CAMERON APPRAISAL DISTRICT
NEW BUILDING ADDITION AND RENOVATIONS
2021 AMISTAD DRIVE, SAN BENITO,TX 78586

GENERAL NOTES

1. THE CONTRACT DOCUMENTS ARE COMPLIMENTARY, AND WHAT IS REQUIRED BY ONE, ARCHITECTURAL, STRUCTURAL, MECHANICAL, PLUMBING, OR ELECTRICAL DRAWINGS OR SPECIFICATIONS, ADDENDUM, BULLETIN, OR OTHER DOCUMENT, SHALL BE AS BINDING AS IF REQUIRED BY ALL. CONTRACTOR SHALL USE ONLY COMPLETE SETS OF CONTRACT DOCUMENTS FOR EACH AND EVERY ITEM OF WORK.
2. CONTRACTOR AGREES THAT, IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONTRACTOR SHALL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY, AND HOLD OWNER AND ARCHITECT HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK.
3. ALL WORK SHALL COMPLY WITH ALL APPLICABLE CODE, ORDINANCES, A.D.A., T.A.S., AND REGULATIONS OF ALL GOVERNING BODIES.
4. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE CODES, ORDINANCES AND STANDARD SPECIFICATIONS OF ALL AGENCIES THAT HAVE THE RESPONSIBILITY OF REVIEWING PLANS AND SPECIFICATIONS FOR CONSTRUCTION OF ALL ITEMS PER THESE PLANS AND SPECIFICATIONS IN THIS LOCALITY.
5. THE CONTRACTOR SHALL OBTAIN ALL THE NECESSARY PERMITS AS REQUIRED FOR CONSTRUCTION OF THIS PROJECT.
6. WHEN ANY EXISTING UTILITY REQUIRES ADJUSTMENT OR RELOCATION, THE CONTRACTOR SHALL NOTIFY THE PROPER UTILITY AND COORDINATE HIS WORK ACCORDINGLY. THERE SHALL BE NO CLAIM MADE BY THE CONTRACTOR AND ANY COSTS CAUSED BY DELAYS IN CONSTRUCTION DUE TO THE ADJUSTMENT OR RELOCATION OF UTILITIES.
7. THE OWNER AND ARCHITECT SHALL NOT BE HELD LIABLE FOR ANY CLAIMS RESULTING FROM ACCIDENTS OR DAMAGES CAUSED BY THE CONTRACTOR'S FAILURE TO COMPLY WITH TRAFFIC AND PUBLIC SAFETY REGULATIONS DURING THE CONSTRUCTION PERIOD.
8. THE CONTRACTOR SHALL CONFINE HIS ACTIVITIES TO THE PROJECT SITE UNDER DEVELOPMENT OR THE EXISTING RIGHT-OF-WAYS, CONSTRUCTION AND PERMANENT EASEMENTS, AND SHALL NOT TRESPASS UPON OTHER PRIVATE PROPERTY WITHOUT THE CONSENT OF THE OWNER OF THE OTHER PROPERTY.
9. THE CONTRACTOR SHALL DISPOSE OF ALL SURPLUS EXCAVATION PROPERLY AND PROVIDE ALL SUITABLE FILL MATERIAL AS APPROVED BY THE SOILS ENGINEER, AND THE COST SHALL BE INCLUDED IN THE PRICE BID FOR THE RELATED ITEMS.
10. EROSION AND SEDIMENT CONTROL SHALL BE PROVIDED IN ACCORDANCE WITH LOCAL AND/OR STATE REQUIREMENTS. PROTECTIVE MEASURES SHALL BE TAKEN BY THE CONTRACTOR TO PROTECT ADJACENT PROPERTY AT ALL TIMES DURING CONSTRUCTION. PROTECTIVE MEASURES SHALL BE TAKEN BY THE CONTRACTOR SO AS NOT TO CAUSE ANY MUD, SILT, OR DEBRIS ONTO PUBLIC OR ADJACENT PROPERTY. ANY MUD OR DEBRIS ON PUBLIC PROPERTY SHALL BE REMOVED IMMEDIATELY.
11. ALL WORK SHALL BE GUARANTEED BY THE CONTRACTOR TO BE FREE FROM DEFECTS IN WORKMANSHIP AND MATERIALS AND IN CONFORMANCE WITH THE APPROVED PLANS AND SPECIFICATIONS, AND THAT THE CONTRACTOR SHALL REPLACE OR REPAIR ANY WORK OR MATERIAL FOUND TO BE DEFECTIVE DURING CONSTRUCTION PERIOD AND IN WARRANTEE PERIOD. PURSUANT TO THE CONTRACT.
12. CONTRACTOR SHALL VERIFY THAT THE PLANS AND SPECIFICATIONS THAT HE IS USING ARE THE VERY LATEST PLANS AND SPECIFICATIONS AND FURTHER SHALL VERIFY THAT THESE PLANS AND SPECIFICATIONS HAVE BEEN APPROVED BY ALL APPLICABLE PERMIT-ISSUING AGENCIES.
13. SHOULD THE CONTRACTOR ENCOUNTER CONFLICTS BETWEEN THESE PLANS AND SPECIFICATIONS, EITHER AMONG THEMSELVES OR WITH THE REQUIREMENTS OF ANY AND ALL REVIEWING AND PERMIT-ISSUING AGENCIES, HE SHALL SEEK CLARIFICATION IN WRITING FROM THE ARCHITECT BEFORE COMMENCEMENT OF ANY CONSTRUCTION. FAILURE TO DO SO SHALL BE AT SOLE EXPENSE TO THE CONTRACTOR.
14. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITIES OR STRUCTURES AT THE SITE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE OWNER OF UTILITIES OR STRUCTURES CONCERNED BEFORE STARTING WORK. THE CONTRACTOR SHALL NOTIFY THE PROPER UTILITY IMMEDIATELY UPON BREAK OR DAMAGE TO ANY UTILITY LINE OR APPURTENANCE, OR THE INTERRUPTION OF THEIR SERVICE. HE SHALL NOTIFY THE PROPER UTILITY INVOLVED, IF EXISTING UTILITY CONSTRUCTION CONFLICTS WITH REQUIREMENTS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT MAY BE RESOLVED.
15. INSTALL ALL MANUFACTURED ITEMS, MATERIALS, AND EQUIPMENT IN STRICT ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS, EXCEPT THAT THE SPECIFICATIONS, WHERE MORE STRINGENT, SHALL GOVERN.
16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL TAPS, EXTENSIONS, WATER, AND ELECTRICITY FOR ALL PROJECT FUNCTIONS, OFFICE, STORAGE, ETC.
17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING HIS OWN TELEPHONE, TOILET, VALVES, OR OTHER DEVICES NECESSARY TO RUN POWER TOOLS AND EQUIPMENT. SUCH MODIFICATIONS TO EXISTING UTILITIES SHALL BE REMOVED AT COMPLETION OF THE PROJECT.
18. THE GENERAL CONTRACTOR SHALL PROVIDE ONE COPY OF AS-BUILT DRAWINGS TO THE OWNER AT THE COMPLETION OF THE PROJECT. AS-BUILT DRAWINGS SHALL BE KEPT ON THE JOB AT ALL TIMES AND UPDATED THROUGHOUT THE CONSTRUCTION PHASE. AS-BUILT DRAWINGS ARE RECORD DRAWINGS OF CHANGES, DELETIONS, AND MODIFICATIONS DURING CONSTRUCTTION. CONTRACTOR RESPONSIBLE FOR THESE RECORDS.
19. THE GENERAL CONTRACTOR SHALL PROVIDE STREET NUMBERING ON THE BUILDING IN COMPLIANCE WITH LOCAL AUTHORITY.
20. ALL PENETRATIONS THRU WALLS SHALL BE SEALED AIR/WATER TIGHT AND CAULKED WITH TWO PART SEALANT EACH SIDE.
21. UNLESS NOTED OTHERWISE, SITE PLAN DIMENSIONS ARE TO BACK OF CURB. FLOOR PLAN DIMENSIONS ARE TO FACE OF STUDS, FRAMING, MASONRY, CONCRETE WALL PANELS, OR FOUNDATION WALLS.
22. CONTRACTOR SHALL PROVIDE SHOP DRAWING SCHEDULE PRIOR TO START OF CONSTRUCTION AND SUBMIT SHOP DRAWINGS TO THE ARCHITECT IN A TIMELY MANNER THAT WILL ALLOW NOT LESS THAN TEN DAYS FOR REVIEW. THE GENERAL CONTRACTOR SHALL SUBMIT CORRECT NUMBER REQUIRED, BUT NOT LESS THAN FIVE COPIES. FOUR OF WHICH ARE DISTRIBUTED ONE EACH TO OWNER, ARCHITECT, DESIGN ARCHITECT, AND ENGINEER. CONTRACTOR TO ADD NUMBER REQUIRED FOR HIS SUPPLIER AND/OR SUBCONTRACTOR.
23. THE GENERAL CONTRACTOR IS REQUIRED TO NOTIFY THE ARCHITECT IN WRITING OF ANY DEVIATIONS INDICATED ON ANY SUBMITTAL, AND THE ARCHITECT GIVE WRITTEN APPROVAL OF THE SPECIFIC DEVIATION(S) IN A CHANGE ORDER OR OTHER DOCUMENTATION. WITHOUT BOTH THE WRITTEN NOTIFICATION AND DOCUMENTED APPROVAL OF THE CHANGE, CONTRACTOR IS REQUIRED (AT HIS EXPENSE) TO COMPLY WITH THE CONTRACT DOCUMENTS, EVEN WHEN THE ARCHITECT (OR ENGINEER) HAS REVIEWED THE SUBMITTAL WITHOUT COMMENTING ON THE DEVIATION.

BOARD OF DIRECTORS

CHAIRPERSON	VICENTE MENDEZ
VICE CHAIRPERSON	DAVID A. GARZA
SECRETARY	DAVID ARGABRIGHT
MEMBER	GLORIA CASAS
MEMBER	CESAR LOPEZ
MEMBER	J. RUBEN MONTEMAYOR
MEMBER	RICARDO MORADO
MEMBER	JESSE VILLARREAL
MEMBER	TONY YZAGUIRRE, JR.

ADMINISTRATION

ADMINISTRATION	
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EXECUTIVE ASSISTANT	LORETTA C. SALINAS
LIAISON OFFICER	MARY MORALES
TAX PAYER ASSISTANT MANAGER	ELIZA VALLE
APPRAISAL - VALUATIONS	
DIRECTOR OF REAL ESTATE	GEORGE GARCIA
BUSINESS PERSONAL PROPERTY MANAGER	ROBERT ROMERO
PROPERTY ID	
MANAGER	JESUS MARTINEZ
I.T./G.I.S. DEPARTMENT	
MANAGER	JOE L. OROZCO

INDEX OF DRAWINGS

TITLE PAGE
TP1 TITLE PAGE

CIVIL
C1.0 GENERAL NOTES
C1.1 GENERAL NOTES
C2.0 DEMO/EXISTING TOPO PLAN
C3.0 SITE PLAN
C4.0 SWPPP
C5.0 WATER DETAILS
C6.0 PAVING DETAILS

ARCHITECTURAL
AC1 OVERALL SITE & PROPOSED SITE PLAN
AC1.1 PROPOSED SITE PLAN & SITE DETAILS
NEW BUILDING ADDITION
A1 PROPOSED FLOOR PLAN & DETAILS
A1.1 RR PLAN AND INTERIOR ELEVATIONS
A1.2 REFLECTIVE CEILING PLAN & DETAILS
A2 EXTERIOR ELEVATIONS & BUILDING SECTIONS
A2.1 ROOF PLAN AND ROOF DETAILS
A3 WALL SECTIONS
A3.1 WALL SECTIONS AND DETAILS
A4 WINDOW TYPES, DOOR & FRAME TYPES & SCHEDULES
A5 DOOR AND WINDOW DETAILS
EXISTING BUILDING RENOVATIONS
D-A1 EXISTING & DEMO FLOOR PLAN
D-A2 EXISTING ROOF REPAIR & REPLACEMENT PLAN
R-A1 RECEPTION, WAITING AREA & RR PLAN
R-A1.1 ENLARGED RR PLAN
R-A1.2 REFLECTIVE CLG PLAN
R-A2 EXTERIOR ELEVATIONS & BLDG SECTIONS
R-A2.1 ROOF DETAILS
R-A3 INTERIOR ELEVATIONS IN EXISTING BUILDING
R-A3.1 NTERIOR ELEVATIONS IN EXISTING BUILDING
R-A3.2 CABINET SECTION DETAILS
R-A4 SCHEDULES IN EXISTING BUILDING

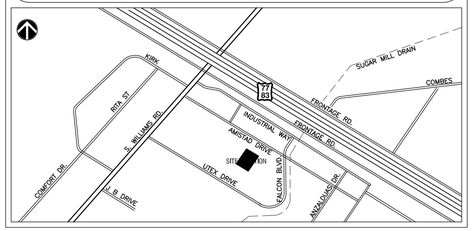
STRUCTURAL
S1.0 GENERAL STRUCTURAL NOTES
S2.0 FOUNDATION PLANS
S3.0 FOUNDATION DETAILS
S4.0 PROPOSED FRAMING PLAN OF NEW BUILDING
S4.1 DEMOLITION FRAMING PLAN EXISTING BLDG.
S4.2 PROPOSED FRAMING PLAN EXISTING BLDG.
S5.0 ROOF PLAN
S6.0 GENERAL FRAMING DETAILS
S6.1 GENERAL FRAMING DETAILS

MECHANICAL
MEP1.1 MEP SITE PLAN
M2.1 MECHANICAL GENERAL NOTES, LEGEND & ABBREVIATIONS
M3.1 MECHANICAL PLAN
M3.2 MECHANICAL ROOF PLAN
M4.1 MECHANICAL SCHEDULES
M5.1 MECHANICAL DETAILS
R-MD1.1 EXISTING BLDG. MECHANICAL DEMO PLAN
R-MD1.2 EXISTING BLDG. MECHANICAL ROOF DEMO PLAN
R-M3.1 EXISTING BLDG. MECHANICAL PLAN
R-M3.2 EXISTING BLDG. MECHANICAL ROOF PLAN

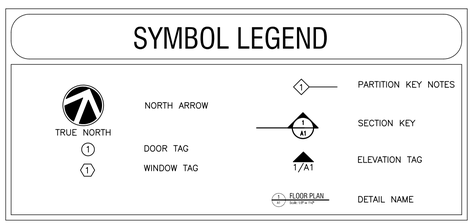
ELECTRICAL
E2.1 ELECTRICAL SYMBOLS, LEGEND AND ABBREVIATIONS
E3.1 LIGHTING FLOOR PLAN
E4.1 ELECTRICAL FLOOR PLAN
E5.1 BUILDING ADDITION ELECTRICAL RISER DIAGRAM AND SCHEDULES
E6.1 LUMINAIRE SCHEDULE, LIGHTING AND CONTROL IMAGES
E7.1 ELECTRICAL DETAILS
R-ED1.1 EXISTING BLDG. ELECTRICAL DEMOLITION PLAN
R-E3.1 EXISTING BLDG. LIGHTING PLAN
R-E3.2 EXISTING BLDG. LIGHTING PLAN - ALTERNATE #2
R-E4.1 EXISTING BLDG. ELECTRICAL PLAN
R-E4.2 EXISTING BLDG. ELECTRICAL ROOF PLAN
R-E5.1 EXISTING BLDG. ELECTRICAL RISER DIAGRAM AND SCHEDULES

PLUMBING
P2.1 PLUMBING PLAN
P3.1 WASTE AND VENT
P4.1 PLUMBING SCHEDULES AND DETAILS
P4.2 PLUMBING DETAILS
R-PD1.1 EXISTING BUILDING PLUMBING DEMOLITION PLAN
R-P2.1 PLUMBING PLAN
R-P3.1 WASTE AND VENT

LOCATION MAP



SYMBOL LEGEND



CODE ANALYSIS

ALL WORK DONE UNDER THIS CONTRACT SHALL COMPLY WITH THE PROVISIONS OF THE SPECIFICATIONS, DRAWINGS AND SHALL SATISFY ALL APPLICABLE CODES, ORDINANCES, AND REGULATIONS OF ALL GOVERNING BODIES INVOLVED. ANY MODIFICATIONS TO THE CONTRACT WORK REQUIRED BY SUCH AUTHORITIES SHALL BE PERFORMED BY THE GENERAL CONTRACTOR. ALL PERMITS AND LICENSES NECESSARY FOR THE EXECUTION OF THE WORK SHALL BE SECURED AND PAID FOR BY THE GENERAL CONTRACTOR.

OWNER: CAMERON APPRAISAL DISTRICT
PROJECT NAME: CAMERON APPRAISAL BUILDING ADDITION
ADDRESS: 2021 AMISTAD DRIVE
CITY/STATE: SAN BENITO, TEXAS

BUILDING: IBC 2012
PLUMBING: IPC 2012
MECHANICAL: IMC 2012
ELECTRICAL: NEC 2011
ENERGY CODE: IECC 2009
ACCESSIBILITY: TAS 2012/ADA 2010/ IBC 2012 (CHAPTER 11)
FIRE/LIFE SAFETY: IFC 2012

BUILDING INFORMATION:
CONSTRUCTION TYPE: TYPE V-B
MAXIMUM STORIES: 1
TOTAL SQ.FT. FOR EXISTING BUILDING: 15,504 SQFT
TOTAL SQ.FT. FOR BUILDING ADDITION: 2,093 SQFT
FIRE PROTECTION SYSTEM:
AUTOMATIC SPRINKLERS: BUILDING ADDITION – FULLY PROTECTED
FIRE EXTINGUISHERS: BUILDING ADDITION – QTY: 2
FIRE DETECTION & ALARMS: PROTECTED

WINDSTORM CODE: TEXAS DEPARTMENT FOR INSURANCE
BASIC WIND SPEED: 120 MPH

CAMERON APPRASIAL DISTRICT

BOARD OF DIRECTORS

CHAIRPERSON	VICENTE MENDEZ
VICE CHAIRPERSON	DAVID A. GARZA
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MEMBER	GLORIA CASAS
MEMBER	CESAR LOPEZ
MEMBER	J. RUBEN MONTEMAYOR
MEMBER	RICARDO MORADO
MEMBER	JESSE VILLARREAL
MEMBER	TONY YZAGUIRRE, JR.

K+ architect
400 E. 3rd
Los Fresnos, TX 78566
Phone: (956) 233-2218

GENERAL CONTRACTOR

CONSTRUCTION SIGN 4' X 8'
(CONTRACTOR TO USE CAMERON APPRAISAL LOGO)

OWNER
CAMERON APPRAISAL DISTRICT
2021 Amistad Drive
San Benito, Texas 78586
Ph.(956) 399-9322
Contact: Richard Molina

DESIGN / PROJECT ARCHITECT
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Ph.(956) 233-2218
Contact: Stanford Knowles

CIVIL ENGINEER
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CAMERON APPRAISAL DISTRICT
NEW BUILDING ADDITION AND RENOVATION
2021 AMISTAD DRIVE, SAN BENITO, TEXAS 78586

Title Page

REGISTERED ARCHITECT STANFORD C. KNOWLES 19051 STATE OF TEXAS

NO.	DATE	REVISIONS

DRAWN BY:	CHECKED BY:
cam	SCK

DATE: 08-15-18

SHEET NO.
TP1

GENERAL NOTES

- PRIOR TO BEGINNING CONSTRUCTION, THE OWNER OR HIS AUTHORIZED REPRESENTATIVE SHALL SCHEDULE A PRECONSTRUCTION CONFERENCE BETWEEN THE OWNER & THE CONSULTING ENGINEER, CONTRACTOR, AND ALL OTHER AFFECTED PARTIES.
- CONTRACTOR TO KEEP PUBLIC ROADS OPEN AT ALL TIMES. AREA USED FOR CONTRACTOR'S PERSONNEL PARKING, MATERIAL STORAGE, STOCKPILE, MATERIAL FABRICATION, AND RELATED CONSTRUCTION USES ARE NOT TO INTERFERE WITH NORMAL.
- CONTRACTOR TO GIVE NOTICE IN WRITING TO ALL AUTHORIZED INSPECTORS, SUPERINTENDENTS, OR PERSONS IN CHARGE OF PRIVATE AND PUBLIC UTILITIES AFFECTED BY HIS OPERATIONS PRIOR TO COMMENCEMENT OF WORK.
- CONTRACTOR TO ASSURE HIMSELF THAT ALL CONSTRUCTION PERMITS HAVE BEEN OBTAINED PRIOR TO COMMENCEMENT OF WORK. REQUIRED PERMITS THAT CAN BE ISSUED ONLY TO CONTRACTOR TO BE OBTAINED AT NO EXPENSE TO THE OWNER.
- UTILITY NOTE: THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN ON THESE PLANS ARE BASED UPON RECORD INFORMATION ONLY, AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR THE ENGINEER. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION, HORIZONTAL AND VERTICAL OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE CAUSED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES, EXISTING OR ABANDONED. NO ADDITIONAL COST TO OWNER.
- THROUGHOUT THE CONSTRUCTION, AND AT THE COMPLETION OF CONSTRUCTION, THE CONTRACTOR IS TO ASSURE THAT DRAINAGE OF STORM WATER RUNOFF IS NOT BLOCKED. MAINTAIN DRAINAGE OF SITE DURING ALL PHASES OF CONSTRUCTION. DO NOT BLOCK DRAINAGE FROM ADJACENT AREAS NOR ADD FLOW TO ADJACENT AREAS.
- THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES 48 HOURS PRIOR TO BEGINNING OF CONSTRUCTION IN A PARTICULAR AREA.
- DAMAGES DONE TO EXISTING UTILITIES, POWER POLES, FENCES, SIGNS, MAILBOXES, DRIVEWAYS, CULVERTS, PAVEMENT, DRAINAGE SYSTEMS, ETC., SHALL BE REPAIRED BY THE CONTRACTOR AT NO COST TO THE OWNER. DRIVEWAYS SHALL BE REPAIRED ON A LIKE FOR LIKE BASIS.
- THE CONTRACTOR SHALL HAVE A PERSON ON CALL 24 HOURS A DAY TO TAKE CARE OF MAINTENANCE ITEMS-CONSTRUCTION AREA, SIGNS ETC. THIS PERSON SHALL HAVE AUTHORITY TO ACT ON BEHALF OF THE CONTRACTOR IN EMERGENCY CONDITIONS. THE PERSON SHALL BE STATIONED CLOSE ENOUGH TO BE ON SITE WITHIN 1/2 HOUR OF NOTIFICATION. THE PERSON SHALL BE IDENTIFIED IN WRITING PRIOR TO THE START OF CONSTRUCTION. THE ON-SITE REPRESENTATIVE SHALL HAVE ACCESS TO ALL EQUIPMENT AND MATERIAL AND HAVE FULL AUTHORITY NECESSARY TO CORRECT ANY PROBLEMS. DEFICIENCIES, OR EMERGENCIES WHICH MAY ARISE. DURING NON-WORKING HOURS, AND DURING THE ABSENCE OF THE SUPERINTENDENT.
- EXCESS SPOIL PRODUCED DURING PREPARATION OF THE SUB-GRADE SHALL BE PLACED SPREAD AND COMPACTED ON-SITE IN AREAS AS INSTRUCTED BY THE ENGINEER TO ACHIEVE ADEQUATE GRADING. ANY UNUSABLE MATERIAL WILL BECOME THE PROPERTY OF THE CONTRACTOR TO BE PROPERLY DISPOSED OF AT HIS EXPENSE. NO SEPARATE PAY. THIS WORK SHALL BE SUBSIDIARY OTHER WORK.
- THE CONTRACTOR WILL PROVIDE HIS OWN CONSTRUCTION STAKING.
- CONTRACTOR TO MATCH EXISTING PAVEMENT, SIDEWALK RAMPS AND CURB & GUTTER PAVEMENT OR ANY OTHER IMPROVEMENTS WHERE APPLICABLE.
- ALL CONCRETE AND ASPHALT DRIVEWAYS ADJUSTED, DAMAGED, OR REPLACED DURING CONSTRUCTION MUST BE SAW-CUT AT A STRAIGHT, NEAT LINE, BEFORE REPAIRING.
- ABANDONED LINES FOUND DURING CONSTRUCTION SHALL BE REMOVED. NO SEPARATE PAY. THIS WORK SHALL BE SUBSIDIARY OTHER WORK.
- THE CONTRACTOR SHALL PLACE BARRICADES, FLAG-MEN, ETC. ON THIS PROJECT IN COMPLIANCE WITH THE PROCEDURE OUTLINED IN THE "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREET AND HIGHWAYS." (PART IV TRAFFIC CONTROLS FOR STREET AND HIGHWAY CONSTRUCTION AND MAINTENANCE OPERATIONS, LATEST REVISION). UPON COMPLETION OF THE WORK, ALL SIGNS SHALL BE REMOVED BY THE CONTRACTOR.
- REFERENCE POINTS: THE OWNER WILL ESTABLISH HORIZONTAL AND VERTICAL CONTROLS ONLY (REFERENCE POINTS AND BENCHMARKS AS SHOWN ON THE CONSTRUCTION PLANS.) THE CONTRACTOR MUST NOTIFY THE ENGINEER AT LEAST 48 HOURS PRIOR TO STARTING WORK ON ANY SECTION OR PART OF THE WORK WHERE CONTROLS HAVE NOT BEEN ESTABLISHED OR ARE NOT IDENTIFIABLE OR VISIBLE TO THE CONTRACTOR. THE ENGINEER WILL UPON SUCH ADVANCE NOTICE WILL REPLACE ANY CONTROLS POINTS THAT HAVE BEEN DESTROYED BY OTHERS PRIOR TO BEGINNING OF CONTRACTORS OPERATIONS. AFTER CONTROL POINTS ARE ESTABLISHED AND / OR IDENTIFIED AS OUTLINED ABOVE, MAINTENANCE OF SUCH CONTROL POINTS SHALL BE RESPONSIBILITY OF THE CONTRACTOR. ANY RE-STAKING REQUIRED FOR ANY REASON THEREAFTER SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR WILL PROVIDE ALL OTHER CONSTRUCTION STAKING (CUT STAKES, BLUE TOPPING, INTERMEDIATE STRING LINE CONTROL, ETC.) REQUIRED TO VERIFY GRADES, DEPTHS THICKNESSES, AND ALIGNMENT OF THE VARIOUS ITEMS OF CONSTRUCTION.
- AS BUILT DRAWINGS:THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING A SET OF AS-BUILT PLANS SHOWING NOTES TO ANY CHANGES TO THE DESIGN PLANS. THIS INFORMATION, SIGNED BY ALL INSPECTORS, WILL BE SUBMITTED TO THE ENGINEER AT THE END OF CONSTRUCTION. THE PROJECT'S FINAL ACCEPTANCE AND FINAL PAYMENT WILL NOT BE APPROVED UNTIL THE CONTRACTOR HAS SUBMITTED THE REQUIRED INFORMATION NEEDED BY THE ENGINEER FOR AS-BUILT DRAWINGS.
- CONCRETE CURB AND GUTTER, PIPE STRUCTURES, ETC. WHICH MUST BE REMOVED IN ORDER TO CONSTRUCT THE PROPOSED IMPROVEMENTS WILL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED AND PROPERLY DISPOSED OF AT HIS EXPENSE. THIS WORK SHALL BE CONSIDERED SUBSIDIARY TO THE VARIOUS BID ITEMS IN THE CONTRACT.
- EXISTING UTILITIES: THE INFORMATION SHOWN CONCERNING TYPE AND LOCATIONS OF UNDERGROUND AND OVERHEAD UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF EXISTING UTILITIES. THE CONTRACTORS INFORMATION SHALL BE CONDUCTED TO PREVENT UNNECESSARY INTERFERENCE WITH ANY EXISTING UTILITY SYSTEM. IF THE CONTRACTOR'S WORK REQUIRES INTERRUPTION, THE CONTRACTOR MUST COORDINATE WITH UTILITY COMPANIES EFFECTED 48 HOURS IN ADVANCE.
- MATERIALS CERTIFICATION AND TESTING: CONTRACTOR SHALL PROVIDE SUPPLIERS CERTIFICATION FOR ALL PROJECT MATERIALS CONCRETE, LIME, CALICHE BASE MATERIAL, PRE-CAST INLETS, PIPES, ETC. THAT SUCH MATERIALS DO MEET PROJECT SPECIFICATIONS PRIOR TO DELIVERY ON-SITE. CONTRACTOR SHALL PROVIDE HOT MIX ASPHALTIC CONCRETE DESIGN FROM A REPUTABLE COMMERCIAL TESTING LABORATORY.
- STANDARD WORK HOURS: THE STANDARD WORK HOURS FOR THE OWNER IS 8:00 AM TO 5:00 PM, MONDAY THROUGH FRIDAY. SHOULD THE CONTRACTOR ELECT TO WORK ON SATURDAY, SUNDAYS OR HOLIDAYS, HE SHALL BE RESPONSIBLE FOR PAYING OVERTIME CHARGES FOR THE OWNERS PERSONNEL INVOLVED. THESE CHARGES WILL BE AT COST AND WILL BE CALCULATED EITHER AT TIME AND A HALF OR DOUBLE TIME, AS APPLICABLE TO THE PARTICULAR DAY BEING WORKED. PRE-APPROVAL SHALL BE OBTAINED FROM THE ENGINEER OR ENGINEER'S REPRESENTATIVE BY COMPLETING AND SIGNING AN OWNER'S FORM ENTITLED "CONSTRUCTION INSPECTORS OVERTIME COMPENSATION AUTHORIZATION", 48 HRS. PRIOR TO COMMENCING ANY OVERTIME WORK.
- ANY WORK DONE OUTSIDE THE STANDARD WORKDAY, WITHOUT PRIOR AUTHORIZATION, SHALL BE CONSIDERED UNDER UNAUTHORIZED WORK. THE CONTRACTOR IS REQUIRED TO PAY THE OVERTIME WAGES OF THE OWNER INSPECTORS THAT WORK OVERTIME MONDAYS THROUGH FRIDAYS AT TIME IN A HALF. THE CONTRACTOR IS RESPONSIBLE FOR THE OVERTIME WAGES OF THE OWNER INSPECTORS THAT WORK HOLIDAYS AT DOUBLE TIME. MINIMUM HOURS WILL BE BILLED TO CONTRACTOR FOR CALL OUTS OR FOR INSUFFICIENT NOTICE OF TWO (2) HOURS.

CONCRETE MIX DESIGN

- CLARIFICATION: ALL CONCRETE USED ON THIS PROJECT SHALL CONTAIN A MINIMUM 4.5 SACKS OF CEMENTITIOUS MATERIAL PER CUBIC YARD OF CONCRETE. THE CEMENTITIOUS MATERIAL SHALL BE PORTLAND CEMENT OR A BLEND OF PORTLAND CEMENT AND FLY ASH. THE PERCENTAGE OF FLY ASH IN THE CEMENTITIOUS MATERIAL SHALL NOT EXCEED 23%. ALL CONCRETE WORK SHALL CONTAIN 1.5 POUNDS OF FIBER MESH PER CUBIC YARD.
- ALL EXPOSED CONCRETE SURFACES SHALL BE TREATED WITH CURING COMPOUND RESIN BASE ASTM C 309 TYPE 2 WITH PIGMENTED TINT OF FUGITIVE DYE.
- IN ADDITION TO THE ABOVE REQUIREMENTS, ALL CONCRETE SHALL TEST TO A MINIMUM 4000 PSI COMPRESSIVE STRENGTH AT 28 DAYS. (OR AS SHOWN ON PLANS).
- EXPANSION JOINTS WILL BE PLACED AT CURB RETURNS, INLETS AND AT THE END OF EACH POUR WITH INTERVALS NOT TO EXCEED 60 FT. JOINTS SHALL CONSIST OF 1/2" PRE-MOLDED EXPANSION JOINT MATERIAL WITH 3, 36" X 1/2" DOWELS, ONE END GREASED AND WRAPPED. CARE MUST BE TAKEN THAT DOWELS ARE STRAIGHT AND LAID PARALLEL WITH CURB AND NO CONCRETE PLUGS OR OTHER MATERIAL BE ALLOWED THROUGH THE DOWEL HOLES OR EXPANSION MATERIAL WHICH WOULD PREVENT THE JOINT FROM OPERATION AS AN EXPANSION JOINT. EXPANSION JOINT MATERIALS SHALL BE PRE-MOLDED ASPHALT IMPREGNATED EXPANSION JOINT MATERIAL CONFORMING WITH ASTM D 994 (NOT WOOD FIBER TYPE)
- DUMMY JOINTS (SAW CUT JOINTS) SHALL BE 2" DEEP AND PLACED AT MAXIMUM 15 FT. INTERVALS.
- WHEN CONNECTING TO EXISTING CURB AND GUTTER, THE CONTRACTOR SHALL DRILL AND DOWEL TWO, #5 X 16" TIE BARS A MINIMUM OF 6" DEEP INTO EXISTING CURB AND GUTTER SECTION.

REMOVING EXISTING PAVEMENTS AND STRUCTURES

- PROTECT FOLLOWING FROM DAMAGE OR DISPLACEMENT
  1. ADJACENT PUBLIC AND PRIVATE PROPERTY.
  2. TREES, PLANTS, AND OTHER LANDSCAPE FEATURES DESIGNATED TO REMAIN.
  3. UTILITIES DESIGNATED TO REMAIN.
  4. PAVEMENT AND UTILITY STRUCTURES DESIGNATED TO REMAIN.
  5. BENCH MARKS, MONUMENTS, AND EXISTING STRUCTURES DESIGNATED TO REMAIN.
- WHEN REQUIRED, PROVIDE RESPIRATORY PROTECTION IN ACCORDANCE WITH OSHA 29 CFR 1910.134 - RESPIRATORY PROTECTION, AND NATIONAL INSTITUTE OF OCCUPATIONAL SAFETY AND HEALTH (NIOSH).
- REMOVE PAVEMENTS AND STRUCTURES BY METHODS THAT WILL NOT DAMAGE UNDERGROUND UTILITIES. DO NOT USE DROP HAMMER NEAR EXISTING UNDERGROUND UTILITIES.
- MINIMIZE AMOUNT OF EARTH LOADED DURING REMOVAL OPERATIONS.
- WHERE EXISTING PAVEMENT IS TO REMAIN, MAKE STRAIGHT SAW CUTS IN EXISTING PAVEMENT TO PROVIDE CLEAN BREAKS PRIOR TO REMOVAL. DO NOT BREAK CONCRETE PAVEMENT OR BASE WITH DROP HAMMER UNLESS CONCRETE OR BASE HAS BEEN SAW CUT TO MINIMUM DEPTH OF 2 INCHES.
- REMOVE SIDEWALKS AND CURBS TO NEAREST EXISTING DUMMY, EXPANSION, OR CONSTRUCTION JOINT.
- INSTALL AND MAINTAIN TRENCH SAFETY SYSTEMS IN ACCORDANCE WITH THE DETAIL SPECIFICATIONS SET OUT IN THE PROVISION OF EXCAVATIONS, TRENCHING, AND SHORING, FEDERAL OCCUPATION SAFETY AND HEALTH ADMINISTRATION (OSHA) STANDARDS, 29CFR, PART 1926, SUBPART P, AS AMENDED, INCLUDING FINAL RULE, PUBLISHED IN THE FEDERAL REGISTER VOL. 54, NO. 209 ON TUESDAY, OCTOBER 31, 1989.
- CONTRACTOR, OR CONTRACTOR'S INDEPENDENTLY RETAINED CONSULTANT, SHALL MAKE DAILY INSPECTIONS OF THE TRENCH SAFETY SYSTEMS TO ENSURE THAT THE INSTALLED SYSTEMS AND OPERATIONS MEET OSHA 29CFR AND OTHER PERSONNEL PROTECTION REGULATIONS REQUIREMENTS.
- IF EVIDENCE OF POSSIBLE CAVE-INS OR SLIDES IS APPARENT, CONTRACTOR SHALL IMMEDIATELY STOP WORK IN THE TRENCH AND MOVE PERSONNEL TO SAFE LOCATIONS UNTIL THE NECESSARY PRECAUTIONS HAVE BEEN TAKEN BY CONTRACTOR TO SAFEGUARD PERSONNEL ENTERING THE TRENCH.
- MAINTAIN A PERMANENT RECORD OF DAILY INSPECTIONS.
- CONTRACTOR SHALL VERIFY SPECIFIC APPLICABILITY OF THE SELECTED OR SPECIALLY DESIGNED TRENCH SAFETY SYSTEMS TO EACH FIELD CONDITION ENCOUNTERED ON THE PROJECT.
- USE EQUIPMENT WHICH WILL PRODUCE DEGREE OF COMPACTION SPECIFIED. COMPACT BACKFILL WITHIN 3 FEET OF WALLS WITH HAND OPERATED EQUIPMENT. DO NOT USE EQUIPMENT WEIGHING MORE THAN 10,000 POUNDS CLOSER TO WALLS THAN A HORIZONTAL DISTANCE EQUAL TO DEPTH OF FILL AT THAT TIME. USE HAND OPERATED POWER COMPACTION EQUIPMENT WHERE USE OF HEAVIER EQUIPMENT IS IMPRACTICAL OR RESTRICTED DUE TO WEIGHT LIMITATIONS.
- CONDUCT AN INSPECTION TO DETERMINE CONDITION OF EXISTING STRUCTURES AND OTHER PERMANENT INSTALLATIONS.
- SET UP NECESSARY STREET DETOURS AND BARRICADES IN PREPARATION FOR EXCAVATION IF CONSTRUCTION WILL AFFECT TRAFFIC.
- MAINTAIN BARRICADES AND WARNING DEVICES AT ALL TIMES FOR STREETS AND INTERSECTIONS WHERE WORK IS IN PROGRESS, OR WHERE CONSTRUCTION WORK IS CONSIDERED HAZARDOUS TO TRAFFIC MOVEMENTS.
- INSTALL AND OPERATE NECESSARY DEWATERING AND SURFACE WATER CONTROL MEASURES.
- PROTECT TREES, SHRUBS, LAWNS, EXISTING STRUCTURES, AND OTHER PERMANENT OBJECTS OUTSIDE OF GRADING LIMITS AND WITHIN GRADING LIMITS AS DESIGNATED ON DRAWINGS.
- PROTECT AND SUPPORT ABOVE-GRADE AND BELOW-GRADE UTILITIES WHICH ARE TO REMAIN.
- RESTORE DAMAGED PERMANENT FACILITIES TO PRE-CONSTRUCTION CONDITIONS UNLESS REPLACEMENT OR ABANDONMENT OF FACILITIES IS INDICATED ON DRAWINGS.
- PREVENT EROSION OF EXCAVATIONS AND BACKFILL. DO NOT ALLOW WATER TO POND IN EXCAVATIONS.
- MAINTAIN EXCAVATION AND BACKFILL AREAS UNTIL START OF SUBSEQUENT WORK. REPAIR AND RECOMPACT SLIDES, WASHOUTS, SETTLEMENTS, OR AREAS WITH LOSS OF DENSITY AT NO ADDITIONAL COST TO OWNER.
- PERFORM EXCAVATION WORK SO THAT UNDERGROUND STRUCTURE CAN BE INSTALLED TO DEPTHS AND ALIGNMENTS SHOWN ON DRAWINGS. USE CAUTION DURING EXCAVATION WORK TO AVOID DISTURBING SURROUNDING GROUND AND EXISTING FACILITIES AND IMPROVEMENTS. KEEP EXCAVATION TO ABSOLUTE MINIMUM NECESSARY. NO ADDITIONAL PAYMENT WILL BE MADE FOR EXCESS EXCAVATION NOT AUTHORIZED BY ENGINEER.
- UPON DISCOVERY OF UNKNOWN UTILITIES, BADLY DETERIORATED UTILITIES NOT DESIGNATED FOR REMOVAL, OR CONCEALED CONDITIONS, DISCONTINUE WORK AT THAT LOCATION. NOTIFY ENGINEER AND OBTAIN INSTRUCTIONS BEFORE PROCEEDING IN SUCH AREAS.
- AVOID SETTLEMENT OF SURROUNDING SOIL DUE TO EQUIPMENT OPERATIONS, EXCAVATION PROCEDURES, VIBRATION, DEWATERING, OR OTHER CONSTRUCTION METHODS.
- PROVIDE SURFACE DRAINAGE DURING CONSTRUCTION TO PROTECT WORK AND TO AVOID NUISANCE TO ADJOINING PROPERTY. WHERE REQUIRED, PROVIDE PROPER DEWATERING AND PIEZOMETRIC PRESSURE CONTROL DURING CONSTRUCTION.
- CONDUCT HAULING OPERATIONS SO THAT TRUCKS AND OTHER VEHICLES DO NOT CREATE DIRT NUISANCE IN STREETS. VERIFY THAT TRUCK BEDS ARE SUFFICIENTLY TIGHT AND LOADED IN SUCH A MANNER SUCH THAT OBJECTIONABLE MATERIALS WILL NOT SPILL ONTO STREETS. PROMPTLY CLEAR AWAY ANY DIRT, MUD, OR OTHER MATERIALS THAT SPILL ONTO STREETS OR ARE DEPOSITED ONTO STREETS BY VEHICLE TIRES.
- MAINTAIN PERMANENT BENCHMARKS, MONUMENTATION, AND OTHER REFERENCE POINTS. UNLESS OTHERWISE DIRECTED, REPLACE THOSE WHICH ARE DAMAGED OR DESTROYED BY WORK.
- PROVIDE SHEETING, SHORING, AND BRACING WHERE REQUIRED TO SAFELY COMPLETE WORK, TO PREVENT EXCAVATION FROM EXTENDING BEYOND LIMITS INDICATED ON DRAWINGS, AND TO PROTECT WORK AND ADJACENT STRUCTURES OR IMPROVEMENTS. USE SHEETING, SHORING, AND BRACING TO PROTECT WORKMEN AND PUBLIC.
- PREVENT VOIDS FROM FORMING OUTSIDE OF SHEETING. IMMEDIATELY FILL VOIDS WITH GROUT, CEMENT STABILIZED SAND, OR OTHER MATERIAL APPROVED BY ENGINEER AND COMPACT TO 95 PERCENT STANDARD DENSITY.
- AFTER COMPLETION OF STRUCTURE, REMOVE SHEETING, SHORING, AND BRACING UNLESS SHOWN ON DRAWINGS TO REMAIN IN PLACE OR DIRECTED BY PROJECT MANAGER IN WRITING THAT SUCH TEMPORARY STRUCTURES MAY REMAIN. REMOVE SHEETING, SHORING AND BRACING IN SUCH A MANNER AS TO MAINTAIN SAFETY DURING BACKFILLING OPERATIONS AND TO PREVENT DAMAGE TO WORK AND ADJACENT STRUCTURES OR IMPROVEMENTS.
- IMMEDIATELY FILL AND COMPACT VOIDS LEFT OR CAUSED BY REMOVAL OF SHEETING WITH CEMENT STABILIZED SAND OR OTHER MATERIAL APPROVED BY ENGINEER AND COMPACT TO 95 PERCENT STANDARD DENSITY.
- CLASSIFY EXCAVATED MATERIALS. PLACE MATERIAL WHICH IS SUITABLE FOR USE AS BACKFILL IN ORDERLY PILES AT SUFFICIENT DISTANCE FROM EXCAVATION TO PREVENT SLIDES OR CAVE-INS.
- COMPLETE BACKFILL TO SURFACE OF NATURAL GROUND OR TO LINES AND GRADES SHOWN ON DRAWINGS. REMOVE FORMS, LUMBER, TRASH AND DEBRIS FROM STRUCTURES. DEPOSIT BACKFILL IN UNIFORM LAYERS AND COMPACT EACH LAYER AS SPECIFIED.
- UNLESS OTHERWISE SHOWN ON DRAWINGS, FOR STRUCTURES UNDER PAVEMENT OR WITHIN ONE FOOT BACK OF CURB, USE CEMENT STABILIZED SAND UP TO THE TOP OF THE PROPOSED STRUCTURE. USE SUITABLE ON-SITE MATERIAL (RANDOM BACKFILL) UP TO 12 INCHES BELOW PAVEMENT BASE OR SUBGRADE. PLACE MINIMUM OF 12 INCHES OF SELECT BACKFILL BELOW PAVEMENT BASE OR SUBGRADE.
- UNLESS OTHERWISE SHOWN ON DRAWINGS, FOR STRUCTURES NOT UNDER PAVEMENT, USE RANDOM BACKFILL OF SUITABLE MATERIAL UP TO THE SURFACE.
- UNLESS OTHERWISE SHOWN ON DRAWINGS, FOR STRUCTURES NOT UNDER PAVEMENT, USE RANDOM BACKFILL OF SUITABLE MATERIAL UP TO THE SURFACE.
- REMOVE CONCRETE FORMS BEFORE STARTING BACKFILL AND REMOVE SHORING AND BRACING AS WORK PROGRESSES.
- MAINTAIN BACKFILL MATERIAL AT NO LESS THAN 2 PERCENT BELOW NOR MORE THAN 2 PERCENT ABOVE OPTIMUM MOISTURE CONTENT, UNLESS OTHERWISE APPROVED BY PROJECT MANAGER. PLACE FILL MATERIAL IN UNIFORM 8-INCH MAXIMUM LOOSE LAYERS. COMPACT FILL TO AT LEAST 95 PERCENT OF MAXIMUM STANDARD PROCTOR DENSITY ACCORDING TO ASTM D 698 BELOW PAVED AREAS. COMPACT FILL TO AT LEAST 90 PERCENT AROUND STRUCTURES BELOW UNPAVED AREAS.
- WHERE BACKFILL IS PLACED AGAINST SLOPED EXCAVATION SURFACE, RUN COMPACTION EQUIPMENT ACROSS BOUNDARY OF CUT SLOPE AND BACKFILL TO FORM COMPACTED SLOPE SURFACE FOR PLACEMENT OF NEXT LAYER OF BACKFILL.
- PLACE BACKFILL USING CEMENT STABILIZED SAND OR FLOWABLE FILL.
- TESTS WILL BE PERFORMED INITIALLY ON MINIMUM OF ONE DIFFERENT SAMPLE OF EACH MATERIAL TYPE FOR PLASTICITY CHARACTERISTICS, IN ACCORDANCE WITH ASTM D 4318, AND FOR GRADATION CHARACTERISTICS, IN ACCORDANCE WITH TEX-101-E AND TEX-110-E. ADDITIONAL CLASSIFICATION TESTS WILL BE PERFORMED WHENEVER THERE IS NOTICEABLE CHANGE IN MATERIAL GRADATION OR PLASTICITY.
- IN-PLACE DENSITY TESTS OF COMPACTED SUBGRADE AND BACKFILL WILL BE PERFORMED ACCORDING TO ASTM D 1556, OR ASTM D 2922 AND ASTM D 3017, AND AT FOLLOWING FREQUENCIES AND CONDITIONS:
  1. MINIMUM OF ONE TEST FOR EVERY 50 TO 100 CUBIC YARDS OF COMPACTED BACKFILL MATERIAL AS DIRECTED BY ENGINEER.
  2. A MINIMUM OF THREE DENSITY TESTS FOR EACH FULL WORK SHIFT
  3. DENSITY TESTS WILL BE PERFORMED IN ALL PLACEMENT AREAS.
  4. NUMBER OF TESTS WILL BE INCREASED WHEN INSPECTION DETERMINES THAT SOIL TYPES OR MOISTURE CONTENTS ARE NOT UNIFORM OR WHEN COMPACTING EFFORT IS VARIABLE AND NOT CONSIDERED SUFFICIENT TO ATTAIN UNIFORM DENSITY.
  5. IDENTIFY ELEVATION OF TEST WITH RESPECT TO NATURAL GROUND.
  6. RECORD APPROXIMATE DEPTH OF LIFT TESTED.
- AT LEAST ONE TEST FOR MOISTURE-DENSITY RELATIONSHIPS WILL BE INITIALLY PERFORMED FOR EACH TYPE OF BACKFILL MATERIAL IN ACCORDANCE WITH ASTM D 698. PERFORM ADDITIONAL MOISTURE-DENSITY RELATIONSHIP TEST ONCE A MONTH OR WHENEVER THERE IS NOTICEABLE CHANGE IN MATERIAL GRADATION OR PLASTICITY.
- WHEN TESTS INDICATE WORK DOES NOT MEET SPECIFIED COMPACTION REQUIREMENTS, RECONDITION, RECOMPACT, AND RETEST AT CONTRACTOR'S EXPENSE.
- UNSUITABLE MATERIAL: UNSUITABLE SOIL MATERIALS ARE THE FOLLOWING:
  1. MATERIALS THAT ARE CLASSIFIED AS ML, CL-ML, MH, PT, OH, AND OL ACCORDING TO ASTM D 2487.
  2. MATERIALS THAT CANNOT BE COMPACTED TO REQUIRED DENSITY DUE TO GRADATION, PLASTICITY, OR MOISTURE CONTENT.
  3. MATERIALS THAT CONTAIN LARGE CLODS, AGGREGATES, STONES GREATER THAN 4 INCHES IN ANY DIMENSION, DEBRIS, VEGETATION, WASTE OR ANY OTHER DELETERIOUS MATERIALS.
  4. MATERIALS THAT ARE CONTAMINATED WITH HYDROCARBONS OR OTHER CHEMICAL CONTAMINANTS.
- EXCAVATION DRAINAGE: REMOVAL OF SURFACE AND SEEPAGE WATER IN TRENCH BY SUMP PUMPING AND USING DRAINAGE LAYER, AS DEFINED IN ASTM D 2321, PLACED ON FOUNDATION BENEATH PIPE BEDDING OR THICKENED BEDDING LAYER OF CLASS I MATERIAL.
- TRENCH CONDITIONS ARE DEFINED WITH REGARD TO STABILITY OF TRENCH BOTTOM AND TRENCH WALLS OF PIPE EMBEDMENT ZONE. MAINTAIN TRENCH CONDITIONS THAT PROVIDE FOR EFFECTIVE PLACEMENT AND COMPACTION OF EMBEDMENT MATERIAL DIRECTLY ON OR AGAINST UNDISTURBED SOILS OR FOUNDATION BACKFILL, EXCEPT WHERE STRUCTURAL TRENCH SUPPORT IS NECESSARY.
- USE PVC COMPOUNDS IN MANUFACTURE OF PIPE THAT CONTAIN NO INGREDIENT IN AMOUNT THAT HAS BEEN DEMONSTRATED TO MIGRATE INTO WATER IN QUANTITIES CONSIDERED TO BE TOXIC.

SEED MAINTENANCE

- MAINTAIN GRASSED AREAS MINIMUM OF 90 DAYS, OR AS REQUIRED TO ESTABLISH AN ACCEPTABLE LAWN. FOR AREAS SEEDED IN FALL, CONTINUE MAINTENANCE FOLLOWING SPRING UNTIL ACCEPTABLE LAWN IS ESTABLISHED.
- MAINTAIN GRASSED AREAS BY WATERING, FERTILIZING, WEEDING, AND TRIMMING.
- REPAIR AREAS DAMAGED BY EROSION BY REGRADING, ROLLING AND REPLANTING.
- RESEED SMALL, SPARSE GRASS AREAS. WHEN SPARSE AREAS EXCEED 20 PERCENT OF PLANTED AREA, RESEED BY SPECIFICATION PROVIDED BY THE PROJECT MANAGER.
- MOW GRASS WHEN HEIGHT REACHES 3 1/2 INCHES OR GREATER ON AVERAGE BEFORE FINAL ACCEPTANCE. MOW TO HEIGHT OF 2 1/2 INCHES.
- RESTORATION OF EXISTING LAWN AREAS DISTURBED BY CONSTRUCTION SHALL BE BY INSTALLATION OF NEW SOD.
- SOD ONLY WHEN WEATHER AND SOIL CONDITIONS ARE DEEMED BY ENGINEER TO BE SUITABLE FOR PROPER PLACEMENT.
- WATER AND FERTILIZE NEW SOD.
- BEGIN MAINTENANCE IMMEDIATELY AFTER EACH SECTION OF GRASS SOD IS INSTALLED AND CONTINUE FOR 30 DAY PERIOD FROM DATE OF SUBSTANTIAL COMPLETION.
- RESOD UNACCEPTABLE AREAS.
- POTABLE, WILL BE AVAILABLE ON-SITE THROUGH CONTRACTOR'S WATER TRUCKS
- VERIFY THAT SOIL PLACEMENT AND COMPACTION HAVE BEEN SATISFACTORILY COMPLETED. VERIFY THAT SOIL IS WITHIN ALLOWABLE RANGE OF MOISTURE CONTENT.
- TOP SOIL SHALL BE FREE OF WEEDS AND FOREIGN MATERIAL IMMEDIATELY BEFORE SODDING.
- DO NOT START WORK UNTIL CONDITIONS ARE SATISFACTORY. DO NOT START WORK DURING INCLEMENT OR IMPENDING INCLEMENT WEATHER.
- RAKE AREAS TO BE SODDED SMOOTH, FREE FROM UNSIGHTLY VARIATIONS, BUMPS, RIDGES OR DEPRESSIONS.
- SPREAD 2 INCH LAYER OF BANK SAND OVER AREAS TO BE SODDED PRIOR TO PLANTING OF SOD.
- APPLY FERTILIZER AT RATE OF 25 POUNDS PER 1000 SQUARE FEET. APPLY AFTER RAKING SOIL SURFACE AND NOT MORE THAN 48 HOURS PRIOR TO LAYING SOD. MIX THOROUGHLY INTO UPPER 2 INCHES OF SOIL. LIGHTLY WATER TO AID IN DISSIPATION OF FERTILIZER.
- FULL SODDING: LAY SOD WITH CLOSELY FITTED JOINTS LEAVING NO VOIDS AND WITH ENDS OF SOD STRIPS STAGGERED. LAY SOD WITHIN 24 HOURS OF HARVESTING.
- ON SLOPES 2:1 AND STEEPER, LAY SOD PERPENDICULAR TO SLOPE AND SECURE EVERY ROW WITH WOODEN PEGS AT MAXIMUM 2 FEET ON CENTER. DRIVE PEGS FLUSH WITH SOIL PORTION OF SOD.
- PRIOR TO PLACING SOD, ON SLOPES 3:1 OR WHERE INDICATED, PLACE HOLD/GRO OR ROLL LITE OR EQUAL OVER TOPSOIL. SECURELY ANCHOR IN PLACE WITH POSTS SUNK FIRMLY INTO GROUND AT MAXIMUM 16 FEET ON CENTER ALONG PITCH OF SLOPE AND EQUAL TO WIDTH OF WIRE MESH HORIZONTALLY ACROSS SLOPES.
- AFTER SOD IS LAID, IRRIGATE THOROUGHLY TO SECURE 6-INCH MINIMUM PENETRATION INTO SOIL BEL

CAMERON COUNTY APPRAISAL DISTRICT

2021 AMISTAD DR.,
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TEXAS REGISTERED ENGINEERING FIRM F-8483

9/16/18

STATE OF TEXAS
JUAN V. GARCIA
111413
LICENSED
PROFESSIONAL ENGINEER

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY JUAN V. GARCIA, P.E. NO. 111413. ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT.

GENERAL NOTES

2021 AMISTAD DR.,
SAN BENITO, TEXAS 78586

REVISION	DESCRIPTION	DATE

PROJECT NO.	183081-01
DATE	08-16-2018
DRAWN BY	M. ARMENTA
DESIGNED BY	F. MEDRANO JR.
APPROVED BY	J.V. GARCIA

DRAWING TITLE

GENERAL NOTES

SHEET NO.

C1.0 OF 7

GENERAL NOTES

- TAMP AND ROLL SOD WITH APPROVED EQUIPMENT TO ELIMINATE MINOR IRREGULARITIES AND TO FORM CLOSE CONTACT WITH SOIL BED IMMEDIATELY AFTER PLANTING AND WATERING. SUBMIT TYPE OF TAMPING AND ROLLING EQUIPMENT TO BE USED TO ENGINEERS FOR APPROVAL, PRIOR TO CONSTRUCTION.

- WATER LAWN AREAS ONCE A DAY WITH MINIMUM 1/2 INCH WATER FOR FIRST 3 WEEKS AFTER AREA IS SODDED.

- AFTER 3 WEEK PERIOD, WATER TWICE A WEEK WITH 3/4 INCH OF WATER EACH TIME UNLESS COMPARABLE AMOUNT HAS BEEN PROVIDED BY RAIN.

- MAKE WEEKLY INSPECTIONS TO DETERMINE MOISTURE CONTENT OF SOIL UNLESS SOIL IS IN FROZEN CONDITION.

- WATER IN AFTERNOON OR AT NIGHT TO ENABLE SOIL TO ABSORB MAXIMUM AMOUNT OF WATER WITH MINIMUM EVAPORATION.

- DURING COURSE OF PLANTING, REMOVE EXCESS AND WASTE MATERIALS; KEEP LAWN AREAS CLEAN AND TAKE PRECAUTIONS TO AVOID DAMAGE TO EXISTING STRUCTURES, PLANTS, GRASS, AND STREETS.

- REMOVE BARRIERS, SIGNS, AND OTHER CONTRACTOR MATERIAL AND EQUIPMENT FROM PROJECT SITE AT TERMINATION OF ESTABLISHMENT PERIOD.

DISPOSAL

- THE CONTRACTOR SHALL ARRANGE TO HAVE WASTES AND DEBRIS TRANSPORTED FROM THE SITE IN ACCORDANCE WITH ALL CITY ORDINANCES AND STATE AND FEDERAL LAWS.

SWPPP CONSTRUCTION NOTES

- CONTRACTOR SHALL IMPLEMENT INLET PROTECTION DEVICES AND REINFORCED FILTER FABRIC BARRIER ALONG ROAD AND SIDE DITCHES AT LOCATIONS SHOWN ON THE TYPICAL STORM WATER POLLUTION PREVENTION (SWPP) PLANS TO KEEP SILT AND OR EXCAVATED MATERIALS FROM ENTERING INTO THE STORM WATER INLETS AND DITCHES EVENTUALLY POLLUTING THE RECEIVING STORM.

- DURING THE EXCAVATION PHASE OF THE PROJECT, CONTRACTOR SHALL SCHEDULE THE WORK IN SHORT SEGMENTS SO THAT EXCAVATION MATERIAL CAN BE QUICKLY HAULED AWAY FROM THE SITE AND TO PREVENT IT FROM STAYING UNCOLLECTED ON THE EXISTING PAVEMENT. ANY LOOSE EXCAVATED MATERIAL WHICH FALLS ON PAVEMENTS OR DRIVEWAYS SHALL BE SWEPT BACK INTO THE EXCAVATED AREA.

- CONTRACTOR SHALL CLEAN UP THE EXISTING STREET INTERSECTIONS AND DRIVEWAYS DAILY, AS NECESSARY, TO REMOVE ANY EXCESS MUD, SILT OR ROCK TRACKED FORM THE EXCAVATED AREA.

- CONTRACTOR SHALL FOLLOW GOOD HOUSEKEEPING PRACTICES DURING THE CONSTRUCTION OF THE PROJECT, ALWAYS CLEANING UP DIRT AND LOOSE MATERIAL AS CONSTRUCTION PROGRESSES.

- CONTRACTOR TO INSPECT AND MAINTAIN THE AREAS LISTED BELOW AT LEAST ONCE EVERY FOURTEEN (14) CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM EVENT OF 0.5 INCHES OR GREATER.

  1. DISTURBED AREAS OF THE CONSTRUCTION SITE THAT HAVE NOT BEEN FINALLY STABILIZED.
  2. AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION.
  3. STRUCTURAL CONTROL MEASURES.
  4. LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE.

- CONTRACTOR TO BE RESPONSIBLE TO MAINTAIN EXISTING DITCHES AND OR CULVERTS FOR UNOBSTRUCTED DRAINAGE AT ALL TIMES. WHERE SODDING IS DISTURBED BY EXCAVATION ON BACKFILLING OPERATIONS, SUCH AREAS SHALL BE REPLACED BY SEEDING OR SODDING. SLOPES 4:1 OR STEEPER SHALL BE REPLACED BY BLOCK SODDING.

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GENERAL NOTES (CONT.)

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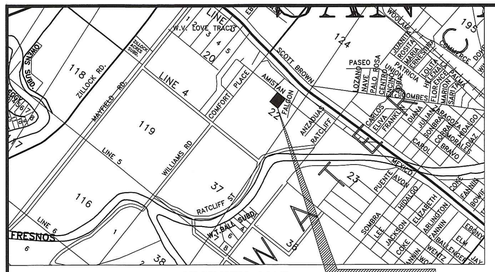
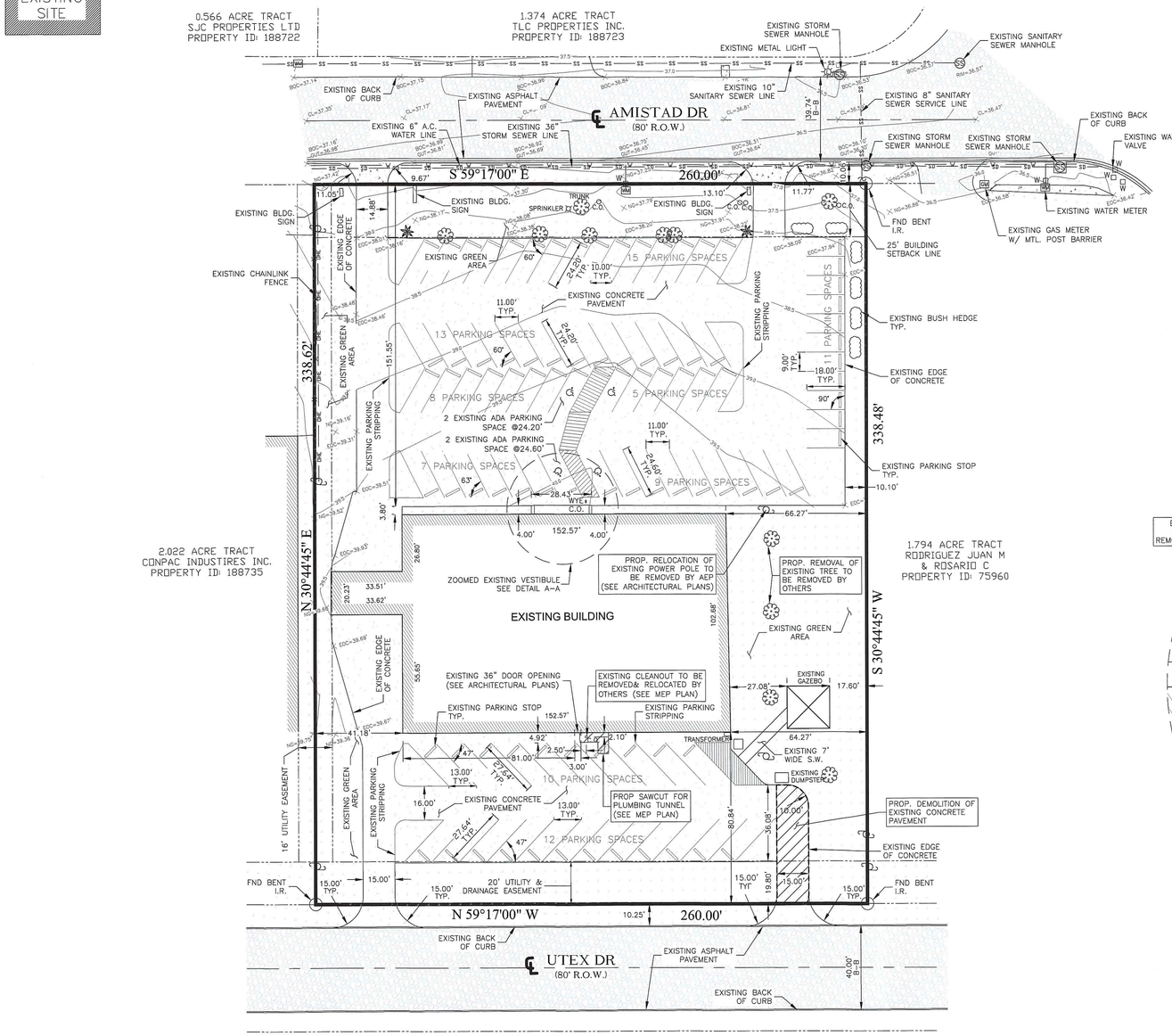
GENERAL NOTES (CONT.)

SHEET NO.

C1.1 OF 7



VICINITY MAP
SCALE: 1" = 2000'



SCALE 1" = 30'

LEGEND:

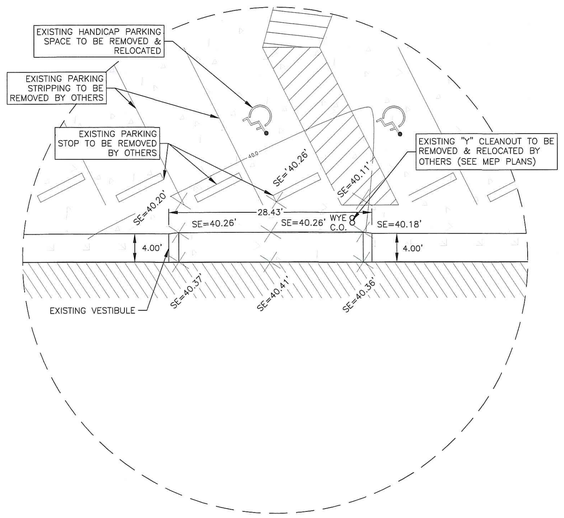
B-B	–BACK TO BACK		–POWER POLE
CONC.	–CONCRETE	- - x - -	–CHAIN LINK FENCE
R.O.W.	–RIGHT-OF-WAY		–PROPERTY BOUNDARY LINE
FND	–FOUND	CO	–CLEAN OUT
IR	–IRON ROD	W	–EXISTING WATER METER
℄	–CENTERLINE	W	–EXISTING WATER VALVE
PROP.	–PROPOSED		–EXISTING TREE
FF	–FINSH FLOOR	SS	–EXISTING SEWER MANHOLE
FL	–FENCE LINE	SS	–EXISTING SANITARY SEWER LINE
SW	–SIDEWALK	SD	–EXISTING STORM SEWER LINE
SE	–SPOT ELEVATION		–EXISTING GREEN AREA
S.W.	–SIDE WALK		–EXISTING CONCRETE PAVEMENT
V.G.	–VALLEY GUTTER		

NOTES:

1. THIS TRACT LIES IN FLOOD ZONE "X", (AREAS OF MINIMAL FLOODING), AS PER THE FLOOD INSURANCE RATE MAP OF COMMUNITY–PANEL NO. 480101, PANEL NO. 0270, F, MAP REVISED FEBRUARY 16, 2018. SEE ATTACHED FIRMETTE FOR CAMERON COUNTY APPRAISAL DISTRICT OFFICE.
2. BEARINGS & DISTANCES ARE BASED OFF THE "LOT 19 SAN BENITO INDUSTRIAL PARK SUBDIVISION" RECORDED VOLUME 24 PAGE 37 OF THE CAMERON COUNTY MAP RECORDS.

PROPOSED DEMOLITION

EXISTING PARKING STOPS'	3 TOTAL
EXISTING PARKING STRIPPING	2 TOTAL
EXISTING TREE	2 TOTAL
EXISTING WYE CLEANOUT	1 TOTAL
EXISTING CLEANOUT	1 TOTAL
EXISTING CONCRETE PAVEMENT	91 SQ.YD.



ZOOMED EXISTING VESTIBULE
SCALE:1"=10'

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DEMO/EXISTING TOPO PLAN

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SAN BENITO, TEXAS 78586

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APPROVED BY	J.V. GARCIA

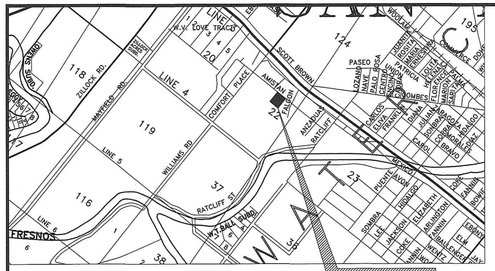
DRAWING TITLE

DEMO/EXISTING TOPO PLAN

SHEET NO.

C2.0 OF 7

Texas811 Know what's below. Call before you dig.



VICINITY MAP
SCALE: 1" = 2000'

EXISTING SITE

LEGEND:

B-B	–BACK TO BACK		–POWER POLE
CONC.	–CONCRETE		–CHAIN LINK FENCE
R.O.W.	–RIGHT-OF-WAY		–PROPERTY BOUNDARY LINE
FND	–FOUND		–CLEAN OUT
IR	–IRON ROD		–EXISTING WATER METER
℄	–CENTERLINE		–EXISTING WATER VALVE
PROP.	–PROPOSED		–EXISTING TREE
FF	–FINSH FLOOR		–EXISTING SEWER MANHOLE
FL	–FENCE LINE		–EXISTING SANITARY SEWER LINE
SW	–SIDEWALK		–EXISTING STORM SEWER LINE
SE	–SPOT ELEVATION		–EXISTING WATER LINE
V.G	–VALLEY GUTTER		–PROPOSED WATER LINE
S.W.	–SIDE WALK		–PROPOSED FIRE LINE
FDC	–FIRE DEPARTMENT CONNECTION		–EXISTING GREEN AREA
			–EXISTING CONCRETE PAVEMENT

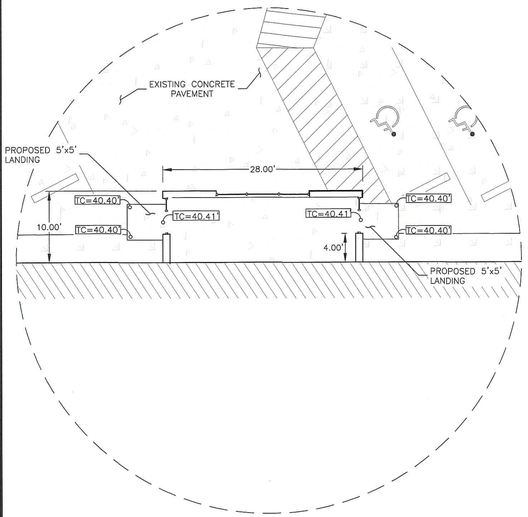
NOTES:

1. CONTRACTOR TO FIELD VERIFY LOCATION OF EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION.
2. ALL WATERLINES WILL BE HYDROSTATICALLY TESTED ALL NEW LINES WILL BE BACTERIA TESTED.
3. ALL WATER LINES, 6" AND ABOVE SHALL BE PVC C900– DR18.
4. MINIMUM VERTICAL SEPARATION BETWEEN WATER AND SEWER LINES WILL BE 18".
5. MAXIMUM TRENCH WIDTH FOR ALL PIPE THROUGH 12" DIA. SHALL BE 32".
6. ALL SANITARY SEWER LINES SHALL BE SDR–26. ALL SANITARY SEWER MANHOLES SHALL BE FIBERGLASS. (CITY OF SAN BENITO STANDARDS).
7. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT ALL PUBLIC UTILITIES IN THE CONSTRUCTION OF THIS PROJECT. ALL MANHOLES, CLEANOUTS, VALVE BOXES, FIRE HYDRANTS, ETC. MUST BE ADJUSTED TO PROPER LINE AND GRADE BY THE CONTRACTOR PRIOR TO AND AFTER THE PLACING OF PERMANENT PAVING. UTILITIES MUST BE MAINTAINED TO PROPER LINE AND GRADE DURING CONSTRUCTION OF THIS PROJECT.
8. INSTALL FIRE DEPARTMENT CONNECTION SHALL BE APPROVED BY CITY OF SAN BENITO FIRE DEPARTMENT (FIRE MARSHALL).
9. REF. TO M.E.P. PLANS FOR TIE–IN LOCATIONS AS REQUIRED TO CONNECT TO NEW BUILDING LINES
10. NO ELECTRICAL, WATER, OR SANITARY SEWER SERVICES IN SAME TRENCH.
11. MINIMUM 9' SEPARATION BETWEEN WATER & SANITARY SEWER MAIN LINES AND SERVICES.
12. CONTRACTOR TO ENSURE THAT WATERLINE HAS A MINIMUM COVER OF 3' TO TOP OF PIPE.
13. ALL FITTINGS SHALL BE CEMENT LINED, GREASED AND WRAPPED IN CLEAR PLASTIC AS PER CITY OF SAN BENITO SPECIFICATIONS.
14. FIELD COORDINATE WITH MEP ENGINEER FOR TIE–INS AND TAPS AS PER CITY OF SAN BENITO SPECIFICATIONS.
15. BENCHMARK SHOWN IS SQ. CUT ON TOP OF EXISTING CAR STOP; ELEVATION= '. ELEVATION IS BASED OFF OF NORTH AMERICAN VERTICAL DATUM 88.
16. NORTHING & EASTING IS BASED OFF OF THE NORTH AMERICAN DATUM 83.

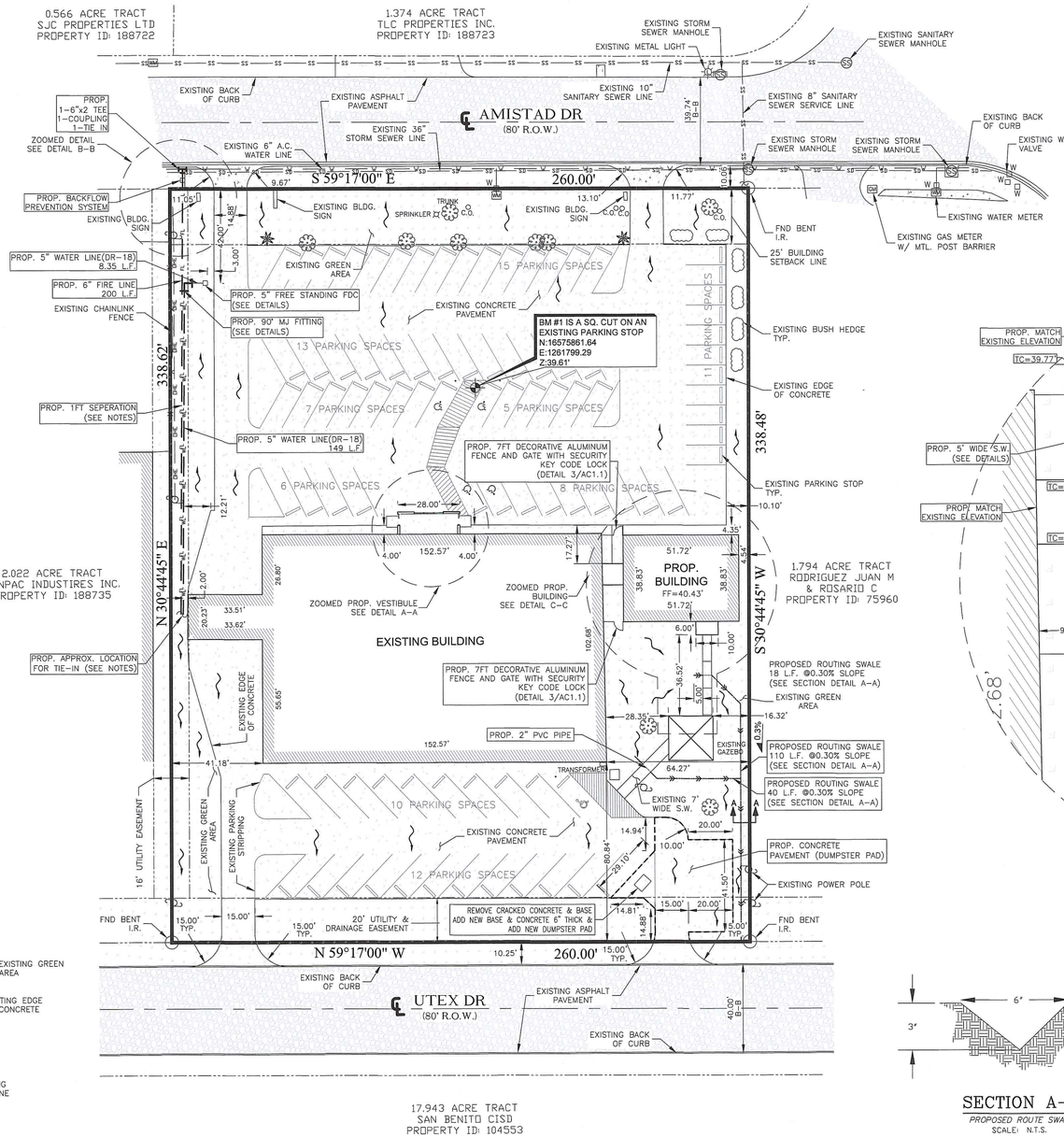
SCALE 1" = 30'

PROPOSED IMPROVEMENTS QUANTITIES

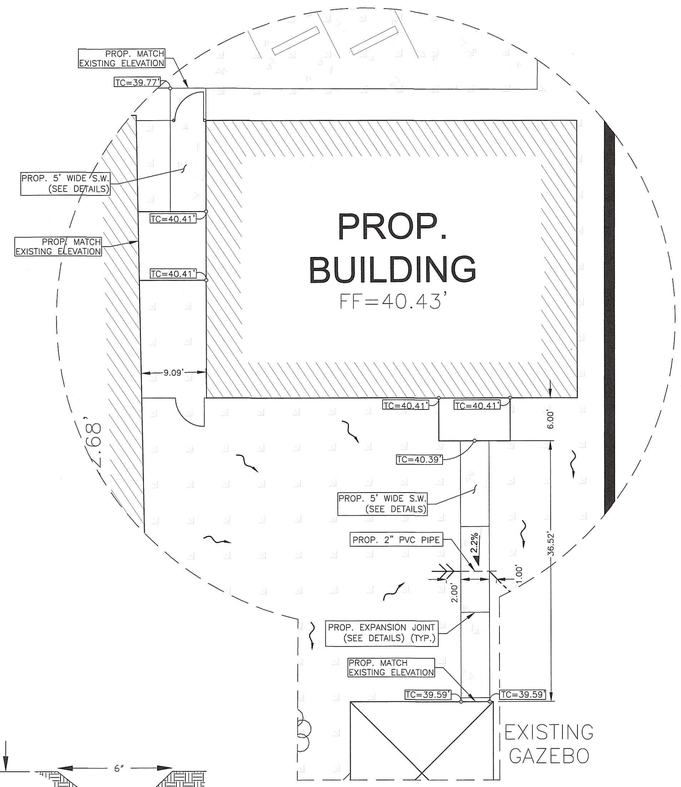
PROPOSED 6" FIRE LINE	200 L.F.
PROPOSED 5" WATER LINE	158 L.F.
PROPOSED 5" FDC	1 TOTAL
PROPOSED RPZ BACKFLOW PREVENTION SYSTEM	1 TOTAL
PROPOSED BUILDING	1 TOTAL
PROPOSED CONCRETE 5' SIDEWALK	26 SQ.YD.
PROPOSED CONCRETE 5'x5' LANDING	3 SQ.YD
PROPOSED CONCRETE PAVEMENT (DUMPSTER PAD)	208 SQ.YD.



ZOOMED PROP. VESTIBULE DETAIL A-A
SCALE:1"=10'



ZOOMED BACKFLOW PREVENTION SYSTEM LOCATION DETAIL B-B
SCALE:1"=10'



ZOOMED PROP. BUILDING DETAILC-C
SCALE:1"=10'

SECTION A–A
PROPOSED ROUTE SWALE
SCALE: N.T.S.

NOTE:
1. ELEVATION VARIES ALONG LENGTH DUE TO SLOPE.

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CAMERON COUNTY APPRAISAL DISTRICT

2021 AMISTAD DR.,
SAN BENITO, TEXAS 78586

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STATE OF TEXAS
JUAN V. GARCIA
111413
LICENSED PROFESSIONAL ENGINEER
8/16/18

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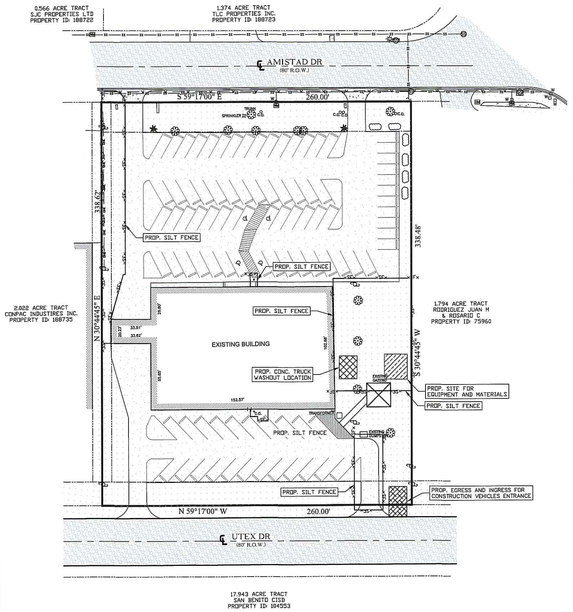
SITE PLAN

2021 AMISTAD DR.,
SAN BENITO, TEXAS 78586

REVISION	DESCRIPTION	DATE

PROJECT NO.	183081-01
DATE	08-16-2018
DRAWN BY	M. ARMENTA
DESIGNED BY	F. MEDRANO JR.
APPROVED BY	J.V. GARCIA
DRAWING TITLE	SITE PLAN
SHEET NO.	C3.0 OF 7



Scale: 1"= 60'

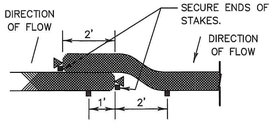
0 30 60 120 180 240

LEGEND

- SITE AREA FOR CONSTRUCTION EQUIPMENT AND MATERIALS
- STABILIZED CONSTRUCTION ENTRANCE. PROPOSED EGRESS AND INGRESS FOR CONSTRUCTION VEHICLES
- PROPOSED CONCRETE TRUCK WASHOUT LOCATION
- xSFx PROPOSED SILT FENCE (SEE DETAILED THIS SHEET)
- PROPOSED AREA OF DISTURBANCE

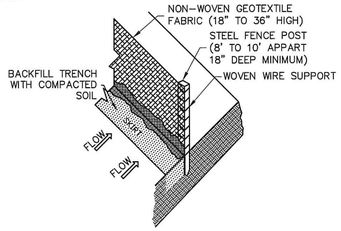
SILT FENCE NOTES:

1. WHERE JOINTS IN THE FABRIC ARE REQUIRED, THE FILTER CLOTH SHOULD BE SPLICED TOGETHER ONLY AT A SUPPORT POST, WITH A MINIMUM 6" OVERLAP AND SHALL BE SECURELY SEALED.
2. INSPECT FILTER FENCES DAILY DURING PERIODS OF PROLONGED RAINFALL, IMMEDIATELY AFTER EACH RAINFALL EVENT, AND WEEKLY DURING PERIODS OF NO RAINFALL. MAKE ANY REQUIRED REPAIRS IMMEDIATELY.



LAP DETAIL

NTS



SILT FENCE DETAIL

NTS

CONCRETE WASHOUT NOTES:

1. CONCRETE WASHOUT AREA(S) SHALL BE INSTALLED PRIOR TO CONCRETE PLACEMENT ON SITE. THE CONCRETE WASHOUT AREA SHALL BE ENTIRELY SELF-CONTAINED.
2. THE CONTRACTOR SHALL SUBMIT THE DESIGN, LOCATION AND SIZING OF THE CONCRETE WASHOUT AREA(S) WITH THE PROJECT'S EROSION AND SEDIMENTATION CONTROL PLAN AND SHALL BE APPROVED BY THE ENGINEER.

   LOCATION: WASHOUT AREA(S) ARE TO BE LOCATED AT LEAST 50 FEET FROM ANY STREAM, WETLAND, STORM DRAINS, OR OTHER SENSITIVE RESOURCE. THE FLOOD CONTINGENCY PLAN MUST ADDRESS THE CONCRETE WASHOUT IF THE WASHOUT IS TO BE LOCATED WITHIN THE FLOODPLAIN.

   SIZE: THE WASHOUT MUST HAVE SUFFICIENT VOLUME TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS INCLUDING, BUT NOT LIMITED TO, OPERATIONS ASSOCIATED WITH GROUT AND MORTAR.
3. SURFACE DISCHARGE IS UNACCEPTABLE. THEREFORE, HAY BALES OR OTHER CONTROL MEASURES, AS APPROVED BY THE ENGINEER, SHOULD BE USED AROUND THE PERIMETER OF THE CONCRETE WASHOUT AREA FOR CONTAINMENT.
4. SIGNS SHOULD BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE CONCRETE AREA(S) AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CONCRETE WASHOUT TO OPERATORS OF CONCRETE TRUCKS AND PUMP RIGS. WASHOUT AREA(S) SHOULD BE FLAGGED WITH SAFETY FENCING OR OTHER APPROVED METHOD.
5. WASHOUT AREA(S) ARE TO BE INSPECTED AT LEAST ONCE A WEEK FOR STRUCTURAL INTEGRITY, ADEQUATE HOLDING CAPACITY AND CHECKED FOR LEAKS, TEARS, OR OVERFLOWS. (AS REQUIRED BY THE CONSTRUCTION SITE ENVIRONMENTAL INSPECTION REPORT) WASHOUT AREA(S) SHOULD BE CHECKED AFTER HEAVY RAIN.
6. HARDENED CONCRETE WASTE SHOULD BE REMOVED AND DISPOSED OF WHEN THE WASTE HAS ACCUMULATED TO HALF OF THE CONCRETE WASHOUT'S HEIGHT. THE WASTE CAN BE STORED AT AN UPLAND LOCATION, AS APPROVED BY THE ENGINEER. ALL CONCRETE WASTE SHALL BE DISPOSED OF IN A MANNER CONSISTENT WITH ALL APPLICABLE LAWS, REGULATIONS, AND GUIDELINES.
7. PAYMENT FOR THIS ITEM IS TO BE INCLUDED UNDER THE GENERAL COST OF THE WORK FOR THE PROJECT, INCLUDING SITE RESTORATION.

CONCRETE WASHOUT AREA

NTS

SEDIMENT BASIN & TRAP USAGE GUIDELINES

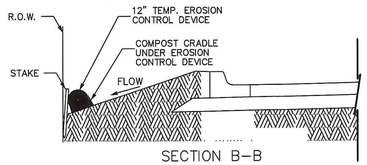
A SEDIMENT TRAP MAY BE USED TO PRECIPITATE SEDIMENT OUT OF RUNOFF DRAINING FROM AN UNSTABILIZED AREA.

TRAPS: THE DRAINAGE AREA FOR A SEDIMENT TRAP SHOULD NOT EXCEED 5 ACRES. THE TRAP CAPACITY SHOULD BE 1800 CF/ACRE (0.5" OVER THE DRAINAGE AREA).

SEDIMENT TRAPS SHOULD BE PLACED IN THE FOLLOWING LOCATIONS:

1. IMMEDIATELY PRECEDING DRAIN INLETS
2. JUST BEFORE THE DRAINAGE ENTERS A WATER COURSE
3. JUST BEFORE THE DRAINAGE LEAVES THE RIGHT OF WAY
4. JUST BEFORE THE DRAINAGE LEAVES THE CONSTRUCTION LIMITS WHERE DRAINAGE FLOWS AWAY FROM THE PROJECT

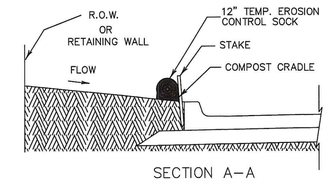
THE TRAP SHOULD BE CLEANED WHEN THE CAPACITY HAS BEEN REDUCED BY ½ OR THE SEDIMENT HAS ACCUMULATED TO A DEPTH OF 1', WHICHEVER IS LESS. CLEANING AND REMOVAL OF ACCUMULATED SEDIMENT DEPOSITS IS INCIDENTAL AND WILL NOT BE PAID FOR SEPERATELY.



SECTION B-B

RIGHT-OF-WAY SEDIMENT TRAP

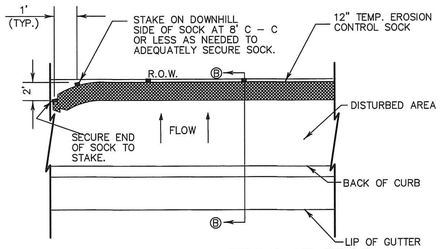
NTS



SECTION A-A

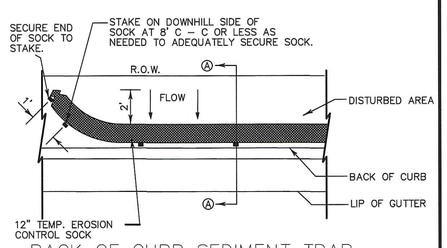
BACK OF CURB SEDIMENT TRAP

NTS



RIGHT-OF-WAY SEDIMENT TRAP PLAN VIEW

NTS



BACK OF CURB SEDIMENT TRAP PLAN VIEW

NTS

GENERAL NOTES

1. LENGTHS OF EROSION CONTROL SOCKS SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND AS REQUIRED FOR THE PURPOSE INTENDED. MAXIMUM LENGTH OF SOCKS SHALL BE 30' FOR 12" DIAMETER SOCKS.
2. UNLESS OTHERWISE DIRECTED, USE BIODEGRADABLE OR PHOTODEGRADABLE CONTAINMENT MESH ONLY WHERE SOCK WILL REMAIN IN PLACE AS PART OF A VEGETATIVE SYSTEM. FOR TEMPORARY INSTALLATIONS, USE RECYCLABLE CONTAINMENT MESH.
3. STUFF SOCKS WITH SUFFICIENT FILTER MATERIAL TO ACHIEVE DENSITY THAT WILL HOLD SHAPE WITHOUT EXCESSIVE DEFORMATION.
4. STAKES SHALL BE 2" X 2" WOOD 4' LONG, EMBEDDED SUCH THAT 2" PROTRUDES ABOVE SOCK.
5. COMPOST CRADLE MATERIAL IS INCIDENTAL AND WILL NOT BE PAID FOR SEPARATELY.

NATURE OF CONSTRUCTION ACTIVITY

* CONSTRUCTION OF THE CAMERON COUNTY APPRAISAL DISTRICT OFFICE

SEQUENCE OF MAJOR ACTIVITIES

* ADDITION OF FIRE LINE & WATER LINE
* ADDITION OF RPZ BACKFLOW PREVENTION SYSTEM
* ADDITION OF BUILDING
* PROPOSED CONCRETE PAVEMENT (DUMPSTER PAD)

AREA OF SITE

* TOTAL AREA OF DISTURBANCE: 0.263 ACRES

ESTIMATED RUNOFF COEFFICIENT

* PRE-CONSTRUCTION C "0.85 (10 YEAR EVENT) COMMERCIAL LAND USE
* POST-CONSTRUCTION C "0.86 (10 YEAR EVENT) COMMERCIAL LAND USE

SOIL DESCRIPTION:

* HARLINGEN CLAY (HA)

SITE PLAN SHOWS THE FOLLOWING:

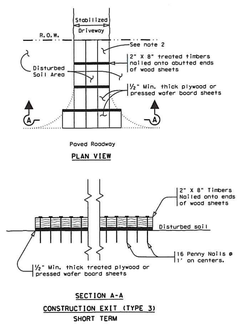
* AREAS OF SOIL DISTURBANCE
* LOCATIONS OF MAJOR STRUCTURAL / NON-STRUCTURAL CONTROLS
* LOCATIONS WHERE STABILIZATION PRACTICES ARE TO OCCUR

NAME OF RECEIVING WATERS

BROWNSVILLE SHIP CHANNEL

BMP'S TO BE IMPLEMENTED

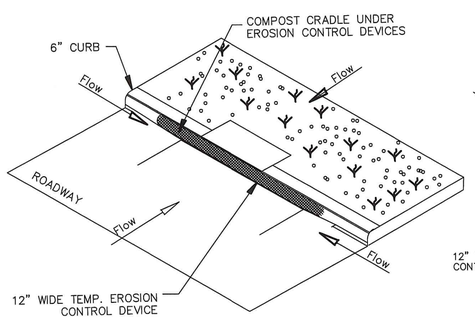
* DURING CONSTRUCTION, SILT FENCING AND/OR EROSION SEDIMENT TRAPS SHALL BE ERECTED AND MAINTAINED WHERE SHOWN TO MINIMIZE ESCAPE OF SEDIMENT INTO STORM SEWER SYSTEM.

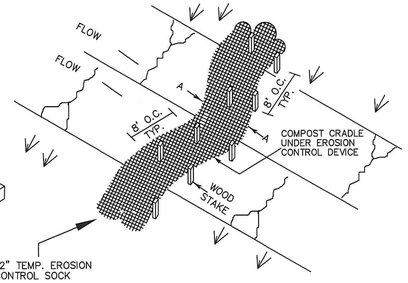


CONSTRUCTION EXIT (TYPE 3)
SHORT TERM

GENERAL NOTES (TYPE 3)

1. The length of the type 3 construction exit shall be as shown on the plans, or as directed by the Engineer.
2. The type 3 construction exit may be constructed from open graded crushed stone with a size of two to four inches spread a min. of 4" thick to the limits shown on the plans.
3. The treated timber planks shall be #2 grade min., and should be free from large and loose knots.
4. The guidelines shown hereon are suggestions only and may be modified by the Engineer.





DITCH LINE SEDIMENT TRAP

NTS

EROSION CONTROL GENERAL NOTES:

1. IT IS THE INTENT OF THE INFORMATION PROVIDED ON THIS SHEET AND WITHIN THE SPECIFICATIONS TO BE USED AS THE GENERAL GUIDELINES OF THE STORM WATER POLLUTION PREVENTION PLAN FOR THIS PROJECT TO ESTABLISH A MINIMUM BASIS OF COMPLIANCE WITH STATE AND FEDERAL REGULATIONS. THE CONTRACTOR SHALL PREPARE THE STORM WATER POLLUTION PREVENTION PLAN AND BE SOLELY RESPONSIBLE FOR ITS IMPLEMENTATION. THE STORM WATER POLLUTION PREVENTION PLAN SHALL MEET THE REQUIREMENTS SET FORTH IN THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) TPDES GENERAL PERMITS FOR STORM WATER DISCHARGES FROM CONSTRUCTION SITES PUBLISHED IN THE FEBRUARY 14, 1988 FEDERAL REGISTER.
2. THE STORM WATER POLLUTION PREVENTION PLAN SHOULD ADDRESS THE FOLLOWING:
   A) DEFINE THE CHARACTERISTICS OF THE SITE AND THE TYPE OF CONSTRUCTION WHICH WILL BE OCCURRING;
   B) DESCRIBE THE SITE PLAN FOR THE FACILITY TO BE CONSTRUCTED;
   C) DESCRIBE THE PRACTICES THAT WILL BE IMPLEMENTED TO CONTROL EROSION AND THE RELEASE OF POLLUTANTS IN STORM WATER;
   D) CREATE AN IMPLEMENTATION SCHEDULE;
   E) DESCRIBE THE FINAL STABILIZATION/TERMINATION DESIGN TO MINIMIZE EROSION AND PREVENT STORM WATER IMPACTS AFTER CONSTRUCTION IS COMPLETE.
3. CONTRACTOR SHALL MAKE THE STORM WATER POLLUTION PREVENTION PLAN AVAILABLE UPON REQUEST TO TCEQ.
4. THE CONTRACTOR MUST AMEND PLANS WHENEVER THERE IS A CHANGE IN DESIGN, CONSTRUCTION, OPERATION, OR MAINTENANCE OF THE PLAN, OR WHEN THE EXISTING PLAN PROVES INEFFECTIVE. MODIFICATIONS INCLUDING DESIGN AND ALL ADDITIONAL MATERIALS AND WORK SHALL BE ACCOMPLISHED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER.
5. STABILIZATION MEASURES ARE TO BE INSPECTED AT A MINIMUM OF ONCE EVERY 7 DAYS AND WITHIN 24 HOURS AFTER ANY STORM EVENT GREATER THAN .5 INCHES, REPAIRS AND INADEQUACIES REVEALED BY THE INSPECTION MUST BE IMPLEMENTED WITHIN 7 CALENDAR DAYS FOLLOWING THE INSPECTION.
6. AN INSPECTION REPORT THAT SUMMARIZES INSPECTION ACTIVITIES AND IMPLEMENTATION OF THE STORM WATER POLLUTION PREVENTION PLAN SHALL BE RETAINED AND MARE PART OF THE PLAN.
7. ALL CONTRACTORS AND SUBCONTRACTORS IDENTIFIED IN THE PLAN MUST CERTIFY AS TO AN UNDERSTANDING OF THE TPDES GENERAL PERMIT BEFORE CONDUCTING ANY ACTIVITY IDENTIFIED IN THE STORM WATER POLLUTION PREVENTION PLAN.
8. THE CONTRACTOR SHALL ADOPT APPROPRIATE CONSTRUCTION SITE MANAGEMENT PRACTICES TO PREVENT THE DISCHARGE OF OILS, GREASE, PAINTS, GASOLINE, AND OTHER POLLUTANTS TO STORM WATER. APPROPRIATE PRACTICES CAN INCLUDE: DESIGNATING AREAS FOR EQUIPMENT MAINTENANCE AND REPAIR; REGULAR COLLECTION OF WASTE; CONVENIENTLY LOCATED WASTE RECEPTACLES; AND DESIGNATING AND CONTROLLING EQUIPMENT WASHDOWN.
9. THE CONTRACTOR SHALL AMEND OR MODIFY THIS PLAN AS REQUIRED BY CONSTRUCTION MEANS, METHODS AND SEQUENCE, MODIFICATIONS SHALL NOT COMPROMISE THE INTENT OF THE REQUIREMENTS OF LAW AND THIS PLAN. MODIFICATIONS SHALL NOT BE BASIS FOR ADDITIONAL COST TO THE OWNER.
10. AREAS OF CONSTRUCTION ELSEWHERE ON THE JOB SITE SHALL CONFORM TO THE DETAILS SHOWN ON THE PLANS.
11. BORROW AREAS, IF EXCAVATED, SHALL BE PROTECTED AND STABILIZED UTILIZING THE PLAN DETAILS. ALL WORK SHALL CONFORM TO GOVERNMENTAL REQUIREMENTS AND BECOME PART OF THE STORM WATER POLLUTION PREVENTION PLAN. THE WORK SHALL BE DONE BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER. IMMEDIATELY UPON COMPLETION OF FINAL GRADING. THIS INCLUDES ALL DITCHES AND EMBANKMENTS. THE CONTRACTOR SHALL MAINTAIN FINAL GRADING AND KEEP SEEDED ARES WATERED UNTIL FULLY ESTABLISHED AND ACCEPTED BY THE OWNER.
12. THE CONTRACTOR SHALL CONSTRUCT A STABILIZED CONSTRUCTION EXIT AT ALL TRAFFIC EXIT POINTS PRIOR TO EXITING ONTO ANY PAVED ROADWAY.
13. THE CONTRACTOR SHALL CONSTRUCT A REINFORCED FILTER BARRIER AT ALL LOCATIONS SHOWN ON PLANS. THE REINFORCED BARRIER SHALL BE CONSTRUCTED.

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CAMERON COUNTY APPRAISAL DISTRICT

2021 AMISTAD DR.,
SAN BENITO, TEXAS 78586

CIVIL/STRUCTURAL ENGINEER
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8/16/18
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SWPPP (STORM WATER POLLUTION PREVENTION PLAN)

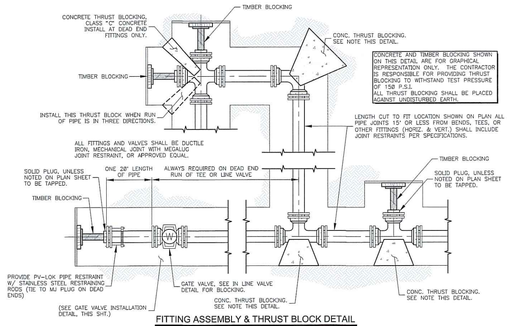
2021 AMISTAD DR.,
SAN BENITO, TEXAS 78586

REVISION	DESCRIPTION	DATE

PROJECT NO.	183081-01
DATE	08-16-2018
DRAWN BY	M. ARMENTA
DESIGNED BY	F. MEDRANO JR.
APPROVED BY	J.V. GARCIA

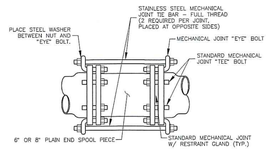
DRAWING TITLE: SWPPP

SHEET NO. C4.0 OF 7



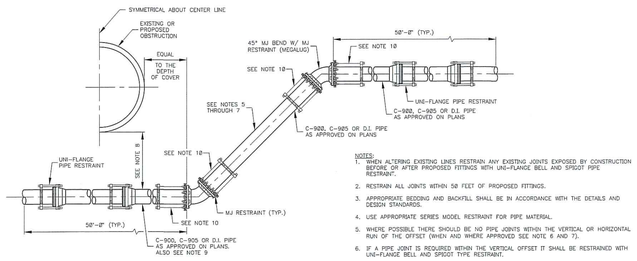
FITTING ASSEMBLY & THRUST BLOCK DETAIL

NOT TO SCALE



MECHANICAL RESTRAINT W/ RESTRAINING RODS

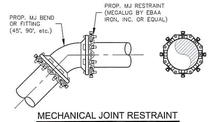
NOT TO SCALE



NOTES:
1. WHEN ALTERING EXISTING LINES RESTRAIN ANY EXISTING JOINTS EXPOSED BY CONSTRUCTION BEFORE OR AFTER PROPOSED FITTINGS WITH UNI-FLANGE BELL AND SPIGOT PIPE RESTRAINT.
2. RESTRAIN ALL JOINTS WITHIN 50 FEET OF PROPOSED FITTINGS.
3. APPROPRIATE BEDDING AND BACKFILL SHALL BE IN ACCORDANCE WITH THE DETAILS AND DESIGN STANDARDS.
4. USE APPROPRIATE SERIES MODEL RESTRAINT FOR PIPE MATERIAL.
5. WHERE POSSIBLE THERE SHOULD BE NO PIPE JOINTS WITHIN THE VERTICAL OR HORIZONTAL RUN OF THE OFFSET (WHEN AND WHERE APPROVED SEE NOTE 6 AND 7).
6. IF A PIPE JOINT IS REQUIRED WITHIN THE VERTICAL OFFSET IT SHALL BE RESTRAINED WITH UNI-FLANGE BELL AND SPIGOT TYPE RESTRAINT.
7. WHEN DEPTH OF OFFSET REQUIRES MORE THAN A STANDARD LENGTH OF PIPE NO SEGMENT SHALL BE LESS THAN 5' IN LENGTH.
8. THE MINIMUM CLEARANCE SHALL BE DETERMINED BY THE AMOUNT OF BEDDING AND BACKFILL REQUIRED BY THE PROSPECTIVE PIPE AND THEIR USAGE. SEE THE BEDDING AND BACKFILL DETAILS FOR DIMENSIONS.
9. A SOLID CONTINUOUS JOINT OF PIPE SHALL BE USED AT ALL TIMES FOR THE HORIZONTAL SECTION OF THE OFFSET.
10. INSTALL STAINLESS STEEL RESTRAINING RODS FROM 45° MJ BEND TO ADJACENT MJ FITTING OR PLUG. IF NO FITTING OR VALVE EXISTS, INSTALL PV-LOK PIPE RESTRAINT OR APPROVED EQUAL.

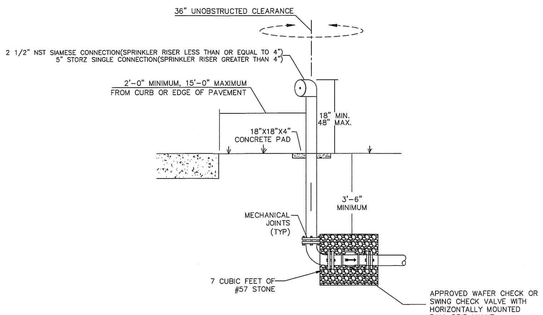
RESTRAINED MECHANICAL JOINT VERTICAL OFFSET

NOT TO SCALE



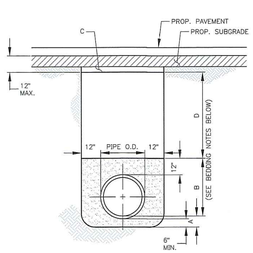
MECHANICAL JOINT RESTRAINT

NOT TO SCALE

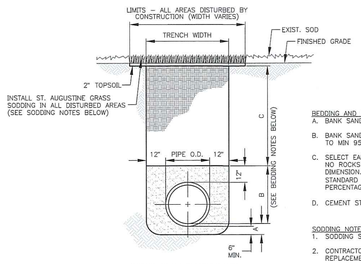


NOTES:

1. THERE SHALL BE NO SHUTOFF VALVE IN THE FIRE DEPT. CONNECTION PIPING (PER NFPA 13).
2. ALL ABOVE GROUND FITTINGS SHALL BE FLANGED.
3. ALL PIPING SHALL BE STEEL OR DUCTILE IRON.
4. SEE SITE PLANS FOR SIZES OF PIPES AND FITTINGS. SIAMESE CONNECTION TO BE IN ACCORDANCE WITH NFPA 13.
5. PROVIDE DRAINAGE AWAY FROM STRUCTURE.
6. KNOX LOCKING PLUG SHALL BE PROVIDED ON THE FDC INLET.
7. APPROVED WATER CHECK OR SWING CHECK VALVE WITH HORIZONTAL MOUNTED BALL DRIP VALVE.
8. THE FDC SHALL BE CONNECTED TO THE PIPING SYSTEM LOCATED DOWNSTREAM OF THE POST INDICATOR VALVE.



WATER PIPE TRENCH DETAIL
FOR PIPES UNDER CONCRETE PAVEMENT



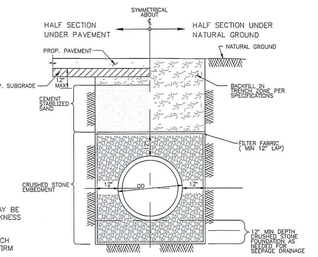
WATER PIPE TRENCH DETAIL
FOR PIPES UNDER NATURAL GROUND

BEDDING AND BACKFILL NOTES:
A. BANK SAND PLACED BEFORE PIPE IS LAID.
B. BANK SAND PLACED AFTER PIPE IS LAID, THOROUGHLY RODDED AND MECHANICALLY TAMPED TO MIN 95% OF MAX. DRY DENSITY AS DETERMINED BY ASTM D-698
C. SELECT EARTH BACKFILL, MAX. LIQUID LIMIT 40 ASTM D4318, P.I. MIN 7, MAX 28 CONTAINING NO ROCKS OR OTHER DEBRIS NOR CONTAINING ANY DIRT CLODS EXCEEDING 6" IN ANY DIMENSION. PLACED IN 6" LAYERS AND COMPACTED TO AT LEAST 95% OF THE MAXIMUM STANDARD PROCTOR DRY DENSITY (ASTM D698) AND AT A MOISTURE CONTENT WITHIN TWO PERCENTAGE POINTS OF THE OPTIMUM MOISTURE CONTENT.
D. CEMENT STABILIZED SAND (AS PER SPECIFICATIONS)

SODDING NOTES:
1. SODDING SHALL BE INSTALLED IN AREAS DISTURBED BY CONSTRUCTION.
2. CONTRACTOR SHALL REPLACE SODDING IN AREAS DAMAGED BY CONSTRUCTION AND THE REPLACEMENT SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.
3. IF EXISTING LANDSCAPING OTHER THAN GRASS IS WITHIN THESE AREAS, THE CONTRACTOR SHALL REBUILD OR REINSTALL THE LANDSCAPING AT NO ADDITIONAL COST TO THE PROJECT.

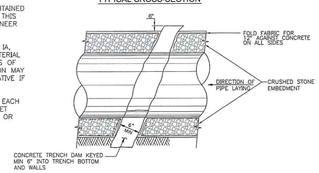
BEDDING, BACKFILL, AND SODDING NOTES FOR TRENCH DETAILS

NOT TO SCALE



TYPICAL CROSS-SECTION

NOTES:
1. ACTUAL SHAPE OF CONCRETE TRENCH DAM CROSS SECTION MAY BE DETERMINED BY CONTRACTOR IN FIELD, MEETING MINIMUM THICKNESS AND KEY DEPTH REQUIREMENTS.
2. THIS DETAIL IS TO BE USED TO PROVIDE A FIRM STABLE TRENCH BOTTOM WHERE MECHANICAL DEWATERING CANNOT PROVIDE A FIRM STABLE TRENCH BOTTOM.
3. IN THE EVENT A FIRM STABLE TRENCH BOTTOM CANNOT BE OBTAINED PRIOR TO IMPLEMENTING THIS DETAIL OR AFTER IMPLEMENTING THIS DETAIL, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OR OWNER'S REPRESENTATIVE.
4. CRUSHED STONE EMBEDMENT SHALL MEET ASTM D2321 CLASS IA, CLASS IB OR CLASS II MATERIAL. USE A SUITABLE GRADED MATERIAL WHERE CONDITIONS MAY CAUSE MIGRATION OF FINES AND LOSS OF PIPE SUPPORT. FOR SEVERE CONDITIONS A SPECIAL FOUNDATION MAY BE REQUIRED. NOTIFY THE ENGINEER OR OWNER'S REPRESENTATIVE IF SUCH CONDITIONS ARE PRESENT.
5. TRENCH DAM SHALL BE PLACED A MINIMUM OF ONE BETWEEN EACH MANHOLE WHEN INSTALLED WITH SANITARY SEWERS OR 300 FEET WHICH EVER IS LESS WHEN INSTALLED WITH SANITARY SEWERS OR WATERLINES.



LONGITUDINAL SECTION ALONG PIPE CENTERLINE
AT FOUNDATION TRENCH DAM

WET CONDITION BEDDING

NOT TO SCALE

CAMERON COUNTY APPRAISAL DISTRICT

2021 AMISTAD DR.,
SAN BENITO, TEXAS 78586

CIVIL/STRUCTURAL ENGINEER
CASA ENGINEERING
Civil & Structural Associates
1117 N. Stuart Place Rd. Suite E
Harlingen, TX 78552
Phone 956.428.7000
www.casaengr.com
TEXAS REGISTERED ENGINEERING FIRM F-8483

8/14/18
STATE OF TEXAS
JUAN V. GARCIA
111413
LICENSED
PROFESSIONAL ENGINEER

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY JUAN V. GARCIA, P.E., NO. 111413, ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER AUTHORITY BY THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE A

WATER DETAILS

2021 AMISTAD DR.,
SAN BENITO, TEXAS 78586

REVISION	DESCRIPTION	DATE

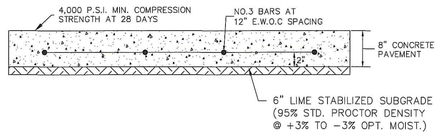
PROJECT NO.	183081-01
DATE	08-16-2018
DRAWN BY	M. ARMENTA
DESIGNED BY	F. MEDRANO JR.
APPROVED BY	J.V. GARCIA

DRAWING TITLE

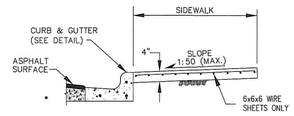
WATER DETAILS

SHEET NO.

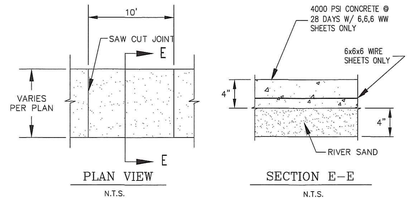
C5.0 OF 7



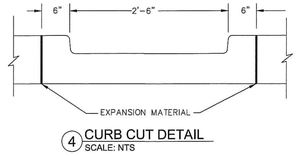
1 CONCRETE PAVEMENT DETAIL
SCALE: NTS



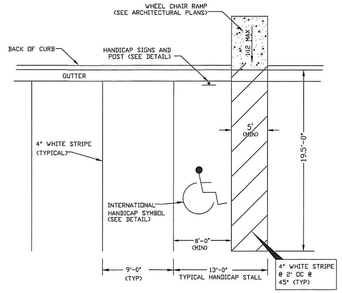
2 TYPICAL SIDEWALK CROSS SECTION
SCALE: NTS



3 TYPICAL SIDEWALK
SCALE: NTS



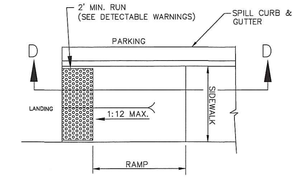
4 CURB CUT DETAIL
SCALE: NTS



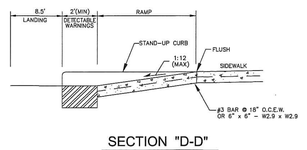
5 STRIPING FOR 90° PARKING
SCALE: NTS

NOTES:
1. ALL WALKWAYS, RAMPS, HANDICAP PARKING SIGNAGE, ETC. SHALL MEET APPROVED A.D.A. STANDARDS

2. 2% MAX. SLOPE IN ALL DIRECTION IN AREAS OF HANDICAP PARKING SPACES



6 TYPICAL SIDEWALK RAMP
SCALE: NTS



SECTION "D-D"
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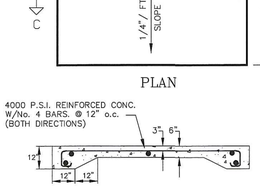
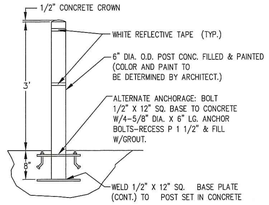
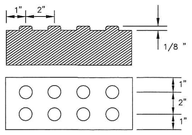


SECTION C-C



7 SINGLE CONCRETE DUMPSTER PAD DETAIL
SCALE: NTS



NOTES:
1. CONTRACTOR TO USE DETECTABLE WARNINGS AS SHOWN BELOW OR APPROVED EQUAL.

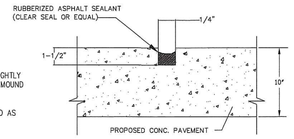
2. RAMP TEXTURES MUST CONSIST OF TRUNCATED DOMED SURFACES. TEXTURES ARE REQUIRED TO BE DETECTABLE UNDERFOOT. SURFACES THAT WOULD ALLOW WATER TO ACCUMULATE ARE PROHIBITED.

3. ADDITIONAL INFORMATION ON CURB RAMP LOCATION, DESIGN, LIGHT REFLECTIVE VALUE AND TEXTURE MAY BE FOUND IN THE CURRENT EDITION OF THE TEXAS ACCESSIBILITY STANDARDS (TAS) PREPARED AND ADMINISTERED BY THE TEXAS DEPARTMENT OF LICENSING AND REGULATION (TDLR).

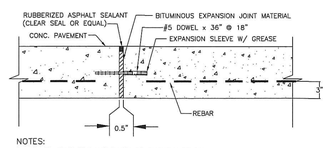
8 TRUNCATED DOME SURFACE
SCALE: NTS

NOTES:
1. PLACE JOINT SEALANT FLUSH OR SLIGHTLY BELOW TOP OF PAVEMENT. DO NOT MOUND MATERIAL ABOVE SURFACE.

2. REBAR/WIRE MESH SHALL BE PLACED AS PER DETAILS



9 CONSTRUCTION BUTT JOINT - SAW CUT
SCALE: NTS



NOTES:
1. PLACE JOINT SEALANT FLUSH OR SLIGHTLY BELOW TOP OF PAVEMENT. DO NOT MOUND MATERIAL ABOVE SURFACE.

2. REBAR/WIRE MESH SHALL BE PLACED AS PER DETAILS

10 EXPANSION JOINT
SCALE: NTS

CAMERON COUNTY APPRAISAL DISTRICT

2021 AMISTAD DR.,
SAN BENITO, TEXAS 78586

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PAVING DETAILS

2021 AMISTAD DR.,
SAN BENITO, TEXAS 78586

REVISION	DESCRIPTION	DATE

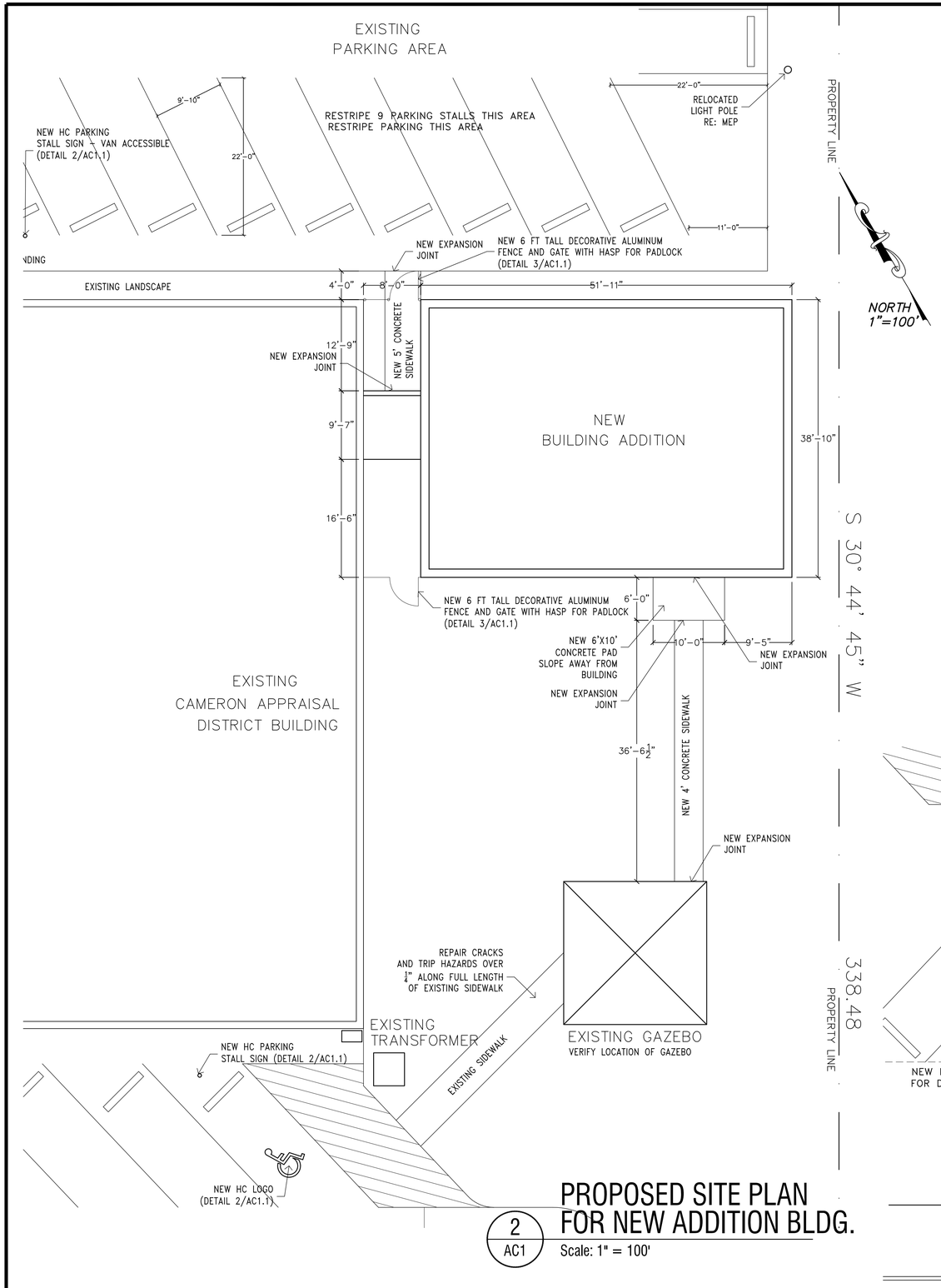
PROJECT NO.	183081-01
DATE	08-16-2018
DRAWN BY	M. ARMENTA
DESIGNED BY	F. MEDRANO JR.
APPROVED BY	J.V. GARCIA

DRAWING TITLE

PAVING DETAILS

SHEET NO.

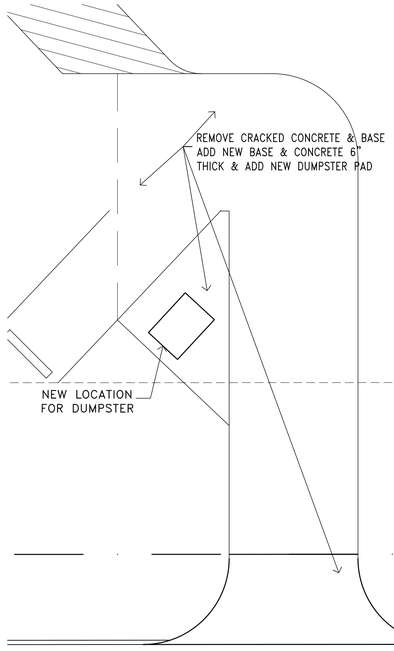
C6.0 OF 7



PROPOSED SITE PLAN FOR NEW ADDITION BLDG.

2 / AC1

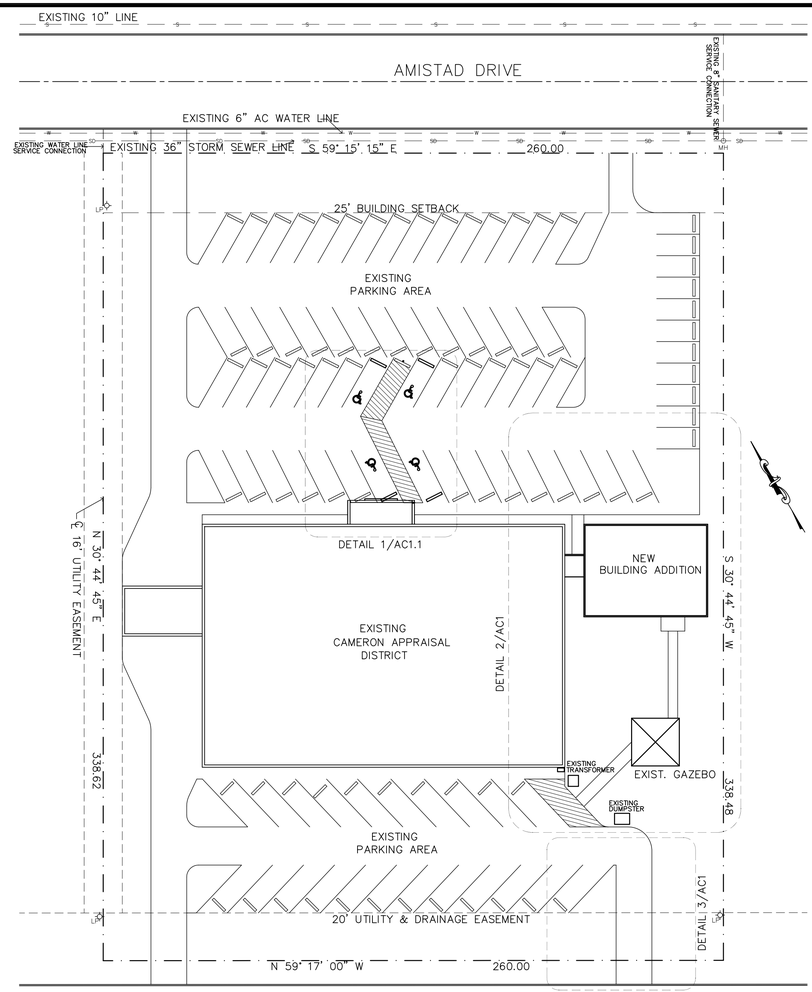
Scale: 1" = 100'



PROPOSED DUMPSTER LOCATION @ REAR EMPLOYEE PARKING

3 / AC1

Scale: 1" = 100'



OVERALL SITE PLAN

1 / AC1

Scale: 1" = 360'

K+ architect
400 E. 3rd
Los Fresnos, TX 78566
Phone: (956) 233-2218
Fax: (956) 233-2219

CAMERON APPRAISAL DISTRICT
NEW BUILDING ADDITION AND RENOVATION
2021 AMISTAD DRIVE, SAN BENITO, TEXAS 78586

Overall Site Plan and Proposed Site Plan at New Addition Bldg.

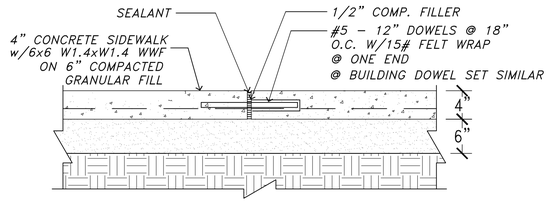
REGISTERED ARCHITECT
STATE OF TEXAS
STANFORD C. KNOWLES
10972

NO.	DATE	REVISIONS

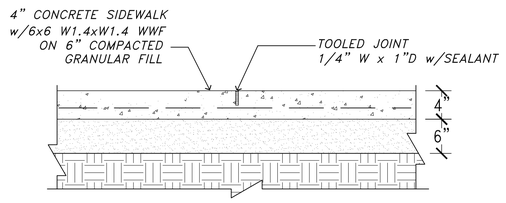
DRAWN BY: cam
CHECKED BY: SCK

DATE: 08-15-18

SHEET NO.
AC1



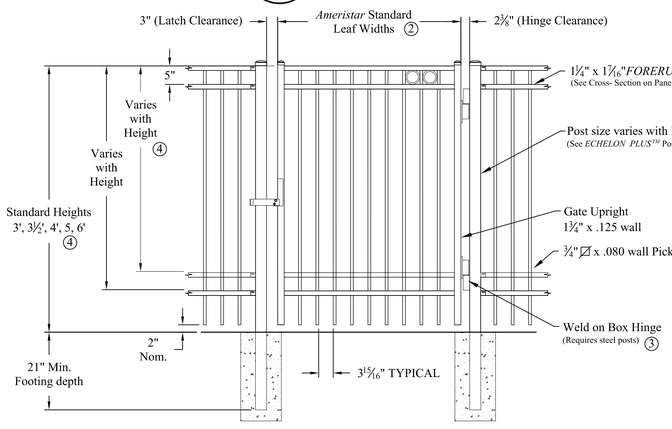
SIDEWALK EXP. JT DETAIL @ 30' O.C
AT INTERSECTIONS, EXISTING SIDEWALK AND BUILDINGS



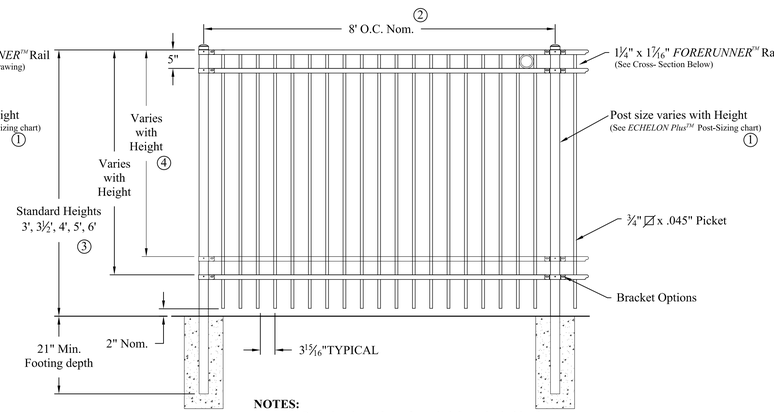
SIDEWALK CONTROL JT DETAIL @ 5' O.C

4 AC1.1 SIDEWALK DETAILS

Scale: N.T.S.

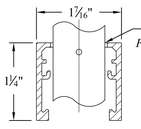


Single gate Arrangement



NOTES:

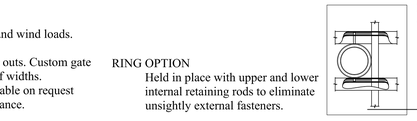
1.) Post size depends on fence height and wind loads.
See ECHELON *Plus* ™ post sizing chart.
2.) Panels also available for 6' on center post spacing
3.) Additional heights available on request
4.) Fourth rail optional.



Pickets welded to *FORERUNNER*™ Rail prior to coating

NOTES:

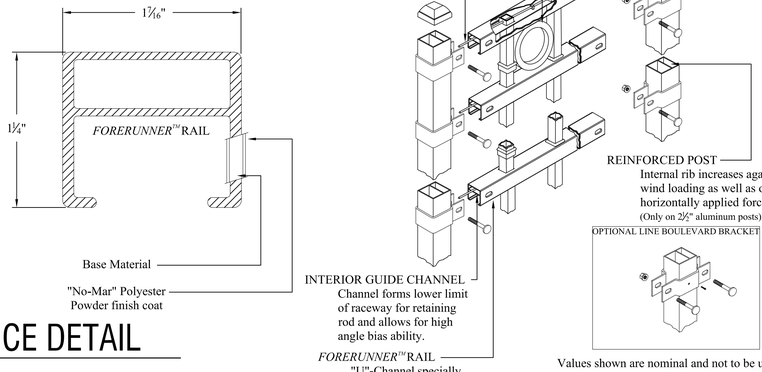
1.) Post size depends on fence height, weight and wind loads.
™ See *ECHELON PLUS* post sizing chart.
2.) See *Ameristar* gate table for standard out to outs. Custom gate openings available for special out to out/leaf widths.
3.) Additional styles of gate hardware are available on request This could change the Latch & Hinge Clearance.
4.) Fourth rail optional. Some heights noted require a fourth rail.



RING OPTION
Held in place with upper and lower internal retaining rods to eliminate unsightly external fasteners.

PANEL BRACKET
Specially designed two -point connection ensures fixity of rail ends for increased strength.

INTERNAL RETAINING ROD
Variable pitch connection system for ease of installation, high angle bias ability and elimination of unsightly external fasteners.



REINFORCED POST
Internal rib increases against wind loading as well as other horizontally applied forces (Only on 2½" aluminum posts).

OPTIONAL LINE BOULEVARD BRACKET

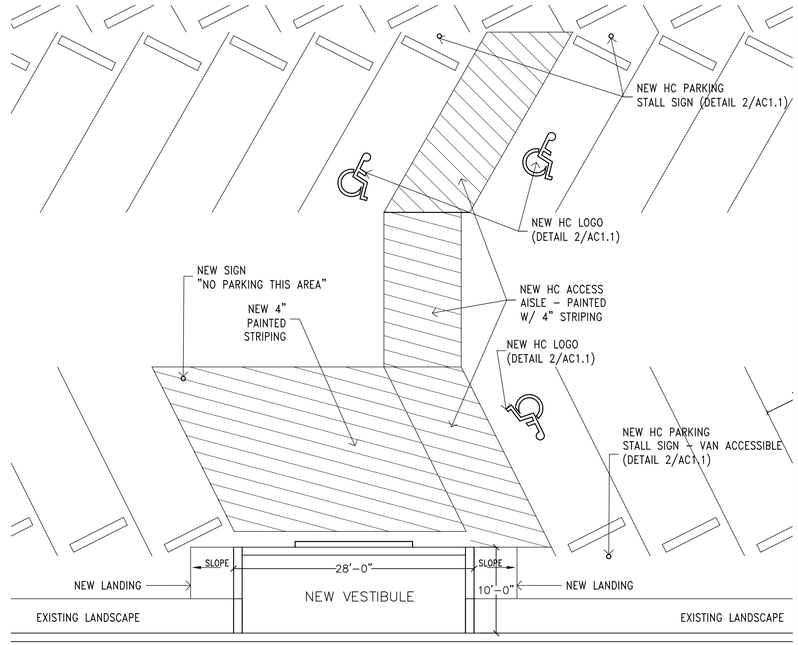
INTERIOR GUIDE CHANNEL
Channel forms lower limit of raceway for retaining rod and allows for high angle bias ability.

FORERUNNER™ RAIL
"U"-Channel specially formed high strength architectural shape.

Values shown are nominal and not to be used for installation purposes. See product specification for installation requirements.

3 AC1.1 ALUMINUM GATE AND FENCE DETAIL

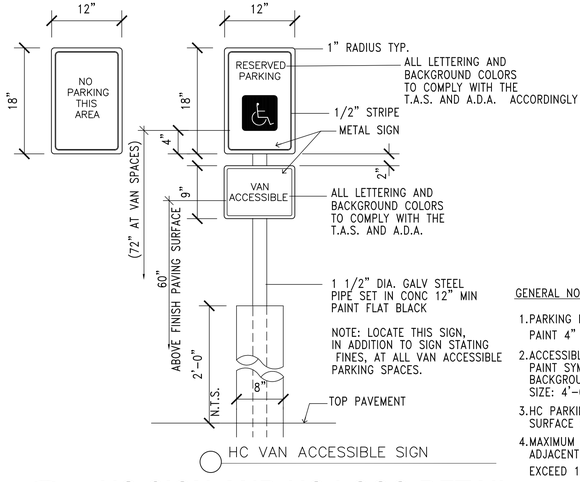
Scale: N.T.S.



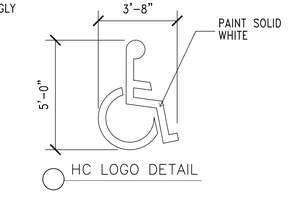
EXISTING
CAMERON APPRAISAL
DISTRICT BUILDING

1 AC1.1 PROPOSED PARKING @ EXISTING BUILDING

Scale: 1" = 100'



HC VAN ACCESSIBLE SIGN



HC LOGO DETAIL

GENERAL NOTES FOR ACCESSIBLE PARKING

1. PARKING LOT STRIPING AND ACCESS AILE TO BE WHITE PAINT 4" WIDE (#15090 IN FED, STD. 595A)
2. ACCESSIBLE SIGN ON PAVEMENT
   PAINT SYMBOL: WHITE (TWO COATS)
   BACKGROUND: BLUE (#15090 IN FED. STD. 595A)
   SIZE: 4'–0"x4'–0"
3. HC PARKING SPACES AND ACCESS AISLES SHALL BE LEVEL WITH SURFACE SLOPES NOT EXCEEDING 1:50 (2%) IN ALL DIRECTIONS.
4. MAXIMUM SLOPES OF ADJOINING GUTTERS, ROAD SURFACE IMMEDIATELY ADJACENT TO THE CURB RAMP, OR ACCESSIBLE ROUTE SHALL NOT EXCEED 1:20.

2 AC1.1 HC SIGN AND HC LOGO DETAIL

Scale: N.T.S.

K+ architect
400 E. 3rd
Los Fresnos, TX 78566
Phone: (956) 233-2218
Fax: (956) 233-2219

CAMERON APPRAISAL DISTRICT
NEW BUILDING ADDITION AND RENOVATION
2021 AMISTAD DRIVE, SAN BENITO, TEXAS 78586

Proposed Site Plan at Existing Building and Site Details

REGISTERED ARCHITECT
STATE OF TEXAS
STANFORD C. KNOWLES
08-15-18

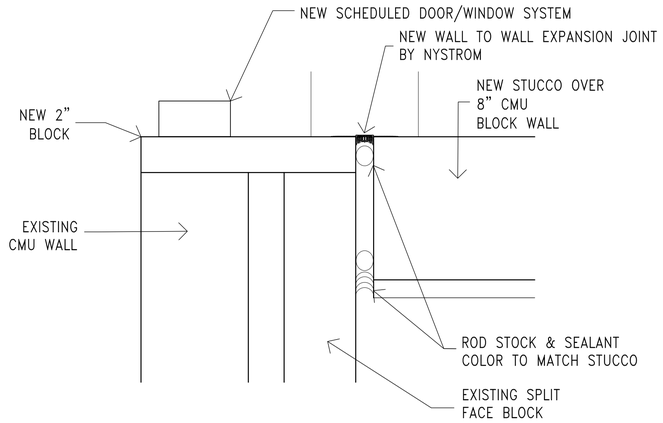
NO.	DATE	REVISIONS

DRAWN BY:	CHECKED BY:
cam	SCK

DATE: 08-15-18

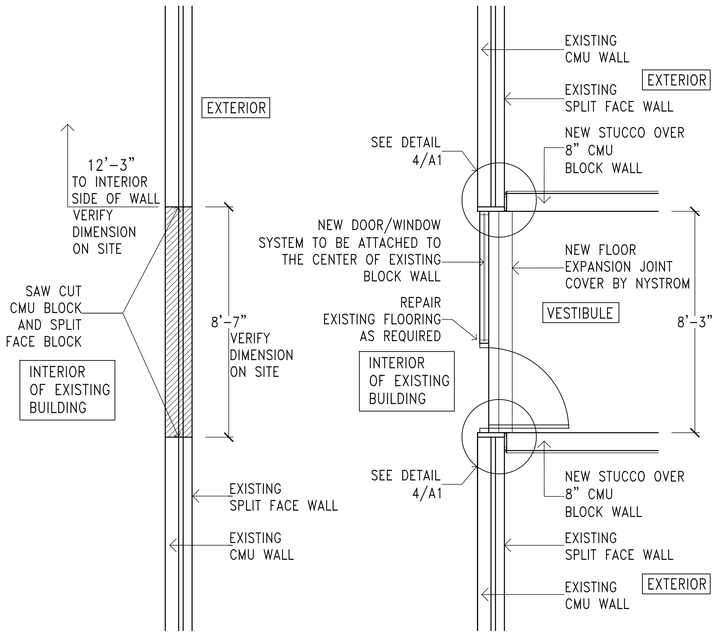
SHEET NO.

AC1.1



4 / A1 EXPANSION JOINT DETAIL @ WALL

Scale: 3" = 1'-0"

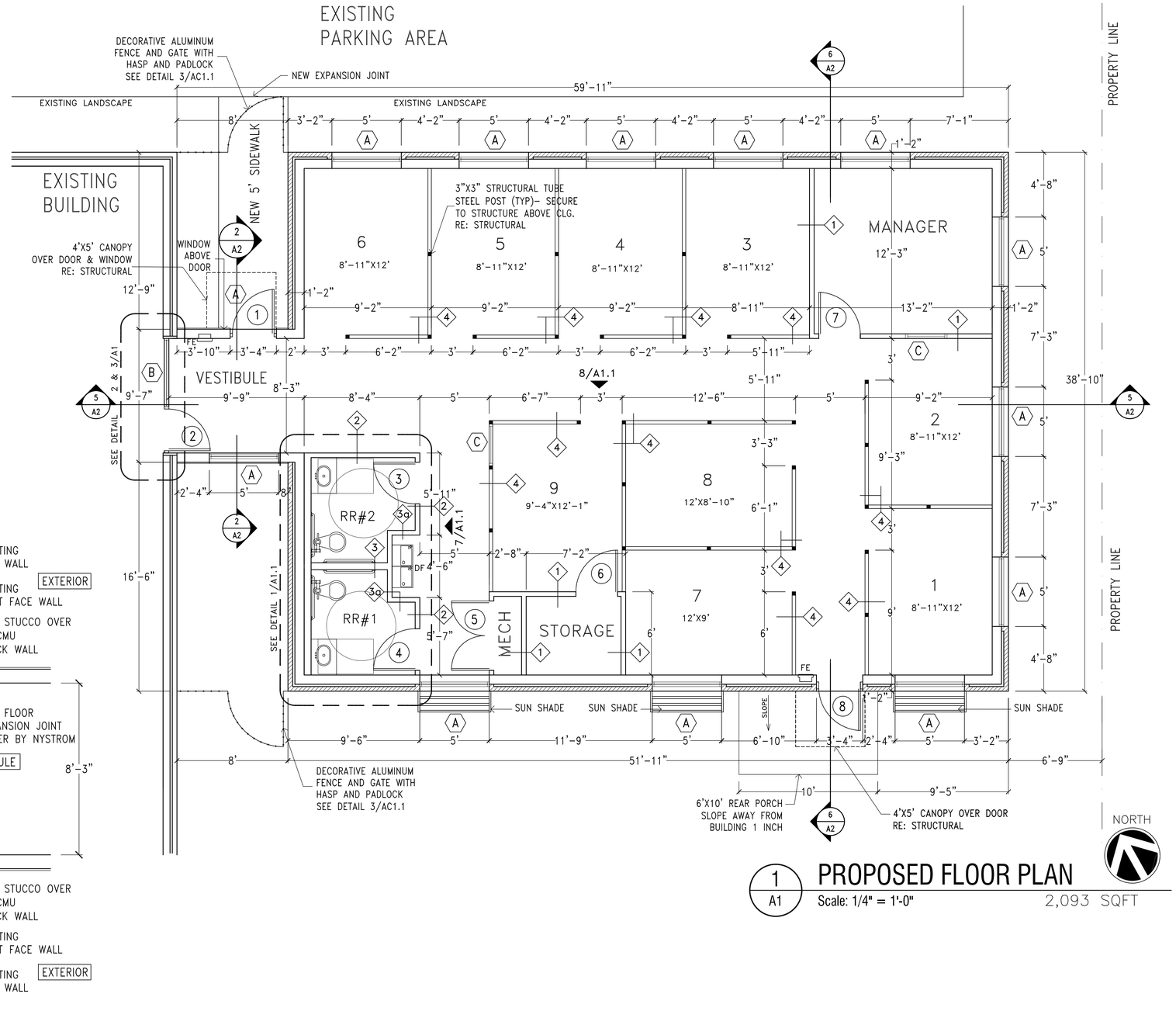


2 / A1 EXISTING / DEMO @ EXTERIOR WALL

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

3 / A1 PROPOSED EXTERIOR WALL WITH NEW DOOR TO VESTIBULE

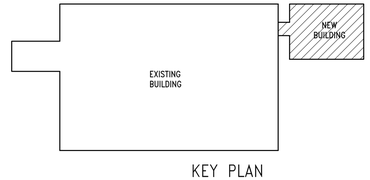
Scale: 3/8" = 1'-0"



1 / A1 PROPOSED FLOOR PLAN

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

2,093 SQFT



KEY PLAN

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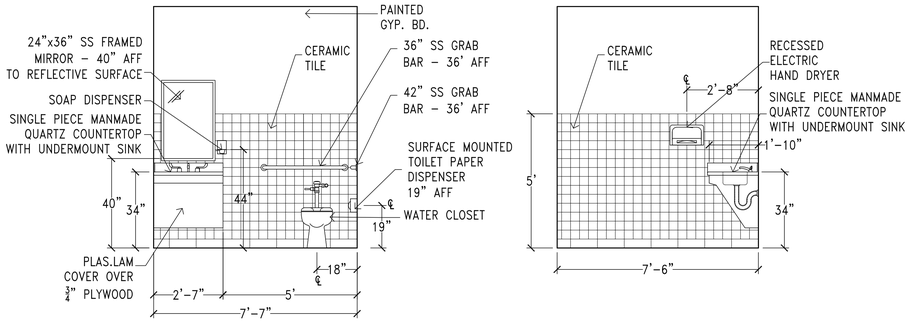
CAMERON APPRAISAL DISTRICT
NEW BUILDING ADDITION AND RENOVATION
2021 AMISTAD DRIVE, SAN BENITO, TEXAS 78586

Proposed Floor Plan and Details

REGISTERED ARCHITECT STATE OF TEXAS

NO.	DATE	REVISIONS

DRAWN BY: cam
CHECKED BY: SCK
DATE: 08-15-18
SHEET NO. A1

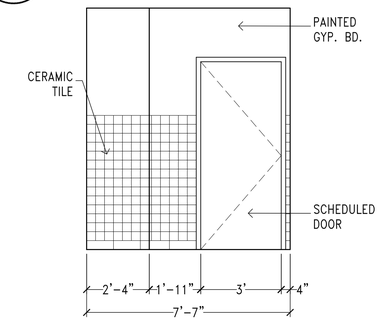


2 / A1.1 — RR #1 — RR #2 - OPPOSITE HAND

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

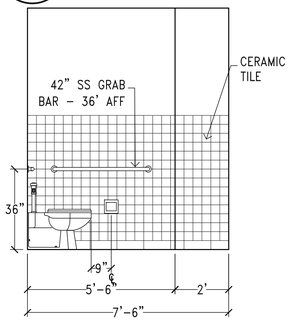
3 / A1.1 — RR #1 — RR #2 - OPPOSITE HAND

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



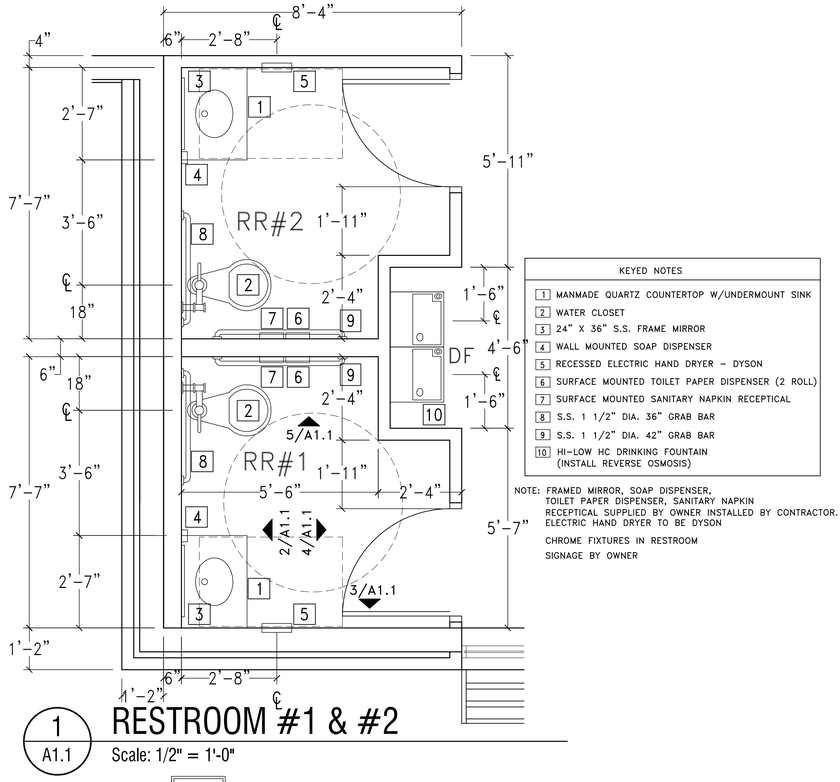
4 / A1.1 — RR #1 — RR #2 - OPPOSITE HAND

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



5 / A1.1 — RR #1 — RR #2 - OPPOSITE HAND

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



KEYED NOTES	
1	MANMADE QUARTZ COUNTERTOP W/UNDERMOUNT SINK
2	WATER CLOSET
3	24" X 36" S.S. FRAME MIRROR
4	WALL MOUNTED SOAP DISPENSER
5	RECESSED ELECTRIC HAND DRYER – DYSON
6	SURFACE MOUNTED TOILET PAPER DISPENSER (2 ROLL)
7	SURFACE MOUNTED SANITARY NAPKIN RECEPTICAL
8	S.S. 1 1/2" DIA. 36" GRAB BAR
9	S.S. 1 1/2" DIA. 42" GRAB BAR
10	HI–LOW HC DRINKING FOUNTAIN (INSTALL REVERSE OSMOSIS)

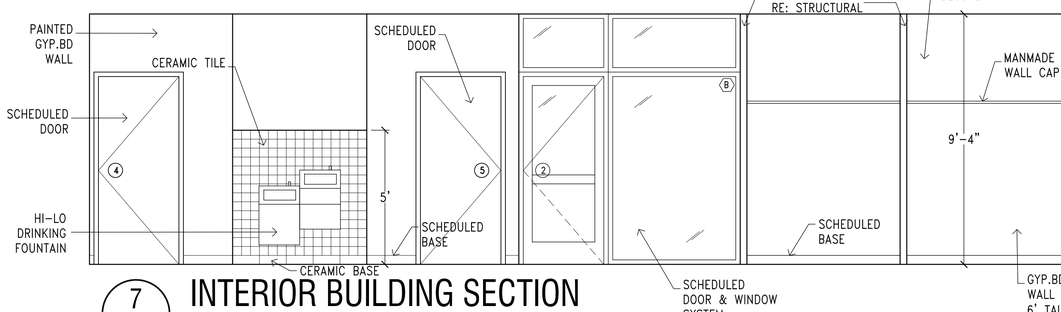
NOTE: FRAMED MIRROR, SOAP DISPENSER, TOILET PAPER DISPENSER, SANITARY NAPKIN RECEPTICAL SUPPLIED BY OWNER INSTALLED BY CONTRACTOR. ELECTRIC HAND DRYER TO BE DYSON

CHROME FIXTURES IN RESTROOM

SIGNAGE BY OWNER

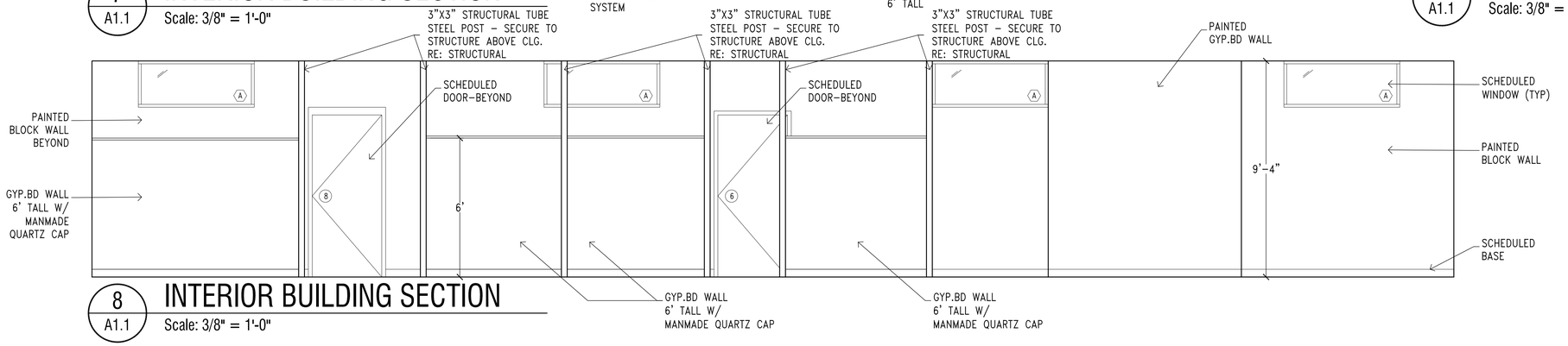
1 / A1.1 — RESTROOM #1 & #2

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



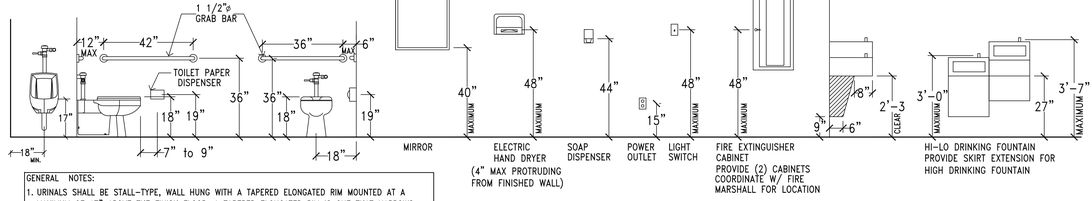
7 / A1.1 — INTERIOR BUILDING SECTION

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



8 / A1.1 — INTERIOR BUILDING SECTION

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



GENERAL NOTES:

1. URINALS SHALL BE STALL–TYPE, WALL HUNG WITH A TAPERED ELONGATED RIM MOUNTED AT A MAXIMUM OF 17" ABOVE THE FINISH FLOOR. A TAPERED ELONGATED RIM IS ONE THAT NARROWS TOWARD THE FRONT TO ALLOW A WHEELCHAIR USER TO STRADDLE THE BASIN AND WHICH EXTENDS AT LEAST 14" FROM THE VERTICAL SURFACE ON WHICH THE FIXTURE IS MOUNTED.
2. CONTROLS FOR FLUSH VALVES SHALL BE HAND OPERATED OR AUTOMATIC, AND SHALL BE MOUNTED NO MORE THAN 44" ABOVE THE FINISH FLOOR
3. CONTROLS FOR FLUSH VALVES SHALL BE MOUNTED ON THE WIDE SIDE OF TOILET AREAS.

NOTE: INSULATE ALL WALLS AND CEILING OF RESTROOMS FOR SOUND. PROVIDE BLOCKING FOR GRAB BARS.

6 / A1.1 — ACCESSIBLE MOUNTING HEIGHTS

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

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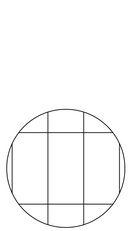
CAMERON APPRAISAL DISTRICT
NEW BUILDING ADDITION AND RENOVATION
2021 AMISTAD DRIVE, SAN BENITO, TEXAS 78586

Proposed RR Plan with RR Interior Elevations and Interior Bldg Sections

REGISTERED ARCHITECT STATE OF TEXAS

NO.	DATE	REVISIONS

DRAWN BY: cam
CHECKED BY: SCK
DATE: 08-15-18
SHEET NO. A1.1

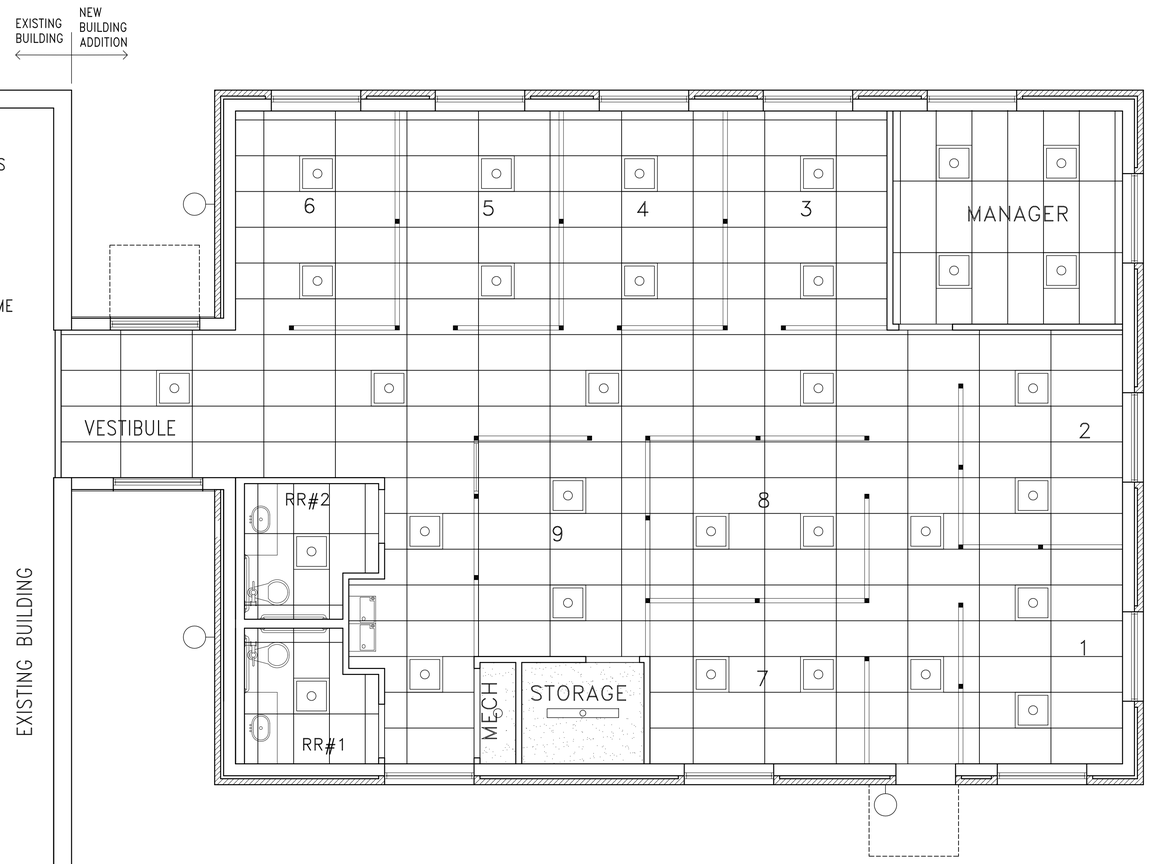


24" X 48" X 5/8" SUSPENDED CEILING TILES ON STANDARD GRID SYSTEM

- SOUND ABSORPTION CEILINGS
- BLACK CEILING GRID

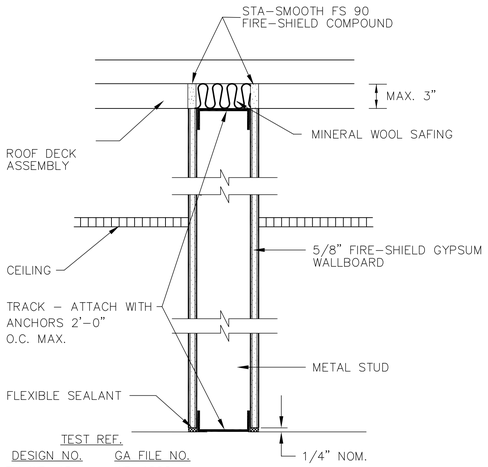
5/8" TYPE "X" FIRERATED GYP. BD. IN FRAME

NOTE: LOCATION OF LIGHT FIXTURES REFER TO LIGHTING PLAN



1 A1.2 PROPOSED REFLECTIVE CEILING PLAN

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



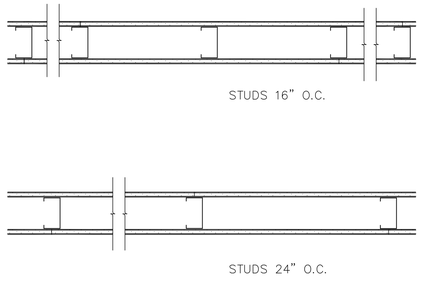
TEST REF.

DESIGN NO.	GA FILE NO.
FM WP-45	WP-1200
OSU T-1770	
OSU T-3296	WP-1340
UL U465	

WHI 495-PSV-1067 (1 HR PARTITION/DECK JUNCTURE)

6 A1.2 ONE HOUR FIRE PARTITION PERPENDICULAR TO FLUTES

Scale: N.T.S



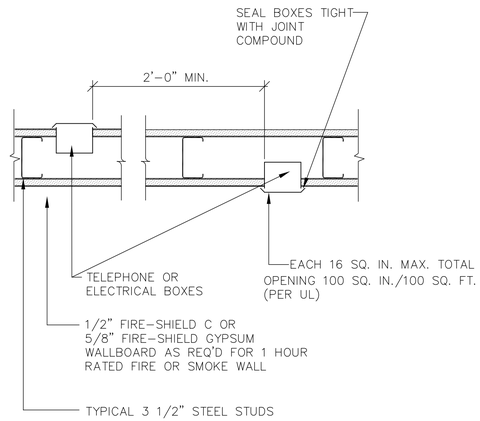
5/8" FIRE-SHIELD GYPSUM WALLBOARD APPLIED VERTICALLY TO 3 5/8" STEEL STUDS

JOINTS TO RECEIVE TAPE AND JOINT COMPOUND

TEST REF.
OSU T-1770

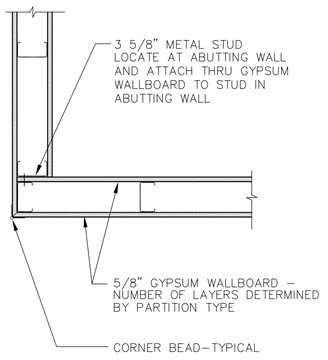
5 A1.2 JOINT REQUIREMENT ONE HOUR WALL

Scale: N.T.S



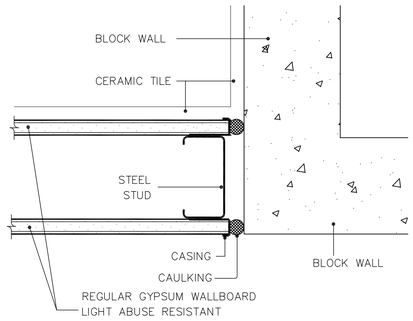
4 A1.2 ADJACENT ELECTRICAL BOXES

Scale: N.T.S



3 A1.2 TYP. CORNER DETAIL

Scale: N.T.S



2 A1.2 CHANGE IN WALL FRAMING DETAIL

Scale: N.T.S

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CAMERON APPRAISAL DISTRICT
NEW BUILDING ADDITION AND RENOVATION
2021 AMISTAD DRIVE, SAN BENITO, TEXAS 78586

Proposed Reflective Ceiling Plan and Details

REGISTERED ARCHITECT STATE OF TEXAS — 08-15-18

NO.	DATE	REVISIONS

DRAWN BY: cam
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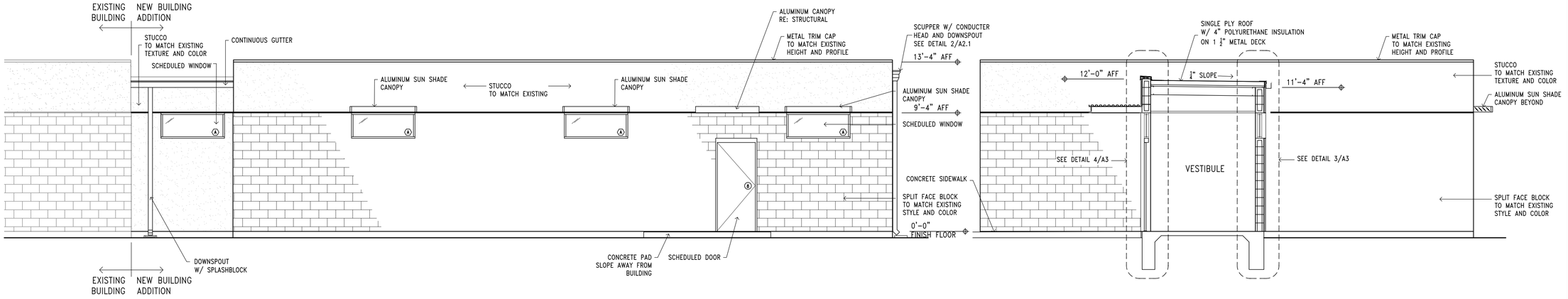
DATE: 08-15-18
SHEET NO. A1.2

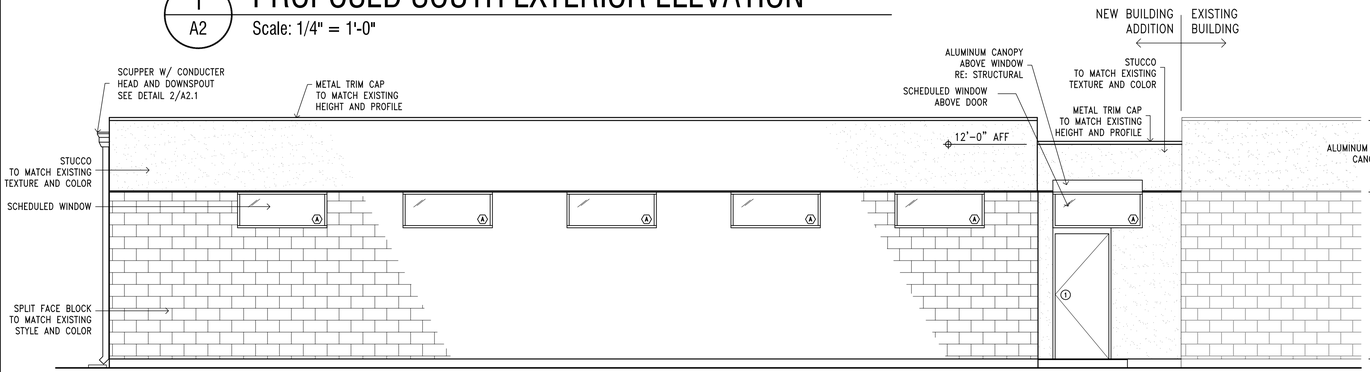


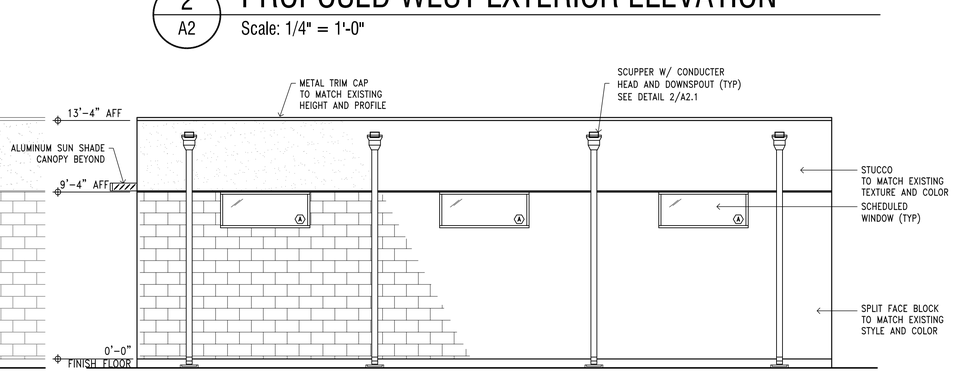
1 / A2 PROPOSED SOUTH EXTERIOR ELEVATION

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

2 / A2 PROPOSED WEST EXTERIOR ELEVATION

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





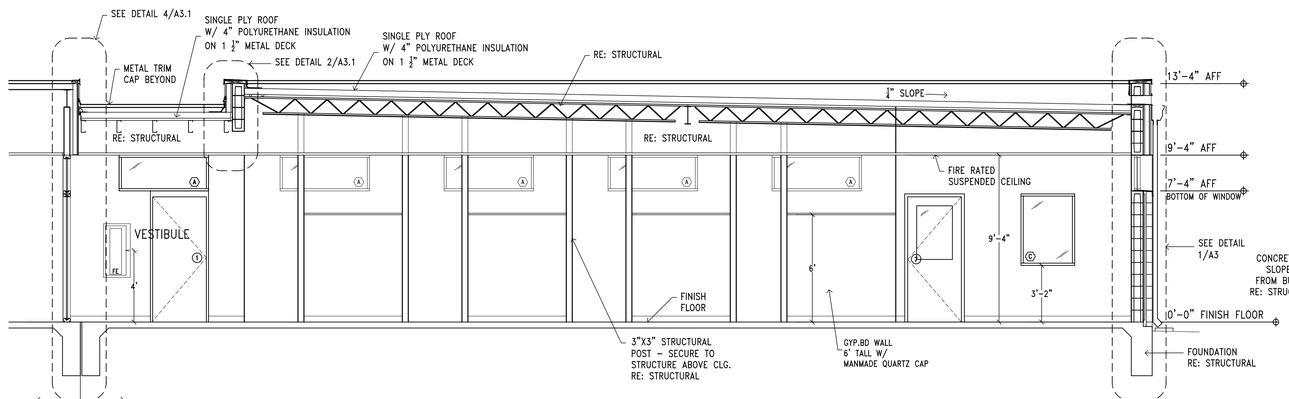
3 / A2 PROPOSED NORTH EXTERIOR ELEVATION

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

NEW BUILDING ADDITION | EXISTING BUILDING

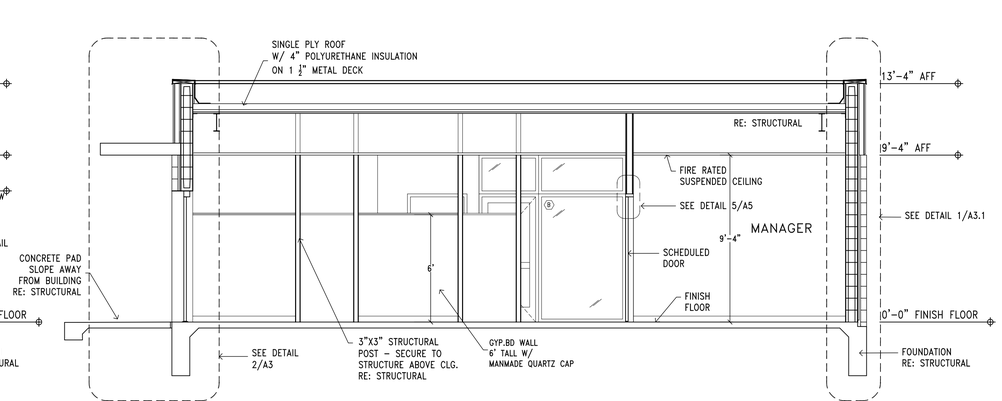
4 / A2 PROPOSED EAST EXTERIOR ELEVATION

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



5 / A2 PROPOSED BUILDING SECTION

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



6 / A2 PROPOSED BUILDING SECTION

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

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CAMERON APPRAISAL DISTRICT
NEW BUILDING ADDITION AND RENOVATION
2021 AMISTAD DRIVE, SAN BENITO, TEXAS 78586

Proposed Exterior Elevations and Building Sections

REGISTERED ARCHITECT STATE OF TEXAS

NO.	DATE	REVISIONS

DRAWN BY: cam
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DATE: 08-15-18
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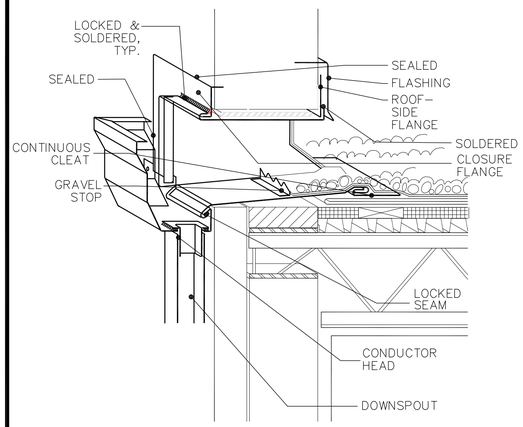
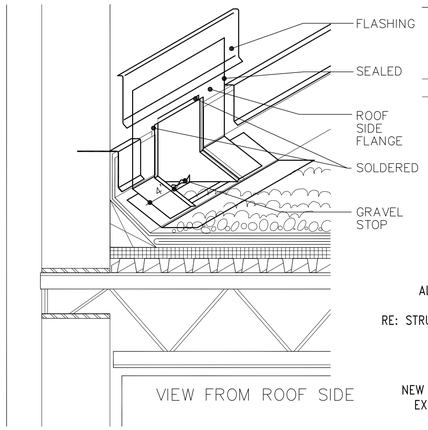
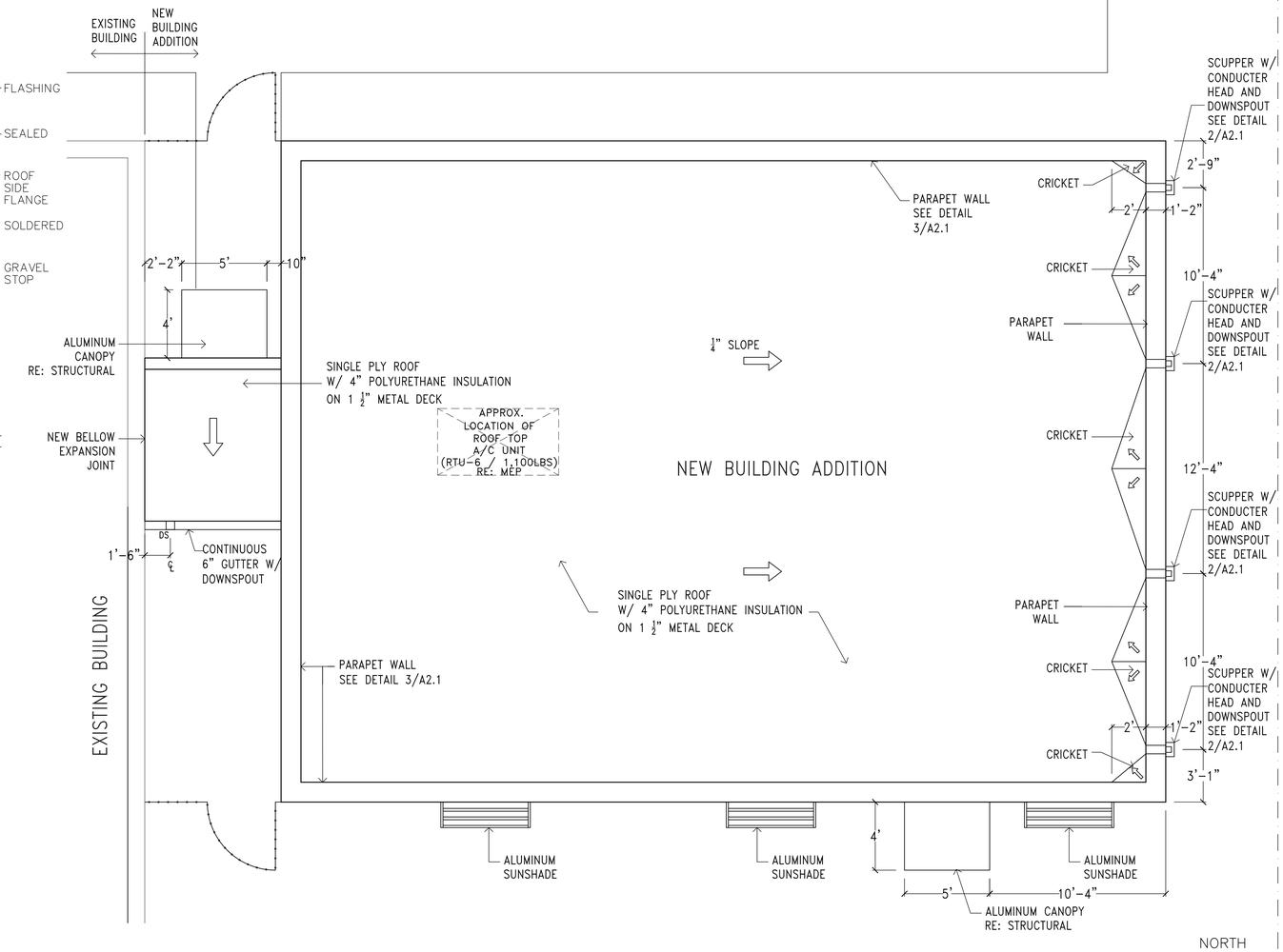




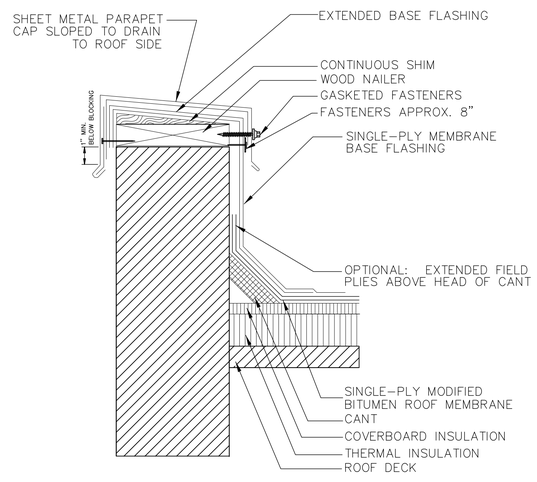
2 A2.1 THRU WALL SCUPPER DETAIL

Scale: N.T.S.



1 A2.1 PROPOSED ROOF PLAN

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



3 A2.1 PARAPET WALL DETAIL

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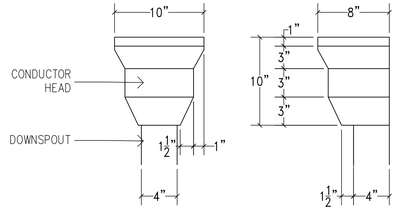

4 A2.1 CONDUCTOR HEAD DETAIL

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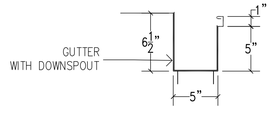

5 A2.1 GUTTER DETAIL

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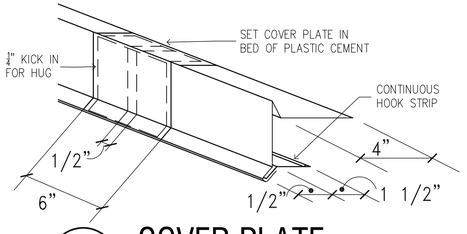

5 A2.1 COVER PLATE

Scale: N.T.S. MATCH EXISTING HEIGHT AND PROFILE

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CAMERON APPRAISAL DISTRICT
NEW BUILDING ADDITION AND RENOVATION
2021 AMISTAD DRIVE, SAN BENITO, TEXAS 78586

Proposed Roof Plan and Details

REGISTERED ARCHITECT
STANFORD C. KNOWLES
09571
STATE OF TEXAS

NO.	DATE	REVISIONS

DRAWN BY: cam
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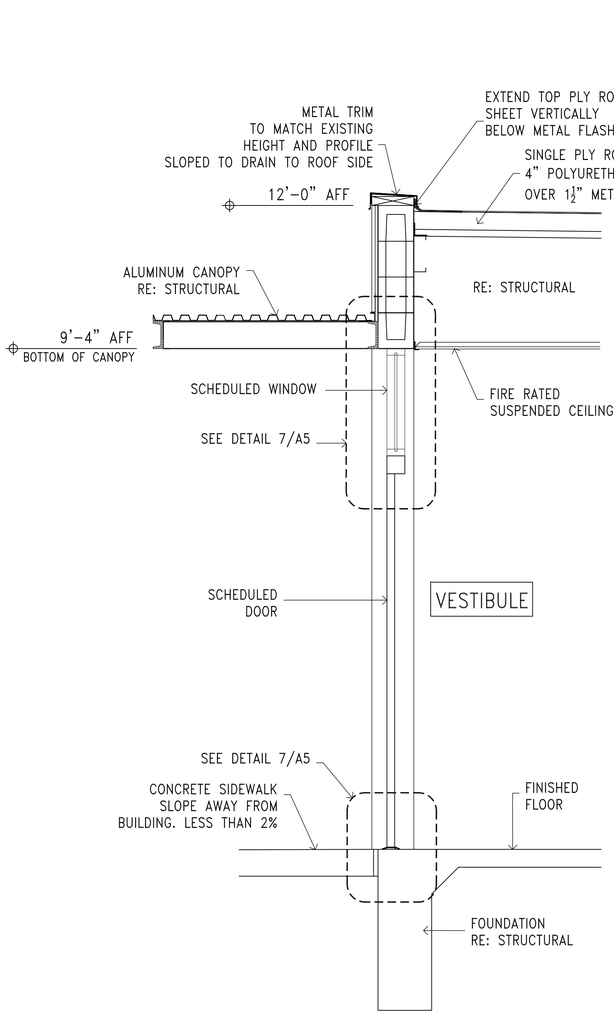
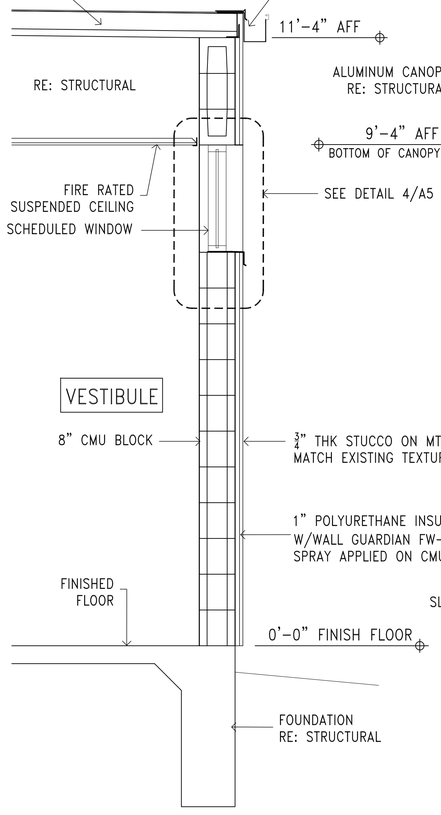
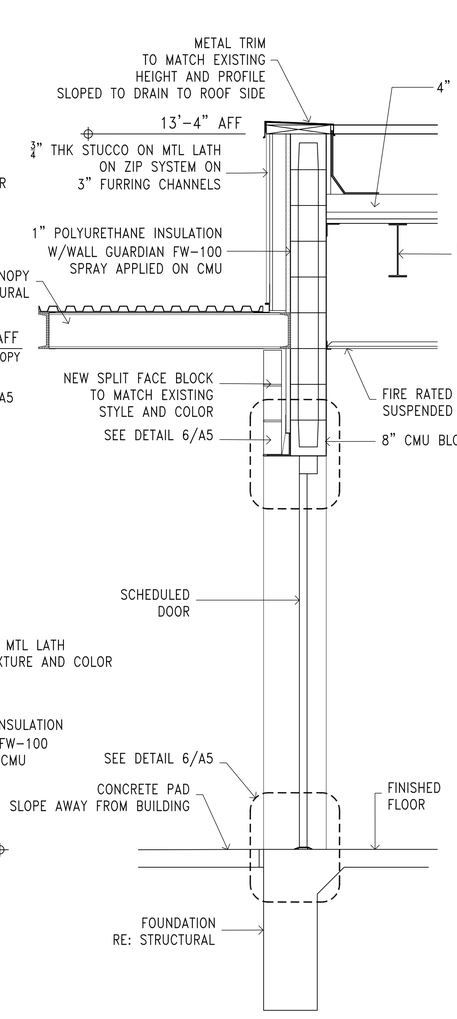
DATE: 08-15-18
SHEET NO. A2.1



4 A3 **WALL SECTION**
Scale: 3/4" = 1'-0"



3 A3 **WALL SECTION**
Scale: 3/4" = 1'-0"



2 A3 **WALL SECTION**
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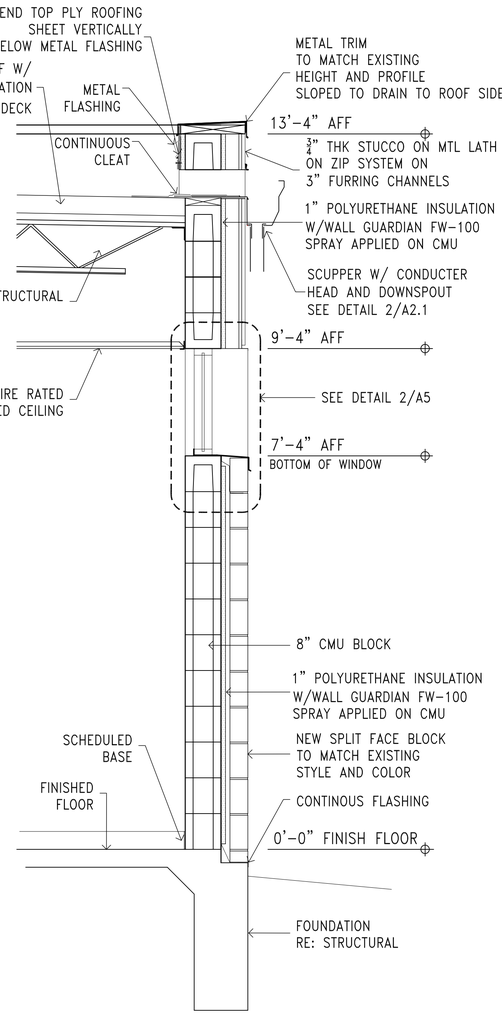

1 A3 **WALL SECTION**
Scale: 3/4" = 1'-0"

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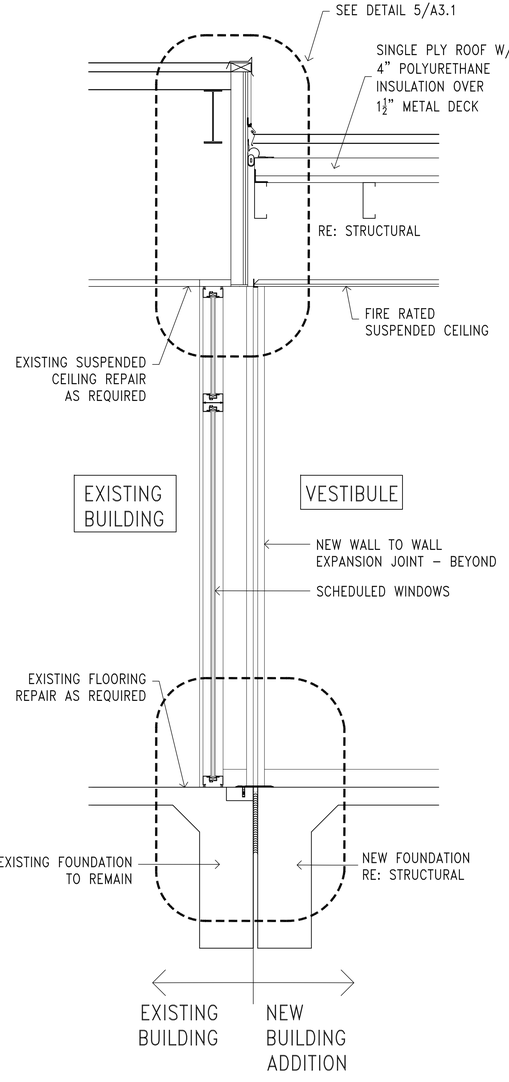
CAMERON APPRAISAL DISTRICT
NEW BUILDING ADDITION AND RENOVATION
2021 AMISTAD DRIVE, SAN BENITO, TEXAS 78586

Proposed Wall Sections

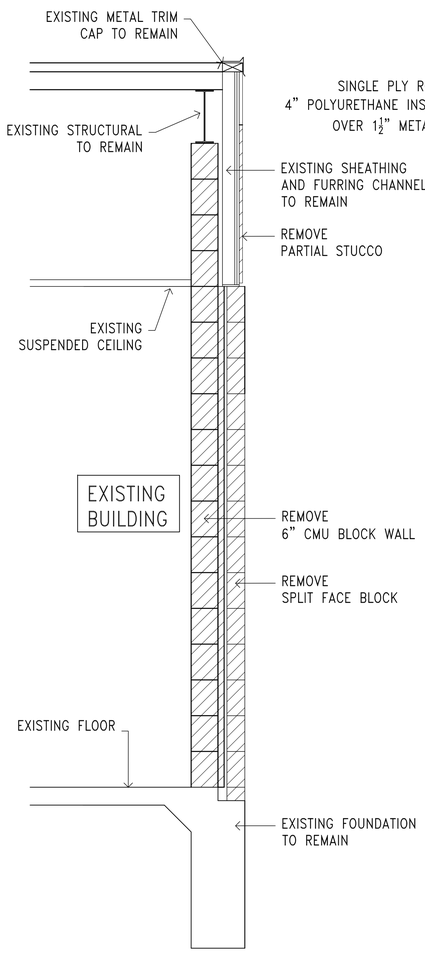
REGISTERED ARCHITECT
STATE OF TEXAS
SCOTT A. KNOWLES
08/15/18

NO.	DATE	REVISIONS

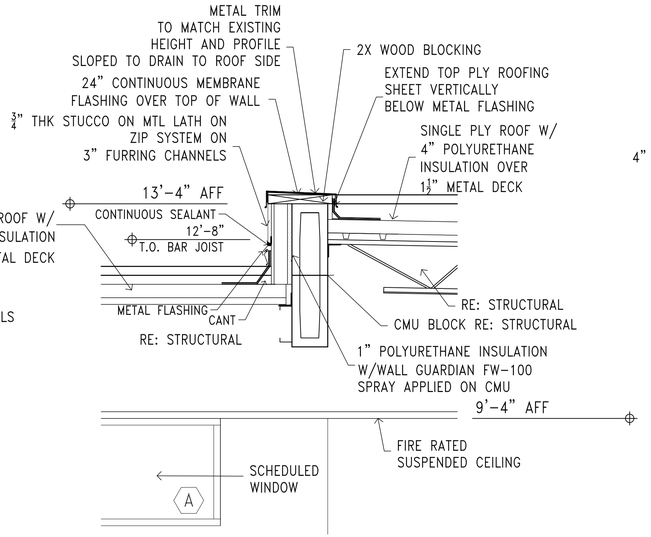
DRAWN BY: cam
CHECKED BY: SCK
DATE: 08-15-18
SHEET NO. A3



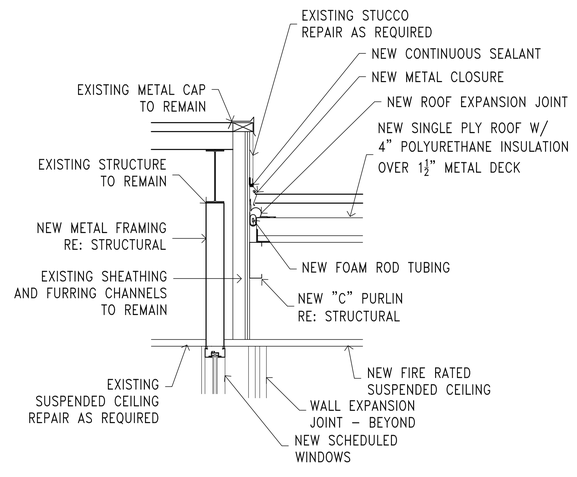
4 A3.1 **WALL SECTION**
Scale: 3/4" = 1'-0"



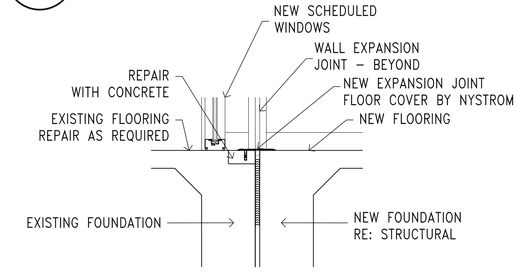
3 A3.1 **EXISTING / DEMOLITION WALL SECTION**
Scale: 3/4" = 1'-0"



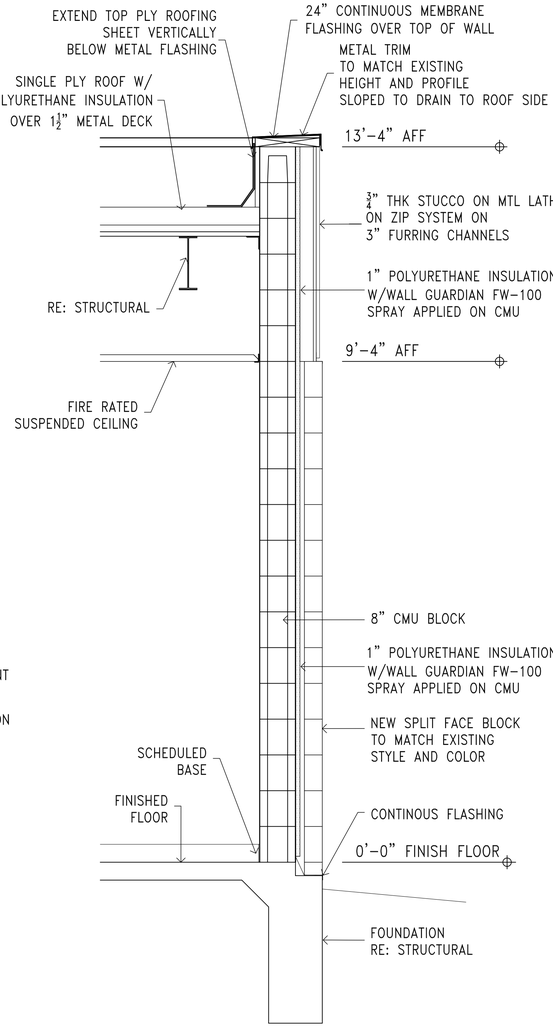
2 A3.1 **PARAPET TO ROOF DETAIL**
Scale: 3/4" = 1'-0"



5 A3.1 **EXIST. BLDG. TO NEW ROOF DETAIL**
Scale: 3/4" = 1'-0"



6 A3.1 **EXIST. BLDG TO NEW BLDG FOUNDATION DETAIL**
Scale: 3/4" = 1'-0"



1 A3.1 **WALL SECTION**
Scale: 3/4" = 1'-0"

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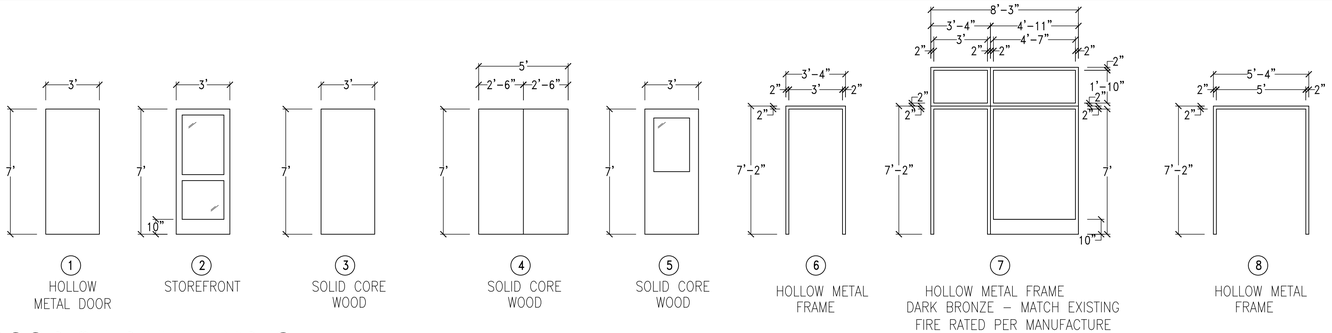
CAMERON APPRAISAL DISTRICT
NEW BUILDING ADDITION AND RENOVATION
2021 AMISTAD DRIVE, SAN BENITO, TEXAS 78586

Proposed Wall Sections and Details

REGISTERED ARCHITECT STANWORD C. KNOWLES STATE OF TEXAS

NO.	DATE	REVISIONS

DRAWN BY: cam
CHECKED BY: SCK
DATE: 08-15-18
SHEET NO. A3.1



1 HOLLOW METAL DOOR

2 STOREFRONT

3 SOLID CORE WOOD

4 SOLID CORE WOOD

5 SOLID CORE WOOD

6 HOLLOW METAL FRAME

7 HOLLOW METAL FRAME DARK BRONZE – MATCH EXISTING FIRE RATED PER MANUFACTURE

8 HOLLOW METAL FRAME

2 A4 DOOR & FRAME TYPES

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

**CHROME DOOR FRAMES STYLE TO MATCH EXISTING
**CHROME DOOR HARDWARE

DOOR SCHEDULE

DOOR NO.	DOOR SIZE (1 3/4" THK)	DOOR TYPE		FRAME TYPE		REMARKS
1	3'-0" x 7'-0"	METAL	1	HM	6	LOCKING PUSH DEVICE ON THE INTERIOR SIDE OF DOOR ONLY NO LOCKSET ON EXTERIOR SIDE OF DOOR
2	3'-0" x 7'-0"	ALUM	2	HM	7	INTERIOR – PUSH DEVICEFROM EXISTING BLDG. FOR FIRE EXIT – NO LOCKSET
3	3'-0" x 7'-0"	SC WOOD	3	HM	6	INTERIOR
4	3'-0" x 7'-0"	SC WOOD	3	HM	6	INTERIOR
5	2-2'-6" x 7'-0"	SC WOOD	4	HM	8	INTERIOR – KEYED LOCKSET
6	3'-0" x 7'-0"	SC WOOD	3	HM	6	INTERIOR – KEYED LOCKSET
7	3'-0" x 7'-0"	SC WOOD	5	HM	6	INTERIOR – HALF GLASS – KEYED LOCKSET
8	3'-0" x 7'-0"	METAL	1	HM	6	LOCKING PUSH DEVICE ON THE INTERIOR SIDE OF DOOR ONLY NO LOCKSET ON EXTERIOR SIDE OF DOOR

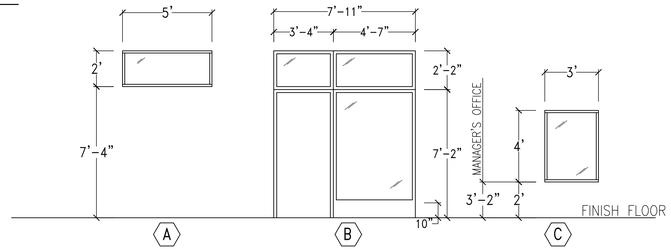
DOOR LEGEND

ALUM = ALUMINUM
SC WOOD = SOLID CORE WOOD
HM = HOLLOW METAL

EXTERIOR DOORS TO TO MEET TDI WINDSTORM REQUIREMENTS
EXTERIOR DOORS TO HAVE WEATHERSTRIP & ADA THRESHOLD
PROVIDE TEMPERED GLASS FOR ALL GLASS DOORS AND WINDOWS WITHIN 24" OF DOORS.

NOTE:

1. HANDLES, PULLS, LATCHES, LOCKS, AND OTHER OPERATING DEVICES ON ACCESSIBLE DOORS SHALL HAVE A SHAPE THAT IS EASY TO GRASP WITH ONE HAND AND DOES NOT REQUIRE TIGHT GRASPING, TIGHT PINCHING, OR TWISTING OF THE WRIST TO OPERATE. LEVER-OPERATED MECHANISMS, PUSH-TYPE MECHANISMS, AND U-SHAPED HANDLES ARE ACCEPTABLE DESIGNS. HARDWARE REQUIRED FOR ACCESSIBLE DOOR PASSAGE SHALL BE MOUNTED NO HIGHER THAN 48 INCHES ABOVE FINISHED FLOOR



A ALUMINUM FRAME TDI WINDSTORM

B HOLLOW METAL FIRE RATED GLASS

C HOLLOW METAL INTERIOR FIXED GLASS

3 A4 WINDOW TYPES

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

**COLOR AND FRAME STYLE TO MATCH EXISTING

WINDOW SCHEDULE

WIN NO.	WINDOW SIZE	QTY.	FRAME TYP.		REMARKS
A	5'-0" x 2'-0"	13	ALUMINUM		TRANSOM – TDI WINDSTORM
B	4'-11" x 7'-2"	1	ALUMINUM		INTERIOR W/ TRANSOM ABOVE FIRE RATED FRAME AND GLASS
C	3'-0" x 4'-0"	2	ALUMINUM		INTERIOR – FIXED GLASS

NOTE:
1. ALL EXTERIOR WINDOWS TO HAVE FRAME AND GLASS SYSTEM APPROVED TDI WINDSTORM INLAND 1 – IMPACT GLASS – VERIFY ATTACHMENT AND SUBMIT FOR APPROVED OF STRUCTURAL ENGINEER
2. VERIFY DIMENSIONS ON ALL WINDOWS WITH FINISH STRUCTURE AND CLADDING
3. STOREFRONT DOOR, GLASS AND FRAME BETWEEN NEW AND EXISTING BUILDING TO BE FIRE RATED PER CODE
4. ALL INTERIOR GLASS TO BE TEMPERED OR LAMINATED PER IBC CODE

**SIGNAGE BY OWNER

ROOM FINISH SCHEDULE

ROOM NAME	BASE MATL	FLOOR MATL	NORTH WALL	WEST WALL	SOUTH WALL	EAST WALL	CLG MATL	CLG HGT	REMARKS
VESTIBULE	4RB	CER	W1		W1		SAC	9'-4"	
RR #1	CER	CER	W4	W3	W3	W4	GB	9'-4"	
RR #2	CER	CER	W4	W3	W4	W4	GB	9'-4"	
MECHANICAL ROOM	4RB	CONC	W2	W2	W1	W2	GB	9'-4"	
STORAGE	4RB	CONC	W2	W2	W1	W2	GB	9'-4"	
MANAGER OFFICE	4RB	CER	W1	W2	W2	W1	SAC	9'-4"	
1	4RB	CER	W2	W2	W1	W1	SAC	9'-4"	
2	4RB	CER	W2	W2	W2	W1	SAC	9'-4"	
3	4RB	CER	W1	W2	W2	W2	SAC	9'-4"	
4	4RB	CER	W1	W2	W2	W2	SAC	9'-4"	
5	4RB	CER	W1	W2	W2	W2	SAC	9'-4"	
6	4RB	CER	W1	W1	W2	W2	SAC	9'-4"	
7	4RB	CER	W2	W2	W1	W2	SAC	9'-4"	
8	4RB	CER	W2	W2	W2	W2	SAC	9'-4"	
9	4RB	CER	W2	W2	W2	W2	SAC	9'-4"	

BASE MATERIAL

4RB = 4" RUBBER
CER = 4"X12" CERAMIC TILE TO MATCH FLOOR TILE ROLL TOP EDGE

FLOOR MATERIAL

CER = 12"X12" NON-SKID GROUP 4 COMMERCIAL ($6.00 INSTALLED ALLOWANCE)
CONC. = SEALED CONCRETE

WALL MATERIAL

W1 = PAINTED CMU BLOCK
W2 = PAINTED GYP. BD.
W3 = 4"X4" CERAMIC TILE (5' AFF) AND PAINTED CMU BLOCK ABOVE
W4 = 4"X4" CERAMIC TILE (5' AFF) AND PAINTED GYP.BD ABOVE

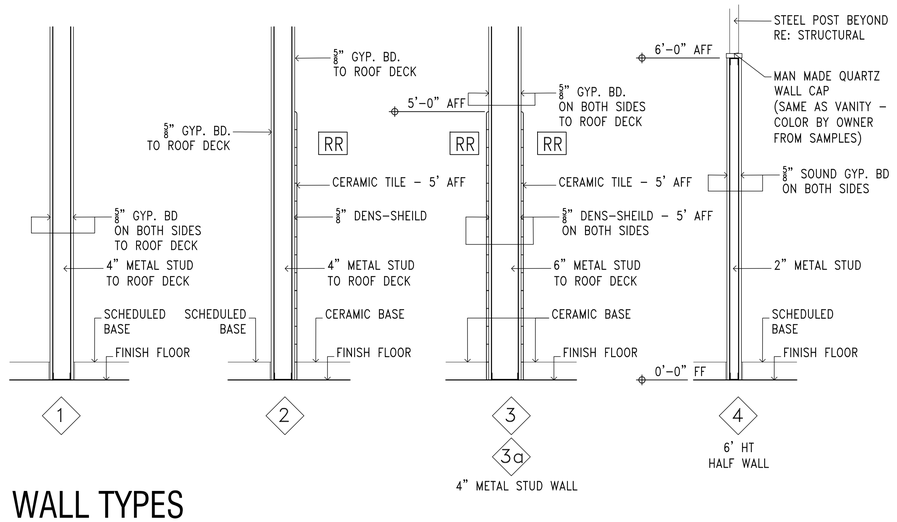
CEILING MATERIAL

SAC = 48"X24"X5/8" FIRE RATED SUSPENDED CEILING TILES ON STANDARD GRID SYSTEM
GB = 5/8" GYPSUM BOARD FIRE RATED

1 A4 SCHEDULES

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

NOTE: 20% ACCENT COLOR AND PATTERN TO BE CHOSEN BY ARCHITECT FOR CERAMIC TILE FLOOR AND WALLS



4" METAL STUD WALL

4 A4 WALL TYPES

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

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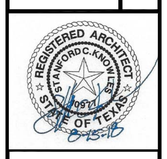
CAMERON APPRAISAL DISTRICT
NEW BUILDING ADDITION AND RENOVATION
2021 AMISTAD DRIVE, SAN BENITO, TEXAS 78586

Schedules and Door & Frame Types, Window Types and Wall Types



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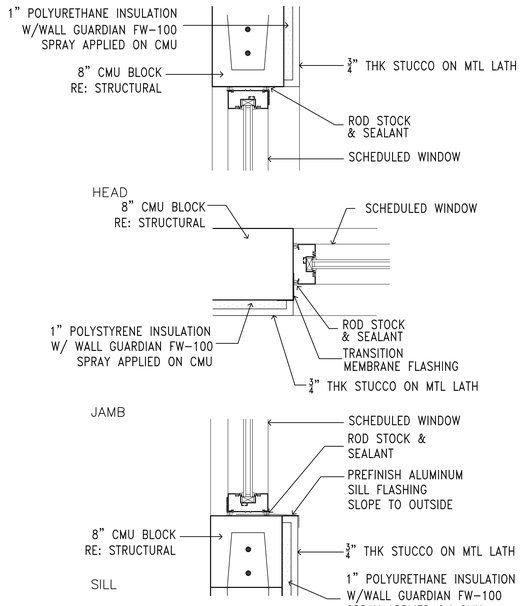
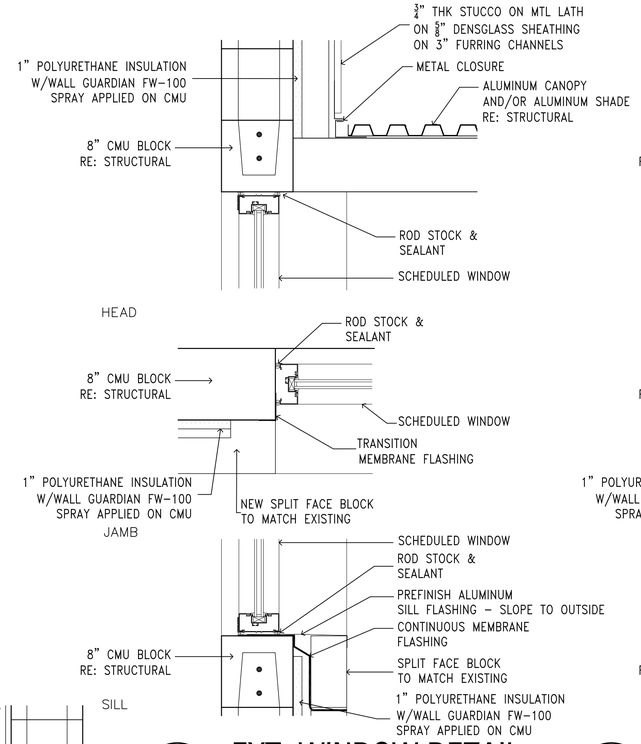


4 A5 **EXT. WINDOW DETAIL**
Scale: 3/4" = 1'-0"



3 A5 **EXT. WINDOW DETAIL**
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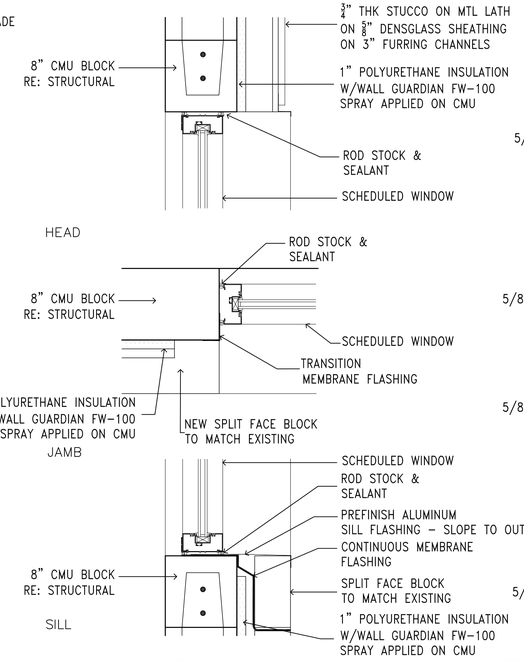
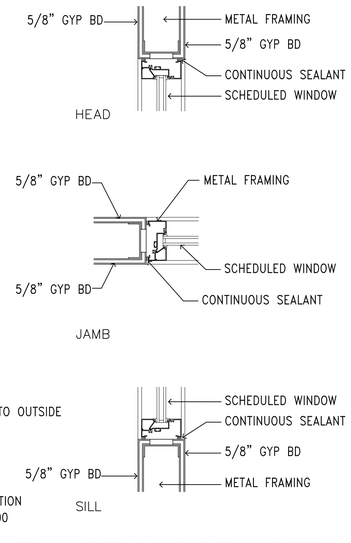
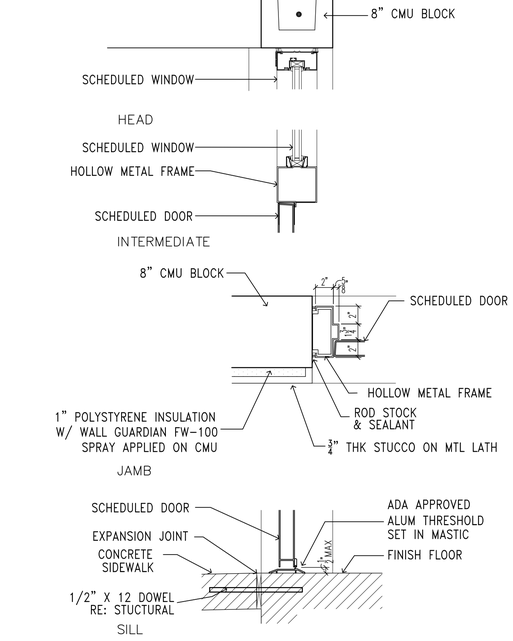


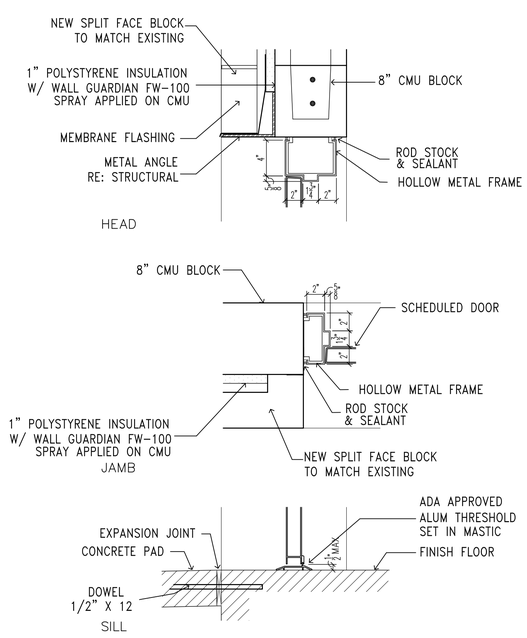
2 A5 **EXT. WINDOW DETAIL**
Scale: 3/4" = 1'-0"



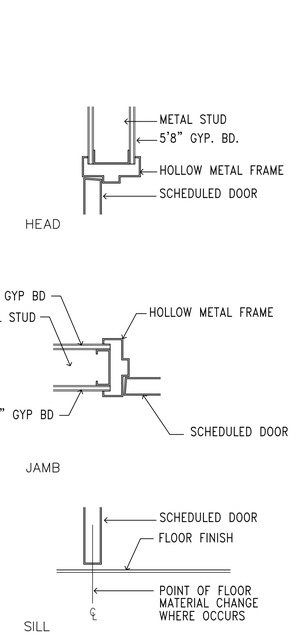
1 A5 **INT. WINDOW DETAIL**
Scale: 3/4" = 1'-0"



7 A5 **EXT. DOOR DETAIL**
Scale: 3/4" = 1'-0"



6 A5 **EXT. DOOR DETAIL**
Scale: 3/4" = 1'-0"



5 A5 **INT. DOOR DETAIL**
Scale: 3/4" = 1'-0"

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CAMERON APPRAISAL DISTRICT
NEW BUILDING ADDITION AND RENOVATION
2021 AMISTAD DRIVE, SAN BENITO, TEXAS 78586

Door and Window Details

REGISTERED ARCHITECT STANFORD C. KNOWLES STATE OF TEXAS

NO.	DATE	REVISIONS

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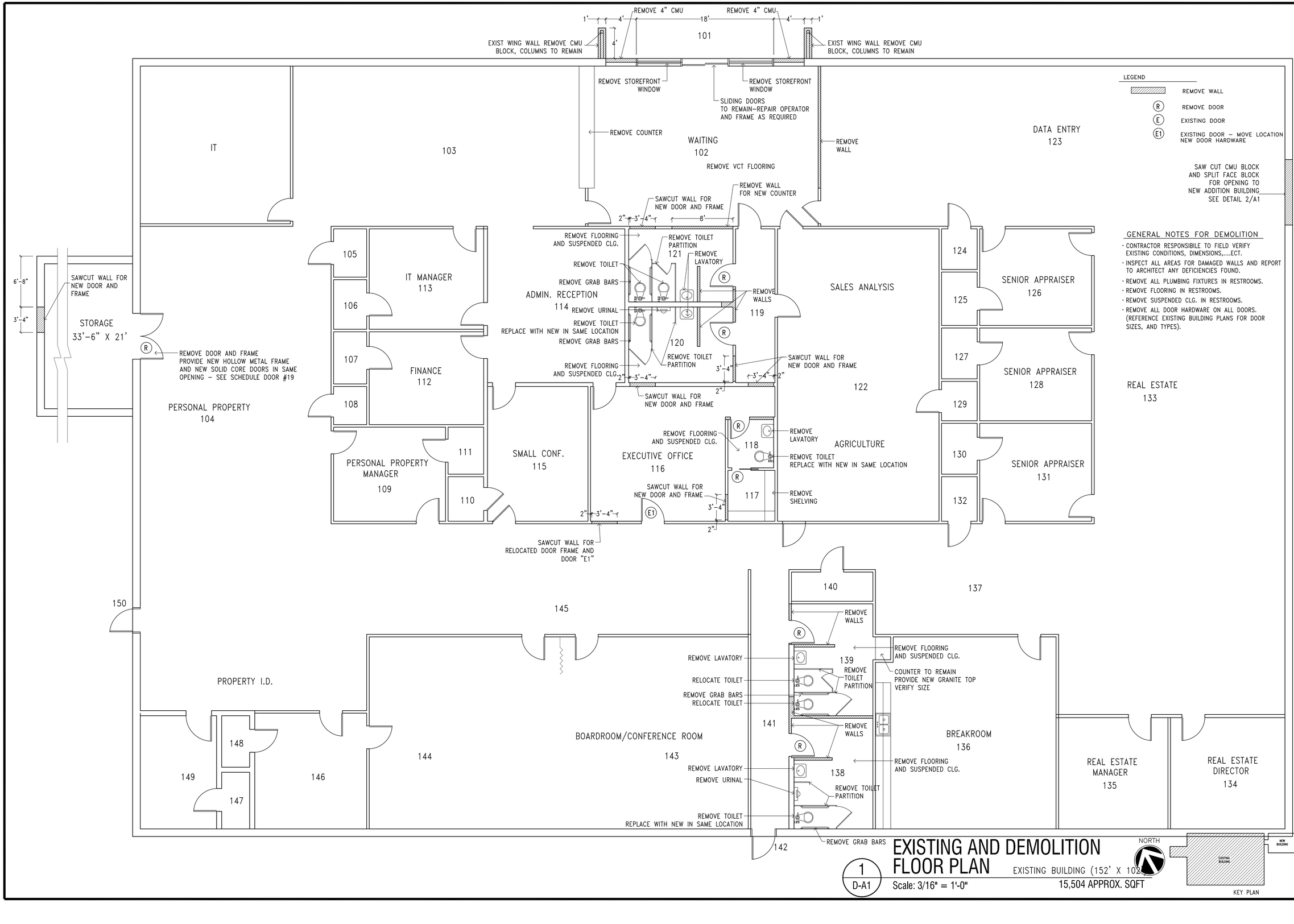
SHEET NO. A5



EXISTING AND DEMOLITION FLOOR PLAN

EXISTING BUILDING (152' X 102')

15,504 APPROX. SQFT

1 / D-A1

Scale: 3/16" = 1'-0"

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CAMERON APPRAISAL DISTRICT
NEW BUILDING ADDITION AND RENOVATION
2021 AMISTAD DRIVE, SAN BENITO, TEXAS 78586

Existing and Demolition Floor Plan of Existing Building

REGISTERED ARCHITECT STEPHEN D. C. KNOWLES STATE OF TEXAS 8-15-18

NO.	DATE	REVISIONS

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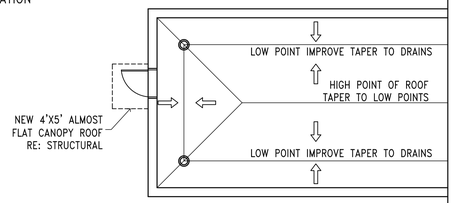
DATE: 08-15-18

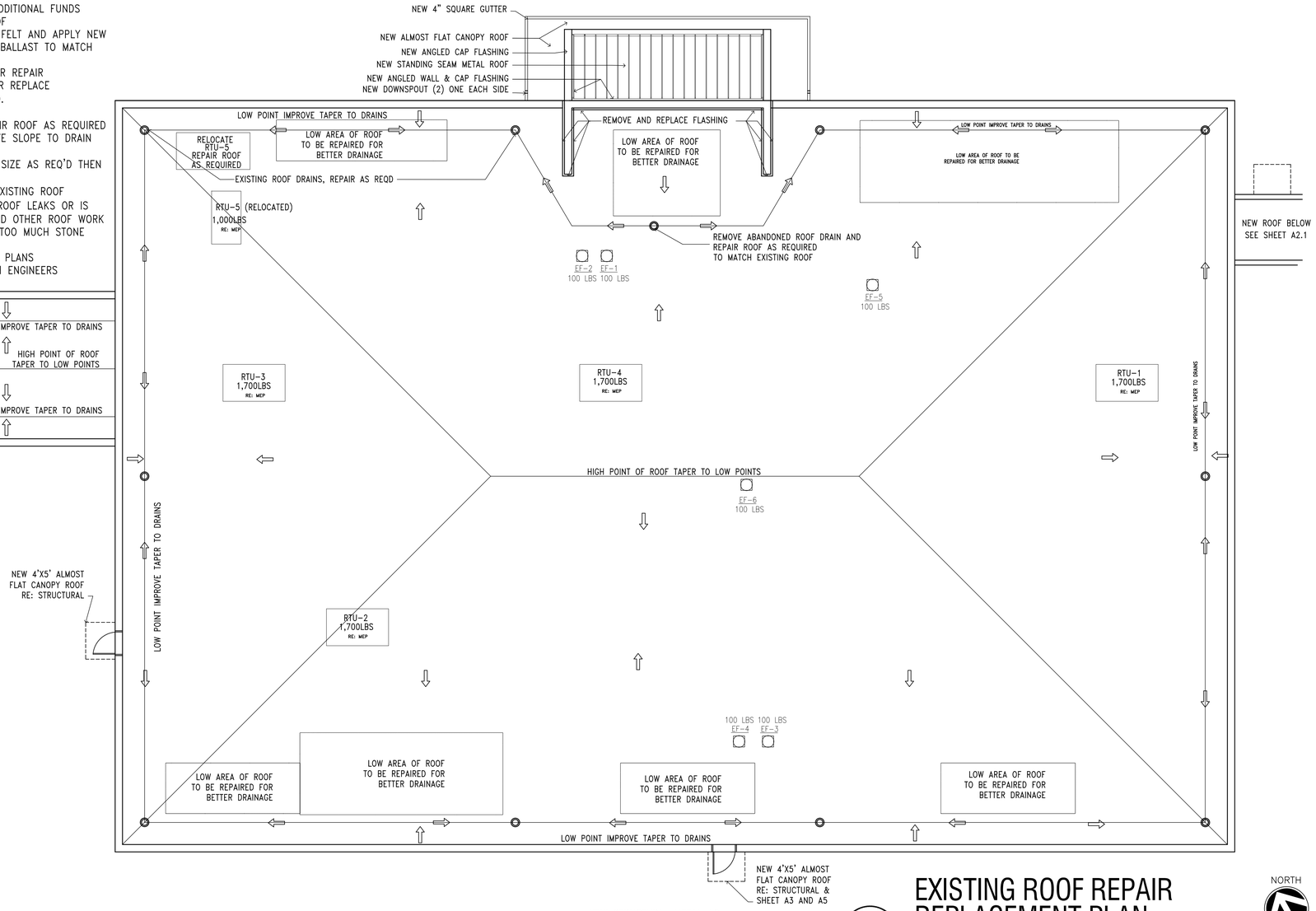
SHEET NO.

D-A1

EXISTING ROOF NOTES

1. CONTRACTOR TO INSPECT ROOF AND QUALIFY AND QUANTIFY REPAIR & REPLACEMENT FOR ROOF BEFORE BID. NO ALLOWANCE OR ADDITIONAL FUNDS WILL BE PROVIDED BEYOND BID AMOUNT FOR WORK ON ROOF
2. WHERE EVER ROOF FELTS ARE EXPOSED, REMOVE DAMAGED FELT AND APPLY NEW HOP MOPPED FELT, TAR & GRAVEL THEN ADD STONE ROOF BALLAST TO MATCH EXISTING.
3. CONTRACTOR TO REPAIR ANY AREA NOTED BY ARCHITECT FOR REPAIR
4. REBUILD OR REPLACE DAMAGED ROOF DRAINS AND CLEAN OR REPLACE DOWNSPOUT PIPES TO EXTERIOR DRAIN LOCATIONS AS REQ'D.
5. TAPER EXISTING ROOF TO EXISTING DRAINS
6. REMOVE ABANDONED DRAIN BEHIND FRONT ENTRY AND REPAIR ROOF AS REQUIRED
7. REMOVE GRAVEL THEN ADD FELT, TAR & GRAVEL TO IMPROVE SLOPE TO DRAIN AT LOW SPOTS IN ROOF
   REMOVE EXISTING ROOF CURBS AND REPLACE WITH PROPER SIZE AS REQ'D THEN PATCH ROOF TO MATCH EXISTING ROOF SYSTEM.
8. REPLACE AIR CONDITIONERS BEFORE REPLACING/REPAIRING EXISTING ROOF
9. REPAIR AND/OR REPLACE ANY AND ALL LOCATIONS WHERE ROOF LEAKS OR IS COMPROMISED FROM REPLACEMENT OF AIR CONDITIONERS AND OTHER ROOF WORK
10. MAKE SURE OVERFLOW SCUPPERS ARE OPERABLE, FREE OF TOO MUCH STONE AND NOT ABOVE ROOF EDGE FLASHING
11. REPLACE ROOF VENTS AND EXHAUST FANS PER MECHANICAL PLANS
12. ROOF REPAIRS TO MEET TDI WINDSTORM REQUIREMENTS WITH ENGINEERS CERTIFICATION



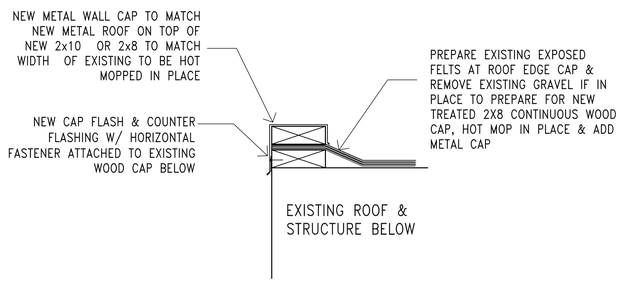


1 D-A2

EXISTING ROOF REPAIR REPLACEMENT PLAN

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

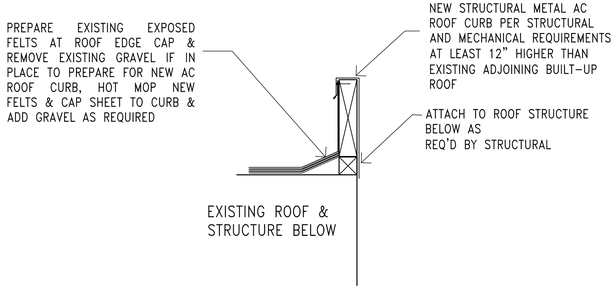
NORTH



2 D-A2

NEW ROOF CAP DETAIL FOR EXISTING BUILDING

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



3 D-A2

NEW AC UNIT ROOF CURB FOR EXISTING BUILDING

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

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CAMERON APPRAISAL DISTRICT
NEW BUILDING ADDITION AND RENOVATION
2021 AMISTAD DRIVE, SAN BENITO, TEXAS 78586

Existing Roof Repair / Replacement Plan

REGISTERED ARCHITECT STANFORD C. KNOWLES JR. STATE OF TEXAS

NO.	DATE	REVISIONS

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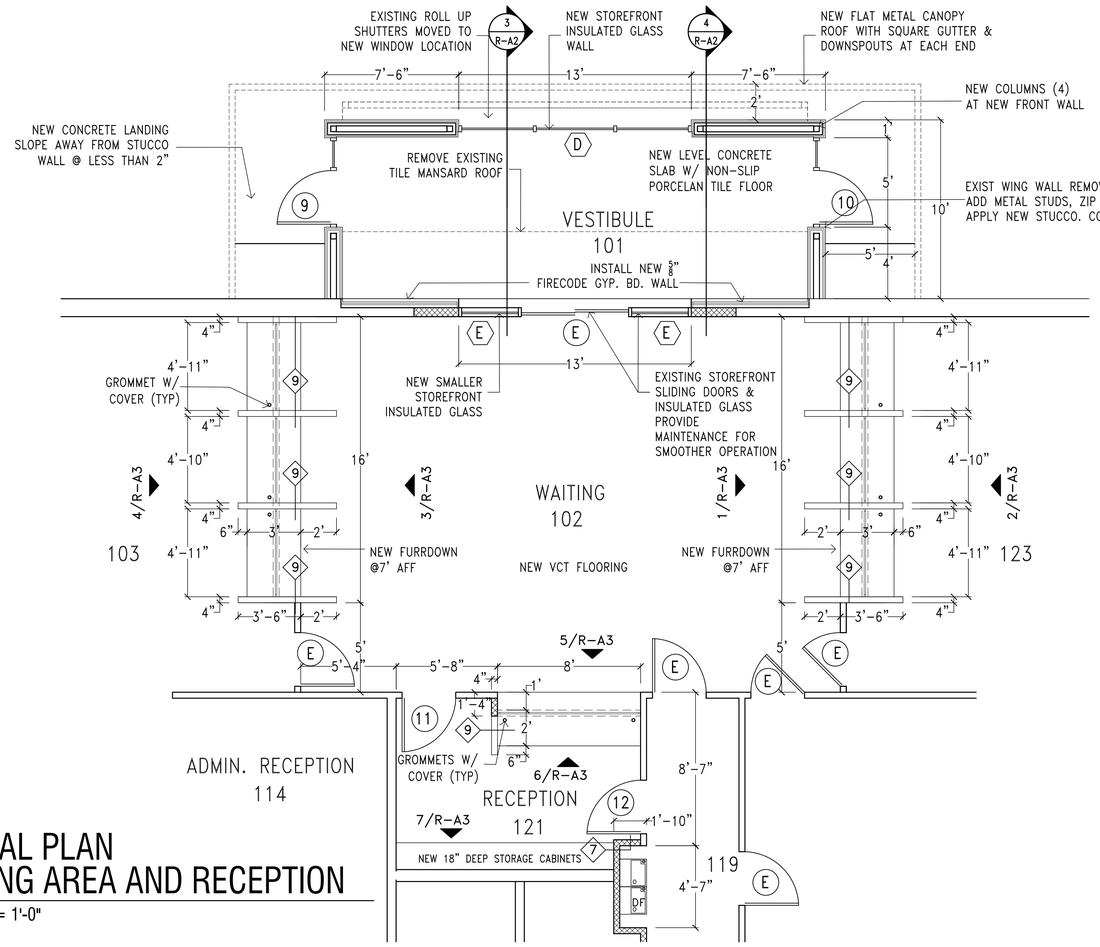
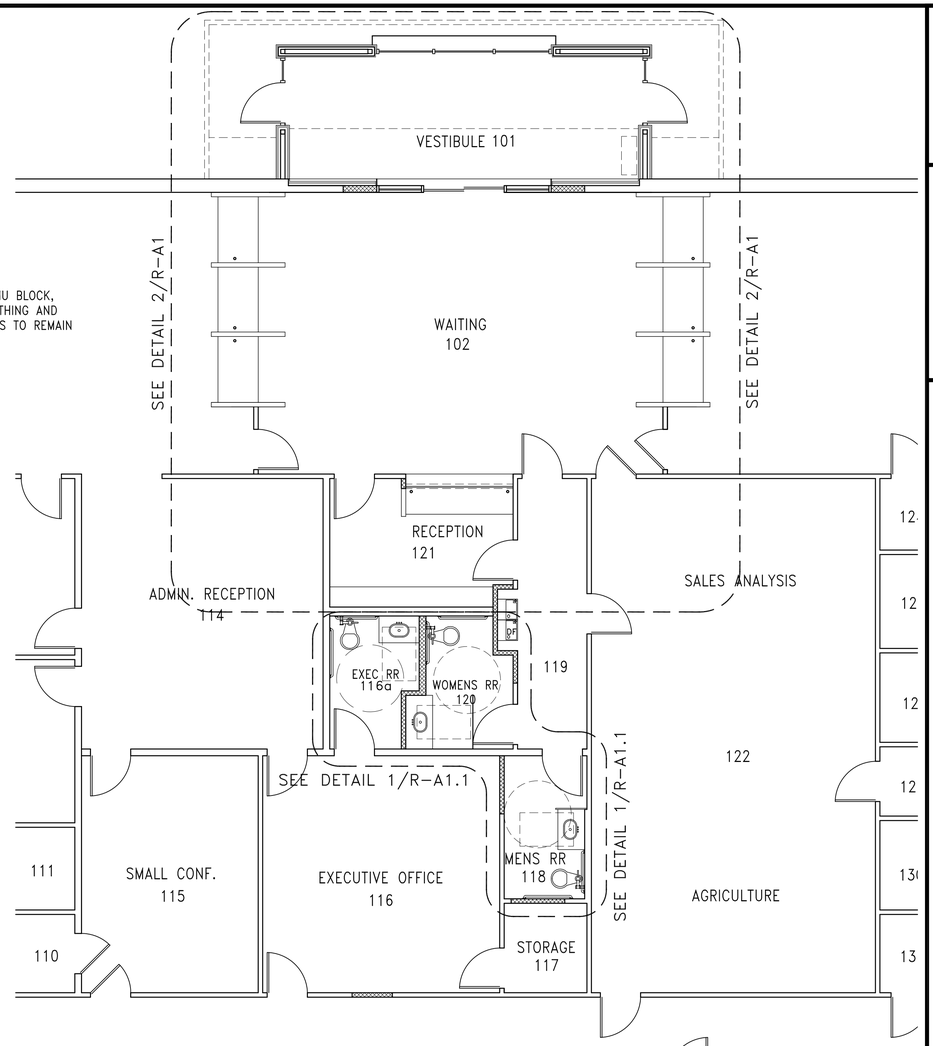
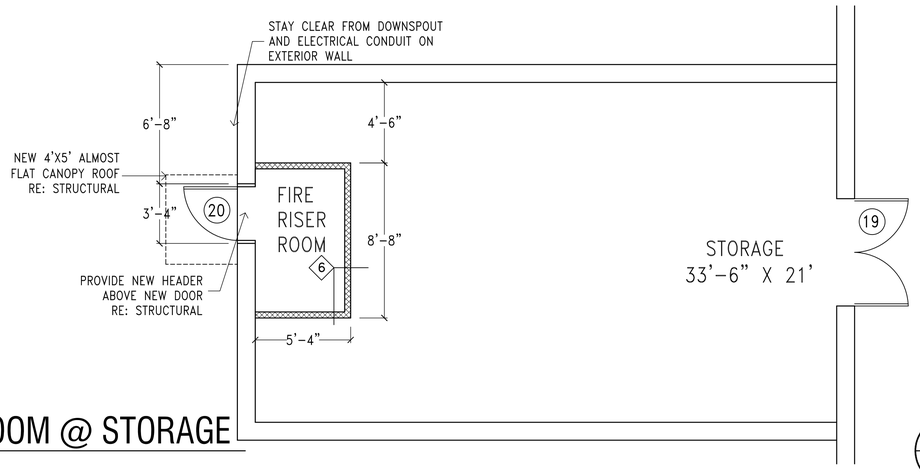


PARTIAL PLAN
WAITING AREA AND RECEPTION

2 / R-A1

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

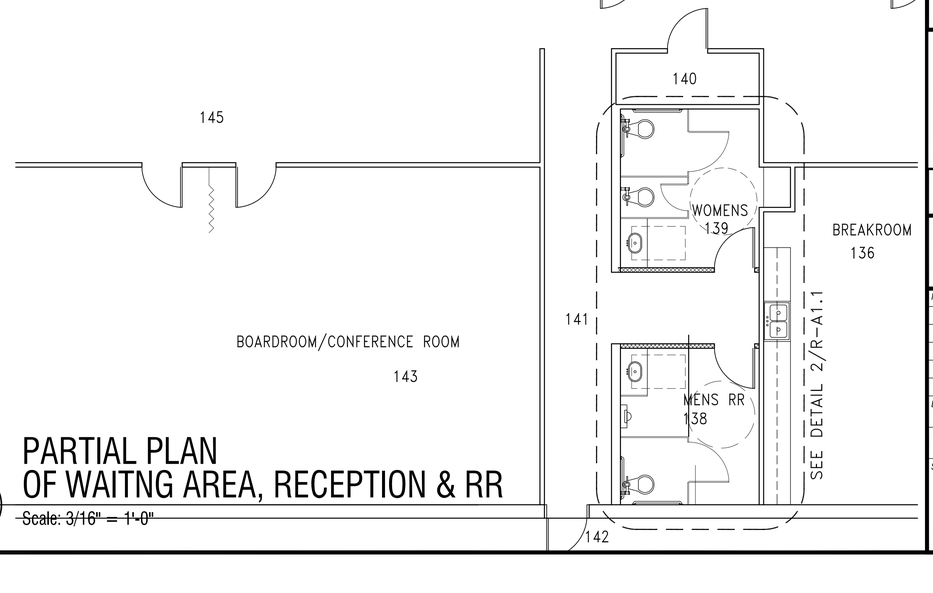




PARTIAL PLAN
OF FIRE RISER ROOM @ STORAGE

3 / R-A1

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



PARTIAL PLAN
OF WAITNG AREA, RECEPTION & RR

1 / R-A1

~~Scale: 3/16" = 1'-0"~~

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CAMERON APPRAISAL DISTRICT
NEW BUILDING ADDITION AND RENOVATION
2021 AMISTAD DRIVE, SAN BENITO, TEXAS 78586

Waiting Area, Reception and Restroom Plan to Existing Bldg.

REGISTERED ARCHITECT STANFORD C. KNOWLES STATE OF TEXAS

NO.	DATE	REVISIONS

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DATE: 08-15-18
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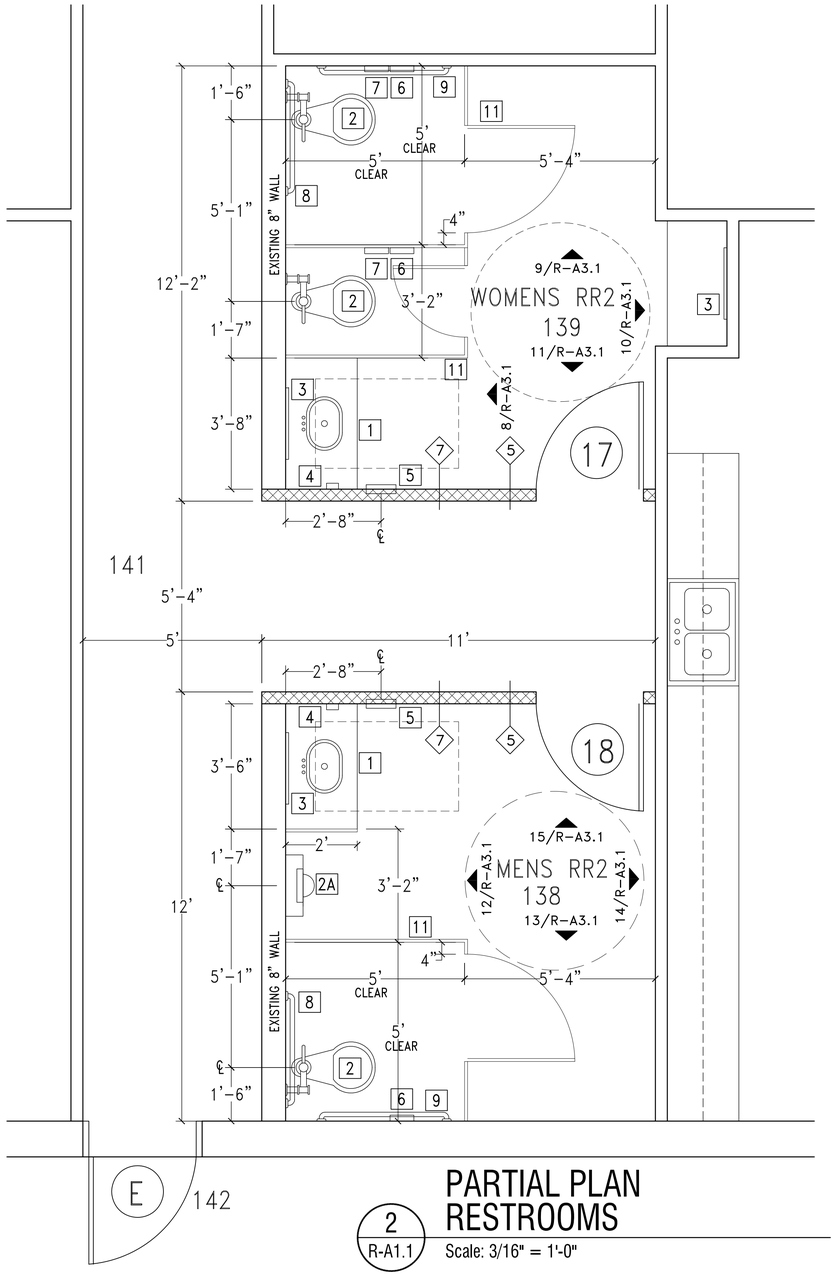
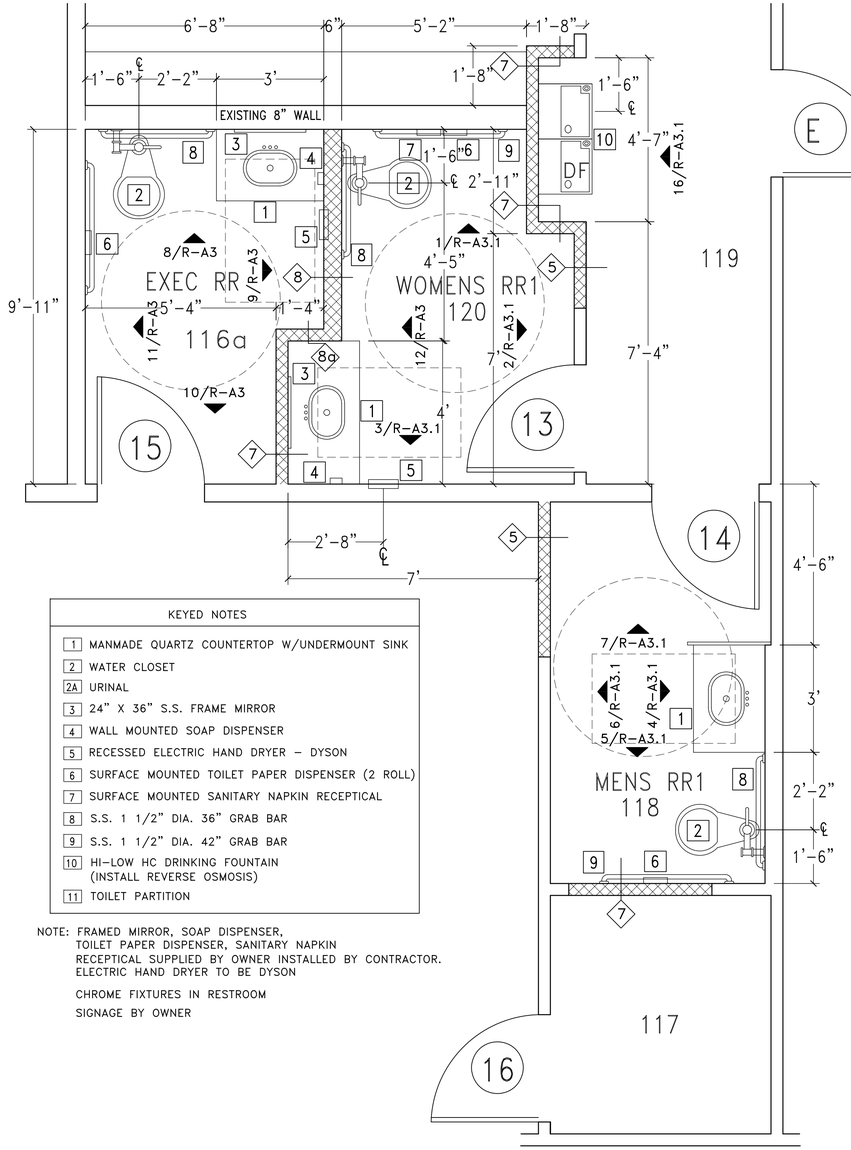


2 PARTIAL PLAN RESTROOMS

R-A1.1

Scale: 3/16" = 1'-0"



KEYED NOTES

1	MANMADE QUARTZ COUNTERTOP W/UNDERMOUNT SINK
2	WATER CLOSET
2A	URINAL
3	24" X 36" S.S. FRAME MIRROR
4	WALL MOUNTED SOAP DISPENSER
5	RECESSED ELECTRIC HAND DRYER – DYSON
6	SURFACE MOUNTED TOILET PAPER DISPENSER (2 ROLL)
7	SURFACE MOUNTED SANITARY NAPKIN RECEPTICAL
8	S.S. 1 1/2" DIA. 36" GRAB BAR
9	S.S. 1 1/2" DIA. 42" GRAB BAR
10	HI–LOW HC DRINKING FOUNTAIN (INSTALL REVERSE OSMOSIS)
11	TOILET PARTITION

NOTE: FRAMED MIRROR, SOAP DISPENSER, TOILET PAPER DISPENSER, SANITARY NAPKIN RECEPTICAL SUPPLIED BY OWNER INSTALLED BY CONTRACTOR. ELECTRIC HAND DRYER TO BE DYSON

CHROME FIXTURES IN RESTROOM

SIGNAGE BY OWNER

1 PARTIAL PLAN RESTROOMS

R-A1.1

Scale: 3/16" = 1'-0"

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CAMERON APPRAISAL DISTRICT
NEW BUILDING ADDITION AND RENOVATION
2021 AMISTAD DRIVE, SAN BENITO, TEXAS 78586

Restroom Plan Enlarged

REGISTERED ARCHITECT STANFORD C. KNOWLES STATE OF TEXAS 09/07/18

NO.	DATE	REVISIONS

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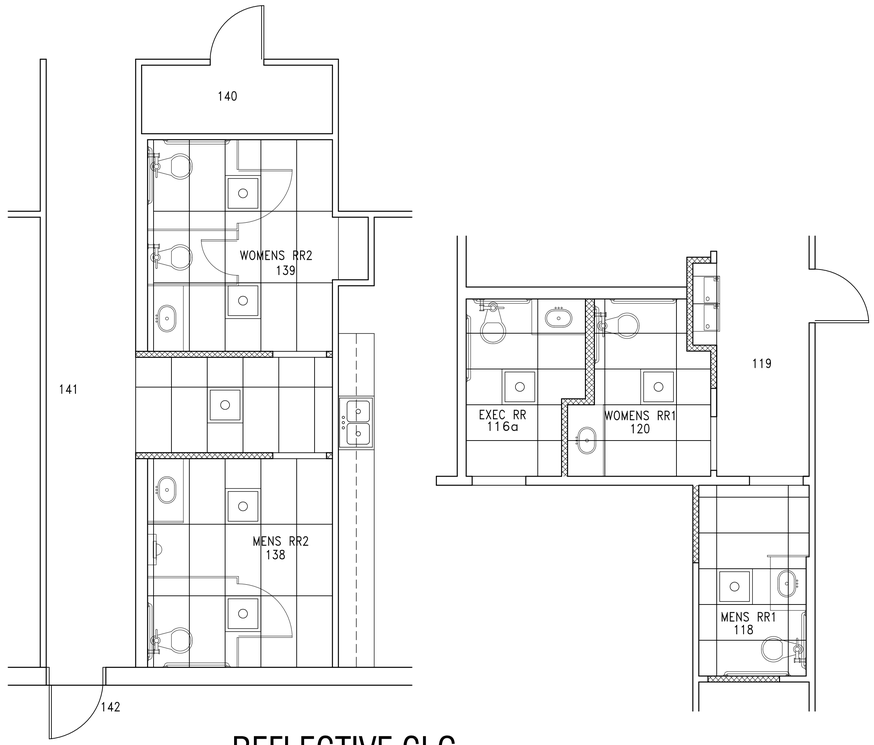
cam	SCK

DATE: 08-15-18

SHEET NO.

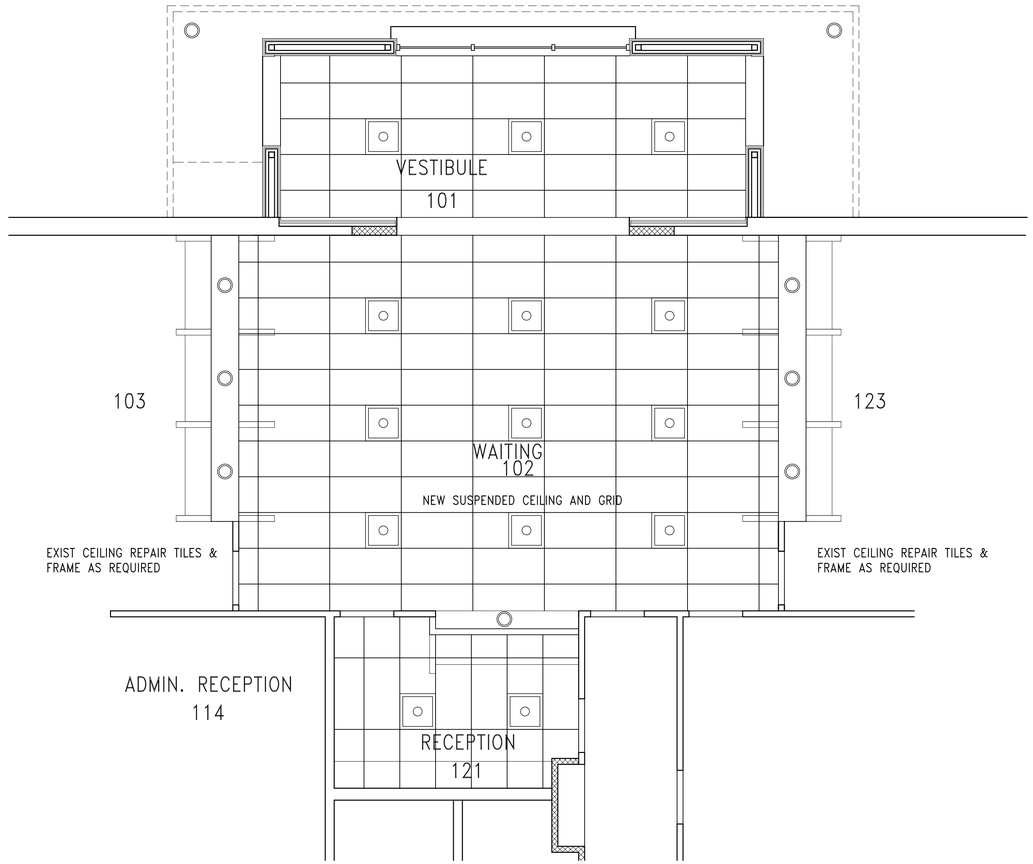
R-A1.1



1
R-A1.2

REFLECTIVE CLG. @ RESTROOMS

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



1
R-A1.2

REFLECTIVE CLG. @ WAITING AREA AND RECEPTION

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

24" X 48" X 5/8" SUSPENDED CEILING TILES ON STANDARD GRID SYSTEM

- SOUND ABSORPTION CEILINGS
- CEILING GRID TO MATCH EXISTING AS REQUIRED

NOTE: LOCATION OF LIGHT FIXTURES REFER TO LIGHTING PLAN

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CAMERON APPRAISAL DISTRICT
NEW BUILDING ADDITION AND RENOVATION
2021 AMISTAD DRIVE, SAN BENITO, TEXAS 78586

Reflective Ceiling Plan for Waiting Area, Reception and Restrooms

REGISTERED ARCHITECT STANFORD C. KNOWLES STATE OF TEXAS

NO.	DATE	REVISIONS

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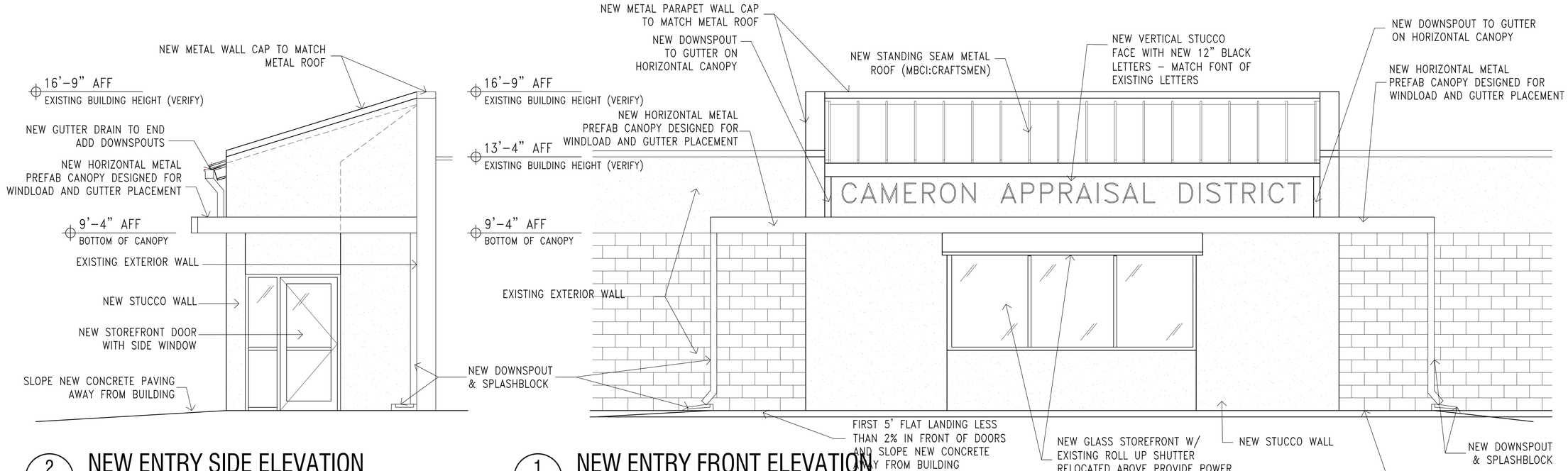
DATE: 08-15-18
SHEET NO.
R-A1.2

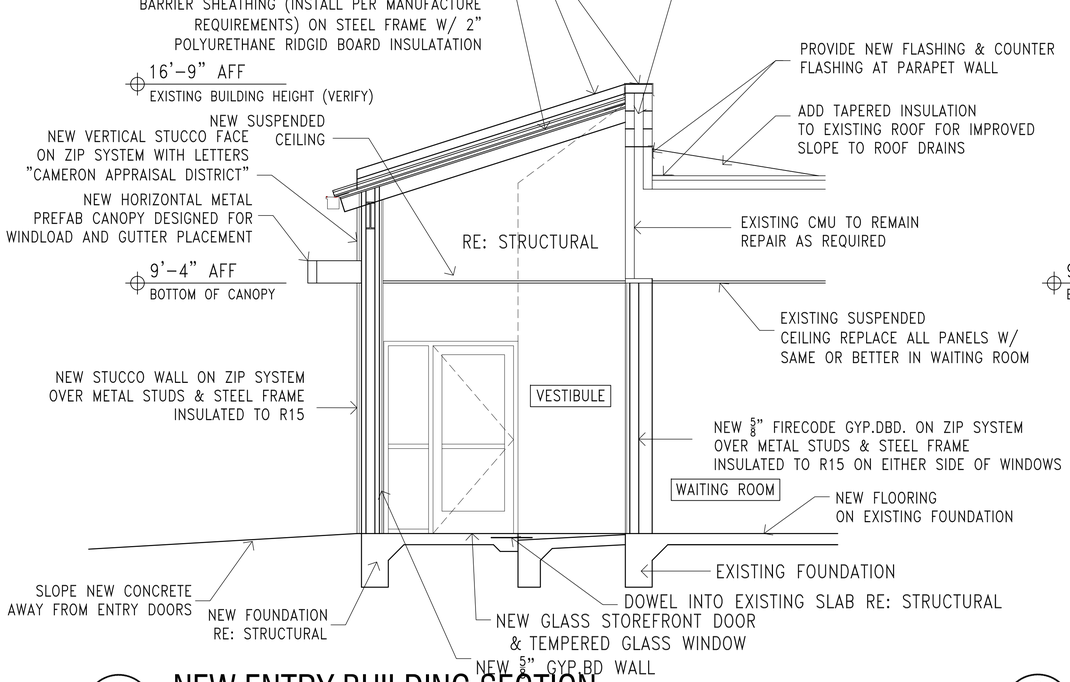


2 R-A2 NEW ENTRY SIDE ELEVATION

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

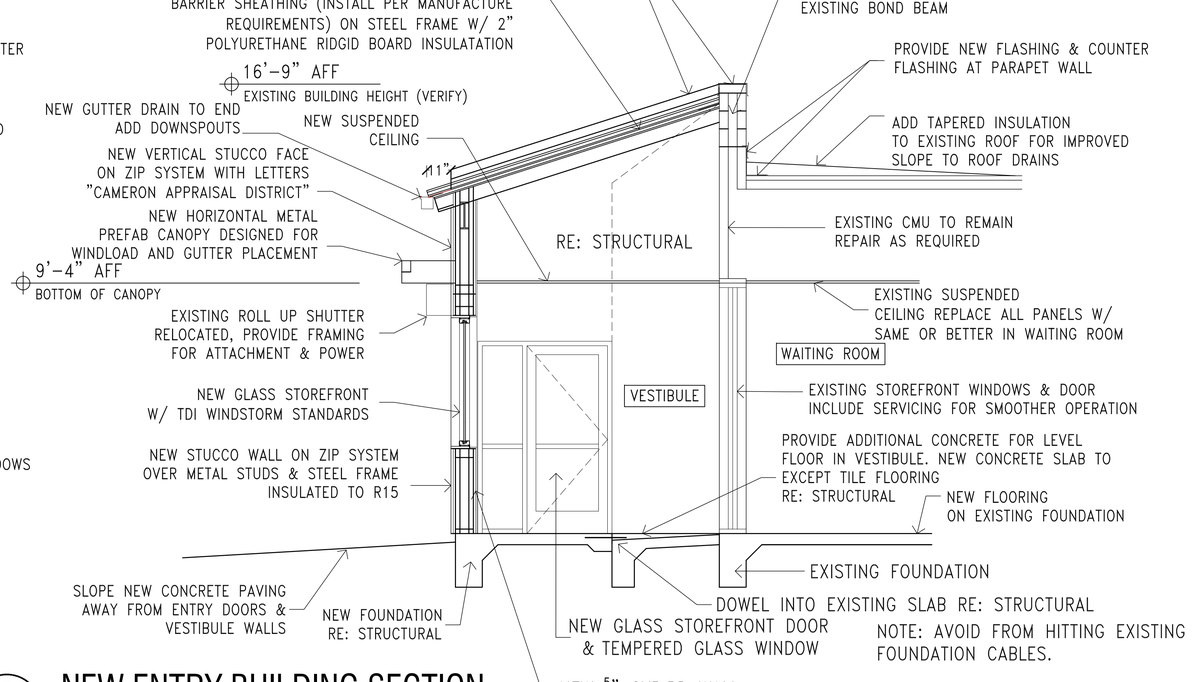
1 R-A2 NEW ENTRY FRONT ELEVATION

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



4 R-A2 NEW ENTRY BUILDING SECTION

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



3 R-A2 NEW ENTRY BUILDING SECTION

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

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CAMERON APPRAISAL DISTRICT
NEW BUILDING ADDITION AND RENOVATION
2021 AMISTAD DRIVE, SAN BENITO, TEXAS 78586

Exterior Elevations and Section Details for Existing Building

REGISTERED ARCHITECT STANFORD C. KNOWLTON JR. STATE OF TEXAS
08-15-18

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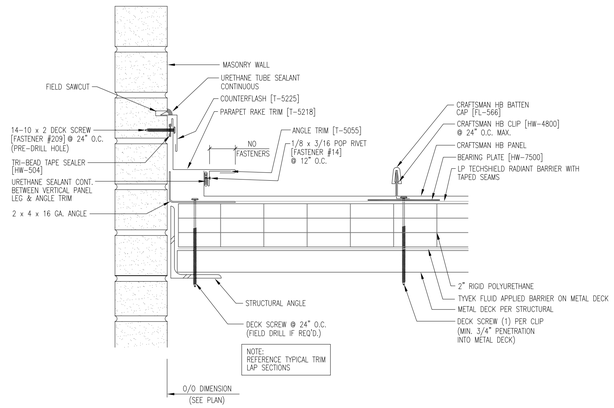
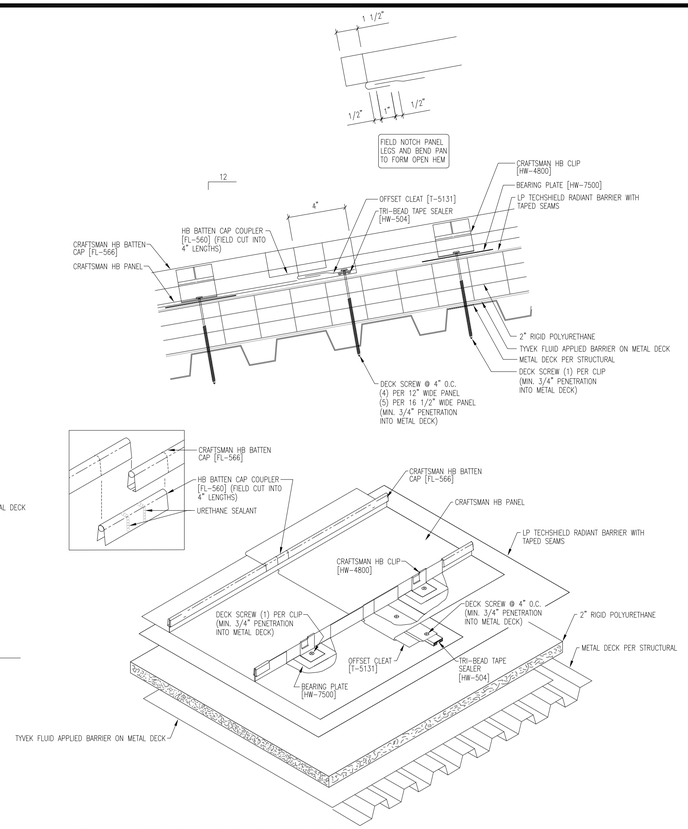
DRAWN BY: cam
CHECKED BY: SCK
DATE: 08-15-18
SHEET NO. R-A2



3 R-A2.1

PARAPET RAKE DETAIL

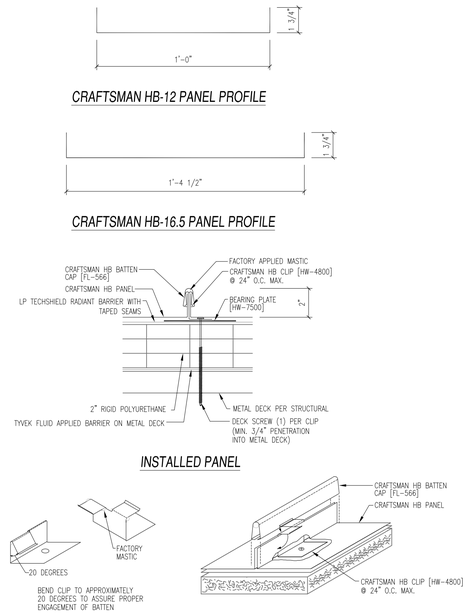
Scale: NTS



2 R-A2.1

ENDLAP DETAIL

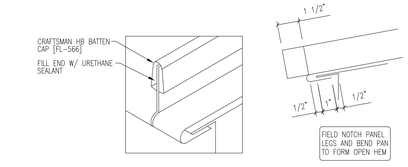
Scale: NTS



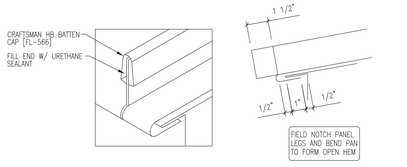
1 R-A2.1

PANEL PROFILE AND INSTALLATION

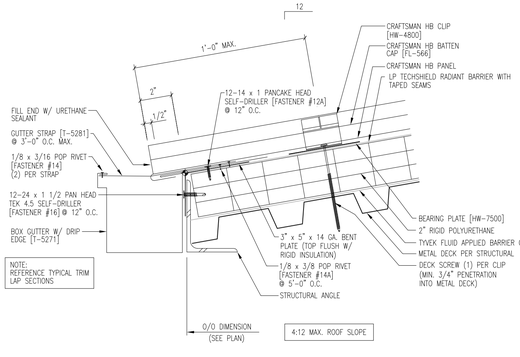
Scale: NTS



PANEL ENGAGEMENT DETAIL



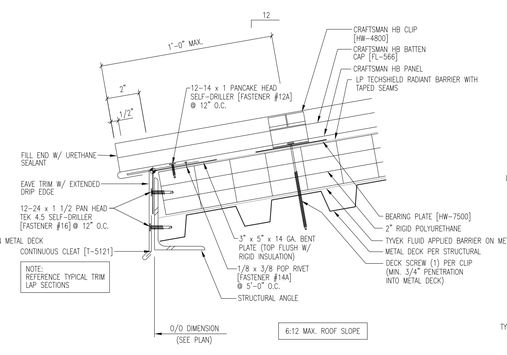
PANEL ENGAGEMENT DETAIL



6 R-A2.1

EAVE DETAIL WITH GUTTER

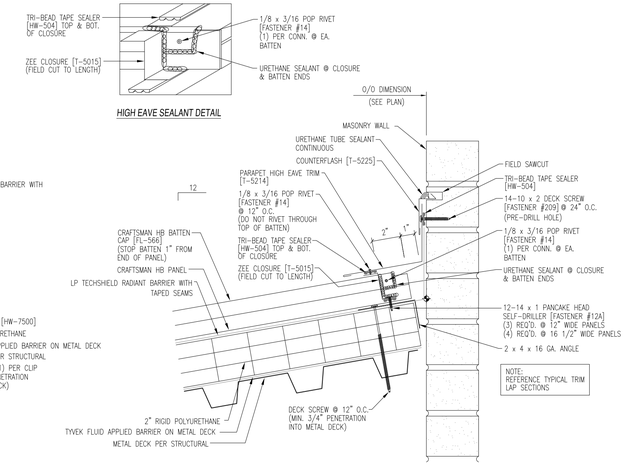
Scale: NTS



5 R-A2.1

EAVE DETAIL

Scale: NTS



4 R-A2.1

PARAPET HIGH EAVE DETAIL

Scale: NTS

K+ architect
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Los Fresnos, TX 78566
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Fax: (956) 233-2219

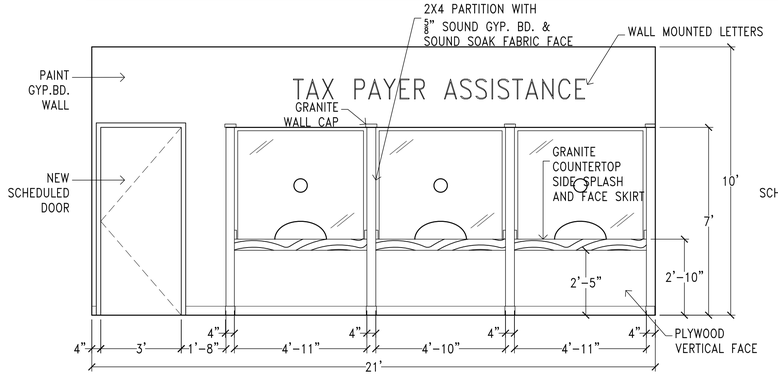
CAMERON APPRAISAL DISTRICT
NEW BUILDING ADDITION AND RENOVATION
2021 AMISTAD DRIVE, SAN BENITO, TEXAS 78586

MBCI Craftmen Roof Details

REGISTERED ARCHITECT
STATE OF TEXAS

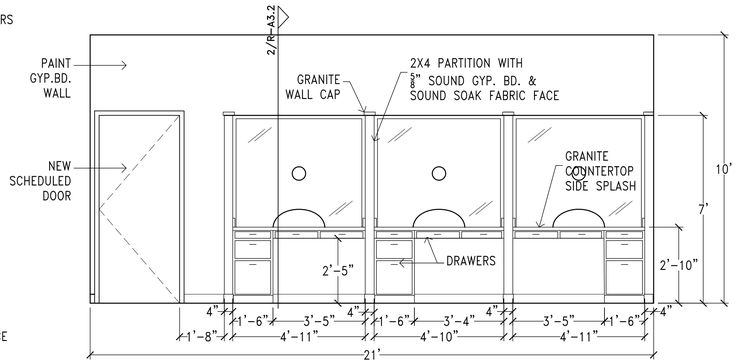
NO.	DATE	REVISIONS

DRAWN BY: cam
CHECKED BY: SCK
DATE: 08-15-18
SHEET NO. R-A2.1



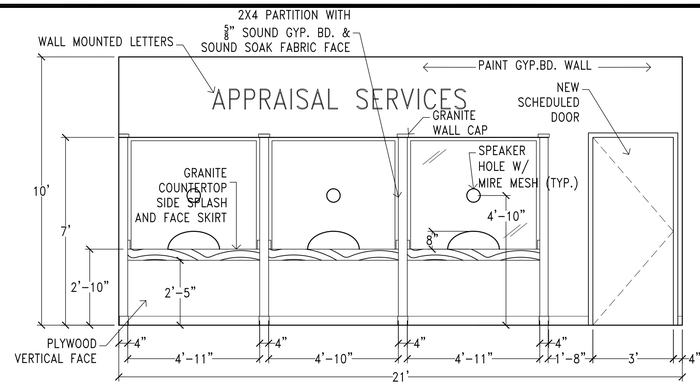
3 R-A3 TAX PAYER SERVICE DESK WAITING AREA SIDE

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



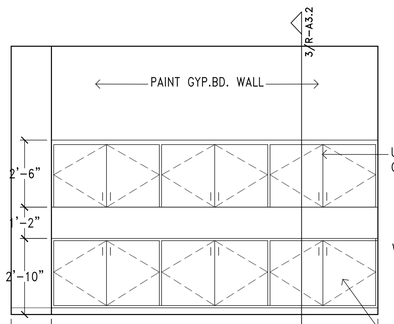
2 R-A3 APPRAISAL SERVICE DESK EMPLOYEE SIDE

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



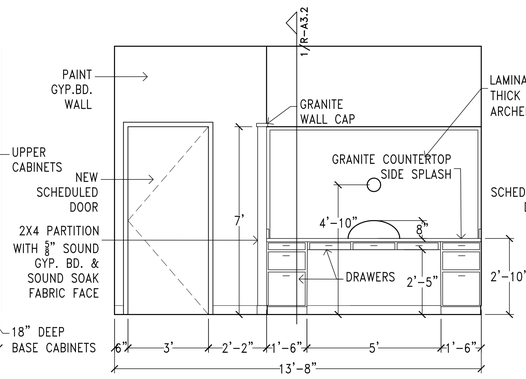
1 R-A3 APPRAISAL SERVICE DESK WAITING AREA SIDE

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



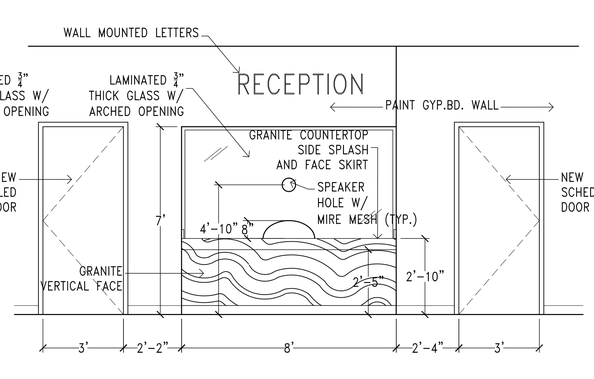
7 R-A3 STORAGE CABINET @ RECEPTION

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



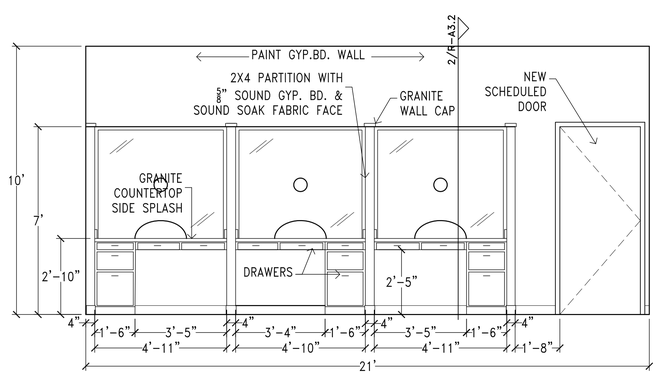
6 R-A3 RECEPTION COUNTER RECEPTION SIDE

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



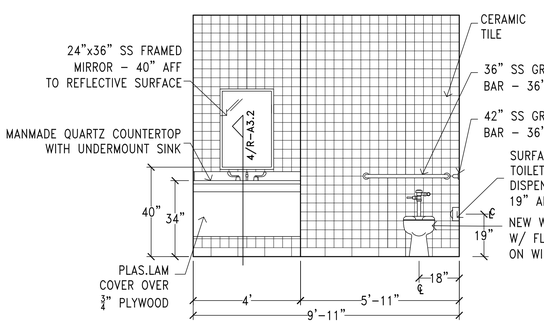
5 R-A3 RECEPTION COUNTER WAITING AREA SIDE

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



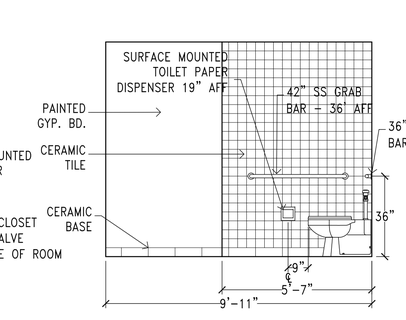
4 R-A3 TAX PAYER SERVICE DESK EMPLOYEE SIDE

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



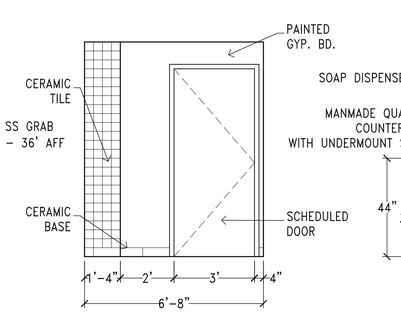
12 R-A3 WOMENS RR1

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



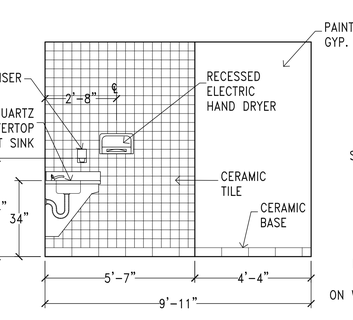
11 R-A3 EXECUTIVE RR

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



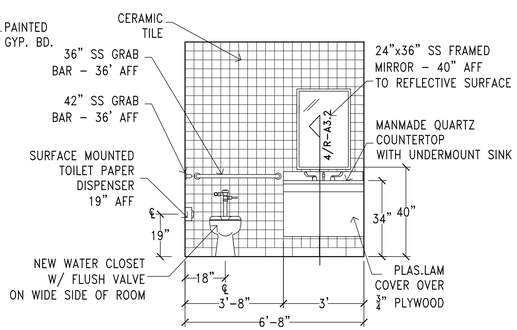
10 R-A3 EXECUTIVE RR

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



9 R-A3 EXECUTIVE RR

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



8 R-A3 EXECUTIVE RR

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

NOTE: INSULATE ALL WALLS AND CEILING OF RESTROOMS FOR SOUND.
PROVIDE BLOCKING FOR GRAB BARS.
SEE ACCESSIBLE MOUNTING HEIGHTS ON SHEET A1.1

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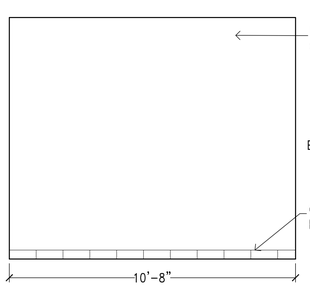
CAMERON APPRAISAL DISTRICT
NEW BUILDING ADDITION AND RENOVATION
2021 AMISTAD DRIVE, SAN BENITO, TEXAS 78586

Interior Elevations to Existing Building

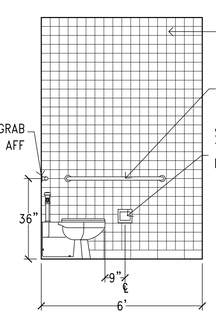
REGISTERED ARCHITECT STEPHANIE C. KNOWLES 29512 STATE OF TEXAS

NO.	DATE	REVISIONS

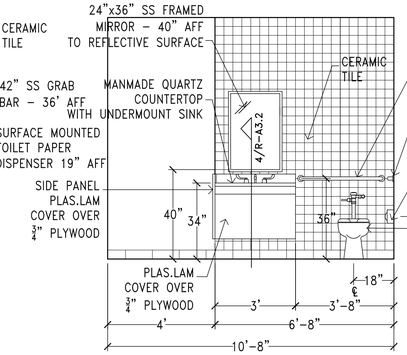
DRAWN BY: cam
CHECKED BY: SCK
DATE: 08-15-18
SHEET NO. R-A3



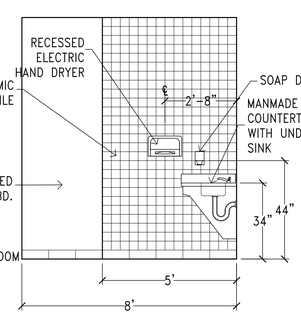
6 R-A3.1 **MENS RR1**
Scale: 3/8" = 1'-0"



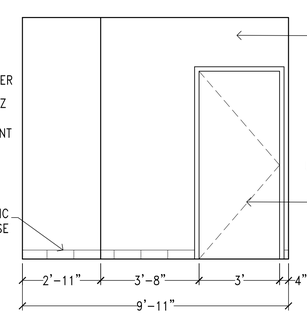
5 R-A3.1 **MENS RR1**
Scale: 3/8" = 1'-0"



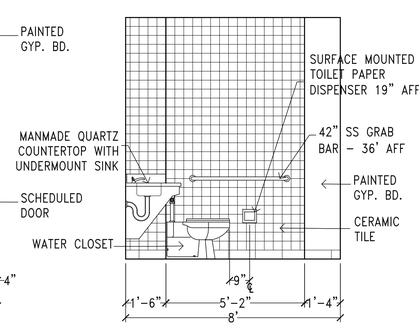
4 R-A3.1 **MENS RR1**
Scale: 3/8" = 1'-0"



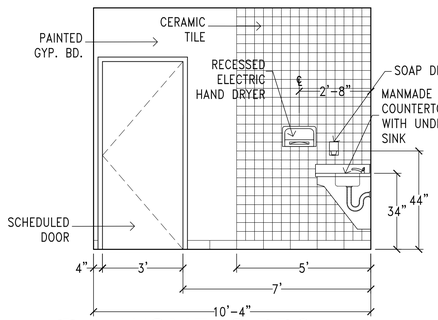
3 R-A3.1 **WOMENS RR1**
Scale: 3/8" = 1'-0"



2 R-A3.1 **WOMENS RR1**
Scale: 3/8" = 1'-0"



1 R-A3.1 **WOMENS RR1**
Scale: 3/8" = 1'-0"



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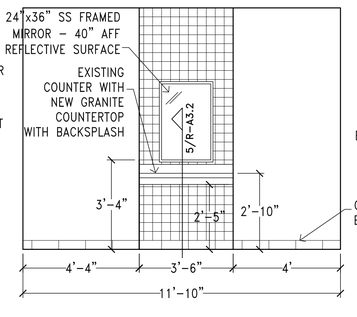
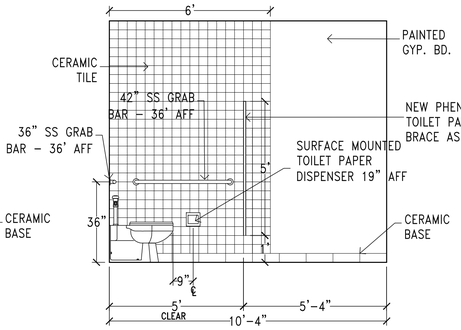
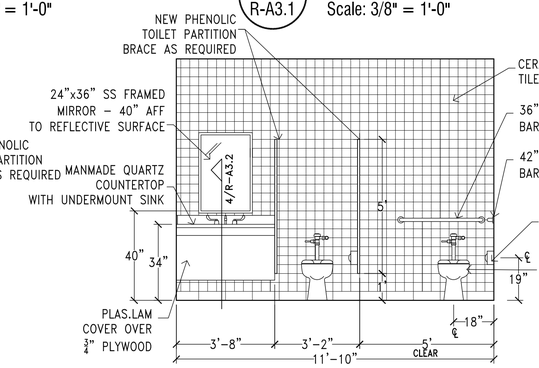
Scale: 3/8" = 1'-0"



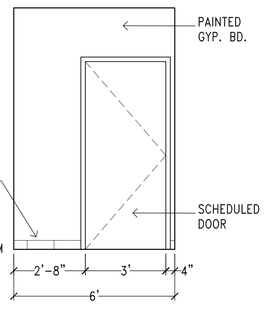
10 R-A3.1 **WOMENS RR2**
Scale: 3/8" = 1'-0"



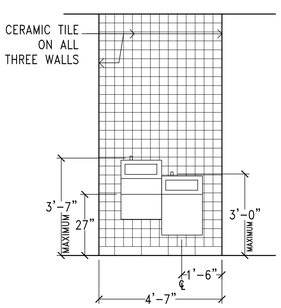
9 R-A3.1 **WOMENS RR2**
Scale: 3/8" = 1'-0"



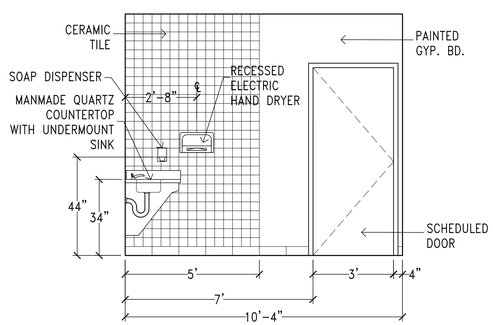
8 R-A3.1 **WOMENS RR2**
Scale: 3/8" = 1'-0"



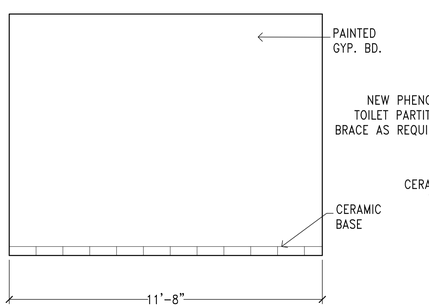
7 R-A3.1 **MENS RR1**
Scale: 3/8" = 1'-0"



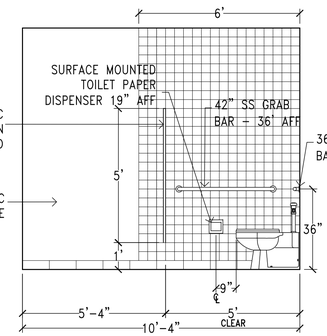
16 R-A3.1 **DRINKING FOUNTAINS**
Scale: 3/8" = 1'-0"



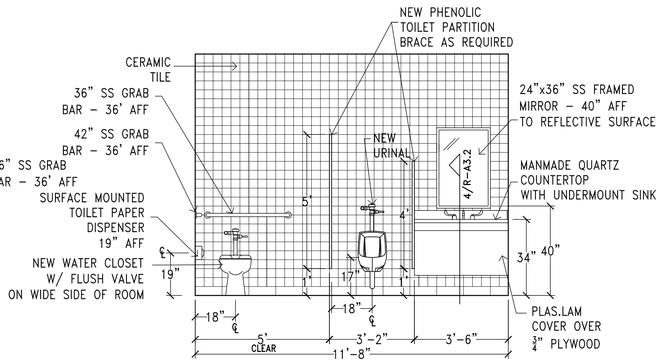
15 R-A3.1 **MENS RR2**
Scale: 3/8" = 1'-0"



14 R-A3.1 **MENS RR2**
Scale: 3/8" = 1'-0"



13 R-A3.1 **MENS RR2**
Scale: 3/8" = 1'-0"



12 R-A3.1 **MENS RR2**
Scale: 3/8" = 1'-0"

NOTE: INSULATE ALL WALLS AND CEILING OF RESTROOMS FOR SOUND.
PROVIDE BLOCKING FOR GRAB BARS.
SEE ACCESSIBLE MOUNTING HEIGHTS ON SHEET A1.1

K+ architect
400 E. 3rd
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Fax: (956) 233-2219

CAMERON APPRAISAL DISTRICT
NEW BUILDING ADDITION AND RENOVATION
2021 AMISTAD DRIVE, SAN BENITO, TEXAS 78586

Interior Elevations to Existing Building

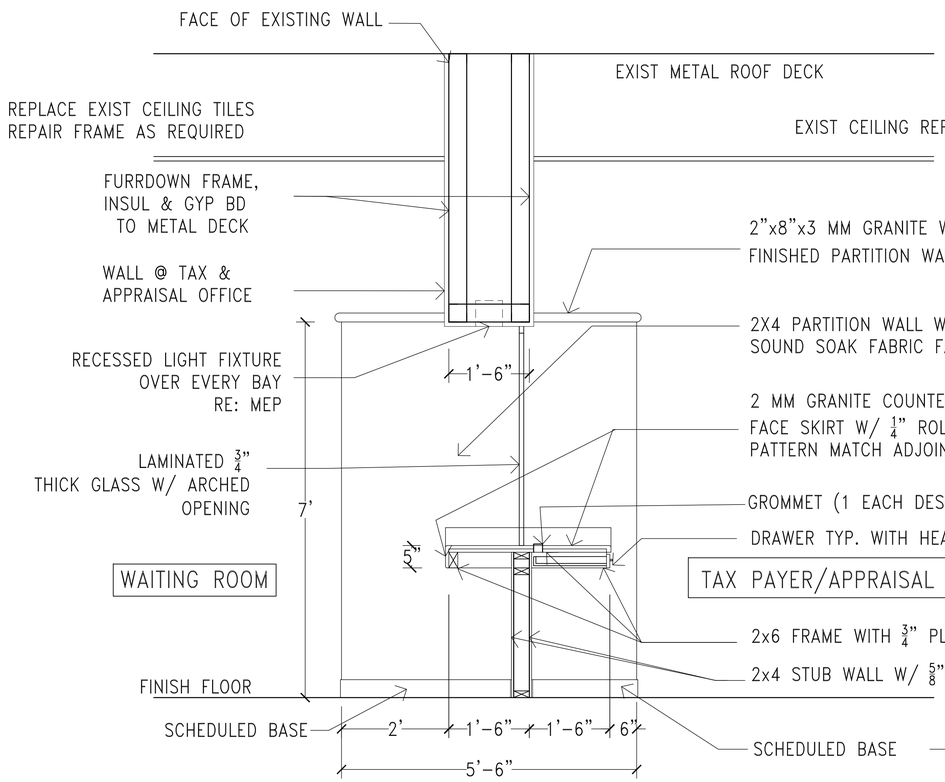
REGISTERED ARCHITECT STANFORD C. KNOWLES 29057 STATE OF TEXAS

NO.	DATE	REVISIONS

DRAWN BY:	CHECKED BY:
cam	SCK

DATE: 08-15-18

SHEET NO.
R-A3.1

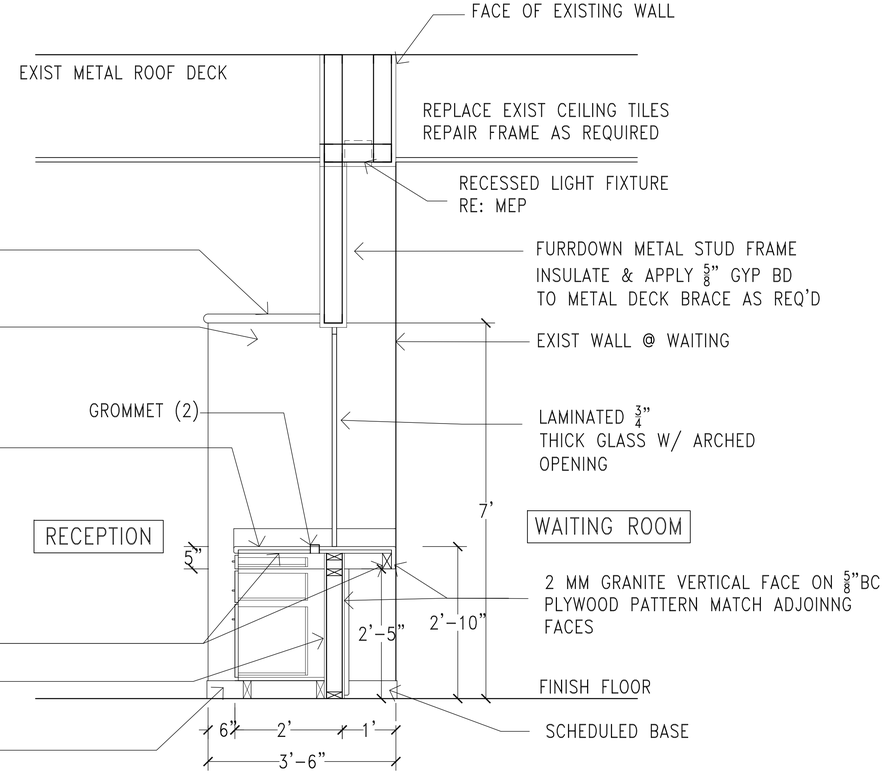


APPRAISAL AND TAXPAYER COUNTER CUSTOMER SERVICE DESK SECTION

2 / R-A3.2 — Scale: 3/4" = 1'-0"

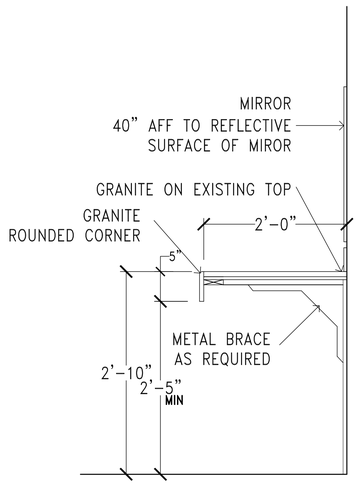
GRANITE NOTES:

1. GRANITE SLAB CHOSEN BY OWNER WITHIN ALLOWANCE.
2. GRANITE TO BE SEALED. 10YEAR WARRANTY ON SEALER.



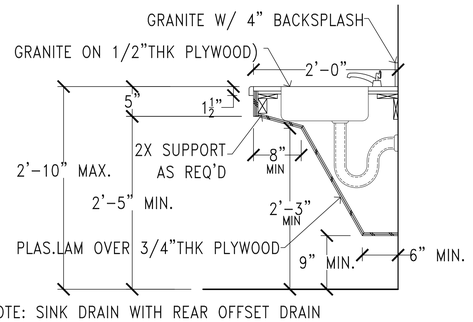
RECEPTION COUNTER @ DRAWERS CUSTOMER SERVICE DESK SECTION

1 / R-A3.2 — Scale: 3/4" = 1'-0"



ACCESSIBLE COUNTER SECTION DETAIL @ RR

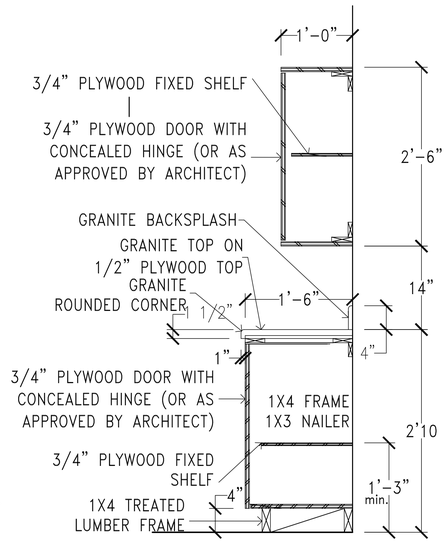
5 / R-A3.2 — Scale: 1" = 1'-0"



NOTE: SINK DRAIN WITH REAR OFFSET DRAIN FOR HC KNEESPACE

ACCESSIBLE VANITY SECTION DETAIL @ RR

4 / R-A3.2 — Scale: 1" = 1'-0"



STORAGE COUNTER @ RECEPTION

3 / R-A3.2 — Scale: 1" = 1'-0"

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Fax: (956) 233-2219

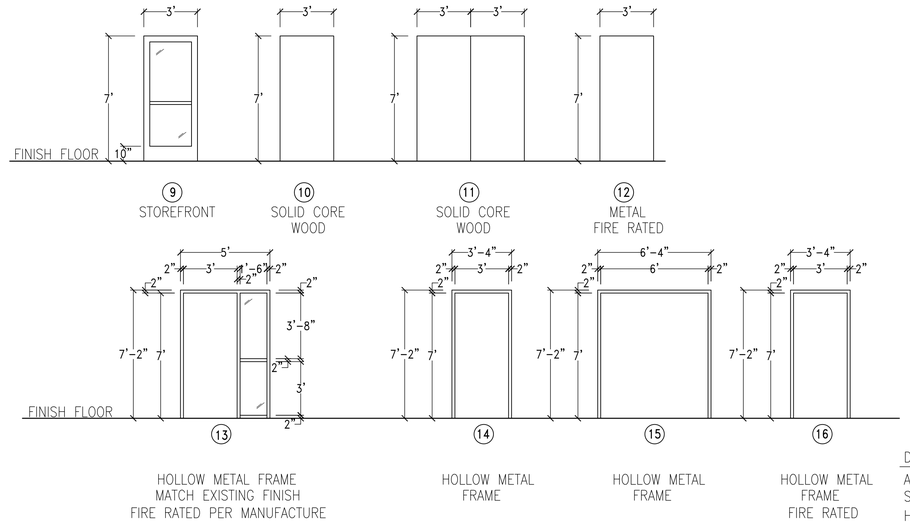
CAMERON APPRAISAL DISTRICT
NEW BUILDING ADDITION AND RENOVATION
2021 AMISTAD DRIVE, SAN BENITO, TEXAS 78586

Cabinet Section Details

REGISTERED ARCHITECT — STANFORD C. KNOWLES — STATE OF TEXAS — 8-15-18

NO.	DATE	REVISIONS

DRAWN BY: cam
CHECKED BY: SCK
DATE: 08-15-18
SHEET NO.
R-A3.2



2 R-A4 DOOR & FRAME TYPES

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

**DOOR FRAMES FINISH AND STYLE TO MATCH EXISTING

DOOR SCHEDULE

DOOR NO.	DOOR SIZE (1 3/4" THK)	DOOR TYPE		FRAME TYPE		REMARKS
9	3'-0" x 7'-0"	ALUM	9	HM	13	EXTERIOR STOREFRONT WITH SIDE WINDOW
10	3'-0" x 7'-0"	ALUM	9	HM	13	EXTERIOR STOREFRONT WITH SIDE WINDOW
11	3'-0" x 7'-0"	SC WOOD	10	HM	14	INTERIOR - KEYED LOCKSET
12	3'-0" x 7'-0"	SC WOOD	10	HM	14	INTERIOR - KEYED LOCKSET
13	3'-0" x 7'-0"	SC WOOD	10	HM	14	INTERIOR
14	3'-0" x 7'-0"	SC WOOD	10	HM	14	INTERIOR
15	3'-0" x 7'-0"	SC WOOD	10	HM	14	INTERIOR
16	3'-0" x 7'-0"	SC WOOD	10	HM	14	INTERIOR
17	3'-0" x 7'-0"	SC WOOD	10	HM	14	INTERIOR
18	3'-0" x 7'-0"	SC WOOD	10	HM	14	INTERIOR
19	2-3'-0" x 7'-0"	SC WOOD	11	HM	15	INTERIOR - KEYED LOCKSET
20	3'-0" x 7'-0"	METAL	12	HM	16	EXTERIOR - KEYED LOCKSET

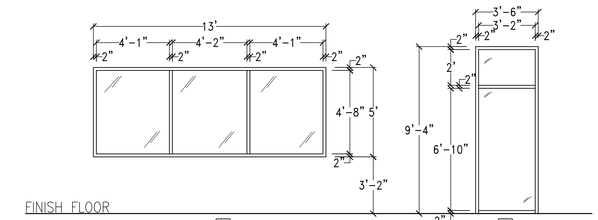
EXTERIOR DOORS TO TO MEET TDI WINDSTORM REQUIREMENTS
EXTERIOR DOORS TO HAVE WEATHERSTRIP & ADA THRESHOLD
PROVIDE TEMPERED GLASS FOR ALL GLASS DOORS AND WINDOWS WITHIN 24" OF DOORS.

DOOR LEGEND

ALUM = ALUMINUM
SC WOOD = SOLID CORE WOOD
HM = HOLLOW METAL

NOTE:

1. HANDLES, PULLS, LATCHES, LOCKS, AND OTHER OPERATING DEVICES ON ACCESSIBLE DOORS SHALL HAVE A SHAPE THAT IS EASY TO GRASP WITH ONE HAND AND DOES NOT REQUIRE TIGHT GRASPING, TIGHT PINCHING, OR TWISTING OF THE WRIST TO OPERATE. LEVER-OPERATED MECHANISMS, PUSH-TYPE MECHANISMS, AND U-SHAPED HANDLES ARE ACCEPTABLE DESIGNS. HARDWARE REQUIRED FOR ACCESSIBLE DOOR PASSAGE SHALL BE MOUNTED NO HIGHER THAN 48 INCHES ABOVE FINISHED FLOOR



NOTE:
1. EXTERIOR WINDOW TO HAVE FRAME AND GLASS SYSTEM APPROVED TDI WINDSTORM INLAND 1 - IMPACT GLASS - VERIFY ATTACHMENT AND SUBMIT FOR APPROVED OF STRUCTURAL ENGINEER
2. VERIFY DIMENSIONS ON WINDOW WITH FINISH STRUCTURE AND CLADDING

**COLOR AND FRAME STYLE TO MATCH EXISTING

WINDOW SCHEDULE

WIN NO.	WINDOW SIZE	QTY.	FRAME TYP.		REMARKS
D	13'-0" x 5'-0"	1	ALUMINUM		INSULATED GLASS - TDI WINDSTORM
E	3'-6" x 7'-2"	2	ALUMINUM		STOREFRONT - MATCH EXISTING STOREFRONT SLIDING DOOR ENTRY

3 R-A4 WINDOW TYPES

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

SIGNAGE ALLOWANCE $10,000

ROOM FINISH SCHEDULE

ROOM NAME	BASE MATL	FLOOR MATL	NORTH WALL	WEST WALL	SOUTH WALL	EAST WALL	CLG MATL	CLG HGT	REMARKS
VESTIBULE (101)	POR	POR	W1	W2	W2	W2	SAC	9'-4"	
WAITING AREA (102)	4RB	VCT	W1	W2	W2	W2	SAC	9'-4"	
TAX OFFICE (103)	4RB	VCT	W1	W2	W2	W2	SAC	9'-4"	
EXECUTIVE RR (116a)	CER	CER	W3	W2,W3	W2	W2,W3	SAC	8'-0"	
STORAGE (117)	4RB	VCT	W2	W2	W2	W2	SAC	8'-0"	
MENS RR1 (118)	CER	CER	W2	W2	W3	W2,W3	SAC	9'-4"	
HALL (119)	4RB	VCT	W2	W2	W2	W2	SAC	8'-0"	
WOMENS RR1 (120)	CER	CER	W3	W3	W2,W3	W2	SAC	9'-4"	
RECEPTION (121)	4RB	VCT	W2	W2	W2	W2	SAC	9'-4"	
MENS RR2 (138)	CER	CER	W3	W3	W2,W3	W2	SAC	9'-4"	
WOMENS RR2 (139)	CER	CER	W2,W3	W3	W3	W2,W3	SAC	9'-4"	
HALL (141)	4RB	VCT	W2	W2	W2	W2	SAC	9'-4"	
FIRE SPRINKLER ROOM	4RB	CONC	W2	W2	W2	W2			

BASE MATERIAL

4RB = 4" RUBBER
CER = 4"X12" CERAMIC TILE TO MATCH FLOOR TILE ROLL TOP EDGE

FLOOR MATERIAL

CER = 12"X12" NON-SKID GROUP 4 COMMERCIAL ($6.00 INSTALLED ALLOWANCE)
VCT = VINYL COMPOSITE TILE
CONC. = SEALED CONCRETE

WALL MATERIAL

W1 = PAINTED CMU BLOCK
W2 = PAINTED GYP. BD.
W3 = 4"X4" CERAMIC TILE (TO CLG.)

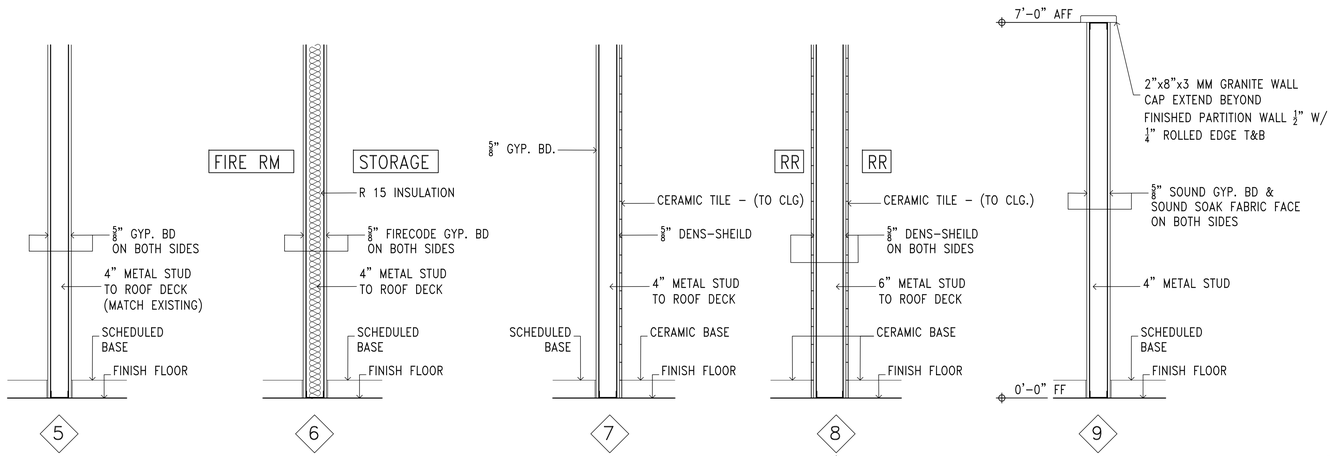
CEILING MATERIAL

SAC = 48"X24"X5/8" FIRE RATED SUSPENDED CEILING TILES ON STANDARD GRID SYSTEM

**CERAMIC TILE AND PATTERN SUPPLIED BY OWNER INSTALLED BY CONTRACTOR.

1 R-A4 SCHEDULES

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



4 R-A4 WALL TYPES

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

K+ architect
400 E. 3rd
Los Fresnos, TX 78566
Phone: (956) 233-2218
Fax: (956) 233-2219

CAMERON APPRAISAL DISTRICT
NEW BUILDING ADDITION AND RENOVATION
2021 AMISTAD DRIVE, SAN BENITO, TEXAS 78586

Schedules for Existing Building

REGISTERED ARCHITECT STANFORD C. KNOWLES 19090 STATE OF TEXAS

NO.	DATE	REVISIONS

DRAWN BY: cam
CHECKED BY: SCK
DATE: 08-15-18
SHEET NO. R-A4

DESIGN CRITERIA:

1. THE FOLLOWING SPECIFICATIONS ARE IN MINIMUM REQUIREMENTS AND THEIR APPLICATION. MANUFACTURER SPECIFICATION, SHALL CONTROL. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW AND SUBMIT ALL SHOP DRAWINGS AND REPORT ALL DOCUMENT DISCREPANCIES TO THE STRUCTURAL ENGINEER PRIOR TO FABRICATION OR ERECTION.

2. AT CONSTRUCTION ISSUE, THESE DRAWINGS REPRESENT STRUCTURAL COMPONENTS IN THEIR FINAL AND FINISHED STATE. CONSTRUCTION PROCEDURES, BRACING, METHODS, SAFETY PRECAUTIONS OR MECHANICAL REQUIREMENTS USED TO ERECT THEM ARE THE SOLE RESPONSIBILITY OF THE GENERAL CONTRACTOR OR SUBCONTRACTOR DOING THE WORK.

3. WIND LOADS ON BUILDING PER ASCE 7-10.

4. BUILDING DESIGN CRITERIA BASED ON IBC 2006.
   - BASIC WIND SPEED (3-SECOND GUST)---------- 130 MPH, 110 MPH(ASD)
   - WIND IMPORTANCE FACTOR---------- Iw = 1.0
   - WIND EXPOSURE---------- C
   - INTERNAL PRESSURE COEFFICIENT---------- + 0.18

DESIGN LOADS (PSF)

	LIVE LOAD	DEAD LOAD *
ROOF	20	20
UNIT FLOOR	40	20
PUBLIC AREAS	100	5

* -ALL DEAD LOADS ARE SUPERIMPOSED LOADS

CONCRETE MASONRY:

1. ALL LOAD BEARING CONCRETE MASONRY SHALL BE IN ACCORDANCE WITH ALL THE REQUIREMENTS OF THE LOCAL BUILDING CODES AND THE NATIONAL CONCRETE MASONRY ASSOCIATION.

2. HOLLOW LOAD BEARING CONCRETE MASONRY UNITS SHALL BE DOMESTIC LIGHTWEIGHT GRADE N UNITS, CONFORMING TO ASTM C-90-75.

3. MASONRY UNITS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2500 PSI WHEN TESTED IN ACCORDANCE WITH ASTM C-140, "METHODS OF SAMPLING AND TESTING CONCRETE MASONRY UNITS" (f'm = 1500 PSI).

4. MORTAR FOR MASONRY SHALL BE IN ACCORDANCE WITH ASTM-270 TYPE "S" (1800 PSI COMPRESSIVE STRENGTH AT 28 DAYS).

5. GROUT FOR ALL REINFORCED HOLLOW MASONRY UNIT WALLS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI (6 SACK MIX) WITH A MAXIMUM 3/8" AGGREGATE.

6. REINFORCING STEEL SHALL CONFORM TO ASTM A-615, GRADE 60.

7. UNLESS OTHERWISE NOTED, ALL MASONRY WALLS SHALL BE REINFORCED WITH 9 GA., MILL GALVANIZED, HORIZONTAL WIRE REINFORCEMENT (TRUSS TYPE) EMBEDDED IN MORTAR JOINTS AT 16"o.c., NOMINAL WIDTH OF JOINT REINFORCING SHALL EQUAL WALL THICKNESS. WIRE REINFORCEMENT SHALL CONFORM TO ASTM DESIGNATION A-82 AND SHALL BE LAPPED AT LEAST 6" WITH AT LEAST ON CROSS WIRE WITHIN THE LAP. JOINT REINFORCING SHALL BE INSTALLED IN THE FIRST AND SECOND MORTAR BED JOINTS IMMEDIATELY ABOVE AND BELOW ALL OPENINGS.

8. UNLESS NOTED OTHERWISE ON PLANS, ONE GROUTED #5 BAR SHALL BE PROVIDED AROUND THE PERIMETER OF ALL WALL OPENINGS.

9. BOND BEAMS SHALL BE REINFORCED WITH ONE CONTINUOUS #5 BAR. REINFORCING SHALL BE CONTINUOUS AT ALL CORNERS AND INTERSECTING WALLS.

10. CONTROL JOINTS SHALL BE CONSTRUCTED WITH SLOTTED MASONRY UNITS AND FACTORY MOLDED JOINT FILLER. JOINTS SHALL BE CAULKED WITH AN APPROVED MATERIAL.

11. CONTROL JOINTS SHALL NOT EXTEND THROUGH BOND BEAMS UNLESS INDICATED ON PLANS.

12. ALL PERIMETER EXTERIOR CMU WALLS SHALL BE REINFORCED WITH VERT. #5's GROUTED SOLID AT THE SPACING INDICATED ON DETAILS AND HORIZONTAL BOND BEAMS REINFORCED w/1-CONT. #5. BOND BEAMS SHALL BE LOCATED VERTICALLY AT 8'-0" o.c. AND AT TOP OF WALL.

STRUCTURAL STEEL NOTES:

1. ALL STRUCTURAL STEEL SHALL CONFORM TO THE ASTM SPECIFICATION A992 UNLESS OTHERWISE SHOWN OR NOTED.

2. ALL STRUCTURAL STEEL PIPING SHALL CONFORM TO ASTM SPECIFICATION A-501.

3. ALL STRUCTURAL STEEL SHALL BE DESIGNED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE LATEST SPECIFICATIONS OF THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION AND THE STEEL JOIST INSTITUTE.

4. ALL STEEL JOISTS SHALL BE DESIGNED AND FABRICATED BY A MEMBER OF THE STEEL JOIST INSTITUTE. CONTRACTOR SHALL PROVIDE WRITTEN CERTIFICATE OF FABRICATOR'S MEMBERSHIP TO THE STEEL JOIST INSTITUTE AT TIME OF SHOP DRAWING SUBMITTAL.

5. ALL STRUCTURAL BOLTS SHALL CONFORM TO ASTM A-325 UNLESS OTHERWISE SHOWN.

6. REFER TO ARCHITECTURAL AND MECHANICAL PLANS FOR VERIFICATION OF ALL BOLTS, BLOCKING ANCHORS, ETC., FOR THE ANCHORAGE OF THEIR RESPECTIVE ITEMS, OR NOTED.

7. ALL BEAMS AND COLUMNS SHALL BE FULL LENGTH WITHOUT SPLICES UNLESS OTHERWISE INDICATED ON PLANS.

8. ALL SHOP AND FIELD WELDS SHALL BE MADE BY WELDERS WHO HAVE BEEN QUALIFIED AND CERTIFIED TO MAKE THE REQUIRED WELDS WITHIN THE PREVIOUS SIX MONTHS IN ACCORDANCE WITH THE LATEST AMERICAN WELDING SOCIETY SPECIFICATIONS.

9. ERECTION CONNECTORS SHALL BE PROVIDED IN ORDER TO PROPERLY ALIGN AND BE TRUE AND PLUMB WHEN WELDS ARE MADE.

10. JOIST MANUFACTURER SHALL PROVIDE BRIDGING AS REQUIRED TO ADEQUATELY BRACE JOISTS AS REQUIRED BY THE STEEL JOIST INSTITUTE. (A.W.S. D-1.1).

11. SHOP DRAWINGS SHALL BE PREPARED FOR ALL STRUCTURAL STEEL AND SUBMITTED FOR REVIEW BY ENGINEER. ENGINEERING DRAWINGS SHALL NOT BE REPRODUCED AND USED AS SHOP DRAWINGS.

12. ALL COMPLETE PENETRATION WELDS, BOTH SHOP AND FIELD, SHALL BE MADE UNDER THE OBSERVATION OF A QUALIFIED TESTING LABORATORY INSPECTOR.

13. THE FABRICATOR SHALL SUPPLY BACKUP PLATES AND EXTENSION TABS FOR ALL COMPLETE PENETRATION WELDS.

14. ANY WELDS FOUND DEFECTIVE SHALL BE REMOVED AND REPLACED AT NO ADDITIONAL COST TO THE OWNER.

15. ALL WELDS TO BE X-RAYED SHALL BE GROUND SMOOTH.

FOUNDATION NOTES:

1. REMOVE MINIMUM TOP 12 INCHES OF EXISTING SOIL UNDER NEW SLABS TO A POINT 5 FEET BEYOND NEW CONSTRUCTION. CUT MAY BE DEEPER IF GRASS AND TREE ROOTS ARE PRESENT.

2. SUBGRADE AREAS SHALL BE SCARIFIED TO A MIN. DEPTH OF 6", TO FORM A 6" DEEP STABILIZED SUBGRADE. STABILIZATION SHALL BE EXTENDED TO 5'-0" BEYOND BUILDING SLAB LINES AND 1'-0" BEYOND CURBS AND PAVING LINES. MOISTURE CONTROL PROCEDURES AT 3% + OF OPTIMUM MOISTURE SHALL BE USED FOR ALL FILL OPERATIONS. AREA SHALL BE THEN COMPACTED TO A DENSITY AT OPTIMUM MOISTURE AS DETERMINED BY ASTM METHOD. SUBGRADE SHALL CONFORM TO THE LINES, GRADES, AND TYP. SECTIONS INDICATED ON THE DRAWINGS AND SHALL ALLOW FULL THICKNESS FOR SLAB AND PAVING BASE AND FOR SURFACE DRAINAGE.

3. STOCKPILE REMOVED SOIL ON SITE AND REUSE FOR FILL OUTSIDE BUILDING PERIMETER & PAVING INSTALL 18" OF NON-EXPANSIVE SELECT FILL AT BUILDING AREA (P.I. 5-17, LL<40) IN MAX. 8" LOOSE LIFTS.

4. COMPACT SELECT FILL TO 90% OF MAXIMUM DRY DENSITY PER ASTM D698. -COMPACTED FILL SHALL EXTEND BEYOND FOUNDATION A MIN. OF 5'-SLOPE AWAY FROM BUILDING SHALL BE A MIN. OF 1:4.

5. IBC R801.3 ROOF DRAINAGE: IN AREAS WHERE EXPANSIVE OR COLLAPSIBLE SOILS ARE KNOWN TO EXIST, ALL DWELLINGS SHALL HAVE A CONTROLLED METHOD OF WATER DISPOSAL FROM ROOFS THAT WILL COLLECT AND DISCHARGE ROOF DRAINAGE TO THE GROUND SURFACE AT LEAST 5 FEET (1524 MM) FROM FOUNDATION WALLS OR TO AN APPROVED DRAINAGE SYSTEM.

6. PROVIDE #5 DOWELS AT 18" O.C. MIN TO ADJACENT CONCRETE CONSTRUCTION (POURED SEPARATELY). 6 MIL AS PER 2006 IBC WATERPROOFING MEMBRANE UNDER: BUILDING SLAB AND ALL AREAS WERE CONCRETE SLAB IS COVERED BY CERAMIC TILE OR OTHER DECORATIVE APPLIED SURFACING. LAP JOINTS BETWEEN SHEETS OF POLY 6" MIN.

7. IT IS RECOMMENDED THAT THE OWNER EMPLOY AN INDEPENDENT TESTING LAB TO VERIFY COMPACTION OF SOIL WHERE REQUIRED AT 1 DENSITY TEST PER EACH 3000 SF.

ROOF FRAMING:

1. ALL WOOD STRUCTURAL FRAMING WILL BE DONE IN ACCORDANCE WITH ALL APPLICABLE CODES AND LOCAL ORDINANCES. IRC AND IBC 2006 AND TDI REVISIONS TO IBC 2006..

2. JOIST ARE SPACED AT 24" O.C., UNLESS OTHERWISE NOTED. AS PER SPAN TABLE.

3. RAFTERS ARE SPACED AT 24" O.C., UNLESS OTHERWISE NOTED. AS PER SPAN TABLE.

4. JOIST AND RAFTERS ARE 2"X6" OR AS NOTED. RIDGE 2"X8", VALLEY AND HIPS ARE 2"X8" OR AS NOTED.

5. R802.3.1 CEILING JOIST SHALL BE CONTINUOUS OR SECURELY JOINED WHERE THEY MEET OVER INTERIOR PARTITIONS AND NAILED TO ADJACENT RAFTERS TO PROVIDE A CONTINUOUS TIE ACROSS THE BUILDING WHEN SUCH JOIST ARE PARALLEL TO THE RAFTERS.

6. ALL BRACES ARE SUPPORTED ON LOAD BEARING WALLS OR LOAD BEARING BEAM. DO NOT BRACE SUPPORTS ON STUB JOIST OR BOX CEILING JOIST. A PURLIN SYSTEM IS NOT REQUIRED IF RAFTER SPAN TABLE IS FOLLOWED.

7. ROOF DECK WILL BE MINIMUM 7/16" STRUCTURAL WOOD PANELS ATTACHED WITH 8D CORROSION RESISTANT NAILS PER NAILING PATTERN OF 4" O.C. EDGES AND 6" O.C. FIELD. UNLESS OTHERWISE NOTED.

NAIL SCHEDULE

JOINT DESCRIPTION		# OF COMMON NAILS	# OF BOX NAILS	NAIL SPACING
ROOF FRAMING				
RAFTER TO TOP PLATE (TOE-NAILED)		5	5	PER RAFTER
CEILING JOIST TO TOP PLATE (TOE-NAILED)		5	5	PER JOIST
CEILING JOIST TO PARALLEL RAFTER (FACE-NAILED)		9-16d	9-16d	EACH LAP
CEILING JOIST LAPS OVER PARTITIONS (FACE-NAILED)		9-16d	9-16d	EACH LAP
COLLAR TIE TO RAFTER (FACE-NAILED)		5-8D	5-8D	PER TIE
BLOCKING TO RAFTER (TOE-NAILED)		2-8D	2-10D	EACH END
RIM BOARD TO RAFTER (END-NAILED)		2-16D	3-16D	EACH END
WALL FRAMIING				
TOP PLATE TO TOP PLATE (FACE-NAILED)		2-16D	2-16D	PER FOOT
TOP PLATE AT INTERSECTIONS (FACE-NAILED)		4-16D	5-16D	JOINTS EACH SIDE
STUD TO STUD (FACE-NAILED)		2-16d	2-16d	24" O.C.
HEADER TO HEADER (FACE-NAILED)		16d	16d	16"O.C. ALONG EDGES
TOP OR BOTTOM PLATE TO STUD (END-NAILED)		3-16D	3-16D	PER STUD
BOTTOM PLATE TO FLOOR JOIST, BANDJOIST ENDJOIST OR BLOCKING (FACE-NAILED)		2-16d	2-16d	PER FOOT
FLOOR FRAMING				
JOIST TO SILL, TOP PLATE OF GIRDER (TOE-NAILED)		4-8D	4-10D	PER JOIST
BRIDGING TO JOIST (TOE-NAILED)		2-8D	2-10D	EACH END
BLOCKING TO JOIST (TOE-NAILED)		2-8D	2-10D	EACH END
BLOCKING TO SILL OR TOP PLATE (TOE-NAILED)		3-16D	4-16D	EACH BLOCK
LEDGER STRIP TO BEAM (FACE-NAILED)		3-16D	4-16D	EACH JOIST
JOIST ON LEDGER TO BEAM (FACE NAILED)		3-8D	3-10D	PER JOIST
BAND JOIST TO JOIST (END-NAILED)		3-16D	4-16D	PER JOIST
BAND JOIST TO SILL OR TOP PLATE (TOE-NAILED)		2-16D	3-16D	PER FOOT
ROOF SHEATHING				
STRUCTURAL PANELS		8D	10D	EDGES 4" FIELD 6"
DIAGONAL BOARD SHEATHING	1"X6" OR 1"X8"	2-8D	2-10D	PER SUPPORT
	1"X10" OR WIDER	3-8D	3-10D	PER SUPPORT
CEILING SHEATHING				
GYPSUM WALLBOARD		5D COOLERS	5D COOLERS	EDGES 7" FIELD 10"
WALL SHEATHING				
STRUCTURAL PANELS		8D	10D	EDGES 6" FIELD 12"
FIBERBOARD PANELS	7/16"	6D	–	EDGES 3" FIELD 6"
	25/32"	8D	–	EDGES 3" FIELD 6"
GYPSUM WALLBOARD		5D COOLERS	5D COOLERS	EDGES 7" FIELD 10"
HARDBOARD		8D	8D	3- PER SUPPORT
PARTICLE BOARD PANELS		8D	8D	SEE MANUFACTURER
DIAGONAL BOARD SHEATHING	1"X6" OR 1"X8"	2-8D	2-10D	PER SUPPORT
	1"X10" OR WIDER	3-8D	3-10D	PER SUPPORT
FLOOR SHEATHING				
STRUCTURAL PANELS	1" OR LESS	8D	10D	6" EDGES 12" FIELD
	GREATER THAN 1"	10D	16D	6" EDGES 6" FIELD
DIAGONAL BOARD SHEATHING	1"X6" OR 1"X8"	2-8D	2-10D	PER SUPPORT
	1"X10" OR WIDER	3-8D	3-10D	PER SUPPORT

1. NAILING REQUIREMENTS ARE BASED ON WALL SHEATHING NAILED 6" O.C. AT THE PANEL EDGES. IF WALL SHEATHING IS NAILED 3" O.C. @ THE PANEL EDGE TO OBTAIN HIGHER SHEAR CAPACITIES, NAILING REQUIREMENTS FOR STRUCTURAL MEMBERS SHALL BE DOUBLED, OR ALTERNATE CONNECTORS, SUCH AS SHEAR PLATES, SHALL BE USED TO MAINTAIN THE LOAD PATH.

2. WHEN WALL SHEATHING IS CONTINUOUS OVER CONNECTED MEMBERS, THE TABULATED NUMBER OF NAILS SHALL BE PERMITTED TO BE REDUCED TO 1-16D NAIL PER FOOT.

3. CORROSION RESISTANT 11 GAGE ROOFING NAILS AND 16 GAGE STAPLES ARE PERMITTED. CHECK IBC FOR ADDITIONAL REQUIREMENTS.

COMPONENTS AND CLADDING REQUIREMENTS

1. ALL EXTERIOR WINDOWS AND GLASS DOORS SHALL MEET THE REQUIREMENTS OF 2006 IBC SECTION R613.

2. EXTERIOR DOORS AND WINDOWS SHALL BE DESIGNED TO RESIST THE DESIGN WIND LOADS SPECIFIED IN TABLE R301.2(2) AND ADJUSTED FOR HEIGHT AND EXPOSURE PER TABLE R301.2(3).

3. ALL EXTERIOR WINDOWS AND SLIDING GLASS DOORS SHALL BEAR A LABEL IDENTIFYING THE MANUFACTURER PERFORMANCE CHARACTERISTICS AND APPROVED INSPECTION AGENCY TO INDICATE COMPLIANCE WITH AAMA/WDMA/CSA 101/I.S.2/A440.

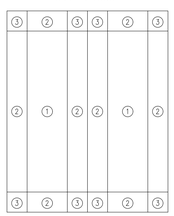
4. EXTERIOR SIDE-HINGED DOORS SHALL BE LABELED AS CONFORMING TO AAMA/WDMA/CSA 101/I.S.2/A440 OR COMPLY WITH SECTION R613.6 OF 2006 IBC.

5. PROTECTION OF EXTERIOR WINDOWS AND GLASS DOORS IN STRUCTURES LOCATED IN WIND-BORNE DEBRIS REGION SHALL BE IN ACCORDANCE WITH SECTION R301.2.1.2 OF 2006 IBC.

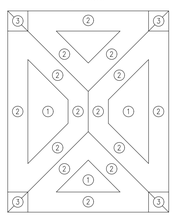
6. ALL EXTERIOR WINDOWS, DOORS AND EXTERIOR ENCLOSURES MUST HAVE PRODUCT EVALUATION ACCEPTABLE TO TDI AND MUST BE INSTALLED AS PER PRODUCT EVALUATION PROVISIONS. WINDOWS AND DOORS SHALL HAVE THE AAMA LABEL AND A MIN. PSF RATING AS SHOWN BELOW.

7. ROOF COVERING MUST HAVE PRODUCT EVALUATION ACCEPTABLE TO TDI FOR DESIGN PRESSURES PROVIDED AND MUST BE INSTALLED PER PRODUCT EVALUATION PROVISIONS.

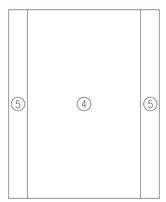
GABLED ROOF



HIP ROOF



WALL ELEVATION



BASIC WINDSPEED (MPH-3-SECOND GUST)

ROOF PITCH	ZONE	EFFECTIVE WIND AREA (FEET2)	110		120		130	
ROOF 0>10°	1	10	10	-21.8	10.5	-25.9	12.4	-30.4
ROOF 0>10°	1	20	10	-21.2	10.0	-25.2	11.6	-29.6
ROOF 0>10°	1	50	10	-20.5	10.0	-24.4	10.6	-28.6
ROOF 0>10°	1	100	10	-19.9	10.0	-23.7	10.0	-27.8
ROOF 0>10°	2	10	10	-36.5	10.5	-43.5	12.4	-51.0
ROOF 0>10°	2	20	10	-32.6	10.0	-38.8	11.6	-45.6
ROOF 0>10°	2	50	10	-27.5	10.0	-32.7	10.6	-38.4
ROOF 0>10°	2	100	10	-23.6	10.0	-28.1	10.0	-33.0
ROOF 0>10°	3	10	10	-55.0	10.5	-65.4	12.4	-76.8
ROOF 0>10°	3	20	10	-45.5	10.0	-54.2	11.6	-63.6
ROOF 0>10°	3	50	10	-33.1	10.0	-39.3	10.6	-46.2
ROOF 0>10°	3	100	10	-23.6	10.0	-28.1	10.0	-33.0
ROOF 10>30°	1	10	12.5	-19.9	14.9	-23.7	17.5	-27.8
ROOF 10>30°	1	20	11.4	-19.4	13.6	-23.0	16.0	-27.0
ROOF 10>30°	1	50	10.0	-18.6	11.9	-22.2	13.9	-26.0
ROOF 10>30°	1	100	10.0	-18.1	10.5	-21.5	12.4	-25.2
ROOF 10>30°	2	10	12.5	-42.1	14.9	-50.1	17.5	-58.7
ROOF 10>30°	2	20	11.4	-38.2	13.6	-45.4	16.0	-53.3
ROOF 10>30°	2	50	10.0	-33.0	11.9	-39.3	13.9	-46.1
ROOF 10>30°	2	100	10.0	-29.1	10.5	-34.7	12.4	-40.7
ROOF 10>30°	3	10	12.5	-42.1	14.9	-50.1	17.5	-58.7
ROOF 10>30°	3	20	11.4	-38.2	13.6	-45.4	16.0	-53.3
ROOF 10>30°	3	50	10.0	-33.0	11.9	-39.3	13.9	-46.1
ROOF 10>30°	3	100	10.0	-29.1	10.5	-34.7	12.4	-40.7
ROOF 30>45°	1	10	19.9	-21.8	23.7	-25.9	27.8	-30.4
ROOF 30>45°	1	20	19.4	-20.7	23.0	-24.6	27.0	-28.9
ROOF 30>45°	1	50	18.6	-19.2	22.2	-22.8	26.0	-25.8
ROOF 30>45°	1	100	18.1	-18.1	21.5	-21.5	25.2	-25.2
ROOF 30>45°	2	10	19.9	-25.5	23.7	-30.3	27.8	-35.6
ROOF 30>45°	2	20	19.4	-24.3	23.0	-29.0	27.0	-34.0
ROOF 30>45°	2	50	18.6	-22.9	22.2	-27.2	26.0	-32.0
ROOF 30>45°	2	100	18.1	-21.8	21.5	-25.9	25.2	-30.4
ROOF 30>45°	3	10	19.9	-25.5	23.7	-30.3	27.8	-35.6
ROOF 30>45°	3	20	19.4	-24.3	23.0	-29.0	27.0	-34.0
ROOF 30>45°	3	50	18.6	-22.9	22.2	-27.2	26.0	-32.0
ROOF 30>45°	3	100	18.1	-21.8	21.5	-25.9	25.2	-30.4
WALL	4	10	21.8	-23.6	25.9	-28.1	30.4	-33.0
WALL	4	20	20.8	-22.6	24.7	-26.9	29.0	-31.6
WALL	4	50	19.5	-21.3	23.2	-25.4	27.2	-29.8
WALL	4	100	18.5	-20.4	22.0	-24.2	25.9	-28.4
WALL	5	10	21.8	-29.1	25.9	-34.7	30.4	-40.7
WALL	5	20	20.8	-27.2	24.7	-32.4	29.0	-38.0
WALL	5	50	19.5	-24.6	23.2	-29.3	27.2	-34.3
WALL	5	100	18.5	-22.6	22.0	-26.9	25.9	-31.6

TABLE R301.2(3)

MEAN ROOF HEIGHT	EXPOSURE B	EXPOSURE C	EXPOSURE D
15	1.00	1.21	1.47
20	1.00	1.29	1.55
25	1.00	1.35	1.61
30	1.00	1.40	1.66
35	1.05	1.45	1.70
40	1.09	1.49	1.74
45	1.12	1.53	1.78
50	1.16	1.56	1.81
55	1.19	1.59	1.84
60	1.22	1.62	1.87

BUILDING COMPONENTS AND CLADDING PRESSURES

IBC 2006 TABLE R301.2(2): BUILDING COMPONENTS AND CLADDING PRESSURES SHOWN ARE FOR THE EXPOSURE (B). IF HOME IS BUILT IN EXPOSURE (C) OR (D). REFER TO TABLE R301.2(3) FOR HEIGHT AND EXPOSURE ADJUSTMENT COEFFICIENTS.

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STATE OF TEXAS
DAVID V. DAY
82808
LICENSED PROFESSIONAL ENGINEER
8-15-18

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S3.0 FOUNDATION DETAILS
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S4.1 DEMOLITION FRAMING PLAN
S4.2 PROPOSED FRAMING PLAN
S5.0 ROOF PLAN
S6.0 STRUCTURAL DETAILS
S6.1 STRUCTURAL DETAILS

REVISION	DESCRIPTION	DATE

PROJECT NO: 183081-01
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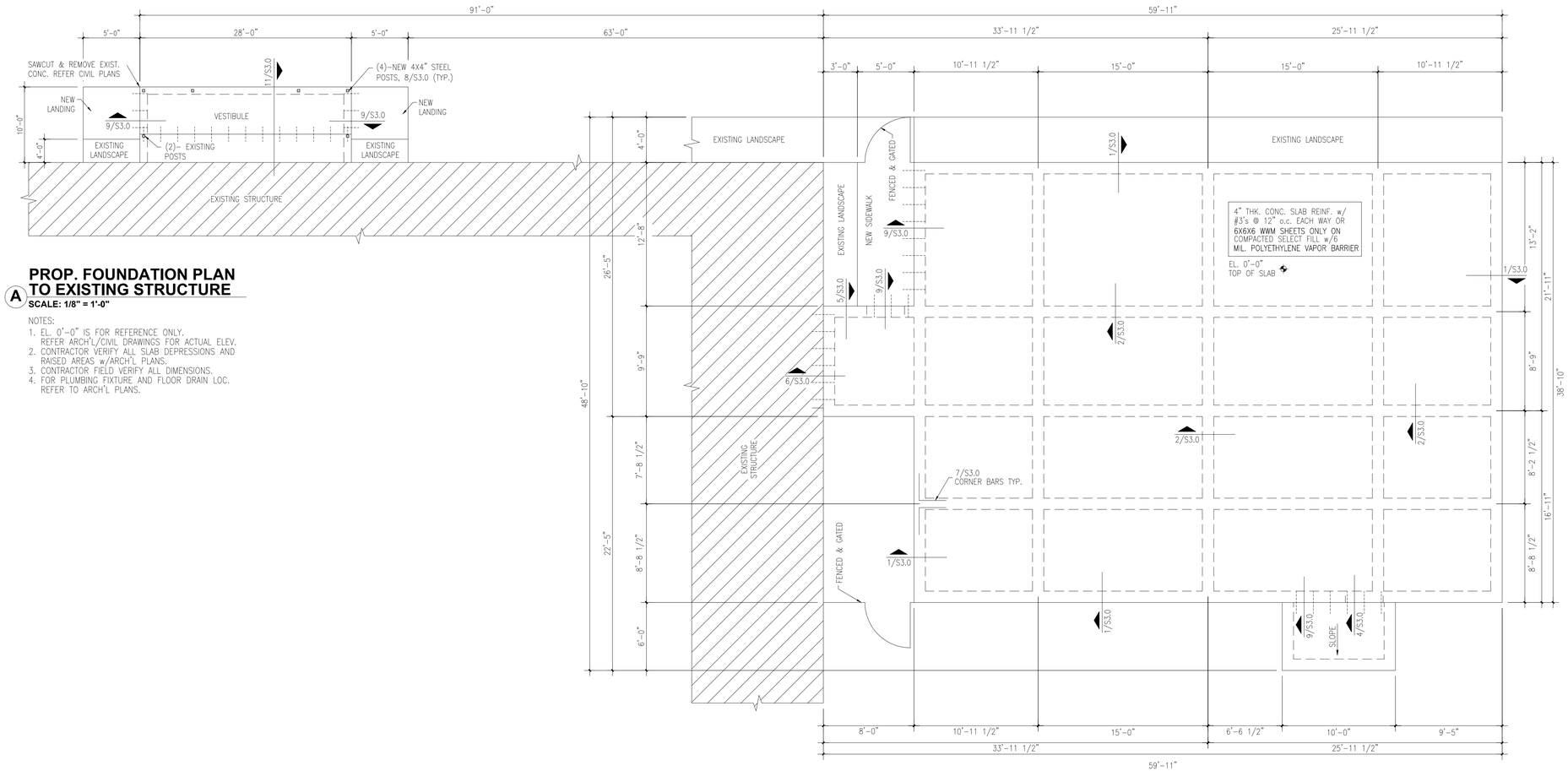
DRAWN BY: MP
DESIGNED BY: DVD

DRAWING TITLE

GENERAL NOTES

SHEET NO.

S1.0 OF 9



A PROP. FOUNDATION PLAN TO EXISTING STRUCTURE

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

NOTES:

1. EL. 0'-0" IS FOR REFERENCE ONLY. REFER ARCH'L/CIVIL DRAWINGS FOR ACTUAL ELEV.
2. CONTRACTOR VERIFY ALL SLAB DEPRESSIONS AND RAISED AREAS w/ARCH'L PLANS.
3. CONTRACTOR FIELD VERIFY ALL DIMENSIONS.
4. FOR PLUMBING FIXTURE AND FLOOR DRAIN LOC. REFER TO ARCH'L PLANS.

PROPOSED FOUNDATION PLAN TO NEW BUILDING

SCALE: 3/16" = 1'-0"

NOTES:

1. EL. 0'-0" IS FOR REFERENCE ONLY. REFER ARCHITECTURAL/CIVIL DRAWINGS FOR ACTUAL ELEVATION.
2. CONTRACTOR VERIFY ALL SLAB DEPRESSIONS AND RAISED AREAS WITH ARCHITECTURAL PLANS.
3. CONTRACTOR FIELD VERIFY ALL DIMENSIONS.
4. FOR PLUMBING FIXTURES AND FLOOR DRAIN LOCATIONS REFER TO ARCHITECTURAL PLANS.

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S6.1 STRUCTURAL DETAILS

REVISION	DESCRIPTION	DATE

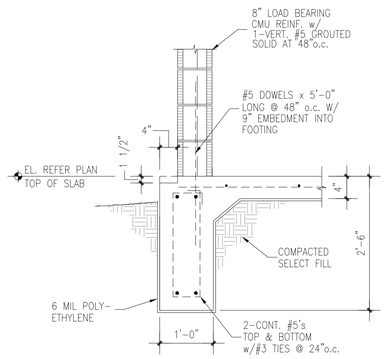
PROJECT NO. 183081-01
DATE 08-15-2018
DRAWN BY MP
DESIGNED BY DVD

DRAWING TITLE

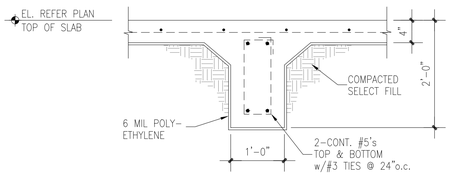
FOUNDATION PLAN

SHEET NO.

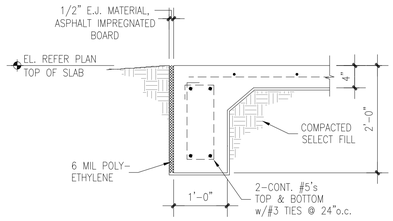
S2.0 OF 9



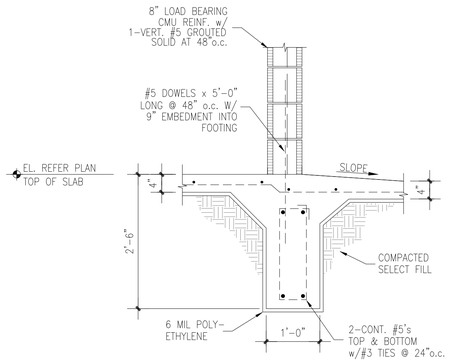
1 TYP. EXTERIOR BEAM w/CMU & BLOCK LEDGE
SCALE: 3/4"=1'-0"



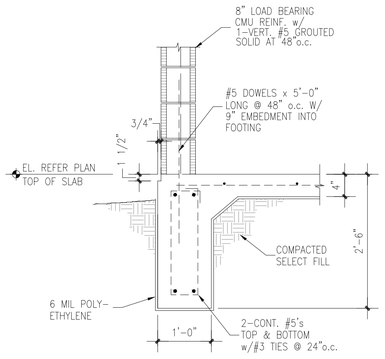
2 TYP. INTERIOR BEAM
SCALE: 3/4"=1'-0"



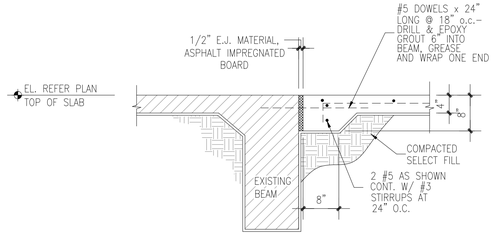
3 TYP. END BEAM
SCALE: 3/4"=1'-0"



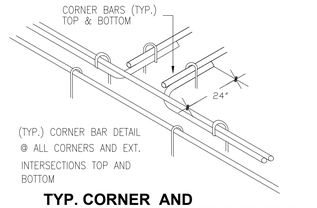
4 BEAM AT DOOR FRAME
SCALE: 3/4"=1'-0"



5 TYP. EXTERIOR BEAM w/CMU & STUCCO LEDGE
SCALE: 3/4"=1'-0"



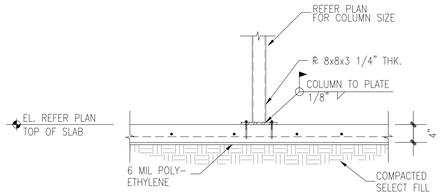
6 PROPOSED BEAM TO EXISTING BEAM
SCALE: 3/4"=1'-0"



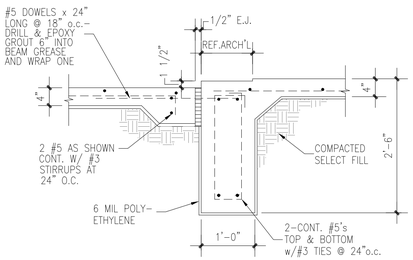
7 TYP. CORNER AND INTERSECTION REINFORCEMENT
NTS

NOTE:
THE FOUNDATION DESIGN IS BASED ON MAX P.I. OF 33.

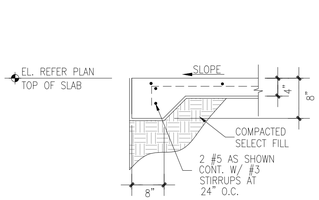
* THIS DESIGN IS BASED ON PERIMETER SOIL MOISTURE BEING KEPT CONSTANT. EXTENDED PERIODS OF DROUGHT CAN CAUSE FOUDATION DEFLECTION.



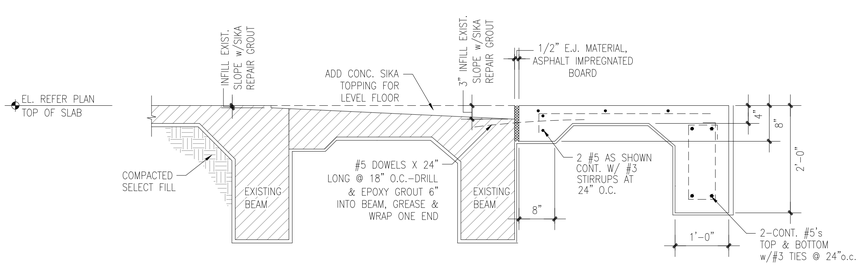
8 TYP. COLUMN CONNECTION
SCALE: 3/4"=1'-0"



9 TYP. LANDING CONCRETE PAD
SCALE: 3/4"=1'-0"

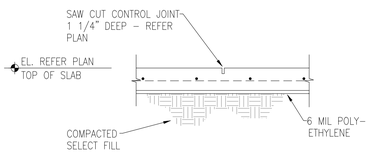


10 CONCRETE SLAB
NTS

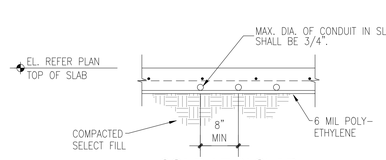


11 FRONT ENTRANCE OF EXIST. BLDG.
SCALE: 3/4"=1'-0"

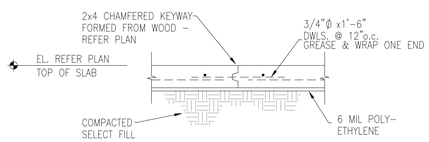
GENERAL FOUNDATION DETAILS



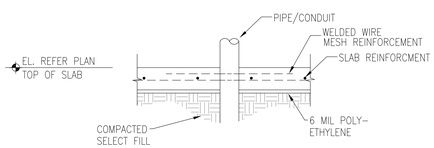
CONTROL JOINT

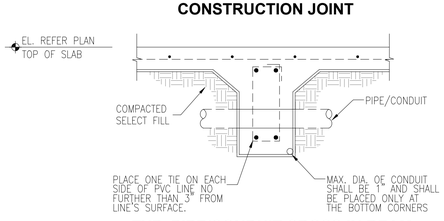


CONDUIT IN SLAB

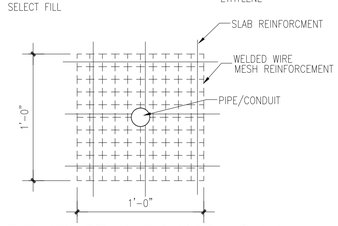


CONSTRUCTION JOINT





TYP. PIPE/CONDUIT CROSS IN BEAM



TYP. PIPE/CONDUIT CROSS IN SLAB

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S4.2 PROPOSED FRAMING PLAN
S5.0 ROOF PLAN
S6.0 STRUCTURAL DETAILS
S6.1 STRUCTURAL DETAILS

REVISION	DESCRIPTION	DATE

PROJECT NO. 183081-01
DATE 08-15-2018
DRAWN BY MP
DESIGNED BY DVD

DRAWING TITLE
FOUNDATION DETAILS

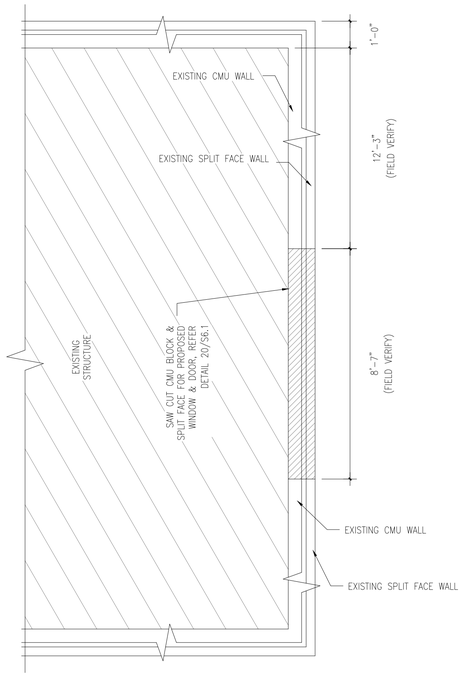
SHEET NO.
S3.0 OF 9

PROPOSED FRAMING PLAN TO NEW BUILDING

SCALE: 3/16"=1'-0"

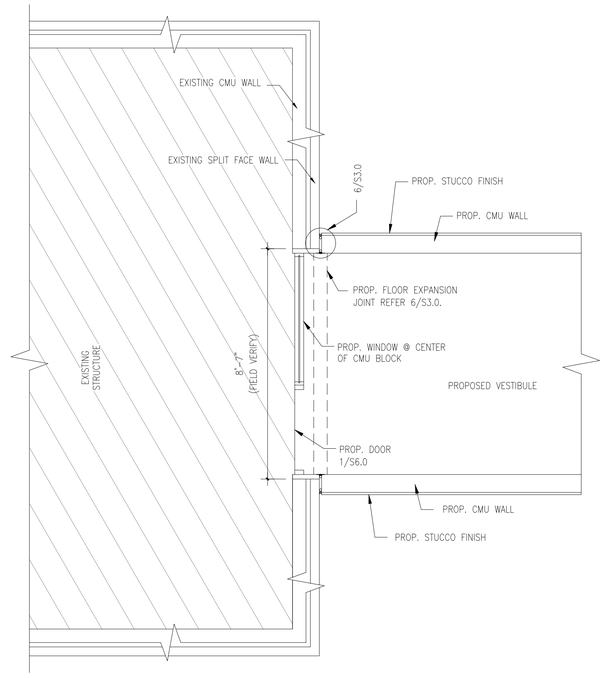
NOTES:

1. REFER SHEARWALL/HEADER SCHEDULE 1/S6.0
2. CASA ENGINEERING LLC NEEDS TO REVIEW FOLLOWING ITEMS:
   A) TRUSS PLANS AND TRUSS SUBMITTALS
      i) ROOF TRUSS LAYOUT PLAN AND CROSS SECTION PLANS.
   B) WINDOW AND DOOR SUBMITTALS
3. REFER DIMENSIONS TO ARCHITECTURAL PLANS.



DEMOLITION WALL & PROP. WALL OF EXISTING BUILDING

A **SCALE: NTS**



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S5.0 ROOF PLAN
S6.0 STRUCTURAL DETAILS
S6.1 STRUCTURAL DETAILS

REVISION	DESCRIPTION	DATE

PROJECT NO. 18.3081-01
DATE 08-15-2018
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DRAWING TITLE

PROP. FRAMING PLAN OF NEW BUILDING

SHEET NO.

S4.0 OF 9

DEMOLITION PLAN TO EXISTING BLDG.

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

NOTES:
1. REFER SHEARWALL/HEADER SCHEDULE 1/S6.0
2. CASA ENGINEERING LLC NEEDS TO REVIEW FOLLOWING ITEMS:
   A) WINDOW AND DOOR SUBMITTALS.
   WALLS TO BE REMOVED, REFER ARCH'L PLANS FOR DEMOLISHED WALLS BEFORE STRAPPING PROP. WALLS.
3. REFER ALL DIMENSIONS TO ARCHITECTURAL PLAN.

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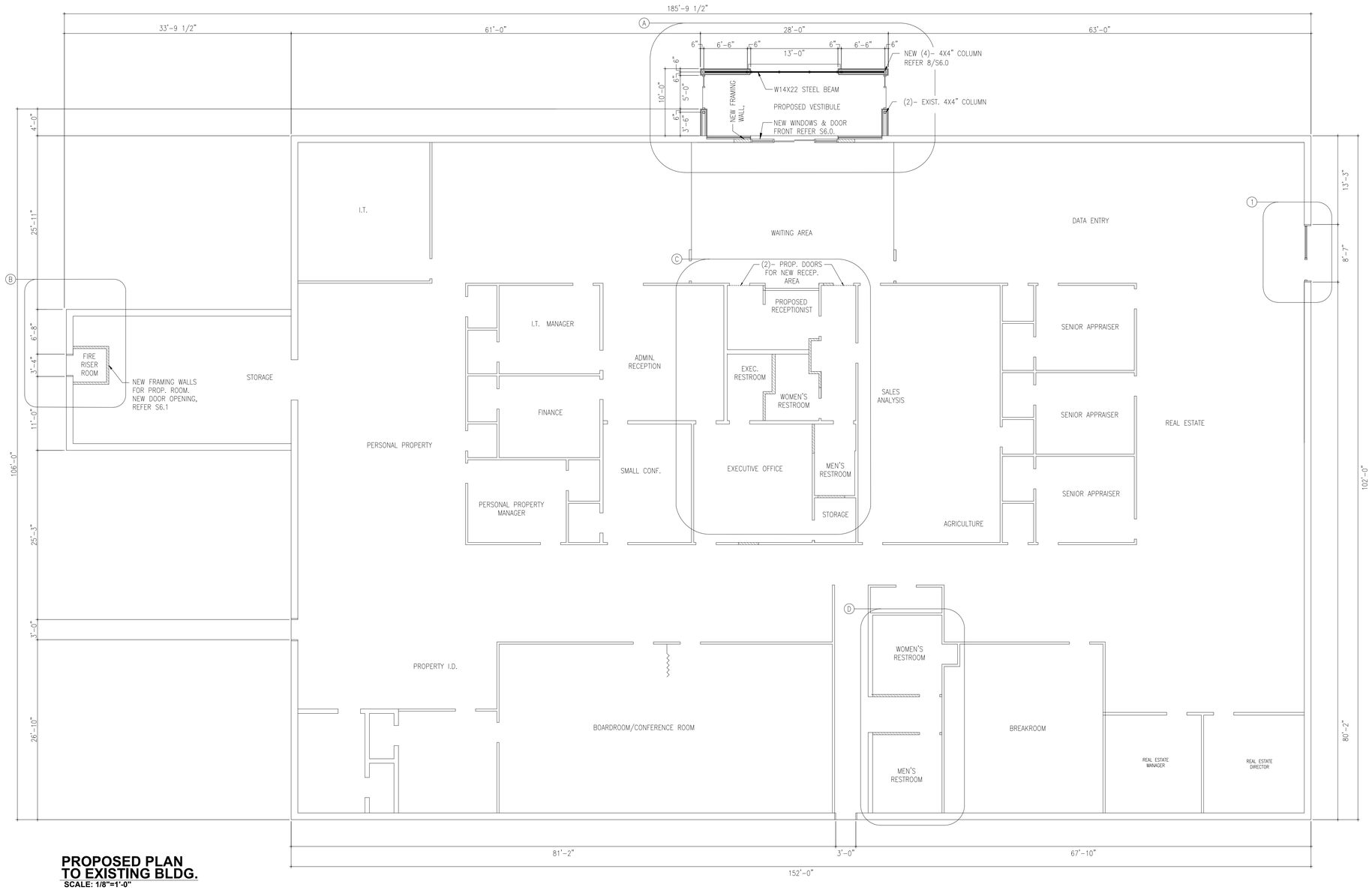
DEMOLITION FRAMING PLAN EXIST. STRUCT.

SHEET NO.

S4.1 OF 9



PROPOSED PLAN TO EXISTING BLDG.

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

NOTES:
REFER SHEARWALL/HEADER SCHEDULE 1/S6.0
CASA ENGINEERING LLC NEEDS TO REVIEW FOLLOWING ITEMS:
A) WINDOW AND DOOR SUBMITTALS
▨ NEW FRAMING WALLS, REFER INTERIOR WALLS TO S6.1.
REFER DIMENSIONS TO ARCHITECTURAL PLAN.

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S6.0 STRUCTURAL DETAILS
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REVISION	DESCRIPTION	DATE

PROJECT NO. 183081-01
DATE 08-15-2018
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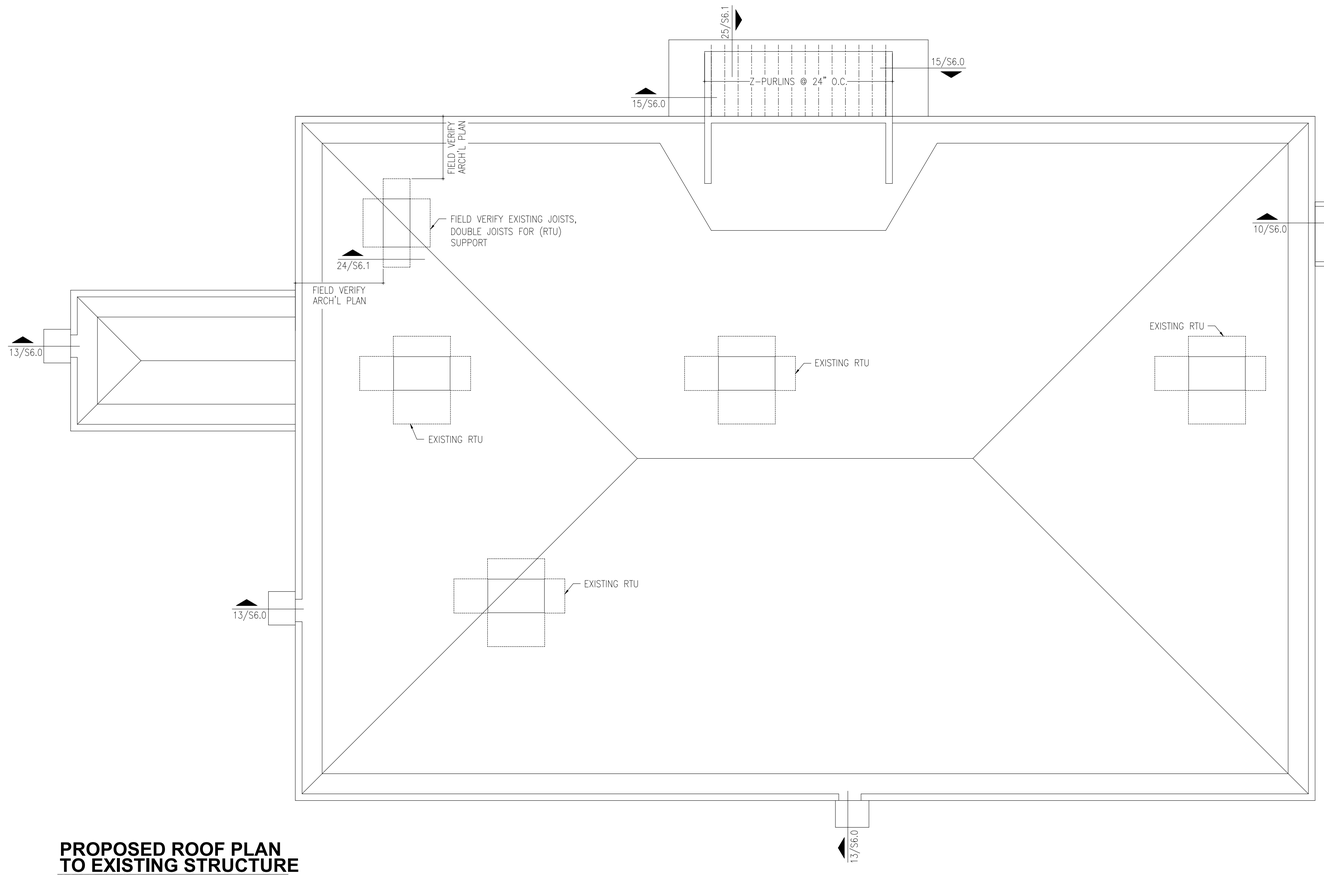
DESIGNED BY DVD

DRAWING TITLE

PROPOSED FRAMING PLAN EXIST. STRUCT.

SHEET NO.

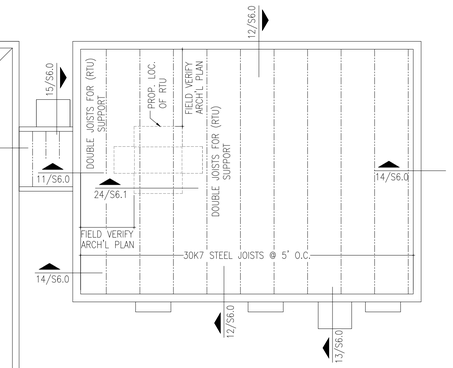
S4.2 OF 9



PROPOSED ROOF PLAN TO EXISTING STRUCTURE

SCALE: 3/32"=1'-0"

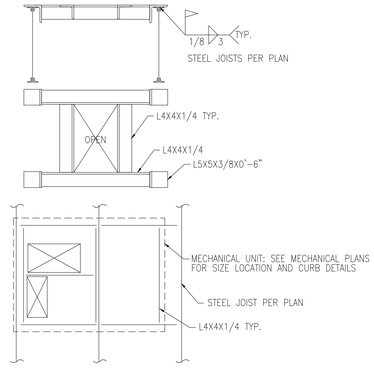
NOTES:
1. REFER SHEARWALL/HEADER SCHEDULE 1/S6.0
2. CANOPY CONNECTION REFER 19/S6.1
3. FOR SLOPES & ROOF HEIGHTS, REFER ARCH'L PLAN.
4. REFER ARCHITECTURAL PLAN FOR RTU LOCATIONS, DOUBLE JOIST FOR RTU SUPPORT.



PROPOSED ROOF PLAN TO ADDITION BLDG.

SCALE: 3/32"=1'-0"

NOTES:
1. REFER SHEARWALL/HEADER SCHEDULE 1/S6.0
2. CANOPY CONNECTION REFER 19/S6.1
3. FOR SLOPES & ROOF HEIGHTS, REFER ARCH'L PLAN.



1 RTU SUPPORT FRAME DETAIL RAISED CURB OPTION

SCALE: NTS

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CONTRACTOR

SHEETS

S1.0 GENERAL NOTES
S2.0 FOUNDATION PLAN
S3.0 FOUNDATION DETAILS
S4.0 PROP. ADD. FRAMING PLAN
S4.1 DEMOLITION FRAMING PLAN
S4.2 PROPOSED FRAMING PLAN
S5.0 ROOF PLAN
S6.0 STRUCTURAL DETAILS
S6.1 STRUCTURAL DETAILS

REVISION	DESCRIPTION	DATE

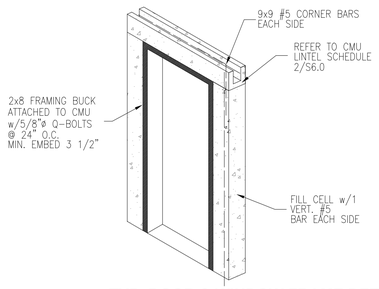
PROJECT NO. 183081-01
DATE 08-15-2018
DRAWN BY MP
DESIGNED BY DVD

DRAWING TITLE

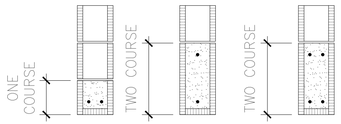
ROOF PLAN

SHEET NO.

S5.0 OF **9**



1 TYP. DOOR & WINDOW FRAME DETAIL
SCALE: 3/4"=1'-0"

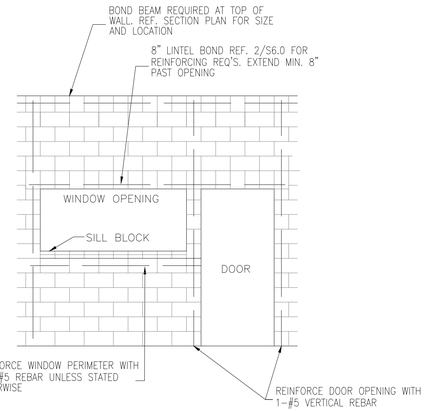


TYP. DOOR & WINDOW FRAME DETAIL

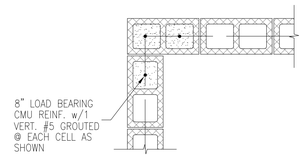
LINTEL SCHEDULE			
WIDTH	SPAN	DEPTH	REINF.
"*"	0'-0" TO 4'-0"	8"	2 - #5
"*"	4'-0" TO 8'-0"	16"	2 - #5
"*"	8'-0" TO 12'-0"	16"	2 - #8
"*"	12'-0" TO 18'-0"	2-16"	4 - #8

"*" WIDTH OF WALL REFER PLAN

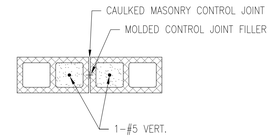
2 LINTEL SCHEDULE
NTS



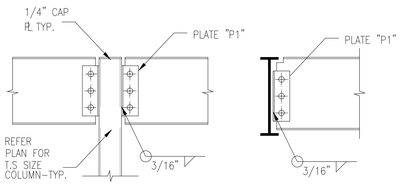
3 OPENING REINFORCEMENT
NTS



4 EXTERIOR CORNER BEAM
SCALE: 3/4"=1'-0"

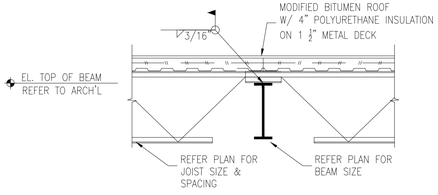


5 TYP. CRACK CONTROL JOINT
SCALE: 3/4"=1'-0"

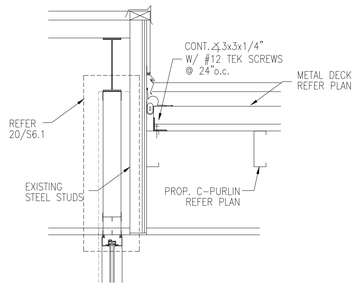


BEAM TO COLUMN CONNECTION SCHEDULE		
BM. SIZE	PLATE "P1"	NO. OF BOLTS (A325)
W12x30	4"x0'-10"x3/8"	2-3/4"ø

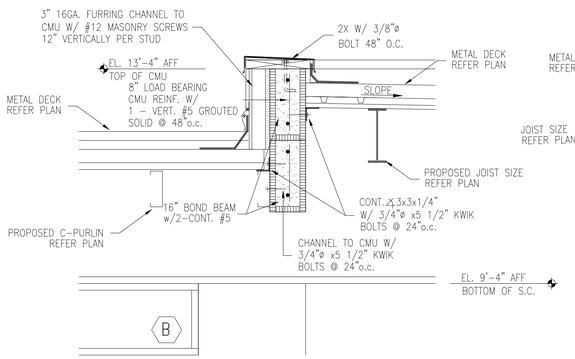
8 BEAM SCHEDULE
NTS



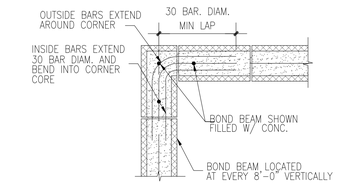
9 JOIST TO BEAM CONNECTION
SCALE: 3/4"=1'-0"



10 VESTIBULE TO EXISTING SECTION
SCALE: 3/4"=1'-0"



11 ROOF TRANSITION
SCALE: 3/4"=1'-0"



6 TYP. CRACK CONTROL JOINT
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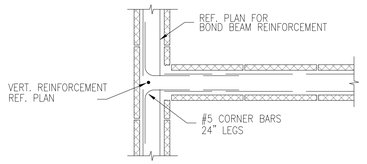
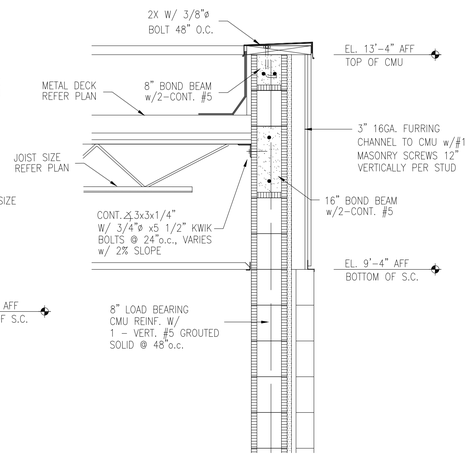
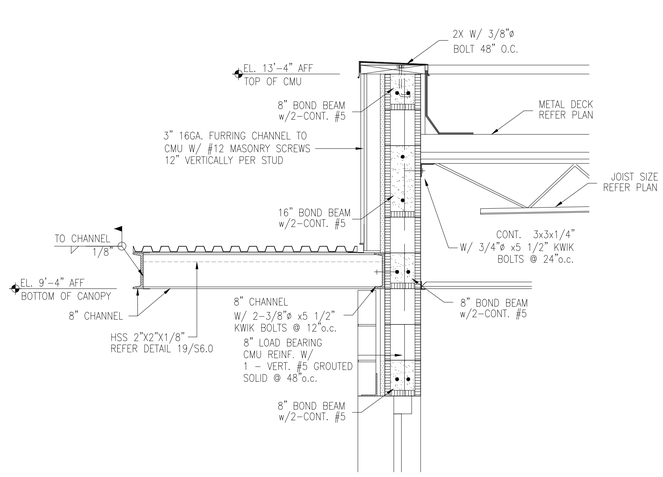


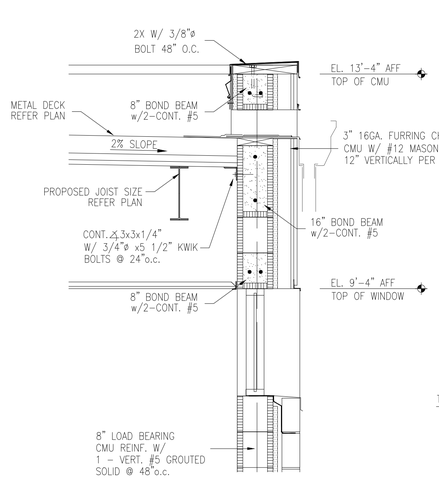
7 BOND BEAM INTERSECTION
SCALE: 3/4"=1'-0"



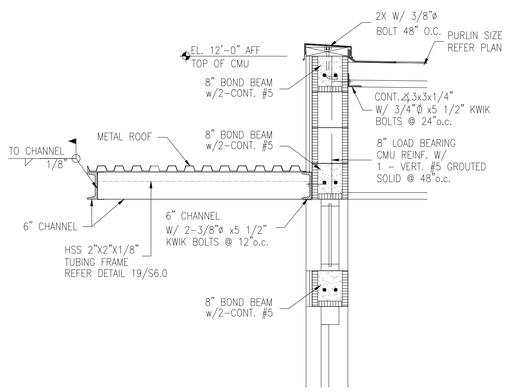
12 TYP. WALL AND JOIST DETAIL
SCALE: 3/4"=1'-0"



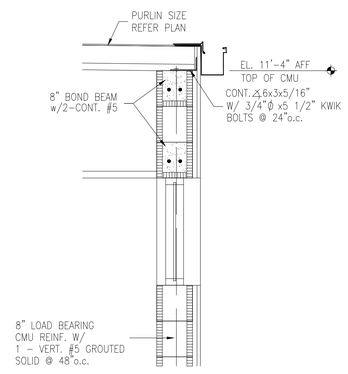
13 TYP. WALL AND JOIST DETAIL w/CANOPY
SCALE: 3/4"=1'-0"



14 TYP. WALL AND JOIST DETAIL
SCALE: 3/4"=1'-0"



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



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

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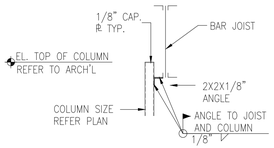
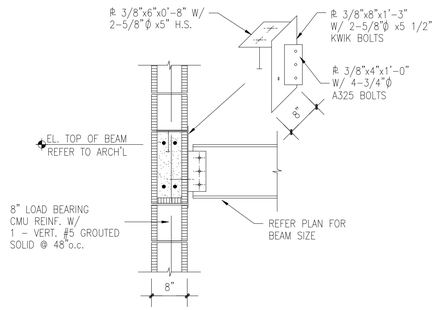
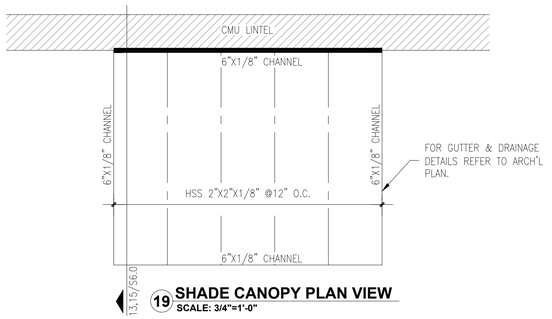


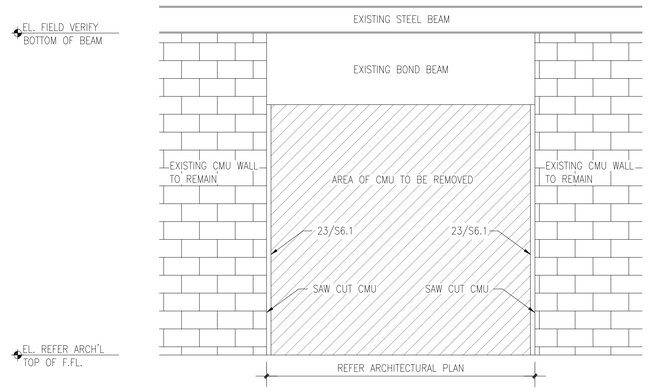
17 COLUMN TO JOIST CONNECTION
SCALE: 3/4"=1'-0"



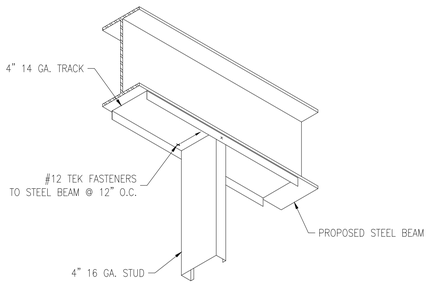
18 TYP. BEAM TO WALL DETAIL
SCALE: 3/4"=1'-0"



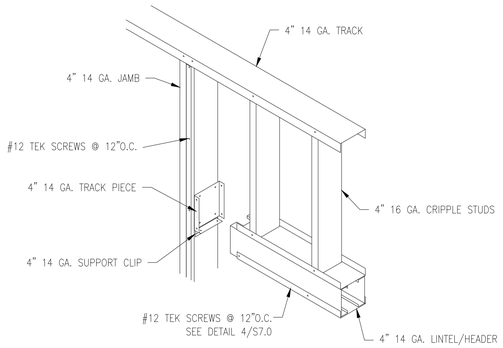
19 SHADE CANOPY PLAN VIEW
SCALE: 3/4"=1'-0"



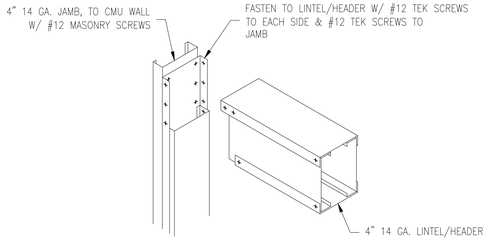
20 CLIPS AT BASE OF HDS STUD/JAMB
NTS



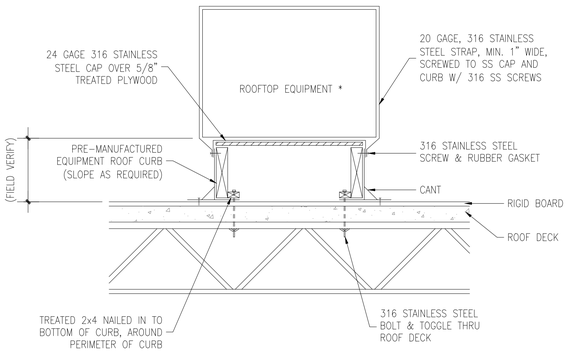
21 CONNECTION TO STRL. I-BEAM
NTS



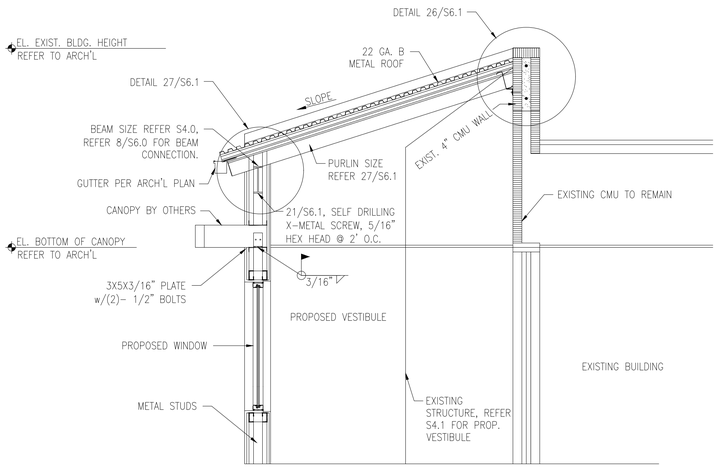
22 LOAD BEARING HEADER JAMB DETAIL
NTS



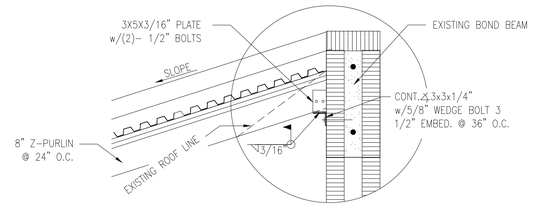
23 CLIPS AT BASE OF HDS STUD/JAMB
NTS



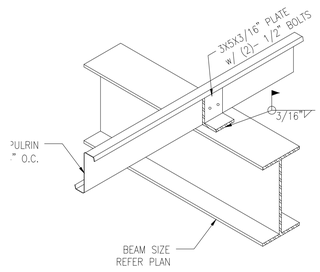
24 ROOFTOP EQUIPMENT MOUNTING DETAIL
NTS



25 PROP. VESTIBULE TO EXIST. BLDG.
NTS



26 Z-PURLIN TO EXIST BOND BEAM
NTS



27 PURLIN TO BEAM CONNECTION
NTS

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GENERAL FRAMING DETAILS

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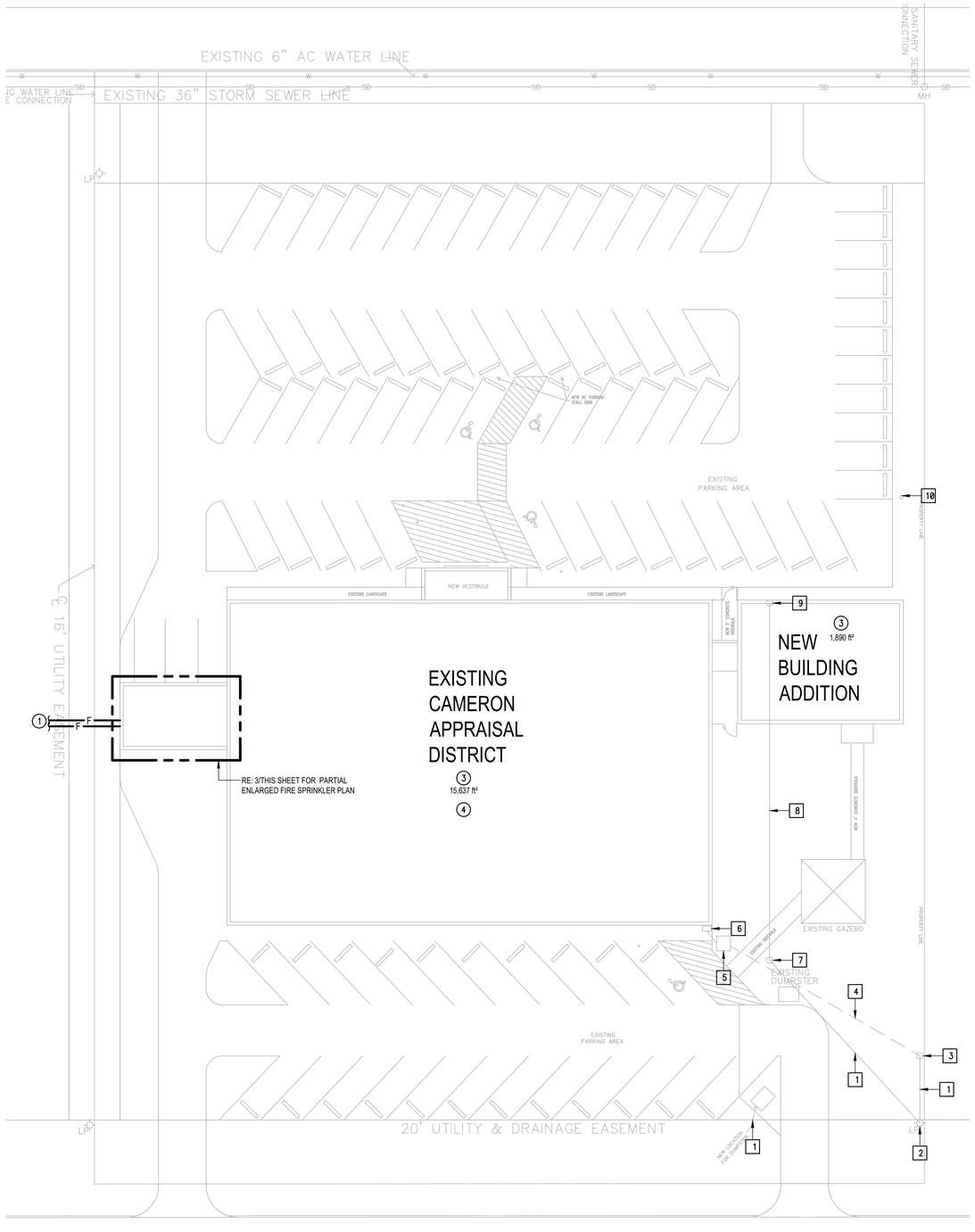


1 M.E.P. SITE PLAN

1 MEP1.1

Scale: 1" = 20'-0"

NORTH

KEYED NOTES:

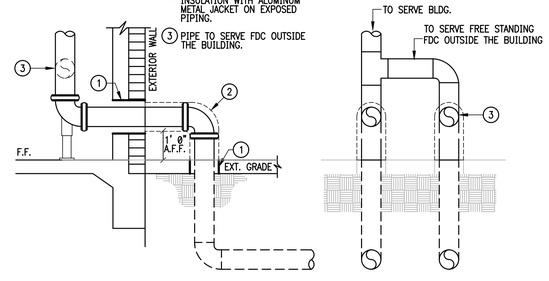
1. EXISTING ELECTRIC UTILITY OVERHEAD SERVICE LINES.
2. EXISTING ELECTRIC UTILITY POWER POLE.
3. EXISTING ELECTRIC UTILITY POWER POLE WITH POLE MOUNT TRANSFORMER.
4. EXISTING ELECTRIC UTILITY UNDERGROUND PRIMARY SERVICE LINE.
5. EXISTING ELECTRIC UTILITY 120/208V/3P PAD MOUNT TRANSFORMER.
6. EXISTING BUILDING MAIN DISCONNECT AND ELECTRICAL SERVICE METER.
7. EXISTING ELECTRIC UTILITY POWER POLE WITH POLE MOUNT FLOOD LIGHT.
8. EXISTING ELECTRIC UTILITY OVERHEAD SERVICE LINES TO BE REMOVED AND RELOCATED. RELOCATION AND COORDINATION WITH ELECTRIC UTILITY TO BE DONE BY OWNER.
9. EXISTING ELECTRIC UTILITY POWER POLE WITH POLE MOUNT FLOOD LIGHT TO BE REMOVED AND RELOCATED. RELOCATION AND COORDINATION WITH ELECTRIC UTILITY TO BE DONE BY OWNER.
10. PROPOSED LOCATION OF EXISTING ELECTRIC UTILITY POWER POLE WITH POLE MOUNT FLOOD LIGHT.

FIRE SUPPRESSION KEYED NOTES:

1. PROVIDE NEW 6" FIRE SPRINKLER LINE. REFER TO CIVIL DRAWING FOR FIRE LINE CONTINUATION. VERIFY SIZE OF FIRE SPRINKLER LINE BY MEANS OF CALCULATION AND COORDINATE WITH GENERAL CONTRACTOR. COORDINATE FREE STANDING FDC AND PROVISION OF BACKFLOW PREVENTER WITH CIVIL. REFER TO PLUMBING SHEETS AND SPECIFICATIONS FOR MORE INFORMATION.
2. PROVIDE 6" FIRE SPRINKLER LINE TO SERVE FREE STANDING FDC OUTSIDE THE BUILDING. COORDINATE WITH CIVIL. VERIFY SIZE OF FIRE SPRINKLER LINE BY MEANS OF CALCULATION AND COORDINATE WITH GENERAL CONTRACTOR.
3. PROVIDE FIRE SPRINKLER SYSTEM FOR THE EXISTING BUILDING AND THE NEW BUILDING ADDITION. CONTRACTOR SHALL INCLUDE THE COST OF THE ENTIRE FIRE SPRINKLER SYSTEM IN THE BASE BID. COORDINATE WITH GENERAL CONTRACTOR.
4. THE INSTALLATION OF THE NEW FIRE SPRINKLER SYSTEM IN THE EXISTING BUILDING REQUIRES THE EXISTING CEILING SYSTEM AND RELATED COMPONENTS (FIRE ALARM DEVICES, SPEAKERS, AIR DEVICES, ETC.) TO BE TEMPORARILY REMOVED. IN ADDITION, THE INSTALLATION OF THE NEW SPRINKLER SYSTEM SHALL BE IN PHASES SUCH THAT BUILDING REMAINS OPERATIONAL AND DISRUPTION IS KEPT AT MINIMUM. THEREFORE, IT IS THE RESPONSIBILITY OF THE FIRE SPRINKLER CONTRACTOR TO COORDINATE THE PHASING AND DETERMINE THE CEILINGS THAT NEEDS TO BE TEMPORARILY REMOVED TO ACCOMMODATE THE NEW FIRE SPRINKLER SYSTEM. REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR MORE INFORMATION REGARDING THE CEILING SYSTEMS AND PHASES/SEQUENCES OF CONSTRUCTION. COORDINATE INSTALLATION OF NEW FIRE SPRINKLER SYSTEM WITH GENERAL CONTRACTOR.

DETAIL KEYED NOTES

1. SLEEVE.
2. PROVIDE 1" CLOSED-CELL INSULATION WITH ALUMINUM METAL JACKET ON EXPOSED PIPING.
3. PIPE TO SERVE FDC OUTSIDE THE BUILDING.



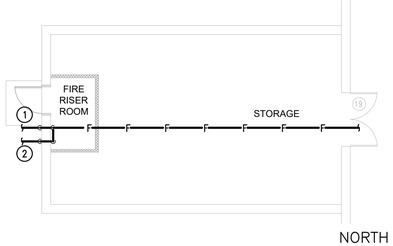
2 FIRE RISER ENTRANCE DETAIL

2 MEP1.1

Scale: NOT TO SCALE

GENERAL NOTES:

1. COORDINATE WORK AMONG ALL DISCIPLINES. IT IS NOT THE INTENT OF THESE DOCUMENTS TO DICTATE WHO MUST DO THE WORK. ALL WORK SHOWN IS THE RESPONSIBILITY OF THE (PRIME) CONTRACTOR.
2. FIELD VERIFY PROJECT SITE EXISTING CONDITIONS AND ELEVATIONS PRIOR TO BEGINNING ANY WORK.
3. COORDINATE ELECTRICAL AND PLUMBING WITH GENERAL CONSTRUCTION.
4. PHASING AND SEQUENCE OF CONSTRUCTION SHALL BE PER ARCHITECTURAL DRAWINGS AND SPECIFICATIONS.
5. FIELD VERIFY/SPOT EXACT LOCATIONS AND EXISTING CONDITIONS OF EXISTING PLUMBING, AND ELECTRICAL. IT IS THE INTENT OF THESE PLANS TO PROVIDE A COMPLETE AND WORKABLE SYSTEMS. SHOULD BIDDER FIND OMISSIONS OR DISCREPANCIES IN THE PLANS, BIDDER SHALL NOTIFY THE ENGINEER PRIOR TO THE BID DATE AND A WRITTEN CLARIFICATION WILL BE ISSUED.
6. DAMAGED ITEMS SHALL BE REPAIRED AT NO ADDITIONAL COST TO OWNER. CONTRACTORS ARE REQUIRED TO SEARCH AND INVESTIGATE FOR EXISTING UTILITIES BEFORE EXCAVATING.
7. ALL MATERIALS AND LABOR, WHETHER SPECIFICALLY INDICATED ON PLANS OR NOT, WHICH ARE NECESSARY FOR THE PROPER INSTALLATION AND FUNCTION OF THE SYSTEM SHALL BE FURNISHED BY THIS CONTRACTOR. INCLUDE ALL COSTS OF CHANGES, IF/AS REQUIRED IN BID PROPOSAL.
8. CONTRACTOR SHALL NOT PROCEED WITH ANY WORK INVOLVING A CHANGE IN PROJECT SCOPE OR COST WITHOUT FIRST HAVING OBTAINED ENGINEER'S APPROVAL IN WRITING. UNLESS ENGINEER HAS AGREED TO SUCH CHANGE PRIOR TO IT BEING DONE, AND HAS AGREED THAT AN INCREASE IN COST ASSOCIATED WITH SUCH CHANGE IS WARRANTED; CONTRACTOR WILL NOT BE REIMBURSED FOR SUCH CHANGE.
9. SLEEVE ALL EXTERIOR WALL PENETRATIONS.
10. PERFORM ALL WORK PER LATEST VERSION OF NATIONAL ELECTRICAL CODE, AND APPLICABLE LOCAL CODES AND ORDINANCES, UNLESS DRAWINGS OR SPECIFICATIONS HAVE MORE STRINGENT REQUIREMENTS.
11. CONTRACTOR IS RESPONSIBLE FOR ALL PERMITS AND FEES ASSOCIATED WITH PROJECT, INCLUDING FEES FOR INSPECTIONS, APPLICATIONS, AND PROVISION OF NEW SERVICES.
12. CONTRACTOR WHO WILL ACTUALLY PERFORM WORK MUST APPLY FOR ALL REQUIRED PERMITS.
13. NOTIFY ENGINEER OF ANY ASPECTS OF DESIGN WHICH ARE THOUGHT TO BE IN NONCOMPLIANCE WITH APPLICABLE CODES.
14. COORDINATE ALL WORK WITH OTHER TRADES; COORDINATE SCHEDULE OF WORK WITH ALL SUB-CONTRACTORS TO ACHIEVE SMOOTH FLOW OF CONSTRUCTION.
15. SEAL AROUND ELECTRICAL RACEWAYS AT ALL WALLS, A/C ROOMS AND WALL LOUVER PENETRATIONS WITH FIREPROOF CAULKING. RE: SPECS. PROVIDE FLASHING AROUND PENETRATION, BOTH INSIDE AND OUTSIDE, TO PROVIDE FINISHED LOOK.
16. TIME OR MONEY ALLOWANCES WILL NOT BE MADE TO ACCOMMODATE UTILITY CONFLICTS THAT CAN BE REASONABLY RESOLVED BY COORDINATION DURING SHOP DRAWING PHASE.
17. CONTRACTOR SHALL REVIEW COMPLETE DOCUMENTS PRIOR TO SUBMITTAL OF PROPOSAL TO GAIN COMPLETE UNDERSTANDING OF PROJECT SCOPE, WORK BY OTHERS, AND ELECTRICAL WORK ASSOCIATED WITH OTHER DISCIPLINES.
18. MAINTAIN MANUFACTURER RECOMMENDED CLEARANCE AROUND ALL EQUIPMENT.
19. AFFIX ID TAGS TO ALL DIVISION 26 EQUIPMENT.
20. CONTRACTOR IS RESPONSIBLE FOR COORDINATION WITH MECHANICAL AND PLUMBING CONTRACTOR REGARDING EQUIPMENT SIZES AND TYPES OF ELECTRICAL INTERFACE EQUIPMENT REQUIRED.
21. FIELD VERIFY ALL CONDITIONS AND MEASURE DIMENSIONS WITHIN THE BUILDING PRIOR TO ORDERING EQUIPMENT AND/OR PROCEEDING WITH INSTALLATION.
22. ALL EQUIPMENT SHALL BE FACTORY TESTED, AND CONTRACTOR SHALL VERIFY THEIR CONDITION PRIOR TO INSTALLATION. CONTRACTOR IS RESPONSIBLE FOR EQUIPMENT DAMAGED DURING MOVING AND INSTALLATION.
23. EQUIPMENT FOUND DEFECTIVE PRIOR TO FINAL ACCEPTANCE SHALL BE REPLACED AT NO COST TO OWNER.
24. WORK TO BE DONE UNDER ALLOWANCES BECOMES AN INTEGRAL PART OF THE PROJECT AND RESPONSIBILITY OF CONTRACTOR ONCE ALLOWANCE IS APPROVED.

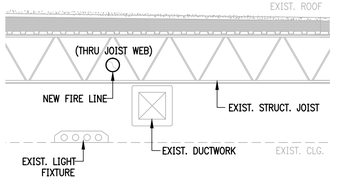


3 PARTIAL ENLARGED M.E.P. SITE PLAN

3 MEP1.1

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

NORTH



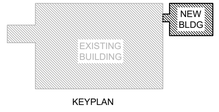
4 FIRE LINE DETAIL

4 MEP1.1

Scale: NOT TO SCALE

STATE OF TEXAS
CESAR A. GONZALEZ
108611
LICENSED PROFESSIONAL ENGINEER
8.16.2018
MECHANICAL

STATE OF TEXAS
RAY PEYNADO
125390
LICENSED PROFESSIONAL ENGINEER
8.16.2018
ELECTRICAL



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CAMERON APPRAISAL DISTRICT
NEW BUILDING ADDITION AND RENOVATION
2021 AMISTAD DRIVE, SAN BENITO, TEXAS 78586

M.E.P. SITE PLAN

NO.	DATE	REVISIONS

DRAWN BY:	CHECKED BY:
ETHOS	SCK

DATE: 08-16-18

SHEET NO.

MEP1.1

CODES & ORDINANCES:

1. GENERAL:
   a. UNLESS DRAWINGS OR SPECIFICATIONS HAVE MORE STRINGENT REQUIREMENTS, PERFORM ALL WORK PER APPLICABLE VERSION OF INTERNATIONAL BUILDING CODES, AND LOCAL CODES AND ORDINANCES.

   b. PRIOR TO SUBMITTING PROPOSAL, NOTIFY ENGINEER OF ANY ASPECTS OF DESIGN WHICH ARE THOUGHT TO BE IN NONCOMPLIANCE WITH APPLICABLE CODES.

2. WIND STORM CERTIFICATION:
   a. CONTRACTOR SHALL DESIGN, CONSTRUCT AND INSTALL EXTERIOR AND ROOF MOUNTED EQUIPMENT TO MEET GOVERNING BUILDING CODES.

3. PERMITS:
   a. CONTRACTOR IS RESPONSIBLE FOR ALL PERMITS AND FEES ASSOCIATED WITH PROJECT, INCLUDING FEES FOR INSPECTIONS, APPLICATIONS, AND PROVISION OF NEW SERVICES.

   b. CONTRACTOR WHO WILL ACTUALLY PERFORM WORK MUST APPLY FOR ALL REQUIRED PERMITS.

4. APPROVALS AND INSPECTIONS:
   a. OBTAIN APPROVAL FROM CITY FIRE DEPARTMENT AND BUILDING AND SAFETY DEPARTMENT PRIOR TO INSTALLATION OF ANY FIRE RELATED ITEMS.

   b. COORDINATE PRESSURE TESTS, INSPECTIONS AND APPROVAL FOR ALL SYSTEMS WITH PERMITTING OFFICER, OWNER AND ENGINEER.

   c. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING WIND STORM CERTIFICATION INSPECTIONS AND CERTIFICATIONS FOR ROOFTOP EQUIPMENT. CONTRACTOR MUST NOTIFY INSPECTOR PRIOR TO INSTALLING EQUIPMENT, AND APPRISE INSPECTOR OF WORK SCHEDULING INVOLVING EQUIPMENT REQUIRING WIND INSPECTION / CERTIFICATION, SO THAT INSPECTIONS MAY BE CARRIED OUT AT REQUIRED STAGE(S) OF CONSTRUCTION.

GENERAL NOTES:

1. CONTRACT RELATED:
   a. COORDINATE WORK AMONG ALL DISCIPLINES. IT IS NOT THE INTENT OF THESE DOCUMENTS TO DICTATE WHO MUST DO THE WORK. ALL WORK SHOWN IS THE RESPONSIBILITY OF THE (PRIME) CONTRACTOR.

   b. WORK TO BE DONE UNDER ALLOWANCES BECOMES AN INTEGRAL PART OF THE PROJECT AND RESPONSIBILITY OF CONTRACTOR ONCE ALLOWANCE IS APPROVED.

   c. CONTRACTOR SHALL NOT PROCEED WITH ANY WORK INVOLVING A CHANGE IN PROJECT SCOPE OR COST WITHOUT FIRST HAVING OBTAINED ENGINEER'S APPROVAL IN WRITING. UNLESS ENGINEER HAS AGREED TO SUCH CHANGE PRIOR TO IT BEING DONE, AND HAS AGREED THAT AN INCREASE IN COST ASSOCIATED WITH SUCH CHANGE IS WARRANTED; CONTRACTOR WILL NOT BE REIMBURSED FOR SUCH CHANGE.

2. TEST & BALANCE:
   a. TEST & BALANCE SHALL BE PERFORMED UNDER GENERAL CONTRACTOR, SEPARATE FROM MECHANICAL CONTRACT. DURING BIDDING, CONTRACTOR SHALL SUBMIT A COPY OF EVIDENCE THAT TAB AGENT MEETS THE QUALIFICATIONS SPECIFIED UNDER DIV. 23 SECTION 230593 TO PRIME CONTRACTOR.

   b. TEST & BALANCE TO COORDINATE MINIMUM AND MAXIMUM OUTSIDE AIR DAMPER SETTINGS WITH DDC CONTROLS AND ENGINEER. PROVIDE TIME ALLOTMENT FOR MULTIPLE DAMPER SETTINGS IN SOME CASES.

   c. CONTRACTOR SHALL COORDINATE TAB ACTIVITIES WITH TAB CONTRACTOR.

COORDINATION:

1. GENERAL:
   a. CONTRACTOR SHALL REVIEW COMPLETE DOCUMENTS PRIOR TO SUBMITTAL OF PROPOSAL TO GAIN COMPLETE UNDERSTANDING OF PROJECT SCOPE, WORK BY OTHERS, AND MECHANICAL WORK ASSOCIATED WITH OTHER DISCIPLINES.

   b. COORDINATE MECHANICAL WITH OTHER TRADES SUCH AS PLUMBING, ELECTRICAL AND STRUCTURAL WORK. COORDINATE SCHEDULE OF WORK WITH ALL SUB-CONTRACTORS TO ACHIEVE SMOOTH FLOW OF CONSTRUCTION.

   c. TIME OR MONEY ALLOWANCES WILL NOT BE MADE TO ACCOMMODATE UTILITY CONFLICTS THAT CAN BE REASONABLY RESOLVED BY COORDINATION DURING SHOP DRAWING STAGE.

   d. PROVIDE COORDINATION DRAWINGS OF REFLECTED CEILING PLAN AND SECTION ABOVE CEILING SHOWING WORK OF ALL AFFECTED TRADES. DO NOT PROCEED WITH FABRICATION WORK UNTIL COORDINATION DRAWINGS HAVE BEEN APPROVED BY A/E.

2. SITE:
   a. TIME OR MONEY ALLOWANCES WILL NOT BE MADE TO ACCOMMODATE UTILITY CONFLICTS THAT CAN BE REASONABLY RESOLVED BY COORDINATION DURING SHOP DRAWING STAGE.

3. ARCHITECTURAL AND STRUCTURAL:
   a. REFER TO ARCHITECTURAL AND STRUCTURAL PLANS FOR DETAILS OF CONSTRUCTION, INCLUDING BEAMS, FLOOR AND WALL PENETRATIONS, CHASES, AND REFLECTED CEILING PLANS. VERIFY OPENING SIZES WITH EQUIPMENT FURNISHED.

   b. SLEEVE ALL EXTERIOR WALL AND GRADE BEAM PENETRATIONS. GRADE BEAM PENETRATIONS SHALL BE MADE WITHIN MIDDLE 1/3 OF VERTICAL SPAN OF BEAM.

   c. SEAL AROUND DUCTS AND PIPING AT ALL WALLS, A/C ROOMS AND WALL LOUVER PENETRATIONS WITH FIREPROOF CAULKING. RE: SPECS. PROVIDE ESCUTCHEON PLATES AND FLASHING AROUND PENETRATION, BOTH INSIDE AND OUTSIDE, TO PROVIDE FINISHED LOOK.

4. SPATIAL COORDINATION:
   a. COORDINATE ALL WORK WITH OTHER TRADES; COORDINATE SCHEDULE OF WORK WITH ALL SUB-CONTRACTORS TO ACHIEVE SMOOTH FLOW OF CONSTRUCTION.

   b. SPACES ABOVE CEILING ARE CONGESTED. DESIGN INTENT IS THAT UTILITIES BE INSTALLED TIGHT AGAINST CEILING STRUCTURE TO EXTENT POSSIBLE, WHILE RETAINING ADEQUATE MAINTENANCE ACCESS PER CODES.

   c. IN CASE OF CONFLICTS, ITEMS SHALL BE ARRANGED ACCORDING TO THE FOLLOWING PRIORITIES: LIGHTING, FIRE PROTECTION, HVAC. PROVIDE OFFSETS/RISES/DROPS REQUIRED TO RESOLVE CONFLICTS WITH OTHER UTILITIES, AND TO ACCOMMODATE ALL UTILITIES ABOVE CEILINGS.

   d. IN GENERAL, REROUTE SMALLER DUCTS/PIPES THROUGH JOISTS TO RESOLVE CONFLICTS WITH LARGER. PERFORM REROUTING IN MOST EFFICIENT MANNER POSSIBLE, AND IN ACCORDANCE WITH INDUSTRY STANDARDS.

   e. PROVIDE COORDINATION DRAWINGS OF REFLECTED CEILING PLAN AND SECTION ABOVE CEILING SHOWING WORK OF ALL AFFECTED TRADES. DO NOT PROCEED WITH FABRICATION WORK UNTIL COORDINATION DRAWINGS HAVE BEEN APPROVED BY A/E.

   f. IN GENERAL ROUTE DUCTS/PIPES IN MOST EFFICIENT MANNER POSSIBLE, AND IN ACCORDANCE WITH INDUSTRY STANDARDS.

   g. SEE ELECTRICAL PLANS FOR EXACT LOCATION OF ELECTRICAL PANELS TO AVOID DUCTWORK AND PIPING RUNNING OVER THESE AREAS. COORDINATE WITH ELECTRICAL CONTRACTOR.

   h. LOCATE AIR DEVICES AS SHOWN. COORDINATE WITH OTHER TRADES TO AVOID CONFLICT AND ADJUST LOCATION IF NEEDED WITHOUT COMPROMISING AIR DEVICES PERFORMANCE.

5. CONTROLS:
   a. REFER TO SPECIFICATIONS FOR CONTROL COMPONENTS AND DEVICES TO BE COORDINATED WITH MECHANICAL WORK.

   b. CONTRACTOR IS RESPONSIBLE FOR INSTALLING LOW VOLTAGE POWER AND COMMUNICATIONS. REFERENCE SPECIFICATIONS FOR CONTROL WORK.

   c. DRAWINGS SHOW GENERAL LOCATION OF SENSORS (T, RH). UNLESS NOTED OTHERWISE, INSTALL SENSORS AT 48" ABOVE FINISHED FLOOR. WIRING SHALL BE IN CONCEALED WALLS. IN CASE OF CONFLICTS WITH FURNITURE, WINDOWS, ETC., COORDINATE EXACT LOCATION WITH ARCHITECT AND ENGINEER.

EQUIPMENT:

1. EQUIPMENT INSPECTION:
   a. FIELD VERIFY ALL CONDITIONS AND MEASURE DIMENSIONS WITHIN THE BUILDING PRIOR TO ORDERING EQUIPMENT AND/OR PROCEEDING WITH INSTALLATION.

   b. ALL EQUIPMENT SHALL BE FACTORY TESTED, AND CONTRACTOR SHALL VERIFY EQUIPMENT CONDITION PRIOR TO INSTALLATION. CONTRACTOR IS RESPONSIBLE FOR EQUIPMENT DAMAGED DURING MOVING AND INSTALLATION.

   c. EQUIPMENT FOUND DEFECTIVE PRIOR TO FINAL ACCEPTANCE SHALL BE REPLACED AT NO COST TO OWNER.

2. EQUIPMENT ACCESS:
   a. PROVIDE MANUFACTURER RECOMMENDED AND CODE ENFORCED CLEARANCES AROUND EQUIPMENT. MAINTAIN 36" CLEAR IN FRONT OF POWERED EQUIPMENT, ELECTRIC HEATERS, ETC.

   b. INSTALL ALL VALVES, CONTROLS, DAMPERS, FANS, ETC. IN ACCESSIBLE LOCATIONS. PROVIDE ADEQUATELY SIZED ACCESS DOORS WHERE REQUIRED.

3. EQUIPMENT INSTALLATION:
   a. PROVIDE SPRING HANGER TYPE VIBRATION ISOLATORS TO SUPPORT SUSPENDED AHUS, FANS AND OTHER POWERED VIBRATING EQUIPMENT. PROVIDE FLEXIBLE DUCT CONNECTORS.

   b. COMPLETELY WEATHERPROOF ALL EQUIPMENT, DUCTS, PIPES AND OTHER DEVICES AND MATERIALS INSTALLED OUTSIDE THE BUILDING, IN PARKING AREA, OR OTHERWISE EXPOSED TO WEATHER. AS A MINIMUM, WEATHERPROOFING SHALL INCLUDE, BUT IS NOT LIMITED TO THE FOLLOWING: JACKETING FOR ALL PIPING INSULATION, VALVES AND ACCESSORIES RATED FOR OUTDOOR SERVICE, ELECTRICAL ENCLOSURES NEMA 4X-SS. PROVIDE ELECTRICAL HEAT TRACING FOR UTILITIES SUSCEPTIBLE TO FREEZING.

   c. AFFIX ID TAGS TO ALL MECHANICAL EQUIPMENT PER SPECIFICATIONS.

5. PLUMBING:
   a. PROVIDE CODE RECOMMENDED CLEARANCE OR MINIMUM 10' BETWEEN EXHAUST FANS DISCHARGES, PLUMBING VENTS AND AIR INTAKES. COORDINATE LOCATIONS WITH PLUMBING CONTRACTOR.

   b. PROVIDE INSULATED AND TRAPPED CONDENSATE DRAIN LINES FROM ALL AIR CONDITIONING EQUIPMENT AND TERMINATE TO NEAREST FLOOR DRAIN OR OTHER APPROVED RECEPTACLES. COORDINATE DRAINS WITH PLUMBING.

6. ELECTRICAL:
   a. CONTRACTOR IS RESPONSIBLE FOR COORDINATION WITH ELECTRICAL CONTRACTOR REGARDING EQUIPMENT SIZES AND TYPES OF ELECTRICAL INTERFACE EQUIPMENT REQUIRED.

   b. DUE TO VARIATIONS IN EQUIPMENT CHARACTERISTICS BY DIFFERENT EQUIPMENT SUPPLIERS, MECHANICAL EQUIPMENT ULTIMATELY PROVIDED MAY DIFFER IN HORSEPOWER OR AMPERAGE REQUIREMENTS FROM THAT SPECIFIED IN THESE DRAWINGS. COORDINATE WITH GENERAL CONTRACTOR PRIOR TO BIDDING, AND PRIOR TO SUBMITTALS AND ORDERING EQUIPMENT, TO ENSURE THAT EQUIPMENT ELECTRICAL REQUIREMENTS ARE CONVEYED TO ELECTRICAL CONTRACTOR. IT IS SOLELY CONTRACTOR'S RESPONSIBILITY TO ENSURE COMPATIBILITY ISSUES ARE COORDINATED.

INSULATION:

1. FIBERGLASS INSULATION MAY NOT BE USED ON ANY COLD PIPING SURFACES; ONLY CLOSED CELL INSULATION IS ACCEPTABLE.

2. PROVIDE INSULATION ON ALL SURFACES CAPABLE OF CREATING CONDENSATION.

DUCTWORK:

1. DUCTWORK GENERAL:
   a. DRAWINGS ARE DIAGRAMMATIC IN NATURE. FOR CLARITY SAKE, MOST DUCT OFFSETS/RISES/DROPS ARE NOT SHOWN. WHERE DUCTS PENETRATE WALLS, INSTALL THEM PERPENDICULAR TO WALL.

   b. RECTANGULAR AND ROUND DUCTWORK SHALL BE GALVANIZED STEEL. SIZES SHOWN ARE INSIDE CLEAR DIMENSION, UNLESS NOTED OTHERWISE.

   c. VERIFY BOTTOM OF DUCT ELEVATION AND COORDINATE WITH OTHER TRADES.

   d. CONSTRUCT AND LEAKAGE TEST ALL DUCTWORK BASED ON SPECIFICATIONS AND SMACNA REQUIREMENTS, WHICHEVER IS MORE STRINGENT. COORDINATE PRESSURE CLASSES WITH EQUIPMENT SCHEDULES.

   e. FLEXIBLE DUCTS MAXIMUM LENGTH SHALL NOT EXCEED 6 FEET. USE OF FLEXIBLE DUCTWORK IS LIMITED TO AREAS WITH AN ACCESSIBLE SUSPENDED CEILING. PINCHED DUCT WILL HAVE TO BE REPLACED.

   f. IN AREAS WHERE DUCT CONFLICTS CANNOT BE AVOIDED, ROUTE SMALLER DUCTS THROUGH ROOF JOISTS.

   g. LOCATE AIR DEVICES AS SHOWN. COORDINATE WITH ELECTRICAL, IF NEEDED. RELOCATE DIFFUSER TO ADJACENT TILE.

2. DUCTWORK INSULATION:
   a. WRAP ALL OUTSIDE AIR, SUPPLY AND RETURN DUCTWORK UNLESS NOTED OTHERWISE.

   b. IN ADDITION, FOR ACOUSTICAL PERFORMANCE INTERNALLY LINE FIRST 10' OF SUPPLY AND LAST 10' OF RETURN DUCTWORK.

   c. PROVIDE ACOUSTICAL LINING FOR ALL TRANSFER DUCTS AND RETURN AIR ELBOWS.

   d. INSULATION ON DUCT SHOULD TO BE PROPERLY TAPED AND MASTICS MUST BE APPLIED ON SEAMS AND JOINTS AND AT ENDS ADJACENT TO DUCT FLANGES AND FITTINGS. FOR DUCT SIDES WITH DIMENSIONS LARGER THAN 18 INCHES, APPLY ADDITIONAL PINS AND CLIPS TO HOLD INSULATION TIGHTLY AGAINST SURFACE AT CROSS BRACING.

   e. INSULATE ALL EXHAUST DUCTWORK 10 FEET FROM EXTERIOR OPENING.

3. DUCT FITTINGS:
   a. WHERE RECTANGULAR TEE FITTINGS ARE SHOWN, PROVIDE FITTING WITH ADJUSTABLE DIVIDER SHEET AND TURNING VANES.

   b. WHERE RECTANGULAR MAIN AND BRANCH CONNECTIONS ARE SHOWN, PROVIDE EXTRACTOR VANES. NOT APPLICABLE TO DUCTWORK DOWNSTREAM OF VAV BOXES.

   c. PROVIDE TURNING VANES IN ALL ELBOWS PER SPECS.

4. DAMPERS:
   a. IN AN ACCESSIBLE LOCATION, PROVIDE MANUAL-TYPE VOLUME BALANCING DUCT DAMPERS IN ALL SUPPLY, RETURN AND EXHAUST DUCT BRANCHES TO INDIVIDUAL GRILLES, REGISTERS AND DIFFUSERS (GRD). TO MINIMIZE NOISE INSTALL DAMPERS CLOSER TO THE BRANCH CONNECTION THAN TO THE GRD. IN DUCTWORK, PROVIDE ACCESS DOORS TO ALL DAMPERS.

   b. ABOVE INACCESSIBLE CEILINGS AND IN CASE DUCT CONFIGURATION DOES NOT ALLOW FOR INSTALLATION OF DAMPER IN DUCTWORK, PROVIDE REMOTE MANUAL DAMPER BY YOUNG REGULATOR OR EQUAL, (CABLE OPERATED SYSTEM) WITH ENGINEER'S PERMISSION CONTRACTOR MAY PROVIDE VOLUME DAMPER THAT IS INTEGRAL TO GRD.

   c. PROVIDE BALANCING DAMPERS ON ALL EXHAUST GRILLES TO ACHIEVE DESIRED AIRFLOW.

   d. PROVIDE DYNAMIC FIRE DAMPERS (RUSKIN DIDB20, TYPE B OR EQUAL) IN ACCORDANCE WITH CODE REQUIREMENT, IN ALL PENETRATIONS OF FIRE RATED WALLS, OCCUPANCY SEPARATION WALLS, BARRIERS AND PARTITIONS, AND EXIT CORRIDORS. REFER TO ARCHITECTURAL PLANS FOR RATED WALLS. PROVIDE ACCESS DOORS AS PER CODE REQUIREMENTS, EQUAL TO RUSKIN ADH-22 FOR RECTANGULAR DUCT, ACUDOR RD FOR ROUND DUCT. WHERE GRILLE ACCESS IS INDICATED, ADDITIONAL DUCT ACCESS DOOR IS NOT REQUIRED. WHERE THE CEILING IS FIRE RATED PROVIDE FIRE RATED AIR DEVICES FOR TRANSFER & RETURN AIR GRILLES AND SUPPLY AIR DIFFUSERS AS PER CODE REQUIRMENTS. REFER TO ARCHITECTURAL PLANS FOR RATED CEILINGS.

   e. PROVIDE ACCESS DOORS (NOT SHOWN IN DRAWINGS) FOR INSPECTION OF DUCT MOUNTED EQUIPMENT SUCH AS FIRE/SMOKE DAMPERS, MANUAL BALANCING DAMPERS AND TURNING VANES. IN AREAS WITH HARD CEILING COORDINATE ACCESS DOOR LOCATIONS AND CEILING ACCESS PANELS WITH OTHER TRADES.

ABBREVIATIONS

A	AMPS	CU	CONDENSING UNIT	FCU	FAN COIL UNIT	HVAC	HEAT., VENT., & AIR CONDITION.	SA	SUPPLY AIR	N.T.S.	NOT TO SCALE
ACT	ACTUATOR	CU.	COPPER	FD	FLOOR DRAIN OR FIRE DAMPER	LCU	LOCAL CONTROL UNIT	SAG	SUPPLY AIR GRILLE	OA	OUTSIDE AIR
A.F.F.	ABOVE FINISHED FLOOR	DDC	DIRECT DIGITAL CONTROLS	FM	FLOW METER	LVG.	LEAVING	SS	STAINLESS STEEL	PCU	PRIMARY CONTROL UNIT
B.	BOTTOM	DMPR.	DAMPER	FS	FLOW SWITCH	MECH	MECHANICAL	SZ	SINGLE ZONE	PH	PHASE
BOP	BOTTOM OF PIPE	DISC.	DISCONNECT	FPI	FINS PER INCH	MOT. STRTR.	MOTOR STARTER	TAB	TESTING & BALANCING	RA	RETURN AIR
BOTT.	BOTTOM	DX	DIRECT EXPANSION COOLING	G.	GROUND	MS	MOTOR STARTER	TS	TEMPERATURE SENSOR	RAG	RETURN AIR GRILLE
C.	CONDUIT OR COMMON	EAG	EXHAUST AIR GRILLE	GA.	GAGE	RAH	RELIEF AIR HOOD	TSTAT	THERMOSTAT	V	VOLTS
CLG.	CEILING OR COOLING	EF	EXHAUST FAN	GALV.	GALVANIZED	RD	ROOF DRAIN	UG	UNDERGROUND	VAV	VARIABLE AIR VOLUME
COMB.	COMBINATION	EMS	ENERGY MANAGEMENT SYSTEM	GRND.	GROUND	RM.	ROOM	MZ	MULTI-ZONE	VFD	VARIABLE FREQUENCY DRIVE
CONC.	CONCRETE	ENT.	ENTERING	HP	HORSEPOWER	RPZ	REDUCED PRESSURE ZONE	NC	NORMALLY CLOSED	W	WIRE
COND.	CONDUIT	EXT.	EXTERNAL OR EXTERIOR	HS	HUMIDITY SENSOR	RTU	ROOFTOP UNIT	NO	NORMALLY OPEN		

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CAMERON APPRAISAL DISTRICT
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2021 AMISTAD DRIVE, SAN BENITO, TEXAS 78586

MECHANICAL GENERAL NOTES, LEGEND & ABBREVIATIONS

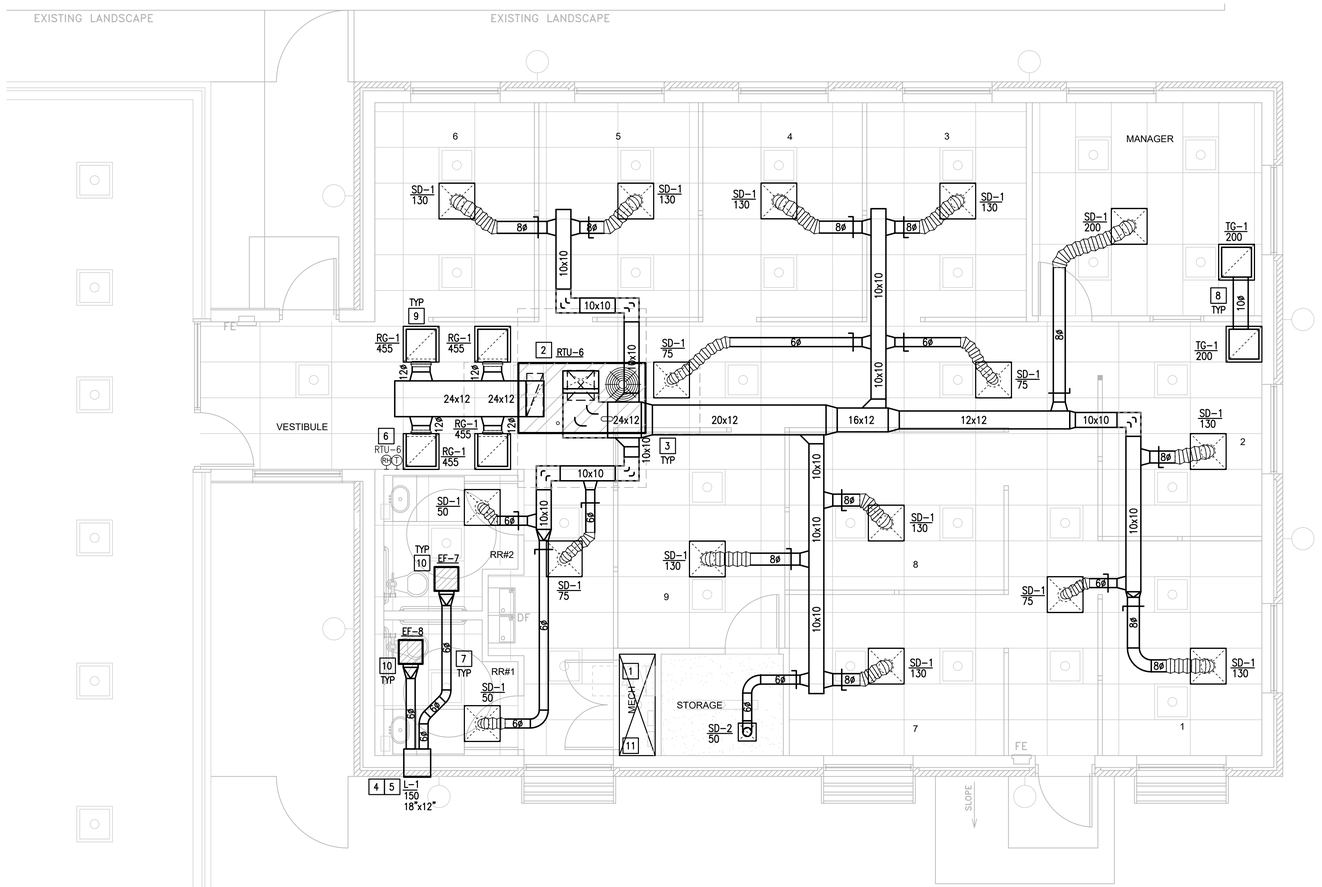
STATE OF TEXAS
CESAR A. GONZALEZ
108611
LICENSED
PROFESSIONAL ENGINEER
8.16.2018

NO.	DATE	REVISIONS

DRAWN BY:	CHECKED BY:
ETHOS	SCK

DATE: 08-16-18

SHEET NO.
M2.1



KEYED NOTES:

1. CODE AND WORKING CLEARANCE FOR ELECTRICAL PANELS. DO NOT ROUTE DUCT OR PIPING DIRECTLY ABOVE ELECTRICAL EQUIPMENT FOOTPRINT. SEE ELECTRICAL PLANS FOR EXACT LOCATION. (TYP.)
2. PROVIDE RTU ON ROOF CURB AS SCHEDULED. REFER TO MECHANICAL ROOF PLAN FOR MORE INFORMATION.
3. DUCTWORK ROUTING SHOWN IS DIAGRAMMATIC IN NATURE. FIELD-VERIFY STRUCTURE AND SPACE AVAILABILITY PRIOR TO SUBMITTING SHOP DRAWINGS. COORDINATE WITH ARCHITECT AND ENGINEER IN CASE OF CONFLICTS.
4. SLEEVE ALL WALL PENETRATIONS PER SPECIFICATIONS. SEAL AROUND DUCTS & PIPING AT ALL WALLS, AC ROOMS AND WALL LOUVER PENETRATIONS WITH FIRE-PROOF CAULKING. PROVIDE ESCUTCHEON PLATES AND FLASHING AROUND PENETRATION, BOTH INSIDE AND OUTSIDE TO PROVIDE A FINISH LOOK. (TYP.)
5. PROVIDE LOUVER AS SCHEDULED. COORDINATE FINAL FINISH, SIZE AND LOCATION WITH ARCHITECT PRIOR TO ORDERING. (TYP.)
6. PROVIDE WALL MOUNTED PROGRAMMABLE T-STAT AND RH SENSOR AS PER SPECIFICATIONS. INSTALL 48" A.F.F. COORDINATE WITH ARCHITECT AND OWNER TO MEET ADA REQUIREMENTS.
7. PROVIDE ROUND SPIRAL LOCK-SEAM DUCT. LONGITUDINAL SEAM TYPE IS NOT ACCEPTABLE. (TYPICAL)
8. PROVIDE ACOUSTICAL LINING FOR TRANSFER DUCT. SEE SPECIFICATIONS. (TYPICAL)
9. PROVIDE FABRICATED RETURN AIR PLENUM BOX ABOVE RETURN GRILLE. INSTALL ACOUSTICAL LINING IN PLENUM BOX. CONNECT WITH FLEX DUCT TO MAIN RETURN TRUNK DUCT WHERE SHOWN ON DRAWING AND INSTALL BALANCING DAMPER WHERE INDICATED. FOR AREAS WHERE FLEX DUCT IS NOT SHOWN, PROVIDE ACOUSTICAL LINING FOR CONNECTION TO MAIN RETURN TRUNK DUCT. SEE DETAIL SHEET. (TYPICAL)
10. PROVIDE EXHAUST FAN AS SCHEDULED. SEE ASSOCIATED DETAIL ON DETAIL SHEET.
11. ROUTE CONDENSATE PIPING DOWN FROM ROOF TO FLOOR DRAIN AT THIS APPROXIMATE LOCATION.

NORTH

1 / M3.1 MECHANICAL PLAN
Scale: 1/4" = 1'-0"

KEYPLAN

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MECHANICAL PLAN

STATE OF TEXAS
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8.16.2018

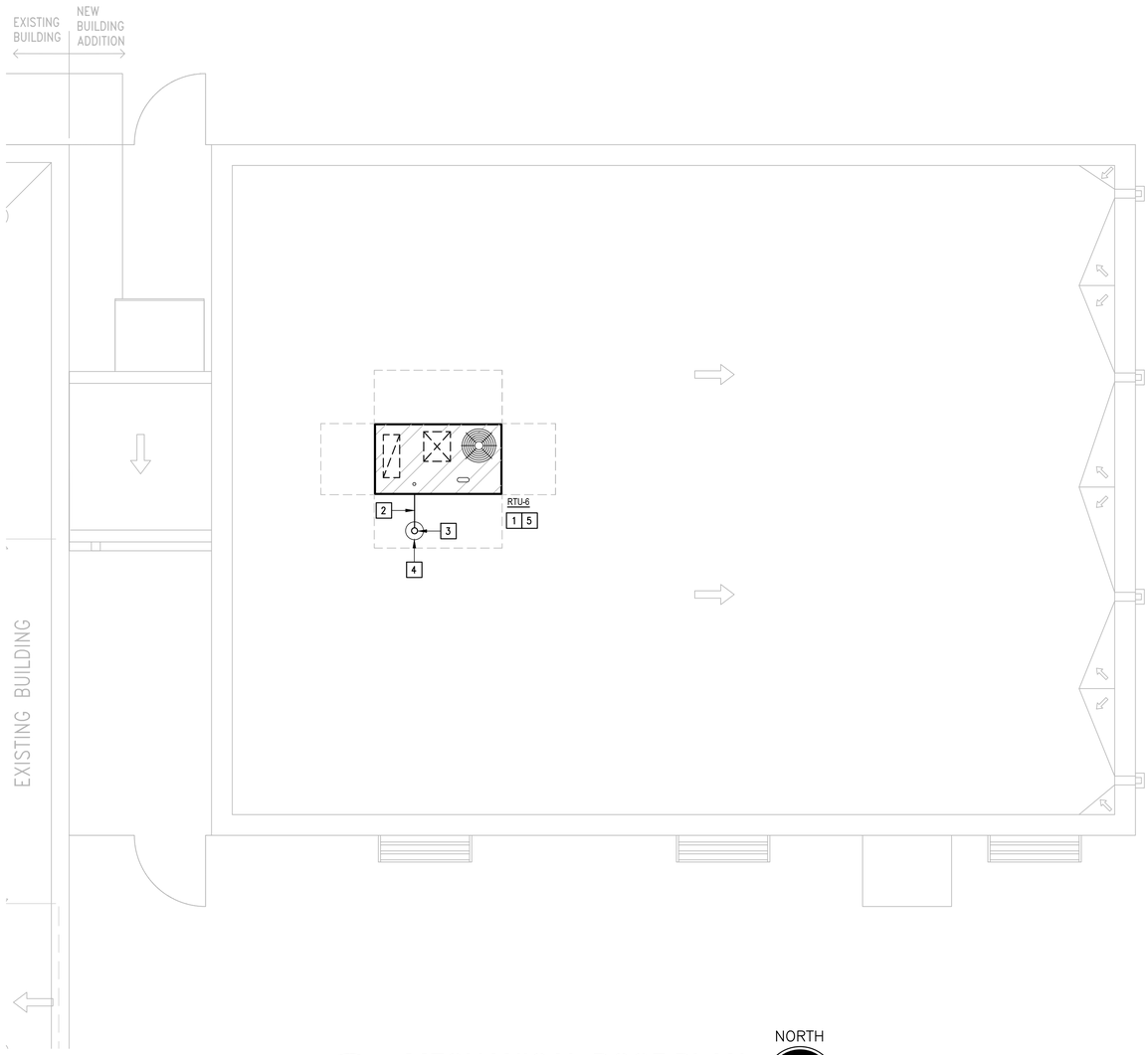
NO.	DATE	REVISIONS

DRAWN BY:	CHECKED BY:
ETHOS	SCK

DATE: 08-16-18

SHEET NO.

M3.1



GENERAL NOTES:

1. ORIENT RTUS TO MINIMIZE DUCTWORK MODIFICATIONS. SEAL ALL OPENINGS AND ENSURE THAT INSTALLATION IS WEATHER-TIGHT. PROVIDE REQUIRED MODIFICATIONS FOR A COMPLETE AND SEAMLESS INSTALLATION.
2. PERFORM DUCTWORK TIE-IN FROM NEW UNITS TO VERTICAL DUCTS VIA FLEX CONNECTORS AND TRANSITION DUCTWORK. VERIFY SPACE AVAILABILITY PRIOR TO BIDDING AND PRIOR TO SUBMITTING DUCTWORK SHOP DRAWINGS.
3. UNLESS OTHERWISE NOTED PROVIDE CONDENSATE DRAIN LINES WITH P-TRAPS, AND EXTEND TO NEAREST CONDENSATE DRAIN RECEPTOR. SUPPORT PIPING ON PIPING SUPPORTS BY MIRO INDUSTRIES, MODEL 1.5, OR EQUAL.
4. PROVIDE ROOF PENETRATION SYSTEM "CHEMCURB" FOR ELECTRICAL AND CONTROL WIRING. REFER TO DETAIL SHEET & ELECTRICAL RISER DIAGRAM.

KEYED NOTES:

1. PROVIDE RTU ON ROOF CURB AS SCHEDULED. ORIENT RTUS TO OPTIMIZE DUCTWORK. SEAL ALL OPENINGS AND ENSURE THAT INSTALLATION IS WEATHER-TIGHT. PROVIDE COPPER CONDENSATE DRAIN LINES WITH P-TRAPS, AND EXTEND TO NEAREST CONDENSATE DRAIN RECEPTOR. SUPPORT PIPING IN PIPING SUPPORTS AS DETAILED. PROVIDE ROOF CURB TO INSTALL EQUIPMENT ON ROOF. SECURE EQUIPMENT TO ROOF CURB AND ROOF CURB TO ROOF STRUCTURE AS PER DIV. 7 SPECIFICATIONS. ATTACHMENTS SHALL BE CAPABLE OF WITHSTANDING THE LOCAL WIND PRESSURES.
2. PROVIDE COPPER CONDENSATE PIPING ON ROOF AND PROVIDE SUPPORTS AS PER DETAIL. REFER TO DETAIL SHEET. (TYPICAL)
3. ROUTE CONDENSATE LINE DOWN TO CEILING SPACE BELOW AT THE APPROXIMATE LOCATION. REFER TO PLUMBING DRAWINGS.
4. PROVIDE ROOF PENETRATION SEAL CHEMCURB SYSTEM FOR REFRIGERANT PIPING, HVAC CONTROL WIRING AND ELECTRICAL POWER CONDUITS. SEE ASSOCIATED DETAIL ON DETAIL SHEET. COORDINATE INSTALLATION WITH ELECTRICAL AND PLUMBING CONTRACTORS.
5. PROVIDE FACTORY INSTALLED CONVENIENCE ELECTRICAL OUTLET AT RTU. COORDINATE WITH EQUIPMENT MANUFACTURER. COORDINATE WITH ELECTRICAL CONTRACTOR.

1 / M3.2 MECHANICAL ROOF PLAN

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

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MECHANICAL ROOF PLAN

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SHEET NO.

M3.2

ROOF TOP UNIT SCHEDULE

MARK	NOMINAL TONS	ROOF CURBS	SUPPLY CFM	OA CFM	ESP (INCHES)	MIN. HP	MCA A	MOCP A	ELECT. V-PH-HZ	AIR ON COND.	COOLING TOTAL BTUH	COOLING SENSIBLE BTUH	COOLING EAT DB/WB	COOLING LAT DB/WB	HEATING KW	HEATING STG.	HEATING ELECT. V-PH-HZ	MIN. S(EER)/IEER	WEIGHT LB	NOTES	MODEL NUMBER LENNOX
EXISTING BUILDING																					
RTU-1	10	ADAPTER	4000	400	0.75	3	92	100	208-3-60	100	117,620	84,729	75.8/64.6	55.8/54.5	30.0	2	208-3-60	12.2/14.0	1,363	1, 3-16	LCH120H4M
RTU-2	12	ADAPTER	4350	400	0.75	3	92	100	208-3-60	100	136,610	95,374	75.7/64.4	55.0/53.5	30.0	2	208-3-60	11.0/13.5	1,403	1, 3-16	LCH150H4M
RTU-3	7.5	ADAPTER	3000	300	0.75	2	69	70	208-3-60	100	87,690	63,866	75.8/64.6	55.7/54.6	22.5	2	208-3-60	12.7/14.0	1,321	1, 3-16	LCH092H4M
RTU-4	7.5	ADAPTER	3000	300	0.75	2	69	70	208-3-60	100	87,690	63,866	75.8/64.6	55.7/54.6	22.5	2	208-3-60	12.7/14.0	1,321	1, 3-16	LCH092H4M
RTU-5	2	NEW	900	50	0.6	0.25	16	25	208-1-60	100	23,190	20,212	75.5/63.6	57.1/55.9	–	–	208-3-60	12.5/14.0	631	2-16	KCB024S4D
NEW ADDITION																					
RTU-6	5	NEW	1950	200	0.5	1	49	50	208-3-60	100	59,259	43,578	75.8/64.6	54.7/54.1	15.0	2	208-3-60	12.7/17.1	841	2-16	LCH060H4E

NOTES:

1. DESIGN INTENT IS TO REUSE EXISTING ROOF CURBS WITH IBC AND WINDSTORM APPROVED ADAPTERS. PROVIDE DELEGATED DESIGN FOR ADAPTORS AS PER NOTE#13 OF THIS SCHEDULE AND AS PER DIV. 7 SPECS.
2. PROVIDE ROOF CURBS WITH VERTICAL DUCT CONNECTION, COPPER CONDENSATE TRAP, TXV AND FREEZE-STAT OPTIONS.
3. PROVIDE HOODED/LOUVERED HAIL GUARDS, STAINLESS STEEL OR CORROSION RESISTANT POLYCARBONATE DRAIN PANS, GALVANIZED FILTER FRAMES, E-COATED COILS.
4. PROVIDE OUTSIDE AIR HOOD, OA MOTORIZED DAMPERS AND ACTUATORS. DO NOT PROVIDE EXHAUST OR RELIEF AIR OPENINGS.
5. PROVIDE HOT GAS REHEAT AND HUMIDITY CONTROL OPTION, UNIT MOUNTED UNITARY CONTROLLERS AND PROGRAMMABLE THERMOSTATS.
6. HEATING KW IN RTU SCHEDULE IS RATED HEATING CAPACITY, NOT NOMINAL KW. FAN HP SHALL BE PER MFR'S RECOMMENDATION.
7. ELECTRICAL DISCONNECT BY DIV. 26. COORDINATE WITH ELECTRICAL CONTRACTOR.
8. PROVIDE WALL MOUNTED TEMPERATURE AND RELATIVE HUMIDITY AS SHOWN ON MECHANICAL PLANS.
9. EQUIPMENT MANUFACTURER AND MECH. CONTRACTOR SHALL COORDINATE THE PROVISION AND INSTALLATION OF T AND RH SENSORS TO ENSURE THESE ARE ALL PROVIDED PROPERLY ON THE PROJECT.
10. PROVIDE MULTI STAGE AIR VOLUME ON ALL UNITS TO MATCH AIR FLOW TO COMPRESSOR STAGING
11. PROVIDE 2 STAGE COMPRESSORS ON UNITS 5 TONS AND UNDER AND 2 CIRCUITS ON LARGER UNITS
12. PROVIDE FACTORY-INSTALLED CONVENIENCE ELECTRICAL OUTLETS AT INDICATED RTUS. SEE MECHANICAL ROOF PLANS FOR LOCATIONS. DIV. 26 TO PROVIDE WIRING AND POWER FOR THE OUTLETS. COORDINATE WITH ELECTRICAL CONTRACTOR.
13. PROVIDE IBC 2012 COMPLIANT CURB AND ATTACHMENTS FROM UNIT TO CURB AND CURB TO STRUCTURE. EQUIPMENT OR CURB MANUFACTURER IS RESPONSIBLE FOR PROVIDING ENGINEERED DETAIL ANALYSIS OF:
    1) ATTACHMENT OF EQUIPMENT TO CURB.
    2) CURB TO STRUCTURE.
    3) CURB AND ATTACHMENT HARDWARE STRENGTH.
    REFER TO ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR ROOF SUBSTRATE DETAILS.
    EQUIPMENT OR CURB MANUFACTURER IS ALSO RESPONSIBLE FOR PROVIDING ENGINEERED INSTALLATION DRAWINGS FOR ITEMS 1 AND 2 LISTED ABOVE.
    BOTH, THE ENGINEERED ANALYSIS AND THE ENGINEERED INSTALLATION DRAWINGS SHALL BE PERFORMED SPECIFICALLY FOR THIS BUILDING AND PROJECT SITE AND STAMPED AND SEALED BY A TEXAS LICENSED ENGINEER.
    SUBMITTALS WILL NOT BE APPROVED UNTIL ALL DOCUMENTATION LISTED ABOVE IS PROVIDED ACCURATELY.

AIR DEVICE & DIFFUSER SCHEDULE

SUPPLY AIR DIFFUSER (SD-1)

TITUS TMS-AA
NC < 20

DESCRIPTION: ALUMINUM HIGH PERFORMANCE, THREE CONE DIFFUSER, BORDER TYPE 3, COLOR WHITE WITH ROUND NECK AND FULL FACE

CLG. MODULE SIZE INCHES	FACE SIZE INCHES	ROUND NECK SIZE	FLEX DUCT SIZE	DIFFUSER DIFFUSION PATTERN & CFM	NOTES
24 X 24	24 X 24	TO MATCH NC CRITERIA	SEE PLAN	SD1-CFM	1-4,6

SUPPLY AIR DIFFUSER (SD-2)

TITUS TMS-AA
NC < 20

DESCRIPTION: ALUMINUM HIGH PERFORMANCE, THREE CONE DIFFUSER, BORDER TYPE 1, COLOR WHITE WITH ROUND NECK AND FULL FACE

CLG. MODULE SIZE INCHES	FACE SIZE INCHES	ROUND NECK SIZE	FLEX DUCT SIZE	DIFFUSER DIFFUSION PATTERN & CFM	NOTES
12 X 12	12 X 12	TO MATCH NC CRITERIA	SEE PLAN	SD2-CFM	1-4,6

RETURN, EXHAUST, AND TRANSFER AIR GRILLE (RG-1, EG-1, & TG-1)

TITUS 50F
NC < 20

DESCRIPTION: ALUMINUM GRID EGGCRATE RETURN GRILLE WITH BORDER TYPE 3 (LAY-IN).

CFM RANGE	CLG. MODULE SIZE INCHES	NOMINAL DUCT SIZE INCHES (INLET)	DIFFUSER DIFFUSION PATTERN & CFM	NOTES
0 – 1600	24 X 24	18 X 18	EG1-CFM (EXHAUST AIR GRILLES ONLY)	1,2,4,5,6
0 – 1600	24 X 24	18 X 18	RG1-CFM (RETURN AIR GRILLES ONLY)	1,4,6
0 – 1600	24 X 24	18 X 18	TG1-CFM (TRANSFER AIR GRILLES ONLY)	1,4,6

NOTES:

1. PROVIDE MANUFACTURER'S STANDARD BAKED WHITE ENAMEL FINISH.
2. PROVIDE FULL SIZE BACK PAN WITH DUCT ADAPTER.
3. INSULATE BACK PAN ON ALL SUPPLY AIR DIFFUSERS AND GRILLES.
4. PROVIDE MOUNTING FRAME TYPE COMPATIBLE WITH SCHEDULED CEILING OR WALL (SURFACE OR LAY-IN).
5. PROVIDE BALANCING DAMPER ON ALL EXHAUST GRILLES.
6. AIR DEVICES SHALL MATCH ARCHITECTURAL FINISH. COORDINATE COLOR WITH ARCHITECT.

EXHAUST FAN SCHEDULE

MARK	SERVING	TYPE	ELECTR. V/H/P	CFM	INPUT WATTS	MOTOR HP	E.S.P. IN. H20	SOUND IN SONES	MANUFACTURER & MODEL NUMBER	WEIGHT (LBS)	CONTROL NOTES	NOTES
EXISTING BUILDING RENOVATION												
EF-1	SEE PLANS	ROOF MOUNTED	120/60/1	75	51.6	–	0.4	2.9	COOK ACE-D-90C15DL	30	A	1-4, 7-10
EF-2	SEE PLANS	ROOF MOUNTED	120/60/1	75	51.6	–	0.4	2.9	COOK ACE-D-90C15DL	30	A	1-4, 7-10
EF-3	SEE PLANS	ROOF MOUNTED	120/60/1	150	60.5	–	0.4	4.0	COOK ACE-D-90C15DM	30	A	1-4, 7-10
EF-4	SEE PLANS	ROOF MOUNTED	120/60/1	150	60.5	–	0.4	4.0	COOK ACE-D-90C15DM	30	A	1-4, 7-10
EF-5	SEE PLANS	ROOF MOUNTED	120/60/1	300	98.1	–	0.4	6.7	COOK ACE-D-10015DM	31	A	1-4, 7-10
EF-6	SEE PLANS	ROOF MOUNTED	120/60/1	75	51.6	–	0.4	2.9	COOK ACE-D-90C15DL	30	A	1-4, 7-10
NEW BUILDING ADDITION												
EF-7	TOILET 136A	CEILING MOUNTED	120/60/1	75	34.4	–	0.4	1.5	LOREN COOK GC-166	12	A	1-6
EF-8	TOILET 136A	CEILING MOUNTED	120/60/1	75	34.4	–	0.4	1.5	LOREN COOK GC-166	12	A	1-6

NOTES:

1. PROVIDE FACTORY MOUNTED DISCONNECT.
2. MANUFACTURER AND MODEL NUMBER LISTED ARE "OR APPROVED EQUAL." REFER TO SPECIFICATIONS.
3. PROVIDE FIELD-INSTALLED FAN SPEED CONTROLLER. COORDINATE INSTALLATION WITH ELECTRICAL CONTRACTOR.
4. PROVIDE FAN WITH ALL ALUMINUM BACKDRAFT DAMPER.
5. PROVIDE DELUXE ALUMINUM GRILLE.
6. PROVIDE SPRING TYPE VIBRATION ISOLATORS FROM MANUFACTURER.
7. PROVIDE PREMIUM EFFICIENCY MOTOR WITH FACTORY WIRED DISCONNECT SWITCH, NEMA 1.
8. PROVIDE SOUND ATTENUATING ALUMINUM ROOF CURB AND LORENIZED COATING.
9. PROVIDE STAINLESS STEEL INSECT SCREEN, EXTENDED LUBE LINES AND BACKDRAFT DAMPER.
10. PROVIDE IBC 2012 COMPLIANT CURB AND ATTACHMENTS FROM UNIT TO CURB AND CURB TO STRUCTURE. EQUIPMENT OR CURB MANUFACTURER IS RESPONSIBLE FOR PROVIDING ENGINEERED DETAIL ANALYSIS OF:
    1) ATTACHMENT OF EQUIPMENT TO CURB.
    2) CURB TO STRUCTURE.
    3) CURB AND ATTACHMENT HARDWARE STRENGTH.
    REFER TO ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR ROOF SUBSTRATE DETAILS.
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    SUBMITTALS WILL NOT BE APPROVED UNTIL ALL DOCUMENTATION LISTED ABOVE IS PROVIDED ACCURATELY.

CONTROL NOTES:

A. FAN SHALL BE OPERATED BY A WALL SWITCH VIA THE OCCUPANCY SENSOR PROVIDED BY DIV.26 COORDINATE WITH ELECTRICAL

LOUVER SCHEDULE

MARK	SERVES	CFM RANGE	FACE SIZE (W X H)	MIN. FREE AREA (FT2)	MANUFACTURER & MODEL NUMBER	NOTES
NEW BUILDING ADDITION						
L-1	EF-7, EF-8	150	18 X 12	0.41	RUSKIN EME520MD	ALL

NOTES:

1. PRIOR TO ORDERING, COORDINATE LOUVER FINISH AND EXACT FACE SIZE WITH ARCHITECT.
2. PROVIDE STAINLESS STEEL BIRD SCREEN AND HARDWARE.
3. PROVIDE FACTORY APPLIED KYNAR 500 FINISH.
4. PROVIDE WITH TDI PRODUCT EVALUATION REPORT.

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CAMERON APPRAISAL DISTRICT
NEW BUILDING ADDITION AND RENOVATION
2021 AMISTAD DRIVE, SAN BENITO, TEXAS 78586

MECHANICAL SCHEDULES

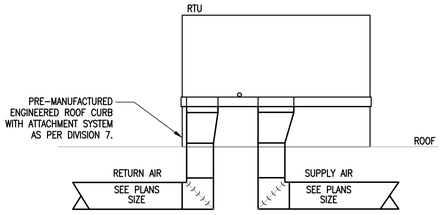
STATE OF TEXAS
CESAR A. GONZALEZ
108611
LICENSED
PROFESSIONAL ENGINEER
8.16.2018

NO.	DATE	REVISIONS

DRAWN BY: ETHOS
CHECKED BY: SCK

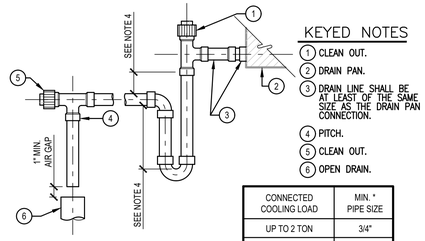
DATE: 08-16-18

SHEET NO.
M4.1



01 ROOFTOP UNIT DETAIL

SCALE : NOT TO SCALE



KEYED NOTES

1. CLEAN OUT.
2. DRAIN PAN.
3. DRAIN LINE SHALL BE AT LEAST OF THE SAME SIZE AS THE DRAIN PAN CONNECTION.
4. PITCH.
5. CLEAN OUT.
6. OPEN DRAIN.

NOTES:

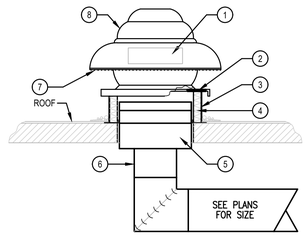
MANUALLY PRIME TRAP BEFORE START UP.
SUPPORT DRAIN LINES TO PREVENT SAG.
ALLOW SUFFICIENT SPACE BELOW PAN FOR TRAP AND PITCH TO DRAIN.
COORDINATE WITH MANUFACTURER OF AHU.

CONNECTED COOLING LOAD	MIN. * PIPE SIZE
UP TO 2 TON	3/4"
2-5	1"
5-30	1-1/4"
30-50	1-1/2"
50-160	2"
160-300	3"
300-430	4"

* NOT SMALLER THAN OUTLET SIZE.

02 CONDENSATE DRAIN DETAIL

SCALE : NOT TO SCALE

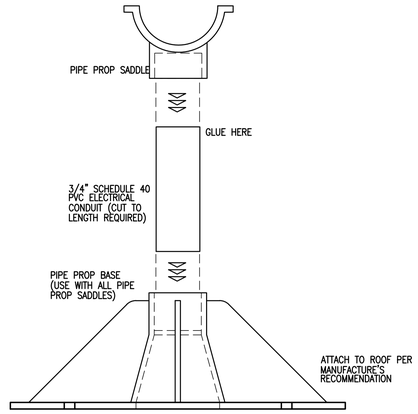


KEYED NOTES

1. ENGRAVED NAME PLATE AS PER SPECS. INCLUDE THE FOLLOWING AS APPLICABLE: "EF/RV-#" "CFM-#" "ELEC-V/PH/F" "CONTROLLED BY-DDC OR SWITCH"
2. CURB GASKET
3. PRE-MANUFACTURED ENGINEERED ROOF CURB WITH ATTACHMENT SYSTEM AS PER DIVISION 7.
4. INSULATION.
5. SHEET METAL PLENUM SAME SIZE AS CURBED OPENING.
6. DUCT FROM BELOW. SEE PLAN FOR SIZE.
7. BIRD SCREEN.
8. FAN/VENT AS SCHEDULED.

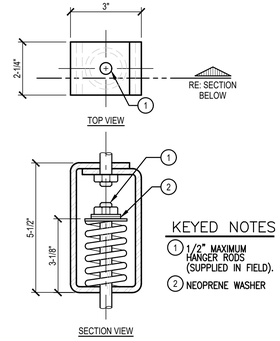
03 ROOF EXHAUST FAN DETAIL

SCALE : NOT TO SCALE



04 CONDENSATE PIPE SUPPORT DETAIL

SCALE : NOT TO SCALE

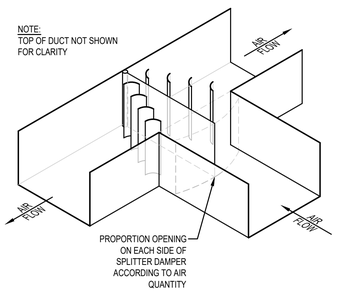


KEYED NOTES

1. 1/2" MAXIMUM HANGER RODS (SUPPLIED IN FIELD).
2. NEOPRENE WASHER

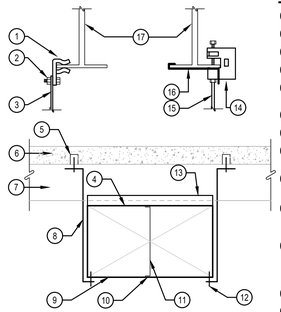
05 SPRING ISOLATION HANGER

SCALE : NOT TO SCALE



06 TYPICAL SPLITTER DAMPER

SCALE : NOT TO SCALE



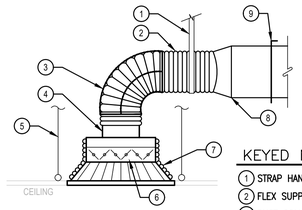
NOTE:
FOLLOW SMACNA GUIDELINES FOR DUCT SUPPORT.

KEYED NOTES

1. FRICTION CLAMP.
2. NUT & BOLT.
3. HANGER STRAP.
4. ARRANGE SEAM JOINTS TO MISS BEAMS.
5. INSERT-DO NOT INSERT INTO BOTTOM OF BEAMS OR JOISTS.
6. CEILING SLAB.
7. CONSTRUCTION BEAM.
8. 1" X 18 GA. STRAP HANGER (ONE HANGER ON DUCTS 31" AND UP).
9. DUCT WITH FLAT SEAM CONSTRUCTION (STANDARD "S" SLIP SNUG TO BEAM).
10. 3/16" SD 64BS POP RIVETS (TWO EACH AT TOP & BOTTOM OF VERTICAL STIFFENER).
11. 1-1/2" X 16 GA. STEEL BAR SUPPORT LOCATED CLOSE TO STIFFENER: DUCT WIDTH TO 24" – NOT REQUIRED DUCT WIDTH 25" TO 47" – ONE (1) REQUIRED.
12. #6 X 3/8" S/M SCREW (TYP).
13. ANGLE STIFFENER FOR DUCT WIDTH 25" TO 40": 1" STANDING "S" OR 1" X 1" X 1/2" ANGLE.
14. C-CLAMP WITH RETAINING CLIP OR WITH LOCK NUT (OPTIONAL).
15. HANGING ROD.
16. RETAINING CLIP.
17. STRUCTURAL.

07 DUCT SUPPORT

SCALE : NOT TO SCALE

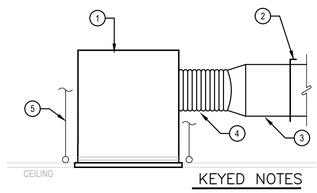


KEYED NOTES

1. STRAP HANGER.
2. FLEX SUPPLY DUCT, TYP.
3. DUCT COLLAR (TO RETAIN ELBOW SHAPE).
4. ROUND NECK ADAPTOR.
5. HANGER. TYP.
6. OPPOSED BLADE DAMPER (ALTERNATIVE), TYP.
7. INSULATION, TYP.
8. RECT. TO ROUND TRANSITION, TYP.
9. VOLUME DAMPER AT TAKE-OFF (PREFERED LOCATION), TYP.

08 CEILING DIFFUSER SUPPORT

SCALE : NOT TO SCALE



KEYED NOTES

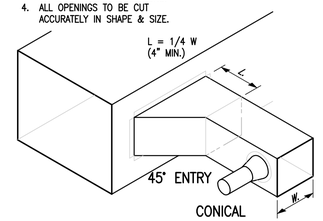
1. SHEET METAL (PAINTED WHERE EXPOSED) PLENUM BOX. PROVIDE SUFFICIENT SUPPORT PER SMACNA REQUIREMENTS TO PLACE NO LOAD ON CEILING GRID.
2. VOLUME DAMPER AT TAKE-OFF (PREFERED LOCATION), TYP.
3. DUCT AS SHOWN ON PLANS TYP.
4. FLEX.
5. HANGER, TYP.

09 CEILING RETURN GRILLE DETAIL

SCALE : NOT TO SCALE

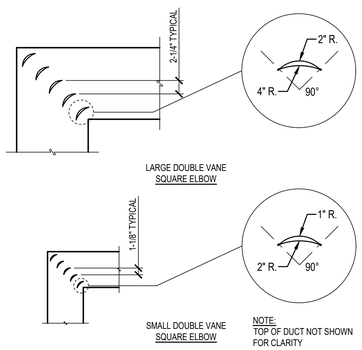
NOTES:

1. FIT ALL CONNECTIONS TO AVOID VISIBLE OPENINGS & SECURE SUITABLY FOR THE PRESSURE CLASS.
2. ADDITIONAL MECHANICAL FASTENERS REQ'D. FOR 4" W.G. & OVER.
3. DO NOT EXPOSE LINER EDGES ON LINED DUCT CONNECTIONS.
4. ALL OPENINGS TO BE CUT ACCURATELY IN SHAPE & SIZE.



10 BRANCH CONNECTION DETAILS

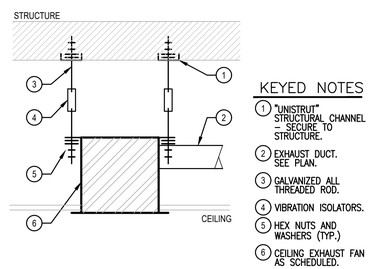
SCALE : NOT TO SCALE



NOTE:
TOP OF DUCT NOT SHOWN FOR CLARITY

11 TYPICAL VANED DUCT ELBOWS

SCALE : NOT TO SCALE



KEYED NOTES

1. "UNISTRUT" STRUCTURAL CHANNEL – SECURE TO STRUCTURE.
2. EXHAUST DUCT. SEE PLAN.
3. GALVANIZED ALL THREADED ROD.
4. VIBRATION ISOLATORS.
5. HEX NUTS AND WASHERS (TYP.)
6. CEILING EXHAUST FAN AS SCHEDULED.

12 CEILING EXHAUST FAN FAN MOUNTING DETAIL

SCALE : NOT TO SCALE

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CAMERON APPRAISAL DISTRICT
NEW BUILDING ADDITION AND RENOVATION
2021 AMISTAD DRIVE, SAN BENITO, TEXAS 78586

MECHANICAL DETAILS

STATE OF TEXAS
CESAR A. GONZALEZ
108611
LICENSED PROFESSIONAL ENGINEER
8.16.2018

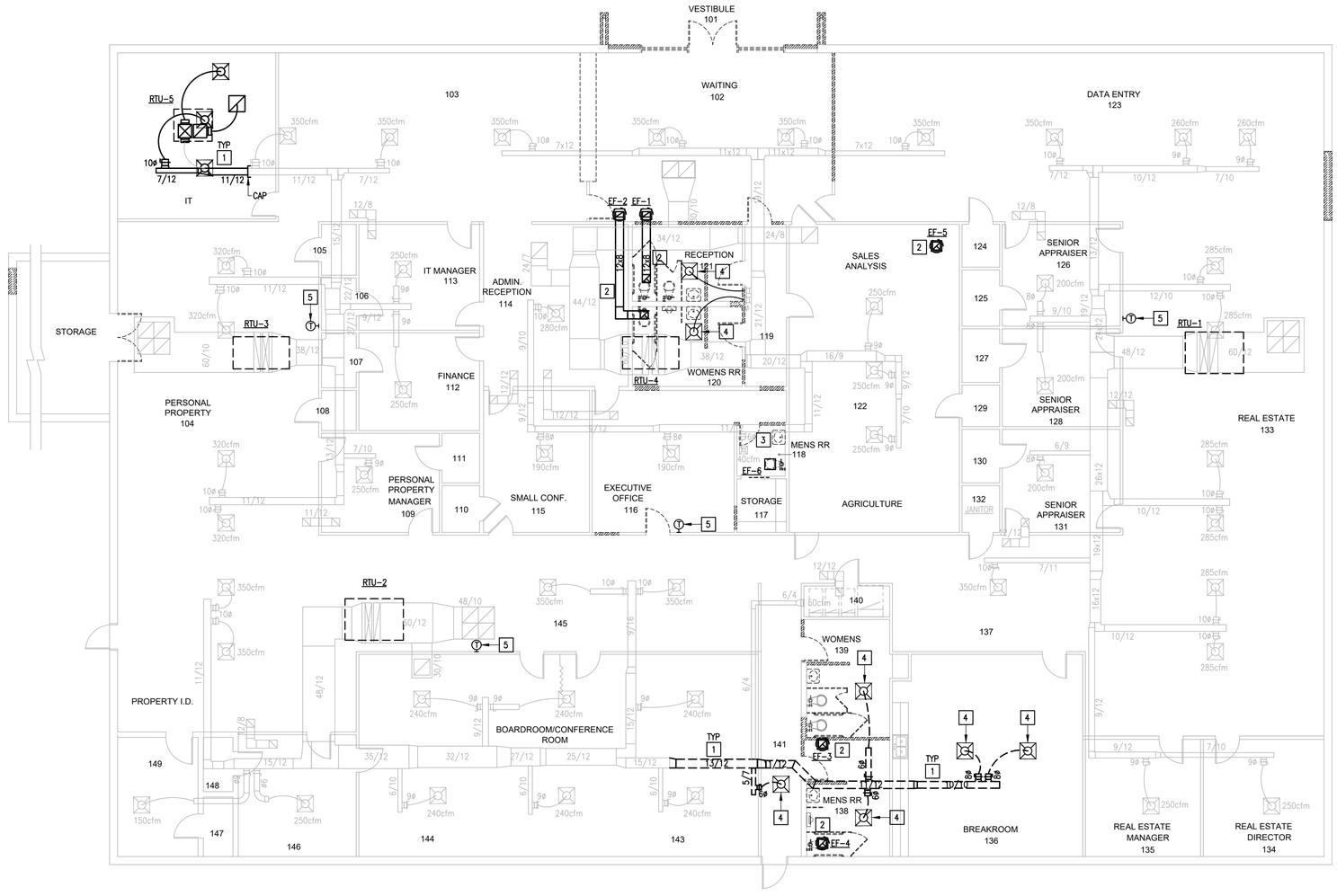
NO.	DATE	REVISIONS

DRAWN BY:	CHECKED BY:
ETHOS	SCK

DATE: 08-16-18

SHEET NO.

M5.1



1 R-MD1.1

EXISTING BUILDING MECHANICAL DEMOLITION PLAN

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

NORTH

GENERAL NOTES:

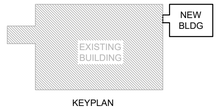
1. REMOVED MATERIALS SHALL BELONG TO OWNER. DELIVER THEM TO OWNERS DESIGNATED LOCATION. IF OWNER DOES NOT WANT THE REMOVED MATERIALS THEN REMOVE THEM FROM SITE & PROPERLY DISPOSE OF THEM.
2. REFER TO ARCHITECTURAL DEMOLITION DRAWINGS FOR WALL AND CEILINGS TO BE REMOVED.
3. REFER TO ARCHITECTURAL SPECIFICATIONS FOR PHASING REQUIREMENTS.
4. PRIOR TO DEMOLITION, IN CEILINGS SCHEDULED TO BE REMOVED AND(OR) REPLACED FOR NEW HVAC DUCTWORK, NEW PLUMBING, NEW FIRE SPRINKLER, NEW ELECTRICAL, AND NEW LIGHTING, PREPARE REFLECTED CEILING PLAN SKETCH SHOWING LOCATIONS OF ALL CEILING COMPONENTS AND DEVICES TO BE RE-USED INCLUDING BUT NOT LIMITED TO:
   - LIGHT FIXTURES; INCLUDING EMERGENCY AND EXIT LIGHTS
   - SPEAKERS
   - CAMERAS
   - WIRELESS ACCESS POINTS
   - FIRE ALARM DEVICES
   - EMERGENCY LIGHTING
   - ETC.

   IF ANY OF THE ABOVE ITEMS ARE IN NON-WORKING CONDITION, SUBMIT A WRITTEN REPORT TO OWNER/ENGINEER. TEMPORARY SUPPORT AND OR REMOVAL OF THESE SYSTEMS SHALL BE PROVIDED FOR NEW WORK.

DEMOLITION KEYED NOTES:

1. DEMOLISH EXISTING DUCTWORK AS SHOWN. SEE NEW PLAN FOR NEW DUCTWORK.
2. DEMOLISH EXISTING DUCTWORK UP TO EXHAUST FAN ON ROOF. SEE NEW PLAN FOR WORK IN THIS AREA.
3. DEMOLISH CEILING EXHAUST FAN. SEE NEW PLAN FOR WORK IN THIS AREA.
4. REMOVE EXISTING AIR DEVICE THAT WILL BE REUSED AND RELOCATED. SEE NEW PLAN FOR NEW LOCATION.
5. DEMOLISH EXISTING THERMOSTAT. SEE NEW PLAN FOR NEW LOCATION.

LEGEND	
	EXISTING WALL TO REMAIN
	NEW WALL
	EXISTING WALL TO BE DEMOLISHED
	EXISTING UNIT TO BE DEMOLISHED
	EXISTING UNIT TO REMAIN
	NEW UNIT
6x6	EXISTING DUCTWORK TO REMAIN
6x6	EXISTING DUCTWORK TO BE DEMOLISHED
6x6	NEW DUCTWORK
T	T-STAT TO REMAIN
T	T-STAT TO BE DEMOLISHED
T	NEW T-STAT



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CAMERON APPRAISAL DISTRICT
NEW BUILDING ADDITION AND RENOVATION
2021 AMISTAD DRIVE, SAN BENITO, TEXAS 78586

EXISTING BUILDING MECHANICAL DEMOLITION PLAN

STATE OF TEXAS
CESAR A. GONZALEZ
108611
LICENSED
PROFESSIONAL ENGINEER
8/16/2018

NO.	DATE	REVISIONS

DRAWN BY:	CHECKED BY:
ETHOS	SCK

DATE: 08-16-18

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R-MD1.1

DEMOLITION GENERAL NOTES:

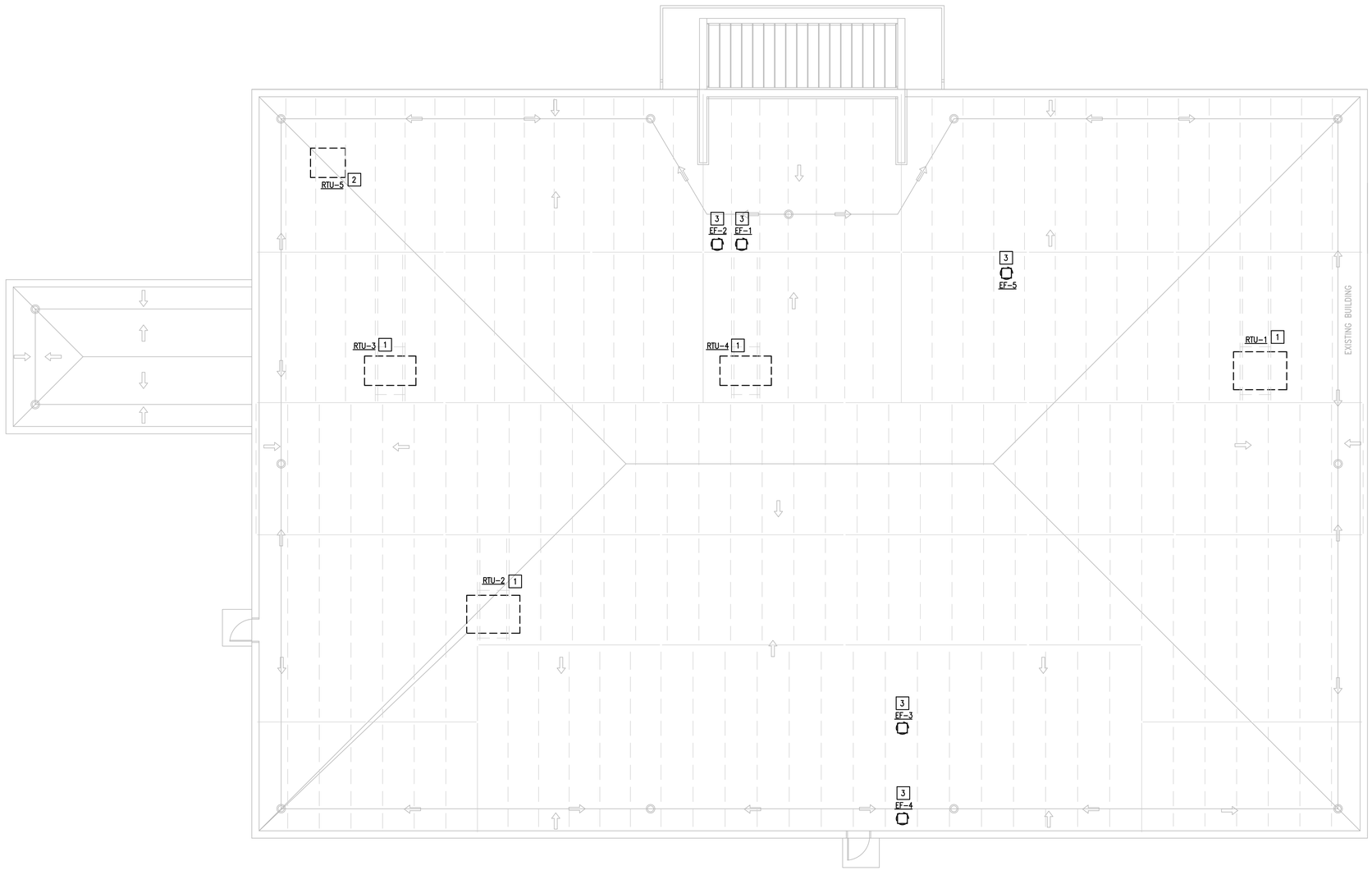
1. OWNER MAY WISH TO KEEP DEMOLISHED EQUIPMENT AND MATERIALS. COORDINATE WITH OWNER, AND DISPOSE OF EQUIPMENT AND MATERIALS THAT OWNER DOES NOT RETAIN.
2. UNLESS NOTED OTHERWISE RETAIN AND REUSE EXISTING CURBS AND PROVIDE NEW CURB ADAPTORS TO INSTALL NEW UNITS.

KEYED NOTES:

[1] DEMOLISH EXISTING DX PACKAGED ROOFTOP UNIT (RTU), CURB ADAPTERS AND CONTROLS. RETAIN EXISTING ROOF CURBS. PROVIDED CONTRACTOR CAN OBTAIN WIND STORM CERTIFICATION WITH EXISTING CURBS. REFER TO ELECTRICAL DRAWINGS FOR WORK RELATED TO DISCONNECTS, CONDUITS, WIRING, ETC.

[2] DEMOLISH EXISTING DX PACKAGED ROOFTOP UNIT (RTU), CURB ADAPTERS, CONTROLS. AND EXISTING ROOF CURB. SEE NEW PLAN FOR NEW RTU LOCATION. REFER TO ELECTRICAL DRAWINGS FOR WORK RELATED TO DISCONNECTS, CONDUITS, WIRING, ETC. COORDINATE PATCHING OF ROOF WITH ARCHITECT AND ROOFING CONTRACTOR.

[3] DEMOLISH EXISTING EXHAUST FAN ON ROOF, AND ASSOCIATED ROOF CURB. SEE NEW PLAN FOR NEW WORK. COORDINATE PATCHING OF ROOF WITH ARCHITECT AND ROOFING CONTRACTOR.

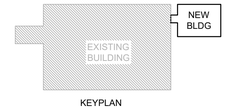


1 / R-MD1.2

EXISTING BUILDING MECHANICAL ROOF DEMOLITION PLAN

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

NORTH



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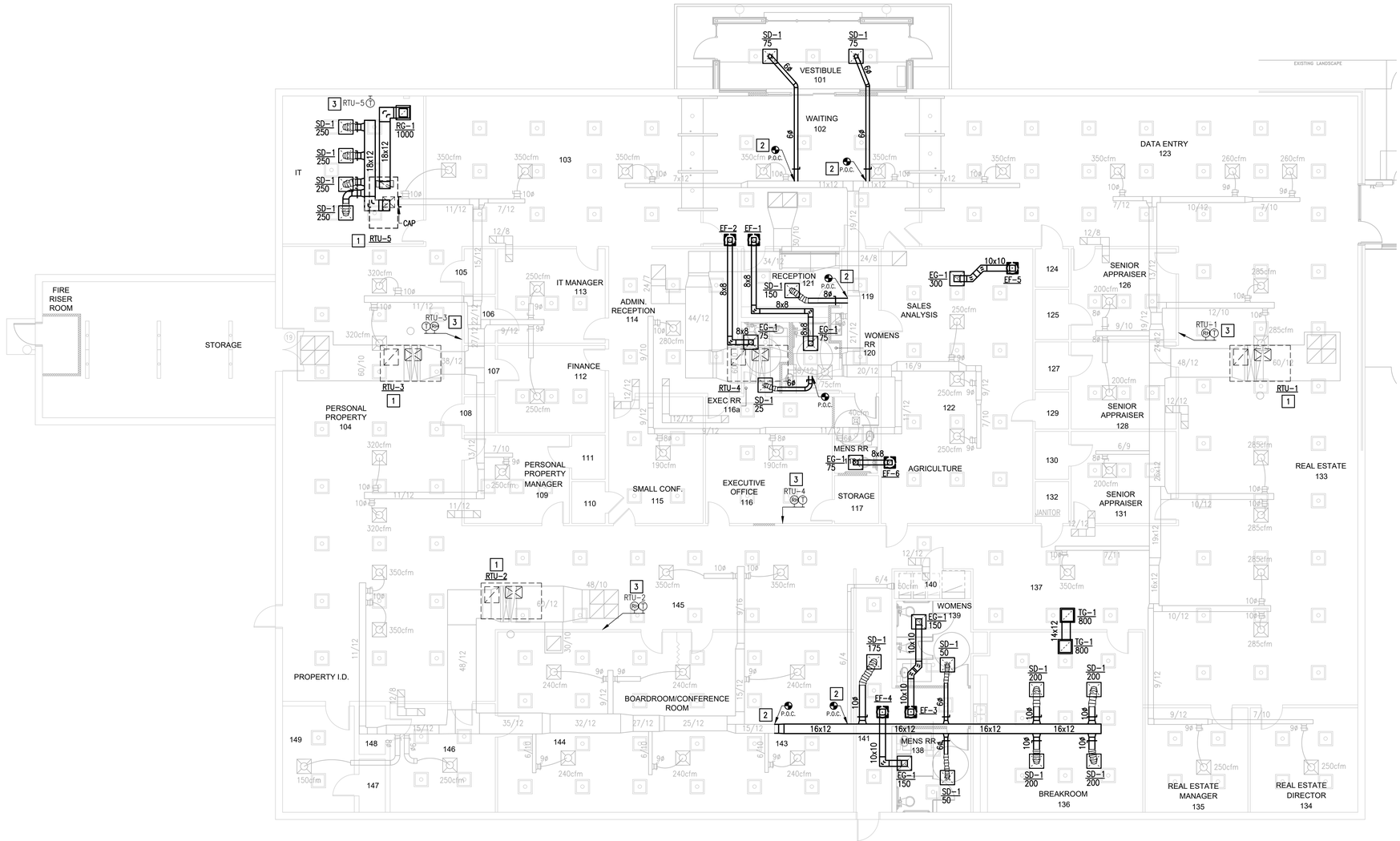

EXISTING BUILDING MECHANICAL PLAN

1 / R-M3.1

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

NORTH

MECHANICAL GENERAL NOTES:

1. PRIOR TO LABELING EQUIPMENT, COORDINATE DESIGNATION AND IDENTIFICATION WITH OWNER AND BUILDING AUTOMATION SYSTEM.
2. DUCTWORK IS TO BE RETAINED. ORIENT RTUS TO MINIMIZE DUCTWORK MODIFICATIONS. SEAL ALL OPENINGS AND ENSURE THAT INSTALLATION IS WEATHER-TIGHT. PROVIDE REQUIRED MODIFICATIONS FOR A COMPLETE AND SEAMLESS INSTALLATION.
3. PERFORM DUCTWORK TIE-IN FROM NEW UNITS TO VERTICAL DUCTS VIA FLEX CONNECTORS AND TRANSITION DUCTWORK. FIELD-VERIFY EXISTING SPACE AVAILABILITY PRIOR TO BIDDING AND PRIOR TO SUBMITTING DUCTWORK SHOP DRAWINGS.
4. UNLESS OTHERWISE NOTED PROVIDE CONDENSATE DRAIN LINES WITH P-TRAPS, AND EXTEND TO NEAREST CONDENSATE DRAIN RECEPTOR. SUPPORT PIPING AS PER SPECIFICATIONS AND DETAILS.
5. AFTER ABOVE CEILING WORK IS COMPLETE, REINSTALL CEILING SYSTEMS, COMPONENTS, AND CEILING DEVICES TO ORIGINAL CONDITION.
6. PROVIDE ROOF PENETRATION SYSTEM "CHEMCURB" FOR ELECTRICAL AND CONTROL WIRING. REFER TO DETAIL SHEET & ELECTRICAL RISER DIAGRAM.

MECHANICAL KEYED NOTES:

1. PROVIDE RTU ON ROOF AS SCHEDULED. SEE MECHANICAL ROOF PLAN FOR MORE INFORMATION.
2. CONNECT NEW DUCTWORK INTO EXISTING AT THIS APPROXIMATE LOCATION.
3. PROVIDE WALL MOUNTED PROGRAMMABLE T-STAT AND RH SENSOR AS PER SPECIFICATION. INSTALL 48" A.F.F.COORDINATE WITH ARCHITECT AND OWNER TO MEET ADA REQUIREMENTS.

LEGEND	
	EXISTING WALL TO REMAIN
	NEW WALL
	EXISTING WALL TO BE DEMOLISHED
	EXISTING UNIT TO BE DEMOLISHED
	EXISTING UNIT TO REMAIN
	NEW UNIT
6x6	EXISTING DUCTWORK TO REMAIN
6x6	EXISTING DUCTWORK TO BE DEMOLISHED
6x6	NEW DUCTWORK
T	T-STAT TO REMAIN
T	T-STAT TO BE DEMOLISHED
T	NEW T-STAT

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2021 AMISTAD DRIVE, SAN BENITO, TEXAS 78586

EXISTING BUILDING MECHANICAL PLAN

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8.16.2018

NO.	DATE	REVISIONS

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ETHOS	SCK

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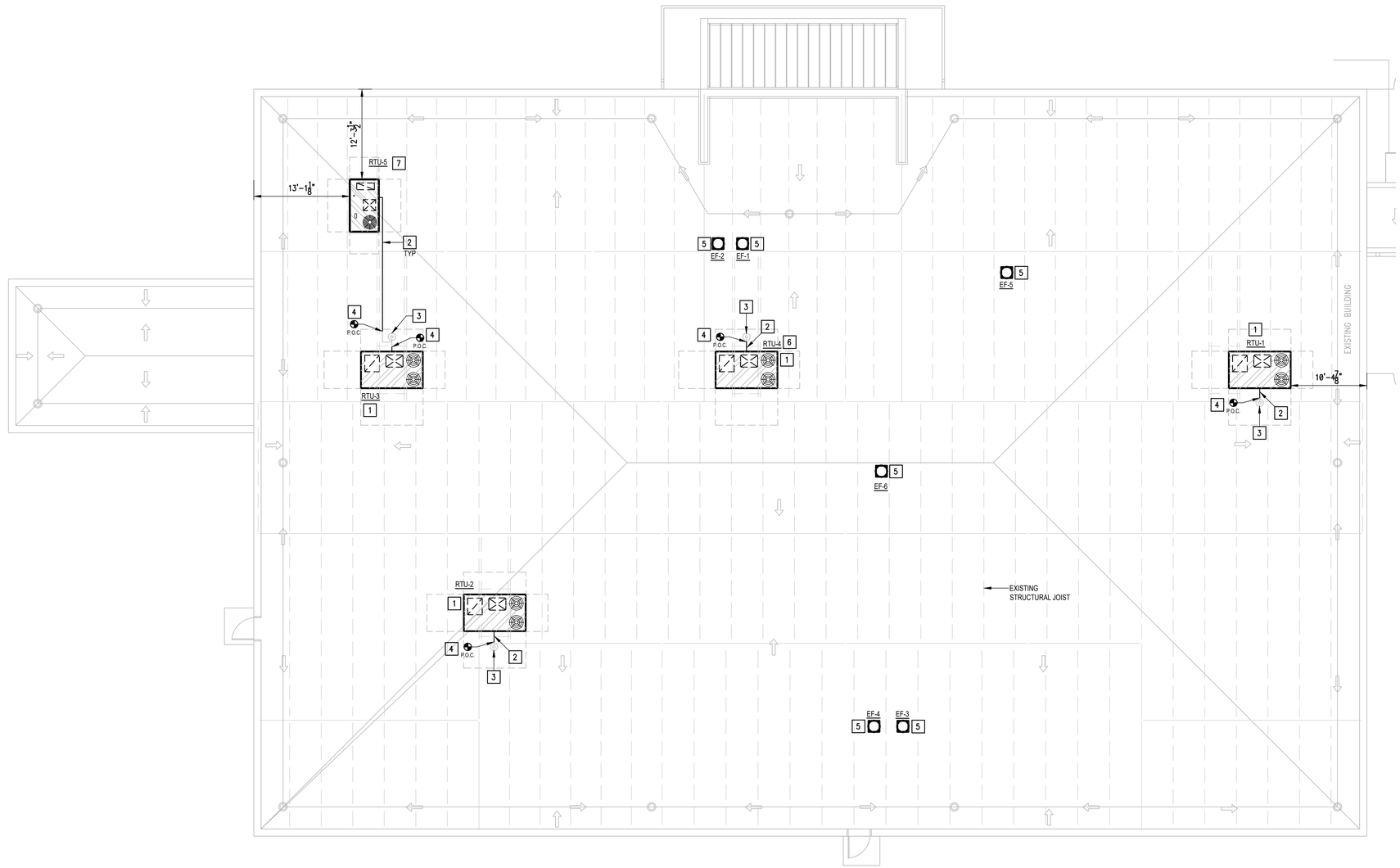


EXISTING BUILDING MECHANICAL ROOF PLAN

1 / R-M3.2

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

NORTH

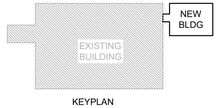
GENERAL NOTES:

1. DUCTWORK IS TO BE RETAINED ORIENT RTUS TO MINIMIZE DUCTWORK MODIFICATIONS. SEAL ALL OPENINGS AND ENSURE THAT INSTALLATION IS WEATHER-TIGHT. PROVIDE REQUIRED MODIFICATIONS FOR A COMPLETE AND SEAMLESS INSTALLATION.
2. DUCTWORK IS TO BE RETAINED. ORIENT RTUS TO MINIMIZE DUCTWORK MODIFICATIONS. SEAL ALL OPENINGS AND ENSURE THAT INSTALLATION IS WEATHER-TIGHT. PROVIDE REQUIRED MODIFICATIONS FOR A COMPLETE AND SEAMLESS INSTALLATION.
3. PERFORM DUCTWORK TIE-IN FROM NEW UNITS TO VERTICAL DUCTS VIA FLEX CONNECTORS AND TRANSITION DUCTWORK. FIELD-VERIFY EXISTING SPACE AVAILABILITY PRIOR TO BIDDING AND PRIOR TO SUBMITTING DUCTWORK SHOP DRAWINGS.
4. UNLESS OTHERWISE NOTED PROVIDE CONDENSATE DRAIN LINES WITH P-TRAPS, AND EXTEND TO NEAREST CONDENSATE DRAIN RECEPTOR. SUPPORT PIPING ON PIPING SUPPORTS BY MIRO INDUSTRIES, MODEL 1.5, OR EQUAL.
5. OWNER APPROVED ROOFING CONTRACTOR SHALL PROVIDE ALL ROOF REPAIRS. PATCH ROOF WHERE EXISTING EQUIPMENT SUCH AS RTUS, ACCUS, DISCONNECTS, ETC. HAVE BEEN REMOVED, AND NEW ROOF CURBS ARE PROVIDED.
6. AFTER ABOVE CEILING WORK IS COMPLETE, REINSTALL CEILING SYSTEMS, COMPONENTS, AND CEILING DEVICES TO ORIGINAL CONDITION.
7. PROVIDE ROOF PENETRATION SYSTEM "CHEMCURB" FOR ELECTRICAL AND CONTROL WIRING. REFER TO DETAIL SHEET & ELECTRICAL RISER DIAGRAM.

KEYED NOTES:

1. PROVIDE NEW DX-ROOFTOP UNIT (RTU) ON EXISTING ROOF CURB WITH TRANSITION ROOF CURB ADAPTER. SEAL ALL OPENINGS AND ENSURE THAT INSTALLATION IS WEATHER-TIGHT. SECURE EQUIPMENT TO ROOF CURB AND ROOF CURB TO ROOF STRUCTURE. ATTACHMENTS SHALL BE CAPABLE OF WITHSTANDING THE LOCAL WIND PRESSURES. REFER TO DIV. 7 FOR MORE INFORMATION. IF TRANSITION CURBS WILL NOT MEET IBC REQUIREMENTS FOR WIND RESTRAINTS, PROVIDE NEW ROOF CURBS.
2. PROVIDE COPPER CONDENSATE PIPING ON ROOF AND PROVIDE SUPPORTS AS PER DETAIL. (TYPICAL)
3. REUSE EXISTING ROOF PENETRATION. COORDINATE INSTALLATION WITH ELECTRICAL AND PLUMBING CONTRACTORS.
4. CONNECT TO EXISTING COPPER CONDENSATE PIPING AT THIS APPROXIMATE LOCATION.
5. PROVIDE EXHAUST FAN ON NEW ROOF CURB AS SCHEDULED. SEAL ALL OPENINGS AND ENSURE THAT INSTALLATION IS WEATHER-TIGHT.
6. PROVIDE FACTORY INSTALLED CONVENIENCE ELECTRICAL OUTLET AT RTU. COORDINATE WITH EQUIPMENT MANUFACTURER. COORDINATE WITH ELECTRICAL CONTRACTOR.
7. PROVIDE NEW DX-ROOFTOP UNIT (RTU) ON NEW ROOF CURB. SEAL ALL OPENINGS AND ENSURE THAT INSTALLATION IS WEATHER-TIGHT. SECURE EQUIPMENT TO ROOF CURB AND ROOF CURB TO ROOF STRUCTURE. ATTACHMENTS SHALL BE CAPABLE OF WITHSTANDING THE LOCAL WIND PRESSURES. REFER TO DIV. 7 FOR MORE INFORMATION.

LEGEND:	
	EX. UNIT TO REMAIN
	NEW UNIT



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CAMERON APPRAISAL DISTRICT
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EXISTING BUILDING MECHANICAL ROOF PLAN

STATE OF TEXAS
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LICENSED PROFESSIONAL ENGINEER
8.16.2018

NO.	DATE	REVISIONS

DRAWN BY:	CHECKED BY:
ETHOS	SCK

DATE: 08-16-18

SHEET NO.

R-M3.2

ABBREVIATIONS:

A	AMPS	EF	EXHAUST FAN	MECH	MECHANICAL
ABC	ABOVE CEILING LINE	EMS	ENERGY MANAGEMENT SYSTEM	MS	MOTOR STARTER
AC	ABOVE COUNTER BACKSPLASH	EXT.	EXTERNAL OR EXTERIOR	NTS	NOT TO SCALE
AFF	ABOVE FINISHED FLOOR	FACP	FIRE ALARM CONTROL PANEL	PH	PHASE
BLC.	BELOW CEILING LINE	G.	GROUND	RM.	ROOM
C.	CONDUIT OR COMMON	GALV.	GALVANIZED	RTU	ROOF TOP UNIT
CLG.	CEILING	GRND.	GROUND	SS	STAINLESS STEEL
COMB.	COMBINATION	HP	HORSEPOWER	UG	UNDERGROUND
COND.	CONDUIT	HVAC	HEATING, VENTILATION, & AIR CONDITIONING	UNO	UNLESS OTHERWISE NOTED
CU.	COPPER			V	VOLTS
DISC.	DISCONNECT	INT.	INTRUSION DETECTION	W	WIRE

GENERAL SYMBOL LEGEND:

SYMBOL	DESCRIPTION	MNTG. HT. UNO (SEE NOTE 1)
	DISCONNECT SWITCH – NON FUSED	AS REQUIRED
	EQUIPMENT CONNECTION	AS REQUIRED
	ELECTRICAL PANELBOARD – SURFACE MOUNTED	AS REQUIRED
	ELECTRICAL PANELBOARD – RECESSED/FLUSH MOUNTED	AS REQUIRED
— — —	UNDERGROUND RACEWAY	AS REQUIRED
———	CONCEALED RACEWAY	AS REQUIRED
	CONDUIT OR EMT HOMERUN TO PANELBOARD CONCEALED IN WALLS OR ABOVE CEILING. LONG CROSSMARKS DENOTE NUMBER OF "HOT" CONDUCTORS SHORT CROSSMARKS INDICATE NEUTRALS AND DOTS INDICATE NUMBER OF GROUND CONDUCTORS. ARROW INDICATES HOME RUN TO ELECTRICAL PANEL.	AS REQUIRED

LUTRON CONTROL SYMBOLS:

SYMBOL	DESCRIPTION	MNTG. HT. UNO (SEE NOTE 1)
S_{VS}	VACANCY WALL SWITCH SENSOR – LUTRON MS-OPS6M2-DV-WH	48"AFF
TBP	DIMMING POWER PACK MODULE – LUTRON RMJS-8T-DV-B	ABV. CLG.
	WIRELESS DIMMING SWITCH – LUTRON PJ2-3BRL-GWH-L01 (CW-1-WH)	48"AFF
	WIRELESS SWITCH – LUTRON PJ2-2B-GWH-L01 (CW-1-WH)	48"AFF
OS	WIRELESS OCCUPANCY SENSOR – LUTRON LRF2-OCR2B-P-WH	CLG.
STCP	SWITCHING POWER PACK MODULE – LUTRON RMJ-16R-DV-B	ABV. CLG.
S_{Z10}	VACANCY DIMMING WALL SWITCH SENSOR – LUTRON MS-Z101-WH	48" AFF
CS	WIRELESS CORNER VACANCY SENSOR – LUTRON LRF2-OKLB-P-WH	9'–0" AFF

NOTES:

1.) 48" AFF INDICATES TO TOP OF DEVICE; ALL OTHER MOUNTING HEIGHTS REFER TO CENTERLINE OF DEVICE. REFERENCE LIGHTING CONTROL SCHEMATIC DETAILS FOR ALL LUTRON CONTROLS WIRING REQUIREMENTS.

WIRING DEVICES SYMBOL LEGEND:

SYMBOL	DESCRIPTION	MNTG. HT. UNO (SEE NOTE 1)
	DUPLEX RECEPTACLE – HUBBELL MODEL #5352X	18"AFF
GFCI	DUPLEX RECEPTACLE W/ GROUND FAULT INTERRUPTING TYPE – HUBBELL MODEL #GF20X	18"AFF
GFCI WICP	DUPLEX RECEPTACLE TAMPER RESISTANT W/ GRND. FAULT INTERRUPTING TYPE – HUBBELL MODEL #GFTWRST20X & WHILE IN USE WEATHERPROOF COVER – HUBBELL MODEL #WP26EH	18"AFF
AC	DUPLEX RECEPTACLE – HUBBELL MODEL #5352X MOUNT @ +4" HORIZONTALLY ABOVE COUNTER BACKSPLASH (U.N.O.)	4"ACB
	SPECIAL RECEPTACLE – TYPE AS NOTED	18"AFF
	JUNCTION BOX W/ BLANK STAINLESS STEEL COVERPLATE	AS REQUIRED

NOTES:

1.) 48" AFF INDICATES TO TOP OF DEVICE;
18" AFF INDICATES TO TOP OF DEVICE;
ALL OTHER MOUNTING HEIGHTS REFER TO CENTERLINE OF DEVICE.
AC INDICATES 4" ABOVE COUNTER TO BOTTOM OF DEVICE.
U.N.O. INDICATES UNLESS NOTED OTHERWISE.

LIGHTING SYMBOL LEGEND:

SYMBOL	DESCRIPTION	MNTG. HT. UNO (SEE NOTE 1)
	2'X4' LIGHT FIXTURE – TYPE AS NOTED	– – – –
	EMERGENCY 2'X4' LIGHT FIXTURE–TYPE AS NOTED CONNECT BATTERY PACK TO BE ON AT ALL TIMES (UNSWITCHED)	– – – –
	SURFACE/WRAPAROUND LIGHT FIXTURE	– – – –
	SURFACE/WRAPAROUND EMERGENCY LIGHT FIXTURE CONNECT BATTERY PACK TO BE ON AT ALL TIMES (UNSWITCHED)	– – – –
	SINGLE FACE EXIT SIGN CEILING OR WALL MOUNTING (DIRECTIONAL ARROWS WHERE INDICATED)	12" ABV. EGRESS OPENING
	DOUBLE FACE EXIT SIGN CEILING OR WALL MOUNTING (DIRECTIONAL ARROWS WHERE INDICATED)	12" ABV. EGRESS OPENING
	WALL MOUNT LIGHT FIXTURE – TYPE AS NOTED	– – – –
	PENDANT LIGHT FIXTURE – TYPE AS NOTED	– – – –

NOTES:

1.) REFERENCE LIGHT FIXTURE SCHEDULE FOR ALL MOUNTING HEIGHTS.

WIRING DEVICES SYMBOL LEGEND:

SYMBOL	DESCRIPTION	MNTG. HT. UNO (SEE NOTE 1)
S	SINGLE POLE TOGGLE SWITCH – HUBBELL MODEL #HBL1221X	48"AFF
S_3	THREE WAY TOGGLE SWITCH – HUBBELL MODEL #HBL1223X	48"AFF
S_4	FOUR WAY TOGGLE SWITCH – HUBBELL MODEL #HBL1224X	48"AFF
S_K	KEYED TOGGLE SWITCH CORBIN TYPE – HUBBELL MODEL #HBL1221RKLX	48"AFF
S_T	1P TOGGLE SWITCH–THERMAL TYPE – SQUARE "D" CLASS 2510 W/ RED PILOT LIGHT & HANDLE GUARD/LOCK OFF	AS REQUIRED
PC	DIGITAL OUTDOOR PHOTO CELL WALL MOUNTED – LC&D SEE DETAIL	12' AFF

NOTES:

1.) 48" AFF INDICATES TO TOP OF DEVICE;
ALL OTHER MOUNTING HEIGHTS REFER TO CENTERLINE OF DEVICE.

FIRE ALARM SYMBOL LEGEND:

SYMBOL	DESCRIPTION	MNTG. HT. UNO (SEE NOTE 1)
PS	FIRE ALARM MANUAL PULLSTATION – PROVIDE BACKBOX WITH 1/2"C AND PULLWIRE.	48"AFF
AV	FIRE ALARM STROBE HORN – PROVIDE 15/75 CANDELA U.N.O. – PROVIDE BACKBOX WITH 1/2"C AND PULLWIRE.	CLG.
PS WP	FIRE SPRINKLER RISER ALARM SPEAKER STROBE (WEATHER PROOF) – PROVIDE BACKBOX WITH 1/2"C AND PULLWIRE.	80"AFF
V	FIRE ALARM STROBE LIGHT CEILING OR WALL MOUNTED – PROVIDE BACKBOX WITH 1/2"C AND PULLWIRE.	80"AFF
SD	FIRE ALARM HEAT DETECTOR CEILING OR WALL MOUNTED – PROVIDE BACKBOX WITH 1/2"C AND PULLWIRE.	CLG.
F	FIRE SPRINKLER FLOW SWITCH	– – – –
TS	FIRE SPRINKLER TAMPER SWITCH – PROVIDE BACKBOX WITH 1/2"C AND PULLWIRE.	– – – –
	FIRE ALARM CONTROL/VOICE EVACUATION PANEL (FLUSH MOUNTED)	– – – –
	FIRE ALARM ANNUNCIATOR PANEL (SURFACE MOUNTED)	– – – –

NOTES:

1.) 48" AFF INDICATES TO TOP OF DEVICE;
ALL OTHER MOUNTING HEIGHTS REFER TO CENTERLINE OF DEVICE.

SPECIAL SYSTEMS SYMBOL LEGEND:

SYMBOL	DESCRIPTION	MNTG. HT. UNO (SEE NOTE 1)
	DATA OUTLET/VOICE OVER IP – PROVIDE BACK BOX WITH 1" RACEWAY STUBBED INTO ACCESSIBLE CLG. WITH PULL WIRE – SEE DETAIL.	18"AFF

NOTES:

1.) 48" AFF INDICATES TO TOP OF DEVICE;
ALL OTHER MOUNTING HEIGHTS REFER TO CENTERLINE OF DEVICE.

CCCTV SYSTEM SYMBOL LEGEND:

SYMBOL	DESCRIPTION	MNTG. HT. UNO (SEE NOTE 1)
	SECURITY CAMERA – PROVIDE BACK BOX WITH 1/2" RACEWAY STUBBED INTO ACCESSIBLE CLG. WITH PULL WIRE. CAMERA AND CABLING PROVIDED BY OWNER.	– – – –

NOTES:

1.) PRIOR TO ANY ROUGH-IN COORDINATE EXACT LOCATION OF BACK BOXES WITH OWNER/CCTV SYSTEM SUPPLIER.

INTRUSION DETECTION SYMBOL LEGEND:

SYMBOL	DESCRIPTION	MNTG. HT. UNO (SEE NOTE 1)
MD	INTRUSION DETECTION MOTION DETECTOR FULL COVERAGE TYPE – PROVIDE BACKBOX WITH 1/2"C AND PULLWIRE.	9'–0"AFF
MD H	INTRUSION DETECTION MOTION DETECTOR HALLWAY COVERAGE TYPE – PROVIDE BACKBOX WITH 1/2"C AND PULLWIRE.	9'–0"AFF
GB	INTRUSION DETECTION GLASS BREAK SENSOR	ABV. CLG.
KP	INTRUSION DETECTION KEYPAD PROVIDE WITH STI COVER – PROVIDE BACKBOX WITH 1/2"C AND PULLWIRE.	48"AFF
DC	INTRUSION DETECTION DOOR MAGNETIC CONTACT – PROVIDE WITH 1/2"C AND PULLWIRE.	– – – –
S	INTRUSION DETECTION INDOOR SIREN – PROVIDE BACKBOX WITH 1/2"C AND PULLWIRE.	
S WP	INTRUSION DETECTION OUTDOOR SIREN – PROVIDE BACKBOX WITH 1/2"C AND PULLWIRE.	

NOTES:

1.) 48" AFF INDICATES TO TOP OF DEVICE;
ALL OTHER MOUNTING HEIGHTS REFER TO CENTERLINE OF DEVICE.

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CAMERON APPRAISAL DISTRICT
NEW BUILDING ADDITION AND RENOVATION
2021 AMISTAD DRIVE, SAN BENITO, TEXAS 78586

ELECTRICAL SYMBOLS LEGEND AND ABBREVIATIONS

STATE OF TEXAS
RAY PEYNADO
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8.16.2018

NO.	DATE	REVISIONS

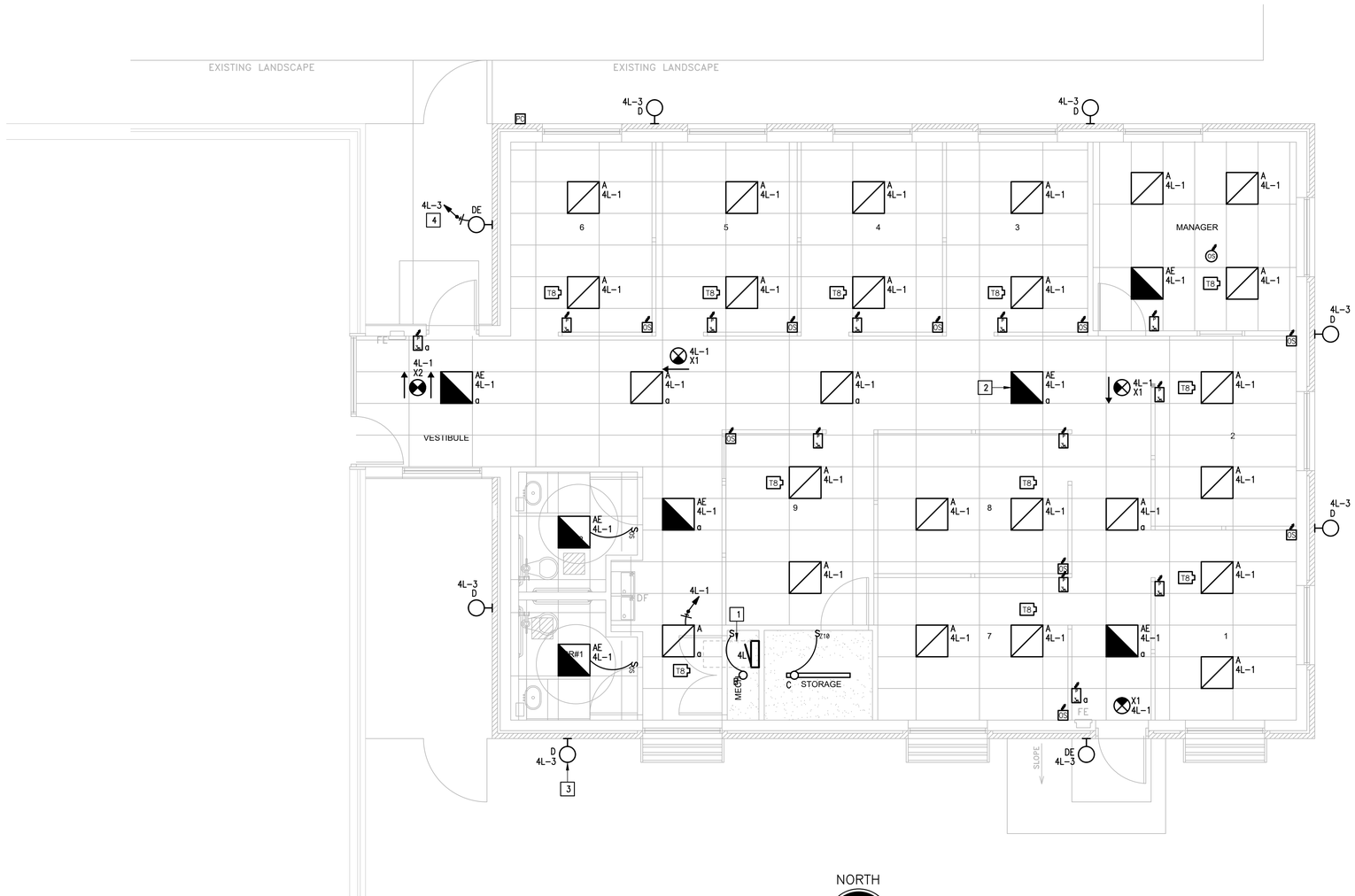
DRAWN BY: ETHOS
CHECKED BY: SCK
DATE: 08-16-18
SHEET NO.
E2.1

GENERAL NOTES:

1. LIGHTING BRANCH CIRCUIT HOMERUNS SHALL BE 3/4" – 2#12 & #12G. 20A/277V HOMERUNS EXCEEDING 200FT THE WIRE SIZE SHALL BE #10 & #8 FOR 275'.
2. INTERIOR LIGHTING CONTROLS SHALL BE BY WIRELESS OCCUPANCY SENSORS.
3. EACH 20A/1P BRANCH CIRCUIT SHALL HAVE A DEDICATED NEUTRAL.
4. EXTERIOR LIGHTING CONTROLS SHALL BE BY PHOTO CELL.
5. PROVIDE 0–10V SIGNAL WIRING TO EACH DIMMED LIGHT FIXTURE.

KEYED NOTES:

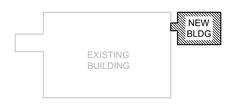
1. NO DUCTWORK OR PIPING TO BE ROUTED ABOVE PANELBOARDS. COORDINATE WITH OTHER TRADES – TYPICAL.
2. CONNECT EMERGENCY BATTERY PACK TO BE CHARGING AT ALL TIMES (UNSWITCHED). LIGHT FIXTURE SHALL BE OPERATED BY THE CORRESPONDING SWITCH – TYPICAL.
3. MOUNT LIGHT FIXTURE TYPE "D" AT 11'–4"AFF TO CENTER OF FIXTURE – TYPICAL.
4. SWITCH VIA PHOTO CELL.



NORTH

1 / E3.1 LIGHTING FLOOR PLAN

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



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LIGHTING FLOOR PLAN

STATE OF TEXAS
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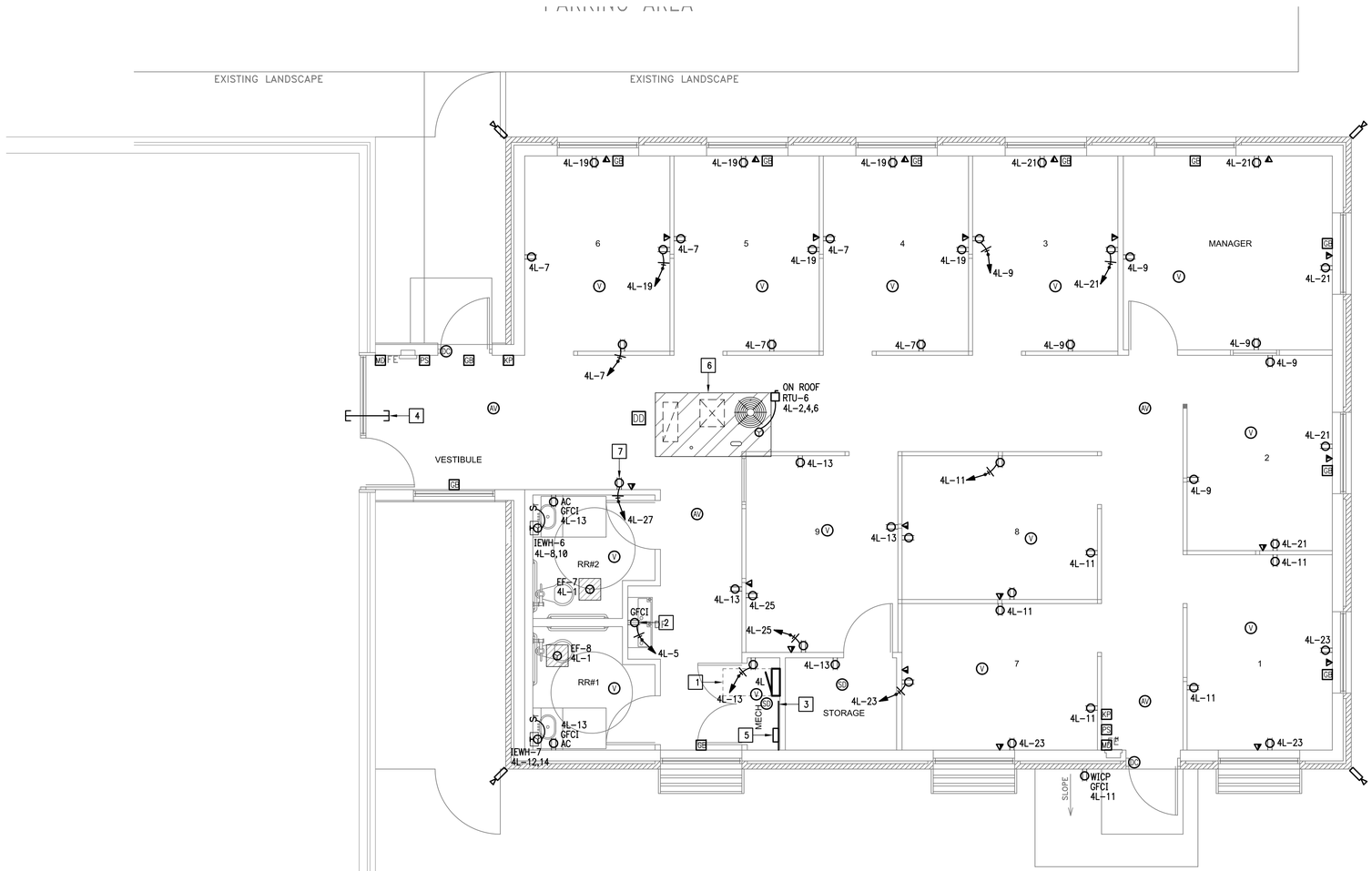

NORTH

1 / E4.1 ELECTRICAL FLOOR PLAN

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

GENERAL NOTES:

1. ELECTRICAL BRANCH CIRCUIT HOMERUNS SHALL BE 3/4" – 2#12 & #12G. 20A/120V HOMERUNS EXCEEDING 100FT, THE WIRE SIZE SHALL BE #10 & #8 FOR 175'.
2. HOMERUNS – INSTALL NO MORE THAN THREE PER RACEWAY (INCLUDING LIGHTING BRANCH CIRCUITS); 3 INSULATED "HOT", 3 INSULATED "NEUTRAL AND 1 SHARED "GROUND".
3. PROVIDE ALL ELECTRICAL RECEPTACLES INSTALLED WITH THE GROUND OPENING IN THE "UP" POSITION.
4. PROVIDE J-HOOKS TO SUPPORT THE FIRE ALARM AND INTRUSION DETECTION CABLING.
5. PROVIDE FIRE STOPPING AT ALL FIRE WALL PENETRATIONS; PROVIDE EXPANSION PLATES & BONDING JUMPERS AT BUILDING EXPANSION JOINTS.
6. EACH 20A/1P BRANCH CIRCUIT SHALL HAVE A DEDICATED NEUTRAL.

KEYED NOTES:

1. NO DUCTWORK OR PIPING TO BE ROUTED ABOVE PANELBOARDS. COORDINATE WITH OTHER TRADES – TYPICAL.
2. CONNECT ELECTRIC DRINKING FOUNTAIN; BRANCH CIRCUIT: 1/2" – 2#12 & #12G. ROUGH-IN AT 17-7/16" TO CENTER OF J-BOX – TYPICAL. COORDINATE WITH PLUMBING CONTRACTOR.
3. PROVIDE 3/4" X 4'(H) X 3'(W), PLYWOOD TELEPHONE/DATA BOARD ON ALL WALLS. FIRE RESISTIVE TREATED (A-D INT-APA). MOUNT AT 24" AFF.
4. PROVIDE 2-2" RACEWAY SLEEVES ABOVE CEILING FOR SPECIAL SYSTEMS CABLING.
5. PROVIDE INTRUSION DETECTION SYSTEM POWER SUPPLY; BRANCH CIRCUIT: 1/2" – 2#12 & #12G, L4-15.
6. CONNECT HVAC EQUIPMENT INTEGRAL GFCI RECEPTACLE TO NEAREST EXISTING 120V NON-GFCI CIRCUIT. VERIFY LOAD PRIOR TO ANY NEW CONNECTION.
7. CONNECT COPIER.

KEYPLAN

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CAMERON APPRAISAL DISTRICT
NEW BUILDING ADDITION AND RENOVATION
2021 AMISTAD DRIVE, SAN BENITO, TEXAS 78586

ELECTRICAL FLOOR PLAN

STATE OF TEXAS
RAY PEYNADO
125390
LICENSED
PROFESSIONAL ENGINEER
8.16.2018

NO.	DATE	REVISIONS

DRAWN BY:	CHECKED BY:
ETHOS	SCK

DATE: 08-16-18

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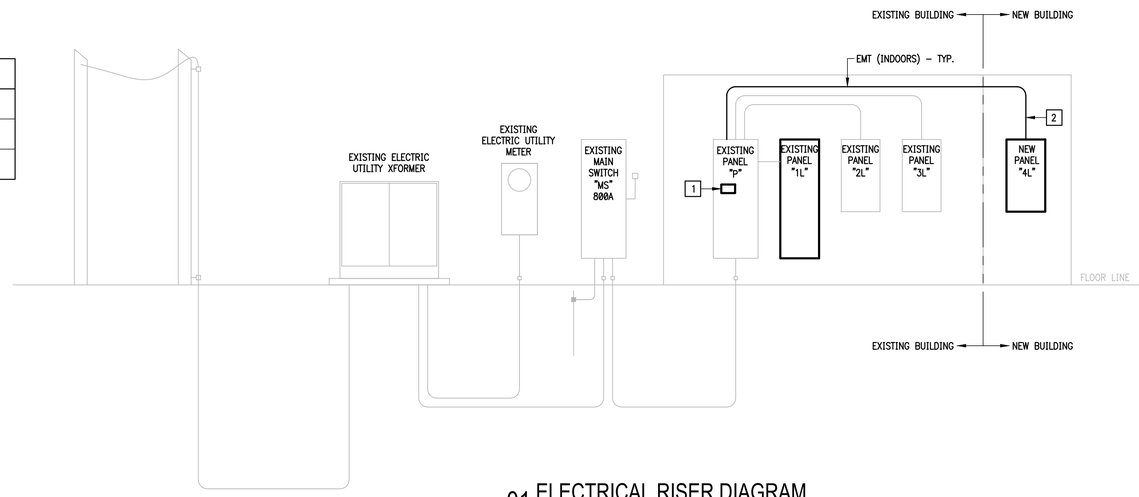
E4.1

LINE TYPE LEGEND:

LINE	DESCRIPTION
– – – –	EXISTING TO BE REMOVED
———	EXISTING TO REMAIN
———	PROVIDE NEW



01 ELECTRICAL RISER DIAGRAM
SCALE : NONE

RACEWAYS EMBEDDED IN FOUNDATION GENERAL NOTES:

RACEWAYS EMBEDDED WITHIN THE SLAB SHALL COMPLY WITH THE FOLLOWING:
1. SHALL HAVE A MINIMUM SPACING OF 2".
2. SHALL NOT BE LARGER THAN 1".
3. SHALL NOT BE RUN THROUGH THE SURFACE AREA OF THE FOOTING.
4. SHALL NOT BE CROSSED OVER/UNDER EACH OTHER WITHIN THE SLAB.
5. SHALL NOT BE TIED TO THE REBAR.
6. SHALL BE A MINIMUM OF 1.5" AWAY FROM SLAB REBAR. IF SPACING CANNOT BE ACCOMPLISHED; IT SHALL BE PROVIDED BELOW GRADE.

ELECTRICAL RISER DIAGRAM KEYED NOTES:

1 EXISTING 800A, 3ø, 4W, MLO, TYPE MP40, CUTLER HAMMER PANELBOARD. REMOVE EXISTING 30A/3P SPARE BREAKER AND PROVIDE A NEW 150A/3P BREAKER TO CONNECT NEW PANELBOARD "4L".

2 PROVIDE 2" – 4#1/0 AND #6G.

EQUIPMENT CONNECTION SCHEDULE:

DESIGN	HP/KW	FLA	MCA	MOCP	VOLTAGE	DISCONNECT	BRANCH CIRCUIT
RTU-6	–	–	49	50	208V/3PHASE	60A, 3PNF, 240V, NEMA 3R.	3/4" – 3#8 & #10G
IEWH-6	4.1 KW	19.7	–	30	208V/1PHASE	1) THERMAL SWITCH.	3/4" – 2#10 & #10G
IEWH-7	4.1 KW	19.7	–	30	208V/1PHASE	1) THERMAL SWITCH.	3/4" – 2#10 & #10G

1) PROVIDE WITHOUT OVERLOADS.

NOTE: LOCATE EQUIPMENT MEANS OF DISCONNECT WITHIN EQUIPMENT SIGHT. DO NOT INSTALL BELOW DUCTWORK OR PLUMBING LINES.

EXHAUST FAN CONNECTION SCHEDULE:

DESIGNATION	HP/WATTS	FLA	VOLTAGE	CONNECTION FOR EACH	BRANCH CIRCUIT
EF-7	34.4 W	0.3	120V/1PHASE	CONNECT AT CEILING. INTERLOCK SWITCHING WITH LIGHTING VACANCY SENSOR.	1/2" – 2#12 & #12G
EF-8	34.4 W	0.3	120V/1PHASE	CONNECT AT CEILING. INTERLOCK SWITCHING WITH LIGHTING VACANCY SENSOR.	1/2" – 2#12 & #12G

4L

ROOM MECH. RM. — VOLTS 208Y/120V 3P 4W — AIC 10,000
MOUNTING SURFACE — BUS AMPS 225 — MAIN BKR 150
FED FROM P — NEUTRAL 100% — LUGS STANDARD
NOTE PROVIDE A TYPE WRITTEN AS BUILT DIRECTORY THAT INCLUDES ROOM NUMBERS.

CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA A	LOAD KVA B	LOAD KVA C	CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA A	LOAD KVA B	LOAD KVA C
1	20/1	EF-7, EF-8, LIGHTING	1.05			2	50/3	* RTU-6	5.88		
3	20/1	EXTERIOR LIGHTING		0.176		4	|			5.88	
5	20/1	DRINKING FOUNTAIN			0.8	6	|				5.88
7	20/1	RECEPT.	1.08			8	30/2	IEWH-6	2.05		
9	20/1	RECEPT.		1.08		10	|			2.05	
11	20/1	RECEPT.			1.26	12	30/2	IEWH-7			2.05
13	20/1	RECEPT.	1.26			14	|		2.05		
15	20/1	INTRUSION DETECTION POWER SUPPLY		0.1		16	20/2	SPARE		0	
17	20/1	SPARE			0	18	|				0
19	20/1	RECEPT.	1.08			20	20/1	SPACE	0		
21	20/1	RECEPT.		1.08		22	20/1	SPACE		0	
23	20/1	RECEPT.			0.72	24	20/1	SPACE			0
25	20/1	RECEPT.	0.36			26	20/1	SPACE	0		
27	20/1	COPIER		1.2		28	20/1	SPACE		0	
29	20/1	SPARE			0	30	20/1	SPACE			0
31	20/1	SPARE	0			32	20/1	SPACE	0		
33	20/1	SPARE		0		34	20/1	SPACE		0	
35	20/1	SPARE			0	36	20/1	SPACE			0
37	20/1	SPARE	0			38	20/1	SPACE	0		
39	20/1	SPARE		0		40	20/1	SPACE		0	
41	20/1	SPARE			0	42	20/1	SPACE			0
								TOTAL CONNECTED KVA BY PHASE	14.8	11.6	10.7

	CONN KVA	CALC KVA	
LIGHTING	1.15	1.44	(125%)
LARGEST MOTOR	0.038	0.048	(125%)
OTHER MOTORS	0.038	0.038	(100%)
RECEPTACLES	9.92	9.92	(50%>10)
KITCHEN EQUIP	0	0	(N/A)

	CONN KVA	CALC KVA	
CONTINUOUS	0.1	0.125	(125%)
HEATING	17.7	17.7	(100%)
COOLING	0	0	(N/A)
NONCONTINUOUS	8.2	8.2	(100%)
DIVERSE	0	0	(N/A)
METERED DEMAND	0	0	(125%)
TOTAL KVA	37.1	37.4	
BALANCED 3-PHASE AMPS		104	

* PROVIDE HACR TYPE.

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CAMERON APPRAISAL DISTRICT
NEW BUILDING ADDITION AND RENOVATION
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BUILDING ADDITION ELECTRICAL RISER DIAGRAM AND SCHEDULES

STATE OF TEXAS
RAY PEYNADO
125390
LICENSED PROFESSIONAL ENGINEER
8.16.2018

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DATE: 08-16-18

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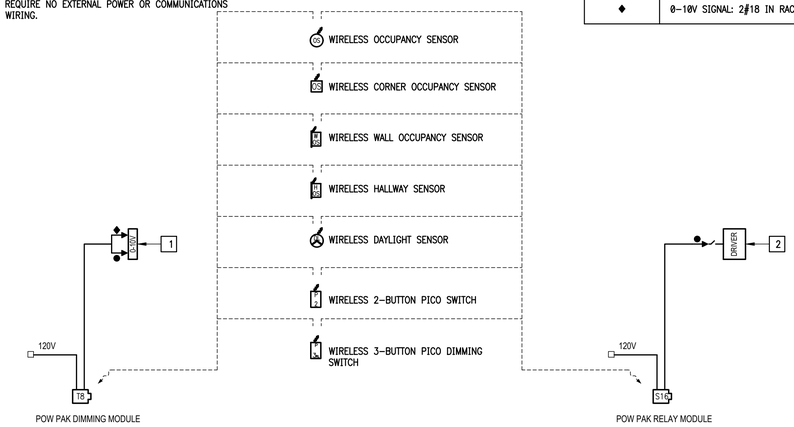
GENERAL NOTES:

1. REFER TO LIGHTING PLANS FOR DEVICE QUANTITIES.
2. REFER TO SYMBOLS LEGEND FOR MOUNTING HEIGHTS.
3. PROVIDE 0-10V SIGNAL WIRING TO EACH DIMMED LED LIGHT FIXTURE DRIVER AND ASSOCIATED POWER PACK DIMMING MODULE.
4. WIRELESS DEVICES ARE BATTERY OPERATED AND REQUIRE NO EXTERNAL POWER OR COMMUNICATIONS WIRING.

KEYED NOTES:

1. LED LIGHT FIXTURE DIMMING DRIVER. REFER TO LIGHTING PLANS FOR QUANTITIES
2. LED LIGHT FIXTURE STANDARD DRIVER. REFER TO LIGHTING PLANS FOR QUANTITIES.

LINE	DESCRIPTION
- - - - - -	RF (RADIO FREQUENCY) CONNECTION
———	WIRED CONNECTION
●	2#12 & #12G IN RACEWAY
◆	0-10V SIGNAL: 2#18 IN RACEWAY



09 TYPICAL LUTRON ONE-LINE CONTROL DIAGRAM

SCALE : NOT TO SCALE

LUMINAIRE SCHEDULE

CALLOUT	LAMP	DESCRIPTION	DRIVER	MOUNTING	MODEL	INPUT WATTS	VOLTS	NOTE	LUMEN MAINT.	LUMENS / LAMP
A	LED	2'x2' LAY-IN FLAT PANEL	0-10V	RECESSED	LITHONIA: EPANL 2X2 3400LM 40K ZT MVOLT LEDALUX: ECOPNL-2X2-40-U-4K	30	120V 1P 2W		L-70	4134
AE	LED	2'x2' LAY-IN FLAT PANEL	0-10V	RECESSED	LITHONIA: EPANL 2X2 3400LM 40K ZT MVOLT EL14L LEDALUX: ECOPNL-2X2-40-U-4K-BU	30	120V 1P 2W	PROVIDE WITH AN EMERGENCY BATTERY PACK.	L-70	4134
B	LED	ROUND MINI DISK	STANDARD	CEILING	JESCO: CM 405 M 4080 WH 15W JUNO: 6RLS 930 9 WH	15	120V 1P 2W		L-70	1190
C	LED	STRIP LIGHT	0-10V	SURFACE	LSI: SDL 4 LED 50L FL UNV DIM1 40 80CRI LITHONIA: CLX L48 5000LM SEF RDL	44	120V 1P 2W		L-70	5002
D	LED	WALLPACK	0-10V	SURFACE	LITHONIA: WSR LED 1 10A700/40K SR4 MVOLT X RAYON: T650LED DL 30 UNI12 40 WT MTO	22	120V 1P 2W	PROVIDE UL LISTED FOR WET LOCATIONS. PROVIDE UL LISTED FOR WET LOCATIONS AND WITH AN EMERGENCY BATTERY PACK. STANDARD COLOR FINISH	L-70	2858
DE	LED	WALLPACK	0-10V	SURFACE	LITHONIA: WSR LED 1 10A700/40K SR4 MVOLT ELCW X RAYON: T650LED DL 30 UNI12 40 WT MTO EM	22	120V 1P 2W	PROVIDE UL LISTED FOR WET LOCATIONS AND WITH AN EMERGENCY BATTERY PACK. STANDARD COLOR FINISH TO BE SELECTED AT A LATER DATE.	L-70	2858
F	LED	6" LENSED DOWN LIGHT	0-10V	CEILING	LITHONIA: LDN6 40/05 L06AR LSS 277 VANTAGE: A6VACLED 2 07 40 C601 SCL MD WHT	12	MULTIPLE	PROVIDE WITH A WHITE PAINTED FLANGE AND T-BAR HANGERS.	L-70	662
X1	LED	SINGLE SIDED EXIT SIGN		WALL/CEILING	BEGHELLI: FTZ-SA-LR1-UWW MULE LIGHTING: WLCX-1-R-W-U-SD	3	120V 1P 2W	PROVIDE WITH A UNIVERSAL MOUNTING CANOPY, LIGHT EMITTING DIODES, & A NI-CAD BATTERY PACK.		0
X2	LED	DOUBLE SIDED EXIT SIGN		WALL/CEILING	BEGHELLI: FTZ-SA-LR2-UWW MULE LIGHTING: WLCX-2-R-W-U-SD	5	120V 1P 2W	PROVIDE WITH A UNIVERSAL MOUNTING CANOPY, LIGHT EMITTING DIODES, & A NI-CAD BATTERY PACK.		0

GENERAL NOTES:
1. OTHER LIGHT FIXTURE AND BALLAST MANUFACTURERS THAN THOSE LISTED ON THIS SCHEDULE ARE REQUIRED TO OBTAIN PRIOR APPROVAL BY SUBMITTING CUT SHEETS OF THEIR SUBSTITUTIONS AT LEAST (10) DAYS PRIOR TO BID. CUT SHEETS SHALL INDICATE/HIGHLIGHT PHOTOMETRIC CURVE, EFFICIENCY & CONSTRUCTION FOR DIRECT COMPARISON WITH SPECIFIED FIXTURES AND BALLAST.
2. EXTRA MATERIALS: SEE SPECIFCATIONS.
3. EMERGENCY BATTERY PACKS SHALL BE COMPLETE FACTORY INSTALLED WITH NI-CAD BATTERY, CHARGER INDICATING LIGHT, ELECTRONIC CIRCUITRY, 1400 LUMENS OUTPUT, 90 MINUTES DURATION & FIVE FULL YEARS WARRANTY.
4. FURNISH ALL 2' X 4' LAY-IN LIGHT FIXTURES WITH INTEGRAL CEILING CLIPS.

01 WIRELESS DIMMING SWITCH
SCALE : NONE

02 VACANCY WALL SWITCH SENSOR
SCALE : NONE

03 WIRELESS SWITCH
SCALE : NONE

04 TYPE 'A' & 'AE' IMAGE
SCALE : NONE

05 TYPE 'B' IMAGE
SCALE : NONE

06 TYPE 'C' IMAGE
SCALE : NONE

07 VACANCY DIMMING WALL SWITCH SENSOR
SCALE : NONE

08 WIRELESS CEILING OCCUPANCY SENSOR
SCALE : NONE

09 WIRELESS CORNER OCCUPANCY SENSOR
SCALE : NONE

10 TYPE 'D' IMAGE
SCALE : NONE

11 TYPE 'X1' & 'X2' IMAGE
SCALE : NONE

12 DIMMING POWER PACK MODULE
SCALE : NONE

13 SWITCHING POWER PACK MODULE
SCALE : NONE

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LUMINAIRE SCHEDULE, LIGHTING AND CONTROLS IMAGES

STATE OF TEXAS
RAY PEYNADO
125390
LICENSED
ARCHITECT
8.16.2018

NO.	DATE	REVISIONS

DRAWN BY: ETHOS
CHECKED BY: SCK
DATE: 08-16-18
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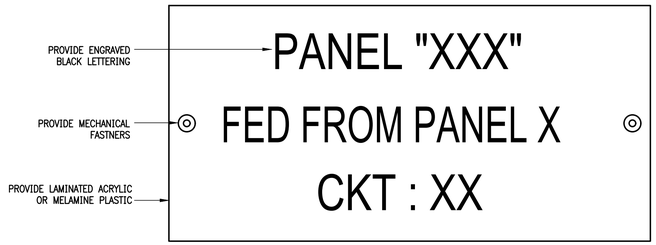


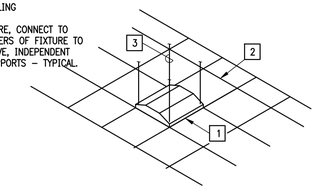
NOTE: ATTACH NAMEPLATES TO ALL ELECTRICAL GEAR AS NOTED ON SECTION 260553.

01 EQUIPMENT IDENTIFICATION LABEL DETAIL

SCALE : NOT TO SCALE

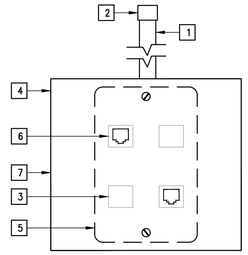
KEYED NOTES:

1. PROVIDE 2' X 2' LAY-IN LIGHT FIXTURE
2. SUSPENDED CEILING
3. PROVIDE TIE WIRE, CONNECT TO ALL FOUR CORNERS OF FIXTURE TO STRUCTURE ABOVE, INDEPENDENT OF CEILING SUPPORTS - TYPICAL.



02 TYPICAL LAY-IN FIXTURE SUPPORT

SCALE : NOT TO SCALE

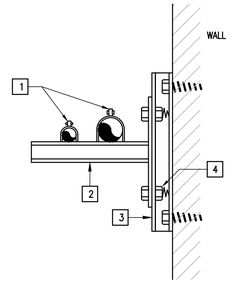


KEYED NOTES:

1. PROVIDE 1" EMT STUBBED ABOVE CLG.
2. PROVIDE INSULATING BUSHING
3. PROVIDE BLANK FILLER COVER
4. PROVIDE COVERPLATE
5. PROVIDE STEEL MUD RING
6. CATEGORY SIX JACK - PROVIDED BY OWNER
7. PROVIDE 4"X4"X2-5/8" DEEP BOX

03 TYPICAL DATA/TELEPHONE OUTLET DETAIL

SCALE : NOT TO SCALE

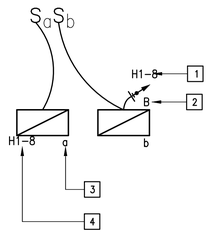


KEYED NOTES:

1. PROVIDE CONDUIT CLAMPS.
2. PROVIDE GALVANIZED UNISTRUT WALL BRACKET.
3. PROVIDE RAMSET OR BOLT GALVANIZED UNISTRUT TO WALL.
4. PROVIDE SELF HOLDING CLAMPING NUT WITH SPRING.

04 RACEWAY RUNS SUPPORT DETAIL

SCALE : NOT TO SCALE

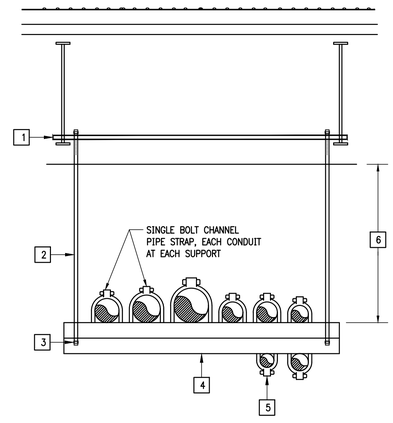


KEYED NOTES:

1. CIRCUIT HOMERUN
2. FIXTURE TYPE - REFER TO LIGHT FIXTURE SCHEDULE
3. INDICATES SWITCH CONTROLLING LIGHT FIXTURE.
4. INDICATES BRANCH CIRCUIT LIGHT FIXTURE IS CONNECTED TO

05 LIGHTING LEGEND DETAIL

SCALE : NOT TO SCALE



KEYED NOTES:

1. PROVIDE UNISTRUT STRUCTURAL CHANNEL SECURED TO TO JOIST AT BOTH ENDS.
2. PROVIDE 1/2" GALVANIZED THREADED ROD MINIMUM.
3. PROVIDE LOCKNUT.
4. PROVIDE GALVANIZED UNISTRUT 8'-0" O/C MAXIMUM.
5. 0'-1" MAXIMUM SIZE ON BOTTOM OF UNISTRUT.
6. VARIES.

06 HORIZONTAL RACEWAYS SUPPORT DETAIL

SCALE : NOT TO SCALE

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CAMERON APPRAISAL DISTRICT
NEW BUILDING ADDITION AND RENOVATION
2021 AMISTAD DRIVE, SAN BENITO, TEXAS 78586

ELECTRICAL DETAILS

STATE OF TEXAS
RAY PEYNADO
125390
LICENSED PROFESSIONAL ENGINEER
8.16.2018

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DATE: 08-16-18

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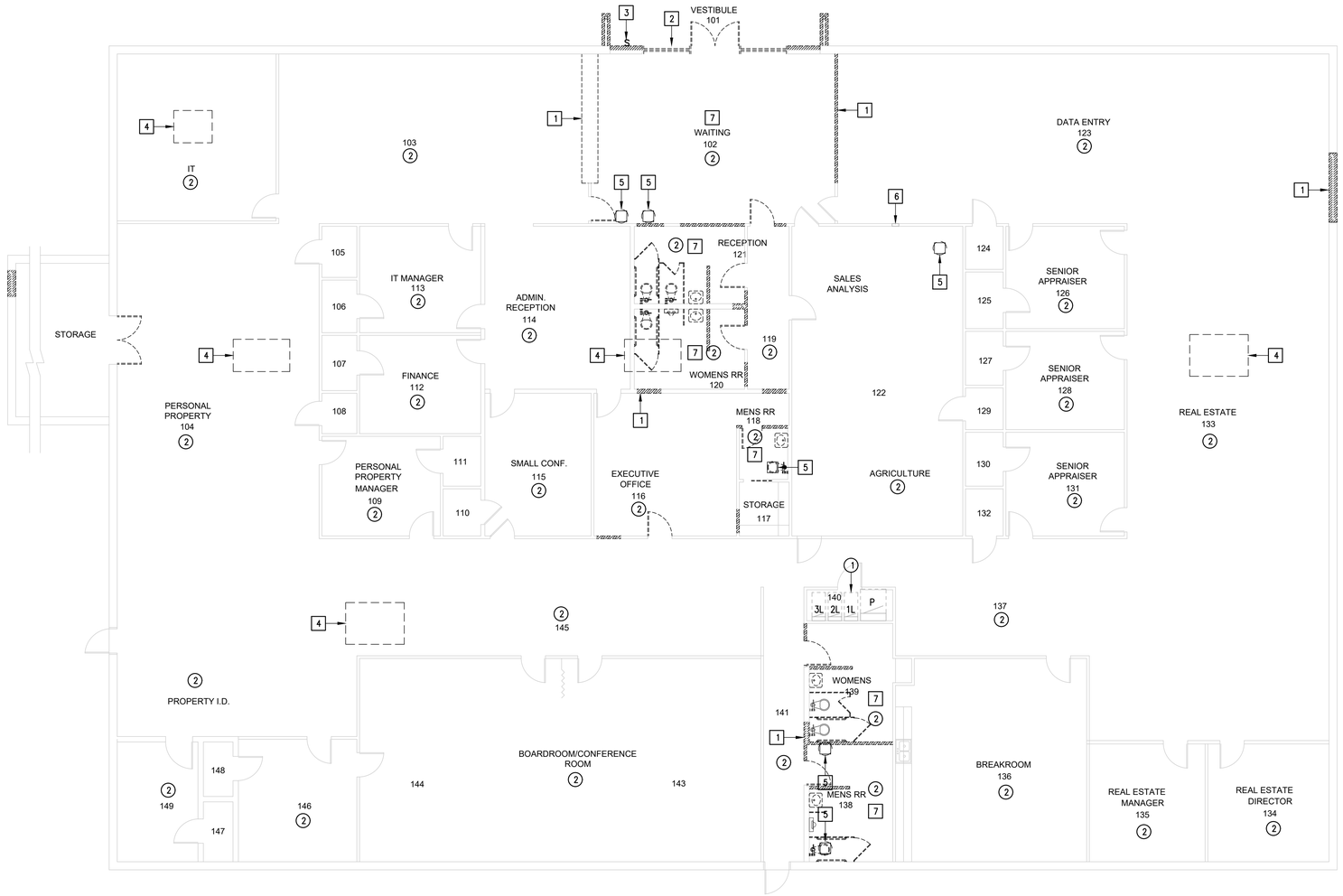

EXISTING BUILDING ELECTRICAL DEMOLITION PLAN

1 / R-ED1.1

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

NORTH

GENERAL NOTES:

1. REFER TO ARCHITECTURAL SPECIFICATIONS FOR PHASING REQUIREMENTS.
2. DISCONNECT AND REMOVE ALL EXISTING FIRE ALARM SYSTEM (FACP, ANNUNCIATOR, SMOKE DETECTORS, PULL STATIONS, VISUAL, AUDIO VISUALS, ETC.) FOR REMOVAL; ALONG WITH RELATED RACEWAY, WIRE AND SUPPORT HARDWARE AFTER NEW FIRE SPRINKLER SYSTEM IS IN PLACE. ABANDON EXISTING WALL MOUNTED RACEWAYS AND BOXES IN PLACE. PROVIDE A BLANK WALL PLATE.
3. REMOVED MATERIALS SHALL BELONG TO OWNER. DELIVER THEM TO OWNERS DESIGNATED LOCATION. IF OWNER DOES NOT WANT THE REMOVED MATERIALS THEN REMOVE THEM FROM SITE & PROPERLY DISPOSE OF THEM.
4. IF REMOVAL OF EXISTING ELECTRICAL SYSTEMS RENDERS EXISTING ELECTRICAL SYSTEMS DOWNSTREAM TO REMAIN INOPERABLE, PROVIDE J-BOXES, CONDUIT WIRING AND SPLICES ABOVE ACCESSIBLE CEILINGS IN ORDER TO CONTINUE OPERATION.
5. REFER TO ARCHITECTURAL DEMOLITION DRAWINGS FOR WALL AND CEILINGS TO BE REMOVED.
6. PRIOR TO DEMOLITION, IN CEILINGS SCHEDULED TO BE REMOVED AND(OR) REPLACED FOR NEW HVAC DUCTWORK, NEW FIRE SPRINKLER, NEW ELECTRICAL FEEDER (PANEL 4L) AND NEW LIGHTING, PREPARE REFLECTED CEILING PLAN SKETCH SHOWING LOCATIONS OF ALL CEILING COMPONENTS AND DEVICES TO BE RE-USED INCLUDING BUT NOT LIMITED TO:
   - LIGHT FIXTURES; INCLUDING EMERGENCY AND EXIT LIGHTS
   - SPEAKERS
   - CAMERAS
   - WIRELESS ACCESS POINTS
   - FIRE ALARM DEVICES
   - EMERGENCY LIGHTING
   - ETC.

   IF ANY OF THE ABOVE ITEMS ARE IN NON-WORKING CONDITION, SUBMIT A WRITTEN REPORT TO OWNER/ARCHITECT. TEMPORARY SUPPORT AND OR REMOVAL OF THESE SYSTEMS SHALL BE PROVIDED FOR NEW WORK.

KEYED NOTES:

1. DISCONNECT AND REMOVE ANY AND ALL LIGHTING, ELECTRICAL AND SPECIAL SYSTEMS LOCATED ON WALLS TO BE REMOVED - TYPICAL.
2. DISCONNECT EXISTING MOTORIZED GATE TO BE RELOCATED. EXTEND EXISTING BRANCH CIRCUIT TO NEW LOCATION.
3. DISCONNECT EXISTING MOTORIZED GATE KEY SWITCH TO BE RELOCATED. EXTEND EXISTING BRANCH CIRCUIT TO NEW LOCATION.
4. DISCONNECT EXISTING HVAC ROOF TOP UNIT TO BE REPLACED. SEE EXISTING RTU'S ELECTRICAL RISER DIAGRAM.
5. DISCONNECT EXISTING HVAC EXHAUST FAN TO BE REPLACED.
6. DISCONNECT AND REMOVE EXISTING FIRE ALARM CONTROL PANEL AFTER NEW FIRE SPRINKLER SYSTEM AND NEW FIRE ALARM CONTROL PANEL IS IN PLACE.
7. DISCONNECT AND REMOVE ALL EXISTING 2X4 LAY-IN LIGHT FIXTURES, EMERGENCY LIGHTS AND LIGHT SWITCHES IN THIS ROOM ALONG RELATED RACEWAYS. WIRING AND SUPPORT HARDWARE. LIGHT SWITCH RACEWAYS AND BACK BOXES MAY BE ABANDONED IN PLACE. PROVIDE A BLANK WALL PLATE.

KEYED NOTES: ALTERNATE #2:

1. APPROXIMATE LOCATION OF EXISTING PANELBOARD SERVING LIGHTING CIRCUITS.
2. DISCONNECT AND REMOVE ALL EXISTING 2X4 LAY-IN LIGHT FIXTURES, EMERGENCY LIGHTS AND LIGHT SWITCHES IN THIS ROOM ALONG RELATED RACEWAYS. WIRING AND SUPPORT HARDWARE. LIGHT SWITCH RACEWAYS AND BACK BOXES MAY BE ABANDONED IN PLACE. PROVIDE A BLANK WALL PLATE. IT IS THE INTENT TO REMOVE ALL EXISTING LIGHTING BRANCH CIRCUITS (UNGROUNDED) AND PROVIDE NEW (GROUNDED). EXISTING RACEWAYS MAY BE RETAINED AND REUSED IF DEEMED SALVAGEABLE.

LINE TYPE LEGEND:

LINE	DESCRIPTION
	EXISTING TO BE REMOVED
	EXISTING TO REMAIN
	PROVIDE NEW

KEYPLAN

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CAMERON APPRAISAL DISTRICT
NEW BUILDING ADDITION AND RENOVATION
2021 AMISTAD DRIVE, SAN BENITO, TEXAS 78586

EXISTING BUILDING ELECTRICAL DEMOLITION PLAN

STATE OF TEXAS
RAY PEYNADO
125390
LICENSED PROFESSIONAL ENGINEER
8.16.2018

NO.	DATE	REVISIONS

DRAWN BY:	CHECKED BY:
ETHOS	SCK

DATE: 08-16-18

SHEET NO.

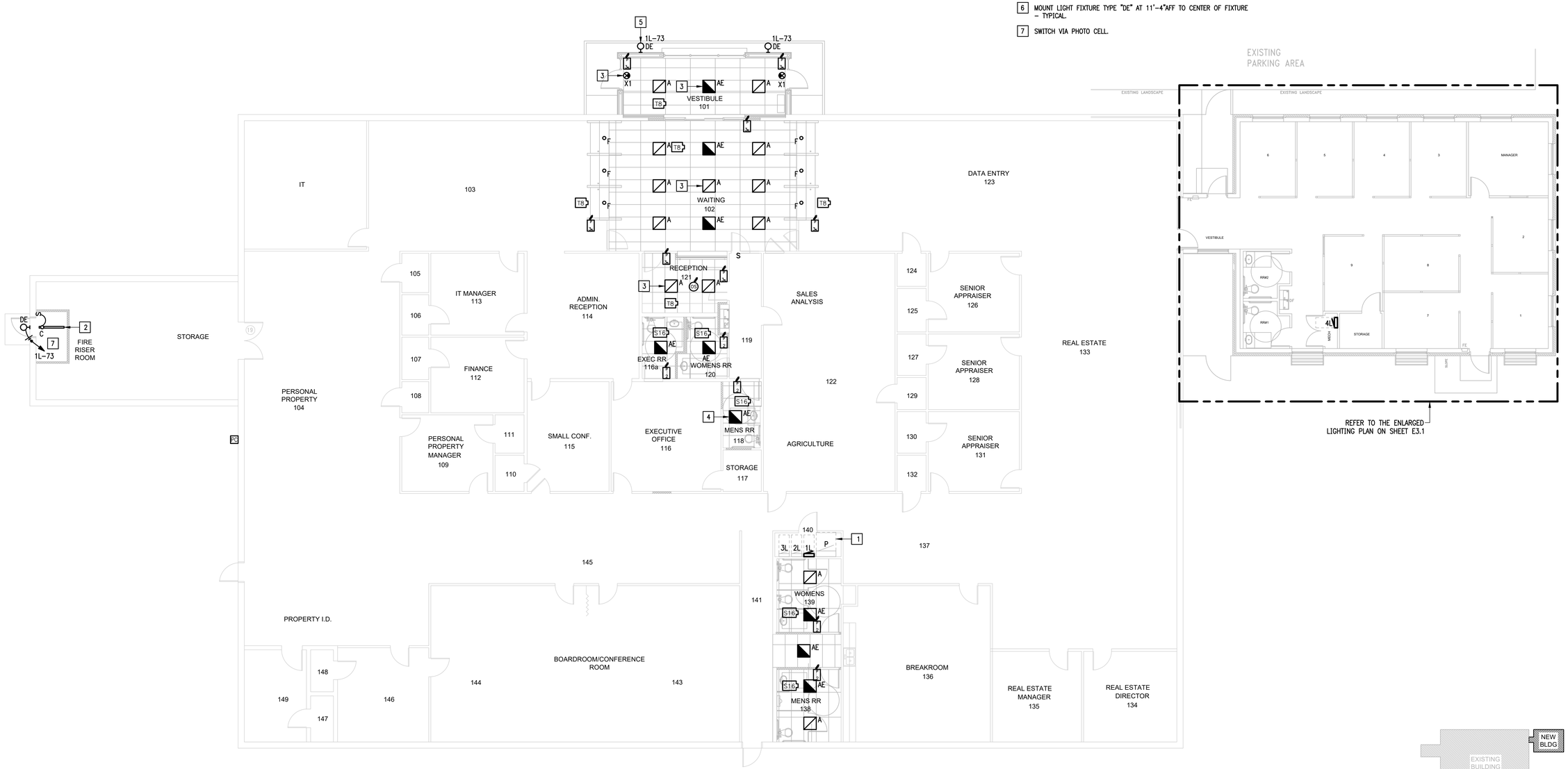
R-ED1.1

KEYED NOTES:

1. NO DUCTWORK OR PIPING TO BE ROUTED ABOVE PANELBOARDS. COORDINATE WITH OTHER TRADES – TYPICAL.
2. PROVIDE UNISTRUT/THREADED ROD AND SUSPEND LIGHT FIXTURE AT 9'–0"AFF. CONNECT TO EXISTING 120V LIGHTING CIRCUIT.
3. CONNECT NEW LIGHT FIXTURES TO EXISTING 120V LIGHTING CIRCUIT – TYPICAL.
4. CONNECT EMERGENCY BATTERY PACK TO BE CHARGING AT ALL TIMES (UNSWITCHED). LIGHT FIXTURE SHALL BE OPERATED BY THE CORRESPONDING SWITCH – TYPICAL.
5. WALL MOUNT LIGHT FIXTURE AT 9'–0"AFF TO TOP OF FIXTURE – TYPICAL.
6. MOUNT LIGHT FIXTURE TYPE "DE" AT 11'–4"AFF TO CENTER OF FIXTURE – TYPICAL.
7. SWITCH VIA PHOTO CELL.

GENERAL NOTES:

1. LIGHTING BRANCH CIRCUIT HOMERUNS SHALL BE 3/4" – 2#12 & #12G. 20A/277V HOMERUNS EXCEEDING 200FT THE WIRE SIZE SHALL BE #10 & #8 FOR 275'.
2. INTERIOR LIGHTING CONTROLS SHALL BE BY WIRELESS OCCUPANCY SENSORS.
3. EACH 20A/1P BRANCH CIRCUIT SHALL HAVE A DEDICATED NEUTRAL.
4. EXTERIOR LIGHTING CONTROLS SHALL BE BY PHOTO CELL.
5. PROVIDE 0–10V SIGNAL WIRING TO EACH DIMMED LIGHT FIXTURE.



KEYPLAN

1 R-E3.1 EXISTING BUILDING LIGHTING PLAN

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

NORTH

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CAMERON APPRAISAL DISTRICT
NEW BUILDING ADDITION AND RENOVATION
2021 AMISTAD DRIVE, SAN BENITO, TEXAS 78586

EXISTING BUILDING LIGHTING PLAN

STATE OF TEXAS
RAY PEYNADO
125390
REGISTERED
PROFESSIONAL ENGINEER
8.16.2018

NO.	DATE	REVISIONS

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R-E3.1

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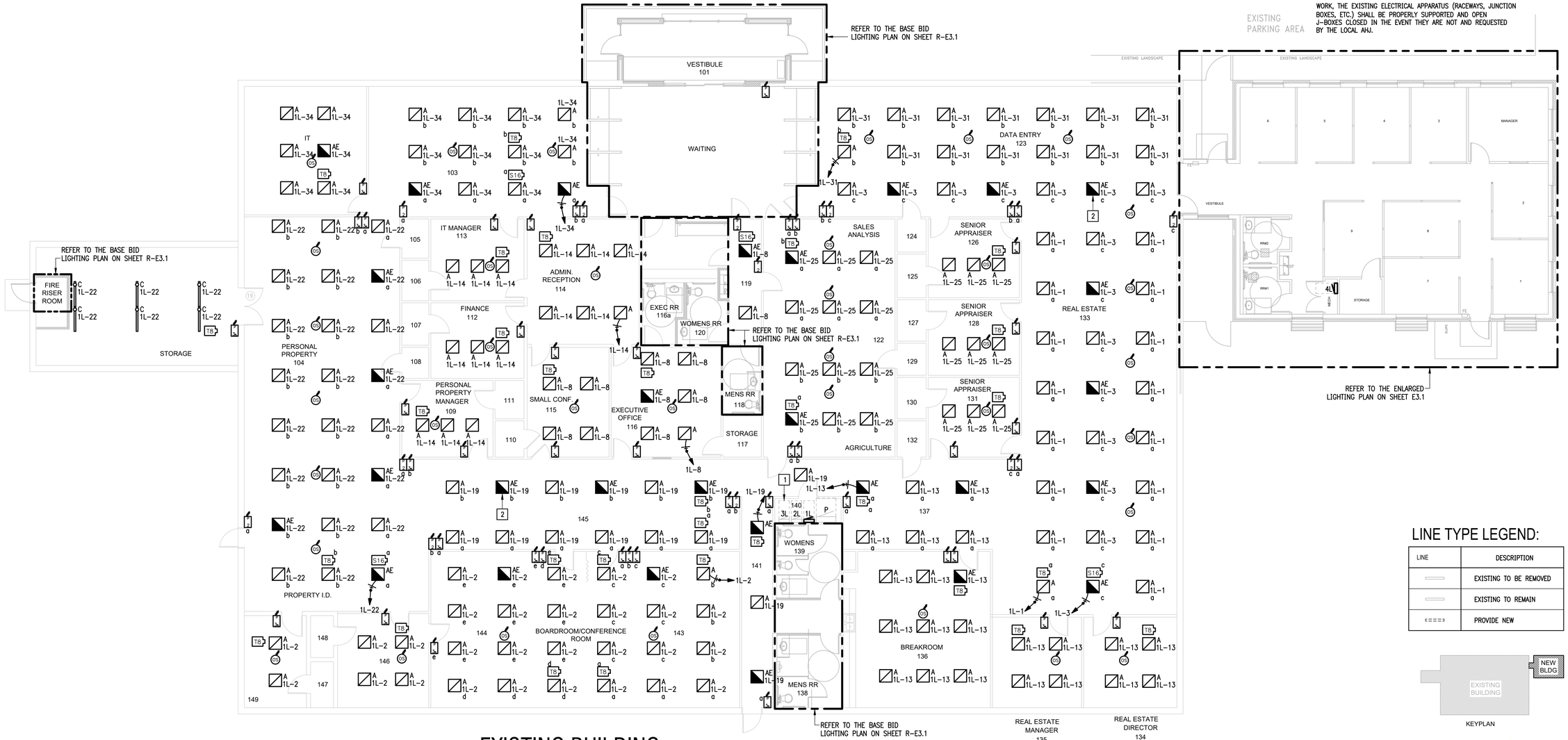
KEYED NOTES:

1. NO DUCTWORK OR PIPING TO BE ROUTED ABOVE PANELBOARDS. COORDINATE WITH OTHER TRADES – TYPICAL.
2. CONNECT EMERGENCY BATTERY PACK TO BE CHARGING AT ALL TIMES (UNSWITCHED). LIGHT FIXTURE SHALL BE OPERATED BY THE CORRESPONDING SWITCH – TYPICAL.

GENERAL NOTES:

1. LIGHTING BRANCH CIRCUIT HOMERUNS SHALL BE 3/4" – 2#12 & #12G. 20A/277V HOMERUNS EXCEEDING 200FT THE WIRE SIZE SHALL BE #10 & #8 FOR 275'.
2. INTERIOR LIGHTING CONTROLS SHALL BE BY WIRELESS OCCUPANCY SENSORS.
3. EXTERIOR LIGHTING CONTROLS SHALL BE BY PHOTO CELL.
4. PROVIDE 0–10V SIGNAL WIRING TO EACH DIMMED LIGHT FIXTURE.
5. EACH 20A/1P BRANCH CIRCUIT SHALL HAVE A DEDICATED NEUTRAL.
6. PROVIDE A BLANK WALL PLATE FOR ALL ABANDONED LIGHT SWITCH BACK BOXES.
7. PROVIDE NEW LIGHTING BRANCH CIRCUITS (GROUNDED). THE ASSIGNED CIRCUITS NUMBERS ONLY SERVE AS A GUIDE. THE CONTRACTOR HAS THE LIBERTY TO MODIFY CIRCUIT NUMBERS IN ORDER TO WORK AROUND THE PHASING OF SCOPE OF WORK AND TO RE-USE EXISTING RACEWAYS IF DEEMED SALVAGEABLE. PROVIDE AN UPDATED TYPE WRITTEN AS BUILT PANELBOARD DIRECTORY THAT INCLUDES ROOM NUMBERS.
8. IN AREAS WHERE THE CEILING IS TO BE REMOVED FOR NEW WORK, THE EXISTING ELECTRICAL APPARATUS (RACEWAYS, JUNCTION BOXES, ETC.) SHALL BE PROPERLY SUPPORTED AND OPEN J-BOXES CLOSED IN THE EVENT THEY ARE NOT AND REQUESTED BY THE LOCAL AHJ.



EXISTING BUILDING LIGHTING PLAN - ALTERNATE #2

1 / R-E3.2

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

LINE TYPE LEGEND:

LINE	DESCRIPTION
	EXISTING TO BE REMOVED
	EXISTING TO REMAIN
	PROVIDE NEW

KEYPLAN

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CAMERON APPRAISAL DISTRICT
NEW BUILDING ADDITION AND RENOVATION
2021 AMISTAD DRIVE, SAN BENITO, TEXAS 78586

EXISTING BUILDING LIGHTING PLAN - ALTERNATE #2

STATE OF TEXAS
RAY PEYNADO
125390
LICENSED PROFESSIONAL ENGINEER
8.16.2018

NO.	DATE	REVISIONS

DRAWN BY:	CHECKED BY:
ETHOS	SCK

DATE: 08-16-18

SHEET NO.

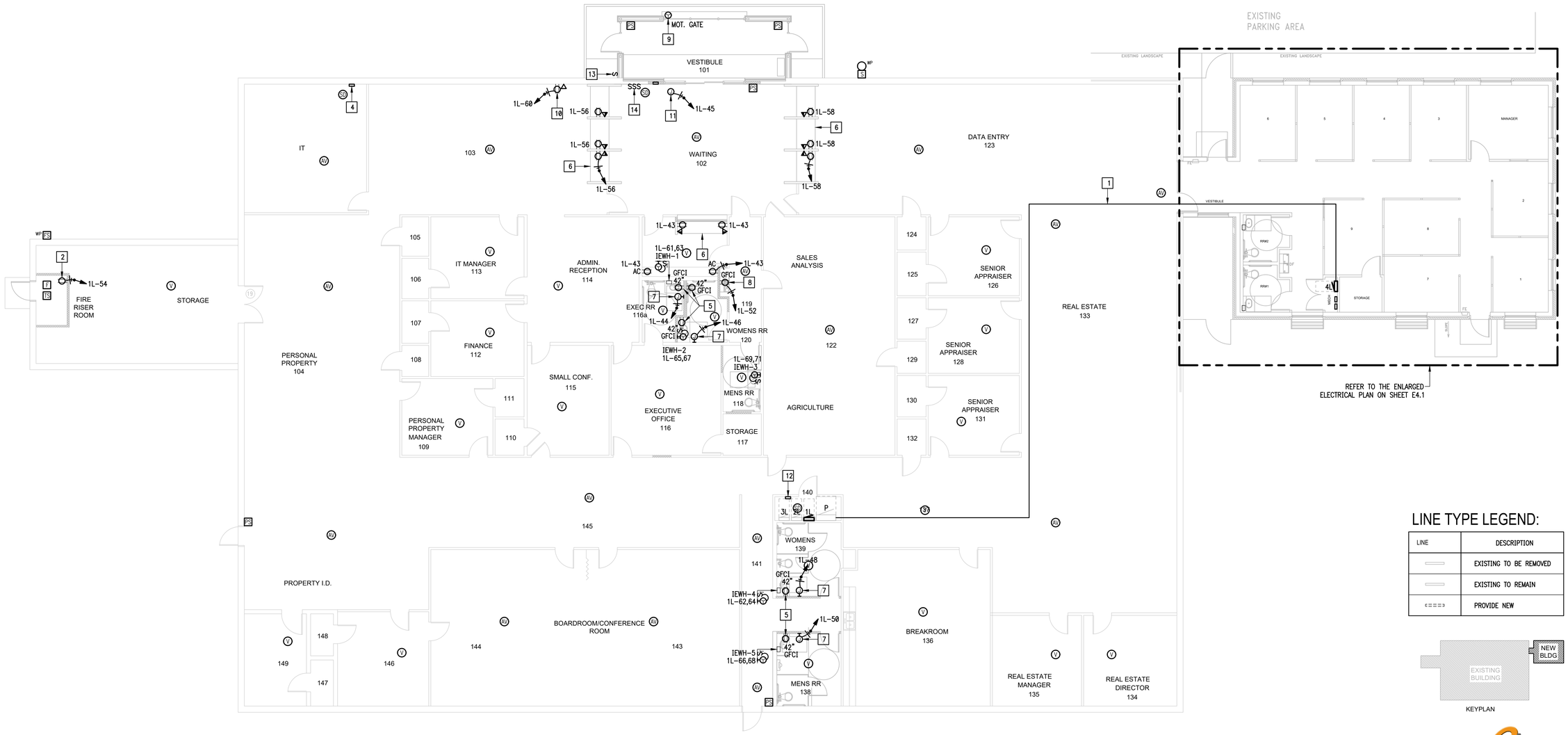
R-E3.2

KEYED NOTES:

1. PROVIDE NEW FEEDER ABOVE CEILING.
2. CONNECT FLOW SWITCH.
3. PROVIDE FIRE ALARM REMOTE ANNUNCIATOR (FLUSH MOUNTED FACING LOBBY).
4. PROVIDE FIRE ALARM CONTROL PANEL; BRANCH CIRCUIT: 1/2" – 2#12 & #12G; 1L-47. PROVIDE TWO TELEPHONE CONNECTIONS.
5. CONNECT NEW RECEPTACLE TO EXISTING RESTROOMS RECEPTACLE CIRCUIT.
6. PROVIDE GROMMETS THROUGH COUNTERTOP TO ACCESS WIRING DEVICES BELOW COUNTER INSIDE KNEE SPACE.
7. PROVIDE INFRARED RECESSED MOUNTED HAND DRYER. HAND DRYER SHALL BE DYSON AIRBLADE V HU02 (NO SUBSTITUTIONS). BRANCH CIRCUIT: 1/2" – 2#12 & #12G. MOUNT AT +34" A.F.F. (BOTTOM). VERIFY THE EXACT LOCATION WITH THE ARCHITECTURAL PLANS.
8. CONNECT ELECTRIC DRINKING FOUNTAIN; BRANCH CIRCUIT: 1/2" – 2#12 & #12G. ROUGH-IN AT 17-7/16" TO CENTER OF J-BOX – TYPICAL. COORDINATE WITH PLUMBING CONTRACTOR.
9. CONNECT EXISTING MOTORIZED GATE AT NEW LOCATION. EXTEND EXISTING BRANCH CIRCUIT TO THIS APPROXIMATE LOCATION.
10. CONNECT COPIER.
11. CONNECT AUTOMATIC SLIDING DOOR.
12. APPROXIMATE LOCATION OF EXISTING INTRUSION DETECTION SYSTEM CONTROL PANEL (NAPCO).
13. CONNECT EXISTING MOTORIZED GATE KEY SWITCH AT NEW LOCATION. EXTEND EXISTING BRANCH CIRCUIT TO THIS APPROXIMATE LOCATION.
14. RE-CONNECT EXISTING MOTORIZED GATE KEY SWITCH(S). EXTEND EXISTING BRANCH CIRCUIT TO NEW GATE LOCATION.

GENERAL NOTES:

1. ELECTRICAL BRANCH CIRCUIT HOMERUNS SHALL BE 3/4" – 2#12 & #12G. 20A/120V HOMERUNS EXCEEDING 100FT, THE WIRE SIZE SHALL BE #10 & #8 FOR 175'.
2. HOMERUNS – INSTALL NO MORE THAN THREE PER RACEWAY (INCLUDING LIGHTING BRANCH CIRCUITS); 3 INSULATED "HOT", 3 INSULATED "NEUTRAL AND 1 SHARED "GROUND".
3. PROVIDE ALL ELECTRICAL RECEPTACLES INSTALLED WITH THE GROUND OPENING IN THE "UP" POSITION.
4. PROVIDE J-HOOKS TO SUPPORT THE FIRE ALARM, INTRUSION DETECTION, VOICE AND DATA CABLING.
5. PROVIDE FIRE STOPPING AT ALL FIRE WALL PENETRATIONS; PROVIDE EXPANSION PLATES & BONDING JUMPERS AT BUILDING EXPANSION JOINTS.
6. EACH 20A/1P BRANCH CIRCUIT SHALL HAVE A DEDICATED NEUTRAL.
7. IF NEW DEVICES ARE TO BE INSTALLED ON EXISTING WALLS; PROVIDE STEEL SURFACE RACEWAYS AND BACK BOXES (WIREMOLD).



LINE TYPE LEGEND:

LINE	DESCRIPTION
	EXISTING TO BE REMOVED
	EXISTING TO REMAIN
⟨=== ⟩	PROVIDE NEW

KEYPLAN

EXISTING BUILDING ELECTRICAL PLAN

1 / R-E4.1

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

NORTH

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CAMERON APPRAISAL DISTRICT
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2021 AMISTAD DRIVE, SAN BENITO, TEXAS 78586

EXISTING BUILDING ELECTRICAL PLAN

STATE OF TEXAS
RAY PEYNADO
125390
PROFESSIONAL ENGINEER
8.16.2018

NO.	DATE	REVISIONS

DRAWN BY: ETHOS
CHECKED BY: SCK

DATE: 08-16-18

SHEET NO.
R-E4.1

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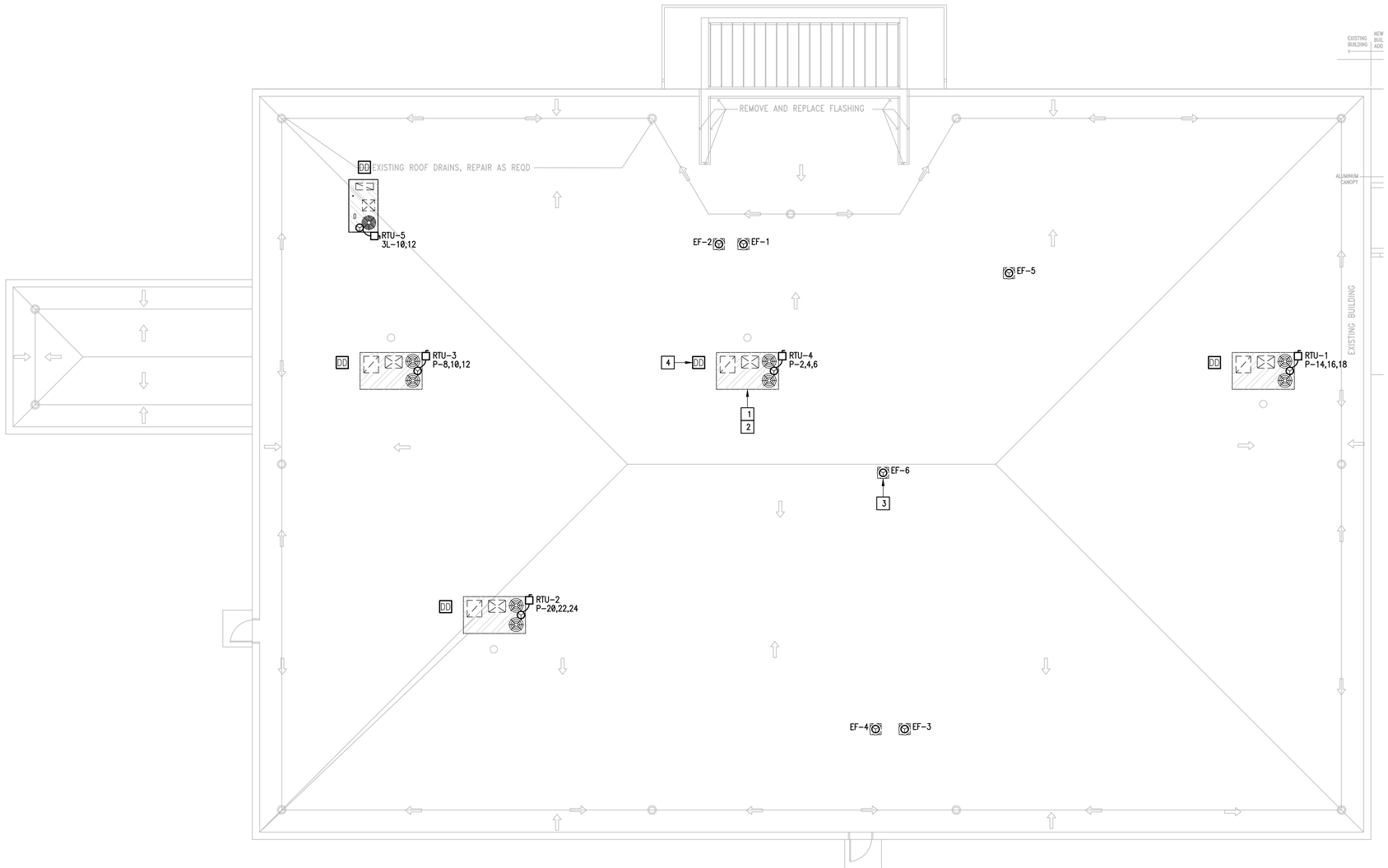
KEYED NOTES:

1. CONNECT NEW HVAC EQUIPMENT. SEE RISER DIAGRAM AND EQUIPMENT RISER DIAGRAM 01/ER-5.1 – TYPICAL.
2. CONNECT HVAC EQUIPMENT INTEGRAL GFCI RECEPTACLE TO NEAREST EXISTING 120V NON-GFCI CIRCUIT. VERIFY LOAD PRIOR TO ANY NEW CONNECTION.
3. CONNECT NEW EXHAUST FAN TO CORRESPONDING RESTROOM LIGHTING CIRCUIT. SEE EXHAUST FAN CONNECTION SCHEDULE – TYPICAL.
4. PROVIDE ABOVE CEILING/BELOW ROOF – TYPICAL.

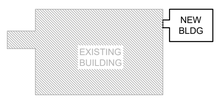


1 R-E4.2

EXISTING BUILDING ELECTRICAL ROOF PLAN

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

NORTH



KEYPLAN

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EXISTING BUILDING ELECTRICAL ROOF PLAN

STATE OF TEXAS
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LICENSED PROFESSIONAL ENGINEER
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NO.	DATE	REVISIONS

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DATE: 08-16-18

SHEET NO.

R-E4.2

EQUIPMENT CONNECTION SCHEDULE:

DESIGN	HP/KW	FLA	MCA	MOCP	VOLTAGE	DISCONNECT	BRANCH CIRCUIT
RTU-1	–	–	92	100	208V/3PHASE	100A, 3P3F, 100AF, 240V, NEMA 3R.	1) 1.5" – 3#1/0 & #6G
RTU-2	–	–	92	100	208V/3PHASE	100A, 3P3F, 100AF, 240V, NEMA 3R.	1) 1.5" – 3#1/0 & #6G
RTU-3	–	–	69	70	208V/3PHASE	100A, 3P3F, 70AF, 240V, NEMA 3R.	1) 1.25" – 3#2 & #8G
RTU-4	–	–	69	70	208V/3PHASE	100A, 3P3F, 70AF, 240V, NEMA 3R.	1) 1.25" – 3#2 & #8G
RTU-5	–	–	16	25	208V/1PHASE	30A, 2P2F, 25AF, 240V, NEMA 3R.	1) 3/4" – 2#10 & #10G
IEWH-1	4.1 KW	19.7	–	30	208V/1PHASE	2) THERMAL SWITCH.	3/4" – 2#10 & #10G
IEWH-2	4.1 KW	19.7	–	30	208V/1PHASE	2) THERMAL SWITCH.	3/4" – 2#10 & #10G
IEWH-3	4.1 KW	19.7	–	30	208V/1PHASE	2) THERMAL SWITCH.	3/4" – 2#10 & #10G
IEWH-4	4.1 KW	19.7	–	30	208V/1PHASE	2) THERMAL SWITCH.	3/4" – 2#10 & #10G
IEWH-5	4.1 KW	19.7	–	30	208V/1PHASE	2) THERMAL SWITCH.	3/4" – 2#10 & #10G

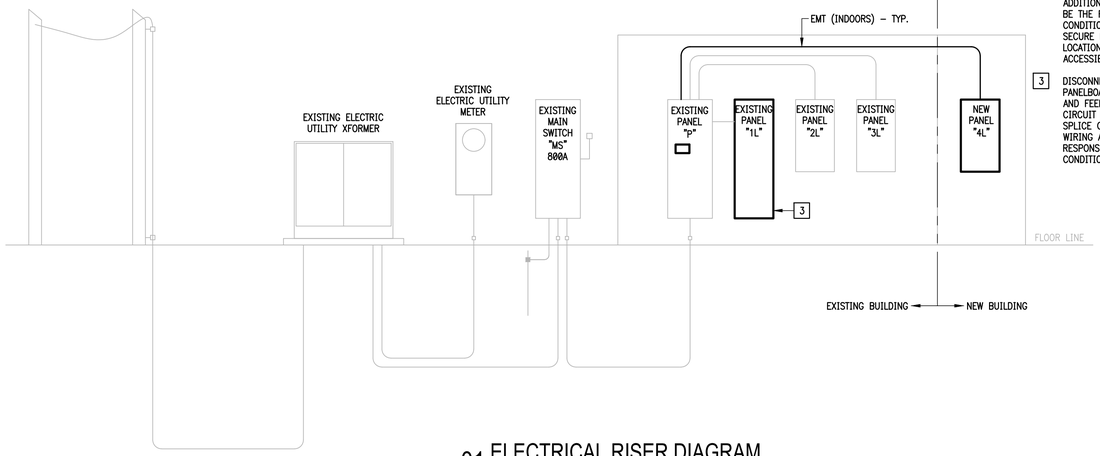
1) RETAIN AND REUSE EXISTING TO MAXIMUM EXTENT POSSIBLE. PROVIDE ADDITIONAL WIRING AND RACEWAY IF NECESSARY.

2) PROVIDE WITHOUT OVERLOADS.

NOTE: LOCATE EQUIPMENT MEANS OF DISCONNECT WITHIN EQUIPMENT SIGHT. DO NOT INSTALL BELOW DUCTWORK OR PLUMBING LINES.

EXHAUST FAN CONNECTION SCHEDULE:

DESIGNATION	HP/WATTS	FLA	VOLTAGE	CONNECTION FOR EACH	BRANCH CIRCUIT
EF-1	51.6 W	0.5	120V/1PHASE	CONNECT AT ROOF. INTERLOCK SWITCHING WITH LIGHTING VACANCY SENSOR.	1/2" – 2#12 & #12G
EF-2	51.6 W	0.5	120V/1PHASE	CONNECT AT ROOF. INTERLOCK SWITCHING WITH LIGHTING VACANCY SENSOR.	1/2" – 2#12 & #12G
EF-3	60.5 W	0.6	120V/1PHASE	CONNECT AT ROOF. INTERLOCK SWITCHING WITH LIGHTING VACANCY SENSOR.	1/2" – 2#12 & #12G
EF-4	60.5 W	0.6	120V/1PHASE	CONNECT AT ROOF. INTERLOCK SWITCHING WITH LIGHTING VACANCY SENSOR.	1/2" – 2#12 & #12G
EF-5	98.1 W	0.9	120V/1PHASE	CONNECT AT ROOF. INTERLOCK SWITCHING WITH LIGHTING VACANCY SENSOR.	1/2" – 2#12 & #12G
EF-6	51.6 W	0.5	120V/1PHASE	CONNECT AT ROOF. INTERLOCK SWITCHING WITH LIGHTING VACANCY SENSOR.	1/2" – 2#12 & #12G



01 ELECTRICAL RISER DIAGRAM
SCALE : NONE

LINE TYPE LEGEND:

LINE	DESCRIPTION
– – – –	EXISTING TO BE REMOVED
———	EXISTING TO REMAIN
———	PROVIDE NEW

ELECTRICAL RISER DIAGRAM KEYED NOTES:

1. DISCONNECT EXISTING HVAC EQUIPMENT FOR REPLACEMENT AND CONNECT NEW HVAC EQUIPMENT. SEE EQUIPMENT CONNECTION SCHEDULE. IF EXISTING HVAC EQUIPMENT CONNECTIONS DO NOT REACH NEW HVAC EQUIPMENT CONNECTION POINTS; PROVIDE A NEW JUNCTION BOX AND SPLICE FEEDER. CONTRACTOR SHALL PROVIDE THE ADDITIONAL WIRING AND RACEWAYS AS NOTED ON DRAWINGS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTING CONDITIONS – TYPICAL FOR RTU-1,2,3 & 4.
2. DISCONNECT EXISTING HVAC EQUIPMENT FOR REPLACEMENT/RELOCATION AND CONNECT NEW HVAC EQUIPMENT. SEE EQUIPMENT CONNECTION SCHEDULE. IF EXISTING HVAC EQUIPMENT CONNECTIONS DO NOT REACH NEW HVAC EQUIPMENT CONNECTION POINTS; PROVIDE A NEW JUNCTION BOX AND SPLICE FEEDER. CONTRACTOR SHALL PROVIDE THE ADDITIONAL WIRING AND RACEWAYS AS NOTED ON DRAWINGS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTING CONDITIONS. PROVIDE CONNECTION THROUGH NEW ROOF CURB AND SECURE DISCONNECT TO EQUIPMENT. COORDINATE DISCONNECT LOCATION WITH HVAC CONTRACTOR TO ENSURE NOT TO OBSTRUCT ACCESSIBLE PANELS.
3. DISCONNECT AND REMOVE EXISTING PANELBOARD. PROVIDE NEW PANELBOARD AS SCHEDULED. RECONNECT EXISTING BRANCH CIRCUITS AND FEEDER. IF EXISTING BRANCH CIRCUITS DO NOT REACH NEW CIRCUIT BREAKERS; PROVIDE A NEW WIREWAY ABOVE CEILING AND SPLICE CIRCUITS. CONTRACTOR SHALL PROVIDE THE ADDITIONAL WIRING AND RACEWAYS AS REQUIRED. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTING CONDITIONS.

1L

ROOM ELECT. RM. | VOLTS 208Y/120V 3P 4W | AIC 10,000
MOUNTING SURFACE | BUS AMPS 225 | MAIN BKR MLO
FED FROM P | NEUTRAL 100% | LUGS STANDARD
NOTE PROVIDE A TYPE WRITTEN AS BUILT DIRECTORY THAT INCLUDES ROOM NUMBERS.

CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA A	LOAD KVA B	LOAD KVA C	CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA A	LOAD KVA B	LOAD KVA C
1	20/1	EXISTING LIGHTING	0.48			2	20/1	EXISTING LIGHTING	0.9		
3	20/1	EXISTING LIGHTING		0.45		4	20/1	EXISTING		0	
5	20/1	EXISTING			0	6	20/1	EXISTING			0
7	20/1	EXISTING	0			8	20/1	EXISTING LIGHTING	0.36		
9	20/1	EXISTING		0		10	20/1	EXISTING		0	
11	20/1	EXISTING			0	12	20/1	EXISTING			0
13	20/1	EXISTING LIGHTING	0.69			14	20/1	EXISTING LIGHTING	0.45		
15	20/1	EXISTING		0		16	20/1	EXISTING		0	
17	20/1	EXISTING			0	18	20/1	EXISTING			0
19	20/1	EXISTING LIGHTING	0.48			20	20/1	EXISTING	0		
21	20/1	EXISTING		0		22	20/1	EXISTING LIGHTING		0.984	
23	20/1	EXISTING			0	24	20/1	EXISTING			0
25	20/1	EXISTING LIGHTING	0.63			26	20/1	EXISTING	0		
27	20/1	EXISTING		0		28	20/1	EXISTING		0	
29	20/1	EXISTING			0	30	20/1	EXISTING			0
31	20/1	EXISTING LIGHTING	0.42			32	20/1	EXISTING	0		
33	20/1	EXISTING		0		34	20/1	EXISTING LIGHTING		0.54	
35	20/1	EXISTING			0	36	20/1	EXISTING			0
37	20/1	EXISTING	0			38	30/1	EXISTING	0		
39	20/1	EXISTING		0		40	30/2	EXISTING		0	
41	20/1	EXISTING			0	42	|				0
43	20/1	RECEPT.	0.72			44	20/1	HAND DRYER	1.5		
45	20/1	AUTOMATIC DOOOR		0.18		46	20/1	HAND DRYER		1.5	
47	20/1	FIRE ALARM CONTROL PANEL			1.2	48	20/1	HAND DRYER			1.5
49	20/1	SPARE	0			50	20/1	HAND DRYER	1.5		
51	20/1	SPARE		0		52	20/1	DRINKING FOUNTAIN		0.8	
53	20/1	SPARE			0	54	20/1	RECEPT.			0.18
55	20/1	SPARE	0			56	20/1	RECEPT.	0.54		
57	20/1	SPARE		0		58	20/1	RECEPT.		0.54	
59	20/1	SPARE			0	60	20/1	COPIER			0.18
61	30/2	IEWH-1	2.05			62	30/2	IEWH-4	2.05		
63	|			2.05		64	|			2.05	
65	30/2	IEWH-2			2.05	66	30/2	IEWH-5			2.05
67	|		2.05			68	|		2.05		
69	30/2	IEWH-3		2.05		70	20/1	SPACE		0	
71	|				2.05	72	20/1	SPACE			0
73	20/1	LIGHTING	0.088			74	20/1	SPACE	0		
75	20/1	SPACE		0		76	20/1	SPACE		0	
77	20/1	SPACE			0	78	20/1	SPACE			0
79	20/1	SPACE	0			80	20/1	SPACE	0		
81	20/1	SPACE		0		82	20/1	SPACE		0	
83	20/1	SPACE			0	84	20/1	SPACE			0
								TOTAL CONNECTED KVA BY PHASE	16.9	11.1	9.21

	CONN KVA	CALC KVA	
LIGHTING	6.38	7.98	(125%)
LARGEST MOTOR	0	0	(N/A)
OTHER MOTORS	0	0	(100%)
RECEPTACLES	9.14	9.14	(50%>10)
KITCHEN EQUIP	0	0	(N/A)

	CONN KVA	CALC KVA	
CONTINUOUS	1.2	1.5	(125%)
HEATING	0	0	(N/A)
COOLING	0	0	(N/A)
NONCONTINUOUS	20.5	20.5	(100%)
DIVERSE	0	0	(N/A)
METERED DEMAND	0	0	(125%)
TOTAL KVA	37.2	39.1	
BALANCED 3–PHASE AMPS		109	

1) DISCONNECT AND RECONNECT EXISTING BRANCH CIRCUITS AND FEEDER.

P - EXISTING

ROOM ELECT. RM. | VOLTS 208Y/120V 3P 4W | AIC 25,000
MOUNTING SURFACE | BUS AMPS 800 | MAIN BKR MLO
FED FROM UTILITY | NEUTRAL 100% | LUGS STANDARD
NOTE

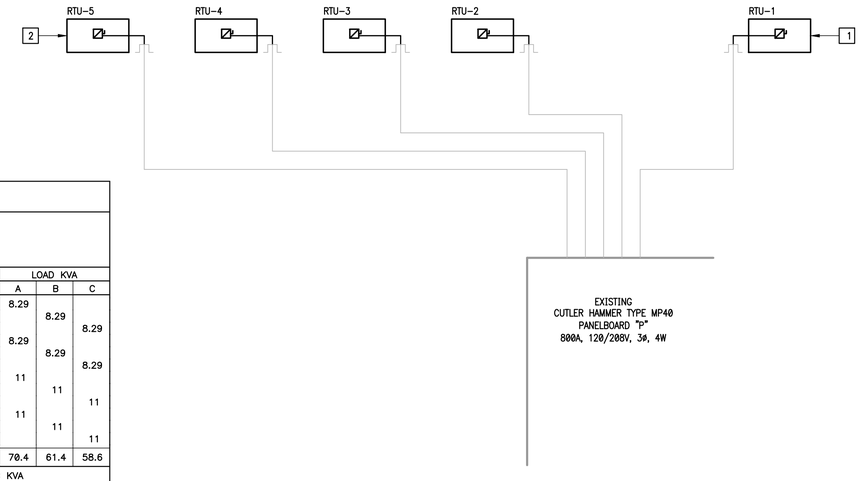
CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA A	LOAD KVA B	LOAD KVA C	CKT #	CKT BKR	CIRCUIT DESCRIPTION	LOAD KVA A	LOAD KVA B	LOAD KVA C
1	150/3	*PANEL 4L	14.8			2	100/3	RTU-4	8.29		
3	|			11.6		4	|		8.29	
5	|				10.7	6	|			8.29
7	100/3	PANEL 3L	0			8	100/3	RTU-3	8.29		
9	|			0		10	|		8.29	
11	|				0	12	|			8.29
13	100/3	PANEL 2L	0			14	150/3	RTU-1	11		
15	|			0		16	|		11	
17	|				0	18	|			11
19	175/3	PANEL 1L	16.9			20	150/3	RTU-2	11		
21	|			11.1		22	|		11	
23	|				9.21	24	|			11
								TOTAL CONNECTED KVA BY PHASE	70.4	61.4	58.6

	CONN KVA	CALC KVA	
LIGHTING	7.53	9.42	(125%)
LARGEST MOTOR	24.9	31.1	(125%)
OTHER MOTORS	0.076	0.076	(100%)
RECEPTACLES	19.1	14.5	(50%>10)
KITCHEN EQUIP	0	0	(N/A)

	CONN KVA	CALC KVA	
CONTINUOUS	1.3	1.63	(125%)
HEATING	109	109	(100%)
COOLING	0	0	(N/A)
NONCONTINUOUS	28.7	28.7	(100%)
DIVERSE	0	0	(N/A)
METERED DEMAND	0	0	(125%)
TOTAL KVA	190	194	
BALANCED 3–PHASE AMPS		539	

1) UNLESS NOTED OTHERWISE; CIRCUIT BREAKERS ARE EXISTING TO REMAIN.

* REMOVE EXISTING CIRCUIT BREAKER AND PROVIDE NEW.



LINE TYPE LEGEND:

LINE	DESCRIPTION
– – – –	EXISTING TO BE REMOVED
———	EXISTING TO REMAIN
———	PROVIDE NEW

01 EXISTING PANEL "P" ELECTRICAL RISER DIAGRAM
SCALE : NONE

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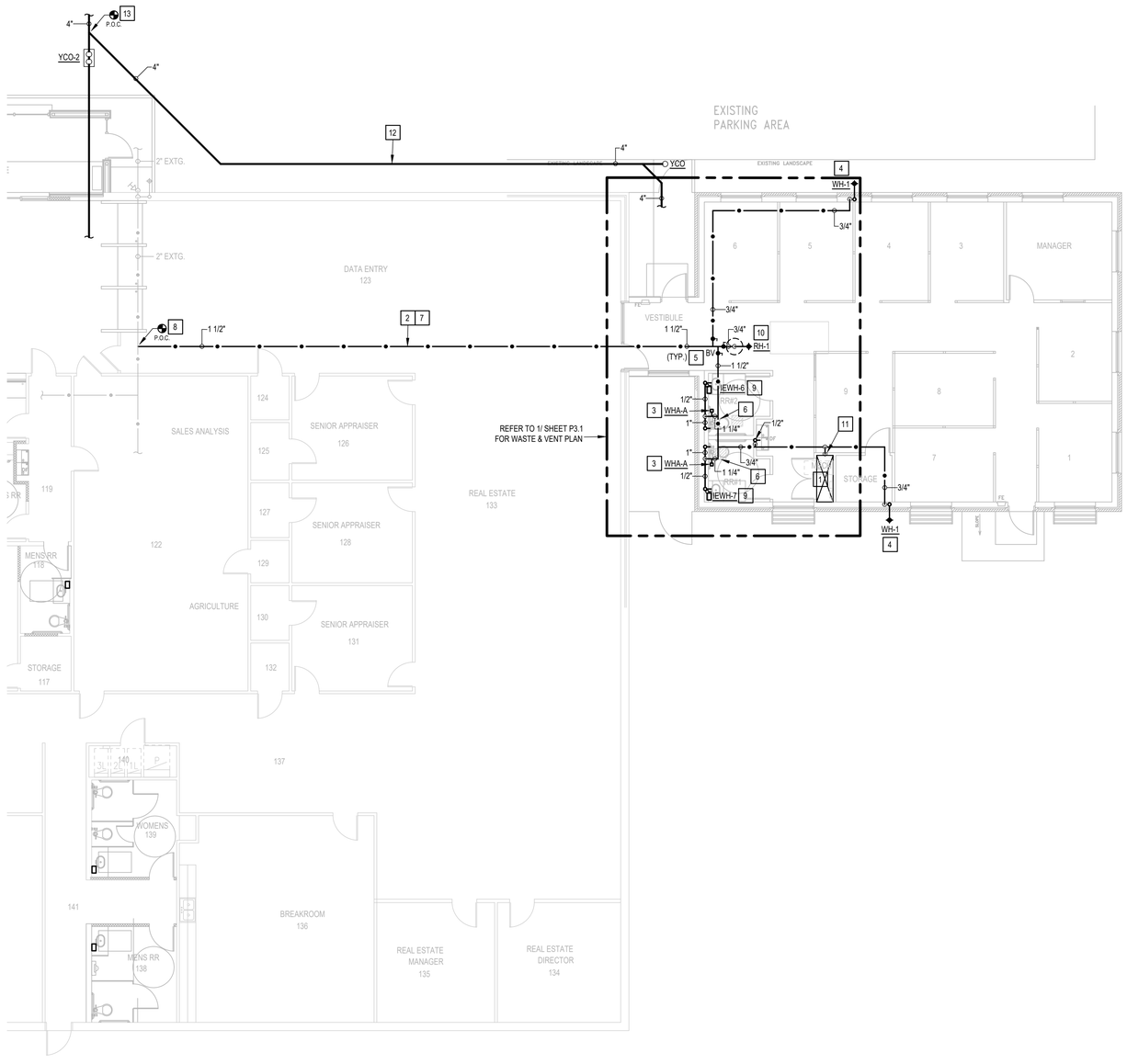
CAMERON APPRAISAL DISTRICT
NEW BUILDING ADDITION AND RENOVATION
2021 AMISTAD DRIVE, SAN BENITO, TEXAS 78586

EXISTING BUILDING ELECTRICAL RISER DIAGRAM AND SCHEDULES

STATE OF TEXAS
RAY PEYNADO
125390
LICENSED
PROFESSIONAL ENGINEER
8.16.2018

NO.	DATE	REVISIONS

DRAWN BY: ETHOS
CHECKED BY: SCK
DATE: 08-16-18
SHEET NO. R-E5.1



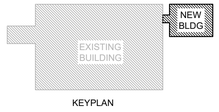
1 P2.1 PLUMBING PLAN

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

NORTH

PLUMBING KEYED NOTES:

1. CLEARANCE FOR ELECTRICAL PANELS. ROUTE NO PIPING OVER THIS AREA. REFER TO ELECTRICAL PLANS FOR EXACT LOCATION OF ELECTRICAL ROOMS.
2. PROVIDE PIPING SUPPORT AS PER SPECS AND DETAIL. SEE ASSOCIATED DETAIL ON DETAIL SHEET. (TYPICAL)
3. PROVIDE BELLOWS TYPE WATER HAMMER ARRESTOR (WHB), MIFAB OR APPROVED EQUAL. INDICATED MODEL (A,B,C,D,E,F) AS PER MIFAB SIZING CHART. PROVIDE 12"X12" ACCESS PANEL WHERE INSTALLED IN AN INACCESSIBLE AREA. ACCESS PANEL EQUAL TO ACUDOR MODEL UF5000 WITH CYLINDER LOCK AND KEY AND PAINT TO MATCH THE WALL/CEILING. (TYPICAL)
4. PROVIDE WALL HYDRANT AS SCHEDULED. PROVIDE CLOSE COUPLED HYDRANT TO ENSURE PIPE TURNS UP INSIDE BLOCK WALL. COORDINATE WALL THICKNESS WITH WALL HYDRANT MANUFACTURER DATA. (TYPICAL)
5. PROVIDE BRONZE ISOLATION BALL VALVE ABOVE CEILING OR BEHIND WALL. PROVIDE A 12"x 12" ACCESS PANEL WHERE INSTALLED IN AN INACCESSIBLE AREA. ACCESS PANEL EQUAL TO ACUDOR MODEL UF5000 WITH CYLINDER LOCK AND KEY AND PAINT TO MATCH THE WALL/CEILING. PROVIDE VALVE IDENTIFICATION TAGS AS PER SPECIFICATIONS. (TYPICAL)
6. INSTALL WATER CLOSET FLUSH VALVE HANDLE TOWARDS WIDE SIDE OF THE ROOM. COORDINATE WITH GENERAL CONTRACTOR. (TYPICAL)
7. REMOVE AND REINSTALL EXISTING CEILING TILES AS REQUIRED TO ACCOMMODATE NEW DOMESTIC COLD WATER PIPING. COORDINATE WITH GENERAL CONTRACTOR.
8. CONNECT NEW DOMESTIC COLD WATER PIPING INTO EXISTING 2" PIPING AT THIS APPROXIMATE LOCATION.
9. PROVIDE INSTANTANEOUS ELECTRIC WATER HEATER AS SCHEDULED.
10. PROVIDE ROOF HYDRANT AS SCHEDULED. SEE ASSOCIATED DETAIL ON DETAIL SHEET.
11. PROVIDE A TRAP PRIMER VALVE ABOVE CEILING, PRECISION PLUMBING PRODUCTS (PPP) MODEL PR-500 OR APPROVED EQUAL. SEE ASSOCIATED DETAIL ON DETAILS SHEET.
12. ROUTE NEW 4" SANITARY SEWER LINE INSIDE EXISTING PLANTER AREA TO AVOID CUTTING EXISTING PARKING LOT ASPHALT. COORDINATE WITH GENERAL CONTRACTOR.
13. CONNECT NEW 4" SANITARY SEWER LINE INTO EXISTING LINE AT THIS APPROXIMATE LOCATION. CUT AND PATCH EXISTING PARKING LOT ASPHALT AS REQUIRED TO MAKE CONNECTION. COORDINATE WITH GENERAL CONTRACTOR.



KEYPLAN

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CAMERON APPRAISAL DISTRICT
NEW BUILDING ADDITION AND RENOVATION
2021 AMISTAD DRIVE, SAN BENITO, TEXAS 78586

PLUMBING PLAN

STATE OF TEXAS
CESAR A. GONZALEZ
108611
LICENSED
PROFESSIONAL ENGINEER
8/16/2018

NO.	DATE	REVISIONS

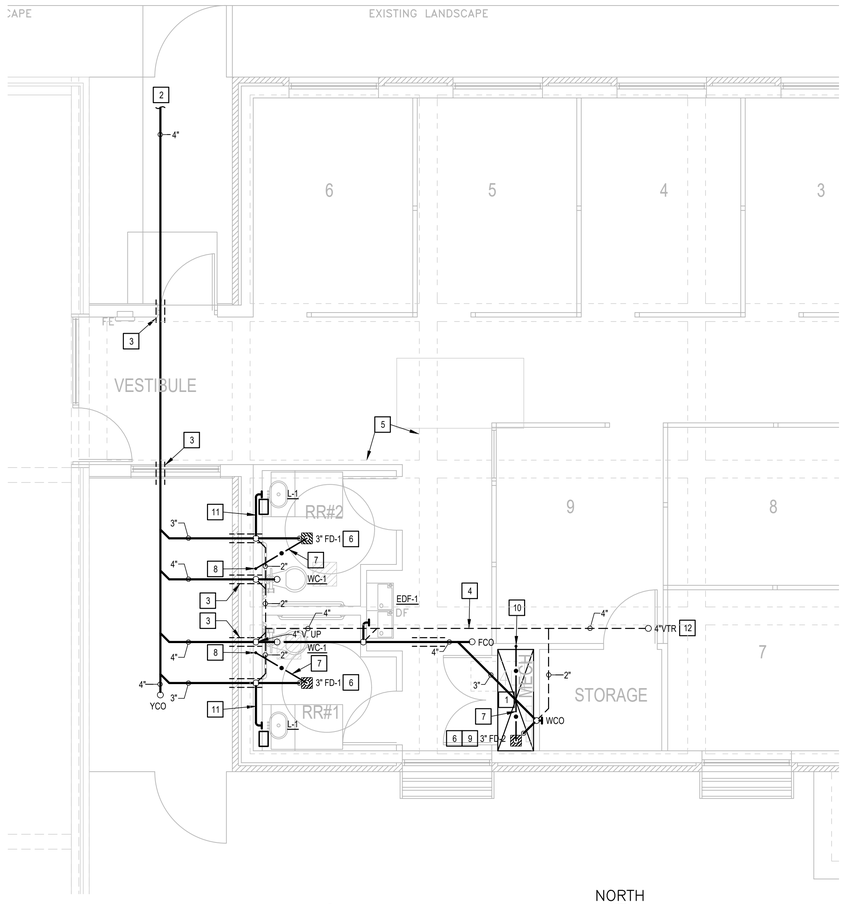
DRAWN BY:	CHECKED BY:
ETHOS	SCK

DATE: 08-16-18

SHEET NO.

P2.1

EXISTING
PARKING AREA



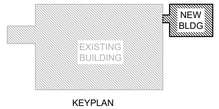
1 P3.1 **WASTE & VENT PLAN**

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

NORTH

PLUMBING KEYED NOTES:

1. CLEARANCE FOR ELECTRICAL PANELS. ROUTE NO PIPING OVER THIS AREA. REFER TO ELECTRICAL PLANS FOR EXACT LOCATION OF ELECTRICAL ROOMS.
2. REFER TO SHEET 1/P2.1 FOR CONTINUATION.
3. SLEEVE ALL GRADE BEAMS, FLOOR SLABS AND MASONRY WALL PENETRATIONS PER DETAIL WHETHER SPECIFICALLY INDICATED ON PLANS OR NOT.
4. PROVIDE PIPING SUPPORT AS PER SPECS AND DETAIL. SEE ASSOCIATED DETAIL ON DETAIL SHEET. (TYPICAL)
5. STRUCTURAL FOUNDATION SHOWN FOR REFERENCE AND COORDINATION PURPOSES. REFER TO STRUCTURAL DRAWINGS FOR MORE DETAILS. (TYPICAL).
6. PROVIDE FLOOR DRAIN AS SCHEDULED. SET FLUSH WITH FINISHED FLOOR. SEE ASSOCIATED DETAIL ON DETAIL SHEET. (TYPICAL)
7. PROVIDE 1/2" SOFT DRAWN COPPER FROM TRAP-PRIMER. ENCASE PIPING INSIDE WALL AND UNDER FLOOR SLAB IN POLYETHYLENE SLEEVE. "POLY-SLEEVE" OR EQUAL.
8. CONNECT TO FLUSH VALVE TRAP-PRIMER (WC). SEE ASSOCIATED DETAIL ON DETAIL SHEET. (TYPICAL)
9. PROVIDE FLOOR DRAIN WITH TYPE I STRAINER TO COLLECT RTU CONDENSATE. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR.
10. CONNECT TO TRAP-PRIMER VALVE ABOVE CEILING.
11. RUN NEW WASTE LINE INSIDE WALL ABOVE CONCRETE FLOOR SLAB.
12. LOCATE NEW 4"VTR AT A MINIMUM OF 15' FROM ANY MECHANICAL EQUIPMENT (OUTSIDE AIR INTAKE).



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CAMERON APPRAISAL DISTRICT
NEW BUILDING ADDITION AND RENOVATION
2021 AMISTAD DRIVE, SAN BENITO, TEXAS 78586

WASTE AND VENT

STATE OF TEXAS
CESAR A. GONZALEZ
108611
REGISTERED
ARCHITECT
8.16.2018

NO.	DATE	REVISIONS

DRAWN BY:	CHECKED BY:
ETHOS	SCK

DATE: 08-16-18

SHEET NO.

P3.1

GENERAL NOTES:

1. ALL PLUMBING WORK SHALL BE IN COMPLIANCE WITH ALL APPLICABLE CODES AS ADAPTED AND AMENDED BY THE INSPECTING AUTHORITIES.
2. DRAWING IS DIAGRAMMATIC ONLY. CONTRACTOR SHALL COORDINATE EXACT LOCATIONS OF PIPING, DEVICES AND EQUIPMENT WITH BUILDING ELEMENTS AND THE WORK OF OTHER TRADES.
3. ALL PLUMBING WORK SHALL BE INSTALLED SO AS TO AVOID CONFLICT WITH THE WORK OF OTHER TRADES. COORDINATE WITH MECHANICAL, ELECTRICAL AND STRUCTURAL FOR PROPER CLEARANCES.
4. REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR PHASING AND SEQUENCE OF CONSTRUCTION WORK.
5. COORDINATE WORK AMONG ALL DISCIPLINES. IT IS NOT THE INTENT OF THESE DOCUMENTS TO DICTATE WHO MUST DO THE WORK. ALL WORK SHOWN IS THE RESPONSIBILITY OF THE PRIME CONTRACTOR.
6. SLEEVE ALL OUTSIDE WALLS, FOUNDATION GRADE BEAMS, INTERIOR WALL PENETRATIONS, AND FIRE SEAL ALL PENETRATION THROUGH FIRE WALLS AND FLOORS WHETHER SHOWN ON PLANS OR NOT.
7. PROVIDE MINIMUM 15' OF SEPARATION BETWEEN HVAC INTAKES AND VENT THRU ROOFS.
8. RECORD INVERT ELEVATIONS OF ALL YARD CLEAN OUT (YCO) ON "AS-BUILT" DRAWINGS.
9. PROVIDE SHUT-OFF VALVES (STOPS) ON ALL ROUGH-INS TO FIXTURES AND EQUIPMENTS.
10. PROVIDE WATER HAMMER ARRESTORS AS INDICATED ON THE DRAWINGS. AIR CHAMBERS NOT AN APPROVED SUBSTITUTE.
11. PROVIDE ANY BACKFLOW PREVENTION DEVICE REQUIRED BY CODE OR LOCAL AUTHORITIES. CONTRACTOR SHALL VERIFY THIS WITH CITY AND LOCAL AGENCIES AND INCLUDE COST IN BID. CONTRACTOR TO HAVE BACK FLOWS CERTIFIED.
12. REFER TO PLUMBING FIXTURE ROUGH-IN SCHEDULE FOR INDIVIDUAL PIPE CONNECTIONS TO FIXTURES.
13. PRIOR TO POURING FOUNDATION AND ERECTING CMU WALLS, COORDINATE INSTALLATION OF PLUMBING FIXTURE CARRIERS WITH GENERAL CONTRACTOR.
14. METAL STUDS AT DRY WALLS SHALL NOT BE CUT THRU HORIZONTAL DIRECTION. COORDINATE WITH DRY WALL CONTRACTOR.

PLUMBING SYMBOLS LEGEND

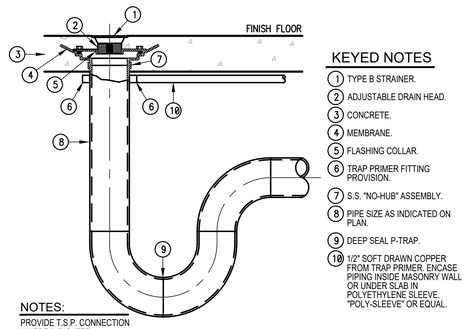
—•—•—	COLD WATER SUPPLY	WCO	WALL CLEANOUT
—• •—	HOT WATER SUPPLY		*GATE VALVE (GV)
----G----G----	GAS LINE		*BALL VALVE
———	SOIL & WASTE LINE - ENLARGED PLANS		VALVE IN RISER TYPE AS NOTED
- - - - - - - -	VENT LINE - ENLARGED PLANS	WC	WATER CLOSET
—AW—	ACID WASTE LINE - ENLARGED PLANS	UR	URINAL
—GW—	GREASE WASTE LINE - ENLARGED PLANS	L	LAVATORY
—F—	FIRE SPRINKLER LINE	SK	SINK
FCO	FLOOR CLEANOUT	EDF	ELECTRIC DRINKING FOUNTAIN
FCO-2	FLOOR CLEANOUT - 2 WAY	MSB	MOP SERVICE BASIN
FD FD	FLOOR DRAIN (FD) WITH DEEP SEAL TRAP	EESHR	EMERGENCY EYE/SHOWER
HDC	HUB DRAIN WITH DEEP SEAL TRAP	TP	TRAP PRIMER
	FLOOR SINK	EWH	ELECTRIC WATER HEATER
YCO	YARD CLEANOUT	VTR	VENT THRU ROOF
YCO-2	YARD CLEANOUT - 2 WAY	CO	CLEANOUT
WH	WALL HYDRANT	A.F.F.	ABOVE FINISH FLOOR
G	TRAP PRIMER	ADT	ACID DILUTION TANK
	*WATER HAMMER	GT	GREASE TRAP

* PROVIDE 12"x12" ACCESS PANEL WHERE INSTALLED IN AN INACCESSIBLE AREA.

PLUMBING FIXTURE SCHEDULE

MARK	MANUFACTURER & MODEL NUMBER	DESCRIPTION	CONNECTIONS WASTE	VENT	CW	HW	NOTES	REMARKS
WC-1	AMERICAN STD. 3461.001 SLOAN ROYAL #111-1.28 SEAT 5901.100	16-1/2" HIGH LOW CONSUMPTION FLUSH VALVE, WHITE VITREOUS CHINA WATER CLOSET WITH ELONGATED SIPHON JET ACTION BOWL, 1.28GPF TOP FLUSH VALVE, WHITE OPEN FRONT SEAT LESS COVER AND BOLT CAPS FOR ADULT ADA MOUNTING.	4"	2"	1"	–	1,2,3	17"-19" TO TOP OF SEAT
UR-1	AMERICAN STD. 6590.001 SLOAN ROYAL #186-0.5 ZURN # Z1222 CARRIER	WALL MOUNTED FLUSH VALVE, WHITE VITREOUS CHINA LOW CONSUMPTION 0.5 GPF URINAL WITH 14" DEEP BOWL, 3/4" TOP SPOUT FLUSH VALVE AND CARRIER FOR ADULT STANDARD MOUNTING	2"	2"	3/4"	–		22" TO RIM OF BASIN
L-1	LAVATORY BY GENERAL CONTRACTOR (COORDINATE) CHICAGO FAUCETS 420-T41E2805ABCP 0.5 GPM AERATOR ZURN #Z1231 CARRIER 17 GA. DRAIN AND 17 GA. P-TRAP W/CLEAN OUT TRUEBRO KIT	LAVATORY BY GENERAL CONTRACTOR. SINGLE LEVER, 4" ON CENTER, CHROME PLATED SOLID BRASS CONSTRUCTION FAUCET WITH THERMOSTATIC MIXING VALVE, ASSE 1070 COMPLAINT, SCALDING PROTECTION INCLUDED, SET AT 100 DEGREES. CHROME PLATED SUPPLY STOPS AND ESCUTCHEONS WITH STAINLESS STEEL FLEXIBLE CONNECTORS, CHROME PLATED DRAIN GRID AND TAILPIECE, P-TRAP AND CARRIER FOR ADULT STANDARD MOUNTING	2"	2"	1/2"	1/2"	3,4,5	SEE ARCHITECTURAL
EDF-1	ELKAY VRCTL8SC LKAPREZL APRON ZURN Z-1225 CARRIER	BI-LEVEL ELECTRIC DRINKING FOUNTAIN, FRONT AND SIDE TOUCH CONTROLS, 8.0 GPH, FLEXI GUARD SAFETY BUBBLERS, PVC P-TRAP, APRON AND CARRIER. FOR ADULT STANDARD & ADA MOUNTING. OUTDOOR RATED, VANDAL RESISTANT. PROVIDE WATER SENTRY FILTER 51300C.	2"	2"	3/4"	–		SEE ARCHITECTURAL
WH-1	ZURN # Z1300-SS-34UN HYDRANT	ENCASED NON-FREEZE ANTI-SIPHON WALL HYDRANT, BRONZE, NON-TURNING OPERATING ROD STOP VALVE IN SUPPLY, KEY OPERATED CONTROL VALVE, STAINLESS STEEL BOX WITH HINGED COVER.	–	–	3/4"	–		
RH-1	JAY R. SMITH 5906	NON-FREEZE ROOF HYDRANT WITH GALV. CASING AND ADJUSTABLE FLOW WHEEL LOCK HANDLE WITH DECK FLANGE AND UNDEER DECK CLAMP.	–	–	3/4"	–		
FD-1	ZURN # ZN415B-P	BODY ASSEMBLY WITH TYPE B STRAINER, DURA COATED CAST IRON BODY WITH BOTTOM OUTLET INVERTED MEMBRANE CLAMP AND ADJUSTABLE COLLAR WITH TRAP PRIMER CONNECTION.	3"	2"	–	–		
FD-2	ZURN # ZN415I-P	BODY ASSEMBLY WITH TYPE I STRAINER, DURA COATED CAST IRON BODY WITH BOTTOM OUTLET INVERTED MEMBRANE CLAMP AND ADJUSTABLE COLLAR WITH TRAP PRIMER CONNECTION.	3"	2"	–	–		

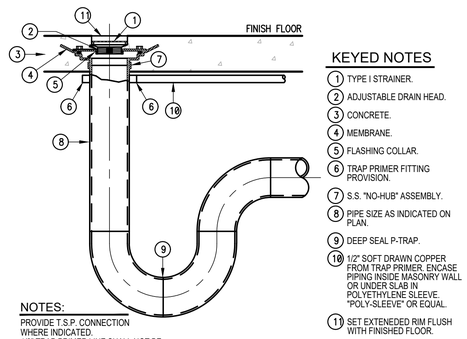
NOTES:
1. INSTALL FLUSH VALVE ON THE WIDE SIDE OF STALL.
2. PROVIDE ADA APPROVED FLUSH VALVE HANDLE FOR ALL ADA PLUMBING FIXTURES.
3. REFER TO PLUMBING PLAN FOR FIXTURES THAT WILL REQUIRE TRAP PRIMER CONNECTIONS.
4. PROVIDE TRUEBRO LAVATORY GUARD MODEL #103 COLOR WHITE. COVER SHALL BE SECURED WITH SNAP-SLIP FLUSH REUSABLE FASTENERS.
5. ANGLE STOPS SHALL HAVE LOCK-UP LOCKING ACCESS COVERS.



KEYED NOTES
1. TYPE B STRAINER.
2. ADJUSTABLE DRAIN HEAD.
3. CONCRETE.
4. MEMBRANE.
5. FLASHING COLLAR.
6. TRAP PRIMER FITTING PROVISION.
7. S.S. "NO-HUB" ASSEMBLY.
8. PIPE SIZE AS INDICATED ON PLAN.
9. DEEP SEAL P-TRAP.
10. 1/2" SOFT DRAWN COPPER FROM TRAP PRIMER. ENCASE PIPING INSIDE MASONRY WALL OR UNDER SLAB IN POLYETHYLENE SLEEVE. "POLY-SLEEVE" OR EQUAL.

NOTES:
PROVIDE T.S.P. CONNECTION WHERE INDICATED.
1/2" TRAP PRIMER LINE SHALL NOT BE EMBEDDED IN THE CONCRETE FLOOR SLAB. ROUTE UNDERNEATH THE POLYETHYLENE VAPOR BARRIER.

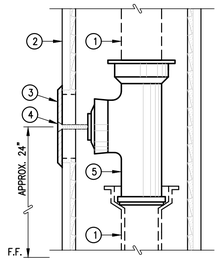
FD-1
FLOOR DRAIN WITH TRAP PRIMER DETAIL
01 SCALE : NOT TO SCALE



KEYED NOTES
1. TYPE I STRAINER.
2. ADJUSTABLE DRAIN HEAD.
3. CONCRETE.
4. MEMBRANE.
5. FLASHING COLLAR.
6. TRAP PRIMER FITTING PROVISION.
7. S.S. "NO-HUB" ASSEMBLY.
8. PIPE SIZE AS INDICATED ON PLAN.
9. DEEP SEAL P-TRAP.
10. 1/2" SOFT DRAWN COPPER FROM TRAP PRIMER. ENCASE PIPING INSIDE MASONRY WALL OR UNDER SLAB IN POLYETHYLENE SLEEVE. "POLY-SLEEVE" OR EQUAL.
11. SET EXTENEDED RIM FLUSH WITH FINISHED FLOOR.

NOTES:
PROVIDE T.S.P. CONNECTION WHERE INDICATED.
1/2" TRAP PRIMER LINE SHALL NOT BE EMBEDDED IN THE CONCRETE FLOOR SLAB. ROUTE UNDERNEATH THE POLYETHYLENE VAPOR BARRIER.

FD-2
FLOOR DRAIN WITH TRAP PRIMER DETAIL
02 SCALE : NOT TO SCALE



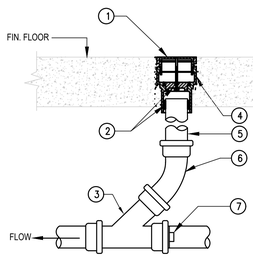
KEYED NOTES
1. PIPE SIZE AS INDICATED ON PLAN.
2. WALL.
3. S.S. SMOOTH ACCESS COVER.
4. SECURING SCREW.
5. NEW CLEANOUT.

WALL CLEANOUT DETAIL
03 SCALE : NOT TO SCALE

INSTANTANEOUS ELECTRIC WATER HEATER

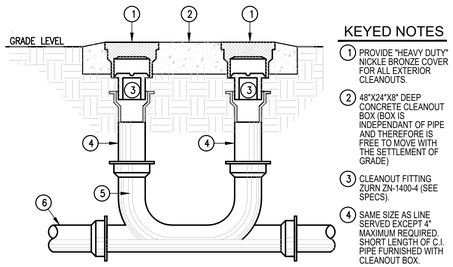
MARK	LOCATION	MINIMUM FLOW RATE GPM	DEGREE RISE AT FLOW RATE	ELECTRICAL V/PH	KW	DIMENSIONS LENGTH X WIDTH	MANUFACTURER MODEL NUMBER	NOTES
IEWH-1	SEE PLAN	0.8	36°	208/1	4.16	10.125" X 6.25"	CHRONOMITE M-20L/208	1,2
IEWH-2	SEE PLAN	0.8	36°	208/1	4.16	10.125" X 6.25"	CHRONOMITE M-20L/208	1,2
IEWH-3	SEE PLAN	0.8	36°	208/1	4.16	10.125" X 6.25"	CHRONOMITE M-20L/208	1,2
IEWH-4	SEE PLAN	0.8	36°	208/1	4.16	10.125" X 6.25"	CHRONOMITE M-20L/208	1,2
IEWH-5	SEE PLAN	0.8	36°	208/1	4.16	10.125" X 6.25"	CHRONOMITE M-20L/208	1,2
IEWH-6	SEE PLAN	0.8	36°	208/1	4.16	10.125" X 6.25"	CHRONOMITE M-20L/208	1,2
IEWH-7	SEE PLAN	0.8	36°	208/1	4.16	10.125" X 6.25"	CHRONOMITE M-20L/208	1,2

NOTE
1. MANUFACTURER AND MODEL NUMBER ARE "OR APPROVED EQUAL.
2. SET TEMPERATURE AT 105 DEGREE.



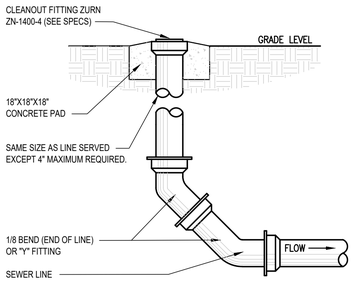
KEYED NOTES
1. FLUSH COVER
2. CLEANOUT PLUG AND BODY, SEE SPECS.
3. PVC WYE (WYE WITH REDUCING BRANCH IF MAIN IS OVER 4")
4. ADJUSTING COLLAR
5. PVC RISER
6. PVC BEND FULL SIZE, 4" MAX.
7. PLUG IF END OF LINE

FLOOR CLEANOUT DETAIL
04 SCALE : NOT TO SCALE

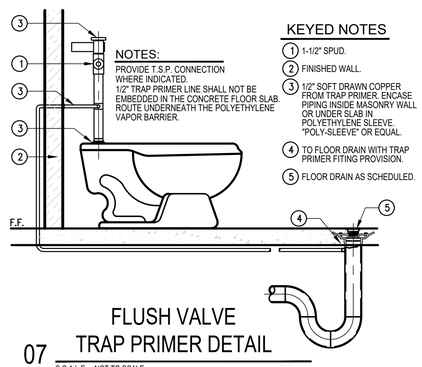


KEYED NOTES
1. PROVIDE "HEAVY DUTY" NICKLE BRONZE COVER FOR ALL EXTERIOR CLEANOUTS.
2. 48"X24"X8" DEEP CONCRETE CLEANOUT BOX (BOX IS INDEPENDANT OF PIPE AND THEREFORE IS FREE TO MOVE WITH THE SETTLEMENT OF GRADE)
3. CLEANOUT FITTING ZURN ZN-1400-4 (SEE SPECS).
4. SAME SIZE AS LINE SERVED EXCEPT 4" MAXIMUM REQUIRED. SHORT LENGTH OF C.I. PIPE FURNISHED WITH CLEANOUT BOX.
5. DOUBLE 2-WAY CLEANOUT.
6. SEWER LINE.

2-WAY YARD CLEANOUT DETAIL
05 SCALE : NOT TO SCALE



YARD CLEANOUT DETAIL
06 SCALE : NOT TO SCALE



NOTES:
PROVIDE T.S.P. CONNECTION WHERE INDICATED.
1/2" TRAP PRIMER LINE SHALL NOT BE EMBEDDED IN THE CONCRETE FLOOR SLAB. ROUTE UNDERNEATH THE POLYETHYLENE VAPOR BARRIER.

KEYED NOTES
1. 1-1/2" SPUD.
2. FINISHED WALL.
3. 1/2" SOFT DRAWN COPPER FROM TRAP PRIMER. ENCASE PIPING INSIDE MASONRY WALL OR UNDER SLAB IN POLYETHYLENE SLEEVE. "POLY-SLEEVE" OR EQUAL.
4. TO FLOOR DRAIN WITH TRAP PRIMER FITING PROVISION.
5. FLOOR DRAIN AS SCHEDULED.

FLUSH VALVE TRAP PRIMER DETAIL
07 SCALE : NOT TO SCALE

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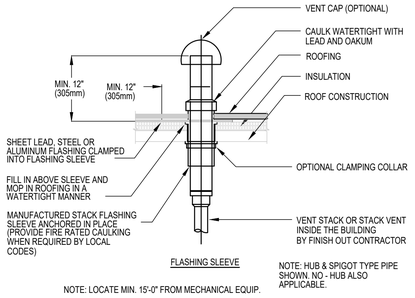
NEW BUILDING ADDITION AND RENOVATION
2021 AMISTAD DRIVE, SAN BENITO, TEXAS 78586

PLUMBING SCHEDULES & DETAILS

STATE OF TEXAS
CESAR A. GONZALEZ
108611
LICENSED PROFESSIONAL ENGINEER
8.16.2018

NO.	DATE	REVISIONS

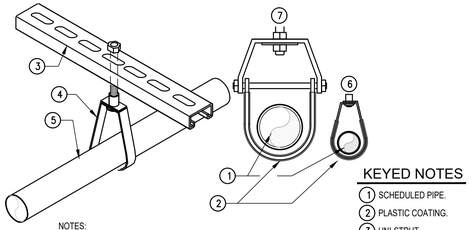
DRAWN BY: ETHOS
CHECKED BY: SCK
DATE: 08-16-18
SHEET NO.
P4.1



NOTE: LOCATE MIN. 15'-0" FROM MECHANICAL EQUIP.

01 VENT THRU ROOF DETAIL

SCALE : NOT TO SCALE



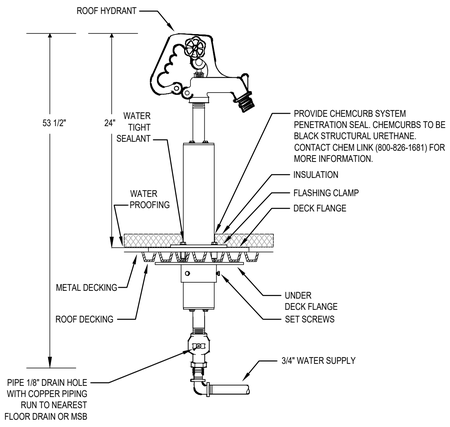
NOTES:
1. PROVIDE PLASTIC COATED HANGERS: COOPER B-LINE
2. MODEL: B3100C OR APPROVED EQUAL FOR CLEVIS
3. HANGERS. MODEL: B3172C OR APPROVED EQUAL FOR BAND HANGERS.

KEYED NOTES

1. SCHEDULED PIPE.
2. PLASTIC COATING.
3. UNI-STRUT.
4. PIPE HANGER.
5. DOMESTIC WATER LINE, COPPER DRAIN LINE FROM AHU'S.
6. BAND HANGER.
7. CLEVIS HANGER.

02 DOMESTIC WATER LINE PIPING SUPPORT DETAIL

SCALE : NOT TO SCALE

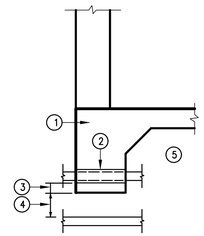


03 ROOF HYDRANT DETAIL

SCALE : NOT TO SCALE

KEYED NOTES

1. GRADE BEAM.
2. GALV. SCH.40 STEEL SLEEVE. SIZE PER SPECS. CENTER PIPE IN SLEEVE.
3. PIPING PASSING HORIZ. THROUGH GRADE BEAM SHALL BE LOCATED NO LESS THAN 6" ABOVE BOTTOM OF BEAM.
4. PIPING PASSING HORIZ. UNDER GRADE BEAM SHALL BE LOCATED A MINIMUM OF 6" BELOW BEAM. PROVIDE A SLEEVE.
5. COORDINATE LOCATIONS OF PIPING IN 3,4,5, ABOVE AS RELIEVING ARCHES OR ADDITIONAL CONCRETE MAY BE REQUIRED TO MAINTAIN STRUCTURAL INTEGRITY OF BEAM.

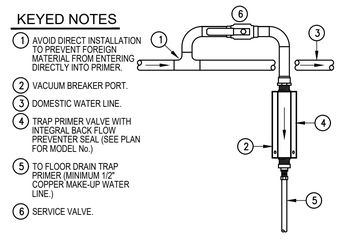


04 GRADE BEAM SLEEVE DETAIL

SCALE : NOT TO SCALE

KEYED NOTES

1. AVOID DIRECT INSTALLATION TO PREVENT FOREIGN MATERIAL FROM ENTERING DIRECTLY INTO PRIMER.
2. VACUUM BREAKER PORT.
3. DOMESTIC WATER LINE.
4. TRAP PRIMER VALVE WITH INTEGRAL BACK FLOW PREVENTER SEAL (SEE PLAN FOR MODEL No.)
5. TO FLOOR DRAIN TRAP PRIMER (MINIMUM 1/2" COPPER MAKE-UP WATER LINE.)
6. SERVICE VALVE.

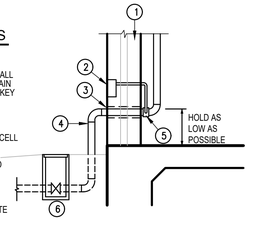


05 TRAP PRIMER CONNECTION DETAIL

SCALE : NOT TO SCALE

KEYED NOTES

1. TYPE "L" COPPER.
2. WALL HYDRANT-INSTALL LOW ENOUGH TO DRAIN. RISER. (WITH LOOSE KEY TYPE).
3. SLEEVE.
4. PROVIDE 1" CLOSED-CELL INSULATION WITH ALUMINUM METAL JACKET ON EXPOSED PIPING.
5. TEE.
6. VALVE INSIDE QUAZITE BOX.



06 WATER ENTRANCE DETAIL

SCALE : NOT TO SCALE

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CAMERON APPRAISAL DISTRICT
NEW BUILDING ADDITION AND RENOVATION
2021 AMISTAD DRIVE, SAN BENITO, TEXAS 78586

PLUMBING DETAILS

STATE OF TEXAS
CESAR A. GONZALEZ
108611
LICENSED PROFESSIONAL ENGINEER
8,16,2018

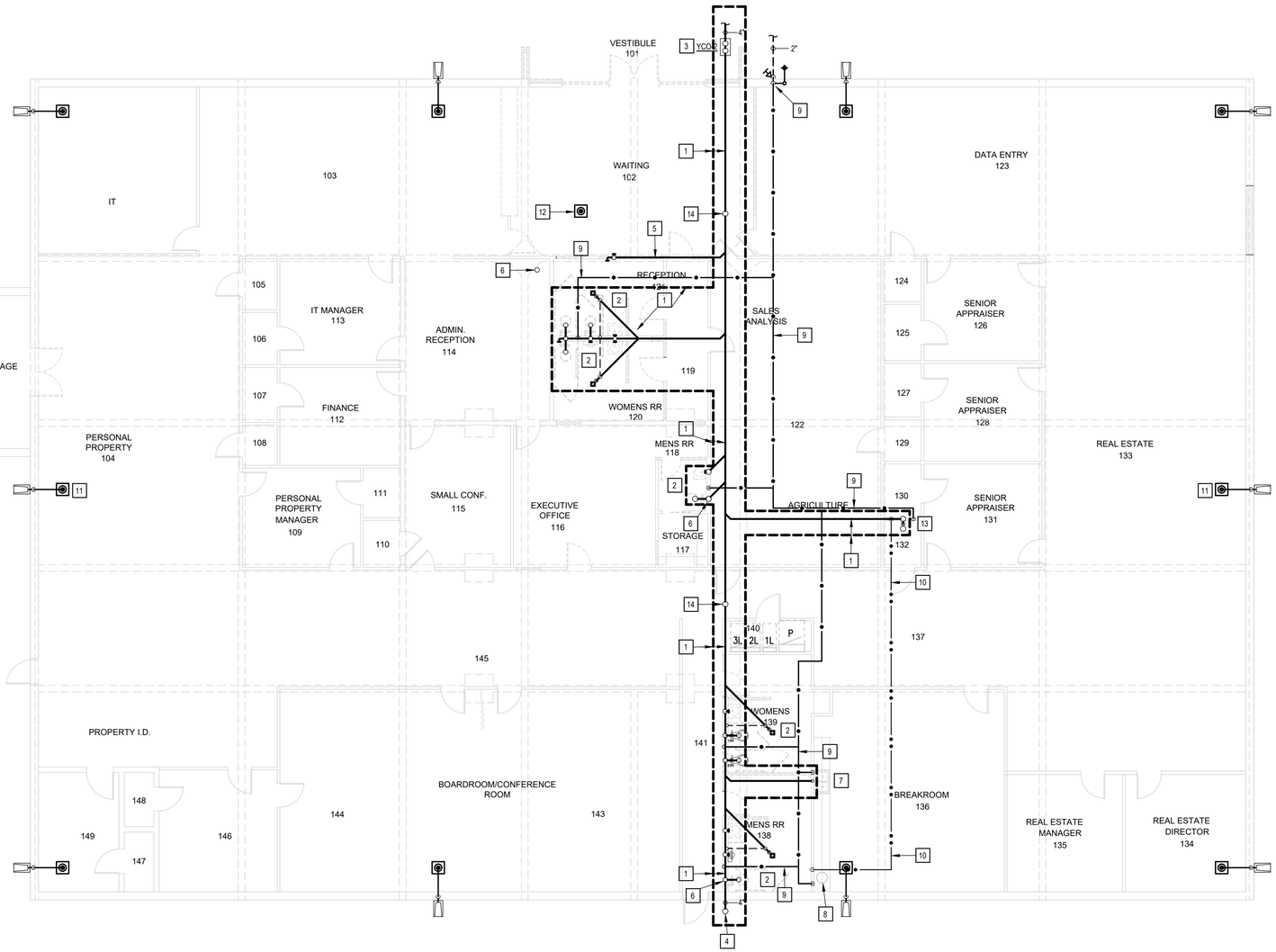
NO.	DATE	REVISIONS

DRAWN BY:	CHECKED BY:
ETHOS	SCK

DATE: 08-16-18

SHEET NO.

P4.2



EXISTING BUILDING PLUMBING DEMOLITION PLAN

1 / R-PD1.1

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

NORTH

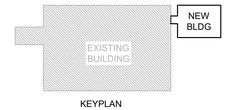
GENERAL NOTES:

1. REMOVED MATERIALS SHALL BELONG TO OWNER. DELIVER THEM TO OWNERS DESIGNATED LOCATION. IF OWNER DOES NOT WANT THE REMOVED MATERIALS THEN REMOVE THEM FROM SITE & PROPERLY DISPOSE OF THEM.
2. REFER TO ARCHITECTURAL DEMOLITION DRAWINGS FOR WALL AND CEILINGS TO BE REMOVED.
3. REFER TO ARCHITECTURAL SPECIFICATIONS FOR PHASING REQUIREMENTS.

PLUMBING KEYED NOTES:

1. TUNNEL UNDER EXISTING CONCRETE FOUNDATION BY GENERAL CONTRACTOR. REMOVE ALL EXISTING UNDERGROUND CAST IRON SANITARY SEWER PIPING SYSTEM AND PREPARE AREA FOR NEW SCHEDULE 40, PVC, SOLID WALL SANITARY SEWER PIPING SYSTEM. REFER TO PLUMBING PLAN, SHEET R-P2.1/R-P3.1 FOR NEW SANITARY SEWER PLUMBING SYSTEM. REFER TO STRUCTURAL PLANS AND SPECS FOR TUNNEL INFORMATION. COORDINATE WITH GENERAL CONTRACTOR.
2. EXISTING PLUMBING FIXTURES TO BE REMOVED.
3. EXISTING YARD CLEAN OUT TO BE REMOVED.
4. EXISTING YARD CLEAN OUT TO BE REPLACED WITH NEW. REFER TO WASTE AND VENT PLUMBING PLAN, SHEET R-P3.1 FOR NEW YARD CLEAN OUT.
5. EXISTING ABANDONED UNDERGROUND PLUMBING LINE TO REMAIN IN PLACE.
6. EXISTING VENT THRU ROOF (VTR) TO REMAIN.
7. EXISTING DOUBLE COMPARTMENT SINK TO REMAIN.
8. EXISTING UNDER COUNTER ELECTRIC HOT WATER HEATER TO REMAIN.
9. EXISTING DOMESTIC COLD WATER SYSTEM TO REMAIN.
10. EXISTING DOMESTIC HOT WATER SYSTEM TO REMAIN.
11. EXISTING ROOF DRAINS TO REMAIN. UNLESS OTHERWISE NOTED. (TYPICAL)
12. EXISTING ABANDONED ROOF DRAIN TO BE REMOVED. PATCH ROOF AS REQUIRED. COORDINATE WITH GENERAL CONTRACTOR.
13. EXISTING MOP SINK TO REMAIN.
14. EXISTING FCO TO REMAIN.

LEGEND	
	EXISTING WALL TO REMAIN
	NEW WALL
	EXISTING WALL TO BE DEMOLISHED



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CAMERON APPRAISAL DISTRICT
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EXISTING BUILDING PLUMBING DEMOLITION PLAN

STATE OF TEXAS
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REGISTERED
ARCHITECT
8.16.2018

NO.	DATE	REVISIONS

DRAWN BY:	CHECKED BY:
ETHOS	SCK

DATE: 08-16-18

SHEET NO.

R-PD1.1

EXISTING BUILDING PLUMBING PLAN

1 / R-P2.1

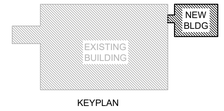
Scale: 1/8" = 1'-0"

NORTH

PLUMBING KEYED NOTES:

1. CONNECT NEW 4" SANITARY SEWER LINE INTO EXISTING LINE AT THIS APPROXIMATE LOCATION. CUT AND PATCH EXISTING PARKING LOT ASPHALT AS REQUIRED TO MAKE CONNECTION. COORDINATE WITH GENERAL CONTRACTOR.
2. REFER TO SHEET R-P3.1 FOR CONTINUATION.
3. PROVIDE BELLOWS TYPE WATER HAMMER ARRESTOR (WHB), MIFAB OR APPROVED EQUAL. INDICATED MODEL (A,B,C,D,E,F) AS PER MIFAB SIZING CHART. PROVIDE 12"X12" ACCESS PANEL WHERE INSTALLED IN AN INACCESSIBLE AREA. ACCESS PANEL EQUAL TO ACUDOR MODEL UF5000 WITH CYLINDER LOCK AND KEY AND PAINT TO MATCH THE WALL/CEILING. (TYPICAL)
4. PROVIDE BRONZE ISOLATION BALL VALVE ABOVE CEILING OR BEHIND WALL. PROVIDE A 12"x 12" ACCESS PANEL WHERE INSTALLED IN AN INACCESSIBLE AREA. ACCESS PANEL EQUAL TO ACUDOR MODEL UF5000 WITH CYLINDER LOCK AND KEY AND PAINT TO MATCH THE WALL/CEILING. PROVIDE VALVE IDENTIFICATION TAGS AS PER SPECIFICATIONS. (TYPICAL)
5. INSTALL WATER CLOSET FLUSH VALVE HANDLE TOWARDS WIDE SIDE OF THE ROOM. COORDINATE WITH GENERAL CONTRACTOR. (TYPICAL)
6. REMOVE AND REINSTALL EXISTING CEILING TILES AS REQUIRED TO ACCOMMODATE NEW DOMESTIC COLD WATER PIPING CONNECTION. COORDINATE WITH GENERAL CONTRACTOR.
7. PROVIDE INSTANTANEOUS ELECTRIC WATER HEATER AS SCHEDULED.
8. CONNECT NEW DOMESTIC COLD WATER LINE INTO EXISTING LINE AT THIS APPROXIMATE LOCATION. CUT AND PATCH EXISTING WALL AS REQUIRED TO MAKE CONNECTION. COORDINATE WITH GENERAL CONTRACTOR.
9. PROVIDE PIPE HANGERS AND SUSPEND NEW SANITARY SEWER LINES FROM EXISTING CONCRETE FOUNDATION (GRADE BEAMS). PROVIDE PROPER CONCRETE ANCHORS. COORDINATE AND OBTAIN APPROVAL FROM GENERAL CONTRACTOR AND/OR STRUCTURAL ENGINEER BEFORE ANCHORING.
10. EXISTING MOP SINK TO REMAIN.
11. EXISTING DOUBLE COMPARTMENT SINK TO REMAIN.
12. EXISTING UNDER COUNTER ELECTRIC WATER HEATER TO REMAIN.

LEGEND	
	EXISTING WALL TO REMAIN
	NEW WALL
	EXISTING WALL TO BE DEMOLISHED



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PLUMBING PLAN

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8/16/2018

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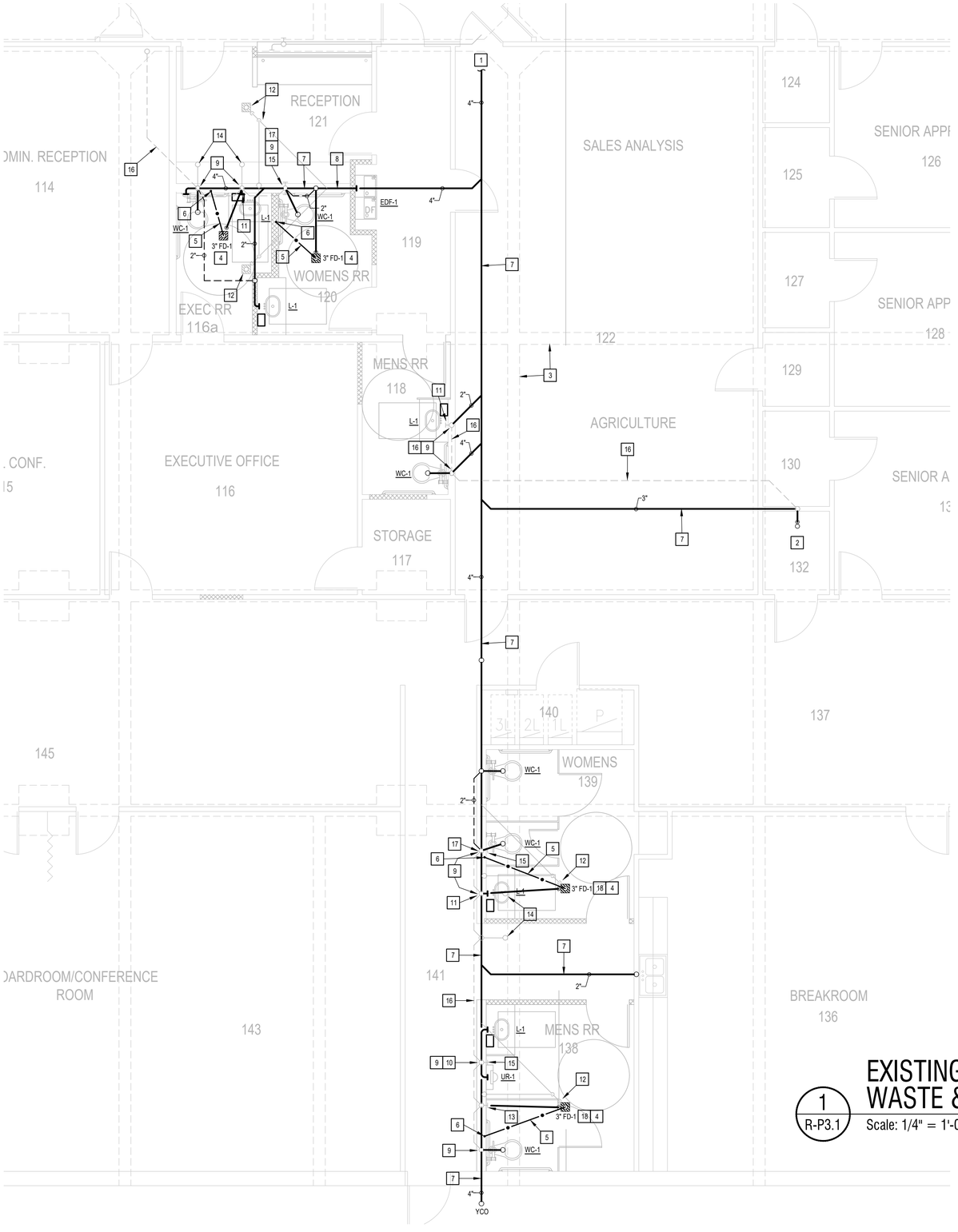
SHEET NO.

R-P2.1



NOTE:
COORDINATE ALL CONCRETE FLOOR PENETRATIONS WITH GENERAL CONTRACTOR AND STRUCTURAL ENGINEER PRIOR TO CUTTING FLOOR TO AVOID DAMAGING EXISTING TENSION CABLES AND/OR THE INTEGRITY OF THE EXISTING CONCRETE FOUNDATION.

PLUMBING KEYED NOTES:

1. REFER TO SHEET 1/R-P2.1 FOR CONTINUATION.
2. EXISTING MOP SINK TO REMAIN.
3. EXISTING STRUCTURAL FOUNDATION SHOWN FOR REFERENCE AND COORDINATION PURPOSES. (TYPICAL).
4. PROVIDE FLOOR DRAIN AS SCHEDULED. SET FLUSH WITH FINISHED FLOOR. SEE ASSOCIATED DETAIL ON DETAIL SHEET. (TYPICAL)
5. PROVIDE 1/2" SOFT DRAWN COPPER FROM TRAP-PRIMER. ENCASE PIPING INSIDE WALL AND UNDER FLOOR SLAB IN POLYETHYLENE SLEEVE. "POLY-SLEEVE" OR EQUAL.
6. CONNECT TO FLUSH VALVE TRAP-PRIMER (WC). SEE ASSOCIATED DETAIL ON DETAIL SHEET. (TYPICAL)
7. PROVIDE PIPE HANGERS AND SUPPORT NEW SANITARY SEWER LINES FROM EXISTING CONCRETE FOUNDATION (GRADE BEAMS). PROVIDE PROPER CONCRETE ANCHORS. COORDINATE AND OBTAIN APPROVAL FROM GENERAL CONTRACTOR AND/OR STRUCTURAL ENGINEER BEFORE ANCHORING.
8. RUN NEW EDF WASTE LINE INSIDE WALL ABOVE CONCRETE FLOOR SLAB.
9. RECONNECT EXISTING VERTICAL PLUMBING LINE INTO NEW UNDERGROUND PLUMBING LINE.
10. MAKE MODIFICATIONS AS REQUIRED TO EXISTING VERTICAL PLUMBING LINE TO CONNECT NEW UR-1 AND L-1 PLUMBING LINE. CUT AND PATCH EXISTING WALL AS REQUIRED. COORDINATE WITH GENERAL CONTRACTOR.
11. MAKE MODIFICATIONS AS REQUIRED TO EXISTING VERTICAL PLUMBING LINE TO CONNECT NEW L-1 PLUMBING LINE. CUT AND PATCH EXISTING WALL AS REQUIRED. COORDINATE WITH GENERAL CONTRACTOR.
12. REMOVE EXISTING FLOOR DRAIN WITH ASSOCIATED WASTE AND VENT PIPING. PATCH EXISTING CONCRETE FLOOR SLAB PENETRATION AS REQUIRED. COORDINATE WITH GENERAL CONTRACTOR.
13. CAP EXISTING URINAL PLUMBING LINE INSIDE WALL AND PATCH WALL AS REQUIRED. COORDINATE WITH GENERAL CONTRACTOR.
14. PATCH EXISTING WATER CLOSET CONCRETE SLAB FLOOR PENETRATION AS REQUIRED. COORDINATE WITH GENERAL CONTRACTOR.
15. CAP EXISTING LAVATORY PLUMBING LINE INSIDE WALL AND PATCH WALL AS REQUIRED. COORDINATE WITH GENERAL CONTRACTOR.
16. EXISTING PLUMBING VENT PIPING SYSTEM TO REMAIN. MAKE MODIFICATIONS AS REQUIRED TO ACCOMMODATE NEW PLUMBING FIXTURES. CAP ALL UNUSED LINES INSIDE EXISTING WALL. PATCH WALL OPENINGS AS REQUIRED. COORDINATE WITH GENERAL CONTRACTOR.
17. CONNECT NEW PLUMBING VENT LINE INTO EXISTING LINE AT THIS APPROXIMATE LOCATION.
18. USE EXISTING FLOOR PENETRATION TO INSTALL NEW FLOOR DRAIN (FD).

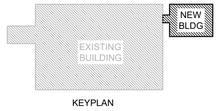
LEGEND	
	EXISTING WALL TO REMAIN
	NEW WALL
	EXISTING WALL TO BE DEMOLISHED

1 R-P3.1

EXISTING BUILDING WASTE & VENT PLAN

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

NORTH



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