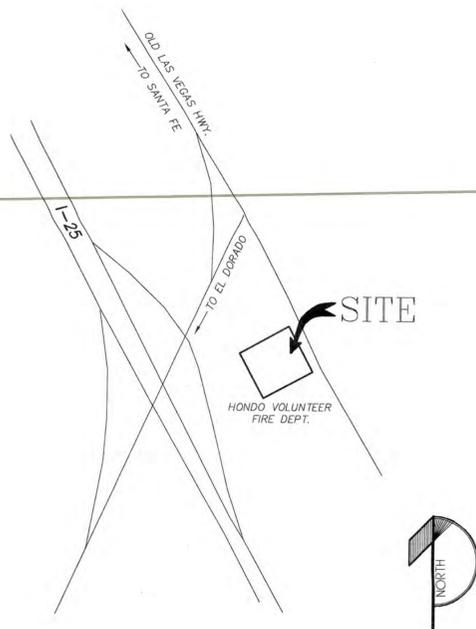


EASTERN REGION HEADQUARTERS HONDO FIRE STATION SANTA FE COUNTY

645 Old Las Vegas Highway, Santa Fe, New Mexico
Township 15 North, Range 10 East, Section 3, Santa Fe County



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- ✓ C.1.1 SITE AND PHASING PLAN, SITE DETAILS
- ✓ C.2.1 GRADING AND DRAINAGE PLAN
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- ✓ S002 STRUCTURAL GENERAL NOTES
- ✓ S101 FOUNDATION PLAN MEZZANINE FRAMING
- ✓ S102 ROOF FRAMING PLAN
- ✓ S201 FOUNDATION SECTIONS AND DETAILS
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- ✓ A.1.2 FLOOR PLAN - DOORS AND FINISHES
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- ✓ A.3.1 REFLECTED CEILING PLAN
- ✓ A.4.1 BUILDING SECTION & EXTERIOR ELEVATIONS
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- ✓ A.6.1 INTERIOR PARTITIONS AND ELEVATIONS
- ✓ A.7.1 INTERIOR ELEVATIONS AND DETAILS
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- ✓ M-1 MECHANICAL FLOOR PLAN
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- ✓ E-5 ELECTRICAL DIAGRAMS AND DETAILS
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COUNTY COMMISSION

HARRY B. MONTOYA, COMMISSIONER DISTRICT 1
 VIRGINIA VIGIL, COMMISSIONER DISTRICT 2
 MIKE D. ANAYA, COMMISSIONER DISTRICT 3
 PAUL CAMPOS, COMMISSIONER DISTRICT 4 (CHAIRMAN)
 JACK SULLIVAN, COMMISSIONER - DISTRICT 5

SANTA FE COUNTY

GERALD T. E. GONZALEZ, COUNTY MANAGER

Chief Stan Holden, Fire Chief Santa Fe County Fire Department

Tony Flores, Director of Project & Facilities Management Department

Rudy Garcia, Project Development Division Director

Architectural Code Review

APPLICABLE CODES AND REGULATIONS
 INTERNATIONAL BUILDING CODE (IBC), 2003
 NEW MEXICO BUILDING CODE, 2003
 LIFE SAFETY CODE (LS), 1994
 AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES (ADAAG), 1992
 NEW MEXICO ENERGY CODE, 1998

OCCUPANCY TYPE (IBC 304)
 FIRE STATION B

EXTERIOR WALLS AND OPENINGS (IBC TABLE 601)

CONSTRUCTION TYPE (IBC TABLE 503) V-B

BUILDING HEIGHT (IBC TABLE 503) ACTUAL ALLOWABLE
 APPARATUS BAY 26'-0" 40'-0"

BUILDING FLOOR AREA (IBC TABLE 503) 8,736 SF 9,000 SF
 AREA UNLIMITED DUE TO FIRE SPRINKLER SYSTEM

OCCUPANT LOAD (IBC TABLE 1003.2.2.2)
 TRAINING ROOM 100
 LIVING QUARTERS 8

RN 9.29.03



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 Hondo Fire Station
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 645 Old Las Vegas Highway
 Santa Fe, New Mexico

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02004
 PROJECT NO.

1 March 2005
 DATE

HRJ
 DRAWN BY

HRJ
 PROJ. MGR.

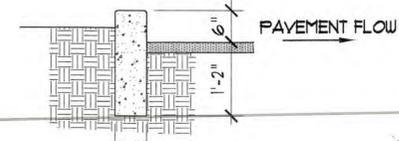
35 65 85 100
 COMPLETION

COVER SHEET

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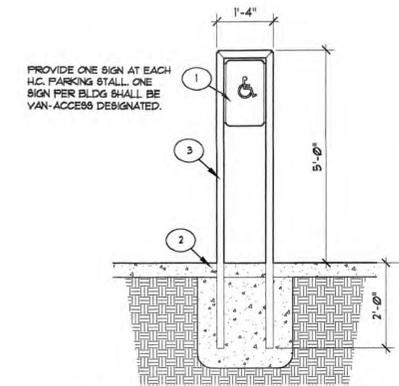


ORIENT TOP
SLOPE TO DRAIN
INTO PLANTERS



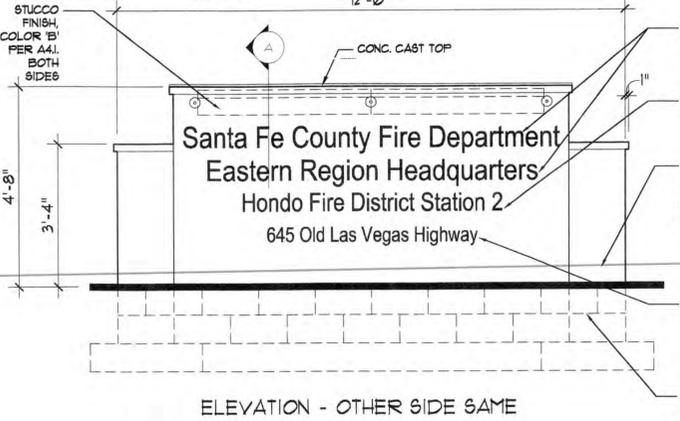
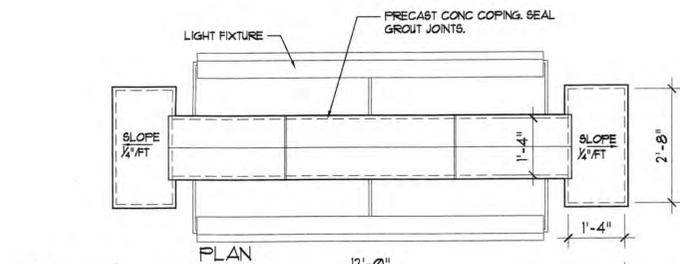
PROVIDE CONTROL JTS @ 3' O.C. TYPICAL
PROVIDE EXPANSION JTS @ 18' O.C. TYPICAL
4000 PSI CONCRETE MINIMUM

4 HEADER CURB
1/2" = 1'-0"



(1) SIGN TO READ "ACCESSIBLE PARKING" TYPICAL EXCEPT VAN AISLES SHALL READ "VAN ACCESSIBLE". SIGN SIZE 11.75" W X 18" H. PROVIDE TRANSLUCENT FLEXIGLASS SIGNS.
(2) PROVIDE 4" CONCRETE ENCASUREMENT OR BORE HOLE THROUGH CONCRETE PAVEMENT.
(3) TO 2" x 2" x 1/8" PRIMED & PAINTED STEEL POSTS & CROSS BAR. PROVIDE 3/4" x 1/8" @ 8" G.A. CONTINUOUS FLANGE EA. SIDE @ SIGN. MITRE OUTSIDE CORNER OF POSTS.
FINISH ALL STEEL PIPE W/ PRIMER & 2 COATS ENAMEL. COLOR TO BE SELECTED BY ARCHITECT.

3 HANDICAP SIGN
NO SCALE

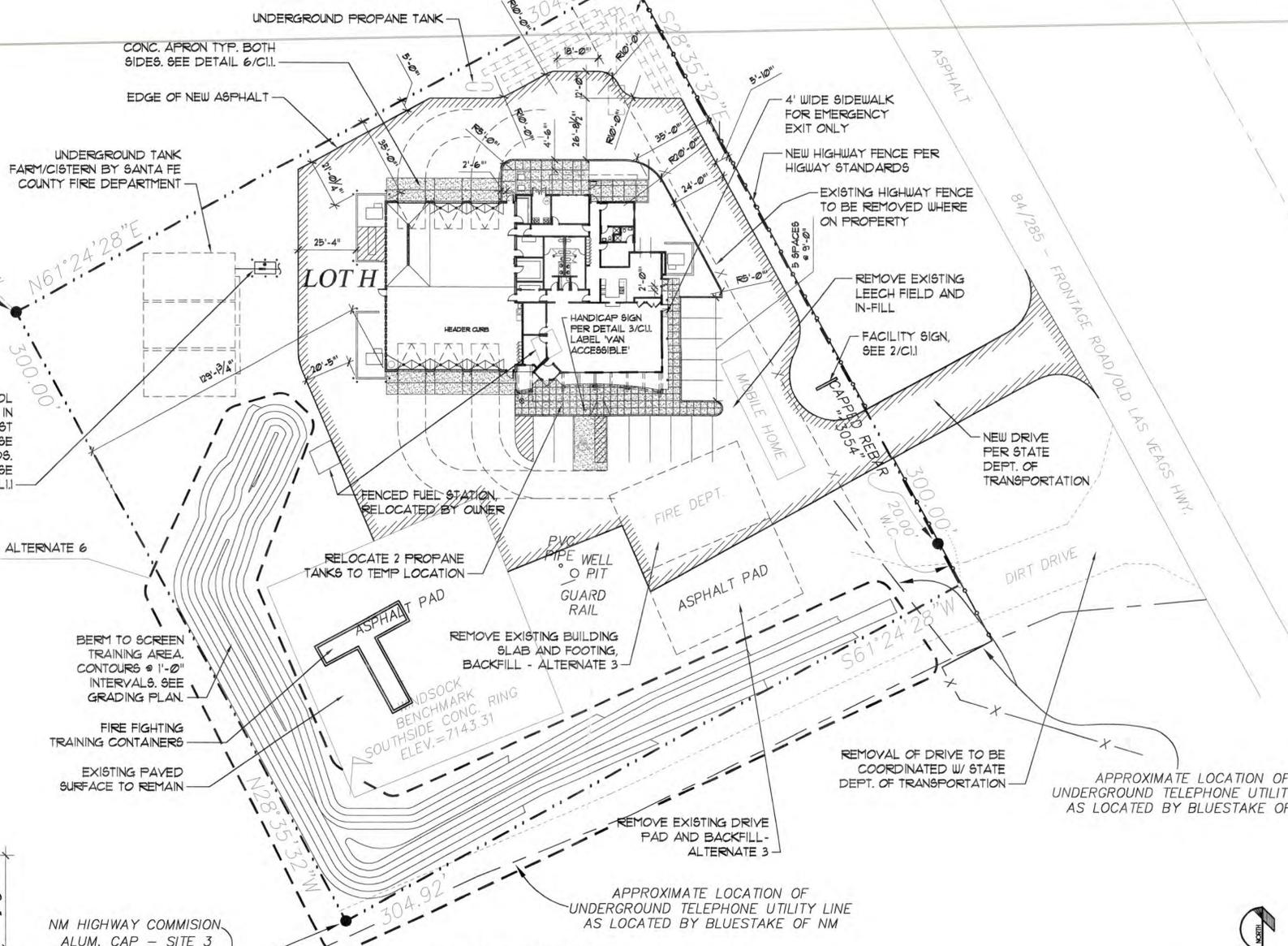


2 SIGN DETAIL
1/2" = 1'-0"

NM HIGHWAY COMMISSION
ALUM. CAP - SITE 3

PLAT REFERENCE

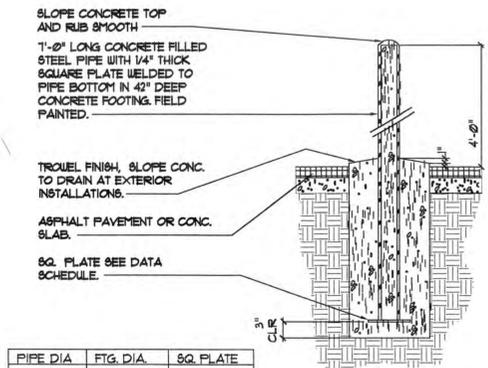
REFERENCE A PLAT OF SURVEY TITLED, "BOUNDARY SURVEY PLAT PREPARED FOR SANTA FE COUNTY & HVFD FOUNDATION, SHOWING A 2.10 ACRE TRACT, LOT H, LYING WITHIN NM STATE HIGHWAY DEPT. R.O.W., WITHIN THE CANADA DE LOS ALAMOS GRANT, PROJECTED SECTION 3, T-15-N, R-10-E, N.M.P.M. SANTA FE COUNTY, NEW MEXICO," DATED 01/31/02 BY JEFFERY L. LUDWIG, N.M.L.S. 13054 AND FILED FOR RECORD IN THE OFFICE OF THE SANTA FE COUNTY CLERK IN PLAT BOOK 493, PAGE 010 AS DOC. No.1191613.



SITE AND PHASING PLAN
1" = 30'-0"

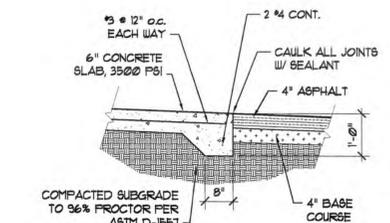
GENERAL NOTES:

- A. CONTRACTOR SHALL COORDINATE WITH OWNER AND ARCHITECT TO PHASING OF WORK SO AS TO NOT INTERFERE WITH OWNER'S USE OF EXISTING FACILITIES.
- B. CONTRACTOR WILL NEED TO COORDINATE WITH OWNER TO SEQUENCING OF OWNER MOVING INTO NEW BUILDING TO ALLOW REMOVAL OF EXISTING STRUCTURES BEFORE COMPLETING SITE WORK.
- C. OWNER SHALL REMOVE EXISTING MOBILE HOME AND FIRE STATION AFTER MOVE IN OF NEW.
- D. ASPHALT PAVING IS TO BE 4" OF ASPHALTIC CONCRETE OVER 4" BASE COURSE.
- E. SEE SHEET A21 FOR WATER HARVESTING DRAIN LOCATIONS & DETAILS.
- F. CONCRETE WHEEL STOPS AS SPECIFIED ARE TO BE INSTALLED AT EACH PARKING SPACE OF THE SOUTH AND EAST PARKING SPACES. HANDICAP SPACE WHEEL STOP IS TO BE PAINTED "HANDICAP" BLUE.

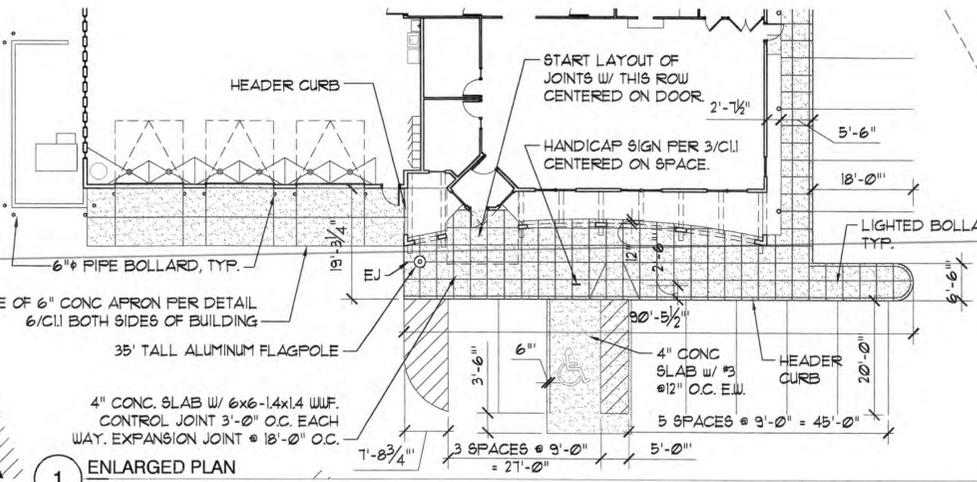


PIPE DIA	FTG. DIA	SQ. PLATE
4"	18"	6" SQ.
6"	24"	8" SQ.
8"	30"	10" SQ.

5 BOLLARD DETAIL
NO SCALE



6 CONCRETE APRON EDGE
1/2" = 1'-0"



1 ENLARGED PLAN
1" = 15'-0"

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Hondo, New Mexico**

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PROJECT NO.
1 March 2005 RE-BID 18 JULY 2005
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SITE AND PHASING PLAN
SITE DETAILS

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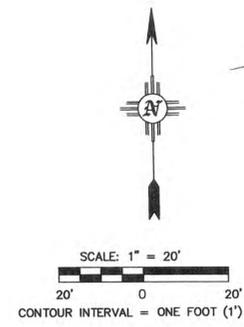
C1.1

STAKING NOTE

INFORMATION SHOWN IS FOR GRADING AND DRAINAGE ONLY AND IS NOT TO BE USED FOR BUILDING STAKING PURPOSES. SEE SITE PLAN FOR ACTUAL LOCATION OF IMPROVEMENTS.

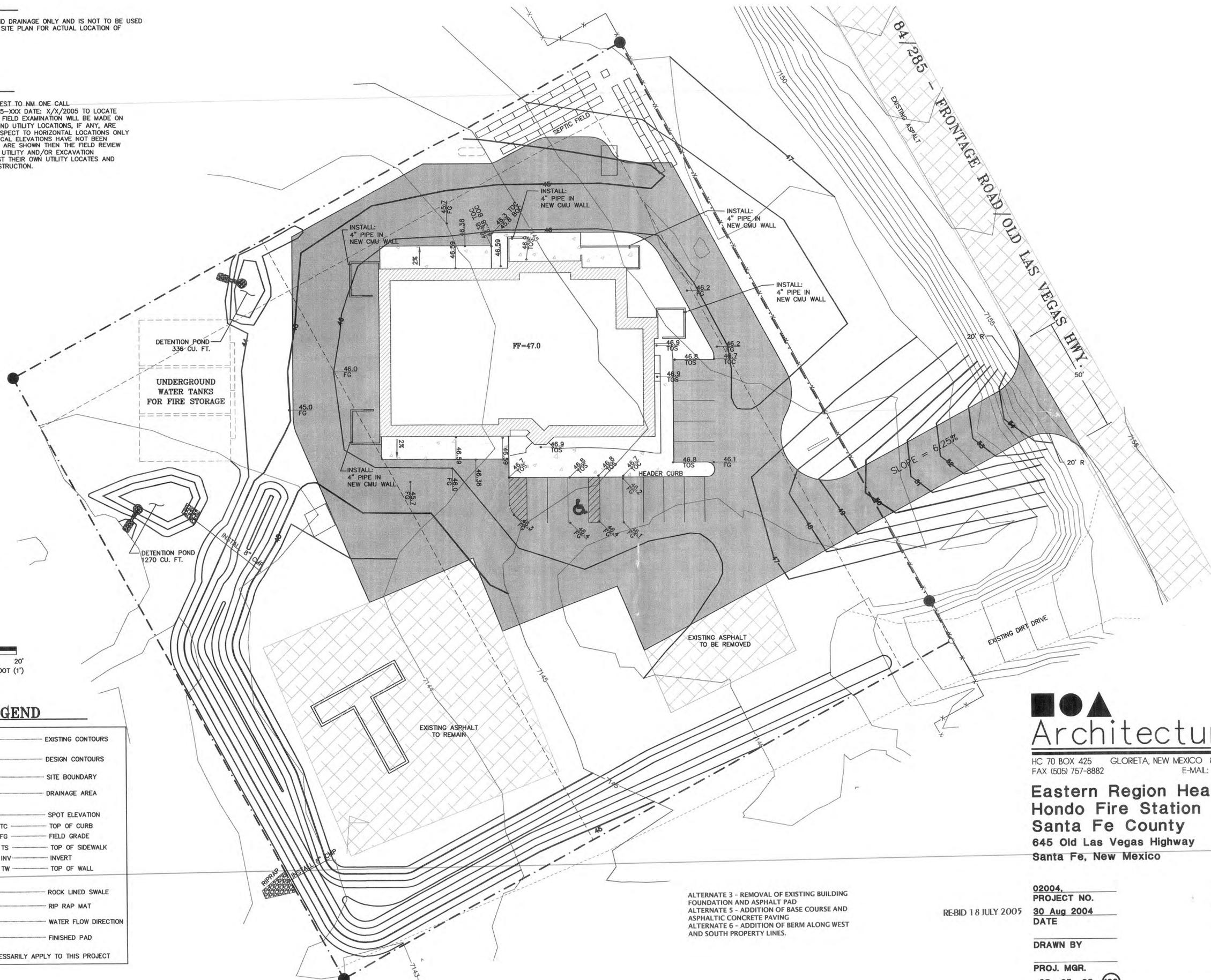
UTILITY NOTE

WALKER ENGINEERING HAS MADE A REQUEST TO NM ONE CALL (1-800-321-2537), REFERENCE NO. 2005-XXX DATE: X/X/2005 TO LOCATE UNDERGROUND UTILITIES FOR THIS SITE. FIELD EXAMINATION WILL BE MADE ON X/X/2005 AND ALL MARKED UNDERGROUND UTILITY LOCATIONS, IF ANY, ARE SHOWN. THE LOCATIONS SHOWN ARE RESPECT TO HORIZONTAL LOCATIONS ONLY AND UNLESS SPECIFICALLY SHOWN, VERTICAL ELEVATIONS HAVE NOT BEEN DEFINED. IF NO UNDERGROUND UTILITIES ARE SHOWN THEN THE FIELD REVIEW REVEALED NO MARKINGS. ALL GRADING, UTILITY AND/OR EXCAVATION CONTRACTORS ARE REQUIRED TO REQUEST THEIR OWN UTILITY LOCATES AND VERIFY FIELD CONDITIONS PRIOR TO CONSTRUCTION.



LEGEND

- EXISTING CONTOURS
 - DESIGN CONTOURS
 - SITE BOUNDARY
 - DRAINAGE AREA
 - SPOT ELEVATION
 - TC — TOP OF CURB
 - FG — FIELD GRADE
 - TS — TOP OF SIDEWALK
 - INV — INVERT
 - TW — TOP OF WALL
 - ROCK LINED SWALE
 - RIP RAP MAT
 - WATER FLOW DIRECTION
 - FINISHED PAD
- NOT ALL SYMBOLS WILL NECESSARILY APPLY TO THIS PROJECT



ALTERNATE 3 - REMOVAL OF EXISTING BUILDING FOUNDATION AND ASPHALT PAD
 ALTERNATE 5 - ADDITION OF BASE COURSE AND ASPHALTIC CONCRETE PAVING
 ALTERNATE 6 - ADDITION OF BERM ALONG WEST AND SOUTH PROPERTY LINES.

RE-BID 18 JULY 2005

HRJ Architecture, LLC

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 PROJECT NO.
30 Aug 2004
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PROJ. MGR.
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W•E Walker Engineering
 905 Camino Sierra Vista, Santa Fe, NM 87501
 505-820-7990
 FAX 505-820-8659
 E-MAIL: civil@walkerengineering.net

No.	REVISION	BY	APP.	DATE

PROJECT:	04-176	DESIGNED BY:	R.L.F.
FILE:	176 GRADING	DRAWN BY:	R.L.F.
DATE:	9/1/2005	CHECKED BY:	M.E.W.
SCALE:			AS NOTED

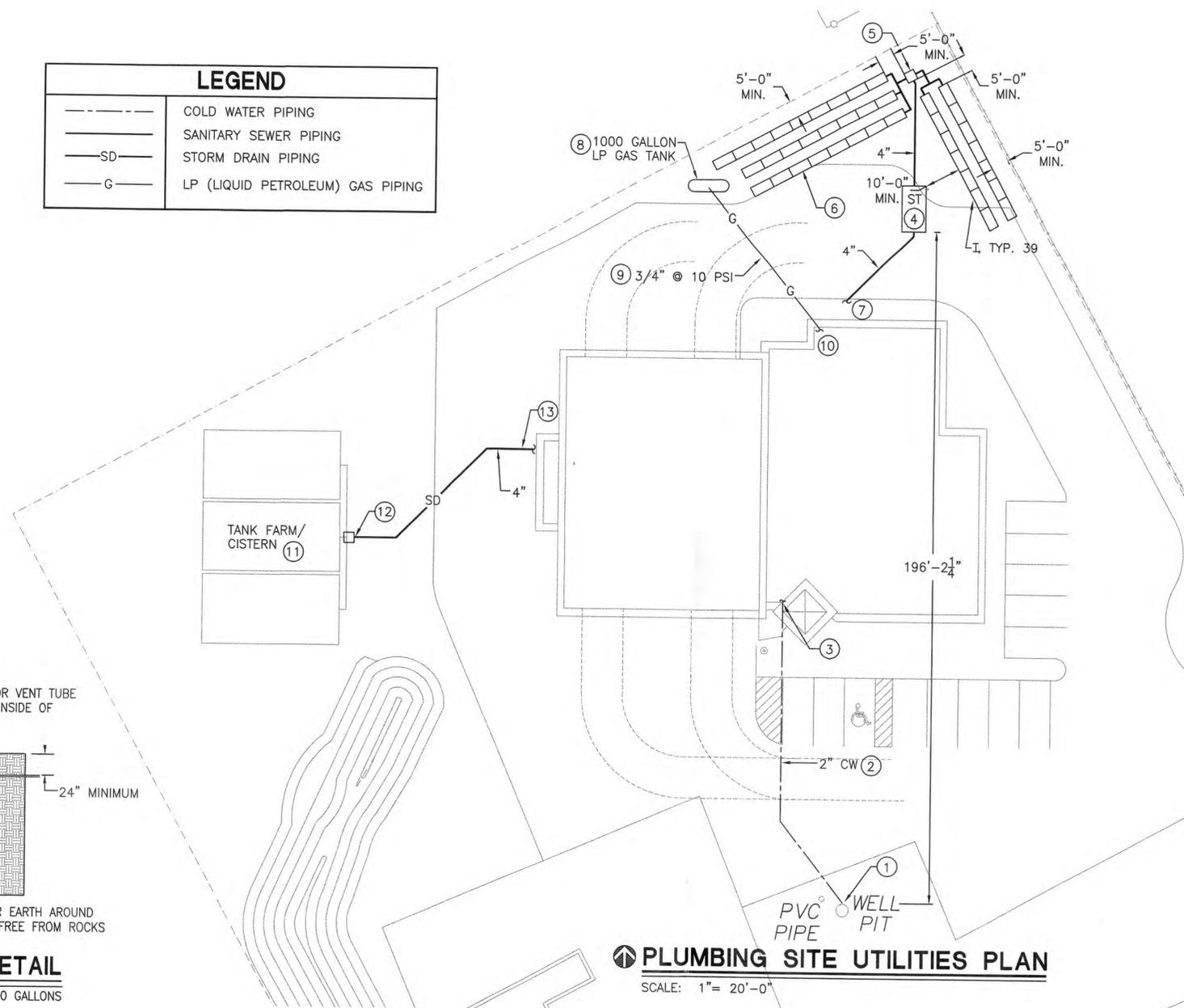
Handwritten signature and initials

PROJECT: **HONDO EAST FIRE STATION**
 SHEET TITLE: **GRADING PLAN**

COUNTY REVIEW	SIGN-OFF	DATE
DEPARTMENT		
LAND USE PLANNER		
PUBLIC WORKS DIRECTOR		
S.F. WATER COMPANY		

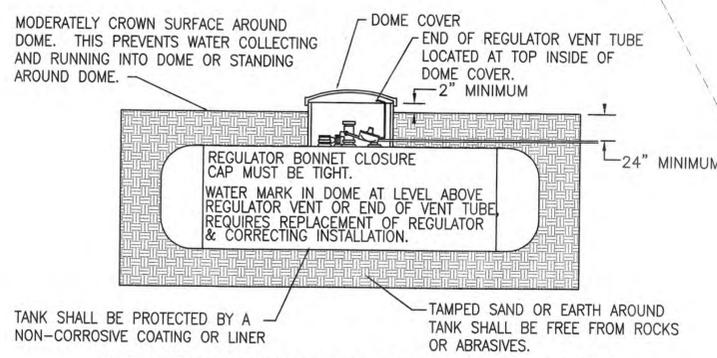
SHEET NO.
C2.1

LEGEND	
----	COLD WATER PIPING
----	SANITARY SEWER PIPING
—SD—	STORM DRAIN PIPING
—G—	LP (LIQUID PETROLEUM) GAS PIPING



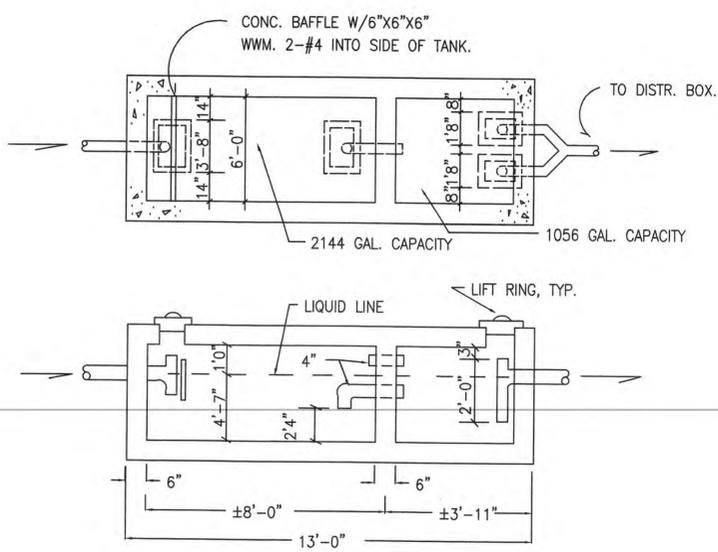
PLUMBING KEYED NOTES

- ① CONNECT NEW MAIN COPPER WATER PIPING TO EXISTING WELL AND 2000 GALLON STORAGE TANK SYSTEM IN THIS AREA. COORDINATE SCOPE OF WORK WITH ARCHITECT / OWNER. PROVIDE AND INSTALL DI-ELECTRIC UNIONS AT ALL CONNECTIONS OF DISSIMILAR METALS.
- ② ROUTE NEW MAIN TYPE "K" COPPER WATER PIPING MINIMUM 48 IN. BELOW GRADE. INSULATE ALL WATER PIPING WITH MINIMUM 1 IN. THICK WEATHER-PROOF INSULATION. SEAL INSULATION CONNECTIONS WEATHER-TIGHT.
- ③ ROUTE NEW MAIN WATER PIPING INTO BUILDING AT THIS LOCATION. SEE "PLUMBING FLOOR PLAN" ON SHEET P-2 FOR CONTINUATION OF PIPING.
- ④ PROVIDE AND INSTALL NEW 3200 GALLON SEPTIC TANK IN THIS LOCATION. CONTRACTOR RESPONSIBLE FOR INSTALLING BAFFLES, 4 IN. PVC PIPE BETWEEN TANK SECTIONS, INLET AND OUTLET CONNECTIONS, AND ALL ASSOCIATED ACCESSORIES NECESSARY TO MEET CURRENT UPC REQUIREMENTS CONCERNING SEPTIC TANK SYSTEMS INCLUDING CORRECT CONSTRUCTION APPROVED FOR AUTOMOBILES TO CROSS OVER. SEE "SEPTIC TANK DETAIL" ON THIS SHEET FOR GENERAL INSTALLATION REQUIREMENTS.
- ⑤ PROVIDE AND INSTALL DISTRIBUTION BOX IN THIS LOCATION. MAINTAIN ALL REQUIRED CLEARANCE REQUIREMENTS. SEE "DISTRIBUTION BOX DETAIL" ON THIS SHEET FOR ADDITIONAL SCOPE OF WORK.
- ⑥ PROVIDE AND INSTALL INFILTRATOR SYSTEM LEACH FIELD IN THIS AREA. INSTALL SYSTEM PER "INFILTRATOR TRENCH DETAIL" ON THIS SHEET AND PER MANUFACTURER'S SPECIFICATION. MINIMUM 39 SECTIONS.
- ⑦ ROUTE NEW PVC WASTE PIPING INTO BUILDING AT THIS LOCATION. SEE "PLUMBING FLOOR PLAN" ON SHEET P-1 FOR CONTINUATION. SLOPE PIPING 1/4 IN. PER FOOT. CONFIRM INVERTS PRIOR TO ORDERING PIPING AND EQUIPMENT AND INFORM OWNER IF MODIFICATIONS ARE NECESSARY PRIOR TO START OF WORK.
- ⑧ PROVIDE AND INSTALL 1000 GALLON LP GAS TANK BELOW GRADE IN THIS AREA. SEE "UNDERGROUND LP STORAGE DETAIL" ON THIS SHEET FOR ADDITIONAL SCOPE OF WORK. INSTALL TO MEET CURRENT UPC REQUIREMENTS AND MANUFACTURER'S SPECIFICATIONS.
- ⑨ ROUTE NEW GAS PIPING 24 IN. MINIMUM BELOW GRADE AT MINIMUM 10 PSI PRESSURE. SLEEVE GAS PIPING ROUTED BELOW PAVED AREAS.
- ⑩ ROUTE NEW GAS PIPING INTO BUILDING AT THIS LOCATION. SEE "PLUMBING FLOOR PLAN" ON SHEET P-2 FOR CONTINUATION AND ADDITIONAL SCOPE OF WORK.
- ⑪ OWNER TO PROVIDE TANK FARM / CISTERN SYSTEM IN THIS AREA FOR STORM WATER COLLECTION. CONTRACTOR SHALL PROVIDE AND WARRANT CONNECTION TO TANK FARM / CISTERN SYSTEM.
- ⑫ CONNECT STORM DRAIN PIPING TO DISTRIBUTION BOX INLET IN THIS LOCATION. ROUTE NEW STORM DRAIN PIPING 24 IN. MINIMUM BELOW GRADE AT 1/4 SLOPE PER FOOT. FIELD VERIFY INVERT PRIOR TO ORDERING ANY PIPING. COORDINATE WITH FIRE PROTECTION CONTRACTOR IN CASE TRENCHING CAN BE USE TO COMBINE PIPING.
- ⑬ SEE "PLUMBING FLOOR PLAN" ON SHEET P-1 FOR CONTINUATION OF SCOPE OF WORK PRIOR TO ROUTING STORM DRAIN PIPING INTO BUILDING.

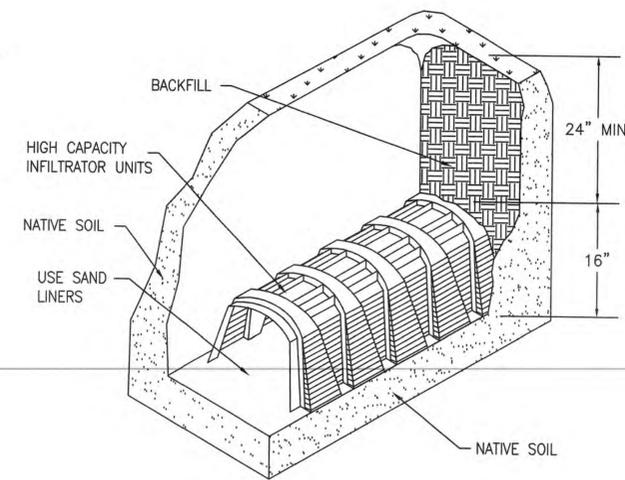


UNDERGROUND LP STORAGE DETAIL
SCALE: NONE 1000 GALLONS

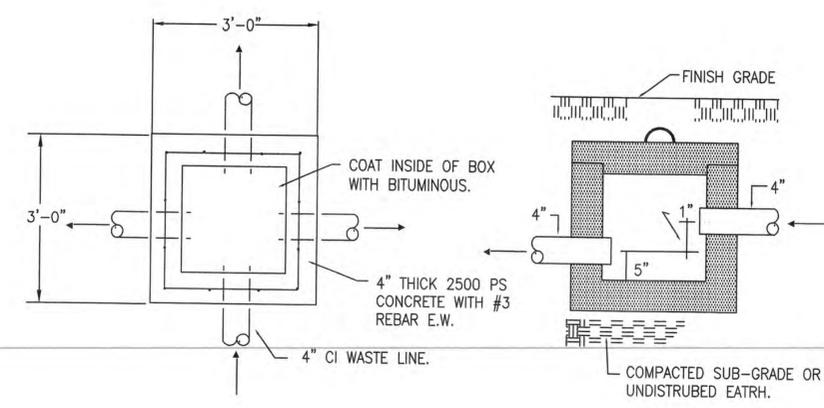
PLUMBING SITE UTILITIES PLAN
SCALE: 1" = 20'-0"



SEPTIC TANK DETAIL
SCALE: NONE 3200 GALLONS



INFILTRATOR TRENCH DETAIL
SCALE: NONE



DISTRIBUTION BOX DETAIL
SCALE: NONE

HIGHTECH E&D, LLC

PRECISION ENGINEERING & DRAFTING SERVICES
EMAIL: info@hightech-engineering.com
(505) 438-8161 Phone (505) 310-2014 Cell
P.O. Box 5611 Santa Fe, NM 87502



Margaret G. Baca
3-1-05

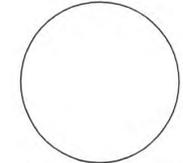
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Santa Fe, New Mexico**

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35 65 95 100

PLUMBING SITE UTILITIES PLAN



IRRIGATION SPECIFICATIONS: (ALTERNATE 4)

PIPE AND FITTINGS-

- A. All piping to plants on the drip irrigation system shall be a flexible poly pipe. The reclamation seed area shall use high pressure flexible tubing. 1/4" or 3/16" microtubing will be used for each emitter to the plants.
- B. Fittings shall be poly fittings compatible to the pipe. Micro fittings shall be used for the microtubing and Agriform parts are recommended.
- C. Clamps shall be stainless steel keystone pinch clamps.

PVC PIPE AND FITTINGS-

- A. Sleeves are to be Schedule 40 PVC pipe with PVC fittings.
- B. Any PVC pipe needed off the water meter to the valve box shall be Schedule 40.
- C. Risers and threaded nipples. All risers are to be galvanized. All threaded nipples are to be Schedule 80.
- D. Primer and glue shall be an approved material meeting irrigation standards.

VALVE BOXES-

- A. Valve boxes shall be Carson or approved equal.

VALVES-

- A. Automatic valves shall be Rainbird DV valves.
- B. Manual gate valves shall be brass with cross handles.

CONTROLLERS-

- A. The controller shall be a Rainbird 6 station outdoor E class or approved equal.

WIRE-

- A. Wire shall be approved for direct burial and compliant with the controller.

BACKFLOW PREVENTER-

- A. Backflow preventer shall be a Champion atmospheric vacuum breaker or equal.

EMITTERS AND RECLAMATION SPRAYS-

- A. Emitters shall be Rainbird 2 gph pressure compensating or approved equal.
- B. Reclamation sprays shall be Hardie microsprinklers on approved stakes.

DRAINS-

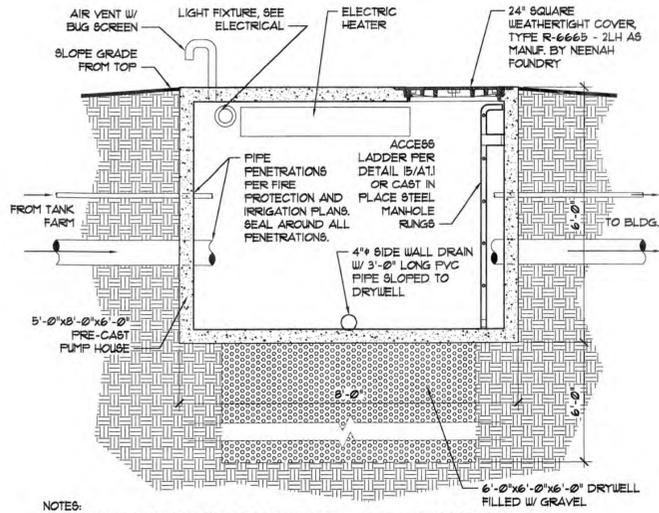
- A. Drains shall be King drains or approved equals

PRESSURE REGULATOR-

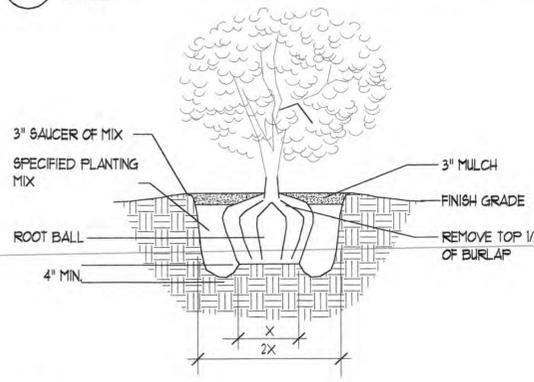
- A. Pressure regulators will be used as needed.

FILTERS-

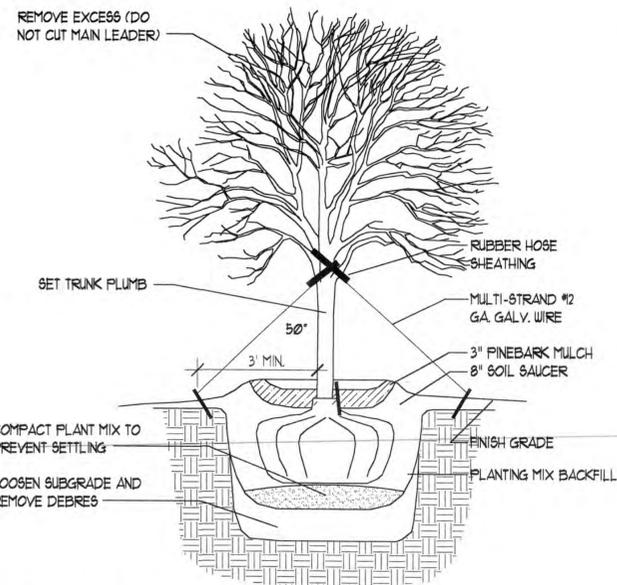
- A. Agriform Y filter or approved equal. All lateral poly pipe will be buried at a minimum of 12". All lateral PVC pipe will be buried at a minimum of 18". All mainline will be buried at a minimum of 36". Sleeving to match.



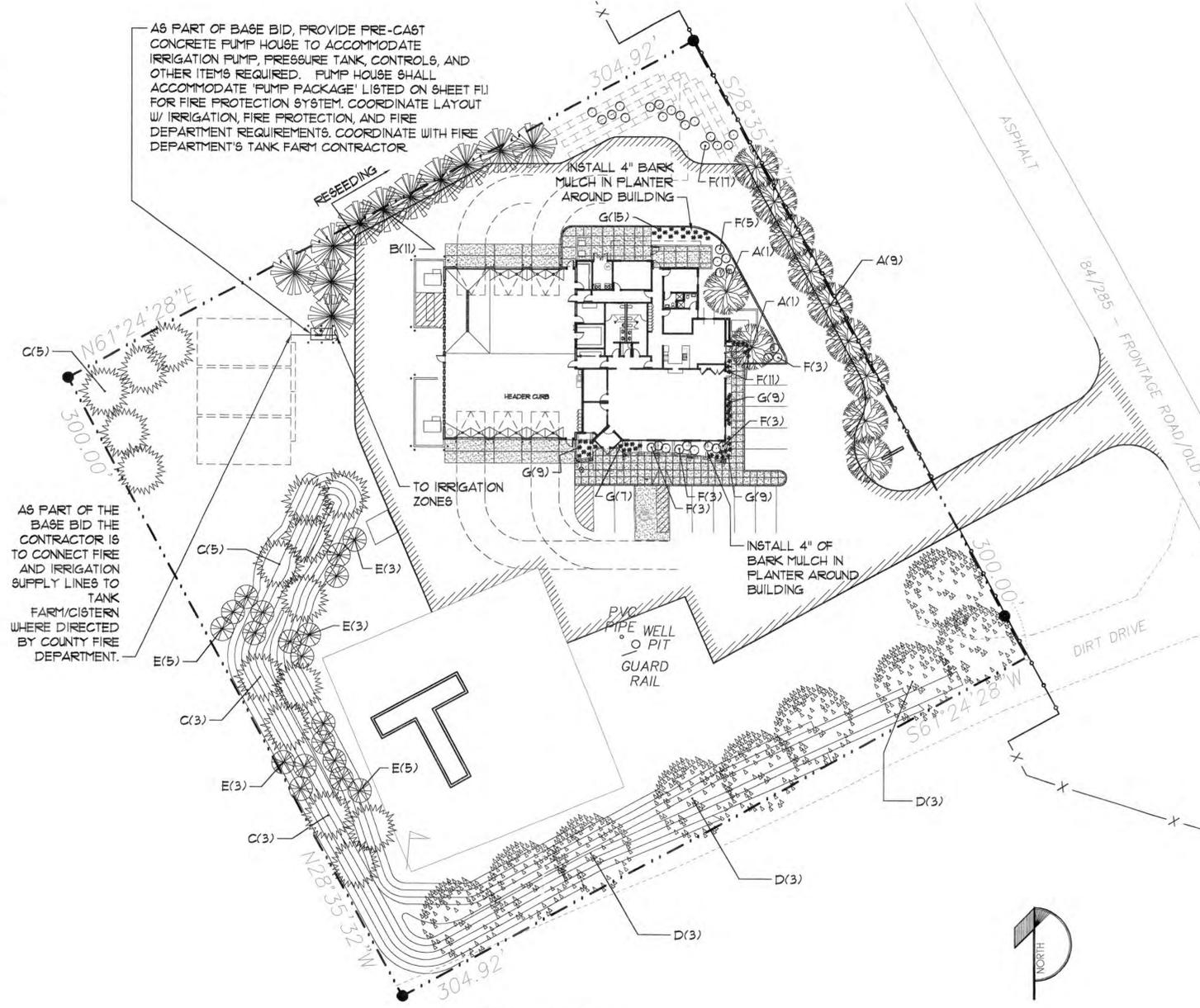
4 PRE-CAST CONCRETE PUMP HOUSE - BASE BID
NO SCALE



3 SHRUB PLANTING
NO SCALE



2 TREE PLANTING
NO SCALE



1 LANDSCAPE PLAN
1" = 30'-0"

KEY	SYM.	COMMON NAME	BOTANICAL NAME	SIZE	NOTES
A	(Symbol)	STERLING SILVER LINDEN	TILIA tomentosa 'Sterling Silver'	2" CAL	1
B	(Symbol)	ROCKY MOUNTAIN JUNIPER	JUNIPERUS scopulorum	6' TALL	2
C	(Symbol)	BOSNIAN PINE	PINUS heldreichii	6' TALL	3
D	(Symbol)	COTTONWOOD	POPULUS spp	2" CAL	4
E	(Symbol)	APACHE PLUME	FALLUGIA paradoxa	5 GAL.	
F	(Symbol)	RUSSIAN SAGE	PEROVSKIA atriplicifolia	5 GAL.	
G	(Symbol)	BLUE AVENA GRASS	HELICTOTRICHON sempervirens	4" POTS	
		SEEDING	HIGH PLAINS PINON-JUNIPER MIX - P4012		5/6

- NOTES:**
- PLANT AT 11' o.c. ALONG THE PROPERTY LINE. PLANT 12" FROM EDGE OF PROPERTY LINE.
 - PLANT AT 12' TO 14' o.c. ALONG THE PROPERTY LINE. PLANT 12" FROM EDGE OF PROPERTY LINE.
 - PLANT AT 16' TO 18' o.c.
 - PLANT AT 28' TO 32' o.c. STAGGERED.
 - AS PER 'PLANTS OF THE SOUTHWEST' MIXTURE: PURPLE ASTER, LANCELEAF COREOPSIS, FLAINS COREOPSIS, CALIFORNIA POPPY, FIREWHEEL, BLANKETFLOWER, SKYROCKET, BLUE FLAX, PALE EVENING PRIMROSE, ROCKY MOUNTAIN PENSTEMON, MEXICAN HAT, YELLOW PRAIRIE CONEFLOWER, ROCKY MOUNTAIN BEEFLANT, TAHOKA DAISY, WESTERN BLUE FLAG
 - 1 OZ PER 400 SQUARE FEET FOR ALL DISTURBED AREAS INCLUDING BUT NOT LIMITED TO BERM, BOTH SIDES OF NEW ENTRY, NORTH AND EAST SIDES OF PROPERTY, AND ON EXISTING DIRT DRIVE FROM PROPERTY LINE TO OLD LAS VEGAS HIGHWAY.

LANDSCAPING NOTES:

- CONTRACTOR SHALL EXAMINE THE SITE AND FAMILIARIZE THEMSELVES WITH ALL CONDITIONS PERTINENT TO THIS WORK.
- IT WILL BE THE CONTRACTORS RESPONSIBILITY TO DETERMINE THE LOCATION OF ALL UNDERGROUND UTILITIES AND TO AVOID DAMAGE TO THE SAME.
- THE CONTRACTOR WILL NOT WILLFULLY INSTALL PLANT MATERIAL AS SHOWN ON THE PLANS WHEN IT IS EVIDENT THAT FIELD CONDITIONS EXIST THAT WERE NOT CONSIDERED IN THE DESIGN. SUCH CONDITIONS SHALL BE BROUGHT TO THE ARCHITECT'S ATTENTION. THE CONTRACTOR WILL ASSUME FULL RESPONSIBILITY FOR ALL REVISIONS DUE TO FAILURE TO GIVE NOTIFICATION.
- PLANTS OF ANY KIND OTHER THAN THOSE INDICATED ON THE PLANT SCHEDULE WILL BE CONSIDERED BY THE ARCHITECT ONLY UPON SUBMISSION OF PROOF THAT ANY PLANT SPECIFIED IS NOT REASONABLY PROCURABLE.
- PLANT MATERIAL SHALL BE PLANTED AS SOON AS POSSIBLE AFTER DELIVERY TO PROJECT SITE.
- PLANT ALL PLANTS WITH PREPARED BACKFILL OF ONE PARTS NATIVE SOIL TO TWO PART ORGANIC MATERIAL.
- FERTILIZE ALL PLANTING FITS WITH 21 GRAMS AGRIFORM TABLETS PER THE FOLLOWING:
FIVE GALLON PLANTS: 3 TABLETS
FIFTEEN GALLON PLANTS: 4 TABLETS
PER CALIPER INCH IF TREE: 3 TABLETS
- PROVIDE FEEDING FOR ALL EXISTING PLANTS WITH INJECTION SYSTEM TO ROOTS. PROVIDE SUBMITTAL OF RECOMMENDATION FOR FEEDING REQUIREMENTS
- INSTALL 4" BARK MULCH WITHIN ALL PLANTING AREAS TO WITHIN 1" OF TOP OF CURB/SIDEWALK.
- PROVIDE WOOD FIBER PADS OR PAPER MULCH OVER ALL SEEDING AREAS. ANCHOR PADS OVER ALL SEEDING AREAS. ANCHOR PADS PER MANUFACTURER'S REQUIREMENTS.
- FOR SLOPES GREATER THAN 3:1, INSTALL EROSION CONTROL PROTECTION OF NON-WOVEN POLYPROPYLENE OR POLYESTER MATERIAL. 90% MIN TENSILE STRENGTH (ASTM D1682) 65% MAX. ELONGATION (ASTM D1682) 50-100 US SIEVE NO. 20 5 CM/SEC MIN PERMEABILITY COEFFICIENT. 230g/m² MIN WEIGHT.
- THE CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIAL, CONSTRUCTION MATERIAL, AND LABOR FOR A PERIOD OF ONE YEAR (365 DAYS) FROM THE DATE OF FINAL ACCEPTANCE OF THE PROJECT. THE CONTRACTOR SHALL REPAIR AND REPLACE WITHIN SEVEN DAYS AS DIRECTED BY THE ARCHITECT.
- CONTRACTOR SHALL SIZE IRRIGATION PUMP FOR IRRIGATION SYSTEM TO ASSURE THAT 3 ZONES MAY OPERATE AT ONE TIME. PUMP SHALL BE CAPABLE OF DRAWING WATER AND PROVIDING PRESSURE TO ENTIRE SITE. CONTRACTOR SHALL ALSO PROVIDE PRESSURE TANKS, CONTROLLER, AND OTHER NECESSARY ITEMS TO ASSURE A PROPER WORKING SYSTEM.
- PROVIDE SLEEVING TO ALL LANDSCAPE AREAS AS PART OF BASE BID.



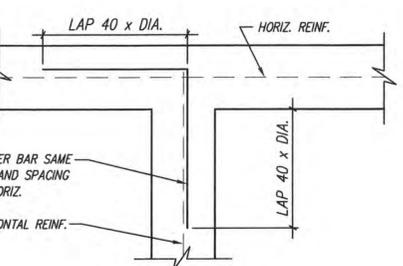
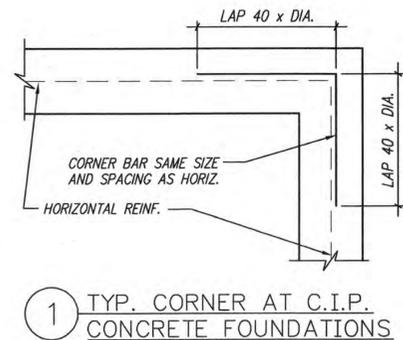
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02004
PROJECT NO.
1 March 2005 RE-BID 18 JULY 2005
DATE
DRAWN BY
HRJ
PROJ. MGR. LANDSCAPE PLAN
35 65 95 100
COMPLETION
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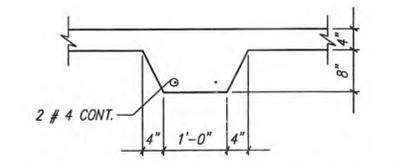
ABBREVIATIONS and SYMBOLS

- Z ANGLE
- A.B. ANCHOR BOLT
- ALT. ALTERNATE
- ARCH. ARCHITECTURAL
- B/F BOTTOM OF FOOTING
- BF or by BEAM FLANGE WIDTH
- BM. BEAM
- B.O.S. BOTTOM OF STRUCTURAL STEEL
- BRDG. BRIDGING
- C/C OR O.C. CENTER TO CENTER
- CL. CENTER LINE
- C.J. CONSTRUCTION JOINT
- C.I.P. CAST IN PLACE
- C.J.T.S. CONST. JOINT AT THICKENED SLAB
- CLR. CLEAR
- CMU. CONCRETE MASONRY UNIT
- COL. COLUMN
- CONC. CONCRETE
- CONN. CONNECTION
- CONT. CONTINUOUS
- COORD. COORDINATE
- CTR. J.T. CONTRACTION JOINT
- D. DEPTH
- DBL. DOUBLE
- DIA. DIAMETER
- DIR. DIRECTION
- DIM.S. DIMENSIONS
- E.E. EACH END
- E.F. EACH FACE
- E.S. EACH SIDE
- E.W. EACH WAY
- EA. EACH
- ELEV. ELEVATION or ELEVATOR
- EXP. A.B. EXPANSION ANCHOR BOLT
- EXP. JOINT EXPANSION JOINT
- F.D. FLOOR DRAIN
- F.G. FINISH GRADE
- F.S. FAR SIDE
- F.F. FINISH FLOOR ELEVATION
- FND. FOUNDATION
- FTG. FOOTING
- GA. GAUGE
- G.B. GRADE BEAM
- G.C. GENERAL CONTRACTOR
- G.C.M. GROUTED CORE MASONRY
- GL. GLU-LAM
- GR. GRADE
- GAL.V. GALVANIZED
- H.A.S. HEADED ANCHOR STUDS
- H.C.M. HOLLOW CORE MASONRY
- H.P. HIGH POINT
- HK. HOOK
- HORIZ. HORIZONTAL
- I.F. INSIDE FACE
- ISO. ISOLATION
- J/B JOIST BEARING
- JST. JOIST
- JT. JOINT
- L.L.H. LONG LEG HORIZONTAL
- L.L.O.S. LONG LEG OUTSTANDING
- L.L.V. LONG LEG VERTICAL
- L.P. LOW POINT
- L.W. LONG WAY
- M.C.J. MASONRY CONTROL JOINT
- M.D. METAL DECK
- MAX. MAXIMUM
- MECH. MECHANICAL
- MIN. MINIMUM
- MISC. MISCELLANEOUS
- NO. NUMBER
- N.S. NEAR SIDE
- N.T.S. NOT TO SCALE
- O.C. ON CENTER
- O.F. OUTSIDE FACE
- OPG. OPENING
- P/J PANEL JOINT
- PL. OR R. PLATE
- P/P PANEL POINT TO PANEL POINT
- P/T POST TENSION
- P.C. PRECAST CONCRETE
- P.C.P. PRECAST CONCRETE PLANK PANEL
- PL. PLATE
- REINF. REINFORCING
- S.F. OF S/F STEP FOOTING
- S.J. STEEL JOIST
- S.L.B.B. SHORT LEG BIG BEAM
- S.L.H. SHORT LEG HORIZONTAL
- S.L.O.S. SHORT LEG OUTSTANDING
- S.L.V. SHORT LEG VERTICAL
- S.O.G. SLAB ON GRADE
- STD. STANDARD
- S.U. STEP UP
- S.W. SHORT WAY
- SCHED. SCHEDULED
- STL. STEEL
- T.B. TIE BEAM
- TH.SL. THICKENED SLAB
- THK. THICK or THICKNESS
- T.C. TOP CHORD OF TRUSS
- T.C.C. TOP OF CONCRETE COLUMN
- T.C.W. TOP OF CONCRETE WALL
- T.D. TURN DOWN SLAB
- T.F. OR T/F TOP OF FOOTING
- T.J. TOOLED JOINT
- T.O.P. OR T/P TOP OF PARAPET
- T.O.J. TOP OF JOIST
- T.O.S. TOP OF STRUCTURAL STEEL
- T.P. TOP OF PILE
- T.P.C. TOP OF PILE CAP
- T.S. TUBE STEEL
- T.O.W. OR T/W TOP OF WALL
- T. & B TOP AND BOTTOM
- TR. TRUSS
- TYP. TYPICAL
- U.N.Q. UNLESS NOTED OTHERWISE
- V.L. VENEER LEDGE
- VER. VERTICAL
- VERT. OR V. VERTICAL
- W. WITH
- W.P. WORKING POINT
- WT. WEIGHT
- W/WF WELDED WIRE FABRIC

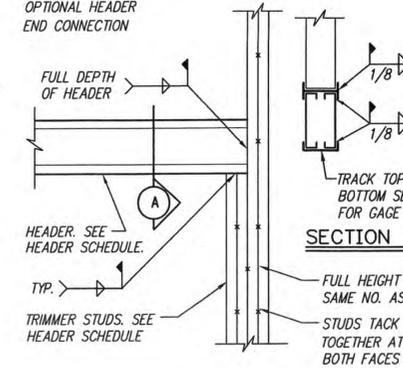
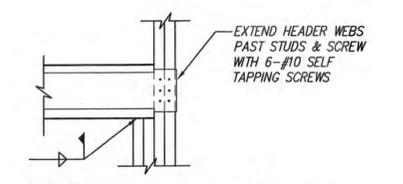


1 TYP. CORNER AT C.I.P. CONCRETE FOUNDATIONS

2 TYPICAL INTERSECTION AT C.I.P. CONCRETE FOUNDATIONS



3 TYPICAL THICKENED SLAB

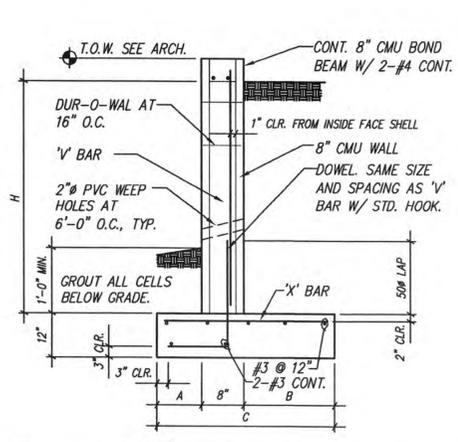


STEEL STUD HEADER SCHEDULE

OPENING	SIZE	GAUGE	S _x IN. ³	I _x IN. ⁴	TRIMMERS EA. SIDE
LESS THAN 4'-0"	2	16 GA.	2x0.86	2x2.76	1 STUD
4'-0" TO 5'-11"	2	16 GA.	2x1.30	2x5.54	2 STUDS
6'-0" TO 7'-11"	2	14 GA.	2x1.97	2x8.17	2 STUDS
8'-0" TO 9'-11"	2	12 GA.	2x3.83	2x19.2	2 STUDS
10'-0" TO 14'-0"	2	12 GA.	2x5.00	2x30.2	3 STUDS

4 TYPICAL HEADER BEARING DETAIL

5 TYPICAL METAL DECK SUPPORT AT SMALL OPENING (APPLIES AT OPENINGS WITH A MAX. DIMENSION 8" TO 15")



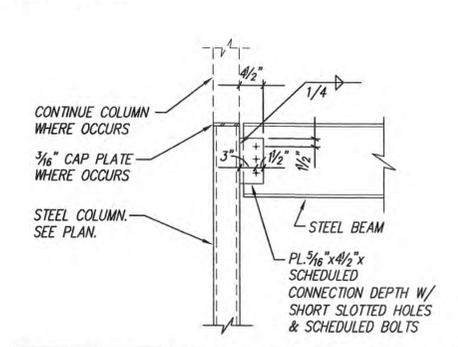
HEIGHT 'H'	A	B	C	'V' BARS	'X' BARS
< 4'-0"	8"	8"	2'-0"	#4 AT 24"	#3 AT 24"
4'-0" TO 6'-0"	10"	1'-8"	3'-2"	#5 AT 16"	#3 AT 16"
6'-0" TO 8'-0"	1'-3"	2'-4"	4'-3"	#6 AT 8"	#4 AT 8"

REBAR F_y = 60,000 PSI
CONCRETE F_c = 3,000 PSI

CMU F_m = 1500 PSI
GROUT = 2000 PSI

SCHEDULE APPLICABLE FOR LEVEL BACKFILL CONDITION. MORE STRINGENT DESIGN IS REQUIRED WHERE BACKFILL SLOPES DOWN TOWARD WALL. DO NOT BACKFILL AGAINST WALL BEFORE GROUT HAS GAINED AT LEAST 85% OF DESIGN STRENGTH. DO NOT USE HEAVY COMPACTION EQUIPMENT WITHIN 5 FEET OF WALL ON UPPER BACKFILL SOILS.

5 TYPICAL 8" CMU RETAINING WALL

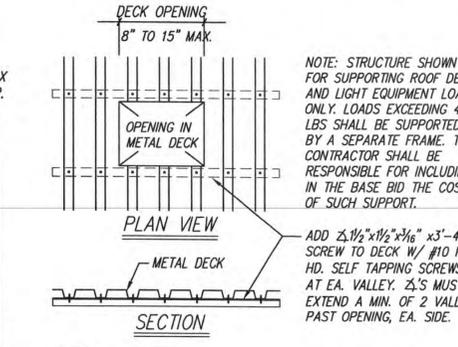


FRAMED BEAM TO COLUMN CONNECTION SCHEDULE

FRAMED BEAM SIZE	CONNECTION DEPTH	# NO. OF BOLT ROWS
C9 & W8, W10	6"	2
C12 & W12, 14	9"	3
C15 & W16	12"	4
W18	15"	5
W21, W24	18"	6
W27 - W36	21"	7

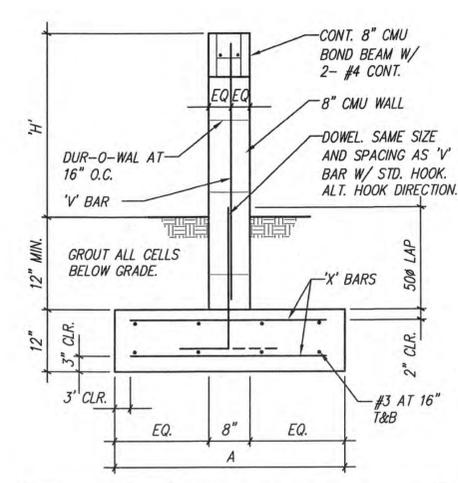
* ALL BOLTS TO BE 3/8" A325N. PROVIDE HARDENED WASHERS AT ALL SLOTTED HOLES.

6 TYPICAL FRAMED BEAM TO COLUMN CONNECTION DETAIL



7 TYP. METAL DECK SUPPORT AT SMALL OPENING (APPLIES AT OPENINGS WITH A MAX. DIMENSION 8" TO 15")

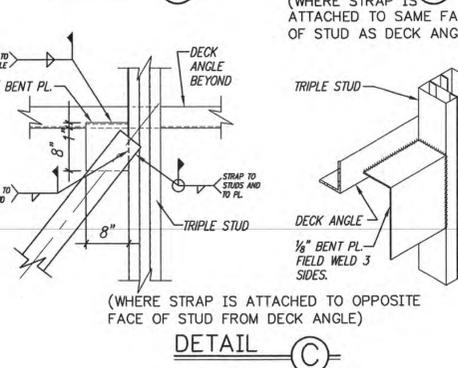
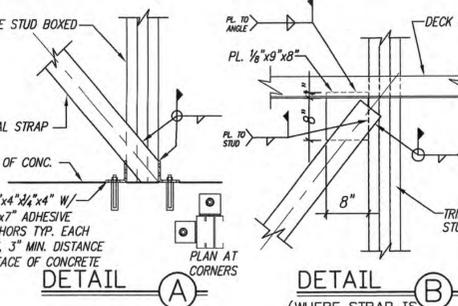
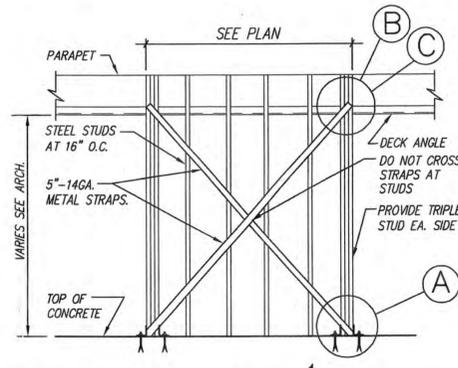
8 TYPICAL STEEL CROSS BRACING SHEAR WALL ELEVATION AT EXTERIOR WALL



HEIGHT 'H'	A	'V' BARS	'X' BARS
< 4'-0"	1'-8"	#4 AT 48"	NOT REQUIRED
4'-0" TO 6'-0"	2'-0"	#4 AT 48"	#3 AT 48"
6'-0" TO 8'-0"	2'-6"	#5 AT 32"	#3 AT 32"
8'-0" TO 10'-0"	3'-0"	#5 AT 16"	#3 AT 16"

REBAR F_y = 60,000 PSI
CONCRETE F_c = 3,000 PSI
GROUT F_c = 2,000 PSI

8 TYPICAL 8" CMU SITE WALL



9 TYPICAL STEEL CROSS BRACING SHEAR WALL ELEVATION AT EXTERIOR WALL

10 TYPICAL STEEL CROSS BRACING SHEAR WALL ELEVATION AT EXTERIOR WALL

STRUCTURAL EARTHWORK NOTES

THE BUILDING FOUNDATIONS HAVE BEEN DESIGNED BASED UPON THE RECOMMENDATIONS OF THE REPORT BY GEO-TEST, INC., "HONDO FIRE STATION", SANTA FE COUNTY, NM, REPORT #1-40607, DATED JUNE 28, 2004.

1A. A COPY OF THIS REPORT MAY BE OBTAINED FROM THE OWNER. THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE REPORT AND COMPLY WITH THE RECOMMENDATIONS IN THE REPORT. THIS REPORT IS A REPRESENTATION OF SOIL CONDITIONS ENCOUNTERED DURING THE TEST BORING SAMPLING AND MAY NOT COMPLETELY REPRESENT THE SOILS TO BE ENCOUNTERED DURING CONSTRUCTION. IF SOIL CONDITIONS ARE ENCOUNTERED WHICH DIFFER FROM THOSE DESCRIBED IN THE GEOTECHNICAL REPORT, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ARCHITECT/ENGINEER FOR ALTERNATE RECOMMENDATIONS.

1B. THE GEOTECHNICAL ENGINEER SHALL ACT AS THE OWNER'S REPRESENTATIVE AND SHALL MAKE OBSERVATIONS AND TESTS AS CONSIDERED NECESSARY FOR QUALITY CONTROL. WHERE FLOOR SLABS ARE TO BE SUPPORTED ON ENGINEERED FILL, CONTINUOUS OBSERVATIONS AND TESTS OF GRADING OPERATIONS SHALL BE MADE BY THE GEOTECHNICAL ENGINEER. ALL TESTS SHALL BE PERFORMED IN ACCORDANCE WITH PROCEDURES SET FORTH IN THE CURRENT BOOK OF STANDARDS OF THE AMERICAN SOCIETY OF TESTING AND MATERIALS (ASTM). THE CONTRACTOR SHALL PAY FOR ALL SUCH TESTING AND OBSERVATION.

2. ALL FOOTINGS AND FLOOR SLAB AREAS SHALL BEAR ON COMPACTED STRUCTURAL SOILS. BUILDING PAD SHALL BE OVEREXCAVATED 1'-0" FROM EXISTING FINISH GRADE AND BACKFILLED WITH 3'-0" OF COMPACTIONED STRUCTURAL SOIL.

3. ALL EXISTING FILL, VEGETATION, DEBRIS, AND DISTURBED NATURAL SOILS IN AREAS FOR SUPPORT OF FOOTINGS, FLOOR SLABS OR PAVEMENTS SHALL BE EXCAVATED TO EXPOSE UNDISTURBED NATURAL SOILS. ALL NON-ACCEPTABLE MATERIAL SHALL BE DISPOSED OF OFF SITE.

4. ALL BACKFILL MATERIAL SHALL BE NON-EXPANSIVE, FREE OF VEGETATION AND CONTAIN NO ROCKS LARGER THAN 6 INCHES. GRADATION OF THE BACKFILL MATERIAL, AS DETERMINED IN ACCORDANCE WITH ASTM D-422, SHALL BE AS FOLLOWS:

GRADATION OF BACKFILL MATERIAL

SIEVE SIZE	PERCENT PASSING
3 INCH	90-100
NO. 4	60-100
NO. 200	15-60

THE PLASTICITY INDEX SHALL BE BETWEEN 4 AND 12 WHEN TESTED IN ACCORDANCE WITH ASTM D-4318.

GRANULAR BASE SHALL MEET THE FOLLOWING GRADATION REQUIREMENTS AS DETERMINED BY ASTM C136.

SIEVE SIZE (square openings)	PERCENT PASSING by Dry Weight
1 1/8 inch	100
1/4 inch	38-70
No. 200	0-12

THE PLASTICITY INDEX OF THE FRACTION OF MATERIAL PASSING THE NO. 40 SIEVE SHALL BE NONPLASTIC WHEN TESTED BY ASTM D4318. THE SITE SOILS DO NOT APPEAR TO MEET REQUIREMENTS FOR GRANULAR BASE.



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PROJECT NO.
18 Jul 2005
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DHS
PROJ. MGR.
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COMPLETION



Structural Typical Details
Structural Earthwork

S001

RE-BID 18 JULY 2005

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STRUCTURAL GENERAL NOTES

1. GENERAL:
- A. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS AND METHODS AND SAFETY OF WORKERS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE AND PROVIDE ALL NECESSARY TEMPORARY SHORING AND BRACING TO SUPPORT ALL LOADS AND PARTS OF THE STRUCTURE DURING CONSTRUCTION. THE STRUCTURE SHOWN ON THE DRAWINGS HAS BEEN DESIGNED FOR STABILITY UNDER COMPLETED CONSTRUCTION CONFIGURATION.
- B. STRUCTURAL DRAWINGS ARE INTENDED TO BE USED WITH ARCHITECTURAL AND MECHANICAL DRAWINGS. CONTRACTOR IS RESPONSIBLE FOR COORDINATING SUCH REQUIREMENTS INTO THE SHOP DRAWINGS AND WORK.
- C. NO OPENINGS NOR NOTCHES SHALL BE MADE IN ANY STRUCTURAL BEAM, JOIST, COLUMN, SUPPORT FLOOR, LOAD BEARING WALL OR PANEL, FOOTING, OR FOUNDATION WALL WITHOUT THE APPROVAL OF THE ARCHITECT/ENGINEER. OPENINGS IN NON-LOAD BEARING WALLS REQUIRE THE ARCHITECT'S APPROVAL.
- D. THE CONTRACTOR IS RESPONSIBLE FOR LIMITING THE AMOUNT OF CONSTRUCTION LOAD IMPOSED UPON NEW STRUCTURAL FRAMING. CONSTRUCTION LOADS SHALL NOT EXCEED THE DESIGN CAPACITY OF THE FRAMING AT THE TIME THE LOADS ARE IMPOSED.
- E. MECHANICAL CONTRACTOR SHALL COORDINATE INSTALLATION OF THE REQUIRED INSERTS WITH THE GENERAL CONTRACTOR. REFER TO MECHANICAL DRAWINGS FOR SUPPORTING STRUCTURE AND INSERTS. MECHANICAL CONTRACTOR SHALL FURNISH ALL NECESSARY STRUCTURES FOR MECHANICAL EQUIPMENT, AND ALL NECESSARY HANGING DEVICES AND INSERTS FOR INSTALLATION OF MECHANICAL EQUIPMENT.
- F. REFER TO MECHANICAL AND ELECTRICAL DRAWINGS FOR ALL CHASES, SLEEVES, OPENINGS, DUCTS, ETC., AS REQUIRED. PROVIDE ALL DECK OPENINGS SUPPORTS PER TYPICAL DETAILS SHEET REGARDLESS OF WHETHER OR NOT DECK OPENING IS SHOWN ON STRUCTURAL DRAWINGS.
- G. WHERE CONFLICTS OCCUR BETWEEN SPECIFICATIONS, NOTES, REFERENCED CODES, AND WORKING DRAWINGS, THE MOST STRINGENT REQUIREMENT SHALL APPLY. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY CONFLICTS IMMEDIATELY UPON BECOMING AWARE OF SUCH CONFLICTS.
- H. SECTIONS AND DETAILS NOT SPECIFICALLY NOTED, SHALL BE CONSTRUCTED PER SECTIONS AND DETAILS SHOWN MOST APPLICABLE.
- I. FIREPROOFING METHODS AND MATERIALS FOR STRUCTURAL MEMBERS ARE NOT SHOWN ON STRUCTURAL DRAWINGS. REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR FIRE RATING REQUIREMENTS, FIREPROOFING METHODS AND MATERIALS.
- J. SEISMIC RESTRAINT AND SEISMIC BRACING ELEMENTS FOR NON STRUCTURAL ITEMS ARE NOT SHOWN ON STRUCTURAL DRAWINGS. REFER TO ITEMS' APPLICABLE DRAWINGS AND SPECIFICATIONS FOR SUCH WORK.
- K. SHOP DRAWINGS SHALL BE FURNISHED AND REVIEWED BEFORE ANY FABRICATION OR ERECTION IS STARTED. THE CONTRACTOR SHALL REVIEW AND APPROVE SHOP DRAWINGS PRIOR TO SUBMITTING TO THE ARCHITECT FOR REVIEW. POORLY PREPARED SHOP DRAWINGS WILL BE REJECTED AND SHALL BE RESUBMITTED.
- L. ENGINEER'S REVIEW OF SHOP DRAWINGS SHALL BE FOR THE PURPOSE OF CHECKING FOR CONFORMANCE WITH THE DESIGN CONCEPT, NOT FOR ACCURACY OR COMPLETENESS OF DETAILS OR QUANTITIES AND PROCEDURES. SHOP DRAWING ERRORS NOT DETECTED DURING ENGINEER'S REVIEW SHALL NOT BE CONSTRUED AS ALLOWING THE CONTRACTOR TO PROCEED KNOWINGLY IN ERROR. REGARDLESS OF ANY INFORMATION CONTAINED IN THE SHOP DRAWINGS, THE REQUIREMENTS OF THE CONTRACT DOCUMENTS ARE NOT WAIVED OR SUPERSEDED IN ANY WAY BY THE SHOP DRAWING REVIEW.
2. DESIGN CRITERIA:
- BUILDING CODES AND STANDARDS:
- STATE OF NEW MEXICO 2003 BUILDING CODE
2003 INTERNATIONAL BUILDING CODE
AMERICAN INSTITUTE OF STEEL CONSTRUCTION 9TH EDITION, "MANUAL OF STEEL CONSTRUCTION, ASD"
AMERICAN CONCRETE INSTITUTE 318, "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE"
AMERICAN IRON AND STEEL INSTITUTE, "SPECIFICATION FOR THE DESIGN OF COLD FORMED STEEL STRUCTURAL MEMBERS"
AMERICAN CONCRETE INSTITUTE ACI 530 "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES"
3. DESIGN LOADS:
- A. LIVE LOADS:
ROOFS: (SNOW) 25 PSF
- B. DEAD LOADS:
ROOF: PER BUILDING MANUFACTURER
- C. WIND LOADS: IN ACCORDANCE WITH 2003 IBC CODE
90 MPH BASIC WIND SPEED
CE = VARIES EXPOSURE 'C'
- D. SEISMIC LOADING: IN ACCORDANCE WITH 2003 IBC CODE
USE GROUP III
DESIGN CATEGORY D
R = 6
.2 SECOND SPECTRAL RESPONSE ACCEL. = .20
1 SECOND SPECTRAL RESPONSE ACCEL. = .06
SOIL PROFILE TYPE SE
IMPORTANCE FACTOR 1.5
- E. SOIL ALLOWABLE: POST TENSION FOUNDATION
(ON APPROVED FILL)

4. MATERIALS:
- A. CONCRETE: $F'_C = 3000$ PSI
- B. STEEL:
- WIDE FLANGE SHAPES: ASTM A992, GR 50
 - STRUCTURAL STEEL TUBING: ASTM A500, GR B
 - MISCELLANEOUS STRUCTURAL STEEL: ASTM A36
 - STEEL PIPE: ASTM A53, TYPE E OR S, GR B OR ASTM A325
 - BOLTS (UNLESS OTHERWISE NOTED):
 - LIGHTGAGE METAL FRAMING (STUDS, HEADERS, STRAPS): ASTM A507 18 GA. GR 33 16 GA. AND HEAVIER GR 50 FED. SPEC. FF-B-561
 - LAG BOLTS:
 - CONCRETE/MASONRY ANCHORS: ASTM A307
 - CONCRETE/MASONRY REINFORCEMENT: ASTM A615 GR 60
 - CONCRETE/MASONRY EXPANSION ANCHORS: FED SPEC. FF-S-325
 - HEADED ANCHOR STUDS: ASTM A108, GRADES 1015-1020, COLD-FINISHED CARBON STEEL AWS D1.1, TYPE B
- C. MASONRY:
- CONCRETE MASONRY UNITS (CMU): $F'_M = 1500$ PSI (1900 CMU ON NET AREA)
 - MORTAR: 1900 PSI
 - GROUT: 2000 PSI
- D. WOOD:
- NOTE: ALL SAWN LUMBER SHALL HAVE A MOISTURE CONTENT OF 19% OR LESS AT TIME OF INSTALLATION.
- FRAMING LUMBER: PONDEROSA PINE #1
 - EXPOSED LUMBER: DOUGLAS FIR - LARCH #2
 - PLYWOOD: C-D EXTERIOR GRADE
 - SILL PLATES: TREATED LUMBER
 - NAILS: FED. SPEC. FF-N-1-1 (EXTERIOR GALVANIZED)
 - POSTS: PONDEROSA PINE #1
5. CONCRETE NOTES:
- A. SPECIFICATIONS:
- ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH ACI 301.
 - ALL HOT WEATHER CONCRETE WORK SHALL BE IN ACCORDANCE WITH ACI 305.
 - ALL COLD WEATHER CONCRETE WORK SHALL BE IN ACCORDANCE WITH ACI 306.
 - FORMWORK SHALL BE IN ACCORDANCE WITH ACI 347. PROVIDE "CLASS A" TOLERANCE FOR CONCRETE SURFACES EXPOSED TO VIEW. PROVIDE "CLASS C" TOLERANCE FOR OTHER CONCRETE SURFACES.
 - USE AIR ENTRAINING ADMIXTURE 5 PERCENT PLUS OR MINUS 1/2 PERCENT FOR ALL EXTERIOR EXPOSED CONCRETE.
- B. FOOTINGS:
- UNLESS DIMENSIONED OTHERWISE, CENTER CONTINUOUS FOOTINGS ON WALL.
 - WHERE COLUMN AND WALL FOOTINGS INTERSECT, CAST THESE MONOLITHIC AND CONTINUE WALL FOOTING REINFORCING THROUGH THE COLUMN FOOTING.
 - CENTER COLUMN FOOTINGS ABOUT COLUMN CENTER LINES BOTH WAYS, UNLESS DIMENSIONED OTHERWISE.
 - EARTH FORMED FOOTINGS ARE ACCEPTABLE ONLY WHERE TRENCH SIDES ARE STABLE AND APPROVAL HAS BEEN GRANTED BY THE ENGINEER. SPECIAL CARE SHALL BE TAKEN TO ASSURE THAT CONCRETE IS PLACED INTO CLEAN TRENCHES AND THAT PLACING OPERATIONS DO NOT CAUSE SLOUGHING OR LOSS OF TRENCH SIDE INTEGRITY. MAINTAIN PROPER FOOTING DIMENSIONS AS SHOWN ON DRAWINGS.
- C. CONCRETE REINFORCING:
- PROVIDE VERTICAL DOWELS IN CONTINUOUS FOOTING, SAME SIZE AND SPACING AS THE VERTICAL WALL STEEL.
 - FOR OPENINGS 1'-0" AND LARGER IN WALLS AND STRUCTURAL SLABS UNLESS NOTED, PROVIDE NO. 5 X 4'-0" ALL CORNERS, TWO NO. 5 AT EACH SIDE, TOP AND BOTTOM.
 - UNLESS OTHERWISE NOTED PROVIDE CORNER BARS THE SAME SIZE AND SPACING AS THE HORIZONTAL REINFORCING AT THE CORNERS AND INTERSECTION OF ALL WALLS, BEAMS, AND FOOTINGS.
 - UNLESS OTHERWISE NOTED, REBAR SPLICES SHALL BE 40 BAR DIAMETER LAP SPLICES.
- D. SLABS ON GRADE:
- CONCRETE MIX DESIGN
 - USE THE LARGEST ALLOWABLE COARSE AGGREGATE SIZE IN ACCORDANCE WITH THE FOLLOWING:

4" SLAB	1" MAXIMUM AGGREGATE
5" OR MORE	1 1/2" MAXIMUM AGGREGATE
 - DO NOT EXCEED 5" CONCRETE SLUMP AT POINT OF PLACEMENT. LIMIT ANY WATER ADDED AT SITE SO AS TO NOT CAUSE THE WATER CEMENT RATIO TO EXCEED THAT OF THE APPROVED CONCRETE MIX DESIGN AND THEREBY CAUSE OBJECTIONABLE SLAB SHRINKAGE AND/OR CURLING.
 - REFER TO ARCHITECTURAL AND PLUMBING DRAWINGS FOR FLOOR DRAINS, FLOOR SLOPES AND RECESSED AREAS.

- DO NOT ADD MOISTURE TO FINISHED SUBGRADE PRIOR TO PLACEMENT OF SLAB, AS SUCH MOISTURE WILL INCREASE SLAB CURLING AND LONG TERM SHRINKAGE CRACKING.
 - BEGIN SPECIFIED CURING OPERATIONS IMMEDIATELY AFTER FINAL TROWELING.
 - MAINTAIN SURFACE FLATNESS, WITH A MAXIMUM VARIATION OF 1/8" IN 10 FEET. WHERE SPECIFIED, FLOOR FLATNESS (FF) AND FLOOR LEVELNESS (FL) NUMBERS SHALL GOVERN OVER 1/8" IN 10 FEET CRITERION.
 - IN AREAS WITH FLOOR DRAINS, MAINTAIN FLOOR LEVEL AT WALLS AND SLOPE SURFACES UNIFORMLY TO DRAINS. MAINTAIN SPECIFIED THICKNESS OF SLAB THROUGHOUT.
- E. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR CAST-IN-PLACE CONCRETE REINFORCEMENT, UNLESS NOTED OTHERWISE:
- | | MINIMUM COVER, IN. |
|--|--------------------|
| 1. CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH... (NOT APPLICABLE FOR SLAB-ON-GRADE). | 3 |
| 2. CONCRETE EXPOSED TO EARTH OR WEATHER: #8 THROUGH #11 BARS..... #5 BAR AND SMALLER | 2 1-1/2 |
| 3. CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND: | |
| SLABS, WALLS, JOISTS: #11 BAR AND SMALLER | 3/4 |
| BEAMS, COLUMNS: PRIMARY REINFORCEMENT, TIES, STIRRUPS, SPIRALS | 1-1/2 |
| 4. FOR SINGLE MAT OF REINFORCING IN SLABS AND WALLS, PLACE REINFORCING IN CENTER UNLESS OTHERWISE DIMENSIONED. | |
- F. CURING
- MAINTAIN CONCRETE WITH MINIMAL MOISTURE LOSS AT RELATIVELY CONSTANT TEMPERATURE FOR PERIOD NECESSARY FOR HYDRATION OF CEMENT AND HARDENING OF CONCRETE.
- G. FINISHES
- REFER TO ARCHITECTURAL DRAWINGS FOR CONCRETE FINISHES AND REQUIRED RECESSES FOR FINISHES.
6. POST TENSION SLAB ON GRADE NOTES:
- A. CONCRETE STRENGTH:
 $F'_C = 3000$ PSI AT 28 DAYS.
 $F'_C = 2400$ PSI AT TIME OF FINAL STRESSING.
 $F'_C = 1000$ PSI AT TIME OF PARTIAL (25%) STRESSING.
- B. POST TENSION TENDONS SHALL BE 1/2" DIAMETER 270K LOW RELAXATION STRANDS.
JACKING FORCE = 33 KIPS PER TENDON
ANCHORING FORCE = 28.9 KIPS PER TENDON
- C. CONCRETE SHALL BE CAREFULLY RODDED BEHIND TENDON ANCHORS. PROVIDE #4 CONTINUOUS REBAR BEHIND ALL ANCHORAGES WITH 24" MINIMUM LAP SPLICES AND CORNER BARS AT ALL CORNERS.
- D. ALL INTERSECTIONS OF TENDONS SHALL BE SECURED TO PREVENT TENDON MOVEMENT. PROVIDE SUPPORT CHAIR AT ALL INTERSECTIONS. ALL TENDONS AND MILD STEEL REINFORCING SHALL BE SECURED AND SUPPORTED TO WITHIN PLUS OR MINUS 3/8" TOLERANCE.
- E. CALCIUM CHLORIDE OR ADMIXTURES CONTAINING CALCIUM CHLORIDE SHALL NOT BE USED.
- F. PROVIDE 1 SET OR 5 CYLINDERS FOR COMPRESSION TESTS PER 50 CUBIC YARDS OF CONCRETE POURED.
- G. TENDON SUPPLIER SHALL PROVIDE SHOP DRAWINGS SHOWING ELONGATION AND TENDON JACKING FORCE.
- H. ALL JACKS USED SHALL BE ACCOMPANIED BY CALIBRATION SHEETS CORRELATING HYDRAULIC PRESSURE TO TENDON FORCE.
- I. ALL BREAKS IN THE TENDON SHEATHING MATERIAL SHALL BE REPAIRED WITH TAPE PRIOR TO CONCRETE PLACEMENT. THE INTERSECTION BETWEEN THE TENDON SHEATHING AND THE ANCHORAGE DEVICE SHALL BE TAPED TO PREVENT GROUT ENTRANCE INTO THE WEDGE HOLES.
- J. PARTIAL STRESSING (25% OF FINAL STRESSING FORCE) TO REDUCE SHRINKAGE CRACKING SHALL BE DONE AT 24 HOURS AFTER SLAB FINISHING. IN COLD WEATHER CONDITIONS, USE SET ACCELERATORS (NOT CONTAINING CALCIUM CHLORIDE) TO ACHIEVE ADEQUATE STRENGTH FOR PARTIAL STRESSING. VERIFY EARLY STRENGTH WITH TEST CYLINDER BREAKS USING FIELD CURED SPECIMENS.
- K. A DESIGNATED REPRESENTATIVE OF THE OWNER SHALL BE PRESENT DURING THE STRESSING OPERATION TO VERIFY STRESSING FORCE APPLICATIONS THROUGH GAUGE PRESSURE READINGS AND TENDON ELONGATIONS. THE DESIGNATED REPRESENTATIVE SHALL ALSO VERIFY THAT THE TENDON FORCE INDICATED BY GAUGE PRESSURE READINGS COMPARES WITHIN 10 PERCENT OF THE TENDON FORCE INDICATED BY TENDON ELONGATIONS. TENDON FORCE VARIATIONS INDICATED BY GAUGE PRESSURE AND ELONGATION IN EXCESS OF 10 PERCENT SHALL BE REPORTED TO THE DESIGN ENGINEER FOR REVIEW AND RECOMMENDED REMEDIAL ACTION.

- L. PROJECTING ENDS OF STRANDS SHALL BE BURNED OFF AFTER STRESSING HAS BEEN PROPERLY COMPLETED AND APPROVED BY OWNER'S REPRESENTATIVE. CLEARANCE FROM THE END OF THE STRAND TO THE EDGE OF THE SLAB SHALL BE APPROXIMATELY 1 INCH. CARE SHALL BE TAKEN TO PREVENT OVERHEATING OF THE WEDGES WHEN BURNING OFF STRAND. STRESSING POCKETS SHALL BE GROUTED WITHIN 7 DAYS OF THE FINAL STRESSING OPERATION TO PREVENT CORROSION OF THE ANCHOR AND WEDGE ASSEMBLY.
- M. UNDER NO CIRCUMSTANCES, SHALL THE ENDS OF UNSTRESSED, PARTIALLY STRESSED OR INCORRECTLY STRESSED TENDONS BE CUT OFF.
- N. LOCALIZED DEVIATION ON TENDON PLACEMENT IS PERMITTED WHERE NECESSARY TO AVOID PLUMBING LINES OR OPENINGS. THE DEVIATION SHALL BE LIMITED TO 12" MAXIMUM AND SHALL BE ACCOMPLISHED BY LARGE RADIUS SMOOTH CURVATURES TO ENDS OF TENDON. TENDONS SHALL CLEAR OPENING BY 4" MINIMUM.
7. LIGHTGAGE METAL FRAMING:
- A. ALL LIGHTGAGE METAL FRAMING SHOWN ON STRUCTURAL DRAWINGS SHALL BE CONSIDERED AS STRUCTURAL LOAD BEARING METAL FRAMING.
- B. FABRICATION OF ALL LIGHTGAGE METAL FRAMING SHALL COMPLY WITH THE REQUIREMENTS IN AISI "SPECIFICATION FOR THE DESIGN OF COLD FORMED STEEL STRUCTURAL MEMBERS".
- C. FRAMING COMPONENTS MAY BE PREFABRICATED INTO PANELS PRIOR TO ERECTION.
- D. STUDS SHALL NOT BE SPLICED. STUDS SHALL FIT SECURELY INTO TOP AND BOTTOM TRACKS WITH THE END OF THE STUD POSITIONED AGAINST THE INSIDE TRACK WEB. WEB CUTOUTS ARE NOT PERMITTED WITHIN 12" OF EITHER END OF STUDS OR LINTELS. ALL FRAMING MEMBERS SHALL BE CUT SQUARELY OR AT AN ANGLE AS REQUIRED, TO FIT SECURELY AGAINST ABUTTING MEMBERS. ATTACHMENT OF COMPONENTS SHALL BE ACCOMPLISHED BY WELDING, UNLESS OTHERWISE NOTED ON DRAWINGS. DOUBLED OR TRIPLED STUDS SHALL BE TACK WELDED TOGETHER AT THE FLANGES AT 24" ON CENTER MAXIMUM ALONG THE LENGTH OF THE STUDS.
- E. ALL DOUBLE AND TRIPLE BUILT-UP STUDS SHALL BE FASTENED TOGETHER AT BOTH WALL FACES AT A SPACING OF 24" ON CENTER MAXIMUM ALONG THE FULL HEIGHT OF THE STUDS. BUILT-UP JOISTS SHALL BE FASTENED TOGETHER IN THE SAME MANNER.
- F. TRACKS SHALL BE ANCHORED TO THE SUPPORTING STRUCTURE TO TRANSFER IMPOSED LOADS. COMPLETE, UNIFORM AND LEVEL BEARING SUPPORT SHALL BE PROVIDED FOR THE BOTTOM TRACK AT EACH STUD LOCATION IN WALLS. UNEVEN BEARING SURFACES SHALL BE REPAIRED BY GRINDING AND/OR CONTINUOUS GROUT LEVELING BED. ALL TRACK BUTT JOINTS EXCEPT FOUNDATION LEVEL, SHALL BE FULLY BUTT WELDED TOGETHER.
- G. PROVIDE DOUBLE STUD HEADERS PER DETAILS WHEREVER A STUD IS INTERRUPTED AT AN OPENING, INCLUDING AT MECHANICAL DUCT. PENETRATIONS WHICH MAY NOT BE INDICATED ON ARCHITECTURAL OR STRUCTURAL DRAWINGS USE MINIMUM 8"-16" GA. UNLESS OTHERWISE NOTED ON LINTEL SCHEDULE.
- H. UNLESS OTHERWISE NOTED OR DETAILED, MINIMUM REQUIRED SECTION PROPERTIES FOR STUDS:
- | SIZE | I | S |
|---------------|------|------|
| 3 5/8"x18 GA. | 0.68 | 0.36 |
| 3 5/8"x16 GA. | 0.84 | 0.43 |
| 4"x18 GA. | 0.86 | 0.41 |
| 4"x16 GA. | 1.06 | 0.49 |
| 6"x18 GA. | 2.23 | 0.71 |
| 6"x16 GA. | 2.76 | 0.86 |
| 8"x18 GA. | 4.46 | 1.07 |
| 8"x16 GA. | 5.54 | 1.30 |
| 8"x14 GA. | 6.89 | 1.66 |
- I. ALL LOAD BEARING JOISTS AND/OR UPPER STORY LEVEL LOAD BEARING STUDS SHALL BE DIRECTLY ALIGNED OVER LOAD BEARING STUD(S) BELOW, UNLESS OTHERWISE NOTED OR DETAILED.
- J. PROVIDE BRIDGING PER MANUFACTURER'S DIRECTIONS. UNLESS GIVEN MORE STRINGENT REQUIREMENTS BY MANUFACTURER, PROVIDE 1/2" CHANNEL BRIDGING IN CONTINUOUS ROWS WELDED TO EACH STUD AND SPACED AT 4'-0" ON CENTER MAXIMUM.
- K. METAL STUD FRAMING SYSTEM DEPICTED ON DRAWINGS HAS BEEN DESIGNED FOR STABILITY UNDER COMPLETED STRUCTURAL CONFIGURATION, INCLUDING COMPLETE LIGHTGAGE METAL FRAMING, BRACING AND CONNECTED FLOOR AND ROOF DIAPHRAGMS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE AND PROVIDE PROPER TEMPORARY BRACING TO MAINTAIN STABILITY DURING CONSTRUCTION.
8. CMU NOTES:
- A. UNLESS OTHERWISE NOTED, PROVIDE GALVANIZED STANDARD TRUSS TYPE DUR-O-WAL OR EQUAL AT ALTERNATE COURSES FOR HORIZONTAL JOINT REINFORCING IN C.M.U. PROVIDE PREFABRICATED DUR-O-WAL CORNER AND INTERSECTION PIECES LAPPED 6" MINIMUM. PROVIDE CONTINUOUS BOND BLOCK CONCRETE FILLED WITH TWO NO. 4 CONTINUOUS AT TOP OF ALL MASONRY WALLS AND CONTINUOUS AT ALL JOIST BEARING AND DECK BEARING ELEVATIONS. FIRST COURSE ABOVE FOOTING SHALL BE A REINFORCED BOND BEAM UNLESS CONTINUOUS # 4 REBAR MINIMUM IS PLACED IN TOP OF CONCRETE FOOTING. EXTEND VERTICAL REINFORCING THRU BOND BLOCK COURSES UNLESS OTHERWISE NOTED. PROVIDE CORNER BARS LAPPED 40 BAR DIAMETERS SAME SIZE AND NUMBER AS BOND BEAM, CONTINUOUS REINFORCING AT ALL BOND BEAM CORNERS AND INTERSECTIONS.

- B. UNLESS OTHERWISE NOTED OR DETAILED, VERTICAL REINFORCING AT ALL CONCRETE MASONRY WALLS SHALL BE: "ASTM-A615-60". ALL CMU WALLS SHALL BE REINFORCED AS FOLLOWS, UNLESS OTHERWISE NOTED:
- 4 REBAR MIN. (SECTIONS AND DETAILS INDICATING LARGER BAR SIZE GOVERN OVER NO. 4 BAR MIN.)
 - 3 VERTICALS AT ALL CORNERS.
 - 1 VERTICAL AT END OF ALL DISCONTINUOUS WALL RUNS.
 - 1 VERTICAL EACH SIDE OF ALL MASONRY WALL OPENINGS.
 - 1 VERTICAL AT 32" O.C. IN ALL STRAIGHT WALL RUNS. (SECTIONS AND DETAILS INDICATING A DIFFERENT BAR SPACING GOVERN OVER THE 32" SPACING.)
 - 1 VERTICAL EACH SIDE OF ALL CONTROL JOINTS.
 - PROVIDE VERTICAL DOWELS SAME AS VERTICAL BARS TOP AND BOTTOM OF EACH VERTICAL EXTENDING 30 DIA. INTO ABUTTING CONCRETE CONSTRUCTION AND 50 DIA. INTO CONCRETE FILLED MASONRY CELLS. ALL REBAR LAP SPLICES SHALL BE A MINIMUM OF 50 BAR DIAMETERS IN LENGTH. REINFORCEMENT SHALL BE SECURED AGAINST DISPLACEMENT PRIOR TO GROUTING BY WIRE POSITIONERS OR OTHER SUITABLE DEVICES AT INTERVALS NOT EXCEEDING 200 BAR DIAMETERS.
- C. UNLESS OTHERWISE SHOWN, PROVIDE MASONRY CONTROL JOINTS, NO. 8 WIDE FLANGE RAPID CONTROL JOINT IN MASONRY WALLS AT THE FOLLOWING LOCATIONS:
- AT 12'-0" FROM ALL CORNERS
AT 32'-0" O.C. IN ALL STRAIGHT WALL RUNS.
9. STEEL FRAMING NOTES:
- A. STRUCTURAL STEEL SHALL BE SHOP FABRICATED IN ACCORDANCE WITH AISC "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES", LATEST EDITION. WELDING SHALL COMPLY WITH AWS 1.1 "STRUCTURAL WELDING CODE".
- B. FIELD CONNECTIONS OF STRUCTURAL STEEL SHALL BE ACCOMPLISHED BY BOLTING, USING HIGH STRENGTH BOLTS IN ACCORDANCE WITH AISC "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 BOLTS". PROVIDE 7/8" DIAMETER A325 BOLTS (UNLESS OTHERWISE INDICATED).
- C. STEEL CONNECTIONS NOT DETAILED ON THE PLANS SHALL BE THE FABRICATOR'S STANDARD CONNECTIONS AND SHALL BE IN ACCORDANCE WITH THE AISC SPECIFICATIONS. ALL BOLTED CONNECTIONS SHALL CONTAIN AT LEAST 2 BOLTS PER CONNECTED MEMBER.
- D. PROVIDE MIN. 3/16" CAP PLATE WELDED TO END OF ALL STRUCTURAL PIPES, TUBES AND PRISMATIC SECTIONS, UNLESS OTHERWISE NOTED. PROVIDE WEEP HOLES ON UNDERSIDE OR NEAR BOTTOM OF SUCH ELEMENTS WHERE ELEMENTS ARE LOCATED OUTSIDE OF THE HEATED BUILDING ENVELOPE.
- E. UNLESS OTHERWISE NOTED, ALL JOISTS SUPPORTING THE FLOOR OR ROOF DECK SHALL BE FIELD WELDED TO SUPPORTING MEMBERS OR TO PRESET BEARING PLATES, EXCEPT WHERE STEEL JOIST INSTITUTE OR OTHER GOVERNING CODES OR AGENCIES REQUIRE BOLTED CONNECTION.
- F. UNLESS OTHERWISE NOTED OR DETAILED, PROVIDE HORIZONTAL AND/OR CROSS BRIDGING AT ALL STEEL JOISTS IN ACCORDANCE WITH SJI SPECIFICATIONS AND OTHER GOVERNING CODES AND AGENCIES.
- G. CAMBER ALL STEEL JOISTS PER SJI'S RECOMMENDED APPROXIMATE CAMBER TABLES, UNLESS NOTED OTHERWISE.
- H. JOIST MANUFACTURER SHALL DESIGN ALL JOIST EXTENDED ENDS AND JOIST EXTENSIONS FOR SPECIFIED DISTRIBUTED ROOF OR FLOOR LOADS PLUS WEIGHT OF WALLS, PARAPETS, FASCIA AND/OR SOFFITS SUPPORTED BY THE EXTENSIONS. WHERE REQUIRED FOR STRENGTH OR DEFLECTION, PROVIDE INCREASED JOIST BEARING DEPTH. IMMEDIATELY NOTIFY ARCHITECT/ENGINEER OF ANY REQUIRED BEARING DEPTH INCREASES. DEFLECTION CRITERIA UNLESS NOTED OTHERWISE ARE: LIVE LOAD DEFL. NOT TO EXCEED $L/360$ AND TOTAL LOAD DEFL. NOT TO EXCEED $L/240$.
- I. UNLESS OTHERWISE NOTED, PROVIDE CONTINUOUS STRUCTURAL ANGLE SUPPORT AT ALL METAL DECK EDGES, DISCONTINUITIES OR SPAN DIRECTION CHANGES. PROVIDE CONTINUOUS BENT PLATE 1/4"x4"x4" ALONG FRAMING HIPS AND VALLEYS FOR CONTINUOUS SUPPORT OF METAL DECK, UNLESS OTHERWISE NOTED.
- J. ALL OPENINGS IN METAL DECKING HAVING A DIMENSION OF 8" OR GREATER PERPENDICULAR TO THE DECK SPAN SHALL BE REINFORCED (8" TO 15" OPENING SIZE) OR FRAMED (15" AND LARGER OPENINGS) PER TYPICAL DETAILS HEREIN. TYPICAL DETAILS ARE INTENDED FOR SUPPORTING THE DECK AND LIGHT EQUIPMENT LOADS ONLY. EQUIPMENT WEIGHTS EXCEEDING THOSE INDICATED IN THE TYPICAL DETAILS SHALL BE SUPPORTED BY ADDITIONAL FRAMES OR CURBS SPANNING TO THE BUILDING FRAME. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING SUCH FRAMES OR CURBS. NOTIFY THE ENGINEER IF EQUIPMENT WEIGHT EXCEEDS 500 LBS. AND IS NOT INDICATED ON THE STRUCTURAL PLANS. FOR ALL MECHANICAL UNITS WHOSE OPERATING WEIGHT EXCEEDS 500 POUNDS, CONTRACTOR SHALL PROVIDE AN AS-BUILT SKETCH FOR EACH JOIST WHERE MECHANICAL UNIT CURB (OR OTHER MECHANICAL UNIT SUPPORT) RESTS ON STEEL JOIST-FRAMED ROOF ASSEMBLY. SKETCHES SHALL DEPICT LOCATION OF MECHANICAL UNIT CURB (OR OTHER SUPPORT) RELATIVE TO JOIST WEB MEMBER PANEL POINTS, INCLUDING THE FIELD MEASURED HORIZONTAL DIMENSION BETWEEN SUPPORT LOCATION AND NEAREST PANEL POINT. SKETCHES SHALL IDENTIFY EACH APPLICABLE JOIST BY THE JOIST SUPPLIER'S DESIGNATED JOIST NUMBER ON THE APPROVED SHOP DRAWINGS. FIELD-ADDED WEB ANGLES SHALL ALSO BE IDENTIFIED. SKETCHES SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO COVERING UP OF THE JOIST FRAMING.

K. METAL DECK CONNECTIONS:

- TYPE 'B' DECK TO OPEN WEB JOISTS AND STRUCTURAL STEEL FRAMING:
 - 5/8" DIAM. PUDDLE WELDS AT 12" O.C. AT DECK EDGES AND END SUPPORTS (36/4 PATTERN).
 - 5/8" DIAM. PUDDLE WELDS AT 12" O.C. AT INTERMEDIATE SUPPORTS AND FRAMING PARALLEL TO DECK SPAN.
 - TEKS #10 SCREWS AT 24" O.C. MAX. AT SIDELAPS
- MECHANICAL FASTENERS MAY BE SUBSTITUTED FOR PUDDLE WELDS WHERE EQUIVALENT DIAPHRAGM STRENGTH CAN BE DEMONSTRATED. SUBMIT MANUFACTURER'S TECHNICAL AND INSTALLATION DATA FOR REVIEW BY ENGINEER.
- TYPE 'B' DECK TO LIGHTGAGE JOISTS
 - TEKS #12 SCREWS AT 12" O.C. AT DECK EDGES AND END SUPPORTS (32/4 PATTERN).
 - TEKS #12 SCREWS AT 12" O.C. AT INTERMEDIATE SUPPORTS AND FRAMING PARALLEL TO DECK SPAN.
 - TEKS #10 SCREWS AT 24" O.C. MAX AT SIDELAPS.
- FORM DECK TO OPEN WEB JOISTS AND STRUCTURAL STEEL FRAMING
 - 5/8" DIAM. PUDDLE WELDS AT 9" O.C. AT DECK EDGES AND END SUPPORTS AND AT INTERMEDIATE SUPPORT (32/4 PATTERN) AND FRAMING PARALLEL TO DECK SPAN.
 - TEKS #10 SCREWS AT 24" O.C. MAX AT SIDELAPS.
- FORM DECK TO LIGHTGAGE JOISTS
 - TEKS #12 SCREWS AT 9" O.C. AT DECK EDGES AND END SUPPORTS AND AT INTERMEDIATE SUPPORTS AND FRAMING PARALLEL TO DECK SPAN.
 - TEKS #10 SCREWS AT 24" O.C. MAX. AT SIDELAPS.
- COMPOSITE DECK TO STRUCTURAL FRAMING
 - ATTACHMENT MAY CONSIST OF A COMBINATION OF 5/8" DIAMETER PUDDLE WELDS AND/OR SHEAR STUDS WELDED THROUGH THE DECK.
 - SPACING OF ATTACHMENTS SHALL NOT EXCEED 16" AND THE AVERAGE SPACING SHALL NOT EXCEED 12".
- ALL FULL PENETRATION WELDS SHALL BE TESTED AND CERTIFIED BY A QUALIFIED INDEPENDENT TESTING LABORATORY. CONTRACTOR SHALL PAY FOR SUCH TESTING.
- PROVIDE TEMPORARY METAL DECK SHORING WHEN THE WEIGHT OF THE WET CONCRETE PLUS CONSTRUCTION LIVE LOADS EXCEED SDI ALLOWABLE MAXIMUM CLEAR SPAN.

DECK GAUGE DECK SPAN FRAME FASTENING STITCH CONNECTORS DESIGN SHEAR

22	4'-0"	36/4	2	305 PLF
22	5'-0"	36/4	3	290 PLF
22	6'-0"	36/4	3	250 PLF
22	4'-0"	36/4	2	370 PLF
20	5'-0"	36/4	3	350 PLF
20	6'-0"	36/4	3	300 PLF

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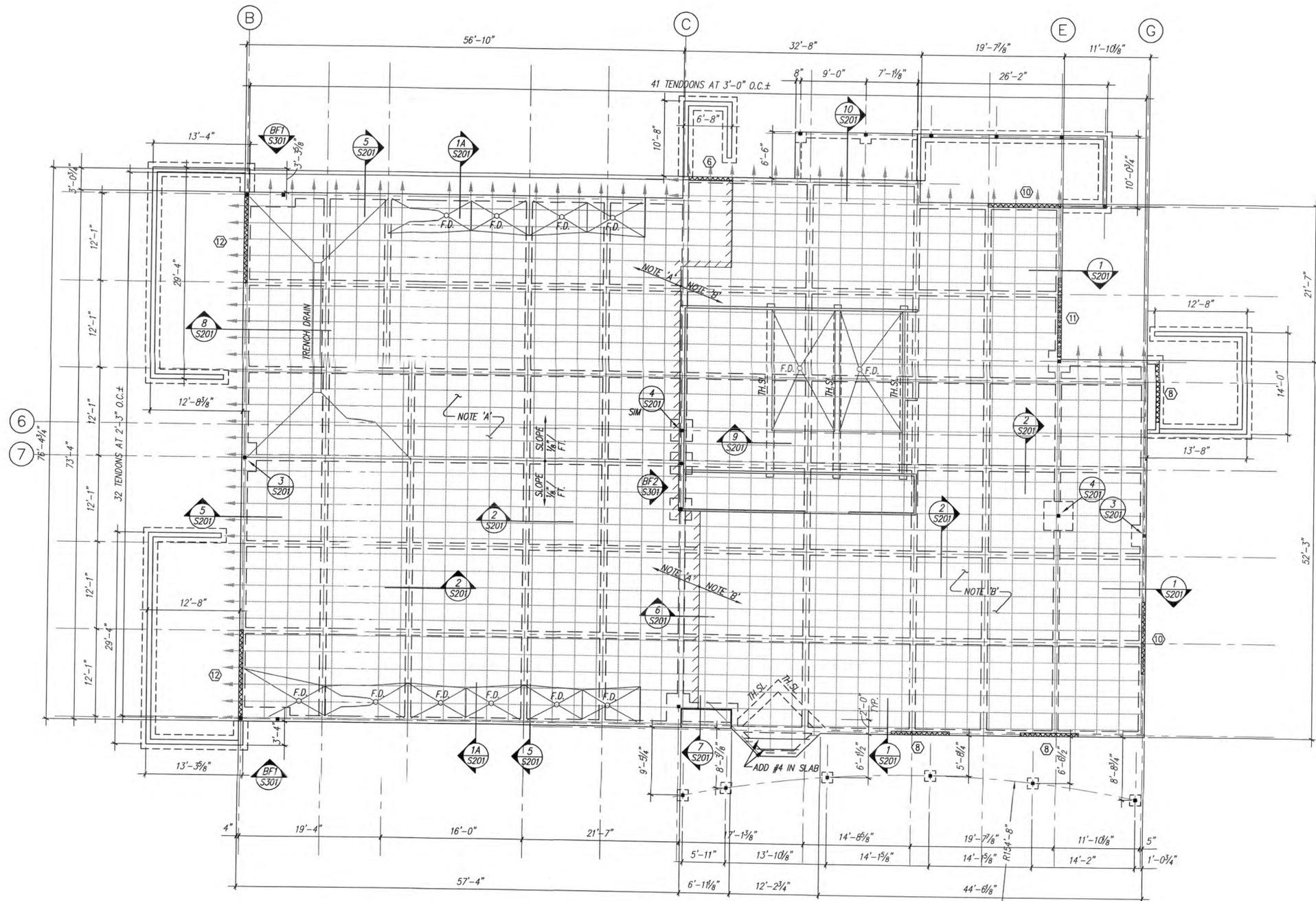
Eastern Region Headquarters
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Santa Fe County
645 Old Las Vegas Highway
Santa Fe, New Mexico

02004, 1595 PROJECT NO.
18 Jul 2005 DATE
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DHS PROJ. MGR.
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RE-BID 18 JULY 2005

Structural General Notes

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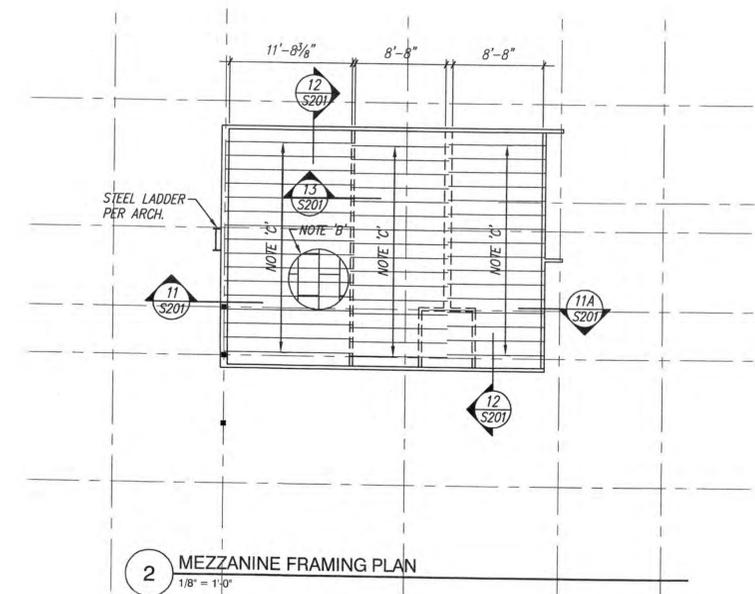


1 FOUNDATION PLAN
1/8" = 1' - 0"

- NOTE 'A' 5" POST-TENSIONED CONCRETE SLAB ON GRADE OVER COMPACTED SUBGRADE.
- NOTE 'B' 4" POST-TENSIONED CONCRETE SLAB ON GRADE OVER COMPACTED SUBGRADE.
- INDICATES POST-TENSION RIB LOCATIONS
- INDICATES POST-TENSION TENDON LOCATION
- TH.SL. DESIGNATES THICKENED SLAB LOCATION
- INDICATES T.S. 6"x6"x1/4" COLUMN UNLESS OTHERWISE NOTED.

NOTE: EXERCISE EXTREME CARE NOT TO CUT OR DAMAGE ANY POST-TENSIONED CABLES AFTER FOUNDATION HAS BEEN INSTALLED. DO NOT CUT OR DRILL ANY HOLES OR OPENINGS INTO P/T CONCRETE SLAB WITHOUT FIRST DETERMINING THE EXACT LOCATION OF CABLES.

- NOTE: ALL UTILITY CONNECTIONS TO BE FLEXIBLE CONNECTIONS
- F.D. INDICATES FLOOR DRAIN. SLOPE SLAB TO DRAIN
- INDICATES TENSION METAL STRAP 'X' BRACED SHEAR WALL LOCATIONS AND LENGTH (IN FEET). SEE SHEET S002 FOR TYPICAL ELEVATIONS AND DETAILS.



2 MEZZANINE FRAMING PLAN
1/8" = 1'-0"

- NOTE 'B' 5/8" PLYWOOD DECK. STAGGER JOINTS. SCREW TO JOISTS W/ #12 SELF-TAPPING FASTENERS AT 5" O.C. ALONG ALL SUPPORTED EDGES AND AT 10" O.C. ALONG INTERMEDIATE SUPPORTS.
- NOTE 'C' 8"x2" -16 GA. METAL 'C' JOISTS AT 16" O.C.



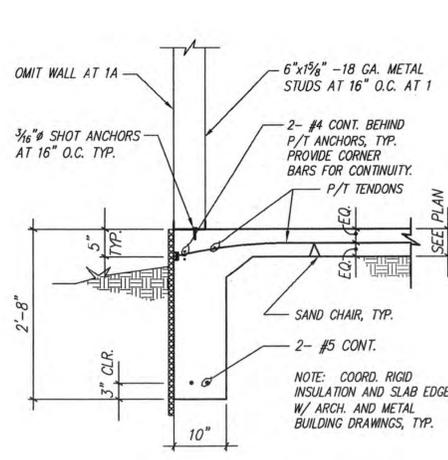
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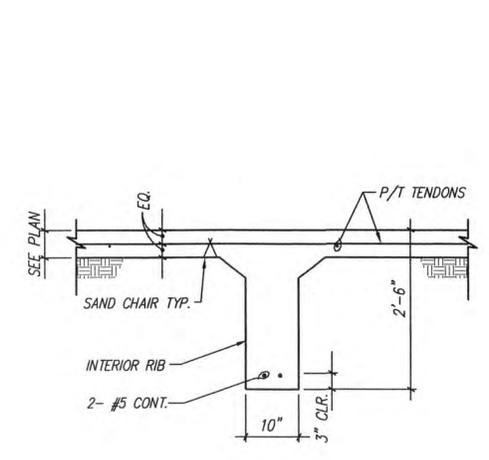
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COMPLETION

Foundation Plan
Mezzanine Framing

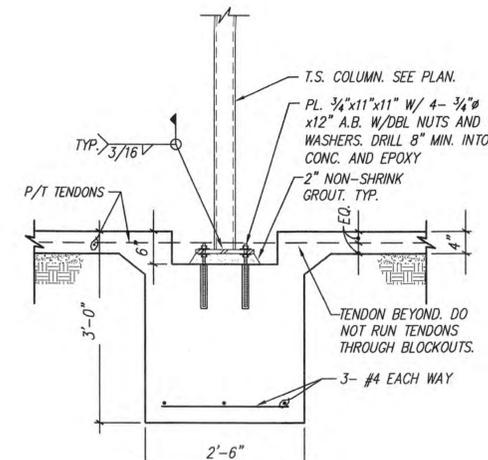




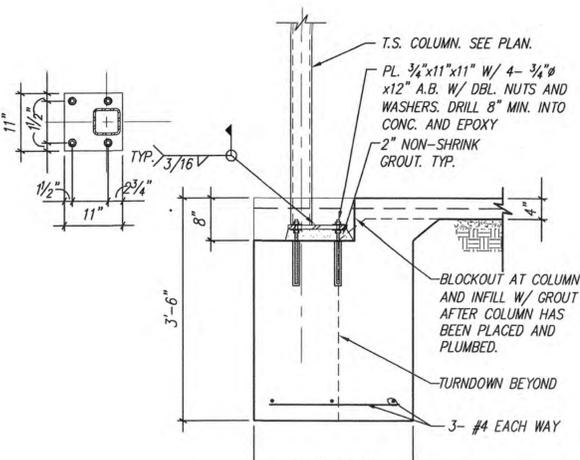
SECTION 1
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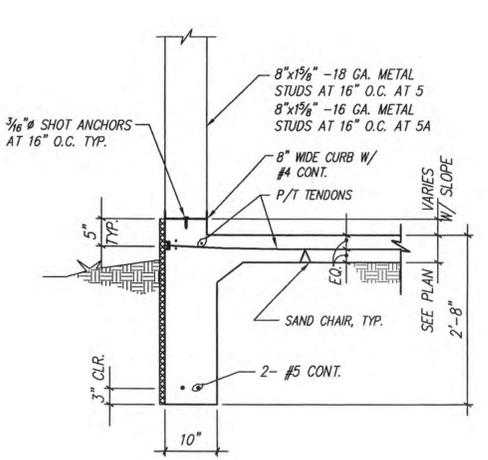
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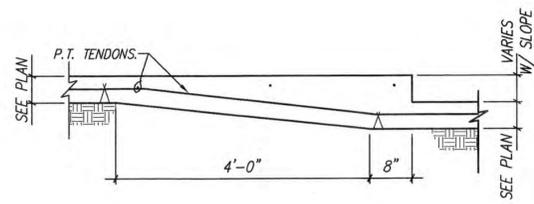
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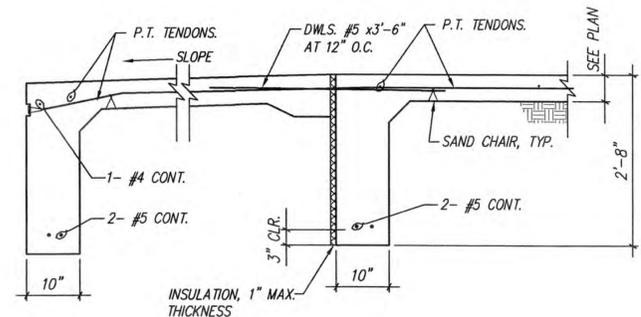
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SCALE: 3/4" = 1'-0"



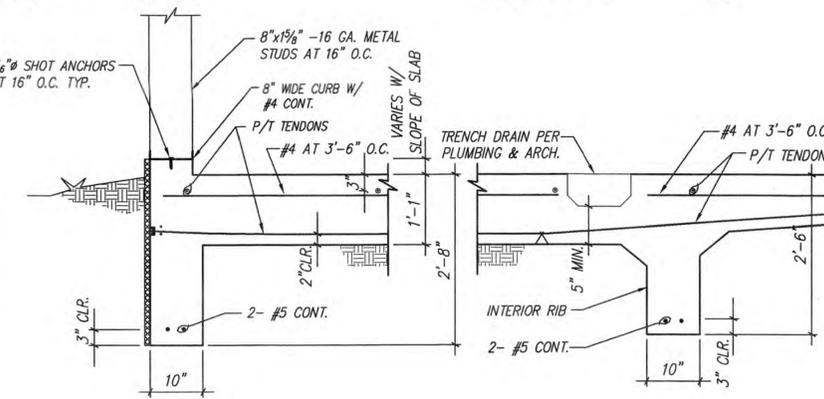
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SCALE: 3/4" = 1'-0"



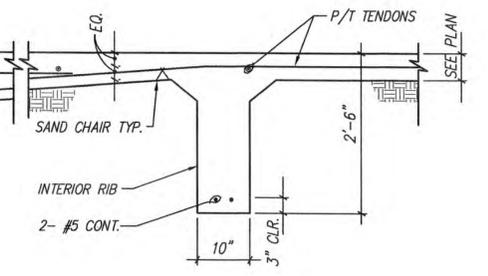
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SCALE: 3/4" = 1'-0"



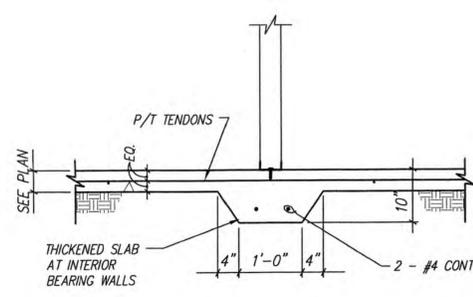
SECTION 7
SCALE: 3/4" = 1'-0"



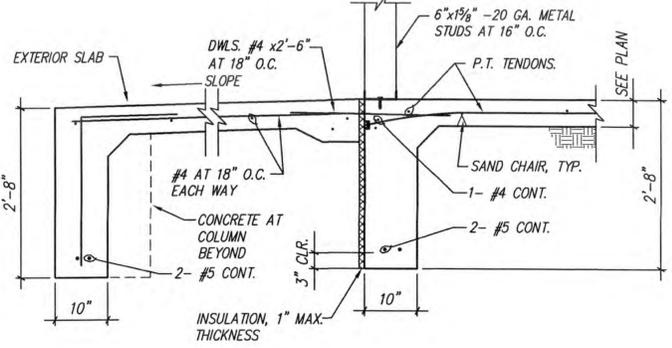
SECTION 8
SCALE: 3/4" = 1'-0"



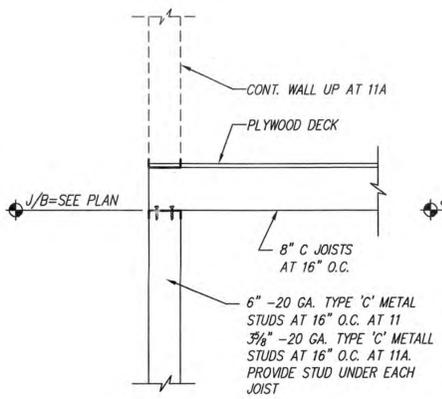
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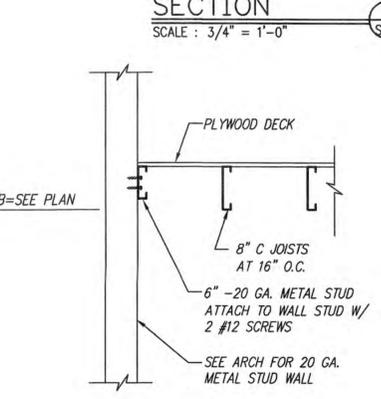
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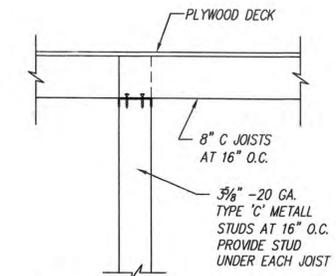
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SCALE: 3/4" = 1'-0"



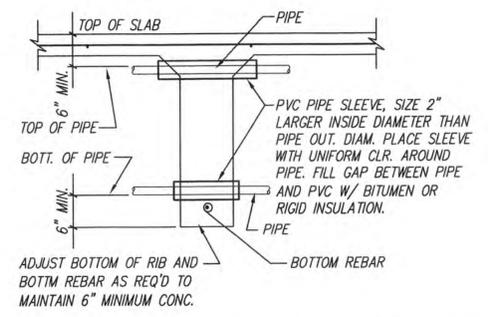
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SCALE: 3/4" = 1'-0"



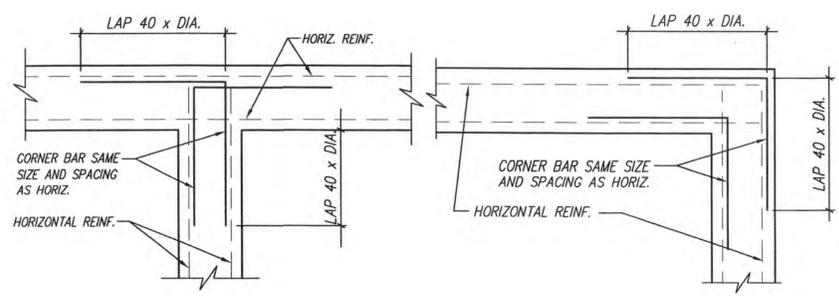
SECTION 13
SCALE: 3/4" = 1'-0"



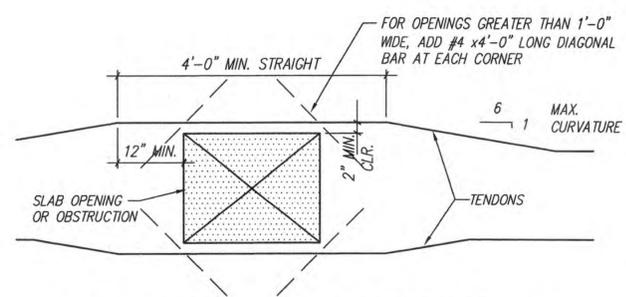
SECTION 14
SCALE: 3/4" = 1'-0"



TYP. DETAIL AT PIPE PENETRATION THROUGH P/T SLAB RIB



TYP. LAP AT RIB CONTINUOUS REBAR



TYP. TENDON LAYOUT AT OPENINGS OR OBSTRUCTIONS - PLAN VIEW

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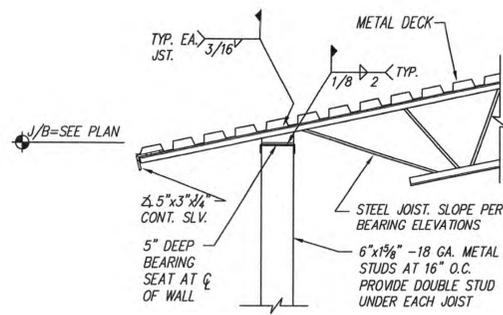
Foundation Sections and Details



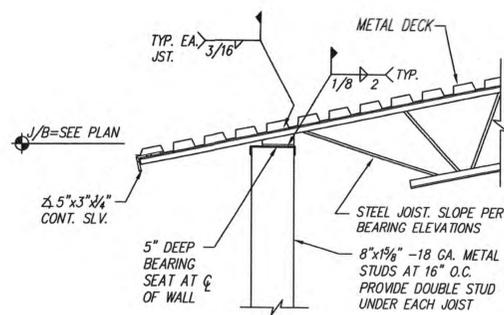
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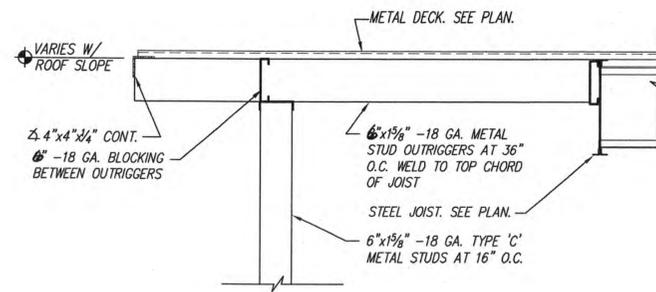
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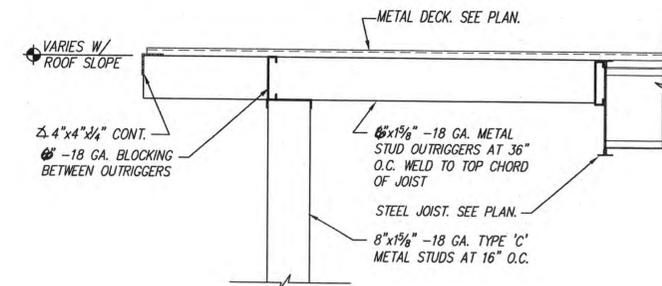
SECTION 1
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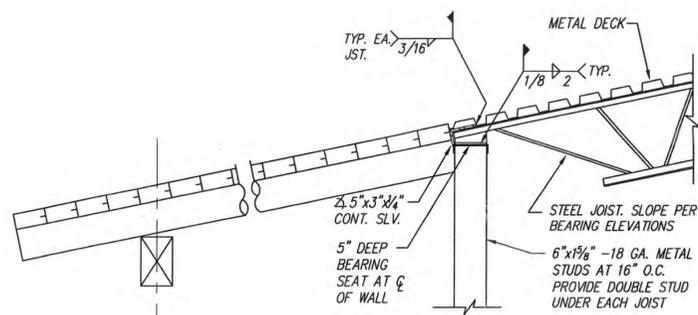
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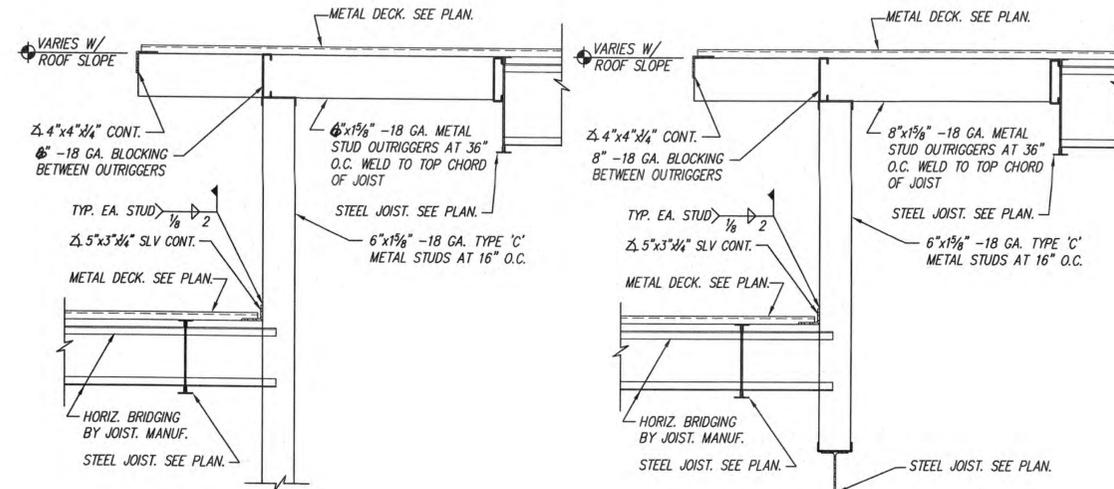
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SCALE: 3/4" = 1'-0"



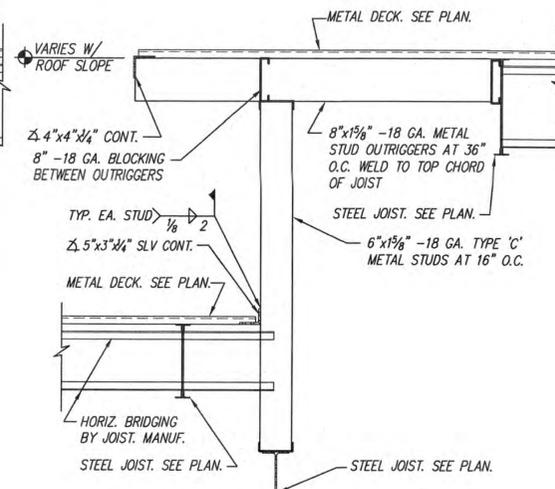
SECTION 4
SCALE: 3/4" = 1'-0"



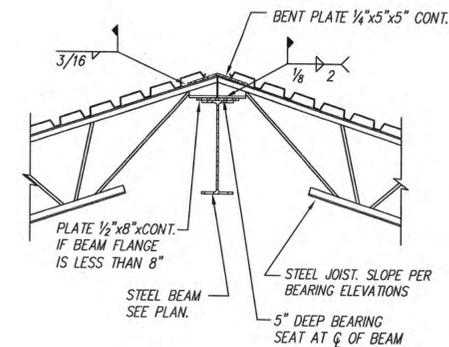
SECTION 5
SCALE: 3/4" = 1'-0"



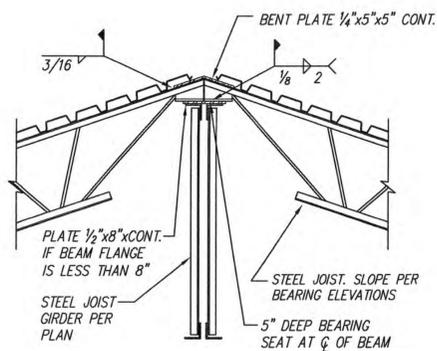
SECTION 6
SCALE: 3/4" = 1'-0"



SECTION 7
SCALE: 3/4" = 1'-0"



SECTION 8
SCALE: 3/4" = 1'-0"



SECTION 9
SCALE: 3/4" = 1'-0"

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Framing Sections and Details

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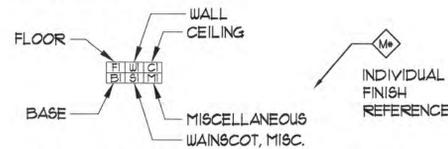
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KEYED NOTES:

- 1) COMBINATION MARKER BOARD 10'-0" W x 4'-0" H w/ 3'-0" W x 4'-0" H ON EACH SIDE. TOTAL LENGTH OF 16'-0". MOUNT TOP 1'-0" AFF.
- 2) TACKBOARD 3'-0" W x 4'-0" H. MOUNT TOP 1'-0" AFF.
- 3) MARKERBOARD 8'-0" W x 4'-0" H. MOUNT TOP 1'-0" AFF.
- 4) TACKBOARD 6'-0" W x 4'-0" H. MOUNT TOP 1'-0" AFF.
- 5) PROVIDE CORNER GUARDS ON ALL OUTSIDE CORNERS OF TYPE 65M-20 AS MANUFACTURED BY C/S ACRYVYN. COLOR TO BE SELECTED BY ARCHITECT.
- 6) BRONZE BUILDING PLAQUE PER SANTA FE COUNTY STANDARDS.

FINISHES:



NOTE: FINISH AND MATERIAL LISTED IS FOR GENERAL REFERENCE AND PRICING. FINAL COLORS ARE SUBJECT TO CHANGE AND FINAL APPROVAL DEPENDING ON MANUFACTURER/SUPPLIER AND ARCHITECT'S SELECTION

FLOORS:

- F1 -- VINYL COMPOSITE TILE: III DALMATIAN BY MANNINGTON COMMERCIAL
- F2 -- VINYL COMPOSITE TILE: (F1) W/ 2'-0" WIDE ACCENT BORDER: 218 WINEBERRY BY MANNINGTON COMMERCIAL
- F3 -- 14"x14" TILE: PORTENZA - TIERRA DI SIENNA PZ04 BY DAL-TILE W/ EPOXY GROUT 164 SILVER KING BY C-CURE
- F4 -- 2"x2" CERAMIC TILE: PORCELAIN 164 SILVER KING BY DAL-TILE W/ EPOXY GROUT 116 CATTAIL BY C-CURE
- F5 -- 2"x2" CERAMIC TILE: PORCELAIN DK335 BY DAL-TILE W/ EPOXY GROUT 168 WILD ONION BY C-CURE
- F6 -- SEALED CONCRETE
- F7 -- CARPET: 304 EARTHLY TAUPE D4892 CARPET TILES BY LEE'S CARPET

WALL: ALL PAINTS BY SHERWIN WILLIAMS

- W1 -- PAINT: SIMPLIFY BEIGE SW 6085 EGG-SHELL FINISH
- W2 -- ENAMEL PAINT: ORIGINAL WHITE SW1011 SEMI-GLOSS
- W3 -- PAINT: SAND DUNE SW 6086 EGG-SHELL

CEILING:

- C1 -- 2x4 LAY-IN TILE: GLACIER T11 BY USG W/ DONN DX GRID
- C2 -- 2x4 LAY-IN TILE: ULTIMA 1915 BEVELED TEGULAR BY ARMSTRONG W/ SUPERFINE XL 3/8" GRID
- C3 -- GYP BOARD, PAINTED ORIGINAL WHITE SW 1011
- C4 -- EXPOSED STRUCTURE, ENAMEL PAINT ORIGINAL WHITE SW 1011

BASE:

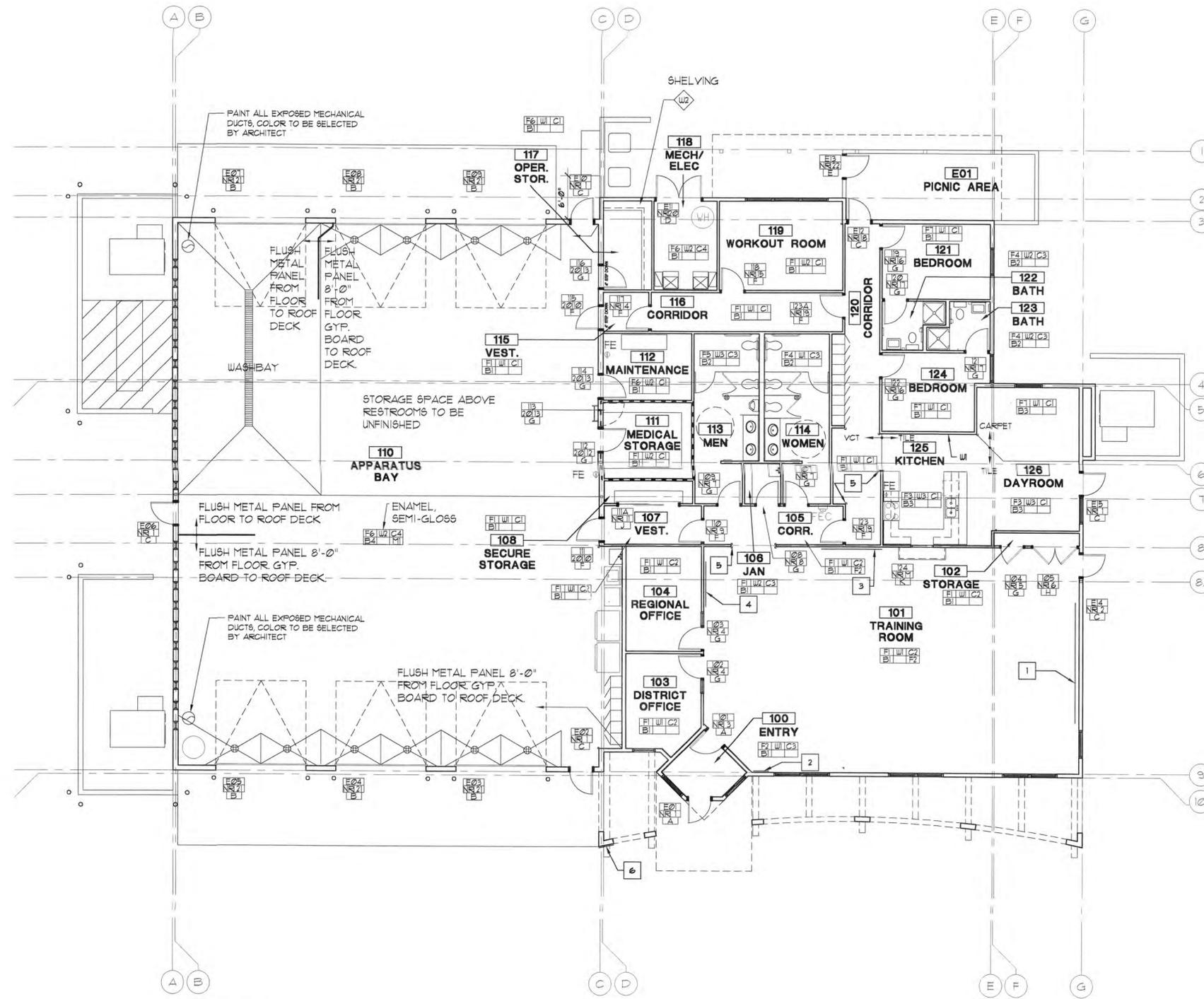
- B1 -- 4" VINYL: 40 BLACK BY JOHNSONITE
- B2 -- BUILT-UP CERAMIC TILE W/ COVE AND BULLNOSE: 2"x2" MOCHA DK36 BY DAL-TILE
- B3 -- 3"x14" TILE BASE: PORTENZA - VERDE LAGO PZ05 BULLNOSE BY DAL-TILE
- B4 -- METAL PANEL - CAULK ALONG BASE

MISCELLANEOUS: ALL PAINTS BY SHERWIN WILLIAMS

- M1 -- GYP BOARD PAINTED. EXTERIOR WALLS TO RECEIVE FLUSH METAL PANELS.
- M2 -- PAINT: RAINSTORM SW 6230
- M3 -- PAINT: FORSYTHIA SW 6301
- M4 -- PLASTIC LAMINATE: WASHINGTON APPLE WF0002E BY NEVAMAR
- M5 -- PLASTIC LAMINATE: HEATHER LEGACY 4602-60 BY WILSONART
- M6 -- PLASTIC LAMINATE: DESERT LANDSCAPE F8-1-IT BY NEVAMAR
- M7 -- PLASTIC LAMINATE: ARTIC LANDSCAPE F8-3-2T BY NEVAMAR

GENERAL NOTES:

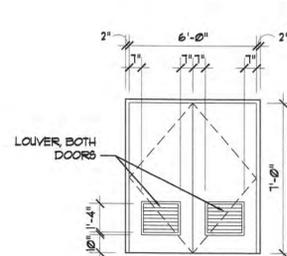
- A. PROVIDE WINDOW TREATMENT PER SPECIFICATIONS FOR ALL EXTERIOR WINDOWS AND FOR SIDELITES OF DOORS 102 AND 103. COLOR TO BE SELECTED BY ARCHITECT.
- B. PROVIDE FIRE EXTINGUISHERS 3/4 FE 1/2 WHERE INDICATED. PROVIDE FIRE EXTINGUISHERS IN CABINETS 3/4 FE 1/2 WHERE INDICATED. EXTINGUISHERS TO BE TYPE 2A10BC.



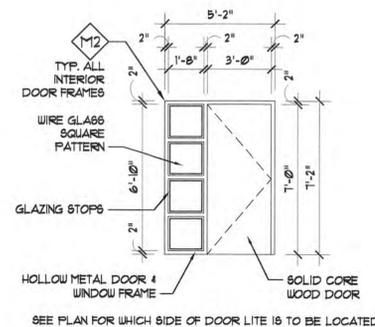
1 FLOOR PLAN
1/8" = 1'-0"

SIGNAGE:

DOOR:	TEXT:
110, 123	EMPLOYEES ONLY
109	MEN
107	WOMEN
E14	EMERGENCY EXIT ONLY
108	JANITOR



ELEV E



ELEV D

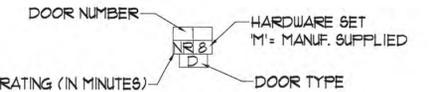
J
SIZE: 8'-4"x1'-0"x1 3/8"
TYPE: SOLID CORE WOOD
FRAME: HOLLOW METAL
FINISH: STAIN DOOR, PAINT FRAME
THRES: 1/2"
MISC: BI-PASS DOORS, TRACK BY MANUFACTURER

K
SIZE: 3'-0"x4'-0"
TYPE: METAL ROLL-UP DOOR
FRAME: METAL
FINISH: MANUF. STANDARD
THRES: 1/2"
MISC: SEE 6, 1, & 8/A1J

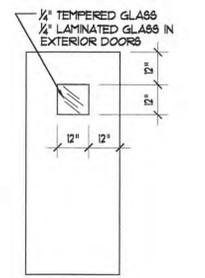
G
SIZE: 3'-0"x1'-0"
TYPE: SOLID CORE WOOD
FRAME: HOLLOW METAL
FINISH: STAIN DOOR, PAINT FRAME
THRES: 1/2"
MISC: FOR DOORS 102 & 103: SEE ELEV. D

H
SIZE: (2) 3'-0"x1'-0"
TYPE: SOLID CORE WOOD
FRAME: HOLLOW METAL
FINISH: STAIN DOOR, PAINT FRAME
THRES: 1/2"
MISC:

DOOR TYPES

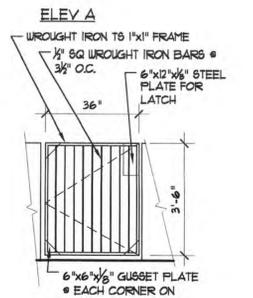


A
SIZE: 3'-0"x1'-0"
TYPE: HOLLOW METAL
FRAME: HOLLOW METAL
FINISH: PAINT
THRES: METAL
MISC: ELEV. A



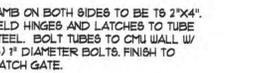
B
SIZE: 12'-0"x12'-0"
TYPE: ROLL-UP OVERHEAD
FRAME: METAL
FINISH: MANUF
THRES: 1/2"
MISC: INSULATED

C
SIZE: 3'-0"x1'-0"
TYPE: HOLLOW METAL, INSUL.
FRAME: HOLLOW METAL
FINISH: PAINT
THRES: 1/2"
MISC:

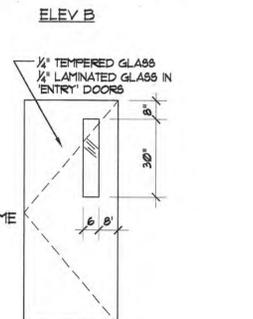


D
SIZE: (2) 3'-0"x1'-0"
TYPE: HOLLOW METAL
FRAME: HOLLOW METAL
FINISH: PAINT
THRES: 1/2"
MISC: SEE ELEV E

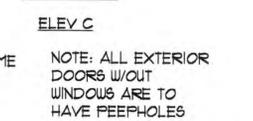
E
SIZE: 3'-0"x3'-6"
TYPE: WROUGHT IRON
FRAME: METAL
FINISH: BLACK
THRES: 1/2"
MISC: ELEV B



F
SIZE: 3'-0"x1'-0"
TYPE: SOLID CORE WOOD
FRAME: HOLLOW METAL
FINISH: STAIN DOOR, PAINT FRAME
THRES: METAL
MISC: ELEV. C



G
SIZE: 3'-0"x1'-0"
TYPE: SOLID CORE WOOD
FRAME: HOLLOW METAL
FINISH: STAIN DOOR, PAINT FRAME
THRES: 1/2"
MISC: FOR DOORS 102 & 103: SEE ELEV. D



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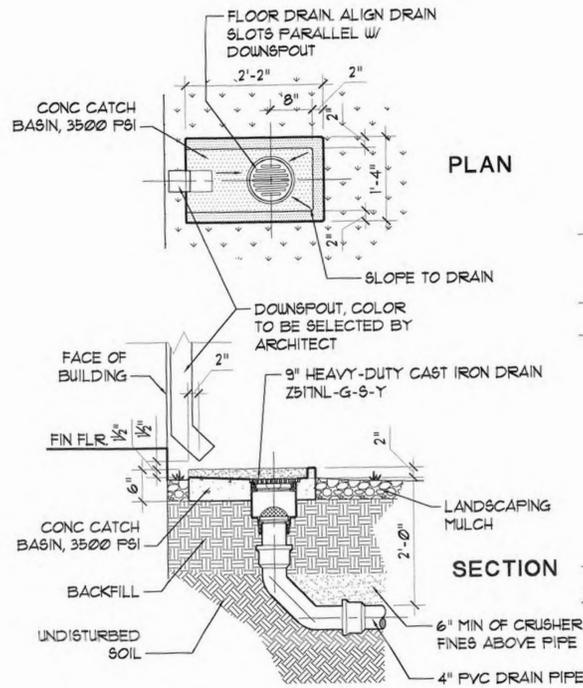
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FLOOR PLAN - DOORS AND FINISHES

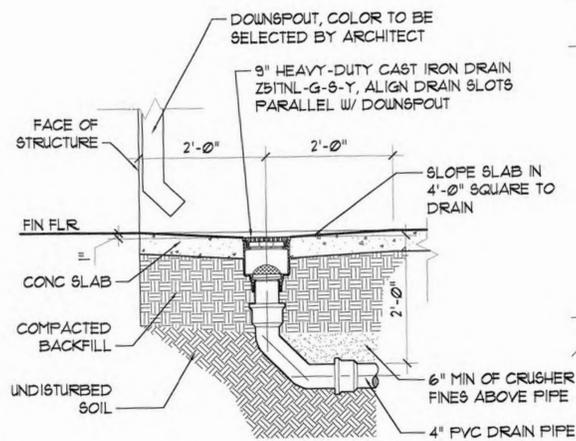
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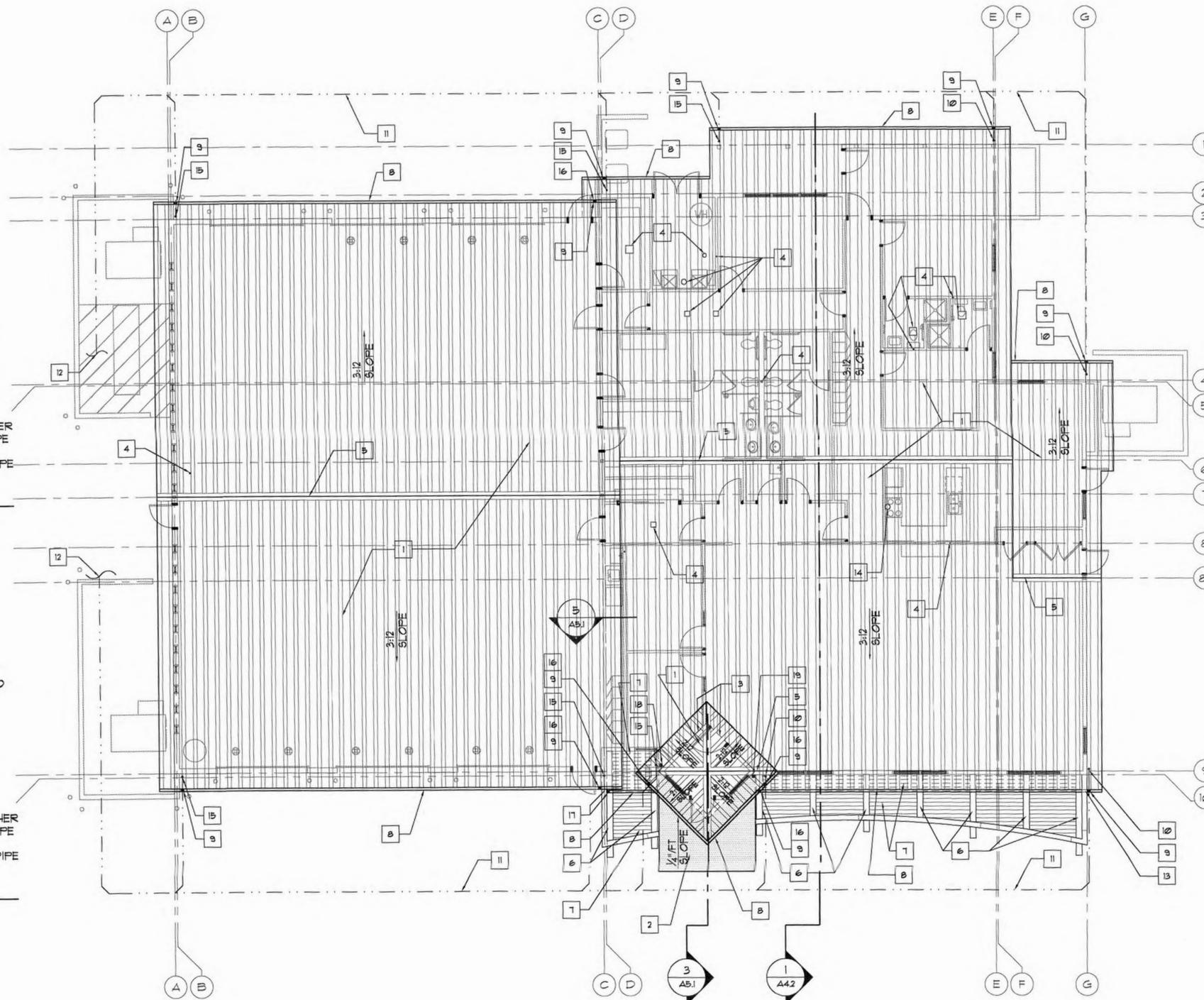
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2 WATER HARVESTING CATCH BASIN DETAIL
3/4" = 1'-0"



3 WATER HARVESTING IN CONC. SLAB DETAIL
3/4" = 1'-0"



1 ROOF PLAN
1/8" = 1'-0"

GENERAL NOTES:

- A. CONTRACTOR SHALL COORDINATE NUMBER AND LOCATIONS OF ALL ROOF PENETRATIONS W/ OTHER TRADES.
- B. ALL ROOF PENETRATIONS SHALL HAVE A FINISH OR BE FINISHED TO MATCH ROOF COLOR.
- C. ALL OVERHANGS 2'-0" UNLESS NOTED OTHERWISE

KEYED NOTES:

- 1) METAL ROOF. COLOR TO MATCH: TAHOE BLUE BY AEP SPAN OR EQUAL.
- 2) FULLY ADHERED EPDM ROOF W/ FLASHING. COLOR TO BE SELECTED BY ARCHITECT
- 3) PROVIDE CANT STRIPS TO DIRECT ROOF DRAINAGE TO ROOF GUTTERS
- 4) MECHANICAL VENT, FLUE, OR HOOD. SEE MECHANICAL AND PLUMBING PLANS
- 5) RIDGE STRIP
- 6) WOOD VIGAS W/ 24 GA. COPPER PROTECTION
- 7) WOOD LATTIAS
- 8) 4"x6" METAL GUTTER. COLOR TO MATCH ROOF.
- 9) 4"x4" METAL DOWNSPOUT. COLOR TO MATCH ROOF.
- 10) WATER HARVESTING CATCH BASIN PER 2/A2.1
- 11) 4"x6" WATER HARVESTING COLLECTION PVC PIPE
- 12) CONNECT WATER HARVESTING SYSTEM TO FILTERING SYSTEM, SEE F-1
- 13) PROVIDE OPENING IN WALL FOR GUTTER TO CONTINUE THROUGH
- 14) VENT FROM RANGE HOOD. OWNER TO SUPPLY AND CONTRACTOR TO INSTALL.
- 15) WATER HARVESTING CATCH BASIN IN CONC. SLAB PER DETAIL 3/A2.1
- 16) DOWNSPOUT TO BE DIRECTED TO DRAIN ONTO LOWER ROOF. PROVIDE FLASH PAN OR PROTECTION OF ROOFING MATERIAL AS REQUIRED BY MANUFACTURER
- 17) TURN DOWNSPOUT INTO COLONNADE WALL AND RUN TO DRAIN ABOVE WATER HARVESTING DRAIN
- 18) PROVIDE GUTTER TO DRAIN AROUND CORNER AND DOWN ABOVE WATER HARVESTING DRAIN
- 19) RUN DOWNSPOUT THROUGH ROOF DECK AND DOWN TO WATER HARVESTING DRAIN. FLASH ROOFING PER MANUFACTURER'S REQUIREMENTS.



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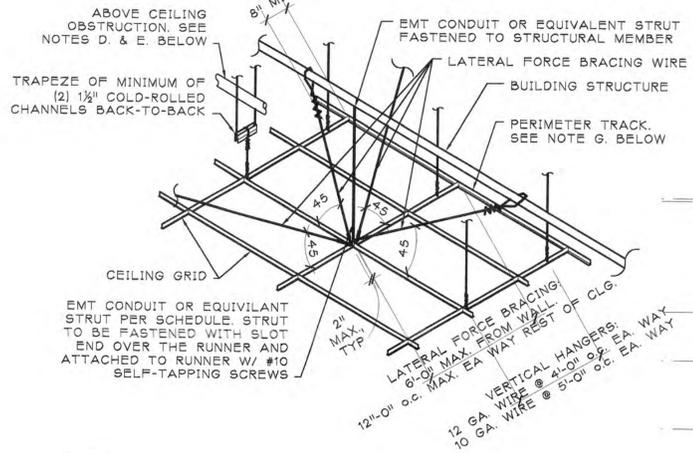
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STRUT SCHEDULE

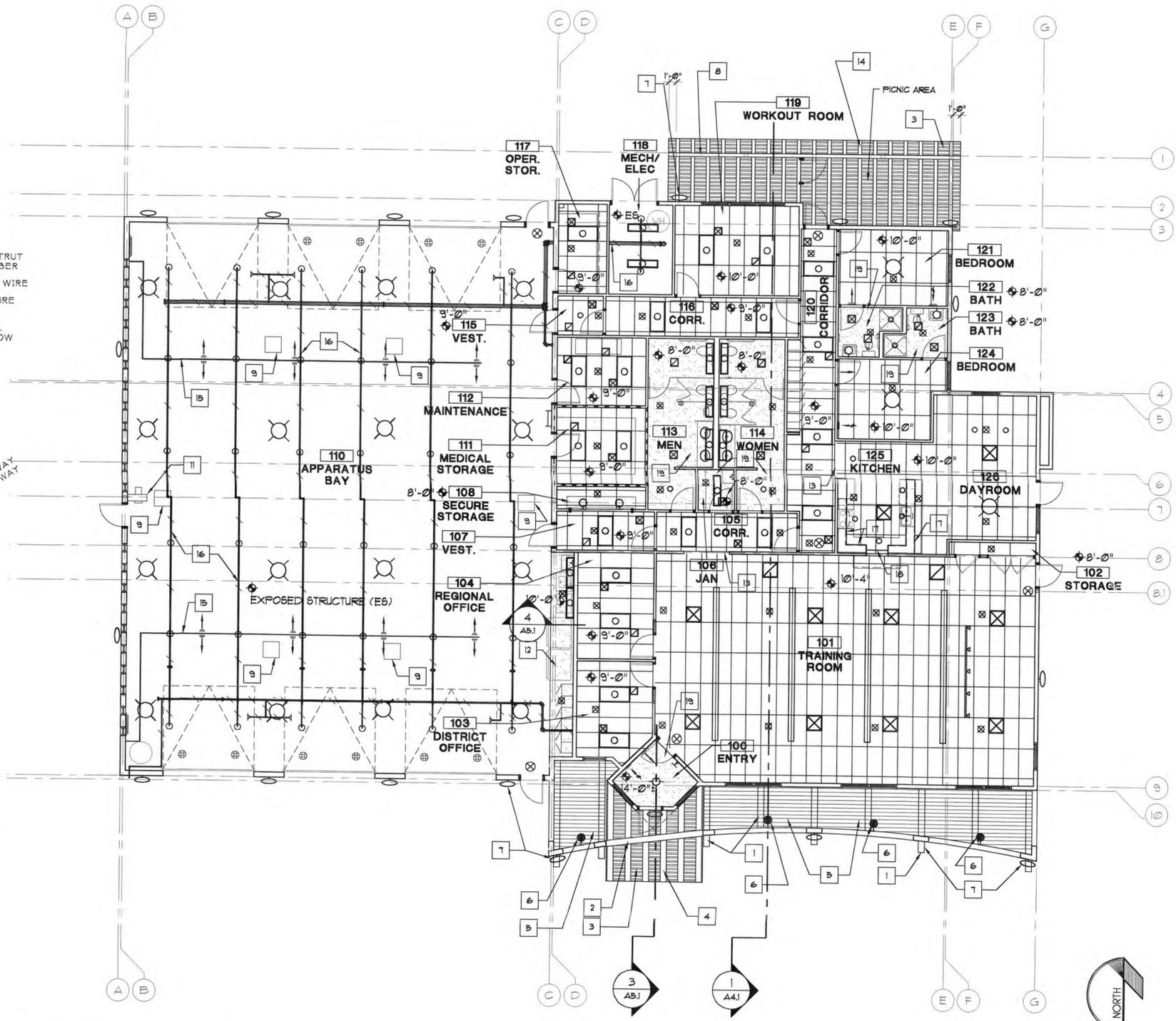
EMT SIZE (NOMINAL)	LENGTH (L) ≤ 200
½"	≤ 3'-10"
¾"	≤ 5'-0"
1"	≤ 6'-8"
1¼"	≤ 8'-5"
1½"	≤ 9'-10"

EMT = ELECTRICAL METALLIC TUBING



LATERAL FORCE BRACING NOTES:
 A. WIRES SHALL BE A MINIMUM OF 12 GAUGE WIRE AND HAVE A MINIMUM OF 3 TURNS EACH END.
 B. ALL SUPPORTS SHALL BE CAPABLE OF CARRYING A MINIMUM OF 100 POUNDS. CONNECTION OF STRUT SHALL BE CAPABLE OF CARRYING A MINIMUM OF 200 POUNDS.
 C. WIRES SHALL NOT HANG MORE THAN 1 IN 6 OUT OF PLUMB UNLESS COUNTER SLOPING WIRES ARE PROVIDED.
 D. WIRES SHALL NOT ATTACH TO OR BEND AROUND INTERFERING MATERIAL OR EQUIPMENT. A TRAPEZE OR EQUIVALENT DEVICE SHALL BE USED WHERE OBSTACLES PRECLUDE DIRECT SUSPENSION.
 E. LATERAL FORCE BRACING SHALL BE A MINIMUM OF 8" FROM ALL HORIZONTAL PIPING AND DUCT WORK THAT IS NOT PROVIDED W/ BRACING RESTRAINTS FOR HORIZONTAL FORCES.
 F. ENDS OF MAIN RUNNERS AND CROSS MEMBERS SHALL BE TIED TOGETHER TO PREVENT THEM FROM SPREADING.
 G. RUNNERS MAY ONLY BE ATTACHED TO THE PERIMETER MEMBER ON TWO ADJACENT WALLS. NO ATTACHMENT IS PERMITTED TO THE OTHER WALLS.
 H. LOCAL KINKS OR BENDS SHALL NOT BE MADE IN HANGER WIRES FOR LEVELING.

2 CEILING BRACING PER IBC 2000
NO SCALE



1 REFLECTED CEILING PLAN (RCP)
1/8" = 1'-0"

GENERAL NOTES:

- A. ALL CEILING ELEMENTS ARE REPRESENTATIVE AND REQUIRES CONTRACTOR TO COORDINATE BETWEEN ALL TRADES.
- B. CONTRACTOR SHALL NOTIFY ARCHITECT OF ALL CONFLICTS IN LOCATION.
- C. STORAGE SPACE ABOVE RESTROOMS, MAINTENANCE, MEDICAL STORAGE, AND SECURE STORAGE SHALL HAVE EXPOSED STRUCTURE.
- D. FOR CEILING TYPES SEE SHEET A12

KEYED NOTES:

- 1) 12" VIGA, TYP, CLEAR FINISH
- 2) 12" WOOD BEAM, CLEAR FINISH
- 3) 3x6 T&G WOOD DECKING, CLEAR FINISH
- 4) 12" VIGAS @ 21" o.c., CLEAR FINISH
- 5) 4" ASPEN LATTIS @ 6" o.c. W/ CLEAR FINISH, OPEN TO SKY
- 6) LIGHTS TO BE FOCUSED ON FACADE
- 7) WALL SCONCE
- 8) 6x10 WOOD BEAM, CLEAR FINISH
- 9) VEHICLE EXHAUST UNIT - ALTERNATE 2. COORDINATE W/ MANUFACTURER AS TO LOCATION.
- 10) NOT USED
- 11) EXHAUST FAN, SEE MECHANICAL
- 12) SOFFITED GYP BOARD CEILING, PAINT W/ ENAMEL PAINT
- 13) FINISHED OPENING HEIGHT 7'-2"
- 14) 6" VIGAS @ 24" o.c.
- 15) EXPOSED MECHANICAL DUCT
- 16) FIRE SPRINKLER LINES
- 17) SOFFIT FOR UPPER KITCHEN CABINETS
- 18) ROLL-UP COILING DOOR CABINET
- 19) ½" TYPE 'X' GYP BOARD CEILING ON ½" HAT CHANNEL @ 16" o.c. ATTACHED TO ½" COLD FORMED METAL CHANNEL @ 16" o.c. SUSPENDED. PAINT FINISH.

LEGEND:

- 2x4 LAY-IN FLUORESCENT LIGHT
- FLUORESCENT LIGHT
- ⊗ TRACK LIGHTING FIXTURE
- ⊙ CEILING MOUNTED LIGHT FIXTURE
- ⊕ WALL MOUNTED LIGHT
- ⊖ WALL MOUNTED LIGHT
- RECESSED LIGHT FIXTURE
- ⊗ EXIT LIGHT
- ⊗ SUPPLY DIFFUSER
- ⊖ RETURN DIFFUSER
- ⊗ PENDENT FIRE SPRINKLER HEAD
- UPRIGHT FIRE SPRINKLER HEAD
- ⊗ FIRE SPRINKLER SIDEWALL HEAD
- ⊖ FIRE SPRINKLER PIPE & HANGER

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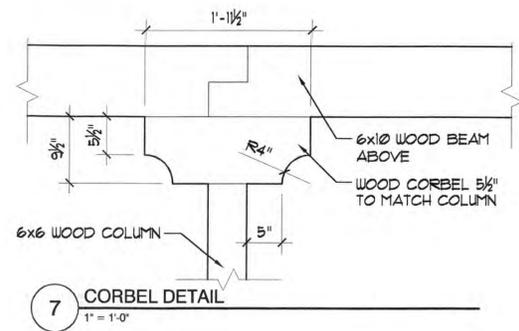
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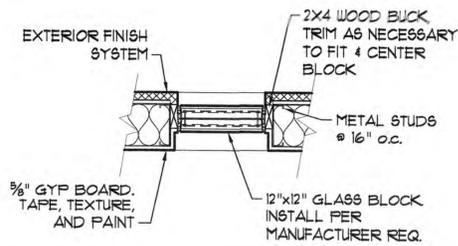
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REFLECTED CEILING PLAN

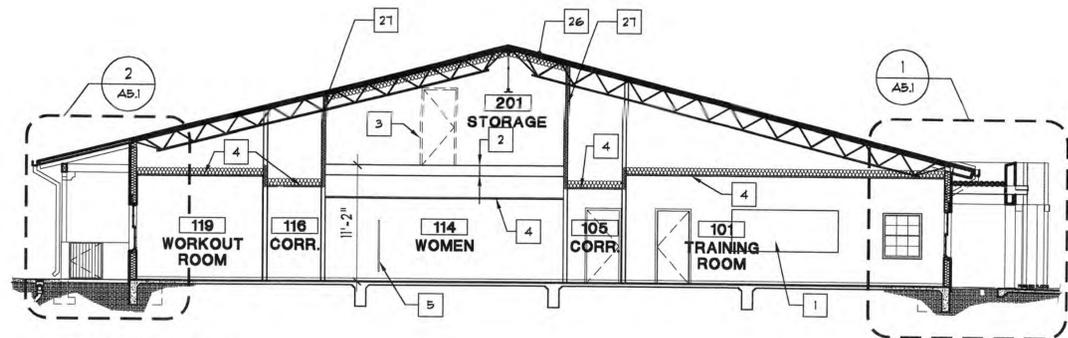




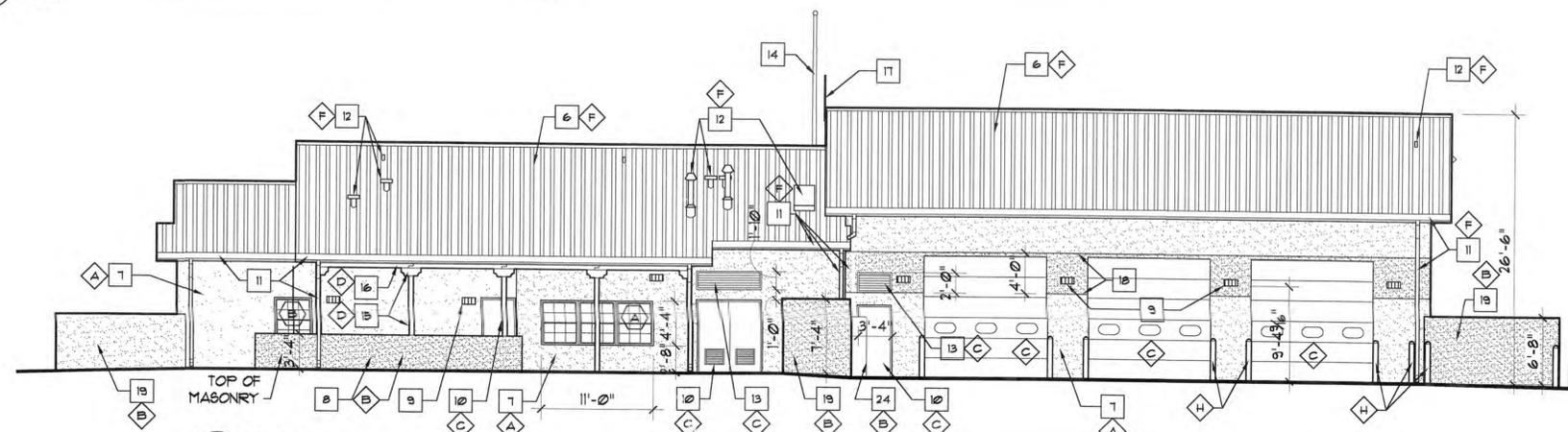
7 CORBEL DETAIL
1" = 1'-0"



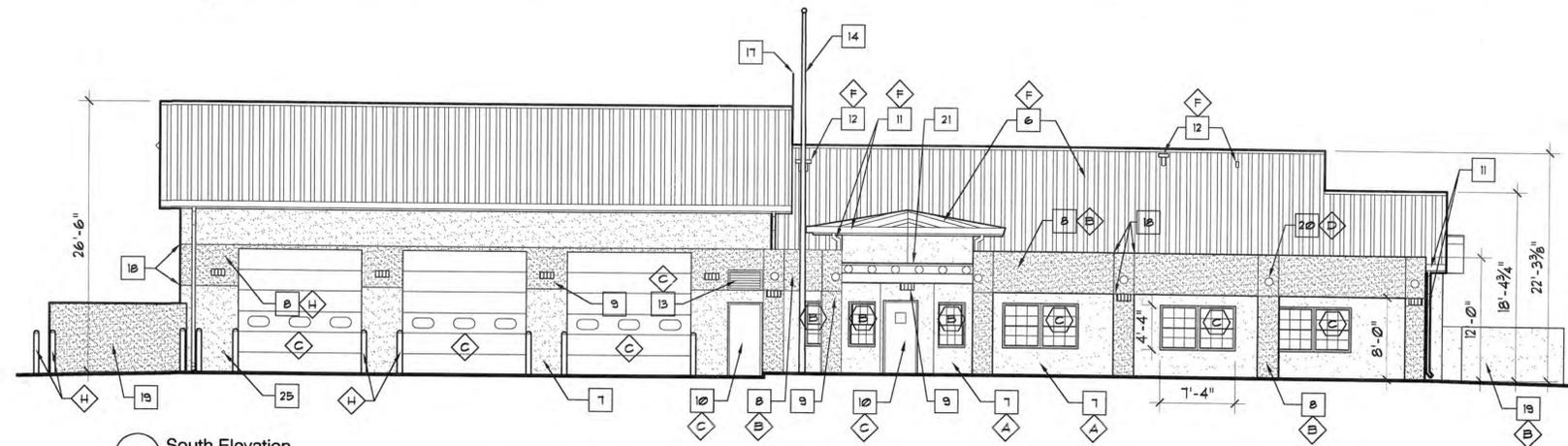
6 GLASS BLOCK WINDOW SECTION
1" = 1'-0"



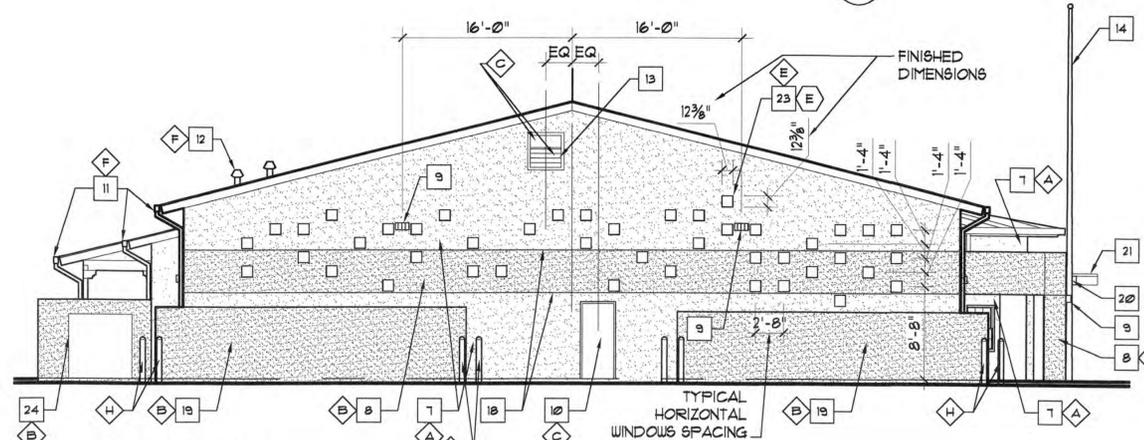
1 Building Section
1/8" = 1'-0"



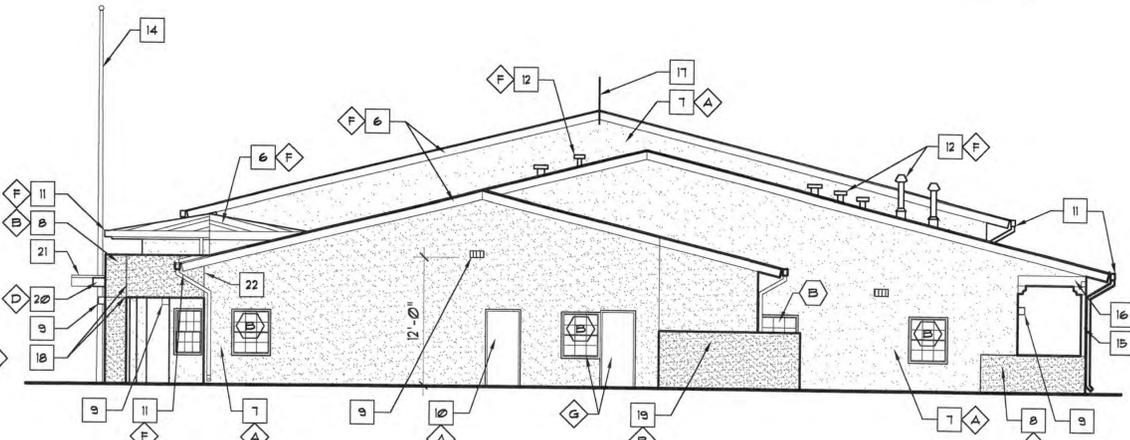
2 North Elevation
1/8" = 1'-0"



3 South Elevation
1/8" = 1'-0"



5 West Elevation
1/8" = 1'-0"



4 East Elevation
1/8" = 1'-0"

KEYED NOTES:

- 1) MARKER BOARD CENTERED IN ROOM. PROVIDE BACKING IN LOCATIONS AS REQUIRED BY MANUFACTURER. TOP OF BOARD MOUNTED AT 1'-2".
- 2) 1 HR. FLOOR CONSTRUCTION PER GA FILE NO. FC 45203 - BASE LAYER 1/2" TYPE 'X' GYPSUM WALLBOARD APPLIED AT RIGHT ANGLES TO 8" DEEP CHANNEL SHAPED 16 GAGE GALVANIZED STEEL JOISTS 16" O.C. WITH 1" TYPE 8-12 DRYWALL SCREWS 24" O.C. FACE SECOND LAYER OF 1/2" TYPE 'X' GYPSUM WALLBOARD APPLIED AT RIGHT ANGLES TO JOISTS WITH 1 1/2" TYPE 8-12 DRYWALL SCREWS 12" O.C. AT END JOISTS AND INTERMEDIATE JOISTS AND 1/2" TYPE G SCREWS 12" O.C. PLACED 3" BACK FROM EITHER SIDE OF END JOISTS AND STAGGERED 6" FROM TYPE 8-12 SCREWS AT JOINT. JOINTS OFFSET 24" FROM BASE LAYER JOINTS. FLOOR OF 3/4" T & G EDGE PLYWOOD APPLIED AT RIGHT ANGLES TO JOISTS WITH 1 1/2" NO. 6 PHILLIPS HEAD SCREWS WITH 3/4" PILOT TIP 6" O.C. AND END JOISTS AND 12" O.C. AT INTERMEDIATE JOISTS.
- 3) DOOR LOCATION IN APPARATUS BAY
- 4) LAY-IN CEILING
- 5) TOILET PARTITION
- 6) METAL ROOF. COLOR TO BE SELECTED BY ARCHITECT.
- 7) STUCCO, COLOR 1 ON MAIN BUILDING UNLESS NOTED OTHERWISE.
- 8) STUCCO, COLOR 2 AS ACCENT COLOR
- 9) LIGHTS, SEE ELECTRICAL
- 10) DOOR TO BE PAINTED. COLOR TO BE SELECTED BY ARCHITECT.
- 11) GUTTER AND DOWNSPOUT, COLOR TO MATCH ROOF
- 12) MECHANICAL ROOF PENETRATION. ALL ROOF COMPONENTS TO BE FINISHED TO MATCH ROOF.
- 13) WEATHERHOOD AND DAMPER FOR EXHAUST FAN. PAINT, COLOR TO BE SELECTED BY ARCHITECT.
- 14) FLAGPOLE
- 15) WOOD COLUMNS AND CORBELS. CLEAR FINISH.
- 16) WOOD BEAM. CLEAR FINISH
- 17) RADIO ANTENNA. TO BE INSTALLED BY OWNER
- 18) ACCENT JOINT
- 19) MASONRY WALL W/ 1/2" STUCCO FINISH. COLOR 2. 5'-4" AFF. TO TOP OF MASONRY UNLESS NOTED OTHERWISE.
- 20) WOOD VIGA W/ COPPER COVER
- 21) EPDM ROOF ON 3x6 T&G WOOD DECK OVER WOOD VIGAS BEARING ON WOOD BEAM
- 22) CONTROL JOINT
- 23.) (4) 6"x6" GLASS BLOCKS TO MAKE PUNCHED WINDOWS TYPE 'E', TYP. SEE DETAIL 6/A5.1
- 24.) ELECTRICAL EQUIPMENT. PAINT TO MATCH STUCCO WALL, TYP.
- 25.) FIRE SPRINKLER TEST NOZZLE. PAINT TO MATCH WALL
- 26.) VINYL FACED BATT INSULATION IN ALL AREAS OF EXPOSED CEILING
- 27.) PROVIDE BATT INSULATION IN WALLS TO CONTINUE THERMAL BARRIER

WINDOW TYPES: ◊

WINDOWS ARE SCHEDULED ON ELEVATIONS

EXTERIOR FINISHES: ◊

- COLORS INDICATED ARE FOR GENERAL REFERENCE AND PRICING. FINAL COLOR ARE SUBJECT TO FINAL APPROVAL DEPENDING ON MANUFACTURER/SUPPLIER
- A) STUCCO - FIELD: 82T CASA BY EL REY STUCCO
 - B) STUCCO - ACCENT: 8C-4D GINGER BROWN BY EL REY STUCCO
 - C) PAINT: SW 6191 JAY BLUE BY SHERWIN WILLIAMS
 - D) WOOD: CLEAR SEALER DEPENDING ON WOOD APPEARANCE
 - E) GLASS BLOCK: DECORA BY PITTSBURGH CORNING GLASS BLOCK
 - F) ROOF: TAHOE BLUE BY AEP 9PAN
 - G) WINDOW FRAMES: BLACK
 - H) PAINT: SW 6321 FORSYTHIA BY SHERWIN WILLIAMS

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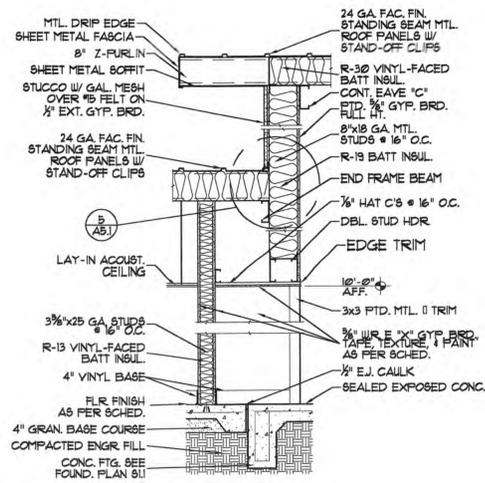
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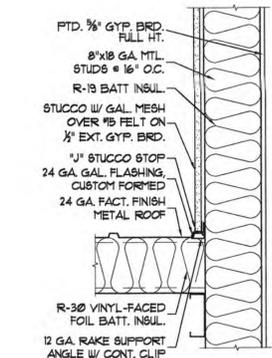


**BUILDING SECTION &
 EXTERIOR ELEVATIONS**

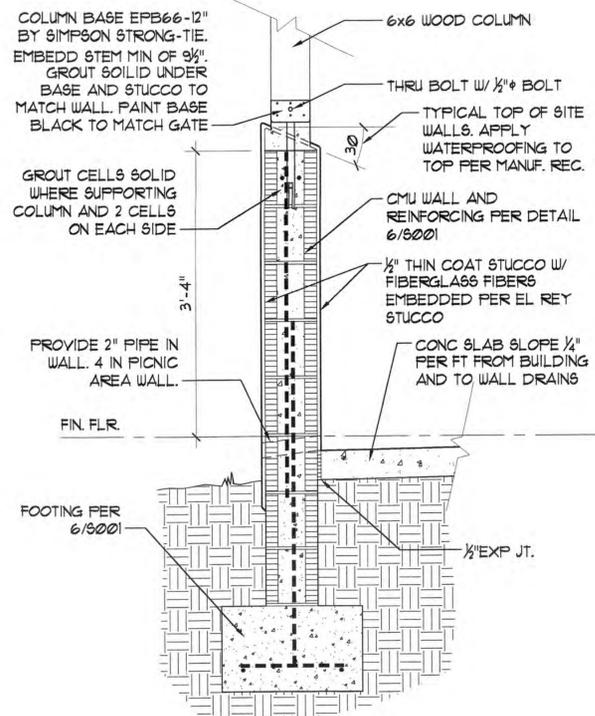
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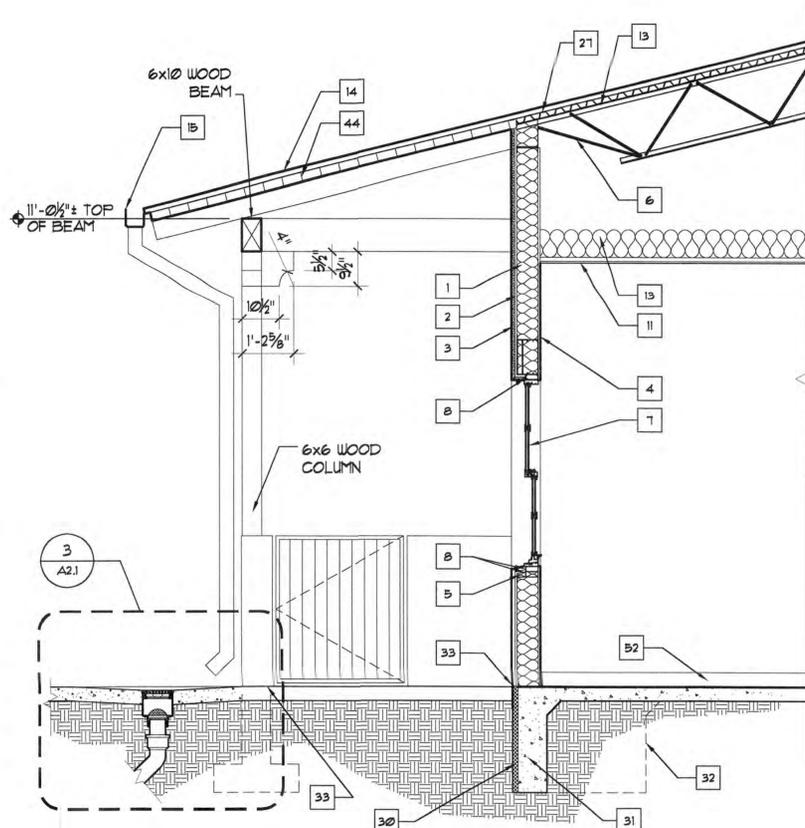
4 WALL SECTION
1/2" = 1'-0"



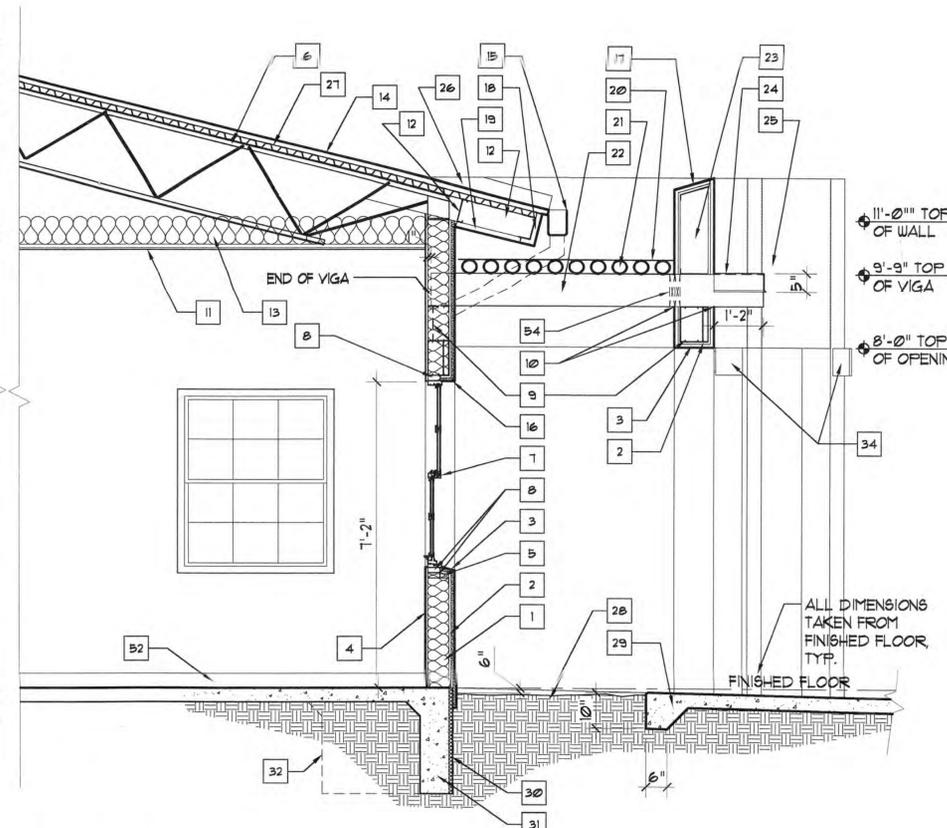
5 TRANSITION DETAIL
1" = 1'-0"



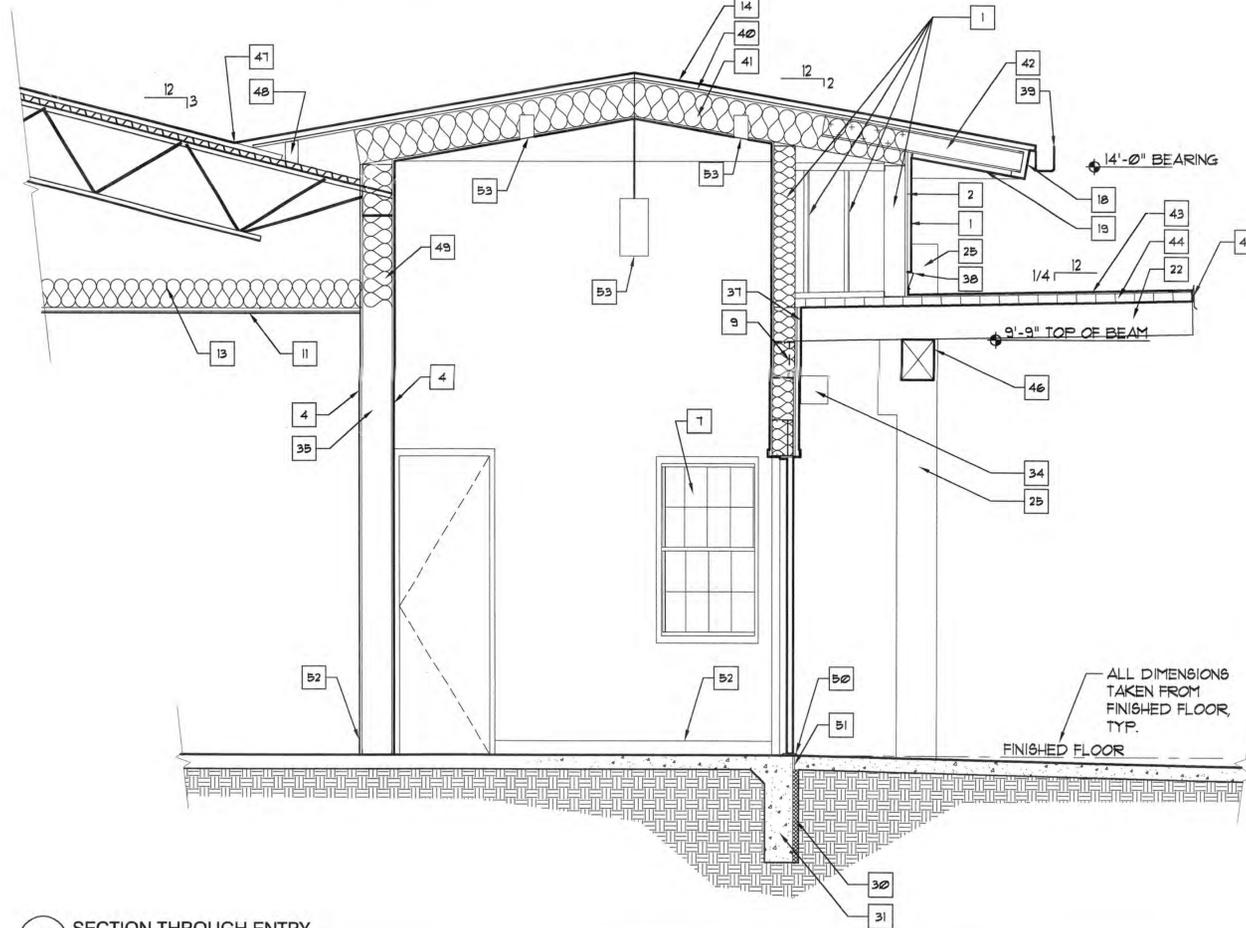
6 PICNIC AREA WALL
1" = 1'-0"



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



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



3 SECTION THROUGH ENTRY
1/2" = 1'-0"

KEYED NOTES:

- 1.) 6" METAL STUDS, FILL CAVITY W/ R-19 BATT INSULATION
- 2.) 3/8" GYP. BOARD EXTERIOR SHEATHING
- 3.) MINIMUM SLOPE OF SILL AWAY FROM WINDOW.
- 4.) 3/8" TYPE 'X' GYP. BOARD
- 5.) PROVIDE 2X CUT TO FORM SLOPED WINDOW SILL
- 6.) BAR JOISTS
- 7.) SINGLE HUNG ALUMINUM WINDOW
- 8.) 3/8" METAL STUD
- 9.) HEADER FOR VIGA. SEE HEADER SCHEDULE ON STRUCTURAL PLAN.
- 10.) VIGA NOT TO BE ANCHORED TO WALL. INSTALL BACKER ROD AND CAULK AROUND VIGA TO ALLOW MOVEMENT, BUT PROVIDE A WEATHERTIGHT SEAL.
- 11.) LAY-IN CEILING
- 12.) 6" METAL STUD OUTRIGGER FOR ROOF OVERHANG, SEE STRUCTURAL. PROVIDE 6" METAL STUD FOR SUPPORT ON BACK OF OUTRIGGER
- 13.) R-30 BATT INSULATION
- 14.) METAL ROOF. COLOR TO BE SELECTED BY ARCHITECT.
- 15.) 6"x4" METAL GUTTER THROUGH WALL
- 16.) DRIP GROOVE
- 17.) PROVIDE MINIMUM SLOPE ALLOWED BY STUCCO MANUFACTURER
- 18.) METAL FASCIA TO MATCH METAL ROOF.
- 19.) FLAT PANEL METAL SOFFIT. COLOR TO BE SELECTED BY ARCHITECT.
- 20.) 12" WIDE x 24 GA. COPPER STRIP TO PROTECT TOP OF BEAM. CAULK EDGES WHERE BUTT WALL. RIDGE BREAK IN MIDDLE TO DRAIN TO EACH SIDE. ANCHOR TO LATTIAS.
- 21.) 4" MIN. BARK STRIPPED ASPEN LATTIAS @ 6" o.c.
- 22.) 10" VIGA
- 23.) 8" x 20 GA. METAL STUDS @ 16" o.c.
- 24.) 24 GA. COPPER VIGA CAP W/ 1/4" DRIP, CAULK WHERE CAP MEETS STUCCO
- 25.) COLONNADE BEYOND
- 26.) ROOF FLASHING, CONTINUE OVER COLONNADE AND DOWN OTHER FACE. CRICKET ON TOP TO DRAIN.
- 27.) 1/2" TYPE 'B' METAL DECK
- 28.) PLANTER OR EXTERIOR GRADE
- 29.) TYPICAL EXTERIOR CONCRETE SLAB
- 30.) 1" PERIMETER INSULATION. EXTEND STUCCO BELOW GRADE
- 31.) FOOTING, SEE STRUCTURAL
- 32.) COLUMN FOOTING BEYOND, SEE STRUCTURAL
- 33.) PROVIDE 3/8" JOINT W/ BACKER ROD AND CAULKING WHERE CONCRETE SLAB MEETS WALL
- 34.) LIGHT FIXTURE
- 35.) 8" METAL STUDS, SEE STRUCTURAL
- 36.) PROVIDE METAL STUDS FOR FURRING AROUND STRUCTURE
- 37.) SECURE VIGA TO SILL, JAMBS, AND HEADER W/ 1/2" LAG SCREWS. CAULK AROUND VIGA WHERE PENETRATING WALL.
- 38.) SPRINKLOK ROOF FLASHING. 8" MAXIMUM HEIGHT ABOVE FINISHED ROOF.
- 39.) 4"x6" METAL GUTTER. COLOR TO MATCH ROOF.
- 40.) 3/4" PLYWOOD ROOF DECK
- 41.) 10" C-JOIST @ 16" o.c. FILL CAVITY W/ R-30 BATT INSULATION.
- 42.) "SCAB" ON 8" METAL C-JOIST TO 10" JOIST
- 43.) EPDM ROOF. FULLY ADHEARED.
- 44.) 3x6 T&G WOOD DECK
- 45.) METAL GRAVEL STOP. PAINT, COLOR TO BE SELECTED BY ARCHITECT.
- 46.) 10x12 WOOD BEAM
- 47.) VALLEY GUTTER
- 48.) PROVIDE 'FONY' WALL OR SIMILAR TO SUPPORT END OF ROOF FRAMING.
- 49.) PROVIDE BATT INSULATION IN WALL TO PROVIDE A CONTINUOUS THERMAL BARRIER
- 50.) METAL THRESHOLD
- 51.) EXPANSION JOINT/PERIMETER INSULATION
- 52.) VINYL BASE
- 53.) LIGHT FIXTURE
- 54.) INSTALL LEDGER FOR LATTIA BEARING. CAULK AROUND ALL LEDGER EDGES

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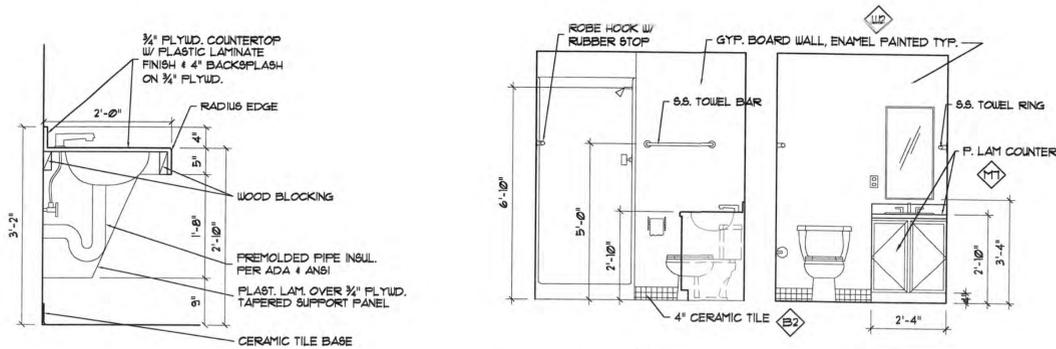
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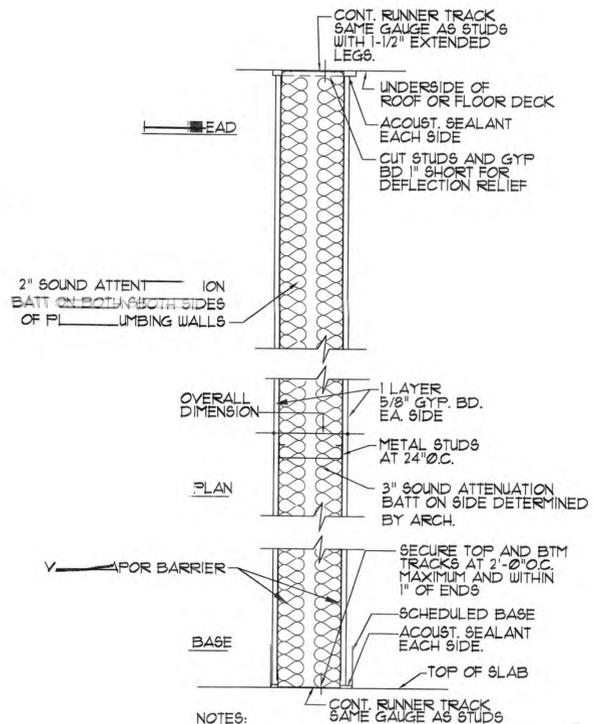
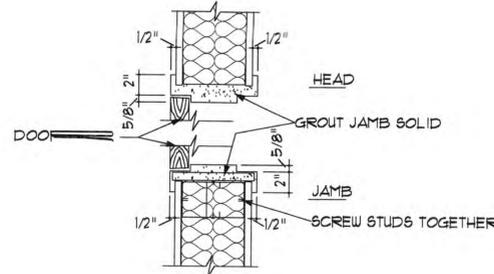
WALL SECTIONS

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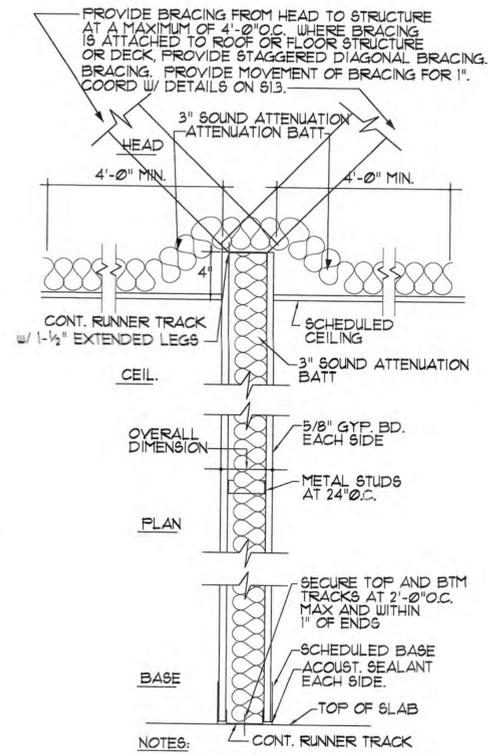
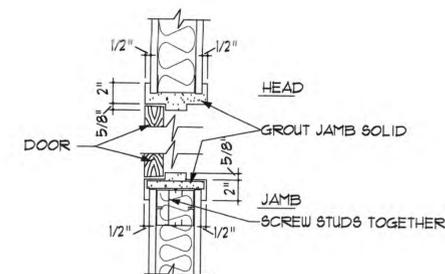


10 COUNTER SECTION
3/4" = 1'-0"

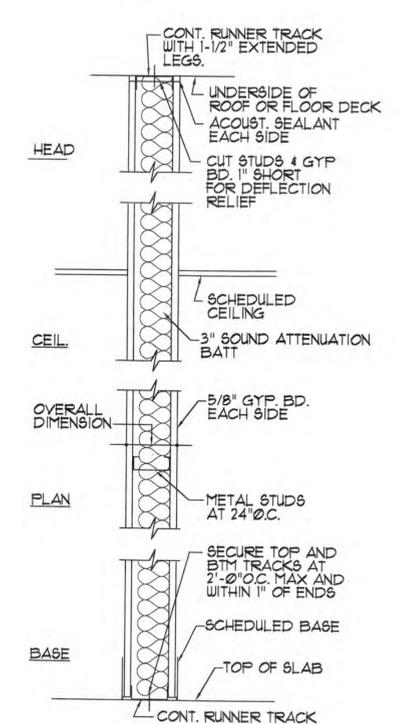
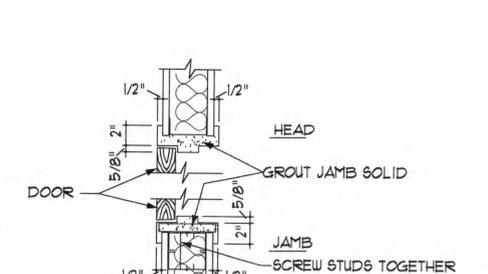
BATH ELEVATIONS
3/8" = 1'-0"



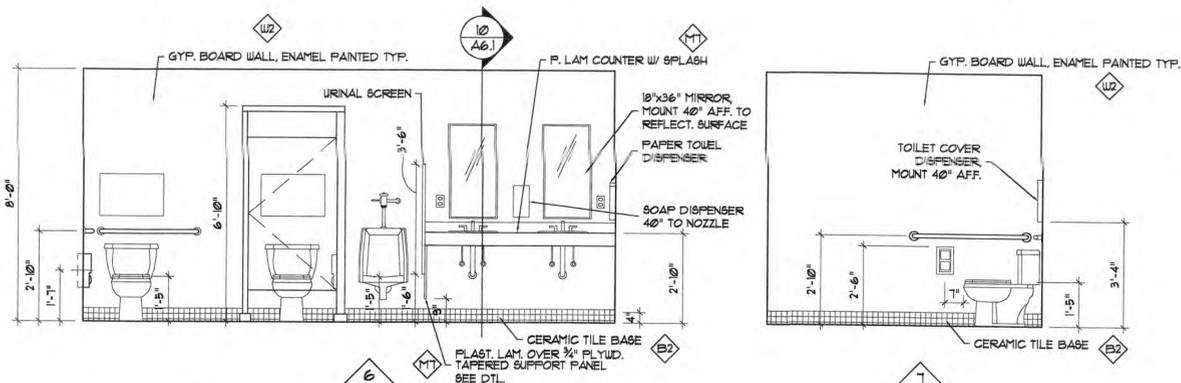
P3 INTERIOR PARTITIONS
1 1/2" = 1'-0"



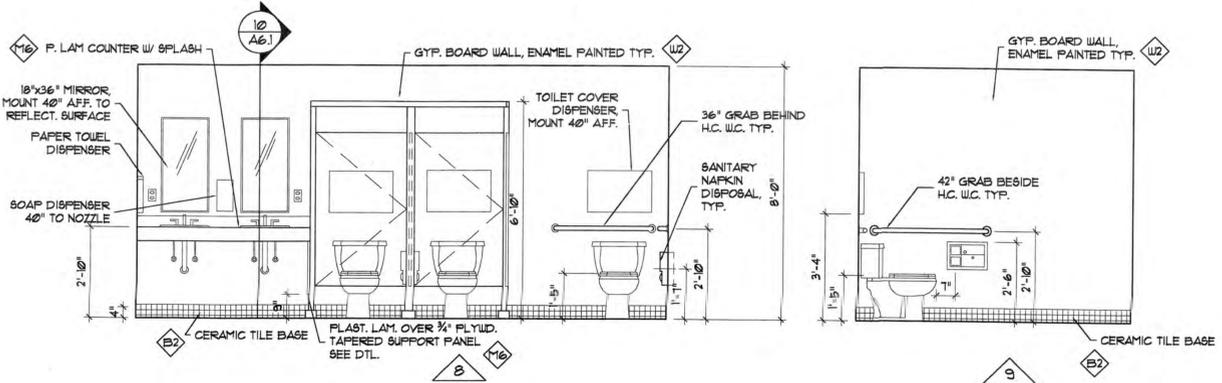
P2 INTERIOR PARTITIONS
1 1/2" = 1'-0"



P1 INTERIOR PARTITIONS
1 1/2" = 1'-0"



RESTROOM ELEVATIONS - MENS
3/8" = 1'-0"



RESTROOM ELEVATIONS - WOMENS
3/8" = 1'-0"

- NOTES:
1. METAL STUD SIZE : 6"
 2. OVERALL DIMENSION : 1 1/4"
 3. 1-HR FIRE RATED (UL DESIGN U448) WHERE DESIGNATED
 4. STC = 50 (USG 912611)
 5. VAPOR BARRIER IN WET AREA

- NOTES:
1. METAL STUD SIZE : 3-5/8"
 2. OVERALL DIMENSION : 4-7/8"
 3. 1-HR FIRE RATED (UL DESIGN U448) WHERE DESIGNATED
 4. STC = 41 (SA-861001)

- NOTES:
1. METAL STUD SIZE : 3-5/8"
 2. OVERALL DIMENSION : 4-7/8"
 3. 1-HR FIRE RATED (UL DESIGN U448) WHERE DESIGNATED
 4. STC = 41 (SA-861001)

GENERAL NOTES:

A. FOR FINISHES (◇) SEE SHEET A12



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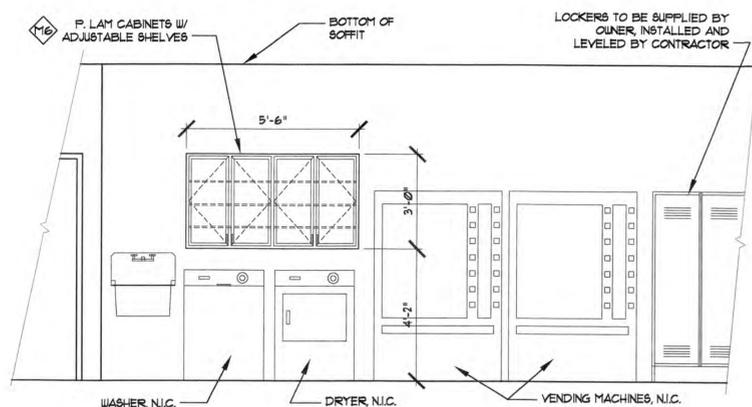
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INTERIOR PARTITIONS
AND ELEVATIONS

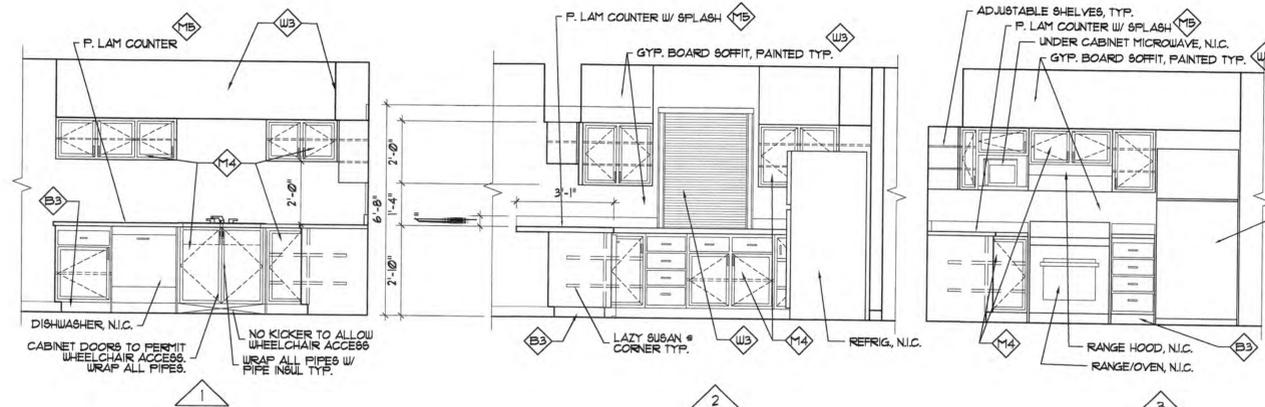
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A6.1



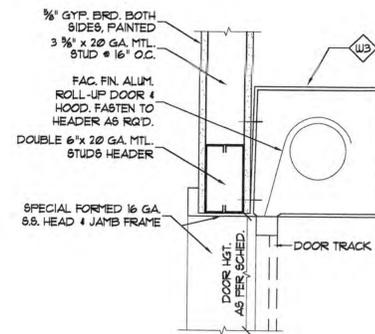
11 APPARATUS BAY ELEVATION
3/8" = 1'-0"



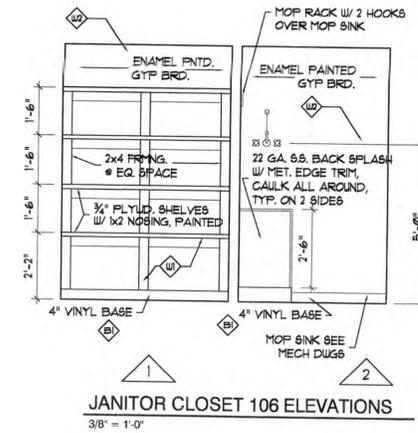
KITCHEN ELEVATIONS
3/8" = 1'-0"

GENERAL NOTES:

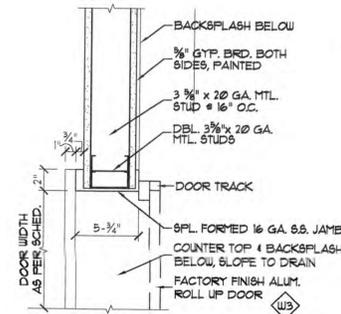
A. FOR FINISHES (◇) SEE SHEET A12



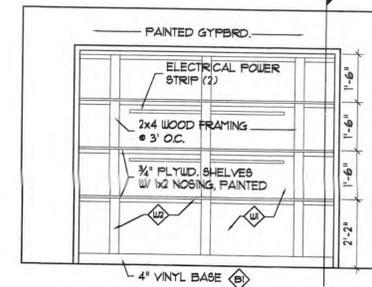
6 COILING DOOR HEAD
1 1/2" = 1'-0"



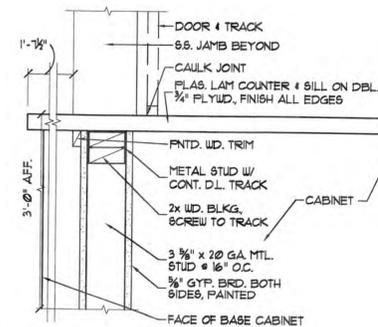
JANITOR CLOSET 106 ELEVATIONS
3/8" = 1'-0"



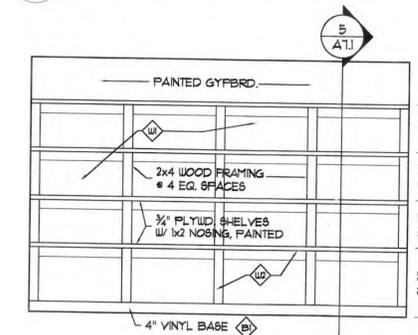
7 COILING DOOR JAMB
1 1/2" = 1'-0"



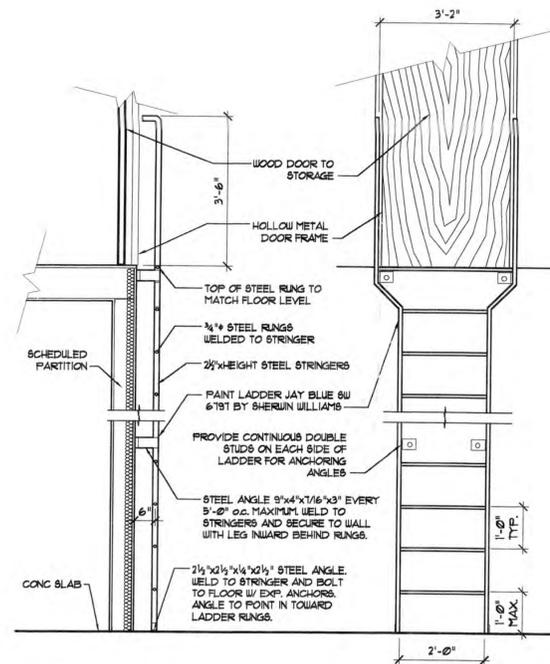
3 SECURE STORAGE 108 ELEVATION
3/8" = 1'-0"



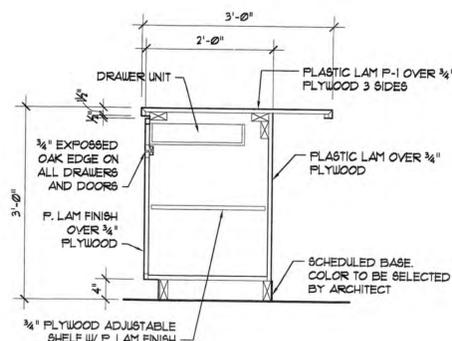
8 COILING DOOR SILL
1 1/2" = 1'-0"



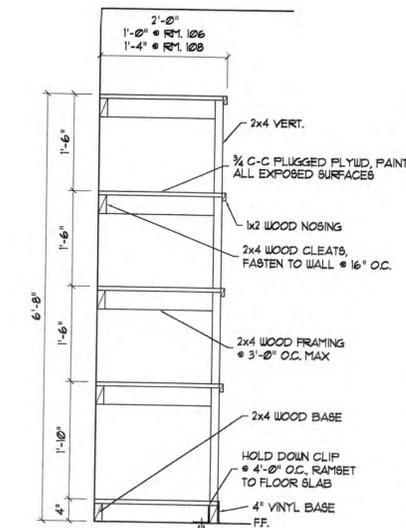
4 STORAGE 117 ELEVATION
3/8" = 1'-0"



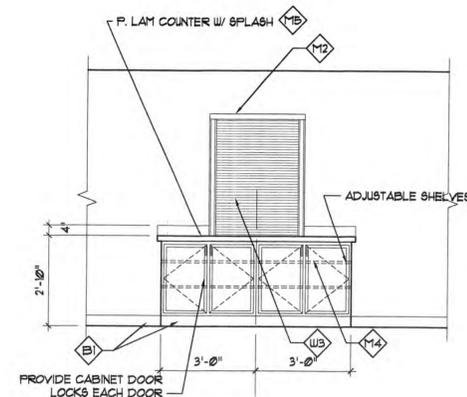
15 ACCESS LADDER
1/2" = 1'-0"



9 TYPICAL CABINET
3/4" = 1'-0"



5 SHELVING SECTION
3/4" = 1'-0"



16 TRAINING ROOM COFFEE BAR
3/8" = 1'-0"

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INTERIOR ELEVATIONS
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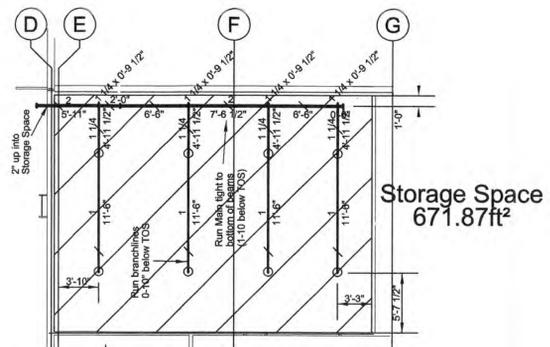
FIRE SPRINKLER CONTRACTOR SHALL START WORK AT 5'-0" OUTSIDE OF STRUCTURE. FIRE SPRINKLER CONTRACTOR SHALL COORDINATE WITH SITE UTILITY CONTRACTOR TO ASSURE A PROPER WORKING SYSTEM.

FIRE PUMP SPECIFICATIONS:
 - Vertical In-line single stage
 - 500 GPM capacity
 - Pressure to be determined

PUMP PACKAGE TO INCLUDE:
 - UL-Listed Controller
 - UL-Listed Jockey Pump
 - Jockey Pump Controller
 - Miscellaneous Equipment

AT POINT OF CONNECTION ENGINEERING ARCHITECT TO DETERMINE IF AVAILABLE WATER SOURCE CAN MEET THIS DEMAND AND DURATION FOR 60 MINUTES. IF NOT A STORAGE TANK AND BOOSTER PUMP SHALL BE REQUIRED TO MEET THE HYDRAULIC DEMAND.

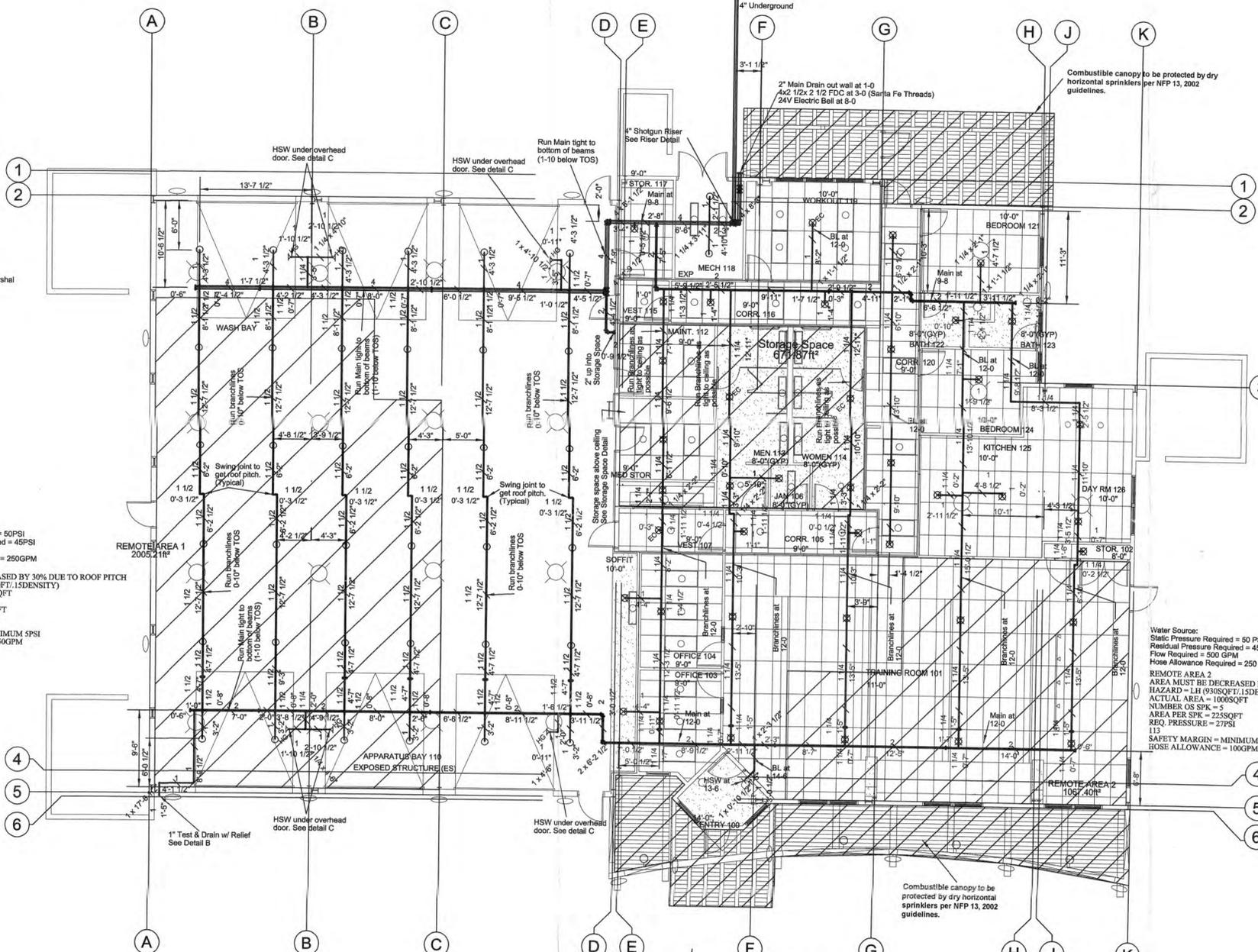
Water Source:
 Static Pressure Required = 50PSI
 Residual Pressure Required = 45PSI
 Flow Required = 500GPM
 Hose Allowance Required = 250GPM



Storage Space Fire Protection

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

- Provide a spare head cabinet with atleast 3 spare sprinklers of each type.
- It is the fire protection installing contractor's responsibility to coordinate with all trades prior to fabrication and installation of sprinkler system including approval by the local fire marshal and applicable standards. Drawing is for bid purposes only.



Fire Protection

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

- Provide a spare head cabinet with atleast 3 spare sprinklers of each type.
- It is the fire protection installing contractor's responsibility to coordinate with all trades prior to fabrication and installation of sprinkler system including approval by the local fire marshal and applicable standards. Drawing is for bid purposes only.

SPRINKLER NOTES: EXTENDED COVERED LIGHT HAZARD ONLY
 RASCO F1FR OR ECHL SPRINKLER
 THREAD = 3/4", K FACTOR = 8.1
 MINIMUM PRESSURE = 10.0PSI
 MAXIMUM SPACING = 18' x 18'
 MAXIMUM DISTANCE FROM WALL = 9'

SMALL ROOM NOTE: ANY ROOM OF LIGHT HAZARD OCCUPANCY SMALLER THAN 800SQFT CAN HAVE THE SPRINKLER LOCATED AT 9'-0FT FROM ONE WALL PROVIDED YOU ARE NOT MORE THAN 7'-6FT FROM THE ADJACENT WALL.

- GENERAL & FOREMAN'S NOTES:
- It is the owners responsibility to provide heat for all areas in the building protected by a wet sprinkler system and for all water filled supply pipes, valves and system risers in all dry pipe sprinkler systems.
 - All new piping is to be hydrostatically tested at not less than 200 psi for 2 hours.
 - All sprinklers located in ceilings with surface mounted lights shall have 401 type escutcheon to avoid obstruction.
 - All pipe dimensions are cut U.N.O.
 - All material shall be UL OR FM approved for fire protection.
 - All 1" to 2" threaded pipe to be Schedule 40 with screwed class 125 fittings or approved equal.
 - All 2" to 6" grooved pipe to be Schedule 10 or approved equal with grooved fittings.
 - All grooved pipe is to be rolled grooved. No Cut grooving is allowed.
 - All outlets on grooved piping shall be shop welded, UL or FM approved.
 - All grooved reducing couplings and flanges shall be UL or FM approved.
 - All outlets fabricated in the field shall be UL or FM approved Mechanical Tee.
 - All trapeze headers shall be schedule 40 pipe.
 - Provide a spare head cabinet with atleast 3 spare sprinklers of each type.
 - It is the fire protection installing contractor's responsibility to coordinate with all trades prior to fabrication and installation of sprinkler system including approval by the local fire marshal and applicable standards. Drawing is for bid purposes only.
 - All hangers are to be approved by NFPA 13 guidelines.
 - Final shop drawings and hydraulic calculations are to be submitted to Santa Fe County Fire Department for review and approvals.

NOTICE:
 IT IS THE RESPONSIBILITY OF THE OWNER AND/OR GENERAL CONTRACTOR TO PROVIDE ADEQUATE HEAT BY WHATEVER MEANS NECESSARY TO KEEP ALL ASPECTS OF THE WET PORTION OF THE FIRE PROTECTION SYSTEM FROM FREEZING.

Engineered by:
 Accent Fire Safety P.C.
 4001 Office Court Dr. - Suite 606
 Santa Fe, NM 87507
 Phone: (505) 474-3923



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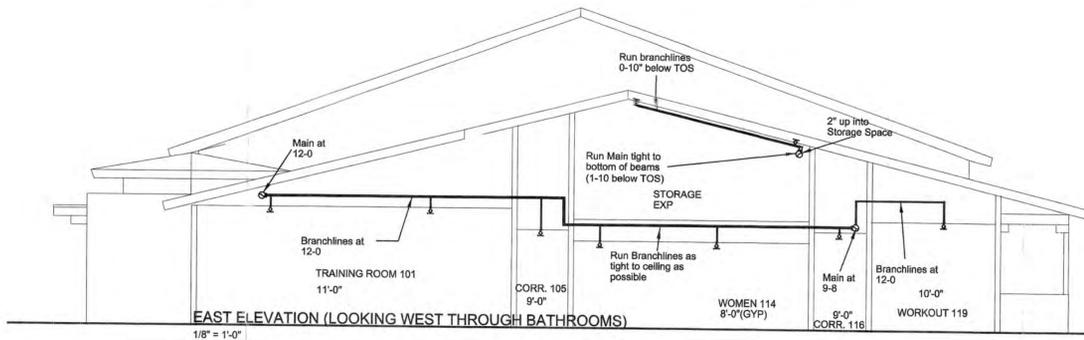
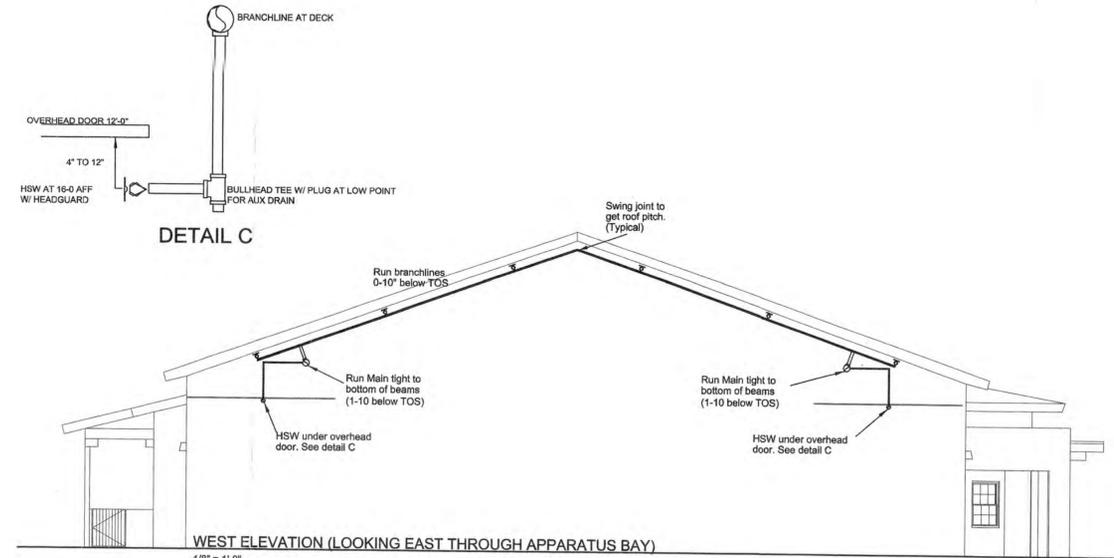
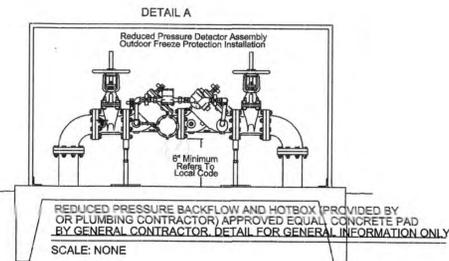
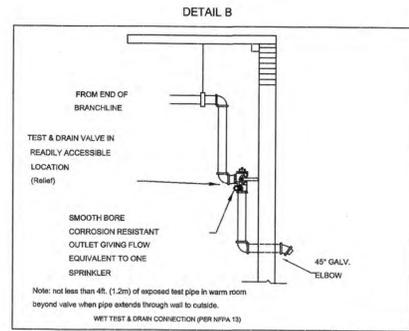
Eastern Region Headquarters
 Hondo Fire Station
 Santa Fe County
 645 Old Las Vegas Highway
 Santa Fe, New Mexico

02004
 PROJECT NO.
 2 MARCH 2005 RE-BID 18 JULY 2005
 DATE
 JW
 DRAWN BY
 JW
 PROJ. MGR.
 35 65 95 100
 COMPLETION
 FIRE PROTECTION FLOOR PLAN
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Symbol	Description	General Notes
○	Hydraulic Reference Points	A.H.J.: Santa Fe Co. Fire Dept. (Fire Marshal) Design Std: N.F.P.A. 13 (2002) Note: All areas are classified as Light Hazard Occupancy with exception of Kitchen, Storage Areas, Mechanical Room and Apparatus Bays (Ordinary Group 1)
○	Elev. Below Top of Steel	
○	Elev. Above Finished Floor	
TOS 20-0	Elev. of Top of Steel	INCLUDED WITH INSTALLATION - Wet pipe sprinkler system per NFPA 13 for Entire Building - Labeling of pipe is required per NFPA 13.
10-0	Ceiling Height	NOT INCLUDED WITH INSTALLATION - Seismic bracing is not required. - Concealed sprinklers is not required. - Sealing of fire rated penetrations is provided by GC.
○	Denotes Hanger Location	
↑	Rise up or down	
+	4 WAY SWAY BRACE	
+	2 WAY BRACE	
+	FIRE RATED WALL	

Number of Sprinklers		Total This Job: 241		Drawing Title	
Symbol	Manuf.	Model	Type	Temp	Finish
⊗	RASCO	EX COV F1FR	XT. COVERAGE PENDENT (RECESSED)	155	CHROME
⊗	37	RASCO	F1FR	QR RECESSED PENDENT	155
⊗	1	RASCO	F1FR	RECESSED HSW	200
⊗	8	RASCO	F1FR	HSW W/ HEADGUARD	200
⊗	46	RASCO	F1FR	QR UPRIGHT	200

Revisions:	Date:	LEGEND	Project No.:
	1 of 1	Fire Protection	02004
			Drawn By: JW
			Scale: 1/8"=1'-0"
			Date: 08/16/04
			Approval By: S.F. Fire Dept.



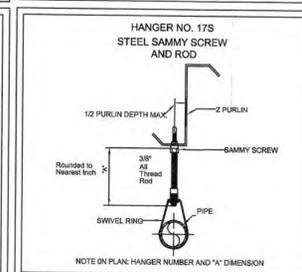
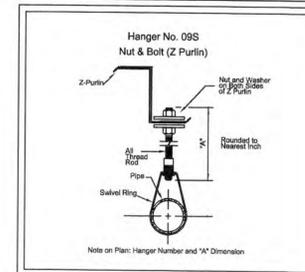
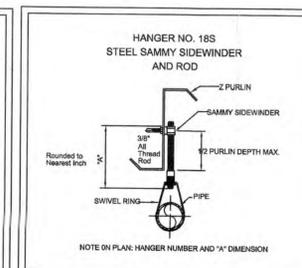
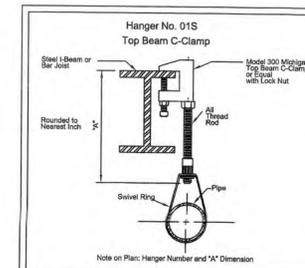
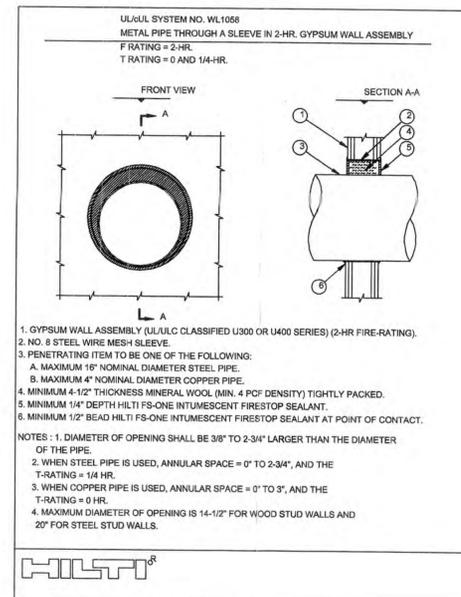
NOTICE:

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FIRE STOP ASSEMBLY NOTE:

REVIEW FS-ONE PRODUCT SUBMITTAL FOR FIRESTOP ASSEMBLIES.

TESTED IN ACCORDANCE WITH UL 1479, ASTM E 814 AND UL 2079



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FIRE PROTECTION SECTIONS AND DETAILS

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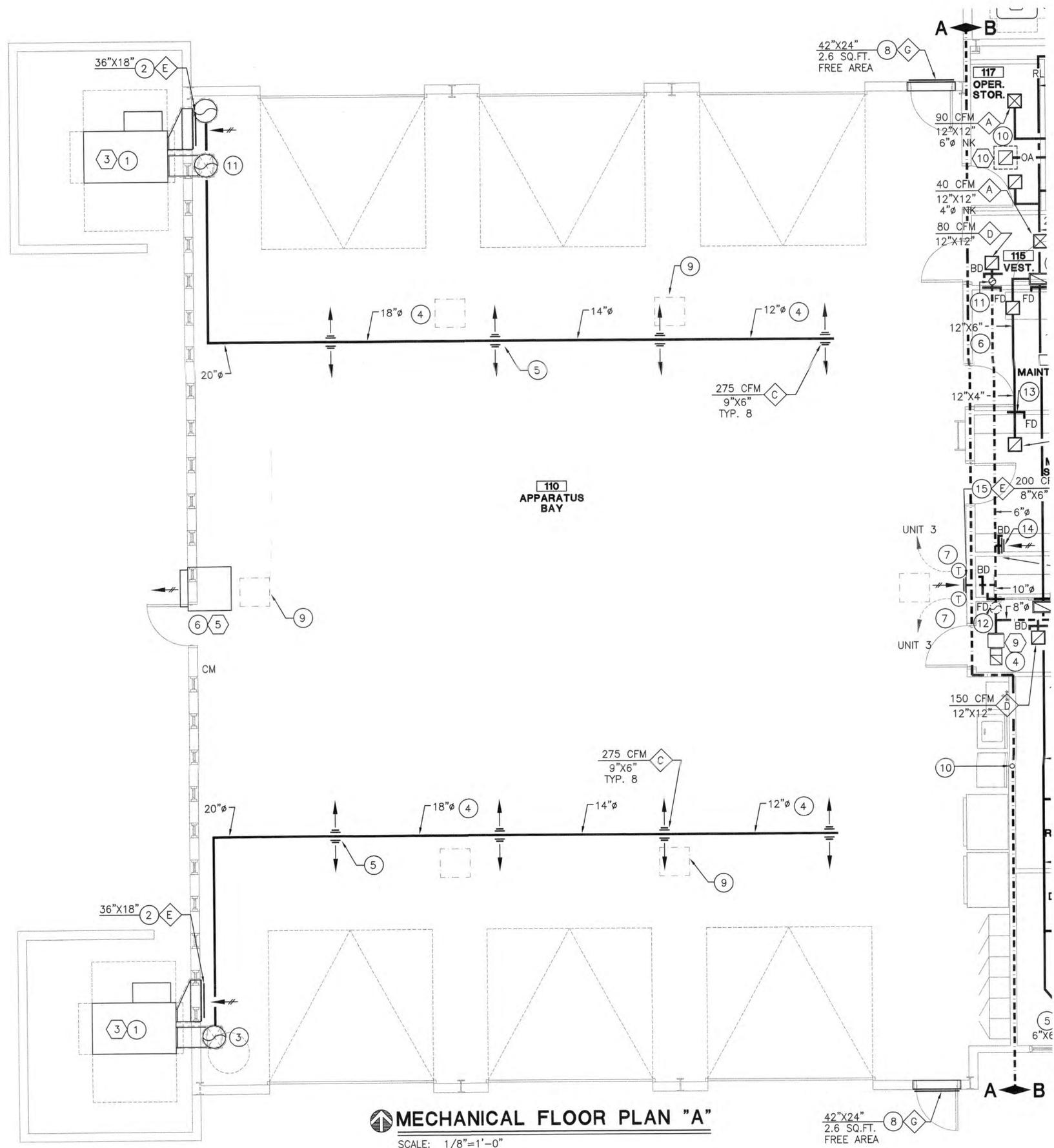
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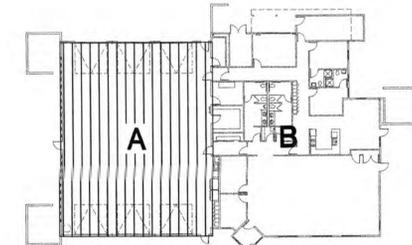


MECHANICAL KEYED NOTES

- ① PROVIDE AND INSTALL PACKAGED UNIT ON GROUND MOUNTED CONCRETE PAD IN LOCATIONS INDICATED ON DRAWINGS. MAINTAIN PROPER SERVICE AND CLEARANCE REQUIREMENTS FOR ALL EQUIPMENT. SEE "HVAC UNIT DETAIL" ON SHEET M-3 FOR ADDITIONAL ACCESSORIES AND SCOPE OF WORK. SEE "SEQUENCE OF OPERATION" ON SHEET 4 FOR ADDITIONAL SCOPE OF WORK. COORDINATE WITH ELECTRICAL CONTRACTOR FOR ALL LINE VOLTAGE POWER CONNECTIONS. INTERCONNECT WITH CARBON MONOXIDE SYSTEM TO SHUT-DOWN IN EVENT OF CARBON MONOXIDE DETECTION.
- ② ROUTE INSULATED RETURN AIR DUCTWORK THRU WALL AND CONNECT TO SIDEWALL RETURN AIR GRILLE. SEAL WALL PENETRATION WEATHER-TIGHT.
- ③ ROUTE INSULATED SUPPLY AIR DUCTWORK THRU WALL AND UP TO LOCATION APPROXIMATELY 16 FEET ABOVE FINISHED FLOOR LEVEL. ROUTE DUCTWORK PER LAYOUT INDICATED ON PLAN. SEAL WALL PENETRATION WEATHER-TIGHT.
- ④ ROUTE SUPPLY AIR DUCTWORK APPROXIMATELY 16 FEET ABOVE FINISHED FLOOR LEVEL. SUSPEND DUCTWORK FROM STRUCTURAL JOISTS PER "DUCT HANGER DETAIL" ON SHEET M-3. AVOID LIGHT FIXTURES, CONDUIT, COMPRESSED AIR PIPING, GAS PIPING, STRUCTURAL BARRIERS, EXHAUST DUCTWORK, GARAGE DOORS AND SUPPORTS, ETC. PAINT ALL EXPOSED DUCTWORK PER ARCHITECT'S SPECIFICATIONS.
- ⑤ PROVIDE AND INSTALL DRUM DIFFUSER IN LOCATIONS INDICATED. ANGLE DOWNWARD FOR PROPER AIR DISTRIBUTION PER MANUFACTURER'S RECOMMENDATION. TYPICAL FOR ALL DRUM DIFFUSERS INDICATED ON PLAN.
- ⑥ PROVIDE AND INSTALL PROPELLER SIDEWALL EXHAUST FAN IN THIS LOCATION. SEE "WALL EXHAUST FAN DETAIL" ON SHEET M-3. SEAL WALL PENETRATION WEATHER-TIGHT. COORDINATE WITH ARCHITECT FOR EXACT MOUNTING HEIGHT. INTERCONNECT WITH WALL SWITCH FOR MANUAL OPERATION AND CARBON MONOXIDE SYSTEM FOR OPERATION UPON DETECTION OF CARBON MONOXIDE. COORDINATE WITH ELECTRICAL CONTRACTOR FOR ALL LINE VOLTAGE POWER CONNECTIONS.
- ⑦ PROVIDE AND INSTALL THERMOSTAT ON WALL IN THIS LOCATION AND INTERCONNECT WITH ASSOCIATED PACKAGE GROUND MOUNTED UNIT FOR PROPER OPERATION AND PER MANUFACTURER'S SPECIFICATIONS. COORDINATE WITH ARCHITECT FOR EXACT MOUNTING LOCATION.
- ⑧ PROVIDE AND INSTALL INTAKE AIR WALL LOUVER ABOVE DOOR IN THIS LOCATION. SEAL WALL OPENING WEATHER-TIGHT. BOTTOM OF LOUVER SHALL BE 12 IN. ABOVE TOP OF DOOR FRAME. PROVIDE AND INSTALL BACKDRAFT DAMPER TO PREVENT HEATED AND COOLED AIR FROM ESCAPING WHEN EXHAUST FAN SYMBOL 5 IS NOT OPERATING.
- ⑨ COORDINATE WITH VEHICLE EXHAUST SYSTEM CONTRACTOR CONCERNING INSTALLATION OF VEHICLE EXHAUST SYSTEM. TYPICAL OF 6 UNITS INDICATED.
- ⑩ ROUTE DRYER VENT UP IN WALL AND OFFSET THRU ROOF TO WEATHER-TIGHT ROOF CAP. SEAL ROOF PENETRATION WEATHER-TIGHT. MAINTAIN MANUFACTURER'S VENTING SPECIFICATIONS.
- ⑪ ROUTE INSULATED SUPPLY AIR DUCTWORK THRU WALL, UP TO LOCATION SLIGHTLY ABOVE RETURN AIR GRILLE, OFFSET DUCTWORK OVER TO CORNER AND TRANSITION UP USING 45 DEG. ANGLED FITTINGS, AND UP TO APPROXIMATELY 16 FEET ABOVE FINISHED FLOOR LEVEL. ROUTE DUCTWORK PER LAYOUT INDICATED ON PLAN. SEAL WALL PENETRATION WEATHER-TIGHT.



MECHANICAL FLOOR PLAN "A"
SCALE: 1/8"=1'-0"



KEY PLAN
SCALE: NONE

LEGEND	
—	SUPPLY AIR DUCTWORK
- - -	RETURN AIR DUCTWORK
· · ·	RELIEF AIR DUCTWORK
- · - ·	OUTSIDE AIR DUCTWORK
- - - -	EXHAUST AIR DUCTWORK
- - - -	CLEARANCE REQUIRED
⊠	SUPPLY AIR DIFFUSER
⊡	RETURN AIR GRILLE
T	THERMOSTAT
# OR #	EQUIPMENT SPECIFICATION
#	KEYED NOTE
FD	FIRE DAMPER
BD	BALANCING DAMPER
→	SUPPLY AIR GRILLE
←	RETURN AIR GRILLE

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Margaret G. Baca
3.1.05

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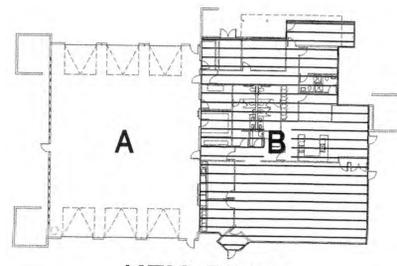
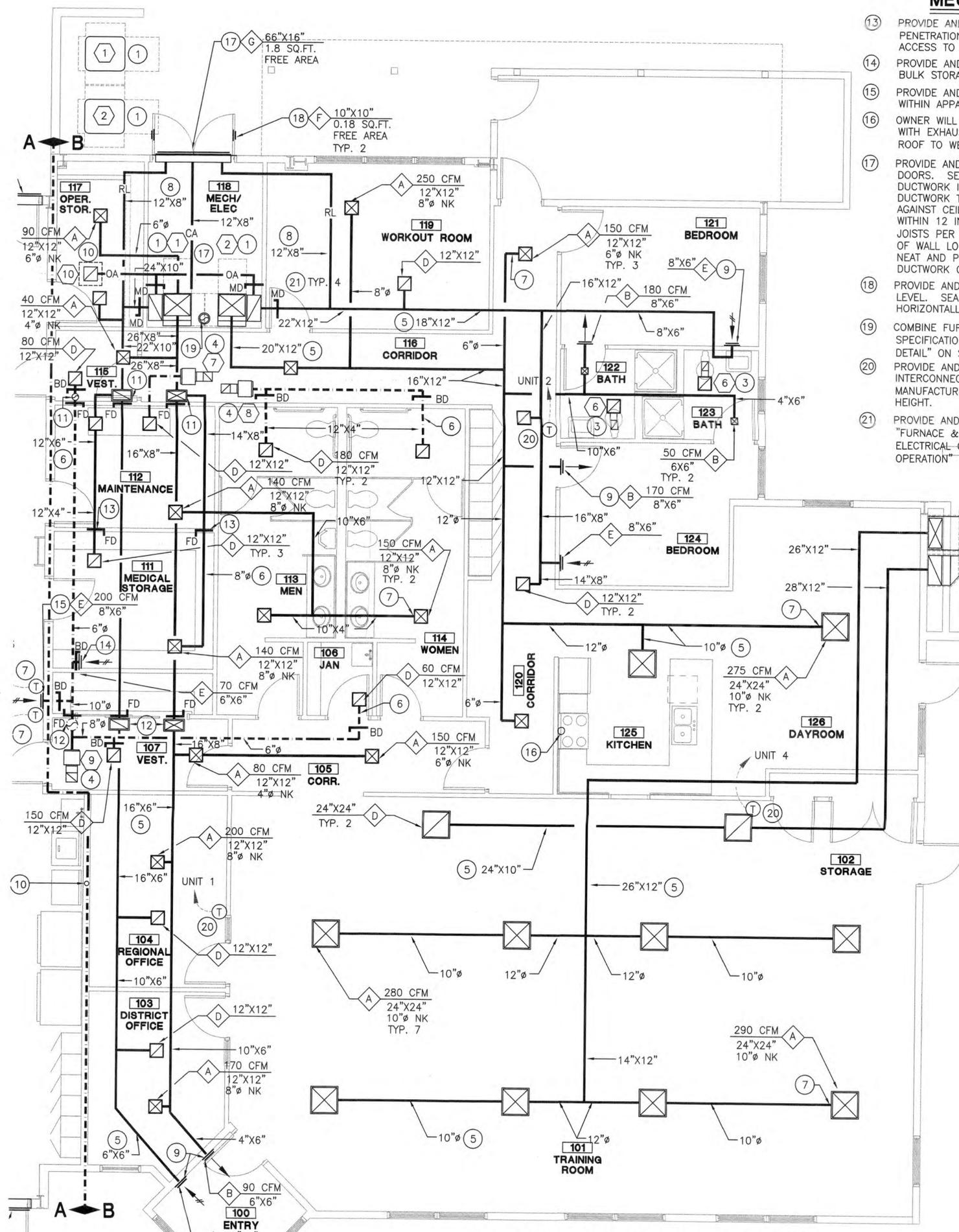
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PROJECT NO.
1 Mar 2005 DATE RE-BID 18 JULY 2005
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MGB PROJ. MGR. MECHANICAL FLOOR PLAN "A"
35 65 95 100 COMPLETION
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MECHANICAL KEYED NOTES, CONT.

- 13 PROVIDE AND INSTALL FIRE DAMPER AT FIRE RATED WALL. SEAL WALL PENETRATION PER "MECHANICAL GENERAL NOTES" ON SHEET M-3. MAINTAIN ACCESS TO DAMPER. TYPICAL AT ALL FIRE DAMPER LOCATIONS.
- 14 PROVIDE AND INSTALL SIDEWALL GRILLE AND BALANCING DAMPER LOCATED WITH BULK STORAGE ROOM. BALANCE PER CFM INDICATED ON DRAWINGS.
- 15 PROVIDE AND INSTALL SIDEWALL GRILLE AND BALANCING DAMPER LOCATED WITHIN APPARATUS BAY AREA. BALANCE PER CFM INDICATED ON DRAWINGS.
- 16 OWNER WILL PROVIDE HOOD FOR RANGE. INSTALL HOOD AND INTERCONNECT WITH EXHAUST DUCTWORK. ROUTE EXHAUST DUCTWORK UP IN WALL AND THRU ROOF TO WEATHER-TIGHT ROOF CAP PER MANUFACTURER'S SPECIFICATIONS.
- 17 PROVIDE AND INSTALL BOTTOM OF WALL LOUVER 12 IN. ABOVE MECHANICAL ROOM DOORS. SEAL WALL PENETRATION WEATHER-TIGHT. CONNECT AND SECURE DUCTWORK INDICATED ON LAYOUT TO WALL LOUVER. CONNECT COMBUSTION AIR DUCTWORK TO MIDDLE OF LOUVER AND ROUTE HORIZONTALLY SLOPED UP AGAINST CEILING. TERMINATE COMBUSTION AIR DUCTWORK AT UPPER LEVEL WITHIN 12 IN. OF THE CEILING STRUCTURE. SECURE DUCTWORK TO STRUCTURAL JOISTS PER "DUCTWORK HANGER DETAILS" ON SHEET M-3. BLOCK OFF REMAINDER OF WALL LOUVER OPENING NOT ATTACHED TO DUCTWORK WITH SHEET METAL IN A NEAT AND PROFESSIONAL MANNER. MINIMUM 12 IN. X 16 IN. COMBUSTION AIR DUCTWORK CONNECTED AT LOUVER.
- 18 PROVIDE AND INSTALL DOOR LOUVERS WITHIN 12 IN. OF THE FINISHED FLOOR LEVEL. SEAL DOOR PENETRATIONS WEATHER-TIGHT. CENTER EACH LOUVER HORIZONTALLY WITHIN WIDTH OF DOOR.
- 19 COMBINE FURNACE FLUES PER CURRENT UMC AND MANUFACTURER'S SPECIFICATIONS AND ROUTE SINGLE THRU ROOF. SEE "FLUE THRU PITCHED ROOF DETAIL" ON SHEET M-3 FOR ADDITIONAL SCOPE OF WORK.
- 20 PROVIDE AND INSTALL THERMOSTAT ON WALL IN THIS LOCATION AND INTERCONNECT WITH ASSOCIATED UNIT FOR PROPER OPERATION AND PER MANUFACTURER'S SPECIFICATIONS. COORDINATE WITH ARCHITECT FOR MOUNTING HEIGHT.
- 21 PROVIDE AND INSTALL MOTORIZED DAMPER WITHIN ACCESSIBLE AREA PER "FURNACE & CONDENSING UNIT DETAIL" ON SHEET M-3. COORDINATE WITH ELECTRICAL CONTRACTOR FOR POWER CONNECTIONS. SEE "SEQUENCE OF OPERATION" FOR ADDITIONAL SCOPE OF WORK.

MECHANICAL KEYED NOTES

- 1 PROVIDE AND INSTALL FURNACE AND OUTDOOR CONDENSER UNITS IN LOCATIONS INDICATED ON DRAWING AND PER MANUFACTURER'S SPECIFICATIONS. MAINTAIN PROPER SERVICE AND CLEARANCE REQUIREMENTS FOR ALL EQUIPMENT. SEE "FURNACE & CONDENSING UNIT DETAIL" ON SHEET M-3 FOR ADDITIONAL ACCESSORIES AND SCOPE OF WORK. ROUTE OUTSIDE INTAKE AND RELIEF AIR DUCTWORK PER LAYOUT INDICATED. INTERCONNECT ASSOCIATED EQUIPMENT INCLUDING INSULATED REFRIGERANT PIPING AND SEE "SEQUENCE OF OPERATION" FOR ADDITIONAL SCOPE OF WORK. COORDINATE WITH ELECTRICAL CONTRACTOR FOR ALL LINE VOLTAGE POWER CONNECTIONS.
- 2 PROVIDE AND INSTALL PACKAGED UNIT ON GROUND MOUNTED CONCRETE PAD IN LOCATION INDICATED. MAINTAIN PROPER SERVICE AND CLEARANCE REQUIREMENTS FOR ALL EQUIPMENT. SEE "HVAC UNIT DETAIL" ON SHEET M-3 FOR ADDITIONAL ACCESSORIES AND SCOPE OF WORK. COORDINATE WITH ELECTRICAL CONTRACTOR FOR ALL LINE VOLTAGE POWER CONNECTIONS. SEE "SEQUENCE OF OPERATION."
- 3 PROVIDE AND INSTALL EXHAUST FAN IN THIS LOCATION. SEE "CEILING CABINET FAN DETAIL 1" ON SHEET M-3. PROVIDE AND INTERCONNECT WITH WALL SWITCH FOR OPERATION. COORDINATE WITH ELECTRICAL CONTRACTOR FOR ALL LINE VOLTAGE POWER CONNECTIONS.
- 4 PROVIDE AND INSTALL EXHAUST FAN IN THIS LOCATION. SEE "CEILING CABINET FAN DETAIL 2" ON SHEET M-3. PROVIDE AND INTERCONNECT WITH CONTROLS INDICATED ON "MECHANICAL EQUIPMENT SCHEDULE." PROVIDE BALANCING DAMPERS IN EXHAUST DUCTWORK TO BALANCE CFM BETWEEN ROOMS AS INDICATED ON DRAWINGS. COORDINATE WITH ELECTRICAL CONTRACTOR FOR ALL LINE VOLTAGE POWER CONNECTIONS.
- 5 PROVIDE AND INSTALL INSULATED SUPPLY AND RETURN AIR DUCTWORK AND EXHAUST DUCTWORK WITHIN SPACE ABOVE CEILING AND SUSPEND PER "DUCT HANGER DETAILS" ON SHEET M-3. AVOID LIGHT FIXTURES, CONDUIT, PIPING, STRUCTURAL BARRIERS, ETC. TYPICAL FOR ALL DUCTWORK.
- 6 PROVIDE AND INSTALL INSULATED SUPPLY AND RETURN AIR DUCTWORK WITHIN SPACE ABOVE FIRST FLOOR CEILING. AVOID LIGHT FIXTURES, CONDUIT, STRUCTURAL BARRIERS, PIPING, ETC. SUSPEND DUCTWORK FROM JOIST STRUCTURE PER "DUCT HANGERS DETAILS" ON SHEET M-3.
- 7 PROVIDE AND INSTALL A 4 FEET MAXIMUM SECTION OF INSULATED FLEX DUCTWORK AND CONNECT TO CEILING DIFFUSER. TYPICAL AT ALL DIFFUSERS. SEE "TYPICAL DIFFUSER CONNECTION DETAIL" ON SHEET M-3.
- 8 PROVIDE AND INSTALL RELIEF AIR DUCTWORK PER LAYOUT AND ROUTE DUCT THRU WALL TO WEATHER-TIGHT WALL LOUVER. SEAL WALL PENETRATION WEATHER-TIGHT. MAINTAIN 10 FEET MINIMUM DISTANCE FROM OUTSIDE AIR INTAKE DUCTWORK. MINIMUM 12 IN. X 16 IN. RELIEF AIR DUCTWORK CONNECTED AT LOUVER FROM EACH FURNACE.
- 9 PROVIDE AND INSTALL SIDEWALL SUPPLY AND RETURN AIR GRILLES IN LOCATIONS INDICATED AND CONNECT TO ASSOCIATED DUCTWORK. TYPICAL ALL SIDEWALL GRILLES. MOUNT ENTRY GRILLES AT 9 FT 4 IN FROM FINISHED FLOOR TO BOTTOM OF GRILLE. COORDINATE EXACT MOUNTING HEIGHT OF BEDROOM GRILLES WITH ARCHITECT.
- 10 ROUTE OUTSIDE AIR DUCTWORK TO THIS LOCATION AND THRU ROOF TO GRAVITY INTAKE HOOD. SEE "OUTSIDE AIR INTAKE HOOD DETAIL" ON SHEET M-3. MAINTAIN 10 FEET MINIMUM DISTANCE BETWEEN OUTSIDE AIR INTAKE AND RELIEF OR EXHAUST AIR. SEAL ROOF PENETRATION WEATHER-TIGHT. COORDINATE EXACT ROOF PENETRATION LOCATION WITH GENERAL CONTRACTOR.
- 11 ROUTE SUPPLY, RETURN, AND EXHAUST DUCTWORK UP IN LOCATIONS INDICATED AND THRU WALL OF BULK STORAGE ROOM. PROVIDE AND INSTALL FIRE DAMPER AT FIRE RATED WALL PENETRATION. MAINTAIN ACCESS TO DAMPER. ROUTE DUCTWORK HORIZONTALLY ACROSS BULK STORAGE CEILING AREA. INSULATE SUPPLY AND RETURN AIR DUCTWORK ROUTED THROUGH BULK STORAGE ROOM.
- 12 ROUTE SUPPLY, RETURN, AND EXHAUST DUCTWORK THRU WALL OF BULK STORAGE ROOM. PROVIDE AND INSTALL FIRE DAMPER AT FIRE RATED WALL PENETRATION. MAINTAIN ACCESS TO DAMPER. ROUTE DUCTWORK DOWN TO SPACE ABOVE FIRST FLOOR CEILING LEVEL IN LOCATIONS INDICATED.



KEY PLAN
SCALE: NONE

LEGEND	
	SUPPLY AIR DUCTWORK
	RETURN AIR DUCTWORK
	RELIEF AIR DUCTWORK
	OUTSIDE AIR DUCTWORK
	EXHAUST AIR DUCTWORK
	CLEARANCE REQUIRED
	SUPPLY AIR DIFFUSER
	RETURN AIR GRILLE
	THERMOSTAT
	EQUIPMENT SPECIFICATION
	KEYED NOTE
	FIRE DAMPER
	BALANCING DAMPER
	SUPPLY AIR GRILLE
	RETURN AIR GRILLE

MECHANICAL FLOOR PLAN "B"

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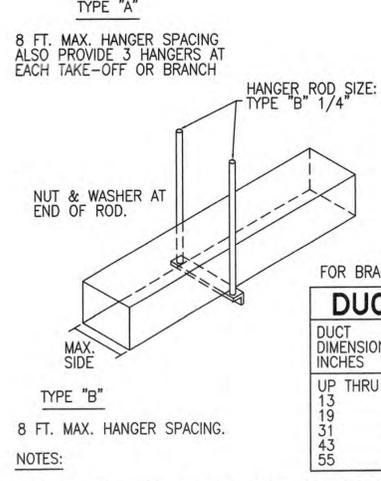
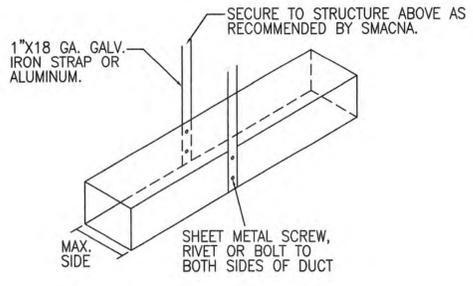
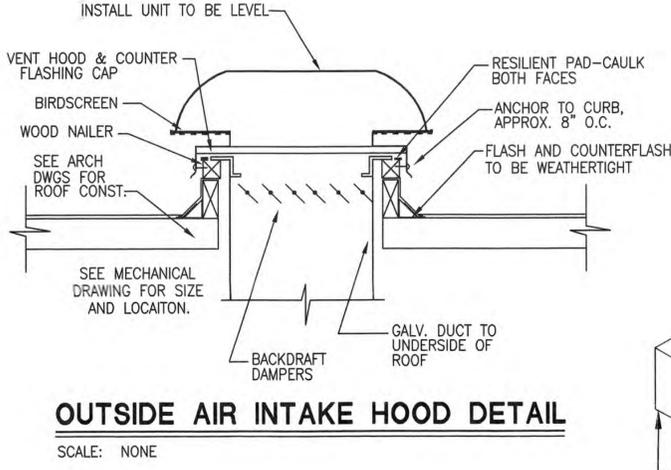
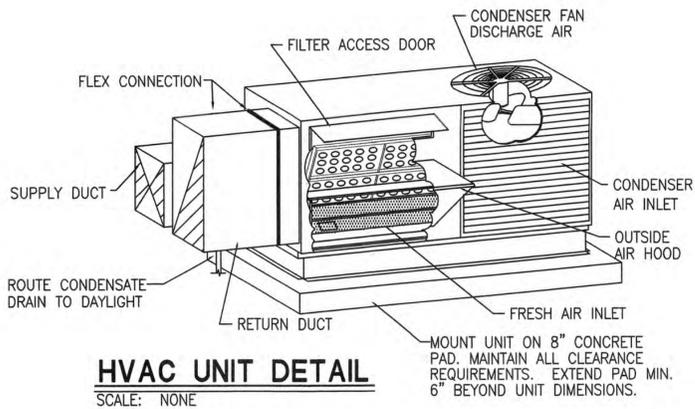
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02004_04008
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35 65 95 100
 COMPLETION

MARGARET G. BACA
 NEW MEXICO
 15783
 REGISTERED PROFESSIONAL ENGINEER
 Margaret G. Baca
 3-1-05

27.00
 M.G.



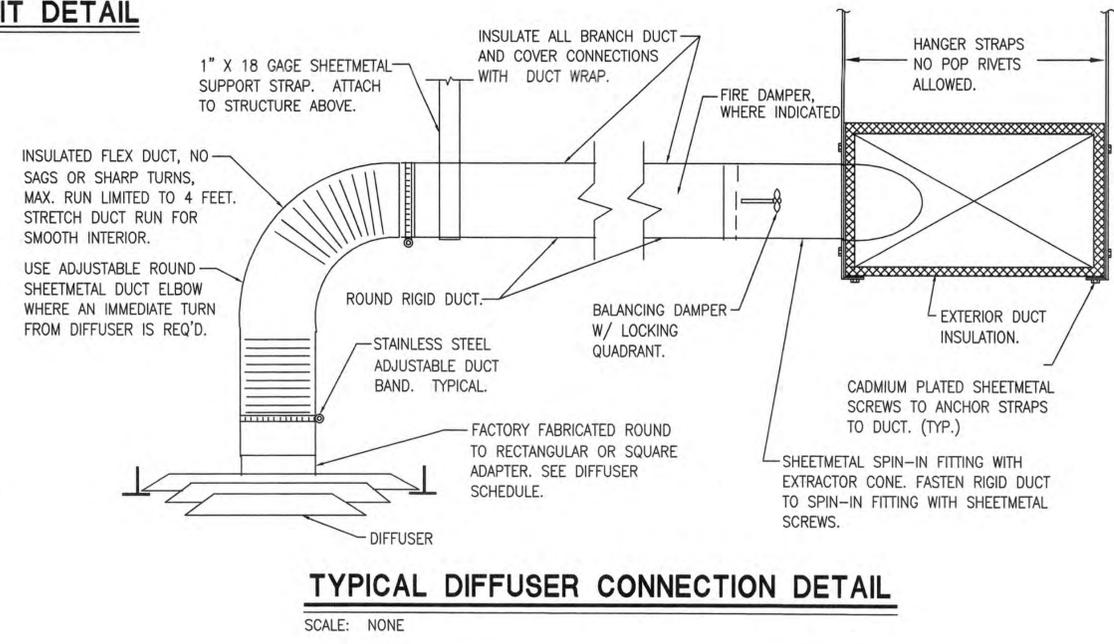
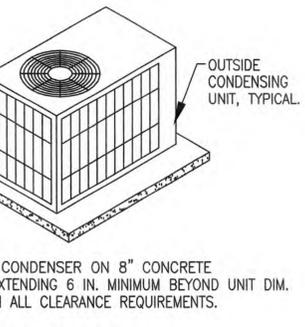
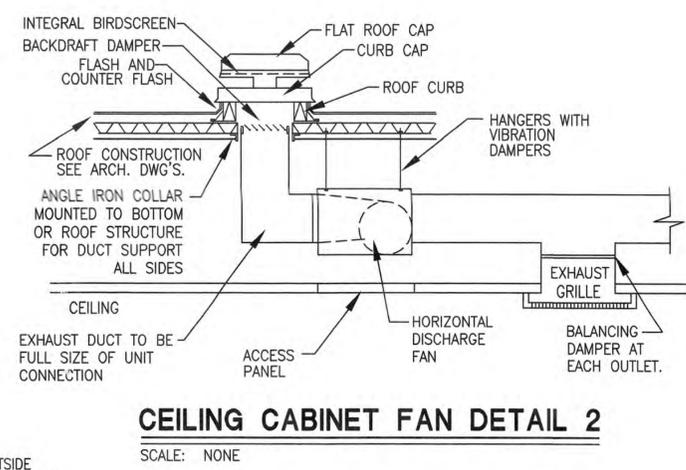
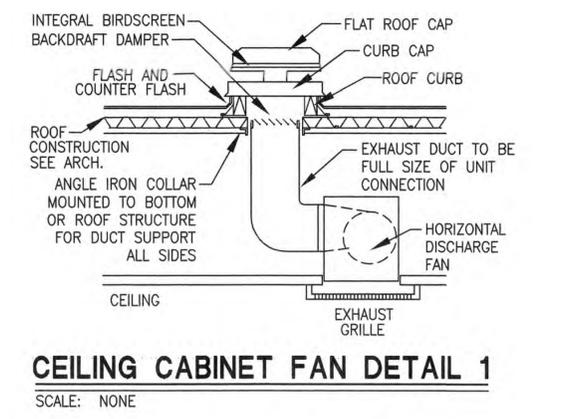
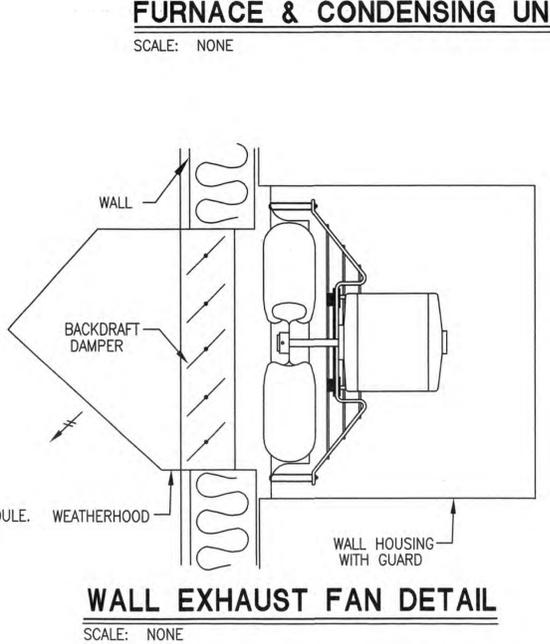
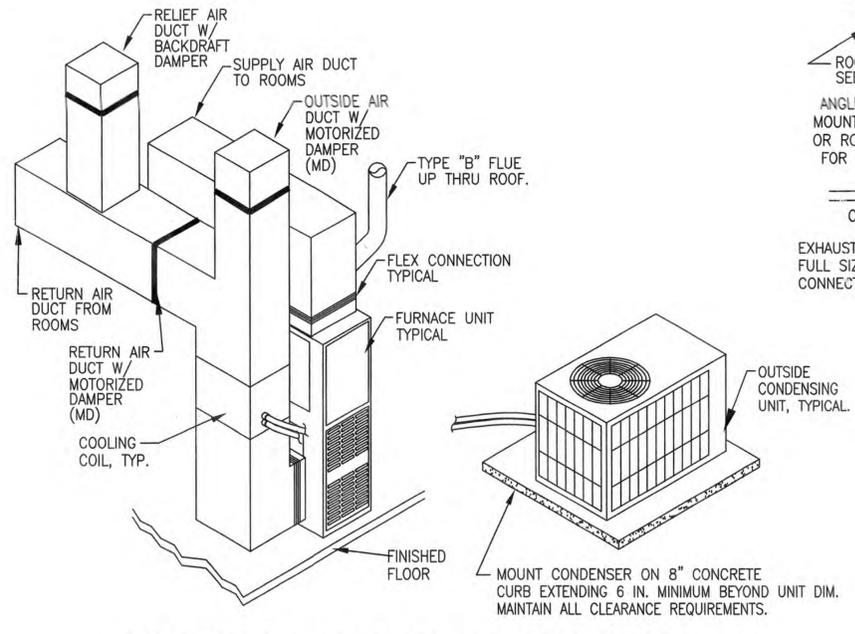
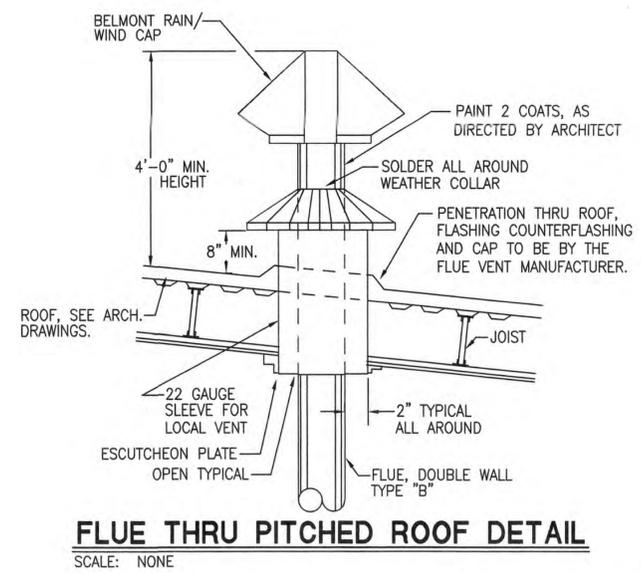
FOR BRACING ANGLES - SEE NOTES

DUCT SCHEDULE		
DUCT DIMENSIONS INCHES		TYPE HANGER
UP THRU 12		A
13		A/B
19		B
31		B
43		B
55		B

1. FOR SEVERAL DUCTS ON ONE HANGER TYPE "B" MAY BE USED. SIZE OF HANGER WILL BE SELECTED ON THE SUM OF DUCT WIDTHS EQUAL TO MAX. WIDTH DUCT SCHEDULE.

2. SCHEDULE FOR ANGLES FOR BRACING: TYPE "B" 1-1/2"x1-1/2"x1/8" ANGLE MAX. SPACING 8'-0" CENTERS.

DUCT HANGER DETAILS
SCALE: NONE



- MECHANICAL GENERAL NOTES**
- CONTRACTORS SHALL PROVIDE AND INSTALL ALL EQUIPMENT NECESSARY FOR COMPLETE AND PROPER INSTALLATION AND OPERATION OF MECHANICAL SYSTEMS INDICATED AND ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST ADOPTED EDITIONS OF THE UBC, UMC, UPC, NFPA, NEC, GAS CODE, LIFE SAFETY CODE, SMACNA, ASHRAE STANDARDS, AND ALL OTHER LOCAL AND STATE AMENDMENTS AT THE TIME OF PERMIT ISSUE. WHERE EVER THERE IS A DISCREPANCY BETWEEN CODE AND DRAWING, THE MORE STRINGENT CONDITION SHALL APPLY.
 - ALL 24 VOLT WIRING ASSOCIATED WITH EQUIPMENT LISTED IN MECHANICAL EQUIPMENT SCHEDULE SHALL BE PROVIDED AND INSTALLED BY MECHANICAL CONTRACTOR. ALL LINE VOLTAGE WIRING AND CONDUIT SHALL BE PROVIDED AND INSTALLED BY ELECTRICAL CONTRACTOR.
 - VERIFY AND ESTABLISH DIMENSIONS, CLEARANCES, AND FIELD CONDITIONS PRIOR TO START OF FABRICATION AND/OR INSTALLATION. COORDINATE INSTALLATION WITH ALL TRADES INVOLVED ON THE PROJECT.
 - DRAWINGS INDICATE THE GENERAL ARRANGEMENT OF SYSTEMS. IF CONDITIONS REQUIRE REARRANGEMENT OF ANY SYSTEM, SUBMIT DEPARTURES FROM DRAWINGS WITH REASONS TO ARCHITECT FOR APPROVAL BEFORE MAKING ANY CHANGES.
 - USE NEW MATERIALS AND EQUIPMENT UNLESS OTHERWISE SPECIFIED AND INSTALL IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
 - PROVIDE AND INSTALL ALL DUCTWORK TRANSITIONS AND CONNECTIONS IN ACCORDANCE WITH THE LATEST SMACNA STANDARDS AND ASHRAE HANDBOOK INCLUDING TURNING VANES IN ALL SQUARE ELBOWS. INSULATE ALL DUCTWORK ACCORDING TO ASHRAE 90.1 ENERGY CODE, OR CURRENTLY ENFORCED ENERGY CODE.
 - COORDINATE WITH ARCHITECTURAL DRAWINGS FOR LOCATIONS OF ALL FIRE RATED WALLS AND ASSEMBLIES. PROVIDE AND INSTALL FIRE DAMPERS IN LOCATIONS INDICATED ON DRAWING(S). ALL PIPE AND DUCTWORK PENETRATIONS OF FIRE WALLS SHALL BE CAULKED AIRTIGHT TO THE ADJACENT STRUCTURE BY MEANS OF UL APPROVED FIRE PROOF CAULKING MATERIAL.
 - COORDINATE ALL CUTTING, PATCHING, REPAIRING, EXISTING UTILITY SHUT-OFF AND START-UP ASSOCIATED WITH THE SCOPE OF WORK ON DRAWING(S) FOR COMPLETE AND FUNCTIONAL LAYOUT AND INSTALLATION OF MECHANICAL SYSTEMS. GIVE OWNER 48 HOUR NOTICE OF ALL NECESSARY UTILITY SHUT-OFFS.
 - CONTRACTOR SHALL PROVIDE AND INSTALL ALL CONTROLS, TRANSFORMERS, SWITCHES, RELAYS, ETC. NECESSARY FOR COMPLETE AND PROPER INSTALLATION AND OPERATION OF ALL SYSTEMS INDICATED ON DRAWINGS. ALL LINE VOLTAGE WIRING AND CONDUIT SHALL BE PROVIDED, INSTALLED, AND CONNECTED BY ELECTRICAL CONTRACTOR.
 - VIBRATIONALLY ISOLATE FROM THE BUILDING STRUCTURE ALL EQUIPMENT AND PIPING PER SMACNA VIBRATION MANUAL TO ASSURE AS QUIET AN OPERATING SYSTEM AS POSSIBLE IS INSTALLED.
 - VERIFY THAT ALL EQUIPMENT SPECIFIED IS CORRECT FOR FIELD INSTALLATION INCLUDING BUT NOT LIMITED TO SIZES, LOCATION, STRUCTURAL CONSISTENCY, ETC. BEFORE ORDERING. SUBMIT CHANGES FOR APPROVAL PRIOR TO ORDERING EQUIPMENT. NO CHANGE ORDERS WILL BE ALLOWED AS A RESULT OF CONTRACTOR'S FAILURE TO MEASURE ACTUAL DIMENSIONS AND PROVIDE CORRECT EQUIPMENT SIZES.
 - CONTRACTOR SHALL COORDINATE ALL DUCTWORK AND PIPING ROUTING WITH STRUCTURAL AND ELECTRICAL SYSTEMS AND PROVIDE ALL NECESSARY OFFSETS TO AVOID CONFLICTS AND MAINTAIN EQUIPMENT ACCESS AND SERVICEABILITY.
 - COORDINATE WORK WITH GENERAL CONTRACTOR TO PAINT ROOFTOP EQUIPMENT, EXPOSED DUCTWORK, INSULATION JACKETS, AND EXPOSED PIPING PER ARCHITECT'S REQUEST.
 - COORDINATE ALL PROPOSED ROOF PENETRATIONS WITH GENERAL CONTRACTOR AND ARCHITECT AND RELOCATE IF NECESSARY.
 - PROVIDE TESTING AND BALANCING CONTRACTOR: CONTRACTOR RESPONSIBLE FOR PROVIDING AND INSTALLING SHEAVES, BALANCING DAMPERS AND ALL EQUIPMENT NECESSARY TO PROVIDE PLUS OR MINUS 5% OF THE CFM REQUIRED AT EACH TERMINAL UNIT. NO CHANGE ORDERS WILL BE ALLOWED AS A RESULT OF THE CONTRACTOR'S FAILURE TO PROVIDE EQUIPMENT NECESSARY FOR TEST AND BALANCE OF SYSTEMS WHETHER SHOWN ON THE DRAWINGS OR NOT.
 - PROVIDE MINIMUM QUANTITY OF SUBMITTAL CUTSHEETS INDICATED WITHIN PROJECT MANUAL CONCERNING EQUIPMENT INDICATED ON MECHANICAL EQUIPMENT SCHEDULE FOR ENGINEER'S REVIEW AND APPROVAL PRIOR TO ORDERING ANY EQUIPMENT.

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SEQUENCE OF OPERATION

GENERAL CONTROL NOTES:

- MECHANICAL CONTRACTOR SHALL PROVIDE ALL CONTROL EQUIPMENT ITEMS, WIRING, TRANSFORMERS, THERMOSTATS, SENSORS, RELAYS, ETC. NECESSARY TO ACCOMPLISH THE CONTROL OPERATION AS DESCRIBED BELOW.
- MECHANICAL CONTRACTOR SHALL PROVIDE ALL LOW VOLTAGE EQUIPMENT AND COORDINATE WITH ELECTRICAL CONTRACTOR FOR ALL LINE VOLTAGE CONNECTIONS AND REACEWAYS.

UNIT SYMBOLS ①&②

FORCED AIR FURNACE UNIT SHALL BE CONTROLLED BY NEW 7-DAY PROGRAMABLE SETBACK THERMOSTAT AND MOTORIZED DAMPERS OPERATED BY 7-DAY PROGRAMABLE TIMECLOCK.

OCCUPIED: THE FAN MOTOR ON THE UNIT SHALL OPERATE CONTINUOUSLY DURING OCCUPIED HOURS.

HEATING: THE BURNER SHALL FIRE INTERMITTENTLY TO SATISFY THE THERMOSTAT HEATING SETPOINT. SEE EQUIPMENT SCHEDULE FOR OUTSIDE AIR CFM SETTING. THE THERMOSTAT SHALL BE SET AT 68 DEG. F. DURING OCCUPIED HOURS.

COOLING: THE CONDENSER AND COMPRESSOR SHALL OPERATE INTERMITTENTLY TO SATISFY THE THERMOSTAT COOLING SETPOINT. SEE EQUIPMENT SCHEDULE FOR OUTSIDE AIR CFM SETTING. THE THERMOSTAT SHALL BE SET AT 74 DEG. F. DURING OCCUPIED HOURS.

UNOCCUPIED:

HEATING: THE FAN MOTOR AND BURNER SHALL OPERATE INTERMITTENTLY TO SATISFY THE THERMOSTAT SETPOINT. THE OUTSIDE AIR DAMPERS SHALL BE FULLY CLOSED. THE THERMOSTAT HEATING SETPOINT SHALL BE SET AT 55 DEG. F. DURING UNOCCUPIED HOURS.

COOLING: NO COOLING.

UNIT SYMBOLS ③&④

FORCED AIR PREPACKAGED GROUND MOUNTED UNITS SHALL BE CONTROLLED BY NEW 7-DAY PROGRAMABLE SETBACK THERMOSTAT AND MOTORIZED DAMPERS OPERATED BY 7-DAY PROGRAMABLE TIMECLOCK.

PROVIDE A DRY BULB TEMPERATURE CONTROLLED ECONOMIZER AND BUILT-IN POWERED EXHAUST PACKAGE WITH BACKDRAFT RELIEF DAMPERS FOR THE UNIT TO MODULATE RETURN AIR AND OUTSIDE AIR DAMPERS FOR 55 DEG F SUPPLY AIR SET POINT WHEN THE OUTSIDE AIR TEMPERATURE PERMITS.

OCCUPIED: THE FAN MOTOR ON THE UNIT SHALL OPERATE CONTINUOUSLY DURING OCCUPIED HOURS.

HEATING: THE BURNER SHALL FIRE INTERMITTENTLY TO SATISFY THE THERMOSTAT HEATING SETPOINT. SEE EQUIPMENT SCHEDULE FOR OUTSIDE AIR CFM SETTING. THE THERMOSTAT SHALL BE SET AT 68 DEG. F. DURING OCCUPIED HOURS.

COOLING: THE CONDENSER AND COMPRESSOR SHALL OPERATE INTERMITTENTLY TO SATISFY THE THERMOSTAT COOLING SETPOINT. SEE EQUIPMENT SCHEDULE FOR OUTSIDE AIR CFM SETTING. THE THERMOSTAT SHALL BE SET AT 74 DEG. F. DURING OCCUPIED HOURS.

UNOCCUPIED:

HEATING: THE FAN MOTOR AND BURNER SHALL OPERATE INTERMITTENTLY TO SATISFY THE THERMOSTAT SETPOINT. THE OUTSIDE AIR DAMPERS SHALL BE FULLY CLOSED. THE THERMOSTAT HEATING SETPOINT SHALL BE SET AT 55 DEG. F. DURING UNOCCUPIED HOURS.

COOLING: NO COOLING.

MECHANICAL EQUIPMENT SCHEDULE, CONT.

FD FIRE DAMPER: "GREENHECK" MODEL FD-150. FIRE DAMPER WITH 1-1/2 HOUR UL RATING. FACTORY FURNISHED SLEEVES MOUNTED OUT OF AIRSTREAM, FUSIBLE LINK RATED FOR 165 DEG. F., RECTANGULAR OR ROUND SIZES TO MATCH DUCTWORK SIZES INDICATED ON DRAWINGS, MOUNTING HARDWARE, AND ALL ACCESSORIES NECESSARY FOR COMPLETE AND PROPER INSTALLATION AND OPERATION.

CM CARBON MONOXIDE SYSTEM: "MACURCO" MODEL CM-21A - CARBON MONOXIDE DETECTOR AND CONTROLLER INTERCONNECTED TO ALARM CONTROL PANEL - INCLUDE CONTROL PANEL, SENSORS, RELAYS, SWITCHES, AND ALL ACCESSORIES NECESSARY FOR COMPLETE AND PROPER INSTALLATION AND OPERATION. INTERCONNECT WITH SIDEWALL PROPELLER EXHAUST FAN SYMBOL 5 TO OPERATE WHEN CARBON MONOXIDE IS DETECTED AND LOCATE AND CONNECT EQUIPMENT PER MANUFACTURER'S SPECIFICATIONS.

DIFFUSER, GRILLE, AND REGISTER SCHEDULE

A SUPPLY AIR DIFFUSER: "TITUS" MODEL TMSA. SQUARE CEILING PANEL WITH STEEL CONSTRUCTION, ADJUSTABLE VANES, SUPPLY AIR DIFFUSER WITH TRUE 360 DEG. PATTERN, OBD, FRAME FOR CORRECT CEILING APPLICATION, STANDARD WHITE FINISH, AND ALL ACCESSORIES NECESSARY FOR COMPLETE AND PROPER INSTALLATION AND OPERATION. DIFFUSER AND DUCT SIZE AS SHOWN ON DRAWINGS.

B SUPPLY AIR REGISTER: "TITUS" MODEL 300FS. RECTANGULAR FACE WITH DOUBLE DEFLECTION BLADES 3/4 IN. SPACING, VERTICAL TO THE FRONT, STANDARD WHITE FINISH, OPPOSED BLADE DAMPER, FRAME FOR WALL APPLICATION INDICATED ON ARCHITECTURAL DRAWINGS, AND ALL ACCESSORIES NECESSARY FOR COMPLETE INSTALLATION AND OPERATION. DUCT SIZE AS INDICATED ON DRAWINGS.

C SUPPLY AIR DRUM LOUVER: "TITUS" MODEL DL. HIGH CAPACITY LONG THROW DRUM DIFFUSER WITH EXTRUDED ALUMINUM CONSTRUCTION, ROTATING DRUM, PIVOTING BLADES, FELT SEAL, SPONGE RUBBER GASKETS, OBD, PRIMED FINISH, FRAME FOR CORRECT INSTALLATION, AND ALL ACCESSORIES NECESSARY FOR COMPLETE AND PROPER INSTALLATION AND OPERATION. COLOR SELECTED BY ARCHITECT. SIZE AS INDICATED ON DRAWINGS.

D RETURN AIR GRILLE: "TITUS" MODEL 50F. FABRICATED ALUMINUM GRILLE WITH 1/2 IN. X 1/2 IN. X 1/2 IN. SQUARES, FRAME FOR CEILINGS INDICATED ON ARCHITECTURAL DRAWINGS, COLOR SELECTED BY ARCHITECT, AND ALL ACCESSORIES NECESSARY FOR COMPLETE INSTALLATION AND OPERATION. DUCT SIZE AS INDICATED ON DRAWINGS.

E SINGLE DEFLECTION RETURN GRILLE: "TITUS" MODEL 350ZFL. 0 DEGREE DEFLECTION, 3/4 INCH SPACING, ALUMINUM CONSTRUCTION, HORIZONTAL BLADES, FRAME FOR WALL APPLICATION INDICATED ON ARCHITECTURAL DRAWINGS, PRIMED FINISH, AND ALL ACCESSORIES NECESSARY FOR COMPLETE INSTALLATION AND OPERATION. COLOR SELECTED BY ARCHITECT. DUCT SIZE AS INDICATED ON DRAWINGS.

F COMBUSTION AIR DOOR LOUVER: "GREENHECK" MODEL ESJ-150. STORMPROOF, STATIONARY, EXTRUDED ALUMINUM FRAME, ROLLED EDGE, BAKED ON ENAMEL FINISH, 3/4 IN. MESH 0.051 GA. BIRDSCREEN, ALUMINUM BLADES, FRAME FOR DOOR APPLICATION, AND ALL ACCESSORIES NECESSARY FOR COMPLETE AND PROPER INSTALLATION AND OPERATION. COORDINATE DOOR THICKNESS WITH GENERAL CONTRACTOR AND LOUVER COLOR SELECTION WITH ARCHITECT. MAINTAIN FREE AREA INDICATED ON DRAWINGS AS MINIMUM.

G OUTSIDE AIR WALL LOUVERS: "GREENHECK" MODEL ESJ-602. STORMPROOF, STATIONARY, EXTRUDED ALUMINUM FRAME, ROLLED EDGE, BAKED ON ENAMEL FINISH, 3/4 IN. MESH 0.051 GA. BIRDSCREEN, ALUMINUM BLADES, FRAME FOR WALL APPLICATION, AND ALL ACCESSORIES NECESSARY FOR COMPLETE AND PROPER INSTALLATION AND OPERATION. COORDINATE LOUVER COLOR WITH ARCHITECT. MAINTAIN FREE AREA INDICATED ON DRAWINGS AS MINIMUM.

AD ACCESS DOOR: "AIR BALANCE INC." MODEL TO MATCH CEILING TYPE - PROVIDE AND INSTALL CEILING MOUNTED, STEEL ACCESS DOOR, FOR CEILING TYPE INDICATED ON ARCHITECTURAL DRAWINGS, WHERE REQUIRED, FOR ACCESS TO BALANCING DAMPERS ABOVE HARD CEILINGS. PROVIDE WITH SCREWDRIVER OPERATED LATCH. PAINT ACCESS DOOR PER ARCHITECTS REQUIREMENTS. SIZE: 18 IN. X 18 IN.

MECHANICAL EQUIPMENT SCHEDULE, CONT.

③&④ PACKAGED ROOFTOP AIR CONDITIONING/HEATING UNIT: "CARRIER" SEE MODEL NUMBERS BELOW - LP GAS HEATING, ELECTRIC COOLING, ALUMINIZED STEEL HEAT EXCHANGER, BELT DRIVEN WITH ADJUSTABLE DRIVE INDOOR FAN, AND DIRECT DRIVE OUTDOOR FAN, SPARK IGNITION PILOT, INDOOR FAN TIME-DELAY RELAY, REDUNDANT GAS VALVE, MODULAR BURNER SECTION, ORIFICE FOR 7000 FT. ASL, INDUCED DRAFT COMBUSTION, COMBUSTION SECTION VIEW PORT, REMOTE SENSING OF PILOT FLAME, HEATING SAFETY CONTROLS (LIMIT SWITCHES, CENTRIFUGAL SWITCH, ROLL OUT SWITCH), STAGGERED COPPER TUBE WITH BONDED ALUMINUM FIN COOLING COILS, LOW AMBIENT TEMP. CONTROLS, RECYCLE TIMER TO PREVENT SHORT CYCLING, ECONOMIZER PACKAGE INCLUDING POWER EXHAUST PACKAGE, CONDENSER COIL HAIL GUARD ASSEMBLY, 2 IN. THROW-AWAY FILTERS, FILTER RACK, FLEXIBLE DUCT CONNECTIONS, VIBRATION ISOLATORS FOR MOTOR, FACTORY SUPPLIED ROOF CURB, FAN CONTROL, MOTOR, MOTOR STARTER, STAGED HEATING AND COOLING, RELAYS, SWITCHES, TRANSFORMERS, FUSES, UNIT MOUNTED DISCONNECT, CONTROL EQUIPMENT, AND ALL ACCESSORIES NECESSARY FOR COMPLETE AND PROPER INSTALLATION AND OPERATION. SUMMER OUTDOOR AIR TEMPERATURE ENTERING CONDENSER = 95 DEG. F. DB. AND 65 DEG. F. WB. ROOM AIR TEMP.= 74 DEG. F. SUMMER AND 70 DEG. F. WINTER. ELEC.: 208V/3PH/60HZ.

SYM	"CARRIER" MODEL NO.		CLNG INPUT MBTUH	HTNG INPUT MBTUH	CFM ESP	MIN. OA CFM	FAN HP	OPER. WGT. LBS.
	③	48TF007		72.0	150.0	2200 0.6	0	1-1/2
④	48TF008		85.0	224.0	2250 0.6	1460	1	1200

SYM	COMP. RLA		LRA	QTY	COMP. FAN FLA	COND HP	EVAP FAN FLA	MCA
	③	20.6			146	1	1.4	1/4
④	14.0	91	2	1.4	1/4	5.8	40.1	

* TWO STAGE HEATING REQUIRED. PARAMETERS DESCRIBED ABOVE ARE AT 7000 FT. ABOVE SEA LEVEL. PROVIDE AND INSTALL SMOKE DUCT DETECTORS IN SUPPLY AND RETURN AIR DUCTS TO SHUT-DOWN ASSOCIATED UNIT IN EVENT OF EMERGENCY.

⑤ PROPELLER EXHAUST FAN: "GREENHECK" MODEL SBE-1H30-4. SIDEWALL, BELT DRIVE EXHAUST FAN WITH ALUMINUM CONSTRUCTED PROPELLERS, WALL HOUSING WITH GUARD, MOUNTING HARDWARE, BAKED ENAMEL COATING, HEAVY DUTY BALL BEARING WITH SINGLE SPEED HEAVY DUTY MOTOR, DISCONNECT SWITCH, ZINC PLATED HEAVY GAUGE WIRE MOTOR MOUNT, DAMPER, WEATHERHOOD INCLUDING BIRD SCREEN, AND ALL ACCESSORIES NECESSARY FOR COMPLETE AND PROPER INSTALLATION AND OPERATION. PERFORMANCE 4100 CFM @ 1.125 ESP, 503 RPM, 1/4 HP, AND 10.2 SONES. INTERCONNECT WITH WALL SWITCH FOR MANUAL OPERATION AND WITH CARBON MONOXIDE SYSTEM FOR AUTOMATIC OPERATION. ELEC: 208V/3PH/60HZ.

⑥ EXHAUSTER: "GREENHECK" MODEL SP-A110. PREMIUM CEILING EXHAUSTER COMPLETE WITH DISCONNECT, BACKDRAFT DAMPER, ROOF CAP, BIRDSCREEN, MOUNTING BRACKETS, HIGH IMPACT POLYSTYRENE CEILING GRILLE, FAN, MOTOR WITH BUILT-IN THERMAL OVERLOAD PROTECTION, AND ALL ACCESSORIES NECESSARY FOR COMPLETE AND PROPER INSTALLATION AND OPERATION. PERFORMANCE 80 CFM @ 0.25 ESP, 950 RPM, 80 WATTS, 0.58 AMPS, WEIGHT 17 LBS., AND CONTROLLED BY A WALL SWITCH. ELEC: 115V/1PH/60HZ.

⑦-⑨ EXHAUSTER: "GREENHECK" SEE MODEL NUMBERS BELOW. PREMIUM INLINE CABINET EXHAUSTER COMPLETE WITH DISCONNECT, BACKDRAFT DAMPER, ROOF CAP, MOUNTING BRACKETS, HOUSING INTERIOR LINED WITH 1/2 IN. SOUND ABSORBING FIBERGLASS INSULATION, REMOVABLE BOTTOM HOUSING PANEL FOR EASY ACCESS, ACCESS PANEL, AND ALL ACCESSORIES NECESSARY FOR COMPLETE AND PROPER INSTALLATION AND OPERATION. COORDINATE CONTROLS SCOPE OF WORK WITH ELECTRICAL CONTRACTOR. ELEC: 115V/1PH/60HZ.

SYM	MODEL NUMBER	CFM	ESP	RPM	WATTS	AMPS	WEIGHT LBS.	CONTROL
⑦	CSP-A250	220	0.25	1000	83	0.79	23	WALL SWITCH
⑧	CSP-A390	360	0.375	1350	144	1.33	23	TIME RELAY
⑨	CSP-A390	560	0.375	1080	325	4.40	36	CONTINUOUS

⑩ GRAVITY INTAKE HOOD: "GREENHECK" FABRA HOOD. HEAVY GAUGE GALVANIZED STEEL CONSTRUCTION, SUPPORT MEMBERS, VERTICAL END PANELS, 1/2 IN. GALVANIZED STEEL MESH BIRDSCREEN, ROOF CURB, BACKDRAFT DAMPERS, MOUNTING HARDWARE, AND ALL ACCESSORIES NECESSARY FOR COMPLETE AND PROPER INSTALLATION AND OPERATION. 12 IN. X 12 IN. THROAT AREA.

Ⓣ THERMOSTAT: "HONEYWELL" MODEL T8600 - ADAPTIVE INTELLIGENT RECOVERY, ENERGY SAVING, MULTIPLE SETBACK, TEMPORARY OVERRIDE, LCD DISPLAY, BATTERY BACKUP, TRANSFORMER, COOLING SUBBASE, AUTOMATIC CHANGE OVER FROM WINTER TO SUMMER, CAPABLE OF TWO STAGE HEATING AND COOLING WHERE REQUIRED, AND ALL ACCESSORIES NECESSARY FOR COMPLETE AND PROPER INSTALLATION AND OPERATION. INCLUDE BATTERIES.

MD MOTORIZED DAMPER: "GREENHECK" MODEL VCD-18. LOW LEAKAGE CONTROL DAMPER CONSTRUCTED OF 16 GAGE GALVANIZED STEEL, EXTRUDED VINYL BLADE SEALS, SYNTHETIC SLEEVE TYPE BEARINGS, PARALLEL BLADES, FLANGE FOR PROPER INSTALLATION, FACTORY INSTALLED ACTUATOR, AND ALL ACCESSORIES NECESSARY FOR COMPLETE AND PROPER INSTALLATION AND OPERATION. SIZE TO ACCOMMODATE DUCT SIZES SHOWN ON DRAWING. SEE "SEQUENCE OF OPERATION." ELEC: 120V/1PH/60HZ.

MECHANICAL EQUIPMENT SCHEDULE

①&② FORCED AIR FURNACE UNIT AND RELATED EQUIPMENT: "CARRIER" SEE MODEL NUMBERS BELOW. FURNACE: LP GAS FIRED, UPFLOW SUPPLY AIR UNIT WITH SIDE AIR RETURN, HOT SURFACE IGNITION, FAN AND MOTOR WITH 2 SPEEDS, ALUMINIZED STEEL HEAT EXCHANGER, INSULATED BLOWER CABINET CONSTRUCTED OF GALVANIZED STEEL, 1 IN. DISPOSABLE FILTERS, CIRCUIT BREAKERS, DISCONNECT, MOTOR STARTERS, RELAYS, SWITCHES, PRESSURE SWITCH, BLOWER CONTROL, LIMIT CONTROL, AND FLAME SENSOR. CONDENSING UNIT: ELECTRIC ENERGY EFFICIENCY CONDENSING UNIT WITH POWDER PAINTED GALVANIZED CABINET, SILENCER TOP, SOUND HOOD, COMPRESSOR VIBRATION ISOLATOR PLATE, REENFORCED STEEL TOP GRILLE, SINGLE SPEED MOTOR, HERMETICALLY SEALED SCROLL COMPRESSOR WITH INTERNAL HIGH TEMPERATURE MOTOR OVERLOAD PROTECTION, COMPRESSORS WITH INTERNAL PRESSURE RELIEF ASSEMBLY, COPPER TUBE WITH ALUMINUM FINS COILS, CONTROL BOX, DISCONNECT, SERVICE VALVES, COMPRESSOR TIME DELAY CONTROL, AND LOW AMBIENT SWITCH. PROVIDE AND INSTALL ALL ACCESSORIES NECESSARY FOR COMPLETE AND PROPER INSTALLATION AND OPERATION. INSTALL AND INTERCONNECT UNITS ACCORDING TO MANUFACTURER'S RECOMMENDATIONS. ORIFICE FOR 7000 FEET ASL. FURNACE UNIT - ELEC: 115V/1PH/60HZ. CONDENSER UNIT - ELEC: 208V/1PH/60HZ.

SYM	CFM	O.A. CFM	ESP IN.H2O	OUTPUT CLNG MBH	INPUT HTNG MBH	HP	"CARRIER" FURNACE MODEL NO.	"CARRIER" INDOOR COIL
				①	1400		480	0.6
②	1700	430	0.6	60.0	155.0	3/4	58CTA15520	CK5A060

SYM	"CARRIER" CONDENSER MODEL NO.	CAP. MBH	COMP. RLA		FAN FLA	MCA
			①	38TRA048		
②	38TRA060	60.0	28.8	169	1.4	37.4

NOTE: CONTRACTOR SHALL SIZE REFRIGERANT LINES FROM THE DX COIL UNIT TO THE CONDENSER ACCORDING TO MANUFACTURER'S RECOMMENDATIONS. PROVIDE ALL FIELD INSTALLED ACCESSORIES FOR THE CONDENSERS INCLUDING ALL REFRIGERANT PIPING, VALVES, FITTINGS, AND INSULATION FOR CORRECT OPERATION.



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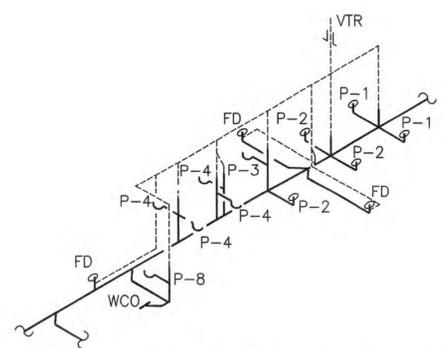
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PLUMBING KEYED NOTES

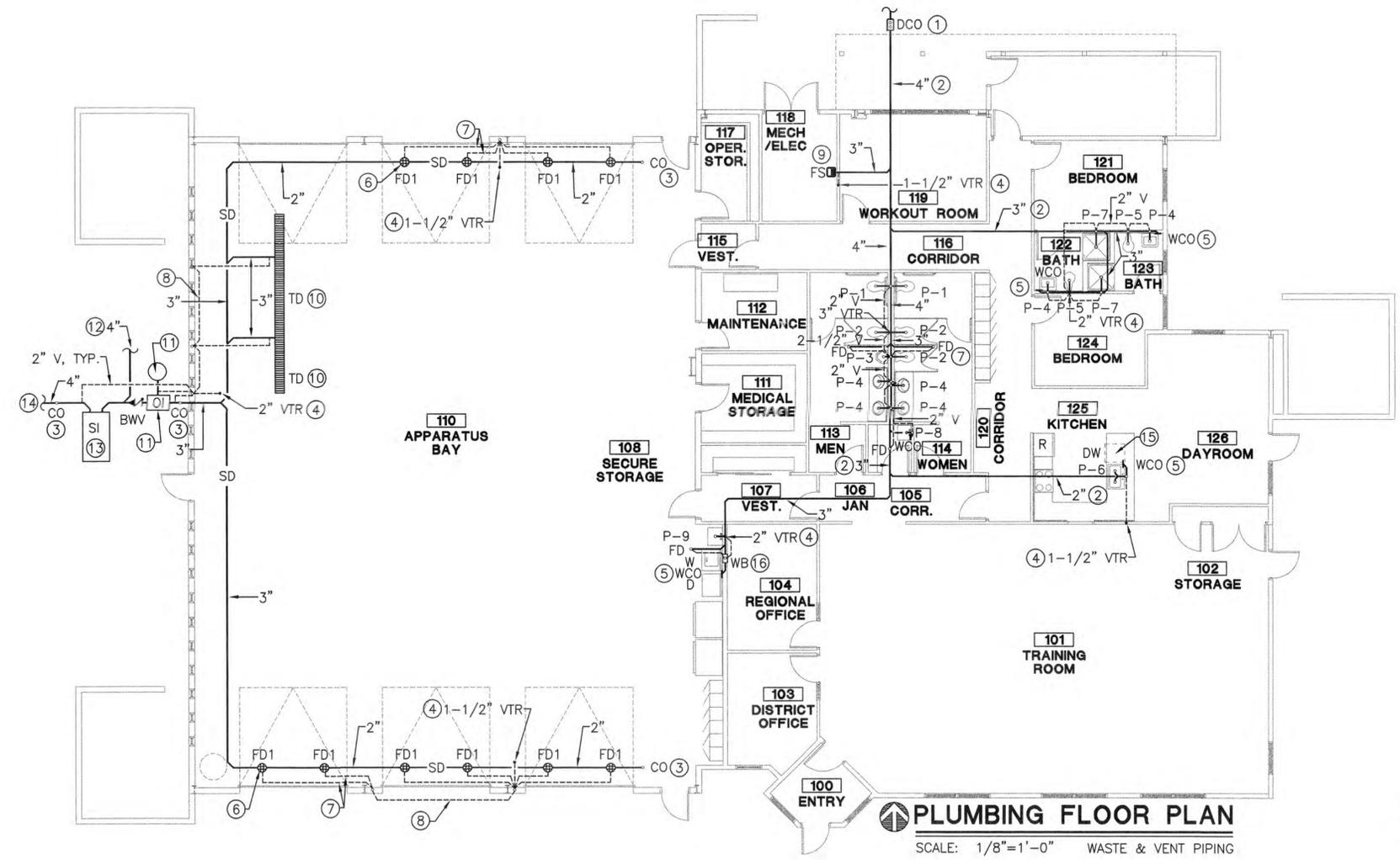
- ① PROVIDE AND INSTALL DOUBLE CLEANOUT IN THIS LOCATION. SEE "DOUBLE CLEANOUT TO GRADE DETAIL" ON SHEET P-3 FOR ADDITIONAL SCOPE OF WORK. SEE "PLUMBING SITE UTILITIES PLAN" SHEET SU-1 FOR CONTINUATION OF WASTE PIPING BEYOND BUILDING.
- ② ROUTE NEW WASTE PIPING BELOW FLOOR PER LAYOUT INDICATED. SLOPE WASTE PIPING AT 1/4 IN. PER FOOT AND CONFIRM ALL INVERTS PRIOR TO ORDERING MATERIALS. TYPICAL FOR ALL WASTE PIPING.
- ③ PROVIDE AND INSTALL CLEANOUT IN THIS LOCATION. SEE "CLEANOUT TO GRADE DETAIL" ON SHEET P-3 FOR SIMILAR INSTALLATION. CLEANOUT COVER SHALL BE FLUSH WITH FLOOR IF INSTALLED INDOORS.
- ④ ROUTE VENT PIPING UP THRU ROOF IN THIS LOCATION. OFFSET VENT PIPING TO AVOID DIFFERENT ROOF LEVELS AS NECESSARY. SEAL ALL ROOF PENETRATIONS WEATHER-TIGHT. SEE "VENT THRU ROOF DETAIL" ON SHEET P-3. TYPICAL FOR ALL VENT PIPING THRU ROOF.
- ⑤ PROVIDE AND INSTALL WALL CLEANOUT IN THIS LOCATION. SEE "WALL CLEANOUT DETAIL" ON SHEET P-3.
- ⑥ PROVIDE AND INSTALL FLOOR DRAIN IN LOCATIONS INDICATED AND CONNECT WATER PIPING TO TRAP PRIMER CONNECTION. TYPICAL FOR ALL FLOOR DRAINS INDICATED ON DRAWINGS. SEE "TRAP PRIMER DETAIL" ON SHEET P-3. COORDINATE WITH STRUCTURAL DRAWINGS DUE TO POST TENSION SLAB. SEE STRUCTURAL DRAWING SHEET S201 DETAIL A "TYP. DETAIL AT PIPE PENETRATION THROUGH P/T SLAB RIB" FOR ADDITIONAL SCOPE OF WORK. STRUCTURAL DETAIL TYPICAL AT ALL FLOOR DRAINS, TRENCH DRAINS, FLOOR SINK, AND PLUMBING FIXTURES WITH WASTE OR VENT PIPING ROUTED THRU SLAB.
- ⑦ ROUTE VENT PIPING INDIVIDUALLY BELOW GRADE TO COMMON LOCATION. ROUTE PIPING THRU SLAB AND CONNECT VENT PIPING WITHIN WALL. COORDINATE SCOPE OF WORK WITH STRUCTURAL DETAIL A ON SHEET S201.
- ⑧ ROUTE AND PROPERLY SLOPE VENT PIPING HORIZONTALLY NEAR CEILING LEVEL.
- ⑨ PROVIDE AND INSTALL FLOOR SINK WITHIN MECHANICAL ROOM. COORDINATE SCOPE OF WORK WITH STRUCTURAL DETAIL A ON SHEET S201. SEE SHEET P-2 FOR ADDITIONAL SCOPE OF WORK.
- ⑩ PROVIDE AND INSTALL TRENCH DRAIN IN THIS LOCATION PER MANUFACTURER'S SPECIFICATIONS. COORDINATE WITH STRUCTURAL DRAWING(S) FOR PROPER INSTALLATION DUE TO POST TENSION SLAB.
- ⑪ PROVIDE AND INSTALL OIL INTERCEPTOR AND ACCESSORIES IN THIS LOCATION PER MANUFACTURER'S AND UPC SPECIFICATIONS. SEE "OIL INTERCEPTOR DETAIL" ON SHEET P-3 FOR ADDITIONAL SCOPE OF WORK. INCLUDE MINIMUM 50 GALLON LEAKPROOF STORAGE CONTAINER TO CONTAIN OIL SEDIMENTS BURIED BESIDE OIL INTERCEPTOR AND INCLUDE PROPER VENTING AND ACCESSIBILITY. PROVIDE AND INSTALL BACKWATER VALVE (BWV) IMMEDIATELY AFTER OIL INTERCEPTOR WITH PROPER ACCESSIBILITY.
- ⑫ ROUTE ROOF DRAIN PIPING TO THIS LOCATION AND CONNECT TO STORM DRAIN PIPING PRIOR TO SAND INTERCEPTOR. VERIFY PROPER INVERTS PRIOR TO ORDERING MATERIALS.
- ⑬ PROVIDE AND INSTALL SAND INTERCEPTOR IN THIS LOCATION PER MANUFACTURER'S AND UPC SPECIFICATIONS.
- ⑭ SEE "PLUMBING SITE UTILITIES PLAN" SHEET SU-1 FOR CONTINUATION OF STORM DRAIN PIPING.
- ⑮ PROVIDE AND INSTALL DISHWASHER AND CONNECT WASTE AND VENT PIPING PER MANUFACTURER'S SPECIFICATIONS.
- ⑯ PROVIDE AND INSTALL WASHER AND WASHER BOX IN THIS LOCATION. SEE "WASHER BOX CONNECTION DETAIL" ON SHEET P-3 FOR ADDITIONAL SCOPE OF WORK.

LEGEND	
----	COLD WATER PIPING
----	HOT WATER PIPING
----	SANITARY SEWER PIPING
—SD—	STORM DRAIN PIPING
----	VENT PIPING
—G—	LP (LIQUID PETROLEUM) GAS PIPING
----	HOT WATER RECIRCULATION LINE
⊗	SHUT-OFF (BALL) VALVE
— — —	UNION
FD • FD1	FLOOR DRAIN
FS ■	FLOOR SINK
○	CO (CLEANOUT) TO GRADE (SINGLE)
∞	DCO (DOUBLE CLEANOUT) TO GRADE
•	VTR (VENT THROUGH ROOF)
○	VERTICAL VENT LINE
HB →	HOSE BIBB
WHA □	WATER HAMMER ARRESTOR



WASTE & VENT PIPING ISOMETRIC

MAIN RESTROOM AREA



PLUMBING FLOOR PLAN
SCALE: 1/8"=1'-0" WASTE & VENT PIPING

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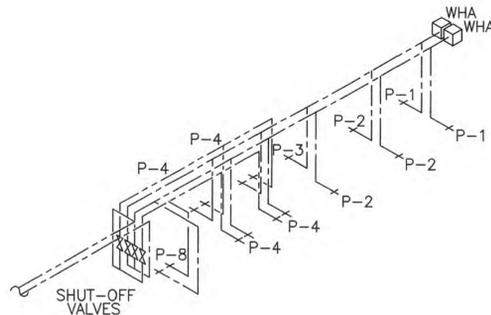
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PLUMBING FLOOR PLAN

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LEGEND	
----	COLD WATER PIPING
----	HOT WATER PIPING
----	SANITARY SEWER PIPING
—SD—	STORM DRAIN PIPING
----	VENT PIPING
—G—	LP (LIQUID PETROLEUM) GAS PIPING
----	HOT WATER RECIRCULATION LINE
⊗	SHUT-OFF (BALL) VALVE
— —	UNION
FD • FD1	FLOOR DRAIN
FS ■	FLOOR SINK
—○—	CO (CLEANOUT) TO GRADE (SINGLE)
—○—	DCO (DOUBLE CLEANOUT) TO GRADE
•	VTR (VENT THROUGH ROOF)
○	VERTICAL VENT LINE
HB —+	HOSE BIBB
WHA □	WATER HAMMER ARRESTOR



WATER PIPING ISOMETRIC

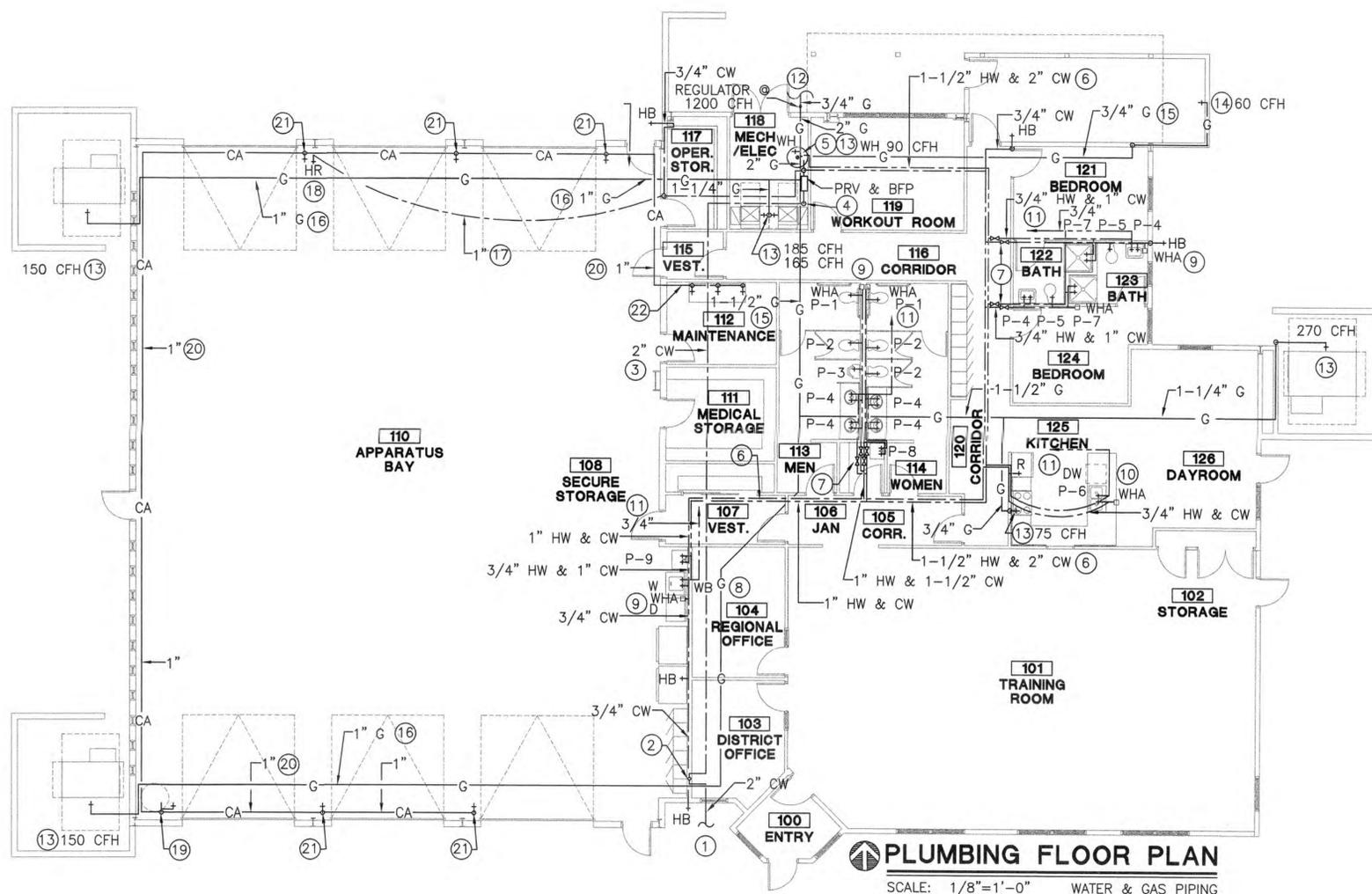
MAIN RESTROOM AREA

PLUMBING KEYED NOTES, CONT.

- 19 COMPRESSED AIR SYSTEM PROVIDED BY OWNER. CONTRACTOR SHALL INSTALL SYSTEM WITHIN THIS CORNER OF THE APPARATUS BAY PER MANUFACTURER'S SPECIFICATIONS AND INCLUDE MAIN ACCESSIBLE SHUT-OFF VALVE. COORDINATE WITH MECHANICAL CONTRACTOR DUE TO DUCTWORK INSTALLED ALONG WEST WALL IN THIS AREA. ROUTE AND SECURE MAIN COMPRESSED AIR PIPING AGAINST WALL, UP NEAR CEILING LEVEL, AND PER LAYOUT INDICATED ON DRAWING.
- 20 PROVIDE AND INSTALL NEW COMPRESSED AIR COPPER PIPING NEAR CEILING LEVEL. SUSPEND FROM JOIST STRUCTURE PER "PIPING HANGER DETAIL" ON SHEET P-3. AVOID WINDOWS ALONG WEST WALL AND MECHANICAL EQUIPMENT.
- 21 ROUTE AND SECURE 1 IN. COMPRESSED AIR COPPER PIPING DOWN WALL IN LOCATIONS INDICATED. PROVIDE AND INSTALL BALL SHUT OFF VALVE AND QUICK RELEASE CONNECTION AT EACH LOCATION INDICATED. COORDINATE WITH THE OWNER CONCERNING THE QUICK RELEASE MOUNTING HEIGHT REQUIREMENTS.
- 22 PROVIDE AND INSTALL THREE BALL SHUT OFF VALVES AND QUICK RELEASE CONNECTIONS AT BENCH AREA. COORDINATE WITH OWNER CONCERNING THE QUICK RELEASE MOUNTING HEIGHT REQUIREMENTS.

PLUMBING KEYED NOTES

- 1 ROUTE MAIN INSULATED WATER PIPING BELOW GRADE AND INTO BUILDING. SEE "PLUMBING SITE UTILITIES PLAN" ON SHEET SU-1 FOR ADDITIONAL SCOPE OF WORK OUTSIDE OF BUILDING.
- 2 ROUTE MAIN INSULATED WATER PIPING FROM BELOW BUILDING, UP INTO WALL, AND HORIZONTALLY INTO SPACE ABOVE CEILING LEVEL.
- 3 ROUTE MAIN INSULATED WATER PIPING WITHIN SPACE ABOVE CEILING LEVEL. DO NOT CONNECT ANY BRANCHES OFF MAIN WATER PIPING PRIOR TO BACKFLOW PREVENTER LOCATED WITHIN MECHANICAL ROOM.
- 4 ROUTE MAIN INSULATED WATER PIPING DOWN IN THIS LOCATION AND CONNECT TO PRESSURE REDUCING VALVE (PRV) AND BACKFLOW PREVENTER (BFP). ROUTE BFP DRAIN TO FLOOR SINK WITH AIR GAP IN COMPLIANCE WITH CURRENT UPC REQUIREMENTS.
- 5 PROVIDE AND INSTALL WATER HEATER IN THIS LOCATION. SEE "WATER HEATER DETAIL" ON SHEET P-3 AND MECHANICAL DRAWINGS FOR ADDITIONAL SCOPE OF WORK. PROVIDE AND INSTALL BALL VALVES TO ADJUST HOT WATER RETURN PIPING FLOW RATES EQUALLY.
- 6 ROUTE INSULATED HOT AND COLD WATER PIPING WITHIN SPACE ABOVE CEILING LEVEL. SUSPEND FROM STRUCTURAL JOISTS PER "PIPING HANGER DETAIL" ON SHEET P-3. TYPICAL FOR ALL PIPING.
- 7 PROVIDE AND INSTALL BALL SHUT-OFF VALVES TO ISOLATE EACH RESTROOM INDIVIDUALLY. SHUT-OFF VALVES SHALL BE ACCESSIBLE AND LABELED CLEARLY TO INDICATE THEIR PURPOSE.
- 8 PROVIDE AND INSTALL WASHER AND WASHER BOX IN THIS LOCATION. SEE "WASHER BOX CONNECTION DETAIL" ON SHEET P-3 FOR ADDITIONAL SCOPE OF WORK.
- 9 PROVIDE AND INSTALL WATER HAMMER ARRESTERS (WHA) AT THE END OF ALL PIPING RUNS.
- 10 PROVIDE AND INSTALL DISHWASHER IN THIS LOCATION. CONNECT WATER PIPING TO UNIT PER MANUFACTURER'S SPECIFICATIONS.
- 11 ROUTE HOT WATER RETURN PIPING TO MECHANICAL ROOM. PROVIDE AND INSTALL ACCESSIBLE BALL VALVES TO EQUALLY BALANCE THE FLOW BETWEEN THE DIFFERENT AREAS. LABEL VALVES CLEARLY TO INDICATE THEIR PURPOSE.
- 12 ROUTE SLEEVED MEDIUM PRESSURE GAS PIPING UP FROM BELOW GRADE AND CONNECT TO VENTED PRESSURE REDUCING VALVE. ROUTE LOW PRESSURE GAS PIPING THRU WALL AND INTO MECHANICAL ROOM. PROVIDE SHUT-OFF VALVE WITHIN MECHANICAL ROOM IN ACCESSIBLE LOCATION. AVOID FIRE PROTECTION EQUIPMENT AND PIPING LOCATED WITHIN THE CORNER OF THE MECHANICAL ROOM.
- 13 ROUTE AND CONNECT NEW GAS PIPING TO EACH GAS BURNING UNIT. PROVIDE AND INSTALL FLEX CONNECTION, UNION, AND GAS COCK AT EACH UNIT. PAINT ALL EXPOSED GAS PIPING PER ARCHITECT'S SPECIFICATIONS. TYPICAL AT ALL GAS BURNING UNITS.
- 14 ROUTE NEW LOW PRESSURE GAS PIPING WITHIN WALL AND CONNECT TO BAR-B-Q UNIT PROVIDED BY OWNER. PROVIDE AND INSTALL FLEX CONNECT, UNION, AND GAS COCK AT UNIT. PAINT ALL EXPOSED GAS PIPING PER ARCHITECT'S SPECIFICATIONS.
- 15 ROUTE LOW PRESSURE GAS PIPING WITHIN SPACE ABOVE CEILING. SUSPEND FROM JOIST STRUCTURE.
- 16 ROUTE LOW PRESSURE GAS PIPING EXPOSED NEAR CEILING LEVEL. SUSPEND FROM JOIST STRUCTURE. PAINT ALL EXPOSED GAS PIPING PER ARCHITECT'S SPECIFICATIONS.
- 17 ROUTE INSULATED COLD WATER PIPING BELOW GRADE BETWEEN OPER. STOR. 117 AND HOSE REEL (HR) LOCATION WITHIN APPARATUS BAY 110.
- 18 ROUTE INSULATED COLD WATER PIPING UP FROM BELOW GRADE AND CONNECT TO HR PER MANUFACTURER'S SPECIFICATIONS.



PLUMBING FLOOR PLAN

SCALE: 1/8"=1'-0" WATER & GAS PIPING

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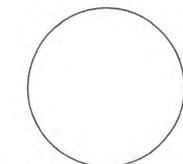
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PLUMBING FLOOR PLAN

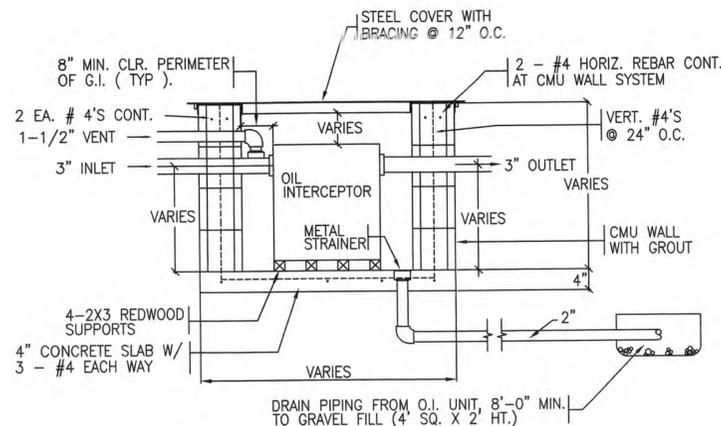
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GENERAL PLUMBING NOTES

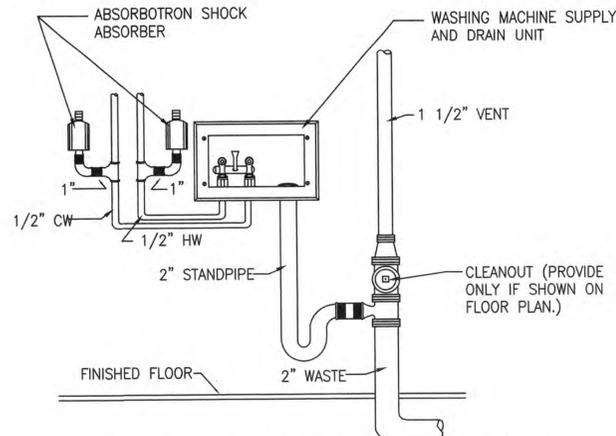
- COMPLETE ALL WORK IN FULL COMPLIANCE WITH THE UPC, UMC, NFPA, ADA, SBC, LIFE SAFETY CODE, AND ALL LOCAL CODES AND ORDINANCES. WHERE EVER THERE IS A DISCREPANCY BETWEEN DRAWINGS AND CODE REQUIREMENTS, THE MORE STRINGENT CONDITIONAL SHALL APPLY.
- ROUTE PIPING AS NEAR AS POSSIBLE TO LAYOUT INDICATED ON DRAWINGS, BUT MAKE MINOR CHANGES IN ROUTING TO ACCOMMODATE SITE CONDITIONS. DO NOT UNDERTAKE MAJOR REROUTING OF PIPING WITHOUT WRITTEN APPROVAL FROM THE ARCHITECT OR ENGINEER. CONTRACTOR IS RESPONSIBLE FOR ALL PIPING, ASSOCIATED FITTINGS, OFFSETS, REQUIRED TRANSITIONS, AND ASSOCIATED EQUIPMENT TO INSTALL A COMPLETE AND OPERATIONAL PLUMBING SYSTEM.
- CONTRACTOR IS RESPONSIBLE FOR COMPLETE LAYOUT AND INSTALLATION OF PLUMBING SYSTEMS INCLUDING ALL COORDINATION OF NEW AND EXISTING SERVICES, MECHANICAL AND ELECTRICAL EQUIPMENT, AND ANY OTHER EQUIPMENT THAT MAY REQUIRE COORDINATION EFFORTS. CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF ALL TEMPORARY UTILITY SHUT-OFF WITH OWNER ALL NECESSARY TRENCHING, BACKFILLING, CUTTING, PATCHING, REPAIRING, ETC. ASSOCIATED WITH THE INSTALLATION OF THE PLUMBING SYSTEMS INDICATED ON THE CONSTRUCTION DOCUMENTS. PROVIDE 48 HOUR NOTICE TO OWNER OF ANY UTILITY SHUT-OFFS.
- ALL CONTRACTORS ARE CAUTIONED TO VISIT THE SITE TO EVALUATE EXISTING CONDITIONS PRIOR TO SUBMITTING THEIR BIDS. NO SUBSEQUENT ALLOWANCE WILL BE MADE TO COMPENSATE FOR LACK OF PRE-BID INSPECTIONS BY THE SUCCESSFUL CONTRACTOR.
- VERIFY SEWER PIPING INVERTS PRIOR TO ROUTING ANY PIPING AND TOTALLY FAMILIARIZE SELF WITH ALL CONSTRAINTS AND LIMITATIONS OF WORK REQUIRED. NO COMPENSATION WILL BE MADE FOR CONTRACTOR'S FAILURE TO COORDINATE WORK WITH GENERAL CONTRACTOR AND ARCHITECT.
- WASTE PIPING SHALL BE SCHEDULE 40 PVC DWV WITH ASTM STANDARD D256480 SOLANT CEMENT JOINT CONNECTIONS. VENT PIPING SHALL BE SCHEDULE 40 PVC DWV ABOVE AND BELOW THE FLOOR AND BURIED BEYOND THE BUILDING.
- WATER PIPING SHALL BE TYPE L COPPER ABOVE FLOOR AND TYPE K COPPER BELOW FLOOR. ALL JOINTS SHALL BE MADE WITH 95/5 TIN/ANTIMONY OR SILVER SOLDER. NO LEAD SOLDER ALLOWED.
- INSULATE ALL WATER PIPING IN ACCORDANCE WITH NEW MODEL ENERGY CODE REQUIREMENTS AND WHERE INDICATED ON THE DRAWING(S).
- BURY UTILITY PIPING AT MINIMUM DEPTH INDICATED:

WATER PIPING	48 IN.
SEWER PIPING	24 IN.
GAS PIPING	24 IN.
- PROVIDE AND INSTALL GAS COCKS, UNIONS, AND FLEXIBLE CONNECTIONS AT ALL GAS BURNING EQUIPMENT AND APPLIANCES.
- NATURAL GAS PIPING SHALL BE SCHEDULE 40 BLACK STEEL ABOVE GRADE AND SCHEDULE 40 BLACK STEEL WRAPPED WITH SCOTCHWRAP OR POLYETHYLENE PIPING WHEN BELOW GRADE. PAINT ALL EXPOSED PIPING TO MATCH SURROUNDING CONDITIONS.
- PROVIDE MINIMUM QUANTITY OF SUBMITTAL CUTSHEETS INDICATED WITHIN PROJECT MANUAL CONCERNING FIXTURES INDICATED ON PLUMBING FIXTURE SCHEDULE FOR ENGINEER'S REVIEW AND APPROVAL PRIOR TO ORDERING ANY FIXTURES.



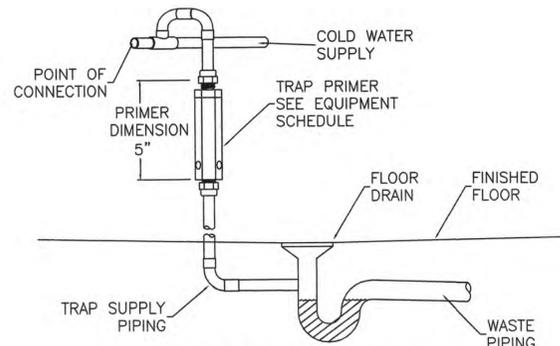
OIL INTERCEPTOR DETAIL

SCALE: NONE



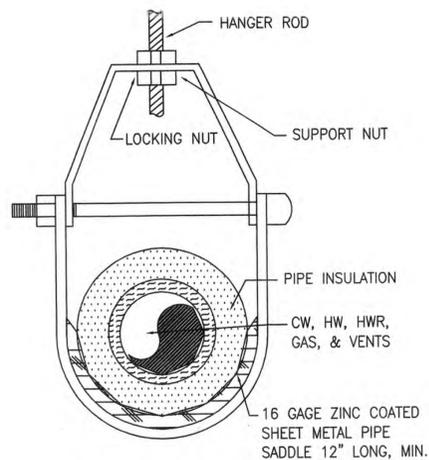
WASHER BOX CONNECTION DETAIL

SCALE: NONE



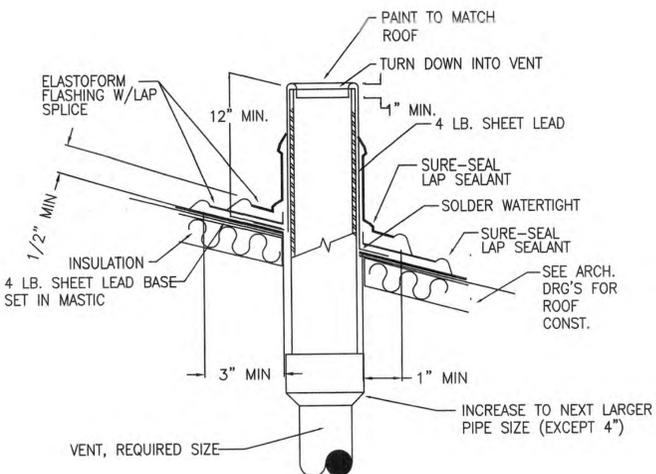
TRAP PRIMER DETAIL

SCALE: NONE



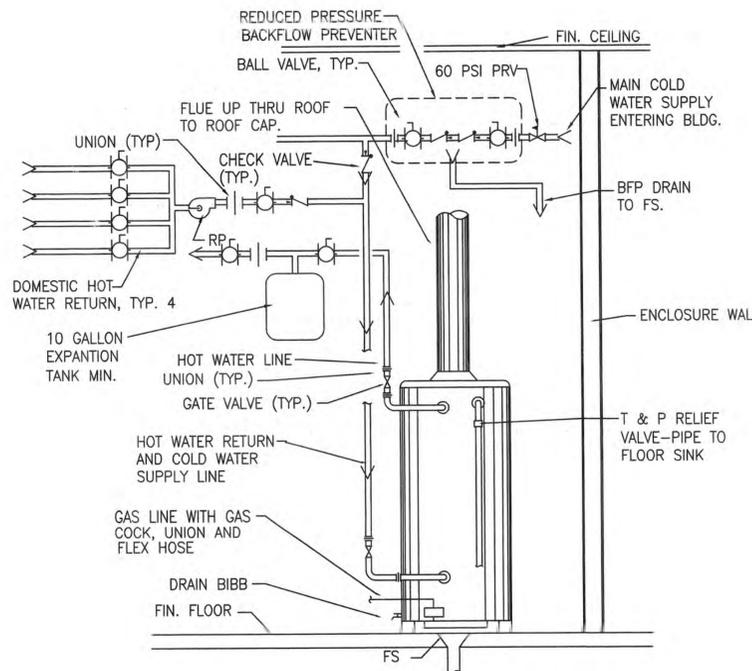
PIPING HANGER DETAIL

SCALE: NONE



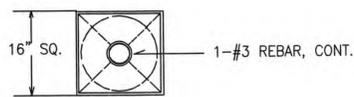
VENT THRU ROOF DETAIL

SCALE: NONE



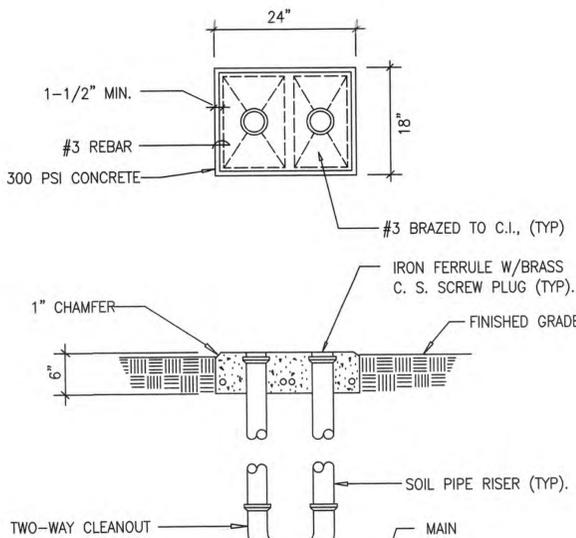
WATER HEATER DETAIL

SCALE: NONE



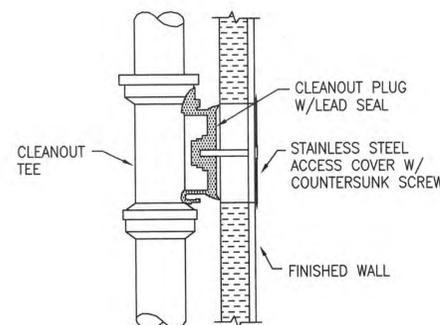
CLEANOUT TO GRADE DETAIL

SCALE: NONE



DOUBLE CLEANOUT TO GRADE DETAIL

SCALE: NONE



WALL CLEANOUT DETAIL

SCALE: NONE

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PLUMBING DETAILS & NOTES

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PLUMBING FIXTURE SCHEDULE, CONT.

SYM	DESCRIPTION
TD	TRENCH DRAIN: "ZURN" MODEL Z-812. 12 IN. WIDE X 10 FT. LONG PRE-SLOPED TRENCH DRAIN SYSTEM WITH RADIUS BOTTOM, SMOOTH FIBERGLASS INTERIOR, STANDARD STEEL ANGLE FRAME WITH ANCHOR STUDS, INTERLOCKING JOINT CONNECTION, TIE STRAPS, HEAVY DUTY DRAIN GRATE, END CAPS, CENTER DRAIN OUTLETS, AND ALL ACCESSORIES NECESSARY FOR COMPLETE AND PROPER INSTALLATION AND OPERATION. FINISH SELECTED BY ARCHITECT. WASTE = 3 IN.; VENT = 1-1/2 IN.
ST	SEPTIC TANK: "LECO INDUSTRIES, INC." (505) 382-0501 PHONE. PREFABRICATED COMMERCIAL 3200 GALLON STORAGE CAPACITY SEPTIC TANK CONSTRUCTED OF TYPE V, 3500 PSI CONCRETE, #4 REBAR ON 1 FOOT CENTERS IN ROOF, CAST IRON MANHOLE COVERS, GRADE RINGS, BAFFLES, INLET AND OUTLET CONNECTIONS, BY-PASS PVC, AND ALL ACCESSORIES NECESSARY FOR COMPLETE AND PROPER INSTALLATION AND OPERATION PER CURRENT UPC REQUIREMENTS.
I	INFILTRATOR: "INFILTRATOR SYSTEMS, INC - DAHL" HIGH CAPACITY INFILTRATOR CHAMBERS, END PLATES, PVC PIPE AND COUPLINGS, 4 IN. INSPECTION PORT CAPS, AND ALL ACCESSORIES NECESSARY FOR COMPLETE AND PROPER INSTALLATION AND OPERATION.
WCO	WALL CLEANOUT: "ZURN" MODEL Z-1468. BRASS PLUG WITH ROUND STAINLESS STEEL SECURED ACCESS COVER. WASTE AS REQUIRED.
CO	EXTERIOR CLEANOUT: PVC OR ABS FEMALE ADAPTER WITH CLEANOUT PLUG. LOCATE 2 IN. BELOW GRADE.
CO	INTERIOR FLOOR CLEANOUT: "ZURN" MODEL Z-1400. CAST IRON CLEANOUT WITH THREADED ADJUSTABLE HOUSING, SV HUB OUTLET, FLANGED FERRULE WITH PLUG AND ROUND SCORRIATED CAST IRON, SATIN BRONZE TRACTOR TOP.
HR	HOSE REEL: "HANNAY" MODEL 1500 SERIES. COMPRESSED AIR POWER REWIND REEL, WITH CHAIN AND SPROCKET DRIVE, BRAKES AND LOCKS, 1/2 IN. FEMALE NPT THREADS INLET AND OUTLET, 90 DEG BALL BEARING SWIVEL JOINT ON INLET, 3000 PSI OPERATING PRESSURE, 20 DEG F TO 400 DEG F TEMPERATURE RANGE, FLEXIBLE CONNECTOR, WALL MOUNTING HARDWARE, 150 FOOT PRESSURE WASHING HOSE WITH 3/8 IN. INSIDE DIAMETER AND 3/4 IN. OUTSIDE DIAMETER, HOSE STOPPER, COMPRESSED AIR MOTOR, COMPRESSED AIR CONTROL VALVE AND HOSE, VARIABLE SPEED CONTROLLER MODEL MD-1225SR WITH PUSH-BUTTON SWITCH MANUAL RESET CIRCUIT BREAKER, RELAY, AND 10 GAUGE WIRE, HIGH PRESSURE SPRAY-ALLS NOZZLE "LAFFERTY EQUIPMENT MFG., INC." MODEL W20SS WITH 4.8 GPM @ 1000 PSI, #2520 NOZZLE SIZE, AND 3/8 IN. HOSE SIZE, MOUNTING HARDWARE, AND ALL ACCESSORIES NECESSARY FOR COMPLETE AND PROPER INSTALLATION AND OPERATION. COORDINATE HOSE COLOR SELECTION WITH ARCHITECT AND COORDINATE SPRAY NOZZLE METERING TIP SELECTION WITH MANUFACTURE. CW = 1 IN. SUPPLY LINE.
HB	HOSE BIBB: "SMITH" MODEL 5609QT. FROSTPROOF WALL HYDRANT WITH BRONZE CONSTRUCTION AND CHROME PLATED FACE, KEY OPERATION, INTERGRAL VACUUM BREAKER, 3/4 IN. INLET AND HOSE CONNECTION, AND ALL ACCESSORIES NECESSARY FOR COMPLETE AND PROPER INSTALLATION AND OPERATION. CONFIRM WALL THICKNESS PRIOR TO ORDERING. CW = 3/4 IN.
BFP	BACKFLOW PREVENTER: "WATTS" MODEL 009QT. A.S.S.E. NO. 1013 AND CSA B 64.4 COMPLIANCE -REDUCED PRESSURE DUAL CHECK VALVE BACKFLOW PREVENTER WITH BRONZE BODY CONSTRUCTION AND STAINLESS STEEL INTERNAL PARTS. PROVIDE ALL ACCESSORIES NECESSARY FOR COMPLETE INSTALLATION AND OPERATION. SIZE: 2 IN.
PRV	PRESSURE REDUCING VALVE: "WATTS" MODEL 223. A.S.S.E. NO. 1003 AND CSA B356 COMPLIANCE - PRESSURE REDUCING VALVE WITH BRONZE BODY CONSTRUCTION, RENEWABLE STAINLESS STEEL SEAT, STAINLESS STEEL INTEGRAL STRAINER SCREEN, REINFORCES DIAPHRAGM, BUNA 'N' VALVE DISC, AND ALL ACCESSORIES NECESSARY FOR COMPLETE INSTALLATION AND OPERATION. SIZE: 2 IN.
TP	TRAP PRIMER: "ZURN" MODEL Z-1022. AUTOMATIC TRAP PRIMER, ALL BRONZE BODY WITH INTEGRAL VACUUM BREAKER, NON-LIMITING INTERNAL OPERATING ASSEMBLY WITH GASKETED BRONZE COVER.
WHA	WATER HAMMER ARRESTER: "ZURN" 1700 SERIES. SIZE FOR THE PIPE LENGTH AND PIPE SIZE AS INDICATED ON THE DRAWINGS. LOCATE AT THE END OF THE PIPING RUN.
WB	WASHER BOX: "GUY GREY" MODEL T200. PACKAGED WASHER BOX WITH 2 IN. CENTERED DRAIN, SHUT-OFF VALVES, WHITE POWDER COATED ON COLD ROLLED STEEL CONSTRUCTION, AND ALL ACCESSORIES NECESSARY FOR COMPLETE INSTALLATION AND OPERATION. WASTE = 2 IN.; VENT = 1-1/2 IN.; HW = CW = 1/2 IN.

PLUMBING FIXTURE SCHEDULE, CONT.

SYM	DESCRIPTION
P-7	SHOWER: "FLORESTONE" MODEL 36-3W. ONE PIECE, FIBERGLASS SHOWER WITH CLASS C FLAME RETARDANCE, SLIP-RESISTANT FLOOR, FLOOR DRAIN, SHOWER HEAD: "RELIANT" MODEL 1495.571, SINGLE LEVER PRESSURE BALANCE VALVE WITH TEMPERING DEVICE, MOUNTING PLATES, VACUUM BREAKER, STOPS, SHOWER DOOR WITH CONTINUOUS HINGE, AND ALL ACCESSORIES NECESSARY FOR COMPLETE AND PROPER INSTALLATION AND OPERATION. COORDINATE FINISHES WITH ARCHITECT. MOUNT SHOWER HEAD MINIMUM 6'-8" OFF FINISHED FLOOR. WASTE = 2 IN., VENT = 1-1/2 IN., CW = HW = 1/2 IN.
P-8	SERVICE SINK: "FIAT" MODEL TSB-100. PRE-CAST, ONE PIECE, TERRAZZO MOP SERVICE SINK, 24 IN. X 24 IN. 12 IN. DEEP, 2 IN. THICK MINIMUM SHOULDERS, 3 IN. DRAIN CONNECTION, "CHICAGO FAUCET" MODEL 540 SERVICE SINK FITTING WITH EXPOSED VALVES, WRIST BLADE HANDLES, RIGID SPOUT, VACUUM BREAKER, WALL BRACE, PAIL HOOK, 3/4 IN. HOSE THREAD, 12 IN. HIGH STAINLESS STEEL WALL GUARD, MOP HANGER CAPABLE OF HOLDING 2 MOPS AND 2 BROOMS, STAINLESS STEEL PROTECTOR FOR SINK RIM, AND ALL ACCESSORIES NECESSARY FOR COMPLETE AND PROPER INSTALLATION AND OPERATION. WASTE = 3 IN., VENT = 1-1/2 IN., CW = HW = 3/4 IN.
P-9	SERVICE SINK: "ELKAY" WELDBILT MODEL WNSFB8124. SINGLE COMPARTMENT, TYPE 304 STAINLESS STEEL, 14 GAUGE, 1/4 IN. RADIUS COVED CORNERS, CHANNEL RIM, 8 IN. HIGH FULL LENGTH BACKSPLASH, 14 IN. DEEP, (4) STAINLESS STEEL TUBULAR LEGS, DRAIN STOP, WALL STOPS, FAUCET: "ELKAY" LK393 WITH 4 IN. WRIST BLADE HANDLES, 8 IN. CENTERS, 9 IN. SWING GOOSENECK SPOUT WITH VANDAL-RESISTANT ANTI-HOSE AERATOR, AND ALL ACCESSORIES NECESSARY FOR COMPLETE AND PROPER INSTALLATION AND OPERATION. WASTE = 2 IN., VENT = 1-1/2 IN., CW = HW = 3/4 IN.
WH	WATER HEATER: "A.O. SMITH" MODEL BT-100. LP GAS FIRED WATER HEATER, 100 GALLON, 75 MBH INPUT, 85 GPH @ 80 DEG. F. TEMPERATURE RISE AT 7000 FEET A.S.L., GLASS LINED INTERNAL TANK WITH FOAM INSULATION, FULLY AUTOMATIC CONTROLS WITH SAFETY SHUTOFF, DRAFT DIVERTER, 150 PSI MAX. WORKING PRESSURE, HANDHOLE CLEANOUT, PROPANE CONVERSION KIT, BUILT-IN GAS FILTER AND INTEGRAL DIRT LEG, ASME RATED PRESSURE AND TEMPERATURE RELIEF VALVE, AND ALL ACCESSORIES NECESSARY FOR COMPLETE AND PROPER INSTALLATION AND OPERATION. GAS CONNECTION = 1/2 IN., CW = HW = 1-1/4 IN.
RP	RECIRCULATING PUMP: "TACO" MODEL 006-B3. DOMESTIC HOT WATER RECIRCULATING PUMP WITH ALL BRONZE BODY CONSTRUCTION, SEVEN DAY PROGRAMABLE TIMECLOCK WITH "HAND/OFF/AUTO" SWITCH FOR AUTOMATIC CONTROL, AND ALL ACCESSORIES NECESSARY FOR COMPLETE AND PROPER INSTALLATION AND OPERATION. ELEC: 115V/1PH/60HZ, 1/40 HP.
OI	OIL INTERCEPTOR: "WADE" MODEL 5400-35. FABRICATED STEEL OIL INTERCEPTOR WITH ACID RESISTING BASE COATING, REMOVABLE BAFFLES, ANTI-SKID GASKETED COVER, THREADED INLET AND OUTLET, AND 35 GPM FLOW RATE CAPACITY. PROVIDE 50 GALLON STORAGE CAPACITY COMPARTMENT, FLOW CONTROL FITTINGS, VENT CONNECTIONS, AND ALL ACCESSORIES NECESSARY FOR COMPLETE AND PROPER INSTALLATION AND OPERATION TO MEET CURRENT UPC REQUIREMENTS. VENT PER MANUFACTURER'S RECOMMENDATIONS. WASTE = 3 IN., VENT = 2 IN.
SI	SAND INTERCEPTOR: "WADE" MODEL 5900-12. FABRICATED STEEL SAND INTERCEPTOR, 365 GALLON CAPACITY, AND ALL ACCESSORIES NECESSARY FOR COMPLETE AND PROPER INSTALLATION AND OPERATION. VENT PER MANUFACTURER'S RECOMMENDATIONS. 1650 SHIPPING WEIGHT. WASTE = 4 IN., VENT = 2 IN.
BWV	BACKWATER VALVE: "ZURN" MODEL BW2930. PVC CONSTRUCTION BACKWATER VALVE WITH THREADED ACCESS COVER, FLAPPER NORMALLY CLOSED, 3 IN. SOLVENT WELD FITTINGS, VALVE CONTAINMENT WITH HEAVY DUTY ACCESSIBLE LID, AND ALL ACCESSORIES NECESSARY FOR COMPLETE INSTALLATION AND OPERATION.
FD	FLOOR DRAIN: "ZURN" MODEL Z415B. COATED CAST IRON FLOOR DRAIN WITH BOTTOM OUTLET, MEMBRANE CLAMP, ADJUSTABLE COLLAR, POLISHED NICKEL BRONZE STRAINER, TRAP PRIMER CONNECTION, AND ALL ACCESSORIES NECESSARY FOR COMPLETE AND PROPER INSTALLATION AND OPERATION. WASTE = 2 IN.; VENT = 1-1/2 IN.
FD1	FLOOR DRAIN: "ZURN" MODEL Z541. HEAVY DUTY FLOOR DRAIN WITH BOTTOM OUTLET, SEEPAGE PAN, COMBINATION MEMBRANE FLASHING CLAMP AND FRAME, ANTI-TILT HEAVY DUTY 12 IN. DIAMETER TRACTOR GRATE WITH POLISHED NICKEL BRONZE FINISH, SUSPENDED SEDIMENT BUCKET, TRAP PRIMER CONNECTION, STAINLESS MESH LINER FOR BUCKET, AND ALL ACCESSORIES NECESSARY FOR COMPLETE AND PROPER INSTALLATION AND OPERATION. WASTE = 2 IN.; VENT = 1-1/2 IN.
FS	FLOOR SINK: "ZURN" MODEL Z-1901. CAST IRON BODY FLOOR SINK WITH 12 IN. X 12 IN. SLOTTED MEDIUM DUTY HALF-GRATE, 8 IN. SUMP, WHITE ACID RESISTING PORCELAIN ENAMEL INTERIOR AND TOP, ALUMINUM ANTI-SPLASH INTERIOR BOTTOM DOME STRAINER, NEOPRENE FLEX GASKETS, AND ALL ACCESSORIES NECESSARY FOR COMPLETE INSTALLATION AND OPERATION. WASTE = 3 IN.; VENT = 1-1/2 IN.

PLUMBING FIXTURE SCHEDULE

SYM	DESCRIPTION
P-1	HANDICAP WATER CLOSET: "AMERICAN STANDARD" MADERA MODEL 2305.100. FLUSH VALVE TYPE WATER CLOSET WITH WATER SAVING, 1.6 GPF, VITREOUS CHINA, DIRECT-FED SIPHON JET ACTION, ELONGATED FRONT BOWL, 1-1/2 IN. TOP SPUD CONNECTION, BOLT CAPS, PLASTIC OPEN FRONT SEAT, VACUUM BREAKER, FLUSH VALVE: "ZURN" MODEL ZR6000AV - BATTERY-POWERED SENSOR FLUSH VALVE FOR A.D.A. COMPLIANCE, AND ALL ACCESSORIES NECESSARY FOR COMPLETE AND PROPER INSTALLATION AND OPERATION. MOUNT AND INSTALL TO MEET A.D.A. REQUIREMENTS. WASTE = 3 IN., VENT = 2 IN., CW = 1 IN.
P-2	WATER CLOSET: "AMERICAN STANDARD" MADERA MODEL 2234.015. FLUSH VALVE TYPE WATER CLOSET WITH WATER SAVING, 1.6 GPF, VITREOUS CHINA, DIRECT-FED SIPHON JET ACTION, ELONGATED FRONT BOWL, 1-1/2 IN. TOP SPUD CONNECTION, BOLT CAPS, PLASTIC OPEN FRONT SEAT, VACUUM BREAKER, FLUSH VALVE: "ZURN" MODEL ZR6000AV - BATTERY-POWERED SENSOR FLUSH VALVE, AND ALL ACCESSORIES NECESSARY FOR COMPLETE AND PROPER INSTALLATION AND OPERATION. WASTE = 3 IN., VENT = 2 IN., CW = 1 IN.
P-3	HANDICAP URINAL: "AMERICAN STANDARD" WASHBROOK MODEL 6501.010. WALL MOUNTED TYPE URINAL WITH WATER SAVING 1.0 GPF, VITREOUS CHINA, WASHOUT FLUSH ACTION, 3/4 IN. TOP SPUD INLET, 2 IN. OUTLET, EXTENDED SIDES, WALL MOUNTING HARDWARE, REMOVABLE BEEHIVE STRAINER, FLUSH VALVE: "ZURN" MODEL ZR6003AV - BATTERY-POWERED SENSOR FLUSH VALVE FOR A.D.A. COMPLIANCE, AND ALL ACCESSORIES NECESSARY FOR COMPLETE AND PROPER INSTALLATION AND OPERATION. MOUNT AND INSTALL TO MEET A.D.A. REQUIREMENTS. WASTE = 2 IN., VENT = 1-1/2 IN., CW = 3/4 IN.
P-4	HANDICAP LAVATORY: "AMERICAN STANDARD" AQUALYN MODEL 0476.028. COUNTERTOP LAVATORY WITH FRONT OVERFLOW, SELF-RIMMING, VITREOUS CHINA, 4 IN. FAUCET CENTERS, FAUCET: "RELIANT" MODEL 2385.439 WITH ONE PEICE METAL POP-UP DRAIN, WALL STOPS, INSULATED P-TRAP, AND ALL ACCESSORIES NECESSARY FOR COMPLETE INSTALLATION AND OPERATION. WASTE = 2 IN., VENT = 1-1/2 IN., CW = HW = 1/2 IN.
P-5	WATER CLOSET: "AMERICAN STANDARD" CADET MODEL 2333.100. TANK TYPE WATER CLOSET WITH TWO-PIECE CONSTRUCTION, WATER-SAVING, 1.6 GPF, VITREOUS CHINA, ELONGATED BOWL, CLOSE-COUPLED FLUSHMETER TANK WITH PRESSURE-ASSISTED SIPHON JET FLUSH ACTION, SIDE-MOUNTED CHROME TRIP LEVER, VACUUM BREAKER, PLASTIC CLOSED FRONT SEAT & COVER, BOLT CAPS, ANGLE STOP, AND ALL ACCESSORIES NECESSARY FOR COMPLETE AND PROPER INSTALLATION AND OPERATION. WASTE = 3 IN., VENT = 2 IN., CW = 3/4 IN.
P-6	KITCHEN SINK: "ELKAY" MODEL LR3322. TYPE 304 STAINLESS STEEL, TWO COMPARTMENT, KITCHEN SINK WITH 1-3/4 IN. RADIUS COVED CORNERS, HEAVY DUTY SOUND GUARD UNDERCOATING, 8 IN. DEPTH, FOUR HOLE CONFIGURATION, FAUCET: "ELKAY" MODEL LK4100 SINGLE LEVER HANDLE WITH SPRAY NOZZLE, AERATOR, 8 IN. TUBULAR SWING-SPOUT, DRAIN STOPPERS, WALL STOPS, AND ALL ACCESSORIES NECESSARY FOR COMPLETE AND PROPER INSTALLATION AND OPERATION. WASTE = 2 IN., VENT = 1-1/2 IN., CW = HW = 1/2 IN.



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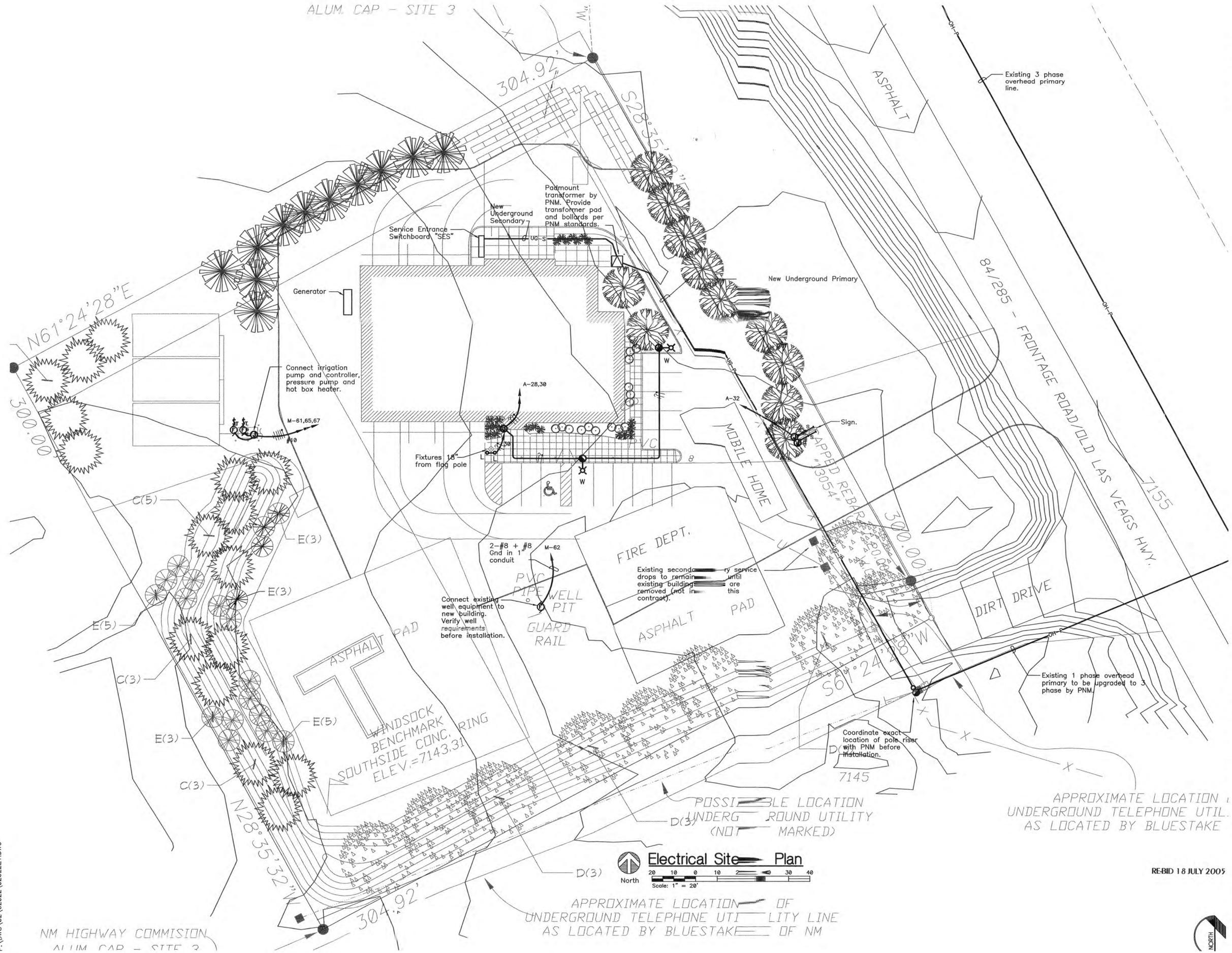
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PLUMBING FIXTURE SCHEDULE

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ALUM. CAP - SITE 3



General Notes

1. Refer to drawing C1.1 for location of pump room. Provide panel P to feed the irrigation pump and Jockey Pump located at the pump room. Provide two keyless porcelain fixtures with 60 watt lamps and wireguards and a switch at the entrance to the pump room. Provide one GFI receptacle in the pump room. Connect electric heater.
2. Exterior lighting design was provided by others. DeLapp Engineering disclaims any responsibility for exterior lighting compliance with energy codes, outdoor lighting ordinances and common engineering practices including Illuminating Engineering Society recommended practices.

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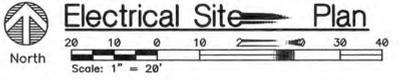
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Electrical
 Site Plan
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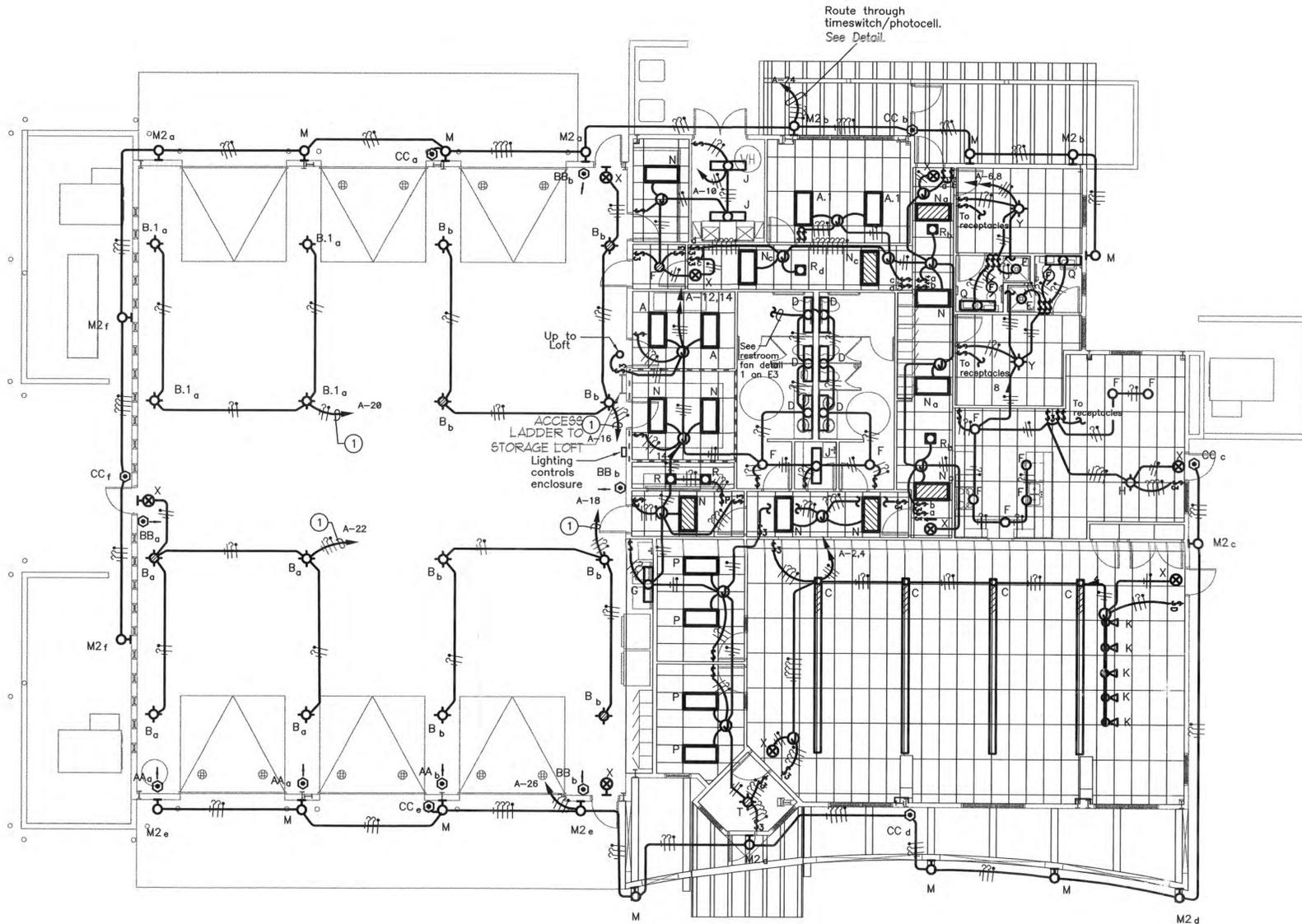
Electrical Site Plan

APPROXIMATE LOCATION OF UNDERGROUND TELEPHONE UTILITY LINE AS LOCATED BY BLUESTAKE OF NM

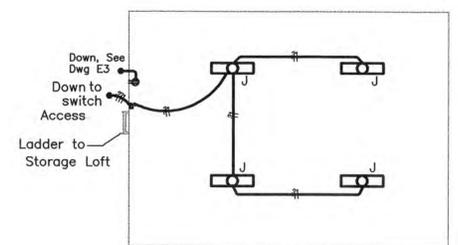
APPROXIMATE LOCATION OF UNDERGROUND TELEPHONE UTILITY AS LOCATED BY BLUESTAKE

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NM HIGHWAY COMMISSION
 ALUM. CAP - SITE 3



Electrical Lighting Plan
 North
 Scale: 1/8" = 1'-0"



Electrical Lighting Plan - Loft

Fixture Schedule

Type	Lamps	VA	WATTS	Mounting	Description
A	3-FO32/835	119	91	Lay-in	2x4 lay-in fluorescent, low harmonic electronic ballast. Lithonia # 2GT8 332 A12125 120 GEB10IS or Metalux # 2G 332A125 120 EB81
A.1	3-FO32/835	119	91	Lay-in	2x4 lay-in fluorescent, low harmonic electronic ballast. Two ballast, dual switched. Lithonia # 2GT8 332 A12125 120 GEB10IS or Metalux # 2G 332A125 120 EB812
B	8-CFTR/42W/GX24Q/835	384	376	Pendant 14' AFF to bottom of fixture	Compact fluorescent prismatic high-bay, damp location listed. Spero # FX842 35 120V 2SL PA22. Emergency fixtures shall be provided with 3500 lumen battery backup ballasts for remote mounting. Spero #EM3500. Install indicator light and test switch (furnished with ballast) in a readily accessible location.
B.1	8-CFTR/42W/GX24Q/835	384	376	Pendant 14' AFF to bottom of fixture	Compact fluorescent prismatic high-bay, damp location listed, with bottom lens. Spero # FX842 35 120V 2SL PA22 4GL-PA22
C	2-FO32/835 per 4' length	78	77	Cable at 9'	Suspended direct/indirect 30% up, 70% down light. semi-specular blade louvre, emergency battery pack. Corelite # NBLM2T81B120V AC24 T120'
D	2-FO32/835	78	77	Surface, wall mtd above mirror	2 Lamp fluorescent wall bracket, low harmonic electronic ballast. Metalux #B1-232-120-TEB81 or Lithonia #WP 2.32 DO 120 GEB10
E	1-CFQ18W/G24q/835	19	19	Recessed	7" lens downlight, wet location. Cooper Lighting Portfolio # C7118 E 7280LI 3 TRM7P 120V
F	2-CFQ18W/G24q/835	47	44	Recessed	7" open reflector downlight, clear Alzak, electronic ballast Portfolio # C7218 1E 7251LI 120V
G	1-F13T5	26	20	Surface under cabinet	21" Undercabinet fluorescent, solid front, prismatic lens, rocker switch. Alkco # SFHP113-RSW 120V, Metalux SFCL-113T5-EB-120-SW
H	4-CFQ26W/G24q-835	108	108	Pendant	Pendant compact fluorescent fixture. 34" Diameter. Shaper Lighting # 494-S-34-CFL4/26-120V-SN
J	2-FO32/835	75	73	Surface	2 lamp strip with wire guard, low harmonic electronic ballast. Lithonia # C232 120 GEB10 or Metalux # SS232 120V EB81
K	1-50PAR20/CAP/FL	50	50	Track	Track fixture. Halo L1702 with L281 perforated shade and track as indicated. 120V
L	1-39W PAR20 Spot MH	102	94	Flush ground mounted	In-grade flush mounted fixture for flag lighting. Cooper Lighting Lumiere # 6002A MH39PAR20SP 120V NBR
M	1-39W MH	67	63	Surface, Wall Mounted	39W MH wall mtd, full cut-off. UL wet label. Cooper Lighting Invue #ENC-39MH-120V-EB-3S-DP
M2	1-39W MH & 1-100W Quartz Halogen	100	100	Surface, Wall Mounted	39W MH wall mtd, full cut-off, with Quartz Halogen lamp on separate circuit. UL wet label. Cooper Lighting Invue #ENC-39MH-120V-EB-3S-DP-MOD.
N	2-FO32/835	78	77	Lay-in	2x4 lay-in fluorescent, low harmonic electronic ballast. Lithonia # 2GT8 232 A12125 120 GEB10IS or Metalux # 2G 232A125 120 EB81
P	3-FO32/835	119	91	Lay-in	2x4 lay-in fluorescent, parabolic louver, low harmonic electronic ballast. Lithonia # 2PM3GB 3 32 18LS 120 GEB10 or Metalux # 2EP3GX 3 32 S 36 I 120V EB81
Q	2-FO32/835	78	77	Surface, wall mtd above mirror	2 Lamp fluorescent wall bracket, low harmonic electronic ballast. Shaper # 605-49'-T8/2/32-120V-SN-2VTB/PE
R	1-CFT13W/GX23/835	32	16	Recessed	Recessed compact fluorescent fixture. Halo # 221-24T. 120V.
S	1-32W Fluor.	33	32	Surface	Fluorescent fixture, low temperature 0 F ballast, wet location label. Hubbell Lighting # AFF-32E-WL-120V
T	1-CFQ26W/G24q-835	29	29	Pendant mtd at 9' AFF	Pendant Cylinder. Shaper Lighting # 461-A-CF1/26-120V-MW
V	1-35W MH	108	56	Concrete pedestal	Metal halide bollard. US Architectural Lighting # BRC12-CL-35-MH-120V-WTM
W	MH250/U	305	295	Pole	LUMARK PFH1253M209 Lamp: MH250/U 20-foot pole and area light.
X	LED	50	2.5	Surface	Red led exit fixture, polycarbonate housing, self-powered, one or two face as indicated on drawings. Lithonia # LQM S W (1/2) R 120/277 ELN or SureLites #CCX-7x-RWH 120/277
Y	2-CFQ26W/G24q-835	60	60	Surface	Surface mount compact fluorescent fixture with luminous double ring, 16" diameter. Shaper Lighting # 493-16-CF2/26-120V-SN

Occupancy Sensors

Type	Mounting	Description
AA	Wall +30' AFF	Multi-Tech Wall-Mount Occupancy Sensor with Ambient Light Override and Secondary Relay. 120 ft 14 ft wide coverage @ 30 ft height. Leviton # ODWHB-IRW
BB	Wall +8' AFF	Multi-Tech Wall-Mount Occupancy Sensor with Ambient Light Override and Secondary Relay. 110 degree coverage, 1200 sq. ft. Leviton #ODW12-MRW
CC	Wall +10' AFG	Professional Series Outdoor PIR Motion Sensor. 200 degree coverage. Ratings - Incandescent: 1000W @ 120V; Fluorescent/Inductive: 500VA @ 120V. Leviton # PS200-10

- General Notes**
1. Provide minimum #12 copper conductors in 1/2" conduit unless otherwise noted.
 2. Provide minimum #10 neutral conductors for multi-wire branch circuits serving receptacles and other non-linear loads.
 3. Provide minimum #10 conductors for all 120V circuits over 100 foot length.
 4. All conductors shall be copper.
 5. See architectural elevations for exterior fixture mounting heights.

- Keyed Notes**
1. Route through lighting controls. Lighting controls shall consist of three Leviton Power Packs # ODP20-010, and one Leviton Add-A-Relay # ODA00-000 installed in a Nema 1 screw cover cabinet. All occupancy sensors shall be wired to the control cabinet with low voltage cable in conduit. Lighting control zone 'a' (with three sensors) requires one Power Pack and one Add-A-Relay, wired per manufacturer's wiring diagram. Lighting control zone 'b' requires two Power Packs. On this zone, connect the blue sensor wires together and connect the common (black) sensor wires so that both power packs will switch together. Each power pack will provide 24Vdc power (red wire) to two of the four sensors.

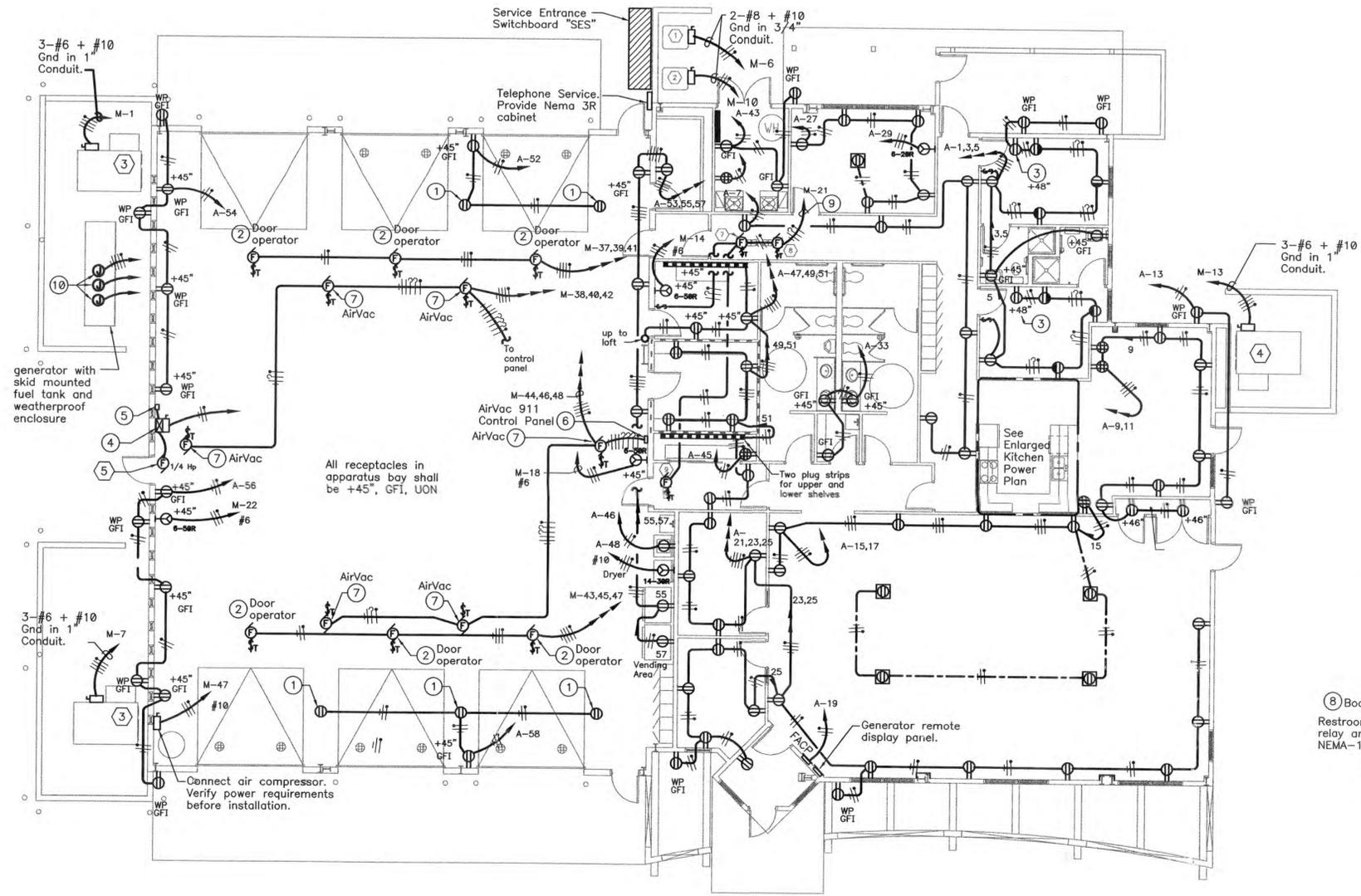
- Fixture schedule**
 Additional Manufacturers
- Type S Lightway FWLA-48-1F32-Z1-CSA
- TYPE MFG PART NUMBER
 A COLUMBIA JT824-332G-FSA12.125-3EBBLHUNV
 A1 COLUMBIA JT824-332G-FSA12.125-EBBLHUNV
 B GUTH ELP-02-41-842T
 B1 GUTH ELP-E2-41-842T
 C LEDALITE 8210T02PNX11EW
 D COLUMBIA WAL4-232-EBBLHUNV
 F PRESCOLITE CF7818UB2-ST492A-CL-BX
 F COLUMBIA CS4-232-EBBLHUNV-CSWG4
 K DMF DT287
 N COLUMBIA JT824-332G-FSA12.125-EBBLHUNV
 P COLUMBIA P4D24-332G-M36-3-EBBLHUNV
 Q KENALL? MLH48-48-F-LG-PP-232-PBB-1-120
- TYPE DESCRIPTION
 B SPECTRUM SP PR22 14CF 842 E1
 B1 SPECTRUM SP PR22 14CF 842 E1 FG
 F LITHONIA AF 2/180TT BAR 120 TRW
 G LITHONIA N2S 17 120 SWR
 K CONTECH CTL610 LA630 with par20 perf shade
 L HYDREL M9410 B P2035CM 120 FLC 34B
 M LITHONIA WSR 50M FT 120 DBBT LPI
 M2 LITHONIA WSR 50M FT 120 ORS DBBT LPI
- TYPE MFG DESCRIPTION
 A LSI LA125 332 SD SSO10 120
 A1 LSI LA125 332 SD SSO10 2 120
 B ATLA HBP224 842E 120 25W
 B1 ATLA HBP224 842E 120 25W PL
 D LSI WB 232 SSO10 120
 E ATLA 78218E1 7825WH GS
 F ATLA 78218E1 7818CL
 G HEWI 1SF 21 113TSP WRS 120
 H REBE 2752 426 AN
 J HEWI 76 4 232 EBLH2 120
 M LUM UD500A MH39 120 DK PLATINUM OR
 M2 LUM UD500A MH39 120 DK PLATINUM OR
 N LSI LA125 232 SD SSO10 120
 P LSI N2P G 18 332 FD SSO10 120
 R INTE TPSTW-ED 13W-PL
 S LSI LF 325 UE BRZ * (MOUNT)

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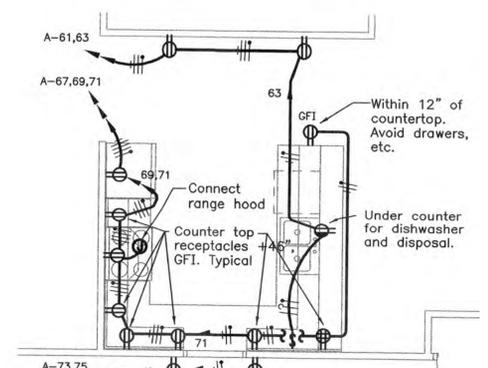
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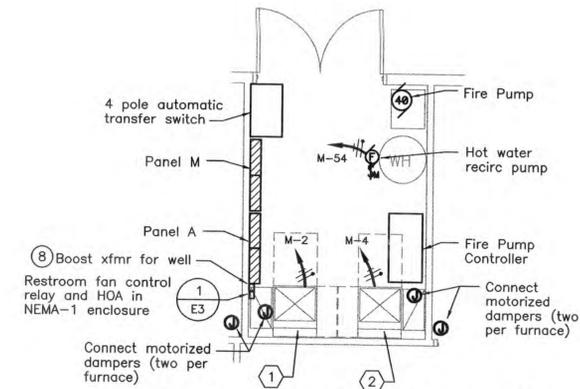
HRJ #02004, D&A #02022
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 1 March 2005
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Electrical Power Plan
 North
 8 4 0 4 8 12 16
 Scale: 1/8" = 1'-0"



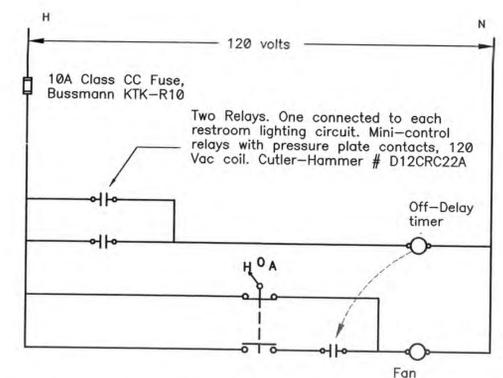
Kitchen Power Plan
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 Scale: 1/4" = 1'-0"



Mechanical Room Power Plan
 4 2 0 2 4 6 8
 Scale: 1/4" = 1'-0"

- General Notes**
1. Provide minimum #12 copper conductors in 1/2" conduit unless otherwise noted.
 2. Provide minimum #10 neutral conductors for multi-wire branch circuits serving receptacles and other non-linear loads.
 3. Provide minimum #10 conductors for all 120V circuits over 100 foot length.
 4. All conductors shall be copper.

- Keyed Notes**
1. Ceiling mounted cord reel, 45' 12/3 SJO cord, 15 Amp rated, Hubbell Gleason # GL-45123-SR. Cord reels shall be GFCI protected, fed from a readily accessible GFCI unit.
 2. Connect door operators and door controls. Verify location of door operator before installation. Door controls shall be interconnected with alarm system. Coordinate with alarm system contractor.
 3. Outlet for carbon monoxide detector.
 4. Provide combination starter/fused disconnect with On-Auto cover mounted switch, 24 VAC control transformer. See carbon monoxide sensor manufacturer's wiring diagram for control diagram.
 5. Carbon monoxide sensor. See mechanical drawings for requirements. (www.macurco.com, model CM-21A)
 6. AirVac 911 (www.airvacuumcorp.com) control panel furnished with AirVac fan system. Provide wiring and install magnetic door switches at each overhead door. Provide wiring and install (Two) photoeye sensors. Photoeye sensors and magnetic switches shall be furnished with the AirVac 911 fan system.
 7. AirVac fans, 3/4 Hp.
 8. Provide 208-240V boost autotransformer for well. Acme T-1-81058, (3.75 kVA, FLA 15.63 Amps). Verify well power requirements before purchasing.
 9. Route through fan control. See detail 1 for control wiring.
 10. Provide circuits for generator block heater and battery charger. Provide a one inch conduit with controls wiring from the generator to each transfer switch. Provide conduit and wiring from the generator location to the remote annunciator which shall be installed next to the fire alarm control panel.



- Notes:
1. Off-delay timer shall be adjustable 0.6-60 minutes. Sq D # 9050-JCK28
 2. Timer may directly control fans up to 1/4 Hp. Provide interposing relay or starter for fans over 1/4 Hp

Restroom Fan Control Diagram

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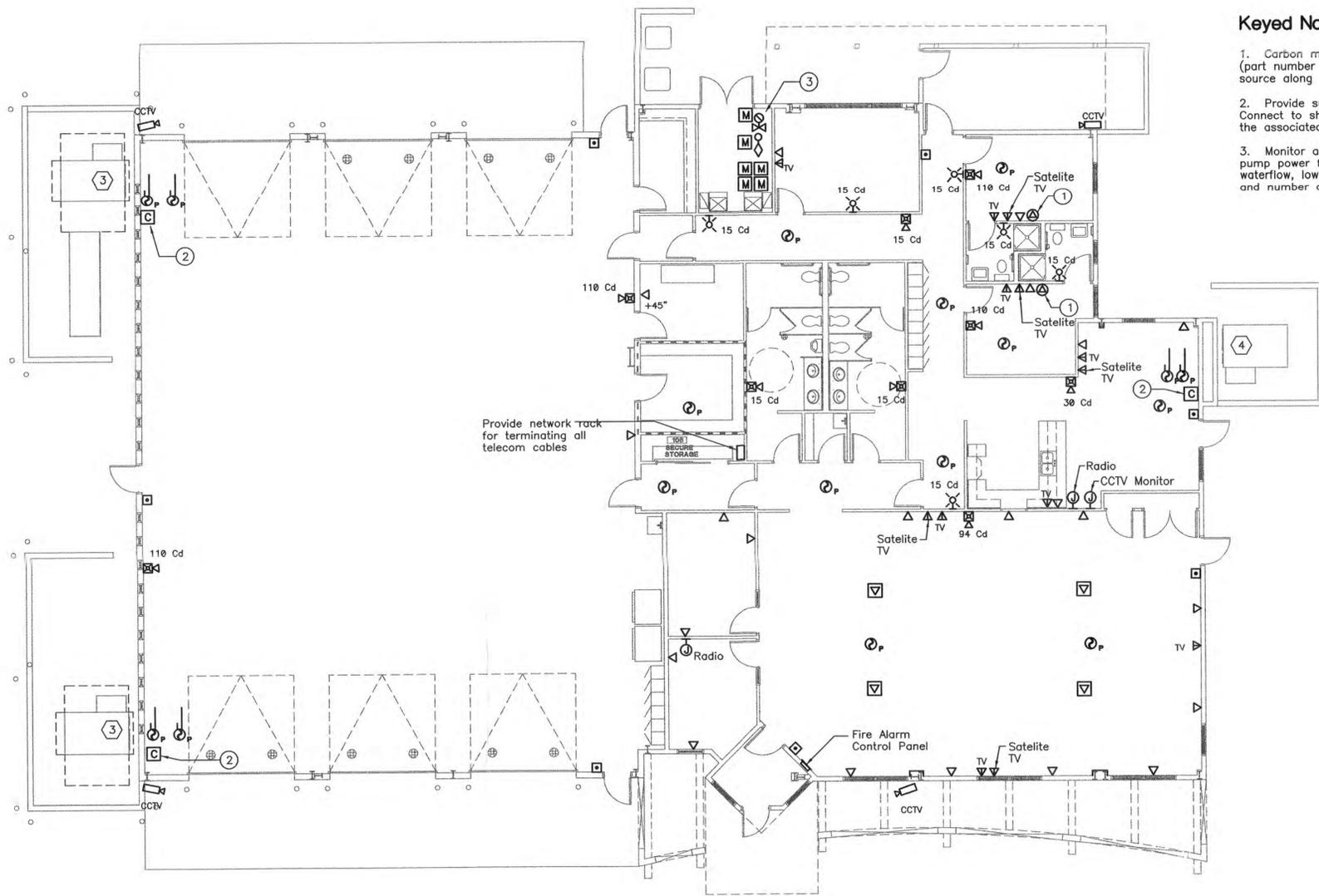
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Electric Power
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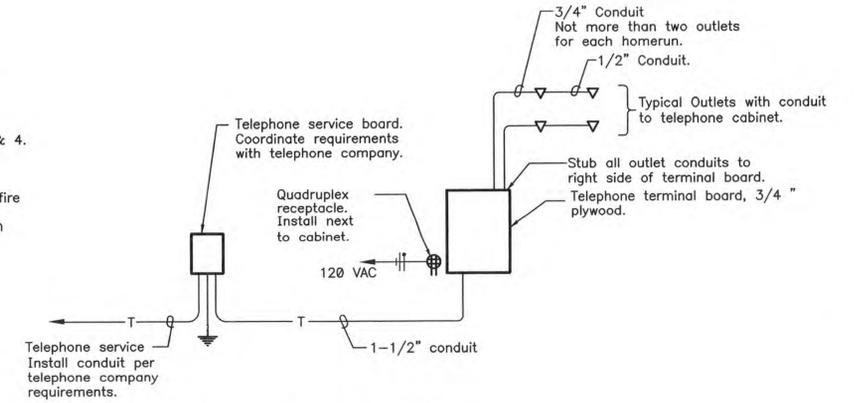


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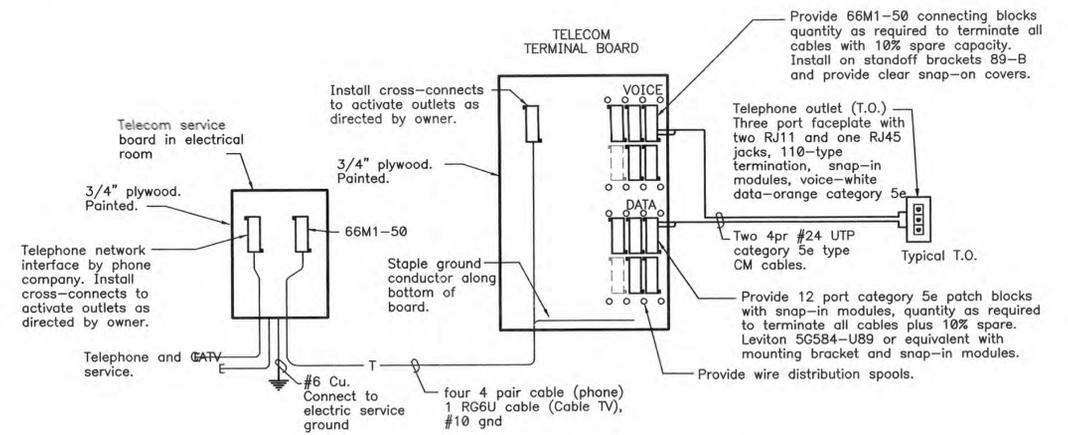
Keyed Notes #

- Carbon monoxide alarm shall be Kidde Unit Number KN-COPP-3 (part number 900-0076). It shall be powered by a 120VAC, 60 Hz source along with a 9V battery back up.
- Provide supply and return duct detectors for air handling units 3 & 4. Connect to shut down only the affected AHU with smoke detected in the associated ducts.
- Monitor all fire pump functions and waterflow conditions, including fire pump power failure, pump running, low pressure, valve closed, sprinkler waterflow, low water tank level. See fire protection drawings for location and number of switches and contacts that require monitoring.



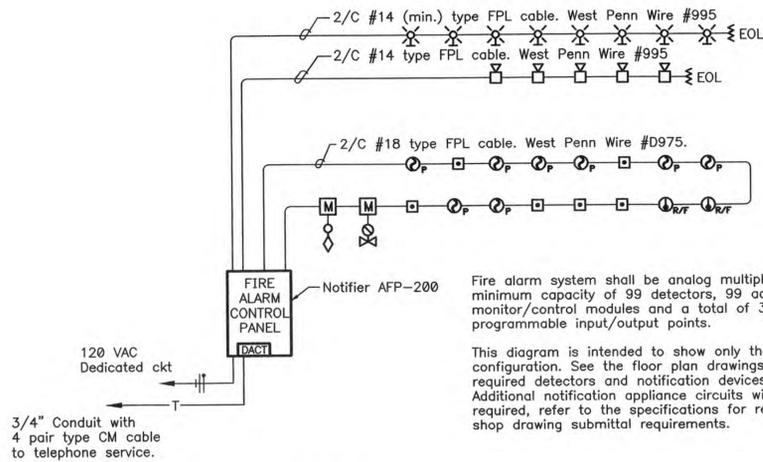
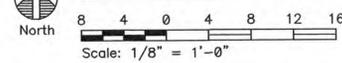
Telecom Conduit Detail

SCALE: none



Telecom System Cabling Requirements

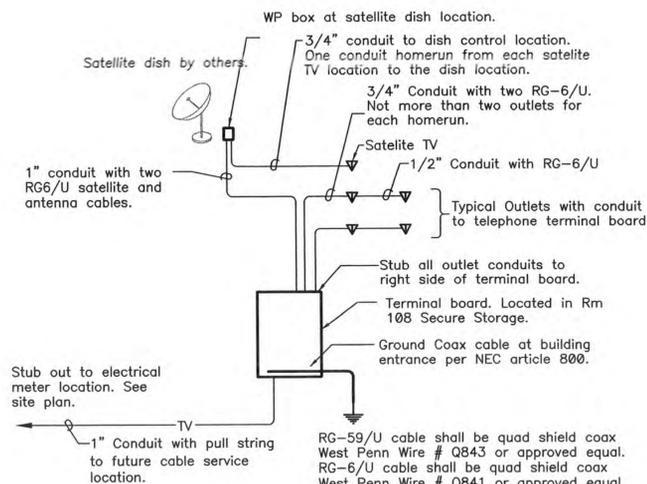
Fire Alarm and Telecom Plan



Fire Alarm Diagram

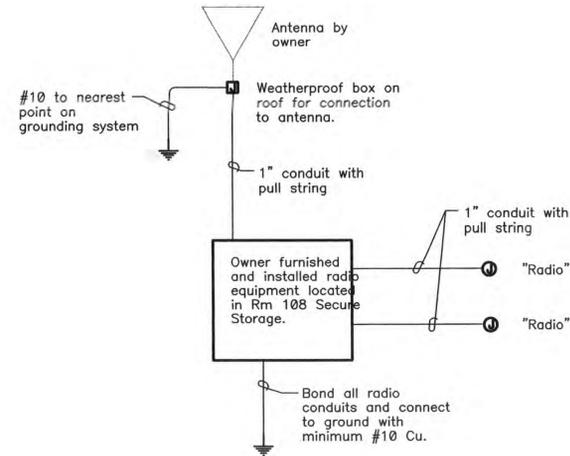
Fire alarm system shall be analog multiplex with a minimum capacity of 99 detectors, 99 addressable monitor/control modules and a total of 301 programmable input/output points.

This diagram is intended to show only the general wiring configuration. See the floor plan drawings for required detectors and notification devices. Additional notification appliance circuits will be required, refer to the specifications for required shop drawing submittal requirements.

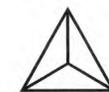


Television Detail

SCALE: none



Radio System Detail



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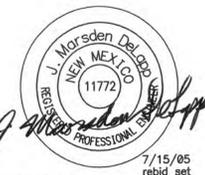


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Eastern Region headquarters
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645 Old Las Vegas Highway
Santa Fe, New Mexico

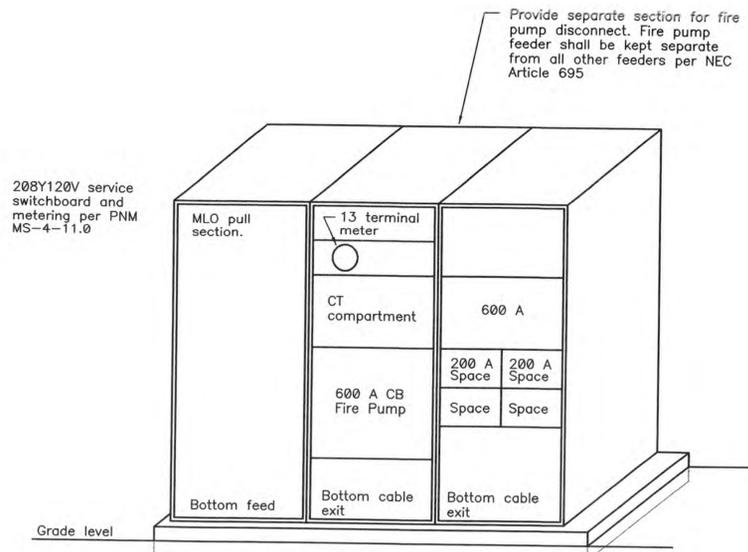
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Electrical Fire Alarm
 and Telecom Plan
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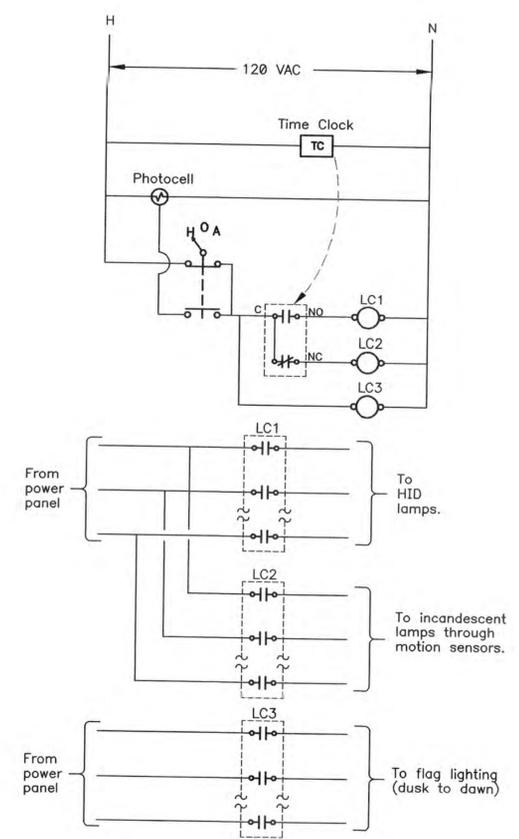


7/15/05
 rebid set

E4



Service Switchboard Elevation
Scale: none

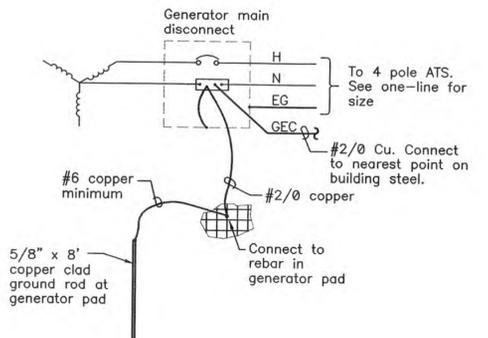


Notes:

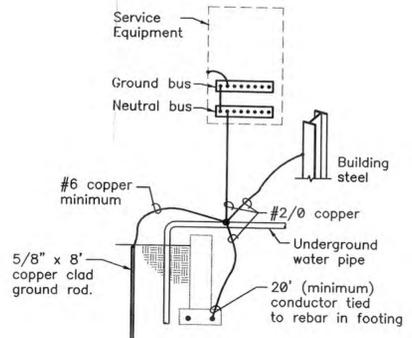
- This control diagram provides for photocell on, timeclock off/switch to motion sensor lighting.
- Timeclock shall be digital and have 7day program, LCD display, automatic daylight saving time adjustment, battery backup. Tork # DG120 or approved equivalent.
- Lighting contactors shall be mechanically held with 20 Amp contacts and 2 wire control option. ASCO 917 or approved equivalent. ASCO 917 is available with 2 to 12 poles. Provide the number of poles for the number of exterior lighting circuits indicated on the lighting drawings plus one spare pole.

Exterior Lighting Control Detail
SCALE: none

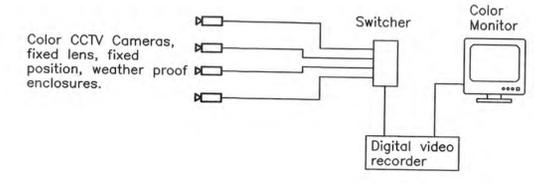
PANELBOARD SCHEDULE Panel: P										
Ckt No.	Description	VA	Bkr/pole	A	B	C	Bkr/pole	VA	Description	Ckt No.
1	Irrigation pump	1176	20/1	1968					Jockey pump	2
3	receptacle	180	20/1			972		792		4
5	Lighting	120	20/1			912		792		6
7	Spare		20/1			0				8
9	Spare		20/1			0		324	Heater	10
11	Spare		20/1			0				12
13	Space		20/1			0			Space	14
15	Space					0			Space	16
17	Space					0			Space	18
		Total connected load per phase		1968	972	912				
		Total connected load		3852						
		Amps on max phase		16						
Voltage: 208Y120 V 3 ph 4 w										
Mains: 100 Amp Copper Bus										
Main CB: 50 Amp										
AIC sym. Rms: 10k AIC, fully rated										
Gnd Bus: Yes										
S.U.S.E.: yes										
Mounting: Surface, NEMA 3R										
Feed: Top										
Location: Pump Room										
Fed From: Panel M										



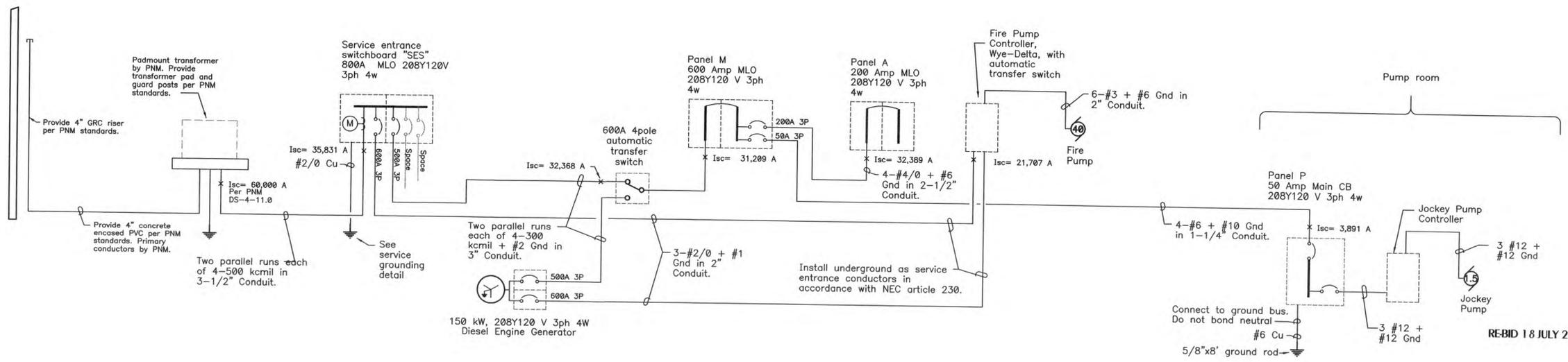
Generator Grounding Detail
Scale: none



Service Grounding Detail
Scale: none



CCTV Detail
SCALE: none



Power One Line Diagram

REV. NO. REVISION DESCRIPTION APPROVED DATE

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PROJECT NO.
DATE **1 March 2005**
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E5

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