MORGAN LEVY PARK BATHROOM RENOVATION

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PERMIT PACKAGE
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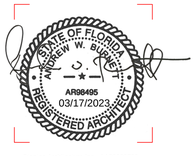

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DRAWING INDEX

NO.	DRAWING NAME	PERMIT SET
GENERAL		
G	COVER SHEET	■
G002	INDEX SHEET	■
G100	GENERAL NOTES	■
ARCHITECTURE		
AD100	LOCATION MAP & DEMOLITION FLOOR AND CEILING PLANS	■
A200	NEW WORK PLANS	■
A300	ELEVATIONS	■
A050	ADA CODE REQ - ACCESSIBLE ROUTE & CLEARANCES	■
A051	ADA CODE REQ - MOUNTING HEIGHTS, TOILET STALLS, & SHOWERS	■
A052	TYP MOUNTING HEIGHTS - GENERAL DIAGRAMS & NOTES	■
MECHANICAL		
M-000	MECHANICAL SYMBOLS, ABBREVIATIONS, NOTES AND LEGEND	■
M-001	MECHANICAL SPECIFICATIONS	■
M-002	MECHANICAL SPECIFICATIONS	■
M-201	MECHANICAL ENLARGED DEMOLITION AND NEW FLOOR PLANS	■
M-601	MECHANICAL SCHEDULES	■
M-701	MECHANICAL DETAILS	■
PLUMBING		
P-001	PLUMBING SYMBOLS, ABBREVIATIONS, NOTES, SPECS AND SCHEDULES	■
P-101	PLUMBING ENLARGED DEMOLITION AND NEW FLOOR PLANS	■
P-201	PLUMBING ISOMETRICS	■
P-301	PLUMBING DETAILS	■
ELECTRICAL		
E-001	ELECTRICAL NOTES AND SYMBOL LEGEND	■
E-101	ELECTRICAL REFLECTED CEILING AND FLOOR PLANS	■
E-201	ELECTRICAL SCHEDULES	■

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PERMIT SET

CITY OF DORAL

MORGAN LEVY
RESTROOM RENOVATIONS
5300 NW 102ND AVENUE
Doral, FL 33178

Title

INDEX SHEET

Project No.	Scale
227100129	As indicated
Revision	Drawing No.
	G002

ABBREVIATIONS

& - And
< - Angle
@ - At
C - Center Line
Ø - Diameter
- Pound
± - Tolerance Dimension

A/E - Architect / Engineer
AB - Anchor Bolt
AC - Air Conditioning
ACBL - Accessible (ADA Compliant)
ACOUS - Acoustical
ACT - Acoustic Ceiling Tile
AD - Access Door
ADA - The Americans with Disabilities Act
ADBL - Adaptable (ADA Compliant)
ADDL - Additional
ADH - Adhesive
ADJ - Adjustable
ADJC - Adjacent
AF - Access Floor
AFF - Above Finished Floor
AGGR - Aggregate
AH - Air Handler
AL - Aluminum
ALT - Alternate
ANOD - Anodized
AP - Access Panel
APPROX - Approximately
ARCH - Architect
ASC - Above Suspended Ceiling
ASPH - Asphalt

BD - Board
BETW - Between
BLDG - Building
BLKG - Blocking
BM - Beam
BO - By Others
BOS - Bottom of Slab
BOT - Bottom
BR - Brass
BRZ - Bronze

CAB - Cabinet
CB - Casing Bead
CEM - Cement
CEMTS - Cementitious
CER - Ceramic
CG - Corner Guard
CHAN - Channel
CHBD - Chalkboard
CHFR - Chamfer
CHR - Chrome
CI - Cast Iron
CJ - Construction Joint
CK - Cork
CLG - Ceiling
CLG - Control Joint
CLO - Closet
CLR - Clear
CLRM - Classroom
CMPST - Composite
CMU - Concrete Masonry Unit
CNTR - Counter
CO - Cased Opening
COL - Column
COMP - Compressible
CONC - Concrete
CONN - Connection
CONSTR - Construction
CONT - Continuous
CONTR - Contractor
COPP - Copper
CPRS - Compressible or Compression
CPT - Carpet
CORR - Corridor
CRS - Cold Rolled Steel
CS - Cast Stone
CSK - Countersunk
CSMT - Casement
CSWK - Casework
CT - Ceramic Tile
CYL - Cylinder

DBL - Double
DD - Deck Drain
DEMO - Demolition
DEPT - Department
DF - Drinking Fountain
DIA - Diameter
DIM - Dimension
DISP - Dispenser
DIV - Division
DMPF - Dampproofing
DN - Down
DO - Ditto
DOP - Door Opening
DR - Door
DS - Downspout
DSP - Dry Standpipe
DST - Door Stop
DTL - Detail
DW - Dishwasher
DWG - Drawing
DWR - Drawer

E - East
EA - Each
EB - Expansion Bolt
EIFS - Exterior Insulation Finish System
EJ - Expansion Joint
EL - Elevation
ELAST - Elastomeric
ELEC - Electrical
ELEV - Elevator
EMER - Emergency
ENCL - Enclosure
ENGR - Engineer
ENTR - Entrance
EOS - Emergency Overflow scupper
EP - Electrical Panel
EPDM - Ethylene Propylene Diene Monomer
EPRF - Explosion Proof
EQ - Equal
EQUIP - Equipment
ESCAL - Escalator
ESMT - Easment
EST - Engineered Stone
ETR - Existing to Remain
EW - Each Way
EWC - Electric Water Cooler
EX / EXIST - Existing
EXC - Excavate
EXH - Exhaust
EXP - Expansion
EXT - Exterior
EXIST - Existing

F/F - Face to Face
FA - Fire Alarm
FACP - Fire Alarm Control Panel
FB - Flat Bar
FCO - Floor Clean Out
FD - Floor Drain
FDC - Fire Department Connection
FDN - Foundation
FE - Fire Extinguisher
FEC - Fire Extinguisher Cabinet
FF - Fabric Flashing
FGL - Fiberglass
FHC - Fire Hose Cabinet
FHP - Full Height Partition
FHY - Fire Hydrant

FIN - Finish
FL - Flashing
FLR - Floor
FLUOR - Fluorescent
FOC - Face of Concrete
FOF - Face of Finish
FOM - Face of Masonry
FOS - Face of Stud
FPRF - Fireproofing
FR - Fire Resistant
FRT - Fire Retardant Treated
FS - Full Size
FSH - Fire Sprinkler Head
FSTP - Firestopping
FT - Foot or Feet
FTG - Footing
FTR - Fin Tube Radiation
FURN - Furniture
FURR - Furring
FUT - Future
FWC - Fabric Wall Covering

G - Gas
GA - Gauge
GALV - Galvanized
GB - Grab Bar
GC - General Contractor
GEN - Generator
GFRC - Glass Fiber Reinforced Concrete
GFRG - Glass Fiber Reinforced Gypsum
GL - Glass
GLMU - Glass Masonry Unit
GMMU - Glass Mesh Mortor Unit
GND - Ground
GR - Grade
GRL - Grille
GRTG - Grating
GSKT - Gasket
GT - Grout
GVL - Gravel
GWB - Gypsum Wall Board

HB - Hose Bibb
HC - Hollow Core
HDBD - Hardboard
HDWD - Hardwood
HDW - Hardware
HGR - Hanger
HT - Height
HM - Hollow Metal
HMD - Hollow Metal Door
HNDRL - Handrail
HO - Hold Open
HORIZ - Horizontal
HP - High Point
HSS- Hollow Steel Sections
HVAC - Heat, Ventilation & Air Conditioning

ID - Inside Diameter
IF - Inside Face
IN - Inch or Inches
INSUL - Insulation
INT - Interior
IWH - Instantaneous Water Heater

JAN - Janitor
JST - Joist
JT - Joint

KD - Knocked Down
KIT - Kitchen
KO - Knockout
KOP - Knockout Panel
KPL - Kickplate

L - Length or Left
LAB - Laboratory
LAD - Ladder
LAM - Laminate
LAV - Lavatory
LB - Pound
LBL - Label
LF - Linear Foot or Feet
LH - Left Hand
LHR - Left Hand Reverse
LIB - Library
LIN - Linear
LKR - Locker
LNM - Linoleum
LNTL - Lintel
LONG - Longitudinal
LP - Low Point
LT - Light
LTG - Lighting
LTWT - Lightweight
LVR - Louver

MACH - Machine
MAINT - Maintenance
MAS - Masonry
MATL - Material
MAX - Maximum
MDF - Medium Density Fiberboard
MDO - Medium Density Overlay
MECH - Mechanical
MED - Medium
MEL - Melamine
MEMB - Membrane
MEZZ - Mezzanine
MF - Metal Flashing
MFR - Manufacturer
MH - Manhole
MIN - Minimum
MIR - Mirror
MISC - Miscellaneous
MKBD - Markerboard
ML - Metal Lath
MLDG - Molding
MLWK - Millwork
MO - Masonry Opening
MTD - Mounted
MTR - Mortar
MTL - Metal
MULL - Mullion
MVBL - Movable

N - North
NA - Not Applicable
NAT - Natural
NIC - Not In Contract
NO - Number
NOM - Nominal
NTS - Not To Scale

OA - Overall
OC - On Center
OD - Outside Diameter
OF - Outside Face
OFCI - Owner Furnished/Contractor Installed
OFF - Office
OFS - Overflow Scupper
OH - Overhead
OPNG - Opening
OPP - Opposite
OTS - Open to Structure

P&S - Power & Signal
PAR - Parallel
PB - Particle Board
PC - Precast
PD- Planter Drain
PERF - Perforated
PERIM - Perimeter
PERP - Perpendicular
PL - Plate
PLAM - Plastic Laminate
PLAS - Plaster
PLBG - Plumbing
PLYWD - Plywood
PM - Pressed Metal
PNEU - Pneumatic
PNL - Panel
POL - Polished
POLY - Polyethelene
PR - Pair
PRCST - Precast
PREFAB - Prefabricated
PREFIN - Prefinished
PT - Pressure Treated
PTD - Painted
PTN - Partition
PVC - Polyvinyl Chloride
PVG - Paving

QT - Quarry Tile
QTY - Quantity
QUAL - Quality

R - Radius or (Stair) Risers
RAD - Radiator
RBR - Rubber
RCP - Reflected Ceiling Plan
RD - Roof Drain
REC - Recessed
REF - Reference
REFR - Refrigerator
REG - Register
REINF - Reinforced or Reinforcing
REM - Removable
REQD - Required
REQS - Requirements
RESIL - Resilient
RF - Resilient Flooring
RFG - Roofing
RH - Right Hand
RHR - Right Hand Reverse
RLG - Railing
RM - Room
RO - Rough Opening
RV - Roof Vent
RWL - Rain Water Leader

S - South
SC - Solid Core
SAFB - Sound Attenuation Fiber Blanket
SCHED - Schedule
SCR - Screw
SCRN - Screen
SDT - Static Dissipative Tile
SECT - Section
SF - Square Foot or Feet
SHR - Shower
SHT - Sheet
SHTG - Sheathing
SHV - Shelving
SIM - Similar
SK - Sink
SLV - Sleeve
SM - Sheet Metal
SP - Spray Particle Paint
SPEC - Specifications
SQ - Square
SS - Stainless Steel
SSF - Solid Surface
SSK - Service Sink
ST - Street
STA - Station
STAG - Stagger
STC - Sound Transmission Class
STD - Standard
STG - Storage
STL - Steel
STN - Stone
STR - Structural
SUSP - Suspended
SYM - Symbol
SYMM - Symmetrical
SVF - Sheet Vinyl Flooring
S4S - Surface Four Sides
SYS - System

T - Treads (Stairs)
T&B - Top and Bottom
T&G - Tongue and Groove
TBD - To Be Determined
TBM - Top of Beam
TC - Top of Concrete
TD - Trench Drain
TDO - Thermoset Decorative Overlay
TEL - Telephone
TEMP - Temporary
TERR - Terrazzo
TF - Top of Footing
TFF - Top of Finished Floor
THK - Thickness
THRES - Threshold
THRU - Through
TKBD - Tackboard
TMPD - Tempered
T.O. - Top Of
TOC - Top Of Concrete
TOF - Top of Footing
TOL - Tolerance
TOM - Top Of Masonry
TOP - Top of Pavement
TOS - Top Of Steel
TOSL - Top of Slab
TOW - Top Of Wall
TPO - Thermoplastic-Polyolefin Roofing
TRANS - Translucent
TV - Television
TYP - Typical

UL - Underwriters Laboratory
UNEX - Unexcavated
UNFIN - Unfinished
UON - Unless Otherwise Noted
UPS - Uninterruptible Power Supply
UR - Urinal
UV - Ultraviolet

VAC - Vacuum
VB - Vapor Barrier or Vinyl Base
VCT - Vinyl Composition Tile
VER - Verify
VERT - Vertical
VEST - Vestibule
VIF - Contractor to Verify In Field
VNR - Veneer
VR - Vapor Retarder
VWC - Vinyl Wall Covering

W - West
W/ - With
W/O - Without
WC - Water Closet
WD - Wood
WGL - Wired Glass
WLD - Welded
WP - Working Point
WSCT - Wainscot
WT - Weight
WTH - Width
WTPRF - Waterproofing
WWF - Welded Wire Fabric

CODE NOTES

1. DEVELOPMENT TO MEET ACCESSIBILITY REQUIREMENTS FLORIDA ACCESSIBILITY CODE 2020, AS APPLICABLE:

SECTION 206 - ACCESSIBLE ROUTES
SECTION 206.2.1 - SITE ARRIVAL POINTS
SECTION 206.2.8 - EMPLOYEE WORK AREAS
SECTION 206.4 - ENTRANCES
207 - ACCESSIBLE MEANS OF EGRESS
215 - FIRE ALARM SYSTEMS
304.4 - DOOR SWING
305.6 - APPROACH
305.7 - MANUEVERING CLEARANCE
306 - KNEE AND TOE CLEARANCE
307 - PROTRUDING OBJECTS

GENERAL DEMOLITION NOTES

1. THIS DRAWING IS ONLY TO ASSIST IN SHOWING THE SCOPE OF DEMOLITION WORK AND IS NOT INTENDED TO INDICATE ALL DEMOLITION. CONTRACTOR SHALL REMOVE ALL EXISTING ITEMS AS REQUIRED TO COMPLETE THE JOB.

2. NOT ALL ITEMS TO BE DEMOLISHED ARE SHOWN ON THE PLAN. CONTRACTOR SHALL BE RESPONSIBLE FOR PERFORMING A WALK-THRU OF THE PROJECT PRIOR TO SUBMITTING A BID TO THE OWNER FOR IDENTIFYING POSSIBLE CRITICAL ITEMS, NOT OR INCORRECTLY ADDRESSED, WHICH REQUIRE REMOVAL/ RELOCATION.

3. PROVIDE SAFETY FEATURES DURING WORK COMPLYING WITH APPLICABLE CODES, RULES AND REGULATIONS HAVING JURISDICTION OF THE PROJECT.

4. CUT, REMOVE, PATCH, ALTER AND REFINISH EXISTING CONSTRUCTION AS REQUIRED TO LEAVE WORK COMPLETE AND IN SATISFACTORY CONDITION. CLOSELY MATCH TEXTURE AND FINISH OF EXISTING ADJACENT SURFACE.

5. CONTRACTOR SHALL TAKE ALL PRECAUTIONS REQUIRED TO PROTECT ALL UNDERGROUND OR OTHER CONCEALED UTILITIES. CONTRACTOR IS TO INSPECT CEILING AND CHASES TO ASSURE PROPER IDENTIFICATION OF UTILITIES PRIOR TO CUTTING, PATCHING, ETC. AS REQUIRED AND INDICATED ON M.E.P. DOCUMENTS.

6. OPENINGS LEFT THROUGH RATED AND SMOKE PARTITIONS DUE TO REMOVAL OF DUCTWORK AND/OR CONDUITS SHALL BE CLOSED (BOTH SIDES).TO MAINTAIN THE FIRE RATING INTEGRITY OF PARTITION PER THE APPLICABLE UL LISTING.

7. RENOVATION WORK SHALL ENTAIL INTERVENTIONS IN AREAS OUTSIDE OF THE IMMEDIATE SCOPE OF WORK, INCLUDING WORK ABOVE AND/OR BELOW THE FLOOR LEVEL WITHIN THE SCOPE. IT SHALL REQUIRE WORK INVOLVING REMOTE UTILITY LINES (ELECTRICAL, MECHANICAL, PLUMBING, COMMUNICATIONS, ETC.). ANY SUCH WORK SHALL BE ALL-INCLUSIVE. PROVIDE ALL STRUCTURES, UTILITIES, FINISHES AND EQUIPMENT REQUIRED TO RESTORE THE AREA TO FULLY OPERATIONAL CONDITIONS AND COMPLIANCE WITH RATING INTEGRITIES TO MEET THE OWNER'S APPROVAL. ALL WORK AS DESCRIBED IN THIS NOTE SHALL BE INCLUDED AS PART OF THE BASE CONTRACT PRICE.

8. CONTRACTOR SHALL COORDINATE DEMOLITION WORK SCHEDULE WITH ADMINISTRATION IN ORDER TO PROVIDE SUFFICIENT ADVANCE NOTICE FOR THE BEGINNING OF WORK IN EACH EXISTING AREA OR FLOOR LEVEL.

9. PATCH AND REPAIR ALL EXISTING SURFACES DAMAGED BY DEMOLITION AND/OR INSTALLATION OF NEW WORK AND/OR UTILITIES, PROVIDE A FLUSH AND EVEN SURFACE AS REQUIRED TO MATCH ADJACENT SURFACES AND/OR RECEIVE NEW SCHEDULED FINISHES.

10. ALL DEMOLITION WORK IS DENOTED BY BROKEN LINES. ANY DISCREPANCIES OR DOUBTS SHALL BE BROUGHT TO THE ARCHITECTS ATTENTION PRIOR TO COMMENCING WORK FOR CLARIFICATION.

11. N/A

12. CONCRETE SLAB SHALL BE INSPECTED BY THE CONTRACTOR TO ENSURE THE CURRENT STATE IS ACCEPTABLE TO RECEIVE NEW FLOOR FINISH OR IF GRINDING, SCRAPING, PATCHING, LEVELING COMPOUND, ETC WILL BE NEEDED TO ACCEPT NEW WORK. CONTRACTOR SHALL PROVIDE METHOD FOR A/E REVIEW IF APPLICABLE.

13. ALL AREAS SCOPED FOR DEMOLITION WORK SHALL BE LEFT PREPPED TO RECEIVE NEW WORK. CONTRACTOR TO COORDINATE WITH NEW WORK PLANS

14. ARCHITECTURAL DRAWINGS WILL IDENTIFY DEMOLITION OF CERTAIN ITEMS INVOLVING OTHER DISCIPLINES HOWEVER IT'S THE CONTRACTOR'S RESPONSIBILITY TO REVIEW ALL OTHER CONSULTANT DRAWINGS (STRUCTURAL, CIVIL, LANDSCAPE, MEP'S, POOL, ETC) APPLICABLE TO THIS PROJECT TO IDENTIFY FULL SCOPE.

15. ALL ITEMS NOTED TO BE DEMOLISHED SHALL INCLUDE ALL CORRESPONDING COMPONENTS AND ACCESSORIES TO IT'S ENTIRETY.

16. OWNER SHALL PROVIDE AN ASBESTOS SURVEY REPORT PERFORMED BY A CERTIFIED COMPANY PRIOR TO PROJECT COMMENCEMENT

17. CONTRACTOR SHALL SALVAGE ALL EXISTING FURNITURE, EQUIPMENT, APPLIANCES, ETC. WITHIN DEMOLISHED SCOPE AND COORDINATE WITH OWNER FOR INSTRUCTIONS ON WHERE IT SHALL BE STORED

18. DRAWINGS ARE NOT TO BE SCALED FOR INFORMATION

19. PLUMBING FIXTURE NEW LOCATIONS WILL INVOLVE THE DEMOLITION OF THE EXISTING SLAB ON GRADE TO PROVIDE NEW PLUMBING TIE-INS. SIMILAR WILL APPLY TO NEW COLD & HOT WATER CONNECTIONS WHICH WILL INVOLVE THE DEMOLITION OF WALL FINISHES. CONTRACTOR SHALL PROVIDE A FIELD INSPECTION TO ASSESS THE EXTENT OF THE DEMOLITION AND INCLUDE IN OVERALL BID (SCOPE OF WORK).

20. CONTRACTOR TO PROVIDE TEMPORARY CODE COMPLIANT BATHROOMS TO BE USED BY PARK DURING RENOVATION OF EXISTING BATHROOMS.

GENERAL LEGEND

Symbol	Description
ELEV 25'-0"	SPOT ELEVATION KEY
	ALIGN KEY
MATCH LINE / SEE X/XXXX	MATCH LINE
	LIMIT OF WORK
1 1/32"	DIMENSION LINE
3 / C	COLUMN LINE INDICATORS
C.5 / C.5	COLUMN LINE INDICATORS (EXSITING BUILDINGS)
FD	FLOOR DRAIN
RD	ROOF DRAIN
DD	DECK DRAIN
DF	DRINKING FOUNTAIN
FC	FIRE EXTINGUISHER CABINET - SURFACE MOUNTED
FS	FIRE EXTINGUISHER CABINET - SEMI-RECESSED
FR	FIRE EXTINGUISHER CABINET - FULLY RECESSED
FE	FIRE EXTINGUISHER - BRACKET MOUNTED
LOBBY	ROOM NAME
101	ROOM NUMBER
101	DOOR NUMBER
S	SEALANT
(S)	SEALANT & BACKER ROD
ROOM NAME / 101 / WALL / BASE / FLOOR	FINISH TAG
ACT1 / 10' - 0"	RCP TAG
1 / A-202b, SIM	DETAIL KEY: DETAIL NUMBER / DRAWING NUMBER
1 / A510, SIM	WALL SECTION KEY
1 / A500	BUILDING SECTION KEY
1 / A-101, SIM	ENLARGED PLAN KEY
1 / A400	EXTERIOR ELEVATION KEY
1 / A802	INTERIOR ELEVATION KEY
1, 2, 3, 4 / A802	MULTIPLE INTERIOR ELEVATIONS
1	REVISION KEY
F / 1x	PARTITION (P) / EXTERIOR WALL (W) / FLOOR (F) / ROOF (R) ASSEMBLY TAG: ASSEMBLY TYPE (P / W / F / R); TYPE (W/ ALFA MODIFIER IF INDICATED)
WW1	WINDOW TYPE
1	LOUVER TYPE
1	PRECAST CONCRETE TYPE
	N.I.C. SHADING
1	DEMO/NEW WORK KEYNOTE TAG; KEYNOTE NUMBER

GENERAL NOTES

1. CONSTRUCTION MANAGER (CM) – THE TERM “CONSTRUCTION MANAGER (CM)” "GENERAL CONTRACTOR" AND "CONTRACTOR" SHALL HAVE THE SAME MEANING UNLESS NOTED OTHERWISE
2. IT IS THE RESPONSIBILITY OF THE CM AND EACH OF HIS SUBCONTRACTORS TO REVIEW ALL DRAWINGS, THE PROJECT MANUAL, ADDENDA, ETC. TO ENSURE COORDINATION OF ALL WORK AFFECTING EACH TRADE. FAILURE TO REVIEW ALL CONTRACT DOCUMENTS FOR APPLICABLE ITEMS OF WORK SHALL NOT RELIEVE THE RESPONSIBLE PARTY FROM PERFORMING ALL WORK REQUIRED.
3. IT IS THE RESPONSIBILITY OF THE CM AND EACH OF HIS SUBCONTRACTORS TO REVIEW ALL DRAWINGS, THE PROJECT MANUAL, ADDENDA, ETC. TO INCLUDE ALL SCOPE APPLICABLE TO EACH TRADE. FAILURE TO REVIEW ALL CONTRACT DOCUMENTS OR NOT CLARIFY QUESTIONS FOR APPLICABLE ITEMS OF WORK SHALL NOT RELIEVE THE RESPONSIBLE PARTY FROM PERFORMING ALL WORK REQUIRED.
4. THE CM SHALL COMPLY WITH ALL FEDERAL, STATE, AND LOCAL SAFETY REGULATIONS. ALL WORK SHALL COMPLY WITH ALL LOCAL GOVERNING ORDINANCES AND OTHER LEGAL REQUIREMENTS OF PUBLIC AUTHORITIES WHICH BEAR ON PERFORMANCE OF WORK. REFER TO LIFESAFETY NARRATIVE FOR MORE INFORMATION.
5. THE CM SHALL COMPLY WITH ALL OSHA REGULATIONS 2020 FBC SAFEGUARDS DURING CONSTRUCTION REQUIREMENTS.
6. THE CM SHALL LIMIT CONSTRUCTION OPERATIONS TO WITHIN THE LIMITS OF CONSTRUCTION. (THE CM IS SOLELY RESPONSIBLE FOR ANY DAMAGES OUTSIDE THE LIMITS OF CONSTRUCTION & NEEDS TO REMEDIATE TO ITS ORIGINAL STATE.)
7. THE CM SHALL COOPERATE WITH THE OWNER, THE OWNER'S REPRESENTATIVES, USERS, FIRE DEPARTMENT, BUILDING DEPARTMENT AND OTHER ENTITIES WHILE WORKING ON THIS PROJECT
8. N/A
9. THE CM SHALL BE RESPONSIBLE FOR THE PERFORMANCE OF ALL WORK UNDER THE CONTRACT REGARDLESS OF WHICH DRAWING SHEETS MAY DEPICT THE WORK WHILE OTHERS MAY NOT. CM SHALL COORDINATE ALL THE WORK OF SUBCONTRACTORS ON SITE TO COMPLETE THE PROJECT.
A. DISCREPANCIES AND OMISSIONS
CONTRACT DOCUMENTS ARE PART AND PARCEL TO ONE ANOTHER. ALL DRAWINGS, SHEETS AND SPECIFICATIONS SHALL BE CONSIDERED IN ITS ENTIRETY, AS THE "CONTRACT DOCUMENTS".
10. THE CM SHALL HAVE THEIR CONSTRUCTION SCHEDULE APPROVED BY THE OWNER AND OWNER'S REPRESENTATIVES PRIOR TO COMMENCING CONSTRUCTION WORK WITHIN THE TIME PERIOD SPECIFIED IN THE CONTRACT DOCUMENTS.
11. THE CM SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS ON THE JOB AND ARCHITECT'S OFFICE MUST BE NOTIFIED OF ANY VARIATIONS FROM THE DIMENSIONS AND CONDITIONS SHOWN BY THE CONTRACT DOCUMENTS.
12. THE CM SHALL SECURE AND PAY FOR, AS NECESSARY PROPER EXECUTION AND COMPLETION OF WORK, AS APPLICABLE AT TIME OF RECEIPT OF BIDS:
A. PERMITS
B. GOVERNMENT FEES
C. LICENSES
13. THE CM SHALL PROMPTLY SUBMIT WRITTEN NOTICE TO THE OWNER OR OWNER'S REPRESENTATIVES ANY OBSERVED DISCREPANCIES IN THE CONTRACT DOCUMENTS FROM LEGAL REQUIREMENTS PRIOR TO BIDDING AND/OR PRIOR TO START OF WORK. MODIFICATIONS TO CONTRACT DOCUMENTS SHALL BE MADE AS NECESSARY TO DEPICT SUCH MODIFICATION PRIOR TO PROCEEDING WITH THE WORK. THE CM SHALL ASSUME RESPONSIBILITY FOR EXECUTED WORK WHEN KNOWN TO BE CONTRARY TO THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.
14. THE CM SHALL ESTABLISH ALL ITEMS THAT REQUIRE IMMEDIATE PROCESSING DUE TO LONG LEAD ORDERING TIME. A LIST OF THESE ITEMS SHALL BE SUBMITTED TO THE OWNER OR OWNER'S REPRESENTATIVES WITHIN ONE WEEK AFTER THE CONTRACT IS AWARDED, TIME ADJUSTMENTS WILL NOT BE MADE FOR LONG LEAD ITEMS.
15. THE STAGING AREA MAY BE LOCATED BY THE OWNER, OWNER'S REPRESENTATIVES PRIOR TO THE BEGINNING OF CONSTRUCTION. THE CM SHALL COORDINATE WITH SPECIFICATIONS AND OWNER REGARDING PAYMENT FOR MATERIAL STORAGE.
16. THE CM'S PERSONNEL SHALL BE READILY AVAILABLE VIA CELL TELEPHONE AT ALL TIMES. CONSTRUCTION EQUIPMENT WILL BE PERMITTED TO PARK OVERNIGHT ONLY WITHIN THE SECURED PROJECT PHASING LIMITS.
17. THE CM'S SUPERINTENDENT SHALL BE:
A. ON THE CONSTRUCTION SITE AT ALL TIMES DURING WORKING HOURS WHILE THIS PROJECT IS IN PROGRESS.
B. DESIGNATED RESPONSIBLE CM REPRESENTATIVE.
C. AVAILABLE IN CASE OF EMERGENCIES ON A 24-HOUR DAILY BASIS.
18. THE CM SHALL PROVIDE JOB SITE ACCESS TO THE OWNER, ARCHITECT AND THEIR REPRESENTATIVES FOR INSPECTION OR OBSERVATION PURPOSES.
19. THE CM AND EACH SUBCONTRACTOR MUST HAVE WORKMAN'S COMPENSATION AS REQUIRED BY LAW, AND MEET OWNER REQUIREMENTS HAVING SUFFICIENT PROTECTION FOR CLAIMS AGAINST PERSONAL INJURY, INCLUDING DEATH, SHOULD THEY ARISE FROM OPERATIONS UNDER CONTRACT.
20. THE CM SHALL DEVELOP ALL PHASING AND ALTERNATE DAILY ROUTES DURING CONSTRUCTION AS PART OF THEIR MEANS AND METHODS. COORDINATE ALL PHASING WITH OWNER, OWNER'S REPRESENTATIVES.
21. THE CM SHALL TAKE ALL PRECAUTIONARY MEASURES TO PROTECT EXISTING ABOVE GROUND AND BELOW GROUND STRUCTURES, WHICH ARE TO REMAIN IN PLACE, FROM DAMAGE. ALL SUCH IMPROVEMENTS OR STRUCTURES DAMAGED BY THE CM'S OPERATIONS SHALL BE REPAIRED OR RECONSTRUCTED OR REPLACED, SATISFACTORY TO THE OWNER, AT THE EXPENSE OF THE CM AND THEIR SUBCONTRACTORS.
22. THE CM SHALL BE RESPONSIBLE FOR THE INSTALLATION OF SAFETY BARRICADES AND OTHER SAFETY PRECAUSTIONARY MEASURES TO ENSURE SAFETY ON THE CONSTRUCTION SITE DURING CONSTRUCTION IN AREAS AFFECTED BY THIS CONTRACT AND MUST COMPLY WITH OSHA REQUIREMENTS.
23. BARRICADES ARE TO REMAIN UNTIL ALL PROJECT CONSTRUCTION IS COMPLETED UNLESS NOTED OTHERWISE.
24. THE CM SHALL BE RESPONSIBLE FOR SECURING THEIR WORK AREA AND COORDINATING THE OVERALL SECURITY OF THE WORK AREA, AFFECTED BUILDING AREAS, AND MATERIAL STORAGE AND STAGING AREAS.
25. CONSTRUCTION EQUIPMENT SHALL BE PARKED ONLY WITHIN THE CM'S SECURED WORK AREA. LOCATION TO BE COORDINATED WITH OWNER'S REPRESENTATIVE.
26. N/A
27. THE CM SHALL CONTINUOUSLY MAINTAIN THE SITE FREE OF RUBBISH AND CONSTRUCTION DEBRIS TO THE MAXIMUM EXTENT POSSIBLE. ALL RUBBISH AND CONSTRUCTION DEBRIS SHALL BE REMOVED IN ITS ENTIRETY FROM THE WORK AREA BEFORE THE END OF EACH WORK PERIOD. THE CM SHALL PROVIDE AND MAINTAIN AT LEAST ONE COVERED DUMPSTER FOR TRASH DISPOSAL AT AN APPROVED LOCATION.
28. UPON COMPLETION OF CONSTRUCTION, THE CM SHALL CLEAN AND RESTORE THE SITE. ALL RUBBISH AND OTHER MATERIAL SHALL BE DISPOSED OFF FROM THE PROPERTY AT THE CM'S DISCRETION AND EXPENSE. THE CM SHALL RESTORE TO ITS PRE CONSTRUCTION CONDITION ALL GRASS AND PAVED AREAS THAT ARE NOT A PART OF THE CONTRACT BUT HAS BEEN DISTURBED BY CONSTRUCTION ACTIVITY.
29. N/A
30. THE CM SHALL BE RESPONSIBLE FOR ADEQUATELY BRACING AND PROTECTING ALL WORK DURING CONSTRUCTION AGAINST DAMAGES, BREAKAGE, COLLAPSE, DISTORTIONS AND OFF-ALIGNMENT ACCORDING TO APPLICABLE CODES, STANDARDS AND GOOD PRACTICE.
31. N/A
32. ALL CHANGE ORDERS SHALL BE APPROVED BY OWNER, THE CM, AND ARCHITECT OF RECORD.
33. N/A
34. DRAWINGS & SPECIFICATIONS- THESE DRAWINGS SHALL NOT BE SCALED. REFER TO DIMENSIONS INDICATED, ACTUAL SIZES OF CONSTRUCTION ITEMS OR OTHER METHOD OF LOCATING CONSTRUCTION. WHERE NO DIMENSIONS OR METHODS OF DETERMINING A LOCATION ARE GIVEN, VERIFY CORRECT LOCATION WITH THE ARCHITECT PRIOR TO INSTALLATION.
35. THE CONTRACT DOCUMENTS SHALL CONSIST OF THE COMPLETE SET OF CONSTRUCTION DRAWINGS AND THE PROJECT SPECIFICATIONS. IT IS THE OWNER'S INTENT THAT BOTH CONSTRUCTION DRAWINGS AND THE PROJECT MANUAL COMPLIMENT EACH OTHER AND ARE BEING PRESENTED AS A "PERFORMANCE SPECIFICATION" WHICH REQUIRES THE CM TO PROVIDE A COMPLETE AND OPERATIONAL PRODUCT BASED ON THE DESIGN PARAMETERS GIVEN, THEREBY PROVIDING AND INSTALLING ALL NECESSARY COMPONENTS AND ELEMENTS.
36. DETAILS NOTED AS "TYPICAL" ARE TO APPLY FOR ALL SUCH CASES WHERE THEY OTHERWISE APPEAR IN THE DOCUMENTS, UNLESS SPECIFICALLY NOTED TO THE CONTRARY OR OTHERWISE
37. IN ADDITION TO WALL TYPES SHOWN ON PLANS THE CM SHALL REFER TO THE ROOM FINISH SCHEDULE, INTERIOR DESIGN DOCUMENTS, AND DETAILS FOR ADDITIONAL INFORMATION REGARDING FINISHES AND NOTIFY THE ARCHITECT OF ANY DESCREPANCIES.
38. ALL MATERIALS AND CONSTRUCTION TO BE INCORPORATED IN THE WORK SHALL BE IN STRICT ACCORDANCE WITH THE LATEST EDITION OF THE A.S.T.M. SPECIFICATIONS AS APPLICABLE, AND TO CONFORM WITH THE STANDARDS AND RECOMMENDATIONS OF THE VARIOUS TRADE INSTITUTES (A.C.I., A.I.S.C.,etc.). ALL MATERIAL INCORPORATED INTO THE WORK SHALL BE NEW.
39. SPECIFICATIONS ARE PROVIDED WHICH REQUIRE THE CM TO APPLY WATER, CHEMICALS, VEGETATION OR OTHER MATERIALS TO PREVENT THE OCCURRENCE OF DUST THAT WILL BE OBJECTIONABLE TO THE OPERATIONS OR USERS OF THE AREAS. THE CM SHALL ALSO DISCONTINUE OPERATIONS, WHICH VIOLATE EXISTING LAWS AND REGULATIONS OR CREATE AN UNDUE HAZARD. ALL COST FOR CONTROLLING DUST OR POLLUTANTS TO THE AIR OF ANY KIND SHALL BE INCIDENTAL TO THE CONTRACT.
40. DIMENSIONS - DIMENSIONS ON PLANS ARE FROM FACE OF MASONRY. INTERIOR DIMENSIONS ARE FROM FACE OF MASONRY, FACE OF FINISH OR FACE OF EXISTING WALL, UNLESS NOTED OTHERWISE.
EXTERIOR DIMENSIONS ARE FROM FACE OF MASONRY, UNLESS NOTED OTHERWISE. DIMENSIONS INDICATED AS CLEAR SHALL BE A MINIMUM DIMENSION, FACE TO FACE OF FINISH MATERIALS.
41. ALL DIMENSIONS MUST BE FIELD VERIFIED BY THE CM AND THE SUBCONTRACTORS BEFORE COMMENCING ANY WORK. ANY DISCREPANCY MUST BE BROUGHT TO THE ATTENTION OF THE OWNER OR OWNER'S REPRESENTATIVE IMMEDIATELY AND IN WRITING PRIOR TO PROCEEDING WITH ANY WORK.
42. CEILING HEIGHTS ARE DIMENSIONED IN RELATIONSHIP TO THE FINISHED FLOOR, UNLESS SPECIFICALLY NOTED OTHERWISE.
43. AS BUILT DRAWINGS - PRINTS OF PLANS TO BE USED BY THE CM FOR RECORDING "AS-BUILT" INFORMATION SHALL BE KEPT AT THE JOB SITE AT ALL TIMES AND ALL CHANGES SHALL BE MARKED IN RED AS THE WORK PROGRESSES. UPON COMPLETION OF THE WORK, AND PRIOR TO APPROVAL OF THE APPLICATION FOR FINAL PAYMENT, THE COMPLETED SET OF "AS-BUILT" PLANS SHALL BE COORDINATED WITH SPECIFICATIONS AND DELIVERED TO THE OWNER.
44. SHOP DRAWINGS- ALL SUBCONTRACTORS SHALL SUBMIT SHOP DRAWINGS:
A. THROUGH THE CM. ONCE REVIEWED, THE CM SHALL THOROUGHLY REVIEW AND SUBMIT THE SHOP DRAWINGS TO THE OWNER OR OWNER'S REPRESENTATIVES TO BE APPROVED BY THE ARCHITECT OF RECORD BEFORE PROCEEDING WITH FABRICATION AND/OR INSTALLATION.
B. DIMENSIONS SHALL BE FIELD VERIFIED, REVIEWED AND APPROVED BY THE CM BEFORE SUBMITTAL.
45. SHOP DRAWINGS THAT ARE INCOMPLETE, OR LACKING SUFFICIENT INFORMATION, WILL BE RETURNED WITHOUT REVIEW. (REFER TO PROJECT MANUAL FOR ADDITIONAL REQUIREMENTS.)
46. SHOP DRAWINGS ARE TO BE COORDINATED WITH ALL EXISTING CONDITIONS AND WORK BY OTHER TRADES.
47. N/A
48. THE MANUFACTURER'S DIRECTIONS FOR APPLICATION, INSTALLATION AND METHODS SHALL BE FOLLOWED AND ARE HEREIN MADE PART OF THE CONSTRUCTION DOCUMENTS.
49. NO SUBSTITUTIONS ARE TO BE MADE WITHOUT APPROVAL BY ARCHITECT. THE CM IS TO SUBMIT SUBSTITUTE MATERIAL SPECIFICATIONS FOR APPROVAL IN WRITING TO ARCHITECT PRIOR TO COMMENCEMENT OF WORK AS DESCRIBED IN THE SPECIFICATIONS.
50. FIRE RATED ITEMS AND FIRE STOPPING- ALL PENETRATIONS OF FIRE RATED PARTITIONS SHALL BE PROTECTED BY UNDERWRITING LABATORIES (UL) LISTED PRODUCTS AND ASSEMBLIES. RATED PARTITIONS, FLOOR-CEILING AND ROOF ASSEMBLIES SHALL BE FIRE RATED AS INDICATED AND SHALL ALSO BE BY (UL) LISTED ASSEMBLIES.
51. REFER TO FIRE STOPPING DETAIL SHEETS AND SPECIFICATIONS FOR ABANDONED SLAB PENETRATIONS BASED ON REMOVAL OF UTILITIES.
52. THE CM SHALL BE AWARE THAT SPECIFIC FIRE-RATED SEPARATION WITHIN THE BUILDING'S CONSTRUCTION ARE REQUIRED BY CODE. THE USE OF SPECIFIC MATERIALS AND COMBINATIONS OF MATERIALS WITHIN FIRE-RATED ASSEMBLIES, AS CALLED FOR ON THE DRAWINGS AND SPECIFICATIONS, ARE FOR THE PURPOSE OF ACHIEVING THE REQUIRED FIRE RATED SEPARATIONS. IT SHALL BE THE CM'S RESPONSIBILITY TO VERIFY THAT ANY CHANGE IN MATERIALS THAT ARE REQUESTED BY OWNER OR MADE BY THE CM AND /OR ITS SUBCONTRACTORS, FROM THOSE MATERIALS DRAWN OR SPECIFIED, MEETS OR EXCEEDS THE REQUIRED MINIMUM FIRE RATING OF CONSTRUCTION ASSEMBLY. SPECIFIC SEQUENCES OR METHODS OF ACHIEVING FIRE RATED ASSEMBLIES REQUIRED BY A "U.L. No." LISTING SHALL BE FOLLOWED WITHOUT DEVIATION, UNLESS OTHERWISE NOTED OR DETAILED.
53. WHERE CMU WALLS, PARTITIONS, FLOOR, CEILING AND ROOF ASSEMBLIES ARE INDICATED TO HAVE A SPECIFIC HOURLY FIRE RATING, THIS SHALL BE TAKEN AS THE MINIMUM ALLOWED.
54. BLOCKING- THE CM SHALL FURNISH AND INSTALL ALL METAL BACKING AND/OR FIRE RATED WOOD BLOCKING WHERE ALLOWED BY CODE AND REQUIRED INCLUDING BUT NOT LIMITED TO WALL MOUNTED OR BRACED FIXTURES, MILLWORK, SHELVES, BATHROOM FIXTURES AND ACCESSORIES OR BY OTHER ITEMS DESCRIBED IN ARCHITECTURAL DRAWINGS / EQUIPMENT DRAWINGS.
55. WHERE ALLOWED BY BUILDING CODES ALL CONCEALED WOOD, PLYWOOD, WOOD BLOCKING, ETC. TO BE FIRE RETARDANT TREATED. REGULAR WOOD SHALL NOT BE USED IN THIS PROJECT. USE NON COMBUSTIBLE BLOCKING WHERE REQUIRED.
56. WHERE NEW WORK ABUTS OR ALIGNS WITH EXISTING, THE CM AND THEIR SUBCONTRACTORS SHALL MAKE A SMOOTH AND EVEN TRANSITION, PATCH WORK TO MATCH EXISTING ADJACENT WORK IN TEXTURE AND APPEARANCE.
57. ALL BARRIERS AND OVERHEAD PROTECTION COVERED WALKWAYS SHALL COMPLY WITH CHAPTER 33 OF THE FLORIDA BUILDING CODE AND CHAPTER 14 OF THE FLORIDA BUILDING CODE EXISTING BUILDING.
58. COORDINATE ALL FIRE-TREATED P.T. WOOD BLOCKING SET WITHIN STUDS AT ALL WALLS FOR BUILT IN FURNITURE, FIXTURES AND EQUIPMENT MOUNTING. COORDINATE WITH FIXTURE, FURNITURE AND EQUIPMENT PLAN & EQUIPMENT CUTS SHEETS.
59. NOISE CONTROL- PROVIDE ALL NECESSARY REQUIREMENTS FOR NOISE CONTROL DURING CONSTRUCTION PERIOD. CONFORM WITH APPLICABLE OSHA REQUIREMENTS AND LOCAL ORDINANCES HAVING JURISDICTION.
60. MEP- CHECK ALL HEIGHTS AND POSSIBLE CEILING CONDITIONS FOR CLEARANCES AND COORDINATION OF DUCTWORK AND ALL OTHER CONSTRAINTS TO ENSURE THE LOCATION AND SIZE OF ALL SYSTEMS AND ITEMS TO BE INSTALLED. ANY DISCREPANCIES ARE TO BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER IN WRITING IMMEDIATELY BEFORE PROCEEDING
61. PRIOR TO CLOSING OF ANY CEILINGS, ALL MECHANICAL SYSTEMS TELEPHONE AND COMMUNICATIONS (TC) AND SECURITY(S) (MEP) ARE TO BE INSPECTED AND WHERE REQUIRED, TESTED BY LOCAL AUTHORITIES AND/OR TESTING AGENCIES HAVING JURISDICTION TO ENSURE THEIR PROPER INSTALLATION AND FUNCTION.
62. N/A
63. ALL MEP AND FIRE SPRINKLER WORK IS TO BE COORDINATED WITH ALL OTHER TRADES AND MILLWORK, EQUIPMENT, OWNER FURNISHED ITEMS, ETC. SPRINKLER HEAD COVERS TO MATCH SOFFIT COLOR OR WOOD FINISH. LIGHT FIXTURE LOCATIONS TAKE PRECEDENT IN LOCATING MEP ITEMS.
64. N/A
65. N/A
66. N/A
67. SEE PLANS FOR ALL FIRE EXTINGUISHER LOCATIONS
68. COORDINATE AND IDENTIFY MEP VALVE LOCATIONS CLEAN OUTS AND OTHER ITEMS REQUIRING ACCESS PANELS WITH ARCHITECT AND INTERIOR DESIGNER FOR APPROVAL IN SHOP DRAWINGS PRIOR TO INSTALLATION.

1. PROJECT DESCRIPTION

A.	Building Location:	Doral, FL
B.	Applicable Building Codes	2020 Florida Building Code – Building, 7th Edition
		2020 Florida Building Code – Plumbing, 7th Edition
		2020 Florida Building Code – Mechanical, 7th Edition
		Florida Building Code 2020 – Accessibility, 7th Edition
		2020 Florida Fire Prevention Code (FFPC) – 7th Edition
		2010 ADA Standards for Accessible Design - 28 CFR Part 36 (Title III)
		2020 National Electrical Code - NFPA 70
E.	Description	Project consists of an alteration level-1 renovation to the 510 sq. ft. existing men's & women's bathrooms at the Morgan Levy Park. The renovation includes the demolition of all flooring, replacement of light fixtures, replacement of all plumbing fixtures, & all vanities. New work includes new finishes, toilet partitions, plumbing fixtures, light fixtures, ceiling repair and new vanities.
F.	Flood Zone	Zone X

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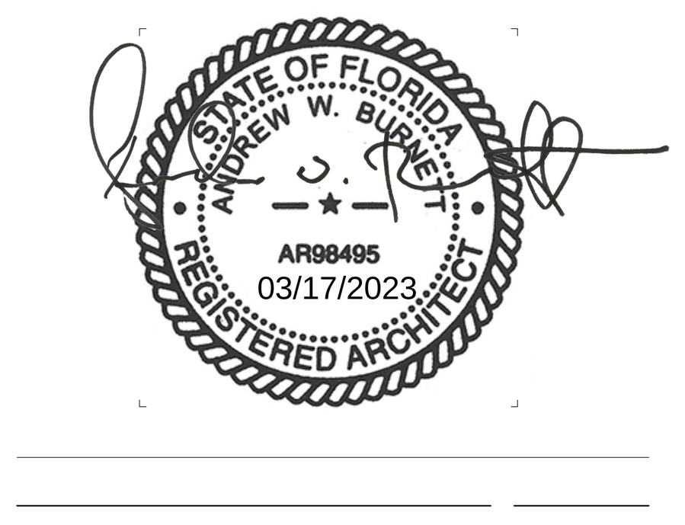

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CITY OF DORAL

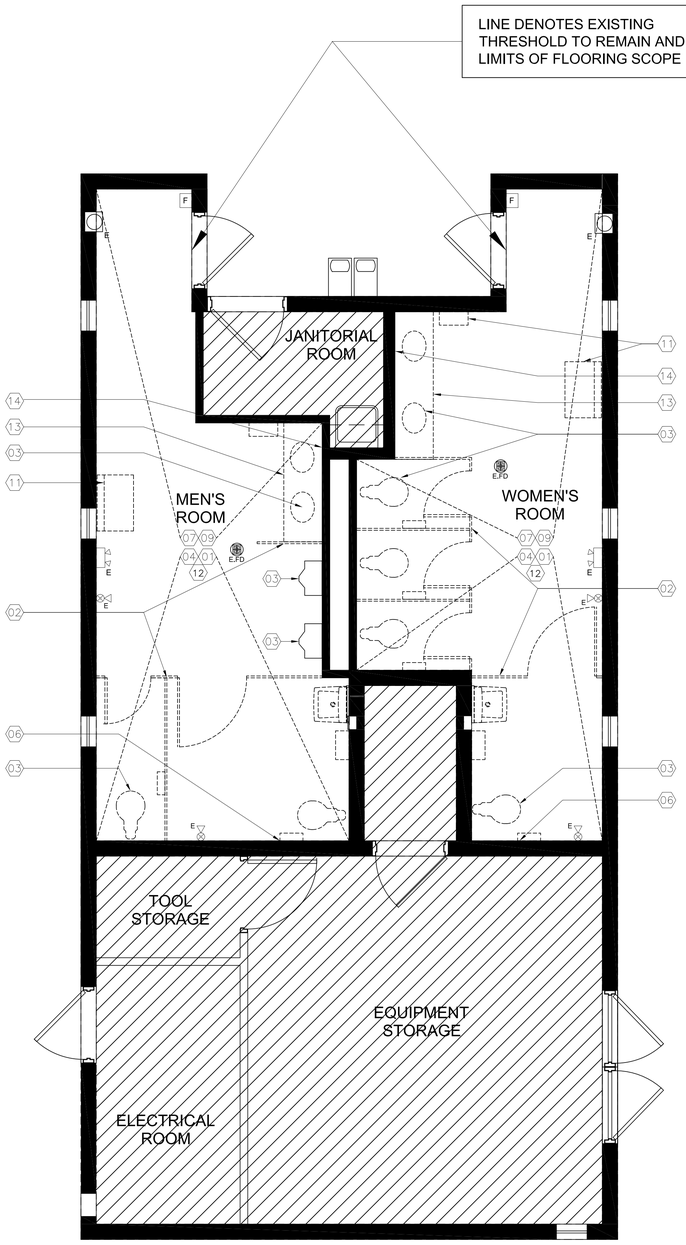
MORGAN LEVY
RESTROOM RENOVATIONS
5300 NW 102ND AVENUE
Doral, FL 33178

Title

GENERAL NOTES

Project No. 227100129	Scale As indicated
Revision	Drawing No.

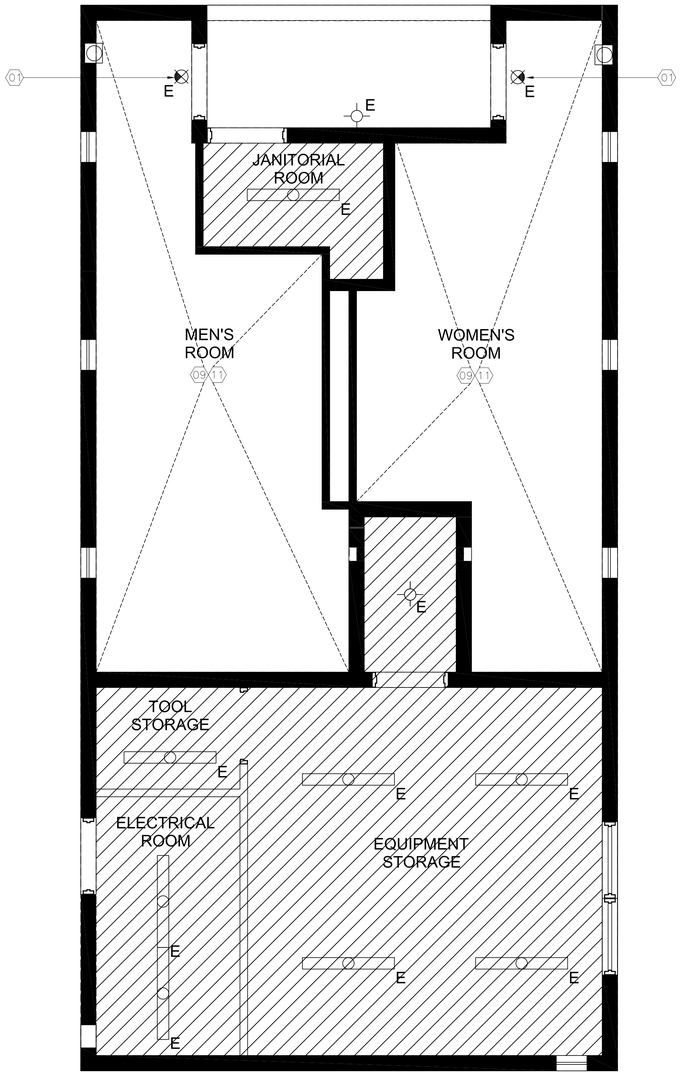
G100



11 AD100

DEMOLITION FLOOR PLAN

3/8"=1'-0"



13 AD100

DEMOLITION CEILING PLAN

3/8"=1'-0"

SCOPE OF WORK LOCATION MAP

DEMOLITION PLAN LEGEND

- EXISTING CONSTRUCTION TO REMAIN
- DEMOLITION
- NEW CONSTRUCTION
- E.FD — EXISTING TO REMAIN FLOOR DRAIN
- E — EXISTING LIGHT FIXTURES TO REMAIN
- AREA NOT INCLUDED IN SCOPE
- E — EXISTING FIRE ALARM HORN STROBE
- E — EXISTING EXIT SIGN
- E — EXISTING EMERGENCY LIGHT
- E — EXISTING RECESSED FIRE EXTINGUISHER
- F — EXISTING FIRE ALARM PULL BOX

KEY NOTES DEMO

01 EXISTING LIFE SAFETY DEVICES TO REMAIN INCLUDING FIRE EXTINGUISHER, SMOKE DETECTOR, AND EXIT SIGNS.

02 REMOVE TOILET PARTITIONS & DOORS IN ITS ENTIRETY

03 REMOVE PLUMBING FIXTURE. REFER TO PLUMBING PLANS FOR ADDITIONAL INFORMATION.

04 ALL EXISTING PARTITIONS TO REMAIN AND BE REPAIRED AS NEEDED DUE TO REPLACEMENTS OF PLUMBING FIXTURES AND LIGHTING.

05 REMOVE ALL EXISTING GRAB BARS, TYPICAL AT ALL LOCATIONS

06 REMOVE EXISTING FLOOR FINISH IN ITS ENTIRETY INCLUDING ANY POTENTIAL LEVELING BUILD-UP TO LEAVE EXISTING SLAB ON GRADE EXPOSED AND PREPPED TO RECEIVE NEW FLOOR FINISH.

07 REMOVE EXISTING MEP DEVICES WHICH SHALL INCLUDE BUT NOT BE LIMITED TO LIGHTS, MECH GRILLS, EXHAUST FANS, ETC. REFER TO MEP DRAWINGS FOR ADDITIONAL INFORMATION

08 ALL ACCESSORIES, FURNITURE, ART WORK, ETC SHALL BE REMOVED AND DISCUSSED WITH OWNER TO DETERMINE NEXT ACTION. INCLUDING BUT NOT LIMITED TO WALL ART, TRASH CANS, SHELVING CABINET, LOCKERS, ALL BATHROOM ACCESSORIES, BENCHES, TOWEL BINS, ETC.

09 REMOVE VANITY COUNTER & BACKSPLASH IN ITS ENTIRETY

10 REMOVE MIRROR & SCONCE. BACKER BOARD SHALL BE REPLACED IN ITS ENTIRETY TO ALLOW FOR NEW WORK.

11 CEILING TO BE REPAIRED AS NEEDED IN ORDER TO INSTALL MECHANICAL REPLACEMENT

12 EXISTING TILE FLOORING TO BE REMOVED 2

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Title
LOCATION MAP &
DEMOLITION FLOOR
AND CEILING PLANS

Project No.	Scale
227100129	As indicated
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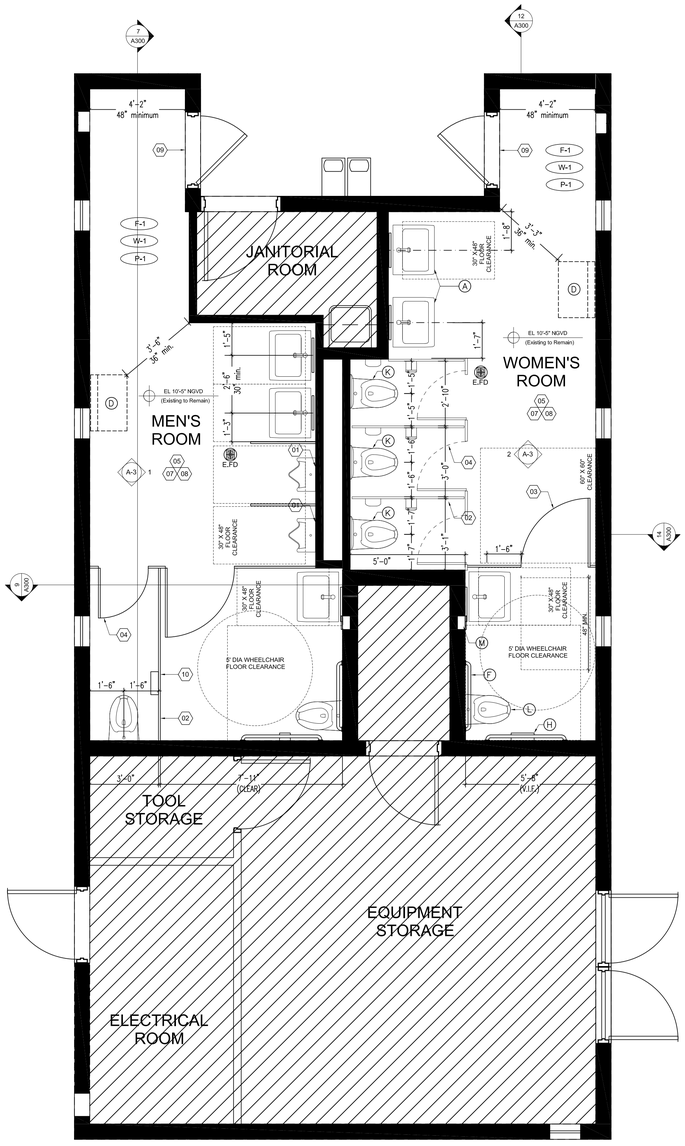
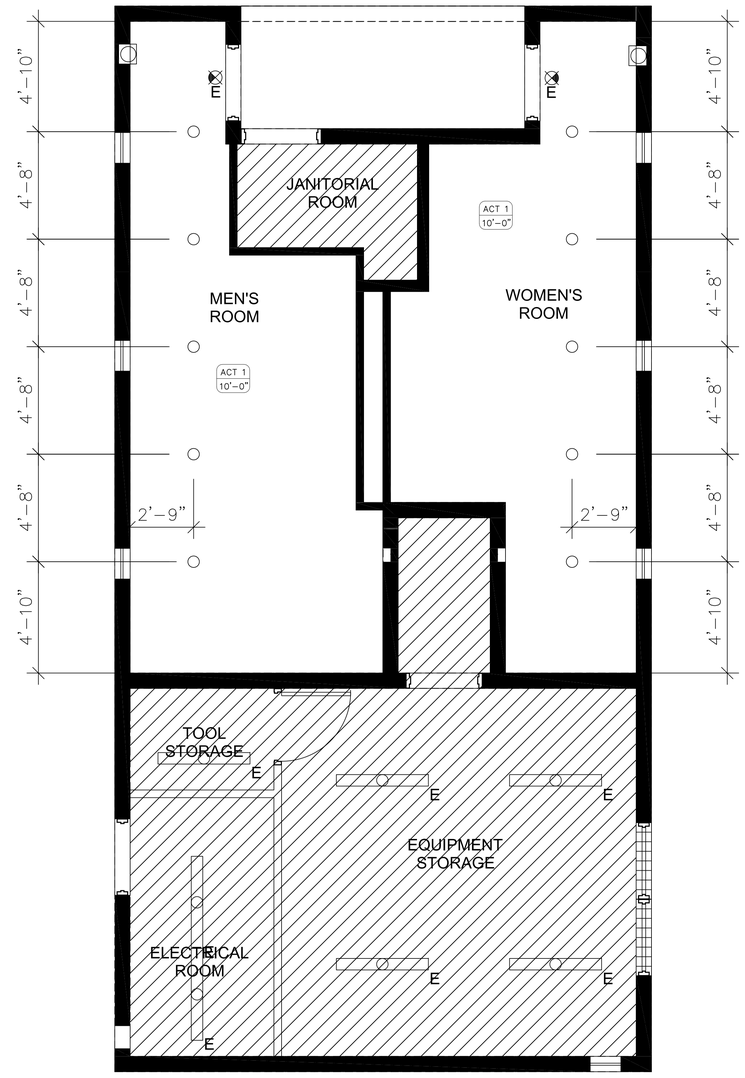
AD100





13 A200 NEW WORK FLOOR PLAN

3/8"=1'-0"

11 A200 NEW WORK REFLECTED CEILING PLAN

3/8"=1'-0"

FLOOR PLAN LEGEND

- EXISTING WALL AND/OR COLUMN TO REMAIN
- NEW MASONRY WALL
- NEW CONCRETE WALL
- FD — NEW FLOOR DRAIN (E.) DENOTES EXISTING TO REMAIN
- AREA NOT INCLUDED IN SCOPE
- E — EXISTING FIRE ALARM HORN STROBE
- E — EXISTING EXIT SIGN
- E — EXISTING EMERGENCY LIGHT
- E — EXISTING RECESSED FIRE EXTINGUISHER
- F — EXISTING FIRE ALARM PULL BOX

GENERAL FLOOR PLAN NOTES

1. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS PRIOR TO START OF CONSTRUCTION. ANY DISCREPANCIES WITH INFORMATION SHOWN ON THE CONSTRUCTION DOCUMENTS SHALL BE BROUGHT TO THE ARCHITECTS' ATTENTION PRIOR TO START OF CONSTRUCTION.
2. DIMENSIONS SHOWN AS VIF SHALL BE CONFIRMED PRIOR TO COMMENCING CONSTRUCTION. CONTACT ARCHITECT TO ENSURE PROGRAM ISN'T BEING IMPACTED.
3. REFER TO ELECT PLANS FOR LIGHT FIXTURE SCHEDULE.

RCP LEGEND

- NEW SURFACE MOUNTED LIGHT
- NEW WALL SCONCE
- ACT1 / 10' - 0" — CEILING TYPE TAG: CEILING TYPE, CEILING HEIGHT AFF
- E — EXISTING LIGHT FIXTURES TO REMAIN
- NEW EXHAUST SEE MECH. DWGS.
- NEW SUPPLY SEE MECH. DWGS.
- NEW RETURN SEE MECH. DWGS.

RCP SHEET NOTES

1. ALL DIMENSIONS OF FIXTURES, DEVICES, ETC ARE TO CENTERLINE U.O.N.
2. LIGHTS WITH NO DIMENSIONS ARE TO BE CENTERED WITHIN ROOM U.O.N.
3. ALL MEP-FP UTILITIES OR DEVICE LOCATIONS THAT ARE IN CONFLICT WITH CEILING HEIGHTS OR ANY OTHER ARCHITECTURAL ELEMENTS/FEATURES SHALL BE COORDINATED AND BROUGHT TO THE ARCHITECTS' ATTENTION PRIOR TO INSTALLATION OR BUILDING.
4. IT'S THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE MEP-FP UTILITY SHOP DRAWINGS WITHIN CEILING SPACES THAT HAVE BEEN FULLY COORDINATED TO IMPEDE ANY CLASH THAT INHIBITS THE ARCHITECTURAL CEILING DESIGN. SHOP DRAWINGS SHALL BE REVIEWED BY THE DESIGN TEAM FOR FINAL APPROVAL.

KEY NOTES - FLOOR PLAN

01. URINAL CARRIER. CONTRACTOR TO FIELD VERIFY EXISTING BACK WALL TO CONFIRM THAT NEW CARRIER WILL FIT WITHIN FRAMED WALL. IF THERE IS CONFLICT CONTACT ARCHITECT PRIOR TO BUILDING.
02. TOILET PARTITION, FLOOR MOUNTED WITH OVERHEAD BRACE.
03. TOILET PARTITION ADA 34" WIDE DOOR LEAF. PROVIDE 32" CLEARANCE IN A 90 DEG OPEN POSITION. (NO SELF CLOSER)
04. STANDARD TOILET PARTITION 26" WIDE DOOR LEAF.
05. BACKER BOARDS REMOVED DURING DEMO SHALL BE REPLACED WITH NEW BACKER BOARDS AT AREAS RECEIVING WALL TILE FINISH AND ALL OTHER AREAS SHALL RECEIVE TYPE "X" MOLD AND WATER-RESISTANT GYPSUM WALL BOARD.
06. REPLACE FLOOR DRAIN COVER WITH NEW GRATE
07. ALL WALLS AND CEILING TO BE PAINTED
08. NEW EPOXY FLOORING TO BE INSTALLED THROUGHOUT BATHROOM INTERIOR
09. EXISTING DOOR THRESHOLD AND NEW FLOOR FINISH SHALL MAINTAIN AN ADA COMPLIANT CHANGE OF FLOOR LEVEL TRANSITION. REFER TO A050
10. MINIMUM 90" LENGTH TO BE FIELD VERIFIED

	FINISHES	
	MARK	DESCRIPTION
	F-1	SHERWIN WILLIAMS EPOXY HIGH PERFORMANCE SW 7019 GAUNTLET GRAY
	W-1	INTERIOR: RESTROOMS SHERWIN WILLIAMS, COLOR: 7010 DUCK WHITE FINISH: SCUFF TUFF ENAMEL FOR HIGH TRAFFIC, APPLICATION AS RECOMMENDED BY MANUFACTURER
	P-1	INTERIOR: RESTROOMS PARTITIONS BRADLEY

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NEW WORK PLANS

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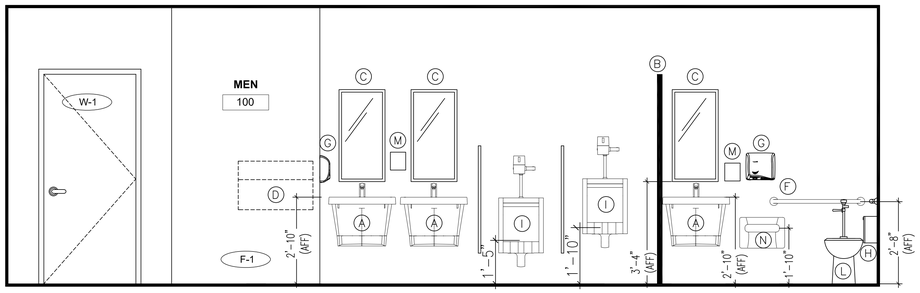
227100129	As indicated
Revision	Drawing No.

AD200

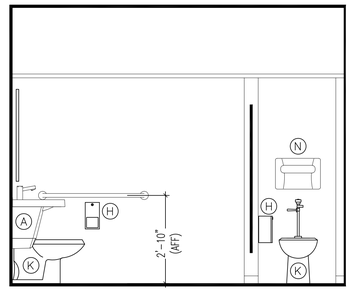
TYPICAL RESTROOM NOTES:

1. REFER TO A051 FOR ALL ADDITIONAL INFORMATION
2. BATHROOMS HAVE BEEN DESIGNED TO MEET THE FBC-ACCESSIBILITY 7TH EDITION. ALL CLEARANCES SHOWN MUST BE MAINTAINED AND FOLLOWED AS PER A051.
3. CONTRACTOR MUST NOTIFY ARCHITECT OF ANY CONFLICTS SHOWN IN THE FIELD PRIOR TO BUILDING.
4. ALL ADA TOILET PARTITIONS STALL DOORS SHALL "NOT" BE EQUIPPED WITH A SELF CLOSING DEVICE

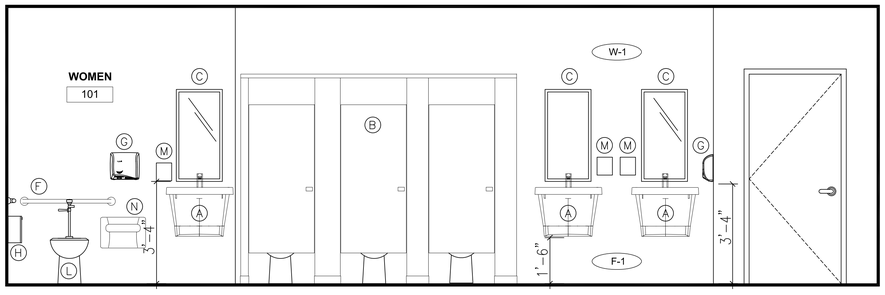
	FIXTURES			
	ITEM	DESCRIPTION	MANUFACTURE AND MODEL NO.	QTY
	Ⓐ	LAVATORY, SINGLE	BRADLEY EXPRESS LAVATORY SYSTEM MODEL TLX-1	6
	Ⓑ	RESTROOM PARTITIONS	"BRADLEY" BRADMAR SERIES 400 FLOOR MOUNTED CANYON GRAN M244	—
	Ⓒ	STAINLESS STEEL MIRROR, SATIN FINISH	"BRADLEY" BRADEX 780-1836 ANGLE FRAME MIRROR 18"X36"	7
	Ⓓ	BABY CHANGING STATION	"BRADLEY" BRADEX 963 GRAY WHITE SURFACE MOUNTED	2
	Ⓔ	42" STAINLESS STEEL GRAB BAR	"BRADLEY" BRADEX 001-42 STANDARD FINISH	2
	Ⓕ	36" STAINLESS STEEL GRAB BAR	"BRADLEY" BRADEX 001-36 STANDARD FINISH	2
	Ⓖ	HAND DRYER	"BRADLEY" HAND DRYER 2902-287300 STEEL EPOXY	4
	Ⓗ	TOILET TISSUE ROLL DISPENSER	"BRADLEY" BRADEX DUAL ROLL MODEL 5402	6
	Ⓘ	URINAL	AMER STAND WASHBROOK FLOWISE UNIVERSAL	2
	Ⓙ	LAVATORY, FAUCET	BRADLEY VERGE FAUCET, CRESTT SERIES S53-3100	6
	Ⓚ	TOILET	AMER STAND MADERA 15" FLUSHOMETER SYSTEM	4
	Ⓛ	TOILET - ADA COMPLIANT	AMER STAND MADERA 16 1/2" FLUSHOMETER SYSTEM	2
	Ⓜ	SOAP DISPENSER	"BRADLEY" BRADEX MODEL 6563	0
	Ⓝ	SEAT COVER DISPENSER	HIGH CAPACITY SURFACE MOUNTED MODEL 583	6
	Ⓞ	TOILET FLUSH VALVE	BATTERY-POWERED DIAPHRAGM-TYPE FLUSH VALVE	6



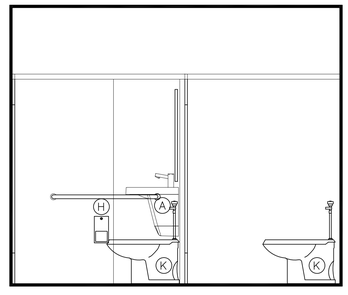
7 A300 INTERIOR ELEVATION
1/2"=1'-0"



9 A300 INTERIOR ELEVATION
1/2"=1'-0"



12 A300 INTERIOR ELEVATION
1/2"=1'-0"



14 A300 INTERIOR ELEVATION
1/2"=1'-0"

Stantec

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Andrew Burnett Lic. # AR98495

STATE OF FLORIDA · ANDREW W. BURNETT · AR98495 · 03/17/2023 · REGISTERED ARCHITECT

Revision	YYYY.MM.DD
Issued	2023.02.15

PERMIT SET

CITY OF DORAL

MORGAN LEVY
RESTROOM RENOVATIONS
5300 NW 102ND AVENUE
Doral, FL 33178

Title

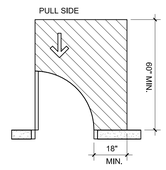
ELEVATIONS

Project No.	Scale
227100129	As indicated
Revision	Drawing No.

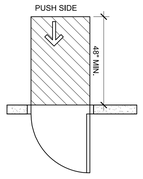
A300

MANEUVERING CLEARANCE AT DOORS

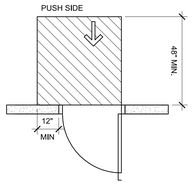
CODE REFERENCE: FBC -ACCESSIBILITY
SEVENTH EDITION CHAPTER 4,
SECTION 404.2.4



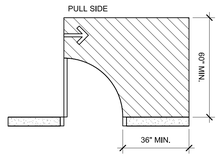
FRONT APPROACH
PULL SIDE



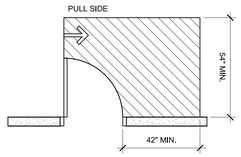
FRONT APPROACH
PUSH SIDE



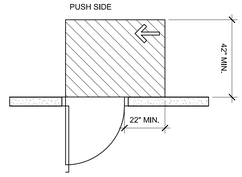
FRONT APPROACH, PUSH SIDE, DOOR PROVIDED WITH BOTH CLOSER AND LATCH



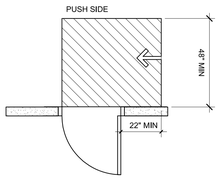
HINGE APPROACH
PULL SIDE



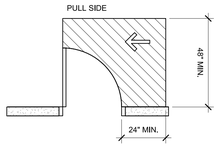
HINGE APPROACH
PULL SIDE



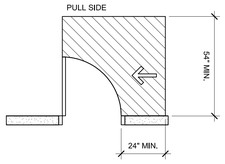
HINGE APPROACH
PUSH SIDE



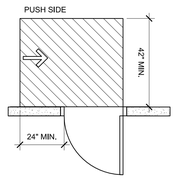
HINGE APPROACH, PUSH SIDE, DOOR PROVIDED WITH BOTH CLOSER AND LATCH



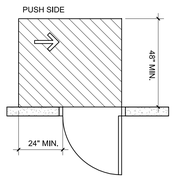
LATCH APPROACH,
PULL SIDE



MANEUVERING CLEAR
LATCH SIDE APPROACH
DOOR PROVIDED WITH CLOSER
AND LATCH

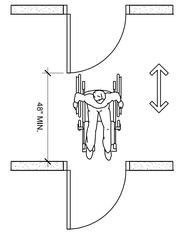


MANEUVERING CLEAR
LATCH SIDE APPROACH

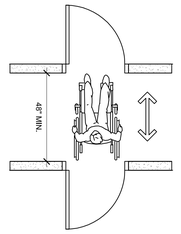


LATCH APPROACH, PUSH
SIDE, DOOR PROVIDED
WITH CLOSER

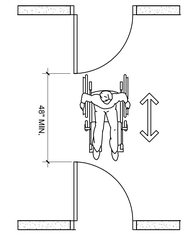
CODE REFERENCE:FBC -ACCESSIBILITY
SEVENTH EDITION CHAPTER 4,
SECTION 404.2.6



TWO HINGED DOORS IN SERIES

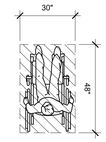


TWO HINGED DOORS IN SERIES



TWO HINGED DOORS IN SERIES

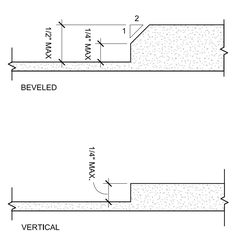
CODE REFERENCE:
FBC-ACCESSIBILITY
SEVENTH EDITION
CHAPTER 3,
SECTION 305.3



WHEELCHAIR CLEAR FLOOR SPACE

ACCESSIBLE ROUTE

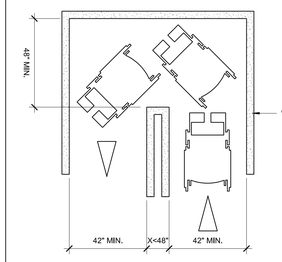
CODE REFERENCE:
FBC -ACCESSIBILITY -SEVENTH EDITION,
CHAPTER 3, SECTION 303.2



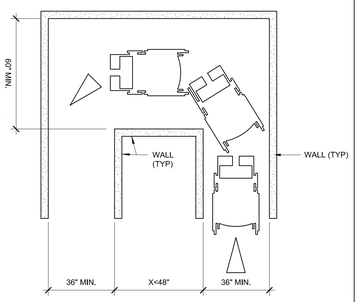
ACCESSIBLE ROUTE

NOTE TO CONTRACTOR:
1. MAX. CHANGE OF FLOOR LEVEL ALLOWED IS 1/4"
OR 1:2 FROM 1/4" TO 1/2" MAX.
2. CHANGE IN LEVEL ABOVE 1/2" SHOULD BE RAMPED

CODE REFERENCE: FBC -ACCESSIBILITY -
SEVENTH EDITION CHAPTER 4, SECTION
403.5.2



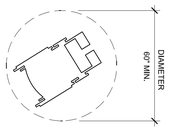
180 DEGREE TURN



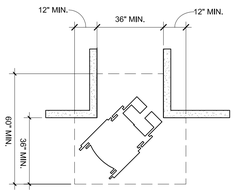
180 DEGREE TURN EXCEPTION
FBC ACCESSIBILITY SECTION 403.5.2

WHEEL CHAIR TURNING SPACE

CODE REFERENCE: FBC -ACCESSIBILITY -SEVENTH EDITION CHAPTER 3,
SECTION 304.3.1



60" DIAMETER TURNING SPACE

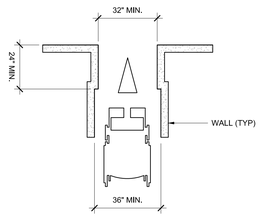


MIN. 60" TURNING DIAMETER FOR WHEELCHAIR

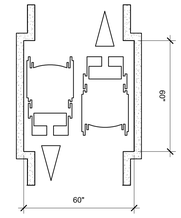
T-SHAPED SPACE FOR 180-DEGREE TURNS
FBC ACCESSIBILITY 304.3.2

MINIMUM CLEAR WIDTH

CODE REFERENCE: FBC -ACCESSIBILITY -SEVENTH EDITION CHAPTER 4,
SECTION 403.5.1 & 403.5.3



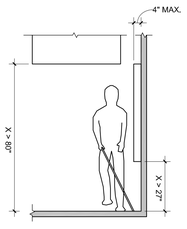
MIN. CLEAR WIDTH FOR SINGLE WHEELCHAIR



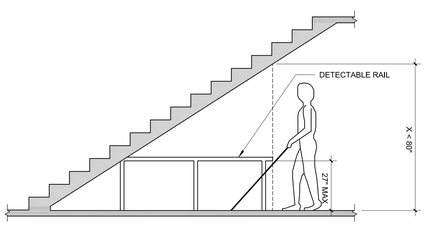
MIN. CLEAR WIDTH FOR TWO WHEELCHAIRS
AT 209' INTERVALS MAX.

PROTRUDING OBJECTS

CODE REFERENCE:
FBC -ACCESSIBILITY -SEVENTH EDITION,
CHAPTER 3, SECTION 307



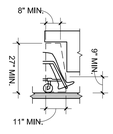
LIMITS OF PROTRUDING OBJECTS



REDUCED VERTICAL CLEARANCE

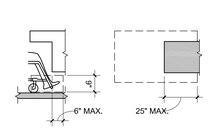
TOE AND KEE CLEARANCE

CODE REFERENCE:
FBC -ACCESSIBILITY -SEVENTH EDITION,
CHAPTER 3, SECTION 306



ELEVATION PLAN

KNEE CLEARANCE

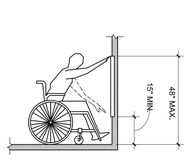


ELEVATION PLAN

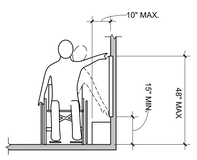
TOE CLEARANCE

REACH RANGES

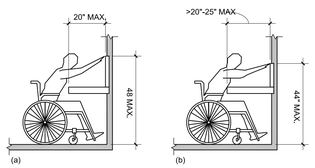
CODE REFERENCE:
FBC -ACCESSIBILITY -SEVENTH EDITION,
CHAPTER 4, SECTION 308



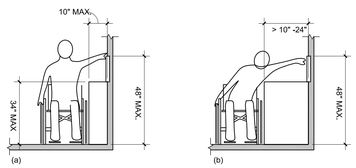
UNOBSTRUCTED FORWARD REACH



UNOBSTRUCTED SIDE REACH



OBSTRUCTED HIGH FORWARD REACH



OBSTRUCTED HIGH SIDE REACH

GENERAL NOTES

MOUNTING HEIGHTS

1. OPERABLE PARTS STATED UNDER FBC 2017 ACCESSIBILITY SECTION 205.1 INCLUDING ADVISORY SHALL COMPLY WITH SECTION 309.
2. OPERABLE PARTS OF THE CONTROLS ARE TO BE LOCATED NO HIGHER THAN 48 INCHES AND NO LOWER THAN 15 INCHES TO CENTERLINE ABOVE THE FLOOR FINISH.
3. THE REACH OVER AN OBSTRUCTION IN WHICH THE DEPTH EXCEEDS 20 INCHES AND MAXIMUM IS 25 INCHES THE HIGH FORWARD REACH SHALL BE 44 INCHES MAXIMUM FOR A FORWARD APPROACH; OR 46 INCHES MAXIMUM FOR A SIDE APPROACH IN WHICH THE OBSTRUCTION IS NOT HIGHER THAN 34 INCHES AND NO DEEPER THAN 24 INCHES MAX.
4. OBSTRUCTIONS SHALL NOT EXTEND OUT MORE THAN 25 INCHES FROM THE WALL IN WHICH AN ACCESSIBLE CONTROL IS LOCATED.

ACCESSIBILITY NOTES

1. CHANGES IN LEVEL BETWEEN 1/4" HIGH MAX. VERTICALLY AND 1/2" HIGH MAXIMUM SHALL BE BEVELED WITH A SLOPE NOT STEEPER THAN 1:2 PER FLORIDA ACCESSIBILITY CODE SECTION 303
2. ACCESSIBILITY ROUTE FROM R.O.W. MINIMUM 60".
3. THE LAYOUT AND DESIGN OF SPACES DEPICTED. ON PLANS SHALL COMPLY WITH 2017 FLORIDA ACCESSIBILITY CODE FOR BUILDING SEVENTH EDITION.
4. HANDICAP TOILET FLUSH CONTROL TO BE LOCATED ON WIDE SIDE AREA OF STALL.
5. WRAP ALL EXPOSED PIPES UNDER LAVATORY WITH INSULATED PIPE PROTECTION COVERS TO PROTECT AGAINST CONTACT.
6. ALL HANDLES TO BE LEVER HANDLES

DOOR HARDWARE AND HANDLES NOTES:

1. DOOR HARDWARE, HANDLES, PULLS, LATCHES, LOCKS, AND OTHER OPERATING DEVICES ON ACCESSIBLE DOORS SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING, OR TWISTING OF THE WRIST AS PER 2017 FLORIDA ACCESSIBILITY CODE SECTION 309.4
2. THE FORCE REQUIRED TO ACTIVATE OPERABLE PARTS SHALL BE 5 POUNDS MAXIMUM.
3. LEVER OPERATED MECHANISMS, PUSH TYPE MECHANISMS, AND UNSHAPED HANDLES ARE ACCEPTABLE DESIGNS.
4. WHEN SLIDING DOORS ARE IN THE FULLY OPEN POSITION, THE OPERATING HARDWARE SHALL BE EXPOSED AND USABLE FROM BOTH SIDES.
5. HARDWARE REQUIRED FOR ACCESSIBLE DOOR PASSAGE SHALL BE MOUNTED BETWEEN 34 INCHES MINIMUM AND 48" MAXIMUM ABOVE THE FINISH FLOOR.

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Stantec Architecture Inc - AA26000733

Andrew Burnett Lic. # AR98495

Revision	YYYY.MM.DD

Issued 2023.02.15

PERMIT SET

CITY OF DORAL

MORGAN LEVY
RESTROOM RENOVATIONS
5300 NW 102ND AVENUE
Doral, FL 33178

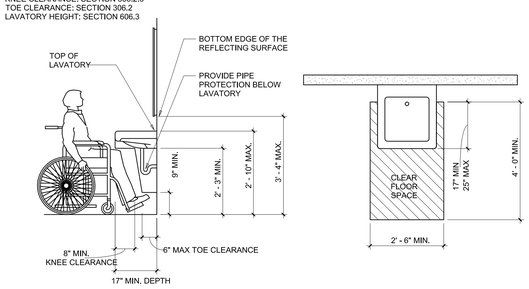
Title
ADA CODE REQ.
ACCESSIBLE ROUTE AND
CLEARANCES

Project No.	Scale
227100129	As indicated
Revision	Drawing No.
	A050

NOTE:
1.ALL LETTERS AND NUMERALS ARE TO BE RAISED 1/32 INCHES, UPPER CASE, SANS SERIF OR SIMPLE SERIF AT LEAST 5/8" HIGH BUT NO HIGHER THAN 2". BRAILLE IS TO BE GRADE 2.
2.PROVIDE & INSTALLED BY G.C. TYPICAL AT ALL RESTROOMS
3. TACTILE CHARACTERS ON SIGNS SHALL BE LOCATED 48 INCHES MINIMUM A.F.F. MEASURED FROM THE BASELINE OF THE LOWEST TACTILE CHARACTER AND 60 INCHES MAXIMUM ABOVE THE F.F MEASURED FROM THE BASELINE OF THE HIGHEST TACTILE CHARACTER.
4, WHERE A TACTILE SIGN IS PROVIDED AT A DOOR, THE SIGN SHALL BE LOCATED ALONGSIDE THE DOOR AT THE LATCH SIDE.
5. SIGNS CONTAINING TACTILE CHARACTERS SHALL BE LOCATED SO THAT A CLEAR FLOOR SPACE OF 18" (455 MM) MIN. BY 18" (455 MM) MIN., CENTERED ON THE TACTILE CHARACTERS, IS PROVIDED BEYOND THE ARC OF ANY DOOR SWING BETWEEN THE CLOSED POSITION AND 45 DEGREE OPEN POSITION.

1 / A5 BATHROOM SIGNAGE
NTS

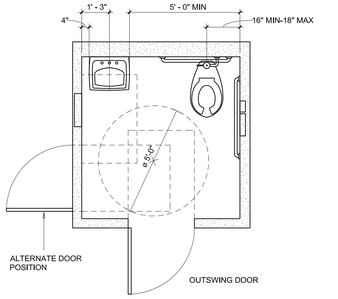
CODE REFERENCE: FBC -ACCESSIBILITY SEVENTH EDITION CHAPTER 3,
KNEE CLEARANCE: SECTION 306.2.3
TOE CLEARANCE: SECTION 306.2
LAVATORY HEIGHT: SECTION 606.3



NOTE:
1. HEIGHTS ARE TO BE CONSIDERED A.F.F.

6 / A5 LAVATORY CLEARANCES
NTS

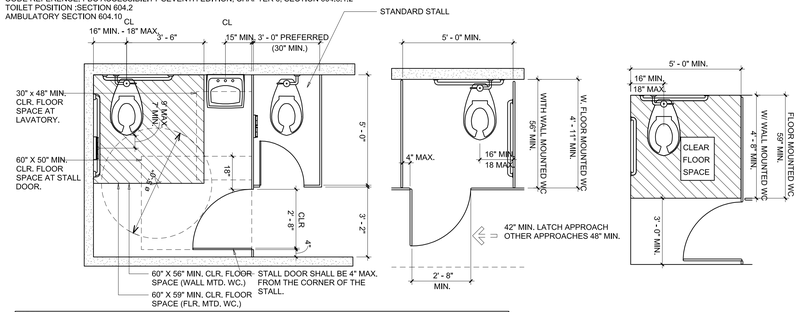
CODE REFERENCE: FBC -ACCESSIBILITY -SEVENTH EDITION (ANSI A117.1-2009)
CHAPTER 6 , SECTION 604



NOTE:
WHERE THE COMBINED TOTAL WATER CLOSET COMPARTMENTS AND URINALS PROVIDED IN A TOILET ROOM IS SIX OR MORE, AT LEAST ONE AMBULATORY ACCESSIBLE WATER CLOSET COMPARTMENT SHALL BE PROVIDED IN ADDITION TO THE WHEELCHAIR-ACCESSIBLE COMPARTMENT

8 / A5 TOILET STALLS
NTS

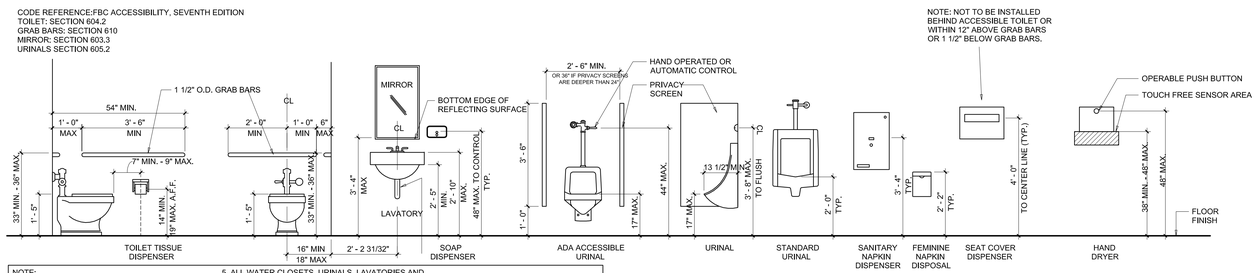
CODE REFERENCE: FBC -ACCESSIBILITY -SEVENTH EDITION (ANSI A117,1-2009) CHAPTER 6 , SECTION 604
CODE REFERENCE: FBC ACCESSIBILITY SEVENTH EDITION, CHAPTER 6, SECTION 604.8.1.2
TOILET POSITION :SECTION 604.2
AMBULATORY SECTION 604.10



NOTE:
THE LAVATORY SHALL NOT OVERLAP THE CLEAR FLOOR SPACE FOR THE TOILET. STALL IS REQUIRED TO INCLUDE A LAVATORY UNDER NEW CONSTRUCTION IN FLORIDA. TYPICAL ACCESSIBLE TOILET STALL PLANS INSWING DOOR . PROVIDE ACCESSIBLE PULL HARDWARE ON BOTH SIDES OF EACH ACCESSIBLE STALL DOOR - TYPICAL.

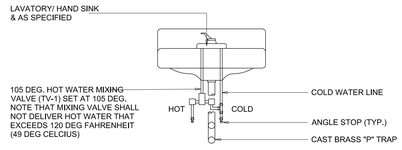
11 / A5 FIXTURES MOUNTING HEIGHTS
NTS

CODE REFERENCE:FBC ACCESSIBILITY, SEVENTH EDITION
TOILET: SECTION 604.2
GRAB BARS: SECTION 610
MIRROR: SECTION 603.3
URINALS SECTION 605.2



NOTE:
1. PLUMBING FIXTURES CANNOT PROJECT MORE THAN 4" FROM WALL, TYP.
2. ALL HEIGHTS ARE TO BE CONSIDERED A.F.F
3. FOR HAND DRYER TOUCH FREE SENSOR REFER TO MANUF. RECOMENDATIONS, HOWEVER NOT TO EXCEED 48" AFF.
4. BATHROOM ACCESSORIES CANNOT PROJECT MORE THAN 4" FROM FINISH WALL WHEN LOCATED BETWEEN 27" TO 80" ABOVE FINISH FLOOR ELEVATION.
5. ALL WATER CLOSETS, URINALS, LAVATORIES AND BIDETS TO COMPLY WITH FBC/P 405.3.1. A WATER CLOSET, URINAL, LAVATORY OR BIDET SHALL NOT BE SET CLOSER THAN 15 IN FROM ITS CENTER TO ANY SIDE WALL, PARTITION, VANITY OR OTHER OBSTRUCTION. WHERE PARTITIONS OR OTHER OBSTRUCTIONS DO NOT SEPARATE ADJACENT FIXTURES, FIXTURES SHALL NOT BE SET CLOSER THAN 30 IN CENTER TO CENTER BETWEEN ADJACENT FIXTURES, THERE SHALL BE NOT LESS THAN A 21-INCH CLEARANCE IN FRONT OF A WATER CLOSET, URINAL, LAVATORY OR BIDET TO ANY WALL, FIXTURE OR DOOR.
6. WATER SUPPLY AND DRAIN PIPES UNDER LAVATORIES AND SINKS SHALL SHALL BE INSULATED OR OTHERWISE CONFIGURED TO PROTECT AGAINST CONTACT. THERE SHALL BE NO SHARP OR ABRASIVE SURFACES UNDER LAVATORIES AND SINKS. TYPICAL.

14 / A5 SINK SERVICE CONNECTION REQUIREMENT
NTS

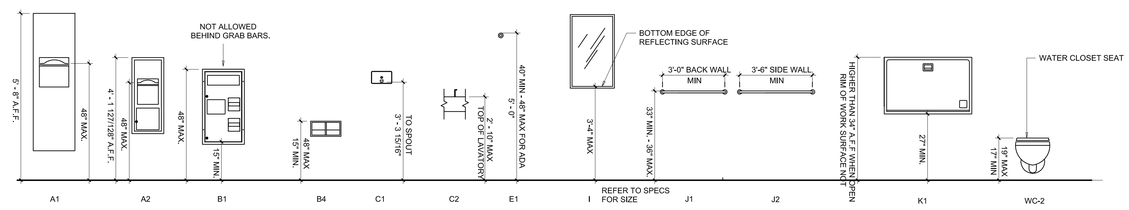


PROVIDE LAV. GUARD MODEL #103 E-Z. P-TRAP COVER. BY TRUEBRO, INC. OR EQUAL ALTERNATE APPROVED BY ARCHITECT

NOTE:
1. PROVIDE PROTECTION AS PER FBC 2017- 606.5.
2. ALL HOT WATER PIPES, DRAIN PIPES EXPOSED SHALL BE INSULATED OR PROTECTED SO AS TO PROTECT AND PREVENT AGAINST CONTACT. THERE SHOULD BE NO SHARP, HOT OR ABRASIVE SURFACES UNDER SINKS. ARCHITHERM-ENGINEERED POLYMER FOAM INSULATION. (SHEET)

16 / A5 FIXTURES & ACCESORIES MOUNTING HEIGHTS
NTS

CODE REFERENCE:
FBC ACCESSIBILITY , SEVENTH EDITION CHAPTER 6, SECTION 603 & 604
SPOUT HEIGHT SECTION 602.4
SPOUT HEIGHT STANDING PERSON SECTION 602.7
MIRROR SECTION 603.3
COAT HOOKS & SHELVES SECTION 603.4
SEAT HEIGHT SECTION 604.4
TOILET TISSUE DISPENSER SECTION 604.7



NOTE:
1. ALL HEIGHTS ARE TO BE CONSIDERED A.F.F
2. ALL MIN AND MAX HEIGHTS ARE TO OPERABLE PARTS OR DISPENSING PORTION OF THE ACCESSORY UNLESS OTHERWISE NOTED.
3. REFER TO ACCESSORY AND PLUMBING SCHEDULES FOR ALL MANUFACTURER & MODEL INFORMATION

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Revision	YYYY.MM.DD

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PERMIT SET

CITY OF DORAL

MORGAN LEVY
RESTROOM RENOVATIONS
5300 NW 102ND AVENUE
Doral, FL 33178

Title
ADA CODE REQ
MOUNTING HEIGHTS,
TOILET STALLS, SHOWERS

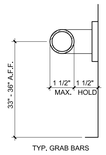
Project No.	Scale
227100129	As indicated
Revision	Drawing No.

A051

TYP. ADA CLEAR FLOOR SPACE

30"X48" CLEAR SPACE IS REQUIRED FOR PARALLEL OR FORWARD APPROACH IN ALL KITCHENS AT SINKS AND ALL APPLIANCES. BATHROOM CLEAR SPACE REQUIRED AT VANITY AND BATHING FIXTURE. DOORS CAN OVERLAP CLEAR SPACES, AS LONG AS ONE 30"X48" CLEAR AREA IS CLEAR OF DOOR SWING. SEE PLANS FOR LOCATIONS AND ORIENTATION.

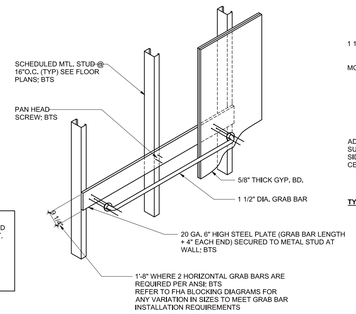
GRAB BAR MOUNTING REQUIREMENTS

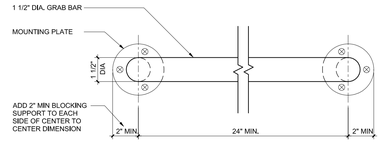


TYP. GRAB BARS

GRAB BAR NOTES:
1. SHALL BE DESIGN DESIGNED AND SUPPORTED AS TOWITHSTAND A LOAD OF NOT LESS THAN 250 POUNDS APPLIED AT ANY POINT, DOWNWARD OR HORIZONTALLY.
2. GRAB BARS SHALL NOT ROTATE WITHIN THEIR FITTINGS.
3. ALL EDGES SHALL HAVE A MINIMUM RADIUS OF 1/8 INCH.

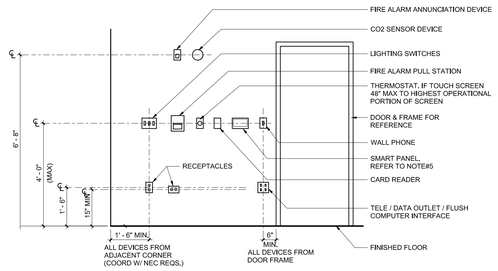
WALL NOTE:
PROVIDE 20 GA. METAL STUD AT ALL REST ROOM WALLS.



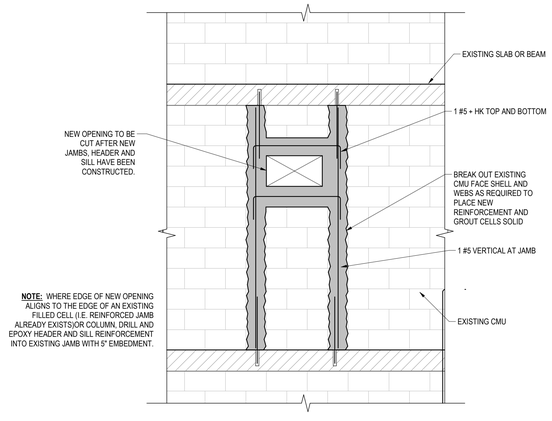


TYP. GRAB BAR ELEVATION - BLOCKING EXTENTS

TYPICAL MOUNTING HEIGHTS - COMMON AREAS



NOTE:
1. ALL DEVICES INSTALLED AS SHOWN U.O.N.
2. ALL MOUNTING HEIGHTS SHALL BE MEASURED FROM CENTERLINE OF DEVICE TO FINISHED FLOOR.
3. DEVICES SHALL BE INSTALLED ON A COMMON VERTICAL CENTERLINE WHEREVER POSSIBLE.
4. DEVICES SHALL BE 18" MIN FROM ANY INSIDE CORNER TO CENTERLINE OF DEVICE.
5. SMART PANELS USED TO CONTROL LIGHTS, THERMOSTAT, ETC, TO BE INSTALLED 48" MAX TO HIGHEST OPERATIONAL PORTION OF SCREEN, IF INDEPENDENT COMPARABLE CONTROLS ARE PROVIDED TO THESE DEVICES TO OVERRIDE SMART PANEL FUNCTION THAN SMART PANEL CAN BE INSTALLED AT A HIGHER ELEVATION. REFER TO MANUF RECOMMENDATIONS.



1 NEW PENETRATION THROUGH EXISTING CMU WALL
1/2" = 1'-0"

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STATE OF FLORIDA
ANDREW W. BURNETT
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03/17/2023
REGISTERED ARCHITECT

Revision	YYYY.MM.DD
COVER SHEET	2023.02.03
INDEX SHEET	2023.02.03
GENERAL NOTES	2023.02.03
LOCATION MAP & DEMO PLANS	2023.02.03
NEW WORK PLANS	2023.02.03
ELEVATIONS	2023.02.03
ADA ACCESSIBLE ROUTES	2023.02.03
ADA MOUNTING HEIGHTS	2023.02.03
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Title
TYP MOUNTING HEIGHTS GENERAL DIAGRAM & NOTES

Project No.	Scale
227100129	As indicated
Revision	Drawing No.

A052

DUCTWORK LEGEND

SINGLE LINE		DOUBLE LINE	SINGLE LINE		DOUBLE LINE
	SUPPLY DUCT UP			RETURN/EXHAUST DUCT UP	
	SUPPLY DUCT DOWN			RETURN/EXHAUST DUCT DOWN	
	STANDARD RADIUS ELBOW (R = W) SUPPLY/ RETURN/ EXHAUST	R W		HORIZONTAL OFFSET SUPPLY/RETURN /EXHAUST	
	MITERED ELBOWS W/ VANES		R/D	RISE OR DROP SUPPLY/RETURN/ EXHAUST	RISE/DROP
OR	BULLHEAD SPLIT SUPPLY	NK VD GOOD FOR TAKEOFF TO RING DUCT VD		45° TAP TAKE-OFF	
	CEILING DUCT MTD. DIFF/GRILLE	VD		90° TAP TAKE-OFF	MAIN DUCT
	TAKEOFF TO DIFF/GRILLE	HARD ELBOW VD		BULLHEAD CONVERSE RETURN/EXHAUST	VD VD
	ACOUSTICALLY LINED DUCT			SUPPLY SIDEWALL LINEAR DIFFUSER (W/SHEET METAL PLENUM W/1" LINING & BRANCH CONN FOR EVERY 4' OF LINEAR.)	VD VD MAX.
	FIRE DAMPER WITH ACCESS DOOR			MODULAR LINEAR DIFFUSER WITH PLENUM	

HVAC DUCTWORK SYMBOL LIST

18X12	DUCT SIZE (FIRST FIGURE INDICATES HORIZONTAL SIZE)
18ø	ROUND DUCT DIAMETER
	ACOUSTIC LINING IN DUCT
	TRANSITION FROM RECTANGULAR TO ROUND OR OVAL DUCT
AD	ACCESS DOOR IN DUCT
	FLEXIBLE CONNECTION
V.D.	VOLUME DAMPER
F.D.	FIRE DAMPER W/ DUCT ACCESS DOOR
M	MOTORIZED DAMPER W/DUCT ACCESS DOOR
F.S.D.	COMBINATION FIRE/SMOKE DAMPER W/DUCT ACCESS DOOR
	SUPPLY REGISTER
	RETURN OR EXHAUST REGISTER OR GRILLE
	SUPPLY CEILING DIFFUSER (4-WAY BLOW)
	SUPPLY CEILING DIFFUSER (3-WAY BLOW)
	SUPPLY CEILING DIFFUSER (2-WAY BLOW)
	SUPPLY CEILING DIFFUSER (1-WAY BLOW)
B(500)	DIFFUSER TYPE AND CFM (CUBIC FEET PER MINUTE). REFER TO SCHEDULE.
	RETURN CEILING GRILLE OR REGISTER
	SUPPLY LINEAR DIFFUSER W/ PLENUM
	RETURN LINEAR DIFFUSER
R	SLOPING RISE IN DUCT IN DIRECTION OF ARROW
D	SLOPING DROP IN DUCT IN DIRECTION OF ARROW
	SUPPLY DUCT UP
	SUPPLY DUCT DOWN
	RETURN OR EXHAUST DUCT UP
	RETURN OR EXHAUST DUCT DOWN
	ELBOW WITH TURNING VANES
	RADIUS ELBOW
	DUCT SPLIT OR BRANCH TAKEOFF
	DOOR LOUVER
	CONTINUATION FOR DUCTWORK
U	DOOR UNDERCUT

HVAC PIPING SYMBOL LIST

	PIPE TURNING UP
	PIPE TURNING DOWN
	CONNECTION TO TOP OF PIPE
	CONNECTION TO BOTTOM OF PIPE
	REDUCER
	EXPANDER
	CAPPED VALVE OUTLET
	CHECK VALVE
R OR D	DUCT RISE OR DROP
CWS	CONDENSER WATER SUPPLY PIPING
CWR	CONDENSER WATER RETURN PIPING
HWS	HOT WATER SUPPLY PIPING
HWR	HOT WATER RETURN PIPING
CHWS	CHILLED WATER SUPPLY PIPING
CHWR	CHILLED WATER RETURN PIPING
D	CONDENSATE DRAIN
	GATE VALVE
	GLOBE VALVE
	BUTTERFLY VALVE
	THREE-WAY VALVE
	TWO-WAY CONTROL VALVE
M	AUTOMATIC CONTROL VALVE
B	BACKFLOW PREVENTER
	PRESSURE GAUGE
	THERMOMETER
	STRAINER WITH BLOWDOWN VALVE.
FS	FLOW SWITCH
P	PRESSURETROL
S	SWITCH W/ PILOT LIGHT

HVAC ABBREVIATIONS

AC	AIR CONDITIONING UNIT
AD	ACCESS DOOR
AFSD	AUTOMATIC FIRE SMOKE DAMPER
AL	ACOUSTIC LINING
AHU	AIR HANDLING UNIT
ATC	AUTOMATIC TEMPERATURE CONTROL
BDD	BACK DRAFT DAMPER
BMS	BUILDING MANAGEMENT SYSTEM
BTU	BRITISH THERMAL UNIT
℄	CUBIC FEET PER MINUTE
CC	COOLING COIL
CD	CEILING DIFFUSER
CD	CONDENSATE DRAIN
CFM	CUBIC FEET PER MINUTE
CG	CEILING GRILLE
CH	CHILLER
CHWP	CHILLED WATER PUMP
C.O.D.	CLEAN OUT DOOR
CP	CONDENSATE PUMP
CR	CEILING REGISTER
CT	COOLING TOWER
CUH	CABINET UNIT HEATER
CW	CONDENSER WATER
CWP	CONDENSER WATER PUMP
CWS&R	CONDENSER WATER SUPPLY AND RETURN
CV	CONSTANT VOLUME
DHWH	DOMESTIC HOT WATER HEATER
DHWT	DOMESTIC HOT WATER TANK
EAT	ENTER AIR TEMPERATURE
EF	EXHAUST FAN
EH	ELECTRICAL HUMIDIFIER
ET	EXPANSION TANK
EUH-#	ELEC. UNIT HEATER
EWT	ENTER WATER TEMPERATURE
FC	FLEXIBLE CONNECTION
FCU	FAN COIL UNIT
FD	FIRE DAMPER WITH ACCESS DOOR
FLA	FULL LOAD AMPS
FLD	FUSIBLE LINK DAMPER
FPB	FAN POWERED BOX
FPI	FINS PER INCH
FOR	FUEL OIL RETURN
FOS	FUEL OIL SUPPLY
GPM	GALLONS PER MINUTE
HX	HEAT EXCHANGER
HZ	HERTZ
HPS	HIGH PRESSURE STEAM
HTHW	HIGH TEMPERATURE HOT WATER
LAT	LEAVING AIR TEMPERATURE
LD-1	LINEAR DIFFUSER TYPE 1
LWT	LEAVING WATER TEMPERATURE
MBH	THOUSAND BTU PER HOUR
MD	MOTORIZED DAMPER
NIC	NOT IN CONTRACT
O.A.I.	OUTSIDE AIR INTAKE
OED	OPEN ENDED DUCT
P.C.	PUMPED CONDENSATE
PH	PHASE
PHWP	PREHEAT HOT WATER PUMP
RHWP	REHEAT HOT WATER PUMP
PHW	PREHEAT HOT WATER
PRV	PRESSURE REDUCED VALVE
PSI	POUNDS PER SQUARE INCH
RF	RETURN FAN
RHW	REHEAT HOT WATER
SAC	SUPPLEMENTAL AIR CONDITIONING UNIT
SD	SMOKE DETECTOR
SF	SUPPLY FAN
TD	TRANSFER DUCT
TX	TOILET EXHAUST
U.O.N.	UNLESS OTHERWISE NOTED
VAV	VARIABLE AIR VOLUME
VIF	VERIFY IN FIELD
VFD	VARIABLE FREQUENCY DRIVE
VD	VOLUME DAMPER(OPPOSED BLADE DAMPER)
W	WITH
WMS	WIRE MESH SCREEN

HVAC SYMBOL LIST

	NEW DUCTWORK-SEE SPECIFICATIONS FOR CONSTRUCTION TYPE AND INTERNAL LINING
	CEILING RETURN/EXHAUST GRILLE
T	THERMOSTAT
	THERMOSTAT/SENSOR WIRING
M	AUTOMATIC MOTORIZED DAMPER, SUITABLE FOR 277 VOLTS.
YRATD	RETURN AIR OPENING
#	NUMBER IN CIRCLE REFERS TO NOTE ON PLANS
	WIRE MESH SCREEN
MD	MOTORIZED DAMPER, SUITABLE FOR 277V
D	SMOKE DETECTOR
	VAV BOX
	FAN POWER BOX WITH HTG COIL
EF	EXHAUST FAN
CUH	CABINET UNIT HEATER
	NEW CONNECT TO EXISTING
	POINT OF DISCONNECT
	TRANSFER DUCT
AFM	AIR FLOW METER
SP	STATIC PRESSURE SENSOR
OS	CEILING MOUNTED OCCUPANCY SENSOR
OS	WALL MOUNTED OCCUPANCY SENSOR

DESIGN REQUIREMENTS

HVAC DESIGN REQUIRES	YES	NO
DUCT SMOKE DETECTOR	X	
FIRE DAMPER(S)		X
FIRE RATED ENCLOSURE		X
SMOKE DAMPER(S)		X
FIRE RATED ROOF/FLOOR CEILING ASSEMBLY		X
FIRE STOPPING		X
SMOKE CONTROL		X

GENERAL DEMOLITION NOTES

1. THE MECHANICAL CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS IN THE FILED AND COORDINATE ALL REMOVAL ACTIVITIES WITH NEW CONSTRUCTION.THE CONTRACTOR SHALL REPORT ALL DISCREPANCIES TO THE OWNER'S REPRESENTATIVE FOR RESOLUTION PRIOR TO BEGINNING REMOVAL.
2. EXISTING MAIN HYDRONIC PIPING AND ALL ASSOCIATED COMPONENTS, VALVES, CONTROLS, HANGERS AND SUPPORT THAT PROVIDE SERVICE TO OTHER BUILDING AREAS THAT ARE NOT PART OF THIS RENOVATION, SHALL BE MAINTAINED.
3. EXISTING DUCTWORK AND ALL ASSOCIATED COMPONENTS, DAMPERS, CONTROLS, DIFFUSERS, GRILLES, HANGERS AND SUPPORT THAT PROVIDE SERVICE TO OTHER BUILDING AREAS THAT ARE NOT PART OF THIS RENOVATION, SHALL BE MAINTAINED.
4. THE LOCATIONS OF EQUIPMENT SHOWN ON THE DRAWINGS IS BASED ON SITE OBSERVATIONS AND THE BEST AVAILABLE INFORMATION AT THE TIME OF DRAWINGS PREPARATION AND SOME DISCREPANCIES MAY EXIST.VERIFY THE EXACT LOCATIONS OF EQUIPMENT TO BE REMOVED IN THE FIELD AND REQUEST CLARIFICATION FROM ENGINEER WHEN EQUIPMENT LOCATION OR EXISTENCE DIFFERS FROM PLANS.
5. COORDINATE WITH ENVIRONMENTAL PRIOR TO REMOVING IN-FLOOR DEVICES AND PENETRATIONS TROUGH THE BUILDING CONSTRUCTION TO ASSURE REMOVAL OF ASBESTOS CONTAINING MATERIALS PRIOR TO STARTING WORK.
6. IT SHALL BE THE CONTRACTOR RESPONSIBILITY TO MAINTAIN THE EXISTING BUILDING IN MECHANICAL OPERATION AT ALL TIMES DURING OCCUPIED PERIOD. IF IT IS ABSOLUTELY NECESSARY TO SHUT-DOWN THE FACILITY AT ANY TIME, THE CONTRACTOR SHALL CONSULT WITH THE OWNER AND MAKE ARRANGEMENTS TO DO SO AT THE OWNER'S CONVENIENCE DURING OFF HOURS. CONTRACTOR SHALL PROVIDE OWNER ADVANCE NOTICE IN WRITING MINIMUM 3 BUSINESS DAYS PRIOR SHUT-DOWN.
7. COORDINATE WORKS WITH OTHER TRADES TO AVOID CONFLICTS AND DELAYS.
8. WHERE THE EXISTING PIPING, CONDUIT, OR DUCTWORK SERVING ANY EXISTING MECHANICAL EQUIPMENT IN AREA OF EXISTING BUILDINGS NOT BE ALTERED IS INTERFERED WITH, CONTRACTOR SHALL REROUTE AND RECONNECT ALL SUCH PIPES OR DUCTWORK PRIOR APPROVAL FROM ENGINEER.
9. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR CUTTING AND PATCHING OF EXISTING CONSTRUCTION UNLESS OTHERWISE NOTED ON PLANS. NO CUTTING OF STRUCTURAL MEMBERS OR STRUCTURE WHICH WILL DETERIORATE THE INTEGRITY AND STRENGTH OF THE BUILDING WILL BE ALLOWED WITH OUT WRITTEN APPROVAL FROM THE STRUCTURAL ENGINEER.
10. PATCH AND REPAIR OPENINGS THROUGH WALLS AND FLOORS WHERE MECHANICAL SYSTEMS WERE REMOVED TO MATCH EXISTING AND TO MAINTAIN FIRE RATING. WALL FINISHED BY OTHERS.
11. ALL MATERIALS AND EQUIPMENT REMOVED AS A RESULT OF DEMOLITION ACTIVITIES SHALL BE TAKEN FROM THE SITE AND DISPOSED OF IN ACCORDANCE WITH ALL APPLICABLE LAWS AND ENVIRONMENTAL REGULATIONS. AT THE DISCRETION OF THE OWNER EXISTING AIR TERMINAL UNITS, AIR OUTLETS AND CONTROLS MAYBE TURNED OVER TO THE OWNER FOR FUTURE USE.

GENERAL NOTES

1. THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS IS TO PROVIDE DESIGN INFORMATION REQUIRED TO OBTAIN A BUILDING PERMIT AND FOR A COMPETENT CONTRACTOR TO IMPLEMENT A COMPLETE "TURN-KEY" PROJECT TO THE OWNER. CONTRACTOR SHALL BE RESPONSIBLE FOR MODIFICATIONS TO EQUIPMENT AND PIPING LOCATIONS, RELOCATIONS OF EXISTING SERVICES WHICH ARE TO REMAIN AND INTERFERE WITH THE WORK. THE MECHANICAL CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL NOTED DELEGATE DESIGNS, INCLUDING ENGAGEMENT OF PROFESSIONAL ENGINEERS AS REQUIRED BY CODE AUTHORITIES AND MEETING ALL PERFORMANCE SPECIFICATIONS.

2. SCOPE OF WORK

A. DEMOLITION WORK
1) DEMOLISH EXISTING AIR TRANSFER GRILLES AND ASSOCIATED DUCTWORK WITHIN SCOPE OF WORK AREA.
2) REMOVE EXISTING LOW WALL NATURAL VENTILATION LOUVERS AND FILL IN.
3) REMOVE EXISTING MINI-SPLIT FROM EACH RESTROOM. EACH UNIT TO BE EVALUATED AND THE UNIT IN BETTER CONDITION IS TO BE RE-USED AND RELOCATED AS PART OF NEW WORK.
4) REPLACE EXISTING EXHAUST GRILLES IN CHEMICAL STORAGE SPACE.
5) REMOVE NOT-IN-SERVICE EXHAUST FAN.
6) REMOVE AND REPLACE EXISTING RESTROOM EXHAUST FAN.
7) ALL EXISTING SUPPLY/RETURN/EXHAUST GRILLES TO REMAIN TO BE COVERED PRIOR TO START OF DEMOLITION.

B. NEW WORK
1) PROVIDE NEW 100% OA SPLIT-DX FCU SYSTEM, DUCTWORK AND GRILLES TO PROVIDE MECHANICAL VENTILATION, COOLING AND HUMIDITY CONTROL TO RESTROOMS.
2) PROVIDE NEW OA INTAKE EXTERIOR WALL MOUNTED LOUVER.
3) RE-BALANCE EXISTING EXHAUST GRILLES TO REMAIN TO CFM'S INDICATED.
4) RELOCATE (1) EXISTING MINI-SPLIT TO EXISTING ELECTRICAL CLOSET.
5) PROVIDE NEW RESTROOM EXHAUST FAN IN SAME LOCATION AS PREVIOUS.

C. START-UP AND COMMISSIONING
1) THE MECHANICAL CONTRACTOR SHALL PROVIDE EQUIPMENT AND LABOR TO CONNECT AND OPERATE A FALSE LOAD, IF REQUIRED, DURING EQUIPMENT START-UP AND COMMISSIONING.
2) THE CONTROLS CONTRACTOR SHALL COORDINATE ALL START-UP AND COMMISSIONING ACTIVITIES WITH THE OEM REPRESENTATIVES, MECHANICAL CONTRACTOR AND THE COMMISSIONING AUTHORITY RETAINED BY THE OWNER.
3) THE MECHANICAL AND CONTROLS CONTRACTORS SHALL INCLUDE IN THEIR BASE PRICE HOURS, MANPOWER, AND EQUIPMENT ANTICIPATED TO BE REQUIRED FOR START-UP AND COMMISSIONING.
4) CONTROLS CONTRACTOR SHALL PERFORM A THREE POINT VERIFICATION FOR ALL SENSORS FOR TEMPERATURE AND HUMIDITY, AND DIFFERENTIAL PRESSURE.

D. PRIOR TO ORDER OF EQUIPMENT OR START OF INSTALLATION OF SYSTEM COMPONENTS, SUBMIT THE FOLLOWING FOR APPROVAL:
4) COMPLETE DETAIL SET OF SHOP DRAWINGS FOR DUCTWORK, EQUIPMENT, PIPING, AND SYSTEMS INDICATING DIMENSIONS, MATERIALS OF CONSTRUCTIONS, AND METHODS OF ASSEMBLY.
5) IN LETTER FORM, MANUFACTURER'S NAMES FOR EQUIPMENT, ACCESSORIES AND INCIDENTALS NOT COVERED BY SHOP DRAWINGS.

3. CONTRACTOR SHALL MAINTAIN SET OF DRAWINGS TO REFLECT RECORD DOCUMENT CONDITIONS. CONTRACTOR SHALL SUBMIT DOCUMENTS INCLUDING A COPY OF ALL APPROVED SHOP DRAWINGS. PROVIDE LITERATURE CUTS, OPERATION AND MAINTENANCE DATA TO OWNER PRIOR TO END OF CONTRACT. SEE SPECIFICATIONS FOR REQUIREMENTS.
4. THROUGHOUT THESE SPECIFICATIONS AND PROJECT DRAWINGS, THE WORD "ENGINEER" OR "ARCHITECT" SHALL MEAN STANTEC.
5. CONTRACTOR SHALL COORDINATE WITH OWNER A MINIMUM OF 48 HOURS BEFORE STARTING WORK FOR THE FOLLOWING: BUILDING ACCESS, RULES AND REGULATIONS, DAILY CLEAN UP AND MATERIAL REMOVAL MOVEMENT THROUGH FACILITY, TIE-INS TO EXISTING SERVICES, STORAGE AREAS AND REMOVALS.
6. ALL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
7. ALL WORK (MATERIAL AND LABOR) SHALL BE WARRANTED FOR A PERIOD OF ONE YEAR FROM TIME OF OWNER'S ACCEPTANCE.
8. CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS PRIOR TO STARTING WORK. ANY DISCREPANCIES SHALL BE REPORTED IMMEDIATELY TO THE OWNER. ALL DIMENSIONS ON DRAWINGS ARE TO BE FIELD VERIFIED AND COORDINATED BY THE CONTRACTOR. THE CONTRACT DRAWINGS ARE CONSIDERED TO BE SCHEMATIC IN NATURE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETAILING ALL CONTRACTIBILITY ISSUES.
9. ALL EXITS FROM EXISTING BUILDING MUST REMAIN UNOBSTRUCTED AND OPERABLE AT ALL TIMES. EXISTING SPRINKLER, CCTV AND ALARM SYSTEM MUST REMAIN IN OPERATING ORDER. CONTRACTOR MUST COORDINATE WITH OWNER A MINIMUM OF 48 HOURS IN ADVANCE FOR ANY SHUTDOWN OF MECHANICAL, ELECTRICAL OR FIRE SPRINKLER SYSTEMS.
10. ALL WORK SHALL BE PERFORMED UTILIZING THE LATEST INDUSTRY STANDARDS OF EACH TRADE. WHERE APPLICABLE, CARE SHALL BE EXERCISED TO MINIMIZE DISTURBANCE TO ADJOINING AREAS OF THE BUILDING BY UTILIZING TEMPORARY PARTITIONS AND KEEPING WORK AREAS UNDER NEGATIVE PRESSURE. CONTRACTOR SHALL PROVIDE ALL NECESSARY SAFETY BARRICADES AS REQUIRED BY OSHA AND ALL GOVERNING AUTHORITIES.
11. CONTRACTOR SHALL SUBMIT A WRITTEN REQUEST TO THE OWNER FOR APPROVAL TO SHUT DOWN ANY MECHANICAL SYSTEM. THE WRITTEN REQUEST SHALL BE ISSUED A MINIMUM OF 48 HOURS PRIOR TO THE SHUTDOWN AND SHALL INCLUDE THE SYSTEM BEING SHUT DOWN, TIME REQUIRED FOR SHUT DOWN, AND DESCRIPTION OF WORK TO BE PERFORMED. NO SYSTEM SHALL BE SHUT DOWN WITHOUT OBTAINING WRITTEN CONSENT FROM THE OWNER.
12. SEE SPECIFICATIONS, DETAILS, AND PLANS FOR EQUIPMENT, DEVICES, DUCTWORK AND PIPING SYSTEMS. ANY COMPONENT CALLED FOR IN THE CONTRACT DOCUMENTS SHALL BE INCLUDED IN THE BID PRICE.
13. CONTRACTOR SHALL COORDINATE WITH STRUCTURAL AND SITE/CIVIL DRAWINGS FOR EQUIPMENT PADS AND SUPPORTS.
14. CONTRACTOR SHALL COORDINATE HIS WORK WITH THE WORK OF ALL OTHER TRADES DURING SHOP DRAWING FABRICATION.
15. ALL GENERAL NOTES APPLY TO ALL MECHANICAL DRAWINGS.
16. ALL WORK SHALL BE PERFORMED SO IT WILL MINIMIZE INTERFERENCE WITH NORMAL BUILDING OPERATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENFORCING ALL OWNER REGULATIONS WITH EMPLOYEES AND SUBCONTRACTORS. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THEIR PERSONNEL AND EQUIPMENT. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT ALL PEOPLE WHO MAY BE ON OR NEAR THE WORK AREA, BY MAINTAINING A SAFE WORK AREA, SAFE WORKING CONDITIONS, AND LIMITING ACCESS TO THE WORK AREA. CONTRACTOR SHALL DESIGNATE ONE OF THEIR EMPLOYEES TO BE PRIMARILY RESPONSIBLE FOR SAFETY ON THE WORK SITE.
17. ALL DRAWINGS AND SPECIFICATIONS SHALL BE CONSIDERED COMPLEMENTARY. ALL DETAILS, ELEMENTS, STRUCTURES, ETC. SHALL BE ASSUMED TO BE ON ALL DOCUMENTS EVEN IF THEY ARE ONLY SHOWN ON ONE DOCUMENT.
18. EFFORTS HAVE BEEN EXERCISED TO ELIMINATE INTERFERENCES BETWEEN AND AMONG TRADES. IN SPITE OF THIS, SOME INTERFERENCES SHOULD BE EXPECTED. THE CONTRACTOR IS RESPONSIBLE FOR BRINGING ALL INTERFERENCES TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE FOR HELP IN RESOLUTION. THE CONTRACTOR IS RESPONSIBLE FOR CORRECTION OF SUCH INTERFERENCES.
19. THESE DRAWINGS SHALL NOT BE SCALED FOR PURPOSES OF CONSTRUCTION. MEASURE FIELD CONDITIONS FOR THE PURPOSE OF COORDINATING NEW WORK.
20. CONTRACTOR SHALL PERSONALLY SUPERVISE THE WORK, OR HAVE A COMPETENT SUPERVISOR, SATISFACTORY TO THE OWNER'S REPRESENTATIVE, PRESENT AT THE WORK SITE AT ALL TIMES DURING THE DEMOLITION AND CONSTRUCTION WORK. CONTRACTOR SHALL PROVIDE ADEQUATE PERSONNEL AND ORGANIZATION FOR THE PROPER COORDINATION AND EXPEDITING OF THE WORK.
21. CONTRACTOR IS FULLY RESPONSIBLE FOR THEIR WORKER'S SAFETY, SAFETY EQUIPMENT, FIRST AID, AND EMERGENCY HANDLING PROCEDURES. OWNER AND STANTEC DO NOT HAVE THE RESPONSIBILITY, PERSONNEL, OR FACILITIES TO HANDLE THE CONTRACTOR'S SAFETY REQUIREMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FOLLOWING SAFETY PROCEDURES, OBTAINING SAFETY TRAINING AND PROVIDING SAFETY DOCUMENTATION AS REQUIRED BY THE SITE AND/OR OWNER'S STANDARDS.
22. FOR ADDITIONAL REQUIREMENTS, REFER TO SPECIFICATIONS.
23. THE CONTRACTOR SHALL BE AWARE THAT DUE TO INACCURACIES OF EXISTING DRAWINGS, NOT ALL EXISTING ITEMS/CONDITIONS MAY BE SHOWN ON THESE DRAWINGS. THE CONTRACTOR SHALL THEREFORE VERIFY FIELD CONDITIONS PRIOR TO START OF WORK AND TAKE CARE DURING CONSTRUCTION NOT TO DAMAGE LINES OR ITEMS NOT SHOWN.
24. CODES, GUIDELINES AND STANDARDS REFERENCED IN THE DRAWINGS AND SPECIFICATIONS AR UNDERSTOOD TO BE MINIMUM REQUIREMENTS. IF THE CONTRACT DOCUMENTS CALL FOR WORK ABOVE AND BEYOND THE REFERENCED CODE, GUIDELINES OR STANDARD, IT SHALL BE INCLUDED IN THE CONTRACTOR'S BID PRICE.

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Revision	YYYY.MM.DD
Issued	2023.02.15

PERMIT SET

CITY OF DORAL

MORGAN LEVY PARK RESTROOM RENOVATIONS

5300 NW 102nd AVENUE
Doral, FL 33178

Title
GENERAL NOTES

Project No. 227100129
Scale As indicated
Revision
Drawing No. **M-000**

10/11/2021 12:11:31 PM

ORIGINAL SHEET - ARCH E1 (30"x42")

MECHANICAL SPECIFCATIONS

1. GENERAL CONDITIONS

THE APPLICABLE PROVISIONS OF THE GENERAL CONSTRUCTION SPECIFICATIONS SHALL APPLY TO THE FOLLOWING SPECIFICATION ARTICLES:

2. APPLICABLE STANDARDS, CODES AND PUBLICATIONS

A. THIS ENTIRE INSTALLATION SHALL BE TESTED AND INSTALLED TO CONFORM, AS A MINIMUM, TO APPLICABLE PROVISIONS OF THE FOLLOWING CODES AND STANDARDS EXCEPT WHERE STRICTER REQUIREMENTS ARE SPECIFIED ELSEWHERE HEREIN OR SHOWN ON THE CONTRACT DRAWINGS:

1) STATE OF FLORIDA (LATEST ADOPTED EDITION)

2) NFPA

3) OSHA AND ALL AGENCIES HAVING JURISDICTION

3. NOTICE TO BIDDERS

A. THE SPECIFICATIONS AND DRAWINGS ARE INTENDED TO SERVE JOINTLY AS A BASIS UPON WHICH THE CONTRACTOR SHALL SUBMIT A CONTRACT PRICE FOR THE MATERIAL AND LABOR PROVISIONS.

B. WHEN CONFLICTS OCCUR IN THE SPECIFICATIONS OR IN THE DRAWINGS, OR BETWEEN EITHER, THE ITEMS OF GREATER QUANTITY OR HIGHER COST SHALL BE PROVIDED.

C. THE CONTRACTOR SHALL PROVIDE ALL ITEMS OF LABOR OR MATERIALS NOT SPECIFICALLY INDICATED, BUT REQUIRED TO COMPLETE THE INTENDED INSTALLATIONS.

D. THE CONTRACTOR SHALL COORDINATE HIS WORK OR ADJUST SAME TO THAT OF OTHER TRADES, IN ORDER THAT CONFLICTS IN SPACE LOCATIONS DO NOT OCCUR.

E. THE WORK UNDER THIS CONTRACT SHALL BE PERFORMED SIMULTANEOUSLY WITH THE WORK OF OTHER TRADES, SO AS NOT TO DELAY THE OVERALL PROGRESS OF WORK.

F. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR HIS WORK WITH ITS COMPLETION AND FINAL ACCEPTANCE AND SHALL REPLACE ANY OF THE SAME WHICH MAY BE DAMAGED, LOST OR STOLEN, WITHOUT ADDITIONAL COST TO THE OWNER.

4. SHOP DRAWINGS AND EQUIPMENT SUBMISSIONS

A. PRIOR TO ORDER OF EQUIPMENT OR START OF INSTALLATION OF SYSTEM COMPONENTS, SUBMIT THE FOLLOWING FOR APPROVAL:

1) COMPLETE DETAILED SET OF SHOP DRAWINGS FOR DUCTWORK, EQUIPMENT AND SYSTEM INDICATING DIMENSIONS, MATERIALS OF CONSTRUCTION AND METHODS OF ASSEMBLY.

2) SHEET METAL SHOP DRAWINGS SHALL BE AT A MINIMUM OF 3/8" = 1'-0" SCALE. THESE SHOP DRAWINGS SHALL BE USED AS THE COORDINATION DRAWINGS FOR ALL TRADES.

3) IN LETTER FORM, MANUFACTURER'S NAMES FOR ACCESSORIES AND INCIDENTALS NOT COVERED BY SHOP DRAWINGS.

5. RECORD DRAWING

A. REPRODUCIBLE RECORD, DWG FILES [AUTOCAD VERSION 2018 OR EARLIER], DRAWINGS, AND PDF VERSIONS SHALL BE SUPPLIED UPON WHICH CORRECTIONS SHALL BE MADE TO PROVIDE AN ACCURATE AND COMPLETE RECORD OF THE WORK AS INSTALLED.

6. OPERATING AND MAINTENANCE INSTRUCTIONS

A. AFTER FINAL TEST AND ADJUSTMENTS FULLY INSTRUCT OWNER'S OPERATING PERSONNEL IN ALL DETAILS OF OPERATING FOR EQUIPMENT INSTALLED. A SIGNED RECEIPT WHICH SHALL BE OBTAINED FROM THE OPERATOR AND SHALL BE PROVIDED AS EVIDENCE THAT INSTRUCTIONS WERE SATISFACTORILY PROVIDED.

B. FURNISH TWO (2) COPIES OF WRITTEN DESCRIPTIONS OF ALL SYSTEMS COVERING ALL MANUAL OPERATING PROCEDURES, AUTOMATIC CONTROL DESCRIPTIONS AND AUTOMATIC CONTROL TEMPERATURE AND PRESSURE SETTINGS. WRITTEN DESCRIPTIONS SHALL INCLUDE LUBRICATION SCHEDULES, PARTS LIST, PERFORMANCE SERVICE FOR EQUIPMENT, FILTER SIZE/QUANTITY SCHEDULE, ETC. WHEN MANUFACTURERS' STANDARD INSTRUCTIONS ARE UTILIZED, THEY SHALL BE CLEARLY MARKED TO INDICATE APPLICABILITY.

7. APPROVALS AND SUBSTITUTIONS

A. IT IS THE INTENT OF THESE SPECIFICATIONS THAT WHEREVER A MANUFACTURER IS SPECIFIED AND SUBSTITUTIONS ARE MADE, THEY SHALL CONFORM IN ALL RESPECTS TO THE SPECIFIED ITEM. CRITERIA AS DELINEATED FOR EQUIPMENT, SHALL BE INTERPRETED AS MINIMUM PERFORMANCE REQUIREMENTS.

B. BASE ALL BIDS ON THE EQUIPMENT AND MANUFACTURERS LISTED. IF SUBSTITUTION IS PROPOSED, MAKE APPLICATION TO THE OWNER IN WRITING STATING THE COST DIFFERENTIAL INVOLVED.

C. THE CONTRACTOR SHALL COORDINATE WITH THE OTHER TRADES ALL REQUIREMENTS RELATED TO THE SUBSTITUTED EQUIPMENT AND CARRY THE ADDITIONAL COSTS.

8. COMMISSIONING, START-UP AND PERFORMANCE TESTS

A. COMMISSIONING PLAN BY OTHERS (COMMISSIONING AUTHORITY).

1) A COMMISSIONING PLAN OF THE MECHANICAL EQUIPMENT, ELECTRICAL LIGHTING AND WATER HEATING SYSTEM SHALL BE DEVELOPED BY AN APPROVED AGENCY AS REQUIRED BY FBC EC SECTION C408 AND SHALL INCLUDE THE FOLLOWING ITEMS:

a. A NARRATIVE DESCRIPTION OF THE ACTIVITIES THAT WILL BE ACCOMPLISHED DURING EACH PHASE OF COMMISSIONING,INCLUDING THE PERSONNEL INTENDED TO ACCOMPLISH EACH OF THE ACTIVITIES.

b. A LISTING OF THE SPECIFIC EQUIPMENT, APPLIANCES OR SYSTEMS TO BE TESTED AND A DESCRIPTION OF THE TESTS TO BE PERFORMED.

c. FUNCTIONS TO BE TESTED INCLUDING, BUT NOT LIMITED TO, CALIBRATIONS AND CONTROLS.

d. CONDITIONS UNDER WHICH THE TEST WILL BE PERFORMED: TESTING SHALL AFFIRM WINTER AND SUMMER DESIGN CONDITIONS AND FULL OUTSIDE AIR CONDITIONS.

e. 'MEASURABLE CRITERIA FOR PERFORMANCE'.

f. WITHIN 90 DAYS OF RECEIPT OF THE CERTIFICATE OF OCCUPANCY FOR THE SITE DRAWINGS, MANUALS, SYSTEM BALANCING REPORTS, DOCUMENTATION FOR LIGHTING CONTROLS SHOWING THAT THEY MEET THE STATE ADOPTED IEEC SECTION C405, THE FINAL COMMISSIONING REPORT, AND ALL OTHER DOCUMENTS AS PER THE STATE ADOPED IEEC SECTION C408 SHALL BE PROVIDED TO THE OWNER, OR OWNER'S AUTHORIZED AGENT.

B. PROVIDE START-UP FOR THE NEW FCU AND EXHAUST FAN INCLUDING CONTROLS, INSTRUMENTATION AND TESTING AND BALANCING. CONTRACTOR SHALL BUDGET MINIMUM 40-MAN HOURS FOR COMMISSIONING ASSISTANCE TO COMMISSIONING AUTHORITY. ADDITIONAL TIME SHALL BE BILLABLE AT PRO-RATED RATE.

C. UPON COMPLETION OF THE INSTALLATION, TEST AND BALANCE ALL EQUIPMENT AND SYSTEMS UNDER FIELD OPERATING CONDITIONS TO DEMONSTRATE ITS COMPLIANCE WITH SPECIFICATION REQUIREMENTS.

D. SHOULD ANY PART OF THE SYSTEM FAIL TO MEET THE CONTRACT REQUIREMENTS, ADJUST REPAIR OR REPLACE ALL DEFECTIVE OR INOPERATIVE PARTS AND AGAIN CONDUCT THE COMPLETE PERFORMANCE TEST.

E. SUBMIT TEST RESULTS TO THE OWNER AND ENGINEER.

9. TESTING, ADJUSTMENTS AND BALANCING

A. MAKE ALL REQUIRED ADJUSTMENTS OF AIR SYSTEM SYSTEM DEVICES UNTIL ALL SPECIFIED PERFORMANCES ARE MET. MECHANICAL CONTRACTOR TO PROVIDE VOLUME DAMPERS AS REQUIRED FOR FINAL BALANCING OF AIR SYSTEMS. CONTRACTOR TO FOLLOW PROCEDURES AS SPECIFIED BY ASHRAE.

B. AIR SYSTEM BALANCING SHALL BE PERFORMED BY AN INDEPENDENT CERTIFIED TESTING AND BALANCING FIRM WITH A MINIMUM OF FIVE YEARS' EXPERIENCE. SUBMIT EVIDENCE OF QUALIFICATIONS BY NEBB, TABB OR AABC.

C. BALANCE ALL SUPPLY, RETURN AND EXHAUST DUCTWORK TO THE QUANTITIES INDICATED ON THE DRAWINGS WITH FOLLOWING TOLERANCES:

1) FANS – DESIGN VOLUME ±5%.

2) LEAKAGE – 1% MAXIMUM.

3) OUTLETS – DESIGN VOLUME ±10%.

D. CONTRACTOR TO PROVIDE TRAVERSE READING AT MAIN SUPPLY, RETURN AND EXHAUST DUCTS.

E. CONTRACTOR SHALL PROVIDE LEAKAGE AND PRESSURE TESTING OF ALL DUCTWORK EQUAL TO THE PRESSURE CLASS RATING OF THE DUCT. FOLLOW IECC, ASHRAE, SMACNA AND ISPE GUIDANCE FOR TESTING.

F. RANDOM CHECKS SHALL BE PERFORMED BY THE OWNER / DESIGNER WITHIN 90 DAYS OF COMPLETION OF TESTING TO VERIFY BALANCE CONDITIONS AND SEASONAL TESTS.

G. SUBMIT TESTING AND BALANCING REPORTS TO THE OWNER AND ENGINEER FOR APPROVAL.

H. WHERE INDICATED, BALANCE ROOMS TO ACHIEVE INDICATED DIFFERENTIAL PRESSURES REQUIRED.

I. WHERE SHOWN, TOTAL ROOM SUPPLY AIR SHALL EQUAL OR EXCEED INDICATED AIR CHANGED REQUIRED.

10. VERIFYING EXISTING CONDITIONS, REMOVALS AND ALTERATION

A. THE CONTRACTOR SHALL VISIT THE PREMISES TO DETERMINE EXISTING CONDITIONS AND COMPARE SAME WITH DRAWINGS AND SPECIFICATIONS AND SATISFY HIMSELF OF ALL CONDITIONS PRIOR TO THE SUBMISSION OF A BID PROPOSAL. NO ALLOWANCES WILL BE MADE FOR THE FAILURE TO COMPLY WITH THESE REQUIREMENTS, AND A BID PROPOSAL SHALL BE CONSTRUED AS EVIDENCE HE HAS DONE SO.

B. TEMPORARY CAP ALL OPEN DUCTWORK DURING CONSTRUCTION.

11. REMOVALS AND ALTERATIONS

A. THE CONTRACTOR SHALL REMOVE, RELOCATE, REPLACE, ADJUST, ADAPT AND MODIFY EXISTING EQUIPMENT AND/OR SYSTEMS AS REQUIRED WHEN SUCH WORK IS UNCOVERED AND FOUND TO INTERFERE WITH COMPLETION OF WORK IN THIS CONTRACT OR OTHER CONTRACT WORK.

B. ALL REMOVED EQUIPMENT AND MATERIAL SHALL BE REMOVED FROM THE PROJECT SITE, OR TO A LOCATION AS DIRECTED BY THE OWNER.

C. KEEP EGRESS EXITS AND CORRIDORS CLEAR AT ALL TIMES.

12. CODES, PERMITS AND INSPECTIONS

A. ALL WORK SHALL MEET OR EXCEED LATEST REQUIREMENT OF NATIONAL STATE, CITY, MUNICIPAL AND OTHER AUTHORITIES EXERCISING JURISDICTION OF THE WORK OF THIS PROJECT.

B. ANY PORTION OF THE WORK WHICH IS NOT SUBJECT TO APPROVAL OF AN AUTHORITY HAVING JURISDICTION SHALL BE PROVIDED IN ACCORDANCE WITH NATIONAL FIRE PROTECTION ASSOCIATION REQUIREMENTS.

C. COMPLY WITH APPLICABLE UTILITY COMPANY RULES AND REGULATIONS.

D. COMPLY WITH OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) REQUIREMENTS.

E. SECURE PERMITS AND INSPECTION CERTIFICATES, AND TRANSMIT SAME TO THE OWNER AT THE COMPLETION OF THE WORK.

13. GUARANTEE AND SERVICE

A. THE CONTRACTOR SHALL GUARANTEE AND SERVICE THE ENTIRE INSTALLATION FOR A PERIOD OF ONE YEAR FROM THE DATE OF THE FINAL ACCEPTANCE OF THE INSTALLATION.

B. THE CONTRACTOR SHALL, DURING THE PERIOD OF THE GUARANTEE, REPLACE OR REPAIR AT HIS OWN EXPENSE ANY PIECE OF EQUIPMENT AND/OR MATERIAL WHICH IS FOUND TO BE DEFECTIVE. THE REPLACEMENT OR REPAIR SHALL BE PERFORMED THE SAME DAY OF NOTIFICATION IN AN EMERGENCY FASHION WHEN NOTIFIED BY THE OWNER OR AUTHORIZED REPRESENTATIVE. THE CONTRACTOR SHALL ALSO REPAIR ALL DAMAGE TO SURROUNDING WORK CAUSED BY THE FAILURE, REPAIR OR REPLACEMENT OF DEFECTIVE EQUIPMENT.

C. THE FINAL ACCEPTANCE WILL BE MADE AFTER THE CONTRACTOR HAS ADJUSTED HIS EQUIPMENT, BALANCED THE VARIOUS SYSTEMS, DEMONSTRATED THAT IT FULFILLS THE REQUIREMENT OF THE DRAWINGS AND SPECIFICATIONS, AND HAS FURNISHED ALL THE REQUIRED CERTIFICATES OF INSPECTION, APPROVALS, BALANCING REPORTS, AS-BUILTS AND O&M MANUALS

14. DUCTWORK

A. ALL DUCTWORK, DAMPERS AND ALL AUXILIARY DEVICES AND WORK NECESSARY TO MAKE THE VARIOUS AIR CONDITIONING AND VENTILATING SYSTEMS COMPLETE AND READY FOR SATISFACTORY OPERATION SHALL BE FURNISHED AND INSTALLED.

B. QUALITY ASSURANCE: FABRICATE SHEET METAL DUCTS, CASINGS AND PLENUMS IN COMPLIANCE WITH THE LATEST SMACNA HVAC DUCT CONSTRUCTION STANDARDS. COMPLY WITH NFPA 90A AND 91.

B. DELEGATED DESIGN SUBMITTAL:

1) DESIGN CALCULATIONS AND DETAILED FABRICATION AND ASSEMBLY OF DUCT ANCHORS HANGERS AND SUPPORTS FOR MULTIPLE DUCTS, VIBRATION ISOLATION AND ATTACHMENTS TO THE BUILDING STRUCTURE.

2) LOCATIONS AND SELECTION OF DUCT ANCHORS.

3) LOCATIONS AND SELECTION OF VIBRATION ISOLATION SUPPORTS.

4) LOCATIONS OF AND DETAILS FOR PENETRATIONS, INCLUDING SLEEVES AND SLEEVE SEALS FOR EXTERIOR WALLS, FLOORS, BASEMENT, AND FOUNDATION WALLS.

5) LOCATIONS OF AND DETAILS FOR PENETRATION AND FIRESTOPPING FOR FIRE- AND SMOKE-RATED WALL AND FLOOR AND CEILING ASSEMBLIES.

C. SINGLE-WALL AND DOUBLE-WALL ROUND AND RECTANGULAR DUCTWORK, MATERIAL GAUGES, BRACING AND CONSTRUCTION IN ACCORDANCE WITH THE LATEST SMACNA DUCT MANUAL STANDARDS. DRIVE SLIPS AND SNAP LOCK CONNECTIONS ARE NOT PERMITTED. TOTAL AIR VOLUME FOR LOW PRESSURE DUCT SYSTEMS SHALL BE AT LEAST 95% OF FAN SUPPLY WHEN MEASURED BY DUCT TRAVERSES TAKEN WITH A PITOT TUBE AND WATER MANOMETER. SHEET METAL MATERIALS SHALL BE AS FOLLOWS:

1) ASTM A527 WITH ASTM A525 ZINC COATING G90 GALVANIZED SHEET STEEL

2) TYPE 316 STAINLESS STEEL

D. ALL LOW PRESSURE SUPPLY AND EXHAUST DUCTWORK SHALL AT MINIMUM BE FABRICATED IN ACCORDANCE WITH SMACNA STANDARDS FOR 2" WG CONSTRUCTION. LEAKAGE CLASS B, SEAL CLASS A. SEAL ALL JOINTS, SEAMS, AND DUCT WALL PENETRATIONS. REFER TO DUCT PRESSURE CLASS SCHEDULE FOR ADDITIONAL REQUIREMENTS. METAL SHALL BE MINIMUM 26 GAUGE THICK.

E. IN ACCORDANCE WITH SMACNA STANDARDS, PROVIDE DUCTWORK, ACCESS DOORS TO ALL CONCEALED CONTROLS, FLUSIBLE LINKS OF DAMPERS, ETC. MINIMUM SIZE SHALL BE 16"X16".

F. DUCT LINERS SHALL NOT BE PERMITTED.

H. SEALANTS SHALL COMPLY WITH THE FOLLOWING:

1) MASTICS: SUITABLE FOR APPLICATION AS A FILLET, IN GROOVES OR BETWEEN FLANGES. OIL BASED CAULKING AND GLAZING COMPOUNDS ARE NOT ACCEPTABLE.

2) GASKETS: SOFT ELASTOMER BUTYL OR EXTRUDED SEALANTS FOR USE IN FLANGED JOINTS.

3) TAPES: TAPES SHALL COMPLY WITH UL 181.

I. PROVIDE MANUAL OPPOSED BLADE DAMPERS IN EACH SPLIT OR TAP CONNECTION TO TRUNK DUCTS, AND WHERE OTHERWISE REQUIRED FOR BALANCING PURPOSES, EACH PROVIDED WITH QUADRANT STYLE OPERATOR AND LOCKING DEVICE. PROVIDE ACCESS DOORS AS REQUIRED AS NEEDED TO ACCESS DAMPERS ABOVE HARD CEILINGS.

J. INSTALL DOUBLE THICKNESS DIVERTING VANES AT ALL MITERED AND SHORT RADIUS ELBOWS.

K. PROVIDE 45 DEGREE ENTRY OR CONICAL TAPS.

L. PROVIDE HANGERS AND FASTENINGS ADEQUATE TO INSURE PERMANENT STABILITY AND IN COMPLIANCE WITH LOCAL CODE REQUIREMENTS. WHERE REQUIRED, PROVIDE SUPPLEMENTARY STEEL ANGLES OR CHANNELS. DO NOT HANG OR SUPPORT ONE DUCT FROM ANOTHER.

M. DUCTWORK LAYOUTS AND ROUTES AS SHOWN ON THE DRAWING ARE SCHEMATIC; THEREFORE, CHANGES IN DUCT SIZES AND/OR LOCATIONS SHALL BE MADE WHERE NECESSARY TO CONFORM TO SPACE CONDITIONS OR OBTAIN MAXIMUM HEADROOM CONDITIONS WITHOUT ADDITIONAL COST TO THE OWNER.

N. AIR DIFFUSERS AND GRILLES SHALL BE LOCATED IN CONFORMANCE TO ARCHITECTURAL REFLECTED CEILING PLANS, WHERE SO INDICATED.

O. WHERE DUCTS ARE REQUIRED TO BE REMOVED, ALL OPENINGS IN REMAINING DUCTS SHALL BE CAPPED AIRTIGHT.

P. ALL NEW AND EXISTING LOW PRESSURE DUCTWORK SHALL BE CAULKED AND SEALED WITH DUCT SEALANT TO MAINTAIN A LEAKAGE RATE OF NO GREATER THAN 1 PERCENT OF AIR VOLUME OR AS OTHERWISE SPECIFIED.

Q. ROUND DUCTWORK TO BE SPIRAL TYPE, WITH RADIUS ELBOWS WITH r/D = 1.0 TO 1.5 PREFERRED FOR TURNS.

R. THE USE OF FLEXIBLE DUCT IS LIMITED TO 4 FEET MAXIMUM LENGTH. WHERE USED, COMPLY WITH THE FOLLOWING:

1) COMPLY WITH ASTM E96 AND UL 181

2) DUCT MATERIAL SHALL BE COMPATIBLE WITH TEMPERATURE AND CHEMICAL REQUIREMENTS OF APPLICATION.

3) PROVIDE STAINLESS STEEL BAND CLAMP WITH HEX SCREW TO TIGHTEN BAND WITH A WORM-GEAR ACTION FOR APPLICATIONS.

4) PROVIDE REINFORCEMENT ELBOW AT ALL TURNS FOR FLEXIBLE DUCT.

5) GMP NON-INSULATED APPLICATIONS:

a. WHITE ACRYLIC ON POLYESTER MATERIAL WITH MECHANICALLY BONDED GALVANIZED HELIX.

b. COATED FIBERGLASS WOVEN FABRIC WITH COATED SPRING STEEL WIRE HELIX.

6) NON-GMP AND NON-LABORATORY NON-INSULATED APPLICATIONS:

a. TWO-PLY VINYL FILM SUPPORTED BY HELICALLY WOUND, SPRING-STEEL WIRE.

b. BLACK POLYMER FILM SUPPORT BY HELICALLY WOUND, SPRING-STEEL WIRE.

c. MULTIPLE LAYERS OF ALUMINUM LAMINATE SUPPORTED BY HELICALLY WOUND, SPRING-STEEL WIRE.

d. ALUMINUM LAMINATE AND POLYESTER FILM WITH LATEX ADHESIVE SUPPORTED BY HELICALLY WOUND, SPRING-STEEL WIRE.

e. INTERLOCKING SPIRAL OF ALUMINUM FOIL.

5) NON-GMP AND NON-LABORATORY INSULATED APPLICATIONS:

a. SAME AS NON-INSULATED APPLICATIONS WITH FACTORY APPLIED FIBROUS-GLASS INSULATION; ALUMINIZED VAPOR-BARRIER FILM.

6) NON-GMP AND NON-LABORATORY INSULATED APPLICATIONS:

a. POLYESTER FILM SUPPORTED BY HELICALLY WOUND ENGINEERED POLYMER WIRE; FIBROUS-GLASS INSULATION; POLYESTER SCRIM REINFORCED, POLYESTER FILM VAPOR BARRIER.

7) GMP INSULATED APPLICATIONS:

a. POLYESTER FILM SUPPORTED BY HELICALLY WOUND ENGINEERED POLYMER WIRE; FIBROUS-GLASS INSULATION; POLYESTER SCRIM REINFORCED, POLYESTER FILM VAPOR BARRIER.

S. DUCT CLEANING:

1) CLEAN NEW AND EXISTING DUCT SYSTEM(S) BEFORE TESTING, ADJUSTING AND BALANCING.

2) CLEAN ALL AIR DEVICES, FANS, AHUS, RTUS, COILS AND RELATED COMPONENTS, DAMPERS, ACTUATORS, TURNING VANES AND DEDICATED EXHAUST AND VENTILATION COMPONENTS AND MAKE-UP AIR SYSTEMS.

3) WIPE DOWN ALL DUCTWORK WITH ISOPROPYL ALCOHOL. COMPLETELY CLEAN AND THOROUGHLY WASH ALL INTERNAL SURFACES USING A NONIONIC SURFACTANT, LOW PARTICULATE, LOW RESIDUE DETERGENT, AND WIPE DRY. USE A LINT FREE CLOTH TO REMOVE OIL AND VISIBLE PARTICULATES. DUCTWORK SHALL BE DELIVERED TO THE JOB SITE CAPPED AND WRAPPED IN SHRINK WRAP.

4) CLEANING PROCEDURES SHALL BE OUTLINED BY THE CONTRACTOR AND SUBMITTED FOR REVIEW PRIOR TO IMPLEMENTATION. PROCEDURES SHALL COMPLY WITH APPROPRIATE STANDARDS AND OWNER STANDARDS.

5) PROVIDE PHOTOGRAPHIC EVIDENCE OF DUCT CLEANING AS PART OF ACCEPTANCE.

T. DUCT SCHEDULE:

1) ALL DUCT SHALL BE GALVANIZED STEEL (MINIMUM 26 GAGE) EXCEPT AS FOLLOWS:

a. DUCTS EXPOSED TO THE WEATHER: DOUBLE-WALL, TYPE 304 STAINLESS STEEL

b. DUCTWORK EXPOSED IN ROOMS: TYPE 316L STAINLESS STEEL, EXTEND 2'-0" PAST THE ROOM CONSTRUCTION.

c. GMP AREA RETURNS / EXHAUST GRILLES & CONNECTIONS: 316L STAINLESS STEEL FOR 6'-0" FROM CONNECTION POINT.

d. OTHER APPLICATIONS AND MATERIALS AS INDICATED ON THE DRAWINGS.

15. DUCTWORK INSULATION:

A. SURFACE-BURNING CHARACTERISTICS:

1) INSULATION INSTALLED INDOORS: FLAME SPREAD INDEX OF 25 AND SMOKE DEVELOPED INDEX OF 50 ACCORDING TO ASTM E84.

B. PROVIDE MOCK-UP OF EACH TYPE OF DUCT INSULATION AND FINISH. FIELD INSPECTIONS SHALL BE BY CONTRACTOR-ENGGAGED AGENCY.

C. INDOOR AND OUTDOOR DUCTWORK SHALL BE INSULATED MINERAL-FIBER BOARD OR BLANKET WITH KRAFT ALUMINUM FOIL VAPOR BARRIER FACING. DENSITY SHALL BE 6.0 LBS. PER CU. FT., MINIMUM R-VALUES SHALL BE AS FOLLOWS:

1) INDOOR: R-6 MINIMUM

2) OUTDOOR: R-12 MINIMUM

3) WITHIN BUILDING ENVELOPE ASSEMBLY: R-12 MINIMUM

D. ALL INSULATION SHALL BE INSTALLED PER MANUFACTURER'S INSTALLATION PROCEDURES.

E. INDOOR, FIELD-APPLIED JACKET: PVC JACKET

F. OUTDOOR, FIELD-APPLIED JACKET: ALUMINUM JACKET.

16. AIR ACCESSORIES, GRILLES, REGISTERS AND DIFFUSERS

A. FURNISH AND INSTALL ALL DIFFUSERS, GRILLES AND REGISTERS AS INDICATED ON DRAWINGS, USE ALL ALUMINUM GRILLES IN WET LOCATIONS AND STAINLESS STEEL AIR TERMINALS IN GMP AND LABORATORY AREAS. ALL SIZES, AIR DISTRIBUTION PATTERNS AND AIR VOLUME CAPACITIES SHALL BE AS SPECIFIED ON THE DRAWINGS.

B. AIR RETURN GRILLS AND REGISTERS SHALL BE PROVIDED WITH FIXED FACE LOUVERS PARALLEL TO THE LONG DIMENSION AND SET AT 45 DEGREE ANGLE. FOR REGISTERS, PROVIDE KEY OPERATED OPPOSED BLADE DAMPERS FIXEDLY ATTACHED TO THE GRILLES.

C. ALL AIR OUTLETS SHALL BE AS INDICATED ON THE DRAWINGS AND SCHEDULES.

D. ALL CEILING TYPE AIR DIFFUSERS SHALL BE PROVIDED WITH EQUALIZING DEFLECTOR AND VOLUME DAMPERS.

E. A SCHEDULE OF DIFFUSERS, GRILLES AND REGISTERS WITH MANUFACTURERS' MODELS, SIZES, ACCESSORIES, FINISHES, ETC., SHALL BE SUBMITTED FOR APPROVAL PRIOR TO RELEASE FOR FABRICATION AND DELIVERY.

F. BACKDRAFT AND PRESSURE RELIEF DAMPERS: MULTIPLE BLADE, PARALLEL ACTION, GRAVITY BALANCED WITH RETURN SPRINGS. MAXIMUM LEAKAGE OF 20 CFM/SQ. FT. FOR DAMPERS LESS THAN 24 INCHES IN EITHER DIRECTION, 40 CFM/SQ. FT. FOR DAMPERS GREATER THAN 24 INCHES IN EITHER DIRECTION.

G. MANUAL VOLUME DAMPERS: MULTIPLE OR SINGLE BLADE, PARALLEL OR OPPOSED-BLADE WITH LINKAGE OUTSIDE THE AIRSTREAM. DAMPER SHALL HAVE LOCKING QUADRANT OPERATOR, BEARINGS BOLTED TO FRAME WITH INTEGRAL SHAFT SEALS. STANDARD AND LOW-LEAK STEEL AND ALUMINUM MANUAL VOLUME DAMPERS. DAMPERS SHALL HAVE MANUAL HAND QUADRANT ACTUATOR.

H. CONTROL DAMPERS: OPPOSED-BLADE DESIGN, MATERIAL SHALL BE GALVANIZED-STEEL, STAINLESS-STEEL OR ALUMINUM FRAME AND BLADES TO MATCH DUCT APPLICATION WITH NEOPRENE BLADE SEALS. DAMPER SHALL HAVE LOCKING QUADRANT OPERATOR, BEARINGS BOLTED TO FRAME WITH INTEGRAL SHAFT SEALS. MAXIMUM LEAKAGE 3 CFM PER SQ. FT. AT 1 IN W.G. STATIC PRESSURE. DAMPERS SHALL HAVE MANUAL HAND QUADRANT ACTUATOR.

I. FIRE DAMPERS:

1) FIRE DAMPER: FACTORY FABRICATED FUSIBLE LINK SHUTTER TYPE MECHANISM OUT OF THE AIRSTREAM. UL LISTED AND LABELED RATED AND IN CONFORMANCE WITH NFPA DYNAMIC DAMPER WITH REPLACEABLE HEAT-RESPONSIVE DEVICE.

2) FIRE DAMPER: RUSKIN MODEL DIBD2 (1.5 HR RATED) OR MODEL DIBD23 (3 HR RATED) AS REQUIRED, TYPE "B", OR APPROVED EQUAL UL 555.

K. FLANGE CONNECTORS.

L. DUCT SILENCERS: FACTORY FABRICATED AND TESTED, ROUND OR RECTANGULAR.

M. TURNING VANES: DOUBLE-BLADE GALVANIZED SHEET STEEL.

N. REMOTE DAMPER OPERATORS

O. DUCT-MOUNTED ACCESS DOORS: DOUBLE-WALL, RECTANGULAR, GALVANIZED SHEET STEEL WITH INSULATION. PROVIDE WITH SASH LOCKS AND PIANO TYPE HINGE AND DOOR GASKETS.

P. PRESSURE RELIEF ACCESS DOOR: DOUBLE WALL WITH INSULATION FILL.

Q. FLEXIBLE CONNECTORS:

1) INDOOR SYSTEMS: GLASS FABRIC DOUBLE COATED WITH NEOPRENE AND WITH THRUST LIMITS FOR FLEXIBLE CONNECTORS AT HIGH-PRESSURE FAN DISCHARGE. MINIMUM WEIGHT 26 OZ./ SQ. YD, TENSILE STRENGTH 480 LBF/IN IN THE WARP AND 360 LBF/IN IN THE FILLING. (-50°F TO 250°F)

2) OUTDOOR SYSTEMS: GLASS FABRIC DOUBLE COATED WITH WEATHERPROOF, SYNTHETIC RUBBER RESISTANT TO UV RAYS AND OZONE AND WITH THRUST LIMITS FOR FLEXIBLE CONNECTORS AT HIGH-PRESSURE FAN DISCHARGE. MINIMUM WEIGHT 24 OZ./ SQ. YD, TENSILE STRENGTH 530 LBF/IN IN THE WARP AND 440 LBF/IN IN THE FILLING. (-50°F TO 250°F)

3) MAINTAIN CHEMICAL AND TEMPERATURE COMPATIBILITY BETWEEN CONNECTOR, ENVIRONMENT AND CONVEYED AIR AND MATERIALS.

T. DUCT ACCESSORY HARDWARE.

U. AIR TERMINALS WITHIN GMP AREAS SHALL BE 316 STAINLESS STEEL CONSTRUCTION.

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Revision	YYYY.MM.DD

Issued	2023.02.15

PERMIT SET

CITY OF DORAL

MORGAN LEVY PARK RESTROOM RENOVATIONS

5300 NW 102nd AVENUE
Doral, FL 33178

Title
MECHANICAL SPECIFICATIONS

Project No.	Scale
227100129	As indicated
Revision	Drawing No.

M-001

10/11/2023 12:11:31 PM

ORIGINAL SHEET - ARCH E1 (30"x42")

MECHANICAL SPECIFCATIONS (CONTINUED)

17. DDC SYSTEM, SENSORS, AND CONTROLS

F. UNLESS OTHERWISE SHOWN LOCATE ALL ROOM THERMOSTATS 4'-0" (CENTERLINE) ABOVE FINISHED FLOOR. NOTIFY THE ENGINEER OF ANY ROOMS WHERE THE PRECEDING LOCATION CANNOT BE MAINTAINED OR WHERE THERE IS A QUESTION ON LOCATION.

G. LOCATE ALL MECHANICAL EQUIPMENT AND CONTROLS FOR UNOBSTRUCTED ACCESS TO ACCESS PANELS, CONTROLS AND VALVING.

H. SYSTEM DESCRIPTION: MICROPROCESSOR-BASED MONITORING AND CONTROL INCLUDING ANALOG/DIGITAL CONVERSION AND PROGRAM LOGIC.

I. PROVIDE SENSORS WITH NIST TRACEABLE CERTIFICATES, AND/OR WITH ADDITIONAL OR EQUIVILANT STANDARDS AS SPECIFIED AND IDENTIFIED BY FACILITY, WITH CALIBRATION DATES VALID WITHIN MINIMUM 6 MONTHS OF THE DATE OF INSTALLATION FOR TEMPERATURE, HUMIDITY, AND PRESSURE SENSORS, AND AS SPECIFIED AND IDENTIFIED BY FACILITY.

J. CONTROLS CONTRACTOR SHALL PERFORM 3 POINT VERIFICATION FOR ALL TEMPERATURE, HUMIDITY, PRESSURE SESNORS, AND ADDITIONAL SENSORS AS IDENTIFIED BY MYLAN, AFTER INSTALLATION TO VERIFY OPERATION IS WITHIN MYLAN SPECIFIED OPERATIONAL LIMITS.

K. ALL CONTROL EQUIPMENT SHALL BE COMPATIBLE WITH EXISTING SITE BMS, EMS, AND EQUIPMENT; AS WELL AS MEET ALL FACILITY SITE STANDARDS, AND CALIBRATION REQUIREMENTS.

L. BMS: EXISTING.

M. EMS: EXISTING.

18. SYSTEM IDENTIFICATION

A. INSTALL ON EACH SYSTEM IN EACH SEPARATED SPACE AND NOT MORE THAN 10 FEET APART, BOTH SIDES OF PARTITIONS, BEFORE AND AFTER TURNS, AND CLOSE TO VALVES AND FLANGES WHERE THEY CAN EASILY BE READ.

B. ALL PIPING SHALL BE IDENTIFIED BY SELF ADHESIVE COLOR CODED PIPE MARKERS WHICH LEGEND CONFORMS TO OSHA/ANSI STANDARDS INCLUDING, BUT NOT LIMITED TO, IDENTIFICATION OF FLOW DIRECTION, PRESSURE, SUPPLY/RETURN, PUMP DISCHARGE, AND SERVICE.

C. EACH SET SHALL CONSIST OF ONE BAND IDENTIFYING THE SYSTEM IN BLACK LETTERS 2" HIGH FOR 3" PIPE AND LARGER, 1-1/2" HIGH FOR 2-1/2" PIPE AND SMALLER; AND ONE BAND ON WHICH PRINTED A BLACK FLOW DIRECTIONAL ARROW.

D. ADHESIVE BANDS: "QUICK-LABEL B-350 PERMA-CODE FILM MARKERS" (W.H. BRADY COMPANY) OR OWNER APPROVED EQUAL.

E. NAMING CONVENTIONS SHALL FOLLOW SITE STANDARD FOR NAMING CONVENTIONS.

F. QUALITY STANDARD FOR IDENTIFICATION: ASME A13.1.

G. MAXIMUM TEMPERATURE: ABLE TO WITHSTAND TEMPERATURES UP TO 160 DEG F.

H. MINIMUM LABEL SIZE: LENGTH AND WIDTH VARY FOR REQUIRED LABEL CONTENT, BUT NOT LESS THAN 2-1/2 BY 3/4 INCH.

I. MINIMUM LETTER SIZE: 1/4 INCH FOR NAME OF UNITS IF VIEWING DISTANCE IS LESS THAN 24 INCHES, 1/2 INCH FOR VIEWING DISTANCES UP TO 72 INCHES, AND PROPORTIONATELY LARGER LETTERING FOR GREATER VIEWING DISTANCES. INCLUDE SECONDARY LETTERING TWO-THIRDS TO THREE-QUARTERS THE SIZE OF PRINCIPAL LETTERING.

J. EQUIPMENT LABELS: STAINLESS STEEL OR PLASTIC, THICK, WITH FASTENERS OR ADHESIVE.

K. WARNING SIGNS AND LABELS: MULTILAYER, MULTICOLOR, PLASTIC LABELS FOR MECHANICAL ENGRAVING, 1/16 INCH THICK WITH FASTENERS OR ADHESIVE.

L. WARNING TAPE: VINYL TAPE WITH WATERPROOF ADHESIVE BACKING SUITABLE FOR INDOOR OR OUTDOOR USE, 2 INCHES.

M. PIPE LABELS: SELF-ADHESIVE.

N. DUCT LABELS: MULTILAYER, MULTICOLOR, PLASTIC LABELS FOR MECHANICAL ENGRAVING, OR PRESSURE SENSITIVE VINYL.

O. DUCT LABEL CONTENTS: INCLUDE IDENTIFICATION OF DUCT SERVICE USING SAME DESIGNATIONS OR ABBREVIATIONS AS USED ON DRAWINGS; ALSO INCLUDE DUCT SIZE AND AN ARROW INDICATING FLOW DIRECTION.

P. FLOW-DIRECTION ARROWS: INTEGRAL WITH DUCT SYSTEM SERVICE LETTERING TO ACCOMMODATE BOTH DIRECTIONS OR AS SEPARATE UNIT ON EACH DUCT LABEL TO INDICATE FLOW DIRECTION.

Q. FASTENERS: STAINLESS-STEEL RIVETS OR SELF-TAPPING SCREWS.

R. ADHESIVE: CONTACT-TYPE PERMANENT ADHESIVE, COMPATIBLE WITH LABEL AND WITH SUBSTRATE.

S. STENCILS: ALUMINUM, BRASS, OR FIBERBOARD.

T. VALVE TAGS: BRASS OR STAINLESS STEEL, 0.32 INCH THICK, WITH BRASS LINK CHAIN FASTENERS.

U. WARNING TAGS: 3 BY 5-1/4 INCHES (75 BY 133 MM) MINIMUM; REINFORCED GROMMET AND WIRE OR STRING FASTENERS.

19. INSTALLATION

A. GENERAL:

1) PROVIDE FIRE STOPPING AT ALL PENETRATIONS THROUGH FIRE RATED PARTITIONS.

2) INSTALL ALL EQUIPMENT IN COMPLIANCE WITH OEM INSTALLATION INSTRUCTIONS.

3) INSTALL LABELS ON ALL NEW WORK.

B. DUCTWORK:

1) INSTALL IN ACCORDANCE WITH SMCANA, AND ISPE GUIDELINES

2) PROVIDE OPENINGS IN DUCTS WHERE REQUIRED TO ACCOMMODATE CONTROLLERS, SENSORS AND OTHER DEVICES.

3) PROVIDE PITOT TUBE OPENINGS WHERE REQUIRED FOR SYSTEM TESTING WITH METAL CAP AND SPRING OR SCREW DEVICE. PROVIDE METAL RING IN INSULATION WHERE OPENINGS ARE REQUIRED.

4) PROVIDE DRAINS IN OUTDOOR AIR, HUMIDIFIER AND COIL SECTIONS WITH DEEP SEAL TRAPS. CONNECT TO DRAINAGE SYSTEM.

5) SEAL SPACE AROUND DUCT PENETRATIONS THRU PARTITIONS.

6) DUCT SHALL BE DELIVERED TO THE SITE CAPPED AND COVERED. CAPS SHALL ONLY BE REMOVED WHEN CONNECTING THE NEXT PIECE OF DUCTWORK. PROVIDE TEMPORARY CAPS ON ALL WORK TO KEEP INTERNAL DUCTWORK CLEAN.

C. FIRE DAMPERS AND FIRE / SMOKE DAMPERS:

1) PROVIDE AND INSTALL 1-1/2 HOUR RATED FIRE DAMPERS AT WALLS / FLOORS LESS THAN 3 HRS RATING, AND 3 HOUR RATED FIRE DAMPERS AT WALLS / FLOORS 3 HOURS OR MORE RATING.

2) PROVIDE ACCESS DOOR AT EACH DAMPER UNLESS OTHERWISE NOTED. INSTALL FIRE DAMPERS AT PENETRATIONS THROUGH RATED PARTITIONS, REGARDLESS IF FIRE DAMPERS ARE NOT SHOWN ON PLANS.

3) PROVIDE AND INSTALL DAMPERS WHERE INDICATED ON DRAWINGS, AND AT ALL RATED WALLS REGARDLESS OF IF SHOWN ON DRAWINGS.

4) INSTALL DAMPERS AS REQUIRED BY THE CURRENT FLORIDA BUILDING CODE, OEM INSTALLATION INSTRUCTIONS, AND AS PER DRAWINGS.

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CITY OF DORAL

MORGAN LEVY PARK RESTROOM RENOVATIONS

5300 NW 102nd AVENUE
Doral, FL 33178

Title
MECHANICAL SPECIFICATIONS

Project No.	Scale
227100129	As indicated
Revision	Drawing No.
	M-002

10/11/2021 12:11:31 PM

ORIGINAL SHEET - ARCH E1 (30"x42")

GENERAL DEMOLITION NOTES

A. ALL EXISTING CONDITIONS INDICATED ON THESE DRAWINGS ARE APPROXIMATE AND BASED UPON A COMBINATION OF AVAILABLE RECORD DESIGN AND AS-BUILT DOCUMENTS.

B. UNLESS NOTED OTHERWISE, ALL OTHER EXISTING HVAC SYSTEMS TO REMAIN IN SERVICE UNCHANGED.

C. EXISTING GRILLES TO REMAIN TO BE RE-BALANCED TO CFM'S INDICATED ON PLAN.

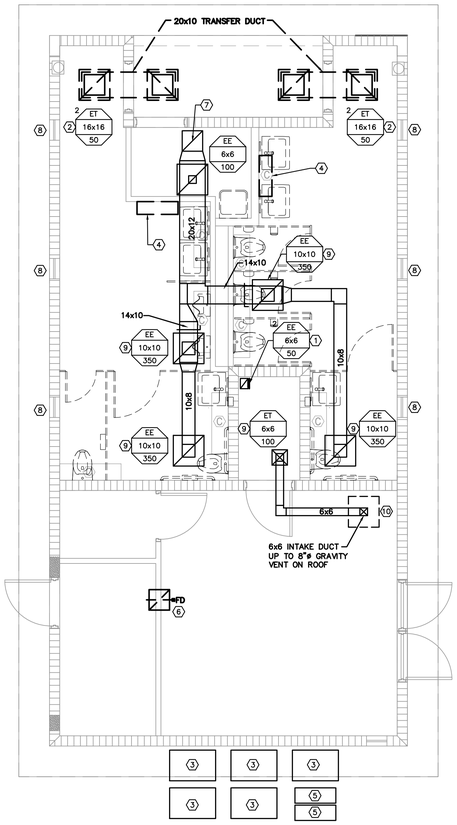
D. GRILLE TAG DESIGNATIONS ARE AS FOLLOWS:
-ES = EXISTING SUPPLY
-ER = EXISTING RETURN
-EE = EXISTING EXHAUST

E. PROVIDE BALANCING DAMPERS AT ALL BRANCHES AND SPLITS.

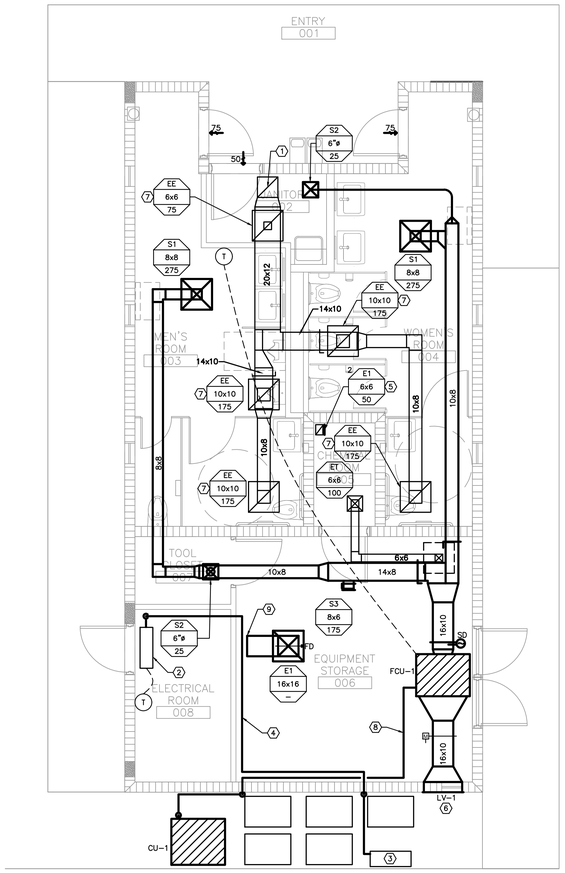
F. PRESSURIZATION AIRFLOWS SHOWN ARE ESTIMATES. T&B CONTRACTOR SHALL ADJUST RETURN/EXHAUST AIRFLOWS, AS NEEDED, TO ACCOMPLISH TRANSFER AIR DIRECTIONAL FLOWS INDICATED. SUPPLY AIRFLOWS INDICATED ARE MINIMUM REQUIRED.

KEYED NOTES

1. EXISTING EXHAUST GRILLES TO BE REPLACED WITH NEW.
2. EXISTING TRANSFER GRILLES AND ASSOCIATED DUCTWORK TO BE DEMOLISHED.
3. EXISTING CONDENSING UNITS TO REMAIN.
4. EXISTING WALL MOUNTED MINI-SPLIT TO BE REMOVED AND CONDITION EVALUATED. THE UNIT IN BETTER CONDITION IS TO BE RELOCATED TO ELECTRICAL ROOM WITH THE OTHER UNIT BEING RETURNED TO OWNER. ALL EXISTING MINI-SPLIT PIPING TO BE DEMOLISHED.
5. EXISTING MINI-SPLIT CONDENSING UNIT TO HAVE CONDITION EVALUATED. THE UNIT IN BETTER CONDITION IS TO REMAIN TO SERVE THE RELOCATED MINI-SPLIT WITH THE OTHER UNIT BEING RETURNED TO OWNER.
6. EXISTING FIRE DAMPER TO BE REMOVED AND CEILING OPENING TO BE PATCHED. REFER TO NEW WORK FOR NEW DUCT CONNECTION AND CEILING PENETRATION.
7. EXISTING RESTROOM EXHAUST FAN ON ROOF TO BE REPLACED WITH NEW.
8. EXISTING LOW WALL LOUVERS TO BE REMOVED AND FILLED IN.
9. EXISTING GRILLE TO REMAIN. REFER TO NEW WORK FOR NEW AIRFLOW BALANCE.
10. EXISTING CEILING ACCESS PANEL TO REMAIN.



1 DEMOLITION PLAN
M-201
1/4"=1'-0"



2 FLOOR PLAN
M-201
1/4"=1'-0"

GENERAL NOTES

A. ALL EXISTING CONDITIONS INDICATED ON THESE DRAWINGS ARE APPROXIMATE AND BASED UPON A COMBINATION OF AVAILABLE RECORD DESIGN AND AS-BUILT DOCUMENTS.

B. UNLESS NOTED OTHERWISE, ALL OTHER EXISTING HVAC SYSTEMS TO REMAIN IN SERVICE UNCHANGED.

C. EXISTING GRILLES TO REMAIN TO BE RE-BALANCED TO CFM'S INDICATED ON PLAN.

D. GRILLE TAG DESIGNATIONS ARE AS FOLLOWS:
-ES = EXISTING SUPPLY
-ER = EXISTING RETURN
-EE = EXISTING EXHAUST

E. PROVIDE BALANCING DAMPERS AT ALL BRANCHES AND SPLITS.

F. PRESSURIZATION AIRFLOWS SHOWN ARE ESTIMATES. T&B CONTRACTOR SHALL ADJUST RETURN/EXHAUST AIRFLOWS, AS NEEDED, TO ACCOMPLISH TRANSFER AIR DIRECTIONAL FLOWS INDICATED. SUPPLY AIRFLOWS INDICATED ARE MINIMUM REQUIRED.

KEYED NOTES

1. REFER TO FAN SCHEDULE FOR NEW EXHAUST FAN INFORMATION.
2. NEW LOCATION FOR RELOCATED EXISTING MINI-SPLIT. UNIT TO BE MOUNTED MINIMUM 1'-0" ABOVE DOOR.
3. LOCATION FOR EXISTING MINI-SPLIT CONDENSING UNIT TO REMAIN.
4. PROVIDE NEW SUPPLY/RETURN REFRIGERANT PIPING FOR EXISTING MINI-SPLIT AS SHOWN.
5. NEW EXHAUST GRILLES TO BE INSTALLED IN SAME PLACE AS PREVIOUS.
6. PROVIDE NEW 30x18 INTAKE LOUVER EQUIVALENT TO GREENHECK EVH-501D. MINIMUM 1.6 SQ. FT FREE AREA REQUIRED.
7. EXISTING GRILLE TO BE RE-BALANCED TO CFM INDICATED.
8. NEW FCU-1 REFRIGERANT SUPPLY/RETURN PIPING.
9. CONNECT NEW 16x16 EA DUCT TO EXISTING DUCT IN ATTIC SPACE CONNECTED TO EXISTING EXHAUST FAN.

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CITY OF DORAL

MORGAN LEVY PARK RESTROOM RENOVATIONS

5300 NW 102nd AVENUE
Doral, FL 33178

Title
MECHANICAL DEMOLITION AND NEW WORK PLAN

Project No.	Scale
227100129	As indicated

Revision | Drawing No.

M-201

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ORIGINAL SHEET - ARCH E1 (30"x42")

AIR DISTRIBUTION SCHEDULE

DESIGNATION	S1	S2	S3	E1
MANUFACTURER	TITUS	TITUS	TITUS	TITUS
MODEL	PAS	PAS	300FL	350ZFL
FACE SIZE	24 x 24	12 x 12	24 x 24	24 x 24
NECK SIZE	SEE DRAWINGS			
FRAME TYPE	NOTE 5			
DEVICE TYPE	CEILING DIFFUSER	CEILING DIFFUSER	SIDEWALL	CEILING DIFFUSER
SYSTEM	SUPPLY	SUPPLY	SUPPLY	EXHAUST
THROW	4-WAY	4-WAY	HORIZONTAL	-
OBD	YES	YES	NO	NO

NOTES:
1. ALTERNATE MANUFACTURERS OF EQUAL QUALITY MAY BE SUBMITTED FOR APPROVAL.
2. ALL AIR DEVICES SHALL BE ALL ALUMINUM CONSTRUCTION AND FULLY GASKETED.
3. UNLESS OTHERWISE NOTED, ALL AIR DEVICES FINISH SHALL BE BAKED OFF-WHITE.
4. FOR SQUARE NECK OUTLETS CONNECTED TO A ROUND FLEXIBLE OR RIGID DUCT, PROVIDE THE REQUIRED INSULATED SQUARE TO ROUND TRANSITION.
5. COORDINATE FRAME TYPE WITH ARCHITECT.

TAG LEGEND

CD TAG	DESIGNATION
	NECK SIZE
	CFM

FAN COIL UNIT SCHEDULE

DESIGNATION		FCU-1
SERVICE		RESTROOMS
LOCATION		EQUIPMENT STORAGE
TYPE		HORIZONTAL DRAW-THRU
FAN	CFM (DESIGN / BALANCE)	850 / 775
	ESP / TSP ("WG)	0.5 / 1.0
	DRIVE	DIRECT
	MOTOR HP	1/2
	VOLTAGE / PHASE	208 / 3
COOLING	TYPE	DX
	SENSIBLE (MBH)	32.52
	TOTAL (MBH)	72.92
	EAT °F DB/WB	91 / 79
	LAT °F DB/WB	56.2 / 55.3
	ROWS / FPI	4R / -
HEATING	TYPE	ELECTRIC
	KW	5.0
	TOTAL (MBH)	18.18
	EAT °F DB/WB	55 / 55
	LAT °F DB	74.8
OUTSIDE AIR CFM		775
FILTER	TYPE	PLEATED
	THICKNESS	2"
	EFFICIENCY	MERV-8
	PD (CLEAN / DIRTY) ("WG)	0.3 / 0.6
MANUFACTURER		TRANE
MODEL		BCHE036
DIMENSIONS (H x W x D) (IN)		17.0 x 42.0 x 33.1
WEIGHT (LBS)		234.2
NOTES		ALL

NOTES
1. PROVIDE WITH CONDENSATE PUMP.
2. PROVIDE WITH DISCONNECT.
3. PROVIDE WITH PROGRAMMABLE THERMOSTAT.
4. SINGLE STAGE HEATING.

FAN SCHEDULE

DESIGNATION	SERVICE	LOCATION	MANUFACTURER	MODEL	TYPE	DESIGN CFM	BALANCE CFM	ESP (IN. W.G.)	HP	MOTOR RPM	FAN RPM	DRIVE	VOLTAGE / PH / HZ	FLA	VFD	DIMENSIONS (L x W x H) (IN)	WEIGHT (LBS)	SONES	EMERGENCY	NOTES
EF-1	RESTROOMS	ROOF	LOREN COOK	101R28D	UPBLAST	850	775	0.50	1/3	2,800	1,857	DIRECT	120 / 1 / 60	-	NO	24 x 24 x 20	33	12.6	NO	ALL

NOTES:
1. PROVIDE WITH EC MOTOR.
2. OUTDOOR APPLICATION, HI-PRO ZINC COATING.
3. PROVIDE WITH ADJUSTABLE COUNTER-BALANCED BACKDRAFT GRAVITY DAMPER.
4. PROVIDE WITH BIRDSCREEN ON FAN DISCHARGE OUTLET.
5. PROVIDE FLEX CONNECTION AT FAN INLET.
6. FAN TO BE MIAMI-DADE NOA RATED.
7. PROVIDE WITH DISCONNECT SWITCH.
8. PROVIDE WITH 12" MANUFACTURER SLOPED ROOF CURB.
9. PROVIDE FIRE ALARM RELAY.

CONDENSING UNIT SCHEDULE

DESIGNATION	SERVICE	LOCATION	TONNAGE	OUTDOOR UNIT										SYSTEM DATA							EMERGENCY POWER	NOTES
				COMPRESSOR				FAN			MANUFACTURER	MODEL	DIMENSIONS (L x W x H) (IN)	WEIGHT (LBS)	MOCP	TOTAL INPUT (W)	VOLTAGE / PH / HZ	EER / SEER	HPSF	REFRIGERANT LINES			
				QTY	TYPE	RLA	LRA	QTY	FLA	MCA										LIQUID	SUCTION		
CU-1	FCU-1	GROUND LEVEL	6.0	1	SCROLL	19.6	-	1	2.20	27.0	TRANE	TTA07243AAA	41 x 33 x 39	241	45.0	-	208 / 3 / 60	- / -	-	7/8"	7/8"	NO	1-8

NOTES:
1. PROVIDE WITH SEACOAST SPRAY PROTECTION.
2. PROVIDE PERMANENT CLEAR WEATHERPROOF LABEL ON CU INDICATING UNIT SERVED.
3. INSULATED SUCTION LINES WITH 1" CLOSED CELL SLIP-ON ARMAFLEX APPROVED FOR OUTDOOR USE. PAINT WITH (2) COATS OF WB ARMAFLEX FINISH PAINT WHERE EXPOSED.
4. SUCTION AND LIQUID LINES SHALL BE SIZE PER MANUFACTURER'S RECOMMENDATION BASED ON ACTUAL ROUTING.
5. PROVIDE WEATHERPROOF DISCONNECT FOR CONDENSING UNIT ,INSTALLATION AND WIRING BY ELECTRICAL CONTRACTOR.
6. PROVIDE 0.75" RUBBER ISOLATION PADS FOR ALL CONDENSING UNITS.

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CITY OF DORAL

MORGAN LEVY PARK RESTROOM RENOVATIONS

5300 NW 102nd AVENUE
Doral, FL 33178

Title
MECHANICAL SCHEDULES

Project No. 227100129
Scale As indicated
Revision
Drawing No. **M-601**

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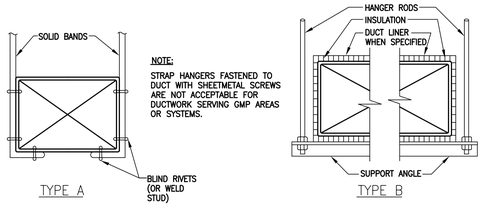
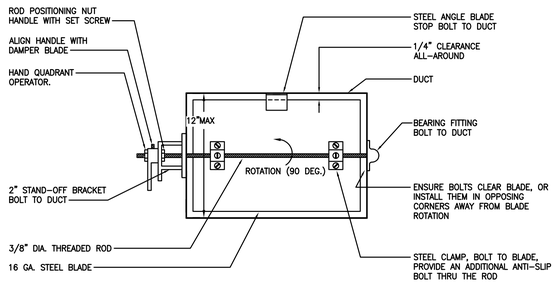
ORIGINAL SHEET - ARCH E1 (30"x42")



NOTE:
STRAP HANGERS FASTENED TO DUCT WITH SHEETMETAL SCREWS ARE NOT ACCEPTABLE FOR DUCTWORK SERVING GMP AREAS OR SYSTEMS.

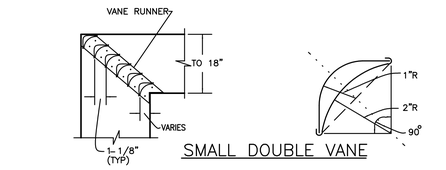
DUCT WIDTH	ROD DIAMETER	TYPE	SUPPORT ANGLE	MAX. SPACING
UP TO 24"	USE 1" x 1/8"	A	NONE	4'-0" O.C.
25" TO 36"	3/8"	B	1 1/2" x 1 1/2" x 1/8"	8'-0" O.C.
37" TO 48"	3/8"	B	2" x 2" x 1/8"	8'-0" O.C.
49" TO 60"	3/8"	B	2" x 2" x 3/16"	6'-0" O.C.
61" TO 84"	3/8"	B	2" x 2" x 1/4"	6'-0" O.C.
ABOVE	3/8"	B	SELECT FOR 1/2" MAX. DEFLECTION AT DES. LD	6'-0" O.C.

DUCTWORK HANGER
NOT TO SCALE

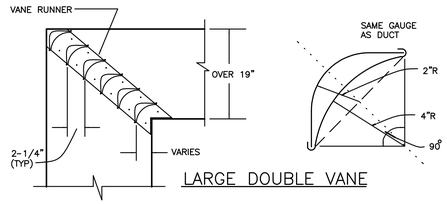


NOTES:
1. DAMPERS FOR ROUND DUCTS SHALL BE SIMILAR TO THE DAMPER SHOWN ABOVE.
2. ENSURE THAT FULL 90° DAMPER BLADE MOVEMENT IS UNOBSTRUCTED.

MANUAL DAMPER (ADJUSTABLE SINGLE-BLADE BALANCING TYPE)
NOT TO SCALE



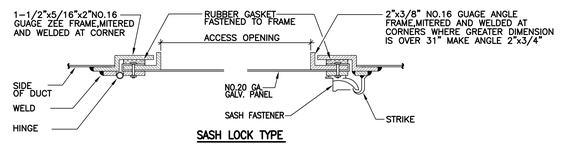
SMALL DOUBLE VANE



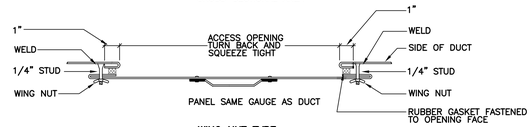
LARGE DOUBLE VANE

NOTES:
1. CONTRACTOR MAY USE TDC TYPE FLANGED JOINTS PROVIDED SPECIFIED MAXIMUM LEKEAGE RATES ARE NOT EXCEEDED NON-FLANGED TYPE SLIP AND DRIVE CONNECTIONS ARE ACCEPTABLE ONLY FOR NON-GMP AREAS.
2. ALL GMP SYSTEMS TO HAVE DUCTMATE FLANGED JOINTS OR EQUAL.

DUCT-TURN INSTALLATION
NOT TO SCALE



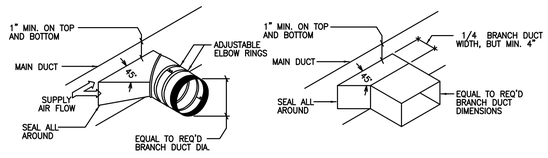
SASH LOCK TYPE
FOR DUCTS OVER 5 SQ.FT. CROSS-SECTIONAL AREA



WING NUT TYPE
FIRE DAMPER ACCESS AND DUCTS UP TO 5 SQ.FT. CROSS-SECTIONAL AREA

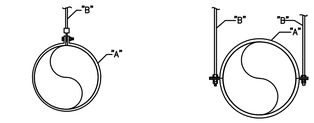
NOTE: NO RIVETS, BOLTS OR FASTENING PROJECTIONS INSIDE DUCT

DUCTWORK ACCESS PANEL INSTALLATION UNINSULATED DUCT
NOT TO SCALE

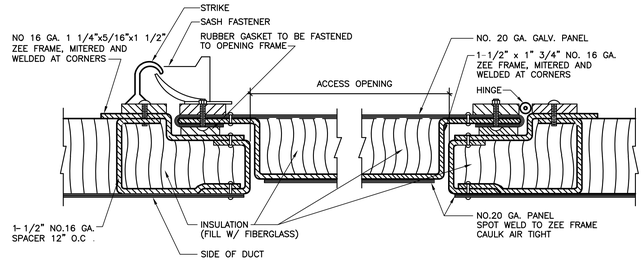


TYPICAL DUCT TAKE-OFF CONNETION
NOT TO SCALE

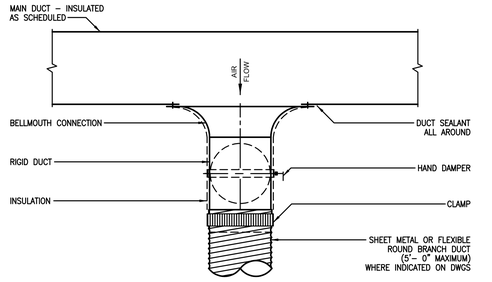
DUCT SIZE	"A" FLAT BAR	"B" ROD DIA
UP TO 24"	1"X1/8"	3/8"
25"TO 41"	1"X1/8"	3/8"
42"AND UP	1-1/2"X 3/16"	1/2"



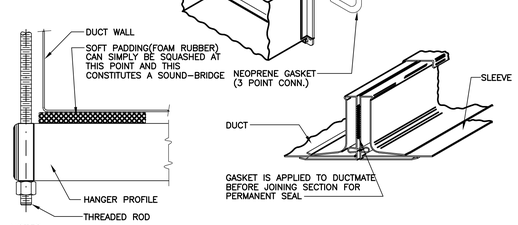
ROUND DUCT HANGER
NOT TO SCALE



DUCTWORK ACCESS PANEL INSTALLATION INSULATED DUCTS
NOT TO SCALE

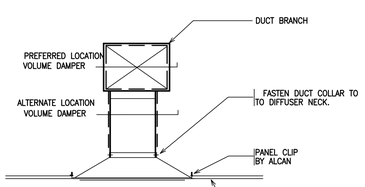


TYPICAL DETAIL OF ROUND SUPPLY AIR DUCT TAP (WITH VOLUME DAMPERS)
NOT TO SCALE

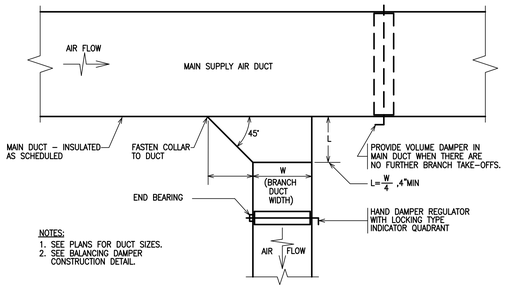


NOTES:
1. CONTRACTOR MAY USE TDC TYPE FLANGED JOINTS PROVIDED SPECIFIED MAXIMUM LEKEAGE RATES ARE NOT EXCEEDED NON-FLANGED TYPE SLIP AND DRIVE CONNECTIONS ARE ACCEPTABLE ONLY FOR NON-GMP AREAS.
2. ALL GMP SYSTEMS TO HAVE DUCTMATE FLANGED JOINTS OR EQUAL. SLIP AND DRIVE LOINTS ARE NOT ACCEPTABLE ON GMP DUCT SYSTEMS.
3. CONTRACTOR MAY USE TDC TYPE FLANGED JOINTS PROVIDED SPECIFIED MAXIMUM LEKEAGE RATES ARE NOT EXCEEDED NON-FLANGED TYPE SLIP AND DRIVE CONNECTIONS ARE NOT ACCEPTABLE

DUCTMATE INSTALLATION
NOT TO SCALE

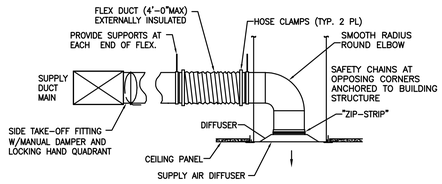


TYPICAL DIFFUSER CONNECTION
NOT TO SCALE



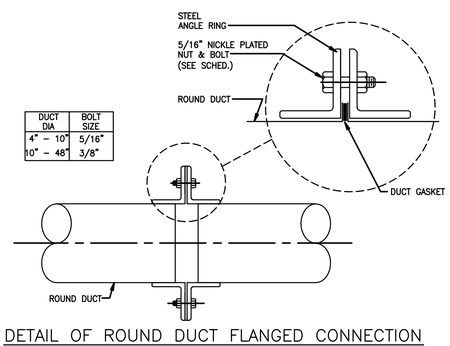
NOTES:
1. SEE PLANS FOR DUCT SIZES.
2. SEE BALANCING DAMPER CONSTRUCTION DETAIL.

TYPICAL DETAIL OF RECTANGULAR SUPPLY AIR DUCT TAP (WITH VOLUME DAMPERS)
NOT TO SCALE



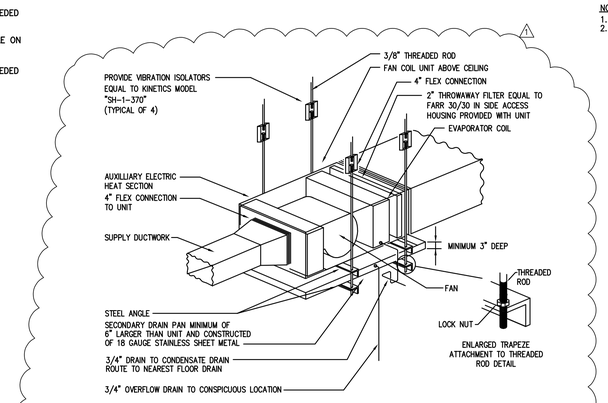
NOTES:
1. FLEXIBLE DUCT SHALL ONLY BE USED FOR STANDARD DIFFUSERS. FLEX DUCT TO TERMINAL FILTER HOUSINGS SHALL NOT BE ACCEPTABLE.

TYPICAL DIFFUSER CONNECTION
NOT TO SCALE



DUCT DIA	BOLT SIZE
4" - 10"	5/16"
10" - 48"	3/8"

DETAIL OF ROUND DUCT FLANGED CONNECTION
NOT TO SCALE

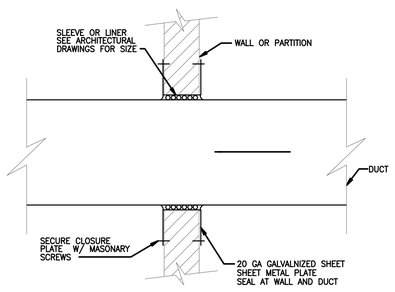


NOTE:
CONTRACTOR SHALL PROVIDE REQUIRED SIZED THREADED ROD AND TRAPEZE ANGLES FOR SUPPORTING MECHANICAL EQUIPMENT. TABLES ARE GUIDES FROM SMACNA HVAC DUCT CONSTRUCTION STANDARDS. CONTRACTOR SHALL REFER TO SMACNA FOR EQUIPMENT WEIGHING MORE THAN 920 LBS. AND REQUIRING TRAPEZE ANGLE MORE THAN 36" IN LENGTH.

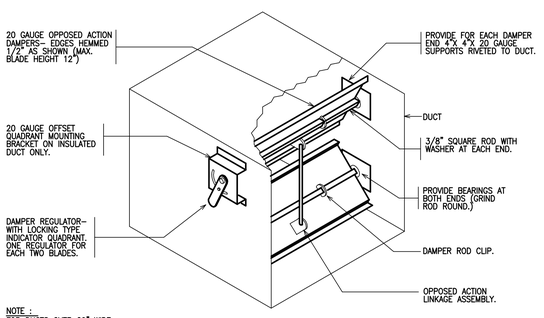
THREADED ROD SIZE	ALLOWABLE MAX. LOAD
3/8"	680 LBS.
1/2"	1250 LBS.
5/8"	2000 LBS.
3/4"	3000 LBS.

TRAPEZE ANGLES 36" IN LENGTH	ALLOWABLE MAX. LOAD
1-1/2"x1-1/2"x1/8"	340 LBS.
1-1/2"x1-1/2"x3/16"	500 LBS.
2"x2"x1/8"	620 LBS.
2"x2"x3/16"	920 LBS.

FAN COIL UNIT INSTALLATION DETAIL
NOT TO SCALE



DUCT PENETRATION THRU NON-RATED FIRE WALL
NOT TO SCALE



NOTE :
FOR DUCTS OVER 29" WIDE AND/OR OVER 12" HIGH.

LOW PRESSURE BALANCING DAMPER
NOT TO SCALE

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Jonathan Frank Quintero Lic. # 85345

JONATHAN FRANK QUINTERO LICENSE No. 85345 STATE OF FLORIDA PROFESSIONAL ENGINEER

1	BUILDING DEPARTMENT COMMENTS	2023-03-10
		YYYY.MM.DD

Revision

	2023.02.15

Issued

PERMIT SET

CITY OF DORAL

MORGAN LEVY PARK RESTROOM RENOVATIONS

5300 NW 102nd AVENUE
Doral, FL 33178

Title
MECHANICAL DETAILS

Project No.	Scale
227100129	As indicated
Revision	Drawing No.
	M-701

10/11/2021 12:11:31 PM

ORIGINAL SHEET - ARCH E1 (30"x42")

SYMBOLS

SYMBOL	DESCRIPTION
	SANITARY PIPING BELOW GRADE
	SANITARY PIPING ABOVE GRADE
	VENT PIPING
ST	STORM WATER PIPING
ST	STORM WATER PIPING BELOW GRADE
ED	EJECTOR DISCHARGE
SD	SUMP DISCHARGE
	COLD WATER PIPING
	HOT WATER PIPING
	EXISTING PIPING TO BE REMOVED
	EXISTING PIPING TO BE ABANDONED
	BALL VALVE
	SHUT-OFF VALVE
	CHECK VALVE
	PRESSURE REDUCING VALVE
	BALANCING VALVE ASSEMBLY
	COCK VALVE
	VALVE IN VERTICAL
	MIXING VALVE
	PIPE DROP OR DOWN
	PIPE CONNECTION, TOP
	PIPE CONNECTION, BOTTOM
	PIPE RISE OR UP
	"P" TRAP
	CLEANOUT
	CLEANOUT DECK PLATE
	CAPPED OUTLET
	VENT THROUGH ROOF
	FLOOR DRAIN
	FLOOR SINK
	ROOF DRAIN, AREA DRAIN
	YARD HYDRANT
	HOSE BIBB
	WALL HYDRANT
	VACUUM BREAKER ASSEMBLY
	THERMOMETER
	PRESSURE GAUGE W/VALVE
BFP	BACKFLOW PREVENTER
	WATER FILTER
	FLOOR, AREA DRAIN (RISER)
	ROOF DRAIN (RISER)
	WATER HAMMER ARRESTOR
M	METER
	PUMP
	DIRECTION OF FLOW
	PIPE BREAK
EJ	
	POINT OF CONNECTION NEW PIPE TO EXISTING
P / #	RISER DESIGNATION
ST / #	LEADER DESIGNATION
* / #	EQUIPMENT DESIGNATION
S	MOISTURE SENSOR

ABBREVIATIONS

SYMBOL	DESCRIPTION
AD	AREA DRAIN
ARCH	ARCHITECTURAL
BFP	BACKFLOW PREVENTER
BLDG	BUILDING
CLG	CEILING
CODP	CLEANOUT DECK PLATE
COWP	CLEANOUT WALL PLATE
CONN	CONNECTION
CONT	CONTINUATION
CTE	CONNECT TO EXISTING
CW	DOMESTIC COLD WATER PIPING
DIA	DIAMETER
DFU	DRAINAGE FIXTURE UNIT VALUES
DN	DOWN
DR	DRAIN
DWG	DRAWING
ED	EJECTOR DISCHARGE
EA	EACH
EL	ELEVATION
EQ	EQUAL
ETR	EXISTING TO REMAIN
EXIST	EXISTING
FAI	FRESH AIR INLET
FD	FLOOR DRAIN
FS	FLOOR SINK
F.F.	FINISH FLOOR
FL	FLOOR
FPC	FLORIDA PLUMBING CODE
GD	GUTTER DRAIN
GH	GROUND HYDRANT
HB	HOSE BIBB
HW	DOMESTIC HOT WATER PIPING
HWR	DOMESTIC HOT WATER RETURN PIPING
INV.EL.	INVERT ELEVATION
MAX	MAXIMUM
MECH	MECHANICAL
MIN	MINIMUM
NFH	NON FREEZE HYDRANT
NGVD	NATIONAL GEODETIC VERTICAL DATUM
NTS	NOT TO SCALE
OD	OVERFLOW DRAIN
PD	PUMP DISCHARGE
PRV	PRESSURE REDUCING VALVE
RD	ROOF DRAIN
REX	REMOVE EXISTING
RPZ	REDUCED PRESSURE ZONE BACKFLOW PREVENTER
S	SANITARY WASTE
SD	SUMP (PUMP) DISCHARGE
SF	SQUARE FEET
ST	STORM WATER PIPING
TD	TRENCH DRAIN
TYP	TYPICAL
V	VENT PIPING
VIF	VERIFY IN FIELD
VLV	VALVE
VTR	VENT THROUGH ROOF
W	WASTE PIPING
W/	WITH
W/O	WITHOUT
WH	WALL HYDRANT
WHA	WATER HAMMER ARRESTOR
WSFU	WATER SUPPLY FIXTURE UNIT VALUE
YH	YARD HYDRANT

NOTE:
SYMBOLS AND ABBREVIATIONS LIST IS PROVIDED FOR CONVENIENCE ONLY. NOT ALL SYMBOLS OR ABBREVIATIONS ARE NECESSARILY USED IN THIS PROJECT.

GENERAL PLUMBING NOTES

1. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO ALL APPLICABLE LOCAL CODES AND REGULATIONS.
2. DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENT OF SYSTEMS AND WORK INCLUDED. FOLLOW DRAWINGS IN LAYING OUT WORK AND CHECK DRAWINGS OF OTHER TRADES RELATING TO WORK TO VERIFY SPACE IN WHICH WORK WILL BE INSTALLED. MAINTAIN HEADROOM AND SPACE CONDITIONS AT ALL TIMES.
3. COORDINATE PLUMBING SYSTEMS WITH WORK OF ALL OTHER TRADES PRIOR TO ANY FABRICATION OR INSTALLATION. PROVIDE ALL FITTINGS, OFFSETS, AND TRANSITIONS AS REQUIRED FOR A COMPLETE WORKABLE INSTALLATION.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS PRIOR TO COMMENCE OF WORK.
5. ALL DRAINAGE SYSTEM DESIGN IS BASED ON 1/4" PER FOOT MINIMUM FALL FOR PIPES 2 1/2" OR LESS, 1/8" PER FOOT MINIMUM FALL FOR PIPES 3" TO 6", AND 1/16" PER FOOT MINIMUM FOR PIPES 8" OR LARGER. GREASE WASTE IS BASED ON 1/4" PER FOOT MINIMUM FALL FOR ALL SIZES. ANY DEVIATION SHALL BE APPROVED BY ARCHITECT/ENGINEER.
6. PROVIDE CLEAN-OUTS AT BASES, AND HORIZONTAL OFFSETS OF ALL SANITARY STACKS AND STORM DOWNSPOUTS.
7. SANITARY AND VENT PIPING INDICATED IS ABOVE CEILING. REFER TO INDIVIDUAL STACK DIAGRAMS FOR WASTE AND VENT PIPING RUN WITHIN WALLS
8. ALL SHUT-OFF VALVES SHALL BE INSTALLED ABOVE AN ACCESSIBLE CEILING, OR ABOVE AN ACCESS DOOR IN A GYPSUM CEILING.
9. ALL FIRE-STOPPING SHALL BE DONE BY THE CONTRACTOR PERFORMING THE WORK REQUIRING THE PENETRATION. REFER TO THE DETAILS PERTAINING TYPE AND METHOD REQUIRED.
10. ALL WORK SHALL BE IN ACCORDANCE WITH THE FBC PLUMBING 2020 EDITION AND THE 2020 ACCESSIBILITY CODE

PLUMBING SPECIFICATIONS

A. GENERAL:
1. WORK UNDER THIS SECTION INCLUDES FURNISHING ALL LABOR, EQUIPMENT, MATERIALS, SUPPLIES AND COMPONENTS AS PERFORMING ALL OPERATIONS AS NECESSARY FOR THE INSTALLATION OF THE COMPLETE PLUMBING SYSTEM.
2. INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
3. SUBMIT MANUFACTURER'S DATA AND SHOP DRAWINGS ON ALL EQUIPMENT FOR REVIEW BEFORE INSTALLATION.
4. ALL DIMENSIONS AND ACTUAL CONSTRUCTION CONDITIONS MUST BE VERIFIED AT THE JOB SITE.
5. THE CONTRACTOR PERFORMING THE WORK SHALL COORDINATE ALL HIS WORK WITH OTHER TRADES AND FIELD CONDITIONS.
6. PLUMBER SHALL NOT DEVIATE FROM THE SANITARY CONNECTION FORMAT WITHOUT ENGINEER'S APPROVAL.
7. THE CONTRACTOR PERFORMING THE WORK, PRIOR TO SUBMITTING HIS BID PRICE, SHALL VISIT THE SITE, FAMILIARIZE HIMSELF WITH ALL FIELD CONDITIONS, AND SHALL OBTAIN ALL REQUIRED INFORMATION NECESSARY TO COMPLETE THE JOB. ANY DISCREPANCIES BETWEEN WHAT IS SHOWN ON THE DRAWINGS AND ACTUAL WORK REQUIRED TO COMPLETE THE JOB SHALL BE TAKEN INTO ACCOUNT IN THE BID PRICE.

B. SANITARY WASTE, STORM AND VENT PIPING:
1. SHALL BE PVC SCHEDULE 40, WHEN NOT IN A RETURN AIR PLENUM, OR COPPER TYPE "M" VENT WHEN IN PLENUM.
2. ALL SANITARY, STORM HORIZONTAL PIPING SHALL BE SLOPED AT 1/4" PER FOOT MINIMUM FALL FOR PIPES 2 1/2" OR LESS, 1/8" PER FOOT MINIMUM FALL FOR PIPES 3" TO 6", AND 1/16" PER FOOT MINIMUM FOR PIPES 8" OR LARGER

C. CONDENSATE PIPING:
1. A/C CONDENSATE SHALL BE COPPER TYPE "M", WHEN NOT IN A RETURN AIR PLENUM, OR COPPER TYPE "L" WHEN IN PLENUM. INSULATE ALL RUNS WITH 1/2" FIBERGLASS INSULATION WITH ALL SERVICE JACKET INSTALLED PER MANUFACTURER'S RECOMMENDATIONS OR 1/2" ARMAFLEX.

D. PIPE HANGERS AND SUPPORTS:
1. PROVIDE ADJUSTABLE HANGERS, INSERTS AND SUPPLEMENTARY STEEL AS REQUIRED FOR PROPER SUPPORT OF PIPE LINES. PHD MANUFACTURING PIPE HANGERS & DEVICES.

E. CLEANOUTS:
1. CLEANOUTS SHALL BE PROVIDED AND INSTALLED AT CHANGE OF DIRECTION ON ALL SOIL OR WASTE PIPING.
2. CLEANOUT COVERS:
   WALLS – MIFAB #C1430-RD STAINLESS STEEL FINISH
   RESILIENT FLOORS – MIFAB #C1220 SERIES
   CONCRETE FLOORS – MIFAB #C1226 SERIES

F. EXECUTION:
1. ALL WATER PIPING SHALL BE TESTED AT 100 PSIG, STERILIZED AND FLUSHED BEFORE CONNECTION TO BUILDING SYSTEMS.

G. ESCUTCHEONS:
1. ESCUTCHEONS SHALL BE PROVIDED AND INSTALLED ON ALL PIPES PASSING THROUGH WALLS, FLOORS AND CEILINGS OF FINISHED AREAS. PROVIDE CHROME PLATED OR STAINLESS STEEL ESCUTCHEONS WITH SET SCREWS FOR HOLDING SECURELY IN PLACE.
2. LOCKER ROOM: ONE-PIECE, CLEANROOM TYPE: HYGIENIC WHITE SILICONE SELF-SEALING BOOT WITH 316 STAINLESS STEEL FLANGE WITH FLAT PRE-DRILLED MOUNTING HOLES. MAXIMUM TEMPERATURE RATING OF 500°F AND IP34 RATING. PIPETITE BY CSI OR APPROVED EQUAL.

PLUMBING DEMOLITION NOTES

1. THIS CONTRACTOR SHALL VISIT THE SITE AND ADJOINING AREAS, EXAMINE AND BE FAMILIAR WITH ALL EXISTING CONDITIONS AND DETERMINE THE IMPACT ON THE EXECUTION OF WORK OF THIS CONTRACT. THIS CONTRACTOR SHALL PERFORM THIS PRIOR TO THE SUBMISSION OF HIS PROPOSAL. SUBMISSION OF A PROPOSAL WILL BE CONSTRUED AS EVIDENCE THAT SUCH AN EXAMINATION HAS BEEN MADE AND LATER CLAIMS WILL NOT BE RECOGNIZED FOR EXTRA LABOR, EQUIPMENT OR MATERIALS REQUIRED BECAUSE OF DIFFICULTIES ENCOUNTERED WHICH COULD HAVE BEEN FORESEEN HAD SUCH AN EXAMINATION BEEN MADE. SINCE THE WORK INVOLVES EXISTING BUILDINGS, SYSTEMS AND FACILITIES, SPECIAL CONSIDERATION SHALL BE GIVEN TO EXAMINATION OF WORKING CONDITIONS, EXISTING FACILITIES AND ALL BUILDING STRUCTURES. THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH ALL EXISTING CONDITIONS LIGHT VARIATION OF ROUTING AND OR CONSTRUCTIONS SHOULD BE ANTICIPATED BY THIS CONTRACTOR TO AVOID CONFLICTS WITH OTHER TRADES. THESE ARE EXPRESSLY INCLUDED AS PART OF THE WORK WHENEVER REQUIRED AT NO ADDITIONAL COST TO THE OWNER. IGNORANCE ON THE PART OF THE CONTRACTOR WILL IN NO WAY RELIEVE HIM OF THE OBLIGATIONS AND RESPONSIBILITIES ASSUMED UNDER THIS CONTRACT.
2. THE PLUMBING SCOPE OF WORK CONSISTS OF REMOVING EXISTING PLUMBING FIXTURES, TRIMS AND ASSOCIATED ACCESSORIES TO THE EXISTING FIXTURE ROUGH-IN AT THE WALL. AN ADD ALTERNATE PROPOSAL SHALL BE PROVIDED TO REPLACE ALL DOMESTIC WATER PIPING, SANITARY WASTE PIPING, SANITARY VENT PIPING, AND ASSOCIATED ACCESSORIES INCLUDING BUT NOT LIMITED TO EXISTING CARRIERS AND HANGERS WITHIN THE AREA OF WORK TO THE EXISTING RISERS.
3. EACH BIDDER SHALL VISIT THE SITE AND BECOME INFORMED AS TO THE CONDITION OF THE PREMISES AND THE EXTENT AND CHARACTER OF WORK REQUIRED.
4. DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENT.
5. VERIFY ALL GOVERNING DIMENSIONS, PIPE SIZES AND LOCATION OF THE EXISTING PIPING AND EQUIPMENT.
6. UPON COMPLETION OF ALL NEW WORK NO ABANDONED PIPING SHALL REMAIN.
7. THE EXISTING SYSTEMS SHALL BE LEFT IN PERFECT WORKING ORDER UPON COMPLETION OF ALL NEW WORK.
8. LOCATIONS AND SIZES OF EXISTING PIPING ARE APPROXIMATE. EXACT SIZES AND LOCATIONS OF ALL EXISTING PIPING SHALL BE VERIFIED AT THE SITE.
9. NO REMOVED EXISTING PIPING FITTINGS, VALVES, FIXTURES, ETC. SHALL BE REUSED UNLESS OTHERWISE APPROVED BY THE ENGINEER.
10. REFER TO ARCHITECTURAL DRAWINGS FOR ALL CEILING HEIGHTS.
11. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL FROM THE PREMISES ALL DEBRIS RESULTING FROM PLUMBING WORK. UNNECESSARY NOISE SHALL BE AVOIDED AT ALL TIMES AND NECESSARY NOISE SHALL BE REDUCED TO A MINIMUM.
12. ANY AND ALL REQUIRED DEMOLITION WORK TO BE PERFORMED ABOVE EXISTING SUSPENDED CEILINGS AND FURRED OUT WALLS SHALL BE DONE AT THE TIME WHEN THE EXISTING CEILINGS AND FURRED OUT WALLS ARE REMOVED BY THE GENERAL CONTRACTOR.
13. ALL EQUIPMENT AND INSTALLATIONS MUST BE EQUAL TO THE STANDARDS OF THE BASE BUILDING. ANY DEVIATION FROM BUILDING STANDARDS WILL BE PERMITTED ONLY IF INDICATED OR SPECIFIED ON THESE PLANS AND SPECIFICATIONS, AND APPROVED.

MAXIMUM FLOW RATE PER FIXTURE

(NOT ALL FIXTURES SHOWN ARE NECESSARILY USED ON THIS PROJECT)

FIXTURE	MAXIMUM FLOW RATE
WATER CLOSET (ALL TYPES)	1.28 GALLONS PER FLUSH
LAVATORY (PUBLIC)	0.5 GPM AT 60 PSI
URINAL	0.5 GALLONS PER FLUSH

MAXIMUM FLOW RATES PER LOCAL MIAMI-DADE AMENDMENT 8-31 TO THE FLORIDA BUILDING CODE.

EXCEPTIONS: SERVICE SINKS, DRINKING FOUNTAINS

MINIMUM FLOW PER FIXTURE AT PEAK DEMAND

(NOT ALL FIXTURES SHOWN ARE NECESSARILY USED ON THIS PROJECT)

FIXTURE	FLOW RATE	FLOW PRESSURE
WATER CLOSET (FLUSH VALVE)	25 GPM	35 PSI
WATER CLOSET (FLUSH TANK)	1.6 GPM	20 PSI
LAVATORY (PUBLIC)	0.4 GPM	8 PSI
URINAL	12 GPM	25 PSI
SERVICE SINK	3 GPM	8 PSI
DRINKING FOUNTAIN	0.75 GPM	8 PSI

OPENING / SLEEVE SCHEDULE

INSULATED DOMESTIC COLD WATER, HOT WATER, AND HOT WATER RECIRCULATION PIPING

PIPE DIAMETER	WALL / FLOOR SLEEVE DIAMETER	BEAM OPENING DIAMETER
¾" & 1"	3"	4"
1¼"	4"	4½"
1½"	4"	5"
1¾"	4"	5"
2" & 2½"	5"	6"
3"	6"	6½"
4"	8"	7½"
5"	8"	8½"
6"	10"	9½"

UNINSULATED SANITARY, WASTE, VENT, STORM, AND GAS PIPING

PIPE DIAMETER	WALL / FLOOR SLEEVE DIAMETER	BEAM OPENING DIAMETER
1¼"	3"	3"
2"	4"	3½"
2½"	4"	4"
3"	5"	4½"
4"	6"	5½"
5"	8"	6½"
6"	8"	7½"
8"	10"	9½"
10"	12"	11½"
12"	15"	13½"
	18"	16½"

FIXTURE CONNECTION SCHEDULE

(NOT ALL FIXTURES SHOWN ARE NECESSARILY USED ON THIS PROJECT)

SYM	FIXTURE	S	W	IW	V	CW	HW
P-1	WATER CLOSET (FLUSH VALVE)	4"			2"	1½"	
P-1A	WATER CLOSET – HANDICAP (FLUSH TANK)	4"			2"	1"	
P-2	LAVATORY		1½"		1½"	1"	1"
P-2A	LAVATORY – HANDICAP		1½"		1½"	1"	1"
P-3	URINAL (FLUSH VALVE)	2"			1½"	1"	
P-3A	URINAL – HANDICAP (FLUSH VALVE)	2"			1½"	1"	
P-4	JANITOR'S MOP SINK		3"		2"	s"	s"
P-5	DRINKING FOUNTAIN		1½"		1½"	1"	
P-6	SINK		1½"		1½"	1"	1"

ELECTRIC WATER HEATER SCHEDULE

MARKS	MANUFACTURER	MODEL	TANK	CAPACITY	SET TEMP.	DIMENSIONS	UEF	ELECTRICAL KW	ELECTRICAL VOLT	ELECTRICAL PH	REMARKS
EWH-1	LOCHINVAR	JR-J-020-K-S	YES	20 GAL	110° F	24.75"H x 18"ø	0.95	4.5	208	1	–

PIPE, FITTING, AND JOINT MATERIAL SCHEDULE

PIPING SYSTEM	PIPING LOCATION	PIPING SIZE	PIPING SPECIFICATION	FITTING SPECIFICATION	JOINT SPECIFICATION
SANITARY/WASTE/ VENT/STORM	BELOW GROUND	ALL	SOLID CORE SCHEDULE 40 PVC	SCHEDULE 40 DWV FITTING	SOLVENT CEMENT WELDED.
	ABOVE GROUND	ALL	SOLID CORE SCHEDULE 40 PVC	SCHEDULE 40 DWV FITTING	SOLVENT CEMENT WELDED.
INDIRECT WASTE	ABOVE GROUND	ALL	TYPE DWV COPPER TUBING	WROUGHT COPPER WITH SOLDER ENDS	95.5 TIN / 4.0 COPPER / 0.5 SILVER SOLDER
COLD WATER/HOT WATER/ HOT WATER CIRCULATION	DISTRIBUTION	ALL	TYPE L HARD DRAWN COPPER TUBING	WROUGHT COPPER WITH SOLDER ENDS	95.5 TIN / 4.0 COPPER / 0.5 SILVER SOLDER

PLUMBING FIXTURE CONNECTION SCHEDULE

MARKS	DESCRIPTION	WASTE	C.W.	H.W.	REMARKS
P-1	WATER CLOSET	4"	1"	--	FLOOR MOUNTED FLUSH TANK (1.6 GPM)
P-1A	WATER CLOSET (HANDICAP)	4"	1"	--	FLOOR MOUNTED FLUSH TANK (16 GPM)
P-2	LAVATORY	1¼"	½"	--	COUNTER TOP
P-2A	LAVATORY (HANDICAP)	1¼"	½"	--	MOUNTED WALL HUNG
P-3	URINAL	2"	¾"	--	WALL MOUNTED FLUSH VALVE
P-4	SERVICE SINK	2"	½"	1½"	HUNG SINK AMERICAN STANDARD OR APPROVED EQUAL
P-5	ELECT. WATER COOLER (HD)	1¼"	½"	--	BI-LEVEL WALL MOUNTED

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Jonathan Frank Quintero Lic. # 85345

JONATHAN FRANK QUINTERO * LICENSE * No. 85345 * STATE OF FLORIDA * PROFESSIONAL ENGINEER

1	BUILDING DEPARTMENT COMMENTS	2023.03.10
Revision		YYYY.MM.DD
Issued		2023.02.15

PERMIT SET

CITY OF DORAL

MORGAN LEVY PARK RESTROOM RENOVATIONS

5300 NW 102nd AVENUE
Doral, FL 33178

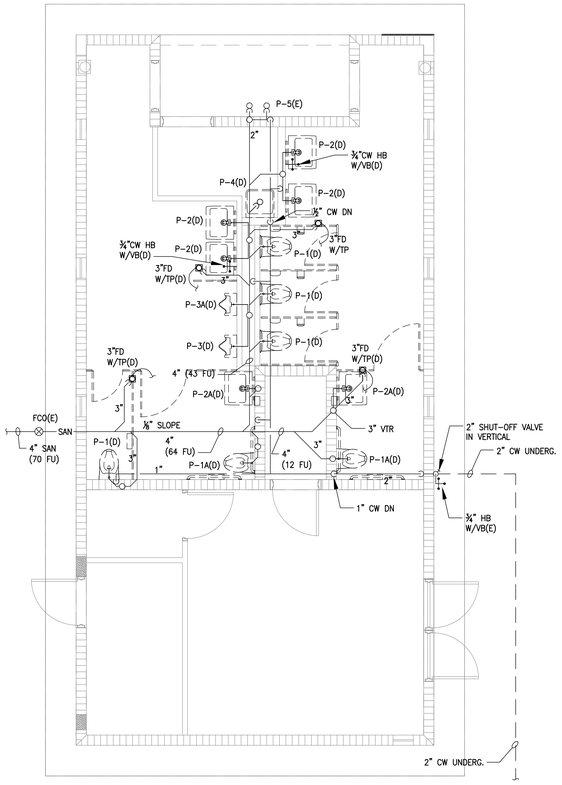
Title

PLUMBING SYMBOLS, ABBREVIATIONS, NOTES, SPECIFICATIONS, AND SCHEDULES

Project No.	Scale
227100129	As indicated
Revision	Drawing No.

P-001

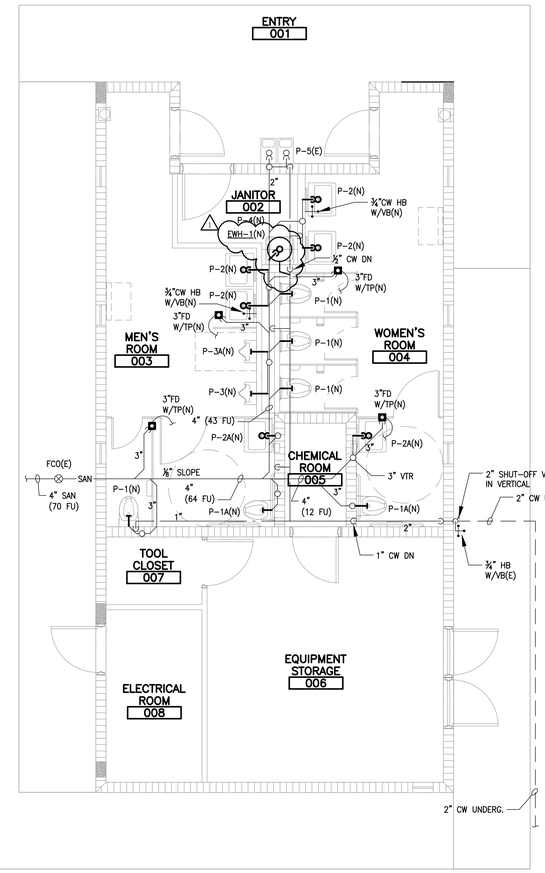
NOTES:
(E) INDICATED EXISTING PLUMBING FIXTURES TO REMAIN.
(D) INDICATED DEMOLITION OF PLUMBING FIXTURES AND TRIMS TO EXISTING PLUMBING ROUGH-IN.



1 P-101 PLUMBING DEMOLITION PLAN

1/4"=1'-0"

NOTES:
(E) INDICATED EXISTING PLUMBING FIXTURES TO REMAIN.
(N) INDICATED NEW PLUMBING FIXTURES AND TRIMS CONNECTED TO EXISTING PLUMBING ROUGH-IN.



2 P-101 PLUMBING FLOOR PLAN

1/4"=1'-0"

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MORGAN LEVY PARK RESTROOM RENOVATIONS

5300 NW 102nd AVENUE
Doral, FL 33178

Title
ENLARGED PLUMBING PLANS

Project No.	Scale
227100129	As indicated
Revision	Drawing No.
	P-101

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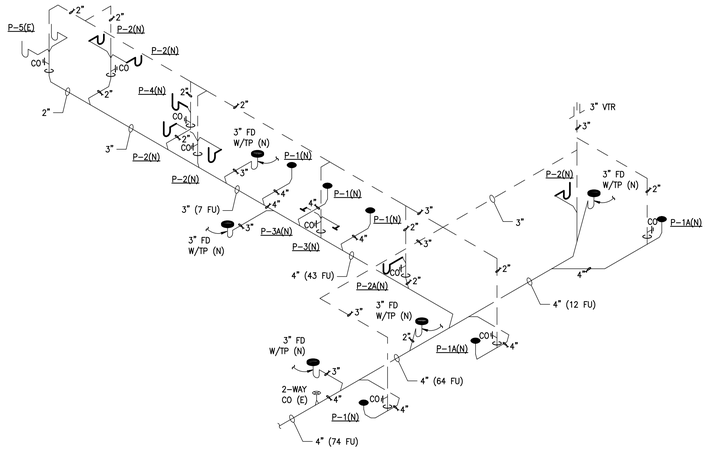
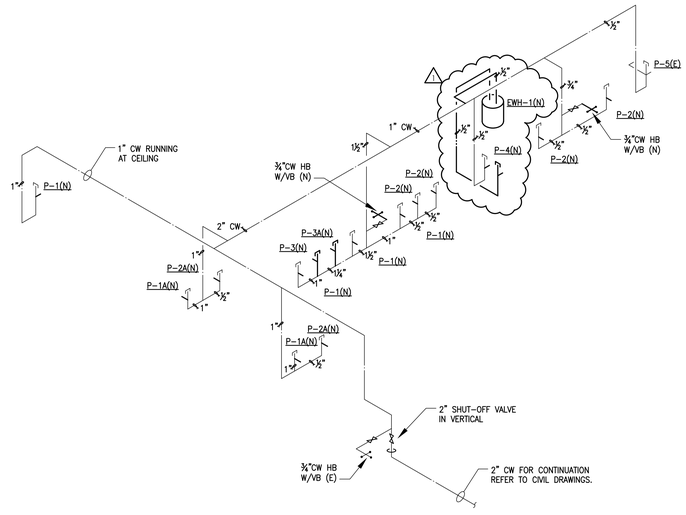
ORIGINAL SHEET - ARCH E1 (30"x42")



NOTES:
(E) INDICATED EXISTING PLUMBING FIXTURES TO REMAIN.
(N) INDICATED NEW PLUMBING FIXTURES AND TRIMS CONNECTED TO EXISTING PLUMBING ROUGH-IN.

SANITARY PIPING - ISOMETRIC

N.T.S.



NOTES:
(E) INDICATED EXISTING PLUMBING FIXTURES TO REMAIN.
(N) INDICATED NEW PLUMBING FIXTURES AND TRIMS CONNECTED TO EXISTING PLUMBING ROUGH-IN.

COLD WATER PIPING - ISOMETRIC

N.T.S.

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CITY OF DORAL

MORGAN LEVY PARK RESTROOM RENOVATIONS

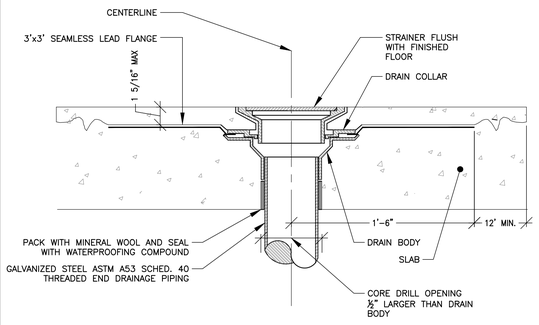
5300 NW 102nd AVENUE
Doral, FL 33178

Title
PLUMBING ISOMETRICS

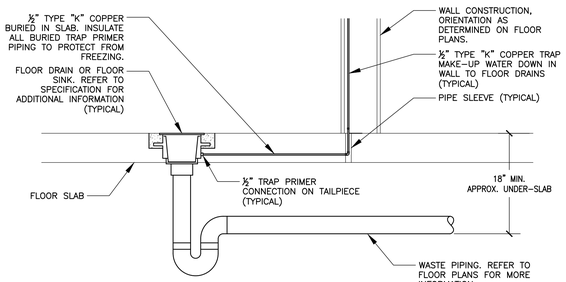
Project No. 227100129	Scale As indicated
Revision	Drawing No. **P-201**

10/11/2021 12:11:31 PM

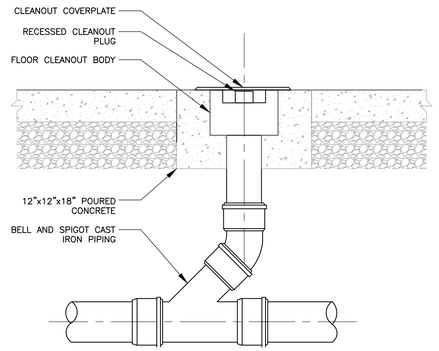
ORIGINAL SHEET - ARCH E1 (30"x42")



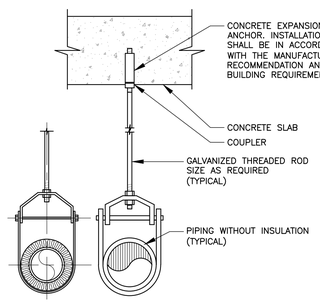
1 P-301 TYPICAL FLOOR DRAIN INSTALLATION DETAIL
SCALE: NTS

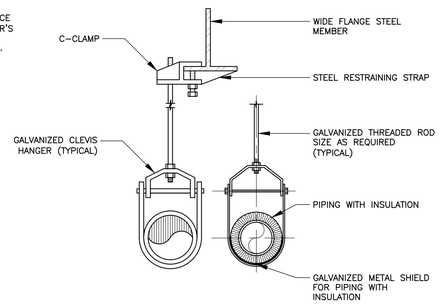


2 P-301 TYPICAL FLOOR DRAIN LAYOUT DETAIL
SCALE: NTS



3 P-301 FINISH FLOOR CLEAN OUT
SCALE: NTS

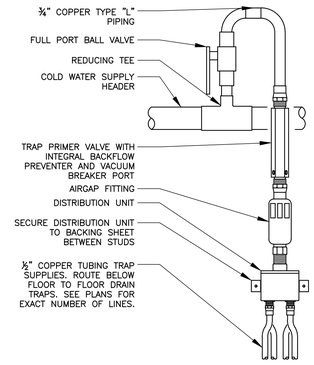




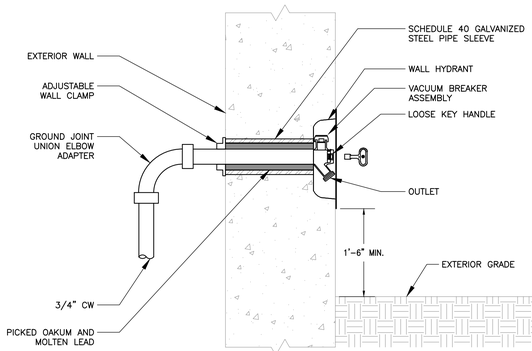
NOTES:

1. CLEVIS HANGERS REQUIRED ON PIPING LARGER THAN 1".
2. ALL COPPER PIPING TO BE PROTECTED FROM HANGERS OF A DISSIMILAR METAL BY ENGINEER ACCEPTED MEANS.

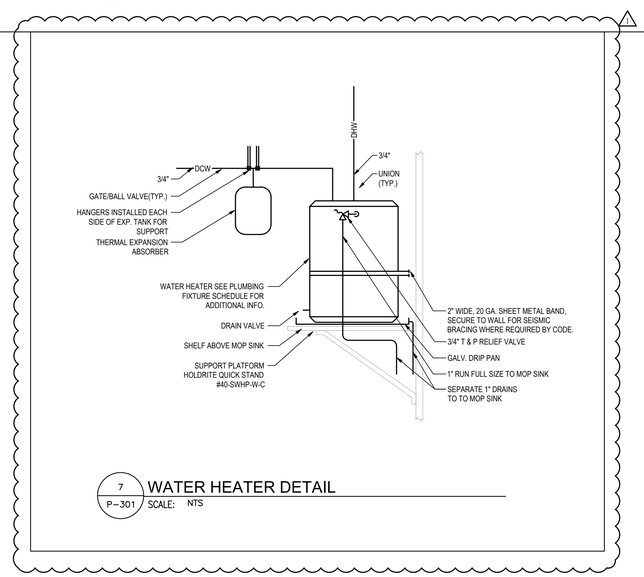
4 P-301 TYPICAL PIPE HANGER DETAIL
SCALE: NTS



5 P-301 PRESSURE DROP ACTIVATED TRAP PRIMER DETAIL
SCALE: NTS



6 P-301 WALL HYDRANT INSTALLATION DETAIL
SCALE: NTS



7 P-301 WATER HEATER DETAIL
SCALE: NTS

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Title
PLUMBING DETAILS

Project No.	Scale
227100129	As indicated
Revision	Drawing No.

P-301

10/11/2021 12:11:31 PM

ORIGINAL SHEET - ARCH E1 (30"x42")

ELECTRICAL NOTES

1. ALL CONDUCTORS SHALL BE AS REQUIRED BY U.L. AND CODES. MINIMUM WIRE SIZE SHALL BE #14 AWG. EXCLUDING CONTROL WIRING.
2. ALL CONDUIT RISERS SHALL BE AS REQUIRED BY U.L. AND CODES.
3. INSTALL PULL WIRES IN EMPTY RACEWAYS. USE POLYPROPYLENE WITH NOT LESS THAN 200 LB TENSILE STRENGTH.
4. ENTIRE INSTALLATION SHALL BE IN ACCORDANCE WITH THE 2020 FBC, NATIONAL ELECTRICAL CODE 2017, AND THE APPLICABLE EDITIONS OF ALL LOCAL CODES, RULES AND ORDINANCES HAVING JURISDICTION.
5. ALL CONDUIT RUNS ARE SHOWN DIAGRAMMATICALLY. EXACT ROUTING SHALL BE DETERMINED IN THE FIELD, UNLESS OTHERWISE NOTED.
6. ALL DISCONNECT SWITCHES SHALL BE SIZED BY NEC TO ACCOMMODATE EQUIPMENT SERVED, INCLUDING REQUIRED FUSES, SWITCHES SHALL BE HORSE POWER RATED AND SIZED FOR 1/2 HORSEPOWER MAX., HEAVY DUTY TYPE.

7. ALL ELECTRICAL EQUIPMENT SHALL BE RAIN-TIGHT WHERE EXPOSED TO THE WEATHER. ALL FLEX CONDUITS CONNECTED TO SUCH EQUIPMENT SHALL BE LIQUID TIGHT.
8. WIRE WAYS SHALL BE SIZED AS REQUIRED PER NEC, UNLESS OTHERWISE NOTED.
9. COORDINATE ALL ELECTRICAL SITE WORK WITH GENERAL CONTRACTOR.
10. FOR UNDERGROUND ELECTRICAL CONDUITS, PROVIDE PULL BOXES, SUCH THAT NO SINGLE CONDUIT RUN HAS BENDS IN EXCESS OF THREE 90 DEGREE BENDS. PULL BOXES SHALL BE SUITABLE AND APPROVED FOR THE INTENDED USE. WARNING TAPE WHICH SAYS, "WARNING BURIED ELECTRIC" SHALL BE PLACED IN TRENCHES ABOVE ALL UNDERGROUND ELECTRIC CONDUITS. WHERE CONDUITS PASS UNDERNEATH PAVED AREAS, THEY SHALL BE RGS. WHERE UNDERGROUND CONDUITS ARE NOT EXPOSED TO MECHANICAL DAMAGE OR ARE NOT UNDER PAVED AREAS, THEY SHALL BE SCHEDULE 40 PVC. ALL CONDUIT RISERS SHALL BE RGS.
11. FOR TELEPHONE SYSTEM:
    A. PROVIDE GROUNDING FOR ALL TELEPHONE OUTLETS AND EQUIPMENT PER REQUIREMENTS OF TELEPHONE COMPANY.
    B. COORDINATE INSTALLATION OF ALL TELEPHONE OUTLETS, RACEWAYS, ENCLOSURES, AND BACKBOARDS WITH TELEPHONE COMPANY.
    C. TELEPHONE CONDUITS SHALL NOT BE INSTALLED IN THE SAME TRENCH WITH POWER AND LIGHTING CONDUITS.
    D. MARK TERMINATIONS OF TELEPHONE CONDUITS AS DIRECTED BY TELEPHONE COMPANY.
    E. VERIFY LOCATION OF TELEPHONE SERVICE WITH TELEPHONE COMPANY, PRIOR TO SUBMITTING BID.
12. ALL CIRCUIT BREAKERS SHALL BE INVERSE TIME TYPE (THERMAL MAGNETIC). TWO AND THREE POLE CIRCUIT BREAKERS SHALL BE COMMON TRIP. NO TIE HANDLES PERMITTED.
13. ALL ELECTRICAL EQUIPMENT, DEVICES, WIRE, LIGHTING FIXTURES, ETC., SHALL BE LISTED, FOR THE INTENDED USE, WITH UNDERWRITER'S LABORATORIES., INC. (UL), WHERE STANDARDS HAVE BEEN ESTABLISHED BY UL.
14. ALL CONDUCTORS SHALL BE IN CONDUITS. ALL CONDUITS SHALL BE INTERMEDIATE (IMC) OR RIGID GALVANIZED STEEL (RGS) EXCEPT THAT:
    A. POLY VINYL CHLORIDE (PVC) CONDUITS MAY BE USED IN CONCRETE SLABS AND UNDERGROUND PROVIDED ELBOWS AND RISERS ARE RGS;
    B. ELECTRICAL METALLIC TUBING (EMT) MAY BE USED IN OR ON WALLS OR CEILINGS WHERE NOT SUBJECT TO MECHANICAL DAMAGE, DAMP CONDITIONS OR CORROSIVE CONDITIONS; EMT COULD BE USED FOR RISING CONDUCTOR AS LONG AS THEY ARE INSIDE THE ELECTRICAL ROOM.
    C. LIQUID TIGHT FLEXIBLE CONDUIT WHERE REQUIRED;
    D. FLEXIBLE METALLIC CONDUIT WHERE REQUIRED IN DRY LOCATIONS.
    E. CONDUITS IN HAZARDOUS AREAS PER NEC SHALL MEET THE REQUIREMENTS OF NEC CHAPTER 5.
15. PROVIDE LAMPS WITH FIXTURES, VERIFY LAMP TYPE WITH MANUFACTURER.
16. COORDINATE ELECTRIC SERVICE WITH POWER UTILITY COMPANY.
17. ELECTRICAL CONTRACTOR SHALL NOT SCALE DRAWINGS. CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS AND ELEVATIONS FOR EXACT LOCATIONS OF ALL EQUIPMENT UNLESS NOTED OTHERWISE.
18. ELECTRICAL CONTRACTOR SHALL VISIT THE JOB SITE AND VERIFY ALL CONDITIONS, LOCATIONS, DIMENSIONS, AND COUNTS AS SHOWN AND/OR NOTED ON THE DRAWINGS. THIS SHALL INCLUDE ANY AND ALL FABRICATIONS PRIOR TO INSTALLATION.
19. IT SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR FOR THE ADVANCED ORDERING OF LONG LEAD ITEMS, AS NOT TO INTERFERE WITH THE PRODUCTION OF OTHER TRADES RESULTING IN ANY DOWN OR LAG TIME.
20. IT SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO PROVIDE ALL LABOR, MATERIALS AND SUPERVISION NECESSARY TO ACCOMPLISH THE WORK AS SHOWN AND/OR NOTED ON THE DRAWINGS.
21. IT SHALL BE UNDERSTOOD THAT ALL WORK PERFORMED SHALL BE DONE BY A LICENSED ELECTRICAL CONTRACTOR AND IN A FIRST-CLASS WORKMANLIKE MANNER. SAID CONTRACTOR SHALL MEET ALL REQUIREMENTS SET FORTH BY ANY LOCAL ORDINANCE AND GOVERNING AUTHORITIES.
22. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE TO REPAIR TO ORIGINAL CONDITIONS ANY AND ALL DAMAGES TO BUILDING SURFACES, EQUIPMENT AND FURNISHINGS CAUSED DURING PERFORMANCE OF WORK.
23. THE ELECTRICAL CONTRACTOR SHALL KEEP ALL AREAS IN WHICH WORK IS BEING PERFORMED, FREE FROM DEBRIS AT ALL TIMES AND SAID AREAS SHALL BE LEFT BROOM CLEAN AT THE END OF EACH WORKING DAY.
24. IT SHALL NOT BE THE INTENT OF THESE PLANS AND/OR SPECIFICATION TO SHOW EVERY MINOR DETAIL OF CONSTRUCTION. THE ELECTRICAL CONTRACTOR SHALL BE EXPECTED TO FURNISH AND INSTALL ALL ITEMS FOR A COMPLETE ELECTRICAL SYSTEM AND PROVIDE ALL REQUIREMENTS NECESSARY FOR EQUIPMENT TO BE PLACED IN PROPER WORKING ORDER.
25. WHERE CORE DRILLING OF FLOOR/WALLS IS REQUIRED, CONTRACTOR SHALL SEAL OPENINGS WATERTIGHT AFTER UTILITIES HAVE BEEN INSTALLED. LOCATION OF CORED HOLES SHALL COORDINATE WITH LOCATION OF EQUIPMENT IN A MANNER TO BE CLEAN AND FUNCTIONAL. THE CONTRACTOR SHALL INSTALL ONLY ONE CONDUIT PER HOLE AND SEAL THE OPENING AROUND THE CONDUIT AS SPECIFIED.
26. ELECTRICAL CONTRACTOR SHALL VERIFY CIRCUIT PROTECTIVE DEVICE RATING FOR EQUIPMENT PRIOR TO CONSTRUCTION.
27. ALL FUSES SHALL BE CURRENT LIMITING, PER U.L., RATED 600V.,
    A. NON-TIME DELAY FUSES IN MAIN SWITCHES AND SWITCHES FEEDING PANELS.
    B. TIME DELAY FUSES FOR MOTOR AND A/C CIRCUITS.
28. OUTLET BOXES SHALL BE PRESSED STEEL IN DRY LOCATIONS, CAST ALLOY WITH THREADED HUBS IN WET OR DAMP LOCATIONS AND SPECIAL ENCLOSURE FOR OTHER CLASSIFIED AREAS.
29. MOTOR STARTERS SHALL BE MANUAL OR MAGNETIC, AS INDICATED OR REQUIRED, WITH OVERLOAD RELAYS OR FUSES IN EACH HOT LEG.
30. FURNISH AND INSTALL DISCONNECT SWITCHES AND WIRING FOR AIR CONDITIONING SYSTEM AS PER MANUFACTURER RECOMMENDATIONS. CONTROLS ARE TO BE SUPPLIED BY AIR CONDITIONING CONTRACTOR AND CONNECTED BY ELECTRICAL CONTRACTOR.
31. CONTRACTOR SHALL GUARANTEE ALL MATERIALS AND WORKMANSHIP FREE FROM DEFECTS FOR A PERIOD OF NOT LESS THAN ONE YEAR FROM DATE OF ACCEPTANCE, UNLESS INDICATED OR SPECIFIED OTHERWISE.
32. CORRECTION OF ANY DEFECTS SHALL BE COMPLETED WITHOUT ADDITIONAL CHARGE AND SHALL INCLUDE REPLACEMENT OR REPAIR OF ANY OTHER PHASE OF THE INSTALLATION WHICH MAY HAVE BEEN DAMAGED THEREBY.
33. ALL REQUIRED INSURANCE SHALL BE PROVIDED FOR PROTECTION AGAINST PUBLIC LIABILITY AND PROPERTY DAMAGE FOR THE DURATION OF THE WORK.
34. AS A MINIMUM, ALL EQUIPMENT SHALL MEET APPLICABLE STANDARDS, FOR THE TYPE OF EQUIPMENT AND INTENDED USE, OF THE FOLLOWING:
    A. AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)
    B. ILLUMINATING ENGINEERS SOCIETY (IES)
    C. AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)
    D. NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATES. (NEMA)

NOTE: THESE STANDARDS ARE SUBORDINATE TO CODES AND STANDARDS SET BY U.L.

35. ALL BALLASTS SHALL HAVE MINIMUM. POWER FACTOR OF 0.90. ALL BALLASTS FOR MERCURY VAPOR, METAL HALIDE AND HIGH-PRESSURE SODIUM FIXTURES SHALL BE CONSTANT WATTAGE TYPE WITH +/-5% LAMP WATTS FOR +/-10% NOMINAL LINE VOLTAGE VARIATION.
36. ELECTRICAL CONTRACTOR SHALL SUBMIT (6 COPIES) EQUIPMENT LAYOUT OF ALL ELECTRICAL SPACES, ROOMS, ETC., TO ENGINEER FOR APPROVAL PRIOR TO ORDERING EQUIPMENT OR INSTALLING CONDUITS, ETC. LAYOUT SHALL CONSIST OF PLAN VIEWS (SCALED AT 1/2"=1'-0") AND ELEVATIONS (DIMENSIONED) FOR EACH SUCH SPACE, ROOM, ETC.
37. ALL CONNECTIONS TO GROUND RODS SHALL BE MADE WITH UL APPROVED WELDED CONNECTIONS, UNLESS NOTED OTHERWISE.
38. PROPER PLASTER RINGS SHALL BE USED WITH OUTLET BOXES. PLASTER RING SHALL BE A MAXIMUM OF 1/8" FROM THE FINISHED SURFACE OF THE DRYWALL AFTER DRYWALL IS INSTALLED. PROPER COORDINATION BETWEEN ELECTRICAL SUBCONTRACTOR AND GENERAL CONTRACTOR FOR PLASTER RING INSTALLATION WILL BE REQUIRED. NO "GOOF" RINGS WILL BE ALLOWED. ALL OUTLET BOXES SHALL BE SECURELY FASTENED. ANY AND ALL IMPROPERLY INSTALLED PLASTER RINGS OR OUTLET BOXES SHALL BE REMOVED AND A NEW RING OR OUTLET INSTALLED AT CONTRACTOR'S EXPENSE. NO GANGABLE BOXES WILL BE ACCEPTED.
39. ALL OPENINGS FOR LIGHT FIXTURES IN CEILINGS SHALL BE PROTECTED IN A MANNER (PER ALL GOVERNING CODES) THAT WILL PROVIDE THE SAME RATING AS THE CEILING. (THIS APPLIES TO ALL FIRE RATED CEILINGS).
40. PROVIDE FIRE RETARDANT U.L. APPROVED SEALANT ON ALL PENETRATIONS OF FIRE RATED PARTITIONS, WALLS AND STRUCTURAL SLABS. IT SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO VERIFY, PRIOR TO SUBMITTING BID, LOCATIONS OF ALL SUCH FIRE RATED PARTITIONS, WALL AND STRUCTURAL SLABS.
41. ELECTRICAL CONTRACTOR SHALL SUBMIT (6 COPIES) EQUIPMENT CUTS FOR ALL SWITCH GEAR AND LIGHTING FIXTURES AS STATED IN LIGHTING FIXTURE AND EQUIPMENT SCHEDULES.
42. USE 3/4" FIRE RESISTANT PLYWOOD BACKBOARDS FOR TELEPHONE TERMINAL BOARDS AND FOR SURFACE MOUNTING GROUPED ELECTRICAL EQUIPMENT, PAINTED ON BOTH SIDES AND EDGES WITH TWO COATS OF FLAT BLACK ASPHALT PAINT.
43. PROVIDE A FUSE HOLDER AND FUSE IN THE PRIMARY SIDE OF EACH UNDERGROUND CONDUCTOR FOR ALL BALLASTS (BUSSMAN HEB AND FNQ OR EQUAL), AT THE HAND HOLE OF EACH EXTERIOR POLE MOUNTED LIGHTING FIXTURE OR J BOX FOR WALL OR GROUND MOUNTED FIXTURE.
44. PROVIDE WIND LOAD RATED LIGHT POLES WITH 175 MPH MINIMUM WIND SPEED (ASCE 7), EXPOSURE WITH IMPORTANCE FACTOR OF 1.0, AND PROVIDE PHOTOMETRICS WITH ALL FIXTURE SUBMITTALS.
45. CONTRACTOR TO VERIFY VOLTAGES OF ALL LIGHT FIXTURES PRIOR TO BIDDING RELATIVE TO THEIR SPECIFIC APPLICATION ON FLOOR PLANS. CONTRACTOR TO COORDINATE FIXTURES WITH ARCHITECTURAL DRAWINGS AND VERIFY APPROPRIATE CLEARANCES AND APPLICATION WITH ALL ARCHITECTURAL FINISHES PRIOR TO BIDDING.
46. A SEPARATELY DEDICATED AND SEPARATELY GROUNDED CIRCUIT WITH AN ISOLATED GROUNDED RECEPTACLE SHALL BE PROVIDED FOR ALL COMPUTER EQUIPMENT.
47. CONTRACTOR TO VERIFY AVAILABLE SERVICE VOLTAGE AND PHASES WITH F.P.&L PRIOR TO BID.
48. METER CANS, HUBS, & LUGS FOR SAME ARE TO BE FURNISHED & INSTALLED BY ELECTRICAL CONTRACTOR. ELECTRICAL CONTRACTOR TO VERIFY SPECIFIC TYPE OF METER CAN TO BE USED WITH F.P.L. PRIOR TO BID.
49. PROVIDE A 4" STEEL REINFORCED CONCRETE HOUSEKEEPING PAD UNDER ALL FLOOR MOUNTED SWITCHGEAR.
50. CONTRACTOR SHALL PROVIDE A TYPE WRITTEN DIRECTORY OF EACH PANEL SCHEDULE. INSIDE ACH PANELBOARD. HAND WRITTEN DIRECTORY IS NOT ACCEPTABLE.
51. SMOKE DETECTORS SHALL BE NO CLOSER THAN 36" FROM SUPPLY AIR DIFFUSERS OR RETURN OPENING.
52. SMOKE ALARMS AND SMOKE DETECTORS SHALL NOT BE INSTALLED AN AREA OF EXCLUSION DETERMINED BY A 10 FT. (3.0m) RADIAL DISTANCE ALONG A HORIZONTAL FLOW PATH FROM A STATIONARY OR FIXED COOKING APPLIANCE, UNLESS LISTED FOR INSTALLATION IN CLOSE PROXIMITY TO COOKING APPLIANCES. SMOKE ALARMS AND SMOKE DETECTOR INSTALLED BETWEEN 10 FT. (3.0m) AND 20 FT.(6.1m) ALONG A HORIZONTAL FLOW PATH FROM A STATIONARY OR FIXED COOKING APPLIANCE SHALL BE EQUIPPED WITH AN ALARM-SILENCING MEANS OR USE PHOTOELECTRIC DETECTION.
53. SMOKE ALARMS AND SMOKE DETECTORS SHALL NOT BE INSTALLED WITHIN A 36 IN.(910mm) HORIZONTAL PATH FROM A DOOR TO A BATHROOM CONTAINING A SHOWER OR TUB.
54. SMOKE ALARMS AND SMOKE DETECTORS SHALL NOT BE INSTALLED WITHIN A 36 IN.(910mm) HORIZONTAL PATH FROM THE TIP OF THE BLADE OF A CEILING-SUSPENDED (PADDLE) FAN, AND TO AC RETURNS.
55. ALL TRIM & TRIM PLATES IN DWELLING UNITS & PUBLIC AREAS TO BE WHITE COLOR 'DECORA' TYPE OR APPROVED EQUAL.
56. 'MC' OR 'AC' CABLE IS PERMITTED WHERE ALLOWED BY CODE & NOT IN EXPOSED AREAS.
57. ALL SMOKE DETECTORS WITHIN IN EACH DWELLING UNIT SHALL BE INTERCONNECTED SO THAT ALL SMOKE DETECTORS WITHIN EACH DWELLING UNIT GO IN TO ALARM WHEN ONE SMOKE DETECTOR SENSES SMOKE. EACH SMOKE DETECTOR SHALL BE TIED TO AN UNSWITCHED LIGHTING CIRCUIT THAT IS CONNECTED TO AN AFCI C.B.
58. ALL CIRCUITS INDICATED ON PANEL SCHEDULES AS 1 POLE CIRCUIT BREAKERS SHALL BE PROVIDED WITH A HOT AND A NEUTRAL CONDUCTOR. CIRCUITS INDICATED WITH A 2 P0LE CIRCUIT BREAKER SHALL BE PROVIDED WITH 2 HOT CONDUCTORS AND A NEUTRAL CONDUCTOR. CIRCUITS THAT ARE INDICATED WITH A 3 POLE CIRCUIT BREAKER SHALL BE PROVIDED WITH 3 HOT CONDUCTORS AND 1 NEUTRAL CONDUCTOR. IF COMMON NEUTRALS ARE USED THE NEXT LARGER CONDUCTOR SIZE SHALL BE USED FOR THE NEUTRAL CONDUCTOR (APPLICABLE FOR MC CABLE).
59. ALL SUPPLY FANS AND AIR HANDLERS THAT ARE SHOWN ON THE MECHANICAL DRAWINGS, THAT ARE RATED 2000 CFM AND LARGER SHALL BE FURNISHED WITH A DUCT SMOKE DETECTOR THAT SHALL BE WIRED TO THE FIRE ALARM PANEL
60. ALL FIRE SMOKE DAMPERS OR MOTORIZED DAMPERS SHOWN ON THE MECHANICAL DRAWINGS SHALL BE CONNECTED BOTH TO THE FIRE ALARM PANEL AND TO A 120V - 20 AMP EMERGENCY CIRCUIT IN THE NEAREST EMERGENCY PANEL.
61. ALL FLOW AND TAMPER SWITCHES SHOWN ON THE FIRE SPRINKLER DRAWINGS SHALL BE CONNECTED TO THE FIRE ALARM PANEL
62. MOTOR STARTERS FOR POOL & FOUNTAINS TO BE INSTALLED & FURNISHED BY ELECTRICAL CONTRACTOR.
63. PROVIDE ARC-FAULT INTERRUPTER CIRCUIT BREAKER FOR ALL FAMILY ROOMS, DINNING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, BEDROOMS, SUNROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS, OR SIMILAR ROOMS OR AREAS IN DWELLING UNITS.
64. THE CONTRACTOR SHALL PROVIDE AN INFRARED (THERMOGRAPH) SCAN TEST OF ALL COPPER CONDUCTORS AND BUS DUCT ONCE ALL SYSTEMS ARE ON LINE AND HOT. THE RESULTS OF THE TESTS SHALL BE FORWARDED TO THE ENGINEER OF RECORD PRIOR TO CERTIFICATE OF OCCUPANCY.
65. ELECTRICAL CONTRACTOR SHALL PROVIDE WRITTEN TEST RESULTS OF THE MEG-OHM READINGS OF ALL BUS-DUCT TO THE ENGINEER OF RECORD PRIOR TO ENERGIZING THE BUS-DUCT. THESE TEST RESULTS MUST BE WRITTEN ON THE BUS-DUCT MANUFACTURER'S LETTER HEAD & SIGNED & SEALED BY THE MANUFACTURER'S ENGINEER.
66. ALL DISCONNECT SWITCHES INDICATED AS W.P. ARE NEMA 4X TYPE. ALL THE OTHER DISCONNECT SWITCHES LOCATED INSIDE THE BUILDING ARE NEMA 1 TYPE (TYP) FOR DRY LOCATION AND NEMA 3R FOR DAMP LOCATION.

COLOR CODING:

120/208V
"A" - BLACK
"B" – RED
"C" - BLUE
"N" - WHITE
"G" - GREEN

67. FURNISH AND INSTALL U.L. LISTED EXPANSION TYPE CONDUIT FITTING AT ALL EXPANSION JOINTS.
68. PROVIDE TAMPER RESISTANT RECEPTACLES IN DWELLING UNIT AND AS PER NEC 406.11
69. OUTLETS BOXES SHALL NOT BE INSTALLED BACK-TO BACK ON FIRE RATED WALL AS PER NEC 300.21 AND NFPA 101 SECTION 8.3.5.6.3
70. PROVIDE PROTECTION FOR EMERGENCY POWERED EQUIPMENT AND DEVICES SUCH AS GARAGE EXHAUST FAN MOTOR STARTER AND DISCONNECTS WHICH ARE LOCATED IN AREA ACCESSIBLE TO NON-AUTHORIZED PERSONS AND WHERE POSSIBLY SUBJECT TO VANDALISM AS REQUIRED BY NEC 700.9(C), 700.12 AND 700.25. TYPICAL FOR GARAGE.
71. FBC 2020 ENERGY CONSERVATION SECTION 505.7.4.2 MANUAL. CONSTRUCTION DOCUMENT SHALL REQUIRE THAT AN OPERATING MANUAL AND MAINTENANCE MANUAL BE PROVIDED TO THE BUILDING OWNER. THE MANUALS SHALL INCLUDE, AT A MINIMUM, THE FOLLOWING:
    1. SUBMITTAL DATA STATING EQUIPMENT RATING AND SELECTED OPTION FOR EACH PIECE OF EQUIPMENT REQUIRING MAINTENANCE.
    2. OPERATION MANUALS AND MAINTENANCE MANUALS FOR EACH PIECE OF EQUIPMENT REQUIRING MAINTENANCE. REQUIRED ROUTINE MAINTENANCE ACTIONS SHALL BE CLEARLY IDENTIFIED.
    3. NAMES AND ADDRESSES OF AT LEAST ON QUALIFIED SERVICE AGENCY.
72. ELECTRICAL CONTRACTOR SHOULD VERIFY THE REQUIRED FIRE RATING OF PENETRATIONS THRU FIRE RATED PENETRATIONS PRIOR TO BIDDING ON PROJECT IN ORDER TO DETERMINE TYPE OF CONDUITS REQUIRED.
73. PROVIDE ARC FLASH WARMING LABELS AS PER NEC 110.16
74. POOL PUMP MOTORS WITH A TOTAL HORSEPOWER (HP) OF GREATER THAN OR EQUAL TO 1 HP SHALL HAVE THE CAPABILITY OF OPERATING AT TWO OR MORE SPEEDS. THE LOW SPEED SHALL HAVE A ROTATION RATE OF NO MORE THAN 1/2 OF THE MOTOR'S MAXIMUM ROTATION RATE AS PER FBC ENERGY CODE 403.9.4.
75. PROVIDE A FLOAT SWITCH AT THE BOTTOM OF EACH ELEVATOR SHAFT THAT DISCONNECTS POWER TO THE ELEVATOR MOTOR IF THE WATER IN THE PIT EXCEEDS 6" AFF. (TYPICAL FOR ALL ELEVATOR PIT)
76. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR EMERGENCY SWITCHGEAR TOGETHER WITH OVERCURRENT DEVICES SELECTIVITY STUDY FROM MANUFACTURER IN COMPLIANCE WITH NEC ART. 700.27 & 701.18. INSTALL RELAYS TYPE IFC77 AT THE GENERATOR BREAKERS AND ON THE GENERATOR DISTRIBUTION PANEL. PROVIDE ELECTRONIC TRIP BREAKERS AT LEAST AT THE FIRST AND SECOND LEVELS OF PROTECTION.
77. LED LIGHT FIXTURE DRIVERS SHALL BE NEMA 410. PROVIDE INRUSH CIRCUIT BREAKERS FOR BRANCH CIRCUITS SERVING LED LIGHT FIXTURES.
78. WHERE EQUIPMENT RATED 1200A OR MORE ROOM SHALL BE PROVIDED WITH DOORS THAT OPENS IN THE EGRESS DIRECTION AND BE PROVIDE WITH PANIC BARS, PRESSURE PLATES OR OTHER DEVICES THAT ARE NORMALLY LATCHED BUT OPEN UNDER SIMPLE PRESSURE NEC110.26(C)(3).
79. NEW STAIRS TO COMPLY WITH THE 2020 FBC SECT. 1006.1.3 / NFPA-101-7.8.1.3.1.
80. ALL WORK SHALL COMPLY WITH CURRENT FLORIDA BUILDING CODE, FIFTH EDITION 2020; SECTION C405 ELECTRICAL POWER AND LIGHTING SYSTEM (MANDATORY). COMPLIANCE WITH THE FOLLOWING SECTIONS FOR LIGHTING CONTROLS: C405.1, GENERAL (MANDATORY); C405.2.1.1 INTERIOR LIGHTING CONTROLS; C405.2.1.2 LIGHT REDUCTION CONTROLS; C405.2.2 ADDITIONAL LIGHTING CONTROLS; C405.2.2.1 AUTOMATIC TIME SWITCH CONTROL DEVICES; C405.2.2.2 OCCUPANCY SENSORS; C405.2.2.3 DAYLIGHT ZONE CONTROL; C405.2.2.3.3 MULTI-LEVEL LIGHTING CONTROLS; C405.2.3 SPECIFIC APPLICATION CONTROLS; C405.2.4 EXTERIOR LIGHTING CONTROLS. SECTION C408 SYSTEM COMMISSIONING; C408.1 GENERAL; NC408.3.1 FUNCTIONAL TESTING. FUNCTIONAL TESTING SHALL BE PERFORM BY THE LIGHTING CONTROL SYSTEM VENDOR (ex: LUTRON, CRESTRON, LEVITON, ETC.)
81. CONTRACTOR SHALL PROVIDE LABEL ON ALL SERVICE EQUIPMENT TO SHOW THE DATE THE FAULT CURRENT CALCULATION WAS PERFORMED IN COMPLIANCE WITH NEC 110.24.
82. PRIOR TO ROUGH-IN CONTRACTOR SHALL VERIFY AND REPORT TO THE ARCHITECT AND ENGINEER ANY CONFLICT RELATED TO NEC 210.52; 210.60; 210.62; 210.63; 210.70 (OUTLET LOCATIONS)
83. CONTRACTOR TO PROVIDE LABEL ON ALL SWITCHBOARDS AND PANEL BOARDS SUPPLIED BY A FEEDER SHALL BE MARKED TO INDICATE THE DEVICE OR EQUIPMENT WHERE THE POWER SUPPLY ORIGINATES. (NEC 408.4(B)).
84. CONTRACTOR SHALL PROVIDE AN INTELLIGENT INTERFACE DEVICE MODEL HTR-1 SERIES MANUFACTURED BY SIEMENS TO ALLOW FSD SHOWN AT EACH UNIT OA DUCT PENETRATION WILL CLOSE IN THE EVENT OF SMOKE COMING INSIDE UNITS. SMOKE DETECTORS INSIDE UNITS WILL TRIGGER THE ACTIVATION OF THE INTERFACE DEVICE AND WILL USED AS SYSTEM DETECTORS. FACP AND ANNUNCIATOR PANEL WILL PROVIDE AN ALARM (NOTIFICATION ONLY). COORDINATE WITH MECHANICAL CONTRACTOR TO ASCERTAIN THAT SYSTEM IS FULLY OPERATIONAL. TYPICAL FOR ALL UNITS UNDER THE SCOPE OF WORD OF THIS PROJECT.
85. CONTRACTOR SHALL PROVIDE SIGNAGE FOR EACH SERVICE AS PER NEC 230.2(E).
86. ALL GROUNDS MUST BE TIED TOGETHER TO FORM A COMMON GROUND SYSTEM AS PER NEC 250.58.
87. A CIRCUIT BREAKER 1200 AMPS OR HIGHER SHALL HAVE DOCUMENTATION AVAILABLE TO THOSE AUTHORIZED TO DESIGN, INSTALL, OPERATE, OR INSPECT THE INSTALLATION AS TO THE LOCATION OF THE CIRCUIT BREAKER AND THE METHOD TO REDUCE THE CLEARING TIME SHALL MEET NEC 240.87. TO REDUCE CLEARING TIME, STANDARD DAS (DYNAMIC ARC-FLASH SENTRY) TECHNOLOGY SHALL BE USED.
88. AS PER NEC 210.63, A 125 VOLT, 20 AMP GFCI, WEATHERPROOF COVERED, PEDESTAL-MOUNTED RECEPTACLE SHALL BE INSTALLED AT AN ACCESSIBLE LOCATION FOR THE SERVICING OF HEATING, AIR-CONDITIONING, AND REFRIGERATION EQUIPMENT. IT SHALL BE LOCATED ON THE SAME LEVEL AND WITHIN 25 FEET OF THE EQUIPMENT.

ELECTRICAL SYMBOL LEGEND

POWER

SYMBOL	DESCRIPTION
	DUPLEX RECEPTACLE
T	TWIST LOCK RECEPTACLE
SP	SURGE PROTECTION TYPE (TVSS) DUPLEX RECEPTACLE
	PEDESTAL MOUNTED RECEPTACLE
	FLOOR OUTLET BOX AND DUPLEX RECEPTACLE WITH APPROPRIATE FLANGE(LEGRAND 880 UON)
	CELING MOUNTED OUTLET
	DUPLEX RECEPTACLE WITH USB PORT
OR	FLOOR OUTLET BOX WITH DUPLEX RECEPTACLE AND ONE COMBINATION W/ VOICE/DATA OUTLET
	FLOOR OUTLET BOX WITH TWO DUPLEX RECEPTACLES AND ONE COMBINATION W/ VOICE/DATA OUTLET
P	POKE THRU
PP	POWER POLE
	DUPLEX RECEPTACLE WITH EACH HALF ON SEPARATE CIRCUIT (BREAKER SHALL BE TWO POLE WITH COMMON TRIP)
	DUPLEX RECEPTACLE MOUNTED ABOVE COUNTER OR HIGH MOUNTED COORDINATE W/ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHT
	DUPLEX SAFETY RECEPTACLE MOUNT COVERPLATES WITH SPANNER HEAD SCREWS
	DUPLEX RECEPTACLE WITH TOP HALF SWITCHED
EWC	SIMPLEX RECEPTACLE (EWC DENOTES ELECTRIC WATER COOLER. COORDINATE WITH EWC INSTALLER FOR MOUNTING HEIGHT)
WP	GFI RECEPTACLE. WP DENOTES WEATHERPROOF COVER.
	GFI RECEPTACLE MOUNTED ABOVE COUNTER
	TWO DUPLEX RECEPTACLES WITH COMMON COVER
	TWO DUPLEX RECEPTACLES WITH COMMON COVER MOUNTED ABOVE COUNTER
IG	ISOLATED GROUND DUPLEX RECEPTACL
	208 OR 240V, SPECIAL PURPOSE RECEPTACLE. RATING AS NOTED OR REQUIRED
	LIGHTING CONTROL TIME CLOCK
GND	GROUND BAR
J	JUNCTION BOX/ WP(WEATHER PROOF)/ EP(EXPLOTION PROOF)
J	JUNCTION BOX- WALL MOUNTED-FURNITURE SYSTEM FEED
	CONDUIT SEAL-OFF FITTINGS
SS_{C3}	SURGE SUPPRESSOR C3 = SERVICE ENTRANCE DEVICE B3 = DISTRIBUTION BOARD DEVICE A3 = PANELBOARD DEVICE
ST OR	SHUNT-TRIP BUTTON - FLUSH MOUNTED UNLESS OTHERWISE NOTED NEMA 3R FOR EXTERIOR LOCATIONS
	MAGNETIC MOTOR STARTER OR CONTACTOR SIZE AS NOTED
EDH-X	ELECTRIC DUCT HEATER
5	MOTOR CONNECTION, NUMBER DENOTES HORSEPOWER
T	TRANSFORMER
	AUTOMATIC TRANSFER SWITCH
3 — 30/15	SAFETY DISCONNECT SWITCH, SIZE & # OF POLES 3 - # OF POLES 30 – FRAME 15/NF/* - FUSE SIZE/NON FUSE/PER MANUFACTURER RECOMENDATION
	COMBINATION MAGNETIC MOTOR STARTER, SIZE & # OF POLES 3 POLE UNLESS OTHERWISE NOTED
$M J	J. BOX WITH MOTOR RATED SWITCH
J	POWER/CONTROL J. BOX FOR DRAPERY SYSTEM
EF OR	EXHAUST FAN
GND	GROUND BAR
	PLUG-IN STRIP WITH RECEPTACLES, 18" O.C. UNLESS OTHERWISE INDICATED
	UNDER GROUND CONCRETE ENCASED DUCTBANK
	EXHAUST FAN

LIGHITNG

SYMBOL	DESCRIPTION
	FLUORESCENT STRIP FIXTURE
A / 2 a / CIRCUIT NUMBER	FIXTURE DESIGNATION FLUORESCENT FIXTURE LOWER CASE LETTER INDICATES CONTROL CIRCUIT SWITCH LEG
	2x4 LIGHTING FIXTURE DIAGONAL SHADING INDICATES UNSWITCHED EMERGENCY POWER SOURCE.
	1x4 WALL MOUNTED FIXTURE WITH WALL OUTLET BOX
	1x4 LIGHTING FIXTURE
	HID, FLUORESCENT, OR INCANDESCENT FIXTURE
	FLUORESCENT, OR INCANDESCENT WALL WASHER.
	ACCENT FLOOD LIGHTING - AIMING AS INDICATED
	EXIT LIGHT FIXTURE DIRECTION ARROWS AS SHOWN (SHADED QUADRANT INDICATES FACE(S) OF FIXTURE)
	WALL MOUNTED EXIT LIGHT FIXTURE
	EXTERIOR LIGHT FIXTURE WITH ARMS AS SHOWN ON DRAWINGS
	TRACK WITH TRACK LIGHT FIXTURE (TRIANGLES INDICATE QUANTITY OF LIGHT FIXTURES)
	BATTERY PACK WITH TWIN HEADS
OS	OCCUPANCY SENSOR
R	LIGHTING RELAY
	PHOTOCELL, MOUNTED ON ROOF FACING NORTH
$	SINGLE POLE SWITCH (SUBSCRIPT INDICATES ITEM CONTROLLED)
$\$_{MO}$	MOTION SENSOR SWITCH
$\$_3$	THREE-WAY SWITCH
$\$_4$	FOUR-WAY SWITCH
$\$_P$	SINGLE POLE SWITCH WITH PILOT LIGHT
$\$_{WP}$	SINGLE POLE SWITCH WITH WEATHERPROOF COVER
$\$_L$	SINGLE POLE SWITCH WITH SECURITY LOCKING KEY
S_F	FAN SWITCH
$\$_M$	MANUAL MOTOR STARTER WITH OVERLOAD HEATERS
$\$_{MP}$	MANUAL MOTOR STARTER WITH OVERLOAD HEATERS AND PILOT LIGHT
$\$_D$	DIMMER SWITCH (1500 WATTS UNLESS OTHERWISE INDICATED) (FOR LED LIGHT MAX LOAD 600 WATTS)
$\$_K$	SINGLE POLE KEY SWITCH
$\$_{3K}$	THREE-WAY KEY SWITCH
$\$_{4K}$	FOUR-WAY KEY SWITCH
$\$_{LV}$	LOW VOLTAGE SWITCH

FIRE ALARM (APT. UNITS)

SYMBOL	DESCRIPTION
SS	SINGLE STATION SMOKE DETECTOR
CO	CARBON MONOXIDE DETECTOR
SS	COMBO SMOKE/CARBON MONOXIDE DETECTOR

TELEPHONE/DATA/CATV RACEWAY SYSTEM

SYMBOL	DESCRIPTION
	COMPUTER/TELEPHONE OUTLET/CATV WITH (2) 8-CONDUCTOR RJ-45 JACKS IN A SINGLE-GANG BOX, 18" A.F.F. UNLESS OTHERWISE NOTED C = ABOVE THE COUNTER W = WALL MOUNTED (54" A.F.F.) PP = PUBLIC PAY (48" A.F.F.)
	TELEPHONE/DATA OR CATV TERMINAL BOARD "TBB" OR "TVBB"
TV	TELEVISION SIGNAL WALL OUTLET

ABBREVIATIONS

A	ARC FAULT CIRCUIT INTERRUPTER (AFCI)
AFF	ABOVE FINISHED FLOOR
ATS	AUTOMATIC TRANSFER SWITCH
AWG	AMERICAN WIRE GAUGE
C/COND	CONDUIT
CM	CEILING MOUNTED
CB	CIRCUIT BREAKER
CR	CARD READER
EM	EMERGENCY
EC	EMPTY CONDUIT
ECB	ENCLOSED CIRCUIT BREAKER
℄	CENTERLINE
EWC	ELECTRIC WATER COOLER
FA	FIRE ALARM
GRD/GND	GROUND
HC	HUNG CEILING
MER	MECHANICAL EQUIPMENT ROOM
NA	NON-AUTOMATIC
NF	NON-FUSED
NTS	NOT TO SCALE
OC	ON CENTER
P	POLES
Ø,PH	PHASE
G	GROUND FAULT CIRCUIT INTERRUPTER (GFCI)
SWBD	SWITCHBOARD
SWGR	SWITCHGEAR
U/G	UNDERGROUND
UNF	UNFUSED
XP	EXPLOSION PROOF
WG	WIRE GUARD PROTECTION
UON	UNLESS OTHERWISE NOTED.
W	WIRE
WP	WEATHERPROOF
WR	WEATHER RESISTANT
CC	DENOTES SEE CIRCUIT CHART
EP	ELECTRICAL PANEL IN UNIT
MB	MEDIA BOX IN UNITS
T	
OS	OCCUPANCY SENSOR

BASIC MATERIALS

SYMBOL	DESCRIPTION
	BRANCH CIRCUIT CONDUIT
	GROUND OR GROUND ROD AS NOTED
UP	CONDUIT TURNING UP
DN	CONDUIT TURNING DOWN
	CONDUIT STUB
	CONDUIT CONTINUED
	FLEXIBLE CONDUIT

SECURITY RACEWAY SYSTEM

SYMBOL	DESCRIPTION
CR	BOX FOR CARD READER
M	MAGNETIC LOCK
DPS	DOOR POSITION SWITCH
MS	BOX FOR EGRESS MOTION SENSOR
	DOORBELL PUSHBUTTON STATION
DB	DOORBELL CHIME (SELF CONTAINED)
	SURVEILLANCE CAMERA

NOT ALL SYMBOLS SHOWN ARE APPLICABLE. SOME SYMBOLS ARE SHOWN TO FACILITATE REVISIONS AND CHANGES IN THE SCOPE OF WORK.

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Revision YYYY.MM.DD

Issued 2023.02.15

PERMIT SET

CITY OF DORAL

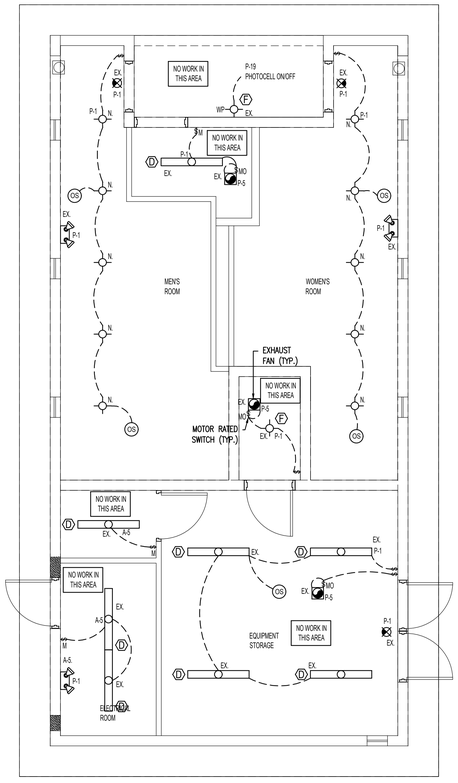
MORGAN LEVY PARK RESTROOM RENOVATIONS

5300 NW 102nd AVENUE
Doral, FL 33178

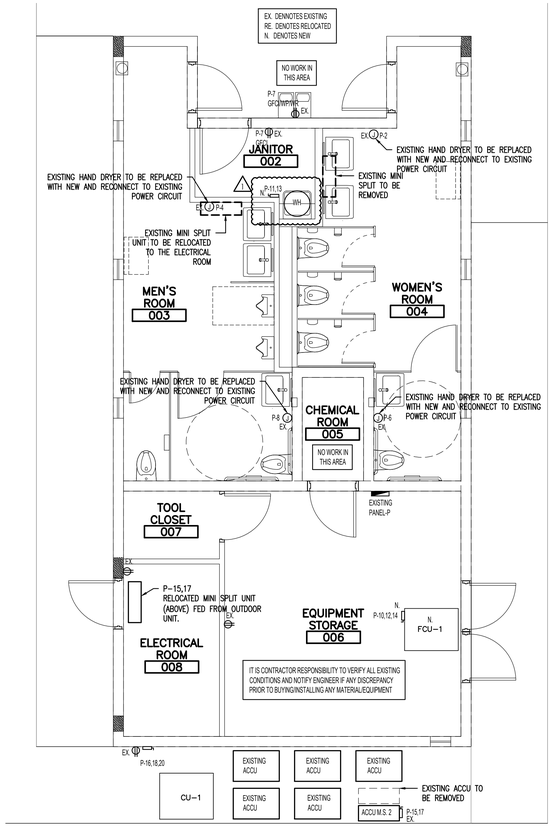
Title
ELECTRICAL GENERAL NOTES

Project No. 227100129
Scale As indicated
Revision
Drawing No.

E-000



FIXTURES		
ITEM	DESCRIPTION	QTY
	EXIT LIGHT	4
M	FLUORESCENT	8
D	FLUORESCENT	5



1 REFLECTED CEILING PLAN
E-101

1/4"=1'-0"

2 POWER PLAN
E-101

1/4"=1'-0"

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1	BUILDING DEPARTMENT COMMENTS	2023.03.10
Revision		YYYY.MM.DD
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MORGAN LEVY PARK RESTROOM RENOVATIONS

5300 NW 102nd AVENUE
Doral, FL 33178

Title

ELECTRICAL PLANS

Project No.	Scale
227100129	As indicated
Revision	Drawing No.

E-101

10/11/2021 12:31:31 PM

ORIGINAL SHEET - ARCH E1 (30"x42")

EXISTING PANEL "P"

MOUNTING: SURFACE
SHORT CIRCUIT RATING: 22K AIC
POLES: 42
FED FROM PANEL: 5EL1D1

VOLT: 208/120V,3Ø,4W
MAIN BUS AMPS: 100
MAIN BREAKER AMPS: 100
MANUFACTURER/TYPE: EXISTING

CKT	LOAD SERVED	POLE	TRIP	WIRE	COND		LOAD	LOAD		COND	WIRE	TRIP	POLE	LOAD SERVED	CKT
1	LIGHTS	1	20	12	1/2"	L	820	2,300	O	3/4"	10	30	1	HAND DRYER	2
3	LIGHTS EXTERIOR	1	20	12	1/2"	L	821	2,301	O	3/4"	10	30	1	HAND DRYER	4
5	EXHAUST FAN	1	20	12	1/2"	L	920	2,302	O	3/4"	10	30	1	HAND DRYER	6
7	RECEPTACLES	1	20	12	1/2"	R	823	2,303	O	3/4"	10	30	1	HAND DRYER	8
9	SPARE	1	20					5,864	O	3/4"	10	25	3		10
11	WATER HEATER	2	30	10	3/4"	O	4,500			3/4"	10	25	3	FCU-1	12
13			30	10	3/4"					3/4"	10	25	3		14
15	MINI SPLIT UNIT 2 (EXISTING)	2	15	12	1/2"	O	1,124	9,720	O	1"	8	45	3		16
17			15	12	1/2"					1"	8	45	3	CU-2	18
19	LIGHTS EXTERIOR	1	15	12	1/2"	L	30			1"	8	45	3		20

CONNECTED LOAD	33,828	TOTAL DEMAND =	34,476	VA
CONNECTED AMPS	94	DEMAND AMPS =	96	AMPS

DEMAND CALCULATION

LIGHTING	L	2591	1.25	3,239
RECEPTACLE	R	823	5411.5	823
MOTOR	M	0	1.25	0
KITCHEN EQUIPMENT	K	0	0.65	0
OTHERS	O	30414	1	30,414

Note:
(1) MAX 3% VD ON BRANCH CIRCUITS AS PER FBC
(2) CORRIDOR LIGHTING CIRCUITS TO BE CONTROLLED THRU THRU LIGHTING CONTROL PANEL & CENTRAL B.A.S.

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Doral, FL 33178

Title
SCHEDULES

Project No. 227100129
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10/11/2021 12:11:31 PM

ORIGINAL SHEET - ARCH E1 (30"x42")