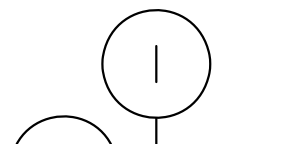

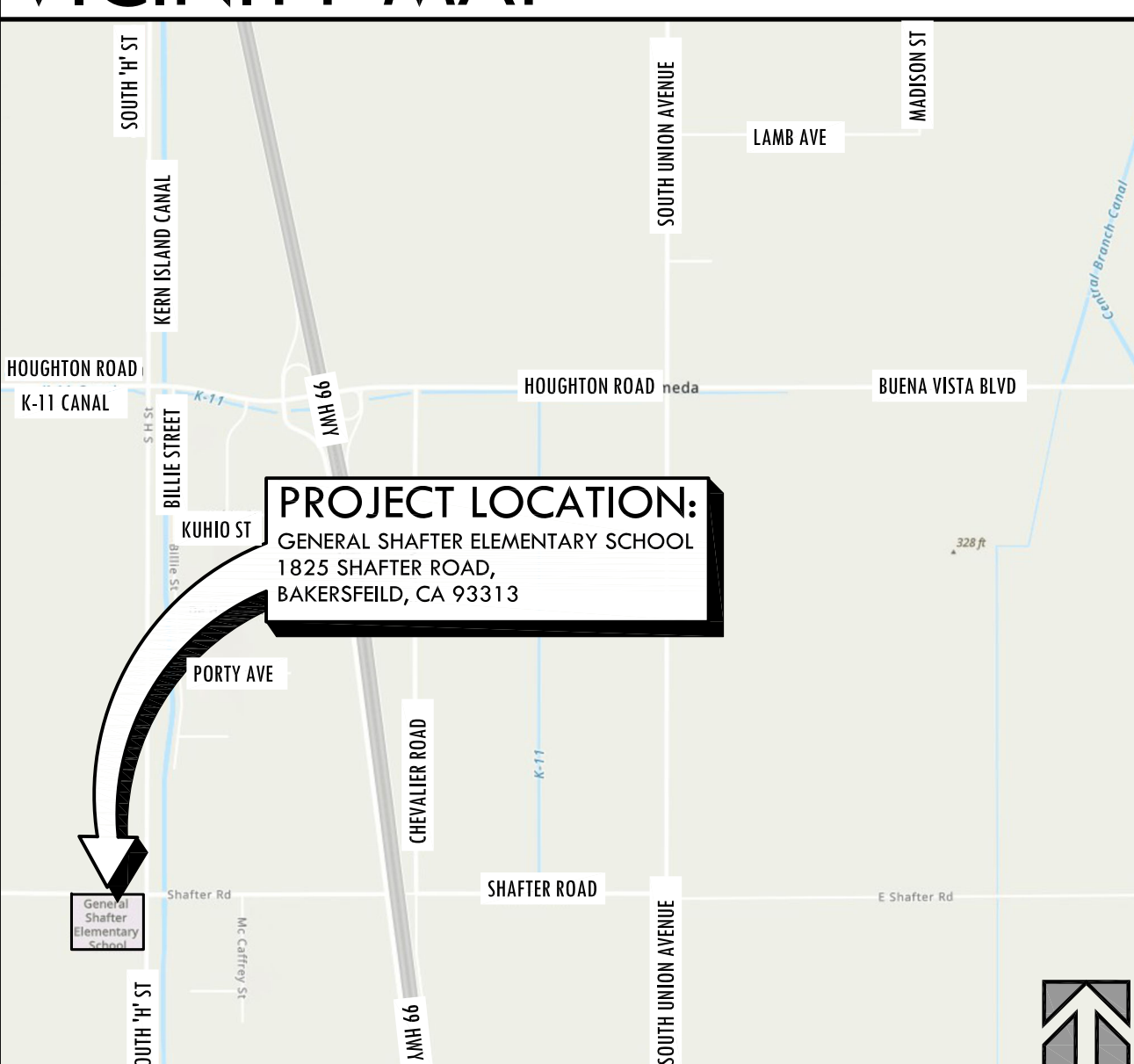

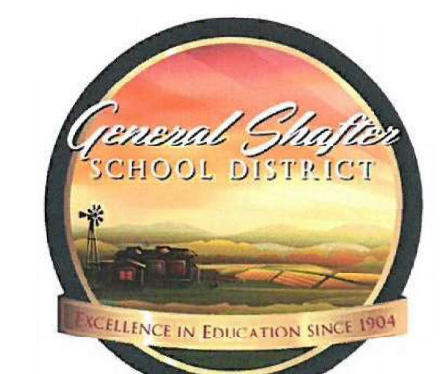


2-24x40 RELOCATABLE CLASSROOMS

AT
GENERAL SHAFTER ELEMENTARY SCHOOL
1825 SHAFTER ROAD, BAKERSFIELD, CA. 93313
FOR
GENERAL SHAFTER SCHOOL DISTRICT
BAKERSFIELD, KERN COUNTY, CALIFORNIA

SYMBOLS	ABBREVIATIONS	GENERAL NOTES	VICINITY MAP	SHEET INDEX
 GRID LINES	 GATE SYMBOL	GENERAL STANDARDS: 1. NOTHING IN THE DRAWINGS AND/OR THE SPECIFICATIONS SHALL BE CONSTRUED TO PERMIT AN INSTALLATION THAT COULD BE IN VIOLATION OF THE APPLICABLE CODES, ORDINANCES, REGULATIONS, RESTRICTIONS, ETC. ALL WORK PERFORMED UNDER THIS CONTRACT SHALL BE IN FULL ACCORDANCE WITH ALL APPLICABLE CODES, ORDINANCES AND REGULATIONS. 2. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN THE FIELD AND SHALL NOTIFY THE ARCHITECT OF ANY DISCREPANCIES IMMEDIATELY. DISCREPANCIES BETWEEN FIELD CONDITIONS AND THE DRAWINGS SHALL CAUSE THE CONTRACTOR TO NOTIFY THE ARCHITECT PRIOR TO MAKING ANY CHANGES IN THE WORK. 3. THE DRAWINGS, IDEAS, DESIGNS AND ARRANGEMENTS REPRESENTED HEREBY ARE AND SHALL REMAIN THE PROPERTY OF THE ARCHITECT/OWNER AND NO PART THEREOF SHALL BE COPIED OR DISCLOSED TO OTHERS OR USED IN CONNECTION WITH ANY WORK OR PROJECT OTHER THAN THE SPECIFIC PROJECT FOR WHICH THESE DOCUMENTS HAVE BEEN PREPARED AND DEVELOPED WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT. VISUAL CONTACT WITH THESE DRAWINGS CONSTITUTES CONCLUSIVE EVIDENCE OF ACCEPTANCE OF THESE RESTRICTIONS. 4. WRITTEN DIMENSIONS ON THESE DRAWINGS SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTOR SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS AT THE JOB-SITE AND THE ARCHITECT SHALL BE NOTIFIED OF ANY VARIATIONS FROM THE DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. 5. MISPLACEMENT, ADDITION, OR OMISSION OF ANY WORD, LETTER, FIGURE, PUNCTUATION MARK, ETC., SHALL IN NO WAY CHANGE OR ALTER THE TRUE INTENT, SPIRIT, OR MEANING OF THE DRAWINGS. THE CONTRACTOR SHALL STUDY AND COMPARE ALL DRAWINGS AND SPECIFICATIONS TO THE ARCHITECT BEFORE COMMENCING WORK IN THAT AREA. ALL WORK SHALL CONFORM WITH 2022 T-24, C.C.R.'S & CURRENTLY ADOPTED EDITIONS OF THE FOLLOWING: PART 1 2022 CALIFORNIA ADMINISTRATIVE CODE, TITLE 24 PART 2 2022 CALIFORNIA BUILDING CODE, TITLE 24 C.C.R. (2021 INTERNATIONAL BUILDING CODE, VOL-1 & 2 WITH CALIFORNIA AMENDMENTS) PART 3 2022 CALIFORNIA ELECTRICAL CODE, T-24, PART-3, C.C.R. (2020 NATIONAL ELEC. CODE OF THE NATIONAL FIRE PROTECTION ASSOCIATION, NFPA) PART 4 2022 CALIFORNIA MECHANICAL CODE, T-24, PART-4 C.C.R. (2021 INTERNATIONAL MECHANICAL CODE OF THE INTERNATIONAL ASSOCIATION OF PLUMBING AND MECHANICAL OFFICIALS, IAPMO) PART 5 2022 CALIFORNIA PLUMBING CODE, T-24, PART-5 C.C.R. (2021 INTERNATIONAL PLUMBING CODE OF THE INTERNATIONAL ASSOCIATION OF PLUMBING & MECH. OFFICIALS, IAPMO & CALIFORNIA AMENDMENTS) PART 6 2022 CALIFORNIA ENERGY CODE, TITLE 24, PART-6 C.C.R. PART 9 2022 CALIFORNIA FIRE CODE, T-24, PART-9, C.C.R. (2021 INTERNATIONAL FIRE CODE OF THE INTERNATIONAL CODE COUNCIL) PART 10 2022 CALIFORNIA EXISTING BUILDING CODE, TITLE 24 C.C.R. (2021 INTERNATIONAL EXISTING BUILDING CODE OF THE INTERNATIONAL CODE COUNCIL, WITH AMENDMENTS) PART 12 2022 CALIFORNIA REFERENCE STANDARDS CODE, TITLE 24 C.C.R. PARTIAL LIST OF APPLICABLE STANDARDS: NFPA 10 STANDARD FOR PORTABLE FIRE EXTINGUISHERS.....2022 EDITION NFPA 13 STANDARD FOR THE INSTALLATION OF SPRINKLER SYSTEMS.....2022 EDITION NFPA 72 NATIONAL FIRE ALARM CODE AND SIGNALING CODE (CALIFORNIA AMENDED).....2022 EDITION NFPA 2001 CLEAN AGENT FIRE EXTINGUISHING SYSTEMS, REFERENCE CODE SECTION FOR NFPA 2001-CC (NFPA 2001-CC).....2018 EDITION UL644 AUDIBLE SIGNALING DEVICES FOR FIRE ALARM AND SIGNALING SYSTEMS, INCLUDING ACCESSORIES.....2003 EDITION UL 261 STANDARD FOR HEAT DETECTORS FOR FIRE PROTECTIVE SIGNALING SYSTEMS w/ REVISIONS THROUGH JULY 20, 2005.....1999 EDITION GENERAL NOTES: A. IF CONFLICTS BETWEEN VARIOUS ELEMENTS (CIVIL, ARCHITECTURAL, ELECTRICAL OR SPEC.) ON THE DRAWINGS ARE DISCOVERED, THEY SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT IN ACCORDANCE W/ THE CONDITIONS OF THE CONTRACT. SUBMIT REFS TO THE DESIGN TEAM IN CASE OF INCONSISTENCIES BETWEEN APPROVED DWGS AND OR APPROVED SPECS IN THE DESCRIPTION OF WORK TO BE DONE, EQUIP. TO BE PROVIDED OR MATERIAL TO BE USED. IT SHALL BE THE ARCHITECT'S RESPONSIBILITY TO DETERMINE THE HIGHER QUALITY & THE GREATER QUALITY OF WORK SHALL APPLY. SUBMIT REVISED DWGS OR SPECS AS A RESULT OF SUCH REFS TO DSA VIA C.C.R.S. SIGNED BY THE ARCHITECT, FOR APPROVAL BY D.S.A. B. THESE PROPOSED DWGS ARE BASED ON PLANS BY OTHERS, FURNISHED BY THE PREVIOUS CONTRACTOR. THE EXISTING DWGS WILL BE MADE AVAILABLE FOR THE CONTRACTOR'S REVIEW UPON REQUEST. THE OWNER, THE ARCHITECT AND THE ENGINEERS SHALL ASSUME NO RESPONSIBILITY FOR THE EXISTING CONDITIONS AND MEASUREMENTS INDICATED ON THE PROPOSED PLANS. EXISTING DIMENSION INDICATED ON THE DWGS HAVE BEEN PROVIDED FROM INFORMATION OBTAINED FROM THE DISTRICT. THE CONTRACTOR SHALL USE ANY MEANS NECESSARY TO VERIFY DIMENSIONS IN THE AREAS OF CONSTRUCTION. THE CONTRACTOR SHALL RE-VERIFY ALL EXISTING MEASUREMENTS & CONDITIONS NECESSARY TO COMPLETE THE WORK AS INDICATED BY THE INTENT OF THESE PLANS PRIOR TO PROCEEDING WITH THE WORK OF THE CONTRACT. THE CONTRACTOR SHALL REPORT ANY DISCREPANCIES TO THE ARCHITECT PRIOR TO STARTING WORK IN THE AREA IN QUESTION. C. CHANGES TO APPROVED DWGS & SPECS SHALL BE MADE BY AN ADDENDUM OR A CONSTRUCTION CHANGE DOCUMENT (CCD TYPE A) SIGNED BY THE ARCHITECT & APPROVED BY D.S.A., AS REQ'D BY SECT. 4-338, PART 1, T-24, C.C.R. PRIOR TO FABRICATION AND INSTALLATION. ALL SUBSTITUTIONS OF PRODUCTS OR DESIGNS WHICH AFFECT THE STRUCTURAL SAFETY, FIRE & LIFE SAFETY OR ACCESSIBILITY OR THE WORK MUST BE SUBMITTED TO DSA AS A CCD FOR REVIEW AND APPROVAL. D. DSA CERTIFIED "CLASS 3" PROJECT INSPECTOR SHALL BE ARCHITECT & DSA APPROVED & EMPLOYED BY G.S.D. THE SITE LOC. SHALL VERIFY & VERIFY GROUNDINGS & PROVIDE CONTINUOUS INSPECTION OF THE WORK. THE DUTIES OF THE I.O.A. ARE DEFINED IN SECT. 4-342, PART 1, T-24, C.C.R. THE I.O.A. SHALL VERIFY ITEMS 1) TO 10.3 PRIOR TO SETTING THE BLDGS. THE DOCUMENTS BEING SUBMITTED SHALL BE CONSISTENT WITH THE BLDGS. THE I.O.A. SHALL SEND COPIES OF ITEMS 1) TO DSA. THE I.O.A. SHALL VERIFY THAT EA. BLDG. IS PLACED IN THE LOCATION SHOWN ON THE DSA APPROVED SITE PLAN w/ SERIAL NUMBERS PER THE DSA APPROVED APPLICATION. 1. INFILTRATION INSPECTION CARD (VERIFIED REPORT FORM (DSR-152-PR)) FOR EACH UNIT OF STKP 04-102450 USED FOR APPLICATION 03-124658 2. WELDING VERIFIED REPORTS 3. SERIAL NUMBERS ARE APPLICABLE TO EACH UNIT INSTALL 4. LAB VERIFIED REPORTS 5. T-24 PARTS 1-5 AND 9 6. CALTRANS SPECIFICATIONS FOR GRADING 7. SET OF "AS-BUILTS", BROUGHT UP TO DATE EACH DAY G. GRADING PLANS, DRAINAGE IMPROVEMENTS, ROAD AND ACCESS REQUIREMENTS AND ENVIRONMENTAL HEALTH CONSIDERATIONS SHALL COMPLY WITH ALL LOCAL ORDINANCES. H. THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS IS THAT THE WORK OF THE ALTERATIONS, REHABILITATION OR RECONSTRUCTION IS TO BE IN ACCORDANCE WITH TITLE 24, CALIFORNIA CODE OF REGULATIONS. SHOULD ANY EXISTING CONDITION SUCH AS DETERIORATION OR NON-COMPLIANT CONSTRUCTION BE DISCOVERED WHICH IS NOT COVERED BY THE CONTRACT DOCUMENTS WHERE THE FINISHED WORK WILL NOT COMPLY WITH T-24, C.C.R., A CONSTRUCTION CHANGE DOCUMENT (CCD TYPE A) OR A SEPARATE SET OF PLANS AND SPECIFICATIONS, DETAILING AND SPECIFYING THE REQUIRED REPAIR WORK SHALL BE SUBMITTED TO AND APPROVED BY D.S.A. BEFORE PROCEEDING WITH THE REPAIR WORK. (SECTION 4-371(C) PART 1 - TITLE 24, C.C.R.) I. ALL ARCHITECTURAL & ELECTRICAL MATERIALS AND INSTALLATION SHALL COMPLY W/ APPLICABLE CODES, STD'S & MANUFACTURER'S RECOMMENDATIONS. J. WHENEVER D.S.A. FINDS ANY CONSTRUCTION WORK BEING PERFORMED IN A MANNER CONTRARY TO THE PROVISIONS OF THE C.C.R., THAT WOULD COMPROMISE THE BLDG.'S STRUCTURAL INTEGRITY, THE DEPT. OF GEN. SERVICES, STATE OF CA, IS AUTHORIZED TO ISSUE A STOP WORK ORDER PER SECTION 4-334.1 CA. ADMIN. CODE (PART 1), T-24, C.C.R.) L. PER 2022 C.A.C. SECTION 1705.3.2.1, CONTINUOUS BATCH PLAN INSPECTION MAY BE WAIVED WHEN THE FOLLOWING REQUIREMENTS ARE MET: 1) THE CONCRETE PLANT COMPLIES FULLY WITH THE REQUIREMENTS OF ASTM C94, SECTION 8 & 10 AND HAS A CURRENT CERTIFICATE FROM THE NATIONAL READY MIXED CONCRETE ASSOCIATION OR ANOTHER AGENCY ACCEPTABLE TO THE BRECKENRIDGE AGENCY. THE CERTIFICATION SHALL INDICATE THAT THE PLANT HAS AUTOMATIC BATCHING AND RECORDING CAPABILITIES. AN APPROVED AGENCY SHALL CHECK THE FIRST BATCH AT THE START OF THE DAY TO VERIFY MATERIALS & PROPORTIONS CONFORM TO THE THE TO THE APPROVED MIX DESIGN. 2) A LICENSED WEIGHMASTER SHALL POSITIVELY IDENTIFY QUANTITY OF MATERIALS AND CERTIFY EACH LOAD BY A BATCH TICKET, INCLUDING MATERIAL QUANTITIES AND WEIGHTS. THIS SHALL ACCOMPANY ALL LOADS OF CONCRETE & SHALL BE TRANSMITTED TO THE PROJECT INSPECTOR OR THE TRUCK DRIVER WITH LOAD IDENTIFICATION. 3) THE LOAD OF CONCRETE SHALL NOT BE PLACED WITHOUT A BATCH TICKET. 4) THE PROJECT INSPECTOR SHALL KEEP A DAILY RECORD OF CONCRETE PLACEMENTS, IDENTIFYING EACH BATCH, ITS LOAD, AND APPROXIMATE LOCATION OF DEPOSIT IN THE STRUCTURE AND SHALL MAINTAIN A COPY OF THE DAILY RECORD AS REQUIRED BY DSA. M. 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 THE NEWLY INSTALLED EQUIPMENT IS OPERATING AND COMPLIANT WITH THE ENERGY CODE. LIGHTING CONTROLS ACCEPTANCE TEST MUST BE PERFORMED BY A CERTIFIED LIGHTING CONTROLS ACCEPTANCE TEST TECHNICIAN (LTC). MECHANICAL SYSTEMS ACCEPTANCE TESTS MUST BE PERFORMED BY A CERTIFIED MECHANICAL ACCEPTANCE TEST TECHNICIAN (MATT). ALL PROJECTS SUBMITTED ON OR AFTER OCTOBER 1, 2021. ENVELOPE AND PROCESS EQUIPMENT ACCEPTANCE TEST SHALL BE PERFORMED BY THE INSTALLING CONTRACTOR, ENGINEER, ARCHITECT OR RECORD OR THE OWNER'S AGENT. A LISTING OF CERTIFIED ATT CAN BE FOUND AT: http://www.enrgy.ca.gov/PROGRAMS-AND-TOPICS/PROGRAMS/ACCEPTANCE-TEST-TECHNICIAN-CERTIFICATION-PROVIDER-PROGRAM/ACCEPTANCE . THE ACCEPTANCE TESTING PROCEDURE MUST BE REPEATED AND OFFICERS MUST BE CORRECTED BY THE BUILDER OR INSTALLING CONTRACTOR UNTIL THE CONSTRUCTION/INSTALLATION OF THE SPECIFIED SYSTEMS CONFORMS AND PASSES THE REQUIRED ACCEPTANCE CRITERIA. PROJECT INSPECTORS WILL CONFIRM THAT THE REQUIRED ACCEPTANCE TESTS HAVE BEEN COMPLETED. N. DRINKING WATER SHALL COMPLY WITH ALL LOCAL HEALTH DEPARTMENT REQUIREMENTS O. WHENEVER DSA FINDS ANY CONSTRUCTION WORK BEING PERFORMED IN A MANNER CONTRARY TO THE PROVISIONS OF CALIFORNIA BUILDING CODE AND THAT WOULD COMPROMISE THE STRUCTURAL INTEGRITY OF THE BLDG., THE DEPT. OF GENERAL SERVICES, STATE OF CA, IS AUTHORIZED TO ISSUE A STOP WORK ORDER PER SECTION 4-334.1 CA. ADMINISTRATIVE CODE (PART 1), TITLE 24, C.C.R.) P. SUBMIT REFS TO DESIGN TEAM IN CASE OF INCONSISTENCIES BETWEEN APPROVED DRAWINGS AND SPECIFICATIONS IN THE DESCRIPTION OF WORK TO BE DONE, EQUIPMENT TO BE PROVIDED OR MATERIAL TO BE USED. IT SHALL BE THE MORE STRINGENT, THE MORE RESTRICTIVE, THE HIGHER QUALITY & THE GREATER QUANTITY OF WORK SHALL APPLY. SUBMIT REVISED DWGS OR SPECS AS RESULT OF SUCH REFS TO DSA VIA C.C.R.S. AS REQ'D BY W-A-6.	 PROJECT LOCATION: GENERAL SHAFTER ELEMENTARY SCHOOL 1825 SHAFTER ROAD, BAKERSFIELD, CA 93313	TITLE SHEET 1-0.0 TITLE SHEET, SHEET INDEX & VICINITY MAP CIVIL C-1 GRADING PLAN C-2 PATH OF TRAVEL PLAN C-3 FIRE WATER PLAN ARCHITECTURAL A-1.1 PARTIAL SITE PLAN - 'A', OVERALL SITE PLAN - 'B' A-1.10 DETAILS ELECTRICAL E-1.00 ELEC. SITE PLAN, SYMBOL LEGEND, DETAILS AND NOTES E-1.10 SIGNAL SITE DIAGRAM, SCHEDULES AND NOTES E-2.00 FIRE ALARM SITE PLAN, FLOOR PLANS, SYMBOL LEGEND, AND NOTES E-2.10 FIRE ALARM SINGLE LINE DIAGRAM, CALC'S, SCHEDULES AND NOTES FIRE PROTECTION FP-1 FIRE SPRINKLER HYDRAULIC REFERENCE SITE PLAN FP-2 FIRE SPRINKLER PIPING PLAN RELOCATABLE BUILDINGS FROM STOCKPILE STATEMENT OF GENERAL CONFORMANCE FOR ARCHITECTS WHO UTILIZE P.C. DWGS (04-104778), PREPARED BY OTHER LICENSED DESIGN PROFESSIONALS, THE DWGS LISTED ON THE "WILSCOT M.S.I. MOBILE MINI" INDEX, HAVE BEEN PREPARED BY DESIGN PROFESSIONALS WHO ARE LICENSED TO PREPARE DWGS IN THIS STATE. THEY HAVE BEEN EXAMINED BY ME FOR: 1. DESIGN INTENT AND APPEAR TO MEET THE APPROPRIATE REQUIREMENTS OF T-24, CA. CODE OF REGS. & THE PROJECT SPEC'S PREPARED BY ME, AND 2. COORDINATE WITH MY PLANS AND SPECS & ARE ACCEPTABLE FOR BEING INCORPORATED INTO THE CONSTRUCTION DWGS OF THIS PROJECT THE STATEMENT OF GEN. CONFORMANCE SHALL NOT BE CONSTRUED AS RELIEVING ME OF MY RIGHTS, DUTIES & RESPONSIBILITIES UNDER SECT. 5 17302 & 81138 OF THE EDC. CODE & SECT. 5 4-336, 4-341 & 4-344 OF T-24, PT-1, SECT. 4-316(B). I FIND THAT ALL DWGS LISTED ON THE "WILSCOT MOBILE MINI" INDEX ARE IN GEN. CONFORMANCE W/ THE DESIGN INTENTS & HAVE BEEN COORDINATED INTO THE PLANS & SPECS. PURSUANT TO DSA POLICY 07-02 APPENDIX A, OTC PACKAGE CHECKLIST, ITEM D-RELOCATION PROJECT #3: I SHALL BE RESPONSIBLE TO VERIFY BY APPROPRIATE MEANS SUBJECT TO DSA APPROVAL, THAT THE MODULAR BLDGS. TO BE MOVED FOR THIS APPLICATION SHALL CONFORM TO THE CURRENTLY APPROVED PLANS & SPECIFICATIONS & HAVE NOT BEEN ALTERED STRUCTURALLY OR SUFFERED STRUCTURAL DETERIORATION. SIGNATURE:  DATE: 09-19-2024 STEPHEN J. CORBIN, AIA, NCARB, LEED-AP BD+C NAME C-16788 11-30-2025 LICENSE NUMBER EXPIRATION DATE WILSCOT M.S.I. RELOCATABLES BLDG.S. PG. 04-104778, UNIT-16 SN: 20156-20157, UNIT-17 SN: 20194-20195 CS COVER SHEET C-1 GENERAL NOTES & SPECIFICATIONS A-1.1-24 24x40 FLOOR PLAN, EXTERIOR ELEVATIONS & ROOF PLAN (DUAL PITCH ROOF) A-2.1-24 24x40 INTERIOR ELEVATIONS A-3.1-24 24x40 REFLECTED CEILING PLAN A-1.1-24 24x40 MECHANICAL PLAN E-1.1-24 24x40 ELECTRICAL LIGHTING PLAN, ELECTRICAL POWER PLAN E-1.1-24 24x40 RIGID FRAME SECTION & DETAILS, DUAL SLOPE, w/ MODULINE TRUSS S-1.0 FLOOR FRAMING PLAN AND DETAILS FOR PLYWOOD FLOOR S-2.1 EXTERIOR WALL FRAMING ELEVATIONS FOR STEEL STUDS S-3.0 WOOD STUD WALL FRAMING DETAILS S-4.1 ROOF FRAMING PLAN w/ 22 GA METAL DECK S-5.1 ROOF FRAMING DETAILS w/ METAL DECK S-6.0 DUAL SLOPE TRUSS & DETAILS R-1 4'-0" WIDE RAMP PLAN & DETAILS R-1 WOOD PAD FOUNDATION PLAN & DETAILS w/ PLYWOOD FLOOR

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-124658 INC.
REVIEWED FOR
SS ☒ FLS ☒ ACS ☒
DATE: 01/08/2025


General Shafter School District
1825 SHAFTER ROAD, BAKERSFIELD, CA 93313
PTN: 63487-7 FILE: 15-70




2-24x40 RELOCATABLE CLASSROOMS AT
GENERAL SHAFTER ELEMENTARY SCHOOL
1825 SHAFTER ROAD, BAKERSFIELD, CA 93313
FOR
GENERAL SHAFTER SCHOOL DISTRICT
BAKERSFIELD, KERN COUNTY, CALIFORNIA

ARCHITECT
1601 NEW STINE ROAD, SUITE 280
BAKERSFIELD, CA 93309
PH: (661) 397-4377
FAX: (661) 397-4378
WWW.SCARCHITECT.COM


STEPHEN J. CORBIN, AIA, NCARB, LEED-AP BD+C

CHECK AND VERIFY ALL DIMENSIONS BEFORE PROCEEDING WITH THE WORK. REPORT DISCREPANCIES TO THE ARCHITECT. ALL CONSTRUCTION SHALL CONFORM TO THE C.C.R.

TITLE SHEET, SHEET INDEX & VICINITY MAP

MARK	DATE	REVISIONS
		
		
		

JOB NO. 1389
DRAWN: SH
CHECKED: MMS
DATE: 8/9/24
0.0 OF SHEETS

GRADING NOTES

1. ALL GRADING SHALL CONFORM TO THE COUNTY OF KERN ORDINANCES AND STANDARDS PERTAINING THERETO (CALIFORNIA BUILDING CODE, 2022) AND SHALL BE SUPERVISED BY AN ENGINEER GRADING IN ACCORDANCE WITH COUNTY OF KERN ORDINANCES.
2. THE DESIGN ENGINEER SHALL EXERCISE SUFFICIENT SUPERVISORY CONTROL DURING GRADING AND CONSTRUCTION TO INSURE COMPLIANCE WITH THE PLANS, SPECIFICATIONS AND CODE WITHIN HIS PRACTICE.
3. THE SOIL ENGINEER, DESIGN ENGINEER, AND BUILDING OFFICIAL SHALL BE NOTIFIED 48 HOURS PRIOR TO PLACING ANY MATERIAL.
4. CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT INCLUDING 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 DEFINE, IDENTIFY, AND HOLD THE OWNER, ARCHITECT, AND THE ENGINEER HARMLESS FROM ANY LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPT FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER, ARCHITECT, OR THE ENGINEER.
5. THE GRADING CONTRACTOR SHALL CONTACT ALL COMPANIES WITH UNDERGROUND FACILITIES PRIOR TO BEGINNING CONSTRUCTION AND VERIFY THE LOCATION AND DEPTH OF ALL UNDERGROUND FACILITIES, INCLUDING TELEPHONE, ELECTRIC, WATER, SEWER, OIL AND GAS LINES. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR BURIED LINES NOT INDICATED ON THE PLAN OR FOR INFORMATION OBTAINED FROM OUTSIDE SOURCES. (USA - 811)
6. THE GRADING CONTRACTOR SHALL BE RESPONSIBLE FOR GRADING ALL AREAS TO ± 0 OR -0.10 FOOT. IF AN AREA SHOULD BE FOUND TO BE MORE THAN 0.10 FOOT OUT OF TOLERANCE AFTER COMPACTING AND COMPLETION OF GRADING, THE CONTRACTOR SHALL RETURN AND CORRECT THE GRADING AT NO COST TO THE OWNER. GRADING TOLERANCE FOR BUILDING PADS SHALL BE ± 0.0 FOOT TO -0.04 FOOT.
7. THE CONTRACTOR SHALL WATER AS REQUIRED DURING THE GRADING OPERATIONS TO PREVENT THE OCCURRENCE OF A DUST NUISANCE AND SHALL PROTECT CURBS AND OTHER OBJECTS WHICH ARE TO REMAIN. DUST CONTROL SHALL CONFORM TO THE SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT REGULATIONS.
8. EXCAVATION - EXCAVATION SHALL CONSIST OF ALL EXCAVATION INVOLVED IN GRADING THE PROJECT AS SHOWN ON THE PLANS. THIS SHALL INCLUDE EXPORTING MATERIAL TO AN OFF-SITE LOCATION, AS REQUIRED.
9. EMBANKMENTS - EMBANKMENT CONSTRUCTION SHALL CONSIST OF CONSTRUCTING EMBANKMENTS, INCLUDING THE PREPARATION OF AREAS WHERE THEY ARE TO BE PLACED, THE CONSTRUCTION OF LINES WITHIN OR OUTSIDE THE CONSTRUCTION AREA, THE GRADING AND COMPACTING OF APPROVED MATERIAL WITHIN THE CONSTRUCTION AREA WHERE UNSUITABLE MATERIAL HAS BEEN REMOVED, AND THE PLACING AND COMPACTING OF EMBANKMENT MATERIAL IN HILLS, PITS, AND DEPRESSIONS. IT SHOULD ALSO CONSIST OF PREPARING SUB-GRADE AT THE GRADING PLANE, CONFORMING TO THE GRADE TOLERANCE, DOING NECESSARY FILLING OR REMOVING, IMPORTING OR EXPORTING, GRADING AND COMPACTING MATERIAL TO THE LINE AND GRADES SHOWN ON THE PLANS. ALL EMBANKMENT CONSTRUCTION SHALL BE CONSIDERED AS INCLUDED IN THE CONTRACT PRICE.
10. THE WORK EMPLOYED HEREIN SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS OF THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION DATED JULY 2018 (UNLESS OTHERWISE SPECIFIED), INsofar AS THE SAME MAY APPLY IN CONNECTION WITH THE NOTES HEREON IN CASE OF CONFLICT WITH THE STANDARD SPECIFICATIONS AND ANY NOTES HEREON. THE NOTES HEREON SHALL TAKE PRECEDENCE OVER AND BE USED IN LIEU OF SUCH CONFLICTING PORTIONS. SAID SPECIFICATIONS SHALL APPLY BUT NOT BE LIMITED TO THE FOLLOWING:
 - A) ALL CONCRETE SHALL BE CLASS "C" USING TYPE I/II CEMENT AS IN ACCORDANCE WITH SECTION 900 AND SHALL HAVE AT LEAST 2500 PSI COMPRESSIVE STRENGTH AT 28 DAYS, PER CALTRANS STANDARD SPECIFICATIONS (2008) UNLESS OTHERWISE SPECIFIED.
 - B) ASPHALT TO CONCRETE SHALL BE TYPE "B", 1/2" MAXIMUM MEDIUM GRADED, AND INTIMATELY MIXED WITH 5-6.5% ASPHALT PER CALTRANS STANDARD SPECIFICATIONS (2008). NO R.A.P. (RECLAIMED ASPHALT PAVEMENT) SHALL BE USED. ASPHALT SHALL BE PERFORMANCE GRADE PG64-10.
 - C) SANDWICH ENGINEERING SHALL NOT BE RESPONSIBLE OR LIABLE FOR UNAUTHORIZED CHANGES TO, OR USES OF, THESE PLANS. ALL CHANGES TO THESE PLANS MUST BE APPROVED, IN WRITING, BY SANDWICH ENGINEERING.
 - D) N/A
11. PRIOR TO COMMENCING CONSTRUCTION, CONTRACTOR SHALL PROVIDE ALL UTILITIES THAT WILL BE AFFECTED BY THIS CONSTRUCTION TO DETERMINE IF ANY UTILITY CONFLICTS EXIST. ANY UTILITY CONFLICTS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER SO THAT DESIGN CHANGES CAN BE MADE PRIOR TO THE START OF CONSTRUCTION.
12. UPON COMPLETION OF GRADING AND BEFORE THE START OF CONSTRUCTION, A FINAL SOLS REPORT SHALL BE PREPARED BY THE SOIL ENGINEER.
13. THE SOIL ENGINEER SHALL REVIEW ALL EXCAVATIONS PRIOR TO BACKFILLING AND SHALL BE NOTIFIED OF ANY ITEM ENCOUNTERED DURING THE GRADING OPERATIONS THAT MIGHT AFFECT FOUNDATION STABILITY SO THAT RECOMMENDATIONS CAN BE MADE BY THE SOIL ENGINEER.
14. CUTS AND FILL SLOPES NEARER THAN FIVE FEET FROM THE BUILDING FOUNDATIONS SHALL NOT BE STEEPER THAN 3:1. CUT AND FILL SLOPES SHALL NOT BE STEEPER THAN 3:1 FOR SLOPES FARTHER THAN FIVE FEET FROM FOOTING LINES.
15. ALL SLOPES GREATER THAN THREE FEET IN VERTICAL HEIGHT SHALL BE PREPARED AND MAINTAINED TO PREVENT EROSION.
16. IMPORTED FILL MATERIAL SHOULD CONSIST OF ESSENTIALLY GRANULAR, SILTY SANDS WITH LOW EXPANSION POTENTIAL AND FREE OF GRASSES, WEEDS, ROCKS LARGER THAN TWO INCHES IN DIAMETER, DEBRIS, AND SOLUBLE SULFATES IN EXCESS OF 200 PARTS PER MILLION. IMPORTED FILL SHOULD CONTAIN SUFFICIENT SILT AND CLAY BINDER TO RENDER THEM STABLE IN FOOTING TRENCHES AND CAPABLE OF MAINTAINING SPECIFIED ELEVATION TOLERANCES DURING PAVING OPERATIONS. ANY CEMENTED MATERIALS PROPOSED TO BE BROUGHT ONTO SCHOOL SITES ARE SUBJECT TO TESTING TO VERIFY THEY ARE IN COMPLIANCE WITH DTSC STANDARDS. OWNER SHALL DETERMINE IF TESTING OF MATERIALS IS REQUIRED PRIOR TO ANY MATERIAL BEING BROUGHT ONTO THE SITE. TESTING OF MATERIALS MAY TAKE UP TO TWO WEEKS TO VERIFY COMPLIANCE WITH DTSC STANDARDS.
17. IMPORTED SOLS SHOULD ALSO MEET THE FOLLOWING CRITERIA:
 - A) MAXIMUM % PASSING #200 SIEVE: 50
 - B) MAXIMUM LIQUID LIMIT: 40
 - C) MAXIMUM PLASTICITY INDEX: 14
 - D) MINIMUM R-VALUE: 50
 - E) MAXIMUM EXPANSION INDEX: 20
18. CLEARING AND GRUBBING - REMOVE ALL DEBRIS, SUCH AS METAL, TRASH, ROCKS GREATER THAN 2" IN DIAMETER, BROKEN CONCRETE, VEGETATION, OTHER BIODEGRADABLE SUBSTANCES, AND UNSUITABLE SOIL FROM AREAS TO BE GRADED. UNSUITABLE SOIL IS SOIL THAT, IN THE OPINION OF THE BUILDING OFFICIAL, SOIL ENGINEER, OR CIVIL ENGINEER, IS NOT COMPETENT TO SUPPORT OTHER SOIL OR STRUCTURES, OR TO SATISFACTORILY PERFORM ANY OTHER FUNCTIONS FOR WHICH THE SOIL IS INTENDED.
19. AREAS TO RECEIVE FILL SHALL BE SCARIFIED SIX INCHES, OR AS RECOMMENDED IN THE SOIL REPORT, WHICHEVER IS GREATER, UNTIL THE SURFACE IS FREE FROM RUTS, HUNDROCKS OR OTHER UNLIEK FEATURES WHICH WOULD TEND TO PREVENT UNIFORM COMPACTION BY THE EQUIPMENT TO BE USED. MOISTEN AND COMPACT TO AT LEAST 90% OF THE MAXIMUM DENSITY PER ASTM D1557 UNLESS OTHERWISE SPECIFIED.
20. ENGINEERED FILL MATERIALS SHOULD BE PLACED IN THIN LAYERS WHICH, WHEN COMPACTED, SHALL NOT EXCEED SIX (6) INCHES IN THICKNESS, BROUGHT TO NEAR THE OPTIMUM MOISTURE CONTENT OR TO A MOISTURE CONTENT CONSISTENT WITH EFFECTIVE COMPACTION AND SOIL STABILITY, AND COMPACTED TO A MINIMUM OF 90 PERCENT OF THE MAXIMUM DENSITY OBTAINABLE BY ASTM TEST METHOD D1557.
21. QUANTITIES FOR EARTHWORK:

EXCAVATION -	150 C.Y.
EMBANKMENT -	120 C.Y.

 QUANTITIES ARE FOR GRADING PERMIT ONLY. THE ENGINEER MAKES NO WARRANTY OF THE ANTICIPATED SHRINKAGE FACTOR. THE CONTRACTOR SHALL NOT USE THESE QUANTITIES TO BASE HIS BID OR THE GRADING PERMIT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPORTING MATERIALS FROM AN OFF-SITE LOCATION OR EXPORTING EXCESS MATERIAL TO AN OFF-SITE LOCATION, AS NEEDED.
22. CONTRACTOR TO VERIFY DIMENSIONS AND ELEVATIONS OF EXISTING IMPROVEMENTS IN THE FIELD BEFORE PROCEEDING WITH WORK. ANY DISCREPANCIES THAT WILL AFFECT THE-INS TO EXISTING IMPROVEMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH ANY WORK.
23. BUILDING PAD PREPARATION: EXCAVATE EARTH MATERIAL TO A MINIMUM DEPTH OF ONE (1) FOOT BELOW THE LOWEST GRADE IN EACH OF THE PROPOSED BUILDING AREAS, OR ONE (1) FOOT BELOW THE LOWEST FOUNDATION, WHICHEVER IS DEEPER. THE BOTTOM OF THE EXCAVATION SHALL BE REVIEWED BY THE SOIL ENGINEER OR HIS REPRESENTATIVE PRIOR TO ANY BACKFILL OPERATIONS. MOISTEN IMPORTED SOLS TO NEAR THE OPTIMUM MOISTURE OR TO A MOISTURE CONTENT CONSISTENT WITH EFFECTIVE COMPACTION AND SOIL STABILITY. COMPACT MOISTENED SOLS TO A MINIMUM OF 90 PERCENT OF THE MAXIMUM DENSITY OBTAINED BY ASTM TEST METHOD D1557. WORK TO LINES AT LEAST TWO (2) FEET BEYOND THE OUTSIDE EDGES OF EXTERIOR FOOTINGS AND TWO FEET BEYOND PAVEMENT EDGES.
24. PAVEMENT AND FLATWORK AREA PREPARATION: GROUND SURFACES TO RECEIVE CONCRETE DRIVEWAY AND BITUMINOUS PAVEMENTS SHOULD BE SCARIFIED AND COMPACTED TO A MINIMUM DEPTH OF 12 INCHES BELOW THE GRADING PLANE IN CUT AREAS OR TO 12 INCHES IN AREAS TO RECEIVE FILL. ENGINEERED FILL PLACED IN PROPOSED PAVEMENT AREAS SHOULD BE COMPACTED TO A MINIMUM OF 90 PERCENT OF THE MAXIMUM DENSITY AS OBTAINED BY ASTM TEST METHOD D1557, AND SHOULD EXTEND TO A MINIMUM OF TWO FEET BEYOND THE OUTSIDE EDGES OF PAVEMENT.
25. ALL TRENCHES AND EXCAVATIONS SHALL BE CONSTRUCTED IN STRICT COMPLIANCE WITH THE APPLICABLE CALIFORNIA AND FEDERAL O.S.H.A. REQUIREMENTS AND OTHER APPLICABLE SAFETY ORDINANCES. CONTRACTOR SHALL BEAT FULL RESPONSIBILITY FOR THE TRENCH SHIELDING DESIGN AND INSTALLATION. CONTRACTORS SHALL OBTAIN APPLICABLE O.S.H.A. PERMITS WHEN WORKMEN MUST ENTER TRENCHES GREATER THAN FIVE FEET.
26. N/A
27. N/A
28. N/A
29. N/A

IMPORTED SOLS SHOULD ALSO MEET THE FOLLOWING CRITERIA:

- A) MAXIMUM % PASSING #200 SIEVE: 50
- B) MAXIMUM LIQUID LIMIT: 40
- C) MAXIMUM PLASTICITY INDEX: 14
- D) MINIMUM R-VALUE: 50
- E) MAXIMUM EXPANSION INDEX: 20

18. CLEARING AND GRUBBING - REMOVE ALL DEBRIS, SUCH AS METAL, TRASH, ROCKS GREATER THAN 2" IN DIAMETER, BROKEN CONCRETE, VEGETATION, OTHER BIODEGRADABLE SUBSTANCES, AND UNSUITABLE SOIL FROM AREAS TO BE GRADED. UNSUITABLE SOIL IS SOIL THAT, IN THE OPINION OF THE BUILDING OFFICIAL, SOIL ENGINEER, OR CIVIL ENGINEER, IS NOT COMPETENT TO SUPPORT OTHER SOIL OR STRUCTURES, OR TO SATISFACTORILY PERFORM ANY OTHER FUNCTIONS FOR WHICH THE SOIL IS INTENDED.

19. AREAS TO RECEIVE FILL SHALL BE SCARIFIED SIX INCHES, OR AS RECOMMENDED IN THE SOIL REPORT, WHICHEVER IS GREATER, UNTIL THE SURFACE IS FREE FROM RUTS, HUNDROCKS OR OTHER UNLIEK FEATURES WHICH WOULD TEND TO PREVENT UNIFORM COMPACTION BY THE EQUIPMENT TO BE USED. MOISTEN AND COMPACT TO AT LEAST 90% OF THE MAXIMUM DENSITY PER ASTM D1557 UNLESS OTHERWISE SPECIFIED.

20. ENGINEERED FILL MATERIALS SHOULD BE PLACED IN THIN LAYERS WHICH, WHEN COMPACTED, SHALL NOT EXCEED SIX (6) INCHES IN THICKNESS, BROUGHT TO NEAR THE OPTIMUM MOISTURE CONTENT OR TO A MOISTURE CONTENT CONSISTENT WITH EFFECTIVE COMPACTION AND SOIL STABILITY, AND COMPACTED TO A MINIMUM OF 90 PERCENT OF THE MAXIMUM DENSITY OBTAINABLE BY ASTM TEST METHOD D1557.

QUANTITIES FOR EARTHWORK

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EMBANKMENT -	120 C.Y.

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23. BUILDING PAD PREPARATION: EXCAVATE EARTH MATERIAL TO A MINIMUM DEPTH OF ONE (1) FOOT BELOW THE LOWEST GRADE IN EACH OF THE PROPOSED BUILDING AREAS, OR ONE (1) FOOT BELOW THE LOWEST FOUNDATION, WHICHEVER IS DEEPER. THE BOTTOM OF THE EXCAVATION SHALL BE REVIEWED BY THE SOIL ENGINEER OR HIS REPRESENTATIVE PRIOR TO ANY BACKFILL OPERATIONS. MOISTEN IMPORTED SOLS TO NEAR THE OPTIMUM MOISTURE OR TO A MOISTURE CONTENT CONSISTENT WITH EFFECTIVE COMPACTION AND SOIL STABILITY. COMPACT MOISTENED SOLS TO A MINIMUM OF 90 PERCENT OF THE MAXIMUM DENSITY OBTAINED BY ASTM TEST METHOD D1557. WORK TO LINES AT LEAST TWO (2) FEET BEYOND THE OUTSIDE EDGES OF EXTERIOR FOOTINGS AND TWO FEET BEYOND PAVEMENT EDGES.

24. PAVEMENT AND FLATWORK AREA PREPARATION: GROUND SURFACES TO RECEIVE CONCRETE DRIVEWAY AND BITUMINOUS PAVEMENTS SHOULD BE SCARIFIED AND COMPACTED TO A MINIMUM DEPTH OF 12 INCHES BELOW THE GRADING PLANE IN CUT AREAS OR TO 12 INCHES IN AREAS TO RECEIVE FILL. ENGINEERED FILL PLACED IN PROPOSED PAVEMENT AREAS SHOULD BE COMPACTED TO A MINIMUM OF 90 PERCENT OF THE MAXIMUM DENSITY AS OBTAINED BY ASTM TEST METHOD D1557, AND SHOULD EXTEND TO A MINIMUM OF TWO FEET BEYOND THE OUTSIDE EDGES OF PAVEMENT.

25. ALL TRENCHES AND EXCAVATIONS SHALL BE CONSTRUCTED IN STRICT COMPLIANCE WITH THE APPLICABLE CALIFORNIA AND FEDERAL O.S.H.A. REQUIREMENTS AND OTHER APPLICABLE SAFETY ORDINANCES. CONTRACTOR SHALL BEAT FULL RESPONSIBILITY FOR THE TRENCH SHIELDING DESIGN AND INSTALLATION. CONTRACTORS SHALL OBTAIN APPLICABLE O.S.H.A. PERMITS WHEN WORKMEN MUST ENTER TRENCHES GREATER THAN FIVE FEET.

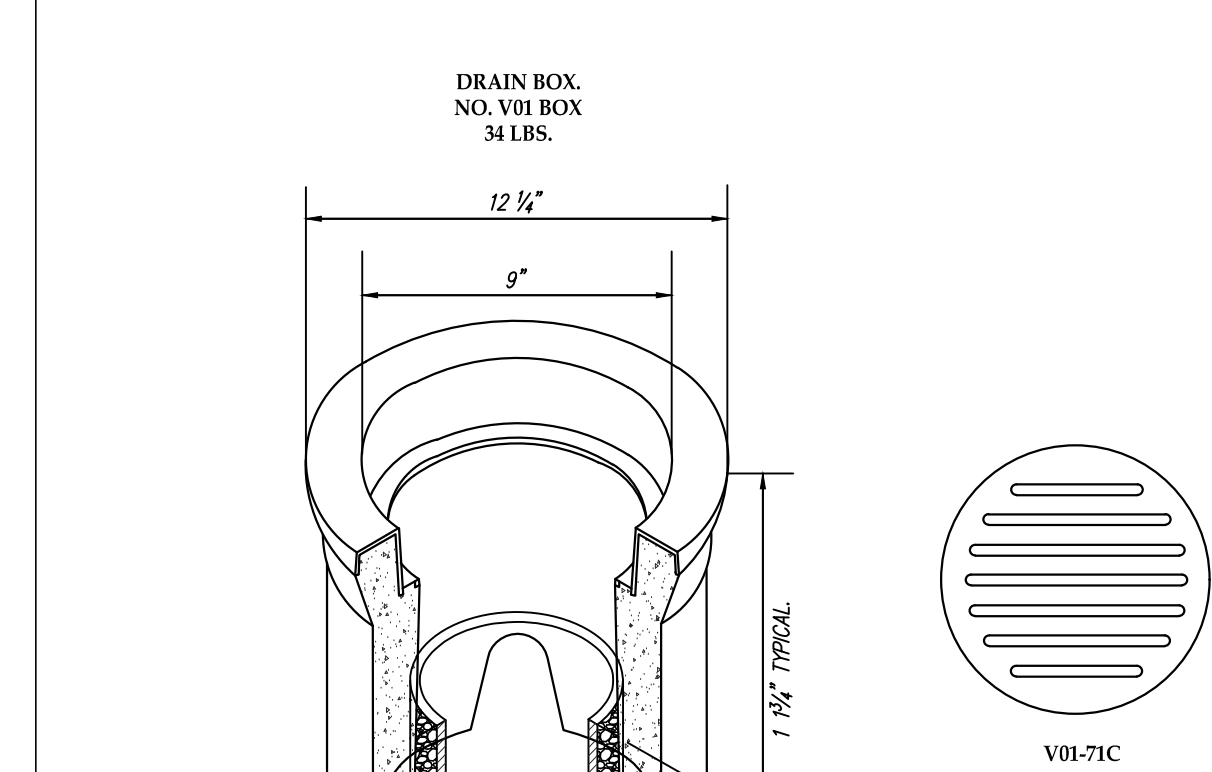
26. N/A

27. N/A

28. N/A

29. N/A

-ETCHED POLYPROPYLENE FACE
-FACE ANCHORED IN CONCRETE
-ULTRA-VIOLET INHIBITOR
-EXCEEDS ASTM-D1683 STANDARDS
FOR ENVIRONMENTAL STRESS
CRACKING RESISTANCE



ORDERING CODE	ITEM	ASSEMBLY WEIGHT	DESCRIPTION
F00B0X	BOX	34	V01 DRAIN BOX (8" I.D. X 12") - 48 PER PALLET
V01-71C	GRATE	12	CAST IRON

1	C1	V01 BOX WITH PIPE CONNECTION AT BOTTOM
---	----	--

CONDENSATE DRAIN

C1

DOWNSPOUT CONNECTION

C1

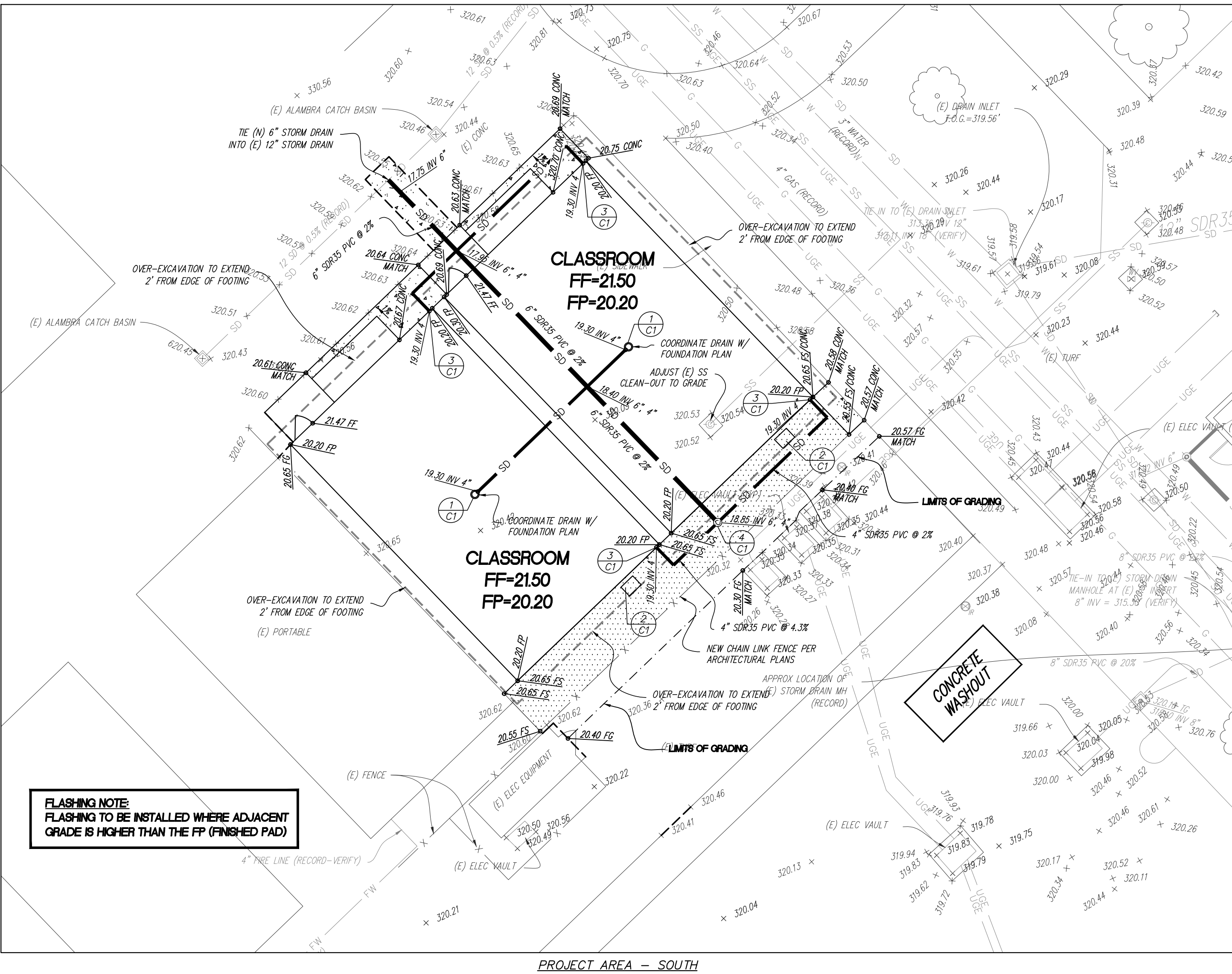
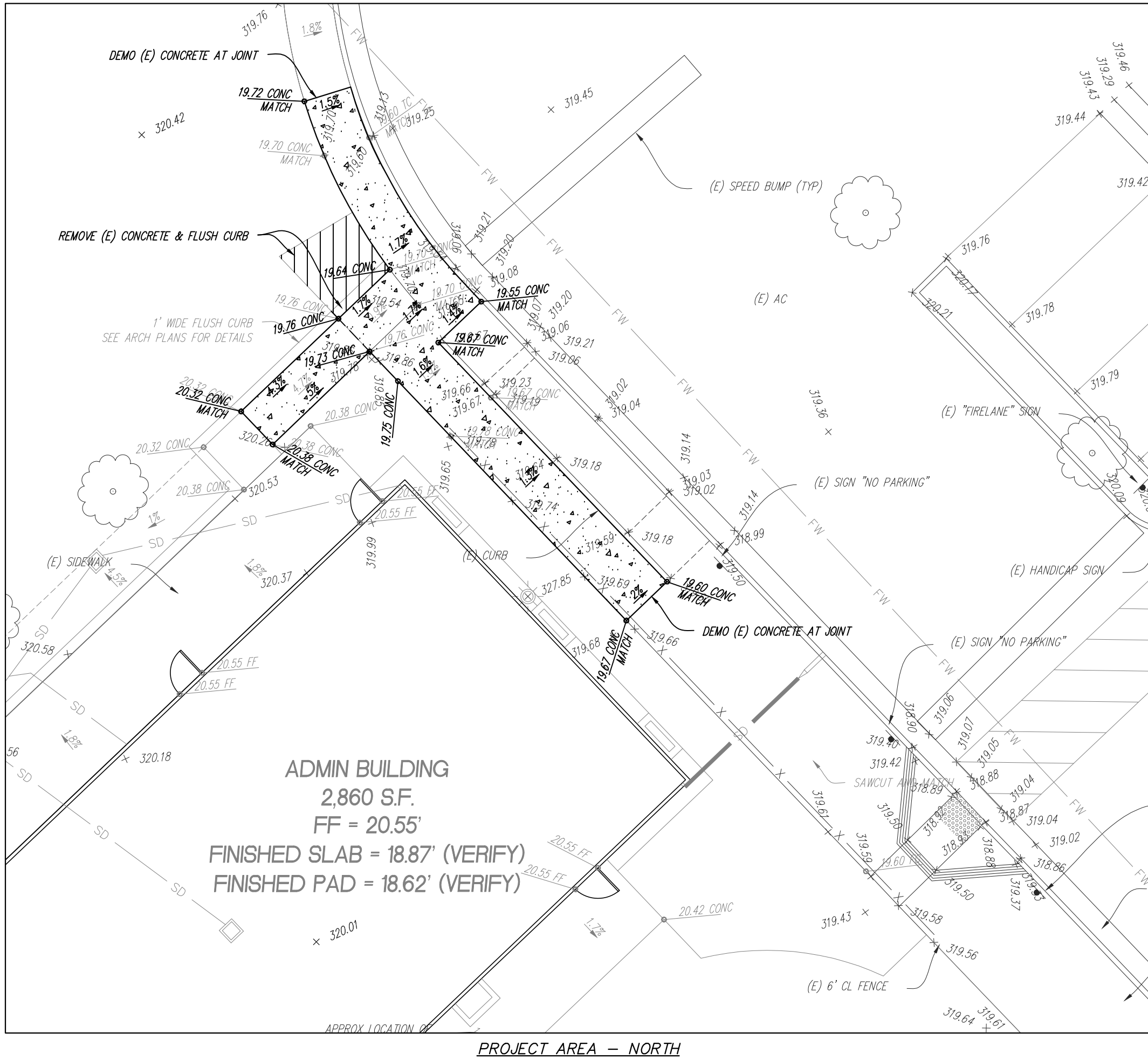
CLEANOUT TO GRADE

C1

PVC/HDPE TRENCH DETAIL

C1

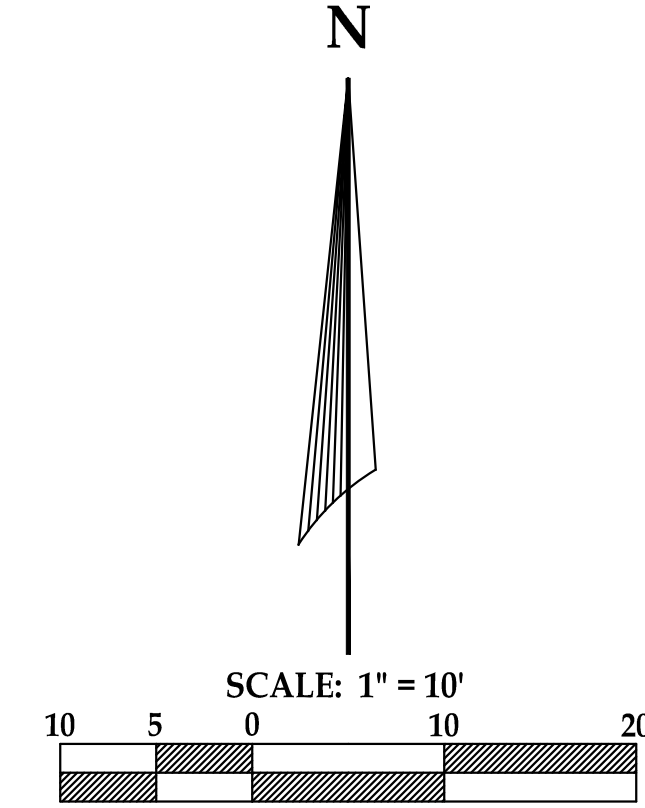
GRADING PLANS FOR 2 RELOCATEABLE CLASSROOMS GENERAL SHAFTER ELEMENTARY SCHOOL 1825 SHAFTER ROAD BAKERSFIELD, CALIFORNIA 93313



LEGEND:

- | | |
|---|--|
| (E) EXISTING
TYP. TYPICAL
BK. BOOK
PC. PAGE
C.O.K. COUNTY OF KERN
C.O.B. CITY OF BAKERSFIELD
OR. OFFICIAL RECORDS
CONC. CONCRETE
A.C. ASPHALT PAVEMENT
FD. FINISH GRADE
EP. EDGE OF PAVEMENT
TC. TOP OF CURB
FL. FLOWLINE
FF. FINISHED FLOOR
FP. FINISHED PAD
TP. TOP OF PAVEMENT
GB. GRADE BREAK
CL. CENTERLINE | EXISTING FIRE HYDRANT
EXISTING WATER METER
EXISTING WATER VALVE
EXISTING HOSE BIB
EXISTING POWER POLE
EXISTING STREET LIGHT
EXISTING FOUNDATION
EXISTING TRAFFIC SIGN
EXISTING SEWER MANHOLE
EXISTING STORM DRAIN MANHOLE
EXISTING SEWER CLEANOUT
EXISTING IRRIGATION VALVE
EXISTING TELEPHONE PULL BOX
EXISTING GAS METER
EXISTING ELECTRICAL PULL BOX
EXISTING LIGHT POLE
DESIGN ELEVATION
DETAIL CALLOUT
CLEAN-OUT TO GRADE |
|---|--|

- | | |
|---|---|
| SD. EXISTING STORM DRAIN LINE
FD. EXISTING FIBER OPTIC LINE
WI. EXISTING WATER LINE
SS. EXISTING SEWER LINE
G. EXISTING GAS LINE
X. EXISTING FENCELINE
UGE. EXISTING UNDERGROUND ELECTRIC LINE
OHE. EXISTING OVERHEAD ELECTRIC LINE
--- EXISTING PROPERTY LINE
--- EXISTING SECTION LINE
--- EXISTING RIGHT-OF-WAY
--- EXISTING CURB & GUTTER
--- EXISTING GROUND CONTOUR LINE & ELEVATION
--- SANITARY
--- LIMITS OF GRADING
--- STORM DRAIN - SDR35 PVC
--- PATH OF TRAVEL
6" OF 3" AGG BASE / LANDSCAPE FABRIC / 12" NATIVE COMPACTED TO SOIL
4" CONCRETE / 10" NATIVE COMPACTED TO SOIL | EXISTING STORM DRAIN LINE
EXISTING FIBER OPTIC LINE
EXISTING WATER LINE
EXISTING SEWER LINE
EXISTING GAS LINE
EXISTING FENCELINE
EXISTING UNDERGROUND ELECTRIC LINE
EXISTING OVERHEAD ELECTRIC LINE
EXISTING PROPERTY LINE
EXISTING SECTION LINE
EXISTING RIGHT-OF-WAY
EXISTING CURB & GUTTER
EXISTING GROUND CONTOUR LINE & ELEVATION
SANITARY
LIMITS OF GRADING
STORM DRAIN - SDR35 PVC
PATH OF TRAVEL
6" OF 3" AGG BASE / LANDSCAPE FABRIC / 12" NATIVE COMPACTED TO SOIL
4" CONCRETE / 10" NATIVE COMPACTED TO SOIL |
|---|---|



SHEET INDEX

- C1 - GRADING PLAN
C2 - PATH OF TRAVEL
F1 - FIRE WATER PLAN

BENCHMARK

TYP. K.E.S. CONCRETE MONUMENT AT CENTERLINE INTERSECTION OF SOUTH H STREET AND SHAFTER ROAD.

ELEVATION = 320.85'
MAD 320.00' TO ALL DESIGN ELEVATIONS*

BASIS OF BEARINGS

THE NORTH LINE OF THE NE 1/4 OF SECTION 24, T.31S., R.27E., M.2M., REPRESENTS FLEET WAY DR. THE NORTH LINE OF THE CENTERLINE OF SHAFTER ROAD HAVING A BEARING OF S89°45'36"E WAS TAKEN AS THE BASIS OF BEARINGS SHOWN HEREON.

LEGAL DESCRIPTION

LOTS 1 AND 8 OF SECTION 24, T.31S., R.27E., M.2M., ACCORDING TO THE "SALES MAP OF THE LANDS OF THE KERN COUNTY LAND COMPANY" FILED AUGUST 27, 1982, IN THE OFFICE OF THE KERN COUNTY RECORDER.

ADDRESS

1825 SHAFTER RD., BAKERSFIELD, CA

APN

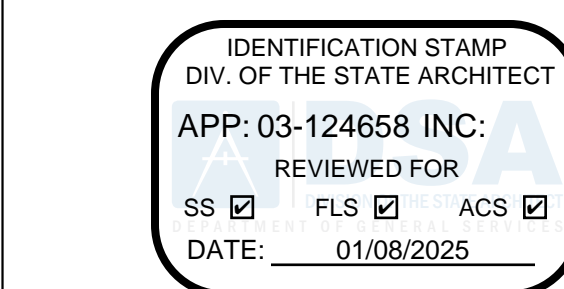
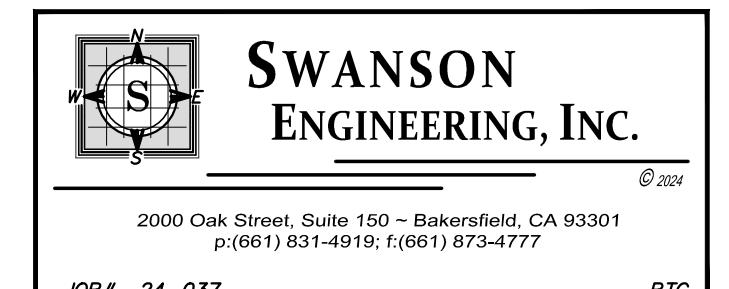
184-392-51.53

UTILITY NOTE

NOT ALL UTILITIES WERE LOCATED BY THIS SURVEY AND SWANSON ENGINEERING, INC. ASSUMES NO RESPONSIBILITY FOR UNDERGROUND UTILITIES OR FACILITIES NOT SHOWN OR FOR INFORMATION OBTAINED FROM OUTSIDE SOURCES.

TRENCHING NOTE

ALL ON-SITE WET UTILITY TRENCHING PER DETAIL S, SHEET C1 UNLESS OTHERWISE SPECIFIED.



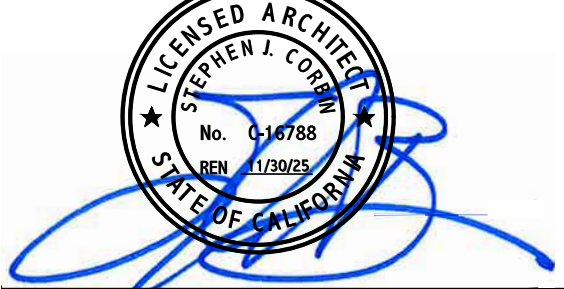
PTN: 63487-7

FILE: 15-70

2-24x40 RELOCATABLE CLASSROOMS AT
GENERAL SHAFTER ELEMENTARY SCHOOL
1825 SHAFTER ROAD, BAKERSFIELD, CA 93313
FOR
GENERAL SHAFTER SCHOOL DISTRICT
BAKERSFIELD, KERN COUNTY, CALIFORNIA



1601 NEW STINE ROAD, SUITE 280
BAKERSFIELD, CA 93309
PH: (661) 397-4377
FAX: (661) 397-4378
WWW.SCARCHITECT.COM



STEPHEN J. CORBIN, AIA, NCARB, LEED®-AP

CHECK AND VERIFY ALL DIMENSIONS BEFORE PROCEEDING WITH THE WORK. REPORT DISCREPANCIES TO THE ARCHITECT. ALL CONSTRUCTION SHALL CONFORM TO THE C.B.C.

GRADING PLAN

MARK	DATE	REVISIONS
△		
△		
△		

JOB NO.

1389

DRAWN: N/A

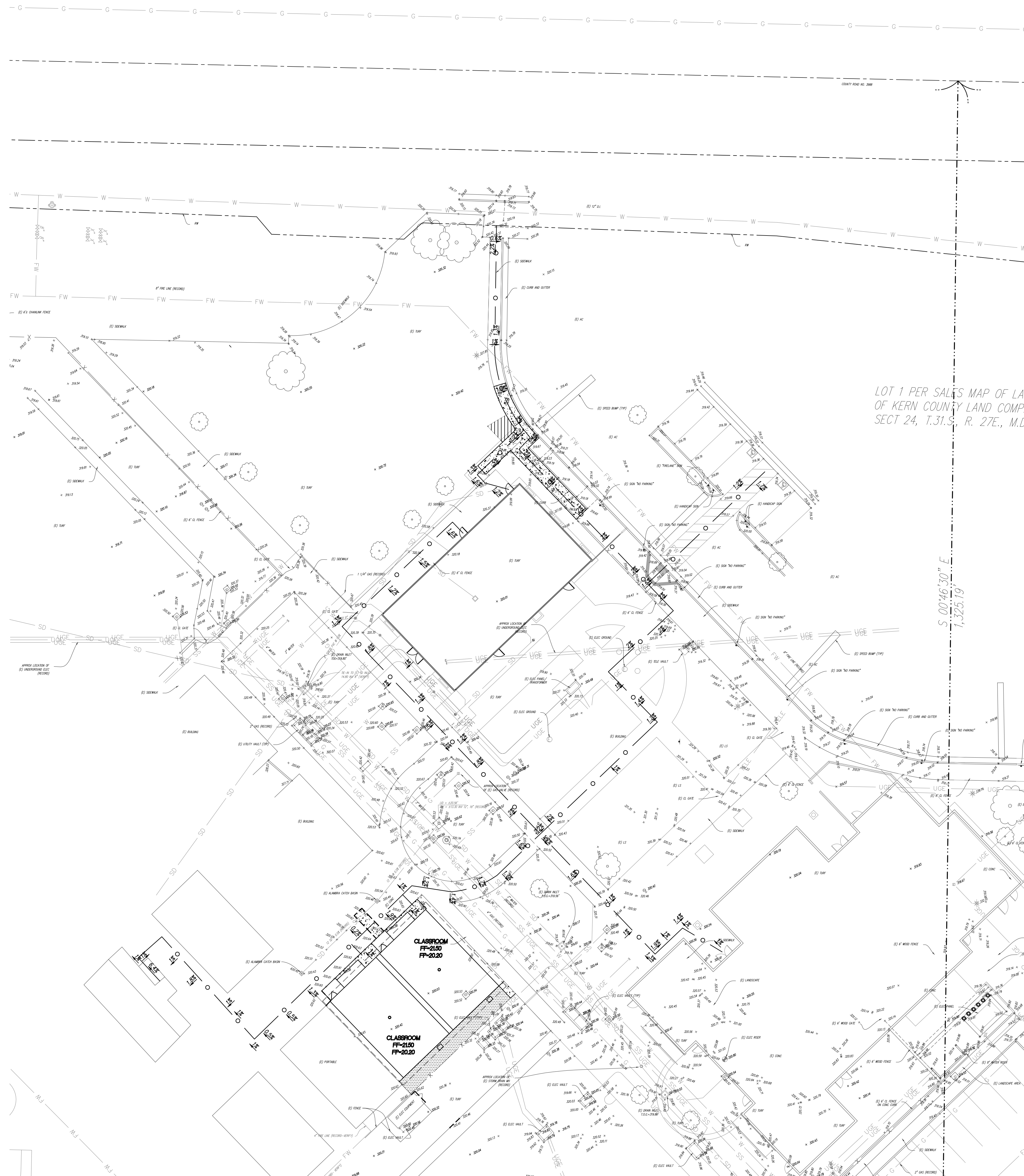
CHECKED: -

DATE: 7/10/2024



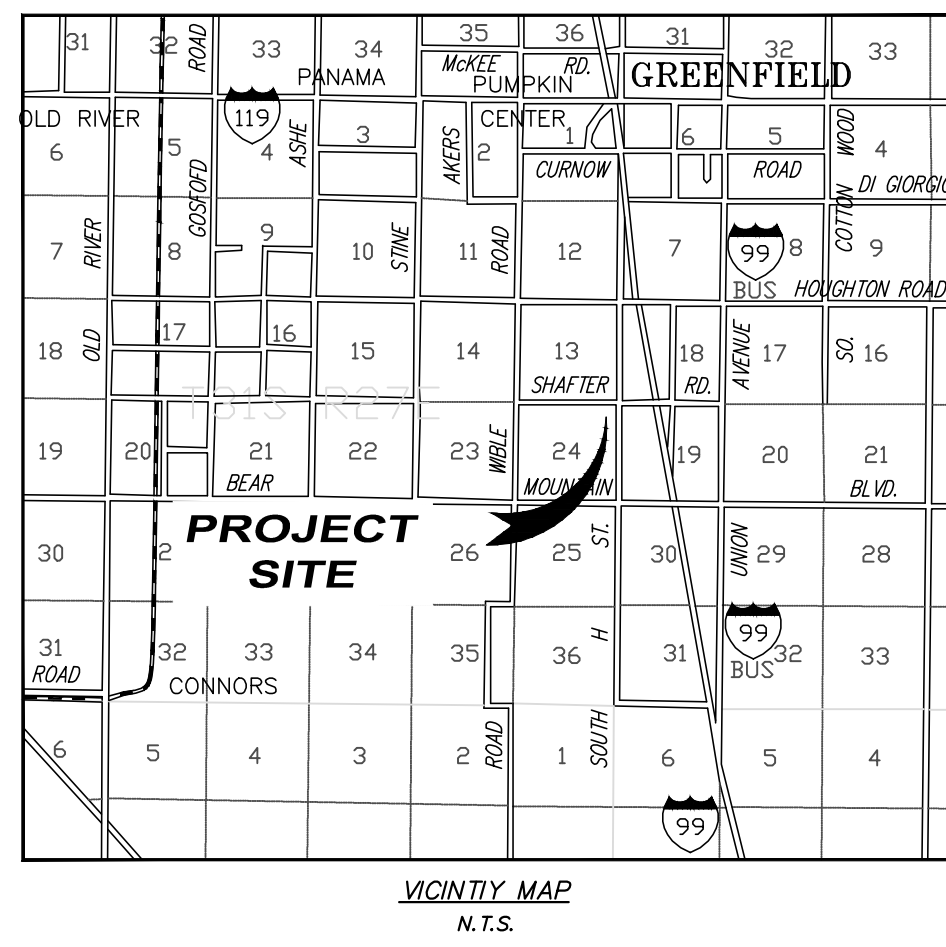
C1

1 OF 3 SHEETS

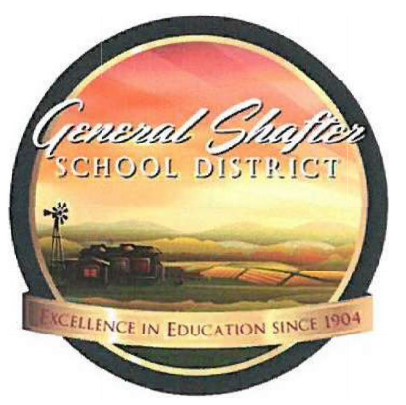


LOT 1 PER SALES MAP OF LAI
OF KERN COUNTY LAND COMP.,
SECT 24, T.31S., R. 27E., M.D.

S. 00146.70' E.
1,325.19'



IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-124658 INC:
REVIEWED FOR:
SS ☒ FLS ☒ ACS ☒
DATE: 01/08/2025



PTN: 63487-7 FILE: 15-70

2-24x40 RELOCATABLE CLASSROOMS AT
GENERAL SHAFTER ELEMENTARY SCHOOL
1825 SHAFTER ROAD, BAKERSFIELD, CA 93313
FOR
GENERAL SHAFTER SCHOOL DISTRICT
BAKERSFIELD, KERN COUNTY, CALIFORNIA



1601 NEW STINE ROAD, SUITE 280
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STEPHEN J. CORBIN, AIA, NCARB, LEED®-AP BD+C

CHECK AND VERIFY ALL DIMENSIONS BEFORE PROCEEDING WITH
THE WORK. REPORT DISCREPANCIES TO THE ARCHITECT. ALL
CONSTRUCTION SHALL CONFORM TO THE C.B.C.

PATH OF TRAVEL

MARK	DATE	REVISIONS
△		
△		
△		

JOB NO.

1389

DRAWN:

N/A

CHECKED:

-

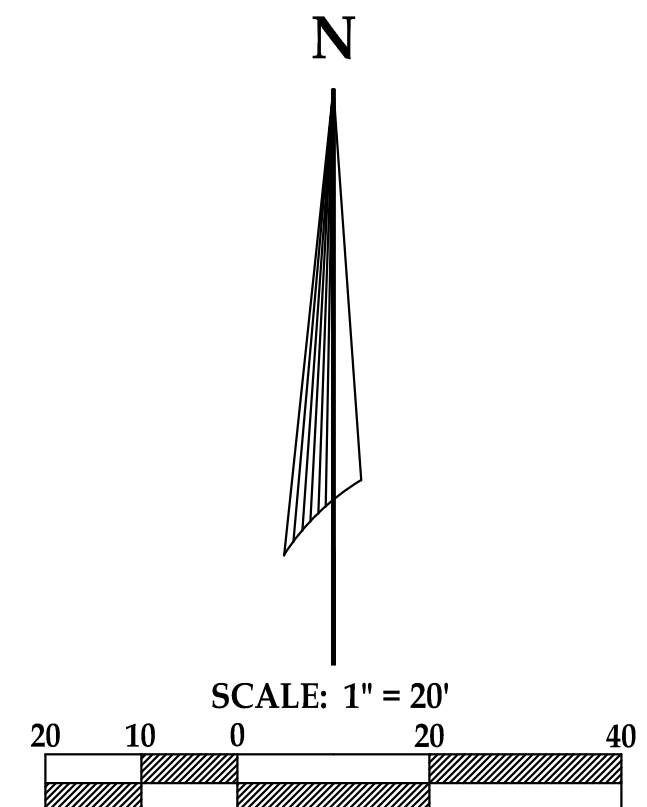
DATE:

7/10/2024

C

C2

2 OF 3 SHEETS



SWANSON
ENGINEERING, INC.
2000 Oak Street, Suite 150 - Bakersfield, CA 93301
P: (661) 831-4919; F: (661) 875-4777
JOB# 24-037

FIRE WATER PLANS - 2 RELOCATEABLE CLASSROOMS

GENERAL SHAFTER ELEMENTARY SCHOOL

1825 SHAFTER ROAD

BAKERSFIELD, CALIFORNIA 93313

FIRE WATER NOTES

1. ALL FIRE WATER LINE INSTALLATIONS SHALL COMPLY WITH KERN COUNTY FIRE DEPARTMENT STANDARDS.
2. FIRE HYDRANTS SHALL BE APPROVED BY THE KERN COUNTY FIRE DEPARTMENT.
3. N/A
4. HYDRANT NOZZLE SHALL BE 4".
5. ALL BACKFLOW DEVICES SHALL BE APPROVED BY THE KERN COUNTY HEALTH DEPARTMENT.
6. N/A
7. MINIMUM COVER OVER FIRE LINES SHALL BE 36".
8. ALL PIPE AND FITTINGS SHALL BE UL LISTED AND CONFORM TO N.E.P.A. #3 AND #24.
9. ALL UNDERGROUND ON-SITE FIRE LINE PIPING SHALL BE C900 CL 150 PVC, UNLESS NOTED OTHERWISE.
10. THRUST BLOCKS SHALL BE INSTALLED IN CONFORMANCE WITH N.E.P.A. #24, 2/FPI.
11. UNDERGROUND PIPING SHALL BE FLUSHED PER N.E.P.A. #24 BEFORE CONNECTING TO OVERHEAD FIRE SPRINKLER SYSTEM.
12. UNDERGROUND PIPING SERVING FIRE SPRINKLER SYSTEMS SHALL BE TESTED AT 200 PSI FOR 2 HOURS MINIMUM.

BENCHMARK

TOP K.C.S. CONCRETE MONUMENT AT CENTERLINE INTERSECTION OF SOUTH H STREET AND SHAFTER ROAD.

ELEVATION = 320.63'
MAD 300.00' TO ALL DESIGN ELEVATIONS*

BASIS OF BEARINGS

THE NORTH LINE OF THE NE 1/4 OF SECTION 24, T.31S, R.27E, M.D.M. PER KCS FILED MAP, BK. 6 PG. 127 OR, ALSO BEING THE CENTERLINE OF SHAFTER ROAD HAVING A BEARING OF S88°45'30"E WAS TAKEN AS THE BASIS OF BEARINGS SHOWN HEREON.

LEGAL DESCRIPTION

LOTS 1 AND 8 OF SECTION 24, T.31S, R.27E, M.D.M. ACCORDING TO THE SALES MAP OF LANDS OF THE KERN COUNTY LAND COMPANY* FILED AUGUST 27, 1992 IN THE OFFICE OF THE KERN COUNTY RECORDER.

ADDRESS

1825 SHAFTER RD, BAKERSFIELD, CA

APN

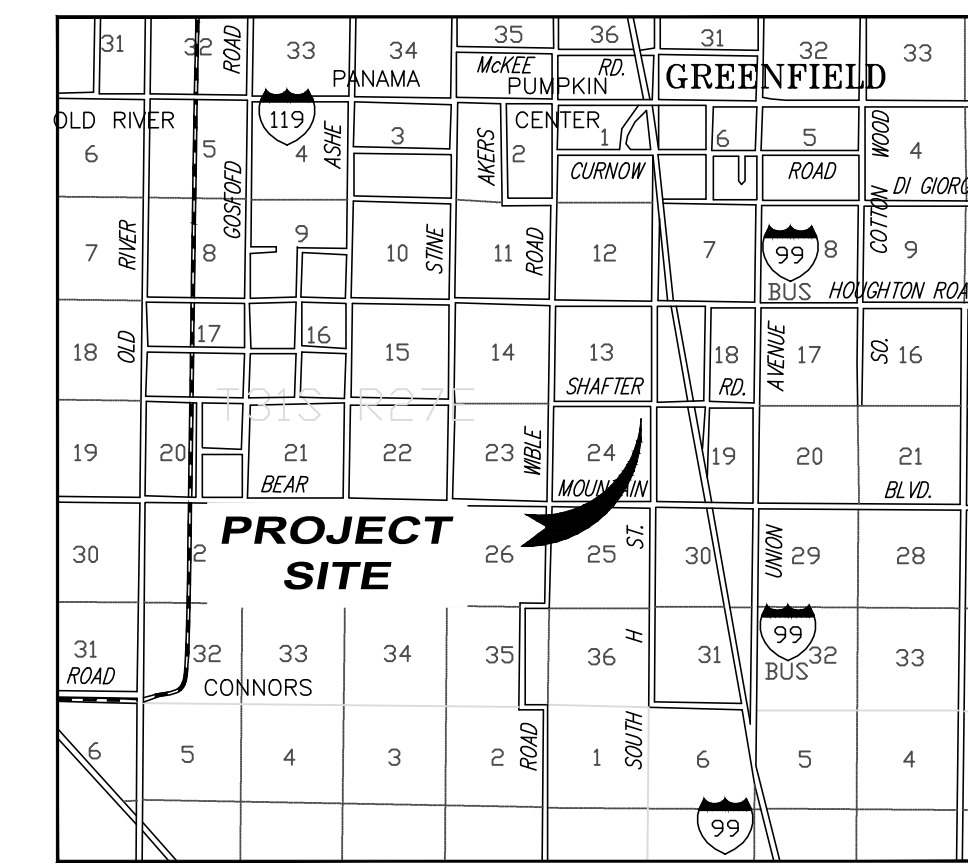
184-382-51.53

UTILITY NOTE

NOT ALL UTILITIES WERE LOCATED BY THIS SURVEY AND SWANSON ENGINEERING, INC. ASSUMES NO RESPONSIBILITY FOR UNDERGROUND UTILITIES OR FACILITIES NOT SHOWN OR FOR INFORMATION OBTAINED FROM OUTSIDE SOURCES.

TRENCHING NOTE

FOR ON-SITE TRENCHING SEE DETAIL 1, SHEET F1 UNLESS OTHERWISE SPECIFIED OTHERWISE.



VICINITY MAP
N.T.S.



N.T.S.

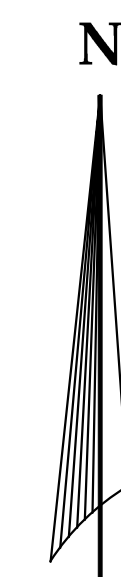
ABBREVIATIONS:
EJ EXISTING
TYP TYPICAL
FD FOUND
BK BROOK
PG PAGE
C.O.K. COUNTY OF KERN
C.O.B. CITY OF BAKERSFIELD
O.R. OPTICAL RECORDS
CONC CONCRETE
A.C. ASPHALT PAVEMENT
FG FINISH GRADE
EP EDGE OF PAVEMENT
TC TOP OF CURB
FL FLOORLINE
FF FINISHED FLOOR
FP FINISHED PAD
TP TOP OF PAVEMENT
GB GRADE BREAK
CL CENTERLINE

LEGEND:

- EXISTING FIRE HYDRANT
- EXISTING WATER METER
- EXISTING WATER VALVE
- EXISTING HOSE BIB
- EXISTING POWER POLE
- EXISTING STREET LIGHT
- FOUND MONUMENT
- EXISTING TRAFFIC SIGN
- EXISTING SINKER MANHOLE
- EXISTING STORM DRAIN MANHOLE
- EXISTING SEWER CLEANOUT
- EXISTING IRRIGATION VALVE
- EXISTING TELEPHONE PULL BOX
- EXISTING GAS METER
- EXISTING ELECTRICAL PULL BOX
- EXISTING LIGHT POLE
- DESIGN ELEVATION
- DETAIL CALLOUT
- CLEAN-OUT TO GRADE

- SD EXISTING STORM DRAIN LINE
- FO EXISTING FIBER OPTIC LINE
- W EXISTING WATER LINE
- SS EXISTING SEWER LINE
- G EXISTING GAS LINE
- X EXISTING FENCELINE
- U/E EXISTING ELECTRIC LINE
- OE EXISTING OVERHEAD ELECTRIC LINE
- EXISTING PROPERTY LINE
- EXISTING SECTION LINE
- EXISTING RIGHT-OF-WAY
- EXISTING CURB & GUTTER
- EXISTING GROUND CONTOUR LINE & ELEVATION
- SAWCUT
- LIMITS OF GRADING
- SD STORM DRAIN LINE - SDR35 PVC
- FW FIRE WATER LINE - DR18 C900 PVC

- 6" OF 3" AGC BASE / LANDSCAPE FABRIC / 12" NATIVE COMPACTED TO BOX
- 4" CONCRETE / 12" NATIVE COMPACTED TO BOX



SCALE: 1" = 10'



SWANSON ENGINEERING, INC.
2000 Oak Street, Suite 150 - Bakersfield, CA 93301
P: (805) 831-4818 F: (805) 875-4777

JOB# 24-037

BYC

2-24x40 RELOCATABLE CLASSROOMS AT

GENERAL SHAFTER ELEMENTARY SCHOOL

1825 SHAFTER ROAD, BAKERSFIELD, CA 93313

FOR
GENERAL SHAFTER SCHOOL DISTRICT
BAKERSFIELD, KERN COUNTY, CALIFORNIA



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BAKERSFIELD, CA 93309
PH: (661) 397-4377
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WWW.SCARCHITECT.COM



STEPHEN J. CORBIN, AIA, NCARB, LEED® AP

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FIRE WATER PLAN

MARK	DATE	REVISIONS
1		
2		
3		

JOB NO.
1389

DRAWN:
N/A

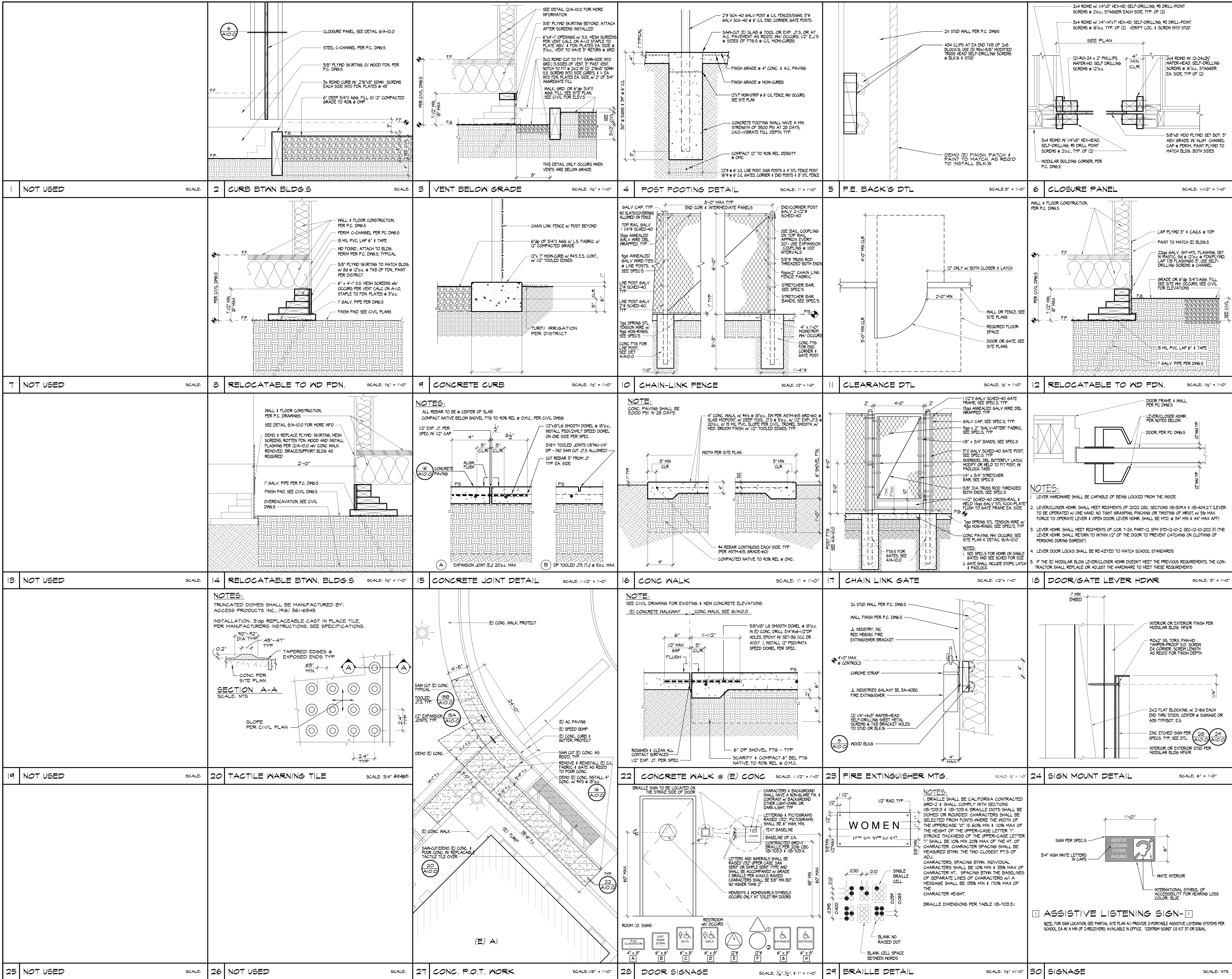
CHECKED:
-

DATE:
7/10/2024



F1

1 OF 1 SHEETS



IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-124658 INC.
REVIEWED FOR:
SS ☒ FLS ☒ ACS ☒
DATE: 01/08/2025

General Shafter
SCHOOL DISTRICT
Bakersfield, CA 93313

PTN: 63487-7 FILE: 15-70

2-2x4x40 RELOCATABLE CLASSROOMS AT
GENERAL SHAFTER ELEMENTARY SCHOOL
1825 SHAFTER ROAD, BAKERSFIELD, CA 93313
FOR
GENERAL SHAFTER SCHOOL DISTRICT
BAKERSFIELD, KERN COUNTY, CALIFORNIA



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DETAILS

MARK	DATE	REVISIONS
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JOB NO.
1389

DRAWN: SM
CHECKED: AGV
DATE: 6/10/24

10.0
- OF - SHEETS

1. PROVIDE MINIMUM 36" WORK CLEARANCE IN FRONT OF PANELS, SERVICE OR EQUIPMENT RATED AT 120/277V 30 4W (PER CEC-110.26).
2. PROVIDE MINIMUM 42" WORK CLEARANCE IN FRONT OF PANELS, SERVICE OR EQUIPMENT RATED AT 480/277V 30 4W (PER CEC-110.26).
3. PROVIDE MINIMUM 30" WIDE WORK SPACE FOR PANELS, SERVICE OR EQUIPMENT (PER CEC-110.26).
4. SPECIFY THAT ONLY LISTED OR LABELED EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH INSTRUCTIONS INCLUDED IN THE LISTING AND LABELING (PER CEC-110.3(B)).
5. SWITCHES SHALL BE MOUNTED A MAXIMUM OF 48" TO THE TOP OF BOX. RECEPTACLES SHALL BE MOUNTED A MINIMUM OF 15" TO THE BOTTOM OF BOX PER CBC 2022 SECTION 11B-308.
6. HVAC CIRCUIT BREAKERS SHALL BE RATED HCCR.
7. ALL SERVICE EQUIPMENT TO BE SUITABLE FOR AVAILABLE SHORT CIRCUIT CURRENT PER CEC ART 110.9.
8. PERMANENTLY DELINEATE ON THE FLOOR WORKING CLEARANCE IN FRONT OF ALL ELECTRICAL EQUIPMENT WITH THE WORDING "NO STORAGE IN THIS AREA" APPLIES TO ELECTRICAL ROOMS AND CLOSETS ONLY.
9. PRIOR TO ORDERING THE SWITCHGEAR, THE ELECTRICAL CONTRACTOR SHALL COORDINATE A.I.C. RATINGS OF SWITCHBOARDS AND PANEL BOARDS PER UTILITY COMPANY REQUIREMENTS. EVIDENCE OF SUCH COORDINATION SHALL BE AVAILABLE ON SITE FOR REVIEW BY INSPECTOR OF RECORD (IOR).
10. SWITCHBOARDS AND PANEL BOARDS THAT ARE LIKELY TO BE ENERGIZED WHILE BEING MAINTAINED OR SERVICED BY QUALIFIED PERSONNEL SHALL BE LABELED WARNING OF POSSIBLE ARC FLASH HAZARDS AND IDENTIFIED WITH THE APPROPRIATE ARC FLASH PROTECTION RATING PERSONAL PROTECTIVE EQUIPMENT (PPE) SIGNAGE (PER CEC ART. 110.16).
11. CONTRACTOR IS TO PROVIDE ENGRAVED NAMEPLATES ON EACH SERVICE PANEL, TRANSFORMER, DISCONNECT SWITCH MOTOR STARTER, ETC. (PER CEC-110.3).
12. CONTRACTOR WILL BE REQUIRED TO PROVIDE A LABEL PER CEC ARTICLE 408.4(A). PROVIDE TYPED PANEL BOARD DIRECTORIES. PANEL BOARDS SHALL ALSO BE MARKED COMPLIANT WITH ARC 408.4(B) FOR ORIGINATED SOURCE OF POWER.
13. NO PIPING, DUCTS, OR EQUIPMENT FOREIGN TO ELECTRICAL EQUIPMENT SHALL BE PERMITTED TO BE LOCATED WITHIN 6 FEET OF THE FLOOR OR TO THE STRUCTURAL CEILING ABOVE THE SPACE OF ELECTRICAL EQUIPMENT (PER CEC ART. 110.26).
14. EACH MULTIWIRED BRANCH CIRCUIT SHALL BE PROVIDED WITH A MEANS THAT WILL SIMULTANEOUSLY DISCONNECT ALL UNGROUNDED CONDUCTORS AT THE POINT WHERE THE BRANCH CIRCUIT ORIGINATES, SUCH AS HANDLE-TIES AND MULTI-POLE BREAKERS (PER CEC- 210.4(B)).
15. THE DISCONNECTING MEANS FOR EACH SERVICE, FEEDER OR BRANCH CIRCUIT ORIGINATING ON A SWITCHBOARD OR PANELBOARD SHALL BE LEGIBLY AND DURABLY MARKED TO INDICATE ITS PURPOSE UNLESS SUCH PURPOSE IS CLEARLY EVIDENT (CFC-605.3.1).
16. ALL WORK SHALL MEET THE LATEST ADOPTED ADDITIONS OF THE CALIFORNIA CODE OF REGULATIONS, TITLE 24 AND ALL OTHER APPLICABLE REGULATIONS, WHICH INCLUDE:

CALIFORNIA BUILDING CODE	2022
CALIFORNIA ELECTRICAL CODE	2022
NON RESIDENTIAL CEC ENERGY STANDARDS	2022
17. PROVIDE THE MAIN SERVICE EQUIPMENT ROOM EGRESS DOOR, WITH THE REQUIRED DIRECTION OF THE DOOR SWING AND THE REQUIRED DOOR HARDWARE. ART. 110.26(C)(3).
18. PROVIDE ARC-FAULT PROTECTION FOR ALL REQUIRED CIRCUITS AS PER ART. 210.12 (CEC).

All mechanical, plumbing, and electrical components shall be anchored and installed per the details on the DSA approved construction documents. Where no detail is indicated, the following components shall be anchored or braced to meet the force and displacement requirements prescribed in the 2022 CBC Sections. 1677A.1.18 through 1677A.1.26 and ASCE 7 -16 Chapter 13.26 and 30.








- A. All permanent equipment and components.
 1. Temporary or movable 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 flexible cable.
 2. Temporary, movable equipment or mobile equipment which is heavier than 400 lbs 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.
- B. The following mechanical and electrical components shall be positively attached to the structure, but need not be anchored to the structure. These components shall be subject to approval of the design professional in general responsible for the component and associated ductwork, piping, and conduit. Flexible connections must allow movement in both traverse and longitudinal directions.
 1. 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.
 2. Components weighing less than 200 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.
- C. The anchorage of all mechanical and electrical components shall be subject to approval of the design professional in general responsible for the component and associated ductwork, piping, and conduit. The project inspector will verify that all components and equipment have been anchored in accordance with the above requirements.

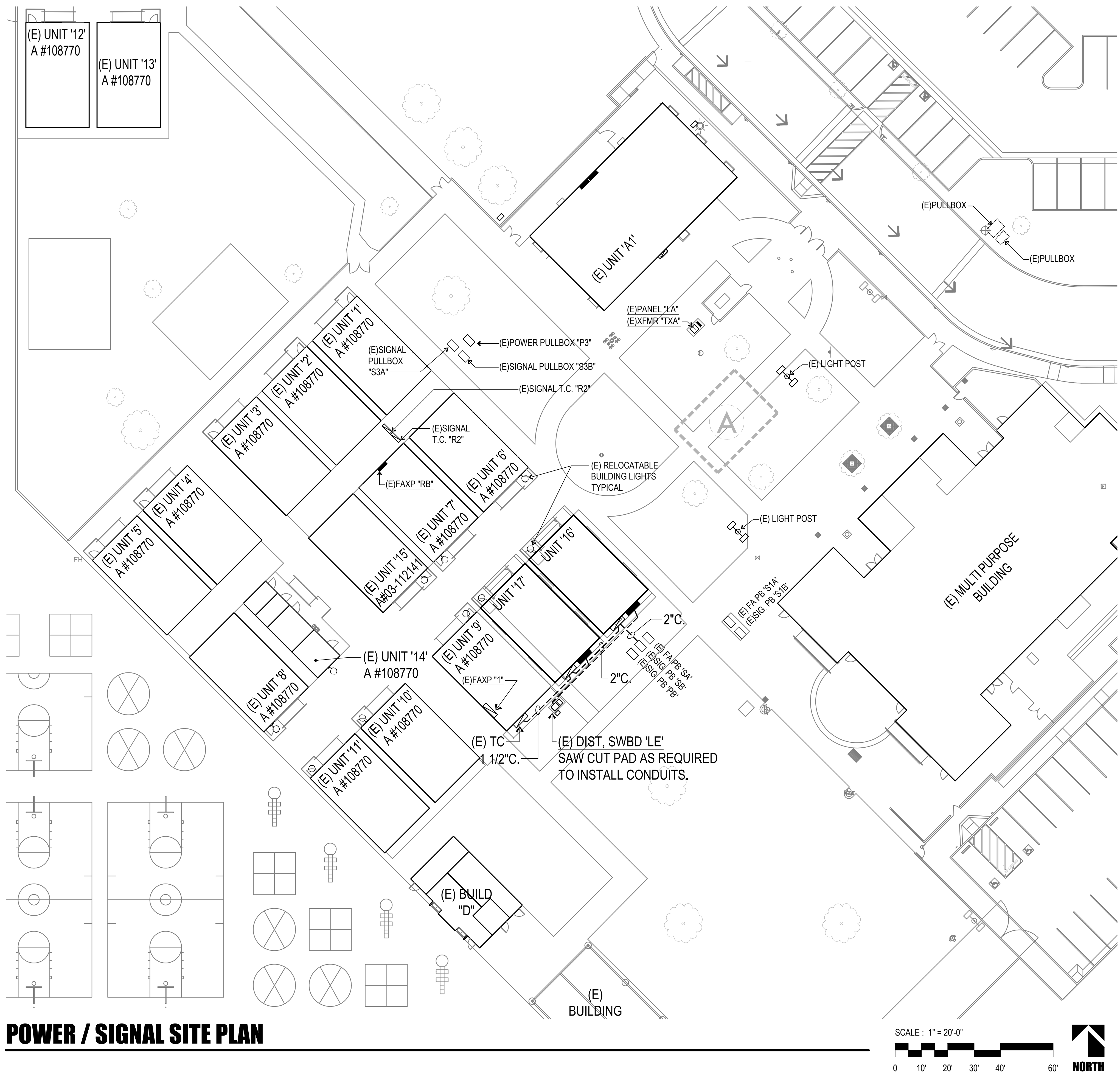
Piping, ductwork, and electrical distribution systems shall be braced to comply with the forces and displacements prescribed in ASCE 7-16 Section 13.3 as defined in ASCE 7-16 Sections 13.6.5, 13.6.6, 13.6.7, 13.6.8 and 2022 CBC Sections 1617A.1.24, 1617A.1.25 and 1617A.1.26.

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 pre-approved installation guide (e.g. OSHPD 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.

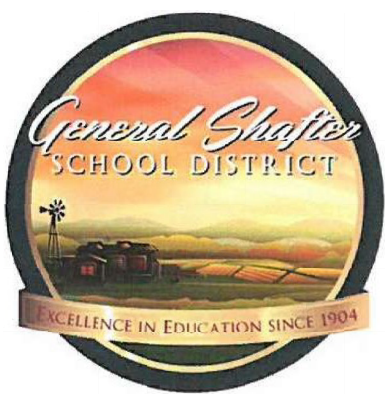
~~MP ☐ MD ☐ PP ☐ E ☒ Option 1: Detailed on the approved drawings with project specific notes and details.~~

~~MP ☐ MD ☐ PP ☐ E ☐ Option 2: Shall comply with the applicable OSHPD Pre-Approval (OPM#) #OPM-0052-13~~

SYMBOL SCHEDULE		
SYMBOL	NAME	DESCRIPTION
① ———	JUNCTION BOX - AS REQUIRED	4" SQUARE BOX & FLUSH PLATE MINIMUM
 ———	ELECTRICAL SWITCHBOARD	REFER TO SINGLE LINE DIAGRAM
 ———	ELECTRICAL PANEL	REFER TO PANEL SCHEDULE
 ———	TERMINAL CABINET	24"H x 18"W x 4"D
 ———	POST TOP LIGHT FIXTURE	SEE POLE BASE DETAIL THIS SHEET
- - - - -	WIRING BELOW GRADE	3/4" CONDUIT MINIMUM, REFER TO SPECIFICATIONS
— — — — —	WIRING IN WALL OR CEILING	3/4" CONDUIT MINIMUM, REFER TO SPECIFICATIONS
 ———	CONDUIT STUB AND CAP	
 ———	NUMBER OF HASH MARKS DENOTES NUMBER OF CONDUCTORS	
 ——— A-15	HOME RUN	TO PANEL 'A' CIRCUIT '15'
— · · ———	(E) CONDUIT TO REMAIN	
(E) ———	EXISTING ITEM	
U.O.N. ———	UNLESS OTHERWISE NOTED	
GFCI ———	GROUND FAULT CIRCUIT INTERRUPTER	



POWER / SIGNAL SITE PLAN



PTN:63487-7 FILE:15-70

24x40 RELOCATABLE CLASSROOMS AT
GENERAL SHAFTER ELEMENTARY SCHOOL
1825 SHAFTER ROAD, BAKERSFIELD CA. 93313
FOR
GENERAL SHAFTER SCHOOL DISTRICT
BAKERSFIELD, KERN COUNTY, CALIFORNIA

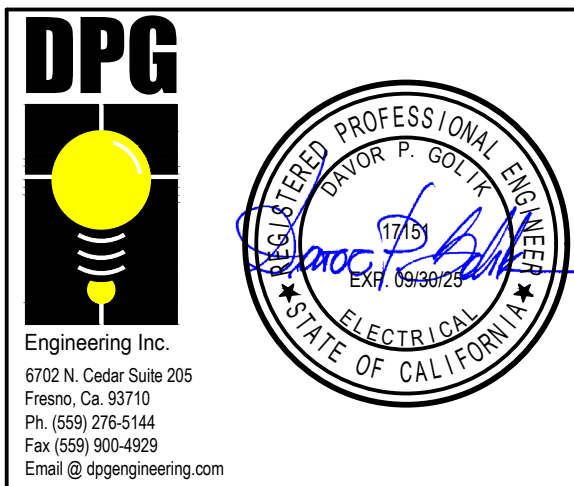


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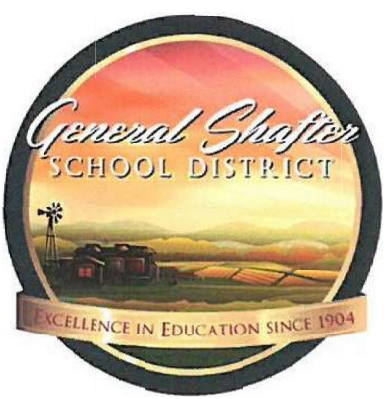


ELECT. SITE PLAN,
SYMBOL LEGEND,
& NOTES

MARK	DATE	REVISIONS
1		
2		
3		

JOB NO.	1389
DRAWN :	R.L.M.
CHECKED :	D.P.G.
DATE :	06/03/24

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OF SHEET



2-24x40 RELOCATABLE CLASSROOMS AT
GENERAL SHAFTER ELEMENTARY SCHOOL
1825 SHAFTER ROAD, BAKERSFIELD CA. 93313
FOR
GENERAL SHAFTER SCHOOL DISTRICT
BAKERSFIELD, KERN COUNTY, CALIFORNIA

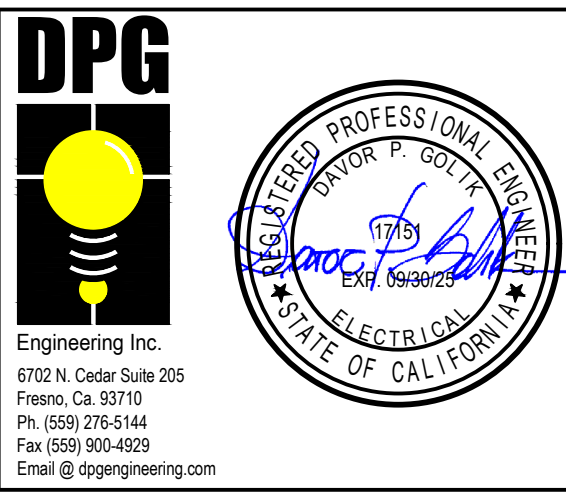


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ELECT. DETAILS &
SCHEDULES

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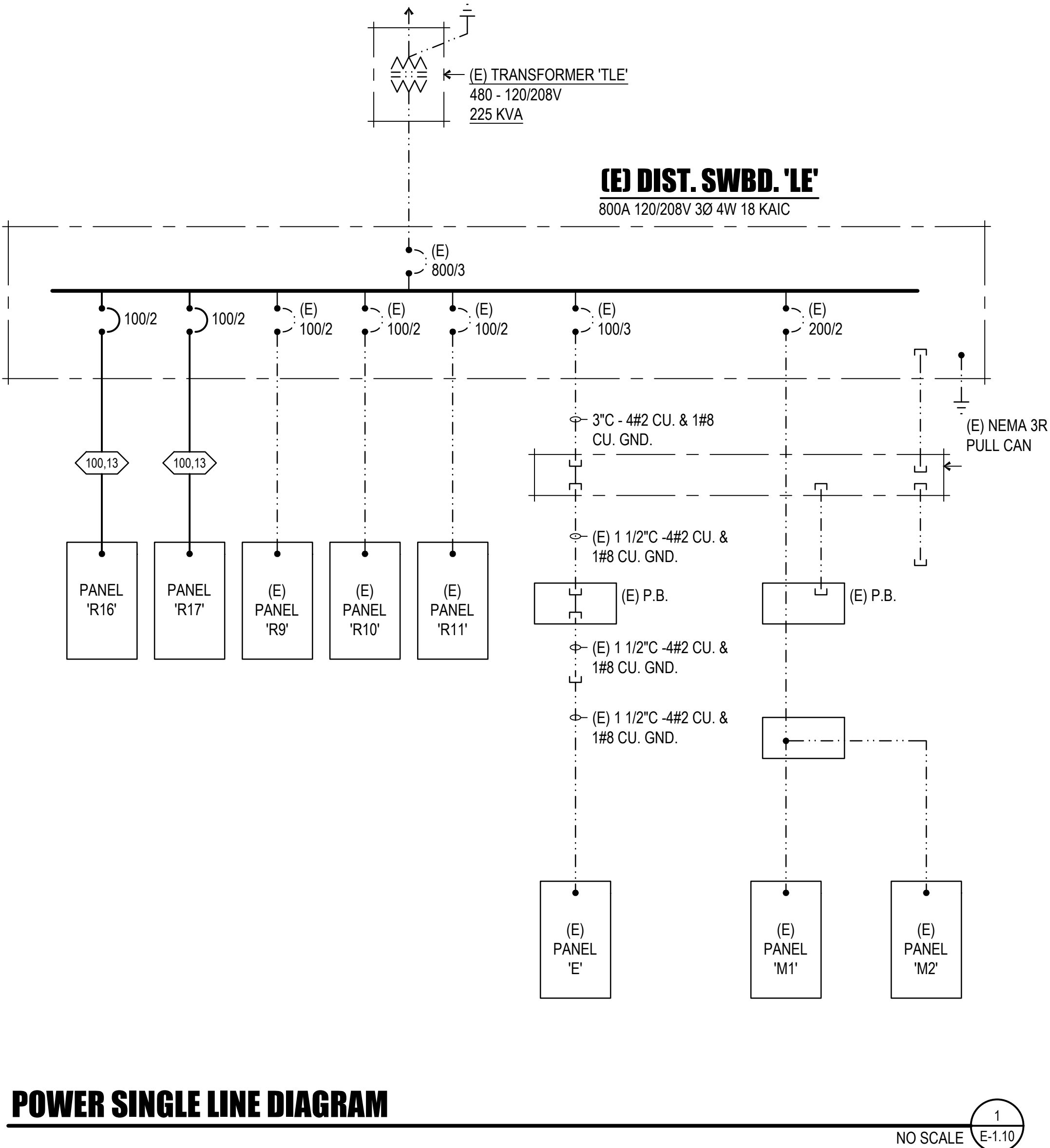
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FEEDER SCHEDULE							
AMPS	CONDUIT AND CONDUCTORS (THHN/THWN CU)					NYLON PULL LINE (NPL)	GROUNDING (THHN/THWN) COPPER PER CONDUIT
	PVC, EMT OR GRS	1Ø 3W (13)	3Ø 3W (33)	3Ø 4W (34)	3Ø 5W (35)		
30	3/4"	3 #10	3 #10	4 #10	NA	1	#10
40	3/4"	3 #8	3 #8	4 #8			#10
50	1"	3 #6	3 #6	4 #6			#10
60	1"	3 #6	3 #6	4 #6			#10
70	1 1/4"	3 #4	3 #4	4 #4			#8
80	1 1/4"	3 #3	3 #3	4 #3			#8
90	1 1/4"	3 #2	3 #2	4 #2			#6
100	1 1/2"	3 #1	3 #1	4 #1	5 #1		#6
125	1 1/2"	3 #1	3 #1	4 #1	5 #1		#6
150	2"	3 #1/0	3 #1/0	4 #1/0	5 #1/0		#6
175	2"	3 #2/0	3 #2/0	4 #2/0	5 #2/0		#4
200	2"	3 #3/0	3 #3/0	4 #3/0	----		#4
225	2 1/2"	3 #4/0	3 #4/0	4 #4/0	5 #4/0		#2
250	3"	3 #250 Kcmil	3 #250 Kcmil	4 #250 Kcmil	5 #250 Kcmil		#2
300	3 1/2"	3 #350 Kcmil	3 #350 Kcmil	4 #350 Kcmil	5 #350 Kcmil		#2
350	4"	3 #500 Kcmil	3 #500 Kcmil	4 #500 Kcmil	5 #500 Kcmil		#1/0
400	4"	3 #500 Kcmil	3 #500 Kcmil	4 #500 Kcmil	5 #500 Kcmil		#1/0
500	(2)3"	3 #250 Kcmil (EA)	3 #250 Kcmil (EA)	4 #250 Kcmil (EA)	5 #250 Kcmil (EA)		#2/0
600	(2)3 1/2"	3 #350 Kcmil (EA)	3 #350 Kcmil (EA)	4 #350 Kcmil (EA)	5 #350 Kcmil (EA)		#2/0
700	(2)4"	3 #500 Kcmil (EA)	3 #500 Kcmil (EA)	4 #500 Kcmil (EA)	5 #500 Kcmil (EA)		#2/0
800	(2)4"	3 #600 Kcmil (EA)	3 #600 Kcmil (EA)	4 #600 Kcmil (EA)	5 #600 Kcmil (EA)		#2/0
1000	(3)3 1/2"	3 #400 Kcmil (EA)	3 #400 Kcmil (EA)	4 #400 Kcmil (EA)	5 #400 Kcmil (EA)		#3/0
1200	(4)3 1/2"	3 #350 Kcmil (EA)	3 #350 Kcmil (EA)	4 #350 Kcmil (EA)	5 #350 Kcmil (EA)		#3/0
1600	(4)4"	3 #600 Kcmil (EA)	3 #600 Kcmil (EA)	4 #600 Kcmil (EA)	5 #600 Kcmil (EA)		#4/0
2000	(5)4"	3 #600 Kcmil (EA)	3 #600 Kcmil (EA)	4 #600 Kcmil (EA)	5 #600 Kcmil (EA)		#4/0

FEEDER AMPS
2000.35
CONDUCTOR TYPE (3Ø 5W)

NOTE:
3Ø 5W FEEDERS ARE 0A, 0B, 0C AND TWO NEUTRAL CONDUCTORS FOR NON
LINEAR LOAD APPLICATIONS.
VERIFY EQUIPMENT LUG SIZE PRIOR TO ORDERING CONDUCTORS, PARALLEL
FEEDER EQUIVALENT IS ACCEPTABLE.



POWER SINGLE LINE DIAGRAM

1. ALL WIRING IS SHOWN DIAGRAMMATICALLY. CONTRACTOR MAY VARY SEQUENCE OR CIRCUITRY. HOWEVER, ALL CIRCUITS SHALL BE CONTINUOUS AND SUPERVISED FROM DEVICE TO DEVICE OR FATC TO DEVICE OR FACP TO FATC OR FATC TO FATC. NO PARALLEL BRANCHING SHALL BE ALLOWED. ANY CONNECTION OF ANY BREAK IN ANY CONDUCTOR SHALL BE BY TERMINAL CONNECTION AT A DEVICE OR AT A FATC ONLY.
2. ALL CONNECTIONS SHALL BE PROPERLY LABELED BY CONDUCTOR AND SHALL HAVE STAKE ON LUG CONNECTORS. PANDUIT TAG (TIE WRAP) SEPARATE.
3. FIRE ALARM TERMINAL CABINETS SHALL HAVE SUFFICIENT SPACE, TERMINAL BOARDS AND SCREW TERMINAL CONNECTORS TO ALLOW CONNECTION OF ALL CONDUCTORS SHOWN. CONTRACTOR SHALL BE REQUIRED TO SUBMIT WITH HIS OTHER SHOP DRAWINGS, DETAILED DRAWINGS OF HIS PROPOSED CONNECTIONS AT EACH FIRE ALARM TERMINAL CABINET PRIOR TO COMMENCING ANY WORK.
4. FIRE ALARM PANEL, REMOTES AND COMPONENTS SHALL BE SECURED TO MOUNTING SURFACES PER MANUFACTURERS SPECIFICATIONS. NO SINGLE DEVICE SHALL EXCEED 20 LBS WITHOUT SPECIAL MOUNTING DETAILS. FIRE ALARM CONTROL PANELS AND REMOTE ANNUNCIATORS SHALL BE INSTALLED WITH THEIR BOTTOMS AT +48" ABOVE FINISHED FLOOR.
5. ALL FIRE ALARM WIRING SHALL BE FPLOR FPLP (FIRE POWER LIMITED) OR FIRE POWER LIMITED PLUS/UM AS REQUIRED FOR APPLICATION. WIRING IN CONDUIT ABOVE GROUND MAY BE TYPE #12 & #14 AWG, STRANDED (19 STRANDS OR LESS) COPPER THHN OR THWN or #16/2 SLG LOOP UNLESS OTHERWISE NOTED. UNDERGROUND AND EXTERIOR CONDUITS TO HAVE WATER TIGHT FITTINGS AND WIRE TO BE APPROVED FOR WET LOCATIONS.
6. 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 APPROVED LAB TESTING CRITERIA. APPROVED TYPES OF MATERIALS SHALL BE IDENTIFIED WITHIN THE PROJECT SPECIFICATIONS WITHIN THE FIRE ALARM

- INSTALLATION OF F.A. EQUIPMENT SHALL BE BY AN AUTHORIZED ENGINEERED SYSTEM DISTRIBUTOR FOR THE EQUIPMENT SPECIFIED BY THE MANUFACTURER FOR SALES, SERVICE, INSTALLATION AND MAINTENANCE. PROVIDE CERTIFICATIONS WITH EQUIPMENT SUBMITTALS. SUBMITTALS BY FIRMS NOT FULFILLING THIS REQUIREMENT WILL BE AUTOMATICALLY REJECTED. INSTALLER SHALL BE NICET LEVEL 3 CERTIFIED. 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. 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.
8. A STAMPED SET OF APPROVED FIRE ALARM DESIGN DOCUMENTS SHALL BE ON THE JOB SITE AND USED FOR INSTALLATION
9. WRITTEN CERTIFICATION USING NFPA 72 INSPECTION AND TESTING FORM BY THE FIRE ALARM EQUIPMENT DISTRIBUTOR (OR VENDOR OR MANUFACTURER) SHALL BE SUBMITTED TO DSA (WITH COPIES TO THE ELECTRICAL ENGINEER AND THE ARCHITECT OF RECORD) AND THE INSTALLATION INCLUDES TESTING AND OPERATION THAT CONFORMS IN ALL RESPECTS TO THE REQUIREMENTS AS SET FORTH IN C.B.C. SECTION 907.8. THE CONTRACTOR SHALL COMPLETE A FIRE ALARM SYSTEM RECORD AND COMPLETION FORM AND SUBMIT TO DSA.
10. UPON COMPLETION OF THE INSTALLATION OF THE FIRE ALARM SYSTEM, A SATISFACTORY TEST OF THE ENTIRE SYSTEM SHALL BE MADE IN THE PRESENCE OF THE ENFORCING AGENCY AND INSPECTOR OF RECORD. DSA, ARCHITECT/ENGINEER AND OWNER SHALL BE NOTIFIED A MINIMUM OF 48 HOURS PRIOR TO THE FINAL INSPECTION AND OR TESTING.
11. THE CERTIFIED INSTALLER WILL BE REQUIRED TO PROVIDE ALL FACTORY WARRANTIES AT THE CLOSE UP OF THE PROJECT.
12. SMOKE DETECTORS SHALL BE MOUNTED MINIMUM 36" FROM SUPPLY AND RETURN AIR VENTS PER MANUFACTURER'S

13. THE CONTRACTOR SHALL ARRANGE A MEETING WITH F.A. INSTALLER PRIOR TO ROUGH-IN TO COORDINATE THE INSTALLATION.
14. AUTOMATIC FIRE ALARM SYSTEMS SHALL TRANSMIT THE ALARM, SUPERVISORY AND TROUBLE SIGNALS TO AN APPROVED SUPERVISING STATION AS REQUIRED BY CBC 907.6.5. THE SUPERVISING STATION SHALL BE LISTED AS EITHER UJFX OR UJUS BY UNDERWRITERS LABORATORY OR SHALL MEET THE REQUIREMENTS OF FACTORY MUTUAL RESEARCH APPROVAL STANDARD 3011. SUPERVISION OF SYSTEM AND LEASED TELEPHONE LINES SHALL BE ARRANGED BY OWNER.
15. ALARM INDICATING DEVICES OF A FIRE ALARM SYSTEM INTENDED TO ALERT ALL OCCUPANTS SHALL CAUSE A LEVEL OF AUDIBILITY OF NOT LESS THAN 15 DBA ABOVE THE AVERAGE AMBIENT NOISE LEVELS OR 5DBA ABOVE MAXIMUM SOUND LEVEL HAVING A DURATION OF 60 SECONDS WHICH EVER IS GREATER. MEASURED 5' ABOVE THE FLOOR. AMBIENT NOISE LEVELS MEANS THE LEVEL WHICH CAN NORMALLY BE EXPECTED WHEN THE FACILITY, BUILDING, ROOM OR AREA IS FUNCTIONING UNDER NORMAL OPERATING OR WORKING CONDITIONS PER CFC 907.5.2.1.1. THE FIRE ALARM EVACUATION SIGNAL SHALL SOUND A SYNCHRONIZED THREE PULSE TEMPORAL PATTERN AS DESCRIBED IN NFPA 72 (CFC 907.5.2.1.3 AND NFPA 18.4.2.1.
16. THE CARBON MONOXIDE SIGNAL SHALL SOUND A FOUR PULSE TEMPORAL PATTERN PER NFPA 720 5.6.6.5.1
17. MICROPHONE ACCESSIBILITY SHALL COMPLY WITH CBC 11B-305 AND 11B-308
18. THE ALARM SYSTEM SHALL ACTIVATE A MEANS OF WARNING THE HEARING IMPAIRED. FLASHING VISUAL WARNINGS SHALL HAVE A FLASH RATE NOT EXCEEDING TWO FLASHES PER SECOND (2 HZ) NOR BE LESS THAN ONE FLASH EVERY SECOND (1 HZ). STROBE SIGNALING DEVICES FOR THE HEARING IMPAIRED SHALL BE STATE FIRE MARSHALL APPROVED AND LISTED. VISUAL NOTIFICATION APPLIANCES SHALL BE SYNCHRONIZED.
19. THE AUTOMATIC ALARM SYSTEM SHALL BE INSTALLED, TESTED,

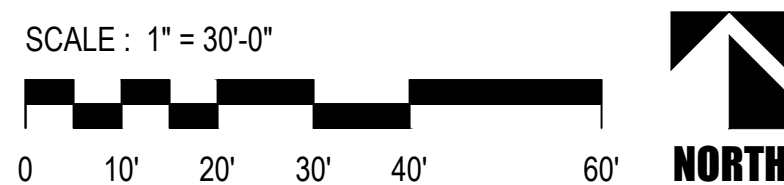
20. PROVIDE ACCESS HOLE FOR ALL ATTIC HEAT DETECTORS LOCATED IN NON-ACCESSIBLE CRAWL OR ATTIC SPACES.
21. ALL BATTERIES SHALL BE STAMPED WITH DATE PUT INTO SERVICE.
22. MANUAL PULL STATIONS SHALL NOT REQUIRE TIGHT GRIPPING, OR TWISTING OF THE WRIST TO OPERATE.
23. SYSTEM DESIGN SHALL BE IN ACCORDANCE WITH 2022 CBC, 2022 CFC, 2022 NFPA 72, NATIONAL FIRE ALARM AND SIGNALING CODE AND NFPA 720, STANDARD FOR THE INSTALLATION OF CARBON MONOXIDE DETECTION AND WARNING EQUIPMENT (2015)
24. THE CONTRACTOR SHALL ADJUST/INSTALL ALL DEVICES TO MAXIMIZE PERFORMANCE AND TO MINIMIZE FALSE ALARMS.
25. 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.
26. 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 MANNER AS INDICATED ON DESIGN DOCUMENTS. EXPOSED EXPOSED CIRCUITS ARE ONLY PERMITTED WHEN NOTED AS EXPOSED ON DESIGN DOCUMENTS.
27. PROVIDE FIRE WATCH TO COMPLY WITH DSA IFR-2(F) DURING CONSTRUCTION THE FIRE ALARM SYSTEM IS NOT OPERATIONAL AND STUDENTS ARE PRESENT IN CAMPUS.
28. VERIFY ALL ADDRESSES OF EXISTING FIRE ALARM INITIATION

FIRE ALARM DEVICE SEQUENCE OF OPERATION MATRIX

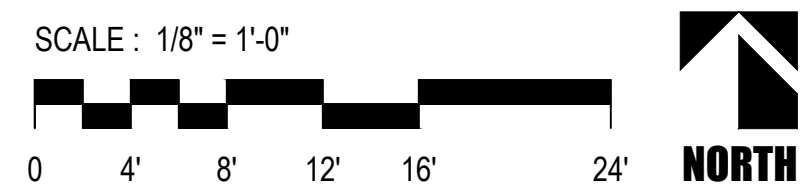
FA CABLE SCHEDULE			
'A'	ADDRESSABLE FA COMMUNICATION CABLE	WEST PENN #D990 (INDOOR)	WEST PENN #AQ225 (OUTDOOR)
'B'	2#12 CU.	WEST PENN #998 (INDOOR)	WEST PENN #AQ227 (OUTDOOR)
'C'	SPEAKER CABLE 14/2	WEST PENN #972 (INDOOR)	WEST PENN #AQ295 (OUTDOOR)

REFERENCE NOTES

- ① REPLACE EXISTING FA HORN WITH NEW SPEAKER HORN. SEE FIRE ALARM SINGLE LINE DIAGRAM FOR NEW CONNECTION REQUIREMENTS.
- ② REPLACE ALL EXISTING FA HORN / VISUALS IN THIS BUILDING WITH NEW SPEAKER / VISUALS. SEE FIRE ALARM SINGLE LINE DIAGRAM FOR NEW CONNECTION REQUIREMENTS.



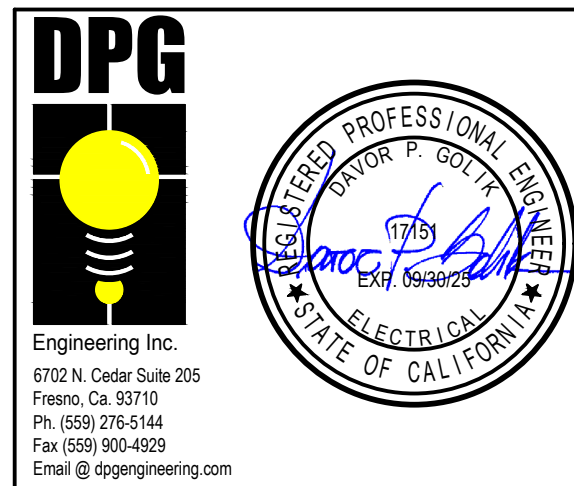
The figure contains two wiring diagrams for a two-story house. The left diagram shows a single-phase system with a main panel (1B-1) and a sub-panel (1A TYP). The right diagram shows a two-phase system with a main panel (1B-1) and a sub-panel (1A TYP). Both diagrams include labels for various components like switches, outlets, and wiring types.



24x40 RELOCATABLE CLASSROOMS AT
GENERAL SHAFTER ELEMENTARY SCHOOL
1825 SHAFTER ROAD, BAKERSFIELD CA. 93313
FOR
GENERAL SHAFTER SCHOOL DISTRICT
BAKERSFIELD, KERN COUNTY, CALIFORNIA



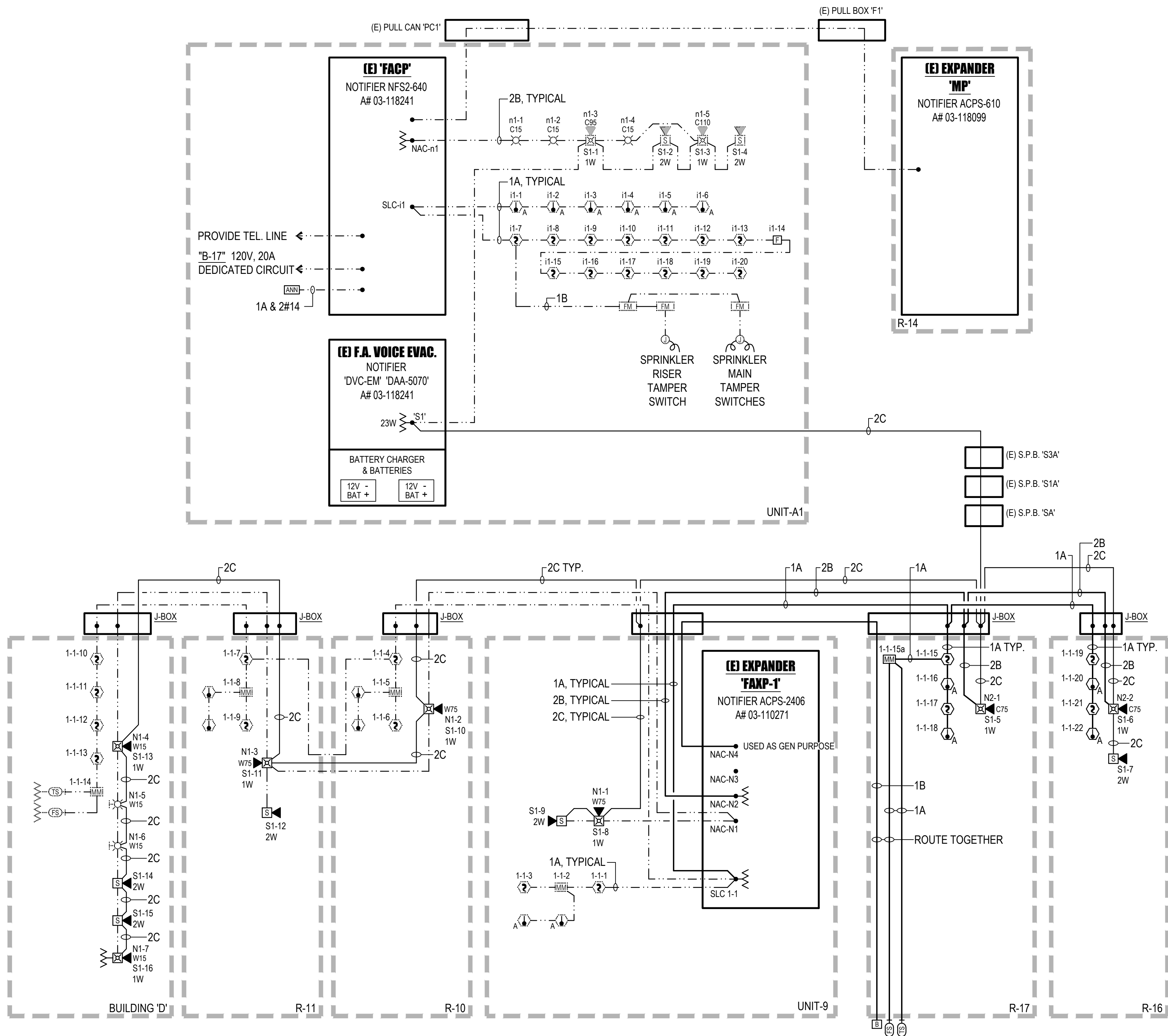
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FIRE ALARM SINGLE LINE DIAGRAM

1
E-2.10
NOT TO SCALE

FA EXPANDER BATTERY CALCULATION

Expander Panel "FAXP-1"

POWER REQUIREMENTS

	No.	CURRENT [A]	
		SUPERVISORY	ALARM
PANEL OVERHEAD	-	0.880	1.461
(E) INITIATION DEVICES	14	0.004	0.007
(N) INITIATION DEVICES	8	0.002	0.028
(E) NAC CKT SUMMARY	2	-	1.168
TOTALS		0.887	2.664

BATTERY CAPACITY

SUPERVISORY POWER = 24 Hr * 0.8866A = 21.278 AHr
ALARM POWER = 0.25 Hr * 2.664A = 0.666 AHr

TOTAL POWER REQUIREMENT = 21.944 AHr
WITH 25% SAFETY FACTOR = 27.431 AHr
MINIMUM BATTERY CAPACITY = 55 AHr
USE NOTIFIER BATTERIES (2) BAT-12550-BP

Note:

1. PRIOR TO START OF CONSTRUCTION, PERFORM BATTERY TEST AND PROVIDE REPORT TO EOR. INCLUDE IN REPORT, EXISTING SUPERVISORY AND ALARM CURRENT.
2. PROVIDE BATTERY BOX/AS REQUIRED

VOLTAGE DROP CALCULATION

NAC Circuit "NT"

VD = Voltage Drop [V]
I = Current [A] (0.816A)
K = 11 (Copper Constant)
L = Distance to Load [ft.] (185)
CM = Circular Mils (#12 AWG = 6530)
V = Voltage [V] (24VDC)
 $VD = \frac{K * I * L}{CM} = \frac{11 * 0.816 * 2 * 185}{6530} = 0.509 V$

$VD\% = \frac{VD}{20.4} = 2.5\%$

VOLTAGE DROP CALCULATION

NAC Circuit "N2"

VD = Voltage Drop [V]
I = Current [A] (0.352A)
K = 11 (Copper Constant)
L = Distance to Load [ft.] (105)
CM = Circular Mils (#12 AWG = 6530)
V = Voltage [V] (24VDC)
 $VD = \frac{K * I * L}{CM} = \frac{11 * 0.352 * 1 * 105}{6530} = 0.125 V$

$VD\% = \frac{VD}{20.4} = 0.6\%$

VOICE EVAC BATTERY CALCULATION

DAA SERIES DIGITAL AUDIO AMPLIFIERS "DAA-5070"

POWER REQUIREMENTS

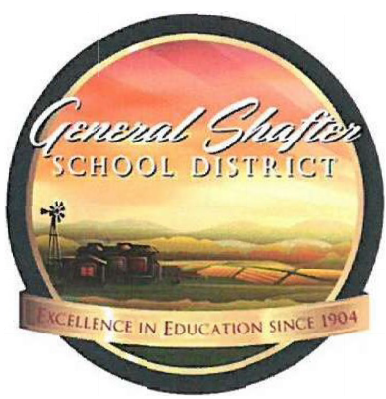
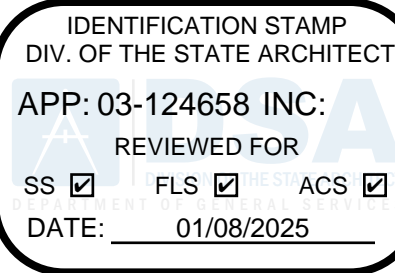
	CURRENT [A]	
	STANDBY	ALARM
PANEL OVERHEAD	0.027	0.446
SPEAKER LOAD	-	0.384
TOTALS	0.027	0.830

BATTERY CAPACITY

SUPERVISORY POWER = 24 Hr * 0.0272A = 0.653 AHr
SPEAKER LOAD = 0.25 Hr * 0.83A = 0.208 AHr

TOTAL POWER REQUIREMENT = 0.860 AHr
MINIMUM BATTERY CAPACITY = 1.075375 AHr

PROVIDE 5 AH BATTERY



PTN: 63487-7 FILE:15-70

2-24x40 RELOCATABLE CLASSROOMS AT
GENERAL SHAFTER ELEMENTARY SCHOOL
1825 SHAFTER ROAD, BAKERSFIELD CA. 93313
FOR
GENERAL SHAFTER SCHOOL DISTRICT
BAKERSFIELD, KERN COUNTY, CALIFORNIA

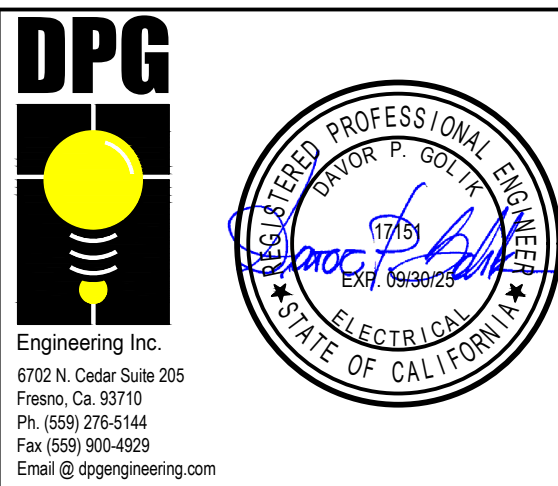


1601 NEW STINE ROAD, SUITE 280
BAKERSFIELD, CA 93309
PH: (661) 397-4377
FAX: (661) 397-4378
WWW.SCARCHITECT.COM



STEPHEN J. CORBIN, NCARB, AIA, LEED ®-AP

CHECK AND VERIFY ALL DIMENSIONS BEFORE PROCEEDING WITH THE WORK. REPORT DISCREPANCIES TO THE ARCHITECT. ALL CONSTRUCTION SHALL CONFORM TO THE C.B.C.



FIRE ALARM
SINGLE LINE
DIAGRAM AND
SCHEDULES

MARK	DATE	REVISIONS
△		
△		
△		

JOB NO.
1389
DRAWN:
R.L.M.
CHECKED:
D.P.G.
DATE:
06/03/24

2.10
OF SHEETS



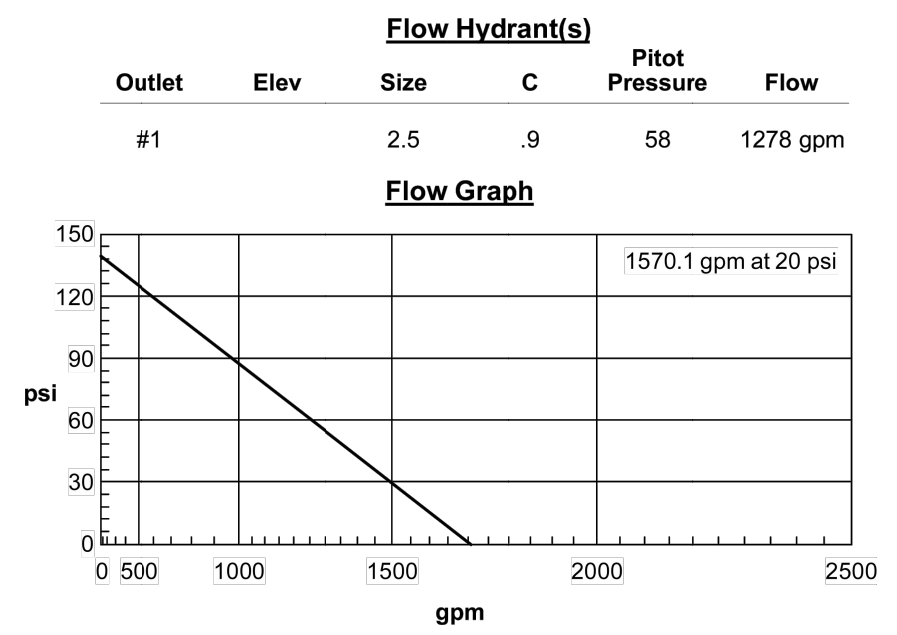
FIRE SPRINKLER HYDRAULIC REFERENCE SITE PLAN (FOR HYDRAULIC REFERENCE ONLY)
SCALE: 1"=20'-0"

KEY NOTES

- 1 FIRE SPRINKLER RISER
- 2 10" ELECTRIC BELL
- 3 FLOW TEST HYDRANT
- 4 READ HYDRANT

Hydrant Flow Test Report

Location: General Shafter Elementary School, 1825 Shafter Rd, Bakersfield, CA 93313
Test Date: 6/17/2024
Test Time: 1:30 PM
Tested by: Another In The Fire, Inc., 16022 San Marco Pl, Bakersfield, CA 93314, C-16 License #1078553, NICET Cert. #148354, David Holt & Jerry Esposito
Notes: Hydrant A Pressure Readings, Hydrant B Flow Hydrant
Read Hydrant: 140 psi static pressure, 58 psi residual pressure, 1.5 ft hydrant elevation



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DIV. OF THE STATE ARCHITECT
APP: 03-124658 INC:
REVIEWED FOR
SS ☒ FLS ☒ ACS ☒
DATE: 01/08/2025

PTN: 63487-7 FILE:15-70

TWO (2) RELOCATABLE CLASSROOMS AT
GENERAL SHAFTER ELEMENTARY SCHOOL
1825 SHAFTER ROAD, BAKERSFIELD, CA 93313
FOR
GENERAL SHAFTER SCHOOL DISTRICT
BAKERSFIELD, KERN COUNTY, CALIFORNIA



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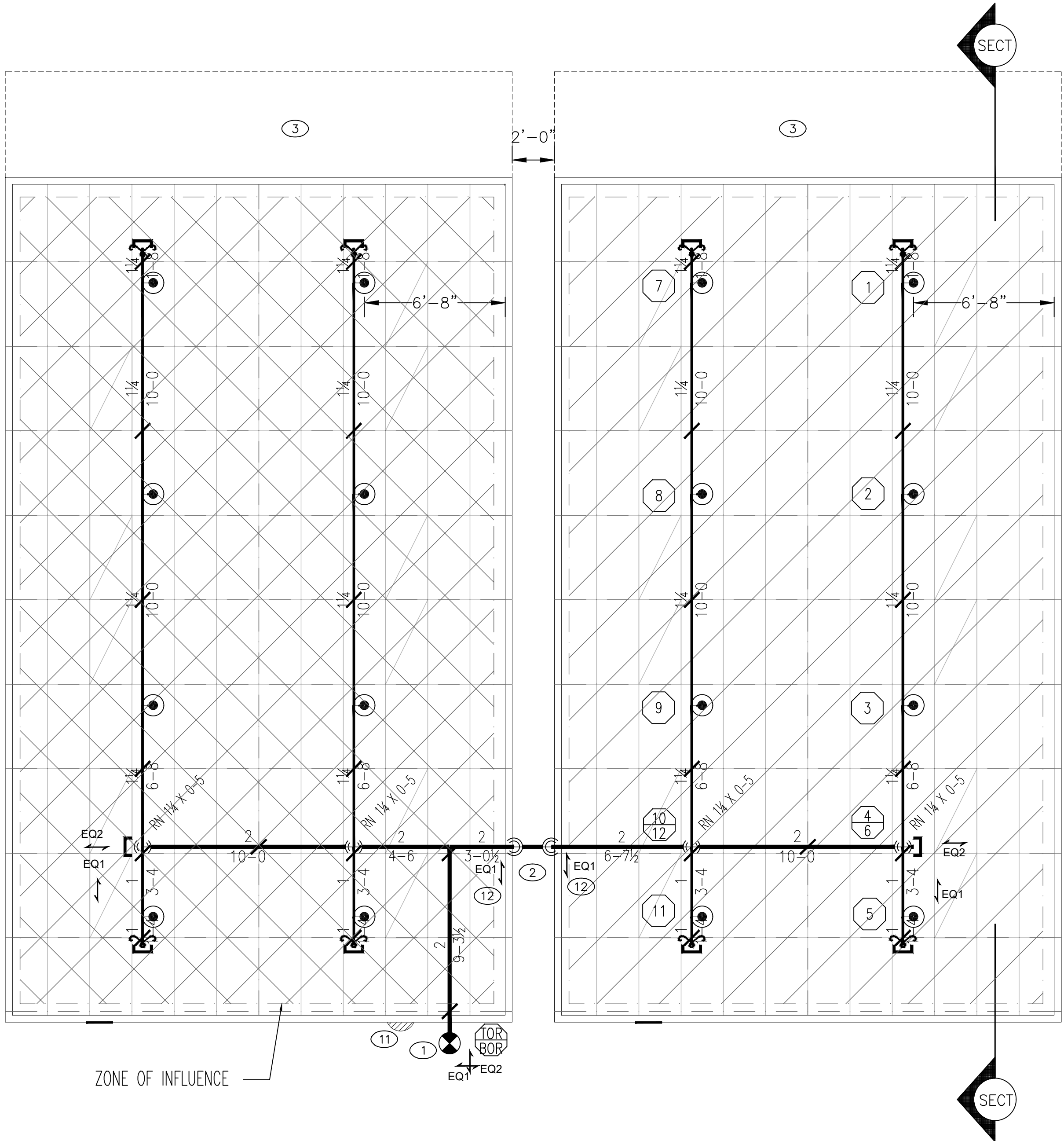
STEPHEN J. CORBIN, AIA, NCARB, LEED®-AP BD+C
CHECK AND VERIFY ALL DIMENSIONS BEFORE PROCEEDING WITH THE WORK. REPORT DISCREPANCIES TO THE ARCHITECT. ALL CONSTRUCTION SHALL CONFORM TO THE C.B.C.

FIRE SPRINKLER HYDRAULIC REFERENCE SITE PLAN

MARK	DATE	REVISIONS
1		
2		
3		

JOB NO. _____
DRAWN: _____
CHECKED: _____
DATE: _____
FP1
OF SHEETS

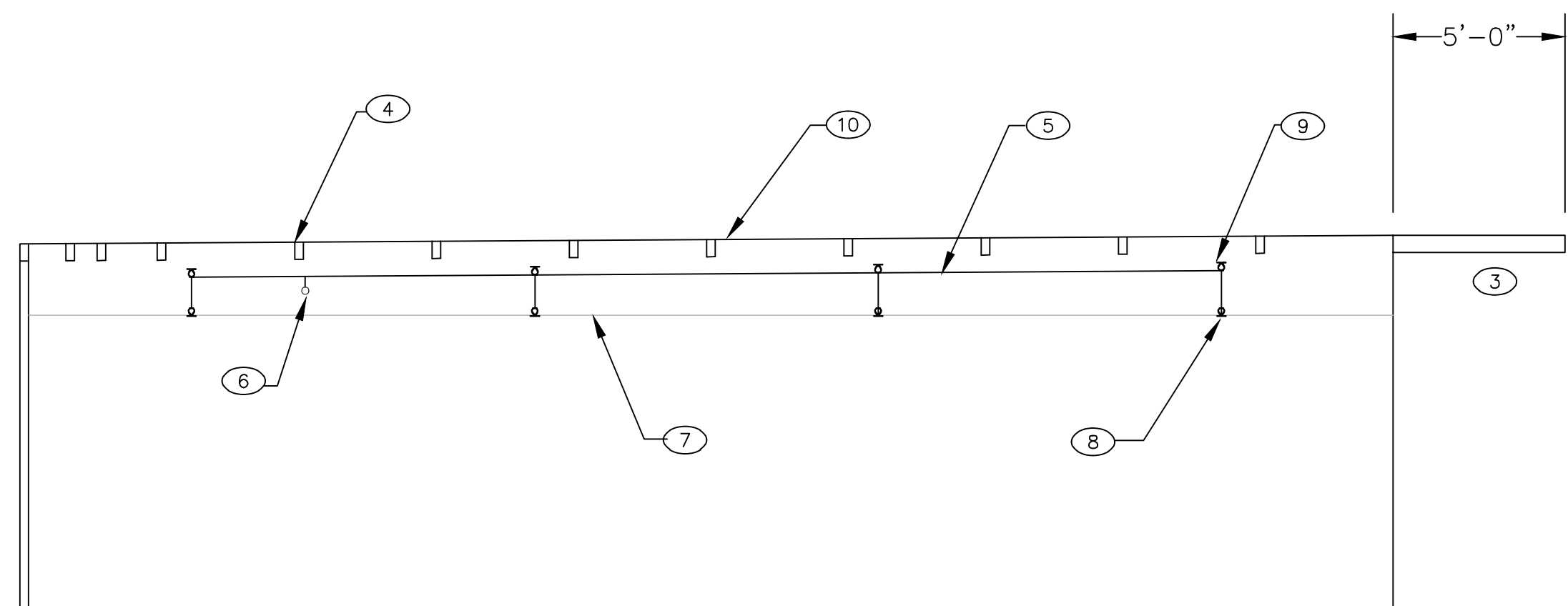
BASKIN MECHANICAL ENGINEERS
2131 19th St, Suite B
Bakersfield, CA 93301
Tel: (661) 397-2114
Pit: 10-24-24



FIRE SPRINKLER PIPING PLAN

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

HYDRAULIC - SYSTEM			
This building is protected by a Hydraulically Designed Automatic Sprinkler System.			
Location	Periode		
No. of Sprinklers	8		
Basis of Design	1. DENSITY	.1	GPM/NO. FT.
2. DESIGNED AREA OF DISCHARGE	Entire Bldg.	50	FT.
System Demand			
1. GPM DISCHARGE	127.60	OPM	
2. RESIDUAL PRESSURE AT THE BASE OF THE RISER	41.36	PSI	
Building Information			
1. OCCUPANCY CLASSIFICATION	Light Hazard		
2. COMMODITY CLASSIFICATION	N/A		
3. MAXIMUM STORAGE HEIGHT	N/A		



FIRE SPRINKLER BUILDING CROSS SECTION

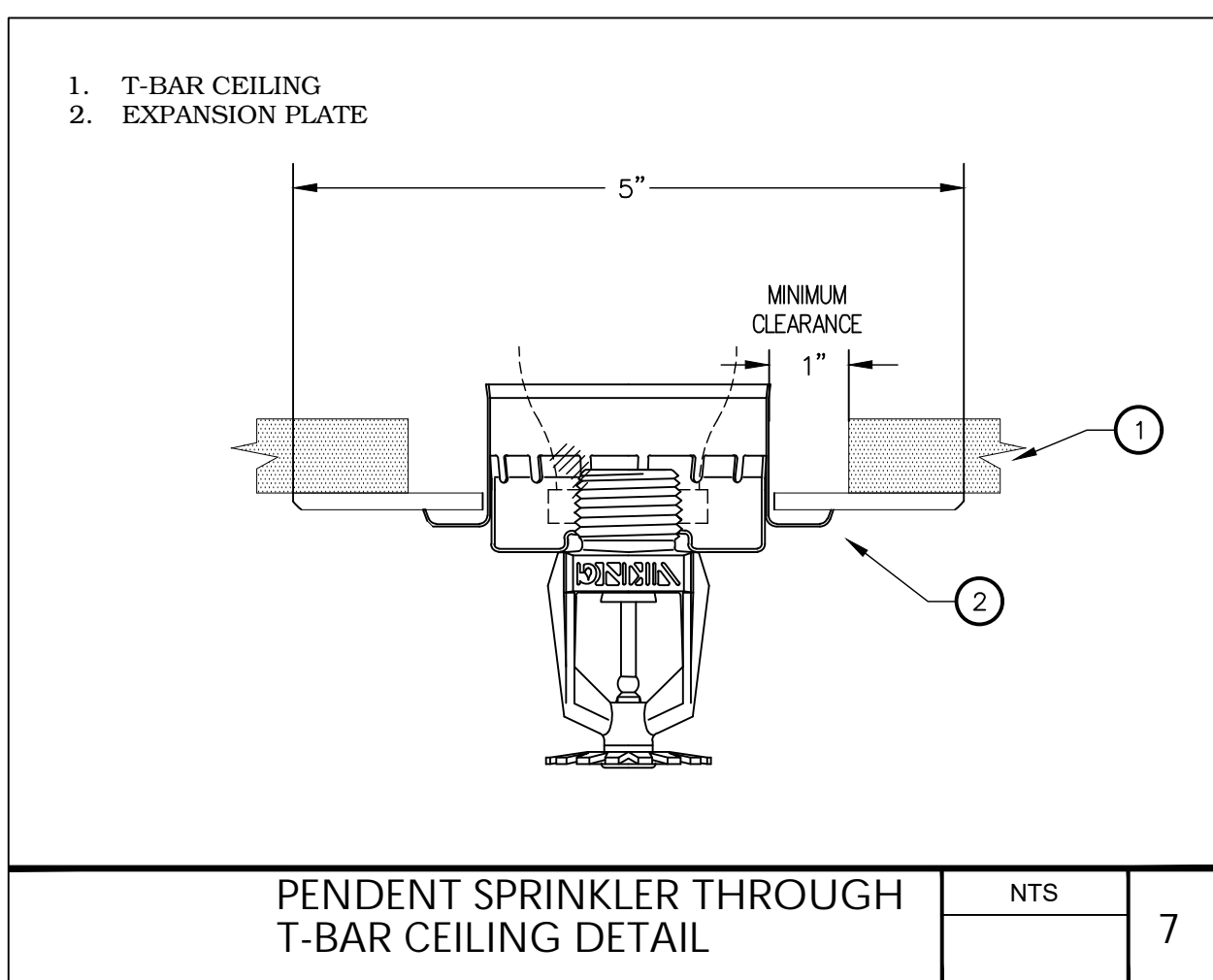
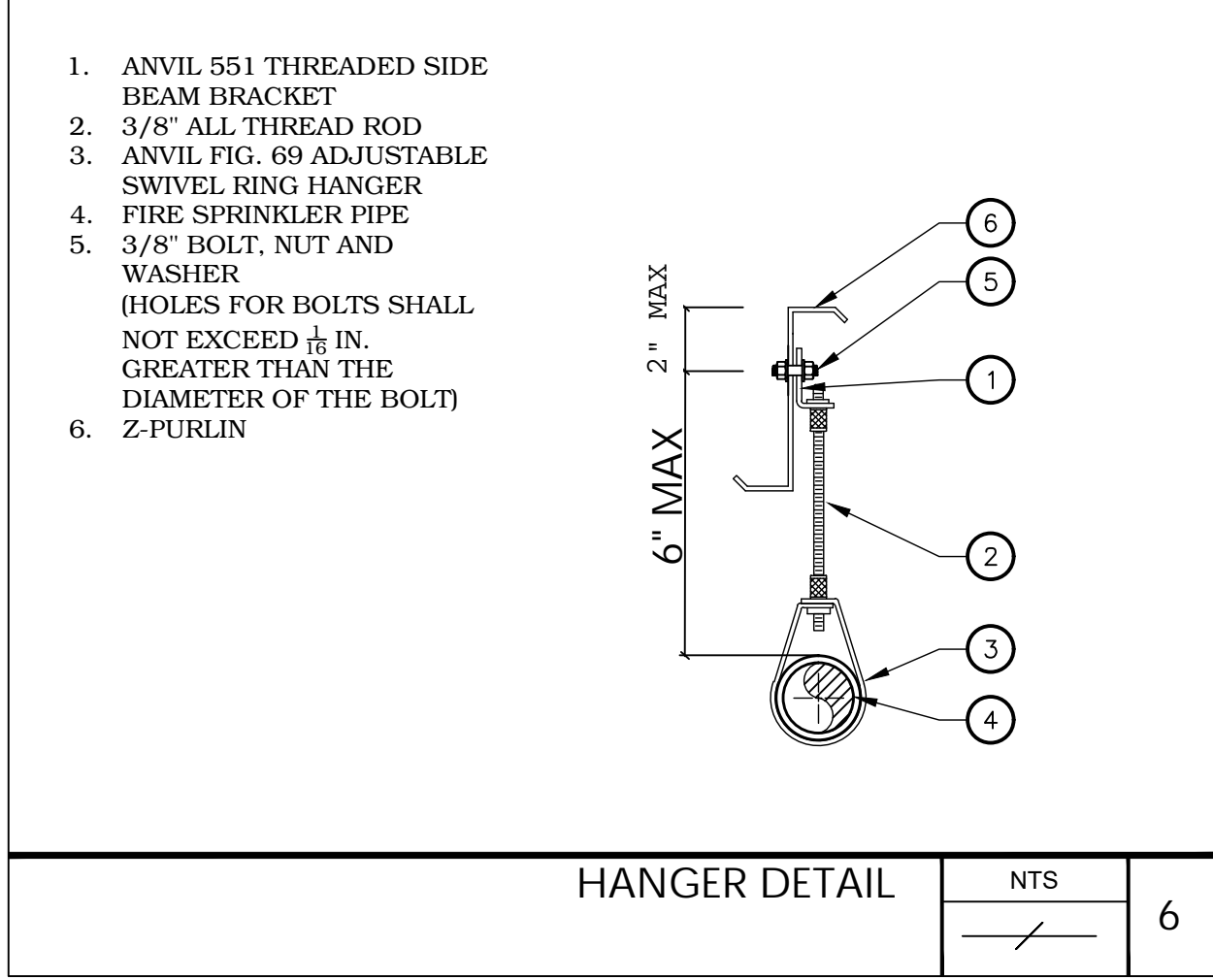
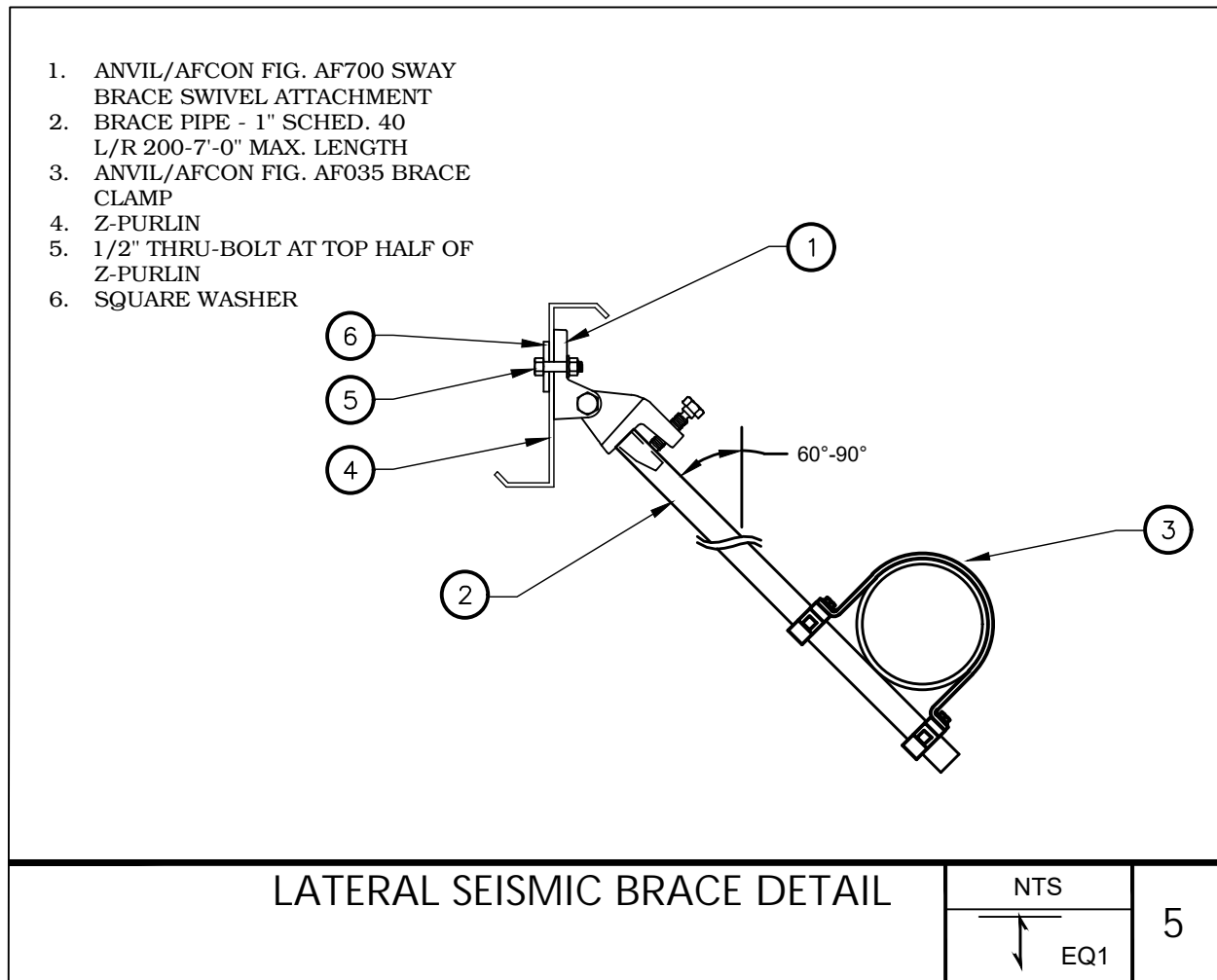
SCALE: 1/8"=1'-0"

KEY NOTES

- 1 FIRE SPRINKLER RISER
- 2 METRAFLUX FIRE LOOP WITH AIR RELEASE VALVE - 4" MOVEMENT
- 3 NONCOMBUSTIBLE EXTERIOR CANOPY - NO A.S. REQUIRED PER NFPA 13 8.15.7.3
- 4 1" - 6" DEFLECTOR DISTANCE
- 5 BRANCH LINE
- 6 2" FIRE SPRINKLER MAIN
- 7 T-BAR CEILING
- 8 155° QR SEMI RECESSED PENDENT SPRINKLER HEAD
- 9 200° QR UPRIGHT SPRINKLER HEAD
- 10 STEEL JOIST WITH METAL DECK
- 11 10" ELECTRIC BELL
- 12 SEISMIC BRACE TO ROOF STRUCTURE

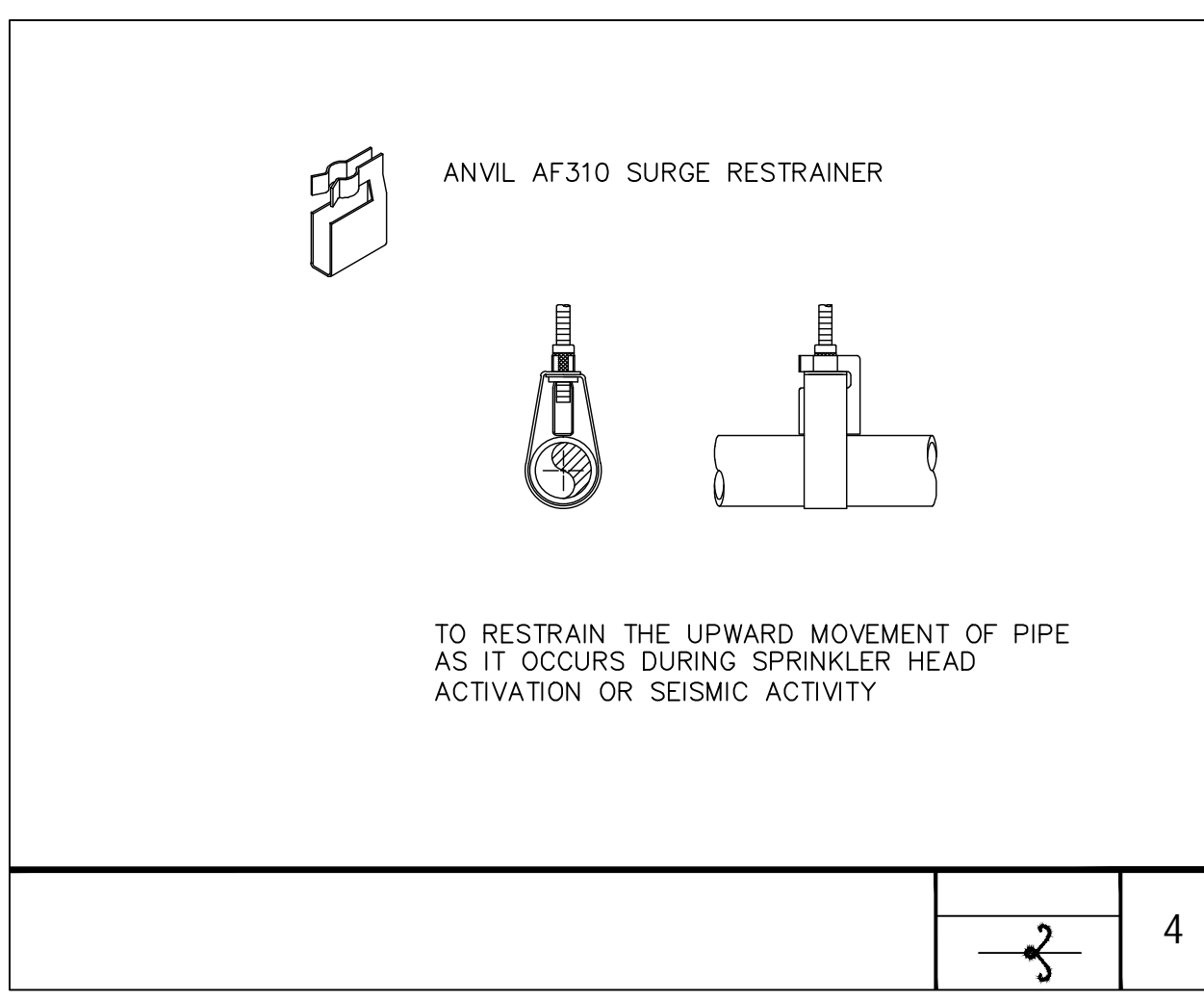
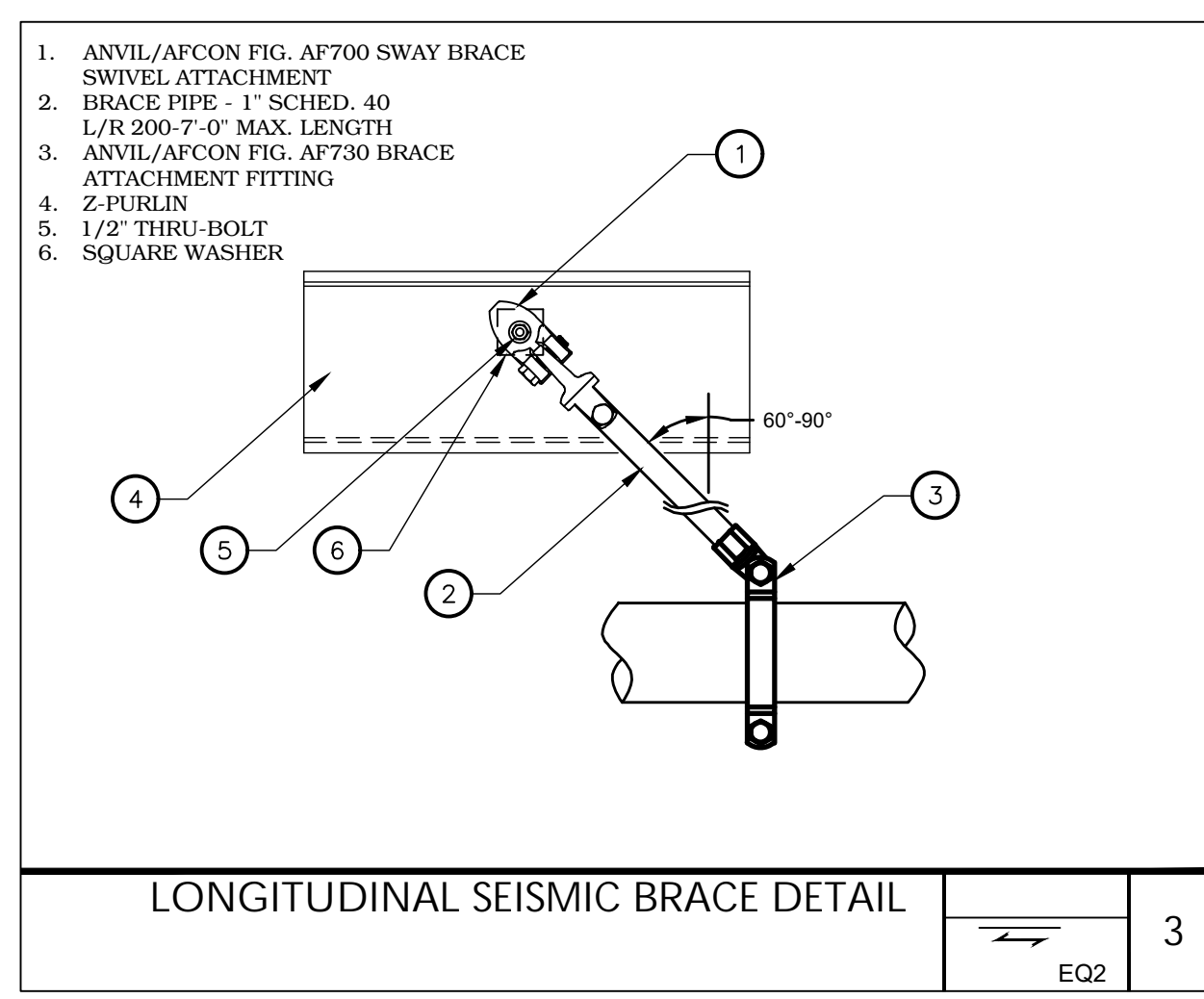
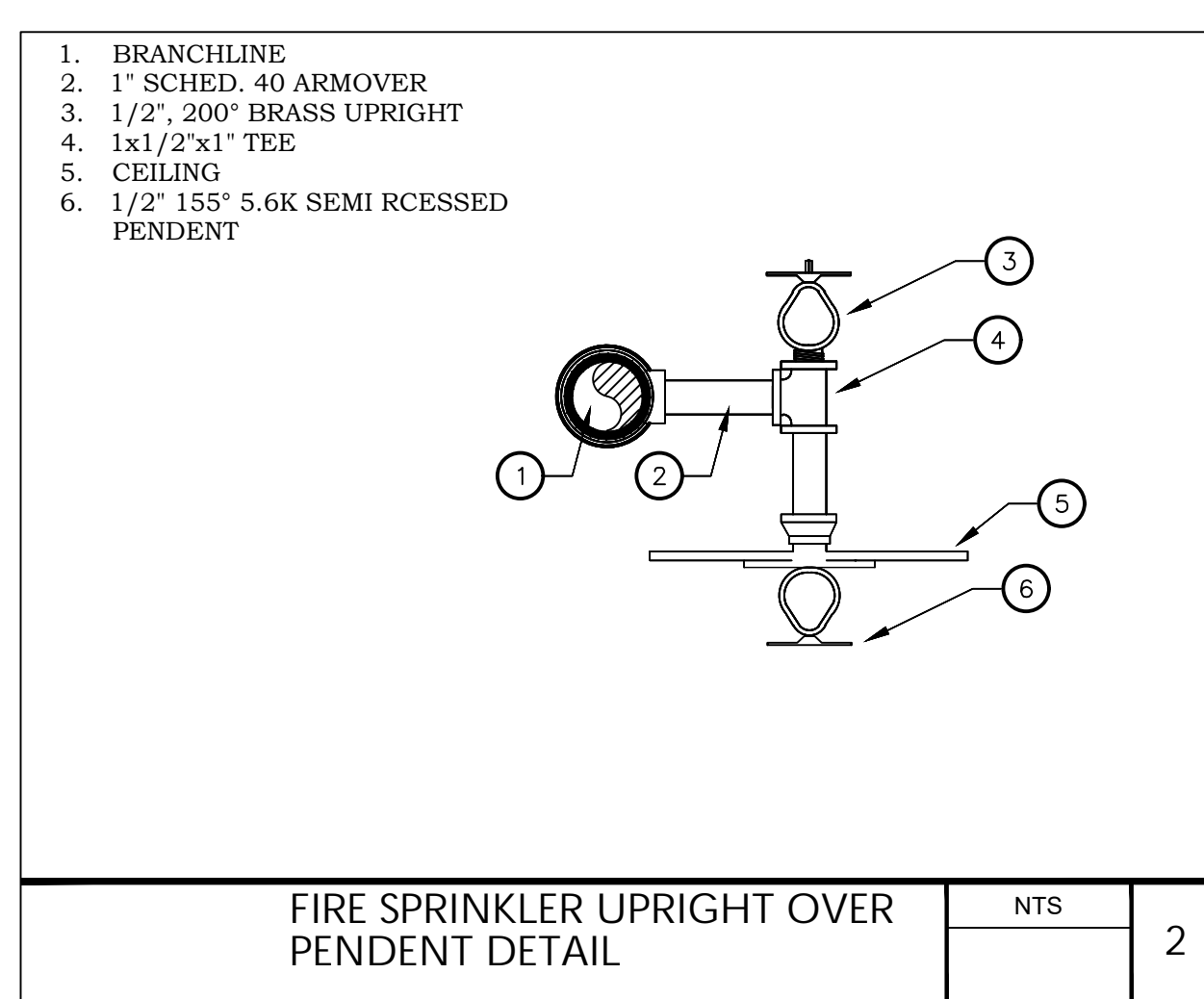
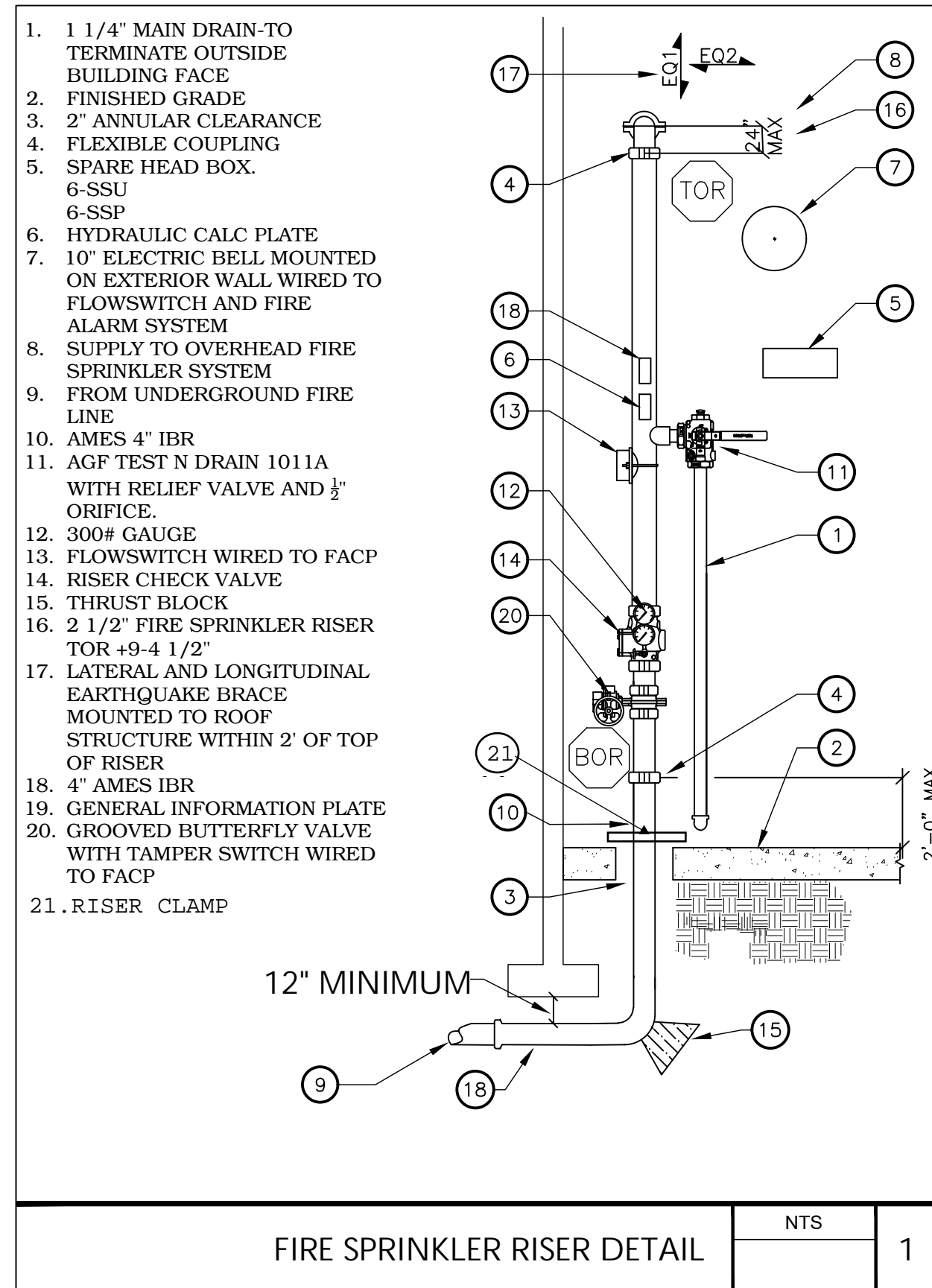
GENERAL NOTES

1. CONTRACTOR IS TO COORDINATE WITH ALL OTHER DISCIPLINES. REFER TO ARCHITECTURAL, MECHANICAL AND PLUMBING SHEETS, FIRE PROTECTION SPECIFICATIONS, AS WELL AS OTHER PORTIONS OF THE CONTRACT DOCUMENTS FOR ADDITIONAL COORDINATION REQUIREMENTS.
2. THE LAYOUT REQUIREMENTS DESCRIBED IN THESE PLANS SHALL BE ADHERED TO AS CLOSELY AS POSSIBLE BUT SHALL NOT SUPERSEDE CODE CONSTRAINTS AND/OR REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION (A/H'S). WHERE CODE OR A/H REQUIREMENTS SUPERSEDE ITEMS SHOWN ON THIS PLAN, CONTRACTOR SHALL INCLUDE ALL ASSOCIATED PROVISIONS IN THE BID, AND SHALL MAKE THEM AT NO ADDITIONAL COST TO OWNER. PROPOSED DEVIATIONS FROM THIS PLAN SHALL BE SUBJECT TO ENGINEER OF RECORD REVIEW AND APPROVAL PRIOR TO IMPLEMENTATION.
3. PIPE SIZED BY LIGHT HAZARD PIPE SCHEDULE. 15.8 PSI IS MINIMUM REQUIRED REQUIRED TO OPERATE AT BOR ON EXISTING SYSTEMS. 15 PSI IS MINIMUM PSI REQUIRED PER NFPA 13.
4. ALL AREAS OF THE BUILDING NOT COVERED BY NOTES HEREIN SHALL BE FULLY SPRINKLERED IN ACCORDANCE WITH SPECIFICATIONS, NFPA 13, 2022 ED., CITY OF ARVIN FIRE DEPARTMENT REQUIREMENTS, DSA FIRE PROTECTION DESIGN STANDARDS AND CODE REQUIREMENTS.
5. WHERE PLAN INDICATES EXPOSED FIRE SPRINKLER PIPING DIRECTION OF LAYOUT, ASSOCIATED CONNECTED FIRE SPRINKLER PIPING RUNNING IN PERPENDICULAR DIRECTIONS SHALL BE INSTALLED ONLY IN CONCEALED LOCATIONS UNLESS INDICATED OTHERWISE.
6. EXPOSED FIRE SPRINKLER SYSTEM PIPING SHALL BE RUN STRAIGHT AND TIGHT TO UNDERSIDE OF STRUCTURAL MEMBERS.
7. FOR HANGER DETAILS, SEE DETAIL 5 ON THIS SHEET.
8. UNO, ALL HANGERS ARE LESS THAN 6" FROM TOP OF PIPE TO POINT OF CONNECTION TO STRUCTURE. NO BRANCH LINE RESTRAINT IS REQUIRED PER NFPA 13, 18.6.5.
9. ALL PIPE 2" AND SMALLER SHALL BE SCHEDULE 40, BLACK STEEL ANSI/ASTM A135.
10. ALL GROOVED AND WELDED PIPE 2 1/2" - 6" SHALL BE SCHEDULE 10, BLACK STEEL ANSI/ASTM A795.
11. THREADED FITTINGS SHALL BE CLASS 125 THREADED CAST IRON ANSI B16.4.
12. ALL THREADED PIPE AND FITTINGS SHALL HAVE THREADS CUT TO ANSI/ASME STANDARD B1.20.1.



FIRE SPRINKLER LEGEND										
TYPE	FINISH	TEMP	K	NPT	SIN#	MFG	MODEL#	ESCUTCHEON		
QR PEND	WHITE	155°	5.6	1/2"	VK3021	VIKING	MICROFAST	SEMI RECESS		
QR SSU	BRASS	200°	5.6	1/2"	VK3001	VIKING	MICROFAST	N/A		
ER INFORMATION IS FOR PLAN REVIEW ONLY. INSTALLING CONTRACTOR IS FOR VERIFYING ACCURATE SPRINKLER LAYOUT AND QUANTITIES, NO PRICING WILL BE ALLOWED SPRINKLER HEADS ADDED BY CONTRACTOR.										

SYMBOL	DESCRIPTION
	DETAIL DESIGNATION
	DETAIL NUMBER
	SHEET NO. WHERE SHOWN
	HYDRAULIC CALCULATION REFERENCE NODE
	SEISMIC BRACE
	FIRE SPRINKLER RISER
	GROOVED COUPLING
	HANGER DESIGNATION
	CHANGE IN ELEVATION
	CAP
	PLUG
	VALVE
	FIRE SPRINKLER PIPE
	END OF LINE RESTRAINT
ANY SUBSTITUTION OF "FLEXIBLE" TYPE PIPING IN LIEU OF "RIGID" PIPE OR ANY CHANGES TO SIZE, MANUFACTURER OR LENGTHS OF "FLEXIBLE" TYPE PIPING REQUIRE RESUBMITTAL OF PIPING PLANS, PRODUCT DATA SHEETS AND HYDRAULIC CALCULATIONS. CONTRACTOR SHALL REIMBURSE OWNER FOR COST IF ADDITIONAL PLAN CHECK IS REQUIRED.	
ANY CHANGES TO THE FIRE SPRINKLER SUPPORT, INCLUDING THE ADDITION OF SWAY BRACING, TO THE APPROVED CONSTRUCTION SET WILL RESULT IN A CHANGE TO THE CONSTRUCTION DOCUMENTS AND WILL REQUIRE ADDITIONAL PLAN REVIEW. CONTRACTOR SHALL REIMBURSE OWNER FOR COST IF ADDITIONAL PLAN CHECK IS REQUIRED.	



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TWO (2) RELOCATABLE CLASSROOMS AT
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1825 SHAFTER ROAD, BAKERSFIELD, CA 93313
FOR
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1601 NEW STINE ROAD, SUITE 280
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Blank area for notes or revisions.

FIRE SPRINKLER PIPING PLAN

MARK	DATE	REVISIONS
1		
2		
3		

JOB NO.
DRAWN:
CHECKED:
DATE:
FP2 OF SHEETS



BUILDING CODES AND STANDARDS

2001 CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE (PART 1, TITLE 24, CCR)
2001 CALIFORNIA BUILDING CODE VOLUMES 1, 2 AND 3 (PART 2 TITLE 24, CCR) (1997 EDITION UNIFORM BUILDING CODE WITH 2001 CALIFORNIA AMENDMENTS)
2001 CALIFORNIA ELECTRICAL CODE (PART 3, TITLE 24, CCR) (1999 EDITION NATIONAL ELECTRICAL CODE WITH 2001 AMENDMENTS)
2001 CALIFORNIA MECHANICAL CODE (PART 4, TITLE 24, CCR) (2000 EDITION IAPMO UNIFORM MECHANICAL CODE WITH 2001 CALIFORNIA AMENDMENTS)
2001 CALIFORNIA PLUMBING CODE (PART 5, TITLE 24, CCR) (2000 EDITION IAPMO UNIFORM PLUMBING CODE WITH 2001 CALIFORNIA AMENDMENTS)
2001 CALIFORNIA ENERGY CODE (PART 6, TITLE 24, CCR)
2001 CALIFORNIA ELEVATOR SAFETY CONSTRUCTION CODE (PART 7, TITLE 24, CCR)
2001 CALIFORNIA FIRE CODE (PART 9, TITLE 24, CCR)
2001 CALIFORNIA REFERENCED STANDARDS CODE (PART 12, TITLE 24, CCR)

NFPA 13, 1999 EDITION, THE INSTALLATION OF AUTOMATIC SPRINKLER SYSTEMS, AS AMENDED
NFPA 14, 2000 EDITION, INSTALLATION OF STANDPIPE, PRIVATE HYDRANT AND HOSE SYSTEMS
NFPA 24, 1995 EDITION, INSTALLATION OF PRIVATE FIRE SERVICE MAINS AND THEIR APPURTENANCES
NFPA 72, 1999 EDITION, NATIONAL FIRE ALARM CODE, AS AMENDED

BUILDING DATA

OCCUPANCY: E-2
TYPE OF CONSTRUCTION: V-NON RATED
WIND LOAD: 80 M.P.H. EXPOSURE 'C'

FLOOR LIVE LOAD: 50 PSF
ROOF LIVE LOAD: 20 PSF

BUILDING AREA: 24'x40'=960 SQ. FT.

STRUCTURAL DESIGN: RIGID FRAME WITH CLEAR SPAN TRUSS
MODULES: 12'x40'
SEISMIC ZONE: 4
SEISMIC NEAR SOURCE FACTORS: Z=0.4, P=1.0, Co=0.44xNa, Na=1.5 REDUCED TO 1.1 PER TITLE 24 SEC. 1629A.4.2
I=1.0, R=4.5, Cv=0.64xNv, Nv=2.0
ENERGY COMPLIANCE: CLIMATE ZONE 1 THRU 16

NOTES:
THIS P.C. IS DESIGNED STRUCTURALLY TO SUPPORT THE WEIGHT OF A FIRE SPRINKLER SYSTEM.

THIS P.C. IS NOT APPROVED FOR 'A' OCCUPANCY USES.

A PROJECT INSPECTOR EMPLOYED BY THE DISTRICT (OWNER) AND APPROVED BY THE THE DIVISION OF THE STATE ARCHITECT SHALL PROVIDE CONTINUOUS INSPECTION OF THE WORK. THE DUTIES OF THE INSPECTOR ARE DEFINED IN SECT. 4-342, PART 1, TITLE 24, CCR. MIN INSPECTOR CLASS 2.

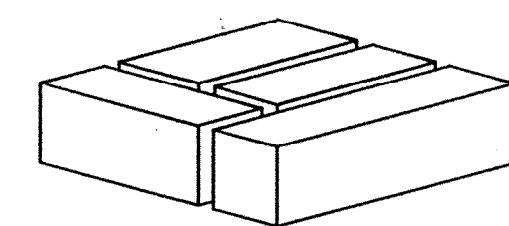
REVISION SUMMARY LOG

REVISION	DATE	DESCRIPTION OF REVISION	SHEET #
1.	-	-	-

MANUFACTURED RELOCATABLE MODULAR BUILDINGS
STOCKPILE FOR (59) 24'x40'
PORTABLE DSA CLASSROOMS

WILLSCOT
FROM STOCKPILE TO SITE SPECIFIC
RELOCATION PACKAGE

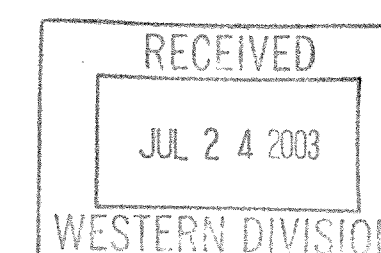
FOR:
GENERAL SHAFTER SD
(x2) R.H. 24x40 CLASSROOMS
Sn: 20156-57 & 20194-95



MSI

MODULAR STRUCTURES
INTERNATIONAL Inc.

920 CITRUS AVE. RIVERSIDE, CA. 92507
(909) 788-3035



DRAWING INDEX

SHEET NO.	ARCHITECTURAL	SHEET NO.
CS	COVER SHEET, BLDG DATA, SHEET INDEX	
G-1	GENERAL NOTES & SPECIFICATIONS	
G-2	CONSTRUCTION NOTES, BLDG. MATERIALS, DOOR, WINDOW & FINISH SCHEDULES	
G-3	STANDARD ARCHITECTURAL PLUMBING DETAILS	
G-4	STANDARD ARCHITECTURAL DETAILS	
FLOOR PLAN #1		
A-1-24	24'x40' FLOOR PLAN, DUAL SLOPE EXTERIOR ELEVATIONS & ROOF PLAN	
A-2-24	24'x40' INTERIOR ELEVATIONS	
A-3-24	24'x40' REFLECTED CEILING PLAN & DETAILS	
M-1-24	24'x40' MECHANICAL PLAN	
E-1-24	24'x40' ELECTRICAL LIGHTING/POWER PLAN & FIRE ALARM	
FLOOR PLAN #2		
A-1.1-24	24'x40' FLOOR PLAN, DUAL SLOPE EXTERIOR ELEVATIONS & ROOF PLAN	
A-2.1-24	24'x40' INTERIOR ELEVATIONS	
A-3.1-24	24'x40' REFLECTED CEILING PLAN & DETAILS	
M-1.1-24	24'x40' MECHANICAL PLAN	
E-1.1-24	24'x40' ELECTRICAL LIGHTING/POWER PLAN & FIRE ALARM	
STRUCTURAL		
S-1	GENERAL NOTES & SPECIFICATIONS	
S-5	RIGID FRAME SECTIONS & DETAILS, DUAL SLOPE W/ LIGHT GA. SIDEWALL	
S-10	FLOOR FRAMING PLAN & DETAILS W/ PLYWOOD FLOOR (80 & 90 MPH WIND)	
S-21	EXTERIOR WALL FRAMING ELEVATIONS (STEEL STUDS 80 & 90 MPH WIND)	
S-25	STEEL STUD WALL FRAMING DETAILS (80 & 90 MPH WIND)	
S-30	WOOD STUD WALL FRAMING DETAILS (80 MPH WIND)	
S-41	ROOF FRAMING PLAN W/ 22 GA. ROOF (80 & 90 MPH WIND)	
S-51	ROOF FRAMING DETAILS W/ 22 GA. ROOF (80 & 90 MPH WIND)	
S-60	DUAL SLOPE TRUSS & DETAILS 20 PSF ROOF (80 MPH WIND)	
R-1	RAMP FRAMING PLAN & DETAILS (4'-0" WIDE RAMP)	
FOUNDATION		
F-1	WOOD PAD FOUNDATION & DETAILS (50 PSF FLOOR, 20 & 30 PSF ROOF) W/ PLYWOOD FLOOR (80 MPH WIND)	
F-1.1	WOOD PAD FOUNDATION & DETAILS (50+20 PSF FLOOR, 20 & 30 PSF ROOF) W/ PLYWOOD FLOOR (80 MPH WIND)	
F-2	CONCRETE FOUNDATION PLAN ABOVE GRADE W/ PLYWOOD FLOOR (80 & 90 MPH WIND)	
F-2.1	CONCRETE FOUNDATION DETAILS ABOVE GRADE W/ PLYWOOD FLOOR (80 & 90 MPH WIND)	
F-4	CONCRETE FOUNDATION PLAN FLUSH W/ GRADE W/ PLYWOOD FLOOR (80 & 90 MPH WIND)	
F-4.1	CONCRETE FOUNDATION DETAILS FLUSH W/ GRADE W/ PLYWOOD FLOOR (80 & 90 MPH WIND)	

MSI
MODULAR STRUCTURES INTERNATIONAL, INC.
920 CITRUS AVE. RIVERSIDE, CALIFORNIA 92507
PHONE: (909) 788-3035 FAX: (909) 788-1123

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PROJECT
MODULAR CLASSROOM BUILDING

COVER SHEET

TITLE

JOB # 03-1012
03-1014
DATE 7/8/03

DRAWN BY JAG

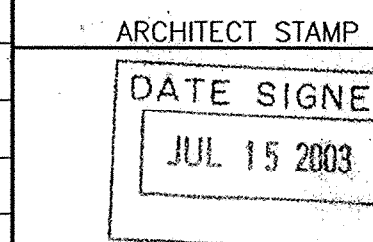
AS NOTED

APPROVED

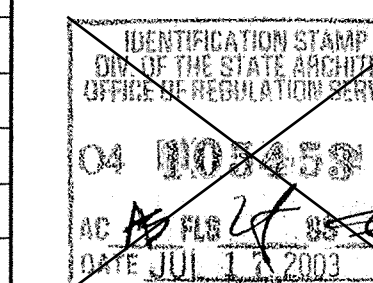
REVISIONS

SHEET NO.

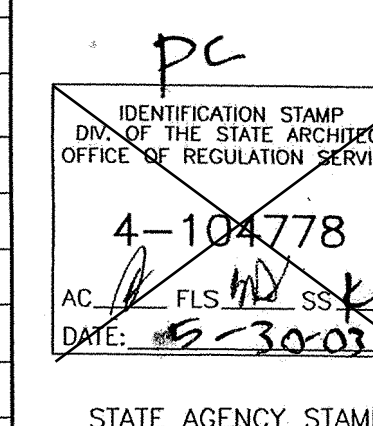
CS



STRUCTURAL ENGINEER STAMP



AC: A.M. Smith
PL: JAG
SS: S. FARRER
STATE AGENCY STAMP



STATE AGENCY STAMP

GENERAL SPECIFICATIONS

SECTION 1A

1. GENERAL

A. THE REQUIREMENTS OF THE GENERAL CONDITIONS OF THE AGREEMENT AND THIS GENERAL REQUIREMENTS APPLY TO THE SEVERAL TRADE SECTIONS WITH THE SAME FORCE AS THOUGH FULLY REPEATED IN EACH SECTION.

B. NAME BRANDS ARE INDICATED TO ESTABLISH A STANDARD OF QUALITY. ITEMS OF EQUAL OR BETTER QUALITY MAY BE SUBSTITUTED FOR THE LISTED BRAND NAMED PRODUCTS.

C. ALL WORK SHALL COMPLY WITH THE REQUIREMENTS OF TITLE 19, AND 24 CALIFORNIA CODE OF REGULATIONS, NO CHANGES SHALL BE MADE FROM D.S.A. APPROVED DRAWINGS OR SPECIFICATIONS WITHOUT PRIOR WRITTEN APPROVAL OF D.S.A. AND THE DISTRICT ARCHITECT.

2. SCOPE OF WORK

A. THE WORK CONSISTS OF MANUFACTURING OFF-SITE IN A PLANT, AND INSTALLING ON-SITE, MODULAR RELOCATABLE BUILDING AS DEFINED HEREIN AND SHOWN AND DETAILED ON DRAWINGS.

B. ALL REQUIREMENTS OF TITLE 19 AND 24 OF THE STATE OF CALIFORNIA CODE OF REGULATIONS (C.C.R.) RELATING TO INSPECTIONS AND VERIFIED REPORTS SHALL BE COMPLIED WITH AND SHALL INCLUDE:

1. GENERAL RESPONSIBLE CHARGE OF FIELD ADMINISTRATION BY THE ARCHITECT OF RECORD.

2. INSPECTION IN-PLANT DURING THE COURSE OF CONSTRUCTION BY AN INSPECTOR APPROVED BY THE DIVISION OF THE STATE ARCHITECT AND THE DISTRICT ARCHITECT. THE INSPECTOR SHALL BE RESPONSIBLE FOR AND APPROVED TO INSPECT THE GENERAL CONSTRUCTION, WELDING, MECHANICAL AND ELECTRICAL WORK, COST OF THESE INSPECTIONS SHALL BE BORNE BY THE SCHOOL DISTRICT.

3. ON SITE INSPECTION OF THE BUILDING INSTALLATION ELECTRICAL AND UTILITY OF THE BUILDING INSTALLATION BY AN INSPECTOR APPROVED BY THE DIVISION OF THE STATE ARCHITECT AND RETAINED BY THE SCHOOL DISTRICT.

4. OTHER SPECIAL TESTS OR INSPECTIONS AS MAY BE REQUIRED BY THE DIVISION OF THE STATE ARCHITECT.

3. WORK NOT INCLUDED

A. ALL ON-SITE OR OFF-SITE UTILITIES AND THE CONNECTION OF THEM TO THE BUILDING UNLESS INDICATED ON THE DRAWINGS.

B. ALL LEVELING, GRADING OR OTHER SITE PREPARATION EXCEPT CONCRETE OR WOOD LEVELING STRIPS; WHERE REQUIRED, UNLESS OTHERWISE INDICATED ON THE DRAWINGS.

C. FIRE ALARM SYSTEM, FIRE EXTINGUISHER, PROGRAM BELL, CLOCK, PUBLIC ADDRESS SYSTEM, INTERCOM SYSTEM, TV SYSTEM UNLESS OTHERWISE INDICATED ON THE DRAWINGS.

4. WHEELS AND TIRCH

SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.

5. ACCESSIBILITY OF SITE

THE SCHOOL DISTRICT SHALL PROVIDE ACCESS TO THE SITE FOR THE INSTALLATION OF THE BUILDING, REMOVAL OF OBSTACLES, FENCING, SPRINKLERS, ETC., NECESSARY FOR THE MOVE-IN OF BUILDINGS SHALL BE THE RESPONSIBILITY OF THE SCHOOL DISTRICT.

6. GENERAL CONSTRUCTION

A. STRUCTURAL FRAME - EACH MODULE SHALL BE DESIGNED AS A MOMENT FRAME STRUCTURE TO WITHSTAND VERTICAL AND HORIZONTAL LOADS AND COMPLY WITH REQUIREMENTS OF THE DIVISION OF THE STATE ARCHITECT, THE NECESSARY PROVISIONS ARE INCORPORATED IN THE STRUCTURE TO PERMIT THE RELOCATION OF THE STRUCTURAL FRAME IN SECTIONS NOT EXCEEDING 12 FEET IN WIDTH.

B. FLOOR - THE FLOOR SHALL BE STEEL FRAMED WITH A DESIGN LIVE LOAD OF 50 LBS. PER SQUARE FOOT UNLESS OTHERWISE NOTED ON THE DRAWINGS.

SECTION 5A STRUCT. AND MISC. STEEL

1. SCOPE OF WORK

CONTRACTOR SHALL PROVIDE ALL MATERIALS, LABOR AND AS SPECIFIED AND INDICATED ON THE DRAWINGS. SERVICES REQUIRED FOR STRUCTURAL AND MISCELLANEOUS STEEL.

2. MATERIALS

A. STRUCTURAL STEEL SHAPES- ASTM A-36, OPEN HEARTH OR ELECTRIC FURNACE ONLY, ALL REGULAR SHAPES AS DESCRIBED IN AISC CONSTRUCTION MANUAL, UNLESS OTHERWISE NOTED.

B. COLD FORMED LIGHT GAUGE STEEL- ASTM A-570 GRADE 33, MINIMUM YIELD 33,000 PSI.

C. STRUCTURAL PIPE - ASTM A-53 MIN. YIELD OF 35,000 PSI. STRUCTURAL TUBING - ASTM A-500 MIN. YIELD OF 46,000 PSI.

D. BOLT MATERIAL- BOLTS AND NUTS, AMERICAN STANDARD REGULAR, AS DETAIL IN AISC CONSTRUCTION MANUAL.

E. ARC-WELDING ELECTRODES- CLASS E-70 SERIES FOR WELDING A-36 STEEL, TO A-53 AND E-70 SERIES FOR WELDING A-570 STEEL.

F. TO A-36, CONFORMING TO REQUIREMENTS OF THE STRUCTURAL WELDING CODE OF AMERICAN WELDING SOCIETY, LATEST EDITION.

G. ALL WELDS USED IN PRIMARY MEMBERS AND CONNECTIONS IN THE LATERAL RESISTING SYSTEM SHALL BE FILLED WITH A FILLER METAL THAT HAS A MINIMUM CHARPY V-NOTCH TOUGHNESS OF 20 FT LBS. AT MINUS 20 DEGREES F, AS DETERMINED BY AWS CLASSIFICATION OR MANUFACTURER CERTIFICATION.

3. WORKMANSHIP

A. GENERAL - ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF AISC STANDARD SPECIFICATIONS, TITLES 21 AND 24 OF THE CALIFORNIA CODE OF REGULATIONS AND THE AMERICAN IRON AND STEEL INSTITUTE SPECIFICATIONS FOR DESIGN OF LIGHT GAUGE STEEL STRUCTURAL MEMBERS.

B. WELDING- ALL WELDING DONE BY SHIELDING ELECTRIC-ARC OR FLUX CORED-ARC PROCESS COMPLYING WITH THE AMERICAN WELDING SOCIETY, WELDING DONE BY OPERATORS QUALIFIED BY TESTS ACCEPTABLE TO THE DIVISION OF THE STATE ARCHITECT.

C. ERECTION- STRUCTURAL STEEL ERECTED TRUE, STRAIGHT, PLUMB AND TO ITS DESIGNED LOCATIONS, FIELD CONNECTIONS BOLTED OR WELDED AS INDICATED ON THE DRAWINGS.

D. NAILS, BOLTS, SCREWS, NUTS, ETC.- FOR EXTERIOR WORK SHALL BE CADMIUM PLATED OR GALVANIZED.

E. HANDRAILS- FABRICATED AS DETAILED, WELDS GROUND SMOOTH.

F. SHOP PAINT-

1. EXPOSED STEEL COATED WITH ONE COAT SHOP COAT.

2. NON-EXPOSED STEEL COATED WITH ONE COAT SHOP COAT.

3. ALL SURFACES THOROUGHLY CLEANED BY EFFECTIVE MEANS PRIOR TO APPLICATION OF SHOPS COAT.

C. TESTS- PROVIDE MILL CERTIFICATES OR TEST ALL MEMBERS. WELDS SHALL BE INSPECTED AND/OR TESTED PER T-24 SECTION 2231A.5

SECTION 6A CARPENTRY

1. SCOPE OF WORK

CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS AND SERVICES TO INSTALL CARPENTRY.

2. MATERIALS

LUMBER GRADE MARKED IN ACCORDANCE WITH "STANDARD GRADING AND DRESSING RULE NO. 18" OF WEST COAST LUMBER INSPECTION BUREAU OR "GRADING RULES FOR WESTERN LUMBER, 3RD EDITION" OF WESTERN WOOD PRODUCTS ASSOCIATION. PLYWOOD GRADE MARKED IN ACCORDANCE WITH "PRODUCT STANDARD 1-1-95 FOR SOFTWOOD" OF AMERICAN PLYWOOD ASSOCIATION, COMPLYING WITH UBC STANDARD 25-9.

A. HEADERS- HEM FIR STUD GRADE OR BETTER.

B. PLATES- HEM FIR STUD GRADE OR BETTER.

C. BLOCKING- HEM FIR STUD GRADE OR BETTER.

D. SILLS AND LUMBER IN CONTACT WITH CONCRETE, MASONRY OR EARTH- ENVELOPE FIRE PRESSURE TREATED WITH SODIUM SALTS, TANALITH U OR CHROMATE COPPER ARSENIC, GRADE- 244; NO. 2 GRADE - 246, CUT ENDS DIPPED IN PRESERVATIVE (CUPROLAN).

E. PLYWOOD ROOF DECKING- APA C-D GRADE, GROUP 1, EXPOSURE 1 WITH EXTERIOR GLUE, ON OVERHANGS, C-C PLUGGED AND TOUCH SANDED.

F. PLYWOOD FLOOR DECKING- APA STURCO-I-FLOOR 48" O.C. 1-1/8" TONGUE AND GROOVE OR SHEARDED.

G. EXTERIOR SIDING/SHEATHING- APA TYPE 303, EXTERIOR, M.D.O. 8" O.C. SIDING, SHEATHING 1/2" O.C.

H. STUDS AND POSTS- HEM FIR STUD GRADE.

I. FASTENERS- ALL NAILS SHALL BE CORROSION RESISTANT PER UBC STANDARD 2304A.4.

J. BUILDING TRIM- 1X RESAWN SELECT H.F. OR MASONITE.

K. DOOR/ WINDOW TRIM- 1X4 RESAWN H.F.

3. WORKMANSHIP

A. FRAMING- SECURELY NAIL, BRIDGED AND BLOCKED TO FORM RIGID STRUCTURE. WORK CUT FITTED AND ASSEMBLED LEVEL, PLUMB AND TRUE TO LINE. TRIM IN AS LONG LENGTHS AS POSSIBLE WITH ALL STANDING TRIM IN ONE PIECE, TRIM SEALED AT ALL EDGES.

B. NAILING- IN ACCORDANCE WITH TITLE 24 C.C.R.- TABLE 23-II-B-1.

C. EXTERIOR WALLS- FACTORY FABRICATED, CAULKING PROVIDED BETWEEN PERIMETER OF WALLS AND STRUCTURAL MEMBERS PROVIDING WEATHERPROOF AND WATERFIGHT SEAL. NECESSARY CLOSURES, SEALS, FLASHING PLACED AT TOP AND BASE SUPPORT OF PANELS AND AROUND OPENINGS.

D. MACHINE APPLIED NAILING- SHALL HAVE PRIOR DEMONSTRATION AND APPROVAL BY DSA FIELD INSPECTOR AND THE ARCHITECT. THE APPROVAL IS SUBJECT TO CONTINUES SATISFACTORY PERFORMANCE.

E. PLYWOOD SHALL HAVE A MINIMUM THICKNESS OF 1/8". IF NAILHEADS PENETRATE THE OUTER PLY MORE THAN WOULD BE NORMAL FOR A HAND HAMMER OR IF MINIMUM ALLOWABLE EDGE DISTANCES ARE NOT MAINTAINED, THE PERFORMANCE WILL BE DEEMED UNSATISFACTORY.

F. TRIM SEALED AT ALL EDGES. SEALANT PAINTED TO MATCH TRIM OR SIDING.

G. RETIGHTEN ALL BOLTS BEFORE CLOSING IN.

H. THE DESIGN MOISTURE CONTENT OF LUMBER IS 19% OR LESS BEFORE FABRICATION, OTHER REVISION THRU CHANGE ORDER WILL BE REQUIRED.

SECTION 7B SHEET METAL

1. SCOPE OF WORK

CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS AND SERVICES TO INSTALL INDICATED SHEET METAL.

2. MATERIALS

A. SHEET METAL- STEEL SHEETS HOT DIP GALVANIZED WITH 1.25 OZ. PER SQUARE FOOT ZINC COATING CONFORMING TO ASTM A123.

B. SOLID- OF STANDARD BRAND, GRADE A OF EQUAL PARTS LEAD AND TIN ASTM B32.

C. FLUX- ZINC SATURATED MURATIC ACID.

3. WORKMANSHIP

SHEET METAL ACCURATELY FORMED TO DIMENSIONS AND SHAPES DETAILED WITH TRUE STRAIGHT LINES, CORNERS AND ANGLES.

FLASHING INSTALLED IN LONGEST LENGTHS POSSIBLE. EXTERIOR WORK FORMED, FABRICATED AND INSTALLED SO THAT IT ADEQUATELY PROMOTES FIRE EXPROSION AND CONTRACTION IN THE COMPLETED WORK AND FINISHES WATER AND WEATHER TIGHT.

SECTION 7J SEALANT

1. SCOPE OF WORK

CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS AND SERVICES TO SEAL THE BUILDINGS.

2. MATERIALS

"VULKEM" SEALANT, POLYURETHANE, MANUFACTURED BY MAMECO INTERNATIONAL OR APPROVED EQUAL, TO BE USED @ ALL STANDING SEAM ROOFING LETS.

SEALANT APPLIED TO DRY CLEAN SURFACES, WHEREVER INDICATED ON DETAILS AND AS NEEDED TO MAKE BUILDING WATERIGHT, IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.

SECTION 8B HOLLOW METAL DOORS & FRAMES

1. SCOPE OF WORK

CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS AND SERVICES TO INSTALL HOLLOW METAL DOORS & FRAMES.

2. MATERIALS

A. DOORS- TYPE I FULL FLUSH INSULATED, MANUFACTURED BY "STEELCRAFT" MANUFACTURING COMPANY OR APPROVED EQUAL, 18 GA. 1-3/4" THICK.

B. FRAMES- 16 GA. COLD ROLLED 2" FACES.

SECTION 8D FINISH HARDWARE

1. SCOPE OF WORK

CONTRACTOR SHALL SUPPLY AND INSTALL HARDWARE AS SPECIFIED AND AS REQUIRED.

2. DOOR SCHEDULE- SEE SHEET G-2

3. SPECIAL REQUIREMENTS

A. CLOSURE FOR EXTERIOR DOORS SHALL BE SET FOR A MAXIMUM OPENING PRESSURE OF 5 LBS.

B. DEADLOCKS ARE NOT PERMITTED UNLESS OPERABLE WITH A SINGLE EFFORT USING LEVER HANDLE.

C. HARDWARE SHALL BE CENTERED BETWEEN 30" AND 44" ABOVE FINISHED FLOOR.

D. ALL EXIT DOORS SHALL BE OPEN ABLE FROM INSIDE WITHOUT ANY EFFORT, SPECIAL TOOL, OR KNOWLEDGE.

SECTION 9E PAINTING

1. SCOPE OF WORK

CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS AND SERVICES TO PAINT BUILDINGS, ALL EXPOSED SURFACES OF BUILDING AND RAMP SHALL BE PAINTED EXCEPT ALUMINUM WINDOW FRAMES AND THRESHOLDS.

2. MATERIALS

A. EXTERIOR WOOD- VISTA BRAND 4100 PRIMER, 6000 FINISH (OR EQUAL).

B. INTERIOR TRIM- TRIM NOT PRECATEDLY SHALL BE PAINTED WITH TWO COATS OF SEMI-GLOSS LATEX OVER PRIMER.

C. METAL- VISTA BRAND 7000 FINISH (OR EQUAL).

3. WORKMANSHIP

A. EXTERIOR- WOOD SIDING, TRIM AND SKIRTING- APPLY TWO COATS OF EXTERIOR FLAT ACRYLIC PAINT SPRAYED ON.

B. INTERIOR TRIM- TRIM NOT PRECATEDLY SHALL BE PAINTED WITH TWO COATS OF SEMI-GLOSS LATEX OVER PRIMER.

C. METAL- ALL METAL SURFACES SHALL BE PAINTED WITH TWO COATS OF ALKOY FINISH COAT OVER SHOP COAT.

D. RAMP- ONE COAT OF NON-SKID SURFACING.

SECTION 13F SITE ASSEMBLY

1. SCOPE OF WORK

CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS AND SERVICES TO PREPARE THE BUILDING ELEMENTS, TRANSPORT THEM FROM THE PLANT TO THE SITE AND TO COMPLETE THE ASSEMBLY AT THE SITE.

THE CONDITION OF THE SITE, SUCH AS DRAINAGE AND SOIL BEARING CAPACITY, SHALL BE THE RESPONSIBILITY OF THE SCHOOL DISTRICT.

2. ASSEMBLY OF ELEMENTS

A. IN A LOCATION AS DETERMINED BY THE SCHOOL DISTRICT, THE CONTRACTOR SHALL PLACE CONCRETE LEVELING STRIPS.

B. THE ELEMENTS SHALL BE BROUGHT TO THE SITE ON WHEELS ASSEMBLY AND TRANSFERRED TO THE PREPARED SITE. GREAT CARE SHALL BE TAKEN TO AVOID DAMAGE TO THE ELEMENTS BY RACKING OR BUMPING.

C. CONNECTION OF THE ELEMENTS TOGETHER SHALL BE DONE ACCORDING TO INSTRUCTIONS ON THE DRAWINGS, FLASHING, TRIM AND OTHER LOOSE ITEMS SHALL BE INSTALLED PER DETAILS ON THE DRAWINGS.

SECTION 15A MECHANICAL

1. SCOPE OF WORK

CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS AND SERVICES TO INSTALL THE AIR CONDITION SYSTEM AS SHOWN ON THE DRAWINGS INCLUDING A/C UNITS AND ACCESSORIES, REMOTE THERMOSTAT, GRILLS AND POWER WIRING COMPLETE TO LOAD CENTER. CONTRACTOR SHALL INSTRUCT OWNER'S OPERATORS ON OPERATION AND MAINTENANCE OF A/C SYSTEM.

2. EQUIPMENT- SEE A/C INFORMATION SCHEDULE FOR SIZE AND TYPE

3. WORKMANSHIP

UNITS SHALL BE INSTALLED COMPLETE, AND OPERATING WITH ALL ACCESSORIES IN ACCORDANCE WITH THE MANUFACTURERS INSTRUCTIONS.

SECTION 16A ELECTRICAL

1. SCOPE OF WORK

CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS AND SERVICES FOR ELECTRICAL INSTALLATION CONFORME WITH ASSOCIATED EQUIPMENT AND FIXTURES IN OPERATING CONDITION READY FOR USE. THE WORK INCLUDES: LIGHT AND POWER SYSTEMS, LIGHTING FIXTURES COMPLETE WITH LAMPS, CONNECTIONS, AND DISCONNECTS TO A/C EQUIPMENT.

A. MATERIALS AND WORKMANSHIP:

ALL WORKMEN SHALL BE SKILLED AND QUALIFIED FOR THE WORK WHICH THEY PERFORM. MATERIALS USED, UNLESS OTHERWISE SPECIFIED, SHALL BE NEW AND OF THE TYPES AND GRADES SPECIFIED.

WORKMANSHIP SHALL BE EQUAL OR BETTER IN QUALITY TO THAT REQUIRED BY THE CONSTRUCTION TRADES FOR A FINISHED PRODUCT.

THE CONTRACTOR SHALL CERTIFY THAT NO ASBESTOS-CONTAINING BUILDING MATERIALS WHICH EXCEED STATE AND FEDERAL MANDATED SAFE ASBESTOS LEVELS HAVE BEEN USED IN THE CONSTRUCTION OF RELOCATABLE FACILITIES.

B. GENERAL DESIGN REQUIREMENTS:

EACH MODULE SHALL BE PERMANENTLY IDENTIFIED WITH A METAL IDENTIFICATION TAG 3" x 1 1/2" MINIMUM SIZE WITH THE FOLLOWING INFORMATION:

A. D.S.A. APPROVAL NUMBER D. DESIGN FLOOR LIVE LOAD
B. DESIGN WIND LOAD E. BUILDER'S NAME
C. DESIGN ROOF LIVE LOAD F. PLANT INSPECTOR/D MARK

EACH MODULE SHALL BE CAPABLE OF RESISTING ALL VERTICAL AND LATERAL LOADS DURING TRANSPORTATION AND RELOCATION. (NORMAL INDUSTRY PRACTICE FOR BRACING MODULES DURING TRANSPORTATION IS ACCEPTABLE), WHEN MODULES ARE ASSEMBLED, JOINTS SHALL BE SEALED WITH REMOVABLE CLOSING STRIPS OR OTHER METHOD TO PRESENT A FINISHED APPEARANCE AND BE PERMANENTLY WATERPROOF.

EACH 12'-0" WIDE MODULE SHALL BE SUFFICIENTLY RIGID TO BE JACKED UP AT THE FRONT AND BACK CORNERS FOR RELOCATION WITHOUT DAMAGE OR THE MODULE SHALL HAVE LIFT LUGS AT FRONT AND BACK LOCATED AS REQUIRED SO THAT THE MODULE MAY BE JACKED UP FOR RELOCATION IN ONE PIECE WITHOUT ADDITIONAL SUPPORTS OF ANY TYPE. EVIDENCE OF EXCESSIVE BOWING DURING THE INSTALLATION OF THE MODULES WHICH, IN THE OPINION OF THE AGENCY ARCHITECT OR STRUCTURAL ENGINEER, CAUSES EXCESSIVE WORKING AT ANY JOINT OR COMPROMISES THE STRUCTURAL INTEGRITY OF THE MODULE, SHALL BE SUFFICIENT REASON FOR REJECTION OF THE MODULE.

C. FRAMING: ROOF, WALLS AND FLOOR:

FRAMING MEMBERS SHALL BE OF THE GRADE AND SIZE CALLED FOR ON THE STRUCTURAL PLANS.

D. MOISTURE BARRIER:

ALL WEATHER-EXPOSED SURFACES SHALL HAVE A WEATHER-RESISTIVE BARRIER TO PROTECT THE INTERIOR WALL COVERING. SUCH BARRIER SHALL BE EQUAL TO THAT PROVIDED FOR IN THE U.B.C. STANDARD NO. 14.1 FOR KRAFT WATERPROOF FELT.

BARRIER SHALL BE FREE FROM HOLES AND BREAKS OTHER THAN THOSE CREATED BY FASTENERS AND CONSTRUCTION SYSTEM DUE TO ATTACHING OF THE BUILDING PAPER.

E. ZBAR:

ALL HORIZONTAL JOINTS IN SIDING SHALL BE PROTECTED BY GALVANIZED "Z BAR- 3/4" x 5/8 x 3/4" FLASHING.

FLASHING NEED NOT BE USED WHERE SKIRTING MEETS THE UNDERSIDE OF AN EXPOSED METAL FRAME AND THE SKIRTING IS RECESSED SUFFICIENTLY TO PROTECT THE TOP EDGE OF PLYWOOD.

F. ROOF OVERHANG:

ALL OVERHANGS SHALL PRESENT A PLEASING AND FINISHED APPEARANCE. SOFFIT MATERIAL, WHEN USED, SHALL BE 3/8" MIN. EXTERIOR SIDING.

PLYWOOD SOFFIT MATERIAL SHALL BE APPLIED WITH EXPOSED GRAIN RUNNING PARALLEL TO THE LENGTH OF THE BUILDING. SOFFIT SHALL BE NEATLY AND CLOSELY FITTED AND TRIMMED TO COVER GAPS. ALL EXPOSED SOFFIT AREAS SHALL BE VENTILATED PER THE C.B.C.

G. ENTRY LANDING AND RAMP:

EACH MODULE SHALL HAVE A LANDING(s) AND RAMP(s) TO CONFORM TO TITLE 24, C.C.R. SECTION 1007. THE LANDING(s) AND RAMP(s) STRUCTURE INCLUDING HANDRAIL AND WHEEL GUIDES, PREFABRICATED METAL LANDINGS AND RAMPS SHALL BE BUILT IN SECTIONS THAT ARE DEMOUNTABLE FOR MOVING AND REINSTALLATION AT A NEW SITE. THERE SHALL BE SUFFICIENT CROSS BRACING UNDER THE RAMP SURFACE TO PREVENT BOWING OR OIL DRAINING OR THE RAMP SURFACE. DESIGN SHALL BE SUCH THAT HEIGHT ADJUSTMENT CAN BE MADE AT THE INSTALLATION SITE.

RAMP SHALL HAVE SKID RESISTANT METAL OR WOOD SURFACE.

H. ELECTRICAL MATERIALS:

ALL ELECTRICAL WIRING 140V AND GREATER SHALL BE IN CONDUIT SYSTEMS AND SHALL MEET OR EXCEED THE REQUIREMENTS OF C.E.C. MINIMUM SIZE CONDUIT IS 1/2" MIN.

ACCEPTABLE CONDUIT:

RIGID ELECTRICAL METALLIC TUBING (EMT); GALVANIZED THIN WALL FLEXIBLE (INTERIOR); GALVANIZED STEEL FLEXIBLE (EXTERIOR); GALVANIZED STEEL WITH FACTORY APPLIED PVC.

ALL CONDUITS SHALL BE CONTINUOUS FROM OUTLET TO OUTLET AND SHALL BE SECURED IN CONFORMANCE WITH C.E.C. FIELD BENDS SHALL BE AVOIDED WHEREVER POSSIBLE. WHERE BENDS MUST BE MADE, USE AN APPROPRIATE "HICKEY" OR BENDING MACHINE. REAM AND DEBUR ALL CONDUIT PRIOR TO INSTALLATION AND TERMINATE IN APPROPRIATE BUSHINGS OR CONNECTORS, JACKET.

WIRING SHALL BE #14 MIN. COPPER TYPE TW, TRW, THWN AS APPLICABLE. CONDUIT FILL SHALL NOT EXCEED REQUIREMENTS OF C.E.C. A SEPARATE GROUNDING CONDUCTOR SHALL BE PULLED THROUGHOUT THE ENTIRE SYSTEM.

CORE SHALL BE TAKEN TO AVOID DAMAGE TO WIRE OR INSULATION DURING PULLING. POWDERED SOAPSTONE OR A PULLING COMPOUND SUCH AS "YELLOW 77" LUBRICANT MAY BE USED IF NECESSARY.

GENERAL NOTES:

A. ALL WORK TO BE IN ACCORDANCE WITH REQUIREMENTS OF CALIFORNIA BUILDING CODE; TITLE 24, PART 2.3.4.5.9 AND TITLE 24, PART 1, GROUP 1. A COPY OF THESE REGULATIONS SHALL BE KEPT ON THE JOB SITE AT ALL TIMES.

B. PLANS AND SPECIFICATIONS: CHANGES IN PLANS AND SPECIFICATIONS SHALL BE MADE BY THE ADDENDUM OR CHANGE ORDER, SIGNED BY THE ARCHITECT AND APPROVED BY THE DIVISION OF THE STATE ARCHITECT BEFORE ANY RELATED WORK CAN BEGIN. CHANGE ORDERS SHALL ALSO BE SIGNED BY THE OWNER PRIOR TO APPROVAL BY ISA.

C. TESTING: TESTS OF MATERIALS SHALL BE BY A PERSON OR TESTING LABORATORY SELECTED BY THE OWNER WITH THE APPROVAL OF DSA AND ARCHITECT. THE OWNER SHALL BE RESPONSIBLE FOR THE COST OF TESTING, EXCEPT FOR THE RETESTING REQUIRED BY THE FAILURE OF ANY MATERIAL TO PASS.

D. ERECTION AT THE SITE: THE BUILDING SHALL BE TRANSPORTED, ERECTED AND SET ON FOUNDATION AS REQUIRED BY A LICENSED TRANSPORTER. ALL REQUIRED FINISH WORK SHALL BE COMPLETED BY SKILLED LABOR OF THE MANUFACTURER/CONTRACTOR, BUT WILL NOT INCLUDE UTILITIES SERVICE CONNECTION.

E. SITE WORK: THE OWNER, UNLESS OTHERWISE SHOWN ON THE APPROVED PLANS, WILL PROVIDE SITE(S) SATISFACTORY TO THE ARCHITECT OR ENGINEER FOR THE INSTALLATION OF THE RELOCATABLE BUILDING(S) THAT ARE LEVEL AND HAVE STABLE SOIL CONDITIONS WITH ADEQUATE SITE DRAINAGE, EXCEPT IF DESIGNATED IN THE CONTRACT DOCUMENTS AS THE RESPONSIBILITY OF THE MANUFACTURER/CONTRACTOR. IF ADDITIONAL GRADING AND/OR LEVELING IS NECESSARY FOR PROPER INSTALLATION OF MODULAR UNITS, THE ADDITIONAL CHARGE WILL BE THE RESPONSIBILITY OF THE OWNER.

F. UTILITIES: THE OWNER WILL BE RESPONSIBLE FOR ANY AND ALL UTILITY, FIRE ALARM OR SPECIAL ELECTRICAL SIGNAL SYSTEM CONNECTIONS EXCEPT IF DESIGNATED IN THE CONTRACT DOCUMENTS AS THE RESPONSIBILITY OF THE MANUFACTURER/CONTRACTOR.

G. FIRE EXTINGUISHER: 10-2A-10BC, PRESSURE TYPE, MAX. 48" TO EXTINGUISHER HANDLE - SEE SPECIFICATION/CONTRACT.

H. BUILDING INSULATION: SHALL COMPLY WITH CALIFORNIA QUALITY STANDARDS FOR INSULATING MATERIAL, FLAME SPREAD - MAX. 25, SMOKE DEVELOP - MAX. 450 CBC SEC. 1510. SEE SPECIFICATION SHEET.

I. GRC CEILING: SUSPENDED T-BAR SYSTEM WITH LAY-IN PANELS. FLAME SPREAD - MAX. 0-25, SMOKE DEVELOP - MAX. 450. SEE SPECIFICATION SHEET.

J. FIRE ALARM SYSTEM - SEE SPECIFICATION SHEET.

1. "THE FIRE ALARM SYSTEM SHALL CONFORM TO CALIFORNIA BUILDING CODE SECTION 305.9, AND CALIFORNIA ELECTRIC CODE ARTICLE 780, CALIFORNIA FIRE CODE, ARTICLE 10."

2. INSTALLATION OF THE FIRE PROTECTIVE SIGNALING SYSTEM SHALL NOT BE STARTED UNTIL DETAILED PLANS AND SPECIFICATIONS, INCLUDING STATE FIRE MARSHAL LISTING NUMBER FOR EACH COMPONENT OF THE SYSTEM HAVE BEEN APPROVED BY CSA.

3. UPON COMPLETION OF THE INSTALLATION OF THE PROTECTIVE SIGNALING EQUIPMENT, A SATISFACTORY TEST OF THE ENTIRE SYSTEM SHALL BE MADE IN THE PRESENCE OF THE ENFORCING FIRE AGENCY.

4. ALARMS- SECTION 1006.2.4, CALIFORNIA FIRE CODE.

EMERGENCY WARNING SYSTEMS ARE REQUIRED, THEY SHALL ACTIVATE A MEANS OF WARNING THE HEARING IMPAIRED. FLASHING VISUAL WARNING SHALL HAVE A FREQUENCY OF NOT MORE THAN 60 FLASHES PER MINUTE.

(A) LOCATE PER CFC 1006.2.4

K. GROUNDING OF BUILDING COMPONENTS

1. THE OWNER, UNLESS OTHERWISE NOTED IN THE CONTRACT DOCUMENTS, SHALL BE RESPONSIBLE FOR PROVIDING THE NECESSARY GROUNDING OF THE BUILDING ELECTRICAL SYSTEM PER CEC 250-50, 250-52 AND 250-56.

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING THE NECESSARY GROUNDING OF THE METAL PORTION BUILDING COMPONENTS (METAL FRAMED STEEL RAMP, ETC.) TO MEET THE REQUIREMENTS OF IR NO 16-1, ISSUED BY D.S.A.

3. THE PROJECT INSPECTOR SHALL WITNESS AND VERIFY THE GROUNDING TESTS.

L. MECHANICAL

1. FACTORY-MADE AIR DUCTS: FACTORY-MADE AIR DUCTS SHALL BE APPROVED FOR THE USE INTENDED OR SHALL CONFORM TO THE REQUIREMENTS OF C.M.C. STANDARD NO. 10-1. EACH PORTION OF A FACTORY-MADE AIR DUCT SYSTEM SHALL BE IDENTIFIED BY THE MANUFACTURER WITH A LABEL OR OTHER SUITABLE IDENTIFICATION INDICATING COMPLIANCE WITH C.M.C. STANDARD NO. 10-1 AND SHALL BE INSTALLED IN

CONSTRUCTION NOTES & MATERIALS:

CHASSIS CONSTRUCTION: CHECK ONE
BOX SIZE: 12'x40'
FRAME: PERIMETER
MAIN RAIL/SIZE: 7"x9.8# C-CHANNEL @ PLYWOOD FLOOR ☒ OR
10"x15.3# C-CHANNEL @ CONCRETE FLOOR ☐
No. OF AXLES: --
REFERENCE DETAIL SHEET: --
MSC: --

FLOOR FRAMING: CHECK ONE
FLOOR LOAD: 50 PSF ☒ 50+20 PSF ☐ 100 PSF ☐ 125 PSF ☐
JOIST SIZE & GRADE: 7"x11 GA. Z-MEMBER @ PLYWOOD FLOOR ☐ OR
6"x8.2 C-CHANNEL @ CONCRETE FLOOR ☐
JOIST SPACING: SEE CHART ON FLOOR FRAMING PLAN 48" O.C.
INSULATION: R-11 UNFACED ☒ OR R-19 UNFACED ☐
BOTTOM ENCLOSURE: CANVEX CW-600
FLOOR DECK: PLYWOOD DECKING ☒ OR LIGHTWEIGHT CONCRETE ☐
REFERENCE DETAIL SHEET: --
MSC: --

EXTERIOR WALLS WOOD STUD OPTION: CHECK ONE ☐ USED ☒ NOT USED
WIND LOAD: 80 MPH EXP. C ☐ OR 90 MPH EXP. C ☐
STUD SIZE & GRADE: 2"x4" H.F. #2 ☐ OR 2"x6" H.F. #2 ☐
SPACING: 16" O.C.
SIDE WALL HEIGHT: 9'-0"
INSULATION: R-13 UNFACED ☐ OR R-19 UNFACED ☐
FIRE RESISTIVE CONSTRUCTION: --
REFERENCE DETAIL SHEET: --
MSC: --

EXTERIOR WALLS STEEL STUD OPTION: CHECK ONE ☐ USED ☐ NOT USED
WIND LOAD: 80 MPH EXP. C ☒ OR 90 MPH EXP. C ☐
STUD SIZE & GRADE: 3 1/2" x 20 GAUGE ☒ OR 5 1/2" x 20 GAUGE ☐
SPACING: 16" O.C.
SIDE WALL HEIGHT: 9'-0"
INSULATION: R-13 UNFACED ☒ OR R-19 UNFACED ☐
FIRE RESISTIVE CONSTRUCTION: --
REFERENCE DETAIL SHEET: --
MSC: --

EXTERIOR WALL SIDING: CHECK ONE
5/8" THK. DURATEMP APA RATED GROOVED @ 8" O.C. ☒
1/2" CDX PLYWOOD W/ STUCCO ON-SITE ☐
REFERENCE DETAIL SHEET: FOR STUCCO SIDING SEE DETAILS #16 & #17 SHEET G-4
MSC: 1.C.B.O.# FOR DURATEMP SIDING (ER-4856)

INTERIOR WALLS: CHECK ONE
STUD SIZE & GRADE: 2"x4" H.F. #2 ☐ OR 3 1/2"x20 GAUGE STEEL STUDS ☐
STUD SPACING: 16" O.C.
PARTITION HEIGHT: TO RAFTERS ☐ OR BELOW RAFTERS ☐
INSULATION: YES ☐ OR NO ☐
FIRE RESISTIVE CONSTRUCTION: --
REFERENCE DETAIL SHEET: --
MSC: --

ROOF DETAILS:
TYPE OF DRAIN SYSTEM: 26 GA. CUTTERS AND DOWN SPOUTS
REFERENCE DETAIL SHEET: --
MSC: --

ROOF FRAMING: CHECK ONE
ROOF LOAD: 20 PSF ☒ OR 30 PSF ☐
RAFTER SIZE/GRADE: 6"x2"x14 GA. Z-MEMBER ☒ OR 7"x1 1/2"x11 GA. Z-MEMBER ☐
RAFTER SPACING: 48" O.C.
INSULATION: R-19 UNFACED ☒ OR R-30 UNFACED ☐
FINISH ROOFING: 22 GAUGE GALV. STANDING SEAM ROOF ☒
26 GAUGE GALV. STANDING SEAM ROOF ☐
BUILT-UP 3-PLY ROOFING ☐ EPDM W/ 1/4" DENSDECK UNDERLAYMENT ☐
ROOF SHEATHING: 3/4" C-D PLYWOOD @ NON 22 GAUGE ROOFING
ROOF SLOPE: 1/4" PER 12" DOUBLE SLOPE
REFERENCE DETAIL SHEETS: --
DRAFT STOP CONSTRUCTION: --
ROOF MOUNT HVAC: CHECK ONE ☐ YES ☒ NO
MSC: --

STEEL COLUMNS: CHECK ONE
CORNER COLUMNS: 3 1/2"x3 1/2"x1/4" ☒ OR 4"x4"x1/4" ☐
MIDSPAN COLUMN @ SIDEWALL: N/A
STEEL POST HEIGHT: 9'-0"
REFERENCE DETAIL SHEET: --
MSC: (NOTE: THE STEEL POST HEIGHT IS FROM TOP OF FLOOR TO BTM. OF SIDEWALL BEAM/HEADER.)

TRUSS TYPE 20 PSF ROOF LOAD: ☒ YES OR ☐ NO
SIDEWALL BEAM TYPE: 18/23/18x3 1/2"x10 GA. CHANNEL @ DOUBLE SLOPE OR
18/28x3 1/2"x10 GA. CHANNEL @ SINGLE SLOPE
ENDWALL HEADER: 18 x 3 1/2" x 12 GA. CHANNEL @ DOUBLE SLOPE AND
18 x 20" x 3 1/2" x 12 GA. CHANNEL @ HIGH SIDE OF SINGLE SLOPE
TOP CHORD: L 3"x3"x3/8"
BOTTOM CHORD: L 3"x3"x3/8"
WEB: L 2"x2"x3/16" @ 1ST TWO BAYS, L 1 1/2"x1 1/2"x3/16" @ ALL OTHERS
OVERHANGS: 5'-0" @ FRONT & 2'-0" @ REAR
OVERHANG MATERIAL: L 4"x3"x3/8" ☒ OR 10"x3"x12 GAUGE C-CHANNEL ☐
SOFFITS: OPEN SOFFITS ☒ OR CLOSED SOFFITS ☐
REFERENCE DETAIL SHEET: --
MSC: --

TRUSS TYPE 30 PSF ROOF LOAD: ☐ YES OR ☒ NO
TRUSS CONFIGURATION: DOUBLE SLOPE ☐ OR SINGLE SLOPE ☐
SIDEWALL BEAM TYPE: 18/23/18x3 1/2"x10 GA. CHANNEL @ DOUBLE SLOPE OR
18/28x3 1/2"x10 GA. CHANNEL @ SINGLE SLOPE
ENDWALL HEADER: 18x3 1/2" x 12 GA. CHANNEL @ DOUBLE SLOPE AND
18x28x3 1/2"x12 GA. CHANNEL @ HIGH SIDE OF SINGLE SLOPE
TRUSS TOP CHORD: L 4"x3"x3/8"
TRUSS BOTTOM CHORD: L 4"x3"x3/8"
WEB: L 2"x2"x3/16" @ 1ST TWO BAYS, L 1 1/2"x1 1/2"x3/16" @ ALL OTHERS
OVERHANGS: 5'-0" @ FRONT & 2'-0" @ REAR
OVERHANG MATERIAL: L 4"x3"x3/8" ☐ OR 10"x3"x12 GAUGE C-CHANNEL ☐
SOFFITS: OPEN SOFFITS ☐ OR CLOSED SOFFITS ☐
REFERENCE DETAIL SHEET: --
MSC: --

SITE CONDITIONS: CHECK ONE
FOUNDATION TYPE: WOOD PAD ☐ OR CONCRETE ☐
FLASHING REQUIRED: CONCRETE FLASH W/ GRADE ☐ OR CONCRETE ABOVE W/ GRADE ☐
RAMP & LANDING: SEE FLOOR PLAN FOR RAMP AND LANDING
SKIRTING REQUIRED: YES ☒ OR NO ☐ ROUGH SAWN T-1-11 UNGROOVED
FIGURE MOUNTING HEIGHTS: ADULT HEIGHT ☐ ELEMENTARY ☐ KIDNIE ☐
MSC: --

ON-SITE SCOPE OF WORK:
1. ALL UNDER FLOOR PLUMBING FURNISHED AND INSTALLED ON-SITE.
2.
3.
4.
5.

VARIABLE MATERIAL SPECIFICATIONS:

ROOFING:
FIRE RATED PER UBC STANDARD 15-2 CLASS 'A'
BASE SHEET FINISHED GRADE 25-30# ASPHALT COATED
W/ 1/4" DENS-DECK ROOF BOARD:
USED AS A UNDERLAYMENT FOR THE EPDM MEMBRANE ROOFING
SYSTEM. FLAME SPREAD: 0, SMOKE DEVELOPED: 0 PER ASTM E 84.
INSTALL PER MANUFACTURER INSTALLATION INSTRUCTIONS.
(C.B.O.# ER-5867)

WINDOWS:
HORIZONTAL SLIDING, 50% VENTING, ANODIZED ALUMINUM FRAME.
PERFORMANCE RATED PER AAMA G5101-88 FOR COMMERCIAL USE AND
MEDIUM EXPOSURE. W/AL ON F/W FASTENED DIRECTLY TO FRAMING AND
BEHIND SIDING MATERIAL. REMOVABLE SCREEN AT VENT SASHES.
LAMINATED OR TEMPERED GLAZING TO BE NOTED ON FLOOR PLAN.
DUAL GLAZED WINDOWS TO HAVE MINIMUM 1/4" AIR SPACE AND 1/8"
CLASS (SEE WINDOW SCHEDULE FOR SIZES)

INTERIOR WALL COVERINGS:
APPLIED OVER MINIMUM 1/2" GYPSUM BOARD, OR MINIMUM 3/8"
(*ORIENTED STRAND BOARD. EXPOSED SURFACES FIRE RATED PER
ASTM E-84, FLAME SPREAD MAXIMUM 200, SMOKE DEVELOPED MAXIMUM
450. (*PROVIDE FIRE BLOCKING WHEN 3/8" OSB IS USED AS
BACKING MATERIAL)
TACKBOARD: VINYL WALL COVERING TO BE CLASS I DONTAR GYPSUM
OR EQUAL, LAMINATED ONTO 1/2" INDUSTRIAL INSULATION
BOARD, 4'-0"x8'-0", LONG EDGES BEVELED.
FLAME SPREAD = 0
SMOKE DENSITY = 175

FRP: FIBERGLASS REINFORCED PLASTIC PANELS, 4'-0"x8'-0",
WITH COLOR MATCHED PVC MOLDINGS OVER 1/2" GYPSUM
FLAME SPREAD AND SMOKE DEVELOPMENT, CLASS C PER ASTM-E84
SMOKE DENSITY NOT TO EXCEED 450. FLAME SPREAD NOT TO EXCEED 200

CEILING TYPE:
SUSPENDED SYSTEM, PERFORMANCE RATED ASTM C635 HEAVY DUTY
ACOUSTIC LAY-IN CEILING PANELS:
LIGHT REFLECTIVE LR-1, FIRE RATED CLASS-A PER ASTM E84,
VINYL FACED FIBERGLASS, 5/8" THICK, ARMSTRONG OR EQUIV.
CLASS A FLAME SPREAD 25 (UL LABEL) PER ASTM E 1264
SMOKE DENSITY NOT TO EXCEED 450

CARPET:
DIRECT GLUE-DOWN, PERFORMANCE RATED PER STATE OF CALIFORNIA
SPECIFICATION 7250-21L-01, (GROUP I, TYPE A, CLASS 24) 4600 MM.
DENSITY. THE CARPET IS TO HAVE A MINIMUM CRITICAL FLUX
OF .25 WATT/CM.

VINYL SHEET FLOORING:
MINIMUM WEAR LAYER .050" THICK, PERFORMANCE RATED PER ASTM
F1303-90 TYPE-II, GRADE-I, CLASS-A, AND ASTM F970 125PSI.
FIRE RATED PER ASTM E648 FLAMMABILITY CLASS-I, AND ASTM E662
SMOKE DENSITY MAX. 450. MIN. COEFFICIENT OF FRICTION TO BE
0.5 PER ASTM D2047

INTERIOR FINISH SCHEDULE					
ROOM	FLOOR	BASE	WALLS	CEILING	
	(BY OTHERS) SHEET VINYL	(BY OTHERS) 8" SELF COVE	1/2" VINYL WRAP TACK BD. OVER 1/2" GYP BD.	F.R.P. OVER 1/2" M.R. GYP BD.	ACOUSTICAL TILE IN HEAVY DUTY GRID @ 8'-0"
CLASSROOMS	•	•	•	•	•
RESTROOMS	•	•	•	•	•

NOTE:
FINISH WALL COVERING & FINISH CEILING SHALL BE FLAME SPREAD CLASS 1

WINDOW SCHEDULE					
ROUGH OPENING WIDTH x HEIGHT	WINDOW SIZE	TYPE	FRAME	SCREEN	GLAZING
A VERIFY	VERIFY	8'-0"x4'-0"	XDX	CLEAR ANODIZED ALUM. FRAME	YES
B					46% GREY TINT
C					DUAL GLAZE, HORIZONTAL SLIDER, ALUMINUM FRAMED SCREENS

DOOR SCHEDULE					
SYM.	WIDTH	HEIGHT	THK.	TYPE	REMARKS
1	3'-0"	6'-8"	1 3/4"	HOLLOW METAL	16 GA. METAL
2	3'-0"	6'-8"	1 3/4"	SOLID CORE	16 GA. METAL
3					PREFINISHED INTERIOR LEGACY DOOR & FRAME
4					

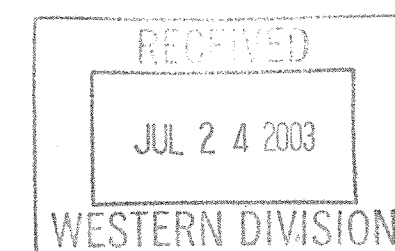
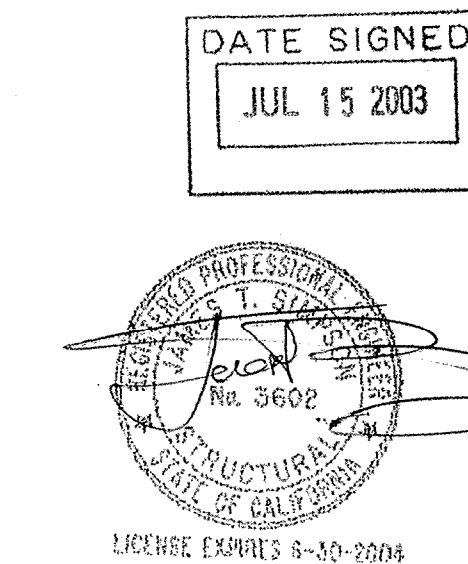
HARDWARE GROUP 1		
QTY.	DESCRIPTION	PART NO.
3	HINGES	HAGAR BB1191 4.5"x4.5" NRP
1	LOCKSET, LEVER HANDLE	SCHLAGE D75PD RHODES, 260 FINISH
1	CLOSER, 5 LBS CLOSING PRESSURE	NORTON 1601
1	THRESHOLD	PEMCO 271A
1	DOOR BOTTOM	PEMCO 216AV
1	WEATHERSTRIP	PEMCO 279PAV
1	DOOR STOP	QUALITY 431

HARDWARE GROUP 2		
QTY.	DESCRIPTION	PART NO.
3	HINGES	HAGAR RC1749 4.0"x4.0" L2
1	PRIVACY LEVER	SCHLAGE D405 RHODES, 260 FINISH

HARDWARE GROUP 3		
QTY.	DESCRIPTION	PART NO.
3	HINGES	HAGAR BB1191 4.5"x4.5" NRP
1	PANIC HARDWARE	VON DUPRIN SERIES 22 EXIT DEVICE
1	CLOSER, 5 LBS CLOSING PRESSURE	NORTON 1601
1	THRESHOLD	PEMCO 271A
1	DOOR BOTTOM	PEMCO 216AV
1	WEATHERSTRIP	PEMCO 279PAV
1	DOOR STOP	QUALITY 431
1	EXTERIOR TRIM, LEVER HANDLE	VON DUPRIN 2300

HARDWARE GROUP 4		
QTY.	DESCRIPTION	PART NO.
3	HINGES	HAGAR RC1749 4.0"x4.0" L2
1	PASSAGE LEVER	SCHLAGE D105 RHODES, 260 FINISH

NOTE:
PANIC HARDWARE IS REQUIRED TO BE INSTALLED WHEN
THE CONFIGURATION OF ANY ROOM PROVIDES AN OCCUPANT
LOAD OF 50 OR GREATER, CBC 1007.3.10



ARCHITECT STAMP
DATE SIGNED
JUL 15 2003

STRUCTURAL ENGINEER STAMP
DATE SIGNED
MAY 21 2003

STATE AGENCY STAMP

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
4-104778
AC FLS WFL SS
DATE: 5-30-03

PROJECT
MODULAR CLASSROOM BUILDING

TITLE
BUILDING SPECIFICATIONS,
CONSTRUCTION NOTES & SCHEDULES

DATE
12-1-02

DRAWN BY
R.D.L.

SCALE
AS NOTED

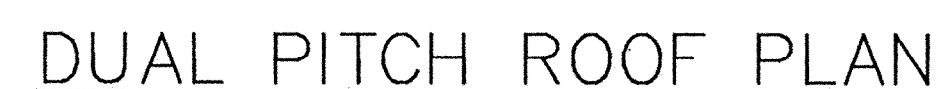
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REVISIONS

SHEET NO.
G-2

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PROJECT	24'x40'	MODULAR CLASSROOM BUILDING
TITLE	24'x40'	FLOOR PLAN, EXTERIOR ELEVATIONS & BOSE PLAN (DUAL PITCH ROOF)




NOTE:
BUILDING HOUSING GROUP 'E' OCCUPANCIES
SHALL HAVE ROOF COVERINGS AS SPECIFIED
IN TABLE 15A CBC - CLASS 'A'

NOTE:
PROVIDE FIRE BLOCKING
PER C.B.C. 708

NOTE:
FLOOR PLAN SHOWN IS 'B' BUILDING
'A' BUILDING IS OPPOSITE HANDED

LEGEND

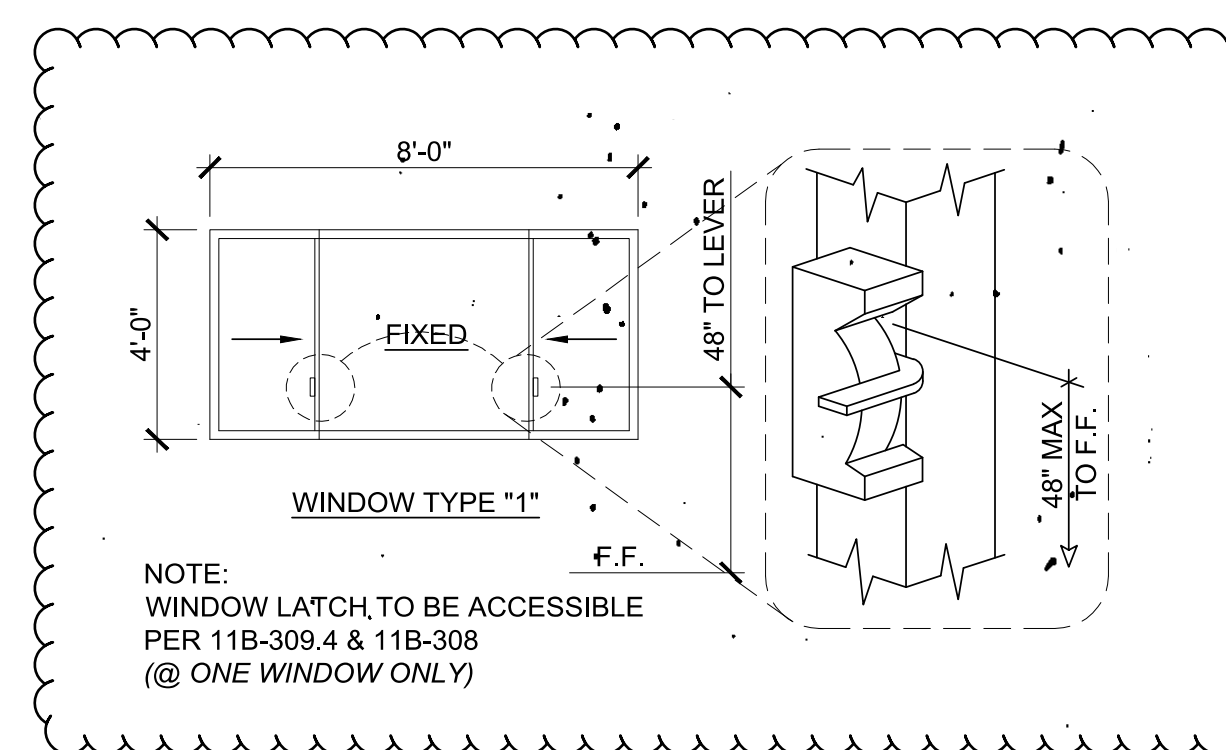
INDICATES DOOR TYPE, SEE SHEET G-2
INDICATES HARDWARE TYPE, SEE SHEET G-2

 INDICATES WINDOW TYPE- SEE SHEET G-2

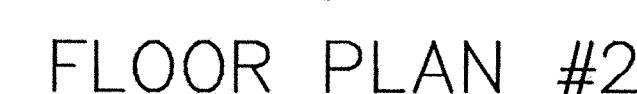
DETAIL #
SHEET #

SIGNAGE | LEGEND:

REFER TO ARCHITECTURAL SET FOR SIGNAGE REQUIREMENTS - ALL SIGNAGE PROVIDED BY DISTRICT (OTHERS).



NOTE: WINDOW LATCH TO BE ACCESSIBLE PER 11B-309.4 & 11B-308 (@ ONE WINDOW ONLY)

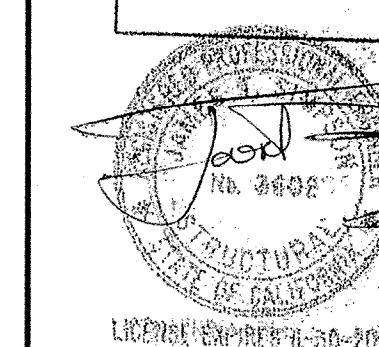


NOTES:

1. MANUFACTURER SHALL MECHANICALLY ATTACH METAL TAG TO EXTERIOR OF BUILDING SHOWING USA APPLICATION NUMBER, MANUFACTURERS NAME, UNIT SERIAL NUMBER, DESIGN LINE LOADS FOR FLOOR AND ROOF, AND THE DESIGN WIND LOAD.
2. WALL AND CEILING FINISHES SHALL BE MIN. CLASS I MATERIAL.
3. FIBERGLAS INSULATION SHALL HAVE THE FOLLOWING:
FLOOR, SPREAD - 0-25
SMOKE DEVELOPED, FIVE CONTRIBUTED 0-450
4. SMOKE REQUIRED PER APPLICABLE CODES LISTED ON SHEET CS PROVIDED AND INSTALLED BY OTHERS ONSITE.
5. ANY ROOM HAVING AN OCCUPANT LOAD OF 50 OR MORE WHERE FIXED SEATS ARE NOT INSTALLED, AND WHICH IS USED FOR CLASSROOM, ASSEMBLY, DINING OR SIMILAR PURPOSE SHALL HAVE THE CAPACITY OF THE ROOM POSTED ON EACH ENTRANCE PLACED IN THE CENTER OF THE ROOM. POSTING SHALL BE BY MEANS OF A DURABLE SIGN HAVING CONTRASTING COLOR FROM THE BACKGROUND TO WHICH IT IS ATTACHED.
6. MAXIMUM EFFORT TO OPERATE DOORS SHALL NOT EXCEED 5 POUNDS FOR EXTERIOR DOORS AND 5 POUNDS FOR INTERIOR DOORS. PUSH OR PULL EFFORT BEING APPLIED AT RIGHT ANGLES TO HINGED DOORS AND AT THE CENTER POINT OF SLIDING OR FOLDING DOORS. COMPENSATING DEVICES OR ATTACHMENTS ARE ALLOWED TO BE USED TO MEET THE ABOVE STANDARDS, WHEN FIRE DOORS ARE REQUIRED, THE MAXIMUM EFFORT TO OPERATE THE DOOR MAY BE INCREASED BUT NOT EXCEED 15 POUNDS.

ARCHITECT STAMP

DATE SIGNE
JUL 15 2003



STRUCTURAL ENGINEER STAMP

LOCATION: 04456

~~IDENTIFICATION STAMP
DIV. OF THE STATE ARCHIT.
OFFICE OF REGULATION & CONTROL~~

04 11 05 1 P 0

~~CONFIDENTIAL~~

AC 1043 9 80
DATE JUL 7 2002

1. The first step is to identify the problem or question that needs to be answered. This involves understanding the context and the specific requirements of the task.

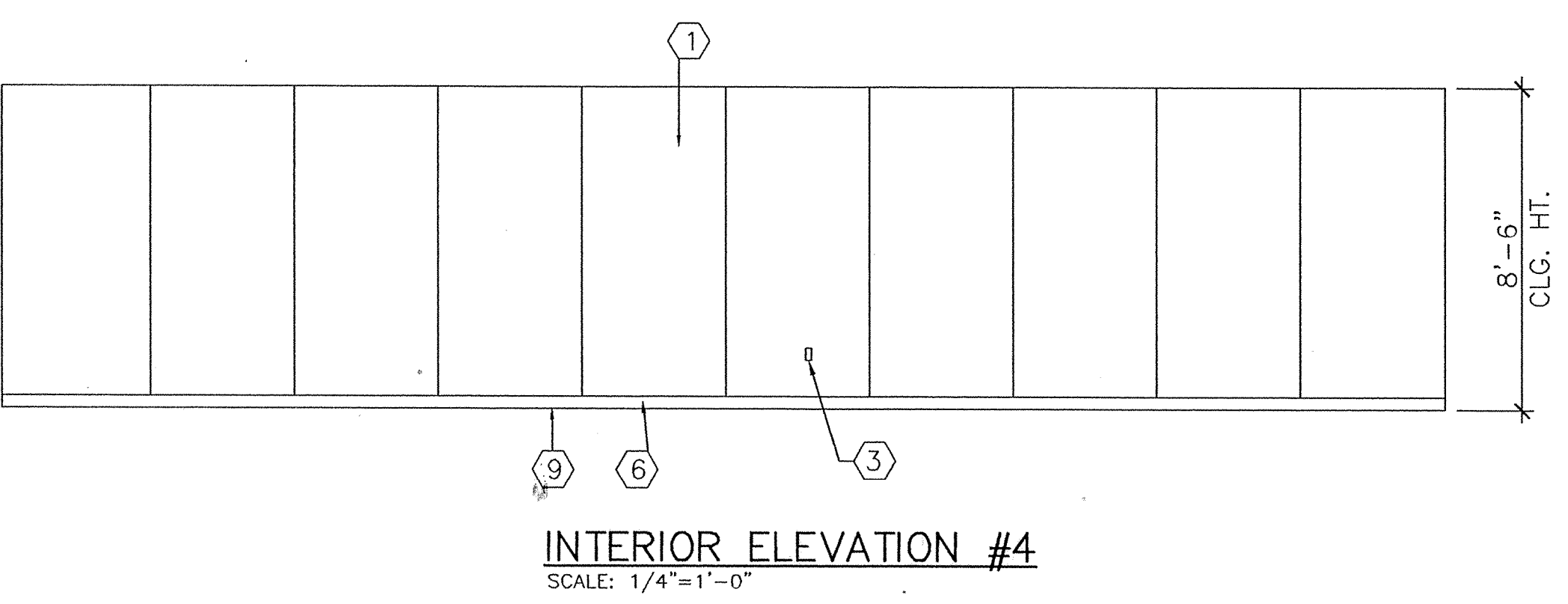
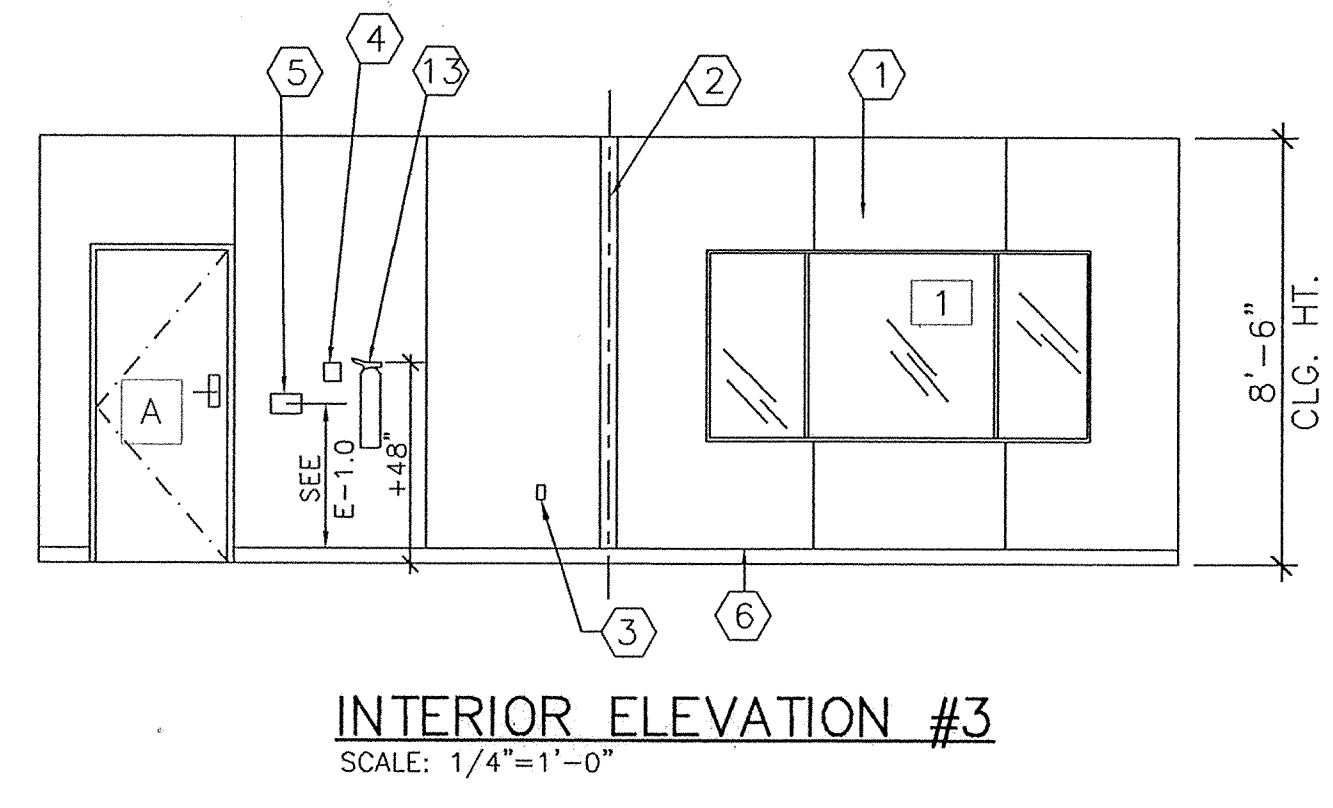
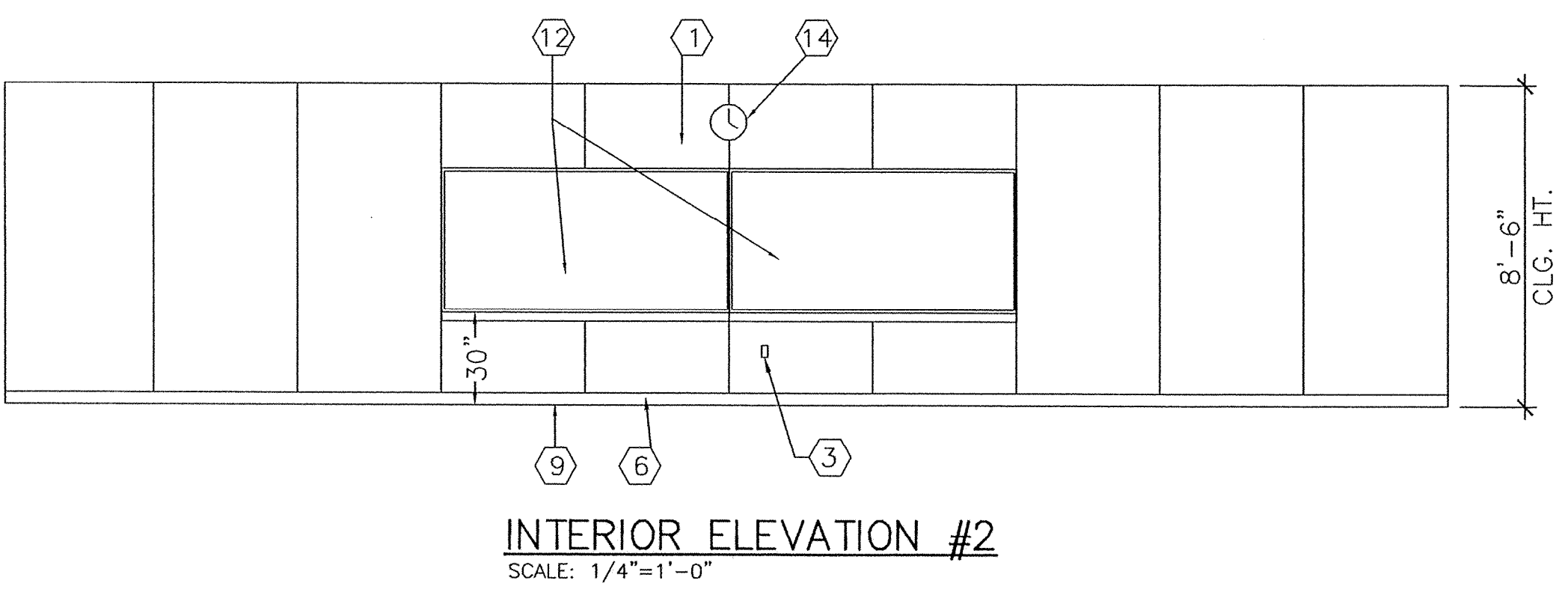
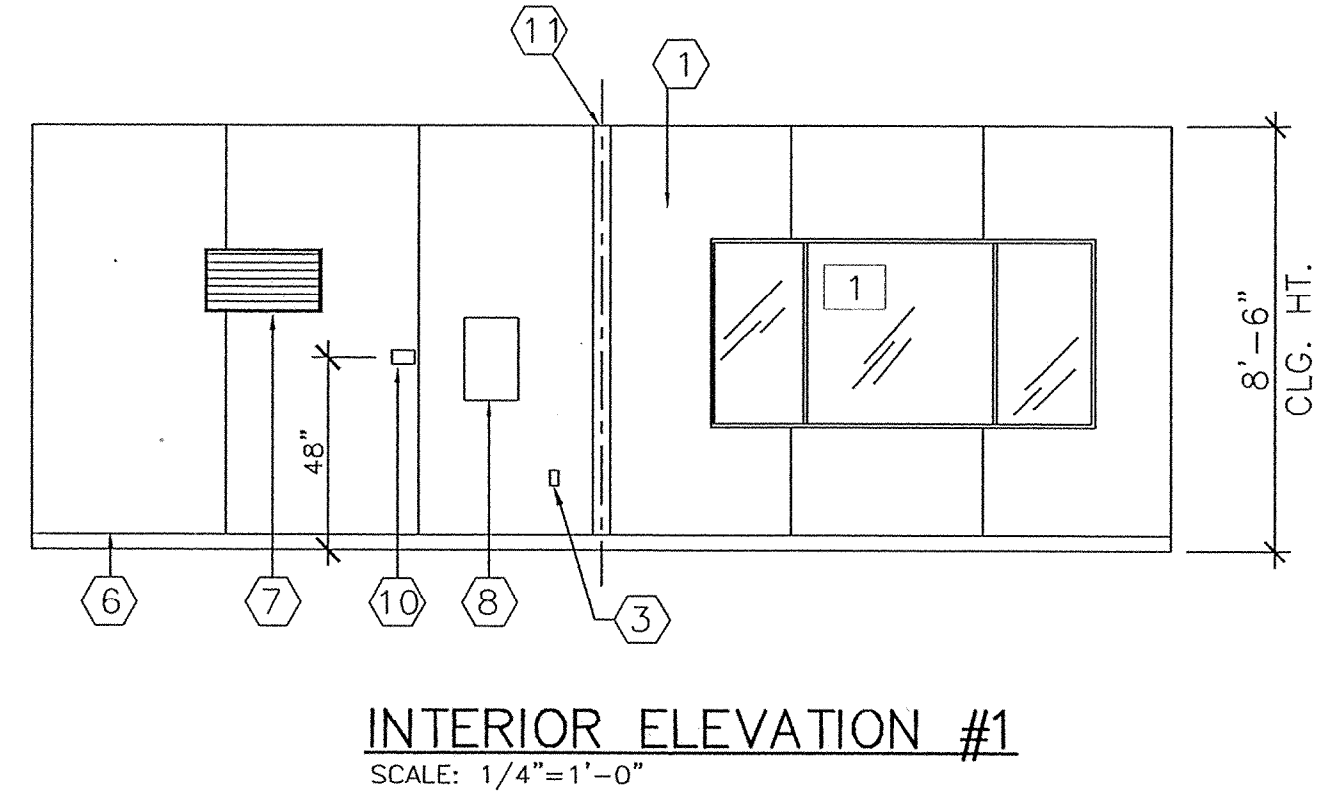
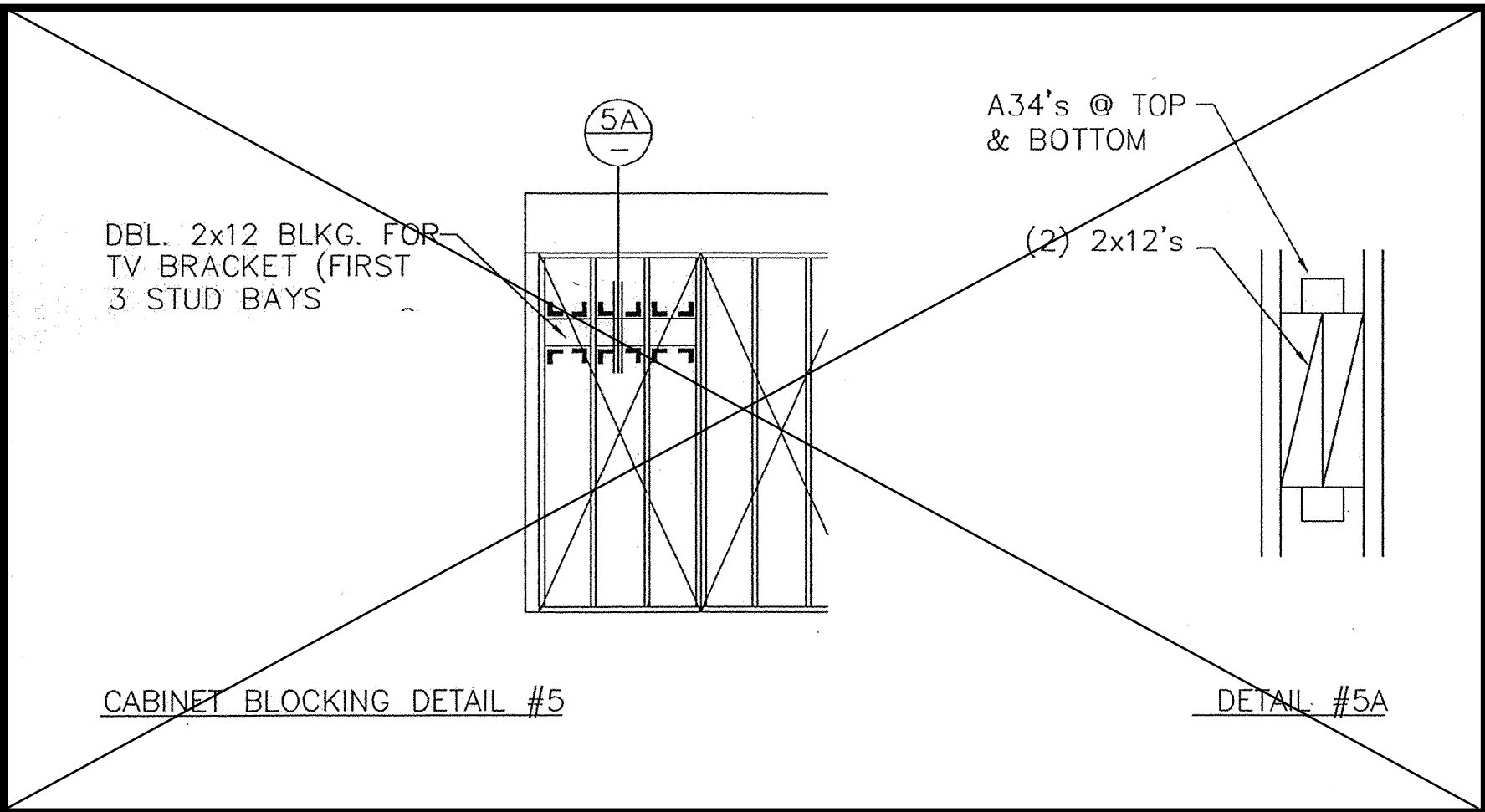
1. *Journal of the American Medical Association*, 1997; 278: 1039-1044.

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1. *Journal of the American Medical Association*, 277: 1025-1026, 1997.

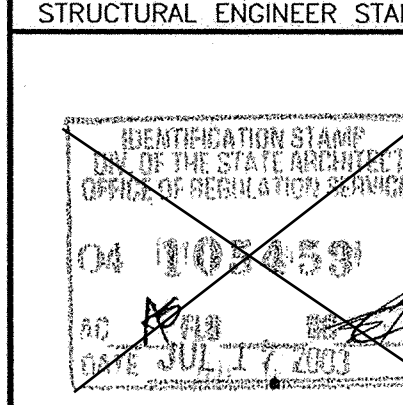
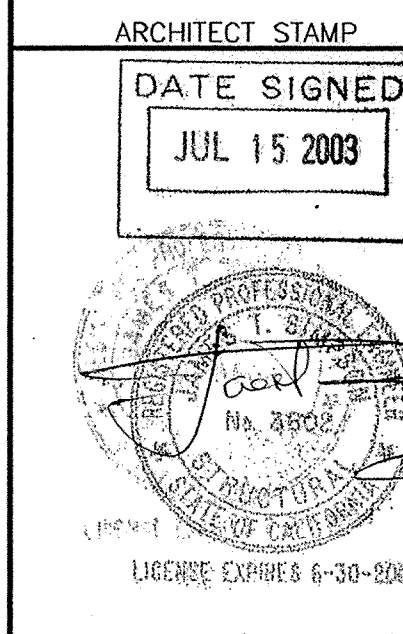
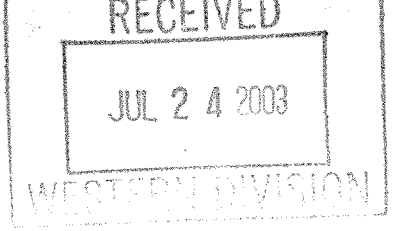
1

STATE AGENCY STAM



KEYNOTES:

- A EXTERIOR DOOR
- 1 EXTERIOR WINDOW
- 1 TYPICAL INTERIOR FINISH
- 2 CLOSURE AT MODULAR JOINT
- 3 DUPLEX WALL RECEPTACLE +18" A.F.F. (SEE POWER PLAN)
- 4 FIRE ALARM PULL STATION (SEE POWER PLAN)
- 5 LIGHT SWITCH (SEE LIGHTING PLAN)
- 6 TOP SET BASE (TYPICAL) SEE FINISH SCHEDULE
- 7 RETURN AIR GRILL
- 8 ELECTRICAL PANEL
- 9 FINISH FLOOR
- 10 THERMOSTAT SEE MECHANICAL PLAN
- 11 MODULAR JOINT
- 12 (2) 8'-0" x 4'-0" MARKERBOARD
- 13 FIRE EXTINGUISHER
- 14 12" DIA. ELECTRIC CLOCK (SEE ELECTRICAL POWER PLAN)



MSI
MODULAR STRUCTURES INTERNATIONAL, INC.
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PROJECT
24'x40'
MODULAR CLASSROOM BUILDING
TITLE
24'x40'
INTERIOR ELEVATIONS

JOB # 03-1014

DATE 7/11/03

DRAWN BY JAG

SCALE 1/4"=1'-0"

APPROVED

REVISIONS

SHEET NO.

A-2.1-24

MSI
MODULAR STRUCTURES INTERNATIONAL, INC.
925 STRASBURG AVE. REDDING, CALIFORNIA 96001
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PROJECT
24'x40'
MODULAR CLASSROOM BUILDING
TITLE
24'x40'
REFLECTED CEILING PLAN

JOB # 03-1014

DATE 7/11/03

DRAWN BY JAG

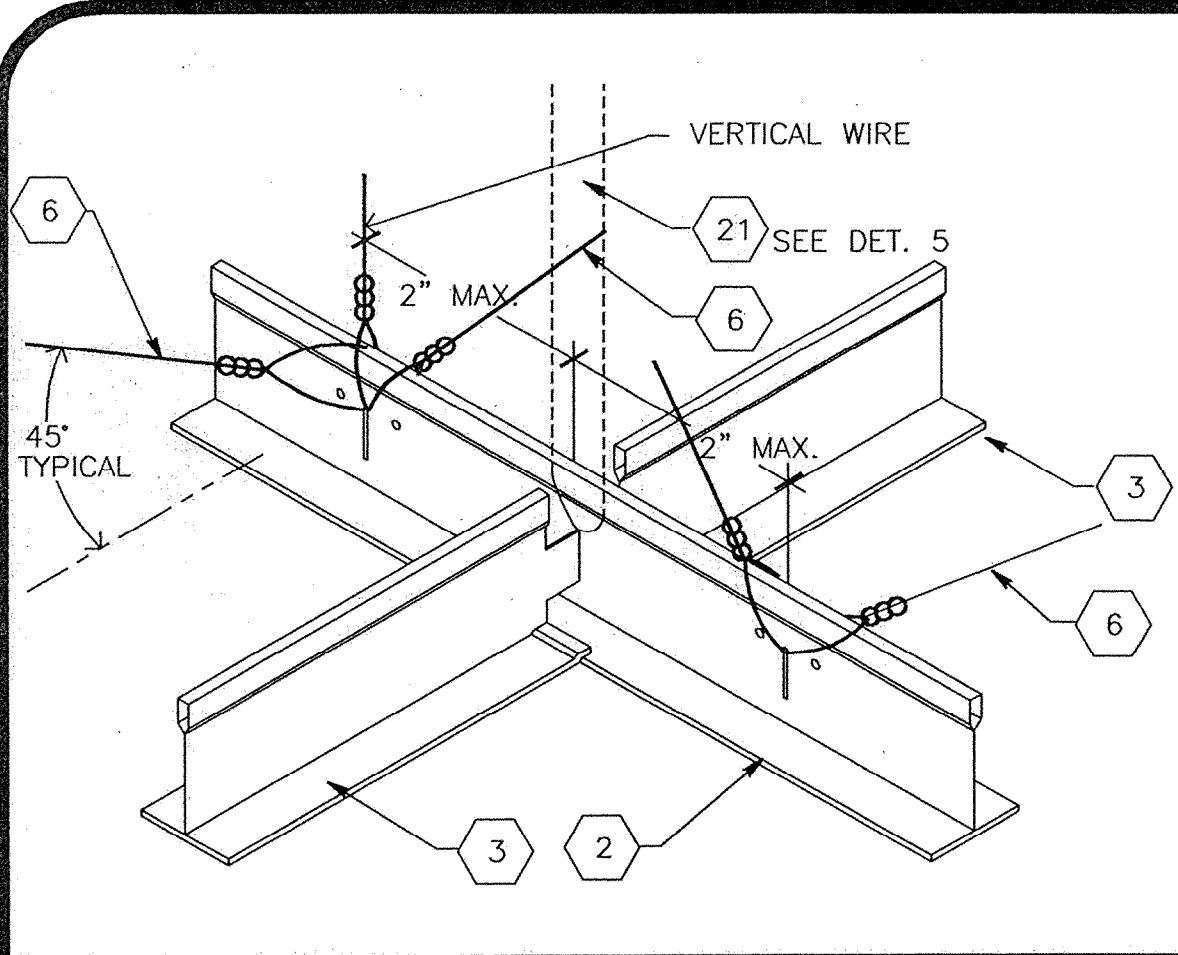
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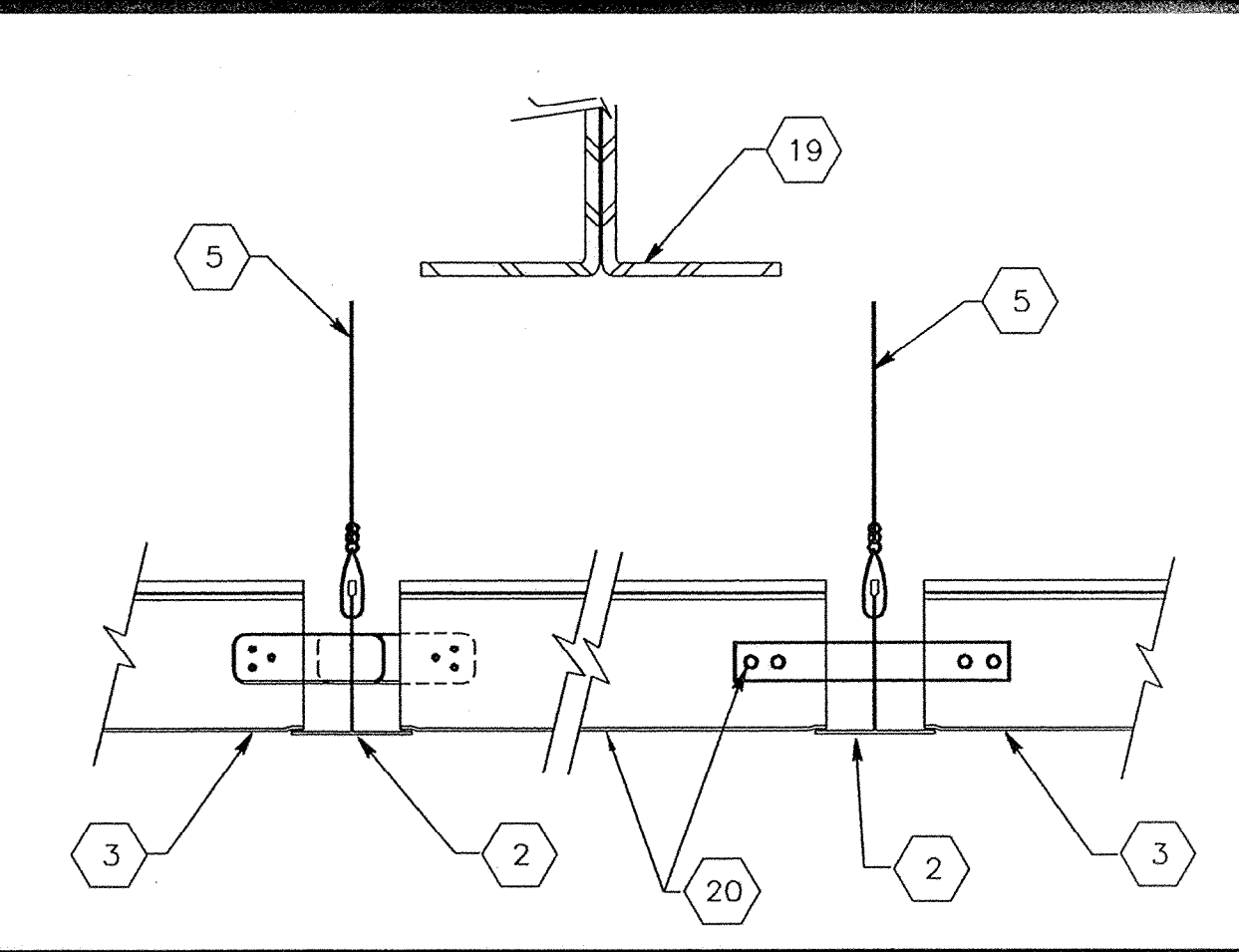
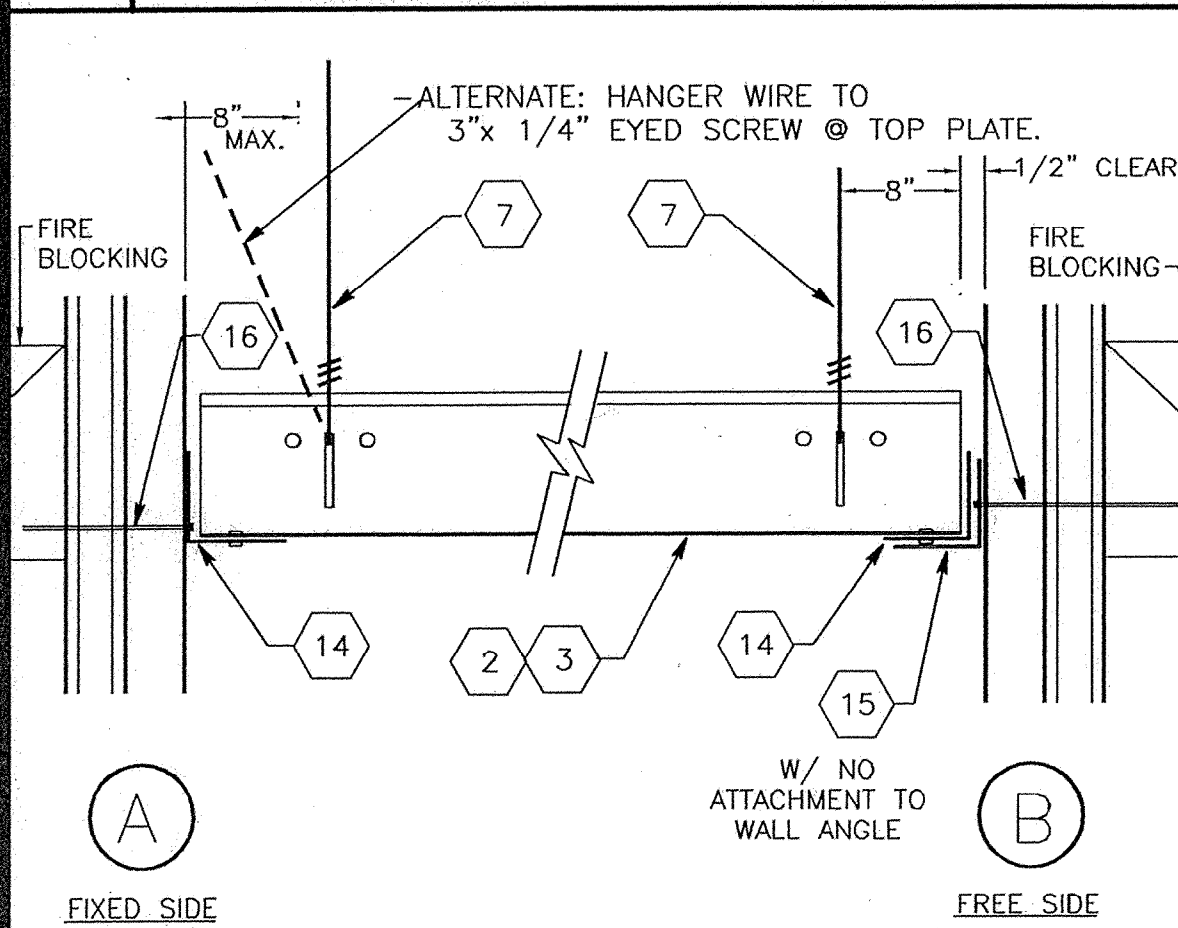
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SHEET NO.

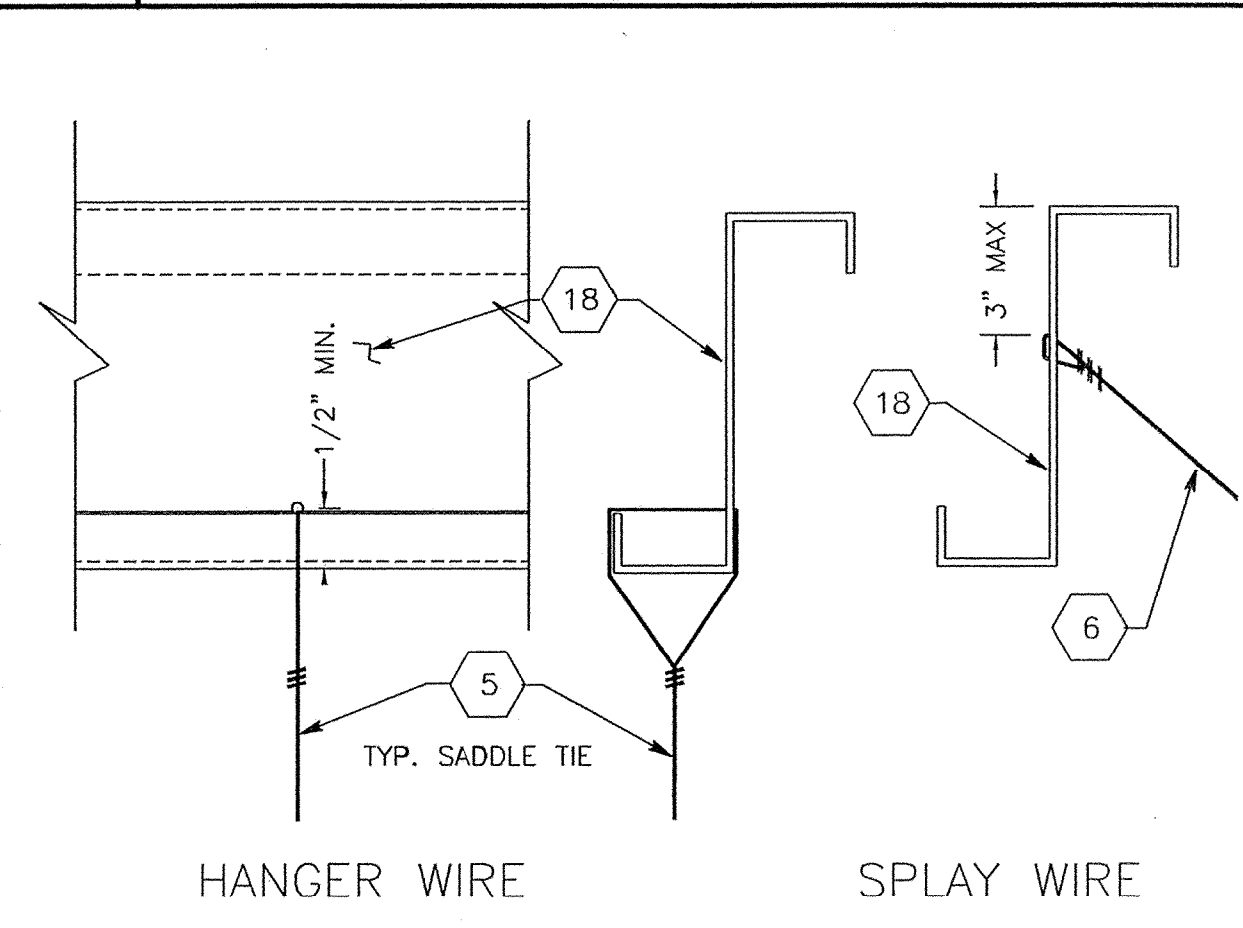
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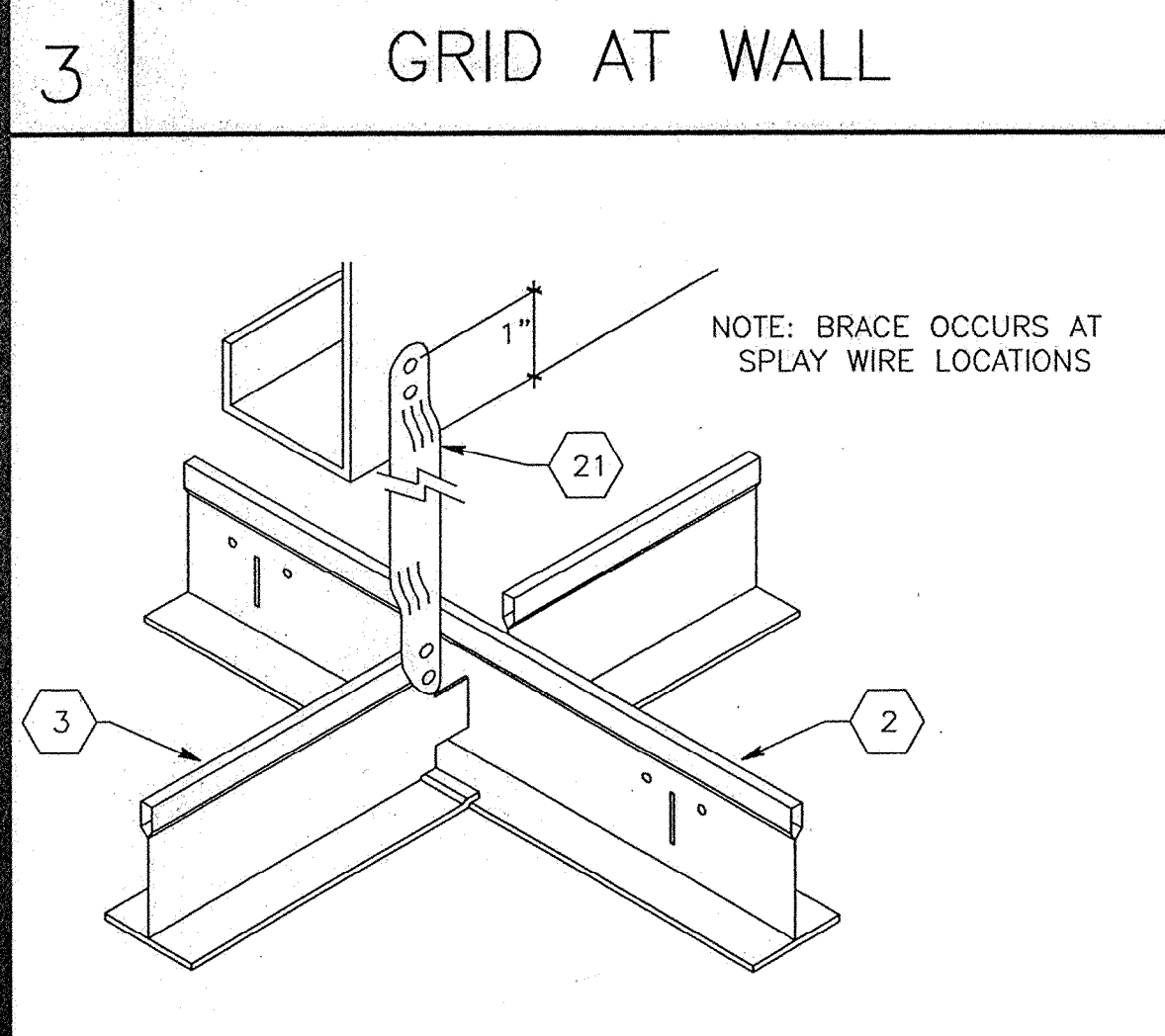
1 SPLAY WIRE



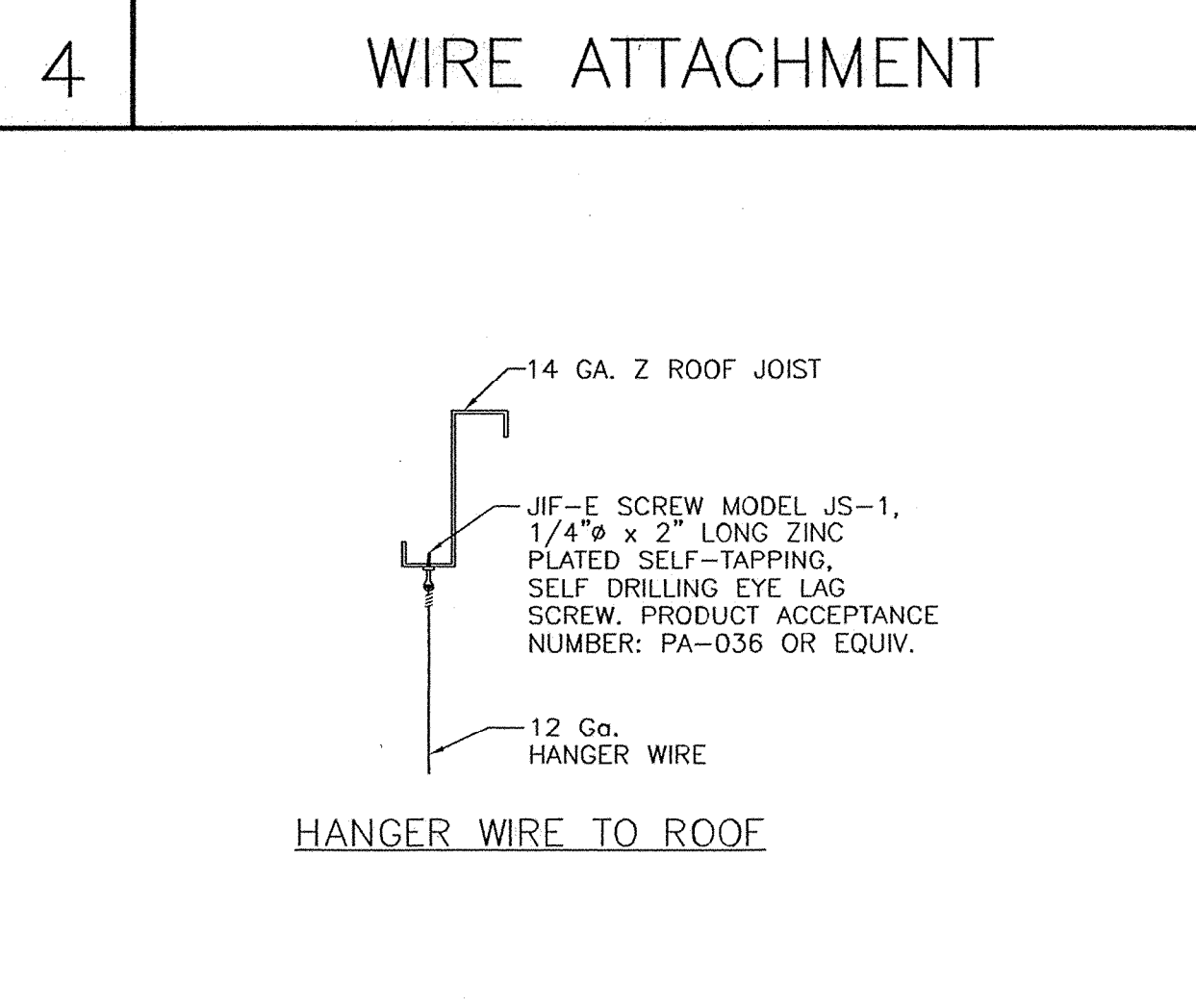
2 GRID AT MODLINE



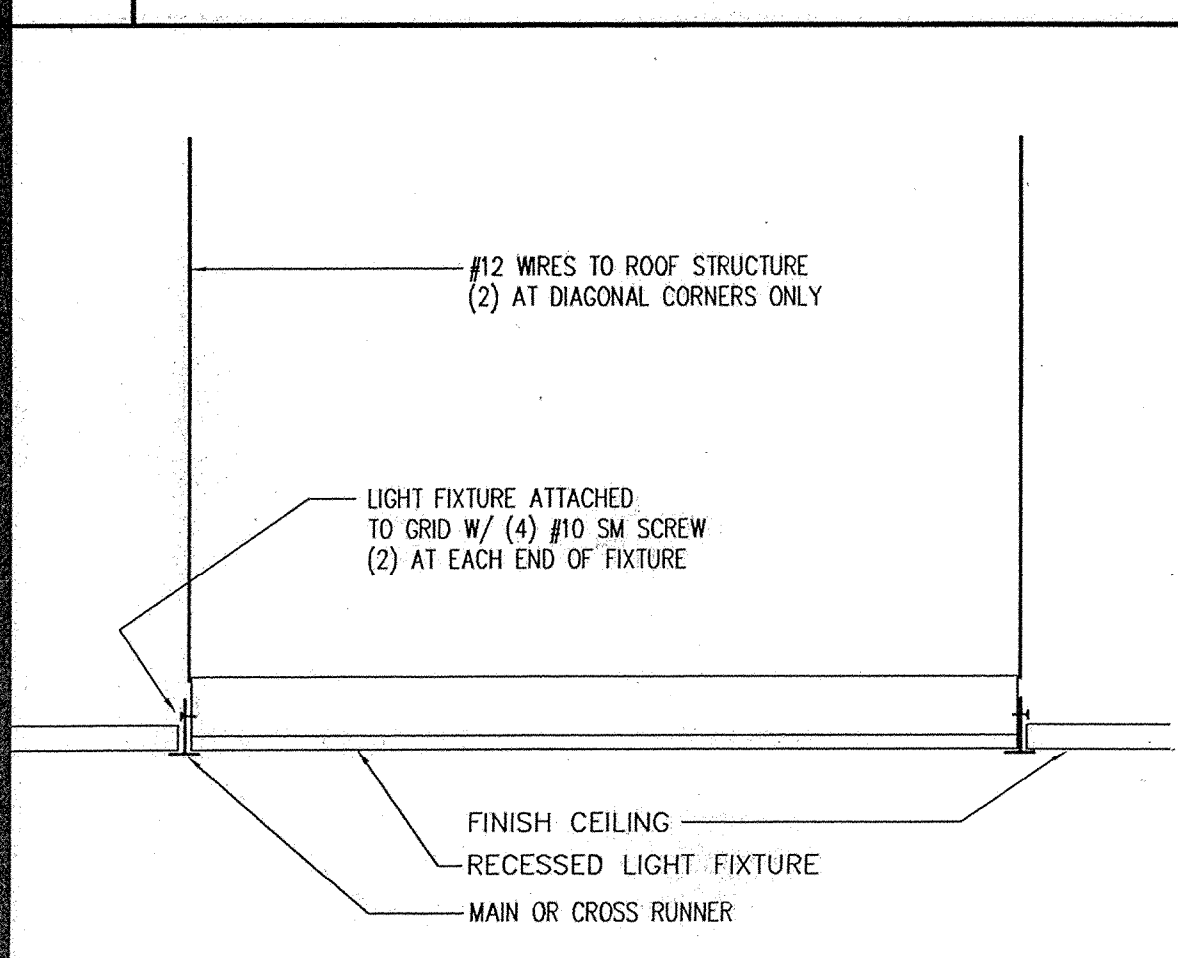
4 WIRE ATTACHMENT



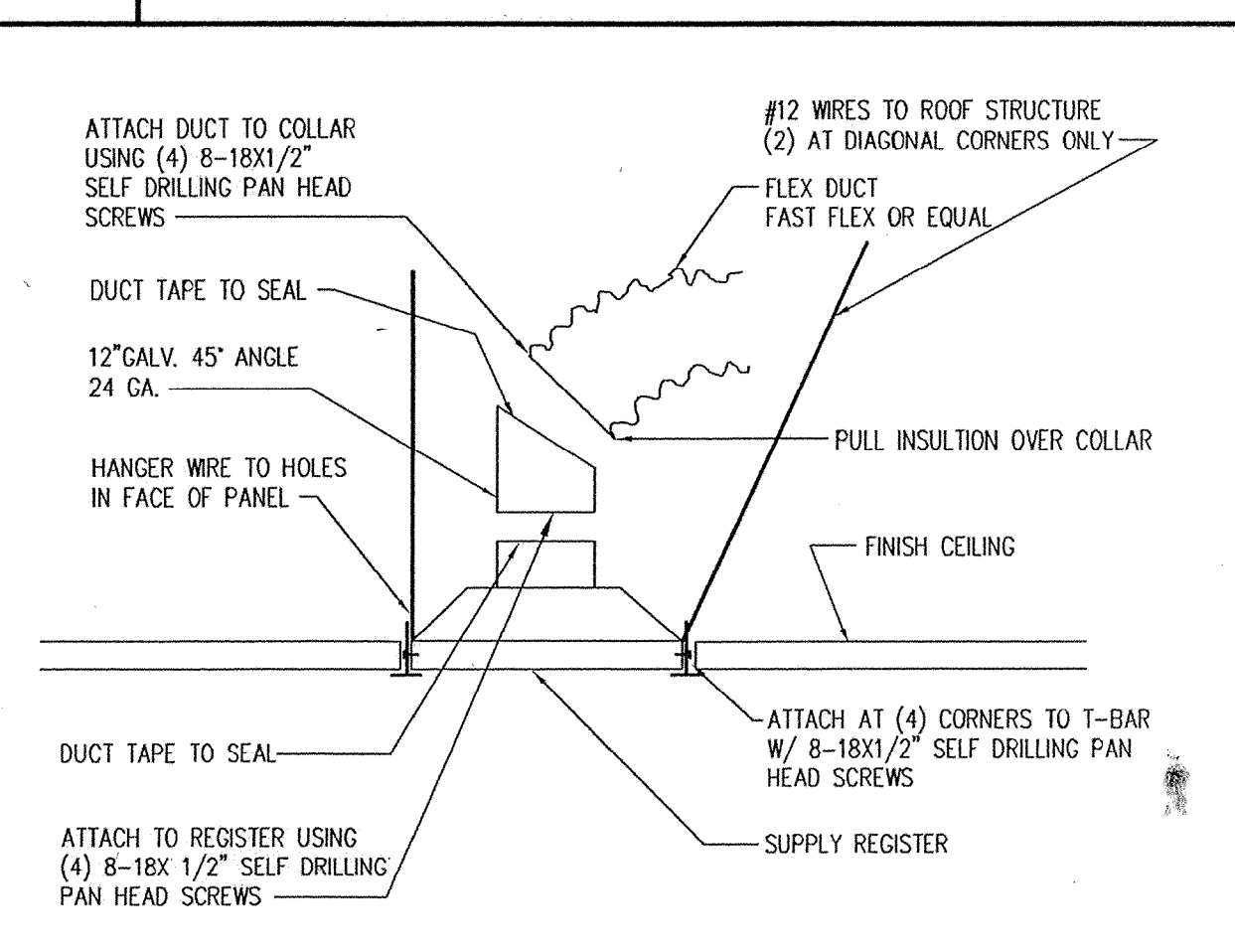
5 VERTICAL BRACE



6 ALTERNATE WIRE ATTACHMENT



7 LIGHTING FIXTURE DETAIL



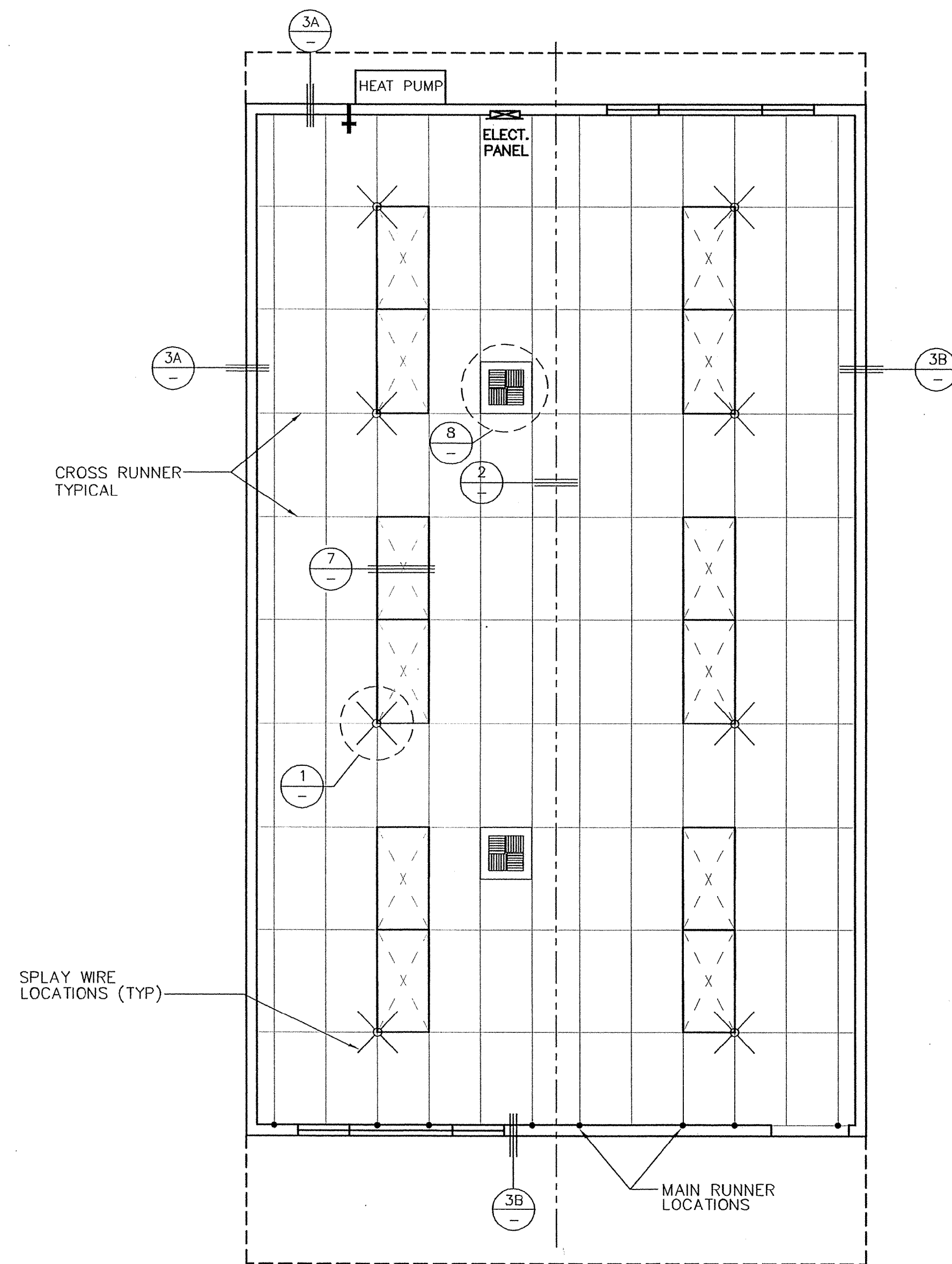
8 REGISTER BOX DETAIL

KEY NOTES

- 1 MAIN RUNNERS @ 4'-0" O.C. WITH HANGER WIRES SPACED @ 4'-0" O.C. MAX.
- 2 MAIN RUNNER: DONN CORP. DX-26 HEAVY DUTY
- 3 CROSS RUNNER: DONN CORP. DXO-424 HEAVY DUTY
- 4 WALL RUNNER: DONN CORP. M7-EV
- 5 TYPICAL HANGER WIRE TO BE 12 GA. STEEL WIRE ATTACHED TO STRUCTURE ABOVE AND TO GRID WITH (3) TIGHT TURNS WITHIN 1 1/2" - SEE DETAIL 4
- 6 TYPICAL SPLAY WIRE TO BE 12 GA. STEEL WIRE ATTACHED TO STRUCTURE ABOVE AND TO GRID WITH (4) TIGHT TURNS WITHIN 1 1/2" - SEE DETAIL 4
- 7 AT END OF ROWS OF RUNNERS, A HANGER WIRE SHALL BE ATTACHED WITHIN 8" (OF ANY WALL OR SOFFIT) OR 1/4 LENGTH OF END TEE WHICHEVER IS LEAST
- 8 VERTICAL WIRES MORE THAN 1:6 OUT OF PLUMB SHALL HAVE COUNTERBALANCE WIRES INSTALLED. ADJOINING WALLS; AT OTHER WALLS NO ATTACHMENT. A 1/2" CLEARANCE BETWEEN END OF RUNNER AND FACE OF WALL. WIRES INSTALLED AS INDICATED ON PLAN. SPLAY WIRES SHALL BE TAUT BUT NOT DISTORTED.
- 9 RUNNERS MAY BE ATTACHED TO WALL MOLDING AT (2) ADJOINING WALLS; AT OTHER WALLS NO ATTACHMENT. WHERE THERE IS NO ATTACHMENT THERE SHALL BE A 1/2" CLEARANCE BETWEEN END RUNNER AND FACE OF WALL.
- 10 CEILING AREAS EVERY 144 SQ. FT. OR LESS SHALL HAVE SPLAY WIRES INSTALLED AS INDICATED ON CEILING PLAN. SPLAY WIRES SHALL BE TAUT BUT SHALL NOT DISTORT GRID.
- 11 ELECTRICIAN SHALL PROVIDE (2) SLACK HANGER WIRES AT OPPOSITE CORNERS OF ALL LIGHT FIXTURES. WIRES SHALL BE ATTACHED TO STRUCTURE ABOVE PER NOTE 5. LIGHT FIXTURES SHALL BE ATTACHED TO CEILING GRID WITH (1) #8 SHEET METAL SCREW @ EACH CORNER.
- 12 DUCTWORK, IF REQUIRED, SHALL BE RIGIDLY ATTACHED TO STRUCTURE ABOVE AT INTERVALS NOT TO EXCEED 4'-0" AND SHALL NOT BE CLOSER THAN 6" TO ANY WIRE.
- 13 CEILING REGISTERS, WHEN INDICATED ON PLANS, SHALL BE ATTACHED TO STRUCTURE ABOVE PER NOTE 5.
- 14 CONT. WALL ANGLE WITH POP RIVET TO EACH MEMBER.
- 15 CONTINUOUS WALL ANGLE.
- 16 6d NAIL @ 16" O.C. INTO BLOCK OR STUD.
- 17
- 18 ROOF JOIST
- 19 ROOF BEAM
- 20 CLOSE OFF CROSS TEE - INSERT ONE END OF CROSS TEE INTO MAIN RUNNER WITH BAYONET. CUT OPPOSITE END TO FIT (IF LESS THAN 24"). INSERT MIN. 20 ga. MTL STRAP THRU MAIN RUNNER, SECURE TO CROSS TEE W/ (2) #8 TEK SCREWS AT EACH END.
- 21 VERTICAL BRACE - 1/2" STEEL EMT AT SPLAY WIRE LOCATIONS. (MAX. HT. OF 4'-0") DRILL 1/8" HOLE THRU CONDUIT AT TOP & BOTTOM. ATTACH CONDUIT TO JOIST ABOVE OR TO BLOCKING W/ (2) #12 SCREWS @ TOP & BOTTOM.

LEGEND

- SUPPLY AIR DIFFUSERS
- 2'x 4' FLUORESCENT DROP-IN FIXTURE
- 4-WAY SPLAY WIRE SYSTEM
- EXHAUST FAN

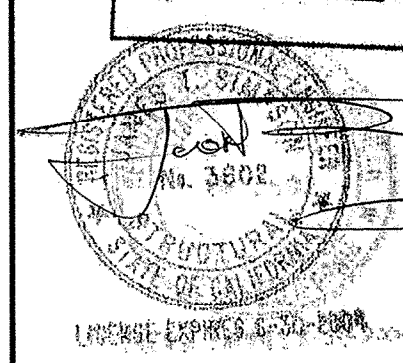


REFLECTED CEILING PLAN

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

RECEIVED
JUL 24 2003
WESTERN DIVISION

ARCHITECT STAMP
DATE SIGNED
JUL 15 2003

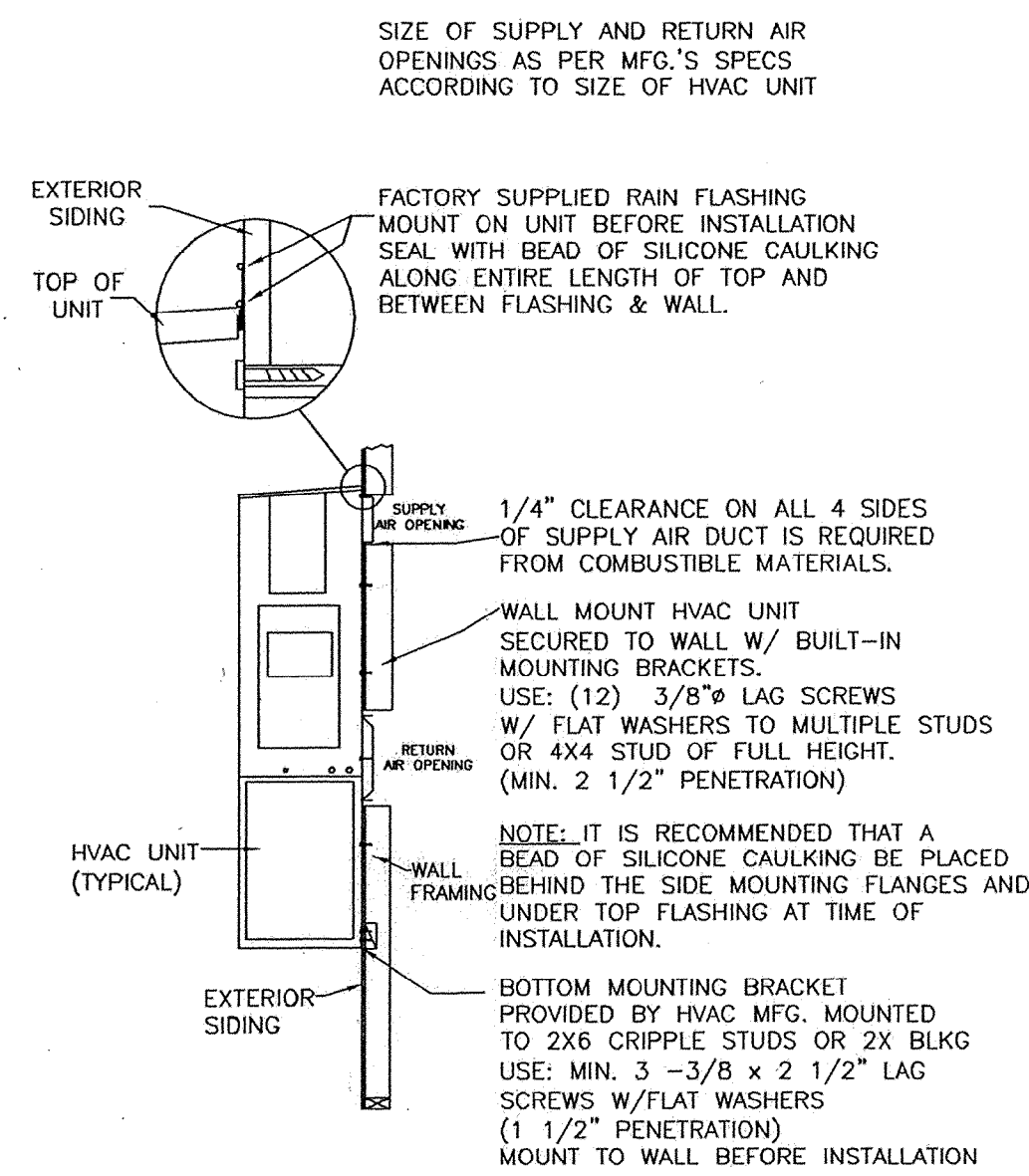


STRUCTURAL ENGINEER STAMP

IDENTIFICATION STAMP
OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
04 100459
AP: FLS / JAG
DATE: JUL 11 2003

STATE AGENCY STAMP

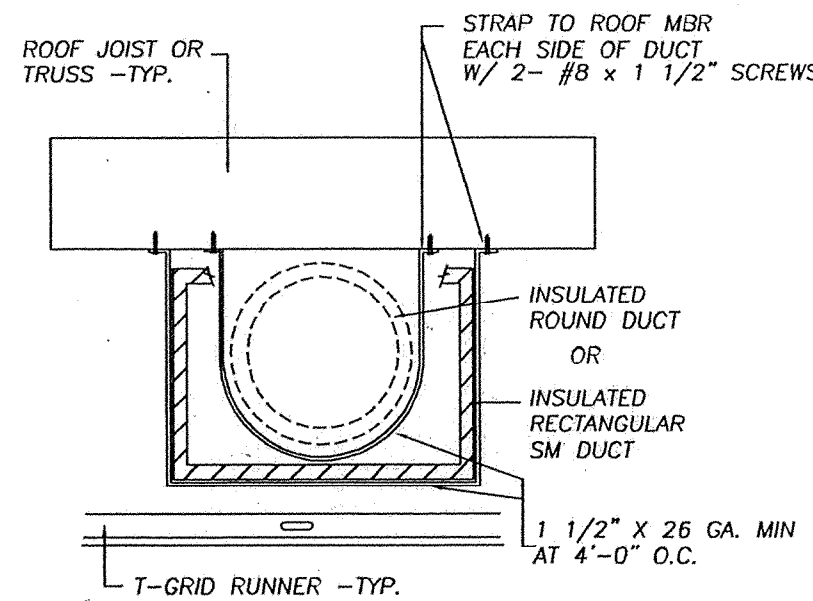
STATE AGENCY STAMP



AIR FILTER: SEE GEN. NOTES ON ARCHT. SHEET OF PLANS

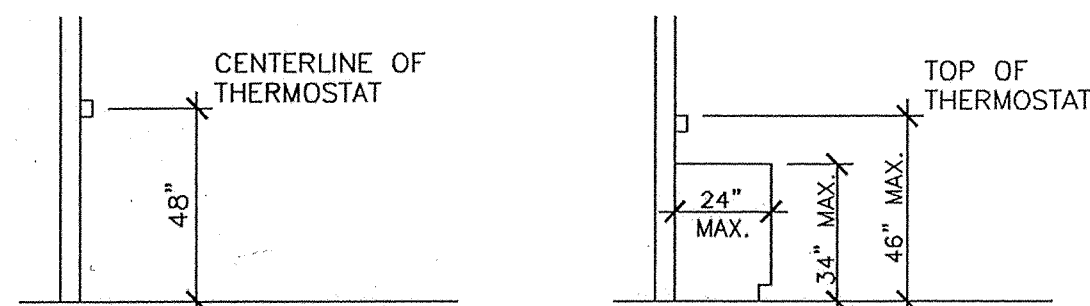
HVAC MOUNTING

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



DUCT MOUNTING

SCALE: 1" = 1'-0"



MOUNTING HEIGHT OVER OBSTRUCTION

MECHANICAL NOTES

FLEXIBLE DUCT SHALL BE MODULAR METAL FABRICATORS SERIES FDMA R4.2 WITH INSULATION, A POLY JACKET, AND A WIRE ENCAPSULATED NON-PERFORATED CORE THAT COMPLIES WITH ASTM C-518, 1991. FLEXIBLE DUCTING SHALL BE UL LISTED CLASS 1 AIR DUCT WITH A FLAME SPREAD RATING NOT TO EXCEED 25, AND A SMOKE-DEVELOPED RATING NOT TO EXCEED 50 IN ACCORDANCE WITH NFPA 90A & 90B.

THERMOSTAT PROGRAMMING TO BE PERFORMED AND BATTERY PROVIDED BY OTHERS ON SITE.

TEST AND BALANCE OF HVAC SYSTEM TO BE PROVIDED AND PERFORMED BY OTHERS ON SITE.

ALL HVAC EQUIPMENT LEAVES FACTORY WIRED FOR 240V. OPERATION. THE ACCEPTABLE OPERATING RANGE FOR THE 240 & 208 TAPS ARE:

TAP	RANGE
240	253-216
208	220-187

BARD HVAC OPENING @ SUPPLY		
10 SEER	SIZE	OPENING
WA/WH	1.0 TON	18 X 6
WA/WH	1.5 / 2.0 TON	21 X 9
WA/WH	2.5 / 3.0 TON	29 X 9
WA/WH	3.5 / 4.0 TON	31 X 11
12 SEER	SIZE	OPENING
WA/WH	2.0 TON	29 X 9
WA/WH	2.5 TON	29 X 9
WA/WH	3.0 TON	31 X 11
GAS/ELEC.	SIZE	OPENING
WG	2.0 / 2.5 TON	29 X 9
WG	3.5 / 4.0 TON	31 X 11

EQUIPMENT & MATERIAL SCHEDULE



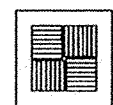
HEAT PUMP 'BARD' WALLMOUNT, WH42-A05VP4 5KW
41,500 NOM. BTUH COOLING CAPACITY-10.00 SEER
41,000 NOM. BTUH HEATING CAPACITY FROM COMPRESSOR-6.60 HSPF
ADDITIONAL 17,065 NOM. BTUH HEATING CAPACITY FROM HEAT STRIP
MCA 60, MOCP 70, 1500 CFM @ .3 ESP. UNIT WEIGHT 510 LB.
MIN. WIRE SIZE #6, 230 VOLT, 60 CYCLE, SINGLE PHASE

NOTE:

ADJUST OUTSIDE AIR DAMPER TO A MIN. OF 352 CFM



THERMOSTAT - WHITE ROGERS 1F92-371
AUTO CHANGEOVER, ELECTRONIC, 5+2 DAY
3 HEAT, 2 COOL, MOUNT AT +48" A.F.F.
USE STAT GUARD #F29-0277



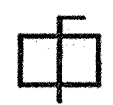
SUPPLY REGISTER, CEILING, SHOEMAKER
104-0BD, 16x16-12, T-BAR, OBD
4 WAY FIXED CURVE BLADE, U.N.O.



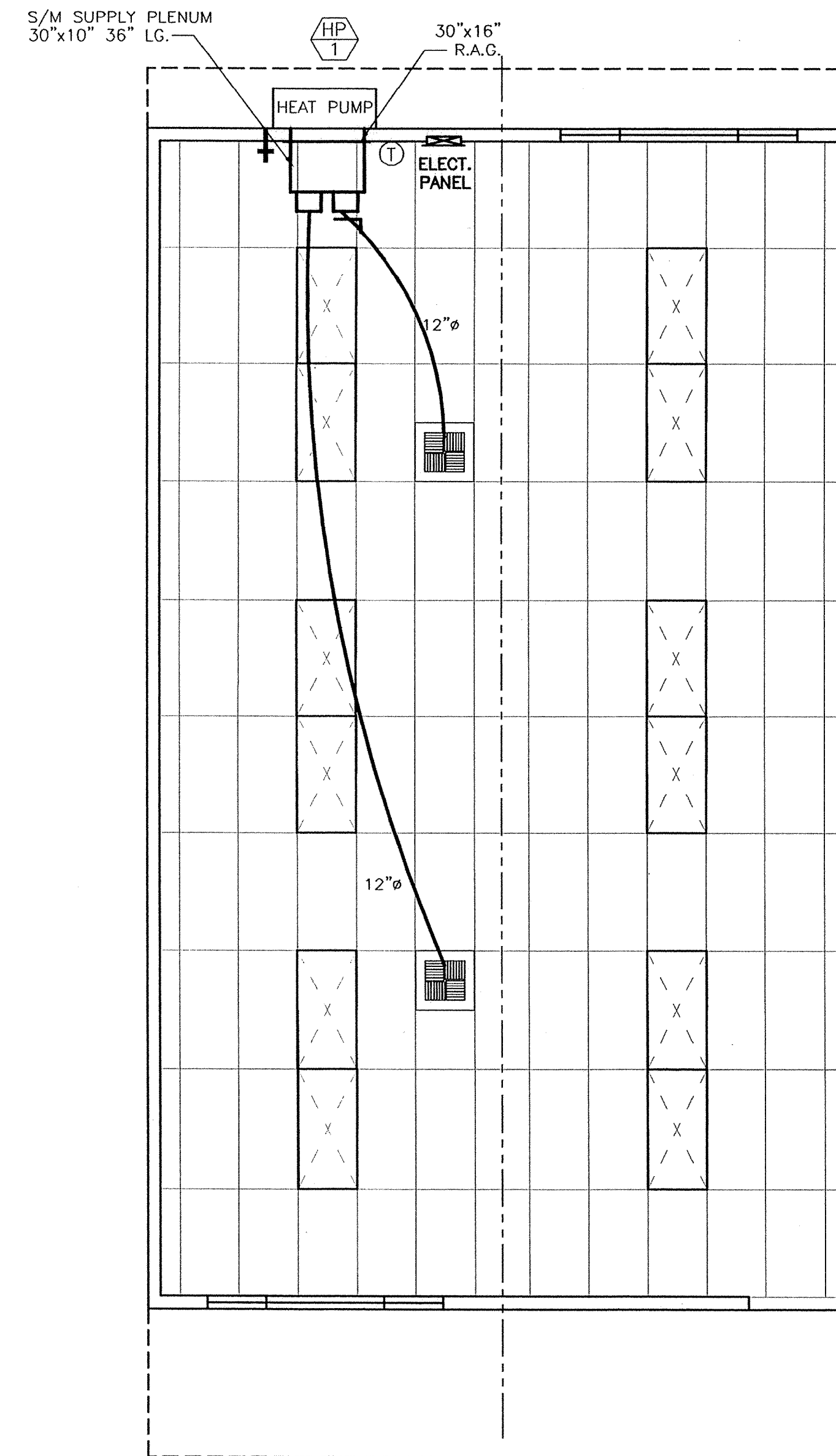
SUPPLY REGISTER, CEILING, AIRMATE
604M 8x8, MLD, 4 WAY FIXED BLADE
U.N.O.



EXHAUST FAN 109 CFM, BROAN #L100 WITH
6" DUCT TO BROAN # 634 ROOF CAP

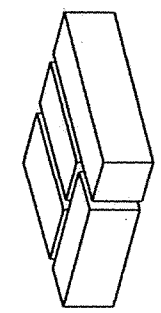


SUPPLY BALANCE DAMPER (SIZE AS NOTED)



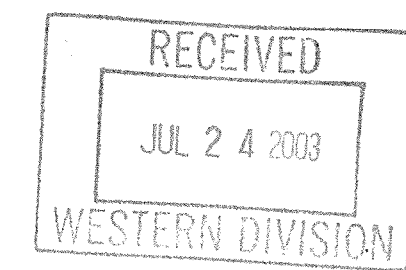
MECHANICAL PLAN

MSI



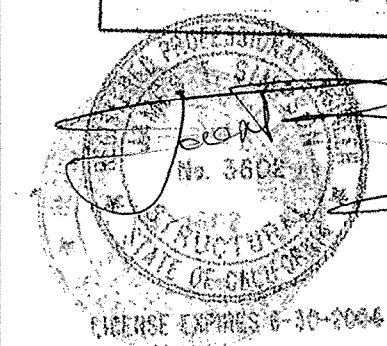
MODULAR STRUCTURES INTERNATIONAL, INC.
920 CITRUS AVE. RIVERSIDE, CALIFORNIA 92507
PHONE: (951) 788-3035 FAX: (951) 788-1523

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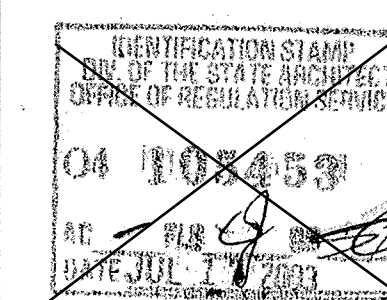
ARCHITECT STAMP

DATE SIGNED
JUL 15 2003



EXPIRES 6-30-2004

STRUCTURAL ENGINEER STAMP



STATE AGENCY STAMP

STATE AGENCY STAMP

24'x40'
MODULAR CLASSROOM BUILDING

24'x40'
MECHANICAL PLAN

TITLE

JOB # 03-1014

DATE 7/11/03

DRAWN BY JAG

SCALE 1/4"=1'-0"

APPROVED

REVISIONS

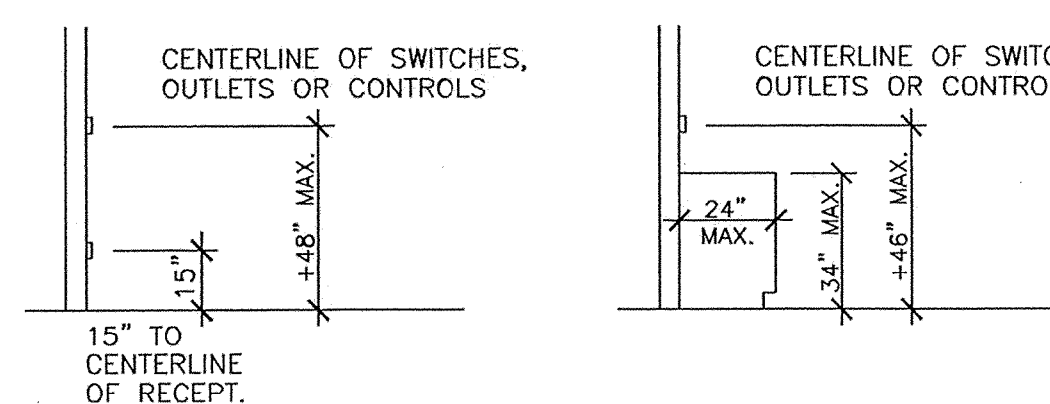
SHEET NO.

M-1.1-24

SYMBOL LEGEND

- DISCONNECT-GENERAL SWITCH R610-B 60 AMP
NOT REQUIRED ON V/C UNITS WITH INTERNAL DISCONNECT BREAKER
- PULL STATION J-BOX W/ 3/4" CONDUIT @ 48" A.F.F.
- EXT. HORN J-BOX W/ 3/4" CONDUIT @ + 7'-0" A.F.F.
- 110V RECEPTACLE 20 AMP
SPECIFICATION GRADE @ +18" A.F.F.
- SWITCH @ +42" A.F.F.
- SPRING WOUND MECHANICAL TIMER, 1-HR. TIMING RANGE
SWITCH @ +42" A.F.F.
- EXTERIOR LIGHT +7'-6"- SEE FIXTURE SCHEDULE
- HORN/STROBE LIGHT J-BOX W/ 3/4" CONDUIT @ + 80" A.F.F.
- SMOKE DETECTOR J-BOX W/ 3/4" CONDUIT @ CEILING
- HEAT DETECTOR J-BOX W/ 3/4" CONDUIT IN ATTIC SPACE
(ONE PER MODULE, IN ATTIC TYP.)
- TELEVISION J-BOX @ 84" A.F.F. W/ 3/4" CONDUIT STUBBED TO ATTIC
- OCCUPANCY SENSOR @ 42", LEVITON ODS00-ID
- DIRECTIONAL PHOTO CELL CONTROL ON ROOF
- CLOCK W/CLOCK OUTLET @ +8'-0"
- +18"
TELE/DATA OUTLET 4" SQ. J-BOX W/ 3/4" CONDUIT STUBBED TO ATTIC
- G.F.I. 110V DUPLEX G.F.I. RECEPTACLE - 15 AMP

NOTE:
ALL FIXTURE MOUNTING HEIGHTS ARE TO THE CENTER OF THE FIXTURE (U.N.O.)

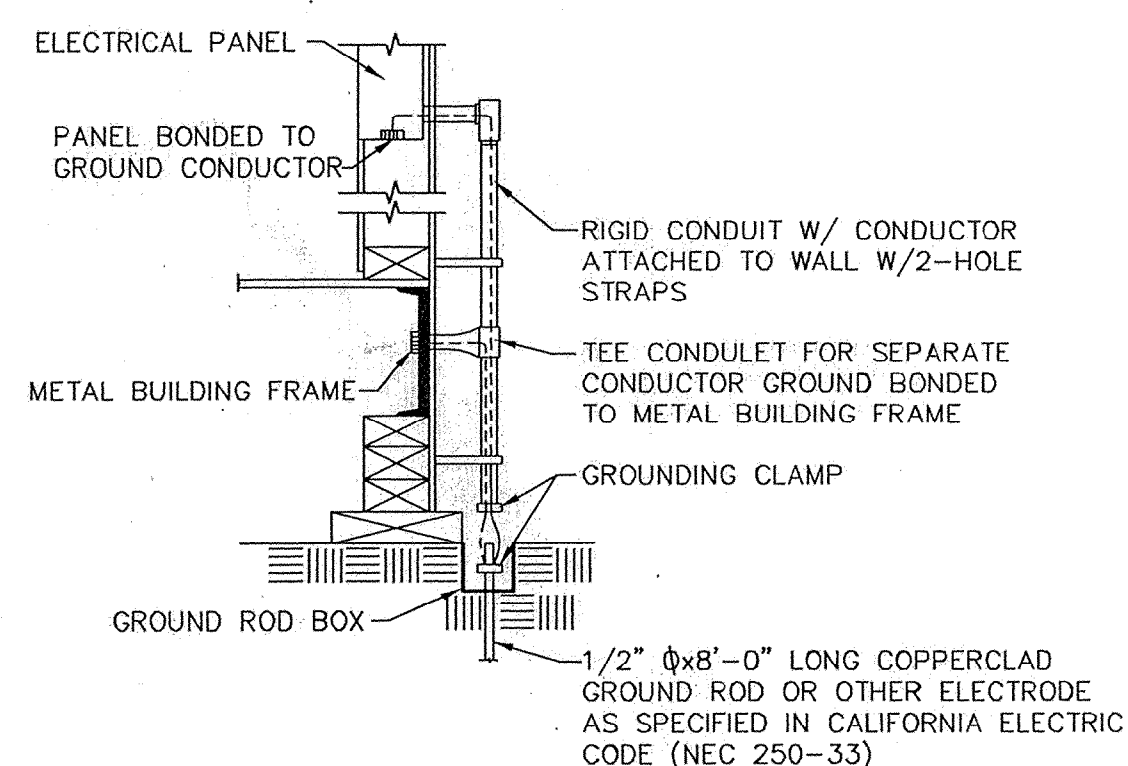


MOUNTING HEIGHT OVER OBSTRUCTION

FIRE ALARM NOTES

- FIRE ALARM SYSTEM SHALL COMPLY W/ TITLE 24 SEC. 305.9, TITLE 24, PART 3, ARTICLE 760 OF THE CALIFORNIA CODE OF REGULATIONS AND CALIFORNIA FIRE REGULATIONS, ARTICLE 10.
- INSTALLATION OF FIRE ALARM SYSTEM SHALL NOT BE STARTED UNTIL DETAIL PLANS, SPECIFICATIONS AND ENGINEERING CALCULATIONS HAVE BEEN ACCEPTED AND SIGNED BY THE ARCHITECT OR STRUCTURAL ENGINEER IN GENERAL CHARGE OF DESIGN AND THE SIGNATURE OF THE ARCHITECT OR PROFESSIONAL ENGINEER WHO HAS BEEN DELEGATED RESPONSIBILITY COVERING THE WORK SHOWN ON A PARTICULAR PLAN OR SPECIFICATION, AND APPROVED BY THE OFFICE OF THE STATE ARCHITECT AND STATE FIRE MARSHAL.

FIRE ALARM SYSTEM (CONDUITS / DEVICES / RINGS / SLEEVES / ETC.) PROVIDED BY OTHERS. (NOT BY WSM)



NOTES:

- SIZE OF CONDUCTORS SHALL COMPLY W/NEC TABLE 250-95.
- BOND SEPARATE CONDUCTORS FROM GROUND ROD TO ELECTRICAL PANEL & TO METAL BUILDING FRAME (NEC 250-81) IN ADDITION TO THE DETAIL SHOWN ABOVE. BOND THE ELECTRICAL GROUND TO METAL WATER PIPE EMBEDDED AT LEAST 10 FT. INTO THE SOIL IF AVAILABLE (NEC 250-81 & 250-83).
- ALL MODULES OF METAL FRAME BUILDINGS SHALL BE ELECTRICALLY BONDED TOGETHER (BOLTING ONLY IS NOT ACCEPTABLE BONDING), INCLUDING RAMP TO STEEL FRAME.
- CHECK RESISTANCE TO GROUND. IF RESISTANCE EXCEEDS 25 OHMS, INSTALL ADDITIONAL GROUND RODS W/CONDUCTORS AS SHOWN, SEPARATED AT LEAST 6'-0" UNTIL RESISTANCE IS REDUCED TO 25 OHMS OR LESS (NEC 250-84).
- PROJECT INSPECTOR SHALL WITNESS GROUNDING TEST.

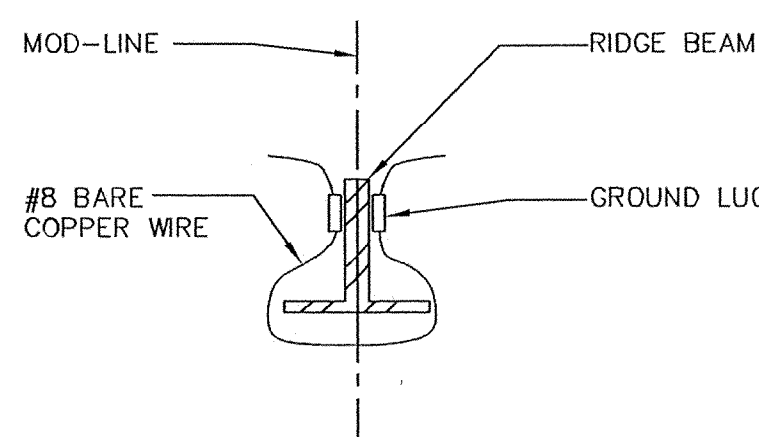
ACCEPTABLE GROUNDING DETAIL

BY OWNER

SMOKE AND HEAT DETECTOR CONDUIT AND DEVICES PROVIDED AND INTERCONNECTED BY OTHERS TO FIRE ALARM SYSTEM

450 J-BOX IN ATTIC FOR CEILING MOUNTED SMOKE DETECTOR (DEVICE BY OTHERS), MAXIMUM 21'-0" FROM ANY POINT IN ROOM AND 30'-0" BETWEEN THEM. PROVIDE A 6'-0" CONDUIT FROM EACH J-BOX TO SMOKE DETECTOR LOCATION, CONDUIT & CONNECTION TO CEILING DEVICE & DEVICE BY OTHERS

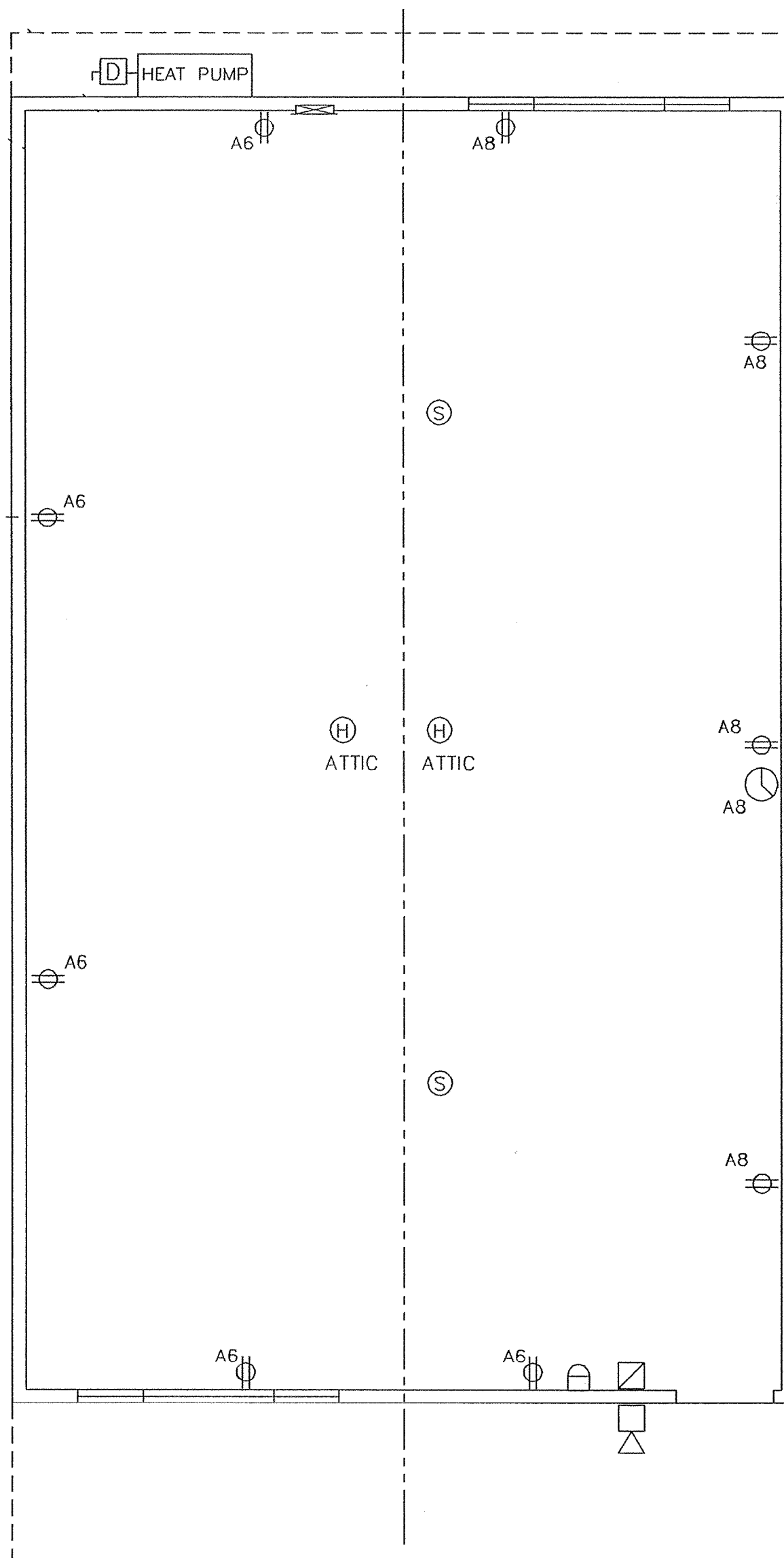
450 J-BOX IN ATTIC FOR ATTIC MOUNTED HEAT DETECTOR (DEVICE BY OTHERS), MAXIMUM 35'-0" FROM ANY POINT IN ATTIC AND 50'-0" BETWEEN THEM. PROVIDE A 6'-0" CONDUIT FROM EACH J-BOX TO HEAT DETECTOR LOCATION, CONDUIT & CONNECTION TO CEILING DEVICE & DEVICE BY OTHERS



MODULE BONDING

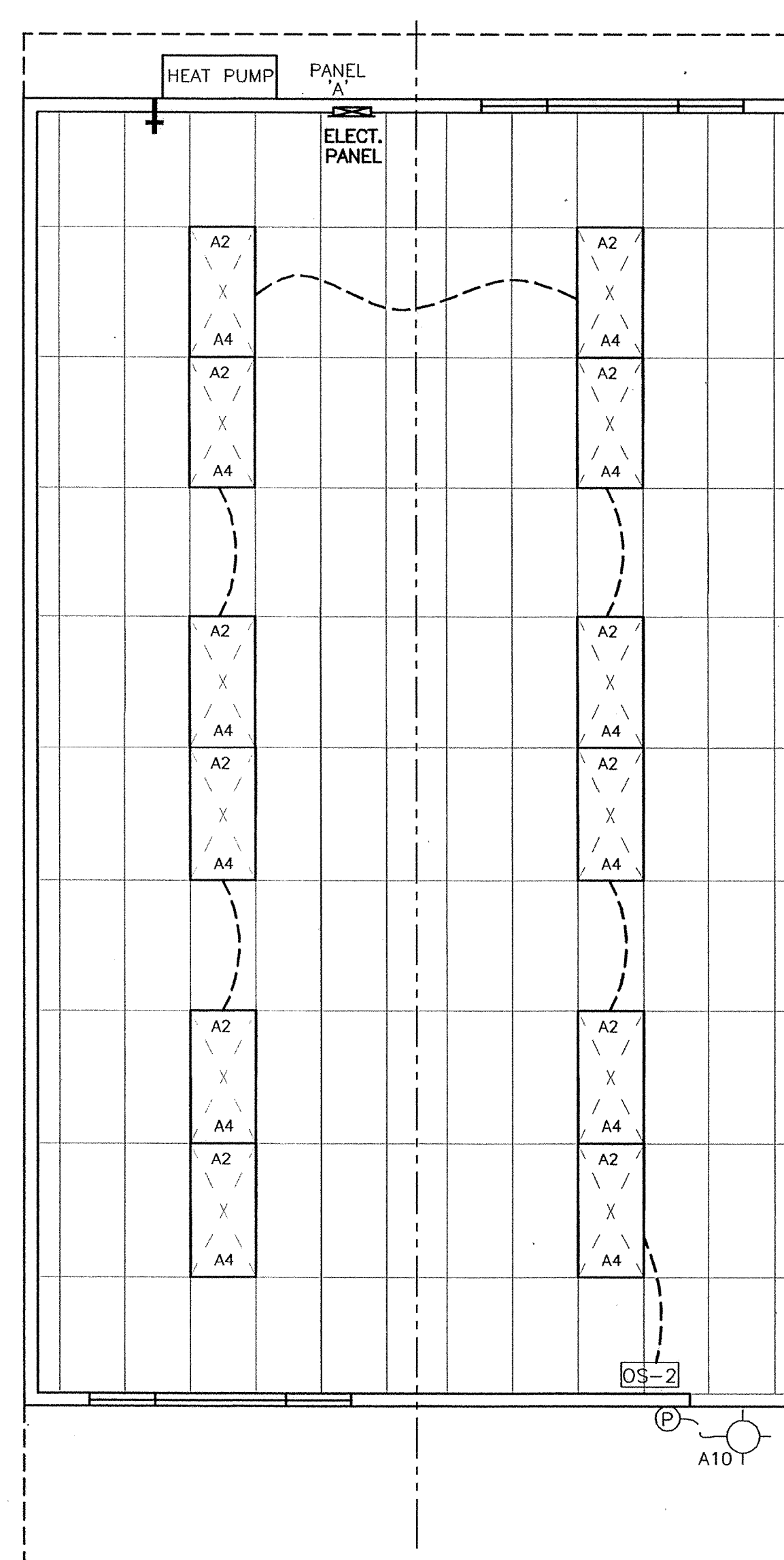
ELECTRICAL POWER PLAN

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



ELECTRICAL LIGHTING PLAN

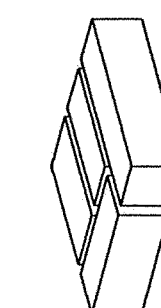
SCALE: 1/4"=1'-0"



FIXTURE SCHEDULE

SYMBOL	DESCRIPTION	WATTS
	2'x 4' FLUORESCENT DROP IN LIGHT FIXTURE ACRYLIC PRISMATIC LENS, DOUBLE ELECTRONIC BALLAST, (3) 32 WATT T-8 TUBES, WEIGHT 27 LBS.	96 WATTS
	INCANDESCENT SURFACE MOUNTED EXTERIOR LIGHT FIXTURE WITH IMPACT RESISTANT ENCLOSURE WITH DIRECTIONAL PHOTO CELL CONTROL ON ROOF. WITH 90 MIN BATTERY BACK-UP	75 WATTS

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PROJECT
MODULAR CLASSROOM BUILDING

TITLE
ELECTRICAL LIGHTING PLAN
ELECTRICAL POWER PLAN

JOB # 03-1014

DATE 7/11/03

DRAWN BY JAG

SCALE 1/4"=1'-0"

APPROVED

REVISIONS

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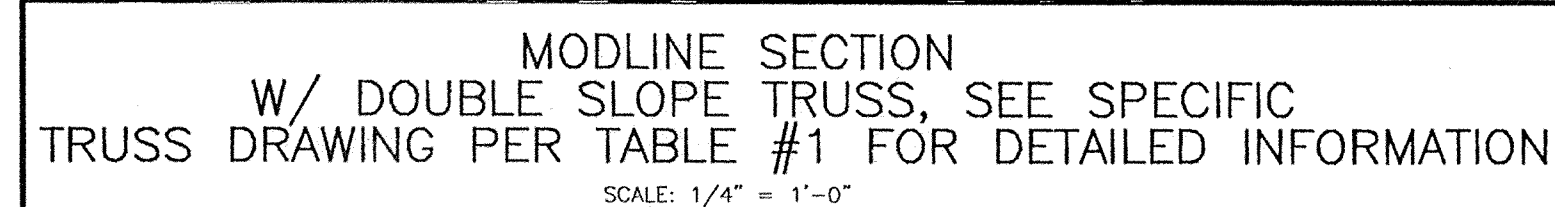
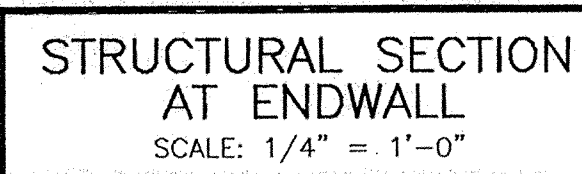
REVISIONS

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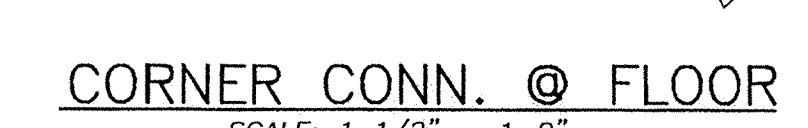
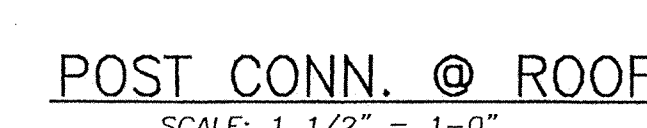
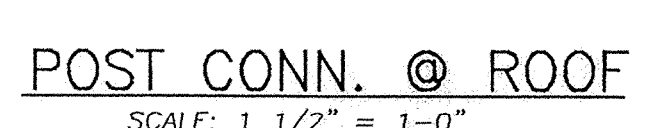
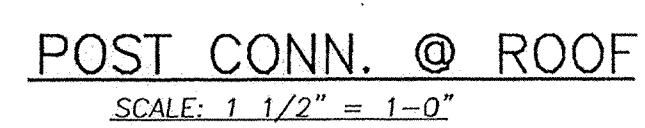
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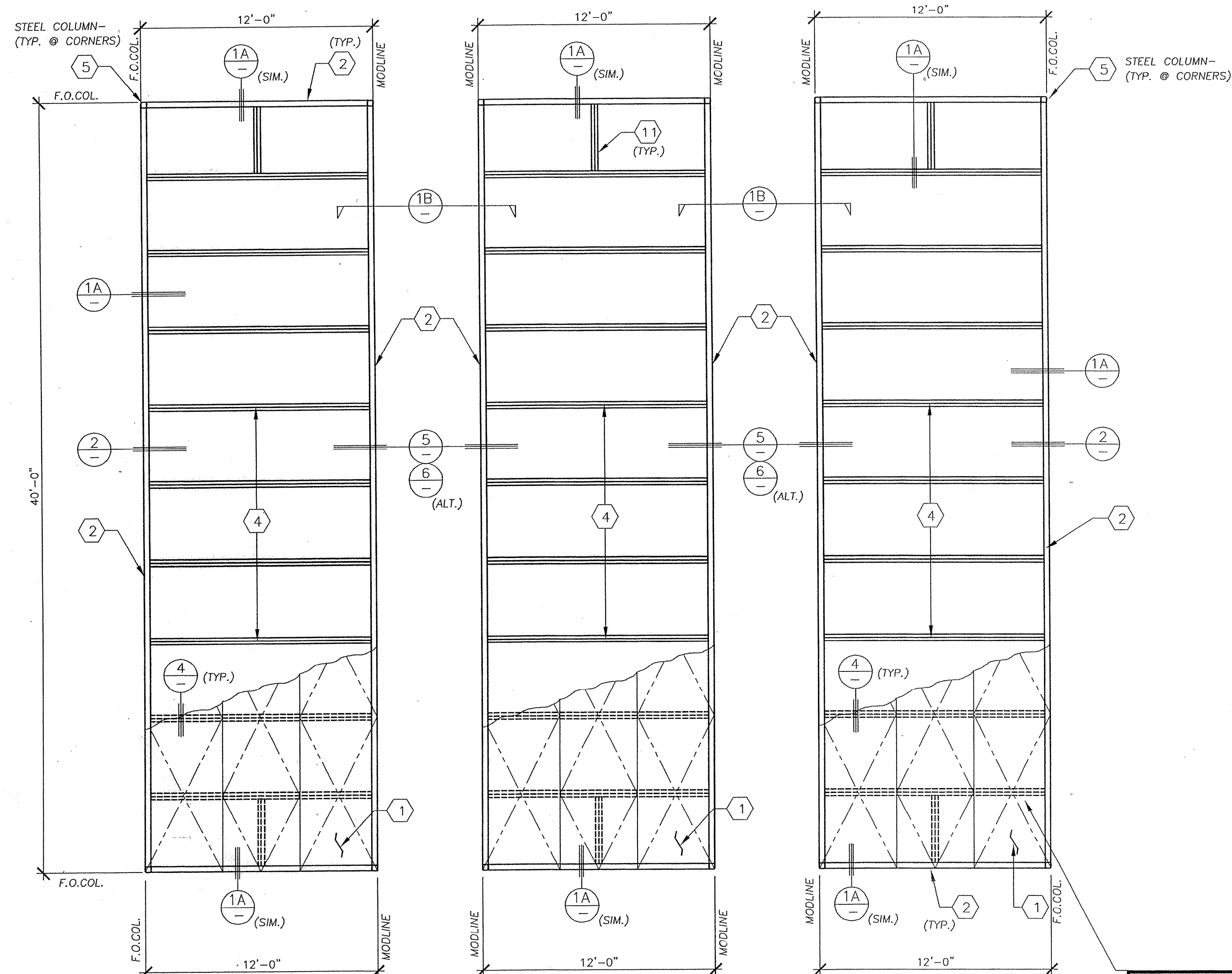
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SHEET NO.
E-1.1-24



SHEET NO.
S-5





LEFT HAND MODULE

CENTER MODULE

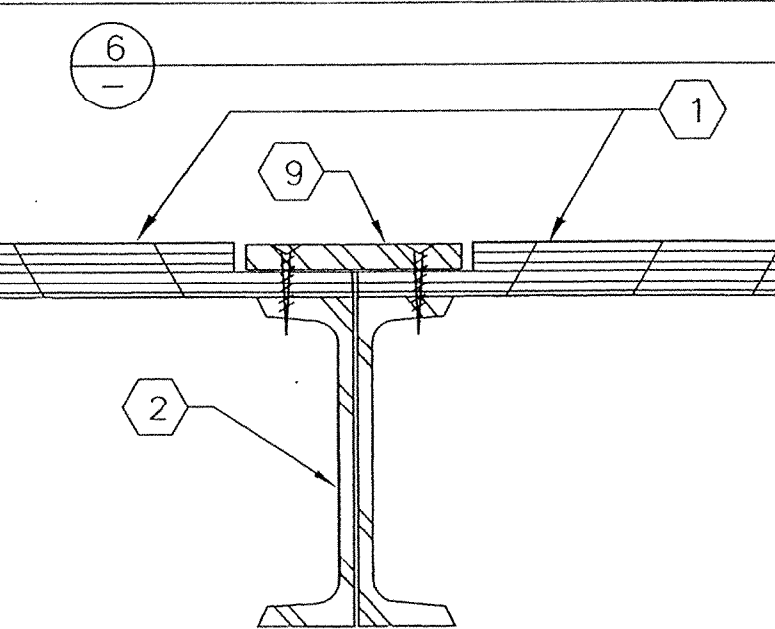
RIGHT HAND MODULE

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

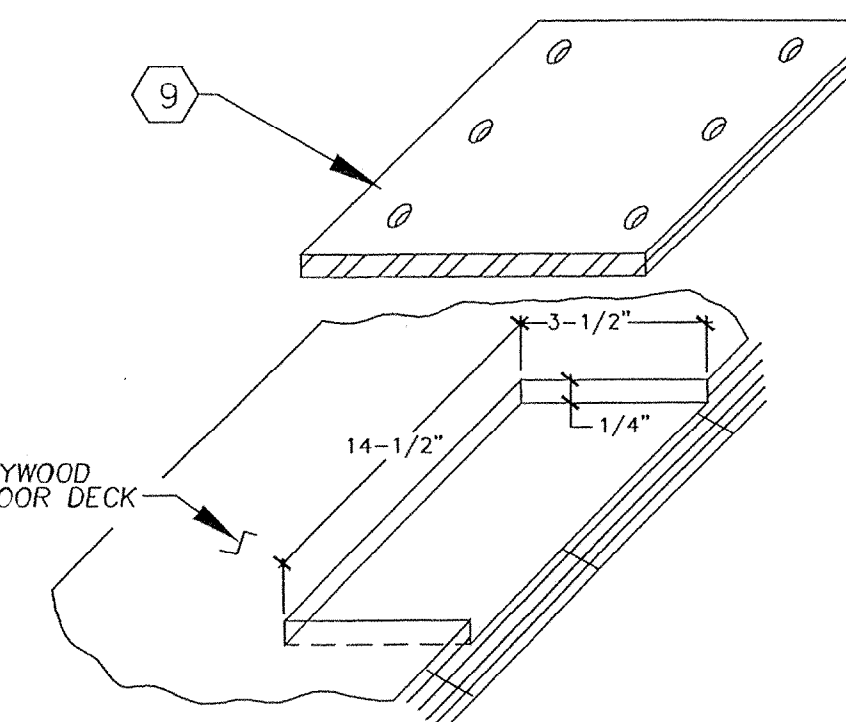
NOTE:
FLOOR JOIST
ARE SHOWN AT
48" O.C. AS AN
EXAMPLE ONLY.

FLOOR JOIST SCHEDULE		
LOAD	JOIST	SPACING
50 PSF	Z 7x1 1/2x11 GA.	48" O.C.
50+20 PSF	Z 7x1 1/2x11 GA.	32" O.C.
100 PSF	Z 7x1 1/2x11 GA.	24" O.C.
125 PSF	Z 7x1 1/2x11 GA.	16" O.C.

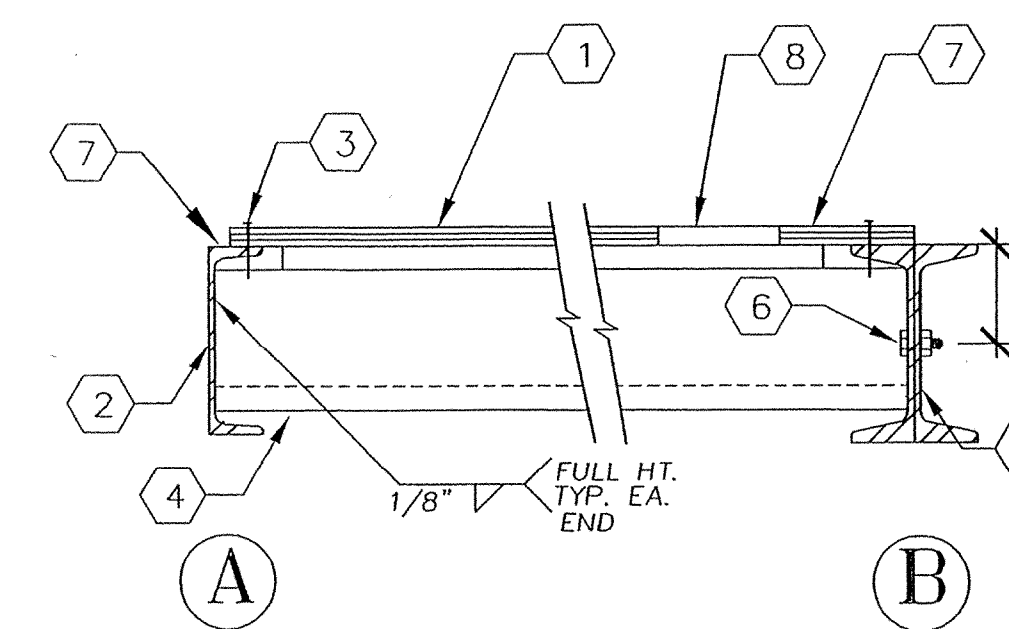
- KEY NOTES
- PLYWOOD FLOOR SHEATHING - 1 1/8" A.F.A. RATED OR EQUAL, P.S. 1-95 T & G EDGES, 48" SPAN RATING, ATTACH TO STEEL FRAMING WITH .170/192 PIN OR #10-24x1 3/4" SELF TAP SCREW @ 6" O.C. BOUNDARY & EDGES AND 10" O.C. FIELD.
 - NOTE: PROVIDE FIELD NAILING @ 6" O.C. WHERE FLOOR JOISTS ARE AT 48" O.C.
 - C7" x 9.8 LB. PERIMETER FRAME
 - 0.145" SHOT PIN @ 6" O.C. PLYWOOD DECK TO PERIMETER CHANNEL
 - FLOOR JOIST L MEMBER, SEE SCHEDULE BELOW.
 - STEEL CORNER COLUMN.
 - 5/8" MACHINE BOLT AT 10'-0" O.C. @ MODULE CONNECTION.
 - AT MODULE JOINT TAKE PLYWOOD TO EDGE OF CHANNEL. AT PERIMETER, HOLD PLYWOOD BACK AS INDICATED.
 - 5" DIA. HOLE AT BOLT LOCATION. (OPTIONAL)
 - 6" x 14" x 12 Gg. PLATE WITH (5) #10-34 x 1 3/4" FLAT HEAD SELF TAP SCREWS INTO STEEL CHANNEL FRAME @ 10" O.C.
 - R-11 INSULATION ON 'SEAL TITE' TYPE HW POLYMAX UNDERBELLY OR EQUAL WITH BIDIRECTIONAL POLYESTER FIBERS.
 - 7"x1 1/2"x11 GA. 'Z' MEMBER @ MIDSPAN.



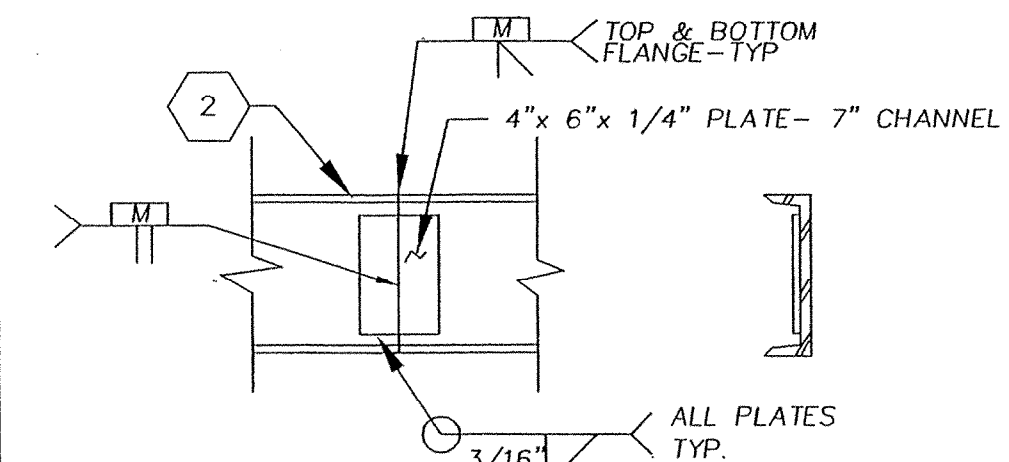
MOD CONN. @ FLOOR
SCALE: 3" = 1'-0"



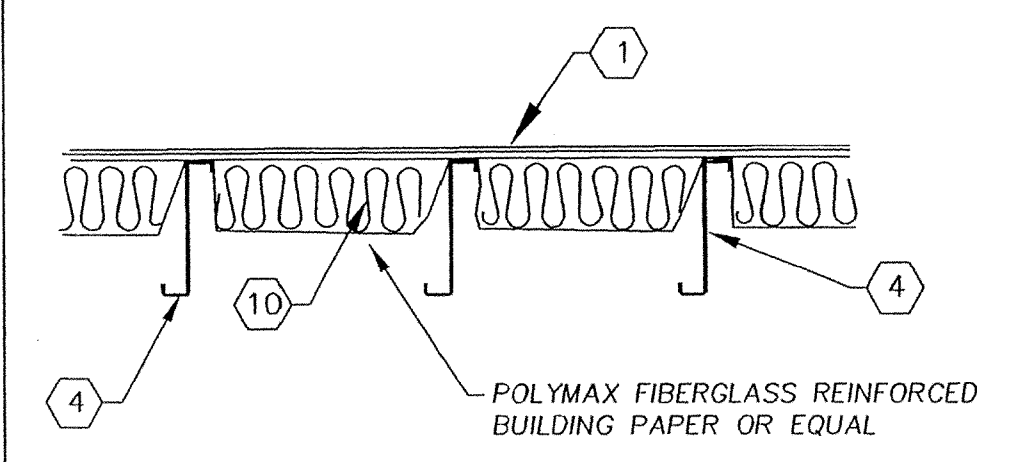
MOD LINE CONN. PLATE ALT.
SCALE: N.T.S.



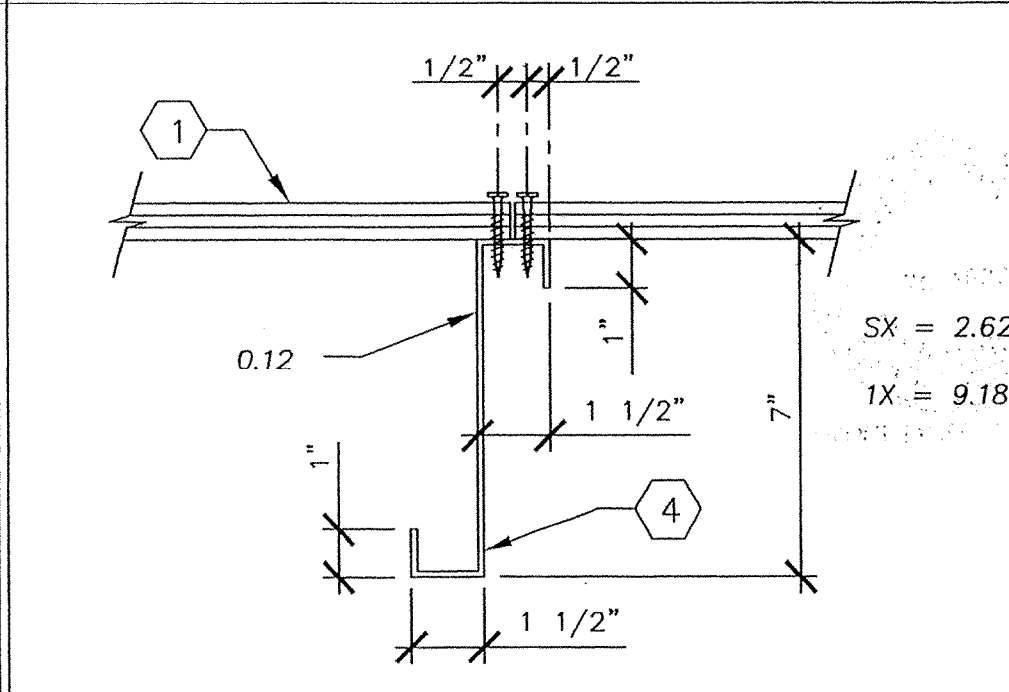
PERIMETER FLOOR
SCALE: 1 1/2" = 1'-0"



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

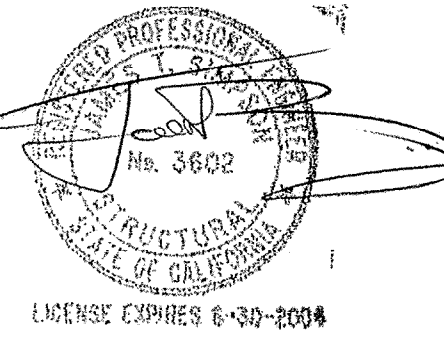


INSULATION @ FLOOR
SCALE: N.T.S.



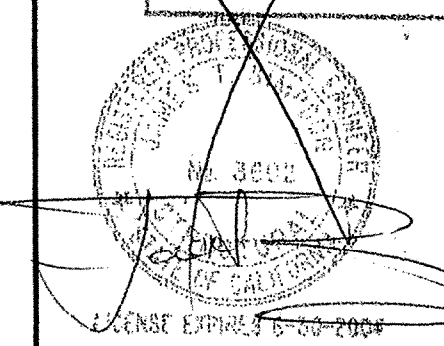
FLOOR JOIST
SCALE: 3" = 1'-0"

DATE SIGNED
JUL 15 2003

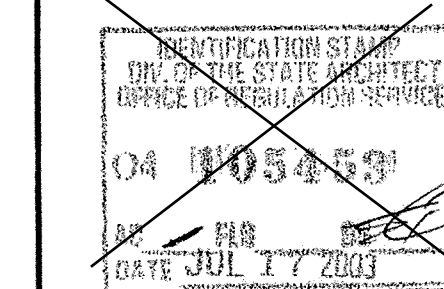


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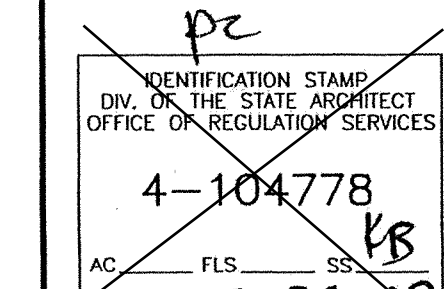
DATE SIGNED
MAY 21 2003



STRUCTURAL ENGINEER STAMP



STATE AGENCY STAMP



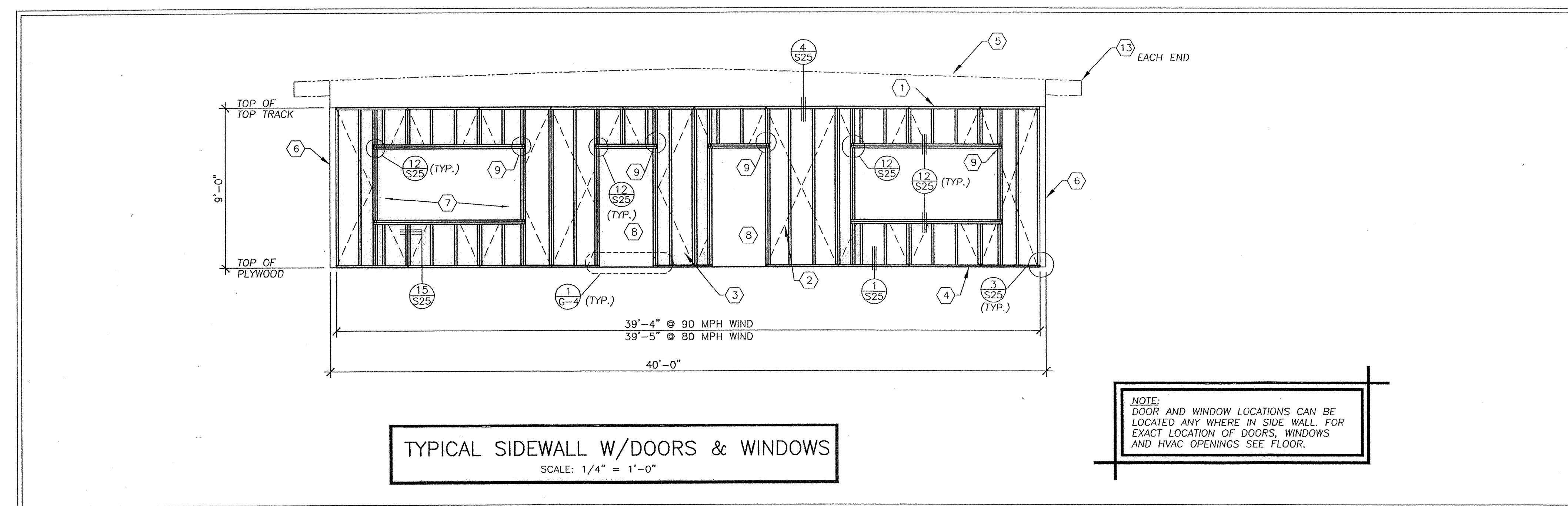
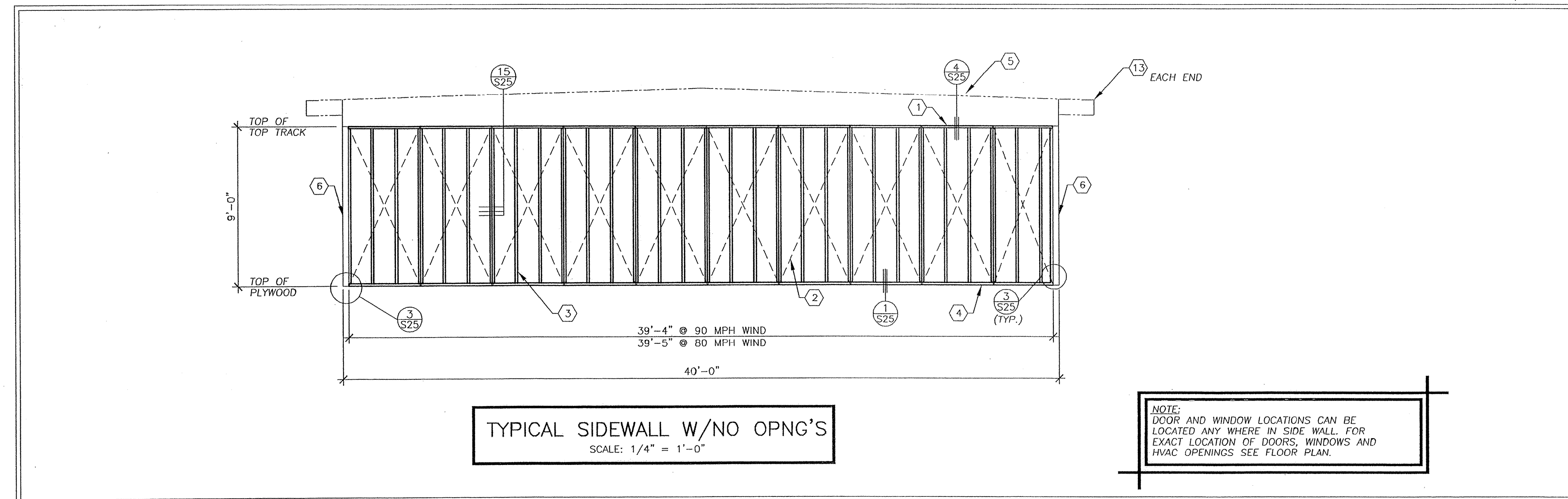
STATE AGENCY STAMP

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PHONE: (909) 786-3035 FAX: (909) 786-1523

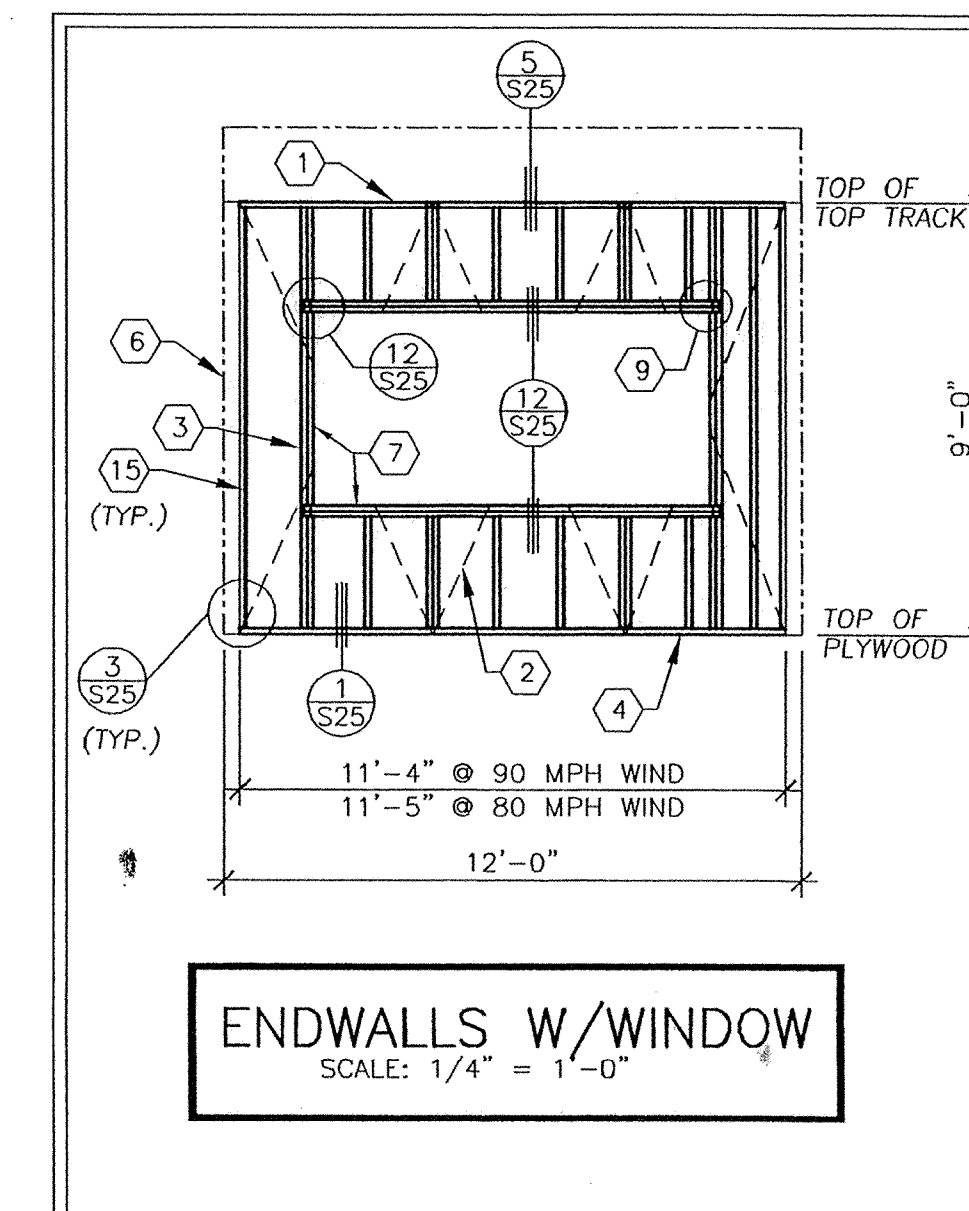
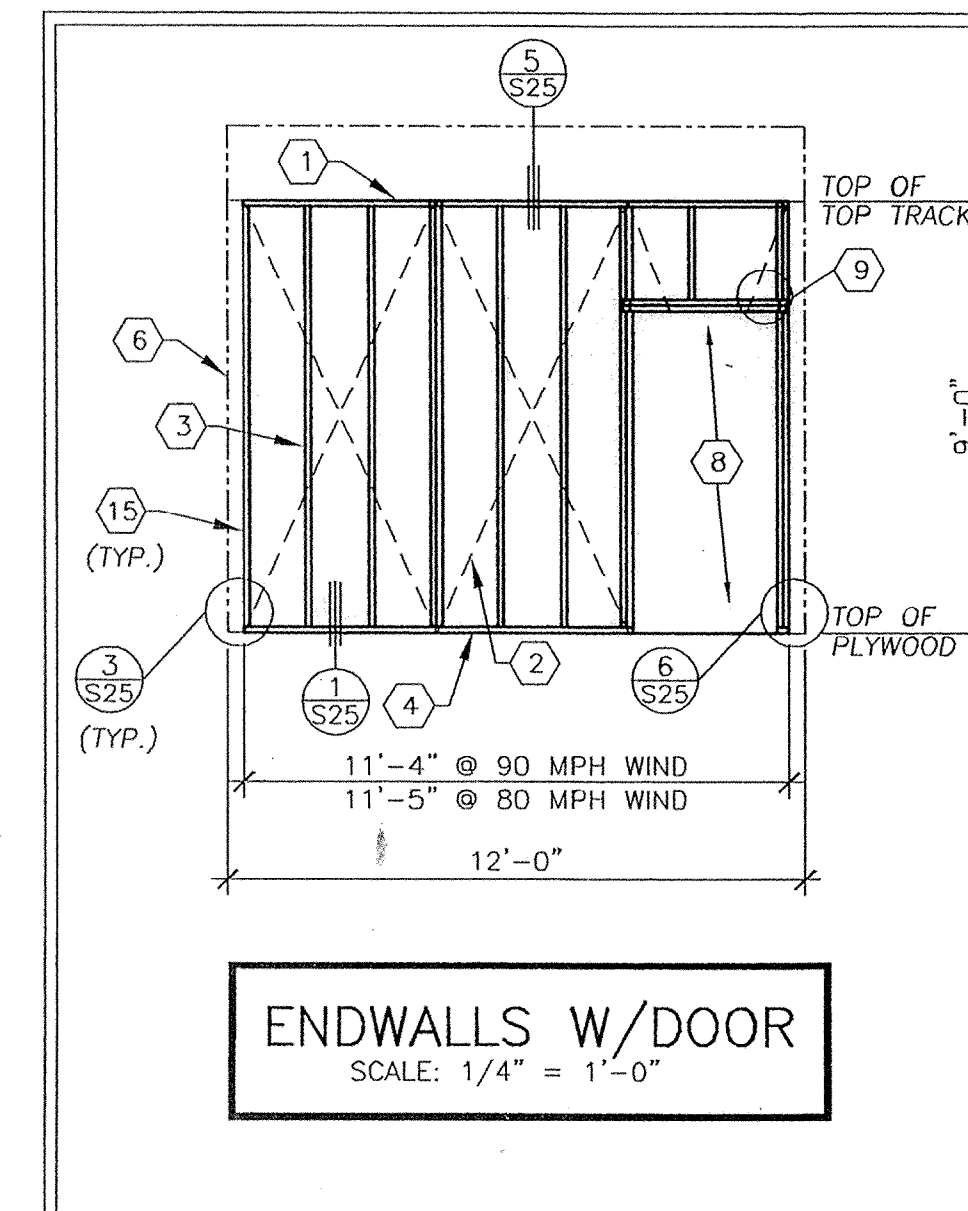
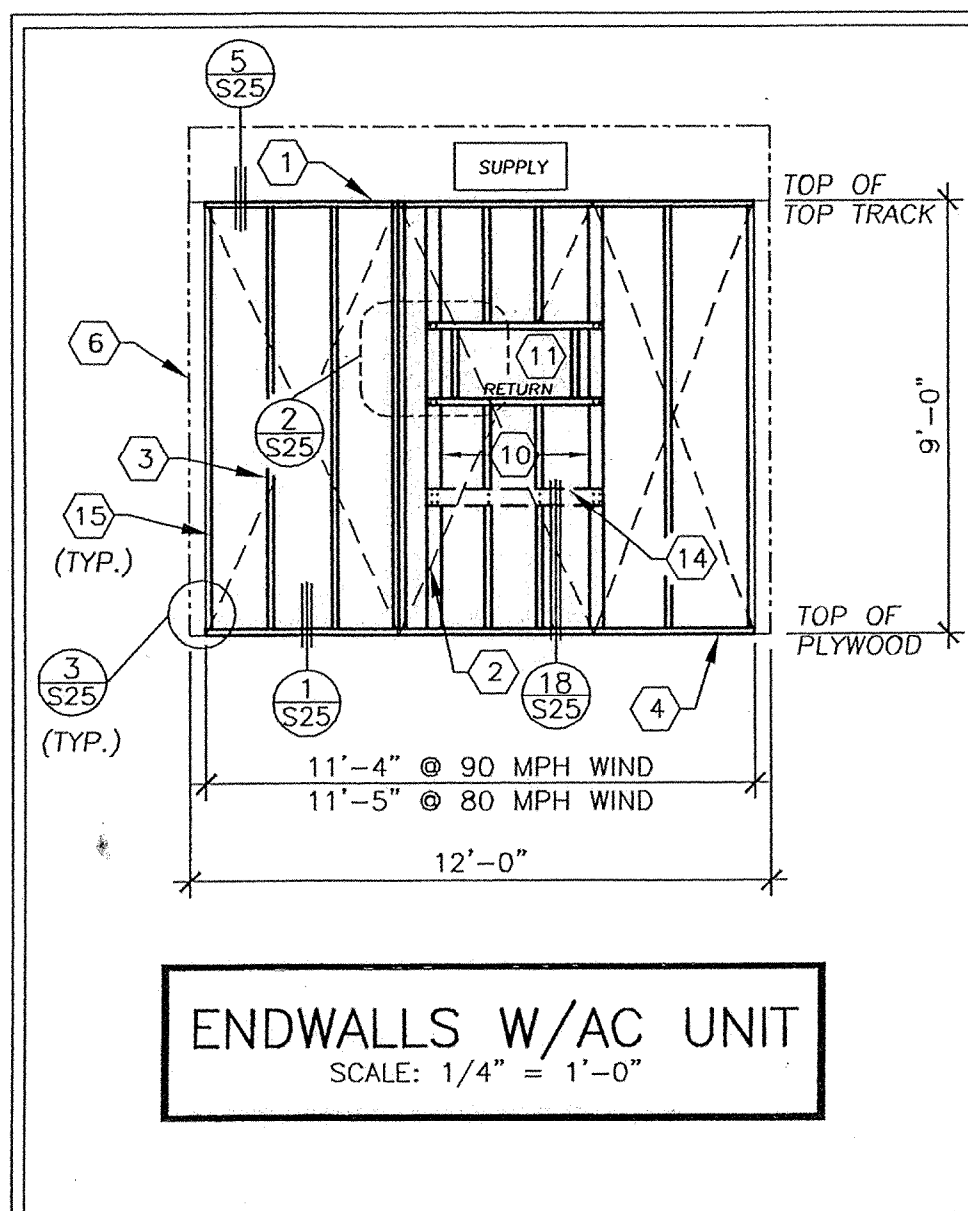
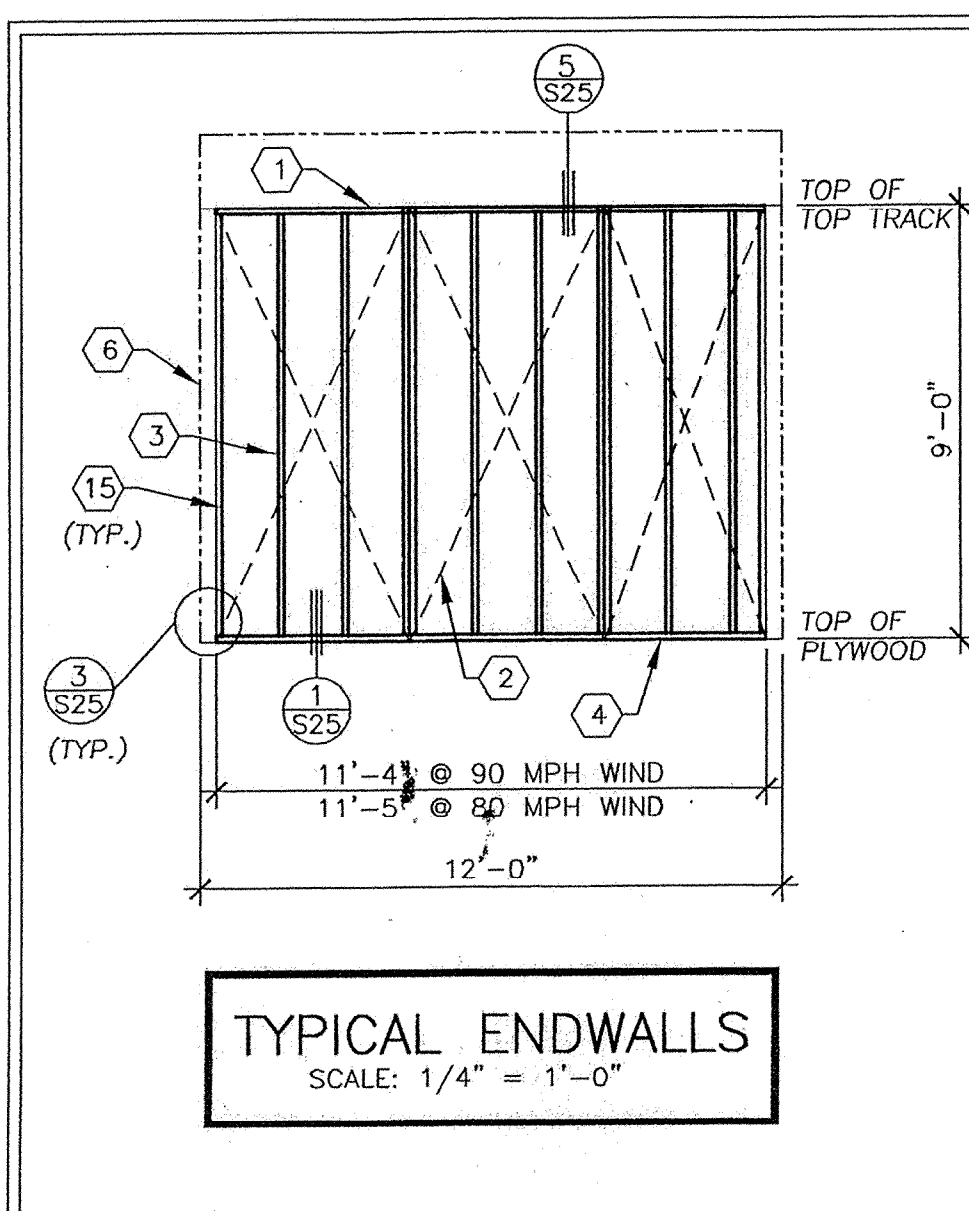
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PROJECT: MODULAR CLASSROOM BUILDING
TITLE & BLDG. DATA: FLOOR FRAMING PLAN AND DETAILS FOR PLYWOOD FLOOR
WIND LOAD: 80 & 90 MPH
ROOF LOAD: 20 & 30 PSF
FLOOR LOAD: 50, 50+20, 100 & 125 PSF

JOB #
DATE 12/1/02
DRAWN BY JAG
SCALE AS NOTED
APPROVED
REVISIONS
SHEET NO. S-10



- ### KEYNOTES
1. CONTINUOUS 3 1/2" x 20 GA. TOP TRACK.
 2. PLYWOOD SIDING/SHEATHING
NAIL SIDING WITH CORROSION RESISTANT
8d BOX NAILS @ 6" BOUNDARY & EDGES, 12" FIELD.
 3. 3 1/2" x 20 GA. STUDS @ 16" O.C.
 4. CONTINUOUS 3 1/2" x 20 GA. BTM. TRACK.
 5. STEEL FRAME- SEE SHEET S-50 - S-51 "STRUCTURAL
SECTIONS" FOR MEMBER TYPES AND SIZES.
 6. STEEL CORNER COLUMN.
 7. FRAME FOR 8040 WINDOW USE (2) FULL HEIGHT 3 1/2" x 20 GA.
JAMB STUDS. (2) 3 1/2" x 20 GA. TRACKS FOR HEADER.
(2) 3 1/2" x 20 GA. TRACKS FOR WINDOW SILL.
 8. FRAME FOR 3'-0" x 6'-8" DOOR. USE (2) FULL HEIGHT
3 1/2" x 20 GA. JAMB STUDS & (2) 3 1/2" x 20 GA. TRACKS
FOR HEADER.
 9. ATTACH HEADER OR SILL TO 3 1/2" x 20 GA. STUD
WITH #8 x 1/2" SELF TAP SCREWS.
AT CORNERS OF ALL OPENINGS.
 10. 4x4 D.F. POST
 11. FRAME FOR A/C UNIT.
 12. NOT USED
 13. OVERHANG, (5'-0" MAX.)
 14. NOTCH (1) PC. OF 3 1/2" x 20 GA. TRACK
AROUND STUDS TO PROVIDE BLKG.
 15. 2 x 4 SHIM LOCATED BETWEEN 4 x 4 STL. POST
AND FIRST 3 1/2" x 20 GA. STUD @ OUTSIDE OF BLDG.
- WALL FRAMING NOTES FOR STUCCO SIDING OPTION:
STUDS TO BE 3 1/2" x 20 GA. @ 16" O.C.
4'-0" WALL OPENINGS - (1) 3 1/2" x 20 GA. TRACK AS HEADER
AND (2) 3 1/2" x 20 GA. FULL HEIGHT JAMB STUDS.
8'-0" WALL OPENINGS - (2) 3 1/2" x 20 GA. TRACK AS HEADER
AND (3) 3 1/2" x 20 GA. FULL HEIGHT JAMB STUDS.



NOTE:
FOR EXACT LOCATION
OF DOORS, WINDOWS
AND HVAC OPENINGS,
SEE FLOOR PLAN.

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PROJECT: MODULAR CLASSROOM BUILDING
TITLE & BLDG. DATA: EXTERIOR WALL FRAMING ELEVATIONS FOR STEEL STUDS
WIND LOAD: 80 & 90 MPH
ROOF LOAD: 20 & 30 PSF
FLOOR LOAD: 50, 50+20, 100 & 125 PSF

ARCHITECT STAMP
DATE SIGNED: JUL 15 2003
MAY 21 2003

STRUCTURAL ENGINEER STAMP
DATE SIGNED: JUL 15 2003
MAY 21 2003

STATE AGENCY STAMP
DATE: 5/30/03

DATE: 12/1/02
DRAWN BY: JAG
SCALE: 1/4" = 1'-0"
APPROVED:
REVISIONS:
SHEET NO. S-21

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PROJECT: MODULAR CLASSROOM BUILDING
TITLE & BLDG. DATA: WOOD STUD WALL FRAMING DETAILS
WIND LOAD: 80 MPH
ROOF LOAD: 20 & 30 PSF
FLOOR LOAD: 50, 50+20, 100 & 125 PSF

DATE 12/1/02
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REVISIONS
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KEYNOTES

1. PROVIDE MOISTURE BARRIER BEHIND SIDING. USE ASPHALT SATURATED KRAFT, TYPE-1, GRADE 'D', STYLE-2 OR EQUAL ICBO NO. 4369.
2. EXTERIOR PLYWOOD SIDING/SHEATHING - NAIL W/ CORROSION RESISTANT 8d BOX NAILS AT 6" O/C BOUNDARY & EDGES, AND 12" O/C FIELD.
3. TYPICAL INTERIOR FINISH
4. STEEL TUBE COLUMN
5. PAINTABLE ACRYLIC LATEX SEALANT (U.N.O.)
6. 'HILTI' DN57-PB @ 24" O.C. (OR RAMSET 1514 SD) OR .144 PIN.
7. 2x4 TRIMMER
8. 2x4 FULL HT STUDS
9. 2x4 TOP PLATE
10. 2x4 BOTTOM PLATE
11. ROOF SHEATHING
12. FLOOR SHEATHING
13. GALV METAL FLASHING
14. 16d NAIL @ 16" O.C.
15. STEEL FLOOR CHANNEL
16. STEEL FLOOR JOIST @ 32" O.C. MIN. FOR PARTITION.
17. HOLLOW METAL DOOR FRAME
18. METAL DOOR
19. WATERPROOF MEMBRANE
20. HEADER - (2)-2x4 H.F. #2
21. DOOR BOTTOM W/ WEATHER STRIP
22. NOT USED
23. WALL MTD. A/C
24. 4x4 H.F. #2 POST (OR BETTER)
25. 2x6 BLOCK BETWEEN STUDS. ATTACH TO STUDS W/ (2) 16d BOX NAILS EA END
26. 11 GA x 24" LONG STEEL BOTTOM BRACKET
27. 3/8" x 2-1/2" LAG BOLT INTO BOTTOM BRACKET AND INTO 2x6 BLOCK W/ 1 1/2" MIN. EMBEDMENT
28. 3/4" SPACER-PLYWOOD
29. 16d BOX NAIL @ 8" O.C.
30. 1/4" FULL HT. STIFFENER
31. 1/2" MACHINE BOLT W/ WASHER @ 24" O.C. OR 0.145" SHOT PIN @ 18" O.C.
32. NOT USED
33. VINYL WRAPPED CLOSE-OFF BATT. ATTACH W/ #8x2 1/4" PAN HEAD WOOD SCREWS STAGGERED 24" O.C. AND (2) SCREWS TOP & BOTTOM.
34. 3 1/4"x1"x4'-6" L x 10 GA. CHANNEL TOP & BOTTOM.
35. 1/2" STEEL CONDUIT BRACE AT 8' O.C. MAX. STAGGERED.
36. ROOF PURLIN (SEE STRUCTURAL ROOF FRAME).
37. PLYWOOD ROOF DECK SHOWN, NOT REQ'D @ 22 GAUGE METAL ROOF DECK.
38. #10 STMS WAFER HD.
39. #10 WOOD SCREWS

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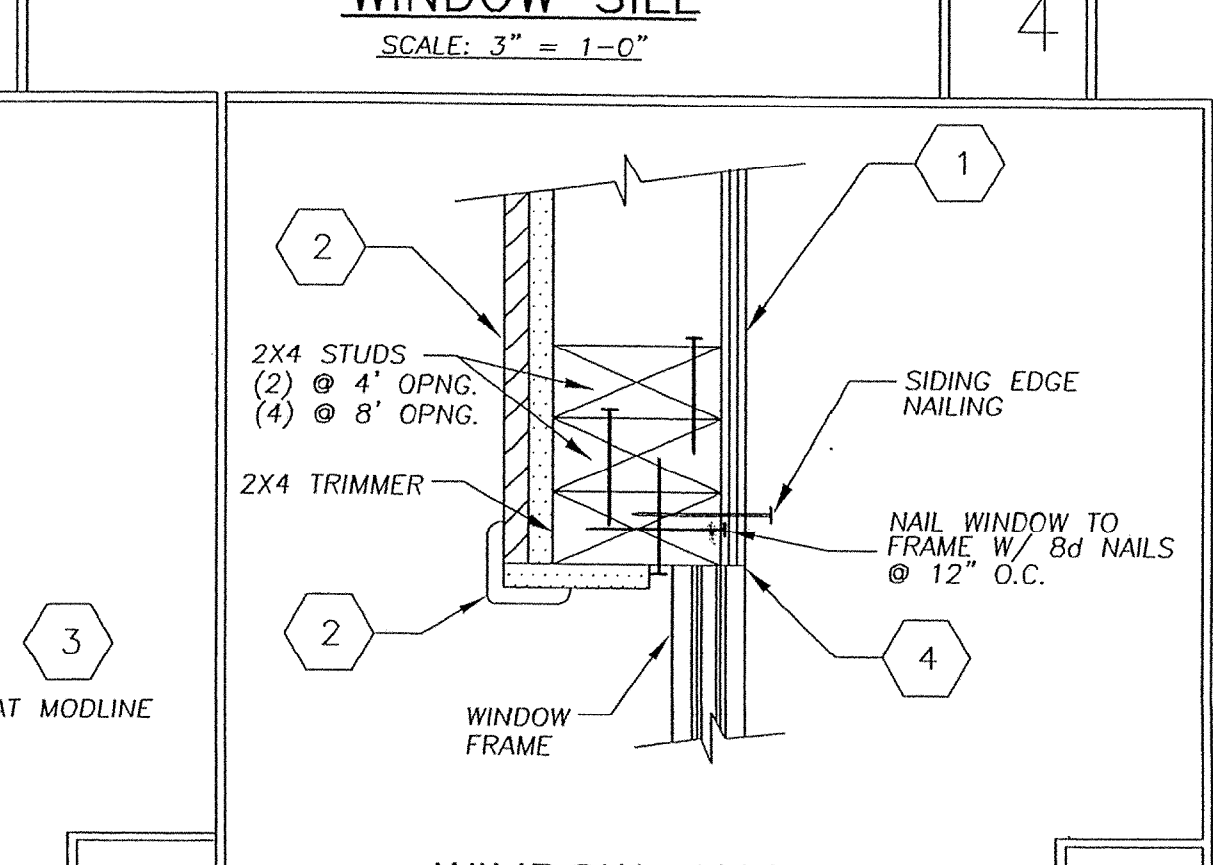
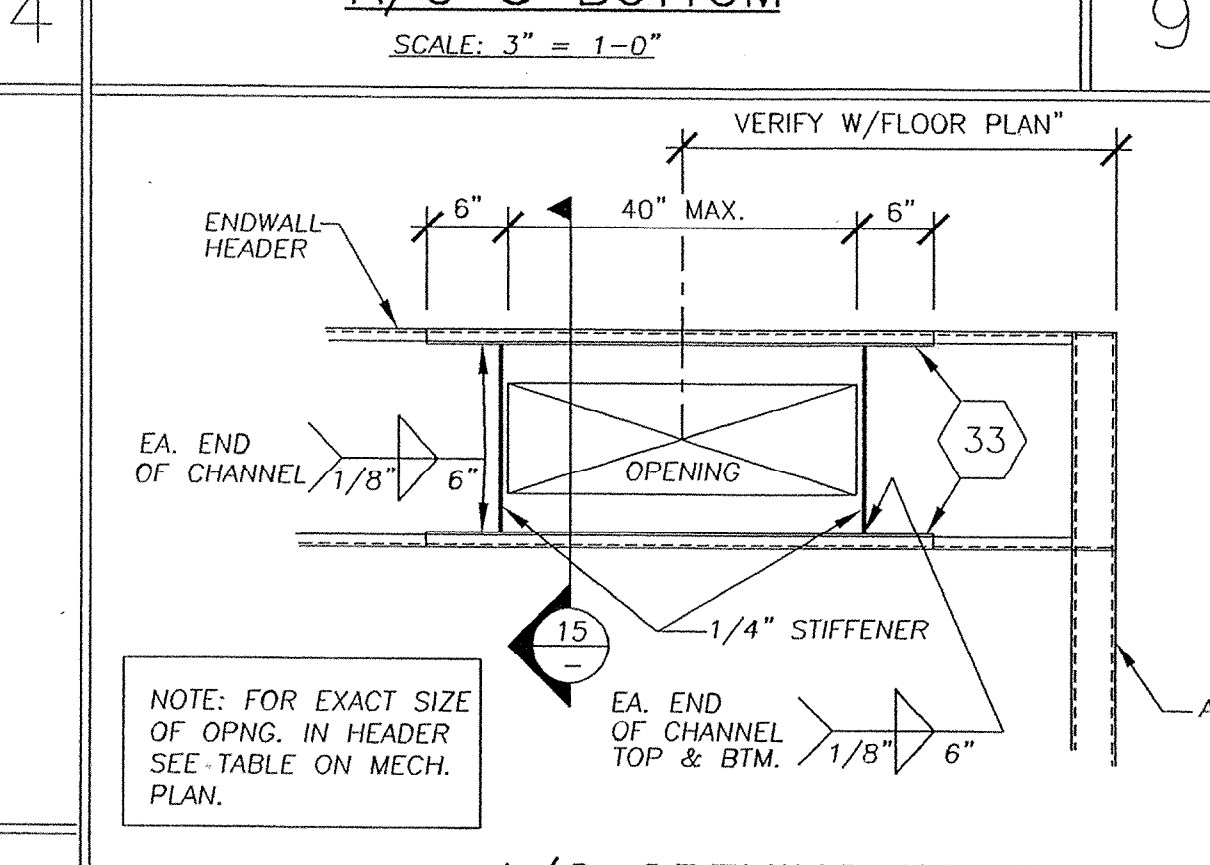
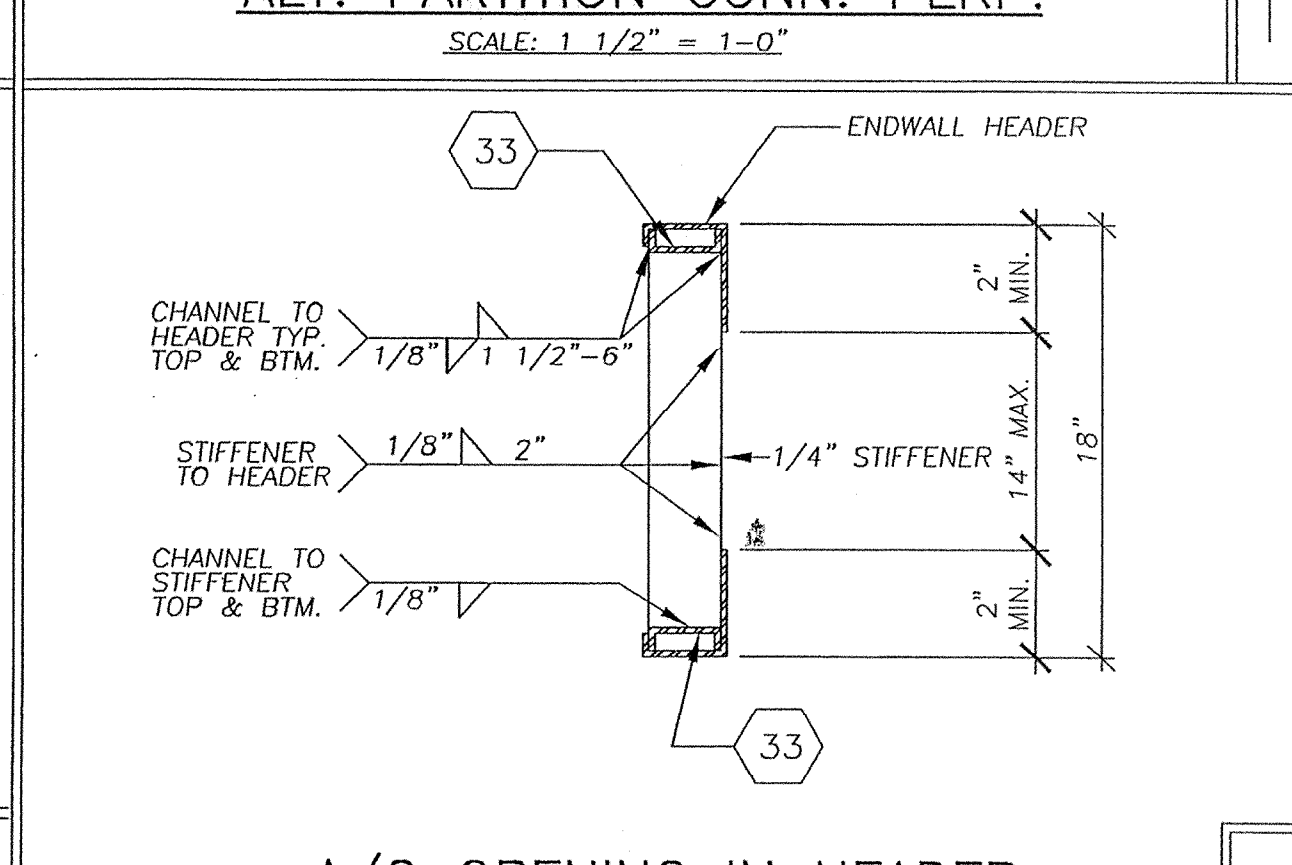
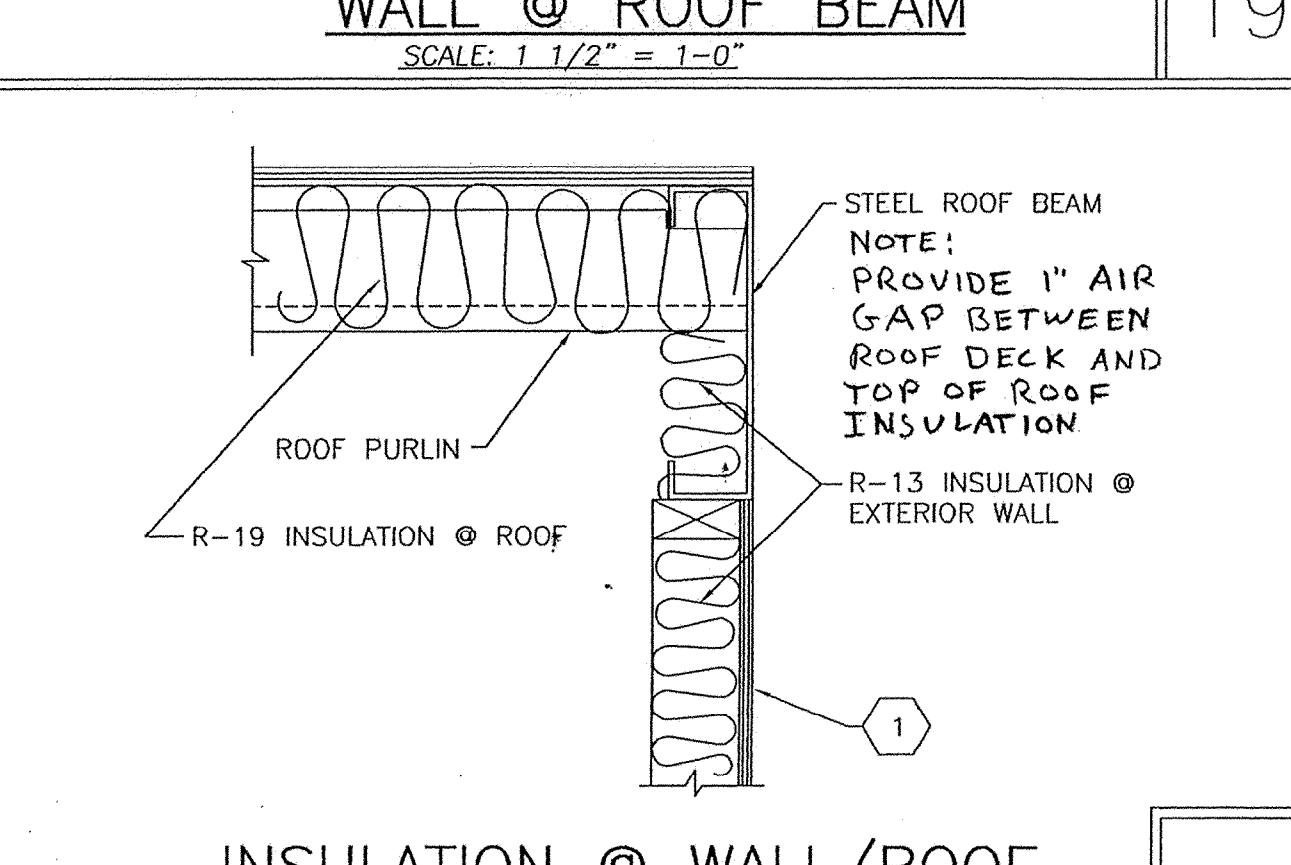
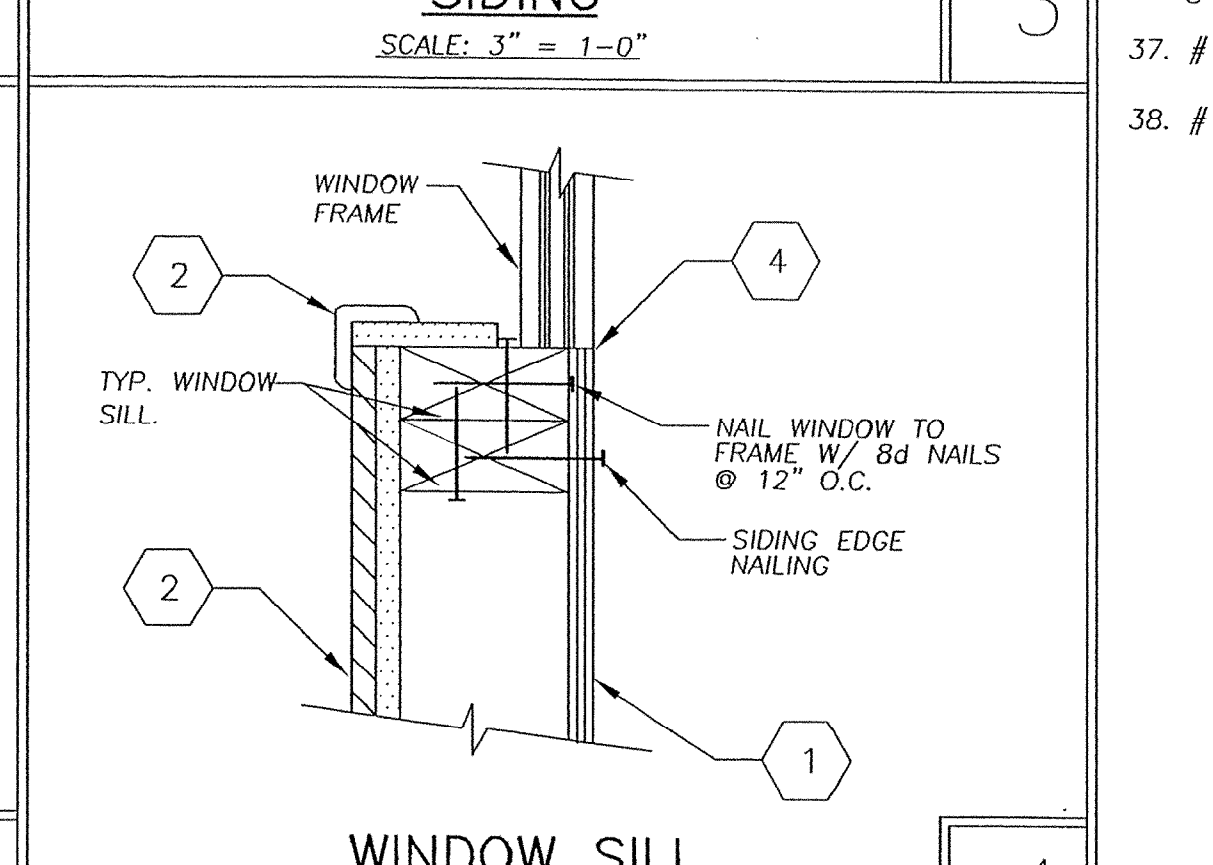
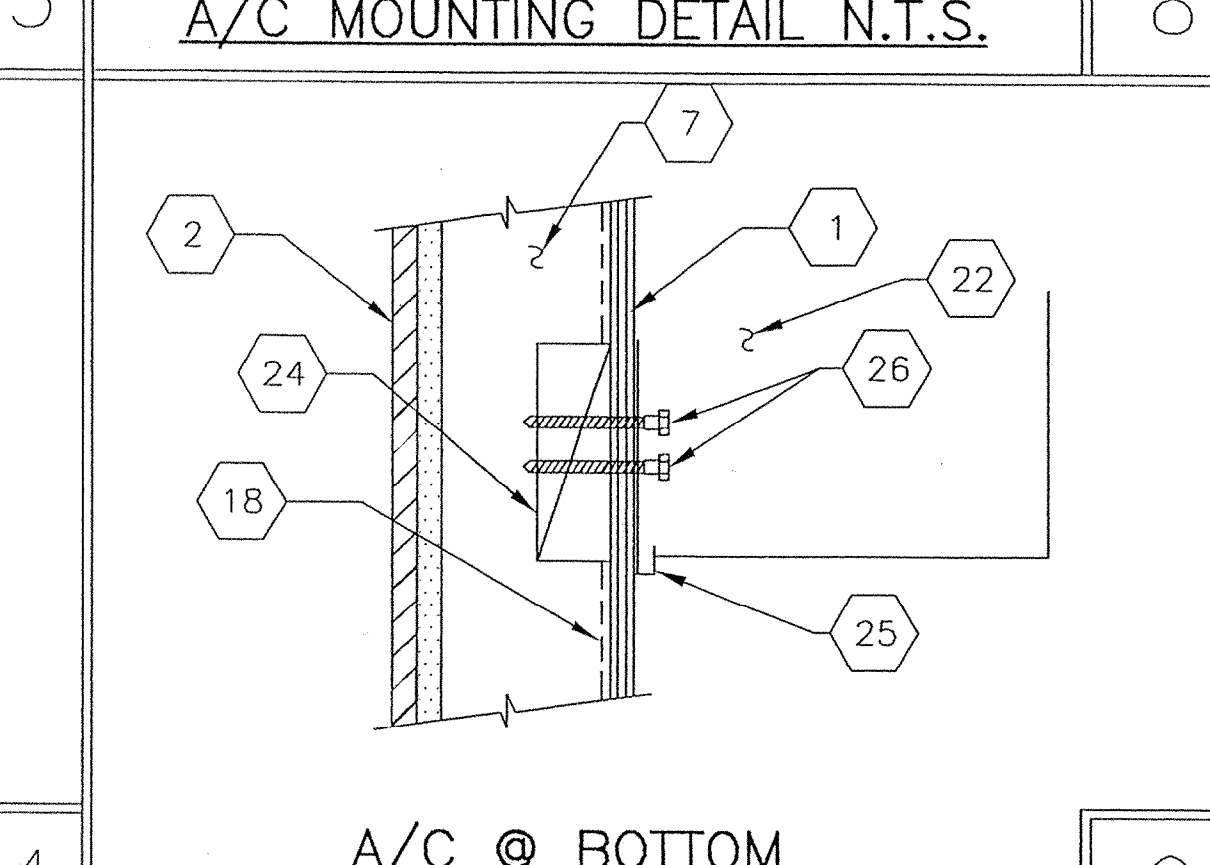
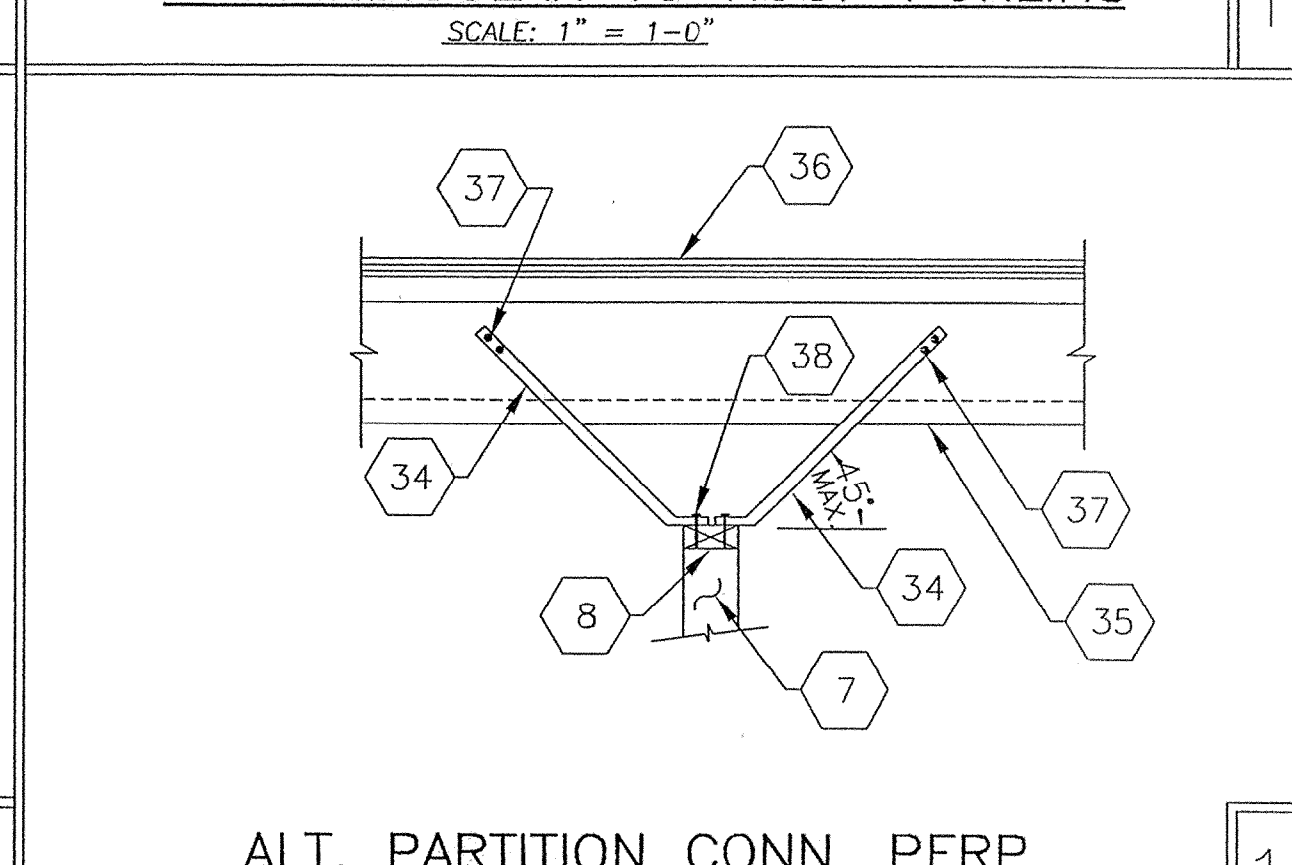
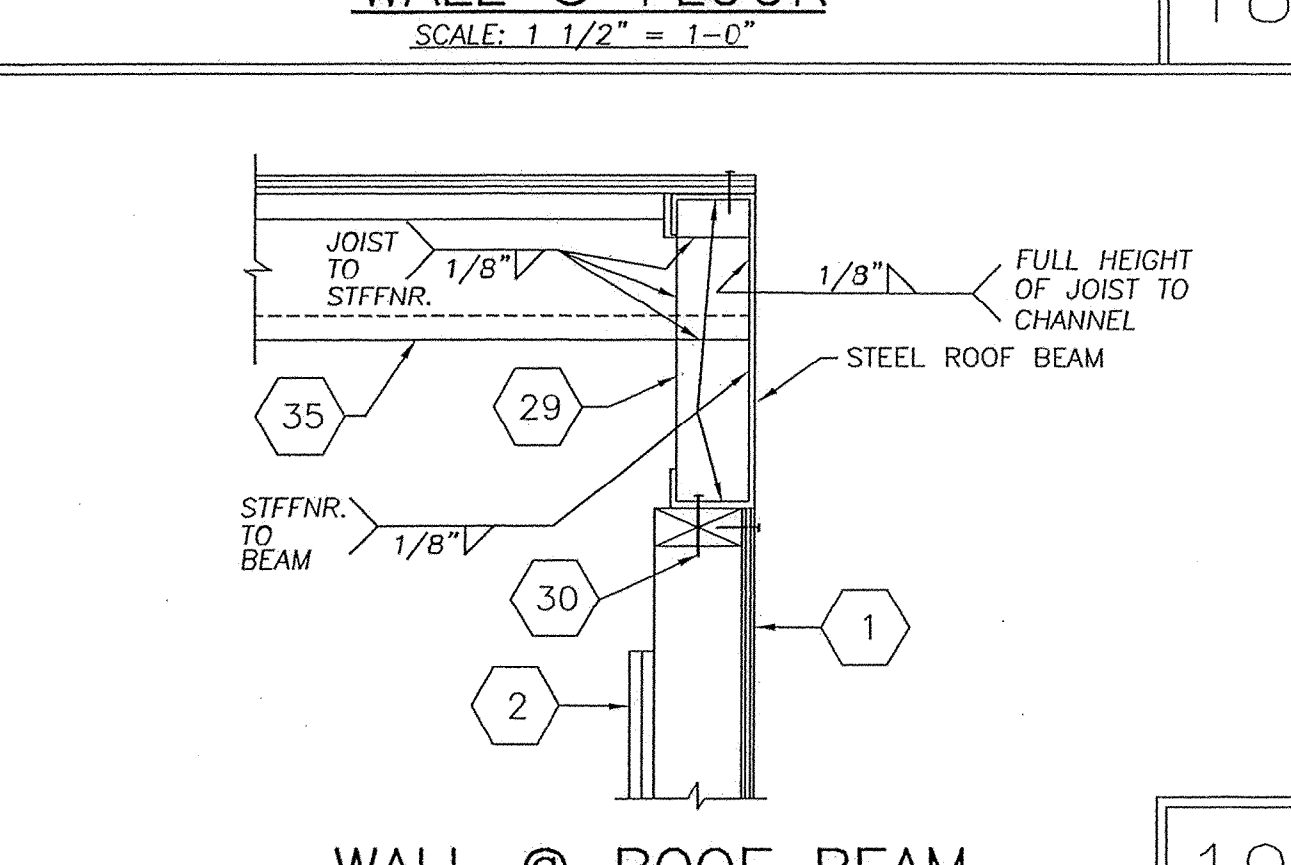
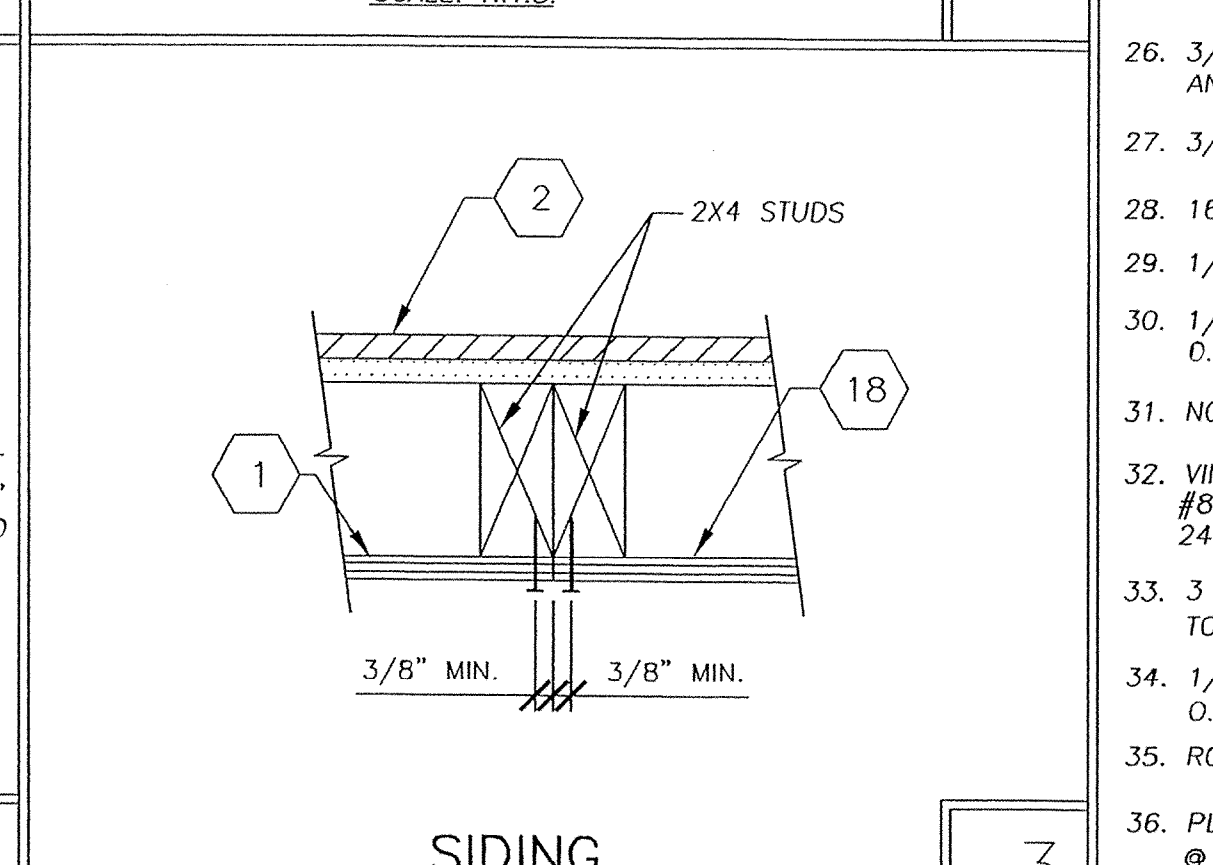
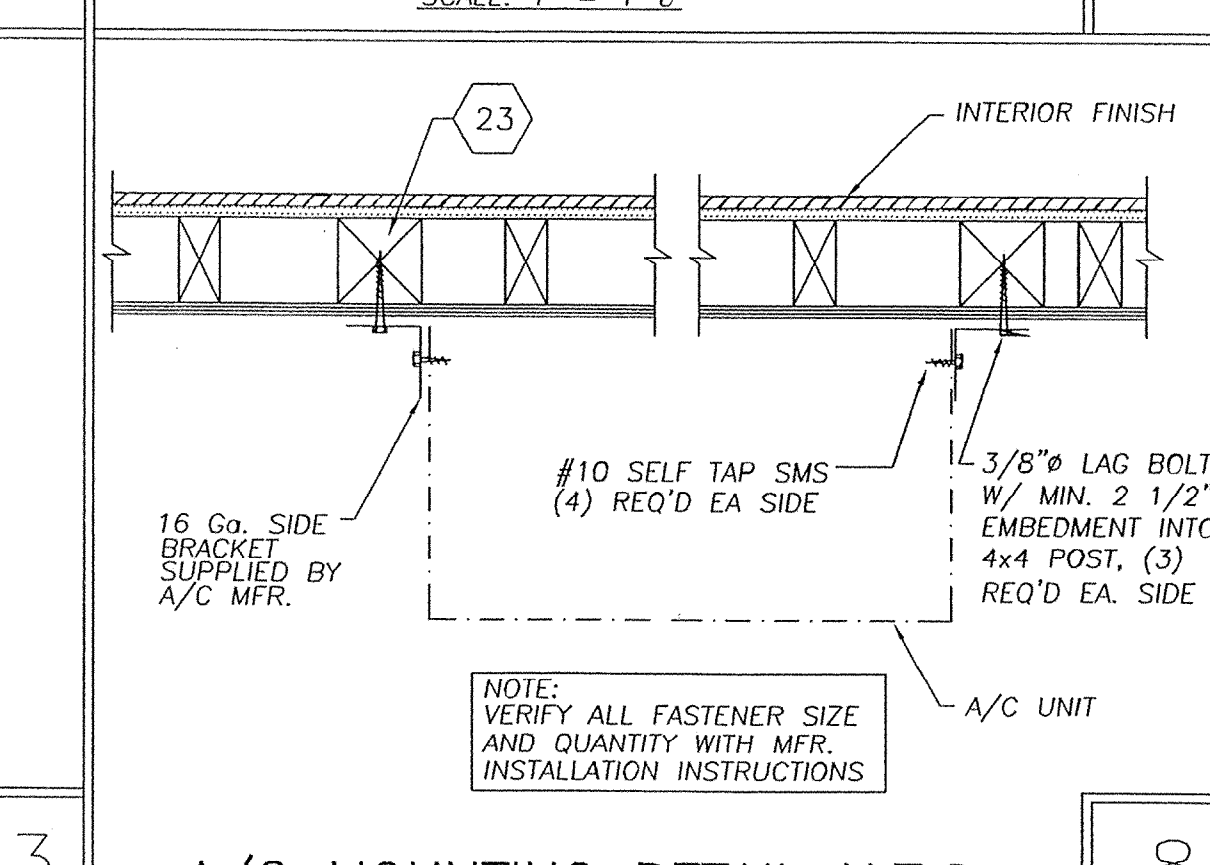
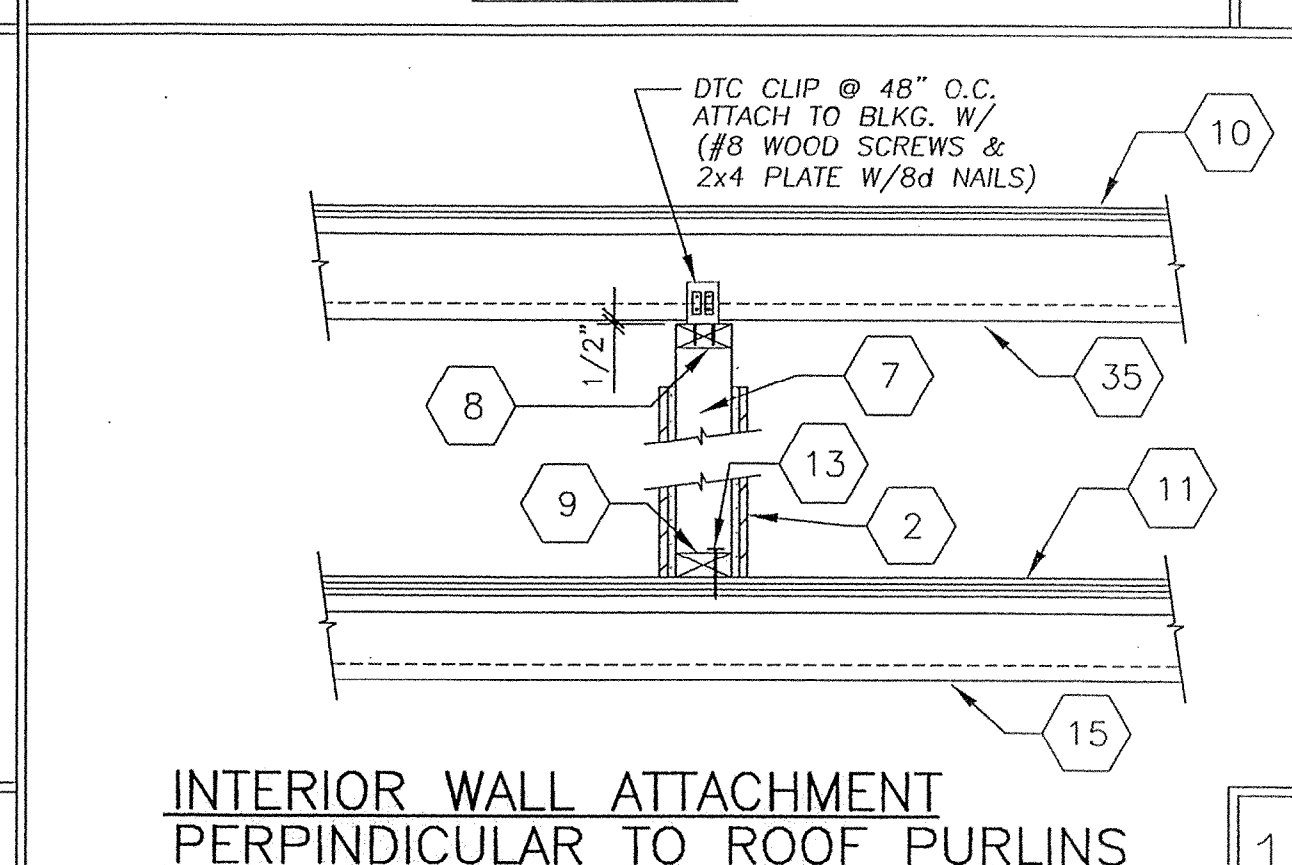
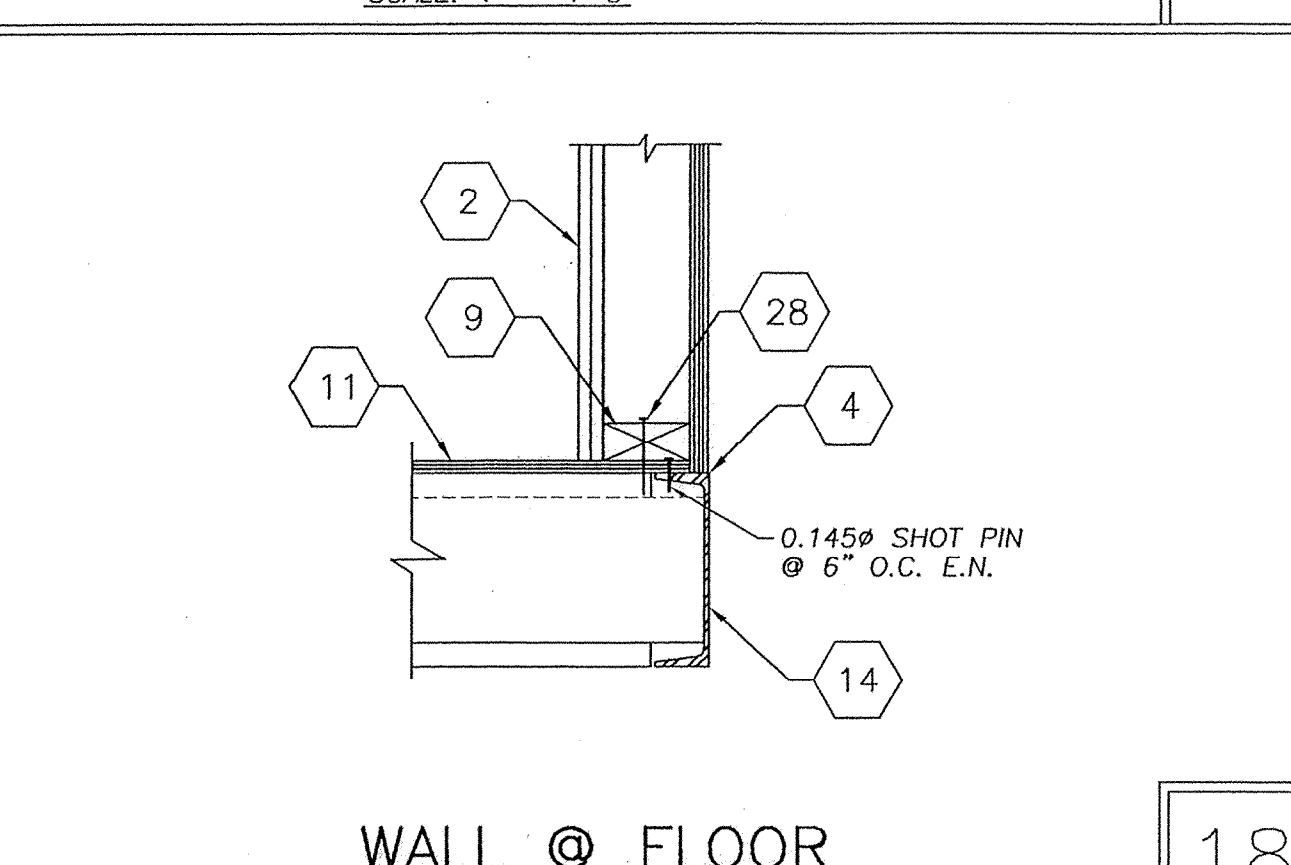
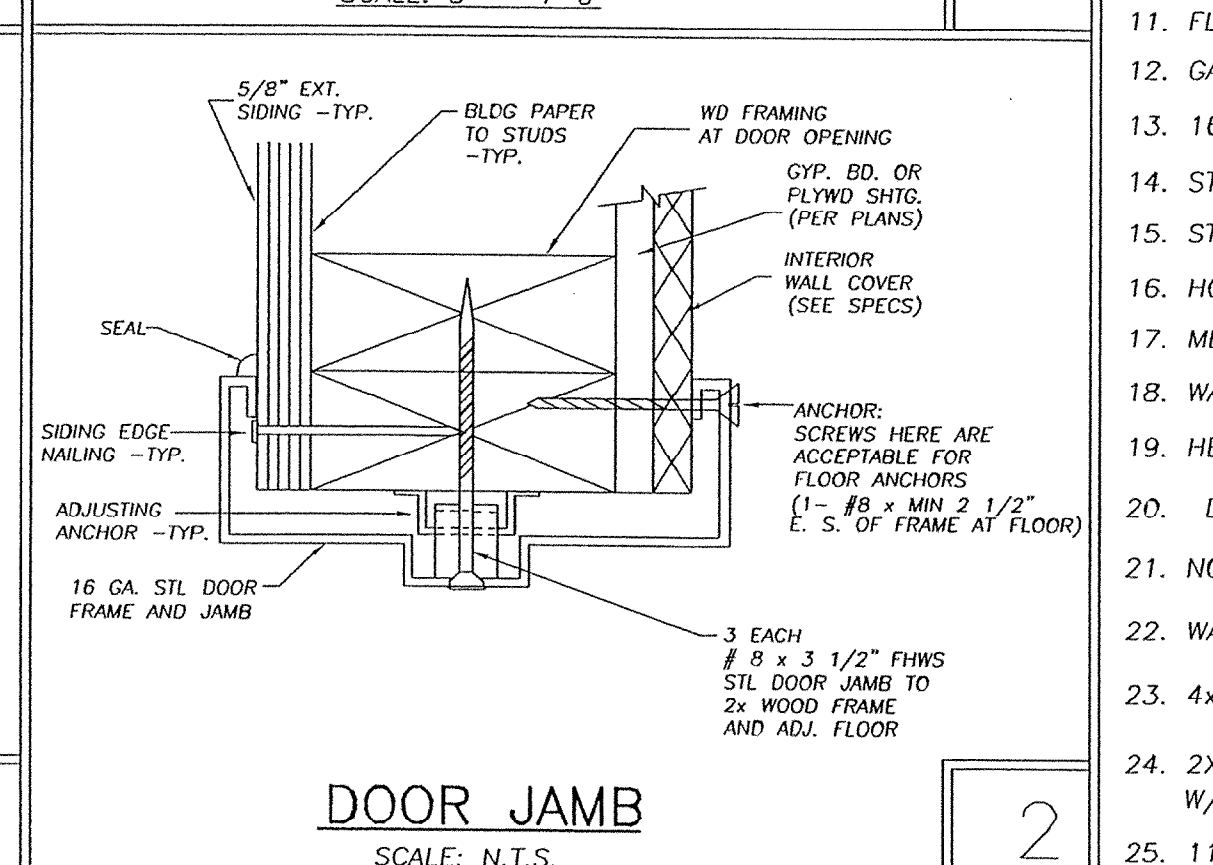
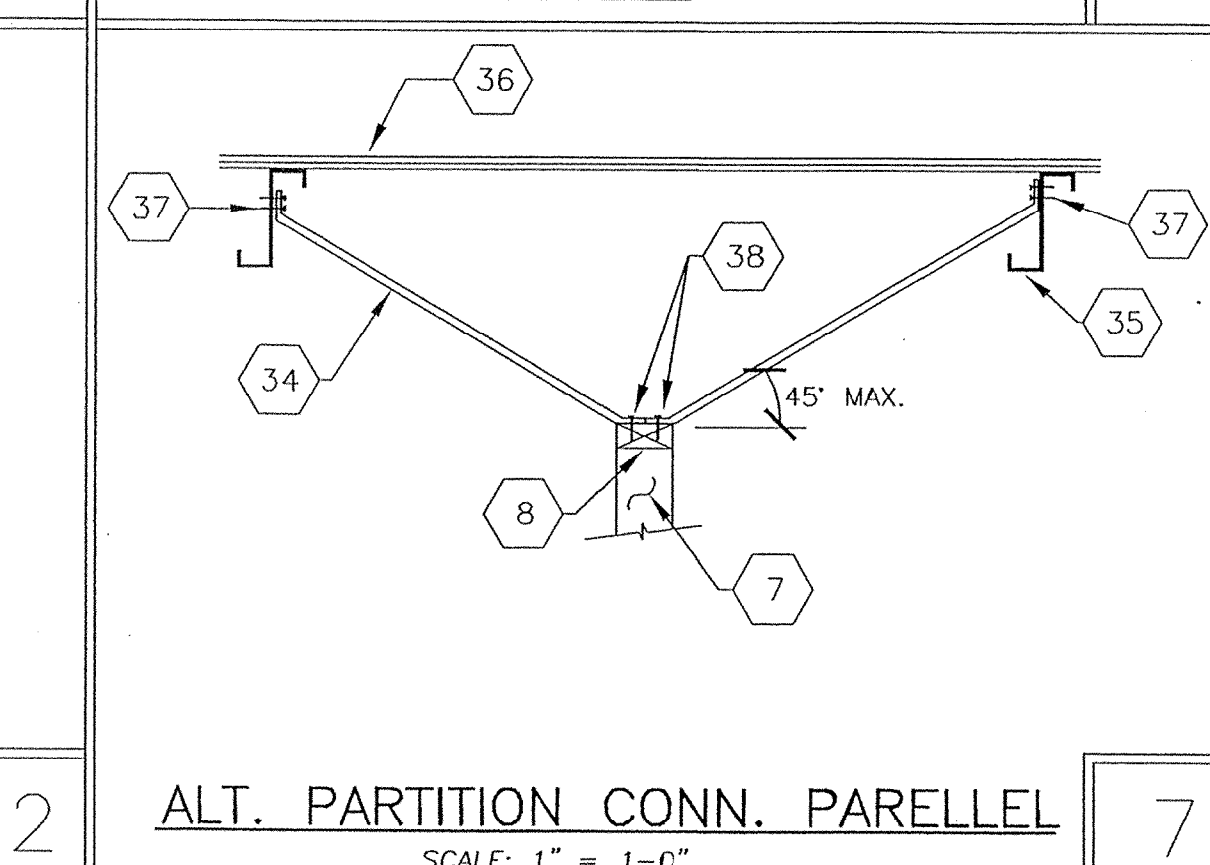
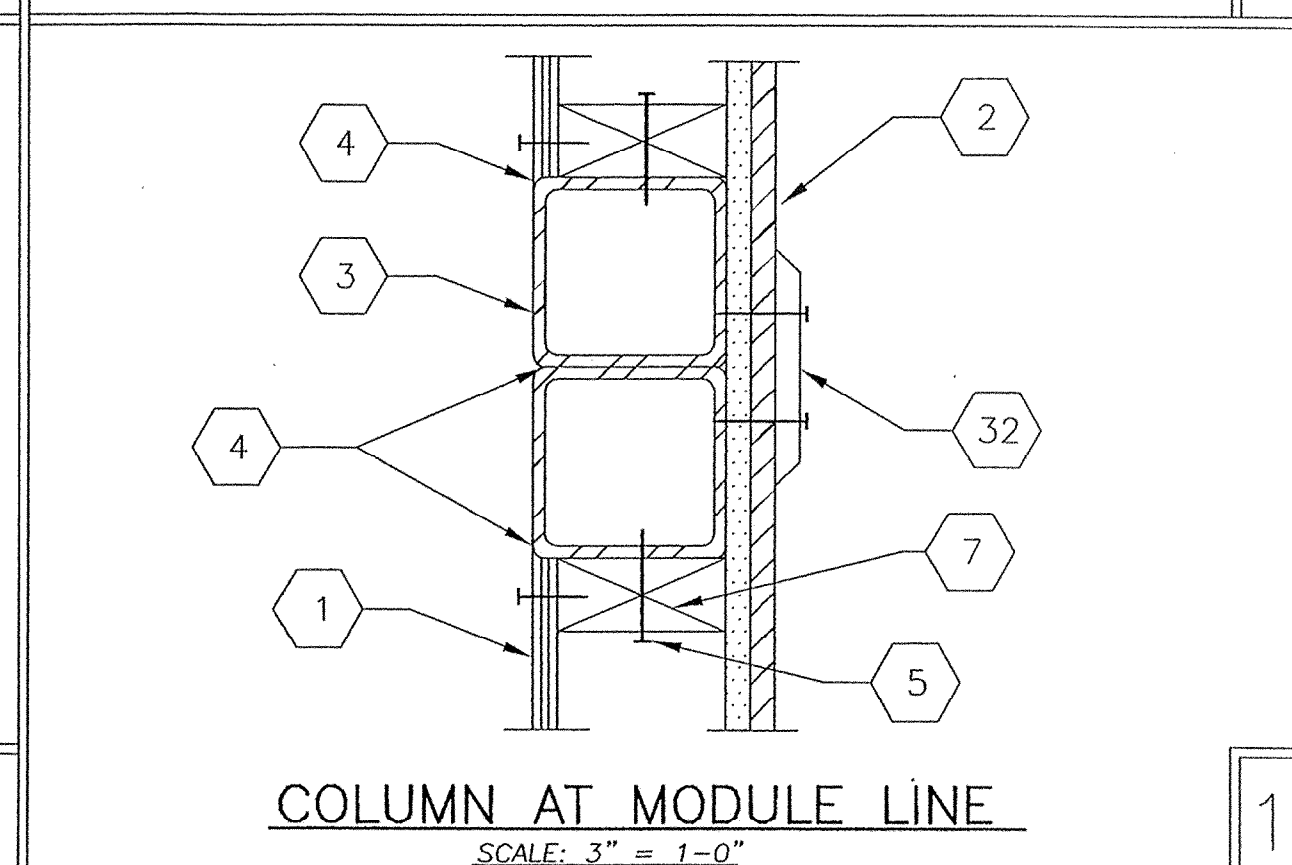
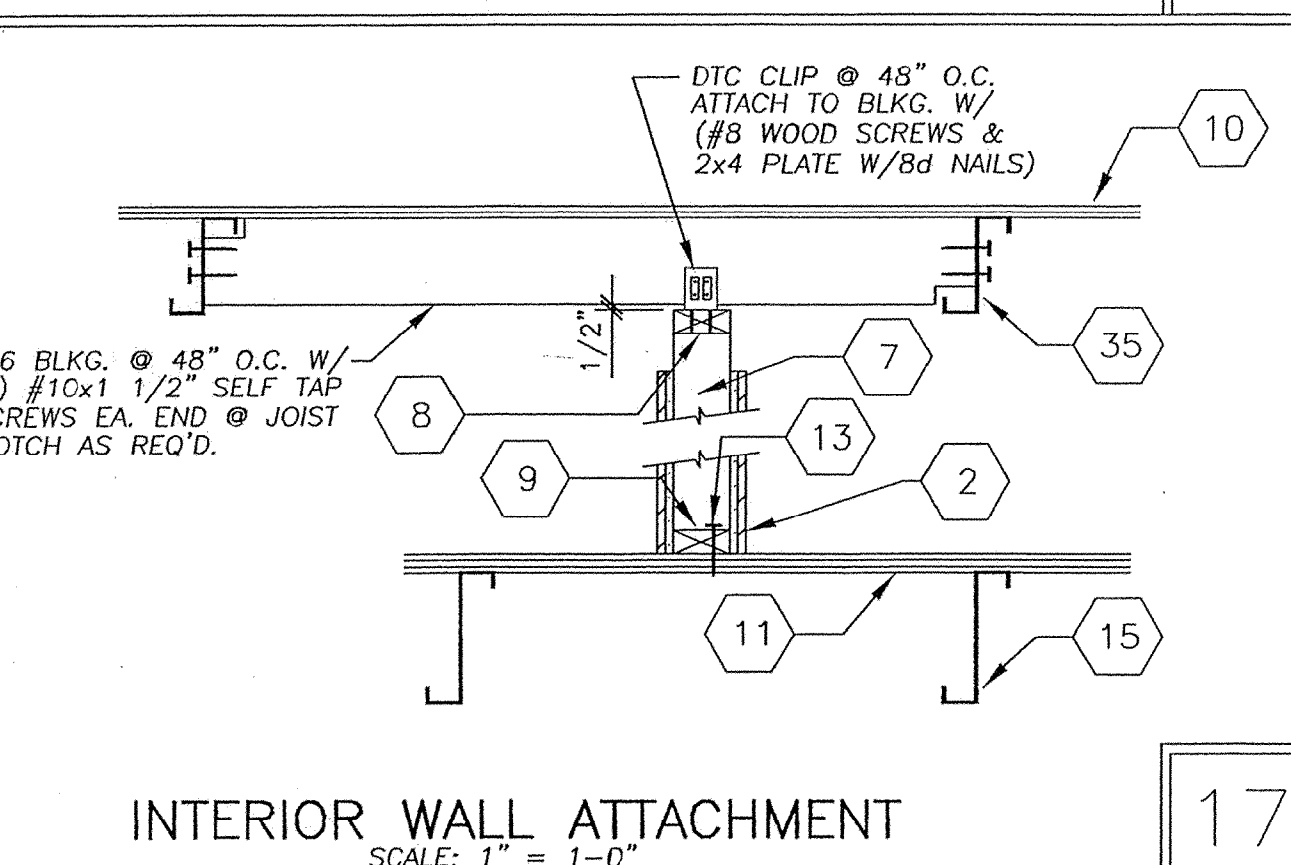
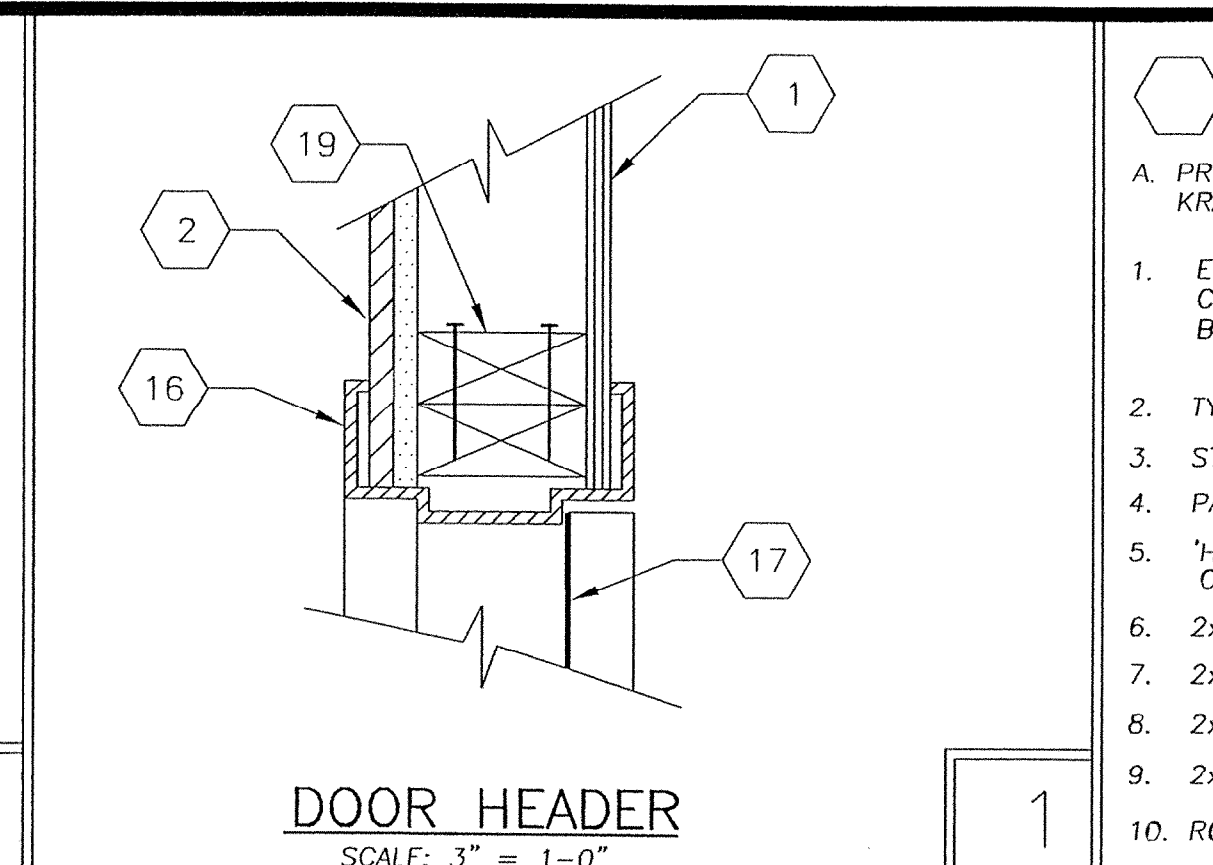
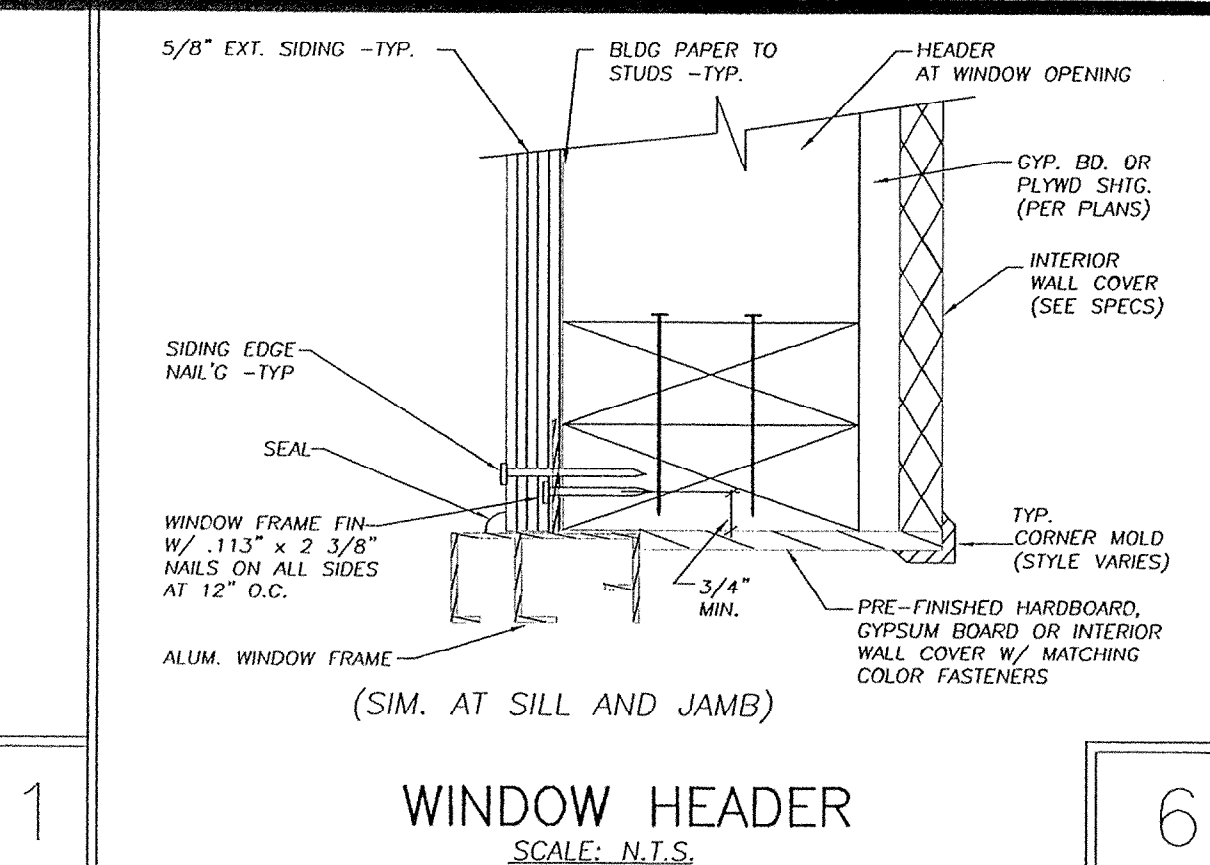
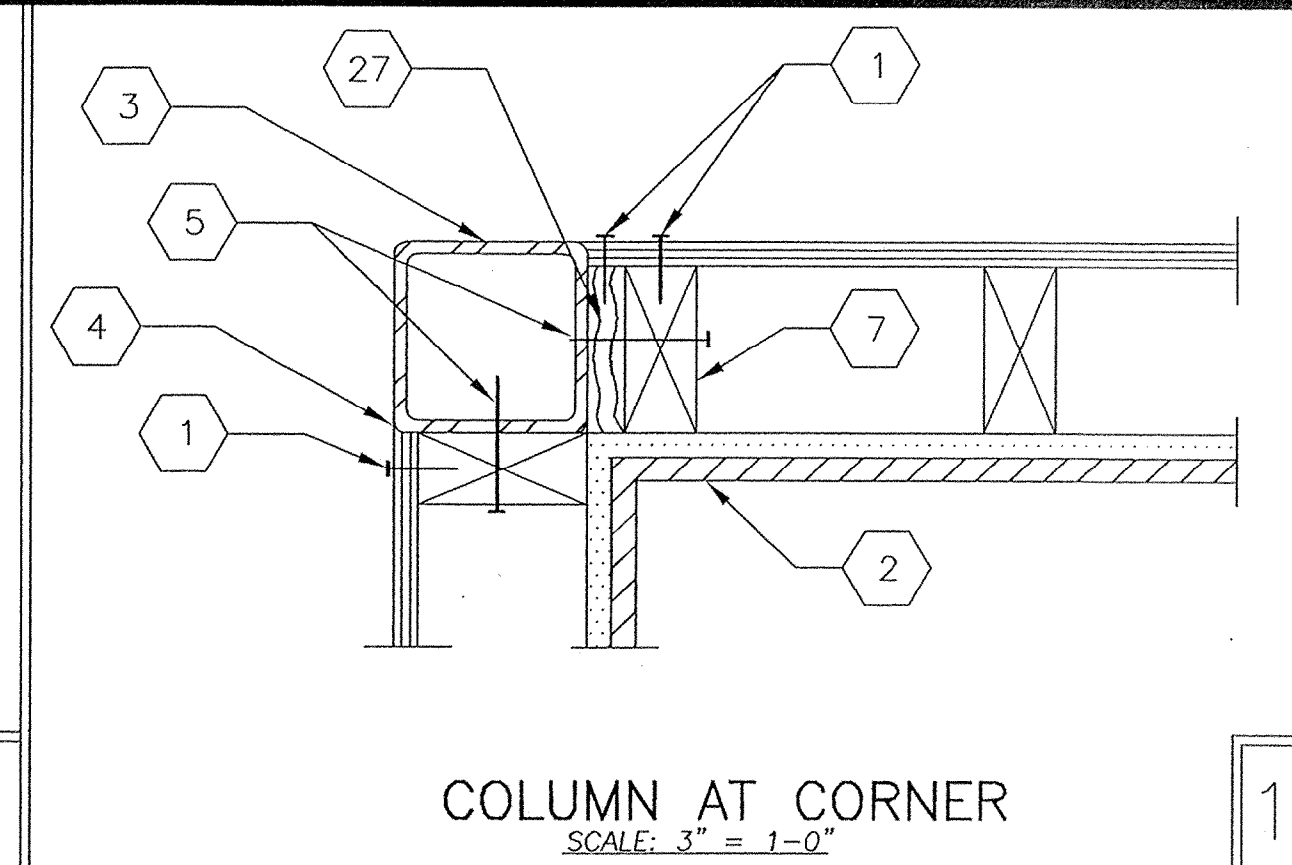
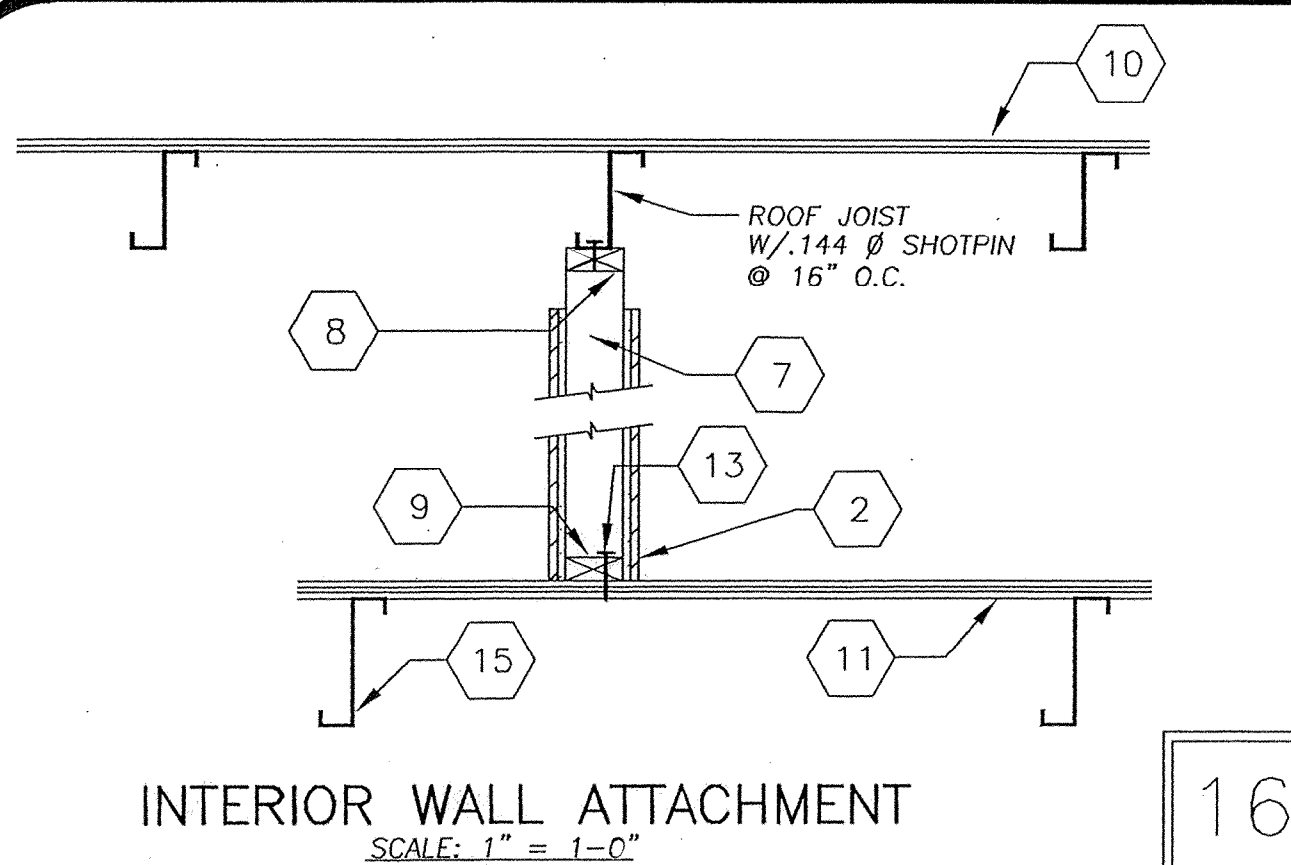
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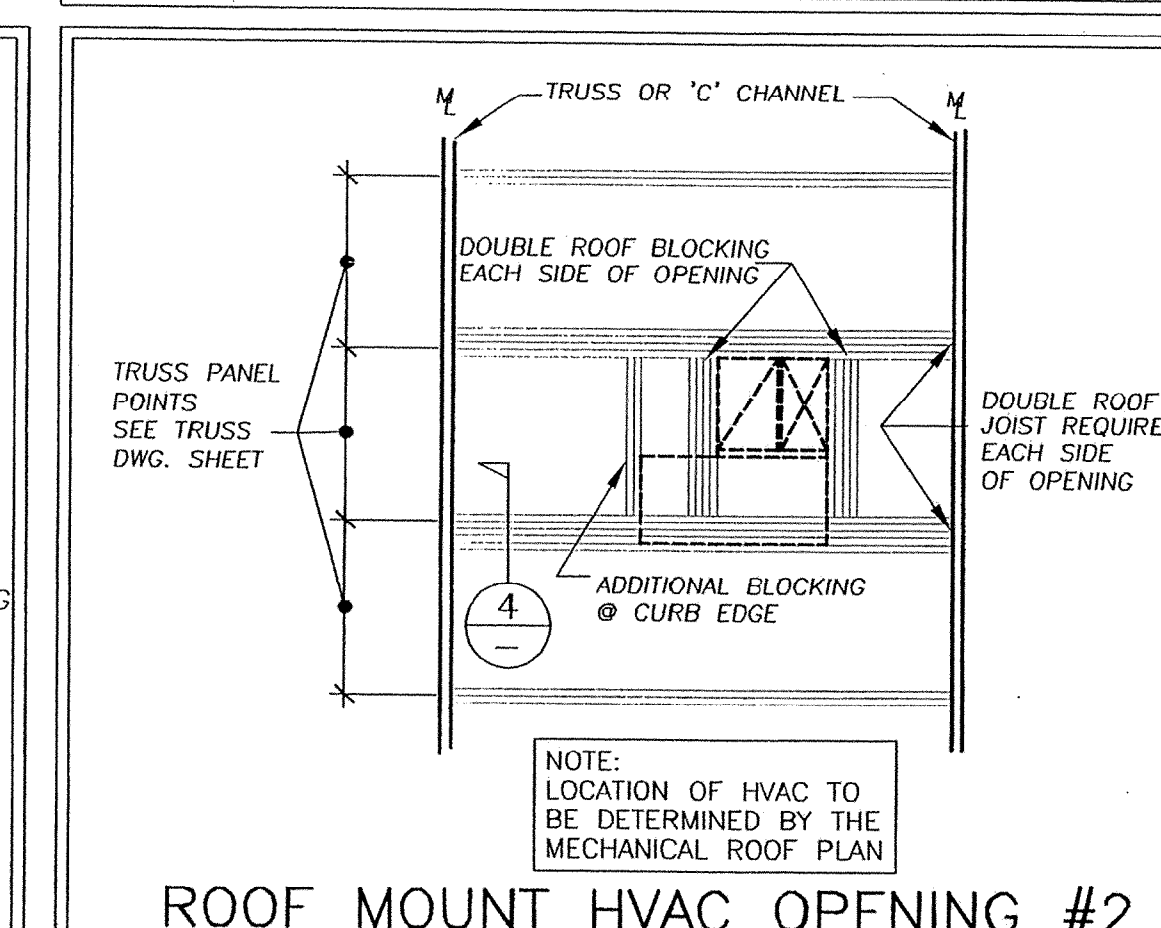


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PROJECT: MODULAR CLASSROOM BUILDING

REVISIONS

S-41



NOTE:
OVERHANGS CAN BE 5'-0" MAX.
W/ PURLINS @ 24" O.C.

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Diagram of a 11 GAGE section. The section is an I-beam with a top flange width of 1 1/2" and a web thickness of 0.120". The total height is 7". The section is labeled 11 GAGE.

Calculations:

$$S_x = 2.624 \text{ in.}^3$$

$$I_x = 9.183 \text{ in.}^4$$

2) ROOF JOIST
 L 7"x1 1/2"x11 GA. (ALTERNATE)

Diagram of a 14 GAUGE section. The section is an I-beam with a top flange width of 2" and a web thickness of 0.075". The total height is 10". The section is labeled 14 GAUGE.

Calculations:

$$I_x = 4.734 \text{ in.}^4$$

$$S_x = 1.578 \text{ in.}^3$$

2) ROOF JOIST
 L 6"x2"x14 GA.

18" TO 23" DOUBLE SLOPE
18" TO 28" SINGLE SLOPE

10.135"

3.5"

1"

1"

R=7/32"

6

ROOF BEAM

18"/23"/18" x 3 1/2" x 10 GA. CHANNEL (BEAM) @ DOUBLE SLOPE
OR 18"/28" x 3 1/2" x 10 GA. CHANNEL (BEAM) @ SINGLE SLOPE

Diagram of a roof header cross-section. The header is an L-shaped member. The vertical leg has a height of 18" @ LOW END and 25" @ HIGH END. The horizontal leg has a width of 3.5". The corner is rounded with a radius $R = 7/32"$. The thickness of the header is 0.105". The diagram is labeled with a circled '1' in the bottom left corner.

1

ROOF HEADER

18" x 3 1/2" x 12 GA. CHANNEL (HDR) @ DOUBLE SLOPE
 28" x 3 1/2" x 12 GA. CHANNEL (HDR) @ SINGLE SLOPE

1. 16"x3 1/2"x 12 GA. RFC STEEL ROOF HEADER.
2. 6" x 2 x 14 G6. STEEL ROOF JOIST @ 48" O.C. FOR 20 PSF ROOF OR 7 x 1 1/2 x 11 GA. @ 48" O.C. FOR 30 PSF ROOF.
3. 10"x12 GA CHANNEL @ ROOF OVERHANGS.
L 4"x3"x3/8" PURLIN & OUTRIGGER AT 20 PSF PURLIN OR L 5"x3"x3/8" OUTRIGGER & L 4"x3"x3/8" PURLIN AT 30 PSF ROOF.
4. WIRE OR STRAP ATTACHED TO ROOF JOISTS FOR INSULATION SUPPORT AT 24" O.C.
5. NOT USED.
6. 18"x23"x18"x3 1/2"x10 GA. TAPERED CHANNEL SECTION BEAM AT DOUBLE SLOPE ROOF AND 18"x28"x3 1/2"x 10 GA. AT SINGLE SLOPE ROOF.
7. STEEL CORNER COLUMN SEE RIGID FRAME SECTION FOR SIZE.
8. STEEL TRUSS. (SEE SHITS. S-60, S-60.1, S-70, & S-70.1)
9. STEEL TRUSS BRACES AT 1/2' O.C. TO BOTTOM CHORD OF TRUSSES L 1" 1/2"x1" 8'x2 3/16"
10. 22 GA. 20 GAUGE METAL STRAPS ONLY FOR 22 GA METAL ROOF OPTION, W/ 3" MIN. OF 1/8" FILLET WELD EACH END TO ROOF BEAM OR HEADER
11. 22 GA. STANDING SEAM ROOF DECK. SEE DETAIL #9 ON SHEET S-51 FOR ROOF PANEL SECTION.

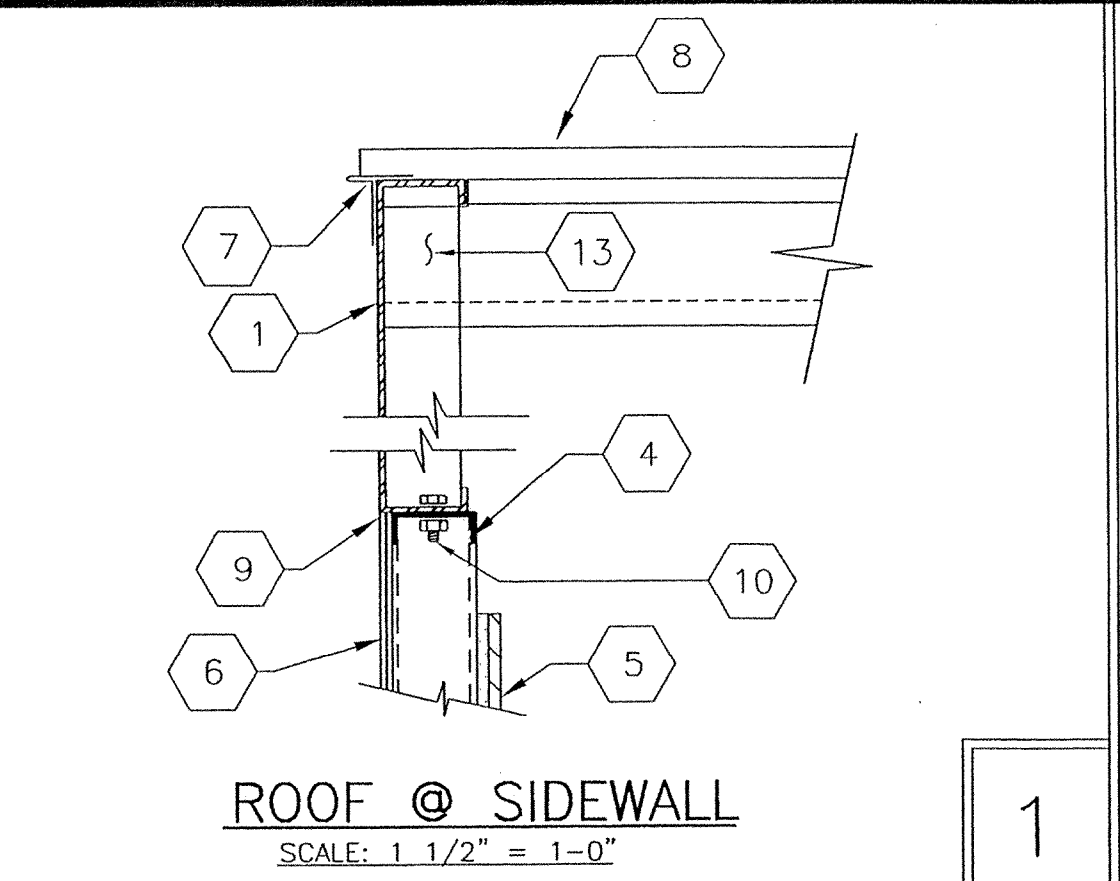
PROJECT: MODULAR CLASSROOM BUILDING

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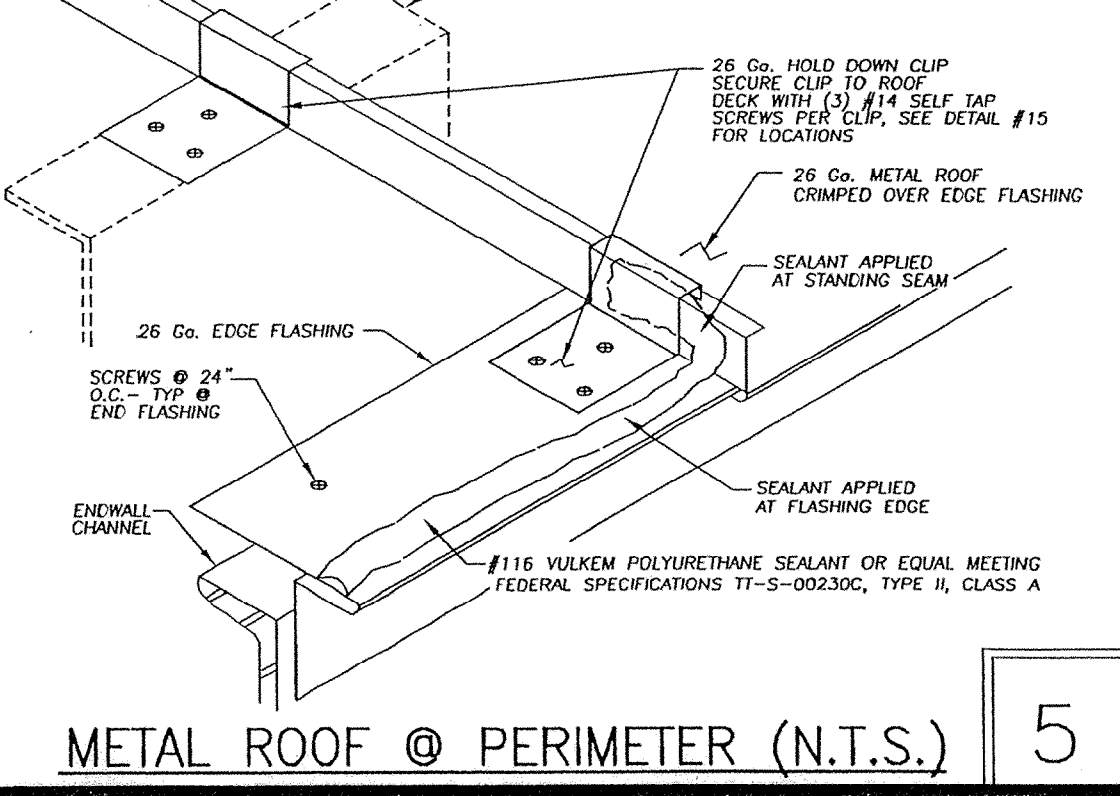
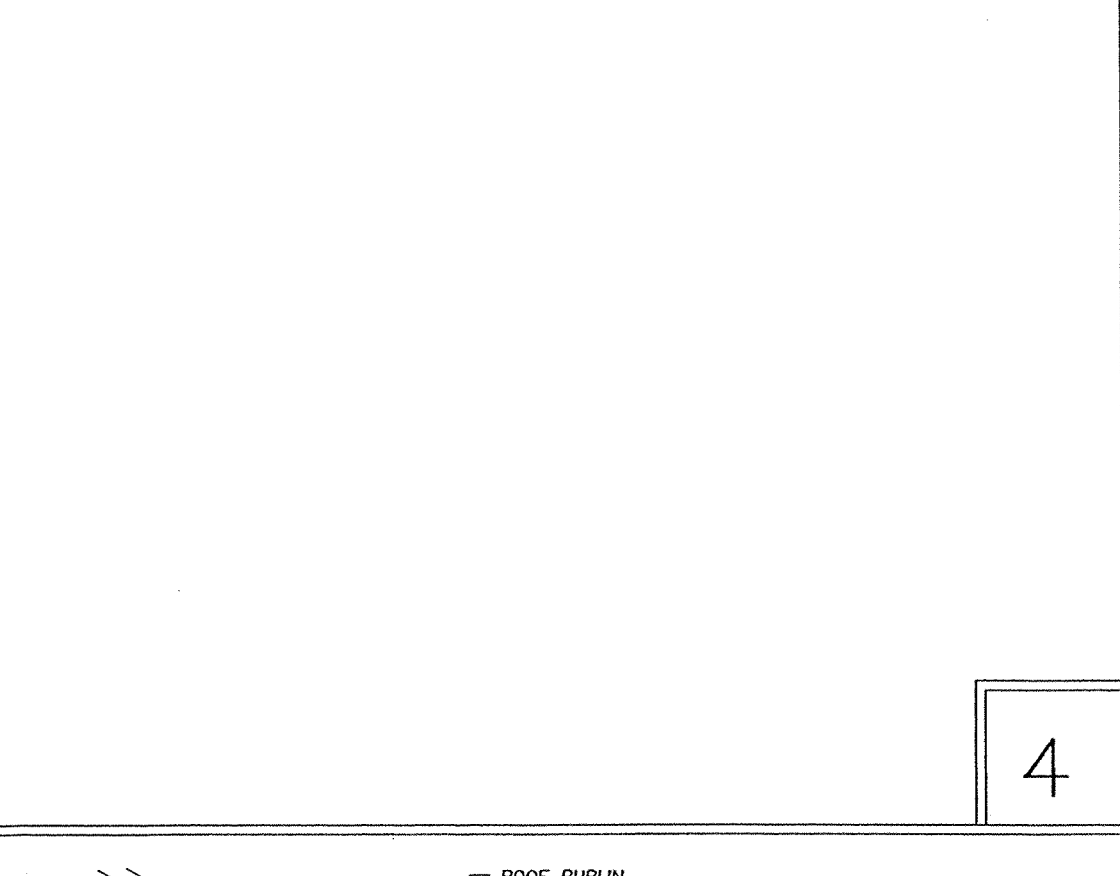
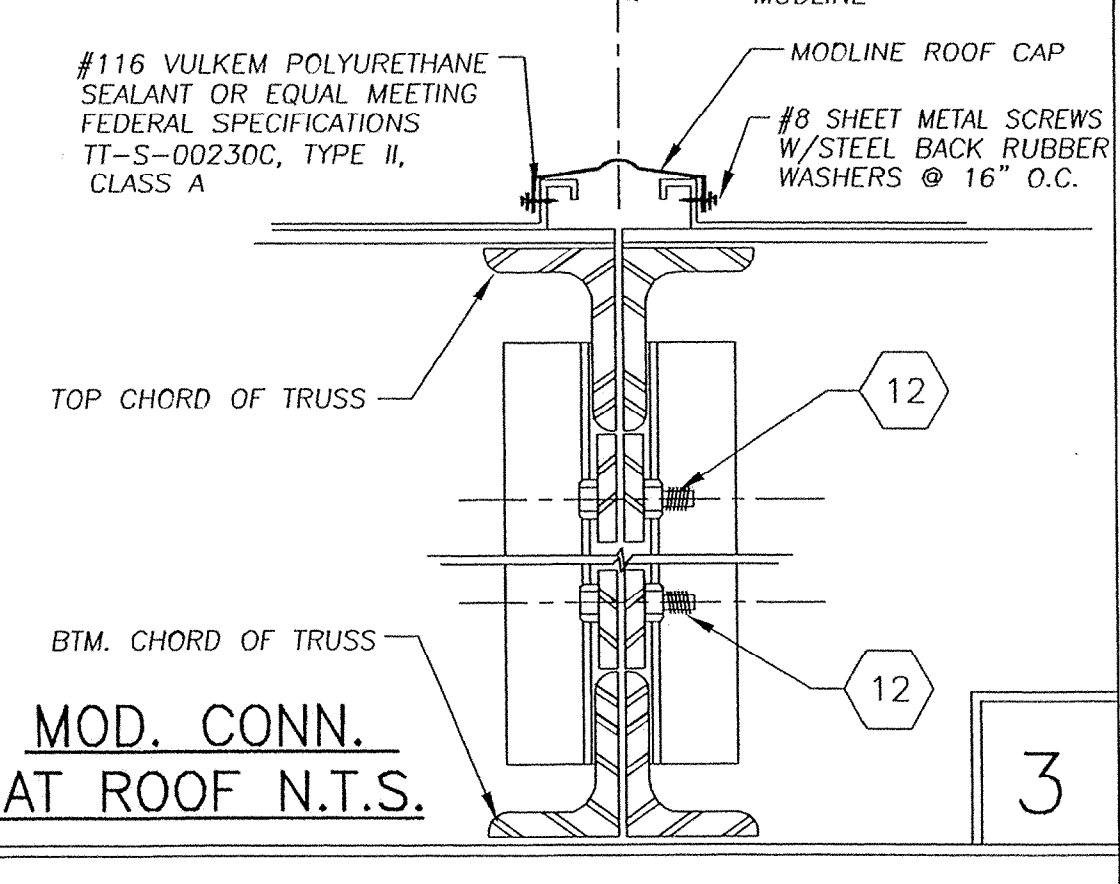
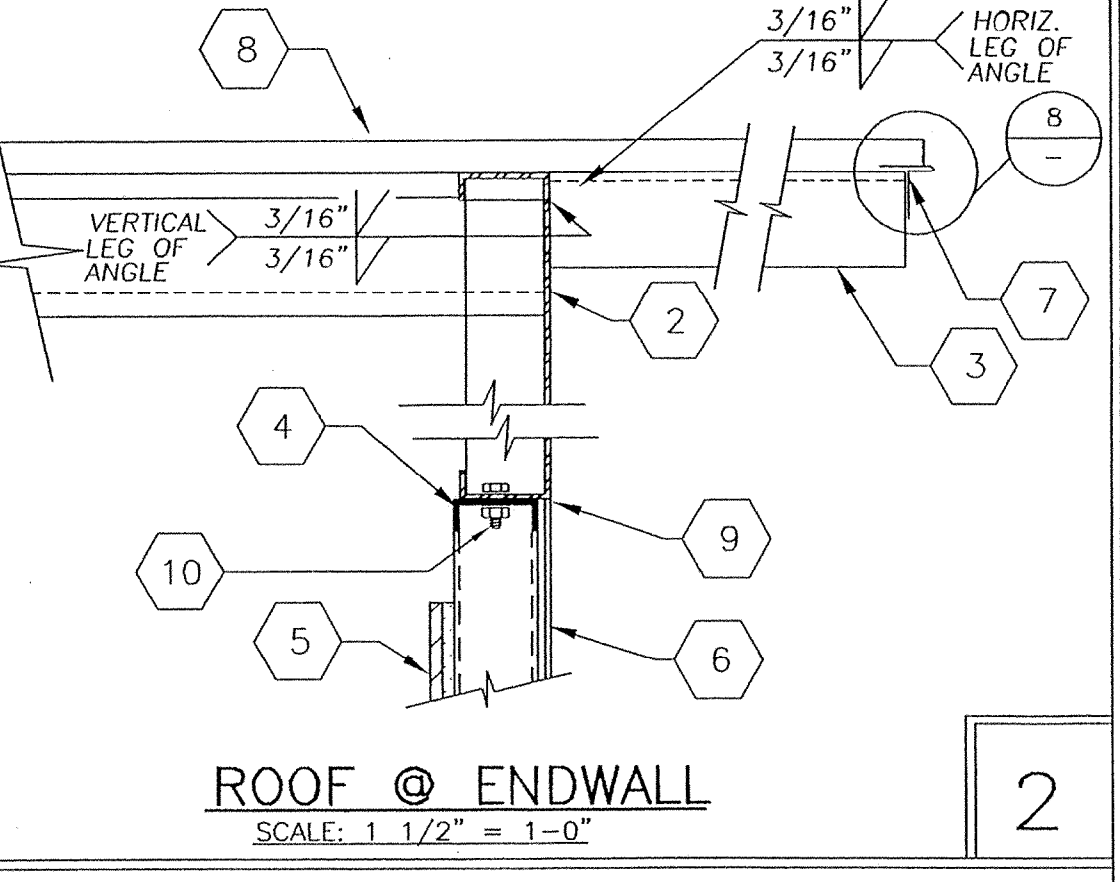
ROOF FRAMING DETAILS W/ METAL DECK

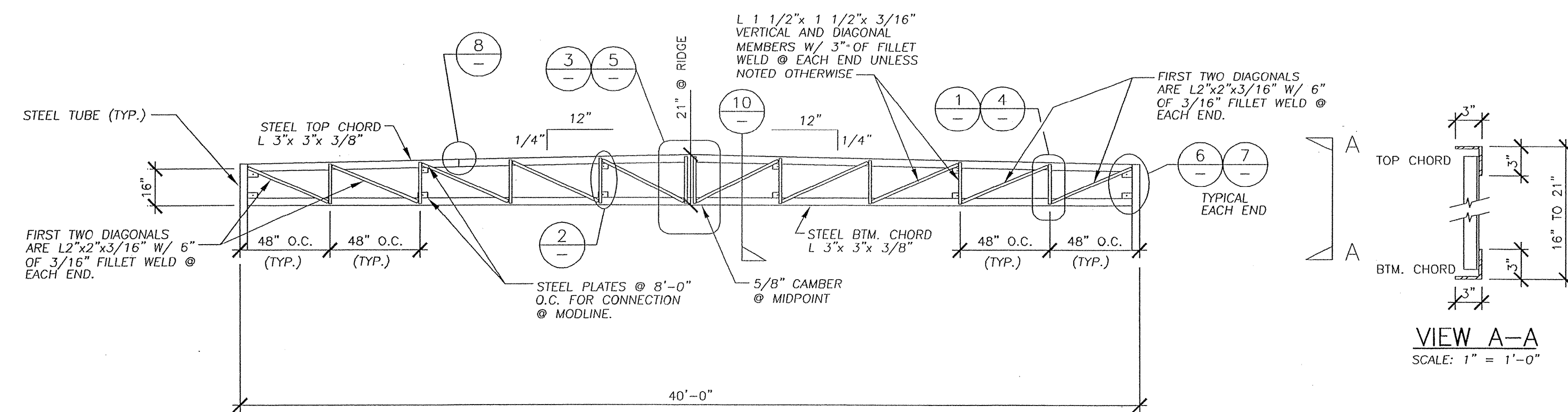
WIND LOAD: 80 & 90 MPH
ROOF LOAD: 20 & 30 PSF
FLOOR LOAD: 50 & 125 PSF

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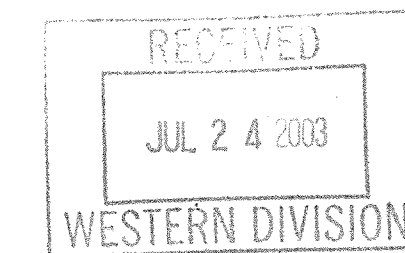
1. 10 GA. CHANNEL @ ROOF SIDEWALL
DUAL SLOPE OPTION: 18/23/18x3 1/2x10 GA.
SINGLE SLOPE OPTION: 18/28/18x3 1/2x10 GA.
2. 12 GA. CHANNEL @ ROOF HEADER
DUAL SLOPE OPTION: 18"x3 1/2"x12 GA.
SINGLE SLOPE OPTION: 18/28x3 1/2"x12 GA.
3. OVERHANG @ ENDWALL, SEE ROOF PLAN FOR SIZE
AND SHT. G-2 FOR OVERHANG MATERIAL
4. 29 GA. STL. TRACK CONT. TOP PLATE-
ATTACH TO CHANNEL W/ 0.145H SHOT
PIN AT 18" O.C. OR 3/8" BOLT AT 24" O.C. MIN.
5. INTERIOR FINISH - SEE SHEET G-2
6. TYP. EXTERIOR FINISH - SEE SHEET G-2
7. 26 GA. FLASHING
8. STEEL ROOF DECK - 22 GA. ROLL FORMED STANDING SEAM
ROOF DECK. SEE DETAIL #9 ROOF PANEL SECTION. SEE DETAILS
#5 AND #10 FOR ATTACHMENT SPECIFICATIONS.
9. PAINTABLE ACRYLIC LATEX SEALANT (U.N.O.)
10. 1/2" MACHINE BOLT W/ WASHER @ 24" OC MIN. OR
0.145H SHOT PIN AT 18" O.C.
11. WELD WASHER - 1-3/8"x3/32" WITH 9/16" HOLE.
WELD TO UPPER CHANNEL FLANGE.
12. 5/8" MACHINE BOLT AT 4'-0" O.C. @ MODULE CONNECTION.
13. 1/4" FULL HEIGHT STIFFENER @ 4'-0" O.C.
14. 6"x14 GA. ROOF JOIST OR BLG.



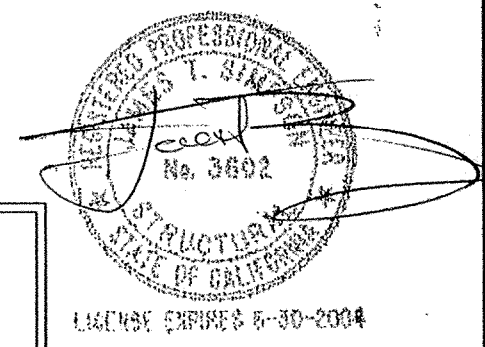


DUAL SLOPE STEEL TRUSS ELEVATION
W/ 20 PSF ROOF LOAD & 80 MPH WIND
SCALE: 1/4" = 1'-0"

- NOTES:
1. ALL STEEL GRADES TO BE A-36 OR EQ. WITH 36 K.S.I. MIN. YIELD.
 2. REQUIRED ELECTRODES FOR ALL WELDS TO BE E-70-XX OR EQ.
 3. VOLTAGE & AMPERAGE SHALL BE PER ELECTRODE MANUFACTURER'S SPECIFICATIONS.
 4. BOLTS & NUTS TO BE A307.
 5. 3/8"x3"x5 1/2" PLATE WITH 11/16" HOLE FOR 5/8" MACHINE BOLT. PLATES @ 8'-0" O.C. FOR MODULE CONNECTION. SEE DETAIL #2A.



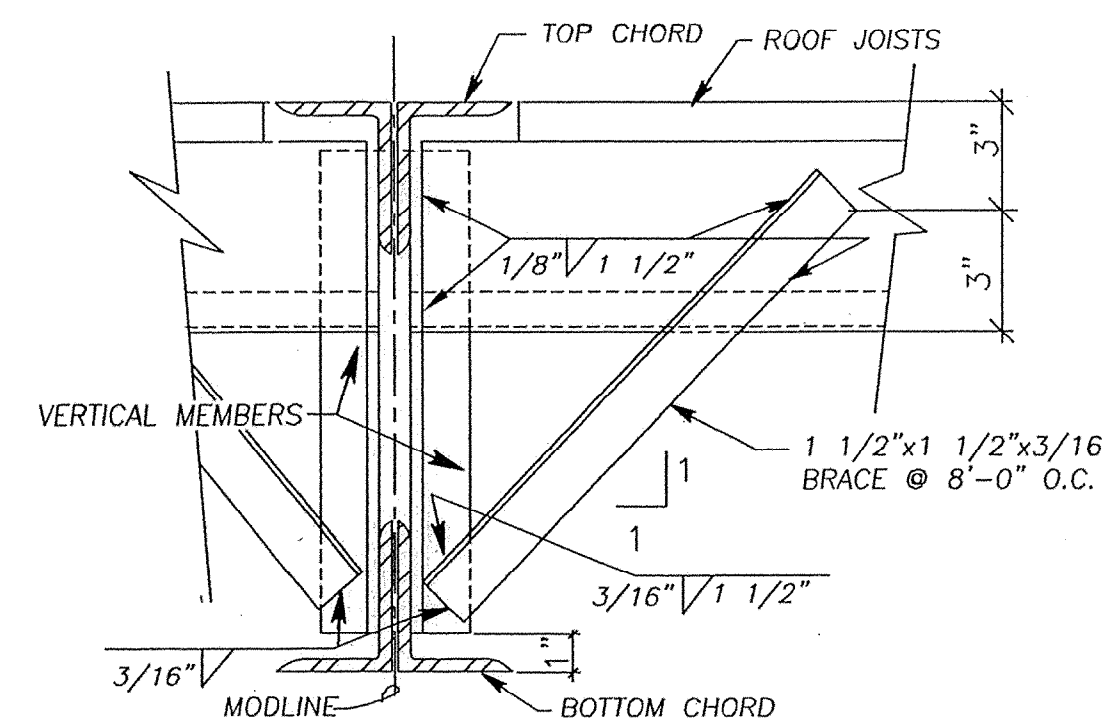
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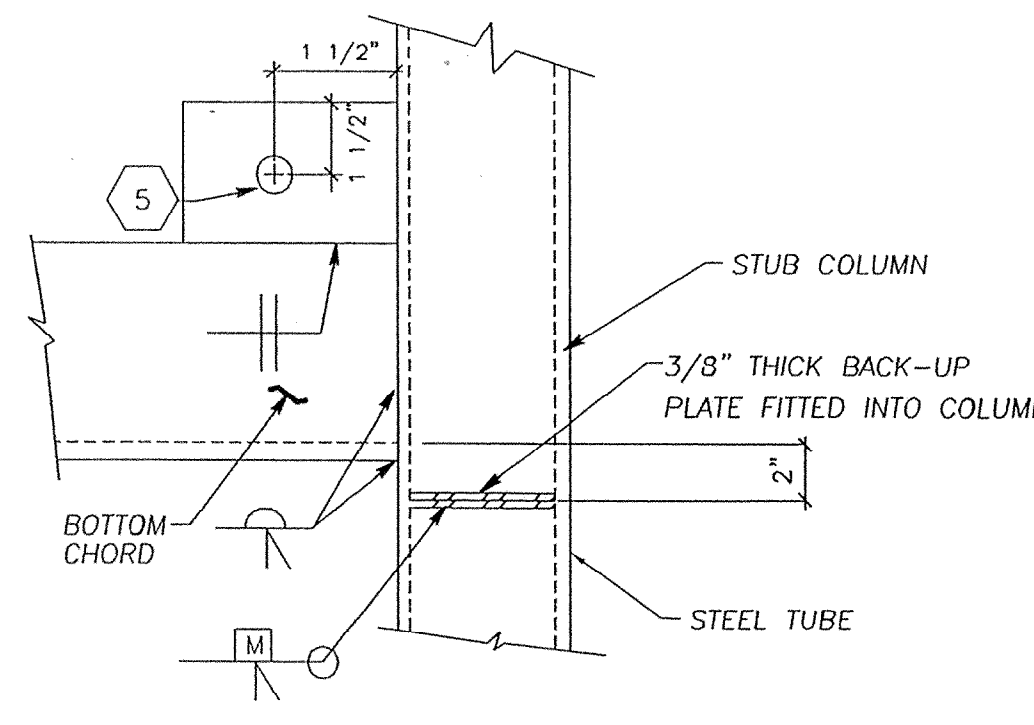
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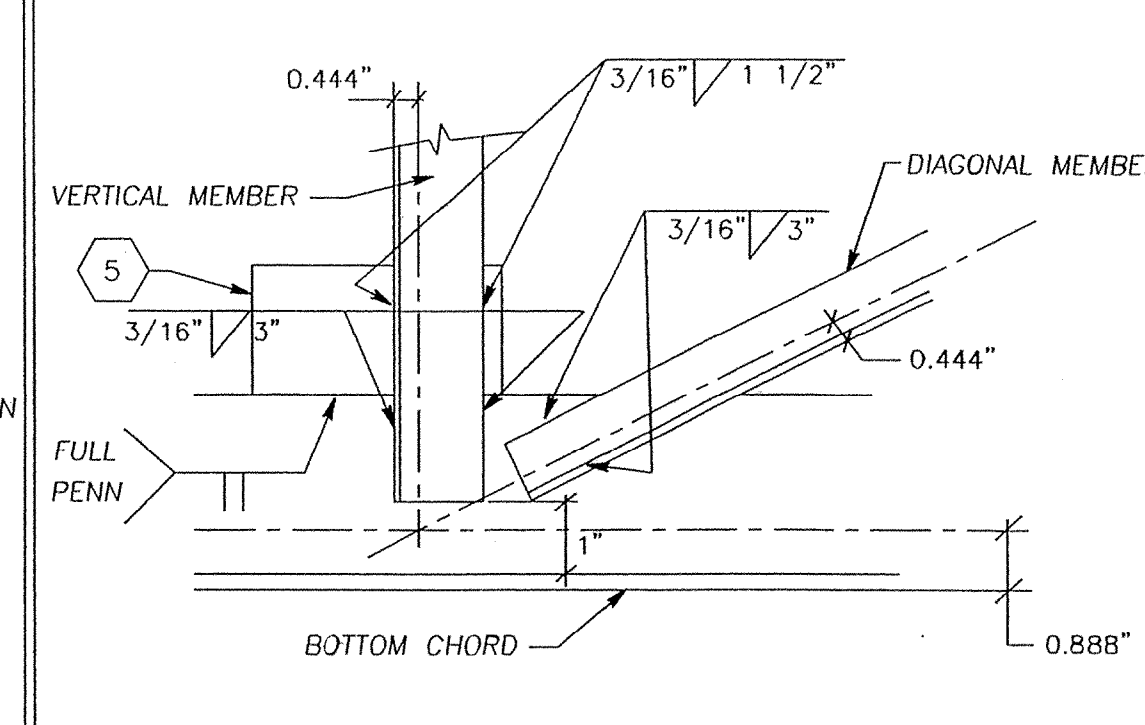
13 TRUSS TO ROOF JOIST BRACING 10



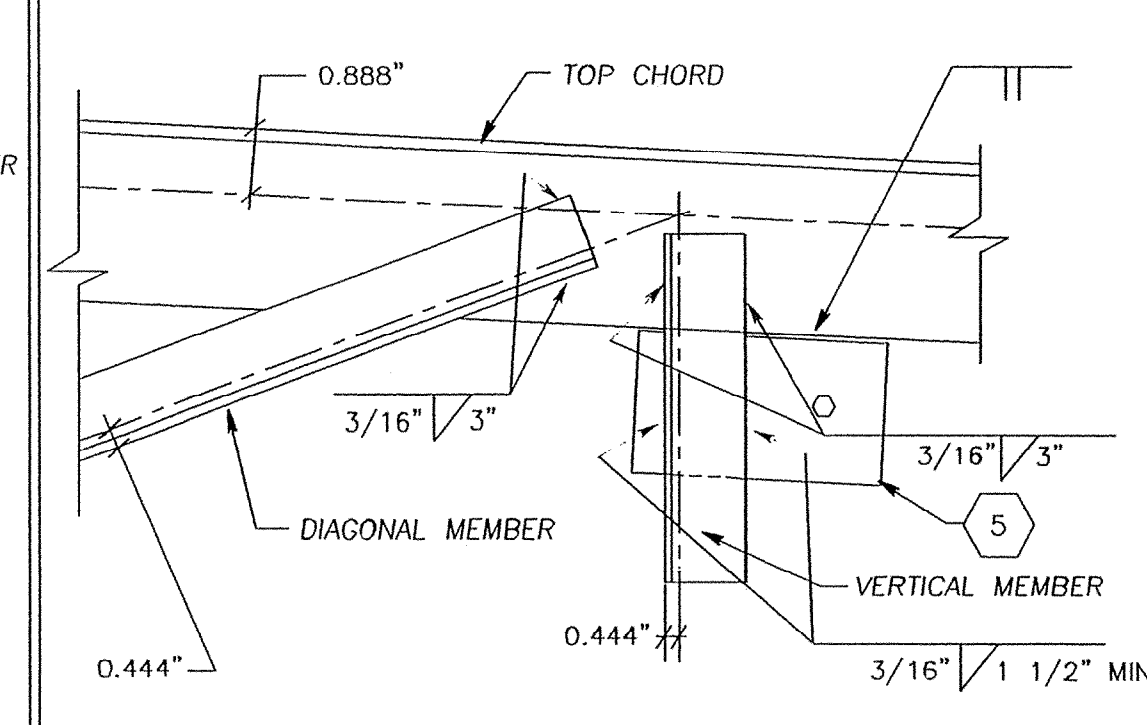
POST CONN. TO TRUSS (BOT.) 7



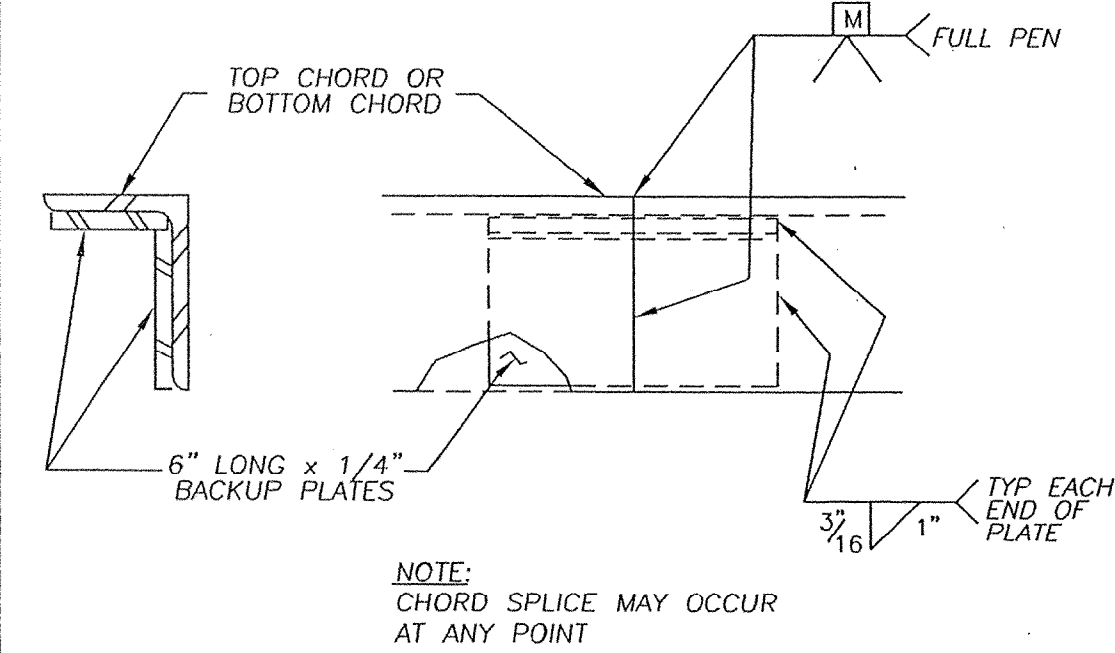
VERT. & DIAG. TO BTM CHORD 4



VERT. & DIAG. TOP CHORD 1

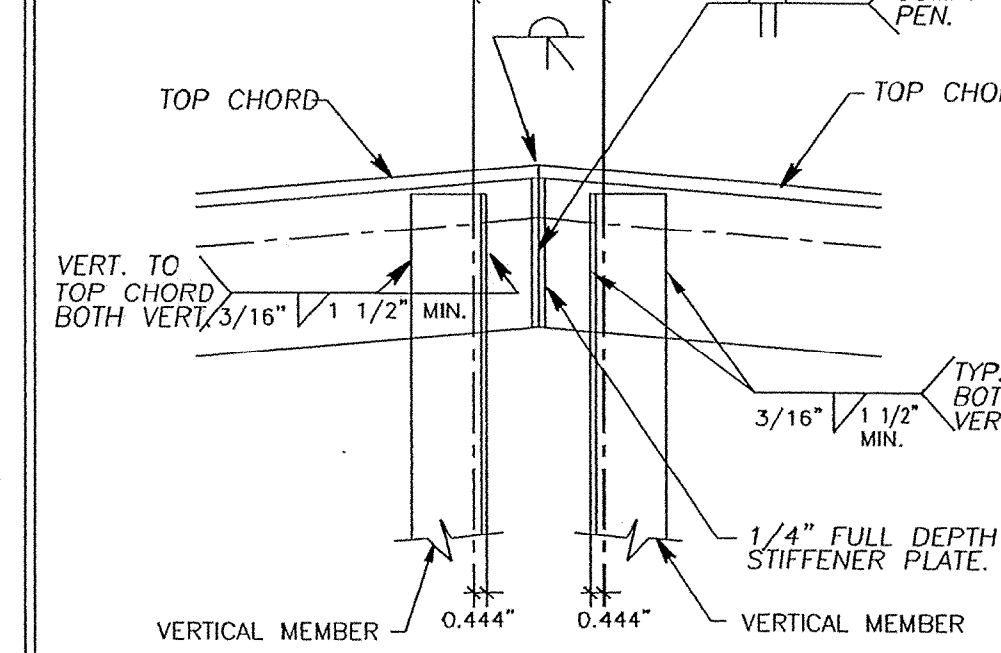


14 TRUSS CHORD SPLICE 11

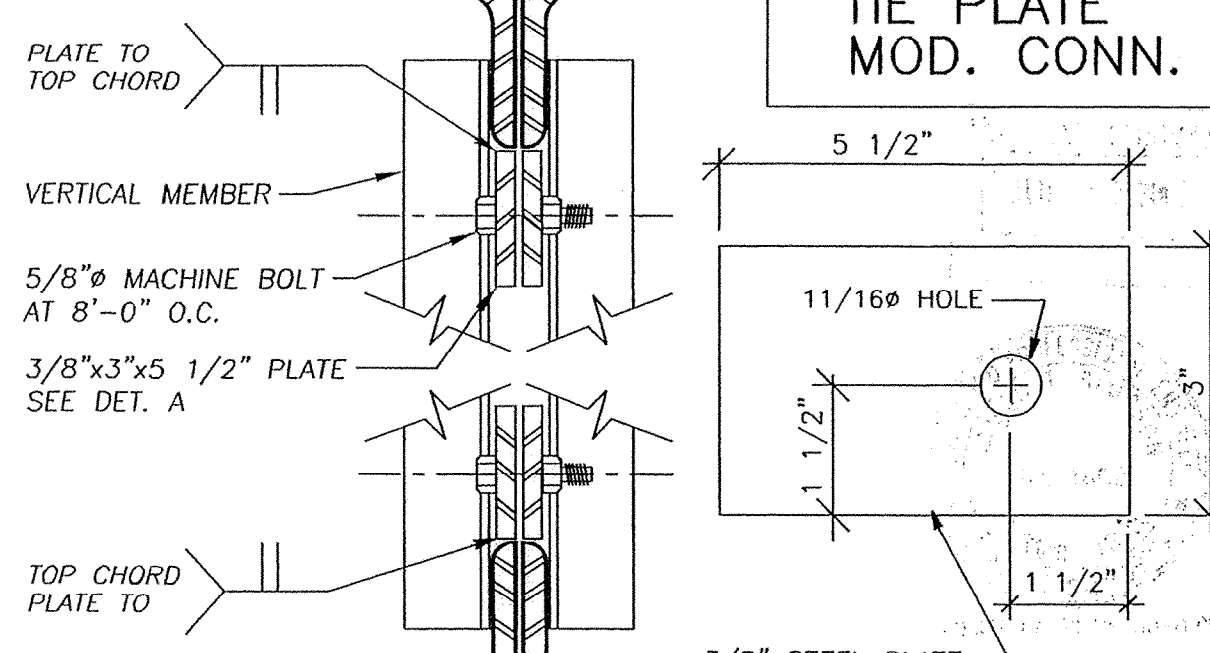


TRUSS CHORD SPLICE 8

TOP CHORD @ MIDPOINT 5



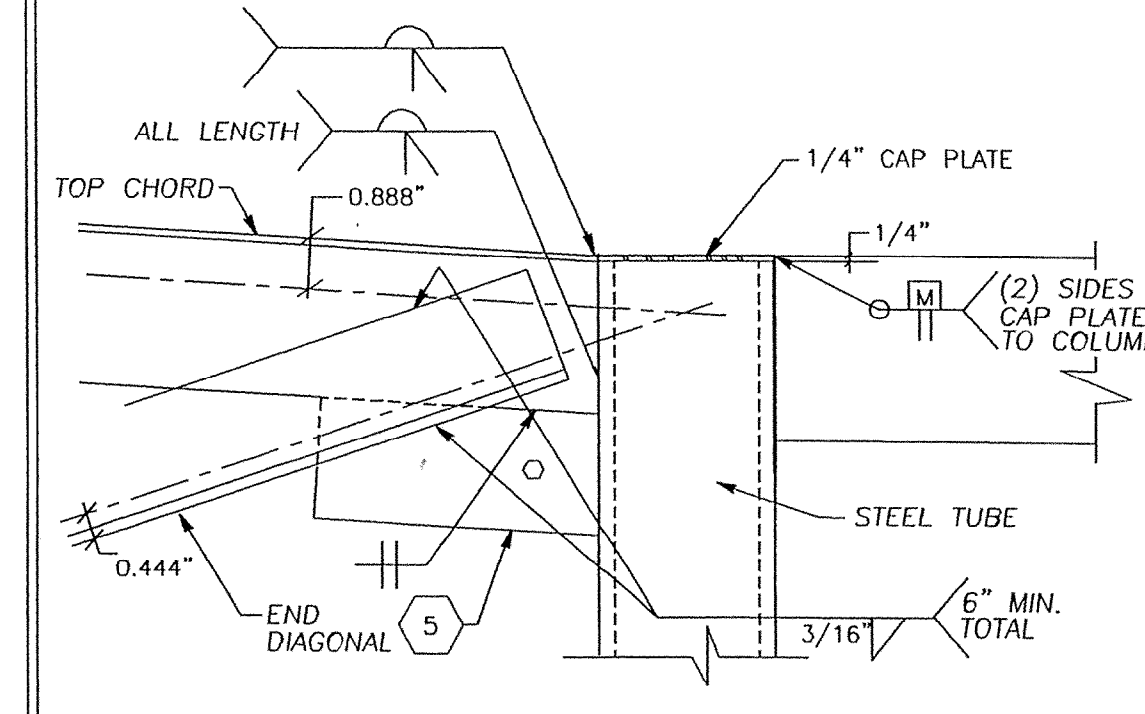
TIE PLATE MOD. CONN. 2



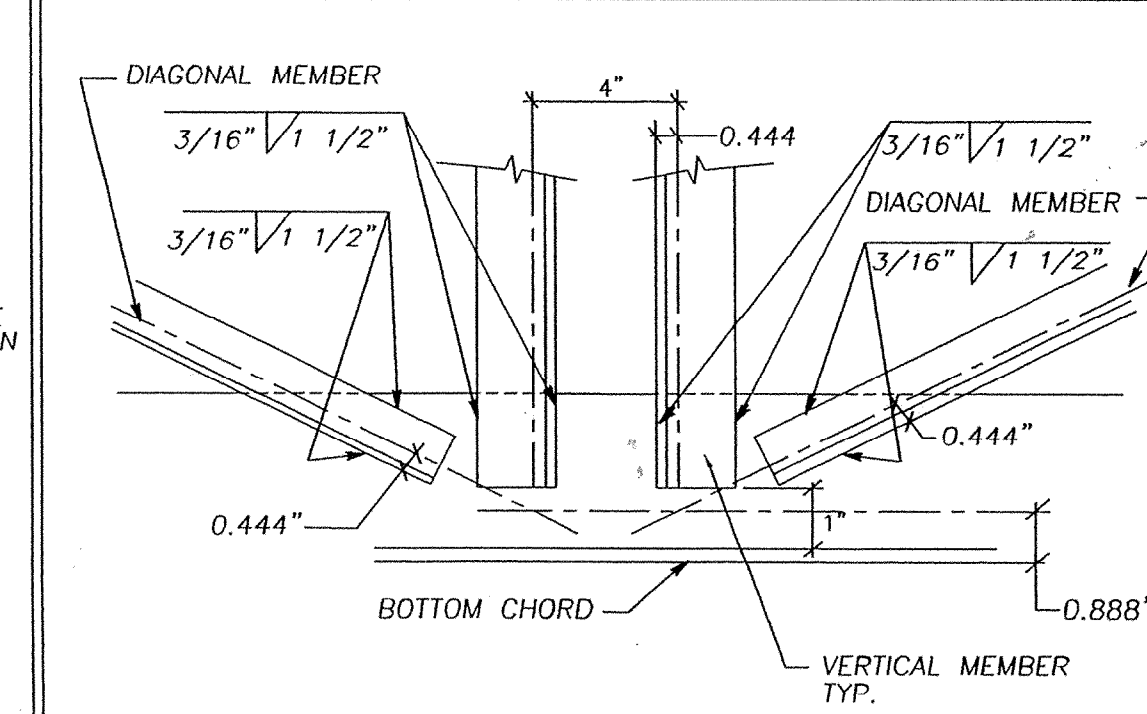
15 POST CONN. TO TRUSS (TOP) 9



POST CONN. TO TRUSS (TOP) 6

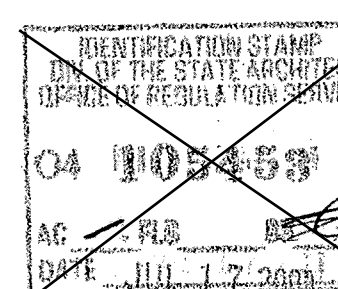
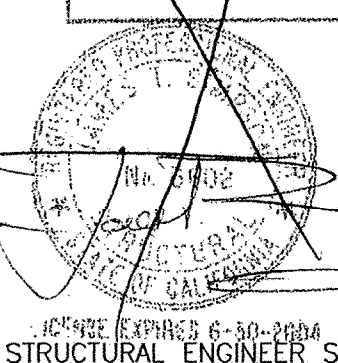


BOTTOM CHORD @ MIDSPAN 3

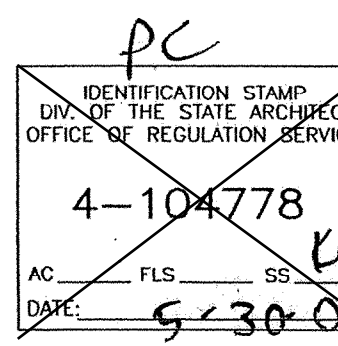


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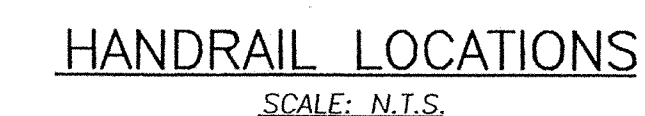
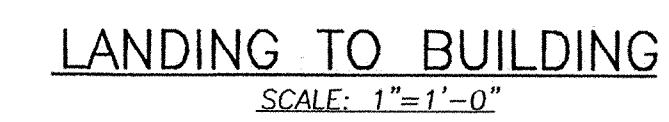
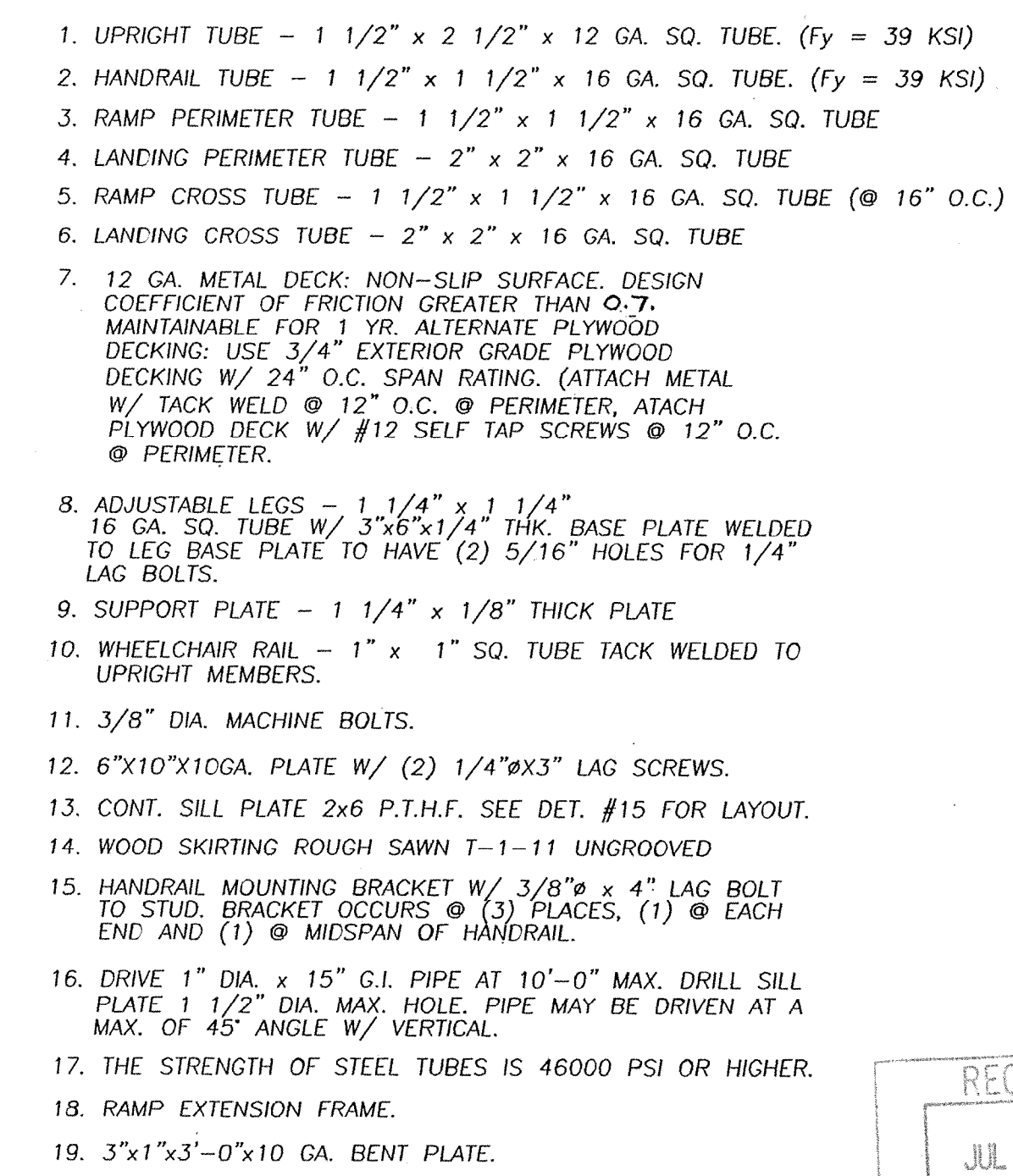
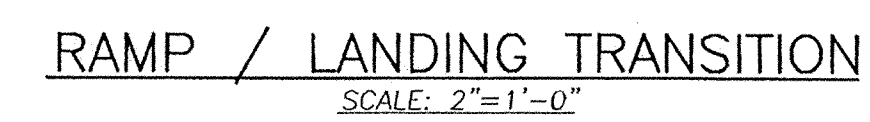
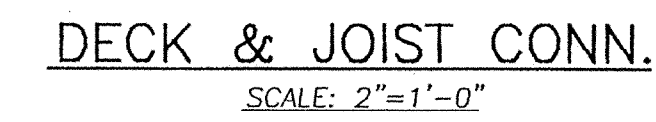
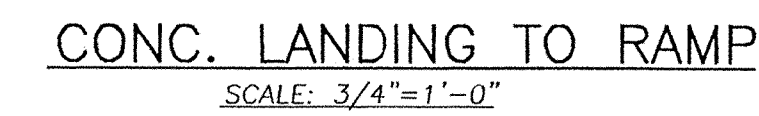
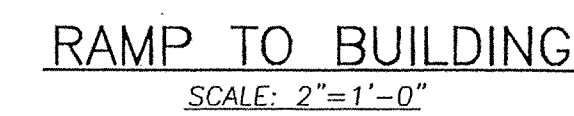
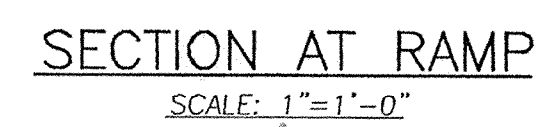
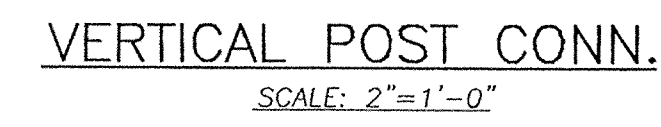
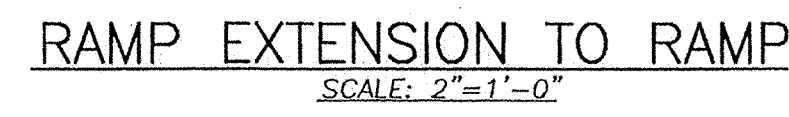
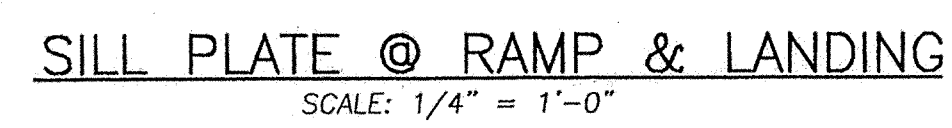
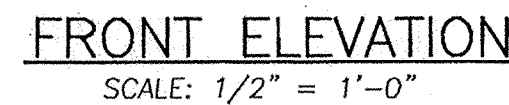
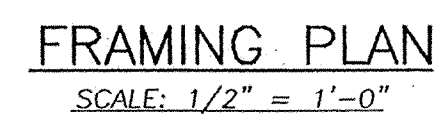
STATE AGENCY STAMP



STATE AGENCY STAMP

PROJECT: MODULAR CLASSROOM BUILDING
TITLE & BLDG. DATA:
DUAL SLOPE TRUSS & DETAILS
WIND LOAD: 80 MPH
ROOF LOAD: 20 PSF
FLOOR LOAD: 50, 50+20, 100 & 125 PSF

DATE 12/1/02
DRAWN BY JAG
SCALE AS NOTED
APPROVED
REVISIONS
SHEET NO. S-60



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ECT: MODULAR CLASSROOM BUILDING

TITLE & BLDG. DATA:
4'-0" WIDE RAMP PLAN & DETAILS
WIND LOAD: 80 & 90 MPH

WIND LOAD: 80 & 90 MPH
ROOF LOAD: 20 & 30 PSF
FLOOR LOAD: 100 PSF

DATE 12-1-02

DRAWN BY **JAG**

SCALE AS NOTED

REVISIONS

[illegible]

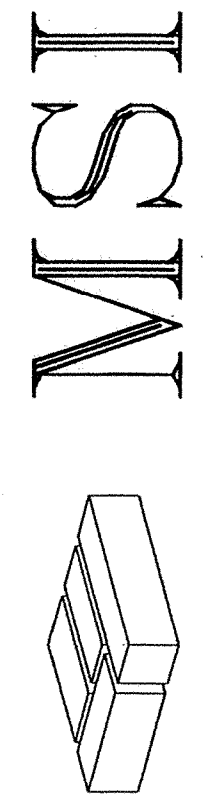
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QUEST NO.

SHEET NO

R-1

www.mhhe.com



MODULAR STRUCTURES INTERNATIONAL, INC.
920 CITRUS AVE. RIVERSIDE, CALIFORNIA 92507
PHONE: (951) 788-3035 FAX: (951) 788-1523

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PROJECT: MODULAR CLASSROOM BUILDING

TITLE & BLDG. DATA:
WOOD PAD FOUNDATION PLAN & DETAILS
W/ PLYWOOD FLOOR
WIND LOAD: 80 MPH
ROOF LOAD: 20 & 30 PSF
FLOOR LOAD: 50 PSF

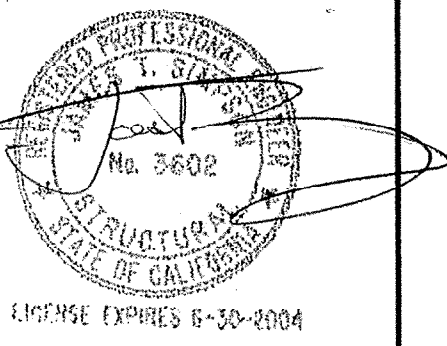
DATE 12-1-02
DRAWN BY J.C.
SCALE 1/4"=1'-0"
APPROVED
REVISIONS
SHEET NO. F-1

KEYNOTES

1. MAXIMUM SOIL BEARING PRESSURE - 1000 PSF.
2. ALL FOUNDATION LUMBER SHALL BE H.F. #2 ALL LUMBER IN CONTACT WITH GRADE SHALL BE STAMPED "FOR GROUND CONTACT" ALL FOUNDATION NAILS SHALL BE CORROSION RESISTANT PER U.B.C. 2304A.3
3. 2x4 CONTINUOUS. INTERVAL TO EACH PAD WITH 16d BOX NAILS @ 5" O.C. STAGGERED.
- 3A. 2x6 CONTINUOUS. INTERVAL TO EACH PAD WITH 16d BOX NAILS @ 5" O.C. STAGGERED.
4. TIE PLATE - 12"x6"x10 Gs. PLATE W/ (8) 5/16" HOLES AS SHOWN FOR (4) 1/4"x 3/4" LONG SELF TAP SCREWS INTO CHANNEL & (4) 1/4"x 3" LAG BOLTS INTO 2x MEMBER. (TYP.)
5. 5/8" PLYWOOD PERIMETER SKIRTING. NAIL TO FOUNDATION PADS WITH 8d BOX NAILS @ 12" O.C. TOP AND BOTTOM.
6. NOT USED.
7. TAPERED SHIMS - NAIL TO FOUNDATION PADS WITH 16d BOX NAILS @ 12" O.C. NAIL 2x12 FOUNDATION PLATE TO TAPERED SHIMS WITH 16d BOX NAILS @ 12" O.C. STAGGERED ALONG EACH TAPERED SHIM. (PER SLOPE OF GROUND AT SITE)
8. PLYWOOD OR WOOD SHIM - MIN. 8" LONG. MAX. 16" BETWEEN SHIMS. NAIL TO PLATES WITH MIN. (3) 16d BOX NAILS PER SHIM MAX. 1-1/2" SHIM HEIGHT AT ANY LOCATION.
9. 11/16" HOLE IN FLOOR JOIST FOR 5/8" x 4" LAG BOLT. (SEE SCHEDULE FOR AMOUNT)
10. DRIVE 1" DIA. x 15' G.I. PIPE @ 10'-0" O.C. MAX. DRILL SILL PLATE 1-1/4" MAX. PIPE MAY BE DRIVEN AT MAX. 45 ANGLE TO VERTICAL.
11. 7"x9.8# STEEL FLOOR CHANNEL.
12. NOT USED.
13. 5/8" MACHINE BOLT @ 10'-0" O.C. FOR MODULE CONNECTION.
14. PLYWOOD FLOOR DECK W/ 0.145" EN @ 6" O.C.
- 15, 16, 17. NOT USED.
18. CONTINUOUS 2x8 P.T.H.F. SILL PLATE. PLATE SPLICES SHALL OCCUR AT CENTER OF 2x4 BLOCK LOCATION.
- 18A. CONTINUOUS 2x10 P.T.H.F. SILL PLATE. PLATE SPLICES SHALL OCCUR AT CENTER OF 2x6 BLOCK LOCATION.
19. 2x4x3'-0" LONG BLOCKS. NAIL BLOCKS TOGETHER WITH 16d BOX NAILS @ 4" O.C. AND (2) 16d NAILS AT EACH END.
- 19A. 2x6x3'-0" LONG BLOCKS. NAIL BLOCKS TOGETHER WITH 16d BOX NAILS @ 4" O.C. AND (2) 16d NAILS AT EACH END.
20. CONTINUOUS 2x12 P.T.H.F. SILL PLATE. PLATE SPLICES SHALL OCCUR AT CENTER OF 2x6 BLOCK LOCATION.
21. FLOOR JOIST OR BLOCK BETWEEN FLOOR JOIST.
22. NOT USED.
23. CONTINUOUS 2x12x(SEE PLAN). NAIL (2) 16d AT EACH END AND 4" O.C.
24. 2x10x24" LONG SILL PADS. P.T.H.F. (SEE PLAN FOR QUANTITY)
25. CONTINUOUS 2x8 H.F. PLATE. PLATE SPLICES SHALL OCCUR AT CENTER OF 2x6 BLOCK LOCATIONS.

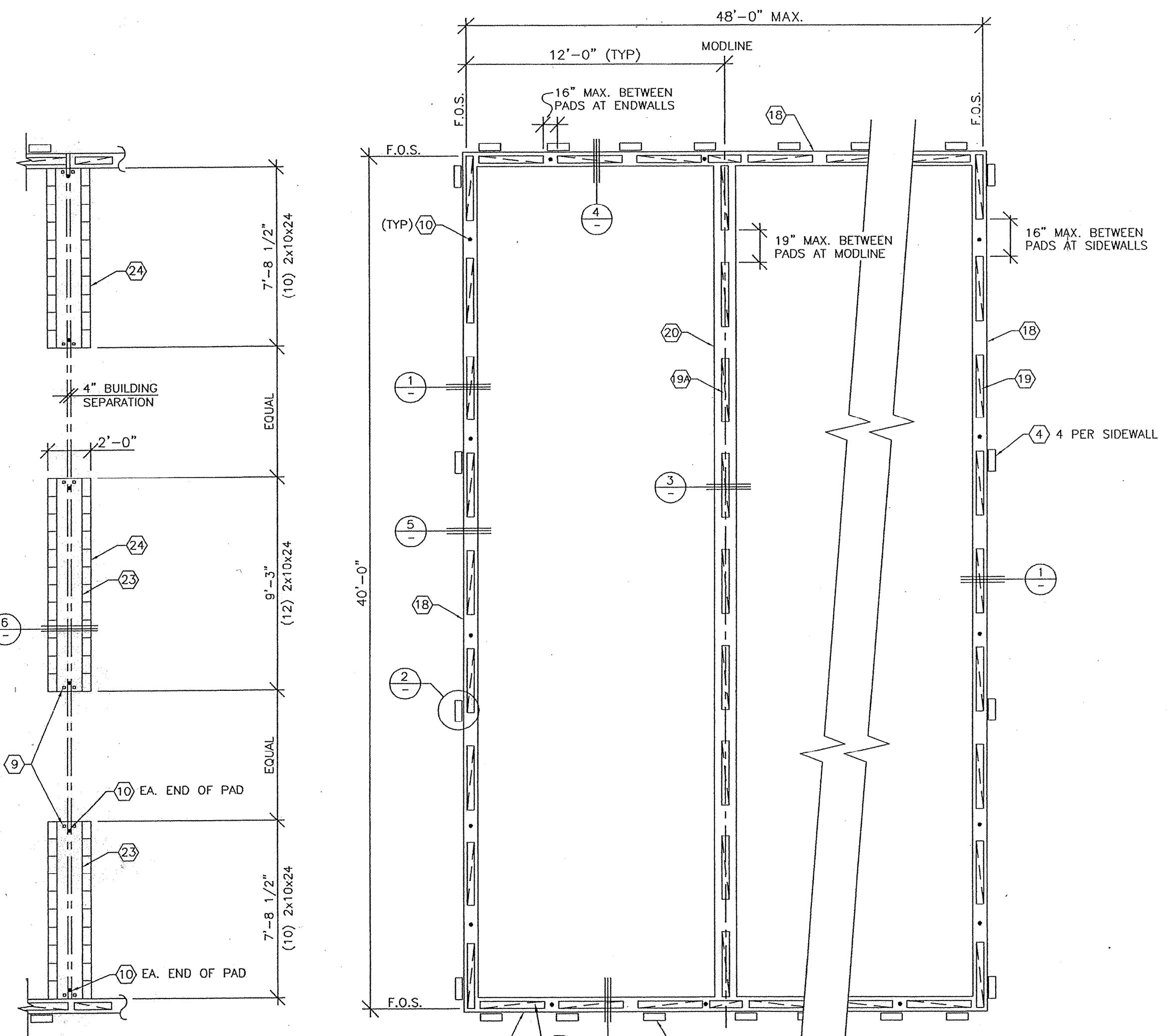
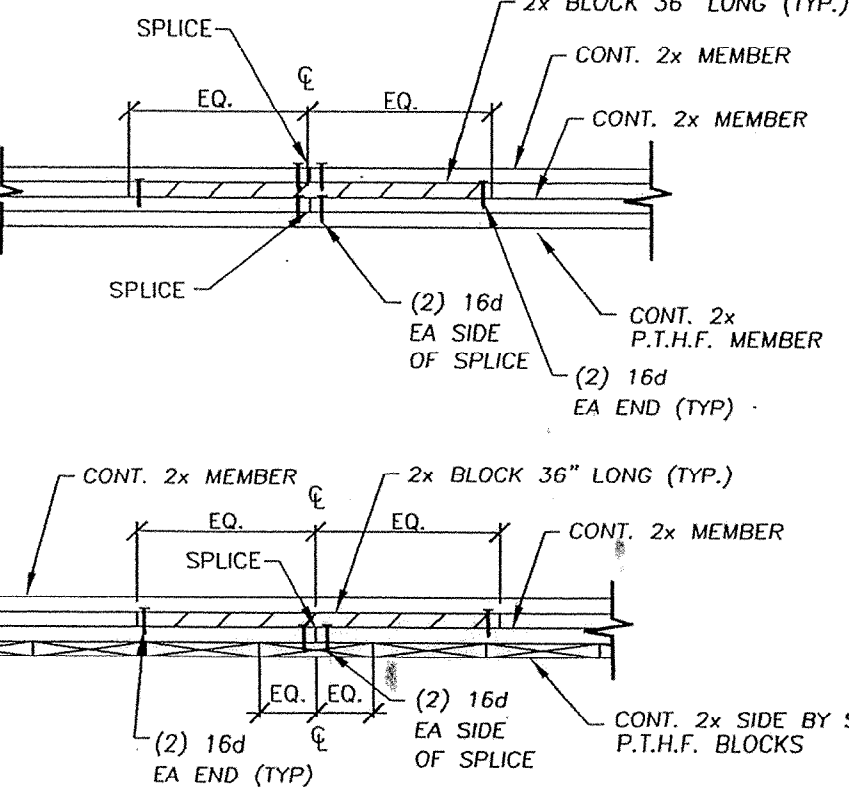
LAG SCHEDULE			
BUILDING SIZE	FLOOR LOAD	LAG BOLTS AT EA. BUILDING	
24'x40'	50 PSF	4	
	50+20 PSF	4	
	100 PSF	4	
	125 PSF	6	
36'x40'	50 PSF	6	
	50+20 PSF	6	
	100 PSF	6	
	125 PSF	8	
48'x40'	50 PSF	6	
	50+20 PSF	6	
	100 PSF	6	
	125 PSF	10	

DATE SIGNED
JUL 15 2003

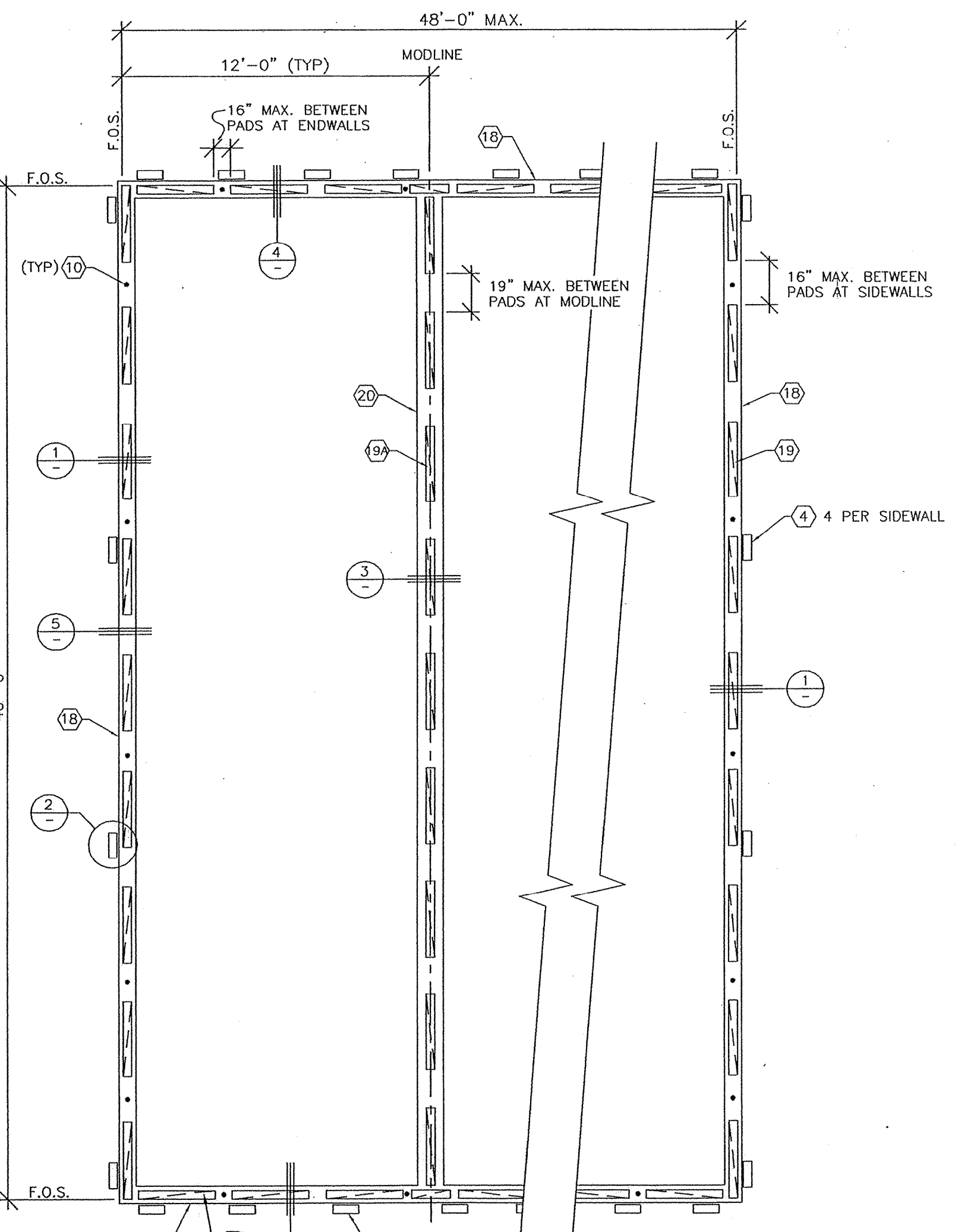


FACE PLATE SCHEDULE-20 & 30 PSF ROOF			
BUILDING SIZE	FLOOR LOAD	FACE PLATES AT SIDES	FACE PLATES AT ENDS
24'x40'	50 PSF	4	7
	50+20 PSF	4	7
	100 PSF	4	7
	125 PSF	8	8
36'x40'	50 PSF	6	8
	50+20 PSF	6	8
	100 PSF	6	8
	125 PSF	9	11
48'x40'	50 PSF	6	8
	50+20 PSF	6	8
	100 PSF	6	8
	125 PSF	14	14

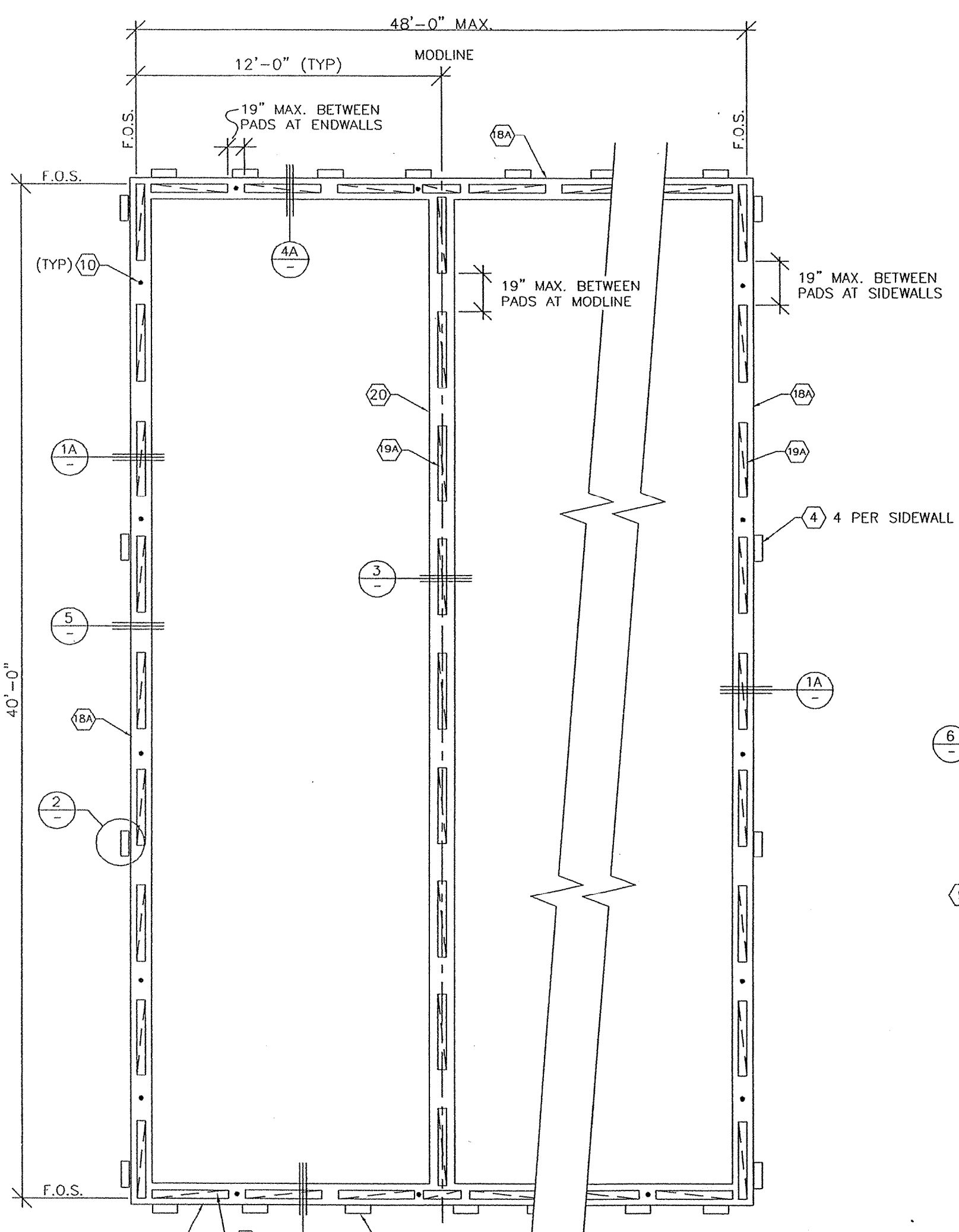
NOTE: THE FACE PLATES SHOWN ON THE FOUNDATION PLAN ARE FOR A 24'x40' W/ 50 PSF FLOOR LOAD. USE THE SCHEDULE ABOVE TO DETERMINE THE REQUIRED FACE PLATES FOR OTHER BUILDING SIZES AND FLOOR LOADS.



FOUNDATION PLAN W/
ADJACENT BUILDING
50 PSF FLOOR LIVE LOAD
20 PSF ROOF LOAD

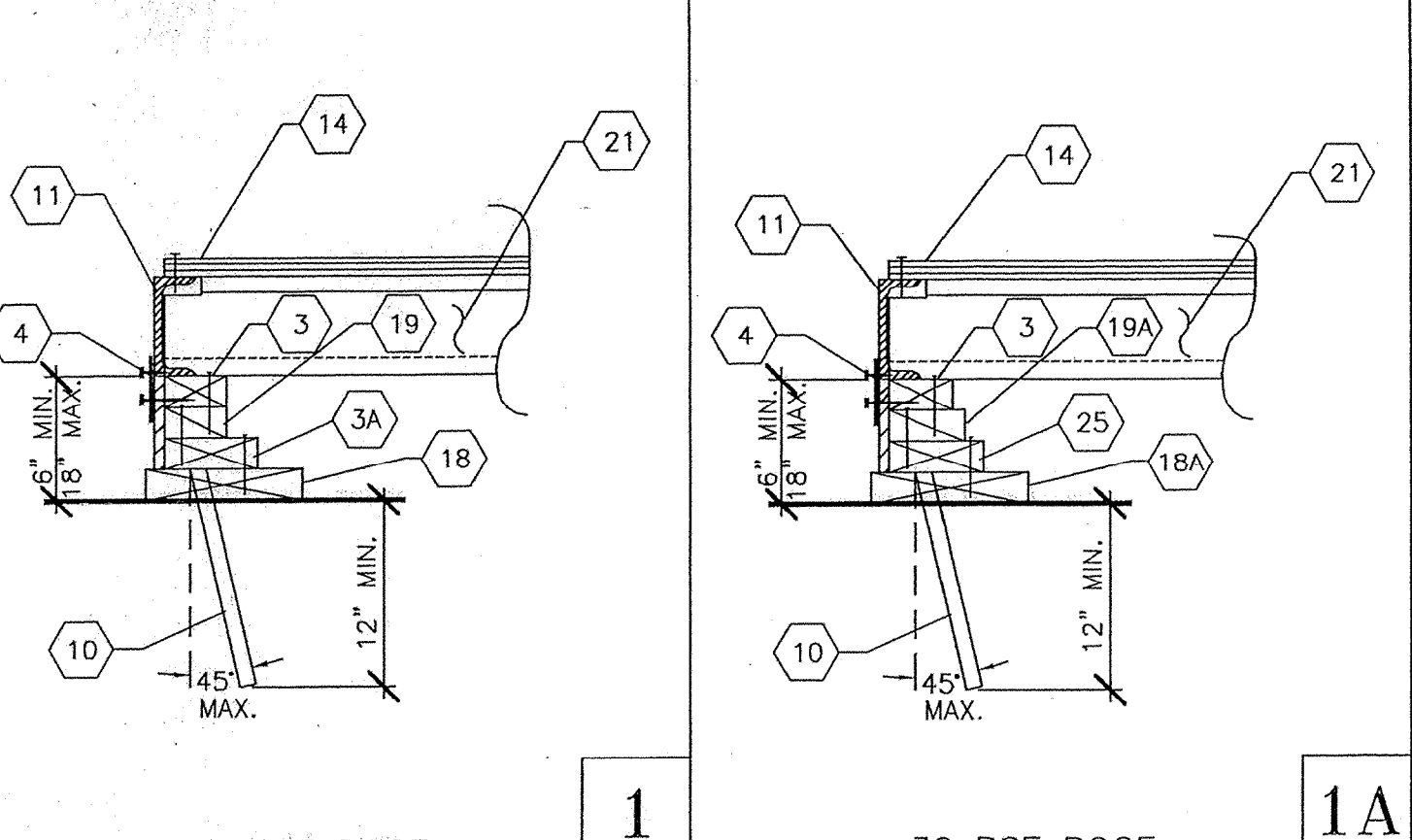


MULTI-WIDE FOUNDATION PLAN (N.T.S.)
50 P.S.F. FLOOR LIVE LOAD
20 PSF ROOF LOAD

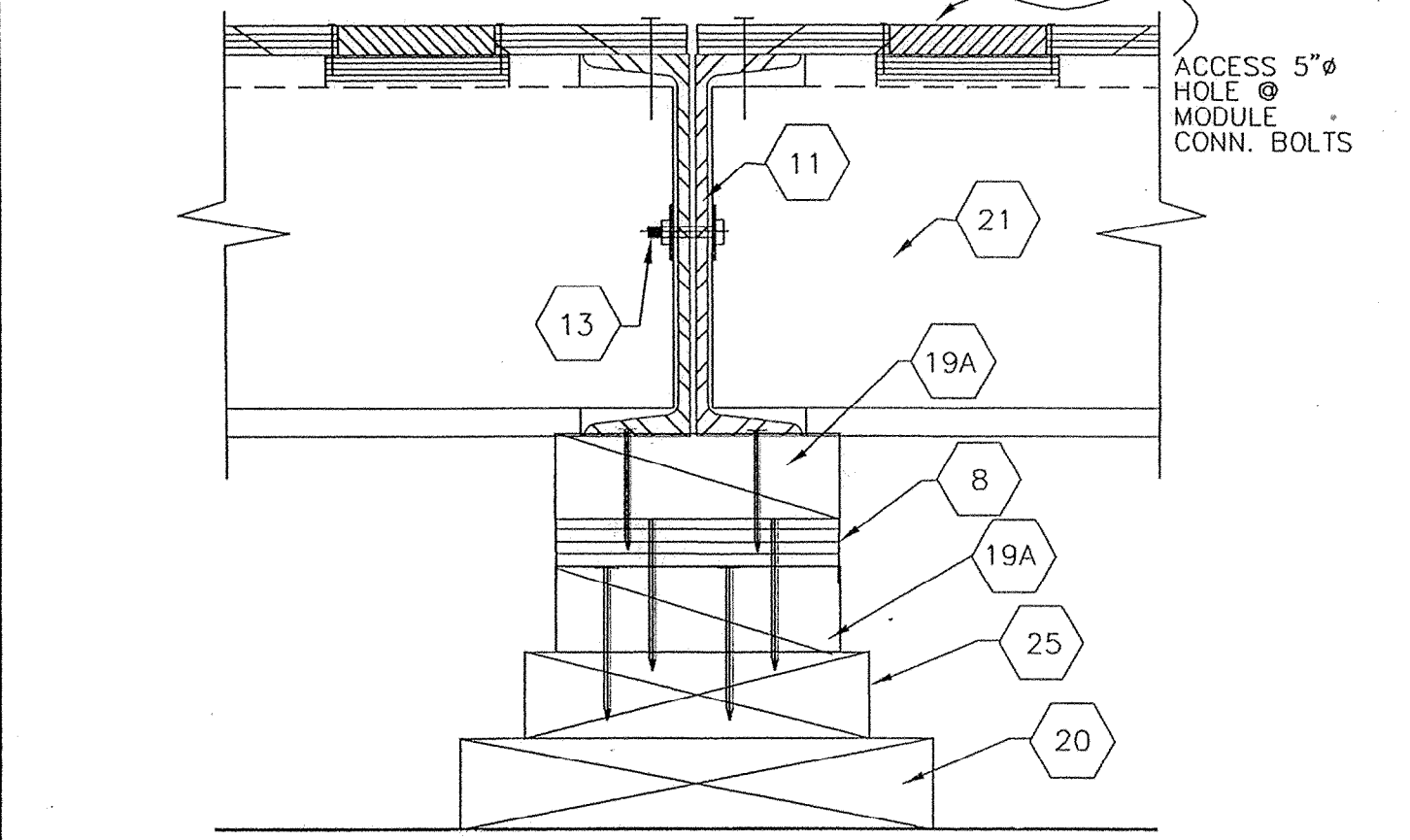


MULTI-WIDE FOUNDATION PLAN (N.T.S.)
50 P.S.F. FLOOR LIVE LOAD
30 PSF ROOF LOAD

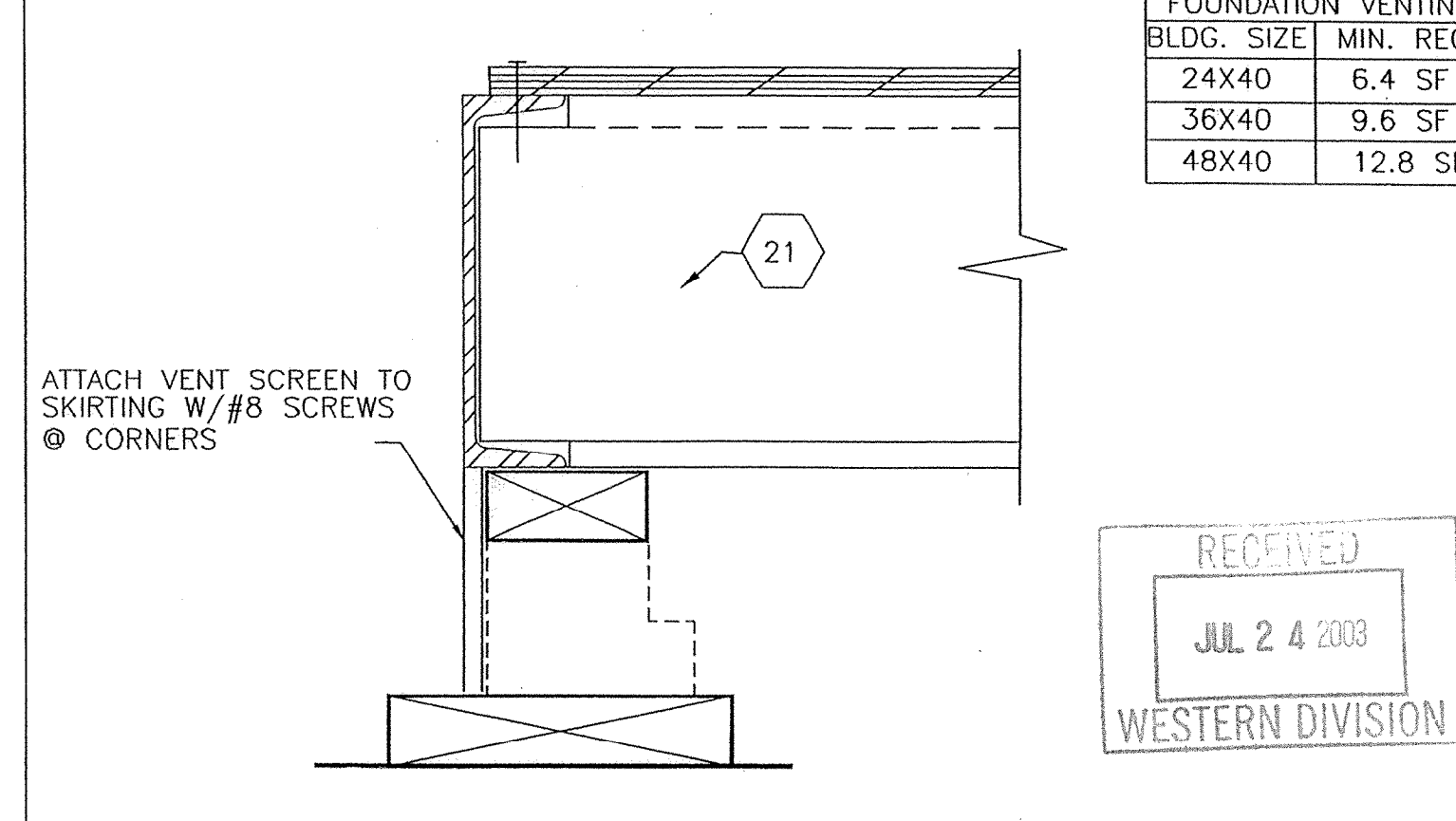
FOUNDATION PLAN W/
ADJACENT BUILDING
50 PSF FLOOR LIVE LOAD
30 PSF ROOF LOAD



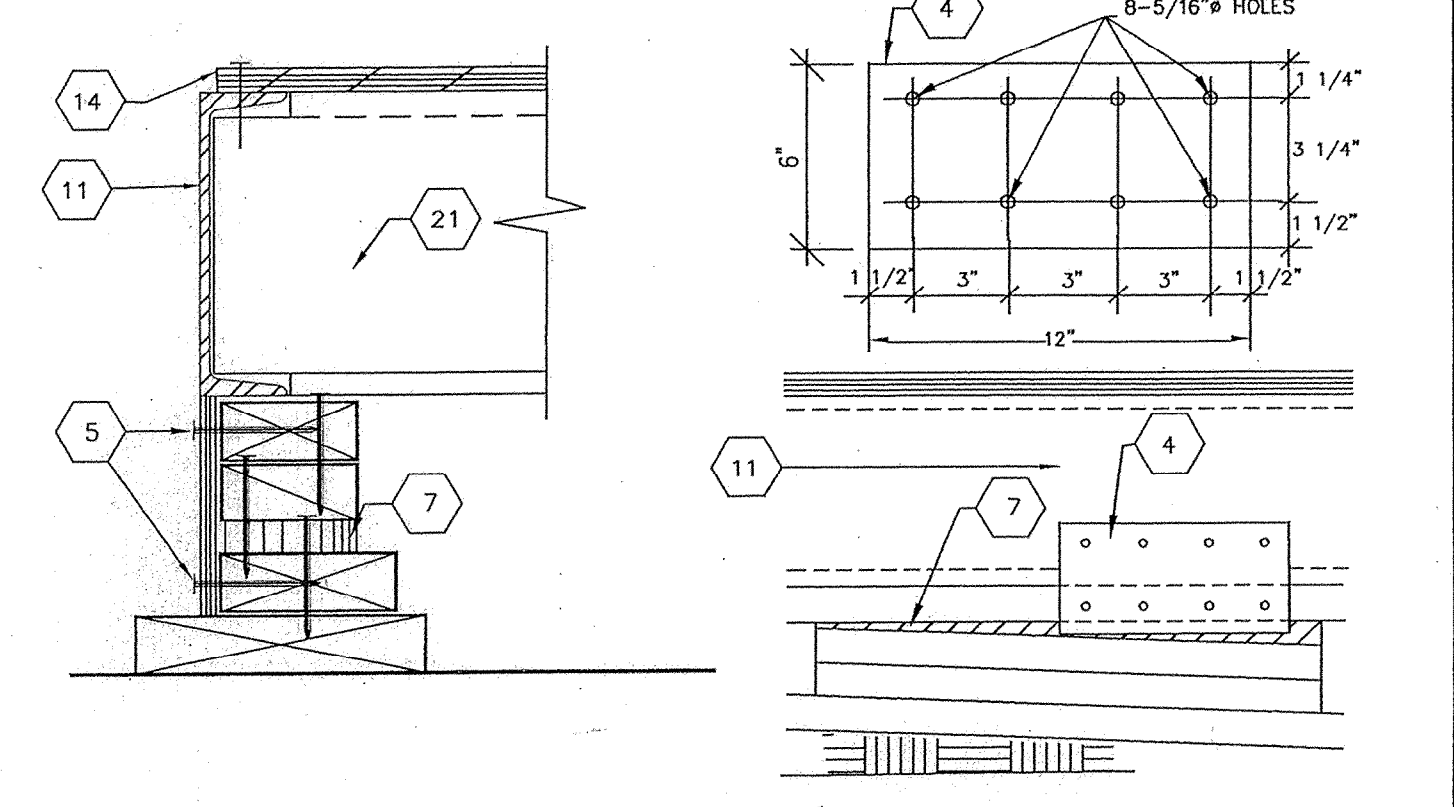
FOUNDATION AT SIDEWALL



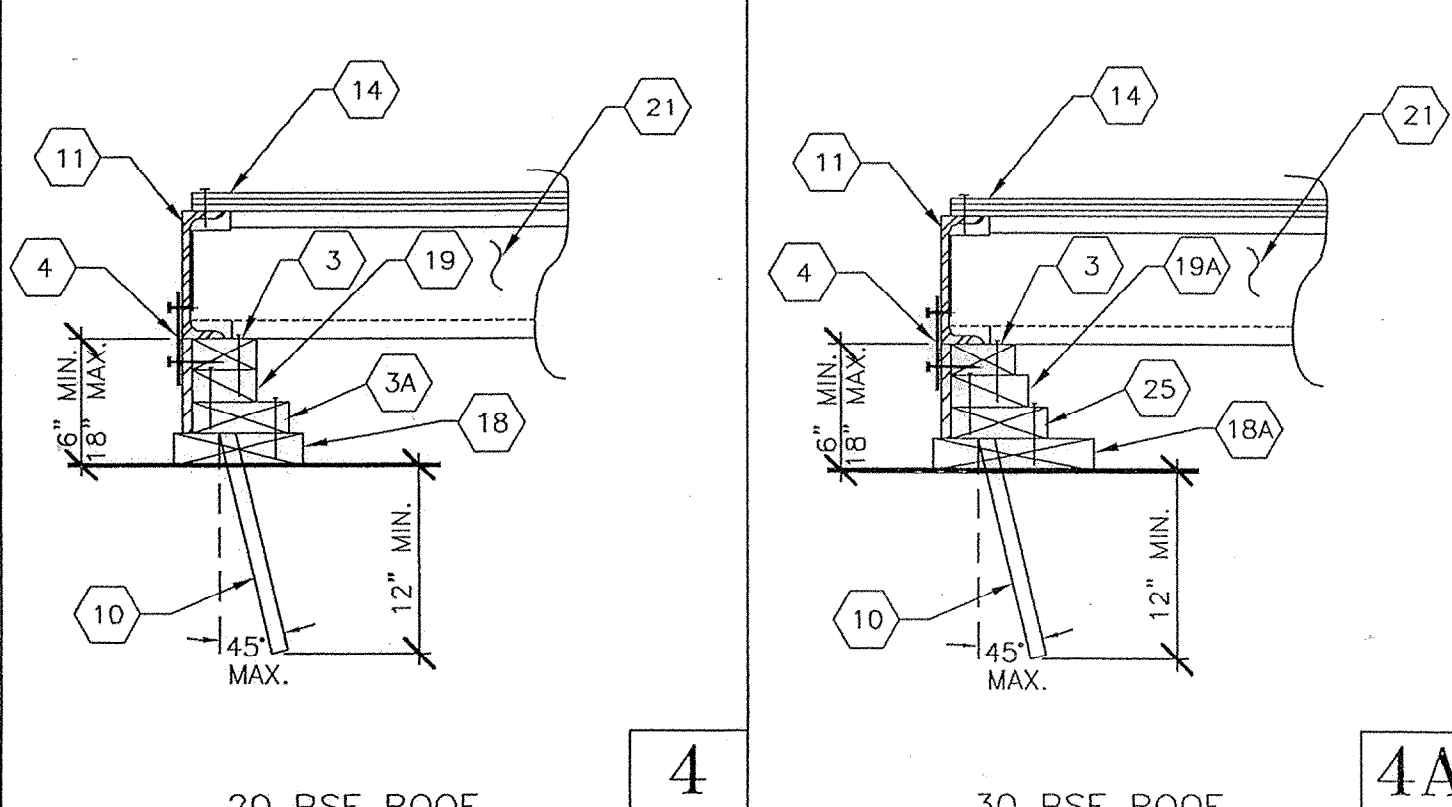
FOUNDATION AT MOD LINE



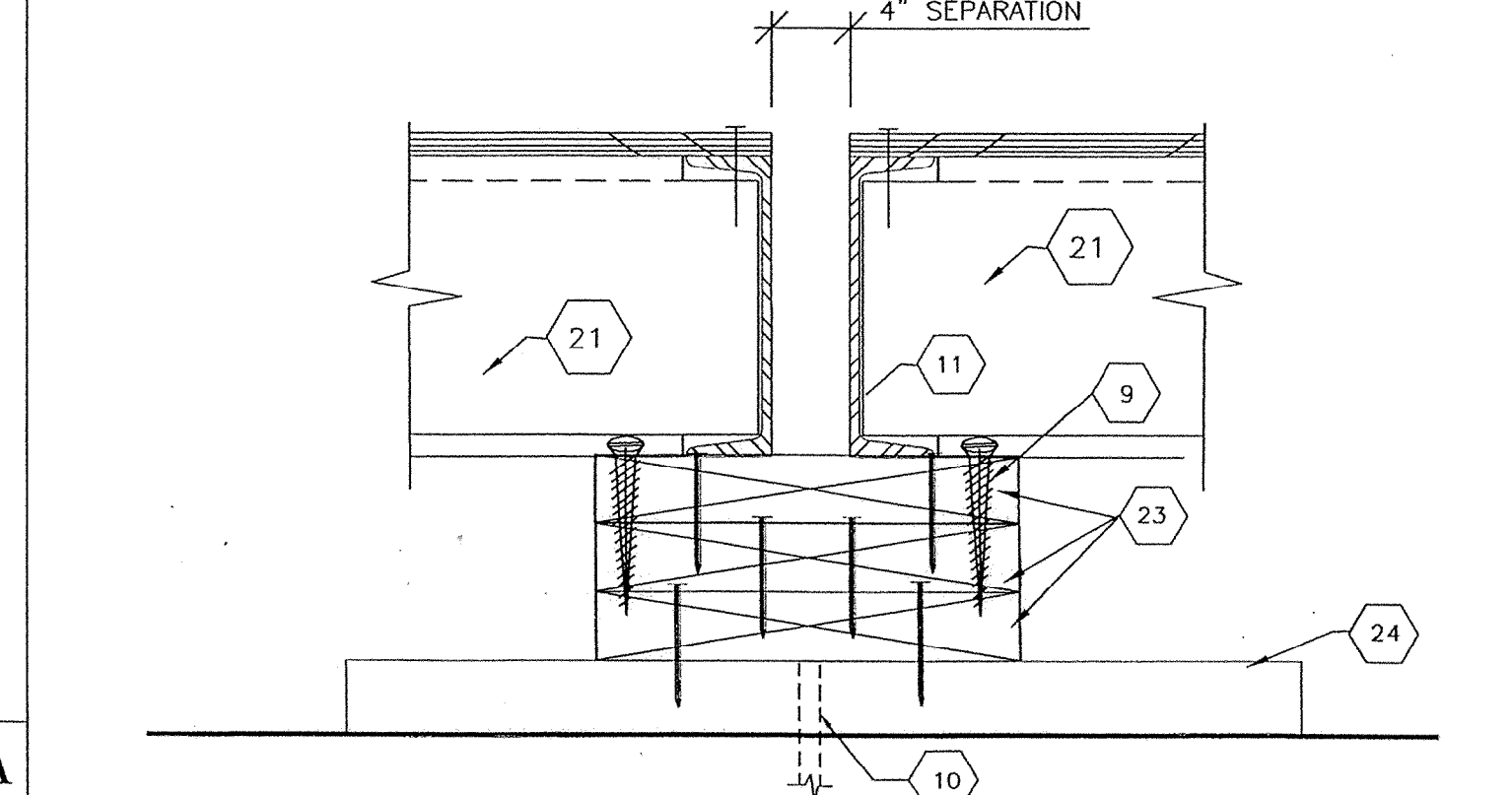
FOUNDATION VENTING



SHIMMING AND SKIRTING



FOUNDATION AT ENDWALL



COMMON PAD

TYP. SPLICE DETAILS