Abbreviations

A.B.	ANCHOR BOLT
ABV.	ABOVE
A.C.	ASPHALT CONCRETE
A/C	AIR CONDITIONING
A.T.	ACOUSTICAL TILE
ACOUST.	ACOUSTICAL
A.D.	AREA DRAIN
ADJ.	ADJUSTABLE
A.F.F.	ABOVE FINISHED FLOOR
AGGR.	AGGREGATE
ALUM.	ALUMINUM
ALT.	ALTERNATE
ANC.	ANCHOR/ANCHORAGE
ARCH.	ARCHITECTURAL
AVG.	AVERAGE
BD.	BOARD
B.F.	BOTH FACES
BLDG.	BUILDING
BLK.	BLOCK
BLKG.	BLOCKING
BM.	BEAM
B.P.	BUILDING PAPER
BDRM.	BEDROOM
BLW.	BELOW
BRG.	BEARING
BRKT.	BRACKET
BRZ.	BRONZE
BTM.	BOTTOM
BTN.	BATTEN
BTR.	BETTER
BTWN.	BETWEEN
B.U.R.	BUILT UP ROOFING
BVL.	BEVELED
B.W.	BOTH WAYS
C.B.	CATCH BASIN
CBC	CA BLDG CODE
CAB.	CABINET
C.A.R.	COLD AIR RETURN
C.C.	CENTER TO CENTER
C.F.	CUBIC FEET
C.G.	CORNER GUARD
C.I.P.	CAST IRON PIPE
C.I.P.C.	CAST-IN-PLACE CONCRETE
C.J.	CONTROL JOINT
CLK'G.	CAULK/CAULKING
CLG.	CEILING
CLR.	CLEAR
C.M.U.	CONCRETE MASONARY UNIT
C.M.P.	CORREGATED METAL PIPE
CNTR.	COUNTER
CO.	CLEANOUT
CO.T.G.	CLEANOUT TO GRADE
COL.	COLUMN
CONC.	CONCRETE
CONN.	CONNECTION
CONT.	CONTINUOUS
CONTR.	CONTRACTOR
CORR.	CORRUGATED
CRS.	COURSE/COURSES
CSK/S.	COUNTERSUNK SCREW
C.T.	CERAMIC TILE
CTR.	CENTER
C.W.	COLD WATER
C.Y.	CUBIC YARD
DBL.	DOUBLE
DEPT.	DEPARTMENT
DET.	DETAIL
D.F.	DOUGLAS FIR
D.I.B.	DRILL IN BOLT
DIA.	DIAMETER
DIAG.	DIAGRAM
DIM.	DIMENSION
DISP.	DISPENSER
DIV.	DIVISION/DIVIDER
D.L.	DEAD LOAD
DN.	DOWN
DR.	DOOR
DRWG.	DRAWING
DR.FNT.	DRINKING FOUNTAIN
D.W.	DISHWASHER
E.	EAST
(E)	EXISTING
EA.	EACH
E.B.	EXPANSION BOLT
E.I.F.S.	EXTERIOR INSULATION FINISH SYSTEM
E.J.	EXPANSION JOINT
ELEC.	ELECTRIC/ELECTRICAL
ELEV.	ELEVATION
EMER.	EMERGENCY
E.N.	EDGE NAILING
ENCL.	ENCLOSURE
E.O.S.	EDGE OF SLAB
E.P.	ELECTRIC PANEL
EQUIP.	EQUIPMENT
E.W.C.	ELECTRIC WATER COOLER
EXH.	EXHAUST
EXP.	EXPOSED
EXT.	EXTERIOR
F.A.	FIRE ALARM
F.A.U.	FORCED AIR UNIT
F.C.C.	FIRE CONTROL CENTER
F.C.U.	FAN COIL UNIT
F.D.	FLOOR DRAIN
F.D.C.	FIRE DEPARTMENT CONNECTION
FND.	FOUNDATION
F.E.	FIRE EXTINGUISHER
F.E.C.	FIRE EXTINGUISHER CABINET
F.F.	FINISHED FLOOR
F.F.B.	FINISHED FLOOR BREAK
F.G.	FIXED GLASS
F.H.	FIRE HYDRANT
F.H.C.	FIRE HOSE CABINET
F.H.V.	FIRE HOSE VALVE
FIN.	FINISH
F.L.	FLOW LINE
F.J.	FLUSH JOINT
FLSH'G.	FLASHING
FLR.	FLOOR
FLOUR.	FLOURSCENT
F.O.C.	FACE OF CONCRTE
F.O.M.	FACE OF MASONRY
F.O.S.	FACE OF STUD
F.O.W.	FACE OF WALL
F.P.	FIREPLACE
F.PR.	FIREPROOF
FRMG.	FRAMING
FT.	FOOT
FTG.	FOOTING
FUR.	FURRED/FURRING
G.	GAS
GA.	GAUGE
GALV.	GALVANIZED
G.B.	GRAB BAR
G.C.	GENERAL CONTRACTOR
GL.	GLASS
G.I.	GALLVANIZED IRON
G.L.B.	GLU-LAM BEAM
GND.	GROUND
GR.	GRADE
GRDR.	GIRDER
G.S.	GYPSUM SHEATHING
G.B.	GYPSUM WALL BOARD
H.B.	HOSE BIB
H.C.	HOLLOW CORE
H.D.	HOLD DOWN
HDR.	HEADER
HDWR.	HARDWARE
HGR.	HANGER
H.M.	HOLLOW METAL
HORIZ.	HORIZONTAL
H.P.	HIGH POINT
HR.	HOUR
HT.	HEIGHT
HTG.	HEATING
H.V.A.C.	HEATING/VENTILATING/AIR CONDITIONING
H.W.	HOT WATER
I.B.	INFILTRATION BARRIER
I.D.	INSIDE DIAMETER
IN.	INCH
INCL.	INCLUDED/INCLUDING
INFO.	INFORMATION
INSUL.	INSULATION/INSULATED
INT.	INTERIOR
INTER.	INTERMEDIATE
INV.	INVERT
JAN.	JANITOR
JST.	JOIST
JT.	JOINT
KP.	KICKPLATE
KIT.	KITCHEN
LAM.	LAMINATE
LAV.	LAVATORY
L.B.	LAG BOLT
LB.	POUND
L.F.	LINEAR FOOT
L.L.	LIVE LOAD
LT.	LIGHT
LTL.	LINTEL
LXR.	LOCKER
L.P.	LOW POINT
LVR.	LOUVER
L.V.L.	LAMINATED VENEER LUMBER
MAS.	MASONRY
MAT'L.	MATERIAL
MAX.	MAXIMUM
M.B.	MACHINE BOLT
M.C.	MEDICINE CABINET
MECH.	MECHANICAL
MED.	MEDIUM
MFD.	MANUFACTURED
MFR.	MANUFACTURER
M.H.	MANHOLE
MICRO.	MICROWAVE
MIN.	MINIMUM
MIR.	MIRROR
MISC.	MISCELLANEOUS
M.O.	MASONRY OPENING
M.R.	MOISTURE RESISTANT
M.R.O.	MASONRY ROUGH OPENING
MOD.	MODULAR
MOV.	MOVABLE
MTD.	MOUNTED
MTL.	METAL
MUL.	MULLION
N.	NORTH
(N)	NEW
N.I.C.	NOT IN CONTRACT
N.A.	NOT APPLICABLE
NO.	NUMBER
N.T.S.	NOT TO SCALE
O/	OVER
O.C.	ON CENTER
O.D.	OUTSIDE DIAMETER
OFF.	OFFICE
O.H.	OVERHEAD
OPNG.	OPENING
OPP.	OPPOSITE
O.R.D.	OVERFLOW ROOF DRAIN
PART.	PARTITION
P.C.	PRECAST CONCRETE
P.C.F.	POUNDS PER CUBIC FOOT
PFB.	PREFABRICATED
PL.	PLATE
P.D.F.	POWER DRIVEN FASTENER
P.L.F.	POUNDS PER LINEAL FOOT
P.LAM.	PLASTIC LAMINATE
PLYWD.	PLYWOOD
P.H.	PAPER HOLDER
PNT.	PAINT
PRJ.	PROJECT/PROJECTED
P.S.F.	POUNDS PER SQUARE FOOT
P.S.I.	POUNDS PER SQUARE INCH
P.T.	PRESSURE TREATED
PT.	POINT
P.T.D.	PAPER TOWEL DISPENSER
P.T.D./R.	PAPER TOWEL DISPENSER & RECEPTACLE
P.T.R.	PAPER TOWEL RECEPTACLE
P.V.C.P.	POLYVINYL CHLORIDE PIPE
PVMT.	PAVEMENT
Q.T.	QUARRY TILE
R.	RISER
R.A.	RETURN AIR
RAD.	RADIUS
R.B.	RUBBER BASE
R/C	REINFORCED CONCRETE
R.D.	ROOF DRAIN
REDWD.	REDWOOD
REINF. or RE-BAR	REINFORCING STEEL BARS
REF.	REFERENCE
REFR.	REFRIGERATOR/REFRIGERATION
REG.	REGISTER
REQ'D.	REQUIRED
RET.	RETAIN/RETAINING
REV.	REVISION
RM.	ROOM
R.O.	ROUGH OPENING
R/S	REINFORCING STEEL
R.W.L.	RAIN WATER LEADER
S.	SOUTH
S.B.	SOLID BLOCKING
S.C.	SOLID CORE
S.C.D.	SEAT COVER DISPENSER
SCHED.	SCHEDULE
S.D.	SOAP DISPENSER
S.DR.	STORM DRAIN
SECT.	SECTION
S.E.D.	SEE ELECTRICAL DRAWINGS
S.F.	SQUARE FOOT
S.F.B.	SPLIT FACE BLOCK
S.F.S.D.	SEE FOOD SERVICE DRAWINGS
SHT.	SHEET
SHTHG.	SHEATHING
SHVL'S.	SHELVES/SHELVING
SHWR.	SHOWER
SIM.	SIMILAR
SLR.	SEALER
S.M.D.	SEE MECHANICAL DRAWINGS
S.N.D.	SANITARY NAPKIN DISPENSER
S.N.R.	SANITARY NAPKIN RECEPTACLE
SPEC.	SPECIFICATIONS
S.P.D.	SEE PLUMBING DRAWINGS
SPL.BLK.	SPLASH BLOCK
SQ.	SQUARE
S.& R.	SHELF AND ROD
S.S.	SANITARY SEWER
S.S.D.	SEE STRUCTURAL DRAWINGS
S.SK.	SERVICE SINK
S.ST.	STAINLESS STEEL
STA.	STATION
S.T.C.	SOUND TRANSMISSION COEFFICIENT
STD.	STANDARD
STL.	STEEL
STO.	STORAGE
STRUCT.	STRUCTURE/STRUCTURAL
SUSP.	SUSPENDED
S.W.	SHEAR WALL
S.Y.	SQUARE YARD
SYS.	SYSTEM
T.	TREAD
T.B.	TOWEL BAR
T.C.	TRASH COMPACTOR
TEL.	TELEPHONE
TEMP.	TEMPERED
T.O.C.	TOP OF CURB
T.& G.	TONGUE AND GROVE
THK.	THICK(NESS)
THR.	THRESHOLD
T.O.B.	TOP OF BEAM
T.O.BLK.	TOP OF BLOCK
T.O.G.	TOP OF GRATE
T.O.PL.	TOP OF PLATE
T.O.S.	TOP OF SLAB
T.O.STL.	TOP OF STEEL
T.O.W.	TOP OF WALL
T.P.D.	TOILET PAPER DISPENSER
T.S.	TUBE STEEL
TV.	TELEVISION
TXT.	TEXTURE
TYP.	TYPICAL
UNF.	UNFINISHED
U.O.N.	UNLESS OTHERWISE NOTED
UR.	URINAL
V.B.	VINYL BASE
V.BR.	VAPOR BARRIER
V.C.P	VITRIFIED CLAY PIPE
V.C.T.	VINYL COMPOSITION TILE
VENT.	VENTILATOR/VENTILATION
VERT.	VERTICAL
VEST.	VESTIBULE
V.I.F.	VERIFY IN FIELD
VIN.	VINYL
VNR	VENEER
V.T.	VINYL TILE
W.	WEST
W/	WITH
W.C.	WATER CLOSET
WD.	WOOD
W/D	WASHER/DRYER
W.G.	WIRED GLASS
W.H.	WATER HEATER
W.HYD.	WALL HYDRANT
WNDW.	WINDOW
W/O	WITHOUT
WP.	WATERPROOF
WSCT.	WAINSCOT
WT.	WEIGHT
W.W.F.	WELDED WIRE FABRIC
YD.	YARD

Reference Symbols

GRID LINE

SECTION
SECTION IDENTIFICATION
SHEET DESIGNATION

DETAIL
DETAIL IDENTIFICATION
SHEET DESIGNATION

INTERIOR ELEVATION
SHEET DESIGNATION
ELEVATION DESIGNATION

EXTERIOR ELEVATION
ELEVATION IDENTIFICATION
SHEET DESIGNATION

ELEVATION

SPOT ELEVATION

101 — ROOM IDENTIFICATION

WINDOW IDENTIFICATION

DOOR IDENTIFICATION

MATCH LINE

WALL ASSEMBLY TYPE

ROOF OR FLOOR / CEILING ASSEMBLY TYPE

REVISION IDENTIFICATION

CONTOUR LINES
EXISTING
PROPOSED

Material Symbols

EARTH (SECTION)

CONCRETE (SECTION)

BRICK MASONRY (PLAN & SECTION)

CONCRETE MASONRY UNIT (PLAN & SECTION)

WOOD MEMBER (BLOCKING)

2 × 12 — WOOD MEMBER (CONTINUOUS — NOMINAL SIZE INDICATED)

PLYWOOD

FINISH MILLWORK (ARCH) (SECTION)

GYPSUM WALL BOARD OR SAND IN SECTION

ASPHALTIC CONCRETE PAVING (SECTION)

METAL — STEEL OR IRON

BATT INSULATION

RIGID INSULATION BOARD OR TILE

Symbols

&	AND
∠	ANGLE
@	AT
℄	CENTER LINE
⊏	CHANNEL
ø	DIAMETER
"	INCHES
'	FEET
d	PENNY
⊥	PERPENDICULAR
℞	PROPERTY LINE
⌑	SQUARE FEET
#	POUND

Project

AIRPORT VEHICLE MAINTENANCE BUILDING ADDITION

TRUCKEE TAHOE AIRPORT DISTRICT

Code Compliance

ALL CONSTRUCTION SHALL COMPLY WITH THE 2013 CALIFORNIA BUILDING, PLUMBING, MECHANICAL, ELECTRICAL AND ENERGY CODES AND ALL OTHER LOCAL CODES & ORDINANCES OF NEVADA COUNTY

OCC GROUP: EXISTING BUILDING: H-4
ADDITION: H-4

CONSTRUCTION TYPE: 11 - A

NUMBER OF STORIES/HEIGHT:ALLOWED - 5 - 65', PROPOSED -2- 28'

BASIC ALLOWED AREA: 37,500 S.F., PROPOSED 3,570 S.F.

INCREASES: N/A

OCC SEP WALLS:
NOT REQ'D, AS ADJACENT (E) OCCUPANCY IS ALSO H-4

EXITING: 2 EXITS REQ'D FROM ADDITION (H-4 OCCUPANCY, TABLE 1015.1)

OCC LOAD FOR ADDITIONAL GROUND FLOOR:
2460/200 S.F. PER OCC = 12
MEZZ STORAGE:
1110/500 S.F. PER OCC = 2

BUILDING USAGE: FACILITY IS NOT OPEN TO THE PUBLIC

TOTAL OCC LOAD FOR EXITS INCLUDING (E) VEHICLE BAYS:
14 OCC FROM ADDITION +2640/200 S.F. OCC =
13 OCC FROM (E) VEHICLE BAY
27 OCC TOTAL: 2 EXITS REQ'D (PER TABLE 1015.1)

SEPARATION OF EXITS: DIAGONAL DISTANCE = 71'
1/2 DIAGONAL DISTANCE = 35.5', MIN.
EXIT SEPARATION
ACTUAL PROPOSED SEPARATION = 54'

CHECK EXISTING PLUMBING FIXTURES:
8820 S.F.(E) + 2460 S.F. ADDITION / 2000 = 5.64 OCC
THEREFORE (E) TOILETS & LAVS IN MENS & WOMENS RESTROOMS OK PER CPC.
EXISTING WOMEN'S ROOM: 2 LAVS, 1 W.C.
EXISTING MEN'S ROOM: 2 LAVS, 1 W.C., 1 URINAL

Vicinity Map

SEE CIVIL ENGINEERING
SHEET C-1 FOR VICINITY MAP

Project Team

OWNER: TRUCKEE TAHOE AIRPORT DISTRICT
CONTACT: KEVIN SMITH, GENERAL MANAGER
10356 TRUCKEE AIRPORT ROAD
TRUCKEE, CA 96161
530-587-4119

CIVIL ENGINEER: ACUMEN ENGINEERING
CONTACT: BILL QUESNEL
P.O.BOX 3497
TRUCKEE, CA 96160
530-550-8068

ARCHITECT: PETER S. GERDIN
15695 DONNER PASS RD STE 206
TRUCKEE, CA 96161
530-587-7513

STRUCTURAL ENGINEER: GABBART & WOODS
ABE HAEN
10775 PIONEER TRAIL, SUITE 214
TRUCKEE, CA 96161
530-563-6274

MECHANICAL ENGINEER: SUGARPINE ENGINEERING
MARK SCHLOSSER
12710 NORTHWOODS BLVD, SUITE 3
TRUCKEE, CA 96161
530-214-0859

ELECTRICAL ENGINEER: SA ENGINEERING
ERIC SANDEL
P.O.BOX 2469
TRUCKEE, CA 96160

Approvals

TRUCKEE TAHOE AIRPORT DISTRICT

APPROVED:_____

TRUCKEE SANITARY DISTRICT

APPROVED:_____

TRUCKEE FIRE PROTECTION DISTRICT

APPROVED:_____

NEVADA COUNTY BUILDING DEPARTMENT

APPROVED:_____

TRUCKEE DONNER P.U.D

APPROVED:_____

Sheet Index

Project Data

PROJECT LOCATION:

12110 CHANDELLE WAY
TRUCKEE, CA 96161

APN: 19-440-39

BLDG SQ FTG:

(E) BLDG	=	8820 S.F.
ADDITION	=	2460 S.F.
MEZZ STORAGE	=	1110 S.F.
TOTAL ADDITION	=	3570 S.F.

Deffered Submittals

FIRE SPRINKLER DESIGN & DRAWINGS

*DEFERRED SUBMITTALS- DOCUMENTS FOR DEFERRED SUBMITTAL ITEMS SHALL BE REVIEWED BY THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE PRIOR TO FORWARDING THEM TO THE BUILDING OFFICIAL. THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE SHOULD NOTE ON THE DOCUMENT INDICATING THAT THE DEFERRED SUBMITTAL DOCUMENTS HAVE BEEN REVIEWED AND FOUND TO BE IN GENERAL CONFORMANCE TO THE DESIGN OF THE BUILDING. THE DEFERRED SUBMITTAL ITEMS SHOULD NOT BE INSTALLED UNTIL THE DEFERRED SUBMITTAL DOCUMENTS HAVE BEEN APPROVED BY THE BUILDING OFFICIAL. 2013 CBC SECTION 107.3.4.1

Notes

*SPECIAL INSPECTIONS PER CBC SECTION 1704- THE OWNER OR THE DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE ACTING AS THE OWNER'S AGENT SHALL EMPLOY ONE OR MORE APPROVED AGENCIES TO PERFORM SPECIAL INSPECTIONS DURING CONSTRUCTION ON THE TYPES OF WORL LISTED UNDER SECTION 1705. COORDINATE WITH THE STRUCTURAL ENGINEER AND LIST ALL REQUIRED INSPECTIONS. 2013 CBC SETION 1704.2.

*FABRICATOR APPROVAL- APPROVAL SHALL BE BASED UPON REVIEW OF THE FABRICATOR'S WRITTEN PROCEDURAL AND QUALITY CONTROL MANUALS AND PERIODIC AUDITING OF FABRICATION PRACTICES BY AN APPROVED SPECIAL INSPECTION AGENCY. AT COMPLETION OF FABRICATION, THE APPROVED FABRICATOR SHALL SUBMIT A CERTIFICATE OF COMPLIANCE TO THE BUILDING OFFICIAL STATING THAT THE WORK WAS PERFORMED IN ACCORDANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS. 2013 CBC SECTION 1704.2.5.2

BID SET

General Notes

REFER TO SOILS REPORT BY HOLDREGE & KULL DATED 2/12/16 FOR UNDERSLAB & FOUNDATIONS RECOMMENDATIONS

95% CONSTRUCTION DRAWINGS

No.	Revisions	Date

Project AIRPORT VEHICLE MAINTENANCE BUILDING ADDITION

Peter S. Gerdin
Architect
15695 Donner Pass Rd. #206
Truckee, CA 96161
Ph. 530.587.7513 Fax 530.587.7557
e-mail psgarcht@cebridge.net

Date 12/15/16
Drawn PAD
Reviewed PG
Scale NA

Sheet No.
CVR
Of _____

GENERAL NOTES

1. All construction materials and methods shall conform to the requirements of Nevada County. All references to the Standard Specifications shall refer to latest edition of the State of California Department of Transportation Standard Specifications. Attention is also directed to the Nevada County Standard plan details.

2. COUNTY, DEPARTMENT or ENGINEER, as used on these plans and notes, refers to the Nevada County Engineer or an authorized agent appointed by the Nevada County Engineer.

3. All field staking shall be done by a registered civil engineer or licensed land surveyor.

4. The contractor is hereby notified that prior to commencing construction, they are responsible for contacting all utility companies for verification at the construction site of the locations of all underground facilities where such facilities may possibly conflict with the placement of the improvements shown on these plans. Call "Underground Service Alert" at 1-800-227-2600 two (2) days minimum to fourteen (14) days maximum before any excavation is started.

5. Contractor is responsible for the protection of all existing monuments and other survey markers. Monuments and survey markers destroyed during construction shall be replaced at the contractor's expense.

6. All asphalt concrete surfaces shall be sawcut two feet minimum inside the edge of pavement to a neat, straight line and removed. The exposed edge shall be sealed with emulsion prior to paving. The exposed base material shall be graded, recompacted and resealed prior to paving.

7. Contractor shall maintain adequate dust control per Nevada County specifications.

8. No construction shall be done without a County approved sediment/erosion control plan to prevent soil erosion. All erosion and sedimentation control measures shall be in accordance with the Regional Water Quality Control Board Best Management Practices.

9. Installation and maintenance of erosion control measures are the minimum required and the responsibility of the contractor. Winterization and erosion control shown on these plans is intended as a guide. Additional erosion control measures may be required as determined by the County. This responsibility shall apply throughout the course of construction and until all disturbed areas have become stabilized and shall not be limited to wet weather periods.

10. After stripping the debris, any existing loose fill, unsuitable soil, silty, sand deposits, or disturbed natural soils shall be excavated and properly disposed of.

11. Asphalt Concrete (AC) mix design and specifications for paving shall conform to the latest edition of the Standard Specifications for Public Works Construction, "Greenbook". Specified lifts of C2-AR-4000 mineral aggregate AC mix.

12. The County or utility provider may require the contractor to uncover any improvements that have been completed without proper County or utility inspection and/or approval. If the installation is found not to meet agency standards or previously approved alternatives shown on the plans, the contractor may be required to remove and replace such improvements at contractor's expense.

13. Construction waste and industrial toxic waste (petroleum and other chemical products) shall be disposed of properly in compliance with existing regulations and facilities.

14. Hours of operation shall be limited to the hours of 7 a.m. to 7 p.m. Monday through Saturday.

NEVADA COUNTY GRADING REQUIREMENTS

NO GRADING SHALL OCCUR AFTER OCTOBER 15 OR BEFORE MAY 15 UNLESS THE CHIEF BUILDING INSPECTOR, OR HIS/HER AUTHORIZED AGENT, DETERMINES PROJECT SOIL CONDITIONS TO BE ADEQUATE TO ACCOMMODATE GRADING ACTIVITIES AND AN ADEQUATE EROSION CONTROL PLAN IS APPROVED AND IN PLACE.

DISRUPTION OF SOILS AND NATIVE VEGETATION SHALL BE MINIMIZED; DISTURBED AREAS SHALL BE GRADED TO MINIMIZE SURFACE EROSION AND SILTATION; BARE SOILS SHALL BE IMMEDIATELY STABILIZED AND REVEGETATED. SEEDED AREAS SHALL BE COVERED WITH BROADCAST STRAW OR PINE NEEDLE MULCH PER REVEGETATION SPECIFICATION.

IF STRAW IS BROADCAST OVER SEEDED AREAS, ONLY CERTIFIED WEED-FREE STRAW OR RICE STRAW SHALL BE UTILIZED TO MINIMIZE THE RISK OF INTRODUCING OR SPREADING NOXIOUS WEEDS SUCH AS YELLOW STAR THISTLE OR ITALIAN THISTLE.

THE CONTRACTOR SHALL EXERCISE EVERY REASONABLE PRECAUTION TO PROTECT WATERWAYS AND DRAINAGE COURSES FROM POLLUTION WITH FUELS, OILS, BITUMEN, CALCIUM CHLORIDE, AND OTHER HARMFUL MATERIALS. CONSTRUCTION BYPRODUCTS AND POLLUTANTS SUCH AS OIL, CEMENT, AND WASH WATER SHALL BE PREVENTED FROM DISCHARGING INTO OR NEAR THESE RESOURCES AND SHALL BE COLLECTED AND REMOVED FROM THE SITE. ALL CONSTRUCTION DEBRIS AND ASSOCIATED MATERIALS AND LITTER SHALL BE REMOVED FROM THE WORK SITE IMMEDIATELY UPON COMPLETION.

PRIOR TO APPROVAL OF IMPROVEMENT OR GRADING PLANS FOR DRIVEWAY OR ROAD CONSTRUCTION, AN APPROVAL LETTER FROM THE NSAQMD SHALL BE OBTAINED, INDICATING THE APPROVED METHOD OF CLEARED VEGETATION DISPOSAL. SUCH METHODS SHALL BE NOTED ON THE IMPROVEMENT PLANS PRIOR TO APPROVAL.

CONTRACTORS AND CONSTRUCTION PERSONNEL INVOLVED IN ANY FORM OF GROUND DISTURBANCE SHALL BE ADVISED OF THE POSSIBILITY OF ENCOUNTERING SUBSURFACE CULTURAL RESOURCES. IF SUCH RESOURCES ARE ENCOUNTERED OR SUSPECTED, WORK SHALL BE HALTED IMMEDIATELY AND THE CONSTRUCTION CONTRACTOR SHALL CONTACT THE PLANNING DEPARTMENT. A PROFESSIONAL ARCHAEOLOGIST SHALL BE CONSULTED TO ACCESS ANY DISCOVERIES AND DEVELOP APPROPRIATE MANAGEMENT RECOMMENDATIONS FOR ARCHAEOLOGICAL RESOURCE TREATMENT. IF BONES ARE ENCOUNTERED AND APPEAR TO BE HUMAN, THE NEVADA COUNTY CORONER AND THE NATIVE AMERICAN HERITAGE COMMISSION SHALL BE CONTACTED. IF THE RESOURCES ENCOUNTERED ARE NATIVE AMERICAN IN ORIGIN, NATIVE AMERICAN TRIBES AND INDIVIDUALS RECOGNIZED BY THE COUNTY SHALL BE NOTIFIED AND CONSULTED ABOUT ANY PLANS FOR TREATMENT.

NSAQMD DUST CONTROL PLAN

1. The contractor shall be responsible for ensuring that all adequate dust control measures are implemented in a timely manner during all phases of project development and construction.
2. All material excavated, stockpiled, or graded shall be sufficiently watered, treated, or covered to prevent fugitive dust from leaving the property boundaries and/or causing a public nuisance. Watering during summer months should occur at least twice daily, with complete coverage of disturbed areas.
3. All areas with vehicle traffic shall be watered or have dust palliative applied as necessary to minimize dust emissions.
4. All on-site vehicle traffic shall be limited to a speed of 15 mph on unpaved roads.
5. All land clearing, grading, earth moving, or excavation activities on a project shall be suspended as necessary to prevent excessive windblown dust when winds are expected to exceed 20 mph.
6. All inactive portions of the development site shall be covered, seeded, or watered or otherwise stabilized until a suitable cover is established.
7. All material transported off-site shall be either sufficiently watered or securely covered to prevent it from being entrained in the air and there must be a minimum of six (6) inches of freeboard in the bed of the transport vehicle.
8. Paved streets adjacent to the project shall be swept or washed at the end of each day, or more frequently if necessary, to remove excessive accumulations or visibly raised areas of soil which may have resulted from activities at the project site.
9. Prior to final occupancy, the contractor shall re-establish ground cover on the site through seeding and watering.

UTILITY PROVIDERS

SANITARY SEWER	–	TRUCKEE SANITARY DISTRICT (530) 587-3804 12304 JOERGER DR., TRUCKEE, CA
POWER/COMMUNICATIONS	–	TRUCKEE DONNER P.U.D. (530) 582-3945 P.O. BOX 309, TRUCKEE, CA
WATER	–	TRUCKEE DONNER P.U.D. (530) 582-3950 P.O. BOX 309, TRUCKEE, CA
NATURAL GAS	–	SOUTHWEST GAS (530) 582-7228 10682 PIONEER TRAIL, TRUCKEE, CA
TELEPHONE	–	AT&T (530) 888-2365 P.O. BOX 2696, TRUCKEE, CA 96160
CABLE TV	–	SUDDENLINK COMMUNICATIONS (530) 587-6100 10607 WEST RIVER ST., TRUCKEE, CA

REVEGETATION PLAN:

ALL DISTURBED AREAS SHALL BE REVEGETATED WITH THE FOLLOWING SEED MIX APPLIED AT THE SPECIFIED RATES:

Species	Purity	Germination	Rate of Application
Slender Wheatgrass (Agropyron trachycaulum)	90%	90%	8 lbs/acre
Luna Pubescent Wheatgrass (Agropyron tricophorum luna)	90%	90%	8 lbs/acre
"Scaldus" Hard Fescue (Festuca longifolia)	90%	90%	10 lbs/acre
"Sherman" Big Bluegrass (Poa ampla)	90%	90%	8 lbs/acre
"Apar Lewis Flax (Linium lewissi)	99%	80%	4 lbs/acre
"Bandera" Rocky Mountain Penstemon (Penstemon strictus)	99%	80%	2 lbs/acre
Lupine Blend	60%	70%	2 lbs/acre
"California Poppy" (Eshscholtzina)	99%	80%	2 lbs/acre**
"Sierra" Sulphur Flower Buckwheat (Eriogonum umbellatum)	40%	50%	2 lbs/acre
		Total:	46 lbs/acre

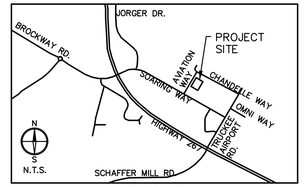
THE SEED SHALL BE EVENLY BROADCAST BY HAND, MECHANICAL HAND SEEDER, OR OTHER APPROVED EQUIPMENT. SEED SHALL BE INCORPORATED INTO THE SOIL USING HAND TOOLS. THE INCORPORATION PROCESS SHALL BE PERFORMED LONGITUDINAL TO THE SLOPE PROGRESSING FROM THE TOE OF THE SLOPE TO THE TOP OF THE SLOPE. THE WORK SHALL NOT CREATE AN EXCESSIVE AMOUNT OF DOWNWARD MOVEMENT OF SOIL OR CLODS ON SLOPING AREAS. SEED SHALL HAVE A SOIL COVER OF NOT LESS THAN ONE-QUARTER INCH (1/4") OR MORE THAN THREE-QUARTERS INCH (3/4").

SLOW RELEASE FERTILIZER SHALL BE AMMONIUM PHOSPHATE SULFATE COMMERCIAL FERTILIZER, AND SHALL CONTAIN A MINIMUM OF 17 PERCENT NITROGEN, 7 PERCENT AVAILABLE PHOSPHORIC ACID, 12 PERCENT WATER SOLUBLE POTASH; AND SHALL BE UNIFORM IN COMPOSITION, DRY AND FREE FLOWING, PELLETED OR GRANULAR. THE APPLICATION RATE SHALL BE 250 POUNDS PER ACRE SPREAD UNIFORMLY OVER THE AREA TO BE REVEGETATED.

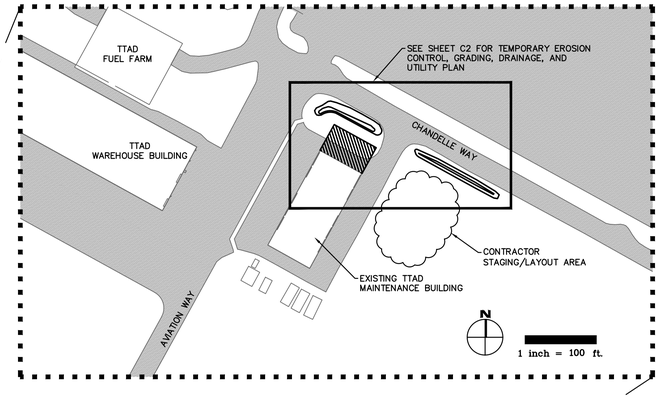
ALL SEEDED AREAS SHALL BE PERMANENTLY MULCHED TO ALLOW ESTABLISHMENT OF VEGETATION. MULCH SHALL CONSIST OF PINE NEEDLES OR PROCESSED SITE CLEARED VEGETATION. THE MULCH SHALL BE APPLIED UNIFORMLY AT A RATE OF APPROXIMATELY 4000 POUNDS/ACRE. THE MULCH SHALL BE ANCHORED IN THE SOIL BY USE OF A SHEEPSFOOT, CRAWLER TRACK OR HAND PUNCHED WITH SHOVELS.

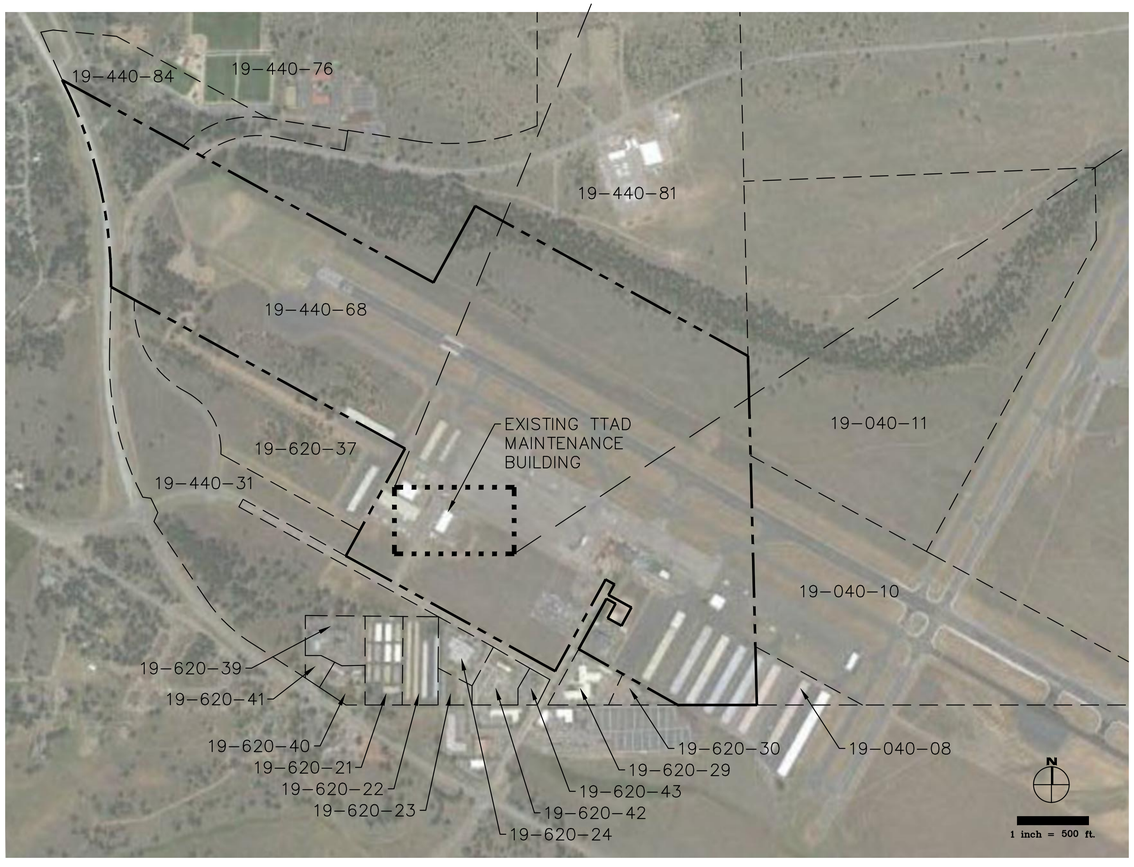
FOLLOWING MANUAL APPLICATION OF THE SEED, AND AMENDMENTS, MULCH MAY BE APPLIED MANUALLY OR WITH TRACK WALK MULCHER. HYDROSEEDING IS NOT SUFFICIENT FOR REVEGETATION.

NOTE: ALL GEOTECHNICAL WORK SHALL BE IN COMPLIANCE WITH THE GEOTECHNICAL REPORT PREPARED BY HOLDREGE & KULL, 41277A-02, DATED FEBRUARY 17, 2016.



VICINITY MAP





BID SET

REGISTERED PROFESSIONAL ENGINEER
WILLIAM G. QUESNEL
No. 46801
Exp. 6/30/17
CIVIL
STATE OF CALIFORNIA
12/15/2016

ACUMEN ENGINEERING COMPANY
ph 530.550.8068
fax 530.550.8069
Post Office Box 3497
Truckee, CA 96160

TRUCKEE TAHOE AIRPORT DISTRICT VEHICLE MAINTENANCE BUILDING ADDITION

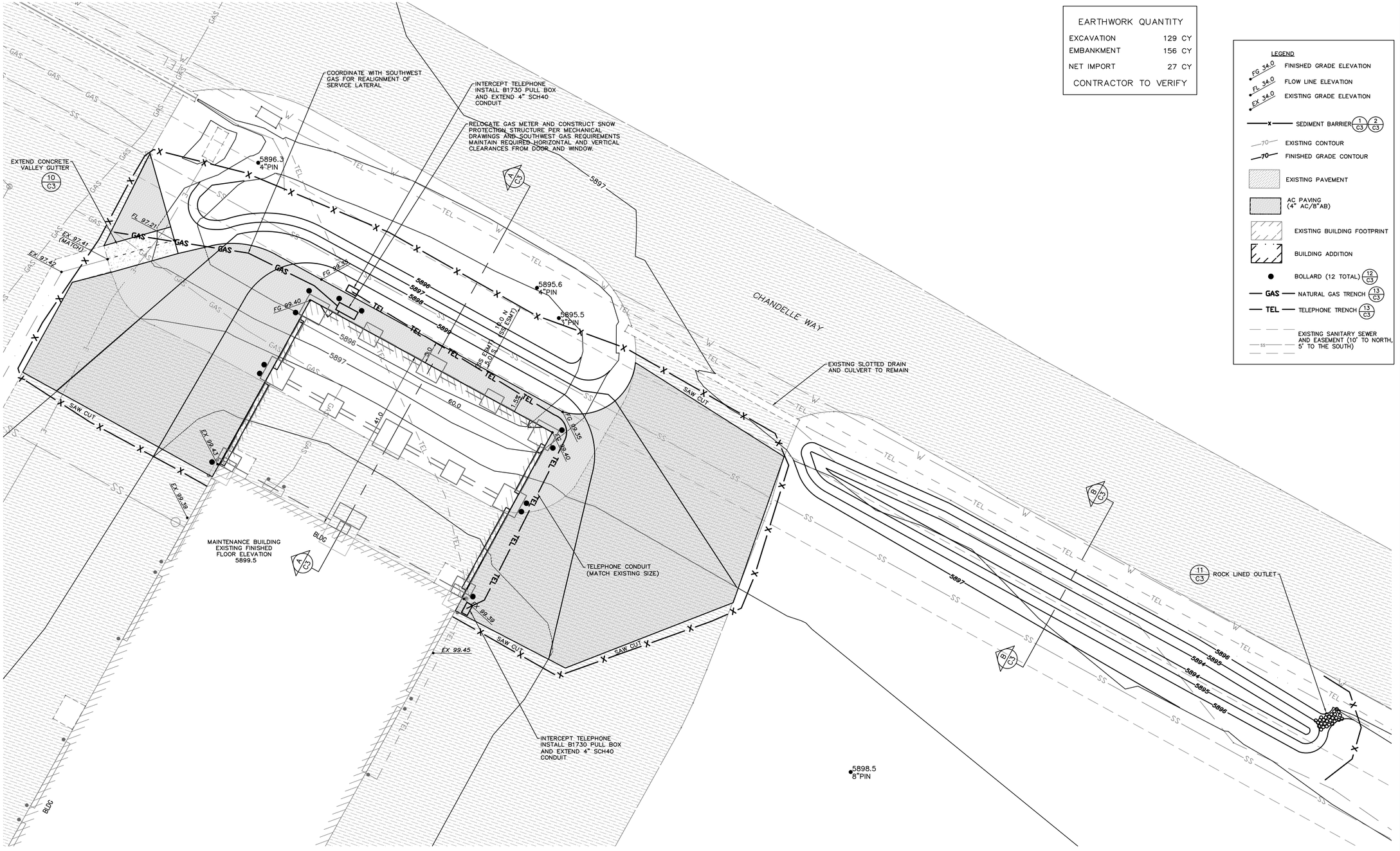
12116 CHANDELLE WAY
TRUCKEE, CALIFORNIA
APN 19-440-68 NEVADA COUNTY

CLIENT NAME:
TRUCKEE TAHOE AIRPORT DISTRICT
10356 TRUCKEE AIRPORT ROAD
TRUCKEE, CA 96161
(530) 587-4119

FILE: TTAD Maintence Bldg Addition.dwg
SCALE: NO SCALE
DATE: 15 DECEMBER 2016
REVISIONS:

DESCRIPTION:
SITE PLAN

SHEET: C1
OF 3 SHEETS



NOTE

THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPE, CONDUIT, OR STRUCTURES SHOWN ON THESE PLANS ARE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN ON THESE DRAWINGS. THE CONTRACTOR FURTHER ASSUMES ALL LIABILITY AND RESPONSIBILITY FOR THE UTILITY PIPES, CONDUITS, AND OTHER STRUCTURES SHOWN OR NOT SHOWN ON THESE DRAWINGS.

ALL FILLS TO BE COMPACTED PER SOILS REPORT. PROVIDE REQUIRED DOCUMENTATION TO BUILDING OFFICIAL PRIOR TO CONSTRUCTION OF BUILDING.

BID SET

GRAPHIC SCALE
10 0 5 10 20 40
(IN FEET)
1 inch = 10 ft.

REGISTERED PROFESSIONAL ENGINEER
WILLIAM G. QUESSE
No. 46801
Exp. 6/30/17
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12/15/2016

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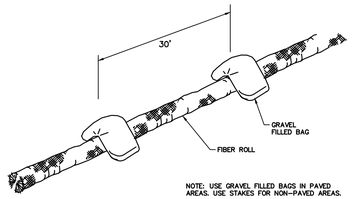
TRUCKEE, CA 96161
(530) 587-4119

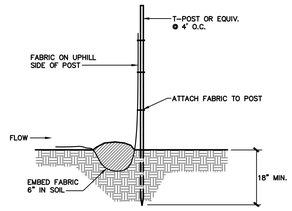
FILE: TTAD Maintence Bldg Addition.dwg
SCALE: NO SCALE
DATE: 15 DECEMBER 2016
REVISIONS:

DESCRIPTION:
TEMPORARY EROSION CONTROL, GRADING, DRAINAGE, AND UTILITY PLAN

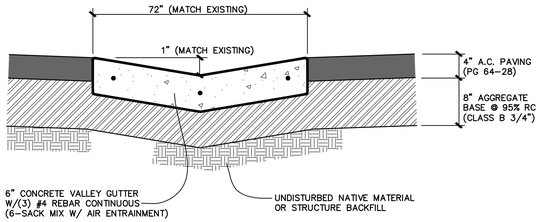
SHEET: C2
OF 3 SHEETS



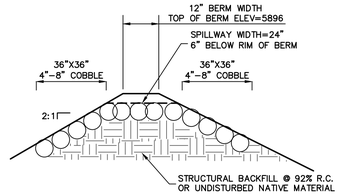
1 SEDIMENT BARRIER
N.T.S.



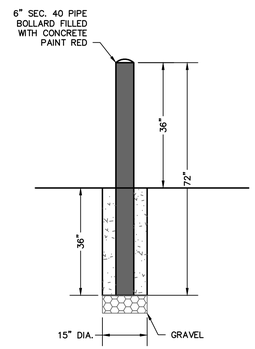
2 SEDIMENT BARRIER
N.T.S.



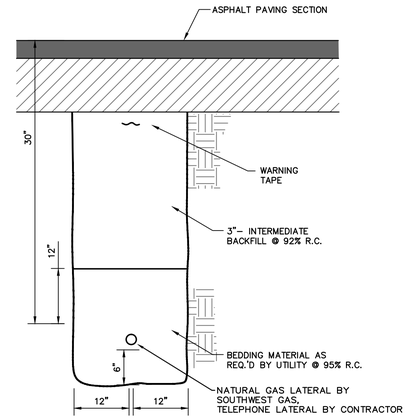
10 VALLEY GUTTER
N.T.S.



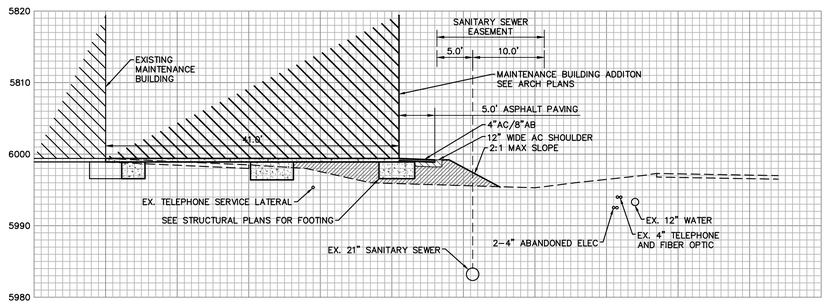
11 ROCK LINED OUTLET
NO SCALE



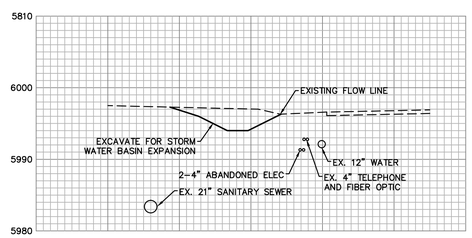
12 BOLLARD
NO SCALE



13 UTILITY TRENCH
NO SCALE



SECTION A-A
1"=10'



SECTION B-B
1"=10'

BID SET

REGISTERED PROFESSIONAL ENGINEER
WILLIAM G. QUESNEL
No. 46801
Exp. 6/30/17
CIVIL
STATE OF CALIFORNIA
12/15/2016

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CLIENT NAME:
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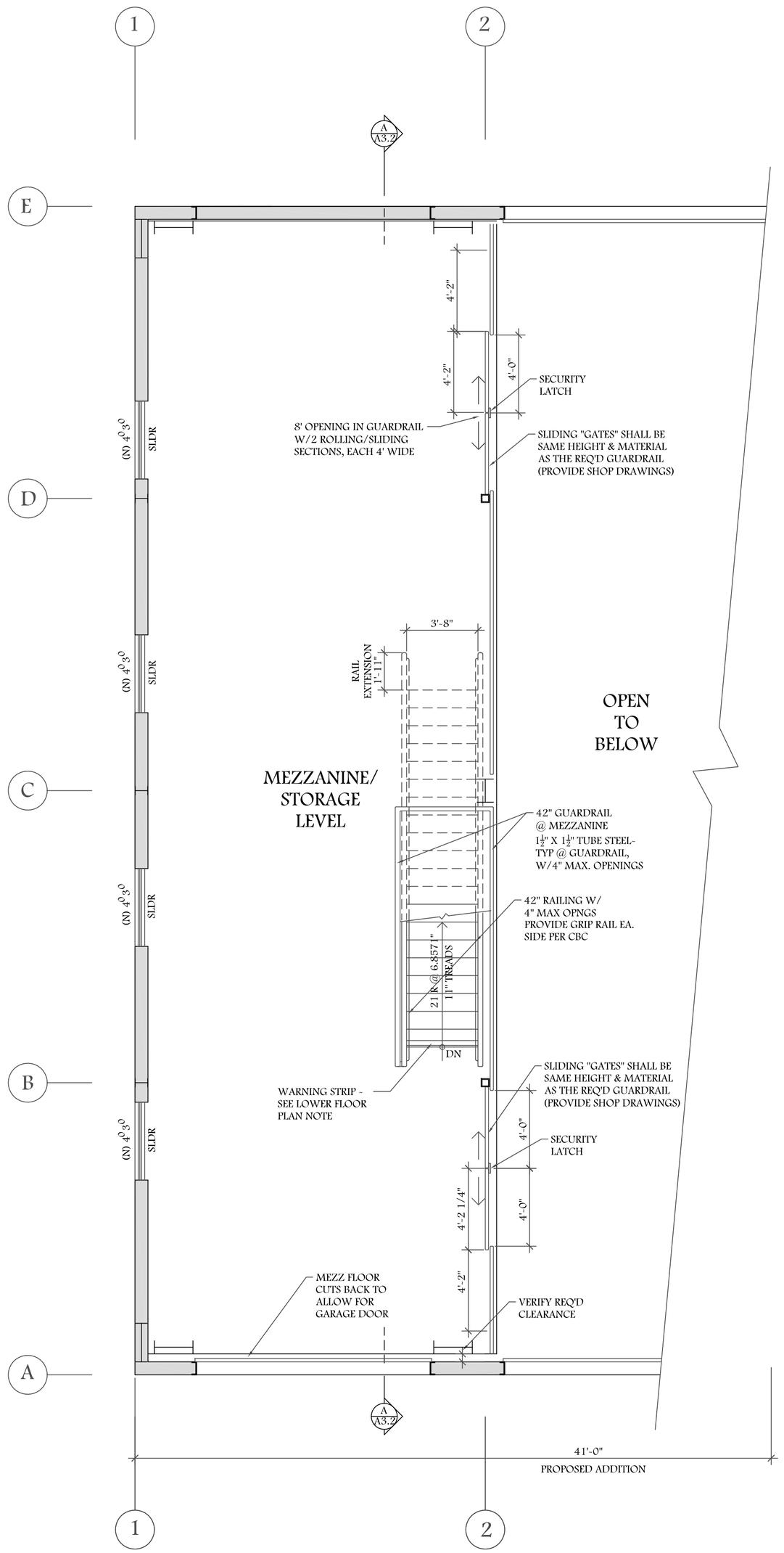
10356 TRUCKEE AIRPORT ROAD
TRUCKEE, CA 96161
(530) 587-4119

FILE: TTAD Maintence Bldg Addition.dwg
SCALE: AS NOTED
DATE: 15 DECEMBER 2016
REVISIONS:

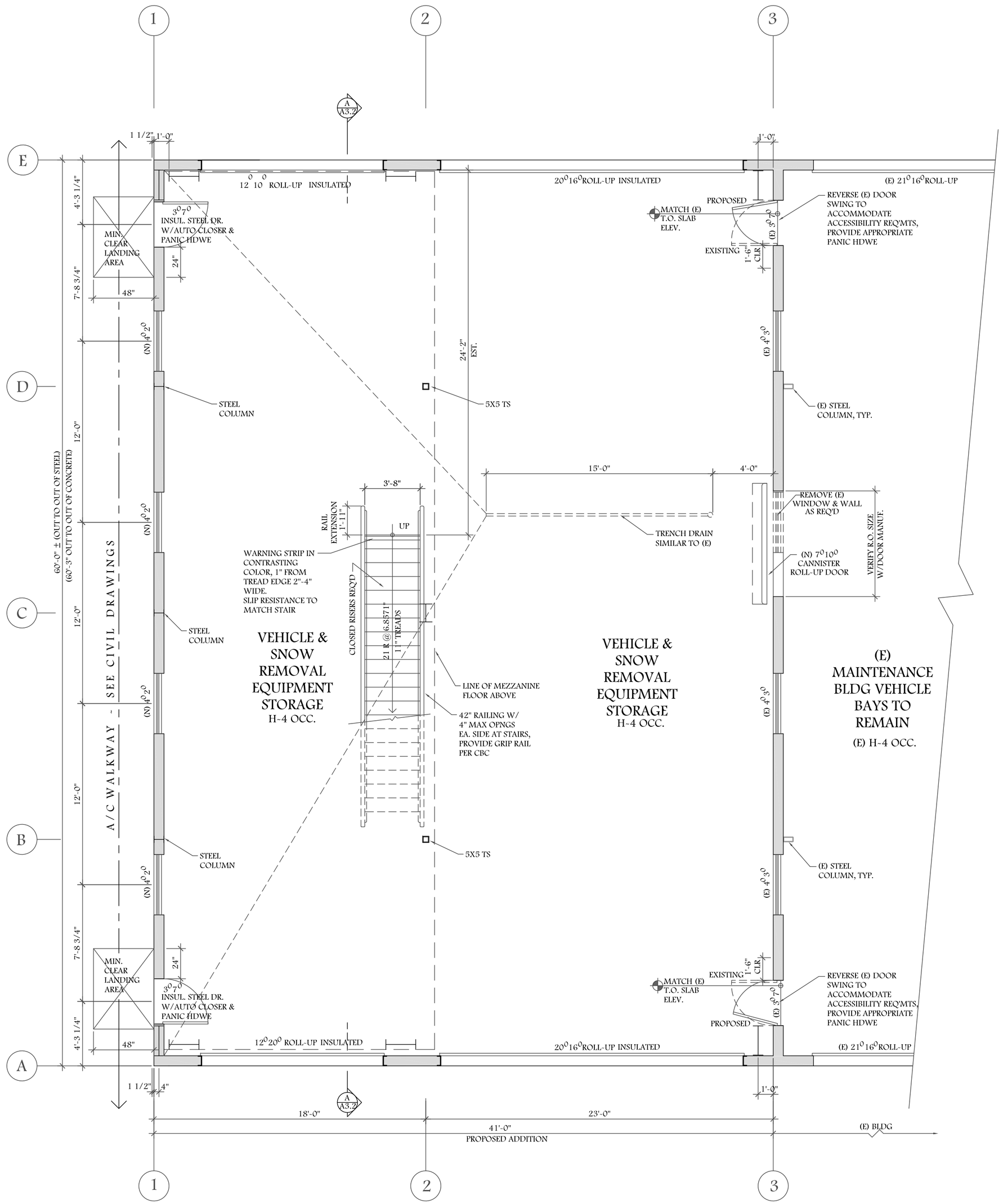
DESCRIPTION:
DETAILS

SHEET: C3
OF 3 SHEETS



UPPER FLOOR PLAN

1110 S.F. MEZZ & STORAGE



LOWER FLOOR PLAN

2460 S.F. ADDITION

GRAPHIC SCALE

0' 4' 8' 12' 16'

BID SET

General Notes

BLDG ADDITION TO BE HEATED TO A MAX. 50° F

SEE SHT S2.1, NOTE 4 FOR LOCATION OF CONC. SLAB CONTROL JOINTS

ALL ROLL UP DOORS ARE ELECTRICALLY OPERATED, SEE ELECT. SHEETS.

PROVIDE ½" PLYWOOD SHEATHING ON INTERIOR SIDE OF ADDED WALLS, UP TO 8' HEIGHT, PAINTED, ON BOTH LOWER & MEZZ LEVELS

GAS METER SHED ON NORTH WALL TO COMPLY WITH WINDOW AND DOOR CLEARANCE REQUIREMENT, AND SHALL NOT ENCROACH INTO LANDING AREA.

No.	Revisions	Date

Project

AIRPORT VEHICLE MAINTENANCE BUILDING ADDITION

Peter S. Gerdin Architect

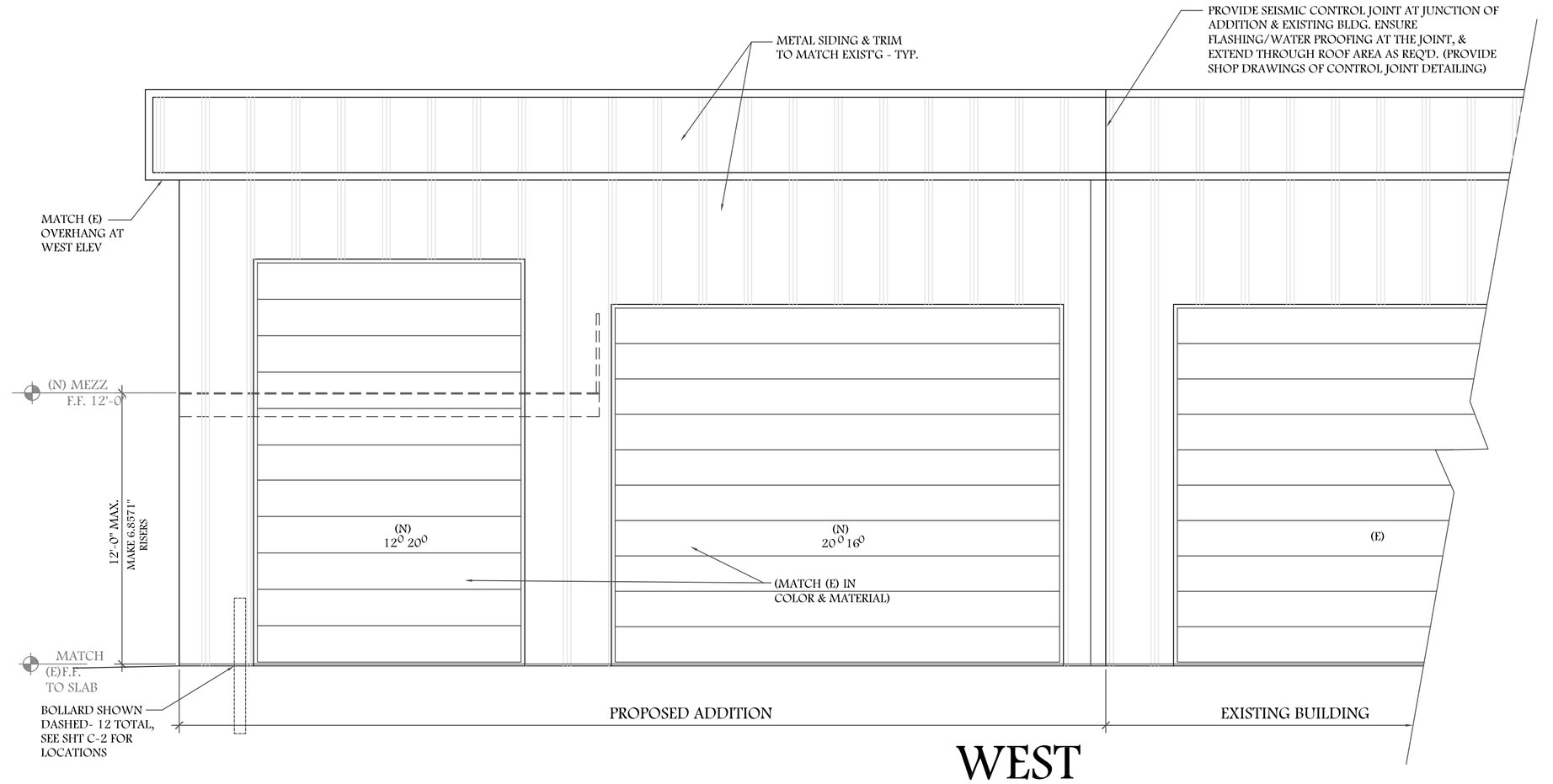
15695 Donner Pass Rd. #206
Truckee, CA 96161
Ph. 530.587.7513 Fax 530.587.7557
e-mail psgarcht@cebridge.net

Plan North

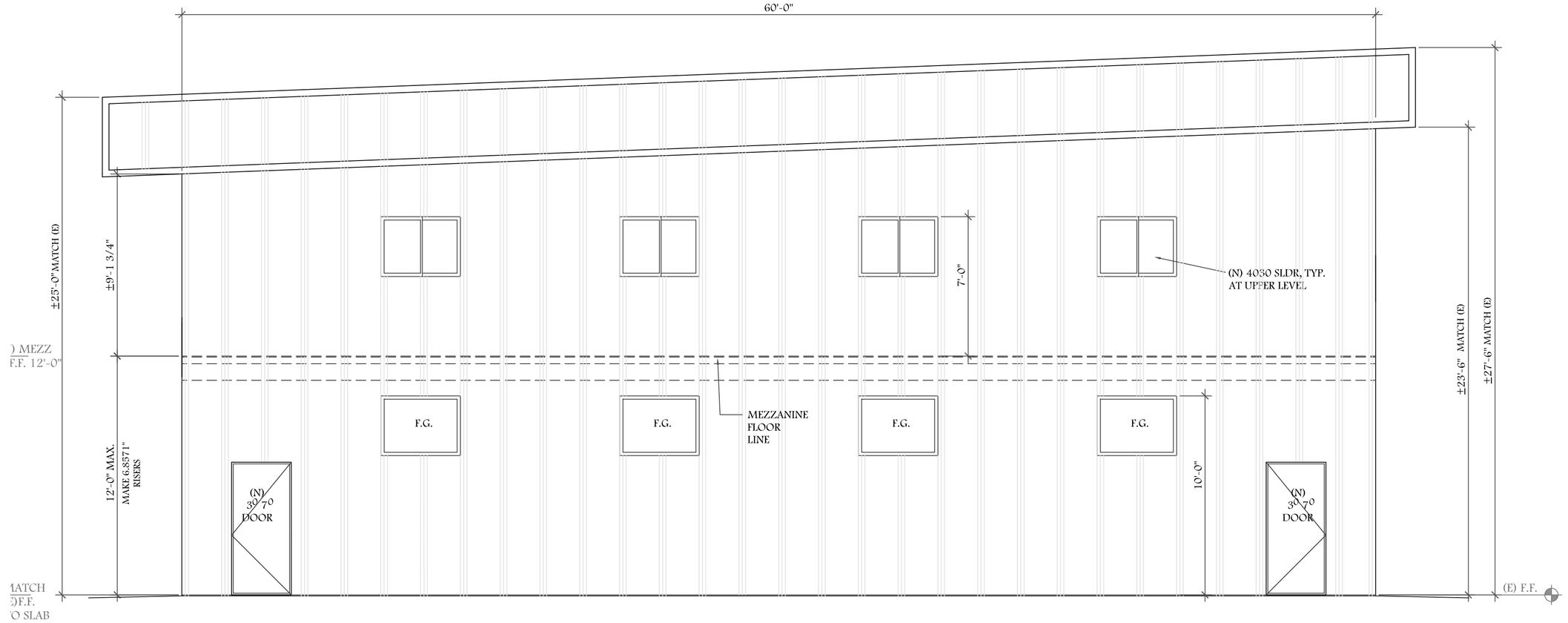
Date	12/15/16
Drawn	PAD
Reviewed	PG
Scale	1/4" = 1'-0"

Sheet No.

A2.1



WEST



NORTH

BID SET

General Notes

No.	Revisions	Date

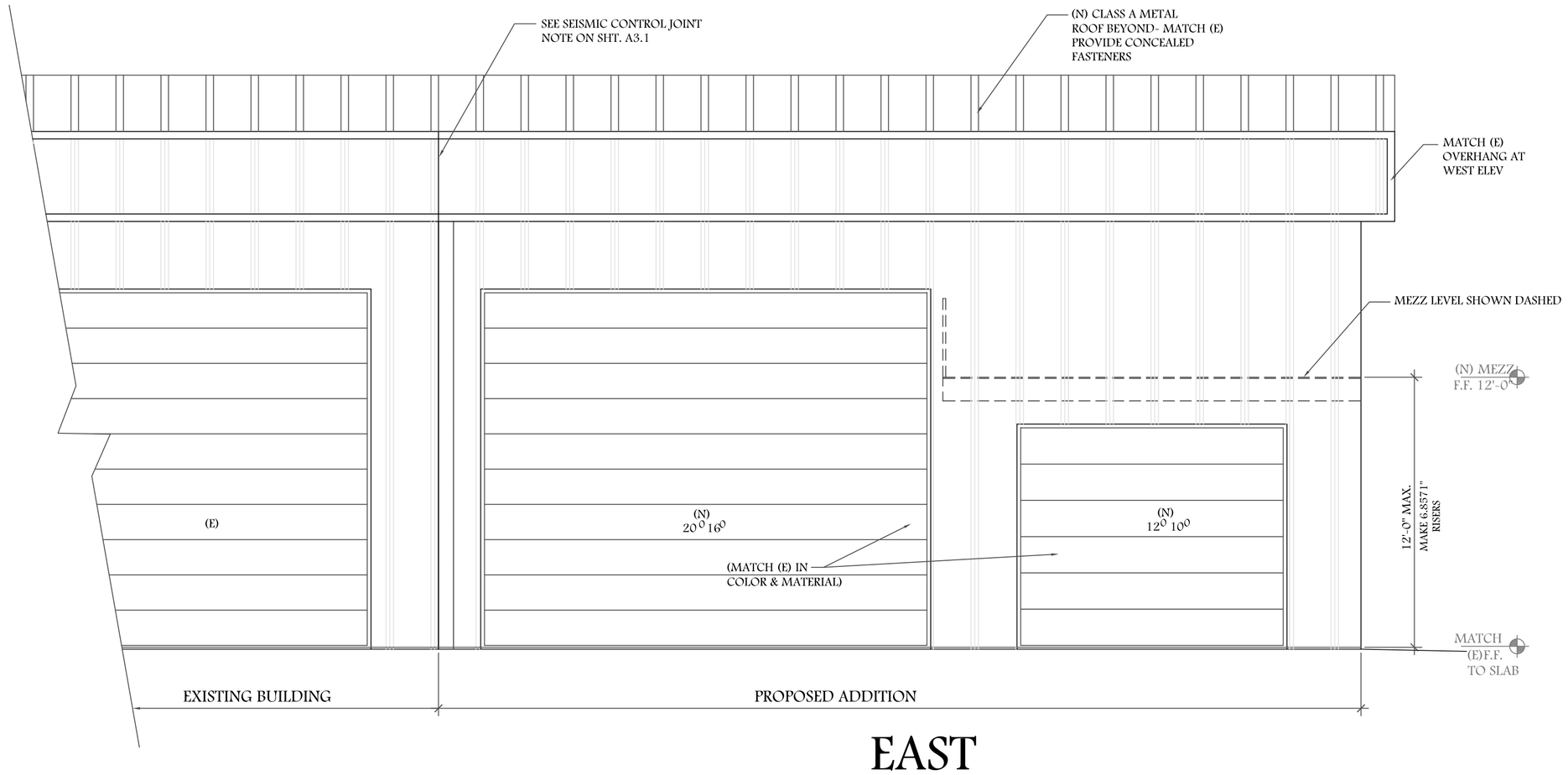
Project AIRPORT VEHICLE MAINTENANCE BUILDING ADDITION

Peter S. Gerdin
Architect

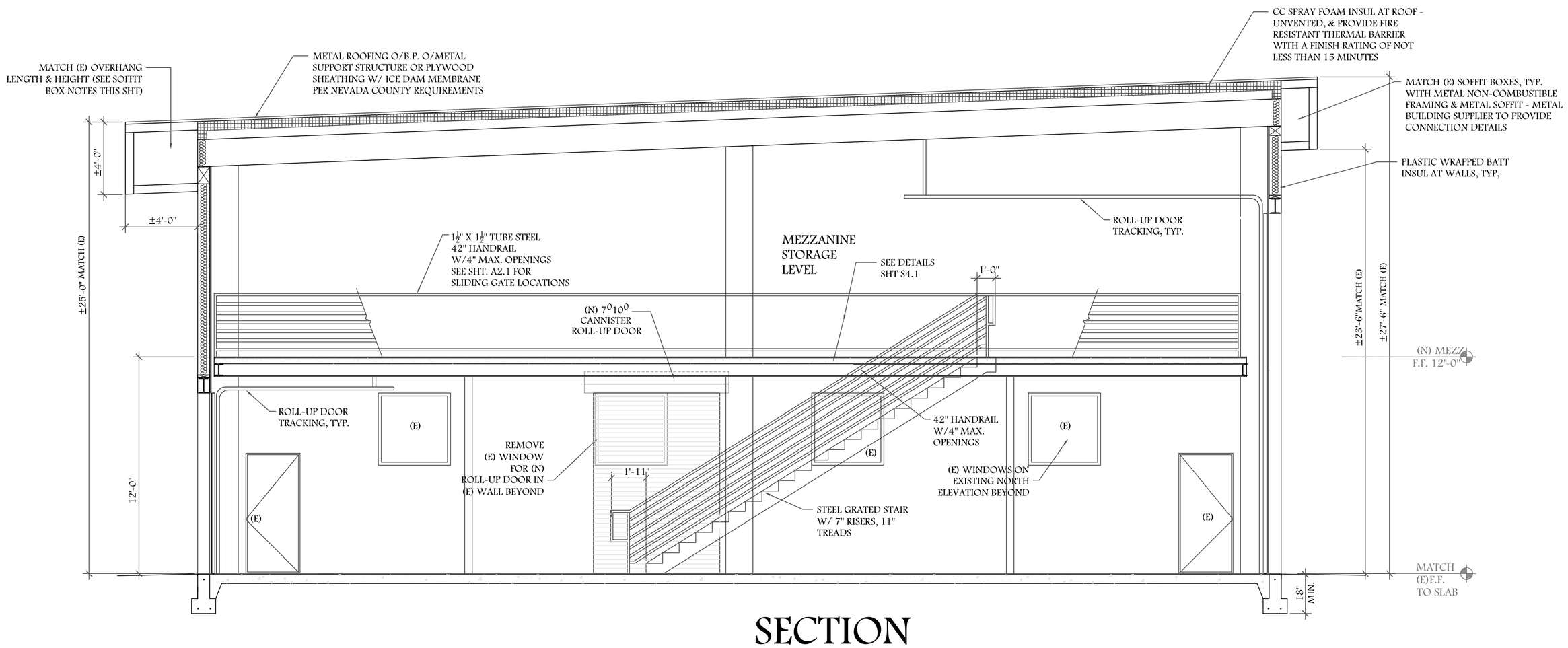
15695 Donner Pass Rd. #206
Truckee, CA 96161
Ph. 530.587.7513 Fax 530.587.7557
e-mail psgarcht@cebridge.net

Date 12/15/16
Drawn PAD
Reviewed PG
Scale 1/4" = 1'-0"

Sheet No. A3.1
Of



EAST



SECTION

BID SET

General Notes

BUILDING INSULATION:
ROOF: R-38
WALLS: R-21

* ALL EXPOSED INSULATION IS REQ'D TO BE ASTM E84 FLAME/SMOKE COMPLIANT

No.	Revisions	Date

Project
AIRPORT VEHICLE MAINTENANCE BUILDING ADDITION

Peter S. Gerdin
Architect

15695 Donner Pass Rd. #206
Truckee, CA 96161
Ph. 530.587.7513 Fax 530.587.7557
e-mail psgarcht@cebridge.net

Date 12/15/16
Drawn PAD
Reviewed PG
Scale 1/4" = 1'-0"

Sheet No.
A3.2
Of

PROJECT STRUCTURAL GENERAL NOTES

01. GENERAL

A. These general notes shall apply to the structural drawings unless otherwise shown or noted.

B. Unless otherwise indicated all details of design, workmanship and materials shall conform to the 2013 Edition of the California Building Code (CBC).

C. Any discrepancies, errors, or omissions found by the Builder relating to the Structural Construction Documents, the Architectural Construction Documents, and actual Site Conditions shall be reported to the Architect. The Architect shall notify the Structural Engineer who shall, in time, correct such error or omission in writing. Any work done by the Builder after discovery of such error shall be at the Builder's risk.

D. The Builder shall verify and coordinate all dimensions among all drawings prior to proceeding with any work or fabrication.

E. The Builder is responsible for all bracing and shoring during construction.

F. DEFINITION OF SPECIAL INSPECTION : Inspection as herein required of the materials, installation, fabrication, erection or placement of components and connections requiring special expertise to ensure compliance with approved construction documents and referenced standards (see IBC / CBC Section 1705).

G. DEFINITION OF SPECIAL INSPECTION, CONTINUOUS : The full-time observation of work requiring special inspection by an approved special inspector who is present in the area where the work is being performed.

H. DEFINITION OF SPECIAL INSPECTION, PERIODIC : The part-time or intermittent observation of work requiring special inspection by an approved special inspector who is present in the area where the work has been or is being performed and at the completion of the work.

I. DEFINITION OF STRUCTURAL OBSERVATION : The visual observation of the structural system by a registered design professional for general comformance to the approved construction documents at significant construction stages and at the completion of the structural system. Structural observation does not include or waive the reponsibility for the inspection required by Section 110, 1705 or other sections of the code.

02. DESIGN CRITERIA

A. Seismic
1. Seismic importance factor (I_E): 1.0
2. Mapped spectral response acceleration: S_s = 1.293
3. Site class = C
4. Seismic design category: D
5. Basic seismic-force-resisting system: Bearing Wall System: Light-framing with wood sheathing.
6. Analysis procedure used: Equivalent Lateral Force Procedure

B. Wind
1. Basic wind speed: V_{ULT} = 130 mph, V_{ASD}= 101 mph
2. Importance factor: I_w = 1.0
3. Wind exposure: C

C. Snow
1. Ground snow load (per jurisdiction): Pg = 190 PSF
2. Importance factor: I = 1.0

D. Live Loads
1. Garage Floor = 50 psf + jack load 3,000 lbs.
2. Mezzanine Storage = 250 psf.

03. FOUNDATION

A. A design soil bearing capacity of 3500 psf for dead plus long term live loads is utilized in this design based on Geotechnical Report by Holdredge and Kull, dated February 17, 2016.

B. All foundation excavation is to be carried to undisturbed native material or placed in an approved engineered fill.

C. Over-excavation of materials shall be backfilled with concrete.

D. All backfill supporting footings and slabs shall be compacted to not less than 95% relative density in accordance with ASTM D 1557 (in lieu of alternate specification per Geotechnical Engineer).

E. Backfilling against foundation walls shall not be permitted until the wall has reached 28-day strength and all supporting structure is in place.

F. Specification of underlayment below interior slabs shall be the responsibility of the Geotechnical Engineer and is not the responsibility of the Structural Engineer. Refer to the Geotechnical Report pages 16-17 for further information.

G. Step footings at a ratio of one vertical to two horizontal, with a maximum vertical step of 2'-0", typ uno.

H. Specification of waterproofing for foundations and retaining walls shall be the responsibility of the Architect, Owner, or Contractor and is not the responsibility of the Structural Engineer.

I. Any unusual site conditions (e.g. loose fill, sub-surface water, etc.) shall be immediately reported to the Structural Engineer.

J. VERIFICATION

TABLE 1705.6 : VERIFICATION OF SOILS BY GEOTECHNICAL ENGINEER	
VERIFICATION	REQ'D ON THIS PROJECT
1. Verify materials below footings are adequate to achieve the design bearing capacity.	YES
2. Verify excavations are extended to proper depth and have reached proper material.	YES
3. Perform classification and testing of controlled fill materials.	IF APPLICABLE
4. Verify use of proper materials, densities and lift thicknesses during placement and compaction of controlled fill.	IF APPLICABLE
5. Prior to placement of controlled fill, observe subgrade and verify that site has been prepared properly.	IF APPLICABLE

04. REINFORCED CONCRETE

A. Reinforced concrete shall conform to applicable requirements of the IBC / CBC and ACI Standard.

B. Concrete shall have a 28 day compressive strength of not less than:
Concrete in exposed walls: 4000 psi
Concrete in exposed slabs: 4000 psi
Concrete stemwalls, footings: 3000 psi

C. Slump shall be 3-4 inches.

D. Aggregate shall conform to ASTM C33 for stone concrete.

E. Provide control joints in all slabs on grade, where indicated. The maximum spacing of control joints shall not be more than 12'-0" o.c.

F. Additives containing calcium chloride shall not be used.

G. Provide water / cementitious materials ratio of 0.45

H. Provide 4-6% air entrainment for all concrete exposed to freezing.

05. REINFORCING STEEL

A. All reinforcing steel shall be as follows :
1. No. 3 bars : ASTM A615, Grade 40
2. No. 4 bars and larger : ASTM A615, Grade 60
3. Reinforcing steel to be welded : ASTM A706, Grade 60
4. Welded wire fabric : ASTM A185

B. All reinforcing steel shall be accurately located and adequately secured in position prior to and during placement of concrete.

C. All details of fabrication and installation of reinforcing steel shall be in accordance with ACI Manual of Standard Practice.

D. Standard Hooked Bars straight extension beyond radius section:
12 bar diameters

E. Lap reinforcing bar splices:
Grade 40: 40 bar diameters
Grade 60: 50 bar diameters

F. Bend all horizontal wall bars 40 bar diameters around all corners, UNO.

G. Provide vertical and horizontal reinforcing bars in concrete and masonry walls to conform to the minimum provisions of ACI 318, Section 14.3, UNO.

06. STRUCTURAL STEEL

A. All shapes including structural steel plates shall conform to ASTM A-36, UNO.

B. Structural steel W sections shall conform to ASTM A572 Grade 50.

C. All steel pipe columns shall conform to ASTM A-53, Type E or S, Grade B.

D. All steel tube sections shall conform to ASTM A500, Grade B.

E. All detailing shall conform to the current AISC specifications.

F. WELDING :
1. All welding shall conform to current American Welding Society specifications for material being welded and be performed by appropriately certified welders.
2. Electrodes shall have minimum tensile strength of 70 ksi, and a minimum Charpy V-Notch rating of 20 ft-lbs at - 20 deg. F.
a. Stick electrode : Use Excalibur 7018 (Lincoln Electric) or equal.
b. Wire electrode : Use Innershield NR-232 (Lincoln Electric) or equal.
(NOTE! Innershield NR-211 Is not acceptable)

G. All bolts shall be unfinished ASTM A-307, UNO.

H. All high strength A325 bolts shall be installed in conformance with AISC Specification for Structural Joints Using ASTM A325 or A490 Bolts.

I. All structural steel and miscellaneous iron not encased in concrete shall receive one shop coat of approved primer paint.

J. Provide 5/8"Ø stud bolts @ 24" O.C. on faces of steel columns in wood walls. (Where applicable, UNO.)

K. SPECIAL INSPECTION: HIGH STRENGTH BOLTS & WELDING (**PRIOR TO FIT-UP**)

07. ADHESIVE ANCHORS

A. Use adhesive manufactured for appropriate application and temperature conditions. Epoxy used for bolts placed into existing concrete shall be approved for use in cracked concrete in Seismic Design Category D, such as Hilti HIT-RE 500-SD, Simpson SET-XP or approved equivalent. Provide ICC report to engineer for approval.

B. Follow adhesive manufacturer's directions for proper application.

C. VERIFICATION & SPECIAL INSPECTION

VERIFICATION AND SPECIAL INSPECTION OF ADHESIVE ANCHORS		
VERIFICATION & SPECIAL INSPECTION	CONT.	PERIODIC
1. Temp of Concrete or CMU	-	X
2. Temp of adhesive	-	X
3. Hole Depth & Diameter	-	X
4. Cleanout	-	X
5. Placement	-	X

08. LIGHT GAUGE METAL STRUCTURAL FRAMING

A. Light gauge metal structural framing shall be fabricated and erected according to manufacturer's recommendations. All structural properties shall be computed in accordance with AISI "Specifications for the Design of Cold Formed Steel Structural Members, latest edition.

B. Unless otherwise noted, steel shall conform to the following specifications:
1. Studs, runners, and joists, painted, 16 gage and heavier: ASTM A1011 Grade 50, modified to a minimum yield point of 50 ksi.
2. Studs, runners, and joists, galvanized, 16 gage and heavier: ASTM A653 Grade 50, modified to a minimum yield point of 50 ksi.
3. Studs, runners, and joists, painted, 18 gage and lighter: ASTM A1008 Grade 33, modified to a minimum yield point of 33 ksi.
4. Studs, runners, and joists, galvanized, 18 gage and lighter: ASTM A653 Grade 33, modified to a minimum yield point of 33 ksi.

C. For minimum stud section properties, refer to the structural details.

D. Metal stud and metal joist bridging (V or solid) shall be provided and installed according to the manufacture's recommendations. Align at least one metal stud under every metal joist, beam or header.

E. Welding of light metal shall be with fillet welds equal in thickness to the thinner of the two section being joined. All welded connection shall be welded as shown on the structural drawings. Double vertical studs shall be stitch welded together on both flanges with 1/16" groove welds x 1" long at 12" on center.

09. PRE-MANUFACTURED METAL BUILDING (BY OTHERS)

A. All structural elements of the metal building systems, including supports for all electrical, mechanical , and hvac components shall be designed, detailed, and stamped and signed by a civil or structural engineer licensed in the state of California. Design for the metal building system shall include loads indicated on the construction documents for the structural member attachments of mezzanine floor area. Design shall comply with the 2013 california building code.

B. Metal Building Drawings and Calculations shall be submitted to the Architect for review prior to fabrication.

C. The metal building shall be fabricated by an approved pre-engineered metal building manufacture. The metal building shall include all roof, wall, and lateral bracing systems.

10. SUBMITTALS TO ENGINEER OF RECORD

SUBMITTALS TO ENGINEER OF RECORD (SEC 1703)	
	REQ'D ON THIS PROJECT
A. Manufactured roof trusses (shop drawings).	NO
B. Manufactured floor trusses	NO
C. Structural steel (shop drawings).	YES
D. Geotechnical verification summary.	YES
E. Concrete mix design (Report).	YES
F. Roof & deck "build-up" spec's	NO
G. Steel stair shop dwgs.	YES

11. SPECIAL INSPECTION

When indicated in the table below, the following items shall be inspected in accordance with the IBC Section 1704 by a certified special inspector from an established testing agency. The testing agency shall send copies of all testing and inspection reports directly to the Architect, Engineer and Building Department. Any materials which fail to meet the project specifications shall imediately be brought to the attention of the Architect.

VERIFICATION, INSPECTION OR MATERIAL TESTING			
ITEM	CONT.	PERIODIC	REQ'D ON THIS PROJECT
Grading, excavation, and fill (by Geotechnical Engineer)	-	X	YES
Bearing Capacity - Compaction (by Geotechnical Engineer)	-	X	YES
Concrete, rebar placement	-	X	YES
Concrete, anchor bolts and inserts	-	X	YES
Concrete, placement	X	-	YES
Concrete, cylinders	X	-	YES
Concrete, use of required mix design	-	X	YES
Concrete, adhesive anchor placement in hardened concrete	-	X	YES
Concrete, post installed mechanical anchors in hardened concrete	-	X	YES
Structural steel - complete and partial joint penetration groove welds	X	-	YES
Structural steel - multi-pass fillet welds	X	-	YES
Structural steel - single pass fillet welds (>5/16")	X	-	YES
Structural steel - single pass fillet welds (<= 5/16")	-	X	YES
Structural steel, field welding - groove welds	X	-	NO
Structural steel, ultrasonic testing of CJP welds	X	-	NO
Structural steel, high strength bolting	-	X	NO
Structural steel, welded anchors or studs	-	X	NO
Metal deck welding	-	X	NO
Floor/roof diaphragm sheathing nailing	-	X	NO
High load diaphragms	-	X	NO
Shearwall nailing	-	X	NO
Seismic force resistance system (Straps, Clips, Bolts, etc.)	-	X	NO
Holdown & vertical metal strap placement	-	X	NO
Glued-Laminated beams, fabrication	-	X	NO
Manufactured trusses & assemblies	-	X	NO
Prefabricated wood structural elements	-	X	NO

12. STRUCTURAL OBSERVATION BY THE ENGINEER OF RECORD

IBC/CBC Section 202... "STRUCTURAL OBSERVATION: The visual observation of the structural system by a registered design professional for general conformance to the approved construction documents. ***Structural observation does not include or waive the responsibility for the inspection required by Section 110, 1705 or other sections of this code.***"

STRUCTURAL OBSERVATION SERVICES SHALL BE PROVIDED BY: Gabbart & Woods

PLANNED FREQUENCY OF OBSERVATIONS:
FOUNDATION REINFORCING & ANCHOR BOLT PLACEMENT

IBC / CBC Section 1704.5... "At the conclusion of the work included in the permit, the structural observer shall submit to the *building official* a written statement that the site visits have been made ***and identify any reported deficiencies, which, to the best of the structural observer's knowledge, have not been resolved.***"

13. SCOPE OF WORK

SCOPE OF WORK
The scope of work contained within these drawings is for the structural foundations and mezzanine framing for the addition to the existing Maintenance Building at the Truckee Tahoe Airport. The superstructure is a pre-manufactured metal building to be designed and provided by others.

ABBREVIATIONS

A.B.	ANCHOR BOLT	K	KIPS
ABV	ABOVE	K.B.	KNEE BRACE
A.C.	ASPHALT CONCRETE	K.P.	KING POST
A.C.I.	AMERICAN CONCRETE INSTITUTE	K.S.	KING STUD
ADD'L	ADDITIONAL	LAM	LAMINATED
A.F.F.	ABOVE FINISH FLOOR	LDGR	LEDGER
AGGR	AGGREGATE	LBS	POUNDS
AISC	AMERICAN INSTITUTE of STEEL CONSTRUCTION	L.F.	LINEAR FOOT
		L.L.	LIVE LOAD
ALT.	ALTERNATE	LSL	LAMINATED STRAND LUMBER (TIMBERSTRAND or EQUAL)
ALUM	ALUMINUM		
APP'L	APPLICABLE	LVL	LAMINATED VENEER LUMBER (MICROLLAM OR EQUAL)
ARCHL	ARCHITECTURAL		
ASTM	AMERICAN SOCIETY of TESTING and MATERIALS	MAT'L	MATERIAL
A.W.S.	AMERICAN WELDING SOCIETY	MAX	MAXIMUM
		M.B.	MACHINE BOLT
BD	BOARD	MFR	MANUFACTURER
BLDG	BUILDING	MANUF.	MANUFACTURED
BLK	BLOCK	MIN	MINIMUM
BLK'G	BLOCKING	MISC	MISCELLANEOUS
BLW	BELOW	ML	MICROLLAM
BM	BEAM	MTL	METAL
B.O.	BOTTOM OF		
BRG	BEARING	(N)	NEW
BTM	BOTTOM	N/A	NOT APPLICABLE
BTWN	BETWEEN	NIC	NOT INCLUDED
BVLD	BEVELED	N.S.	NEAR SIDE
B.W.	BOTH WAYS	N.T.S.	NOT TO SCALE
CALCS	CALCULATIONS	O/	OVER
CANTLR	CANTILEVER	O.C.	ON CENTER
C.C.	CENTER TO CENTER	O.D.	OUTSIDE DIAMETER
CJ	CONTROL JOINT	O.F.	OUTSIDE FACE
CJP	COMPLETE JOINT PENETRATION	O.H.	OVERHANG
		O.L.	OUTLOOKER
CL	CENTERLINE	OPNG	OPENING
CLG	CEILING	OPP	OPPOSITE
CLR	CLEAR		
C.M.U.	CONCRETE MASONRY UNIT	P.B.	PITCH BREAK
CNTRSNK	COUNTERSINK	PC	PIPE COLUMN
COL	COLUMN	PCF	POUNDS PER CUBIC FOOT
CONC.	CONCRETE	PKT	POCKET
CONN'X	CONNECTION	PLF	POUNDS PER LINEAR FOOT
CONSTR	CONSTRUCTION	PLWD	PLYWOOD
CONT'D	CONTINUED	PREFAB	PREFABRICATED
CONT'S	CONTINUOUS	PSF	POUNDS PER SQUARE FOOT
CTR	CENTER	PSI	POUNDS PER SQUARE INCH
CPG	CONTINUOUS PARALLEL TO GRAIN BEARING REQUIRED(POSTS)	PSL	PARALLEL STRAND LUMBER
		P.T.	PRESSURE TREATED
		PVMT	PAVEMENT
d	PENNY	RAD	RADIUS
DBL	DOUBLE	RDWD	REDWOOD
D.F.	DOUG FIR	REINF.	REINFORCEMENT
DIA / Ø	DIAMETER	REBAR	REINFORCING BARS
DIAG.	DIAGONAL	REF.	REFERENCE
DIM	DIMENSION	REQ'D	REQUIRED
DECK'G	DECKING	REQMT	REQUIREMENT
D.L.	DEAD LOAD	RET.	RETAIN
DN	DOWN	RETG	RETAINING
DTL	DETAIL	REV	REVISION
DWG	DRAWING	RFTR	RAFTER
		R.O.	ROUGH OPENING
(E)	EXISTING	R&R	REMOVE & REPLACE
EA.	EACH		
E.J.	EXPANSION JOINT	S.A.D.	SEE ARCHL DRAWINGS
E.L.	END LENGTH	SCHED.	SCHEDULE
EMBED	EMBEDMENT	SEC.	SECTION
E.N.	EDGE NAILING	SF	SQUARE FEET
ENGR	ENGINEER	SHT	SHEET
E.O.S.	EDGE of SLAB	SHT'G	SHEATHING
EQ.	EQUAL	SIM	SIMILAR
EQUIP.	EQUIPTMENT	S.M.G.	SEE MECHANICAL DRAWINGS
E.S.	EACH SIDE	S.O.G.	SLAB ON GRADE
E.W.	EACH WAY	SPEC'S	SPECIFICATIONS
EXT.	EXTERIOR	STAG'D	STAGGERED
		STD	STANDARD
FDN	FOUNDATION	STFNR	STIFFENER
F.F.	FINISH FLOOR	STL	STEEL
F.G.	FINISH GRADE	STRUCT.	STRUCTURAL
FIN	FINISH	SYMM	SYMMETRICAL
FLR	FLOOR		
F.O.C.	FACE of CONCRETE	T&G	TOUNGE and GROOVE
F.O.M.	FACE of MASONRY	T&B	TOP AND BOTTOM
F.O.S.	FACE of STUD	TBSTD	TIMBERSTRAND
F.O.W.	FACE of WALL	TEMP.	TEMPERED
F.P.	FULL PENETRATION	THK	THICK
FRMG	FRAMING	THKNS	THICKNESS
F.S.	FAR SIDE	THR'D	THREADED
FT	FOOT / FEET	THRU	THROUGH
FTG	FOOTING	T.O.	TOP OF
		TRMR	TRIMMER
GA	GAGE	TYP	TYPICAL
GALV	GALVANIZED		
G.F.R.	GLASS FIBER REINFORCED	U.N.O.	UNLESS NOTED OTHERWISE
GL	GLUE LAM		
GLB	GLU-LAM BEAM	VERT.	VERTICAL
GRD	GRADE	V.I.F.	VERIFY IN FIELD
GYP BD	GYPSUM BOARD		
		W/	WITH
HD	HOLDOWN	WD	WOOD
HDR	HEADER	W/I	WITHIN
HF	HARDY FRAME	W/O	WITHOUT
HGR	HANGER	WNDW	WINDOW
HORIZ.	HORIZONTAL	W.P.	WATER PROOF
HSS	HOLLOW STRUCTURAL SECTION	WT	WEIGHT
		W.W.F.	WELDED WIRE FABRIC
HT	HEIGHT		
		YD	YARD
I.B.C.	INTERNATIONAL BUILDING CODE		
I.D.	INSIDE DIAMETER		
I.F.	INSIDE FACE		
INT.	INTERIOR		
JST	JOIST		
JT	JOINT		

AIRPORT VEHICLE MAINTENANCE BUILDING ADDITION
FOUNDATION & MEZZANINE FRAMING

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No.	Revisions	Date
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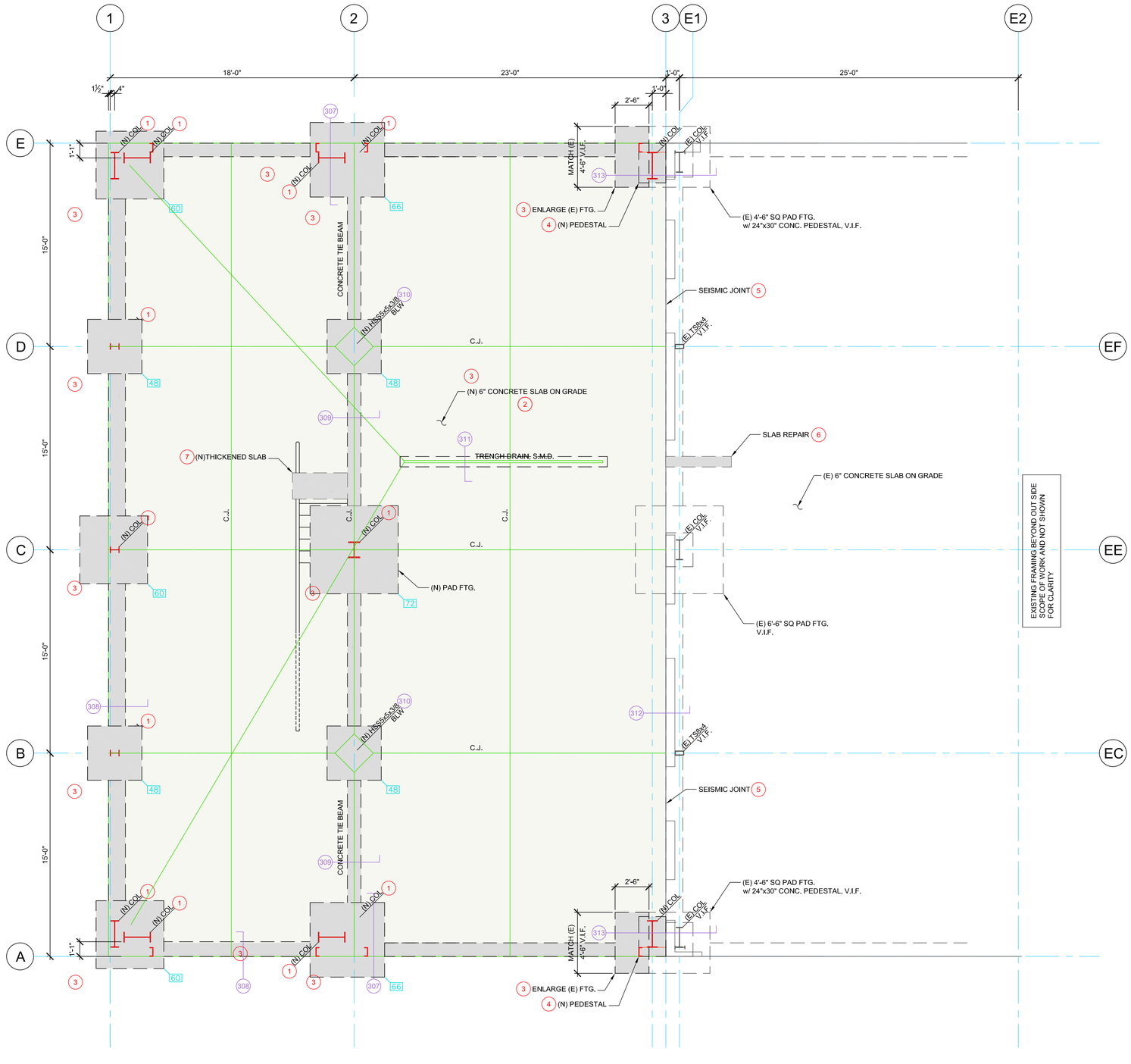
Date 12/15/16
Drawn ADH
Reviewed RW
Scale

Sheet No.
S1.1

PLAN GRAPHIC LEGEND (BEST IN COLOR)

- NEW CONCRETE SLAB ON GRADE
- NEW CONCRETE FOOTING
- STEEL BEAM
- HUNG
- BEARING
- MOMENT CONNECTION
- 24 — PAD FOOTING TAG
- HSS COL BELOW
- POST OR COL ABOVE
- WIDE FLANGE COL BELOW
- WIDE FLANGE COL ABV
- 101 — GENERAL SECTION DETAIL
- 101 — SPECIFIC LOCATION DETAIL
- 12 — KEYNOTE



FOUNDATION PLAN

1/4" = 1'-0"

GRAPHIC SCALE 0' 1' 2' 4' 8'

GENERAL PLAN NOTES

FOUNDATION:

1. REFER TO GEOTECHNICAL REPORT BY HOLDREGE & KULL DATED FEB. 17, 2016.
2. ALL EXTERIOR FOOTINGS SHALL HAVE MINIMUM 24" FROST PROTECTION, U.N.O.
3. BUILDER SHALL CHECK AND VERIFY ALL DIMENSIONS WITH ARCHITECTURAL DRAWINGS PRIOR TO CONSTRUCTION.
4. SLAB CONTROL JOINT PATTERN SHALL BE PROVIDED AS A MINIMUM @ 15 FT. O.C. @ INTERIOR SLABS OR 6 FT. O.C. @ EXTERIOR PATIOS, EACH WAY, U.N.O.
5. SEE ARCHITECTURAL DRAWINGS FOR FLOOR DRAIN LOCATIONS IF APPLICABLE.

PLAN KEYNOTES

1. COLUMN BY METAL BUILDING MANUFACTURER. REFER TO METAL BUILDING SHOP DRAWINGS FOR COLUMN MEMBER SIZE AND BASE PLATE DETAILS.
2. 6" CONCRETE SLAB ON GRADE W/ #4 @ 12" O.C. EACH WAY (MID-DEPTH). UNDERLAYMENT DESIGNED BY OTHERS (REFER TO GEOTECHNICAL REPORT).
3. (E) FTG TO BE ENLARGED AS INDICATED ON PLAN. FOOTING REINFORCING SHALL BE DRILLED & EPOXIED INTO FACE OF EXISTING FTG. PER DETAIL 313.
4. (N) CONCRETE PEDESTAL BELOW (N) METAL BUILDING COLUMN. VERTICAL PEDESTAL REINFORCING AND COLUMN ANCHOR BOLTS SHALL BE DRILLED & EPOXIED INTO TOP OF EXISTING FOOTING.
5. PROVIDE SEISMIC SEPARATION BETWEEN NEW AND EXISTING STRUCTURES PER ASCE 7-10, SECTION 12.12.3. REFER TO ARCH'L DRAWINGS FOR SEISMIC JOINT DETAILS AT EXTERIOR WALLS AND ROOF. AS AN ALTERNATE, NEW AND EXISTING STRUCTURES COULD BE TIED TOGETHER IF METAL BUILDING MANUFACTURE CAN JUSTIFY THAT THE ADDITION IS DESIGNED SUCH THAT IT DOES NOT INCREASE THE LOAD TO THE EXISTING STRUCTURE.
6. AT LOCATIONS WHERE EXISTING SLAB IS LOCALLY DEMOLISHED TO ALLOW FOR INSTALLATION OF NEW SUB SLAB PLUMBING, CHIP EXISTING CONCRETE OUT WITHOUT DAMAGING EXISTING SLAB REINFORCING. REPLACE SLAB WITH NEW CONCRETE OF AT LEAST 6" THICK. IF EXISTING SLAB REINFORCING IS CUT, REPLACE WITH NEW #3 DOWELS DRILLED AND EPOXIED INTO FACE OF EXISTING SLAB @ 18" O.C., WITH 6" EMBED.
7. PROVIDE THICKENED SLAB (12" THICK) AT LOCATION WHERE STAIR STRINGER LANDS ON SLAB.

PAD FOOTING SCHEDULE

TAG	PAD SIZE	REINFORCING
30	30" SQ x 18" THK	(4) #5 BARS EW T&B
36	36" SQ x 18" THK	(5) #5 BARS EW T&B
42	42" SQ x 20" THK	(6) #6 BARS EW T&B
48	48" SQ x 28" THK	(7) #6 BARS EW T&B
54	54" SQ x 28" THK	(8) #6 BARS EW T&B
60	60" SQ x 28" THK	(9) #6 BARS EW T&B
66	66" SQ x 30" THK	(9) #6 BARS EW T&B
72	72" SQ x 30" THK	(10) #6 BARS EW T&B

FOOTNOTES

1. Place footings in undisturbed, native soils.
2. Provide concrete pedestal above footing as required to extend minimum 6" above finished grade. See details.

FOOTING SIZES BASED ON ASSUMED COLUMN REACTIONS AND ARE PROVIDED FOR ESTIMATING PURPOSES. ACTUAL FOOTING SIZES WILL NEED TO BE CONFIRMED ONCE LOADS AND REACTIONS ARE PROVIDED BY PRE-MANUFACTURED METAL BUILDING SUPPLIER AND ARE SUBJECT TO CHANGE.

AIRPORT VEHICLE MAINTENANCE BUILDING ADDITION
FOUNDATION & MEZZANINE FRAMING

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No.	Revisions	Date
	Bid Set	12/15/2016

Project
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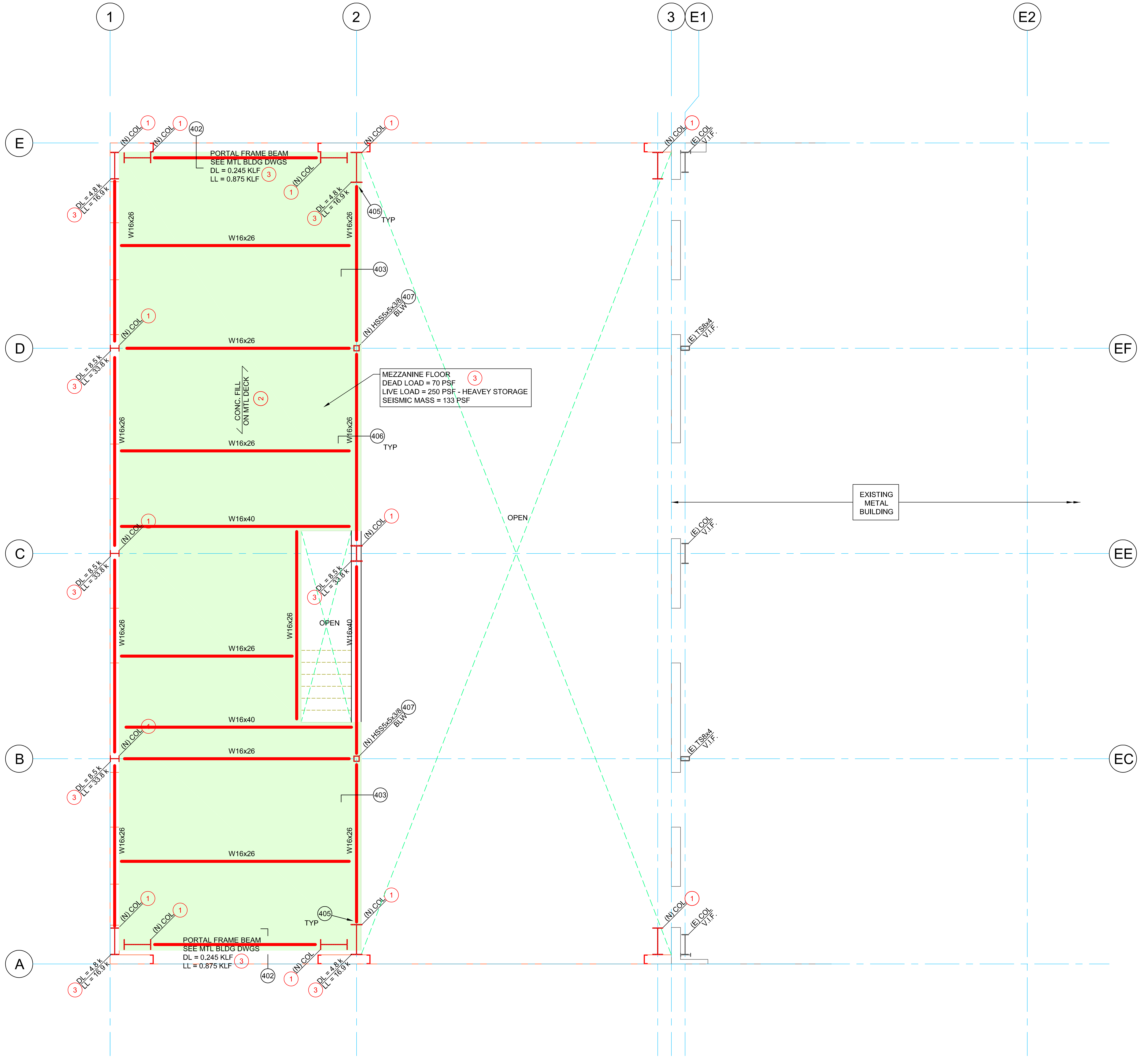
Date	12/15/16
Drawn	ADH
Reviewed	RW
Scale	

Sheet No.
S2.1

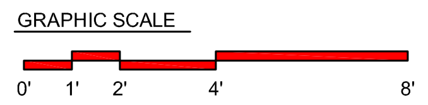
PLAN GRAPHIC LEGEND (BEST IN COLOR)

🟩	NEW CONCRETE SLAB ON GRADE
▨	NEW CONCRETE FOOTING
━	STEEL BEAM
─┤	HUNG
─┼	BEARING
─◀	MOMENT CONNECTION
24	PAD FOOTING TAG
■ ●	HSS COL BELOW
☒ ⊗	POST OR COL ABOVE
├─┤	WIDE FLANGE COL BELOW
├┄┤	WIDE FLANGE COL ABV
101 ─	GENERAL SECTION DETAIL
101 →	SPECIFIC LOCATION DETAIL
12	KEYNOTE



MEZZANINE FRAMING PLAN

1/4" = 1'-0"



GENERAL PLAN NOTES

FRAMING SYSTEM:

1. STEEL BEAMS SHALL BE ASTM A572 Grade 50.
2. METAL DECK SHALL BE WELDED TO STEEL FRAMING PER SCHEDULE 401.
3. VERIFY ALL DIMENSIONS AND ELEVATIONS WITH ARCHITECTURAL DRAWINGS AND EXISTING CONDITIONS PRIOR TO START OF CONSTRUCTION.
4. PROVIDE FLOOR JOISTS BELOW ALL PARALLEL PARTITIONS. BLOCK BELOW PERPENDICULAR PARTITIONS.
5. TOP OF MEZZANINE CONCRETE = +12'-0", S.A.D
   TOP OF MEZZANINE STEEL = +11'- 5 1/2", S.A.D.

PLAN KEYNOTES

① COLUMN BY METAL BUILDING MANUFACTURER. REFER TO METAL BUILDING SHOP DRAWINGS FOR COLUMN MEMBER SIZE AND BASE PLATE DETAILS.

② 3-1/2" CONCRETE TOPPING OVER 3" 18GA METAL DECK, REFER TO SCHEDULE 401, TAG 'A'.

③ MEZZANINE LOADING IMPOSED ON METAL BUILDING COLUMNS TO BE INCORPORATED INTO METAL BUILDING DESIGN. DL = DEAD LOAD, LL = LIVE LOAD IN KIPS (k) OR KIPS PER LINEAR FOOT (KLF), UN-FACTORED (ASD). METAL BUILDING SHALL ALSO BE DESIGNED FOR 133 PSF SEISMIC MASS FROM MEZZANINE (70 PSF DL + 25% * 250 PSF STORAGE LOAD)

AIRPORT VEHICLE MAINTENANCE BUILDING ADDITION
FOUNDATION & MEZZANINE FRAMING

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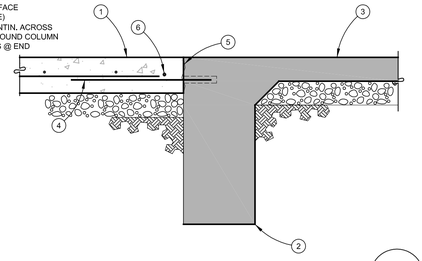
Drawn ADH
Reviewed RW
Scale

Sheet No.
S2.2

1 SLAB ON GRADE PER PLAN
2 (E) THICKENED SLAB EDGE, V.I.F.
3 (E) S.O.G., V.I.F.
4 DRILL & EPOXY #4 x 3'-0" DOWELS @ 24" O.C., EMBED 6"
5 ROUGHEN SURFACE (1/4" AMPLITUDE)
6 #6 TIE BAR, CONTIN. ACROSS SLAB, HOOK AROUND COLUMN ANCHOR BOLTS @ END

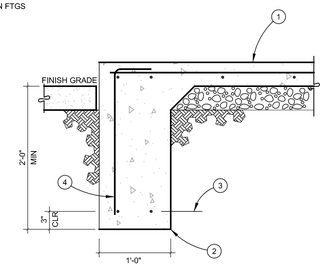


DTL - NEW SLAB @ EXISTING BLDG EDGE

312

SCALE : 1" = 1'-0" MA_312

1 SLAB ON GRADE PER PLAN
2 THICKENED SLAB EDGE
3 (2) #5 BARS TOP & BOTTOM EXTEND INTO COLUMN FTGS
4 #4 x ⌠ @ 12" O.C.

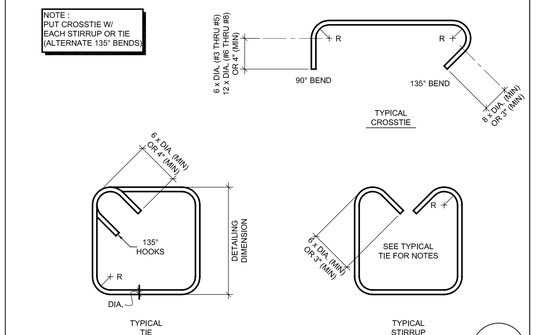


DTL - EXTERIOR SLAB EDGE

308

SCALE : 1" = 1'-0" MA_308

NOTE :
PUT CROSSTIE W/ EACH STIRRUP OR TIE (ALTERNATE 135° BENDS)

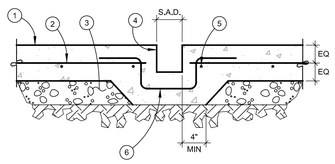


DTL - TYPICAL STIRRUP, TIE HOOKS & BENDS (CONC.)

302

SCALE : 1" = 1'-0" STD009

1 SLAB PER PLAN
2 SLAB REINF. PER PLAN (WHERE OCCURS)
3 UNDERLAYMENT & MOISTURE BARRIER DESIGNED BY OTHERS
4 TRENCH DRAIN, S.A.D.
5 #4 EA. SIDE OF DRAIN
6 #4 x ⌐¬ @ 12" O.C.

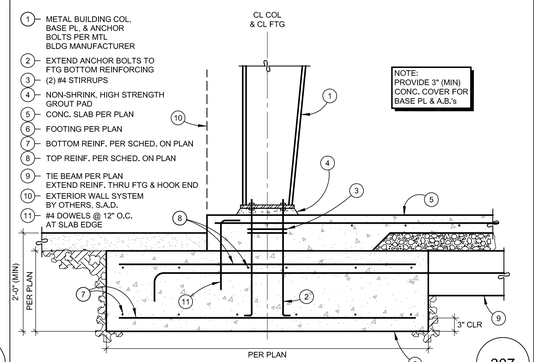


DTL - TYPICAL FLOOR SLAB @ TRENCH DRAIN

311

SCALE : 1" = 1'-0" MA_311

1 METAL BUILDING COL, BASE PL. & ANCHOR BOLTS PER MTL BLDG MANUFACTURER
2 EXTEND ANCHOR BOLTS TO FTG BOTTOM REINFORCING
3 (2) #4 STIRRUPS
4 NON-SHRINK, HIGH STRENGTH GROUT PAD
5 CONC. SLAB PER PLAN
6 FOOTING PER PLAN
7 BOTTOM REINF. PER SCHED. ON PLAN
8 TOP REINF. PER SCHED. ON PLAN
9 TIE BEAM PER PLAN EXTEND REINF. THRU FTG & HOOK END
10 EXTERIOR WALL SYSTEM BY OTHERS, S.A.D.
11 #4 DOWELS @ 12" O.C. AT SLAB EDGE



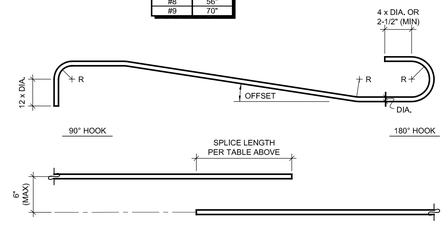
DTL - PERIMETER COLUMN TO FOOTING

307

SCALE : 3/4" = 1'-0" MA_307

BEND RADIUS :
R = 3 x DIA. FOR #3 THRU #8
R = 4 x DIA. FOR #9 THRU #11
R = 5 x DIA. FOR #14 THRU #18

BAR SIZE	SPLICE LENGTH
#3	12"
#4	18"
#5	30"
#6	36"
#7	42"
#8	56"
#9	70"

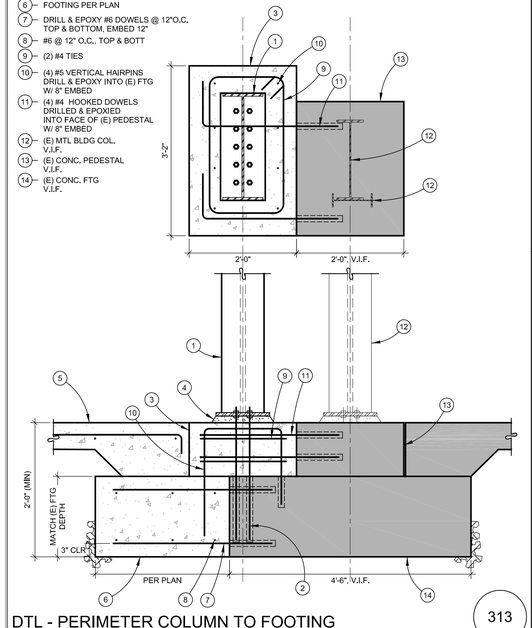


DTL - TYPICAL HOOKS & SPLICE (CONCRETE)

303

SCALE : 1" = 1'-0" STD008

1 METAL BUILDING COL, BASE PL. & ANCHOR BOLTS PER MTL BLDG MANUFACTURER
2 EXTEND ANCHOR BOLTS TO FTG BOTTOM REINFORCING DRILL & EPOXY INTO (E) FOOTING IF FTG OVERLAPS WITH BOLT LAYOUT
3 NEW PEDESTAL
4 NON-SHRINK, HIGH STRENGTH GROUT PAD
5 CONC. SLAB PER PLAN
6 FOOTING PER PLAN
7 DRILL & EPOXY #6 DOWELS @ 12"O.C. TOP & BOTTOM, EMBED 12"
8 #6 @ 12" O.C., TOP & BOTT
9 (2) #4 TIES
10 (4) #5 VERTICAL HAIRPINS DRILL & EPOXY INTO (E) FTG W/ 8" EMBED
11 (4) #4 HOOKED DOWELS DRILLED & EPOXIED INTO FACE OF (E) PEDESTAL W/ 8" EMBED
12 (E) MTL BLDG COL. V.I.F.
13 (E) CONC. PEDESTAL V.I.F.
14 (E) CONC. FTG V.I.F.



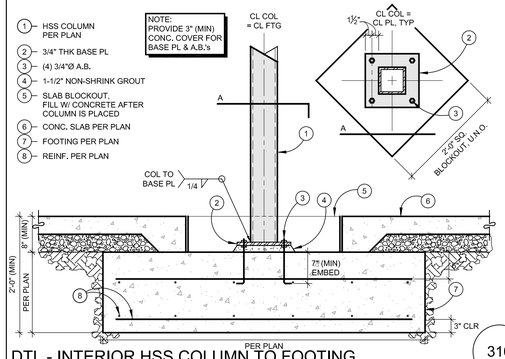
DTL - PERIMETER COLUMN TO FOOTING

313

SCALE : 3/4" = 1'-0" MA_313

1 HSS COLUMN PER PLAN
2 3/4" THK BASE PL
3 (4) 3/4"Ø A.B.
4 1-1/2" NON-SHRINK GROUT
5 SLAB BLOCKOUT. FILL W/ CONCRETE AFTER COLUMN IS PLACED
6 CONC. SLAB PER PLAN
7 FOOTING PER PLAN
8 REINF. PER PLAN

NOTE: PROVIDE 3" (MIN) CONC. COVER FOR BASE PL & A.B.'s

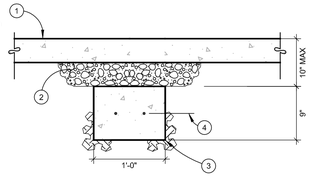


DTL - INTERIOR HSS COLUMN TO FOOTING

310

SCALE : 3/4" = 1'-0" STL015

1 CONC. SLAB ON GRADE PER PLAN
2 BASE MATERIAL DESIGNED BY OTHERS
3 CONCRETE TIE BEAM PER PLAN
4 (2) #6 CONTINUOUS BARS ALL LAPS SHALL BE MADE WITH A TYPE 1 MECHANICAL COUPLER 'DAYTON SUPERIOR BAR LOCK S/CA SERIES' OR APPROVED EQUIVALENT (ICC REPORT TESTED TO AT LEAST 1.25fy). HOOK REBAR INTO FOOTINGS @ ENDS PER DETAIL 307.



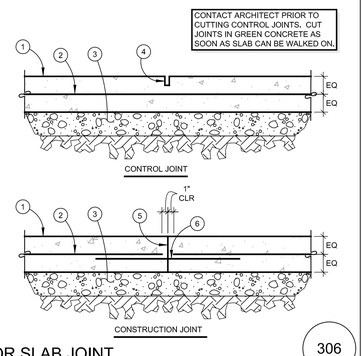
DTL - CONCRETE TIE BEAM

309

SCALE : 1" = 1'-0" MA_309

1 SLAB PER PLAN
2 SLAB REINF. PER PLAN (WHERE OCCURS)
3 UNDERLAYMENT & MOISTURE BARRIER DESIGNED BY OTHERS
4 SAW-CUT JOINT, DEPTH = 1/4" OF SLAB THICKNESS
5 TOOLED EDGE PER ARCH'L
6 1/2"Ø x 2'-0" LONG SMOOTH DOWEL @ 24" O.C. (WRAP OR GREASE ONE END)

CONTACT ARCHITECT PRIOR TO CUTTING CONTROL JOINTS. CUT JOINTS IN GREEN CONCRETE AS SOON AS SLAB CAN BE WALKED ON.



DTL - TYPICAL FLOOR SLAB JOINT

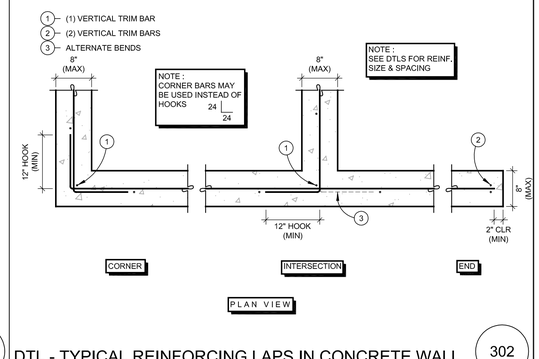
306

SCALE : 1" = 1'-0" STD013

1 (1) VERTICAL TRIM BAR
2 (2) VERTICAL TRIM BARS
3 ALTERNATE BENDS

NOTE : CORNER BARS MAY BE USED INSTEAD OF HOOKS 24 | 24

NOTE : SEE DTLS FOR REINF. SIZE & SPACING



DTL - TYPICAL REINFORCING LAPS IN CONCRETE WALL

302

SCALE : 3/4" = 1'-0" STD007

1 SLAB ON GRADE PER PLAN
2 (E) THICKENED SLAB EDGE, V.I.F.
3 (E) S.O.G., V.I.F.
4 DRILL & EPOXY #4 x 3'-0" DOWELS @ 24" O.C., EMBED 6"
5 ROUGHEN SURFACE (1/4" AMPLITUDE)
6 #6 TIE BAR, CONTIN. ACROSS SLAB, HOOK AROUND COLUMN ANCHOR BOLTS @ END

DTL - NEW SLAB @ EXISTING BLDG EDGE

312

SCALE : 1" = 1'-0" MA_312

1 SLAB ON GRADE PER PLAN
2 THICKENED SLAB EDGE
3 (2) #5 BARS TOP & BOTTOM EXTEND INTO COLUMN FTGS
4 #4 x ⌠ @ 12" O.C.

DTL - EXTERIOR SLAB EDGE

308

SCALE : 1" = 1'-0" MA_308

NOTE :
PUT CROSSTIE W/ EACH STIRRUP OR TIE (ALTERNATE 135° BENDS)

DTL - TYPICAL STIRRUP, TIE HOOKS & BENDS (CONC.)

302

SCALE : 1" = 1'-0" STD009

1 SLAB PER PLAN
2 SLAB REINF. PER PLAN (WHERE OCCURS)
3 UNDERLAYMENT & MOISTURE BARRIER DESIGNED BY OTHERS
4 TRENCH DRAIN, S.A.D.
5 #4 EA. SIDE OF DRAIN
6 #4 x ⌐¬ @ 12" O.C.

DTL - TYPICAL FLOOR SLAB @ TRENCH DRAIN

311

SCALE : 1" = 1'-0" MA_311

1 METAL BUILDING COL, BASE PL. & ANCHOR BOLTS PER MTL BLDG MANUFACTURER
2 EXTEND ANCHOR BOLTS TO FTG BOTTOM REINFORCING
3 (2) #4 STIRRUPS
4 NON-SHRINK, HIGH STRENGTH GROUT PAD
5 CONC. SLAB PER PLAN
6 FOOTING PER PLAN
7 BOTTOM REINF. PER SCHED. ON PLAN
8 TOP REINF. PER SCHED. ON PLAN
9 TIE BEAM PER PLAN EXTEND REINF. THRU FTG & HOOK END
10 EXTERIOR WALL SYSTEM BY OTHERS, S.A.D.
11 #4 DOWELS @ 12" O.C. AT SLAB EDGE

DTL - PERIMETER COLUMN TO FOOTING

307

SCALE : 3/4" = 1'-0" MA_307

BEND RADIUS :
R = 3 x DIA. FOR #3 THRU #8
R = 4 x DIA. FOR #9 THRU #11
R = 5 x DIA. FOR #14 THRU #18

BAR SIZE	SPLICE LENGTH
#3	12"
#4	18"
#5	30"
#6	36"
#7	42"
#8	56"
#9	70"

DTL - TYPICAL HOOKS & SPLICE (CONCRETE)

303

SCALE : 1" = 1'-0" STD008

1 METAL BUILDING COL, BASE PL. & ANCHOR BOLTS PER MTL BLDG MANUFACTURER
2 EXTEND ANCHOR BOLTS TO FTG BOTTOM REINFORCING DRILL & EPOXY INTO (E) FOOTING IF FTG OVERLAPS WITH BOLT LAYOUT
3 NEW PEDESTAL
4 NON-SHRINK, HIGH STRENGTH GROUT PAD
5 CONC. SLAB PER PLAN
6 FOOTING PER PLAN
7 DRILL & EPOXY #6 DOWELS @ 12"O.C. TOP & BOTTOM, EMBED 12"
8 #6 @ 12" O.C., TOP & BOTT
9 (2) #4 TIES
10 (4) #5 VERTICAL HAIRPINS DRILL & EPOXY INTO (E) FTG W/ 8" EMBED
11 (4) #4 HOOKED DOWELS DRILLED & EPOXIED INTO FACE OF (E) PEDESTAL W/ 8" EMBED
12 (E) MTL BLDG COL. V.I.F.
13 (E) CONC. PEDESTAL V.I.F.
14 (E) CONC. FTG V.I.F.

DTL - PERIMETER COLUMN TO FOOTING

313

SCALE : 3/4" = 1'-0" MA_313

1 HSS COLUMN PER PLAN
2 3/4" THK BASE PL
3 (4) 3/4"Ø A.B.
4 1-1/2" NON-SHRINK GROUT
5 SLAB BLOCKOUT. FILL W/ CONCRETE AFTER COLUMN IS PLACED
6 CONC. SLAB PER PLAN
7 FOOTING PER PLAN
8 REINF. PER PLAN

NOTE: PROVIDE 3" (MIN) CONC. COVER FOR BASE PL & A.B.'s

DTL - INTERIOR HSS COLUMN TO FOOTING

310

SCALE : 3/4" = 1'-0" STL015

1 CONC. SLAB ON GRADE PER PLAN
2 BASE MATERIAL DESIGNED BY OTHERS
3 CONCRETE TIE BEAM PER PLAN
4 (2) #6 CONTINUOUS BARS ALL LAPS SHALL BE MADE WITH A TYPE 1 MECHANICAL COUPLER 'DAYTON SUPERIOR BAR LOCK S/CA SERIES' OR APPROVED EQUIVALENT (ICC REPORT TESTED TO AT LEAST 1.25fy). HOOK REBAR INTO FOOTINGS @ ENDS PER DETAIL 307.

DTL - CONCRETE TIE BEAM

309

SCALE : 1" = 1'-0" MA_309

1 SLAB PER PLAN
2 SLAB REINF. PER PLAN (WHERE OCCURS)
3 UNDERLAYMENT & MOISTURE BARRIER DESIGNED BY OTHERS
4 SAW-CUT JOINT, DEPTH = 1/4" OF SLAB THICKNESS
5 TOOLED EDGE PER ARCH'L
6 1/2"Ø x 2'-0" LONG SMOOTH DOWEL @ 24" O.C. (WRAP OR GREASE ONE END)

CONTACT ARCHITECT PRIOR TO CUTTING CONTROL JOINTS. CUT JOINTS IN GREEN CONCRETE AS SOON AS SLAB CAN BE WALKED ON.

DTL - TYPICAL FLOOR SLAB JOINT

306

SCALE : 1" = 1'-0" STD013

1 (1) VERTICAL TRIM BAR
2 (2) VERTICAL TRIM BARS
3 ALTERNATE BENDS

NOTE : CORNER BARS MAY BE USED INSTEAD OF HOOKS 24 | 24

NOTE : SEE DTLS FOR REINF. SIZE & SPACING

DTL - TYPICAL REINFORCING LAPS IN CONCRETE WALL

302

SCALE : 3/4" = 1'-0" STD007

1 METAL BUILDING COL, BASE PL. & ANCHOR BOLTS PER MTL BLDG MANUFACTURER
2 EXTEND ANCHOR BOLTS TO FTG BOTTOM REINFORCING DRILL & EPOXY INTO (E) FOOTING IF FTG OVERLAPS WITH BOLT LAYOUT
3 NEW PEDESTAL
4 NON-SHRINK, HIGH STRENGTH GROUT PAD
5 CONC. SLAB PER PLAN
6 FOOTING PER PLAN
7 DRILL & EPOXY #6 DOWELS @ 12"O.C. TOP & BOTTOM, EMBED 12"
8 #6 @ 12" O.C., TOP & BOTT
9 (2) #4 TIES
10 (4) #5 VERTICAL HAIRPINS DRILL & EPOXY INTO (E) FTG W/ 8" EMBED
11 (4) #4 HOOKED DOWELS DRILLED & EPOXIED INTO FACE OF (E) PEDESTAL W/ 8" EMBED
12 (E) MTL BLDG COL. V.I.F.
13 (E) CONC. PEDESTAL V.I.F.
14 (E) CONC. FTG V.I.F.

DTL - PERIMETER COLUMN TO FOOTING

313

SCALE : 3/4" = 1'-0" MA_313

1 HSS COLUMN PER PLAN
2 3/4" THK BASE PL
3 (4) 3/4"Ø A.B.
4 1-1/2" NON-SHRINK GROUT
5 SLAB BLOCKOUT. FILL W/ CONCRETE AFTER COLUMN IS PLACED
6 CONC. SLAB PER PLAN
7 FOOTING PER PLAN
8 REINF. PER PLAN

NOTE: PROVIDE 3" (MIN) CONC. COVER FOR BASE PL & A.B.'s

DTL - INTERIOR HSS COLUMN TO FOOTING

310

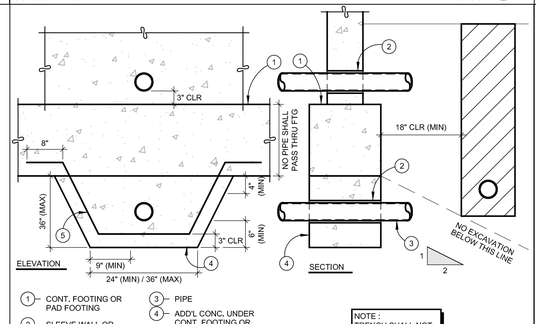
SCALE : 3/4" = 1'-0" STL015

1 CONC. SLAB ON GRADE PER PLAN
2 BASE MATERIAL DESIGNED BY OTHERS
3 CONCRETE TIE BEAM PER PLAN
4 (2) #6 CONTINUOUS BARS ALL LAPS SHALL BE MADE WITH A TYPE 1 MECHANICAL COUPLER 'DAYTON SUPERIOR BAR LOCK S/CA SERIES' OR APPROVED EQUIVALENT (ICC REPORT TESTED TO AT LEAST 1.25fy). HOOK REBAR INTO FOOTINGS @ ENDS PER DETAIL 307.

DTL - CONCRETE TIE BEAM

309

SCALE : 1" = 1'-0" MA_309



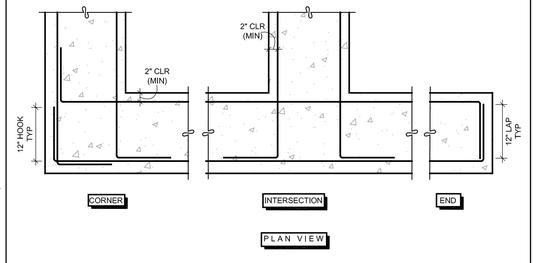
1 CONT. FOOTING OR PAD FOOTING
2 SLEEVE WALL OR FOOTING AS REQ'D FOR PIPE (1" CLR MIN)
3 PIPE
4 ADD'L CONC. UNDER CONT. FOOTING OR PAD FOOTING
5 #4 @ 16" O.C. (LAP W/ FOOTING REBAR)

NOTE : TRENCH SHALL NOT UNDERMINE FOOTING

DTL - TYPICAL PIPE AND TRENCH

305

SCALE : 3/4" = 1'-0" STD014



DTL - TYPICAL REINFORCING LAPS IN FOOTING

301

SCALE : 3/4" = 1'-0" STD006

AIRPORT VEHICLE MAINTENANCE BUILDING ADDITION
FOUNDATION & MEZZANINE FRAMING

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No.	Revisions	Date
	Bid Set	12/15/2016

Project
AIRPORT VEHICAL MAINTENANCE BUILDING ADDITION

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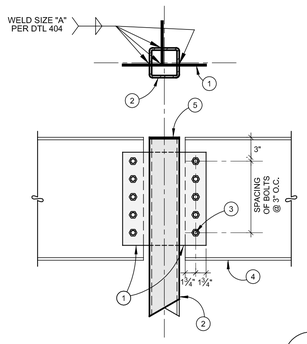
Date 12/15/16
Drawn ADH
Reviewed RW
Scale

Sheet No.
S3.1

1 KNIFE CONNECTION PL PER DTL 404 (OFFSET FROM COL CL)
2 HSS COLUMN PER PLAN
3 SIZE & NUMBER OF BOLTS PER DTL 404
4 BEAM PER PLAN @ CENTERLINE OF HSS COLUMN
5 1/4" CAP PL

NOTE:
SIMILAR WHERE BEAMS OCCUR ON TWO OPPOSITE SIDES OF COLUMN



DTL - STEEL BEAM TO HSS COLUMN

407

SCALE : 1" = 1'-0" STL001

STEEL BEAM CONNECTION SCHEDULE				
SUPPORTED MEMBER DEPTH	CONNECTION PLATE	WELD SIZE "A"	(IF APPL'L) # SHEAR BOLTS 7/8"Ø A325N	BOLT CAPACITY
8	5/16"	1/4" FILLET	(2)	11.1
9	5/16"	1/4" FILLET	(2)	11.1
10	5/16"	1/4" FILLET	(2)	11.1
12	5/16"	1/4" FILLET	(3)	22.4
14	5/16"	1/4" FILLET	(3)	22.4
15	3/8"	5/16" FILLET	(4)	35.7
16	3/8"	5/16" FILLET	(4)	35.7
18	3/8"	5/16" FILLET	(5)	49.4
21	3/8"	5/16" FILLET	(5)	49.4
24	1/2"	3/8" FILLET	(6)	63.0
27	1/2"	3/8" FILLET	(7)	76.7
30	5/8"	3/8" FILLET	(8)	84.1
33	5/8"	3/8" FILLET	(8)	84.1

FOOTNOTES

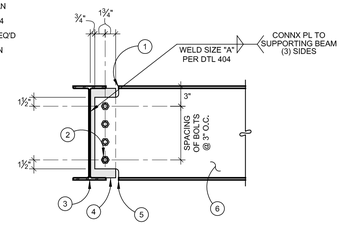
1. See details for applications.
2. Use A325N bolts, UNO.
3. Special inspection required, TYP.

DTL - STEEL BEAM BOLTING, WELDING & TAB SCHEDULE

404

STLSCHED3_875

1 COPE TOP FLANGE
2 SIZE & NUMBER OF BOLTS PER DTL 404
3 SUPPORTING BEAM PER PLAN
4 CONNECTION PL PER DTL 404
5 COPE BOTTOM FLANGE IF REQ'D
6 SUPPORTED BEAM PER PLAN

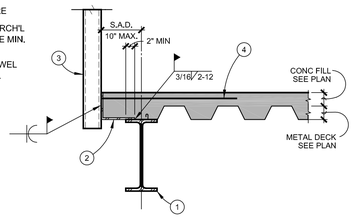


DTL - STEEL BEAM SHEAR CONNECTION (BOLTED)

406

SCALE : 1" = 1'-0" STL004

1 WF BEAM PER PLAN
2 1/4" BENT PLATE CLOSURE
3 GAURD RAIL POST PER ARCH'L (1-1/2"x1-1/2"x1/4" SQ TUBE MIN, @ 4'-0" O.C. MAX.)
4 #4 x 3'-0" A307 REBAR DOWEL WELDED TO CLOSURE PL

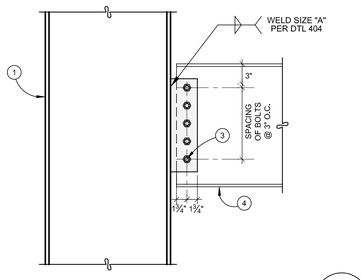


DTL - DECK CLOSURE @ EDGE W/ GUARDRAIL

403

SCALE : 3/4" = 1'-0" MA_403

1 STEEL COLUMN PER PLAN
2 CONNECTION PL PER DTL 404
3 BOLTS PER DTL 404
4 BEAM PER PLAN

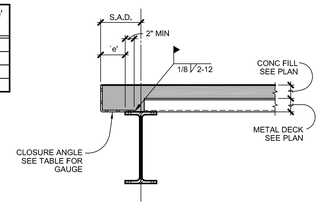


DTL - STEEL BEAM TO WIDE FLANGE COLUMN

405

SCALE : 1" = 1'-0" STL018

OVERHANG `e' 9" MAX	
2" to 4"	16GA
5"	16GA
6" to 7"	12GA
8" to 9"	10GA



DTL - DECK CLOSURE @ EDGE

402

SCALE : 3/4" = 1'-0" MA_402

STEEL DECK SCHEDULE													
DECK TAG	STEEL DECK REQUIREMENTS							COMPOSITE DECK REQUIREMENTS					NOTES
	STEEL DECK GAGE & PROFILE[1]	PERP. SUPPORTS		PAR. SUPPORTS		SIDELAPS		CONC. TYPE[4]	CONC. ABV DECK	TOTAL THICKNESS	HEADED STUD LENGTH	SLAB REINFORCEMENT[5]	
		CONNX[2]	PATTERN	CONNX[2]	PATTERN	CONNX[2]	PATTERN						
A	3", 18 GA, GALV. W3-FORMLOCK	⅝"~ PW	36/3	⅝"~ PW	12" o.c.	VSC OR 1½" TSW	36" o.c.	NW	3-1/2"	6-1/2"	N/A	#3 @ 18"o.c. EA. WAY	TYPICAL FLOOR

NOTES
1. METAL DECK BY VERCO, INC. OR APPROVED EQUAL. ALL DECK TO BE GALVANIZED AND INSTALLED PER MANUFACTURER'S INSTRUCTIONS.
2. DECK TO BE CONTINUOUS OVER THREE OR MORE UNSHORED SPANS.
3. PW = ARC PUDDLE WELD (SIZE BASED ON MIN. VISIBLE DIAMETER)
   STUDS WELDED THROUGH DECK MAY BE USED IN PLACE OF PUDDLE WELDS.
   SDK = PNEUTEK FASTENING SYSTEM
   VSC = VERCO SIDELAP CONNECTION w/ PUNCHLOCK TOOL
   TSW = TOP SEAM WELD
4. COMPOSITE DECK DESIGN IS BASED UPON THE FOLLOWING:
   A. WET WEIGHT OF CONCRETE NOT TO EXCEED
      145 pcf FOR NORMAL WEIGHT CONCRETE (NWC)
      135 pcf FOR LIGHT WEIGHT CONCRETE (LWC)
   B. ½" OF ADDITIONAL SLAB THICKNESS HAS BEEN INCLUDED IN DEAD LOAD TO ACCOUNT FOR INITIAL BEAM DEFLECTIONS AND SLAB LEVELING.
   C. CONSTRUCTION LIVE LOAD NOT TO EXCEED 20 psf
5. PLACE REBAR 1" BELOW TOP SURFACE OF SLAB. TOP LAYER OF REINFORCEMENT SHALL RUN PARALLEL TO RIBS.
6. ALL CONCRETE COMPOSITE DECKS MAY HAVE VENTED METAL DECK AS AN OPTION TO CONTRACTOR.

STEEL DECK SPECIFICATIONS

401

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

AIRPORT VEHICLE MAINTENANCE BUILDING ADDITION
FOUNDATION & MEZZANINE FRAMING

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No.	Revisions	Date
	Bid Set	12/15/2016

Project
AIRPORT VEHICAL MAINTENANCE BUILDING ADDITION

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Date 12/15/16
Drawn ADH
Reviewed RW
Scale

Sheet No.
S4.1

DEMOLITION SYMBOLS

	DISCONNECT FROM EXISTING
	CONNECT TO EXISTING

PLUMBING FIXTURE CONNECTION SCHEDULE

FIXTURE	HW	CW	WASTE	VENT
HOSE BIBB		3/4"		
FLOOR DRAIN OR FLOOR SINK		1/2"	2"	1½"

SIZES SHOWN ARE PIPE SIZES TO A SINGLE FIXTURE.

GAS FIRED UNIT HEATER SCHEDULE

MARK	TYPE	CFM	INPUT @ S.L. (MBH)	OUTPUT @ ALT. (MBH)	ELECTRICAL HP/(WATTS)	ELECTRICAL VOLT/HP	MANUFACTURER* & MODEL #	ACCESSORIES	REMARKS
RH-1	RADIANT HEATER	NO FAN	30	25	10W	120/1	MODINE MHR30	WALL THERMOSTAT PER PLANS	24V CTRL, DIRECT SPARK IGNITION, 30LBS
–	–	–	–		–	–	–	–	–

MANUFACTURERS:
* BEACON MORRIS, TRANE, MCQUAY OR MODINE EQUIVALENT

GENERAL NOTES:
A:
B:

PLUMBING FIXTURE SCHEDULE

SYMBOL	TYPE	A.D.A.	FINISH	MANUFACTURER* & MODEL #	FAUCET TRIM MFR.* & MODEL #	ACCESSORIES	REMARKS
TD-1	TRENCH DRAIN	NA	CAST IRON GRATE	ZURN Z-883	NA	END OUTLET, END CAP, SEE PLANS.	PER PLANS
FCO	FLOOR CLEANOUT	NA	BRONZE COVER	ZURN		ADJUSTABLE COVER	FLUSH WITH FLOOR
TPV	TRAP PRIMER VALVE	NA	–	PPP PRIME PERFECT		–	ASSE LISTED, INSTALL PER MFR.
HB-1	HOSE BIBB	NA	–	WOODFORD MODEL 25		METAL HANDLE	ANTI-SIPHON ASSE LISTED
CA-1	COMPRESSED AIR CONNECTION	NA		SNAP-ON PTQFRL			WALL MOUNTED BOX, COMPLETE SET
	–	–	–	–		–	–

MANUFACTURERS:
FIXTURE: AMERICAN STANDARD, UNIVERSAL RUNDLE, FIAT STERN WILLIAMS
FAUCET: SPEAKMAN, DELTA, AMERICAN STANDARD, CHICAGO
DRAIN: JOSAM, WADE SMITH

GENERAL NOTES:
A:
B:

EXHAUST FAN SCHEDULE

MARK	TYPE	FAN CFM	FAN SONES	FAN ESP @ S.L. (IN WC)	FAN ESP @ ALT (IN WC)	MOTOR HP	MOTOR VOLT/PHASE	MANUFACTURER* & MODEL #	ACCESSORIES	REMARKS
EF-1	SIDEWAL	3635	18.7	–	0.125	1	120/1	GREENHECK CW-161-VG1	15"x15" BACKDRAFT DAMPER	SIDEWALL EXHAUSTER WITH VARI-GREEN MOTOR
–	–	–	–	–	–	–	–	–	–	–

MANUFACTURERS:
* ACME, COOK, GREENHECK, PANASONIC, PENN

GENERAL NOTES:
A:
B:

GRILLE, REGISTER, DIFFUSER & LOUVER

SYMBOL	USE	PATTERN	FINISH	MANUFACTURER* & MODEL #	ACCESSORIES	REMARKS
LV-1	INTAKE LOUVER	48"Wx36"H	COLOR PER ARCHITECT	RUSKIN ELC6375DAX + ACTUATOR + BIRD SCREEN	SPRING RETURN ACTUATOR, BELIMO AFB24. BIRD SCREEN	6" DEEP COMBINATION LOUVER/DAMPER, CONCEALED LINKAGE, DRAINABLE BLADES, INTERLOCK WITH FAN
	–	–	–	–	–	–
	–	–	–	–	–	–
	–	–	–	–	–	–

MANUFACTURERS:
GRD KRUEGER, METALAIRE, TITUS
LOUVER GREENHECK, L&D, RUSKIN

GENERAL NOTES:
A:
B:

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4. Submission or distribution to meet regulatory requirements, or for other purposes in connection with this project, shall not to be construed as publication in derogation of the rights of Sugarpine Engineering, Inc.

GENERAL NOTES:

1. All exposed pipes, ducts and materials shall be metallic or shall be suitably wrapped to meet applicable flame spread requirements. No exposed plastic pipe, duct or wiring is allowed.
2. Coordinate with existing conditions, GC, and all other trades prior to all installations. Overlay plans and visit site as necessary. No allowance will be made for re-work due to lack of advanced coordination.
3. See Specifications Manual for additional information.
4. Fire suppression system changes shall be designed by FPE or NICET 3 licensed technician. Comply with NFPA 13. Perform flow tests and submit all calculations and final shop drawings. Residual pressures may be available from the District upon request. Plans show basic arrangements only.
5. The building occupancy per architectural plans is Group H-4 and any and all hazardous materials shall be kept in sealed containers and stored in approved hazardous materials storage cabinets. NFPA 13 Occupancy Hazard class is Ordinary Hazard Group 2.
6. All contractors and subcontractors shall be licensed and experienced with the systems, performance levels, and construction types indicated in the plans and specifications prior to bidding.
7. All equipment shall meet or exceed 2013 Title 24 prescriptive efficiencies, controls, and other requirements. See compliance forms for more information. Signed and submitted compliance forms are part of this contract. This new building has heat and vent only. The building interior is a process space with freeze protection heating controls limited to less than 55°F setpoint; therefore, this space is classified as unconditioned.
8. All products shall be selected and capable of performance at project altitude: 5,900'.
9. All products shall be provided and installed to comply with CBC Chapter 16 seismic requirements. All piping shall be anchored and laterally braced.
10. All products and systems shall be installed to comply with their UL listings.
11. All control wiring shall be in metallic (EMT) raceways. Raceways by EC, wiring by MC. MC responsible to coordinate this requirement to the EC and GC for base bid.
12. Sugarpine Engineering cannot, through its designs, specifications, observations, or by any other means, guarantee the prevention, reduction or elimination of microorganisms, Legionella, chemicals, particles, molecules or debris (collectively substances) in air, water or other building systems, or control potential risk factors for human health. Similarly, Sugarpine cannot guarantee the security of the project, including but not limited to entry, forced entry, filtration, air quality, equipment reliability, or other means of protection, explicit or implied.
13. All standalone, factory, and equipment-provided controls are considered part of the controls system for the project. Each device shall have its programming and settings adjusted by the Controls Contractor, and shall be integrated with the building's overall controls, if applicable. See control sequences for more information.
14. Prior to passing rough mechanical inspection, the contractor shall complete, and provide to the inspector for acceptance, the applicable Title 24 energy compliance forms, as required by the Authority Having Jurisdiction.
15. Contractor shall include in the base bid all Acceptance Testing, where required to complete acceptance forms requested by the AHJ.

ABBREVIATIONS & ACRONYMS

(E)	Existing
(N)	New
A	Amperes, Amps
ABS	Acrylonitrile Butadiene Styrene
ADA	Americans with Disabilities Act
ADJ	Adjustable
AFF	Above Finished Floor
AFG	Above Finished Grade
AFUE	Annual Fuel Utilization Efficiency
AGF	Air Gap Fitting
ALT	Altitude
APD	Air Pressure Drop
ASSE	American Society of Sanitary Engineering
ATD	Air Temperature Differential
BAS	Building Automation System
BDD	Backdraft Damper
BFF	Below Finished Floor
BFG	Below Finished Grade
BFP	Backflow Preventer
BHP	Brake Horsepower
BMS	Building Management System
BMS	Building Management/Automation System
BTUH	Btu/Hour
CA	Combustion Air
CFH	Cubic Feet per Hour
CFM	Cubic Feet per Minute
CKT	Circuit
CLG	Ceiling
CO	Cleanout
COMB	Combustion, Combination
CONC	Concentric, Concrete
COP	Coeficient of Performance
COTG	Cleantout To/At Grade
CW	Cold Water
DDC	Direct Digital Control
DFU	Drainage Fixture Unit
DHW	Domestic Hot Water
DIAG	Diagram
DN	Down
DT	Differential Temperature
DX	Direct Expansion Refrigerant
EA	Exhaust Air
EAT	Entering Air Temperature
EC	Electrical Contractor
ECM	Electrically Commutated Motor
ED	Electrical Division
EER	Energy Efficiency Ratio
EFF	Efficiency
EPA	Environmental Protection Agency, US
EWT	Entering Water Temperature
EXH	Exhaust
FBO	Furnished By Others/Owner
FC	Fan Coil
FCO	Floor Cleanout
FD	Floor Drain
FIXT	Fixture
FLA	Full Load Amps
FREQ	Frequency
FS	Floor Sink, Fire/Smoke
FT	Feet
GA	Gauge
GC	General Contractor
GEO	Geological, Geoexchange, Earth
GPH	Gallons Per Hour
GPM	Gallons Per Minute
GSHP	Ground Source Heat Pump
HOA	Hand-Off-Auto
HP	Heat Pump, Horsepower
HW	Domestic Hot Water
HWC	Domestic Hot Water Recirculation
Hz	Hertz
IE	Invert Elevation (Bottom of Pipe)
IWC	Inches Water Column
ISO	Isolation, Isolator
JT	Joint Trench
KBTU	1,000 Btu
LAT	Leaving Air Temperature
LAV	Lavatory
LPG	Liquified Petroleum Gas (Propane)
LRA	Locked Rotor Amps
LWT	Leaving Water Temperature
MAT	Mixed Air Temperature
MBH	1,000 Btu per Hour
MC	Mechanical Contractor
MCA	Minimum Circuit Ampacity
MD	Mechanical Division
MFG	Manufacturing
MFR	Manufacturer
MG	Medium Pressure (2psi) Gas
MGT	Management
MOCP	Max Overcurrent Protection
NA	Not Applicable
NG	Natural Gas (Methane)
NIC	Not In Contract
OBD	Opposed Blad Damper
OC	On Center
OCC	Occupancy
OSA	Outside Air / Ventilation Air
PE	Polyethylene
PEX	Cross-linked Polyethylene
PH	Phase
PRV	Pressure Reducing Valve
PSI	Pounds per Square Inch
PVC	Polyvinyl Chloride
RA	Return Air
RLA	Running Load Amps
RP	Reduced Pressure
RPBFP	Reduced Pressure Backflow Preventer
RPM	Revolutions per Minute
RTN	Return
SA	Supply Air
SEER	Seasonal Energy Efficiency Ratio
SF	Square Feet
SL	Sea Level
SS	Sanitary Sewer
SUP	Supply
T24	Title 24 (California)
TEMP	Temporary, Temperature
TFR	Transfer
THERM	100,000 Btu
TPV	Trap Primer Valve
TYP	Typical
UL	Underwriters Laboratory
UNO	Unless Noted Otherwise
UPC	Uniform Plumbing Code
V	Volts
VAR	Variable
VFD	Variable Frequency Drive
VIB	Vibration
VOC	Volatile Organic Compound
VSD	Variable Speed Drive
VTR	Vent Through Roof
W	Waste, Watts
W/	With
WCO	Wall Cleanout
WSFU	Water Supply Fixture Unit
WTD	Water Temperature Differential
WWHP	Water to Water Heat Pump

SECTION CUT

PIPE SYMBOLS, DEVICES & PLAN TAGS

SMS	SNOWMELT SUPPLY
SMR	SNOWMELT RETURN
HWS	HEATING WATER SUPPLY
HWR	HEATING WATER RETURN
SHS	SOLAR HEATING WATER SUPPLY
SHR	SOLAR HEATING WATER RETURN
G	STD PRESSURE GAS
MG	MEDIUM PRESSURE 2 PSI GAS
D	DRAIN (NON SEWER)
PC	PUMPED CONDENSATE
GF	GLYCOL FEED
RFS	RADIANT FLOOR SUPPLY
RFR	RADIANT FLOOR RETURN
RS	REFRIGERANT SUCTION
RL	REFRIGERANT LIQUID
— CW	DOMESTIC COLD WATER
— — HW	DOMESTIC HOT WATER
— — — HWC	DOMESTIC HOT WATER CIRCULATION
F	FIRE LINE
W	WASTE PIPE
V	PLUMBING VENT PIPE

PW	PRESSURIZED WASTE
ST	STORM DRAIN
ST(OF)	STORM DRAIN OVERFLOW
SO	SAND AND OIL WASTE
	BUTTERFLY VALVE
	SHUT OFF VALVE (BALL, BUTTERFLY)
	GLOBE VALVE
	CHECK VALVE
	FLOW CONTROL VALVE
	BALL VALVE
	PLUG OR BALANCING VALVE
	FLOW BALANCING VALVE
	PLUG VALVE IN RISER
	BALL OR GLOBE VALVE IN RISER
	BALL DRAIN VALVE W/ HOSE END
	TEMPERATURE CONTROL VALVE
	PRESSURE REDUCING VALVE
	VENTURI/FLOW INDICATOR
	SOLENOID VALVE
	PUMP & EQUIPMENT CONNECTOR
	PIPE UNION

	REDUCED PRESSURE BACKFLOW PREVENTER
	PIPE ANCHOR
	PIPE EXPANSION JOINT
	FLEXIBLE CONNECTOR
	SAFETY RELIEF VALVE
	AIR VENT
	PRESSURE - TEMP. TAP
	PRESSURE GAUGE W/ EXTENSION & COCK
	THERMOMETER
	VACUUM BREAKER
	FLOOR/GRADE CLEANOUT
	CLEANOUT CAP
	FLOOR DRAIN
	FLOOR SINK, FULL/HALF GRATE
	ROOF DRAIN
	STRAINER W/ BLOW-OFF VALVE
	SHOCK ARRESTOR
	FLOW SWITCH
	HOSE BIBB
	WALL HYDRANT
	RADIANT MANIFOLD

DUCT SYMBOLS

F/S	COMBINATION FIRE/SMOKE DAMPER
	FIRE DAMPER
	ACCESS PANEL
	FLEX CONNECTOR
	CAP
	AIR EXTRACTOR
12x24	DUCT SIZES ARE OUTSIDE SHEET METAL (WIDTHxHEIGHT)
TYPE/CFM SIZE A	AIR INLET

	SUPPLY DUCT DOWN
	RETURN/EXHAUST DUCT DOWN
	ROUND DUCT DOWN
	TURNING VANES IN ELBOW
	MANUAL BALANCING DAMPER
BDD	MOTORIZED DAMPER
BDD	BACK DRAFT DAMPER
CFM SIZE TYP. 3 A	AIR OUTLET

	CEILING SUPPLY DIFFUSER/REGISTER
	CEILING RETURN/EXHAUST GRILLE
	SIDEWALL SUPPLY/RETURN GRILLE
	FLOOR SUPPLY/RETURN GRILLE
	SLOT SUPPLY/RETURN GRILLE
	DIRECTION OF THROW/FLOW
	SECTION THRU SUPPLY AIR DUCT.
	SECTION THRU OUTSIDE AIR, RETURN AIR, OR EXHAUST DUCT
U.C. SIZE	UNDER-CUT DOOR. COORD WITH GC.

45° CONICAL WYE (ROUND)
90° CONICAL TEE
DUCT SPLIT
FLEX DUCT (RIGID / FLEX)
SIZE AND/OR SHAPE TRANSITION (RECT / ROUND)

90° RADIUS ELBOW.
90° ELBOW W/TURNING VANES
45° RADIUS ELBOW.
45° ELBOW

CONTROLS SYMBOLS

CO2	CARBON DIOXIDE SENSOR
CO	CARBON MONOXIDE SENSOR
VOC GAS	VOC AND/OR COMBUSTIBLE GAS SENSOR
T TSTAT	THERMOSTAT OR ROOM SENSOR
S	SLAB TEMPERATURE SENSOR
H	HUMIDISTAT OR ROOM SENSOR
	SOLENOID VALVE
	3-WAY CONTROL VALVE
	2-WAY CONTROL VALVE
FS	FLOW SWITCH
DPT	DIFFERENTIAL PRESSURE TRANSMITTER
SMK SD	SMOKE DETECTOR

SP	STATIC PRESSURE SENSOR
EPO	EMERGENCY POWER OFF SWITCH
CS	CURRENT SENSOR
MS	MOTOR STARTER
RH	RELATIVE HUMIDITY SENSOR
RLY	RELAY
VFD VSD	VARIABLE SPEED/FREQUENCY (AC) DRIVE
ECM	ELECTRICALLY COMMUTATED (DC) MOTOR
BI BO AI AO	DDC POINTS (ANALOG, BINARY, IN, OUT)
B	MANUAL SWITCH

AFMS	AIRFLOW MEASURING STATION
	FAN OR PUMP
DM	MOTORIZED DAMPER
TE	AVERAGING TEMPERATURE SENSOR
TE	INSERTION TEMPERATURE SENSOR
FRZ	FREEZESTAT OR LOW-TEMP SENSOR
CP	CONTROL PANEL / MODULE
T TC A	TEMPERATURE SENSOR
	MODULE AS LABELED

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Truckee Tahoe Airport District
Airport Vehicle Maintenance Building Addition
Truckee Tahoe Airport Road
Truckee, CA

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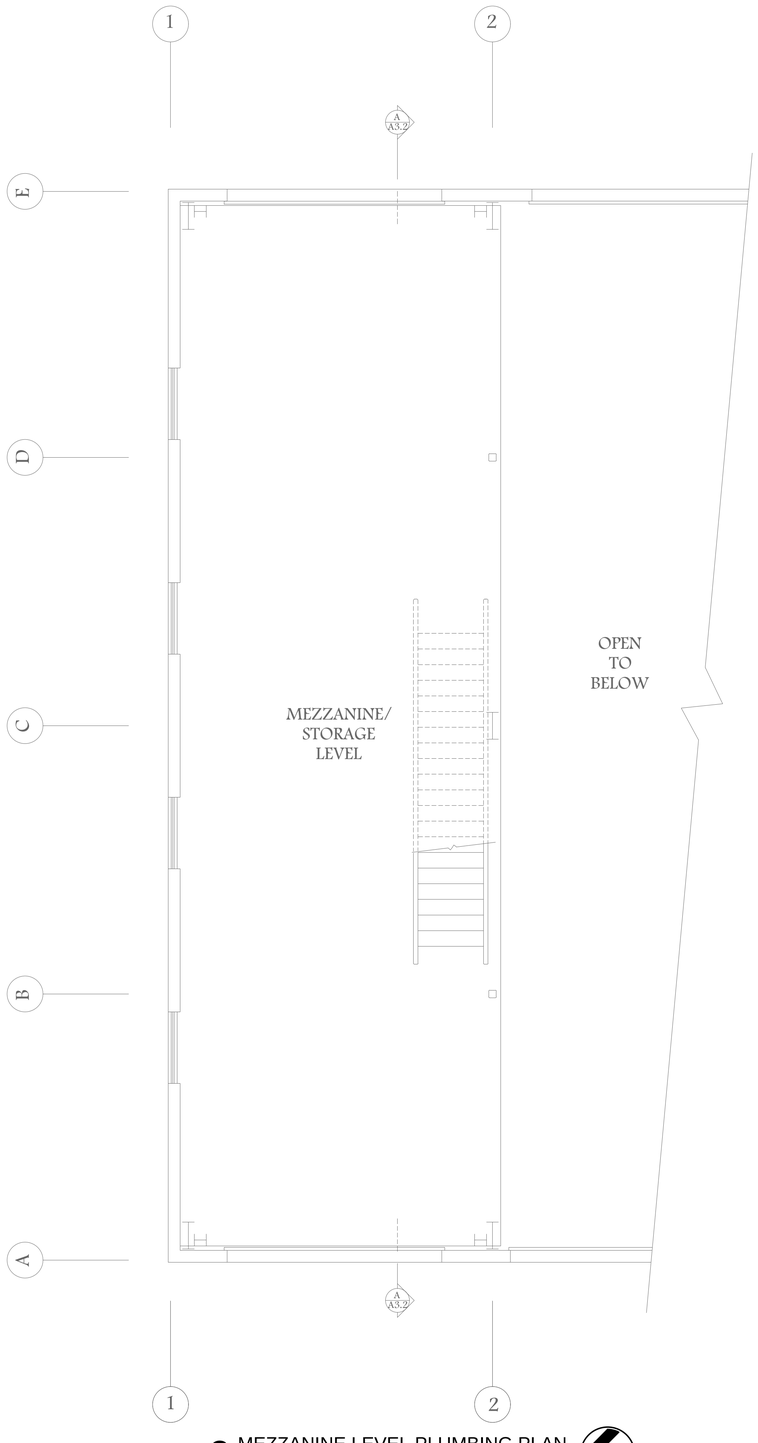
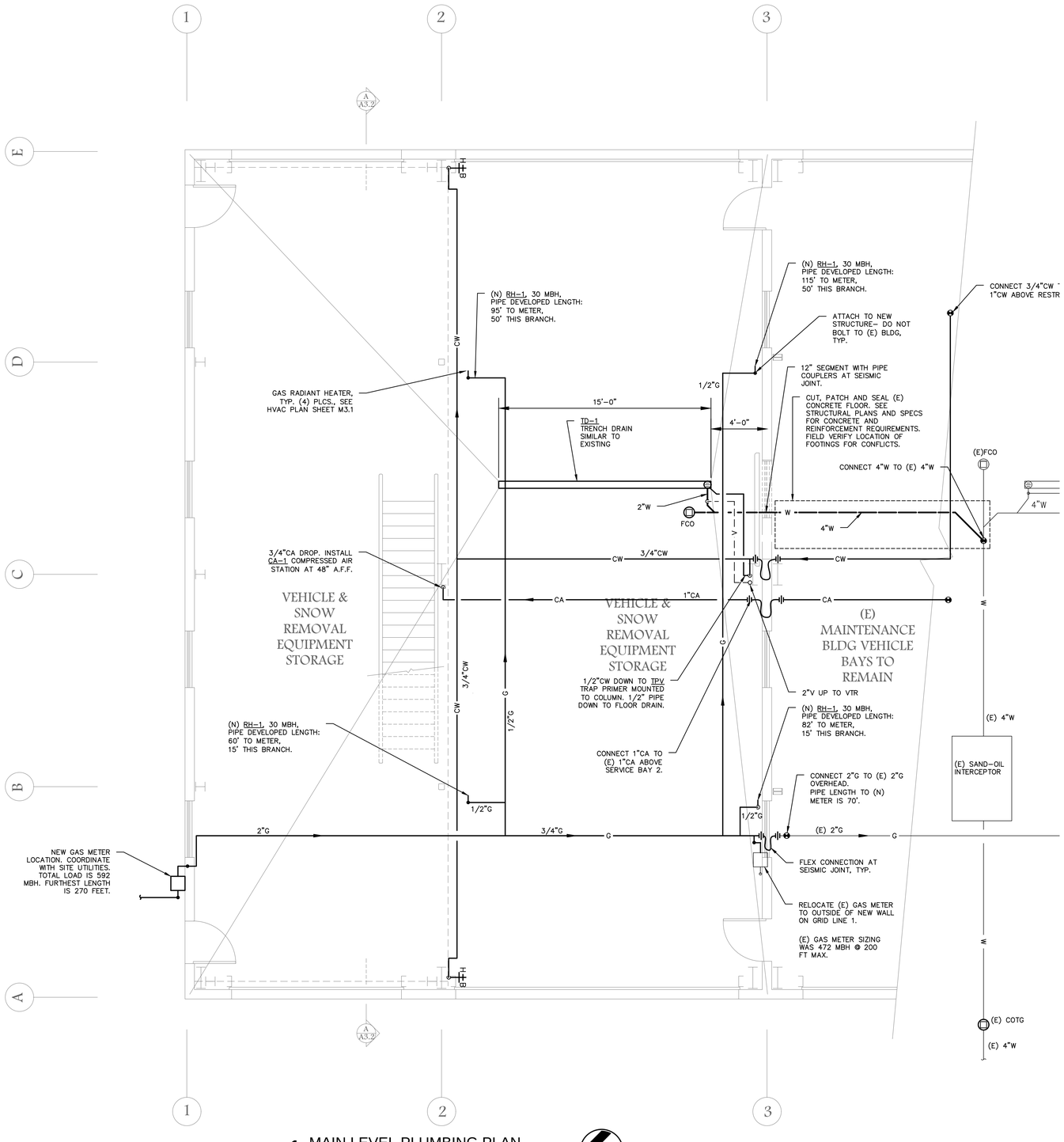


2 MEZZANINE LEVEL PLUMBING PLAN
SCALE: 1/4" = 1'-0"



1 MAIN LEVEL PLUMBING PLAN
SCALE: 1/4" = 1'-0"

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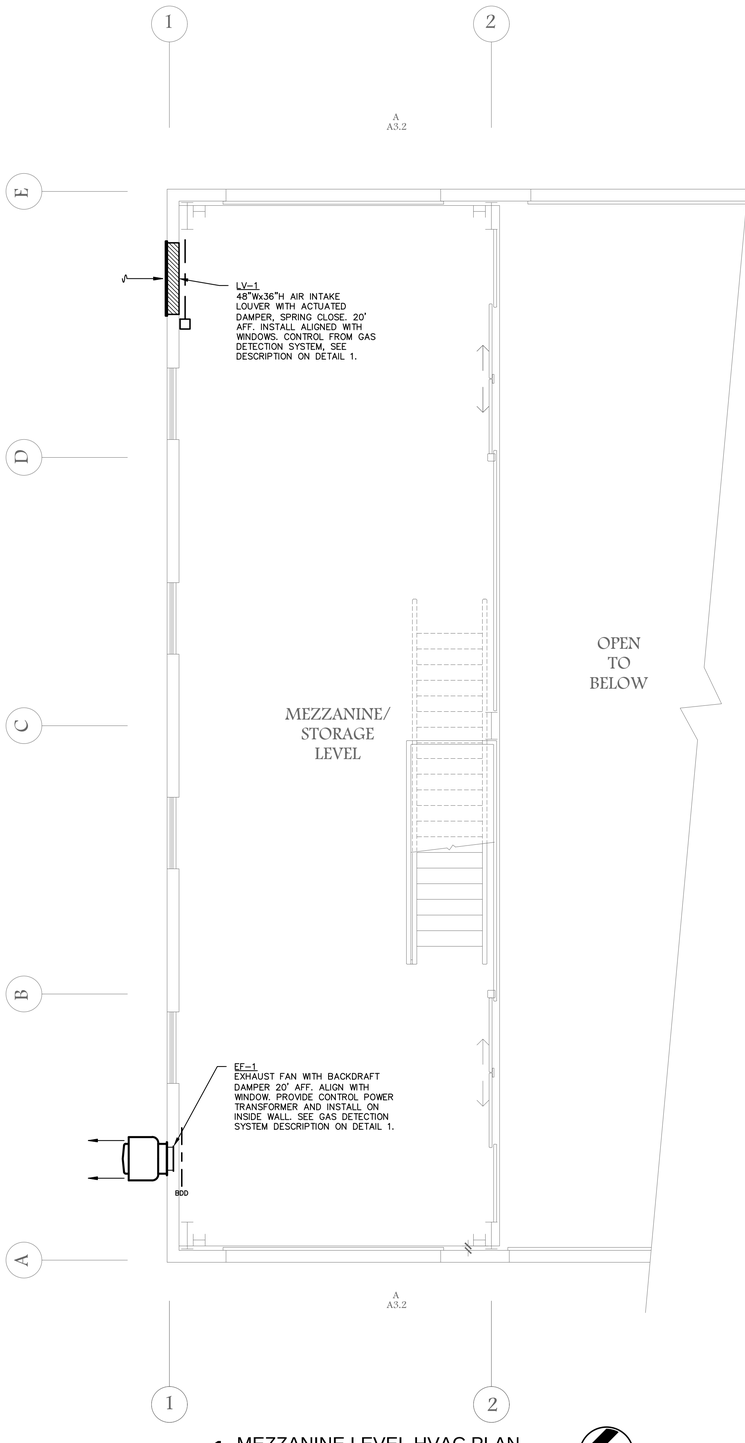
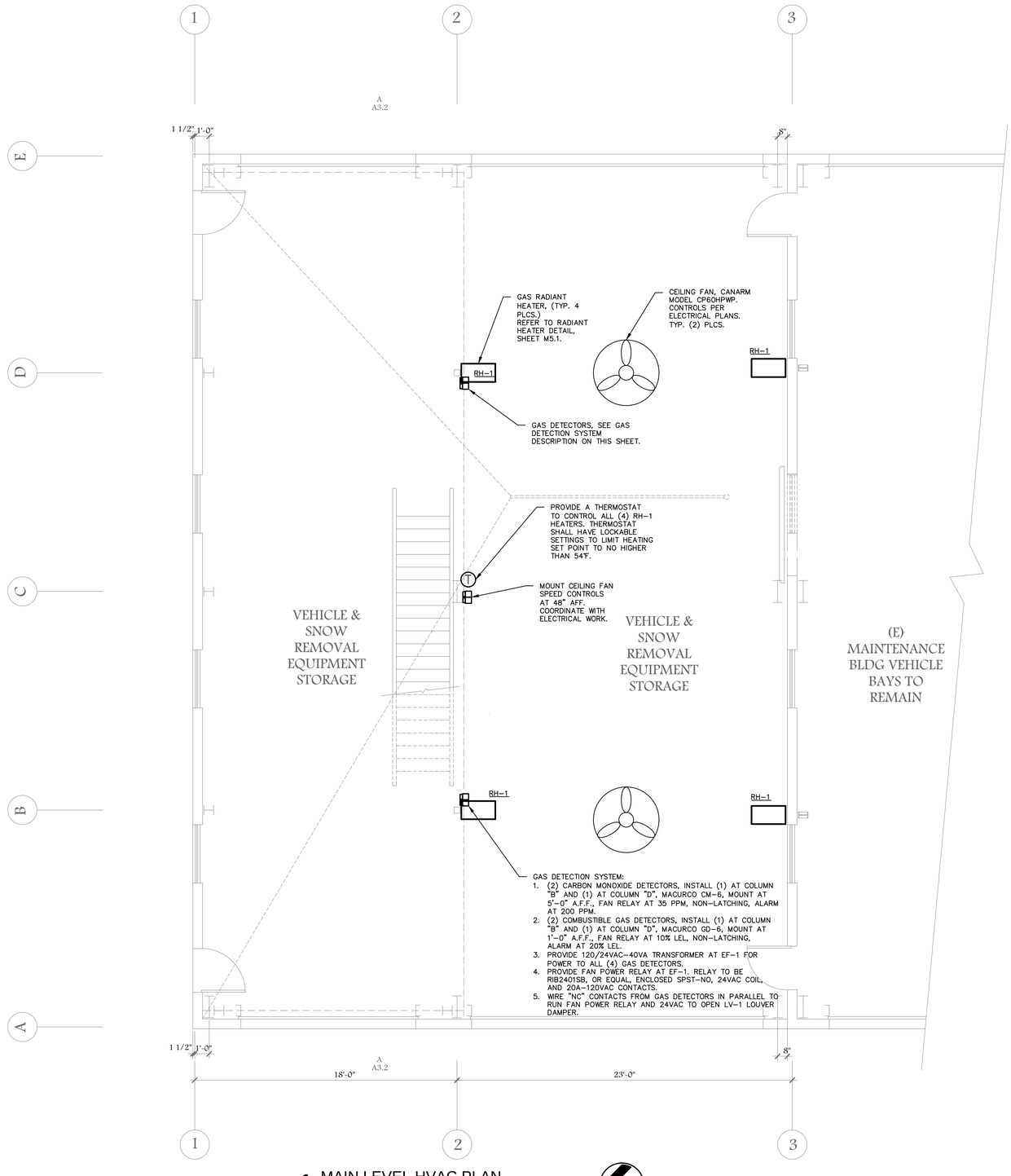


1 MEZZANINE LEVEL HVAC PLAN

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



1 MAIN LEVEL HVAC PLAN

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

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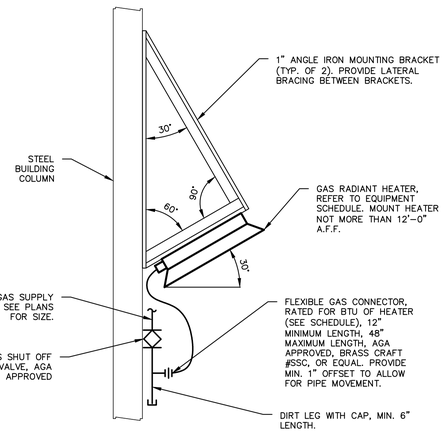
HVAC PLANS

SHEET NO.
M3.1



RADIANT HEATER DETAIL
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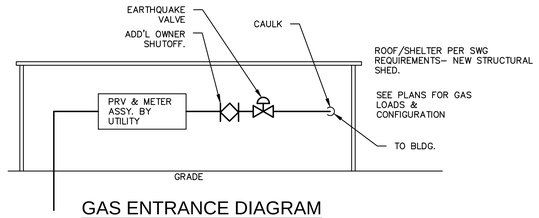

GAS ENTRANCE DIAGRAM
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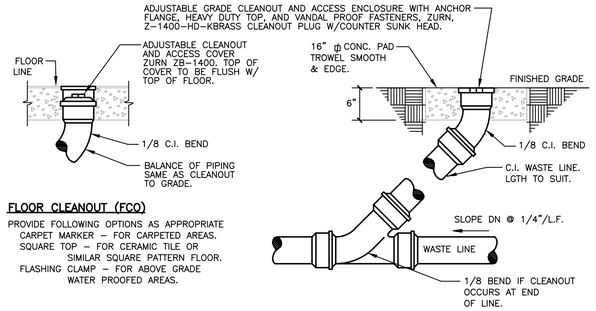
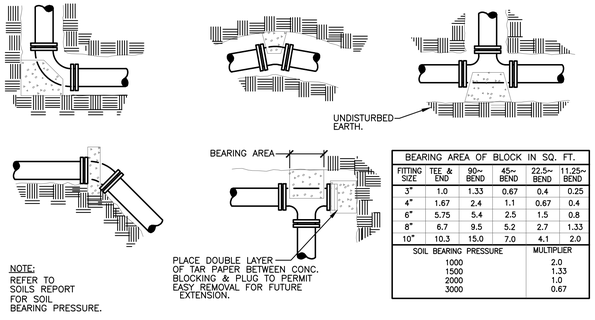


FLOOR CLEANOUT (FCO)

PROVIDE FOLLOWING OPTIONS AS APPROPRIATE
CARPET MARKER – FOR CARPETED AREAS.
SQUARE TOP – FOR CERAMIC TILE OR SIMILAR SQUARE PATTERN FLOOR.
FLASHING CLAMP – FOR ABOVE GRADE WATER PROOFED AREAS.

CLEANOUT TO GRADE (COTG)

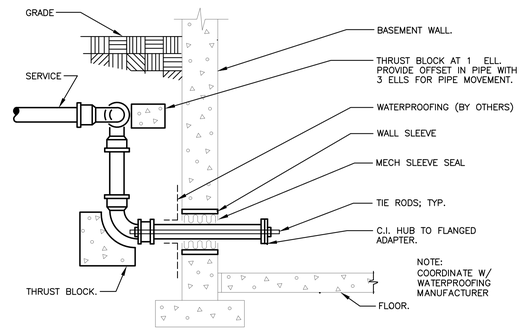
CLEANOUT DIAGRAMS
NO SCALE



BEARING AREA OF BLOCK IN SQ. FT.					
FITTING SIZE	TEE & END	90°~ BEND	45°~ BEND	22.5°~ BEND	11.25°~ BEND
3"	1.0	1.33	0.67	0.4	0.25
4"	1.67	2.4	1.1	0.67	0.4
6"	5.75	5.4	2.5	1.5	0.8
8"	6.7	9.5	5.2	2.7	1.33
10"	10.3	15.0	7.0	4.1	2.0

SOIL BEARING PRESSURE	MULTIPLIER
1000	2.0
1500	1.33
2000	1.0
3000	0.67

THRUST BLOCK DIAGRAM
NO SCALE



WATER &/OR FIRE ENTRY DIAGRAM
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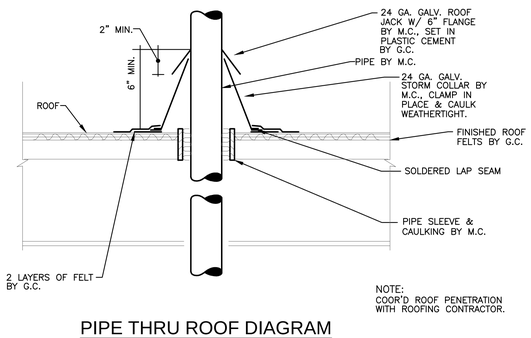
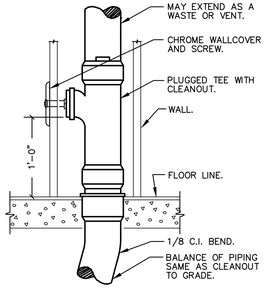


PIPE THRU ROOF DIAGRAM
NO SCALE



WALL CLEANOUT DIAGRAM
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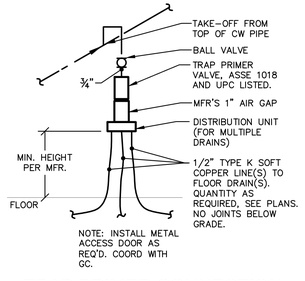
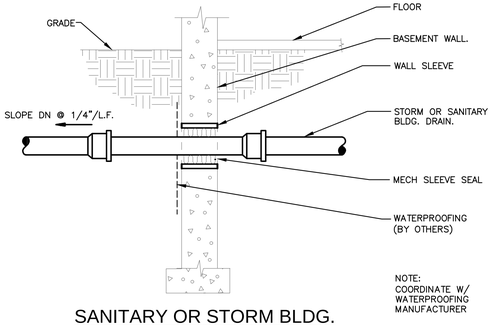


TRAP PRIMER CONNECTION DIAGRAM
NO SCALE



SANITARY OR STORM BLDG. DRAIN THRU WALL DIAGRAM
NO SCALE

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PANEL " C " 208 Y/ 120 VOLT 3 PH 4 WIRE 125A main lug AMPERE MAIN 100 : 125 AMPERE BUS

LOCATION New Bay MOUNTING Surface A.I.C. 22kAIC.

CRK	LOAD LINE A	LOAD LINE B	LOAD LINE C	LOAD DESCRIPTION	OUTLETS REC	OUTLETS LITES	CIRC. BRKR POLE	CIRC. BRKR TRIP	BUS A	BUS B	BUS C	CIRC. BRKR TRIP	CIRC. BRKR POLE	OUTLETS LITES	OUTLETS REC	LOAD DESCRIPTION	LOAD LINE A	LOAD LINE B	LOAD LINE C	CRK
1				Spare			1	20	+			30	3			SPD				2
3				Spare			2	20		+		30	-			SPD				4
5				Spare			-	-			+	30	-			SPD				6
7	20			HVAC Controls			1	20	+			20	1			Spare				8
9		1488		EF-1 1hp			1	20		+		20	1			Spare				10
11				Spare			1	20			+	20	1			Spare				12
13	5200			208V 50A Receptacle	x		2	50	+			20	1			Spare				14
15		5200		208V 50A Receptacle	x		-	-		+		20	1		x	GFCI Recpt Outside North Wall		1600		16
17			5200	208V 50A Receptacle	x		2	50			+	20	1		x	GFCI Recpt Outside North Wall			1600	18
19	5200			208V50A Receptacle	x		-	-	+			20	1		x	GFCI Recpt Outside West Wall	1600			20
21				208V Receptacle - Future	x		2	50		+		20	1		x	GFCI Recpt Outside West Wall		1600		22
23				208V Receptacle - Future	x		-	-			+	20	1		x	GFCI Recpt Inside North Wall			1600	24
25				208V Receptacle - Future	x		2	50	+			20	1		x	GFCI Recpt Inside North Wall	1600			26
27				208V Receptacle - Future	x		-	-		+		20	1		x	GFCI Recpt Mezzanie		1600		28
29				Spare							+	20	1			Spare				30
31									+											32
33										+										34
35											+									36
37									+											38
39										+										40
41											+									42
	10420	6888	5200	SUB TOTALS													3200	4800	3200	

NOTES: PROVIDE ALL CIRCUITS, CONDUIT, WIRE, DISCONNECTS, RECEPTS., ETC. REQUIRED BY MECHANICAL EQUIPMENT.
PROVIDE FACTORY SPD IN PANEL C.
ALL OUTSIDE 120V RECEPTACLES SHALL BE SPECIFICATION GRADE 20A GFCI TYPE WITH HD METAL IN-USE COVERS
INSIDE RECEPTACLES SHALL BE SPECIFICATION GRADE 20A GFCI.

	LOAD LINE A	LOAD LINE B	LOAD LINE C
LINE TOTALS	13620	11488	8400
LCL ADDER			
TOTAL VA/PH	13620	11488	8400
LINE AMPS	114	96	70
TOTAL KVA LOAD		33.5	

PANEL C SCHEDULE

PANEL " E2 " 208 Y/ 120 VOLT 3 PH 4 WIRE 125A main lug AMPERE MAIN 80 : 125 AMPERE BUS

LOCATION Next to new Panel C MOUNTING Surface A.I.C. 22kAIC

CRK	LOAD LINE A	LOAD LINE B	LOAD LINE C	LOAD DESCRIPTION	OUTLETS REC	OUTLETS LITES	CIRC. BRKR POLE	CIRC. BRKR TRIP	BUS A	BUS B	BUS C	CIRC. BRKR TRIP	CIRC. BRKR POLE	OUTLETS LITES	OUTLETS REC	LOAD DESCRIPTION	LOAD LINE A	LOAD LINE B	LOAD LINE C	CRK
1				Spare			1	20	+			20	1			Spare				2
3		1296		Mezzanine Rollup Door 10.8A			1	20		+		20	1			Equip. Bay Rollup Door 10.8A		1296		4
5			1296	Equip. Bay Rollup Door 10.8A			1	20			+	20	1	-		Equip. Bay Rollup Door 10.8A			1296	6
7	20			RH-1 Radiant Heater (4ea)			1	20	+			20	1	x		Mezzanine Lighting	500			8
9				Spare			1	20		+		20	1	x		Under Mezzanine Lighting		1200		10
11			202	CF-1 .84A ea FRMC-5 Control			1	20			+	20	1	x		Bay Lighting			960	12
13	1600			GFCI Recpt. Inside South Wall	x		1	20	+			20	1	x		Outside Lighting	600			14
15		1600		GFCI Recpt. Inside South Wall	x		1	20		+		20	1		x	GFCI Recpt Outside West Wall		1600		16
17			1600	GFCI Recpt Outside East Wall	x		1	20			+	20	1		x	GFCI Recpt Outside West Wall			1600	18
19	1600			GFCI Recpt Outside East Wall	x		1	20	+			20	1		x	GFCI Recpt Outside West Wall	1600			20
21		1600		GFCI Recpt Outside East Wall	x		1	20		+		20	1			Spare				22
23				Spare			1	20			+	20	1			Spare				24
25				Spare			1	20	+			30	3			SPD				26
27				Spare			1	20		+		-	-			SPD				28
29				Spare			1	20			+	-	-			SPD				30
31									+											32
33										+										34
35											+									36
37									+											38
39										+										40
41											+									42
	3220	4496	3097.6	SUB TOTALS													2700	4096	3856	

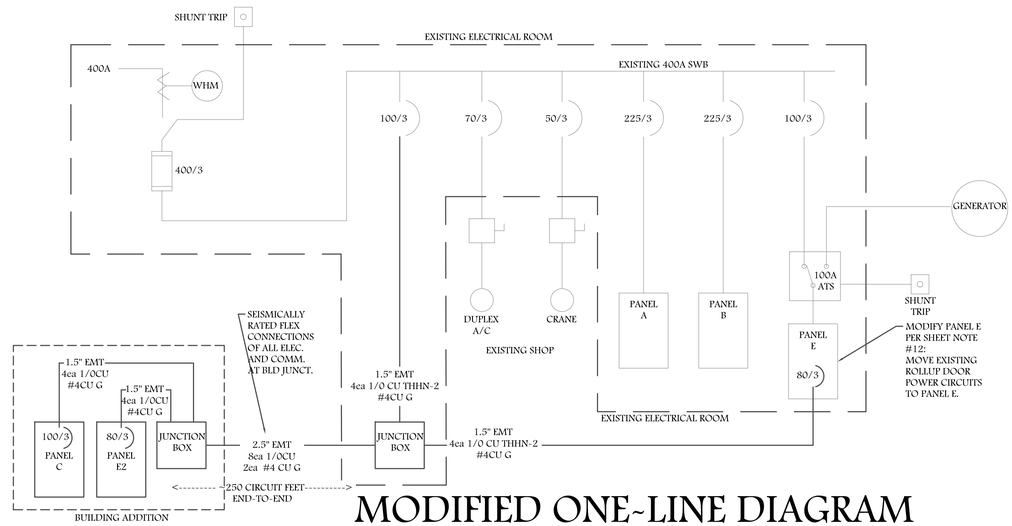
NOTES: PROVIDE ALL CIRCUITS, CONDUIT, WIRE, DISCONNECTS, RECEPTS., ETC. REQUIRED BY MECHANICAL EQUIPMENT.
PROVIDE FACTORY SPD IN PANEL E2.
ALL OUTSIDE 120V RECEPTACLES SHALL BE SPECIFICATION GRADE 20A GFCI TYPE WITH HD METAL IN-USE COVERS.
SPRAY COVERS OF ALL RECEPTACLES ON E2 PANEL RED TO MARK AS ON EMERGENCY POWER.
INSIDE GFCI RECEPTACLES SHALL BE SPECIFICATION GRADE 20A.

	LOAD LINE A	LOAD LINE B	LOAD LINE C
LINE TOTALS	5920	8592	6953.6
LCL ADDER			
TOTAL VA/PH	5920	8592	6953.6
LINE AMPS	49	72	58
TOTAL KVA LOAD		21.5	

PANEL E2 SCHEDULE

MODIFIED LOAD CALCULATION	
ITEM	**kVA**
PANEL A	7
PANEL B	18
PANEL E	33
CRANE	12.6
COMPRESSORS	18
25% LARGEST MOTOR	3
20% SPARE	15
Total Original kVA	**107**
Total Original Amperes	**297A**
ADDITIONAL LOADS - VA	
Lighting 3570sf @ 2VA/sf	7,500
Receptacles - Block Heaters	9,600
Ventilation+Heating	1,500
Roll-up Door	3,888
Total Added VA	**22,488**
Added Amperes	**62**
New Calculated Load - 208V Amperes	**359**

LOAD CALCULATION



MODIFIED ONE-LINE DIAGRAM

GENERAL ELECTRICAL NOTES

1. LIGHTING FIXTURE POWER SHALL NOT EXCEED TITLE 24 LIMITS
2. LIGHTING FIXTURES SHALL BE LED TYPE WITH DIMMING POWER SUPPLIES
3. LIGHTING CONTROLS SHALL BE OCCUPANCY SENSING WITH SENSORS INSTALLED AS REQUIRED FOR FULL COVERAGE OF THE LIT AREA
4. DEFAULT CONDUIT IS 3/4" EMT, UNLESS CONDUCTOR FILL REQUIRES LARGER, WITH STEEL RAIN-TIGHT COMPRESSION FITTINGS. EMT IN/UNDER FLOOR SHALL BE RATED FOR UG AND CONCRETE EMBEDUMENT OR GRS OR PVC WITH GRS ELBOWS AND RISERS SHALL BE USED.
5. SUPPORT 3/4" EMT 5' O.C. THROUGHOUT.
6. DEFAULT LIGHTING CONDUCTOR IS #12 CU THHN-2 WITH #12GND. DEFAULT RECEPT. CONDUCTORS: DIRECT, UNDER SLAB, #10 W/#12 GND. OVERHEAD, #8 WITH #12GND (~150 CIRCUIT FEET). RUNS UNDER 50' MAY BE #12 WITH #12GND. LIMIT VOLTAGE DROP TO LESS THAN 2.5%.
7. INSTALL BONDING CONDUCTORS IN ALL POWER CONDUITS.
8. PANELS AND BREAKERS SHALL BE 22kAIC RATED
9. SUBMIT SHOP DRAWINGS SHOWING MOUNTING METHODS FOR ALL SWITCHES, RECEPTACLES, CONTROLS, LIGHTING FIXTURES AND CONDUIT WITH DETAILS OF SUPPORT AND ATTACHMENT
10. ALL RECEPTACLES AND SWITCHES SHALL BE SPECIFICATION GRADE
11. DISTRIBUTE LOADS IN NEW E2 PANEL TO EQUALIZE CURRENTS ACROSS THREE PHASES IN PANEL E AND E2
12. MOVE ONE CIRCUIT IN EXISTING PANEL E TO CLEAR SPACE FOR 80/3 BREAKER. PROVIDE EDITED PANEL SCHEDULE SHOWING NEW CIRCUIT ASSIGNMENT. MOVE EXISTING DOOR MOTORS NOT ON PANEL E TO PANEL E. INSTALL SUB-PANEL AND LARGER BREAKER IF REQUIRED. CONNECT THE LOADS TO THE UNDERLOADED GENERATOR PHASE.
13. PROVIDE FACTORY INSTALLED SPD IN NEW PANELS E2 AND C.
14. IDENTIFY AND EXTEND ORIGINAL OUTSIDE LIGHTING POWER CIRCUIT AND CONNECT NEW OUTSIDE LIGHTING FIXTURES TO THIS CIRCUIT
15. PROVIDE ALL REQUIRED CIRCUITS, CONDUIT, DISCONNECTS, ETC. FOR MECHANICAL EQUIPMENT, GAS DETECTORS, ETC. SEE MECHANICAL PLANS
16. PROVIDE CONDUIT TO EXISTING FIRE ALARM CONTROL PANEL (FACP) IN ELECTRICAL ROOM FROM NEW SENSORS AND OTHER DETECTOR AND ALARM EQUIPMENT DESIGNED AN PROVIDED BY FIRE ALARM CONTRACTOR. F.A. CONTRACTOR SHALL SPECIFY CONDUIT AND BOX SIZES AND LOCATIONS.
17. LIGHTING FIXTURES SUSPENDED FROM CEILING OR OTHER STRUCTURAL MEMBERS SHALL HAVE FACTORY SEISMIC TETHERING CABLES
18. HEIGHT AFF OF RECEPTACLES AND SWITCHES SHALL BE PER ARCHITECT.
19. WALL PLATES AND GFCI HD IN-USE COVERS OF RECEPTACLES ON E2 SHALL BE PAINTED RED. COLOR AND COATING TYPE BY ARCHITECT.
20. PERMANENTLY LABEL THE PANEL AND CIRCUIT BREAKER NUMBER OF ALL RECEPTACLES WITH ENGRAVED LABELS ATTACHED WITH SILASTIC MASTIC.

LIGHTING FIXTURE SCHEDULE

L1 - G.E. HIGHBAY LED LIGHT FIXTURE ABV1-0-1-V-47-9-N-V-22-A-A-W ALBEO 120V, 2 MODULE, 95W, STANDARD OUTPUT, 4K, 90°BEAM, DIMMING POWER SUPPLY COMPATIBLE WITH DIMMERS, 1/2" THREADED ROD MOUNTING KIT WITH 6' CORD, 15A PLUG, WHITE. WITH SEISMIC TETHER CABLE IF REQUIRED BY CODE OR MANUFACTURER. QUAN=12

L2 - G.E. LOWBAY LED LIGHT FIXTURE ALC5-0-1-H48-8-S-N-V-ST-K-N-W ALBEO 120V, 1 MODULE, 38W, HIGH OUTPUT, 4K 80+CRI, 80°BEAM, 4FEET, STAND ALONE, NO SENSOR, DIMMING POWER SUPPLY COMPATIBLE WITH DIMMERS, STANDARD MOUNTING (TO CEILING), KNOCKOUT, WHITE. QUAN=12

L3 - LED WALLPACK PER TTAD: DARK SKY COMPLIANT (FULL CUTOFF), EITHER INDIVIDUAL OR CENTRAL PHOTOELECTRIC CONTROL. BACKUP BATTERY IF FOR EGRESS LIGHTING APPROXIMATELY 50W. COOPER CROSSTOUR XTOWSA-MS/DIM-L20-CBP. 41W, MOTION+DIMMING CONTROL, COLD WX BATTERY BACKUP.

1. LIGHTING FIXTURES AND CONTROLS SHALL BE C.E.C. CERTIFIED AND COMPLIANT WITH T-24 POWER LIMITS.
2. FINALIZE FIXTURE PART NUMBERS WITH MANUFACTURER'S REPRESENTATIVE BEFORE SUBMITTING OR ORDERING.
3. TOTAL TITLE 24 INSIDE LIGHTING ALLOWANCE FOR NEW SPACE: 3,570SF @ 1.0W/SF = 3,570VA.
4. INSIDE LIGHTING:
   12ea L1@93 VA EACH = 1,116VA
   12ea L2@38 VA EACH = 456VA
   TOTAL INSIDE LIGHTING= 1,596VA
5. NEW OUTSIDE LIGHTING
   3 L3@41 VA EACH = 123VA

BID SET

TRUCKEE TAHOE AIRPORT

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General Notes

VERIFY LOCATION OF ALL ELECTRICAL WITH OWNER & ARCHITECT DURING WALK THRU - PRIOR TO ROUGH IN.

BLDG ADDITION TO BE HEATED TO A MAX. 50° F

REGISTERED PROFESSIONAL ENGINEER ERIC F. SANDELL NO. E16076 Exp. 12-31-17 ELECTRICAL STATE OF CALIFORNIA

12-15-2016

No.	Revisions	Date

Project

AIRPORT VEHICLE MAINT. BLD. ADDITION ONE-LINE DIAGRAM

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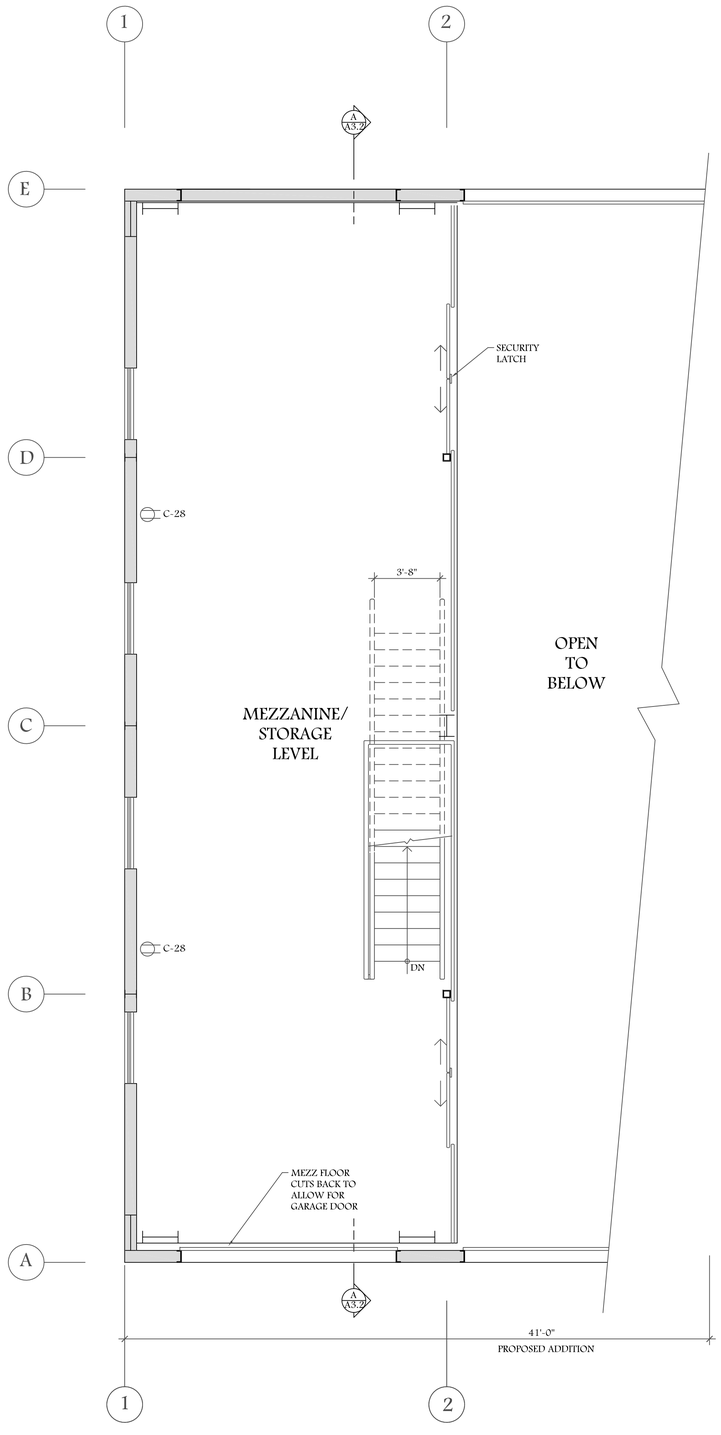
Plan North

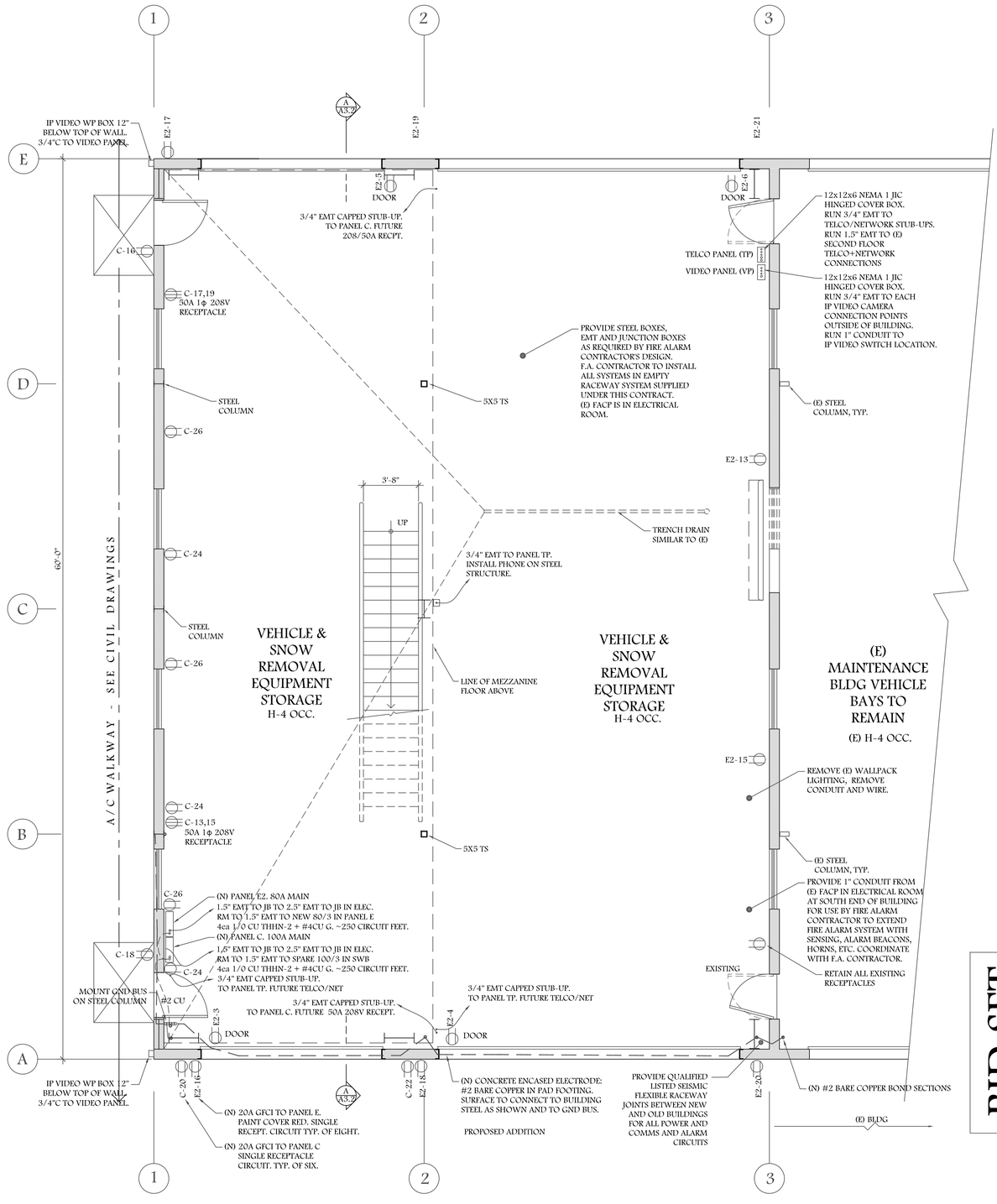
Date 12/15/16
Drawn SD
Reviewed EFS
Scale 1/4" = 1'-0"

Sheet No. E1.0



UPPER FLOOR POWER PLAN

1110 S.F. MEZZ & STORAGE



LOWER FLOOR POWER/DATA PLAN

2460 S.F. ADDITION

GRAPHIC SCALE

0' 4' 8' 12' 16'

BID SET

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12-15-2016

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AIRPORT VEHICLE MAINT. BLD. ADDITION PWR & DATA PLAN

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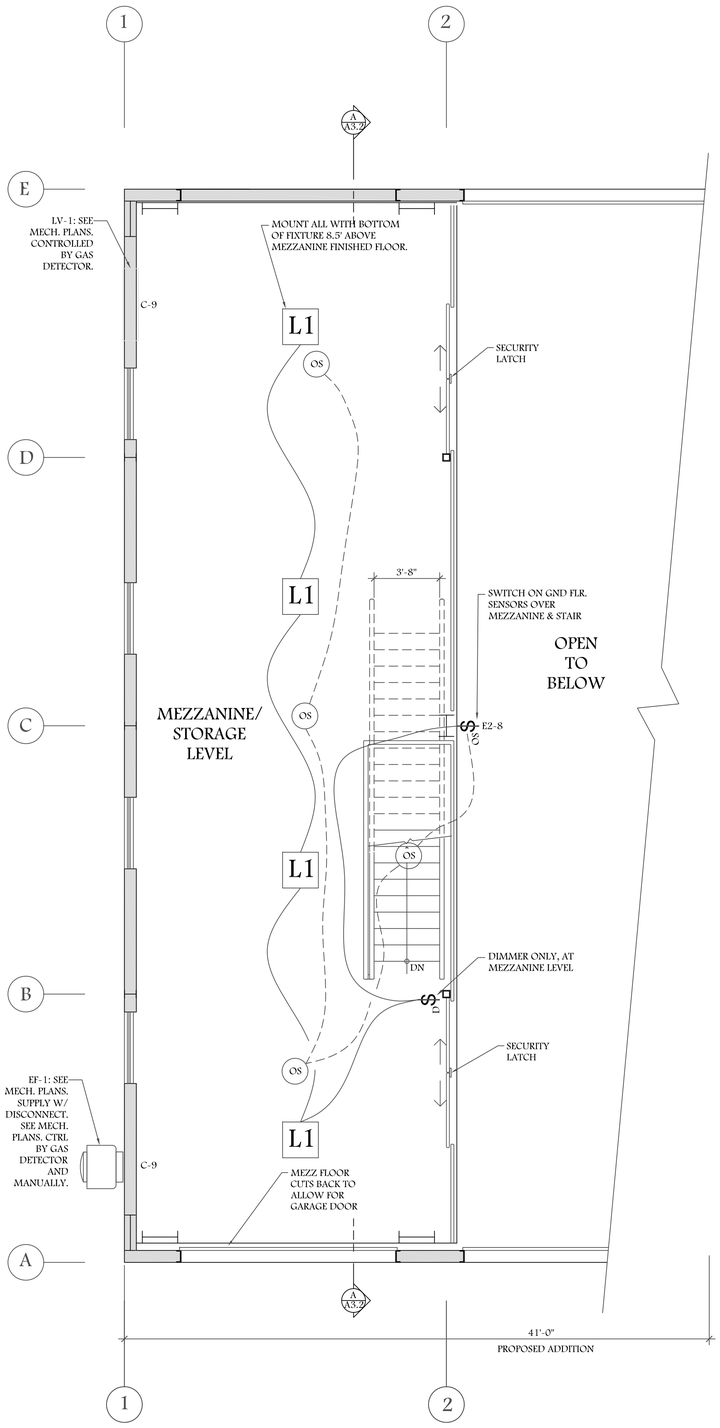
Plan North

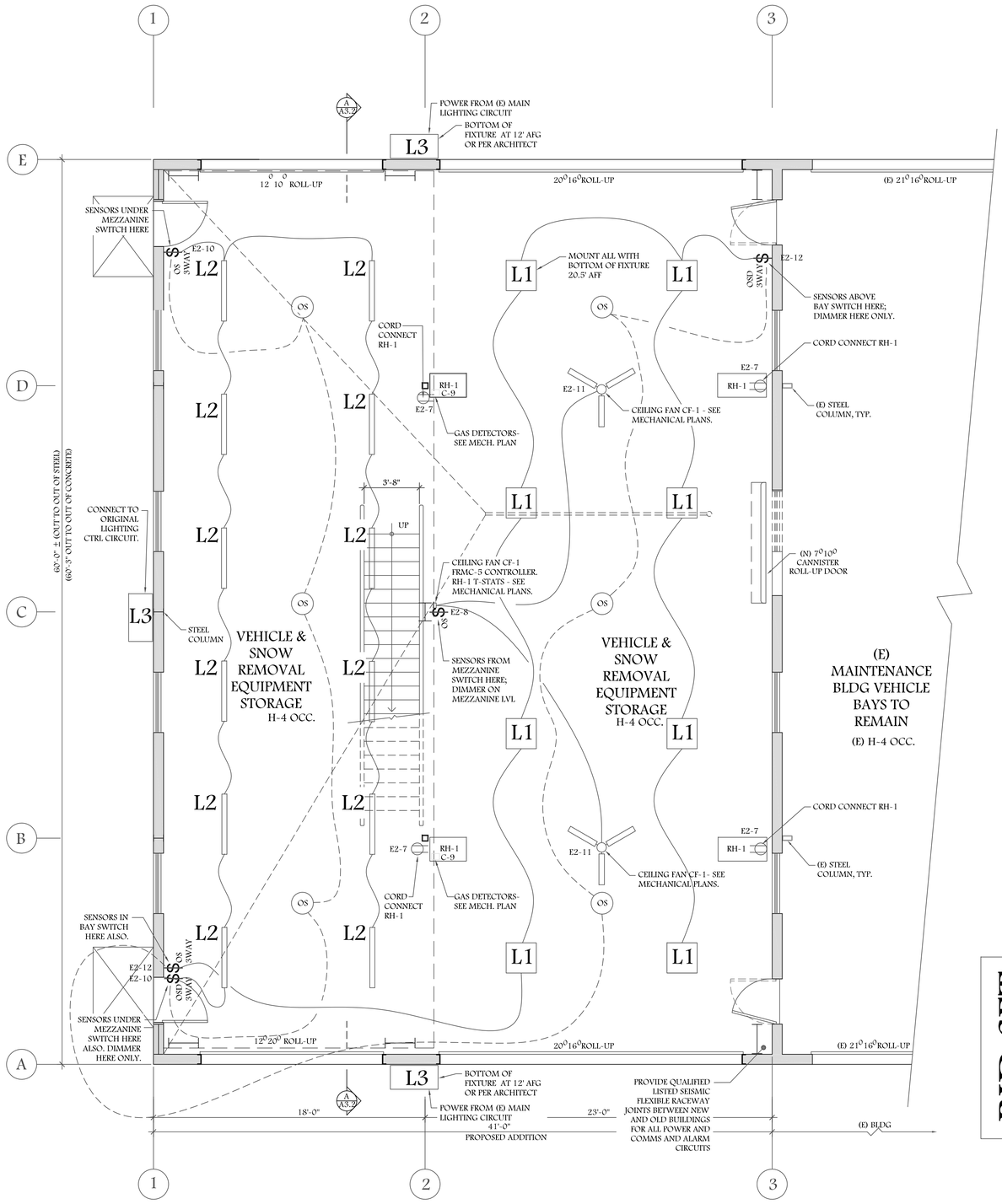
Date	12/15/16
Drawn	SD
Reviewed	EFS
Scale	1/4" = 1'-0"

Sheet No. E1.1



UPPER FLOOR LIGHTING & HVAC PLAN

1110 S.F. MEZZ & STORAGE



LOWER FLOOR LIGHTING & HVAC PLAN

2460 S.F. ADDITION

GRAPHIC SCALE

0' 4' 8' 12' 16'

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REGISTERED PROFESSIONAL ENGINEER
ERIC F. SANDEL
NO. E16076
Exp. 12-31-15
ELECTRICAL
STATE OF CALIFORNIA

12-15-2016

No.	Revisions	Date

Project

AIRPORT VEHICLE MAINT. BLD. ADDITION: LTG & HVAC PLAN

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Plan North

Date 12/15/16
Drawn SD
Reviewed EFS
Scale 1/4" = 1'-0"

Sheet No.
E2.1