IOWA DEPARTMENT OF NATURAL RESOURCES

CONSTRUCTION DRAWINGS TRAINING CENTER RANGE RENOVATION OLOFSON SHOOTING RANGE POLK COUNTY, IOWA

PROJECT # 16-02-77-02 PLANS PREPARED BY LAND AND WATERS BUREAU CONSERVATION AND RECREATION DIVISION

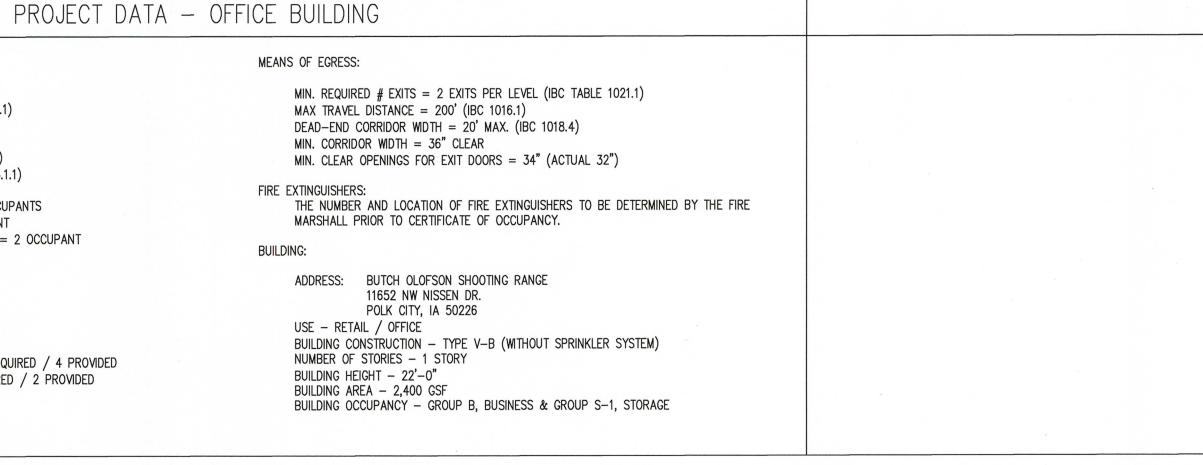
	DIREC	TORY		PROJECT DATA — OFFICE BUILDING						
OWNER			CTOR/STRUCTURAL ENGINEER	OCCUPANT LOAD:	MEANS OF EGRESS:					
COMPANY ADDRESS CITY,STATE,ZIP CONTACT TELEPHONE FAX EMAIL ARCHITECT COMPANY ADDRESS CITY,STATE,ZIP CONTACT TELEPHONE FAX EMAIL	IOWA DEPARTMENT OF NATURAL RESOURCES 502 E. 9TH. ST. DES MOINES, IA 50319 N/A 515.281.5918 515.281.6794 N/A IOWA DEPARTMENT OF NATURAL RESOURCES 502 E. 9TH. ST. DES MOINES, IA 50319 RYAN RICHEY 515.979.0107 - RYAN.RICHEY@DNR.IOWA.GOV	ADDRESS CITY,STATE,ZIP CONTACT TELEPHONE FAX EMAIL ELECTRICAL COMPANY ADDRESS CITY,STATE,ZIP CONTACT TELEPHONE FAX EMAIL	KCL ENGINEERING 218 1/2 5TH STREET WEST DES MOINES, IA 50265 JAMES DEEDS 515-371-9970 - JDEEDS@KCLENGINEERING.COM	GROUP B - BUSINESS BUSINESS AREAS - 1665 GROSS (IBC TABLE 1004.1.1) GROUP S - STORAGE / ACCESSORY STORAGE AREAS - 190 GROSS (IBC TABLE 1004.1.1) MECHANICAL AREAS - 325 GROSS (IBC TABLE 1004.1.1) BUSINESS 1665 SF / 100 = 16.65 = 17 OCCUPANTS STORAGE 190 SF / 300 = .63 = 1 OCCUPANT ACCESSORY / MECH. 325 SF / 300 = 1.08 = 2 OCCUPANT TOTAL OCCUPANT LOAD = 20 OCCUPANTS REQUIRED FIXTURES: 1 TOTAL WATER CLOSET (1 UNISEX) WATER CLOSETS - 1 PER 25 FOR FIRST 50 = 1 REQUIRED / 4 PROVIDED LAVATORIES - 1 PER 40 FOR FIRST 80 = 1 REQUIRED / 2 PROVIDED	MIN. REQUIRED # EXITS = 2 EXITS PER LEVEL (IBC TABLE 1021.1) MAX TRAVEL DISTANCE = 200' (IBC 1016.1) DEAD—END CORRIDOR WIDTH = 20' MAX. (IBC 1018.4) MIN. CORRIDOR WIDTH = 36" CLEAR MIN. CLEAR OPENINGS FOR EXIT DOORS = 34" (ACTUAL 32") FIRE EXTINGUISHERS: THE NUMBER AND LOCATION OF FIRE EXTINGUISHERS TO BE DETERMINED B' MARSHALL PRIOR TO CERTIFICATE OF OCCUPANCY. BUILDING: ADDRESS: BUTCH OLOFSON SHOOTING RANGE 11652 NW NISSEN DR. POLK CITY, IA 50226 USE — RETAIL / OFFICE BUILDING CONSTRUCTION — TYPE V—B (WITHOUT SPRINKLER SYSTEM) NUMBER OF STORIES — 1 STORY BUILDING HEIGHT — 22'—0" BUILDING AREA — 2,400 GSF BUILDING OCCUPANCY — GROUP B, BUSINESS & GROUP S—1, STORAGE					
CIVIL ENGIN		COMPANY	L ENGINEER KCL ENGINEERING	PRO.IFO	CT DESCRIPTION					
ADDRESS CITY,STATE,ZIP CONTACT TELEPHONE FAX EMAIL	DES MOINES, IA 50319 BRETT JOHNSON 515.250.3711 - BRETT.JOHNSON@DNR.IOWA.GOV	E. 9TH. ST. ADDRESS 218 1/2 5TH STREET MOINES, IA 50319 CITY,STATE,ZIP WEST DES MOINES, IA 50265 TT JOHNSON CONTACT CHAD BASS 250.3711 TELEPHONE 515—205—1397 FAX —		USEFUL LIFE AND IS IN NEED OF UPGRADING AND RENOVATION. ALL DEMOLISHED STRUCTURE	S METRO AREA SINCE IT OPENED IN THE 1980S. THE RANGE IN IT'S CURRENT LAYOUT HAS OUTLIVED S ON PROPERTY ARE BEING REPLACED WITH NEW. THE EXISTING SHOOTING BERMS WILL BE REWORKED RUCTED IN PLACE OF THE DEMOLISHED OFFICE/CLASSROOM STRUCTURE. THIS MUCH NEEDED FACELIFT					

©IOWA\ ONE CALL

DONALD R. LABATE 12599 SURVEY CONTROL DIMENSION PLAN My license renewal date is December 31, 2016. OVERALL GRADING PLAN Pages or sheets covered by this seal: SITE GRADING PLAN A - 310 - A - 312UTILITY PLAN DETAIL SHEET ARCHITECTURAL I hereby certify that this architectural document was prepared by me or under my direct personal supervision and that I am a duly LIFE SAFETY PLAN A-100 REFERENCE FLOOR PLAN DIMENSION FLOOR PLAN RYAN E RYAN E. RICHEY REFLECTED CEILING PLAN RICHEY EXTERIOR ELEVATIONS AND DETAILS My license renewal date is June 30, 2017 EXTERIOR ELEVATIONS AND DETAILS Pages or sheets covered by this seal: BUILDING SECTIONS AND ROOF DETAILS A - 001 - A - 600A - 131BUILDING SECTIONS ENLARGED PLAN AND ELEVATIONS A - 140A - 141INTERIOR ELEVATIONS I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly LICENSED Professional ENGINEER under the laws of the State of Iowa. A - 142MILLWORK SECTIONS GARAGE AND TANK STORAGE PLAN GARAGE ELEVATIONS AND SECTIONS BRETT JOHNSON JOHNSON SHOOTING STRUCTURE PLANS My license renewal date is DECEMBER 31, 2017. SHOOTING STRUCTURE PLANS Pages or sheets covered by this seal: SHOOTING STRUCTURE DETAILS C1 - C6FINISH, DOOR & WINDOW SCHEDULES MECHANICAL MECHANICAL SYMBOLS AND NOTES I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly OFFICE FLOOR PLAN - MECHANICAL LICENSED Professional ENGINEER under the laws of the State of Iowa. MECHANICAL DETAILS MECHANICAL SCHEDULES CHAD D PLUMBING CHAD D. BASS BASS OFFICE UNDERFLOOR PLAN - PLUMBING My license renewal date is DECEMBER 31, 2017. OFFICE FLOOR PLAN - PLUMBING Pages or sheets covered by this seal: PLUMBING SCHEDULES AND DETAILS M0.0 - P2.0ELECTRICAL E0.0 ELECTRICAL SYMBOLS AND NOTES LIGHTING FLOOR PLAN I hereby certify that this engineering document was prepared by POWER/SYSTEMS FLOOR PLAN me or under my direct personal supervision and that I am a duly LICENSED Professional ENGINEER under the laws of the State of Iowa ELECTRICAL DETAILS ELECTRICAL SCHEDULES 9-13-16 JAMES R. DEEDS IV DATE 17588 My license renewal date is DECEMBER 31, 2016. BID ITEMS Pages or sheets covered by this seal: **ESTIMATED** ITEM E0.0 - E4.0ITEM DESCRIPTION NUMBER QUANTITY GRADING 1 LS

I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly

licensed Professional Engineer under the laws of the State of Iowa.



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ENGINEERING BUREAU CHIEF		DATE
ma PAn		11/30/11
AUTHORIZED - PARKS WILDLIFE FISHERIE	S LAW ENFORCEMENT	DATE

1	GRADING	1 LS
2	SEEDING, FERTILIZING AND MULCHING	4 AC
3	SCOURSTOP OUTLET PROTECTION	16 SF
4	8" FILTER SOCK	100 LF
5	5" REINFORCED PCC SIDEWALK	166.5 SY
6	GRANULAR SUBBASE FOR PCC SIDEWALK	34 LF
7	6" PVC SDR 35 PIPE	98 LF
8	8" PVC SDR 35 PIPE	261 LF
9	10" PVC SDR 35 PIPE	198 LF
10	12" DIAMETER NYLOPLAST DRAIN BASIN	3 EA
11	10" DIAMETER NYLOPLAST DRAIN BASIN	6 EA
12	6" DIAMETER RAT GUARD	4 EA
13	10" DIAMETER RAT GUARD	1 EA
14	REPLACE GRATE WITH SOLID MANHOLE LID	1 EA
15	2" HDPE WATER PIPE	37 LF
16	2" CURB STOP	1 EA
17	PAINT STRIPING & HANDICAP SIGNAGE	1 LS
18	PRECAST CONCRETE WHEEL STOPS	11 EA
19	SIGNAGE-HC SIGNS FOR PARKING SPACES	1 LS
20	BLACK PVC COATED CHAIN LINK FENCING	1 LS
21	NPDES GENERAL PERMIT #2 & SWPPP	1 LS
22	CONSTRUCTION STAKING	1 LS
23	MOBILIZATION	1 LS
24	ELECTRICAL SERVICE (MAIN BUILDING & STUBBED TO ALTERNATES)	1 LS
25	TRAINING CENTER BUILDING	1 LS
	ALTERNATE #1	
26	GARAGE (INCLUDING INTERIOR ELECTRICAL) & TANK ENCLOSURE	1 LS
27	CLASS 'A' CRUSHED STONE	39 TONS
	ALTERNATE #2	
28	SHOOTING STRUCTURE #1 (INCLUDING INTERIOR ELECTRICAL)	1 LS
29	ROAD GRAVEL	9.2 TONS
30	5-INCH REINFORCED PCC SIDEWALK	24 SY
31	GRANULAR SUBBASE FOR PCC SIDEWALK	5 TONS
	ALTERNATE #3	
32	SHOOTING STRUCTURE #2 (INCLUDING INTERIOR ELECTRICAL)	1 LS
33	ROAD GRAVEL	9.2 TONS
34	5-INCH REINFORCED PCC SIDEWALK	14 SY
35	GRANULAR SUBBASE FOR PCC SIDEWALK	3 TONS
	ALTERNATE #3	
36	SHOOTING STRUCTURE #3 (INCLUDING INTERIOR ELECTRICAL)	1 LS
77	ROAD GRAVEL	9.2 TONS
37		24 SY
38	5-INCH REINFORCED PCC SIDEWALK	2.0.

SHEET INDEX

SHEET. NO. | SHEET TITLE

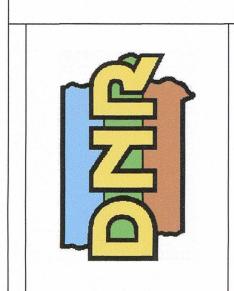
ARCHITECTURAL COVER SHEET

PROJECT LOCATION

CIVIL

WALL TYPES, NOTES & SYMBOLS

OWA DEPARTMENT OF NATURAL RESOURCES



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NO. BY REVISION DRAWN BY: PROJECT NUMBER: 16-02-77-02 CHK'D BY: DATE: 08.31.2016

A-001

DIMENSION NOTES

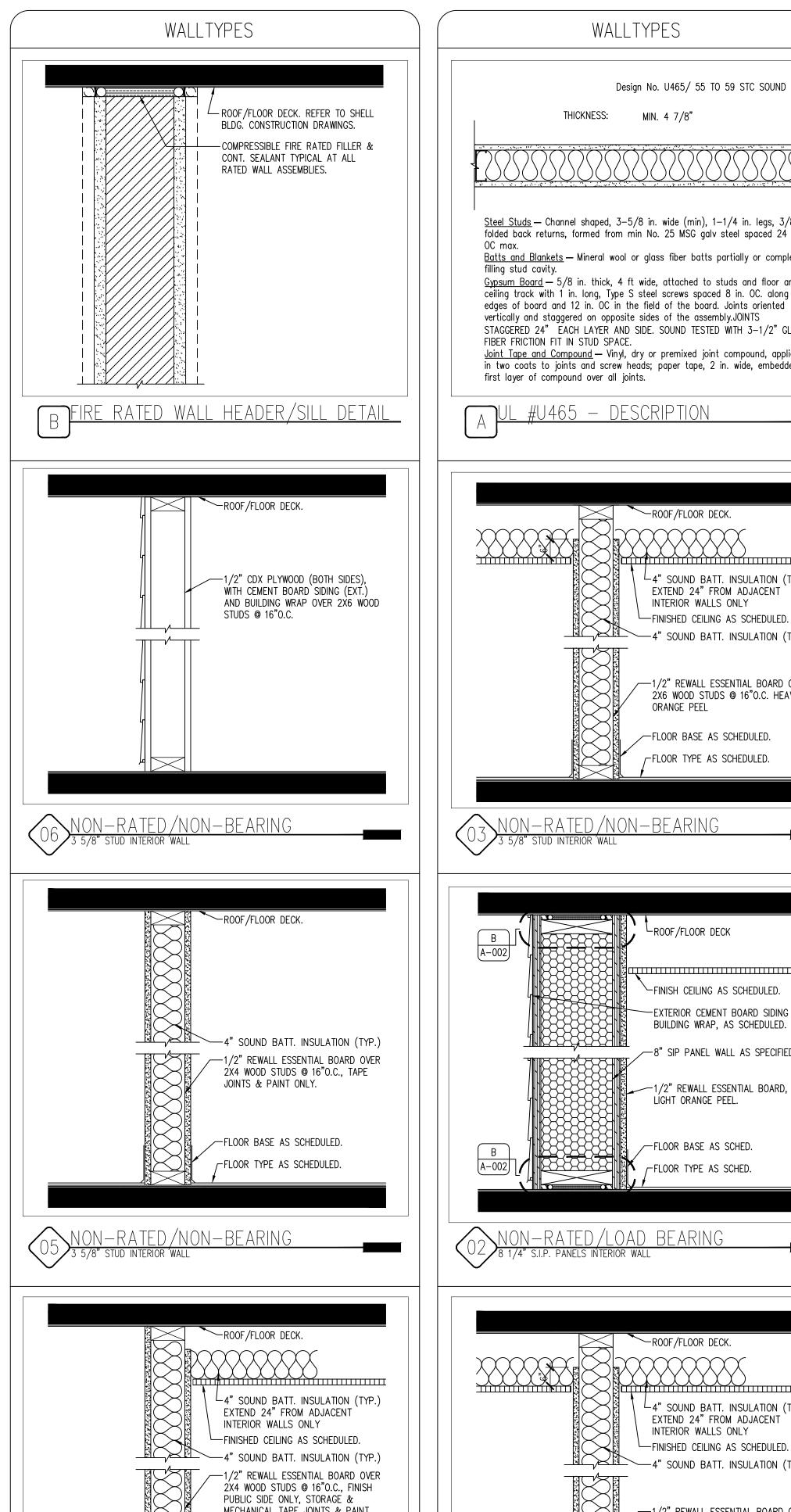
"EQUAL OR EQ" IS USED IN LIEU OF THE ACTUAL DIMENSIONS.

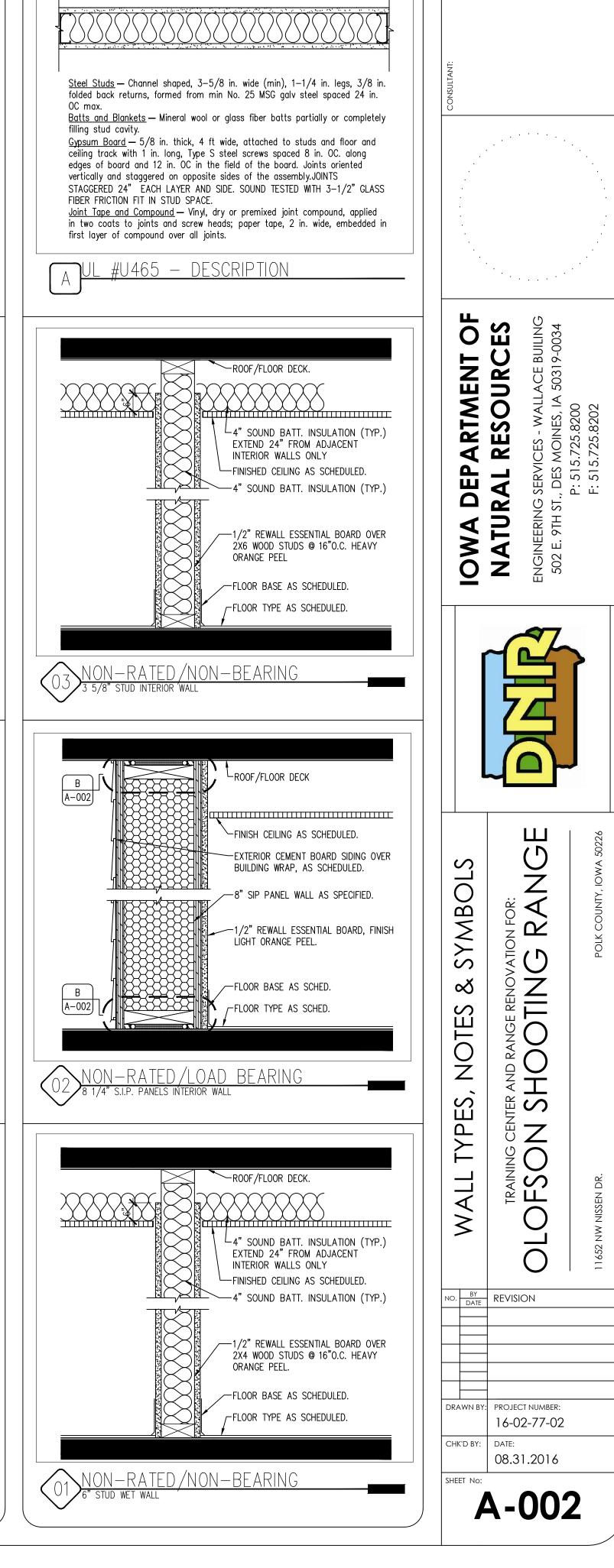
1. IN INTERIOR SPACES THE ACTUAL DIMENSIONS MAY BE LESS IMPORTANT THAN IF AT

TWO ELEMENTS IN THE BUILDING WERE TO BE EQUAL. IN THESE CASES, THE WORD

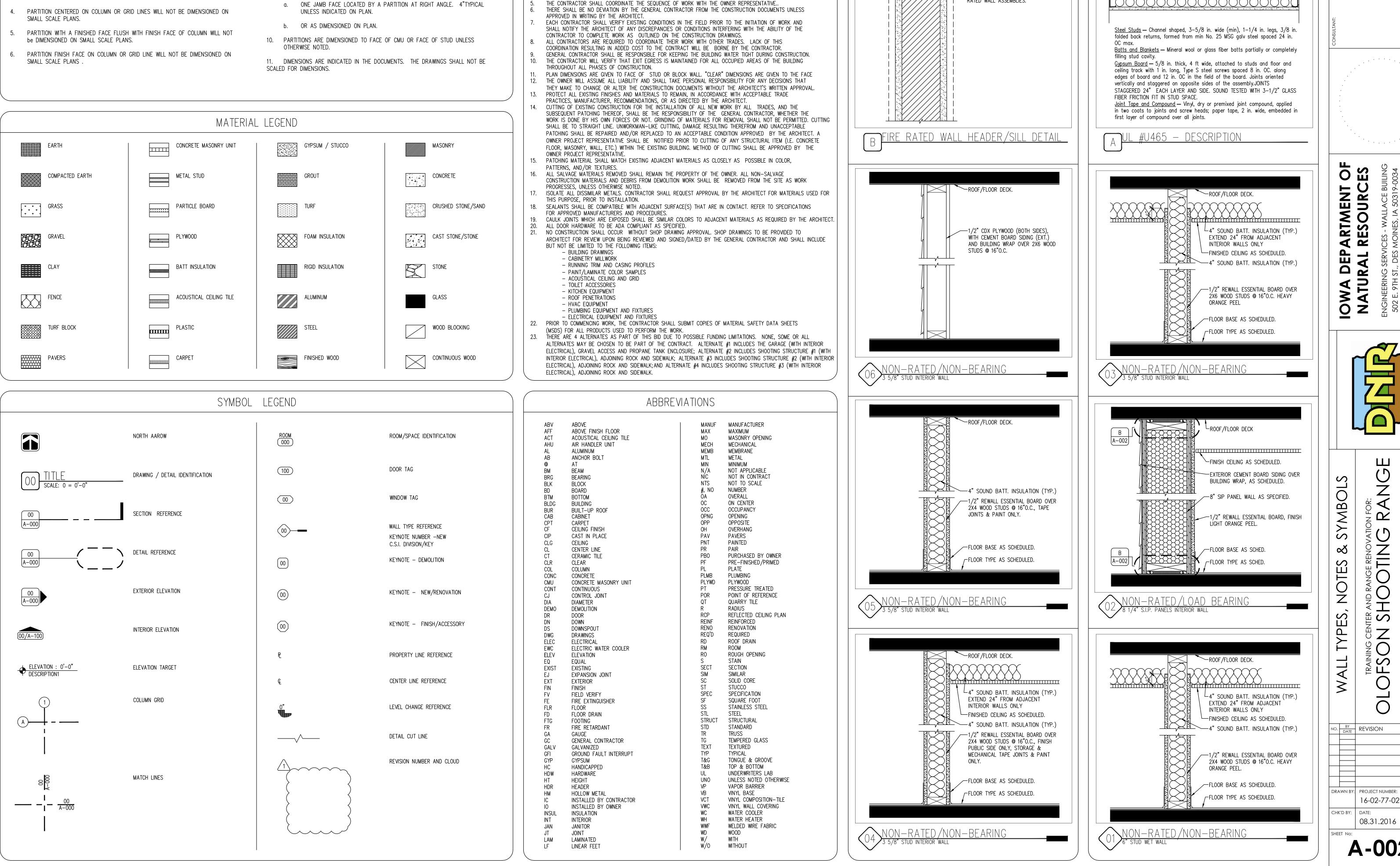
- 2. WHEN A ROOM CENTERLINE IS INDICATED ONLY ONE SIDE OF THE ROOMS ELEMENTS MAY BE DIMENSIONED.
- 3. COLUMN IDENTIFICATION: DETAILS WILL GOVERN ALL DIMENSIONS AND NO DIMENSIONS WILL BE SHOWN ON SMALL SCALE PLANS.
- WHEN ONE JAMB OCCURS AT A COLUMN OR GRID LINE NO DIMENSIONS WILL BE SHOWN ON THE SMALL SCALE PLANS. THE OPENING WIDTH WILL BE GOVERNED BY CRITERIA OR SCHEDULES.
- WHEN NEITHER JAMB OCCURS AT A COLUMN OR GRID LINE ONE JAMB WILL BE DIMENSIONED.
- DOOR LOCATIONS ARE TO BE LOCATED BY ONE OF FOLLOWING:

GENERAL NOTES THE FOLLOWING GENERAL NOTES SHALL PERTAIN TO THE ENTIRE SET OF CONTRACT DOCUMENTS A GENERAL CONTRACTOR SHALL NOTE THAT THE ARCHITECTURAL DRAWINGS ARE ESTABLISHING A MINIMUM MATERIAL OR CONSTRUCTION METHOD STANDARD. THE GENERAL CONTRACTOR SHALL PROVIDE A BID PRICE BASED ON THE SPECIFIC MATERIALS NOTED. DO NOT SCALE DRAWINGS. IF DIMENSIONS ARE IN QUESTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING CLARIFICATION FROM THE ARCHITECT BEFORE CONTINUING WITH CONSTRUCTION. GENERAL CONTRACTOR AND SUBCONTRACTORS SHALL PERFORM THEIR WORK IN ACCORDANCE WITH ALL APPLICABLE CODES GOVERNING EACH TRADE. THE CONTRACTOR SHALL MAINTAIN A CLEAN AND ORGANIZED JOB SITE. ACCEPTABLE TO THE OWNER. THE CONTRACTOR SHALL COORDINATE THE SEQUENCE OF WORK WITH THE OWNER REPRESENTATIVE... THERE SHALL BE NO DEVIATION BY THE GENERAL CONTRACTOR FROM THE CONSTRUCTION DOCUMENTS UNLESS APPROVED IN WRITING BY THE ARCHITECT. EACH CONTRACTOR SHALL VERIFY EXISTING CONDITIONS IN THE FIELD PRIOR TO THE INITIATION OF WORK AND SHALL NOTIFY THE ARCHITECT OF ANY DISCREPANCIES OR CONDITIONS INTERFERING WITH THE ABILITY OF THE CONTRACTOR TO COMPLETE WORK AS OUTLINED ON THE CONSTRUCTION DRAWINGS. ALL CONTRACTORS ARE REQUIRED TO COORDINATE THEIR WORK WITH OTHER TRADES. LACK OF THIS COORDINATION RESULTING IN ADDED COST TO THE CONTRACT WILL BE BORNE BY THE CONTRACTOR. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING THE BUILDING WATER TIGHT DURING CONSTRUCTION. THE CONTRACTOR WILL VERIFY THAT EXIT EGRESS IS MAINTAINED FOR ALL OCCUPIED AREAS OF THE BUILDING THROUGHOUT ALL PHASES OF CONSTRUCTION. PLAN DIMENSIONS ARE GIVEN TO FACE OF STUD OR BLOCK WALL. "CLEAR" DIMENSIONS ARE GIVEN TO THE FACE THE OWNER WILL ASSUME ALL LIABILITY AND SHALL TAKE PERSONAL RESPONSIBILITY FOR ANY DECISIONS THAT THEY MAKE TO CHANGE OR ALTER THE CONSTRUCTION DOCUMENTS WITHOUT THE ARCHITECT'S WRITTEN APPROVAL. PROTECT ALL EXISTING FINISHES AND MATERIALS TO REMAIN, IN ACCORDANCE WITH ACCEPTABLE TRADE PRACTICES. MANUFACTURER. RECOMMENDATIONS, OR AS DIRECTED BY THE ARCHITECT. CUTTING OF EXISTING CONSTRUCTION FOR THE INSTALLATION OF ALL NEW WORK BY ALL TRADES, AND THE SUBSEQUENT PATCHING THEREOF, SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR, WHETHER THE SHALL BE TO STRAIGHT LINE. UNWORKMAN-LIKE CUTTING, DAMAGE RESULTING THEREFROM AND UNACCEPTABLE PATCHING SHALL BE REPAIRED AND/OR REPLACED TO AN ACCEPTABLE CONDITION APPROVED BY THE ARCHITECT. A OWNER PROJECT REPRESENTATIVE SHALL BE NOTIFIED PRIOR TO CUTTING OF ANY STRUCTURAL ITEM (I.E. CONCRETE FLOOR, MASONRY, WALL, ETC.) WITHIN THE EXISTING BUILDING. METHOD OF CUTTING SHALL BE APPROVED BY THE OWNER PROJECT REPRESENTATIVE. PATCHING MATERIAL SHALL MATCH EXISTING ADJACENT MATERIALS AS CLOSELY AS POSSIBLE IN COLOR,





MIN. 4 7/8"











Z ž W SHOOTING

TRAINING CENT

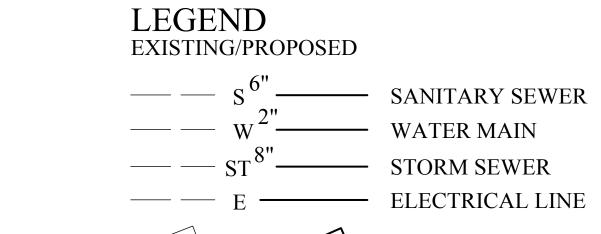
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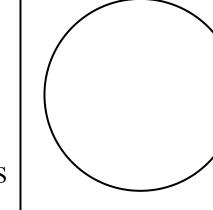
6990 ELEVATION

SPOT ELEVATION

TREES

8" FILTER SOCK

CLEARING LIMITS



SURVEY CONTROL POINTS

SURVEY CONTROL POINT #1 659951.4610

1564469.1760 906.147

ELEV: PK NAIL IN ASPHALT

SURVEY CONTROL POINT #3 659945.1750

1564704.7440

906.286 PK NAIL IN ASPHALT

SURVEY CONTROL POINT #5 660007.4970 1564693.1390 906.414 ELEV: NAIL

SURVEY CONTROL POINT #2

659946.4180 1564580.7900 906.287

PK NAIL IN ASPHALT

SURVEY CONTROL POINT #4 660010.6340

1564457.4290 906.391

NAIL

SHOOTING

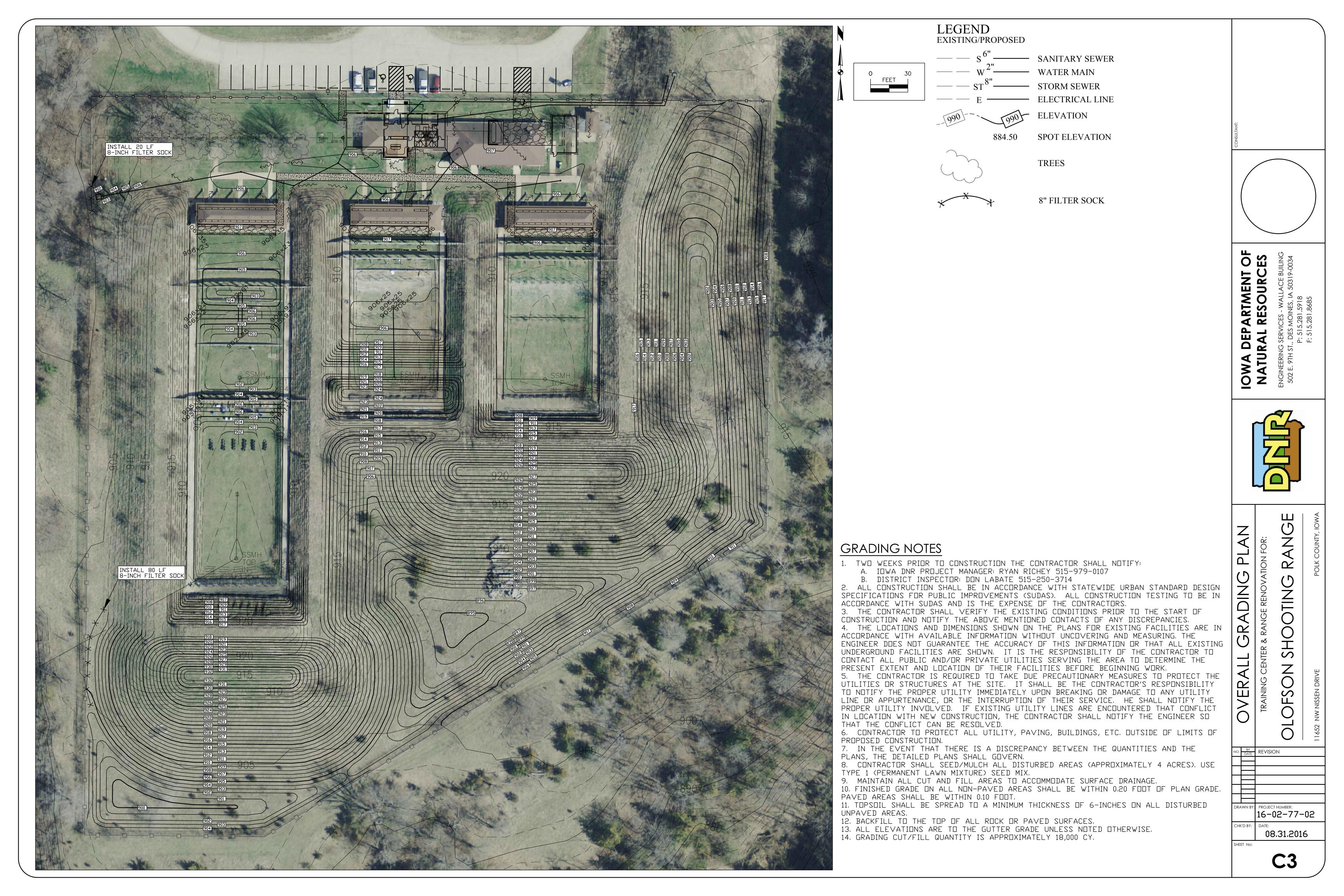
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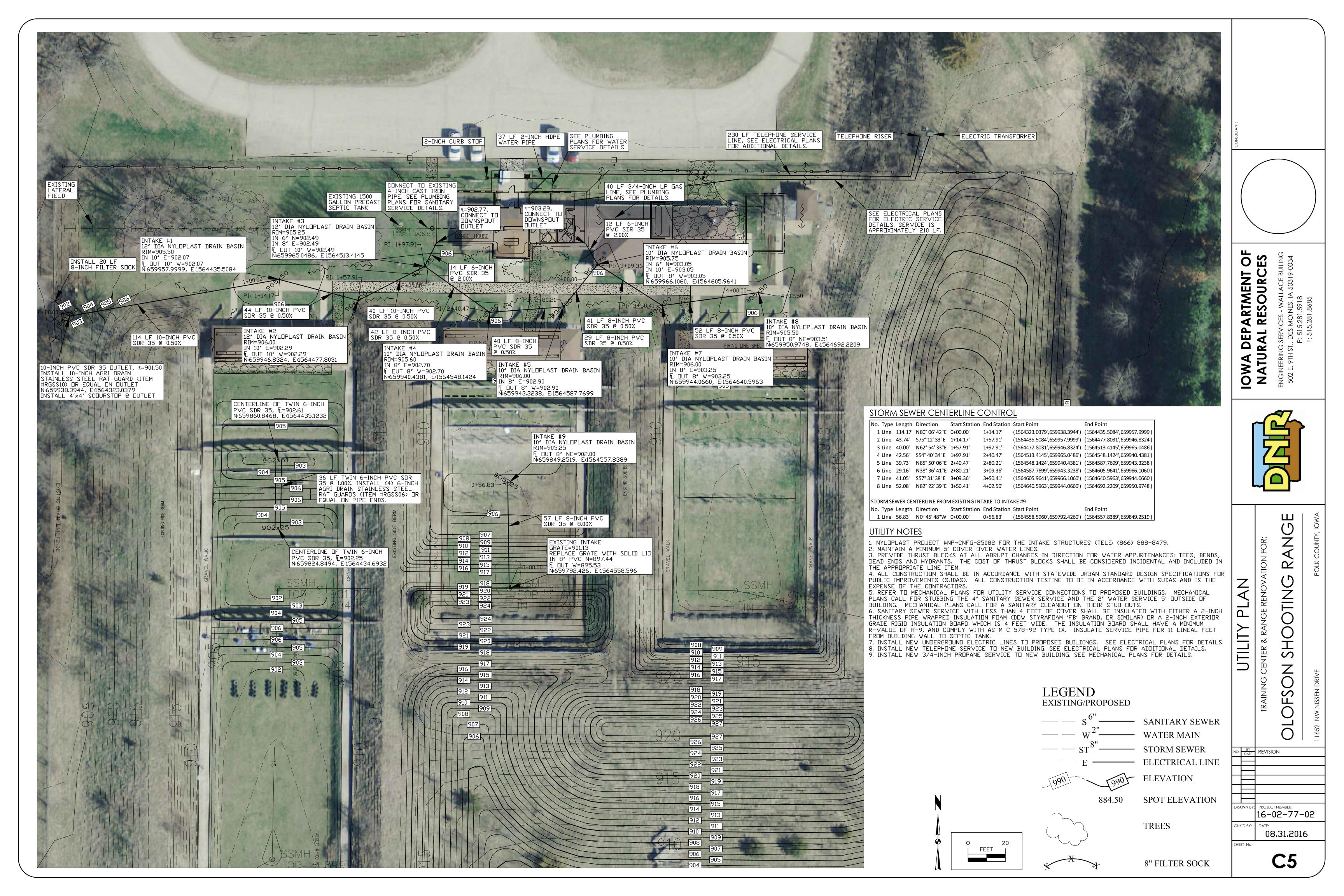
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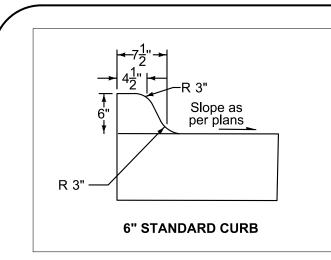
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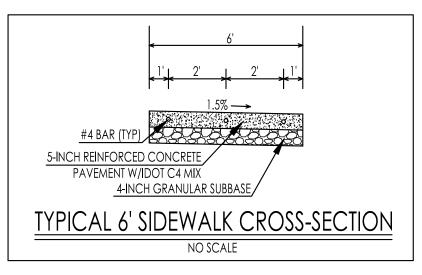


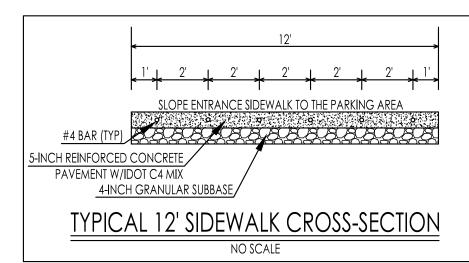


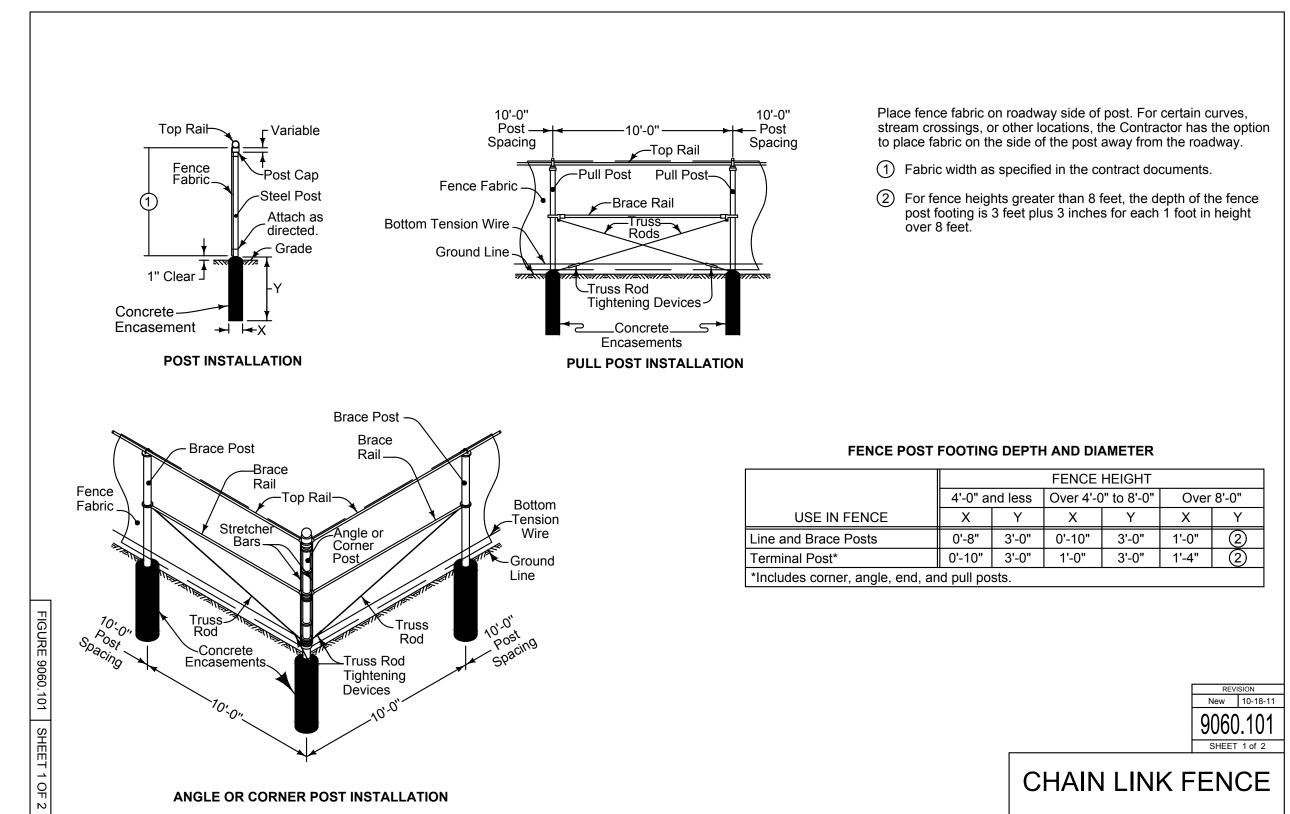


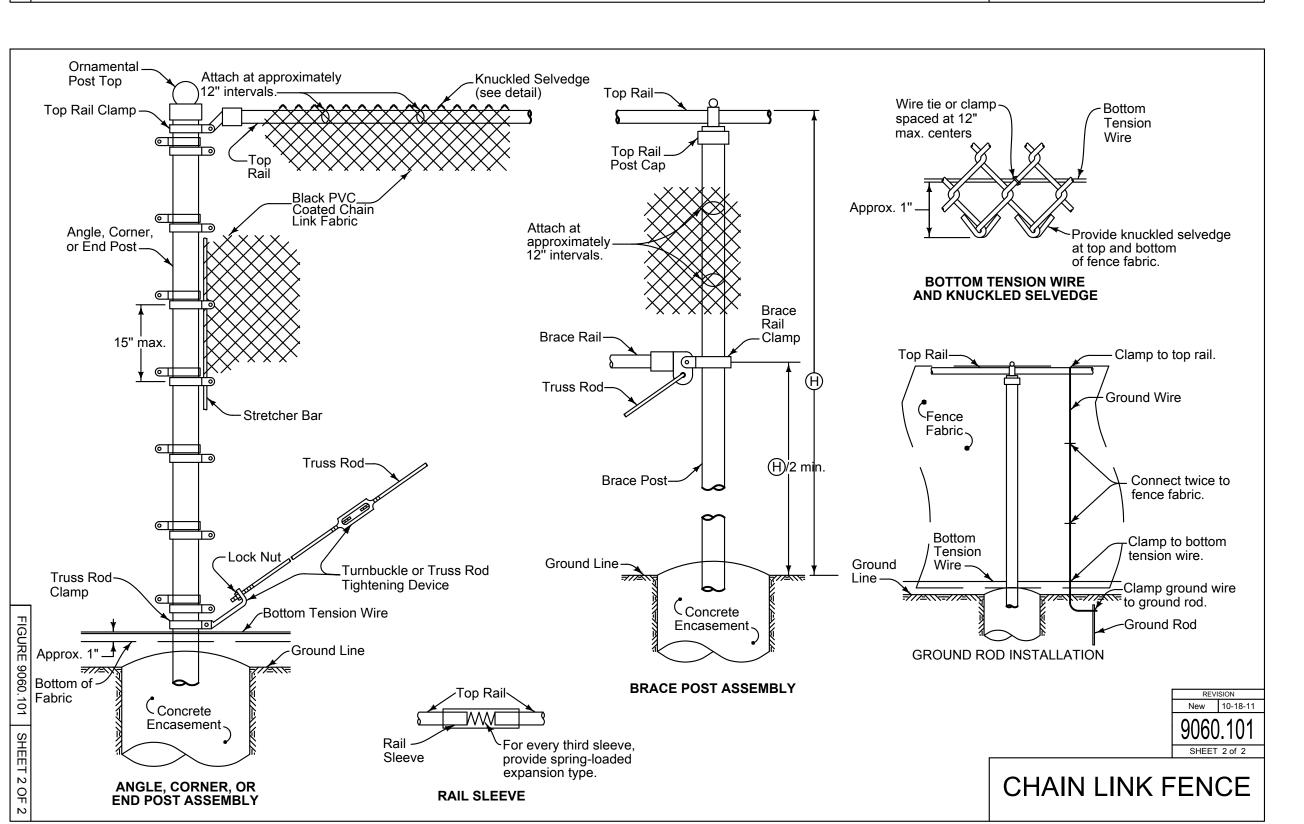


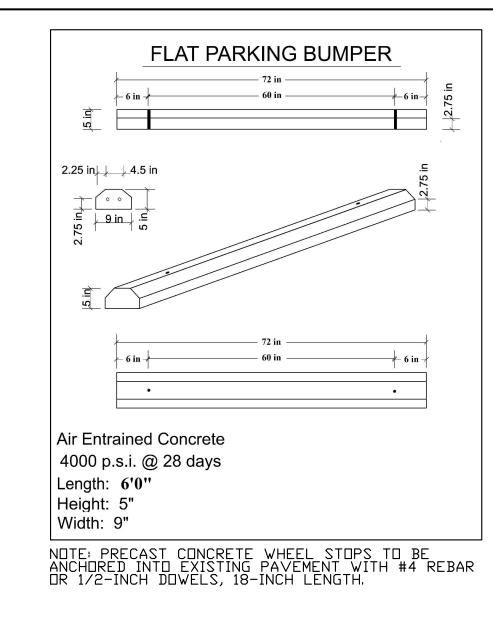


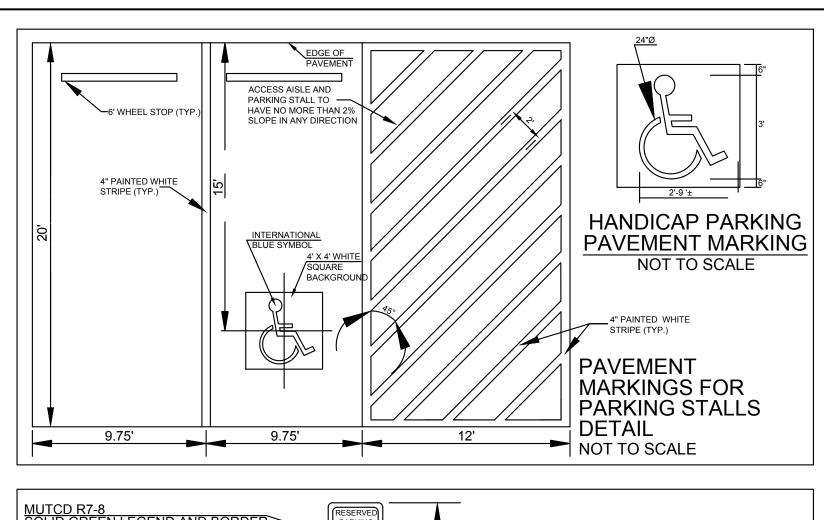


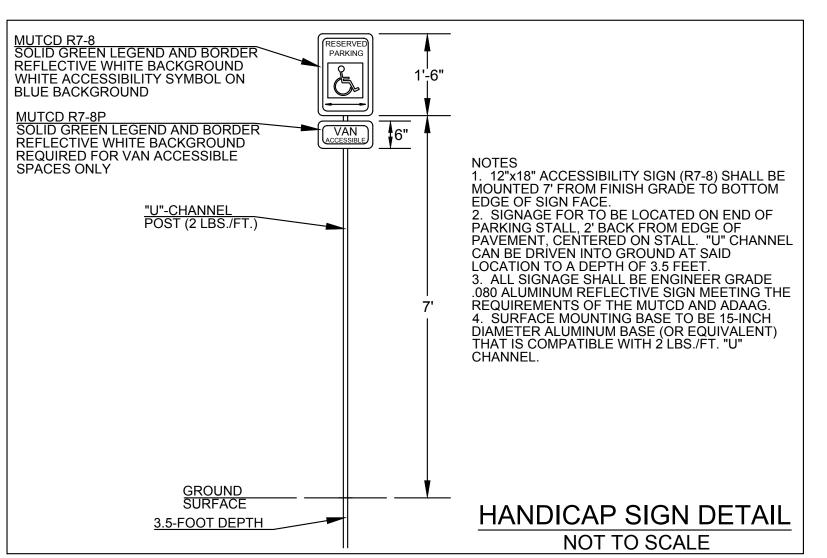














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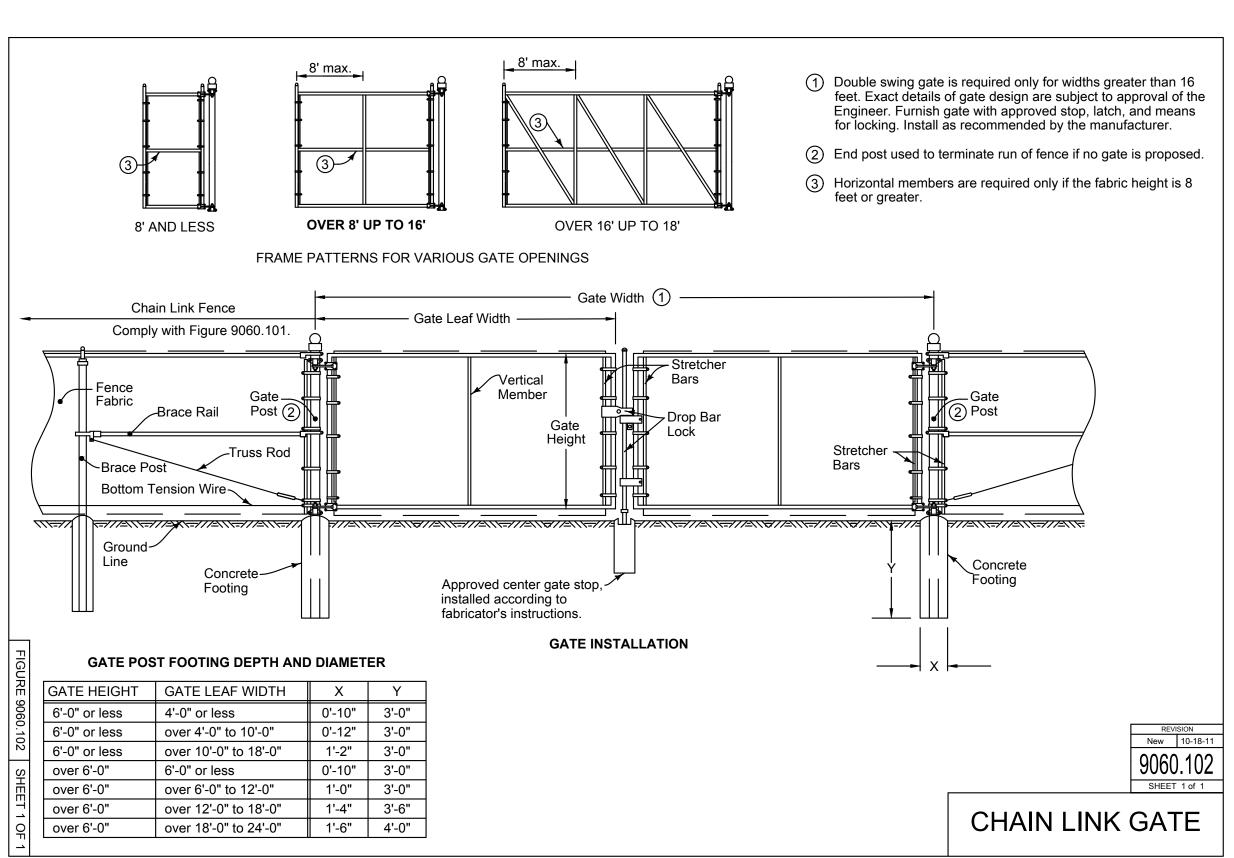
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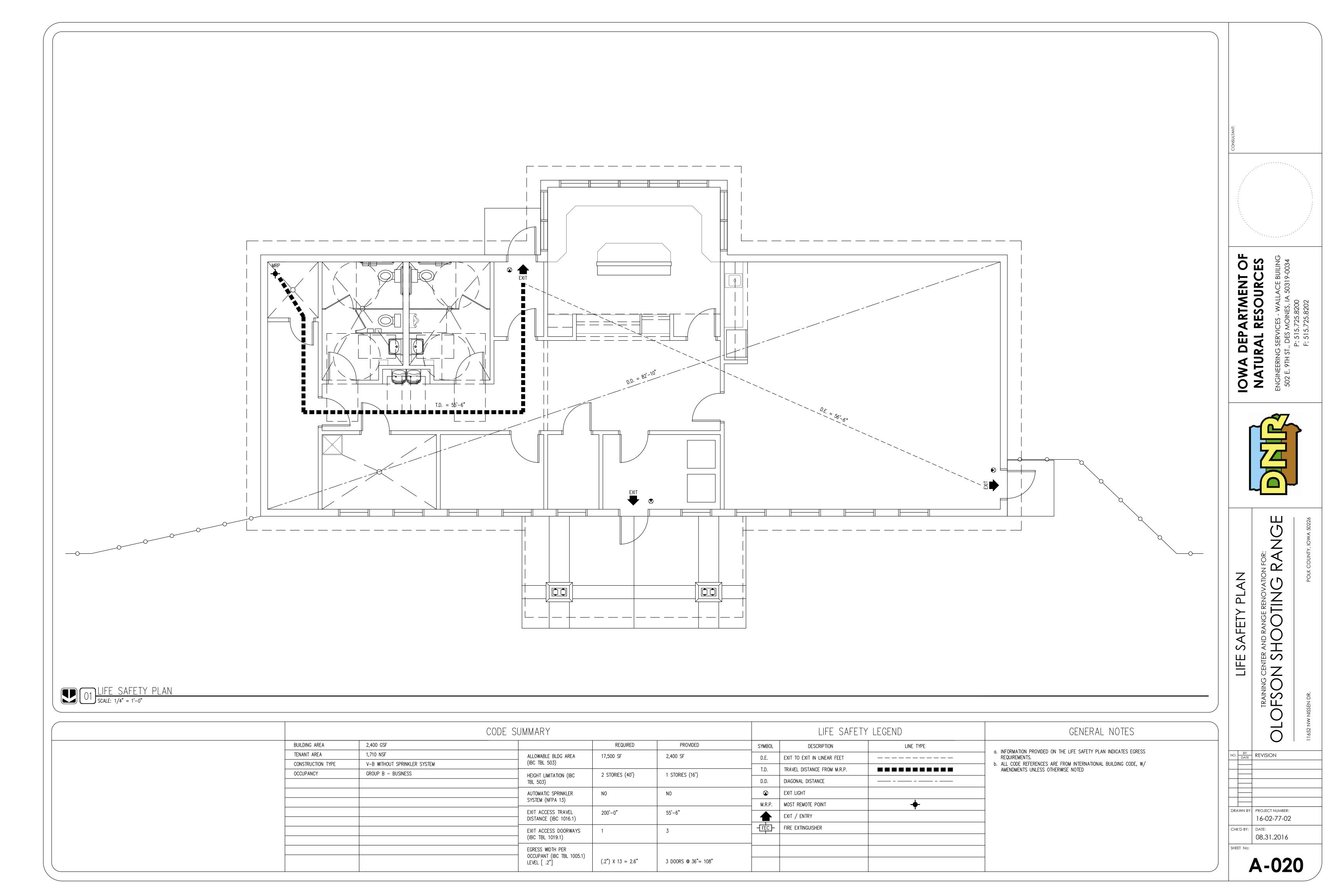


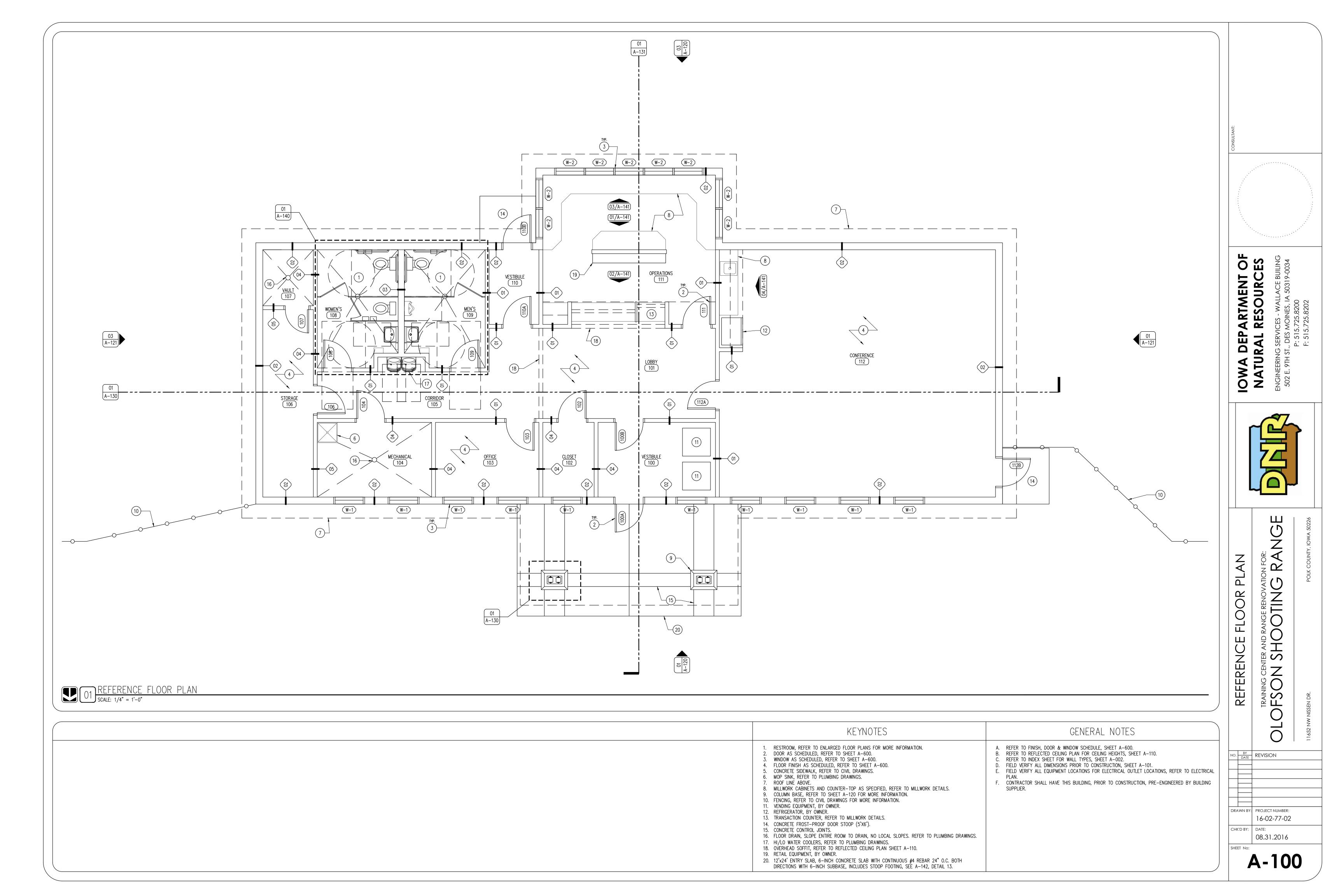


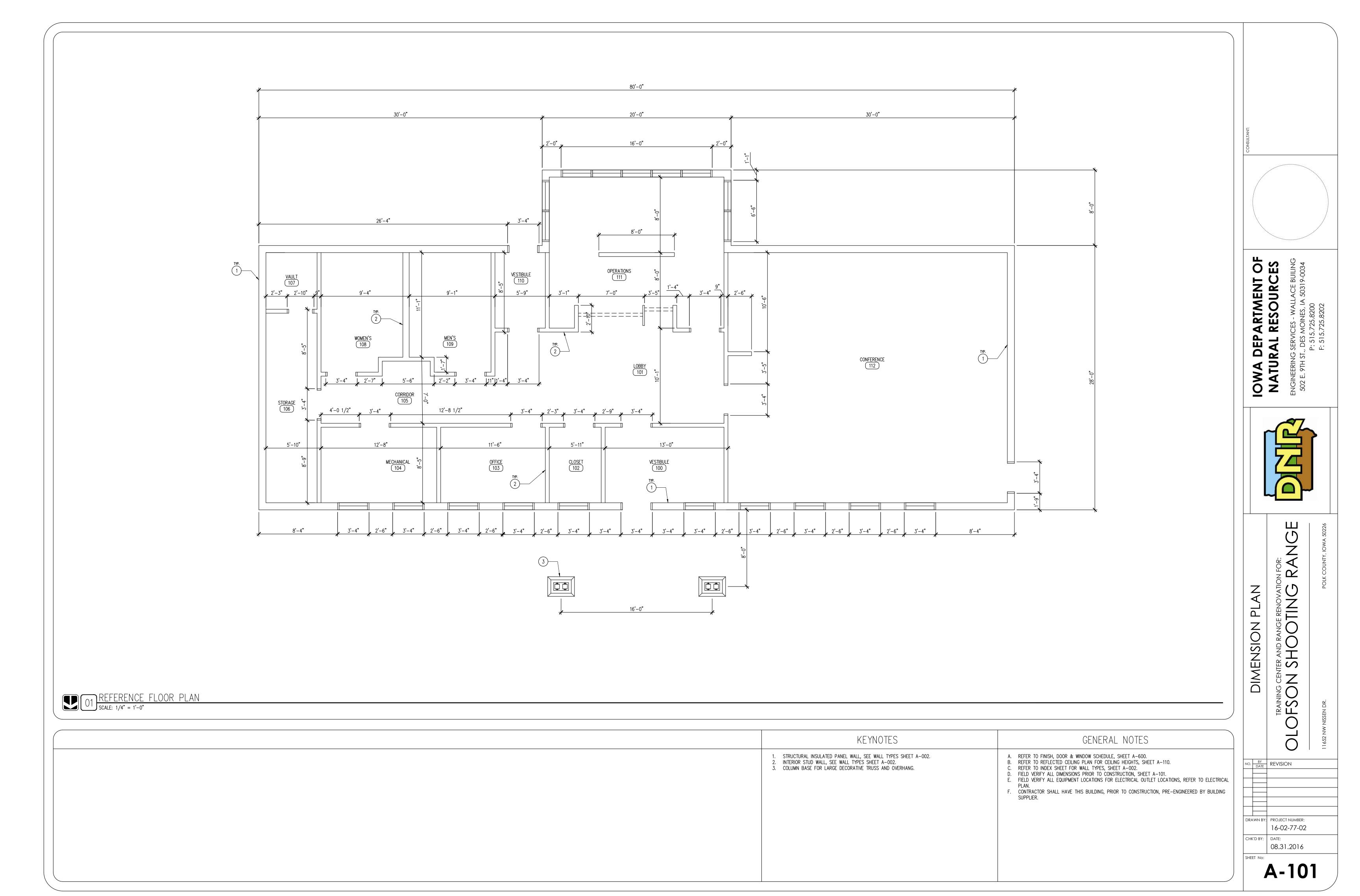


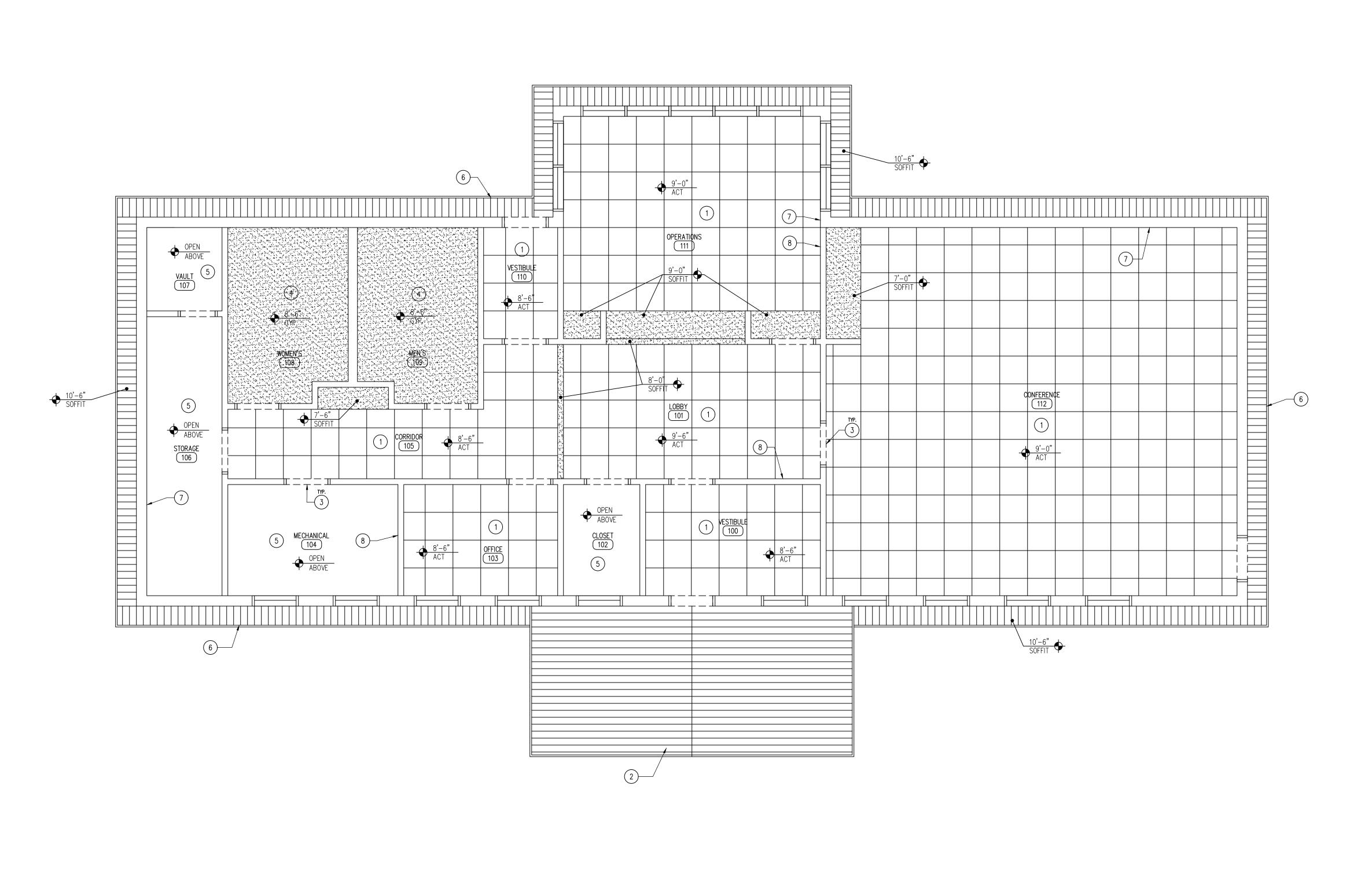
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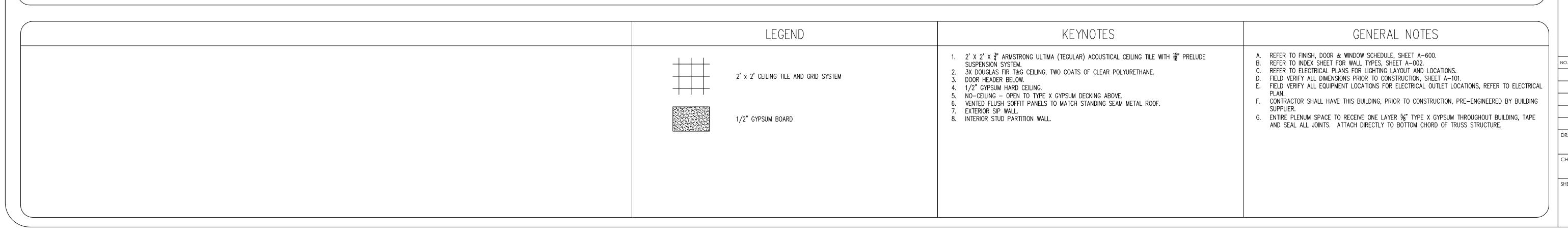






REFLECTED CEILING PLAN

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



IOWA DEPARTMENT OF NATURAL RESOURCES

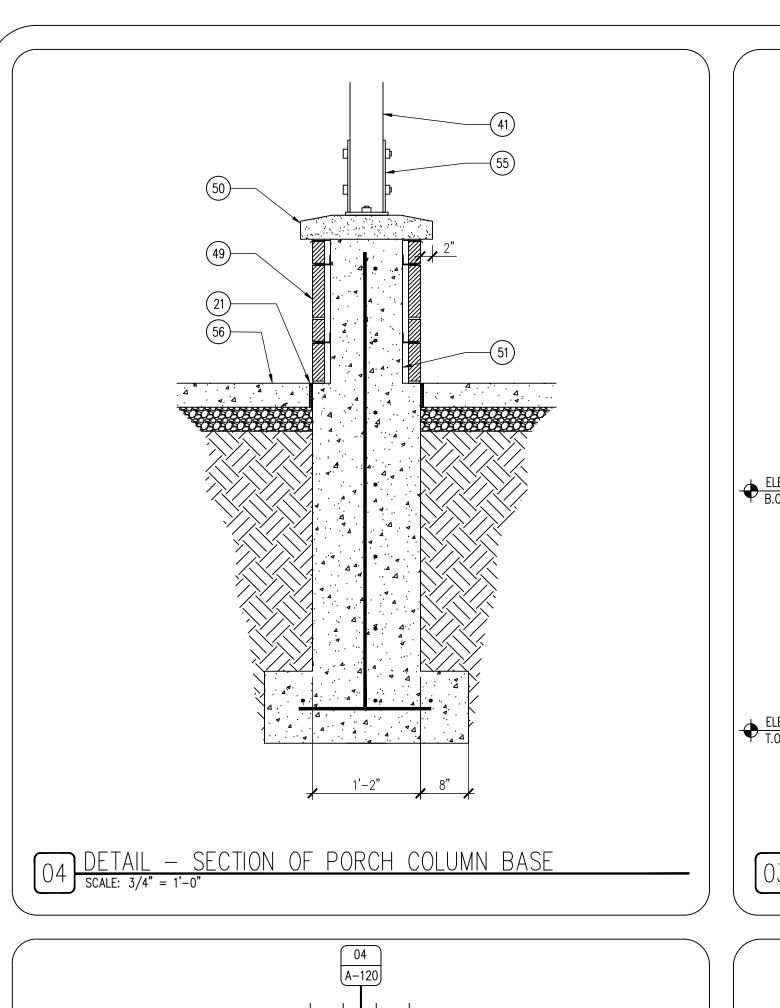
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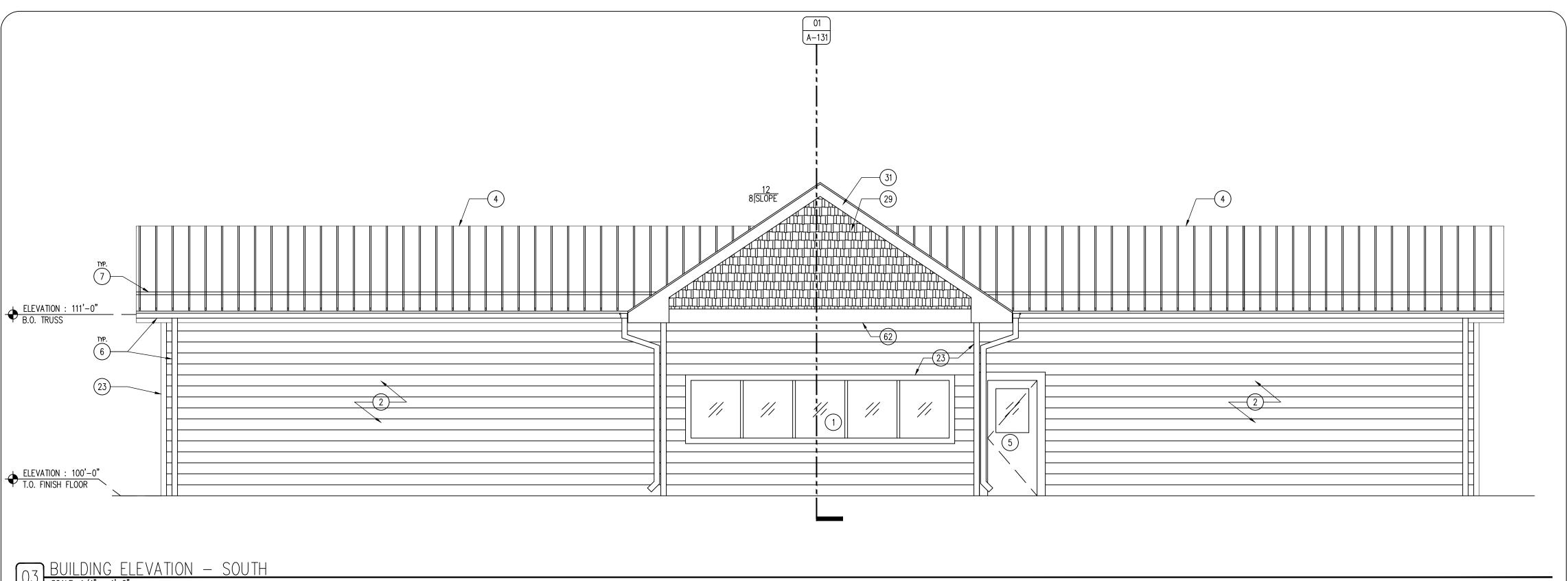
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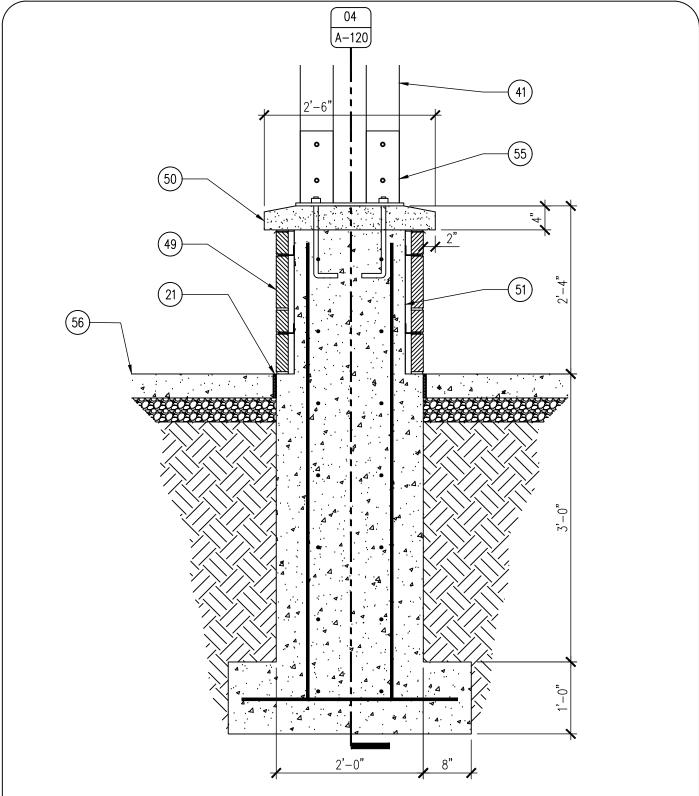
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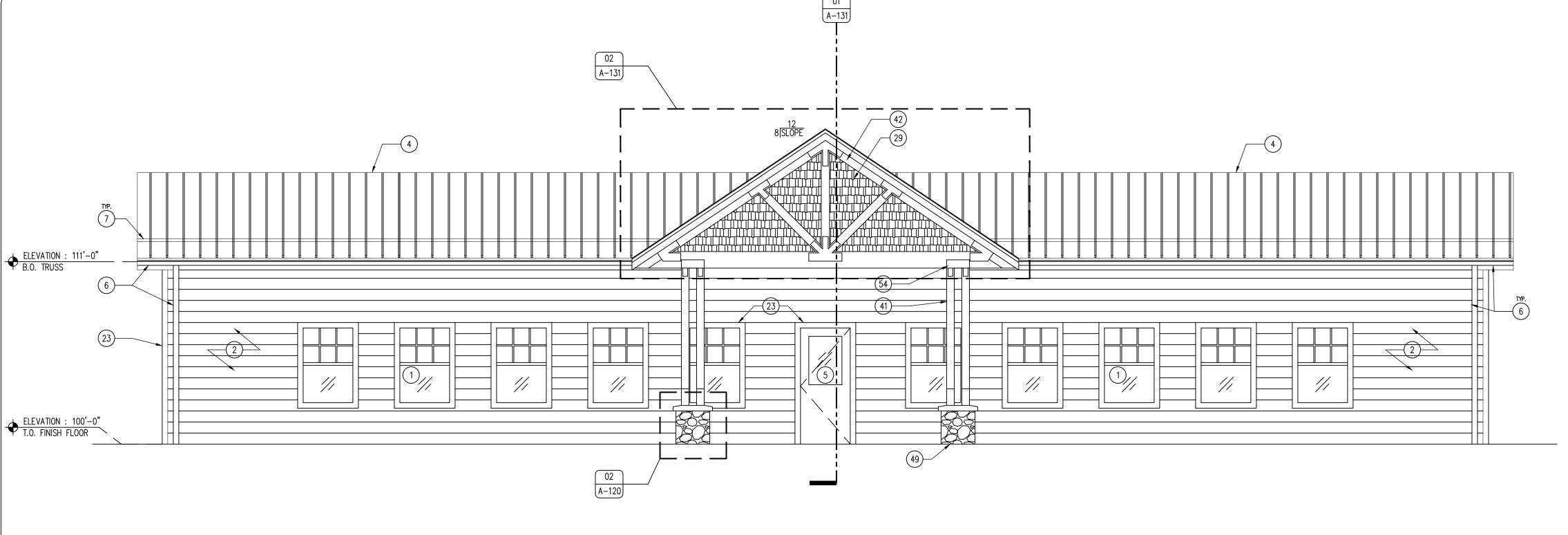
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DETAIL — SECTION OF PORCH COLUMN BASE

WINDOW AS SCHEDULED, REFER TO SHEET A-600.	21. TREATED SIP SILL PLATE, PER MANUFACTURER'S RECOMMENDA	TIONS
8 $lpha$ " JAMES HARDIE PLANK LAP SIDING, SELECT CEDARMILL, COLOR TO BE TIMBER BARK.	22. 3%" TYPE X GYPSUM BOARD DECK. INSTALL DIRECTLY TO TRU	SSES,

- METAL VENTED FLUSH-SOFFIT AND FASCIA PANEL. COLOR TO MATCH ROOF.
- DOOR AS SCHEDULED, REFER TO SHEET A-600. SEAMLESS METAL GUTTER AND DOWNSPOUT SYSTEM WITH LEAF GUARD TO MATCH ROOF.
- COLORGARD SNOW BAR BY S-5!, PLACE OVER ALL ROOF EAVES, COLOR TO MATCH ROOF. 2X BLOCKING AS REQUIRED.
- INSULATION BAFFLE. 10. TRUSS HANGER CLIP (SPECIFIED BY BUILDING MANUFACTURER).

PAC-CLAD SNAP-CLAD METAL ROOF, COLOR TO BE DARK BRONZE.

- 11. TRUSS (SPECIFIED BY BUILDING MANUFACTURER), FOR DEMONSTRATION PURPOSES ONLY.
- 12. STRUCTURAL INSULATED PANEL (SIP) WALL, BY BUILDING MANUFACTURER. 13. VAPOR BARRIER, PER MANUFACTURER'S RECOMMENDATIONS.
- 14. TOP PLATE WITH SEALANT ON ALL POINTS, PER BUILDING MANUFACTURER'S RECOMMENDATIONS. 15. R-42 CERTAINTEED FIBER-GLASS BLOWN ROOF INSULATION.
- 16. 3/4" PLYWOOD ROOF DECK SHEATHING WITH WATER AND ICE SHIELD OVER ENTIRE ROOF. 17. PAC-CLAD VENTED RIDGE CAP, MATCH COLOR OF ROOF.

- 18. ROOF CLIPS BY ROOF MANUFACTURER.
- 19. CONTINUOUS TRENCH FOOTING FOUNDATION, REFER TO DETAIL 02/A-130. 20. 2" SUB-SLAB RIGID INSULATION UNDER ENTIRE SLAB AND AROUND PERIMETER OF FOUNDATION AS SHOWN. TAPE AND SEAL ALL JOINTS.
- 23. 5.5" JAMES HARDIE 4/4 RUSTIC TRIM BOARDS, PRIMED AND PAINTED DARK BRONZE AROUND WINDOWS

- 25. 4" SOUND BATT INSULATION.
- 26. ADA ACCESSIBLE DOOR THRESHOLD.

- 31. 2X FASCIA, WRAP IN BREAK METAL TO MATCH ROOF.
- 33. METAL SILL FLASHING BY BUILDING MANUFACTURER.
- 38. METAL FLASHING, MATCH ROOF COLOR.

- - , TAPE AND SEAL ALL JOINTS.
- AND DOORS, COLOR TO MATCH SIDING ON BUILDING CORNERS.
- 24. 6" SOUND BATT INSULATION.
- 27. 24 X 24 ARMSTRONG ULTIMA TEGULAR ACOUSTIC CEILING TILES, REFER TO SHEET A-600.
- 28. PARTITION WALL AS SCHEDULED, REFER TO SHEET A-002.
- 29. JAMES HARDIE STAGGERED EDGE PANEL SIDING, TIMBER BARK COLOR. 30. 1/3" EXPANSION JOINT WITH SEALANT.
- 32. METAL VALLEY FLASHING BY ROOFING MANUFACTURER.
- 34. METAL HEAD-WALL FLASHING BY ROOFING MANUFACTURER.
- 35. 6" CONCRETE SLAB WITH CONTINUOUS #4 REBAR 24" O.C. BOTH DIRECTIONS, OVER 2" SUB-SLAB RIGID 51. CAST IN PLACE CONCRETE COLUMN FOUNDATION WITH #4 REBAR 12" O.C. ALL DIRECTIONS. INSULATION AND POLYETHYLENE VAPOR BARRIER, TAPED AND SEALED, WITH 6" SUBBASE. 36. #5 DOWEL, EMBED INTO SLAB 24" MINIMUM.
- 37. WALL FINISH AS SCHEDULED, REFER TO SHEET A-600.

39. BACKER ROD AND SEALANT.

KEYNOTES

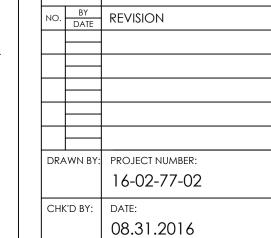
- 40. #5 DOWEL-ROD "J" HOOK, EMBED 36" INTO FOOTING, 18" INTO SLAB.
- 41. 6X6 ROUGH-SAWN DOUGLAS FIR COLUMN, STAIN WITH TWO COATS TWP 103. 42. HEAVY TIMBER, ROUGH-SAWN DOUGLAS FIR TRUSS, STAIN TWO COATS TWP (COLOR TBD) WITH
- OVERSIZED METAL BRACKETS AS SHOWN, POWDER COAT BLACK. 43. 34" X 4" HARD MAPLE TRIM, REFER TO SHEET A-600.
- 44. 3X DOUGLAS FIR T&G DECKING, TWO COATS OF CLEAR POLYURETHANE WITH WATER & ICE SHIELD OVER 59. 2X OUTRIGGER EAVE, PER BUILDING MANUFACTURER.
- ENTIRE SURFACE. 45. CEILING AS SCHEDULED, REFER TO SHEET A-110.
- 46. MOP SINK, REFER TO PLUMBING DRAWINGS. 47. RUBBER BASE, REFER TO SHEET A-600.

GALVANIZED WITH LOCK WASHERS.

- 48. BREAK METAL PROTECTION OVER INSULATION, EXTEND INTO GROUND MINIMUM 4" FROM SURFACE.
- 49. STONE COLUMN BASE, STONE TO BE ROUND-SIDE OUT, SPLIT-FACE, GRANITE BOULDERS THIN VENEER, BY EDEN STONE. MORTAR TO BE ASTM C270, COLOR TBD. 50. 4" HONED INDIANA LIMESTONE COLUMN CAP, BUFF COLORED, WITH DRIP EDGE.
- 52. 2X6 CEDAR FASCIA TRIM EDGE, STAIN TWO COATS TWP 103. 54. 3" OVERSIZED MILD-STEEL TRUSS BRACKET, POWDER COAT BLACK. ALL HARDWARE TO BE 34"
- 55. STEEL COLUMN BASE PLATE, 3/8" MILD-STEEL POWDER COATED BLACK. ANCHOR BOLTS TO BE UNDER A. REFER TO FINISH, DOOR & WINDOW SCHEDULE, SHEET A-600. COLUMNS, PILOT HOLE CAP AND BASE PLATE, THEN EPOXY SET ANCHOR BOLTS INTO CONCRETE BASE,
- LEVEL. EMBED MINIMUM 18". 56. CONCRETE WALK WITH SUBBASE CONNECTING TO 12'x24' ENTRY SLAB, REFER TO CIVIL DRAWINGS. 57. SILL ANCHOR, PER BUILDING MANUFACTURER'S RECOMMENDATIONS. 58. WATER AND ICE SHIELD OVER ENTIRE ROOF DECKING PER MANUFACTURER'S RECOMMENDATIONS.
- 60. METAL RAKE EDGE FLASHING BY ROOFING MANUFACTURER.
- 61. STOOP FOOTING, EXTEND 48", #5 DOWELS INTO SLAB 12" O.C., 18" EMBEDMENT MINIMUM. 62. ¼ JAMES HARDIE 11 ¼" RUSTIC TRIM BOARD AS EYEBROW BETWEEN LAP SIDING AND SHAKES. COLOR
- TO BE TIMBER BARK.
- 63. BUILDING WRAP, PER BUILDING MANUFACTURER'S RECOMMENDATIONS. 64. THICKENED SLAB EDGE. TOTAL ENTRY SLAB IS 12'x24', 6" CONCRETE SLAB WITH CONTINUOUS #4 REBAR
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- 66. DIE WALL WITH HARD MAPLE CAP, REFER TO MILLWORK DRAWINGS. 67. TRANSACTION COUNTER, REFER TO MILLWORK DRAWINGS.
- 68. HI/LO WATER COOLER, REFER TO PLUMBING DRAWINGS.
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GENERAL NOTES

- REFER TO REFLECTED CEILING PLAN FOR CEILING HEIGHTS, SHEET A-110.
- REFER TO INDEX SHEET FOR WALL TYPES, SHEET A-002. FIELD VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION, SHEET A-101.
- FIELD VERIFY ALL EQUIPMENT LOCATIONS FOR ELECTRICAL OUTLET LOCATIONS, REFER TO ELECTRICAL
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- SUPPLIER.



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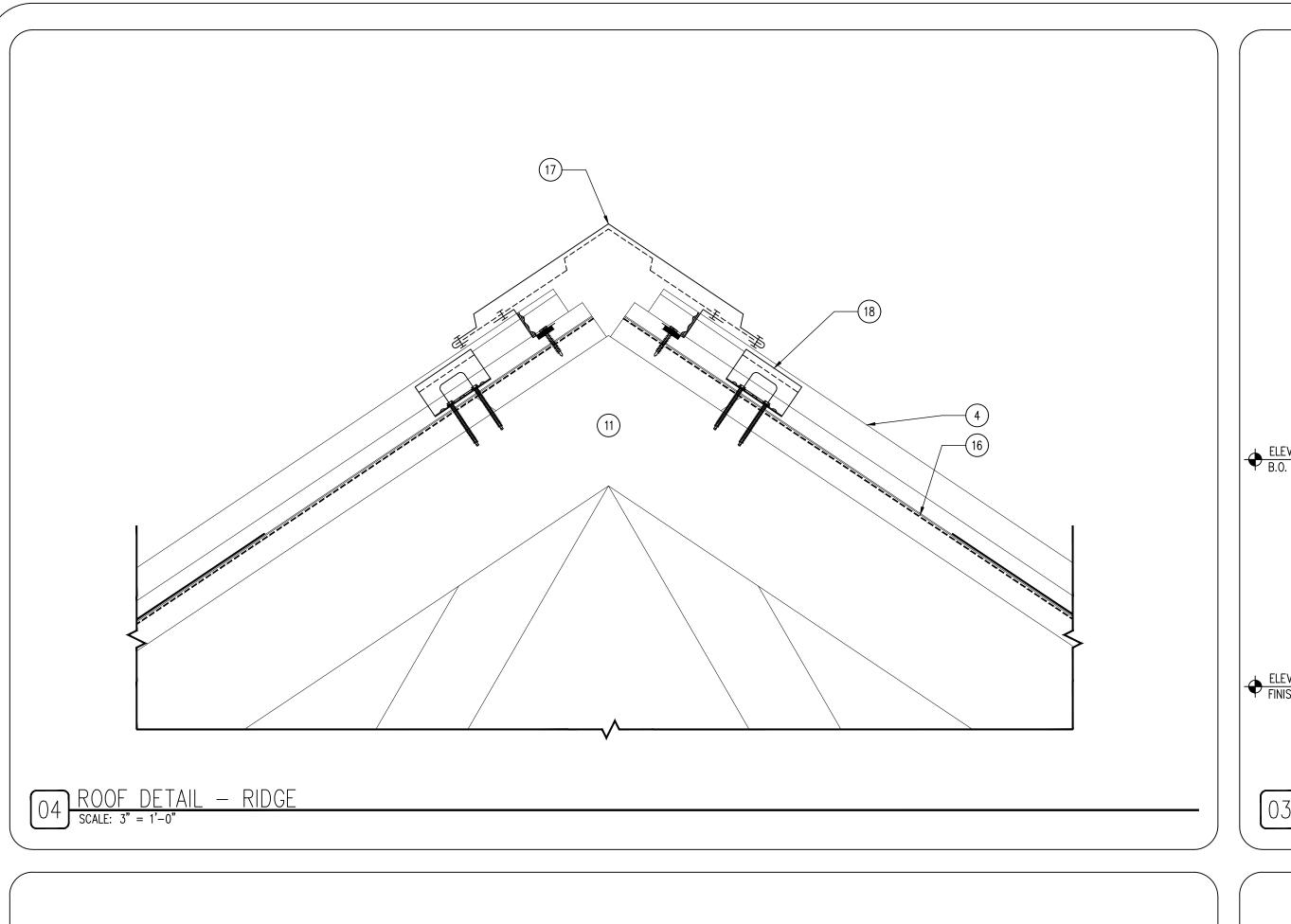
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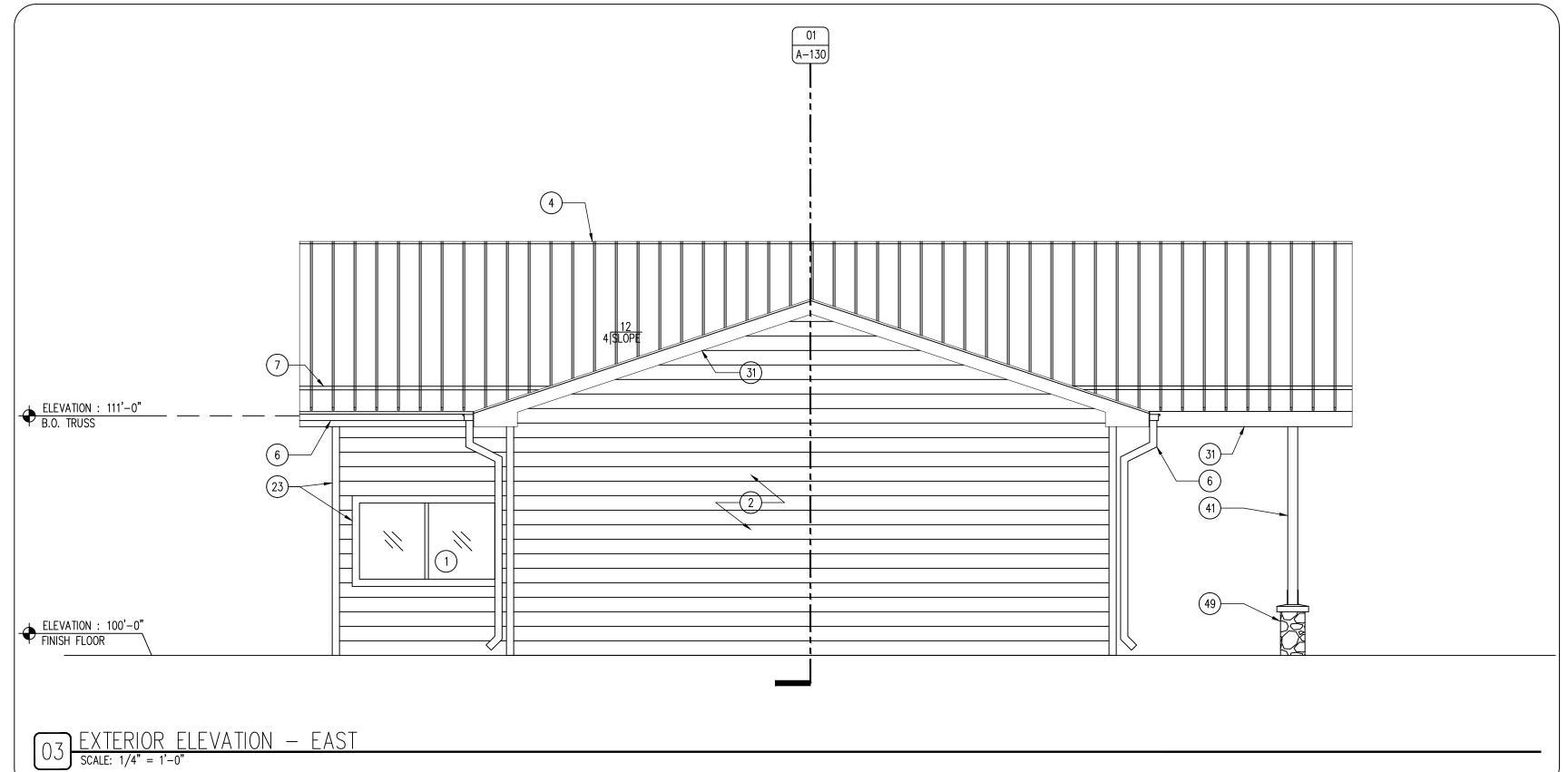
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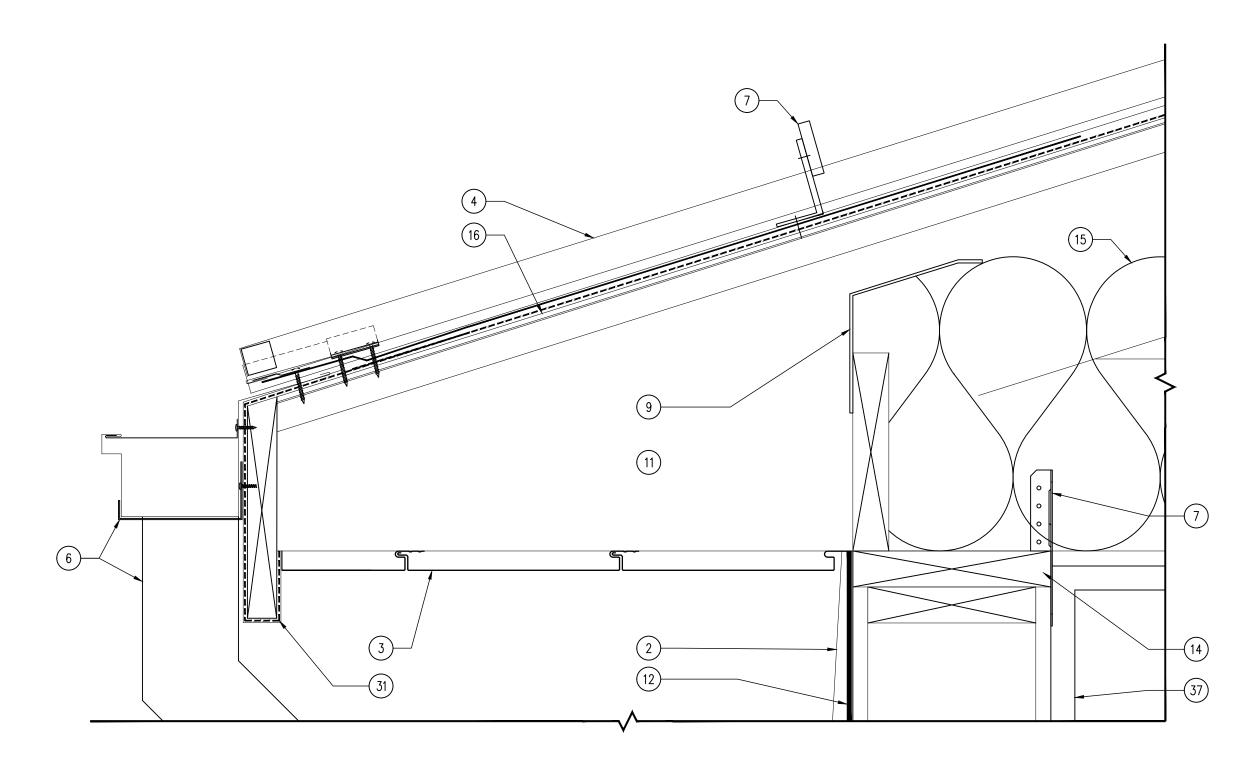
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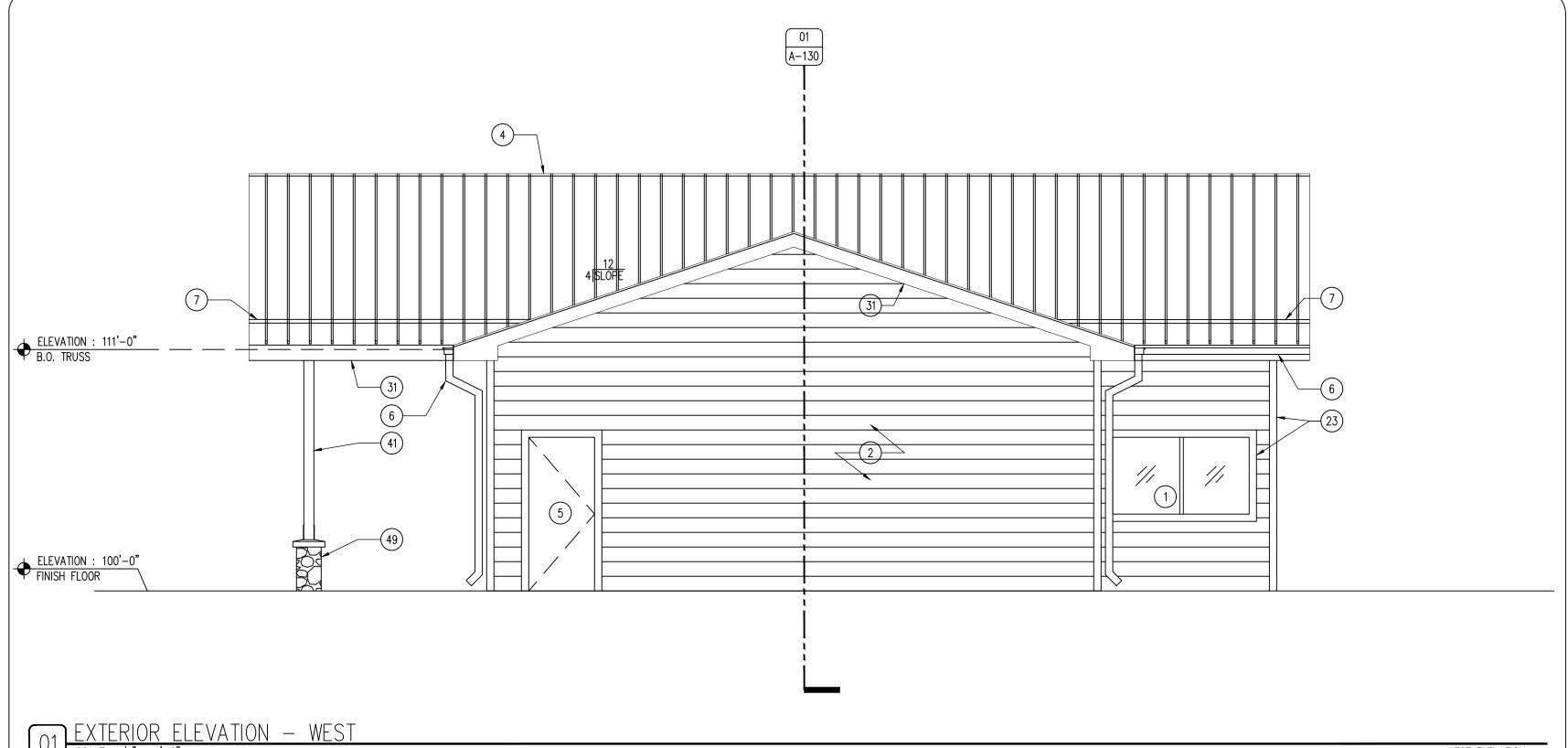
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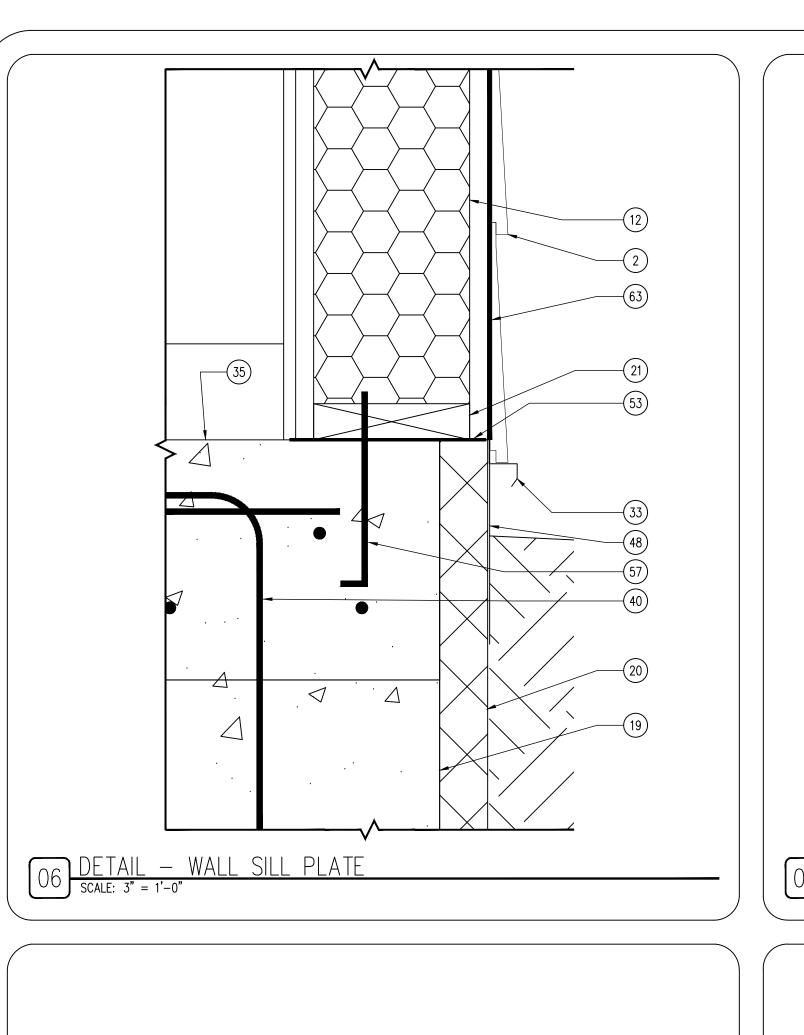


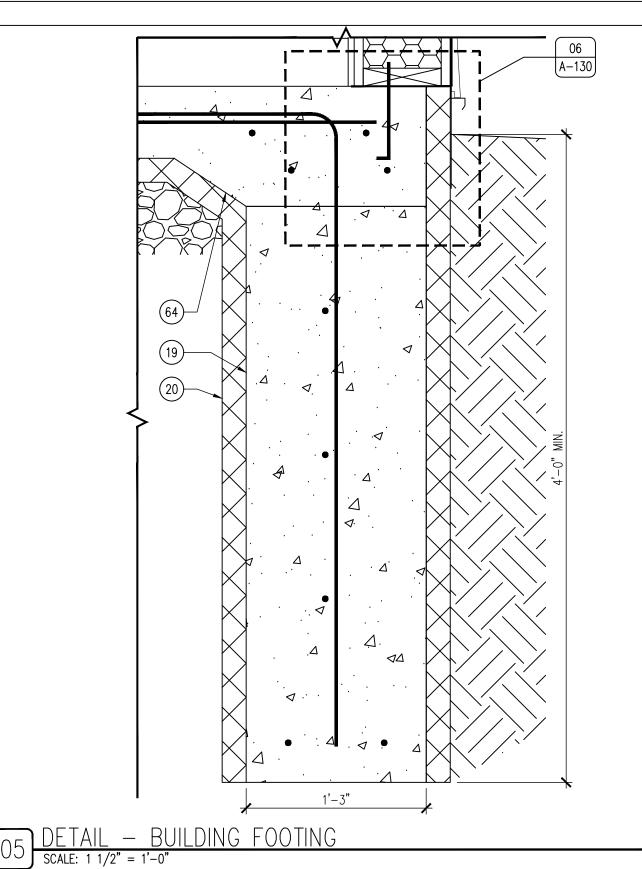


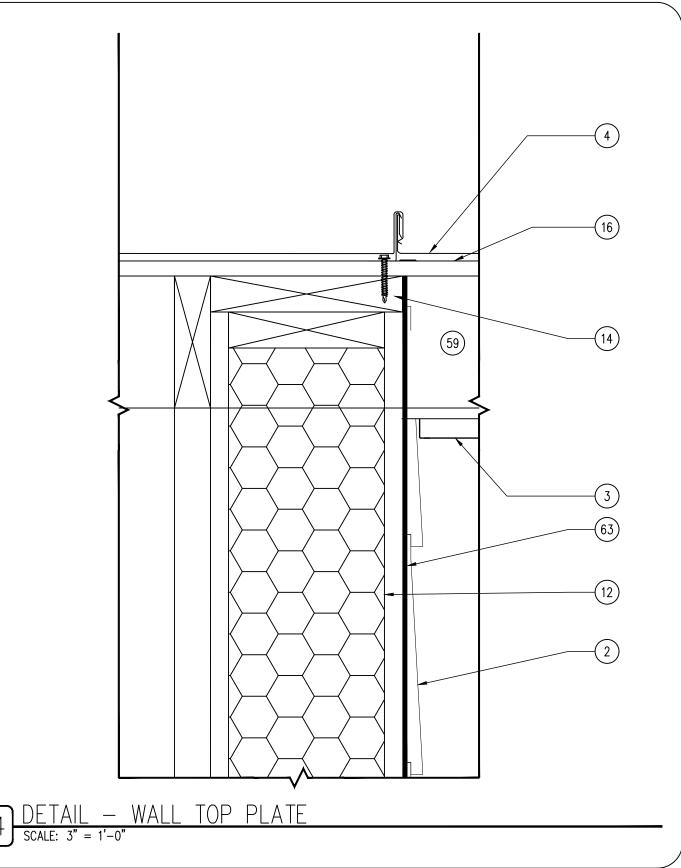


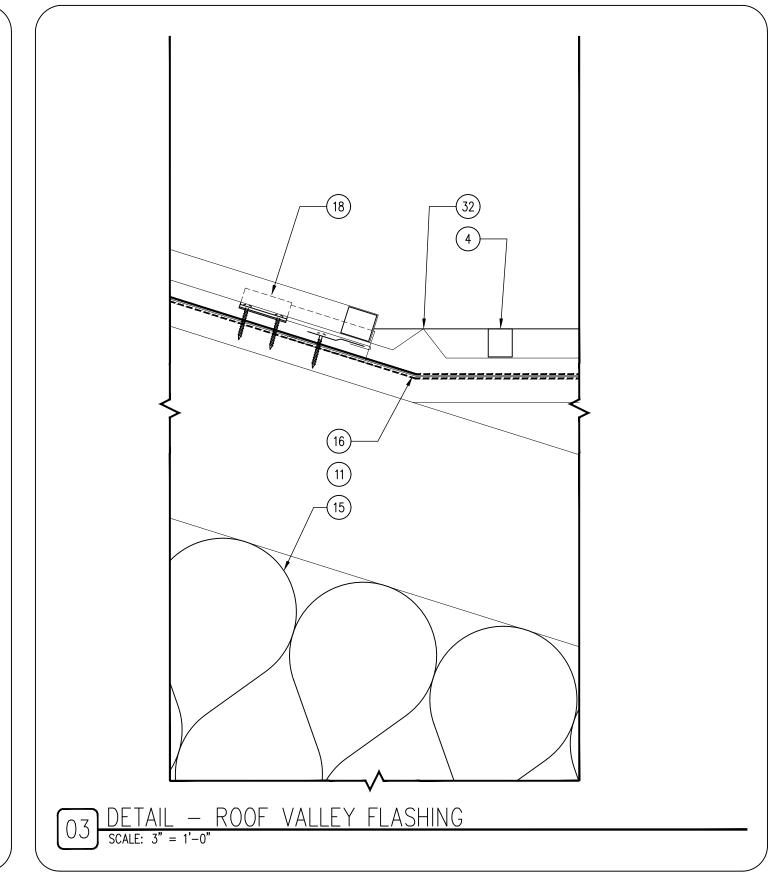
Ш \mathcal{L} Ш KEYNOTES GENERAL NOTES WINDOW AS SCHEDULED, REFER TO SHEET A-600. 21. TREATED SIP SILL PLATE, PER MANUFACTURER'S RECOMMENDATIONS. 39. BACKER ROD AND SEALANT. 55. STEEL COLUMN BASE PLATE, 3/8" MILD-STEEL POWDER COATED BLACK. ANCHOR BOLTS TO BE UNDER A. REFER TO FINISH, DOOR & WINDOW SCHEDULE, SHEET A-600. 40. #5 DOWEL-ROD "J" HOOK, EMBED 36" INTO FOOTING, 18" INTO SLAB. COLUMNS, PILOT HOLE CAP AND BASE PLATE, THEN EPOXY SET ANCHOR BOLTS INTO CONCRETE BASE, REFER TO REFLECTED CEILING PLAN FOR CEILING HEIGHTS, SHEET A-110. $8~\chi^{\prime\prime}$ James Hardie Plank Lap Siding, select cedarmill, color to be timber bark. 22. 5%" TYPE X GYPSUM BOARD DECK. INSTALL DIRECTLY TO TRUSSES, TAPE AND SEAL ALL JOINTS. NO. BY REVISION METAL VENTED FLUSH-SOFFIT AND FASCIA PANEL. COLOR TO MATCH ROOF. 41. 6X6 ROUGH-SAWN DOUGLAS FIR COLUMN, STAIN WITH TWO COATS TWP 103. LEVEL. EMBED MINIMUM 18". 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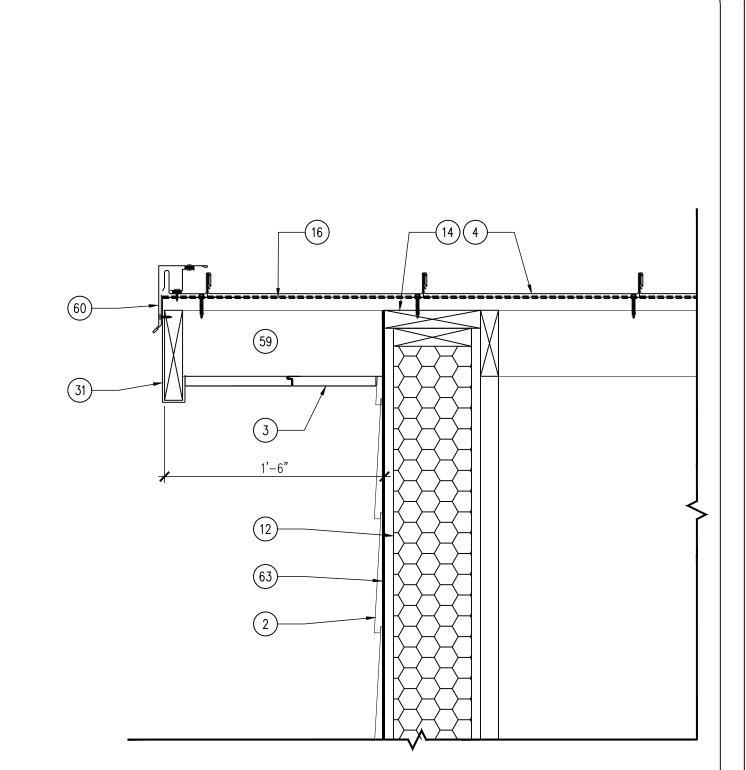
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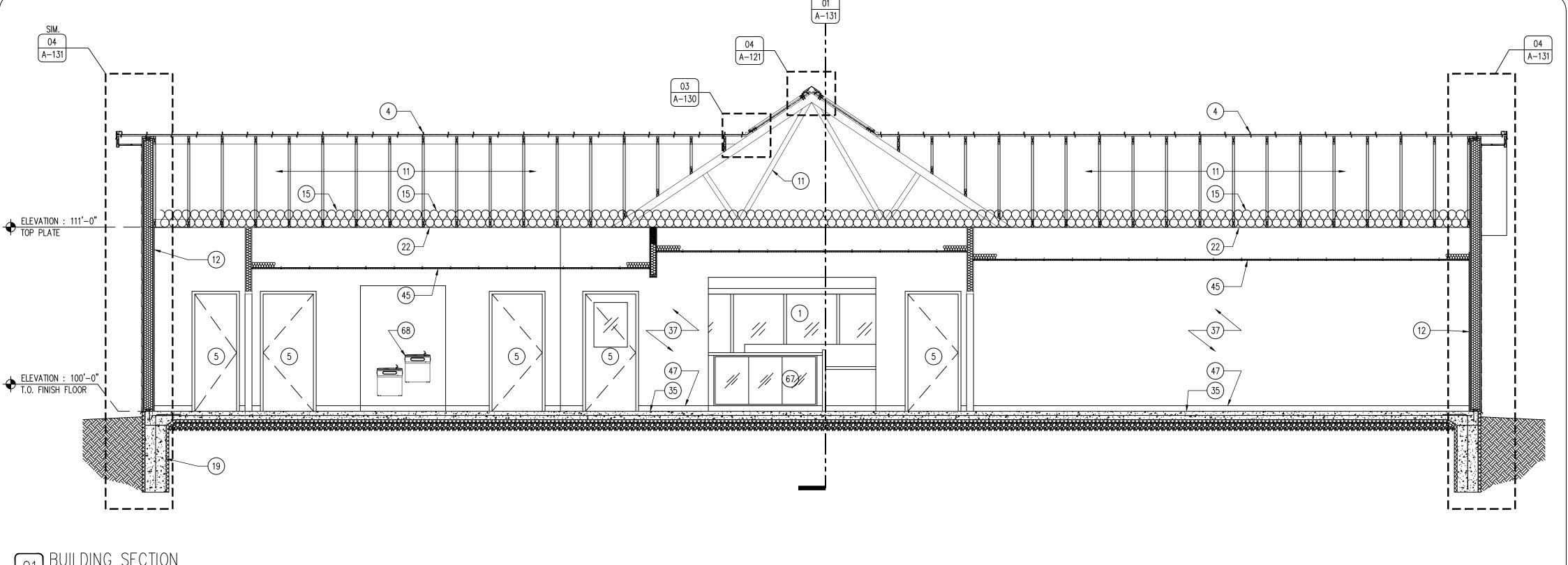












KEYNOTES WINDOW AS SCHEDULED, REFER TO SHEET A-600. 21. TREATED SIP SILL PLATE, PER MANUFACTURER'S RECOMMENDATIONS. $8~\chi"$ James Hardie Plank Lap Siding, select cedarmill, color to be timber bark. METAL VENTED FLUSH-SOFFIT AND FASCIA PANEL. COLOR TO MATCH ROOF. 23. 5.5" JAMES HARDIE 4/4 RUSTIC TRIM BOARDS, PRIMED AND PAINTED DARK BRONZE AROUND WINDOWS PAC-CLAD SNAP-CLAD METAL ROOF, COLOR TO BE DARK BRONZE. AND DOORS, COLOR TO MATCH SIDING ON BUILDING CORNERS. DOOR AS SCHEDULED, REFER TO SHEET A-600.

COLORGARD SNOW BAR BY S-5!, PLACE OVER ALL ROOF EAVES, COLOR TO MATCH ROOF. 2X BLOCKING AS REQUIRED. INSULATION BAFFLE.

SEAMLESS METAL GUTTER AND DOWNSPOUT SYSTEM WITH LEAF GUARD TO MATCH ROOF.

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- 22. 5%" TYPE X GYPSUM BOARD DECK. INSTALL DIRECTLY TO TRUSSES, TAPE AND SEAL ALL JOINTS.
- 24. 6" SOUND BATT INSULATION.
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- INSULATION AND POLYETHYLENE VAPOR BARRIER, TAPED AND SEALED, WITH 6" SUBBASE.
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40. #5 DOWEL-ROD "J" HOOK, EMBED 36" INTO FOOTING, 18" INTO SLAB.

OVERSIZED METAL BRACKETS AS SHOWN, POWDER COAT BLACK.

43. 34" X 4" HARD MAPLE TRIM, REFER TO SHEET A-600.

41. 6X6 ROUGH-SAWN DOUGLAS FIR COLUMN, STAIN WITH TWO COATS TWP 103.

39. BACKER ROD AND SEALANT.

ENTIRE SURFACE.

VENEER, BY EDEN STONE. MORTAR TO BE ASTM C270, COLOR TBD. 50. 4" HONED INDIANA LIMESTONE COLUMN CAP, BUFF COLORED, WITH DRIP EDGE. 35. 6" CONCRETE SLAB WITH CONTINUOUS #4 REBAR 24" O.C. BOTH DIRECTIONS, OVER 2" SUB-SLAB RIGID 51. CAST IN PLACE CONCRETE COLUMN FOUNDATION WITH #4 REBAR 12" O.C. ALL DIRECTIONS. 52. 2X6 CEDAR FASCIA TRIM EDGE, STAIN TWO COATS TWP 103.

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GENERAL NOTES

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- REFER TO INDEX SHEET FOR WALL TYPES, SHEET A-002. FIELD VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION, SHEET A-101.
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SUPPLIER.

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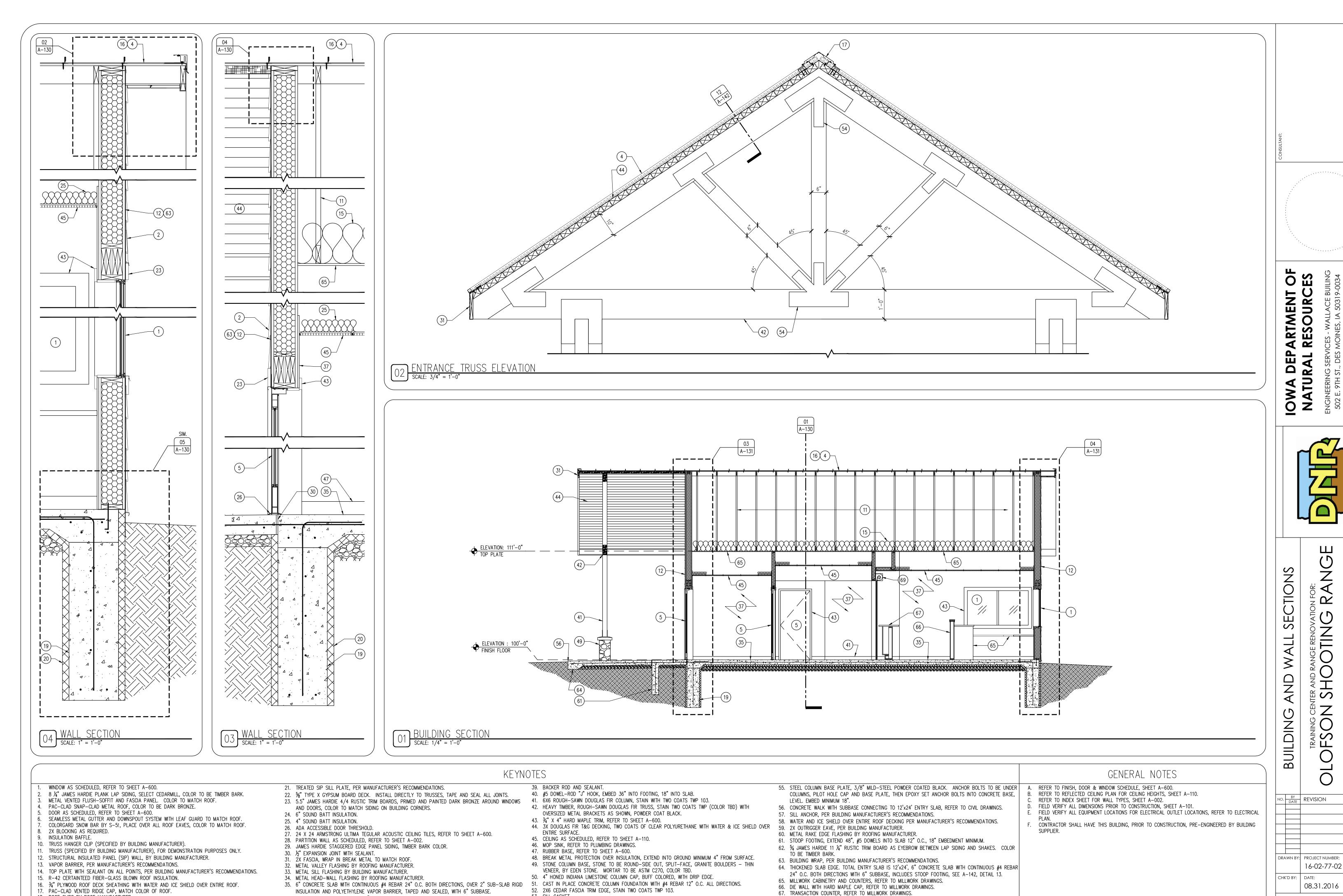
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CYLINDER LOCK ON TUBULAR BOTTOM BAR (MATCH KEYING WITH BUILDING), COLOR TO BE WHITE.

18. ROOF CLIPS BY ROOF MANUFACTURER.

SHOWN. TAPE AND SEAL ALL JOINTS.

19. CONTINUOUS TRENCH FOOTING FOUNDATION, REFER TO DETAIL 02/A-130.

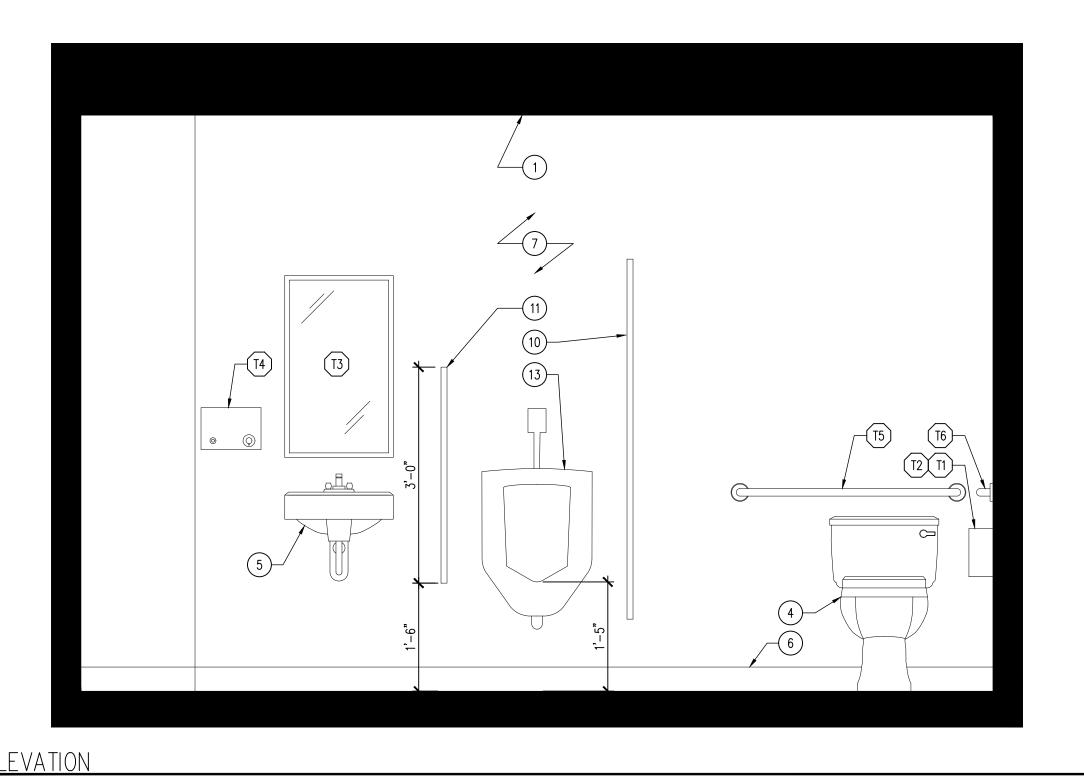
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36. #5 DOWEL, EMBED INTO SLAB 24" MINIMUM.

38. METAL FLASHING, MATCH ROOF COLOR.

37. WALL FINISH AS SCHEDULED, REFER TO SHEET A-600.

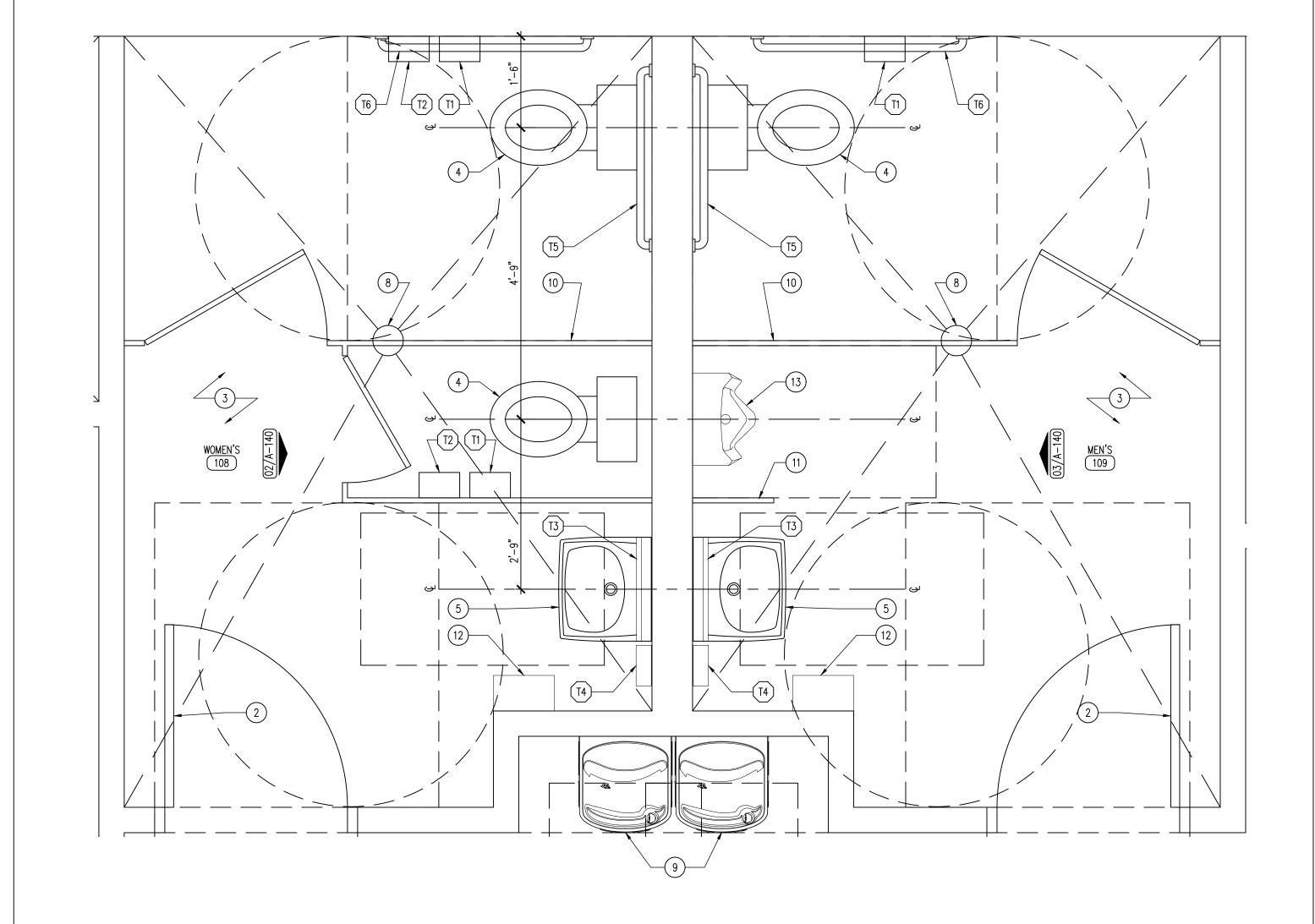
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RESTROOM ELEVATION

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



O1 ENLARGED RESTROOM FLOOR PLAN SCALE: 1" = 1'-0"

ENLARGED KEYNOTES TOILET ACCESSORY SCHEDULE GENERAL NOTES A. REFER TO FINISH, DOOR & WINDOW SCHEDULE, SHEET A-600.

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C. REFER TO INDEX SHEET FOR WALL TYPES, SHEET A-002.

D. FIELD VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION, SHEET A-101. ALL MODEL NUMBERS BASED ON BOBRICK "CONTURA SERIES" WASHROOM EQUIPMENT UNLESS OTHERWISE NOTED. CEILING AS SCHEDULED, REFER TO REFLECTED CEILING PLAN SHEET A-110. DOOR AS SCHEDULED, REFER TO SHEET A-600. FINISH FLOOR AS SCHEDULED, REFER TO FINISH SCHEDULE SHEET A-600. ADA COMPLIANT TOILET AS SCHEDULED, REFER TO PLUMBING DRAWINGS. T-1 SURFACE-MOUNTED MULTI-ROLL TISSUE DISPENSER B-4388 ADA COMPLIANT LAVATORY. REFER TO PLUMBING DRAWINGS. FIELD VERIFY ALL EQUIPMENT LOCATIONS FOR ELECTRICAL OUTLET LOCATIONS, REFER TO ELECTRICAL RUBBER WALL BASE AS SCHEDULED, REFER TO FINISH SCHEDULE SHEET A-600. T-2) SURFACE-MOUNTED SANITARY NAPKIN DISPOSAL B-354 CONTRACTOR SHALL HAVE THIS BUILDING, PRIOR TO CONSTRUCTION, PRE-ENGINEERED BY BUILDING WALL FINISH AS SCHEDULED, REFER TO FINISH SCHEDULE SHEET A-600. FLOOR DRAIN, REFER TO PLUMBING DRAWINGS. T-3) ANGLE-FRAMED MIRROR - MOUNT BOTTOM EDGE OF MIRROR 40" AFF B-290 3636 9. ADA COMPLIANT HI/LO WATER COOLERS, REFER TO PLUMBING DRAWINGS. 10. BRADMAR TOILET PARTITIONS, SENTINEL OVERHEAD BRACED 400 SERIES, COLOR TBD. T-4) RECESSED SOAP DISPENSER B-4063 11. BRADMAR URINAL SCREEN, MATCH COLOR OF PARTITIONS. 12. HAND DRYER AS SCHEDULED, REFER TO MECHANICAL DRAWINGS. 13. URINAL, REFER TO PLUMBING DRAWINGS. (T-5) Concealed Mounting with Snap Flange Grab Bars B-6806 x 36 T-6 Concealed Mounting with Snap Flange Grab Bars B-6806 x 42

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ELEVATIONS

PLAN

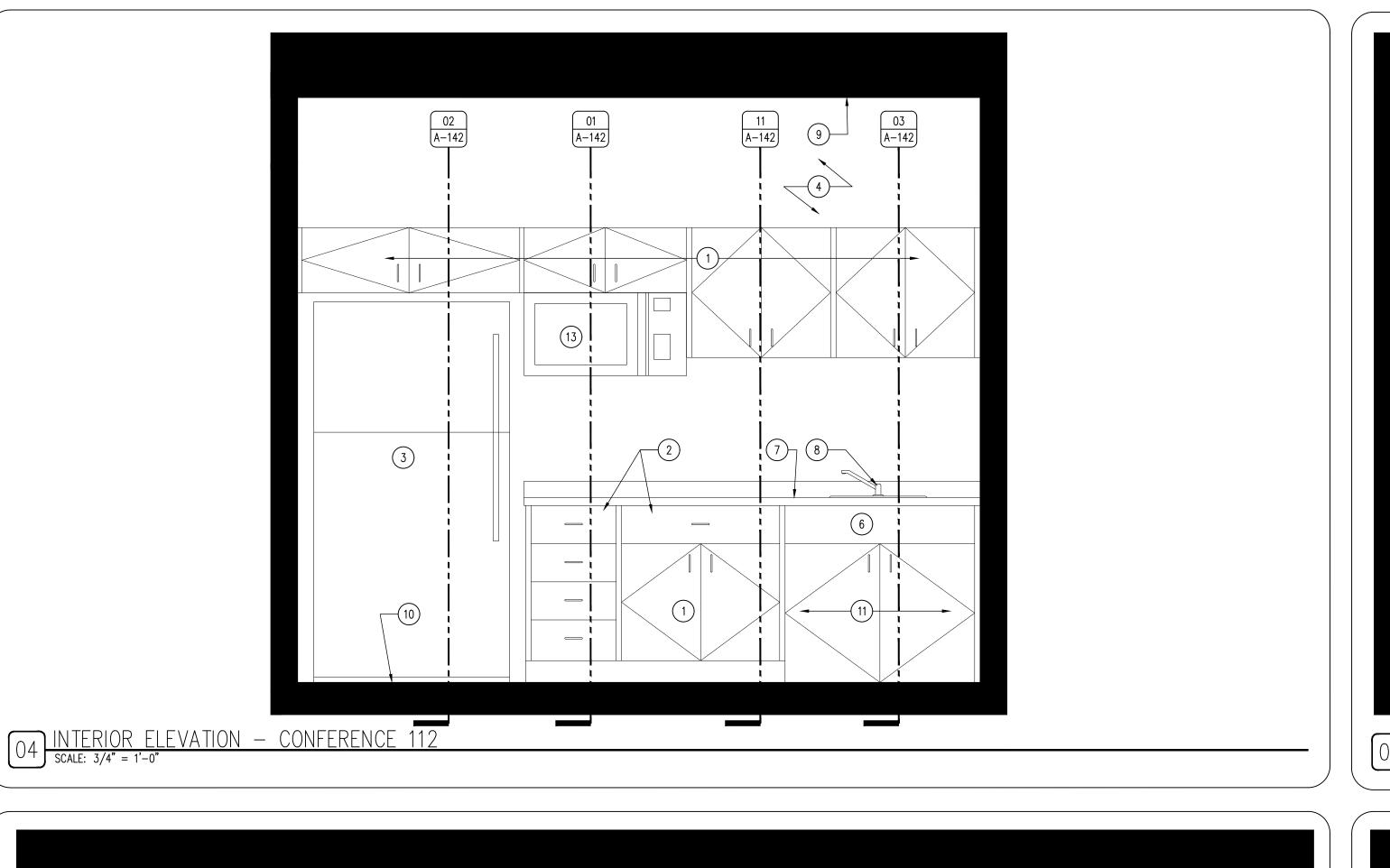
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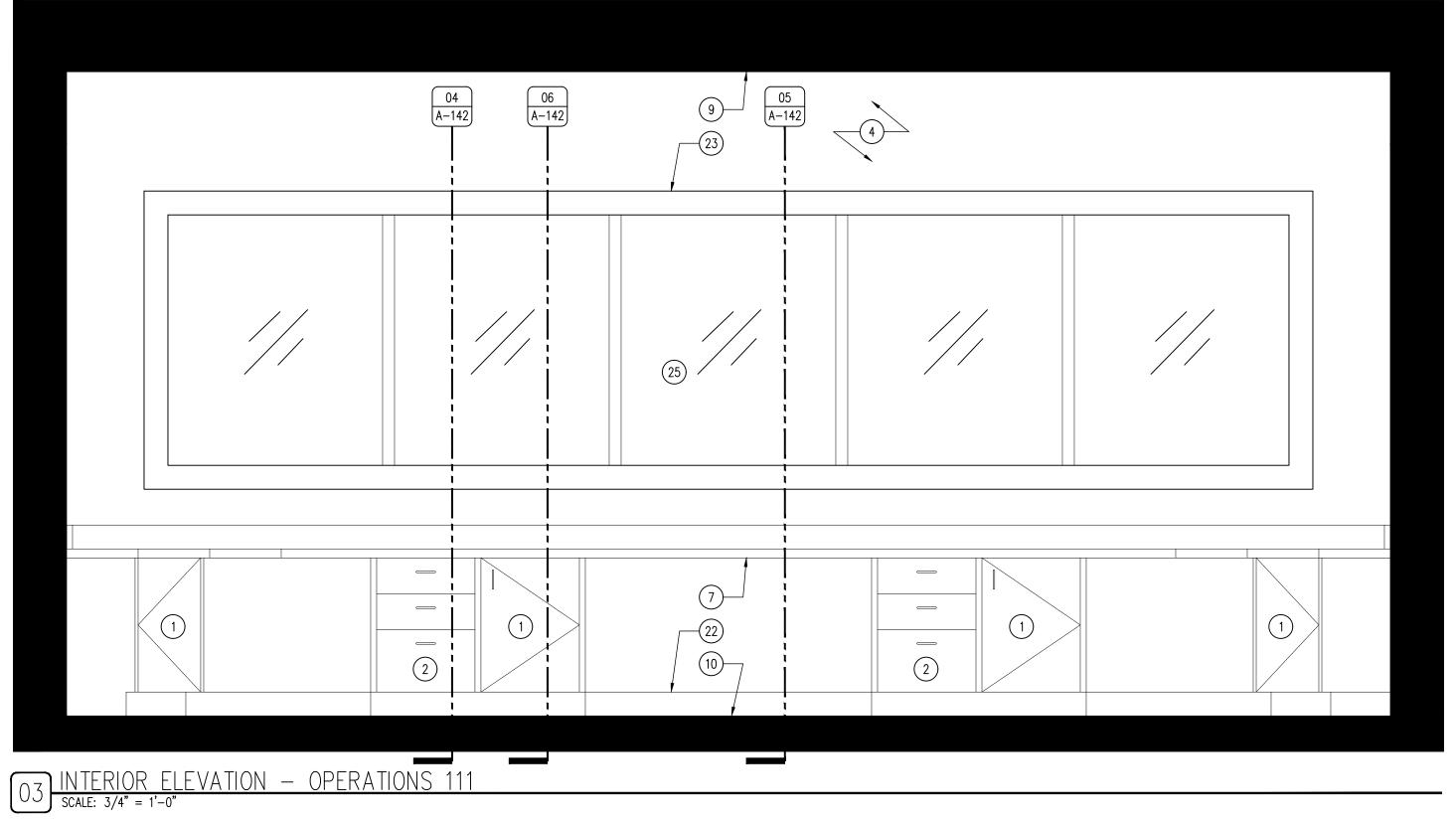
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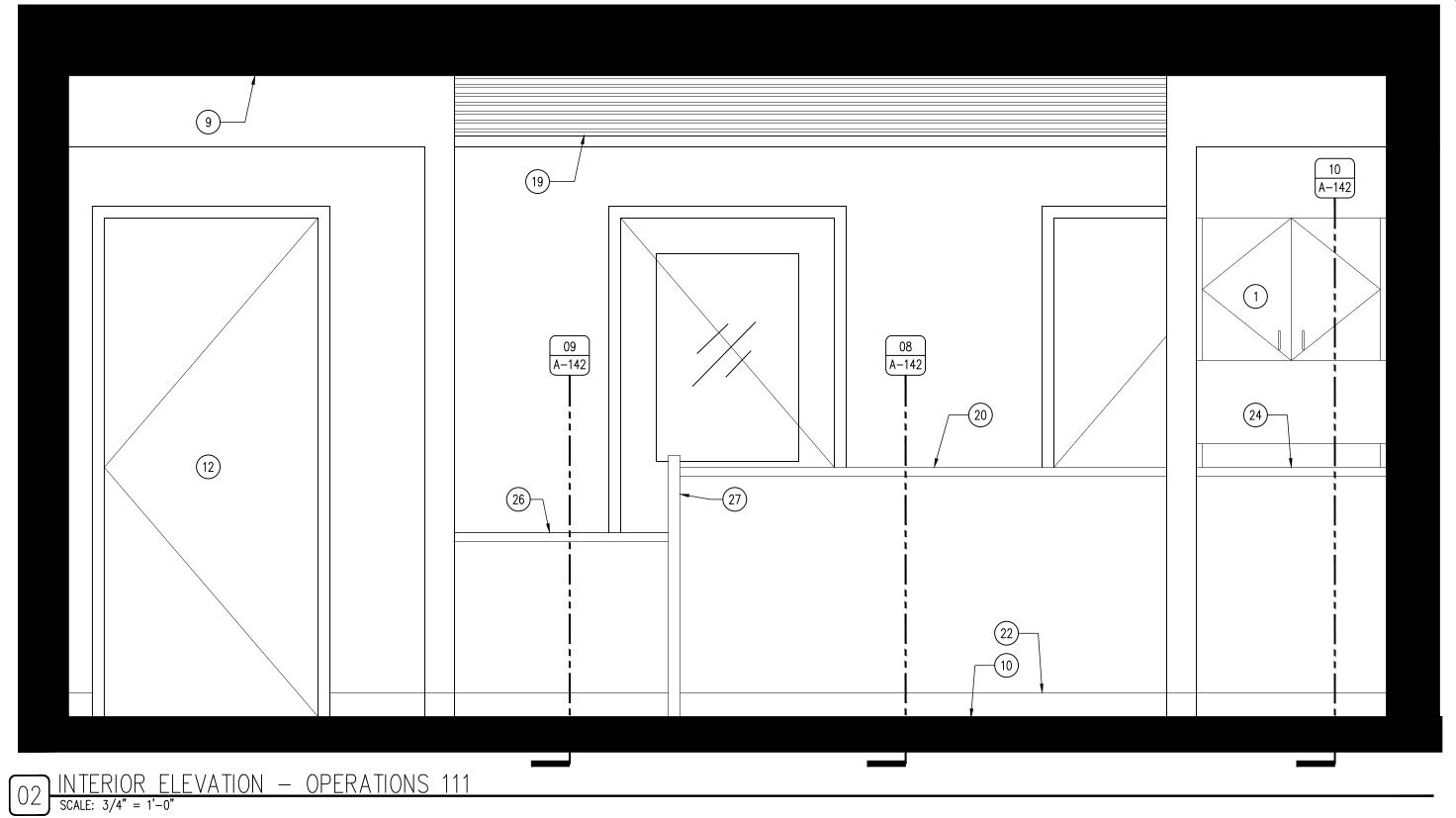
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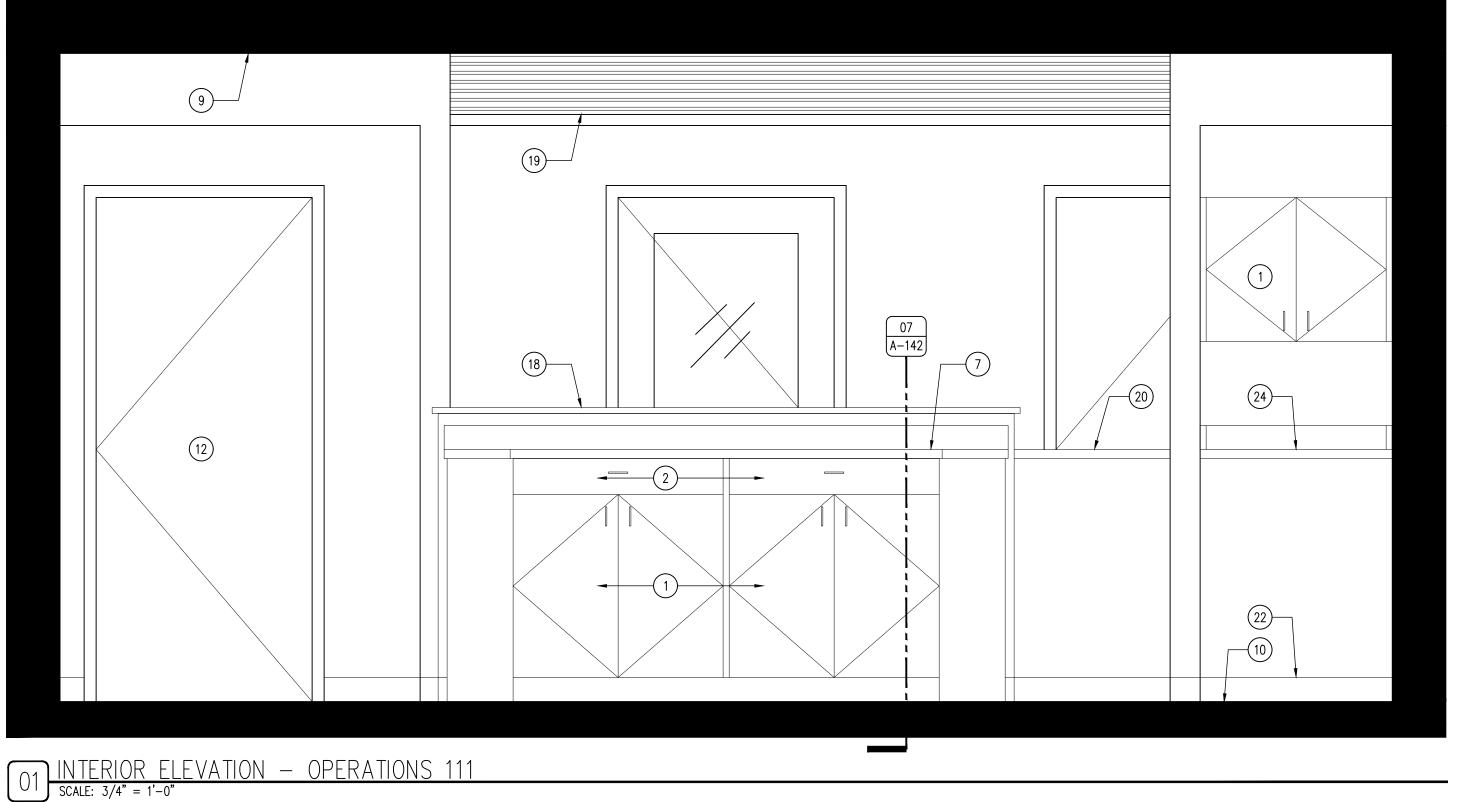
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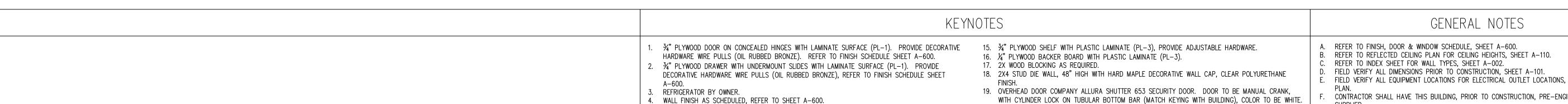
A-140











- GROMMET HOLE WITH PLASTIC GROMMET, SIZE ACCORDING TO MICROWAVE MANUFACTURER'S
- 6. 34" PLYWOOD VALENCE WITH LAMINATE SURFACE (PL-1). REFER TO FINISH SCHEDULE SHEET A-600. 7. 1 1/3" COUNTER WITH PLASTIC LAMINATE SURFACE (PL-2) AND BACKSPLASH WITH 3/4" HARD MAPLE
- FRONT-EDGE. REFER TO FINISH SCHEDULE SHEET A-600. 8. SINGLE BASIN STAINLESS STEEL UNDER-MOUNT SINK, REFER TO PLUMBING DRAWINGS. 9. CEILING FINISH AS SCHEDULED. REFER TO REFLECTED CEILING PLAN SHEET A-110.
- 10. FLOOR AS SCHEDULED. REFER TO FINISH SCHEDULE SHEET A-600. 11. ADA COMPLIANT UNDER-SINK DOORS ON CONCEALED HINGES WITH LAMINATE SURFACE (PL-1). PROVIDE DECORATIVE HARDWARE WIRE PULLS, REFER TO FINISH SCHEDULE SHEET A-600.
- DOOR AS SCHEDULED, REFER TO DOOR SCHEDULE SHEET A-600. MICROWAVE AND FAN EXHAUST COMBO SET, REFER TO ELECTRICAL DRAWINGS. ELECTRICAL OUTLET, REFER TO ELECTRICAL DRAWINGS.
- WITH CYLINDER LOCK ON TUBULAR BOTTOM BAR (MATCH KEYING WITH BUILDING), COLOR TO BE WHITE.
- CONTRACTOR TO ENSURE DOOR EXTENDS TO FLOOR WITHOUT CONFLICT WITH TRANSACTION COUNTER. 20. SOLID SURFACE TRANSACTION COUNTER, REFER TO MILLWORK SECTIONS A-142. 21. ADA COMPLIANT TOILET AS SCHEDULED, REFER TO PLUMBING DRAWINGS.
- 22. RUBBER WALL BASE AS SCHEDULED, REFER TO FINISH SCHEDULE SHEET A-600.
- 23. 4" HARD MAPLE WINDOW TRIM. 24. SOLID SURFACE COUNTER-TOP WITH BACK-SPLASH.
- 25. WINDOW AS SCHEDULED, REFER TO SHEET A-600.
- 26. ADA HEIGHT, SOLID SURFACE TRANSACTION COUNTER, REFER TO MILLWORK SECTIONS A-142. 27. 1 ½" HARD MAPLE PLYWOOD DIVIDER WITH ¾" HARD MAPLE EDGE BANDING, EXTEND 2" BEYOND WIDTH OF COUNTER IN ALL DIRECTIONS, FINISH TWO COATS POLYURETHANE.
- FIELD VERIFY ALL EQUIPMENT LOCATIONS FOR ELECTRICAL OUTLET LOCATIONS, REFER TO ELECTRICAL
- CONTRACTOR SHALL HAVE THIS BUILDING, PRIOR TO CONSTRUCTION, PRE-ENGINEERED BY BUILDING
- SUPPLIER.
- . ALL PLYWOOD PRODUCTS TO HAVE NO ADDED UREA-FORMALDEHYDE (NAUF). H. ALL PLYWOOD CABINET AND DRAWER SURFACES TO HAVE VOC FREE CLEAR SATIN FINISH.

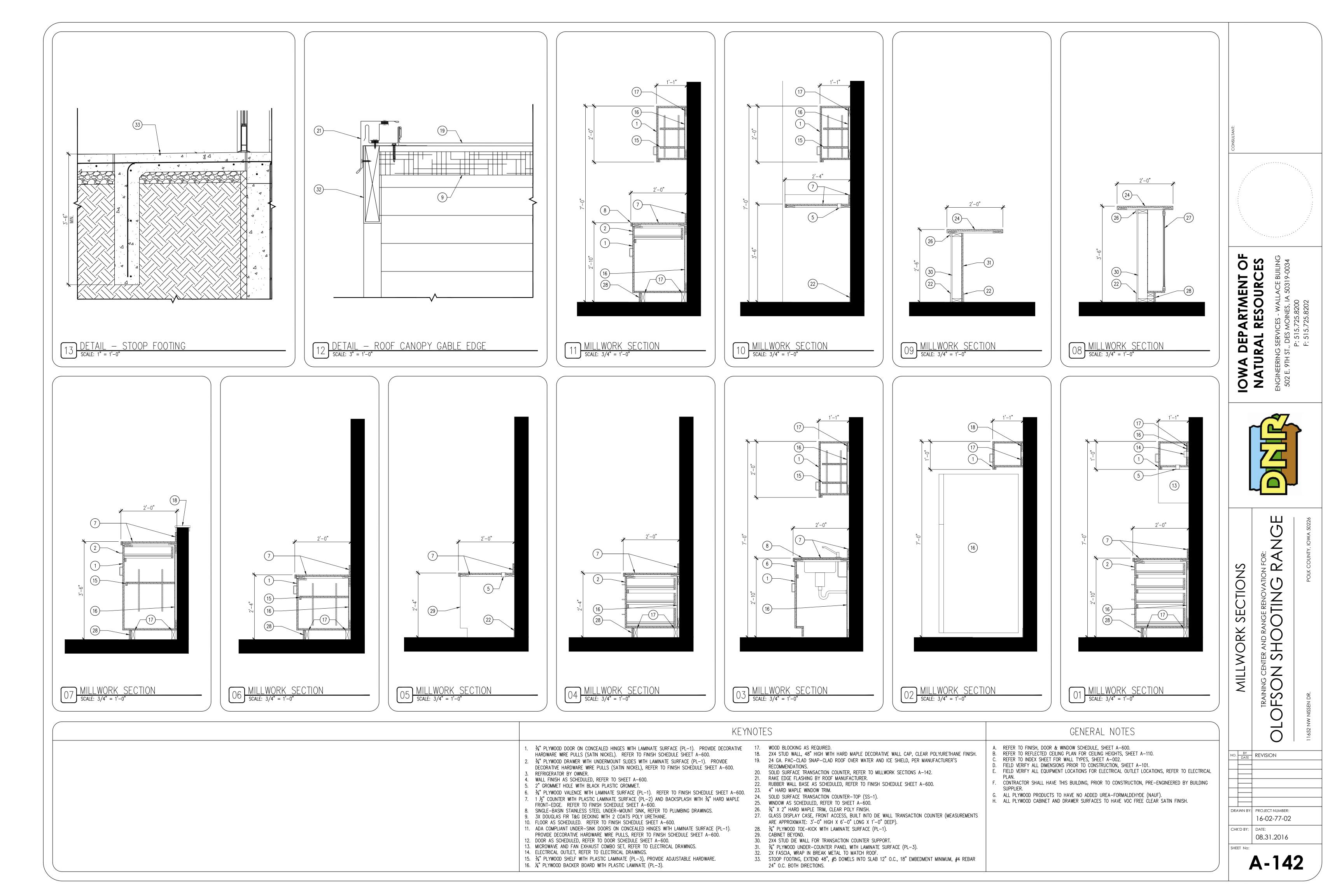
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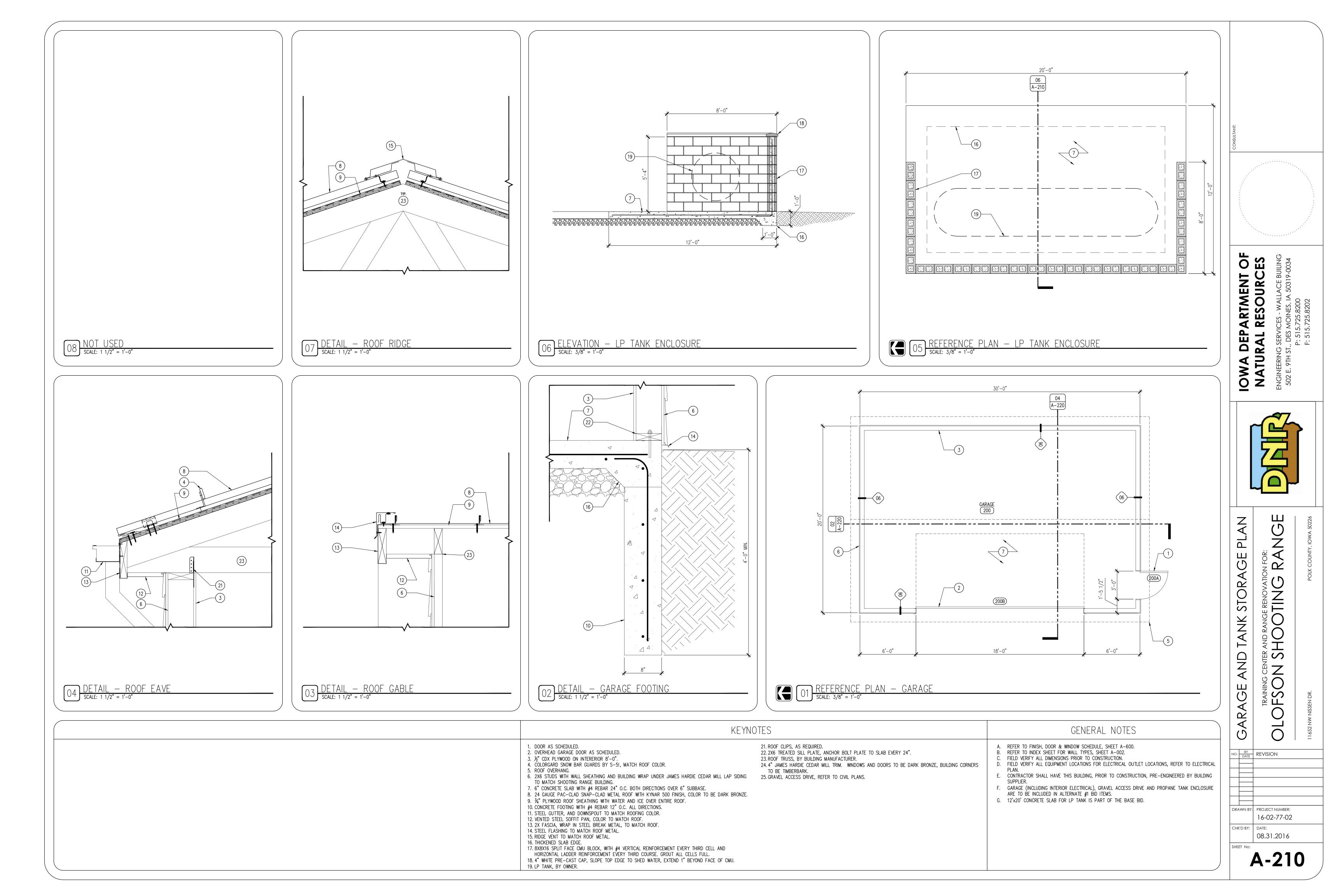
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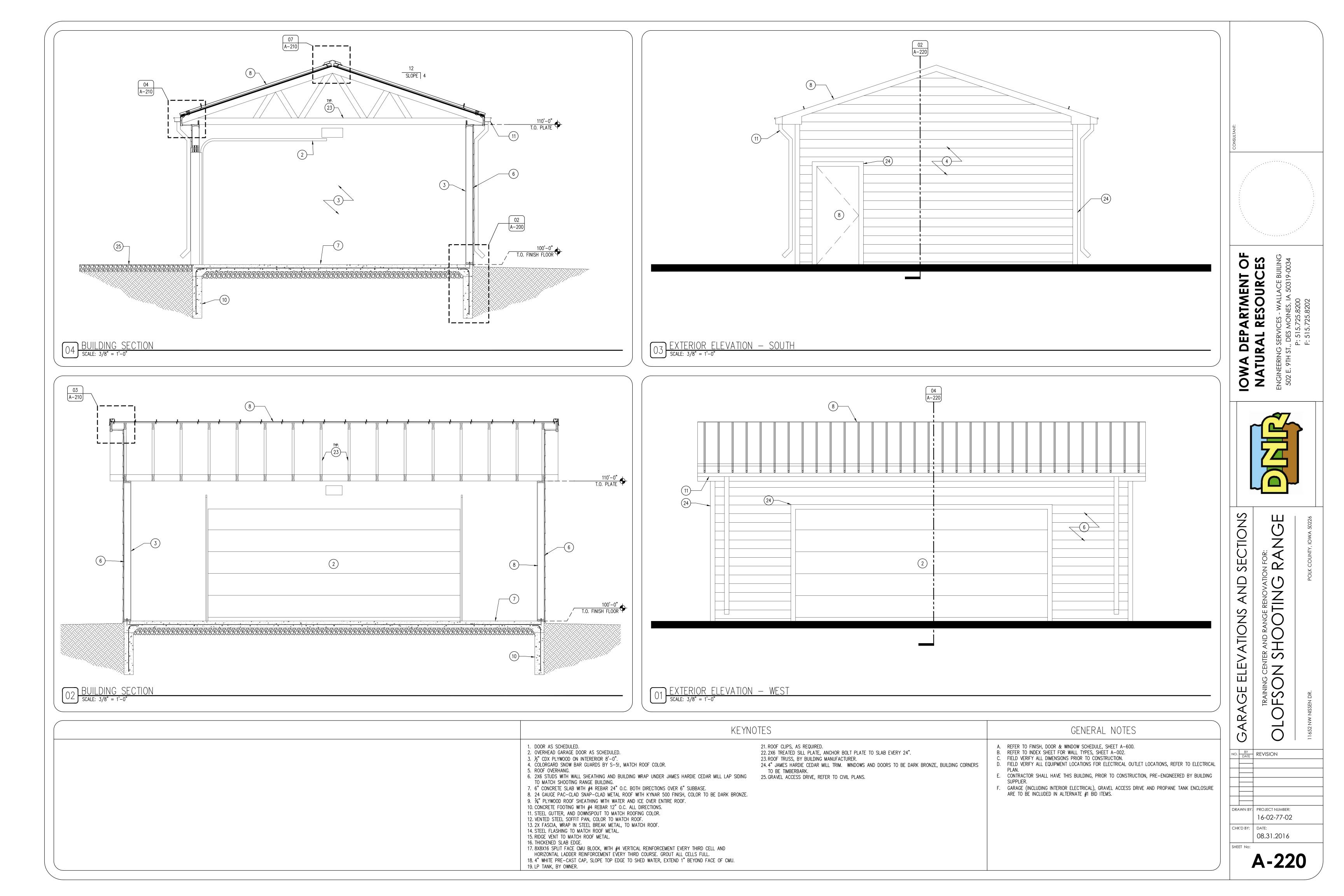
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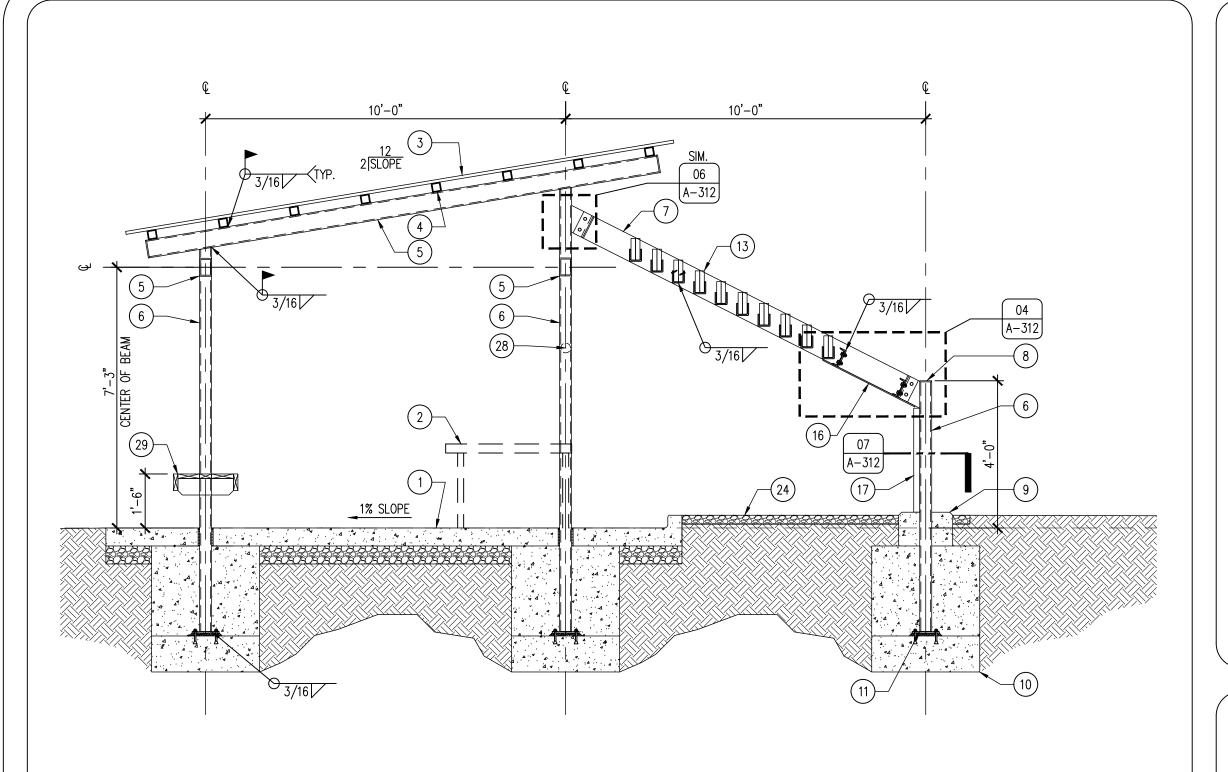
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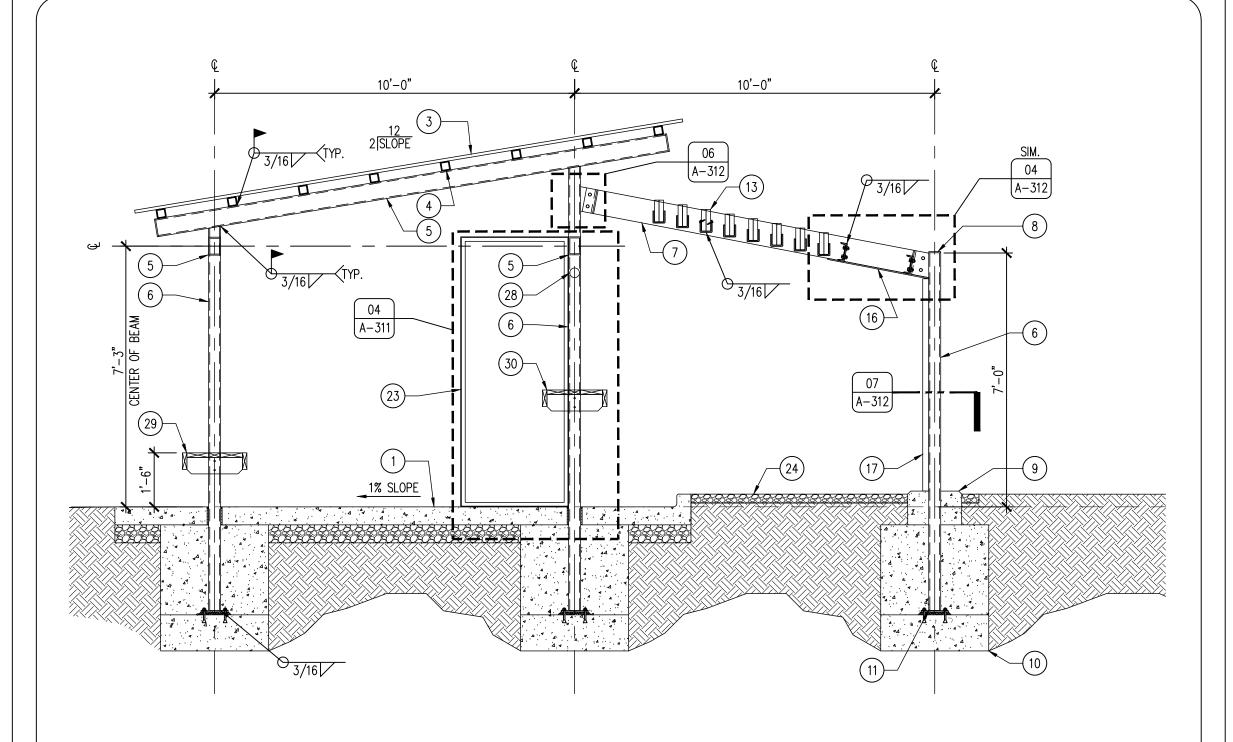








SECTION — SHOOTING STRUCTURE — SEATED POSITION (50 & 100 YARD RANGE)



SECTION — SHOOTING STRUCTURE — STANDING POSITION (30 & 50 YARD RANGE)

A-311

- 6" CONCRETE SLAB OVER 6" SUBBASE WITH CONTINUOUS #4 REBAR 24" O.C. BOTH DIRECTIONS, SLOPE 1% AWAY FROM SHOOTING LINE. 6" CURB SHOOTING SIDE OF SLAB, REFER TO CIVIL DETAILS. CONCRETE SHOOTING BENCH (SUPPLIED BY OWNER), INSTALLED 5'-0" O.C. BY CONTRACTOR.
- 3. STEEL ROOFING, REFER TO A-600 FOR MORE INFORMATION.
- 4. HSS 3X3X¼" 24" 0.C. 5. HSS 6X4X%" BEAM, ATTACHED %" END PLATE BOTH SIDES, WELD AND GRIND SMOOTH.
- 6. HSS 4X4X¾" COLUMN.
- 7. HSS 8X4X¾" BEAM, REMOVABLE. ADJUST ANGLE AND MOUNTING HEIGHT IN FIELD WITH DNR STAFF. 8. 36" CAP PLATE, WELD & GRIND SMOOTH.
- CONCRETE PIER CAP, EXTEND ABOVE SURFACE 2" MINIMUM.
- 10. 36" DIAMETER CONCRETE FOOTING, 48" DEEP MINIMUM. POUR FIRST 12" FOOTING FOR COLUMN BASE
- 11. COLUMN BASE PLATE 1/2" X9X9 WITH 4 1/2" WEDGE ANCHORS, FOR ERECTION ONLY. LEVEL AND INSERT 1" NON-SHRINK GROUT UNDER PLATE.
- TAB WITH 2 3/4" DIAMETER M.B., TYPICAL EACH END. 13. 2 - 2X8 TREATED BAFFLES SCREWED TOGETHER WITH TREATED SCREWS AND SET IN A HSS

12. %" END PLATE WELDED AND GROUND SMOOTH WITH %" KNIFE PLATE TO CONNECT TO %" SHEAR

8X4X¾"X4" LONG CUT IN HALF TO MAKE A "U" HANGER. PROVIDE HOLE FOR SCREW. 14. 3" END PLATE WITH EXTENSIONS TO CARRY PLATE ASSEMBLY, TO MATCH PLATE ABOVE.

- 15. ¾"X6X6 WITH 2 ½" M.B., TYPICAL.
- 16. REMOVABLE ASSEMBLY OF 3/2 X10'-0" X3'-0" STEEL PLATE WELDED TO C6X8.2 CHANNELS THAT ARE BOLTED TO THE SHEAR TABS ON THE BEAMS, STIFFEN ASSEMBLY WITH STEEL ANGLES AS

KEYNOTES

REFERENCE PLAN - 30 YARD RANGE (ALTERNATE BID #3)

- NECESSARY. ADJUST MOUNTING PLACEMENT WITH DNR STAFF FOR PROPER ANGLES AND HEIGHTS. 17. 4X4X¾" STEEL ANGLE, TACK WELD ANGLE TO FACE OF COLUMN. 18. TREATED 2X8 BENCH LUMBER, ATTACH TO SUPPORTS WITH TREATED SCREWS.
- 19. TREATED 2X6 BENCH LUMBER, ATTACH TO SUPPORTS WITH TREATED SCREWS.
- 20. TREATED 2X4 BENCH LUMBER, ATTACH TO SUPPORTS WITH TREATED SCREWS. 21. TREATED 2X6 BOTH SIDES OF STEEL COLUMN, ATTACHED WITH TWO (2) 1/2" DIAMETER GALVANIZED
- CARRIAGE BOLTS. 22. INTERMEDIATE HSS 4X4X¾" POST WITH BASE SUPPORT FLANGE, 10'-0" O.C. EQUALLY SPACED BETWEEN STEEL STRUCTURAL COLUMNS TO SUPPORT WOOD SHOOTING BENCHES AND SITTING

BENCHES. ATTACH POSTS TO SLAB WITH FOUR 1/2" DIAMETER EXPANSION ANCHORS ON EACH

CORNER OF SUPPORT FLANGE. 23. SHOOTING LANE DIVIDER (7'-0" TALL X 3'-0" WIDE), TWO LAYERS SQUARE WEAVE GALVANIZED WIRE MESH (#4), 1/4" SQUARE OPENING MAXIMUM. SANDWICH MESH BETWEEN TWO 1.5X1.5X1/4" GALVANIZED STEEL ANGLES CONTINUOUS AROUND PERIMETER (WELD ASSEMBLY TOGETHER). BOLT WITH 1/4" GALVANIZED CARRIAGE BOLTS WITH LOCK WASHERS FOUR TIMES TO COLUMN OR OVERHEAD BEAM (TWO EACH SIDE) AND FOUR BELOW BENCH AREA ON STEEL COLUMN (TWO EACH SIDE), ATTACH

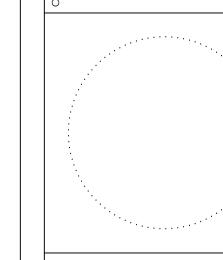
BOTTOM SECTION TO CONCRETE WITH FOUR 1/4" ANCHORS (TWO EACH SIDE, ON CORNERS).

- 24. 4" CRUSHED GRAVEL, SET FLUSH WITH TOP-SIDE OF CURB, REFER TO CIVIL DRAWINGS. EXTEND
- ENTIRE LENGTH OF SHOOTING STRUCTURE X 8'-0". 25. SHOOTING PLATFORMS, BY OWNER.
- 26. ROOF LINE OVERHEAD. 27. END PLATE 36" WELDED AND GROUND SMOOTH WITH 36" KNIFE PLATE TO CONNECT TO 36" SHEAR
- TAB WITH $2 \frac{3}{4}$ " DIAMETER M.B., TYPICAL EACH END. 28. SHOOTING LANE LIGHT, REFER TO ELECTRICAL. MOUNT CENTER OF LIGHT 6'-6" A.F.F. ON STANDING
- RANGES AND 5'-0" A.F.F. ON SEATED RANGES.
- 29. TREATED WOOD SEATING BENCH, MOUNT 1'-6" A.F.F.
- 30. TREATED WOOD SHOOTING BENCH, MOUNT 3'-2" A.F.F. EXCEPT ON ADA LANES, MOUNT 2'-6" A.F.F. 31. ADA SHOOTING BENCH.
- 32. " COMPRESSIBLE EXPANSION JOINT MATERIAL WITH CONTINUOUS POLYURETHANE SEALANT.
- 33. REMOVABLE ASSEMBLY OF 3/2"X10'-0"X2'-4" STEEL PLATE BOLTED TO 3/2"X3"X3" ANGLESS THAT ARE WELDED TO VERTICAL FACE OF COLUMN, STIFFEN ASSEMBLY WITH STEEL ANGLES AS NECESSARY. ADJUST MOUNTING PLACEMENT WITH DNR STAFF FOR PROPER ANGLES AND HEIGHTS.

GENERAL NOTES

- A. FIELD VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION, SHEET A-101. ALL DIMENSIONS FOR BAFFLING SYSTEM ARE APPROXIMATE AND SHALL BE FIELD VERIFIED WITH OWNER PRIOR TO
- PERMANENT INSTALLATION.
- FIELD VERIFY ALL EQUIPMENT LOCATIONS FOR ELECTRICAL OUTLET LOCATIONS, REFER TO ELECTRICAL
- ALL STEEL STRUCTURE AND MEMBERS TO BE PAINTED, ONE COAT STEEL PRIMER AND TWO COATS FINISH PAINT, COLOR TBD.
- 50-YARD RANGE TO BE PART OF ALTERNATE BID #2.
- 30-YARD RANGE TO BE PART OF ALTERNATE BID #3.

100-YARD RANGE TO BE PART OF ALTERNATE BID #4.





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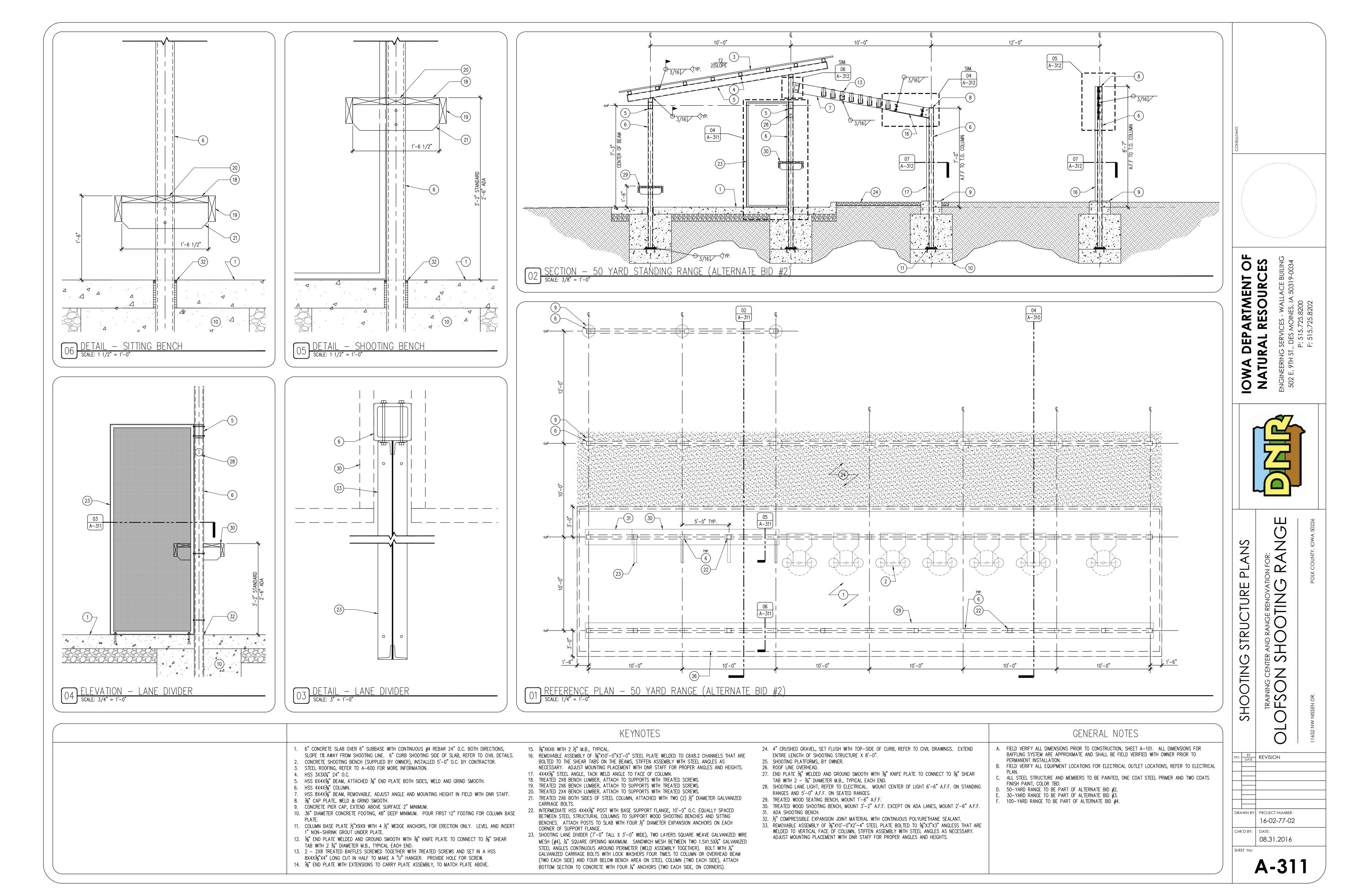
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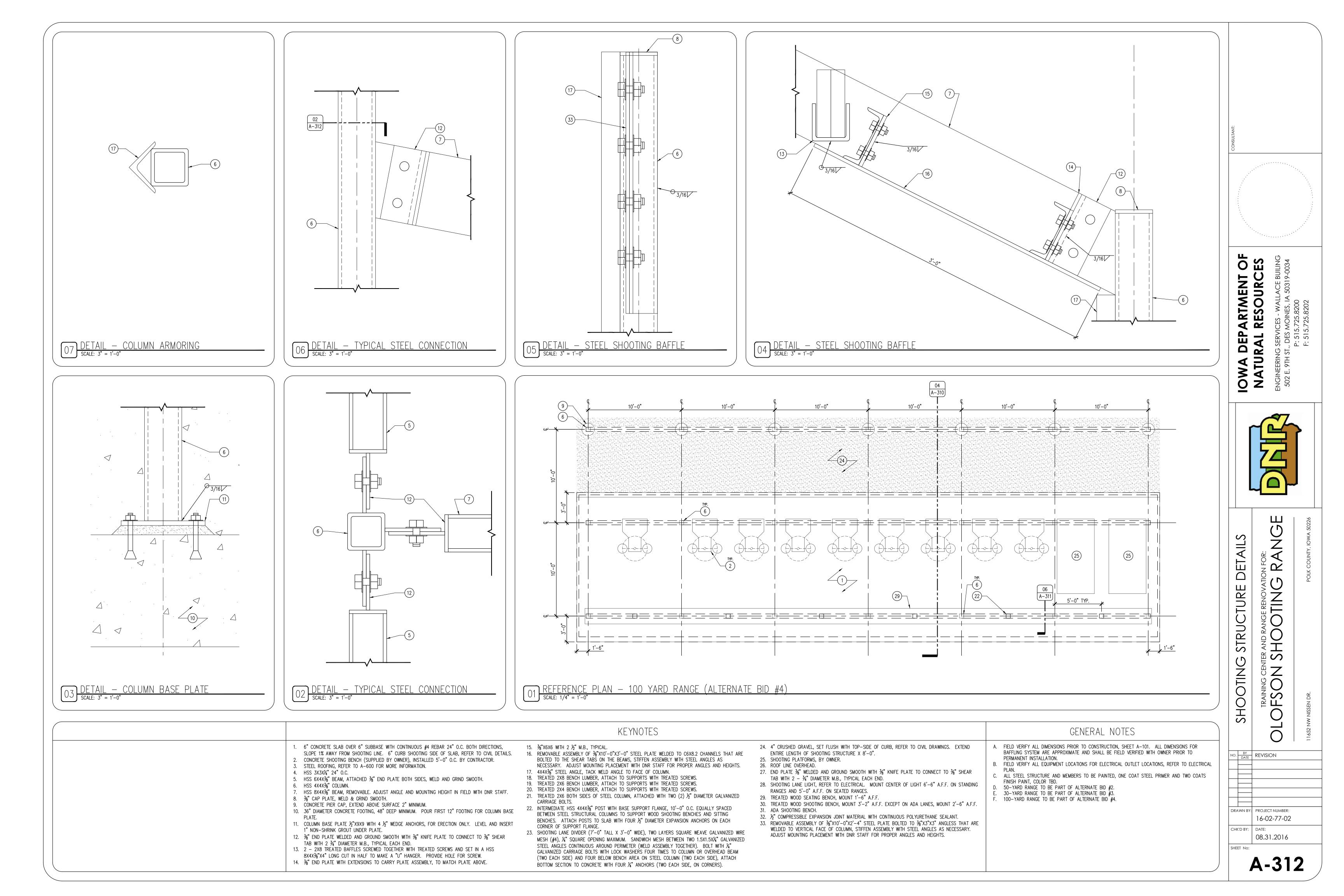
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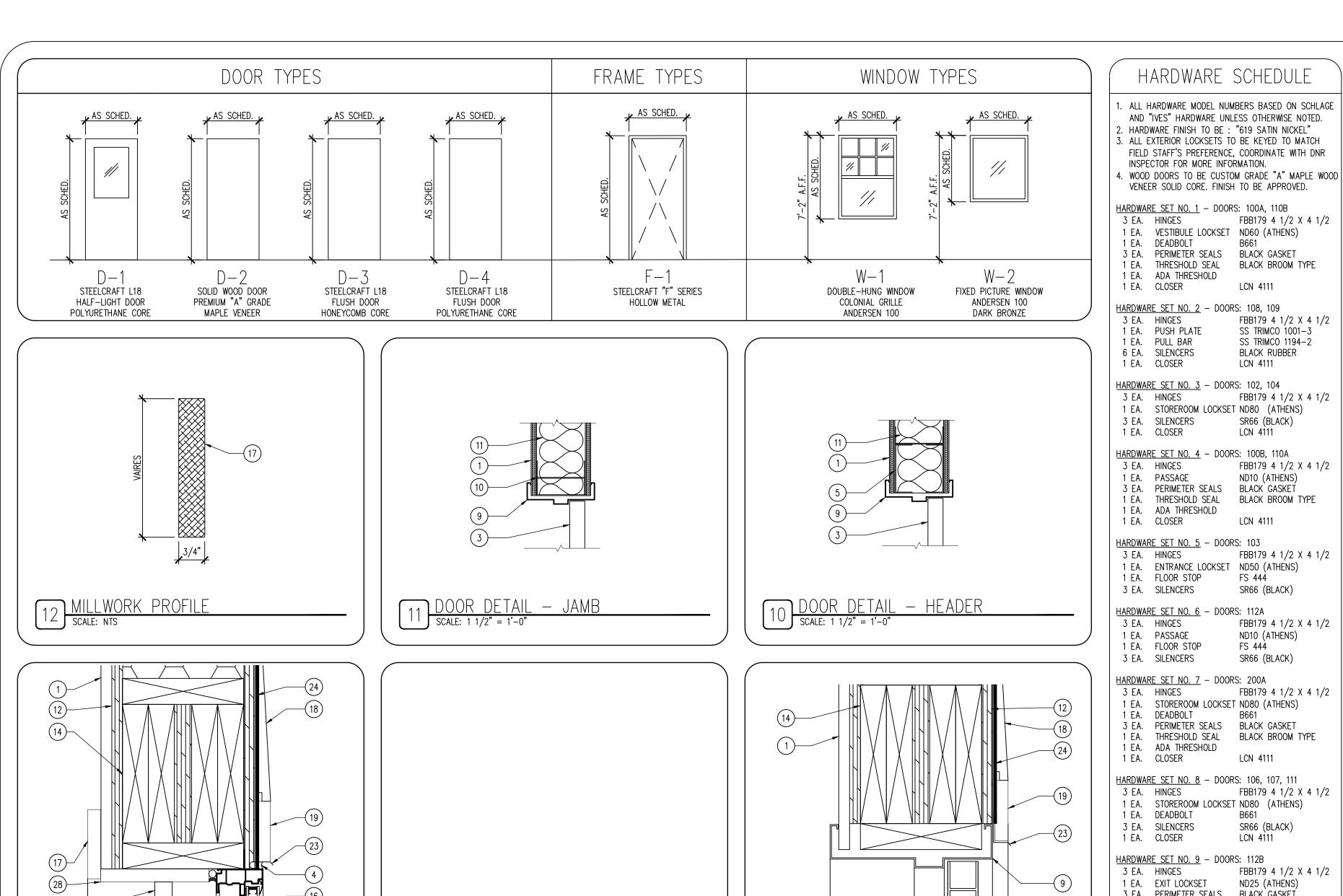
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NOT USED SCALE: 3" = 1'-0"

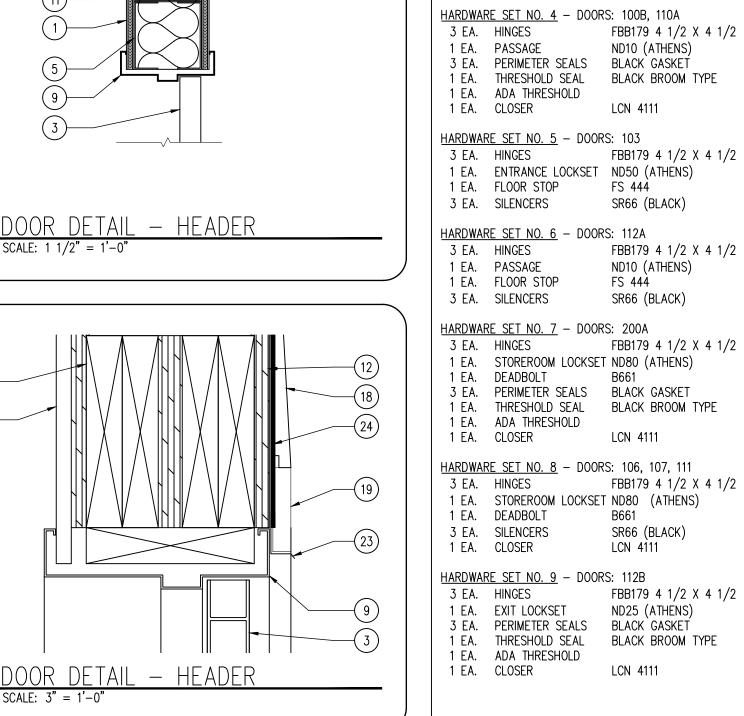
05 NOT USED SCALE: 3" = 1'-0"

 $J \subseteq SCALE$: 6" = 1'-0"

06 WINDOW DETAIL - JAMB

SCALE: 3" = 1'-0"

28



04 DOOR DETAIL - JAMB

SCALE: 3" = 1'-0"

HARDWARE SCHEDULE

. ALL HARDWARE MODEL NUMBERS BASED ON SCHLAGE

AND "IVES" HARDWARE UNLESS OTHERWISE NOTED.

. HARDWARE FINISH TO BE : "619 SATIN NICKEL"

VENEER SOLID CORE. FINISH TO BE APPROVED.

1 EA. VESTIBULE LOCKSET ND60 (ATHENS)

1 EA. STOREROOM LOCKSET ND80 (ATHENS)

1 EA. THRESHOLD SEAL BLACK BROOM TYPE

LCN 4111

1 EA. DEADBOLT

1 EA. CLOSER

1 EA. PUSH PLATE

1 EA. PULL BAR

6 EA. SILENCERS

1 EA. CLOSER

1 EA. CLOSER

1 EA. ADA THRESHOLD

FBB179 4 1/2 X 4 1/2

FBB179 4 1/2 X 4 1/2

FBB179 4 1/2 X 4 1/2

1. REWALL BOARD.

3. DOOR AS SCHEDULED.

5. MTL. BOX STUD HEADER

10. 3 5/8" METAL. STUD.

6. ADA COMPLIANT, THRESHOLD. 7. WOOD BLOCKING AS REQUIRED.

8. R-15 MINIMUM BATT INSULATION.

(12. SIP WALL SYSTEM AS SCHEDULED.

9. DOOR FRAME AS SCHEDULED.

11. SOUND BATT INSULATION.

2. 6" STRUCTURAL METAL STUD.

4. CONTINOUS SEALANT AND BACKER ROD

SS TRIMCO 1001-3

SS TRIMCO 1194-2

BLACK RUBBER

SR66 (BLACK) LCN 4111

LCN 4111

INSPECTOR FOR MORE INFORMATION.

3. ALL EXTERIOR LOCKSETS TO BE KEYED TO MATCH FIELD STAFF'S PREFERENCE, COORDINATE WITH DNR



			FINISH SCHE	EDULE				
ENTION		MANUFACTURI	ER INFO					
FINISH MARK	MATERIAL	COMPANY NAME	PRODUCT NUMBER	DIMENSION	COLOR	FINISH	COMMENTS	
FLOOR FI	INISH							
CONC-1	SEALED CONCRETE	-	-	-	CLEAR	HIGH-GLOSS	2 COATS POLYURETHANE SEALER	
RB-1	RUBBER BASE	JOHNSONITE	63	4"	BURNT UMBER	-	_	
CEILING F	FINISH							
ACT-1	ACOUSTICAL CLG TILE	ARMSTRONG	1911 TEGULAR	24"X 24"	WHITE	ULTIMA	PRELUDE XL 15/16" SUSP. SYSTEM	
GYP-1	GYPSUM CEILING	-	-	1/2"	WHITE	PNT-1	-	
INTERIOR	FINISH							
PNT-1	INTERIOR PAINT	SHERWIN WILLIAMS	DURATION	-	SW6106 - KILIM BEIGE	PEARL	COMMON	
PNT-2	INTERIOR PAINT	SHERWIN WILLIAMS	DURATION	-	SW6108 - LATTE	PEARL	ACCENT	
RW-1	ESSENTIAL BOARD	REWALL	-	1/2"	_	ORANGE PEEL	FINISH WITH HEAVY ORANGE PEEL	
MILLWORK	K / WOOD FINISH							
PL-1	PLASTIC LAMINATE	FORMICA	962-58	-	PLATINUM	MATTE	-	
PL-2	PLASTIC LAMINATE	FORMICA	689-58	-	STELLAR	MATTE	3/4" HARD MAPLE EDGE ON ALL COUNTER	
PL-3	PLASTIC LAMINATE	-	-	-	BLACK	MATTE	INTERIOR & SHELVES OF ALL CABINET BOXE	
SS-1	CORIAN	DUPONT	-	-	LAVA ROCK	MANUF.	TRANSACTION COUNTER ONLY	
WD-1	HARD MAPLE	-	-	3/4	CLEAR	2 COATS POLY	DIMENSION VARIES BY APPLICATION	
EXTERIOR	RFINISH							
SR-1	STANDING SEAM METAL ROOF	MSMC	VERTICAL SEAM	24 GA	DARK BRONZE	KYNAR 500	PANELS TO HAVE STRIATIONS	
CB-1	CEMENT BOARD SIDING	JAMES HARDIE	CEDARMILL COLORPLUS	8.25"	TIMBER BARK	MANUF.	-	
CB-2	CEMENT BOARD SIDING	JAMES HARDIE	STAGGERED EDGE	_	TIMBER BARK	MANUF.	ACCENT	

CONC-1	SEALED CONCRETE	-	-	_	CLEAR	HIGH-GLOSS	2 COATS POLYURETHANE SEALER
RB-1	RUBBER BASE	JOHNSONITE	63	4"	BURNT UMBER	_	-
CEILING	FINISH				•		
ACT-1	ACOUSTICAL CLG TILE	ARMSTRONG	1911 TEGULAR	24"X 24"	WHITE	ULTIMA	PRELUDE XL 15/16" SUSP. SYSTEM
GYP-1	GYPSUM CEILING	-	-	1/2"	WHITE	PNT-1	-
INTERIOR	FINISH						
PNT-1	INTERIOR PAINT	SHERWIN WILLIAMS	DURATION	_	SW6106 - KILIM BEIGE	PEARL	COMMON
PNT-2	INTERIOR PAINT	SHERWIN WILLIAMS	DURATION	_	SW6108 - LATTE	PEARL	ACCENT
RW-1	ESSENTIAL BOARD	REWALL	-	1/2"	-	ORANGE PEEL	FINISH WITH HEAVY ORANGE PEEL
MILLWOR	K / WOOD FINISH						
PL-1	PLASTIC LAMINATE	FORMICA	962-58	_	PLATINUM	MATTE	-
PL-2	PLASTIC LAMINATE	FORMICA	689-58	_	STELLAR	MATTE	3/4" HARD MAPLE EDGE ON ALL COUNTER
PL-3	PLASTIC LAMINATE	-	-	_	BLACK	MATTE	INTERIOR & SHELVES OF ALL CABINET BOXI
SS-1	CORIAN	DUPONT	-	_	LAVA ROCK	MANUF.	TRANSACTION COUNTER ONLY
WD-1	HARD MAPLE	-	-	3/4	CLEAR	2 COATS POLY	DIMENSION VARIES BY APPLICATION
EXTERIO	R FINISH						
SR-1	STANDING SEAM METAL ROOF	MSMC	VERTICAL SEAM	24 GA	DARK BRONZE	KYNAR 500	PANELS TO HAVE STRIATIONS
CB-1	CEMENT BOARD SIDING	JAMES HARDIE	CEDARMILL COLORPLUS	8.25"	TIMBER BARK	MANUF.	-
CB-2	CEMENT BOARD SIDING	JAMES HARDIE	STAGGERED EDGE	_	TIMBER BARK	MANUF.	ACCENT

22. QUARTZ COUNTER TOP, QZ-1, ANGLE BRACE

23. METAL FLASHING W/ SEALANT, AS REQUIRED.

25. WATER RESISTANT PLYWOOD SHEATHING.

27. POST-FRAME BUILDING BY MANUFACTURER.

28. 3/4" HARD MAPLE PLYWOOD, 2 COATS POLY.

29. INDOW WINDOW INSERT (FIXED WINDOWS ONLY)

MATCH MULLION SPACING WITH WINDOWS.

CONTINUOUS VAPOR BARRIER.

24. CONTINUOUS VAPOR BARRIER.

26. STEEL SIDING AS SCHEDULED.

AS REQUIRED.

								DOOR SC	HEDULE								
)00R						FRAME								
DOOR		DIMENSION		TVDE	01.400	FINICIA		DETAILS		TVDE	Envious		511 UOL	FIRE RATING		HARDWARE	COMMENTS
NUMBER	WIDTH	HEIGHT	THICK.	TYPE	GLASS	FINISH	HEAD	JAMB	THRESHOLD	TYPE	FINISH	LABEL	SET #	KEYSIDE ROOM NUMBER			
100A	3'-0"	7'-0"	1 3/4"	D-1	MANUF.	MANUF.	07/A-600	04/A-600	01/A-600	F-1	MANUF.		1	EXT.	EXT. STEELCRAFT "L" SERIES - HALF-LIGHT		
100B	3'-0"	7'-0"	1 3/4"	D-1	MANUF.	MANUF.	07/A-600	04/A-600	01/A-600	F-1	MANUF.		4	_	EXT. STEELCRAFT "L" SERIES - HALF-LIGHT		
102	3'-0"	7'-0"	1 3/4"	D-2	MANUF.	CLEAR	10/A-600	11/A-600	-	F-1	MANUF.		3	101	PREMIUM GRADE "A" MAPLE		
103	3'-0"	7'-0"	1 3/4"	D-2	MANUF.	CLEAR	10/A-600	11/A-600	_	F-1	MANUF.		5	105	PREMIUM GRADE "A" MAPLE		
104	3'-0"	7'-0"	1 3/4"	D-2	MANUF.	CLEAR	10/A-600	11/A-600	_	F-1	MANUF.		3	105	PREMIUM GRADE "A" MAPLE		
106	3'-0"	7'-0"	1 3/4"	D-2	MANUF.	CLEAR	10/A-600	11/A-600	_	F-1	MANUF.		8	105	PREMIUM GRADE "A" MAPLE		
107	3'-0"	7'-0"	1 3/4"	D-3	MANUF.	CLEAR	10/A-600	11/A-600	_	F-1	MANUF.		8	106	PREMIUM GRADE "A" MAPLE		
108	3'-0"	7'-0"	1 3/4"	D-2	MANUF.	CLEAR	10/A-600	11/A-600	_	F-1	MANUF.		2	_	PREMIUM GRADE "A" MAPLE		
109	3'-0"	7'-0"	1 3/4"	D-2	MANUF.	CLEAR	10/A-600	11/A-600	_	F-1	MANUF.		2	_	PREMIUM GRADE "A" MAPLE		
110A	3'-0"	7'-0"	1 3/4"	D-1	MANUF.	MANUF.	07/A-600	04/A-600	01/A-600	F-1	MANUF.		4	_	EXT. STEELCRAFT "L" SERIES - HALF-LIGHT		
110B	3'-0"	7'-0"	1 3/4"	D-1	MANUF.	MANUF.	07/A-600	04/A-600	01/A-600	F-1	MANUF.		1	110	EXT. STEELCRAFT "L" SERIES - HALF-LIGHT		
111	3'-0"	7'-0"	1 3/4"	D-2	MANUF.	CLEAR	10/A-600	11/A-600	-	F-1	MANUF.		8	101	PREMIUM GRADE "A" MAPLE		
112A	3'-0"	7'-0"	1 3/4"	D-2	MANUF.	CLEAR	10/A-600	11/A-600	-	F-1	MANUF.		6	-	PREMIUM GRADE "A" MAPLE		
112B	3'-0"	7'-0"	1 3/4"	D-4	MANUF.	MANUF.	07/A-600	04/A-600	01/A-600	F-1	MANUF.		9	-	EXT. STEELCRAFT "L" SERIES - FLUSH DOOR		
200A	3'-0"	7'-0"	1 3/4"	D-3	MANUF.	MANUF.	08/A-600	05/A-600	SIM 01/A-600	F-1	MANUF.		7	EXT.	EXT. STEELCRAFT "L" SERIES - FLUSH DOOR		
200B	18'-0"	8'-0"	_	-	_	DARK BROWN	_	_	_	_	DARK BROWN		_	_	KEYPAD AND 2X REMOTES OPERATORS		

13. 2X, PER MANUF. RECOMMENDATION.

15. BOX STUD HEADER.

21. CONCRETE SLAB.

16. WINDOW AS SCHEDULED.

WITH HAND EASED EDGE.

DOORSCONCRETE SLAB.

14. SIP HEADER, PER MANUF. RECOMMENDATION.

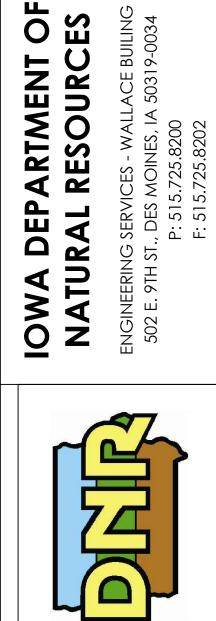
17. HARD MAPLE TRIM, WD-1, 2 COATS POLY

18. CEMENT BOARD SIDING, AS SCHEDULED.

19. CEMENT BOARD TRIM, AS SCHEDULED.

20. BRUSH TYPE GASKET FOR EXTERIOR

	WINDOW SCHEDULE												
WINDOW FRAME													
	WINDOW	DIMEN	NSION	TVDE	CLACC	FINICH		DETAILS		TVDE	FINICIT	QUANTITY	COMMENTS
	TYPE	WIDTH	HEIGHT	TYPE	GLASS	FINISH	HEAD	JAMB	SILL	TYPE	FINISH		
	W-1	40"	58"	1	MANUF.	BRONZE/WHITE	SIM. 09/A-600	SIM. 06/A-600	SIM. 03/A-600	_	DARK BRONZE	2	ANDERSEN 100 - DOUBLE HUNG WITH COLONIAL GRILLE
	W-2	40"	46"	2	MANUF.	BRONZE/WHITE	09/A-600	06/A-600	12/A-600	_	DARK BRONZE	1	ANDERSEN 100 - FIXED WINDOWS WITH INDOW WINDOW INSERTS



CHEDULE

A. WINDOW BASIS OF DESIGN, ANDERSEN 100

SERIES. REFER TO MANUFACTURER'S

B. ALL FIXED WINDOWS TO RECEIVE ACOUSTIC

WINDOW INSERTS ON INTERIOR SIDE OF

C. CHECK ALL QUANTITIES, DIMENSIONS AND

FINISHES BEFORE ORDERING.

GRADE WITH COMMERCIAL COATING - INDOW

INSTRUCTIONS.

WINDOWS.

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MECHANICAL SYMBOLS



UNION AIR VENT — MANUAL AIR VENT — AUTOMATIC THERMOMETER WITH GAGE COCK PRESSURE GAUGE WITH GAGE COCK STRAINER REDUCED PRESSURE BACKFLOW PREVENTER WATER HAMMER ARRESTOR — SIZE AS NOTED CHECK VALVE RISER DOWN (ELBOW) RISER DOWN (TEE) RISER UP (ELBOW) NEW PIPING SHUT OFF VALVE (BALL, BUTTERFLY, ETC. REFER TO SPECS)

NOTE: NOT ALL SYMBOLS APPLY TO THIS PROJECT.

MECHANICAL GENERAL NOTES

COORDINATE LOCATION/INSTALLATION OF MECHANICAL AND ELECTRICAL WORK WITH ALL OTHER TRADES. NO ASPECT OF A SYSTEM INSTALLATION OR ITS ROUGH—IN SHALL COMMENCE UNTIL PROPER AND TIMELY COORDINATION WITH ALL TRADES ASSOCIATED WITH THE INSTALLATION HAS TRANSPIRED. ITEMS TO BE COORDINATED SHALL INCLUDE BUT NOT BE LIMITED TO: BUILDING STRUCTURE, SHEET METAL, ALL PIPING SYSTEMS, LIGHT FIXTURES, CONDUITS, ETC. REFER TO ALL GENERAL, MECHANICAL, AND ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT.

INCORPORATE INTO INSTALLATION MECHANICAL SPECIFICATIONS, DRAWINGS, STATE AND LOCAL CODES, AND OTHER APPLICABLE REQUIREMENTS.

ON COMPLETION OF THE INSTALLATION, MECHANICAL CONTRACTOR SHALL COOPERATE WITH THE OWNER TO PROVIDE ANY NECESSARY ADJUSTING AND BALANCING TO OBTAIN PROPER OPERATION OF ALL EQUIPMENT AND SYSTEMS. CONTRACTOR SHALL PROVIDE ALL FACILITIES AND EQUIPMENT, AND MAKE ALL TESTS, REQUIRED FOR ADJUSTMENTS AND BALANCING TO ESTABLISH THE PROPER PERFORMANCE OF ANY PIECE OF EQUIPMENT.

PIPING SHALL NOT BLOCK CLEARANCES TO MECHANICAL EQUIPMENT. INSTALLING CONTRACTOR SHALL BE RESPONSIBLE FOR RELOCATING PIPING IF ACCESS CLEARANCES ARE OBSTRUCTED.

HVAC GENERAL NOTES

MECHANICAL CONTRACTOR TO PROVIDE A COMPLETE HVAC SYSTEM, INCLUDING DUCTWORK, MECHANICAL EQUIPMENT, SUPPORTS, HANGERS AND ALL APPURTENANCES. INSTALL ALL EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS. INSTALL SYSTEM TO MEET ALL CITY AND STATE CODES AND REQUIREMENTS.

DRAWING PLANS, SCHEMATICS, AND DIAGRAMS INDICATE GENERAL LOCATION AND ARRANGEMENT OF DUCT SYSTEM. INDICATED DUCT LOCATIONS, CONFIGURATIONS, AND ARRANGEMENTS WERE USED TO SIZE DUCTS AND CALCULATE FRICTION LOSS FOR AIR—HANDLING EQUIPMENT SIZING AND FOR OTHER DESIGN CONSIDERATIONS.

ALL DUCT DIMENSIONS LISTED ARE INTERIOR FREE AREA DUCT DIMENSIONS AND DO NOT INCLUDE INSULATION REQUIREMENTS. CONTRACTOR MUST INCREASE DUCT SIZES ACCORDINGLY TO ACCOMMODATE DUCT LINER.

PLUMBING GENERAL NOTES

MECHANICAL CONTRACTOR TO PROVIDE A COMPLETE PLUMBING SYSTEM, INCLUDING, PIPE, INSULATION, HANGERS, SUPPORTS, EQUIPMENT, FIXTURES, MIXING VALVES, VALVES, AND ALL APPURTENANCES. INSTALL ALL EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS. SIZE AND INSTALL SYSTEM PER PLUMBING CODE. COMPLY WITH ALL LOCAL AND STATE CODES AND REQUIREMENTS.

DRAWING PLANS, SCHEMATICS, AND DIAGRAMS INDICATE GENERAL LOCATION AND ARRANGEMENT OF PLUMBING SYSTEM.

MECHANICAL ABBREVIATIONS

ABSOR	ABSORPTION	EQUIP	EQUIPMENT	LDBT	LEAVING DRY BULB TEMPERATURE
ACU	AIR CONDITIONING UNIT	EST	EXTERNAL STATIC PRESSURE	LWT	LEAVING WATER TEMPERATURE
AD	ACCESS DOOR OR AREA DRAIN	EWBT	ENTERING WET BULB TEMPERATURE	LWBT	LEAVING WET BULB TEMPERATURE
AFF	ABOVE FINISHED FLOOR	EWC	ELECTRIC WATER COOLER	MB	MOP BASIN
AFG	ABOVE FINISHED GRADE	EWT	ENTERING WATER TEMPERATURE	MBH	1000 BTUH
AHU	AIR HANDLING UNIT	EX	EXISTING	MC	MECHANICAL CONTRACTOR
AV	AIR VENT	EXH	EXHAUST	MECH	MECHANICAL
вот	воттом	EXP	EXPANSION	MH	MANHOLE
BTU	BRITISH THERMAL UNIT	FAI	FRESH AIR INTAKE	NTS	NOT TO SCALE
BTUH	BTU PER HOUR	FCU	FAN COIL UNIT	OA	OUTSIDE AIR
CA	COMPRESSED AIR	FD	FLOOR DRAIN	OD	OVERFLOW ROOF DRAIN
СВ	CATCH BASIN	FLEX	FLEXIBLE	PSI	POUNDS PER SQUARE INCH
CENT	CENTRIFUGAL	FLR	FLOOR	PRV	POWER ROOF VENTILATOR
CFM	CUBIC FEET PER MINUTE	FPM	FEET PER MINUTE	PRV	PRESSURE REDUCING VALVE
CI	CAST IRON	FPS	FEET PER SECOND	PV	PRESSURE VENT
CL	CENTER LINE	FS	FLOOR SINK	PVC	POLYVINYL CHLORIDE
COND	CONDENSATE	FT	FINTUBE	RA	RETURN AIR
CO	CLEAN OUT	FTG	FOOTING	RD	ROOF DRAIN
CONC	CONCRETE	GA	GAGE	RH	RELATIVE HUMIDITY
CONTR	CONTRACTOR	GAL	GALLON	RTU	ROOF TOP UNIT
СР	CONDENSATE PUMP	GALV	GALVANIZED	RV	RELIEF VALVE
CU	COPPER	GC	GENERAL CONTRACTOR	SK	SINK
CUH	CABINET UNIT HEATER	GPH	GALLONS PER HOUR	SA	SUPPLY AIR
CWP	CIRCULATING WATER PUMP	GPM	GALLONS PER MINUTE	SH	SHOWER
DDC	DIRECT DIGITAL CONTROLS	Н	WALL HYDRANT	SP	STATIC PRESSURE
DN	DOWN	HR	HOUR	TCC	TEMPERATURE CONTROL CONTRACTO
DR	DRAIN	HTG	HEATING	TYP	TYPICAL
DS	DOWNSPOUT	НВ	HOSE BIBB	UC	UNDER CUT DOOR (3/4")
EA	EXHAUST AIR	ISP	INTERNAL STATIC PRESSURE	UH	UNIT HEATER
EAT	ENTERING AIR TEMPERATURE	JR	JANITOR RECEPTOR	UR	URINAL
EC	ELECTRICAL CONTRACTOR	LAV	LAVATORY	UV	UNIT VENTILATOR
EDBT	ENTERING DRY BULB TEMPERATURE			VTR	VENT THROUGH ROOF
EF	EXHAUST FAN			WC	WATER CLOSET
EJ	EXPANSION JOINT			WH	WATER HEATER

NOTE: NOT ALL ABBREVIATIONS APPLY TO THIS PROJECT.

MECHANICAL WARRANTY NOTES

MECHANICAL CONTRACTOR SHALL WARRANT ALL EQUIPMENT AND INSTALLATION FOR A MINIMUM OF 1 YEAR FROM THE DATE OF SUBSTANTIAL COMPLETION. AIR CONDITIONING REFRIGERATION SYSTEMS SHALL BE WARRANTED FOR A MINIMUM OF 5 YEARS (PARTS ONLY), NON-PRORATED, FROM THE DATE OF SUBSTANTIAL COMPLETION. THE WARRANTY SHALL APPLY TO COMPRESSORS, EVAPORATORS, AND CONDENSER COILS, HIGH AND LOW SIDE PIPING AND PIPING SPECIALTIES WHICH SHALL INCLUDE EXPANSION AND SOLENOID VALVES, RELIEF VALVES, FILTER-DRYER, AND SIGHT GLASSES. PRESSURE GAUGES AND PRESSURE SWITCHES ARE NOT UNDER THE EXTENDED WARRANTY EXCEPT FOR LOSS OF REFRIGERANT AND CONSEQUENTIAL DAMAGE TO THE SYSTEM WHICH WILL BE AN EXTENDED WARRANTY OBLIGATION. ALL DEFECTS THAT BECOME APPARENT WITHIN THE WARRANTY PERIOD SHALL BE REPAIRED BY THE MECHANICAL CONTRACTOR AS DIRECTED BY THE ENGINEER THROUGH THE OWNERS REPRESENTATIVE. WARRANTY WILL NOT OBLIGATE THE MECHANICAL CONTRACTOR TO REPAIR DAMAGE RESULTING FROM ACCIDENT OR IMPROPER OPERATION OF CARE ON THE PART OF THE OWNER AND NOT DUE TO DEFECTIVE MATERIAL. REFER TO SPECIFICATIONS FOR ADDITIONAL DETAILS AND OTHER WARRANTY INFORMATION.

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KANGE

CENTER AND RANGE RENOVATION
N SHOOTING

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YMBOL

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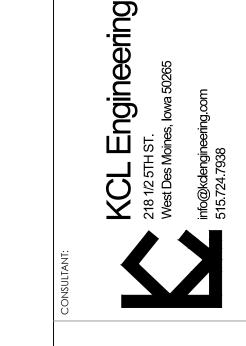
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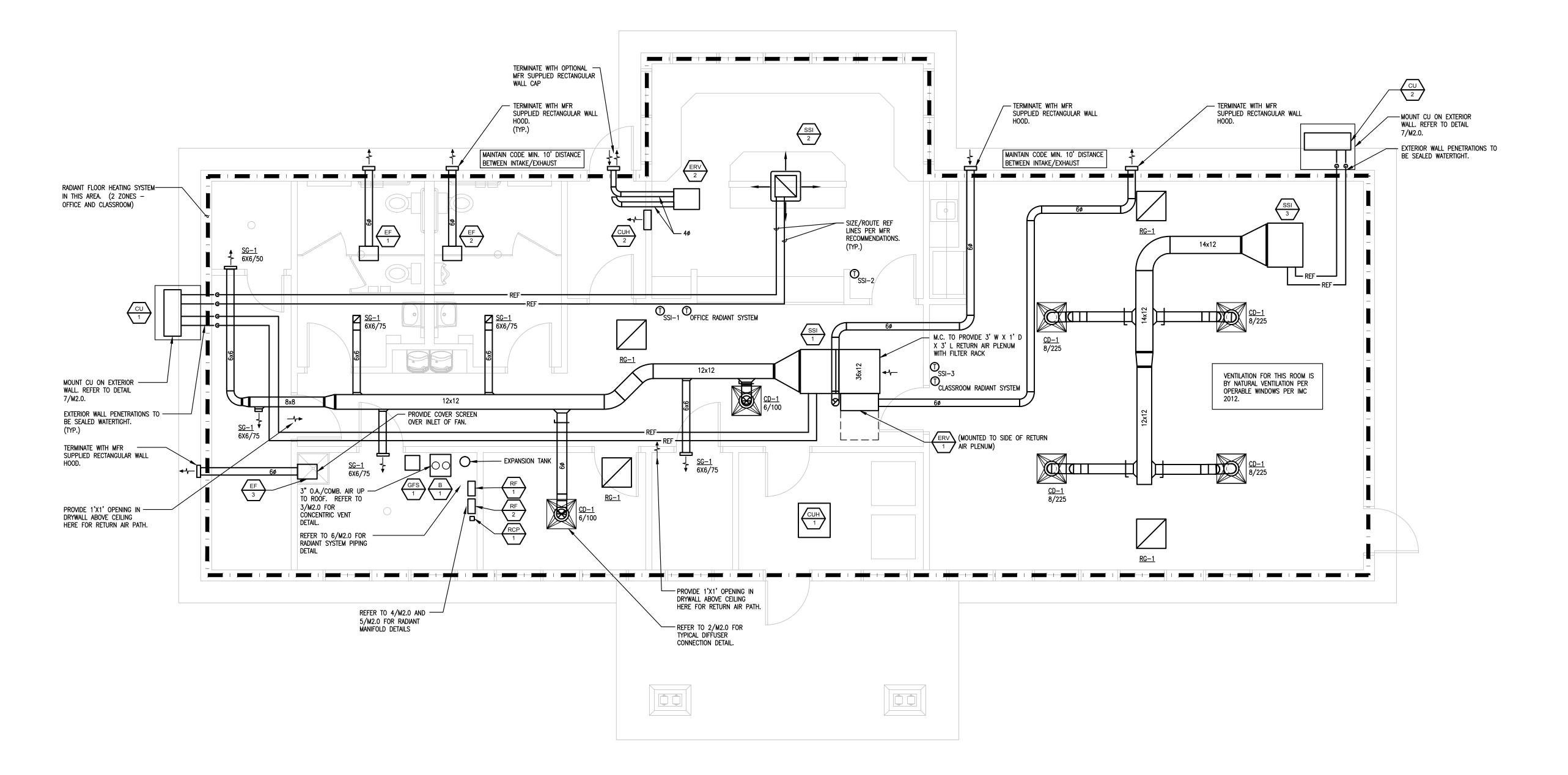
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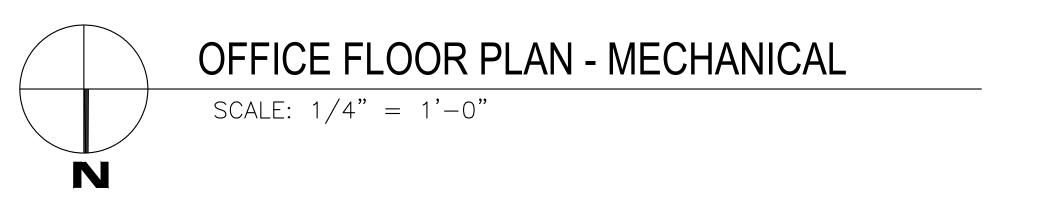
M0.0



GENERAL NOTES 1. REFER TO MO.O FOR GENERAL NOTES.

2. REFER TO 1/M2.0 FOR DUCTWORK DETAIL.





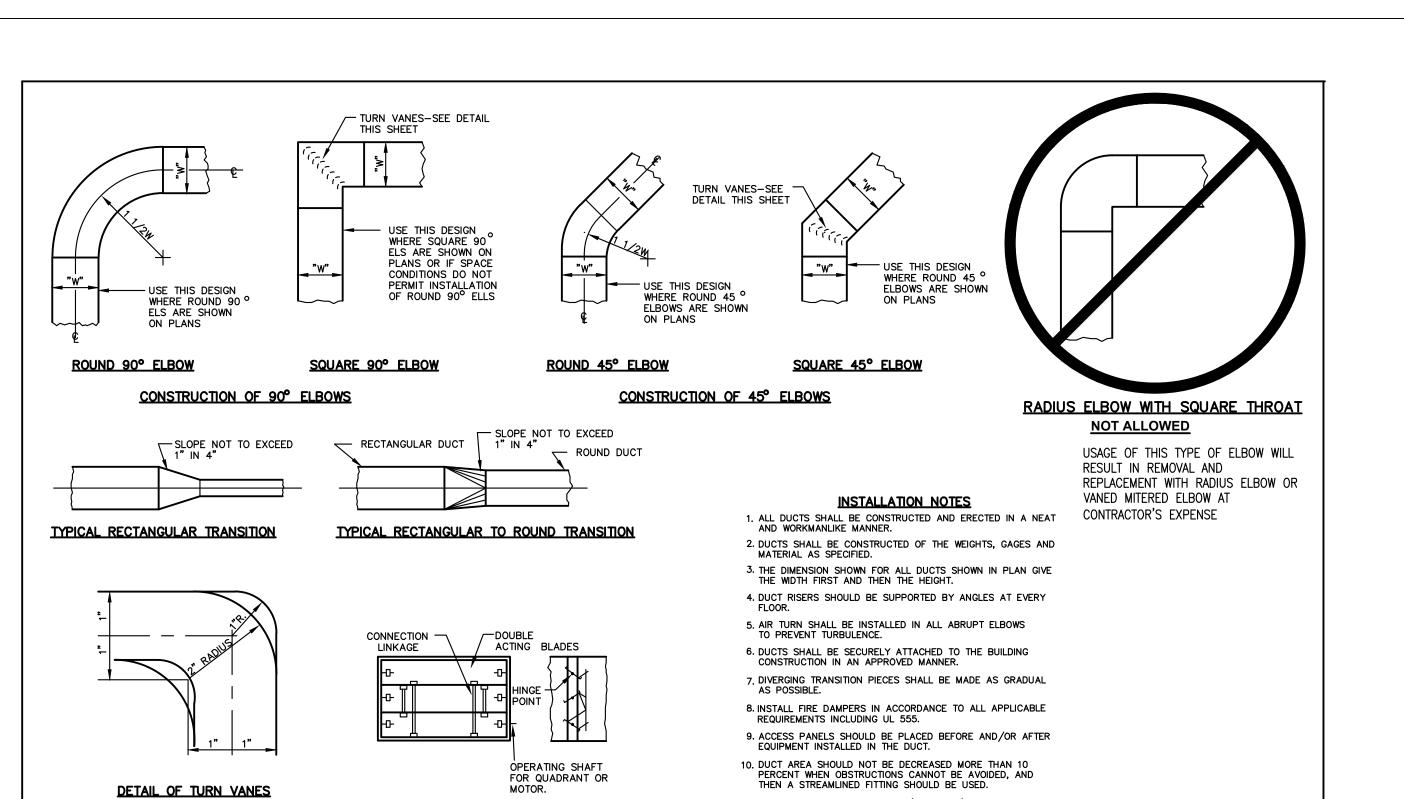


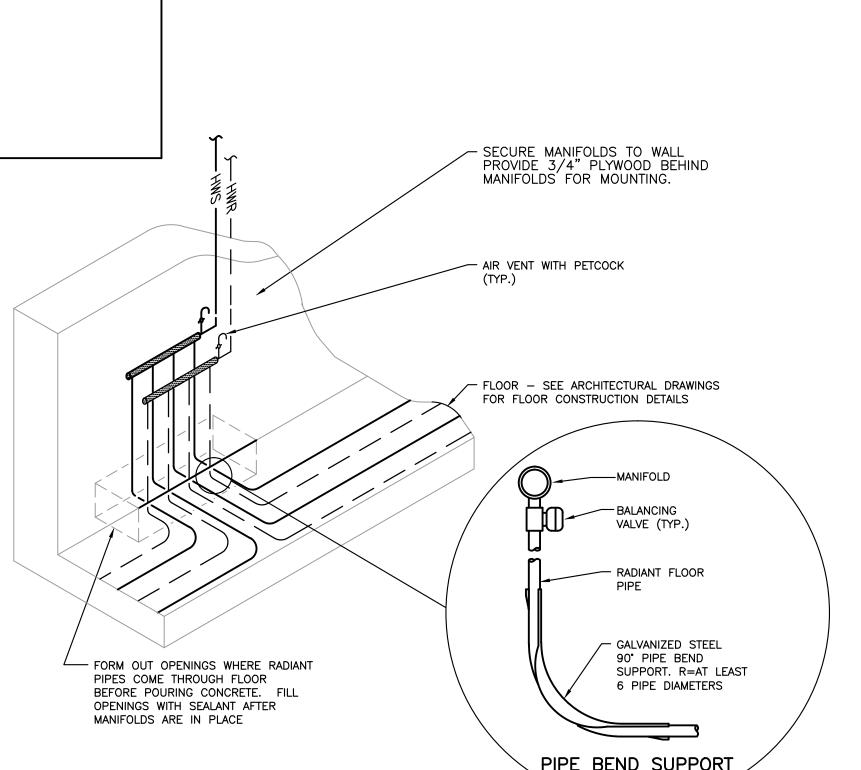
OFFICE FLOOR PLAN - MECHANICAL SHOOTING

NO. BY REVISION

CB 16-02-77-02 ML 08.31.2016

M1.0





FLEX DUCT MAX. 6'-0"

FLEX DUCT SIZE SHALL

MATCH NECK SIZE

CEILING

SUPPLY DUCT

- HAND DAMPER

- DRAW BAND WITH SILICONE SEALER

12" MINIMUM ABOVE AVERAGE -

SNOW ACCUMULATION

CLAMP-

FLUE EXHAUST PIPE ---

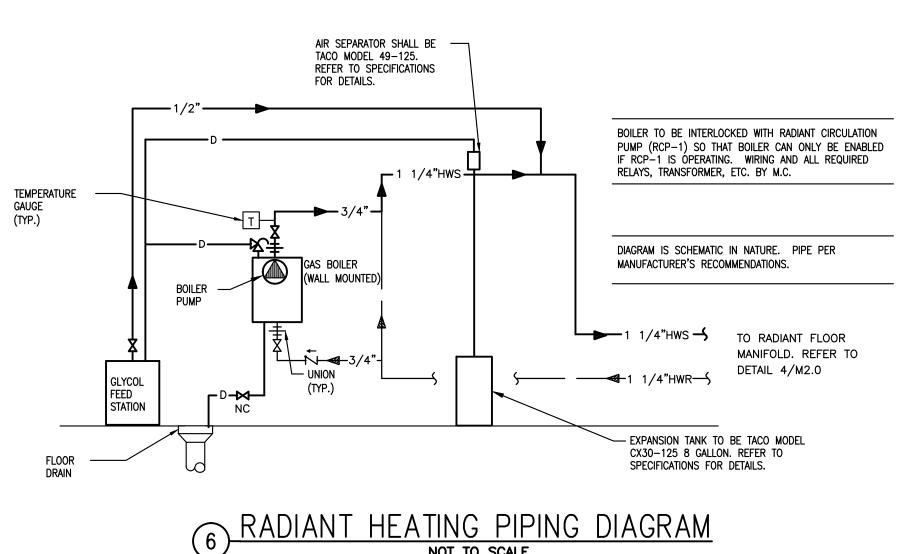
COLLAR -

CEILING DIFFUSER

(SIDE OF DUCT CONNECTION)

NOT TO SCALE

TYPICAL DIFFUSER CONNECTION



NOT TO SCALE

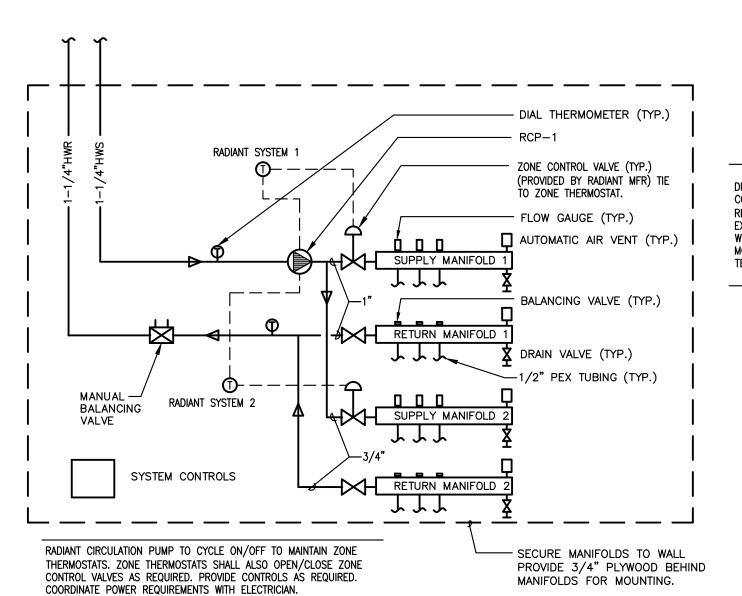


DIAGRAM IS SCHEMATIC IN NATURE, PROVIDE ADDITIONAL COMPONENTS AS REQUIRED AND INSTALL PER MFR RECOMMENDATIONS. INSTALL TUBING ON MINIMUM 2" EXTRUDED POLYSTYRENE INSULATION AND SET IN PLACE WITH CLIPS. WALL THERMOSTAT SHALL BE CAPABLE OF MONITORING SLAB TEMPERATURE AS WELL AS SPACE TEMPERATURE. REFER TO 15772 FOR ADDITIONAL DETAILS.

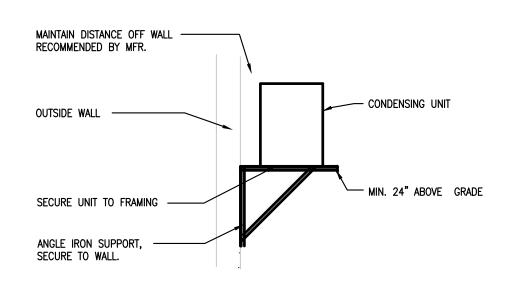
FLEXIBLE FABRIC CONNECTIONS (OR EQUAL) SHOULD BE USED ON BOTH INLETS AND OUTLETS OF ALL FANS AND AIR HANDLING UNITS.

12. JOINTS AND SEAMS OF SUPPLY DUCTS SHALL BE FASTENED SECURELY AND MADE AIR TIGHT.

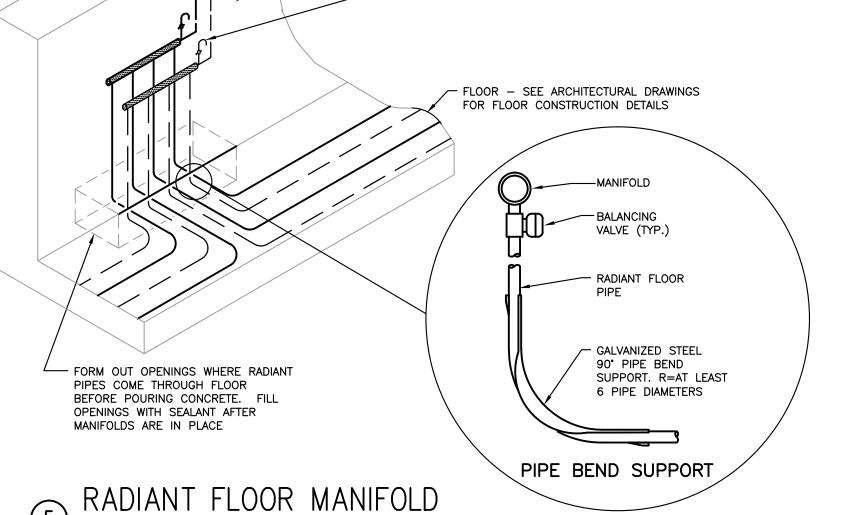
(4) IN-FLOOR RADIANT MULTI-ZONE SYSTEM DETAIL

TYPICAL VOLUME DAMPER

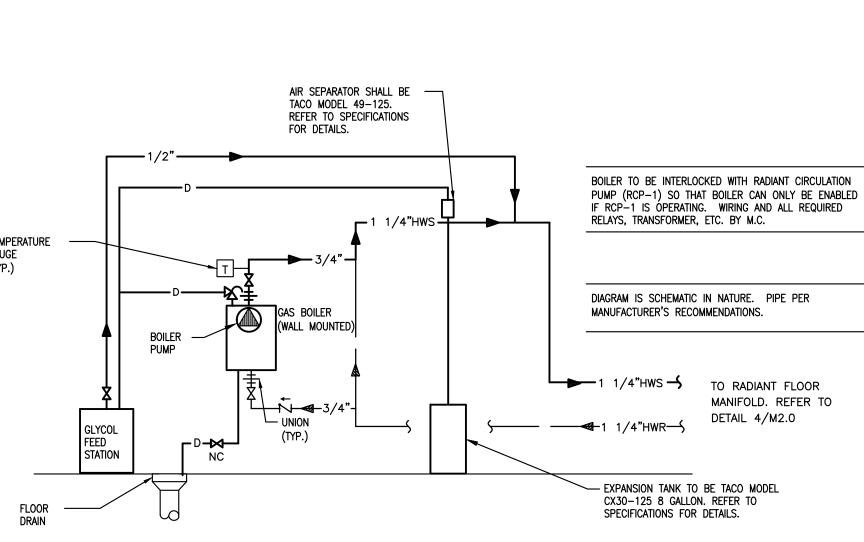
DETAILS OF THE LOW VELOCITY DUCT LAYOUT



CONDENSING UNIT MOUNTING DETAIL



NOT TO SCALE



— FLASHING

SIZE/ROUTE FLUE AND C.A. PIPING PER MFR RECOMMENDATIONS

NOT TO SCALE

— ROOF

COMBUSTION AIR PIPE

DETAILS A MECHANIC

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NO. BY REVISION

DRAWN BY: PROJECT NUMBER: CB 16-02-77-02

CHK'D BY: DATE: ML 08.31.2016

M2.0

RADIANT FLOOR MANIF	OLD SCHEDULE	
REFERENCE	RF-1	RF-2
MANUFACTURER	ROTH RADIANT	ROTH RADIANT
MODEL#	NP MANIFOLD SET	NP MANIFOLD SET
SERVES	OFFICE	CLASSROOM
SUPPLY WATER TEMP (F)	120	120
TUBE SPACING	12"	12"
TUBE SIZE (NOMINAL)	1/2"	1/2"
LOAD (BTUH/S.F.)	30	30
APPROX. SQ. FT OF COVERAGE	1,450	800
TOTAL LOAD (BTUH)	43,500	24,000
AMBIANT ROOM TEMP (F)	68	68
FLOOR COVERING	CARPET	CARPET
TOTAL MANIFOLD GPM	4.5	2.5
MINIMUM LOOPS REQUIRED	6	3
MAXIMUM LOOP LENGTH (FT)	300	300
MAXIMUM TUBE & MANIFOLD PRESS. DROP (FT)	8.95	9.75
SYSTEM FLUID	25% PROPYLENE GLYCOL	25% PROPYLENE GLYCOL
NOTES	1	1

PUMP SCHEDULE				
REFERENCE	RCP-1			
MANUFACTURER	TACO			
MODEL#	L1130			
SERVES	RADIANT FLOOR SYSTEM			
GPM	7			
TOTAL DEVELOPED HEAD (FT)	24			
НР	1/8			
PUMP RPM	3,250			
VOLT/PHASE	120/1			
NOTES	1, 2			

1. E.C. TO PROVIDE DISCONNECT. 2. PUMP TO RUN TO MAINTAIN SPACE TEMP. REFER TO RADIANT MANIFOLD DETAILS.

GLYCOL FEED STATION SCHEDULE				
REFERENCE	GFS-1			
MANUFACTURER	WESSELS			
MODEL#	GMP-6			
SERVES	RF-1 (RADIANT SYSTEM)			
TANK VOLUME	6 GALLONS			
UNIT DIMENSIONS	12" W X 12"D X 18" H			
FACTORY DISCH. PRESS. SETTING	12 PSIG			
VOLTAGE/PH	115/1			
NOTES	1, 2, 3			

1. DISCONNECT SHALL BE PROVIDED / INSTALLED BY E.C.

2. SYSTEM CONNECTION SIZE IS 1/2"NPT.

3. PROVIDE UNIT ABOVE, EQUIVALENT BY GENERAL TREATEMENT PRODUCTS OR PRE-APPROVED EQUAL.

1. MFR TO PROVIDE OPEN/CLOSE TYPE CONTROL VALVE WITH MANIFOLD AND ZONE THERMOSTAT.

GAS HOT WATER BOILER SCHEDULE				
REFERENCE	B-1			
MANUFACTURER	LAARS			
MODEL#	MLXH075PA1LN			
BOILER TYPE	INSTANTANEOUS CONDENSING			
FUEL	L. P.			
GAS PRESSURE (MIN/MAX)	4.0" / 14" W.C.			
SERVES	RADIANT FLOOR SYSTEM			
GAS INPUT (MBH)	75,000			
GAS OUTPUT (MBH)	71,250			
TURNDOWN	5:1			
DIMENSIONS (W/H/D)	17" X 31" X 15"			
THERMAL EFFICIENCY (%)	95			
ENTERING WATER TEMP (°F)	50			
LEAVING WATER TEMP (°F)	120			
COMB. AIR / FLUE DIAM	3"			
VOLTAGE/PH	120/1			
FLA (AMPS)	1.5			
MCA	15			
NOTES	1,2,3,4,5,6			

1. 3/4" HWS/HWR CONNECTIONS

- 2. PROVIDE WITH PACKAGED BOILER CONTROLS. 3. PROVIDE CONDENSATE NEUTRALIZER FOR THE BOILER CONDENSATE DRAIN. 4. 3" EXHAUST VENT PIPE TO BE PVC/CPVC, PE, OR STAINLESS STEEL. 3" INTAKE CAN BE ABS, PVC, CPVC
- OR GALVANIZED. INSTALL PER MFR RECOMMENDATIONS.
- 5. PROVIDE PRIMARY BOILER PUMP WITH BOILER THAT COMES INSTALLED AND WIRED TO THE BOILER FROM THE FACTORY.
- 6. BOILER TO BE INTERLOCKED WITH RADIANT CIRCULATION PUMP (RCP-1) SO THAT BOILER CAN ONLY BE ENABLED WHEN RCP-1 IS OPERATING.

REFERENCE	EF-1,2	EF-3		
MANUFACTURER	GREENHECK	GREENHECK		
MODEL#	SP-B150	SQ-60-D		
TYPE	CEILING MOUNTED	INLINE		
SERVES	RESTROOMS	MECH ROOM		
CFM	150	75		
ESP (IN. W.C.)	0.3	0.2		
FAN RPM	1050	1326		
BELT/DIRECT	DIRECT	DIRECT		
SPEED CONTROL (YES/NO)	YES	YES		
SONES	3.0	2.6		
DAMPER TYPE	BACKDRAFT	BACKDRAFT		
ВНР	128 W	0.01		
MOTOR HP	128 W	1/40		
VOLTAGE/PH	120/1	120/1		
NOTES	1,2,3	4,5		

- 1. PROVIDE WITH WHITED LOW PROFILE EXHAUST GRILLE. 2. FAN TO OPERATE OFF OF ROOM LIGHT SWITCH. WIRING BY E.C.
- 3. PLUG DISCONNECT BY FAN MFR. 4. INTEGRAL STARTER AND DISCONNECT PROVIDED BY FAN MFR.
- 5. FAN TO OPERATE DURING OCCUPIED HOURS. M.C. SHALL PROVIDE TIMER FOR FAN. WIRING BY E.C.

SPLIT SYSTEM HEAT PUMP INDOOR UNIT SCHEDULE						
REFERENCE	SSI-1	SSI-2	SSI-3			
MANUFACTURER	MITSUBISHI	MITSUBISHI	MITSUBISHI			
MODEL#	SEZ-KD18NA4	SLZ-KA12NA	PEAD-A30AA5			
TYPE	ABOVE CEILING DUCTED	CEILING CASSETTE	ABOVE CEILING DUCTED			
SERVES	OFFICES	SERVICE DESK	CLASSROOM			
NOMINAL TONS	1.5	1	2.5			
MAX UNIT CFM	625	390	900			
EXTERNAL STATIC PRESSURE (IN. W.G.)	0.4	N/A	0.5			
COOLING CAP. (RATED/MIN.) (BTU/H)	17,200 / 3,800	11,100	30,000 / 12,000			
HEATING CAP. (RATED/MIN.) (BTU/H)	21,600 / 4,8000	13,600	32,000 / 12,000			
REFRIGERANT	R410A	R410A	R410A			
SEER	17.5	16.3	15.5			
HSPF	10.0	8.9	9.4			
VOLTAGE/PH	240/1	240/1	240/1			
MCA	1	1	3			
MOCP	SEE C.U. SCHEDULE	SEE C.U. SCHEDULE	SEE C.U. SCHEDULE			
NOTES	1, 2, 3, 4, 5, 6	1, 2, 3, 4, 5, 6	1, 2, 3, 4, 5, 6			

- 1. PROVIDE WITH REMOTE WALL MOUNTED THERMOSTAT. WIRING BY M.C.
- 2. INDOOR UNIT RECEIVES POWER FROM OUTDOOR UNIT BY INTERCONNECTED WIRING PROVIDED BY M.C. WIRING BY E.C.
- 3. COOLING RATED CAPACITY IS BASED ON THE FOLLOWING CONDITIONS. INDOOR: 80F/76F, OUTDOOR: 95F/75F 4. HEATING RATED CAPACITY IS BASED ON THE FOLLOWING CONDITIONS. INDOOR: 70F/60F, OUTDOOR: 47F/43F
- 5. HEATING MODE OF HEAT PUMP TO SERVE AS BACKUP FOR RADIANT FLOOR HEATING SYSTEM.
- 6. PROVIDE FILTER WITH UNIT AND PROVIDE UNIT WITH INTEGRAL CONDENSATE PUMP.

CONDENSING UNIT SCHEDULE					
REFERENCE	CU-1	CU-2			
MANUFACTURER	MITSUBISHI	MITSUBISHI			
MODEL#	MXZ-3C30NA	PUZ-A30NHA6			
SERVES	SSI-1,2	SSI-3			
NOMINAL TONS	2.5	2.5			
COOLING CAP. (RATED/MIN.) (BTU/H)	27,400 / 12,600	30,000 / 12,000			
HEATING CAP. (RATED/MIN.) (BTU/H)	27,600 / 11,400	32,000 / 12,000			
LOW TEMP. HEATING CAP. (AT 17F) (BTU/H)	15,100	23,000			
REFRIGERANT	R410A	R410A			
# COMPRESSORS	1	1			
SEER	17.6	15.5			
HSPF	10.1	9.4			
VOLTAGE/PH	240/1	240/1			
MCA	22.1	25			
OVERCURRENT PROTECTION (AMPS)	25	40			
NOTES	1, 2, 3, 4	1, 2, 3, 4			

NOTES:

- 1. DISCONNECT SHALL BE PROVIDED / INSTALLED BY E.C.
- 2. UNIT TO BE MOUNTED TO BUILDING EXTERIOR WALL. 3. REFER TO SPLIT SYSTEM INDOOR UNIT SCHEDULE FOR CAP. RATING CONDITIONS.
- 4. HEATING MODE OF HEAT PUMP TO SERVE AS BACKUP FOR RADIANT FLOOR HEATING SYSTEM.

CABINET UNIT HEATER SCHEDULE				
REFERENCE	CUH-1	CUH-2		
MANUFACTURER	INDEECO	INDEECO		
MODEL#	CUI	WAI		
TYPE HORIZONTAL CEILING RECESSED		WALL MOUNTED RECESSED		
SERVES	VESTIBULE	VESTIBULE		
CFM (MAX.)	250	160		
DIMENSIONS L X W X D (IN)	28 X 26 X 10	23 X 16 X 6		
KW (MAX.)	3	1.5		
AMPS	13.9	6.6		
VOLTAGE/PH	240/1	240/1		
NOTES	1,2,3	1,2		

- 1. PROVIDE UNIT WITH INTEGRAL DISCONNECT AND INTEGRAL THERMOSTAT.
- 2. FINAL COLOR TO BE SELECTED BY ARCH.
- 3. UNIT HAS TWO STAGE HEATING AND HIGH/LOW FAN SPEEDS.

VENTILATOR UNIT			
REFERENCE	ERV-2		
MANUFACTURER	PANASONIC		
MODEL#	FV-04VE1		
SERVES	SERVICE DESK		
SUPPLY CFM	30		
EXHAUST CFM	30		
TYPE CORE	TOTAL/CORE		
VOLTAGE/PH	120/1		
WATTS	21		
SONES	0.3		
NOTES	1,2,3		

- 1. PROVIDE WITH SINGLE POINT POWER CONNECTION, AND DISCONNECT.
- 2. PROVIDE UNIT WITH FACTORY INSTALLED E.A. BACKDRAFT DAMPER. 3. UNIT TO RUN BASED ON TIME OF DAY TIMER PROVIDED/WIRED BY M.C..

ENERGY RECOVERY VENTILATOR (ERV)				
REFERENCE	ERV-1			
MANUFACTURER	RENEWAIRE			
MODEL#	BR130			
ТҮРЕ	INDOOR STATIC PLATE, HEAT AND HUMDITY TRANSFER			
SERVES	SSI-1			
WEGHT (LBS)	50			
DIMENSIONS (LxDxH)	31" X 18" X 14"			
CFM	75			
ESP (IN. W.C.)	0.5			
TEMPERATURE EFF. %	80.0			
TOTAL EFF. % (WINTER/SUMMER)	75/62			
VOLTAGE/PH	120/1			
INPUT WATTS	121			
FLA	1.3			
NOTES	1,2,3,4			

- 1. PROVIDE UNIT WITH BUILT IN PROPORTIONAL RUNTIME CONTROL AND SWITCHED TERMINALS FOR SPLIT SYSTEM INTERCONNECT.
- 2. MERV 8 FILTER TO BE PROVIDED WITH UNIT. 3. UNIT PROVIDED WITH CORD AND PLUG DISCONNECT.
- 4. PROVIDE UNIT WITH BACKDRAFT DAMPERS.

GRILLES REGISTERS AND DIFFUSERS SCHEDULE								
REFERENCE	MATERIAL	MARGIN (IN)	INLET (IN)	FACE (IN)	DAMPER	MFR	MODEL	NOTES
CD-1 (SUPPLY DIFFUSER)	STEEL	NA	SEE DWG	24x24	NO	TITUS	OMNI	1,2
SG-1 (SUPPLY GRILLE)	ALUMINUM	1 1/4"	SEE DWG	INLET +2"	YES	TITUS	300FL	2
RG-1 (RETURN GRILLE)	STEEL	NA	FACE ONLY	24x24	NO	TITUS	PXP	1,2

- 1. REFER TO ARCH DRAWINGS FOR FINAL CEILING TYPE FOR MOUTING TYPE.
- 2. PROVIDE WITH WHITE FINISH.

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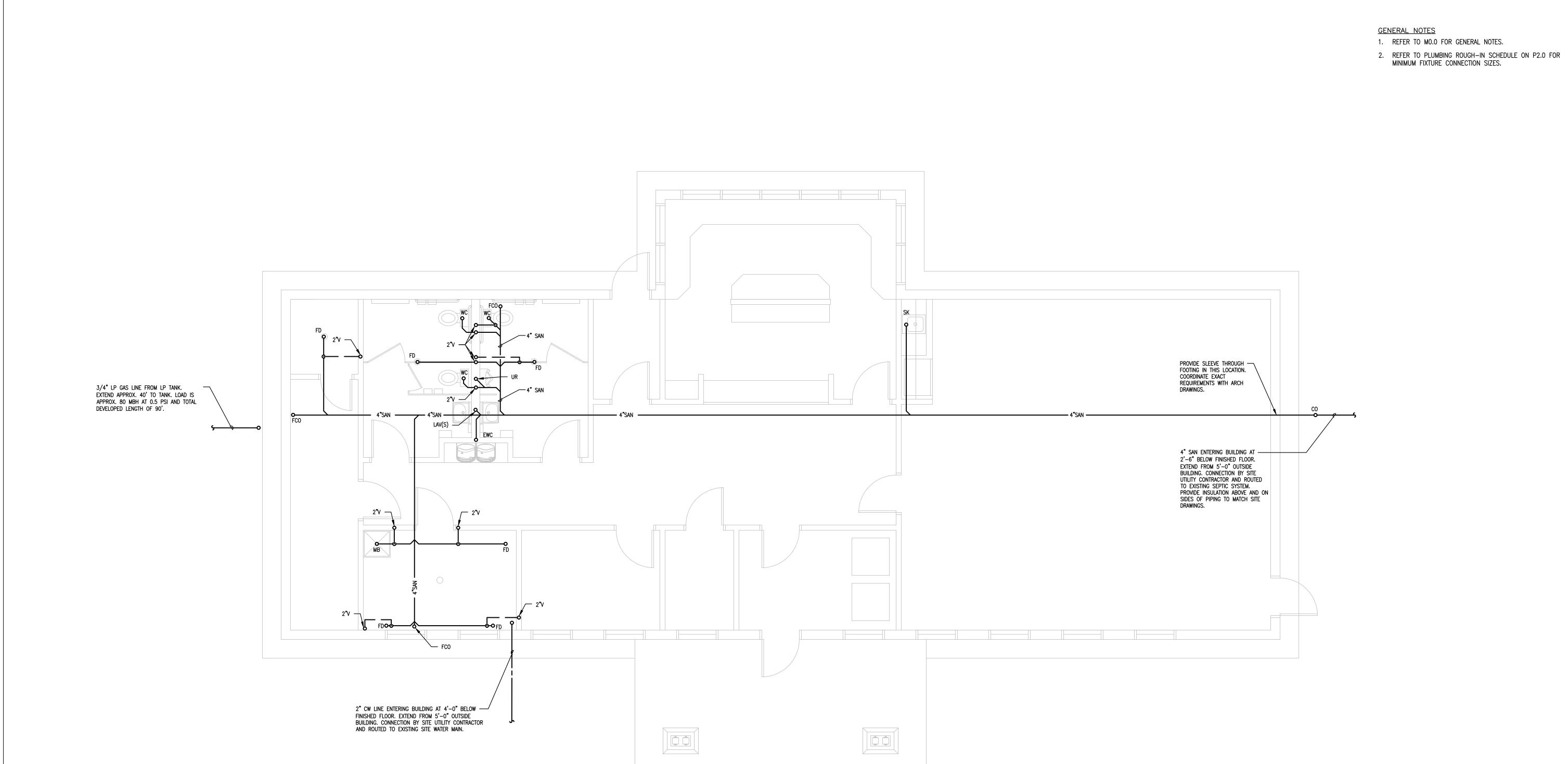
SHOOTING TRAINING CENT
FSON

MECHANICAL SCHEDULES

NO. BY REVISION

DRAWN BY: PROJECT NUMBER: CB 16-02-77-02 CHK'D BY: DATE:

ML 08.31.2016



OFFICE UNDER FLOOR PLAN -SHOOTING

· PLUMBING

CB 16-02-77-02 ML 08.31.2016

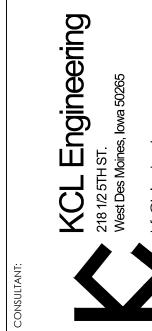
OFFICE UNDER FLOOR PLAN - PLUMBING

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



- 1. REFER TO MO.O FOR GENERAL NOTES.
- 2. REFER TO PLUMBING ROUGH-IN SCHEDULE ON P2.0 FOR MINIMUM FIXTURE CONNECTION SIZES.
- 3. REFER TO P2.0 FOR PLUMBING DETAILS.
- 4. ALL EXTERIOR AND INTERIOR EXPOSED GAS LINES SHALL BE PAINTED PER ARCHITECTS COLOR CHOICE.
- 5. PROVIDE TG-1 FOR ALL FLOOR DRAINS.

GENERAL NOTES





OFFICE FLOOR PLAN - PLUMBING

SHOOTING

OLOFSON (

CB 16-02-77-02

ML 08.31.2016



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

NOTES:	
1. REFER TO PLUMBING FIXTURE SCHEDULE FOR N	IINIMUM CONNECTION SIZES.

PLUMBING FIXTURES ROUGH-IN SCHEDULE					
FIXTURE	CW	HW	VENT	WASTE	NOTES
LAVATORY	1/2"	1/2"	1 1/2"	1 1/2"	1,2
SINK	1/2"	1/2"	1 1/2"	1 1/2"	1,2
WATER CLOSET (TANK)	1/2"	-	2"	4"	1,2
URINAL (FLUSH VALVE)	3/4"	-	1 1/2"	2"	1
MOP BASIN	3/4"	3/4"	1 1/2"	3"	1,2
FLOOR DRAIN	-	-	2"	3"	1,2

1. ALL SIZES SHOWN ARE MINIMUM CONNECTION SIZES, REFER TO DRAWINGS FOR FINAL SIZES

2. ALL BELOW FLOOR WASTE SIZES ARE TO BE A MINIMUM OF 2".

ELECTRIC WATER HEATER										
REFERENCE	WH-1									
MANUFACTURER	AO SMITH									
MODEL#	ECT-40									
SERVES	BUILDING									
GALLONS	40									
ENERGY FACTOR	0.92									
RECOVERY GPM 90F RISE	21									
INPUT KW	4.50									
VOLTAGE/PH	240 / 1									
NOTES	1,2									

	40	SERVES	DOM. WAT
ACTOR	0.92	GPM	1
Y GPM 90F RISE	21	MOTOR HP	0.08
,	4.50	FT HEAD	10
PH	240 / 1	VOLTAGE/PH	115/1
	1,2	NOTES	1,2
	•	NOTES:	

1. UNIT TO BE CSA CERTIFIED AND ASME RATED T&P RELIEF VALVE 2. UNIT TO MEET REQUIREMENTS OF ASHRAE 90.1

1. PUMP TO OPERATE PER TIMER PROVIDED/WIRED BY M.C. 2. EC TO PROVIDE DISCONNECT.

DOMESTIC CIRC. PUMP

REFERENCE

MANUFACTURER

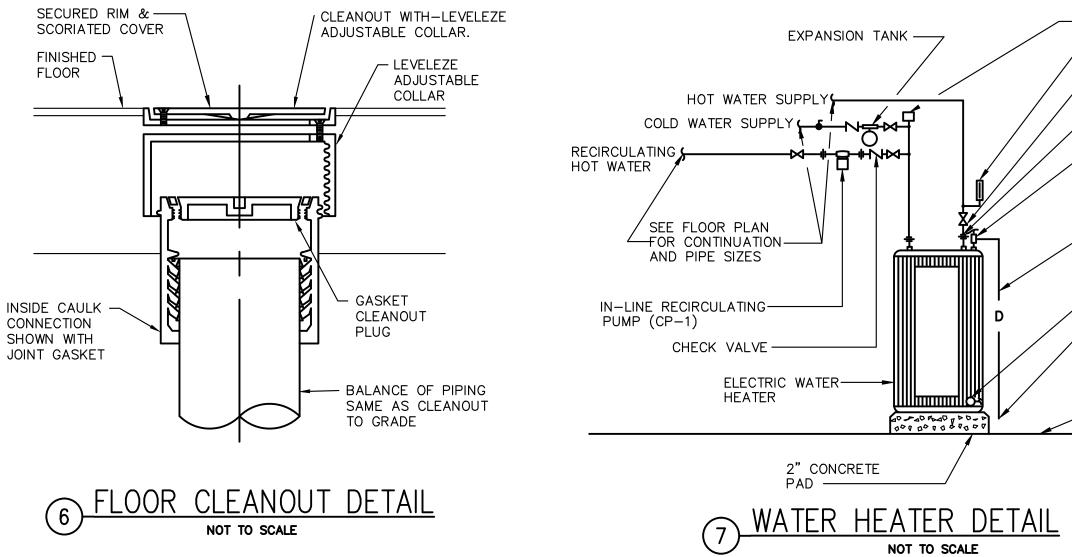
MODEL#

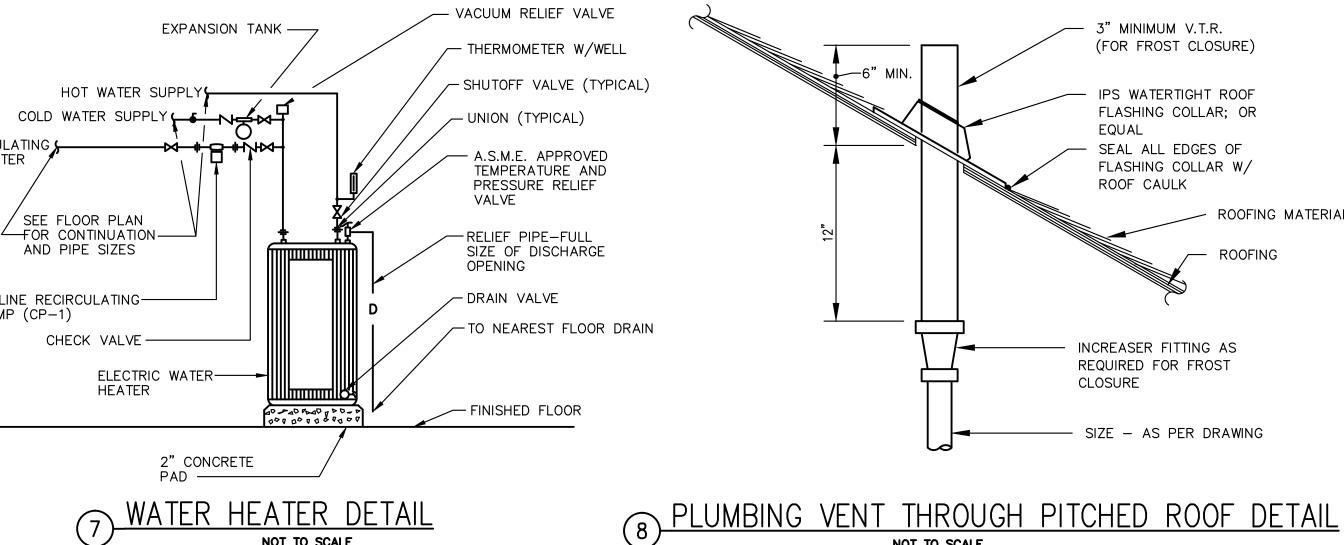
CP-1

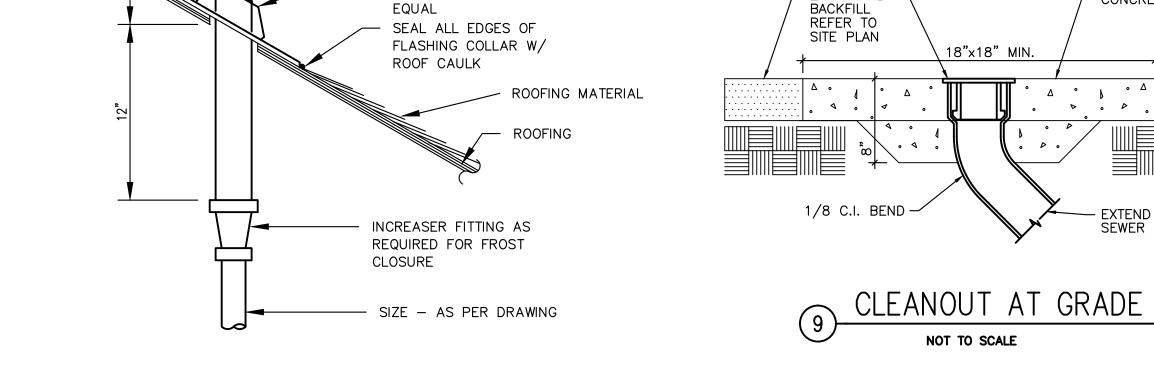
BELL&GOSSETT

PL-30

INLINE







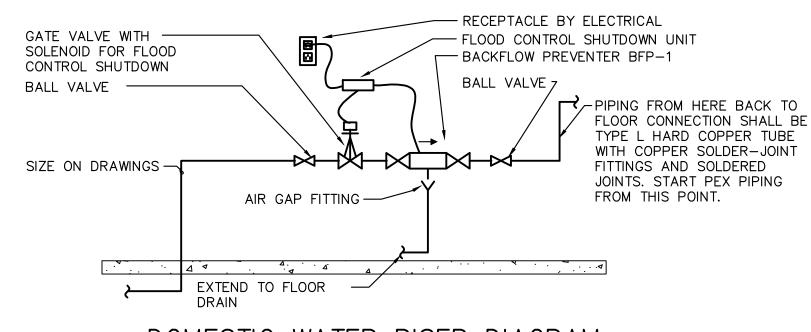
4 LOCAL MIXING VALVE DETAIL
NOT TO SCALE

-BARREL FABRICATED OF HARDDRAWN TYPE "K" COPPER -PISTON TO PROVIDE A PERMANENT MECHANICAL BARRIER BETWEEN FLUID AND PRE-LOAD AIR CHARGE -BRASS FREE TURNING PISTON ASTM B-16 WITH O-RINGS -JOINTS TO BE MADE WITH 95-5 LEAD FREE SOLDER. -BRASS THREADED ADAPTOR

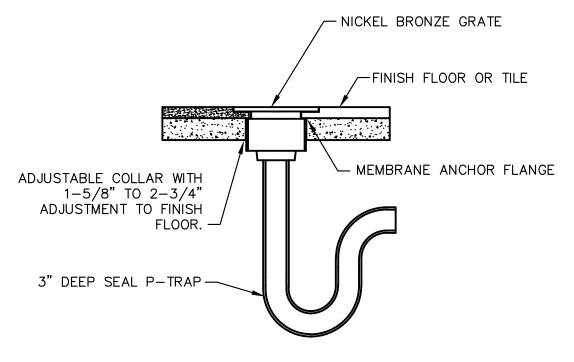
SIZE	SYMBOL	FIXTURE UNIT RATINGS	A SIZE	B SIZE
1/2"	Α	1 - 11	5"	1/2"
3/4"	В	12 - 32	5	3/4"
1"	C	33 - 60	7"	1"
1-1/4"	D	61 - 113	7"	1-1/4"
1-1/2"	Ε	114 - 154	9"	1-1/2"
2"	F	155 - 330	9"	2"

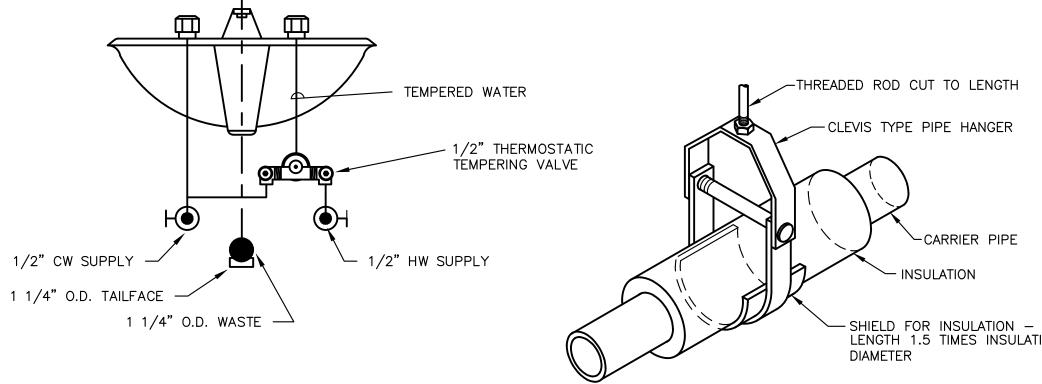
(1) WATER SHOCK ARRESTOR DETAIL

FINISHED FLOOR



DOMESTIC WATER RISER DIAGRAM





FLUSH CLEANOUT—

EARTH AND

— CONCRETE

— EXTEND TO SEWER

SHIELD FOR INSULATION — LENGTH 1.5 TIMES INSULATION

Engineering



DETAILS AND SCHEDULES O 出 い

ES

PLUMBING

O. DATE REVISION DRAWN BY: PROJECT NUMBER: CB 16-02-77-02

P2.0

ML 08.31.2016

ELECTRICAL SYMBOLS

F_1	RECESSED TROFFER LIGHT FIXTURE	BS () +
O F1	STRIP LIGHT FIXTURE - SURFACE MOUNTED	
├-- F1	UTILITY STRIP FIXTURE	•
L1 O+	WALL MOUNTED LIGHT FIXTURE — HEIGHT AS NOTED	�
P1	POLE MOUNTED LIGHT FIXTURE	□h
X1	EXIT LIGHT — WALL MOUNTED, +96" OR AS NOTED (ARROW INDICATES EGRESS DIRECTION)	
©	OCCUPANCY SENSOR, CEILING MOUNTED	
⊙	OCCUPANCY SENSOR, WALL MOUNTED. +48" OR AS NOTED	LV
(18)	DAYLIGHTING SENSOR	
ьS	SINGLE POLE SWITCH, +48" OR AS NOTED LOWERCASE LETTERING DENOTES SWITCH LEG	$oldsymbol{ abla}$
_b S ₃	THREE WAY SWITCH, +48" OR AS NOTED LOWERCASE LETTERING DENOTES SWITCH LEG	•
_b S _K	KEY OPERATED SWITCH, +48" OR AS NOTED LOWERCASE LETTERING DENOTES SWITCH LEG	▼
S _{UD}	UP/DOWN/STOP CONTROL, +48" OR AS NOTED	₩ ▼
$\mathbf{S}_{\mathtt{D}}$	0-10V DIMMER SWITCH, +48" OR AS NOTED LOWERCASE LETTERING DENOTES SWITCH LEG	S
=	DUPLEX RECEPTACLE, +18" OR AS NOTED	
#	FOUR PLEX RECEPTACLE, +18" OR AS NOTED	\bigcirc 1
G ⊜=	DUPLEX GROUND FAULT RECEPTACLE, +18" OR AS NOTED	E401
₩ ⊕ =	DUPLEX GROUND FAULT "W"-TYPE RECEPTACLE WITH IN-USE WEATHERPROOF COVER, +24" OR AS NOTED	AHU 1
EWC 😂	DUPLEX RECEPTACLE MOUNTED WITHIN WATER COOLER HOUSING, VERIFY HEIGHT. CONNECT TO GROUND FAULT CIRCUIT BREAKER.	M
⊖	DUPLEX RECEPTACLE — MOUNTED OVERHEAD	(3)——

SCALE: 1" = 20'-0"

ELECTRICAL GENERAL NOTES

- 1. THE ENTIRE PROJECT SHALL COMPLY WITH THE CURRENT ISSUE OF THE NATIONAL ELECTRIC CODE (NEC), INCLUDING AMENDMENTS, AND WITH ALL STATE, LOCAL, AND OTHER CODES AS APPLICABLE. THE CURRENT ISSUE SHALL BE THE ISSUE THAT IS IN EFFECT WHEN THE CONSTRUCTION PERMITS ARE SECURED FOR THE WORK. THE INTERPRETATIONS AND DECISIONS OF THE AUTHORITY HAVING JURISDICTION OF APPLICABLE CODES SHALL GOVERN.
- 2. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED STATE AND LOCAL PERMITS AND ASSOCIATED FEES.
- 3. NOTE THAT THE ELECTRICAL DRAWINGS ARE ONLY A PORTION OF THE COMPLETE SET OF PLANS. THE COMPLETE SET OF PLANS SHALL BE USED TO DEFINE THE ELECTRICAL WORK. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO, USING THE ARCHITECTURAL PLANS FOR DIMENSIONS AND DETAILS; EQUIPMENT PLANS FOR ROUGH-IN REQUIREMENTS, AND THE MECHANICAL PLANS FOR EQUIPMENT SIZES AND LOCATIONS. COORDINATE ALL WIRING DEVICE LOCATIONS AND ELEVATIONS INDICATED ON PLANS WITH THE OWNER, ARCHITECT AND FINAL FURNITURE/EQUIPMENT LAYOUTS.
- 4. COORDINATE LOCATION/INSTALLATION OF MECHANICAL AND ELECTRICAL WORK WITH ALL OTHER TRADES. NO ASPECT OF A SYSTEM INSTALLATION OR ITS ROUGH-IN SHALL COMMENCE UNTIL PROPER AND TIMELY COORDINATION WITH ALL TRADES ASSOCIATED WITH THE INSTALLATION HAS TRANSPIRED. ITEMS TO BE COORDINATED SHALL INCLUDE BUT NOT BE LIMITED TO: BUILDING STRUCTURE, SHEET METAL, ALL PIPING SYSTEMS, LIGHT FIXTURES, CONDUITS, CABLE TRAYS, ETC. REFER TO ALL GENERAL, MECHANICAL, AND ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR
- 5. RACEWAYS AND BOXES ARE SHOWN DIAGRAMMATICALLY ONLY AND INDICATE THE GENERAL AND APPROXIMATE LOCATION. THE LAYOUT DOES NOT SHOW THE TOTAL NUMBER OF RACEWAYS OR BOXES FOR THE CIRCUITS REQUIRED, NOR ARE THE LOCATIONS OF INDICATED RUNS INTENDED TO SHOW THE ACTUAL ROUTING OF THE RACEWAYS.
- 6. ALL CONDUCTOR SIZES ARE BASED ON COPPER UNLESS OTHERWISE NOTED.
- 7. SUPPORT ALL CONDUITS FROM STRUCTURAL SLABS, WALLS, STRUCTURAL MEMBERS AND ROOF JOISTS. DO NOT SUPPORT CONDUITS FROM CEILING TIE WIRES, DUCTWORK, PIPING OR OTHER NONSTRUCTURAL MEMBERS.

ELECTRICAL ABBREVIATIONS

DEVICE MOUNTED +8" ABOVE COUNTER TOP ELECTRICAL CONTRACTOR GROUND FAULT CIRCUIT INTERRUPTER MECHANICAL CONTRACTOR MOTOR OPERATED DAMPER WEATHERPROOF DEVICE WIRE GUARD



GENERAL NOTE:

UNDERGROUND FACILITIES, STRUCTURES, AND UTILITIES HAVE BEEN SHOWN BASED UPON INFORMATION OBTAINED FROM FIELD LOCATIONS BY UTILITY COMPANIES, AVAILABLE SURVEYS AND RECORDS. THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. IT IS ALSO POSSIBLE THAT THERE MAY BE OTHER UNDERGROUND FACILITIES, STRUCTURES, AND UTILITIES IN EXISTENCE THAT ARE NOT SHOWN. IT IS THE RESPONSIBILITY OF EACH INDIVIDUAL PARTY REFERENCING THIS PLAN TO DETERMINE THE EXACT LOCATION AND TYPE OF UNDERGROUND FACILITIES ON THE SITE. HAND EXCAVATE AT CRITICAL POINTS AS NECESSARY TO VERIFY LOCATIONS, SIZES, ELEVATIONS, FLOW LINES, ETC. IF A PROBLEM OR INTERFERENCE EXISTS, NOTIFY ARCHITECT/ENGINEER BEFORE PROCEEDING.

GENERAL NOTES:

- 1. COORDINATE LOCATION/INSTALLATION OF MECHANICAL AND ELECTRICAL WORK WITH ALL OTHER TRADES. NO ASPECT OF A SYSTEM INSTALLATION OR ITS ROUGH-IN SHALL COMMENCE UNTIL PROPER AND TIMELY COORDINATION WITH ALL TRADES ASSOCIATED WITH THE INSTALLATION HAS TRANSPIRED. ITEMS TO BE COORDINATED SHALL INCLUDE BUT NOT BE LIMITED TO: BUILDING STRUCTURE, SHEET METAL, ALL PIPING SYSTEMS, LIGHT FIXTURES, CONDUITS, CABLE TRAYS, ETC. REFER TO ALL GENERAL, MECHANICAL, AND ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT.
- 2. WORK NOT IDENTIFIED AS PART OF AN ALTERNATE BID SHALL BE CONSIDERED WORK UNDER BASE BID.
- 3. UNDER ALL ALTERNATES, ALL DEVICES INCLUDING LIGHTS AND ELECTRICAL EQUIPMENT SHALL BE SURFACE MOUNTED TO STRUCTURE. COORDINATE FINAL ROUTING AND MOUNTING WITH OWNER PRIOR TO FINAL INSTALL.

KEYED NOTES:

- (1) 2" EMPTY CONDUIT WITH PULL STRING FOR TELECOMMUNICATION SERVICE ENTRANCE. COORDINATE FINAL ROUGH—IN WITH CIVIL ENGINEER AND TELEPHONE SERVICE COMPANY. COORDINATE ROUTING OF UNDERGROUND CONDUIT/CONDUCTORS WITH CIVIL DRAWINGS AND OWNER PRIOR TO FINAL INSTALL
- (2) ROUTE CABLES IN 2" PVC CONDUIT BACK TO MDF RACK IN CLOSET 102 VIA COMMUNICATIONS HAND HOLE. REFER TO RISER DIAGRAM ON E3.0 FOR DETAILS. COORDINATE ROUTING WITH CIVIL ENGINEER AND OWNER PRIOR TO FINAL INSTALL.
- (3) SERVICE CONDUCTORS TO EXISTING UTILITY TRANSFORMER. REFER TO ONE-LINE DIAGRAM ON E3.0. REFER TO CIVIL SHEETS FOR LOCATION OF EXISTING UTILITY AND SITE DISTRIBUTION EQUIPMENT.
- (4) COORDINATE ROUTING OF UNDERGROUND CONDUIT/CONDUCTORS WITH CIVIL DRAWINGS AND OWNER PRIOR TO FINAL INSTALL.

BOILER SHUTDOWN/RESET PUSHBUTTON, +48" OR AS NOTED BS = BOILER SHUTDOWN, BR = BOILER RESET, CS = CHILLER SHUTDOWN, EM = EMERGENCY SHUTDOWN

HAND DRYER OUTLET, +42" TO BOTTOM OR AS NOTED

SAFETY DISCONNECT SWITCH, SEE EQUIPMENT SCHEDULE

LIGHTING AND POWER PANEL - SURFACE MOUNTED

- CONDUIT CONCEALED IN CEILING OR WALL CONSTRUCTION

CONDUIT CONCEALED IN FLOOR CONSTRUCTION OR UNDERGROUND

VOICE/DATA OUTLET, +18" OR AS NOTED

TELEPHONE OUTLET, +18" OR AS NOTED

SURFACE MOUNTED SPEAKER WITH BAFFEL

CCTV CAMERA, SURFACE/CEILING MOUNT A=INTERIOR B=EXTERIOR

INDICATES DETAIL NUMBER

EQUIPMENT IDENTIFICATION

EQUIPMENT NUMBER

NOTE REFERENCE

METER

WALL TELEPHONE OUTLET, +48" OR AS NOTED

INDICATES DRAWING NUMBER WHERE DETAIL IS FOUND

DATA OUTLET, +18" OR AS NOTED

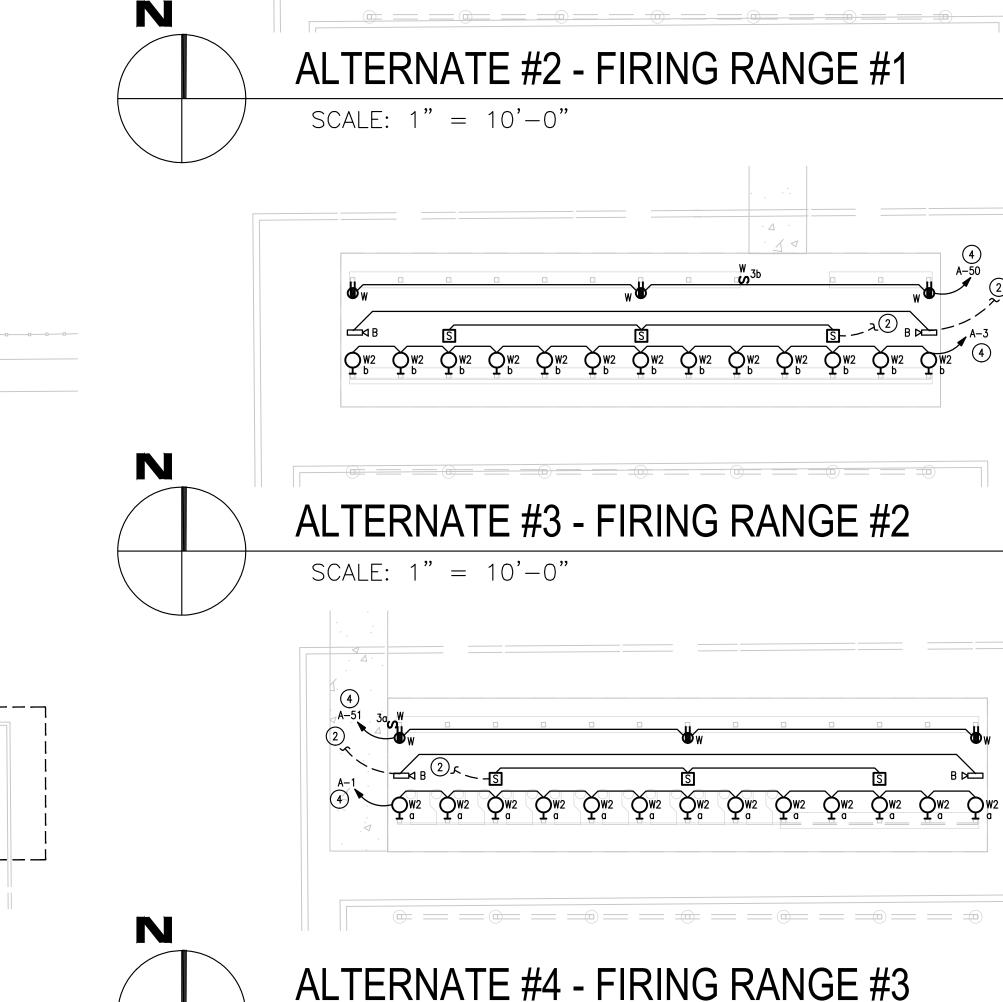
EQUIPMENT CONNECTION AS NOTED

PANEL AS NOTED - FLUSH MOUNTED

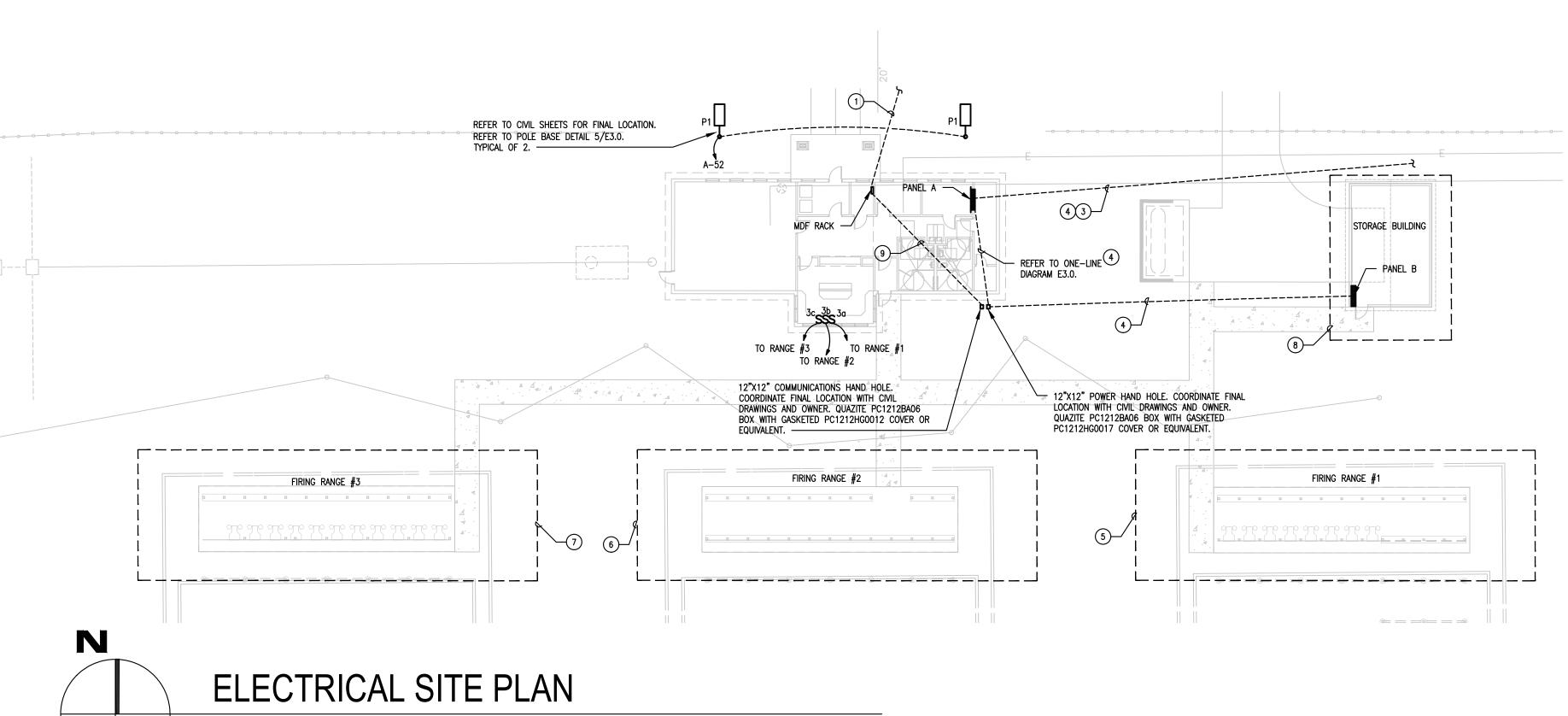
EXPOSED CONDUIT

LOW VOLTAGE WIRING

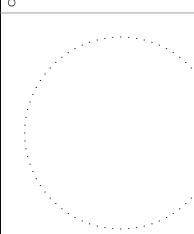
- (5) ALTERNATE BID NUMBER 2 FOR FIRING LINE SHELTER #1. BASE BID SHALL INCLUDE ONLY EMPTY CONDUIT WITH PULL STRING STUBBED UP TO OWNER DIRECTED LOCATION. EXCLUDING BASE BID WORK AS DESCRIBED, ALL SHOWN ELECTRICAL WORK SHALL BE CONSIDERED PART OF ALTERNATE BID NUMBER 2. COORDINATE FINAL REQUIREMENTS WITH OWNER PRIOR TO FINAL INSTALL.
- (6) ALTERNATE BID NUMBER 3 FOR FIRING LINE SHELTER #2. BASE BID SHALL INCLUDE ONLY EMPTY CONDUIT WITH PULL STRING STUBBED UP TO OWNER DIRECTED LOCATION. EXCLUDING BASE BID WORK AS DESCRIBED, ALL SHOWN ELECTRICAL WORK SHALL BE CONSIDERED PART OF ALTERNATE BID NUMBER 3. COORDINATE FINAL REQUIREMENTS WITH OWNER PRIOR TO FINAL INSTALL.
- 7) ALTERNATE BID NUMBER 4 FOR FIRING LINE SHELTER #3. BASE BID SHALL INCLUDE ONLY EMPTY CONDUIT WITH PULL STRING STUBBED UP TO OWNER DIRECTED LOCATION. EXCLUDING BASE BID WORK AS DESCRIBED, ALL SHOWN ELECTRICAL WORK SHALL BE CONSIDERED PART OF ALTERNATE BID NUMBER 4.
- (8) ALTERNATE BID NUMBER 1 FOR STORAGE BUILDING. BASE BID SHALL INCLUDE ONLY EMPTY CONDUIT WITH PULL STRING STUBBED UP TO PANELBOARD LOCATION. EXCLUDING BASE BID WORK AS DESCRIBED ABOVE, ALL SHOWN ELECTRICAL WORK SHALL BE CONSIDERED PART OF ALTERNATE BID NUMBER
- 9 ROUTE (3) 2" EMPTY CONDUITS WITH PULL STRING FOR COMMUNICATIONS WIRING PART OF ALTERNATE BIDS #2, #3, AND #4.



SCALE: 1" = 10'-0"



Engine







AND

SYMBOLS

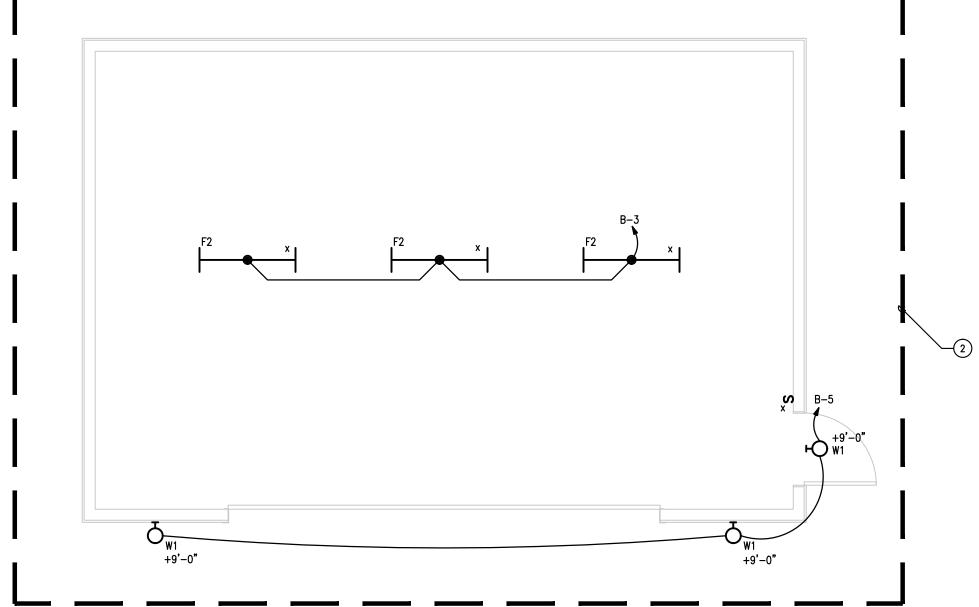
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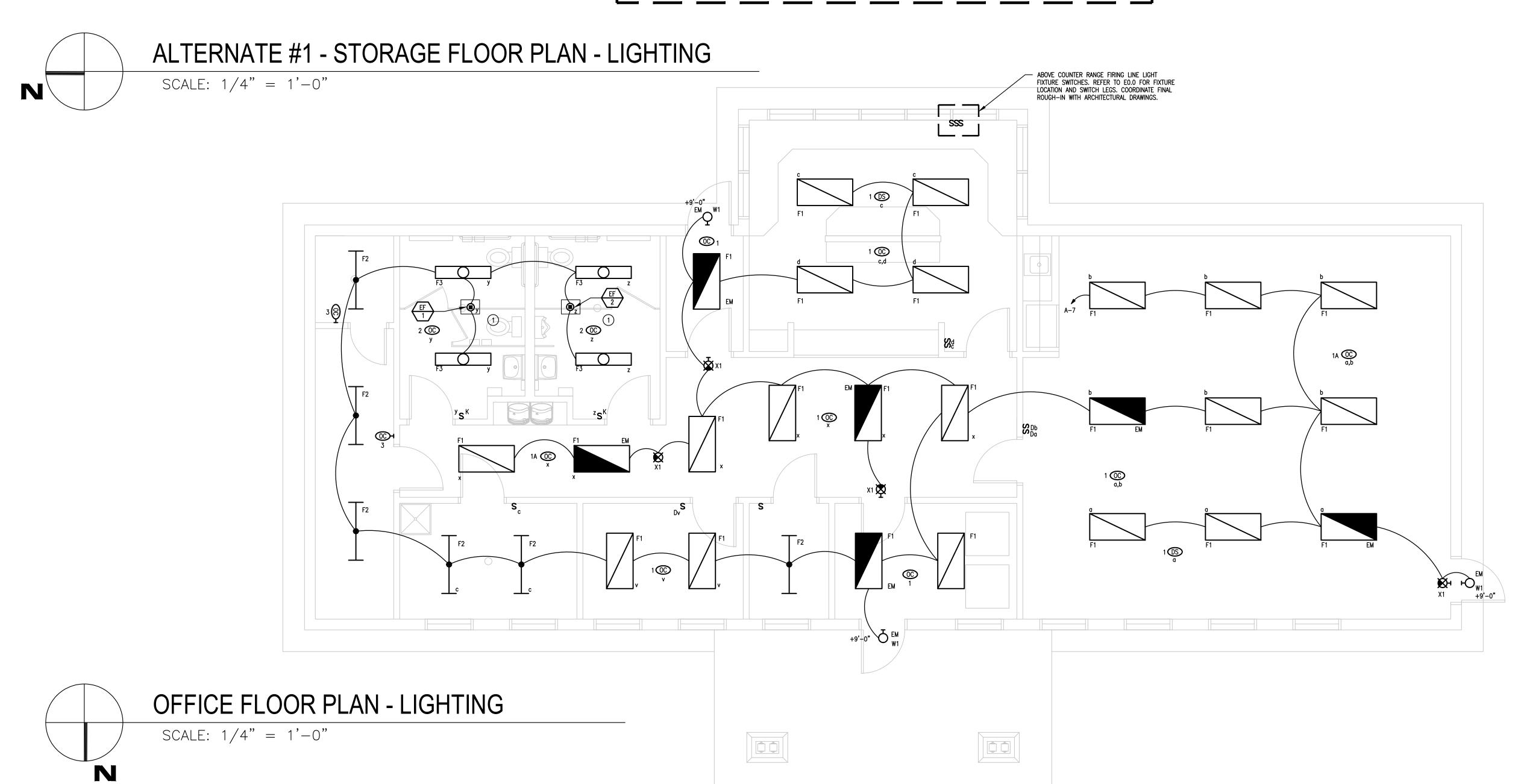
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JTL 16-02-77-02

JRD 08.31.2016

- . COORDINATE LOCATION/INSTALLATION OF MECHANICAL AND ELECTRICAL WORK WITH ALL OTHER TRADES. NO ASPECT OF A SYSTEM INSTALLATION OR ITS ROUGH—IN SHALL COMMENCE UNTIL PROPER AND TIMELY COORDINATION WITH ALL TRADES ASSOCIATED WITH THE INSTALLATION HAS TRANSPIRED. ITEMS TO BE COORDINATED SHALL INCLUDE BUT NOT BE LIMITED TO: BUILDING STRUCTURE, SHEET METAL, ALL PIPING SYSTEMS, LIGHT FIXTURES, CONDUITS, CABLE TRAYS, ETC. REFER TO ALL GENERAL, MECHANICAL, AND ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR THIS PROJECT.
- KEYED NOTES:
- CONNECT EXHAUST FAN TO LIGHTING CIRCUIT SO FAN OPERATES VIA OCCUPANCY SENSOR. COORDINATE FINAL LOCATION AND REQUIREMENTS WITH M.C.
- 2 ELECTRICAL WORK FOR STORAGE BUILDING SHALL BE PART OF ALTERNATE NUMBER 1. BASE BID SHALL ONLY INCLUDE EMPTY CONDUIT WITH PULL STRING STUBBED UP TO PANEL B LOCATION.





KCL Engineering

218 1/2 5TH ST.

West Des Moines, Iowa 50265

218 Weight

RESOURCES - WALLACE BUILING

NATUR ENGINEERING 502 E. 9TH ST



IG RANGE

SON SHOOTING

SON SHOOTING

LIGHTING FLOOR PLAN

11652 NW NISSEN

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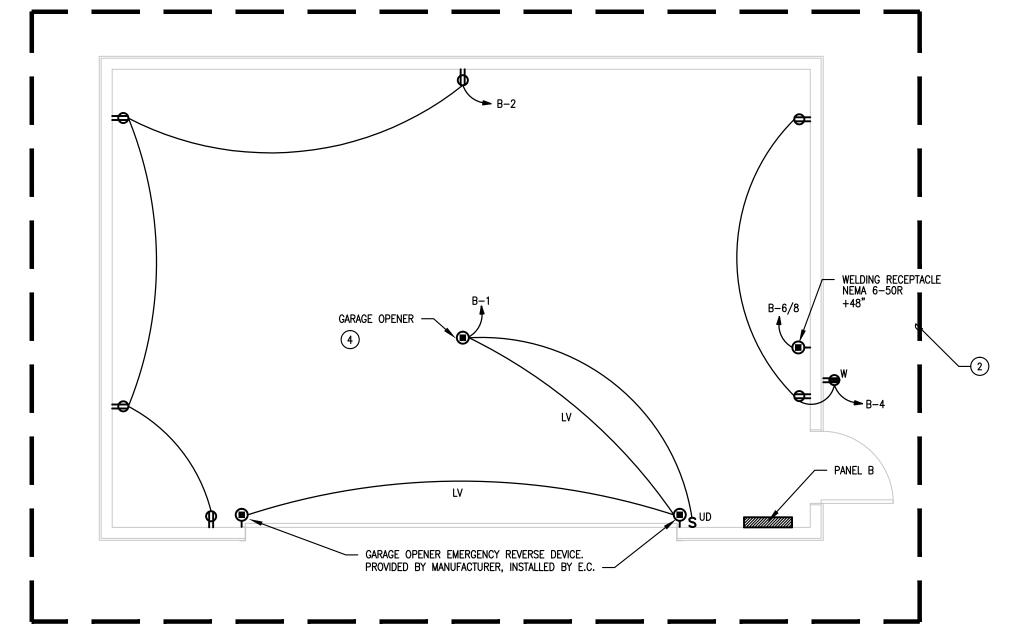
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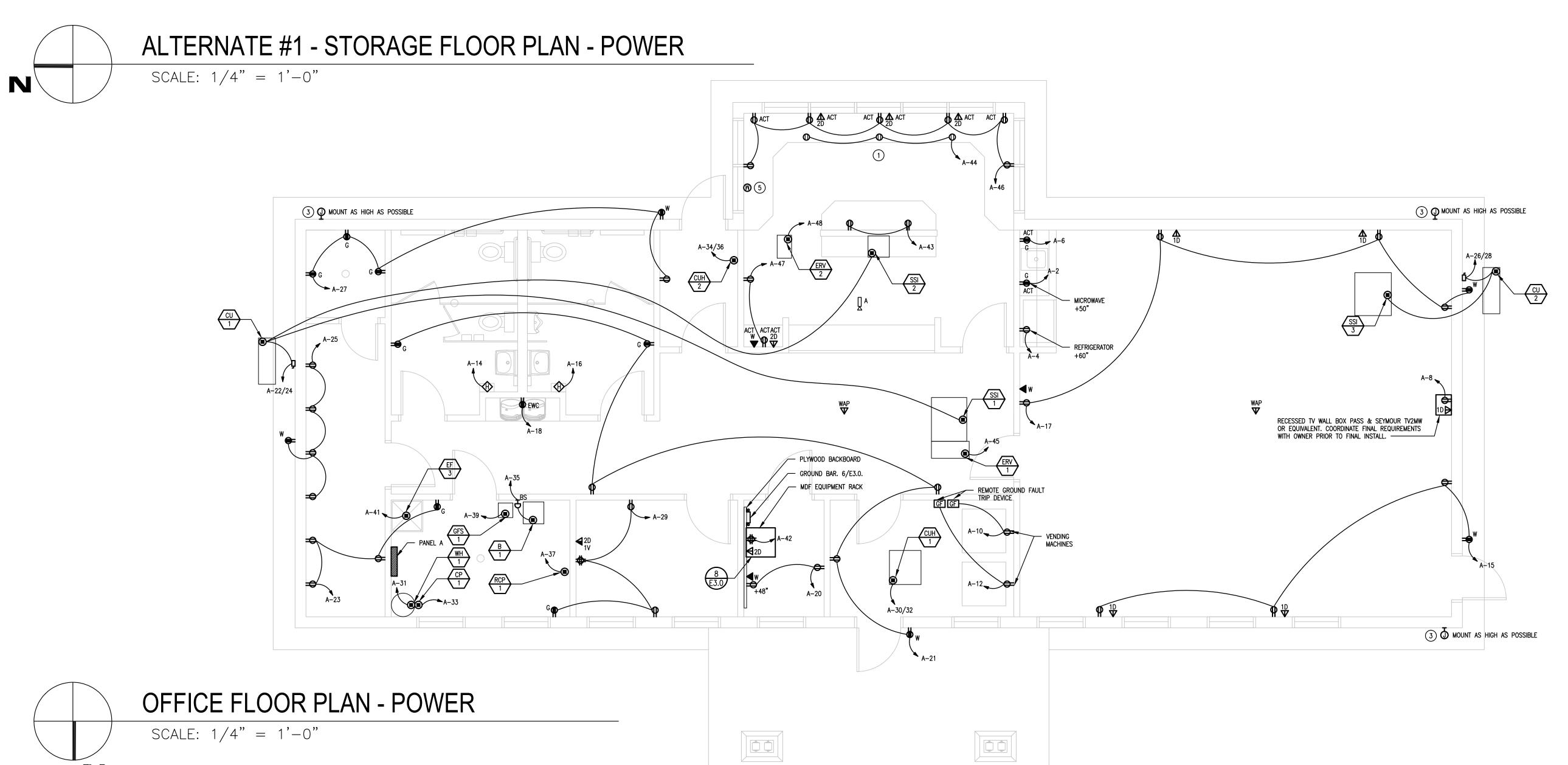
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N

KEYED NOTES:

- 1 COORDINATE FINAL RANGE CONTROL STATION LAYOUT WITH OWNER PRIOR TO FINAL
- 2 ELECTRICAL WORK FOR STORAGE BUILDING SHALL BE PART OF ALTERNATE NUMBER 1. BASE BID SHALL ONLY INCLUDE EMPTY CONDUIT WITH PULL STRING STUBBED UP TO PANEL B LOCATION.
- FUTURE CAMERA LOCATION. INSTALL JUNCTION BOX WITH EMPTY 1" CONDUIT TO ABOVE CEILING SPACE. PROVIDE STAINLESS STEEL COVER PLATE.
- COORDINATE GARAGE DOOR MOTOR AND WIRING WITH DOOR MANUFACTURER AND OWNER PRIOR TO FINAL INSTALL.
- 5 ROUTE 1" CONDUIT FOR PA MICROPHONE STATION ABOVE CEILING TO MDF. COORDINATE FINAL LOCATION WITH OWNER PRIOR TO FINAL INSTAL.







218 We info

RESOURCES
VICES - WALLACE BUILING
S MOINES, IA 50319-0034

NATUI ENGINEERIN 502 E. 9TH §



NG RANGE

DESON SHOOTING

OFSON SHOOTING

BY REVISION

NO. BY DATE REVISIO

POWER/SYSTEMS FLOOR PLAN

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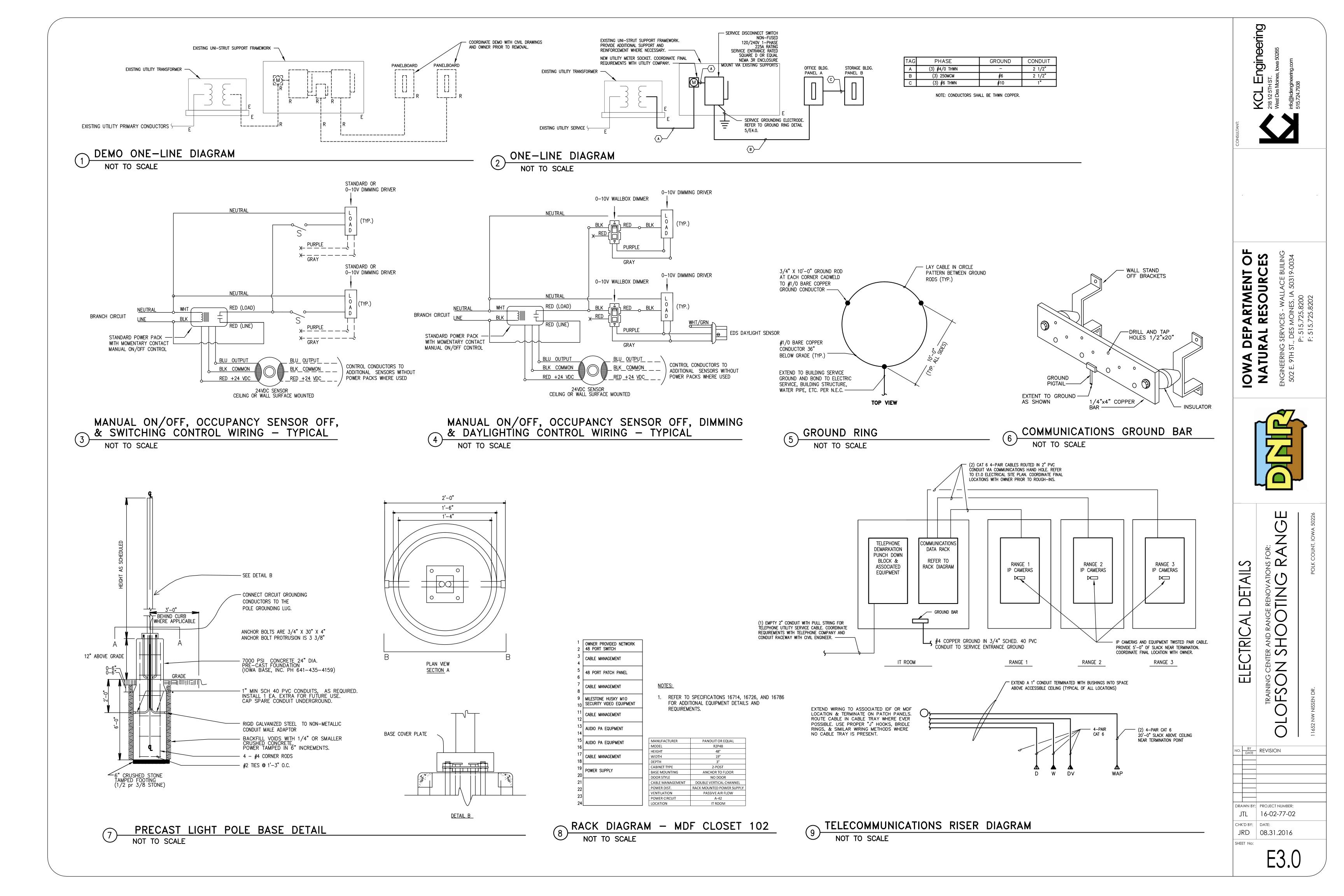
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			LUMINAIRE SO	CHEDULE						
					LAM			FIXTURE	FIXTURE	
TYPE	MANUFACTURER	MODEL NUMBER	DESCRIPTION	DIMENSIONS	TYPE	QUANTITY	BALLAST	LOAD	VOLTS	APPROVED EQUALS
F1	CREE	ZR24-50L-40K-FD	2X4 LED RECESSED TROFFER. MINIMUM 5,000 LUMENS. PROVIDE WITH EMERGENCY BATTERY PACK WERE INDICATED WITH "EM" ON DRAWINGS.	2X4	4,000K CCT LEDS AS PROVIDED BY MANUFACTURER	AS PROVIDED BY MANUFACTURER	AS PROVIDED BY MANUFACTURER	44	120	HE WILLIAMS, COLUMBIA, METALUX, OR SUBMIT FOR PRIOR APPROVAL
F2	HE WILLIAMS	75L-4-L38/840-56-DMA-YBY-2- DRV-UNV	LED LENSED STRIP FIXTURE. 22-GAUGE DIE-FORMED C.R.S. HOUSING. ALL PARTS PAINTED AFTER FABRICATION. ACRYLIC #12 LENS. SUSPENDED MOUNT. PROVIDE WITH (2) Y HANGERS AND (2) 2' CHAINS. COORDINATE MOUNTING LOCATION AND HEIGHT WITH OWNER. MINIMUM 3,800 LUMENS AND AT LEAST 80 CRI AT 4,000K CCT.	1' X 4'	LED / 4,000K CCT	AS PROVIDED BY MANUFACTURER	AS PROVIDED BY MANUFACTURER	54	120	CREE, PHILIPS, LITHONIA, OR AS APPROVED BY ENGINEER
F3	KENALL	MLHA12-48-R-MW-PP-1-45L40K- DCC-1-DV-EL	- 1X4 LED SURFACE MOUNT FIXTURE. MINIUM 4,000 LUMENS AT 4,000K CCT. PROVIDE SURFACE MOUNT BRACKETS. PROVIDE WITH PEARLESCENT POLYCARBONATE LENS.	1X4	4,000K CCT LEDS AS PROVIDED BY MANUFACTURER	AS PROVIDED BY MANUFACTURER	AS PROVIDED BY MANUFACTURER	45	120	SUBMIT FOR PRIOR APPROVAL
W1	PHILIPS GARDCO	121-MRM-WT-35LA-350-NW-UNV BLP-PCB-MHS	EXTERIOR WALL MOUNT CUT-OFF LED LUMINAIRE. DIE-CAST ALUMINUM HOUSING WITH TEMPERED GLASS LENS ASSEMBLY AND STAINLESS STEEL FASTENERS. CLEAR SPECULAR ANODIZED ALUMINUM REFLECTOR. BRONZE POLYESTER POWDER COAT FINISH. UL LISTED FOR WET LOCATION. INTEGRAL PASSIVE INFRARED MOTION SENSOR CABABLE OF DETECTION MOTION WITHIN 24 FEET. MOTION SENSOR REDUCES SYSTEM WATTAGE TO 25% OF FULL OUTPUT WHEN NO MOTION IS DETECTED FOR 5 MINUTES. INTEGRAL PHOTOCELL. PROVIDE EMERGENCY BATTERY WHERE INDICATED WITH "EM".	15.5" X 9.25" X 5.5"	4,000K CCT LEDS AS PROVIDED BY MANUFACTURER	AS PROVIDED BY MANUFACTURER	AS PROVIDED BY MANUFACTURER	35	120	LITHONIA WSQ SERIES, LSI XPWS3 SERIES, CREE XSP, OR SUBMIT FOR PRIOR APPROVAL
W2	EDWARDS	105XBRMR120A	RED LED CONSTANT ILLUMINATION SIGNAL LIGHT WITH RED ACRYLIC LENS. VERIFY FINAL LCOATION WITH OWNER PRIOR TO FINAL INSTALLATION. PROVIDE OUTLET BOX ATTACHMENT FOR INSTALLATION.	3.75"X 4.75"	RED LEDS AS PROVIDED BY MANUFACTURER	AS PROVIDED BY MANUFACTURER	AS PROVIDED BY MANUFACTURER	12	120	SUBMIT FOR PRIOR APPROVAL
P1	LITHONIA	DSXO LED-40C-700-40K-T4M- MVOLT-RPA	POLE MOUNTED PARKING LED FIXTURE. MOUNT AT VIA 25'-0" STEEL TAPPERED POLE. PROVIDE WITH MOTION SENSOR AND INTEGRAL PHOTOCELL. MOTION SENSOR REDUCES SYSTEM WATTAGE TO 25% OF FULL OUTPUT WHEN NO MOTION IS DETECTED FOR 5 MINUTES. REFER TO POLE MOUNT DETAIL FOR PRECAST POLE BASE. MINIMUM 10,000 LUMENS AT 4,000K CCT.	13"X7"X26"	4,000K CCT LEDS AS PROVIDED BY MANUFACTURER	AS PROVIDED BY MANUFACTURER	AS PROVIDED BY MANUFACTURER	91	120	SUBMIT FOR PRIOR APPROVAL
X1	DUAL LITE	LX-U-R-W-I	UNIVERSAL MOUNTING EXIT SIGN WITH WHITE HOUSING AND RED LETTERS. PROVIDE WITH SELF DIAGNOSTIC TESTING. RED LETTERING WHITE FINISH HOUSING.	-	RED LEDS AS PROVIDED BY MANUFACTURER	AS PROVIDED BY MANUFACTURER	AS PROVIDED BY MANUFACTURER	5	120	SUBMIT FOR PRIOR APPROVAL

GENERAL NOTES:

- 1. COORDINATE FINAL LIGHT FIXTURE INSTALL WITH OWNER PRIOR TO INSTALLING ROUGH-INS.
- 2. VERIFY COMPATIBILITY OF LIGHT FIXTURES WITH CEILING MATERIAL, ADJACENT CONSTRUCTION, AND ADJACENT FINISHES PRIOR TO SHOP DRAWINGS SUBMITTAL AND NOTIFY THE ARCHITECT OF ANY CONFLICTS WITH THE PROPOSED INSTALLATION.
- 3. CONTRACTOR IS RESPONSIBLE FOR ALL MISCELLANEOUS HARDWARE NECESSARY TO INSTALL AND SUPPORT THE LUMINAIRES.

								PAN									DNR - OLOFSON RANGE
LOAD DESCRIPTION		TY			WIRE		CKT						WIRE			LOAD	LOAD DESCRIPTION
	(VA)				SIZE		NO	Α	В			+		COND	_	(VA)	
RANGE-1 LIGHTING	455	ĮL.	20	1	10	3/4	1	1555	1055	2	20	1	12	3/4	R		MICROWAVE
RANGE-2 LIGHTING	455	L	20	1	10	3/4	3		1655	4	20*	1	12	3/4	R		REFRIGERATOR
RANGE-3 LIGHTING	455	L	20	1	10	3/4	5	635		6	20	1	12	3/4	R	N 9 X 10	KITCHEN RECEPTACLES
NTERIOR LIGHTING	1450	L	20	1	12	3/4	7		1810	8	20	1	12	3/4	R		TV RECEPTACLE
SPARE			20	1			9	1200		10	20	1	12	3/4	R		VENDING MACHINE
SPARE			20	1			11		1200	12	20	1	12	3/4	R		VENDING MACHINE
EXTERIOR LIGHTING	200	L	20	1	12	3/4	13	950		14	20	1	12	3/4	R		HAND DRYER
RECEPTACLES	720	R	20	1	12	3/4	15		1470	16	20	1	12	3/4	R	750	HAND DRYER
RECEPTACLES	720	R	20	1	12	3/4	17	1920		18	20	1	12	3/4	R	1200	EWC
RECEPTACLES	1080	R	20	1	12	3/4	19		1440	20	20	1	12	3/4	R	360	IT RECEPCTACLES
RECEPTACLES	720	R	20	1	12	3/4	21	2920		22	25	2	12	3/4	M	4400	CU-1
RECEPTACLES	720	R	20	1	12	3/4	23		2920	24							-
RECEPTACLES	900	R	20	1	12	3/4	25	3300		26	40	2	10	3/4	M	4800	CU-2
RECEPTACLES	900	R	20	1	12	3/4	27		3300	28							-
RECEPTACLES	900	R	20	1	12	3/4	29	2400		30	20	2	12	3/4	M	3000	CUH-1
WH-1	4500	M	30	1	10	3/4	31		6000	32							-
CP-1	150	М	20	1	12	3/4	33	900		34	20	2	12	3/4	M	1500	CUH-2
3-1	180	М	20	1	12	3/4	35		930	36							-
SHUNT TRIP	-		20	1	12	3/4	37	1250		38	50	2	8	1"	R	2500	PANEL B
GFS	500	М	20	1	12	3/4	39		1750	40							-1
EF-3	100	M	20	1	12	3/4	41	600		42	20	1	12	3/4	R	500	DATA RACK
ACT RECEPTACLES	360	R	20	1	12	3/4	43		900	44	20	1	12	3/4	R	540	CEILING TV CIRCUIT
ERV-1	100	М	20	1	12	3/4	45	1360		46	20	1	12	3/4	R		ACT RECEPTACLES
RECEPTACLES	360	R	20	1	12	3/4	47		460	48	20	1	12	3/4	R		ERV-2
RANGE-3 RECEPTACLES	540	R	20	1	10	3/4	49	1080		50	20	1	10	3/4	R	540	RANGE-2 RECEPTACLES
RANGE-1 RECEPTACLES	540	R	20	1	10	3/4	51	1000	790	52	20	1	10	3/4	L	250	SITE LIGHTING
RCP-1	150	М	20	1	12	3/4	53	150	123	54	20	1		0, .			SPARE
* DENOTES GFCI BREAKER	150	IVI	20	1	12	5/4	55	130		54	20	1					OF AIRE
OLTS-PHASE-WIRE	120/240	/ 10	υμνεί	E 3	N/												
BUS RATING	225A	v - 1 [IIAO	0	, v v					TOT	ΔΙΙζ	٦٨٢	א א ר	PHASE			(KVA)
MAIN BREAKER RATING	225A-2P	<u> </u>								101	AL L	JAL	ווסכ	ПАЗЕ			(NVA)
MOUNTED	SURFAC	_								Λ ال	1 / C L	. ~		CTED	101	(D	20.22
DEMAND LIGHTING	3.27	_	K//V	@	1000/			2 27						CTED			24.63
					100%			3.27	-	ВР	HASE	: 00	OININE	CIED	LUF	ND.	24.03
DEMAND RCPT. 10KVA @ 100%+ DEMAND MOTOR			KVA	_				16.10	-								
	19.38)			100%			19.38	-								
DEMAND APPLIANCES					100%				-	DEA	4 A A I D		\ D				
OTHER	00000		KVA	@	%				-1		AND						TOTAL MAA
SCCR RATING	22000		A							SUN	/IIVIAH	(Y	TYPE				TOTAL KVA
TOT. DEMAND (KVA)	38.75																
TOT. DEMAND (AMPS)	161.44		-								HTING		L				3.27
	14-00-	_									EPT.		R				16.10
TOT. CONNECTED LOAD (KVA)	44.85									MO			M				19.38
TOT. CONNECTED LOAD (AMPS)	186.8	5									LIAN	CE					
										OTH	FR		0				

LOAD DESCRIPTION	LOAD	TV	BDK	D	MIDE		CKT	PH/	\SE	CKT	BDK	ъ	WIRE		TV	LOAD	LOAD DESCRIPTION
LOAD BESCHI HON	(VA)	ı		_		COND		A	В					COND		(VA)	LOAD DESCRIPTION
GARAGE OPENER	900	М	20	1	12	3/4	1	1620		2	20	1	12	3/4	R		RECEPTACLES
LIGHTING	180	L	20	1	12	3/4	3		720	4	20	1	12	3/4	R	540	RECEPTACLES
EXTERIOR LIGHTING	180	L	20	1	12	3/4	5	180		6	50	2	6	3/4	R		WELDER
SPARE			20	1			7			8		П					-
SPARE			20	1			9			10	20	1					SPARE
SPARE			20	1			11			12	20	1					SPARE
BUS RATING MAIN BREAKER RATING MOUNTED	100A 50A-2P SURFAC	- Œ												CTED I			1.80
DEMAND LIGHTING	0.36	_	KVA	@	100%			0.36		B PI	HASE	C	ONNE	CTED	_O/	\D	0.72
DEMAND RCPT. 10KVA @ 100%+	1.26		KVA	@	50%			1.26									
DEMAND MOTOR	0.90		KVA					0.90									
DEMAND APPLIANCES			KVA														
OTHER			KVA	@	%					DEM	IAND	LC	DAD				
SCCR RATING	10000		A							SUN	1MAR	Y	TYPE				TOTAL KVA
TOT. DEMAND (KVA)	2.52		_														
TOT. DEMAND (AMPS)	10.50		_								ITING		L				0.36
											EPT.		R				1.26
TOT. CONNECTED LOAD (KVA)	2.52		=							MOT		-	M				0.90
TOT. CONNECTED LOAD (AMPS)	10.50		•							APP OTH	LIAN(ER	CE	A O				
TOT. CONNECTED AMPS * 1.25	13.13		AMPS	3													

						EC	UIPMEN	IT SCHI	EDULE
	ELECTRICA	L CHAR	ACTERIS	TICS		DISC	CONNECT		
	МОТО					SIZE	NEMA		
TAG	VOLT/PHASE	HP	KW	MCA	TYPE	(AMPS)	RATING	(AMPS)	REMARKS
CU-1	240/1	-	-	22.1	DS	30	3R	-	CONNECTED TO SSI-1,2 - INTERCONNECT WIRE PROVIDED BY M.C.
CU-2	240/1	-	-	25	DS	30	3R	-	CONNECTED TO SSI-3 - INTERCONNECT WIRE PROVIDED BY M.C.
SSI-1,2	240/1	-	-	1	INT	-	-	-	CONNECT VIA CU-1
SSI-3	240/1	-	-	3	INT	-	-	-	CONNECT VIA CU-2
GFS-1	115/1	-	-	1	СВ	-	-	-	-
RCP-1	120/1	1/8	-	-	СВ	-	-	-	-
B-1	120/1	-	-	15	СВ	-	-	-	-
EF-1,2	120/1	-	-	1	во	-	-	-	CORD AND PLUG BY MANUFACTURER. CONNECT TO NEAREAST LIGHTING CIRCUIT.
EF-3	120/1		-	1	INT	-	-	-	-
CUH-1	240/1	-	3	13.9	INT	-	-	-	INT. THERMOSTAT
CUH-2	240/1	-	1.5	6.6	INT	-	-	-	INT. THERMOSTAT
ERV-1	120/1	-	-	1	во	-	-	-	CORD AND PLUG BY MANUFACTURER
ERV-2	120/1	-	-	1	DS	20	1	-	COORDINATE WITH M.C.
WH-1	240/1	-	4.5	-	СВ	-	-	-	DISCONNECT VIA PANEL A. COORDINATE WITH M.C.
CP-1	115/1	-	-	1	СВ	-	-	-	DISCONNECT VIA PANEL A. COORDINATE WITH M.C.
BREVIATIONS:					•	•		•	
СВ	CIRCUIT BREAI	KER IN F	PANELBO	DARD			во	CORD A	ND PLUG
DS	NON-FUSED D	ISCONNE	ECT SWI	TCH					
FS	TOGGLE SWITE	CH WITH	I PLUG F	USE					
INT	INTEGRAL WIT	H EQUIP	MENT F	ROM FAC	CTORY				
HOA	HAND OFF AU	TO SWIT	CH						

	LIGHTING CONTROL DEVICE SCHEDULE										
TYPE	MANUFACTURER	CATALOG NUMBER	MOUNTING	VOLTAGE	DESCRIPTION	APPROVED EQUALS					
OC1	HUBBELL BUILDING AUTOMATION	OMNIDT2000/UVPP	CEILING		2000 SQUARE FOOT COVERAGE ULTRASONIC AND PASSIVE INFRARED OCCUPANCY SENSOR WITH WHITE FINISH AND 120-277/24 VOLT POWER PACK. INTEGRAL SELF-ADJUSTING SENSITIVITY MICROPROCESSOR. 360° PASSIVE INFRARED COVERAGE. SENSOR INCLUDES THREE ACCESSORY PASSIVE INFRARED MASKS TO REDUCE COVERAGE ZONE TO 180° AND LIMIT ZONE WIDTH AS REQUIRED. VERIFY REQUIRED AREA OF COVERAGE WITH OWNER AND ENGINEER AND MASK SENSOR ACCORDINGLY. FIVE YEAR WARRANTY FURNISHED BY MANUFACTURER.	AS APPROVED BY ENGINEER					
OC1A	HUBBELL BUILDING AUTOMATION	OMNIDT2000	CEILING	120-277/ 24VDC	2000 SQUARE FOOT COVERAGE ULTRASONIC AND PASSIVE INFRARED OCCUPANCY SENSOR WITH WHITE FINISH AND WITHOUT 120-277/24 VOLT POWER PACK. EXTEND CONTROL CIRCUIT CONDUCTORS TO ASSOCIATED OC1 SENSOR.	AS APPROVED BY ENGINEER					
OC2	HUBBELL BUILDING AUTOMATION	OMNIUS2000/UVPP	CEILING	120-277/ 24VDC	2000 SQUARE FOOT COVERAGE ULTRASONIC OCCUPANCY SENSOR WITH WHITE FINISH AND 120-277/24 VOLT POWER PACK. INTEGRAL SELF-ADJUSTING SENSITIVITY MICROPROCESSOR. 180° ULTRASONIC COVERAGE. FIVE YEAR WARRANTY FURNISHED BY MANUFACTURER.	AS APPROVED BY ENGINEER					
OC3	HUBBELL BUILDING AUTOMATION	LHD-IRS3-N-GY	WALL	120/277	1000 SQUARE FOOT COVERAGE ULTRASONIC AND PASSIVE INFRARED WALLBOX OCCUPANCY SENSOR WITH MANUAL ON SWITCH, 2 BUTTON DIMMER, AND INTEGRAL DAYLIGHTING PHOTOCELL. IMPACT RESISTANT PIR LENS AND HOUSING WITH GRAY FINISH. 120/277 VOLT INPUT POWER. INTEGRAL SELF-ADJUSTING SENSITIVITY MICROPROCESSOR. FIELD CONFIGURE SENSOR FOR AUTOMATIC ON/OFF OPERATION. FIVE YEAR WARRANTY FURNISHED BY MANUFACTURER.	AS APPROVED BY ENGINEER					
DS	PLC MULTIPOINT	EDS	CEILING	0-10VDC	BLUE SPECTRUM RESPONSE ENHANCED PHOTODIODE SURFACE MOUNTED DAYLIGHT SENSOR WITH 0-10VDC INPUT / OUTPUT RANGE. CLEAR ACRYLIC FRESNEL OPTIC HAS 60° REFERENCE CONE FACING DOWN AND DETECTION RANGE OF 0-500 FOOTCANDLES, WITH ADJUSTMENT RANGE OF 7-140 FOOTCANDLES. FULLY ADJUSTABLE DAYLIGHT SENSITIVITY RESPONSE ACCURATE TO 1% AT 70°F. SENSOR BODY CAN ATTACH DIRECTLY TO CEILING, IS FLAME RETARDANT AND COMPLIES WITH UL94HB. SENSOR CONNECTS DIRECTLY TO 0-10V CONTROL CONDUCTORS OF COMPATIBLE LED POWER SUPPLY DRIVERS. COORDINATE DAYLIGHTING OPERATION SET POINTS WITH OWNER AND ENGINEER AND PER FACTORY SUPPLIED CALIBRATION INSTRUCTIONS. CONTRACTOR TO SUBMIT CALIBRATION REPORT DOCUMENTS FOR EACH DAYLIGHTING SENSOR CONTROLLED AREA INDICATING DATE OF CALIBRATION AND PERFORMANCE OF DAYLIGHTING CONTROLS. FOR CALIBRATION AND TESTING FOLLOW DAYLIGHT SENSOR SYSTEM MANUFACTURER'S RECOMMENDED PROCEDURE.	KELE EDS SERIES GREENGATE DLC-PD-DIM SERIES, HUBBELL BUILDING AUTOMATION DLC7 SERIES					
SD	LEVITON	IP710-LF-W	WALL	0-10VDC	0-10V DIMMING SWITCH, WHITE FINISH	AS APPROVED BY ENGINEER					

GENERAL NOTES: (apply to all types.)

A. SENSOR EQIUIPMENT MANUFACTURERS SHALL PROVIDE FACTORY AUTHORIZED REPRESENTATIVE TO DEMONSTRATE TYPICAL INSTALLATION AND COMMISSIONING OF EQUIPMENT TO INSTALLING CONTRACTOR DURING PROJECT CONSTRUCTION.

B. OCCUPANCY SENSOR TIME-OFF SETTINGS SHALL BE 20 MINUTES MINIMUM AND 30 MINUTES MAXIMUM.

KCL Engineering

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West Des Moines, Iowa 50265

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IL RESOURCES RVICES - WALLACE BUILING



NG RANGE

SCHEDULES

DIAGRAM &

TRAINING CENTER AND RANGE RENOVATIONS

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AWN BY: PROJECT NUMBER:

DRAWN BY: PROJECT NUMBER:

JTL 16-02-77-02

CHK'D BY: DATE:

JRD 08.31.2016

EET No:

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