

NORTH

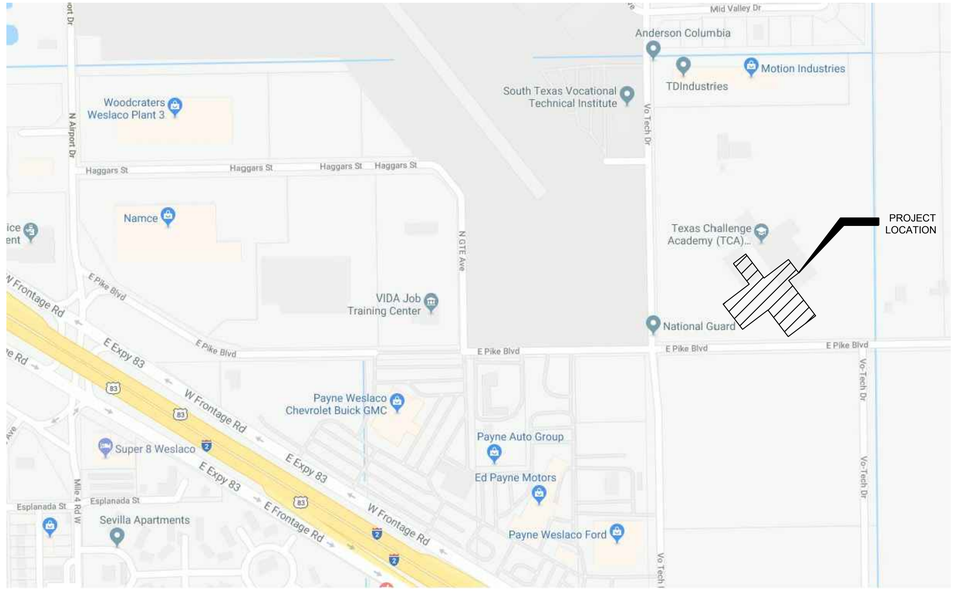
COUNTY LOCATION MAP

NOT TO SCALE

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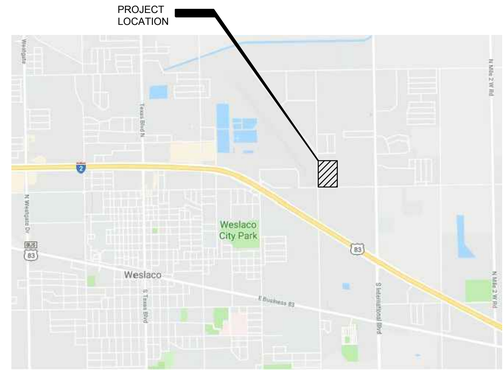
SET NO:



NORTH

SITE LOCATION MAP

NOT TO SCALE



NORTH

VICINITY MAP

NOT TO SCALE

BUILDING CODE SUMMARY

1. INTERNATIONAL CODE COUNCIL
   - A. BUILDING CODE — INTERNATIONAL BUILDING CODE 2012
   - B. STRUCTURAL CODE — INTERNATIONAL BUILDING CODE 2012
   - C. PLUMBING CODE — INTERNATIONAL PLUMBING CODE 2012
   - D. MECHANICAL CODE — INTERNATIONAL MECHANICAL CODE 2012
   - E. FIRE CODE — INTERNATIONAL FIRE CODE 2012
   - F. ENERGY CODE — INTERNATIONAL ENERGY CONSERVATION CODE 2012

2. NATIONAL FIRE PROTECTION ASSOCIATION
   - A. ELECTRICAL CODE — NATIONAL ELECTRICAL CODE 2012

3. STATE ENERGY CONSERVATION OFFICE/TEXAS COMPTROLLERS OFFICE
   - A. ENERGY CODES FOR STATE BUILDINGS — TITLE 34, PART 1, CH. 19, SB.C, RULE 19.31

4. ACCESSIBILITY CODES
   - A. AMERICANS WITH DISABILITIES ACT — TITLE II
   - B. TEXAS ACCESSIBILITY STANDARDS — TDLR, ABA- ART. 9102

TEXAS ARMY NATIONAL GUARD

CONSTRUCTION & FACILITIES MANAGEMENT OFFICE - CFMO

2200 W. 35TH STREET - CAMP MABRY - AUSTIN, TEXAS 78703

SCOPE OF WORK

FACILITY RENOVATION TO MODERNIZE THE WESLACO TEXAS ARMY NATIONAL GUARD READINESS CENTER AND MILITARY RECRUITING OFFICE. SCOPE INCLUDES ARCHITECTURAL, MEP, CIVIL, STRUCTURAL, FIRE ALARM AND DATA/IT MODIFICATIONS.

DESIGN TEAM

ISSUED FOR BID

REGISTERED ARCHITECT HOMERO SAENZ 25047 STATE OF TEXAS

04/20/2018

FREESE AND NICHOLS

4055 International Plaza, Suite 200
Fort Worth, Texas 76109-4895
Phone – (817) 735-7300
Fax – (817) 735-7491

Freese and Nichols, Inc.
Texas Registered Engineering
Firm F-2144

FNI PROJECT # ADG17589A

STATE OF TEXAS VAN CASHEN 118595 LICENSED PROFESSIONAL ENGINEER

04/20/2018

SHEET # G-1

BID OPTIONS "◯"

1) TEMPORARY RESTROOM BUILDING.
2) TEMPORARY SHOWER BUILDING.
3) FULL IT SYSTEM INCLUDING UPGRADES.
4) ADDITIONAL HVAC UPGRADES/REPAIRS/HVLS FANS.
5) RESTROOM/CONFERENCE ROOM RENOVATION IN ADMIN WING.
6) EXTERIOR BUILDING / PARKING IMPROVEMENTS/ BUILDING SIGN.
7) EXTERIOR EARTHWORK & DRAINAGE.
8) ELECTRICAL GENERATOR PROVISIONS.
9) SITE SECURITY FENCING TO MEET ATFP STANDOFF REGULATIONS.
10) NEW STORAGE CAGING IN EXISTING NORTHEAST STORAGE AREA.
11) TA-50 LOCKERS FOR SECURE EQUIPMENT STORAGE.

SECO OPTIONS "□"

1) PROVIDE OCCUPANCY SENSORS.
2) PROVIDE DDC CONTROL SYSTEM.

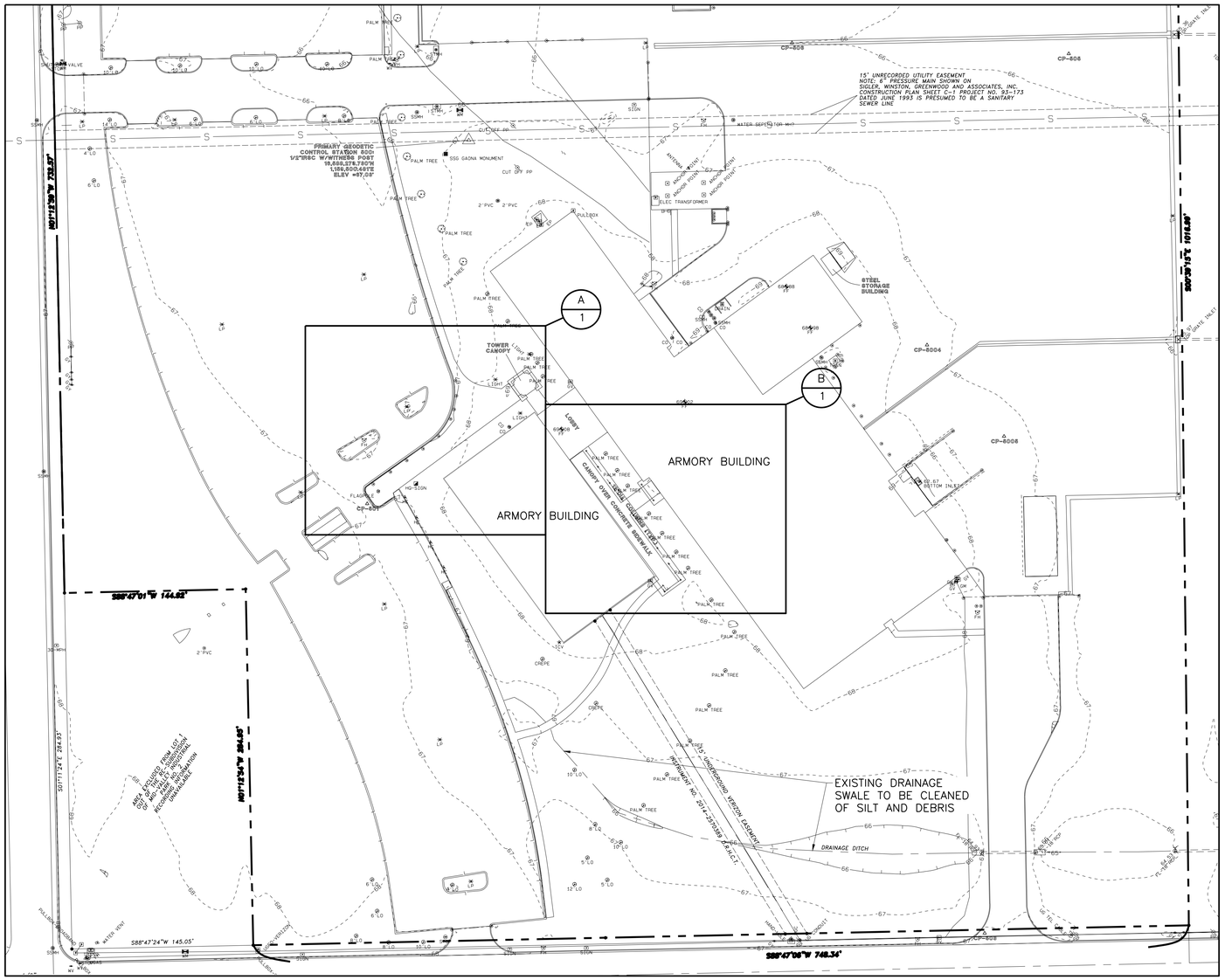
STAR Campaign FY18 Weslaco Readiness Center Major Maintenance

TEXAS ARMY NATIONAL GUARD

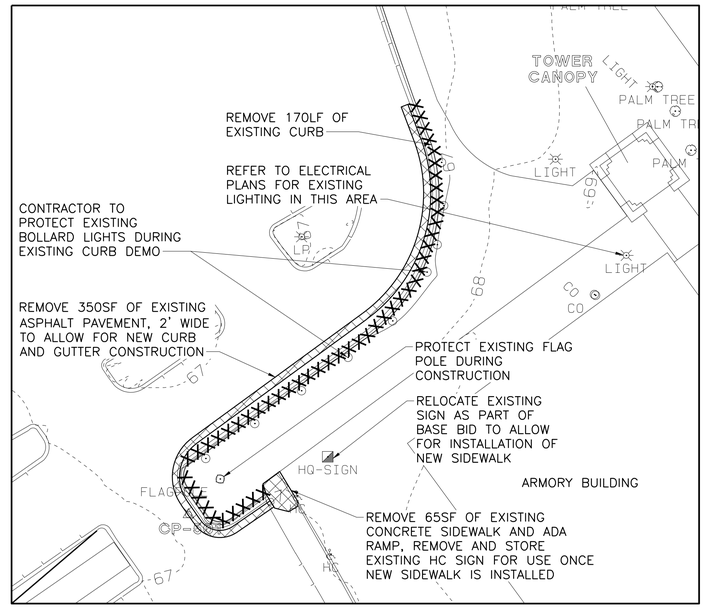
1100 VO-TECH DRIVE
WESLACO, TEXAS 78596

PROJECT NO: 48190030

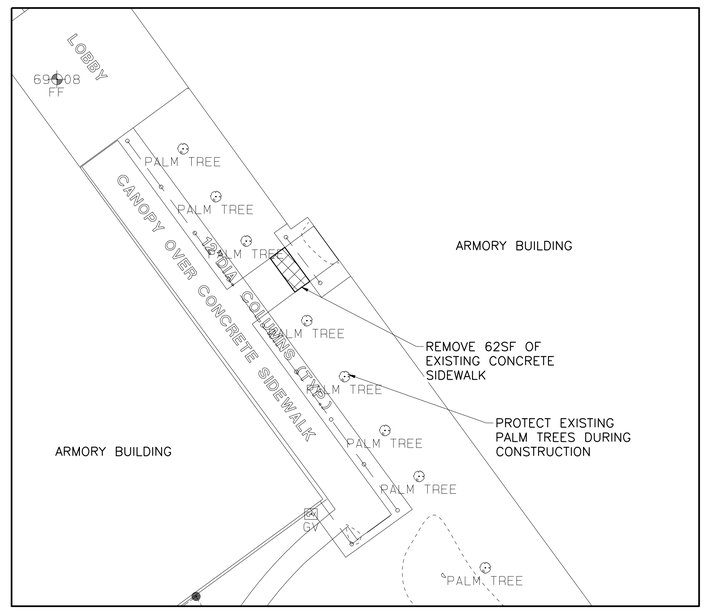
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NORTH 1 — OVERALL DEMO PLAN
1" = 50'-0"



NORTH A 1 — DETAIL ENTRANCE DEMO BASE BID
1" = 20'-0"



NORTH B 1 — DETAIL BREEZEWAY DEMO BID OPTION 7
1" = 20'-0"

0 10' 20' 40'
SCALE IN FEET

0 50' 100'
SCALE IN FEET

LEGEND

- EXISTING PAVEMENT DEMOLITION AS BASE AND BID OPTION 7
- XXXXXX — TO BE DEMOLISHED
- — - - — PROPERTY LINE

NOTES

1. SUMMARY OF CIVIL BID OPTIONS CAN BE FOUND ON THIS SHEET.
2. CONTRACTOR SHALL CONSULT WITH OWNER FOR MATERIAL STORAGE AND LAY-DOWN AREAS.

BID OPTIONS "◯"

6. EXTERIOR BUILDING/PARKING IMPROVEMENTS/BUILDING SIGN.
7. EXTERIOR EARTHWORK & DRAINAGE.
9. PROVIDE SITE SECURITY FENCING TO MEET ATFP STANDOFF REGULATIONS.

STATE OF TEXAS
BRETT M. BRISTOW
101000
LICENSED
PROFESSIONAL ENGINEER
04/20/2018

THE STATE OF TEXAS

PROJECT ARCHITECT:
HOMER SAENZ, AIA
PROJECT NO. ADG17589A
ISSUE DATE: 04/20/18
DRAWN BY: BMB
REVIEWED BY: THH

FREESE NICHOLS
4055 International Plaza, Suite 200
Fort Worth, Texas 76109-4895
Phone - (817) 735-7300
Fax - (817) 735-7491
Freese and Nichols, Inc.
Texas Registered Engineering Firm F-2144

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TEXAS MILITARY FORCES
CONSTRUCTION & FACILITIES MANAGEMENT OFFICE-CFMO
CAMP MABRY P.O. BOX 5218 AUSTIN, TEXAS 78763-5218
(512) 782-6131 FAX (512) 782-1481

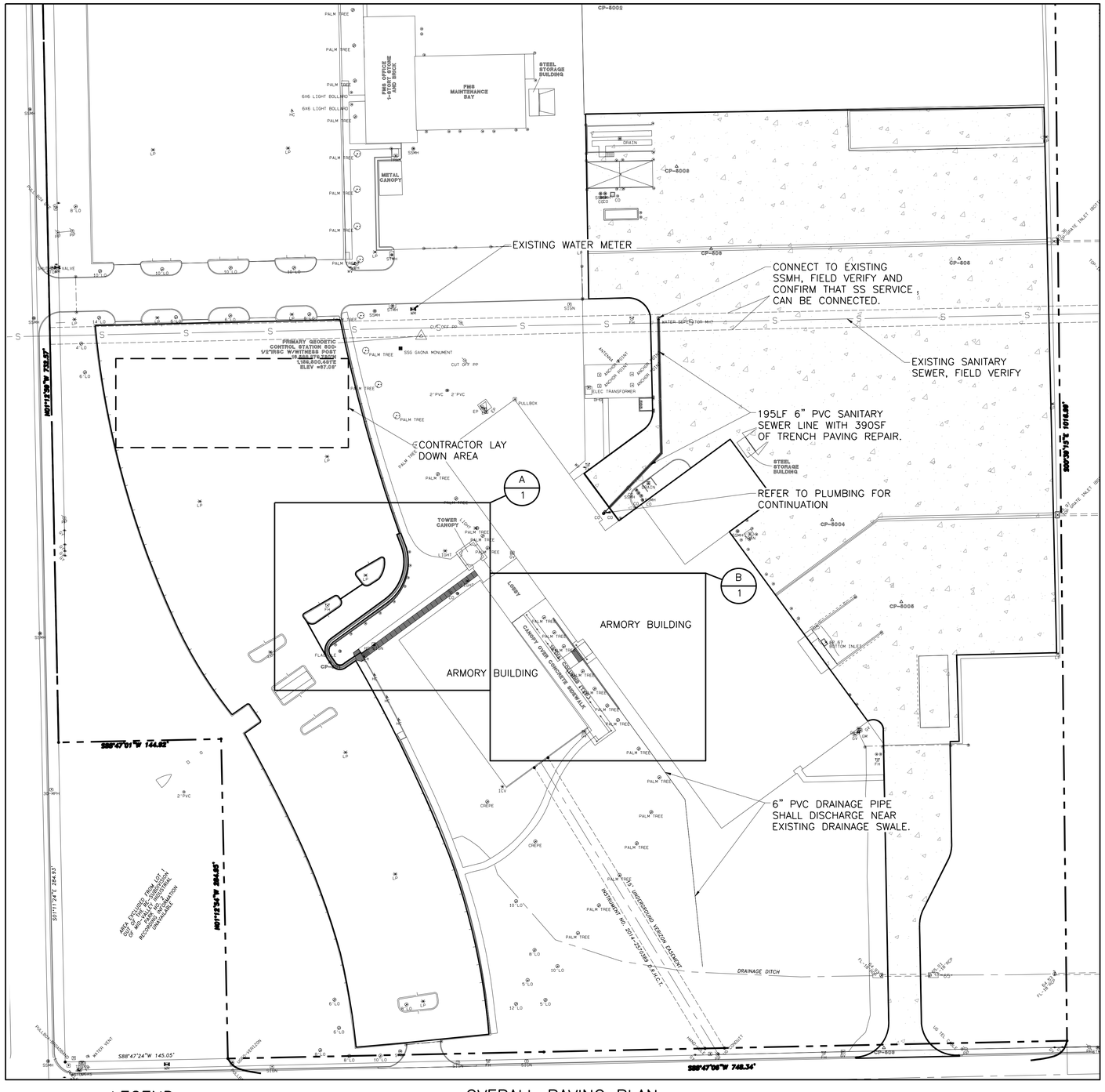
STAR CAMPAIGN FY18 - WESLACO
RC MAJOR MAINTENANCE

TXARNG CFMO

CIVIL
DEMOLITION PLAN

C-1

SHT. 1 of 129



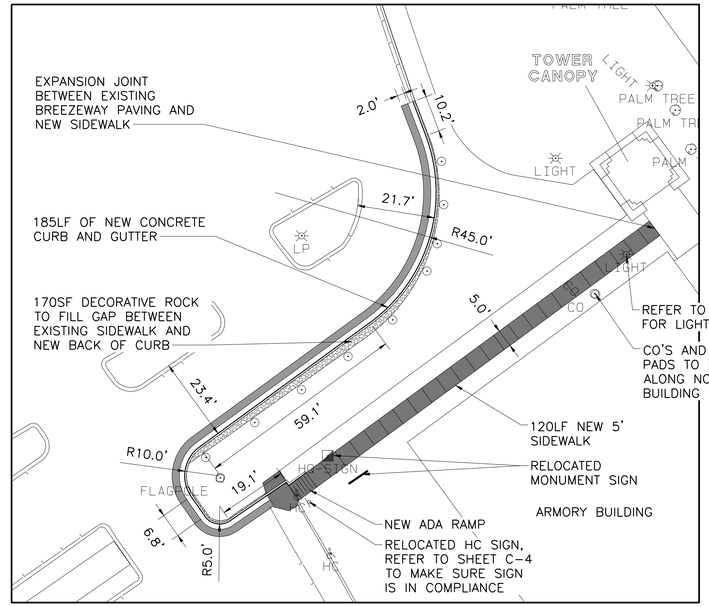
LEGEND

- EXISTING CONCRETE MAINTENANCE EFFORT, BID OPTION (6)
- NEW CONCRETE SIDEWALK FOR ADA COMPLIANCE, BASE BID
- 2' ASPHALT PAVING FOR INSTALLATION OF CURB AND GUTTER, BASE BID

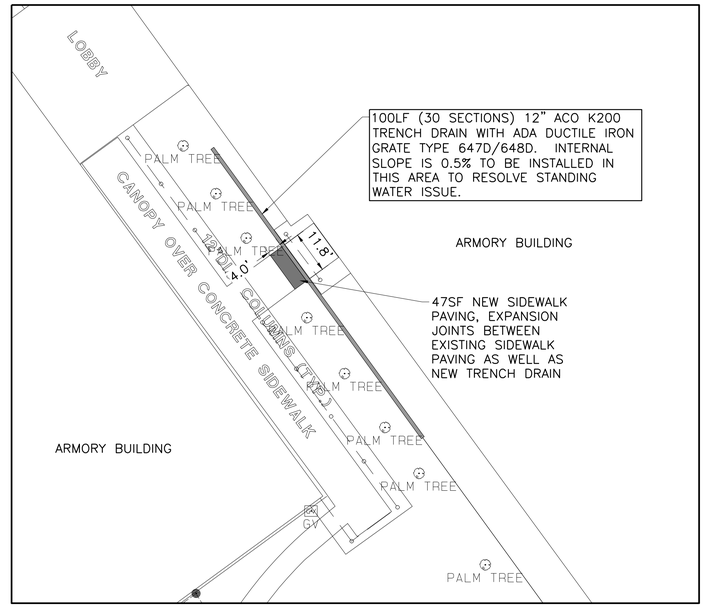
NORTH 1 — OVERALL PAVING PLAN
BASE AND BID OPTIONS 6&7
1" = 50'-0"

BID OPTIONS "◯"

6. EXTERIOR BUILDING/PARKING IMPROVEMENTS/BUILDING SIGN.
7. EXTERIOR EARTHWORK & DRAINAGE.
9. PROVIDE SITE SECURITY FENCING TO MEET ATFP STANDOFF REGULATIONS.



NORTH A 1 — DETAIL ENTRANCE PAVING
BASE BID
1" = 20'-0"



NORTH B 1 — DETAIL BREEZEWAY PAVING
BID OPTION (7)
1" = 20'-0"

NOTES:

1. REFER TO ARCHITECTURE SHEETS FOR UPDATED SECURITY FENCING LOCATIONS.
2. SUMMARY OF THE PROJECTS BID OPTIONS CAN BE FOUND ON SHEET G-1. DISCIPLINE SPECIFIC BID OPTIONS CAN BE FOUND ON THIS SHEET.
3. ALL DIMENSIONS AND COORDINATES ARE TO FACE OF CURB OR EDGE OF PAVEMENT UNLESS NOTED OTHERWISE.
4. SEE SHEET C-4 FOR PAVING DETAILS, PAVEMENT SECTIONS AND JOINTING NOTES.
5. ALL NEW SIDEWALKS AND RAMPS SHOWN ON DRAWINGS MUST BE IN COMPLIANCE WITH CURRENT TEXAS ACCESSIBILITY STANDARDS AND ADA.
6. CURBS IN THE PARKING LOTS THAT WILL BE RESEALED AND RE-STRIPED SHALL BE PROTECTED. IF CURBS ARE DAMAGED DURING CONSTRUCTION CONTRACTOR SHALL REPLACE CURB.

0 10' 20' 40' SCALE IN FEET

0 50' 100' SCALE IN FEET

STATE OF TEXAS — BRETT M. BRISTOW — 101000 — LICENSED PROFESSIONAL ENGINEER — 04/20/2018

THE STATE OF TEXAS

PROJECT ARCHITECT:
HOMER SAENZ, AIA
PROJECT NO. ADG17589A
ISSUE DATE: 04/20/18
DRAWN BY: BMB
REVIEWED BY: THH

FREESE NICHOLS
4055 International Plaza, Suite 200
Fort Worth, Texas 76109-4895
Phone - (817) 735-7300
Fax - (817) 735-7491
Freese and Nichols, Inc.
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TEXAS MILITARY FORCES
CONSTRUCTION & FACILITIES MANAGEMENT OFFICE-CFMO
CAMP MABRY P.O. BOX 5218 AUSTIN, TEXAS 78763-5218
(512) 782-6151 FAX (512) 782-1481

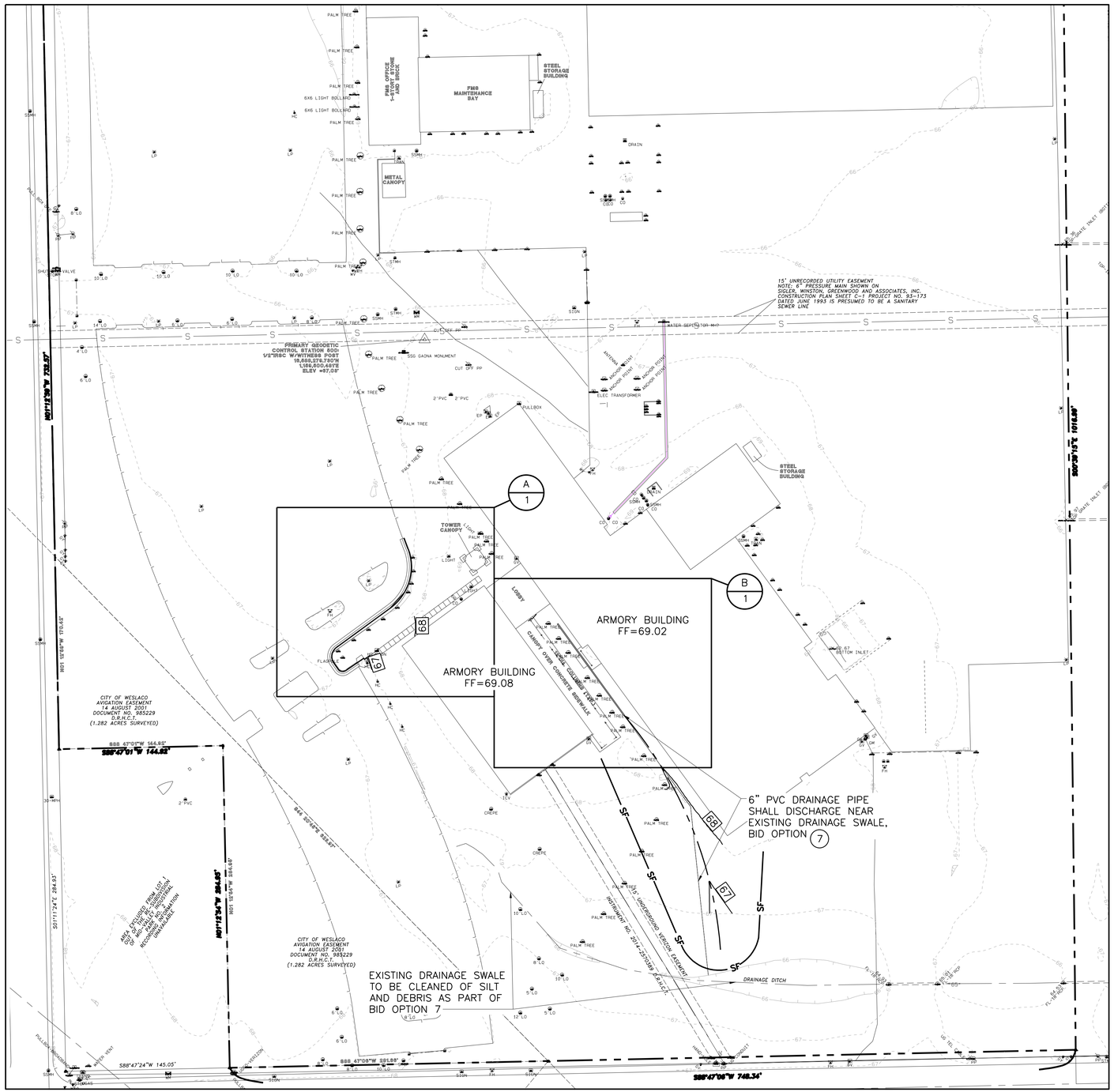
STAR CAMPAIGN FY18 - WESLACO
RC MAJOR MAINTENANCE

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CIVIL PAVING PLAN

C-2

SHT. 3 of 129



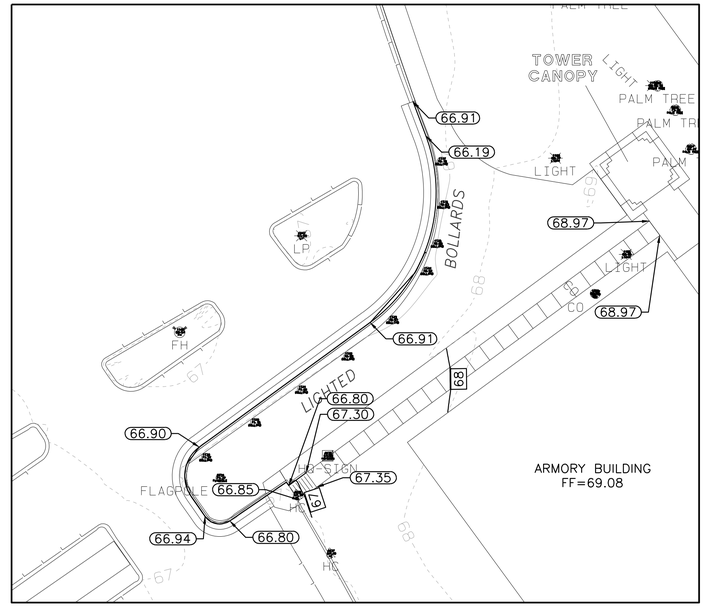
LEGEND

- 65.00 — TOP OF PAVEMENT
- 65.00 — NATURAL GROUND
- 65.00 — EXISTING SHOT
- 65 — EXISTING CONTOURS
- 65 — PROPOSED CONTOURS
- SF — SILT FENCE, REFER TO DETAIL 1, SHEET C-5
- FLOW LINE

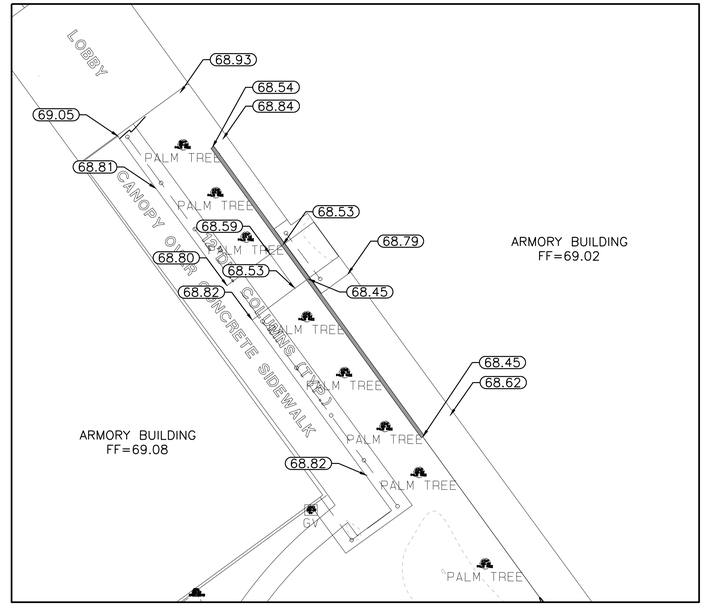
NORTH 1 — OVERALL GRADING PLAN
BASE AND BID OPTIONS 6&7
1" = 50'-0"

BID OPTIONS "◯"

6. EXTERIOR BUILDING/PARKING IMPROVEMENTS/BUILDING SIGN.
7. EXTERIOR EARTHWORK & DRAINAGE.
9. PROVIDE SITE SECURITY FENCING TO MEET ATFP STANDOFF REGULATIONS.



NORTH A 1 — DETAIL ENTRANCE GRADING
BASE BID
1" = 20'-0"



NORTH B 1 — DETAIL BREEZEWAY GRADING
BID OPTION 7
1" = 20'-0"

0 10' 20' 40'
SCALE IN FEET

0 50' 100'
SCALE IN FEET

NOTES:

1. SUMMARY OF THE PROJECTS BID OPTIONS CAN BE FOUND ON SHEET G-1.
2. ALL PROPOSED SIDEWALKS AND HANDICAP RAMPS MUST BE INSTALLED SO THEY ARE IN COMPLIANCE WITH CURRENT TEXAS ACCESSIBILITY STANDARDS AND ADA.
3. REFER TO SHEET C-5 FOR EROSION CONTROL DETAILS.

STATE OF TEXAS
BRETT M. BRISTOW
101000
LICENSED
PROFESSIONAL ENGINEER
04/20/2018

THE STATE OF TEXAS

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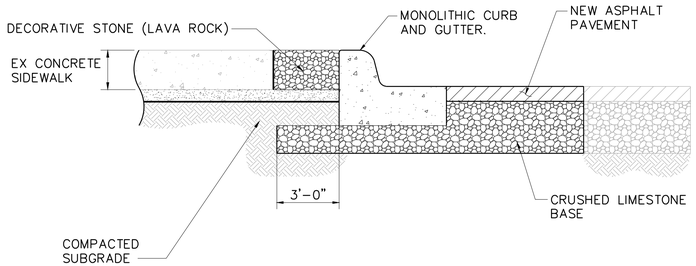
STAR CAMPAIGN FY18 - WESLACO
RC MAJOR MAINTENANCE

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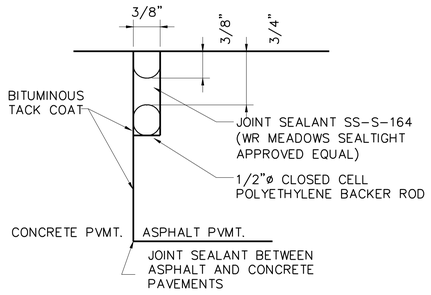
CIVIL
GRADING PLAN

C-3

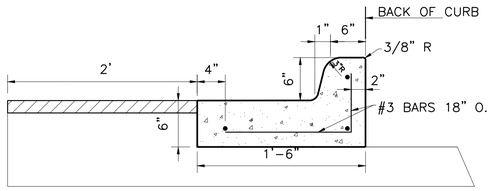
SHT. 4 of 129



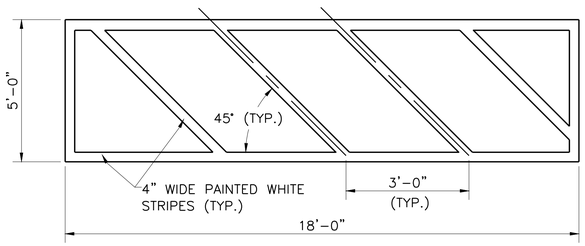
1 SIDEWALK PAVING SECTION
NOT TO SCALE



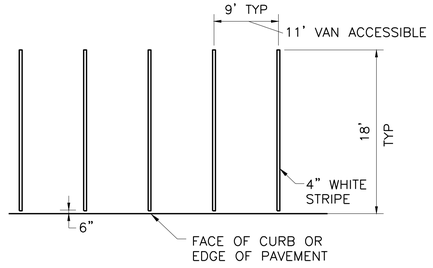
2 JOINT SEALANT BETWEEN ASPHALT AND CONCRETE PAVEMENT
NOT TO SCALE



3 CURB AND GUTTER DETAIL
NOT TO SCALE

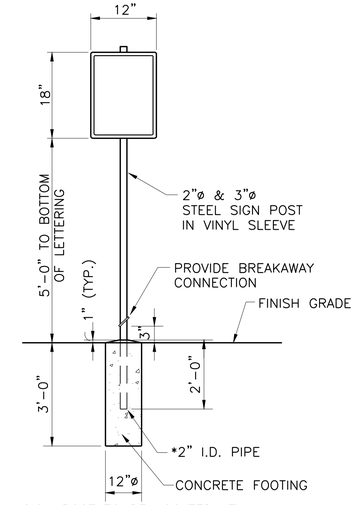


4 HANDICAP PARKING STRIPING DETAIL
NOT TO SCALE



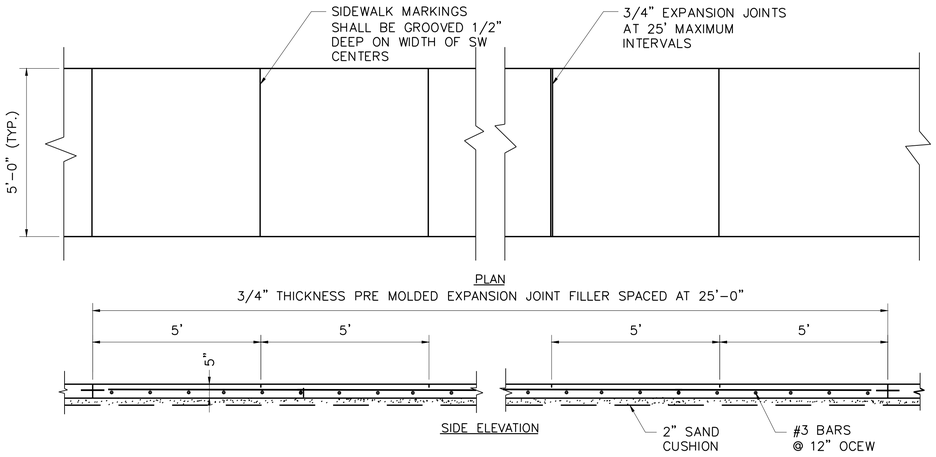
90° PARKING

5 TYPICAL PARKING STRIPE DETAIL
NOT TO SCALE

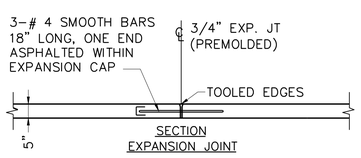


* SIGN POST TO BE LOCATED AT BACK OF SIDEWALK AS INDICATED ON PAVING PLAN SHEET

6 ADA PARKING SIGN
NOT TO SCALE



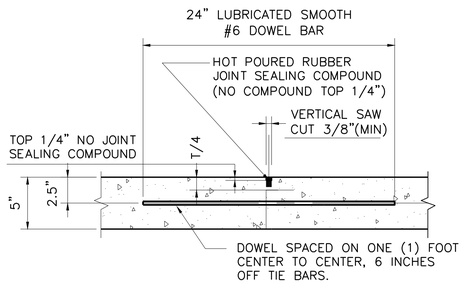
7 SIDEWALK PAVING
NOT TO SCALE



CONCRETE SIDEWALK
NOT TO SCALE

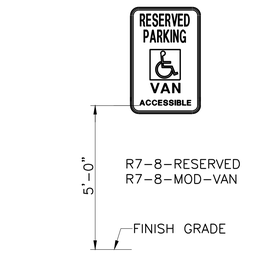
NOTES:

1. JOINTS SHALL BE EQUALLY SPACED BETWEEN SIDEWALK INTERSECTION JOINTS SHOWN IN THE PLAN

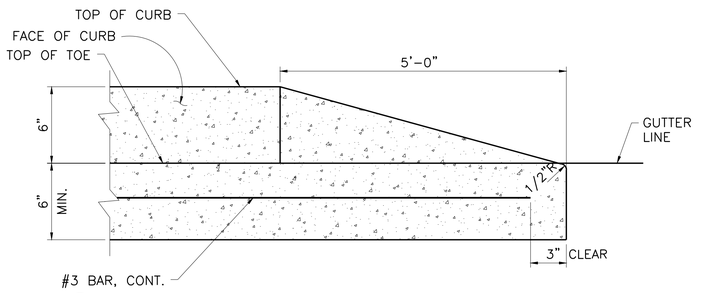


T = PAVEMENT THICKNESS

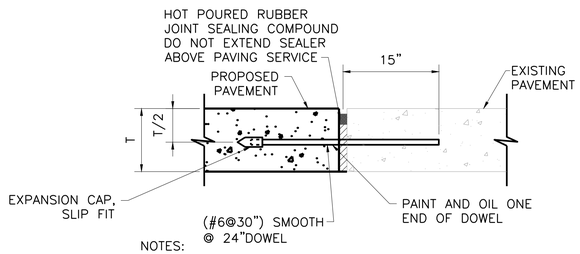
8 CONTRACTION JOINT
NOT TO SCALE



9 RESERVED AND VAN ACCESSIBLE PARKING SIGN
NOT TO SCALE



10 CURB TERMINAL DETAIL - TYP.
NOT TO SCALE



NOTES:

1. FOR EXISTING PAVEMENT - DRILL AND EPOXY DOWEL IN PLACE.
2. EXPANSION JOINTS SHALL BE 3/4" THICK REDWOOD FOR FULL DEPTH OF PAVEMENT AND SHALL INCLUDE GREASED 30" SMOOTH 3/4" DIA. DOWEL STEEL BARS WITH CAPS.

11 EXPANSION JOINT AT EXISTING CONCRETE
NOT TO SCALE

STATE OF TEXAS
BRETT M. BRISTOW
101000
LICENSED
PROFESSIONAL ENGINEER
04/20/2018

THE STATE OF TEXAS

PROJECT ARCHITECT:
HOMER SAENZ, AIA
PROJECT NO. ADG17589A
ISSUE DATE: 04/20/18
DRAWN BY: BMB
REVIEWED BY: THH

FREESE AND NICHOLS
4055 International Plaza, Suite 200
Fort Worth, Texas 76109-4895
Phone - (817) 735-7300
Fax - (817) 735-7491
Freese and Nichols, Inc.
Texas Registered Engineering Firm F-2144

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CAMP MABRY P.O. BOX 5218
(512) 782-6131
AUSTIN, TEXAS 78763-5218
FAX (512) 782-1481

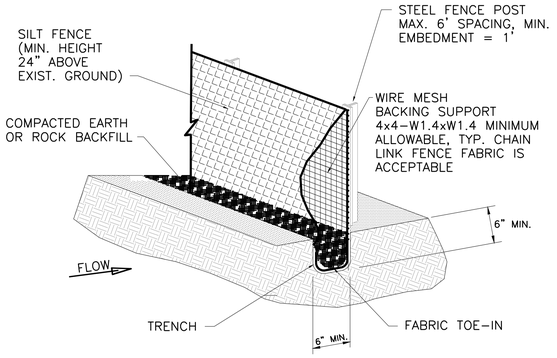
STAR CAMPAIGN FY18 - WESLACO
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CIVIL
PAVING DETAILS

C-4

SHT .. of ..



1 ISOMETRIC PLAN VIEW
NOT TO SCALE

1 SILT FENCE
NOT TO SCALE

SILT FENCE GENERAL NOTES:

1. STEEL POSTS WHICH SUPPORT THE SILT FENCE SHALL BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. POST MUST BE EMBEDDED A MINIMUM OF ONE FOOT.
2. THE TOE OF THE SILT FENCE SHALL BE TRENCHED IN WITH A SPADE OR MECHANICAL TRENCHER, SO THAT THE DOWNSLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW. WHERE FENCE CANNOT BE TRENCHED IN (e.g. PAVEMENT), WEIGHT FABRIC FLAP WITH ROCK ON UPHILL SIDE TO PREVENT FLOW FROM SEEPING UNDER FENCE.
3. THE TRENCH MUST BE A MINIMUM OF 6 INCHES DEEP AND 6 INCHES WIDE TO ALLOW FOR THE SILT FENCE FABRIC TO BE LAID IN THE GROUND AND BACKFILLED WITH COMPACTED MATERIAL.
4. SILT FENCE SHOULD BE SECURELY FASTENED TO EACH STEEL SUPPORT POST OR TO WOVEN WIRE, WHICH IN TURN IS ATTACHED TO THE STEEL FENCE POST. THERE SHALL BE A 3 FOOT OVERLAP, SECURELY FASTENED WHERE ENDS OF FABRIC MEET.
5. INSPECTION SHALL BE MADE EVERY TWO WEEKS AND AFTER EACH 1/2" RAINFALL. REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
6. SILT FENCE SHALL BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.
7. ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF HALF THE HEIGHT OF THE FENCE. THE SILT SHALL BE DISPOSED OF AT AN APPROVED SITE AND IN SUCH A MANNER AS TO NOT CONTRIBUTE TO ADDITIONAL SILTATION.

STATE OF TEXAS
BRETT M. BRISTOW
101000
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PROFESSIONAL ENGINEER
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AUSTIN, TEXAS 78763-5218
FAX (512) 782-1481

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DETAILS

C-5

SHT 6 of 129

SCHEDULE OF TYPICAL ARCHITECTURAL ABBREVIATIONS

(NOT ALL ABBREVIATIONS MAY BE USED)

A	
AB	ANCHOR BOLT
ABV	ABOVE
ACC	ACCESS
ACOUST	ACOUSTICAL
ADH	ADHESIVE
A/C	AIR CONDITIONING
ADJ	ADJACENT OR ADJUSTABLE
AFF	ABOVE FINISH FLOOR
AGG	AGGREGATE
ALUM	ALUMINUM
ALT	ALTERNATE
ANC	ANCHOR
ANOD	ANODIZED
APPROX	APPROXIMATELY
ARCH	ARCHITECT(URAL)
ASPH	ASPHALT
ATC	ACOUSTICAL TILE CEILING
AUTO	AUTOMATIC
AUX	AUXILIARY
B	
B/F	BELOW FLOOR
BLDG	BUILDING
BLKG	BLOCKING
BM	BENCH MARK OR BEAM
BCMU	BURNISHED CONCRETE MASONRY UNIT
BRG	BEARING
BOT	BOTTOM
BEL	BELOW
BET	BETWEEN
BIT	BITUMEN
BLK	BLOCK
BD	BOARD
BRZ	BRONZE
C	
C	CHANNEL OR CONDUIT
CAB	CABINET
C/C	CENTER TO CENTER
CG	CORNER GUARD
CIP	CAST IRON PIPE OR CAST IN PLACE
CISP	CAST IRON SOIL PIPE
CJ	CONTROL JOINT
CL	CENTERLINE
CLG	CEILING
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
CO	CLEANOUT
COL	COLUMN
CONC	CONCRETE
COND	CONDITION
CONN	CONNECTION
CONST	CONSTRUCTION
CONT	CONTINUOUS
CONTR	CONTRACTOR
CSK	COUNTERSINK (SUNK)
CT	CERAMIC TILE
CTR	CENTER
CPT	CARPET (ED)
CSMT	CASEMENT
CB	CATCH BASIN
CHT	CEILING HEIGHT
CW	COLD WATER
D	
D	DEPTH OR DRAIN
DBL	DOUBLE
DCO	DOUBLE CLEANOUT
DET	DETAIL
D.I.	DUCTILE IRON
DIA	DIAMETER
DIAG	DIAGONAL
DN	DOWN
DR	DOOR OR DRIVE
DS	DOWNSPOUT
DWG	DRAWING
DWL	DOWEL

E	
EA	EACH
ECJ	EDGE CONTROL JOINT
EF	EACH FACE OR EXHAUST FAN
EL	ELEVATION
ELEC	ELECTRIC(AL)
ELEV	ELEVATOR/ELEVATION
EMERG	EMERGENCY
EM	ELECTRO MAGNETICALLY
EMH	ELECTRICAL MANHOLE
EQ	EQUAL
EQUIP	EQUIPMENT
EW	EACH WAY
EWC	ELECTRIC WATER COOLER
EWH	ELECTRIC WATER HEATER
EXH	EXHAUST
EXIST	EXISTING
EXP	EXPOSED
EXP.JT.	EXPANSION JOINT (OR E.J.)
EXT	EXTERIOR
F	
F	FIRE PIPE
FA	FIRE ALARM
FCO	FLOOR CLEANOUT
FDC	FIRE DEPT. CONNECTION
FD	FLOOR DRAIN
FDN	FOUNDATION
FE	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER CABINET
FF	FINISH FLOOR
FH	FIRE HYDRANT
FHC	FIRE HOSE CABINET
FIN	FINISH
FIX	FIXTURE
FL/FLR	FLOOR
FPRF	FIREPROOFING
FR	FIRE RATED
FS	FLOOR SINK
FT	FEET
FTG	FOOTING
FVC	FIRE VALVE CABINET
G	
G	GRILLE OR GAS
GALV	GALVANIZED
GB	GRAB BAR OR GRADE BEAM
GCO	GRADE CLEANOUT
GI	GALVANIZED IRON OR GRATE INLET
GL	GLASS
GND	GROUND
GR	GRADE
GWB	GYPSUM WALLBOARD
GYP	GYPSUM
H	
HB	HOSE BIBB
HD	HANDICAP
HDWE	HARDWARE
HDWD	HARDWOOD
HM	HOLLOW METAL
HORIZ	HORIZONTAL
HR	HOUR
HS	HIGH STRENGTH OR HEADED STUDS
HT	HEIGHT
HTR	HEATER
HVAC	HEATING/ VENTILATING/ AIR CONDITIONING
HW	HOT WATER
HWTM	HOT WATER TEMPERATURE MAINTENANCE
I	
ID	INSIDE DIAMETER
IF	INSIDE FACE
IN	INCH
INSUL	INSULATION
INT	INTERIOR
J	
J	JUNCTION
JAN	JANITOR
JB	JUNCTION BOX
JT	JOINT

K	
KCJ	KEYED CONSTRUCTION JOINT
KIT	KITCHEN
KV	KILOVOLT
KVA	KILOVOLT-AMPERE
KW	KILOWATT
KWH	KILOWATT-HOURS
L	
L	LENGTH
LAM	LAMINATE
LAV	LAVATORY
LF	LINEAR FEET
LL	LIVE LOAD
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LONG	LONGITUDINAL
LP	LOW POINT
LT	LIGHT
LTG	LIGHTING
LT WT	LIGHT WEIGHT
LVL	LEVEL
M	
M	MOTOR
MAINT	MAINTENANCE
MAS	MASONRY
MAT	MATERIAL
MAX	MAXIMUM
MECH	MECHANICAL
MTL	METAL
MFR	MANUFACTURER
MH	MANHOLE
MIN	MINIMUM
MO	MASONRY OPENING
MTG	MOUNTING OR MOUNTED
MTL	METAL
N	
NFWH	NON-FREEZE WALL HYDRANT
NO	NUMBER OR NORMALLY OPEN
NOM	NOMINAL
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
O	
OA	OUTSIDE AIR
OC	ON CENTER
OCEW	ON CENTER, EACH WAY
OD	OUTSIDE DIAMETER
OF	OUTSIDE FACE
OFD	OVERFLOW DRAIN
OH	OVERHEAD
OPNG	OPENING
OPP	OPPOSITE
OSB	ORIENTED STRAND BOARD
P	
PART	PARTITION
PL	PROPERTY LINE OR PLATE
PLAM	PLASTIC LAMINATE
PLAS	PLASTER
PLYWD	PLYWOOD
PNL	PANEL
PR	PAIR
PSI	POUNDS PER SQUARE INCH
PVC	POLYVINYL CHLORIDE
PVMT	PAVEMENT
Q	
QT	QUARRY TILE
R	
R	RISER, REGISTER, OR RADIUS
RA	RETURN AIR
RAD	RADIUS OR RETURN AIR DUCT
RD	ROOF DRAIN
RE	REFER TO
REF	REFERENCE
REFL	REFLECTED
REINF	REINFORCING (REINFORCED)
REQ'D	REQUIRED
RET	RETAINING
REV	REVERSE
RM	ROOM
RO	ROUGH OPENING

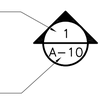
S	
SA	SUPPLY AIR
SAN	SANITARY
SAT	SUSPENDED ACOUSTICAL TILE
SCH	SCHEDULE, SCHEDULED
SCHED	SCHEDULE, SCHEDULED
SD	SMOKE DAMPER OR STORM DRAIN
SECT	SECTION
SF	SUPPLY FAN OR SQUARE FEET
SGFT	STRUCTURAL GLAZED FACING TILE
SH	SPRINKLER HEAD
SHT	SHEET
SIM	SIMILAR
SM	SPRINKLER MAIN
SPEC	SPECIFICATIONS
SQ	SQUARE
SS	SERVICE SINK OR SANITARY SEWER
SSM	SOLID SURFACE MATERIAL
SSMH	SANITARY SEWER MANHOLE
SSTL	STAINLESS STEEL (OR S.S.)
STA	STATION
STD	STANDARD
STIFF	STIFFENER
STIR	STIRRUP
STL	STEEL
STOR	STORAGE
STR	STRUCTURAL
STRUCT	STRUCTURAL
SUSP	SUSPENDED
SV	SHEET VINYL
SVC	SERVICE
SW	SWITCH
SYM	SYMMETRICAL
T	
T	TREAD OR THICKNESS
T&B	TOP AND BOTTOM
TAS	TEXAS ACCESSIBILITY STANDARDS
TC	TOP OF CURB
TEL	TELEPHONE
TEMP	TEMPERATURE
TLT	TOILET
TOT	TOTAL
TOW	TOP OF WALL
TP	TOILET PARTITION
TRANS	TRANSVERSE OR TRANSITION
TS	TUBE STEEL
T-STAT	THERMOSTAT
TYP	TYPICAL
U	
UL	UNDERWRITERS LABORATORIES INC.
UR	URINAL
V	
V	VENT OR VOLT
VAC	VACUUM
VB	VINYL BASE
VCT	VINYL COMPOSITION TILE
VERT	VERTICAL
VF	VENTILATION FAN
VOL	VOLUME
VTR	VENT THROUGH ROOF
VWC	VINYL WALL COVERING
W	
W	WIDTH OR WASTE
W/	WITH
WC	WATER CLOSET
WD	WOOD
WDW	WINDOW
WH	WATER HEATER OR WALL HYDRANT
W/O	WITHOUT
WP	WEATHERPROOF OR WORKING POINT
WPFG	WATERPROOFING
WS	WATER STOP
WSCT	WAINSCOT
WT	WEIGHT
WV	WATER VALVE
WWF	WELDED WIRE FABRIC

GENERAL NOTES

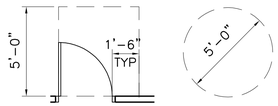
1. ALL DIMENSIONS ARE GIVEN TO:
   - A FACE OF CONCRETE OR MASONRY.
   - B CENTER LINE OF COLUMNS WHERE INDICATED.
   - C FINISHED FACE OF GYPSUM BOARD OR TILE WHERE INDICATED.
   - D CONCRETE FLOOR LINE.
2. REFER TO REFLECTED CEILING PLANS FOR PARTITIONS THAT EXTEND TO ROOF DECK. REFER TO A-2 FOR PARTITION TYPES.
3. ALL WOVEN WIRE MESH PARTITIONS, FRAMING, DOORS AND SHELVING MUST BE DESIGNED TO SUPPORT ALL APPLICABLE LOADS AND IN ACCORDANCE AND FULL COMPLIANCE WITH MOST CURRENT UNITED FACILITIES CRITERIA 4-171-05.
4. 10 GA GALVANIZED WOVEN WIRE MESH PARTITION IN 1½" x ⅛" THICK STEEL CHANNEL FRAMING, TYP.

PLAN GRAPHICS

REFERENCE

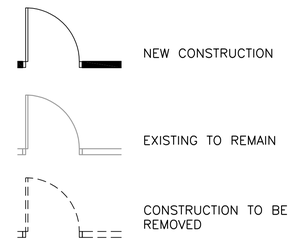


ACCESSIBILITY

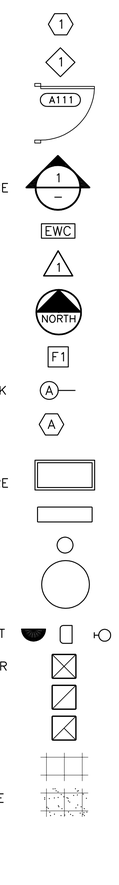


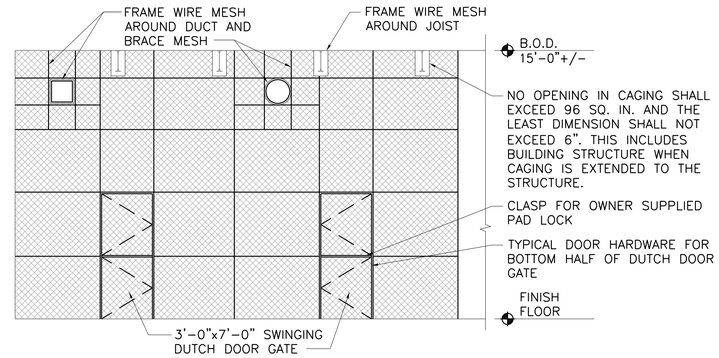
DASHED LINES INDICATE CLEAR SPACE REQUIREMENTS TO SATISFY TAS. NOT ALL CLEARANCE REQUIREMENTS ARE SHOWN ON PLANS.

LINEWORK



SYMBOLS





GENERAL NOTES

1. ALL WOVEN WIRE MESH PARTITIONS, FRAMING, DOORS AND SHELVING MUST BE DESIGNED TO SUPPORT ALL APPLICABLE LOADS AND IN ACCORDANCE AND FULL COMPLIANCE WITH MOST CURRENT UNITED FACILITIES CRITERIA 4-171-05.
2. 10 GA GALVANIZED WOVEN WIRE MESH PARTITION IN 1½"x ⅛" THICK STEEL CHANNEL FRAMING, TYP. CAGE FRAMES SHOULD BE NO MORE THAN 1" FROM THE FLOOR AND NO MORE THAN 2" FROM THE WALLS OR CEILINGS.

(10) 1/– WIRE MESH STORAGE ELEVATION

1/4" = 1'-0"

BID OPTIONS "○"

10. NEW STORAGE CAGING IN EXISTING NORTHEAST STORAGE AREA.



THE STATE OF TEXAS

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4055 International Plaza, Suite 200
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Fax - (817) 735-7491
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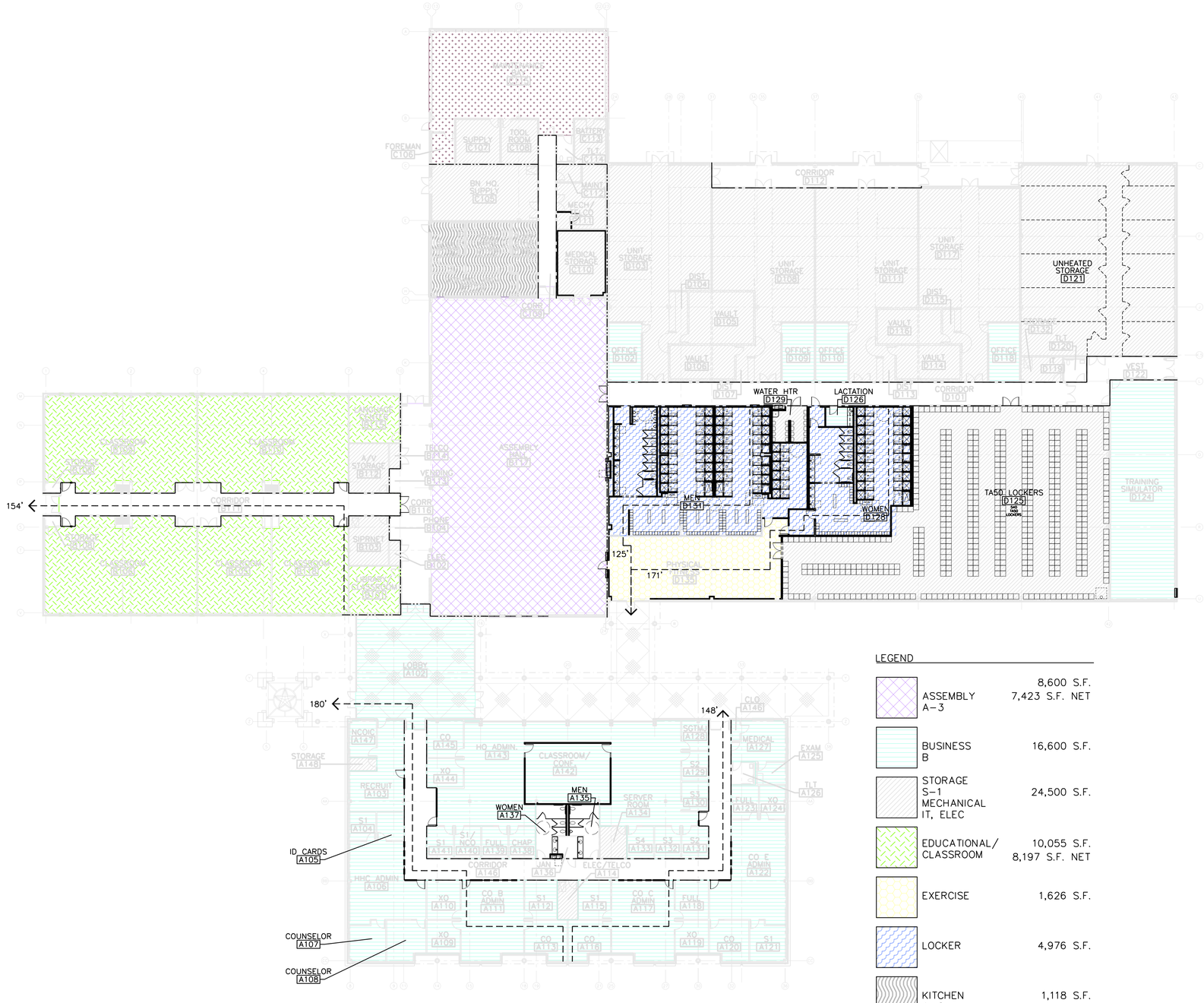
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ARCHITECTURAL ABBREVIATIONS AND SYMBOLS

A-0

SHT. 7 of 129



LEGEND

ASSEMBLY A-3	8,600 S.F.	7,423 S.F. NET
BUSINESS B	16,600 S.F.	
STORAGE S-1 MECHANICAL IT, ELEC	24,500 S.F.	
EDUCATIONAL/ CLASSROOM	10,055 S.F.	8,197 S.F. NET
EXERCISE	1,626 S.F.	
LOCKER	4,976 S.F.	
KITCHEN A-2	1,118 S.F.	
FACTORY F-1	2,440 S.F.	

2 HR RATED WALL
1 HR RATED WALL
TRAVEL DISTANCE

NORTH TRUE / NORTH PLAN — 1 — EGRESS FLOOR PLAN
1" = 20'-0"

BID OPTIONS "◯"

1. TEMPORARY RESTROOM BUILDING.
2. TEMPORARY SHOWER BUILDING.
3. FULL IT SYSTEM INCLUDING CLASSROOM UPGRADES.
4. ADDITIONAL HVAC UPGRADES/ REPAIRS/ HVLS FANS.
5. RESTROOM/ CONFERENCE ROOM RENOVATION IN ADMIN WING.
6. EXTERIOR BUILDING/ PARKING IMPROVEMENTS/ BUILDING SIGN.
7. EXTERIOR EARTHWORK & DRAINAGE.
8. ELECTRICAL GENERATOR PROVISIONS.
9. PROVIDE SITE SECURITY FENCING TO MEET ATFP STANDOFF REGULATIONS.
10. NEW STORAGE CAGING IN EXISTING NORTHEAST STORAGE AREA.
11. PROVIDE TA-50 LOCKERS FOR SECURE EQUIPMENT STORAGE.

CODE REVIEW – IBC 2015

PROJECT: WESLACO READINESS CENTER,
WESLACO, TEXAS

OCCUPANCIES:
A-3 ASSEMBLY OCCUPANCY
B BUSINESS OCCUPANCY
S-1 STORAGE OCCUPANCY
F-1 FACTORY OCCUPANCY

AUTOMATIC FIRE SUPPRESSION: REQUIRED BY IBC/UFC, NOT PROVIDED

BUILDING SIZE: 75,382 GROSS SF

TYPE OF CONSTRUCTION: IIB

BUILDING AREA BASED ON OCCUPANCY (TABLE 506.2):

	NS	S1(AREA FACTOR INCREASE)
B	= 23,000 SF	92,000 S.F
A-3	= 9,500 SF	38,000 S.F.
S-1	= 17,500 SF	70,000 S.F.
F-1	= 15,500 SF	62,000 S.F.

HEIGHT LIMITATIONS (TABLE 504.3):

A, B, S & F = 55'

STORIES (TABLE 504.4):

B = 3
A-3 = 2
S-1 = 2
F-1 = 2

FIRE RESISTIVE REQUIREMENTS (HR) (TABLE 601):

STRUCTURAL FRAME	= 0
BEARING WALL – INTERIOR/EXTERIOR	= 0
NON-BEARING WALLS AND PARTITIONS – INTERIOR	= 0
FLOOR CONSTRUCTION	= 0
ROOF CONSTRUCTION	= 0

NON-BEARING WALLS AND PARTITIONS – EXTERIOR (TABLE 602):

<5'	1 (A, B,) 2 (F-1,S-1)
>5' < 10'	1
>10' < 30'	0
> 30'	0

CORRIDOR RATING (A, B, S >30 OCCUPANTS) (TABLE 1020.1): = 1 HOUR

OCCUPANT LOAD (TABLE 1004.1.2):

ASSEMBLY W/ TABLES & CHAIRS	–15 SF NET
BUSINESS	–100 GROSS
STORAGE/MECHANICAL	–300 GROSS
EDUCATIONAL CLASSROOMS	– 20 SF NET

MINIMUM CORRIDOR WIDTH (TABLE 1020.2): 44" TYPICAL

NUMBER OF EXITS REQUIRED (TABLE 1006.3.1): 4 REQUIRED
TOTAL: 1,203 OCCUPANTS PER IBC 921 OCCUPANTS PER TMD

EXIT ACCESS TRAVEL DISTANCE (TABLE 1017.2): ASSEMBLY, BUSINESS AND STORAGE = 200'

MAXIMUM LENGTH OF DEAD END CORRIDORS (SECTION 1020.4):
ASSEMBLY, BUSINESS AND STORAGE = 20'

EGRESS WIDTH (SECTION 1005.3.2): = .20"/OCCUPANT
1,203 X .20 = 240.6" REQUIRED
= 936" PROVIDED

SEPERATION OF OCCUPANCIES (TABLE 508.4): A / B, S-1, OR F-1 = 2 HOURS

DOOR RATING: 20 MINUTES AT 1 HOUR RATED CORRIDORS
90 MINUTES AT 2 HOUR SEPERATION

MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURES (TABLE 2902.1):

S-1 AND MECH	= 81 OCCUPANTS			
A-3	= 528 OCCUPANTS			
B	= 184 OCCUPANTS			
E	= 410 OCCUPANTS			
	1,203 OCCUPANTS			
S-1		TOILETS	LAVATORIES	EWC
81 X 50% = 41 (MALE)		0.41	0.41	0.08
81 X 50% = 41 (FEMALE)		0.41	0.41	
A-3		TOILETS	LAVATORIES	EWC
528 X 50% = 264 M		2.11	1.32	1.06
528 X 50% = 263 F		4.06	1.31	
B		TOILETS	LAVATORIES	EWC
184 X 50% = 92 M		2.84	2.15	1.84
184 X 50% = 92 F		2.84	2.15	
E		TOILETS	LAVATORIES	EWC
410 X 50% = 205 M		4.10	4.10	4.10
410 X 50% = 205 F		4.10	4.10	
TOTAL	M	9	8	7
	F	11	8	
		20 TOTAL	16 TOTAL	
PLUMBING FIXTURES (PER TMD)	M (2/3)	13	11	
	F (1/3)	7	5	

SHOWERS (PER TMD):

925 (1/15) =	62 SHOWERS TOTAL
925 X 67% = 620 M	42 SHOWERS
925 X 33% = 305 F	20 SHOWERS

0 10' 20' 40'
SCALE IN FEET

04/20/2018

THE STATE OF TEXAS

PROJECT ARCHITECT:
HOMER SAENZ, AIA
PROJECT NO. ADG17589A
ISSUE DATE: 04/20/18
DRAWN BY: HS
REVIEWED BY: JWW

FREESE NICHOLS
4055 International Plaza, Suite 200
Fort Worth, Texas 76109-4895
Phone – (817) 735-7300
Fax – (817) 735-7491
Freese and Nichols, Inc.
Texas Registered Engineering
Firm F-2144

NO.	DATE	ISSUE
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5		
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TEXAS MILITARY FORCES
CONSTRUCTION & FACILITIES MANAGEMENT OFFICE-CFMO
CAMP MABRY P.O. BOX 5218
AUSTIN, TEXAS 78763-5218
(512) 782-6131
FAX (512) 782-1481

STAR CAMPAIGN FY18 - WESLACO
RC MAJOR MAINTENANCE

TXARNG CFMO

ARCHITECTURAL EGRESS PLAN AND CODE REVIEW

A-1

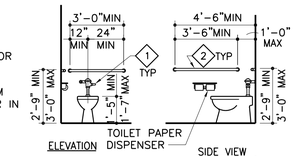
SHT. 8 of 129

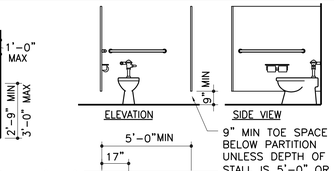
GENERAL NOTES:

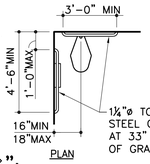
1. ALL FIXTURE HEIGHTS AND MOUNTING DIMENSIONS SHALL COMPLY WITH REQUIREMENTS OF TAS (ADA). CONTRACTOR MUST VERIFY EACH SUCH DIMENSION.
2. ALL DOOR DIMENSIONS ARE CLEAR, FROM EDGE OF DOOR STOP TO EDGE OF DOOR IN 90° OPEN POSITION.
3. FAUCETS FOR SINKS SHALL HAVE LEVER HANDLES.
4. ANGLE STOPS, RISERS, TAIL PIECES & P-TRAPS NOT OTHERWISE ENCLOSED BY CABINETS OR OTHER ENCLOSURES SHALL HAVE ADA PROTECTIVE COVERS.
5. TOILET PARTITION DOORS AT ACCESSIBLE STALL MUST HAVE A MINIMUM CLEARANCE OF 32".
6. PROVIDE BLOCKING AS REQUIRED FOR ALL FIXTURES AND ACCESSORIES. REFER TO 12 & 13/A-22 FOR DETAILS.

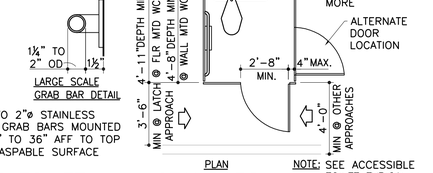
NOTES BY SYMBOL "◇":

1. OPERATING HANDLE ON FLUSH TANK OR FLUSH VALVE WC MUST BE FURNISHED EITHER RIGHT OR LEFT HANDED SO THAT HANDLE OCCURS ON WIDE SIDE OF STALL OR SPACE AND SHALL BE MOUNTED BELOW THE GRAB BAR.
2. GRAB BARS AND ASSOCIATED BLOCKING, ANCHORS, AND FASTENERS SHALL BE CAPABLE OF RESISTING A DOWNWARD FORCE OF 250 LBS. APPLIED AT ANY POINT ALONG THE HANDRAIL.







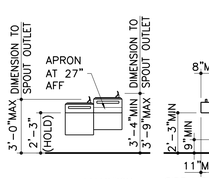


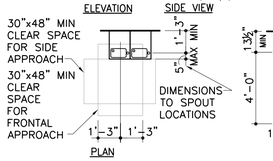
ACCESSIBLE TOILET TYPICAL DIMENSIONS

1/4"=1'-0"

STANDARD ACCESSIBLE TOILET STALL

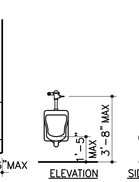
1/4"=1'-0"

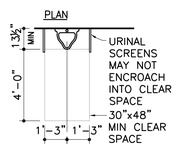




ACCESSIBLE WATER COOLER

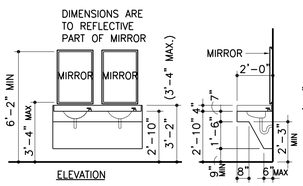
1/4"=1'-0"

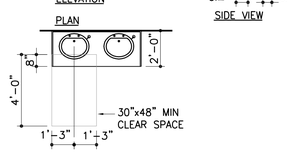




ACCESSIBLE URINAL

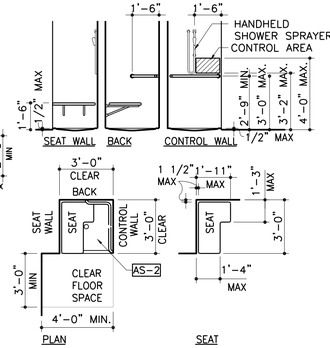
1/4"=1'-0"





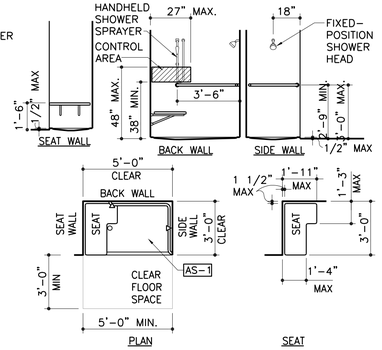
ACCESSIBLE COUNTER TOP LAV

1/4"=1'-0"



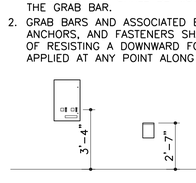
ACCESSIBLE SHOWER (36"x36")

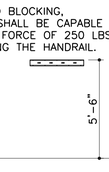
1/4"=1'-0"

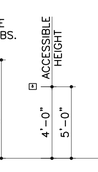


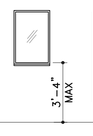
ACCESSIBLE SHOWER (60"x36")

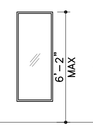
1/4"=1'-0"

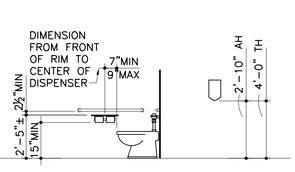






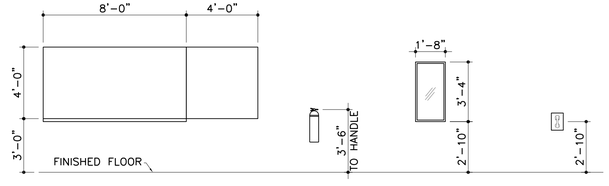






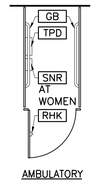
TOILET ACCESSORY MOUNTING HEIGHTS

1/4"=1'-0"

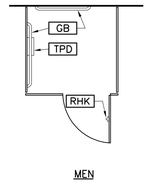


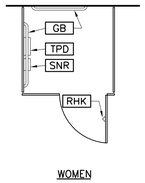
SPECIALTIES MOUNTING HEIGHTS

1/4"=1'-0"



AMBULATORY ACCESSIBLE STALLS

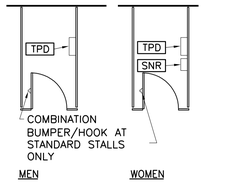




STANDARD ACCESSIBLE STALLS

TYPICAL NOTES:

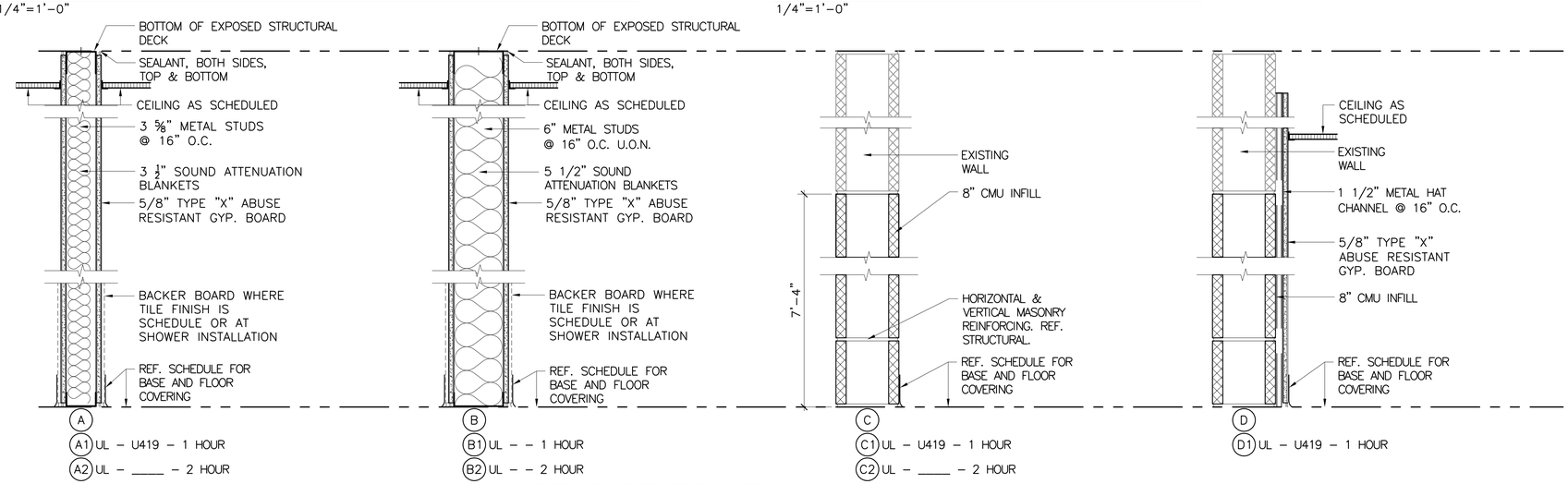
1. ALL TOILET STALLS SHALL HAVE THE ACCESSORIES AS SHOWN ABOVE.
2. REFER TO INTERIOR ELEVATIONS FOR PLACEMENT OF MIRRORS.
3. REFER TO FLOOR PLAN FOR LOCATION OF MOP HOLDERS, SANITARY NAPKIN DISPENSER, ELECTRIC WATER COOLERS, AND FIRE EXTINGUISHERS.
4. PROVIDE WATER CLOSET AT ACCESSIBLE HEIGHT AT AMBULATORY STALL.



STANDARD STALLS

TYPICAL TOILET STALL ACCESSORIES

1/4"=1'-0"



PARTITION TYPES

NTS

FREESE AND NICHOLS
4055 International Plaza, Suite 200
Fort Worth, Texas 76109-4895
Phone - (817) 735-7300
Fax - (817) 735-7491
Freese and Nichols, Inc.
Texas Registered Engineering Firm F-2144

NO.	DATE	ISSUE
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PROJECT ARCHITECT: HOMER SAENZ, AIA
PROJECT NO. ADG17589A
ISSUE DATE: 04/20/18
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STAR CAMPAIGN FY18 - WESLACO
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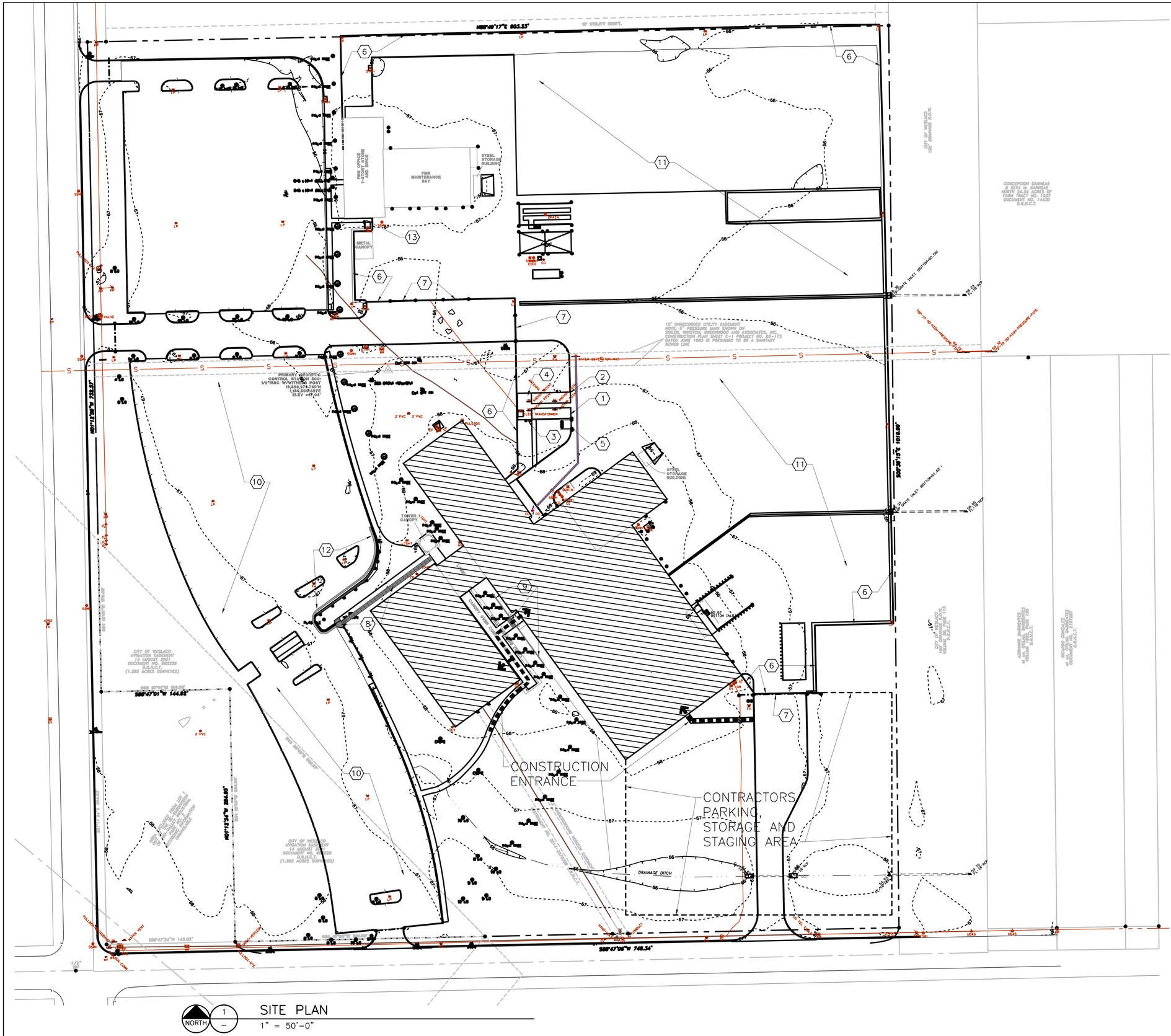
0 1' 2' 4' 8'
1/4"=1'-0"

HOMER SAENZ 25611 REGISTERED ARCHITECT
04/20/2018

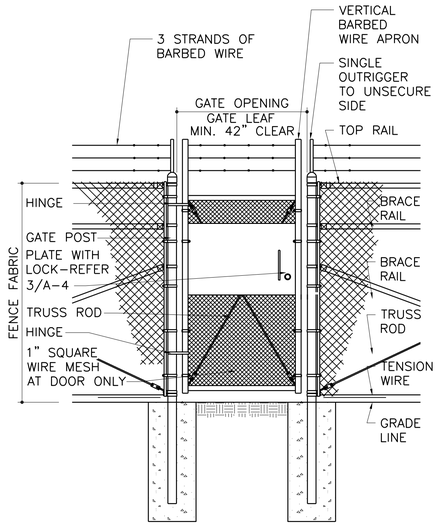
ARCHITECTURAL ACCESSIBILITY AND PARTITION SCHEDULE

A-2

SHT. 9 of 129


N89°48'17"E 803.23'
10' UTILITY ESMT.
FIRE OFFICE & STORAGE 1-STORY BRICK AND BRICK
FIRE MAINTENANCE BAY
STEEL STORAGE BUILDING
METAL CANOPY
GAZEBO
GAS VALVE
TRANSFORMER
STEEL STORAGE BUILDING
TOWER CANOPY
CONCRETE CANOPY
CONCEPCION GARNICA & ELVA M. GARNICA NORTH 24.24 ACRES OF FARM TRACT NO. 1037 DOCUMENT NO. 14430 O.R.A.C.T.
CITY OF WESLACO 100' DRAINAGE R.O.W.
15' UNRECORDED UTILITY EASEMENT NOTES: 8" PRESSURE MAIN SHOWN ON "WATER, SEWER & DRAINAGE ASSOCIATES, INC. CONSTRUCTION PLANS SHEET 3 OF 3 PROJECT NO. 93-173 DATED JUNE 1993 IS PRESUMED TO BE A SANITARY SEWER LINE
WATER, SEPTIC TANK
PRIMARY GEODETIC CONTROL STATION 5001 1/2"IRSC W/WITNESS POST 16,888,273.780'N 1,166,600.461'E ELEV =N/A
N01°13'34"W 752.57'
S89°47'01"W 144.92'
N01°13'34"W 284.65'
CITY OF WESLACO AVIATION EASEMENT 14 AUGUST 2001 DOCUMENT NO. 950229 O.R.A.C.T. (1.382 ACRES SURVEYED)
S89°47'34"W 145.05'
S89°47'06"W 748.34'
S00°29'13"E 1016.89'
2"PVC
2"PVC
CONSTRUCTION ENTRANCE
CONTRACTORS PARKING, STORAGE AND STAGING AREA
DRAINAGE DITCH
CURB INLET, SEE DETAIL
10'-0" CEMENTITIOUS PRESSURE PIPE
20'-0" CEMENTITIOUS PRESSURE PIPE
6' GRATE INLET, BOTTOM=90.50
6' GRATE INLET, BOTTOM=91.62
6' GRATE INLET, BOTTOM=91.70
CL BOTTOM EL 91.62
CL BOTTOM EL 91.70
CL BOTTOM EL 91.78
FL=91.78
FL=91.70
FL=91.62
FL=90.50
FL=90.58
FL=90.66
FL=90.74
FL=90.82
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FL=93.22
FL=93.30
FL=93.38
FL=93.46
FL=93.54
FL=93.62

STANDARD HINGE



GATE POSTS OUTSIDE DEIMENSION (NOMINAL) TO BE 2.875"

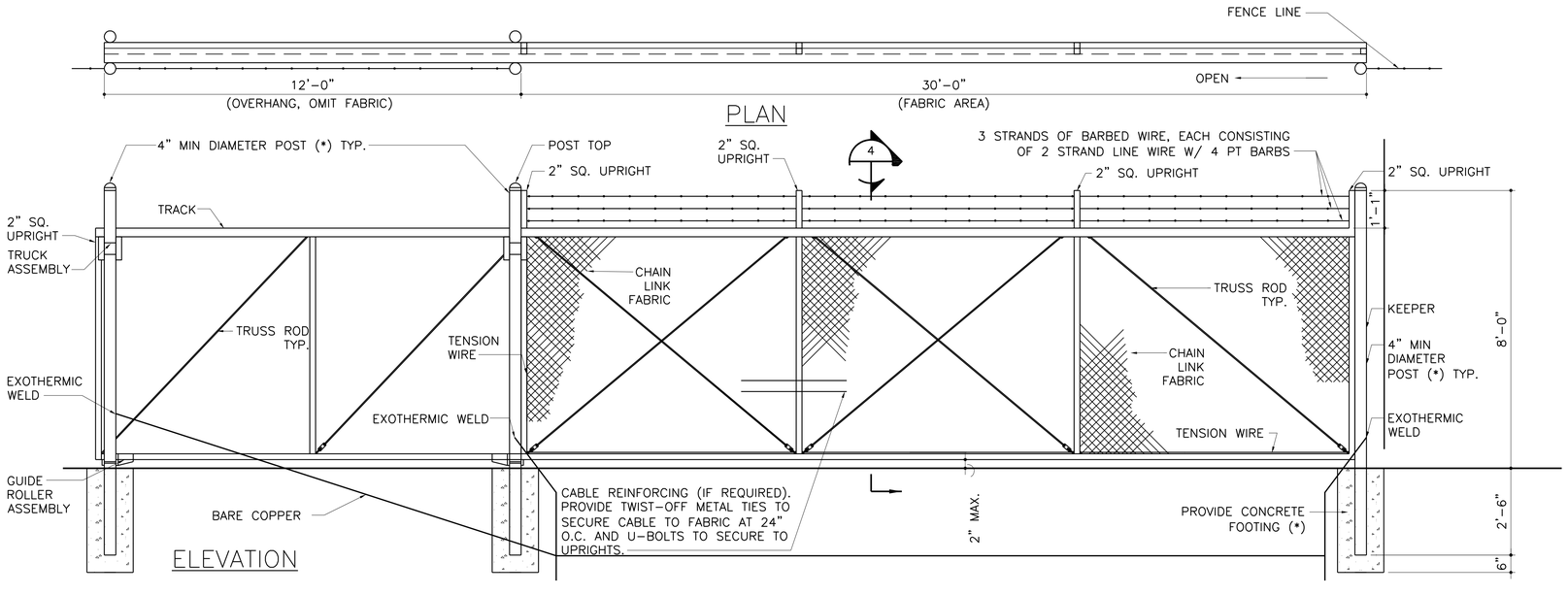
NOTES:

1. FOR NON-SENSORED FENCES, DETAILS SHOWN ARE TO CLARIFY REQUIREMENTS AND ARE NOT INTENDED TO LIMIT OTHER TYPE OF FENCE SECTIONS AND METHODS OF INSTALLATION WHICH COMPLY WITH THE SPECIFICATIONS.
2. SWING GATES SHALL BE CONSTRUCTED WITH DROP RODS, PADLOCKS, LATCH ASSEMBLY AND GATE KEEPERS EXCEPT AS NOTED.
3. ALL GATE FRAMES SHALL MEET THE
4. MINIMUM REQUIREMENTS OF ASTM F900 1.90" NOMINAL (ROUND) OR 2.00" NOMINAL (SQUARE). GATE FRAMES SHALL BE OF WELDED CONSTRUCTION OR SHALL BE ASSEMBLED USING HEAVY FITTINGS. AT CONTRACTOR'S OPTION A WELDED HORIZONTAL BRACE MAY BE USED IN LIEU OF TRUSS RODS TO BRACE ALL WELDED GATE FRAMES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER RIGID CONSTRUCTION OF ALL GATES SUPPLIED.
5. GATES SHALL BE DESIGNATED AS FOLLOWS:

FENCE TYPE	–	FE5, FE6, ETC.
FENCE HEIGHT	–	INCHES
TYPE OPENING	–	SO (SINGLE)
	–	DO (DOUBLE)
HINGE	–	RA (STANDARD)
	–	HO (OFFSET)
OPENING	–	FEET (CLEAR OPENING BETWEEN GATE POSTS)
EXAMPLES:		FE6-84-DO-RA-24
		FE5-48-SO-GO-6

6. UNLESS NOTED OTHERWISE, PROVIDE FE6-72-DO-HO-42.
7. SEE DRAWINGS PER NUMBER, WIDTH AND TYPE OF GATE OPENINGS.

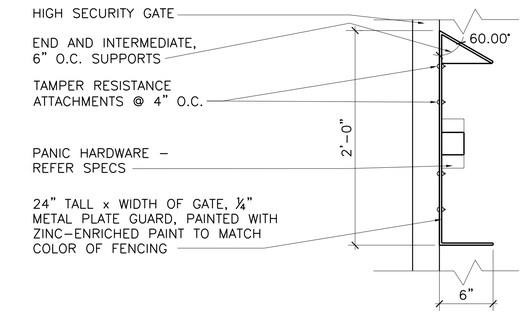
1 – PERSONNEL GATE TYPE FE-6 FENCE
NTS



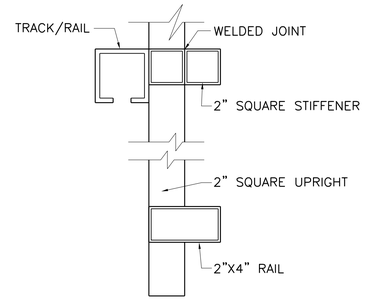
(*) POST SIZE AND ASSOCIATED FOOTING DIAMETER TO BE DETERMINED BY MANUFACTURER, BASED ON LEAF WEIGHT AND DIMENSION. MINIMUM FOOTING DIAMETERS (TO BE FILLED WITH 4000 PSI CONCRET: 40" DIAMETER FOR 8" POST; 36" DIAMETER FOR 6" POST; 24" DIAMETER FOR 4" POST; OTHER SIZES TO BE DESIGNED BY MANUFACTURER OR KTR. NO FOOTING WIDTH SHALL BE LESS THAN 4(X) THE POST WIDTH.

BARBED WIRE NOT SHOWN ON FENCE PORTION FOR CLARITY. SEE SHEET A-5 FOR FENCE DESIGN AND BARBED WIRE.

2 – SINGLE CANTILEVERED SLIDING GATE 3 FABRIC BAYS/2 WITHOUT
NTS



3 – PANIC HARDWARE GUARD AT PERSONNEL GATE
1 1/2" = 1'-0"



4 – SECTION (TYP)
NTS

BID OPTIONS "◯"

9. PROVIDE SITE SECURITY FENCING TO MEET ATFP STANDOFF REGULATIONS.

0 4" 8" 1'
1-1/2"=1'-0"

0 6" 1' 2'
3/4"=1'-0

0 1' 2' 4' 8'
1/4"=1'-0"

REGISTERED ARCHITECT HOMER D. SAENZ 25081 STATE OF TEXAS
04/20/2018

THE STATE OF TEXAS

PROJECT ARCHITECT:
HOMER SAENZ, AIA
PROJECT NO. ADG17589A
ISSUE DATE: 04/20/18
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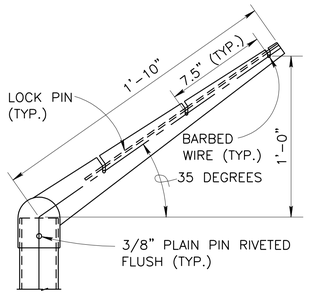
STAR CAMPAIGN FY18 - WESLACO
RC MAJOR MAINTENANCE

TXARNG CFMO

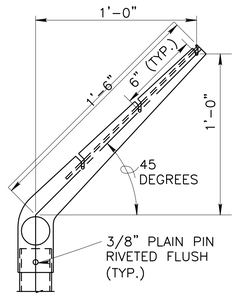
ARCHITECTURAL SITE DETAILS - BID OPTION 9

A-4

SHT. 11 of 129

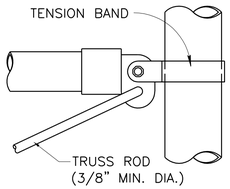


CORNER POST

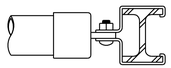


LINE POST

EXTENSION ARM DETAILS
NO SCALE

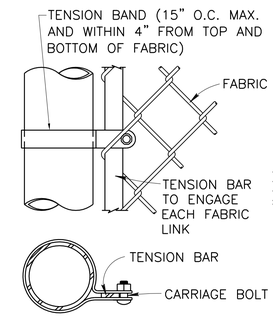


ROUND POST

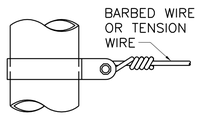


H-BEAM

BRACE RAIL CLAMP DETAILS

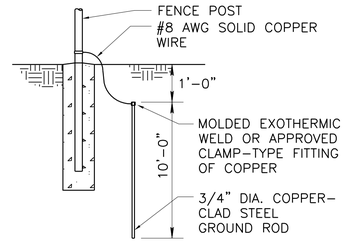


END OR GATE POST DETAIL

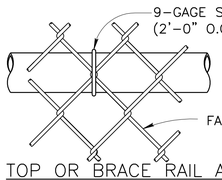


TENSION BAND DETAIL

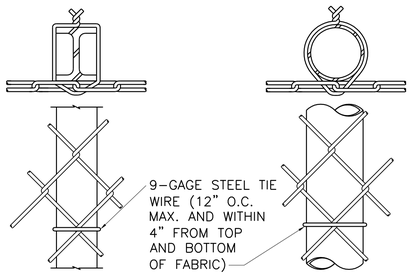
FASTENING DETAILS
NO SCALE



GROUNDING DETAIL
NO SCALE

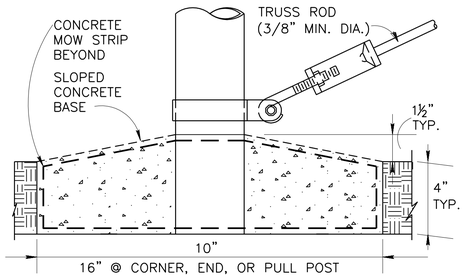


TOP OR BRACE RAIL ATTACHMENT

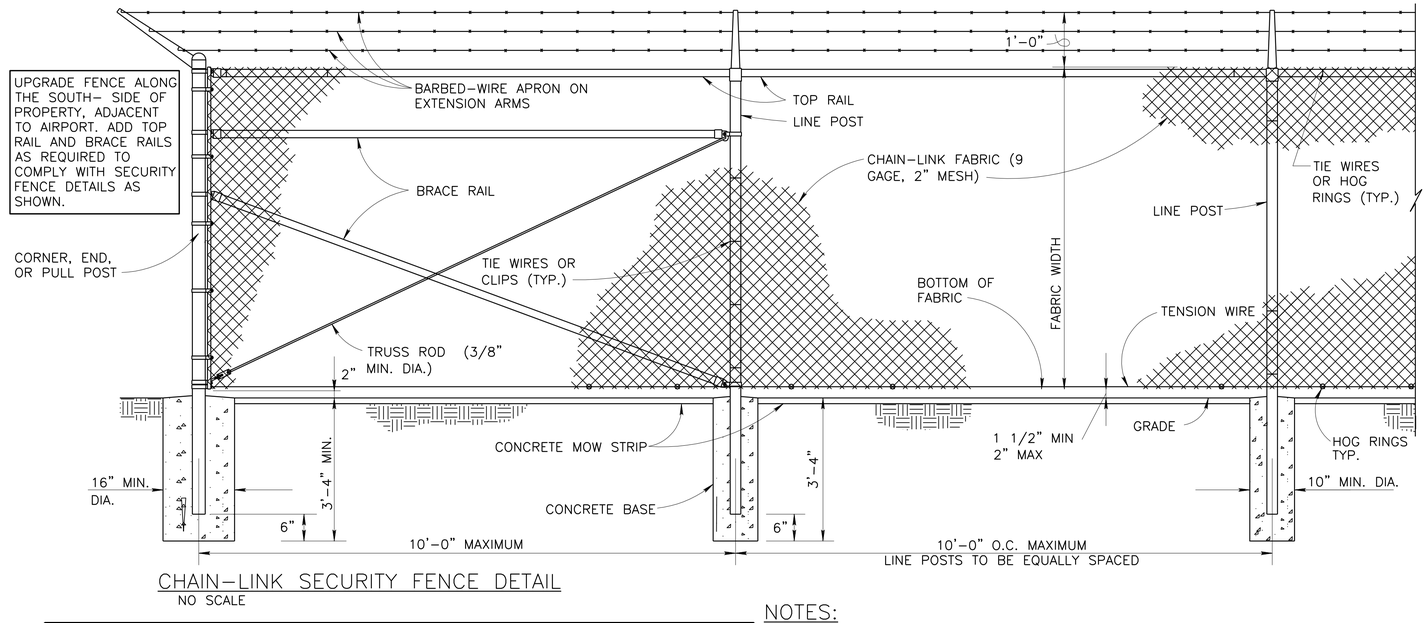


H-BEAM ROUND POST

LINE POST ATTACHMENTS
NO SCALE



TRUSS ROD AND BAND
NO SCALE



CHAIN-LINK SECURITY FENCE DETAIL
NO SCALE

STEEL POST SCHEDULE

USE AND SECTION	MINIMUM OUTSIDE DIMENSIONS (NOMINAL)		
	FABRIC WIDTH < 72"	FABRIC WIDTH 84" TO 96"	FABRIC WIDTH >108"
CORNER, END & PULL POSTS			
TUBULAR – ROUND	2.375" O.D.	2.875" O.D.	4.00" O.D.
TUBULAR – SQUARE	2.00" SQ.	2.50" SQ.	3.00" SQ.
C-SECTION (ROLL-FORMED)	3.50" X 3.50"	3.50" X 3.50"	———
LINE POSTS			
TUBULAR – ROUND	1.90" O.D.	2.375" O.D.	2.875" O.D.
H-SECTION	2.25" X 1.70"	2.25" X 1.70"	2.25" X 1.70"
C-SECTION (ROLL-FORMED)	1.875" X 1.625"	2.25" X 1.70"	———
TOP, BOTTOM & BRACE RAILS			
TUBULAR – ROUND	1.66" O.D.		
TUBULAR – SQUARE	1.50" SQ.		
H-SECTION	1.625" X 1.50"		
C-SECTION (ROLL-FORMED)	1.625" X 1.25"		

NOTES:

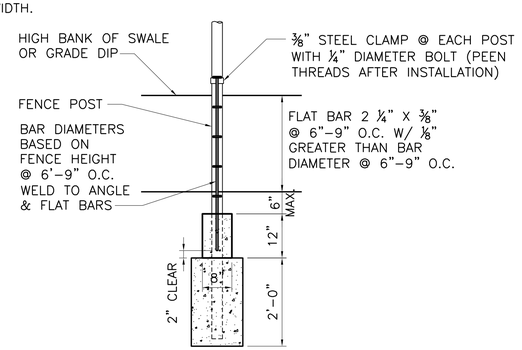
1. U.N.O. PROVIDE FENCE TYPE FE6, TR
2. DETAILS SHOWN ARE TO CLARIFY REQUIREMENTS AND ARE NOT INTENDED TO LIMIT OTHER TYPES OF FENCE SECTIONS AND METHODS OF INSTALLATION THAT COMPLY WITH THE SPECIFICATIONS.
3. WIRE TIES, RAILS, POSTS, AND BRACES SHALL BE CONSTRUCTED ON THE SECURE SIDE OF THE FENCE ALIGNMENT. CHAIN-LINK FABRIC SHALL BE PLACED ON THE SIDE OPPOSITE THE SECURE AREA.
4. UNLESS SPECIFICALLY SHOWN OR SPECIFIED, ALL FE6 FENCE SHALL HAVE AN APRON EXTENDED OUTWARD FROM THE AREA BEING PROTECTED.
5. C-SECTION POSTS SHALL BE INSTALLED SO THAT THE VOID INSIDE THE POST IS COMPLETELY FILLED WITH CONCRETE UP TO THE TOP OF THE FOUNDATION.
6. MODIFY FENCING AT SWALES AND GRADE DIPS PER UFC STANDARDS. COORDINATE WITH OWNER.

FENCE LEGEND:

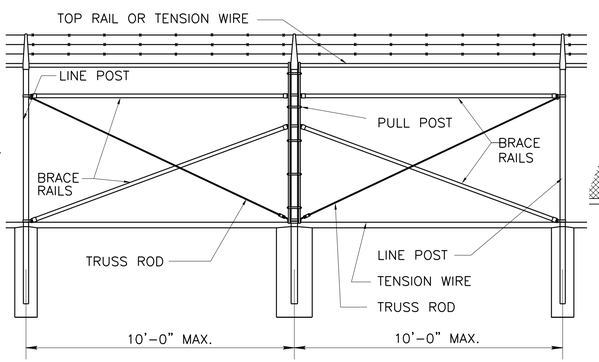
TYPE FE5 – CHAIN-LINK FENCE WITHOUT BARBED-WIRE APRON
TYPE FE6 – CHAIN-LINK FENCE W/BARBED-WIRE ON SINGLE OUTRIGGER
TYPE FE7 – CHAIN-LINK FENCE W/BARBED WIRE ON DOUBLE OUTRIGGER
TYPE FE8 – CHAIN-LINK FENCE W/BARBED-WIRE AND BARBED-TAPE ON DOUBLE OUTRIGGER
TR – FENCE WITH TOP RAIL AND TENSION WIRE AT BOTTOM
TBR – FENCE WITH TOP AND BOTTOM RAILS
TWB – TENSION WIRE TOP AND BOTTOM
TWBR – FENCE WITH TOP TENSION WIRE AND BOTTOM RAIL
FINAL NUMBER IS FABRIC WIDTH IN INCHES.

EXAMPLES

FE6-TR-72 – CHAIN-LINK SECURITY FENCE WITH BARBED-WIRE ON SINGLE OUTRIGGER, TOP RAIL, AND 72 INCH FABRIC WIDTH.
FE5-TWB-84 – CHAIN-LINK SECURITY FENCE WITH NO APRON, TOP AND BOTTOM TENSION WIRE, AND
84 INCH FABRIC WIDTH.

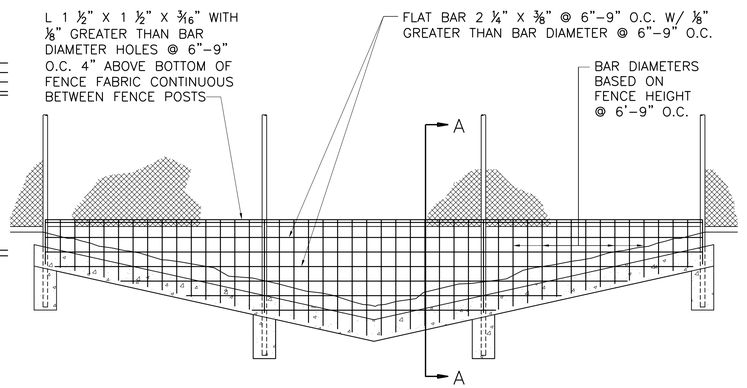


SECTION A-A



BRACE PANEL DETAIL
NO SCALE

NOTE: PROVIDE BRACE PANEL WHENEVER STRAIGHT RUNS EXCEED 500 FEET.



ELEVATION

FENCE SECURITY BARRIER AT SWALE OR GRADE DIP
NO SCALE

BID OPTIONS "◯"

9. PROVIDE SITE SECURITY FENCING TO MEET ATFP STANDOFF REGULATIONS.



PROJECT ARCHITECT:
HOMER SAENZ, AIA
PROJECT NO. ADG17589A
ISSUE DATE: 04/20/18
DRAWN BY: HS
REVIEWED BY: JWW

FREESE NICHOLS
4055 International Plaza, Suite 200
Fort Worth, Texas 76109-4895
Phone - (817) 735-7300
Fax - (817) 735-7491
Freese and Nichols, Inc.
Texas Registered Engineering Firm F-2144

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TEXAS MILITARY FORCES
CONSTRUCTION & FACILITIES MANAGEMENT OFFICE-CFMO
AUSTIN, TEXAS 78763-5218
FAX (512) 782-1481
CAMP MABRY P.O. BOX 5218
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STAR CAMPAIGN FY18 - WESLACO
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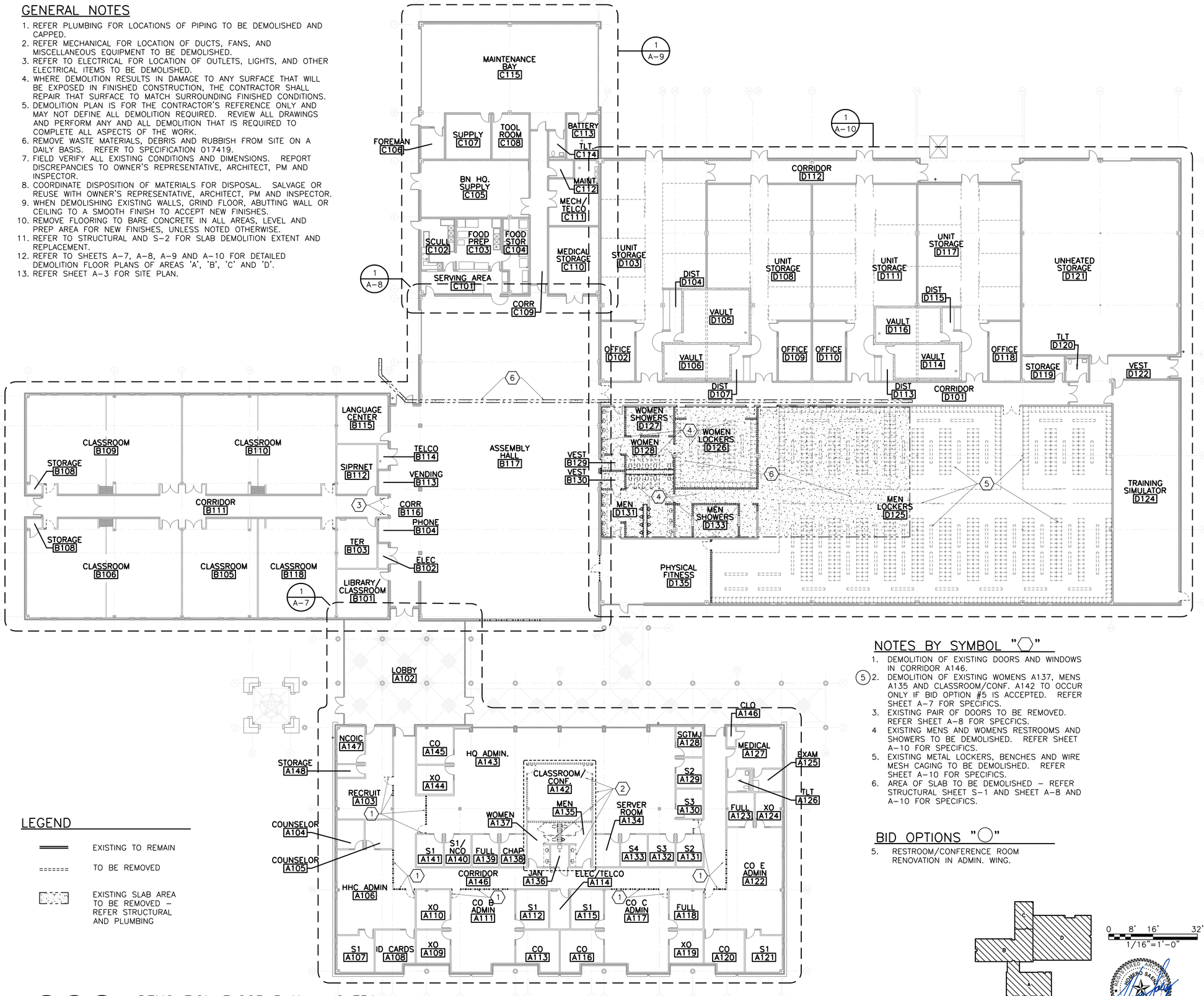
ARCHITECTURAL SECURITY FENCING DETAILS - BID OPTION 9

A-5

SHT. 12 of 129

GENERAL NOTES

1. REFER PLUMBING FOR LOCATIONS OF PIPING TO BE DEMOLISHED AND CAPPED.
2. REFER MECHANICAL FOR LOCATION OF DUCTS, FANS, AND MISCELLANEOUS EQUIPMENT TO BE DEMOLISHED.
3. REFER TO ELECTRICAL FOR LOCATION OF OUTLETS, LIGHTS, AND OTHER ELECTRICAL ITEMS TO BE DEMOLISHED.
4. WHERE DEMOLITION RESULTS IN DAMAGE TO ANY SURFACE THAT WILL BE EXPOSED IN FINISHED CONSTRUCTION, THE CONTRACTOR SHALL REPAIR THAT SURFACE TO MATCH SURROUNDING FINISHED CONDITIONS.
5. DEMOLITION PLAN IS FOR THE CONTRACTOR'S REFERENCE ONLY AND MAY NOT DEFINE ALL DEMOLITION REQUIRED. REVIEW ALL DRAWINGS AND PERFORM ANY AND ALL DEMOLITION THAT IS REQUIRED TO COMPLETE ALL ASPECTS OF THE WORK.
6. REMOVE WASTE MATERIALS, DEBRIS AND RUBBISH FROM SITE ON A DAILY BASIS. REFER TO SPECIFICATION 017419.
7. FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS. REPORT DISCREPANCIES TO OWNER'S REPRESENTATIVE, ARCHITECT, PM AND INSPECTOR.
8. COORDINATE DISPOSITION OF MATERIALS FOR DISPOSAL. SALVAGE OR REUSE WITH OWNER'S REPRESENTATIVE, ARCHITECT, PM AND INSPECTOR.
9. WHEN DEMOLISHING EXISTING WALLS, GRIND FLOOR, ABUTTING WALL OR CEILING TO A SMOOTH FINISH TO ACCEPT NEW FINISHES.
10. REMOVE FLOORING TO BARE CONCRETE IN ALL AREAS, LEVEL AND PREP AREA FOR NEW FINISHES, UNLESS NOTED OTHERWISE.
11. REFER TO STRUCTURAL AND S-2 FOR SLAB DEMOLITION EXTENT AND REPLACEMENT.
12. REFER TO SHEETS A-7, A-8, A-9 AND A-10 FOR DETAILED DEMOLITION FLOOR PLANS OF AREAS 'A', 'B', 'C' AND 'D'.
13. REFER SHEET A-3 FOR SITE PLAN.



NOTES BY SYMBOL "⬡"

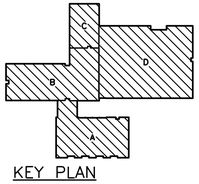
1. DEMOLITION OF EXISTING DOORS AND WINDOWS IN CORRIDOR A146.
5. 2. DEMOLITION OF EXISTING WOMENS A137, MENS A135 AND CLASSROOM/CONF. A142 TO OCCUR ONLY IF BID OPTION #5 IS ACCEPTED. REFER SHEET A-7 FOR SPECIFICS.
3. EXISTING PAIR OF DOORS TO BE REMOVED. REFER SHEET A-8 FOR SPECFICS.
4. EXISTING MENS AND WOMENS RESTROOMS AND SHOWERS TO BE DEMOLISHED. REFER SHEET A-10 FOR SPECIFICS.
5. EXISTING METAL LOCKERS, BENCHES AND WIRE MESH CAGING TO BE DEMOLISHED. REFER SHEET A-10 FOR SPECIFICS.
6. AREA OF SLAB TO BE DEMOLISHED – REFER STRUCTURAL SHEET S-1 AND SHEET A-8 AND A-10 FOR SPECIFICS.

BID OPTIONS "◯"

5. RESTROOM/CONFERENCE ROOM RENOVATION IN ADMIN. WING.

LEGEND

- EXISTING TO REMAIN
- TO BE REMOVED
- EXISTING SLAB AREA TO BE REMOVED – REFER STRUCTURAL AND PLUMBING



KEY PLAN

0 8' 16' 32'
1/16"=1'-0"

NORTH TRUE NORTH 1 – DEMOLITION FLOOR PLAN – OVERALL
1/16" = 1'-0"

04/20/2018

THE STATE OF TEXAS

PROJECT ARCHITECT:
HOMER SAENZ, AIA
PROJECT NO. ADG17589A
ISSUE DATE: 04/20/18
DRAWN BY: HS
REVIEWED BY: JWW

FREESE AND NICHOLS
4055 International Plaza, Suite 200
Fort Worth, Texas 76109-4895
Phone – (817) 735-7300
Fax – (817) 735-7491
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CAMP MABRY P.O. BOX 5218 AUSTIN, TEXAS 78763-5218
(512) 782-6131 FAX (512) 782-1481

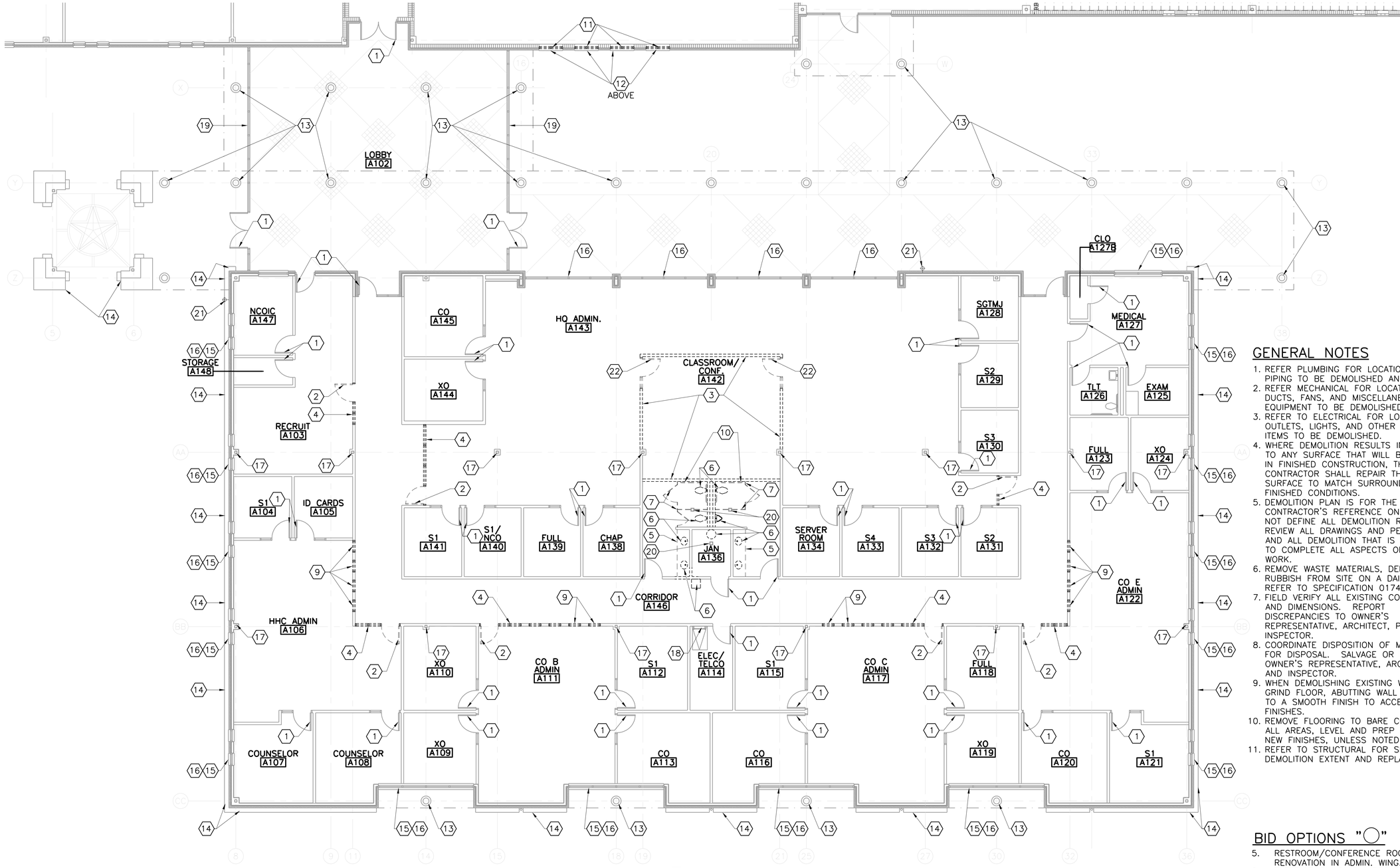
STAR CAMPAIGN FY18 - WESLACO
RC MAJOR MAINTENANCE

TXARNG CFMO

ARCHITECTURAL
OVERALL DEMOLITION FLOOR PLAN

A-6

SHT. 13 of 129



DEMOLITION FLOOR PLAN – AREA "A"

1/8" = 1'-0"

LEGEND

EXISTING TO REMAIN

TO BE REMOVED

NOTES BY SYMBOL "⬡"

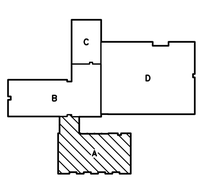
1. EXISTING DOOR TO REMAIN.
2. REMOVE EXISTING DOOR AND FRAME.
3. REMOVE EXISTING WALL.
4. REMOVE EXISTING SIDELIGHT AND FRAME.
5. REMOVE EXISTING MILLWORK COUNTERTOP.
6. REMOVE EXISTING PLUMBING. REF: PLUMBING.
7. REMOVE EXISTING TOILET PARTITIONS.
8. DEMOLISH FLOOR AS NOTED. REF: STRUCTURAL.
9. REMOVE EXISTING 2'X2' WINDOW.
10. REMOVE EXISTING WALL MOUNTED GRAB BARS.
11. REMOVE EXISTING LOUVER AND FRAME.
12. REMOVE EXISTING PORTION OF WALL ABOVE FOR NEW LOUVER.
13. EXISTING COLUMNS TO REMAIN.
14. EXISTING LIMESTONE WAINSCOT, CLEAN AND RESEAL.–TYP.
15. EXISTING LIMESTONE WINDOW HEADS AND SILLS, CLEAN AND RESEAL.–TYP.
16. EXISTING WINDOWS TO REMAIN
17. EXISTING STEEL COLUMN TO REMAIN.
18. EXISTING ROOF ACCESS LADDER AND HATCH TO REMAIN.
19. EXISTING STOREFRONT TO REMAIN.
20. EXISTING FLOOR DRAIN TO REMAIN – REFER PLUMBING.
21. DEMOLISH EXISTING HOSE BIB – REFER PLUMBING.
22. REMOVE EXISTING DOOR, FRAME AND SIDELIGHT, SALVAGE FOR REUSE.

GENERAL NOTES

1. REFER PLUMBING FOR LOCATIONS OF PIPING TO BE DEMOLISHED AND CAPPED.
2. REFER MECHANICAL FOR LOCATION OF DUCTS, FANS, AND MISCELLANEOUS EQUIPMENT TO BE DEMOLISHED.
3. REFER TO ELECTRICAL FOR LOCATION OF OUTLETS, LIGHTS, AND OTHER ELECTRICAL ITEMS TO BE DEMOLISHED.
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6. REMOVE WASTE MATERIALS, DEBRIS AND RUBBISH FROM SITE ON A DAILY BASIS. REFER TO SPECIFICATION 017419.
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10. REMOVE FLOORING TO BARE CONCRETE IN ALL AREAS, LEVEL AND PREP AREA FOR NEW FINISHES, UNLESS NOTED OTHERWISE.
11. REFER TO STRUCTURAL FOR SLAB DEMOLITION EXTENT AND REPLACEMENT.

BID OPTIONS "◯"

5. RESTROOM/CONFERENCE ROOM RENOVATION IN ADMIN. WING.
6. EXTERIOR BUILDING IMPROVEMENTS.



KEY PLAN

0 4' 8' 16'

1/8"=1'-0"

04/20/2018

PROJECT ARCHITECT:
HOMER SAENZ, AIA

PROJECT NO. ADG17589A
ISSUE DATE: 04/20/18
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REVIEWED BY: JWW

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4055 International Plaza, Suite 200
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Phone – (817) 735-7300
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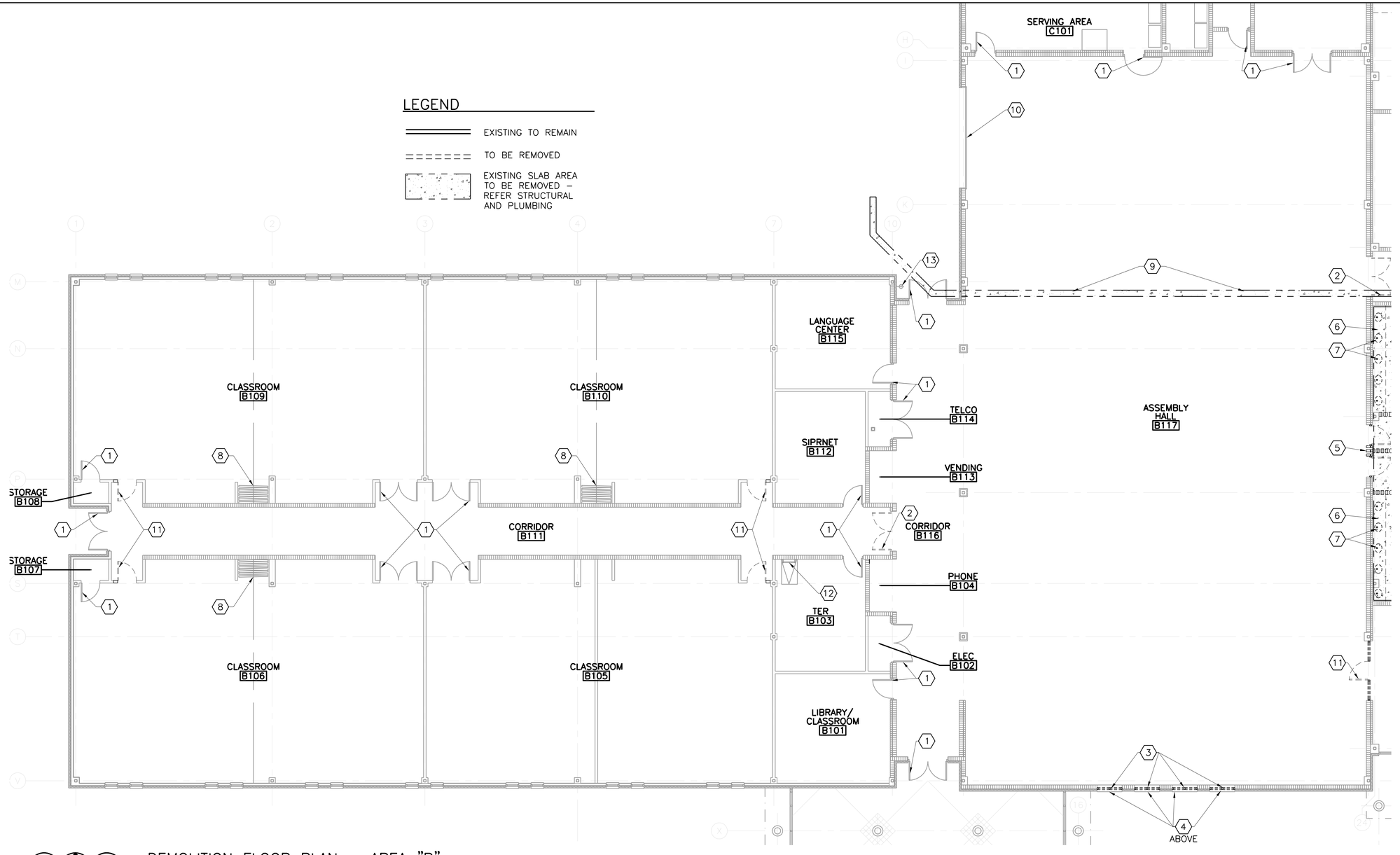
STAR CAMPAIGN FY18 - WESLACO
RC MAJOR MAINTENANCE

TXARNG CFMO

ARCHITECTURAL
DEMOLITION
FLOOR PLAN - AREA 'A'

A-7

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DEMOLITION FLOOR PLAN – AREA "B"

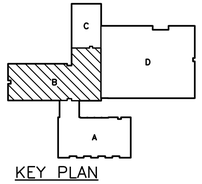
1/8" = 1'-0"

GENERAL NOTES

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10. REMOVE FLOORING TO BARE CONCRETE IN ALL AREAS, LEVEL AND PREP AREA FOR NEW FINISHES, UNLESS NOTED OTHERWISE.

NOTES BY SYMBOL "⬡"

1. EXISTING DOOR TO REMAIN.
2. REMOVE EXISTING PAIR OF DOORS AND FRAME.
3. REMOVE EXISTING LOUVER AND FRAME.
4. REMOVE EXISTING PORTION OF WALL ABOVE FOR NEW LOUVER.
5. REMOVE EXISTING WALL. REF: STRUCTURAL.
6. REMOVE EXISTING MILLWORK COUNTERTOP.
7. REMOVE EXISTING PLUMBING. REF: PLUMBING.
8. EXISTING ROOM DIVIDER TO REMAIN.
9. DEMOLISH FLOOR AS NOTED. REF: STRUCTURAL.
10. EXISTING OVERHEAD DOOR TO REMAIN.
11. REMOVE EXISTING DOOR AND FRAME AND PORTION OF WALL AS SHOWN. SALVAGE DOOR AND FRAME FOR RE-USE.
12. EXISTING ROOF ACCESS LADDER AND HATCH TO REMAIN.
13. DEMOLISH EXISTING HOSE BIB – REFER PLUMBING.



KEY PLAN

0 4' 8' 16'

1/8"=1'-0"

04/20/2018

PROJECT ARCHITECT:
HOMER SAENZ, AIA
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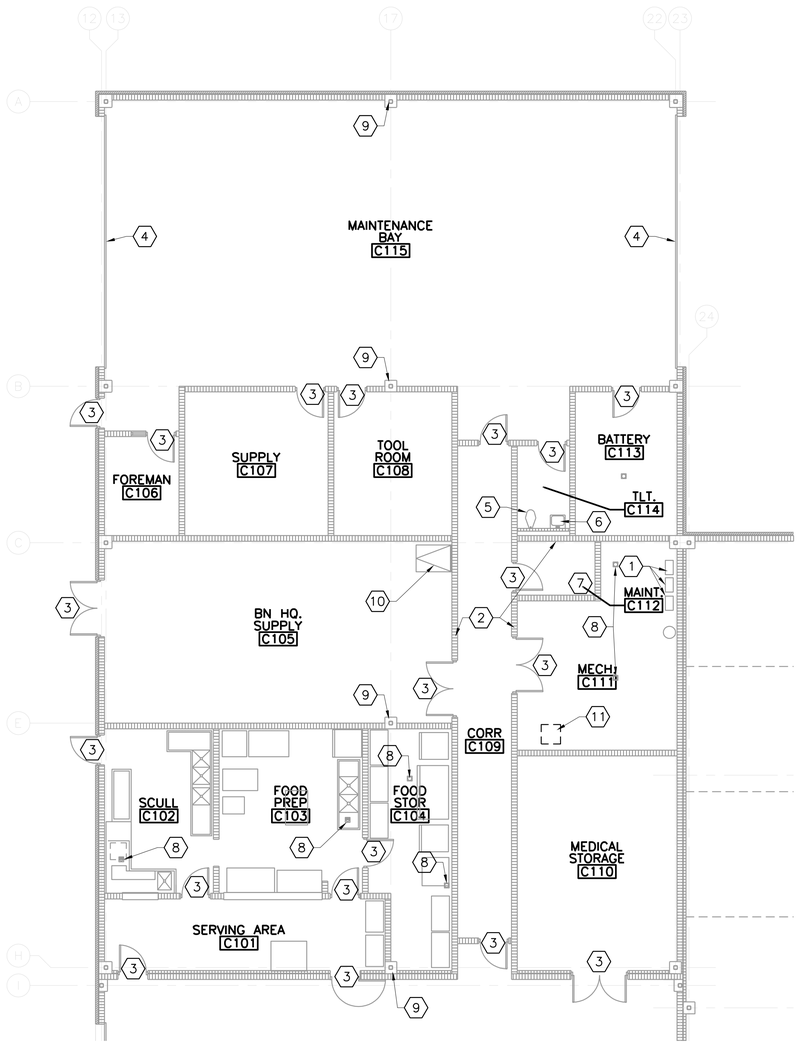
STAR CAMPAIGN FY18 - WESLACO
RC MAJOR MAINTENANCE

TXARNG CFMO

ARCHITECTURAL DEMOLITION FLOOR PLAN - AREA 'B'

A-8

SHT. 15 of 129



NORTH TRUE NORTH PLAN

1 — DEMOLITION FLOOR PLAN – AREA "C"

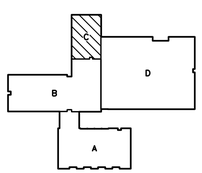
1/8" = 1'-0"

GENERAL NOTES

1. REFER PLUMBING FOR LOCATIONS OF PIPING TO BE DEMOLISHED AND CAPPED.
2. REFER MECHANICAL FOR LOCATION OF DUCTS, FANS, AND MISCELLANEOUS EQUIPMENT TO BE DEMOLISHED.
3. REFER TO ELECTRICAL FOR LOCATION OF OUTLETS, LIGHTS, AND OTHER ELECTRICAL ITEMS TO BE DEMOLISHED.
4. WHERE DEMOLITION RESULTS IN DAMAGE TO ANY SURFACE THAT WILL BE EXPOSED IN FINISHED CONSTRUCTION, THE CONTRACTOR SHALL REPAIR THAT SURFACE TO MATCH SURROUNDING FINISHED CONDITIONS.
5. DEMOLITION PLAN IS FOR THE CONTRACTOR'S REFERENCE ONLY AND MAY NOT DEFINE ALL DEMOLITION REQUIRED. REVIEW ALL DRAWINGS AND PERFORM ANY AND ALL DEMOLITION THAT IS REQUIRED TO COMPLETE ALL ASPECTS OF THE WORK.
6. REMOVE WASTE MATERIALS, DEBRIS AND RUBBISH FROM SITE ON A DAILY BASIS. REFER TO SPECIFICATION 017419.
7. FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS. REPORT DISCREPANCIES TO OWNER'S REPRESENTATIVE, ARCHITECT, PM AND INSPECTOR.
8. COORDINATE DISPOSITION OF MATERIALS FOR DISPOSAL. SALVAGE OR REUSE WITH OWNER'S REPRESENTATIVE, ARCHITECT, PM AND INSPECTOR.
9. WHEN DEMOLISHING EXISTING WALLS, GRIND FLOOR, ABUTTING WALL OR CEILING TO A SMOOTH FINISH TO ACCEPT NEW FINISHES.
10. REMOVE FLOORING TO BARE CONCRETE IN ALL AREAS, LEVEL AND PREP AREA FOR NEW FINISHES, UNLESS NOTED OTHERWISE.

NOTES BY SYMBOL "⬡"

1. EXISTING WATER HEATERS TO BE DEMOLISHED – REFER PLUMBING.
2. EXISTING CMU WALLS TO REMAIN.
3. EXISTING DOOR TO REMAIN.
4. EXISTING OVERHEAD DOOR TO REMAIN.
5. EXISTING WATER CLOSET TO REMAIN – REFER PLUMBING.
6. EXISTING SINK TO REMAIN – REFER PLUMBING.
7. EXISTING MOP SINK TO REMAIN – REFER PLUMBING.
8. EXISTING FLOOR DRAIN TO REMAIN – REFER PLUMBING.
9. EXISTING COLUMN TO REMAIN.
10. EXISTING ROOF ACCESS LADDER AND HATCH TO REMAIN.
11. EXISTING TRANSFORMER TO BE RELOCATED – REFER ELECTRICAL.



KEY PLAN

0 4' 8' 16'

1/8"=1'-0"

HOMER SAENZ 04/20/2018

PROJECT ARCHITECT: HOMER SAENZ, AIA

PROJECT NO. ADG17589A
ISSUE DATE: 04/20/18
DRAWN BY: HS
REVIEWED BY: JWW

FREESE NICHOLS
4055 International Plaza, Suite 200
Fort Worth, Texas 76109-4895
Phone – (817) 735-7300
Fax – (817) 735-7491
Freese and Nichols, Inc.
Texas Registered Engineering Firm F-2144

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TEXAS MILITARY FORCES
CONSTRUCTION & FACILITIES MANAGEMENT OFFICE–CFMO
AUSTIN, TEXAS 78763-5218
FAX (512) 782-1481
CAMP MABRY P.O. BOX 5218
(512) 782-6131

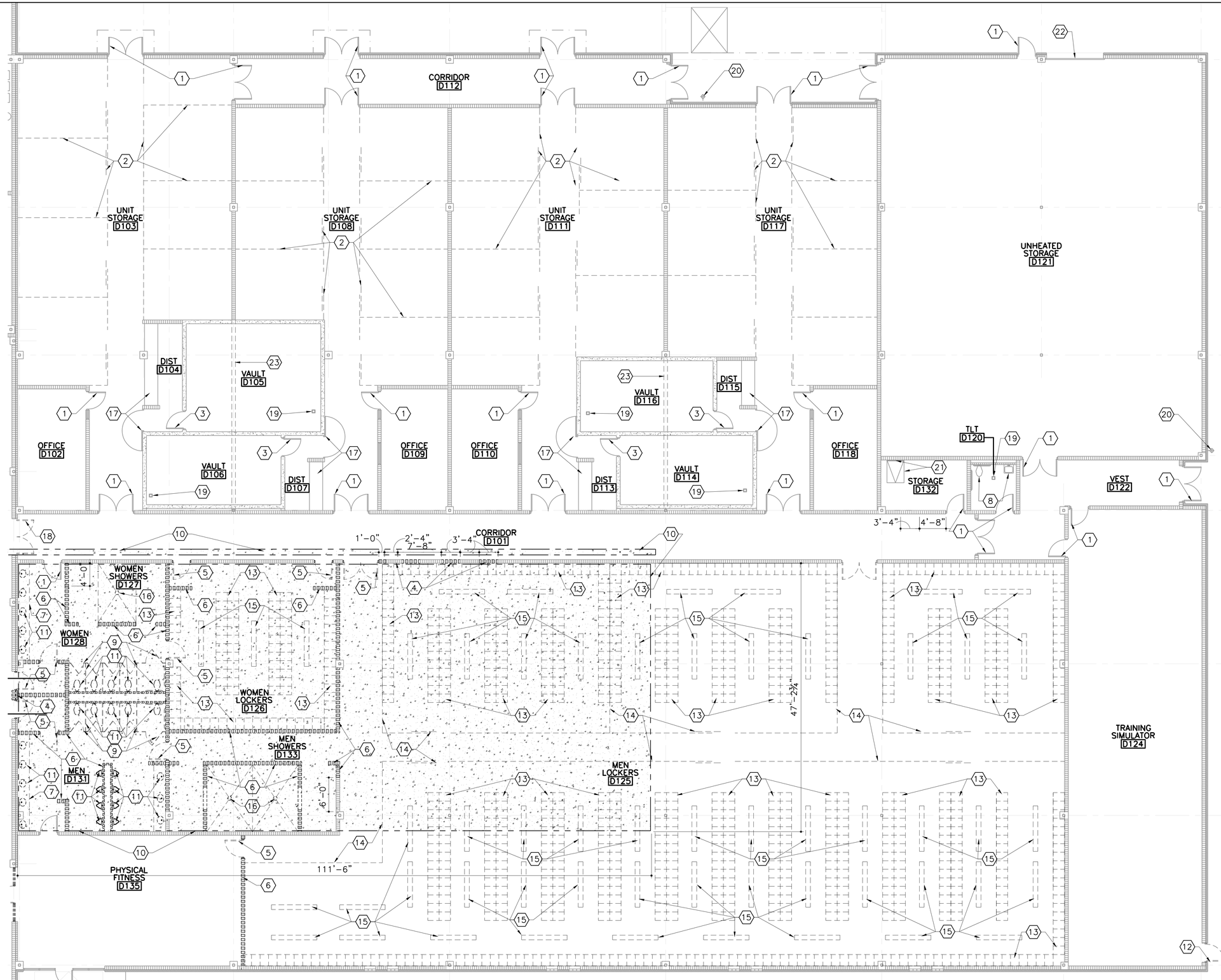
STAR CAMPAIGN FY18 - WESLACO
RC MAJOR MAINTENANCE

TXARNG CFMO

ARCHITECTURAL DEMOLITION FLOOR PLAN - AREA 'C'

A-9

SHT. 16 of 129

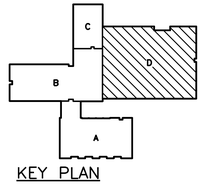


GENERAL NOTES

1. REFER PLUMBING FOR LOCATIONS OF PIPING TO BE DEMOLISHED AND CAPPED.
2. REFER MECHANICAL FOR LOCATION OF DUCTS, FANS, AND MISCELLANEOUS EQUIPMENT TO BE DEMOLISHED.
3. REFER TO ELECTRICAL FOR LOCATION OF OUTLETS, LIGHTS, AND OTHER ELECTRICAL ITEMS TO BE DEMOLISHED.
4. WHERE DEMOLITION RESULTS IN DAMAGE TO ANY SURFACE THAT WILL BE EXPOSED IN FINISHED CONSTRUCTION, THE CONTRACTOR SHALL REPAIR THAT SURFACE TO MATCH SURROUNDING FINISHED CONDITIONS.
5. DEMOLITION PLAN IS FOR THE CONTRACTOR'S REFERENCE ONLY AND MAY NOT DEFINE ALL DEMOLITION REQUIRED. REVIEW ALL DRAWINGS AND PERFORM ANY AND ALL DEMOLITION THAT IS REQUIRED TO COMPLETE ALL ASPECTS OF THE WORK.
6. REMOVE WASTE MATERIALS, DEBRIS AND RUBBISH FROM SITE ON A DAILY BASIS. REFER TO SPECIFICATION 017419.
7. FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS. REPORT DISCREPANCIES TO OWNER'S REPRESENTATIVE, ARCHITECT, PM AND INSPECTOR.
8. COORDINATE DISPOSITION OF MATERIALS FOR DISPOSAL. SALVAGE OR REUSE WITH OWNER'S REPRESENTATIVE, ARCHITECT, PM AND INSPECTOR.
9. WHEN DEMOLISHING EXISTING WALLS, GRIND FLOOR, ABUTTING WALL OR CEILING TO A SMOOTH FINISH TO ACCEPT NEW FINISHES.
10. REMOVE FLOORING TO BARE CONCRETE IN ALL AREAS, LEVEL AND PREP AREA FOR NEW FINISHES, UNLESS NOTED OTHERWISE.
11. REFER TO STRUCTURAL AND S-1 FOR SLAB DEMOLITION EXTENT AND REPLACEMENT.

NOTES BY SYMBOL "⬡"

1. EXISTING DOOR TO REMAIN.
2. EXISTING WIRE MESH, DOOR AND PANEL TO REMAIN.
3. EXISTING VAULT DOOR TO REMAIN.
4. REMOVE PORTION OF WALL FOR NEW OPENING. REF: STRUCTURAL.
5. REMOVE EXISTING DOOR AND FRAME.
6. REMOVE EXISTING CMU WALL.
7. REMOVE EXISTING COUNTERTOP.
8. EXISTING PLUMBING TO REMAIN. REF: PLUMBING.
9. REMOVE EXISTING TOILET PARTITIONS.
10. DEMOLISH FLOOR AS NOTED. REF: STRUCTURAL.
11. REMOVE EXISTING PLUMBING FIXTURE AND ASSOCIATED PIPING. REF: PLUMBING.
12. REMOVE EXISTING ACCESS DOOR AND FRAME.
13. REMOVE EXISTING METAL LOCKERS.
14. REMOVE EXISTING WIRE MESH PANELS AND DOORS.
15. REMOVE EXISTING FLOOR MOUNTED BENCH.
16. REMOVE EXISTING GANG SHOWER PEDESTAL.
17. ISSUE COUNTER AND GATE TO REMAIN.
18. REMOVE DOORS, FRAME TO REMAIN.
19. EXISTING FLOOR DRAIN TO REMAIN.
20. EXISTING HOSE BIB TO BE DEMOLISHED. REF: PLUMBING.
21. EXISTING ROOF ACCESS HATCH AND WALL MOUNTED LADDER TO REMAIN.
22. EXISTING OVERHEAD DOOR TO REMAIN.
23. EXISTING 8" CMU WALL CONTINUES ACROSS THE TOP OF VAULT AREA TO THE BOTTOM OF DECK.



KEY PLAN

0 4' 8' 16'
1/8"=1'-0"

LEGEND

EXISTING TO REMAIN

TO BE REMOVED

EXISTING SLAB AREA TO BE REMOVED – REFER STRUCTURAL AND PLUMBING

NORTH TRUE NORTH PLAN 1 –

DEMOLITION FLOOR PLAN – AREA "D"

1/8" = 1'-0"

JOHN D. SALAZAR — LICENSED ARCHITECT — STATE OF TEXAS — 25011 — REGISTERED

04/20/2018

THE STATE OF TEXAS

PROJECT ARCHITECT:
HOMER SAENZ, AIA
PROJECT NO. ADG17589A
ISSUE DATE: 04/20/18
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REVIEWED BY: JWW

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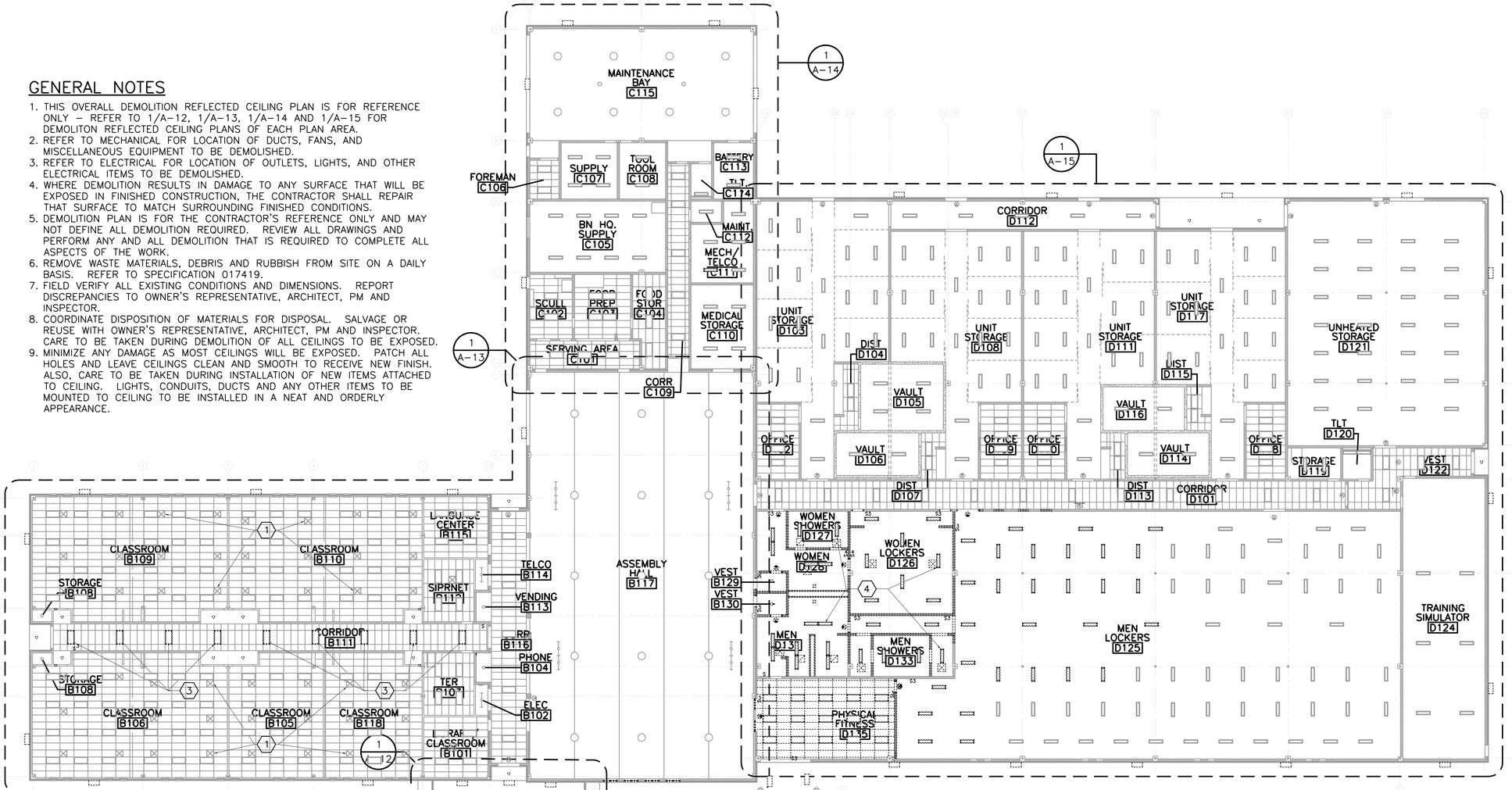
ARCHITECTURAL DEMOLITION FLOOR PLAN - AREA 'D'

A-10

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GENERAL NOTES

1. THIS OVERALL DEMOLITION REFLECTED CEILING PLAN IS FOR REFERENCE ONLY – REFER TO 1/A–12, 1/A–13, 1/A–14 AND 1/A–15 FOR DEMOLITON REFLECTED CEILING PLANS OF EACH PLAN AREA.
2. REFER TO MECHANICAL FOR LOCATION OF DUCTS, FANS, AND MISCELLANEOUS EQUIPMENT TO BE DEMOLISHED.
3. REFER TO ELECTRICAL FOR LOCATION OF OUTLETS, LIGHTS, AND OTHER ELECTRICAL ITEMS TO BE DEMOLISHED.
4. WHERE DEMOLITION RESULTS IN DAMAGE TO ANY SURFACE THAT WILL BE EXPOSED IN FINISHED CONSTRUCTION, THE CONTRACTOR SHALL REPAIR THAT SURFACE TO MATCH SURROUNDING FINISHED CONDITIONS.
5. DEMOLITION PLAN IS FOR THE CONTRACTOR'S REFERENCE ONLY AND MAY NOT DEFINE ALL DEMOLITION REQUIRED. REVIEW ALL DRAWINGS AND PERFORM ANY AND ALL DEMOLITION THAT IS REQUIRED TO COMPLETE ALL ASPECTS OF THE WORK.
6. REMOVE WASTE MATERIALS, DEBRIS AND RUBBISH FROM SITE ON A DAILY BASIS. REFER TO SPECIFICATION 017419.
7. FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS. REPORT DISCREPANCIES TO OWNER'S REPRESENTATIVE, ARCHITECT, PM AND INSPECTOR.
8. COORDINATE DISPOSITION OF MATERIALS FOR DISPOSAL. SALVAGE OR REUSE WITH OWNER'S REPRESENTATIVE, ARCHITECT, PM AND INSPECTOR. CARE TO BE TAKEN DURING DEMOLITION OF ALL CEILINGS TO BE EXPOSED.
9. MINIMIZE ANY DAMAGE AS MOST CEILINGS WILL BE EXPOSED. PATCH ALL HOLES AND LEAVE CEILINGS CLEAN AND SMOOTH TO RECEIVE NEW FINISH. ALSO, CARE TO BE TAKEN DURING INSTALLATION OF NEW ITEMS ATTACHED TO CEILING. LIGHTS, CONDUITS, DUCTS AND ANY OTHER ITEMS TO BE MOUNTED TO CEILING TO BE INSTALLED IN A NEAT AND ORDERLY APPEARANCE.



LEGEND

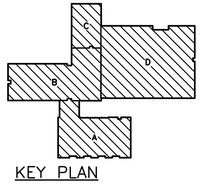
- EXISTING 2X4 ACOUSTICAL TILE GRID TO REMAIN
- EXISTING 1X4 LIGHT FIXTURE TO REMAIN
- EXISTING 2X4 LIGHT FIXTURE TO REMAIN
- EXISTING HI–BAY LIGHT FIXTURE TO REMAIN
- EXISTING CAN LIGHT FIXTURE TO REMAIN
- EXISTING HVAC DIFFUSER TO REMAIN
- EXISTING 2X4 ACOUSTICAL TILE GRID TO BE DEMOLISHED
- EXISTING 1X4 LIGHT FIXTURE TO BE DEMOLISHED
- EXISTING 2X4 LIGHT FIXTURE TO BE DEMOLISHED
- EXISTING HI–BAY LIGHT FIXTURE TO BE DEMOLISHED
- EXISTING CAN LIGHT FIXTURE TO BE DEMOLISHED
- EXISTING HVAC DIFFUSER TO BE DEMOLISHED

NOTES BY SYMBOL "⬡"

1. EXISTING HVAC DIFFUSERS TO REMAIN – REFER MECHANICAL.
5 2. DEMOLITION OF EXISTING WOMENS A137, MENS A135 AND CLASSROOM/CONF. A142 TO OCCUR ONLY IF BID OPTION #5 IS ACCEPTED. REFER SHEET A–12 FOR SPECIFICS.
3. EXISTING LIGHTS TO BE DEMOLISHED. REFER SHEET A–13 FOR SPECFICS.
4 EXISTING CEILINGS AND LIGHT FIXTURES MENS AND WOMENS RESTROOMS AND SHOWERS TO BE DEMOLISHED. REFER ELECTRICAL AND SHEET A–15 FOR SPECIFICS.

BID OPTIONS "◯"

5. RESTROOM/CONFERENCE ROOM RENOVATION IN ADMIN. WING.
6. EXTERIOR BUILDING IMPROVEMENTS



KEY PLAN

0 8' 16' 32'
1/16"=1'-0"

NORTH TRUE NORTH 1 – DEMOLITION REFLECTED CEILING PLAN – OVERALL
1/16" = 1'-0"

04/20/2018

PROJECT ARCHITECT:
HOMER SAENZ, AIA
PROJECT NO. ADG17589A
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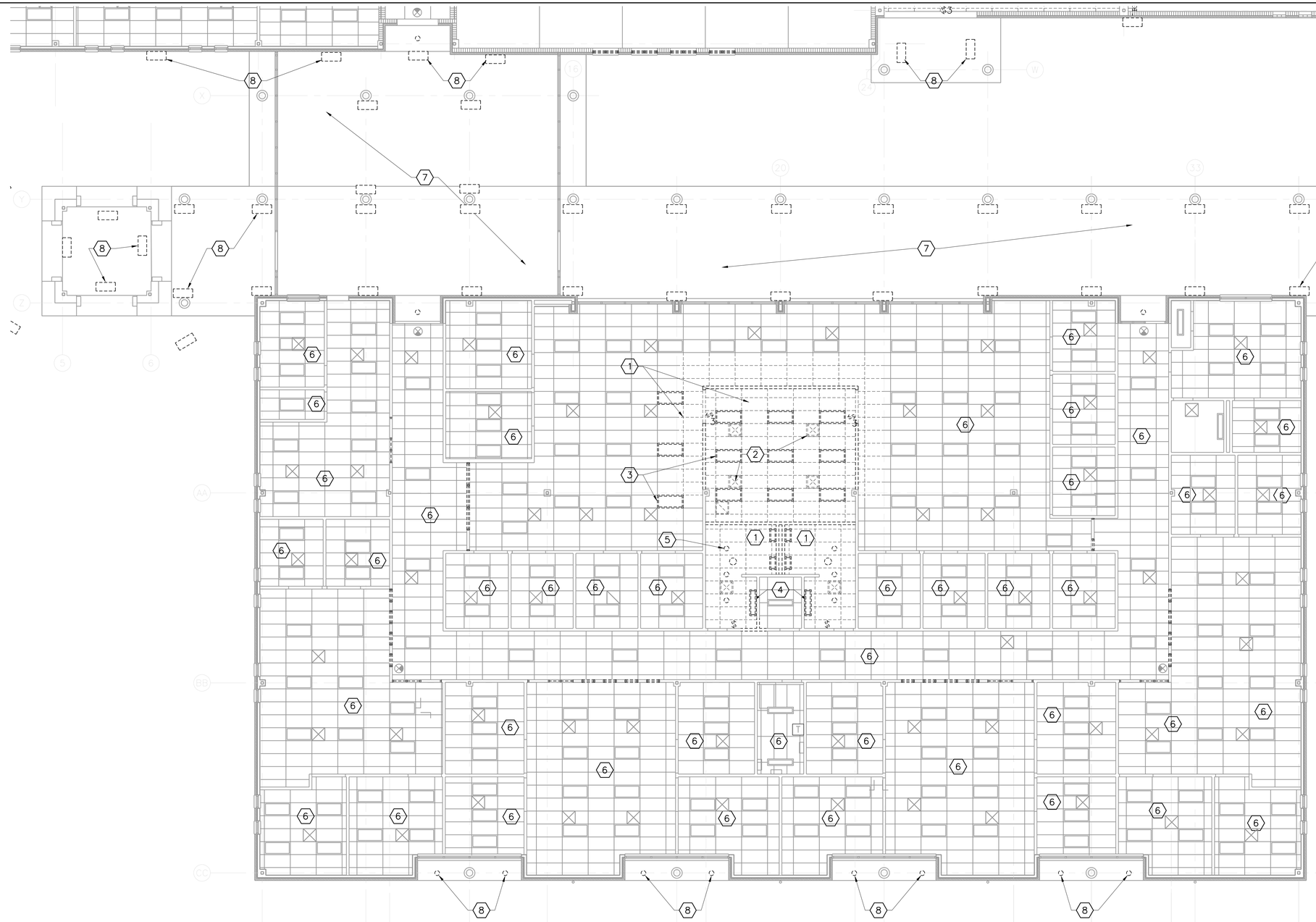
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ARCHITECTURAL OVERALL DEMOLITION REFLECTED CLNG PLAN

A-11

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LEGEND

- EXISTING 2X4 ACOUSTICAL TILE GRID TO REMAIN
- EXISTING 1X4 LIGHT FIXTURE TO REMAIN
- EXISTING 2X4 LIGHT FIXTURE TO REMAIN
- EXISTING CAN LIGHT FIXTURE TO REMAIN
- EXISTING HVAC DIFFUSER TO REMAIN
- EXISTING 2X4 ACOUSTICAL TILE GRID TO BE DEMOLISHED
- EXISTING 1X4 LIGHT FIXTURE TO BE DEMOLISHED
- EXISTING 2X4 LIGHT FIXTURE TO BE DEMOLISHED
- EXISTING CAN LIGHT FIXTURE TO BE DEMOLISHED
- EXISTING HVAC DIFFUSER TO BE DEMOLISHED

DEMOLITION REFLECTED CEILING PLAN – AREA "A"

1/8" = 1'-0"

GENERAL NOTES

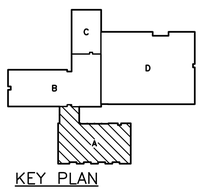
1. REFER TO MECHANICAL FOR LOCATION OF DUCTS, FANS, AND MISCELLANEOUS EQUIPMENT TO BE DEMOLISHED.
2. REFER TO ELECTRICAL FOR LOCATION OF OUTLETS, LIGHTS, AND OTHER ELECTRICAL ITEMS TO BE DEMOLISHED.
3. WHERE DEMOLITION RESULTS IN DAMAGE TO ANY SURFACE THAT WILL BE EXPOSED IN FINISHED CONSTRUCTION, THE CONTRACTOR SHALL REPAIR THAT SURFACE TO MATCH SURROUNDING FINISHED CONDITIONS.
4. DEMOLITION PLAN IS FOR THE G.C.'S REFERENCE ONLY AND MAY NOT DEFINE ALL DEMOLITION REQUIRED. REVIEW ALL DRAWINGS, PERFORM ANY AND ALL DEMOLITION THAT IS REQUIRED TO COMPLETE ALL ASPECTS OF THE WORK.
5. REMOVE WASTE MATERIALS, DEBRIS AND RUBBISH FROM SITE ON A DAILY BASIS. REFER TO SPECIFICATION 017419.
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NOTES BY SYMBOL "⬡"

(5) 1. DEMO EXISTING CEILING GRID AND TILES.
(5) 2. DEMO EXISTING HVAC DIFFUSER – RE: MECHANICAL.
(5) 3. DEMO EXISTING 2X4 LIGHT FIXTURE – RE: ELECTRICAL.
(5) 4. DEMO EXISTING 1X4 STRIP LIGHT FIXTURE – RE: ELECTRICAL.
(5) 5. DEMO EXISTING CAN LIGHT FIXTURE – RE: ELECTRICAL.
6. EXISTING CEILING GRID AND TILES TO BE REMOVED AND REPLACED AS NEEDED.
7. EXISTING EXPOSED STRUCTURE TO REMAIN.
(6) 8. IF BID OPTION#6 IS SELECTED, DEMOLISH EXISTING EXTERIOR LIGHT FIXTURE, OTHERWISE EXISTING EXTERIOR LIGHT FIXTURES ARE TO REMAIN.

BID OPTIONS "◯"

5. RESTROOM/CONFERENCE ROOM RENOVATION IN ADMIN. WING.
6. EXTERIOR BUILDING IMPROVEMENTS



KEY PLAN

0 4' 8' 16'
1/8"=1'-0"



04/20/2018

PROJECT ARCHITECT:
HOMER SAENZ, AIA

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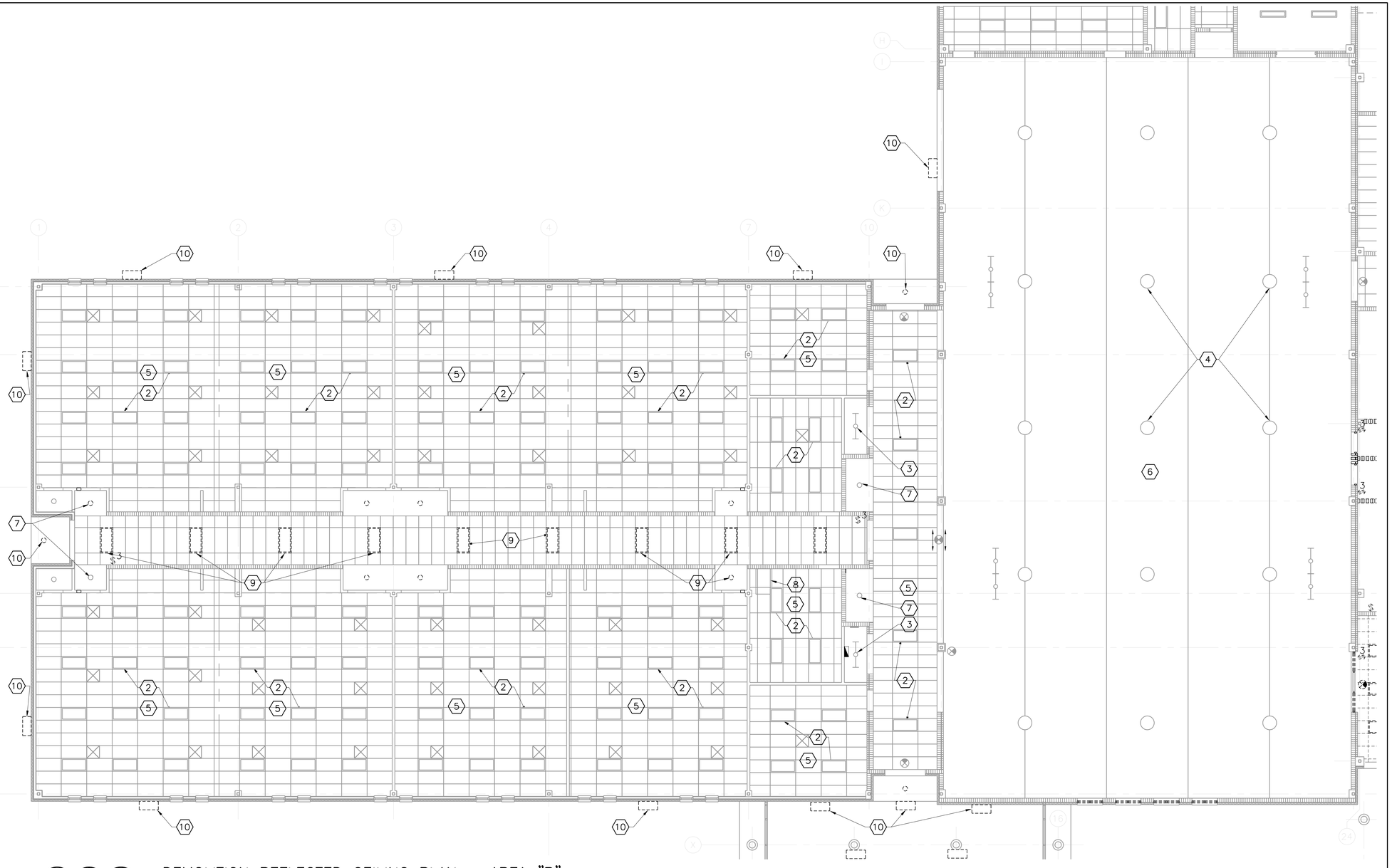
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ARCHITECTURAL DEMOLITION REFLECTED CEILING PLAN - AREA 'A'

A-12

SHT. 19 of 129



NORTH TRUE NORTH PLAN 1 – DEMOLITION REFLECTED CEILING PLAN – AREA "B"

1/8" = 1'-0"

GENERAL NOTES

1. REFER TO MECHANICAL FOR LOCATION OF DUCTS, FANS, AND MISCELLANEOUS EQUIPMENT TO BE DEMOLISHED.
2. REFER TO ELECTRICAL FOR LOCATION OF OUTLETS, LIGHTS, AND OTHER ELECTRICAL ITEMS TO BE DEMOLISHED.
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8. CARE TO BE TAKEN DURING DEMOLITION OF ALL CEILINGS TO BE EXPOSED. PATCH ALL HOLES AND LEAVE CEILINGS CLEAN AND SMOOTH TO RECEIVE NEW FINISH. ALSO, CARE TO BE TAKEN DURING INSTALLATION OF NEW ITEMS ATTACHED TO CEILING. LIGHTS, CONDUITS, DUCTS AND ANY OTHER ITEMS TO BE MOUNTED TO CEILING TO BE INSTALLED IN A NEAT AND ORDERLY APPEARANCE.

NOTES BY SYMBOL "⬡"

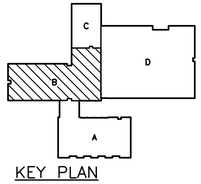
1. EXISTING HVAC DIFFUSER – RE: MECHANICAL.
2. EXISTING 2X4 LIGHT FIXTURE – RE: ELECTRICAL.
3. EXISTING 1X4 STRIP LIGHT FIXTURE – RE: ELECTRICAL.
4. EXISTING HI–BAY LIGHT FIXTURE – RE: ELECTRICAL.
5. EXISTING CEILING GRID AND TILES TO BE REMOVED AND REPLACED AS NEEDED.
6. EXISTING EXPOSED STRUCTURE TO REMAIN.
7. EXISTING CAN LIGHT TO REMAIN.
8. EXISTING ROOF ACCESS HATCH TO REMAIN.
9. DEMOLISH LIGHT FIXTURE. RE: ELECTRICAL.
10. IF BID OPTION#6 IS SELECTED, DEMOLISH EXISTING EXTERIOR LIGHT FIXTURE, OTHERWISE EXISTING EXTERIOR LIGHT FIXTURES ARE TO REMAIN.

LEGEND

- EXISTING 2X4 ACOUSTICAL TILE GRID TO REMAIN
- EXISTING 1X4 LIGHT FIXTURE TO REMAIN
- EXISTING 2X4 LIGHT FIXTURE TO REMAIN
- EXISTING HI–BAY LIGHT FIXTURE TO REMAIN
- EXISTING CAN LIGHT FIXTURE TO REMAIN
- EXISTING HVAC DIFFUSER TO REMAIN
- EXISTING 2X4 LIGHT FIXTURE TO BE DEMOLISHED

BID OPTIONS "◯"

6. EXTERIOR BUILDING IMPROVEMENTS



KEY PLAN

0 4' 8' 16'

1/8"=1'-0"



04/20/2018

THE STATE OF TEXAS

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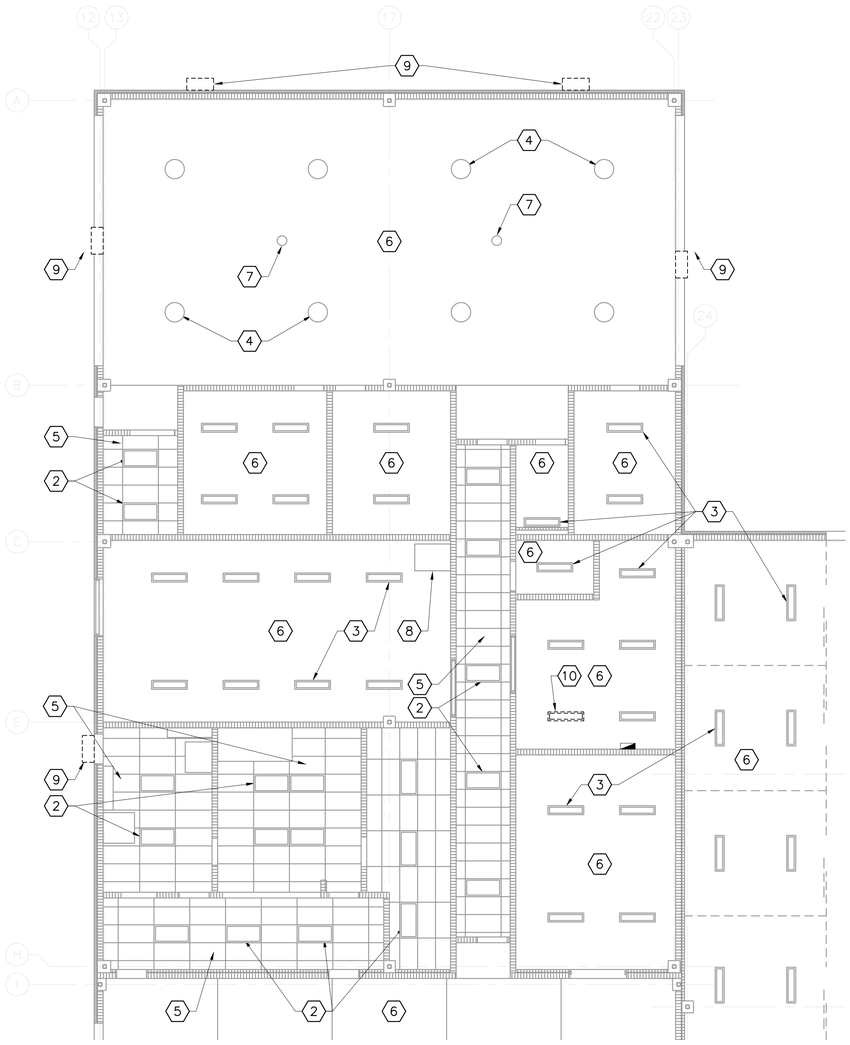
STAR CAMPAIGN FY18 - WESLACO
RC MAJOR MAINTENANCE

TXARNG CFMO

ARCHITECTURAL DEMOLITION REFLECTED CEILING PLAN - AREA 'B'

A-13

SHT. 20 of 129



LEGEND

- EXISTING 2X4 ACOUSTICAL TILE GRID TO REMAIN
- EXISTING 1X4 LIGHT FIXTURE TO REMAIN
- EXISTING 2X4 LIGHT FIXTURE TO REMAIN
- EXISTING HI-BAY LIGHT FIXTURE TO REMAIN
- EXISTING 1X4 LIGHT FIXTURE TO BE DEMOLISHED

NOTES BY SYMBOL "⬡"

1. EXISTING HVAC DIFFUSER – RE: MECHANICAL.
2. EXISTING 2X4 LIGHT FIXTURE – RE: ELECTRICAL.
3. EXISTING 1X4 STRIP LIGHT FIXTURE – RE: ELECTRICAL.
4. EXISTING HI-BAY LIGHT FIXTURE – RE: ELECTRICAL.
5. EXISTING CEILING GRID AND TILES TO REMAIN.
6. EXISTING EXPOSED STRUCTURE TO REMAIN.
7. EXISTING SPEAKER TO REMAIN.
8. EXISTING ROOF ACCESS HATCH TO REMAIN.
9. IF BID OPTION#6 IS SELECTED, DEMOLISH EXISTING EXTERIOR LIGHT FIXTURE, OTHERWISE EXISTING EXTERIOR LIGHT FIXTURES ARE TO REMAIN.
10. EXISTING 1X4 LIGHT FIXTURE TO BE DEMOLISHED – RE: ELECTRICAL

BID OPTIONS "◯"

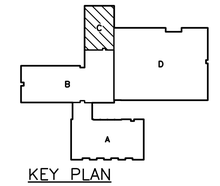
6. EXTERIOR BUILDING IMPROVEMENTS

DEMOLITION REFLECTED CEILING PLAN – AREA "C"

1/8" = 1'-0"

GENERAL NOTES

1. REFER TO MECHANICAL FOR LOCATION OF DUCTS, FANS, AND MISCELLANEOUS EQUIPMENT TO BE DEMOLISHED.
2. REFER TO ELECTRICAL FOR LOCATION OF OUTLETS, LIGHTS, AND OTHER ELECTRICAL ITEMS TO BE DEMOLISHED.
3. WHERE DEMOLITION RESULTS IN DAMAGE TO ANY SURFACE THAT WILL BE EXPOSED IN FINISHED CONSTRUCTION, THE CONTRACTOR SHALL REPAIR THAT SURFACE TO MATCH SURROUNDING FINISHED CONDITIONS.
4. DEMOLITION PLAN IS FOR THE G.C.'S REFERENCE ONLY AND MAY NOT DEFINE ALL DEMOLITION REQUIRED. REVIEW ALL DRAWINGS, PERFORM ANY AND ALL DEMOLITION THAT IS REQUIRED TO COMPLETE ALL ASPECTS OF THE WORK.
5. REMOVE WASTE MATERIALS, DEBRIS AND RUBBISH FROM SITE ON A DAILY BASIS. REFER TO SPECIFICATION 017419.
6. FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS. REPORT DISCREPANCIES TO OWNER'S REPRESENTATIVE, ARCHITECT, PM AND INSPECTOR.
7. COORDINATE DISPOSITION OF MATERIALS FOR DISPOSAL. SALVAGE OR REUSE WITH OWNER'S REPRESENTATIVE, ARCHITECT, PM AND INSPECTOR.
8. CARE TO BE TAKEN DURING DEMOLITION OF ALL CEILINGS TO BE EXPOSED. PATCH ALL HOLES AND LEAVE CEILINGS CLEAN AND SMOOTH TO RECEIVE NEW FINISH. ALSO, CARE TO BE TAKEN DURING INSTALLATION OF NEW ITEMS ATTACHED TO CEILING. LIGHTS, CONDUITS, DUCTS AND ANY OTHER ITEMS TO BE MOUNTED TO CEILING TO BE INSTALLED IN A NEAT AND ORDERLY APPEARANCE.



KEY PLAN

0 4' 8' 16'

1/8"=1'-0"

04/20/2018

PROJECT ARCHITECT:
HOMER SAENZ, AIA
PROJECT NO. ADG17589A
ISSUE DATE: 04/20/18
DRAWN BY: HS
REVIEWED BY: JWW

FREESE AND NICHOLS
4055 International Plaza, Suite 200
Fort Worth, Texas 76109-4895
Phone - (817) 735-7300
Fax - (817) 735-7491
Freese and Nichols, Inc.
Texas Registered Engineering Firm F-2144

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CONSTRUCTION & FACILITIES MANAGEMENT OFFICE-CFMO
CAMP MABRY P.O. BOX 5218
AUSTIN, TEXAS 78763-5218
(512) 782-6131 FAX (512) 782-1481

STAR CAMPAIGN FY18 - WESLACO
RC MAJOR MAINTENANCE

TXARNG CFMO

ARCHITECTURAL DEMOLITION REFLECTED CEILING PLAN - AREA 'C'

A-14

SHT. 21 of 129



GENERAL NOTES

1. RE: MECHANICAL FOR LOCATION OF DUCTS, FANS, AND MISCELLANEOUS EQUIPMENT TO BE DEMOLISHED.
2. RE: ELECTRICAL FOR LOCATION OF OUTLETS, LIGHTS, AND OTHER ELECTRICAL ITEMS TO BE DEMOLISHED.
3. WHERE DEMOLITION RESULTS IN DAMAGE TO ANY SURFACE THAT WILL BE EXPOSED IN FINISHED CONSTRUCTION, THE G.C. SHALL REPAIR THAT SURFACE TO MATCH SURROUNDING FINISHED CONDITIONS.
4. DEMOLITION PLAN IS FOR THE G.C.'S REFERENCE ONLY AND MAY NOT DEFINE ALL DEMOLITION REQUIRED. REVIEW ALL DRAWINGS, PERFORM ANY AND ALL DEMOLITION THAT IS REQUIRED TO
5. COMPLETE ALL ASPECTS OF THE WORK. REMOVE WASTE MATERIALS, DEBRIS AND RUBBISH FROM SITE ON A DAILY BASIS. REFER TO SPECIFICATION 017419.
6. FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS. REPORT DISCREPANCIES TO OWNER'S REPRESENTATIVE, ARCHITECT, PM AND INSPECTOR.
7. COORDINATE DISPOSITION OF MATERIALS FOR DISPOSAL. SALVAGE OR REUSE WITH OWNER'S REPRESENTATIVE, ARCHITECT, PM AND INSPECTOR.
8. CARE TO BE TAKEN DURING DEMOLITION OF ALL CEILINGS TO BE EXPOSED. PATCH ALL HOLES AND LEAVE CEILINGS CLEAN AND SMOOTH TO RECEIVE NEW FINISH. ALSO, CARE TO BE TAKEN DURING INSTALLATION OF NEW ITEMS ATTACHED TO CEILING. LIGHTS, CONDUITS, DUCTS AND ANY OTHER ITEMS TO BE MOUNTED TO CEILING TO BE INSTALLED IN A NEAT AND ORDERLY APPEARANCE.

LEGEND

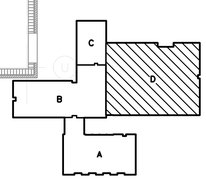
- EXISTING 2X4 ACOUSTICAL TILE GRID TO REMAIN
- EXISTING 1X4 LIGHT FIXTURE TO REMAIN
- EXISTING 2X4 LIGHT FIXTURE TO REMAIN
- EXISTING CAN LIGHT FIXTURE TO REMAIN
- EXISTING HVAC DIFFUSER TO REMAIN
- EXISTING 2X4 ACOUSTICAL TILE GRID TO BE DEMOLISHED
- EXISTING 1X4 LIGHT FIXTURE TO BE DEMOLISHED
- EXISTING 2X4 LIGHT FIXTURE TO BE DEMOLISHED
- EXISTING CAN LIGHT FIXTURE TO BE DEMOLISHED
- EXISTING HVAC DIFFUSER TO BE DEMOLISHED

BID OPTIONS "◯"

6. EXTERIOR BUILDING IMPROVEMENTS

NOTES BY SYMBOL "⬡"

1. DEMO EXISTING CEILING GRID AND TILES.
2. DEMO EXISTING HVAC DIFFUSER – RE: MECHANICAL.
3. DEMO EXISTING 2X4 LIGHT FIXTURE – RE: ELECTRICAL.
4. DEMO EXISTING 1X4 STRIP LIGHT FIXTURE – RE: ELECTRICAL.
5. DEMO EXISTING CAN LIGHT FIXTURE – RE: ELECTRICAL.
6. EXISTING CEILING GRID AND TILES TO BE REMOVED AND REPLACED AS NEEDED.
7. EXISTING EXPOSED STRUCTURE TO REMAIN.
8. EXISTING 2X4 LIGHT FIXTURE TO REMAIN – RE: ELECTRICAL.
9. EXISTING 1X4 STRIP LIGHT FIXTURE TO REMAIN – RE: ELECTRICAL.
10. EXISTING CAN LIGHT FIXTURE TO REMAIN – RE: ELECTRICAL.
11. IF BID OPTION#6 IS SELECTED, DEMOLISH EXISTING EXTERIOR LIGHT FIXTURE, OTHERWISE EXISTING EXTERIOR LIGHT FIXTURES ARE TO REMAIN.
12. EXISTING ROOF ACCESS HATCH TO REMAIN.



KEY PLAN

0 4' 8' 16'
1/8"=1'-0"

04/20/2018

NORTH TRUE NORTH PLAN 1 –

DEMOLITION REFLECTED CEILING PLAN – AREA "D"
1/8" = 1'-0"

THE STATE OF TEXAS

PROJECT ARCHITECT:
HOMER SAENZ, AIA
PROJECT NO. ADG17589A
ISSUE DATE: 04/20/18
DRAWN BY: HS
REVIEWED BY: JWW

FREESE NICHOLS
4055 International Plaza, Suite 200
Fort Worth, Texas 76109-4895
Phone - (817) 735-7300
Fax - (817) 735-7491
Freese and Nichols, Inc.
Texas Registered Engineering
Firm F-2144

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CAMP MABRY P.O. BOX 5218
(512) 782-6131
AUSTIN, TEXAS, 78763-5218
FAX (512) 782-1481

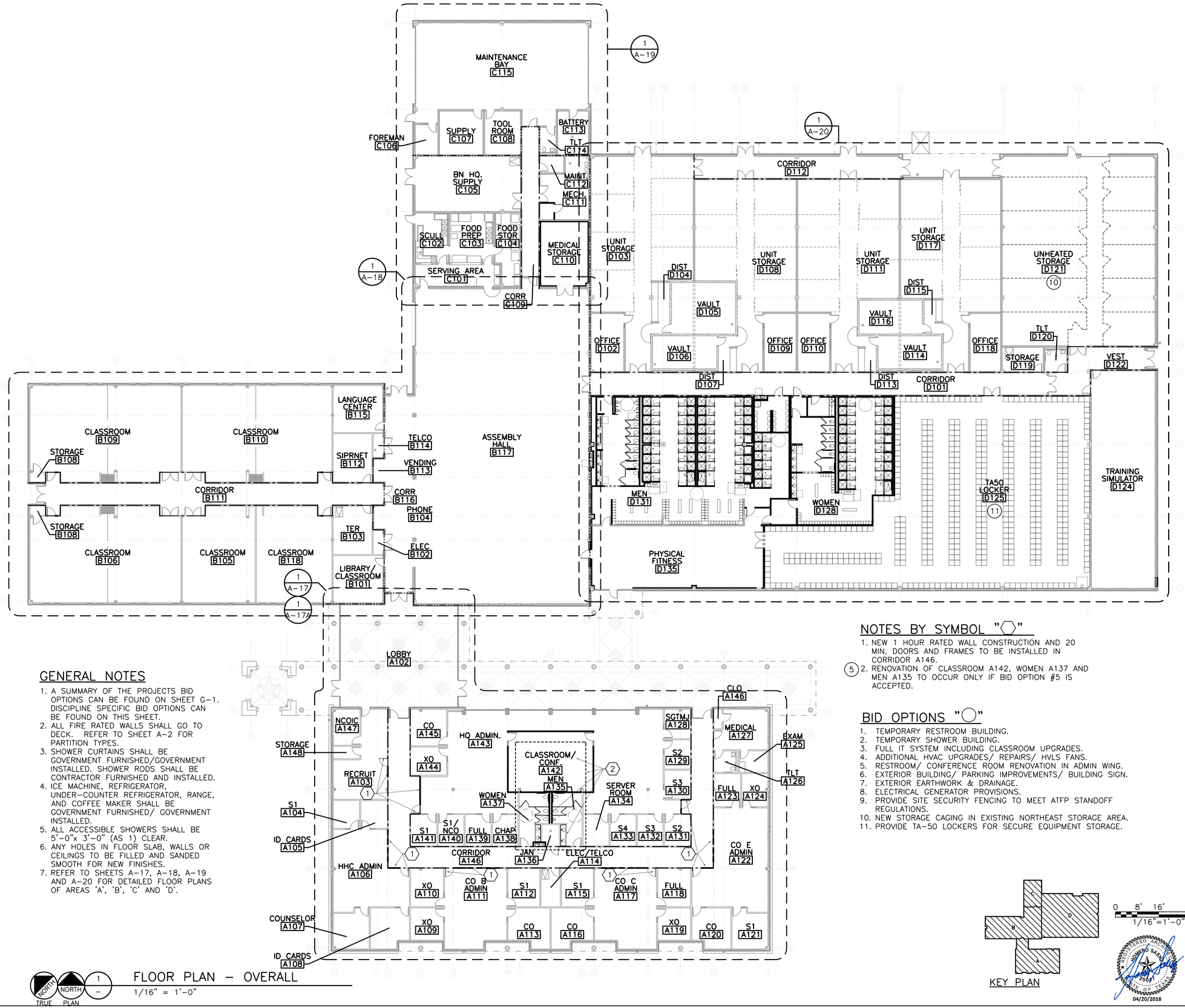
STAR CAMPAIGN FY18 - WESLACO
RC MAJOR MAINTENANCE

TXARNG CFMO

ARCHITECTURAL DEMOLITION REFLECTED CEILING PLAN - AREA 'D'

A-15

SHT. 22 of 129



GENERAL NOTES

1. A SUMMARY OF THE PROJECTS BID OPTIONS CAN BE FOUND ON SHEET G-1. DISCIPLINE SPECIFIC BID OPTIONS CAN BE FOUND ON THIS SHEET.
2. ALL FIRE RATED WALLS SHALL GO TO DECK. REFER TO SHEET A-2 FOR PARTITION TYPES.
3. SHOWER CURTAINS SHALL BE GOVERNMENT FURNISHED/GOVERNMENT INSTALLED. SHOWER RODS SHALL BE CONTRACTOR FURNISHED AND INSTALLED.
4. ICE MACHINE, REFRIGERATOR, UNDER-COUNTER REFRIGERATOR, RANGE, AND COFFEE MAKER SHALL BE GOVERNMENT FURNISHED/ GOVERNMENT INSTALLED.
5. ALL ACCESSIBLE SHOWERS SHALL BE 5'-0"x 3'-0" (AS 1) CLEAR.
6. ANY HOLES IN FLOOR SLAB, WALLS OR CEILINGS TO BE FILLED AND SANDED SMOOTH FOR NEW FINISHES.
7. REFER TO SHEETS A-17, A-18, A-19 AND A-20 FOR DETAILED FLOOR PLANS OF AREAS 'A', 'B', 'C' AND 'D'.

NOTES BY SYMBOL "⬡"

1. NEW 1 HOUR RATED WALL CONSTRUCTION AND 20 MIN. DOORS AND FRAMES TO BE INSTALLED IN CORRIDOR A146.
(5) 2. RENOVATION OF CLASSROOM A142, WOMEN A137 AND MEN A135 TO OCCUR ONLY IF BID OPTION #5 IS ACCEPTED.

BID OPTIONS "◯"

1. TEMPORARY RESTROOM BUILDING.
2. TEMPORARY SHOWER BUILDING.
3. FULL IT SYSTEM INCLUDING CLASSROOM UPGRADES.
4. ADDITIONAL HVAC UPGRADES/ REPAIRS/ HVLS FANS.
5. RESTROOM/ CONFERENCE ROOM RENOVATION IN ADMIN WING.
6. EXTERIOR BUILDING/ PARKING IMPROVEMENTS/ BUILDING SIGN.
7. EXTERIOR EARTHWORK & DRAINAGE.
8. ELECTRICAL GENERATOR PROVISIONS.
9. PROVIDE SITE SECURITY FENCING TO MEET ATFP STANDOFF REGULATIONS.
10. NEW STORAGE CAGING IN EXISTING NORTHEAST STORAGE AREA.
11. PROVIDE TA-50 LOCKERS FOR SECURE EQUIPMENT STORAGE.

KEY PLAN

0 8' 16' 32'
1/16"=1'-0"

NORTH TRUE NORTH 1 – PLAN

FLOOR PLAN – OVERALL
1/16" = 1'-0"

PROJECT ARCHITECT:
HOMER SAENZ, AIA
PROJECT NO. ADG17589A
ISSUE DATE: 04/20/18
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REVIEWED BY: JWW

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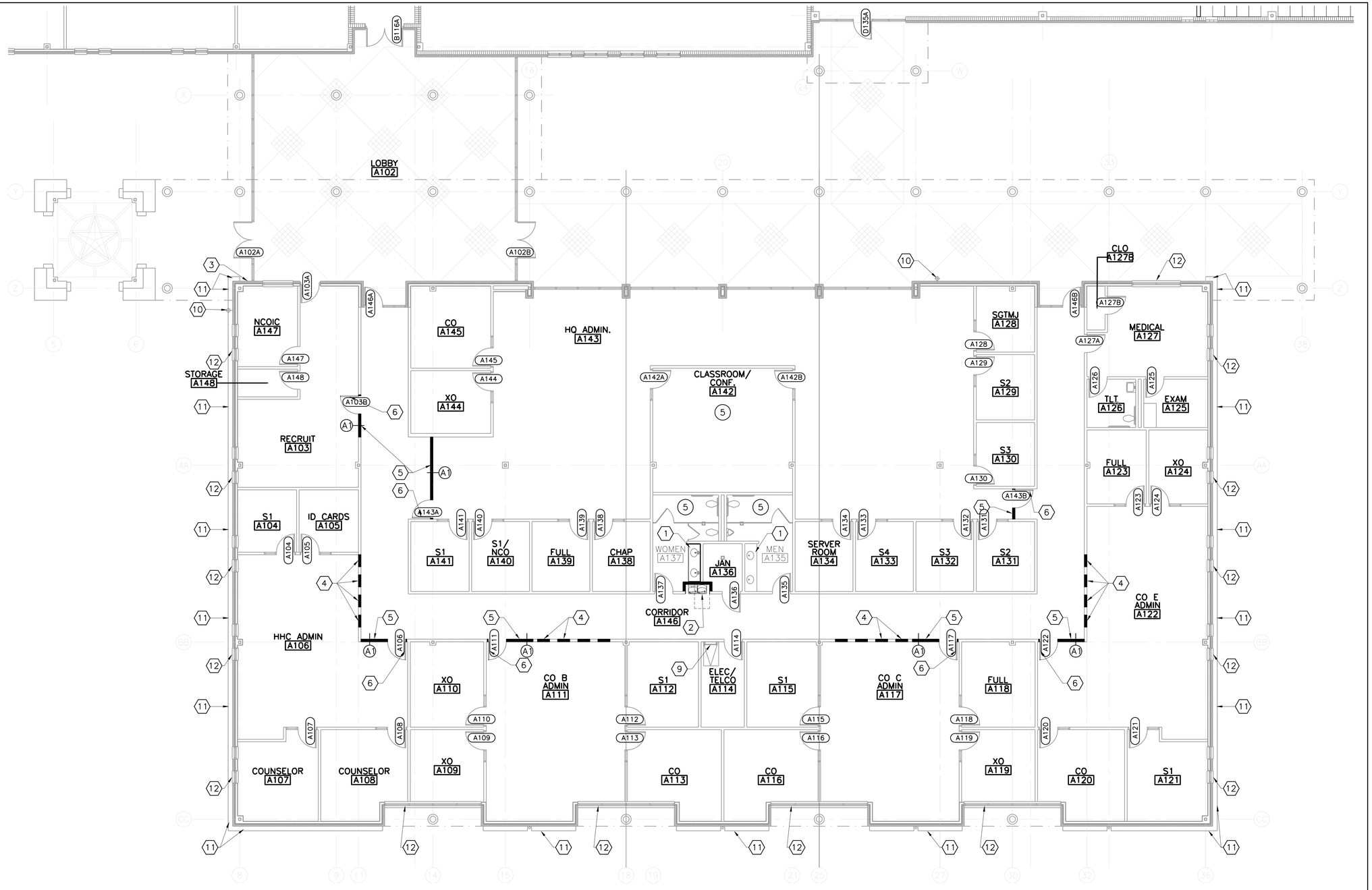
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ARCHITECTURAL OVERALL FLOOR PLAN

A-16

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04/20/2018



FLOOR PLAN – AREA "A"

1/8" = 1'-0"

GENERAL NOTES

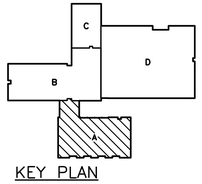
1. A SUMMARY OF THE PROJECTS BID OPTIONS CAN BE FOUND ON SHEET G-1. DISCIPLINE SPECIFIC BID OPTIONS CAN BE FOUND ON THIS SHEET.
2. ALL FIRE RATED WALLS SHALL GO TO DECK. REFER TO SHEET A-2 FOR PARTITION TYPES.
3. REFER SHEET A-17A FOR BID OPTION # 5 – RESTROOM / CONFERENCE ROOM RENOVATION.

BID OPTIONS "◯"

5. RESTROOM/CONFERENCE ROOM RENOVATION IN ADMIN. WING. REFER TO SHEET A-17A FOR BID OPTION.
6. EXTERIOR BUILDING IMPROVEMENTS.

NOTES BY SYMBOL "⬡"

1. SOLID SURFACE LAVATORY COUNTERTOP AND BACKSPLASH.
2. HI/LO ELECTRIC WATER COOLER WITH SKIRT OPTION FOR CANE DETECTION.
3. KNOX BOX – 3200 SERIES, UL1037, SURFACE MOUNTED.
4. INFILL 1 HOUR RATED WALL INFILL TO MATCH EXISTING ADJACENT FINISHES AT DEMOLISHED 2'-0" X 2'-0" WINDOWS.
5. NEW 1 HOUR WALL INFILL AT DEMOLISHED SIDELIGHT WINDOWS.
6. NEW 20 MIN. RATED DOOR.
7. NOT USED.
8. NOT USED.
9. EXISTING ROOF ACCESS LADDER AND HATCH TO REMAIN.
10. NEW HOSE BIB – REFER PLUMBING.
11. EXISTING LIMESTONE WAINSCOT, CLEAN AND RESEAL.
12. EXISTING LIMESTONE WINDOW HEADS AND SILLS, CLEAN AND RESEAL.



KEY PLAN

0 4' 8' 16'

1/8"=1'-0"

04/20/2018

PROJECT ARCHITECT:
HOMER SAENZ, AIA

PROJECT NO. ADG17589A
ISSUE DATE: 04/20/18
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(512) 782-6131 FAX (512) 782-1481

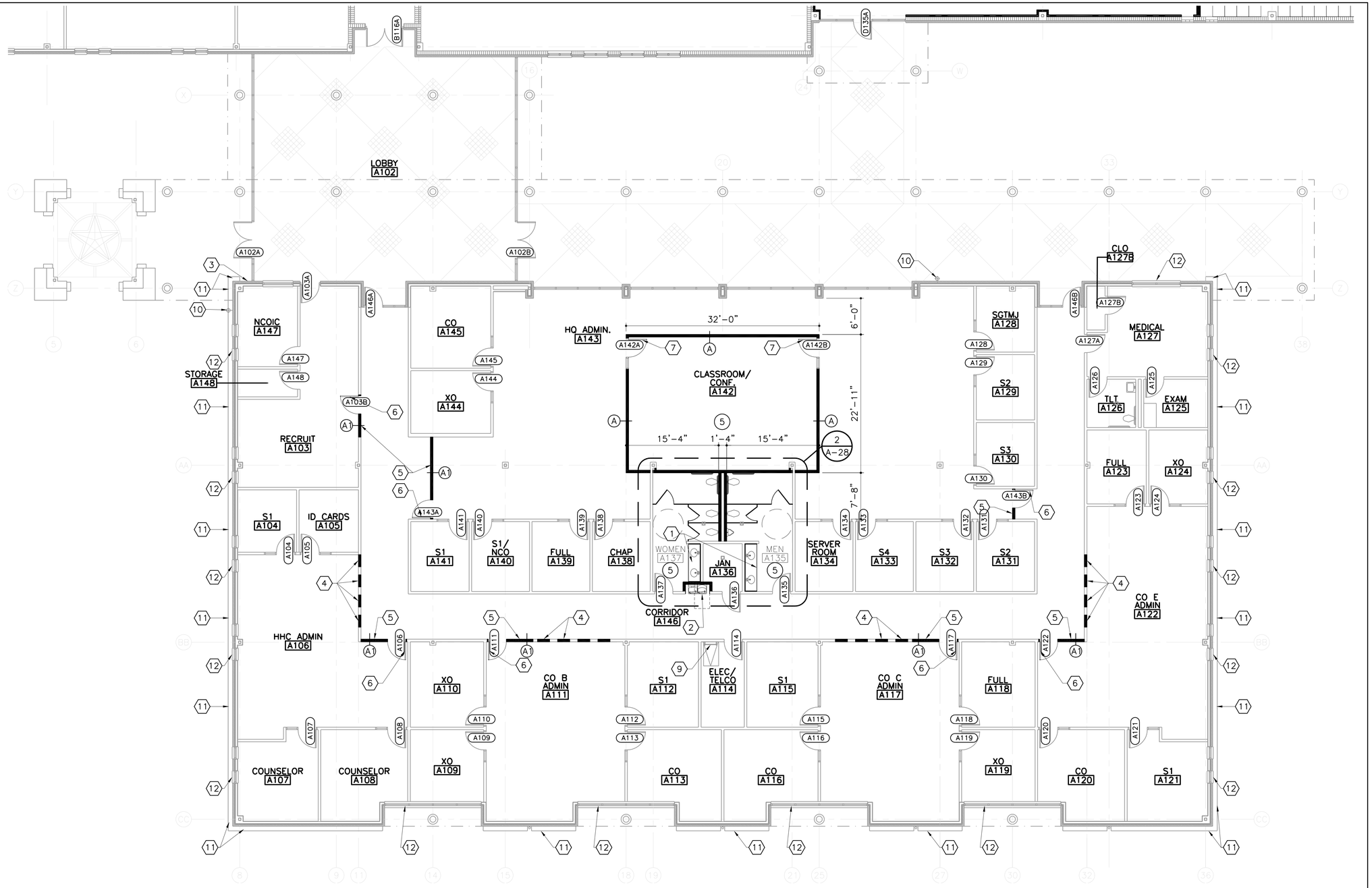
STAR CAMPAIGN FY18 - WESLACO
RC MAJOR MAINTENANCE

TXARNG CFMO

ARCHITECTURAL FLOOR PLAN AREA 'A'

A-17

SHT. 24 of 129



NORTH TRUE / NORTH PLAN — 1 — FLOOR PLAN – AREA "A"

1/8" = 1'-0"

GENERAL NOTES

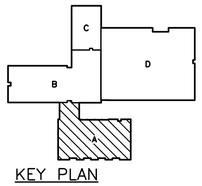
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2. ALL FIRE RATED WALLS SHALL GO TO DECK. REFER TO SHEET A-2 FOR PARTITION TYPES.

BID OPTIONS "◯"

5. RESTROOM/CONFERENCE ROOM RENOVATION IN ADMIN. WING.
6. EXTERIOR BUILDING IMPROVEMENTS.

NOTES BY SYMBOL "⬡"

1. SOLID SURFACE LAVATORY COUNTERTOP AND BACKSPLASH.
2. HI/LO ELECTRIC WATER COOLER WITH SKIRT OPTION FOR CANE DETECTION.
3. KNOX BOX – 3200 SERIES, UL1037, SURFACE MOUNTED.
4. INFILL 1 HOUR RATED WALL INFILL TO MATCH EXISTING ADJACENT FINISHES AT DEMOLISHED 2'-0" X 2'-0" WINDOWS.
5. NEW 1 HOUR WALL INFILL AT DEMOLISHED SIDELIGHT WINDOWS.
6. NEW 20 MIN. RATED DOOR.
7. REINSTALL EXISTING DOOR AND FRAME.
8. NOT USED.
9. EXISTING ROOF ACCESS LADDER AND HATCH TO REMAIN.
10. NEW HOSE BIB – REFER PLUMBING.
11. EXISTING LIMESTONE WAINSCOT, CLEAN AND RESEAL.
12. EXISTING LIMESTONE WINDOW HEADS AND SILLS, CLEAN AND RESEAL.



KEY PLAN

0 4' 8' 16'

1/8"=1'-0"

04/20/2018

PROJECT ARCHITECT:
HOMER SAENZ, AIA

PROJECT NO. ADG17589A
ISSUE DATE: 04/20/18
DRAWN BY: HS
REVIEWED BY: JWW

FREESE NICHOLS
4055 International Plaza, Suite 200
Fort Worth, Texas 76109-4895
Phone – (817) 735-7300
Fax – (817) 735-7491
Freese and Nichols, Inc.
Texas Registered Engineering
Firm F-2144

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CONSTRUCTION & FACILITIES MANAGEMENT OFFICE-CFMO
CAMP MABRY P.O. BOX 5218
(512) 782-6131
AUSTIN, TEXAS 78763-5218
FAX (512) 782-1481

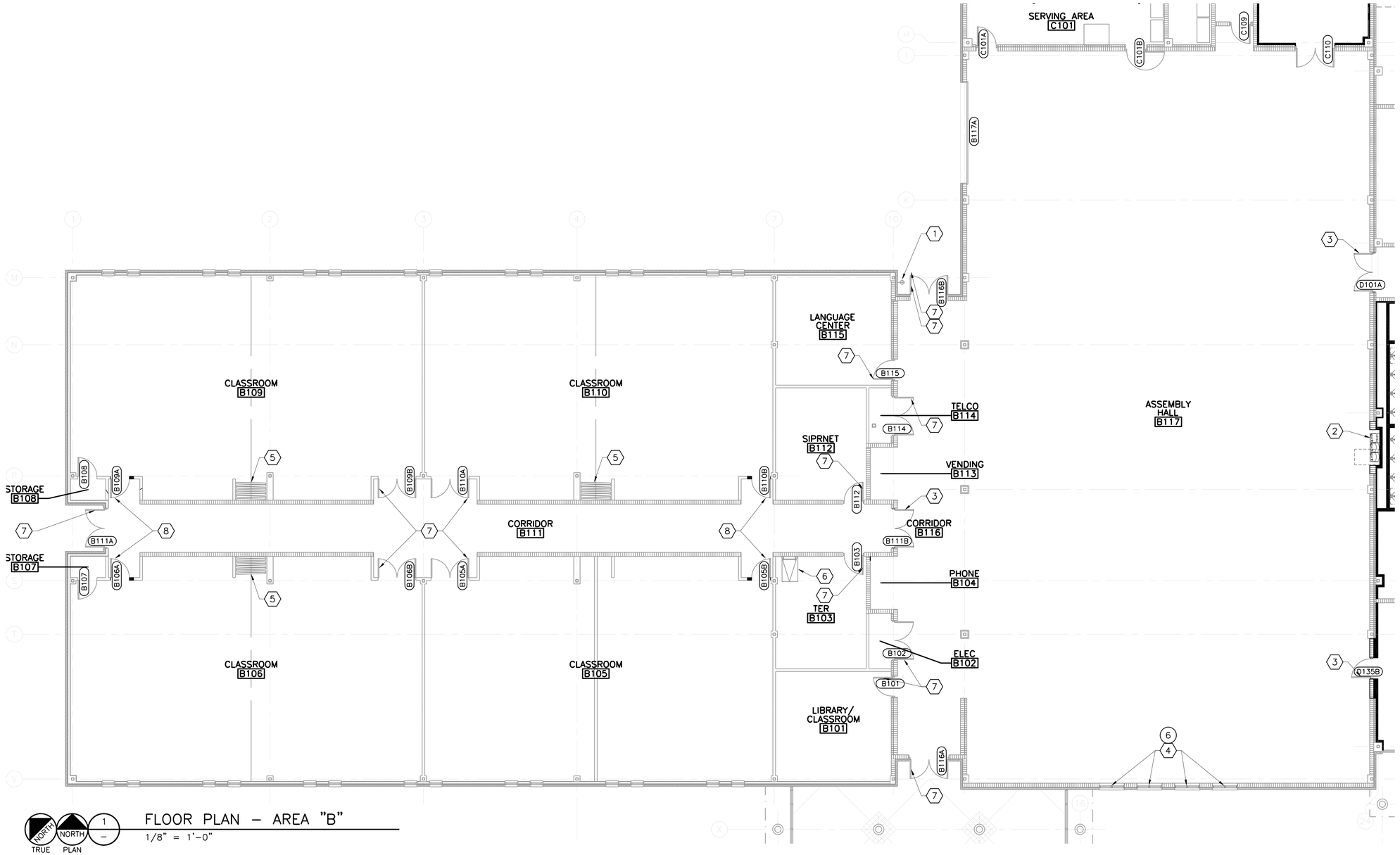
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ARCHITECTURAL FLOOR PLAN - BID OPTION 5

A-17A

SHT. 25 of 129



NORTH TRUE / NORTH PLAN — 1 — FLOOR PLAN – AREA "B"

1/8" = 1'-0"

GENERAL NOTES

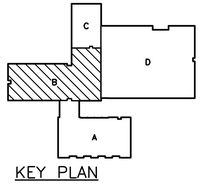
1. A SUMMARY OF THE PROJECTS BID OPTIONS CAN BE FOUND ON SHEET G-1. DISCIPLINE SPECIFIC BID OPTIONS CAN BE FOUND ON THIS SHEET.
2. ALL FIRE RATED WALLS SHALL GO TO DECK. REFER TO SHEET A-2 FOR PARTITION TYPES.

NOTES BY SYMBOL "⬡"

1. NEW HOSE BIB. RE: PLUMBING.
2. HI/LO ELECTRIC WATER COOLER WITH SKIRT OPTION FOR CANE DETECTION.
3. NEW 90 MIN. LABEL DOOR AND FRAME.
4. NEW LOUVERS – REFER MECHANICAL.
5. EXISTING ROOM DIVIDER TO REMAIN.
6. EXISTING ROOF ACCESS LADDER AND HATCH TO REMAIN.
7. EXISTING DOOR TO REMAIN.
8. EXISTING DOOR TO BE REINSTALLED AS SHOWN, TO BE 2012 TAS COMPLIANT.

BID OPTIONS "◯"

6. EXTERIOR BUILDING IMPROVEMENTS.



KEY PLAN

0 4' 8' 16'

1/8"=1'-0"

04/20/2018

PROJECT ARCHITECT:
HOMER SAENZ, AIA
PROJECT NO. ADG17589A
ISSUE DATE: 04/20/18
DRAWN BY: HS
REVIEWED BY: JWW

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(512) 782-6151 FAX (512) 782-1481

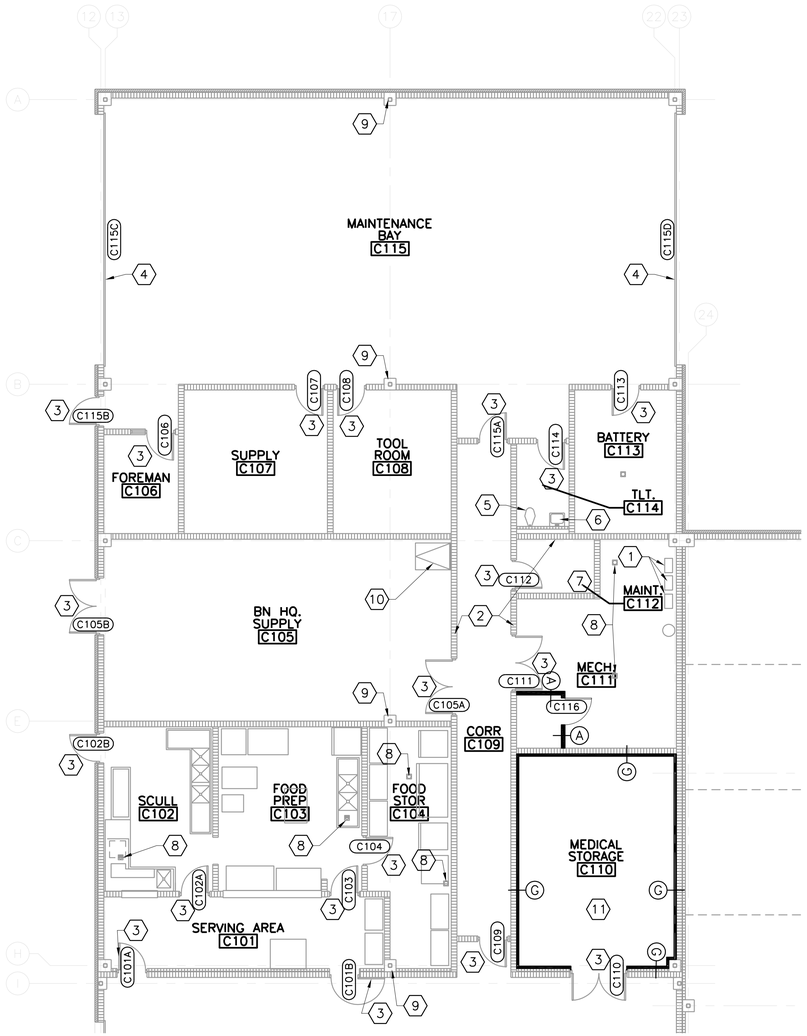
STAR CAMPAIGN FY18 - WESLACO
RC MAJOR MAINTENANCE

TXARNG CFMO

ARCHITECTURAL FLOOR PLAN AREA 'B'

A-18

SHT. 26 of 129



NORTH TRUE NORTH PLAN

FLOOR PLAN – AREA "C"

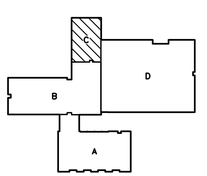
1/8" = 1'-0"

GENERAL NOTES

1. A SUMMARY OF THE PROJECTS BID OPTIONS CAN BE FOUND ON SHEET G-1. DISCIPLINE SPECIFIC BID OPTIONS CAN BE FOUND ON THIS SHEET.
2. ALL FIRE RATED WALLS SHALL GO TO DECK. REFER TO SHEET A-2 FOR PARTITION TYPES.

NOTES BY SYMBOL "⬡"

1. EXISTING WATER HEATERS TO BE DEMOLISHED – REFER PLUMBING.
2. EXISTING CMU WALLS TO REMAIN.
3. EXISTING DOOR TO REMAIN.
4. EXISTING OVERHEAD DOOR TO REMAIN.
5. EXISTING WATER CLOSET TO REMAIN – REFER PLUMBING.
6. EXISTING SINK TO REMAIN – REFER PLUMBING.
7. EXISTING MOP SINK TO REMAIN – REFER PLUMBING.
8. EXISTING FLOOR DRAIN TO REMAIN – REFER PLUMBING.
9. EXISTING COLUMN TO REMAIN.
10. EXISTING ROOF ACCESS LADDER AND HATCH TO REMAIN.
11. INSTALL CONTINUOUS INSULATION AT PERIMETER WALLS AS SHOWN IN PARTITION TYPE AND SPRAY ON CLOSED CELL INSULATION WITH INTUMESCENT COATING AT ROOF DECK ABOVE.



KEY PLAN

0 4' 8' 16'

1/8"=1'-0"

HOMER SAENZ 15504 REGISTERED ARCHITECT STATE OF TEXAS

04/20/2018

THE STATE OF TEXAS

PROJECT ARCHITECT:
HOMER SAENZ, AIA
PROJECT NO. ADG17589A
ISSUE DATE: 04/20/18
DRAWN BY: HS
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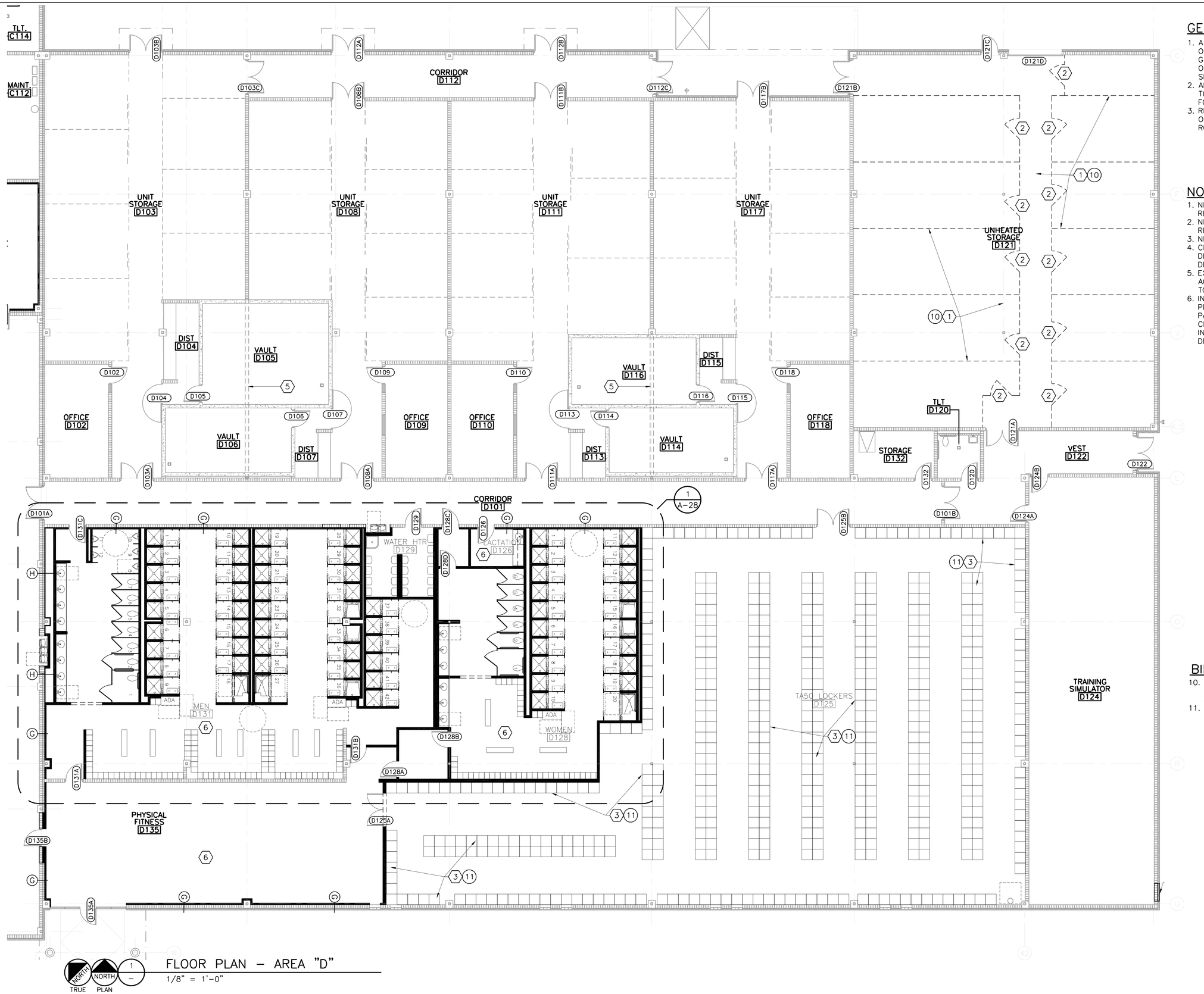
STAR CAMPAIGN FY18 - WESLACO
RC MAJOR MAINTENANCE

TXARNG CFMO

ARCHITECTURAL FLOOR PLAN AREA 'C'

A-19

SHT. 27 of 129



GENERAL NOTES

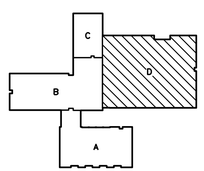
1. A SUMMARY OF THE PROJECTS BID OPTIONS CAN BE FOUND ON SHEET G-1. DISCIPLINE SPECIFIC BID OPTIONS CAN BE FOUND ON THIS SHEET.
2. ALL FIRE RATED WALLS SHALL GO TO DECK. REFER TO SHEET A-2 FOR PARTITION TYPES.
3. REFER SHEET A-32 FOR SPECIFICS ON RESTROOM/SHOWER/LOCKER ROOM AREAS.

NOTES BY SYMBOL "⬡"

1. NEW WIRE MESH STORAGE CAGING – REFER DETAIL 1/A-0.
2. NEW WIRE MESH DUTCH DOOR – REFER DETAIL 1/A-0.
3. NEW TA-50 LOCKER.
4. CMU/ BRICK WALL INFILL AT DEMOLISHED ACCESS DOOR – REFER DETAIL 9/A-33.
5. EXISTING 8" CMU WALL CONTINUES ACROSS THE TOP OF VAULT AREA TO THE BOTTOM OF DECK.
6. INSTALL CONTINUOUS INSULATION AT PERIMETER WALLS AS SHOWN IN PARTITION TYPE AND SPRAY ON CLOSED CELL INSULATION WITH INTUMESCENT COATING AT ROOF DECK ABOVE.

BID OPTIONS "◯"

10. PROVIDE NEW STORAGE CAGING IN EXISTING NORTHEAST STORAGE AREA.
11. PROVIDE TA-50 LOCKERS FOR SECURE EQUIPMENT STORAGE.



KEY PLAN

0 4' 8' 16'
1/8"=1'-0"

NORTH TRUE / NORTH PLAN — 1 / –

FLOOR PLAN – AREA "D"

1/8" = 1'-0"

PROJECT ARCHITECT:
HOMER SAENZ, AIA

PROJECT NO. ADG17589A
ISSUE DATE: 04/20/18
DRAWN BY: HS
REVIEWED BY: JWW

FREESE NICHOLS
4055 International Plaza, Suite 200
Fort Worth, Texas 76109-4895
Phone – (817) 735-7300
Fax – (817) 735-7491

Freese and Nichols, Inc.
Texas Registered Engineering Firm F-2144

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CAMP MABRY P.O. BOX 5218 AUSTIN, TEXAS 78763-5218
(512) 782-6131 FAX (512) 782-1481

STAR CAMPAIGN FY18 - WESLACO
RC MAJOR MAINTENANCE

TXARNG CFMO

ARCHITECTURAL FLOOR PLAN AREA 'D'

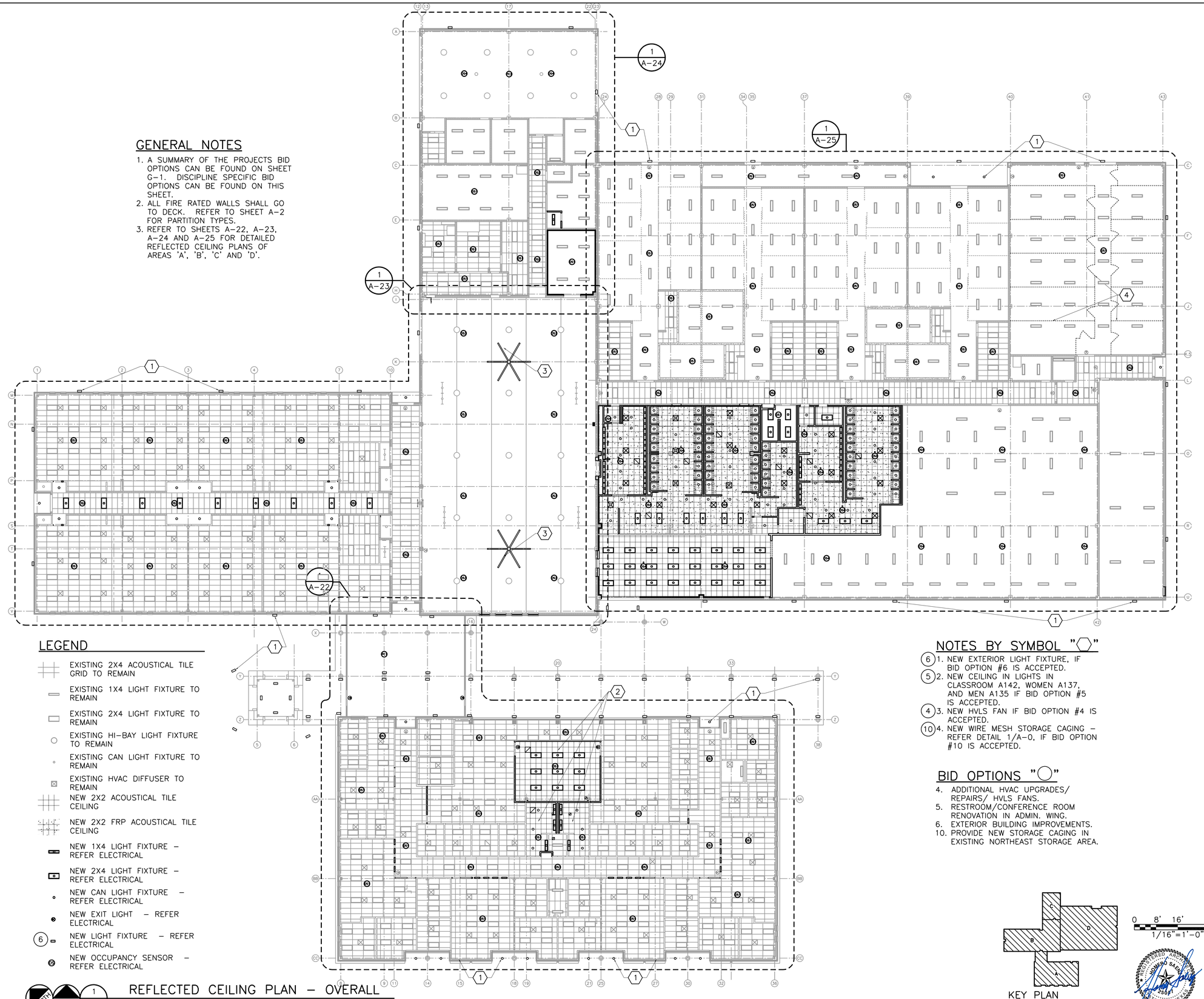
A-20

SHT. 28 of 129

REGISTERED ARCHITECT HOMERO SAENZ 25061 STATE OF TEXAS
04/20/2018

GENERAL NOTES

1. A SUMMARY OF THE PROJECTS BID OPTIONS CAN BE FOUND ON SHEET G-1. DISCIPLINE SPECIFIC BID OPTIONS CAN BE FOUND ON THIS SHEET.
2. ALL FIRE RATED WALLS SHALL GO TO DECK. REFER TO SHEET A-2 FOR PARTITION TYPES.
3. REFER TO SHEETS A-22, A-23, A-24 AND A-25 FOR DETAILED REFLECTED CEILING PLANS OF AREAS 'A', 'B', 'C' AND 'D'.



LEGEND

- EXISTING 2X4 ACOUSTICAL TILE GRID TO REMAIN
- EXISTING 1X4 LIGHT FIXTURE TO REMAIN
- EXISTING 2X4 LIGHT FIXTURE TO REMAIN
- EXISTING HI-BAY LIGHT FIXTURE TO REMAIN
- EXISTING CAN LIGHT FIXTURE TO REMAIN
- EXISTING HVAC DIFFUSER TO REMAIN
- NEW 2X2 ACOUSTICAL TILE CEILING
- NEW 2X2 FRP ACOUSTICAL TILE CEILING
- NEW 1X4 LIGHT FIXTURE – REFER ELECTRICAL
- NEW 2X4 LIGHT FIXTURE – REFER ELECTRICAL
- NEW CAN LIGHT FIXTURE – REFER ELECTRICAL
- NEW EXIT LIGHT – REFER ELECTRICAL
- (6) NEW LIGHT FIXTURE – REFER ELECTRICAL
- NEW OCCUPANCY SENSOR – REFER ELECTRICAL

NOTES BY SYMBOL "⬡"

(6) 1. NEW EXTERIOR LIGHT FIXTURE, IF BID OPTION #6 IS ACCEPTED.
(5) 2. NEW CEILING IN LIGHTS IN CLASSROOM A142, WOMEN A137, AND MEN A135 IF BID OPTION #5 IS ACCEPTED.
(4) 3. NEW HVLS FAN IF BID OPTION #4 IS ACCEPTED.
(10) 4. NEW WIRE MESH STORAGE CAGING – REFER DETAIL 1/A-0, IF BID OPTION #10 IS ACCEPTED.

BID OPTIONS "◯"

4. ADDITIONAL HVAC UPGRADES/ REPAIRS/ HVLS FANS.
5. RESTROOM/CONFERENCE ROOM RENOVATION IN ADMIN. WING.
6. EXTERIOR BUILDING IMPROVEMENTS.
10. PROVIDE NEW STORAGE CAGING IN EXISTING NORTHEAST STORAGE AREA.

KEY PLAN

0 8' 16' 32'
1/16"=1'-0"

1 NORTH TRUE NORTH PLAN

REFLECTED CEILING PLAN – OVERALL

1/16" = 1'-0"

PROJECT ARCHITECT:
HOMER SAENZ, AIA

PROJECT NO. ADG17589A
ISSUE DATE: 04/20/18
DRAWN BY: HS
REVIEWED BY: JWW

FREESE AND NICHOLS
4055 International Plaza, Suite 200
Fort Worth, Texas 76109-4895
Phone – (817) 735-7300
Fax – (817) 735-7491

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CAMP MABRY P.O. BOX 5218
AUSTIN, TEXAS 78763-5218
(512) 782-6131
FAX (512) 782-1481

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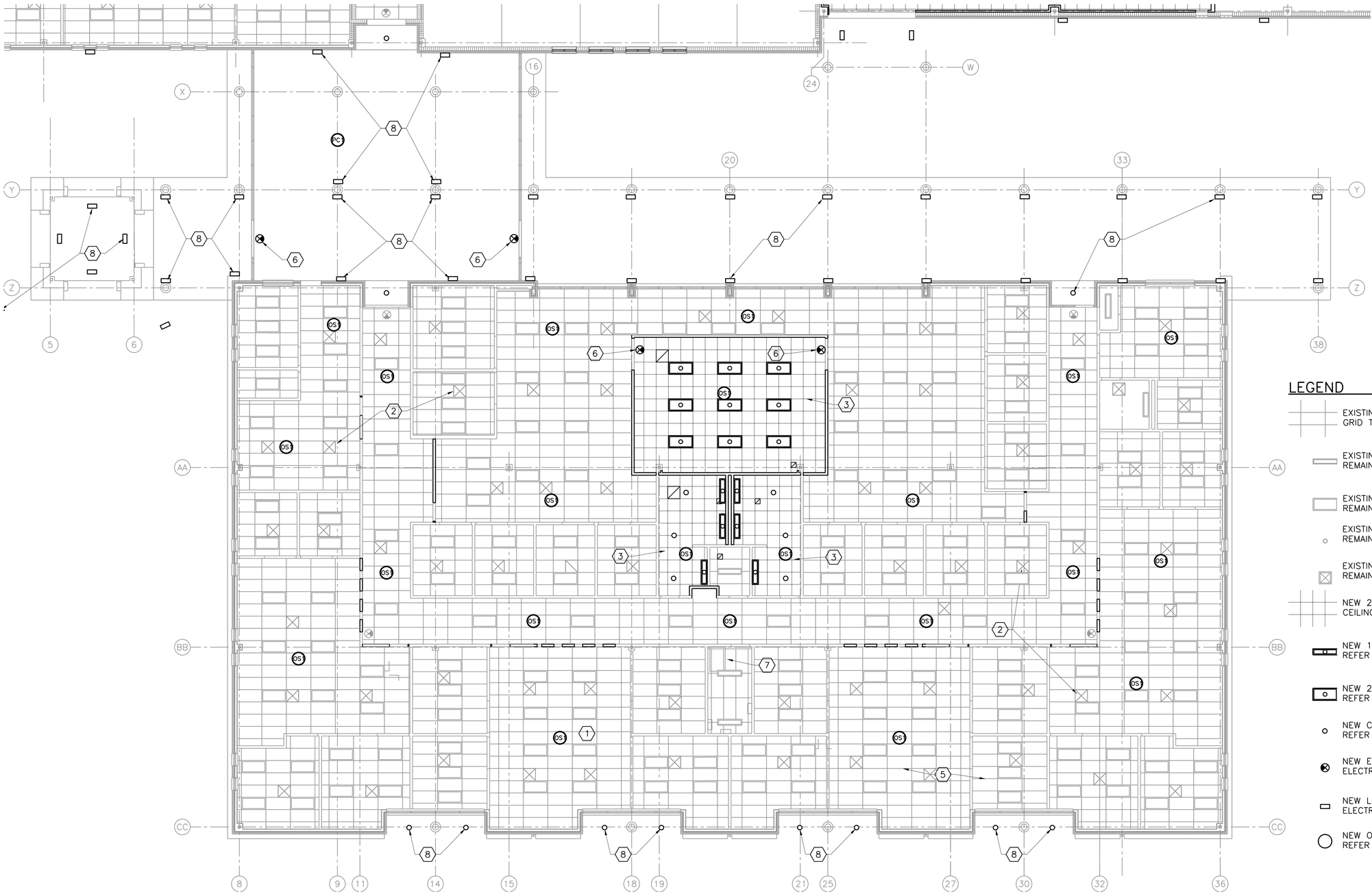
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ARCHITECTURAL PLAN - OVERALL REFLECTED CEILING

A-21

SHT. 29 of 129

HOMER D. SAENZ 25041 REGISTERED ARCHITECT STATE OF TEXAS
04/20/2018



LEGEND

- EXISTING 2X4 ACOUSTICAL TILE GRID TO REMAIN
- EXISTING 1X4 LIGHT FIXTURE TO REMAIN
- EXISTING 2X4 LIGHT FIXTURE TO REMAIN
- EXISTING CAN LIGHT FIXTURE TO REMAIN
- EXISTING HVAC DIFFUSER TO REMAIN
- NEW 2X2 ACOUSTICAL TILE CEILING
- NEW 1X4 LIGHT FIXTURE – REFER ELECTRICAL
- NEW 2X4 LIGHT FIXTURE – REFER ELECTRICAL
- NEW CAN LIGHT FIXTURE – REFER ELECTRICAL
- NEW EXIT LIGHT – REFER ELECTRICAL
- NEW LIGHT FIXTURE – REFER ELECTRICAL
- NEW OCCUPANCY SENSOR – REFER ELECTRICAL

REFLECTED CEILING PLAN – AREA "A"

1/8" = 1'-0"

GENERAL NOTES

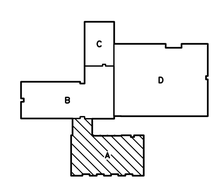
1. REFER TO SHEETS A-23, A-24, AND A-25 FOR CONTINUATION OF REFLECTED CEILING PLAN.
2. A SUMMARY OF THE PROJECT BID OPTIONS CAN BE FOUND ON SHEET G-1. DISCIPLINE SPECIFIC BID OPTIONS CAN BE FOUND ON THIS SHEET.
3. REFER TO OTHER DISCIPLINE'S DRAWINGS FOR ADDITIONAL INFORMATION.

NOTES BY SYMBOL "⬡"

1. EXISTING CEILING AND LIGHTS TO REMAIN.
2. EXISTING HVAC DIFFUSER. RE: MECHANICAL.
3. (5) NEW 2'X2' ACT.
4. (5) NEW LIGHT FIXTURE. RE: ELECTRICAL.
5. NEW OCCUPANCY SENSOR. RE: ELECTRICAL.
6. NEW EXIT LIGHT. RE: ELECTRICAL.
7. EXISTING ROOF HATCH AND LADDER.
8. (6) NEW EXTERIOR LIGHT FIXTURE.

BID OPTIONS "◯"

5. RESTROOM/CONFERENCE ROOM RENOVATION IN ADMIN. WING.
6. EXTERIOR BUILDING IMPROVEMENTS.



KEY PLAN

0 4' 8' 16'

1/8"=1'-0"

REGISTERED ARCHITECT HOMERO SAENZ 25847 STATE OF TEXAS

04/20/2018

THE STATE OF TEXAS

PROJECT ARCHITECT:
HOMER SAENZ, AIA

PROJECT NO. ADG17589A
ISSUE DATE: 04/20/18
DRAWN BY: HS
REVIEWED BY: JWW

FREESE AND NICHOLS
4055 International Plaza, Suite 200
Fort Worth, Texas 76109-4895
Phone - (817) 735-7300
Fax - (817) 735-7491

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(512) 782-6131 FAX (512) 782-1481

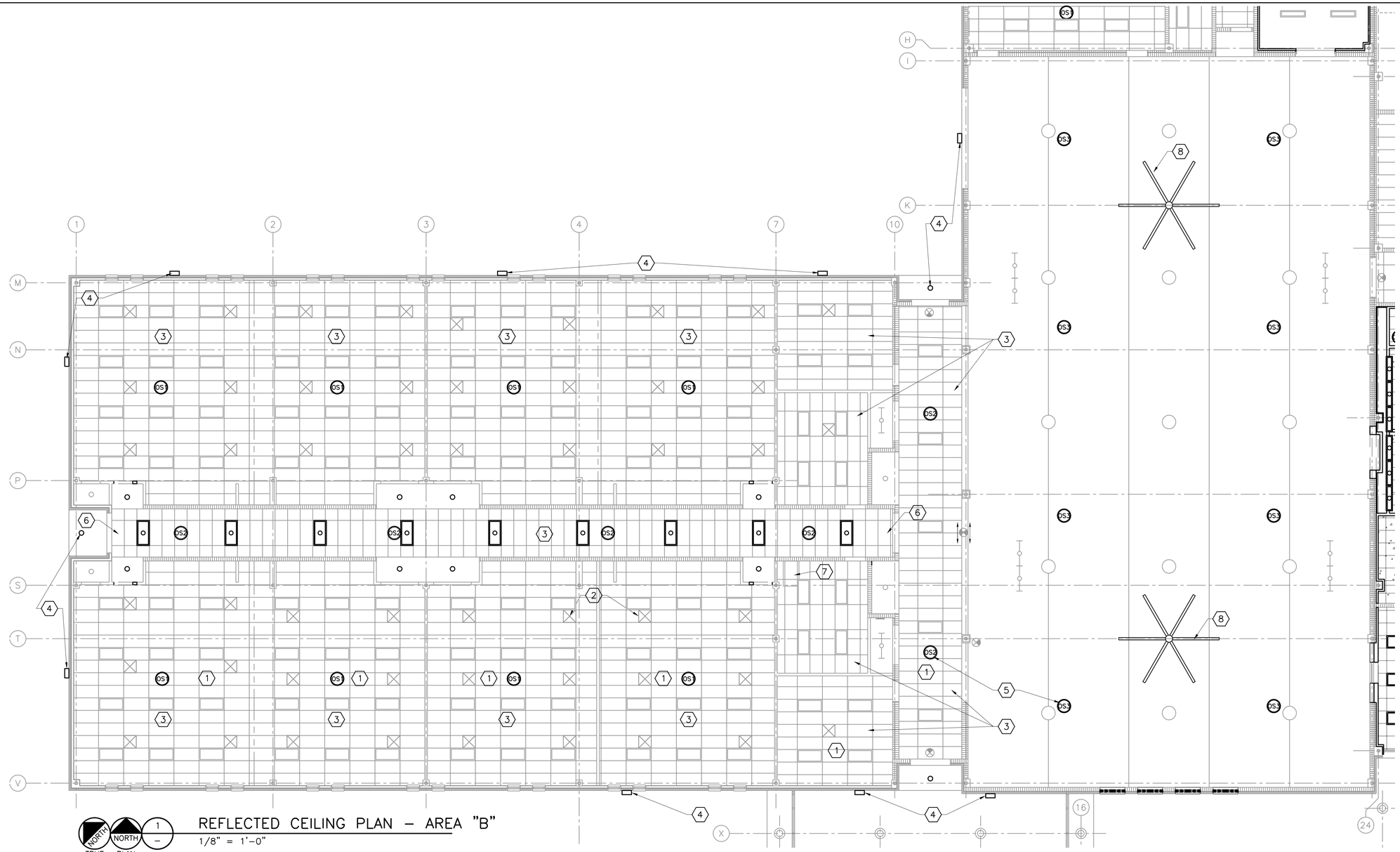
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ARCHITECTURAL REFLECTED CEILING PLAN - AREA 'A'

A-22

SHT. 30 of 129



NORTH TRUE NORTH PLAN 1 — REFLECTED CEILING PLAN – AREA "B"

1/8" = 1'-0"

GENERAL NOTES

1. REFER TO SHEETS A-22, A-24, AND A-25 FOR CONTINUATION OF REFLECTED CEILING PLAN.
2. A SUMMARY OF THE PROJECT BID OPTIONS CAN BE FOUND ON SHEET G-1. DISCIPLINE SPECIFIC BID OPTIONS CAN BE FOUND ON THIS SHEET.
3. REFER TO OTHER DISCIPLINE'S DRAWINGS FOR ADDITIONAL INFORMATION.

NOTES BY SYMBOL "⬡"

1. EXISTING CEILING AND LIGHTS TO REMAIN.
2. HVAC DIFFUSER. RE: MECHANICAL.
3. EXISTING 2'X4' ACT TO REMAIN.
6. 4. NEW EXTERIOR LIGHT FIXTURE. RE: ELECTRICAL.
5. NEW OCCUPANCY SENSOR. RE: ELECTRICAL.
6. NEW EXIT LIGHT. RE: ELECTRICAL.
7. EXISTING ROOF HATCH AND LADDER.
4. 8. NEW HVLS FAN. RE: MECHANICAL SHEET M-6.

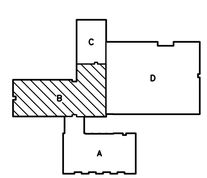
LEGEND

- EXISTING 2X4 ACOUSTICAL TILE GRID TO REMAIN
- EXISTING 1X4 LIGHT FIXTURE TO REMAIN
- EXISTING 2X4 LIGHT FIXTURE TO REMAIN
- EXISTING HI-BAY LIGHT FIXTURE TO REMAIN
- EXISTING CAN LIGHT FIXTURE TO REMAIN
- EXISTING HVAC DIFFUSER TO REMAIN
- NEW 2X4 LIGHT FIXTURE – REFER ELECTRICAL
- NEW EXIT LIGHT – REFER ELECTRICAL
- NEW LIGHT FIXTURE – REFER ELECTRICAL
- NEW OCCUPANCY SENSOR – REFER ELECTRICAL

BID OPTIONS "◯"

4. ADDITIONAL HVAC UPGRADES/ REPAIRS/ HVLS FANS.
6. EXTERIOR BUILDING IMPROVEMENTS.

KEY PLAN

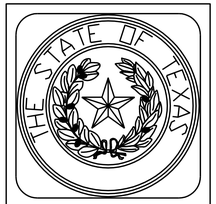


0 4' 8' 16'

1/8"=1'-0"



04/20/2018



PROJECT ARCHITECT:
HOMER SAENZ, AIA

PROJECT NO. ADG17589A
ISSUE DATE: 04/20/18
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REVIEWED BY: JWW

FREESE AND NICHOLS
4055 International Plaza, Suite 200
Fort Worth, Texas 76109-4895
Phone - (817) 735-7300
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AUSTIN, TEXAS 78763-5218
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FAX (512) 782-1481

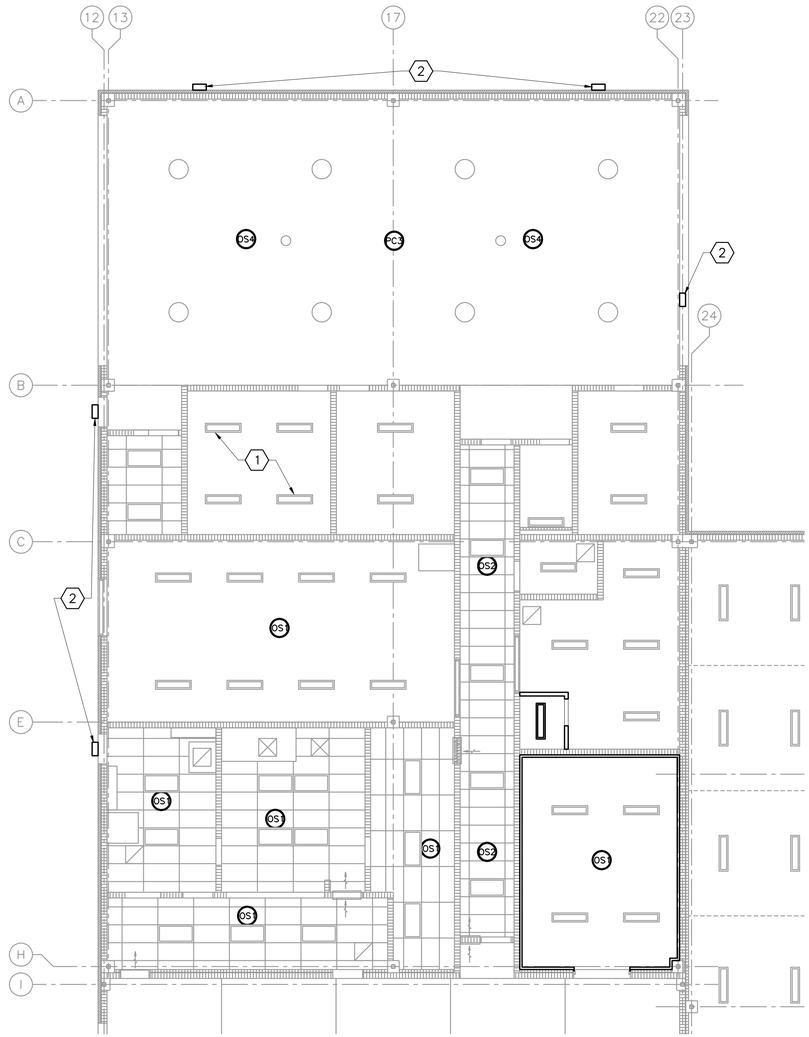
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RC MAJOR MAINTENANCE

TXARNG CFMO

ARCHITECTURAL REFLECTED CEILING PLAN - AREA 'B'

A-23

SHT. 31 of 129



REFLECTED CEILING PLAN – AREA "C"

1/8" = 1'-0"

GENERAL NOTES

1. REFER TO SHEETS A-22, A-23, AND A-25 FOR CONTINUATION OF REFLECTED CEILING PLAN.
2. A SUMMARY OF THE PROJECT BID OPTIONS CAN BE FOUND ON SHEET G-1. DISCIPLINE SPECIFIC BID OPTIONS CAN BE FOUND ON THIS SHEET.
3. REFER TO OTHER DISCIPLINE'S DRAWINGS FOR ADDITIONAL INFORMATION.

NOTES BY SYMBOL "⬡"

1. EXISTING LIGHTING TO REMAIN.

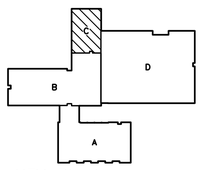
(6) 2. NEW EXTERIOR LIGHT FIXTURE – REFER ELECTRICAL.

BID OPTIONS "◯"

6. EXTERIOR BUILDING IMPROVEMENTS

LEGEND

- EXISTING 2X4 ACOUSTICAL TILE GRID TO REMAIN
- EXISTING 1X4 LIGHT FIXTURE TO REMAIN
- EXISTING 2X4 LIGHT FIXTURE TO REMAIN
- EXISTING HI-BAY LIGHT FIXTURE TO REMAIN
- EXISTING CAN LIGHT FIXTURE TO REMAIN
- EXISTING HVAC DIFFUSER TO REMAIN
- (OS) NEW OCCUPANCY SENSOR – REFER ELECTRICAL



KEY PLAN

0 4' 8' 16'

1/8"=1'-0"

HOMER SAENZ REGISTERED ARCHITECT 25067 STATE OF TEXAS

04/20/2018

PROJECT ARCHITECT:
HOMER SAENZ, AIA

PROJECT NO. ADG17589A
ISSUE DATE: 04/20/18
DRAWN BY: HS
REVIEWED BY: JWW

FREESE AND NICHOLS
4055 International Plaza, Suite 200
Fort Worth, Texas 76109-4895
Phone - (817) 735-7300
Fax - (817) 735-7491

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AUSTIN, TEXAS 78763-5218
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RC MAJOR MAINTENANCE

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ARCHITECTURAL REFLECTED CEILING PLAN - AREA 'C'

A-24

SHT. 32 of 129

GENERAL NOTES

1. REFER TO SHEETS A-22, A-23, AND A-24 FOR CONTINUATION OF REFLECTED CEILING PLAN.
2. A SUMMARY OF THE PROJECT BID OPTIONS CAN BE FOUND ON SHEET G-1. DISCIPLINE SPECIFIC BID OPTIONS CAN BE FOUND ON THIS SHEET.
3. REFER TO OTHER DISCIPLINE'S DRAWINGS FOR ADDITIONAL INFORMATION.

NOTES BY SYMBOL "⬡"

1. EXISTING 1X4 LIGHT FIXTURE TO REMAIN.
2. NEW 2X4 LIGHT FIXTURE. RE: ELECTRICAL.
3. NEW CAN LIGHT FIXTURE. RE: ELECTRICAL.
4. INFILL EXISTING OPENINGS IN PRECAST HOLLOW CORE CONC. PLANK – MAINTAIN NON-COMBUSTIBLE ROOF DECK CONSTRUCTION. REFER DETAIL 8/A-33.
5. EXISTING 8" CMU WALL CONTINUES ACROSS THE TOP OF THE VAULT AREA TO BOTTOM OF DECK.
6. NEW WOVEN WIRE MESH PARTITIONS PER DETAIL 1/A-0.
7. NEW EXTERIOR LIGHT FIXTURE. RE: ELECTRICAL.

LEGEND

- EXISTING 2X4 ACOUSTICAL TILE GRID TO REMAIN
- EXISTING 1X4 LIGHT FIXTURE TO REMAIN
- EXISTING 2X4 LIGHT FIXTURE TO REMAIN
- EXISTING CAN LIGHT FIXTURE TO REMAIN
- NEW HVAC SUPPLY AIR DIFFUSER – REFER MECHANICAL
- NEW HVAC RETURN AIR DIFFUSER – REFER MECHANICAL
- NEW 2X2 ACOUSTICAL TILE CEILING
- NEW 2X2 FRP ACOUSTICAL TILE CEILING
- NEW 2X4 LIGHT FIXTURE – REFER ELECTRICAL
- NEW CAN LIGHT FIXTURE – REFER ELECTRICAL
- NEW EXIT LIGHT – REFER ELECTRICAL
- NEW LIGHT FIXTURE – REFER ELECTRICAL
- NEW OCCUPANCY SENSOR – REFER ELECTRICAL

BID OPTIONS "◯"

4. ADDITIONAL HVAC UPGRADES/ REPAIRS/ HVLS FANS.
6. EXTERIOR BUILDING IMPROVEMENTS
10. PROVIDE NEW STORAGE CAGING IN EXISTING NORTHEAST STORAGE AREA.

KEY PLAN

0 4' 8' 16'
1/8"=1'-0"

NORTH TRUE / NORTH PLAN

REFLECTED CEILING PLAN – AREA "D"

1/8" = 1'-0"

04/20/2018

PROJECT ARCHITECT:
HOMER SAENZ, AIA

PROJECT NO. ADG17589A
ISSUE DATE: 04/20/18
DRAWN BY: HS
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AUSTIN, TEXAS 78763-5218
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ARCHITECTURAL REFLECTED CEILING PLAN - AREA 'D'

A-25

SHT. 33 of 129

ROOM FINISH SCHEDULE

ROOM NO.	ROOM NAME	FLOOR	BASE	WALLS				CEILING	HEIGHT	NOTES
				NORTH	EAST	SOUTH	WEST			
A102	LOBBY	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
A103	RECRUIT	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
A104	COUNSELOR	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	ACT-1	8'-8"	
A105	COUNSELOR	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	ACT-1	8'-8"	
A106	HHC ADMIN	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
A107	S1	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
A108	ID CARDS	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
A109	XO	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
A110	XO	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
A111	CO B ADMIN	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
A112	S1	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
A113	CO	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
A114	ELEC/ TELCO	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
A115	S1	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
A116	CO	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
A117	CO C ADMIN	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
A118	FULL	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
A119	ZO	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
A120	CO	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
A121	S1	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
A122	CO E ADMIN	CPT-1	RB-1	ETR	ETR	ETR	ETR	ETR	8'-8"	
A123	FULL	CPT-1	RB-1	ETR	ETR	ETR	ETR	ETR	8'-8"	
A124	XO	CPT-1	RB-1	ETR	ETR	ETR	ETR	ETR	8'-8"	
A125	EXAM	CPT-1	RB-1	ETR	ETR	ETR	ETR	ETR	8'-8"	
A126	TLT	CPT-1	RB-1	ETR	ETR	ETR	ETR	ETR	8'-8"	
A127	MEDICAL	CPT-1	RB-1	ETR	ETR	ETR	ETR	ETR	8'-8"	
A127B	CLO	CPT-1	RB-1	ETR	ETR	ETR	ETR	ETR	8'-8"	
A128	SGTMJ	CPT-1	RB-1	ETR	ETR	ETR	ETR	ETR	8'-8"	
A129	S2	CPT-1	RB-1	ETR	ETR	ETR	ETR	ETR	8'-8"	
A130	S3	CPT-1	RB-1	ETR	ETR	ETR	ETR	ETR	8'-8"	
A131	S2	CPT-1	RB-1	ETR	ETR	ETR	ETR	ETR	8'-8"	
A132	S3	CPT-1	RB-1	ETR	ETR	ETR	ETR	ETR	8'-8"	
A133	S4	CPT-1	RB-1	ETR	ETR	ETR	ETR	ETR	8'-8"	
A134	SERVER ROOM	CPT-1	RB-1	ETR	ETR	ETR	ETR	ETR	8'-8"	
A135	MEN	CT-1	CTB-1	CT-2	CT-2	CT-2	CT-2	ACT-2	8'-8"	
A136	JAN	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
A137	WOMEN	CT-1	CTB-1	CT-2	CT-2	CT-2	CT-2	ACT-2	8'-8"	
A138	CHAP	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
A139	FULL	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
A140	S1/ NCO	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
A141	S1	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
A142	CLASSROOM/ CONF.	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	ACT-1	8'-8"	
A143	HQ ADMIN	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
A144	XO	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
A145	CO	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
A146	CLO	ETR	RB-1	ETR	ETR	ETR	ETR	ETR	8'-8"	
A147	NCOIC	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
A148	STORAGE	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
B101	LIBRARY/ CLASSROOM	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
B102	ELEC	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
B103	TANG. AND STORAGE	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
B104	PHONE	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
B105	CLASSROOM	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
B106	CLASSROOM	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
B107	STORAGE	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
B108	STORAGE	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
B109	CLASSROOM	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
B110	CLASSROOM	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
B111	CORRIDOR	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
B112	A/V STORAGE	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
B113	VENDING	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
B114	TELCO	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
B115	LANGUAGE CENTER	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
B116	CORRIDOR	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
B117	ASSEMBLY HALL	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
C101	SERVING AREA	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
C102	SCULL	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
C103	FOOD PREP	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
C104	FOOD STOR	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
C105	BN HQ. SUPPLY	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
C106	FOREMAN	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
C107	SUPPLY	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
C108	TOOL ROOM	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
C109	CORRIDOR	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
C110	TABLE/CHAIR STORAGE	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	

ROOM FINISH SCHEDULE

ROOM NO.	ROOM NAME	FLOOR	BASE	WALLS				CEILING	HEIGHT	NOTES
				NORTH	EAST	SOUTH	WEST			
C111	MECH/ TELCO	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
C112	MAINT.	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
C113	BATTERY	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
C114	TLT	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
C115	MAINTENANCE BAY	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
C116	TER	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
D101	CORRIDOR	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
D102	OFFICE	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
D103	UNIT STORAGE	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
D104	DIST	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
D105	VAULT	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
D106	VAULT	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
D107	DIST	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
D108	UNIT STORAGE	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
D109	OFFICE	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
D110	OFFICE	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
D111	UNIT STORAGE	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
D112	CORRIDOR	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
D113	DIST	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
D114	VAULT	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
D115	DIST	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
D116	VAULT	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
D117	UNIT STORAGE	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
D118	OFFICE	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
D119	STORAGE	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
D120	TLT	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
D121	UNHEATED STORAGE	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
D122	VEST	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
D124	TRAINING SIMULATOR	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
D125	TA50 LOCKERS	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
D126	LACTATION	VCT-1	RB-1	PT-1	PT-1	PT-1	PT-1	ACT-1	8'-8"	
D128	WOMEN	CT-1	CTB-1	CT-2	CT-2	CT-2	CT-2	ACT-2	8'-8"	
D128A	VESTIBULE	CT-1	CTB-1	CT-2	CT-2	CT-2	CT-2	ACT-1	8'-8"	
D128B	VESTIBULE	CT-1	CTB-1	CT-2	CT-2	CT-2	CT-2	ACT-1	8'-8"	
D129	WATER HTR	ETR	ETR	ETR	ETR	ETR	ETR	ETR	8'-8"	
D131	MEN	CT-1	CTB-1	CT-2	CT-2	CT-2	CT-2	ACT-2	8'-8"	
D135	PHYSICAL FITNESS	RAF/SC-1	RB-1	PT-1	PT-1	PT-1	PT-1	ESFP	8'-8"	

INTERIOR MATERIAL SCHEDULE

MARK	ITEM	DESCRIPTION/COLOR	NOTES
ACT-1	CEILING TILE	ARMSTRONG FINE FISSURED 1729 2X2	
ACT-2	CEILING TILE, FRP	2x2 FIBERCORR BY NUDO, WHITE, SMOOTH	
CG-1	CORNER GUARD	2½"x2½" STAINLESS STEEL	
CPT-1	CARPET TILE	MOHAWK	
CT-1	CERAMIC TILE, 2x2	DALTILE, DESERT GRAY SPECKLE, D200	
CT-2	CERAMIC TILE, 4¼x4¼	DALTILE, DESERT GRAY, X114	
CTB-1	CERAMIC TILE BASE	DALTILE, DESERT GRAY 4x4 COVED	
ETR	EXISTING TO REMAIN		
ES	EXPOSED STRUCTURE	EXISTING TO REMAIN, PT-1 FINISH	
ESFP	EXPOSED STRUCTURE W/ SPRAYED ON FIREPROOFING	EXISTING TO REMAIN, SPRAYED ON FIREPROOFING	REPAIR/REPLACE SPRAY ON FIREPROOFING AS REQUIRED
FRP-1	FRP WAINSCOT	NUDO, FIBERLITE WHITE, SMOOTH	
GB-1	GYPSUM BOARD	PT-1 FINISH	
PL-1	PLASTIC LAMINATE	WILSONART, COSMIC STRANDZ, 4941K-18	CABINETS
PL-2	PLASTIC LAMINATE	WILSONART, NORTH SEA D90-60	RESTROOM APRONS
PT-1	ACRYLIC PAINT - SATIN	SHERWIN WILLIAMS, SW 7006, EXTRA WHITE	
PT-2	ACRYLIC PAINT - SEMI-GLOSS	SHERWIN WILLIAMS, SW 7065, ARGOS	METAL DOORS & FRAMES
PT-3	ACRYLIC PAINT - SEMI-GLOSS	SHERWIN WILLIAMS, SW 7061, NITE OWL	
PD-1	HDPE	AMPCO, NORTH SEA D90-60	TOILET, URINAL & SHOWER DRESS COMPARTMENT SCREENS
RB-1	RUBBER BASE	ROPPE, 150 DARK GREY, STANDARD TOE	
SC-1	SEALED CONCRETE	CHEM MASTERS SAFE CURE AND SEAL 309	
SS-1	SOLID SURFACE	DUPONT ZODIAC, MYSTIC BLACK	
SS-2	SOLID SURFACE	DUPONT ZODIAC, STORM GREY	LACTATION
VCT-1	VINYL COMPOSITION TILE	ARMSTRONG, 12X12 POLAR WHITE STANDARD EXCELON	
VCT-2	VCT-ANTI STATIC	ARMSTRONG, PEARL WHITE 51953	WITH GROUNDING WIRES AND MASTIC
QT	QUARRY TILE	MATCH EXISTING	
CMU	CONCRETE MASONRY UNITS	PT-1 FINISH	
OPW	OPERABLE WALL PARTITION		
RAF	RUBBER athletic FLOORING	ROPPE, RECOIL TILES 36"X36", 100 BLACK	

NOTES:

1. STRIP EXISTING FLOOR. SAND SMOOTH, CLEAN AND RESEAL.
2. APPLY PT-1 FINISH AT DRYWALL PARTITIONS NEW AND EXISTING. CLEAN AND REPAINT EXISTING MASONRY
3. PARTITIONS. APPLY BLOCK FILLER & PAINT NEW MASONRY PARTITIONS, PT-1 FINISH.



04/20/2018

PROJECT ARCHITECT:
HOMER SAENZ, AIA

PROJECT NO. ADG17589A
ISSUE DATE: 04/20/18
DRAWN BY: HS
REVIEWED BY: JWW

FREESE NICHOLS
4055 International Plaza, Suite 200
Fort Worth, Texas 76109-4895
Phone - (817) 735-7300
Fax - (817) 735-7491
Freese and Nichols, Inc.
Texas Registered Engineering
Firm F-2144

NO.	DATE	ISSUE
1		
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7		
8		

TEXAS MILITARY FORCES
CONSTRUCTION & FACILITIES MANAGEMENT OFFICE-CFMO
AUSTIN, TEXAS 78763-5218
FAX (512) 782-1481
CAMP MABRY P.O. BOX 5218
(512) 782-6131

STAR CAMPAIGN FY18 - WESLACO
RC MAJOR MAINTENANCE

TXARNG CFMO

ARCHITECTURAL ROOM FINISH SCHEDULE

A-26

SHT. 34 of 129

DOOR AND FRAME SCHEDULE

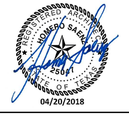
MARK	DOOR DESCRIPTION			FRAME DESCRIPTION						UL LABEL	REMARKS
	SIZE	MAT	TYPE	MAT	TYPE	DOOR DETAILS					
	WIDTH x HEIGHT x THICKNESS					HEAD	JAMB	JAMB	SILL		
A102A	(2) 3'-0"x7'-6"x1¾"	ALUM	EXIST	ALUM	EXIST						
A102B	(2) 3'-0"x7'-6"x1¾"	ALUM	EXIST	ALUM	EXIST						
A103A	3'-0"x7'-2½"x1¾"	ALUM	EXIST	ALUM	EXIST						
A103B	3'-0"x7'-0"x1¾"	WOOD	B	HM	HM-2	3/A-33	4/A-33	4/A-33	–	20 MIN	4
A104	3'-0"x7'-0"x1¾"	WOOD	EXIST	IA	EXIST						
A105	3'-0"x7'-0"x1¾"	WOOD	EXIST	IA	EXIST						
A106	3'-0"x7'-0"x1¾"	WOOD	B	HM	HM-2	3/A-33	4/A-33	4/A-33	–	20 MIN	4
A107	3'-0"x7'-0"x1¾"	WOOD	EXIST	IA	EXIST						
A108	3'-0"x7'-0"x1¾"	WOOD	EXIST	IA	EXIST						
A109	3'-0"x7'-0"x1¾"	WOOD	EXIST	IA	EXIST						
A110	3'-0"x7'-0"x1¾"	WOOD	EXIST	IA	EXIST						
A111	3'-0"x7'-0"x1¾"	WOOD	B	HM	HM-2	3/A-33	4/A-33	4/A-33	–	20 MIN	4
A112	3'-0"x7'-0"x1¾"	WOOD	EXIST	IA	EXIST						
A113	3'-0"x7'-0"x1¾"	WOOD	EXIST	IA	EXIST						
A114	3'-0"x7'-0"x1¾"	WOOD	EXIST	IA	EXIST						
A115	3'-0"x7'-0"x1¾"	WOOD	EXIST	IA	EXIST						
A116	3'-0"x7'-0"x1¾"	WOOD	EXIST	IA	EXIST						
A117	3'-0"x7'-0"x1¾"	WOOD	B	HM	HM-2	3/A-33	4/A-33	4/A-33	–	20 MIN	4
A118	3'-0"x7'-0"x1¾"	WOOD	EXIST	IA	EXIST						
A119	3'-0"x7'-0"x1¾"	WOOD	EXIST	IA	EXIST						
A120	3'-0"x7'-0"x1¾"	WOOD	EXIST	IA	EXIST						
A121	3'-0"x7'-0"x1¾"	WOOD	EXIST	IA	EXIST						
A122	3'-0"x7'-0"x1¾"	WOOD	B	HM	HM-2	3/A-33	4/A-33	4/A-33	–	20 MIN	4
A123	3'-0"x7'-0"x1¾"	WOOD	EXIST	IA	EXIST						
A124	3'-0"x7'-0"x1¾"	WOOD	EXIST	IA	EXIST						
A125	3'-0"x7'-0"x1¾"	WOOD	EXIST	IA	EXIST						
A126	3'-0"x7'-0"x1¾"	WOOD	EXIST	IA	EXIST						
A127A	3'-0"x7'-0"x1¾"	WOOD	EXIST	IA	EXIST						
A127B	3'-0"x7'-0"x1¾"	WOOD	EXIST	IA	EXIST						
A128	3'-0"x7'-0"x1¾"	WOOD	EXIST	IA	EXIST						
A129	3'-0"x7'-0"x1¾"	WOOD	EXIST	IA	EXIST						
A130	3'-0"x7'-0"x1¾"	WOOD	EXIST	IA	EXIST						
A131	3'-0"x7'-2½"x1¾"	WOOD	EXIST	IA	EXIST						
A132	3'-0"x7'-0"x1¾"	WOOD	EXIST	IA	EXIST						
A133	3'-0"x7'-0"x1¾"	WOOD	EXIST	IA	EXIST						
A134	3'-0"x7'-0"x1¾"	WOOD	EXIST	IA	EXIST						
A135	3'-0"x7'-0"x1¾"	WOOD	EXIST	IA	EXIST						
A136	3'-0"x7'-0"x1¾"	WOOD	EXIST	IA	EXIST						3
A137	3'-0"x7'-0"x1¾"	WOOD	EXIST	IA	EXIST						
A138	3'-0"x7'-0"x1¾"	WOOD	EXIST	IA	EXIST						
A139	3'-0"x7'-0"x1¾"	WOOD	EXIST	IA	EXIST						
A140	3'-0"x7'-0"x1¾"	WOOD	EXIST	IA	EXIST						
A141	3'-0"x7'-0"x1¾"	WOOD	EXIST	IA	EXIST						
A142A	3'-0"x7'-0"x1¾"	WOOD	EXIST	HM	EXIST	3/A-33	4/A-33	4/A-33	–	20 MIN	5
A142B	3'-0"x7'-0"x1¾"	WOOD	EXIST	HM	EXIST	3/A-33	4/A-33	4/A-33	–	20 MIN	5
A143A	3'-0"x7'-0"x1¾"	WOOD	B	HM	HM-2	3/A-33	4/A-33	4/A-33	–	20 MIN	4
A143B	3'-0"x7'-0"x1¾"	WOOD	B	HM	HM-2	3/A-33	4/A-33	4/A-33	–	20 MIN	4
A144	3'-0"x7'-0"x1¾"	WOOD	EXIST	IA	EXIST						
A145	3'-0"x7'-0"x1¾"	WOOD	EXIST	IA	EXIST						
A146A	3'-0"x7'-0"x1¾"	ALUM	EXIST	ALUM	EXIST						
A146B	3'-0"x7'-0"x1¾"	ALUM	EXIST	ALUM	EXIST						
A147	3'-0"x7'-0"x1¾"	WOOD	EXIST	IA	EXIST						
A148	3'-0"x7'-0"x1¾"	WOOD	EXIST	IA	EXIST						
B101	3'-0"x7'-0"x1¾"	WOOD	EXIST	HM	EXIST						2
B102	(2) 3'-0"x7'-0"x1¾"	WOOD	EXIST	HM	EXIST						2
B103	3'-0"x7'-0"x1¾"	WOOD	EXIST	HM	EXIST						
B105A	(2) 3'-0"x7'-0"x1¾"	WOOD	EXIST	IA	EXIST						
B105B	3'-0"x7'-0"x1¾"	WOOD	EXIST	IA	EXIST						
B106A	3'-0"x7'-0"x1¾"	WOOD	EXIST	IA	EXIST						
B106B	(2) 3'-0"x7'-0"x1¾"	WOOD	EXIST	IA	EXIST						
B107	3'-0"x7'-0"x1¾"	WOOD	EXIST	IA	EXIST						
B108	3'-0"x7'-0"x1¾"	WOOD	EXIST	IA	EXIST						
B109A	3'-0"x7'-0"x1¾"	WOOD	EXIST	IA	EXIST						
B109B	(2) 3'-0"x7'-0"x1¾"	WOOD	EXIST	IA	EXIST						
B110A	(2) 3'-0"x7'-0"x1¾"	WOOD	EXIST	IA	EXIST						

DOOR REMARKS:

1. INSULATED.
2. CLEAN AND PREP DOOR & FRAME. REPAIR AS REQUIRED AND REPAINT.
3. REMOVE LOCKSET, PROVIDE BEST CYLINDRICAL LEVER LOCKSET.
4. VISION PANEL. – PROVIDE FIRE RATED GLASS AT RATED DOORS, LAMINATED CLEAR GLASS AT NON-RATED DOORS.
5. CLEAN DOOR AND FRAME. REPAIR AND REPAINT HOLLOW METAL DOOR FRAME. REFINISH WOOD DOOR.
6. ADD CIPHER LOCK (CDX09) TO SIPRNET ROOM DOOR.

DOOR AND FRAME SCHEDULE

MARK	DOOR DESCRIPTION			FRAME DESCRIPTION						UL LABEL	REMARKS
	SIZE	MAT	TYPE	MAT	TYPE	DOOR DETAILS					
	WIDTH x HEIGHT x THICKNESS					HEAD	JAMB	JAMB	SILL		
B110B	3'-0"x7'-0"x1¾"	WOOD	EXIST	IA	EXIST						
B111A	(2) 3'-0"x7'-0"x1¾"	HM	EXIST	HM	EXIST						
B111B	(2) 3'-0"x7'-0"x1¾"	WOOD	B	HM	HM-1	1/A-33	2/A-33	2/A-33	–	90 MIN	1,4
B112	3'-0"x7'-0"x1¾"	WOOD	EXIST	HM	EXIST						6
B114	(2) 3'-0"x7'-0"x1¾"	WOOD	EXIST	HM	EXIST						2
B115	3'-0"x7'-0"x1¾"	WOOD	EXIST	HM	EXIST						2
B116A	(2) 3'-0"x7'-0"x1¾"	WOOD	EXIST	IA	EXIST						
B116B	(2) 3'-0"x7'-0"x1¾"	HM	EXIST	HM	EXIST						
B117A	16'-0"x14'-0"x1¾"	STL	EXIST	STL	EXIST						
C101A	3'-0"x7'-0"x1¾"	WOOD	EXIST	HM	EXIST						
C101B	3'-0"x7'-0"x1¾"	WOOD	EXIST	HM	EXIST						
C102A	3'-0"x7'-0"x1¾"	WOOD	EXIST	HM	EXIST						
C102B	3'-0"x7'-0"x1¾"	HM	EXIST	HM	EXIST						
C103	3'-0"x7'-0"x1¾"	WOOD	EXIST	HM	EXIST						
C104	3'-0"x7'-0"x1¾"	WOOD	EXIST	HM	EXIST						
C105A	(2) 3'-0"x7'-0"x1¾"	WOOD	EXIST	HM	EXIST						
C105B	(2) 3'-0"x7'-0"x1¾"	HM	EXIST	HM	EXIST						
C106	3'-0"x7'-0"x1¾"	WOOD	EXIST	HM	EXIST						
C107	3'-0"x7'-0"x1¾"	WOOD	EXIST	HM	EXIST						
C108	3'-0"x7'-0"x1¾"	WOOD	EXIST	HM	EXIST						
C109	3'-0"x7'-0"x1¾"	WOOD	EXIST	HM	EXIST						3
C110	(2) 3'-0"x7'-0"x1¾"	WOOD	EXIST	HM	EXIST						
C111	(2) 3'-0"x7'-0"x1¾"	WOOD	EXIST	HM	EXIST						
C112	3'-0"x7'-0"x1¾"	WOOD	EXIST	HM	EXIST						
C113	3'-0"x7'-0"x1¾"	WOOD	EXIST	HM	EXIST						
C114	3'-0"x7'-0"x1¾"	WOOD	EXIST	HM	EXIST						
C115A	3'-0"x7'-0"x1¾"	HM	EXIST	HM	EXIST						3
C115B	3'-0"x7'-0"x1¾"	HD	EXIST	HM	EXIST						
C115C	28'-0"x14'-0"x1¾"	STL	EXIST	STL	EXIST						
C115D	28'-0"x14'-0"x1¾"	STL	EXIST	STL	EXIST						
C116	3'-0"x7'-0"x1¾"	WOOD	A	HM	HM-2	3/A-33	4/A-33	4/A-33	–		1
D101A	(2) 3'-0"x7'-0"x1¾"	WOOD	B	HM	HM-1	1/A-33	2/A-33	2/A-33	–		4
D101B	(2) 3'-0"x7'-0"x1¾"	WOOD	EXIST	HM	EXIST						
D102	3'-0"x7'-0"x1¾"	WOOD	EXIST	HM	EXIST						
D103A	(2) 3'-0"x7'-0"x1¾"	HM	EXIST	HM	EXIST						
D103B	(2) 3'-0"x7'-0"x1¾"	HM	EXIST	HM	EXIST						
D103C	(2) 3'-0"x7'-0"x1¾"	HM	EXIST	HM	EXIST						
D104	3'-6"x7'-0"x1¾"	WOOD	EXIST	HM	EXIST						
D105	4'-4"x7'-¼"x1¾" VAULT		EXIST		EXIST						
D106	4'-4"x7'-¼"x1¾" VAULT		EXIST		EXIST						
D107	3'-6"x7'-0"x1¾"	WOOD	EXIST	HM	EXIST						
D108A	(2) 3'-0"x7'-0"x1¾"	HM	EXIST	HM	EXIST						
D108B	(2) 3'-0"x7'-0"x1¾"	HM	EXIST	HM	EXIST						
D109	3'-0"x7'-0"x1¾"	WOOD	EXIST	HM	EXIST						
D110	3'-0"x7'-0"x1¾"	WOOD	EXIST	HM	EXIST						
D111A	(2) 2'-10"x7'-0"x1¾"	WOOD	EXIST	HM	EXIST						
D111B	(2) 2'-10"x7'-0"x1¾"	WOOD	EXIST	HM	EXIST						
D112A	(2) 2'-10"x7'-0"x1¾"	HM	EXIST	HM	EXIST						
D112B	(2) 2'-10"x7'-0"x1¾"	HM	EXIST	HM	EXIST						
D112C	(2) 2'-10"x7'-0"x1¾"	HM	EXIST	HM	EXIST						
D113	3'-6"x7'-0"x1¾"	WOOD	EXIST	HM	EXIST						
D114	4'-4"x7'-¼"x1¾" VAULT		EXIST		EXIST						
D115	3'-6"x7'-0"x1¾"	WOOD	EXIST	HM	EXIST						
D116	4'-4"x7'-¼"x1¾" VAULT		EXIST		EXIST						
D117A	(2) 2'-10"x7'-0"x1¾"	HM	EXIST	HM	EXIST						
D117B	(2) 2'-10"x7'-0"x1¾"	HM	EXIST	HM	EXIST						
D118	3'-0"x7'-0"x1¾"	WOOD	EXIST	HM	EXIST						
D119	3'-0"x7'-0"x1¾"	WOOD	EXIST	HM	EXIST						
D120	3'-0"x7'-0"x1¾"	HM	EXIST	HM	EXIST						
D121A	(2) 2'-10"x7'-0"x1¾"	WOOD	EXIST	HM	EXIST						
D121B	(2) 2'-10"x7'-0"x1¾"	HM	EXIST	HM	EXIST						
D121C	3'-0"x7'-0"x1¾"	HM	EXIST	HM	EXIST						
D121D	10'-0"x10'-0"x1¾"	STL	EXIST	STL	EXIST						
D122	(2) 2'-10"x7'-0"x1¾"	HM	EXIST	HM	EXIST						
D124A	3'-0"x7'-0"x1¾"	WOOD	EXIST	HM	EXIST						
D124B	3'-0"x7'-0"x1¾"	WOOD	EXIST	HM	EXIST						
D125A	(2) 2'-10"x7'-0"x1¾"	WOOD	A	HM	HM-2	3/A-33	4/A-33	4/A-33	–		
D125B	(2) 2'-10"x7'-0"x1¾"	WOOD	A	HM	EXIST	1/A-33	2/A-33	2/A-33	–		
D126	3'-0"x7'-0"x1¾"	WOOD	A	HM	HM-1	1/A-33	2/A-33	2/A-33	–	20 MIN	
D128A	3'-0"x7'-0"x1¾"	WOOD	A	HM	HM-2	3/A-33	4/A-33	4/A-33	–		
D128B	3'-0"x7'-0"x1¾"	WOOD	X	HM	HM-2	3/A-33	4/A-33	4/A-33	–	20 MIN	
D128C	3'-0"x7'-0"x1¾"	WOOD	A	HM	HM-1	1/A-33	2/A-33	2/A-33	–		
D128D	3'-0"x7'-0"x1¾"	WOOD	X	HM	HM-2	3/A-33	4/A-33	4/A-33	–		
D129	3'-0"x7'-0"x1¾"	WOOD	A	HM	HM-1	1/A-33	2/A-33	2/A-33	–	20 MIN	
D131A	3'-0"x7'-0"x1¾"	WOOD	EXIST	HM	EXIST						
D131B	3'-0"x7'-0"x1¾"	WOOD	A	HM	HM-2	3/A-33	4/A-33	4/A-33	–	20 MIN	
D131C	3'-0"x7'-0"x1¾"	WOOD	EXIST	HM	EXIST						
D135A	3'-0"x7'-0"x1¾"	ALUM	EXIST	ALUM	EXIST						
D135B	3'-0"x7'-0"x1¾"	WOOD	B	HM	HM-1	1/A-33	2/A-33	2/A-33	–	90 MIN	1,4



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4055 International Plaza, Suite 200
Fort Worth, Texas 76109-4895
Phone – (817) 735-7300
Fax – (817) 735-7491
Freese and Nichols, Inc.
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Firm F-2144

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CAMP MABRY P.O. BOX 5218
AUSTIN, TEXAS 78763-5218
(512) 782-6151
FAX (512) 782-1481

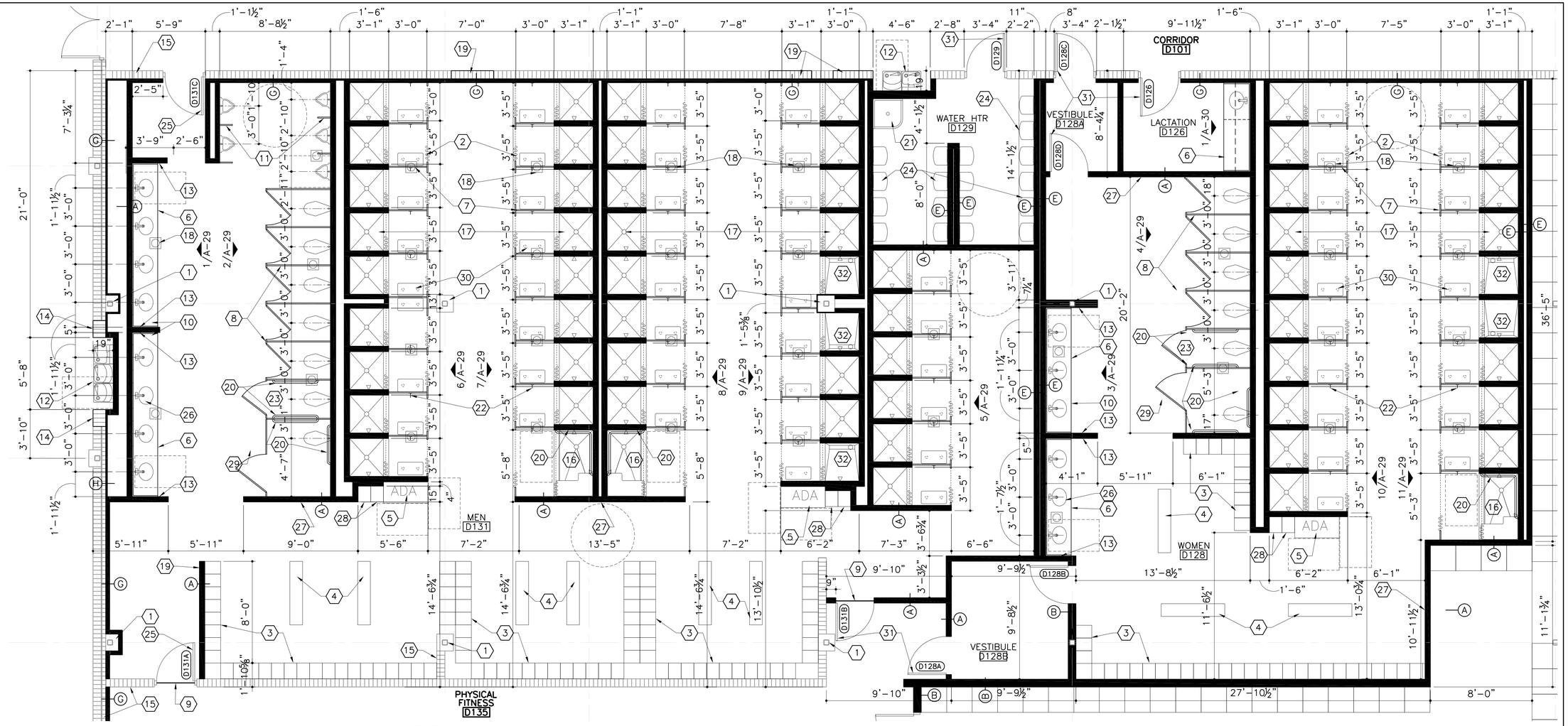
STAR CAMPAIGN FY18 - WESLACO
RC MAJOR MAINTENANCE

TXARNG CFMO

ARCHITECTURAL DOOR SCHEDULE AND TYPES

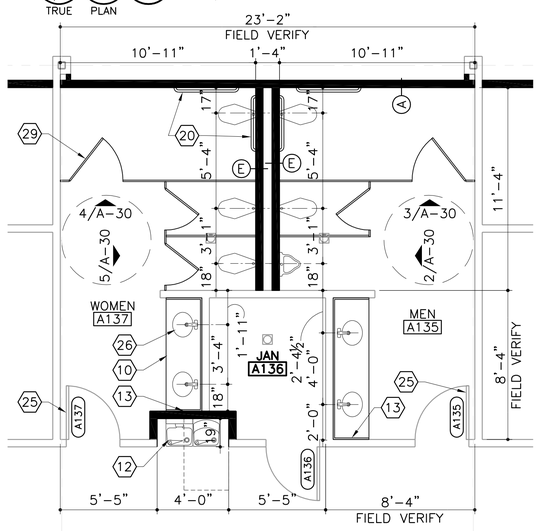
A-27

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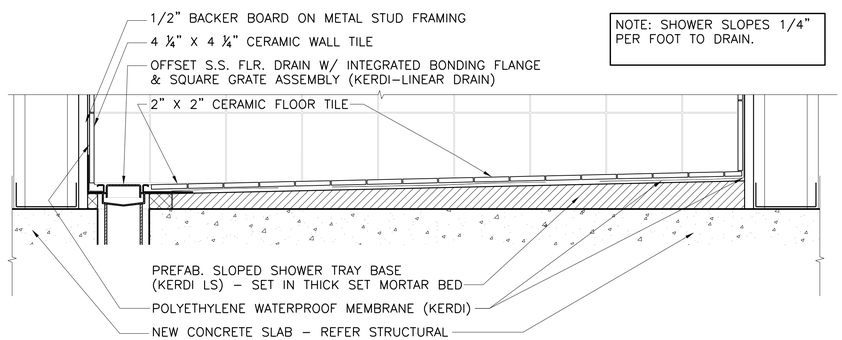
1 NORTH TRUE NORTH PLAN — ENLARGED FLOOR PLAN – AREA "D" SHOWER/LOCKER ROOMS

1/4" = 1'-0"



5 NORTH TRUE NORTH PLAN 2 — ENLARGED FLOOR PLAN – AREA "A" RESTROOMS

1/4" = 1'-0"



NOTE: SHOWER SLOPES 1/4" PER FOOT TO DRAIN.

5 SHOWER BASE DETAIL W/ OFFSET DRAIN

3" = 1'-0"

NOTES BY SYMBOL "⬡"

1. EXISTING COLUMN TO REMAIN.
2. SHOWER CURTAIN BY OWNER, ROD CONTRACTOR FURNISHED/INSTALLED. MOUNT ROD AT 7'-8" A.F.F. MINIMUM – AT SHOWER AND SHOWER DRESS COMPARMENT.
3. 12"X15"x36" DOUBLE TIER METAL LOCKER WITH SLOPED TOP ON 4" CONCRETE BASE.
4. WOOD BENCHES (12"X48")
5. ADA BENCH (20"X42"). PROVIDE 2 ROBE HOOKS/TOWEL PINS ABOVE BENCH @ 48" A.F.F.
6. SOLID SURFACE COUNTER – PROVIDE UPPER PLAM CABINETS.
7. HDPE TOILET PARTITION & SHOWER DRESS COMPARTMENT, TYPICAL.
8. HDPE TOILET PARTITION DOOR (26"X60").
9. LIMITS OF TILE FLOORING.
10. SOLID SURFACE COUNTER.
11. HDPE URINAL SCREEN, TYPICAL.
12. ELECTRIC WATER COOLER.
13. ELECTRIC HAND DRYER.
14. INFILL MASONRY
15. EXISTING CMU WALL TO REMAIN.
16. ACCESSIBLE TILE SHOWER COMPARTMENT – RE: 2/A-31 FOR ADDITIONAL INFORMATION.
17. STANDARD TILE SHOWER COMPARTMENT – REFER TO SHEET 1/A-31 FOR ADDITIONAL INFORMATION.
18. FLOOR DRAIN, TYPICAL.
19. NEW CMU WALL – REFER SHEET A-2 FOR PARTITION TYPES.
20. GRAB BAR.
21. MOP SINK – REFER PLUMBING.
22. ROBE HOOK.
23. AMBULATORY STALL.
24. TANKLESS WATER HEATER – REFER PLUMBING.
25. EXISTING DOOR TO REMAIN.
26. SINK – REFER PLUMBING.
27. FULL LENGTH FRAMED MIRROR (24"X54")
28. ADA LOCKER: 12"X15"X72" FULL HEIGHT METAL LOCKER W/ SLOPE TOP ON 4" CONC. BASE – REFER 7/A-33.
29. HDPE TOILET PARTITION DOOR AT ADA STALL (36"X60")
30. WOOD BENCH AT SHOWER DRESS COMPARTMENT (10"X24")
31. NEW DOOR.
32. TILE SHOWER COMPARTMENT WITH OFFSET DRAIN – RE: 5/A-28.

BID OPTIONS "◯"

5. RESTROOM/CONFERENCE ROOM RENOVATION IN ADMIN. WING.

0 1' 2' 4' 8'

1/4"=1'-0"

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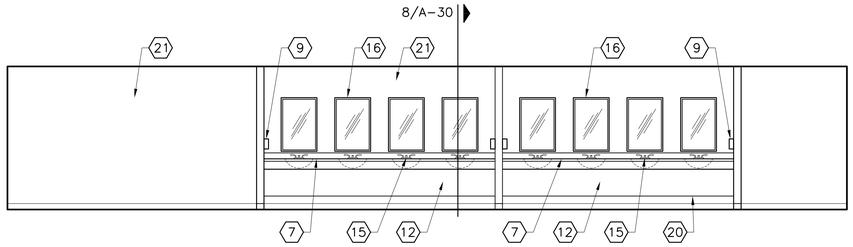
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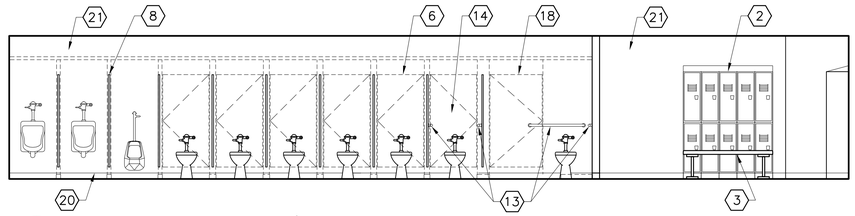
ARCHITECTURAL ENLARGED FLOOR PLANS

A-28

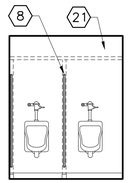
SHT. 36 of 129



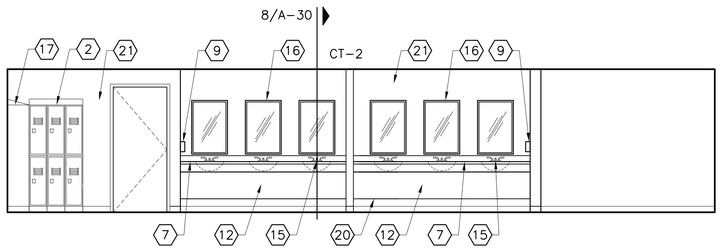
1 – ELEVATION – MEN'S LATRINE
1/4" = 1'-0"



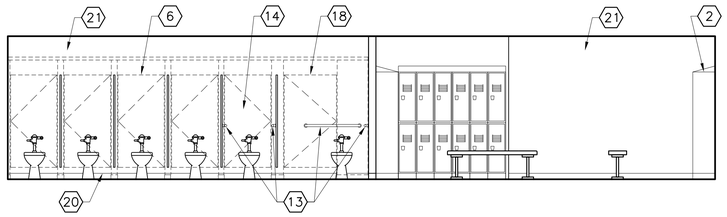
2 – ELEVATION – MEN'S LATRINE
1/4" = 1'-0"



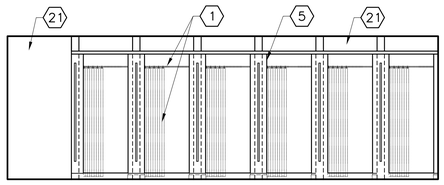
2 – ELEVATION – MEN'S LATRINE
1/4" = 1'-0"



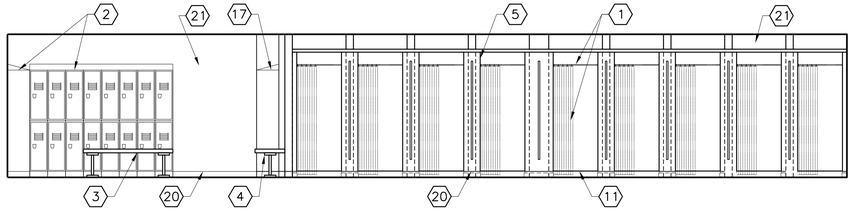
3 – ELEVATION – WOMEN'S LATRINE
1/4" = 1'-0"



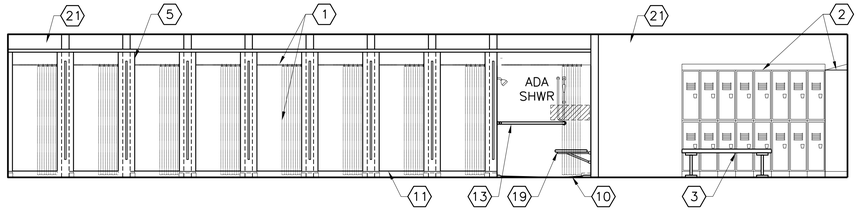
4 – ELEVATION – WOMEN'S LATRINE
1/4" = 1'-0"



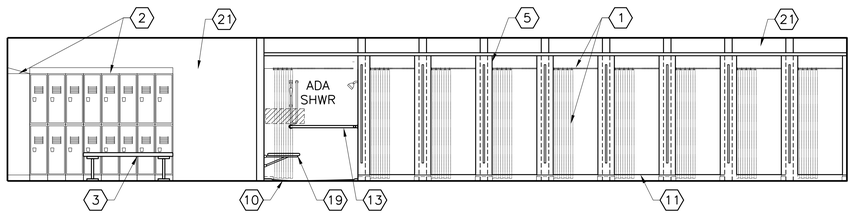
5 – ELEVATION – MEN'S SHOWERS
1/4" = 1'-0"



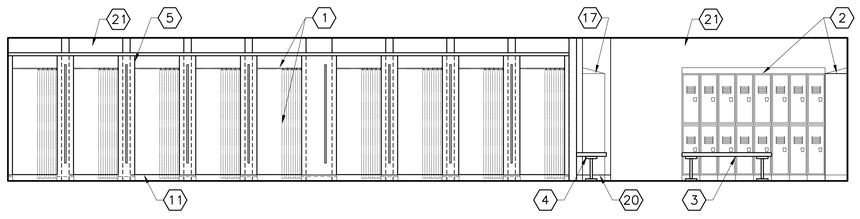
6 – ELEVATION – MEN'S SHOWERS
1/4" = 1'-0"



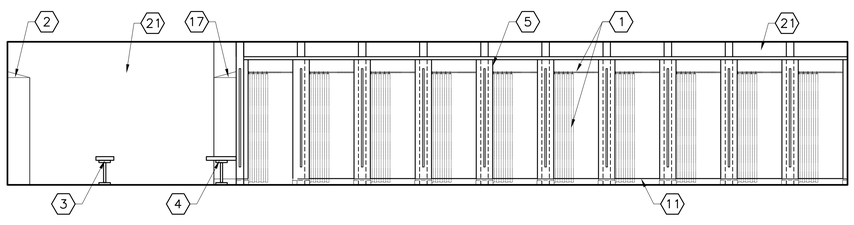
7 – ELEVATION – MEN'S SHOWERS
1/4" = 1'-0"



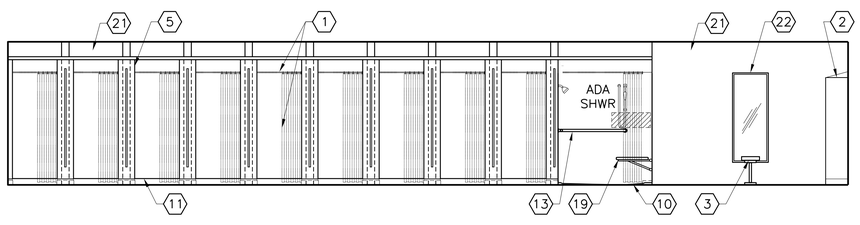
8 – ELEVATION – MEN'S SHOWERS
1/4" = 1'-0"



9 – ELEVATION – MEN'S SHOWERS
1/4" = 1'-0"



10 – ELEVATION – WOMEN'S SHOWERS
1/4" = 1'-0"



11 – ELEVATION – WOMEN'S SHOWERS
1/4" = 1'-0"

NOTES BY SYMBOL "⬡"

1. SHOWER CURTAIN BY OWNER, ROD CONTRACTOR FURNISHED/INSTALLED. MOUNT ROD AT 7'-8" A.F.F. MINIMUM – AT SHOWER AND SHOWER DRESS COMPARMENT.
2. 12"X15"x36" DOUBLE TIER METAL LOCKER WITH SLOPED TOP ON 4" CONCRETE BASE.
3. WOOD BENCHES.
4. ADA BENCH (20"X42"). PROVIDE 2 ROBE HOOKS/TOWEL PINS ABOVE BENCH @ 48" A.F.F.
5. HDPE TOILET PARTITION & SHOWER DRESS COMPARTMENT, TYPICAL.
6. HDPE TOILET PARTITION DOOR (26"X60").
7. SOLID SURFACE COUNTER.
8. HDPE URINAL SCREEN, TYPICAL.
9. ELECTRIC HAND DRYER.
10. ACCESSIBLE TILE SHOWER COMPARTMENT – RE: 2/A-31 FOR ADDITIONAL INFORMATION.
11. STANDARD TILE SHOWER COMPARTMENT – REFER TO SHEET 1/A-31 FOR ADDITIONAL INFORMATION.
12. REMOVABLE PLAM PANEL.
13. GRAB BAR.
14. AMBULATORY STALL.
15. SINK – REFER PLUMBING.
16. FMS – FRAMED MIRROR, TYP.
17. ADA LOCKER: 12"X15"X72" FULL HEIGHT METAL LOCKER W/ SLOPE TOP ON 4" CONC. BASE – REFER 7/A-33.
18. HDPE TOILET PARTITION DOOR AT ADA STALL (36"X60")
19. WOOD BENCH AT SHOWER DRESS COMPARTMENT (10"X24")
20. CERAMIC TILE BASE AS SCHEDULED.
21. CERAMIC TILE – CT-2.
22. FULL LENGTH FRAMED MIRROR (24"X54").

0 1' 2' 4' 8'
1/4"=1'-0"



04/20/2018

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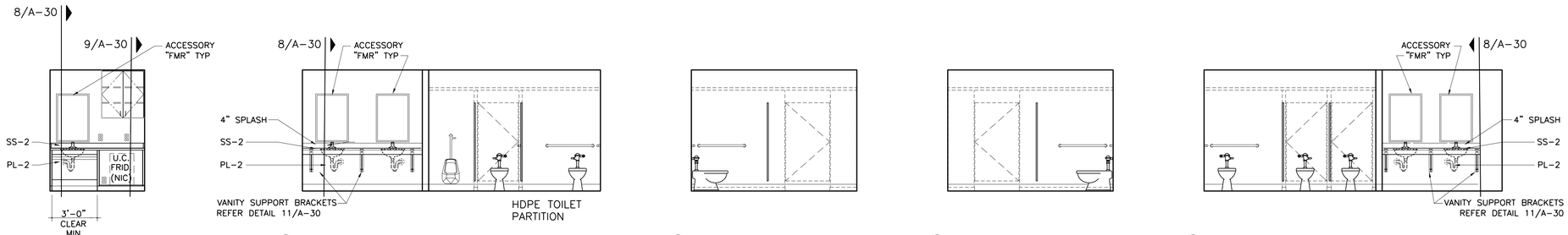
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ARCHITECTURAL
INTERIOR ELEVATIONS

A-29

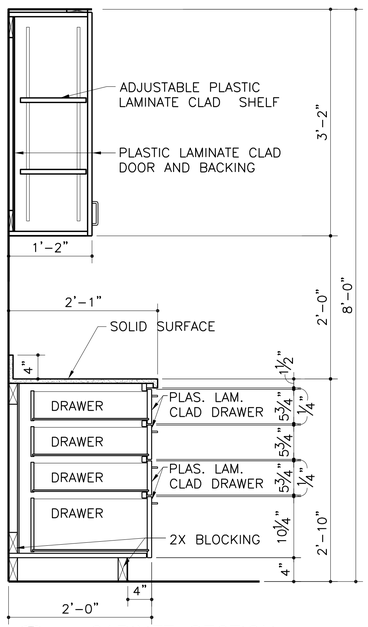
SHT. 37 of 129



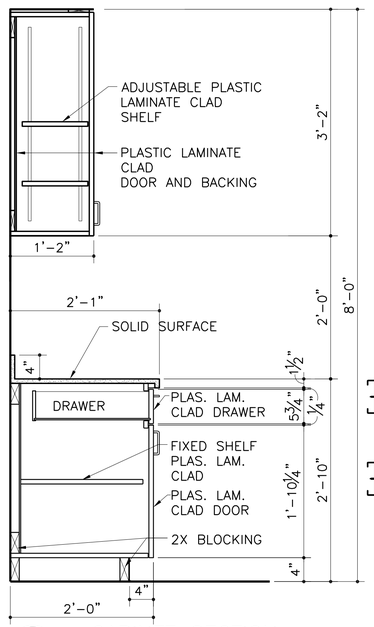
BID OPTIONS "◯"

5. RESTROOM/CONFERENCE ROOM RENOVATION IN ADMIN. WING.

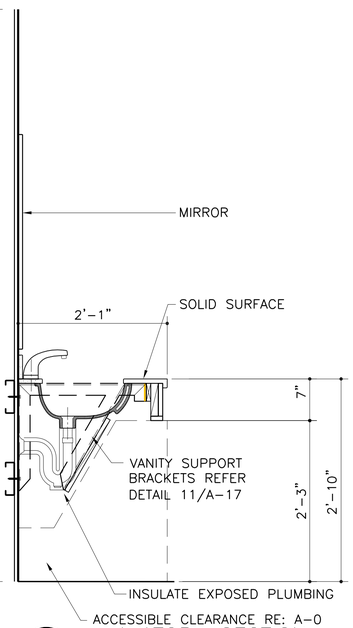
(1/–) LACTATION
1/4" = 1'-0"



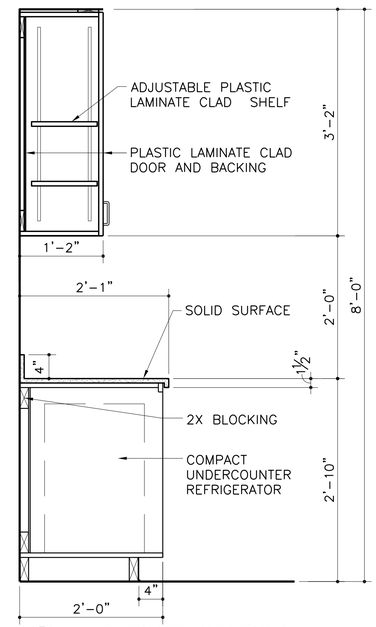
(5/2/–) MENS A135
1/4" = 1'-0"



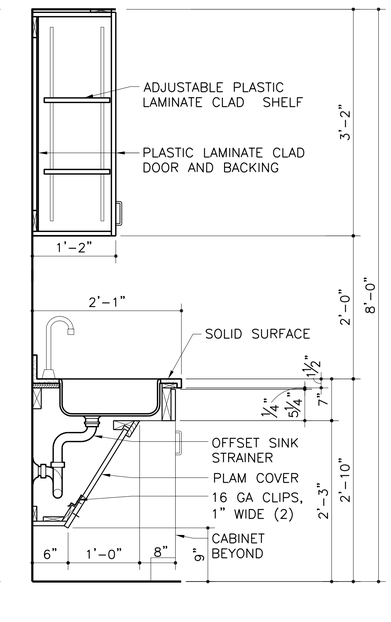
(5/3/–) MENS A135
1/4" = 1'-0"



(5/4/–) WOMENS A137
1/4" = 1'-0"



(5/5/–) WOMENS A137
1/4" = 1'-0"



(6/A-30) CABINET SECTION
1" = 1'-0"

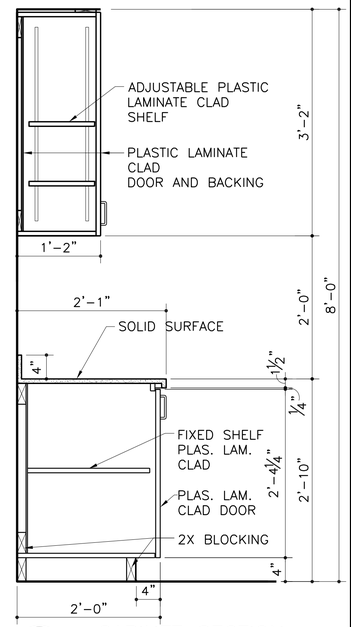
(7/A-30) CABINET SECTION
1" = 1'-0"

BASE CABINET ONLY AT SIM.

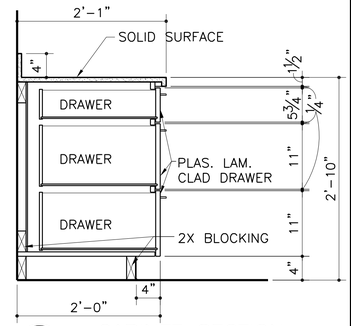
(8/A-30) LAVATORY SECTION
1" = 1'-0"

(9/A-30) CABINET SECTION
1" = 1'-0"

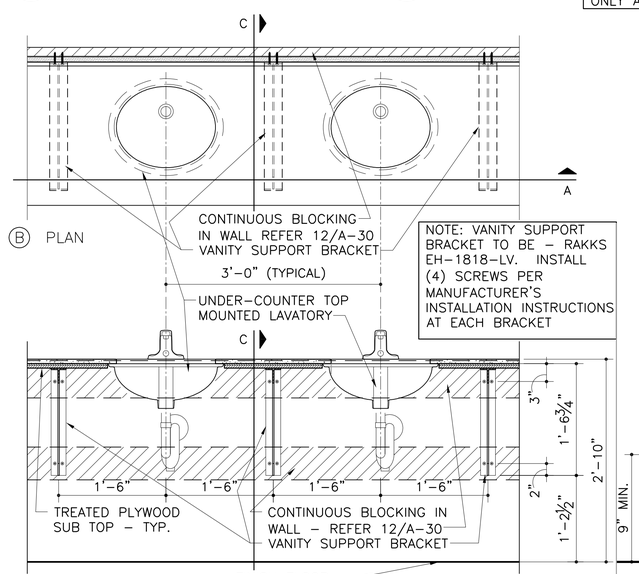
(10/A-30) CABINET SECTION
1" = 1'-0"



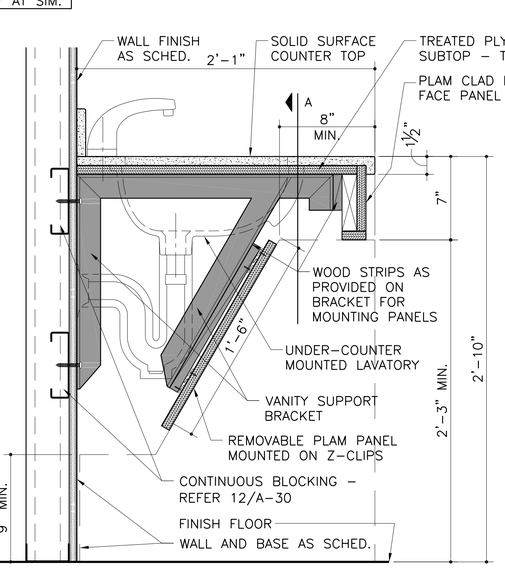
(14/A-30) CABINET SECTION
1" = 1'-0"

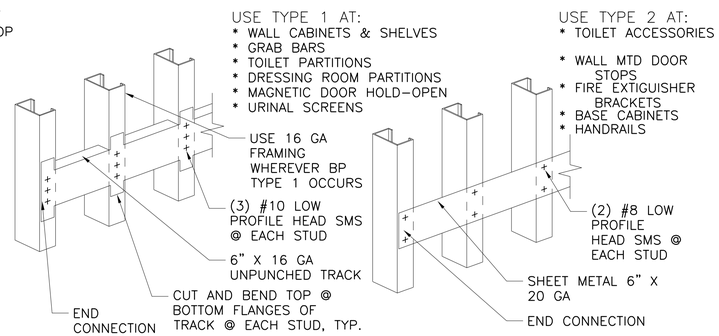


(15/A-17) CABINET SECTION
1" = 1'-0"



(11/A-17) LAVATORY SUPPORT BRACKET
N.T.S.





A BACKING PLATE TYPE 1 B BACKING PLATE TYPE 2

BACKING PLATE NOTES:
1. EXTEND BACKING PLATE TYPE 1 ACROSS (3) STUDS MIN.
2. EXTEND BACKING PLATE TO 1 STUD BEYOND EXTENT OF CABINETRY OR WALL HUNG EQUIPMENT.
3. DO NOT CUT BACKING PLATE FLANGES EXCEPT FOR NOTCHING AT WALL STUDS

(12/A-30) BLOCKING/BACKING PLATE SUPPORT DETAIL
N.T.S.

FREESE NICHOLS
4055 International Plaza, Suite 200
Fort Worth, Texas 76109-4895
Phone – (817) 735-7300
Fax – (817) 735-7491
Freese and Nichols, Inc.
Texas Registered Engineering Firm F-2144

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PROJECT ARCHITECT: HOMER SAENZ, AIA
PROJECT NO. ADG17589A
ISSUE DATE: 04/20/18
DRAWN BY: HS
REVIEWED BY: JWW

TEXAS MILITARY FORCES
CONSTRUCTION & FACILITIES MANAGEMENT OFFICE-CFMO
AUSTIN, TEXAS 78763-5218
FAX (512) 782-1481
CAMP MABRY P.O. BOX 5218
(512) 782-6131

STAR CAMPAIGN FY18 - WESLACO
RC MAJOR MAINTENANCE

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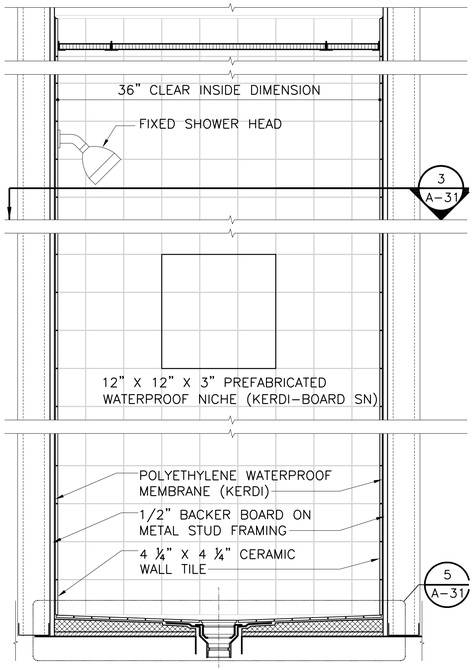
0 1" 2" 4" 8"
3"=1'-0"
0 6" 1' 2'
1"=1'-0"
0 1' 2' 4' 8'
1/4"=1'-0"

JOSEPH SAENZ 25061 REGISTERED ARCHITECT STATE OF TEXAS
04/20/2018

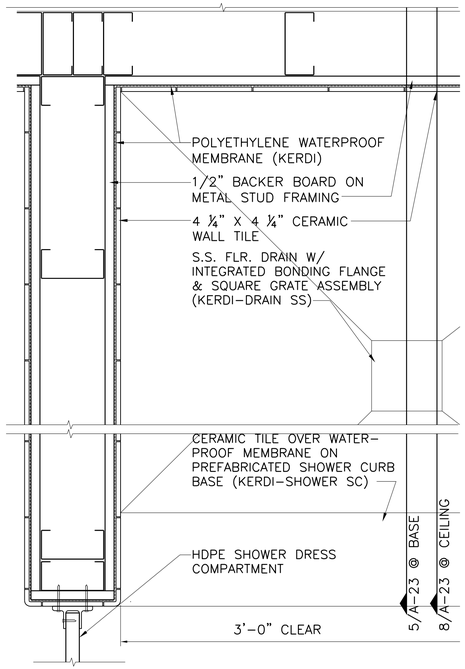
MILLWORK ELEVATIONS & DETAILS

A-30

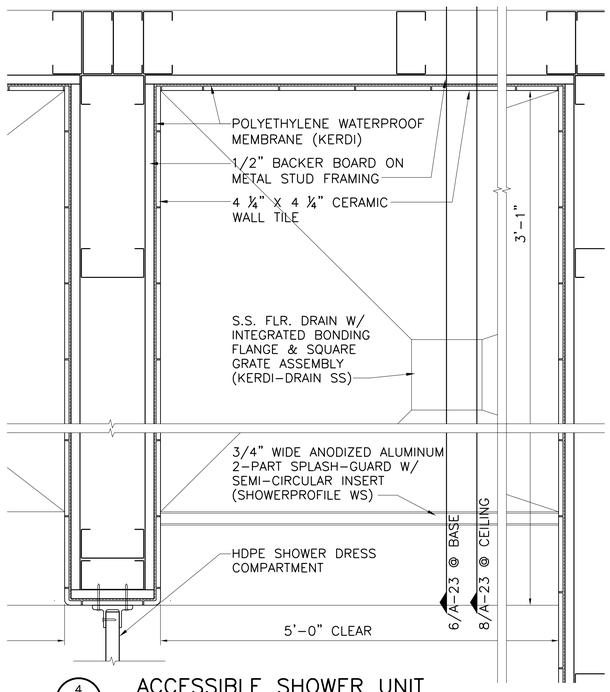
SHT. 38 of 129



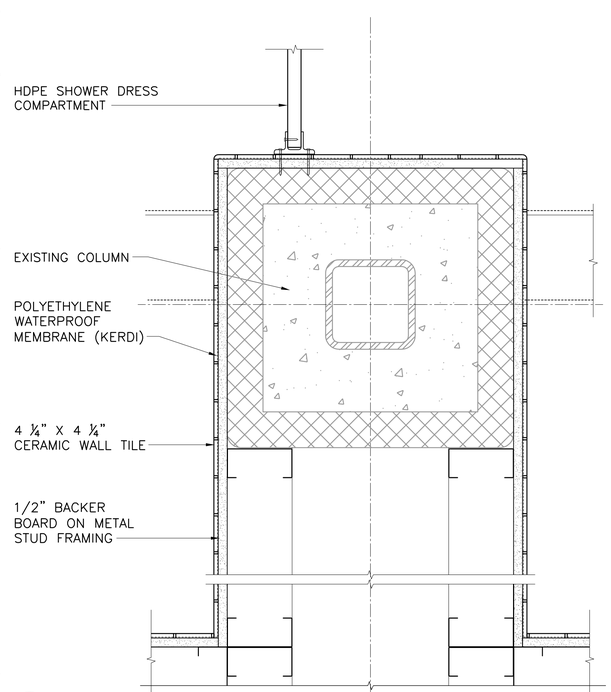
1 STANDARD SHOWER UNIT
1 1/2" = 1'-0"



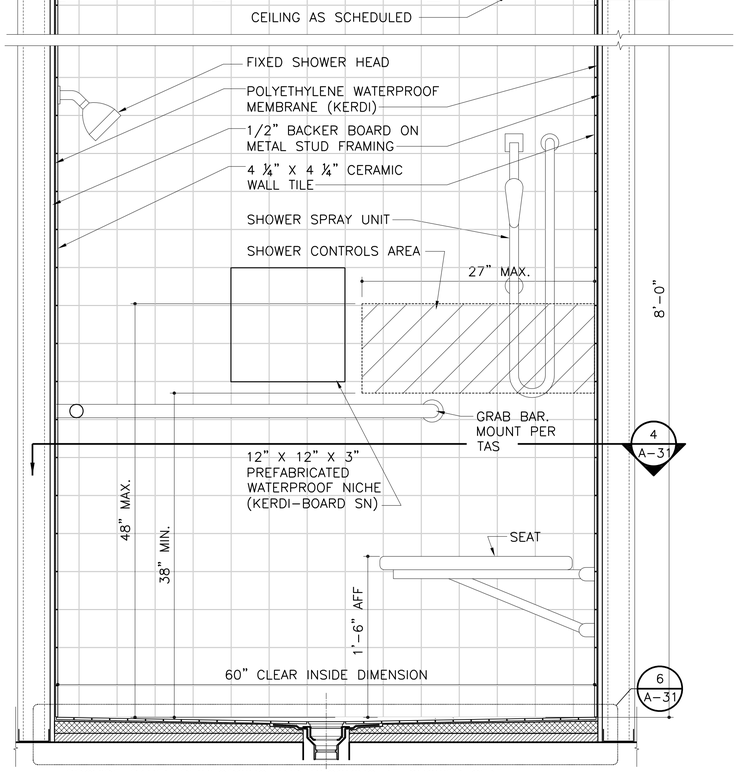
3 STANDARD SHOWER UNIT
3" = 1'-0"



4 ACCESSIBLE SHOWER UNIT
3" = 1'-0"



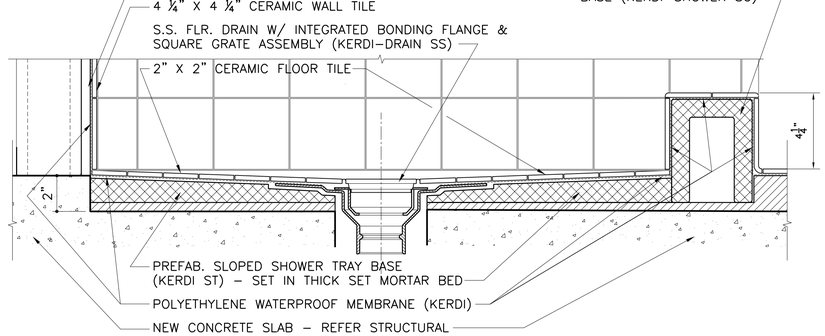
7 PLAN DETAIL @ EXISTING COLUMN
3" = 1'-0"



PROVIDE PANEL REINFORCING AND BLOCKING AT SHOWER SEAT AND GRAB BARS

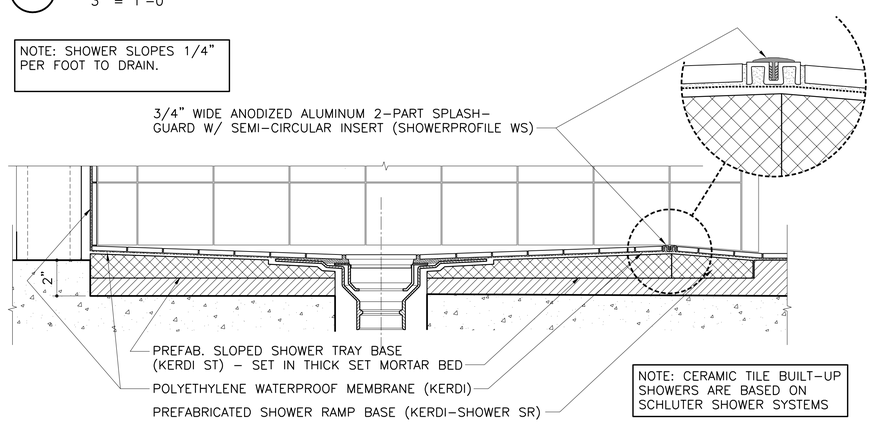
SEAL ALL JOINTS AT BACKER BOARD AND PROVIDE PRIMER PRIOR TO INSTALL.

2 ACCESSIBLE SHOWER UNIT
1 1/2" = 1'-0"



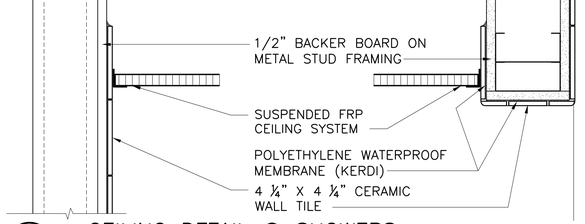
5 STANDARD SHOWER BASE DETAIL
3" = 1'-0"

NOTE: SHOWER SLOPES 1/4" PER FOOT TO DRAIN.



REFER TO 5/A-31 - STANDARD SHOWER FOR BALANCE OF NOTES

6 ACCESSIBLE SHOWER BASE DETAIL
3" = 1'-0"



8 CEILING DETAIL @ SHOWERS
3" = 1'-0"

0 1' 2' 4'
3/8"=1'-0

0 4" 8" 1'
1-1/2"=1'-0"

0 1" 2" 4" 8"
3"=1'-0"

JOSEPH SEAN FOLEY 85067 LICENSED ARCHITECT STATE OF TEXAS
04/20/2018

THE STATE OF TEXAS

PROJECT ARCHITECT:
HOMER SAENZ, AIA
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4055 International Plaza, Suite 200
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Fax - (817) 735-7491
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Texas Registered Engineering Firm F-2144

NO.	DATE	ISSUE
1	~~ADD1 06/26/2017~~	
2	~~ADD2 07/12/2017~~	
3	~~IFC 08/25/2017~~	
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CONSTRUCTION & FACILITIES MANAGEMENT OFFICE-CFMO
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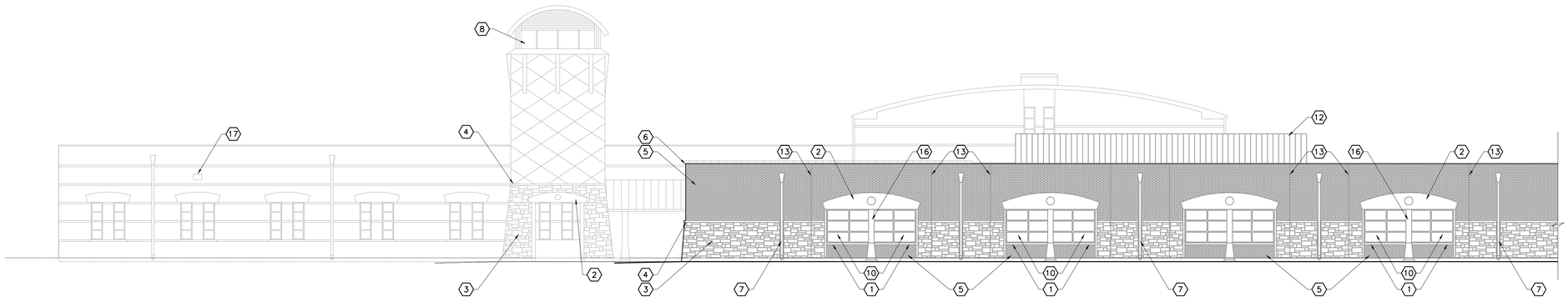
STAR CAMPAIGN FY18 - WESLACO
RC MAJOR MAINTENANCE

TXARNG CFMO

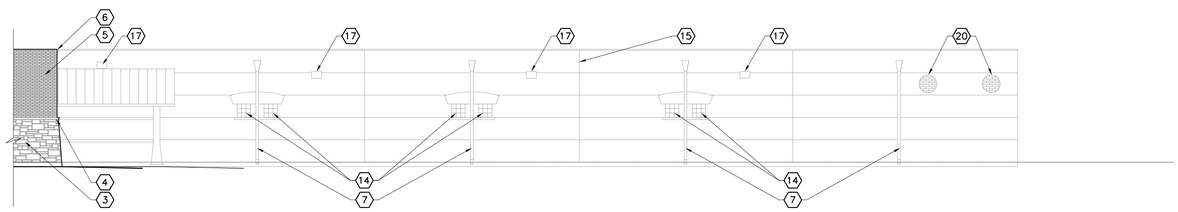
ARCHITECTURAL DETAILS

A-31

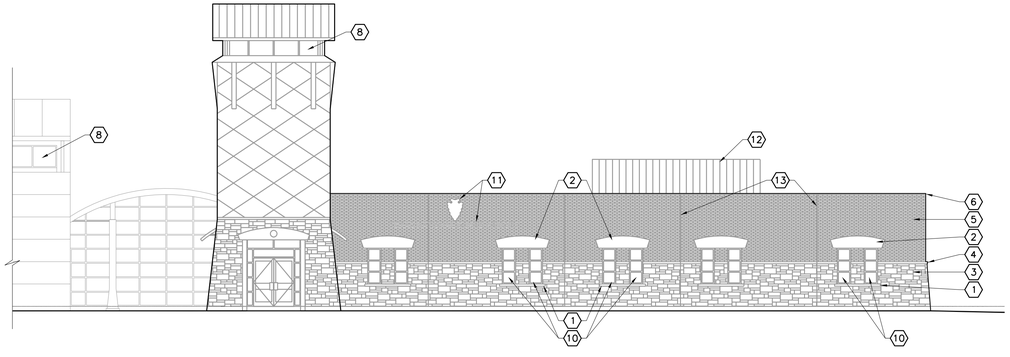
SHT. 39 of 129



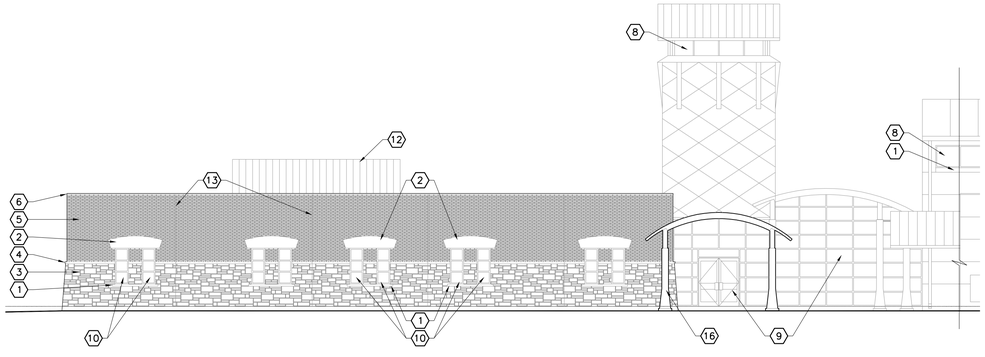
1 PARTIAL SOUTH ELEVATION
3/32" = 1'-0"



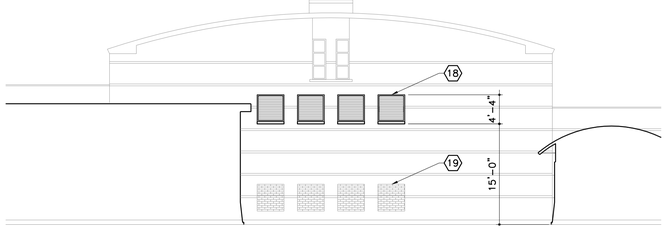
2 PARTIAL SOUTH ELEVATION
3/32" = 1'-0"



3 PARTIAL WEST ELEVATION
3/32" = 1'-0"



4 PARTIAL EAST ELEVATION
3/32" = 1'-0"



5 PARTIAL ELEVATION – DRILL HALL SOUTH WALL
3/32" = 1'-0"

GENERAL NOTES

1. DISCIPLINE SPECIFIC BID OPTIONS CAN BE FOUND ON THE COVER SHEET.
2. ELEVATIONS BASED ON PLAN NORTH ORIENTATION.

NOTES BY SYMBOL "⬡"

6 1. EXISTING CAST STONE SILL – CLEAN EXISTING STAINS AND SEAL.
6 2. EXISTING CAST STONE HEAD – CLEAN EXISTING STAINS AND SEAL.
6 3. EXSTING LIMESTONE VENEER – CLEAN EXISTING STAINS AND SEAL.
6 4. EXISTING CAST STONE WATERTABLE – CLEAN EXISTING STAINS AND SEAL.
5. EXISTING BRICK VENEER TO REMAIN.
6. EXISTING METAL COPING TO REMAIN.
7. EXISTING DOWNSPOUT.
8. EXISTING CLERESTORY WINDOW.
9. EXISTING STOREFRONT AND DOOR SYSTEM.
6 10. EXISTING WINDOWS TO REMAIN, CAULK AND RESEAL EXTERIOR AND INTERIOR.
11. EXISTING BUILDING SIGNAGE TO REMAIN.
12. EXISTING METAL PANEL – HVAC SCREEN TO REMAIN.
6 13. EXISTING EXPANSION JOINT, REPLACE ELASTOMERIC SEALANT – TYPICAL.
6 14. EXISTING GLASS BLOCK WINDOW TO REMAIN, CAULK AND RESEAL EXTERIOR AND INTERIOR – TYPICAL.
6 15. EXISTING MASONRY CONTROL JOINT, REPLACE ELASTOMERIC SEALANT – TYPICAL.
16. EXISTING COLUMN TO REMAIN.
6 17. NEW LIGHT FIXTURE – RE: ELECTRICAL.
18. NEW ALUMINUM LOUVERS.
19. INFILL EXISTING LOUVER OPENINGS, RE: 1/A-2.
20. INFILL EXISTING EXHAUST FAN OPENINGS, RE: 1/A-2.

BID OPTIONS "◯"

6. EXTERIOR BUILDING IMPROVEMENTS.

0 4' 8' 16'
3/32"=1'-0"



04/20/2018

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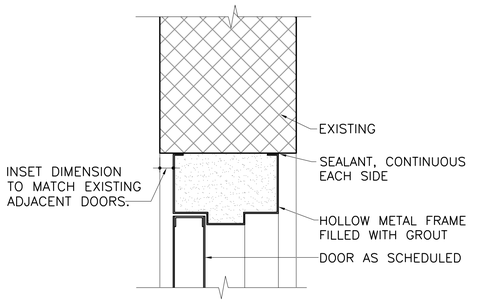
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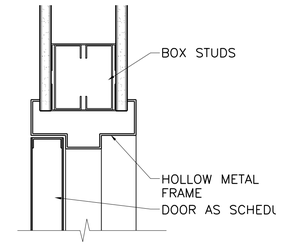
ARCHITECTURAL EXTERIOR ELEVATIONS

A-32

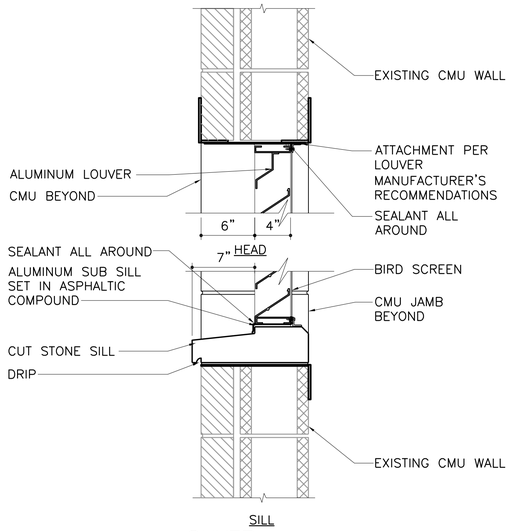
SHT. 40 of 129



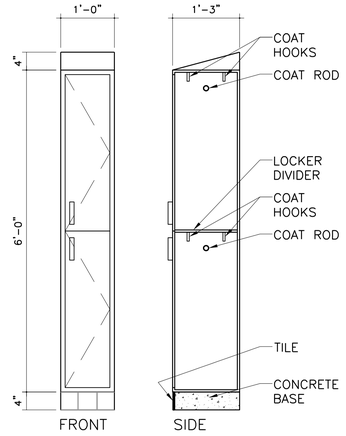
1 HEAD
3"=1'-0"



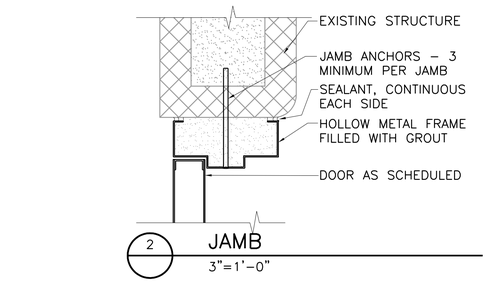
3 HEAD
3"=1'-0"



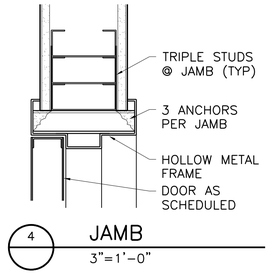
5 LOUVER HEAD AND SILL (JAMB SIM)
3"=1'-0"



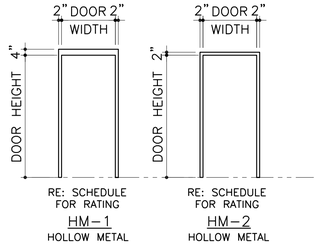
6 STANDARD LOCKER
N.T.S.



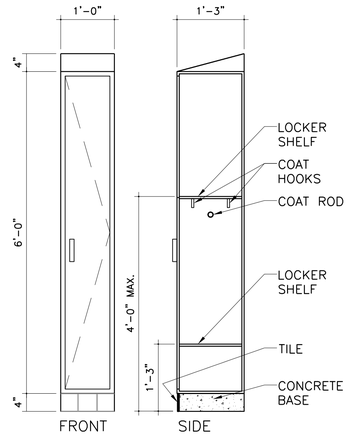
2 JAMB
3"=1'-0"



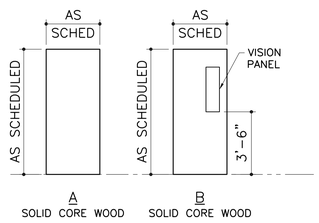
4 JAMB
3"=1'-0"



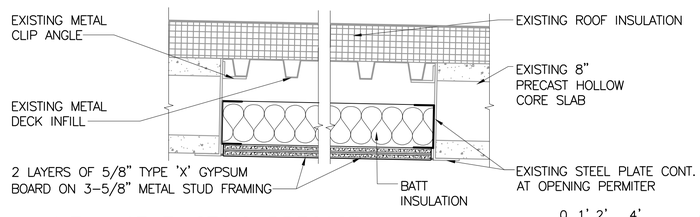
FRAME TYPES
1/4"=1'-0"



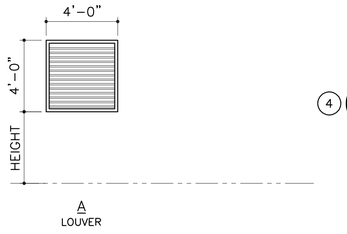
7 ACCESSIBLE LOCKER
N.T.S.



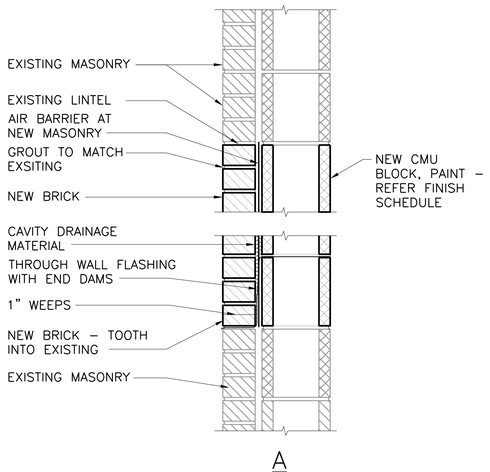
DOOR TYPES
1/4"=1'-0"



8 INFILL AT EXISTING PRECAST HOLLOW CORE SLAB OPENINGS
N.T.S.



OPENING TYPES
1/4"=1'-0"



9 CMU WALL INFILL DETAILS
1 1/2" = 1'-0"

BID OPTIONS "◯"

4. ADDITIONAL HVAC UPGRADES/ REPAIRS/ HVLS FANS.

0 1' 2' 4' 8'
1/4"=1'-0"
0 4" 8" 1'
1-1/2"=1'-0"
0 1" 2" 4" 8"
3"=1'-0"

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ARCHITECTURAL DOOR TYPES AND DETAILS

A-33

SHT. 41 of 129

HOMER SAENZ 25681 REGISTERED ARCHITECT STATE OF TEXAS
04/20/2018

GENERAL NOTES

1. CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE 2015 INTERNATIONAL BUILDING CODE, INCLUDING LOCAL SUPPLEMENTS, EXCEPT WHERE APPLICABLE CODES OR THE CONTRACT DOCUMENTS ARE MORE RESTRICTIVE.

2. DEAD LOADS: ACTUAL WEIGHTS OF MATERIALS OF CONSTRUCTION AND FIXED SERVICE EQUIPMENT

3. LIVE LOADS:
   A. MECHANICAL, LIGHT STORAGE: 125 PSF
   B. ASSEMBLY: 100 PSF
   C. CORRIDORS: 80 PSF
   D. ROOMS: 50 PSF
   E. ROOF: 20 PSF

4. SNOW LOAD
   A. GROUND SNOW LOAD: Pg = 5 PSF
   B. SNOW IMPORTANCE FACTOR: I = 1.00

5. LATERAL LOADS:
   A. RISK CATEGORY II
   B. WIND LOAD:
      i. ULTIMATE DESIGN WIND SPEED: V ULT = 135 MPH
      ii. WIND EXPOSURE: C
   C. SEISMIC LOAD:
      i. SEISMIC IMPORTANCE FACTOR: I = 1.00
      ii. MAPPED SPECTRAL ACCELERATIONS: SS = 0.040, S1 = 0.014
      iii. SITE CLASS: C
      iv. SPECTRAL RESPONSE COEFFICIENT: SDS = 0.043, SD1 = 0.023
      v. SEISMIC DESIGN CATEGORY: A

6. VERIFY ALL DIMENSIONS, ELEVATIONS, OPENING SIZES, AND MECHANICAL AND ELECTRICAL EQUIPMENT WEIGHTS PRIOR TO STARTING WORK.

7. REMOVE ALL ABANDONED FOUNDATIONS, UTILITIES, PIPELINES, ETC. THAT INTERFERE WITH NEW CONSTRUCTION.

8. FIELD VERIFY ALL EXISTING CONDITIONS, INCLUDING LOCATION AND DIMENSIONS OF ALL EXISTING CONSTRUCTION AND UTILITIES. NOTIFY ENGINEER IF THERE IS A CONFLICT BETWEEN THE CONTRACT DOCUMENTS AND EXISTING CONDITIONS BEFORE PROCEEDING WITH WORK.

9. PROVIDE EXCAVATION SHORING TO PROTECT AND SUPPORT FOUNDATION SOILS UNDER EXISTING STRUCTURES.

10. THE STRUCTURES ARE DESIGNED FOR STABILITY IN THE FINAL CONDITION ONLY. PROVIDE TEMPORARY BRACING AND SHORING AS REQUIRED FOR STABILITY DURING CONSTRUCTION.

11. SEE OTHER DISCIPLINE DRAWINGS FOR SIZE AND LOCATION OF ALL OPENINGS, DEPRESSIONS, OFFSETS, SLEEVES, CURBS, PADS, INSERTS, ETC. NOT SHOWN ON STRUCTURAL DRAWINGS. BEFORE FABRICATION OF MATERIALS, COORDINATE WITH MECHANICAL AND ELECTRICAL EQUIPMENT REQUIREMENTS.

12. PLANS, SECTIONS, AND DETAILS ARE NOT TO BE SCALED FOR DETERMINATION OF QUANTITIES, LENGTHS, OR FIT OF MATERIALS.

13. THE GENERAL NOTES AND TYPICAL DETAILS ARE GENERAL AND APPLY TO THE ENTIRE PROJECT EXCEPT WHERE THERE ARE SPECIFIC INDICATIONS TO THE CONTRARY.

14. CONTRACTOR SHALL PROVIDE COORDINATION DRAWINGS BEFORE STARTING CONSTRUCTION. COORDINATION DRAWINGS MUST SHALL ALL TRADES.

CONCRETE

1. CONCRETE SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 4,000 PSI, UNLESS SPECIFIED OTHERWISE.

2. REINFORCING SHALL BE IN ACCORDANCE WITH ASTM A615, GRADE 60, DEFORMED.

3. CONCRETE CLEAR COVER OVER REINFORCING SHALL BE IN ACCORDANCE WITH ACI 318, LISTED BELOW, UNLESS NOTED OTHERWISE.
   A. CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH: 3"
   B. EXPOSED TO EARTH OR WEATHER
      i. #6 BARS AND LARGER: 2"
      ii. #5 BARS AND SMALLER: 1-1/2"
   C. NOT EXPOSED TO EARTH OR WEATHER
      i. SLABS AND WALLS: 1"
      ii. BEAMS AND COLUMNS: 1-1/2"

4. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 3/4" INSIDE FORMS OR TOOLED TO 3/4" RADIUS ON SLABS, UNLESS NOTED OTHERWISE.

5. SLABS ON GRADE SHALL HAVE CONSTRUCTION JOINTS AND/OR CONTROL JOINTS (SAWED OR FORMED JOINTS) LOCATED AS SHOWN ON THE DRAWINGS. CONTRACTOR SHALL LOCATE SLAB JOINTS ON RECORD INFORMATION SHOP DRAWINGS.

6. HOOKS SHOWN ON DRAWINGS SHALL BE ASSUMED TO BE STANDARD HOOKS PER ACI 318, UNLESS NOTED OTHERWISE.

7. ALL REINFORCING SHALL BE CONTINUOUS. CONTINUOUS BARS SHALL LAP 48 BAR DIAMETERS OF SMALLER BAR LAPPED, UNLESS NOTED OTHERWISE. ALL REBAR EMBEDMENT LENGTHS SHALL BE 36 BAR DIAMETERS, UNLESS NOTED OTHERWISE.

8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL FORMING, TEMPORARY BRACING, AND SHORING.

FOUNDATION

1. FOUNDATIONS HAVE BEEN DESIGNED IN ACCORDANCE WITH GEOTECHNICAL REPORT "SUBSURFACE EXPLORATION AND FOUNDATION RECOMMENDATIONS FOR THE PROPOSED ARMORY" WESLACO, TEXAS DATED DECEMEBER 14, 1993, PREPARED BY PROFESSIONAL SERVICE INDUSTRIES, INC. (REPORT NO. 326-35415). A COPY OF THIS REPORT IS AVAILABLE FOR INSPECTION AT THE ENGINEER'S OFFICE.

2. AT THE LOCATIONS WHERE UTILITY TRENCHES CROSS THE BUILDING LINE, 5'-0" OF EACH TRENCH CENTERED ON THE BUILDING LINE SHALL BE BACKFILLED AS FOLLOWS: OUTSIDE THE BUILDING LINE BACKFILL ABOVE THE UTILITY WITH A COMPACTED, LOW-PERMEABILITY CLAY; INSIDE THE BUILDING LINE BACKFILL WITH SPECIFIED SELECT FILL; EMBEDMENT MATERIAL BELOW AND AROUND THE UTILITY SHALL BE FLOWABLE FILL.

3. EXCAVATION, SUBGRADE PREPARATION, AND BACKFILL
   A. EXISTING SUBGRADE MATERIAL MOISTURE CONTENT SHALL BE ADJUSTED AS NECESSARY AND MAINTAIN IT TO BETWEEN 1 PERCENT BELOW OPTIMUM AND 3 PERCENT ABOVE OPTIMUM AND RECOMPACT THE SOIL TO A MINIMUM OF 98 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D698 (STANDARD PROCTOR). ADD SELECT FILL TO RAISE SUBGRADE AS NECESSARY.
   B. SELECT FILL MATERIAL SHALL CONSIST OF MATERIALS WHICH ARE CLASSIFIED AS SP, SM, SC, CL, OR DUAL CLASSIFICATIONS THEREOF, WHICH HAVE A LIQUID LIMIT LESS THAN OR EQUAL TO 36 AND A PLASTICITY INDEX OF A MINIMUM OF 7 AND A MAXIMUM OF 15 AND CONTAIN AT LEAST 30 PERCENT MATERIAL PASSING THE #200 SIEVE, WHICH ARE FREE OF ORGANIC MATERIALS.
   C. SELECT FILL SHALL BE PLACED IN MAXIMUM 8" LOOSE LIFTS FOR HEAVY EQUIPMENT AND 4" LOOSE LIFTS FOR HAND-DIRECTED EQUIPMENT. COMPACT TO A MINIMUM OF 95 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D698 (STANDARD PROCTOR).
   D. IN-PLACE FIELD DENSITY TESTS SHALL BE CONDUCTED AT A RATE OF ONE TEST PER 2,500 SQUARE FEET FOR EVERY LIFT OR A MINIMUM OF 2 TESTS PER LIFT.
   E. THE SUBGRADE MOISTURE CONTENT AND DENSITY SHALL BE MAINTAINED DURING CONSTRUCTION.

4. EXTERIOR SLABS SHALL SLOPE AWAY FROM THE STRUCTURES A MINIMUM OF 1/4" PER FOOT, UNLESS NOTED OTHERWISE. GRADING AROUND STRUCTURES SHALL BE SLOPED TO DRAIN ALL WATER AWAY FROM STRUCTURES.

5. FOUNDATIONS HAVE BEEN DESIGNED FOR A NET ALLOWABLE BEARING PRESSURE OF 1,800 PSF FOR BEAMS AND 2,300 PSF FOR COLUMN FOOTINGS FOR FOUNDATIONS BEARING ON UNDISTURBED FIRM SOIL OR APPROVED ENGINEERED FILL MATERIAL. SUITABLE BEARING MATERIALS SHALL BE VERIFIED BY A LICENSED PROFESSIONAL GEOTECHNICAL ENGINEER.

STRUCTURAL STEEL

1. ALL STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE AISC "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS", ANSI/AISC 360-05.

2. STEEL MATERIAL SHALL BE IN ACCORDANCE WITH THE FOLLOWING UNLESS NOTED OTHERWISE:
   A. WIDE FLANGES: ASTM A992
   B. CHANNELS: ASTM A36
   C. PIPES: ASTM A53, TYPE E OR S, GRADE B
   D. HSS: ASTM A500, GRADE B
   E. PLATES: ASTM A36
   F. MISC.: ASTM A36
   G. ANCHOR RODS: ASTM F1554, GRADE 36

3. PROVIDE ALL TEMPORARY SUPPORTS REQUIRED FOR STEEL ERECTION.

4. UNLESS NOTED OTHERWISE, IT IS THE INTENT OF THESE DRAWINGS THAT SHOP CONNECTIONS EITHER BE WELDED OR BOLTED AND THAT FIELD CONNECTIONS BE BOLTED.

5. ALL BOLTED CONNECTIONS SHALL BE MADE WITH 3/4" DIA. ASTM A325 BOLTS OR 7/8" DIA. ASTM A490 BOLTS, UNLESS NOTED OTHERWISE.

6. ALL BOLT HOLES SHALL BE STANDARD HOLES PER AISC 360 TABLE J3.3, UNLESS OTHERWISE NOTED. DO NOT OVERSIZE, SLOT, OR ENLARGE HOLES UNLESS SPECIFICALLY INDICATED.

7. WELDING SHALL BE DONE IN ACCORDANCE WITH "STRUCTURAL WELDING CODE-STEEL", AMERICAN WELDING SOCIETY (AWS D1.1 - 2010).

8. WELDING SHALL BE PERFORMED WITH E70XX LOW-HYDROGEN ELECTRODES.

9. NO HOLES SHALL BE CUT THROUGH STEEL FRAMING IN FIELD UNLESS APPROVED BY THE ENGINEER.

POST-INSTALLED ANCHORS (EXPANSION OR ADHESIVE)

1. INSTALL IN ACCORDANCE WITH MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS (MPII), BUT NOT LESS THAN THAT INDICATED BELOW.

2. ADHESIVE ANCHORS SHALL ONLY BE INSTALLED BY CONSTRUCTION PERSONNEL CERTIFIED UNDER ACI/CRSI ADHESIVE ANCHOR INSTALLER CERTIFICATION PROGRAM. SUBMIT CERTIFICATIONS AS RECORD DATA.

3. ANCHOR DIAMETER AND EMBEDMENT SHALL BE AS INDICATED. USE STANDARD EMBEDMENT AS RECOMMENDED BY MANUFACTURER IF EMBEDMENT IS NOT INDICATED
.

4. HOLES SHALL BE DRILLED USING ROTARY HAMMER DRILLS WITH ANSI MATCHED TOLERANCE CARBIDE-TIPPED DRILL BITS. DRILL BIT DIAMETER SHALL MATCH DIAMETER RECOMMENDED BY MANUFACTURER.

5. USE CARE AND CAUTION WHEN INSTALLING TO AVOID CUTTING OR DAMAGING EXISTING REINFORCING STEEL.

6. AS INDICATED BLOW HOLES CLEAN WITH COMPRESSED AIR, 80 PSI MINIMUM. START BLOWING WITH NOZZLE AT BACK OF HOLE AND SLOWLY EXTRACT NOZZLE.

7. EXPANSION ANCHORS SHALL BE A STUD BOLT TYPE WITH HEX HEAD NUT AND SHALL BE GALVANIZED, UNLESS NOTED OTHERWISE, AND AS NOTED BELOW:
   A. ANCHORS SHALL BE HILTI KWIK BOLT TZ OR AN APPROVED EQUAL.
   B. BLOW HOLES CLEAN. REPEAT 3 TIMES.
   C. DRIVE ANCHOR INTO HOLE WITH A HAMMER AND THEN TIGHTEN TO SPECIFIED TORQUE.

8. ADHESIVE ANCHORS SHALL BE DEFORMED REINFORCING BARS CONFORMING TO ASTM A615, GR 60 OR GALVANIZED THREADED ROD CONFORMING TO ASTM F1554 GRADE 36, UNLESS NOTED OTHERWISE, AND AS NOTED BELOW:
   A. ADHESIVE SHALL BE HILTI HIT-RE 500-V3 OR AN APPROVED EQUAL. USE HILTI HIT-HY 70 FOR HOLLOW OR GROUTED MASONRY OR AN APPROVED EQUAL.
   B. PRIOR TO INSTALLATION: ALL DEFORMED BARS AND THREADED ROD SHALL BE CLEAN, FREE OF OIL, GREASE, OR OTHER RESIDUE, IN ACCORDANCE WITH MPII.
   C. CLEAN HOLES BEFORE INSTALLING ANCHOR PER MPII, BUT NOT LESS THAN THE FOLLOWING:
      i. BLOW HOLE CLEAN. REPEAT 3 TIMES.
      ii. BRUSH HOLE WITH SPECIFIED BRUSH. REPEAT 3 TIMES.
      iii. BLOW HOLE CLEAN. REPEAT 3 TIMES.
   D. INSTALL EPOXY STARTING AT BACK OF HOLE. AS REQUIRED BY MPII, USE MANUFACTURER SUPPLIED PISTON PLUG INJECTION SYSTEM FOR ALL HORIZONTAL AND VERTICALLY INCLINED HOLES.
   E. INSTALL ANCHOR BY SIMULTANTEOUSLY TWISTING AND INSERTING INTO HOLE.
   F. ALLOW ANCHOR TO SET REQUIRED TIME. DO NOT DISTURB.
   G. TIGHTEN NUT. DO NOT OVER-TORQUE.
   H. MINIMUM CONCRETE AGE AT TIME OF INSTALLATION: 28 DAYS
   I. CONCRETE TEMPERATURE RANGE AT TIME OF INSTALLATION SHALL BE: 41DEG F TO 104DEG F.
   J. CONCRETE MOISTURE CONDITION AT TIME OF INSTALLATION: DRY.

STRUCTURAL MODIFICATIONS

1. REFER TO OTHER DISCIPLINE DRAWINGS FOR RELOCATION AND DEMOLITION OF PIPING, CONDUITS, FIXTURES, INSTRUMENTS, ETC. ASSOCIATED WITH STRUCTURES SHOWN TO BE DEMOLISHED.

2. ALL DEMOLITION, REMOVAL, AND CONSTRUCTION ACTIVITIES SHALL BE CONDUCTED WITH CONSIDERATION FOR EXISTING STRUCTURES, EQUIPMENT, ETC. ANY DAMAGE WHICH MAY OCCUR BEYOND DESCRIBED DEMOLITION AND CONSTRUCTION SHALL BE REMEDIED AT CONTRACTOR'S EXPENSE AND OWNER/ENGINEER NOTIFIED. DO NOT OVER CUT AT OPENINGS AND PROPOSED DEMOLITION AREAS UNLESS SPECIFICALLY NOTED AS ACCEPTABLE IN THE DRAWINGS.

3. CONTRACTOR SHALL REMOVE AND PROPERLY DISPOSE OF ALL DEMOLISHED CONCRETE AND OTHER MATERIALS FROM THE EXISTING STRUCTURES OFF SITE PRIOR TO THE NEW CONSTRUCTION.

4. UNLESS NOTED OTHERWISE, CUTTING EMBEDDED REBARS DUE TO PIPING, CONDUITS, OR ANY OTHER PENETRATION THROUGH EXISTING CONCRETE OR MASONRY STRUCTURE IS PROHIBITED. CONTRACTOR SHALL DETECT THE EXISTING REBAR LOCATIONS BY NONDESTRUCTIVE TESTING METHODS AND KEEP PENETRATION AWAY FROM THE EMBEDDED REBARS.

5. WHERE REMOVING EXISTING CONCRETE BUT RETAINING REBARS IS INDICATED ON DRAWINGS, SAWCUT EXISTING CONCRETE TO THE LIMITS SHOWN ON PLANS BUT NOT MORE THAN 3/4" DEEP TO AVOID DAMAGING OR NICKING THE REINFORCING.

6. WHERE DEMOLITION OF EXISTING CONCRETE WILL LEAVE EMBEDDED EXISTING REBARS EXPOSED, AN ADDITIONAL 1-1/2" CONCRETE AND REINFORCEMENT BEYOND LIMITS OF THE DEMOLITION SHALL BE REMOVED. THE 1-1/2" AREAS BEING REMOVED SHALL THEN BE PLACED BACK WITH CONCRETE STRUCTURAL REPAIR MATERIAL AS SPECIFIED TO PROVIDE CORROSION PROTECTION FOR THE EXPOSED EXISTING REBARS, UNLESS NOTED OTHERWISE NOTED.

7. ROUGHEN THE EXISTING CONCRETE SURFACES THAT WILL ENCOUNTER NEW CONCRETE. "ROUGHENED SURFACE" SHALL HAVE A UNIFORMLY ROUGHENED CONCRETE SURFACE TO A FULL AMPLITUDE (DISTANCE BETWEEN HIGH AND LOW POINTS OR SIDE TO SIDE) OF APPROXIMATELY 1/4" WITH SUITABLE TOOLS TO EXPOSE A FRESH FACE. APPLY SPECIFIED BONDING AGENT TO THE EXISTING CONCRETE SURFACES PRIOR TO THE PLACEMENT OF NEW CONCRETE PER MANUFACTURER'S INSTRUCTIONS.

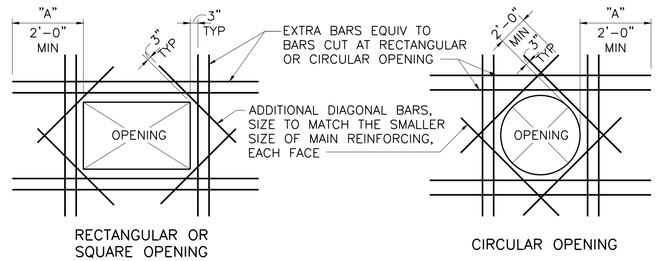
8. ALL EXPOSED EXISTING REBARS SHALL BE CLEANED BY ABRASIVE BLASTING AND COATED WITH AN EPOXY RESIN/PORTLAND CEMENT ADHESIVE BONDING AGENT TO PROVIDE CORROSION PROTECTION.

9. PRIOR TO DEMOLITION, CONTRACTOR SHALL PERFORM GPR SCANNING OF EXISTING CMU WALLS TO DETERMINE LOCATION OF REINFORCING, GROUTED AND/OR UNGROUTED CELLS, BOND BEAMS, LINTELS, ETC. PENETRATIONS SHALL BE LOCATED TO AVOID CUTTING EXISTING REINFORCING AND GROUTED CELLS. ADJUSTED LOCATIONS OF PENETRATIONS SHALL BE INCLUDED IN COORDINATION DRAWINGS.

IBC CHAPTER 17 SPECIAL INSPECTION REQUIREMENTS

1. SPECIAL INSPECTIONS ARE REQUIRED TO BE PERFOMRED IN ACCORDANCE WITH IBC 2015.

2. THE CONTRACTOR IS REQUIRED TO ENABLE THE ABOVE INSPECTIONS TO OCCUR BY PROVIDING ACCESS TO THE ELEMENTS REQUIRING INSPECTION. IN ADDITION, THE CONTRACTOR SHALL PROVIDE 48 HOURS ADVANCED NOTICE TO THE OWNER OR THE OWNER'S REPRESENTATIVE REGARDING ALL CONSTRUCTION ACTIVITIES RELATED TO AND/OR AFFECTING THE REQUIRED SPECIAL INSPECTIONS.



RECTANGULAR OR SQUARE OPENING

CIRCULAR OPENING

NOTES:
1. DISCONTINUE TYPICAL REINFORCING AT OPENING.
2. PLACE ADDITIONAL BARS IN SAME ORIENTATION AND POSITION AS BARS CUT BY OPENING. PROVIDE ONE SET OF BARS FOR EACH LAYER OF REINFORCING CUT.
3. "A" = TOP BAR EMBEDMENT LENGTH (24" MINIMUM). PROVIDE STANDARD HOOK IF FULL EMBEDMENT LENGTH IS NOT POSSIBLE.
4. REINFORCING STEEL IS TO BE CARRIED ACROSS ALL CONSTRUCTION JOINTS.
5. SEE MECHANICAL AND ARCHITECTURAL DRAWINGS FOR SLAB AND WALL OPENINGS NOT SHOWN ON STRUCTURAL DRAWINGS.
6. ADDITIONAL REINFORCING MAY BE OMITTED ONLY WHERE OPENING IS FRAMED BY BEAMS OR WALLS.
7. ADDITIONAL REINFORCING NOT REQUIRED WHEN SPECIFIED REINFORCING IS NOT CUT.
8. ALL REINFORCING SPACING SHALL BE GREATER THAN 3" CENTER TO CENTER.

1/- TYPICAL WALL OR SLAB OPENING ADDITIONAL REINFORCEMENT

NOT TO SCALE

STATE OF TEXAS
MISTY THOMSON
110346
LICENSED
PROFESSIONAL ENGINEER

04/20/2018

THE STATE OF TEXAS

PROJECT ARCHITECT:
HOMER SAENZ, AIA
PROJECT NO. ADG17589A
ISSUE DATE: 04/20/18
DRAWN BY: JLM
REVIEWED BY: PAB

FREESE NICHOLS
4055 International Plaza, Suite 200
Fort Worth, Texas 76109-4895
Phone - (817) 735-7300
Fax - (817) 735-7491
Freese and Nichols, Inc.
Texas Registered Engineering Firm F-2144

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TEXAS MILITARY FORCES
CONSTRUCTION & FACILITIES MANAGEMENT OFFICE-CFMO
AUSTIN, TEXAS 78763-5218
FAX (512) 782-1481
CAMP MABRY P.O. BOX 5218
(512) 782-6131

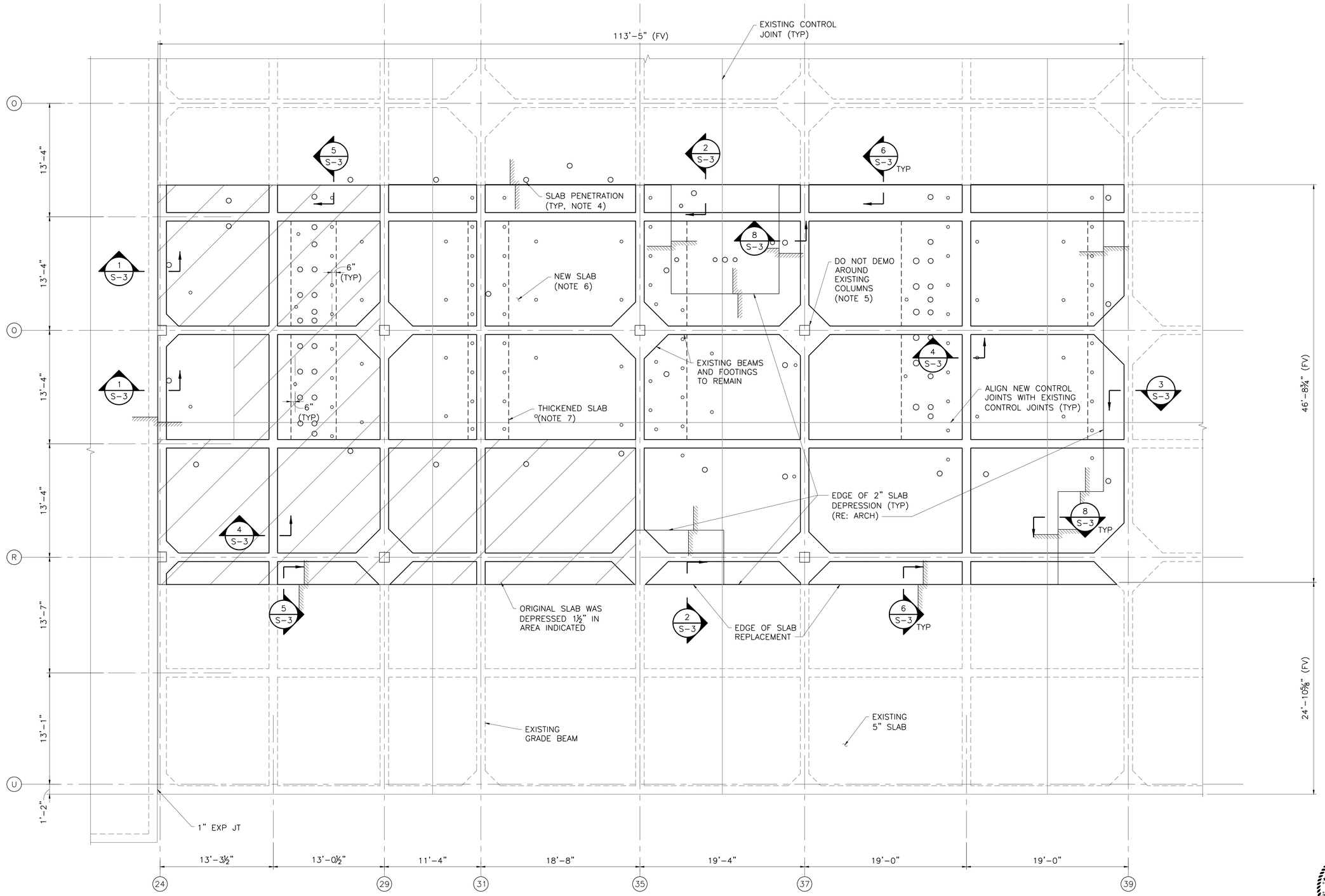
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STRUCTURAL GENERAL NOTES

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NORTH TRUE NORTH PLAN

1 / – FOUNDATION PLAN

3/16"=1'-0"

NOTES:

1. FIELD VERIFY EXISTING GRADE BEAM LOCATIONS AND SIZES PRIOR TO DEMOLITION.
2. CARE SHALL BE TAKEN DURING DEMOLITION AND CONSTRUCTION TO NOT DAMAGE EXISTING STRUCTURE SHOWN TO REMAIN.
3. DO NOT OVER CUT SLAB DURING SLAB DEMOLITION. DO NOT CUT THROUGH EXISTING GRADE BEAMS OR FOOTINGS.
4. REFER TO PLUMBING FOR ALL UNDERFLOOR PIPE LOCATIONS AND PENETRATIONS. ALL LOCATIONS MAY NOT BE SHOWN ON STRUCTURAL SHEETS.
5. DO NOT CHIP CONCRETE AT COLUMNS. 14"x14" AREA AROUND EXISTING COLUMNS SHALL NOT BE DEPRESSED.
6. 5" CONCRETE SLAB-ON-GRADE REINFORCED WITH #4 @ 12"C/C, EACH WAY, ON 3" CHAIRS.
7. WHERE MULTIPLE SLAB PENETRATIONS IN CLOSE PROXIMITY EXIST, THICKEN SLAB TO 9". ADD ADDITIONAL REINFORCEMENT AROUND PENETRATIONS PER 1/S-0.

STATE OF TEXAS — MISTY THOMISON — 110346 — LICENSED PROFESSIONAL ENGINEER

04/20/2018

THE STATE OF TEXAS

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AUSTIN, TEXAS 78763-5218
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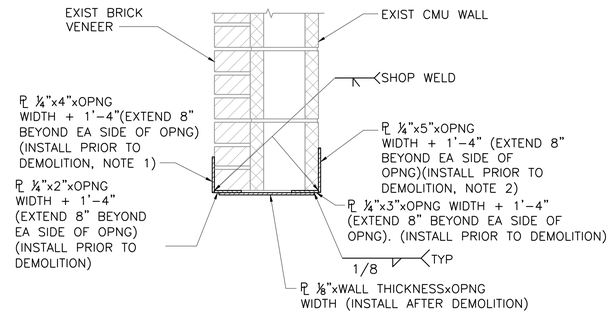
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STRUCTURAL FOUNDATION PLAN

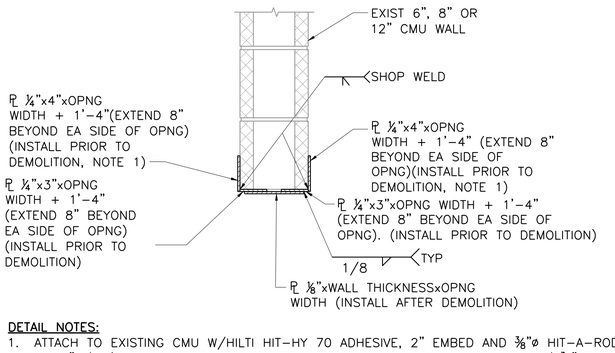
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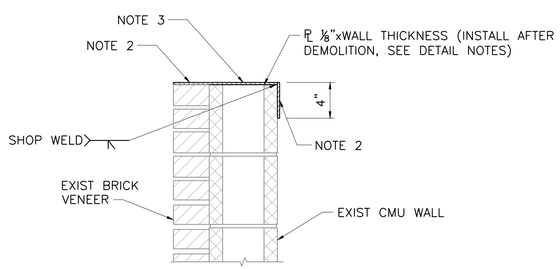
DETAIL NOTES:
1. ATTACH TO EXISTING BRICK AT 16" C/C MAXIMUM WITH ¼"ø HILTI KWIK-CON II AND 1¾" EMBEDMENT. DO NOT LOCATE ANCHORS IN HEAD OR BED JOINTS.
2. ATTACH TO EXISTING CMU W/HILTI HIT-HY 70 ADHESIVE, 2" EMBED AND ⅜"ø HIT-A-ROD @ 16"C/C (IF CELL IS GROUTED SOLID PROVIDE HIT-RE 500 V3 ADHESIVE W/3⅜" EMBED)
3. FIELD VERIFY EXISTING CONDITIONS PRIOR TO DEMOLITION.

1 — HEADER DETAIL AT EXISTING WALL WITH BRICK VENEER
1 1/2"=1'-0"



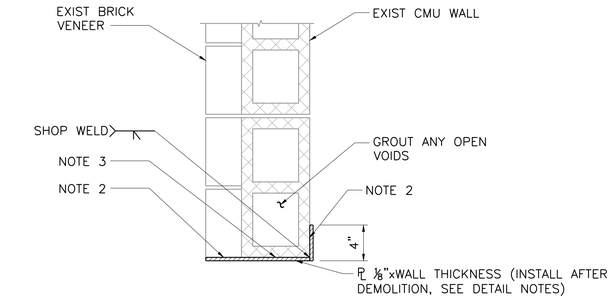
DETAIL NOTES:
1. ATTACH TO EXISTING CMU W/HILTI HIT-HY 70 ADHESIVE, 2" EMBED AND ⅜"ø HIT-A-ROD @ 16"C/C (IF CELL IS GROUTED SOLID PROVIDE HIT-RE 500 V3 ADHESIVE W/3⅜" EMBED)
2. FIELD VERIFY EXISTING CONDITIONS PRIOR TO DEMOLITION.
3. ℄ ¼"x3" HORIZONTAL PLATES MAY BE REDUCED TO ℄ ¼"x2" PLATES AT 6" CMU WALLS.

4 — HEADER DETAIL AT EXISTING CMU WALL
1 1/2"=1'-0"



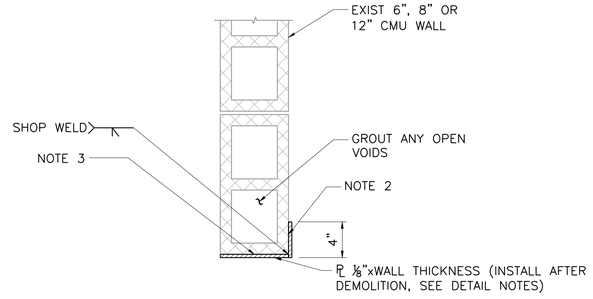
DETAIL NOTES:
1. WELD SILL PLATE TO NEW JAMB PLATE. ANCHOR TO EXISTING CMU WALL AND BRICK VENEER WITH ¼"ø HILTI KWIK-CON II ANCHORS AND 1¾" EMBEDMENT AT THE SPACING INDICATED BELOW. DO NOT LOCATE ANCHORS IN HEAD OR BED JOINTS.
2. ATTACH ⅛" PLATE TO BRICK AND INSIDE FACE OF CMU AT 8" C/C.
3. ATTACH ⅛" PLATE TO HEAD JOINT OF CMU AT 16" C/C.
4. FIELD VERIFY EXISTING CONDITIONS PRIOR TO DEMOLITION.

7 — SILL DETAIL AT EXISTING WALL WITH BRICK VENEER
1 1/2"=1'-0"



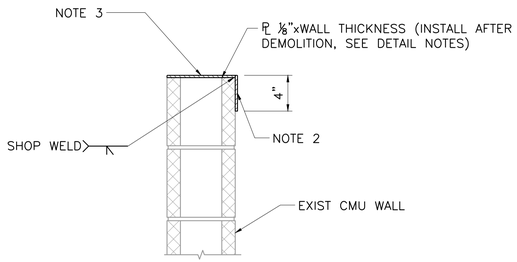
DETAIL NOTES:
1. WELD JAMB PLATE TO NEW HEADER PLATE. ANCHOR TO EXISTING CMU WALL AND BRICK VENEER WITH ¼"ø HILTI KWIK-CON II ANCHORS AND 1¾" EMBEDMENT AT THE SPACING INDICATED BELOW. DO NOT LOCATE ANCHORS IN HEAD OR BED JOINTS.
2. ATTACH ⅛" PLATE TO BRICK AND INSIDE FACE OF CMU AT 8" C/C.
3. ATTACH ⅛" PLATE TO HEAD JOINT OF CMU AT 16" C/C.
4. FIELD VERIFY EXISTING CONDITIONS PRIOR TO DEMOLITION.

2 — JAMB DETAIL AT EXISTING WALL WITH BRICK VENEER
1 1/2"=1'-0"



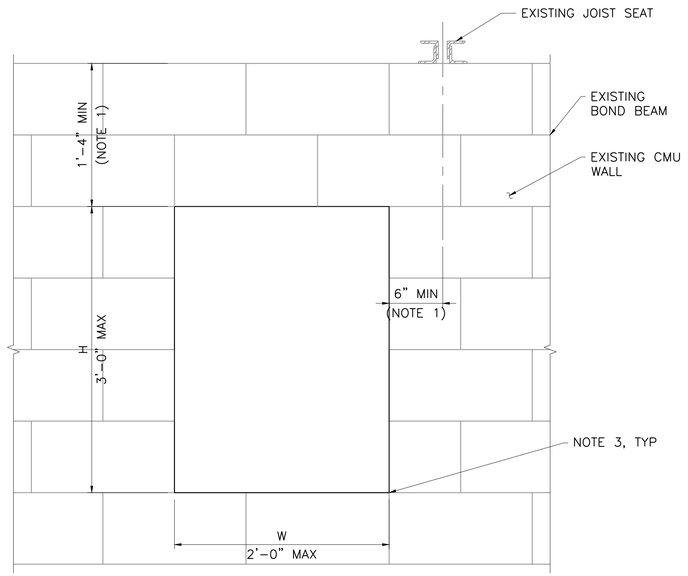
DETAIL NOTES:
1. WELD JAMB PLATE TO NEW HEADER PLATE. ANCHOR TO EXISTING CMU WALL WITH ¼"ø HILTI KWIK-CON II ANCHORS AND 1¾" EMBEDMENT AT THE SPACING INDICATED BELOW. DO NOT LOCATE ANCHORS IN HEAD OR BED JOINTS.
2. ATTACH ⅛" PLATE TO INSIDE FACE OF CMU AT 8" C/C.
3. ATTACH ⅛" PLATE TO HEAD JOINT OF CMU AT 16" C/C.
4. FIELD VERIFY EXISTING CONDITIONS PRIOR TO DEMOLITION.

5 — JAMB DETAIL AT EXISTING CMU WALL
1 1/2"=1'-0"



DETAIL NOTES:
1. WELD SILL PLATE TO NEW JAMB PLATE. ANCHOR TO EXISTING CMU WALL AND BRICK VENEER WITH ¼"ø HILTI KWIK-CON II ANCHORS AND 1¾" EMBEDMENT AT THE SPACING INDICATED BELOW. DO NOT LOCATE ANCHORS IN HEAD OR BED JOINTS.
2. ATTACH ⅛" PLATE TO INSIDE FACE OF CMU AT 8" C/C.
3. ATTACH ⅛" PLATE TO HEAD JOINT OF CMU AT 16" C/C.
4. FIELD VERIFY EXISTING CONDITIONS PRIOR TO DEMOLITION.

3 — SILL DETAIL AT EXISTING WALL
1 1/2"=1'-0"



DETAIL NOTES:
1. OPENINGS CUT IN EXISTING CMU WALLS SHALL BE LOCATED NO LESS THAN 6" HORIZONTALLY FROM EXISTING JOIST SEATS OR NO LESS THAN 1'-4" BELOW EXISTING JOIST SEAT ELEVATION.
2. CUTTING EMBEDDED REBARS DUE TO PIPING, CONDUITS, OR ANY OTHER PENETRATION THROUGH EXISTING MASONRY STRUCTURE IS PROHIBITED. OPENINGS SHALL BE LOCATED TO AVOID CUTTING EXISTING REBAR AND BOND BEAMS. CONTRACTOR SHALL DETECT THE EXISTING REBAR LOCATIONS BY NONDESTRUCTIVE TESTING METHODS AND KEEP PENETRATION AWAY FROM THE EMBEDDED REBARS.
3. DO NOT OVER CUT OPENINGS AT CORNERS.
4. DO NOT CUT OPENINGS THROUGH VAULT WALLS.
5. THIS DETAIL SHALL APPLY FOR ALL OPENINGS THROUGH EXISTING CMU WALLS WHERE H IS LESS THAN OR EQUAL TO 3'-0" AND W IS LESS THAN OR EQUAL TO 2'-0". WHERE OPENING DIMENSIONS EXCEED THESE LIMITS, STEEL HEADERS, JAMBS, AND SILLS SHALL BE INSTALLED. COORDINATE SIZE AND LOCATION OF OPENINGS WITH OTHER DISCIPLINE DRAWINGS.

6 — SMALL PENETRATIONS THROUGH EXISTING CMU WALLS
NOT TO SCALE

04/20/2018

0 4' 8'
3/16"=1'-0"

THE STATE OF TEXAS

PROJECT ARCHITECT:
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FREESE NICHOLS
4055 International Plaza, Suite 200
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CAMP MABRY P.O. BOX 5218 AUSTIN, TEXAS 78763-5218
(512) 782-6131 FAX (512) 782-1481

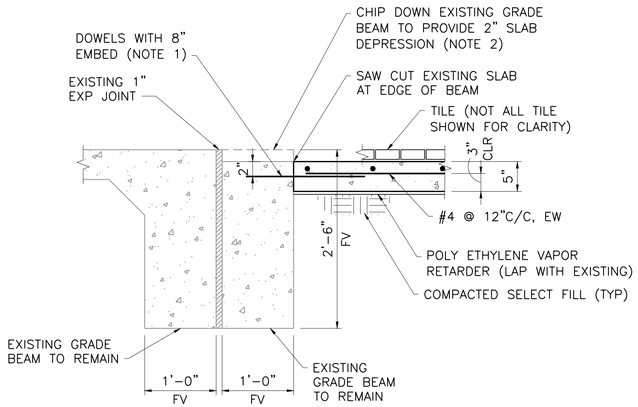
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STRUCTURAL TYPICAL DETAILS

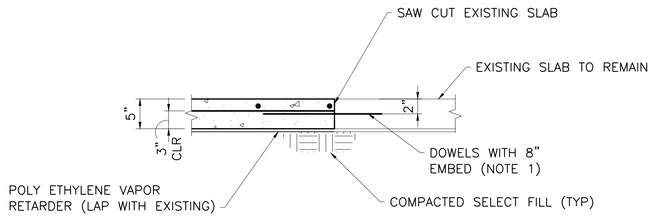
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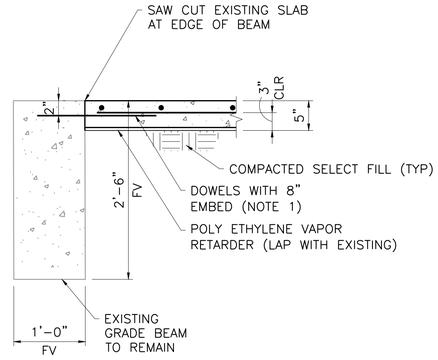
NOTES:
1. DOWELS SHALL BE #4 BARS @ 12"C/C. DRILL AND EPOXY INTO EXISTING SLAB/BEAM USING HILTI HIT-RE 500 V3 OR APPROVED EQUAL. LAP WITH NEW SLAB REINF A MINIMUM OF 12".
2. DEPTH OF DEMOLITION VARIES, MAXIMUM DEMOLITION DEPTH OF 2". DO NOT DAMAGE EXISTING GRADE BEAM REINFORCING. IF REINFORCING IS EXPOSED, NOTIFY ENGINEER.

1/S-1 TYPICAL SECTION AT EDGE BEAM
1"=1'-0"



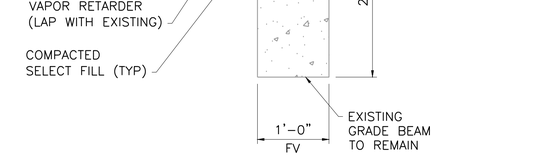
NOTES:
1. DOWELS SHALL BE #4 BARS @ 12"C/C. DRILL AND EPOXY INTO EXISTING SLAB/BEAM USING HILTI HIT-RE 500 V3 OR APPROVED EQUAL. LAP WITH NEW SLAB REINF A MINIMUM OF 12".

2/S-1 TYPICAL SECTION AT SLAB
1"=1'-0"



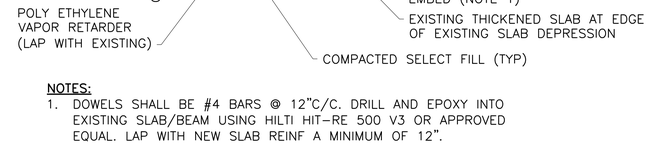
NOTES:
1. DOWELS SHALL BE #4 BARS @ 12"C/C. DRILL AND EPOXY INTO EXISTING SLAB/BEAM USING HILTI HIT-RE 500 V3 OR APPROVED EQUAL. LAP WITH NEW SLAB REINF A MINIMUM OF 12".

3/S-1 TYPICAL SECTION AT INTERIOR BEAM
1"=1'-0"



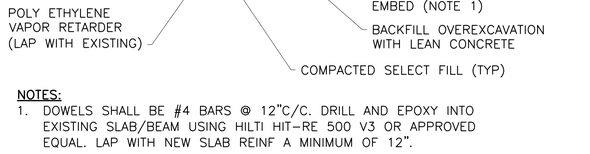
NOTES:
1. DOWELS SHALL BE #4 BARS @ 12"C/C. DRILL AND EPOXY INTO EXISTING SLAB/BEAM USING HILTI HIT-RE 500 V3 OR APPROVED EQUAL. LAP WITH NEW SLAB REINF A MINIMUM OF 12".
2. DEPTH OF DEMOLITION VARIES, MAXIMUM DEMOLITION DEPTH OF 2". DO NOT DAMAGE EXISTING GRADE BEAM REINFORCING. IF REINFORCING IS EXPOSED, NOTIFY ENGINEER.

4/S-1 SECTION AT DEPRESSED INTERIOR BEAM
1"=1'-0"



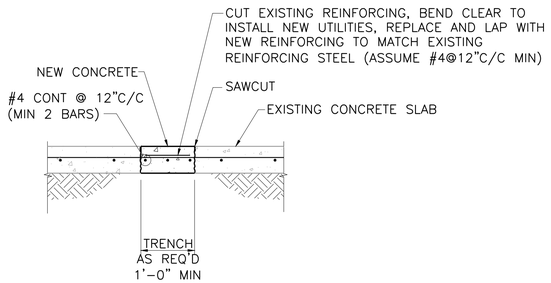
NOTES:
1. DOWELS SHALL BE #4 BARS @ 12"C/C. DRILL AND EPOXY INTO EXISTING SLAB/BEAM USING HILTI HIT-RE 500 V3 OR APPROVED EQUAL. LAP WITH NEW SLAB REINF A MINIMUM OF 12".

5/S-1 SECTION AT DEPRESSED SLAB
1"=1'-0"

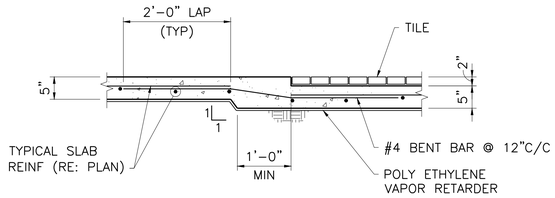


NOTES:
1. DOWELS SHALL BE #4 BARS @ 12"C/C. DRILL AND EPOXY INTO EXISTING SLAB/BEAM USING HILTI HIT-RE 500 V3 OR APPROVED EQUAL. LAP WITH NEW SLAB REINF A MINIMUM OF 12".

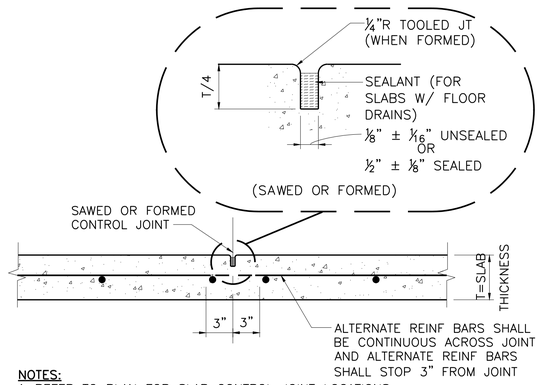
6/S-1 TYPICAL SECTION AT SLAB
1"=1'-0"



7/– SLAB TRENCHING DETAIL
NOT TO SCALE



8/– SECTION AT NEW FLOOR DEPRESSION
3/4"=1'-0"



NOTES:
1. REFER TO PLAN FOR SLAB CONTROL JOINT LOCATIONS.
2. SAW JOINTS WITHIN 1 HOUR OF COMPLETION OF FINISHING OPERATIONS WITH EARLY-ENTRY ROLLER SAW.

9/– SLAB SAW CUT CONTROL JOINT (SJ)
NOT TO SCALE

STATE OF TEXAS
MISTY THOMISON
110346
LICENSED
PROFESSIONAL ENGINEER
04/20/2018

PROJECT ARCHITECT:
HOMER SAENZ, AIA
PROJECT NO. ADG17589A
ISSUE DATE: 04/20/18
DRAWN BY: JLM
REVIEWED BY: PAB

FREESE NICHOLS
4055 International Plaza, Suite 200
Fort Worth, Texas 76109-4895
Phone - (817) 735-7300
Fax - (817) 735-7491
Freese and Nichols, Inc.
Texas Registered Engineering Firm F-2144

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CONSTRUCTION & FACILITIES MANAGEMENT OFFICE-CFMO
CAMP MABRY P.O. BOX 5218 AUSTIN, TEXAS 78763-5218
(512) 782-6131 FAX (512) 782-1481

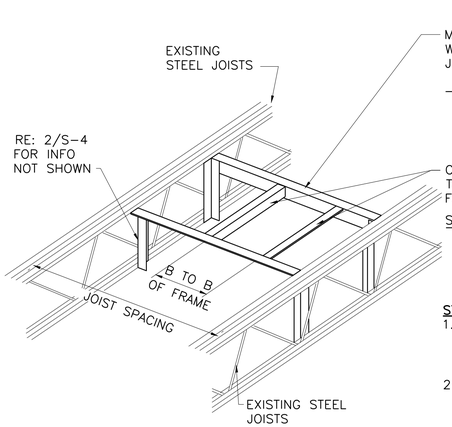
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STRUCTURAL FOUNDATION DETAILS

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MAIN SUPPORT ANGLES – FIELD WELD BETWEEN ADJACENT ROOF JOISTS. SIZE AS FOLLOWS:

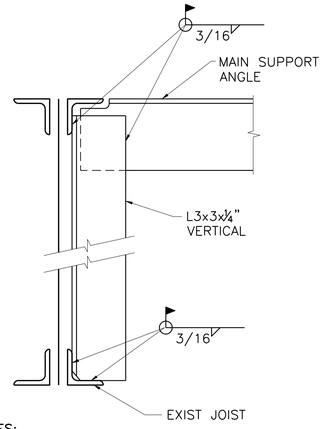
JOIST SPACING	ANGLE SIZE
1'–0" TO 3'–0"	3" x 4" x 5/16" LLV
3'–1" TO 5'–0"	4" x 4" x 3/8"
5'–1" TO 7'–0"	3" x 5" x 3/8" LLV

CROSS FRAMING MEMBERS – SHOP WELD TO MAIN SUPPORT ANGLES. SIZE AS FOLLOWS:

SUPPORT ANGLE SPACING	ANGLE SIZE
6" TO 3'–0"	2" x 2" x 1/4"
3'–1" TO 5'–0"	3" x 4" x 1/4" LLV
5'–1" TO 6'–8"	4" x 4" x 3/8"

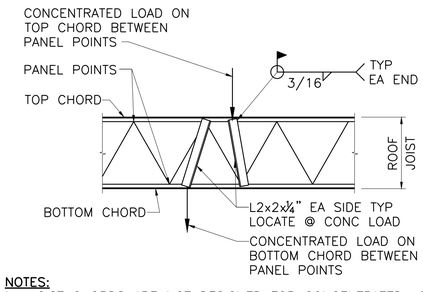
STEEL FRAME NOTES:
1. PROVIDE A ROOF FRAME FOR EACH MECHANICAL EQUIPMENT ROOF PENETRATION. UNLESS NOTED OTHERWISE (UNO) USE THE TYPICAL FRAME DETAIL SHOWN.
2. SIZE OF OPENING (B TO B OF FRAME) TO BE DETERMINED BY THE EQUIPMENT TO BE INSTALLED. VERIFY W/MECH DRAWINGS & SHOP DRAWINGS.

1 / – ROOF FRAMING @ MECHANICAL EQUIPMENT OPENING
NOT TO SCALE



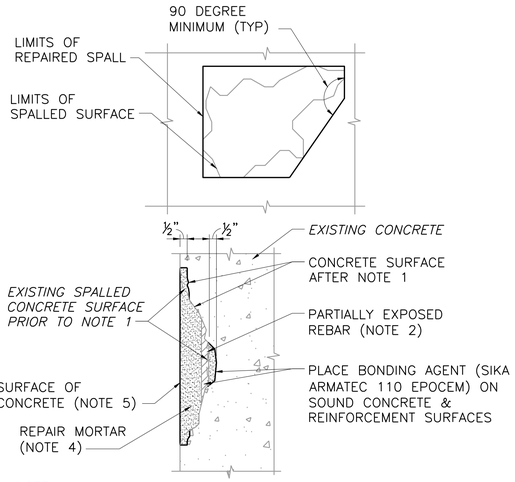
NOTES:
1. WHERE VERTICAL ANGLE DOES NOT ALIGN WITH PANEL JOINT, REINFORCE JOIST PER 3/S-4.

2 / – MECHANICAL OPENING DETAIL
NOT TO SCALE



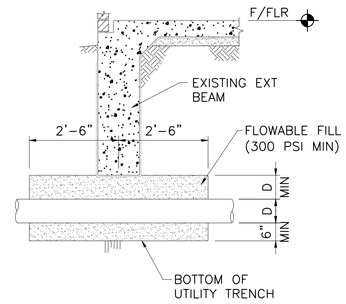
NOTES:
1. JOIST CHORDS ARE NOT DESIGNED FOR CONCENTRATED LOADS. WHEN POSSIBLE PLACE LOADS @ PANEL POINTS. IF LOADS OCCUR BETWEEN PANEL POINTS FIELD WELD ANGLES EACH SIDE FROM POINT OF LOAD TO NEAREST PANEL POINT AS SHOWN ABOVE.
2. REFER TO MECHANICAL PLANS FOR ROOFTOP UNITS.

3 / – TYPICAL JOIST REINFORCING
NOT TO SCALE



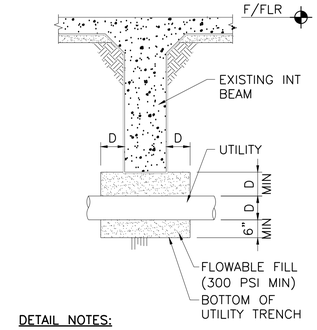
DETAIL NOTE:
1. SAW CUT PERIMETER OF SPALLED AREA. REMOVE CONCRETE WITHIN CUT PERIMETER AS REQUIRED TO PROVIDE A ½" MINIMUM REPAIR DEPTH. REMOVE ALL UNSOUND CONCRETE. CLEAN REBAR OF CORROSION AND CONTAMINATES USING MECHANICAL MEANS.
2. IF ANY REBAR HAS MORE THAN HALF ITS CROSS-SECTION EXPOSED, THEN REMOVE CONCRETE FROM AROUND THE BAR TO A MINIMUM DEPTH OF ½".
3. CRACKS IN SOUND CONCRETE, THAT EXTEND OUT FROM THE SPALLED AREA TO BE REPAIRED, SHALL BE PRESSURE INJECTED WITH HIGH STRENGTH, LOW VISCOSITY EPOXY. USE SIKADUR 35, HI-MOD LV, BY SIKA CORPORATION. PROVIDE SUPPORT PRODUCTS AND CRACK PREPARATION AS RECOMMENDED BY MANUFACTURER.
4. REPAIR MORTAR SHALL BE SIKATOP 122 PLUS (FOR HORIZONTAL SURFACES) OR SIKATOP 123 PLUS (FOR VERTICAL AND OVERHEAD SURFACES), BY SIKA CORPORATION. PREPARE, INSTALL IN MULTIPLE LIFTS AS REQUIRED, FINISH, AND CURE AS RECOMMENDED BY MANUFACTURER.
5. FINISHED SURFACE TEXTURE SHALL MATCH EXISTING FINISH TEXTURE.

4 / – TYPICAL CONCRETE SPALL & CRACK REPAIR
NOT TO SCALE



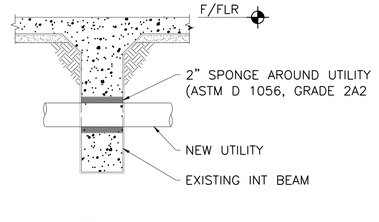
DETAIL NOTES:
1. WIDTH OF FLOWABLE FILL SHALL MATCH WIDTH OF EXCAVATED UTILITY TRENCH, BUT NOT LESS THAN 6" EACH SIDE OF UTILITY.

5 / – UTILITY CROSSING BELOW EXTERIOR BEAM
NOT TO SCALE



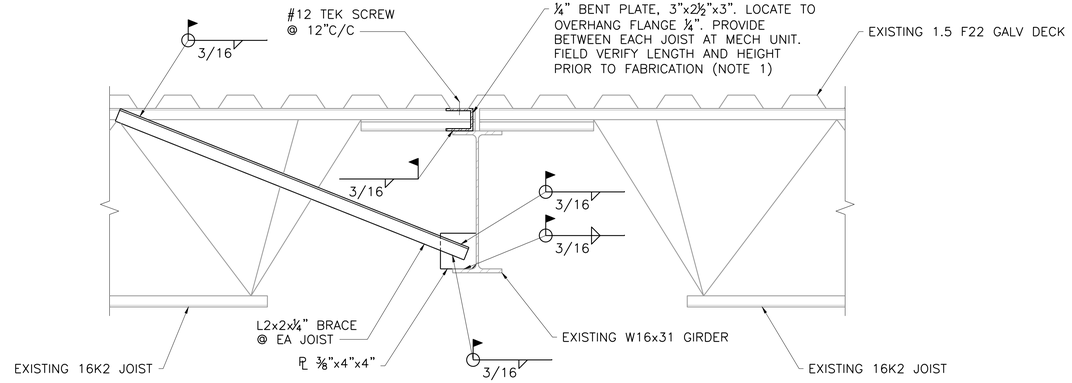
DETAIL NOTES:
1. WIDTH OF FLOWABLE FILL SHALL MATCH WIDTH OF EXCAVATED UTILITY TRENCH, BUT NOT LESS THAN 6" EACH SIDE OF UTILITY.

6 / – UTILITY CROSSING BELOW INTERIOR BEAM
NOT TO SCALE



DETAIL NOTES:
1. LOCATE PENETRATION WITHIN MIDDLE ⅓ OF EXISTING BEAM. PRIOR TO CORING PENETRATION THROUGH BEAM CONTRACTOR SHALL DETECT EXISTING REBAR LOCATIONS BY NON-DESTRUCTIVE TESTING METHODS AND LOCATE PENETRATIONS AWAY FROM THE EMBEDDED REBARS.

8 / – UTILITY CROSSING THROUGH INTERIOR BEAM
NOT TO SCALE



NOTES:
1. INSTALL AND WELD BENT PLATE WHEN SUPPORTED ROOF IS UNLOADED – PRIOR TO INSTALLING NEW EQUIPMENT AND WHEN THERE IS NO LIVE LOAD ON ROOF.

7 / – MECHANICAL EQUIPMENT SUPPORT DETAIL
1 1/2"=1'–0"



04/20/2018

THE STATE OF TEXAS

PROJECT ARCHITECT:
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FREESE NICHOLS
4055 International Plaza, Suite 200
Fort Worth, Texas 76109-4895
Phone – (817) 735-7300
Fax – (817) 735-7491
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CAMP MABRY P.O. BOX 5218 AUSTIN, TEXAS 78763-5218
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STRUCTURAL FRAMING DETAILS

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HVAC SYMBOLS (ALL SYMBOLS SHOWN ARE NOT NECESSARILY USED ON THE DRAWINGS)

ABBREVIATIONS

A/C	AIR CONDITIONING
AFF	ABOVE FINISHED FLOOR
APPROX	APPROXIMATELY
ARCH	ARCHITECTURE/ARCHITECTURAL
ASHRAE	AMERICAN SOCIETY OF HEATING, REFRIGERATION, AND AIR CONDITIONING ENGINEERS
BAS	BUILDING AUTOMATION SYSTEM
BHP	BRAKE HORSEPOWER
BTUH	BRITISH THERMAL UNIT PER HOUR
C	CENTIGRADE
CC	COOLING COIL
CFM	CUBIC FEET PER MINUTE
CD	CONDENSATE DRAIN
CONN	CONNECTION
dB	DECIBELS
DIA	DIAMETER
DB	DRY BULB
DDC	DIRECT DIGITAL CONTROL
DEG	DEGREE
DX	DIRECT EXPANSION
DWGS	DRAWINGS
ELEC	ELECTRIC/ELECTRICAL
EAT	ENTERING AIR TEMPERATURE
EWT	ENTERING WATER TEMPERATURE
EFF	EFFICIENCY
EL	ELEVATION
EMCS	ENERGY MONITORING AND CONTROL SYSTEM
EXH	EXHAUST
F	FAHRENHEIT
FLEX	FLEXIBLE
FPM	FEET PER MINUTE
FT	FEET, FOOT
GPM	GALLONS PER MINUTE
HC	HEATING COIL
HVAC	HEATING, VENTILATION AND AIR CONDITIONING
HZ	HERTZ
HP	HORSEPOWER
HTG	HEATING
IN	INCHES
KW	KILOWATT
LAT	LEAVING AIR TEMPERATURE
LWT	LEAVING WATER TEMPERATURE
MAX	MAXIMUM
MECH	MECHANICAL
MCA	MINIMUM CIRCUIT AMPACITY
MBH	THOUSANDS BTU's PER HOUR
MIN	MINIMUM
NFPA	NATIONAL FIRE PROTECTION ASSOC.
NC	NOISE CRITERIA
NOM	NOMINAL
NTS	NOT TO SCALE
NO	NUMBER
N.C.	NORMALLY CLOSED
N.O.	NORMALLY OPEN
OA	OUTSIDE AIR
P/PH	PHASE
PLBG	PLUMBING
PSI	POUNDS PER SQUARE INCH
RE	REFER/REFERENCE
RA	RETURN AIR
RPM	REVOLUTIONS PER MINUTE
SMACNA	SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOC.
SQ FT	SQUARE FEET
SP	STATIC PRESSURE
SA	SUPPLY AIR
TEMP	TEMPERATURE
T-STAT	THERMOSTAT
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
VAV	VARIABLE AIR VOLUME
VFD	VARIABLE FREQUENCY DRIVE
VD	VOLUME DAMPER
WT	WATTS
WTR	WATER
WC	WATER COLUMN
WG	WATER GAUGE
WB	WET BULB

PIPING SYMBOLS

- ELBOW UP
- ELBOW DOWN
- PLUG CLEAN-OUT
- CONTROL VALVE
- CLEAN OUT
- PIPE GUIDE
- CAP ON END LINE
- DIRECTION OF FLOW

MISCELLANEOUS

- A200 — DIFFUSER/GRILLE/REGISTER LABEL: "A" – TYPE/DESIGNATION, "200" – AIRFLOW (CFM)
- T — THERMOSTAT
- E — EMERGENCY HVAC SHUTDOWN SWITCH
- H — HUMIDITY SENSOR
- DRAWING NOTE REFERENCE
- ∅ — DIAMETER/PHASE
- DP — DIFFERENTIAL PRESSURE SENSOR
- C — CO2 SENSOR
- SP — DUCT MOUNTED STATIC PRESSURE SENSOR
- S — DUCT SMOKE DETECTOR
- F — FIRESTAT
- POINT OF NEW CONNECTION BETWEEN NEW AND EXISTING WORK
- X — SENSOR WITH LOCKING PROTECTIVE GUARD

PLAN SYMBOLOGY

DEMOLITION PLANS		SINGLE LINE	DOUBLE LINE	NEW PLANS		SINGLE LINE
DUCTWORK	EXISTING TO REMAIN			DUCTWORK	EXISTING TO REMAIN	
DUCTWORK	EXISTING TO BE REMOVED			DUCTWORK	NEW	
PIPING	EXISTING TO REMAIN			PIPING	EXISTING TO REMAIN	
PIPING	EXISTING TO BE REMOVED			PIPING	NEW	
EXISTING EQUIPMENT TO BE RELOCATED.		R		EXISTING EQUIPMENT TO BE RELOCATED.		R

DUCTWORK SYMBOLS

- SUPPLY AIR DIFFUSER – ARROWS INDICATE PATTERN. NO ARROWS SHOWN EQUALS 4-WAY.
- RETURN/TRANSFER/INTAKE AIR GRILLE
- EXHAUST GRILLE
- SUPPLY AIR PLENUM SLOT DIFFUSER
- 12" — ROUND DUCTWORK
- 12/12 — RECTANGULAR DUCTWORK. SIZE INDICATED IN INCHES, FIRST NUMBER IS SIDE SHOWN
- FLEXIBLE DUCT
- SUPPLY OR OUTSIDE AIR DUCT
- RETURN/TRANSFER AIR DUCT
- RELIEF OR EXHAUST AIR DUCT
- RADIUS DUCTWORK ELBOW ROUND OR RECTANGULAR
- RECTANGULAR DUCTWORK BRANCH TAKE-OFF W/DAMPER AND 45 DEGREE BRANCH INLET
- FLARED SPIN-IN TAP WITH DAMPER
- SPIN-IN TAP WITH DAMPER
- ROUND DUCT BRANCH TAKE-OFF FROM RECTANGULAR OR FLAT OVAL MAIN WITH CONICAL TAP. PROVIDE BALANCE DAMPER FOR LOW PRESSURE DUCTWORK ONLY
- DUCTWORK SIZE TRANSITION.
- FLEXIBLE DUCT CONNECTION TO EQUIPMENT
- SUPPLY OR OUTSIDE AIR DUCT UP
- SUPPLY OR OUTSIDE AIR DUCT DOWN
- RETURN AIR DUCT UP
- RETURN AIR DUCT DOWN
- RELIEF OR EXHAUST AIR DUCT UP
- RELIEF OR EXHAUST AIR DUCT DOWN
- IN-LINE 90 DEGREE RISE OR DROP IN DUCT
- UP — INCLINED RISE IN DUCT
- DN — INCLINED DROP IN DUCT
- 90° ELBOW WITH TURNING VANES
- M — MOTORIZED DAMPER
- MANUAL VOLUME (BALANCE) DAMPER
- FD – FIRE DAMPER; SD – SMOKE DAMPER; CD – COMBINATION FIRE/SMOKE DAMPER

PIPING TYPES

- CONDENSATE DRAIN (COLD)

EQUIPMENT DESIGNATIONS

AHU	AIR HANDLING UNIT
ACCU	AIR-COOLED CONDENSING UNIT
CU	DEDICATED CONDENSING UNIT
DH	DEHUMIDIFIER
EF	EXHAUST FAN
FCU	FAN COIL UNIT
HRU	HEAT RECOVERY UNIT
HVLS	HIGH VELOCITY LOW SPEED FAN
MS	MINISPLIT
RH	RELIEF HOOD
RTU	ROOFTOP UNIT
SF	SUPPLY FAN
UH	GAS-FIRED UNIT HEATER

GENERAL NOTES

1. THIS PROJECT IS DESIGNED BASED ON THE FOLLOWING CODES: INTERNATIONAL MECHANICAL CODE 2015, INTERNATIONAL ENERGY CONSERVATION CODE 2015, UFC 3-401-01 MECHANICAL ENGINEERING, UFC 3-410-01 HEATING, VENTILATING, AND AIR CONDITIONING SYSTEMS, WITH CHANGE 1, UFC-3-420-01 PLUMBING SYSTEMS, UFC 3-600-01 FIRE PROTECTION ENGINEERING FOR FACILITIES, UFC 4-010-01 DOD MINIMUM ANTITERRORISM STANDARDS FOR BUILDINGS, UFC-4-024-01 PROCEDURES FOR DESIGNING AIRBORNE CHEMICAL PROTECTION FOR BUILDINGS.
2. FURNISH AND INSTALL ALL EQUIPMENT AS PER MANUFACTURER'S RECOMMENDATIONS AND INSTRUCTIONS.
3. VERIFY DIMENSIONS, LOCATIONS, ELEVATIONS AND CONFIGURATION OF ALL ITEMS ASSOCIATED WITH INSTALLATION OF THE DUCTWORK AND EQUIPMENT.
4. PROVIDE MODIFICATIONS AND ACCESSORIES AS REQUIRED AND RECOMMENDED BY THE MANUFACTURER TO ENSURE PROPER OPERATION OF EQUIPMENT.
5. PAINT ALL EQUIPMENT VISIBLE THRU AIR DEVICES MATTE BLACK.
6. PROVIDE MANUAL VOLUME DAMPERS IN DUCTWORK AT ALL DUCT SPLITS, BRANCH RUNOUTS AND DUCT COLLARS FOR SUPPLY AIR AND EXHAUST AIR DIFFUSERS, REGISTERS AND GRILLES.
7. ALL DUCT SIZES SHOWN ON THE DRAWINGS ARE NET INSIDE CLEAR DIMENSIONS.
8. UTILIZE LONG RADIUS ELBOWS WHERE SPACE PERMITS UNLESS OTHERWISE NOTED. ALL RECTANGULAR ELBOWS SHALL CONTAIN TURNING VANES.
9. COORDINATE WITH OTHER UTILITIES TO AVOID INTERFERENCES WHEN INSTALLING DUCTWORK, PIPING AND EQUIPMENT.
10. ALL DUCTWORK SHALL BE CONSTRUCTED, SEALED AND INSTALLED IN CONFORMANCE TO SMACNA DUCT CONSTRUCTION STANDARDS.
11. DUCT RUNOUTS TO LINEAR/RECTANGULAR SUPPLY DIFFUSERS SHALL BE THE SAME SIZE AS THE INLET DIAMETER OF THE DIFFUSER. THE LENGTH OF FLEXIBLE DUCTS TO THE DIFFUSERS SHALL NOT EXCEED 5'-0".
12. PROVIDE FIRE DAMPERS IN DUCTWORK AT ALL FIRE BARRIER PENETRATIONS.
13. PROVIDE FIRE RESISTANT FLEXIBLE CONNECTION WHENEVER DUCTWORK IS CONNECTED TO MOTORIZED EQUIPMENT.
14. DUCT MATERIAL SHALL BE ZINC-COATED STEEL WITH METAL AND GALVANIZING THICKNESS AS PER SMACNA CONSTRUCTION STANDARDS.
15. PROVIDE OSHA-REQUIRED CLEARANCES AROUND ALL HVAC EQUIPMENT AND COMPONENTS FOR PERSONNEL ACCESS AND MAINTENANCE.
16. PIPING HANGERS AND SUPPORTS – ALL HANGERS AND SUPPORTS SHALL COMPLY WITH MANUFACTURER'S STANDARDIZATION SOCIETY (MSS) STANDARDS. VERTICAL PIPES MUST BE SUPPORTED AT EACH FLOOR WITH PIPE CLAMPS.
17. INSULATE BACKS AND PLENUMS OF SUPPLY AIR DEVICES WITH MINIMUM 1" MINERAL FIBER.
18. FOR ALL MECHANICAL EQUIPMENT PROVIDE LOCAL DISCONNECT MOUNTED ON UNIT OR INTEGRAL TO UNIT CONTROL PANEL.
19. ALL AIR MOVING EQUIPMENT CONTAINING PARTICULATE FILTERS SHALL NOT BE OPERATED WITHOUT PARTICULATE FILTERS IN PLACE.
20. DRAWINGS SHOWING ALL DUCT AND PIPE SIZES, EQUIPMENT LOCATIONS AND ELEVATIONS HAVE BEEN RECREATED USING EXISTING OWNER-FURNISHED DRAWINGS AND SITE SURVEYS. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL SITE CONDITIONS IN ORDER TO MAKE ANY NECESSARY ADJUSTMENTS PRIOR TO ORDERING MATERIALS OR COMMENCING INSTALLATION. CHANGE ORDERS WILL NOT BE APPROVED FOR DIMENSIONAL VERIFICATIONS REQUIRING MINOR ADJUSTMENTS NEEDED TO COMPLETE INSTALLATION.
21. CONTRACTOR IS NOT TO PROCEED WITH ANY WORK INVOLVING A CHANGE IN PROJECT SCOPE OR COST WITHOUT HAVING OBTAINED OWNER'S APPROVAL IN WRITING. CONTRACTOR WILL NOT BE REIMBURSED ANY ADDITIONAL CHANGES SHOULD THEY PERFORM WORK WITHOUT THE OWNER'S WRITTEN APPROVAL.
22. CONTRACTOR SHALL PROVIDE A 20 AMP GFCI SERVICE RECEPTACLE WITHIN 25 FEET OF ALL ROOFTOP MOUNTED HVAC EQUIPMENT. COORDINATE WITH ELECTRICAL FOR POWER REQUIREMENTS.
23. INSTALL ALL PIPING PENETRATING WALLS PERPENDICULAR TO WALL. DRAWINGS IN MANY AREAS MAY INDICATE GENERAL ROUTING ONLY. REFRIGERANT PIPE ROUTING NOT SHOWN ON PLANS, CONTRACTOR SHALL ROUTE PIPING TO MINIMIZE PIPE LENGTH AND AVOID CONFLICT WITH EXISTING UTILITIES.
24. ROUTE INSULATED PIPING TIGHT AGAINST STRUCTURE ABOVE SUSPENDED CEILING AND WRAP PIPING BELOW BEAMS. CONCEAL PIPING ABOVE SUSPENDED CEILINGS TO EXTENT POSSIBLE. DO NOT ROUTE PIPING ABOVE ELECTRICAL OR TELECOMMUNICATIONS ROOMS UNLESS IT IS SLEEVED. COORDINATE PIPING LAYOUT WITH OTHER TRADES SUCH AS DUCTWORK, LIGHTING, ELECTRICAL, FIRE ALARM AND BUILDING CONTROLS. PROVIDE SHOP DRAWINGS TO CLEARLY SHOW PIPING ROUTING AND COORDINATION WITH OTHER ELEMENTS. IN CASE OF CONFLICT, COORDINATE REROUTING OF UTILITIES WITH ENGINEER AND ARCHITECT.
25. CONTRACTOR SHALL SUBMIT A COORDINATION SHOP DRAWINGS SHOWING HVAC EQUIPMENT, DUCTWORK, AND PIPING OVERLAID ON OTHER TRADES AND IDENTIFYING CONFLICTS TO THE OWNER AND ENGINEER FOR REVIEW. CONTRACTOR SHALL NOT PROCEED TO INSTALLATION UNTIL COORDINATION DRAWING HAS BEEN APPROVED BY THE OWNER AND ENGINEER.
26. PROVIDE DIELECTRIC UNIONS AT ALL CONNECTIONS OF DISSIMILAR METALS (SUCH AS COPPER TO GALVANIZED STEEL).
27. PROVIDE INSULATED AND TRAPPED CONDENSATE DRAIN LINES FROM ALL AIR CONDITIONING EQUIPMENT INCLUDING BRACH CONNECTOR BOXES AND TERMINATE TO NEAREST FLOOR SINK OR OTHER APPROVED RECEPTACLES. CONDENSATE PIPING SHALL MAINTAIN A MINIMUM HORIZONTAL SLOPE IN THE DIRECTION OF DISCHARGE OF NOT LESS THAN ONE-EIGHTH UNIT VERTICAL IN 12 UNIT HORIZONTAL (1-PERCENT SLOPE). CONDENSATE SHALL NOT DISCHARGE IN STREET, ALLEY, OR OTHER AREAS THAT SHALL CAUSE NUISANCE. AT ALL INDOOR UNITS, PROVIDE SECONDARY DRAIN PAN WITH TRAPPED SECONDARY LINES. IN ADDITION, PROVIDE FLOAT SWITCH IN SECONDARY DRAIN PAN AND HARD WIRE FLOAT SWITCH TO DISABLE UNIT IN AN EVENT OF FLOAT TRIP. DO NOT PROVIDE TRAPS AT PUMPED CONDENSATE LOCATIONS, AND DO NOT COMBINE PUMPED AND GRAVITY CONDENSATE SYSTEMS.
28. DRAWINGS SHOWS GENERAL LOCATIONS OF THERMOSTATS/TEMPERATURE SENSORS. UNLESS NOTED OTHERWISE, INSTALL THERMOSTATS/TEMPERATURE SENSORS AT 48" ABOVE FINISHED FLOOR. WIRING SHALL BE CONCEALED IN WALLS. IN CASE OF CONFLICT WITH FURNITURE, WINDOWS, OR ELECTRICAL SWITCHES, COORDINATE EXACT LOCATION WITH OWNER'S REPRESENTATIVE.
29. PROVIDE A MINIMUM OF 10' BETWEEN EXHAUST FANS, PLUMBING VENTS THRU ROOF AND AIR INTAKES. COORDINATE LOCATIONS WITH EXISTING VENT AND EQUIPMENT LOCATIONS AND OFFSET AS NECESSARY TO COMPLY THEREIN.
30. FOR AIR HANDLING UNITS OVER 2000 CFM, PROVIDE SMOKE DETECTORS IN THE SUPPLY AIR DUCT UPSTREAM OF ANY BRANCH CONNECTIONS AND IN THE RETURN AIR DUCT UPSTREAM OF FILTERS AND OUTSIDE AIR CONNECTION. DUCT SMOKE DETECTORS SHALL SHUT DOWN UNIT UPON ACTIVATION AND SIGNAL ALARM TO FIRE ALARM PANEL. CONTRACTOR TO COORDINATE WITH OWNER'S REPRESENTATIVE FOR FIRE ALARM SYSTEM INFORMATION. FOR DUCTLESS SYSTEMS SUPPLYING OVER 2000 CFM, THE UNIT SHALL SHUT DOWN UPON ACTIVATION OF THE ROOM SMOKE DETECTOR. SMOKE DETECTORS SHALL BE FURNISHED, INSTALLED AND WIRED BY THE FIRE ALARM CONTRACTOR. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR MOUNTING THE SMOKE DETECTOR IN DUCTWORK IN ACCORDANCE WITH THE MANUFACTURER'S PRINTED INSTRUCTIONS. REFER TO FIRE ALARM SHEETS FOR FIRE ALARM CONTROL PANEL LOCATION. COMPLY WITH NFPA 72.
31. TELECOMMUNICATION EQUIPMENT ROOM (IT) SHALL HAVE DEDICATED HVAC EQUIPMENT.
32. PROVIDE TEMPORARY CONSTRUCTION FILTERS TO BE REMOVED AND REPLACED WITH NEW FILTERS AT SUBSTANTIAL COMPLETION. NEW FILTERS SHALL BE 2", MERV 8, PLEATED FILTERS.
33. ALL THERMOSTATS INSTALLED IN THE DRILL HALL AND STORAGE AREAS SHALL BE PROVIDED WITH A CLEAR, NON-LOCKABLE PLASTIC COVER.
34. ALL EMERGENCY SHUTDOWN BUTTONS THROUGHOUT THE BUILDING SHALL BE PROVIDED WITH A CLEAR, NON-LOCKABLE PLASTIC COVER.
35. ALL REFRIGERANT AND CONDENSATE PIPING INSULATION SHALL ADHERE TO THE 2015 INTERNATIONAL ENERGY CONSERVATION CODE UNLESS OTHERWISE SPECIFIED.
36. CONTRACTOR SHALL PROVIDE COORDINATION DRAWINGS BEFORE STARTING CONSTRUCTION. COORDINATION DRAWINGS MUST SHOW ALL TRADES.

STATE OF TEXAS — VAN CASHEN — 118595 — LICENSED PROFESSIONAL ENGINEER

04/20/2018

THE STATE OF TEXAS

PROJECT ARCHITECT:
HOMER SAENZ, AIA
PROJECT NO. ADG17589A
ISSUE DATE: 04/20/18
DRAWN BY: AJS
REVIEWED BY: VMC

FREESE AND NICHOLS
4055 International Plaza, Suite 200
Fort Worth, Texas 76109-4895
Phone – (817) 735-7300
Fax – (817) 735-7491
Freese and Nichols, Inc.
Texas Registered Engineering Firm F-2144

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AUSTIN, TEXAS 78763-5218
(512) 782-6131
FAX (512) 782-1481

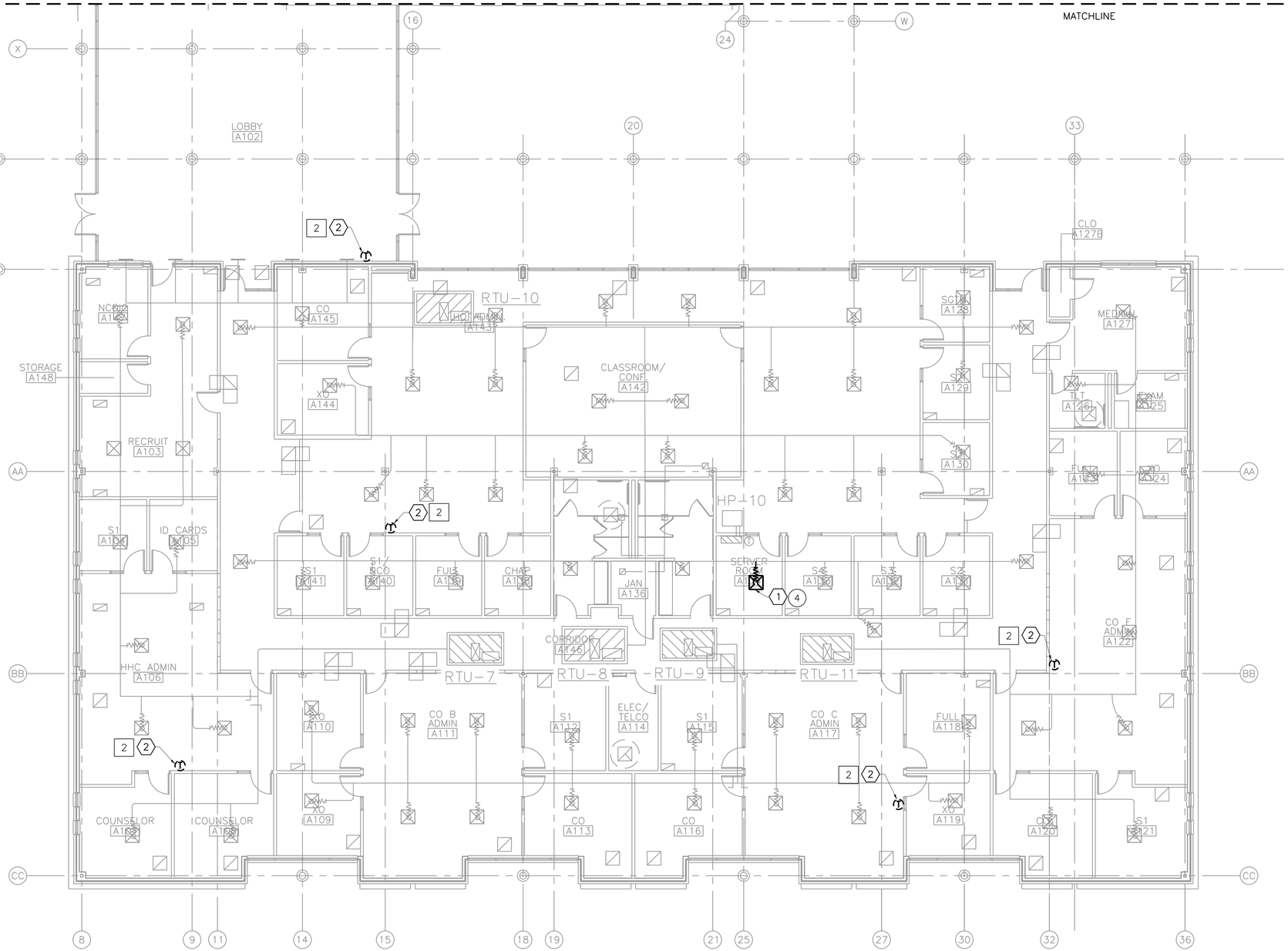
STAR CAMPAIGN FY18 - WESLACO
RC MAJOR MAINTENANCE

TXARNG CFMO

MECHANICAL LEGEND, GEN, NOTES & ABBREVIATIONS

M-0

SHT. 47 of 129



GENERAL NOTES:

1. REFER TO DIVISION 23 SECTION AND OTHER RELATED PORTIONS OF THE TECHNICAL SPECIFICATIONS FOR ADDITIONAL WORK RELATED TO HVAC SYSTEM.
2. REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL WORK RELATED TO HVAC EQUIPMENT.
3. REFER TO SHEET M-0 FOR LEGEND, ABBREVIATIONS, AND GENERAL NOTES.
4. REFER TO ARCHITECTURAL DRAWINGS FOR WALL AND ROOF MODIFICATIONS ASSOCIATED WITH MECHANICAL DEMOLITION.

NOTES BY SYMBOL "⬡"

(4) 1. IF BID OPTION #4 IS SELECTED, DEMOLISH DIFFUSER, CONTROL DAMPER, AND DUCTWORK BACK TO DUCT BRANCH OFF. CAP OPENING PER SMACNA STANDARDS.

2 2. IF SECO OPTION #2 IS SELECTED, DEMOLISH EXITING THERMOSTATS. RETAIN WIRING AND CONDUIT FOR REUSE TO EXTENT POSSIBLE.

BID OPTIONS "◯"

4. ADDITIONAL HVAC UPGRADES/REPAIRS/HVLS FANS.

SECO OPTIONS "□"

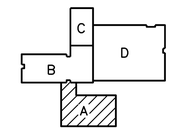
2. PROVIDE DDC CONTROL SYSTEM.

NORTH TRUE / NORTH PLAN — 1 / M-1

DEMOLITION FLOOR PLAN – A

1/8"=1'-0"

KEY PLAN





0 4' 8' 16'
1/8"=1'-0"

PROJECT ARCHITECT:
HOMER SAENZ, AIA

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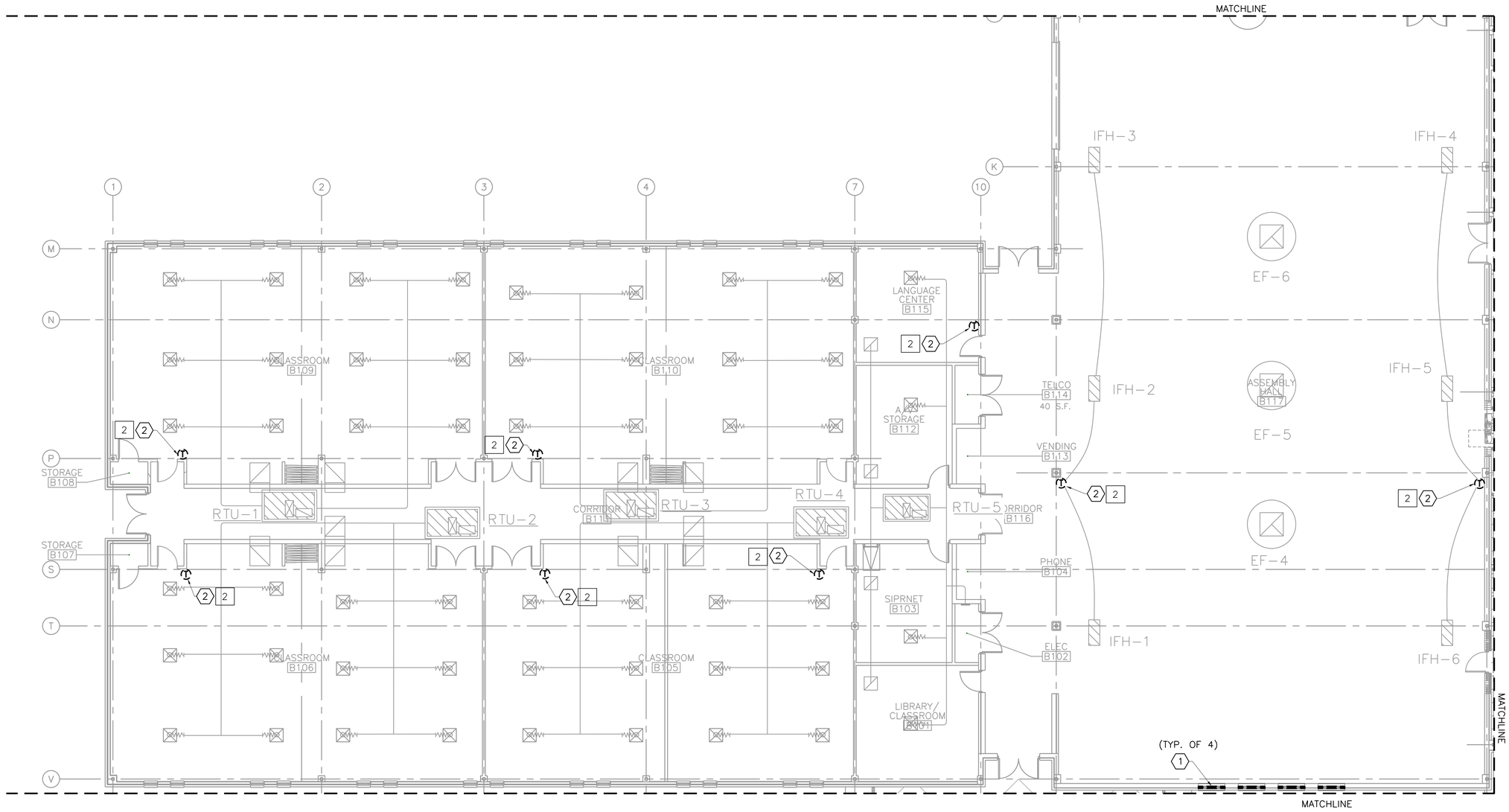
STAR CAMPAIGN FY18 - WESLACO
RC MAJOR MAINTENANCE

TXARNG CFMO

MECHANICAL
DEMOLITION PLAN - A

M-1 (4) (2)

SHT. 48 of 129



NORTH TRUE / NORTH PLAN — 1 / M-2

DEMOLITION FLOOR PLAN – B

1/8"=1'-0"

GENERAL NOTES:

1. REFER TO DIVISION 23 SECTION AND OTHER RELATED PORTIONS OF THE TECHNICAL SPECIFICATIONS FOR ADDITIONAL WORK RELATED TO HVAC SYSTEM.
2. REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL WORK RELATED TO HVAC EQUIPMENT.
3. REFER TO SHEET M-0 FOR LEGEND, ABBREVIATIONS, AND GENERAL NOTES.
4. REFER TO ARCHITECTURAL DRAWINGS FOR WALL AND ROOF MODIFICATIONS ASSOCIATED WITH MECHANICAL DEMOLITION.
5. PATCH OPENINGS IN WALL THAT RESULT FROM DUCT DEMOLITION TO MATCH ADJOINING WALL IN CONSTRUCTION AND FINISH.

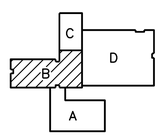
NOTES BY SYMBOL "⬡"

1. DEMOLISH EXISTING LOUVERS. PATCH BRICK WALL TO MEET SECURITY REQUIREMENTS.

2 2. IF SECO OPTION #2 IS ACCEPTED, DEMOLISH EXITING THERMOSTATS. RETAIN WIRING AND CONDUIT FOR REUSE TO EXTENT POSSIBLE.

SECO OPTIONS "□"

2. PROVIDE DDC CONTROL SYSTEM.

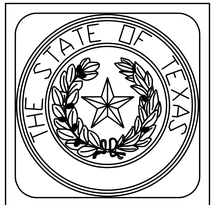


KEY PLAN



0 4' 8' 16'

1/8"=1'-0"



PROJECT ARCHITECT:
HOMER SAENZ, AIA

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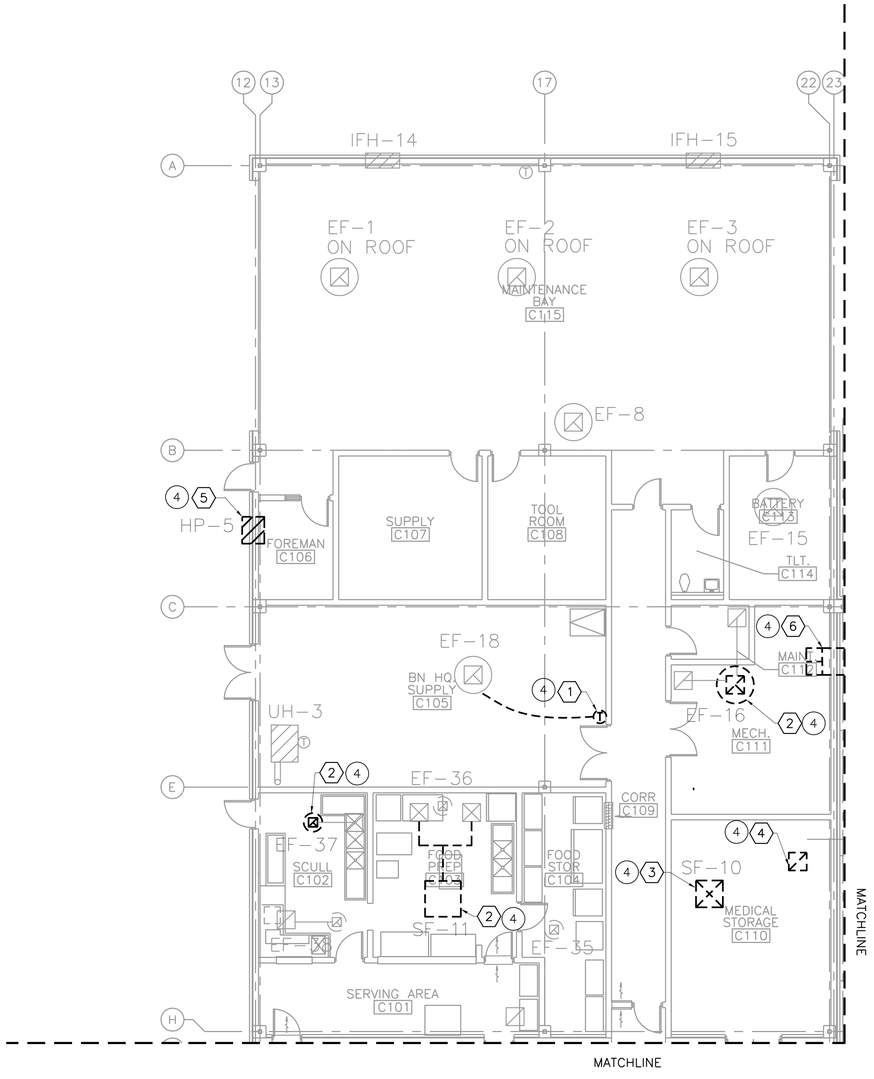
STAR CAMPAIGN FY18 - WESLACO
RC MAJOR MAINTENANCE

TXARNG CFMO

MECHANICAL
DEMOLITION PLAN - B

M-2 2

SHT. 49 of 129



DEMOLITION FLOOR PLAN – C

1/8"=1'-0"

GENERAL NOTES:

1. REFER TO DIVISION 23 SECTION AND OTHER RELATED PORTIONS OF THE TECHNICAL SPECIFICATIONS FOR ADDITIONAL WORK RELATED TO HVAC SYSTEM.
2. REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL WORK RELATED TO HVAC EQUIPMENT.
3. REFER TO SHEET M-0 FOR LEGEND, ABBREVIATIONS, AND GENERAL NOTES.
4. REFER TO ARCHITECTURAL DRAWINGS FOR WALL AND ROOF MODIFICATIONS ASSOCIATED WITH MECHANICAL DEMOLITION.
5. PATCH OPENINGS IN WALL THAT RESULT FROM DUCT DEMOLITION TO MATCH ADJOINING WALL IN CONSTRUCTION AND FINISH.

NOTES BY SYMBOL "⬡"

(4) 1. IF BID OPTION #4 IS SELECTED, DEMOLISH EXISTING THERMOSTATS. RETAIN CONDUIT FOR REUSE TO EXTENT POSSIBLE.

(4) 2. IF BID OPTION #4 IS SELECTED, DEMOLISH EXISTING ROOF-MOUNTED FAN. RETAIN ROOF CURB, DUCTWORK, HOOD, WIRING, CONDUIT AND CONTROLS FOR REUSE TO EXTENT POSSIBLE.

(4) 3. IF BID OPTION #4 IS SELECTED, DEMOLISH ROOF-MOUNTED FAN AND ASSOCIATED DUCTWORK, DIFFUSERS, AND CONTROLS. CAP ROOF OPENING IN ACCORDANCE WITH ROOF WARRANTY.

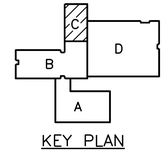
(4) 4. IF BID OPTION #4 IS SELECTED, DEMOLISH ROOF-MOUNTED INTAKE HOOD. CAP ROOF OPENING IN ACCORDANCE WITH ROOF WARRANTY.

(4) 5. IF BID OPTION #4 IS SELECTED, DEMOLISH EXISTING PACKAGED IN-WALL AC UNIT AND ASSOCIATED WIRING AND CONTROLS. RETAIN WALL OPENING.

(4) 6. IF BID OPTION #4 IS SELECTED, DEMOLISH DUCTWORK IN ENTIRETY AND PATCH WALLS PER ARCHITECTURE DETAILS. DUCTWORK CONTINUED ON M-4.

BID OPTIONS "◯"

4. ADDITIONAL HVAC UPGRADES/REPAIRS/HVLS FANS.



KEY PLAN



0 4' 8' 16'

1/8"=1'-0"

PROJECT ARCHITECT:
HOMER SAENZ, AIA
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ISSUE DATE: 04/20/18
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4055 International Plaza, Suite 200
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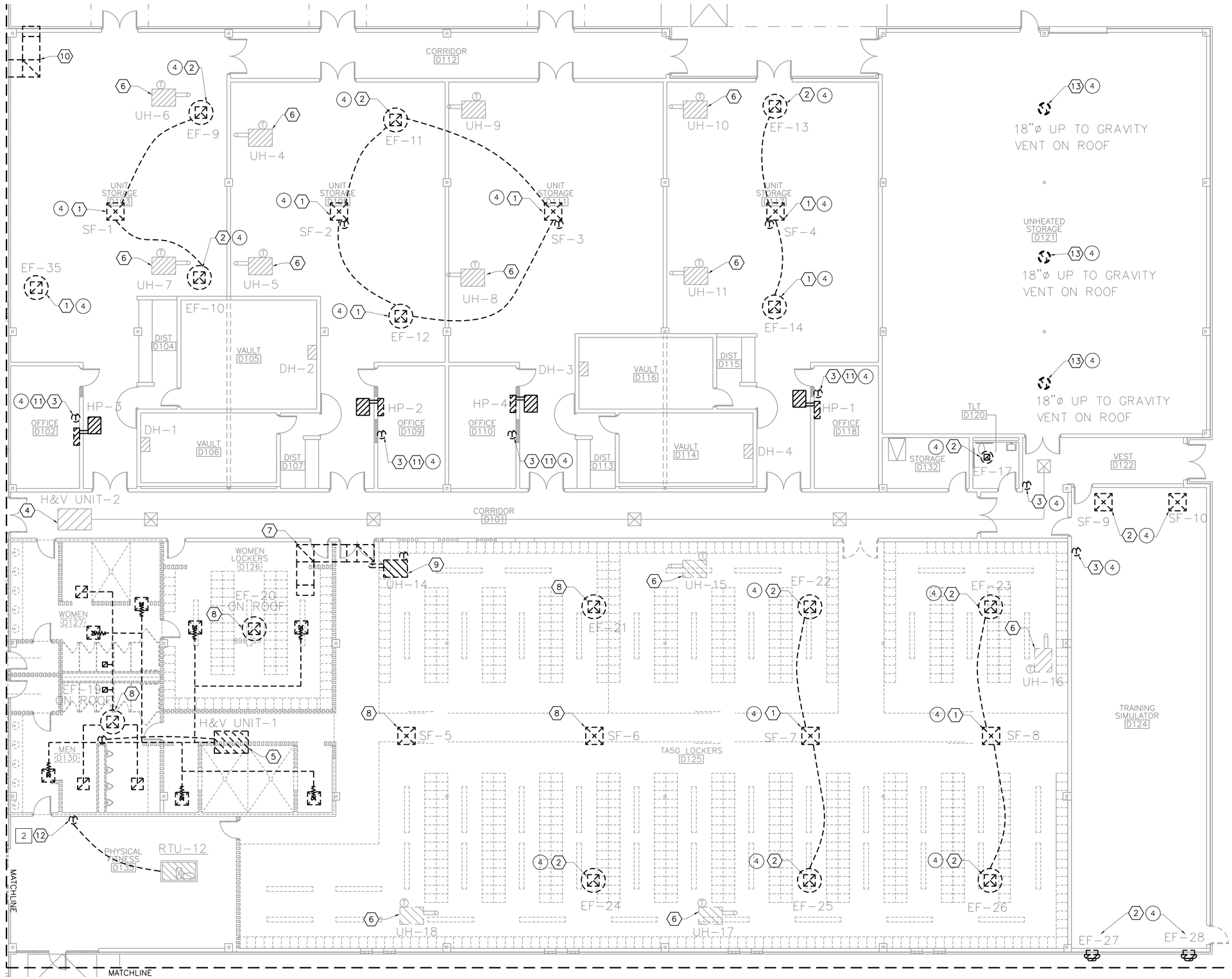
STAR CAMPAIGN FY18 - WESLACO
RC MAJOR MAINTENANCE

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MECHANICAL
DEMOLITION PLAN - C

M-3 (4)

SHT. 50 of 129



NORTH TRUE / NORTH PLAN — 1 / M-4

DEMOLITION FLOOR PLAN – D

1/8"=1'-0"

GENERAL NOTES:

1. REFER TO DIVISION 23 SECTION AND OTHER RELATED PORTIONS OF THE TECHNICAL SPECIFICATIONS FOR ADDITIONAL WORK RELATED TO HVAC SYSTEM.
2. REFER TO ELECTRICAL DRAWINGS FOR ADDITOINAL WORK RELATED TO HVAC EQUIPMENT.
3. REFER TO SHEET M–0 FOR LEGEND, ABBREVIATIONS, AND GENERAL NOTES.
4. REFER TO ARCHITECTURAL DRAWINGS FOR WALL AND ROOF MODIFICATIONS ASSOCIATED WITH MECHANICAL DEMOLITION.
5. PATCH OPENINGS IN WALL THAT RESULT FROM DUCT AND PIPING DEMOLITION TO MATCH ADJOINING WALL IN CONSTRUCTION AND FINISH.
6. CAP ALL ROOF PENETRATIONS RESULTING FROM HVAC DEMOLITION THAT ARE NOT BEING REUSED.

NOTES BY SYMBOL "◇"

(4) 1. IF BID OPTION #4 IS SELECTED, DEMOLISH ROOF–MOUNTED FAN AND ASSOCIATED DUCTWORK, DIFFUSERS, WIRING AND CONTROLS. RETAIN CURB FOR REUSE.

(4) 2. IF BID OPTION #4 IS SELECTED, DEMOLISH ROOF–MOUNTED FANS ND ASSOCIATED DUCTWORK, DIFFUSERS WIRING, AND CONTROLS. PATCH ROOF OPENING PER ROOF MANUFACTURER'S WARRANTY AND ARCHITECTURAL DETAILS.

(4) 3. IF BID OPTION #4 IS SELECTED, DEMOLISH EXITING THERMOSTATS. RETAIN CONDUIT FOR REUSE TO EXTENT POSSIBLE.

4. EXISTING HEATING VENTILATOR UNIT TO REMAIN.
5. DEMOLISH EXISTING HEATING VENTILATOR UNIT AND ASSOCIATED DUCTWORK, DIFFUSERS, WIRING AND CONTROLS.CAP CURB PER MANUFACTURER'S WARRANTY.
6. EXISTING UNIT HEATER TO REMAIN.
7. DEMOLISH EXISTING TRANSFER DUCT AND CAP WALL PENETRATIONS IN WALLS TO REMAIN PER ARCH SHEETS.
8. DEMOLISH ROOF–MOUNTED FAN AND ASSOCIATED DUCTWORK, DIFFUSERS WIRING, AND CONTROLS. CAP CURB PER MANUFACTURER'S WARRANTY.
9. DEMOLISH EXISTING UNIT HEATER AND ASSOCIATED CONTROLS, WIRING, AND FLUE.
10. DEMOLISH DUCTWORK IN ENTIRETY AND PATCH WALLS PER ARCHITECTURE DETAILS.

(4) 11. IF BID OPTION #4 IS SELECTED, DEMOLISH EXISTING MINI SPLIT HEAT PUMP AIR HANDLER, CONTROLS, REFRIGERANT PIPING, CONDENSER UNIT, AND ACCESSORIES. RETAIN AND REUSE ROOF PENETRATIONS FOR NEW EQUIPMENT.

[2] 12. IF SECO OPTION #2 IS SELECTED, DEMOLISH EXITING THERMOSTATS. RETAIN WIRING AND CONDUIT FOR REUSE TO EXTENT POSSIBLE.

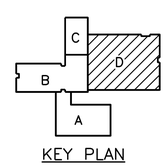
(4) 13. IF BID OPTION #4 IS SELECTED, DEMOLISH 18"ø ROOF VENT; PATCH ROOF PENETRATION PER ROOF MANUFACTURER'S WARRANTY AND ARCHITECTURAL DETAILS.

BID OPTIONS "◯"

4. ADDITIONAL HVAC UPGRADES/REPAIRS/HVLS FANS.

SECO OPTIONS "□"

2. PROVIDE DDC CONTROL SYSTEM.



KEY PLAN



0 4' 8' 16'

1/8"=1'-0"

THE STATE OF TEXAS

PROJECT ARCHITECT: HOMER SAENZ, AIA
PROJECT NO. ADG17589A
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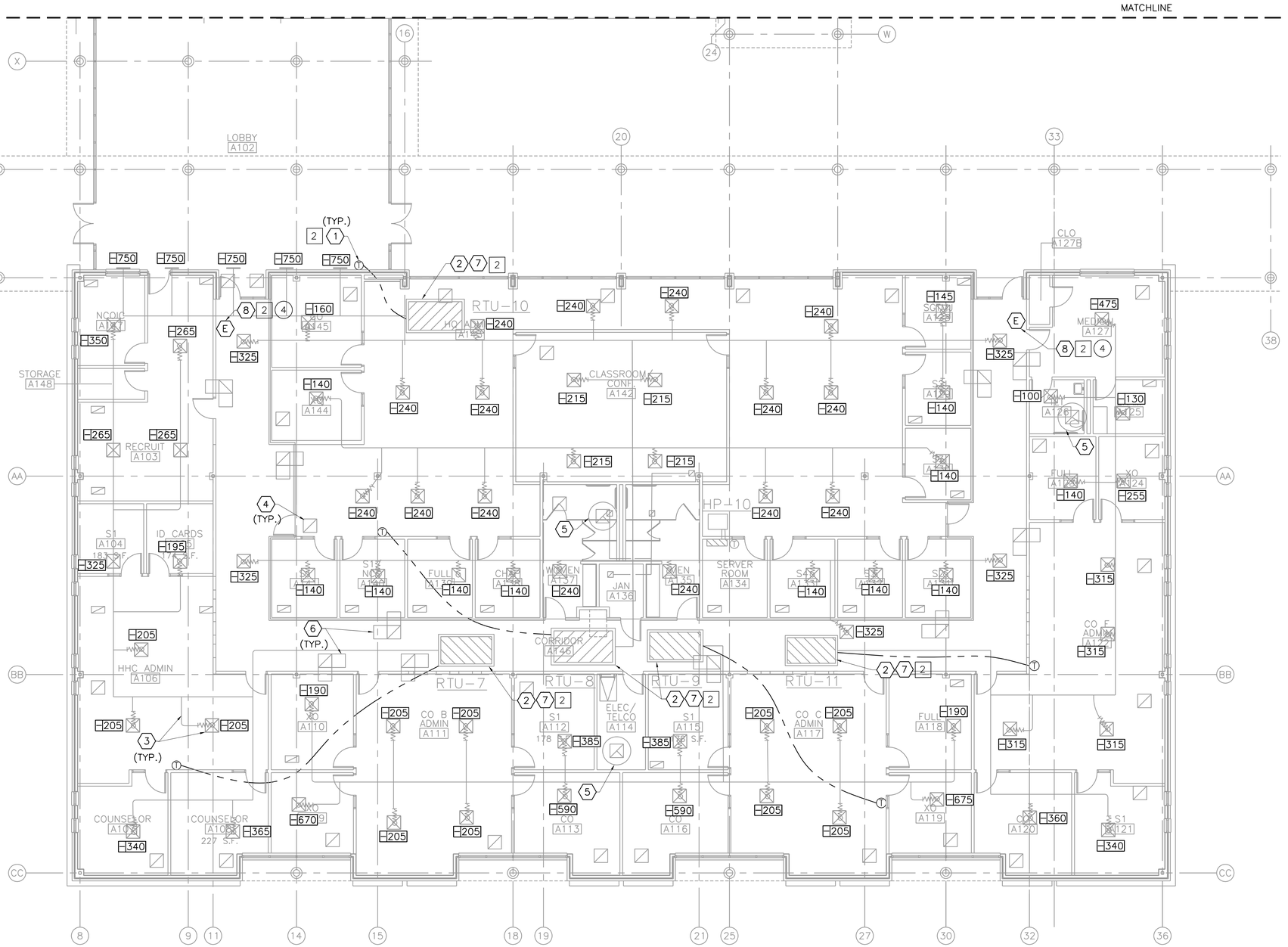
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RC MAJOR MAINTENANCE

TXARNG CFMO

MECHANICAL
DEMOLITION PLAN - D

M-4 (4) [2]

SHT. 51 of 129



GENERAL NOTES:

1. REFER TO DIVISION 23 SECTION AND OTHER RELATED PORTIONS OF THE TECHNICAL SPECIFICATIONS FOR ADDITIONAL WORK RELATED TO HVAC SYSTEM.
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3. REFER TO SHEET M-0 FOR LEGEND, ABBREVIATIONS, AND GENERAL NOTES.
4. REFER TO ARCHITECTURAL DRAWINGS FOR WALL AND ROOF MODIFICATIONS ASSOCIATED WITH MECHANICAL DEMOLITION.
(4) 5. IF BID OPTION #4 IS ACCEPTED, MODIFY EXISTING DUCT ROUTING AS NECESSARY TO ACCOMMODATE FLOWS INDICATED.
6. PROVIDE MANUAL BALANCING DAMPERS AS REQUIRED TO FACILITATE PROPER SYSTEM BALANCING.
7. REUSE EXISTING WALL PENETRATIONS FOR DUCT ROUTING WHERE POSSIBLE.

NOTES BY SYMBOL "⬡"

[2] 1. IF SECO OPTION #2 IS ACCEPTED, PROVIDE BAS-INTEGRATED ZONE TEMPERATURE SENSOR WITH ADJUSTABLE SETPOINT CONTROL.
2. EXISTING ROOF TOP UNITS TO REMAIN.
3. EXISTING DUCTWORK, DIFFUSERS, AND SUPPORTS TO REMAIN. CONTRACTOR TO FIELD VERIFY LOCATION OF BALANCING DAMPERS FOR EACH DIFFUSER AND RE-BALANCE FLOW RATES AS SPECIFIED ON THIS SHEET. IF EXISTING DUCTWORK IS INSUFFICIENT TO MEET DESIGN FLOWS, COORDINATE WITH ENGINEER FOR DIRECTION.
4. EXISTING RETURN AIR GRILLES TO REMAIN.
5. EXISTING EXHAUST FAN AND ASSOCIATED DUCTWORK TO REMAIN.
6. EXISTING TRANSFER DUCT TO REMAIN.
[2] 7. IF SECO OPTION #2 IS SELECTED, PROVIDE NEW BACNET CONTROLLER INTERFACED TO EXISTING RTU CONTROLLER PER 4/M-11.
(4) [2] 8. IF BID OPTION #4 AND SECO OPTION #2 ARE ACCEPTED, PROVIDE EMERGENCY SHUTDOWN SWITCH WITH NON-LOCKING CLEAR PLASTIC COVER TO SHUT DOWN ALL EQUIPMENT CONNECTED TO BAS.

BID OPTIONS "◯"

4. ADDITIONAL HVAC UPGRADES/REPAIRS/HVLS FANS.

SECO OPTIONS "□"

2. PROVIDE DDC CONTROL SYSTEM.

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

KEY PLAN

0 4' 8' 16'
1/8"=1'-0"

VAN CASHEN
118595
LICENSED PROFESSIONAL ENGINEER
04/20/2018

PROJECT ARCHITECT:
HOMER SAENZ, AIA

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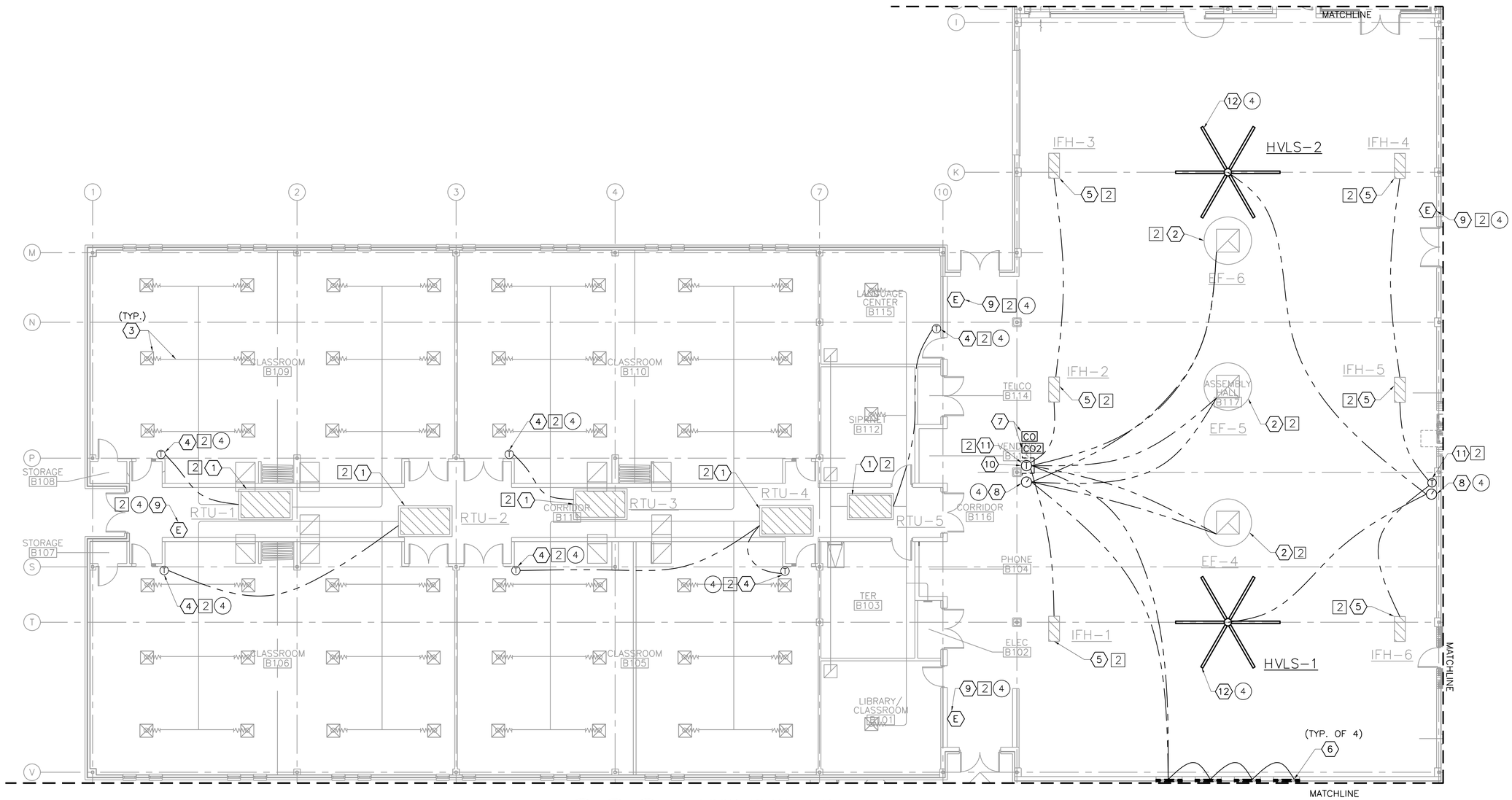
STAR CAMPAIGN FY18 - WESLACO
RC MAJOR MAINTENANCE

TXARNG CFMO

MECHANICAL
FLOOR PLAN - A

M-5 (4) [2]

SHT. 52 of 129



NORTH TRUE NORTH PLAN — 1 / M-6

FLOOR PLAN – B

1/8"=1'-0"

GENERAL NOTES:

1. REFER TO SHEET M–0 FOR LEGEND, ABBREVIATIONS, AND GENERAL NOTES.
2. REFER TO ARCHITECTURAL DRAWINGS FOR WALL AND ROOF MODIFICATIONS ASSOCIATED WITH MECHANICAL DEMOLITION.
3. REFER TO DIVISION 23 SECTION AND OTHER RELATED PORTIONS OF THE TECHNICAL SPECIFICATIONS FOR ADDITIONAL WORK RELATED TO HVAC SYSTEM.

NOTES BY SYMBOL "⬡"

[2] 1. EXISTING ROOF TOP UNITS TO REMAIN. IF SECO OPTION #2 IS ACCEPTED, CONNECT TO BAS PER DETAILS ON 1/M–10.

[2] 2. EXISTING ROOF MOUNTED EXHAUST FANS TO REMAIN. IF BID OPTION #2 IS ACCEPTED, CONNECT TO BAS AND CONTROL PER 1/M–10.

3. EXISTING DUCTWORK, DIFFUSERS, SUPPORTS, AND CONTROLS TO REMAIN.

[2] (4) 4. IF SECO OPTION #2 IS ACCEPTED, PROVIDE BAS–INTEGRATED ZONE TEMPERATURE SENSOR WITH ADJUSTABLE SETPOINT CONTROL.

[2] 5. EXISTING RADIANT GAS–FIRED HEATERS TO REMAIN. IF SECO OPTION #2 IS ACCEPTED, CONNECT TO BAS AND CONTROL PER 3/M–11.

6. PROVIDE NEW COMBINATION LOUVER/DAMPERS WITH MOTORIZED ACTUATORS INTERLOCKED WITH EXHAUST FANS; CONTROL PER 1/M–10.

7. PROVIDE CARBON MONOXIDE (CO) AND CARBON DIOXIDE (CO2) SENSORS IN 3 GAUGE WIRE CAGES. REFER TO 2/M–10 FOR INTEGRATION INTO EXHAUST FAN CONTROLLER (OR BAS IF SECO OPTION #2 IS ACCEPTED) AND INFORMATION ON MOUNTING HEIGHTS. REFER TO FIRE ALARM DRAWINGS FOR FIRE ALARM SYSTEM INTEGRATION.

(4) 8. IF BID OPTION #4 IS ACCEPTED, PROVIDE 2 HOUR (ADJ.) TIMER TO CONTROL HVLS FANS.

(4) [2] 9. IF BID OPTION #4 AND SECO OPTION #2 ARE ACCEPTED, PROVIDE EMERGENCY SHUTDOWN SWITCH WITH NON–LOCKING CLEAR PLASTIC COVER TO SHUT DOWN ALL EQUIPMENT CONNECTED TO BAS.

10. PROVIDE TIMER AND THERMOSTAT TO CONTROL EXHAUST FANS. RE: 2/M–10 FOR MORE DETAILS AND CONTROL INFORMATION.

[2] 11. PROVIDE NEW THERMOSTAT TO CONTROL EXISTING INFRARED HEATERS TO MAINTAIN A ROOM TEMPERATURE AT 45°F (ADJ.) IF SECO OPTION #2 IS SELECTED, PROVIDE BAS–COMPATABLE TEMPERATURE SENSOR AND CONTROL PER 3/M–11.

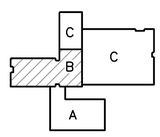
(4) 12. IF BID OPTION #4 IS SELECTED, PROVIDE NEW HIGH VOLUME LOW SPEED CIRCULATION FAN. MOUNT AT THE SAME LEVEL AS LIGHTS IN THIS ROOM.

BID OPTIONS "◯"

4. ADDITIONAL HVAC UPGRADES/REPAIRS/HVLS FANS.

SECO OPTIONS "□"

2. PROVIDE DDC CONTROL SYSTEM.



KEY PLAN



0 4' 8' 16'

1/8"=1'-0"

THE STATE OF TEXAS

PROJECT ARCHITECT:
HOMER SAENZ, AIA
PROJECT NO. ADG17589A
ISSUE DATE: 04/20/18
DRAWN BY: AJS
REVIEWED BY: VMC

FREESE AND NICHOLS
4055 International Plaza, Suite 200
Fort Worth, Texas 76109–4895
Phone – (817) 735–7300
Fax – (817) 735–7491
Freese and Nichols, Inc.
Texas Registered Engineering Firm F–2144

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TEXAS MILITARY FORCES
CONSTRUCTION & FACILITIES MANAGEMENT OFFICE–CFMO
CAMP MABRY P.O. BOX 5218 AUSTIN, TEXAS 78763–5218
(512) 782–6131 FAX (512) 782–1481

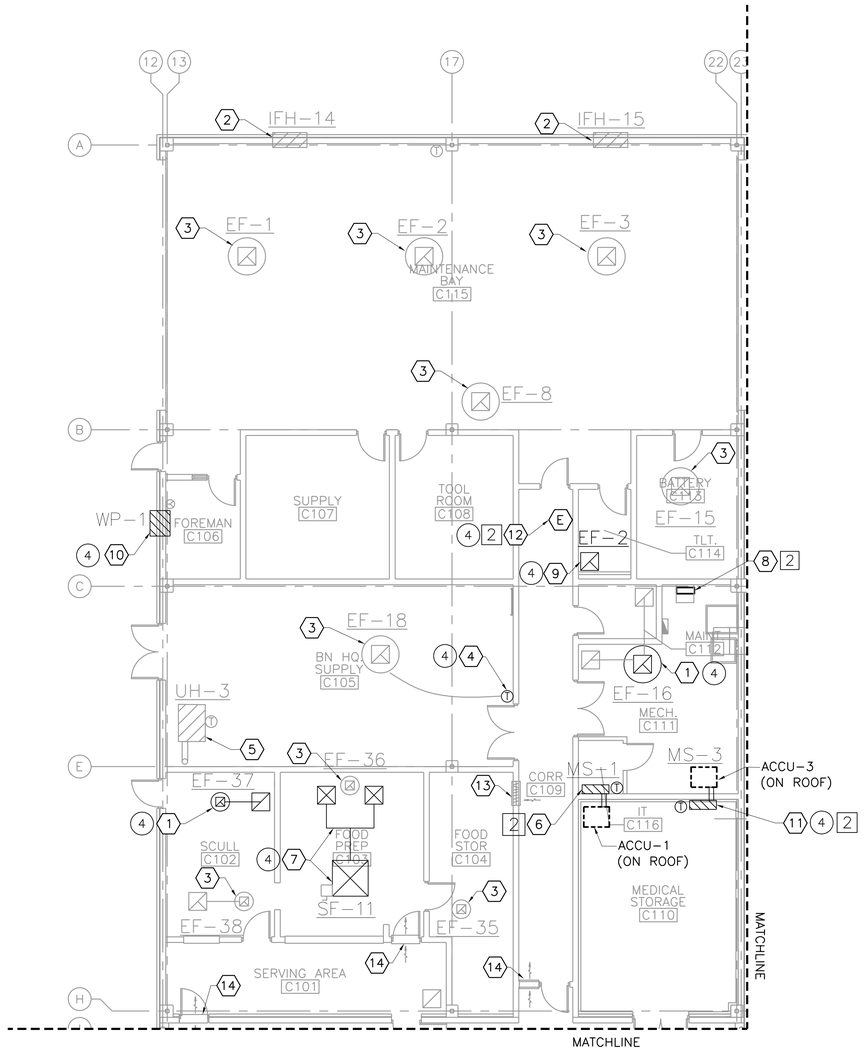
STAR CAMPAIGN FY18 - WESLACO
RC MAJOR MAINTENANCE

TXARNG CFMO

MECHANICAL
FLOOR PLAN - B

M-6 [2] (4)

SHT. 53 of 129



NORTH TRUE / NORTH PLAN — 1 / M-7

FLOOR PLAN – C

1/8"=1'-0"

GENERAL NOTES:

1. REFER TO SHEET M-0 FOR LEGEND, ABBREVIATIONS, AND GENERAL NOTES.
2. REFER TO ARCHITECTURAL DRAWINGS FOR WALL AND ROOF MODIFICATIONS ASSOCIATED WITH MECHANICAL DEMOLITION.
3. PATCH OPENINGS IN WALL THAT RESULT FROM DUCT DEMOLITION TO MATCH ADJOINING WALL IN CONSTRUCTION AND FINISH.
4. REFER TO DIVISION 23 SECTION AND OTHER RELATED PORTIONS OF THE TECHNICAL SPECIFICATIONS FOR ADDITIONAL WORK RELATED TO HVAC SYSTEM.

NOTES BY SYMBOL "⬡"

(4) 1. IF BID OPTION #4 IS ACCEPTED, PROVIDE NEW FAN AS SCHEDULED ON EXISTING CURB. PROVIDE CURB ADAPTOR AS NECESSARY.

2. EXISTING INFRARED UNIT HEATERS TO REMAIN.

3. EXISTING ROOF MOUNTED EXHAUST FANS TO REMAIN.

(4) 4. IF BID OPTION #4 IS ACCEPTED, PROVIDE THERMOSTAT TO ENABLE EXHAUST FANS WHEN TEMPERATURE RISES ABOVE 85°F (ADJ.).

5. EXISTING UNIT HEATER TO REMAIN.

[2] 6. PROVIDE NEW MINI SPLIT AC UNIT. REFRIGERANT LINE TO BE ROUTED PER MANUFACTURER'S RECOMMENDATIONS. AIR-COOLED CONDENSING UNIT TO BE LOCATED ON ROOF. IF SECO OPTION #2 IS ACCEPTED, CONNECT TO BAS AND CONTROL PER 2/M-12.

(4) 7. IF BID OPTION #4 IS ACCEPTED, PROVIDE NEW MAKEUP AIR UNIT ON ROOF AS SCHEDULED. INTERCONNECT TO EF-36 SUCH THAT BOTH FANS OPERATE SIMULTANEOUSLY. BALANCE AS INDICATED ON MECHANICAL SCHEDULES ON M-9.

[2] 8. IF SECO OPTION #2 IS ACCEPTED, PROVIDE BAS PANEL. RE: 1/M-10 FOR MORE DETAILS.

(4) 9. IF BID OPTION #4 IS ACCEPTED, PROVIDE CEILING MOUNTED EXHAUST FAN AS SCHEDULED; WIRE TO OPERATE IN CONJUNCTION WITH LIGHT SWITCH.

(4) 10. IF BID OPTION #4 IS ACCEPTED, PROVIDE PACKAGED WALL UNIT AS SCHEDULED. MODIFY EXISTING OPENING TO ACCOMMODATE NEW UNIT SIZE.

[2] (4) 11. IF BID OPTION #4 IS ACCEPTED, PROVIDE NEW MINI SPLIT HEAT PUMP. REFRIGERANT LINE TO BE ROUTED PER MANUFACTURER'S RECOMMENDATIONS. AIR-COOLED CONDENSING UNIT TO BE LOCATED ON ROOF. IF SECO OPTION #2 IS ACCEPTED, CONNECT TO BAS AND CONTROL PER 1/M-12.

[2] (4) 12. IF BID OPTION #4 AND SECO OPTION #2 ARE ACCEPTED, PROVIDE EMERGENCY SHUTDOWN SWITCH WITH NON-LOCKING CLEAR PLASTIC COVER TO SHUT DOWN ALL EQUIPMENT CONNECTED TO BAS.

13. EXISTING MOTORIZED DAMPER TO REMAIN.

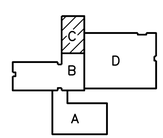
14. EXISTING AIR TRANSFER DUCT TO REMAIN.

BID OPTIONS "◯"

4. ADDITIONAL HVAC UPGRADES/REPAIRS/HVLS FANS.

SECO OPTIONS "□"

2. PROVIDE DDC CONTROL SYSTEM.



KEY PLAN

VAN CASHEN 118595 LICENSED PROFESSIONAL ENGINEER 04/20/2018

0 4' 8' 16'

1/8"=1'-0"

THE STATE OF TEXAS

PROJECT ARCHITECT: HOMER SAENZ, AIA
PROJECT NO. ADG17589A
ISSUE DATE: 04/20/18
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REVIEWED BY: VMC

FREESE AND NICHOLS
4055 International Plaza, Suite 200
Fort Worth, Texas 76109-4895
Phone – (817) 735-7300
Fax – (817) 735-7491
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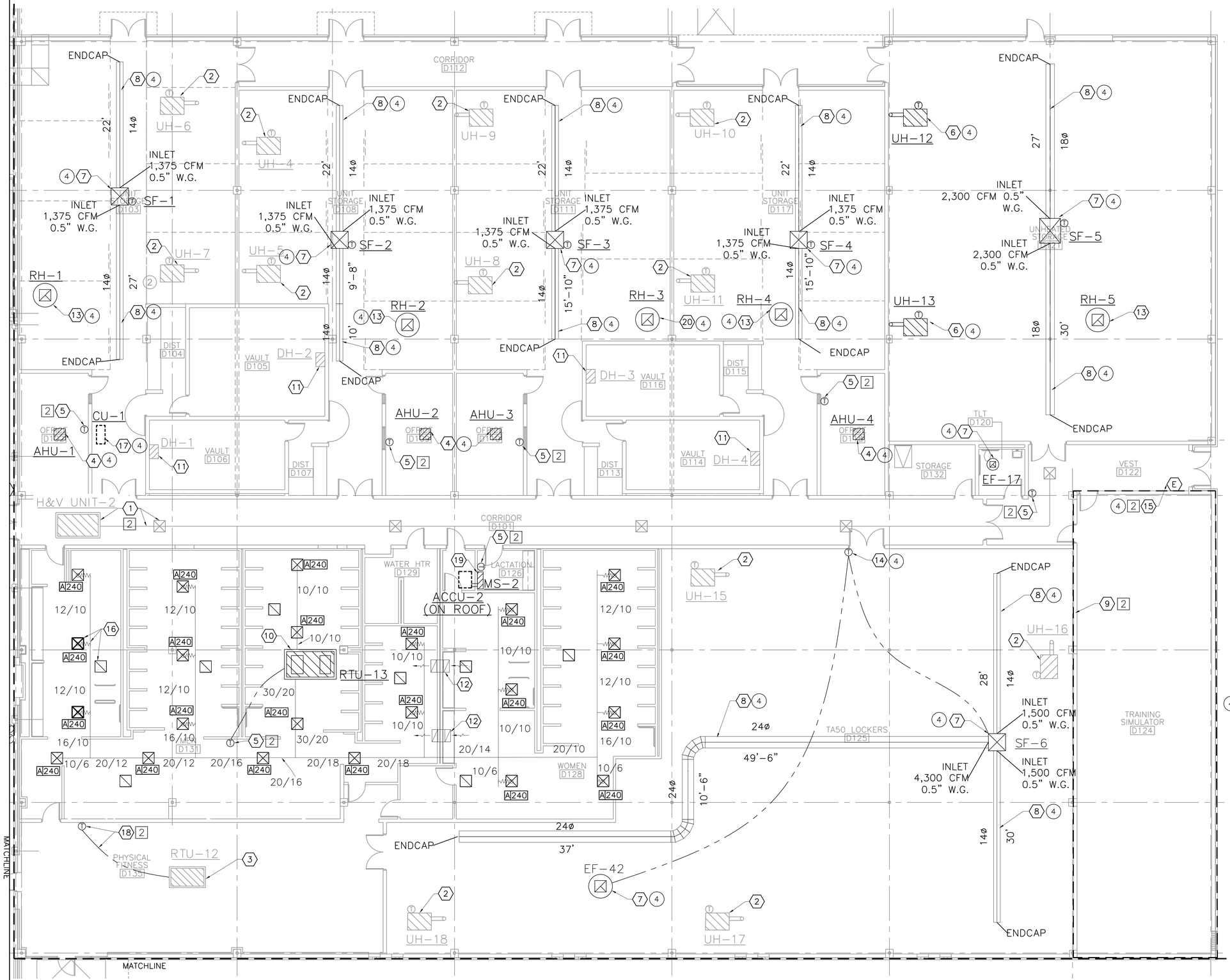
STAR CAMPAIGN FY18 - WESLACO
RC MAJOR MAINTENANCE

TXARNG CFMO

MECHANICAL
FLOOR PLAN - C

M-7 [2] (4)

SHT. 54 of 129



GENERAL NOTES:

1. REFER TO SHEET M-0 FOR LEGEND, ABBREVIATIONS, AND GENERAL NOTES.
2. REFER TO ARCHITECTURAL DRAWINGS FOR WALL AND ROOF MODIFICATIONS ASSOCIATED WITH MECHANICAL DEMOLITION.
3. PATCH OPENINGS IN WALL THAT RESULT FROM DUCT DEMOLITION TO MATCH ADJOINING WALL IN CONSTRUCTION AND FINISH.
4. REFER TO DIVISION 23 SECTION AND OTHER RELATED PORTIONS OF THE TECHNICAL SPECIFICATIONS FOR ADDITIONAL WORK RELATED TO HVAC SYSTEM.

NOTES BY SYMBOL "⬡"

[2] 1. EXISTING H&V UNIT AND RELATED DUCTWORK AND DIFFUSERS TO REMAIN. IF SECO OPTION #2 IS ACCEPTED, CONNECT TO BAS AS INDICATED ON 1/M-11.

2. EXISTING UNIT HEATERS TO REMAIN.

[2] 3. EXISTING RTU TO REMAIN; IF SECO OPTION #2 IS SELECTED, PROVIDE NEW BACNET CONTROLLER INTERFACED TO EXISTING RTU CONTROLLER PER 4/M-11.

(4) 4. IF BID OPTION #4 IS SELECTED, PROVIDE NEW CEILING MOUNTED AIR HANDLER UNIT; PROVIDE OUTDOOR AIR DUCT, ROOF PENETRATION, AND INTAKE COVER AS SCHEDULED ON M-9.

[2] 5. PROVIDE 7-DAY PROGRAMMABLE THERMOSTAT. IF SECO OPTION #2 IS ACCEPTED, PROVIDE BAS-INTEGRATED ZONE TEMPERATURE SENSOR WITH ADJUSTABLE SETPOINT CONTROL.

(4) 6. IF BID OPTION #4 IS SELECTED, PROVIDE NEW UNIT HEATER AS SCHEDULED. MOUNT AT BOTTOM OF UNIT AT MIN. 10' AFF.

(4) 7. IF BID OPTION #4 IS SELECTED, PROVIDE NEW FAN AT EXISTING ROOF PENETRATION AS SCHEDULED. MODIFY ROOF OPENING TO ACCOMMODATE NEW UNIT. CONNECT SUPPLY FANS 1-6 TO FABRIC DUCT PER MANUFACTURER'S RECOMMENDATIONS.

(4) 8. IF BID OPTION #4 IS ACCEPTED, PROVIDE FABRIC DUCT; CONNECT TO SUPPLY FAN OPENING PER MANUFACTURER'S RECOMMENDATIONS.

[2] 9. TRAINING SIMULATOR AC TO BE PROVIDED UNDER SEPARATE CONTRACT. UNITS TO BE CONNECTED TO BAS IF SECO OPTION #2 IS ACCEPTED. RE: 1/M-10 AND 4/M-11 FOR INTEGRATION AND CONTROL DETAILS.

10. PROVIDE NEW RTU WITH ENERGY RECOVERY. REFER TO SCHEDULE FOR MORE DETAILS. PROVIDE WITH FULL SIZED CONDENSATE DRAIN; REUSE EXISTING PENETRATION AND DRAIN TERMINATION. REFER TO 1/S-4 FOR STRUCTURAL SUPPORT AT NEW UNIT; REFER TO 7/S-4 FOR SUPPORT AT EXISTING GIRDER BEAM.

11. EXISTING DEHUMIDIFIERS TO REMAIN.

12. PROVIDE NEW 12"x26" TRANSFER DUCT ABOVE CEILING. REFER TO 7/M-13 FOR MORE DETAILS.

(4) 13. IF BID OPTION #4 IS SELECTED, PROVIDE RELIEF HOOD AT EXISTING ROOF PENETRATION. MODIFY ROOF OPENING AS NECESSARY TO ACCOMMODATE SPECIFIED RELIEF HOOD.

(4) 14. IF BID OPTION #4 IS ACCEPTED, PROVIDE NEW THERMOSTAT TO CONTROL SF-6 AND EF-42 PER 3/M-12.

(4) [2] 15. IF BID OPTION #4 AND SECO OPTION #2 ARE ACCEPTED, PROVIDE EMERGENCY SHUTDOWN SWITCH TO SHUT DOWN ALL EQUIPMENT CONNECTED TO BAS.

16. PROVIDE NEW SUPPLY DIFFUSERS, RETURN GRILLES, AND DUCT AS SCHEDULED.

(4) 17. IF BID OPTION #4 IS SELECTED, PROVIDE NEW AIR-COOLED CONDENSING UNIT LOCATED ON ROOF, ROUTE REFRIGERANT LINES TO ASSOCIATED AHUS PER MANUFACTURER'S RECOMMENDATIONS. PENETRATE ROOF PER DETAIL 3/M-13. USE EXISTING PENETRATION.

[2] 18. EXISTING THERMOSTAT TO REMAIN. IF SECO OPTION #2 IS SELECTED, PROVIDE BAS-INTEGRATED ZONE TEMPERATURE SENSOR WITH ADJUSTABLE SETPOINT CONTROL

19. PROVIDE NEW WALL-MOUNTED AIR HANDLER UNIT; PROVIDE OUTDOOR AIR DUCT, ROOF PENETRATION, AND INTAKE COVER AS SCHEDULED ON M-9.

(4) 20. IF BID OPTION #4 IS SELECTED, PROVIDE RELIEF HOOD AT NEW ROOF PENETRATION. PENETRATE ROOF PER MANUFACTURER'S RECOMMENDATIONS AND ARCHITECTURAL DETAILS.

FLOOR PLAN - D

1/8"=1'-0"

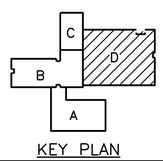
BID OPTIONS "◯"

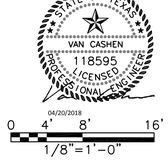
4. ADDITIONAL HVAC UPGRADES/REPAIRS/HVLS FANS.

SECO OPTIONS "□"

2. PROVIDE DDC CONTROL SYSTEM.

KEY PLAN





0 4' 8' 16'

1/8"=1'-0"

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AUSTIN, TEXAS 78763-5218
(512) 782-6131
FAX (512) 782-1481

STAR CAMPAIGN FY18 - WESLACO
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MECHANICAL
FLOOR PLAN - D

M-8 [2] (4)

SHT. 55 of 129

FAN SCHEDULE (4)

MARK	SERVES	CFM	EXT SP IN. WG	MOTOR DATA HP	RPM	VOLT/PH/HZ	MAX. SONES	MANUFACTURER/MODEL	NOTES
EF-16	C111	250	0.5	1/10	1750	115/1	7.1	GREENHECK/G-085-VG	1,2,3,4,5,8
EF-2	C114	70	0.10	6W	935	115/1	0.4	GREENHECK/SP-80-VG	7
EF-17	D120	70	0.10	6W	935	115/1	0.4	GREENHECK/SP-80-VG	7
EF-37	C102	700	0.38	1/4	1750	115/1	6	GREENHECK/CUE-121-VG	1,2,3,4,5,8
EF-42	D125	8,100	0.2	3/4	1750	460/3	309	GREENHECK/RPDR-36-611-C7	1,2,3,4,5,8
SF-11	RANGE HOOD	4,100	0.5	1	1750	460/3	15.8	GREENHECK/RSF-150-15	1,2,3,4,6,8
SF-1 THRU 4	D104, D108, D111, D117	2,750	0.523	1/2	1750	230/1	21	GREENHECK/AS-24-418-B5	1,2,3,4,5,8
SF-5	D121	4,600	0.5	1 1/2	1750	230/1	34	GREENHECK/AS-20-428-A15	1,2,3,4,5,8
SF-6	D125	7,300	0.549	1 1/2	1750	460/3	61	GREENHECK/RPDR-30-410-A15	1,2,3,4,5,8

NOTES:
1) PROVIDE WITH ROOF CURB ADAPTER, DAMPER TRAY CURB CAP SEAL, AND ACCESSORIES FOR HIGH WIND LOADS FROM FACTORY.
2) PROVIDE WITH NEMA-1, TOGGLE STYLE DISCONNECT SWITCH SHIPPED WITH UNIT.
3) PROVIDE WITH WD-100 GRAVITY DAMPER SIZED FOR DAMPER TRAY FROM FACTORY.
4) PROVIDE WITH ALUMINUM BIRDSCREEN.
5) DIRECT DRIVE, ROOF MOUNTED CENTRIFGUAL FAN. PROVIDE WITH MOTOR SPEED DIAL MOUNTED TO FAN MOTOR FOR BALANCING.
6) BELT DRIVE, ROOF MOUNTED CENTRIFGUAL FAN. PROVIDE WITH TWO ADDITIONAL BELTS FROM FACTORY.
7) CEILING MOUTNED FAN. PROVIDE WITH ALUMINUM GRILLE AND ROOF JACK FROM FACTORY.
8) PROVIDE WITH NEW ROOF CURB, DAMPER TRAY CURB CAP SEAL, AND ACCESSORIES FOR HIGH WIND LOADS FROM FACTORY.

VENTILATOR HOOD SCHEDULE (4)

MARK	THROAT DIAMETER (IN.)	HOOD DIAMETER (IN.)	CURB DIMENSIONS (L/W/H)	CFM	ESP (IN. WG)	THROAT VELOCITY	TYPE	MANUFACTURER/MODEL	NOTES
RH-1 THRU 4	20	35.5	32.5/32.5/12	2,750	0.184	1222	GRAVITY	GREENHECK/GRSR-20	1,2,3
RH-5	30	48	42.5/42.5/12	4,600	0.163	915	GRAVITY	GREENHECK/GRSR-30	1,2,3

NOTES:
1) PROVIDE 0.5 IN. MESH BIRDSCREEN.
2) ALUMINUM HOUSING.
3) PROVIDE WITH WD-100 GRAVITY DAMPERS.

PACKAGED WALL UNIT SCHEDULE

TAG	SERVES	MANUFACTURER/MODEL	TYPE	NOMINAL COOLING CAPACITY (BTU/H)	COOLING EER	NOMINAL HEATING CAPACITY (BTU/H)	HEATING COP	COOLING DESIGN ENTERING TEMP DB/WB (°F)	HEATING DESIGN ENTERING TEMP DB (°F)	VOLTAGE / PHASE	MCA (COOLING/HEATING)
WP-1	C106	CARRIER/26TTW12HC230V1A	THRU WALL	12,000	9.8	10,600	ELECTRIC	80.0/67.0	37	208/230V/1-PHASE	6.1/15.2

NOTES:
1. PROVIDE WITH FACTORY FURNISHED DISCONNECT SWITCH.

CIRCULATION FAN SCHEDULE (4)

MARK	WEIGHT (LBS)	MOTOR DATA HP	RPM	VOLT/PH	MOCP	MCA	MAX. SONES	NO. BLADES	FAN DIAMETER (FT.)	MANUFACTURER/MODEL	NOTES
HVLS-1 & 2	284	2	87	208/3	15	4.9	3	4	16	JOHNSON/REVOLUTION	1,2,3

NOTES:
1. PROVIDE WITH FACTORY MOUNTING HARDWARE TO MOUNT FAN TO STRUCTURE.
2. PROVIDE WITH FACTORY WALL-MOUNTED CONTROLLER.
3. PROVIDE DIRECT DRIVE MOTOR.

GAS-FIRED UNIT HEATER SCHEDULE (4)

MARK	SERVES	CFM	CAP. (MBH)	TEMP. RISE (°F)	MOUNTING HIEGHT	HP	VOLT/PH	MANUFACTURER/MODEL	NOTES
UH 12 & 13	D121	1160	60	48	10'-0"	1\12	115/1	MODINE / HD-75	1,2

NOTES:
1) PROVIDE SUPPORT FROM STRUCTURE ABOVE.
2) PROVIDE WITH FACTORY MOUNTED INTEGRAL THERMOSTAT AND SET TO TURN ON AT 45 °F (ADJ.)

ROOFTOP UNIT WITH ENERGY RECOVERY SCHEDULE

MARK	SUPPLY FAN CFM	FAN HP/QTY	E.S.P. (IN. W.G.)	T.S.P. (IN. W.G.)	EXHAUST FAN CFM	FAN HP/QTY	E.S.P. (IN. W.G.)	T.S.P. (IN. W.G.)	EER	AMBIENT COOL/ HEAT (°F) DB	ENERGY RECOVERY WHEEL PERFORMANCE COOLING OA (°F) DB/WB	COOLING PRE-TREATED OA (°F) DB/WB	COOLING RA (°F) DB/WB	COOLING EA (°F) DB/WB	COOLING TOTAL CAPACITY (MBH)	HEATING OA (°F) DB/WB	HEATING PRE-TREATED OA (°F) DB/WB	HEATING RA (°F) DB/WB	HEATING EA (°F) DB/WB	HEATING TOTAL CAPACITY (MBH)	COOLING COIL EAT (°F) DB/WB	COOLING COIL LAT (°F) DB/WB	COOLING COIL TOTAL CAP (MBH)	COOLING COIL SENSIBLE CAP (MBH)	COOLING COIL FACE VELOCITY (FPM)	NAT. GAS HEATING COIL EAT (°F) DB	NAT. GAS HEATING COIL LAT (°F) DB	NAT. GAS HEATING COIL HEAT INPUT (MBH)	NAT. GAS HEATING COIL HEAT OUTPUT (MBH)	CONDENSER ROWS/FPI	CONDENSER COMPRESSOR QTY/RLA	CONDENSER CONDENSER FAN QTY/HP/FLA	ELECTRICAL VOLT /PH	ELECTRICAL MCA (AMPS)	ELECTRICAL MFS (AMPS)	WEIGHT (LBS)	MANUFACTURER/MODEL
RTU-13	5,300	5/1	0.50	1.83	1,870	5/1	0.50	0.92	11.4	98/37	98/80	78/64	75/63	91/78	117.0	37/31	66/55	70/58	41/36	58.4	76/64	48/48	234.0	160.0	262	68	110	300.0	240.0	6/12	2/14.7	3/1.34/1.55	460/3	53.6	60	4,650	GREENHECK/RVE-85-52P-30L-20

REMARKS:
1) PROVIDE WITH 14" TALL ROOF CURB SHIPPED FROM FACTORY AND ALL ACCESSORIES FOR ROOF MOUNTING WITH BOTTOM SUPPLY AND BOTTOM RETURN.
2) PROVIDE WITH SINGLE POINT ELECTRICAL CONNECTION FROM FACTORY.
3) PROVIDE WITH CONTROLLER COMPATIBLE WITH BACNET BAS.
4) PROVIDE WITH MERV 8 PLEATED FILTERS.
5) PROVIDE WITH 115V CONVENIENCE OUTLET.
6) PROVIDE ELECTRICAL CONNECTIONS THROUGH ROOF CURB.

DIFFUSER AND GRILLE SCHEDULE

MARK	TYPE	FACE SIZE (IN.)	NECK SIZE (IN.)	MANUFACTURER/MODEL	NOTES
A	LAY-IN SUPPLY DIFFUSER	24x24	8"Ø	TITUS/TDC	1,2,3,4
B	LAY-IN EGGCRATE RETURN GRILLE	24x24	N/A	TITUS/50F	1,2,3,4

NOTES:
1) UNITS SHALL BE FURNISHED WITH APPROPRIATE FRAMES FOR DUCT, CEILING OR WALL MOUNTING.
2) FINISH/PAINT COLOR SHALL BE WHITE UNLESS OTHERWISE NOTED.
3) PROVIDE FRAMES/ACCESSORIES FOR MOUNTING IN RESPECTIVE CEILING/WALL/DUCT.
4) ALL DEVICES SHALL BE WHITE.

AIR COOLED CONDENSING UNIT SCHEDULE

SYSTEM TAG	TAG REFERENCE	SERVES	MANUFACTURER/ MODEL	COOLING INDOOR CONDITIONS (DB/WB)	HEATING INDOOR CONDITIONS (DB)	NOMINAL COOLING CAPACITY (MBH)	NOMINAL HEATING CAPACITY (MBH)	COOLING EFFICIENCY IEER/EER [SEER]	HEATING COP @ 47°F [HSPF]	DESIGN COOLING OUTDOOR TEMP DB (°F)	DESIGN HEATING OUTDOOR TEMP WB (°F)	CORRECTED COOLING TOT/SENS CAPACITY (MBH)	CORRECTED HEATING CAPACITY (MBH)	VOLTAGE / PHASE	MCA 208/230
BASE BID															
ACCU-1	ACCU-1	MS-1	TRANE/4TYK1609A	80/67	N/A	9	-	16	-	98	N/A	11.4	-	208/1	9
ACCU-2	ACCU-2	MS-2	TRANE/4TYK1609A	80/67	65	9	9.5	16	9	98	37	11.4	12.4	208/1	9
BID OPTION (4)															
CU-1	CU-1	AHU-1, AHU-2, AHU-3, AHU-4	TRANE/4TXM2242A	80/67	65	42	45	21	10.2	98	37	40.4	45	208/1	26
ACCU-3	ACCU-3	MS-3	TRANE/4TYK1609A	80/67	65	9	9.5	16	9	98	37	11.4	12.4	208/1	9

NOTES:
1. INSULATE REFRIGERANT SUCTION LINE PER SPECIFICATIONS.
2. SIZE, ROUTE, INSULATE AND PROVIDE APPURTENANCES FOR DX PIPING SYSTEMS, PER MANUFACTURER RECOMMENDATIONS.
3. PROVIDE WITH FACTORY FURNISHED DISCONNECT SWITCH.

MINI-SPLIT AIR HANDLER UNIT SCHEDULE

TAG	SERVES	MANUFACTURER/MODEL	TYPE	OUTSIDE AIR (CFM)	NOMINAL COOLING CAPACITY (MBH)	NOMINAL HEATING CAPACITY (MBH)	COOLING DESIGN ENTERING TEMP DB/WB (°F)	HEATING DESIGN ENTERING TEMP DB/WB (°F)	REFRIG PIPE DIM LIQUID/SUCTION (INCH)	PEAK FAN AIRFLOW (CFM)	SOUND PRESSURE PER FAN SPEED 208V/230V (DBA) H/M/L	VOLTAGE / PHASE	ELECTRICAL MCA/MFS
BASE BID													
MS-1	C116	TRANE/4MYW1609A	Indoor air handler unit	0	9	-	80.0/67.0	N/A	1/4	-	38/34/28	208/230V/1-PHASE	POWERED BY OUTDOOR
MS-2	D126	TRANE/4MXW1609A	Indoor air handler unit	30	9	9.5	80.0/67.0	65	1/4	-	38/34/28	208/230V/1-PHASE	POWERED BY OUTDOOR
BID OPTION (4)													
AHU-1 THRU 3	D102, D109, D110	TRANE/4MXC8512	Indoor air handler unit	30	12	13	80.0/67.0	65	1/4	353	46/42/37	208/230V/1-PHASE	POWERED BY OUTDOOR
AHU- 4	D118	TRANE/4MXC8518	Indoor air handler unit	30	14.4	16	80.0/67.0	65	1/4	353	46/42/37	208/230V/1-PHASE	POWERED BY OUTDOOR
MS-3	C110	TRANE/4MXW1609A	Indoor air handler unit	30	9	9.5	80.0/67.0	65	1/4	-	38/34/28	208/230V/1-PHASE	POWERED BY OUTDOOR

NOTES:
1. PROVIDE WITH FACTORY FURNISHED DISCONNECT SWITCH.
2. UNIT SHALL MAINTAIN A SETBACK TEMPERATURE OF 85°F (ADJ.) IN COOLING AND 65°F (ADJ.) IN HEATING DURING UNOCCUPIED HOURS SET BY OWNER.
3. PROVIDE WITH FACTORY FURNISHED PROGRAMMABLE THERMOSTAT.

BID OPTIONS "◯"

4. ADDITIONAL HVAC UPGRADES/REPAIRS/HVLS FANS.

SECO OPTIONS "□"

2. PROVIDE DDC CONTROL SYSTEM.

VAN CASHEN
118595
LICENSED
PROFESSIONAL ENGINEER
STATE OF TEXAS
04/20/2018

THE STATE OF TEXAS

PROJECT ARCHITECT:
HOMER SAENZ, AIA
PROJECT NO. ADG17589A
ISSUE DATE: 04/20/18
DRAWN BY: AJS
REVIEWED BY: VMC

FREESE AND NICHOLS
4055 International Plaza, Suite 200
Fort Worth, Texas 76109-4895
Phone – (817) 735-7300
Fax – (817) 735-7491
Freese and Nichols, Inc.
Texas Registered Engineering
Firm F-2144

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TEXAS MILITARY FORCES
CONSTRUCTION & FACILITIES MANAGEMENT OFFICE-CFMO
CAMP MABRY P.O. BOX 5218
(512) 782-6131
AUSTIN, TEXAS 78763-5218
FAX (512) 782-1481

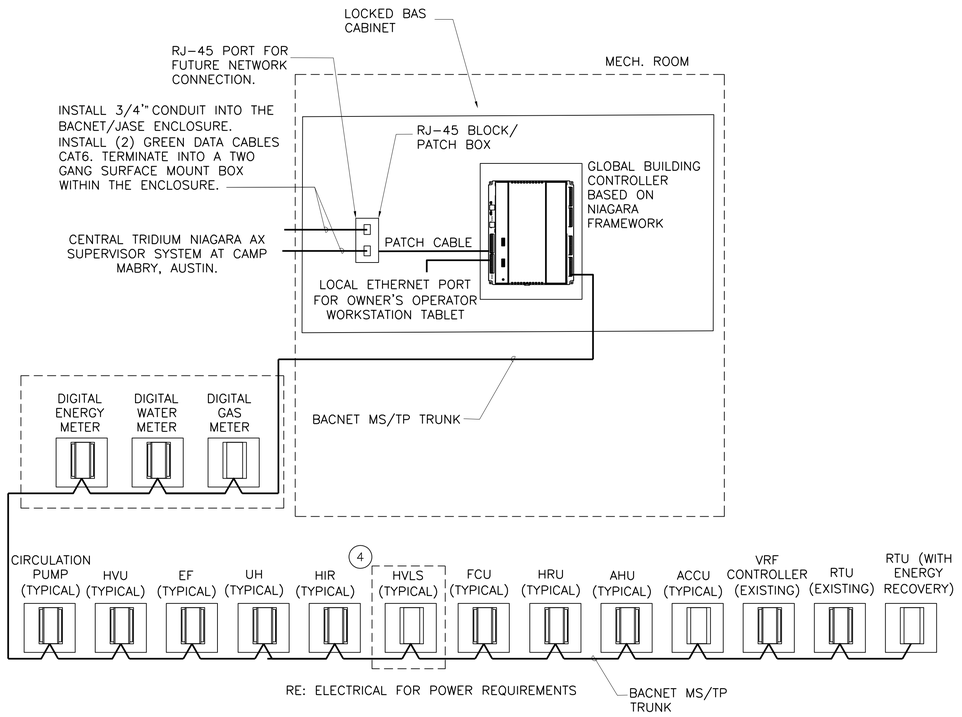
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MECHANICAL SCHEDULES

M-9 (4)

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NOTE:

BASE BID: PROVIDE GLOBAL BUILDING CONTROLLER AND DIGITAL ENERGY METERS. METERS TO BE INTEGRATED TO GLOBAL CONTROLLER VIA BACNET MS/TP AS SHOWN.

SECO BID OPTION #2: UTILIZE THE NIAGARA GLOBAL BUILDING CONTROLLER FOR INTEGRATION OF ALL OTHER EQUIPMENT SHOWN ON DIAGRAM AND P&ID DETAILS.

2 (1 / M-10) NETWORK ARCHITECTURE DIAGRAM

NTS

BAS INPUT/OUTPUT POINT LIST											
		HARDWARE POINTS				SOFTWARE POINTS					
TAG	POINT NAME	AI	AO	DI	DO	AV	BV	TREND	ALARM	ADJUSTABLE	SHOW ON GRAPHIC
1	WATER FLOW RATE	X						X			
2	DEMAND							X			X
3	PEAK MONTH-TO-DATE							X			X
4	PEAK TODAY							X			X
5	PEAK YEAR-TO-DATE							X			X
6	USAGE MONTH-TO-DATE							X			X
7	USAGE TODAY							X			X
8	USAGE YEAR-TO-DATE							X			X
9	GAS METER FAILURE								X		

WATER METER POINTS LIST

BAS INPUT/OUTPUT POINT LIST											
		HARDWARE POINTS				SOFTWARE POINTS					
TAG	POINT NAME	AI	AO	DI	DO	AV	BV	TREND	ALARM	ADJUSTABLE	SHOW ON GRAPHIC
1	GAS FLOW RATE	X						X			
2	DEMAND							X			X
3	PEAK MONTH-TO-DATE							X			X
4	PEAK TODAY							X			X
5	PEAK YEAR-TO-DATE							X			X
6	USAGE MONTH-TO-DATE							X			X
7	USAGE TODAY							X			X
8	USAGE YEAR-TO-DATE							X			X
9	GAS METER FAILURE								X		

GAS METER POINTS LIST

BAS INPUT/OUTPUT POINT LIST											
		HARDWARE POINTS				SOFTWARE POINTS					
TAG	POINT NAME	AI	AO	DI	DO	AV	BV	TREND	ALARM	ADJUSTABLE	SHOW ON GRAPHIC
1	REAL POWER - KW TOTAL					X		X			X
2	REAL ENERGY - KWH TOTAL					X		X			X
3	PWR-DEMAND					X		X			X
4	PWR-DEMAND-PEAK					X		X			X
5	VOLTAGE A-B					X		X			X
6	VOLTAGE A-N					X		X			X
7	VOLTAGE B-C					X		X			X
8	VOLTAGE B-N					X		X			X
9	VOLTAGE C-A					X		X			X
10	VOLTAGE C-N					X		X			X
11	AMP A					X		X			X
12	AMP B					X		X			X
13	AMP C					X		X			X
14	POWER FACTOR A					X		X			X
15	POWER FACTOR B					X		X			X
16	POWER FACTOR C					X		X			X
17	POWER FACTOR TOTAL					X		X			X
18	REACTIVE POWER - KVAR					X		X			X

ELEC. METER POINTS LIST

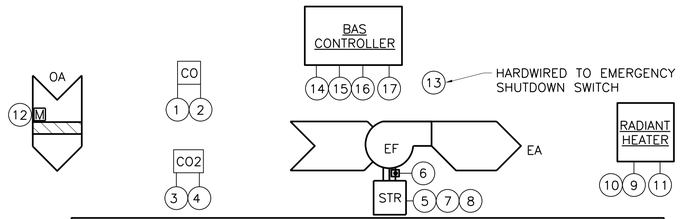
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BAS GENERAL NOTES:

1. PROVIDE A TOTALLY NATIVE BACNET BASED DIRECT DIGITAL CONTROL (DDC) SYSTEM INCLUDING A COMPATIBLE OPERATOR WORKSTATION LAPTOP BASED ON THE NETWORK ARCHITECTURE DIAGRAM SHOWN IN DETAIL 1 ON THIS SHEET.
2. THE GLOBAL BUILDING CONTROLLER SHALL BE BASED ON THE TRIDIUM NIAGARA N4 FRAMEWORK AND SHALL BE ABLE TO ESTABLISH AND MAINTAIN TWO WAY COMMUNICATION AND CONTROL WITH THE EXISTING NIAGARA AX SUPERVISOR VIA THE OWNER – FURNISHED RCAS NETWORK. PROVIDE REQUIRED NIAGARA AX LICENSING FOR THE N4 CONTROLLER.
3. THE OWNER SHALL OWN AND SHALL HAVE FULL RIGHTS TO ALL FEATURES OF THE NIAGARA AX SOFTWARE.
4. THE LOCAL BUILDING CONTROLLER/JACE SHALL BE CONFIGURED WITH DCHP ADDRESSING.
5. CONTRACTOR SHALL CONTACT AND COORDINATE WITH TRIDIUM TO ACQUIRE THE STANDARD NIAGARA AX GRAPHICS AND SHALL MODIFY/ALTER THESE GRAPHICS TO MATCH SYSTEMS AND EQUIPMENT IN THIS PROJECT. REFER TO TECHNICAL SPECIFICATION SECTION 23 09 23 FOR MORE INFORMATION.
6. REFER TO TECHNICAL SPECIFICATION SECTION 23 09 23 FOR STANDARD NOMENCLATURE AND FILE NAMING CONVENTIONS.
7. REFER TO TECHNICAL SPECIFICATION SECTION 23 09 23 TO COMPLY WITH REQUIREMENTS OF UMCS-MCX ARMY METERING PROGRAM GUIDANCE FOR ADVANCED METERS.
8. ALL EQUIPMENT (EXISTING AND NEW) SHALL CONNECT TO THE GLOBAL BUILDING CONTROLLER VIA THE BACNET MS/TP TRUNK. PROVIDE REQUIRED CONTROLLERS TO INTERFACE EQUIPMENT

ZONE TEMPERATURE CONTROL:

1. THE BAS SHALL INCLUDE 7-DAY OCCUPANCY SCHEDULES FOR INDIVIDUAL EQUIPMENT AND A 7-DAY MASTER OCCUPANCY SCHEDULE FOR THE BUILDING. THE ZONE TEMPERATURE CONTROL SHALL BE BASED ON OCCUPANCY SCHEDULE AND THE OCCUPANCY STATUS OF THE ROOM (WHERE PROVIDED WITH OCCUPANCY SENSORS).
2. OCCUPIED MODE: THE BUILDING SHALL BE "OCCUPIED" FROM 8 A.M. (ADJ.) TO 6 P.M. (ADJ.), MONDAY THRU FRIDAY. TEMPERATURE SETPOINTS: COOLING: 75°F (ADJ.), HEATING 70°F (ADJ.).
3. UNOCCUPIED MODE: THE BUILDING SHALL BE "UNOCCUPIED" FROM 6 P.M. (ADJ.) TO 8 A.M. (ADJ.) MONDAY THRU FRIDAY AND ENTIRE DAY ON SATURDAY AND SUNDAY. TEMPERATURE SETPOINTS: COOLING: 85°F (ADJ.) AND HEATING: 60°F (ADJ).
4. ZONE SETPOINT ADJUST: THE OCCUPANT SHALL BE ABLE TO ADJUST THE ZONE TEMPERATURE HEATING AND COOLING SET POINTS AT THE ZONE SENSOR BY ±2°F.
5. ZONE UNOCCUPIED OVERRIDE: A TIMED LOCAL OVERRIDE CONTROL SHALL ALLOW AN OCCUPANT TO OVERRIDE THE SCHEDULE AND PLACE THE UNIT INTO AN OCCUPIED MODE FOR AN ADJUSTABLE (INITIALLY SET AT 2 HOURS) PERIOD OF TIME. AT THE EXPIRATION OF THIS TIME, CONTROL OF THE UNIT SHALL AUTOMATICALLY RETURN TO THE MASTER SCHEDULE.
6. ASSEMBLY HALL ZONE TEMPERATURE CONTROL: REFER TO 3/M-11 FOR TEMPERATURE SETPOINTS FOR THE ASSEMBLY HALL.
7. TEMPERATURE CONTROL DEVICES SHALL BE EQUIPPED WITH DEADBANDS THAT COMPLY WITH IECC 2015.



BAS INPUT/OUTPUT POINT LIST						
TAG	POINT NAME	AI	AO	DI	DO	ALARM
1	CO CONCENTRATION	X				
2	CO CONCENTRATION SETPOINT				X	
3	CO2 CONCENTRATION	X				
4	CO2 CONCENTRATION SETPOINT				X	
5	EXHAUST FAN ON/OFF *				X	
6	EXHAUST FAN STATUS *			X		
7	EXHAUST FAN FAILURE *					X
8	FAN ENABLE (24/7) *				X	
9	RADIANT HEATER ON/OFF *				X	
10	RADIANT HEATER STATUS *			X		
11	RADIANT HEATER FAILURE *					X
12	DAMPER POSITION (OPEN/CLOSE) *		X			
13	EMERGENCY SHUTDOWN (GLOBAL) *					X
14	HIGH CO ALARM					X
15	HIGH CO2 ALARM					X
16	HIGH CO MASS NOTIFICATION (TO FACP)					X
17	HIGH CO2 MASS NOTIFICATION (TO FACP)					X

* NOTE: THESE POINTS ARE ALREADY MONITORED UNDER THE DRILL HALL VENTILATION CONTROL SEQUENCE.

HAZARDOUS EXHAUST SEQUENCE OF OPERATION:

1. ASSEMBLY HALL HAZARDOUS GAS EXHAUST SEQUENCE: THE SYSTEM SHALL BE CONTROLLED BY THE BAS AND OPERATE AS FOLLOWS:
   - 1.1. THE EXHAUST FANS, DAMPERS, AND RADIANT HEATERS SHALL REMAIN ENABLED AT ALL TIMES.
   - 1.2. CARBON DIOXIDE (CO2) MONITORING: A CO2 SENSOR SHALL BE PLACED ON THE DRILL HALL WALL, AT 18" AFF. THE SENSOR SHALL MONITOR CO2 CONCENTRATION IN THE SPACE AND ENABLE THE VENTILATION SYSTEM PER THE FOLLOWING:
     - 1.2.1. THE EXHAUST FAN SHALL ENERGIZE AND THE DAMPERS SHALL OPEN TO MAXIMUM OPEN POSITION WHEN THE CO2 CONCENTRATION (HIGHER OF THE TWO SENSORS INSTALLED) RISES ABOVE THE CO2 SETPOINT OF 1200 PPM (ADJ.). THIS VENTILATION SEQUENCE SHALL OVERRIDE ANY TEMPERATURE BASED SYSTEM CONTROL IN THE DRILL HALL.
     - 1.2.2. THE EXHAUST FAN SHALL DE-ENERGIZE AND THE DAMPERS SHALL CLOSE WHEN THE CO2 CONCENTRATION (HIGHER OF THE TWO SENSORS INSTALLED) FALLS BELOW THE CO2 SETPOINT OF 1100 PPM (ADJ.). THE CONTROLS FOR THE DRILL HALL SHALL REVERT BACK TO THE TEMPERATURE BASED CONTROL SEQUENCES AFTER 15 MINUTES OF CONTINUOUS CO2 CONCENTRATIONS BELOW THE DE-ENERGIZE SETPOINT.
     - 1.2.3. HIGH CO2 ALARM: AN ALARM SHALL BE TRIGGERED ON THE BAS WHEN THE CO2 CONCENTRATION (HIGHER OF THE TWO SENSORS INSTALLED) EXCEEDS 1800 PPM, AND THE SYSTEM IS RUNNING. THE ALARM WILL STOP WHEN THE CO2 CONCENTRATION (HIGHER OF THE TWO SENSORS INSTALLED) FALLS BELOW 1700 PPM, AND THE SYSTEM IS RUNNING.
     - 1.2.4. CO2 MASS NOTIFICATION ALARM: IN THE EVENT THE CO2 CONCENTRATION (HIGHER OF THE TWO SENSORS INSTALLED) EXCEEDS 2000 PPM, A VISUAL AND AN AUDIBLE ALARM SHALL BE GENERATED VIA THE FIRE ALARM MASS NOTIFICATION SYSTEM ALERTING THE BUILDING OCCUPANTS OF THE HIGH CONCENTRATION AND ADVISING THEM TO LEAVE THE BUILDING. REFER TO FIRE ALARM DRAWINGS.
   - 1.3. CARBON MONOXIDE (CO) MONITORING: A CO SENSOR SHALL BE PLACED ON THE DRILL HALL WALL AS SHOWN ON M-4, AT 6'-0" AFF. THE SENSOR SHALL MONITOR CO CONCENTRATION IN THE SPACE AND ENABLE THE VENTILATION SYSTEM UNDER PER THE FOLLOWING:
     - 1.3.1. THE EXHAUST FAN SHALL ENERGIZE AND THE DAMPERS SHALL OPEN TO MAXIMUM OPEN POSITION WHEN THE CO CONCENTRATION (HIGHER OF THE TWO SENSORS INSTALLED) RISES ABOVE THE CO SETPOINT OF 8 PPM (ADJ.). THIS VENTILATION SEQUENCE SHALL OVERRIDE ANY TEMPERATURE BASED SYSTEM CONTROL IN THE DRILL HALL.
     - 1.3.2. THE EXHAUST FAN SHALL DE-ENERGIZE AND THE DAMPERS SHALL CLOSE WHEN THE CO CONCENTRATION (HIGHER OF THE TWO SENSORS INSTALLED) FALLS BELOW THE CO SETPOINT OF 6 PPM (ADJ.). THE CONTROLS FOR THE DRILL HALL SHALL REVERT BACK TO THE TEMPERATURE BASED CONTROL SEQUENCES AFTER 15 MINUTES OF CONTINUOUS CO CONCENTRATIONS BELOW THE DE-ENERGIZE SETPOINT.
     - 1.3.3. HIGH CO ALARM: AN ALARM SHALL BE TRIGGERED ON THE BAS WHEN THE CO CONCENTRATION (HIGHER OF THE TWO SENSORS INSTALLED) EXCEEDS 8 PPM AND THE SYSTEM IS RUNNING. THE ALARM WILL STOP WHEN THE CO CONCENTRATION (HIGHER OF THE TWO SENSORS INSTALLED) FALLS BELOW 6 PPM.
     - 1.3.4. CO MASS NOTIFICATION ALARM: IN THE EVENT THE CO CONCENTRATION EXCEEDS 35 PPM, A VISUAL AND AN AUDIBLE ALARM SHALL BE GENERATED VIA THE FIRE ALARM MASS NOTIFICATION SYSTEM ALERTING THE BUILDING OCCUPANTS OF THE HIGH CONCENTRATION AND ADVISING THEM TO LEAVE THE BUILDING. REFER TO FIRE ALARM DRAWINGS.
     - 1.3.5. THE RADIANT HEATERS SHALL STOP FIRING WHEN THE CO CONCENTRATION EXCEEDS 35 PPM.

2 (2 / M-10) ASSEMBLY HALL HAZARDOUS GAS EXHAUST P&ID CONTROL SCHEMATIC

NTS

NOTE: THIS SEQUENCE APPLIES TO EF-6 AND EF-7. IF SECO OPTION 2 IS NOT SELECTED, PROVIDE INDEPENDENT CONTROLLER AND CONTROL AS INDICATED

SECO OPTIONS "□"

1. PROVIDE OCCUPANCY SENSORS
2. PROVIDE DDC CONTROL SYSTEM

BID OPTIONS "◯"

4. ADDITIONAL HVAC UPGRADES/REPAIRS/HVLS FANS.

STATE OF TEXAS — VAN CASHEN — 118595 — LICENSED PROFESSIONAL ENGINEER

04/20/2018

THE STATE OF TEXAS

PROJECT ARCHITECT: HOMER SAENZ, AIA
PROJECT NO. ADG17589A
ISSUE DATE: 04/20/18
DRAWN BY: RWE
REVIEWED BY: VMC

FREESE AND NICHOLS
4055 International Plaza, Suite 200
Fort Worth, Texas 76109-4895
Phone – (817) 735-7300
Fax – (817) 735-7491
Freese and Nichols, Inc.
Texas Registered Engineering Firm F-2144

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CONSTRUCTION & FACILITIES MANAGEMENT OFFICE-CFMO
CAMP MABRY P.O. BOX 5218 AUSTIN, TEXAS 78763-5218
(512) 782-6131 FAX (512) 782-1481

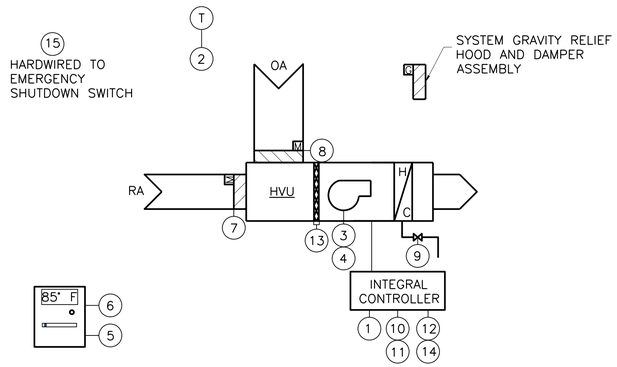
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MECHANICAL NETWORK ARCHITECTURE DIAGRAM

M-10 2

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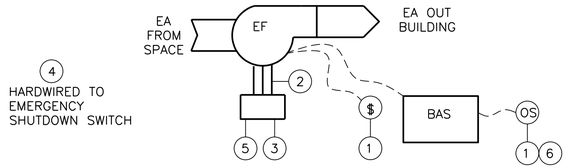
BAS INPUT/OUTPUT POINT LIST						
TAG	POINT NAME	AI	AO	DI	DO	ALARM
1	SYSTEM ENABLE				X	
2	OUTSIDE AIR TEMPERATURE (GLOBAL)	X				
3	SUPPLY FAN ON/OFF				X	
4	SUPPLY FAN STATUS (CT)			X		
5	SPACE AIR TEMPERATURE	X				
6	SPACE AIR TEMPERATURE SETPOINT				X	
7	RETURN AIR DAMPER		X			
8	OUTDOOR AIR DAMPER		X			
9	GAS VALVE POSITION				X	
10	SUPPLY FAN FAILURE					X
11	LOW SPACE AIR TEMPERATURE					X
12	SMOKE DETECTOR					X
13	FILTER ALARM					X
14	EMERGENCY SHUTDOWN (GLOBAL)					X

DIRECT FIRED HEATING VENTILATOR CONTROL SEQUENCE

1. THE HVU SHALL BE CONTROLLED BY THE BAS AND REMAIN ENABLED 24/7. THE BAS CONTRACTOR SHALL PROVIDE THE HVU SYSTEM WITH A BACNET CONTROLLER COMPATIBLE WITH THE TRIDIUM NIAGARA AX FRAMEWORK. THE UNIT SHALL START AND STOP BASED ON THE FOLLOWING CRITERIA: OCCUPANCY SENSORS, FREEZE PROTECTION CONDITIONS, LOCAL OVERRIDE OF ZONE THERMOSTAT, OR MANUAL/REMOTE OVERRIDE THROUGH THE BAS.
2. THE HVU SHALL BE CONTROLLED AS FOLLOWS WHEN THE SPACE IS OCCUPIED (AS DETERMINED BY OCCUPANCY SENSORS):
   - 2.1. SUPPLY FAN: THE SUPPLY FAN SHALL OPERATE CONTINUOUSLY WHEN THE SPACE IS OCCUPIED.
     - 2.2.1. HIGH SPACE TEMPERATURE OPERATIONS [>85°F] (ADJ.): THE HVU SHALL PROVIDE 100% OUTSIDE AIR TO THE SPACE. THE BAS SHALL MODULATE THE OUTSIDE AIR DAMPER TO ITS FULLY OPEN POSITION AND THE RETURN AIR DAMPER TO ITS FULLY CLOSED POSITION. THE GRAVITY RELIEF HOOD SHALL RELIEVE EXCESS PRESSURE FROM THE SPACE.
     - 2.2.2. MODERATE SPACE TEMPERATURE OPERATIONS [55°F < T < 85°F] (ADJ.): THE BAS SHALL SET THE OUTSIDE AIR DAMPER TO THE MINIMUM OUTDOOR AIR POSITION (CFM SPECIFIED ON UNIT SCHEDULE), AND THE RETURN AIR DAMPER SHALL MODULATE TO ALLOW FOR REMAINDER OF THE SYSTEM AIRFLOW. DAMPER POSITIONS TO BE DETERMINED BY TAB FIRM.
     - 2.2.3. LOW SPACE TEMPERATURE OPERATIONS [<55°F] (ADJ.): WHEN THE SPACE TEMPERATURE FALLS BELOW 55°F (ADJ.), UNIT SHALL OPERATE IN HEATING MODE. THE BAS SHALL SET THE OUTSIDE AIR DAMPER TO THE MINIMUM OUTDOOR AIR POSITION (CFM SPECIFIED ON UNIT SCHEDULE), AND THE RETURN AIR DAMPER SHALL MODULATE TO ALLOW FOR REMAINDER OF AIRFLOW. TAB SHALL DETERMINE DAMPER POSITIONS. UPON PROOF OF AIRFLOW, GAS VALVE SHALL MODULATE TO THE OPEN POSITION AND GAS HEATER SHALL FIRE AS REQUIRED TO MAINTAIN A SPACE TEMPERATURE SETPOINT. WHEN THE SPACE TEMPERATURE EXCEEDS 58°F (ADJ.), GAS VALVE SHALL CLOSE. HEATING ELEMENT SHALL NOT BE ALLOWED TO FIRE WITHOUT PROOF OF AIRFLOW.
3. THE HVU SHALL BE CONTROLLED AS FOLLOWS WHEN THE SPACE IS UNOCCUPIED (AS DETERMINED BY OCCUPANCY SENSORS):
   - 3.1. SUPPLY FAN: THE SUPPLY FAN SHALL NOT OPERATE UNLESS MANUALLY OVERRIDDEN FROM THE BAS, LOCAL OVERRIDE FROM THE THERMOSTAT, OR AS REQUIRED FOR FREEZE PROTECTION.
   - 3.2. DAMPER POSITION: THE OUTSIDE AIR DAMPER SHALL BE FULLY CLOSED AND THE RETURN AIR DAMPER SHALL BE FULLY OPEN DURING UNOCCUPIED CONDITIONS.
     - 3.2.1. FREEZE PROTECTION: IN THE EVENT THE SPACE IS UNOCCUPIED AND THE SPACE TEMPERATURE DROPS BELOW BELOW 45°F, THE SUPPLY AIR FAN SHALL RUN AND THE GAS VALVE SHALL BE OPENED. THE BAS SHALL MAINTAIN THE OUTSIDE AIR DAMPER IN THE FULLY CLOSED POSITION AND THE RETURN AIR DAMPER IN THE FULLY OPEN POSITION.
4. EMERGENCY SHUTDOWN: THE UNIT FAN SHALL STOP, THE GAS CONTROL VALVE SHALL CLOSE AND THE OUTSIDE AIR DAMPER SHALL BE MOVED TO THE CLOSED POSITION IN THE EVENT THAT AN EMERGENCY SHUTDOWN BUTTON IS TRIGGERED IN THE FACILITY. NORMAL OPERATIONS SHALL RESUME ONLY AFTER A MANUAL SYSTEM RESET AT THE BAS.
5. THE HVU SHALL BE PROVIDED WITH THE FOLLOWING ALARMS:
   - 5.1. A CURRENT TRANSFORMER INSTALLED ON THE SUPPLY FAN CIRCUIT SHALL SEND AN ALARM TO THE BAS IF THE FAN IS COMMANDED ON AND NO CURRENT IS DETECTED.
   - 5.2. THE BAS SHALL MONITOR THE SPACE THERMOSTAT AND SEND AN ALARM IF THE SPACE TEMPERATURE DROPS BELOW 40°F (ADJ.)
   - 5.3. A SMOKE DETECTOR LOCATED IN THE RETURN AIR DUCTWORK SHALL BE HARD WIRED INTO THE MOTOR CONTROL CIRCUIT TO SHUT DOWN THE FAN AND SEND AN ALARM TO THE BAS IF SMOKE IS DETECTED.
   - 5.4. THE CONTROLLER WILL ACTIVATE AN ALARM WHEN THE FILTER PRESSURE LOSS ACROSS THE FILTER EXCEEDS THE HIGH LIMIT SETPOINT OF 0.7 INCHES STATIC PRESSURE (ADJ.)
   - 5.5. THE CONTROLLER WILL ACTIVATE AN ALARM WHEN AN EMERGENCY SYSTEM SHUTDOWN IS TRIGGERED.

2 (1 / M-11) HEATING VENTILATOR UNIT P&ID CONTROL SCHEMATIC

NTS



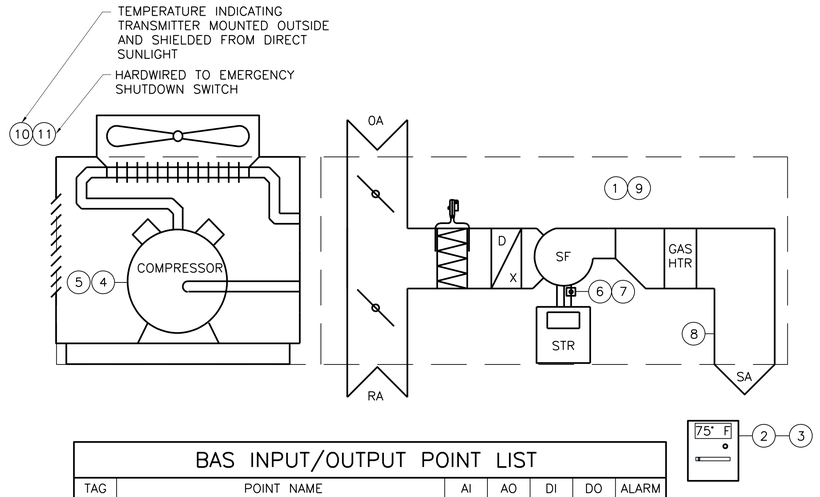
BAS INPUT/OUTPUT POINT LIST						
TAG	POINT NAME	AI	AO	DI	DO	ALARM
1	FAN ON/OFF				X	
2	FAN STATUS			X		
3	FAN FAILURE					X
4	EMERGENCY SHUTDOWN (GLOBAL)					X
5	FAN ENABLE (SWITCH)				X	
6	OCCUPANCY			X		

EF CONTROL SEQUENCE

1. THE SYSTEM SHALL BE CONTROLLED BY THE BAS AND SHALL OPERATE AS FOLLOWS:
   - 1.1. FAN SHALL BE ENABLED WHEN A LIGHT SWITCH IN ANY ROOM SERVED BY THE FAN IS ON. FAN SHALL ENERGIZE WHEN OCCUPANCY SENSOR IN ANY ROOM SERVED BY THE FAN DETECTS OCCUPANCY.
   - 1.2. FAN SHALL DE-ENERGIZE WHEN NO OCCUPANCY IS DETECTED BY ANY OCCUPANCY SENSORS IN ANY OF THE ROOMS SERVED BY THE FAN FOR 15 MINUTES (ADJ.).
2. ALARMS: THE ONBOARD BACNET CONTROLLER SHALL TRANSMIT SYSTEM ALARMS TO THE GRAPHIC USER INTERFACE (GUI). THE ONBOARD CONTROLLER SHALL, AT A MINIMUM, TRACK ALARMS LISTED IN THE I/O POINTS LIST.

2 (2 / M-11) SWITCH CONTROLLED EXHAUST FAN P&ID CONTROL SCHEMATIC

NTS



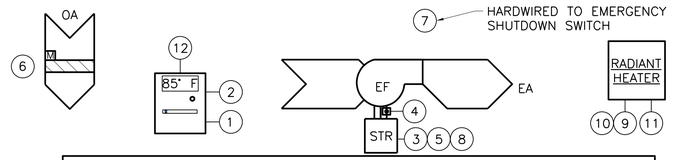
BAS INPUT/OUTPUT POINT LIST						
TAG	POINT NAME	AI	AO	DI	DO	ALARM
1	RTU ENABLE/DISABLE			X		
2	SPACE TEMPERATURE	X				X
3	SPACE AIR TEMPERATURE SETPOINT	X				
4	COMPRESSOR STATUS			X		
5	COMPRESSOR FAILURE					X
6	SUPPLY FAN STATUS			X		
7	SUPPLY FAN FAILURE					X
8	SUPPLY AIR TEMPERATURE	X				
9	SMOKE DETECTOR STATUS			X		X
10	OUTSIDE AIR TEMPERATURE (GLOBAL)	X				
11	EMERGENCY SHUTDOWN (GLOBAL)					X

ROOFTOP UNIT (RTU) CONTROL:

1. THE EXISTING RTUS SHALL BE INTEGRATED INTO THE BUILDING AUTOMATION SYSTEM. THE BAS CONTRACTOR SHALL ADD A BACNET CONTROLLER TO INTERFACE TO THE EXISTING RTU CONTROLLER. THE BAS CONTRACTOR SHALL ADD CONTROLLERS, SENSORS, CONTROL WIRING, AND OTHER REQUIRED ITEMS TO MEET THE SEQUENCE LISTED BELOW AND TO COVER THE ITEMS REQUIRED IN THE POINTS LIST.
2. THE RTU SHALL BE CONTROLLED BY THE BAS AND SHALL BE ENABLED WHEN THE BUILDING IS IN OCCUPIED MODE. THE BAS CONTRACTOR SHALL PROVIDE THE RTU SYSTEM WITH A BACNET CONTROLLER COMPATIBLE WITH THE TRIDIUM NIAGARA AX FRAMEWORK.
3. THE RTU SHALL BE CONTROLLED AS FOLLOWS WHEN THE SPACE IS OCCUPIED (AS DETERMINED BY BUILDING SCHEDULE IN THE BAS):
   - 3.1. SUPPLY FAN: THE SUPPLY FAN SHALL OPERATE CONTINUOUSLY WHEN THE SPACE IS OCCUPIED.
   - 3.2. THE SPACE AIR TEMPERATURE SETPOINT SHALL BE MONITORED AND THE SYSTEM SHALL BE ENERGIZED TO MAINTAIN THE SETPOINTS 75°F (COOLING) & 70°F (HEATING), (BOTH ADJUSTABLE)
4. PROVIDE ADJUSTABLE SETPOINT THERMOSTAT COMPATIBLE WITH BACNET CONTROLLER.
5. THE BACNET CONTROLLER SHALL COMMUNICATE WITH THE BAS TO ALLOW THE MONITORING AND CONTROL OF I/O POINTS LISTED HERE.
6. ALARMS: BACNET CONTROLLER SHALL TRANSMIT SYSTEM ALARMS TO THE GUI. THE ONBOARD CONTROLLER SHALL, AT A MINIMUM, TRACK ALARMS LISTED IN THE I/O POINTS LIST.
7. EMERGENCY SHUTDOWN: THE UNIT FAN SHALL STOP, THE GAS CONTROL VALVE SHALL CLOSE AND THE OUTSIDE AIR DAMPER SHALL BE MOVED TO THE CLOSED POSITION IN THE EVENT THAT AN EMERGENCY SHUTDOWN BUTTON IS TRIGGERED IN THE FACILITY. NORMAL OPERATIONS SHALL RESUME ONLY AFTER A MANUAL SYSTEM RESET AT THE BAS.
   - 7.1. BAS CONTRACTOR TO PROVIDE APPROPRIATE SIGNALS TO THE EXISTING RTU CONTROLLER TO ACCOMPLISH THE EMERGENCY SHUTDOWN REQUIREMENTS.
8. THE RTU SHALL BE PROVIDED WITH THE FOLLOWING ALARMS:
   - 8.1. A CURRENT TRANSFORMER INSTALLED ON THE SUPPLY FAN CIRCUIT SHALL SEND AN ALARM TO THE BAS IF THE FAN IS COMMANDED ON AND NO CURRENT IS DETECTED.
   - 8.2. THE BAS SHALL MONITOR THE SPACE THERMOSTAT AND SEND AN ALARM IF THE SPACE TEMPERATURE DROPS BELOW 65°F (ADJ.) OR EXCEEDS 85°F (ADJ).
   - 8.3. A SMOKE DETECTOR LOCATED IN THE RETURN AIR DUCTWORK SHALL BE HARD WIRED INTO THE MOTOR CONTROL CIRCUIT TO SHUT DOWN THE FAN AND SEND AN ALARM TO THE BAS IF SMOKE IS DETECTED.
   - 8.4. THE CONTROLLER WILL ACTIVATE AN ALARM WHEN AN EMERGENCY SYSTEM SHUTDOWN IS TRIGGERED.

2 (4 / M-11) ROOFTOP AIR CONDITIONING UNIT CONTROL SCHEMATIC

NTS



BAS INPUT/OUTPUT POINT LIST						
TAG	POINT NAME	AI	AO	DI	DO	ALARM
1	SPACE AIR TEMPERATURE	X				
2	SPACE AIR TEMPERATURE SETPOINT				X	
3	EXHAUST FAN ON/OFF				X	
4	EXHAUST FAN STATUS			X		
5	EXHAUST FAN FAILURE					X
6	INTAKE DAMPER POSITION (OPEN/CLOSE)				X	
7	EMERGENCY SHUTDOWN (GLOBAL)					X
8	FAN ENABLE (OCCUPIED HOURS)				X	
9	RADIANT HEATER ON/OFF				X	
10	RADIANT HEATER STATUS			X		
11	RADIANT HEATER FAILURE					X
12	OVERRIDE TIMER			X		X

EF & RADIANT HEATER CONTROL SEQUENCE

1. THE SYSTEM SHALL BE CONTROLLED BY THE BAS AND OPERATE AS FOLLOWS:
   - 1.1. THE EXHAUST FAN AND RADIANT HEATER SHALL REMAIN ENABLED DURING OCCUPIED HOURS. THE OCCUPANCY HOURS SHALL BE DETERMINED BASED ON THE MASTER BUILDING SCHEDULE.
   - 1.2. THE EXHAUST FANS SHALL ENERGIZE & THE OA INTAKE DAMPER SHALL OPEN WHEN THE SPACE AIR TEMPERATURE RISES ABOVE THE TEMPERATURE SETPOINT OF 85°F (ADJ.).
   - 1.3. THE RADIANT HEATERS SHALL ENERGIZE WHEN THE SPACE AIR TEMPERATURE DROPS BELOW THE TEMPERATURE SETPOINT OF 55°F (ADJ.).
   - 1.4. USER OVERRIDE: THE EXHAUST SYSTEM WILL BE PROVIDED WITH A TIMER LOCATED NEXT TO ITS THERMOSTAT THAT WILL ENABLE THE USER TO ENERGIZE THE EXHAUST SYSTEM FOR A PERIOD NOT TO EXCEED 2 HRS. (ADJ.).
2. FREEZE PROTECTION: DURING UNOCCUPIED HOURS THE UNIT HEATERS SHALL ENABLE WHEN THE SPACE AIR TEMPERATURE DROPS BELOW 50°F AND ENERGIZE WHEN THE SPACE AIR TEMPERATURE DROPS BELOW THE UNOCCUPIED TEMPERATURE SETPOINT OF 45°F.
3. ALARMS: THE ONBOARD BACNET CONTROLLER SHALL TRANSMIT SYSTEM ALARMS TO THE GUI. THE ONBOARD CONTROLLER SHALL, AT A MINIMUM, TRACK ALARMS LISTED IN THE I/O POINTS LIST.

2 (3 / M-11) ASSEMBLY HALL EXHAUST & HEATER P&ID CONTROL SCHEMATIC

NTS



PROJECT ARCHITECT:
HOMER SAENZ, AIA
PROJECT NO. ADG17589A
ISSUE DATE: 04/20/18
DRAWN BY: RWE
REVIEWED BY: VMC

FREESE AND NICHOLS
4055 International Plaza, Suite 200
Fort Worth, Texas 76109-4895
Phone - (817) 735-7300
Fax - (817) 735-7491
Freese and Nichols, Inc.
Texas Registered Engineering Firm F-2144

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TEXAS MILITARY FORCES
CONSTRUCTION & FACILITIES MANAGEMENT OFFICE-CFMO
CAMP MABRY P.O. BOX 5218 AUSTIN, TEXAS 78763-5218
(512) 782-6131 FAX (512) 782-1481

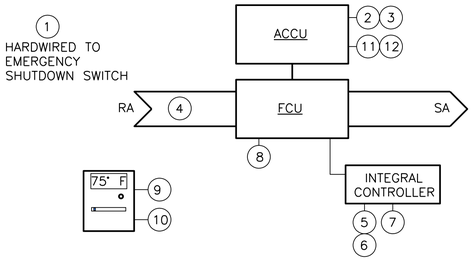
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MECHANICAL P&ID CONTROLS SCHEMATIC

M-11 2

SHT. 58 of 129



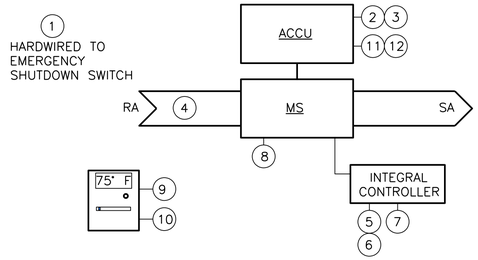
BAS INPUT/OUTPUT POINT LIST						
TAG	POINT NAME	AI	AO	DI	DO	ALARM
1	EMERGENCY SHUTDOWN (GLOBAL)					X
2	COMPRESSOR STATUS			X		
3	COMPRESSOR FAILURE					X
4	RETURN AIR TEMPERATURE	X				
5	FILTER DIFFERENTIAL PRESSURE					X
6	SUPPLY FAN STATUS			X		
7	SUPPLY FAN FAILURE					X
8	CONDENSATE OVERFLOW					X
9	SPACE AIR TEMPERATURE	X				
10	SPACE AIR TEMPERATURE SETPOINT				X	
11	ACCU FAN STATUS			X		
12	ACCU FAN FAILURE					X

MINI-SPLIT CONTROL SEQUENCE
1. THE MINI-SPLIT SYSTEM SHALL REMAIN ENABLED DURING ALL HOURS.
2. MINI-SPLIT CONTROL: THE MINI-SPLIT SYSTEM SHALL BE PROVIDED WITH A FACTORY FURNISHED ON-BOARD BACNET CONTROLLER COMPATIBLE WITH THE TRIDIUM NIAGARA AX FRAMEWORK. THE MANUFACTURER SHALL USE ITS PREFERRED SEQUENCE TO MEET THE FOLLOWING REQUIREMENTS: THE SPACE AIR TEMPERATURE SETPOINT SHALL BE MONITORED AND THE SYSTEM SHALL BE ENERGIZED TO MAINTAIN THE SETPOINTS 75°F (COOLING) & 70°F (HEATING).
3. THE ONBOARD BACNET CONTROLLER SHALL COMMUNICATE WITH THE BAS TO ALLOW THE MONITORING AND CONTROL OF I/O POINTS LISTED HERE. THE SYSTEM SHALL BE ENABLED 24/7.
4. ALARMS: THE ONBOARD BACNET CONTROLLER SHALL TRANSMIT SYSTEM ALARMS TO THE GUI. THE ONBOARD CONTROLLER SHALL, AT A MINIMUM, TRACK ALARMS LISTED IN THE I/O POINTS LIST.

2 (1/M-12) MINI-SPLIT (WITH HEATING) P&ID CONTROL SCHEMATIC

NTS

NOTE: THIS SEQUENCE APPLIES TO ACCU-2 THRU 7 AND THEIR ASSOCIATED AIR HANDLER.



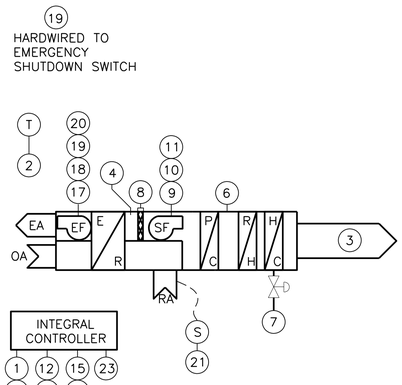
BAS INPUT/OUTPUT POINT LIST						
TAG	POINT NAME	AI	AO	DI	DO	ALARM
1	EMERGENCY SHUTDOWN (GLOBAL)					X
2	COMPRESSOR STATUS			X		
3	COMPRESSOR FAILURE					X
4	RETURN AIR TEMPERATURE	X				
5	FILTER DIFFERENTIAL PRESSURE					X
6	SUPPLY FAN STATUS			X		
7	SUPPLY FAN FAILURE					X
8	CONDENSATE OVERFLOW					X
9	SPACE AIR TEMPERATURE	X				
10	SPACE AIR TEMPERATURE SETPOINT				X	
11	ACCU FAN STATUS			X		
12	ACCU FAN FAILURE					X

MINI-SPLIT CONTROL SEQUENCE
1. THE MINI-SPLIT SYSTEM SHALL REMAIN ENABLED DURING ALL HOURS.
2. MINI-SPLIT CONTROL: THE MINI-SPLIT SYSTEM SHALL BE PROVIDED WITH A FACTORY FURNISHED ON-BOARD BACNET CONTROLLER COMPATIBLE WITH THE TRIDIUM NIAGARA AX FRAMEWORK. THE MANUFACTURER SHALL USE ITS PREFERRED SEQUENCE TO MEET THE FOLLOWING REQUIREMENTS: THE SPACE AIR TEMPERATURE SETPOINT SHALL BE MONITORED AND THE SYSTEM SHALL BE ENERGIZED TO MAINTAIN THE SETPOINTS 75°F.
3. THE ONBOARD BACNET CONTROLLER SHALL COMMUNICATE WITH THE BAS TO ALLOW THE MONITORING AND CONTROL OF I/O POINTS LISTED HERE. THE SYSTEM SHALL BE ENABLED 24/7.
4. ALARMS: THE ONBOARD BACNET CONTROLLER SHALL TRANSMIT SYSTEM ALARMS TO THE GUI. THE ONBOARD CONTROLLER SHALL, AT A MINIMUM, TRACK ALARMS LISTED IN THE I/O POINTS LIST.

2 (2/M-12) MINI-SPLIT (COOLING ONLY) P&ID CONTROL SCHEMATIC

NTS

NOTE: THIS SEQUENCE APPLIES TO ACCU-1 AND ITS ASSOCIATED AIR HANDLER.



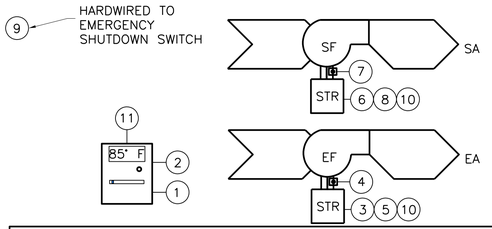
BAS INPUT/OUTPUT POINT LIST						
TAG	POINT NAME	AI	AO	DI	DO	ALARM
1	SYSTEM ENABLE				X	
2	OUTSIDE AIR TEMPERATURE (GLOBAL)	X				
3	SUPPLY AIR TEMPERATURE	X				
4	PRETREATED AIR TEMPERATURE	X				
5	SUPPLY AIR TEMPERATURE SETPOINT				X	
6	COOLING COIL LEAVING AIR TEMPERATURE					
7	GAS VALVE POSITION		X			
8	FILTER DIFFERENTIAL PRESSURE					X
9	SUPPLY FAN ON/OFF				X	
10	SUPPLY FAN STATUS			X		
11	SUPPLY FAN FAILURE					X
12	CONDENSATE OVERFLOW					X
13	COMPRESSOR STATUS			X		
14	COMPRESSOR FAILURE					X
15	CONDENSER FAN STATUS			X		
16	CONDENSER FAN FAILURE					X
17	EMERGENCY SHUTDOWN (GLOBAL)					X
18	EXHAUST FAN ON/OFF				X	
19	EXHAUST FAN STATUS			X		
20	EXHAUST FAN FAILURE					X
21	DUCT SMOKE DETECTOR ALARM					X
22	SUPPLY VFD SPEED		X			
23	EXHAUST VFD SPEED		X			

RTU WITH ENERGY RECOVERY CONTROL SEQUENCE
1. THE RTU SHALL BE CONTROLLED BY THE BAS AND SHALL BE ENABLED WHEN THE BUILDING IS IN OCCUPIED MODE. THE BAS CONTRACTOR SHALL PROVIDE THE RTU SYSTEM WITH A BACNET CONTROLLER COMPATIBLE WITH THE TRIDIUM NIAGARA AX FRAMEWORK.
2. THE RTU SHALL BE CONTROLLED AS FOLLOWS WHEN THE SPACE IS OCCUPIED (AS DETERMINED BY BUILDING SCHEDULE IN THE BAS):
   2.1. SUPPLY FAN: THE SUPPLY FAN SHALL OPERATE CONTINUOUSLY WHEN THE SPACE IS OCCUPIED.
   2.1. EXHAUST FAN: THE EXHAUST FAN SHALL OPERATE CONTINUOUSLY WHEN THE SPACE IS OCCUPIED.
   2.2. THE SPACE AIR TEMPERATURE SETPOINT SHALL BE MONITORED AND THE SYSTEM SHALL BE ENERGIZED TO MAINTAIN THE SETPOINTS 75°F (COOLING) & 70°F (HEATING), (BOTH ADJUSTABLE).
3. PROVIDE ADJUSTABLE SETPOINT THERMOSTAT COMPATIBLE WITH BACNET CONTROLLER.
4. THE BACNET CONTROLLER SHALL COMMUNICATE WITH THE BAS TO ALLOW THE MONITORING AND CONTROL OF I/O POINTS LISTED HERE.
5. ALARMS: BACNET CONTROLLER SHALL TRANSMIT SYSTEM ALARMS TO THE GUI. THE ONBOARD CONTROLLER SHALL, AT A MINIMUM, TRACK ALARMS LISTED IN THE I/O POINTS LIST.
6. EMERGENCY SHUTDOWN: THE UNIT FAN SHALL STOP, THE GAS CONTROL VALVE SHALL CLOSE AND THE OUTSIDE AIR DAMPER SHALL BE MOVED TO THE CLOSED POSITION IN THE EVENT THAT AN EMERGENCY SHUTDOWN BUTTON IS TRIGGERED IN THE FACILITY. NORMAL OPERATIONS SHALL RESUME ONLY AFTER A MANUAL SYSTEM RESET AT THE BAS.
   6.1. BAS CONTRACTOR TO PROVIDE APPROPRIATE SIGNALS TO THE EXISTING RTU CONTROLLER TO ACCOMPLISH THE EMERGENCY SHUTDOWN REQUIREMENTS.
7. THE RTU SHALL BE PROVIDED WITH THE FOLLOWING ALARMS:
   7.1. A CURRENT TRANSFORMER INSTALLED ON THE SUPPLY FAN CIRCUIT SHALL SEND AN ALARM TO THE BAS IF THE FAN IS COMMANDED ON AND NO CURRENT IS DETECTED.
   7.2. THE BAS SHALL MONITOR THE SPACE THERMOSTAT AND SEND AN ALARM IF THE SPACE TEMPERATURE DROPS BELOW 65°F (ADJ.) OR EXCEEDS 85°F (ADJ).
   7.3. A SMOKE DETECTOR LOCATED IN THE RETURN AIR DUCTWORK SHALL BE HARD WIRED INTO THE MOTOR CONTROL CIRCUIT TO SHUT DOWN THE FANS AND SEND AN ALARM TO THE BAS IF SMOKE IS DETECTED.
   7.4. THE CONTROLLER WILL ACTIVATE AN ALARM WHEN AN EMERGENCY SYSTEM SHUTDOWN IS TRIGGERED.

2 (5/-) RTU W/ ENERGY RECOVERY P&ID CONTROL SCHEMATIC

NTS

NOTE: THIS SEQUENCE APPLIES TO RTU-13



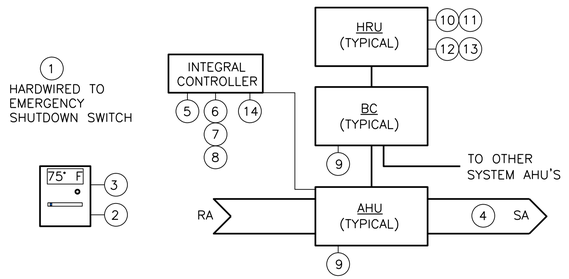
BAS INPUT/OUTPUT POINT LIST						
TAG	POINT NAME	AI	AO	DI	DO	ALARM
1	SPACE AIR TEMPERATURE	X				
2	SPACE AIR TEMPERATURE SETPOINT				X	
3	EXHAUST FAN ON/OFF				X	
4	EXHAUST FAN STATUS			X		
5	EXHAUST FAN FAILURE					X
6	SUPPLY FAN ON/OFF				X	
7	SUPPLY FAN STATUS			X		
8	SUPPLY FAN FAILURE					X
9	EMERGENCY SHUTDOWN (GLOBAL)				X	X
10	FAN ENABLE (OCCUPIED HOURS)				X	X
11	OVERRIDE TIMER			X	X	X

EF CONTROL SEQUENCE
1. THE SYSTEM SHALL BE CONTROLLED BY THE BAS AND OPERATE AS FOLLOWS:
   1.1. THE EXHAUST FAN SHALL REMAIN ENABLED DURING OCCUPIED HOURS. THE OCCUPANCY HOURS SHALL BE DETERMINED BASED ON THE MASTER BUILDING SCHEDULE.
   1.2. THE EXHAUST FANS SHALL ENERGIZE AND THE ASSOCIATED SUPPLY FAN SHALL OPEN WHEN THE SPACE AIR TEMPERATURE RISES ABOVE THE TEMPERATURE SETPOINT OF 85°F (ADJ.).
   1.3. USER OVERRIDE: THE EXHAUST SYSTEM WILL BE PROVIDED WITH A TIMER LOCATED NEXT TO ITS THERMOSTAT THAT WILL ENABLE THE USER TO ENERGIZE THE EXHAUST SYSTEM FOR A PERIOD NOT TO EXCEED 2 HRS. (ADJ.).
2. ALARMS: THE ONBOARD BACNET CONTROLLER SHALL TRANSMIT SYSTEM ALARMS TO THE GUI. THE ONBOARD CONTROLLER SHALL, AT A MINIMUM, TRACK ALARMS LISTED IN THE I/O POINTS LIST.

2 4 (3/M-12) LOCKER ROOM EXHAUST FAN P&ID

NTS

NOTE: THIS SEQUENCE APPLIES TO EF-1 AND SF-6



BAS INPUT/OUTPUT POINT LIST						
TAG	POINT NAME	AI	AO	DI	DO	ALARM
1	EMERGENCY SHUTDOWN (GLOBAL)					X
2	SPACE AIR TEMPERATURE	X				
3	SPACE AIR TEMPERATURE SETPOINT (PER AHU)				X	
4	SUPPLY AIR TEMPERATURE (PER AHU)	X				
5	FILTER SIGN (PER AHU)					X
6	SUPPLY FAN ON/OFF (PER AHU)				X	
7	SUPPLY FAN STATUS (PER AHU)			X		
8	SUPPLY FAN FAILURE (PER AHU)					X
9	CONDENSATE OVERFLOW (PER AHU AND BC)					X
10	COMPRESSOR STATUS			X		
11	COMPRESSOR FAILURE					X
12	HRU FAN STATUS			X		
13	HRU FAN FAILURE					X
14	SYSTEM ENABLE				X	

VRF CONTROL SEQUENCE
1. THE EXISTING VRF SYSTEM SHALL BE INTEGRATED INTO THE BUILDING AUTOMATION SYSTEM. THE BAS CONTRACTOR SHALL ADD A BACNET CONTROLLER TO INTERFACE TO THE EXISTING RTU CONTROLLER. THE BAS CONTRACTOR SHALL ADD CONTROLLERS, SENSORS, CONTROL WIRING, AND OTHER REQUIRED ITEMS TO MEET THE SEQUENCE LISTED BELOW AND TO COVER THE ITEMS REQUIRED IN THE POINTS LIST.
2. THE SYSTEM SHALL BE CONTROLLED BY THE BAS AND SHALL BE CONTROLLED AS FOLLOWS:
3. VRF SYSTEM CONTROL: THE VRF SYSTEM SHALL BE PROVIDED WITH FACTORY FURNISHED ON-BOARD BACNET CONTROLLERS THAT ARE COMPATIBLE WITH TRIDIUM NIAGARA AX FRAMEWORK. THE ON-BOARD CONTROLLERS SHALL USE MANUFACTURER PREFERRED CONTROL SEQUENCE TO MAINTAIN THE SPACE TEMPERATURE AT SPECIFIED TEMPERATURE SETPOINT BASED ON OCCUPANCY SCHEDULE AND OCCUPANCY STATUS (BASED ON OCCUPANCY SENSORS). REFER TO SHEET #### FOR MORE INFORMATION ON OCCUPANCY SCHEDULE, OCCUPANCY STATUS AND ZONE TEMPERATURE SETPOINTS.
4. THE ONBOARD BACNET CONTROLLER SHALL COMMUNICATE WITH THE BAS TO ALLOW AT THE MINIMUM MONITORING AND CONTROL OF I/O POINTS LISTED HERE. THE SYSTEM SHALL BE ENABLED BY THE BAS. ALL CONTROL POINTS ON THE I/O POINTS LIST SHALL BE MONITORED AND CONTROLLED FROM THE GRAPHIC USER INTERFACE (GUI).
5. ALARMS: THE ONBOARD BACNET CONTROLLER SHALL TRANSMIT SYSTEM ALARMS TO THE GUI. THE ONBOARD CONTROLLER SHALL, AT A MINIMUM, TRACK ALARMS LISTED IN THE I/O POINTS LIST.

2 4 (4/M-12) VRF P&ID CONTROL SCHEMATIC

NTS

STATE OF TEXAS
VAN CASHEN
118595
REGISTERED/LICENSED PROFESSIONAL ENGINEER
04/20/2018

THE STATE OF TEXAS

PROJECT ARCHITECT:
HOMER SAENZ, AIA
PROJECT NO. ADG17589A
ISSUE DATE: 04/20/18
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REVIEWED BY: VMC

FREESE AND NICHOLS
4055 International Plaza, Suite 200
Fort Worth, Texas 76109-4895
Phone - (817) 735-7300
Fax - (817) 735-7491
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CONSTRUCTION & FACILITIES MANAGEMENT OFFICE-CFMO
CAMP MABRY P.O. BOX 5218
AUSTIN, TEXAS 78763-5218
(512) 782-6131
FAX (512) 782-1481

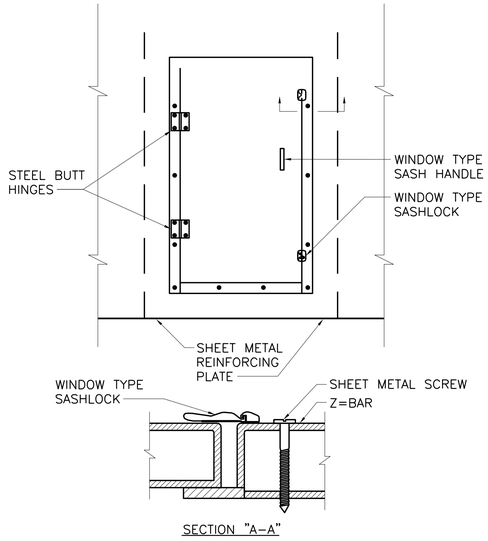
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RC MAJOR MAINTENANCE

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MECHANICAL P&ID CONTROLS SCHEMATIC

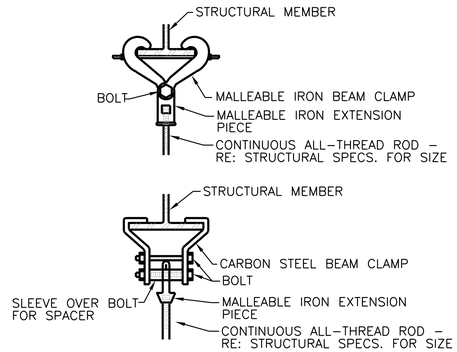
M-12 (2/4)

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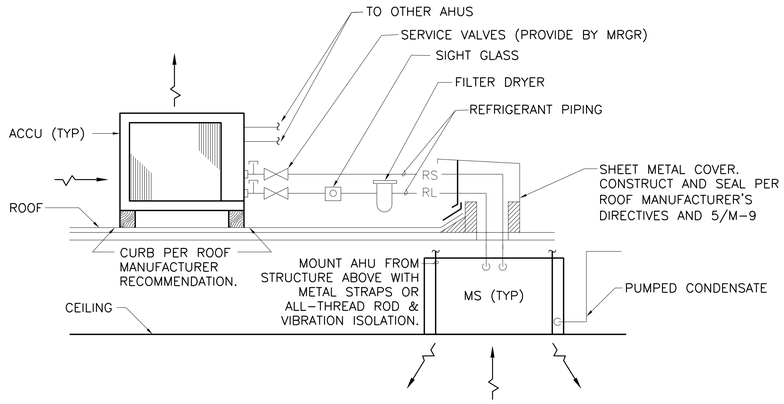


NOTE: INSTALL SO THAT AIR PRESSURE HOLDS DOOR SHUT.

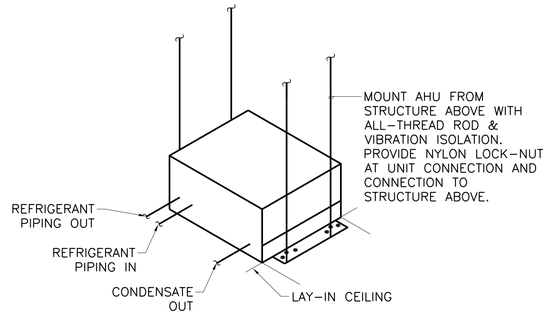
1 M–13 ACCESS DOOR DETAIL
NOT TO SCALE



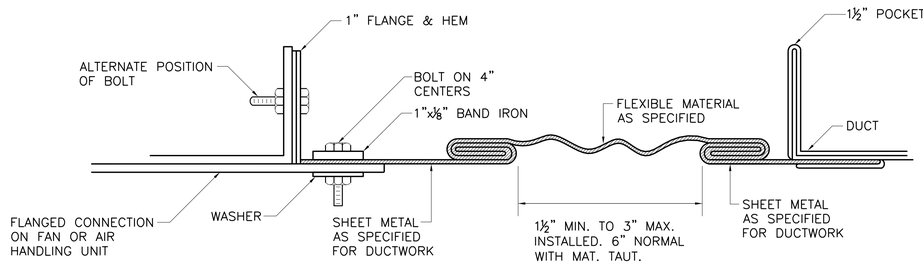
2 M–13 BEAM CLAMPS FOR PIPE OR EQUIPMENT SUPPORT
NOT TO SCALE



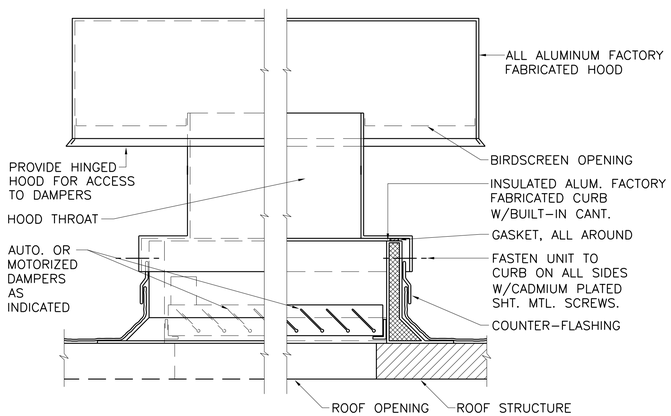
3 M–13 AHU AND CU CONNECTION DETAIL
NOT TO SCALE



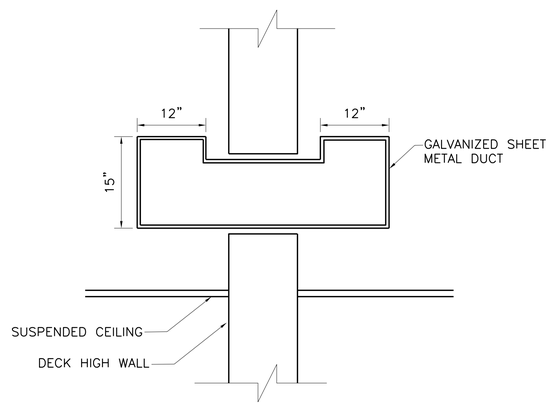
4 M–13 CEILING CASSETTE TYPE AHU
NOT TO SCALE



5 M–13 RECTANGULAR FLEXIBLE CONNECTION DETAIL
NOT TO SCALE



6 M–13 ROOF HOOD (SUPPLY/RELIEF) DETAIL
NOT TO SCALE



7 M–13 TRANSFER DUCT DETAIL
NOT TO SCALE

STATE OF TEXAS
VAN CASHEN
118595
LICENSED
PROFESSIONAL ENGINEER
04/20/2018

THE STATE OF TEXAS

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AUSTIN, TEXAS 78763–5218
FAX (512) 782–1481

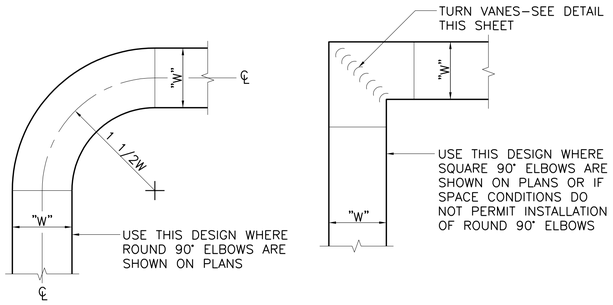
STAR CAMPAIGN FY18 - WESLACO
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TXARNG CFMO

MECHANICAL DETAILS

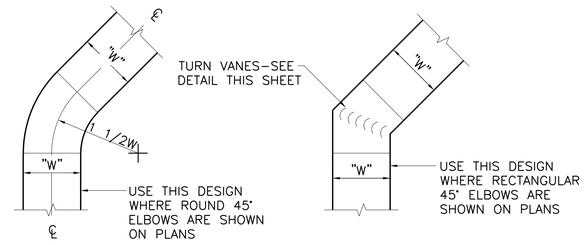
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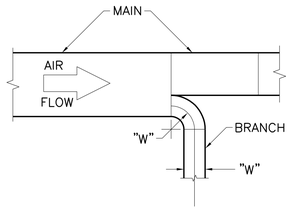
ROUND 90° ELBOW SQUARE 90° ELBOW

CONSTRUCTION OF 90° ELBOWS

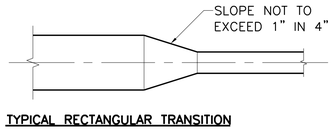


ROUND 45° ELBOW SQUARE 45° ELBOW

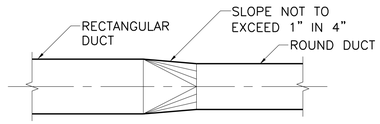
CONSTRUCTION OF 45° ELBOWS



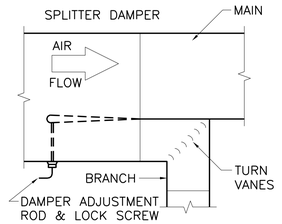
ROUND BRANCH TAKEOFF



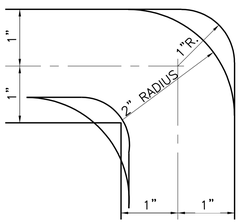
TYPICAL RECTANGULAR TRANSITION



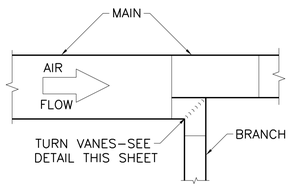
TYPICAL RECTANGULAR TO ROUND TRANSITION



TYPICAL SPLITTER DAMPER

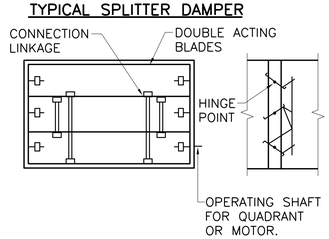


DETAIL OF TURN VANES



SQUARE BRANCH TAKEOFF

CONSTRUCTION OF BRANCH TAKEOFFS FROM MAIN



TYPICAL VOLUME DAMPER

INSTALLATION NOTES

1. ALL DUCTS SHALL BE CONSTRUCTED AND ERECTED IN A NEAT AND WORKMANLIKE MANNER.
2. DUCTS SHALL BE CONSTRUCTED OF THE WEIGHTS, GAGES AND MATERIAL SHOWN IN THE SCHEDULE ON THESE DRAWINGS.
3. THE DIMENSION SHOWN FOR ALL DUCTS SHOWN IN PLAN GIVE THE WIDTH FIRST AND THEN THE HEIGHT.
4. DUCT RISERS SHOULD BE SUPPORTED BY ANGLES AT EVERY FLOOR.
5. AIR TURN SHALL BE INSTALLED IN ALL ABRUPT ELBOWS TO PREVENT TURBULENCE.
6. DUCTS SHALL BE SECURELY ATTACHED TO THE BUILDING CONSTRUCTION IN AN APPROVED MANNER.
7. DIVERGING TRANSITION PIECES SHALL BE MADE AS GRADUAL AS POSSIBLE.
8. INSTALL FIRE DAMPERS IN ACCORDANCE WITH UL 555.
9. ACCESS PANELBOWS SHOULD BE PLACED BEFORE AND/OR AFTER EQUIPMENT INSTALLED IN THE DUCT.
10. DUCT AREA SHOULD NOT BE DECREASED MORE THAN 10 PERCENT WHEN OBSTRUCTIONS CANNOT BE AVOIDED, AND THEN A STREAMLINED FITTING SHOULD BE USED.
11. FLEXIBLE FABRIC CONNECTIONS (OR EQUAL) SHOULD BE USED ON BOTH INLETS AND OUTLETS OF ALL FANS AND AIR HANDLING UNITS.
12. JOINTS AND SEAMS OF SUPPLY DUCTS SHALL BE FASTENED SECURELY AND MADE AIR TIGHT.

DETAILS OF THE LOW VELOCITY DUCT LAYOUT

NTS

PROJECT ARCHITECT:
HOMER SAENZ, AIA
PROJECT NO. ADG17589A
ISSUE DATE: 04/20/18
DRAWN BY: AJS
REVIEWED BY: VMC

FREESE AND NICHOLS
4055 International Plaza, Suite 200
Fort Worth, Texas 76109-4895
Phone – (817) 735-7300
Fax – (817) 735-7491
Freese and Nichols, Inc.
Texas Registered Engineering Firm F-2144

NO.	DATE	ISSUE
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TEXAS MILITARY FORCES
CONSTRUCTION & FACILITIES MANAGEMENT OFFICE–CFMO
CAMP MABRY P.O. BOX 5218 AUSTIN, TEXAS 78763-5218
(512) 782-6131 FAX (512) 782-1481

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RC MAJOR MAINTENANCE

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MECHANICAL DUCT DETAILS

M-14

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STATE OF TEXAS VAN CASHEN 118595 LICENSED PROFESSIONAL ENGINEER
04/20/2018

PLUMBING LEGEND

SYMBOL	DESCRIPTION	ABBREVIATION
	SANITARY SEWER	SS
	VENT	V
180HW	HOT WATER (180°)	HW(180°)
140HW	HOT WATER (140°)	HW(140°)
	HOT WATER (127°)	HW
	HOT WATER RETURN	HWR
	COLD WATER	CW
RD	ROOF DRAIN	RD
OFD	OVERFLOW DRAIN	OFD
G	NATURAL GAS	G
A	COMPRESSED AIR	A
TP	TRAP PRIMER	TP
FOS	FUEL OIL SUPPLY	FOS
FOR	FUEL OIL RETURN	FOR
D	DRAIN	D
PS	PUMPED SANITARY WASTE	PS
CD	CONDENSATE DRAIN	CD
PC	PUMPED CONDENSATE DRAIN	PC
GW	GREASE LADEN WASTE	GW
AW	ACID WASTE	AW
AV	ACID WASTE VENT	AV
XX	EXISTING PIPING	
XX	EXISTING PIPING TO BE REMOVED (DEMO PLAN ONLY)	
	DIRECTION OF PITCH DOWN (SLOPE)	
	DIRECTION OF FLOW	
FCO	FLOOR CLEANOUT	FCO
PCO	PLUG CLEANOUT	PCO
WCO	WALL CLEANOUT	WCO
GCO	GRADE CLEANOUT	GCO
DGCO	DOUBLE GRADE CLEANOUT	DGCO
NFWH or HB	NON-FREEZE WALL HYDRANT or HOSE BIBB	NFWH or HB
	SHUT-OFF VALVE (SEE SPECIFICATIONS FOR TYPE)	
	PRESSURE BALANCING VALVE	
	VALVE IN RISER (TYPE AS SPECIFIED OR NOTED)	
	RELIEF VALVE	
	REDUCER OR INCREASER FITTING	
	UNION	
	PIPE TURNING AND RISING UP	
	PIPE TURNING AND DROPPING DOWN	
	TEE OUT OF TOP OF PIPE	
	TEE OUT OF BOTTOM OF PIPE	
	CAP ON END OF PIPE	
	FLOOR DRAIN	FD
	FLOOR SINK	FS
RD	ROOF DRAIN	RD
OFD	OVERFLOW DRAIN	OFD
1/8"/FT	1/8" PER FOOT SLOPE	
1/4"/FT	1/4" PER FOOT SLOPE	
	AMERICANS WITH DISABLITIES ACT	ADA
	ABOVE FINISHED GRADE	AFG
	ABOVE FINISHED FLOOR	AFF
	BELOW FINISHED FLOOR	BFF
	BELOW FINISHED GRADE	BFG
	COLD WATER FIXTURE UNITS	CWFU'S
	DOUBLE CHECK BACKFLOW PREVENTER	DCBFP
	DRAINAGE WASTE AND VENT	DWV
	FIXTURE UNIT	F.U.
	GALLONS PER HOUR	GPH
	GALLONS PER MINUTE	GPM
	HORSE POWER	HP
	INVERT ELEVATION OR FLOW LINE	I.E.
	NOT TO SCALE	NTS
	RECOVERY	REC
	REDUCED PRESSURE BACKFLOW PREVENTER	RPBFP
	REFER TO:	RE:
	SANITARY WASTE FIXTURE UNITS	SWFU'S
	TEXAS ACCESSIBILITIES STANDARD	TAS
	TEMPERATURE	TEMP
	TEXAS COMMISSION ON ENVIRONMENTAL QUALITY	TCEQ
	TYPICAL	TYP
	UNDERFLOOR	U/F
	VENT THROUGH ROOF	VTR
	WITH	W/
X / P-X — RISER NUMBER; SHEET WHERE RISER DIAGRAM IS SHOWN	PLUMBING RISER LOCATOR	
PLAN/DETAIL NUMBER — X / –	DRAWING/DETAIL REFERENCE	RE: X/PX
	POINT OF NEW TO EXISTING CONNECTION	

NOTE: ALL SYMBOLS AND ABBREVIATIONS SHOWN ARE NOT NECESSARILY USED ON THE DRAWINGS.

ELECTRIC INSTANTANEOUS WATER HEATER SCHEDULE

MARK	LOCATION	SERVES	TEMP RISE	OUTLET GPM	TURN ON GPM	KW	V/PH/AMP	MANUFACTURER AND MODEL	COMMENTS
EWH1	RESTROOM	LAVATORIES	56°F	0.5	0.3	4.1	208/1/20	EEMAX #EX4208T	THERMOSTAT SET AT 105°F

GENERAL NOTES

1. THIS PROJECT IS DESIGNED BASED ON THE FOLLOWING CODES: INTERNATIONAL PLUMBING CODE 2015, INTERNATIONAL ENERGY CONSERVATION CODE 2009, WITH LOCAL AMENDMENTS. UFC 3-401-01 MECHANICAL ENGINEERING, UFC 3-410-01 HEATING, VENTILATING, AND AIR CONDITIONING SYSTEMS, WITH CHANGE 1, UFC-3-420-01 PLUMBING SYSTEMS, UFC 3-600-01 FIRE PROTECTION ENGINEERING FOR FACILITIES, UFC 4-010-01 DOD MINIMUM ANTITERRORISM STANDARDS FOR BUILDINGS, UFC-4-024-01 PROCEDURES FOR DESIGNING AIRBORNE CHEMICAL PROTECTION FOR BUILDINGS.
2. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR THE EXACT LOCATION OF ALL CEILING MOUNTED DEVICES.
3. REFER TO ARCHITECTURAL INTERIOR ELEVATION DRAWINGS, WHERE THE ARCHITECT HAS DRAWN SUCH ELEVATIONS, FOR THE LOCATIONS OF ALL WALL MOUNTED DEVICES. OTHERWISE INSTALL PER INDUSTRY STANDARDS, CODES AND/OR ORDINANCES OF THE AUTHORITY HAVING JURISDICTION.
4. COORDINATE ALL SLAB PENETRATIONS AND SLEEVES PRIOR TO EACH CONCRETE POUR.
5. PROVIDE ACCESS DOORS FOR INSTALLATION IN WALLS AND CEILINGS WHERE ACCESS IS REQUIRED TO CONCEALED PLUMBING EQUIPMENT, VALVES, CONTROLS AND OTHER DEVICES.
6. INSTALL PIPING TO PROVIDE THE MAXIMUM POSSIBLE CLEAR HEIGHT UNDERNEATH. MAINTAIN A MINIMUM OF 10 INCHES ABOVE FINISHED CEILING TO PROVIDE CLEARANCE FOR LIGHTING FIXTURES.
7. COORDINATE THE EXACT LOCATION OF FLOOR DRAINS WITH THE ARCHITECTURAL DRAWINGS AND MECHANICAL EQUIPMENT LOCATIONS PRIOR TO INSTALLATION OF DRAINS.
8. COORDINATE WORK WITH ARCHITECTURAL FEATURES, PIPING, EQUIPMENT, MECHANICAL WORK, ELECTRICAL WORK, AND BUILDING STRUCTURE TO AVOID INTERFERENCES.

GENERAL NOTES (CONTINUED)

9. PROVIDE RATED INTUMESCENT CAULK OR PUTTY AT ALL FIRE RATED PENETRATION LOCATIONS, INCLUDING BUT NOT LIMITED TO STAIRWELLS, CORRIDORS, AND MECHANICAL OR ELECTRICAL EQUIPMENT ROOMS. ESCUTCHEONS ARE NOT REQUIRED, HOWEVER THE CAULK OR PUTTY SHALL BE INSTALLED SMOOTH AND FLUSH TO THE SURROUNDING SURFACE.
10. MINIMUM SLOPE FOR DRAINAGE PIPE WITHIN 5'-0" OF BUILDING IS ¼" PER FOOT FOR 2½" DIAMETER AND LESS AND ⅛" PER FOOT FOR 3" DIAMETER AND GREATER. MINIMUM SLOPE FOR DRAINAGE PIPE BEYOND 5'-0" OF BUILDING IS 1%.
11. ANY PENETRATIONS DUE TO INSTALLATION OF NEW EQUIPMENT OR PATCHING OF ROOF DUE TO MOVING OR THE DEMOLITION OF EXISTING EQUIPMENT ARE TO BE REVIEWED AND APPROVED BY EXISTING ROOFING COMPANY HOLDING THE WARRANTY. CONTRACTOR SHALL NOT PERFORM ANY WORK ON THE ROOF UNTIL A WRITTEN APPROVAL TO PROCEED IS OBTAINED FROM THE ROOFING COMPANY HOLDING THE WARRANTY. DETAILS TO BE APPROVED BY ROOFING COMPANY BEFORE ANY WORK IS PERFORMED. A COPY OF THE LETTER GIVING THE NOTICE TO PROCEED ALONG WITH DETAILS FOR CURBS OR OTHER WORK TO BE SUBMITTED TO OWNER, OWNER'S REPRESENTATIVE, OWNER'S INSPECTOR AND ARCHITECT. REFER TO SPECIFICATION SECTION 07 01 50 REPAIR OF ROOF.
12. WHERE THESE DOCUMENTS INDICATE THE REMOVAL AND REPLACEMENT OF WALL HYDRANTS OR OTHER COMPONENTS, THE INSTALLATION OF THE NEW COMPONENT SHALL INCLUDED REPLACING BRICKWORK TO MATCH THE EXISTING BRICKWORK AS REQUIRED. USE NON-SHRINK GROUT. PROVIDE A CLEAR NON-SLUMPING ONE PART, 100% SILICONE RUBBER ACETOXY SEALANT AROUND COMPONENT, INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS INSTRUCTIONS. SILA-SEAL OR APPROVED EQUAL.
13. WHERE EXISTING PENETRATIONS THROUGH THE ROOF ARE REUSED, OR NEW ROOF OPENINGS ARE REQUIRED, PROTECT OPENING WATER-TIGHT DURING RAIN EVENTS DURING CONSTRUCTION.
14. VERIFY AVAILABLE WATER PRESSURE ON SITE PRIOR TO BEGINNING CONSTRUCTION. THE MINIMUM AVAILABLE PRESSURE SHALL BE 55 PSIG FLOWING 150 GPM

PLUMBING FIXTURE ROUGH-IN SCHEDULE

MARK	DESCRIPTION	ROUGH-IN (INCHES) W	V	HW	CW	REMARKS
WC1	WATER CLOSET	4"	2"	–	1"	FLOOR MOUNTED, FLUSH VALVE TYPE, ADA/TAS ACCESSIBLE
WC2	WATER CLOSET	4"	2"	–	1"	FLOOR MOUNTED, FLUSH VALVE TYPE
UR1	URINAL	2"	2"	–	3/4"	WALL MOUNTED, ADA/TAS ACCESSIBLE
UR2	URINAL	2"	2"	–	3/4"	WALL MOUNTED
L1	LAVATORY	2"	2"	1/2"	1/2"	COUNTER-TOP MOUNTED, OVAL, W/HARD-WIRED ELECTRICAL INFRARED SENSOR FAUCET, ADA/TAS ACCESSIBLE
SSK1	SERVICE SINK	3"	2"	1/2"	1/2"	28"x28" FLOOR MOUNTED, CORNER, 5-SIDED, TERRAZO OR MOLDED STONE
EWC1	ELECTRIC WATER COOLER	2"	2"		1/2"	WALL MOUNTED, DUAL, HI-LO TYPE W/APRON ON HIGH UNIT AND WITH BOTTLE FILLER, ADA/TAS ACCESSIBLE
EWC2	ELECTRIC WATER COOLER	2"	2"		1/2"	WALL MOUNTED, HI TYPE W/APRON ON HIGH UNIT AND WITH BOTTLE FILLER, ADA/TAS ACCESSIBLE
SH1	SHOWER (STANDARD)	2"FD	2"	1/2"	1/2"	BUILT-UP TYPE ENCLOSURE, WITH MIXING VALVE, SHOWER HEAD AND DRAIN
SH2	SHOWER (ACCESSIBLE)	2"FD	2"	1/2"	1/2"	WIDE, BUILT-UP TYPE ENCLOSURE, WITH MIXING VALVE, HAND HELD SPRAYER, SHOWER ARM, 5'-0" FLEXIBLE HOSE, IN-LINE VACUUM BREAKER, SLIDE BAR, DRAIN, ADA/TAS ACCESSIBLE
SH3	SHOWER (STANDARD)	2"FD	2"	1/2"	1/2"	BUILT-UP TYPE ENCLOSURE, WITH MIXING VALVE, SHOWER HEAD AND OFFSET DRAIN IN TROUGH

NOTE:
REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION, ACCEPTABLE MANUFACTURER AND MODEL NUMBER ON PLUMBING FIXTURES.

NATURAL GAS TANKLESS WATER HEATER SCHEDULE

MARK	LOCATION	INPUT MIN BTU/HR.	INPUT MAX BTU/HR.	ELEMENT DATA W	V	PH	HZ	FLOW RATE TEMP RISE °F	FLOW GPM	MANUFACTURER AND MODEL NO.	REMARKS
GWH1 (BANK1)	WATER HEATER ROOM D129	19,900	199,900	350	120	1	60	57	6.8	NAVIEN, NPE-240S-NG	(3) MANIFOLDED WATER HEATERS
		19,900	199,900	350	120	1	60	57	6.8	NAVIEN, NPE-240S-NG	
		19,900	199,900	350	120	1	60	57	6.8	NAVIEN, NPE-240S-NG	
GWH2 (BANK2)	WATER HEATER ROOM D129	19,900	199,900	350	120	1	60	57	6.8	NAVIEN, NPE-240S-NG	(3) MANIFOLDED WATER HEATERS
		19,900	199,900	350	120	1	60	57	6.8	NAVIEN, NPE-240S-NG	
		19,900	199,900	350	120	1	60	57	6.8	NAVIEN, NPE-240S-NG	
GWH3 (BANK3)	WATER HEATER ROOM D129	19,900	199,900	350	120	1	60	57	6.8	NAVIEN, NPE-240S-NG	(4) MANIFOLDED WATER HEATERS
		19,900	199,900	350	120	1	60	57	6.8	NAVIEN, NPE-240S-NG	
		19,900	199,900	350	120	1	60	57	6.8	NAVIEN, NPE-240S-NG	
		19,900	199,900	350	120	1	60	57	6.8	NAVIEN, NPE-240S-NG	
GWH4 (BANK4)	WATER HEATER ROOM D129	19,900	199,900	350	120	1	60	57	6.8	NAVIEN, NPE-240S-NG	(4) MANIFOLDED WATER HEATERS
		19,900	199,900	350	120	1	60	57	6.8	NAVIEN, NPE-240S-NG	
		19,900	199,900	350	120	1	60	57	6.8	NAVIEN, NPE-240S-NG	
		19,900	199,900	350	120	1	60	57	6.8	NAVIEN, NPE-240S-NG	
GWH5 (BANK5)	WATER HEATER ROOM D129	19,900	199,900	350	120	1	60	57	6.8	NAVIEN, NPE-240S-NG	(4) MANIFOLDED WATER HEATERS
		19,900	199,900	350	120	1	60	57	6.8	NAVIEN, NPE-240S-NG	
		19,900	199,900	350	120	1	60	57	6.8	NAVIEN, NPE-240S-NG	
		19,900	199,900	350	120	1	60	57	6.8	NAVIEN, NPE-240S-NG	

NOTE:
1. SET OUTLET TEMPERATURE TO 127°F MAX.
2. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

STATE OF TEXAS — VAN CASHEN — 118595 — LICENSED — PROFESSIONAL ENGINEER
04/20/2018

THE STATE OF TEXAS

PROJECT ARCHITECT:
HOMER SAENZ, AIA
PROJECT NO. ADG17589A
ISSUE DATE: 04/20/18
DRAWN BY: MRB
REVIEWED BY: RJK

FREESE AND NICHOLS
4055 International Plaza, Suite 200
Fort Worth, Texas 76109-4895
Phone - (817) 735-7300
Fax - (817) 735-7491
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CAMP MABRY P.O. BOX 5218
AUSTIN, TEXAS 78763-5218
(512) 782-6131
FAX (512) 782-1481

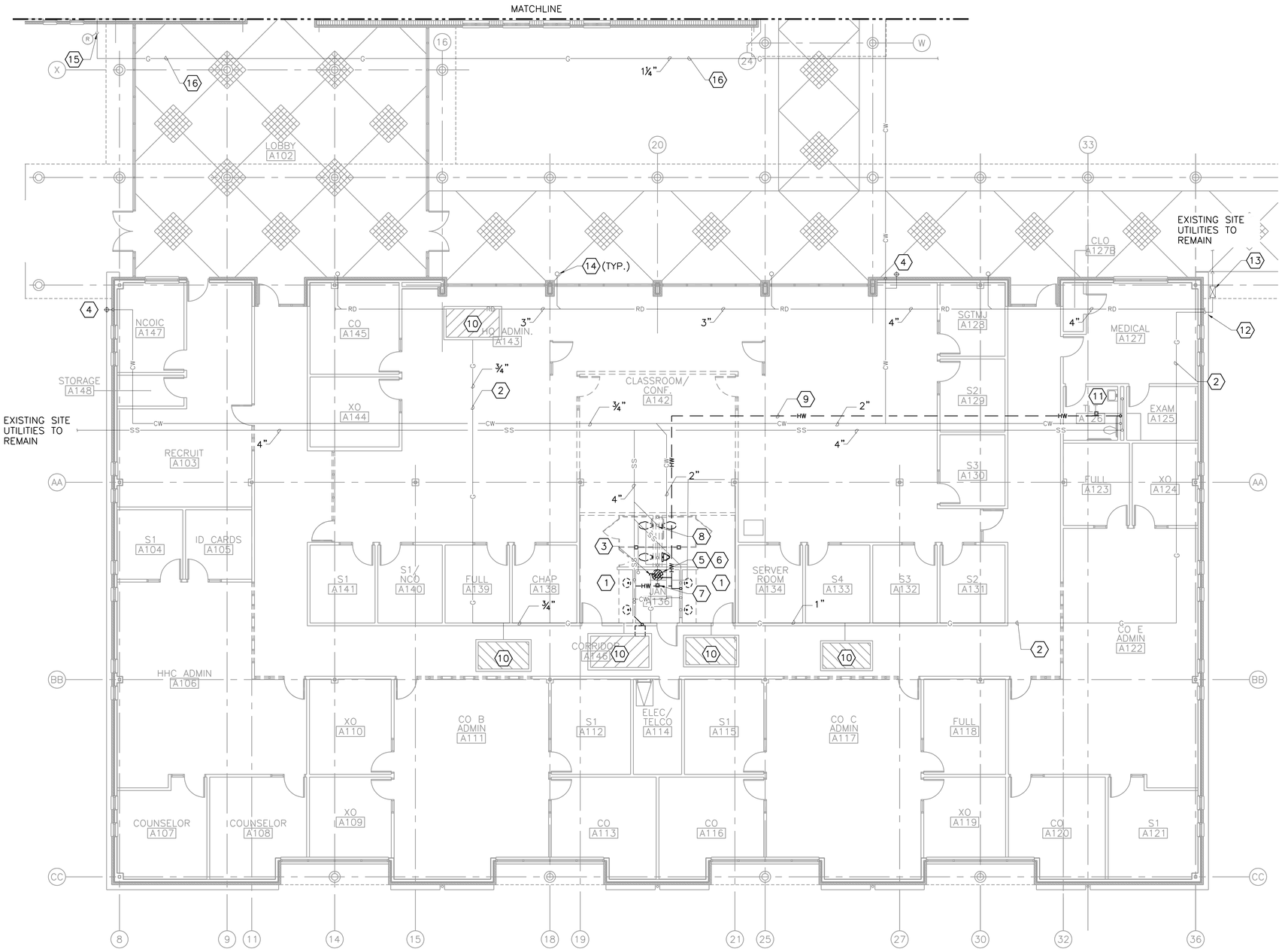
STAR CAMPAIGN FY18 - WESLACO
RC MAJOR MAINTENANCE

TXARNG CFMO

PLUMBING LEGEND, GENERAL NOTES, DETAIL AND SCHEDULES

P-0

SHT. 62 of 129



NORTH NORTH 1 – DEMOLITION FLOOR PLAN – A

1/8"=1'-0"

GENERAL NOTES:

1. A SUMMARY OF THE PROJECT'S BID OPTIONS CAN BE FOUND ON SHEET G-1. DISCIPLINE SPECIFIC BID OPTIONS CAN BE FOUND ON THIS SHEET.
2. REFER TO SHEET P-0 FOR LEGEND, GENERAL NOTES, ABBREVIATIONS AND SCHEDULES.
3. EXISTING ROOF DRAINAGE SYSTEM TO REMAIN AS IS UNLESS INDICATED OTHERWISE.

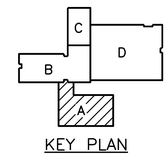
NOTES BY SYMBOL "⬡"

1. ALL PLUMBING FIXTURES AND ASSOCIATED PIPING WITHIN RESTROOM AND JAN. ROOM TO BE REMOVED. REMOVE FLOOR DRAIN AND PLUG REMAINING PIPE BELOW FLOOR. PATCH FLOOR TO MATCH EXISTING.
2. EXISTING NATURAL GAS PIPING ON ROOF TO REMAIN.
3. EXISTING NATURAL GAS PIPE DOWN THROUGH ROOF TO REMAIN.
4. REMOVE EXISTING RECESSED WALL HYDRANT.
5. REMOVE EXISTING NATURAL GAS-FIRED TANK TYPE WATER HEATER AND ASSOCIATED PIPING. REMOVE FLUE DUCT THRU ROOF AND PATCH ROOF. COORDINATE WITH ROOFING CONTRACTOR.
6. REMOVE EXISTING THERMOSTATIC MIXING VALVE STATION ON WALL AND ASSOCIATED PIPING AS INDICATED.
7. EXISTING FLOOR DRAIN TO REMAIN.
8. EXISTING VENT THROUGH ROOF (VTR) TO REMAIN.
9. REMOVE EXISTING DOMESTIC HOT WATER PIPING.
10. EXISTING HVAC RTU TO REMAIN.
11. EXISTING PLUMBING FIXTURES AND FLOOR DRAIN TO REMAIN.
12. EXISTING GAS RISER TO REMAIN.
13. EXISTING GAS METER ASSEMBLY TO REMAIN.
14. EXISTING ROOF DRAIN DOWNSPOUTS TO REMAIN.
15. EXISTING 1¼" GAS RISER AND REGULATOR TO REMAIN.
16. EXISTING GAS PIPE BELOW FLOOR TO REMAIN.

BID OPTIONS "◯"

5. RESTROOM/CONFERENCE ROOM RENOVATION IN ADMIN WING.

KEY PLAN





0 4' 8' 16'

1/8"=1'-0"

PROJECT ARCHITECT:
HOMER SAENZ, AIA
PROJECT NO. ADG17589A
ISSUE DATE: 04/20/18
DRAWN BY: MRB
REVIEWED BY: RJK

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4055 International Plaza, Suite 200
Fort Worth, Texas 76109-4895
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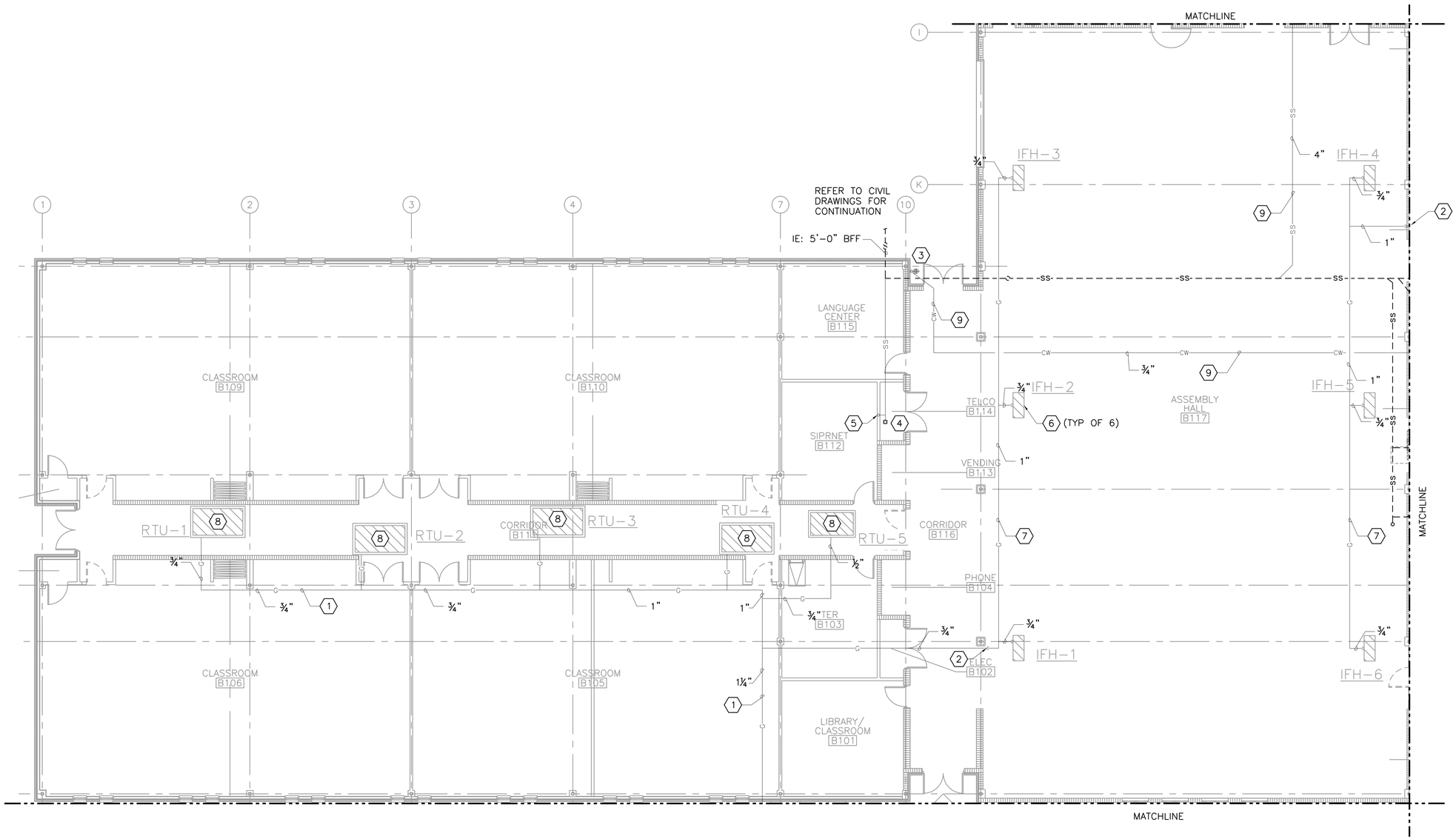
STAR CAMPAIGN FY18 - WESLACO
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TXARNG CFMO

PLUMBING DEMOLITION FLOOR PLAN - A

P-1 (5)

SHT. 63 of 129



NORTH PLAN NORTH / NORTH TRUE NORTH — 1/8"=1'-0"

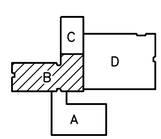
DEMOLITION FLOOR PLAN – B

GENERAL NOTES:

1. A SUMMARY OF THE PROJECT'S BID OPTIONS CAN BE FOUND ON SHEET G-1. DISCIPLINE SPECIFIC BID OPTIONS CAN BE FOUND ON THIS SHEET.
2. REFER TO SHEET P-0 FOR LEGEND, GENERAL NOTES, ABBREVIATIONS AND SCHEDULES.
3. EXISTING ROOF DRAINAGE SYSTEM TO REMAIN AS IS UNLESS INDICATED OTHERWISE.

NOTES BY SYMBOL "⬡"

1. EXISTING GAS PIPING ON ROOF TO REMAIN.
2. EXISTING GAS PIPE THROUGH WALL TO REMAIN.
3. REMOVE EXISTING RECESSED WALL HYDRANT.
4. EXISTING FLOOR DRAIN TO REMAIN.
5. EXISTING VENT THROUGH ROOF (VTR) TO REMAIN.
6. EXISTING GAS FIRED INFRA-RED UNIT HEATERS TO REMAIN.
7. EXISTING GAS PIPING IN JOIST SPACE ABOVE ASSEMBLY HALL TO REMAIN.
8. EXISTING GAS FIRED HVAC ROOF-TOP UNIT TO REMAIN.
9. EXISTING PIPING BELOW FLOOR TO REMAIN.



KEY PLAN

VAN CASHEN 118595 LICENSED PROFESSIONAL ENGINEER 04/20/2018

0 4' 8' 16'
1/8"=1'-0"

PROJECT ARCHITECT:
HOMER SAENZ, AIA
PROJECT NO. ADG17589A
ISSUE DATE: 04/20/18
DRAWN BY: MRB
REVIEWED BY: RJK

FREESE AND NICHOLS
4055 International Plaza, Suite 200
Fort Worth, Texas 76109-4895
Phone – (817) 735-7300
Fax – (817) 735-7491
Freese and Nichols, Inc.
Texas Registered Engineering Firm F-2144

NO.	DATE	ISSUE
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TEXAS MILITARY FORCES
CONSTRUCTION & FACILITIES MANAGEMENT OFFICE-CFMO
CAMP MABRY P.O. BOX 5218
(512) 782-6131
AUSTIN, TEXAS 78763-5218
FAX (512) 782-1481

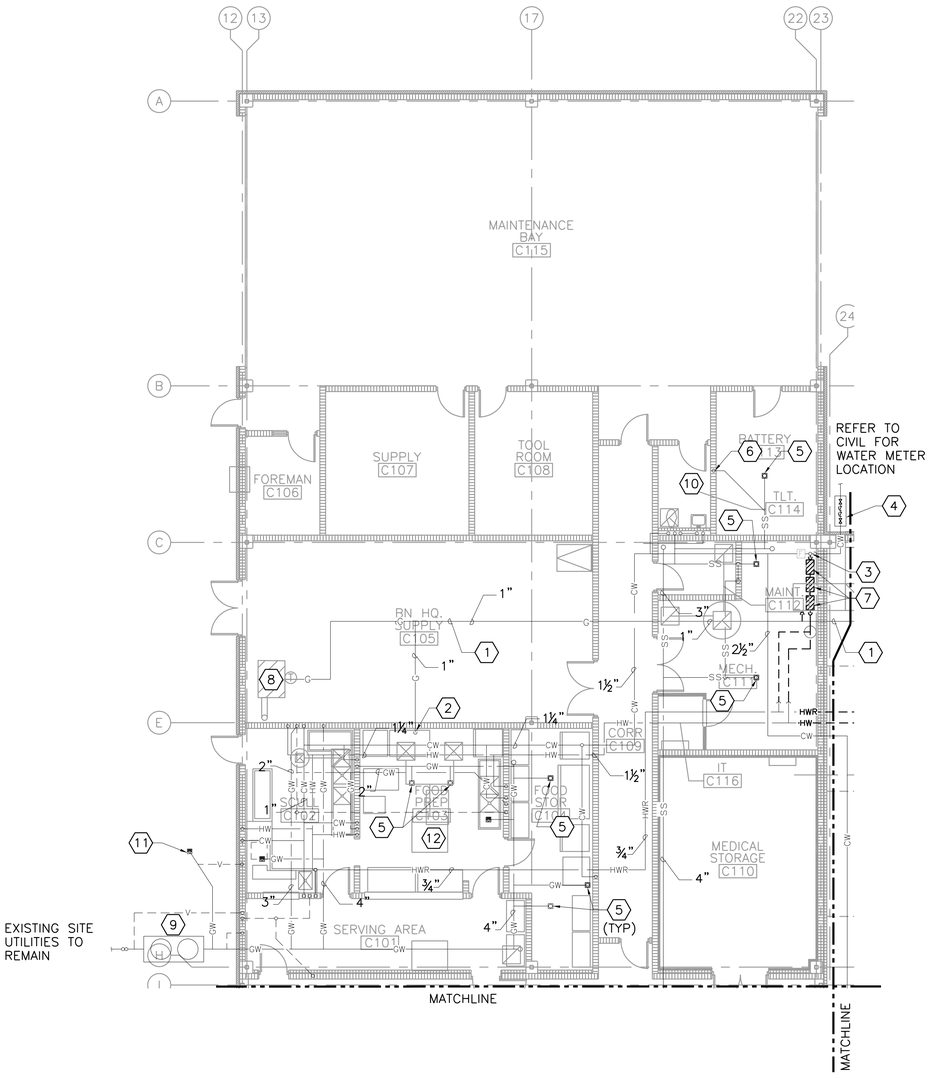
STAR CAMPAIGN FY18 - WESLACO
RC MAJOR MAINTENANCE

TXARNG CFMO

PLUMBING DEMOLITION FLOOR PLAN- B

P-2

SHT. 64 of 129



NORTH PLAN NORTH

NORTH TRUE NORTH

1 — DEMOLITION FLOOR PLAN – C

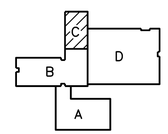
1/8"=1'-0"

GENERAL NOTES:

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2. REFER TO SHEET P-0 FOR LEGEND, GENERAL NOTES, ABBREVIATIONS AND SCHEDULES.
3. EXISTING ROOF DRAINAGE SYSTEM TO REMAIN AS IS UNLESS INDICATED OTHERWISE.

NOTES BY SYMBOL "⬡"

1. EXISTING GAS PIPING ON ROOF TO REMAIN.
2. EXISTING GAS PIPE DOWN THROUGH ROOF TO REMAIN.
3. EXISTING VALVED 3" DOMESTIC WATER RISER TO REMAIN.
4. EXISTING 3" BACKFLOW PREVENTOR IN VAULT TO REMAIN.
5. EXISTING FLOOR DRAIN TO REMAIN.
6. EXISTING VENT THROUGH ROOF (VTR) TO REMAIN.
7. REMOVE EXISTING NATURAL GAS FIRED INSTANTANEOUS WATER HEATERS, ASSOCIATED PIPING AS INDICATED AND CAP REMAINING PIPE.
8. EXISTING GAS FIRED HVAC EQUIPMENT TO REMAIN.
9. EXISTING CONCRETE GREASE SEPARATOR TO REMAIN. PUMP OUT AND PROPERLY DISPOSE OF GREASE LADEN WASTE. AFTER SEPARATOR IS COMPLETELY EMPTY AND DRY, CLEAN SEPARATOR INTERIOR WITH ALKALINE DEGREASER AND PRESSURE WASH. PERMANENTLY INJECT ALL CRACKS WITH COMMERCIAL GRADE LOW PRESSURE CRACK SEALANT. SEAL INTERIOR CONCRETE SURFACES WITH SILICONATE MULTI-SURFACE SMOOTH WB PENETRATING SEALANT.
10. EXISTING PLUMBING FIXTURES TO REMAIN.
11. EXISTING 3" CAN WASH DRAIN TO REMAIN.
12. ALL PIPING AND EQUIPMENT IN KITCHEN AREA TO REMAIN.



KEY PLAN

STATE OF TEXAS
VAN CASHEN
118595
LICENSED
PROFESSIONAL ENGINEER
04/20/2018

0 4' 8' 16'

1/8"=1'-0"

PROJECT ARCHITECT:
HOMER SAENZ, AIA

PROJECT NO. ADG17589A
ISSUE DATE: 04/20/18
DRAWN BY: MRB
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Firm F-2144

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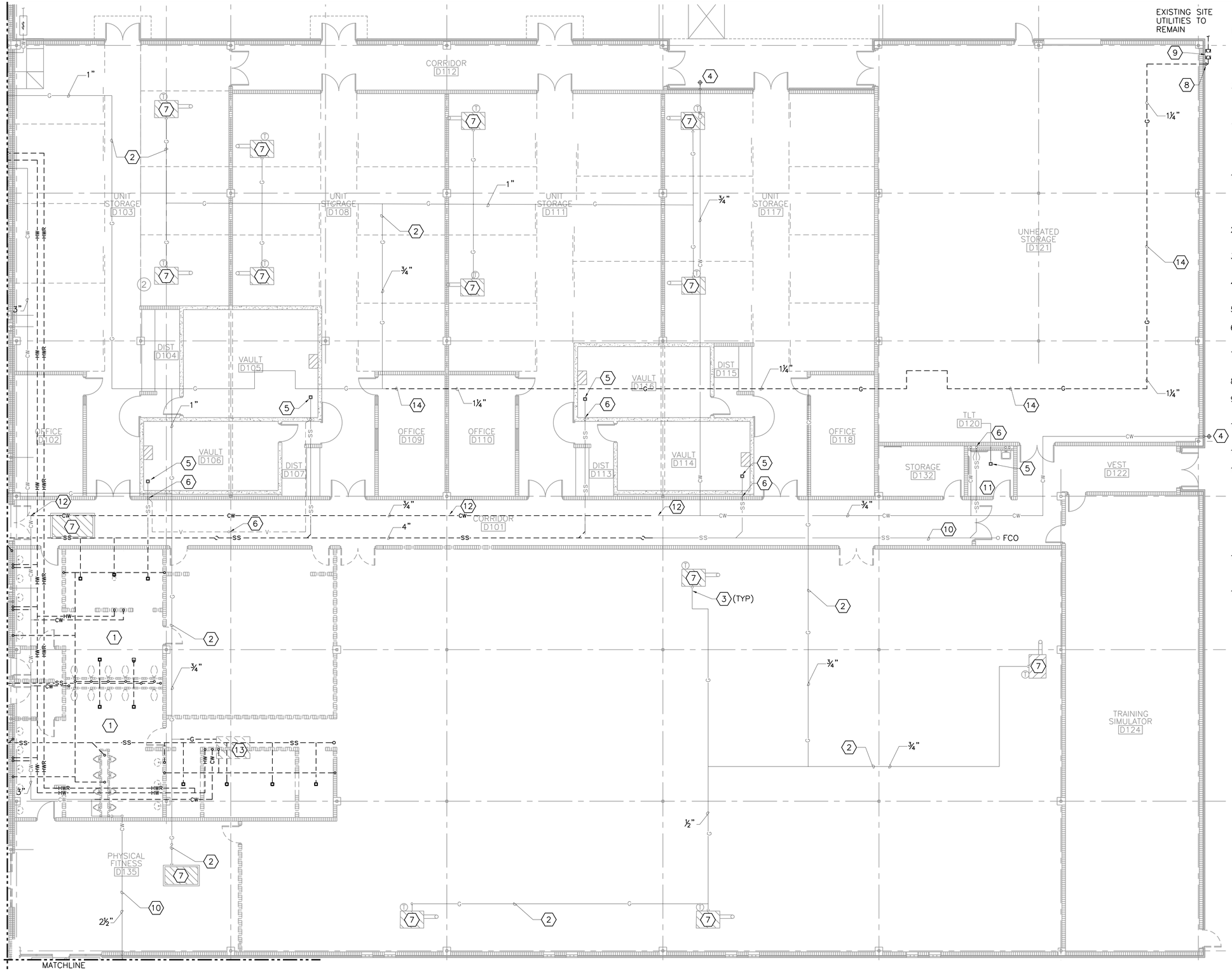
STAR CAMPAIGN FY18 - WESLACO
RC MAJOR MAINTENANCE

TXARNG CFMO

PLUMBING DEMOLITION FLOOR PLAN - C

P-3

SHT. 65 of 129



GENERAL NOTES:

1. A SUMMARY OF THE PROJECT'S BID OPTIONS CAN BE FOUND ON SHEET G-1. DISCIPLINE SPECIFIC BID OPTIONS CAN BE FOUND ON THIS SHEET.
2. REFER TO SHEET P-0 FOR LEGEND, GENERAL NOTES, ABBREVIATIONS AND SCHEDULES.
3. EXISTING ROOF DRAINAGE SYSTEM TO REMAIN AS IS UNLESS INDICATED OTHERWISE.

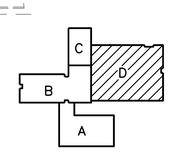
NOTES BY SYMBOL "⬡"

1. ALL PLUMBING FIXTURES AND ASSOCIATED PIPING WITHIN RESTROOMS AND JAN. ROOM TO BE REMOVED. REMOVE FLOOR DRAIN AND PLUG REMAINING PIPE BELOW FLOOR.
2. EXISTING NATURAL GAS PIPING ON ROOF TO REMAIN.
3. EXISTING NATURAL GAS PIPE DOWN THROUGH ROOF TO REMAIN.
4. REMOVE EXISTING RECESSED WALL HYDRANT.
5. EXISTING FLOOR DRAIN TO REMAIN.
6. EXISTING VENT THROUGH ROOF (VTR) TO REMAIN.
7. EXISTING GAS FIRED HVAC EQUIPMENT TO REMAIN.
8. EXISTING GAS RISER TO BE DEMOLISHED.
9. EXISTING GAS METER ASSEMBLY TO BE DEMOLISHED.
10. EXISTING PIPING BELOW FLOOR TO REMAIN.
11. EXISTING PLUMBING FIXTURES TO REMAIN.
12. EXISTING CW PIPE TO REMAIN IN SERVICE UNTIL CONSTRUCTION IS OF NEW RESTROOM AND SHOWER AREAS ARE COMPLETE. THE EXISTING CW PIPING IS TO BE REMOVED FOLLOWING THE INSTALLMENT OF ALL NEW CW PIPING SERVING THESE AREAS IS COMPLETED AND OPERATIONAL INCLUDING SERVICE SWITCH OVER.
13. GAS FIRED HVAC UNIT TO BE DEMOLISHED. DEMOLISH ASSOCIATED GAS PIPING AND CAP.
14. DEMOLISH GAS PING ON ROOF AS INDICATED.

NORTH PLAN NORTH / NORTH TRUE NORTH

1 — DEMOLITION FLOOR PLAN – D

1/8"=1'-0"

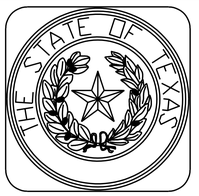


KEY PLAN



0 4' 8' 16'

1/8"=1'-0"



PROJECT ARCHITECT:
HOMER SAENZ, AIA
PROJECT NO. ADG17589A
ISSUE DATE: 04/20/18
DRAWN BY: MRB
REVIEWED BY: RJK

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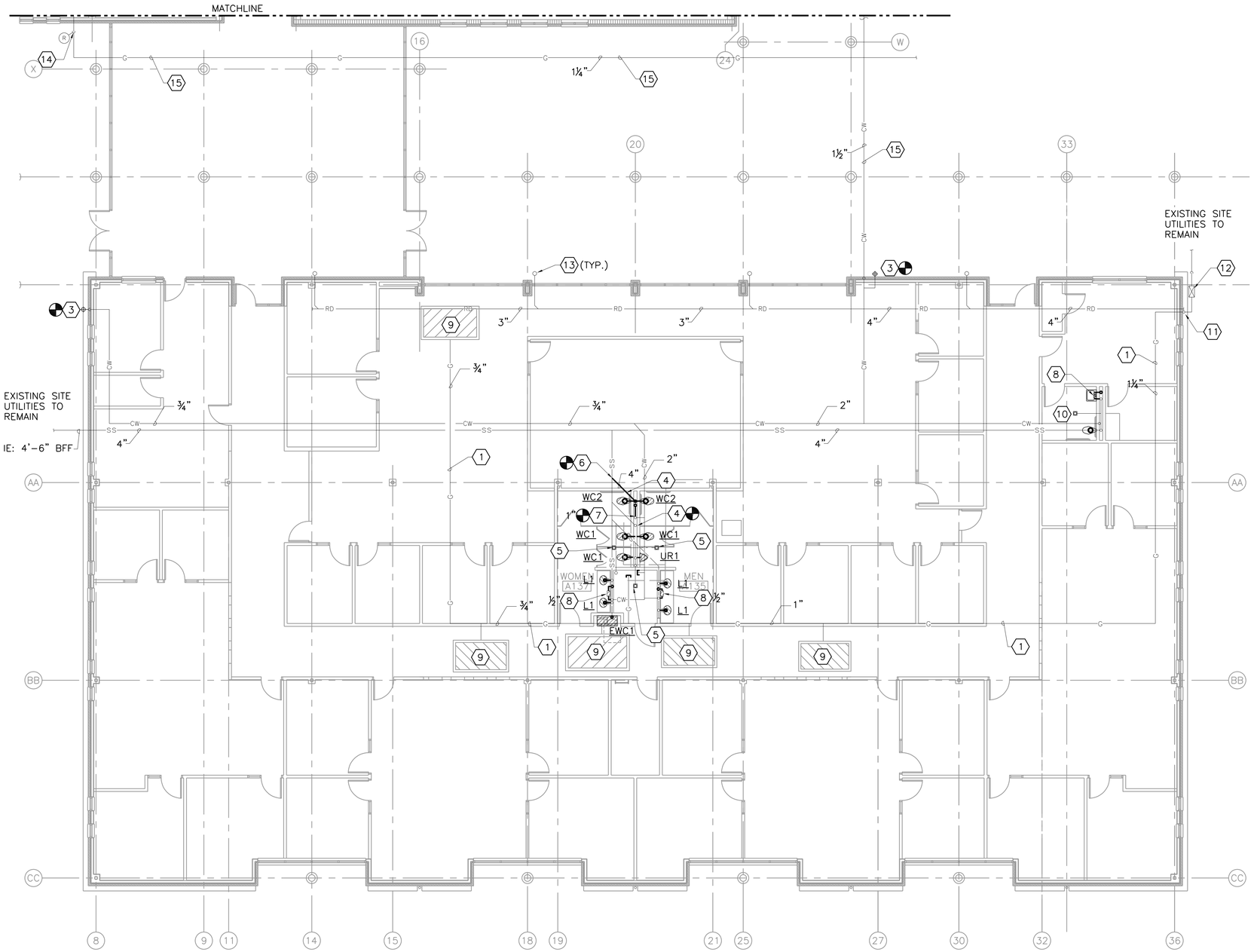
STAR CAMPAIGN FY18 - WESLACO
RC MAJOR MAINTENANCE

TXARNG CFMO

PLUMBING DEMOLITION FLOOR PLAN - D

P-4

SHT. 66 of 129



GENERAL NOTES:

1. A SUMMARY OF THE PROJECT'S BID OPTIONS CAN BE FOUND ON SHEET G-1. DISCIPLINE SPECIFIC BID OPTIONS CAN BE FOUND ON THIS SHEET.
2. REFER TO SHEET P-0 FOR LEGEND, GENERAL NOTES, ABBREVIATIONS AND SCHEDULES.
3. EXISTING ROOF DRAINAGE SYSTEM TO REMAIN AS IS UNLESS INDICATED OTHERWISE.
4. PROVIDE NEW TRAP SEAL DEVICE IN ALL EXISTING AND NEW FLOOR DRAINS, FLOOR SINKS, AND HUB DRAINS.
5. ALL EXTERIOR AND INTERIOR NATURAL GAS PIPING TO BE PAINTED SAFETY YELLOW.

NOTES BY SYMBOL "⬡"

1. EXISTING NATURAL GAS PIPING ON ROOF.
2. NEW 4" SANITARY SEWER PIPE.
3. NEW ¾" NON-FREEZE RECESSED WALL HYDRANT WITH INTEGRAL VACUUM BREAKER. PROVIDE WATER-PROOF SEALANT AROUND NEW WALL HYDRANT.
4. EXISTING 3" VTR TO BE REUSED. CONNECT NEW AND EXISTING VENT PIPING ABOVE CEILING TO EXISTING 3" VTR.
5. NEW 4" FLOOR DRAIN WITH TRAP SEAL DEVICE.
6. CONNECT NEW SS PIPE INTO EXISTING SS PIPE UNDERFLOOR/GRADE.
7. CONNECT NEW CW PIPE TO EXISTING CW PIPE IN PLUMBING CHASE.
8. NEW ELECTRIC INSTANTANEOUS WATER HEATER EWH1 MOUNTED ON BACK WALL BELOW COUNTER/LAVATORY. EXTEND/CONNECT CW, HW AND ELEC ACCORDINGLY, ON GFCI CIRCUITS. PROVIDE SHUT-OFF VALVE ON CW SUPPLY TO EWH1.
9. EXISTING HVAC EQUIPMENT.
10. EXISTING PLUMBING FIXTURES.
11. EXISTING GAS RISER TO REMAIN.
12. EXISTING GAS METER ASSEMBLY TO REMAIN.
13. EXISTING ROOF DRAIN DOWNSPOUTS TO REMAIN.
14. EXISTING 1¼" GAS RISER AND REGULATOR TO REMAIN.
15. EXISTING PIPING BELOW GRADE TO REMAIN.

BID OPTIONS "◯"

5. RESTROOM/CONFERENCE ROOM RENOVATION IN ADMIN WING.

NORTH PLAN NORTH / NORTH TRUE NORTH

1 – FLOOR PLAN – A

1/8"=1'-0"

KEY PLAN

0 4' 8' 16'

1/8"=1'-0"

PROJECT ARCHITECT:
HOMER SAENZ, AIA
PROJECT NO. ADG17589A
ISSUE DATE: 04/20/18
DRAWN BY: MRB
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STAR CAMPAIGN FY18 - WESLACO
RC MAJOR MAINTENANCE

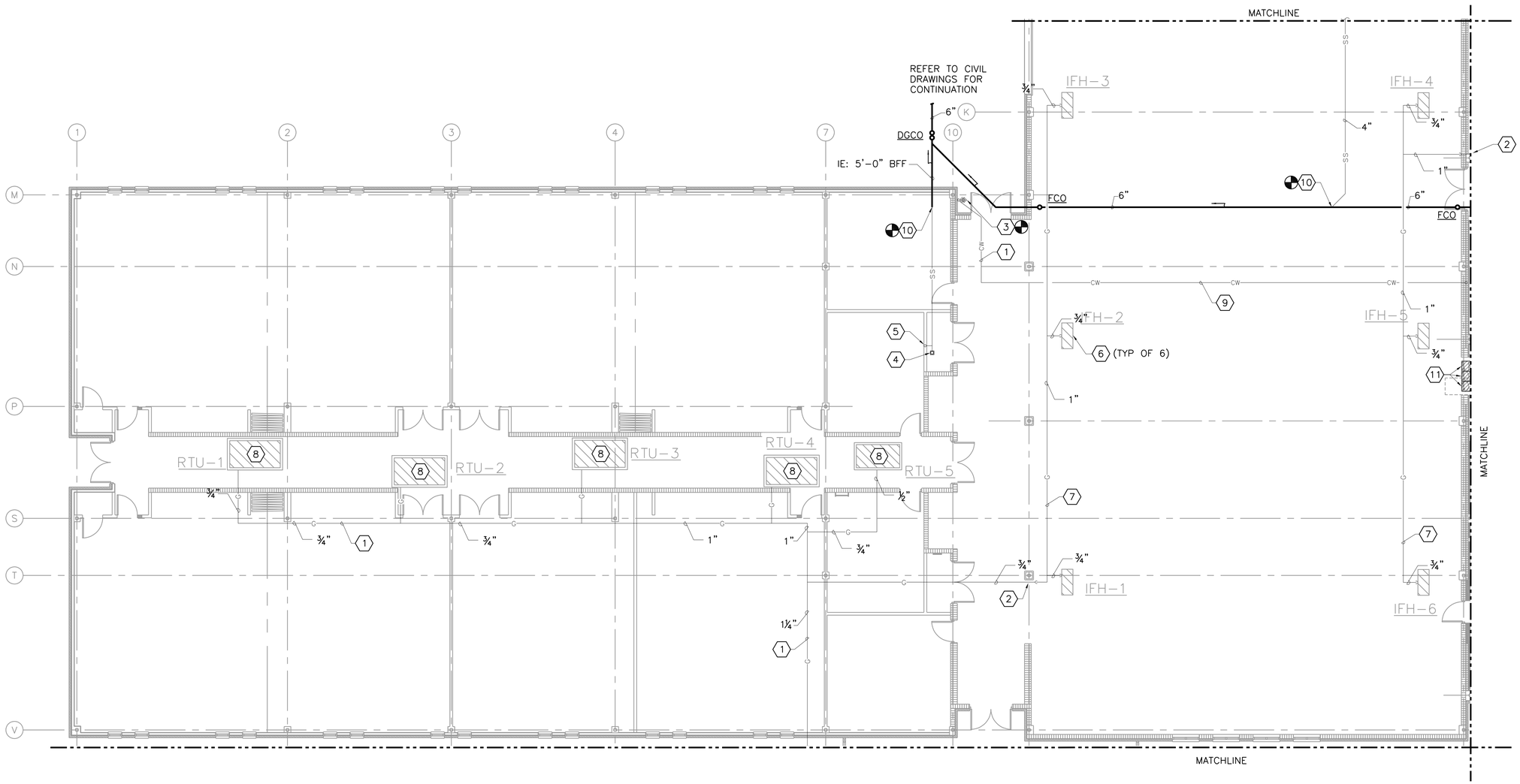
TXARNG CFMO

PLUMBING
FLOOR PLAN - A

P-5 (5)

SHT. 67 of 129

VAN CASHEN 118595 LICENSED PROFESSIONAL ENGINEER
04/20/2018



GENERAL NOTES:

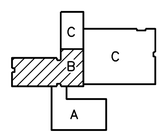
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3. EXISTING ROOF DRAINAGE SYSTEM TO REMAIN AS IS UNLESS INDICATED OTHERWISE.
4. PROVIDE NEW TRAP SEAL DEVICE IN ALL EXISTING AND NEW FLOOR DRAINS, FLOOR SINKS, AND HUB DRAINS.
5. ALL EXTERIOR AND INTERIOR NATURAL GAS PIPING TO BE PAINTED SAFETY YELLOW.

NOTES BY SYMBOL "⬡"

1. EXISTING NATURAL GAS PIPING ON ROOF.
2. EXISTING NATURAL GAS PIPE THROUGH WALL.
3. NEW ¾" NON-FREEZE RECESSED WALL HYDRANT WITH INTEGRAL VACUUM BREAKER. PROVIDE WATER-PROOF SEALANT AROUND NEW WALL HYDRANT.
4. EXISTING FLOOR DRAIN. PROVIDE NEW TRAP SEAL DEVICE.
5. EXISTING VENT THROUGH ROOF (VTR).
6. EXISTING GAS FIRED INFRA-RED UNIT HEATERS.
7. EXISTING GAS PIPING IN JOIST SPACE ABOVE ASSEMBLY HALL.
8. EXISTING GAS FIRED HVAC ROOF-TOP UNIT.
9. EXISTING PIPING BELOW FLOOR.
10. CONNECT NEW SS PIPE INTO EXISTING SS PIPE UNDERFLOOR/GRADE.
11. NEW ELECTRIC WATER COOLERS RE: ENLARGED FLOOR PLAN 1/P-9.

NORTH PLAN NORTH / NORTH TRUE NORTH — 1 — FLOOR PLAN – B

1/8"=1'-0"



KEY PLAN

STATE OF TEXAS — VAN CASHEN — 118595 — LICENSED PROFESSIONAL ENGINEER — 04/20/2018

0 4' 8' 16'

1/8"=1'-0"

THE STATE OF TEXAS

PROJECT ARCHITECT:
HOMER SAENZ, AIA
PROJECT NO. ADG17589A
ISSUE DATE: 04/20/18
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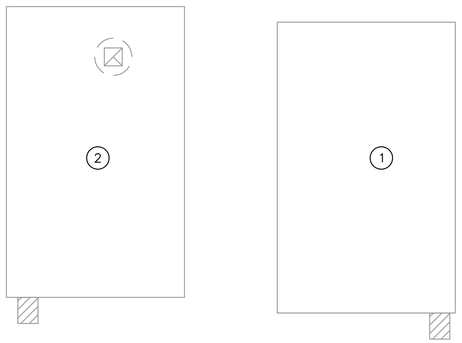
STAR CAMPAIGN FY18 - WESLACO
RC MAJOR MAINTENANCE

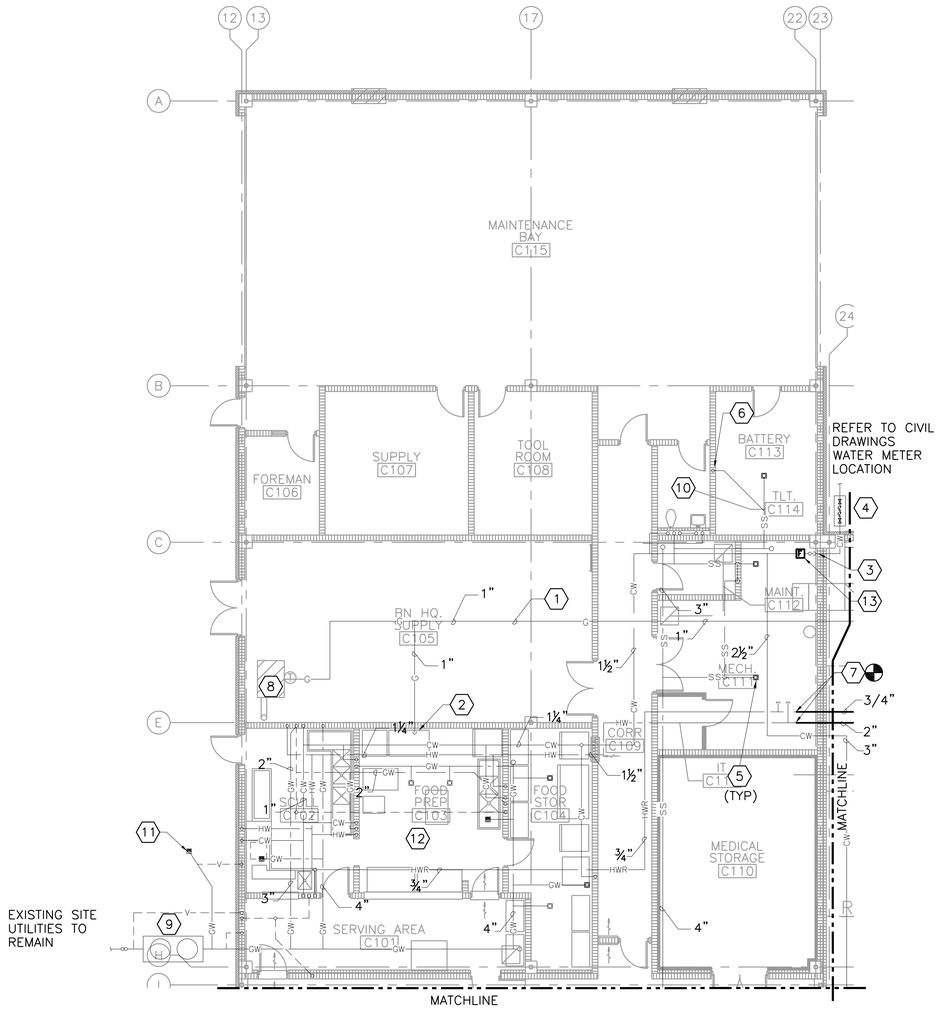
TXARNG CFMO

PLUMBING
FLOOR PLAN - B

P-6

SHT. 68 of 129





GENERAL NOTES:

1. A SUMMARY OF THE PROJECT'S BID OPTIONS CAN BE FOUND ON SHEET G-1. DISCIPLINE SPECIFIC BID OPTIONS CAN BE FOUND ON THIS SHEET.
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3. EXISTING ROOF DRAINAGE SYSTEM TO REMAIN AS IS UNLESS INDICATED OTHERWISE.
4. PROVIDE NEW TRAP SEAL DEVICE IN ALL EXISTING AND NEW FLOOR DRAINS, FLOOR SINKS, AND HUB DRAINS.
5. ALL EXTERIOR AND INTERIOR GAS PIPING TO BE PAINTED SAFETY YELLOW.

NOTES BY SYMBOL "⬡"

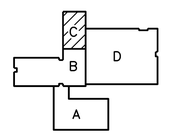
1. EXISTING GAS PIPING ON ROOF.
2. EXISTING GAS PIPE DOWN THROUGH ROOF.
3. EXISTING VALVED 3" DOMESTIC WATER RISER.
4. EXISTING 3" BACKFLOW PREVENTOR IN VAULT.
5. EXISTING FLOOR DRAIN.
6. EXISTING VENT THROUGH ROOF (VTR).
7. CONNECT NEW 2" HW AND 3/4" HWR PIPE AND EXTEND AS INDICATED.
8. EXISTING GAS FIRED HVAC EQUIPMENT.
9. EXISTING CONCRETE GREASE SEPARATOR TO REMAIN. PUMP OUT AND PROPERLY DISPOSE OF GREASE LADEN WASTE. AFTER SEPARATOR IS COMPLETELY EMPTY AND DRY, CLEAN SEPARATOR INTERIOR WITH ALKALINE DEGREASER AND PRESSURE WASH. PERMANENTLY INJECT ALL CRACKS WITH COMMERCIAL GRADE LOW PRESSURE CRACK SEALANT. SEAL INTERIOR CONCRETE SURFACES WITH SILICONATE MULTI-SURFACE SMOOTH WB PENETRATING SEALANT.
10. EXISTING PLUMBING FIXTURES TO REMAIN.
11. EXISTING 3" CAN WASH DRAIN.
12. ALL PIPING AND EQUIPMENT IN KITCHEN AREA TO REMAIN IN SERVICE.
13. PROVIDE NEW DIGITAL FLOW METER WITH VALVED BYPASS ASSEMBLY. WATER METER PROVIDED BY BUILDING AUTOMATION SYSTEM CONTRACTOR. RE: SPECIFICATION 230923.

BID OPTIONS "◯"

1. CONNECT TEMPORARY RESTROOM BUILDING TO EXISTING DOMESTIC WATER TEMPORARY CONNECTION. CONNECT TEMPORARY RESTROOM BUILDING INTO EXISTING TEMPORARY SANITARY WASTE CONNECTION. CONTRACTOR TO FIELD VERIFY EXACT LOCATION OF EXISTING CONNECTIONS.
2. CONNECT TEMPORARY SHOWER BUILDING TO EXISTING DOMESTIC WATER TEMPORARY CONNECTION. CONNECT TEMPORARY SHOWER BUILDING INTO EXISTING TEMPORARY SANITARY WASTE CONNECTION. CONTRACTOR TO FIELD VERIFY EXACT LOCATION OF EXISTING CONNECTIONS.

NORTH PLAN NORTH / NORTH TRUE NORTH — 1/– FLOOR PLAN – C

1/8"=1'-0"



KEY PLAN

STATE OF TEXAS
VAN CASHEN
118595
LICENSED
PROFESSIONAL ENGINEER
04/20/2018

0 4' 8' 16'

1/8"=1'-0"

STATE OF TEXAS

PROJECT ARCHITECT:
HOMER SAENZ, AIA
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STAR CAMPAIGN FY18 - WESLACO RC MAJOR MAINTENANCE

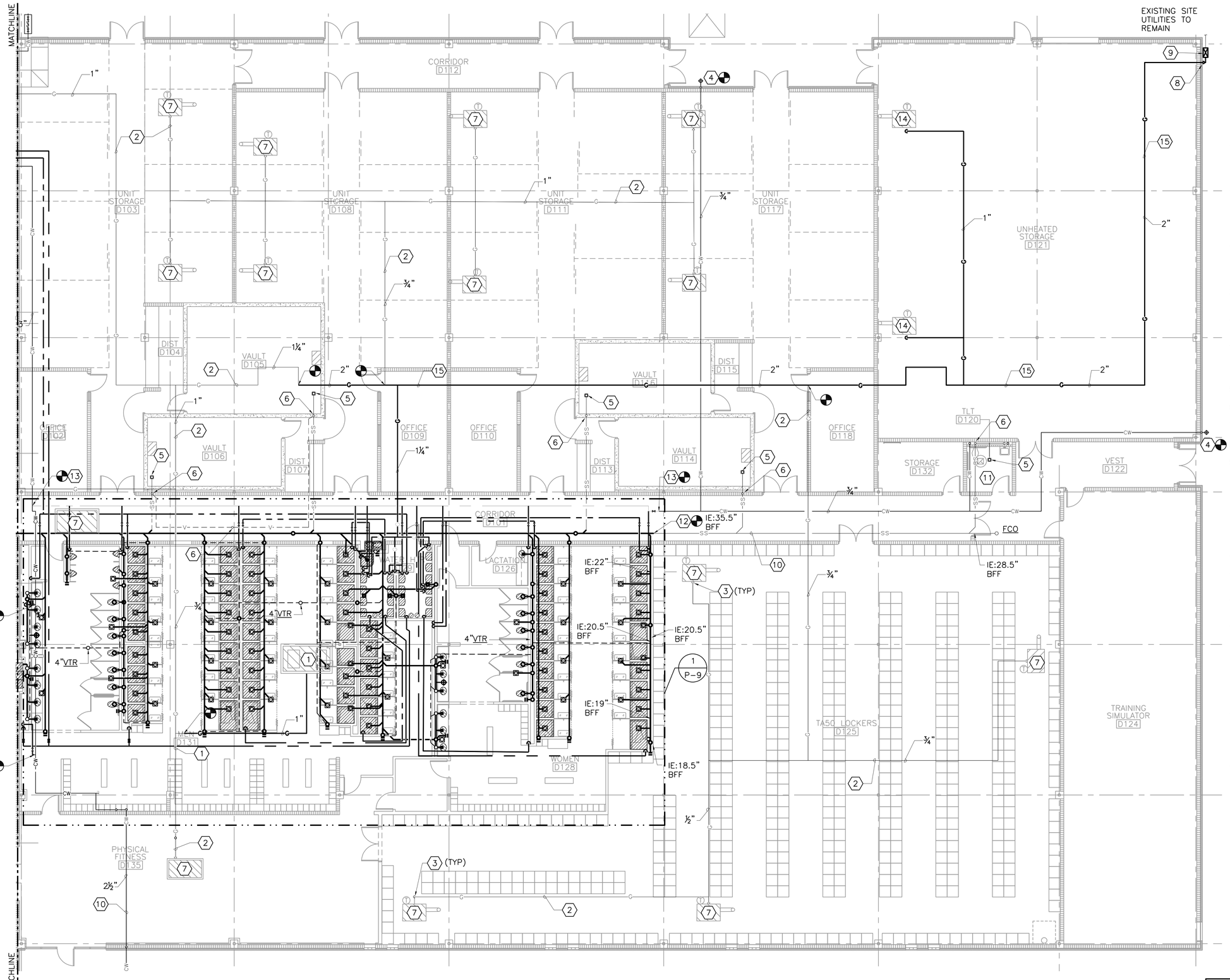
TXARNG CFMO

PLUMBING

FLOOR PLAN - C

P-7

SHT. 69 of 129



GENERAL NOTES:

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3. EXISTING ROOF DRAINAGE SYSTEM TO REMAIN AS IS UNLESS INDICATED OTHERWISE.
4. PROVIDE NEW TRAP SEAL DEVICE IN ALL EXISTING AND NEW FLOOR DRAINS, FLOOR SINKS, AND HUB DRAINS.
5. ALL EXTERIOR AND INTERIOR NATURAL GAS PIPING TO BE PAINTED SAFETY YELLOW.

NOTES BY SYMBOL "⬡"

1. NEW GAS FIRED HVAC UNIT. CONNECT INTO EXISTING AS INDICATED. PROVIDE WITH SHUT-OFF VALVE AND GAS DIRT LEG.
2. EXISTING NATURAL GAS PIPING ON ROOF.
3. EXISTING NATURAL GAS PIPE DOWN THROUGH ROOF.
4. NEW 3/4" NON-FREEZE RECESSED WALL HYDRANT WITH INTEGRAL VACUUM BREAKER. PROVIDE WATER-PROOF SEALANT AROUND NEW WALL HYDRANT.
5. EXISTING FLOOR DRAIN.
6. EXISTING VENT THROUGH ROOF (VTR).
7. EXISTING GAS FIRED HVAC EQUIPMENT.
8. NEW GAS 2" RISER UP TO ROOF.
9. NEW METER AND REGULATOR TO PROVIDE 1537 CFH WITH AN INCOMING GAS PRESSURE OF 15 PSIG AND A DISCHARGE PRESSURE OF 5 PSIG. PROVIDE TRANSCEIVER CAPABLE OF INTERFACE WITH THE BACNET SYSTEM WITH A PULSE OUTPUT. GAS METER PROVIDED BY BUILDING AUTOMATION SYSTEM CONTRACTOR. RE: SPECIFICATION 230923.
10. EXISTING PIPING BELOW FLOOR.
11. EXISTING PLUMBING FIXTURES TO REMAIN.
12. CONNECT NEW SS PIPE INTO EXISTING SS PIPE UNDERFLOOR GRADE.
13. EXISTING CW PIPE TO REMAIN IN SERVICE UNTIL CONSTRUCTION IS OF NEW RESTROOM AND SHOWER AREAS ARE COMPLETE. THE EXISTING CW PIPING IS TO BE REMOVED FOLLOWING THE INSTALLMENT OF ALL NEW CW PIPING SERVING THESE AREAS IS COMPLETED AND OPERATIONAL INCLUDING SERVICE SWITCH OVER.
14. NEW GAS FIRED UNIT HEATERS IN D121. ROUTE GAS PIPING FROM ROOF ABOVE, COORDINATE ROOF PENETRATION WITH ROOF WARRANTY. PROVIDE WITH SHUT-OFF VALVE AND GAS DIRT LEG.
15. NEW GAS PIPE ON ROOF.

NORTH PLAN NORTH / NORTH TRUE NORTH — 1/ — FLOOR PLAN – D
1/8"=1'-0"

KEY PLAN

0 4' 8' 16'
1/8"=1'-0"

THE STATE OF TEXAS

PROJECT ARCHITECT:
HOMER SAENZ, AIA
PROJECT NO. ADG17589A
ISSUE DATE: 04/20/18
DRAWN BY: MRB
REVIEWED BY: RJK

FREESE AND NICHOLS
4055 International Plaza, Suite 200
Fort Worth, Texas 76109-4895
Phone - (817) 735-7300
Fax - (817) 735-7491
Freese and Nichols, Inc.
Texas Registered Engineering Firm F-2144

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TEXAS MILITARY FORCES
CONSTRUCTION & FACILITIES MANAGEMENT OFFICE-CFMO
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(512) 782-6131 FAX (512) 782-1481

STAR CAMPAIGN FY18 - WESLACO
RC MAJOR MAINTENANCE

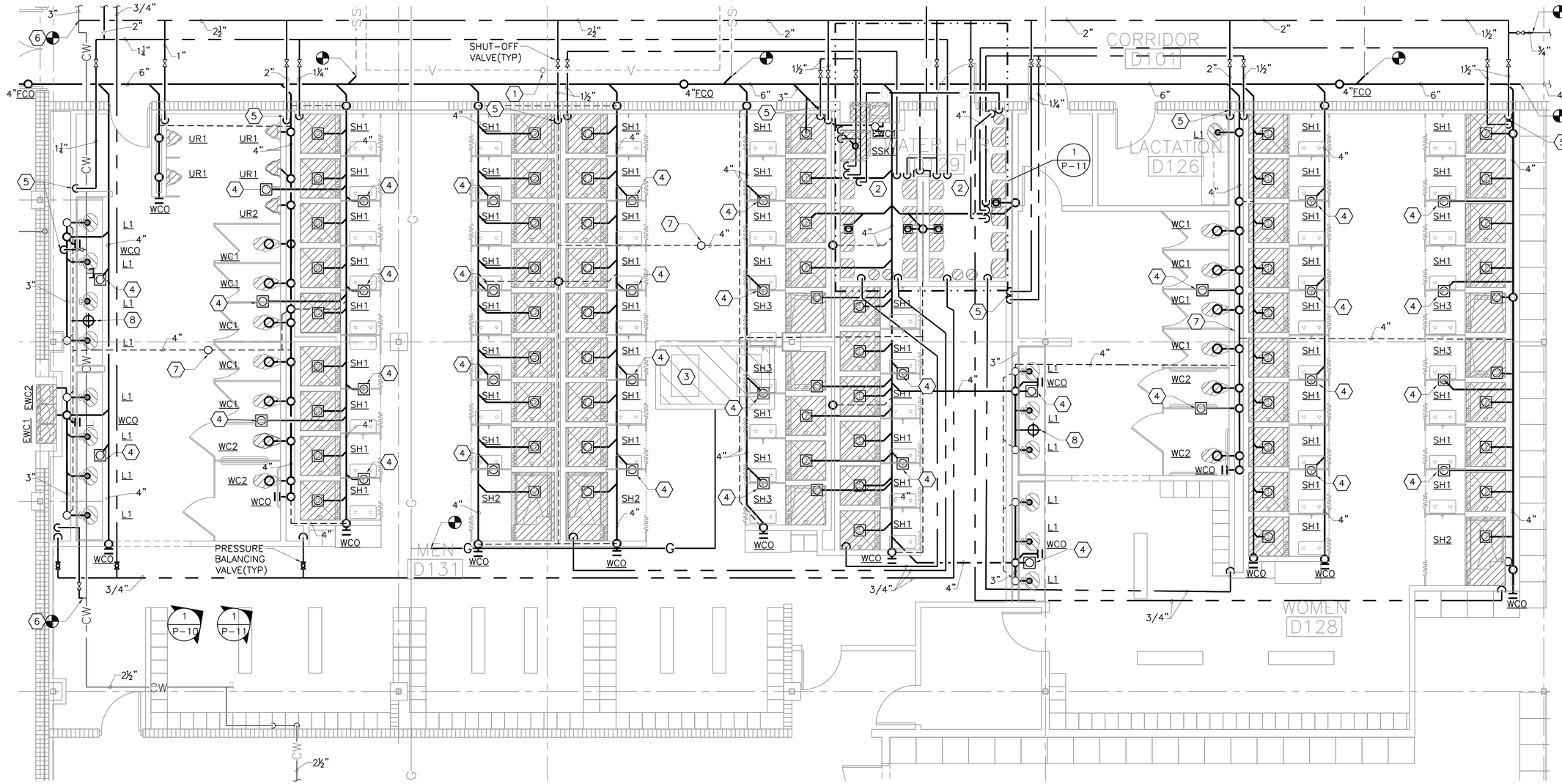
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PLUMBING
FLOOR PLAN - D

P-8

SHT. 70 of 129

VAN CASHEN 118595 LICENSED PROFESSIONAL ENGINEER STATE OF TEXAS
04/20/2018



NOTES BY SYMBOL "⬡"

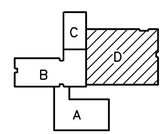
1. EXISTING VTR TO REMAIN.
2. NEW NATURAL GAS-FIRED INSTANTANEOUS TANKLESS WATER HEATERS. 200 CFH EACH AT 10" W.C. 18 REQUIRED FOR NEW LAYOUT. RE: 1, 2 & 3/P-12 AND SCHEDULE ON SHEET P-0.
3. NEW GAS FIRED HVAC UNIT.
4. NEW 2" FLOOR DRAIN WITH TRAP GUARD INSERT.
5. DROP HW AND CW FROM ABOVE INTO PLUMBING CHASE TO SERVE BATTERY OF PLUMBING FIXTURES.
6. EXISTING CW PIPE TO REMAIN IN SERVICE UNTIL CONSTRUCTION IS OF NEW RESTROOM AND SHOWER AREAS ARE COMPLETE. THE EXISTING CW PIPING IS TO BE REMOVED FOLLOWING THE INSTALLMENT OF ALL NEW CW PIPING SERVING THESE AREAS IS COMPLETED AND OPERATIONAL INCLUDING SERVICE SWITCH OVER.
7. NEW 4" VTR. COORDINATE ROOF PENETRATION WITH ROOFING WARRANTY.
8. NEW ½" HOSE BIBB UNDER COUNTER AT 12" AFF.

GENERAL NOTES:

1. A SUMMARY OF THE PROJECT'S BID OPTIONS CAN BE FOUND ON SHEET G-1. DISCIPLINE SPECIFIC BID OPTIONS CAN BE FOUND ON THIS SHEET.
2. REFER TO SHEET P-0 FOR LEGEND, GENERAL NOTES, ABBREVIATIONS AND SCHEDULES.
3. EXISTING ROOF DRAINAGE SYSTEM NOT SHOWN FOR CLARITY.
4. PROVIDE NEW TRAP SEAL DEVICE IN ALL EXISTING AND NEW FLOOR DRAINS, FLOOR SINKS, AND HUB DRAINS.
5. ALL EXTERIOR AND INTERIOR NATURAL GAS PIPING TO BE PAINTED SAFETY YELLOW.

NOTE:
ENTIRE EXISTING CONCRETE FLOOR SLAB TO BE REMOVED/REPLACED IN RESTROOM, SHOWER AND LOCKER AREAS DURING CONSTRUCTION. COORDINATE NEW UNDER FLOOR SS PIPE INSTALLATION WITH NEW CONCRETE SLAB, GRADE BEAMS AND SLAB INSTALLATION. RE: STRUCTURAL DRAWINGS FOR CONCRETE SLAB REMOVAL, REPLACEMENT, TRENCHING AND BACKFILL.

NORTH PLAN NORTH / NORTH TRUE NORTH — 1 — ENLARGED FLOOR PLAN
1/4"=1'-0"



KEY PLAN



0 1' 2' 4' 8'
1/4"=1'-0"

THE STATE OF TEXAS

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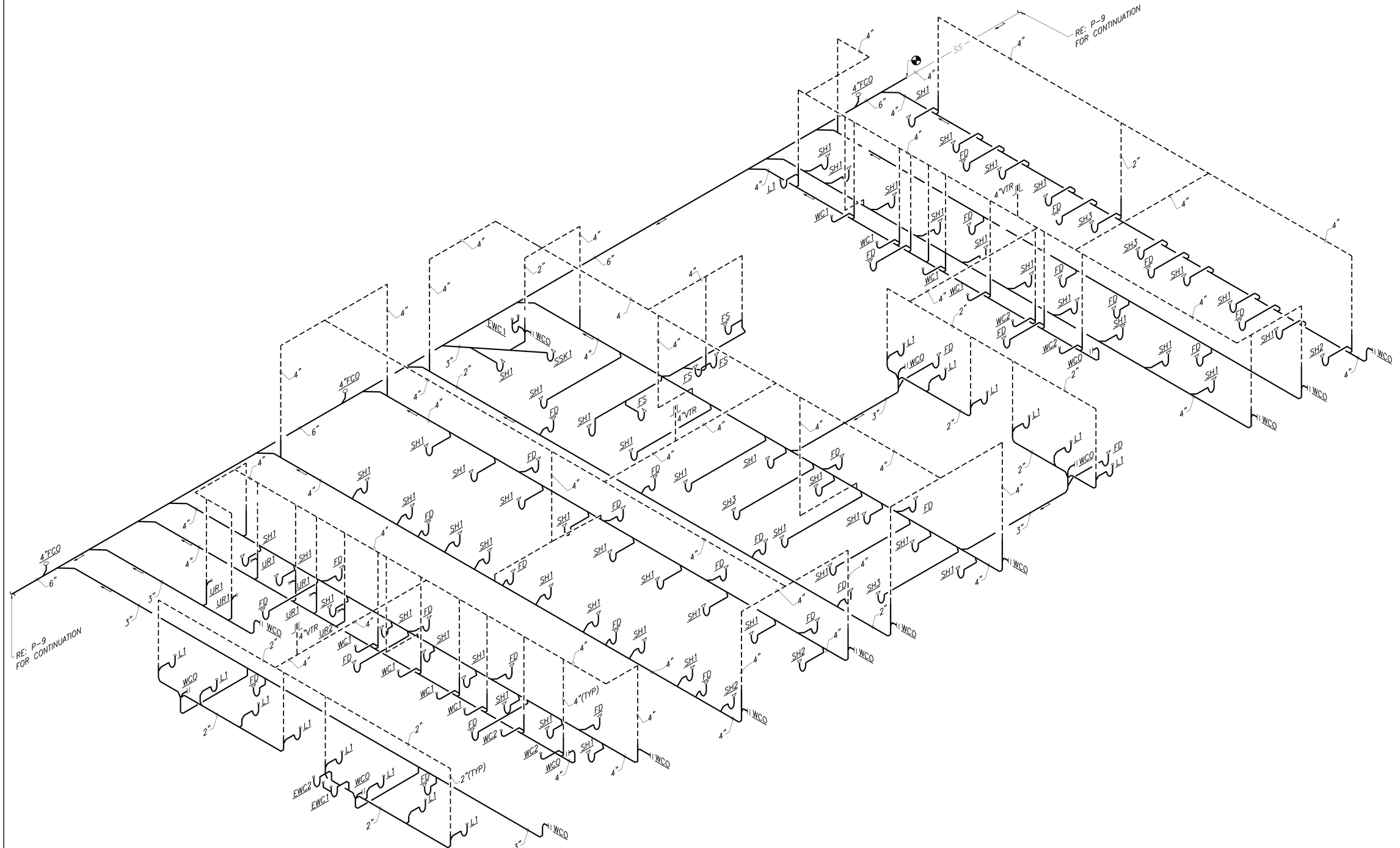
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FAX (512) 782-1481

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PLUMBING
ENLARGED FLOOR PLAN
P-9
SHT. 71 of 129



SANITARY WASTE & VENT RISER

1 SANITARY RISER DIAGRAM
NOT TO SCALE

STATE OF TEXAS
VAN CASHEN
118595
LICENSED
PROFESSIONAL ENGINEER
04/20/2018

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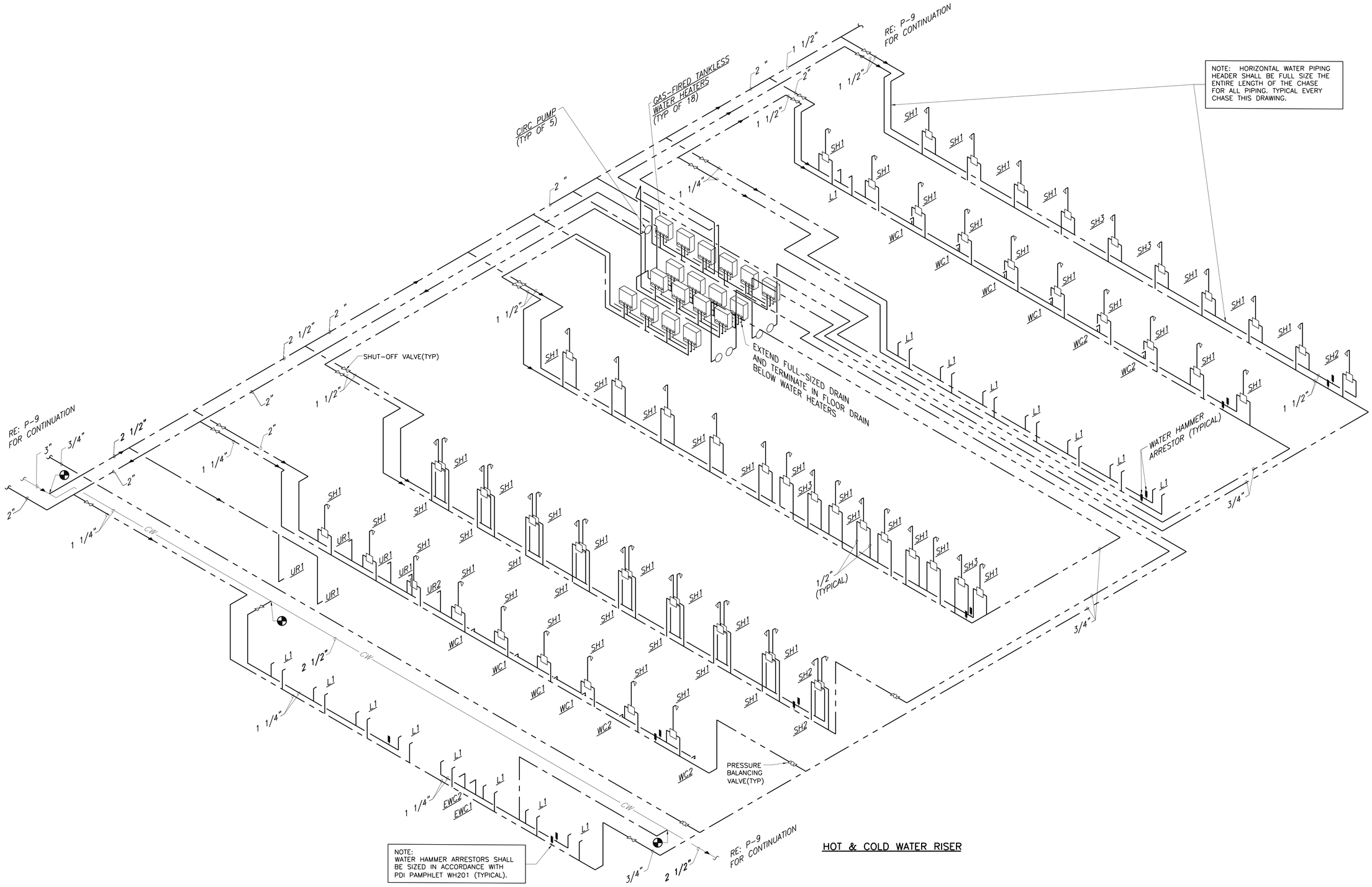
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RC MAJOR MAINTENANCE

TXARNG CFMO

PLUMBING
SANITARY
RISER DIAGRAMS

P-10

SHT. 72 of 129



HOT & COLD WATER RISER

1 DOMESTIC WATER RISER DIAGRAM

NOT TO SCALE

VAN CASHEN
118595
LICENSED PROFESSIONAL ENGINEER
04/20/2018

THE STATE OF TEXAS

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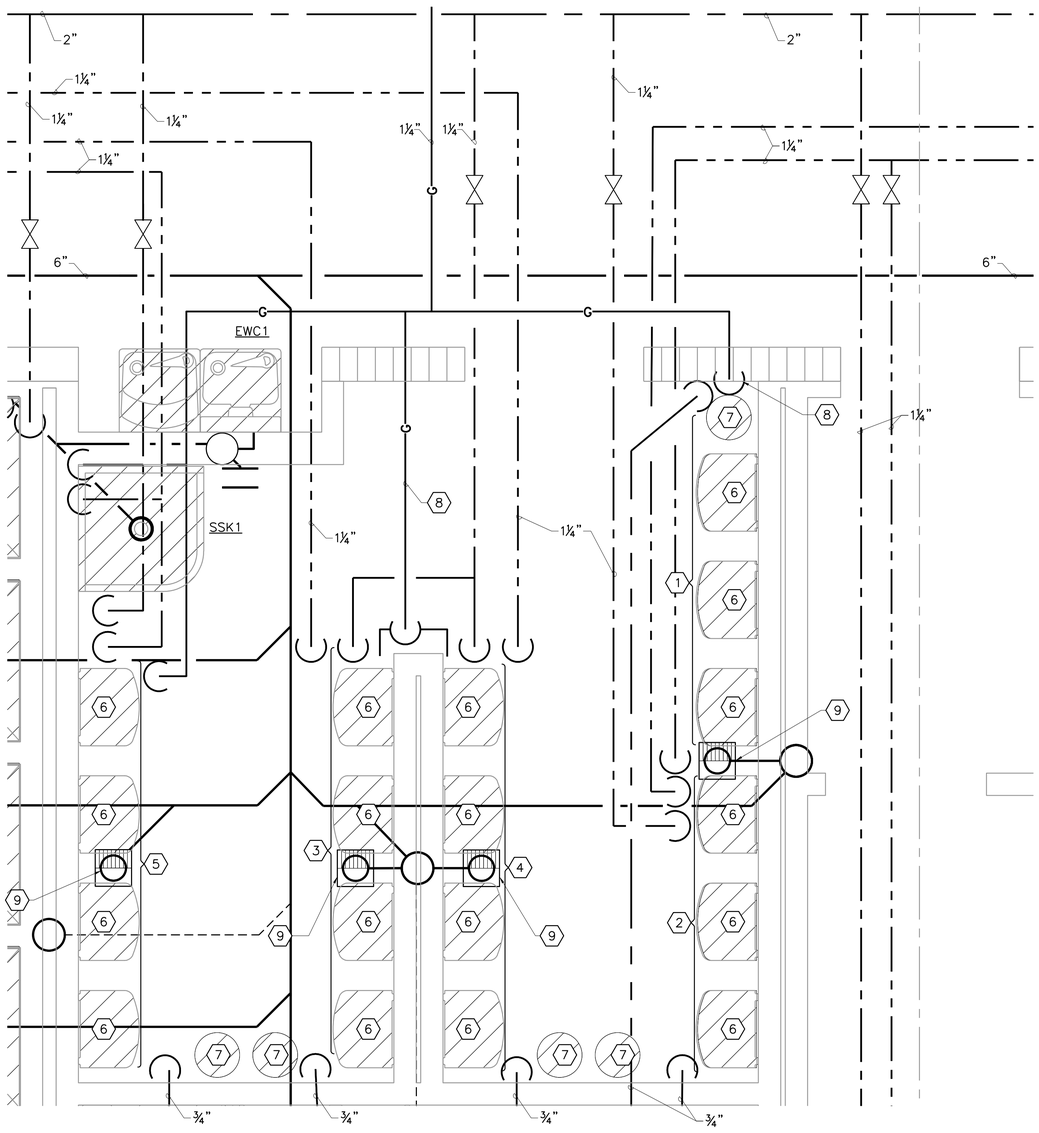
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RC MAJOR MAINTENANCE

TXARNG CFMO

PLUMBING DOMESTIC WATER RISER DIAGRAMS

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SHT. 73 of 129



ENLARGED FLOOR PLAN – WATER HEATER ROOM D129

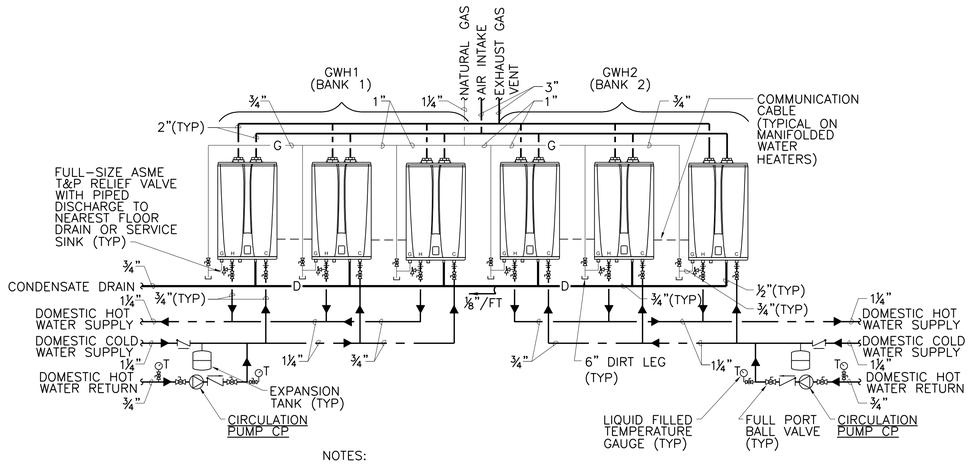
3/4"=1'-0"

GENERAL NOTES:

1. A SUMMARY OF THE PROJECT'S BID OPTIONS CAN BE FOUND ON SHEET G-1. DISCIPLINE SPECIFIC BID OPTIONS CAN BE FOUND ON THIS SHEET.
2. REFER TO SHEET P-0 FOR LEGEND, GENERAL NOTES, ABBREVIATIONS AND SCHEDULES.
3. PROVIDE NEW TRAP SEAL DEVICE IN ALL EXISTING AND NEW FLOOR DRAINS, FLOOR SINKS, AND HUB DRAINS.
4. ALL EXTERIOR AND INTERIOR NATURAL GAS PIPING TO BE PAINTED SAFETY YELLOW.

NOTES BY SYMBOL "⬡"

1. GAS WATER HEATER GWH1 (BANK 1), SUPPLYING WOMENS RESTROOMS AND SHOWERS.
2. GAS WATER HEATER GWH2 (BANK 2), SUPPLYING WOMENS RESTROOMS AND SHOWERS.
3. GAS WATER HEATER GWH3 (BANK 3), SUPPLYING MENS RESTROOMS AND SHOWERS.
4. GAS WATER HEATER GWH4 (BANK 4), SUPPLYING MENS RESTROOMS AND SHOWERS.
5. GAS WATER HEATER GWH5 (BANK 5), SUPPLYING MENS RESTROOMS AND SHOWERS.
6. NEW NATURAL GAS-FIRED INSTANTANEOUS TANKLESS WATER HEATERS. GWH1 THROUGH GWH5. 200 CFH EACH AT 10" W.C. 18 REQUIRED FOR NEW LAYOUT. RE:1/P-0 FOR SCHEDULES, RE: 2&3/P-12 FOR DETAILS.
7. NEW HOT WATER CIRCULATION PUMP WITH 24/7 PROGRAMMABLE TIMER. PROGRAM TO RUN WEEKENDS BETWEEN 6:00AM AND 9:00PM. ADJUSTABLE FOR USER CONTROL, CONTROLLED BY BAS SYSTEM IF INSTALLED. RE: DETAIL 2&3/P-12.
8. NEW NATURAL GAS SUPPLY DOWN TO WATER HEATERS.
9. NEW 4" FLOOR SINK WITH HALF GRATE AND TRAP GUARD INSERT.

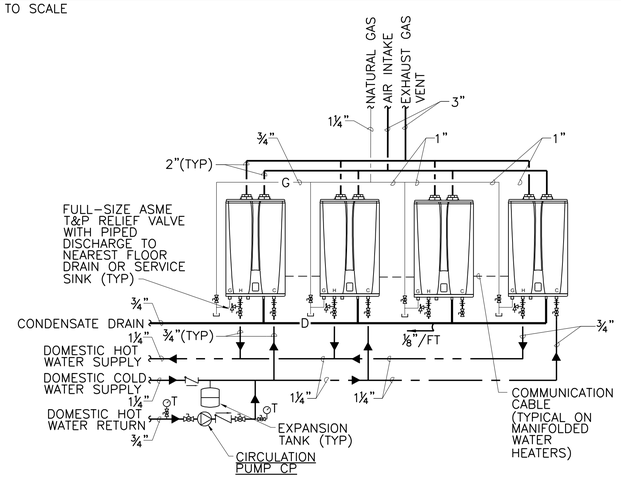


NOTES:
OUTLET TEMPERATURE SHALL BE SET TO 127°F.

WATER HEATER ROOM D129

2 – NATURAL GAS-FIRED TANKLESS WATER HEATER DETAIL (GWH BANK 1 & 2)

NOT TO SCALE



NOTES:
OUTLET TEMPERATURE SHALL BE SET TO 127°F.

WATER HEATER ROOM D129

3 – NATURAL GAS-FIRED TANKLESS WATER HEATER DETAIL (GWH BANK 3, 4, 5)

NOT TO SCALE

VAN CASHEN 118595 LICENSED PROFESSIONAL ENGINEER
04/20/2018

0 6" 1' 2'
3/4"=1'-0

THE STATE OF TEXAS

PROJECT ARCHITECT:
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PLUMBING WATER HEATER ROOM AND DETAILS

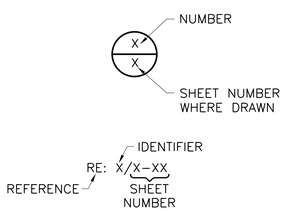
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ABBREVIATIONS	
AC	ALTERNATING CURRENT
AF	AMP FRAME
AFD	ADJUSTABLE FREQUENCY DRIVE
AFF	ABOVE FINISHED FLOOR OR GRADE
AG	ABOVE GRADE
AGSB	ABOVE GROUND SPLICE BOX
AIC	AMPERES INTERRUPTING CAPACITY
AL OR ALUM	ALUMINUM
AMP OR A	AMPERE
AT	AMP TRIP
ATS	AUTOMATIC TRANSFER SWITCH
AUTO	AUTOMATIC
AUX	AUXILIARY
AWG	AMERICAN WIRE GAUGE
C.	CONDUIT
CB	CIRCUIT BREAKER
C/C	CENTER TO CENTER
CHH	COMMUNICATION MANHOLE/HANDHOLE
CKT	CIRCUIT
CLF	CURRENT LIMITING FUSE
CONT.	CONTINUATION
CP	CONTROL PANEL
CPT	CONTROL POWER TRANSFORMER
CR	CONTROL RELAY
CS	CONTROL SWITCH OR COMBINATION STARTER
CT	CURRENT TRANSFORMER
CU	COPPER
DC	DIRECT CURRENT
DI	DOOR INTERLOCK
DN	DOWN
DP	DIFFERENTIAL PRESSURE
DWG	DRAWING
EMH	ELECTRICAL MANHOLE/HANDHOLE
EC	EMPTY CONDUIT
ELEC	ELECTRICAL
ELEV	ELEVATION
EM	EMERGENCY
EHH	ELECTRICAL MANHOLE
EO	ELECTRICALLY OPERATED
ETM	ELAPSED TIME METER
EUC	ELECTRIC UTILITY CO.
EXIST.	EXISTING
FBO	FURNISHED BY OTHERS
FO	FIBER OPTIC
FRP	FIBERGLASS REINFORCED POLYESTER
FT	FEET
FU	FUSE
G. OR GRD	GROUND
GA.	GAUGE
GCP	GENERATOR CONTROL PANEL
GEN	GENERATOR
GFI	GROUND FAULT INTERRUPTER
GFS	GROUND FAULT SENSING
GO	GATE OPERATOR
GRS	GALVANIZED RIGID STEEL
HH	HANDHOLE
HP	HORSEPOWER
HT	HEIGHT
HTP	HEAT TRACE PANEL
HTR	HEATER
HZ	HERTZ
ID	INTERNAL DIAMETER
IMH	INSTRUMENT MANHOLE
INST	INSTRUMENT
IRP	INTERPOSING RELAY PANEL
JB	JUNCTION BOX
KVA	KILOVOLT–AMPERE
KW	KILOWATT
LA	LIGHTNING ARRESTER
LC	LIGHTNING CONTACTOR
LED	LIGHT EMITTING DIODE
LGTS ON LTG	LIGHTS/LIGHTING
LP	LIGHTING PANEL
LSIG	LONG, SHORT, INSTANTANEOUS, GROUND
MBFV	MOTOR OPERATED BUTTERFLY VALVE
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MCP	MOTOR CIRCUIT PROTECTOR
MFR	MANUFACTURER
MFR'S	MANUFACTURER'S
MH	MANHOLE
ML	MULTILIN
MOV	MOTOR OPERATED VALVE
MLO	MAIN LUGS ONLY
MPR	MOTOR PROTECTION RELAY
MR	MULTIRATIO
MTD	MOUNTED
MTG	MOUNTING
MTS	MANUAL TRANSFER SWITCH

ABBREVIATIONS	
NC or N.C.	NORMALLY CLOSED
NF	NON–FUSED
NO or N.O.	NORMALLY OPEN OR NUMBER
NO.	NUMBER
OD	OUTSIDE DIAMETER
OHE	OVERHEAD ELECTRIC
OL	OVERLOAD
OLX	OVERLOAD CONTROL RELAY
P	POLE
PB	PULL BOX OR PUSH BUTTON
PC	PHOTOCELL
PCC	PUMP CONTROL CONSOLE
PFR	PHASE FAILURE RELAY
PH	PHASE
PL.	PLATE
PLC	PROGRAMMABLE LOGIC CONTROLLER
PPR	PHASE PROTECTIVE RELAY
PR.	PAIR OR PAIR CABLE
PT	POTENTIAL TRANSFORMER
PTT	PUSH TO TEST TYPE
PVC	POLYVINYL CHLORIDE
QTY	QUANTITY
RC	REMOTE CONTROL
RCP	RELAY CONTROL PANEL
REC.	CIRCUIT RECLOSURE
RECP	RECEPTACLES
REQD.	REQUIRED
RTD	RESISTANCE TEMPERATURE DETECTOR
RTU	REMOTE TERMINAL UNIT
SC	SURGE CAPACITOR
SCH	SCHEMATIC
SCTB	SHORT CIRCUIT TERMINAL BLOCK
SEC	SECONDS OR SECONDARY
SHLD. OR SH	SHIELD OR SHIELDED
SHT	SHEET
SN OR S/N	SOLID NEUTRAL
SPD	SURGE PROTECTION DEVICES
SSRVS	SOLID–STATE REDUCED VOLTAGE STARTER
SS	STAINLESS STEEL
ST	STARTER
STA.	STATION
STC	SIGNAL TERMINATION CABINET
SV	SOLENOID VALVE
SW	SWITCH
SWGR	SWITCHGEAR
TC	TERMINATION CABINET OR TRAY CABLE
TEL	TELEPHONE
TO	TIME DELAY ON OPENING
TR.	TRIAD
TS	TEMPERATURE SWITCH
TW	TWISTED
TYP	TYPICAL
UG	UNDERGROUND
UPS	UNINTERRUPTIBLE POWER SUPPLY
UTP	UNSHIELDED TWISTED PAIR CABLE
V	VOLTS
VAR.	VARIABLE
VFD	VARIABLE FREQUENCY DRIVE
VFI	VACUUM FAULT INTERUPTER
VO	VALVE OPERATOR
W	WITH, WIRE OR WATT
WP	WEATHERPROOF
WR	WEATHER RESISTANT
XFMR	TRANSFORMER
XMTR	TRANSMITTER
XP	EXPLOSION PROOF

NOTE:
THIS IS A STANDARD LEGEND. THEREFORE, NOT ALL OF THIS INFORMATION MAY BE USED ON THIS PROJECT.



PLAN SYMBOL	DESCRIPTION
b A	LIGHTING FIXTURE "A" – FIXTURE TYPE "b" – SWITCH NUMBER
A	EMERGENCY BATTERY PACK LIGHT FIXTURE "A" – FIXTURE TYPE
X	CEILING MOUNTED EXIT SIGN "X" – FIXTURE TYPE
X	WALL MOUNTED EXIT SIGN ARROW INDICATES DIRECTION OF EGRESS "X" – FIXTURE TYPE
FACP	FIRE ALARM CONTROL PANEL
F	MANUAL PULL STATION
	CEILING MOUNTED STROBE
	WALL MOUNTED STROBE
	SMOKE DETECTOR
	HEAT DETECTOR
	HORN
	COMBINATION STROBE/HORN
	CONDUIT, EXPOSED/SURFACE MOUNTED
	CONDUIT OR DUCTBANK, CONCEALED
	CONDUIT, EXPOSED/SURFACE MOUNTED, TURNING UP
	CONDUIT, EXPOSED/SURFACE MOUNTED, TURNING DOWN
	CONDUIT STUBBED OUT AND CAPPED
OHE OHE	OVERHEAD ELECTRIC LINE
UGE UGE	UNDERGROUND ELECTRIC LINE
OHP OHP	OVERHEAD PRIMARY LINE
UGP UGP	UNDERGROUND PRIMARY LINE
OHS OHS	OVERHEAD SECONDARY LINE
UGS UGS	UNDERGROUND SECONDARY LINE
OHC OHC	OVERHEAD COMMUNICATION LINE
UGC UGC	UNDERGROUND COMMUNICATION LINE
OHFO OHFO	OVERHEAD FIBER OPTIC LINE
UGFO UGFO	UNDERGROUND FIBER OPTIC LINE
	FLEXIBLE METAL CONDUIT
	HEAT TRACE
2(3 #3/0, #2G., 3"C.)	DENOTES A QUANTITY OF TWO (2) 3–INCH CONDUITS EACH CONTAINING THREE NO. 3/0 AWG CONDUCTORS AND ONE NO.2 AWG GROUND CONDUCTOR
2–2/C#16	DENOTES A QUANTITY OF TWO INSTRUMENT CABLES. EACH CONSISTS OF TWO NO.16 AWG CONDUCTORS
3-4"C	THREE 4–INCH CONDUITS
MC1–XXX 4 #14, #14G., ¾"C (2#14 SPARE)	CABLE TAG FOUR #14 CONTROL OR POWER CONDUCTORS, ONE #14 GROUND CONDUCTOR. ALL CONDUCTORS IN A ¾" CONDUIT. TWO OF THE FOUR #14 CONTROL OR POWER CONDUCTORS ARE SPARE.
LA–1,3	HOMERUN, CIRCUITS 1 AND 3 RUN TO PANEL LA 2 #12, #12G., 3/4"C. UNLESS NOTED OTHERWISE
$b	SINGLE POLE SWITCH "b" – INDICATES SWITCH LEG SHALL CONTROL LIGHT FIXTURES WITH "b" – DESIGNATION
$Xc	MULTI POLE SWITCH "x" – INDICATES NUMBER OF POLE "c" – INDICATES SWITCH SHALL CONTROL LIGHT FIXTURES WITH "c" DESIGNATION
$M	MANUAL MOTOR STARTER /DISCONNECT
$3	3 WAY SWITCH
$4	4 WAY SWITCH
$D D	DIMMER LIGHTING CONTROL SWITCH
$TM TM	TIME SWITCH
	DUPLEX RECEPTACLE, 20A, 120V, 2P, 3W "C" – MOUNTED ABOVE COUNTERTOP "GFI" OR "GF" – GROUND FAULT INTERRUPTER TYPE "WP" – WEATHERPROOF
F	FLOOR MOUNTED RECEPTACLE
	SIMPLEX RECEPTACLE, GROUNDED TYPE
	QUADPLEX RECEPTACLE

PLAN SYMBOL	DESCRIPTION
J J	JUNCTION BOX
PB	PULL BOX
TC	TERMINAL CABINET
OS	OCCUPANCY SENSOR
PC	PHOTOCELL
PW	PREWIRED
MH	MANHOLE
M	UTILITY METER
M	MOTORIZED LOUVER
DAMP	INDICATES THAT ALL ELECTRICAL EQUIPMENT AND MATERIALS INSTALLED WITHIN THE ROOM OR AREA IN WHICH THIS NOTATION APPEARS SHALL BE OF NEMA 12 CONSTRUCTION UNLESS OTHERWISE NOTED
WET	INDICATES THAT ALL ELECTRICAL EQUIPMENT AND MATERIALS INSTALLED WITHIN THE ROOM OR AREA IN WHICH THIS NOTATION APPEARS SHALL BE OF NEMA 4 CONSTRUCTION UNLESS OTHERWISE NOTED
CORROSIVE	INDICATES THAT ALL ELECTRICAL EQUIPMENT AND MATERIALS INSTALLED WITHIN THE ROOM OR AREA IN WHICH THIS NOTATION APPEARS SHALL BE OF NEMA 4X CONSTRUCTION UNLESS OTHERWISE NOTED
CLASS I, DIV.1, GROUP D	INDICATES THAT ALL ELECTRICAL EQUIPMENT AND MATERIALS INSTALLED WITHIN THE ROOM OR AREA IN WHICH THIS NOTATION APPEARS SHALL CONFORM TO N.E.C REQUIREMENTS FOR THE HAZARDOUS AREA CLASSIFICATION SHOWN

ONE–LINE OR CONTROL DIAGRAM	PLAN	DESCRIPTION
	OR	PANEL
5	M	MOTOR, NUMBER DESIGNATES HORSEPOWER
VM *	-	VOLTMETER (WITH SWITCH IF 3–PHASE)
AM *	-	AMMETER (WITH SWITCH IF 3–PHASE)
*	-	METER * WM – WATTMETER WHM – WATTHOUR METER WHDM – WATTHOUR DEMAND METER WHDR – WATTHOUR DEMAND RECORDER PF – POWER FACTOR METER ETM – ELAPSED TIME METER TRANSDUCER AX – CURRENT TRANSDUCER WX – WATT TRANSDUCER
#	-	RELAY, NO. AS INDICATED 25 – SYNCHRONISM CHECK RELAY 27 – UNDER VOLTAGE RELAY 38 – BEARING PROTECTIVE DEVICE 40 – LOSS OF EXCITATION RELAY 42 – RUNNING CONTACTOR/PILOT RELAY 46 – REVERSE PHASE/PHASE BALANCE/CURRENT RELAY 47 – PHASE SEQUENCE VOLTAGE RELAY 48 – MACHINE OR TRANSFORMER THERMAL RELAY 50 – INSTANTANEOUS OVERCURRENT RELAY 50G – INSTANTANEOUS GROUND 51 – TIME OVER CURRENT RELAY, GROUNDING RESISTOR TYPE 51N – TIME OVERCURRENT RELAY, RESIDUAL TYPE 51V – TIME OVERCURRENT RELAY WITH VOLTAGE RESTRAINT 59 – OVER VOLTAGE RELAY 60 – NEGATIVE SEQUENCE VOLTAGE RELAY 62 – TIME DELAY RELAY 63 – OVER PRESSURE RELAY 67 – AC DIRECTIONAL OVERCURRENT RELAY 83 – AUTOMATIC SELECTIVE CONTROL OR TRANSFER RELAY 86 – LOCKING–OUT RELAY 87 – DIFFERENTIAL PROTECTIVE RELAY B – SUFFIX INDICATES "BUS" G – SUFFIX INDICATES "GENERATOR" GF – GROUND FAULT IR – INTERPOSING RELAY PFR – PHASE FAILURE, PHASE REVERSAL, UNDERVOLTAGE, OVERVOLTAGE RELAY ST – SHUNT TRIP T – SUFFIX INDICATES "TRANSFORMER" TRP CAP – CAPACITOR TRIP X – SUFFIX INDICATES "AUXILIARY"

THE STATE OF TEXAS

PROJECT ARCHITECT:
HOMER SAENZ, AIA

PROJECT NO. ADG17589A
ISSUE DATE: 04/20/18
DRAWN BY: AT
REVIEWED BY: MTC

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4055 International Plaza, Suite 200
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TEXAS MILITARY FORCES
CONSTRUCTION & FACILITIES MANAGEMENT OFFICE–CFMO
CAMP MABRY P.O. BOX 5218
AUSTIN, TEXAS 78763–5218
(512) 782–6131
FAX (512) 782–1481

STAR CAMPAIGN FY18 - WESLACO
RC MAJOR MAINTENANCE

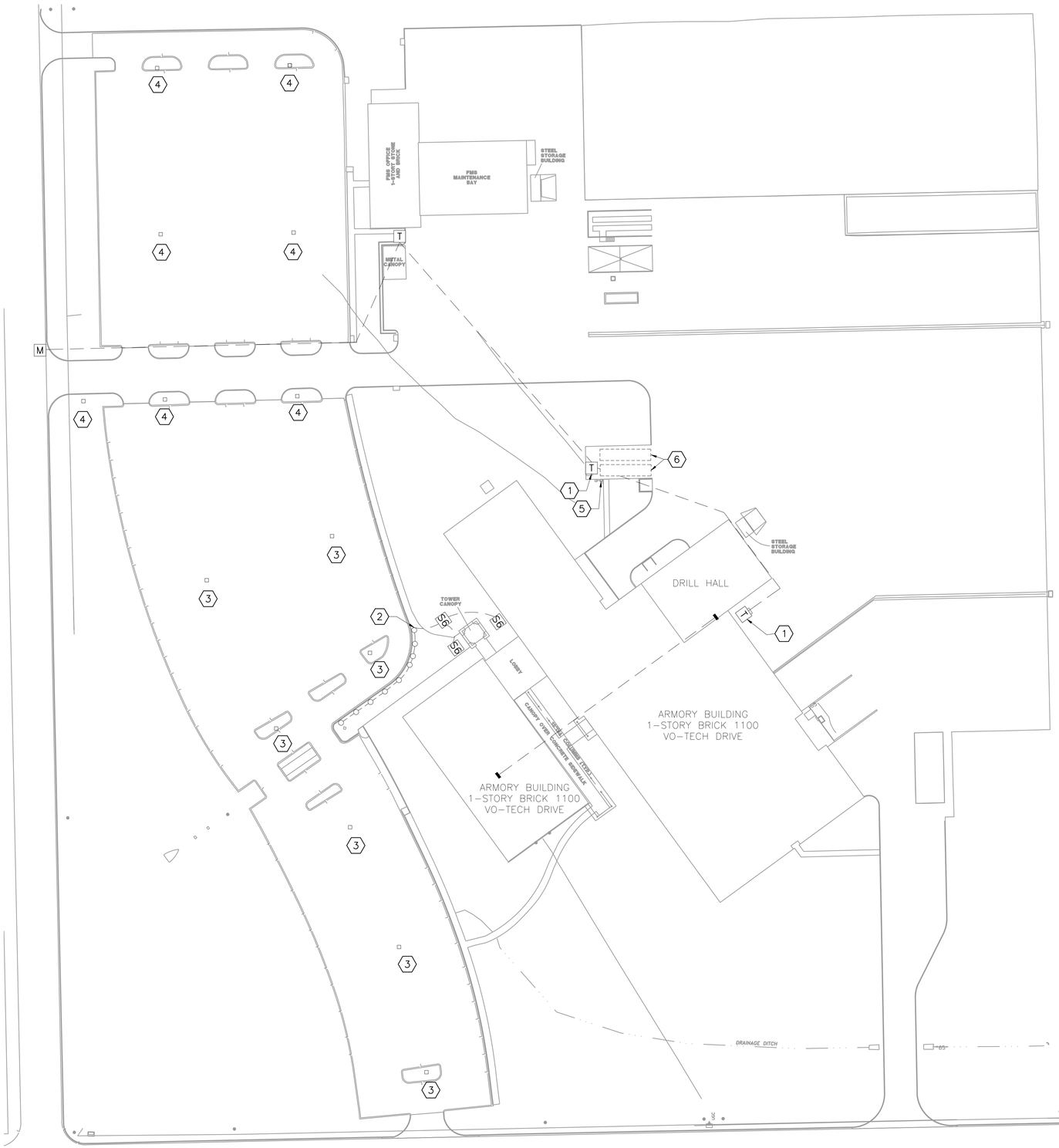
TXARNG CFMO

ELECTRICAL LEGEND

E-0

SHT. 75 of 129

STATE OF TEXAS
TERESA CASTILLÓN
111323
LICENSED
PROFESSIONAL ENGINEER
4/20/18



ELECTRICAL SITE PLAN

1"= 50'-0"

NORTH TRUE

0 50' 100'

SCALE IN FEET

GENERAL NOTES:

1. A SUMMARY OF THE PROJECT BID OPTIONS CAN BE FOUND ON SHEET G-1. DISCIPLINE SPECIFIC BID OPTIONS CAN BE FOUND ON THIS SHEET.
2. THE OWNER SHALL BE GIVEN THE FIRST RIGHT OF REFUSAL FOR ALL EQUIPMENT BEING DEMOLISHED (FIXTURES, SWITCHES, ETC.). THE CONTRACTOR SHALL STORE ALL EQUIPMENT THAT THE OWNER ELECTS TO KEEP AT THE LOCATION ON SITE TO BE DESIGNATED BY THE OWNER. ALL OTHER EQUIPMENT SHALL BE DEMOLISHED AND PROPERLY DISPOSED OF BY THE CONTRACTOR.
3. ALL EXISTING TO REMAIN CIRCUITS SHALL BE TRACED BY THE ELECTRICAL CONTRACTOR AND MARKED ACCORDINGLY BEFORE BEGINNING WORK.

NOTES BY SYMBOL "⬡"

1. EXISTING UTILITY TRANSFORMER TO REMAIN.
2. BOLLARDS WITH 50W HPS LAMPS SHALL REMAIN.
3. LED LIGHT FIXTURES/POLES SHALL REMAIN.
4. EXISTING LIGHT POLES WITH 1000W HPS LAMPS SHALL REMAIN.

(1)(2) 5. EXISTING ELECTRICAL SERVICE SHALL BE USED TO SERVE TEMPORARY BUILDINGS. RE: 2/E-23 FOR ONE-LINE DIAGRAM.

(1)(2) 6. TEMPORARY SHOWER AND RESTROOM BUILDINGS. RE: 1/A-3.

BID OPTIONS "◯"

1. TEMPORARY RESTROOM BUILDING.
2. TEMPORARY SHOWER BUILDING.

STATE OF TEXAS
TERESA CASTILLÓN
111323
LICENSED
PROFESSIONAL ENGINEER
4/20/18
Teresa Castillo

THE STATE OF TEXAS

PROJECT ARCHITECT:
HOMER SAENZ, AIA

PROJECT NO. ADG17589A
ISSUE DATE: 04/20/18
DRAWN BY: AT
REVIEWED BY: MTC

FREESE and NICHOLS
4055 International Plaza, Suite 200
Fort Worth, Texas 76109-4895
Phone - (817) 735-7300
Fax - (817) 735-7491

Freese and Nichols, Inc.
Texas Registered Engineering
Firm F-2144

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AUSTIN, TEXAS 78763-5218
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STAR CAMPAIGN FY18 - WESLACO
RC MAJOR MAINTENANCE

TXARNG CFMO

ELECTRICAL
ELECTRICAL SITE PLAN

E-1

SHT. 76 of 129

GENERAL NOTES:

1. A SUMMARY OF THE PROJECT BID OPTIONS CAN BE FOUND ON SHEET G-1. DISCIPLINE SPECIFIC BID OPTIONS CAN BE FOUND ON THIS SHEET.
2. REMOVE ALL LIGHT FIXTURES, EXIT SIGNS, AND SWITCHES SHOWN HATCHED. REMOVE ASSOCIATED CIRCUITRY TO NEAREST JUNCTION BOX. SWITCH BACK BOXES MAY REMAIN WHERE SWITCHES WILL BE INSTALLED IN SAME LOCATION DURING THE CONSTRUCTION PHASE.
3. FIXTURES AND DEVICES SHOWN AT A LIGHT LINE WEIGHT SHALL REMAIN. RETAIN EXISTING CONDUCTORS AND CONDUITS FOR REUSE WHERE FEASIBLE.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL ABANDONED CONDUIT. FIELD VERIFY ALL REQUIREMENTS. INCLUDE ALL COSTS IN BASE BID.
5. THE OWNER SHALL BE GIVEN THE FIRST RIGHT OF REFUSAL FOR ALL EQUIPMENT BEING DEMOLISHED (FIXTURES, SWITCHES, ETC.). THE CONTRACTOR SHALL STORE ALL EQUIPMENT THAT THE OWNER ELECTS TO KEEP AT THE LOCATION ON SITE TO BE DESIGNATED BY THE OWNER. ALL OTHER EQUIPMENT SHALL BE DEMOLISHED AND PROPERLY DISPOSED OF BY THE CONTRACTOR.
6. THE ELECTRICAL DEMOLITION DRAWINGS ARE DIAGRAMMATIC IN NATURE AND ARE PROVIDED TO CONVEY THE GENERAL SCOPE OF WORK. ALL EXISTING LIGHT FIXTURES, SWITCHES ETC. SHALL BE FIELD VERIFIED PRIOR TO BEGINNING WORK OR SUBMITTING PRICES. IT IS THE INTENT OF THESE DOCUMENTS THAT ALL EXISTING LIGHT FIXTURES, SWITCHES, AND ASSOCIATED RACEWAYS, CIRCUITRY, AND EQUIPMENT IN THIS AREA BE DEMOLISHED UNLESS OTHERWISE NOTED.
7. ALL EXISTING TO REMAIN CIRCUITS SHALL BE TRACED BY THE ELECTRICAL CONTRACTOR AND MARKED ACCORDINGLY BEFORE BEGINNING WORK.
8. ALL VOIDS LEFT FROM CONDUIT/WIRING REMOVAL IN BUILDING EXTERIOR WALLS SHALL BE SEALED WATER TIGHT. ALL VOIDS LEFT FROM CONDUIT/WIRING REMOVAL IN INTERIOR WALLS SHALL BE PATCHED AND FIREPROOFED AS REQUIRED TO MAINTAIN THE INTEGRITY OF THE PARTITION.
9. GROUT AND SEAL ALL PENETRATIONS WHERE CONDUIT HAS BEEN REMOVED.

NOTES BY SYMBOL "⬡"

(5) 1. IF BID OPTION NO. 5 IS SELECTED, REMOVE LIGHT FIXTURE AND SWITCH. RETAIN CONDUCTORS AND CONDUIT FOR REUSE AS MUCH AS PRACTICAL. . ENSURE THAT ADJACENT LIGHT FIXTURES TO REMAIN ARE CONNECTED BACK TO THE APPROPRIATE LIGHTING CIRCUIT. IF BID OPTION NO. 5 IS NOT SELECTED, LIGHT FIXTURES SHALL REMAIN AS THEY ARE.

(6) 2. IF BID OPTION NO. 6 IS SELECTED, REMOVE EXTERIOR LIGHT FIXTURES. RETAIN WIRING AND CONDUIT FOR REUSE AS MUCH AS PRACTICAL. IF BID OPTION NO. 6 IS NOT SELECTED, LIGHT FIXTURES ALL REMAIN AS THEY ARE.

(6) 3. IF BID OPTION NO. 6 IS SELECTED, REMOVE LIGHTING CONTACTORS, TIMERS, AND ASSOCIATED CIRCUITRY BACK TO SOURCE. FIELD VERIFY EXISTING CONDITIONS AND REQUIREMENTS.

(6) 4. IF BID OPTION NO. 6 IS SELECTED, GROUND MOUNTED LIGHT FIXTURES. RETAIN WIRING AND CONDUIT FOR REUSE AS MUCH AS PRACTICAL. IF BID OPTION NO. 6 IS NOT SELECTED, LIGHT FIXTURES ALL REMAIN AS THEY ARE.

BID OPTIONS "◯"

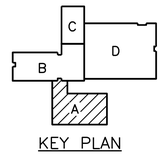
5. RESTROOM/CONFERENCE ROOM RENOVATION IN ADMIN WING.
6. EXTERIOR BUILDING/PARKING IMPROVEMENTS/BUILDING SIGN.



NORTH TRUE / NORTH PLAN

1 — LIGHTING DEMOLITION PLAN – AREA 'A'

1/8"=1'-0"



KEY PLAN

0 4' 8' 16'

1/8"=1'-0"

STATE OF TEXAS
TERESA CASTILLÓN
111323
LICENSED
PROFESSIONAL ENGINEER
4/20/18

PROJECT ARCHITECT:
HOMER SAENZ, AIA

PROJECT NO. ADG17589A
ISSUE DATE: 04/20/18
DRAWN BY: AT
REVIEWED BY: MTC

FREESE NICHOLS
4055 International Plaza, Suite 200
Fort Worth, Texas 76109-4895
Phone - (817) 735-7300
Fax - (817) 735-7491

Freese and Nichols, Inc.
Texas Registered Engineering
Firm F-2144

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STAR CAMPAIGN FY18 - WESLACO
RC MAJOR MAINTENANCE

TXARNG CFMO

ELECTRICAL LIGHTING DEMOLITION PLAN - AREA 'A'

E-2

SHT. 77 of 129

GENERAL NOTES:

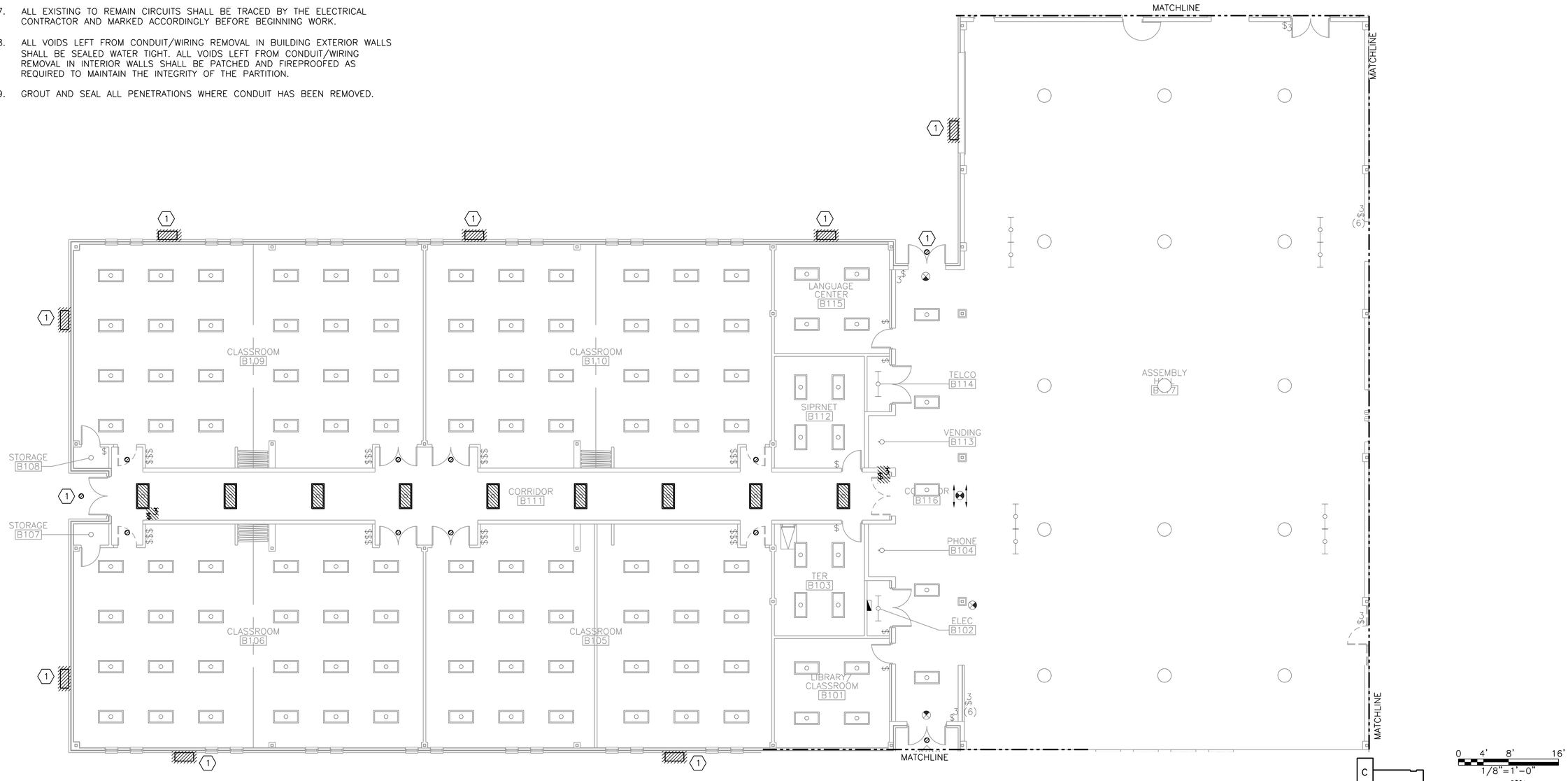
1. A SUMMARY OF THE PROJECT BID OPTIONS CAN BE FOUND ON SHEET G-1. DISCIPLINE SPECIFIC BID OPTIONS CAN BE FOUND ON THIS SHEET.
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3. FIXTURES AND DEVICES SHOWN AT A LIGHT LINE WEIGHT SHALL REMAIN. RETAIN EXISTING CONDUCTORS AND CONDUITS FOR REUSE WHERE FEASIBLE.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL ABANDONED CONDUIT. FIELD VERIFY ALL REQUIREMENTS. INCLUDE ALL COSTS IN BASE BID.
5. THE OWNER SHALL BE GIVEN THE FIRST RIGHT OF REFUSAL FOR ALL EQUIPMENT BEING DEMOLISHED (FIXTURES, SWITCHES, ETC.). THE CONTRACTOR SHALL STORE ALL EQUIPMENT THAT THE OWNER ELECTS TO KEEP AT THE LOCATION ON SITE TO BE DESIGNATED BY THE OWNER. ALL OTHER EQUIPMENT SHALL BE DEMOLISHED AND PROPERLY DISPOSED OF BY THE CONTRACTOR.
6. THE ELECTRICAL DEMOLITION DRAWINGS ARE DIAGRAMMATIC IN NATURE AND ARE PROVIDED TO CONVEY THE GENERAL SCOPE OF WORK. ALL EXISTING LIGHT FIXTURES, SWITCHES ETC. SHALL BE FIELD VERIFIED PRIOR TO BEGINNING WORK OR SUBMITTING PRICES. IT IS THE INTENT OF THESE DOCUMENTS THAT ALL EXISTING LIGHT FIXTURES, SWITCHES, AND ASSOCIATED RACEWAYS, CIRCUITRY, AND EQUIPMENT IN THIS AREA BE DEMOLISHED UNLESS OTHERWISE NOTED.
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9. GROUT AND SEAL ALL PENETRATIONS WHERE CONDUIT HAS BEEN REMOVED.

NOTES BY SYMBOL "⬡"

(6) 1. IF BID OPTION NO. 6 IS SELECTED, REMOVE EXTERIOR LIGHT FIXTURES. RETAIN EXISTING CIRCUITRY FOR REUSE. IF BID OPTION NO. 6 IS NOT SELECTED, LIGHT FIXTURES ALL REMAIN AS THEY ARE.

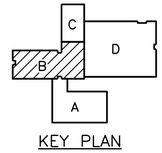
BID OPTIONS "◯"

6. EXTERIOR BUILDING/PARKING IMPROVEMENTS/ BUILDING SIGN.



LIGHTING DEMOLITION PLAN – AREA 'B'

1/8"=1'-0"



KEY PLAN

0 4' 8' 16'

1/8"=1'-0"

TERESA CASTILLÓN 111323 LICENSED PROFESSIONAL ENGINEER 4/20/18

PROJECT ARCHITECT:
HOMER SAENZ, AIA

PROJECT NO. ADG17589A
ISSUE DATE: 04/20/18
DRAWN BY: AT
REVIEWED BY: MTC

FREESE NICHOLS
4055 International Plaza, Suite 200
Fort Worth, Texas 76109-4895
Phone - (817) 735-7300
Fax - (817) 735-7491
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Texas Registered Engineering Firm F-2144

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CAMP MABRY P.O. BOX 5218 AUSTIN, TEXAS 78763-5218
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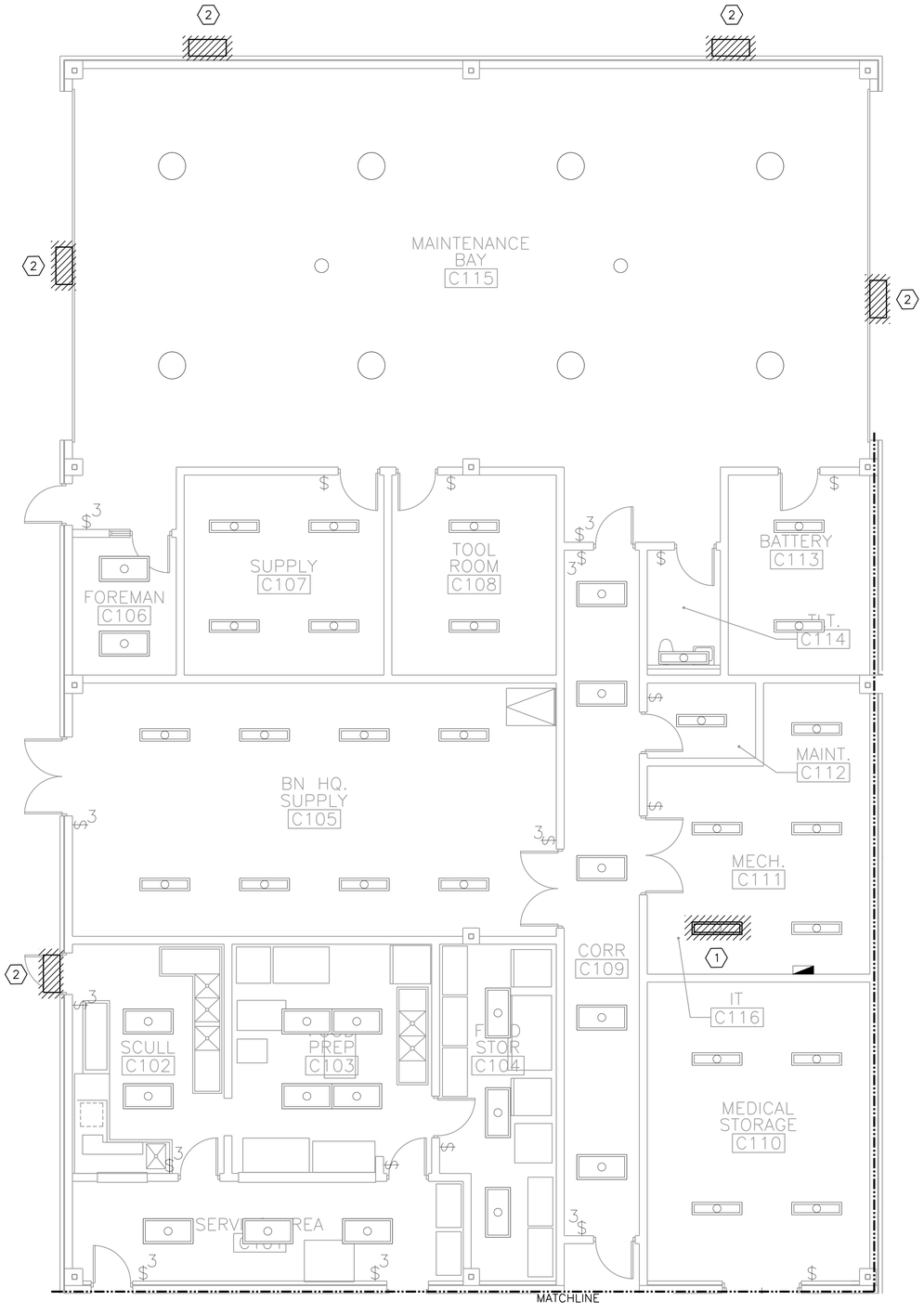
STAR CAMPAIGN FY18 - WESLACO
RC MAJOR MAINTENANCE

TXARNG CFMO

ELECTRICAL LIGHTING DEMOLITION PLAN - AREA 'B'

E-3

SHT. 78 of 129



TRUE NORTH / NORTH — 1/– LIGHTING DEMOLITION PLAN – AREA 'C'

3/16"=1'-0"

GENERAL NOTES:

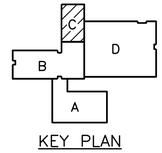
1. REMOVE ALL LIGHT FIXTURES, EXIT SIGNS, AND SWITCHES SHOWN HATCHED. RETAIN EXISTING CIRCUITRY FOR REUSE. SWITCH BACK BOXES MAY REMAIN WHERE SWITCHES WILL BE INSTALLED IN SAME LOCATION DURING THE CONSTRUCTION PHASE.
2. FIXTURES AND DEVICES SHOWN AT A LIGHT LINE WEIGHT SHALL REMAIN. RETAIN EXISTING CONDUCTORS AND CONDUITS FOR REUSE WHERE FEASIBLE.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL ABANDONED CONDUIT. FIELD VERIFY ALL REQUIREMENTS. INCLUDE ALL COSTS IN BASE BID.
4. THE OWNER SHALL BE GIVEN THE FIRST RIGHT OF REFUSAL FOR ALL EQUIPMENT BEING DEMOLISHED (FIXTURES, SWITCHES, ETC.). THE CONTRACTOR SHALL STORE ALL EQUIPMENT THAT THE OWNER ELECTS TO KEEP AT THE LOCATION ON SITE TO BE DESIGNATED BY THE OWNER. ALL OTHER EQUIPMENT SHALL BE DEMOLISHED AND PROPERLY DISPOSED OF BY THE CONTRACTOR.
5. THE ELECTRICAL DEMOLITION DRAWINGS ARE DIAGRAMMATIC IN NATURE AND ARE PROVIDED TO CONVEY THE GENERAL SCOPE OF WORK. ALL EXISTING LIGHT FIXTURES, SWITCHES ETC. SHALL BE FIELD VERIFIED PRIOR TO BEGINNING WORK OR SUBMITTING PRICES. IT IS THE INTENT OF THESE DOCUMENTS THAT ALL EXISTING LIGHT FIXTURES, SWITCHES, AND ASSOCIATED RACEWAYS, CIRCUITRY, AND EQUIPMENT IN THIS AREA BE DEMOLISHED UNLESS OTHERWISE NOTED.
6. ALL EXISTING TO REMAIN CIRCUITS SHALL BE TRACED BY THE ELECTRICAL CONTRACTOR AND MARKED ACCORDINGLY BEFORE BEGINNING WORK.
7. ALL VOIDS LEFT FROM CONDUIT/WIRING REMOVAL IN BUILDING EXTERIOR WALLS SHALL BE SEALED WATER TIGHT. ALL VOIDS LEFT FROM CONDUIT/WIRING REMOVAL IN INTERIOR WALLS SHALL BE PATCHED AND FIREPROOFED AS REQUIRED TO MAINTAIN THE INTEGRITY OF THE PARTITION.
8. GROUT AND SEAL ALL PENETRATIONS WHERE CONDUIT HAS BEEN REMOVED.

NOTES BY SYMBOL "⬡"

1. REMOVE LIGHT FIXTURE. RETAIN EXISTING CIRCUITRY FOR REUSE.
6 2. IF BID OPTION NO. 6 IS SELECTED, REMOVE EXTERIOR LIGHT FIXTURES AND ASSOCIATED CIRCUITRY. IF BID OPTION NO. 6 IS NOT SELECTED, LIGHT FIXTURES ALL REMAIN AS THEY ARE.

BID OPTIONS "◯"

6. EXTERIOR BUILDING/PARKING IMPROVEMENTS/BUILDING SIGN.



KEY PLAN

0 4' 8'

3/16"=1'-0"

STATE OF TEXAS
TERESA CASTILLON
111323
LICENSED
PROFESSIONAL ENGINEER
4/20/18

THE STATE OF TEXAS

PROJECT ARCHITECT:
HOMER SAENZ, AIA

PROJECT NO. ADG17589A
ISSUE DATE: 04/20/18
DRAWN BY: JF
REVIEWED BY: MTC

FREESE and NICHOLS
4055 International Plaza, Suite 200
Fort Worth, Texas 76109-4895
Phone - (817) 735-7300
Fax - (817) 735-7491

Freese and Nichols, Inc.
Texas Registered Engineering
Firm F-2144

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AUSTIN, TEXAS 78763-5218
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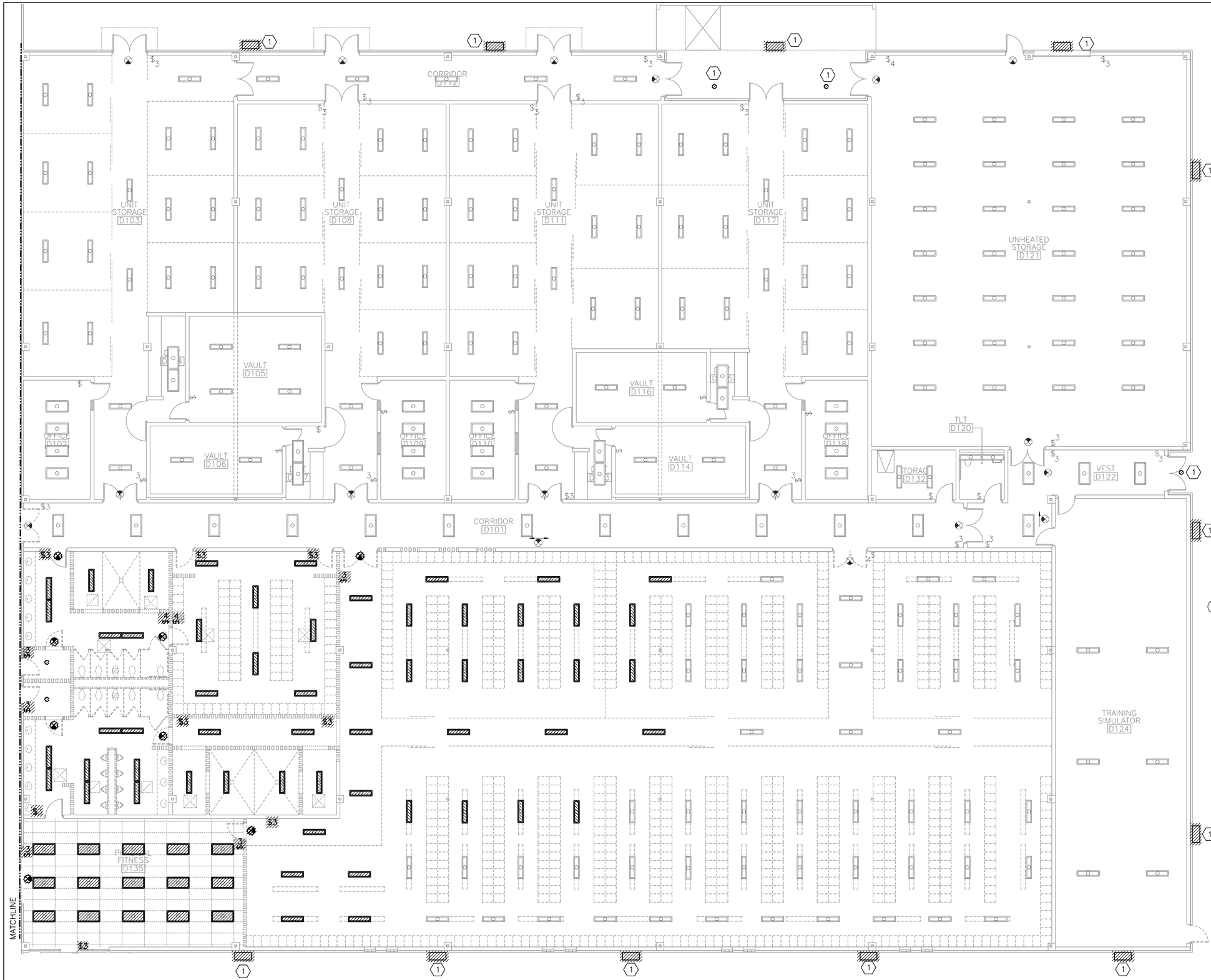
STAR CAMPAIGN FY18 - WESLACO
RC MAJOR MAINTENANCE

TXARNG CFMO

ELECTRICAL LIGHTING DEMOLITION PLAN - AREA 'C'

E-4

SHT. 79 of 129



GENERAL NOTES:

1. A SUMMARY OF THE PROJECT BID OPTIONS CAN BE FOUND ON SHEET G-1. DISCIPLINE SPECIFIC BID OPTIONS CAN BE FOUND ON THIS SHEET.
2. REMOVE ALL LIGHT FIXTURES, EXIT SIGNS, AND SWITCHES SHOWN HATCHED. RETAIN EXISTING CIRCUITRY FOR REUSE. SWITCH BACK BOXES MAY REMAIN WHERE SWITCHES WILL BE INSTALLED IN SAME LOCATION DURING THE CONSTRUCTION PHASE.
3. FIXTURES AND DEVICES SHOWN AT A LIGHT LINE WEIGHT SHALL REMAIN. RETAIN EXISTING CONDUCTORS AND CONDUITS FOR REUSE WHERE FEASIBLE.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL ABANDONED CONDUIT. FIELD VERIFY ALL REQUIREMENTS. INCLUDE ALL COSTS IN BASE BID.
5. THE OWNER SHALL BE GIVEN THE FIRST RIGHT OF REFUSAL FOR ALL EQUIPMENT BEING DEMOLISHED (FIXTURES, SWITCHES, ETC.). THE CONTRACTOR SHALL STORE ALL EQUIPMENT THAT THE OWNER ELECTS TO KEEP AT THE LOCATION ON SITE TO BE DESIGNATED BY THE OWNER. ALL OTHER EQUIPMENT SHALL BE DEMOLISHED AND PROPERLY DISPOSED OF BY THE CONTRACTOR.
6. THE ELECTRICAL DEMOLITION DRAWINGS ARE DIAGRAMMATIC IN NATURE AND ARE PROVIDED TO CONVEY THE GENERAL SCOPE OF WORK. ALL EXISTING LIGHT FIXTURES, SWITCHES ETC. SHALL BE FIELD VERIFIED PRIOR TO BEGINNING WORK OR SUBMITTING PRICES. IT IS THE INTENT OF THESE DOCUMENTS THAT ALL EXISTING LIGHT FIXTURES, SWITCHES, AND ASSOCIATED RACEWAYS, CIRCUITRY, AND EQUIPMENT IN THIS AREA BE DEMOLISHED UNLESS OTHERWISE NOTED.
7. ALL EXISTING TO REMAIN CIRCUITS SHALL BE TRACED BY THE ELECTRICAL CONTRACTOR AND MARKED ACCORDINGLY BEFORE BEGINNING WORK.
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9. GROUT AND SEAL ALL PENETRATIONS WHERE CONDUIT HAS BEEN REMOVED.

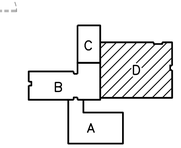
NOTES BY SYMBOL "⬡"

(6) 1. IF BID OPTION NO. 6 IS SELECTED, REMOVE EXTERIOR LIGHT FIXTURES. RETAIN EXISTING CIRCUITRY FOR REUSE. IF BID OPTION NO. 6 IS NOT SELECTED, LIGHT FIXTURES ALL REMAIN AS THEY ARE.

BID OPTIONS "◯"

6. EXTERIOR BUILDING/PARKING IMPROVEMENTS/ BUILDING SIGN.

LIGHTING DEMOLITION PLAN – AREA 'D'
1/8"=1'-0"



KEY PLAN

0 4' 8' 16'
1/8"=1'-0"

STATE OF TEXAS
TERESA CASTILLON
111323
LICENSED
PROFESSIONAL ENGINEER
4/20/18

THE STATE OF TEXAS

PROJECT ARCHITECT:
HOMER SAENZ, AIA
PROJECT NO. ADG17589A
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STAR CAMPAIGN FY18 - WESLACO
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ELECTRICAL LIGHTING DEMOLITION PLAN - AREA 'D'

E-5

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GENERAL NOTES

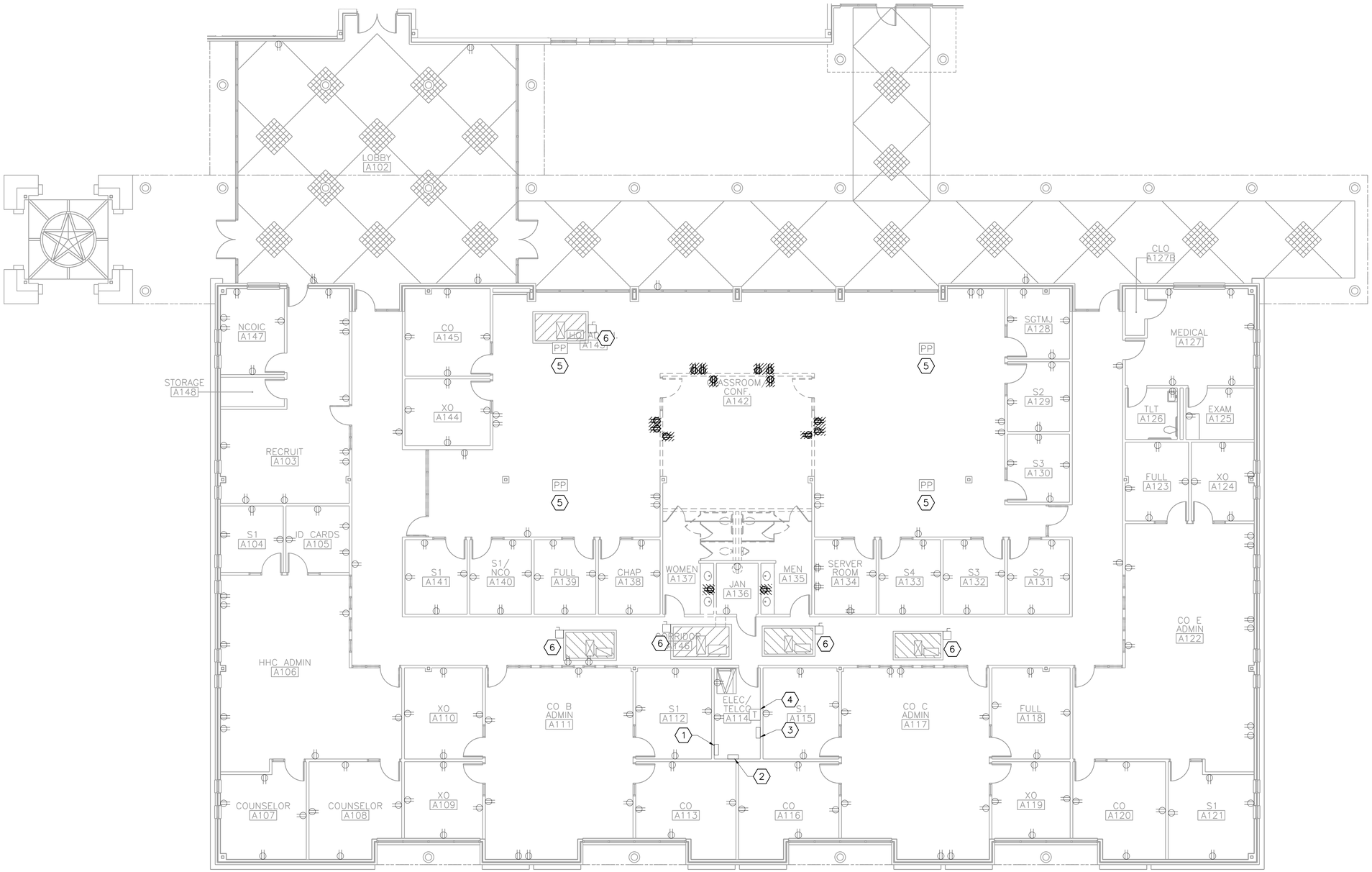
1. RETAIN THE RECEPTACLE CIRCUITS FOR REUSE DURING THE CONSTRUCTION PHASE OF THE PROJECT. LABEL CIRCUIT CONDUCTORS WITH THE ROOM NUMBER SERVED.
2. NOT ALL RECEPTACLES AND OTHER DEVICES ARE SHOWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING RECEPTACLES AND DEVICES AND PROVIDING POWER FOR DEVICES TO REMAIN FOR A COMPLETE AND OPERATIONAL SYSTEM AT NO ADDITIONAL COST TO THE OWNER. THE CONTRACTOR SHALL PROVIDE ALL CONDUCTORS AND CONDUIT AS REQUIRED.
3. ALL EQUIPMENT AND DEVICES SHOWN HATCHED SHALL BE REMOVED. REMOVE ASSOCIATED WIRING AND CONDUIT BACK TO SOURCE.
4. THE ELECTRICAL DEMOLITION DRAWINGS ARE DIAGRAMMATIC IN NATURE AND ARE PROVIDED TO CONVEY THE GENERAL SCOPE OF WORK. ALL EXISTING DEVICES SHALL BE FIELD VERIFIED PRIOR TO BEGINNING WORK OR SUBMITTING PRICES. IT IS THE INTENT OF THESE DOCUMENTS THAT ALL EXISTING ELECTRICAL RACEWAYS, CIRCUITRY, AND ELECTRICAL EQUIPMENT IN THIS AREA BE DEMOLISHED UNLESS OTHERWISE NOTED.
5. THE OWNER SHALL BE GIVEN THE FIRST RIGHT OF REFUSAL FOR ALL EQUIPMENT BEING DEMOLISHED (FIXTURES, GEAR, DISCONNECTS, MOTOR STARTERS, ETC.). THE CONTRACTOR SHALL STORE ALL EQUIPMENT THAT THE OWNER ELECTS TO KEEP AT THE LOCATION ON SITE TO BE DESIGNATED BY THE OWNER. ALL OTHER EQUIPMENT SHALL BE DEMOLISHED AND PROPERLY DISPOSED OF BY THE CONTRACTOR.
6. ALL RECEPTACLES AND JUNCTION BOXES SHOWN HATCHED SHALL BE REMOVED. REMOVE ASSOCIATED WIRING BACK NEAREST JUNCTION BOX. REMOVE ALL SURFACE MOUNTED CONDUIT.
7. ALL EXISTING CIRCUITS TO REMAIN SHALL BE TRACED BY THE ELECTRICAL CONTRACTOR AND MARKED ACCORDINGLY BEFORE BEGINNING WORK.
8. GROUT AND SEAL ALL PENETRATIONS WHERE CONDUIT HAS BEEN REMOVED.
9. (5) ALL RECEPTACLES SHOWN HATCHED ON THIS SHEET ARE PART OF BID OPTION NO. 5. IF BID OPTION NO. 5 IS NOT SELECTED, EXISTING RECEPTACLES SHALL REMAIN AS THEY ARE.

NOTES BY SYMBOL "⬡"

1. 480Y/277V,3ø,4W,400A PANEL "AM1" SHALL REMAIN.
2. 480Y/277V,3ø,4W,125A PANEL "AH1" SHALL REMAIN.
3. 208Y/120V,3ø,4W,225A PANEL "AL1" SHALL REMAIN.
4. 480–208Y/120V,3ø,4W TRANSFORMER SHALL REMAIN.
5. POWER POLE CIRCUITRY SHALL REMAIN.
6. DISCONNECT SWITCH AND ASSOCIATED WIRING AND CONDUCTORS SHALL REMAIN. ASSOCIATED CONVENIENCE RECEPTACLE SHALL REMAIN.

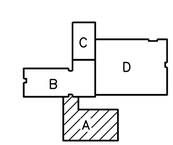
BID OPTIONS "◯"

5. RESTROOM/CONFERENCE ROOM RENOVATION IN ADMIN WING.



NORTH TRUE NORTH PLAN — 1 — POWER DEMOLITION PLAN – AREA 'A'

1/8"=1'-0"



KEY PLAN

0 4' 8' 16'

1/8"=1'-0"

STATE OF TEXAS — TERESA CASTILLÓN — 111323 — LICENSED PROFESSIONAL ENGINEER — 4/20/18

Teresa Castillón

THE STATE OF TEXAS

PROJECT ARCHITECT: HOMER SAENZ, AIA

PROJECT NO. ADG17589A
ISSUE DATE: 04/20/18
DRAWN BY: AT
REVIEWED BY: MTC

FREESE NICHOLS

4055 International Plaza, Suite 200
Fort Worth, Texas 76109-4895
Phone – (817) 735-7300
Fax – (817) 735-7491

Freese and Nichols, Inc.
Texas Registered Engineering
Firm F-2144

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TEXAS MILITARY FORCES
CONSTRUCTION & FACILITIES MANAGEMENT OFFICE–CFMO
AUSTIN, TEXAS 78763-5218
CAMP MABRY P.O. BOX 5218 FAX (512) 782-1481
(512) 782-6131

STAR CAMPAIGN FY18 - WESLACO
RC MAJOR MAINTENANCE

TXARNG CFMO

ELECTRICAL POWER DEMOLITION PLAN - AREA 'A'

E-6

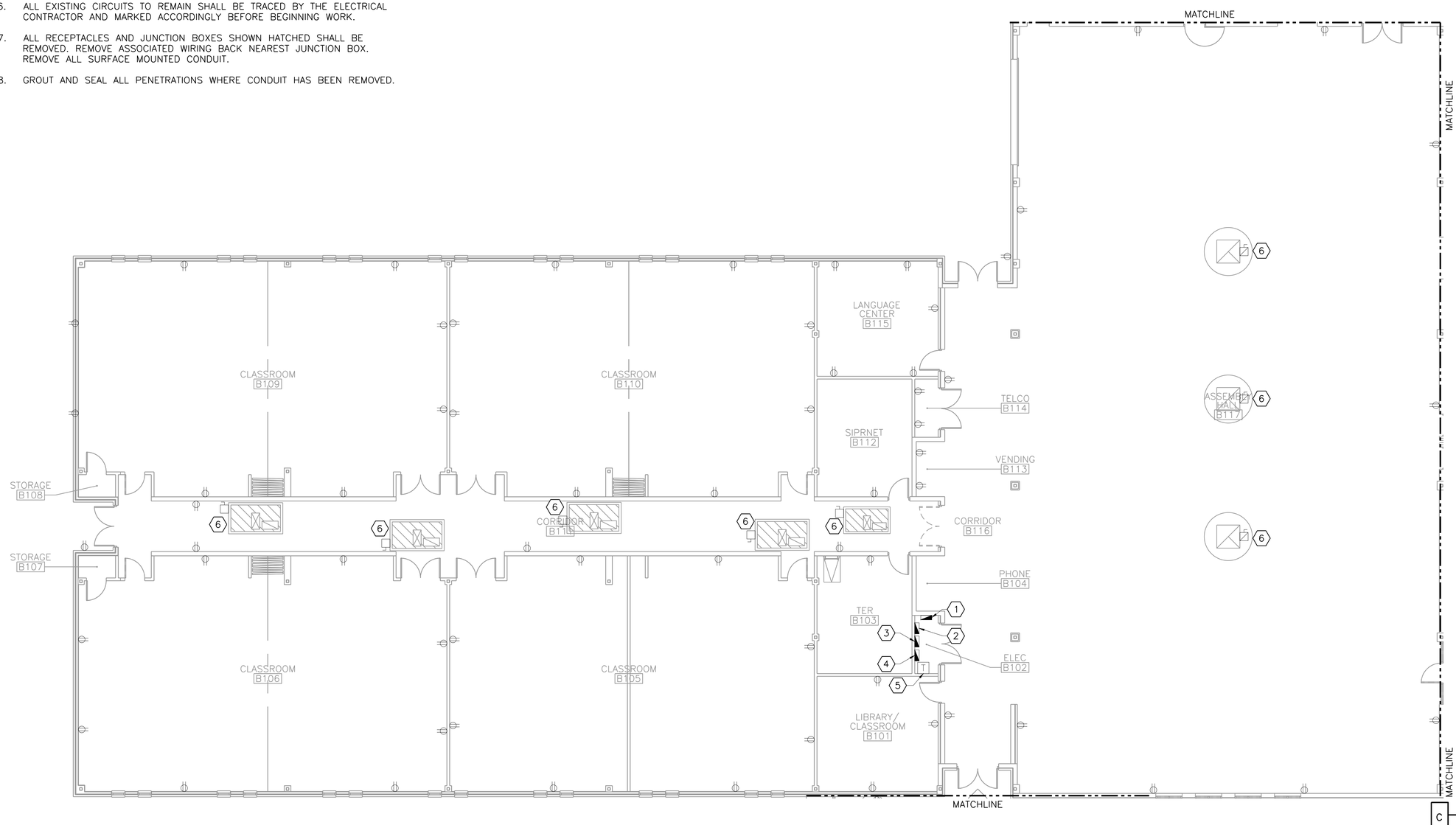
SHT. 81 of 129

GENERAL NOTES

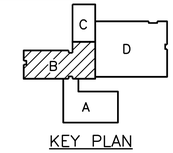
1. RETAIN THE RECEPTACLE CIRCUITS FOR REUSE DURING THE CONSTRUCTION PHASE OF THE PROJECT. LABEL CIRCUIT CONDUCTORS WITH THE ROOM NUMBER SERVED.
2. NOT ALL RECEPTACLES AND OTHER DEVICES ARE SHOWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING RECEPTACLES AND DEVICES AND PROVIDING POWER FOR DEVICES TO REMAIN FOR A COMPLETE AND OPERATIONAL SYSTEM AT NO ADDITIONAL COST TO THE OWNER. THE CONTRACTOR SHALL PROVIDE ALL CONDUCTORS AND CONDUIT AS REQUIRED.
3. ALL EQUIPMENT AND DEVICES SHOWN HATCHED SHALL BE REMOVED. REMOVE ASSOCIATED CIRCUITRY BACK TO SOURCE.
4. THE ELECTRICAL DEMOLITION DRAWINGS ARE DIAGRAMMATIC IN NATURE AND ARE PROVIDED TO CONVEY THE GENERAL SCOPE OF WORK. ALL EXISTING DEVICES SHALL BE FIELD VERIFIED PRIOR TO BEGINNING WORK OR SUBMITTING PRICES. IT IS THE INTENT OF THESE DOCUMENTS THAT ALL EXISTING ELECTRICAL RACEWAYS, CIRCUITRY, AND ELECTRICAL EQUIPMENT IN THIS AREA BE DEMOLISHED UNLESS OTHERWISE NOTED.
5. THE OWNER SHALL BE GIVEN THE FIRST RIGHT OF REFUSAL FOR ALL EQUIPMENT BEING DEMOLISHED (FIXTURES, GEAR, DISCONNECTS, MOTOR STARTERS, ETC.). THE CONTRACTOR SHALL STORE ALL EQUIPMENT THAT THE OWNER ELECTS TO KEEP AT THE LOCATION ON SITE TO BE DESIGNATED BY THE OWNER. ALL OTHER EQUIPMENT SHALL BE DEMOLISHED AND PROPERLY DISPOSED OF BY THE CONTRACTOR.
6. ALL EXISTING CIRCUITS TO REMAIN SHALL BE TRACED BY THE ELECTRICAL CONTRACTOR AND MARKED ACCORDINGLY BEFORE BEGINNING WORK.
7. ALL RECEPTACLES AND JUNCTION BOXES SHOWN HATCHED SHALL BE REMOVED. REMOVE ASSOCIATED WIRING BACK NEAREST JUNCTION BOX. REMOVE ALL SURFACE MOUNTED CONDUIT.
8. GROUT AND SEAL ALL PENETRATIONS WHERE CONDUIT HAS BEEN REMOVED.

NOTES BY SYMBOL "⬡"

1. 208Y/120V,3ø,4W PANEL "BL1" SHALL REMAIN.
2. 208Y/120V,3ø,4W,225A PANEL "AL1" SHALL REMAIN.
3. 480Y/277V,3ø,4W,125A PANEL "BH1" SHALL REMAIN.
4. 480Y/277V,3ø,4W,400A PANEL "BM1" SHALL REMAIN.
5. 480Y–208Y/120V,3ø,4W TRANSFORMER SHALL REMAIN.
6. EXISTING ELECTRICAL DISCONNECT SWITCH AND ASSOCIATED WIRING AND CONDUIT SHALL REMAIN. ASSOCIATED CONVENIENCE RECEPTACLE SHALL REMAIN.



NORTH TRUE / NORTH PLAN — 1 — POWER DEMOLITION PLAN – AREA 'B'
1/8"=1'–0"



KEY PLAN

0 4' 8' 16'
1/8"=1'–0"

STATE OF TEXAS — TERESA CASTILLON — 111323 — LICENSED PROFESSIONAL ENGINEER — 4/20/18

THE STATE OF TEXAS

PROJECT ARCHITECT:
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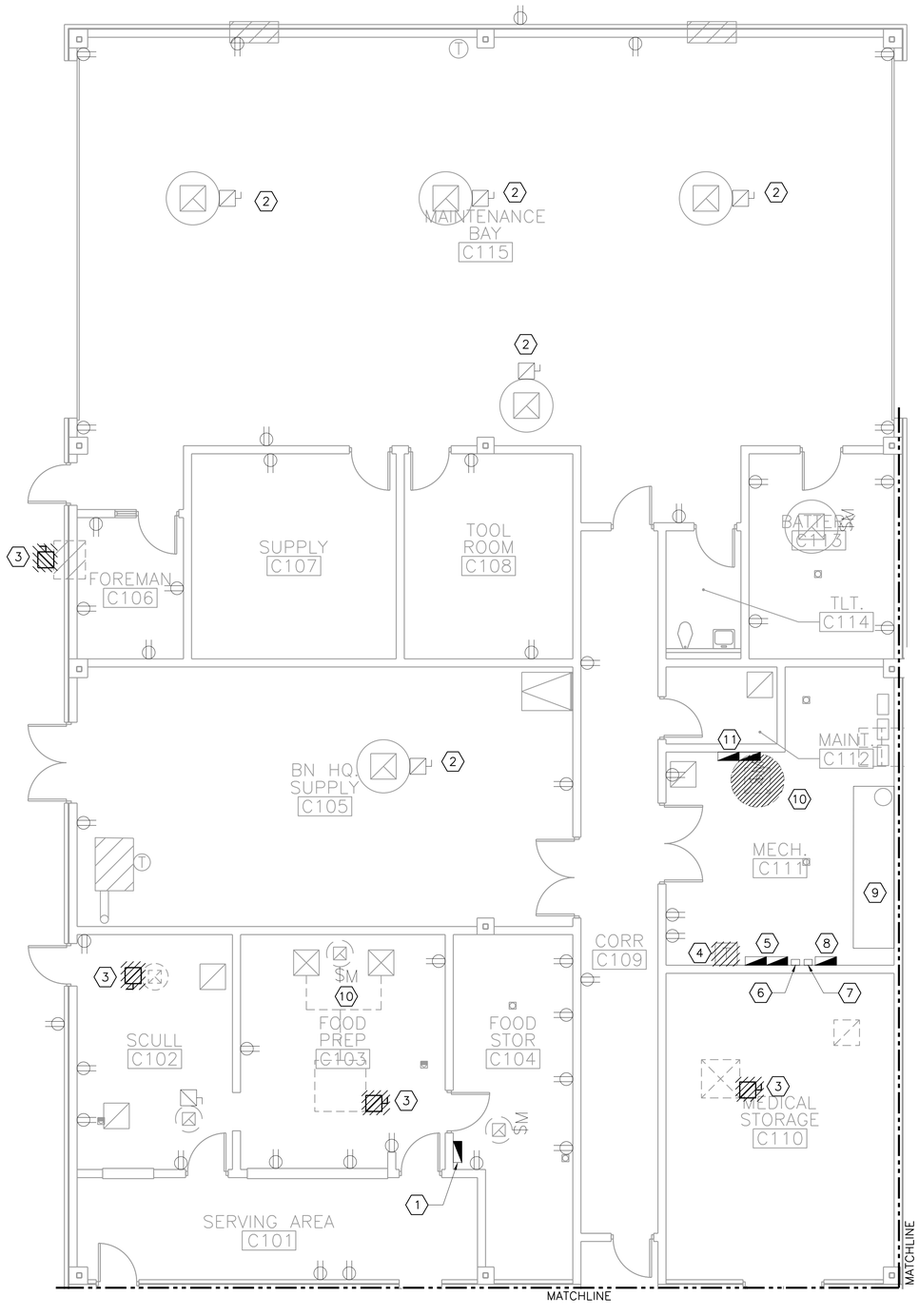
STAR CAMPAIGN FY18 - WESLACO
RC MAJOR MAINTENANCE

TXARNG CFMO

ELECTRICAL POWER DEMOLITION PLAN-AREA 'B'

E-7

SHT. 82 of 129



NORTH TRUE NORTH 1 – PLAN

POWER DEMOLITION PLAN – AREA 'C'

3/16"=1'-0"

GENERAL NOTES

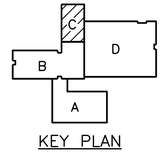
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3. ALL EQUIPMENT AND DEVICES SHOWN HATCHED SHALL BE REMOVED. REMOVE ASSOCIATED CIRCUITRY BACK TO SOURCE.
4. THE ELECTRICAL DEMOLITION DRAWINGS ARE DIAGRAMMATIC IN NATURE AND ARE PROVIDED TO CONVEY THE GENERAL SCOPE OF WORK. ALL EXISTING DEVICES SHALL BE FIELD VERIFIED PRIOR TO BEGINNING WORK OR SUBMITTING PRICES. IT IS THE INTENT OF THESE DOCUMENTS THAT ALL EXISTING ELECTRICAL RACEWAYS, CIRCUITRY, AND ELECTRICAL EQUIPMENT IN THIS AREA BE DEMOLISHED UNLESS OTHERWISE NOTED.
5. THE OWNER SHALL BE GIVEN THE FIRST RIGHT OF REFUSAL FOR ALL EQUIPMENT BEING DEMOLISHED (FIXTURES, GEAR, DISCONNECTS, MOTOR STARTERS, ETC.). THE CONTRACTOR SHALL STORE ALL EQUIPMENT THAT THE OWNER ELECTS TO KEEP AT THE LOCATION ON SITE TO BE DESIGNATED BY THE OWNER. ALL OTHER EQUIPMENT SHALL BE DEMOLISHED AND PROPERLY DISPOSED OF BY THE CONTRACTOR.
6. ALL EXISTING CIRCUITS TO REMAIN SHALL BE TRACED BY THE ELECTRICAL CONTRACTOR AND MARKED ACCORDINGLY BEFORE BEGINNING WORK.
7. ALL RECEPTACLES AND JUNCTION BOXES SHOWN HATCHED SHALL BE REMOVED. REMOVE ASSOCIATED WIRING BACK NEAREST JUNCTION BOX. REMOVE ALL SURFACE MOUNTED CONDUIT.
8. ALL VOIDS LEFT FROM CONDUIT/WIRING REMOVAL IN BUILDING EXTERIOR WALLS SHALL BE SEALED WATER TIGHT. ALL VOIDS LEFT FROM CONDUIT/WIRING REMOVAL IN INTERIOR WALLS SHALL BE PATCHED AND FIREPROOFED AS REQUIRED TO MAINTAIN THE INTEGRITY OF THE PARTITION.
9. GROUT AND SEAL ALL PENETRATIONS WHERE CONDUIT HAS BEEN REMOVED.

NOTES BY SYMBOL "⬡"

1. 480–208Y/120V, 3PH, 4W PANEL KL1 SHALL REMAIN.
2. DISCONNECT SWITCH AND ASSOCIATED WIRING AND CONDUIT SHALL REMAIN.
3. (4) IF BID OPTION NO.4 IS SELECTED, REMOVE DISCONNECT SWITCH AND ALL ASSOCIATED WIRING AND CONDUIT BACK TO SOURCE. IF OPTION IS NOT SELECTED, DISCONNECT AND ASSOCIATED CIRCUITRY SHALL REMAIN.
4. 480Y–208Y/120V,3ø,4W TRANSFORMER "CT1" SHALL BE REMOVED AND RELOCATED. METERS LOCATED ON THE WALL BEHIND TEH TRANSFORMER SHALL BE RELOCATED WITH THE TRANSFORMER.
5. 208Y/120V,3ø,4W,400A PANEL "CL1" SHALL REMAIN.
6. TIMECLOCK SHALL REMAIN.
7. LIGHTING CONTACTOR SHALL REMAIN.
8. 480/277V,3ø,4W,125A PANEL CH1 SHALL REMAIN.
9. 480Y/277V,3ø,4W,1200A MAIN DISTRIBUTION PANEL "DPC" SHALL REMAIN.
10. (4) IF BID OPTION NO.4 IS SELECTED, REMOVE SWITCH AND ALL ASSOCIATED WIRING AND CONDUIT BACK TO SOURCE. IF OPTION IS NOT SELECTED, ELECTRICAL SHALL REMAIN AS IS. RETAIN CONVENIENCE RECEPTACLE.
11. 480Y/277V,3ø,4W,225A PANEL "CM1" SHALL REMAIN.

BID OPTIONS "◯"

4. ADDITIONAL HVAC UPGRADES/REPAIRS/HVLS FANS.



KEY PLAN

0 4' 8'
3/16"=1'-0"

STATE OF TEXAS
TERESA CASTILLON
111323
LICENSED
PROFESSIONAL ENGINEER
4/20/18

THE STATE OF TEXAS

PROJECT ARCHITECT:
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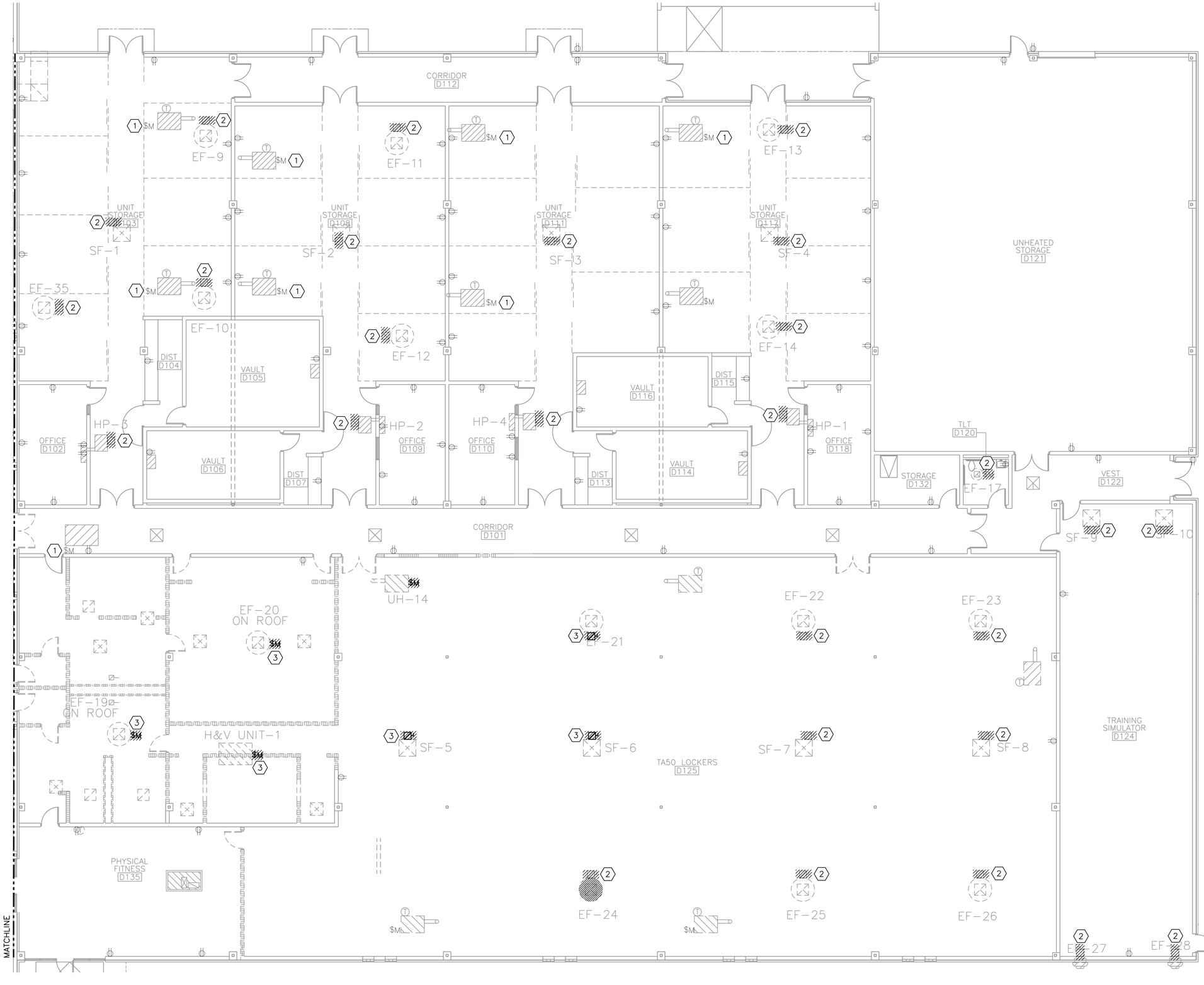
STAR CAMPAIGN FY18 - WESLACO
RC MAJOR MAINTENANCE

TXARNG CFMO

ELECTRICAL POWER DEMOLITION PLAN - AREA 'C'

E-8

SHT. 83 of 129



GENERAL NOTES

1. RETAIN THE RECEPTACLE CIRCUITS FOR REUSE DURING THE CONSTRUCTION PHASE OF THE PROJECT. LABEL CIRCUIT CONDUCTORS WITH THE ROOM NUMBER SERVED.
2. NOT ALL RECEPTACLES AND OTHER DEVICES ARE SHOWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING RECEPTACLES AND DEVICES AND PROVIDING POWER FOR DEVICES TO REMAIN FOR A COMPLETE AND OPERATIONAL SYSTEM AT NO ADDITIONAL COST TO THE OWNER. THE CONTRACTOR SHALL PROVIDE ALL CONDUCTORS AND CONDUIT AS REQUIRED.
3. ALL EQUIPMENT AND DEVICES SHOWN HATCHED SHALL BE REMOVED.
4. THE ELECTRICAL DEMOLITION DRAWINGS ARE DIAGRAMMATIC IN NATURE AND ARE PROVIDED TO CONVEY THE GENERAL SCOPE OF WORK. ALL EXISTING DEVICES SHALL BE FIELD VERIFIED PRIOR TO BEGINNING WORK OR SUBMITTING PRICES. IT IS THE INTENT OF THESE DOCUMENTS THAT ALL EXISTING ELECTRICAL RACEWAYS, CIRCUITRY, AND ELECTRICAL EQUIPMENT IN THIS AREA BE DEMOLISHED UNLESS OTHERWISE NOTED.
5. THE OWNER SHALL BE GIVEN THE FIRST RIGHT OF REFUSAL FOR ALL EQUIPMENT BEING DEMOLISHED (FIXTURES, GEAR, DISCONNECTS, MOTOR STARTERS, ETC.). THE CONTRACTOR SHALL STORE ALL EQUIPMENT THAT THE OWNER ELECTS TO KEEP AT THE LOCATION ON SITE TO BE DESIGNATED BY THE OWNER. ALL OTHER EQUIPMENT SHALL BE DEMOLISHED AND PROPERLY DISPOSED OF BY THE CONTRACTOR.
6. ALL EXISTING CIRCUITS TO REMAIN SHALL BE TRACED BY THE ELECTRICAL CONTRACTOR AND MARKED ACCORDINGLY BEFORE BEGINNING WORK.
7. ALL RECEPTACLES AND JUNCTION BOXES SHOWN HATCHED SHALL BE REMOVED. REMOVE ASSOCIATED WIRING BACK NEAREST JUNCTION BOX. REMOVE ALL SURFACE MOUNTED CONDUIT.
8. ALL VOIDS LEFT FROM CONDUIT/WIRING REMOVAL IN BUILDING EXTERIOR WALLS SHALL BE SEALED WATER TIGHT. ALL VOIDS LEFT FROM CONDUIT/WIRING REMOVAL IN INTERIOR WALLS SHALL BE PATCHED AND FIREPROOFED AS REQUIRED TO MAINTAIN THE INTEGRITY OF THE PARTITION.
9. GROUT AND SEAL ALL PENETRATIONS WHERE CONDUIT HAS BEEN REMOVED.

NOTES BY SYMBOL "⬡"

1. SWITCH AND ASSOCIATED CIRCUITRY SHALL REMAIN.

(4) 2. IF BID OPTION NO.4 IS SELECTED, REMOVE DISCONNECT SWITCH AND ASSOCIATED WIRING AND CONDUIT BACK TO SOURCE. RETAIN 120V CIRCUITRY FOR CONVENIENCE RECEPTACLES FOR REUSE WITH NEW RECEPTACLES.

IF OPTION IS NOT SELECTED, DISCONNECT SWITCH AND ALL ASSOCIATED WIRING AND CONDUIT SHALL REMAIN. RETAIN CONVENIENCE RECEPTACLE.

3. REMOVE DISCONNECT SWITCH AND ASSOCIATED CIRCUITRY BACK TO SOURCE.

BID OPTIONS "◯"

4. ADDITIONAL HVAC UPGRADES/REPAIRS/ HVLS FANS.

POWER DEMOLITION PLAN – AREA 'D'

1/8"=1'-0"

NORTH TRUE / NORTH PLAN

KEY PLAN

0 4' 8' 16'
1/8"=1'-0"

STATE OF TEXAS · TERESA CASTILLON · 111323 · LICENSED PROFESSIONAL ENGINEER · 4/20/18

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ELECTRICAL POWER DEMOLITION PLAN - AREA 'D'

E-9

SHT. 84 of 129

GENERAL NOTES:

1. ALL LIGHT FIXTURES SHOWN DARK AND WITH A LETTER DESIGNATION ARE TO BE PROVIDED UNDER BASE BID. LIGHT FIXTURES SHOWN AT A LIGHT LINE WEIGHT AND WITH NO DESIGNATION ARE EXISTING TO REMAIN.
2. ALL LIGHTING CIRCUITRY SHALL BE #12, WITH A #12G., IN A ¾"C. UNLESS NOTED OTHERWISE, FOR LIGHTING CIRCUITS GREATER THAN 100' PROVIDE #10, WITH A #10G., IN A ¾"C. FOR LIGHTING CIRCUITS GREATER THAN 250' PROVIDE #8, WITH A #8G., IN A ¾"C. PROVIDE ALL CONDUCTORS AND CONDUIT AS REQUIRED FOR A COMPLETE AND OPERATIONAL SYSTEM.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR SIZING AND PROVIDING ALL JUNCTION AND PULL BOXES IN ACCORDANCE WITH THE NEC.
4. CONDUIT SHALL NOT BE ROUTED ON THE OUTSIDE OF THE BUILDING FOR EXTERIOR LIGHTS.
5. ALL EXPOSED CONDUIT AND ASSOCIATED MOUNTING HARDWARE SHALL BE PAINTED TO MATCH THE SURFACE IT IS ATTACHED TO. FIELD VERIFY ALL REQUIREMENTS.
6. REFERENCE E-14 LIGHTING CONTROLS LEGEND FOR SWITCHES' AND SWITCH SENSOR'S.

NOTES BY SYMBOL "⬡"

(5) 1. IF BID OPTION NO. 5 IS SELECTED, PROVIDE LIGHT FIXTURES AND ASSOCIATED CIRCUITRY AS SHOWN IN THE CLASSROOM/CONFERENCE ROOM, WOMEN'S RESTROOM A137, AND MEN'S RESTROOM A135.

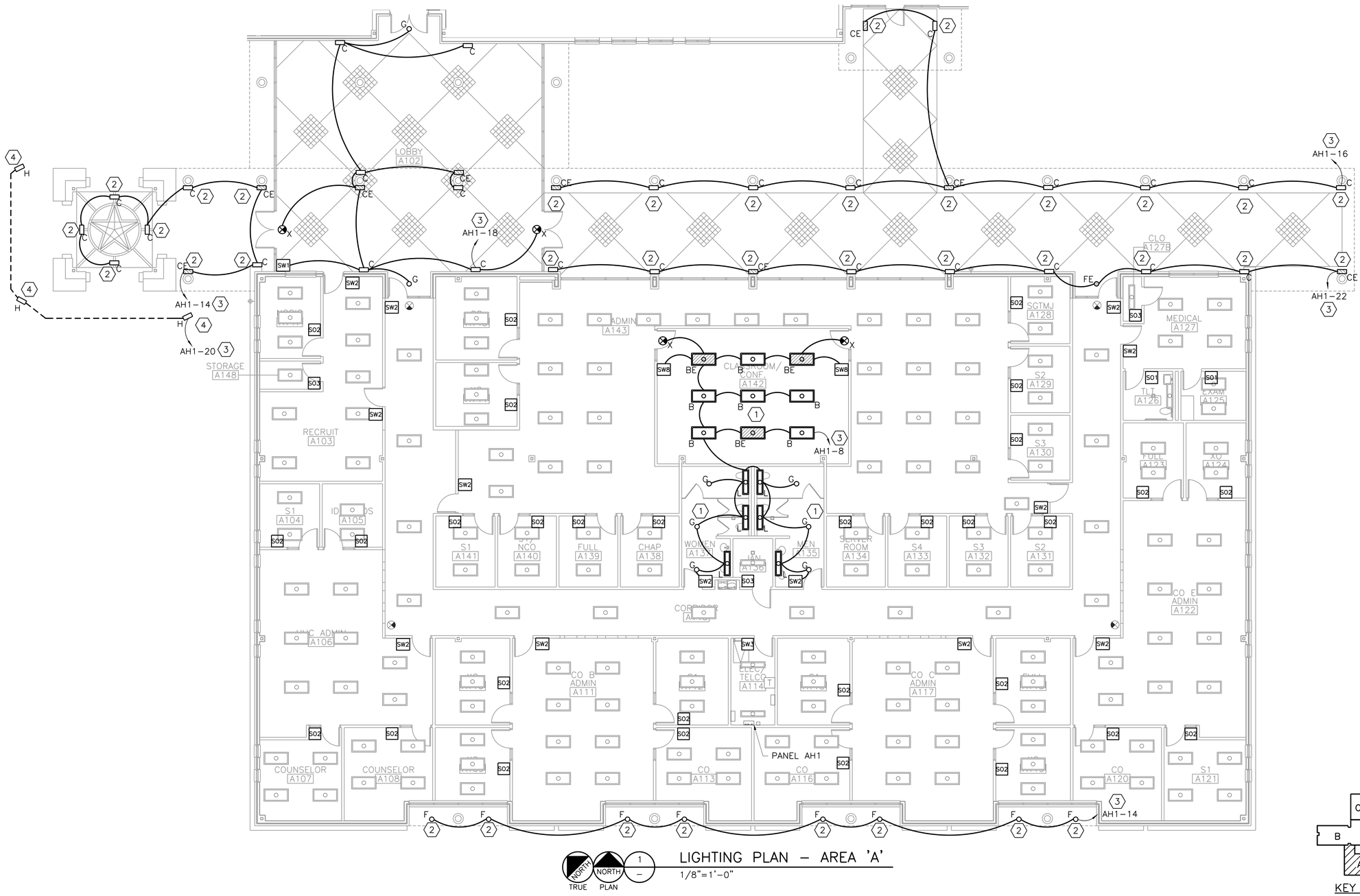
(6) 2. PROVIDE EXTERIOR LIGHT FIXTURE.

3. CONNECT BACK TO EXISTING CIRCUIT. PROVIDE ADDITIONAL WIRING AND CONDUIT AS REQUIRED FOR A COMPLETE AND OPERATIONAL SYSTEM.

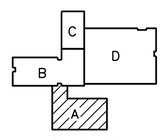
(6) 4. LIGHT FIXTURE SHALL BE MOUNTED IN THE GROUND IN THE SAME LOCATION WHERE THE EXISTING FIXTURES WERE PREVIOUSLY LOCATED.

BID OPTIONS "◯"

5. RESTROOM/CONFERENCE ROOM RENOVATION IN ADMIN WING.
6. EXTERIOR BUILDING/PARKING IMPROVEMENTS/ BUILDING SIGN.



LIGHTING PLAN – AREA 'A'
1/8"=1'-0"



KEY PLAN

0 4' 8' 16'
1/8"=1'-0"

THE STATE OF TEXAS

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HOMER SAENZ, AIA

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ELECTRICAL LIGHTING PLAN - AREA 'A'

E-10

SHT. 85 of 129

STATE OF TEXAS
TERESA CASTILLON
111323
LICENSED
PROFESSIONAL ENGINEER
4/20/18

GENERAL NOTES:

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2. ALL LIGHTING CIRCUITRY SHALL BE #12, WITH A #12G., IN A ¾"C. UNLESS NOTED OTHERWISE, FOR LIGHTING CIRCUITS GREATER THAN 100' PROVIDE #10, WITH A #10G., IN A ¾"C. FOR LIGHTING CIRCUITS GREATER THAN 250' PROVIDE #8, WITH A #8G., IN A ¾"C. PROVIDE ALL CONDUCTORS AND CONDUIT AS REQUIRED FOR A COMPLETE AND OPERATIONAL SYSTEM.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR SIZING AND PROVIDING ALL JUNCTION AND PULL BOXES IN ACCORDANCE WITH THE NEC.
4. CONDUIT SHALL NOT BE ROUTED ON THE OUTSIDE OF THE BUILDING FOR EXTERIOR LIGHTS.
5. ALL EXPOSED CONDUIT AND ASSOCIATED MOUNTING HARDWARE SHALL BE PAINTED TO MATCH THE SURFACE IT IS ATTACHED TO. FIELD VERIFY ALL REQUIREMENTS.
6. REFERENCE E-14 LIGHTING CONTROLS LEGEND FOR SWITCHES' AND SWITCH SENSOR'S.

NOTES BY SYMBOL "⬡"

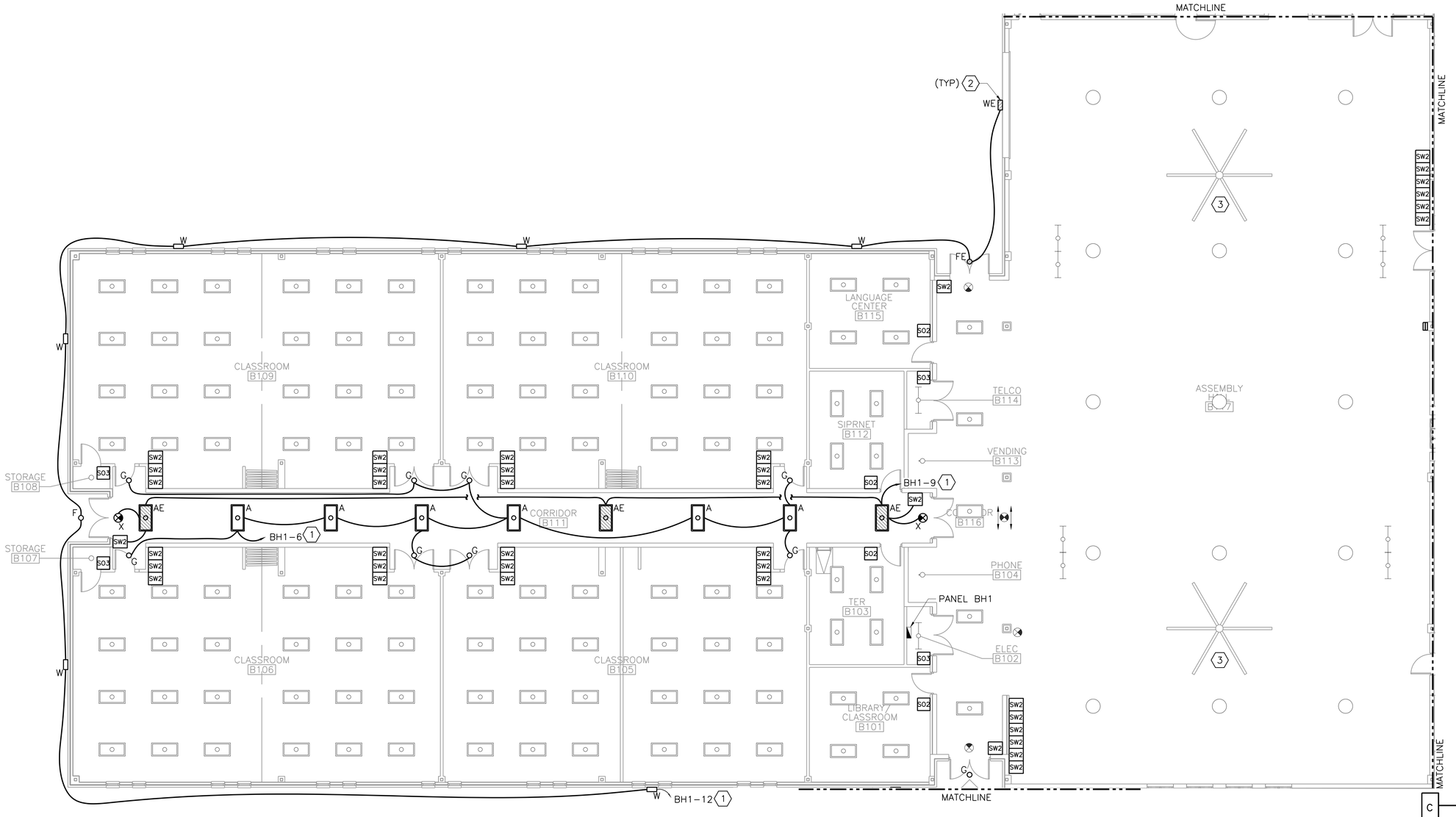
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(6) 2. PROVIDE EXTERIOR LIGHT FIXTURE.

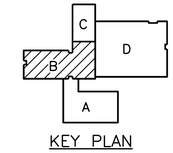
(4) 3. COORDINATE WITH MECHANICAL CONTRACTOR TO ENSURE THAT THE LOCATION OF HVLS FANS WILL NOT INTERFERE WITH EXISTING FIXTURES.

BID OPTIONS "◯"

4. ADDITIONAL HVAC UPGRADES/REPAIRS/HVLS FANS.
6. EXTERIOR BUILDING/PARKING IMPROVEMENTS/ BUILDING SIGN.



LIGHTING PLAN – AREA 'B'
1/8"=1'-0"



KEY PLAN

0 4' 8' 16'
1/8"=1'-0"

STATE OF TEXAS
TERESA CASTILLÓN
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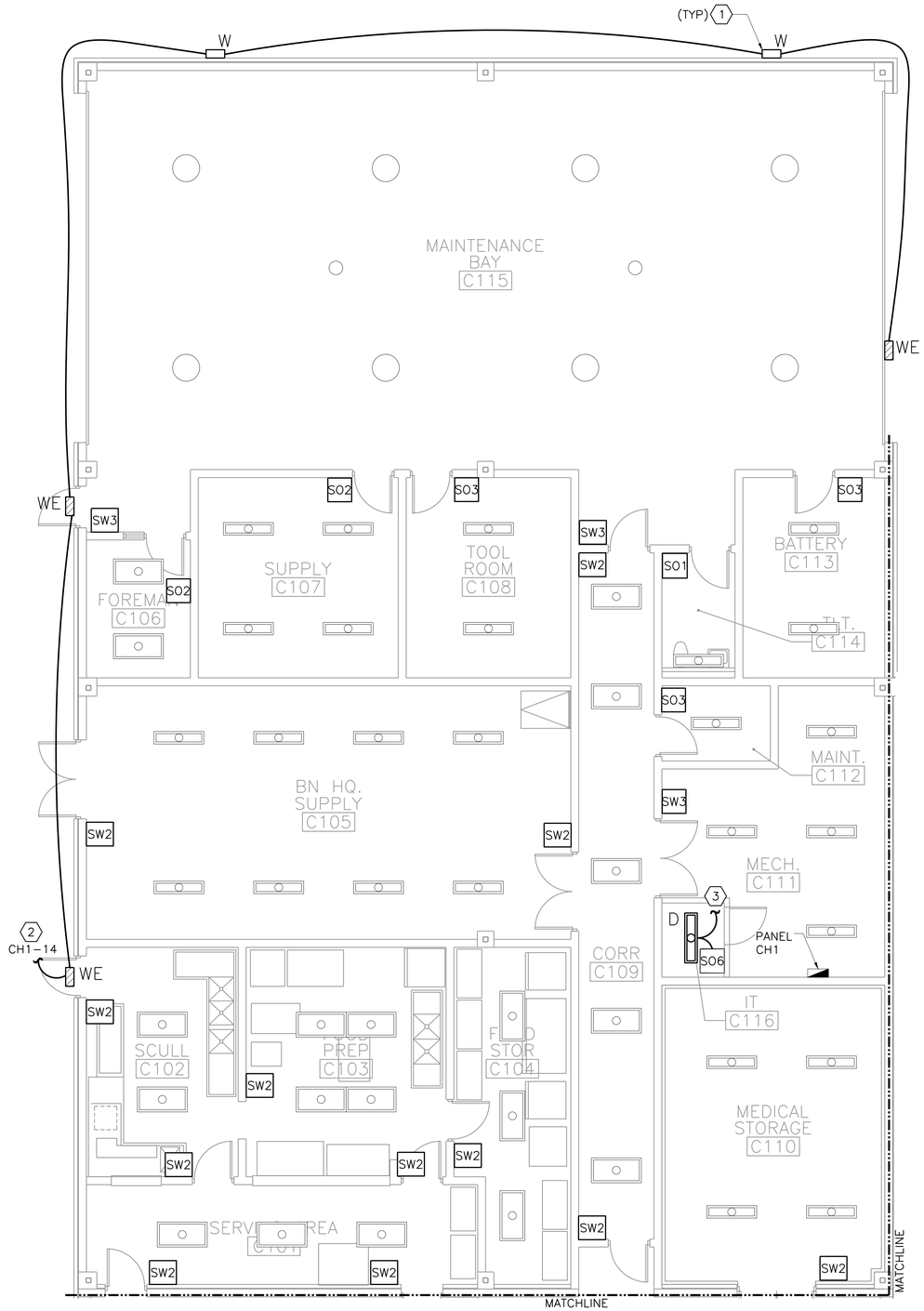
STAR CAMPAIGN FY18 - WESLACO
RC MAJOR MAINTENANCE

TXARNG CFMO

ELECTRICAL LIGHTING PLAN - AREA 'B'

E-11

SHT. 86 of 129



LIGHTING PLAN – AREA 'C'

3/16"=1'-0"

TRUE NORTH PLAN NORTH

GENERAL NOTES:

1. ALL LIGHT FIXTURES SHOWN DARK AND WITH A LETTER DESIGNATION ARE TO BE PROVIDED UNDER BASE BID. LIGHT FIXTURES SHOWN AT A LIGHT LINE WEIGHT AND WITH NO DESIGNATION ARE EXISTING TO REMAIN.
2. ALL LIGHTING CIRCUITRY SHALL BE #12, WITH A #12G., IN A ¾"C. UNLESS NOTED OTHERWISE, FOR LIGHTING CIRCUITS GREATER THAN 100' PROVIDE #10, WITH A #10G., IN A ¾"C. FOR LIGHTING CIRCUITS GREATER THAN 250' PROVIDE #8, WITH A #8G., IN A ¾"C. PROVIDE ALL CONDUCTORS AND CONDUIT AS REQUIRED FOR A COMPLETE AND OPERATIONAL SYSTEM.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR SIZING AND PROVIDING ALL JUNCTION AND PULL BOXES IN ACCORDANCE WITH THE NEC.
4. EMERGENCY LIGHT FIXTURES SHALL BE WIRED WITH UNSWITCHED 'HOT' CONDUCTOR FROM PANELBOARD. CONNECT FIXTURE SO THAT EMERGENCY SIDE IS OPERATIONAL REGARDLESS OF TOGGLE SWITCH POSITION OR OCCUPANCY SENSOR MODE. EMERGENCY FIXTURES SHALL FUNCTION AS "NIGHT LIGHTS".
5. CONDUIT SHALL NOT BE ROUTED ON THE OUTSIDE OF THE BUILDING FOR EXTERIOR LIGHTS.
6. ALL EXPOSED CONDUIT AND ASSOCIATED MOUNTING HARDWARE SHALL BE PAINTED TO MATCH THE SURFACE IT IS ATTACHED TO. FIELD VERIFY ALL REQUIREMENTS.
7. REFERENCE E-14 LIGHTING CONTROLS LEGEND FOR SWITCHES' AND SWITCH SENSOR'S.

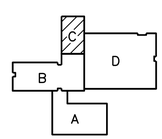
NOTES BY SYMBOL "⬡"

(6) 1. PROVIDE EXTERIOR LIGHT FIXTURE.

2. CONNECT BACK TO EXISTING CIRCUIT. PROVIDE ADDITIONAL WIRING AND CONDUIT AS REQUIRED FOR A COMPLETE AND OPERATIONAL SYSTEM.
3. CONNECT TO EXISTING LIGHTING CIRCUIT SERVING MECHANICAL ROOM. PROVIDE ADDITIONAL WIRING AND CONDUIT AS REQUIRED FOR A COMPLETE AND OPERATIONAL SYSTEM.

BID OPTIONS "◯"

6. EXTERIOR BUILDING/PARKING IMPROVEMENTS/ BUILDING SIGN.



KEY PLAN

0 4' 8'

3/16"=1'-0"



THE STATE OF TEXAS

PROJECT ARCHITECT:
HOMER SAENZ, AIA

PROJECT NO. ADG17589A
ISSUE DATE: 04/20/18
DRAWN BY: JF
REVIEWED BY: MTC

FREESE and NICHOLS
4055 International Plaza, Suite 200
Fort Worth, Texas 76109-4895
Phone - (817) 735-7300
Fax - (817) 735-7491

Freese and Nichols, Inc.
Texas Registered Engineering
Firm F-2144

NO.	DATE	ISSUE
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TEXAS MILITARY FORCES
CONSTRUCTION & FACILITIES MANAGEMENT OFFICE-CFMO

CAMP MABRY P.O. BOX 5218
AUSTIN, TEXAS 78763-5218
(512) 782-6131
FAX (512) 782-1481

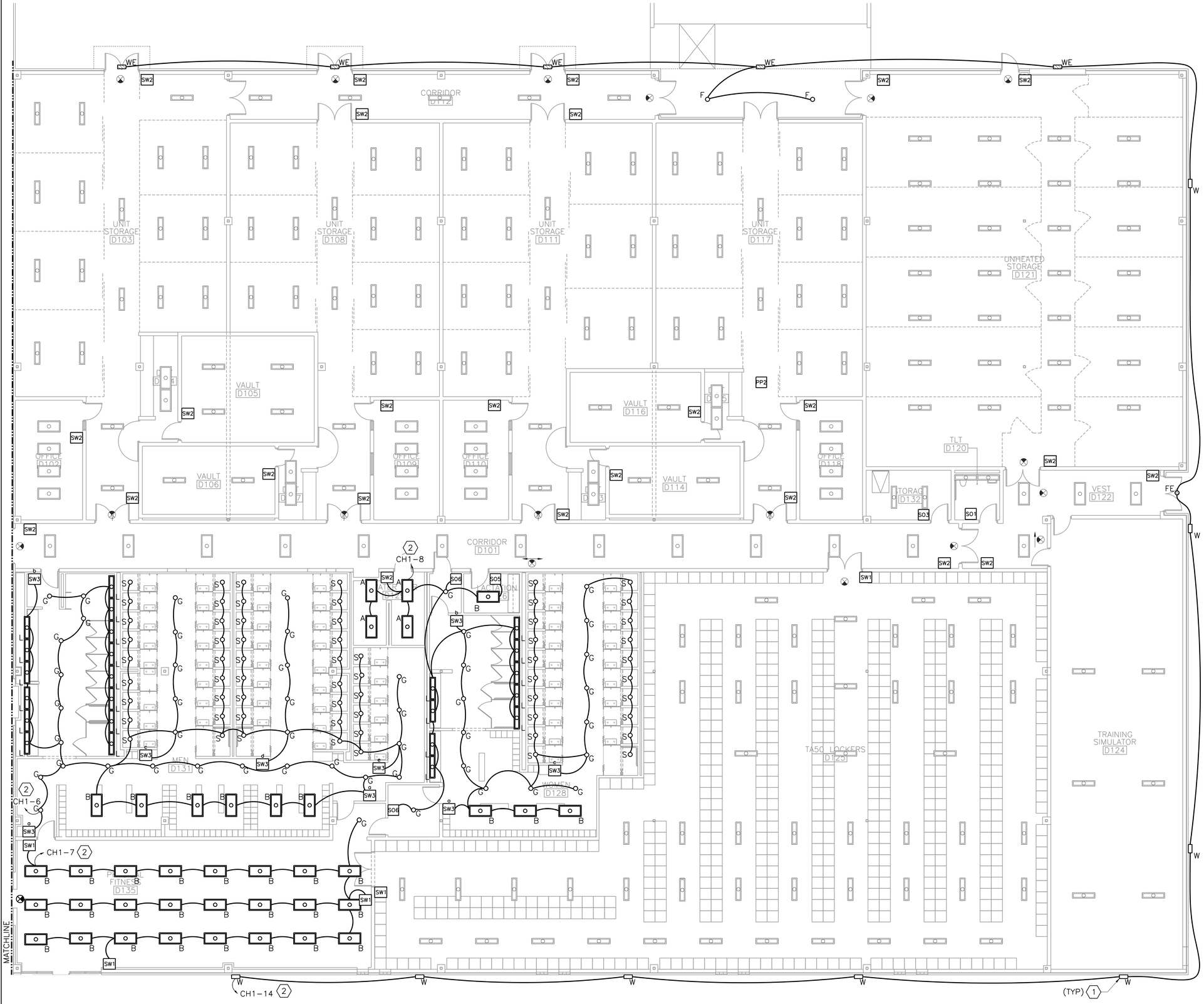
STAR CAMPAIGN FY18 - WESLACO
RC MAJOR MAINTENANCE

TXARNG CFMO

ELECTRICAL LIGHTING PLAN - AREA 'C'

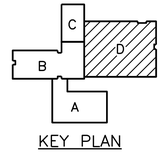
E-12

SHT. 87 of 129



LIGHTING PLAN – AREA 'D'

1/8"=1'-0"



KEY PLAN

0 4' 8' 16'

1/8"=1'-0"

GENERAL NOTES:

1. ALL LIGHT FIXTURES SHOWN DARK AND WITH A LETTER DESIGNATION ARE TO BE PROVIDED UNDER BASE BID. LIGHT FIXTURES SHOWN AT A LIGHT LINE WEIGHT AND WITH NO DESIGNATION ARE EXISTING TO REMAIN.
2. ALL LIGHTING CIRCUITRY SHALL BE #12, WITH A #12G., IN A ¾"C. UNLESS NOTED OTHERWISE, FOR LIGHTING CIRCUITS GREATER THAN 100' PROVIDE #10, WITH A #10G., IN A ¾"C. FOR LIGHTING CIRCUITS GREATER THAN 250' PROVIDE #8, WITH A #8G., IN A ¾"C. PROVIDE ALL CONDUCTORS AND CONDUIT AS REQUIRED FOR A COMPLETE AND OPERATIONAL SYSTEM.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR SIZING AND PROVIDING ALL JUNCTION AND PULL BOXES IN ACCORDANCE WITH THE NEC.
4. EMERGENCY LIGHT FIXTURES SHALL BE WIRED WITH UNSWITCHED 'HOT' CONDUCTOR FROM PANELBOARD. CONNECT FIXTURE SO THAT EMERGENCY SIDE IS OPERATIONAL REGARDLESS OF TOGGLE SWITCH POSITION OR OCCUPANCY SENSOR MODE. EMERGENCY FIXTURES SHALL FUNCTION AS "NIGHT LIGHTS".
5. CONDUIT SHALL NOT BE ROUTED ON THE OUTSIDE OF THE BUILDING FOR EXTERIOR LIGHTS.
6. ALL EXPOSED CONDUIT AND ASSOCIATED MOUNTING HARDWARE SHALL BE PAINTED TO MATCH THE SURFACE IT IS ATTACHED TO. FIELD VERIFY ALL REQUIREMENTS.
7. REFERENCE E-14 LIGHTING CONTROLS LEGEND FOR SWITCHES' AND SWITCH SENSOR'S.

NOTES BY SYMBOL "⬡"

(6) 1. PROVIDE EXTERIOR LIGHT FIXTURE.

2. CONNECT BACK TO EXISTING CIRCUIT BREAKER. PROVIDE ADDITIONAL WIRING AND CONDUIT AS REQUIRED FOR A COMPLETE AND OPERATIONAL SYSTEM.

BID OPTIONS "◯"

6. EXTERIOR BUILDING/PARKING IMPROVEMENTS/ BUILDING SIGN.

THE STATE OF TEXAS

PROJECT ARCHITECT:
HOMER SAENZ, AIA

PROJECT NO. ADG17589A
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STAR CAMPAIGN FY18 - WESLACO
RC MAJOR MAINTENANCE

TXARNG CFMO

ELECTRICAL LIGHTING PLAN - AREA 'D'

E-13

SHT. 88 of 129

STATE OF TEXAS
TERESA CASTILLON
111323
LICENSED
PROFESSIONAL ENGINEER
4/20/18

GENERAL NOTES:

1. CONTRACTOR SHALL BE RESPONSIBLE FOR SIZING AND PROVIDING ALL JUNCTION AND PULL BOXES IN ACCORDANCE WITH THE NEC.
2. CONTRACTOR SHALL ADJUST OCCUPANCY SENSORS IN ALL AREAS TO COORDINATE WITH ROOM CIRCULATION PATTERNS. ADJUST ALL TIMED EVENTS (FOR EXAMPLE, 'OFF' DELAY) WHEN ROOM IS UNOCCUPIED TO COORDINATE WITH OWNERS' REQUIREMENTS.
3. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL OCCUPANCY SENSORS/POWER PACKS AND ASSOCIATED POWER AND CONTROLS CABLING FOR A COMPLETE AND OPERATIONAL SYSTEM. INSTALL ALL DEVICES, BACKBOXES, CONDUIT, AND ACCESSORIES IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATION 26 09 23 LIGHTING CONTROL DEVICES.
4. AT LOCATIONS WHERE ROOM LIGHT FIXTURES ARE CONTROLLED THROUGH THE USE OF OCCUPANCY SENSORS, PROVIDE THE NUMBER OF SENSORS AND LOCATE THE UNITS AS REQUIRED FOR COMPLETE ROOM COVERAGE. WHERE MORE THAN ONE SENSOR IS LOCATED IN A COMMON SPACE, CONNECT THE UNITS SUCH THAT DETECTION OF OCCUPANCY FROM EITHER UNIT WILL ENERGIZE THE ROOM LIGHTING. WHERE TOGGLE OR DIMMER SWITCHES ARE SHOWN IN CONJUNCTION WITH OCCUPANCY SENSORS, CONNECT THE SWITCH(ES) TO DE-ENERGIZE THE ROOM LIGHTING REGARDLESS OF OCCUPANCY.
5. THE OCCUPANCY SENSORS SHOWN ON THE PLANS IS CONCEPTUAL AND IS NOT INTENDED TO INDICATE THE NUMBER OF OCCUPANCY SENSORS REQUIRED FOR COMPLETE COVERAGE IN AN AREA. THE CONTRACTOR SHALL SUBMIT A PLAN SHOWING OCCUPANCY SENSOR LOCATIONS AND COVERAGE, POWER PACKS, ETC. AS AN OFFICIAL SUBMITTAL TO THE ENGINEER FOR APPROVAL.
6. [1] ALL OCCUPANCY SENSORS ASSOCIATED POWER PACKS, SWITCHES, AND WIRING ARE PART OF SECO OPTION NO. 1.
7. REFERENCE E-27 AND E-28 FOR CONTROL DIAGRAMS.

SECO OPTIONS "□"

1. PROVIDE OCCUPANCY SENSORS

NOTES BY SYMBOL "⬡"

1. FIELD VERIFY OPTIMAL LOCATION FOR PHOTOCELL. PHOTOCELL SHALL FACE NORTH.
2. VIA PHOTOCELL.

WIRE LEGEND

CAT5e
CAT5e
PRE-TERMINATED CAT5e CABLE

LIGHTING CONTROLS LEGEND

BG1
NBRG 8 KIT
BRIDGE, KIT

DP1
NPP16 D SA
POWER/RELAY PACK, OCCUPANCY CONTROLLED DIMMING, VACANCY (DEFAULT) OR AUTO-ON

DP3
NPP16 D
POWER/RELAY PACK, OCCUPANCY CONTROLLED DIMMING

OS1
NCM PDT 10
LOW VOLTAGE CEILING MOUNT SENSOR, PASSIVE DUAL TECHNOLOGY, LARGE MOTION / EXTENDED RANGE 360° LENS

OS2
NCM 10
LOW VOLTAGE CEILING MOUNT SENSOR, LARGE MOTION / EXTENDED RANGE 360° LENS

OS3
NCM 6
LOW VOLTAGE CEILING MOUNT SENSOR, HIGH BAY 360° LENS

OS4
NCM PDT 10 LT
LOW VOLTAGE CEILING MOUNT SENSOR, PASSIVE DUAL TECHNOLOGY, LARGE MOTION / EXTENDED RANGE 360° LENS, LOW TEMPERATURE / HIGH HUMIDITY

LIGHTING CONTROLS LEGEND

PC1
NCM ADCX
LOW VOLTAGE CEILING MOUNT SENSOR, PHOTOCONTROL W/ AUTO DIMMING; NO WIRES

PC2
LSA APS OL

PL1
ARP INTENC08 NLT
ACUITY RELAY PANEL, INCLUDE INT AND ENC, 8-SIZE, NLIGHT

PP1
NPP16
POWER/RELAY PACK

PP2
NPP16 SA
POWER/RELAY PACK, VACANCY (DEFAULT) OR AUTO-ON

PP3
NPP16 LT
POWER/RELAY PACK, LOW TEMPERATURE / HIGH HUMIDITY

PP4
NPP16 SA LT
POWER/RELAY PACK, VACANCY (DEFAULT) OR AUTO-ON, LOW TEMPERATURE / HIGH HUMIDITY

SC2
NECY MVOLT BAC ENC GFXK
NLIGHT ECLYPSE, 120-277 VAC, BACNET, 14 1/4"H X 14 1/4"W X 4"D METAL ENCLOSURE FOR ECLYPSE ENERGYSYTE OR NLIGHT ECLYPSE., NGWY2 GFX AND PS 150 POWER SUPPLY WITH CAT5 CABLE

SO1
WSX PDT XX
WALL SWITCH SENSOR, PASSIVE DUAL TECHNOLOGY

SO2
WSX PDT SA XX
WALL SWITCH SENSOR, PASSIVE DUAL TECHNOLOGY, VACANCY (DEFAULT) OR AUTO-ON

SO3
WSX SA XX
WALL SWITCH SENSOR, VACANCY (DEFAULT) OR AUTO-ON

SO4
WSX XX
WALL SWITCH SENSOR

SO5
WSX PDT D SA XX
WALL SWITCH SENSOR, PASSIVE DUAL TECHNOLOGY, OCCUPANCY CONTROLLED DIMMING, VACANCY (DEFAULT) OR AUTO-ON

SO6
NWSX LV XX
WALL SWITCH SENSOR, LOW VOLTAGE

SW1
NPODM DX XX
LOW VOLTAGE PUSH-BUTTON WALLPOD, RAISE/LOWER DIMMING WITHOUT WIRES

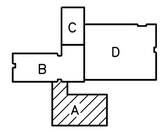
SW2
NPODM XX
LOW VOLTAGE PUSH-BUTTON WALLPOD

SW3
NPODM XX LT
LOW VOLTAGE PUSH-BUTTON WALLPOD, LOW TEMPERATURE / HIGH HUMIDITY

SW8
NPODM 4S DX XX
LOW VOLTAGE PUSH-BUTTON WALLPOD, 4 SCENE CONTROL, RAISE/LOWER DIMMING WITHOUT WIRES



LIGHTING CONTROLS PLAN – AREA 'A'
1/8"=1'-0"



KEY PLAN

0 4' 8' 16'
1/8"=1'-0"

TERESA CASTILLON
111323
LICENSED
PROFESSIONAL ENGINEER
4/20/18

THE STATE OF TEXAS

PROJECT ARCHITECT:
HOMER SAENZ, AIA
PROJECT NO. ADG17589A
ISSUE DATE: 04/20/18
DRAWN BY: AT
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Phone - (817) 735-7300
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CAMP MABRY P.O. BOX 5218 AUSTIN, TEXAS 78763-5218
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STAR CAMPAIGN FY18 - WESLACO
RC MAJOR MAINTENANCE

TXARNG CFMO

ELECTRICAL LIGHTING CONTROLS PLAN - AREA 'A'

E-14

SHT. 89 of 129

GENERAL NOTES:

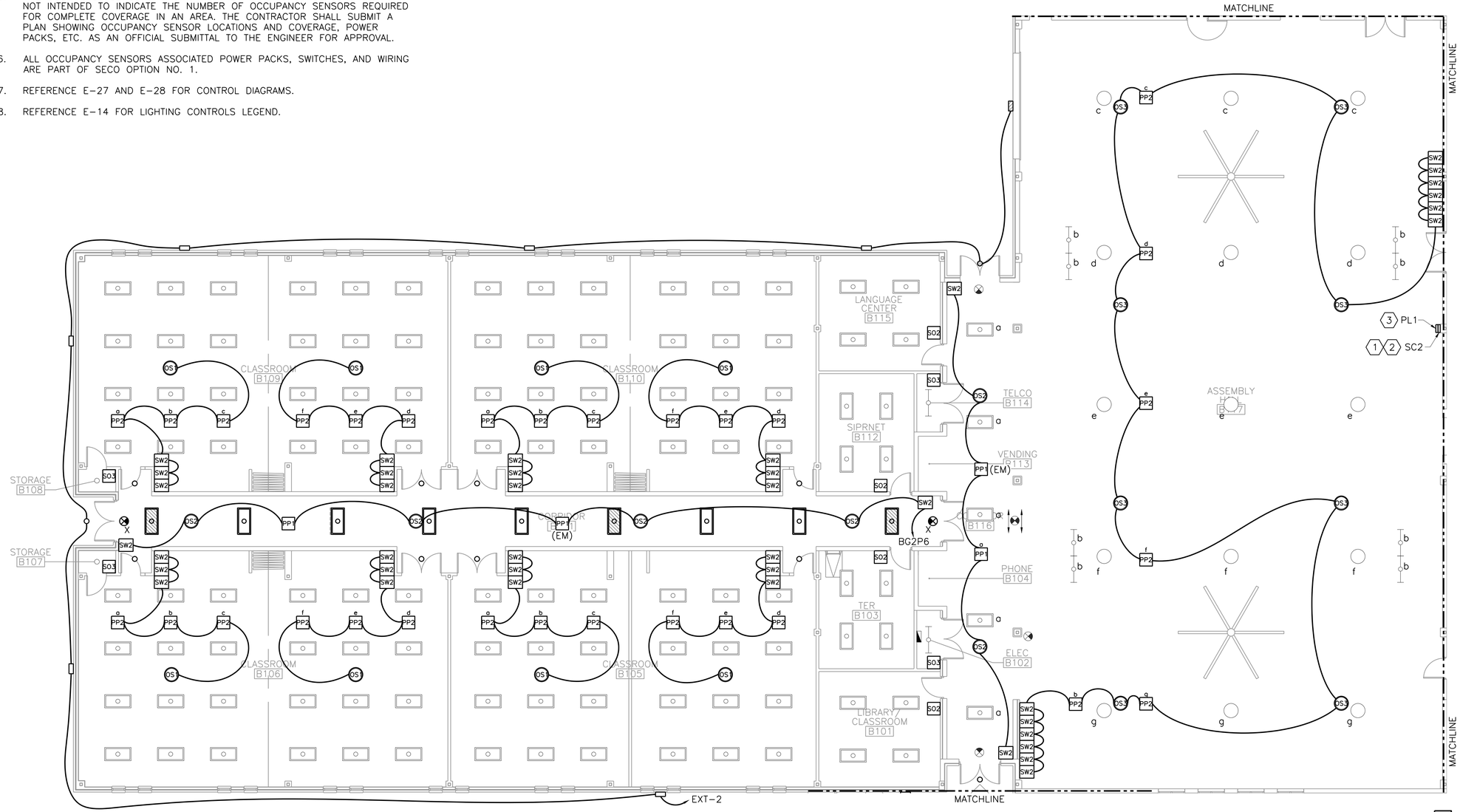
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4. AT LOCATIONS WHERE ROOM LIGHT FIXTURES ARE CONTROLLED THROUGH THE USE OF OCCUPANCY SENSORS, PROVIDE THE NUMBER OF SENSORS AND LOCATE THE UNITS AS REQUIRED FOR COMPLETE ROOM COVERAGE. WHERE MORE THAN ONE SENSOR IS LOCATED IN A COMMON SPACE, CONNECT THE UNITS SUCH THAT DETECTION OF OCCUPANCY FROM EITHER UNIT WILL ENERGIZE THE ROOM LIGHTING. WHERE TOGGLE OR DIMMER SWITCHES ARE SHOWN IN CONJUNCTION WITH OCCUPANCY SENSORS, CONNECT THE SWITCH(ES) TO DE-ENERGIZE THE ROOM LIGHTING REGARDLESS OF OCCUPANCY.
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7. REFERENCE E-27 AND E-28 FOR CONTROL DIAGRAMS.
8. REFERENCE E-14 FOR LIGHTING CONTROLS LEGEND.

NOTES BY SYMBOL "⬡"

1. [1] PROVIDE NLIGHT ECLYPSE TIME-BASE CONTROLLER (NECY) FOR INTERIOR LIGHTING.
2. [2] IF SECO OPTION NO. 2 IS SELECTED, PROVIDE CONNECTION TO BUILDING AUTOMATION SYSTEM (BAS). RE: MECHANICAL SHEETS FOR ADDITIONAL INFORMATION
3. [1] PROVIDE NLIGHT ENABLED RELAY PANEL FOR EXTERIOR LIGHTS ARP INTENC08. RE: 1/E-28 FOR ADDITIONAL INFORMATION

SECO OPTIONS "□"

1. PROVIDE OCCUPANCY SENSORS.
2. PROVIDE DDC CONTROL SYSTEM.



LIGHTING CONTROLS PLAN – AREA 'B'
1/8"=1'-0"

KEY PLAN

0 4' 8' 16'
1/8"=1'-0"

TERESA CASTILLÓN 111323 LICENSED PROFESSIONAL ENGINEER 4/20/18

PROJECT ARCHITECT:
HOMER SAENZ, AIA
PROJECT NO. ADG17589A
ISSUE DATE: 04/20/18
DRAWN BY: AT
REVIEWED BY: MTC

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4055 International Plaza, Suite 200
Fort Worth, Texas 76109-4895
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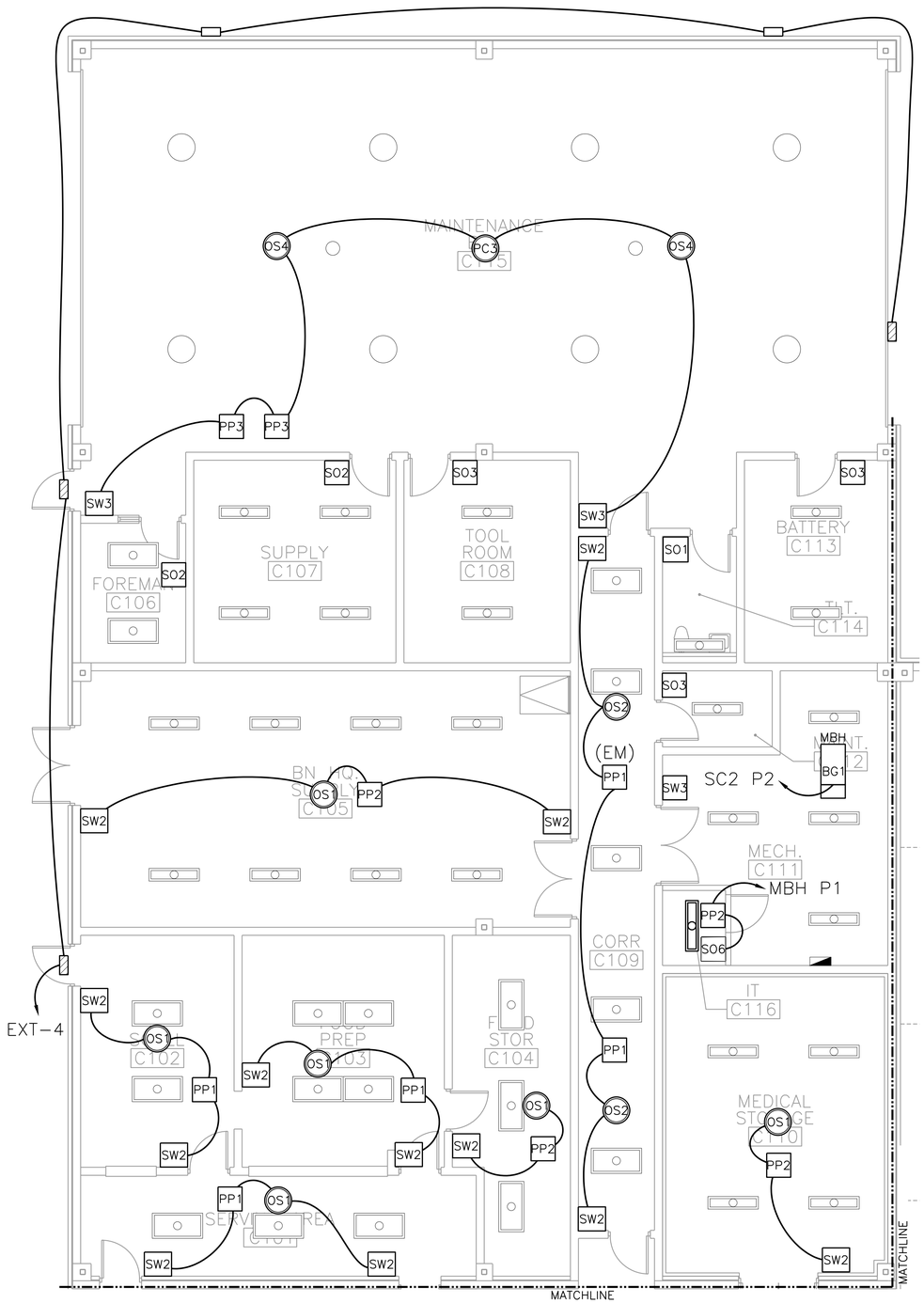
STAR CAMPAIGN FY18 - WESLACO
RC MAJOR MAINTENANCE

TXARNG CFMO

ELECTRICAL LIGHTING CONTROLS PLAN - AREA 'B'

E-15

SHT. 90 of 129



LIGHTING CONTROLS PLAN – AREA 'C'

3/16"=1'-0"

TRUE NORTH PLAN NORTH 1

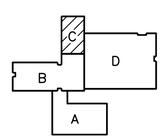
GENERAL NOTES:

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4. AT LOCATIONS WHERE ROOM LIGHT FIXTURES ARE CONTROLLED THROUGH THE USE OF OCCUPANCY SENSORS, PROVIDE THE NUMBER OF SENSORS AND LOCATE THE UNITS AS REQUIRED FOR COMPLETE ROOM COVERAGE. WHERE MORE THAN ONE SENSOR IS LOCATED IN A COMMON SPACE, CONNECT THE UNITS SUCH THAT DETECTION OF OCCUPANCY FROM EITHER UNIT WILL ENERGIZE THE ROOM LIGHTING. WHERE TOGGLE OR DIMMER SWITCHES ARE SHOWN IN CONJUNCTION WITH OCCUPANCY SENSORS, CONNECT THE SWITCH(ES) TO DE-ENERGIZE THE ROOM LIGHTING REGARDLESS OF OCCUPANCY.
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6. [1] ALL OCCUPANCY SENSORS ASSOCIATED POWER PACKS, SWITCHES, AND WIRING ARE PART OF SECO OPTION NO. 1.
7. REFERENCE E-27 AND E-28 FOR CONTROL DIAGRAMS.
8. REFERENCE E-14 FOR LIGHTING CONTROLS LEGEND.

SECO OPTIONS "□"

1. PROVIDE OCCUPANCY SENSORS.

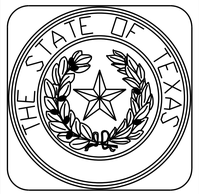
KEY PLAN



0 4' 8'

3/16"=1'-0"





PROJECT ARCHITECT:
HOMER SAENZ, AIA

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STAR CAMPAIGN FY18 - WESLACO
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ELECTRICAL LIGHTING CONTROLS PLAN - AREA 'C'

E-16

SHT. 91 of 129

GENERAL NOTES:

1. CONTRACTOR SHALL BE RESPONSIBLE FOR SIZING AND PROVIDING ALL JUNCTION AND PULL BOXES IN ACCORDANCE WITH THE NEC.
2. CONTRACTOR SHALL ADJUST OCCUPANCY SENSORS IN ALL AREAS TO COORDINATE WITH ROOM CIRCULATION PATTERNS. ADJUST ALL TIMED EVENTS (FOR EXAMPLE, 'OFF' DELAY) WHEN ROOM IS UNOCCUPIED TO COORDINATE WITH OWNERS' REQUIREMENTS.
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6. ALL OCCUPANCY SENSORS ASSOCIATED POWER PACKS, SWITCHES, AND WIRING ARE PART OF SECO OPTION NO. 1.
7. REFERENCE E-27 AND E-28 FOR CONTROL DIAGRAMS.
8. REFERENCE E-14 FOR LIGHTING CONTROLS LEGEND.

SECO OPTIONS "□"

1. PROVIDE OCCUPANCY SENSORS

LIGHTING CONTROLS PLAN – AREA 'D'

1/8"=1'-0"

KEY PLAN

0 4' 8' 16'

1/8"=1'-0"

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STAR CAMPAIGN FY18 - WESLACO
RC MAJOR MAINTENANCE

TXARNG CFMO

ELECTRICAL LIGHTING CONTROLS PLAN - AREA 'D'

E-17

SHT. 92 of 129

STATE OF TEXAS
TERESA CASTILLON
111323
LICENSED
PROFESSIONAL ENGINEER
4/20/18

GENERAL NOTES:

1. ALL POWER CIRCUITRY SHALL BE MINIMUM 2#12, #12G., 3/4"C. UNLESS NOTED OTHERWISE. FOR POWER CIRCUITS GREATER THAN 100' PROVIDE 2#10, #10G., 3/4"C.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR SIZING AND PROVIDING ALL PULL BOXES AS PER THE NATIONAL ELECTRIC CODE.
3. EXISTING CONDUITS AND BACKBOXES IN EXISTING MASONRY WALLS MAY BE RE-USED ONLY WITH EXPLICIT DIRECTION FROM THE ELECTRICAL ENGINEER OR OWNER'S REPRESENTATIVE. PERMISSION MUST BE IN WRITING FROM THE ENGINEER/REPRESENTATIVE.
4. COORDINATE LOCATION OF JUNCTION BOXES AND OUTLETS THAT SERVE EQUIPMENT SUPPLIED BY OTHERS PRIOR TO ROUGH-IN. EXAMPLES OF EQUIPMENT INCLUDE HAND DRYERS, U.C. REFRIGERATOR, WATER COOLER, ICE MAKER, ETC. CONTRACTOR SHALL INSTALL ALL ELECTRICAL DEVICES, CONDUIT, WIRE AND TERMINATIONS IN ACCORDANCE WITH EQUIPMENT SUPPLIER'S RECOMMENDATIONS.

(3) 5. ALL ELECTRICAL WORK IN SERVER ROOM A134 IS BID OPTION NO. 3.

NOTES BY SYMBOL "⬡"

(5) 1. IF BID OPTION NO. 2 IS SELECTED, PROVIDE RECEPTACLES AND ASSOCIATED CIRCUITRY AS SHOWN INSIDE AND OUTSIDE OF CONFERENCE ROOM. IF BID OPTION NO. 2 IS NOT SELECTED, EXISTING RECEPTACLES SHALL REMAIN AS THEY ARE.

2. PROVIDE NEMA L6-30R RECEPTACLE MOUNTED TO RACK. RE: TECHNOLOGY PLANS

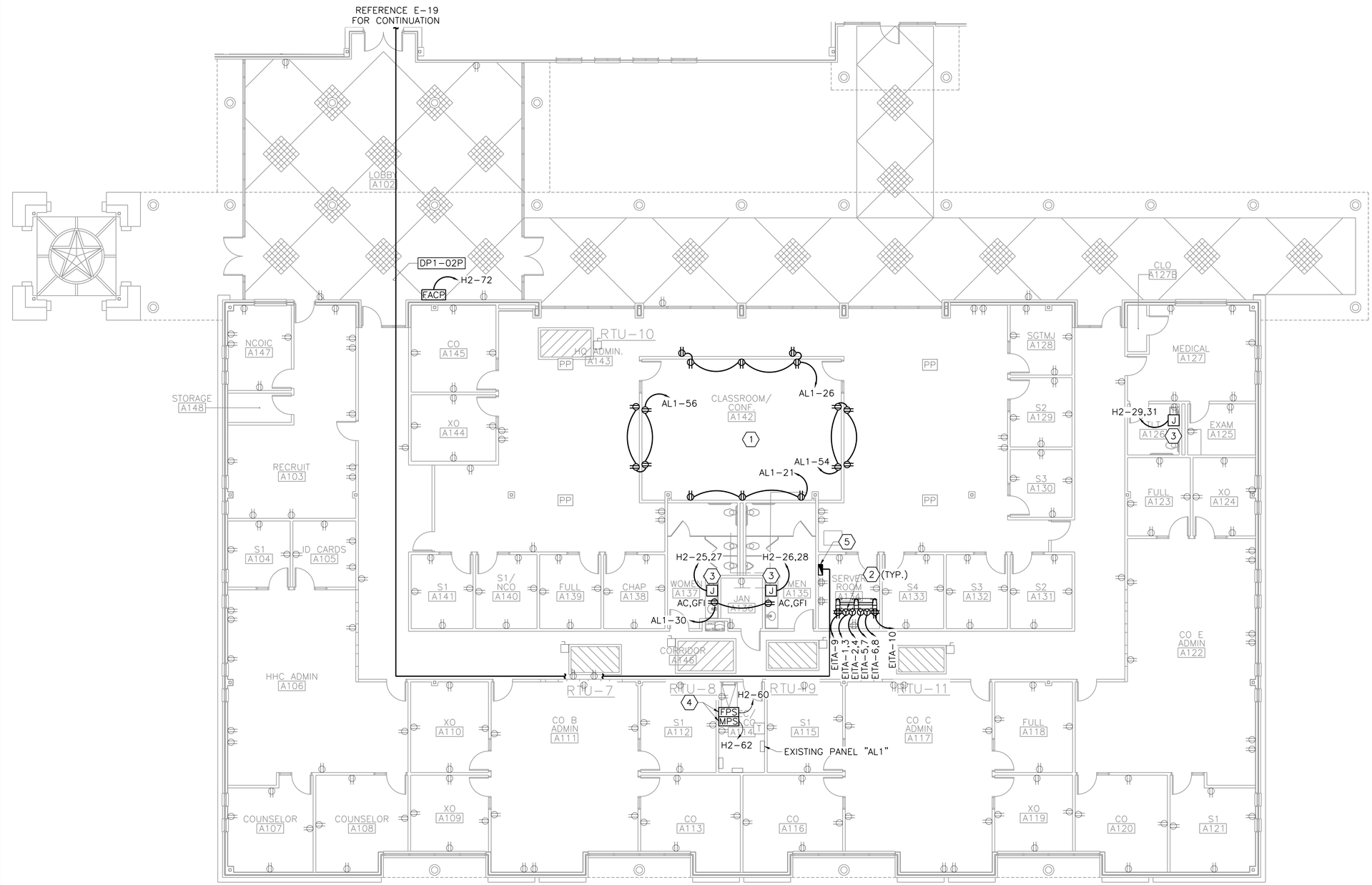
(5) 3. PROVIDE JUNCTION BOX FOR ELECTRICAL WATER HEATER. COORDINATE FINAL LOCATION WITH PLUMBING CONTRACTOR.

4. PROVIDE CIRCUITRY FOR FIRE ALARM AND MASS NOTIFICATION POWER SUPPLIES. COORDINATE WITH FIRE ALARM CONTRACTOR. RE: FIRE ALARM SHEETS.

(3) 5. PROVIDE 208Y/120V, 3ø, 4W, 100A PANEL EITA. COORDINATE LOCATION WITH TELECOMM CONTRACTOR.

BID OPTIONS "◯"

3. FULL IT SYSTEM INCLUDING UPGRADES.
5. RESTROOM/CONFERENCE ROOM RENOVATION IN ADMIN WING.



NORTH TRUE / NORTH PLAN — 1/— POWER PLAN – AREA 'A'
1/8"=1'-0"

KEY PLAN

0 4' 8' 16'
1/8"=1'-0"

STATE OF TEXAS — TERESA CASTILLÓN — 111323 — LICENSED PROFESSIONAL ENGINEER — 4/20/18

THE STATE OF TEXAS

PROJECT ARCHITECT:
HOMER SAENZ, AIA
PROJECT NO. ADG17589A
ISSUE DATE: 04/20/18
DRAWN BY: AT
REVIEWED BY: MTC

FREESE and NICHOLS
4055 International Plaza, Suite 200
Fort Worth, Texas 76109-4895
Phone - (817) 735-7300
Fax - (817) 735-7491
Freese and Nichols, Inc.
Texas Registered Engineering Firm F-2144

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TEXAS MILITARY FORCES
CONSTRUCTION & FACILITIES MANAGEMENT OFFICE-CFMO
CAMP MABRY P.O. BOX 5218 AUSTIN, TEXAS. 78763-5218
(512) 782-6131 FAX (512) 782-1481

STAR CAMPAIGN FY18 - WESLACO
RC MAJOR MAINTENANCE

TXARNG CFMO

ELECTRICAL POWER PLAN - AREA 'A'

E-18

SHT. 93 of 129

GENERAL NOTES:

1. ALL POWER CIRCUITRY SHALL BE MINIMUM 2#12, #12G., 3/4"C. UNLESS NOTED OTHERWISE. FOR POWER CIRCUITS GREATER THAN 100' PROVIDE 2#10, #10G., 3/4"C.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR SIZING AND PROVIDING ALL PULL BOXES AS PER THE NATIONAL ELECTRIC CODE.
3. EXISTING CONDUITS AND BACKBOXES IN EXISTING MASONRY WALLS MAY BE RE-USED ONLY WITH EXPLICIT DIRECTION FROM THE ELECTRICAL ENGINEER OR OWNER'S REPRESENTATIVE. PERMISSION MUST BE IN WRITING FROM THE ENGINEER/REPRESENTATIVE.
4. COORDINATE LOCATION OF JUNCTION BOXES AND OUTLETS THAT SERVE EQUIPMENT SUPPLIED BY OTHERS PRIOR TO ROUGH-IN. EXAMPLES OF EQUIPMENT INCLUDE HAND DRYERS, U.C. REFRIGERATOR, WATER COOLER, ICE MAKER, ETC. CONTRACTOR SHALL INSTALL ALL ELECTRICAL DEVICES, CONDUIT, WIRE AND TERMINATIONS IN ACCORDANCE WITH EQUIPMENT SUPPLIER'S RECOMMENDATIONS.

NOTES BY SYMBOL "⬡"

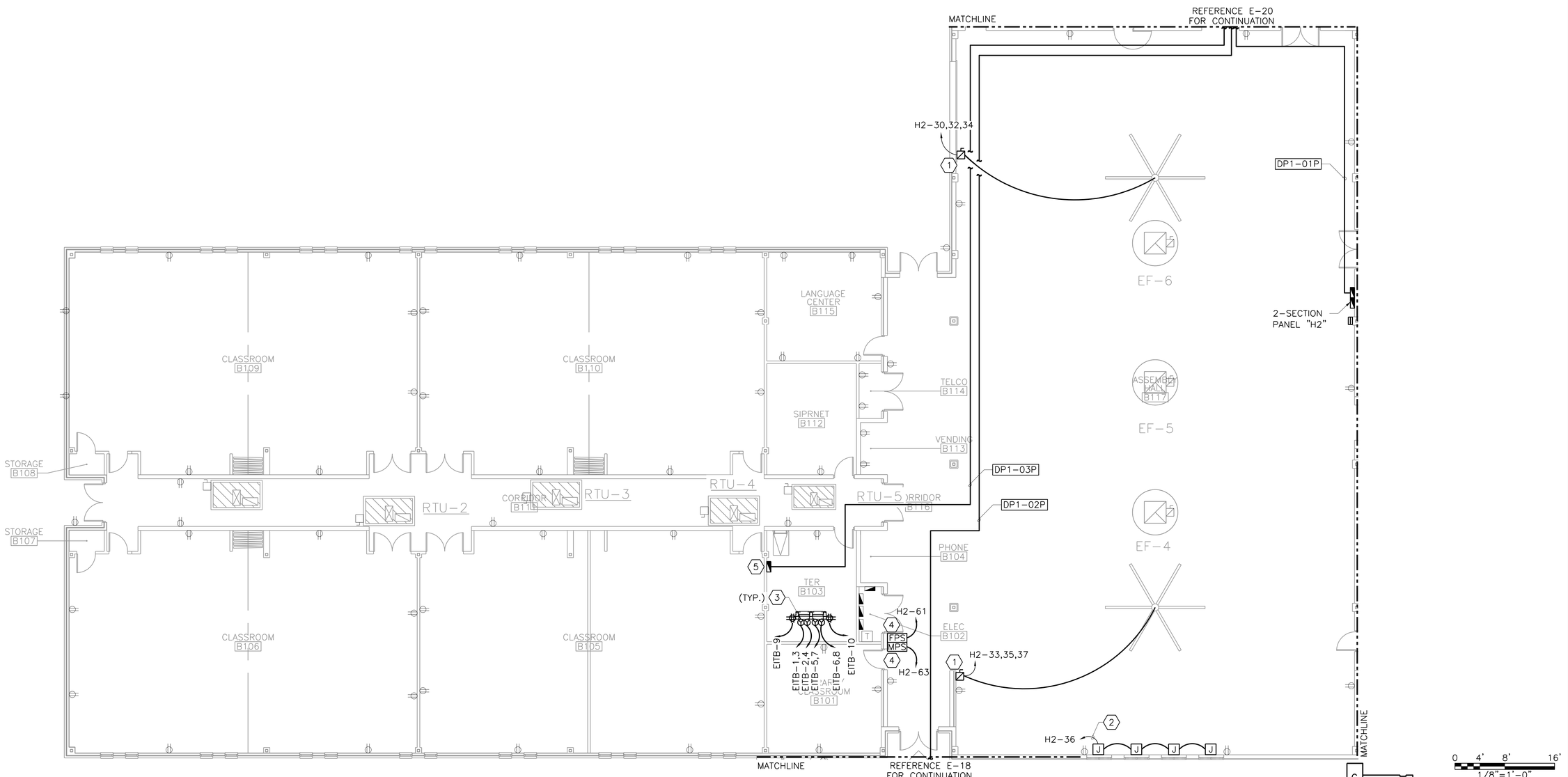
(4) 1. PROVIDE 30A/3P/10A FUSED DISCONNECT SWITCH FOR HVLS FAN. PROVIDE 3 #12, #12G., ¾"C.

2. PROVIDE 2 #10, #10G., ¾"C.
3. PROVIDE NEMA L6-30R RECEPTACLE MOUNTED TO RACK. RE: TECHNOLOGY PLANS.
4. PROVIDE CIRCUITRY FOR FIRE ALARM AND MASS NOTIFICATION POWER SUPPLIES. COORDINATE WITH FIRE ALARM CONTRACTOR. RE: FIRE ALARM SHEETS.

(3) 5. PROVIDE 208Y/120V, 3ø, 4W, 100A PANEL EITB. COORDINATE LOCATION WITH TELECOMM CONTRACTOR.

BID OPTIONS "◯"

3. FULL IT SYSTEM INCLUDING UPGRADES.
4. ADDITIONAL HVAC UPGRADES/REPAIRS/HVLS FANS.



NORTH TRUE NORTH PLAN — 1 — POWER PLAN – AREA 'B'
1/8"=1'-0"

THE STATE OF TEXAS

PROJECT ARCHITECT:
HOMER SAENZ, AIA
PROJECT NO. ADG17589A
ISSUE DATE: 04/20/18
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REVIEWED BY: MTC

FREESE and NICHOLS
4055 International Plaza, Suite 200
Fort Worth, Texas 76109-4895
Phone - (817) 735-7300
Fax - (817) 735-7491
Freese and Nichols, Inc.
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CAMP MABRY P.O. BOX 5218
(512) 782-6131
AUSTIN, TEXAS 78763-5218
FAX (512) 782-1481

STAR CAMPAIGN FY18 - WESLACO
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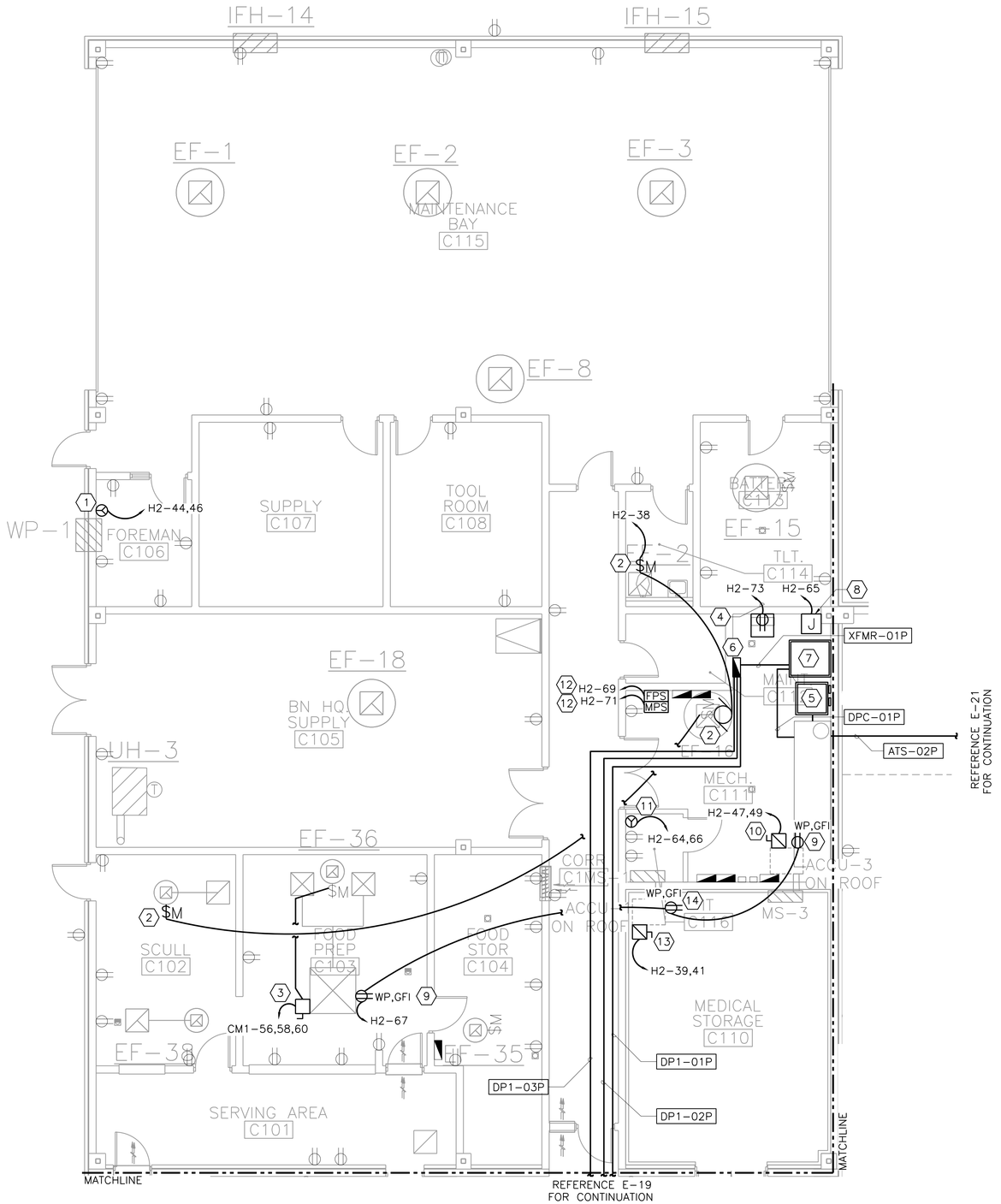
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ELECTRICAL POWER PLAN - AREA 'B'

E-19

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STATE OF TEXAS
TERESA CASTILLÓN
111323
LICENSED
PROFESSIONAL ENGINEER
4/20/18



NORTH (TRUE) NORTH (PLAN) 1

POWER PLAN – AREA 'C'

3/16"=1'-0"

GENERAL NOTES:

1. ALL POWER CIRCUITRY SHALL BE MINIMUM 2#12, #12G., 3/4"C. UNLESS NOTED OTHERWISE. FOR POWER CIRCUITS GREATER THAN 100' PROVIDE 2#10, #10G., 3/4"C.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR SIZING AND PROVIDING ALL PULL BOXES AS PER THE NATIONAL ELECTRIC CODE.
3. EXISTING CONDUITS AND BACKBOXES IN EXISTING MASONRY WALLS MAY BE RE-USED ONLY WITH EXPLICIT DIRECTION FROM THE ELECTRICAL ENGINEER OR OWNER'S REPRESENTATIVE. PERMISSION MUST BE IN WRITING FROM THE ENGINEER/REPRESENTATIVE.
4. COORDINATE LOCATION OF JUNCTION BOXES AND OUTLETS THAT SERVE EQUIPMENT SUPPLIED BY OTHERS PRIOR TO ROUGH-IN. EXAMPLES OF EQUIPMENT INCLUDE HAND DRYERS, U.C. REFRIGERATOR, WATER COOLER, ICE MAKER, ETC. CONTRACTOR SHALL INSTALL ALL ELECTRICAL DEVICES, CONDUIT, WIRE AND TERMINATIONS IN ACCORDANCE WITH EQUIPMENT SUPPLIER'S RECOMMENDATIONS.

NOTES BY SYMBOL "⬡"

(4) 1. PROVIDE NEMA 6-20R RECEPTACLE. COORDINATE FINAL LOCATION WITH LOCATION OF WALL UNIT. PROVIDE 2#10, #10G, ¾"C.

(4) 2. PROVIDE MOTOR RATED SWITCH FOR FAN.

(4) 3. PROVIDE 30A/2P/15A FUSED DISCONNECT SWITCH IN NEMA 3R ENCLOSURE. PROVIDE 2 #12, #12G., ¾"C. INTERLOCK WITH EF-36.

[2] 4. PROVIDE 2 #12, #12G., ¾"C. FOR BAS PANEL.

5. REINSTALL EXISTING TRANSFORMER "CT1" IN THIS LOCATION. PROVIDE ALL WIRING AND CONDUIT AS REQUIRED BACK TO PANELS FOR A COMPLETE AND OPERATIONAL SYSTEM. PROVIDE CONCRETE PAD.

6. PROVIDE 480Y/277V, 3PH, 4W DISTRIBUTION PANEL "DPH1".

7. PROVIDE 480-208Y/120V, 3PH, 4W 225KVA TRANSFORMER ON CONCRETE PAD.

8. PROVIDE JUNCTION BOX FOR CONNECTION TO FLOW METER. COORDINATE WITH PLUMBING.

9. PROVIDE WP,GFI CONVENIENCE RECEPTACLE ON HVAC UNIT LOCATED ON ROOF.

(4) 10. PROVIDE 30A/2P/15A FUSED DISCONNECT SWITCH IN NEMA 3R ENCLOSURE. PROVIDE 2 #12, #12G., ¾"C.

11. PROVIDE NEMA L6-30R RECEPTACLE. COORDINATE FINAL LOCATION WITH TELECOMM. PROVIDE 2#10, #10G., 3/4"C.

12. PROVIDE CIRCUITRY FOR FIRE ALARM AND MASS NOTIFICATION ALARM AUXILIARY POWER SUPPLIES. COORDINATE WITH FIRE ALARM CONTRACTOR. RE: FIRE ALARM DRAWINGS

13. PROVIDE 30A/2P/15A FUSED DISCONNECT SWITCH IN NEMA 3R ENCLOSURE. PROVIDE 2 #10, #10G., 1"C.

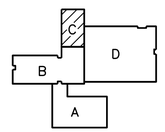
14. PROVIDE CONVENIENCE RECEPTACLE AND CONNECT TO NEAREST EXISTING 120V CIRCUIT ON ROOF.

BID OPTIONS "◯"

4. ADDITIONAL HVAC UPGRADES/REPAIRS/HVLS FAN.

SECO OPTIONS "□"

2. PROVIDE DDC CONTROL SYSTEM.



KEY PLAN

0 4' 8'
3/16"=1'-0"

STATE OF TEXAS
TERESA CASTILLÓN
111323
LICENSED
PROFESSIONAL ENGINEER
4/20/18

PROJECT ARCHITECT:
HOMER SAENZ, AIA
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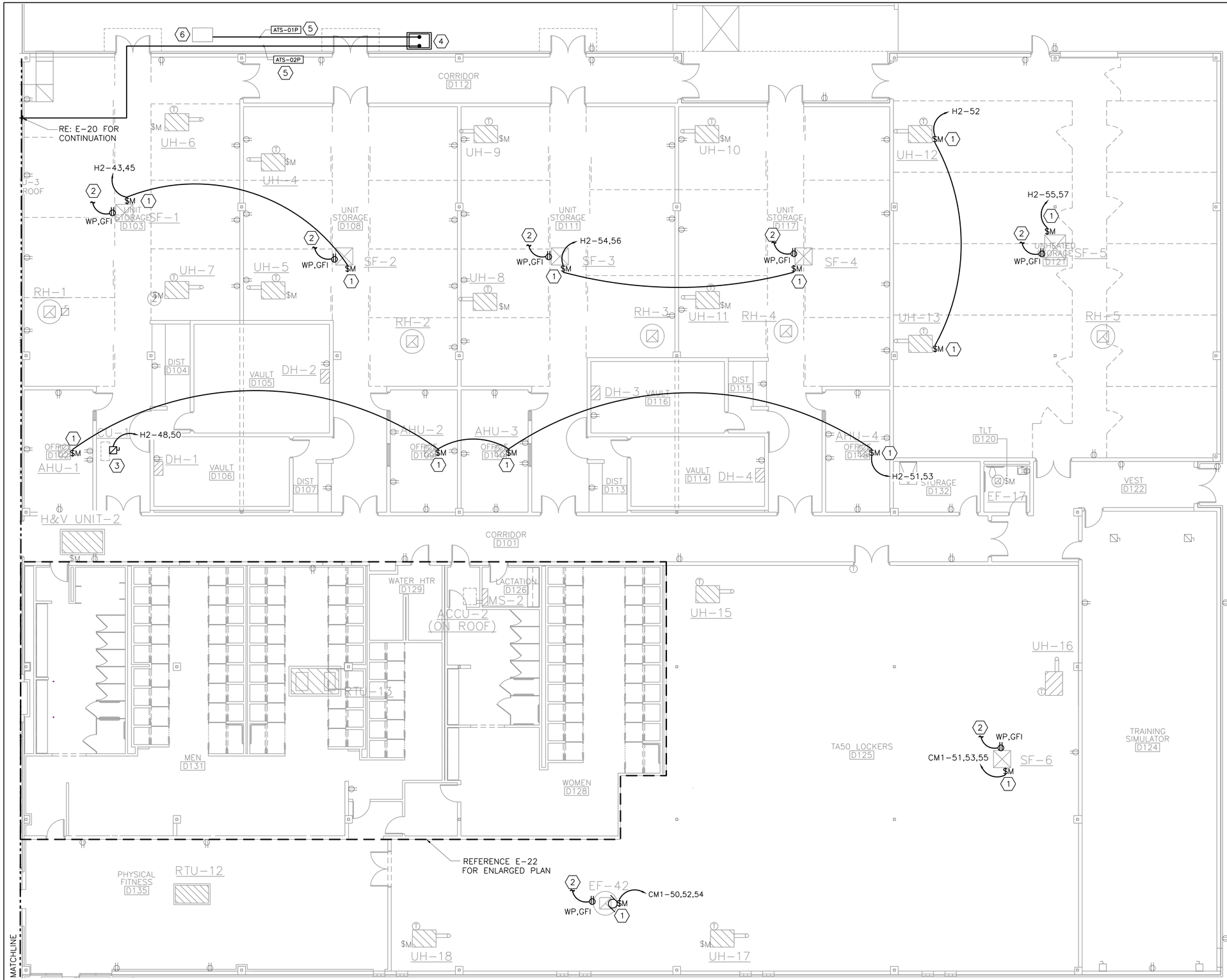
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RC MAJOR MAINTENANCE

TXARNG CFMO

ELECTRICAL POWER PLAN - AREA 'C'

E-20

SHT. 95 of 129



POWER PLAN – AREA 'D'

1/8"=1'-0"

TRUE NORTH / PLAN NORTH

GENERAL NOTES:

1. ALL POWER CIRCUITRY SHALL BE MINIMUM 2#12, #12G., 3/4"C. UNLESS NOTED OTHERWISE. FOR POWER CIRCUITS GREATER THAN 100' PROVIDE 2#10, #10G., 3/4"C.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR SIZING AND PROVIDING ALL PULL BOXES AS PER THE NATIONAL ELECTRIC CODE.
3. EXISTING CONDUITS AND BACKBOXES IN EXISTING MASONRY WALLS MAY BE RE-USED ONLY WITH EXPLICIT DIRECTION FROM THE ELECTRICAL ENGINEER OR OWNER'S REPRESENTATIVE. PERMISSION MUST BE IN WRITING FROM THE ENGINEER/REPRESENTATIVE.
4. COORDINATE LOCATION OF JUNCTION BOXES AND OUTLETS THAT SERVE EQUIPMENT SUPPLIED BY OTHERS PRIOR TO ROUGH-IN. EXAMPLES OF EQUIPMENT INCLUDE HAND DRYERS, U.C. REFRIGERATOR, WATER COOLER, ICE MAKER, ETC. CONTRACTOR SHALL INSTALL ALL ELECTRICAL DEVICES, CONDUIT, WIRE AND TERMINATIONS IN ACCORDANCE WITH EQUIPMENT SUPPLIER'S RECOMMENDATIONS.

NOTES BY SYMBOL "⬡"

(4) 1. PROVIDE MOTOR RATED SNAP SWITCH.

(4) 2. PROVIDE CONVENIENCE RECEPTACLE. CONNECT BACK TO EXISTING 120V CIRCUIT. FIELD VERIFY EXISTING CONDITIONS AND REQUIREMENTS.

(4) 3. PROVIDE 60A/3P/35A FUSED DISCONNECT IN NEMA 3R ENCLOSURE. PROVIDE 2#8, #10G., 3/4"C.

(8) 4. PROVIDE AUTOMATIC TRANSFER SWITCH. RE: E-23 FOR ADDITIONAL INFORMATION

(8) 5. ROUTE CONDUIT MOUNTED TO THE EXTERIOR WALL.

6. EXISTING UTILITY TRANSFORMER. COORDINATE WITH LOCAL UTILITY REPRESENTATIVE FOR CONNECTION TO EXISTING TRANSFORMER.

BID OPTIONS "◯"

4. ADDITIONAL HVAC UPGRADES/REPAIRS/HVLS FAN.
8. ELECTRICAL GENERATOR PROVISIONS.

KEY PLAN

0 4' 8' 16'

1/8"=1'-0"

STATE OF TEXAS — TERESA CASTILLÓN — 111323 — LICENSED PROFESSIONAL ENGINEER — 4/20/18

PROJECT ARCHITECT:
HOMER SAENZ, AIA

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STAR CAMPAIGN FY18 - WESLACO
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ELECTRICAL POWER PLAN - AREA 'D'

E-21

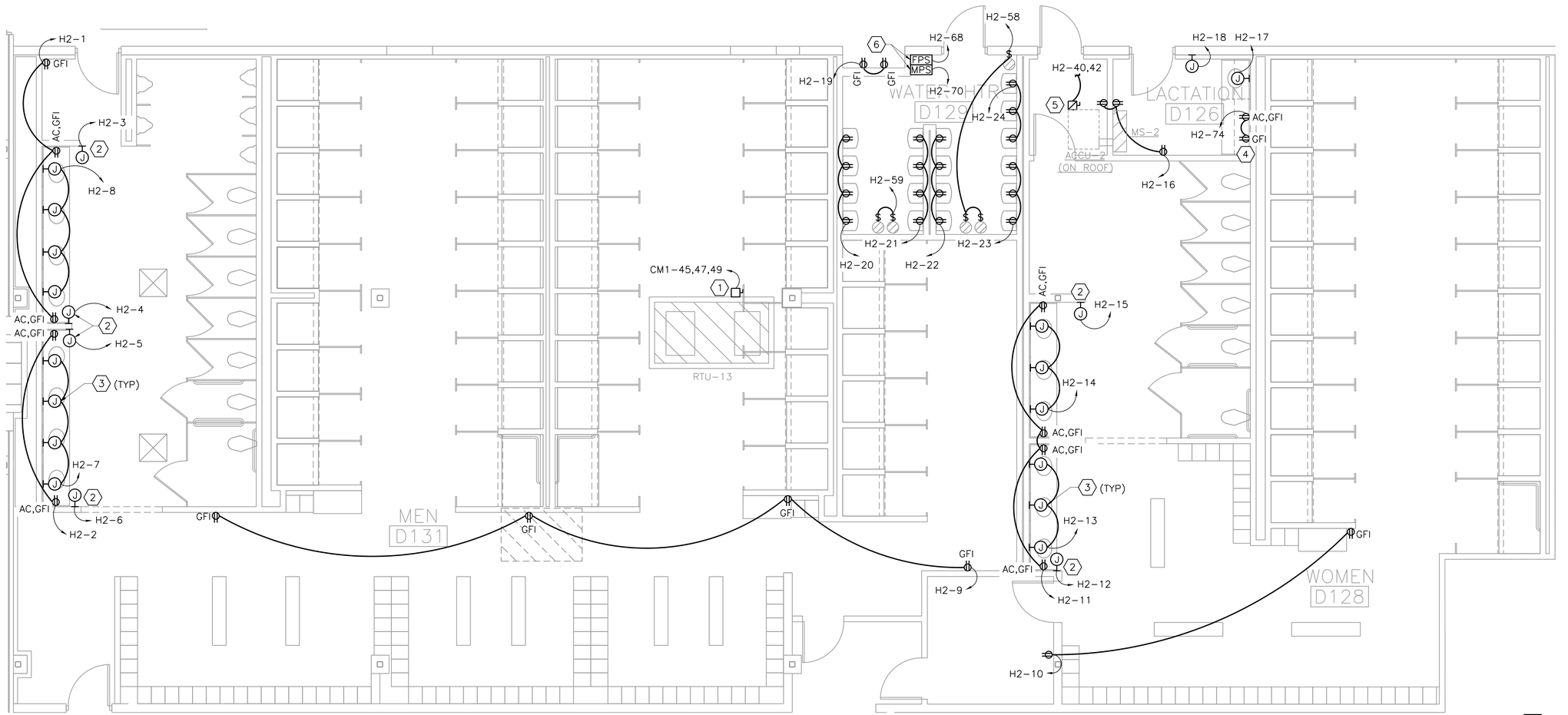
SHT. 96 of 129

GENERAL NOTES:

1. ALL POWER CIRCUITRY SHALL BE MINIMUM 2#12, #12G., 3/4"C. UNLESS NOTED OTHERWISE. FOR POWER CIRCUITS GREATER THAN 100' PROVIDE 2#10, #10G., 3/4"C.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR SIZING AND PROVIDING ALL PULL BOXES AS PER THE NATIONAL ELECTRIC CODE.
3. EXISTING CONDUITS AND BACKBOXES IN EXISTING MASONRY WALLS MAY BE RE-USED ONLY WITH EXPLICIT DIRECTION FROM THE ELECTRICAL ENGINEER OR OWNER'S REPRESENTATIVE. PERMISSION MUST BE IN WRITING FROM THE ENGINEER/REPRESENTATIVE.
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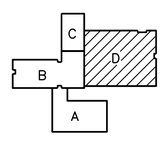
NOTES BY SYMBOL "⬡"

1. PROVIDE 60A/3P/60AF DISCONNECT SWITCH IN NEMA 3R ENCLOSURE. PROVIDE 3 #4, #10G., 1"C.
2. PROVIDE JUNCTION BOX AND MAKE FINAL CONNECTION TO HAND DRYER. PROVIDE 2 #8, #10G., 1"C.
3. PROVIDE JUNCTION BOX FOR ELECTRONIC FAUCET AND MAKE FINAL CONNECTION. PROVIDE 2 #8, #10G., 1"C.
4. PROVIDE RECEPTACLE BELOW THE COUNTER FOR MINI REFRIGERATOR.
5. PROVIDE A 30A/2P/15A FUSED DISCONNECT SWITCH IN A NEMA 3R ENCLOSURE. PROVIDE 2#12, #12G., 3/4"C.
6. PROVIDE CIRCUITRY FOR FIRE ALARM AND MASS NOTIFICATION POWER SUPPLIES. COORDINATE WITH FIRE ALARM CONTRACTOR. RE: FIRE ALARM SHEETS.



NORTH TRUE / NORTH PLAN 1 — ENLARGED POWER PLAN – AREA 'D'

1/4"=1'-0"



KEY PLAN

0 1' 2' 4' 8'

1/4"=1'-0"

STATE OF TEXAS
TERESA CASTILLÓN
111323
LICENSED
PROFESSIONAL ENGINEER
4/20/18

PROJECT ARCHITECT:
HOMER SAENZ, AIA

PROJECT NO. ADG17589A
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AUSTIN, TEXAS 78763-5218
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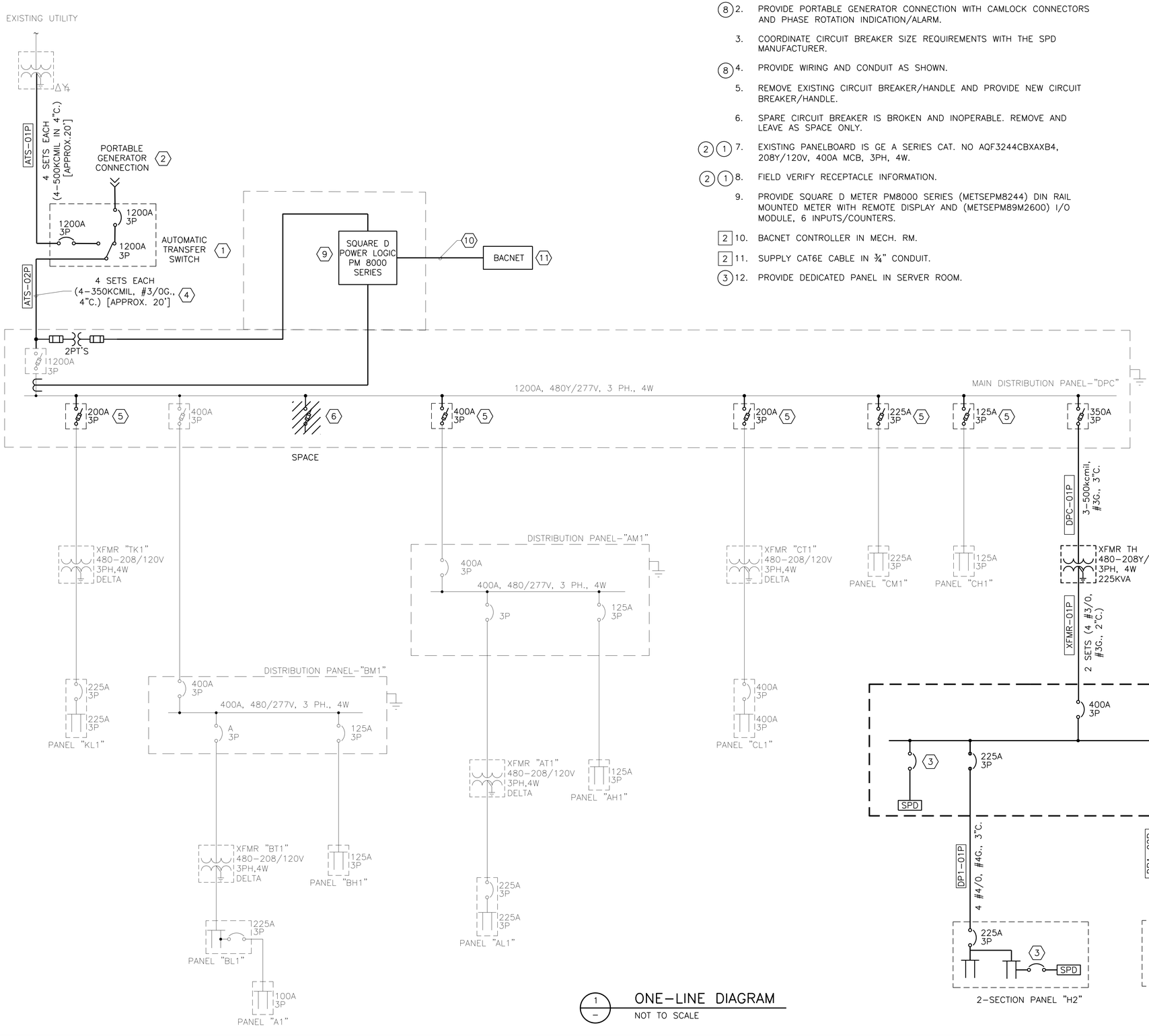
STAR CAMPAIGN FY18 - WESLACO
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ELECTRICAL ENLARGED POWER PLAN - AREA 'D'

E-22

SHT. 97 of 129



1 — ONE-LINE DIAGRAM
NOT TO SCALE

2 — MODULAR BUILDINGS ONE-LINE DIAGRAM (1)(2)
NOT TO SCALE

NOTES BY SYMBOL "⬡"

(8) 1. PROVIDE 1200A, 480Y/277V, 4 POLE, OPEN TRANSITION AUTOMATIC TRANSFER SWITCH IN NEMA 3R CONFIGURATION. NORMAL AND EMERGENCY POWER SHALL HAVE 1200A ADJUSTABLE TRIP BREAKER WITH AR ENERGY REDUCTION MODE. ARC ENERGY REDUCTION SHALL BE ENGAGED WITH A KEY SWITCH AND INDICATOR LIGHT SHALL ILLUMINATE WHEN KEY SWITCH IS ENGAGED.

(8) 2. PROVIDE PORTABLE GENERATOR CONNECTION WITH CAMLOCK CONNECTORS AND PHASE ROTATION INDICATION/ALARM.

3. COORDINATE CIRCUIT BREAKER SIZE REQUIREMENTS WITH THE SPD MANUFACTURER.

(8) 4. PROVIDE WIRING AND CONDUIT AS SHOWN.

5. REMOVE EXISTING CIRCUIT BREAKER/HANDLE AND PROVIDE NEW CIRCUIT BREAKER/HANDLE.

6. SPARE CIRCUIT BREAKER IS BROKEN AND INOPERABLE. REMOVE AND LEAVE AS SPACE ONLY.

(2)(1) 7. EXISTING PANELBOARD IS GE A SERIES CAT. NO AQF3244CBXAXB4, 208Y/120V, 400A MCB, 3PH, 4W.

(2)(1) 8. FIELD VERIFY RECEPTACLE INFORMATION.

9. PROVIDE SQUARE D METER PM8000 SERIES (METSEPM8244) DIN RAIL MOUNTED METER WITH REMOTE DISPLAY AND (METSEPM89M2600) I/O MODULE, 6 INPUTS/COUNTERS.

(2) 10. BACNET CONTROLLER IN MECH. RM.

(2) 11. SUPPLY CAT6E CABLE IN ¾" CONDUIT.

(3) 12. PROVIDE DEDICATED PANEL IN SERVER ROOM.

GENERAL NOTES:

1. ITEMS SHOWN AT A LIGHT LINE WEIGHT ARE EXISTING TO REMAIN. ITEMS SHOWN AT A DARK LINE WEIGHT ARE TO BE PROVIDED.
2. AIC RATING OF NEW CIRCUIT BREAKERS SHALL MATCH AIC RATING OF EXISTING PANEL.

BID OPTIONS "◯"

1. TEMPORARY RESTROOM BUILDING.
2. TEMPORARY SHOWER BUILDING.
3. FULL IT SYSTEM INCLUDING UPGRADES.
4. ELECTRICAL GENERATOR PROVISIONS

SECO OPTIONS "□"

2. PROVIDE DDC CONTROL SYSTEM.

THE STATE OF TEXAS

PROJECT ARCHITECT:
HOMER SAENZ, AIA
PROJECT NO. ADG17589A
ISSUE DATE: 04/20/18
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STAR CAMPAIGN FY18 - WESLACO
RC MAJOR MAINTENANCE

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ELECTRICAL ONE-LINE DIAGRAMS

E-23

SHT. 98 of 129

STATE OF TEXAS
TERESA CASTILLÓN
111323
LICENSED
PROFESSIONAL ENGINEER
4/20/18

PANEL NO. CM1 SECTION 2 (EXIST.

MAIN 225 AMPS MLO — LOCATION MECH/ELEC RM
SERVICE VOLTAGE 480Y/277 VOLTS — BUS RATING 225 AMPS
A.I.C. 65,000 — NEUTRAL BUS 225 AMPS — FEED FROM

DESCRIPTION	BREAKER POLE	BREAKER AMP	VOLT AMPS A	VOLT AMPS B	VOLT AMPS C	CKT NO	BUSS CONN	CKT NO	VOLT AMPS A	VOLT AMPS B	VOLT AMPS C	BREAKER POLE	BREAKER AMP	DESCRIPTION
EXISTING LOAD	1	20	1000			43		44	1000			1	20	EXISTING LOAD
RTU-13	3		11928			45		46		1000		1	20	EXISTING LOAD
				11928		47		48			1000	1	20	EXISTING LOAD
		60			11928	49		50	443.41			3		EF-42
SF-6	3		1454.9			51		52		443.41				
				1454.9		53		54			443.41		20	
		20			1454.9	55		56	831.38			3		SF-11
SPACE						57		58		831.38				
SPACE						59		60			831.38		20	
SPACE						61		62						SHUNT TRIP SPACE FOR SF-11
SPACE						63		64						SPACE
SPACE						65		66						SPACE
SPACE						67		68						SPACE
SPACE						69		70						SPACE
SPACE						71		72						SPACE
SPACE						73		74						SPACE
SPACE						75		76						SPACE
SPACE						77		78						SPACE
SPACE						79		80						SPACE
SPACE						81		82						SPACE
SPACE						83		84						SPACE
CONNECTED BUS A 3,275 VA			1000	0	0				2274.8	2274.8	2274.8			DEMAND KVA: 9.8
CONNECTED BUS B 2,275 VA						TOTAL:	7824.368183	VA						DEMAND AMPS: 11.8
CONNECTED BUS C 2,275 VA														

NOTE: ** INDICATES ITEMS UNDER THIS CONTRACT

NOTE: * INDICATES GFI BREAKER

PANEL NO. CH1 (EXISTING)

MAIN 100 AMPS MLO — LOCATION MECH/ELEC ROOM C110
SERVICE VOLTAGE 480Y/277 VOLTS — BUS RATING 100 AMPS
A.I.C. 65,000 — NEUTRAL BUS 100 AMPS — FEED FROM

DESCRIPTION	BREAKER POLE	BREAKER AMP	VOLT AMPS A	VOLT AMPS B	VOLT AMPS C	CKT NO	BUSS CONN	CKT NO	VOLT AMPS A	VOLT AMPS B	VOLT AMPS C	BREAKER POLE	BREAKER AMP	DESCRIPTION
EXISTING LOAD	1	20	1000			1		2	1000			1	20	EXISTING LOAD
EXISTING LOAD	1	20		1000		3		4		1000		1	20	EXISTING LOAD
EXISTING LOAD	1	20			1000	5		6			3704	1	20	MEN'S RESTROOM/SHOWER LIGHTS
FITNESS ROOM LIGHTS	1	20	1152			7		8	1852			1	20	WOMEN'S RESTROOM/SHOWER, LACTATION, WATER HEATER RM
EXISTING LOAD	1	20		1000		9		10		1000		1	20	EXISTING LOAD
EXISTING LOAD	1	20			1000	11		12			1000	1	20	EXISTING LOAD
EXISTING LOAD	1	20	1000			13		14	739			1	20	EXTERIOR LIGHTS
EXISTING LOAD	1	20		1000		15		16		1000		1	20	EXISTING LOAD
EXISTING LOAD	1	20			1000	17		18			1000	1	20	EXISTING LOAD
EXISTING LOAD	1	20	1000			19		20	1000			1	20	EXISTING LOAD
EXISTING LOAD	1	20		1000		21		22		1000		1	20	EXISTING LOAD
EXISTING LOAD	1	20			1000	23		24			1000	1	20	EXISTING LOAD
EXISTING LOAD	1	20	1000			25		26	1000			1	20	EXISTING LOAD
EXISTING LOAD	1	20		1000		27		28		1000		1	20	EXISTING LOAD
EXISTING LOAD	1	20			1000	29		30			1000	1	20	EXISTING LOAD
EXISTING LOAD	1	20	1000			31		32	1000			1	20	EXISTING LOAD
EXISTING LOAD	1	20		1000		33		34		1000		1	20	EXISTING LOAD
EXISTING LOAD	1	20			1000	35		36			1000	1	20	EXISTING LOAD
EXISTING LOAD	1	20	1000			37		38	1000			1	20	EXISTING LOAD
EXISTING LOAD	1	20		1000		39		40		1000		1	20	EXISTING LOAD
EXISTING LOAD	1	20			1000	41		42			1000	1	20	EXISTING LOAD
CONNECTED BUS A 14,743 VA			7152	7000	7000				7591	7000	9704			DEMAND KVA: 45.4
CONNECTED BUS B 14,000 VA						TOTAL:	45447	VA						DEMAND AMPS: 54.7
CONNECTED BUS C 16,704 VA														

NOTE: ** INDICATES ITEMS UNDER THIS CONTRACT

NOTE: * INDICATES GFI BREAKER

PANEL NO. H2

MAIN 225 AMPS MCB — LOCATION
SERVICE VOLTAGE 208Y/120 VOLTS — BUS RATING 225 AMPS
A.I.C. 25,000 — NEUTRAL BUS 225 AMPS — FEED FROM

DESCRIPTION	BREAKER POLE	BREAKER AMP	VOLT AMPS A	VOLT AMPS B	VOLT AMPS C	CKT NO	BUSS CONN	CKT NO	VOLT AMPS A	VOLT AMPS B	VOLT AMPS C	BREAKER POLE	BREAKER AMP	DESCRIPTION
MEN'S D131- RECEPTACLES	1	20	540			1		2	360			1	20	MEN'S D131- RECEPTACLES
MEN'S D131 HAND DRYER	1	20		1400		3		4		1400		1	20	MEN'S D131 HAND DRYER
MEN'S D131 HAND DRYER	1	30			1400	5		6			1400	1	15	MEN'S D131 HAND DRYER
MEN'S D131 SINK SENSORS	1	20	500			7		8	500			1	20	MEN'S D131 SINK SENSORS
MEN'S D131 CONV. RECEPTACLE	1	20		720		9		10		360		1	20	WOMEN'S D128 CONV. RECEPTACLES
WOMEN'S D128 ABOVE COUNTER RECEPTACLES	1	20			720	11		12			1400	1	20	WOMEN'S D128 HAND DRYER
WOMEN'S D128 ABOVE SINK SENSORS	1	20	500			13		14	500			1	20	WOMEN'S D128 ABOVE SINK SENSORS
WOMEN'S D128 HAND DRYER	1	20		1400		15		16		540		1	20	LACTATION GENERAL RECEPTACLES
LACTATION SINK SENSOR	1	15			500	17		18			1400	1	15	LACTATION HAND DRYER
WATER FOUNTAIN RECEPTACLES	1	20	600			19		20	1400			1	20	TANKLESS WATER HEATERS
TANKLESS WATER HEATERS	1	20		1400		21		22		1400		1	20	TANKLESS WATER HEATERS
TANKLESS WATER HEATERS	1	20			1050	23		24			1050	1	20	TANKLESS WATER HEATERS
ADMIN WING-WOMEN'S A137 SINK WATER HEATER	2		2050			25		26	2050			2		ADMIN WING-MEN'S A135 SINK WATER HEATER
		25		2050		27		28		2050			25	
ADMIN WING-TLT A126 SINK WATER HEATER	2				2050	29		30			792.59	3		HVLS-1
		25	2050			31		32	792.59					
HVLS-2	3			792.59		33		34		792.59			20	
					792.59	35		36			140	1	20	ASSEMBLY HALL MOTORIZED LOUVERS
		20	792.59			37		38	300			1	20	EF-16, EF-37
ACCU-1	2			728		39		40		728		2		ACCU-2
		20			728	41		42			728		20	
SF-1, SF-2	2		637			43		44	2050			2		WP-1
		20		637		45		46		2050			20	
ACCU-3	2				728	47		48			2075	2		CU-1
		15	728			49		50	2075				35	
AHU-1, 2, 3, 4	2			1310.4		51		52		600		1	20	UH-12, UH-13
		20			1310.4	53		54			637	2		SF-3, SF-4
SF-5	2		1300			55		56	637				20	
		20		1300		57		58	780			1	20	CIRCULATION PUMPS
CIRCULATION PUMPS	1	20			480	59		60		500		1	20	AREA A FPS
AREA B FPS	1	20	500			61		62			500	1	20	AREA A MPS
AREA B MPS	1	20		500		63		64	2882.1			2		TELECOMM L630R
FLOWMETER	1	20			500	65		66		2882.1			30	
HVAC RECEPTACLES	1	20	540			67		68			500	1	20	AREA D FPS
AREA C FPS	1	20		500		69		70	500			1	20	AREA D MPS
AREA C MPS	1	20			500	71		72		500		1	20	FACP
BAS CONTROL PANEL	1	20	500			73		74			1920	1	20	MINI FRIDGE
SPARE	1	20				75		76				1	20	SPARE
SPARE	1	20				77		78				1	20	SPARE
SPARE	1	20				79		80				3		SPD
SPARE	1	20				81		82						
SPARE	1	20				83		84					20	
CONNECTED BUS A 21,902 VA			11238	12738	10759				10665	9920.6	9622.6			DEMAND KVA: 68.6
CONNECTED BUS B 22,659 VA						TOTAL:	64942.3187	VA						DEMAND AMPS: 190.5
CONNECTED BUS C 20,382 VA														

NOTE: * INDICATES GFI BREAKER

THE STATE OF TEXAS

PROJECT ARCHITECT:
HOMER SAENZ, AIA
PROJECT NO. ADG17589A
ISSUE DATE: 04/20/18
DRAWN BY: AT
REVIEWED BY: MTC

FREESE and NICHOLS
4055 International Plaza, Suite 200
Fort Worth, Texas 76109-4895
Phone - (817) 735-7300
Fax - (817) 735-7491
Freese and Nichols, Inc.
Texas Registered Engineering Firm F-2144

NO.	DATE	ISSUE
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TEXAS MILITARY FORCES
CONSTRUCTION & FACILITIES MANAGEMENT OFFICE-CFMO
AUSTIN, TEXAS 78763-5218
FAX (512) 782-1481
CAMP MABRY P.O. BOX 5218
(512) 782-6131

STAR CAMPAIGN FY18 - WESLACO
RC MAJOR MAINTENANCE

TXARNG CFMO

ELECTRICAL SCHEDULES I

E-24

SHT. 99 of 129

STATE OF TEXAS
TERESA CASTILLÓN
111323
LICENSED
PROFESSIONAL ENGINEER
4/20/18
Teresa Castillón

PANEL NO. BH1 (EXISTING)

MAIN 100 AMPS MLO — LOCATION ELEC RM B104
SERVICE VOLTAGE 480Y/277 VOLTS — BUS RATING 100 AMPS
A.I.C. FIELD VERIFY — NEUTRAL BUS 100 AMPS — FEED FROM

DESCRIPTION	BREAKER POLE	BREAKER AMP	VOLT AMPS A	VOLT AMPS B	VOLT AMPS C	CKT NO	BUSS CONN	CKT NO	VOLT AMPS A	VOLT AMPS B	VOLT AMPS C	BREAKER POLE	BREAKER AMP	DESCRIPTION
EXISTING LOAD	1	20	1000			1		2	1000			1	20	EXISTING LOAD
EXISTING LOAD	1	20		1000		3		4		1000		1	20	EXISTING LOAD
EXISTING LOAD	1	20			1000	5		6			288	1	20	CORRIDOR B111 LIGHTS
EXISTING LOAD	1	20	1000			7		8	1000			1	20	EXISTING LOAD
CORRIDOR B111 EMERGENCY LIGHTS	1	20		144		9		10		1000		1	20	EXISTING LOAD
EXISTING LOAD	1	20			1000	11		12			427	1	20	EXTERIOR LIGHTS
EXISTING LOAD	1	20	1000			13		14	1000			1	20	EXISTING LOAD
EXISTING LOAD	1	20		1000		15		16		1000		1	20	EXISTING LOAD
EXISTING LOAD	1	20			1000	17		18			1000	1	20	EXISTING LOAD
EXISTING LOAD	1	20	1000			19		20	1000			1	20	EXISTING LOAD
EXISTING LOAD	1	20		1000		21		22		1000		1	20	EXISTING LOAD
EXISTING LOAD	1	20			1000	23		24			1000	1	20	EXISTING LOAD
EXISTING LOAD	1	20	1000			25		26	1000			1	20	EXISTING LOAD
EXISTING LOAD	1	20		1000		27		28		1000		1	20	EXISTING LOAD
EXISTING LOAD	1	20			1000	29		30			1000	1	20	EXISTING LOAD
EXISTING LOAD	1	20	1000			31		32	1000			1	20	EXISTING LOAD
EXISTING LOAD	1	20		1000		33		34		1000		1	20	EXISTING LOAD
EXISTING LOAD	1	20			1000	35		36			1000	1	20	EXISTING LOAD
EXISTING LOAD	1	20	1000			37		38	1000			1	20	EXISTING LOAD
EXISTING LOAD	1	20		1000		39		40		1000		1	20	EXISTING LOAD
EXISTING LOAD	1	20			1000	41		42			1000	1	20	EXISTING LOAD
			7000	6144	7000				7000	7000	5715			

CONNECTED BUS A 14,000 VA — DEMAND KVA: 39.9
CONNECTED BUS B 13,144 VA — TOTAL: 39859 VA — DEMAND AMPS: 47.9
CONNECTED BUS C 12,715 VA
NOTE: ** INDICATES ITEMS UNDER THIS CONTRACT — NOTE: * INDICATES GFI BREAKER

PANEL NO. AH1 (EXISTING)

MAIN 100 AMPS MLO — LOCATION ELEC/TELCO 114
SERVICE VOLTAGE 480Y/277 VOLTS — BUS RATING 100 AMPS
A.I.C. FIELD VERIFY — NEUTRAL BUS 100 AMPS — FEED FROM

DESCRIPTION	BREAKER POLE	BREAKER AMP	VOLT AMPS A	VOLT AMPS B	VOLT AMPS C	CKT NO	BUSS CONN	CKT NO	VOLT AMPS A	VOLT AMPS B	VOLT AMPS C	BREAKER POLE	BREAKER AMP	DESCRIPTION
EXISTING LOAD	1	20	1000			1		2	1000			1	20	EXISTING LOAD
EXISTING LOAD	1	20		1000		3		4		1000		1	20	EXISTING LOAD
EXISTING LOAD	1	20			1000	5		6			1000	1	20	EXISTING LOAD
EXISTING LOAD	1	20	1000			7		8	744			1	20	CONFERENCE ROOM LIGHTS
EXISTING LOAD	1	20		1000		9		10		1000		1	20	EXISTING LOAD
EXISTING LOAD	1	20			1000	11		12			1000	1	20	EXISTING LOAD
EXISTING LOAD	1	20	1000			13		14	400			1	20	EXTERIOR LIGHTS
EXISTING LOAD	1	20		1000		15		16		1000		1	20	EXISTING LOAD
EXISTING LOAD	1	20			1000	17		18			256	1	20	LOBBY LIGHTS
EXISTING LOAD	1	20	1000			19		20	75			1	20	EXTERIOR GROUND MOUNTED LIGHTS
EXISTING LOAD	1	20		1000		21		22		525		1	20	BREEZEWAY LIGHTS
EXISTING LOAD	1	20			1000	23		24			1000	1	20	EXISTING LOAD
EXISTING LOAD	1	20	1000			25		26	1000			1	20	EXISTING LOAD
EXISTING LOAD	1	20		1000		27		28		1000		1	20	EXISTING LOAD
EXISTING LOAD	1	20			1000	29		30			1000	1	20	EXISTING LOAD
EXISTING LOAD	1	20	1000			31		32	1000			1	20	EXISTING LOAD
EXISTING LOAD	1	20		1000		33		34		1000		1	20	EXISTING LOAD
EXISTING LOAD	1	20			1000	35		36			1000	1	20	EXISTING LOAD
EXISTING LOAD	1	20	1000			37		38	1000			1	20	EXISTING LOAD
EXISTING LOAD	1	20		1000		39		40		1000		1	20	EXISTING LOAD
EXISTING LOAD	1	20			1000	41		42			1000	1	20	EXISTING LOAD
			7000	7000	7000				5219	6525	6256			

CONNECTED BUS A 12,219 VA — DEMAND KVA: 39.0
CONNECTED BUS B 13,525 VA — TOTAL: 39000 VA — DEMAND AMPS: 46.9
CONNECTED BUS C 13,256 VA
NOTE: ** INDICATES ITEMS UNDER THIS CONTRACT — NOTE: * INDICATES GFI BREAKER

PANEL NO. AL1 (EXISTING)

MAIN 225 AMPS MCB — LOCATION ELEC TELCO. ROOM A114
SERVICE VOLTAGE 208Y/120 VOLTS — BUS RATING 225 AMPS
A.I.C. 65,000 — NEUTRAL BUS 225 AMPS — FEED FROM

DESCRIPTION	BREAKER POLE	BREAKER AMP	VOLT AMPS A	VOLT AMPS B	VOLT AMPS C	CKT NO	BUSS CONN	CKT NO	VOLT AMPS A	VOLT AMPS B	VOLT AMPS C	BREAKER POLE	BREAKER AMP	DESCRIPTION
EXISTING LOAD	1	20	1000			1		2	1000			1	20	EXISTING LOAD
EXISTING LOAD	1	20		1000		3		4		1000		1	20	EXISTING LOAD
EXISTING LOAD	1	20			1000	5		6			1000	1	20	EXISTING LOAD
EXISTING LOAD	1	20	1000			7		8	1000			1	20	EXISTING LOAD
EXISTING LOAD	1	20		1000		9		10		1000		1	20	EXISTING LOAD
EXISTING LOAD	1	20			1000	11		12			1000	1	20	EXISTING LOAD
EXISTING LOAD	1	20	1000			13		14	1000			1	20	EXISTING LOAD
EXISTING LOAD	1	20		1000		15		16		1000		1	20	EXISTING LOAD
EXISTING LOAD	1	20			1000	17		18			1000	1	20	EXISTING LOAD
EXISTING LOAD	1	20	1000			19		20	1000			1	20	EXISTING LOAD
CONFERENCE ROOM RECEPTACLES	1	20		540		21		22		1000		1	20	EXISTING LOAD
EXISTING LOAD	1	20			1000	23		24			1000	1	20	EXISTING LOAD
EXISTING LOAD	1	20	1000			25		26	900			1	20	CONFERENCE ROOM RECEPTACLES
EXISTING LOAD	1	20		1000		27		28		1000		1	20	EXISTING LOAD
EXISTING LOAD	1	20			1000	29		30			360	1	20	RESTROOM RECEPTACLES
EXISTING LOAD	1	20	1000			31		32	1000			1	20	EXISTING LOAD
EXISTING LOAD	1	20		1000		33		34		1000		1	20	EXISTING LOAD
EXISTING LOAD	1	20			1000	35		36			1000	1	20	EXISTING LOAD
EXISTING LOAD	1	20	1000			37		38	1000			1	20	EXISTING LOAD
EXISTING LOAD	1	20		1000		39		40		1000		1	20	EXISTING LOAD
EXISTING LOAD	1	20			1000	41		42			1000	1	20	EXISTING LOAD
EXISTING LOAD	1	20	500			43		44	500			1	20	EXISTING LOAD
EXISTING LOAD	1	20		500		45		46		500		1	20	EXISTING LOAD
EXISTING LOAD	1	20			500	47		48			500	1	20	EXISTING LOAD
EXISTING LOAD	1	20	500			49		50	500			1	20	EXISTING LOAD
EXISTING LOAD	1	20		500		51		52		500		1	20	EXISTING LOAD
EXISTING LOAD	1	20			500	53		54			720	1	20	CONFERENCE ROOM RECEPTACLES
EXISTING LOAD	1	20	500			55		56	720			1	20	CONFERENCE ROOM RECEPTACLES
EXISTING LOAD	1	20		500		57		58		500		1	20	EXISTING LOAD
EXISTING LOAD	1	20			500	59		60			500	1	20	EXISTING LOAD
EXISTING LOAD	1	20	500			61		62	500			1	20	EXISTING LOAD
EXISTING LOAD	1	20		500		63		64		500		1	20	EXISTING LOAD
EXISTING LOAD	1	20			500	65		66			500	1	20	EXISTING LOAD
EXISTING LOAD	1	20	500			67		68	500			1	20	EXISTING LOAD
EXISTING LOAD	1	20		500		69		70		500		1	20	EXISTING LOAD
EXISTING LOAD	1	20			500	71		72			500	1	20	EXISTING LOAD
EXISTING LOAD	1	20	500			73		74	500			1	20	EXISTING LOAD
EXISTING LOAD	1	20		500		75		76		500		1	20	EXISTING LOAD
EXISTING LOAD	1	20			500	77		78			500	1	20	EXISTING LOAD
EXISTING LOAD	1	20	500			79		80	500			1	20	EXISTING LOAD
EXISTING LOAD	1	20		500		81		82		500		1	20	EXISTING LOAD
EXISTING LOAD	1	20			500	83		84			500	1	20	EXISTING LOAD
			10500	10040	10500				10620	10500	10080			

CONNECTED BUS A 21,120 VA — DEMAND KVA: 62.2
CONNECTED BUS B 20,540 VA — TOTAL: 62240 VA — DEMAND AMPS: 172.8
CONNECTED BUS C 20,580 VA
NOTE: ** INDICATES ITEMS UNDER THIS CONTRACT — NOTE: * INDICATES GFI BREAKER

THE STATE OF TEXAS

PROJECT ARCHITECT:
HOMER SAENZ, AIA
PROJECT NO. ADG17589A
ISSUE DATE: 04/20/18
DRAWN BY: AT
REVIEWED BY: MTC

FREESE and NICHOLS
4055 International Plaza, Suite 200
Fort Worth, Texas 76109-4895
Phone - (817) 735-7300
Fax - (817) 735-7491
Freese and Nichols, Inc.
Texas Registered Engineering
Firm F-2144

NO.	DATE	ISSUE
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9		

TEXAS MILITARY FORCES
CONSTRUCTION & FACILITIES MANAGEMENT OFFICE-CFMO
CAMP MABRY P.O. BOX 5218 AUSTIN, TEXAS 78763-5218
(512) 782-6131 FAX (512) 782-1481

STAR CAMPAIGN FY18 - WESLACO
RC MAJOR MAINTENANCE

TXARNG CFMO

ELECTRICAL SCHEDULES II

E-25

SHT. 100 of 129

STATE OF TEXAS
TERESA CASTILLÓN
111323
LICENSED
PROFESSIONAL ENGINEER
4/20/18

PANEL NO. EITA — MAIN 100 AMPS MCB — LOCATION SERVER ROOM A134
SERVICE VOLTAGE 208Y/120 VOLTS — BUS RATING 100 AMPS
A.I.C. 65,000 — NEUTRAL BUS 100 AMPS — FEED FROM

DESCRIPTION	BREAKER POLE	BREAKER AMP	VOLT AMPS A	VOLT AMPS B	VOLT AMPS C	CKT NO	BUSS CONN	CKT NO	VOLT AMPS A	VOLT AMPS B	VOLT AMPS C	BREAKER POLE	BREAKER AMP	DESCRIPTION
L6-30R	2	30	2496			1		2	2496			2	30	L6-30R
				2496		3		4		2496				
L6-30R	2	30			2496	5		6			2496	2	30	L6-30R
			2496			7		8	2496					
SERVER ROOM QUAD	1	20		360		9		10		360		1	20	SERVER ROOM QUAD
SPACE						11		12						SPACE
SPACE						13		14						SPACE
SPACE						15		16						SPACE
SPACE						17		18						SPACE
SPACE						19		20				3		SPD
SPACE						21		22						
SPACE						23		24					20	

CONNECTED BUS A 9,984 VA — 4992 2856 2496 — 4992 2856 2496 — DEMAND KVA: 20.7
CONNECTED BUS B 5,712 VA — TOTAL: 20688 VA — DEMAND AMPS: 57.4
CONNECTED BUS C 4,992 VA — NOTE: * INDICATES GFI BREAKER

PANEL NO. EITB — MAIN 100 AMPS MCB — LOCATION TER B103
SERVICE VOLTAGE 208Y/120 VOLTS — BUS RATING 100 AMPS
A.I.C. 65,000 — NEUTRAL BUS 100 AMPS — FEED FROM

DESCRIPTION	BREAKER POLE	BREAKER AMP	VOLT AMPS A	VOLT AMPS B	VOLT AMPS C	CKT NO	BUSS CONN	CKT NO	VOLT AMPS A	VOLT AMPS B	VOLT AMPS C	BREAKER POLE	BREAKER AMP	DESCRIPTION
L6-30R	2	30	2496			1		2	2496			2	30	L6-30R
				2496		3		4		2496				
L6-30R	2	30			2496	5		6			2496	2	30	L6-30R
			2496			7		8	2496					
SERVER ROOM QUAD	1	20		360		9		10		360		1	20	SERVER ROOM QUAD
SPACE						11		12						SPACE
SPACE						13		14						SPACE
SPACE						15		16						SPACE
SPACE						17		18						SPACE
SPACE						19		20				3		SPD
SPACE						21		22						
SPACE						23		24					20	

CONNECTED BUS A 9,984 VA — 4992 2856 2496 — 4992 2856 2496 — DEMAND KVA: 20.7
CONNECTED BUS B 5,712 VA — TOTAL: 20688 VA — DEMAND AMPS: 57.4
CONNECTED BUS C 4,992 VA — NOTE: * INDICATES GFI BREAKER

LIGHTING FIXTURE SCHEDULE

TYPE	MANUFACTURER	CATALOG NO.	VOLT.	DESCRIPTION	LAMPS	INPUT WATTS
A	LITHONIA	2GTL4-40L-GZ10-LP835-USPOM	277	2'x4' LED TROFFER WITH .125" ACRYLIC FLAT LENS, REGRESSED ALUMINUM DOOR, 4000 LUMENS, 3500K CCT, AND ELECTRONIC DRIVER.	LED	32
AE	LITHONIA	2GTL4-40L-GZ10-LP835-EL14-USPOM	277	SIMILAR TO TYPE "A" EXCEPT WITH A 1400 NOMINAL LUMEN EMERGENCY BATTERY PACK.	LED	32
B	LITHONIA	2AVL4-40L--MDR-MVOLT-EZ1-LP835-USPOM	277	2'x4' DIRECT/INDIRECT LED TROFFER WITH A METAL DIFFUSER, COLD ROLLED STEEL REFLECTOR ASSEMBLY, 4000 LUMENS, 3500K CCT, 82 CRI, ELECTRONIC DIMMING DRIVER, AND WHITE FINISH.	LED	48
BE	LITHONIA	2AVL4-40L--MDR-MVOLT-EZ1-LP835-EL14L-USPOM	277	SIMILAR TO TYPE "C" EXCEPT WITH A 1400 NOMINAL LUMEN EMERGENCY BATTERY PACK.	LED	48
C	LITHONIA	DSXF1LED-P2-4000K-HMF-277-THK-DBLXD-USPOM	277	D-SERIES SIZE 1 LED FLOO LUMINAIRE. PROVIDE HYDREL WMSA-78C BLACK WALL MOUNT SPLICE FOR MOUNTING.	LED	25
CE	LITHONIA	DSXF1LED-P2-4000K-HMF-277-THK-DBLXD-USPOM, POWER SENTRY EAC ISSM MICRO INVERTER	277	D-SERIES SIZE 1 LED FLOO LUMINAIRE. PROVIDE HYDREL WMSA-78C BLACK WALL MOUNT SPLICE FOR MOUNTING. PROVIDE 20W MICRO-INVERTER.	LED	25
D	LITHONIA	ZL1F-L48-4500LM-MDD-MVOLT-35K-90CRI-WH-USPOM	277	4' LED STRIP LIGHT WITH STEEL HOUSING, WHITE FINISH, 4500 UMENS, 3500K CCT, 90CRI, FROSTED LENS, AND ELECTRONIC DRIVER.	LED	25
F	BEGA USA	33136 BRZ K4	277	SURFACE CANOPY MOUNTED LED LUMINAIRE, ONE PIECE DIE-CAST ALUMINIUM, 4000K, 85CRI, DARK BRONZE. IP65 RATED.	LED	25
FE	BEGA USA	33137 BRZ K4 WITH REMOTE BATTERY	277	SURFACE CANOPY MOUNTED LED LUMINAIRE, ONE PIECE DIE-CAST ALUMINIUM, 4000K, 85CRI, DARK BRONZE. IP65 RATED, WITH REMOTE MOUNTED BATTERY PACK, POWER SENTRY PS1555CP. BATTERY PACK MAY BE MOUNTED ABOVE THE CEILING INSIDE THE BUILDING.	LED	25
G	LITHONIA	EVO-35/35-6-AR-WD-LSS-MVOLT-EZ1-USPOM	277	6" DOWN LIGHT WITH CLEAR TRIM, SEMISPECULAR FINISH, 3500K CRI, 3500 LUMENS, 85 CRI, AND ELECTRONIC DRIVER.	LED	28
GE	LITHONIA	EVO-35/35-6-AR-WD-LSS-MVOLT-EZ1-EL-USPOM	277	SIMILAR TO TYPE "G" EXCEPT WITH AN EMERGENCY BATTERY PACK.	LED	28
H	LITHONIA	DSXF2-P2-40K-FL-MVOLT-IS-DDBXD-FV-USPOM	277	D-SERIES SIZE 2 LED FLOO LUMINAIRE. PROVIDE STANCHION FOR MOUNTING TO THE GROUND	LED	25
L	MARK LIGHTING	SL4L LOP (X)FT FLP FL 80CRI 35K 600LMF WW MIN1 NODIM 120 NLIGHT DPL USPOM	277	4 INCH DIRECT LEF TROFFER WITH A FLUSH 90% TRANSMISSIVE SATIN DIFFUSER, ALUMINUM EXTRUDED HOUSING, 600 LUMENS PER FOOT, 3500K CCT, 82 CRI, ELECTRONIC DIMMING DRIVER, AND WHITE FINISH, CONTRACTOR TO PROVIDE WALL TO WALL WITHIN 1 INCH.	LED	24
S	GOTHAM	EVO-35/25-6-DFR-MVOLT-EZ1-USPOM	277	6" SHOWER LIGHT WITH NON-CONDUCTIVE HOUSING, WHITE FLANGE, REGRESSED LENS, 3500K CRI, 2500 LUMENS, 85 CRI, AND ELECTRONIC DRIVER.	LED	42
X	LITHONIA	LE-S-1-R-EL N-SD-USPOM	277	EXIT LIGHT WITH DIE-CAST ALUMINUM HOUSING, BRUSHED ALUMINUM FINISH, RED LEDS, AND NI-CAD BATTERY BACK-UP.	LED	14
W	LITHONIA	WST LED-P2-40K-VF277-VG-DDBXD-USPOM	277	OUTDOOR TRAPEZOIDAL WALLPACK FIXTURE WITH DIE-CAST ALUMINUM HOUSING, 20LEDS, 4000 LUMENS, 4000K CCT, VANDAL GUARD, AND DARK BRONZE FINISH	LED	53
WE	LITHONIA	WST LED-P2-40K-VF277-E7WC VG-DDBXD-USPOM	277	SIMILAR TO TYPE "W" EXCEPT WITH AN EMERGENCY BATTERY PACK.	LED	53

LIGHTING FIXTURE SCHEDULE NOTES:

1. LIGHT FIXTURES PROVIDED SHALL BE APPROVED EQUAL TO THE FIXTURE INDICATED IN THE SCHEDULE ABOVE.
2. FIXTURE MODEL NUMBERS ARE USED TO ESTABLISH MINIMUM QUALITY AND PERFORMANCE STANDARDS AND NOT TO ESTABLISH MOUNTING TYPE. MOUNTING REQUIREMENTS MAY VARY FOR THE SAME TYPE OF FIXTURE THROUGHOUT THE PROJECT. CONTRACTOR SHALL VERIFY INSTALLATION LOCATION AND PROVIDE APPROPRIATE MOUNTING HARDWARE FIXTURE TYPE DESIGN FOR EACH LOCATION.
3. FOR FIXTURE TYPE "FE" THE CONTRACTOR SHALL PROVIDE A NEMA 12 BOX FOR THE REMOTE BALLAST. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL MOUTNING HARDWARE AS REQUIRED.
4. THE CONTRACTOR SHALL WIRE ALL EMERGENCY BATTERY PACKS TO THE UNSWITCHED SIDE OF THE CIRCUIT IN WHICH IT IS CONNECTED. THE CONTRACTOR SHALL PROVIDE ALL CONDUCTORS AND CONDUIT AS REQUIRED FOR A COMPLETE AND OPERATIONAL SYSTEM.

LUMINAIRE CONTROL FUNCTIONS PROGRAMMED BY AUTHORISED FACTORY TECHNICIAN

	SPACE DESCRIPTION		A: OCCUPANCY SENSOR CONTROL (O) / TIME SWITCH CONTROL (T) / PHOTOCELL SWITCH CONTROL (P) / OCCUPANCY SENSOR PROGRAMMABLE CONTROL (OP)	B: AUTOMATICALLY TURN OFF LIGHTS WITHIN 30 MINUTES OF ALL OCCUPANTS LEAVING THE SPACE	C: AUTOMATICALLY TURN ON THE LIGHT TO NOT MORE THAN 50% WHEN OCCUPANT ENTERS THE SPACE	D: OCCUPANTS CAN MANUALLY TURN OFF THE LIGHT	E: AUTOMATICALLY TURN OFF LIGHTS AS A FUNCTION OF AVAILABLE DAYLIGHT	F: AUTOMATICALLY REDUCE THE CONNECTED LIGHTING POWER BY NOT LESS THAN 30% FROM NOT LATER THAN MIDNIGHT TO 6AM, FROM ONE HOUR AFTER BUSINESS CLOSING TO ONE HOUR BEFORE BUSINESS OPENING OR DURING ANY PERIOD WHEN ACTIVITY HAS NOT BEEN DETECTED FOR A TIME LONGER THAN 15 MINUTES	G: TIME BASED CONTROL WITH MANUAL OVERRIDE NOT OVER 2 HOUR CONTROLLING LESS THAN 5000 SQFT.	H: LOAD SHEDDING	I: DAYLIGHT HARVESTING	
1	CLASSROOM/LECTURE/TRAINING ROOM	OP	●	●	●							1
2	CONFERENCE/MEETING/MULTIPURPOSE ROOM	OP	●	●	●							2
3	COPY/PRINT ROOM	OP	●	●	●							3
4	LOBBY	OP	●	●	●				●			4
5	OFFICE	OP	●	●	●							5
6	RESTROOM	OP	●	●	●							6
7	JANITORIAL CLOSET/STORAGE/LOCKER ROOM	OP	●	●	●							7
8	ANY SPACES 300 SQFT. OR LESS ENCLOSED BY FLOOR TO CEILING PARTITION	OP	●	●	●							8
9	CORRIDOR	T						●				9
10	REMAINING AREAS WITH NO OCCUPANCY SENSOR	T						●				10
11	EXTERIOR AREAS	O/T/P				●	●					11
			A	B	C	D	E	F	G	H		

1 — SEQUENCE OF OPERATIONS FOR LIGHTING SWITCHING / CONTROL
NOT TO SCALE

TERESA CASTILLÓN 111323 LICENSED PROFESSIONAL ENGINEER STATE OF TEXAS 4/20/18

THE STATE OF TEXAS

PROJECT ARCHITECT:
HOMER SAENZ, AIA
PROJECT NO. ADG17589A
ISSUE DATE: 04/20/18
DRAWN BY: JF
REVIEWED BY: MTC

FREESE NICHOLS
4055 International Plaza, Suite 200
Fort Worth, Texas 76109-4895
Phone - (817) 735-7300
Fax - (817) 735-7491
Freese and Nichols, Inc.
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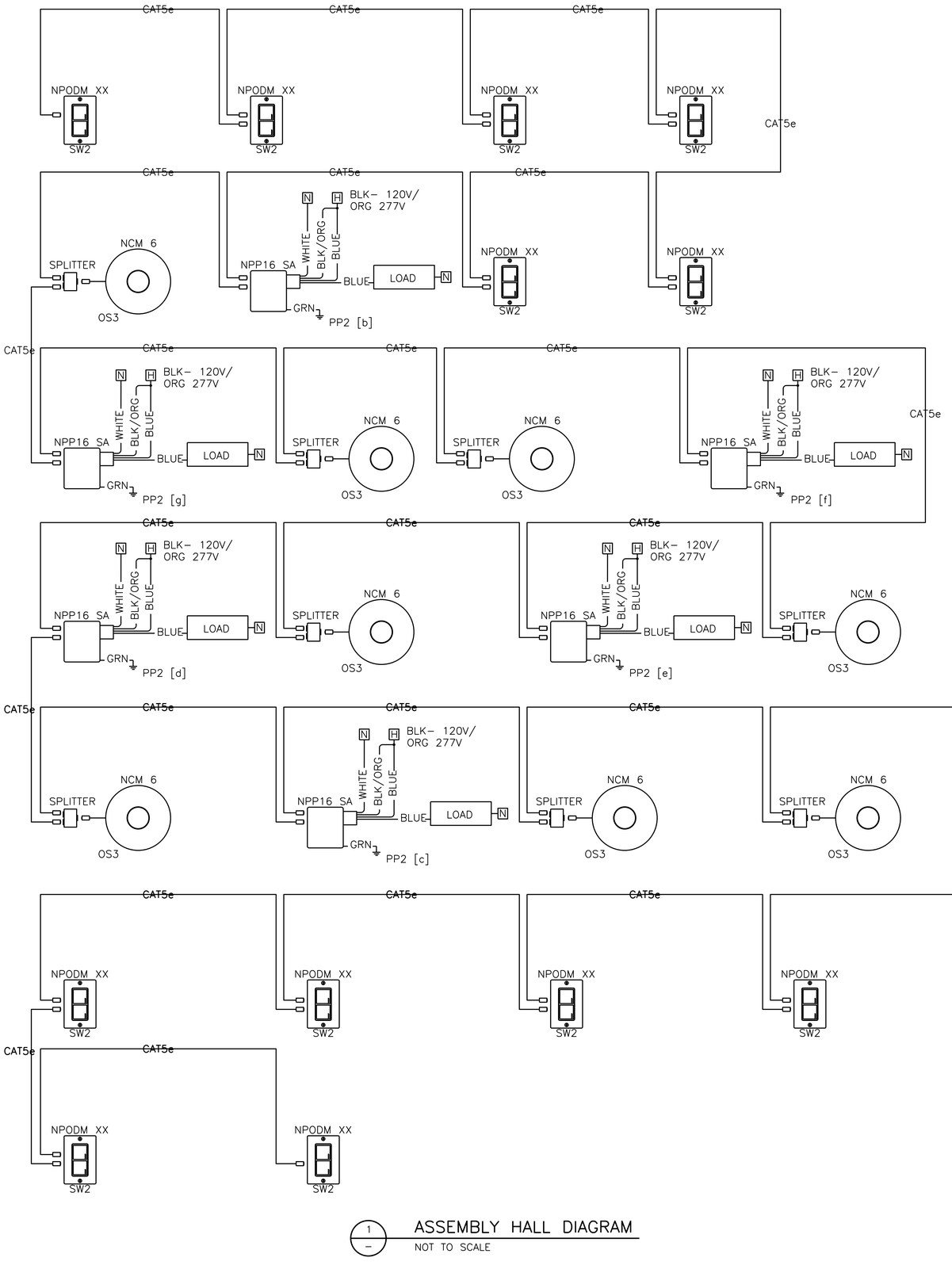
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CONSTRUCTION & FACILITIES MANAGEMENT OFFICE-CFMO
CAMP MABRY P.O. BOX 5218 AUSTIN, TEXAS 78763-5218
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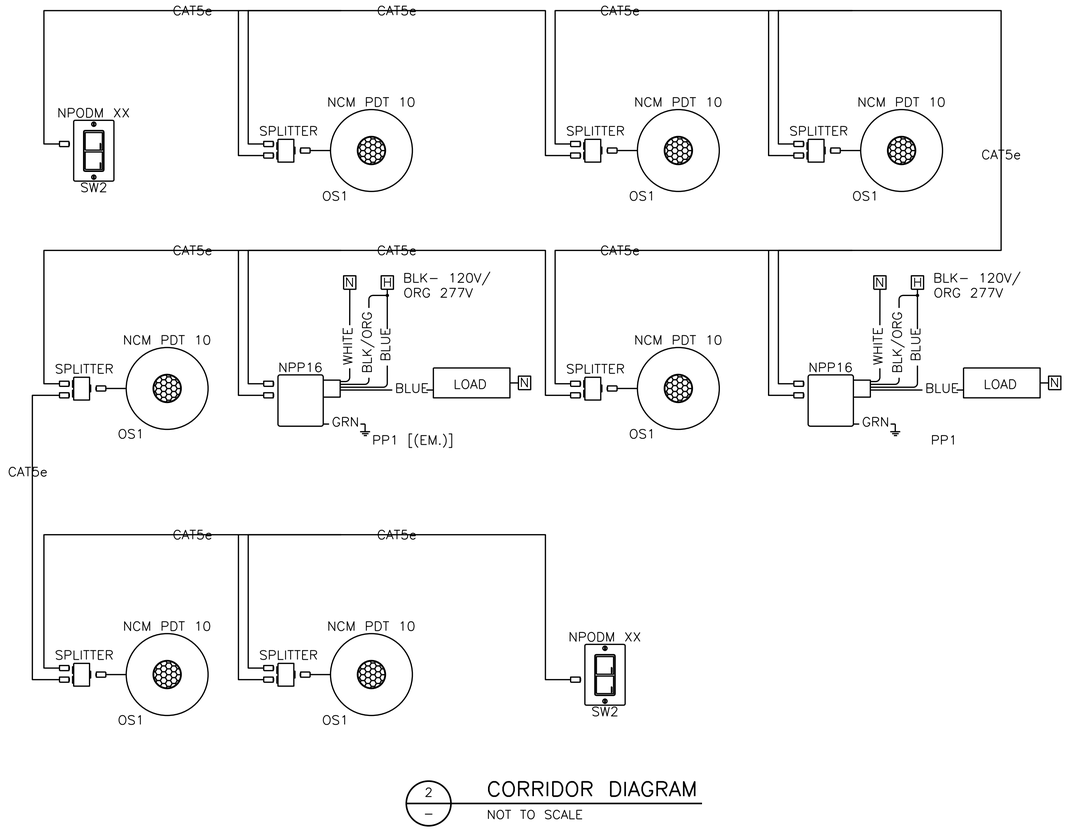
ELECTRICAL SCHEDULES III

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SHT. 101 of 129



1 — ASSEMBLY HALL DIAGRAM
NOT TO SCALE



2 — CORRIDOR DIAGRAM
NOT TO SCALE

TERESA CASTILLÓN
111323
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CAMP MABRY P.O. BOX 5218
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(512) 782–6131
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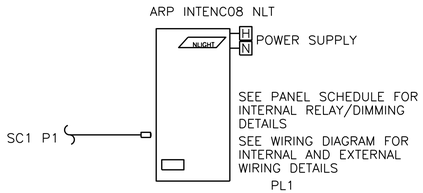
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ELECTRICAL LIGHTING CONTROL DIAGRAMS I

E-27

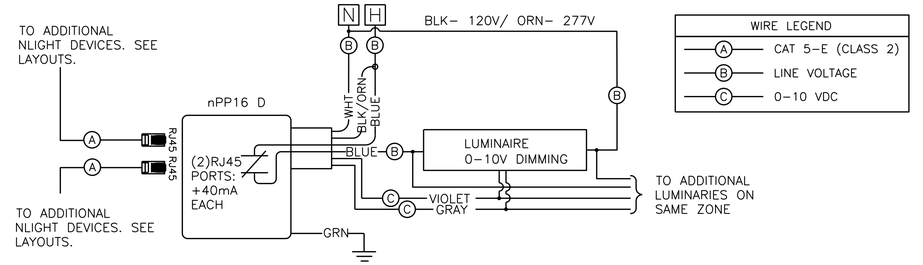
SHT. 102 of 129



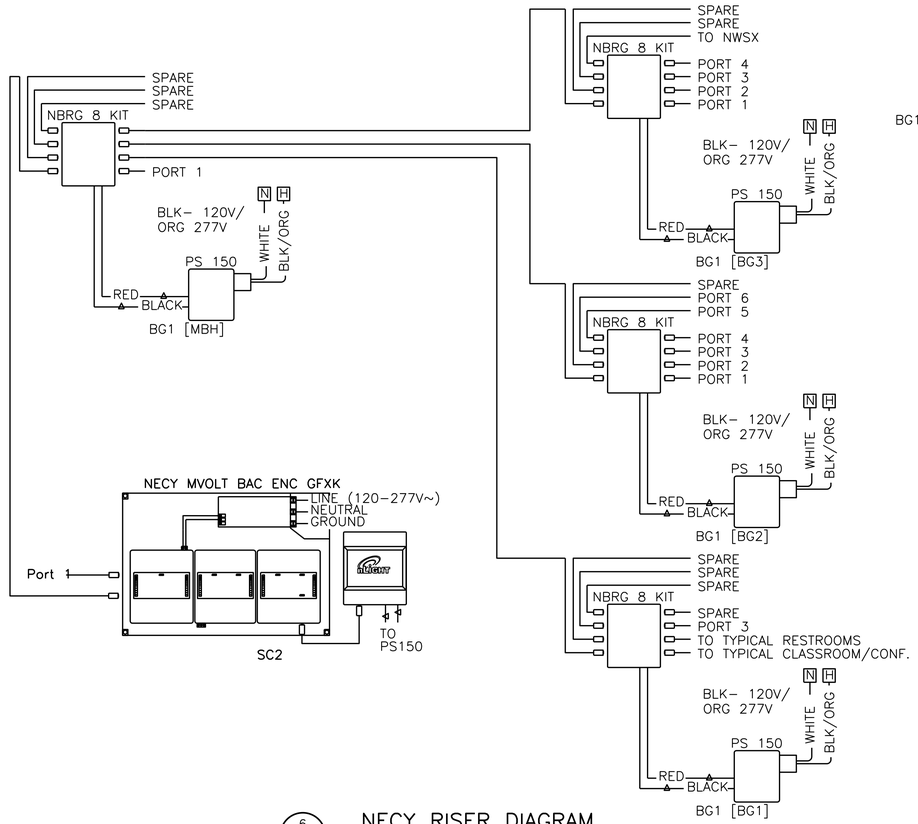
1 — PANEL 'ARP' RISER DIAGRAM
NOT TO SCALE

PANEL ARP1 LOAD SCHEDULE- 120/277V

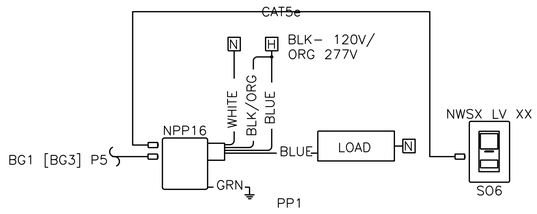
Area	Zone Name	Breaker #	Voltage	Output#	Fixture Designation	Load Type	Fixture Watts
LOBBY	LOBB-1		277	1	D	0-10V	25
BREEZEWAY	BZW-1		277	2	C	NON-DIM	25
TOWER/ENTRY	TWR-1		277	3	C	NON-DIM	25
EXTERIOR	EXT-1		277	4	F	NON-DIM	26
EXTERIOR	EXT-2		277	5	W/F	NON-DIM	53/26
EXTERIOR	EXT-3		277	6	W/F	NON-DIM	53/26
EXTERIOR	EXT-4		277	7	W/F	NON-DIM	53/27
SPARE				8			



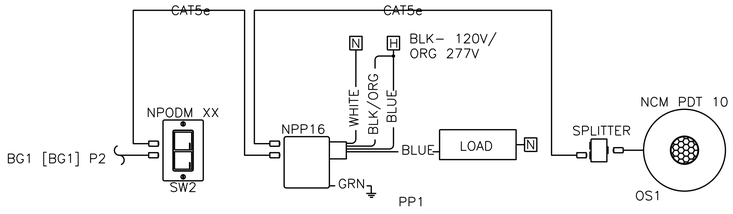
2 — TYPICAL WIRING DIAGRAM: POWER RELAY PACK NPP16D (DIMMING)
NOT TO SCALE



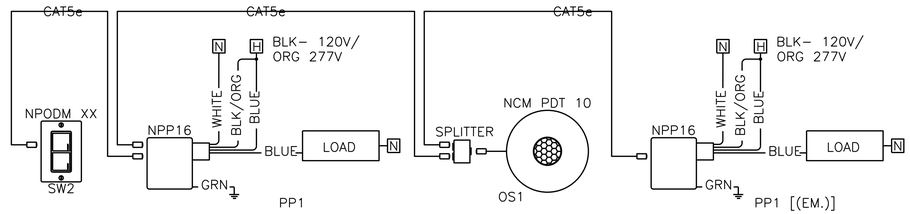
6 — NECY RISER DIAGRAM
NOT TO SCALE



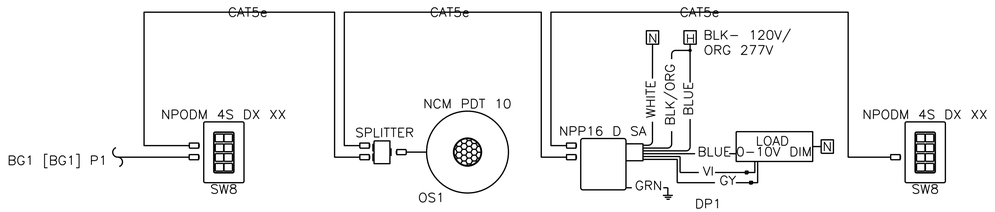
3 — TYPICAL NWSX
NOT TO SCALE



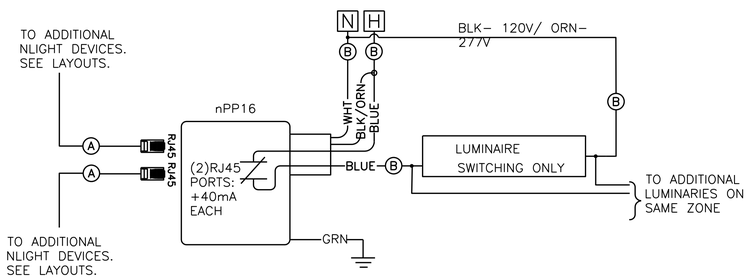
4 — TYPICAL RESTROOM
NOT TO SCALE



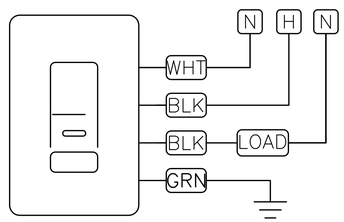
5 — TYPICAL OPEN OFFICE
NOT TO SCALE



7 — TYPICAL CLASSROOM/CONFERENCE RM
NOT TO SCALE



8 — TYPICAL WIRING DIAGRAM: POWER RELAY PACK NPP16
NOT TO SCALE



9 — TYPICAL WSX
NOT TO SCALE

STATE OF TEXAS
TERESA CASTILLÓN
111323
LICENSED
PROFESSIONAL ENGINEER
4/20/18

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FREESE and NICHOLS
4055 International Plaza, Suite 200
Fort Worth, Texas 76109–4895
Phone – (817) 735–7300
Fax – (817) 735–7491
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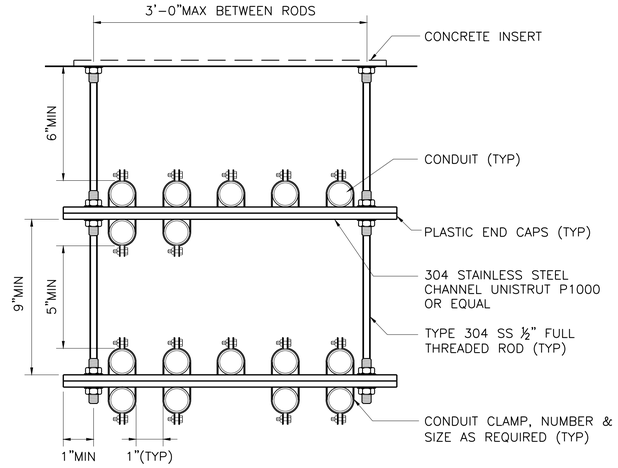
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ELECTRICAL LIGHTING CONTROL DIAGRAMS II

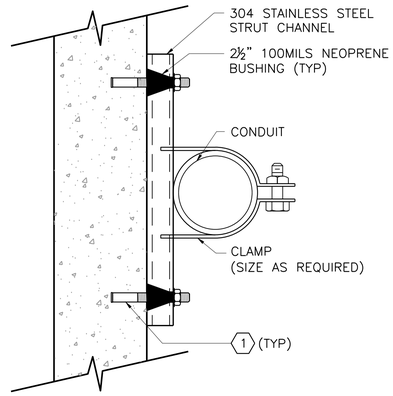
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1 – CEILING MOUNTED CONDUIT RACK

NOT TO SCALE

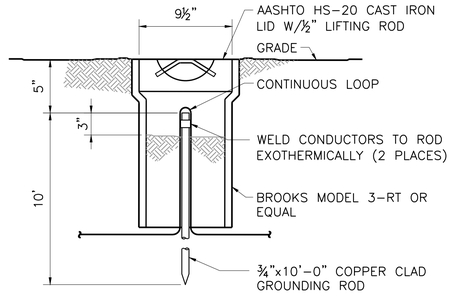


NO.3 NOTES BY SYMBOL "⬡"

1. ANCHORS SHALL BE ½"DIA STAINLESS STEEL KWIK BOLT III WITH 3½" EMBEDMENT. DO NOT DAMAGE EXISTING STRUCTURE DURING ANCHOR INSTALLMENT.

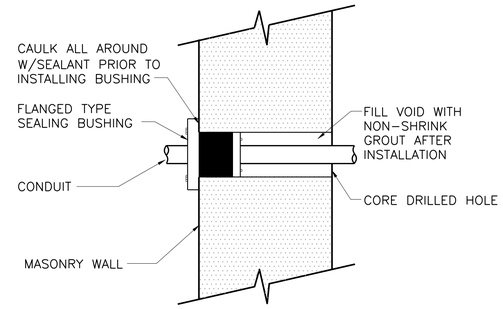
2 – CEILING OR WALL EXPOSED CONDUIT INSTALLATION

NOT TO SCALE



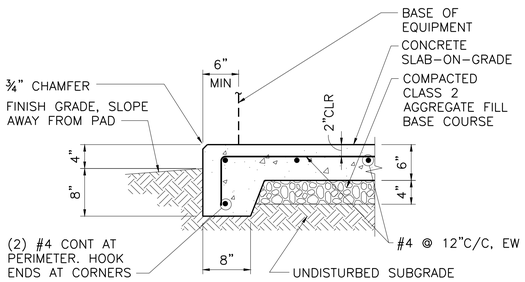
3 – GROUND ROD DETAIL

NOT TO SCALE



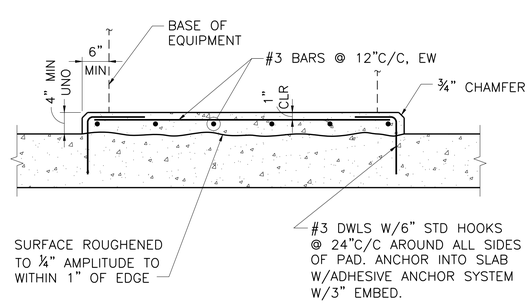
4 – WATERTIGHT CONDUIT PENETRATION

NOT TO SCALE



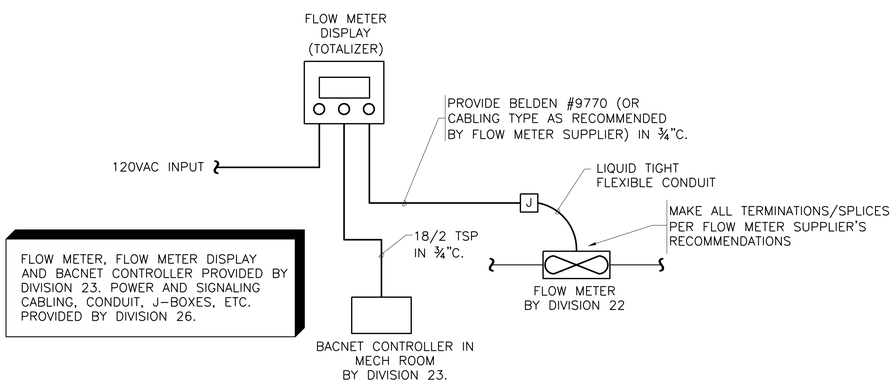
5 – TYPICAL EXTERIOR EQUIPMENT PAD

NOT TO SCALE



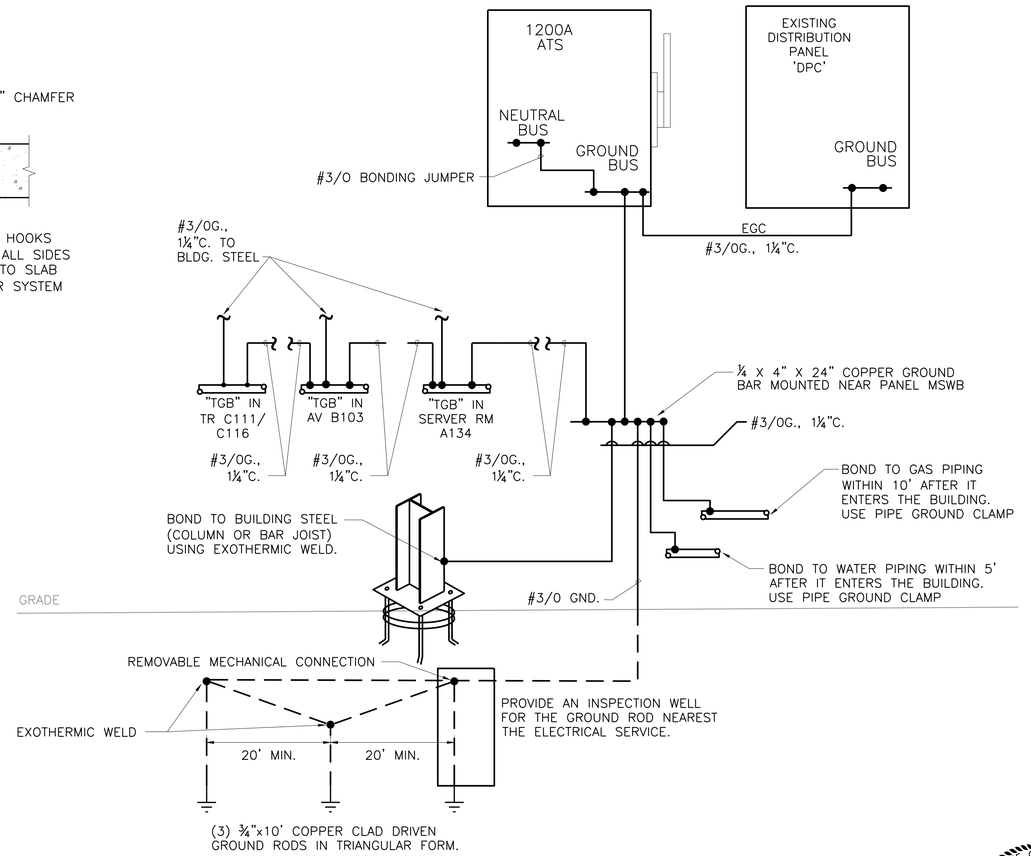
6 – INTERIOR EQUIPMENT PAD

NOT TO SCALE



7 – FLOW METER/TOTALIZER WIRING DIAGRAM

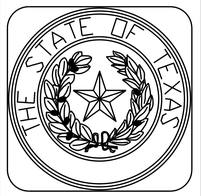
NOT TO SCALE



8 – GROUNDING DIAGRAM

NOT TO SCALE





PROJECT ARCHITECT:
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FREESE NICHOLS
4055 International Plaza, Suite 200
Fort Worth, Texas 76109-4895
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Fax - (817) 735-7491
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ELECTRICAL DETAILS I

E-29

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SYSTEM OUTPUTS

SYSTEM INPUT		FA/MASS NOTIFICATION ANNUNCIATION						NOTIFICATION										LIFE SAFETY AND SUPPLEMENTAL CONTROLS							
		ACTUATE COMMON ALARM SIGNAL INDICATOR	ACTUATE AUDIBLE ALARM SIGNAL	ACTUATE COMMON SUPERVISORY SIGNAL INDICATOR	ACTUATE AUDIBLE SUPERVISORY SIGNAL	ACTUATE COMMON TROUBLE SIGNAL INDICATOR	ACTUATE AUDIBLE TROUBLE SIGNAL	DISPLAY STATUS	BROADCAST FIRE ALARM SIGNAL THROUGH SPEAKERS	BROADCAST MASS NOTIFICATION SIGNAL THROUGH SPEAKERS	ACTIVATE MASS NOTIFICATION STROBES	DE-ACTIVATE FIRE ALARM STROBES	BROADCAST GIANT VOICE SIGNAL THROUGH SPEAKERS (IF PRESENT)	SILENCE FIRE ALARM SIGNAL	ACTIVATE EXTERIOR HORN/STROBE					RELEASE MAGNETICALLY HELD SMOKE DOORS	UNLOCK EXITS/ACCESS CONTROL	SHUT DOWN DUCT FIRE SMOKE DAMPERS	TRANSMIT MNS ACTIVATE TO TRANSMIT TO REMOTE STATION	MNS OVERRIDE OF ACTIVE FIRE ALARM	TRANSMIT ALARM SIGNAL TO REMOTE STATION	TRANSMIT TROUBLE SIGNAL TO REMOTE STATION	TRANSMIT SUPERVISORY SIGNAL TO REMOTE STATION
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y
1	MANUAL PULL STATION	●	●					●	●											●				●		
2	SMOKE (OR HEAT) DETECTOR	●	●					●	●											●				●		
3	DUCT DETECTOR			●	●			●													●					●
4	MONITOR POINT: KITCHEN HOOD EXHAUST FAN	●	●					●	●											●				●		
5	FIRE ALARM SYSTEM LOW BATTERY					●	●	●																	●	
6	FIRE ALARM SYSTEM AC POWER FAILURE					●	●	●												●					●	
7	OPEN CIRCUIT					●	●	●																	●	
8	GROUND FAULT					●	●	●																	●	
9	NOTIFICATION APPLIANCE SHORT CIRCUIT					●	●	●																	●	
10	MASS NOTIFICATION MESSAGE (PUSHBUTTON ON LOC)									●	●	●	●	●									●	●		
11	MASS NOTIFICATION LIVE PAGE (PUSHBUTTON ON LOC)									●	●	●	●	●									●	●		
12	FIRE ALARM MESSAGE (PUSHBUTTON ON LOC)								●																	
13	MASS NOTIFICATION MESSAGE (PUSHBUTTON ON FACP)									●	●	●	●	●									●	●		
14	MASS NOTIFICATION LIVE PAGE (PUSHBUTTON ON FACP)									●	●	●	●	●									●	●		
15	FIRE ALARM MESSAGE (PUSHBUTTON ON FACP)								●																	
16	HVAC SHUTDOWN (PUSHBUTTON ON FACP)																				●					
17	CONTACT GIANT VOICE (IF PRESENT)												●	●												
18	FIRE ALARM MESSAGE (PUSHBUTTON ON FACP)																						●	●		
19	FIRE ALARM MESSAGE (PUSHBUTTON ON FACP)																									
20	CARBON MONOXIDE DETECTOR	●	●					●	●											●				●		
21	CARBON DIOXIDE DETECTOR	●	●					●	●											●				●		

SEQUENCE OF OPERATIONS FOR FIRE ALARM/MASS NOTIFICATION CONTROL PANEL

1 –

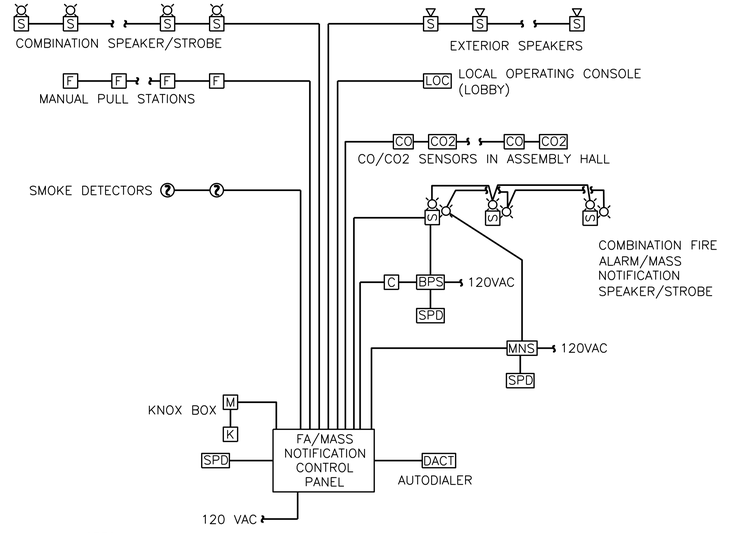
NOT TO SCALE

FIRE ALARM/MASS NOTIFICATION GENERAL NOTES:

1. ALL WORK SHALL BE IN ACCORDANCE WITH NFPA72, NATIONAL FIRE ALARM CODE, MOST RECENT EDITION.
2. ALL EQUIPMENT AND DEVICES SHOWN HATCHED SHALL BE REMOVED.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL ABANDONED CONDUIT. FIELD VERIFY ALL REQUIREMENTS.
4. REMOVE ALL SMOKE DETECTORS, HEAT DETECTORS, ETC. AND ALL ASSOCIATED CONDUIT AND CONDUCTORS BACK TO SOURCE.
5. RETAIN BACKBOXES OF EXISTING FIRE ALARM DEVICES FOR REUSE WHERE PRACTICAL. IF THE EXISTING BACKBOX WILL NOT BE REUSED, PROVIDE A COVERPLATE AND ABANDON IN PLACE.
6. ALL NEW FIRE ALARM CABLING SHALL BE INSTALLED IN CONDUIT.

FA/MASS NOTIFICATION SYMBOLS LEGEND

SYMBOL	DESCRIPTION
FACP	FIRE ALARM CONTROL PANEL
K	KNOX BOX
LOC	LOCAL OPERATING CONSOLE w/HANDSET FOR MAKING ANNOUNCEMENTS
F	MANUAL PULL STATION
M	MONITOR MODULE
C	CONTROL MODULE
TS	TAMPER SWITCH
FS	FLOW SWITCH
BPS	FIRE ALARM POWER SUPPLY
MNS	MASS NOTIFICATION POWER SUPPLY
DACT	DIGITAL ALARM COMMUNICATING TRANSMITTER (AUTO DIALER)
SPD	SURGE PROTECTION DEVICE
	DUCT DETECTOR–PHOTOELECTRIC TYPE
	SMOKE DETECTOR–PHOTOELECTRIC TYPE
C S XXcd XXdb	COMBINATION SPEAKER/STROBE "C" – INDICATES CEILING MOUNTED "XXcd" – INDICATES CANDELA RATING "XXdb" – INDICATES SOUND PRESSURE LEVEL
S WP	WEATHER–PROOF SPEAKER, BULL HORN TYPE
C S XXdb	SPEAKER "C" – INDICATES CEILING MOUNTED "XXdb" – INDICATES SOUND PRESSURE LEVEL
S XXcd XXdb R/W	COMBINATION FIRE/MASS SPEAKER/STROBE "XXcd" – CANDELA "XXdb" – DECIBEL R/W – INDICATES RED/WHITE
XXcd	STROBE 'XXcd" – INDICATES CANDELA RATING
CO	CARBON MONOXIDE SENSOR PROVIDED BY BAS CONTRACTOR
CO2	CARBON DIOXIDE SENSOR PROVIDED BY BAS CONTRACTOR
FPS	FIRE ALARM AUXILIARY POWER SUPPLY
MPS	MASS NOTIFICATION AUXILIARY POWER SUPPLY
AIM	KITCHEN HOOD INTERFACE MODULE



NOTES:
1. REFER TO FLOOR PLANS FOR EXACT NUMBER OF DEVICES.
2. THIS DIAGRAM IS SCHEMATIC IN NATURE.
3. ALL INITIATION DEVICES CAN BE ON THE SAME SLC LOOP.

FIRE ALARM/MASS NOTIFICATION SYSTEM RISER

2 –

NOT TO SCALE

STATE OF TEXAS · TERESA CASTILLON · 111323 · LICENSED · PROFESSIONAL ENGINEER · 4/20/18

THE STATE OF TEXAS

PROJECT ARCHITECT:
HOMER SAENZ, AIA
PROJECT NO. ADG17589A
ISSUE DATE: 04/20/18
DRAWN BY: HW
REVIEWED BY: MTC

FREESE and NICHOLS
4055 International Plaza, Suite 200
Fort Worth, Texas 76109–4895
Phone – (817) 735–7300
Fax – (817) 735–7491
Freese and Nichols, Inc.
Texas Registered Engineering Firm F–2144

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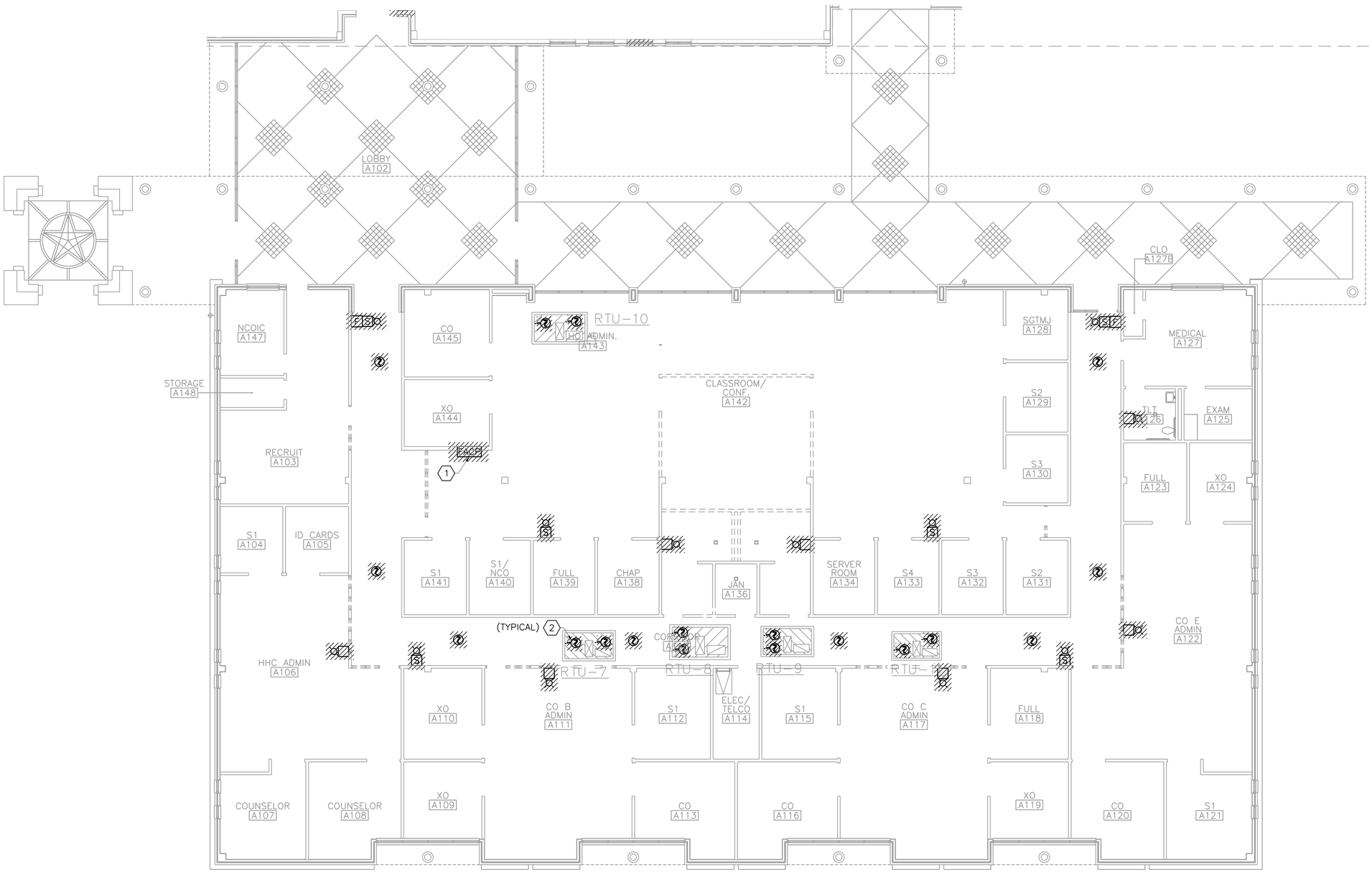
FIRE ALARM LEGEND

FA-1

SHT. 105 of 129

NOTES BY SYMBOL "⬡"

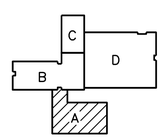
1. REMOVE FIRE ALARM CONTROL PANEL AND ALL ASSOCIATED WIRING AND CONDUIT. PATCH AND REPAIR WALL TO MATCH EXISTING.
2. REMOVE DUCT DETECTOR.



NORTH TRUE / NORTH PLAN — 1 / —

FIRE ALARM DEMOLITION PLAN – AREA 'A'

1/8"=1'-0"



KEY PLAN

0 4' 8' 16'

1/8"=1'-0"

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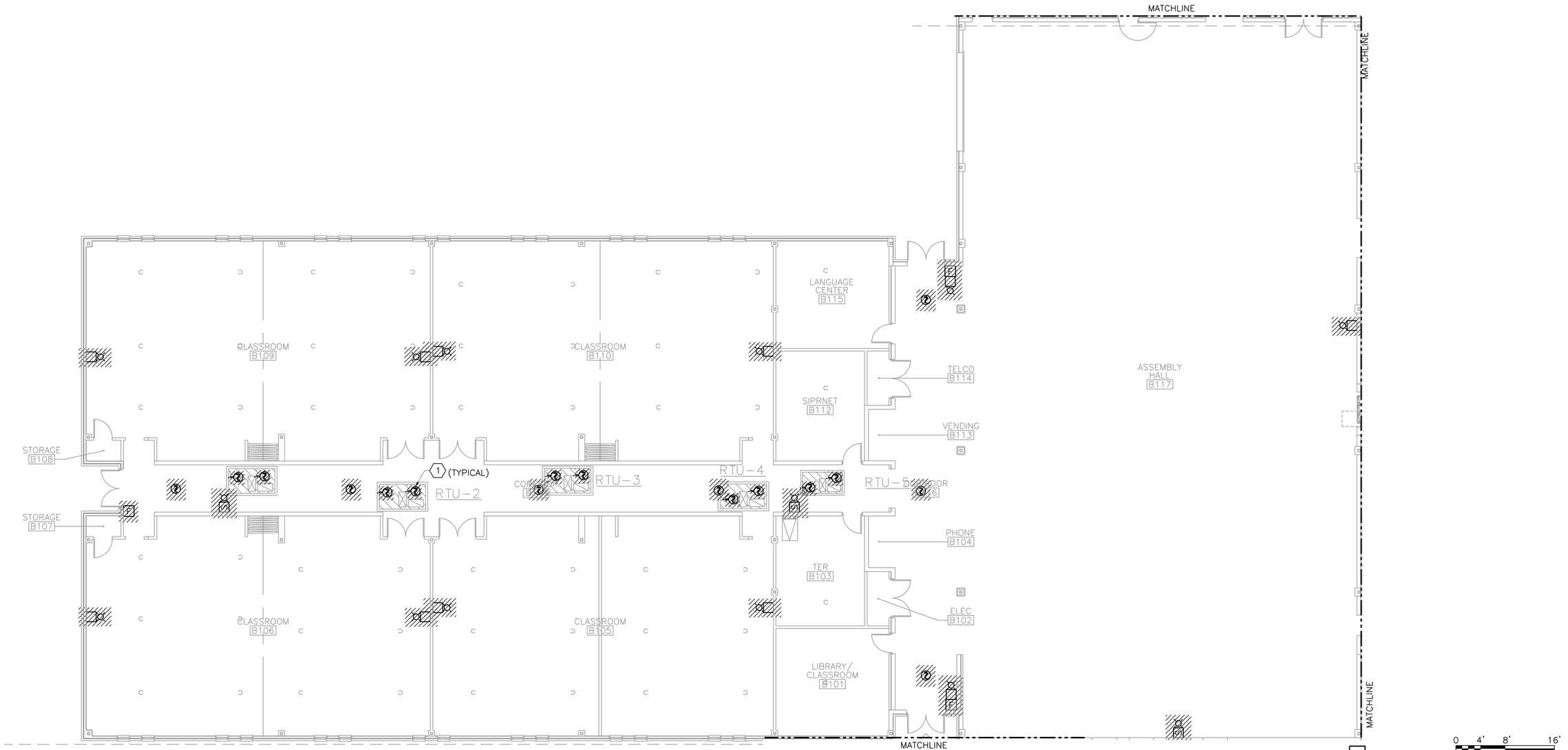
FIRE ALARM DEMOLITION PLAN - AREA 'A'

FA-2

SHT. 106 of 129

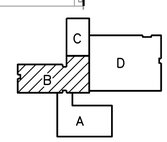
NOTES BY SYMBOL "⬡"

1. REMOVE DUCT DETECTOR.



NORTH TRUE / NORTH PLAN — 1 — FIRE ALARM DEMOLITION PLAN – AREA 'B'

1/8"=1'-0"



KEY PLAN

0 4' 8' 16'

1/8"=1'-0"

THE STATE OF TEXAS

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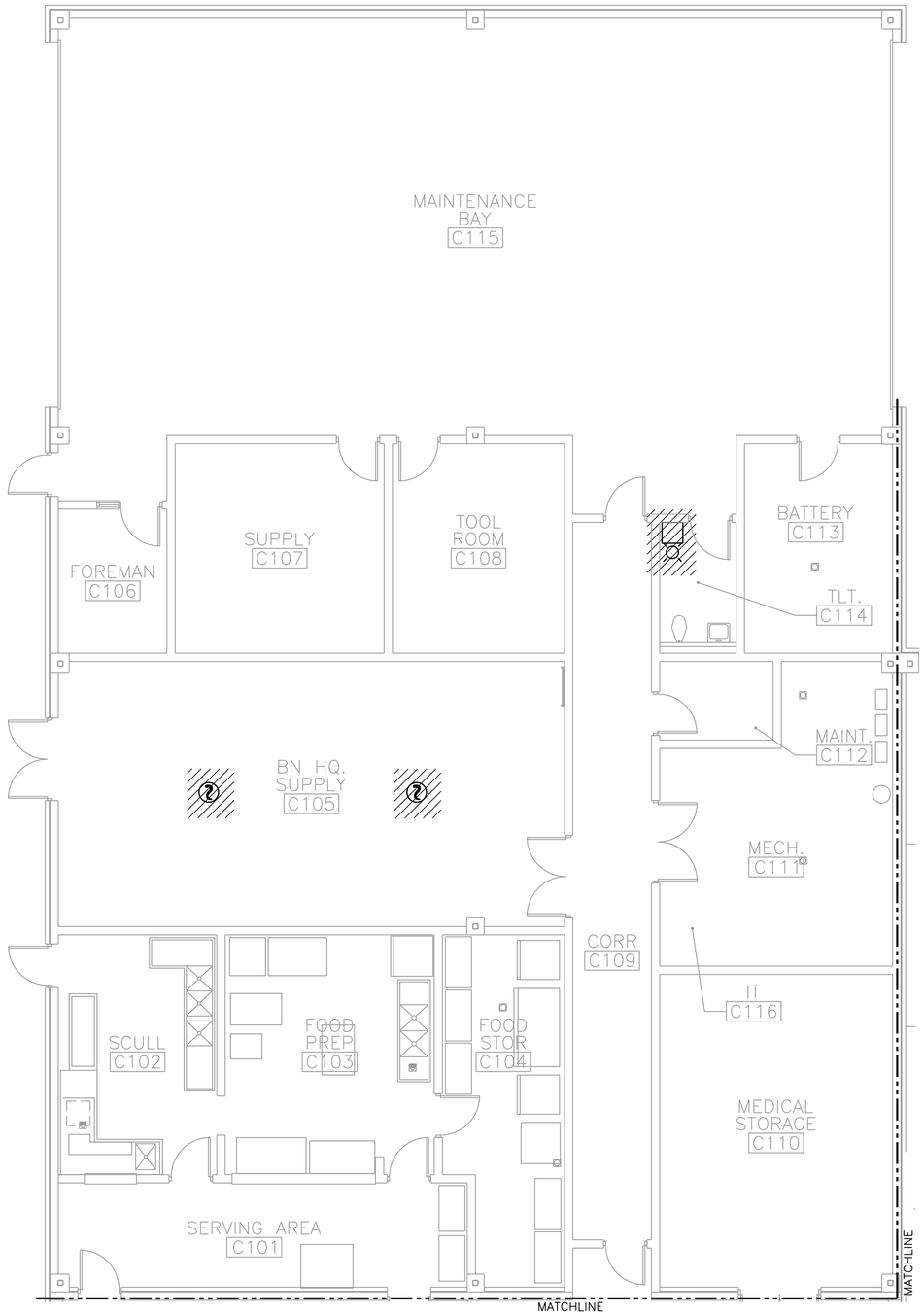
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FIRE ALARM DEMOLITION PLAN - AREA 'B'

FA-3

SHT. 107 of 129

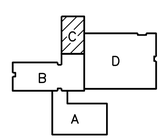
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4/20/18



NORTH TRUE NORTH PLAN 1 —

FIRE ALARM DEMOLITION PLAN – AREA 'C'

3/16"=1'-0"



KEY PLAN

0 4' 8'

3/16"=1'-0"

STATE OF TEXAS
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4/20/18

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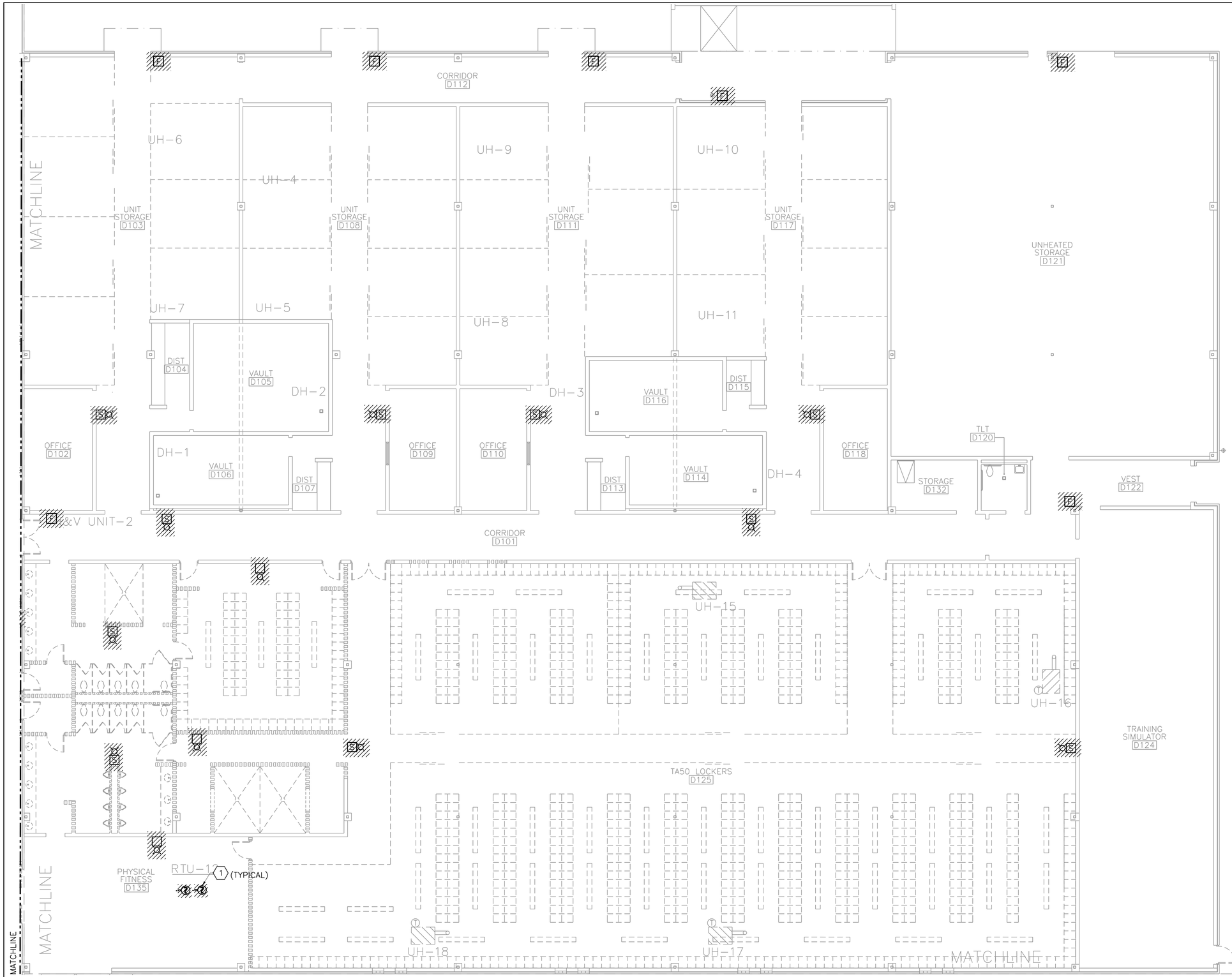
FIRE ALARM DEMOLITION PLAN - AREA 'C'

FA-4

SHT. 108 of 129

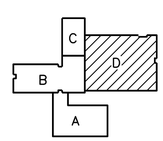
NOTES BY SYMBOL "⬡"

1. REMOVE DUCT DETECTOR.



FIRE ALARM DEMOLITION PLAN – AREA 'D'

1/8"=1'-0"



KEY PLAN

0 4' 8' 16'

1/8"=1'-0"

TERESA CASTILLON 111323 LICENSED PROFESSIONAL ENGINEER 4/20/18

PROJECT ARCHITECT:
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4055 International Plaza, Suite 200
Fort Worth, Texas 76109-4895
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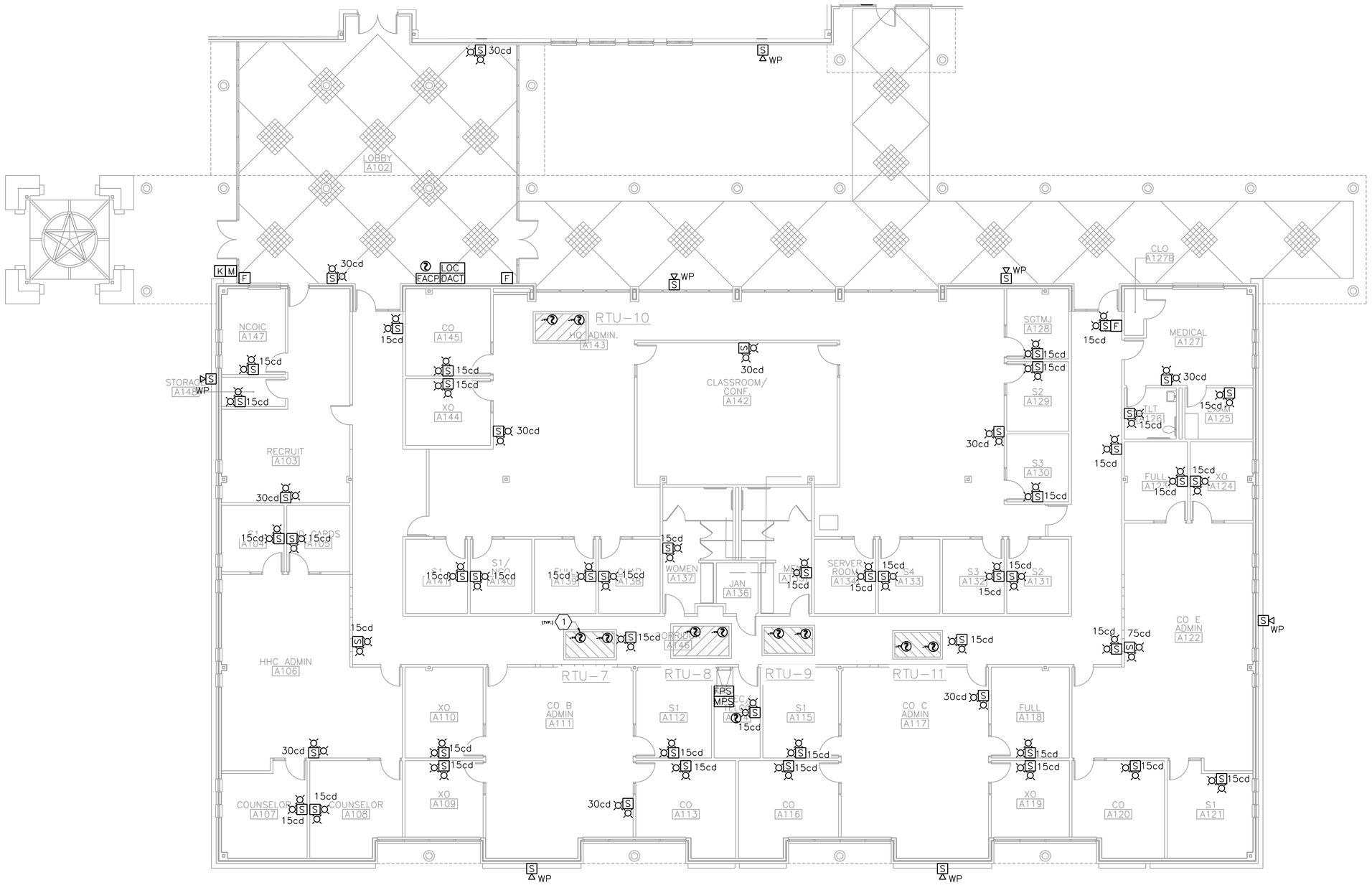
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FIRE ALARM DEMOLITION PLAN - AREA 'D'

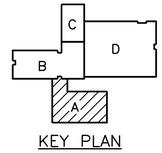
FA-5

NOTES BY SYMBOL "⬡"

1. DUCT DETECORS TO BE PROVIDED BY OTHERS. PROVIDE CONNECTION TO FIRE ALARM/MASS NOTIFICATION SYSTEM. COORDINATE REQUIREMENTS WITH MECHANICAL CONTRACTOR.



FIRE ALARM PLAN – AREA 'A'
1/8"=1'-0"



KEY PLAN

0 4' 8' 16'
1/8"=1'-0"

STATE OF TEXAS
TERESA CASTILLON
111323
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4/20/18

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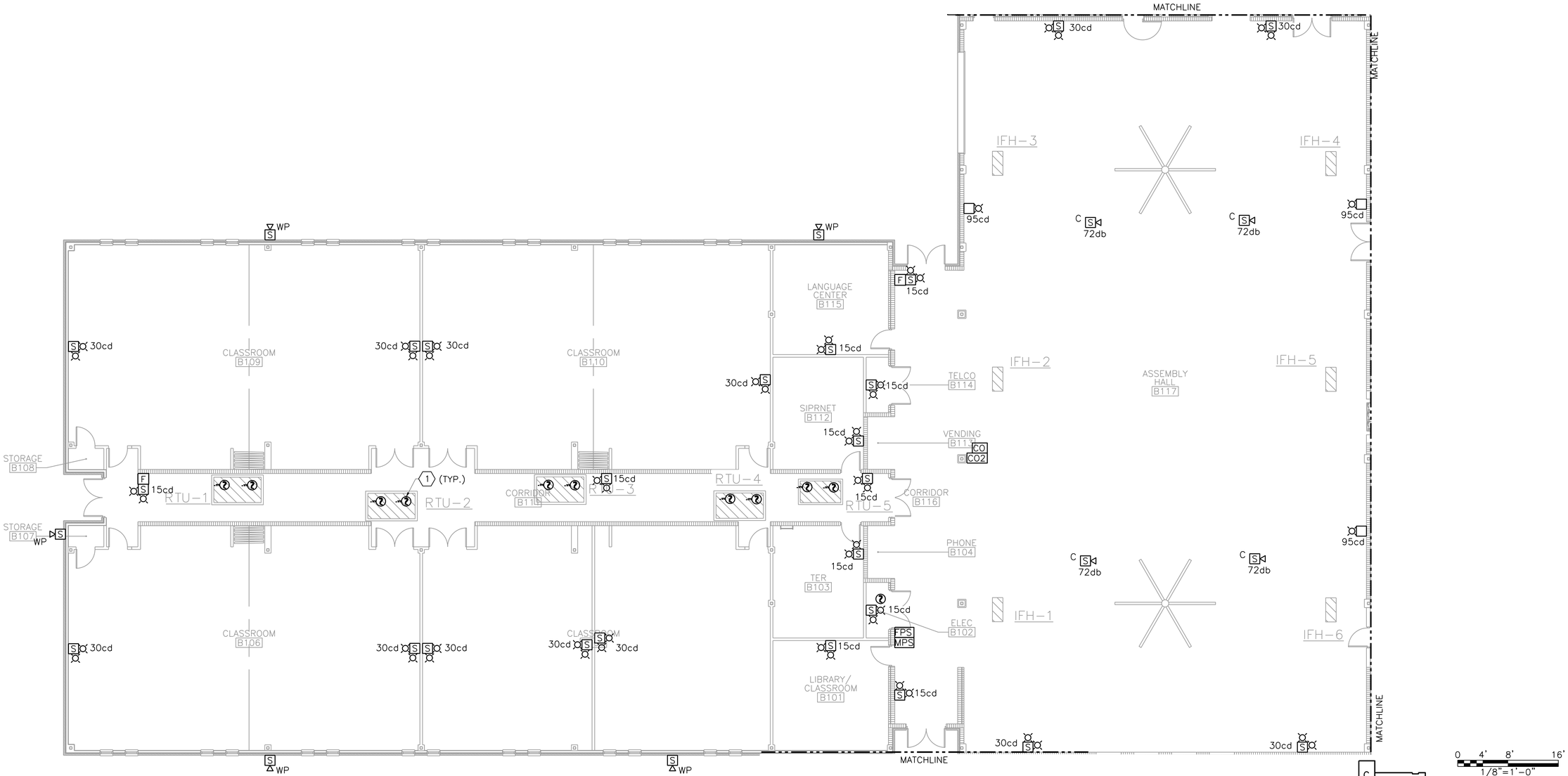
FIRE ALARM PLAN - AREA 'A'

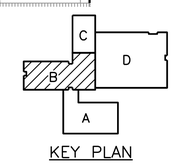
FA-6

SHT. 110 of 129

NOTES BY SYMBOL "⬡"

1. DUCT DETECORS TO BE PROVIDED BY OTHERS. PROVIDE CONNECTION TO FIRE ALARM/MASS NOTIFICATION SYSTEM. COORDINATE REQUIREMENTS WITH MECHANICAL CONTRACTOR.





KEY PLAN

0 4' 8' 16'

1/8"=1'-0"

NORTH TRUE NORTH PLAN 1 –

FIRE ALARM PLAN – AREA 'B'

1/8"=1'-0"

PROJECT ARCHITECT:
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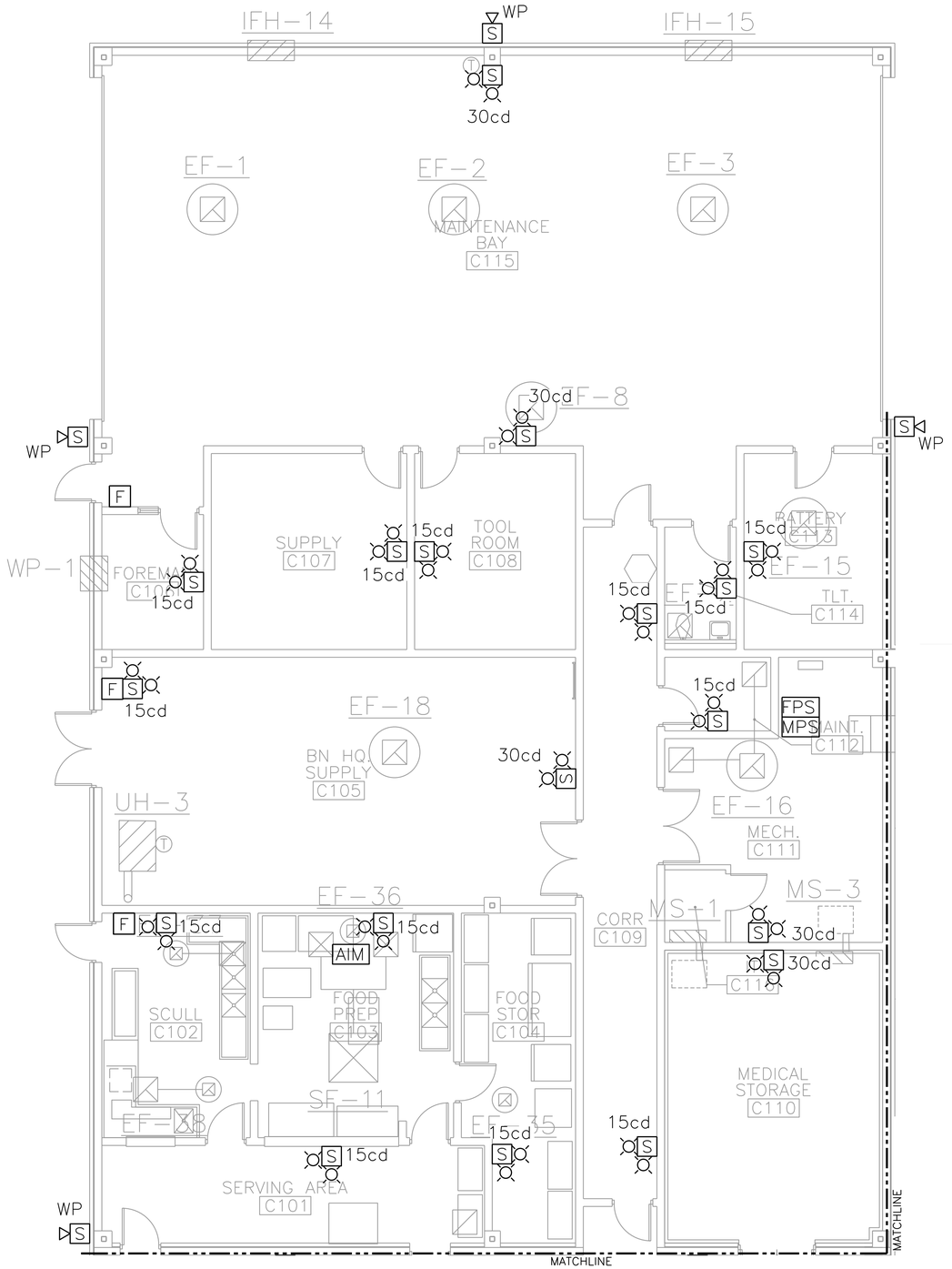
TXARNG CFMO

FIRE ALARM PLAN - AREA 'B'

FA-7

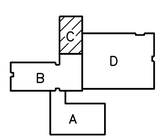
SHT. 111 of 129

STATE OF TEXAS TERESA CASTILLON 111323 LICENSED PROFESSIONAL ENGINEER 4/20/18



FIRE ALARM PLAN – AREA 'C'

3/16"=1'-0"



KEY PLAN

0 4' 8'

3/16"=1'-0"

STATE OF TEXAS
TERESA CASTILLÓN
111323
LICENSED
PROFESSIONAL ENGINEER
4/20/18

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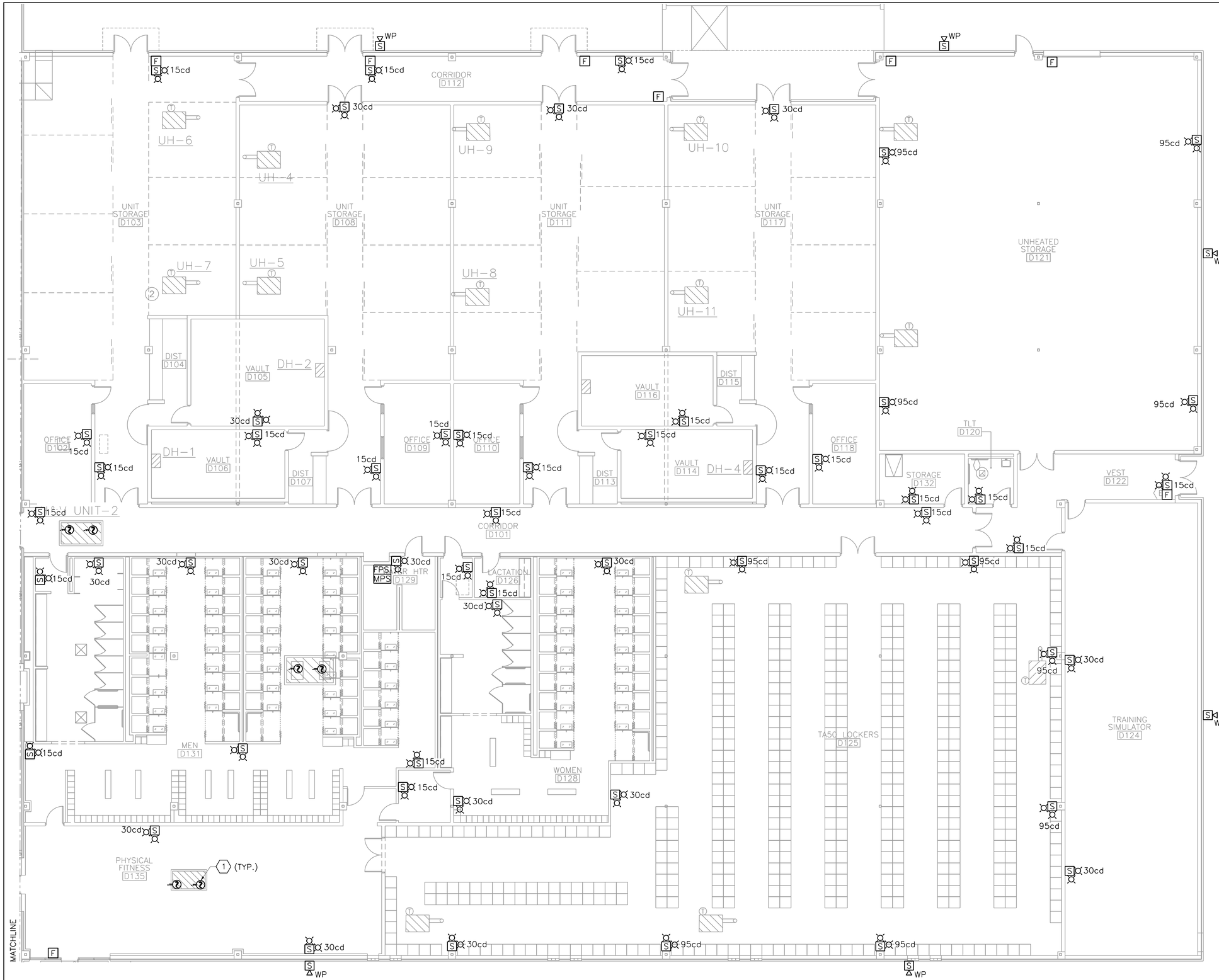
FIRE ALARM PLAN - AREA 'C'

FA-8

SHT. 112 of 129

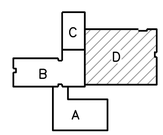
NOTES BY SYMBOL "⬡"

1. DUCT DETECORS TO BE PROVIDED BY OTHERS. PROVIDE CONNECTION TO FIRE ALARM/MASS NOTIFICATION SYSTEM. COORDINATE REQUIREMENTS WITH MECHANICAL CONTRACTOR.



FIRE ALARM PLAN – AREA 'D'

1/8"=1'-0"



KEY PLAN

0 4' 8' 16'

1/8"=1'-0"

STATE OF TEXAS
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ELECTRICAL PLAN - AREA 'D'

FA-9

SHT. 113 of 129

ABBREVIATIONS: (ALL ABBREVIATIONS SHOWN ARE NOT NECESSARILY USED ON DRAWINGS)

A

ABV	ABOVE
ADJ	ADJUSTABLE
AFF	ABOVE FINISHED FLOOR
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
AP	ACCESS POINT
ARCH	ARCHITECT, ARCHITECTURAL
AWG	AMERICAN WIRE GAUGE

B

BLDG	BUILDING
BMS	BUILDING MANAGEMENT SYSTEM

C

C	CONDUIT
CFCI	CONTRACTOR FURNISHED CONTRACTOR INSTALLED
CLG	CEILING
CL	CEILING LINE
COMM	COMMUNICATIONS
CONF	CONFERENCE
CORR	CORRIDOR
CR	COMMUNICATIONS ROOM

D

DEMO	DEMOLISH
DIA	DIAMETER
DN	DOWN

E

EA	EACH
EF	ENTRANCE FACILITY
EL	ELEVATOR
ELEC	ELECTRICAL
EMT	ELECTRICAL METALLIC TUBING
ENCL	ENCLOSURE
EXIST	EXISTING

F

FA	FIRE ALARM
FACP	FIRE ALARM CONTROL PANEL
FOC	FIBER OPTIC CABLE
FMS	FACILITIES MAINTENANCE SHOP

G

GA	GAUGE
GALV	GALVANIZED
G,GND	GROUND
GUI	GRAPHIC USER INTERFACE

H

HH	HAND HOLES

I

ID	INSIDE DIAMETER
IEEE	INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS
IDF	INTERMEDIATE DISTRIBUTION FRAME

J

J-BOX	JUNCTION BOX

K

KVA	KILO VOLT AMPERE
KW	KILOWATTS

L

LB	POUNDS
LCD	LIQUID CRYSTAL DISPLAY
LF	LINEAR FEET
LTG	LIGHTING

M

MATV	MASTER ANTENNA TV
MAX	MAXIMUM
MDF	MAIN DISTRIBUTION FRAME
MECH	MECHANICAL
MT	MOUNTED

N

N/A	NOT APPLICABLE
NEC	NATIONAL ELECTRIC CODE
NEMA	NATIONAL ELECTRIC MANUFACTURERS ASSOCIATION
NIC	NOT IN CONTRACT
N.T.S	NOT TO SCALE

O

O.A.R.	OWNER AUTHORIZED REPRESENTATIVE
OD	OUTSIDE DIAMETER
OFCI	OWNER FURNISHED CONTRACTOR INSTALLED
OFOI	OWNER FURNISHED OWNER INSTALLED

P

PDS	PREMISE DISTRIBUTION SYSTEM
PVC	POLYVINYL CHLORIDE
PWR	POWER

Q

QTY	QUANTITY

R

RCP	REFLECTED CEILING PLAN
REF:	REFERENCE, REFER
REST	RESTROOM
REQD	REQUIRED
REV	REVISED, REVISION, REVISE
RGS	RIGID GALVANIZED STEEL
RM	ROOM
RMC	RIGID METALLIC CONDUIT
RU	RACK UNIT

S

SCS	STRUCTURED CABLING SYSTEM
SECT	SECTION
SF	SQUARE FEET
ST	STAIR
STD	STANDARD
STOR	STORAGE
SUSP	SUSPEND
SVC	SERVICE

T

TBD	TO BE DETERMINED
TR	TELECOMMUNICATIONS ROOM
TEF	TELECOM ENTRANCE FACILITY
TER	TELECOM EQUIPMENT ROOM
TMD	TEXAS MILITARY DEPARTMENT
TGB	TELECOMMUNICATIONS GROUND BUSBAR
THRU	THROUGH
TYP	TYPICAL

U

UL	UNDERWRITERS LABORATORIES, INC.
UNO	UNLESS NOTED OTHERWISE
UTP	UNSHIELDED TWISTED PAIR

V

VERT	VERTICAL
VEST	VESTIBULE
VIP	VERY IMPORTANT PERSON

W

W/	WITH
WAO	WORK AREA OUTLET
W/O	WITHOUT
WP	WEATHER-PROOF

GENERAL NOTES:

1. DRAWINGS ARE DRAWN TO SCALE UNLESS OTHERWISE NOTED. CONTRACTOR IS RESPONSIBLE FOR COORDINATING EXACT ROUTING OF ALL SERVICES WITH EXISTING CONDITIONS AND WITH ALL OTHER TRADES.
2. IN THE INSTALLATION OF THIS WORK, THE CONTRACTOR SHALL COMPLY IN EVERY WAY WITH THE REQUIREMENTS OF LOCAL LAWS AND ORDINANCES, THE LAWS OF THE STATE OF TEXAS, AND THE NATIONAL ELECTRICAL CODE.
3. CAREFULLY EXAMINE THE PREMISES TO DETERMINE THE EXTENT OF WORK AND THE CONDITIONS UNDER WHICH IT MUST BE DONE. IF THERE ARE ANY QUESTIONS REGARDING THE PROJECT, THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING CLARIFICATIONS FROM THE DESIGN CONSULTANT OR THEIR DESIGNATED REPRESENTATIVE BEFORE PROCEEDING WITH WORK OR RELATED WORK IN QUESTION.
4. ANY DISCREPANCIES BETWEEN THESE PLANS AND ACTUAL FIELD CONDITIONS MUST BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE OAR FOR CLARIFICATION.
5. ALL WORK SHALL BE DONE IN A THOROUGH AND CONSCIENTIOUS MANNER ACCORDING TO INDUSTRY STANDARDS AND SHALL BE SUBJECT TO INSPECTION AND ACCEPTANCE. WORK THAT IS DEEMED SUBSTANDARD OR NOT TO INDUSTRY STANDARD WILL BE SUBJECT TO REPLACEMENT OR REPAIR AT NO ADDITIONAL COST TO THE OWNER OR GENERAL CONTRACTOR.
6. CONTRACTOR TO COORDINATE ALL DEMOLITION ACTIVITIES WITH GENERAL CONTRACTOR, OWNER AND SERVICE PROVIDERS PRIOR TO PERFORMANCE OF ALL ACTIVITIES.
7. CONTRACTOR MUST RETURN ALL ACTIVE EQUIPMENT AND ELECTRONICS REMOVED AS PART OF THE DEMOLITION SCOPE TO OWNER. ALL EQUIPMENT MUST BE REMOVED, STORED, LOGGED AND LABELED CAREFULLY.
8. PRIOR TO DEMOLITION OF ANY COMMUNICATIONS COPPER OR FIBER CABLES, CONTRACTOR SHALL VERIFY WITH DESIGN CONSULTANT AND OWNER THAT ALL ACTIVE CIRCUITS HAVE BEEN CUT OVER OR DEACTIVATED. DO NOT DEMO WITHOUT AUTHORIZATION FROM OWNER OR TENANTS.
9. THE CONTRACTOR SHALL PROVIDE, INSTALL, TERMINATE, PATCH, CROSS-CONNECT, LABEL, AND DOCUMENT COMMUNICATIONS CABLING SYSTEMS BASED ON THE PROJECT SPECIFICATIONS AND ACCOMPANYING DRAWINGS.
10. CONTRACTOR SHALL PROVIDE, INSTALL, TERMINATE, AND LABEL RACKS, PATCH PANELS, WIRE MANAGEMENT AND CABLING AS DESCRIBED IN THE DRAWINGS.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER BONDING AND GROUNDING OF THE SYSTEMS IN ACCORDANCE WITH APPLICABLE ELECTRICAL CODES AND ANSI-J-STD-607-C.
12. ALL CONDUITS SHALL BE ROUTED TO ACCESSIBLE CEILING SPACE OR AN ACCESS PANEL SHALL BE PROVIDED. ACCESS PANELS SHALL COMPLY WITH FIRE CODE.
13. DIVISION 26 ELECTRICAL CONTRACTOR TO PROVIDE (1) 4-11/16" X 4-11/16" X 2-1/8" BACKBOX AND SINGLE GANG DEVICE RING WITH (1) ONE-INCH CONDUIT TO EITHER THE CABLE TRAY OR ABOVE ACCESSIBLE CEILING AS REQUIRED FOR STANDARD, CEILING AND WALL MOUNTED TELEPHONE/DATA COMMUNICATION WORK-AREA-OUTLETS (WAO), UNLESS NOTED OTHERWISE.
14. COORDINATE WORK AREA OUTLET PLACEMENT WITH THE PLACEMENT OF ELECTRICAL OUTLETS WHEREVER POSSIBLE. IN ALL CASES THERE SHALL BE A ELECTRICAL OUTLET NO FURTHER THAN ONE STUD BAY DISTANCE FROM A LOW VOLTAGE WAO.

TELECOMM PATHWAY NOTES:

GENERAL:

1. CONDUITS SHALL HAVE A MAXIMUM 40% FILL RATIO. CABLE TRAY SHALL HAVE A MAXIMUM 50% FILL RATIO.
2. NON-CONTINUOUS CABLE SUPPORT SYSTEMS (J-HOOKS) INSTALLATION AND CONFIGURATION SHALL CONFORM TO THE REQUIREMENTS OF THE CURRENT REVISION LEVELS OF ANSI/EIA/TIA STANDARDS 568 & 569, NFPA 70 (NATIONAL ELECTRICAL CODE), APPLICABLE LOCAL CODES, AND TO THE MANUFACTURERS INSTALLATION INSTRUCTIONS AND THE NEMA VE-2 GUIDELINES.
3. REGARDLESS OF PATHWAY TYPE, ALL CABLING SHALL BE SUPPORTED AT A 5'-0" MAXIMUM INTERVAL.
4. UNLESS OTHERWISE NOTED, CABLE PATHWAY WITHIN ROOMS WILL RUN PARALLEL TO WALLS.
5. UNLESS OTHERWISE NOTED ALL CONDUITS ARE ONE-INCH IN DIAMETER.

CONDUIT:

1. CONDUIT RUNS SHALL NOT CONTAIN 90° CONDUIT BODIES (OR LB'S).
2. MAINTAIN PROPER CONDUIT BEND RADIUS IN ACCORDANCE WITH ANSI/EIA/TIA-569-B. FOR CONDUIT WITH AN INTERNAL DIAMETER OF 2" OR LESS, MAINTAIN A BEND RADIUS OF AT LEAST 6 TIMES THE INTERNAL CONDUIT DIAMETER. FOR CONDUIT WITH AN INTERNAL DIAMETER GREATER THAN 2", MAINTAIN A BEND RADIUS OF AT LEAST 10 TIMES THE INTERNAL CONDUIT DIAMETER.
3. DO NOT CONSIDER A PULL BOX AS A BEND. ALL CONDUITS MUST RUN STRAIGHT THROUGH A PULL BOX WITH THE BEND EITHER BEFORE OR AFTER THE PULL BOX.
4. REAM ALL CONDUIT ENDS. FIT STUBBED CONDUITS WITH AN INSULATED BUSHING TO ELIMINATE SHARP EDGES THAT MAY DAMAGE CABLE DURING INSTALLATION OR SERVICE. EQUIP ALL CONDUIT WITH PULL CORD WITH A MINIMUM TEST RATING OF 200LBS.
5. ALL OUTLET BOX CONDUITS SHALL BE ROUTED TO NEAREST ACCESSIBLE CEILING SPACE WHETHER OR NOT SHOWN AS SUCH ON DRAWINGS.

SYMBOL LEGEND (NOT ALL SYMBOLS MAY BE USED)

X Y	WALL VOICE/DATA MOUNTED OUTLET - "X" DENOTES QTY OF DATA SERVICES CAT6 CABLES, "Y" DENOTES QTY OF VOICE SERVICES CAT6 CABLES
X	WALL DATA MOUNTED OUTLET - "X" DENOTES QTY OF DATA SERVICES CAT6 CABLES
W	WALL MOUNTED PHONE AT 48" AFF. - (1) CAT6 VOICE CABLE
WAP	WIRELESS ACCESS POINT
	WIRE MESH CABLE TRAY, TYPICAL
	WALL MOUNT QUAD OUTLET - 5-20R
	WALL MOUNTED L5-20R
	CONDUIT TURNING UP
	CONDUIT TURNING DOWN
	CONDUIT UP
	CONDUIT DOWN
	CONDUIT TERMINATION (SLEEVE/STUB)

DEMOLITION GENERAL NOTES:

1. CONTRACTOR TO COORDINATE ALL DEMOLITION ACTIVITIES WITH GENERAL CONTRACTOR, OWNER AND SERVICE PROVIDERS PRIOR TO PERFORMANCE OF ALL ACTIVITIES.
2. CONTRACTOR SHALL COORDINATE REMOVAL OF ALL DEVICES AND THEIR REQUIREMENT TO BE DEMOLISHED, SALVAGED, REUSED OR RELOCATED WITH THE GENERAL CONTRACTOR AND OWNER PRIOR TO DEMOLITION.
3. EXISTING HORIZONTAL OUTLET CONDUITS INSIDE WALLS ARE TO REMAIN. INCLUDING THE BACKBOX AND CONDUIT UP TO ACCESSIBLE CEILING. THE EXISTING DATA CABLING IS TO BE DEMOLISHED AS PART OF THIS WORK. THE PATHWAY SHALL REMAIN AVAILABLE FOR FUTURE USE DURING CONSTRUCTION WHERE APPROPRIATE AND APPROVED.
4. CONTRACTOR MUST RETURN ALL ACTIVE EQUIPMENT AND ELECTRONICS REMOVED AS PART OF THE DEMOLITION SCOPE TO OWNER. ALL EQUIPMENT MUST BE REMOVED, STORED, LOGGED AND LABELED CAREFULLY.
5. PRIOR TO DEMOLITION OF ANY COMMUNICATIONS COPPER OR FIBER CABLES, CONTRACTOR SHALL VERIFY WITH DESIGN CONSULTANT AND OWNER THAT ALL ACTIVE CIRCUITS HAVE BEEN CUT OVER OR DEACTIVATED. DO NOT DEMO WITHOUT AUTHORIZATION FROM OWNER OR TENANTS.
6. CONTRACTOR SHALL PROTECT ANY EQUIPMENT IN THE DESIGNATED DEMOLITION AND/OR CONSTRUCTION AREA FROM DAMAGE PRIOR TO COMMENCING WORK.
7. REMOVAL OF EQUIPMENT AND DEVICES SHALL INCLUDE BRACKETS, CABLING, CONDUIT, JUNCTION BOXES, MOUNTING HARDWARE, TRIM PIECES AND RELATED EQUIPMENT HARDWARE.
8. ITEMS SHOWN ON DRAWINGS MAY NOT BE DRAWN TO EXACT SCALE. CONTRACTOR IS RESPONSIBLE FOR COORDINATING EXACT ROUTING OF ALL SERVICES WITH EXISTING CONDITIONS AND WITH OTHER TRADES.
9. IN THE EXECUTION OF THIS WORK, THE CONTRACTOR SHALL COMPLY IN EVERY WAY WITH THE REQUIREMENTS OF LOCAL LAWS AND ORDINANCES, THE LAWS OF THE STATE OF TEXAS, THE NATIONAL BOARD OF FIRE UNDERWRITERS, AND THE NATIONAL ELECTRICAL CODE.
10. CAREFULLY EXAMINE THE PREMISES TO DETERMINE THE EXTENT OF WORK AND CONDITION UNDER WHICH IT MUST BE DONE. IF THERE ARE ANY QUESTIONS REGARDING THE PROJECT, THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING CLARIFICATIONS FROM THE DESIGN CONSULTANT, OR THEIR DESIGNATED REPRESENTATIVE BEFORE PROCEEDING WITH WORK OR RELATED WORK IN QUESTION.
11. ANY DISCREPANCIES BETWEEN THESE PLANS AND ACTUAL FIELD CONDITIONS MUST BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE OWNER AUTHORIZED REPRESENTATIVE OR THEIR DESIGNATED REPRESENTATIVE FOR CLARIFICATION.
12. ALL WORK SHALL BE DONE IN A THOROUGH AND CONSCIENTIOUS MANNER ACCORDING TO INDUSTRY STANDARDS AND SHALL BE SUBJECT TO INSPECTION AND ACCEPTANCE. WORK THAT IS DEEMED SUB-STANDARD OR NOT TO INDUSTRY STANDARD WILL BE SUBJECT TO REPLACEMENT OR REPAIR AT NO ADDITIONAL COST TO THE OWNER OR GENERAL CONTRACTOR.
13. PRIOR TO STARTING THE INSTALLATION, THE ASSIGNED INSTALLATION SUPERVISOR OR LEAD TECHNICIAN SHALL PARTICIPATE IN A WALK-THROUGH OF THE PROJECT LOCATION WITH THE DESIGN CONSULTANT, OR THEIR DESIGNATED REPRESENTATIVE, TO REVIEW THE INSTALLATION DOCUMENTATION.
14. THE CONTRACTOR IS REQUIRED TO PROPERLY FIRESTOP ANY CORES, UTILIZED FOR THE PLACEMENT OF COMMUNICATIONS CABLING, WITH APPROVED FIRESTOPPING COMPOUND AND ACCORDING TO LOCAL AND NATIONAL CODES.
15. COMPLETION OF THIS WORK MUST BE COORDINATED WITH WORK BEING PERFORMED UNDER CONCURRENT, ADJACENT PROJECTS. CONTRACTOR SHALL COORDINATE WITH OWNER AND OTHER CONTRACTORS AS REQUIRED REGARDING SCHEDULE, PATHWAYS, LABELING, TESTING, ET AL.
16. COORDINATE TELECOM PATHWAYS WITH OTHER CONDUIT.
17. CONTRACTOR TO PERFORM DEMOLITION OF CABLING BEGINNING AT ENDS OF THE CABLING RUN TO VERIFY CONNECTIVITY STATUS. REGARDLESS OF ANY CABLING LABELS ATTACHED TO SUBJECT RUN.

IT SYSTEMS OVERVIEW:

TECHNOLOGY SYSTEMS OVERVIEW

THIS DRAWING PACKAGE CONSISTS OF TECHNOLOGY SYSTEMS INFRASTRUCTURE REQUIRED IN THE DEMOLITION, CONSTRUCTION AND RENOVATION OF THE EXISTING WESLACO ARMORY READINESS CENTER FACILITY. THIS PACKAGE PROVIDES LOCATIONS OF DEVICE AND CABLING TERMINATIONS, MAJOR CABLING PATHWAY ACCOMMODATIONS AND COMMUNICATIONS ROOMS REQUIREMENTS. THE TECHNOLOGY SYSTEMS INCLUDED IN THIS PACKAGE ARE IDENTIFIED BELOW.

DEMOLITION

CONTRACTOR IS RESPONSIBLE FOR DEMOLITION OF ALL VOICE/DATA SYSTEMS CABLING WITHIN THE SCOPE OF WORK BOUNDARIES. CONTRACTOR MUST PROTECT AND LABEL ALL INFRASTRUCTURE SHOWN ON DRAWINGS TO REMAIN THROUGHOUT CONSTRUCTION. ALL PHONE, NETWORK SWITCHGEAR AND AUDIO-VISUAL END DEVICES SHALL BE REMOVED BY OWNER. CONTRACTOR SHALL RETURN ANY ADDITIONAL NETWORK EQUIPMENT FOUND IN DEMOLITION AREA TO OWNER FOR RE-USE OR DISPOSAL.

BUSINESS CONTINUITY AND SELECTIVE DEMOLITION

THE CURRENT COPPER BACKBONE INFRASTRUCTURE WILL BE REQUIRED TO BE PROTECTED, OPERATIONAL AND MAINTAINED THROUGHOUT THE LIFECYCLE OF THE PROJECT. SERVICE INTERRUPTIONS ARE NOT PERMITTED AT ANY TIME. CONTRACTOR SHALL PROVIDE A THOROUGH WRITTEN PLAN TO TEST, TAG, LABEL AND PROTECT CRITICAL SYSTEM COMPONENTS. IN THE MAIN TELECOMM EQUIPMENT ROOM (TER) SELECTIVE DEMOLITION WILL BE REQUIRED TO REPLACE THE OLD DEMARC BACKBOARD, DEMOLISH SELECTED OLD TECHNOLOGIES, MAINTAIN CURRENT SYSTEMS AND ADD NEW SYSTEMS. THOROUGH COORDINATION BETWEEN THE OWNER AND CONTRACTOR IS REQUIRED.

COMMUNICATIONS ROOMS

CONTRACTOR SHALL INSTALL ALL NEW COMMUNICATIONS ROOM INFRASTRUCTURE AS INDICATED ON DRAWINGS. THIS INCLUDES WALL/FLOOR PENETRATIONS, WORK AREA OUTLETS, EQUIPMENT CABINETS/RACKS, ETC. INDICATED ON PLANS UNLESS NOTED OTHERWISE.

BACKBONE CABLING

CONTRACTOR SHALL INSTALL ALL CONDUIT PATHWAY INFRASTRUCTURE AS INDICATED ON DRAWINGS. CONTRACTOR SHALL PRODIVE AND INSTALL ALL BACKBONE COPPER AND FIBER CABLING WITH ALL ASSOCIATED TERMINATION HARDWARE AS IDENTIFIED IN THE DRAWINGS.

HORIZONTAL CABLING

CONTRACTOR SHALL INSTALL ALL HORIZONTAL CABLING INFRASTRUCTURE, INCLUDING CONDUIT AND CABLE TRAY, AS REQUIRED ON THE DRAWINGS AND SPECIFICATIONS. INSTALL TMD PHONE AND DATA OUTLETS AND CABLE FROM THE NEAREST COMMUNICATIONS ROOM, UNLESS NOTED OTHERWISE. PROVIDE COPPER PATCH CABLES FOR ALL INSTALLED OUTLETS AS REQUIRED IN SPECIFICATIONS.

BIDDING INSTRUCTIONS

THIS DRAWING PACKAGE CONSISTS OF TWO BID SCENARIOS, A BASE BID AND BID OPTION #3 FULL IT SYSTEM INCLUDING UPGRADES.

MOYE CONSULTING
MOYE IT CONSULTING, LLC
1255 CORPORATE DRIVE, SUITE 100
IRVING, TX 75038
972.887.5555
WWW.MOYECONSULTING.COM

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THE STATE OF TEXAS

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HOMER SAENZ, AIA

PROJECT NO. ADG17589A
ISSUE DATE: 04/20/18
DRAWN BY: MOYE
REVIEWED BY: MOYE

FREESE NICHOLS
4055 International Plaza, Suite 200
Fort Worth, Texas 76109-4895
Phone – (817) 735-7300
Fax – (817) 735-7491
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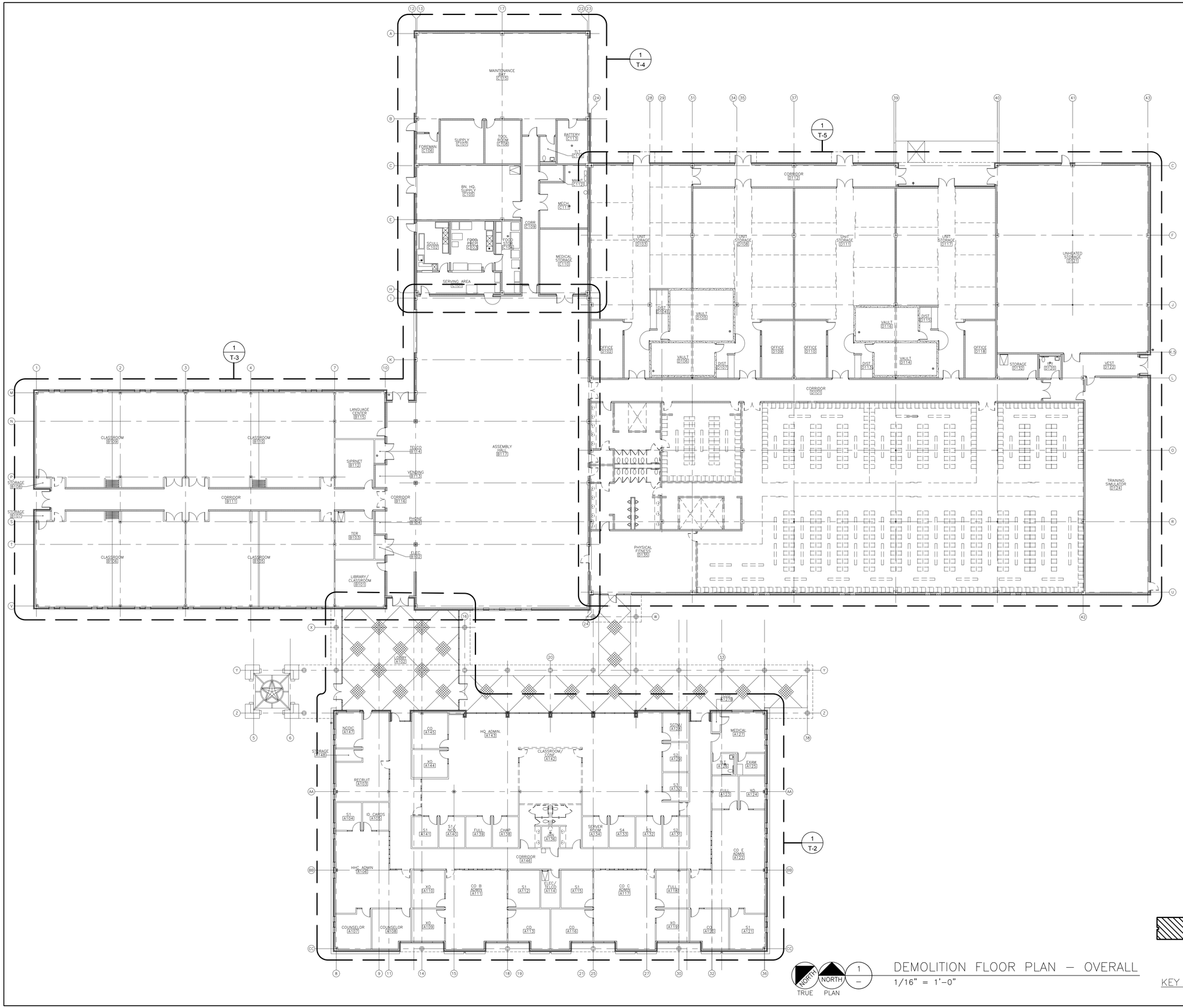
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CAMP MABRY P.O. BOX 5218
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TECHNOLOGY SYSTEMS OVERVIEW AND SYMBOLS

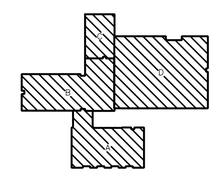
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SHT 114 OF 129



GENERAL NOTES

BID OPTION #3 FULL IT SYSTEM INCLUDING UPGRADES.



KEY PLAN

0 8' 16' 32'
1/16"=1'-0"

NORTH TRUE NORTH PLAN 1 –

DEMOLITION FLOOR PLAN – OVERALL
1/16" = 1'-0"

MOYE CONSULTING
MOYE IT CONSULTING, LLC
1255 CORPORATE DRIVE, SUITE 100
IRVING, TX 75038
972 887 5555
WWW.MOYECONSULTING.COM

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Fort Worth, Texas 76109-4895
Phone – (817) 735-7300
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TECHNOLOGY OVERALL DEMOLITION FLOOR PLAN

T-1

SHT 115 OF 129

KEYED DEMO NOTES

TD01 GENERAL LOW VOLTAGE DEMOLITION BOUNDARY AREA. CONTRACTOR TO DEMO ALL LOW VOLTAGE CABLING AND PATHWAY WITHIN BOUNDARY BACK TO POINT OF ORIGIN, UNLESS NOTED OTHERWISE.

TD02 EXISTING FIBER OPTIC CABLE IN CEILING FROM SERVICE PROVIDER PROTECT IN PLACE THROUGHOUT CONSTRUCTION.

TD03 EXISTING TELECOM EQUIP (TER) ROOM A134 TO REMAIN ACTIVE THROUGHOUT CONSTRUCTION. REFER TO T-11 SELECTIVE DEMO REQUIREMENTS IN THIS ROOM.

TD04 EXISTING TELECOM EQUIP (TELCO) ROOM A114 TO REMAIN ACTIVE THROUGHOUT CONSTRUCTION. REFER TO T-11 SELECTIVE DEMO REQUIREMENTS IN THIS ROOM.

TD05 4" ENTRANCE CONDUIT.

TD06 EXISTING FLOOR MOUNTED PA HEAD END. TO REMAIN IN PLACE.

TD07 EXISTING WALL MOUNTED AIPHONE MASTER CONSOLE AT 60" AFF. TO REMAIN IN PLACE.

TD08 EXISTING (4) 25 PAIR COPPER CABLES IN CEILING PROTECT IN PLACE THROUGHOUT CONSTRUCTION.

TD09 EXISTING INCOMING SERVICE PROVIDER FIBER OPTIC CABLE IN CEILING FROM SERVICE PROVIDER PROTECT IN PLACE THROUGHOUT CONSTRUCTION.

LOBBY A102
NCOIC A147
STORAGE A148
RECRUIT A103
S1 A104
ID CARDS A105
HHC ADMIN A106
COUNSELOR A107
COUNSELOR A108
XO A109
XO A110
CO B ADMIN A111
S1 A112
CO A113
TELCO A114
CO A116
S1 A115
CO C ADMIN A117
FULL A118
XO A119
CO A120
S1 A121
CO E ADMIN A122
CO A145
XO A144
HQ ADMIN. A143
CLASSROOM/ CONF A142
S1 A141
S1/ NCO A140
FULL A139
CHAP A138
CORRIDOR A146
JAN A136
TER A134 SERVER ROOM A134
S4 A133
S3 A132
S2 A131
SGTMJ A128
S2 A129
S3 A130
CLO A127B
MEDICAL A127
TLT A126
EXAM A125
FULL A123
XO A124

FLOOR PLAN – AREA "A"
1/8" = 1'-0"

GENERAL NOTES

BID OPTION #3 FULL IT SYSTEM INCLUDING UPGRADES.

MOYE CONSULTING
MOYE IT CONSULTING, LLC
1255 CORPORATE DRIVE, SUITE 100
IRVING, TX 75038
972 887 5555
WWW.MOYECONSULTING.COM

KEY PLAN

0 4' 8' 16'
1/8"=1'-0"

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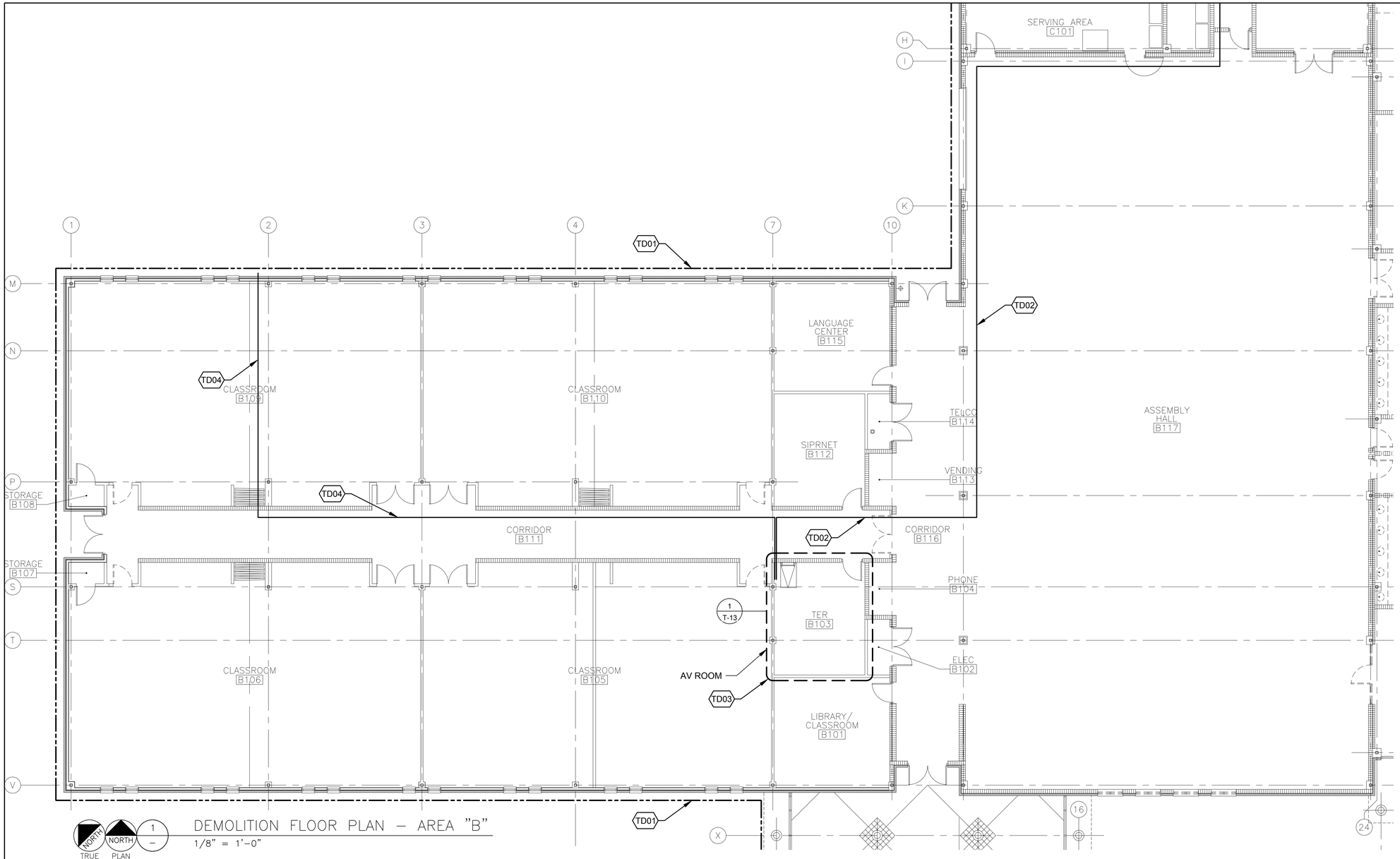
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TECHNOLOGY DEMOLITION FLOOR PLAN - AREA A

T-2

SHT 116 OF 129



NORTH TRUE NORTH PLAN 1 –

DEMOLITION FLOOR PLAN – AREA "B"

1/8" = 1'–0"

KEYED DEMO NOTES

TD01 GENERAL LOW VOLTAGE DEMOLITION BOUNDARY AREA. CONTRACTOR TO DEMO ALL LOW VOLTAGE CABLING AND PATHWAY WITHIN BOUNDARY BACK TO POINT OF ORIGIN, UNLESS NOTED OTHERWISE.

TD02 EXISTING 2" OVERHEAD CONDUIT FROM C111/C116 TO B103 EXISTING 12 STRAND SM FIBER. PROTECT IN PLACE.

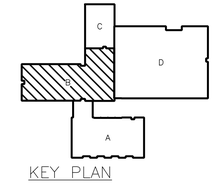
TD03 EXISTING TELECOM EQUIP (AV) ROOM B103 TO REMAIN ACTIVE THROUGHOUT CONSTRUCTION. REFER TO T-11 SELECTIVE DEMO REQUIREMENTS IN THIS ROOM.

TD04 EXISTING CONDUIT WITH FIBER OPTIC CABLE. TO REMAIN. PROTECT IN PLACE.

GENERAL NOTES

BID OPTION #3 FULL IT SYSTEM INCLUDING UPGRADES.

MOYE CONSULTING
MOYE IT CONSULTING, LLC
1255 CORPORATE DRIVE, SUITE 100
IRVING, TX 75038
972 887 5555
WWW.MOYECONSULTING.COM



KEY PLAN

0 4' 8' 16'

1/8"=1'–0"

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PROJECT ARCHITECT:
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FREESE NICHOLS
4055 International Plaza, Suite 200
Fort Worth, Texas 76109-4895
Phone – (817) 735-7300
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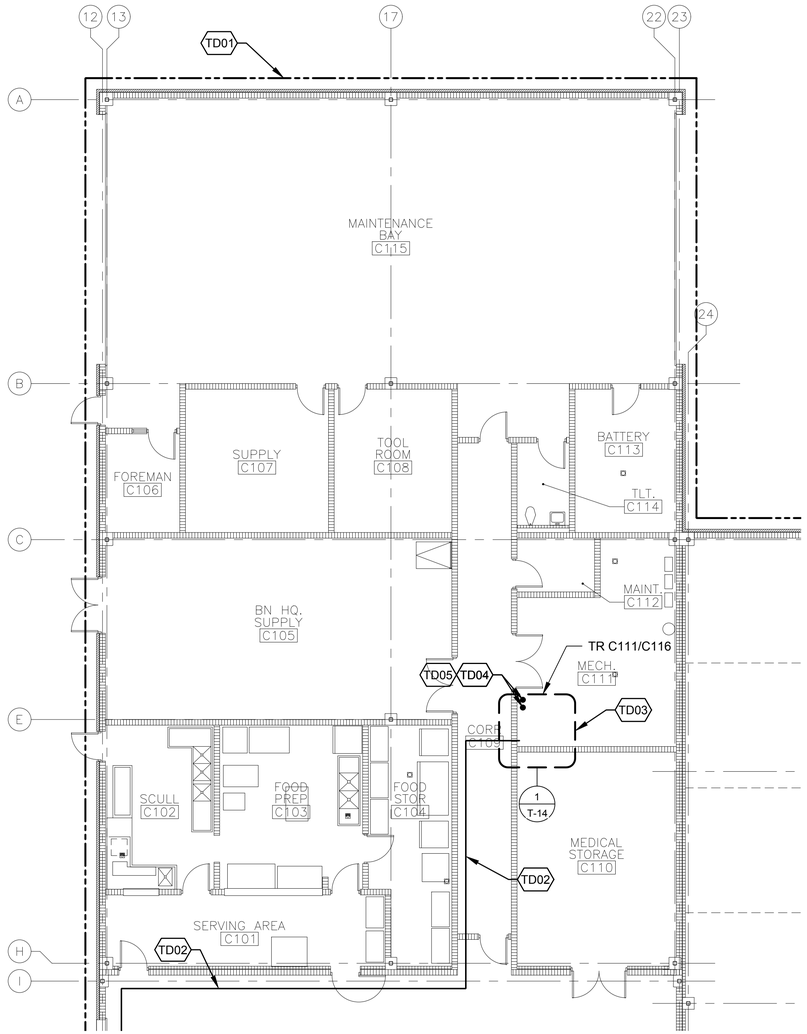
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TECHNOLOGY DEMOLITION FLOOR PLAN - AREA B

T-3

SHT 117 OF 129



NORTH TRUE

NORTH PLAN

1 — DEMOLITION FLOOR PLAN – AREA "C"

1/8" = 1'-0"

KEYED DEMO NOTES

TD01 GENERAL LOW VOLTAGE DEMOLITION BOUNDARY AREA. CONTRACTOR TO DEMO ALL LOW VOLTAGE CABLING AND PATHWAY WITHIN BOUNDARY BACK TO POINT OF ORIGIN, UNLESS NOTED OTHERWISE.

TD02 EXISTING 2" OVERHEAD CONDUIT FROM C111/C116 TO B103 EXISTING 12 STRAND SM FIBER. PROTECT IN PLACE.

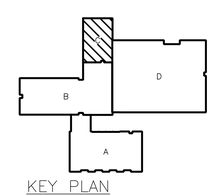
TD03 EXISTING TELECOM EQUIP (TR) ROOM C111 TO REMAIN ACTIVE THROUGHOUT CONSTRUCTION. REFER TO T-13 SELECTIVE DEMO REQUIREMENTS IN THIS ROOM.

TD04 (2) 4" ENTRANCE CONDUIT. PROTECT AND PREVENT CONDUIT OBSTRUCTION, TEMP SEAL OR PLUG DURING DEMOLITION.

TD05 EXISTING INCOMING SERVICE PROVIDER FIBER OPTIC CABLE FROM FLOOR ENTRANCE CONDUITS FROM SERVICE PROVIDER PROTECT IN PLACE THROUGHOUT CONSTRUCTION.

GENERAL NOTES

BID OPTION #3 FULL IT SYSTEM INCLUDING UPGRADES.



KEY PLAN

0 4' 8' 16'

1/8"=1'-0"

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
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4055 International Plaza, Suite 200
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(512) 782-6131 FAX (512) 782-1481

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TECHNOLOGY DEMOLITION FLOOR PLAN - AREA C

T-4

SHT 118 OF 129

KEYED DEMO NOTES

TD01 GENERAL LOW VOLTAGE DEMOLITION BOUNDARY AREA. CONTRACTOR TO DEMO ALL LOW VOLTAGE CABLING AND PATHWAY WITHIN BOUNDARY BACK TO POINT OF ORIGIN, UNLESS NOTED OTHERWISE.

TD02 EXISTING INTRUSION DETECTION CONTROLLER AND CIRCUITS TO REMAIN. DO NOT DEMOLISH, TRACE, TAG AND PROTECT IN PLACE. MUST REMAIN ACTIVE DURING CONSTRUCTION.

CORRIDOR D112
UNIT STORAGE D103
UNIT STORAGE D108
UNIT STORAGE D111
UNIT STORAGE D117
UNHEATED STORAGE D121
DIST D104
VAULT D105
VAULT D106
DIST D107
OFFICE D102
OFFICE D109
OFFICE D110
VAULT D116
DIST D115
DIST D113
VAULT D114
OFFICE D118
STORAGE D132
TET D120
VEST D122
CORRIDOR D101
TRAINING SIMULATOR D124
PHYSICAL FITNESS D135

GENERAL NOTES

BID OPTION #3 FULL IT SYSTEM INCLUDING UPGRADES.

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IRVING, TX 75038
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KEY PLAN

0 4' 8' 16'
1/8"=1'-0"

DEMOLITION FLOOR PLAN – AREA "D"
1/8" = 1'-0"

NORTH TRUE / NORTH PLAN

THE STATE OF TEXAS

PROJECT ARCHITECT:
HOMER SAENZ, AIA
PROJECT NO. ADG17589A
ISSUE DATE: 04/20/18
DRAWN BY: MOYE
REVIEWED BY: MOYE

FREESE NICHOLS
4055 International Plaza, Suite 200
Fort Worth, Texas 76109-4895
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Fax – (817) 735-7491
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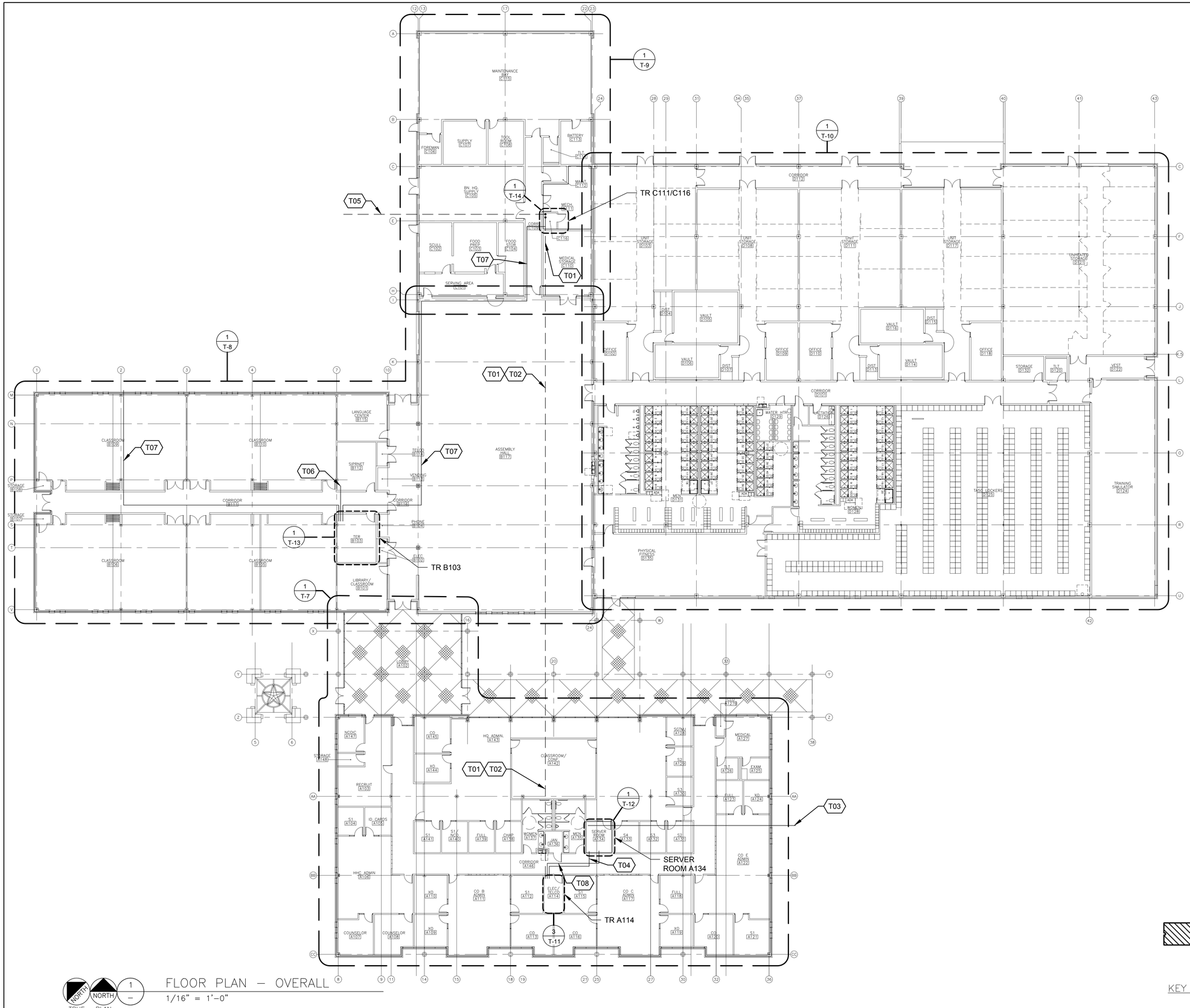
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TECHNOLOGY DEMOLITION FLOOR PLAN - AREA D

T-5

SHT 119 OF 129



KEY NOTES

- T01 EXISTING UNDERGROUND 4" CONDUIT FROM A114 TO C111/C116.
- T02 PROVIDE AND INSTALL NEW 24 STRAND SINGLE MODE FIBER OPTIC CABLE FROM C116 TO A134. TERMINATE NEW FIBER OPTIC CABLE WITH LC CONNECTORS IN A134 RACK 1. REFER TO SHEET T-14 FOR FIBER TERMINATION LOCATION.
- T03 PROTECT SERVICE PROVIDER (LEC) FIBER OPTIC CABLE IN CEILING FROM A134 TO EAST EXTERIOR WALL.
- T04 PROVIDE AND INSTALL NEW 2" CONDUIT FOR NEW FIBER OPTIC CABLE. ROUTE NEW 24 SMF THROUGH A114 TO SERVER ROOM A134.
- T05 UNDERGROUND 4" CONDUIT TO FMS FROM C111/C116.
- T06 PROVIDE AND INSTALL A NEW 2" RMC-CONDUIT. REF: 4/T-15 FUTURE SIPR ROOM.
- T07 EXISTING CONDUIT CONTAINING FIBER OPTIC BACKBONE CABLING TO REMAIN IN PLACE.
- T08 EXISTING FIBER OPTIC BACKBONE CABLE. TO REMAIN PROTECT IN PLACE.

NORTH TRUE NORTH — 1 PLAN

FLOOR PLAN – OVERALL

1/16" = 1'-0"

KEY PLAN

0 8' 16' 32'

1/16"=1'-0"

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4055 International Plaza, Suite 200
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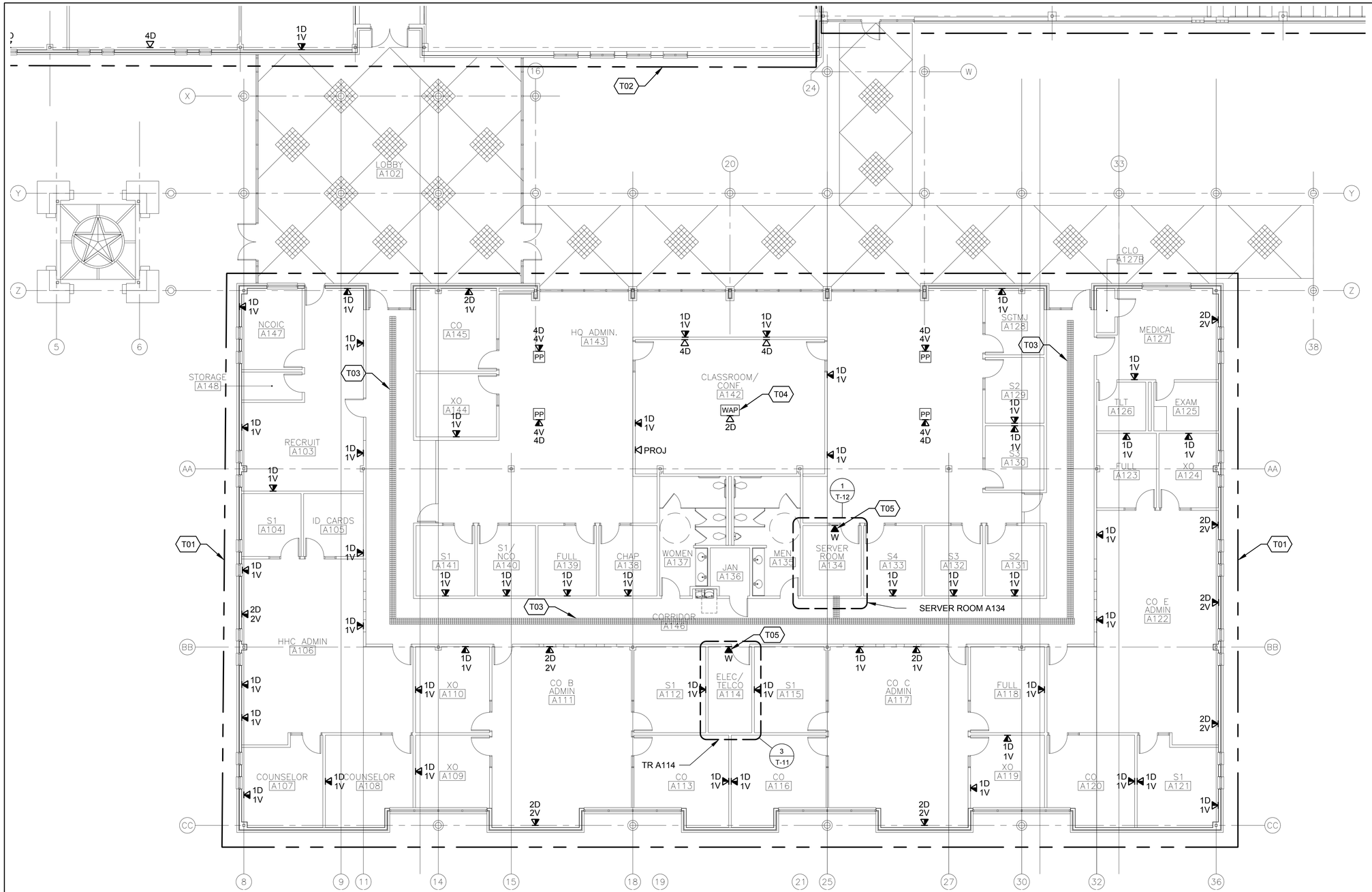
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TECHNOLOGY OVERALL FLOOR PLAN

T-6

SHT 120 OF 129



FLOOR PLAN – AREA "A"

1/8" = 1'-0"

KEYED NOTES

- T01 ALL OUTLETS HOME RUN TO TELECOM EQUIP. ROOM (SERVER ROOM) # A134.
- T02 ALL OUTLETS HOME RUN TO TELECOM EQUIP. ROOM (TR) # B103.
- T03 FURNISH AND INSTALL NEW OVERHEAD 12" WIRE MESH CABLE TRAY.
- T04 CONTRACTOR TO PROVIDE AND INSTALL CEILING MOUNTED, WALL MOUNT BOX WITH (2) CAT6 DATA (GREEN) CABLES FOR WAP AT THIS LOCATION. OWNER TO FURNISH, CONFIGURE AND INSTALL WAP.
- T05 (1) WHITE CAT6 VOICE SERVICES. OUTLET MOUNTED ON STAINLESS STEEL FACEPLATE FOR WALL MOUNTED PHONE AT 48" A.F.F.

GENERAL NOTES

BID OPTION #3 FULL IT SYSTEM INCLUDING UPGRADES.

KEY PLAN

0 4' 8' 16'

1/8"=1'-0"

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HOMER SAENZ, AIA

PROJECT NO. ADG17589A
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4055 International Plaza, Suite 200
Fort Worth, Texas 76109-4895
Phone – (817) 735-7300
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MOYE IT CONSULTING, LLC
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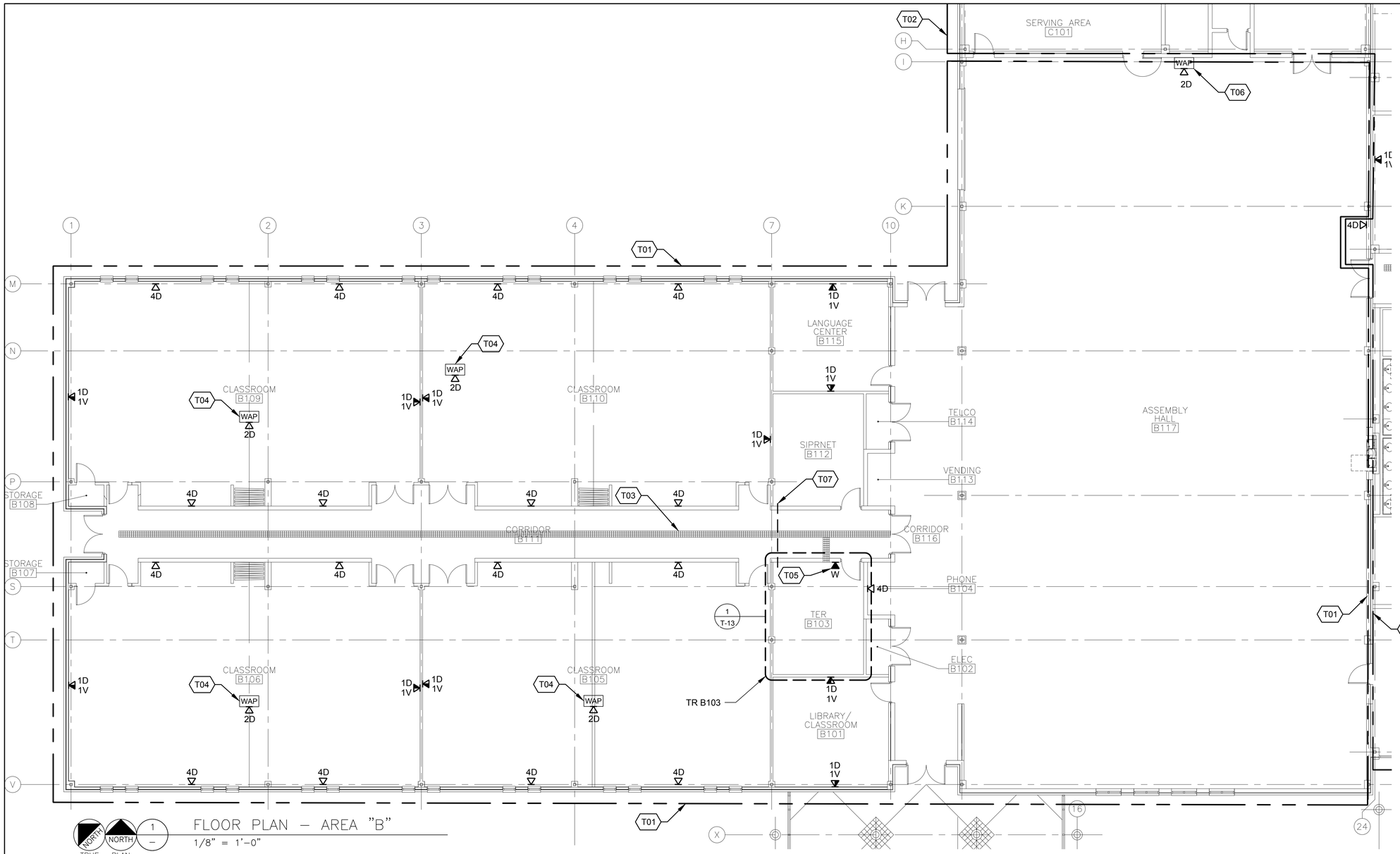
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TECHNOLOGY FLOOR PLAN - AREA A

T-7

SHT 121 OF 129



NORTH TRUE NORTH PLAN

1 — FLOOR PLAN – AREA "B"

1/8" = 1'-0"

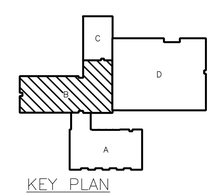
KEYED NOTES

- T01 ALL OUTLETS HOME RUN TO TELECOM EQUIP. ROOM (TR) # B103.
- T02 ALL OUTLETS HOME RUN TO TELECOM EQUIP. ROOM (IT/TER) # C111/C116.
- T03 FURNISH AND INSTALL NEW OVERHEAD 12" WIRE MESH CABLE TRAY.
- T04 CONTRACTOR TO PROVIDE AND INSTALL CEILING MOUNTED, WALL MOUNT BOX WITH (2) CAT6 DATA (GREEN) CABLES FOR WAP AT THIS LOCATION. OWNER TO FURNISH, CONFIGURE AND INSTALL WAP.
- T05 (1) WHITE CAT6 VOICE SERVICES OUTLET MOUNTED ON STAINLESS STEEL FACEPLATE FOR WALL MOUNTED PHONE AT 48" A.F.F.
- T06 CONTRACTOR TO PROVIDE AND INSTALL WALL MOUNTED AT 12' AFF, WALL MOUNT BOX WITH (2) CAT6 DATA (GREEN) CABLES FOR WAP AT THIS LOCATION. OWNER TO FURNISH, CONFIGURE AND INSTALL WAP.
- T07 PROVIDE AND INSTALL A NEW 2" RMC-CONDUIT. REF: 4/T-15 FUTURE SIPR ROOM.

GENERAL NOTES

BID OPTION #3 FULL IT SYSTEM INCLUDING UPGRADES.

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KEY PLAN

0 4' 8' 16'

1/8"=1'-0"

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Fax – (817) 735-7491
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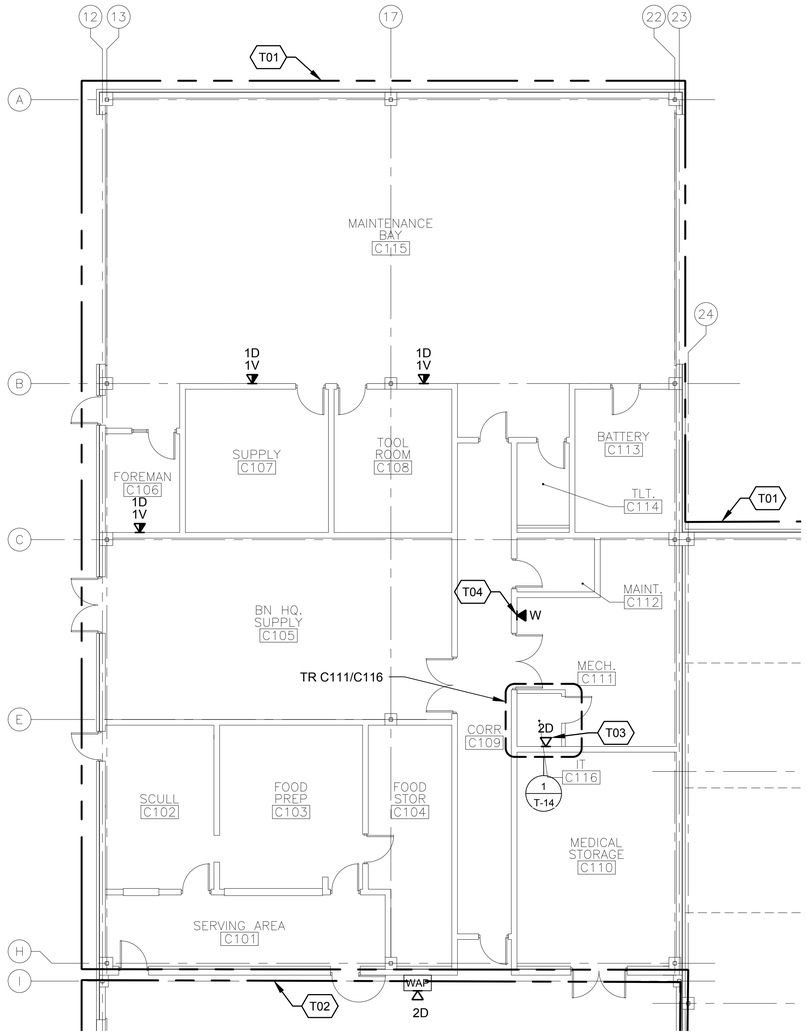
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TECHNOLOGY FLOOR PLAN - AREA B

T-8

SHT 122 OF 129



FLOOR PLAN – AREA "C"

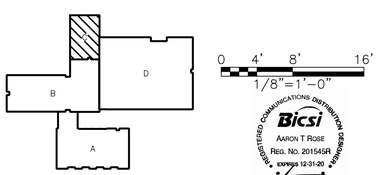
1/8" = 1'-0"

KEYED NOTES

- T01 ALL OUTLETS HOME RUN TO TELECOM EQUIP. ROOM (TR) # C111/C116.
- T02 ALL OUTLETS HOME RUN TO TELECOM EQUIP. ROOM (TR) # B103.
- T03 PROVIDE AND INSTALL NEW BUILDING MANAGEMENT SYSTEM (BMS) DATA LOCATION FURNISH AND INSTALL WORK AREA OUTLET FOR CONNECTIVITY.
- T04 (1) WHITE CAT6 VOICE SERVICES, OUTLET MOUNTED ON STAINLESS STEEL FACEPLATE FOR WALL MOUNTED PHONE AT 48" A.F.F.

GENERAL NOTES

BID OPTION #3 FULL IT SYSTEM INCLUDING UPGRADES.



KEY PLAN

0 4' 8' 16'

1/8"=1'-0"

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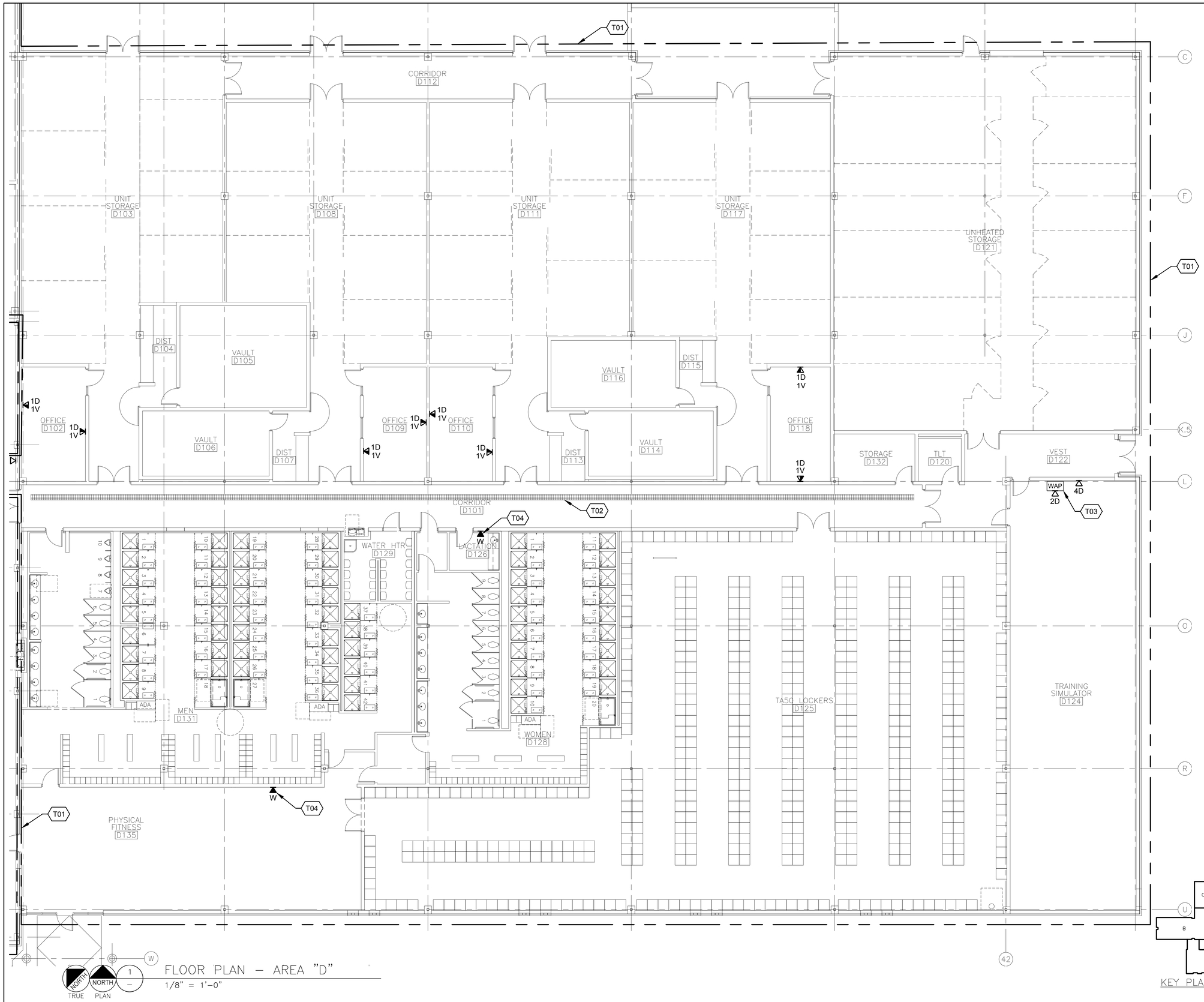
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TECHNOLOGY FLOOR PLAN - AREA C

T-9

SHT 123 OF 129



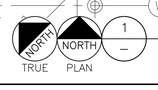
KEYED NOTES

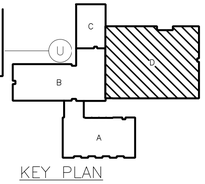
- T01 ALL OUTLETS HOME RUN TO TELECOM EQUIP. ROOM C111/C116.
- T02 FURNISH AND INSTALL NEW OVERHEAD 6" WIRE MESH CABLE TRAY.
- T03 CONTRACTOR TO PROVIDE AND INSTALL CEILING MOUNTED, WALL MOUNT BOX WITH (2) CAT6 DATA (GREEN) CABLES FOR WAP AT THIS LOCATION. OWNER TO FURNISH, CONFIGURE AND INSTALL WAP.
- T04 (1) WHITE CAT6 VOICE SERVICES, OUTLET MOUNTED ON STAINLESS STEEL FACEPLATE FOR WALL MOUNTED PHONE AT 48" A.F.F.

GENERAL NOTES

BID OPTION #3 FULL IT SYSTEM INCLUDING UPGRADES.

FLOOR PLAN – AREA "D"
1/8" = 1'-0"





KEY PLAN

0 4' 8' 16'
1/8"=1'-0"

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972 887 5555
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(512) 782-6131
FAX (512) 782-1481

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TECHNOLOGY FLOOR PLAN - AREA D

T-10

SHT 124 OF 129

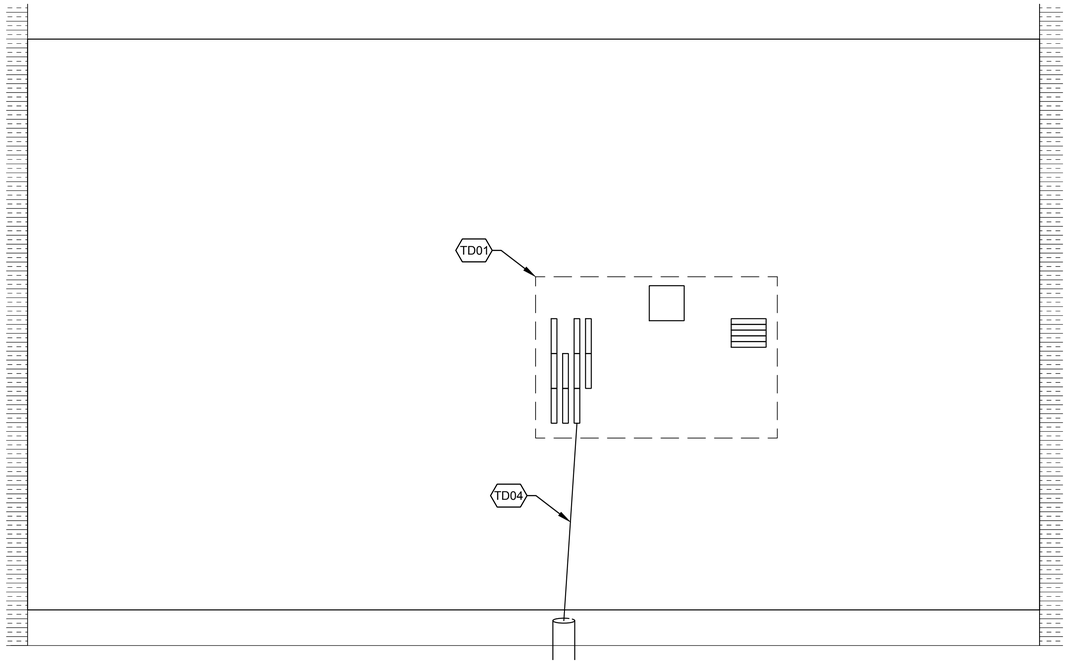
KEYED DEMO NOTES

TD01 EXISTING EQUIPMENT CONTRACTOR TO DEMO ALL CABLING AND CONNECTIVITY HARDWARE, UNLESS NOTED OTHERWISE. CONTRACTOR SHALL RETURN ALL ELECTRONIC EQUIPMENT MOUNTED TO OWNER.

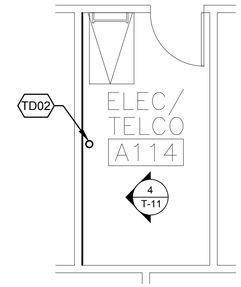
TD02 PROTECT IN PLACE ALL EXISTING FIBER OPTIC CABLE. TEMPORARILY SEAL OR PLUG CONDUIT TO PREVENT OBSTRUCTIONS.

TD03 PROTECT IN PLACE EXISTING COPPER TIE CABLES.

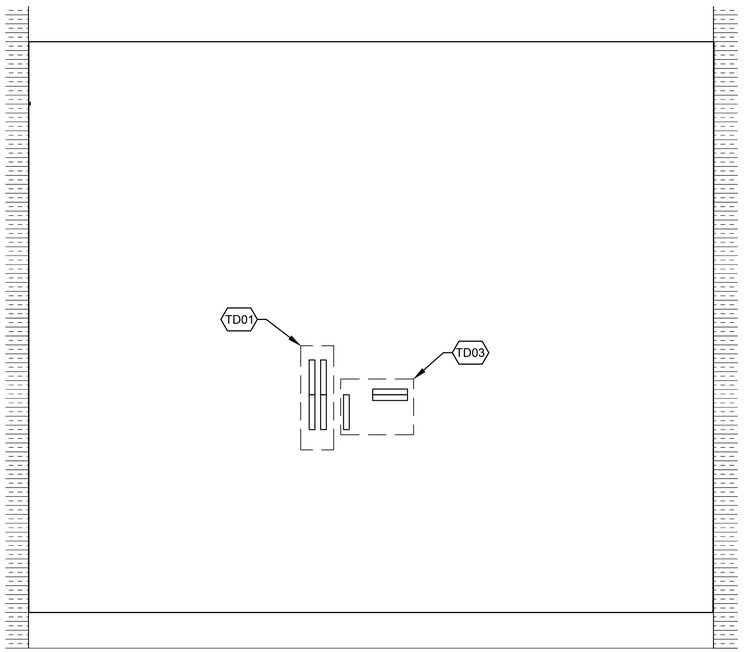
TD04 100 PAIR COPPER. PROTECT IN PLACE. DO NOT DEMO.



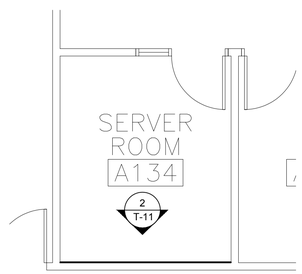
4 — DEMO ELEVATION VIEW ELEC/TELCO A114
N.T.S.



NORTH TRUE NORTH PLAN 3 — DEMO ENLARGED PLAN ELEC/TELCO A114
1/4" = 1'-0"



2 — DEMO ELEVATION VIEW SERVER A134
N.T.S.



NORTH TRUE NORTH PLAN 1 — DEMO ENLARGED PLAN SERVER ROOM A134
1/4" = 1'-0"

GENERAL NOTES

BID OPTION #3 FULL IT SYSTEM INCLUDING UPGRADES.

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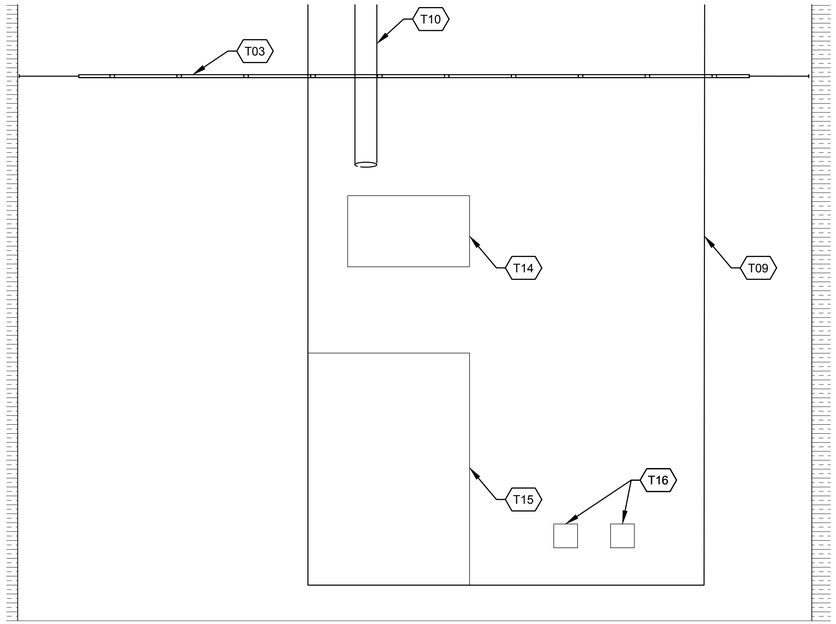
TECHNOLOGY DEMO ENLARGED PLAN

T-11

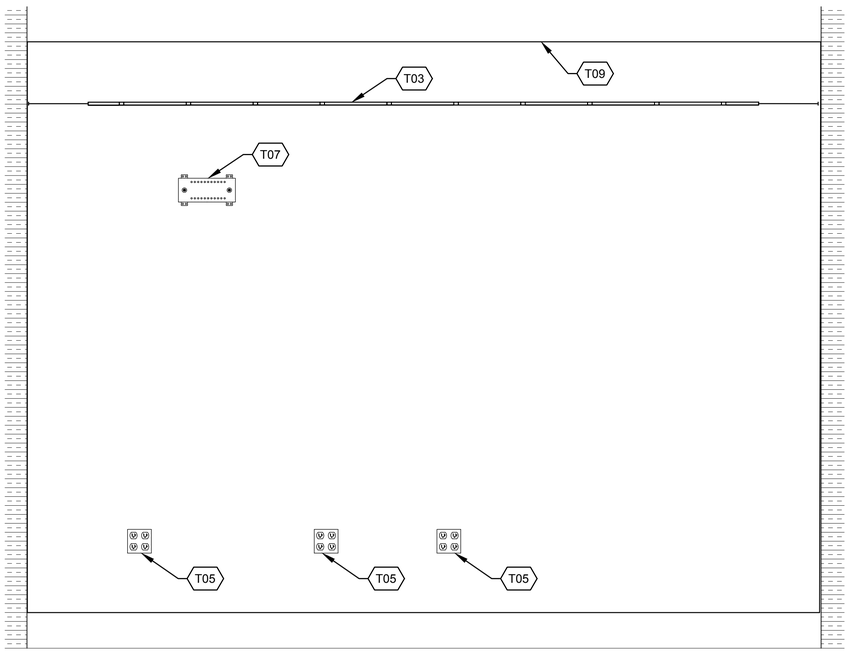
SHT 125 OF 129

KEYED NOTES

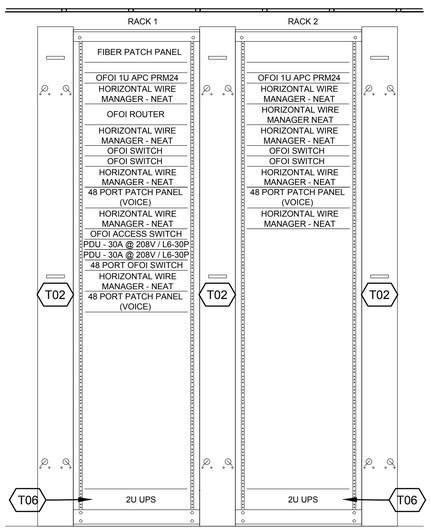
- T01 PROVIDE NEW 19"W X 84"H 2-POST EQUIPMENT RACK (TYPICAL).
- T02 PROVIDE NEW 6"W VERTICAL CABLE MANAGER (TYPICAL).
- T03 PROVIDE NEW 12" OVERHEAD LADDER RACK. MOUNT AT 90" AFF.
- T04 FOR REFERENCE ONLY OF LOCATION FOR NEW (2) L6-30 (DIV 26).
- T05 FOR REFERENCE ONLY OF LOCATION FOR NEW DUPLEX 120V-20A (DIV 26).
- T06 FOR REFERENCE ONLY OFOI UPS.
- T07 PROVIDE NEW 4"W X 12"L COPPER TELECOMMUNICATIONS GROUNDING BUSBAR (TGB). MOUNT AT 84" AFF.
- T08 EXISTING SERVICE PROVIDER FIBER OPTIC AND COPPER CABLING. PROTECT IN PLACE.
- T09 FURNISH AND INSTALL 3/4" FIRE-RESISTANT PLYWOOD - GRADE A/C - PAINTED ON ALL 6 SIDES WITH TWO COATS OF FIRE RETARDANT PAINT. LEAVING EACH FIRE-RATING STAMP VISIBLE. (TYPICAL).
- T10 PROTECT SERVICE PROVIDER (LEC) FIBER OPTIC CABLE IN CEILING FROM A134 TO EAST EXTERIOR WALL.
- T11 PROVIDE AND INSTALL NEW 2" CONDUIT FOR NEW FIBER OPTIC CABLE. ROUTE NEW 24 SMF THROUGH A114 TO SERVER ROOM A134.
- T12 EXISTING FIBER OPTIC BACKBONE CABLE. TO REMAIN PROTECT IN PLACE.
- T13 FURNISH AND INSTALL (2) 4" FIRESTOP SLEEVES FOR ALL NEW CABLING.
- T14 PROTECT SERVICE PROVIDER (LEC) WALL MOUNTED FIBER OPTIC TERMINATION.
- T15 PROTECT SERVICE PROVIDER (LEC) WALL MOUNTED CABINET.
- T16 (2) EXISTING ELECTRICAL OUTLET TO REMAIN.



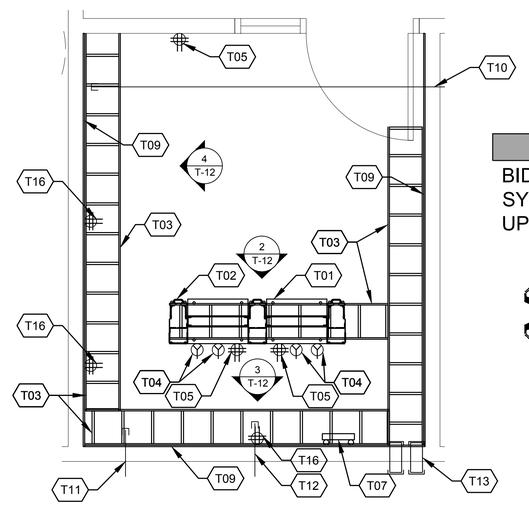
4 — WEST WALL ELEVATION SERVER ROOM A134
1" = 1'-0"



3 — SOUTH WALL ELEVATION SERVER ROOM A134
1" = 1'-0"



2 — RACK ELEVATION SERVER ROOM A134
N.T.S.



1 — ENLARGED PLAN SERVER ROOM A134
1/2" = 1'-0"

NORTH TRUE NORTH PLAN

GENERAL NOTES

BID OPTION #3 FULL IT SYSTEM INCLUDING UPGRADES.

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MOYE IT CONSULTING, LLC
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REG. No. 201545R
EXPIRES 12-31-20

THE STATE OF TEXAS

PROJECT ARCHITECT:
HOMER SAENZ, AIA
PROJECT NO. ADG17589A
ISSUE DATE: 04/20/18
DRAWN BY: MOYE
REVIEWED BY: MOYE

FREESE and NICHOLS
4055 International Plaza, Suite 200
Fort Worth, Texas 76109-4895
Phone – (817) 735-7300
Fax – (817) 735-7491
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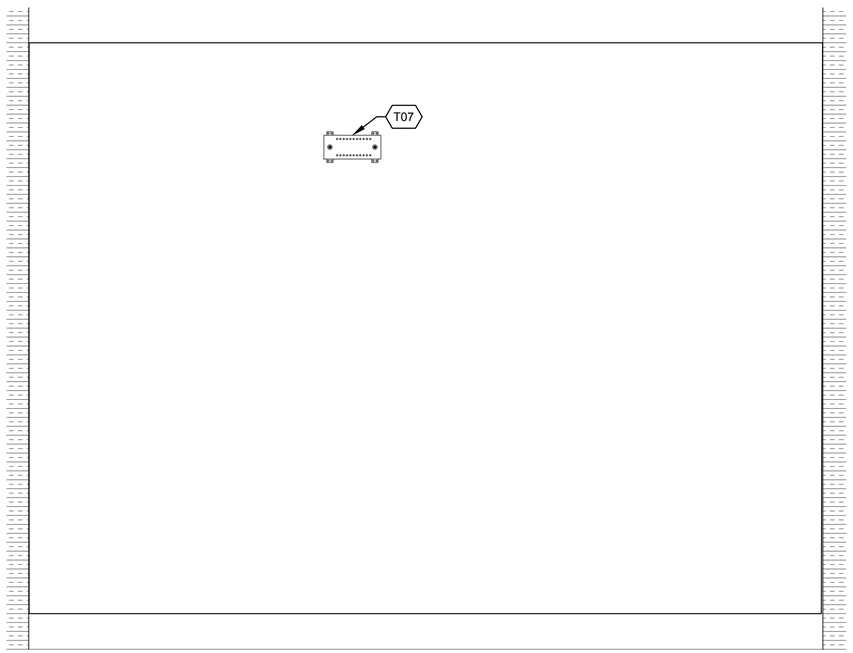
TECHNOLOGY ENLARGED PLAN

T-12

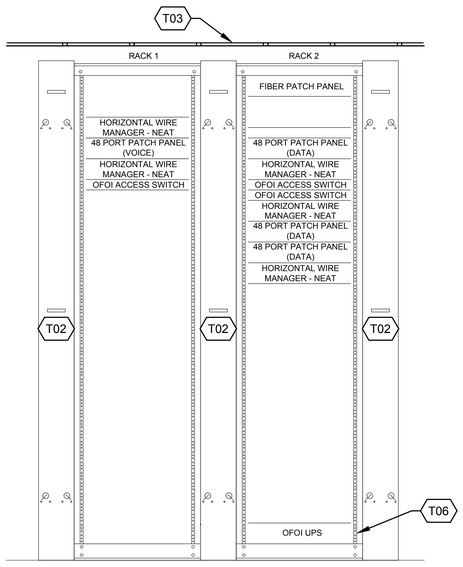
SHT 126 OF 129

KEYED NOTES

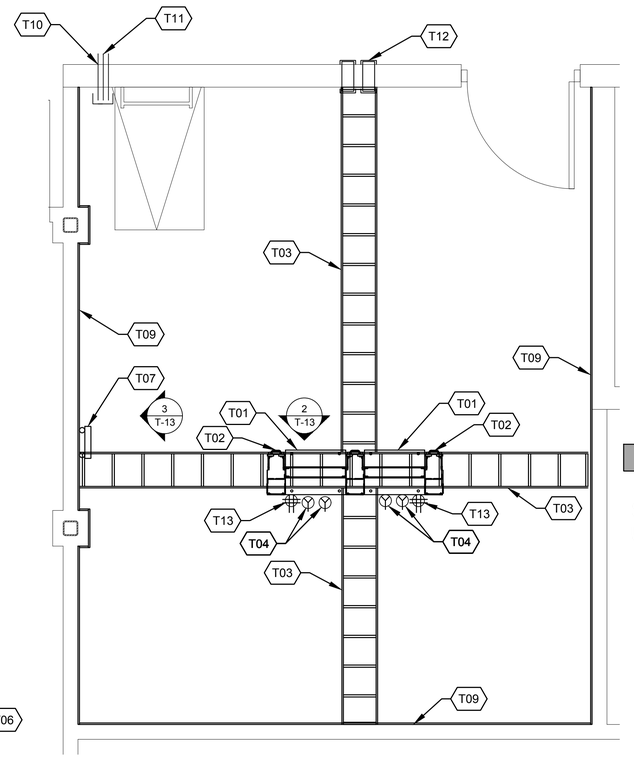
- T01 PROVIDE NEW 19"W X 84"H 2-POST EQUIPMENT RACK (TYPICAL).
- T02 PROVIDE NEW 6"W VERTICAL CABLE MANAGER (TYPICAL).
- T03 PROVIDE NEW 12" OVERHEAD LADDER RACK. MOUNT AT 90" AFF.
- T04 FOR REFERENCE ONLY OF LOCATION FOR NEW (2) L6-30 (DIV 26).
- T05 EXISTING 120 ELECTRICAL OUTLET TO REMAIN.
- T06 FOR REFERENCE ONLY OFOI UPS.
- T07 PROVIDE NEW 4"W X 12"L COPPER TELECOMMUNICATIONS GROUNDING BUSBAR (TGB). MOUNT AT 84" AFF. REFERENCE: ELECTRICAL SHEET E-29 FOR ONE LINE DIAGRAMS.
- T08 EXISTING FIBER OPTIC AND COPPER CABLING. PROTECT IN PLACE.
- T09 FURNISH AND INSTALL 3/4" FIRE-RESISTANT PLYWOOD - GRADE A/C - PAINTED ON ALL 6 SIDES WITH TWO COATS OF FIRE RETARDANT PAINT. LEAVING EACH FIRE-RATING STAMP VISIBLE. (TYPICAL).
- T10 EXISTING CONDUIT WITH FIBER OPTIC CABLE. TO REMAIN. PROTECT IN PLACE.
- T11 PROVIDE AND INSTALL A NEW 2" RMC-CONDUIT. REF: 4/T-15 FUTURE SIPR ROOM.
- T12 FURNISH AND INSTALL (2) 4" FIRESTOP SLEEVES FOR ALL NEW CABLING.
- T13 FOR REFERENCE ONLY OF LOCATION FOR NEW DUPLEX 120V-20A (DIV 26).



3 — WEST WALL ELEVATION AV B103
1" = 1'-0"



2 — RACK ELEVATION AV B103
N.T.S.



NORTH NORTH 1 — ENLARGED PLAN AV B103
1/2" = 1'-0"

GENERAL NOTES

BID OPTION #3 FULL IT SYSTEM INCLUDING UPGRADES.

MOYE CONSULTING
MOYE IT CONSULTING, LLC
1255 CORPORATE DRIVE, SUITE 100
IRVING, TX 75038
972 887 5555
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THE STATE OF TEXAS

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Fort Worth, Texas 76109-4895
Phone – (817) 735-7300
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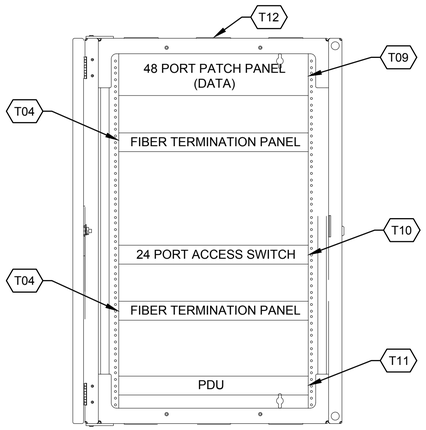
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TECHNOLOGY ENLARGED PLAN

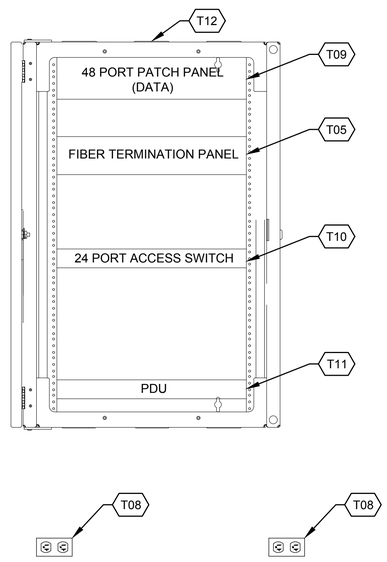
T-13

SHT 127 OF 129



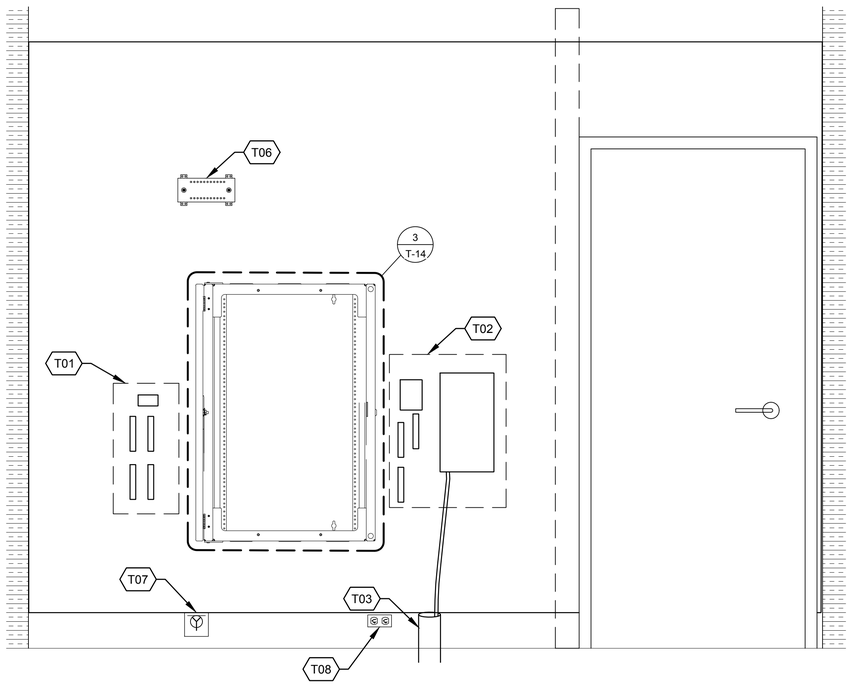
4 — EXISTING WALL MOUNT RACK DEMO C111/C116

N.T.S.



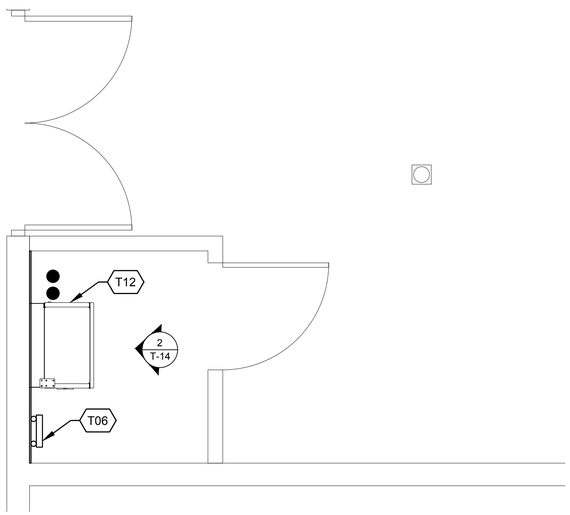
3 — WALL ELEVATION C111/C116

N.T.S.



2 — WALL ELEVATION C111/C116

N.T.S.



1 — ENLARGED PLAN C111/C116

1/2" = 1'-0"

TRUE NORTH / PLAN NORTH

KEYED NOTES

- T01 TO REMAIN IN SERVICE, PROTECT IN PLACE.
- T02 TO REMAIN IN SERVICE, PROTECT IN PLACE THROUGHOUT CONSTRUCTION.
- T03 PROVIDER ENTRANCE CONDUIT TO REMAIN. PROTECT IN PLACE THROUGHOUT CONSTRUCTION.
- T04 DEMO FIBER TERMINATION SHELF. RE-TERMINATE EXISTING FIBER IN THE NEW 2U FIBER TERMINATION SHELF. ALL FIBERS SHALL BE TERMINATED WITH LC CONNECTORS.
- T05 PROVIDE AND INSTALL NEW 2U FIBER TERMINATION PANEL.
- T06 PROVIDE AND INSTALL NEW 4"W X 12"L COPPER TELECOMMUNICATIONS GROUNDING BUSBAR (TGB). MOUNT AT 84" AFF.
- T07 FOR REFERENCE ONLY OF LOCATION FOR NEW L6-30 (DIV 26).
- T08 FOR REFERENCE ONLY EXISTING TO REMAIN (1) 5-20R DUPLEX 120 ELECTRICAL OUTLET (DIV 26).
- T09 EXISTING TO REMAIN CAT5 48 PORT PATCH PANEL FOR DATA TERMINATIONS.
- T10 EXISTING TO REMAIN CISCO DATA SWITCHES.
- T11 EXISTING TO REMAIN 1U PDU.
- T12 EXISTING TO REMAIN WALL CABINET.

THE STATE OF TEXAS

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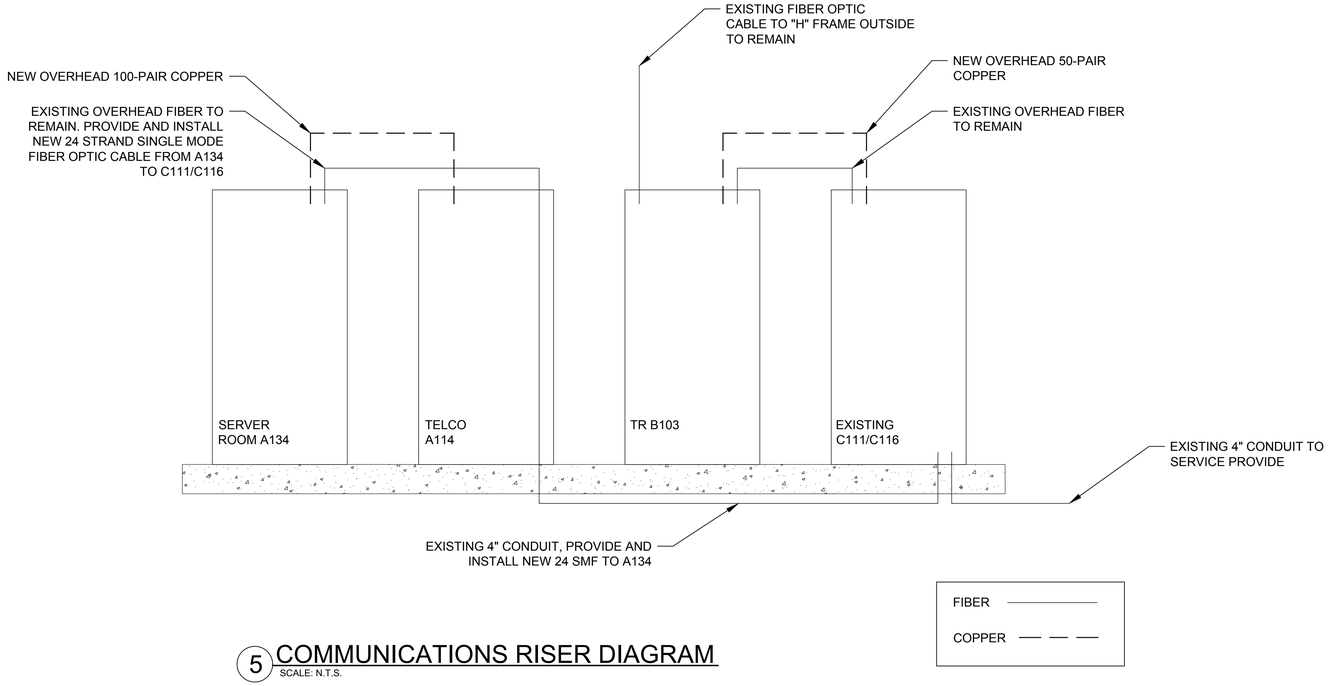
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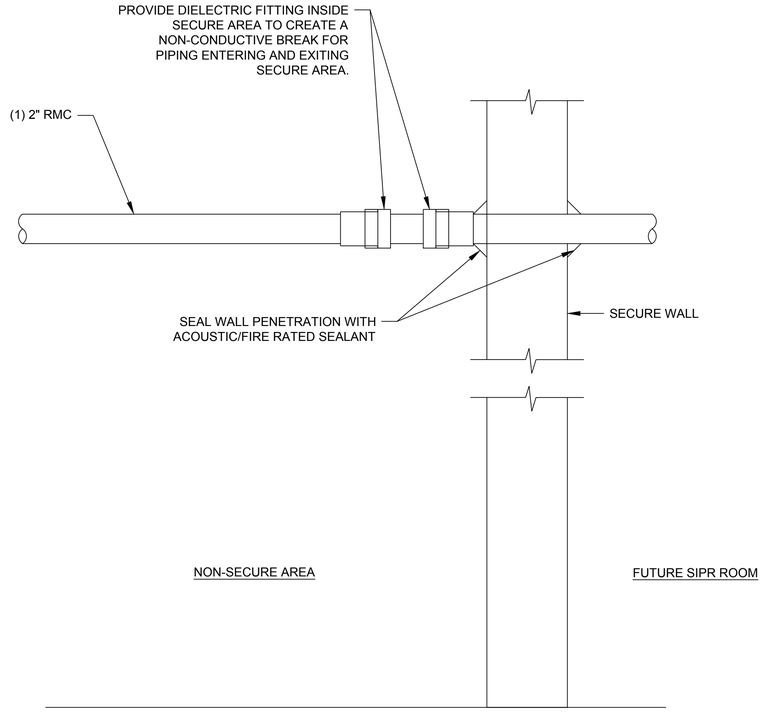
TECHNOLOGY ENLARGED PLAN

T-14

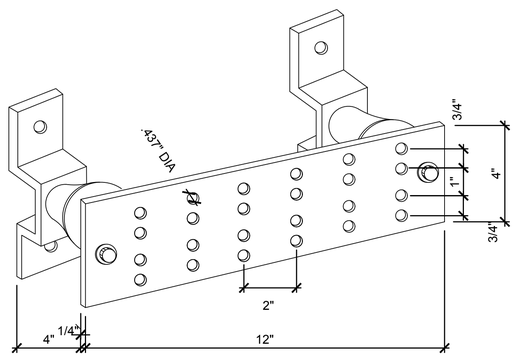
SHT 128 OF 129



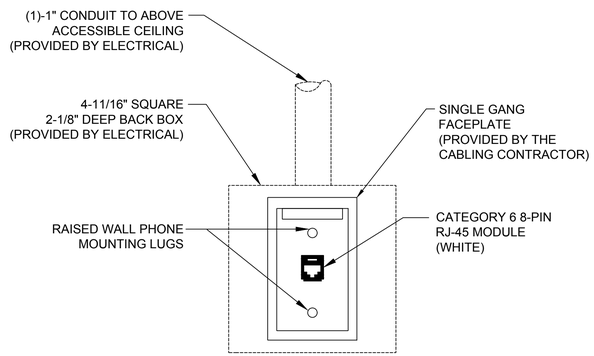
5 COMMUNICATIONS RISER DIAGRAM
SCALE: N.T.S.



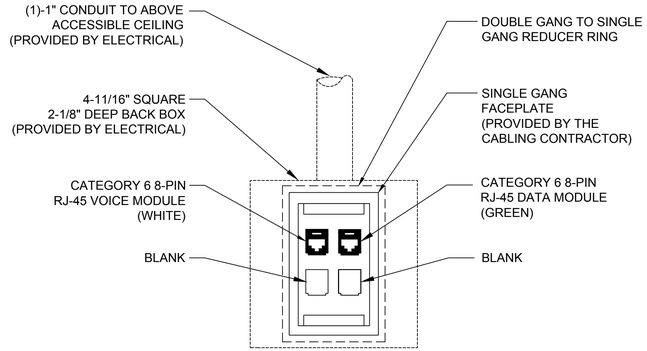
4 CONDUIT PENETRATION THRU SECURE AREA WALL
SCALE: N.T.S.



3 TELECOMMUNICATIONS GROUNDING BUSBAR
SCALE: N.T.S.



2 TYPICAL WALL PHONE OUTLET
SCALE: N.T.S.
W



1 TYPICAL WORK AREA OUTLET
SCALE: N.T.S.
1D
1V

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TECHNOLOGY DETAILS

T-15

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