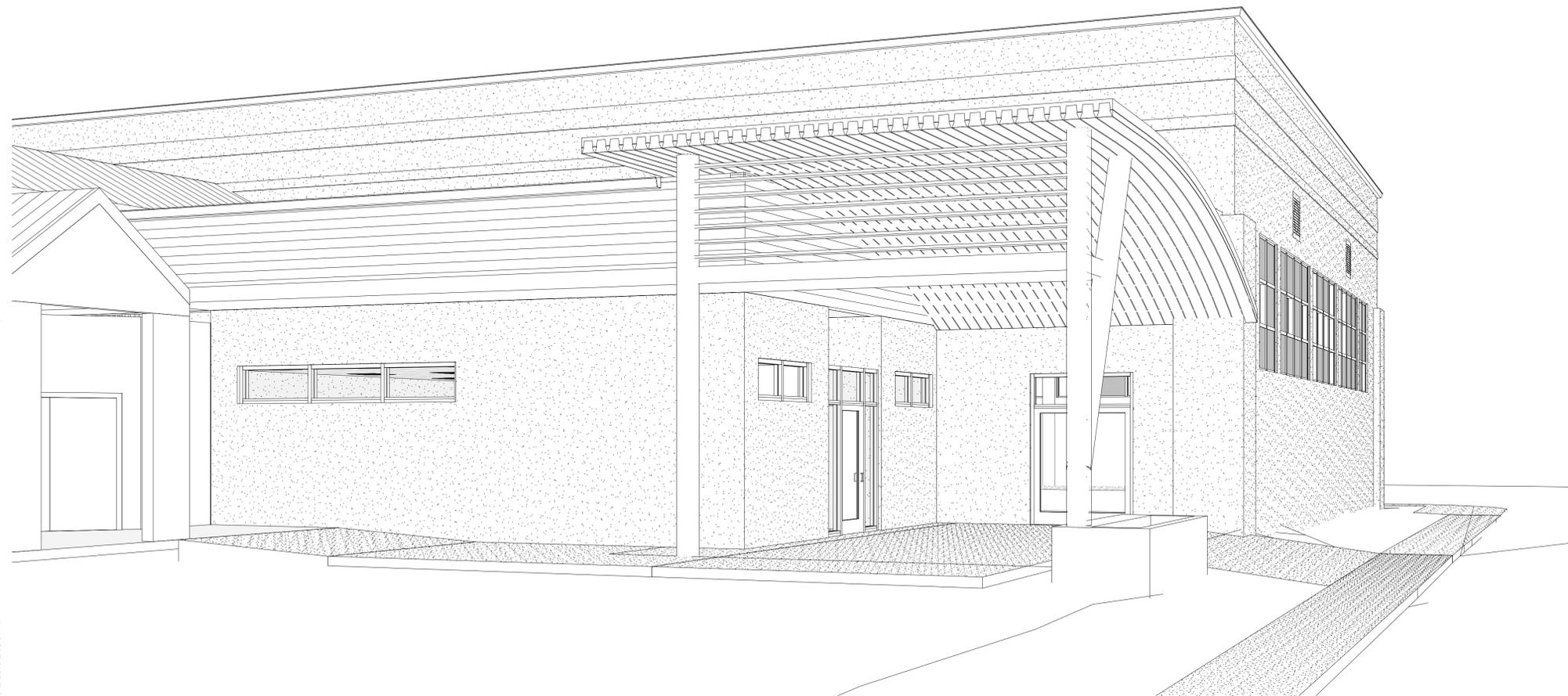


RENOVATION OF FREDERICK DOUGLASS RECREATION CENTER

111 OLIVIA ST
KEY WEST, FLORIDA 33040

50% CONSTRUCTION DOCUMENT SET - OWNER REVIEW



3/2/2015 2:03:01 PM

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members of



CONSULTANT:

CLIENT / PROJECT NAME:

CITY OF KEY WEST
ALTERATIONS TO

FREDERICK DOUGLASS
RECREATION CENTER

111 OLIVIA STREET
KEY WEST, FL 33040



AREA MAP
NORTH
NTS



SITE MAP
NORTH
NTS

Original drawing is 24"x36". Scale accordingly if reduced.

SHEET TITLE:

COVER SHEET

REVISIONS:

DATE ISSUED: 2/27/2015
PROJECT NO.: 12.0001

DRAWING NUMBER:

G-001

SHEET: 1 OF 57

ANDREW M. HAYES
AIA 016166

ABBREVIATIONS

A.B.	ANCHOR BOLT	INT.	INTERIOR
A.F.F.	ABOVE FINISH FLOOR	JT.	JOINT
A.H.U.	AIR HANDLING UNIT	KIT.	KITCHEN
A.P.	ACCESS PANEL	KW.	KILOWATT
A.T.	ACOUSTICAL TILE	L.	LENGTH
ACCOUST.	ACOUSTICAL	L.F.	LINEAR FEET
ADJ.	ADJUSTABLE	L.L.	LEAD LINED
ALT.	ALTERNATE	LAM.	LAMINATE
ALUM.	ALUMINUM	LAV.	LAVATORY
ANOD.	ANODIZED	LKR.	LOCKER
APP.	APPROXIMATE	M.H.	MANHOLE
ARCH.	ARCHITECTURAL	M.O.	MASONRY OPENING
B.F.E.	BASE FLOOD ELEVATION	M.T.	METAL THRESHOLD
B.U.R.	BUILT-UP ROOFING	MFD.	MANUFACTURED
BD.	BOARD	MFR.	MANUFACTURER
BLDG.	BUILDING	MIN.	MINIMUM
BM.	BEAM	MIR.	MIRROR
BOT.	BOTTOM	MISC.	MISCELLANEOUS
C.F.C.I.	CONTRACTOR FURNISHED AND CONTRACTOR INSTALLED	MLDG.	MOLDING
C.G.	CORNER GUARD	MTD.	MOUNTED
C.I.	CAST IRON	MIL.	METAL
C.J.	CONTROL JOINT	N.I.C.	NOT IN CONTRACT
C.M.U.	CONCRETE MASONRY UNIT	NOM.	NOMINAL
C.T.	CERAMIC TILE	NIS.	NOT TO SCALE
CAB.	CABINET	O.A.	OVERALL
CL.	CLEAR	O.C.	ON CENTER
CL.	CLEAR	O.D.	OUTSIDE DIAMETER
CLO.	CLOSET	OFCL.	OWNER FURNISHED CONTRACTOR INSTALLED
COL.	COLUMN	P.LAM.	PLASTIC LAMINATE
CONC.	CONCRETE	P.T.	PRESSURE TREATED
CONSTR.	CONSTRUCTION	P.T.D.	PAPER TOWEL DISPENSER
CONTR.	CONTRACTOR	P.V.C.	POLYVINYL CHLORIDE
CORR.	CORRIDOR	PL.	PLATE
CPT.	CARPET	PLAS.	PLASTER
CRT.	COUNTER	PLUMB.	PLUMBING
DET.	DETAIL	PLW.D.	PLYWOOD
DIA.	DIAMETER	Q.T.	QUARRY TILE
DIAG.	DIAGONAL	R.	RADIUS
DI.M.	DIMENSION	R.C.P.	REINFORCED CONCRETE PIPE
DISP.	DISPENSER	R.D.	ROOF DRAIN
DN.	DOWN	R.O.	ROUGH OPENING
DWG.	DRAWING	REC.	RECEPTACLE
E.B.	EXPANSION BOLT	REF.	REFRIGERATOR
E.J.	EXPANSION JOINT	REG.	REGLET
E.P.	ELECTRICAL PANEL	REINF.	REINFORCED
E.W.C.	ELECTRIC WATER COOLER	REQD.	REQUIRED
EL.	ELEVATION	RM.	ROOM
ELEC.	ELECTRICAL	SCHD.	SCHEDULE
ELEV.	ELEVATOR	SCRN.	SCREEN
EQ.	EQUAL	SEC.	SECTION
EQUIP.	EQUIPMENT	SH.	SHelf
EX.	EXISTING	SHT.	SHEET
EXP.	EXPOSED	SIM.	SIMILAR
EXT.	EXTERIOR	SP.	SPACE
F.C.	FURRING CHANNEL	SPECS.	SPECIFICATIONS
F.D.	FLOOR DRAIN	SS.	STAINLESS STEEL
F.E.C.	FIRE EXTINGUISHER CAB.	STL.	STEEL
F.F.	FINISH FLOOR	STOR.	STORAGE
F.H.C.	FIRE HOSE CABINET	STRUC.	STRUCTURAL
F.R.	FIRE RATED	SUSP.	SUSPENDED
FIN.	FINISH	T.B.	TOGGLE BOLT
FL.	FLOOR	T.C.	TOILET COMPARTMENT
G.C.	GENERAL CONTRACTOR	T.P.D.	TOILET PAPER DISPENSER
G.F.R.C.	GLASS FIBER REINFORCED CEMENT	TEL.	TELEPHONE
G.F.R.G.	GLASS FIBER REINFORCED GYPSUM	TEMP.	TEMPERATURE
G.W.B.	GYPSUM WALLBOARD	TYP.	TYPICAL
GA.	GAUGE	U.C.	UNDERCOUNTER
GALV.	GALVANIZED	UTIL.	UTILITY
GL.	GLASS	V.B.	VINYL BASE
GR.	GRADE	V.I.F.	VERIFY IN FIELD
GYP.	GYPSUM	V.W.C.	VINYL WALLCOVERING
H.B.	HOSE BIBB	VERT.	VERTICAL
HT.	HEIGHT	VEST.	VESTIBULE
HVAC.	HEATING, VENTILATING, & AIR CONDITIONING	W.	WIDTH
I.D.	INSIDE DIAMETER	W.C.	WATER CLOSET
I.E.	INVERT ELEVATION	W.P.	WEATHER PROOF
INSUL.	INSULATION	W.W.F.	WELDED WIRE FABRIC
		W/	WITH
		WD.	WOOD

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GENERAL NOTES

- THE CONTRACT DOCUMENTS FOR THE CITY OF KEY WEST FREDERICK DOUGLASS RECREATION BUILDING INCLUDE THE CONTRACT GENERAL CONDITIONS, SPECIFICATIONS, DRAWINGS, ADDENDA AND CONTRACT MODIFICATIONS.
- CONTRACTOR IS RESPONSIBLE FOR PROVIDING A COMPLETE SET OF DRAWINGS TO EACH SUBCONTRACTOR & TRADE, AS WELL AS FOR INSURING THAT THE WORK OF EACH SUBCONTRACTOR IS COORDINATED WITH THE WORK OF ALL OTHER SUBCONTRACTORS.
- BEFORE BEGINNING WORK AT THE SITE, WHERE POSSIBLE, AND THROUGHOUT THE COURSE OF THE WORK, INSPECT AND VERIFY THE LOCATION AND CONDITION OF EVERY ITEM AFFECTED BY THE WORK UNDER THIS CONTRACT AND REPORT DISCREPANCIES TO THE ARCHITECT BEFORE DOING WORK RELATED TO THAT BEING INSPECTED.
- DISCREPANCIES BETWEEN PORTIONS OF THE CONTRACT DOCUMENTS ARE NOT INTENDED. THE CONTRACTOR IS TO CLARIFY WITH THE ARCHITECT ANY DISCREPANCIES WHICH MAY OCCUR PRIOR TO COMMENCING ANY CONSTRUCTION.
- ALL CONSTRUCTION SHALL COMPLY WITH APPLICABLE CODES AND RESTRICTIONS ENFORCED BY AUTHORITIES HAVING JURISDICTION.
- TRADE, PRODUCT, OR MANUFACTURER'S NAMES OR CATALOG NUMBERS SHOWN ON THE DRAWINGS FOR NEW PRODUCTS ARE TO ESTABLISH QUALITY REQUIRED. IN EACH CASE ADD, BY INFERENCE, AFTER TRADE, PRODUCT OR MANUFACTURER'S NAME, THE PHRASE "OR, AS APPROVED BY ARCHITECT."
- DETERMINE THE LOCATION OF PARTITIONS NOT DIMENSIONED BY THEIR RELATION TO COLUMN FACE OR CENTER WINDOW JAMB OR MULLION, OR OTHER SIMILAR FIXED ITEM.
- ACTUAL LOCATIONS OF LIGHT FIXTURES, PLUMBING FIXTURES, ETC. ARE TO BE AS INDICATED ON ARCHITECTURAL DRAWINGS. ANY CONFLICTS WITH DRAWINGS ARE TO BE RESOLVED WITH THE ARCHITECT PRIOR TO CONSTRUCTION.
- THE LAST DATED REVISION VOIDS AND SUPERSEDES ANY AND ALL PREVIOUS DRAWINGS WITH THE SAME DRAWING NUMBER. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DELIVER THE REVISED DRAWINGS TO ALL SUBCONTRACTORS AND SUPPLIERS WITH CLEAR INSTRUCTIONS NOT TO UTILIZE PRECEDING DRAWINGS. ALL COSTS RESULTING FROM A FAILURE TO ISSUE REVISED DRAWINGS IN A TIMELY MANNER SHALL BE ABSORBED BY THE CONTRACTOR. THE OWNER AND ARCHITECT WILL NOT BE RESPONSIBLE FOR ANY COSTS ASSOCIATED WITH THE ABOVE.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL KNOWN EXISTING UTILITIES AND TO PROTECT THEM FROM DAMAGE. THE CONTRACTOR SHALL BEAR ALL EXPENSES OF REPAIR OR REPLACEMENT OF UTILITIES OR OTHER PROPERTY DAMAGED BY ORIGINATED IN CONNECTION WITH THE PERFORMANCE OF THE WORK. ALL FINAL CONNECTIONS FROM THE BUILDING TO EXISTING UTILITIES SHALL BE BY THIS CONTRACTOR.
- THE CONTRACTOR SHALL TAKE REASONABLE PRECAUTION FOR THE SAFETY OF PERSONS AND PROPERTY IN CONNECTION WITH THE PERFORMANCE OF THE CONTRACT AS REQUIRED BY GENERAL CONDITIONS AND ALL APPLICABLE LOCAL, STATE, AND FEDERAL REGULATIONS.
- THE CONTRACTOR IS RESPONSIBLE TO COORDINATE BETWEEN MECHANICAL, ELECTRICAL, PLUMBING, STRUCTURAL, AND ARCHITECTURAL DRAWINGS IN ORDER TO VERIFY ALL SLAB, WALL AND ROOF PENETRATIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO RESOLVE ALL QUESTIONS PRIOR TO BEGINNING THE WORK. COMMENCEMENT OF WORK SIGNIFIES CONTRACTOR WARRANTS ALL PENETRATIONS ARE CORRECTLY LOCATED AND THAT THE COST OF ANY CORRECTIONS, IF NECESSARY, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- ALL DEBRIS SHALL BE REMOVED FROM THE PREMISES BY THE CONTRACTOR AND ALL AREAS SHALL BE LEFT IN A CLEAN CONDITION AT ALL TIMES DURING CONSTRUCTION.
- THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO ENSURE THE SAFETY OF THE OCCUPANTS AND WORKERS AS REQUIRED BY GENERAL CONDITIONS AND ALL APPLICABLE LOCAL, STATE, AND FEDERAL REGULATIONS.
- DO NOT OBSTRUCT STREETS, SIDEWALKS, ALLEYS OR OTHER RIGHT-OF-WAYS WITHOUT FIRST OBTAINING PROPER PERMITS.
- ALL FIRE RATED CONSTRUCTION SHALL CONFORM WITH UL TESTED STANDARDS AND/OR LOCAL REQUIREMENTS AS WELL AS THESE CONTRACT DOCUMENTS.
- CONTRACTOR TO PROVIDE AND INSTALL FIRE EXTINGUISHERS AS REQUIRED BY LOCAL FIRE MARSHALL. (SEE LIFE SAFETY PLANS FOR LOCATIONS)
- CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS OF THE SOILS REPORT.

FLORIDA APPROVED PRODUCTS LIST

THE INTENT OF THIS PRODUCT APPROVAL LIST IS AS A BASIS OF DESIGN. ALL PRODUCTS SPECIFIED BY THE ARCHITECT HAVE APPROVAL FROM THE STATE OF FLORIDA. ANY SUBSTITUTIONS MADE BY THE CONTRACTOR SHALL ALSO HAVE FLORIDA PRODUCT APPROVAL AND MEET OR EXCEED THE PERFORMANCE AND QUALITY OF PRODUCTS SPECIFIED BY THE ARCHITECT.

PRODUCT CATEGORY	SUB CATEGORY	MANUFACTURER	APPROVAL NUMBER
PANEL WALLS	PRODUCTS INTRODUCED AS A RESULT OF NEW TECHNOLOGY	MAJOR INDUSTRIES	FL 13504.1
PANEL WALLS	STOREFRONTS	YKK AP	FL 14218.3
EXTERIOR DOORS	SWINGING EXTERIOR DOOR ASSEMBLIES	INGERSOLL-RAND	FL 12400.1
EXTERIOR DOORS	SWINGING EXTERIOR DOOR ASSEMBLIES	INGERSOLL-RAND	FL 12400.3
EXTERIOR DOORS	SWINGING EXTERIOR DOOR ASSEMBLIES	YKK AP	FL 12882.1

GENERAL SITE DATA

PROPERTY DATA:

PROPERTY IDENTIFICATION: KW PT LOT 6 & PT LOT 10 OF TRACT 3 H2-391/93 G13-54/57/575/77 OR66-396/99 OR61-451/52 OR61-451/452 OR1106-123/125 OR1122-1308/11/C

PROPERTY STREET ADDRESS: 111 OLIVIA STREET KEY WEST, FL 33040

PARCEL ID: 00014720-000000

ZONING DISTRICT: HNC-3 HISTORIC NEIGHBORHOOD COMMERCIAL

EXISTING USE: GYMNASIUM

LEVEL III BUILDING ALTERATION

DEVELOPMENT POTENTIAL:

MINIMUM LOT AREA: 4,000 S.F.
 LAND AREA OF PARCEL: 33,700 S.F.
 TOTAL BUILDING AREA: 18,053 S.F.

MAXIMUM IMPERVIOUS AREA OF PROPERTY - 60 TOTAL PROPERTY AREA EXISTING IMPERVIOUS AREA: EXISTING TO REMAIN

MAXIMUM FLOOR AREA RATIO (FAR): 1.0
 ACTUAL FAR 18,053/33,700 = 0.54

BUILDING ENVELOPE:

BUILDING HEIGHT:
 MAXIMUM BUILDING HEIGHT: 30' - 0"
 ACTUAL BUILDING HEIGHT: 29' - 8"

MINIMUM BUILDING SETBACKS:

REQUIRED	EXISTING (ACTUAL)
FRONT YARD: 0' - 0"	6' - 9"
SIDE YARDS: 5' - 0"	2' - 8"
STREET SIDE: 7' - 6"	1' - 11"
REAR YARD: 15' - 0"	47' - 9"

PARKING:
 EXISTING TO REMAIN - ACCORDING TO SEC. 108-571 OF THE COKW LAND DEVELOPMENT REGULATIONS. PARKING REQUIREMENTS ARE NOT APPLIED WHEN FLOOR AREA IS NOT INCREASED.

BUILDING CODE INFORMATION

PROJECT DATA

PROPOSED USE: GYMNASIUM

GROSS FLOOR AREA: EXISTING 12,153 G.S.F. PROPOSED 12,078 G.S.F.

BUILDING BASE FLOOD ELEVATION: 6' - 0"

FLOOD HAZARD AREA: FEMA FLOOD ZONE AE (MAP 12087/C1516K)

BUILDING CODE INFORMATION: 2010 FLORIDA BUILDING CODE - BUILDING (FBC) 2010 FLORIDA BUILDING CODE - EXISTING BUILDING 2010 FLORIDA BUILDING CODE - MECHANICAL 2010 FLORIDA FIRE PREVENTION CODE (FFPC) 2008 NFPA 70, NATIONAL ELECTRIC CODE (NEC)

USE AND OCCUPANCY CLASSIFICATION (FBC BUILDING CHAPTER 3)

BUILDING OCCUPANCY OR USE: PRIMARY ASSEMBLY BUSINESS GROUP A-3 SECONDARY BUSINESS GROUP B

TYPES OF CONSTRUCTION (FBC EXISTING BUILDING CHAPTER 4) (FBC BUILDING CHAPTER 6)

LEVEL III BUILDING ALTERATION CONSTRUCTION CLASSIFICATION: TYPE IIB (SPRINKLERED)

GENERAL BUILDING HEIGHTS AND AREAS (FBC BUILDING CHAPTER 5)

ALLOWABLE HEIGHT AND BUILDING AREAS (FBC TABLE 502)

TYPE II B (SPRINKLERED) ASSEMBLY GROUP A-3

MAXIMUM ALLOWABLE BUILDING HEIGHT:	75 FEET
MAXIMUM ALLOWABLE STORIES:	3 STORIES
MAXIMUM ALLOWABLE AREA PER FLOOR: (WITH FRONTAGE INCREASE)	36,442 S.F.

$A_{3a} = (A_1)(A_2)(1 + \frac{1}{10}) - (A_1)(1 + \frac{1}{10})$
 $A_{3a} = (9,500)(19,500)(1 + \frac{1}{10}) - (9,500)(19,500)$
 $A_{3a} = 36,442 S.F.$

MEANS OF EGRESS (FBC BUILDING CHAPTER 10)

USE	AREA (SQ. FT.)	LOAD FACTOR (SQ. FT. PERSON) TABLE 1004.1.1	OCCUPANT LOAD
ASSEMBLY A-3	7812 SF	15	522
ASSEMBLY A-3 (STAGE)	1121 SF	15	75
BUSINESS	1194 SF	100	15
ELECTRICAL	156 SF	300	1
STORAGE	500 SF	300	3
	10783 SF		616

MAXIMUM FLOOR AREA ALLOWANCES PER OCCUPANT

ASSEMBLY GROUP A-4 BUSINESS GROUP B	15 NET/OCCUPANT 100 G.S.F./OCCUPANT
-------------------------------------	-------------------------------------

EGRESS WIDTH PER OCCUPANT SERVED (FBC 1005.1)

STAIRWAYS (INCHES PER OCCUPANT)	0.3
OTHER EGRESS COMPONENTS (INCHES PER OCCUPANT)	0.2

EGRESS PATH ASSEMBLY GROUP A MINIMUM REQUIRED 44 INCHES

DOORS MINIMUM CLEAR WIDTH 32 INCHES

EXIT ACCESS EXIT ACCESS TRAVEL DISTANCE (FBC TABLE 1016.1) 250 FEET (WITH SPRINKLER SYSTEM)

COMMON PATH OF EGRESS TRAVEL 75 FEET (WITH SPRINKLER SYSTEM)

MINIMUM NUMBER OF EXITS FOR OCCUPANT LOAD (FBC TABLE 1021.1)

OCCUPANT LOAD (PERSONS PER STORY) 500 - 1,000	MINIMUM NUMBER OF EXITS (PER STORY) 3
---	---------------------------------------

PLUMBING FIXTURES (FBC- PLUMBING CH. 4)

MINIMUM FIXTURES:	
WATER CLOSETS	MALE - 6 REQUIRED FEMALE - 10 REQUIRED
LAVATORIES	MALE - 2 REQUIRED FEMALE - 3 REQUIRED
WATER FOUNTAINS	1 REQUIRED
SERVICE SINK	1 REQUIRED

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CONSULTANT:

CLIENT / PROJECT NAME:

CITY OF KEY WEST
 ALTERATIONS TO

FREDERICK DOUGLASS RECREATION CENTER

111 OLIVIA STREET
 KEY WEST, FL 33040

Original drawing is 24"x36". Scale accordingly if reduced.

SHEET TITLE:
 T.O.C. / GENERAL NOTES / BUILDING CODE INFORMATION

REVISIONS:

DATE ISSUED: 2/27/2015
 PROJECT NO.: 12.0D01

DRAWING NUMBER:

MATERIAL SYMBOLS



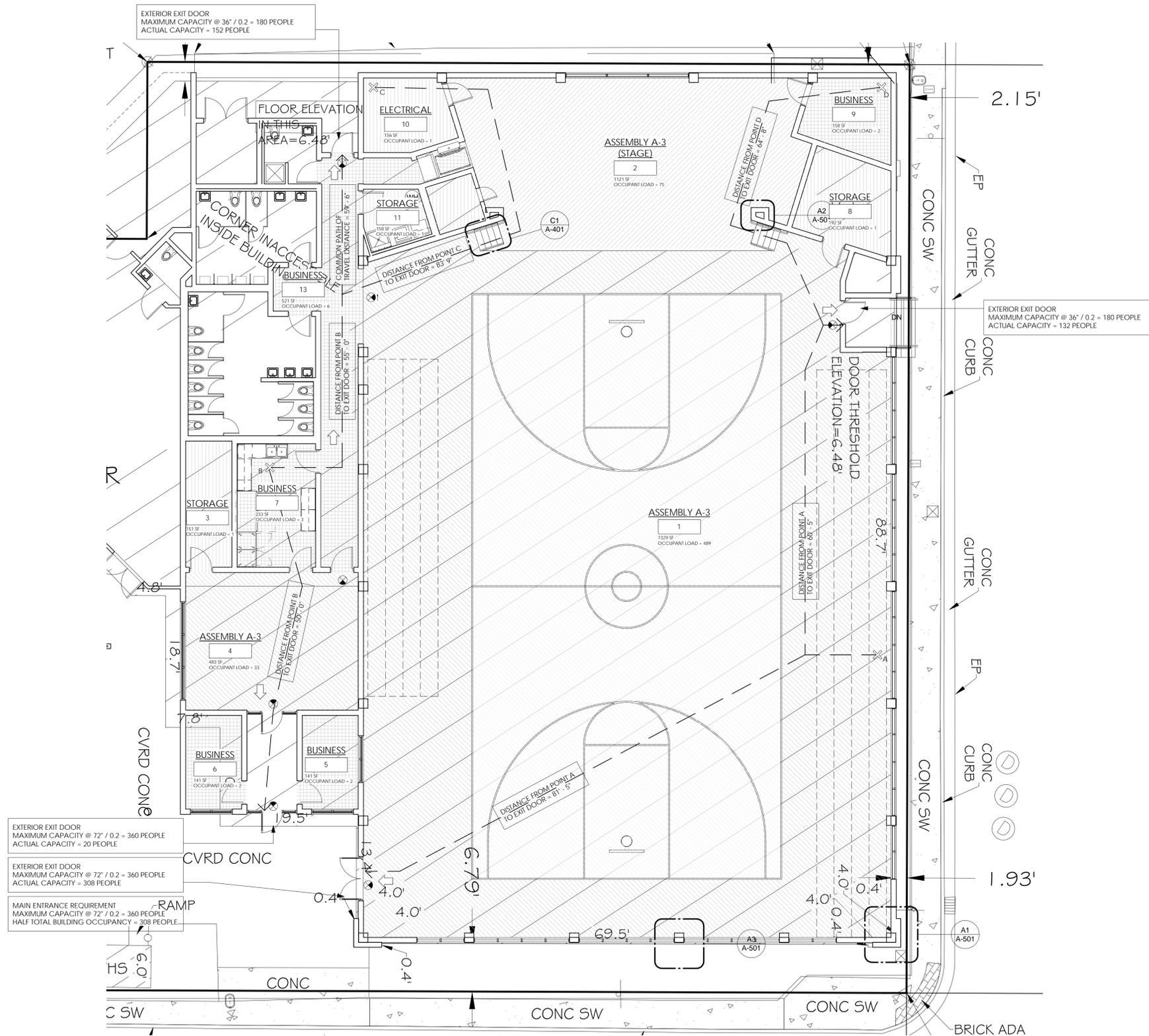
OCCUPANT LOAD BY CALCULATION

USE	AREA (SQ. FT.)	LOAD FACTOR (SQ. FT./PERSON) TABLE 1004.1.1	OCCUPANT LOAD
ASSEMBLY A-3	7812 SF	15	522
ASSEMBLY A-3 (STAGE)	1121 SF	15	75
BUSINESS	1194 SF	100	15
ELECTRICAL	156 SF	300	1
STORAGE	500 SF	300	3
	10783 SF		616

LIFE SAFETY SYMBOLS LEGEND

	SMOKE PARTITION TO DECK
	ONE HOUR FIRE RESISTANCE RATED WALL
	TWO HOUR FIRE RESISTANCE RATED WALL
	MAX. TRAVEL DISTANCE TO REACH EXIT
	DIRECTION OF TRAVEL
	CEILING MOUNTED ILLUMINATED EXIT SIGN
	CEILING MOUNTED ILLUMINATED EXIT SIGN, DOUBLE FACE
	WALL MOUNTED ILLUMINATED EXIT SIGN
	LOCATION OF MOST DISTANT OCCUPANT
	MULTIPURPOSE DRY CHEMICAL EXTINGUISHER (20-B RATED)
	MULTIPURPOSE DRY CHEMICAL EXTINGUISHER (2-A RATED) IN RECESSED CABINET
	FIRE ALARM PULL STATION
	SMOKE DETECTOR
	HEAT DETECTOR
	HORN WITH STROBE
	FIRE DOOR & FRAME CLASSIFICATION IN HOURS
	EMERGENCY LIGHT, BATTERY POWERED
	COMBINATION EMERGENCY LIGHT AND EXIT SIGN
	FIRE ALARM STROBE ONLY
	FIRE ALARM CONTROL PANEL
	FIRE DEPARTMENT CONNECTION

NOTE: THIS LEGEND REPRESENTS TYPICAL ELEMENTS. NOT ALL SYMBOLS MAY BE USED IN THE LIFE SAFETY PLAN.



LIFE SAFETY PLAN - FIRST FLOOR
1/8" = 1'-0"

EXISTING TREE TABLE

NUMBER	COMMON NAME	BOTANICAL NAME	DBH	RATING	REPLACEMENT	STATUS
1	UNKNOWN	CAESALPINNA SPECIES	3" & 14"	2	○	R
2	WILD TAMARIND	LYSILOMA LATISILIGUUM	11"	3	○	S
3	WILD CINNAMON	CANELLA WINTERANA	11"	3	○	S
4	GUMBO LIMBO	BURSERIA SIMARUBA	20"	3	○	S
4A	BRAZILIAN PEPPER	SCHINUS TEREBINTHIFOLIUS		3	○	R
5	THATCH PALM	THRINAX RADIATA		3	○	R
6	BLACK OLIVE	BUCIDA BUCERAS	3" & 4"	3	○	R
7	SIMPSON STOPPER	MYRCIANTHES FRAGRANS	3"	2	○	R
8	SPANISH STOPPER	EUGENIA FOETIDA	4"	2	○	R
9	CABBAGE PALM PUP	SABAL PALMETTO		3	○	R
9A	POTATO TREE	SOLANUM ERIANTHUM	3"	1	○	R
10	THATCH PALM	THRINAX RADIATA		3	○	S
11	GUMBO LIMBO	BURSERIA SIMARUBA	10"	3	○	S
12	THATCH PALM	THRINAX RADIATA		3	○	S
13	THATCH PALM	THRINAX RADIATA		3	○	S
14	ROYAL POINCIANA	DELONIX REGIA	16"	3	○	S
15	THATCH PALM	THRINAX RADIATA		3	○	S
16	ROYAL POINCIANA	DELONIX REGIA	13"	3	○	S
17	GUMBO LIMBO	BURSERIA SIMARUBA	15"	3	○	R
18	THATCH PALM	THRINAX RADIATA		3	○	R
18A	BRAZILIAN PEPPER	SCHINUS TEREBINTHIFOLIUS		3	○	R
19	UNKNOWN	UNKNOWN	17"	3	○	S
20	CABBAGE PALM PUP	SABAL PALMETTO		3	○	R
21	BLACK OLIVE	BUCIDA BUCERAS		3	○	R
22	BLACK OLIVE	BUCIDA BUCERAS	8"	3	○	R
23	BLACK OLIVE	BUCIDA BUCERAS	7"	3	○	R
24	MAHOGANY	SWIETENIA MAHAGONI	1"	3	○	R
25	BLACK OLIVE	BUCIDA BUCERAS	6"	3	○	R
25A	BLACK OLIVE CLUMP	BUCIDA BUCERAS		3	○	R
26	UNKNOWN CLUMP	UNKNOWN		3	○	R
27	FIREBUSH	HAMELIA NODOSA	3"	3	○	R
28	HIBISCUS	HIBISCUS ROSA-SINENSIS		3	○	R
28A	FICUS	FICUS SPECIES		3	○	R

CONDITION CHART

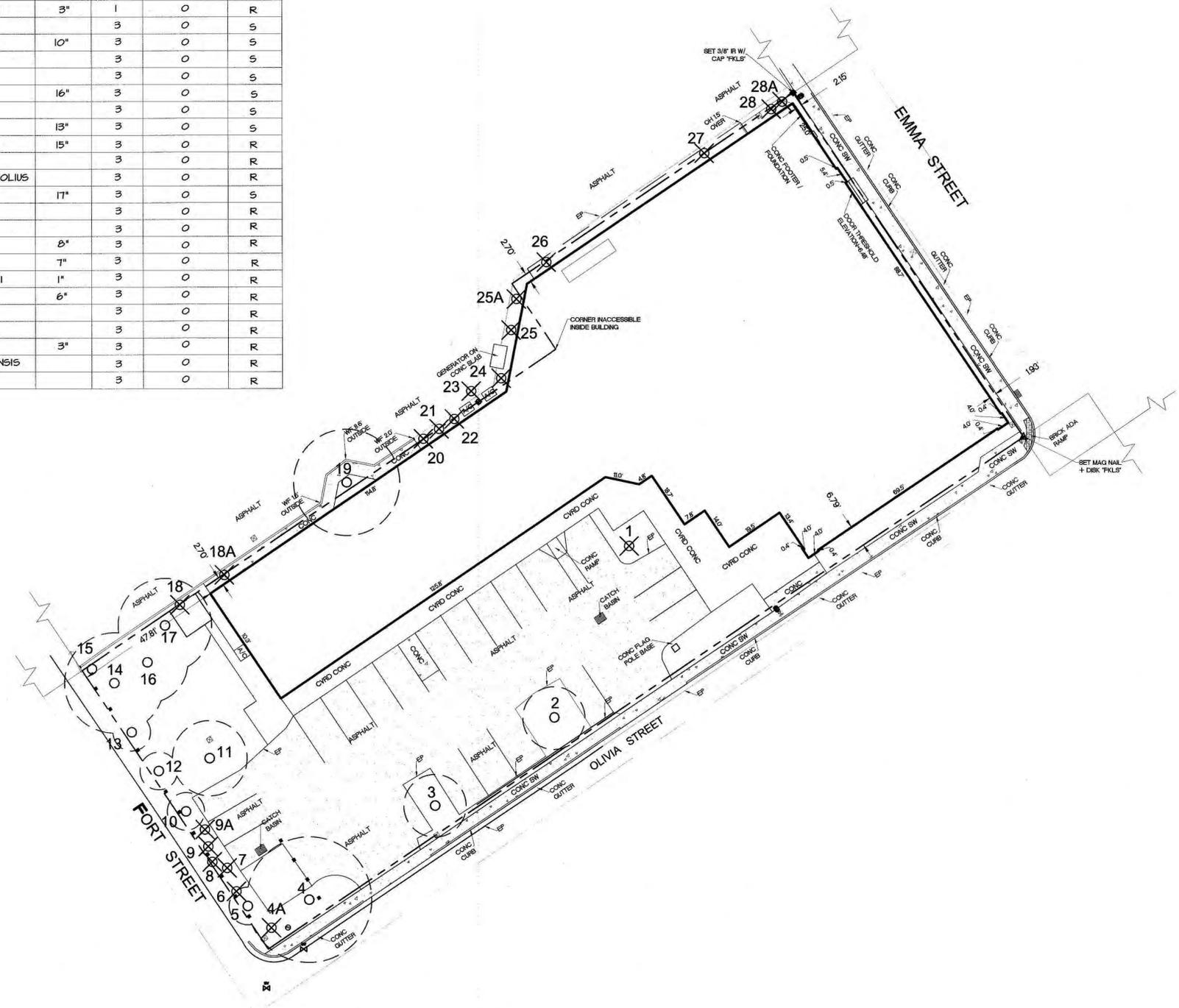
1	POOR
2	FAIR
3	GOOD
4	EXCELLENT

SYMBOL LEGEND

EXISTING TREE TO REMAIN



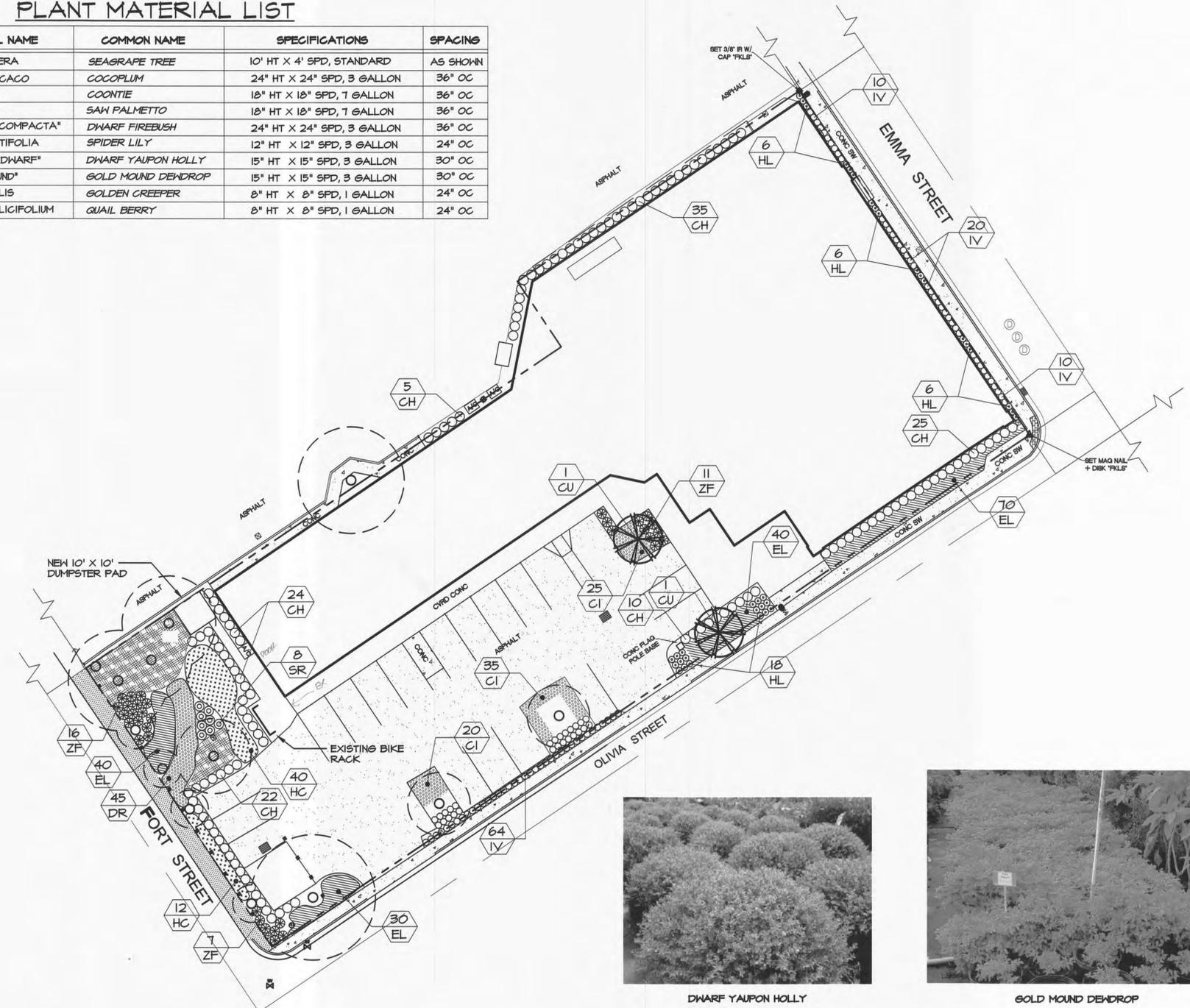
EXISTING TREE TO REMOVE



PLANT MATERIAL LIST

SYMBOL	QUANTITY	BOTANICAL NAME	COMMON NAME	SPECIFICATIONS	SPACING
CU	2	COCCOLOBA UVIFERA	SEAGRAPE TREE	10' HT X 4' SPD, STANDARD	AS SHOWN
CH	121	CHRYSOBALANUS ICAGO	COCOPLUM	24" HT X 24" SPD, 3 GALLON	36" OC
ZF	34	ZAMIA FLORIDANA	COONTIE	18" HT X 18" SPD, 7 GALLON	36" OC
SR	8	SERENOA REPENS	SAW PALMETTO	18" HT X 18" SPD, 7 GALLON	36" OC
HC	52	HAMELIA PATENS "COMPACTA"	DWARF FIREBUSH	24" HT X 24" SPD, 3 GALLON	36" OC
HL	36	HYMENOCALLIS LATIFOLIA	SPIDER LILY	12" HT X 12" SPD, 3 GALLON	24" OC
IV	104	ILEX "SCHELLINGS DWARF"	DWARF YAUPON HOLLY	15" HT X 15" SPD, 3 GALLON	30" OC
DR	45	DURANTA "GOLD MOUND"	GOLD MOUND DENDROP	15" HT X 15" SPD, 3 GALLON	30" OC
EL	180	ERNODEA LITTERALIS	GOLDEN CREEPER	8" HT X 8" SPD, 1 GALLON	24" OC
CI	80	CROSSOPETALUM ILICIFOLIUM	QUAIL BERRY	8" HT X 8" SPD, 1 GALLON	24" OC

SYMBOL LEGEND



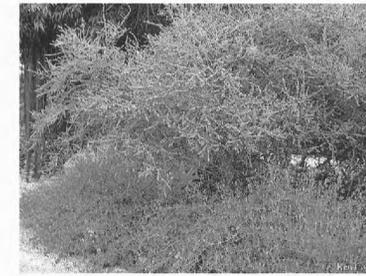
QUAIL BERRY



DWARF YAUPON HOLLY



GOLD MOUND DENDROP



GOLDEN CREEPER



SEA GRAPE



COCOPLUM



COONTIE



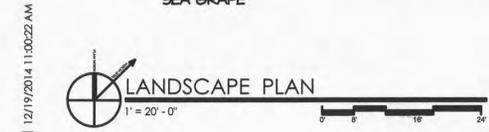
SAW PALMETTO



DWARF FIREBUSH



SPIDER LILY



12/19/2014 11:00:22 AM

L. ALYSON LUTTEN, P.L.A.
 L0001168

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CLIENT / PROJECT NAME:

FREDERICK DOUGLASS RECREATION CENTER STRUCTURAL ASSESSMENT TASK A

111 OLIVIA STREET KEY WEST, FLORIDA

Original drawing is 24"x36". Scale accordingly if reduced.

SHEET TITLE: STRUCTURAL SPECIFICATIONS

REVISIONS:

DATE ISSUED: OCT 24, 2014 PROJECT NO.: 12.0001

DRAWING NUMBER:

S-001 SHEET: OF 4

STRUCTURAL SPECIFICATIONS

MISCELLANEOUS

- 1. THE STRUCTURAL SYSTEM IS UNSTABLE UNTIL ALL CONNECTIONS HAVE BEEN MADE AND ALL CONCRETE HAS REACHED ITS MINIMUM DESIGN STRENGTH, AS SHOWN IN THE STRUCTURAL DOCUMENTS.
2. CONTRACTOR IS RESPONSIBLE FOR MEANS AND METHODS OF CONSTRUCTION TO ENSURE THE SAFETY OF THE BUILDING UNTIL STRUCTURAL SYSTEM IS COMPLETED. THIS INCLUDES, BUT IS NOT LIMITED TO, THE ADDITION OF WHATEVER TEMPORARY BRACING, SHORING, GUYS OR TIE-DOWNS THAT MAY BE NECESSARY. SUCH MATERIAL SHALL BE REMOVED AND SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AFTER COMPLETION OF THE PROJECT.
3. CONTRACTOR TO SUPPORT, BRACE AND SECURE EXISTING STRUCTURE AS REQUIRED. CONTRACTOR IS SOLELY RESPONSIBLE FOR THE SAFETY OF THE BUILDING DURING CONSTRUCTION.
4. APPLICABLE BUILDING CODE: 2010 FLORIDA BUILDING CODE.
5. GRAVITY DESIGN LOADS:
AREA SUPERIMPOSED LIVE LOAD TOTAL DEAD LOAD
NEW ADDITION ROOF 20 PSF 25 PSF
EXISTING GYM ROOF 20 PSF 15 PSF
6. WIND DESIGN CRITERIA:
ULTIMATE BASIC WIND SPEED: VULT=200 MPH (3 SECOND GUST)
EQUVALENT NOMINAL BASIC WIND SPEED VASD = 155 MPH (3 SECOND GUST)
RISK CATEGORY = III
EXPOSURE CATEGORY = C
ENCLOSED BUILDING INTERNAL PRESSURE COEFFICIENT, GCPI= +/-0.18
WIND BORNE DEBRIS REGION
7. ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE REFERENCED BUILDING CODE.
8. COORDINATE ALL DIMENSIONS AND ELEVATIONS WITH THE ARCHITECTURAL DRAWINGS. DO NOT SCALE DRAWINGS.
9. CONTACT ENGINEER WITH ANY QUESTIONS OR DISCREPANCIES FOUND ON DRAWINGS.
10. BUILDING EXPANSION JOINTS (EJ), WHERE SHOWN, WILL EXPAND AND CONTRACT OVER THE LIFE OF THE BUILDING. JOINT SEALANTS AND COVERS MUST ACCOMMODATE THIS MOVEMENT.
11. SECTIONS AND DETAILS ARE REFERENCED IN TYPICAL LOCATIONS BUT ALSO APPLY TO ALL OTHER SIMILAR CONDITIONS.
12. CONTRACTOR TO VERIFY ALL EXISTING DIMENSIONS, ELEVATIONS, AND CONDITIONS PRIOR TO BEGINNING CONSTRUCTION.
13. SUBMIT SHOP DRAWINGS AS REQUIRED HEREIN. ALLOW FOR TWO WEEKS REVIEW TIME AFTER RECEIPT OF SUBMITTALS BY THIS FIRM. ALL SUBMITTALS SHALL BE CHECKED AND SIGNED BY THE GENERAL CONTRACTOR AND SIGNED/SEALED BY THE DELEGATED ENGINEER, WHERE SPECIFIED HEREIN.
14. CONTRACTOR SHALL NOT BE RELIEVED FROM RESPONSIBILITY FOR ERRORS OR OMISSIONS IN SHOP DRAWINGS OR MIX DESIGNS BY THE ENGINEER'S REVIEW THEREOF.
15. ANY CHANGES TO THE STRUCTURE SHALL HAVE BEEN REVIEWED AND APPROVED IN WRITING BY THE ENGINEER PRIOR TO COMMENCING WORK ON ITEMS AFFECTED.
16. CONTRACTOR SHALL NOTIFY THIS OFFICE WHEN THE STRUCTURAL SYSTEM IS SUBSTANTIALLY COMPLETED, AND BEFORE SHEATHING, CEILINGS, OR ROOFING IS INSTALLED.

DELEGATED ENGINEER

- 1. WHERE NOTED HEREIN, A LICENSED PROFESSIONAL (DELEGATED) ENGINEER SHALL BE RETAINED TO DESIGN THE PRODUCT OR ASSEMBLY.
2. THE DELEGATED ENGINEER SHALL BE EXPERIENCED IN THE DESIGN OF THE REFERENCED PRODUCT OR ASSEMBLY.
3. THE DELEGATED ENGINEER MUST BE PROVIDED WITH A COPY OF THESE DRAWINGS AND SPECIFICATIONS.
4. IT IS THE DELEGATED ENGINEER'S RESPONSIBILITY TO REVIEW THE ENGINEER OF RECORD'S WRITTEN ENGINEERING REQUIREMENTS AND AUTHORIZATION FOR THE DELEGATED ENGINEERING DOCUMENT TO DETERMINE THE APPROPRIATE SCOPE OF ENGINEERING.
5. THE DELEGATED ENGINEERING DOCUMENT SHALL COMPLY WITH THE WRITTEN ENGINEERING REQUIREMENTS RECEIVED FROM THE ENGINEER OF RECORD. THEY SHALL INCLUDE THE PROJECT IDENTIFICATION AND THE CRITERIA USED AS A BASIS FOR ITS PREPARATION. IF A DELEGATED ENGINEER DETERMINES THERE ARE DETAILS, FEATURES OR UNANTICIPATED PROJECT LIMITS WHICH CONFLICT WITH THE WRITTEN ENGINEERING REQUIREMENTS PROVIDED BY THE ENGINEER OF RECORD, THE DELEGATED ENGINEER SHALL TIMELY CONTACT THE ENGINEER OF RECORD FOR RESOLUTION OF CONFLICTS.
6. THE DELEGATED ENGINEER SHALL FORWARD THE DELEGATED ENGINEERING DOCUMENT TO THE ENGINEER OF RECORD FOR REVIEW. ALL FINAL DELEGATED ENGINEERING DOCUMENTS REQUIRE THE IMPRESSED SEAL AND SIGNATURE OF THE DELEGATED ENGINEER AND INCLUDE:
A) DRAWINGS INTRODUCING ENGINEERING INPUT SUCH AS DEFINING THE CONFIGURATION OR STRUCTURAL CAPACITY OF STRUCTURAL COMPONENTS AND/OR THEIR ASSEMBLY INTO STRUCTURAL SYSTEMS.
B) CALCULATIONS.

EXISTING BUILDINGS

INFORMATION ON THE EXISTING BUILDING, SHOWN ON THESE PLANS, IS OBTAINED FROM EXISTING BUILDING PLANS BY _____, DATED _____, DATED _____ EXISTING INFORMATION DOES NOT NECESSARILY REFLECT AS-BUILT CONDITIONS. THE CONTRACTOR SHALL VERIFY ALL INFORMATION SHOWN ON THESE PLANS AND NOTIFY THE ENGINEER OF ANY VARIATION.

SITE WORK

- 1. A SUBSURFACE INVESTIGATION HAS BEEN COMPLETED AT THE PROJECT SITE BY WINGERTER LABORATORIES, INC. SOIL BORING LOGS AND SITE PREPARATION PROCEDURES ARE INCLUDED IN THE PROJECT SOILS REPORT W/ ORDER NO. 13-1194, DATED JUNE 18, 2013, WHICH IS AN INTEGRAL PART OF THESE CONTRACT DOCUMENTS.
2. SITE WORK SHALL BE DONE IN STRICT ACCORDANCE WITH THE PROJECT SOILS REPORT.
3. CONTRACTOR SHALL REVIEW THE SOILS REPORT AND VERIFY THAT TEST BORINGS HAVE BEEN DONE UNDER ALL BUILDING(S) PRIOR TO BEGINNING EARTHWORK.
4. INFORMATION FROM GEOTECHNICAL REPORT:
A) DESIGN SOIL BEARING PRESSURE = 4,000 PSF.
B) ESTIMATED MAXIMUM SETTLEMENT = _____ INCHES.
C) ESTIMATED DIFFERENTIAL SETTLEMENT = _____ INCHES.
5. A QUALIFIED TESTING LABORATORY SHALL BE RETAINED TO PERFORM THE FOLLOWING MINIMUM TESTS. REFER TO SOILS REPORT FOR ANY ADDITIONAL TESTING.
A) ONE DENSITY TEST FOR EACH 2,000 SQUARE FEET OF COMPACTED SUBGRADE AND COMPACTED FILL.
B) ONE DENSITY TEST AT EACH COLUMN FOOTING.
C) ONE DENSITY TEST PER 50 FEET OF WALL FOOTING.
6. ONE COPY OF ALL TEST REPORTS SHALL BE SENT DIRECTLY TO OWNER, ARCHITECT, STRUCTURAL ENGINEER, AND GENERAL CONTRACTOR.
7. FOUNDATION WALLS THAT RETAIN EARTH SHALL BE BRACED AGAINST BACKFILLING PRESSURES UNTIL FLOOR SLABS AT TOP AND BOTTOM ARE IN PLACE.
8. THE SIDES OF FOOTINGS MAY BE EARTH-FORMED IF THE EXCAVATION CAN BE KEPT VERTICAL, CLEAN, AND STABLE, OTHERWISE, PLYWOOD FORMS MUST BE USED.
9. EXERCISE CARE WHEN COMPACTING NEAR ADJACENT STRUCTURES. FOLLOW THE RECOMMENDATIONS IN THE SOILS REPORT AND DOCUMENT EXISTING CONDITIONS WITH PHOTOGRAPHS PRIOR TO STARTING WORK.
10. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL LOCATE ALL EXISTING UNDERGROUND UTILITY LINES, TANKS, ETC. WITHIN THE CONSTRUCTION AREA AND RELOCATE THEM AS DIRECTED BY THE CIVIL ENGINEER.

CAST IN PLACE CONCRETE

- 1. ALL CAST-IN-PLACE CONCRETE WORK INCLUDES REINFORCING STEEL AND RELATED WORK SHOWN INCLUDING FORMWORK, SETTING ANCHOR BOLTS, PLATES, FRAMES, DOWELS FOR MASONRY OR OTHER ITEMS EMBEDDED IN CONCRETE.
2. APPLICABLE STANDARDS

Table with 2 columns: ACI NUMBER, TITLE. Lists standards for concrete construction, including ACI 117, 226, 301, 302, 304, 304.2R, 305R, 306R, 308, 309R, 315, 318, 347.

Table with 2 columns: CRSI NUMBER, TITLE. Lists standards for reinforcing bars, including CRSI 63.

- 3. CONCRETE MATERIALS
A) PORTLAND CEMENT - ASTM C 150, TYPE I
B) AGGREGATES - NORMAL WEIGHT CONCRETE, COARSE AND FINE, ASTM C33. STRUCTURAL LIGHT WEIGHT ASTM C330.
C) AIR-ENTRAINING - ASTM C260
D) WATER REDUCING - ASTM C494, TYPE A
E) WATER - FRESH, CLEAN AND POTABLE
F) NO ACCELERATORS, RETARDERS OR ADMIXTURES CONTAINING CHLORIDES WILL BE PERMITTED
G) FLY-ASH - ASTM C618, CLASS F, 20% MAXIMUM OF CEMENTITIOUS MATERIAL BY WEIGHT. DO NOT USE FOR EXPOSED SLABS OR ARCHITECTURAL CONCRETE.
H) SUPER PLASTICIZER - ASTM C494, TYPE F OR G, WHERE AUTHORIZED BY THE ENGINEER.
I) GROUND GRANULATED BLAST-FURNACE SLAG CEMENT - ASTM C989, 50% MAXIMUM BY WEIGHT.
J) MAXIMUM AGGREGATE SIZE - FOOTINGS = #57, OTHERS #67

- 4. REINFORCING MATERIALS
A) DEFORMED BARS - ASTM A615, GRADE 60
B) SMOOTH DOWELS - ASTM A615, PLAIN BARS, MINIMUM YIELD STRENGTH OF 60,000 PSI.
C) CORROSION RESISTANT UNCOATED STEEL (MMFX-2) - ASTM A615, GRADE 75 AND ASTM A1035 LOW-CARBON (8% MINIMUM) CHROMIUM BY MMFX OR EQUAL.
D) WELDED WIRE FABRIC - ASTM A185, PLAIN WIRE FABRIC IN FLAT SHEETS ONLY.
E) ACCESSORIES TO CONFORM TO ACI 315.
F) WHERE CONCRETE SURFACES ARE EXPOSED, MAKE THOSE PORTIONS OF ALL ACCESSORIES IN CONTACT WITH THE CONCRETE SURFACE OR WITHIN 1/2 INCH THEREOF, OF PLASTIC OR STAINLESS STEEL.
5. PROVIDE THE FOLLOWING MINIMUM CONCRETE STRENGTHS AT 28 DAYS:
A) FOOTINGS, SLAB-ON-GRADE-----3000 PSI
B) MASONRY WALL BEAMS, TIE COLUMNS-----3000 PSI
C) FORMED COLUMNS, WALLS, BEAMS & SLABS-----4000 PSI
6. CONCRETE MUST BE BATCHED, MIXED AND TRANSPORTED IN ACCORDANCE WITH THE SPECIFICATIONS FOR READY-MIXED CONCRETE ASTM C94.
7. REQUIRED SLUMP = 4 PLUS OR MINUS ONE INCH.
8. CONCRETE MUST BE PLACED WITHIN 90 MINUTES OF BATCH TIME. WHEN AIR TEMPERATURE IS BETWEEN 85 AND 90 DEGREES F, REDUCE MIXING AND DELIVERY TIME TO 75 MINUTES. WHEN AIR TEMPERATURE IS HIGHER THAN 90 DEGREES F, REDUCE MIXING AND DELIVERY TIME TO 60 MINUTES.
9. DO NOT ADD WATER AT THE JOB SITE WITHOUT APPROVAL OF THE PROJECT SUPERINTENDENT. DO NOT EXCEED THE SLUMP LIMITATION. USE ONLY COLD WATER FROM THE TRUCK TANK. ANY ADDED WATER MUST BE INDICATED ON THE DELIVERY TICKET PLUS THE NAME OF THE PERSON AUTHORIZING. TEST CYLINDERS SHALL BE TAKEN AFTER THE ADDITION OF WATER.
10. LAP SPlice REINFORCING PER CONCRETE LAP SCHEDULE MINIMUM UNLESS OTHERWISE SHOWN OR NOTED.
11. PROVIDE CORNER BARS AT ALL WALL FOOTING, WALL AND BEAM CORNERS. SIZE AND NUMBER TO MATCH HORIZONTAL BARS.
12. PROVIDE FOUNDATION DOWELS TO MATCH SIZE AND NUMBER OF VERTICAL BARS. EMBED DOWELS TO:
A) 3" ABOVE BOTTOM OF FOOTINGS
13. REINFORCEMENT SHALL BE FASTENED AND SECURED TOGETHER TO PREVENT DISPLACEMENT BY CONSTRUCTION LOADS OR THE PLACING OF CONCRETE.
14. REINFORCING BAR COVER
A) FOOTINGS 2" (TOP), 3" (SIDES AND BOTTOM)
B) COLUMNS AND BEAMS 1-1/2"
C) SLABS 3/4" (INTERIOR), 1-1/2" (EXTERIOR)
15. WHERE BAR LENGTHS ARE GIVEN ON THE DRAWINGS, LENGTH OF HOOK, IF REQUIRED, IS NOT INCLUDED.
16. SELECT PROPORTIONS IN ACCORDANCE WITH ACI 301 TO PROVIDE CONCRETE CAPABLE OF BEING PLACED WITHOUT EXCESSIVE SEGREGATION AND WITH ACCEPTABLE FINISHING PROPERTIES, DURABILITY, SURFACE HARDENERS, APPEARANCE, AND STRENGTH REQUIREMENTS REQUIRED BY THESE SPECIFICATIONS.
17. CHAIR WELDED WIRE FABRIC REINFORCING AT 3'-0" ON CENTER MAXIMUM IN EACH DIRECTION.
18. MAXIMUM WATER TO CEMENT RATIO WHEN NO BACK-UP DATA IS AVAILABLE:
A) 4000 PSI, 28-DAY COMPRESSIVE STRENGTH; W/C RATIO, 0.44 MAXIMUM (NON-AIR-ENTRAINED), 0.36 MAXIMUM (AIR-ENTRAINED).
B) 3000 PSI, 28-DAY COMPRESSIVE STRENGTH; W/C RATIO, 0.58 MAXIMUM (NON-AIR-ENTRAINED), 0.47 MAXIMUM (AIR-ENTRAINED).
19. DATA TO BE SUBMITTED:
A) INTENDED USAGE AND LOCATION FOR EACH TYPE
B) MIX DESIGN FOR EACH TYPE
C) CEMENT CONTENT IN POUNDS-PER-CUBIC YARD
D) COARSE AND FINE AGGREGATE IN POUNDS/CUBIC YARD
E) WATER CEMENT RATIO BY WEIGHT
F) CEMENT TYPE AND MANUFACTURER
G) SLUMP RANGE
H) AIR CONTENT
I) ADMIXTURE TYPE AND MANUFACTURER
J) PERCENT ADMIXTURE BY WEIGHT
K) STRENGTH TEST DATA REQUIRED TO ESTABLISH MIX DESIGN.
L) COMPLETE DETAIL AND PLACING SHOP DRAWINGS FOR ALL REINFORCING STEEL INCLUDING ACCESSORIES THAT HAVE BEEN REVIEWED AND STAMPED BY THE GENERAL CONTRACTOR. INCLUDE ALL REQUIRED DIMENSIONS AND ELEVATIONS (IE. TOP OF CONCRETE)
20. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE CONSTRUCTION OF FORMWORK, SHORING AND RE-SHORING IN ACCORDANCE WITH ACI 347.
A) FORM AND SHORING DESIGN BY A P.E. REGISTERED IN THE STATE OF FLORIDA.
21. SUBMIT FORM WORK AND SHORING DRAWINGS TO LOCAL BUILDING DEPARTMENT WHEN REQUIRED BY FLORIDA THRESHOLD LAW.
22. CONSTRUCTION JOINTS NOT SHOWN ON THE DRAWINGS MUST BE MADE AND LOCATED TO LEAST IMPAIR THE STRENGTH OF THE STRUCTURE.
A) NO HORIZONTAL CONSTRUCTION JOINTS WILL BE PERMITTED IN BEAMS, GIRDERS AND SLABS.

- B) LOCATION OF ANY CONSTRUCTION JOINT NOT SHOWN IS SUBJECT TO REVIEW AND ACCEPTANCE BY ENGINEER.
23. INTERNAL VIBRATION, PROPERLY APPLIED IS THE REQUIRED METHOD OF CONSOLIDATING PLASTIC CONCRETE.
24. PROVIDE 3/4" CHAMFER ON ALL EXPOSED CORNERS OF COLUMNS, BEAMS AND WALLS UNLESS OTHERWISE NOTED ON ARCHITECTURAL DRAWINGS.
25. CONTRACTOR SHALL VERIFY LOCATIONS OF ALL OPENINGS, SLEEVES, AND SLAB RECESSES AS REQUIRED BY OTHER TRADES BEFORE CONCRETE IS PLACED. NO SLEEVE, OPENINGS, OR INSERT MAY BE PLACED IN BEAMS, JOISTS, OR COLUMN UNLESS APPROVED BY THE ENGINEER.
26. CONTRACTOR SHALL VERIFY EMBEDDED ITEMS INCLUDING, BUT NOT LIMITED TO, ANCHOR BOLTS, BOLT CLUSTERS, WELD PLATES, ETC., BEFORE PLACING CONCRETE. NOTIFY ENGINEER OF ANY CONFLICTS WITH REBAR.
27. SEE ARCHITECTURAL DRAWINGS FOR REQUIRED CONCRETE FINISHES.
28. SLOPE WALKWAYS TO DRAIN AWAY FROM THE BUILDING.
29. BUILDING FLOOR AND SITE SLABS-ON-GRADE SHALL BE 4" MINIMUM THICKNESS, UNLESS NOTED OTHERWISE.
A) REINFORCED WITH 6X6 - W1.4 X W1.4 W.W.F.
B) PLACED ON 10 MIL POLYETHYLENE VAPOR RETARDER. LAP 6" AND TAPE ALL JOINTS.
C) SAW-CUT CONTROL JOINTS @ LESS THAN OR EQUAL TO 15'-0" EACH WAY.
D) PROVIDE HOUSEKEEPING PADS AS REQUIRED.
E) SEE DRAWINGS FOR ANY ADDITIONAL CONDITIONS.
30. TESTING
A) A QUALIFIED TESTING LAB SHALL BE RETAINED TO PERFORM QUALITY CONTROL WORK AND ON-SITE TESTING.
B) SLUMP TEST - ASTM 143
C) MOLD AND CURE TEST CYLINDERS (ASTM C-31) AND TEST CYLINDERS FOR STRENGTH (ASTM C39). TAKE ONE TEST - FOUR CYLINDERS FOR EACH DAYS POUR OF 50 CUBIC YARDS, OR FRACTION THEREOF. TEST ONE CYLINDER AT 7 DAYS, TWO AT 28 DAYS AND ONE HOLD. TEST CYLINDER SAMPLES SHALL BE TAKEN AT THE POINT OF DISCHARGE WHEN USING A PUMP.
D) ONE COPY OF ALL TEST REPORTS SHALL BE SENT DIRECTLY TO THE OWNER, ENGINEER, ARCHITECT AND GENERAL CONTRACTOR.
31. CONTRACTOR SHALL PROVIDE FLATNESS AND LEVELNESS IN CONCRETE SLABS PER ACI 302.1R, FIG. 8.7 MINIMUM REQUIRED "F" NUMBERS FOR TYPE OF SLAB USE. REFER TO ACI 117 FOR FLOOR TOLERANCES.
32. REPAIR ANY CRACKS OR DEFECTIVE AREAS THAT WILL RESTORE THE AFFECTED SURFACE OR AREAS TO THEIR FULL DESIGN STRENGTH AND APPEARANCE. CONTACT THE STRUCTURAL ENGINEER FOR ADVICE AND EVALUATION.
33. ACCEPTANCE OF THE STRUCTURE WILL BE MADE IN CONFORMANCE WITH ACI 301.
34. ALL CAST-IN-PLACE CONCRETE MUST BE MAINTAINED WITH MINIMAL MOISTURE LOSS AT A RELATIVELY CONSTANT TEMPERATURE FOR A MINIMUM OF 7 DAYS FOLLOWING THE PLACING OF THE CONCRETE BY THE USE OF A WATER SPRAY, WATER SATURATED FABRIC, MOISTURE RETAINING MEMBRANE OR LIQUID CURING COMPOUND.
35. CURE SLABS-ON-GRADE FOR THE FIRST 72 HOURS BY THE USE OF:
A) FOG SPRAYING
B) PONDING
C) SPRINKLING
D) CONTINUOUSLY WET ABSORPTIVE MATS OR FABRIC
E) CONTINUE CURING BY USE OF MOISTURE RETAINING COVER UNTIL CONCRETE HAS OBTAINED ITS SPECIFIED 28 DAY COMPRESSIVE STRENGTH.
F) OR LIQUID CURING COMPOUND AFTER FINISHING PROCESS IS COMPLETED.
G) CONCRETE WET CURE TIME TO BE 7 DAYS MINIMUM AT 50 DEGREES MINIMUM TEMPERATURE.
36. SUBMIT MATERIALS AND METHOD OF CURING FOR REVIEW.
37. DO NOT USE MOISTURE RETAINING CURING COMPOUNDS FOR CURING SURFACES TO RECEIVE CARPET, FLEXIBLE FLOORING, CERAMIC TILED FLOORS OR OTHER SPECIFIED FLOOR SYSTEMS, UNLESS IT HAS BEEN DEMONSTRATED THAT SUCH COMPOUNDS WILL NOT PREVENT BOND.
38. DO NOT PERMIT CONCRETE NOT FULLY CURED TO BE EXPOSED TO EXCESSIVE TEMPERATURE CHANGES OR HIGH WINDS.
39. POUR ALL GROUND SLABS ON 10 MIL MINIMUM VAPOR RETARDER IN COMPLIANCE WITH ASTM E1745, LAPPED 6" MINIMUM AND FULLY TAPED.
40. EQUIPMENT MADE OF ALUMINUM OR ALUMINUM ALLOYS, SHALL NOT BE USED FOR PUMP LINES, TREMIES, OR CHUTES OTHER THAN SHORT CHUTES SUCH AS THOSE USED TO CONVEY CONCRETE FROM A TRUCK MIXER.
41. THE CODE PROHIBITS THE USE OF ALUMINUM (CONDUIT, PIPES, ETC.) IN STRUCTURAL CONCRETE UNLESS IT IS EFFECTIVELY COATED OR COVERED.

PRECAST CONCRETE U-LINTELS AND SILLS

- 1. UNITS SHALL BE FABRICATED BY A FIRM ENGAGED IN THE MANUFACTURING OF PRECAST AND PRE-STRESSED CONCRETE U-LINTELS AND SILLS FOR A MINIMUM OF 5 YEARS. FABRICATOR SHALL HAVE A QUALITY ASSURANCE PROGRAM THAT COMPLIES WITH THE PROCEDURES OF MANUAL 116 BY THE PRECAST/PRE-STRESSED CONCRETE INSTITUTE PCI).

- 2. PLANT RECORDS OF PRODUCTION AND QUALITY CONTROL SHALL BE KEPT IN ACCORDANCE WITH PCI RECOMMENDATIONS AND MADE AVAILABLE UPON REQUEST FOR THE ARCHITECT/ENGINEER.
3. CODES AND STANDARDS:
A) AMERICAN SOCIETY FOR TESTING AND MATERIALS(ASTM)
1) C33 - SPECIFICATION FOR CONCRETE AGGREGATES
2) C150 - SPECIFICATION FOR PORTLAND CEMENT
B) PRECAST/PRE-STRESSED CONCRETE INSTITUTE (PCI) STANDARDS: MANUAL FOR QUALITY CONTROL FOR PRECAST AND PRE-STRESSED CONCRETE MNL-116.
C) AMERICAN CONCRETE INSTITUTE: BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE (ACI 318)
D) AMERICAN CONCRETE INSTITUTE: BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES (ACI 530)
4. CONCRETE MATERIALS:
A) PORTLAND CEMENT: ASTM C150 TYPE I OR III, GRAY COLOR
B) AGGREGATES: ASTM C33
C) WATER: POTABLE
D) ADMIXTURES: SHALL NOT CONTAIN CALCIUM CHLORIDE OR CHLORIDE IONS
5. REINFORCING
A) DEFORMED REINFORCEMENT: ASTM A615 GRADE 40 OR 60.
6. U-LINTEL UNITS 14 FEET IN OVERALL LENGTH AND SHORTER SHALL BE MADE OF CONCRETE WITH A MINIMUM STRENGTH OF 3500 PSI AT 28 DAYS.
7. U-LINTEL UNITS EXCEEDING 14 FEET IN OVERALL LENGTH SHALL BE MADE OF CONCRETE WITH A MINIMUM STRENGTH OF 6000 PSI AT 28 DAYS AND SHALL BE PRE-STRESSED CONCRETE.
8. SILL UNITS SHALL BE MADE OF CONCRETE WITH A MINIMUM STRENGTH OF 3000 PSI AT 28 DAYS.
9. UNITS SHALL BE SAND BLOCK FINISH EXCEPT PRE-STRESSED, 6" WIDE, AND 12" WIDE U-LINTELS SHALL BE SMOOTH FORM FINISHED.
10. PRECAST CONCRETE U-LINTELS SHALL BE DESIGNED BY A LICENSED DELEGATED ENGINEER.
11. SUBMITTALS
A) PROVIDE MANUFACTURER'S CATALOG ENGINEERING DATA.
B) MANUFACTURER SHALL RATE U-LINTEL UNITS FOR GRAVITY, UPLIFT, AND LATERAL LOADS IN UNITS OF POUNDS PER LINEAR FOOT.

FIBROUS REINFORCING (ALTERNATE TO W.W.F. IN SLAB-ON-GRADE)

- 1. REINFORCING FIBERS TO BE VIRGIN 100% MICRO SYNTHETIC POLYPROPYLENE FIBERS, SPECIFICALLY MANUFACTURED FOR USE IN CONCRETE, CONTAINING NO REPROCESSED OLEFIN MATERIALS, WITH THE FOLLOWING MINIMUM PHYSICAL CHARACTERISTICS:
A) SPECIFIED GRAVITY: 0.91
B) YOUNG'S MODULUS 0.5 (3.5KN/MM2)
C) TENSILE STRENGTH: 45-60 KSI
D) LENGTH: 3/4" MAXIMUM, MULTI GRADATION DESIGN
2. REINFORCING FIBERS TO BE SUPPLIED BY THE FOLLOWING APPROVED MANUFACTURERS:
A) "FIBERSTRAND 100", EUCLID CHEMICAL COMPANY
B) "FIBERMESH 150 OR 300, PROPEX CONCRETE SOLUTIONS
C) "FORTA ECONO-NET", FORTA CORPORATION
D) "NYCON SUPER FIBERS", NYCON, INC.
3. FIBERS TO BE ADDED IN MANUFACTURER'S APPROVED AMOUNT WITH A MINIMUM OF 1.5 LBS PER CUBIC YARD FOR POLY AND NYLON.
4. CONCRETE TO BE MIXED IN ACCORDANCE WITH FIBER MANUFACTURER'S RECOMMENDATIONS FOR UNIFORM AND COMPLETE DISPERSION OF FIBER BUNDLES INTO SINGLE MONOFILAMENTS WITHIN CONCRETE.
5. REINFORCING FIBERS ONLY TO BE USED IN CONCRETE SLAB-ON-GRADES, AND NOT IN PRECAST PLANK OR METAL DECK TOPPING SLABS.
6. FOR A "NON-HAIRY" FINISH, USE A MONOFILAMENT FIBER. MORE DEMANDING APPLICATIONS, USE A COLLATED FIBRILLATED FIBER, WHICH WILL WEAR AWAY OVER TIME.

STRUCTURAL DRAWING INDEX

Table with 2 columns: Drawing ID, Description. Lists drawings S-001 through S-303 including structural specifications, foundation plan, roof framing plan, and masonry details.

NOT FOR CONSTRUCTION - NOT FOR FINAL PRICING - SUBJECT TO CHANGE

10-30-2014 CS

STRUCTURAL SPECIFICATIONS (CONTINUED)
MASONRY

- HOLLOW LOAD BEARING UNITS SHALL CONFORM TO ASTM C90, NORMAL WEIGHT, TYPE II. MINIMUM NET COMPRESSIVE UNIT STRENGTH = 2000 PSI. (NET AREA COMPRESSIVE MASONRY STRENGTH F_m = 1500 PSI).
- MORTAR SHALL BE TYPE S AND CONFORM TO ASTM C270 (PROPORTION OR PROPERTY SPECIFICATION) WITH A MINIMUM AVERAGE COMPRESSIVE STRENGTH AT 28 DAYS OF 1800 PSI.
- COARSE GROUT SHALL CONFORM TO ASTM C476:
 - 2500 PSI AT 28 DAYS.
 - 1/4" MAXIMUM AGGREGATE.
 - 8" - 11" SLUMP.
- CODES AND STANDARDS:
 - SPECIFICATIONS FOR MASONRY STRUCTURES - ACI 530.1/ASCE 6/TMS 602 IS INCLUDED BY REFERENCE IN ITS ENTIRETY.
 - BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES - ACI 530/ASCE 5/TMS 402.
- A REINFORCED TIE BEAM SHALL BE PROVIDED IN ALL WALLS SHOWN ON THE STRUCTURAL DRAWINGS AT EACH FLOOR, THE ROOF, AND AT TOP OF ANY PARAPET WALL. USE GALVANIZED MESH-TYPE CELL CAPS. PROVIDE CORNER BARS AT ALL BEAM CORNERS TO MATCH HORIZONTAL BARS.
- UNLESS NOTED OTHERWISE, THE BEAMS SHALL BE AS FOLLOWS:
 - ROOF LEVEL: DOUBLE COURSE OF KNOCK-OUT BLOCKS WITH (1) #5 IN EACH COURSE.
- VERTICAL BARS SHALL BE HELD IN POSITION AT THE TOP AND BOTTOM OF BAR AND AT 8" O.C. MAXIMUM WITH A MINIMUM CLEARANCE OF 1/2" FROM MASONRY. THE CLEAR DISTANCE BETWEEN BARS SHALL NOT EXCEED ONE BAR DIAMETER, OR MORE THAN 1". CENTER BARS IN WALLS U.N.O.
- VERTICAL REINFORCING SHALL BE AS SHOWN ON THE DRAWINGS. FILLCELLS WITH COARSE GROUT AS SPECIFIED. PROVIDE ACI 90 DEGREE STANDARD HOOKS INTO FOOTING AND ROOF TIE BEAM. LAP SPlice VERTICAL REINFORCEMENT ABOVE FOOTING AND ABOVE EACH FLOOR LEVEL UNLESS NOTED OTHERWISE. MAINTAIN VERTICAL REINFORCING SHOWN ON PLANS ABOVE AND BELOW MASONRY OPENINGS. CONTINUE FOUNDATION DOWELS BELOW ALL MASONRY OPENINGS.
- REINFORCED FILL CELLS ARE TO BE CLEAN AND FREE OF ANY FOREIGN MATERIAL OR DEBRIS. REMOVE ANY INSULATING MATERIAL FROM CELLS, INCLUDING POLYSTYRENE INSULATING INSERTS, PRIOR TO GROUT POUR.
- REINFORCING BARS SHALL BE STRAIGHT EXCEPT FOR BENDS AROUND CORNERS AND WHERE BENDS OR HOOKS ARE DETAILED ON THE PLANS.
- REINFORCING BARS SHALL BE LAPPED PER MASONRY LAP SCHEDULE MINIMUM (UNLESS OTHERWISE NOTED) WHERE SPLICED AND SHALL BE WIRED TOGETHER.
- WHEN A FOUNDATION DOWEL DOES NOT LINE UP WITH A VERTICAL CORE, IT SHALL NOT BE SLOPED MORE THAN ONE HORIZONTAL IN SIX VERTICALS. DOWELS SHALL BE GROUTED INTO A CORE IN VERTICAL ALIGNMENT, EVEN THOUGH IT IS IN AN ADJACENT CELL TO THE VERTICAL WALL REINFORCEMENT.
- PROVIDE HORIZONTAL WALL REINFORCING (9 GA.) HOT DIPPED GALVANIZED LADDER TYPE DUR-O-WALL (OR EQUIVALENT) AT 16" O.C. JOINT REINFORCING SHALL CONFORM TO ASTM A-951.
- PROVIDE HORIZONTAL JOINT REINFORCEMENT AT DOORS AND WINDOWS FOR FIRST AND SECOND BLOCK COURSE ABOVE AND BELOW APERTURES. RUN REINFORCING CONTINUOUS OR EXTEND TWO FEET FROM APERTURE EDGE.
- WIRE REINFORCEMENT SHALL BE LAPPED AT LEAST 6" AT SPLICES AND SHALL CONTAIN AT LEAST ONE CROSS WIRE OF EACH PIECE OF REINFORCEMENT IN THE LAPPED DISTANCE.
- CLEANOUTS SHALL BE PROVIDED IN THE BOTTOM COURSE OF MASONRY IN EACH GROUT POUR WHEN THE POUR HEIGHT EXCEEDS 5'. CLEANOUTS TO BE SAW-CUT 4" X 4".
- GROUT POUR HEIGHT SHALL NOT EXCEED 24'. PLACE GROUT IN 5' MAX. LIFTS HEIGHTS.
- CONSOLIDATE GROUT POURS AT THE TIME OF PLACEMENT BY MECHANICAL MEANS AND RECONSOLIDATE AFTER INITIAL WATER LOSS AND SETTLEMENT.
- ALL MASONRY FOUNDATION STEMWALLS AND RETAINING WALLS SHALL BE FULLY GROUTED.
- STORE BLOCKS ON PALLETS AND COVER WITH PLASTIC SHEETING.
- PLACE MASONRY IN RUNNING BOND WITH 3/8" MORTAR JOINTS. PROVIDE COMPLETE COVERAGE FACE SHELL MORTAR BEDDING, HORIZONTAL AND VERTICAL FULLY MORTAR WEBS IN ALL COURSES OF PIERS, COLUMNS, AND PILASTERS AND ADJACENT TO GROUTED CELLS.
- SEE DRAWINGS FOR MASONRY CONTROL JOINT LOCATIONS. SPACE AT 26'-0" O.C. AT EXTERIOR WALLS, 32'-0" O.C. AT INTERIOR WALLS UNLESS NOTED OTHERWISE.
- SUBMITTALS:**
 - SUBMIT PROPOSED GROUT MIX DESIGN PRIOR TO CONSTRUCTION.
 - SUBMIT PROPOSED MORTAR MIX DESIGN PRIOR TO CONSTRUCTION.
 - SUBMIT DETAILED SHOP DRAWINGS OF REINFORCING BARS SHOWING NUMBER, SIZE, AND LOCATION. INCLUDE BAR LISTS AND BEND DIAGRAMS. INCLUDE ALL REQUIRED DIMENSIONS AND ELEVATIONS.
 - SUBMIT COMPRESSIVE STRENGTH TESTS OF PROPOSED MASONRY UNITS PRIOR TO CONSTRUCTION. MASONRY UNITS ARE TO BE TESTED IN ACCORDANCE WITH ASTM C140.

- A QUALIFIED TESTING LABORATORY SHALL BE RETAINED TO PERFORM THE FOLLOWING TESTS:
 - SAMPLE AND TEST GROUT IN ACCORDANCE WITH ASTM C1019 FOR EACH 5000 SQ. FT. OF MASONRY.
 - SLUMP TESTS - ASTM C143.
 - MASONRY PRISM TEST IN ACCORDANCE WITH ASTM C1314. PROVIDE ONE SET OF 3 PRISMS PRIOR TO CONSTRUCTION AND DURING CONSTRUCTION FOR EACH 5000 SQ. FT. OF WALL.
- PROVIDE 8" DEEP PRECAST REINFORCED CONCRETE LINTELS OVER ALL MASONRY OPENINGS NOT SHOWN TO HAVE A STRUCTURAL BEAM. MINIMUM END BEARING = 8". LINTEL WIDTH TO MATCH MASONRY WIDTH.
- TOPS OF PARTIALLY CONSTRUCTED WALLS SHALL BE COVERED WITH VISQUEEN WHENEVER RAIN OCCURS AND AT THE END OF THE WORK DAY.

DRILL-IN BOLTS, SCREWS AND DOWELS

- EPOXY BOLTS SHALL BE ASTM A307 THREADED BOLTS WITH NUTS AND WASHERS INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. PROVIDE "EPOXY-TIE SET" ANCHORS BY SIMPSON STRONG-TIE OR EQUAL.
- ANCHORING ADHESIVE SHALL BE A TWO-COMPONENT SOLID EPOXY-BASED SYSTEM SUPPLIED IN MANUFACTURER'S STANDARD SIDE-BY-SIDE CARTRIDGE AND DISPENSED THROUGH A STATIC-MIXING NOZZLE SUPPLIED BY THE MANUFACTURER. EPOXY SHALL MEET THE MINIMUM REQUIREMENTS OF ASTM C-881 SPECIFICATION FOR TYPE I, II, IV AND V, GRADE 3, CLASS B, C AND D AND MUST DEVELOP A MINIMUM 12,650 PSI COMPRESSIVE YIELD STRENGTH AFTER 7-DAY CURE.
- EXPANSION BOLTS SHALL BE "WEDGE-ALL" ANCHORS BY SIMPSON STRONG-TIE OR EQUAL.
- EXPANSION BOLTS SHALL BE NON-BOTTOM BEARING, WEDGE-STYLE EXPANSION ANCHOR FOR USE IN SOLID CONCRETE OR GROUT FILLED MASONRY WITH A ONE-PIECE NON-CORROSIVE CLIP FOR UNIFORM HOLDING CAPACITY THAT INCREASES AS TENSION IS APPLIED. INSTALL IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
- MASONRY SCREWS SHALL BE 1/4" DIAMETER WITH 1-1/2" MINIMUM EMBEDMENT INSTALLED IN DRILLED HOLES USING AN APPROPRIATE BIT DIAMETER.
- SCREWS SHALL BE MADE FROM TEN HUNDRED SERIES COLD-ROLLED STEEL AND SHALL BE FLUOROCARBON COATED. PROVIDE "TITEN" SCREWS BY SIMPSON STRONG-TIE OR EQUAL.
- DRILL-IN REBAR DOWELS SHALL BE SET USING A TWO-PART EPOXY AS DESCRIBED ABOVE.
- NAILS, SCREWS, BOLTS AND/OR OTHER FASTENERS OF ANY KIND AND DESCRIPTION SHALL BE OF DOMESTIC (USA) MANUFACTURE; NO FOREIGN MADE FASTENERS, NOR FASTENERS MADE OF FOREIGN MADE MATERIALS WILL BE ALLOWED ON THE PROJECT.

STRUCTURAL STEEL

- STRUCTURAL STEEL SHALL CONFORM TO THE AISC "SPECIFICATION FOR BUILDINGS", LATEST EDITION.
- WELDED CONNECTIONS SHALL CONFORM TO THE LATEST REVISED CODE OF THE AMERICAN WELDING SOCIETY, AWS D1.1. ALL WELDING SHALL BE PERFORMED USING E70XX, LOW HYDROGEN ELECTRODES. ELECTRODES ARE TO BE PROTECTED FROM MOISTURE.
- CONNECTIONS TO BE DOUBLE ANGLE FRAMED BEAM CONNECTION PER AISC UNLESS NOTED OTHERWISE. ALL BOLTS TO BE 3/4" DIAMETER UNLESS NOTED OTHERWISE. SHOP CONNECTIONS MAY BE WELDED OR BOLTED. WELDS ARE TO BE EQUAL IN STRENGTH TO BOLTS. ALL FIELD CONNECTIONS ARE TO BE BOLTED WITH ASTM A325N OR A490 BOLTS (BEARING TYPE BOLTS WITH THREADS IN THE SHEAR PLANE) INCLUDING SUITABLE NUTS AND PLAIN HARDENED WASHERS. ALL BOLTS SHALL BE TIGHTENED SNUG TIGHT UNLESS OTHERWISE NOTED. DESIGN CONNECTIONS FOR THE LARGER OF EITHER THE SHEAR SHOWN ON THE DRAWINGS, (INDICATED AS "V = K" AT ENDS OF MEMBER) OR 55% OF THE MAXIMUM LOAD(IN KIIPS) LISTED IN THE TABLES FOR "MINIMUM TOTAL FACTORED UNIFORM LOADS IN KIIPS FOR BRACED, SIMPLE SPAN BEAMS BENT ABOUT THE STRONG AXIS" OF THE LATEST EDITION OF THE AISC "MANUAL OF STEEL CONSTRUCTION".
- SIZE AND USE OF HOLES: SEE AISC TABLE J3.3.
 - LARGER HOLES ARE PERMITTED IN STANDARD COLUMN BASE PLATES. MAXIMUM HOLE DIAMETER = BOLT DIAMETER + 3/8". HARDENED WASHERS, TO COVER THE LARGER HOLE, SHALL BE PROVIDED.
 - LARGER HOLES ARE NOT PERMITTED IN WIND FRAME COLUMN BASE PLATES. MAXIMUM HOLE DIAMETER = BOLT DIAMETER + 1/16".
 - SLOTTED HOLES: A PLATE WASHERS OR A CONTINUOUS BAR WITHSTANDARD HOLES, HAVING A SIZE SUFFICIENT TO COMPLETELY COVER THE SLOT AFTER INSTALLATION, AND A MIN. OF 5/16" THICK SHALL BE PROVIDED. TACK WELD NUT TO BOLT AFTER ERECTION.
- STEEL BEAMS SHALL BE FABRICATED WITH THE NATURAL CAMBER (WITHIN THE MILL TOLERANCE) LOCATED ABOVE THE HORIZONTAL CENTERLINE BETWEEN THE END CONNECTIONS.
- VERIFY THE EXACT SIZE AND LOCATION OF ALL FLOOR AND ROOF OPENINGS FOR MECHANICAL EQUIPMENT WITH THE MECHANICAL CONTRACTOR PRIOR TO FABRICATION OF MATERIALS.
- SHOP PRIME STEEL SURFACES EXCEPT THE FOLLOWING:
 - SURFACES EMBEDDED IN CONCRETE OR MORTAR. EXTEND PRIMING OF PARTIALLY EMBEDDED MEMBERS TO A DEPTH OF 2 INCHES.
 - SURFACES TO BE FIELD WELDED.
 - SURFACES TO BE HIGH-STRENGTH BOLTED WITH SLIP-CRITICAL CONNECTIONS.
 - SURFACES TO RECEIVE SPRAYED FIRE-RESISTIVE MATERIALS.
 - GALVANIZED SURFACES.

- SURFACE PREPARATION: CLEAN SURFACES TO BE PAINTED. REMOVE LOOSE RUST AND MILL SCALE AND SPATTER, SLAG, OR FLUX DEPOSITS. PREPARE SURFACES ACCORDING TO THE FOLLOWING SPECIFICATIONS AND STANDARDS.
- PRIMING: IMMEDIATELY AFTER SURFACE PREPARATION, APPLY PRIMER ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS AND AT RATE RECOMMENDED BY SSPC TO PROVIDE A DRY FILM THICKNESS OF NOT LESS THAN 1.5 MILS. USE PRIMING METHODS THAT RESULT IN FULL COVERAGE OF JOINTS, CORNERS, EDGES, AND EXPOSED SURFACES.
 - STRIPE PAINT CORNERS, CREVICES, BOLTS, WELDS, AND SHARP EDGES.
 - APPLY TWO COATS OF SHOP PAINT TO INACCESSIBLE SURFACES AFTER ASSEMBLY OR ERECTION. CHANGE COLOR OF SECOND COAT TO DISTINGUISH IT FROM FIRST.
- PRIME AND PAINT ALL FIELD WELDS AFTER INSPECTION.

- A QUALIFIED TESTING LABORATORY SHALL BE RETAINED TO PERFORM THE FOLLOWING TESTS.
 - VISUALLY INSPECT ALL STEEL MEMBERS AND CONNECTIONS.
 - TEST 50 PERCENT OF FULL PENETRATION WELDS.
- ONE COPY OF ALL TEST REPORTS SHALL BE SENT DIRECTLY TO OWNER, ARCHITECT, STRUCTURAL ENGINEER, AND GENERAL CONTRACTOR.
- STEEL SHALL CONFORM TO:
WIDE FLANGE (WF)(WT)-----ASTM A992 (50 KSI)
SHAPES (L, C, MC)-----ASTM A36
HOLLOW STRUCTURAL SECTIONS (HSS)-----
ASTM A500 GRADE B (RECTANGULAR 46 KSI; ROUND 42 KSI)
STEEL PIPE-----ASTM A53
ANCHOR RODS-----ASTM F1554 (55 KSI W/S1 SUPPLEMENT)
ANCHOR BOLTS-----ASTM A307
FRAMING BOLTS-----ASTM A325N OR A490N
SHEAR STUDS-----ASTM A108
WELDING ELECTRODES-----E70XX
- FASTENERS AND MATERIALS USED FOR WELDING OR OTHERWISE SECURING COMPONENTS ONE TO ANOTHER SHALL BE OF DOMESTIC (USA MADE) MANUFACTURE. SIMILARLY, ALL MATERIALS USED IN THE MANUFACTURING PROCESS SHALL BE FROM A DOMESTIC SOURCE.
- OPENINGS THROUGH STEEL BEAMS SHALL BE PROVIDED AS DETAILED ON THE DRAWINGS. ALL SUCH OPENINGS SHALL BE MACHINE CUT IN THE SHOP. ALL RECTANGULAR OPENINGS SHALL HAVE A CORNER RADIUS OF 2 TIMES THE WEB THICKNESS, 1/2" MINIMUM.
- SHOP AND FIELD WELDS SHALL BE DONE BY A.W.S. CERTIFIED WELDERS. PROVIDE CURRENT CERTIFICATES UPON REQUEST.
- NO SPLICES SHALL BE PERMITTED IN ANY STRUCTURAL STEEL MEMBER UNLESS SHOWN ON APPROVED SHOP DRAWINGS.
- STEEL STAIRS AND/OR LADDERS SHALL BE DESIGNED FOR 100 PSF LIVE LOAD BY A LICENSED DELEGATED ENGINEER, WHO SHALL SUBMIT SIGNED AND SEALED SHOP DRAWINGS. SHOP DRAWINGS SHALL SPECIFY ALL DESIGN LOADS.

- SUBMITTALS: CONTRACTOR SHALL SUBMIT DETAILED SHOP DRAWINGS SHOWING ALL STRUCTURAL STEEL LAYOUTS AND DETAILS, SIZES OF MEMBERS, TYPE OF STEEL, CONNECTION DETAILS, WELDS, BOLTS, ETC., AS REQUIRED TO FABRICATE AND ERECT ALL STRUCTURAL STEEL FRAMING. ALL CONNECTIONS NOT SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE DESIGNED BY THE DETAILER AND SUBMITTED ON SHOP DRAWINGS, SIGNED AND SEALED BY A REGISTERED FLORIDA DELEGATED ENGINEER.
- NON-SHRINK GROUT SHALL BE: NONMETALLIC SHRINKAGE-RESISTANT GROUT, PREMIXED, NON-CORROSIVE, NON-STAINING PRODUCT CONTAINING SELECTED SILICA SANDS, PORTLAND CEMENT, SHRINKAGE COMPENSATING AGENTS, PLASTICIZING AND WATER-REDUCING AGENTS, COMPLYING WITH CRD-C621, CORPS OF ENGINEERS.
- IF NOT SPECIFIED ON THE DRAWINGS, THE THROAT SIZE OF ANY FILLET WELD SHALL BE EQUAL TO 1/16" LESS THAN THE THINNEST CONNECTION COMPONENT.
- NO FIELD WELDING OF GALVANIZED MEMBERS IS PERMITTED.
- MINIMUM EMBEDMENT DEPTH OF ANCHOR BOLTS:
 - BEAMS, COLUMNS, WALLS = 6"
 - FOOTINGS = 3" FROM BOTTOM

- ERECTION
 - BEFORE ERECTION, THE CONTRACTOR IS TO REMOVE ALL MUD, DIRT OR OTHER FOREIGN MATTER, WHICH ACCUMULATES DURING HANDLING AND STORAGE.
 - DRIFTING TO ENLARGE UNFAIR HOLES WILL NOT BE PERMITTED. DRILL SUCH HOLES TO ACCOMMODATE THE NEXT LARGER SIZE FASTENER, WHERE POSSIBLE.
 - AFTER ERECTION, CLEAN FIELD WELDS, BOLTED CONNECTIONS, AND ABRADED AREAS WHERE SHOP COAT HAS BEEN DAMAGED. SPOT AND PRIME AREAS USING SAME MATERIAL AS SHOP COAT.
 - SET ALL MEMBERS SO THAT, IN THEIR FINAL LOCATION, LEVEL, PLUMBNESS AND ALIGNMENT ARE WITHIN THE TOLERANCES PRESCRIBED BY AISC CODE.
 - DOUBLE CONNECTIONS THROUGH COLUMN WEBS OR AT BEAMS THAT FRAME OVER THE TOPS OF COLUMNS MUST BE DESIGNED TO HAVE AT LEAST ONE INSTALLED BOLT REMAIN IN PLACE TO SUPPORT THE FIRST BEAM WHILE THE SECOND BEAM IS BEING ERECTED. ALTERNATIVELY, THE FABRICATOR MUST SUPPLY A SEAT OR EQUIVALENT DEVICE WITH A MEANS OF POSITIVE ATTACHMENT TO SUPPORT THE FIRST BEAM WHILE THE SECOND BEAM IS BEING ERECTED.

OPEN WEB STEEL JOISTS AND JOIST GIRDERS (NOTED "JOISTS" HEREIN)

- STEEL JOIST MANUFACTURER SHALL BE A MEMBER OF THE STEEL JOIST INSTITUTE.
- STEEL JOISTS SHALL CONFORM TO THE REQUIREMENTS OF THE LATEST EDITION OF THE AISC STANDARD SPECIFICATIONS FOR OPEN WEB STEEL JOISTS K, LH, OR DLH SERIES (SEE PLAN), AND OSHA STEEL ERECTION STANDARD.
- JOISTS, GIRDERS, AND ALL ACCESSORIES SHALL BE DESIGNED BY A LICENSED DELEGATED ENGINEER WHO SHALL PREPARE DESIGN CALCULATIONS AND SUPERVISE THE PREPARATION OF SHOP DRAWINGS.
- VERIFY THE EXACT LOCATION AND WEIGHT OF ALL MECHANICAL EQUIPMENT WITH THE MECHANICAL CONTRACTOR PRIOR TO FABRICATION OF JOISTS.
- ALL HANGERS TO SUPPORT MECHANICAL EQUIPMENT, ETC., TO BE SUPPORTED BY THE TOP OR BOTTOM CHORD OF JOISTS SHALL BE LOCATED AT THE PANEL POINT OF THE JOIST. IF HANGERS MUST BE LOCATED IN BETWEEN PANEL POINTS, PROVIDE JOIST STIFFENER AS INDICATED IN DETAILS. ALL HANGERS TO BE LOCATED AT THE CENTERLINE OF THE BOTTOM CHORD MEMBER.
- NO MODIFICATION THAT AFFECTS THE STRENGTH OF A STEEL JOIST SHALL BE MADE WITHOUT THE APPROVAL OF THE DELEGATED ENGINEER.
- DELEGATED ENGINEER SHALL DESIGN JOISTS AND BRIDGING FOR GRAVITY LOADS AND WIND LOAD UPLIFT PRESSURES INDICATED ON THE DRAWINGS.
- JOIST BRIDGING SHALL BE FURNISHED AND INSTALLED TO MEET THE DESIGN AND SPACING REQUIREMENTS OF THE SJI STANDARD SPECIFICATIONS. ALL BRIDGING AND BRIDGING ANCHORS SHALL BE COMPLETELY INSTALLED BEFORE CONSTRUCTION LOADS ARE PLACED ON THE JOISTS.
- WHERE COLUMNS ARE NOT FRAMED IN AT LEAST TWO DIRECTIONS WITH SOLID WEB BEAMS, A STEEL JOIST SHALL BE FIELD-BOLTED AT THE COLUMN TO PROVIDE LATERAL STABILITY DURING ERECTION.
- A 6"x6" MINIMUM VERTICAL STABILIZER PLATE TO RECEIVE THE JOIST BOTTOM CHORD MUST BE PROVIDED AT COLUMNS. THE STABILIZER PLATE MUST HAVE A 13/16 INCH HOLE FOR THE ATTACHMENT OF GUYING OR PLUMBING CABLES.
- JOISTS AND ACCESSORIES SHALL HAVE ONE SHOP COAT OF PAINT MEETING THE MINIMUM PERFORMANCE REQUIREMENTS OF THE LATEST SJI SPECIFICATIONS. SEE ARCHITECT FOR PREFERRED COLOR.
- SEE PLAN FOR ANY CONCENTRATED LOADS OR UNUSUAL CONDITIONS. ALL JOISTS SUBJECT TO SPECIAL LOADS OR CONDITIONS SHALL BE CONSIDERED "SPECIAL JOISTS", (SP).
- CONTRACTOR SHALL SUBMIT DETAILED SHOP DRAWINGS SHOWING JOISTS, BRIDGING, AND ALL CONNECTIONS. SHOP DRAWINGS SHALL BE SIGNED AND SEALED BY THE DELEGATED ENGINEER.
- THE DELEGATED ENGINEER MUST BE PROVIDED WITH A COPY OF THESE DRAWINGS AND SPECIFICATIONS.
- UNLESS PANELIZED, ALL JOISTS 40 FOOT LONG AND LONGER AND THEIR BEARING MEMBERS MUST HAVE HOLES TO ALLOW FOR INITIAL CONNECTIONS BY BOLTING.
- PROVIDE ONE ROW UPLIFT BRIDGING AT THE FIRST PANEL POINT FROM EACH SUPPORT.
- A ROW OF BOLTED DIAGONAL BRIDGING MUST BE PROVIDED NEAR MIDSPAN OF ALL JOISTS SHOWN IN SJI TABLES A & B. DO NOT RELEASE HOISTING CABLES UNTIL THIS BRIDGING IS INSTALLED.
- FOR JOIST SPANS OVER 60 FEET, ALL ROWS OF BRIDGING SHALL BE BOLTED DIAGONAL BRIDGING. DO NOT RELEASE HOISTING CABLES UNTIL THE TWO ROWS NEAR THE THIRD POINTS ARE INSTALLED.
- FOR JOIST SPANS OVER 100 FEET THRU 144 FEET, ALL ROWS OF BRIDGING SHALL BE BOLTED DIAGONAL BRIDGING. DO NOT RELEASE HOISTING CABLES UNTIL ALL ROWS OF BRIDGING ARE INSTALLED.
- PROVIDE ONE ROW DIAGONAL BRIDGING AT THE SUPPORTS OF ALL FULL DEPTH BEARING JOISTS. DO NOT RELEASE HOISTING CABLES UNTIL THE SUPPORT BRIDGING IS INSTALLED.
- DURING THE CONSTRUCTION PERIOD, THE CONTRACTOR SHALL PROVIDE MEANS FOR ADEQUATE DISTRIBUTION OF CONCENTRATED LOADS SO THAT THE CARRYING CAPACITY OF ANY JOIST IS NOT EXCEEDED.
- ONE END OF ALL JOISTS SHALL BE ATTACHED TO ITS SUPPORT IN ACCORDANCE WITH SJI SPECIFICATIONS BEFORE ALLOWING THE WEIGHT OF AN ERECTOR ON THE JOISTS.
- IN THE CASE OF BOTTOM CHORD BEARING JOISTS, THE ENDS OF THE JOIST MUST BE RESTRAINED LATERALLY BEFORE RELEASING THE HOISTING CABLES.
- SEE STANDARD JOIST SPECIFICATIONS FOR CAMBER REQUIREMENTS.
- SUBMIT COMPLETE SHOP DRAWINGS FOR ALL JOISTS AND ACCESSORIES, AND A LETTER, SIGNED AND SEALED BY THE DELEGATED ENGINEER, CONFIRMING COMPLIANCE WITH THE DESIGN CRITERIA AND ALL APPLICABLE CODES.

METAL DECKING

- METAL DECK WORK SHALL CONFORM TO THE REQUIREMENTS OF THE STEEL DECK INSTITUTE.
- METAL ROOF DECK SHALL BE 1 1/2" DEEP, 22 GA., WIDE RIB TYPE B AND GALVANIZED. (VULCRAFT 1.5B22 OR EQUIVALENT.)
- FASTEN ROOF DECK WITH 5/8" DIAMETER PUDDLE WELDS AT EACH SUPPORT PER 36" WIDTH AND #12 TEK SCREWS AT MIDSPAN OF SIDELAPS AS INDICATED ON PLANS.

THIS DRAWING IS NOT FOR CONSTRUCTION. IT HAS BEEN ISSUED FOR GOVERNMENTAL REVIEW AND/OR PRELIMINARY PRICING ONLY.

- MINIMUM FASTENING AT BUILDING PERIMETER OF DECK SHALL BE 5/8" DIAMETER PUDDLE WELDS AT 6" O.C.
- METAL DECK AND SHEET METAL COATING DESIGNATION:
 - WITH STRUCTURAL CONCRETE OR INSULATING CONCRETE TOPPING - G90
 - WITHOUT STRUCTURAL CONCRETE OR INSULATING CONCRETE TOPPING - G60
- INSTALL ALL DECKING 3 SPAN CONTINUOUS.
- USE WELD WASHERS FOR ALL DECKING 24 GA. AND THINNER.
- DO NOT HANG OR ATTACH DUCTWORK, CONDUIT, PIPING, EQUIPMENT, CEILING, ETC. FROM METAL DECKING.
- ROOF DECK OPENINGS 12" DIAMETER OR LARGER ARE TO HAVE SUPPORT ANGLES PER TYPICAL DECK OPENING DETAIL, INCLUDING OPENINGS FOR ROOF SUMP PANS.
- PRIME AND PAINT ALL FIELD WELDS AFTER INSPECTION WITH A GALVANIZED TOUCH-UP PAINT. (SEE NOTE BELOW)
- SUBMITTALS: CONTRACTOR SHALL SUBMIT DETAILED SHOP DRAWINGS SHOWING LAYOUT OF DECK, TYPE OF DECK, ALL CONNECTIONS INCLUDING END WELDS, SEAM WELDS, INTERMEDIATE WELDS, AND ALL ACCESSORY MATERIAL SUCH AS CLOSURES, SUMPS FOR DRAINS, ETC.
- A QUALIFIED TESTING LABORATORY SHALL BE RETAINED TO VISUALLY INSPECT ALL DECK WELDS AND FASTENERS.

COLD-FORM STEEL FRAMING

- STEEL FRAMING SHALL CONFORM TO THE A.I.S.I. "SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS".
- COLD-FORMED STEEL FRAMING SYSTEM, INCLUDING STUDS, TRUSSES, CONNECTIONS, AND ALL ACCESSORIES, SHALL BE DESIGNED BY A DELEGATED ENGINEER WHO SHALL PREPARE CALCULATIONS AND SUPERVISE THE PREPARATION OF SHOP DRAWINGS.
- WELDED CONNECTIONS SHALL CONFORM TO "CODE FOR WELDING IN BUILDING CONSTRUCTION, AWS D1.3".
- ASTM A 568 STANDARD SPECIFICATION FOR GENERAL REQUIREMENTS FOR STEEL, CARBON AND HIGH STRENGTH LOW-ALLOY HOT ROLLED SHEET AND COLD ROLLED SHEET.
- ALL STEEL FRAMING SHALL BE INSTALLED BY PERSONNEL EXPERIENCED IN LIGHT GAUGE STEEL FRAMING INSTALLATION.
- WHERE STEEL FRAMING MEMBERS ARE COMPONENTS OF ASSEMBLIES INDICATED FOR A FIRE RESISTANCE RATING, INCLUDING THOSE REQUIRED FOR COMPLIANCE WITH GOVERNING REGULATIONS, PROVIDE MEMBERS WHICH HAVE BEEN APPROVED BY GOVERNING AUTHORITIES HAVING JURISDICTION.
- PROTECT LIGHT GAUGE STEEL FRAMING MEMBERS FROM RUSTING AND DAMAGE. DELIVER TO PROJECT SITE IN BUNDLES, FULLY IDENTIFIED WITH NAME, BRAND, TYPE AND GRADE. STORE OFF GROUND IN A DRY VENTILATED SPACE OR PROTECT WITH SUITABLE WATERPROOF COVERINGS.
- WITH EACH TYPE OF STEEL FRAMING REQUIRED, PROVIDE MANUFACTURER'S STANDARD STEEL RUNNERS (TRACKS), BLOCKING, LINTELS, CLIP ANGLES, BRACING, REINFORCEMENTS, FASTENERS, AND ACCESSORIES AS RECOMMENDED BY MANUFACTURER FOR APPLICATIONS INDICATED, AS NEEDED TO PROVIDE A COMPLETE STEEL FRAMING SYSTEM.
- FABRICATE METAL FRAMING COMPONENTS OF STRUCTURAL QUALITY SHEET STEEL WITH A MINIMUM YIELD POINT OF 50,000 PSI FOR STUDS, AND 33,000 PSI FOR RUNNERS; ASTM A653.
- PROVIDE GALVANIZED FINISH TO METAL FRAMING COMPONENTS COMPLYING WITH ASTM A525 WITH A G60 COATING.
- PROVIDE MANUFACTURER'S STANDARD STRUCTURAL "CEE" SHAPED STEEL STUDS OF SIZE, SHAPE, AND GAUGE INDICATED, WITH A NOMINAL 1.5/8" FLANGE AND MINIMUM 1/2" FLANGE RETURN LIP BY DIETRICH INDUSTRIES, INC. OR PRIOR APPROVED EQUAL.
- THE EXTERIOR WALL SYSTEM SHALL BE DESIGNED TO WITHSTAND BOTH POSITIVE AND NEGATIVE WIND PRESSURE WITH A MAXIMUM DEFLECTION BASED UPON THE APPLICABLE CODE AND MATERIAL REQUIREMENTS OF THE VENEER, BUT SHALL NOT EXCEED L/360.
- FRAMING COMPONENTS MAY BE PREFABRICATED INTO PANELS PRIOR TO ERECTION. FABRICATE PANELS PLUMB, SQUARE, TRUE TO LINE AND BRACED AGAINST RACKING WITH JOINTS WELDED. PERFORM LIFTING OF PREFABRICATED PANELS IN A MANNER TO PREVENT DAMAGE OR DISTORTION.
- INSTALL METAL FRAMING SYSTEMS IN ACCORDANCE WITH REVIEWED SHOP DRAWINGS.
- INSTALL CONTINUOUS TRACKS SIZED TO MATCH STUD DEPTH. ALIGN TRACKS ACCURATELY TO LAYOUT AT BASE AND TOPS OF STUDS. SECURE TRACKS AS RECOMMENDED BY STUD MANUFACTURER FOR TYPE OF CONSTRUCTION INVOLVED, EXCEPT DO NOT EXCEED 24" O.C. SPACING FOR NAIL OR POWDER-DRIVEN FASTENERS, OR 16" O.C., FOR OTHER TYPES OF ATTACHMENT. PROVIDE FASTENERS AT CORNERS AND ENDS OF TRACKS.
- FRAME BOTH SIDES OF EXPANSION AND CONTROL JOINTS, AS SHOWN FOR THE WALL SYSTEM, WITH SEPARATE STUDS AND DO NOT BRIDGE THE JOINT WITH COMPONENTS OF THE STUD SYSTEM.
- WHERE REQUIRED, TEMPORARY BRACING SHALL BE PROVIDED UNTIL ERECTION IS COMPLETED.

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CONSULTANT:



CLIENT / PROJECT NAME:

**FREDERICK DOUGLASS
RECREATION CENTER
STRUCTURAL ASSESSMENT
TASK A**

**111 OLIVIA STREET
KEY WEST, FLORIDA**

Original drawing is 24"x36". Scale accordingly if reduced.

SHEET TITLE:

STRUCTURAL SPECIFICATIONS

REVISIONS:

DATE ISSUED: OCT 24, 2014
PROJECT NO.: 12.0001

DRAWING NUMBER:

S-002

SHEET:

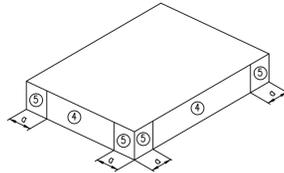
OF 4

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STRUCTURAL SPECIFICATIONS (CONTINUED)
COLD-FORM STEEL FRAMING

18. RESISTANCE TO BENDING AND ROTATION ABOUT THE MINOR AXIS SHALL BE PROVIDED BY MECHANICAL LATERAL BRACING WHERE REQUIRED.
19. ATTACHMENTS OF SIMILAR COMPONENTS SHALL BE DONE BY WELDING, SCREW ATTACHMENT, OR BOLTING. WIRE TYING OF FRAMING COMPONENTS SHALL NOT BE PERMITTED.
20. WELDING OF MEMBERS LIGHTER THAN 18 GAUGE SHALL NOT BE PERMITTED.
21. SPLICES SHALL NOT BE PERMITTED.
22. MINIMUM NUMBERS OF EQUALLY SPACED JOIST BRIDGING FOR THE SPANS SHOWN:
 UP TO 14' _ 1 ROW
 14' TO 20' _ 2 ROWS
 20' TO 26' _ 3 ROWS
 26' TO 32' _ 4 ROWS
 OVER 32' _ AT 8' CENTERS
23. PROVIDE HORIZONTAL BLOCKING BETWEEN EACH STUD AT 4'-0" ON CENTER MAXIMUM OR AT EACH SHEATHING JOINT.
24. FULLY INSTALL ALL BRIDGING BEFORE APPLYING LOADS.
25. JOIST SHALL BEAR DIRECTLY ON STUDS UNLESS HEADERS ARE USED.
26. PROVIDE JOIST WEB STIFFENERS WHERE JOIST BEARING IS LESS THAN 3_1/2".
27. STEEL TRUSSES:
 A) TRUSS ERECTOR IS RESPONSIBLE FOR ALL TEMPORARY BRIDGING OF THE TRUSS SYSTEM DURING CONSTRUCTION.
 B) TRUSSES SHALL BE DESIGNED SO THAT NO HORIZONTAL REACTIONS ARE IMPOSED ON THE SUPPORTING STRUCTURE UNDER VERTICAL LOAD.
 C) PREFABRICATED TRUSSES AND PANELS SHALL BE SQUARE AND BRACED AGAINST RACKING.
 D) TRUSS MANUFACTURER SHALL PROVIDE A BENT PLATE 3" X 3" X 1/4 GAGE TYPICAL AT ALL RIDGE AND VALLEY LINES. PROVIDE CONTINUOUS DECK SUPPORT BETWEEN TRUSSES AT ALL HIPS, RIDGES, VALLEYS, AND CHANGES IN ROOF SLOPE.
28. CONTRACTOR TO SUBMIT THE FOLLOWING:
 A) SUBMIT COMPLETE STRUCTURAL CALCULATIONS FOR THE STEEL FRAMING SYSTEM. CALCULATIONS SHALL COVER ALL STUDS, JAMB STUDS, RUNNER TRACK, BRACING, ATTACHMENT OF LIGHT GAUGE FRAMING TO LIGHT GAUGE FRAMING, AND ATTACHMENT OF LIGHT GAUGE FRAMING TO CONCRETE OR STRUCTURAL STEEL.
 B) SUBMIT DETAILED SHOP DRAWINGS FOR STEEL FRAMING SHOWING THE TYPE AND SPACING OF ALL MEMBERS. ALL ATTACHMENTS SHALL BE CLEARLY DETAILED ON THE DRAWINGS. INDICATED SUPPLEMENTAL STRAPPING, BRACING, CLIPS, AND OTHER ACCESSORIES REQUIRED FOR PROPER INSTALLATION.
 C) SUBMIT CERTIFICATION OF MATERIALS FROM THE MANUFACTURER TO SHOW COMPLIANCE WITH THESE SPECIFICATIONS AND RELATED DRAWINGS.
29. SUBMITTALS SHALL BEAR THE SEAL OF THE DELEGATED ENGINEER.
30. SUBMITTED SHOP DRAWINGS MUST BE CHECKED AND SIGNED BY THE GENERAL CONTRACTOR.

ULTIMATE WIND PRESSURES (PSF) EXTERIOR DOORS, WINDOWS, WALLS				
EFFECTIVE AREA (ft ²)	ZONE 4		ZONE 5	
	PRESSURE	SUCTION	PRESSURE	SUCTION
1 TO 20	93.0	-100.1	93.0	-124.0
21 TO 50	88.1	-96.4	88.1	-115.4
51 TO 100	83.5	-91.3	83.5	-105.0
101 TO 150	79.2	-87.0	79.2	-96.4
151 TO 250	76.6	-84.4	76.6	-92.1
251 TO 500	74.0	-81.8	74.0	-86.1
501 + ABOVE	69.1	-77.5	69.1	-77.5



DOORS, WINDOWS AND WALLS

GROSS ULTIMATE WIND LOADS GYMNASIUM ROOF ROOFING MATERIALS			
COMPONENTS AND CLADDING	ROOF ZONE		
	1	2	3
PRESSURE (psf)	41.3	41.3	41.3
SUCTION (psf)	-101.6	-110.5	-256.6

NET ULTIMATE WIND LOADS GYMNASIUM ROOF JOISTS			
COMPONENTS AND CLADDING	ROOF ZONE		
	1	2	3
PRESSURE (psf)	33.6	33.6	33.6
SUCTION (psf)	-93.8	-114.5	-120.5

ULTIMATE GROSS WIND LOADS NEW ADDITION ROOF ROOFING MATERIALS			
COMPONENTS AND CLADDING	ROOF ZONE		
	1	2	3
PRESSURE (psf)	35.5	35.5	35.5
SUCTION (psf)	-87.2	-146.3	-220.2

ULTIMATE NET WIND LOADS NEW ADDITION ROOF JOISTS			
COMPONENTS AND CLADDING	ROOF ZONE		
	1	2	3
PRESSURE (psf)	32.5	32.5	32.5
SUCTION (psf)	-74.2	-114.2	-156.3

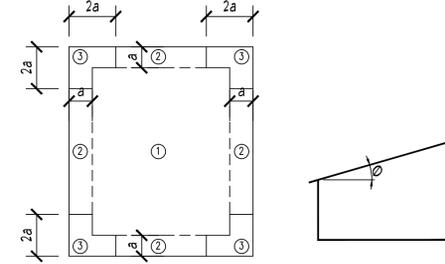
ULTIMATE GROSS WIND LOADS PITCHED ROOF ROOFING MATERIALS			
COMPONENTS AND CLADDING	ROOF ZONE		
	1	2	3
PRESSURE (psf)	51.7	51.7	51.7
SUCTION (psf)	-82.1	-142.9	-211.3

ULTIMATE NET WIND LOADS PITCHED ROOF TRUSSES			
COMPONENTS AND CLADDING	ROOF ZONE		
	1	2	3
PRESSURE (psf)	36.5	36.5	36.5
SUCTION (psf)	-64.5	-94.9	-155.1

ULTIMATE GROSS WIND LOADS PITCHED ROOF OVERHANGS AND CANOPIES ROOFING MATERIALS			
COMPONENTS AND CLADDING	ROOF ZONE		
	1	2	3
PRESSURE (psf)	51.7	51.7	51.7
SUCTION (psf)	-82.1	-142.9	-211.3

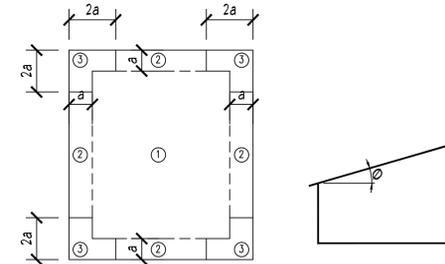
ULTIMATE NET WIND LOADS PITCHED ROOF OVERHANGS AND CANOPIES TRUSSES			
COMPONENTS AND CLADDING	ROOF ZONE		
	1	2	3
PRESSURE (psf)	36.5	36.5	36.5
SUCTION (psf)	-148.0	-178.4	-239.2

1. a = 15 FT
2. THIS BUILDING IS DESIGNED AS AN ENCLOSED STRUCTURE. ALL EXTERIOR COMPONENTS (DOORS, WINDOWS, ETC.) MUST BE DESIGNED TO WITHSTAND THE WIND LOADINGS SPECIFIED FOR THE DESIGN OF COMPONENTS AND CLADDING IN THE TABLES. IN ADDITION, ALL AREAS OF EXTERIOR GLAZING MUST BE CERTIFIED FOR MISSILE IMPACT OR PROTECTED BY WIND-BORNE DEBRIS BY A SCREEN BARRIER.
3. TO CONVERT THE (ASCE 1-10) ULTIMATE WIND PRESSURES IN THE TABLES ABOVE TO (ASD) WIND PRESSURES, MULTIPLY EACH VALUE BY 0.6.



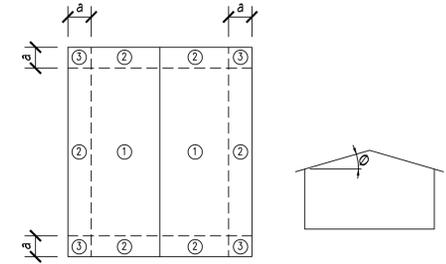
FLAT ROOF (0° < θ < 3°)
**COMPONENT AND CLADDING
 LOADING DIAGRAMS**

1. a = 3 FT
2. THIS BUILDING IS DESIGNED AS AN ENCLOSED STRUCTURE. ALL EXTERIOR COMPONENTS (DOORS, WINDOWS, ETC.) MUST BE DESIGNED TO WITHSTAND THE WIND LOADINGS SPECIFIED FOR THE DESIGN OF COMPONENTS AND CLADDING IN THE TABLES. IN ADDITION, ALL AREAS OF EXTERIOR GLAZING MUST BE CERTIFIED FOR MISSILE IMPACT OR PROTECTED BY WIND-BORNE DEBRIS BY A SCREEN BARRIER.
3. TO CONVERT THE (ASCE 1-10) ULTIMATE WIND PRESSURES IN THE TABLES ABOVE TO (ASD) WIND PRESSURES, MULTIPLY EACH VALUE BY 0.6.



FLAT ROOF (0° < θ < 3°)
**COMPONENT AND CLADDING
 LOADING DIAGRAMS**

1. a = 3 FT
2. THIS BUILDING IS DESIGNED AS AN ENCLOSED STRUCTURE. ALL EXTERIOR COMPONENTS (DOORS, WINDOWS, ETC.) MUST BE DESIGNED TO WITHSTAND THE WIND LOADINGS SPECIFIED FOR THE DESIGN OF COMPONENTS AND CLADDING IN THE TABLES. IN ADDITION, ALL AREAS OF EXTERIOR GLAZING MUST BE CERTIFIED FOR MISSILE IMPACT OR PROTECTED BY WIND-BORNE DEBRIS BY A SCREEN BARRIER.
3. TO CONVERT THE (ASCE 1-10) ULTIMATE WIND PRESSURES IN THE TABLES ABOVE TO (ASD) WIND PRESSURES, MULTIPLY EACH VALUE BY 0.6.



GABLE ROOF (7° < θ < 27°)

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SHEET TITLE:
STRUCTURAL SPECIFICATIONS
AND WIND TABLES

REVISIONS:

DATE ISSUED: OCT 24, 2014
PROJECT NO.: 12.0001

DRAWING NUMBER:

S-003 SHEET: OF 4

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SHEET TITLE:

EXISTING FOUNDATION PLAN WITH UPGRADES
TO 2010 FBC

REVISIONS:

DATE ISSUED: OCT 24, 2014
PROJECT NO.: 12.0001

DRAWING NUMBER:

S-101 SHEET: OF 4

FOUNDATION PLAN NOTES:

- FUTURE SLAB-ON-GRADE TO BE 4" (MIN.) THICK (4000 PSI) CONCRETE REINFORCEMENT W/ 6x6 W/4 x W/4 PROVIDED IN SHEETS ON 10 MIL VAPOR RETARDER LAF AND TAPE BEAMS OVER COMPACTED SOIL.
- TOP OF SLAB = 0'-0" UNO.
TOP OF FOOTING = (-) 1'-4"
- CENTER ALL FOOTINGS BELOW WALL/COLUMN UNO.
- ALL WALL FOOTINGS TO BE TYPE F20W UNO.
- REFER TO SHEET S-001, S-002 AND S-003 FOR SPECIFICATIONS.
- C.J. CONTROL JOINT, SEE 1/S-301.
- COORDINATE ALL DIMENSIONS, ELEVATIONS, SLOPES, RECESSES AND SLAB EDGES W/ ARCH'L DRAWINGS.
- REFER TO S-301 FOR FOUNDATION DETAILS.
- ALL STRUCTURAL METAL STUDS AT STOREFRONTS ARE TO BE PRE-ENGINEERED. SUBMIT SIGNED AND SEALED CALCULATIONS AND SHOP DRAWINGS.
- VERIFY FOOTING ELEVATIONS WITH CIVIL AND FIELD CONDITIONS. MAINTAIN 12" SOIL COVER ON TOP OF FOOTING. SEE STEPPED FOOTING DETAIL X/ S-XXX.
- REFER TO ARCHITECT FOR EXTERIOR SIDEWALK SLABS INCLUDING CONTROL JOINT LOCATIONS.
- REFER TO ARCHITECT FOR EXTERIOR SIDEWALK SLABS INCLUDING CONTROL JOINT LOCATIONS.
- 8" MASONRY W/ #5 V. @ XX" O.C. MAX. IN FULLY GROUTED CELLS AT ALL WALL INTERSECTIONS, (2) VERTICAL AT SIDES OF OPENINGS IN ADJACENT CELLS AND AT CORNERS WITH MATCHING DOUELS INTO FOUNDATION. HOOK INTO FOOTING CONTINUOUS TO TOP OF TIE BEAM.

FOOTING SCHEDULE

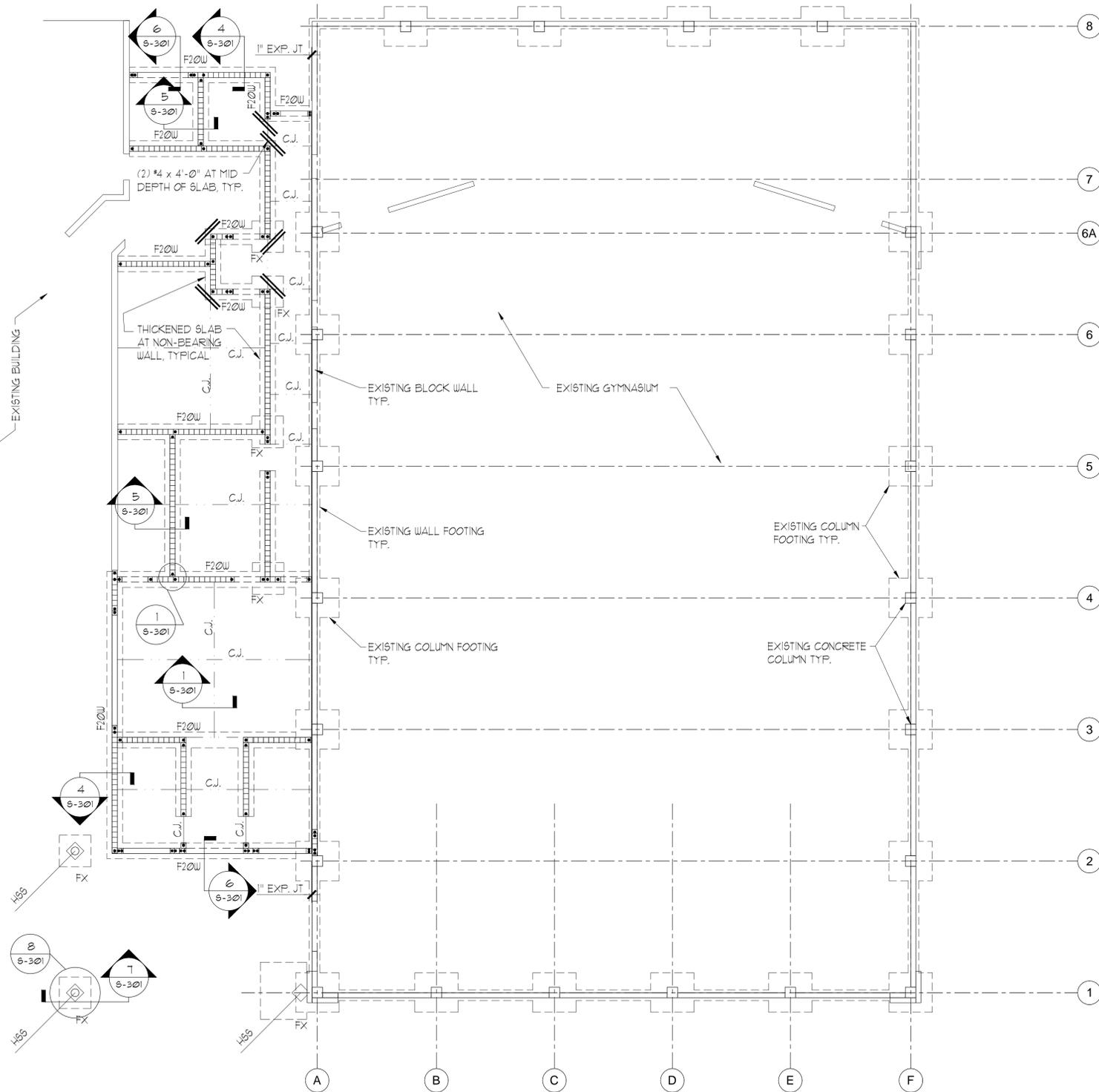
MARK	SIZE	DEPTH	REINF. EA. WAY	REMARKS	DWL/A.B. EMBEDMENT
F20W	2'-0"	1'-0"	(3) #5 CONT. #4@24" TRANSV.	WALL FTG.	9"

MASONRY REINF. LAP SCHEDULE

BAR SIZE	LAP LENGTH
#3 BAR	18"
#4 BAR	24"
#5 BAR	30"
#6 BAR	36"
#7 BAR	42"

- NOTE:
- LAPS BASED ON 48 BAR DIAMETERS
 - BAR STRESSES DO NOT EXCEED 80%

**VERTICAL REINFORCEMENT BAR
LAP SCHEDULE - MASONRY**



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

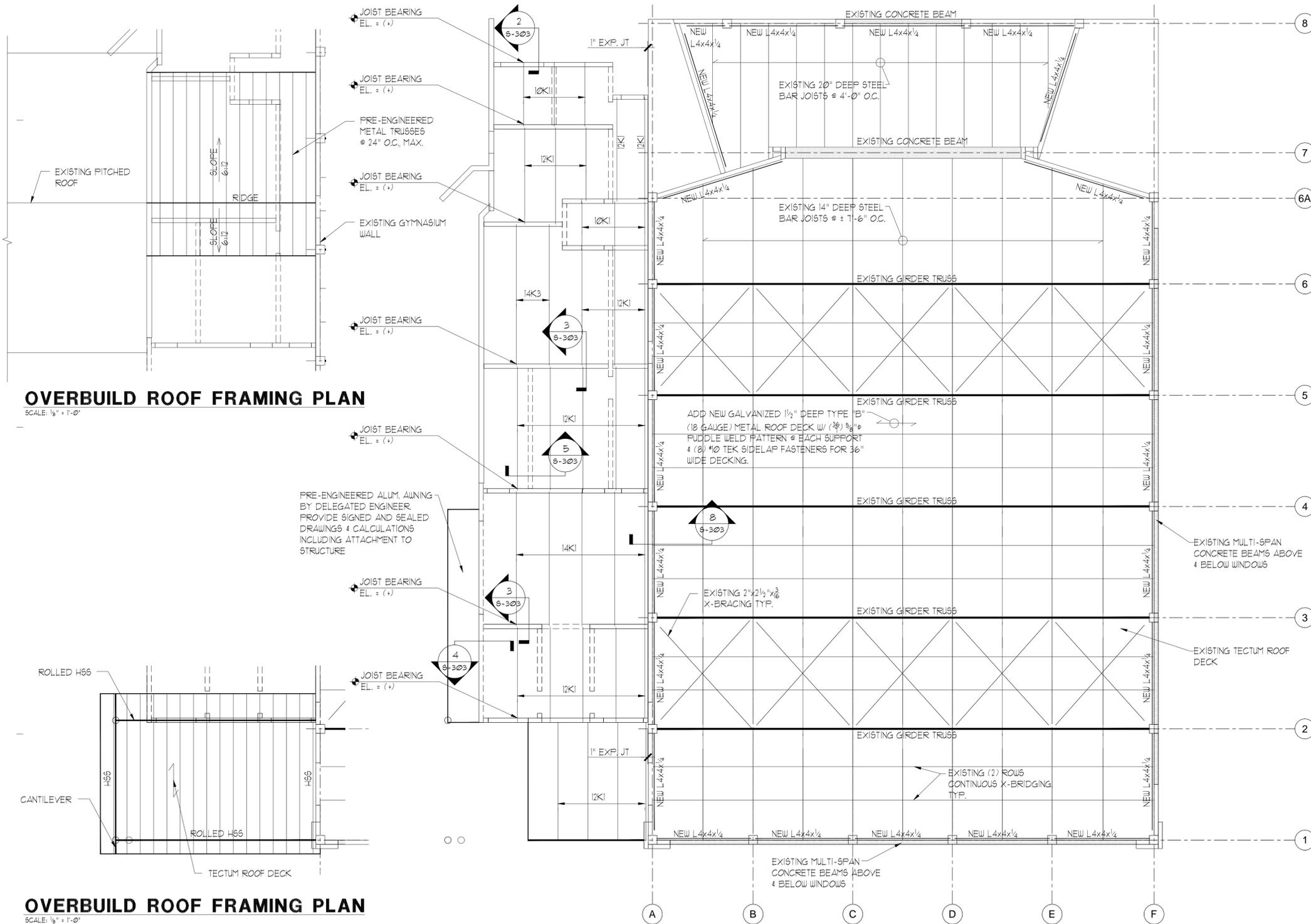


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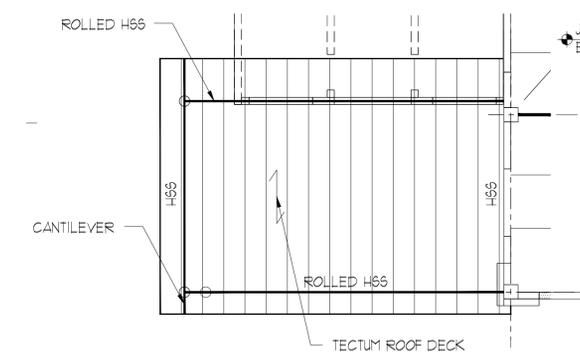
ROOF FRAMING PLAN NOTES:

- METAL ROOF DECK TO BE 1 1/2" DEEP (22) GA. PAINTED TYPE "B". FASTEN DECK W/ (1) 5/8" Puddle Weld Pattern at each support and (8) #2 TEK SCREW SIDE LAP FASTENERS FOR 36" WIDE DECKING. SEE 1/5-303.
- ROOF JOISTS ARE EQUALLY SPACED BETWEEN SUPPORTS AT 5'-0" ON CENTER.
- MAIN ROOF SLOPE - SEE ARCHL.
- SP = JOIST ENGINEER TO DESIGN A SPECIAL JOIST OR DOUBLE JOIST AT ROOF TOP UNIT LOCATIONS FOR UNITS WEIGHING 1450 LBS. OR MORE. RTUS TO BEAR ON A MINIMUM OF (2) JOISTS AS SHOWN. ONE RTU MAX. PER JOIST SPAN. REFER TO MECHANICAL / ARCHITECTURAL DRAWINGS FOR EXACT LOCATION, SIZE AND WEIGHT. WEIGHTS SHOWN DO NOT INCLUDE ALLOWANCE FOR WEIGHT SUPPORTING CURBS.
- REFER TO ARCHITECTURAL FOR DIMENSIONS AND ELEVATIONS.
- REFER TO SHEETS S-001, S-002, AND S-003 FOR SPECIFICATIONS.
- ALL STRUCTURAL METAL STUDS AND STOREFRONT ARE TO BE PRE-ENGINEERED. SUBMIT SIGNED AND SEALED CALCULATIONS AND SHOP DRAWINGS.
- (+) INDICATES TOP OF STEEL BEAM, TYP., UNO.



OVERBUILD ROOF FRAMING PLAN

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



OVERBUILD ROOF FRAMING PLAN

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

ROOF FRAMING PLAN

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



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CLIENT / PROJECT NAME:
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STRUCTURAL ASSESSMENT
TASK A**
111 OLIVIA STREET
KEY WEST, FLORIDA

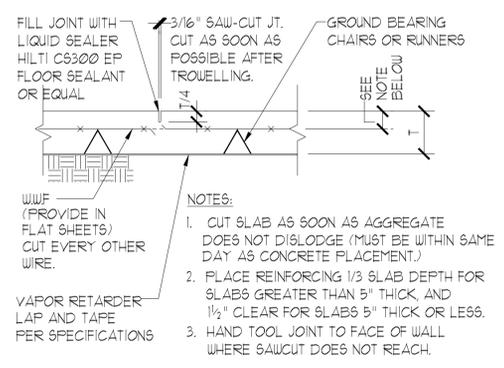
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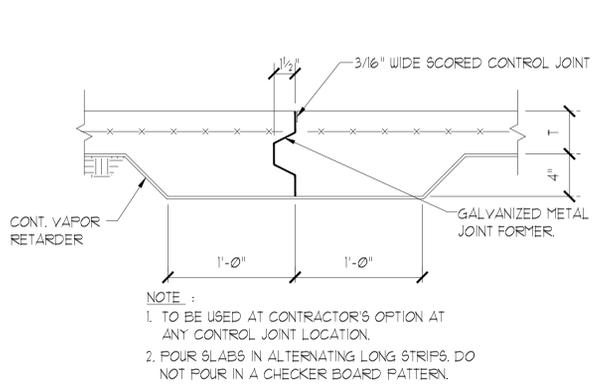
SHEET TITLE:
FOUNDATION DETAILS

REVISIONS:

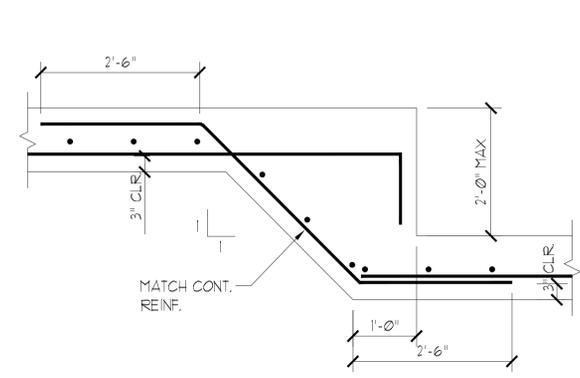
DATE ISSUED: OCT 24, 2014
PROJECT NO.: 12.0D01
DRAWING NUMBER:
S-301 SHEET: **OF 4**



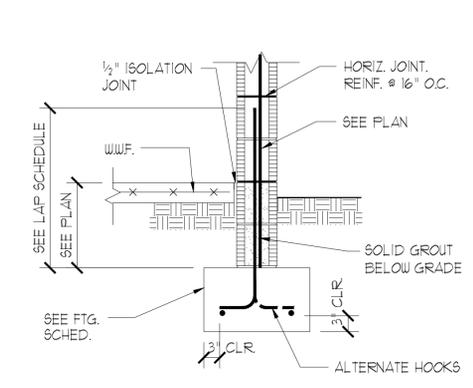
CONTRACTION JOINT
SCALE: 1/2" = 1'-0"



CONSTRUCTION JOINT
SCALE: 1/2" = 1'-0"

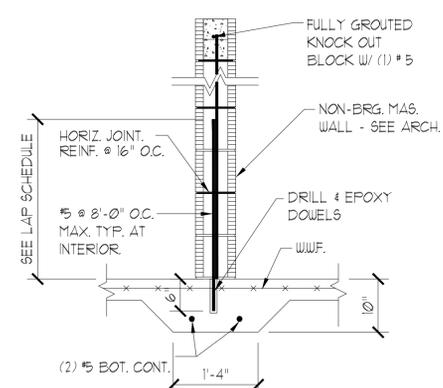


STEPPED FOOTING
SCALE: 1/2" = 1'-0"

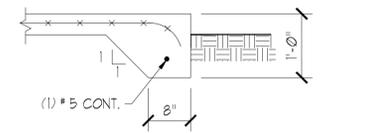


WALL FOOTING
SCALE: 1/2" = 1'-0"

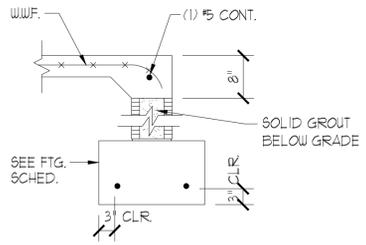
COLUMN SIZE	LOCATION	BASE ID	ANCHOR BOLTS	ANCHOR MIN. EMBEDMENT de UNO	EDGE DISTANCE
HSS XX	EXTERIOR	3/4"x12"x1'-0"	(4) 3/4"x1'-2"	9"	1 1/2"



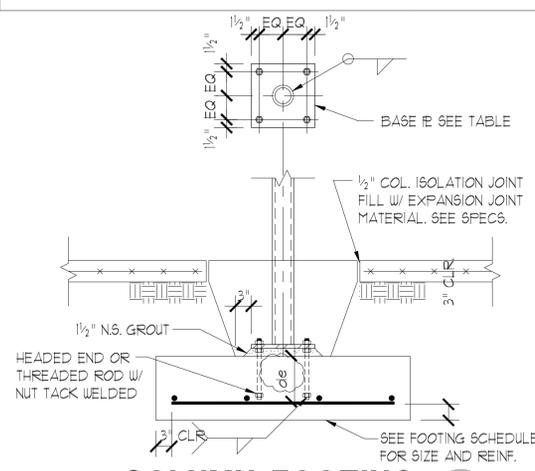
NON-BEARING MAS.
SCALE: 1/2" = 1'-0"



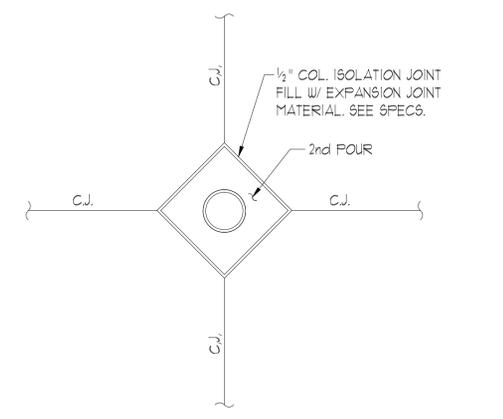
THICKENED SLAB EDGE 6A
SCALE: 1/2" = 1'-0"



THICKENED SLAB EDGE 6B
SCALE: 1/2" = 1'-0"



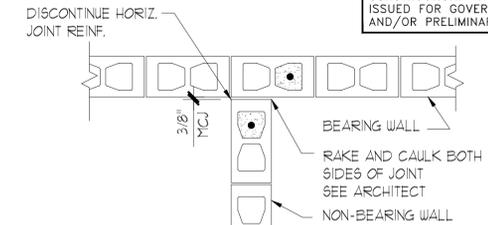
COLUMN FOOTING
SCALE: 1/2" = 1'-0"



COL. ISOLATION JOINT
SCALE: 1/2" = 1'-0"



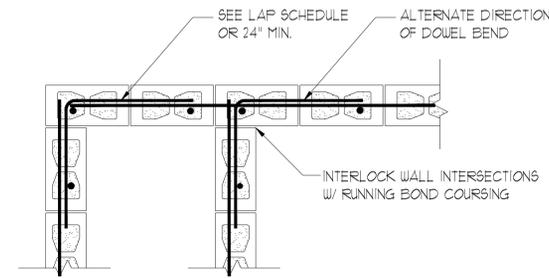
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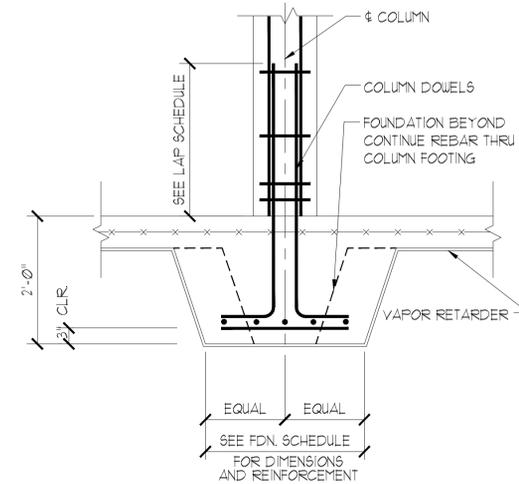
NON-BRG. TO BRG. WALL

BRG. TO BRG. OR NON-BRG. TO NON-BRG.

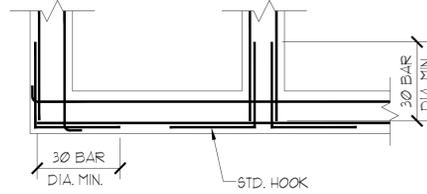
TYP. WALL INTERSECTIONS



8" MASONRY BOND BEAM CONNECTION



COLUMN FOOTING

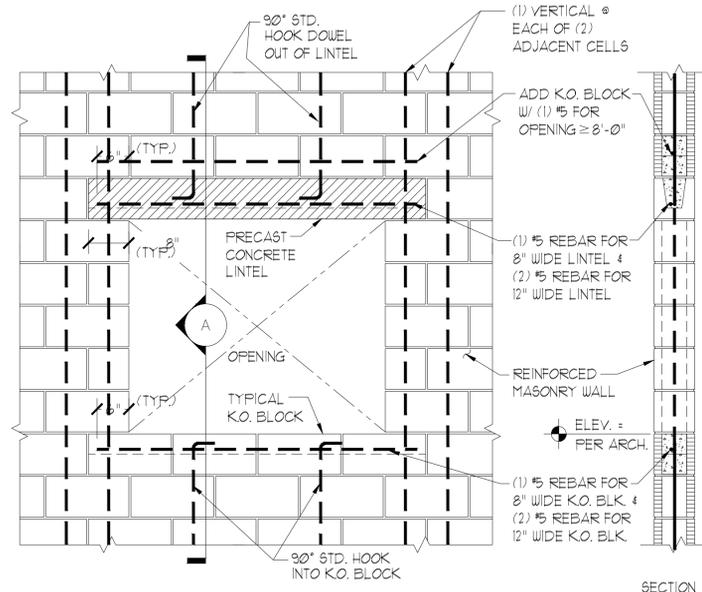


TYPICAL WALL AND FTG. REINF. INTERSECTIONS

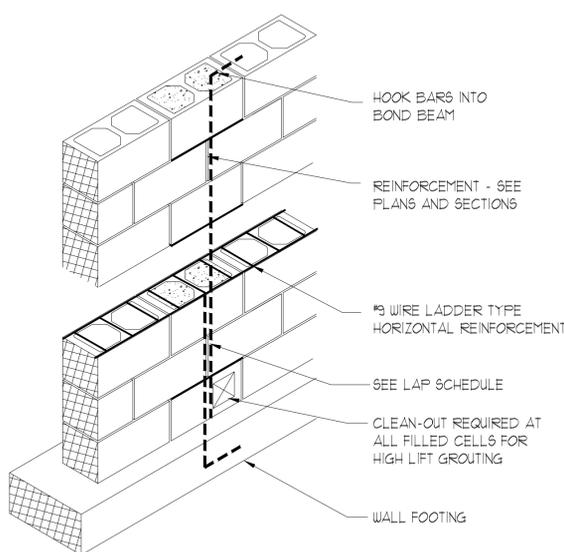
8" LINTEL SAFE LOAD TABLE
FOR 8"x8" HIGH-STRENGTH CASTCRETE PRECAST-PRESTRESSED U LINTELS

LENGTH	UNIFORM SAFE LOAD - POUNDS PER LINEAR FOOT	
	W/O K.O. BLOCK	W/ K.O. BLOCK
4'-0" (48") PRECAST	2,693 LBS.	6,113 LBS.
4'-6" (54") PRECAST	2,189 LBS.	6,113 LBS.
5'-0" (60") PRECAST	1,451 LBS.	4,360 LBS.
7'-6" (90") PRECAST	1,011 LBS.	2,661 LBS.
9'-4" (112") PRECAST	752 LBS.	1,843 LBS.
10'-6" (126") PRECAST	643 LBS.	1,533 LBS.
11'-4" (136") PRECAST	582 LBS.	1,366 LBS.
12'-0" (144") PRECAST	540 LBS.	1,254 LBS.
14'-0" (168") PRECAST	442 LBS.	1,002 LBS.
17'-4" (208") PRESTRESSED	300 LBS.	950 LBS.
19'-4" (232") PRESTRESSED	235 LBS.	750 LBS.

- NOTE:
1. W/O K.O. BLOCK DESIGNATION REPRESENTS AN 8"x8" FULLY GROUTED CASTCRETE LINTEL WITH (1) #5 CONT. BOTTOM REINF.
 2. W/ K.O. BLOCK DESIGNATION REPRESENTS A 16" NOMINAL DEPTH, FULLY GROUTED COMPOSITE LINTEL WITH (1) #5 CONT. TOP REINF. IN THE K.O. BEAM AND (1) #5 CONT. BOTTOM IN CASTCRETE LINTEL.
 3. PROVIDE CASTCRETE PRECAST CONCRETE LINTELS OVER ALL MASONRY OPENINGS GREATER THAN 12" USE RECESSED LINTELS WHERE REQUIRED BY ARCHITECTURAL DRAWINGS. PROVIDE MINIMUM 8" BEARING EACH SIDE OF OPENINGS AND KNOCKOUT BOTTOM OF LINTEL FOR MASONRY / CONCRETE COLUMN REINFORCING TO CONTINUE. SUBMIT LINTEL MANUFACTURER'S LOAD CAPACITY TABLE WITH LINTEL SHOP DRAWINGS.



TYPICAL CONCRETE LINTEL REINFORCING DETAIL



WALL REINFORCING

THIS DRAWING IS NOT FOR CONSTRUCTION. IT HAS BEEN ISSUED FOR GOVERNMENTAL REVIEW AND/OR PRELIMINARY PRICING ONLY.

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Florida P.E. 32629
McCarthy Project No. 13178

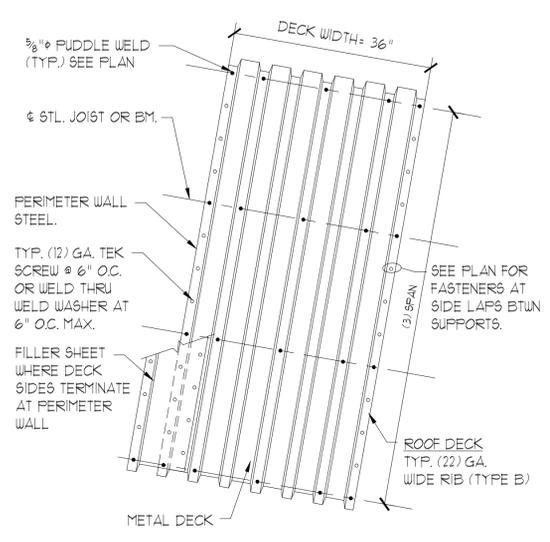
CLIENT / PROJECT NAME:
FREDERICK DOUGLASS
RECREATION CENTER
STRUCTURAL ASSESSMENT
TASK A
111 OLIVIA STREET
KEY WEST, FLORIDA

Original drawing is 24"x36". Scale accordingly if reduced.
SHEET TITLE:
ROOF FRAMING DETAILS

REVISIONS:

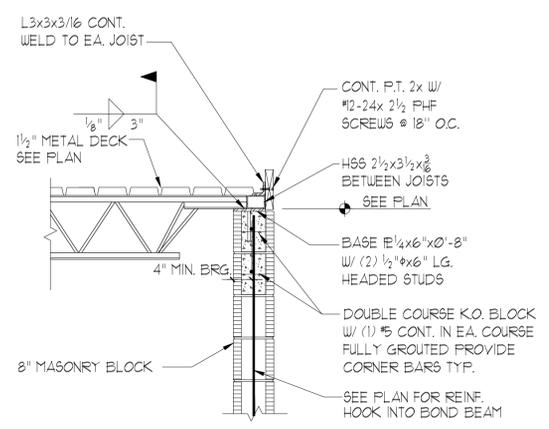
DATE ISSUED: OCT 24, 2014
PROJECT NO.: 12.0001
DRAWING NUMBER:

S-303 SHEET: OF 4

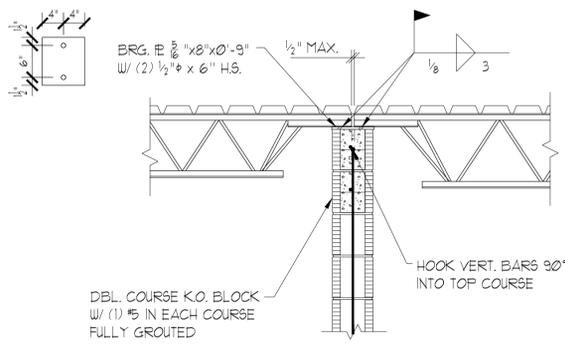


METAL ROOF DECK ATTACHMENT 1

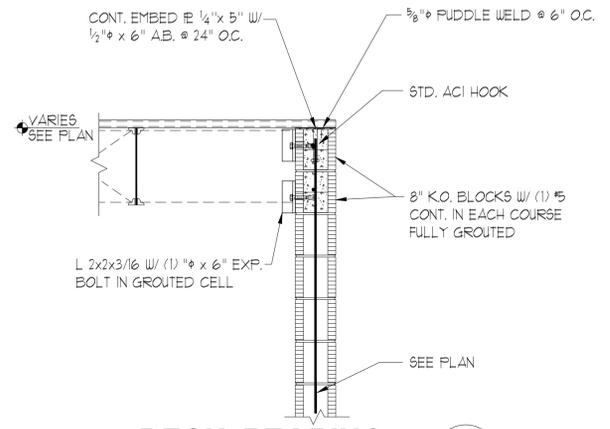
WHEN DECK STARTER SHEET LOW LIP IS WELDED TO PERIMETER AT 1'-0" O.C. STEEL FILLER SHEET IS NOT REQUIRED.



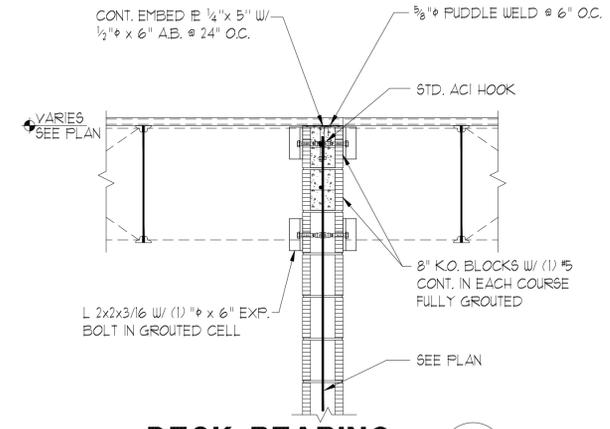
JOIST BEARING 2



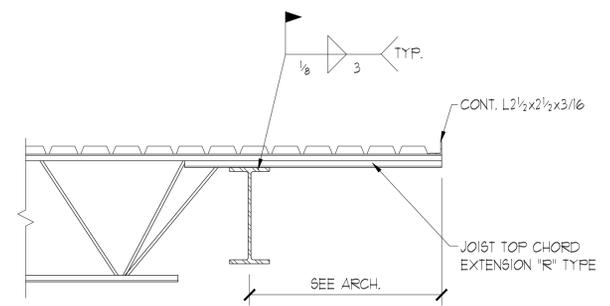
K JOIST BEARING 3



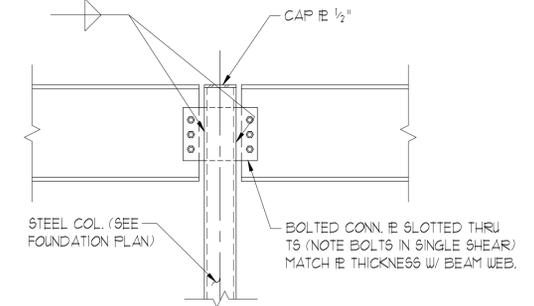
DECK BEARING 4



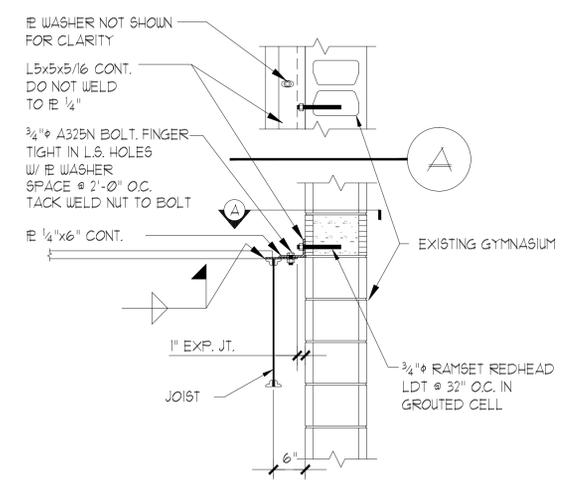
DECK BEARING 5



JOIST BEARING AT STEEL BEAM 6



BEAM-COLUMN CONNECTION 7



EXPANSION JOINT 8

10-30-2014 CS

NOT FOR CONSTRUCTION - NOT FOR FINAL PRICING - SUBJECT TO CHANGE

members of



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CITY OF KEY WEST
ALTERATIONS TO

FREDERICK DOUGLASS
RECREATION CENTER

111 OLIVIA STREET
KEY WEST, FL 33040

Original drawing is 24"x36". Scale accordingly if reduced.

SHEET TITLE:

ARCHITECTURAL SITE PLAN

REVISIONS:

DATE ISSUED: 2/27/2015
PROJECT NO.: 12.0001

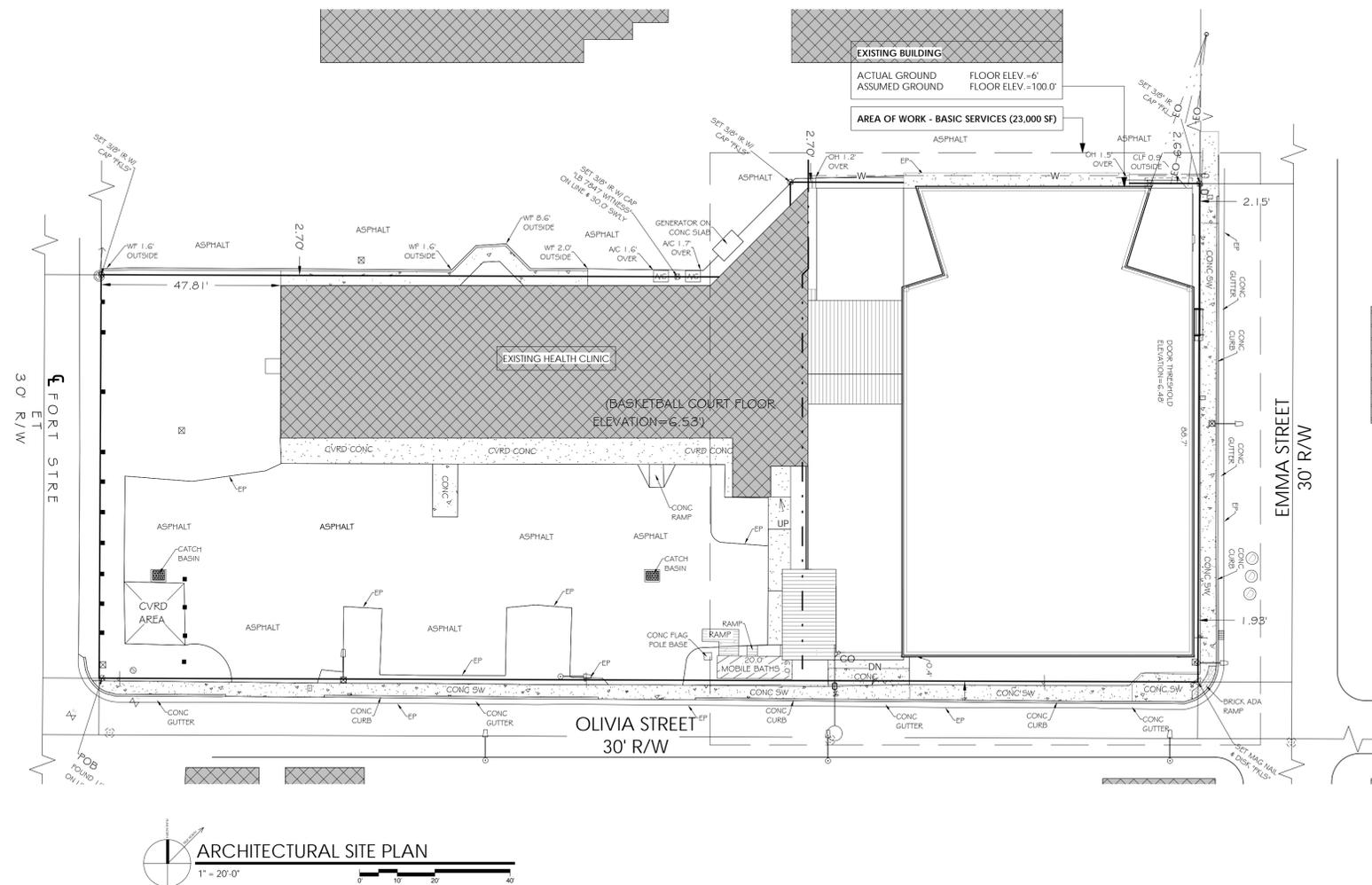
DRAWING NUMBER:

A-001

SHEET: 16 OF 57

SYMBOLS LEGEND

	SERVICE AREA BOUNDARY LINE
	ASSUMED PROPERTY LINE BETWEEN BUILDINGS ON THE SAME LOT
	SITE LIGHTING
	STORM DRAIN
	WATER (UNDERGROUND)
	ELECTRICAL (OVERHEAD)
	SANITARY SEWER



ARCHITECTURAL SITE PLAN
1" = 20'-0"



GENERAL DEMOLITION NOTES

- REMOVE AND DETACH ITEMS FROM EXISTING CONSTRUCTION AND LEGALLY DISPOSE OF THEM OFF-SITE, UNLESS INDICATED TO BE REMOVED AND SALVAGED OR REMOVED AND REINSTALLED.
- REMOVE OR RELOCATE ALL WIRING, PLUMBING AND MECHANICAL EQUIPMENT AFFECTED BY REMOVAL OF PARTITIONS. REMOVED PIPES AND/OR LINES SHALL BE CUT TO A POINT OF CONCEALMENT BEHIND OR BELOW FINISH SURFACES AND SHALL BE PROPERLY CAPPED OR PLUGGED.

SELECTIVE DEMOLITION KEYNOTES

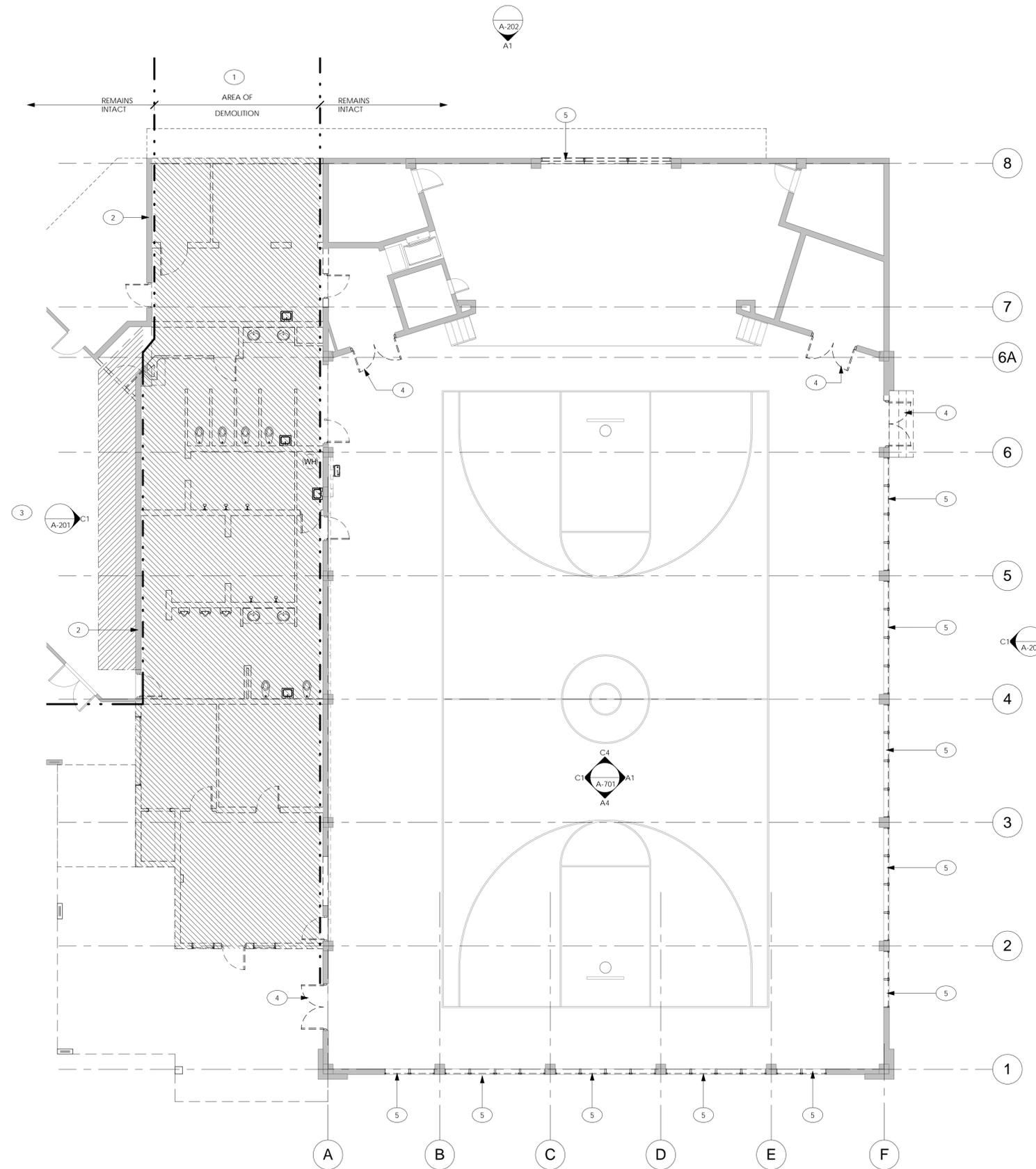
- DEMOLISH ALL FLOORS, WALLS & ROOF IN THIS AREA UNLESS OTHERWISE NOTED
- WALLS THAT NEED TO REMAIN INTACT
- CANTILEVERED CONCRETE ROOF TO BE REMOVED
- REMOVE EXISTING DOUBLE DOORS
- REMOVE EXISTING WINDOWS



EXISTING ONE STORY BUILDING



AREA OF CONCRETE OVERHANG CANTILEVER THAT IS INTEGRAL TO ROOF STRUCTURE OF EXISTING BUILDING TO BE DEMOLISHED AND WILL HAVE TO BE REMOVED SIMULTANEOUS TO BUILDING



SELECTIVE DEMOLITION PLAN
1/8" = 1'-0"



GENERAL DEMOLITION NOTES

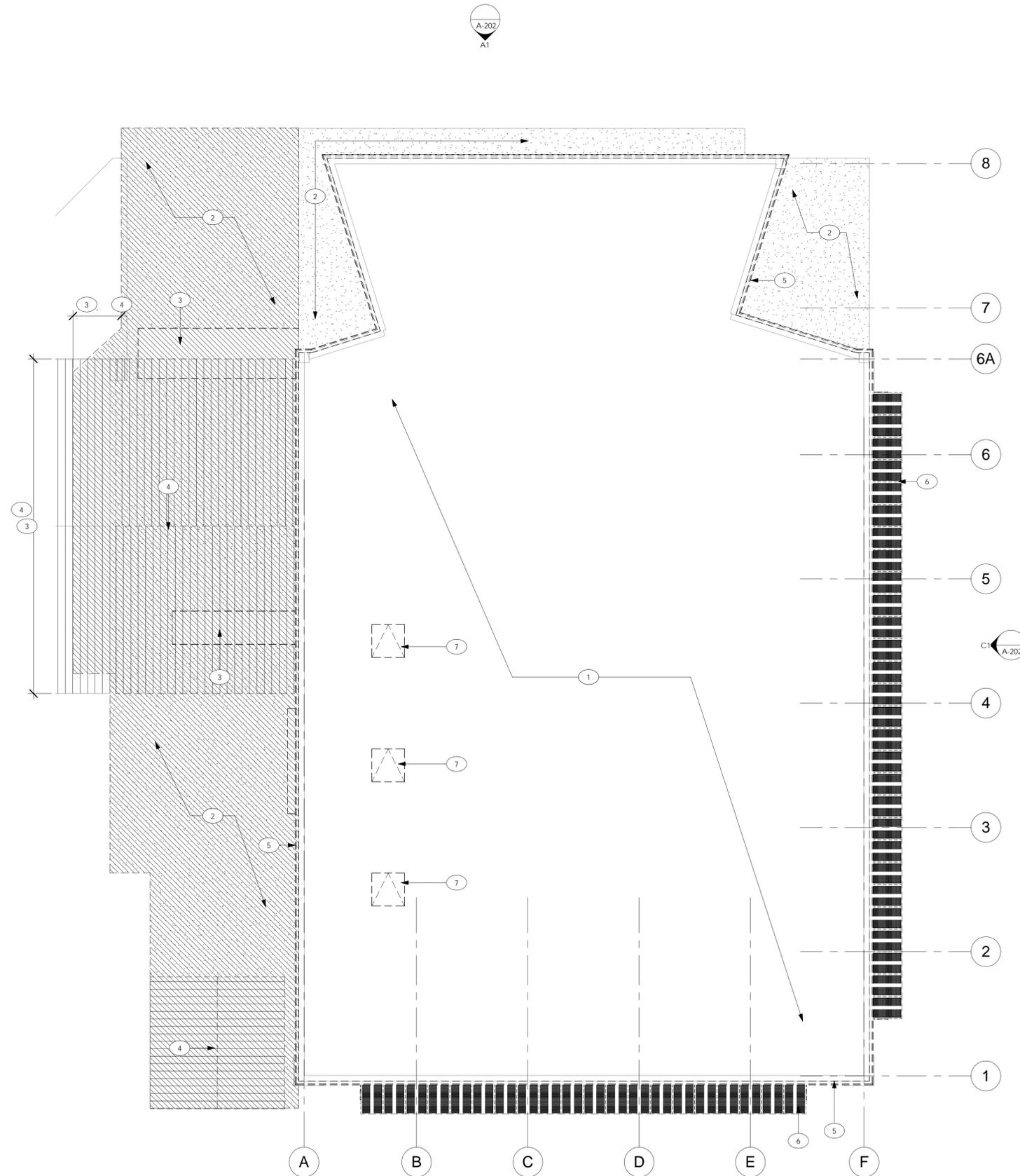
1. REMOVE AND DETACH ITEMS FROM EXISTING CONSTRUCTION AND LEGALLY DISPOSE OF THEM OFF-SITE, UNLESS INDICATED TO BE REMOVED AND SALVAGED OR REMOVED AND REINSTALLED.
2. REMOVE OR RELOCATE ALL WIRING, PLUMBING AND MECHANICAL EQUIPMENT AFFECTED BY REMOVAL OF PARTITIONS. REMOVED PIPES AND/OR LINES SHALL BE CUT TO A POINT OF CONCEALMENT BEHIND OR BELOW FINISH SURFACES AND SHALL BE PROPERLY CAPPED OR PLUGGED.

SELECTIVE DEMOLITION KEYNOTES

1. REMOVE BUILT-UP ROOF ON TECTUM/GYPSUM DECK
2. REMOVE ROOF MEMBRANE ON 4" CONCRETE DECK
3. REMOVE ROOF MEMBRANE, PLYWOOD DECK AND 2X6 FRAMING
4. REMOVE STANDING SEAM ALUMINUM ROOF
5. REMOVE GALVANIZED ALUMINUM GUTTER
6. REMOVE ALUMINUM STORM SHUTTERS
7. REMOVE SEALED ROOF VENT



AREA OF BUILDING TO BE COMPLETELY DEMOLISHED



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



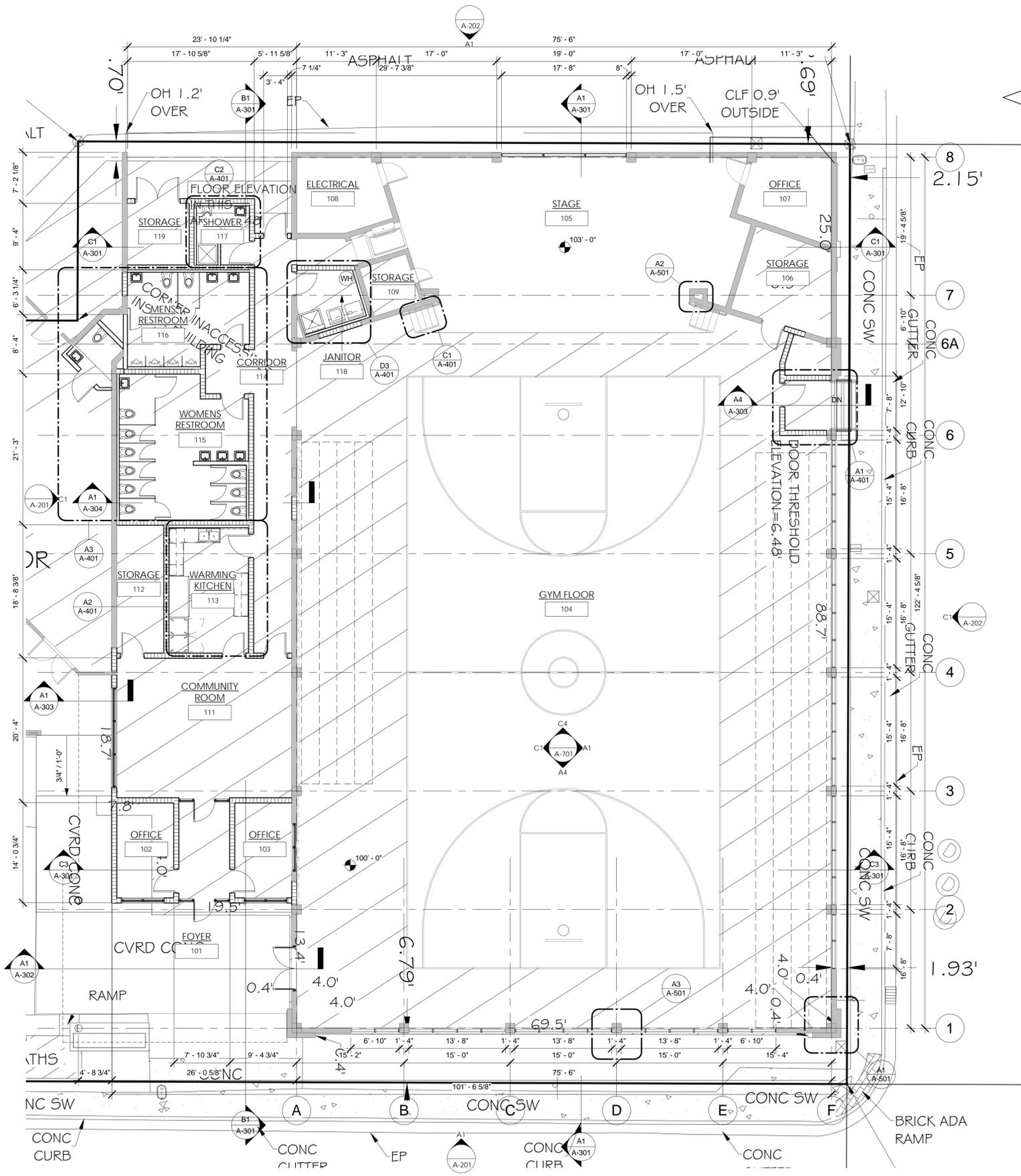
**FREDERICK DOUGLASS
RECREATION CENTER**

GENERAL NOTES

- REFER TO SHEETS A-501 FOR DIMENSIONS ON ENLARGED PLANS

DIMENSION NOTES

- SEE A-500 SHEETS FOR ENLARGED PLANS
- DIMENSIONS ARE INDICATED TO THE CENTERLINE OF STRUCTURAL GRID, FACE OF CONCRETE WALL, NOMINAL FACE OF CMU WALL, FACE OF PARTITION AS SCHEDULED, UNLESS OTHERWISE NOTED
- ALIGNMENT OF PARTITIONS AND FINISHES AS SCHEDULED SHALL BE STRAIGHT, TRUE & PLUMB. DIMENSIONAL LAYOUT SHALL BE IN THE FOLLOWING PRIORITY ORDER:
A. STRUCTURAL DRAWINGS
B. LARGE SCALE DETAILS
C. SMALL SCALE DETAILS
D. ENLARGED PLANS AND SECTIONS
E. FLOOR PLANS
- FLOOR ELEVATIONS ARE INDICATED AT THE FACE OF THE STRUCTURAL SLAB, UNLESS OTHERWISE NOTED
- VERTICAL DIMENSIONS ARE INDICATED FROM THE FLOOR ELEVATION TO FACE OF FINISHED MATERIAL, UNLESS NOTED ABOVE FINISH FLOOR - "AFF"
- CEILING HEIGHTS ARE INDICATED FROM THE FLOOR ELEVATION TO THE FACE OF THE SUSPENDED ACOUSTIC CEILING GRID OR FACE OF FINISH MATERIAL FOR OTHER CEILING TYPES, UNLESS OTHERWISE NOTED
- REQUIRED SIZE, CLEARANCES, AND RELATIONSHIPS ARE INDICATED BY DIMENSIONS AS NOTED
- THE EXISTING DIMENSIONS AND CONDITIONS SHOWN ON THESE DRAWINGS ARE PROVIDED BY THE ARCHITECT BASED ON AVAILABLE INFORMATION. THE CONTRACTOR SHALL VERIFY EXISTING CONDITIONS ON THE JOB SITE AND NOTIFY THE ARCHITECT OF DEVIATIONS FROM THESE DRAWINGS.



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

3/2/2015 12:52:37 PM



CONSULTANT:

CLIENT / PROJECT NAME:
CITY OF KEY WEST
ALTERATIONS TO

**FREDERICK DOUGLASS
RECREATION CENTER**

111 OLIVIA STREET
KEY WEST, FL 33040

Original drawing is 24"x36". Scale accordingly if reduced.

SHEET TITLE:
REFLECTED CEILING PLAN

REVISIONS:

DATE ISSUED: 2/27/2015
PROJECT NO.: 12.0D01

DRAWING NUMBER:

A-103

SHEET: 21 OF 57

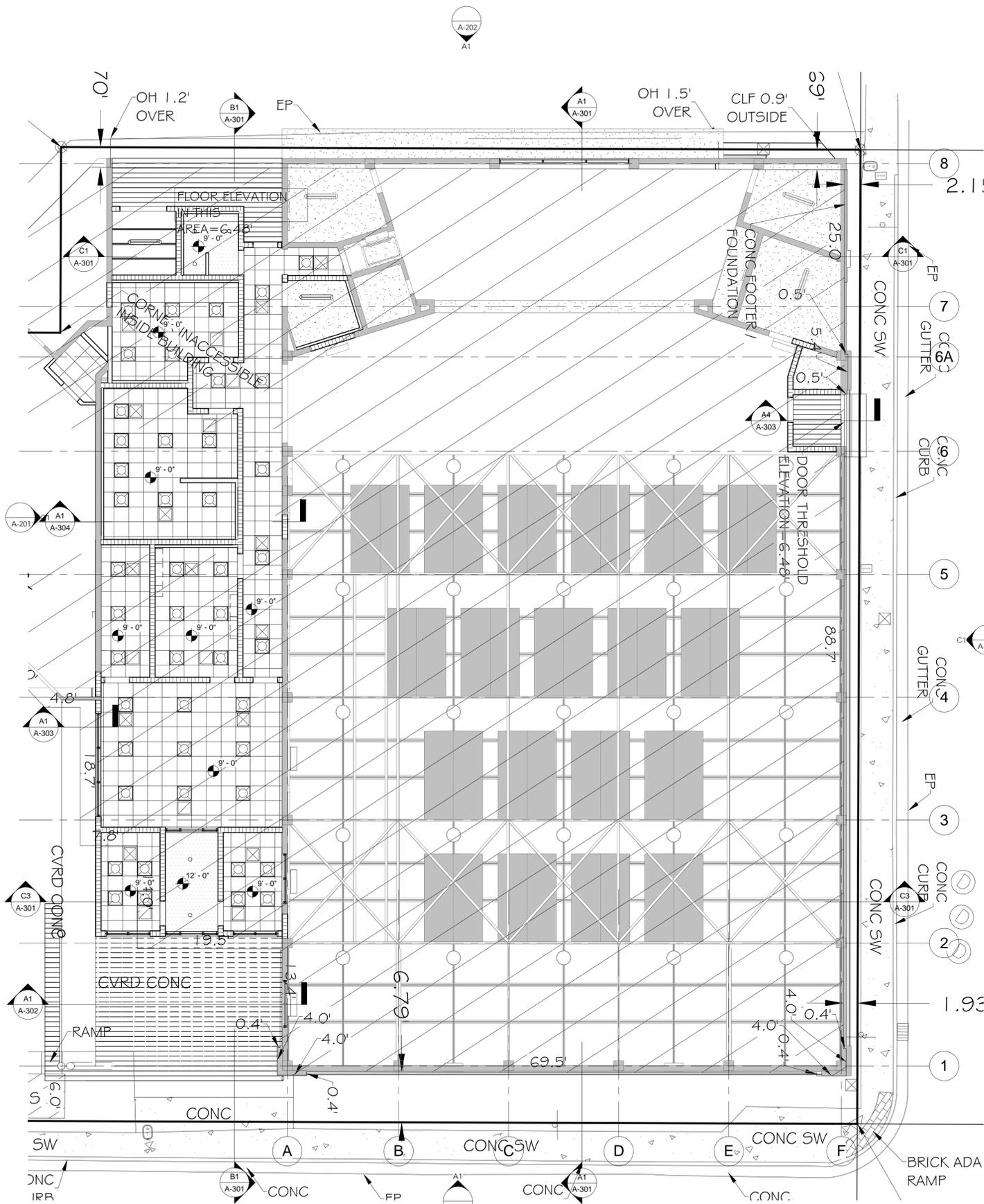
GENERAL NOTES

1. REVIEW ALL PROPOSED CONSTRUCTION BEFORE COMMENCING WORK.
2. FURNISH AND INSTALL ALL NEW CEILINGS AS INDICATED ON THE DRAWINGS AND IN THE ROOM FINISH SCHEDULE.
3. REFER TO MECHANICAL, ELECTRICAL, PLUMBING, & FIRE PROTECTION DRAWINGS FOR COORDINATION OF ALL TRADES AND ASSOCIATED WORK.
4. ARCHITECTURAL DRAWINGS TAKE PRECEDENCE OVER ENGINEERING DRAWINGS FOR SCHEDULE OF LIGHT FIXTURES.
5. CEILING HEIGHTS INDICATED ARE RELATIVE TO FINISH FLOOR HEIGHT WHERE CEILING TAG IS LOCATED.
6. ALL ACOUSTICAL CEILING TILE IS TO BE CENTERED IN THE ROOM.
7. WHERE ACOUSTICAL PANELS ARE REQUIRED TO BE CUT, CUT THE PANELS TO MAINTAIN A SHARP AND NEAT EDGE.

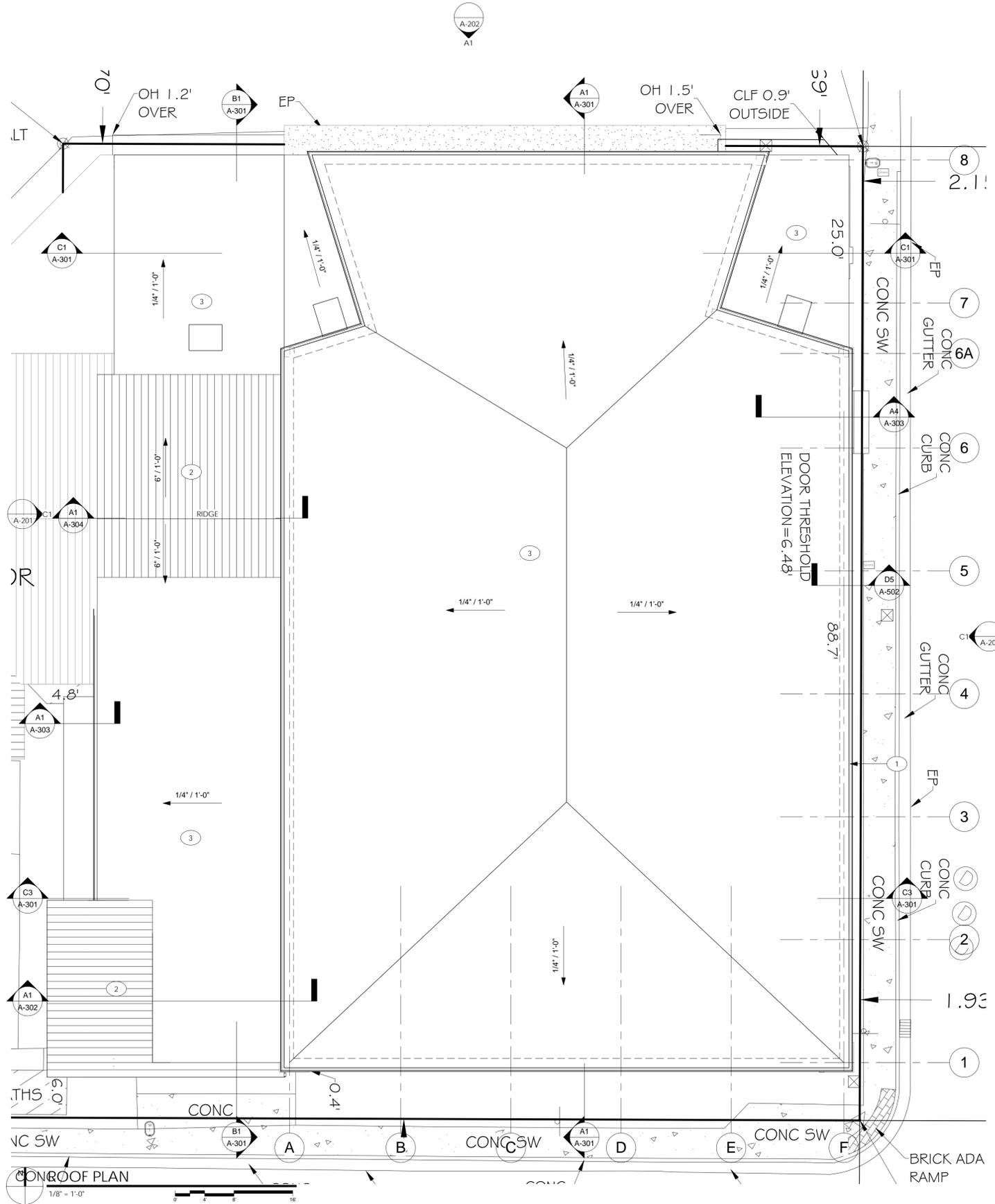
SHEET KEYNOTES

CEILING LEGEND

- GYPSUM BOARD
- OPEN TO STRUCTURE
- 2' X 2' ACOUSTICAL LAY IN CEILING
- CEILING HEIGHT SYMBOL
- DIFFUSERS (CEILING MOUNTED)
- DIFFUSERS (DUCT MOUNTED)
- EMERGENCY LIGHT, BATTERY POWERED
- EMERGENCY LIGHT/EXIT SIGN COMBINATION, BATTERY POWERED
- CEILING MOUNTED ILLUMINATED EXIT SIGN
- WALL MOUNTED ILLUMINATED EXIT SIGN
- 2' X 4' RECESSED LIGHT FIXTURE
- LOW PROFILE T5 STRIP LIGHT
- INDUSTRIAL LOW BAY SUSPENDED LIGHT FIXTURE
- ROOF VENT
- ACOUSTIC PANEL



REFLECTED CEILING PLAN
1/8" = 1'-0"



SHEET KEYNOTES

1	GALVANIZED ALUMINUM GUTTER
2	STANDING SEAM ALUMINUM ROOF
3	BUILT-UP ROOF

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AR0016166

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ALTERATIONS TO

**FREDERICK DOUGLASS
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KEY WEST, FL 33040

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SHEET TITLE:

ROOF PLAN

REVISIONS:

DATE ISSUED: 2/27/2015
PROJECT NO.: 12.0D01

DRAWING NUMBER:

3/2/2015 12:52:50 PM



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111 OLIVIA STREET
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SHEET TITLE:
FURNITURE, FIXTURES & EQUIPMENT PLAN

REVISIONS:

DATE ISSUED: 2/27/2015
PROJECT NO.: 12.0D01

DRAWING NUMBER:

A-105

SHEET: 23 OF 57

EQUIPMENT SCHEDULE 'A'-FURNISHED & INSTALLED BY CONTRACTOR

MARK	DESCRIPTION	MODEL	MANUFACTURER	DEPTH	WIDTH	NOTES
A-BLC	RELOCATED BLEACHERS	EXISTING TO REMAIN	EXISTING	10' - 0"	48' - 0"	
A-CWD	COMMERCIAL WASHER/DRYER	TBD	TBD	2' - 6"	2' - 3"	
A-FRG	COMMERCIAL REFRIGERATOR/FREEZER	TBD	TBD	3' - 0"	6' - 0"	
A-LFT	ADA LIFT	EXISTING TO REMAIN	EXISTING	7' - 0"	3' - 4"	
A-WMB	FOOD WARMING BOX	TBD	TBD	2' - 10"	2' - 4"	

EQUIPMENT SCHEDULE 'B'-FURNISHED BY OWNER & INSTALLED BY CONTRACTOR

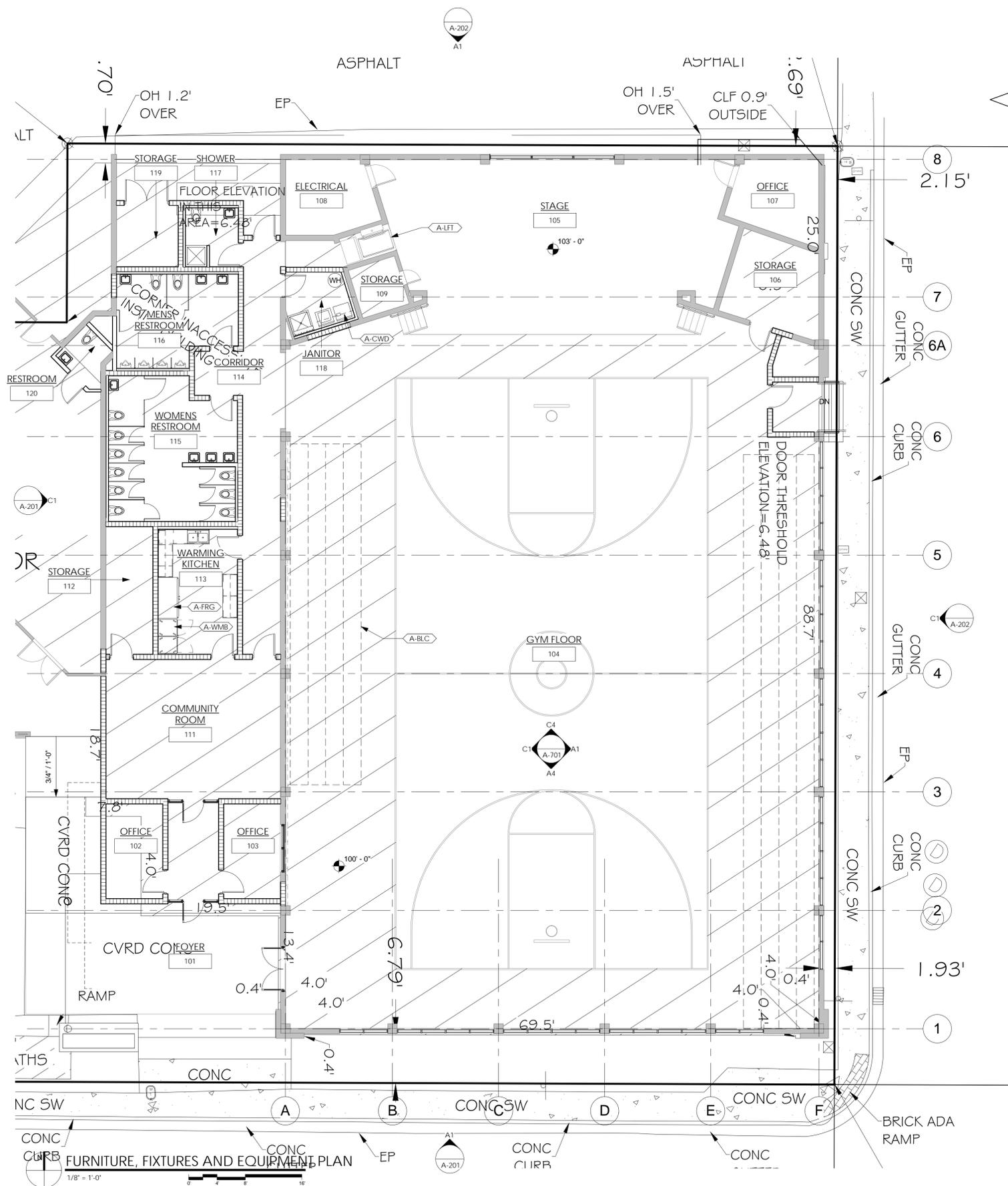
MARK	DESCRIPTION	MODEL	MANUFACTURER	SERVICES								NOTES
				MECHANICAL				ELECTRICAL				
				CW	HW	DR	EXH	AMP	V	PH	HP	

EQUIPMENT SCHEDULE 'C'-FURNISHED BY OWNER & INSTALLED BY OWNER (OTHERS)

MARK	DESCRIPTION	MODEL	MANUFACTURER	SERVICES								NOTES
				MECHANICAL				ELECTRICAL				
				CW	HW	DR	EXH	AMP	V	PH	HP	

OWNER TO PROVIDE LIST OF ALL FURNITURE & EQUIPMENT TO BE RELOCATED INTO THIS SPACE

- GENERAL NOTES:
1. FF&E IS PROVIDED FOR COORDINATION ONLY
 2. INTERIOR WALL PARTITIONS, SYSTEMS FURNITURE & SEATING SHOWN IN EQUIPMENT SCHEDULE 'C' IS NOT IN CONTRACT & PROVIDED BY OTHERS
 3. DIMENSIONS PROVIDED ON THIS SHEET MUST BE FIELD VERIFIED PRIOR TO FABRICATION OR ORDERING OF EQUIPMENT



3/2/2015 12:52:54 PM

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CITY OF KEY WEST
 ALTERATIONS TO

**FREDERICK DOUGLASS
 RECREATION CENTER**

111 OLIVIA STREET
 KEY WEST, FL 33040

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SHEET TITLE:

EXTERIOR ELEVATIONS

REVISIONS:

DATE ISSUED: 2/27/2015
 PROJECT NO.: 12.0D01

DRAWING NUMBER:

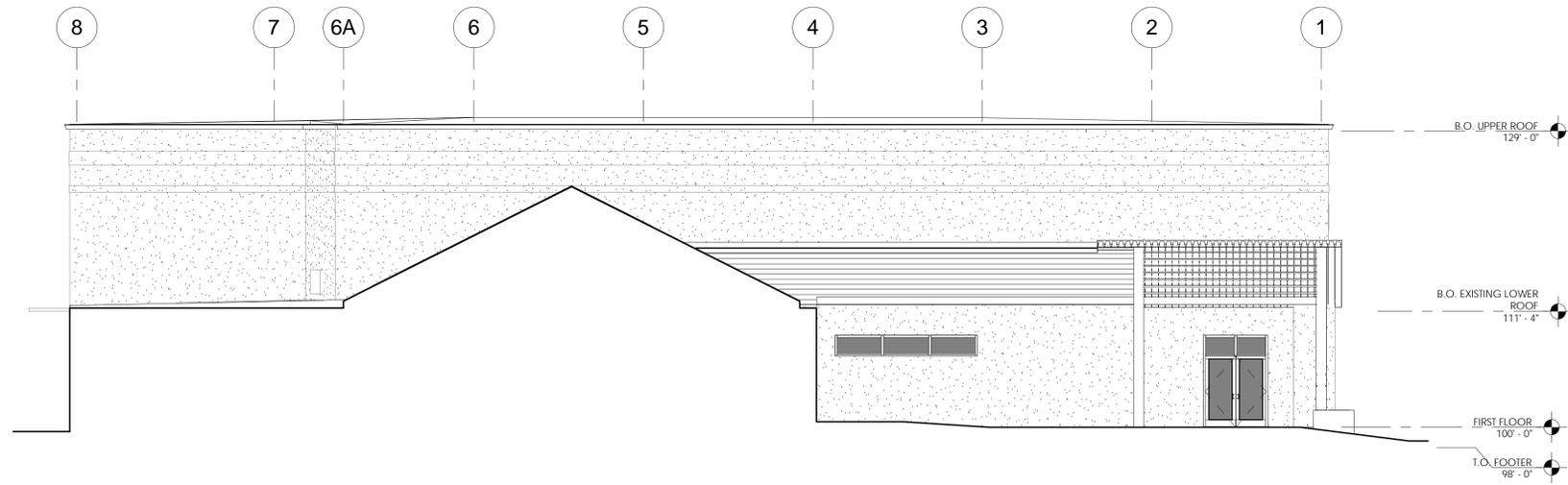
A-201

SHEET: 24 OF 57

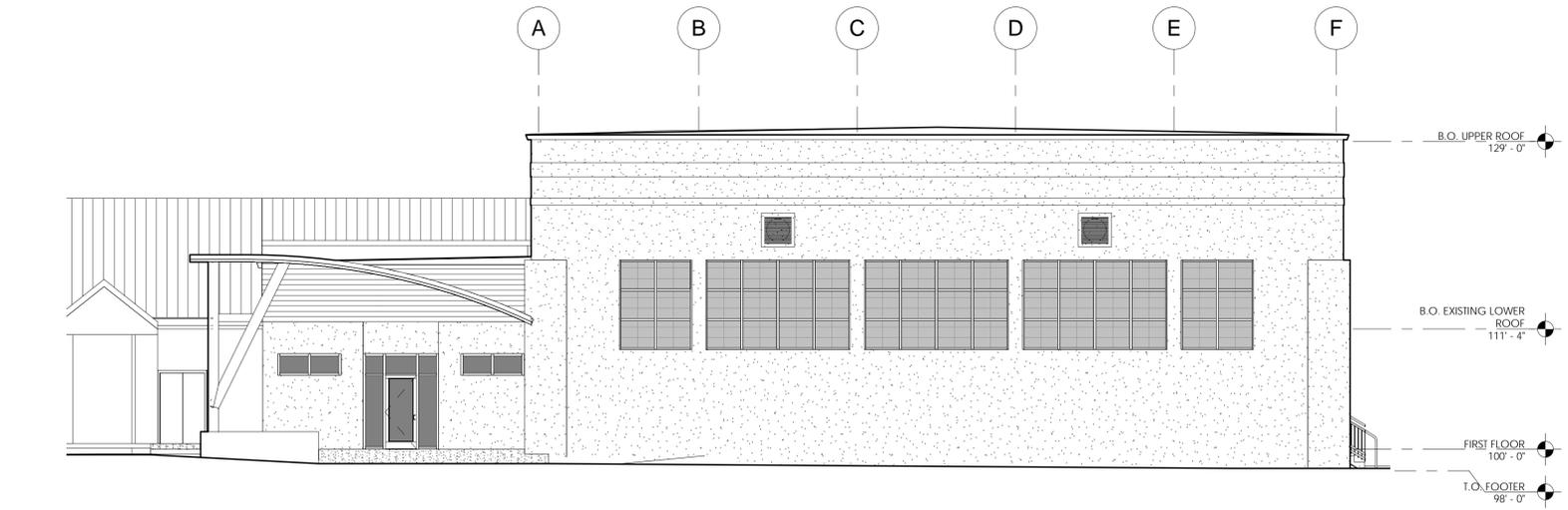
SHEET KEYNOTES

EXTERIOR FINISH MATERIALS LEGEND

1. PAINTED COMPONENTS
 - PORTLAND CEMENT PLASTER
TBD
 - HOLLOW METAL DOORS AND FRAMES
TBD
2. PREMANUFACTURED COMPONENTS
 - WINDOWS
TBD
 - STORM SHUTTERS
TBD
 - ALUMINUM GUTTERS
TBD
 - FLOOD PANELS
TBD



C1 WEST ELEVATION
 1/8" = 1'-0"



A1 SOUTH ELEVATION
 1/8" = 1'-0"

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 ALTERATIONS TO

**FREDERICK DOUGLASS
 RECREATION CENTER**

111 OLIVIA STREET
 KEY WEST, FL 33040

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SHEET TITLE:

EXTERIOR ELEVATIONS

REVISIONS:

DATE ISSUED: 2/27/2015
 PROJECT NO.: 12.0001

DRAWING NUMBER:

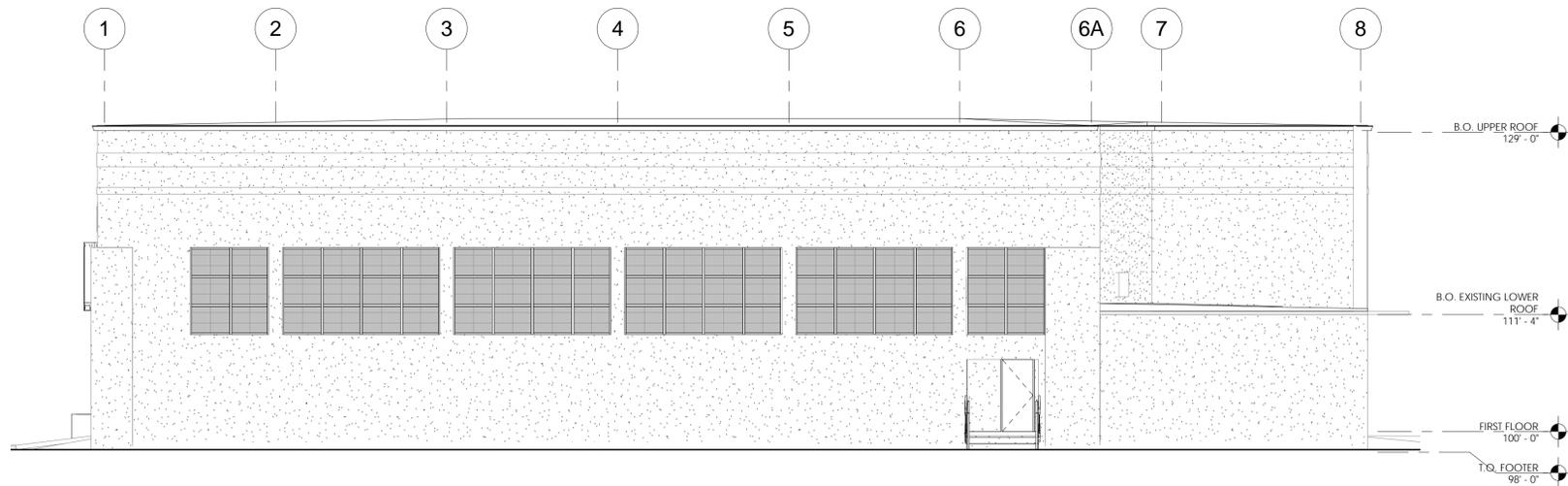
A-202

SHEET: 25 OF 57

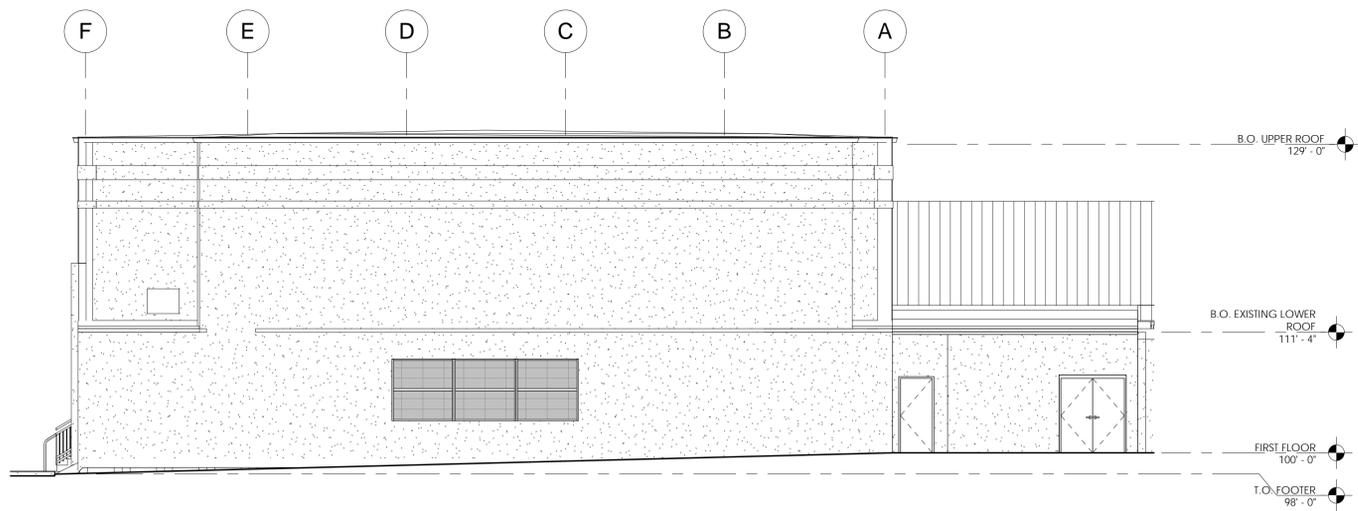
SHEET KEYNOTES

EXTERIOR FINISH MATERIALS LEGEND

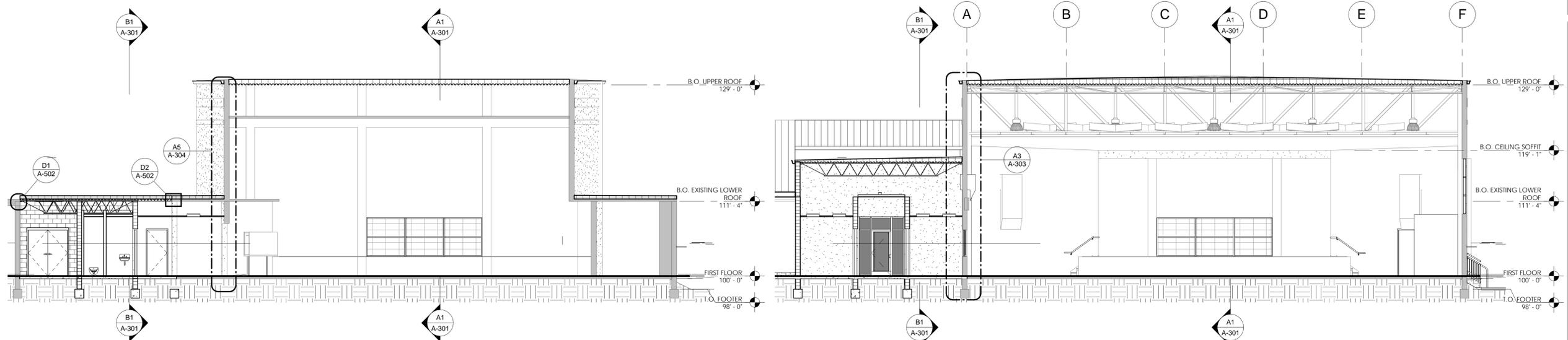
1. PAINTED COMPONENTS
 - PORTLAND CEMENT PLASTER
TBD
 - HOLLOW METAL DOORS AND FRAMES
TBD
2. PREMANUFACTURED COMPONENTS
 - WINDOWS
TBD
 - STORM SHUTTERS
TBD
 - ALUMINUM GUTTERS
TBD
 - FLOOD PANELS
TBD



C1 EAST ELEVATION
 1/8" = 1'-0"

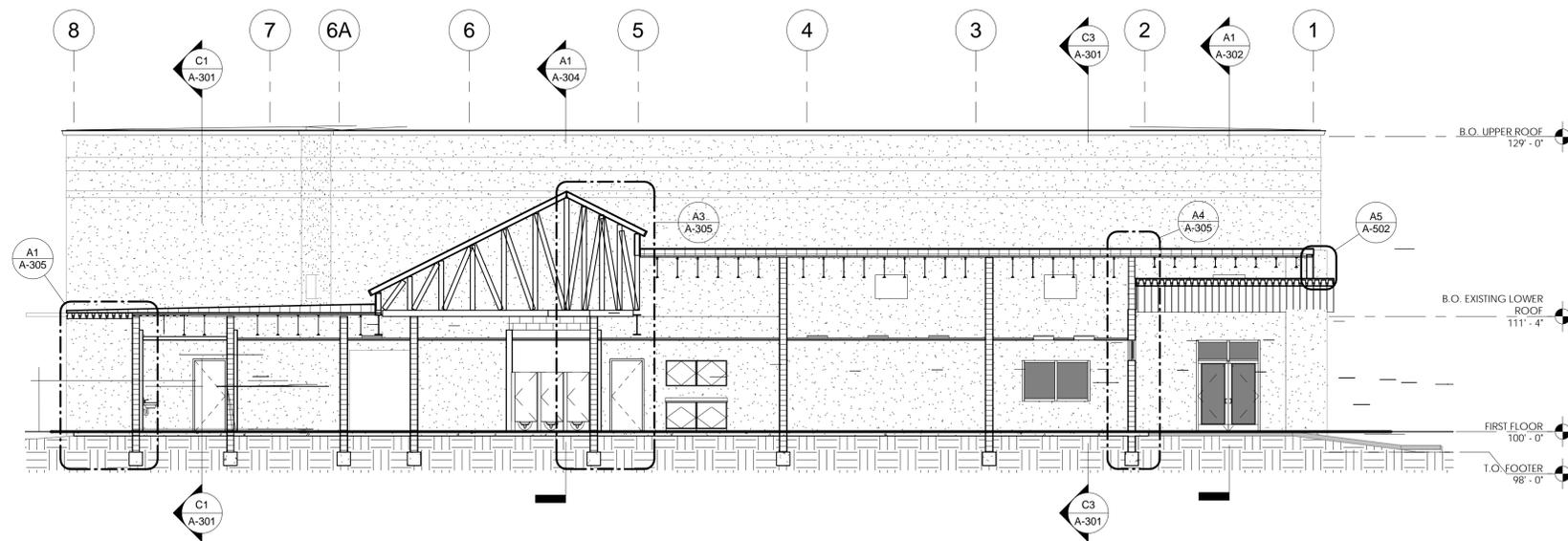


A1 NORTH ELEVATION
 1/8" = 1'-0"

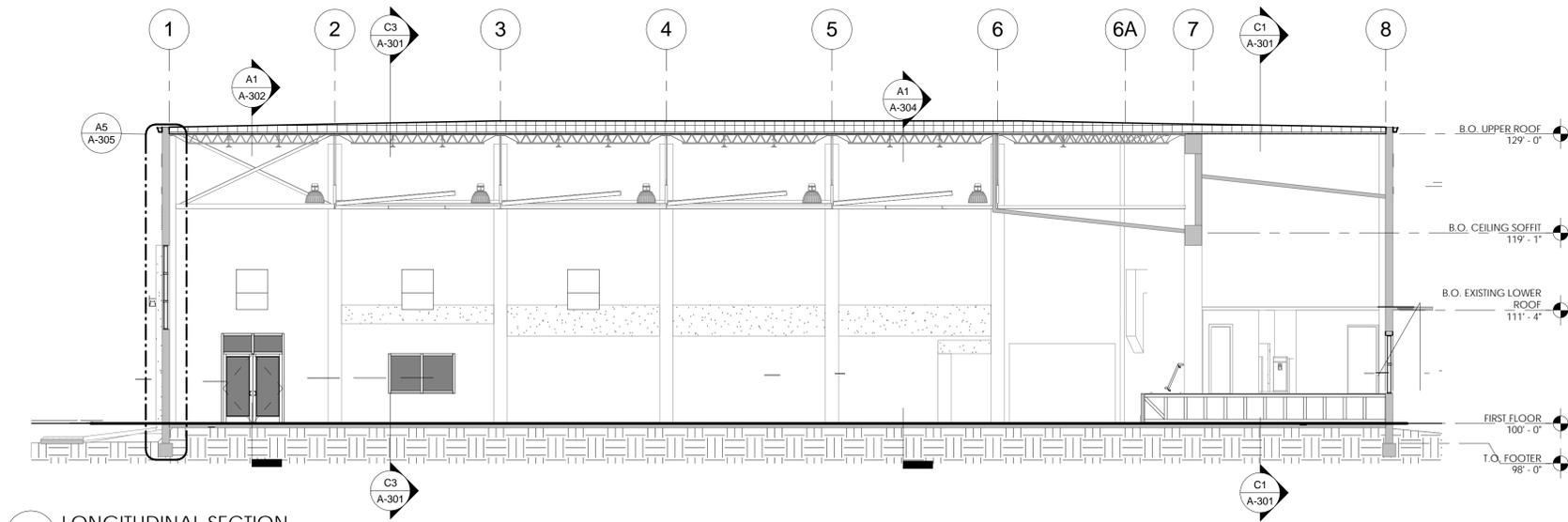


C1 TRANSVERSE SECTION
1/8" = 1'-0"

C3 TRANSVERSE SECTION
1/8" = 1'-0"



B1 LONGITUDINAL SECTION 2
1/8" = 1'-0"



A1 LONGITUDINAL SECTION
1/8" = 1'-0"

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ALTERATIONS TO

FREDERICK DOUGLASS RECREATION CENTER

111 OLIVIA STREET
KEY WEST, FL 33040

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SHEET TITLE:

WALL SECTIONS

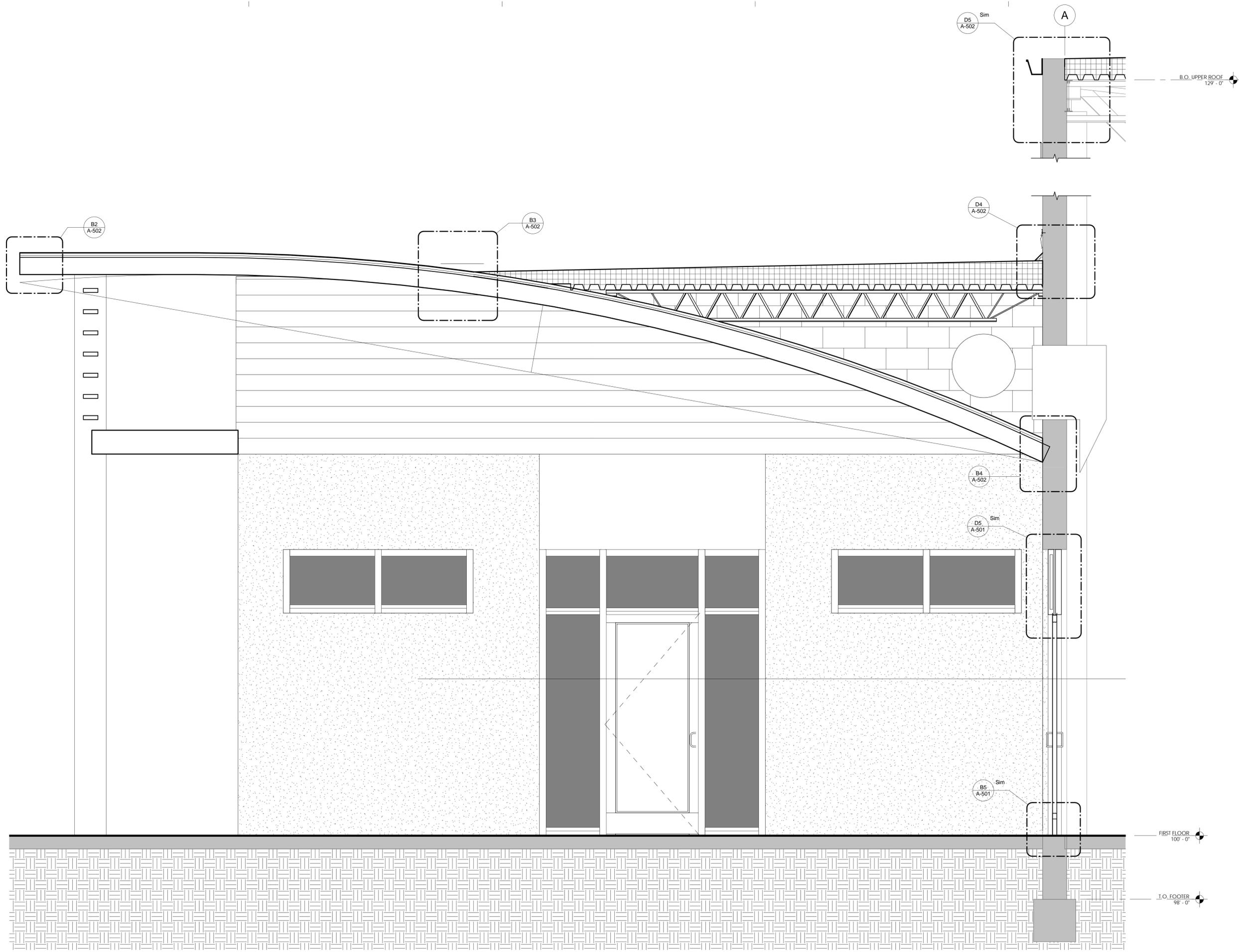
REVISIONS:

DATE ISSUED: 2/27/2015
PROJECT NO.: 12.0001

DRAWING NUMBER:

A-302

SHEET: 27 OF 57



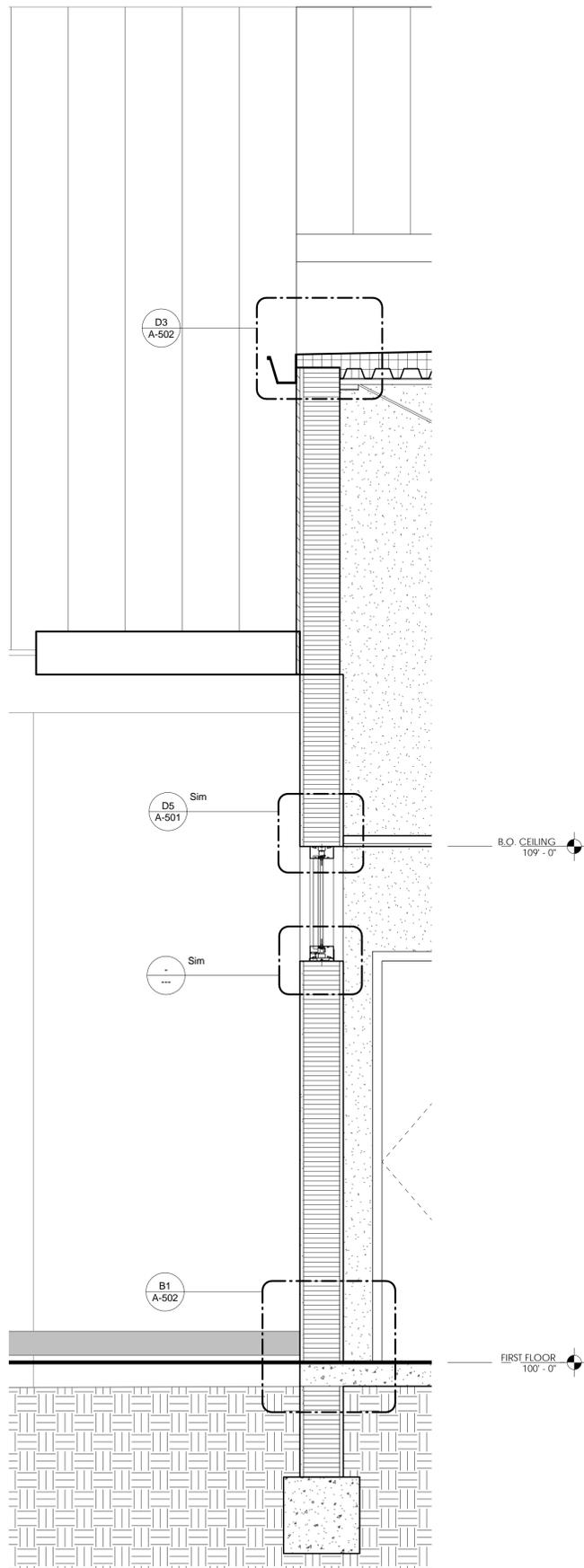
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A1 WALL SECTION
3/4" = 1'-0"

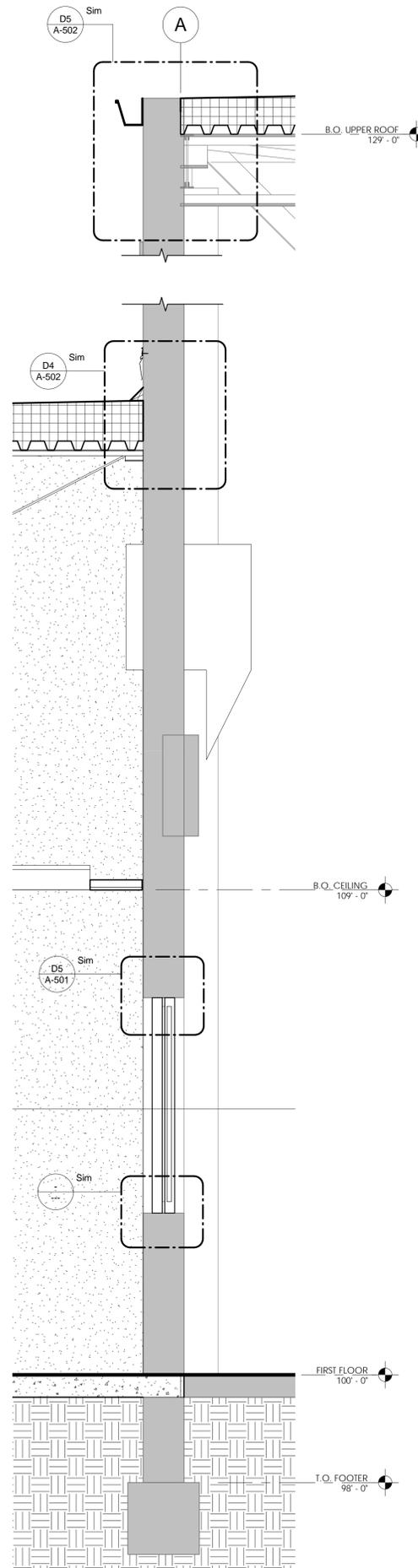




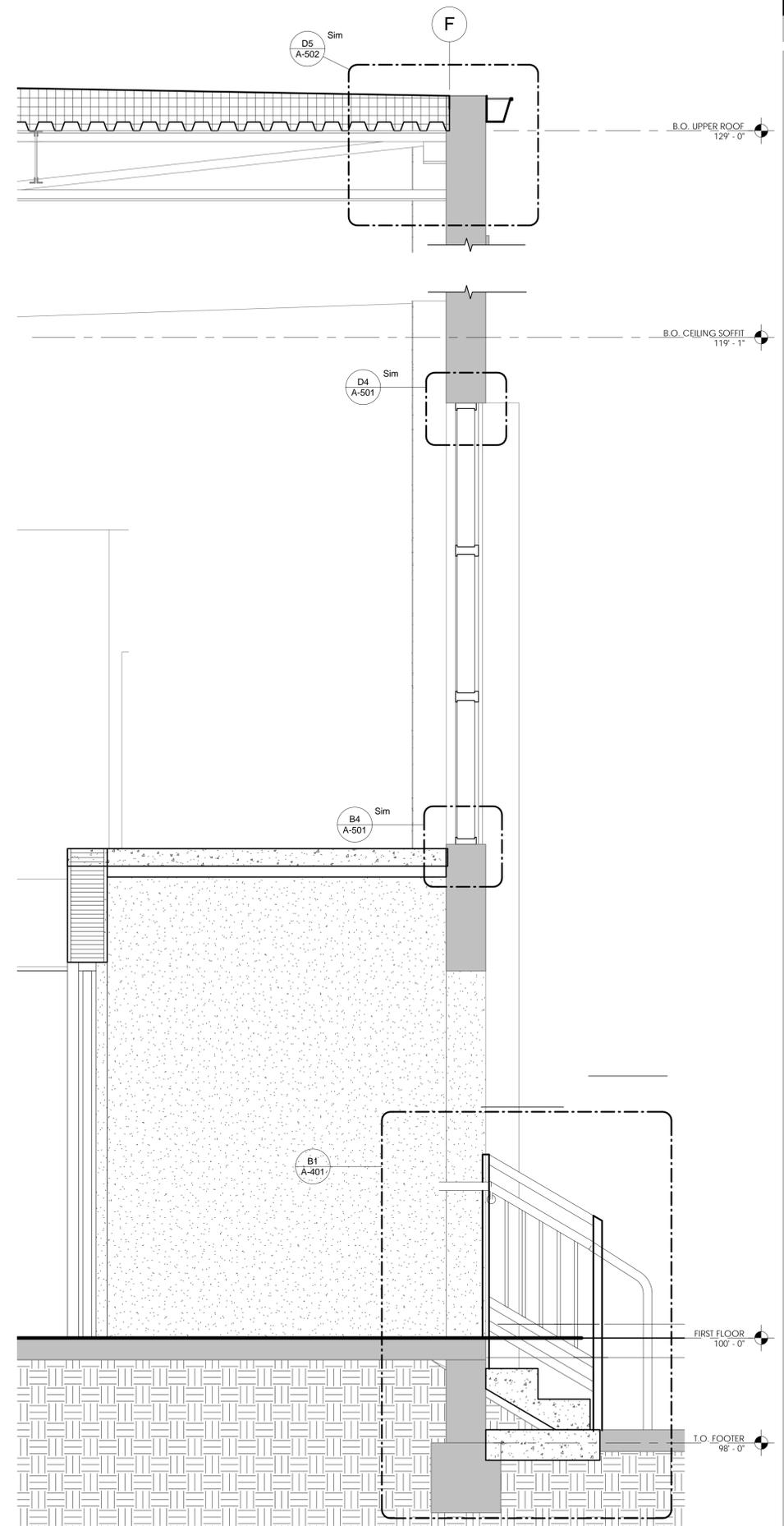
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A1 WALL SECTION
3/4" = 1'-0"



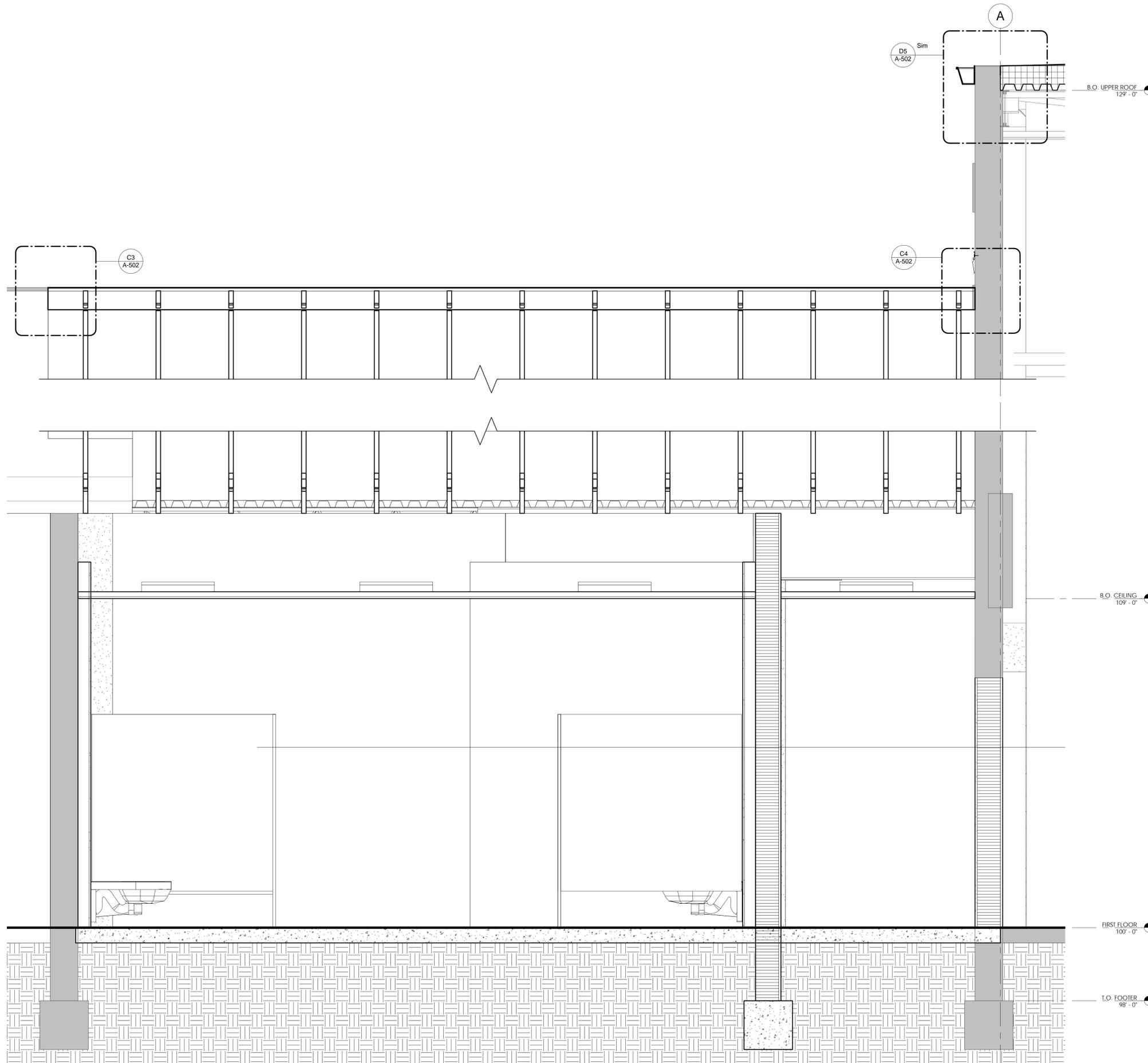
A3 WALL SECTION
3/4" = 1'-0"



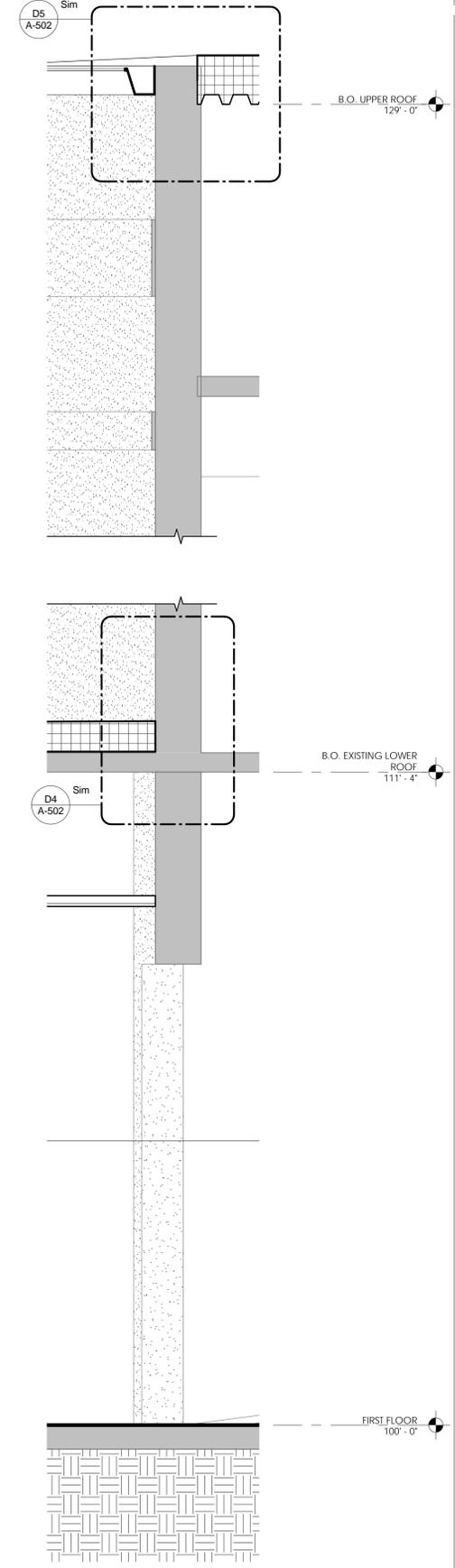
A4 WALL SECTION
3/4" = 1'-0"



FREDERICK DOUGLASS RECREATION CENTER



A1 WALL SECTION
3/4" = 1'-0"



A5 WALL SECTION
3/4" = 1'-0"

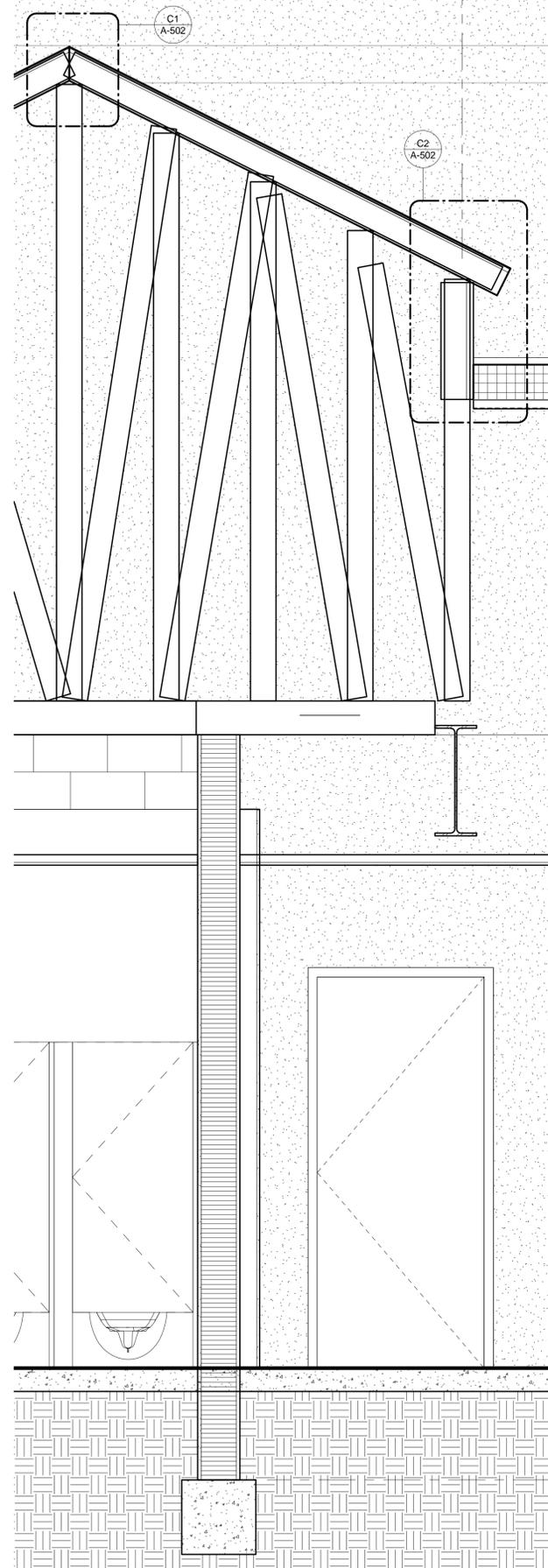


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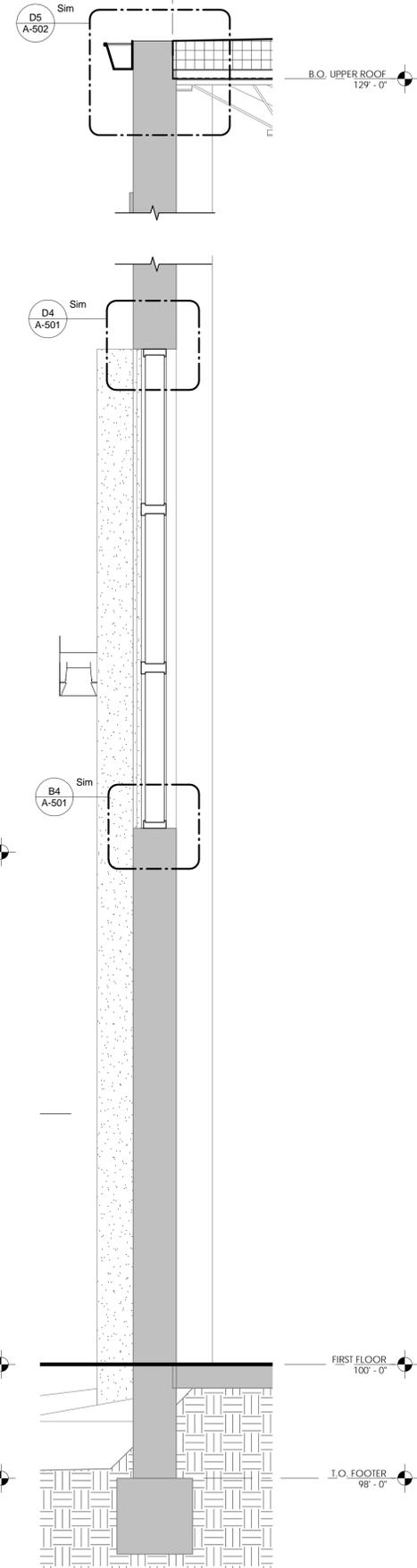
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5



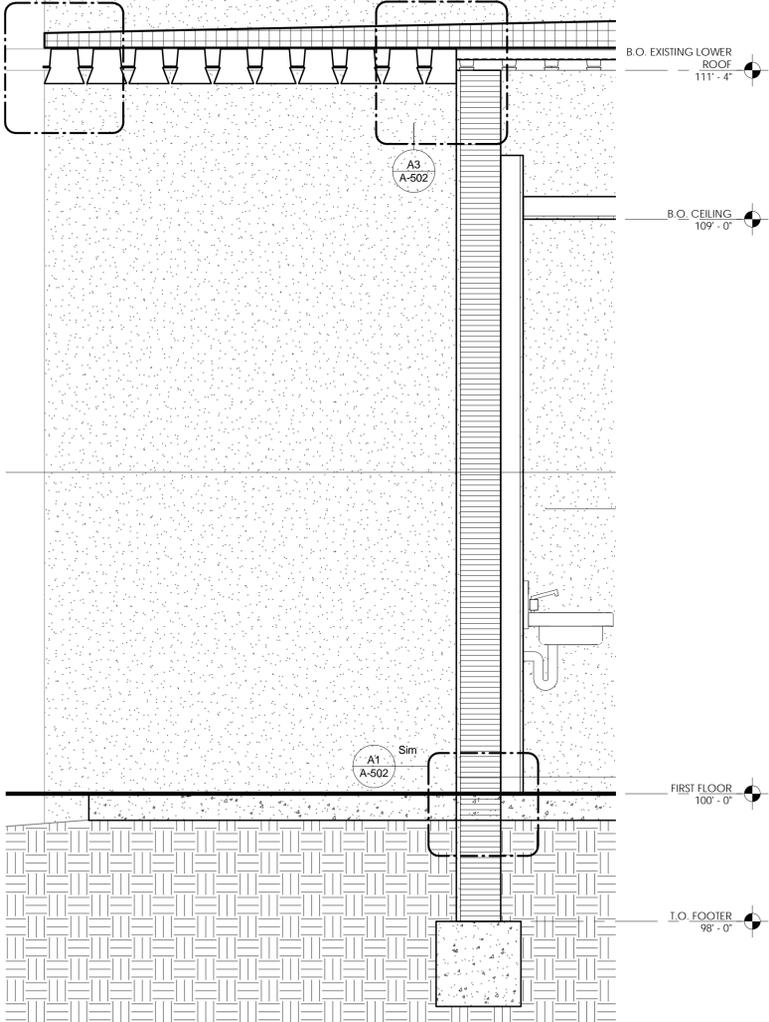
A3 WALL SECTION
3/4" = 1'-0"

1



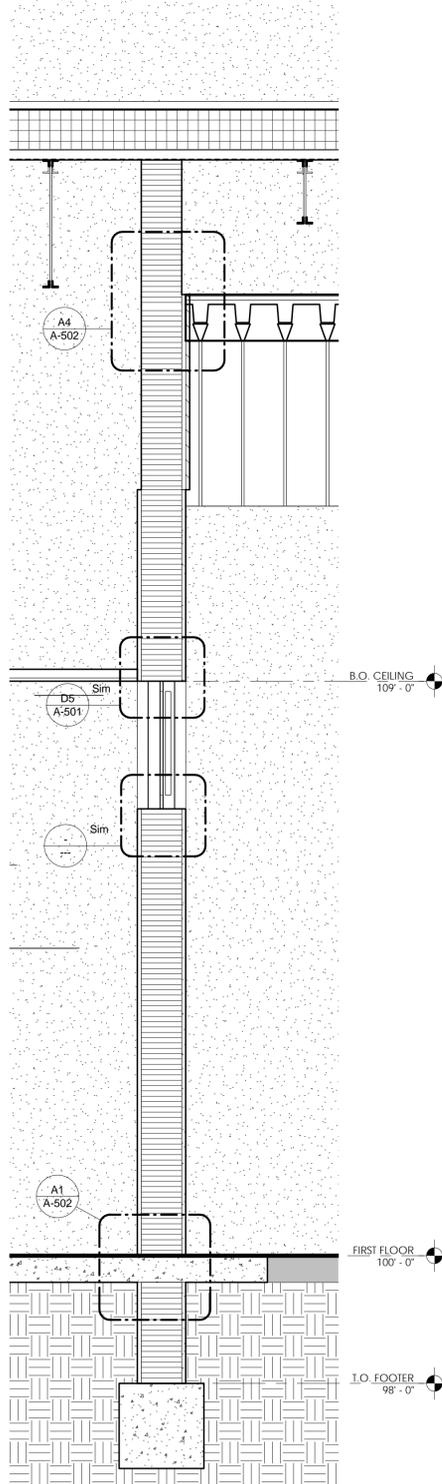
A5 WALL SECTION
3/4" = 1'-0"

A2
A-502



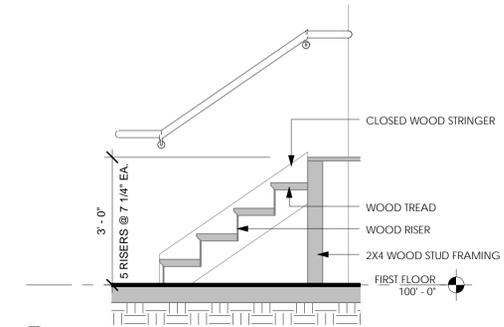
A1 WALL SECTION
3/4" = 1'-0"

A4
A-502

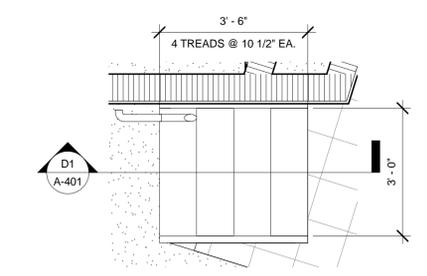


A4 WALL SECTION
3/4" = 1'-0"

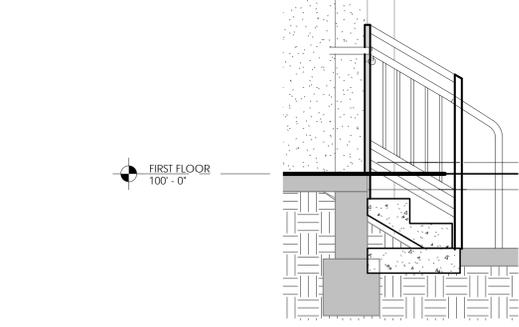
3/2/2015 12:53:59 PM



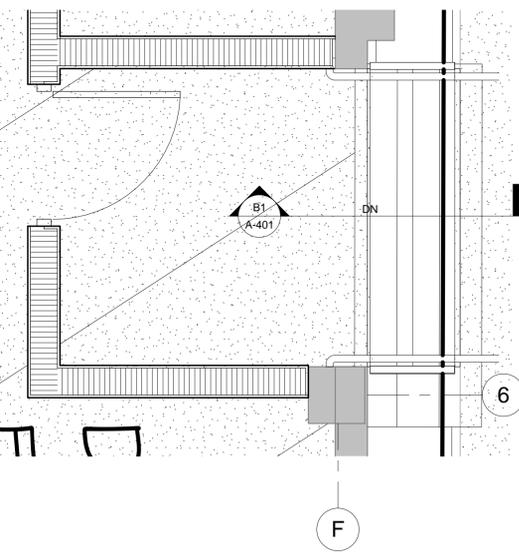
D1 STAIR SECTION
1/2" = 1'-0"



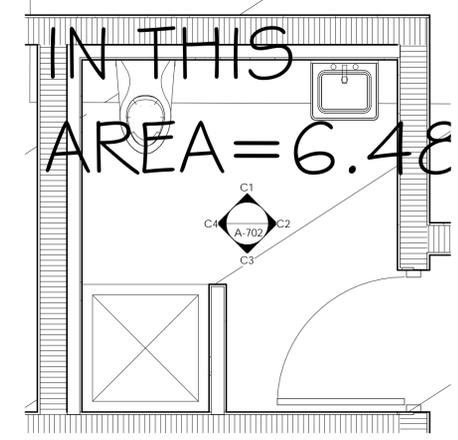
C1 ENLARGED STAIR PLAN
1/2" = 1'-0"



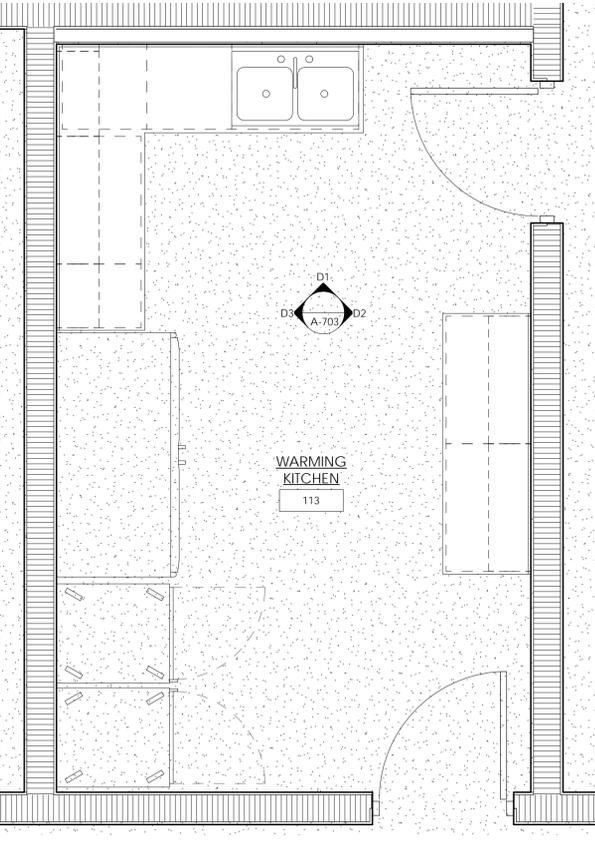
B1 STAIR SECTION
1/2" = 1'-0"



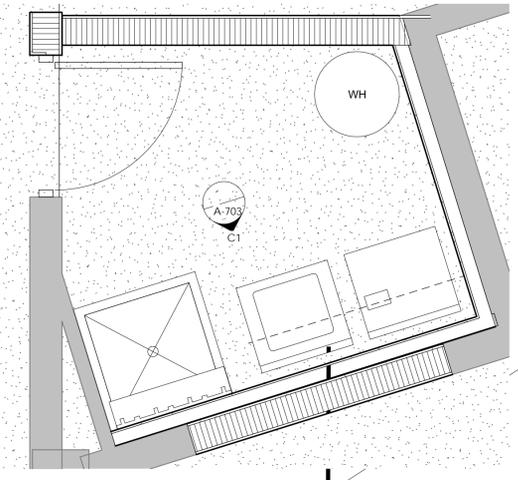
A1 ENLARGED PLAN - EAST ENTRANCE
1/2" = 1'-0"



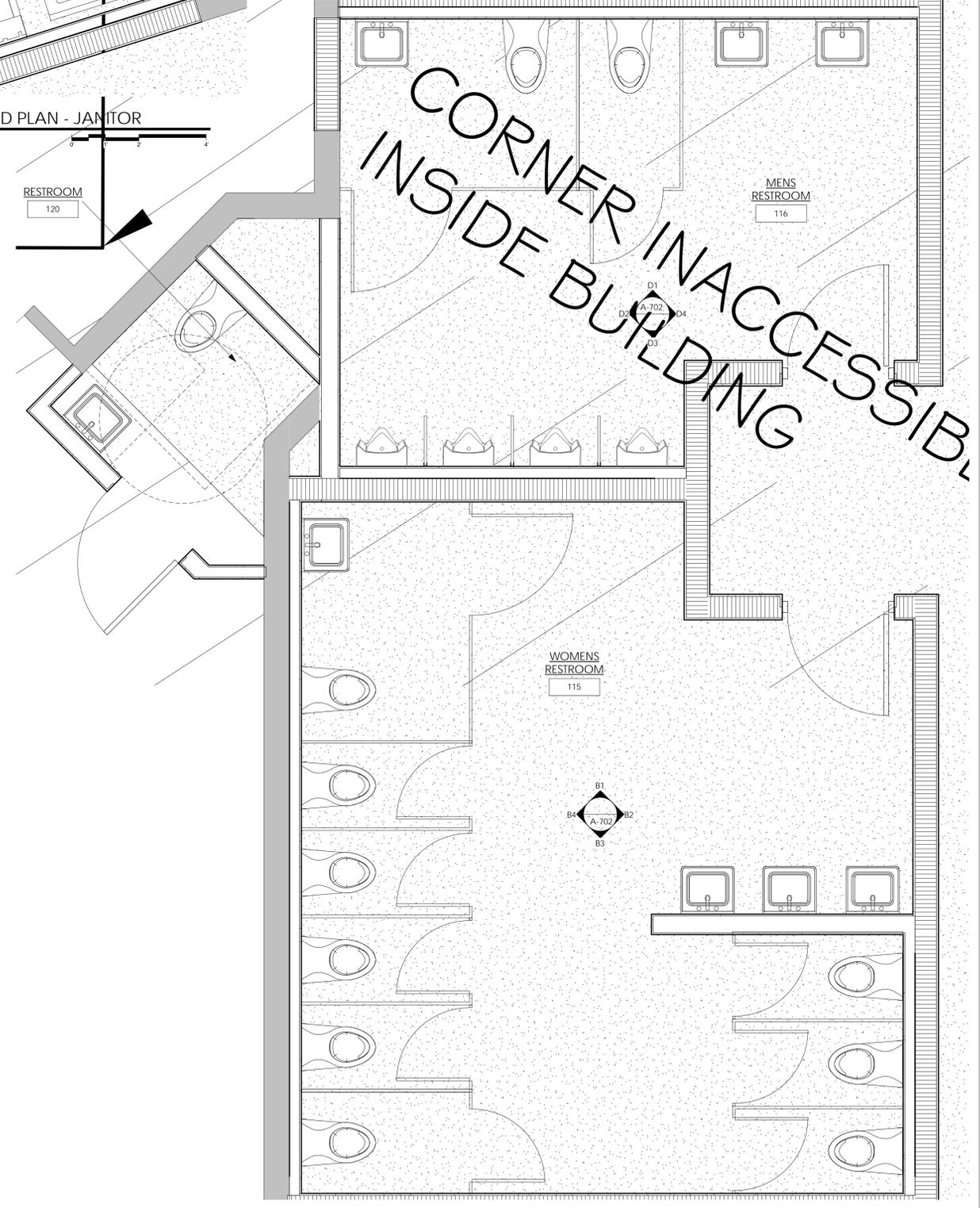
C2 ENLARGED PLAN - SHOWER
1/2" = 1'-0"



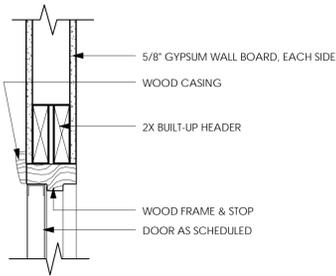
A2 ENLARGED PLAN - WARMING KITCHEN
1/2" = 1'-0"



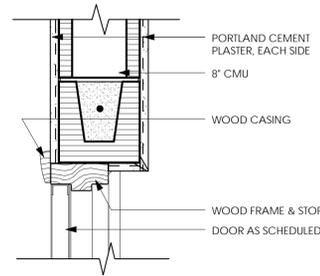
D3 ENLARGED PLAN - JANITOR
1/2" = 1'-0"



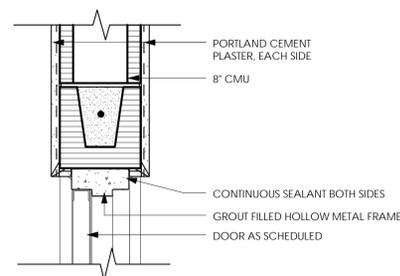
A3 ENLARGED PLAN - RESTROOMS
1/2" = 1'-0"



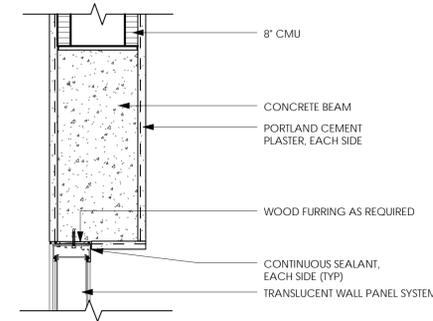
D1 DOOR HEAD @ STUD
1 1/2" = 1'-0"



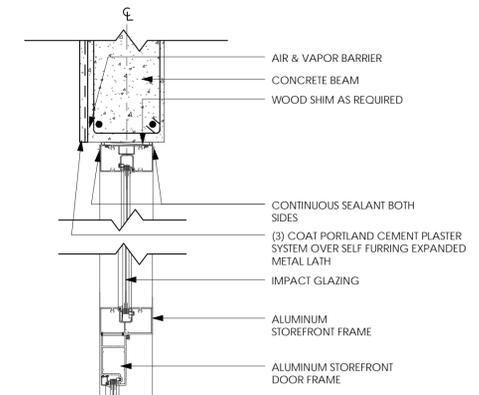
D2 DOOR HEAD DETAIL
1 1/2" = 1'-0"



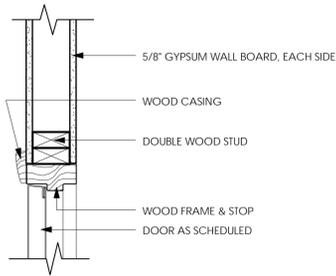
D3 DOOR HEAD DETAIL
1 1/2" = 1'-0"



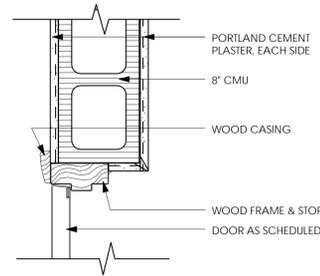
D4 TRANSLUCENT WALL PANEL HEAD DETAIL
1 1/2" = 1'-0"



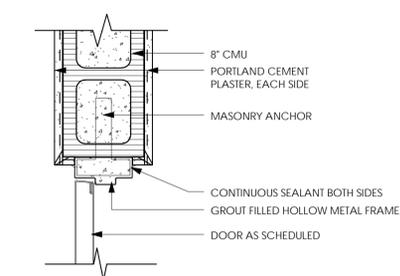
D5 STOREFRONT HEAD DETAIL
1 1/2" = 1'-0"



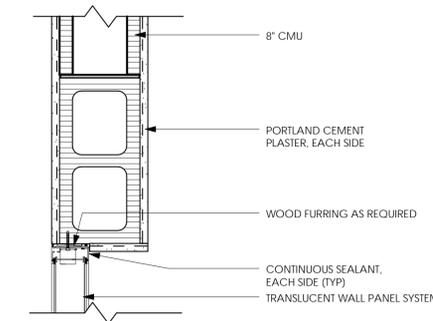
C1 DOOR JAMB @ STUD
1 1/2" = 1'-0"



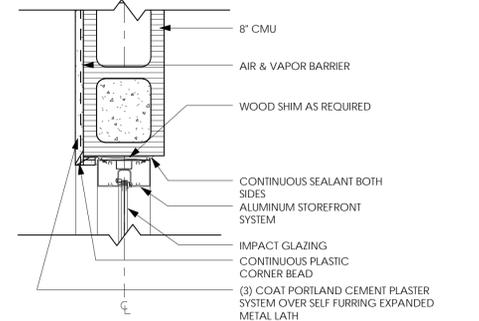
C2 DOOR JAMB @ CMU 2
1 1/2" = 1'-0"



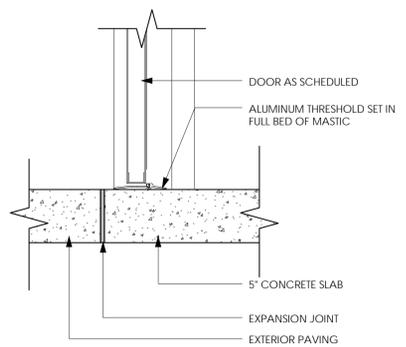
C3 DOOR JAMB DETAIL
1 1/2" = 1'-0"



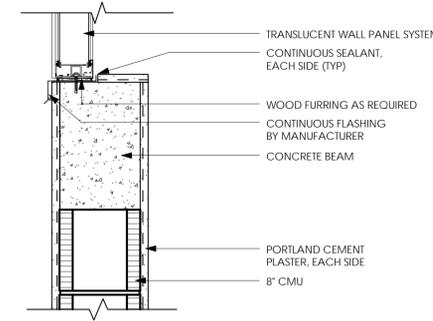
C4 TRANSLUCENT WALL PANEL JAMB DETAIL
1 1/2" = 1'-0"



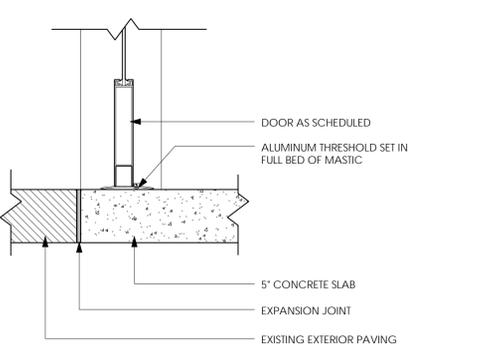
C5 STOREFRONT JAMB IN CMU
1 1/2" = 1'-0"



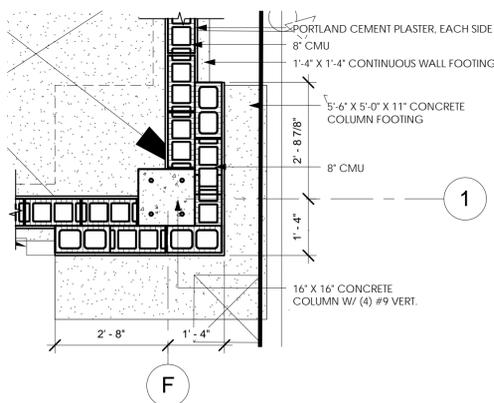
B3 DOOR THRESHOLD DETAIL
1 1/2" = 1'-0"



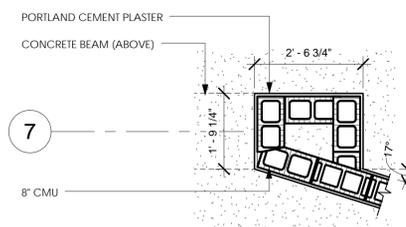
B4 TRANSLUCENT WALL PANEL SILL DETAIL
1 1/2" = 1'-0"



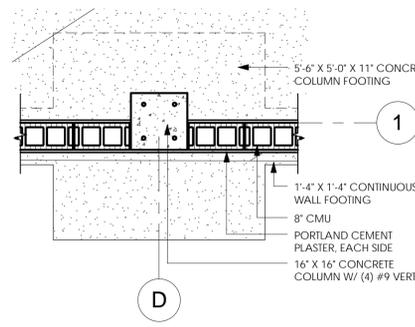
B5 STOREFRONT THRESHOLD DETAIL
1 1/2" = 1'-0"



A1 COLUMN FOOTING DETAIL
1/2" = 1'-0"



A2 COLUMN DETAIL
1/2" = 1'-0"



A3 COLUMN FOOTING DETAIL
1/2" = 1'-0"

members of



CONSULTANT:

CLIENT / PROJECT NAME:
CITY OF KEY WEST
ALTERATIONS TO

FREDERICK DOUGLASS RECREATION CENTER

111 OLIVIA STREET
KEY WEST, FL 33040

Original drawing is 24"x36". Scale accordingly if reduced.

SHEET TITLE:

DETAILS

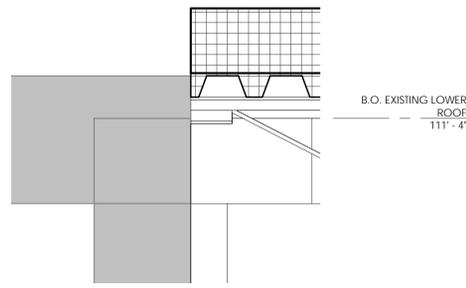
REVISIONS:

DATE ISSUED: 2/27/2015
PROJECT NO.: 12.0D01

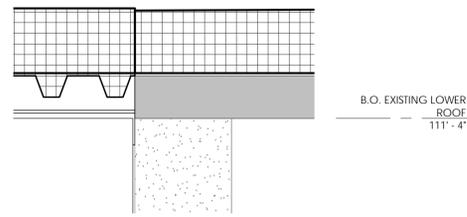
DRAWING NUMBER:

A-502

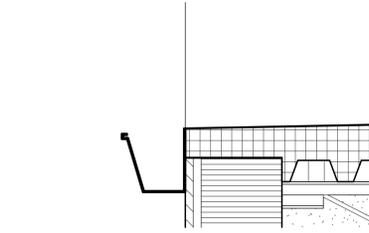
SHEET: 33 OF 57



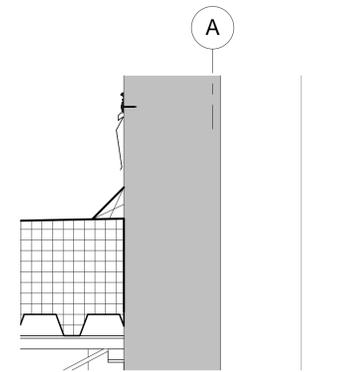
D1 ROOF DETAIL
1 1/2" = 1'-0"



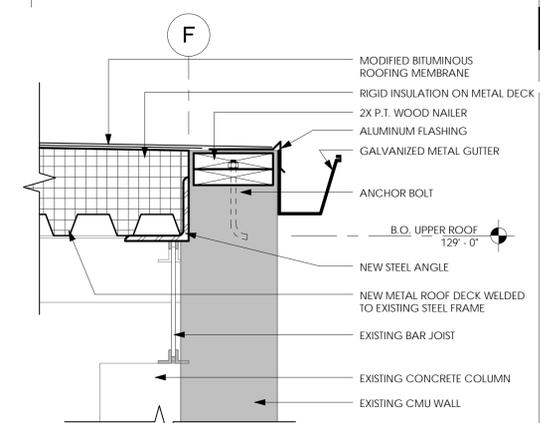
D2 ROOF DETAIL
1 1/2" = 1'-0"



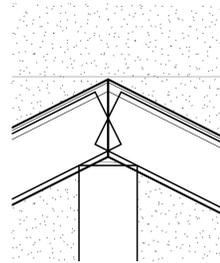
D3 MOD BIT GUTTER DETAIL @ COMM ROOM
1 1/2" = 1'-0"



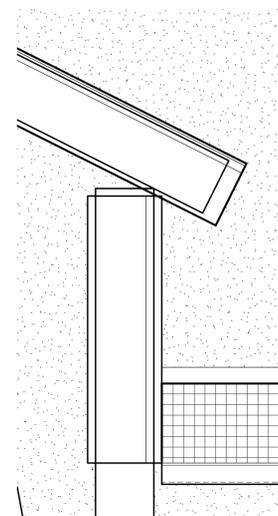
D4 MOD BIT WALL DETAIL
1 1/2" = 1'-0"



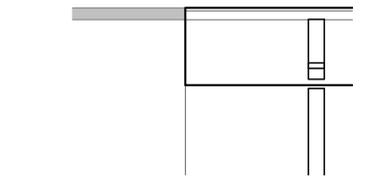
D5 TYPICAL ROOF DETAIL
1 1/2" = 1'-0"



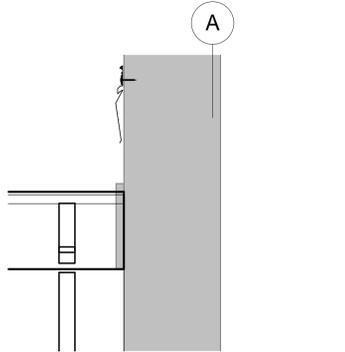
C1 GABLE RIDGE DETAIL
1 1/2" = 1'-0"



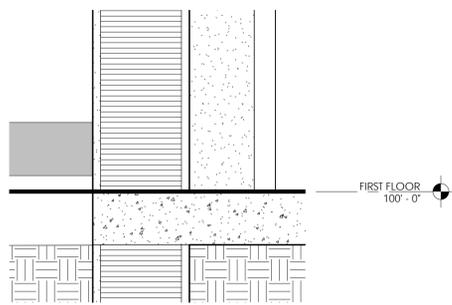
C2 GABLE DRIP EDGE DETAIL
1 1/2" = 1'-0"



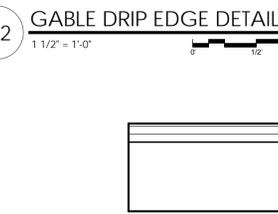
C3 STANDING SEAM ROOF DETAIL
1 1/2" = 1'-0"



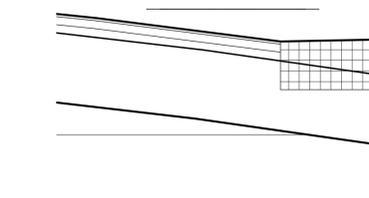
C4 STANDING SEAM WALL DETAIL
1 1/2" = 1'-0"



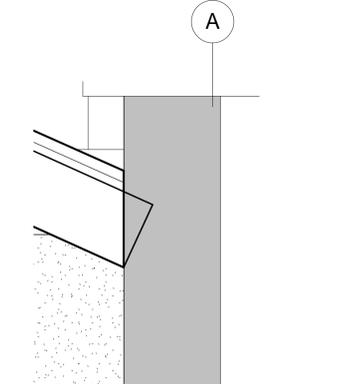
B1 WALL FLOOR DETAIL @ COMM ROOM
1 1/2" = 1'-0"



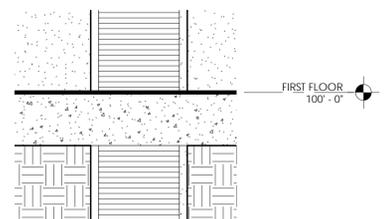
B2 CURVED ROOF EDGE DETAIL
1 1/2" = 1'-0"



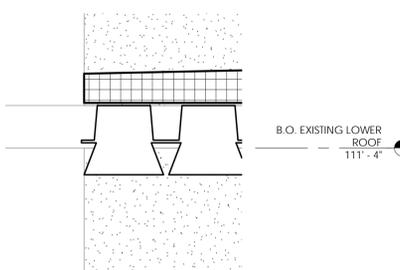
B3 MOD BIT TO CURVED ROOF DETAIL
1 1/2" = 1'-0"



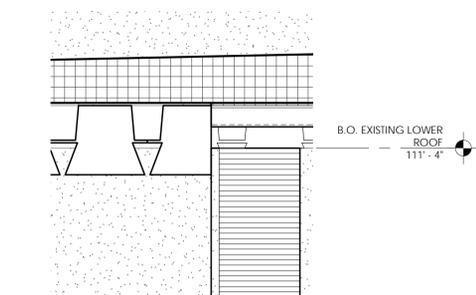
B4 CURVED ROOF WALL DETAIL
1 1/2" = 1'-0"



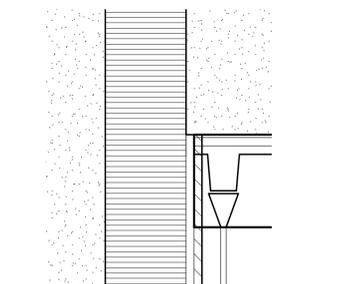
A1 WALL FLOOR DETAIL @ OFFICE
1 1/2" = 1'-0"



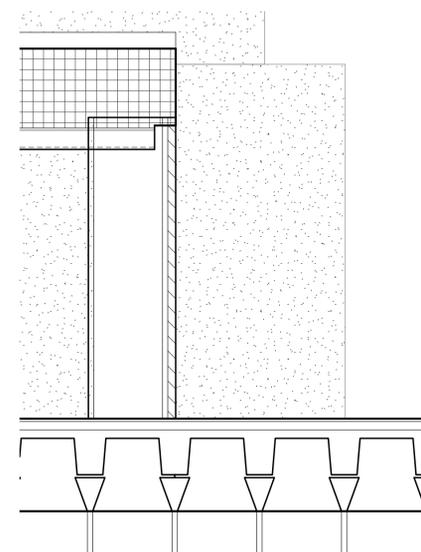
A2 ROOF EDGE DETAIL @ NW EXIT
1 1/2" = 1'-0"



A3 ROOF WALL DETAIL @ NW EXIT
1 1/2" = 1'-0"



A4 CURVED ROOF WALL DETAIL 2
1 1/2" = 1'-0"



A5 CURVED ROOF SIDING WALL DETAIL
1 1/2" = 1'-0"

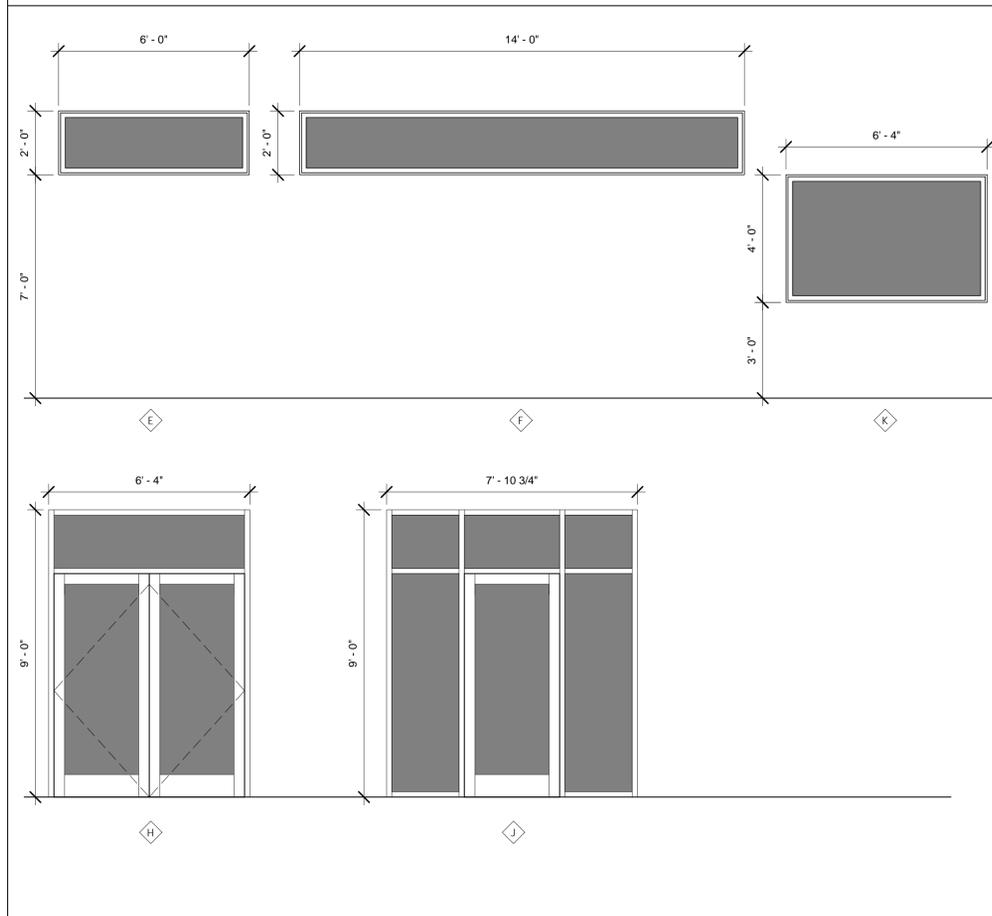
WINDOW & STOREFRONT SCHEDULE

MARK	WIDTH	HEIGHT	TYPE	MATL	FIN	GLZ	LINTEL HEIGHTS	HEAD DETAIL	JAMB DETAIL	SILL DETAIL	NOTES
A	16'-8"	8'-5"	TRANSLUCENT WALL SYSTEM	AL	AN	GL-1	17'-10"	D4/A-501	C4/A-501	B4/A-501	
B	7'-8"	8'-5"	TRANSLUCENT WALL SYSTEM	AL	AN	GL-1	17'-10"	D4/A-501	C4/A-501	B4/A-501	
C	15'-0"	8'-5"	TRANSLUCENT WALL SYSTEM	AL	AN	GL-1	17'-10"	D4/A-501	C4/A-501	B4/A-501	
D	6'-10"	8'-5"	TRANSLUCENT WALL SYSTEM	AL	AN	GL-1	17'-10"	D4/A-501	C4/A-501	B4/A-501	
E	6'-0"	2'-0"	STOREFRONT	AL	AN	GL-1	9'-0"	D5/A-501	C5/A-501	A5/A-501	
F	14'-0"	2'-0"	STOREFRONT	AL	AN	GL-1	9'-0"	D5/A-501	C5/A-501	A5/A-501	
G	17'-8"	5'-10"	TRANSLUCENT WALL SYSTEM	AL	AN	GL-1	8'-10"	D4/A-501	C4/A-501	B4/A-501	
H	6'-4"	9'-0"	STOREFRONT	AL	AN	GL-1	9'-0"	D5/A-501	C5/A-501	-	
J	7'-10 3/4"	9'-0"	STOREFRONT	AL	AN	GL-1	9'-0"	D5/A-501	C5/A-501	A4/A-501	
K	6'-8"	4'-0"	STOREFRONT	AL	AN	GL-1	7'-0"	D5/A-501	C5/A-501	A5/A-501	

WINDOW AND FRAME CODE LIST

MATERIAL		FINISH		GLAZING TYPE	
AL	ALUMINUM	AN	ANODIZED	GL-1	IMPACT RESISTANT

STOREFRONT ELEVATIONS



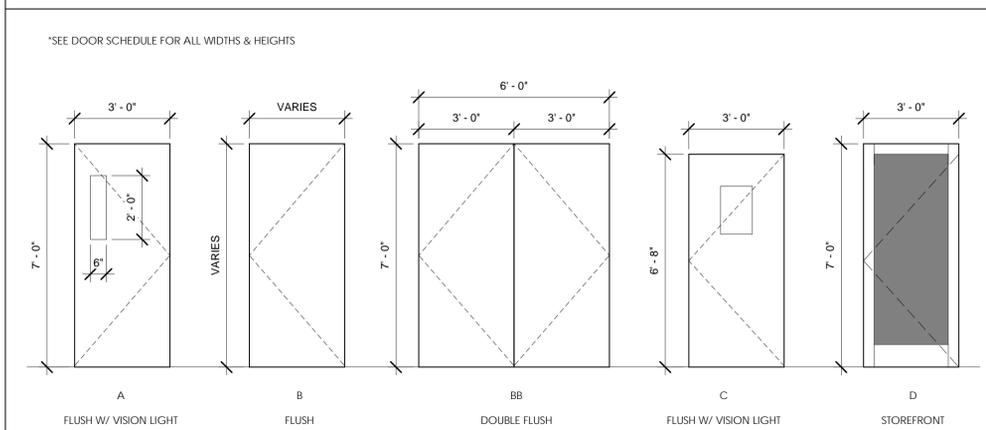
DOOR SCHEDULE

MARK	WIDTH	HEIGHT	DOOR			FRAME						THRES DETAIL	FIRE RATING	HARDWARE SET NO	NOTES	
			MATERIAL	FINISH	ELEV	MATERIAL	FINISH	HEAD DETAIL	JAMB DETAIL							
101A	3'-0"	7'-0"	AL	AN	D	GL-1			AL	AN	D5/A-501	C5/A-501	B5/A-501			
101B	3'-0"	7'-0"	AL	AN	D	GL-1			AL	AN	D5/A-501	C5/A-501	B5/A-501			
101C	3'-0"	7'-0"	AL	AN	D	GL-1			AL	AN	D5/A-501	C5/A-501	B5/A-501			
102A	3'-0"	7'-0"	0'-1 3/4"	HM	P	B			FA	HM	P	D3/A-501	C3/A-501			
103A	3'-0"	7'-0"	0'-1 3/4"	HM	P	B			FA	HM	P	D3/A-501	C3/A-501			
104C	3'-0"	7'-0"	0'-1 3/4"	HM	P	A	GL-1		FA	HM	P	D3/A-501	C3/A-501	B3/A-501		
106A	3'-0"	7'-0"	0'-1 3/4"	HM	P	B			FA	HM	P	D3/A-501	C3/A-501			
107A	3'-0"	6'-8"	0'-1 3/4"	SC	P	C	GL-2		FA	WD	P	D2/A-501	C2/A-501			EXISTING DOOR TO REMAIN
108A	3'-0"	6'-8"	0'-1 3/4"	SC	P	C	GL-2		FA	WD	P	D2/A-501	C2/A-501			EXISTING DOOR TO REMAIN
109A	2'-0"	6'-8"	0'-1 3/4"	SC	P	B			FA	WD	P	D1/A-501	C1/A-501			EXISTING DOOR TO REMAIN
111A	3'-0"	7'-0"		AL	AN	D	GL-2		AL	AN	D5/A-501	C5/A-501				
111B	3'-0"	7'-0"	0'-1 3/4"	HM	P	A	GL-2		FA	HM	P	D3/A-501	C3/A-501			
112A	3'-0"	7'-0"	0'-1 3/4"	HM	P	B			FA	HM	P	D3/A-501	C3/A-501			
113A	3'-0"	7'-0"	0'-1 3/4"	HM	P	A	GL-2		FA	HM	P	D3/A-501	C3/A-501			
113B	3'-0"	7'-0"	0'-1 3/4"	HM	P	A	GL-2		FA	HM	P	D3/A-501	C3/A-501			
114A	3'-0"	7'-0"	0'-1 3/4"	HM	P	B			FA	HM	P	D3/A-501	C3/A-501	B3/A-501		
115A	3'-0"	7'-0"	0'-1 3/4"	HM	P	B			FA	HM	P	D3/A-501	C3/A-501			
116A	3'-0"	7'-0"	0'-1 3/4"	HM	P	B			FA	HM	P	D3/A-501	C3/A-501			
117A	3'-0"	7'-0"	0'-1 3/4"	HM	P	B			FA	HM	P	D3/A-501	C3/A-501			
118A	3'-0"	7'-0"	0'-1 3/4"	HM	P	B			FA	HM	P	D3/A-501	C3/A-501			
119A	6'-0"	7'-0"	0'-1 3/4"	HM	P	BB			FA	HM	P	D3/A-501	C3/A-501	B3/A-501		
120A	3'-0"	6'-8"	0'-1 3/4"	HM	P	B			FA	HM	P	D3/A-501	C3/A-501			REUSE EXISTING DOOR

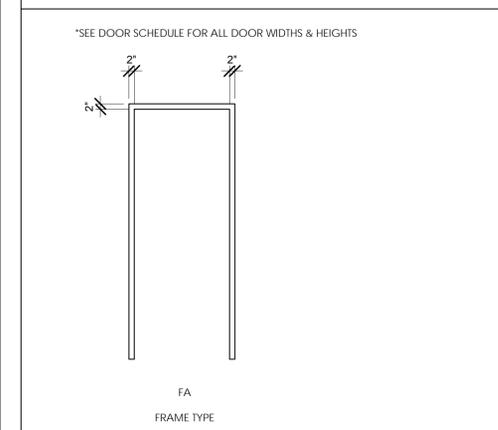
DOOR AND FRAME CODE LIST

DOOR MATERIAL		DOOR FINISH		FRAME MATERIAL		FRAME FINISH		GLAZING TYPE	
HM	HOLLOW METAL	P	PAINTED	M	METAL	P	PAINTED	GL-1	CLEAR IMPACT RESISTANT
SC	SOLID CORE WOOD	AN	ANODIZED	WD	WOOD	AN	ANODIZED	GL-2	CLEAR TEMPERED GLASS
AL	ALUMINUM			AL	ALUMINUM				

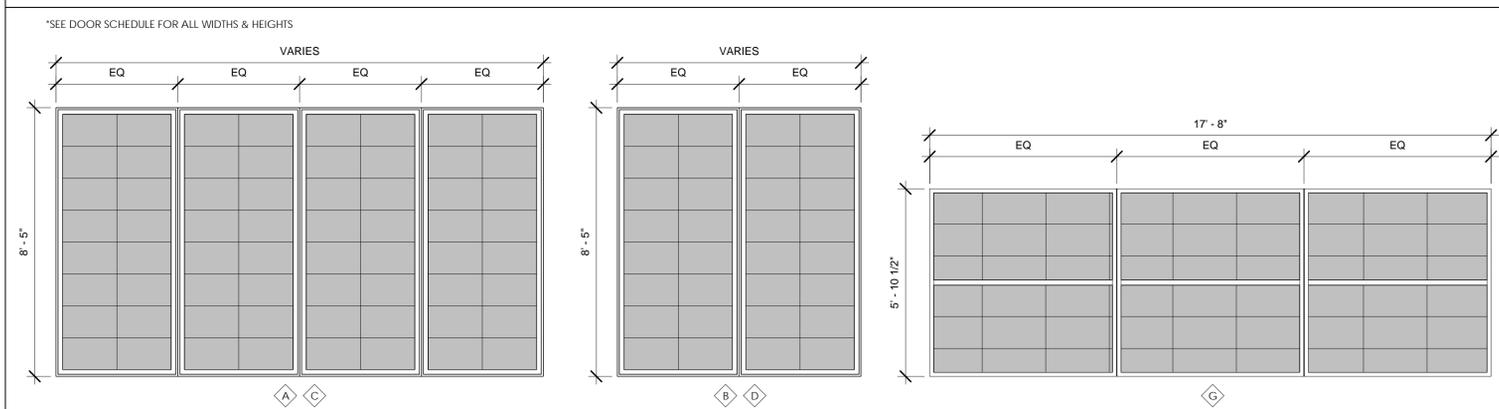
DOOR ELEVATIONS



DOOR FRAME ELEVATIONS



TRANSLUCENT PANEL SYSTEM ELEVATIONS



CONSULTANT:

CLIENT / PROJECT NAME:
CITY OF KEY WEST
ALTERATIONS TO

**FREDERICK DOUGLASS
RECREATION CENTER**

111 OLIVIA STREET
KEY WEST, FL 33040

Original drawing is 24"x36". Scale accordingly if reduced.

SHEET TITLE:
DOOR & WINDOW SCHEDULES

REVISIONS:

DATE ISSUED: 2/27/2015
PROJECT NO.: 12.0D01

DRAWING NUMBER:

members of



CONSULTANT:

CLIENT / PROJECT NAME:

CITY OF KEY WEST
ALTERATIONS TO

FREDERICK DOUGLASS RECREATION CENTER

111 OLIVIA STREET
KEY WEST, FL 33040

Original drawing is 24"x36". Scale accordingly if reduced.

SHEET TITLE:

PARTITION SCHEDULE

REVISIONS:

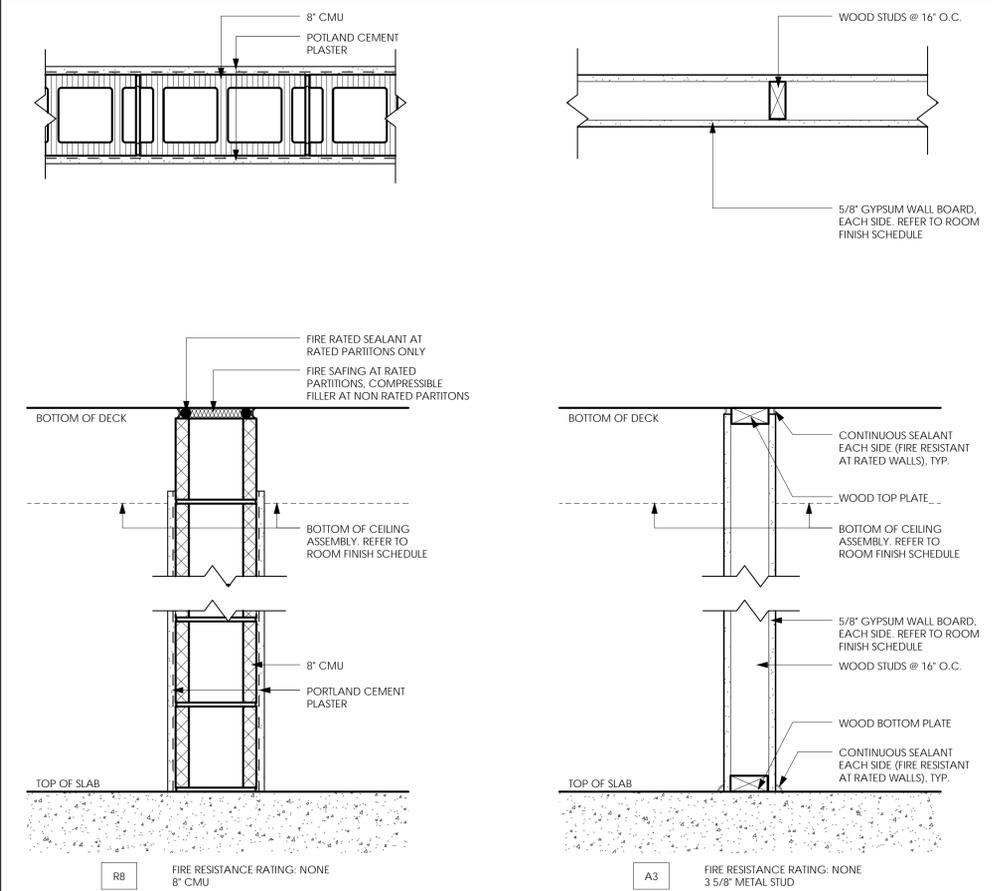
DATE ISSUED: 2/27/2015
PROJECT NO.: 12.0D01

DRAWING NUMBER:

A-602

SHEET: X OF 57

PARTITION SCHEDULE



members of



CONSULTANT:

CLIENT / PROJECT NAME:

CITY OF KEY WEST
ALTERATIONS TO

FREDERICK DOUGLASS
RECREATION CENTER

111 OLIVIA STREET
KEY WEST, FL 33040

Original drawing is 24"x36". Scale accordingly if reduced.

SHEET TITLE:

INTERIOR ELEVATIONS

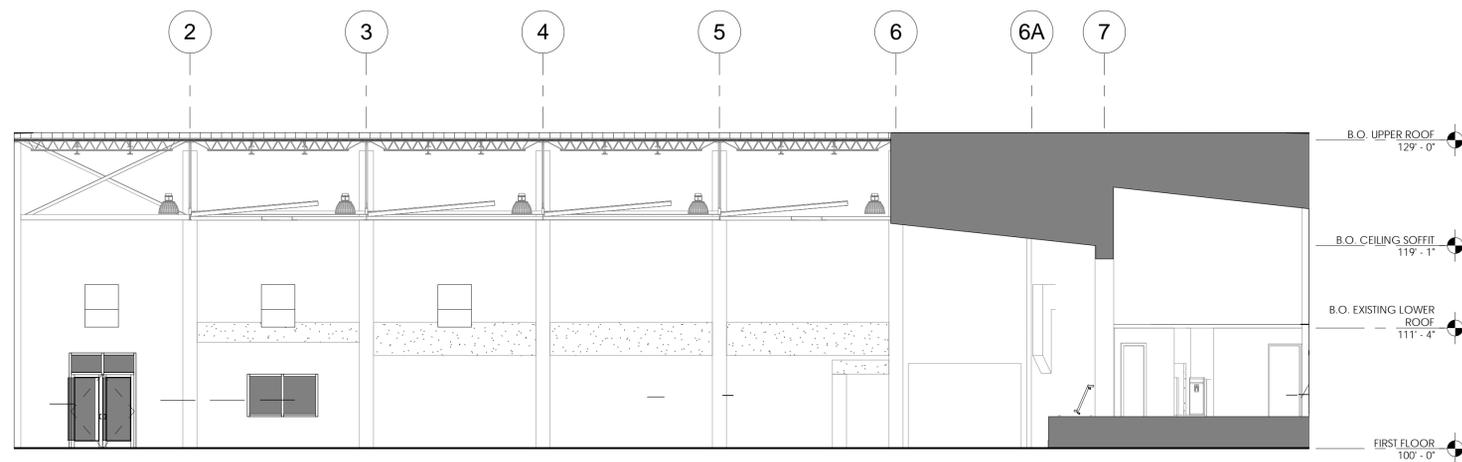
REVISIONS:

DATE ISSUED: 2/27/2015
PROJECT NO.: 12.0D01

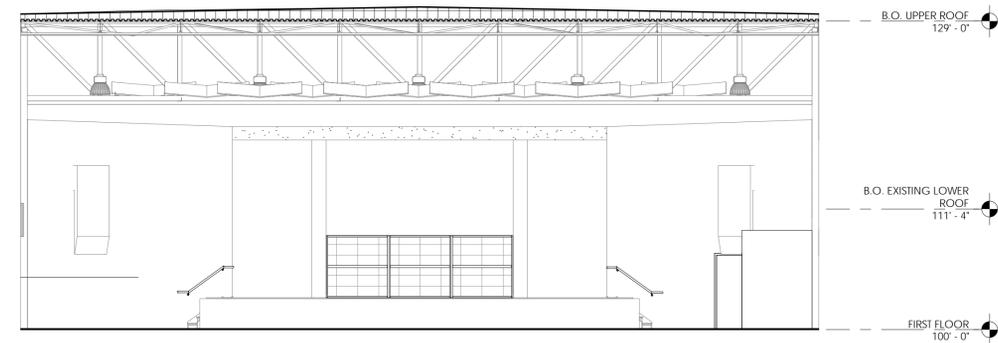
DRAWING NUMBER:

A-701

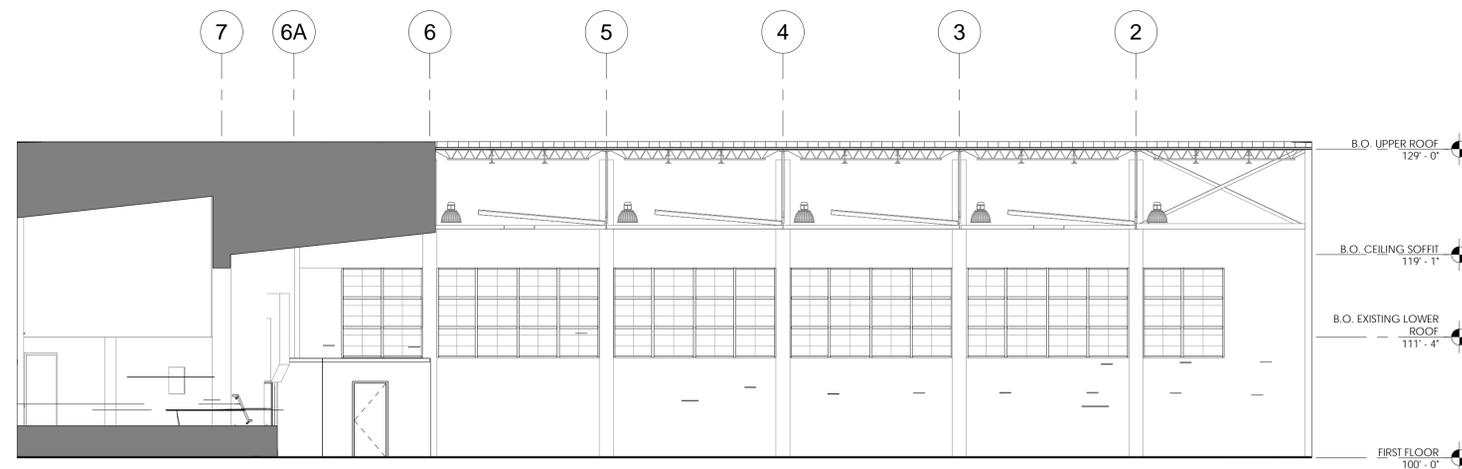
SHEET: 35 OF 57



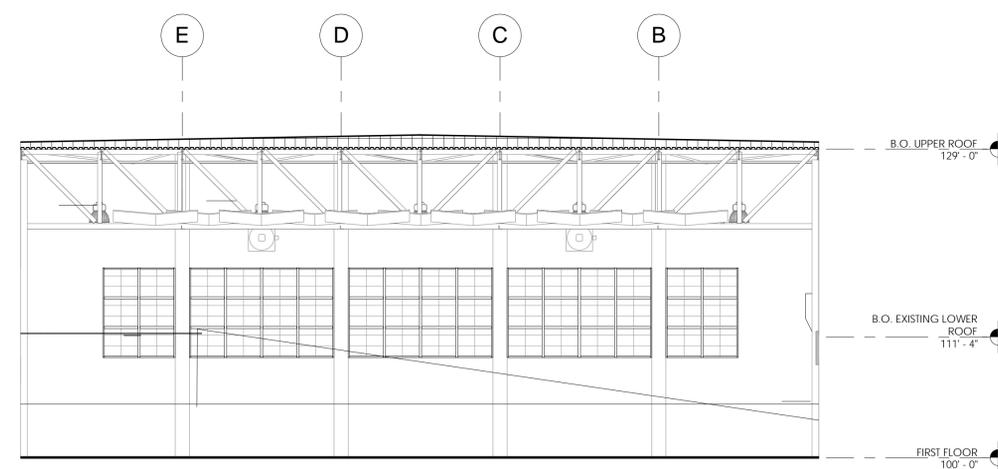
C1 INTERIOR ELEVATION - 104 WEST
1/8" = 1'-0"



C4 INTERIOR ELEVATION - 104 NORTH
1/8" = 1'-0"



A1 INTERIOR ELEVATION - 104 EAST
1/8" = 1'-0"



A4 INTERIOR ELEVATION - 104 SOUTH
1/8" = 1'-0"

members of



CONSULTANT:

CLIENT / PROJECT NAME:
CITY OF KEY WEST
ALTERATIONS TO

FREDERICK DOUGLASS RECREATION CENTER

111 OLIVIA STREET
KEY WEST, FL 33040

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SHEET TITLE:

INTERIOR ELEVATIONS

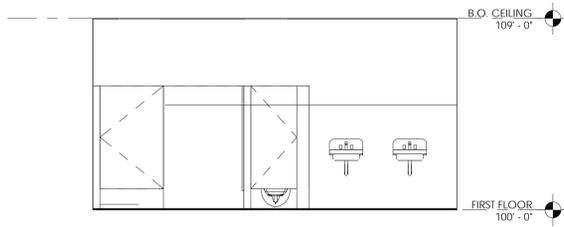
REVISIONS:

DATE ISSUED: 2/27/2015
PROJECT NO.: 12.0D01

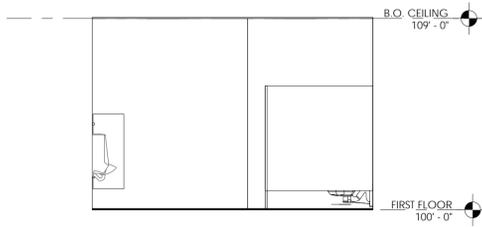
DRAWING NUMBER:

A-702

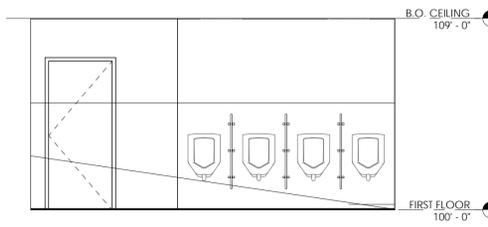
SHEET: 36 OF 57



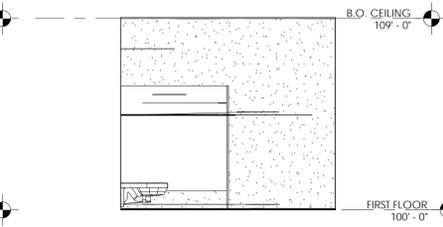
D1 INTERIOR ELEVATION - 116 NORTH
1/4" = 1'-0"



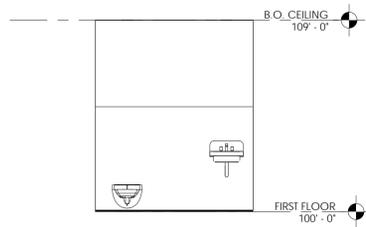
D2 INTERIOR ELEVATION - 116 EAST
1/4" = 1'-0"



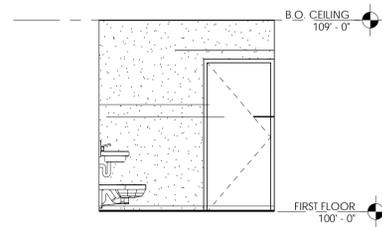
D3 INTERIOR ELEVATION - 116 SOUTH
1/4" = 1'-0"



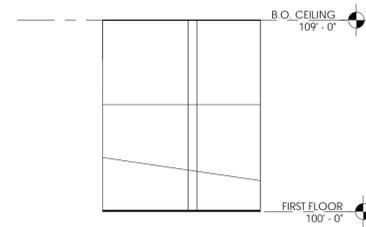
D4 INTERIOR ELEVATION - 116 WEST
1/4" = 1'-0"



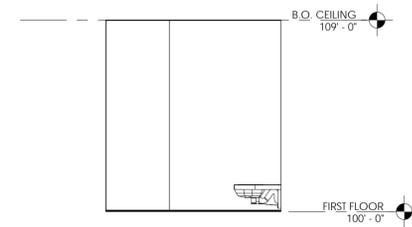
C1 INTERIOR ELEVATION - 117 NORTH
1/4" = 1'-0"



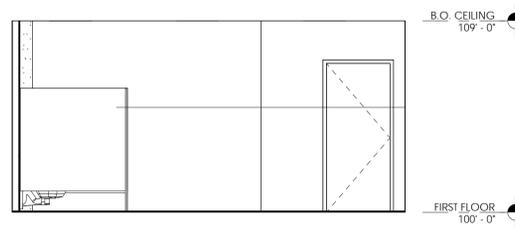
C2 INTERIOR ELEVATION - 117 EAST
1/4" = 1'-0"



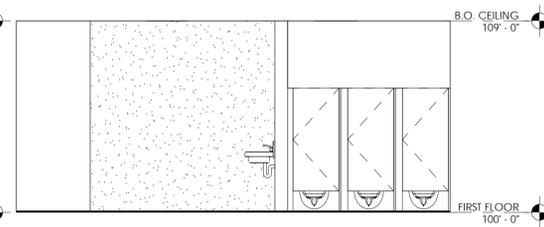
C3 INTERIOR ELEVATION - 117 SOUTH
1/4" = 1'-0"



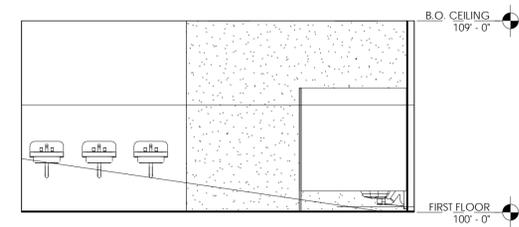
C4 INTERIOR ELEVATION - 117 WEST
1/4" = 1'-0"



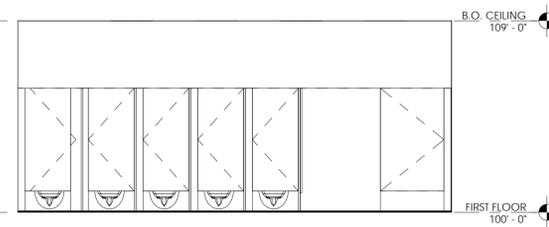
B1 INTERIOR ELEVATION - 115 NORTH
1/4" = 1'-0"



B2 INTERIOR ELEVATION - 115 EAST
1/4" = 1'-0"



B3 INTERIOR ELEVATION - 115 SOUTH
1/4" = 1'-0"



B4 INTERIOR ELEVATION - 115 WEST
1/4" = 1'-0"

members of



CONSULTANT:

CLIENT / PROJECT NAME:

CITY OF KEY WEST
ALTERATIONS TO

FREDERICK DOUGLASS
RECREATION CENTER

111 OLIVIA STREET
KEY WEST, FL 33040

Original drawing is 24"x36". Scale accordingly if reduced.

SHEET TITLE:

INTERIOR ELEVATIONS & MILLWORK

REVISIONS:

DATE ISSUED: 2/27/2015
PROJECT NO.: 12.0D01

DRAWING NUMBER:

A-703

SHEET: 37 OF 57

CASEWORK FINISH MATERIALS LEGEND

- COUNTERTOP FINISHES & COLORS
A.
- CASEWORK FINISHES & COLORS
A. MENS & WOMENS
FINISH:
COLOR:

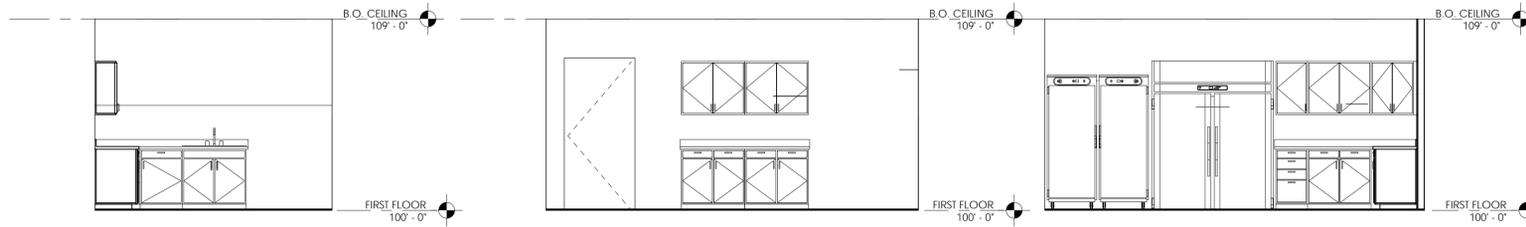
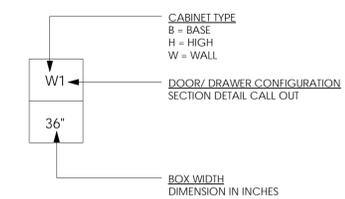
GENERAL NOTES

- CASEWORK FABRICATOR TO CONSULT SPECIFICATIONS PRIOR TO START OF WORK.
- PROVIDE COLOR SAMPLES OF ALL WOOD, PLASTIC LAMINATE AND SOLID SURFACE MATERIAL PRIOR TO PROCUREMENT. ALLOW FOR ARCHITECT REVIEW TIME OF 15 CALENDAR DAYS.

CABINET NOTES

- CABINERY CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS
- COUNTERTOP MATERIAL: AS NOTED IN MATERIALS LEGEND
- CASEWORK FABRICATION MATERIAL: AS NOTED ON DRAWINGS AND IN SPECIFICATIONS
- FULL OVERLAY DOORS & DRAWERS
- NO BLIND CORNERS UTILIZE ALL SPACE
- TYPICAL DRAWER SLIDES TO BE FULL EXTENSION & BALL-BEARING WITH QUIET CLOSERS
- CONTRACTOR TO VERIFY OPENINGS FOR APPLIANCES PRIOR TO FABRICATION OF CABINETS
- DOOR AND DRAWER HARDWARE: 4" SIMPLE WIDE PULL WITH BRUSHED METAL FINISH
- PLUMBING FIXTURES: SEE PLUMBING EQUIPMENT SCHEDULE
- COUNTERS TO HAVE FORMED BACKSPLASH & ROLLED NOSE

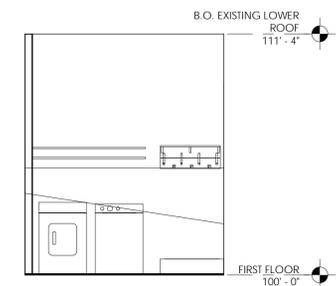
CABINET LEGEND



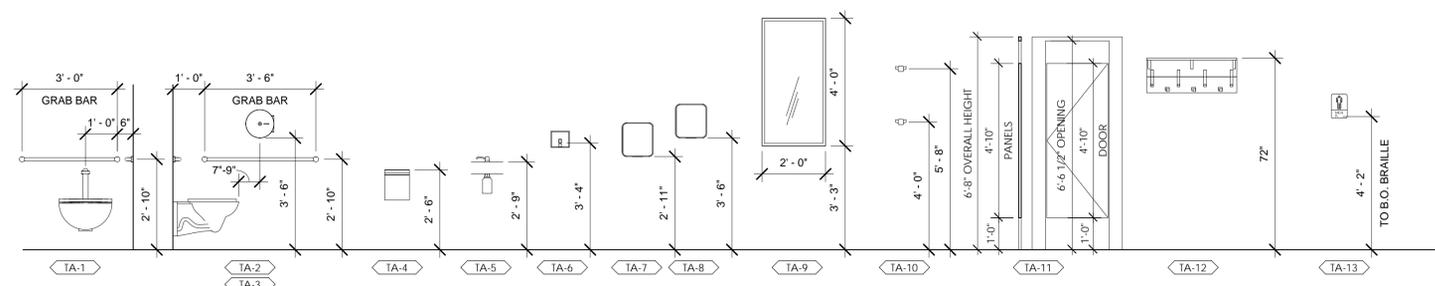
D1 INTERIOR ELEVATION - 113 NORTH
1/4" = 1'-0"

D2 INTERIOR ELEVATION - 113 EAST
1/4" = 1'-0"

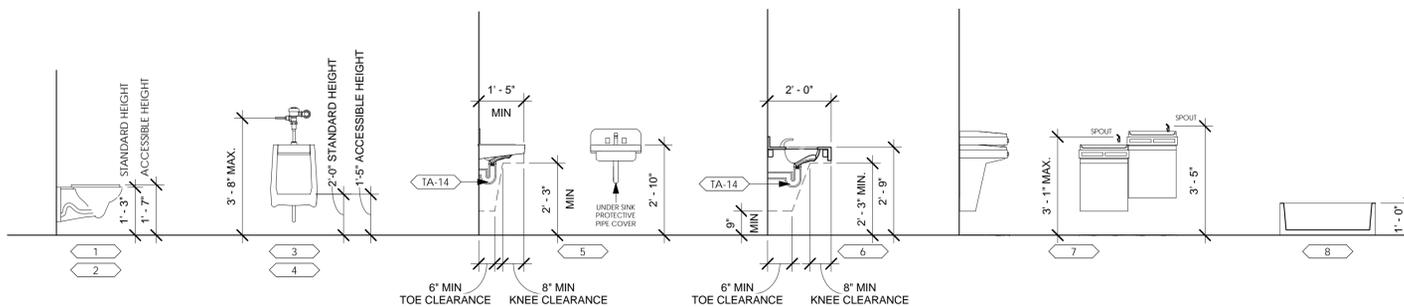
D3 INTERIOR ELEVATION - 113 WEST
1/4" = 1'-0"



C1 INTERIOR ELEVATION - 118 SOUTH
1/4" = 1'-0"



D3 PLUMBING ACCESSORIES - MOUNTING HEIGHTS
3/8" = 1'-0"



C3 PLUMBING FIXTURES - MOUNTING HEIGHTS
3/8" = 1'-0"

PLUMBING LEGEND		
DESCRIPTION	ABBREV.	SYMBOL
SANITARY PIPING	SAN	—————
VENT PIPING	V	-----
COLD WATER PIPING	CW	-----
HOT WATER PIPING	HW	-----
EXISTING PIPING TO REMAIN		-----
VENT THRU ROOF	VTR	-----
WALL CLEAN OUT	W/CO	-----
FLOOR DRAIN	FD	⊙
TRAP PRIMER	TP	-----
TRAP PRIMER PIPING	TPP	-----
BALL VALVE	BV	⊗
NEW CONNECTION		⊙
CAP		⊖

PLUMBING ACCESSORY SCHEDULE			
MARK	FIXTURE	DESCRIPTION	APPROVED MANUFACTURERS
FD-1	FLOOR DRAIN	FLOOR DRAIN: CAST IRON FLOOR DRAIN WITH INTEGRAL DEEP DRUM TYPE P-TRAP WITH DOUBLE DRAINAGE FLANGE, NO HUB SPIGOT SIDE OUTLET, WEEPHOLES, BRONZE INTEGRAL FLUSH-FLOOR CLEANOUT AND THREADED TO RECEIVE A JOSAM ADJUSTABLE STRAINER.	JOSAM NO. 30502

PLUMBING FIXTURE AND PIPE SIZING SCHEDULE							
MARK	FIXTURE	WASTE	VENT	COLD	HOT	DESCRIPTION	APPROVED MANUFACTURERS
P-1	WATER CLOSET BARRIER FREE	4"	AS SHOWN ON PLANS	1 1/4"	----	WATER CLOSET: FLOOR MOUNTED, FLUSHOMETER, ELONGATED BOWL, WHITE VITREOUS CHINA, SIPHON JET, 1 1/2" TOP SPUD, BOLT CAPS, 1.6 GPF, 16 1/2" HIGH FLUSH VALVE: NON-HOLD OPEN, LOW FORCE, ADA COMPLIANT HANDLE, SYNTHETIC RUBBER DIAPHRAGM WITH DUAL FILTERED FIXED BYPASS, 1" IPS SCREWDRIVER STRAIGHT STOP, VACUUM BREAKER FLUSH CONN., GROUND JOINT TAILPIECE, 1 1/2" TOP SPUD, CAST WALL FLANGE WITH SET SCREW AND SWEAT SOLDER ADAPTER CONTROLS FOR FLUSH VALVE SHALL BE MOUNTED ON WIDE SIDE OF TOILET AREAS. SEAT: FINISH WHITE, EXTRA HEAVY DUTY PLASTIC FOR ELONGATED BOWL, OPEN FRONT LESS COVER, STAINLESS STEEL CHECK HINGE.	AMERICAN STANDARD MADERA NO. 3043.001 SLOAN ROYAL NO. 100-1.6 AMERICAN STANDARD NO. 5905.100
P-2	LAVATORY BARRIER FREE	1 1/2"		1/2"	----	LAVATORY: WALL HUNG, 20 1/2" x 18 1/2", WHITE VITREOUS CHINA, FRONT OVERFLOW AND SINGLE HOLE - CENTER TRIM: LAVATORY FAUCET, WITH SINGLE HOLE CENTERS, SPOUT AND AERATOR, PUSH HANDLE, ADJUSTABLE FLOW CYCLE, SELF CLOSING METERING, PERFORATED GRID DRAIN WITH OFFSET 1 1/4" TAIL PIECE. PROVIDE STOPS, SUPPLIES, TRAP, ETC. TO MAKE A COMPLETE INSTALLATION CARRIER: ----	AMERICAN STANDARD LUCERNE NO. 0356.041 AMERICAN STANDARD NO. 1340.105 ----
P-3	URINAL	2"		1"	----	URINAL: WALL MOUNTED, WHITE VITREOUS CHINA, SIPHON JET WITH FLUSHING RIM, 1.0 GPF, 3/4" INLET SPUD FLUSH VALVE: NON-HOLD OPEN HANDLE, EXPOSED DIAPHRAGM, 3/4" IPS SCREWDRIVER ANGLE STOP WITH PROTECTIVE CAP, VACUUM BREAKER FLUSH CONN., ADJUSTABLE TAILPIECE, 3/4" TOP SPUD, SWEAT SOLDER ADAPTER CARRIER: DURA-COATED RECTANGULAR STEEL UPRIGHTS WITH WELDED FEET, ADJUSTABLE SUPPORT PLATES AND MOUNTING FASTENERS	AMERICAN STANDARD LYNBROOK NO. 6601.012 KOHLER FRESHMAN NO. K-4989-T ELJER CORRECTO NO. 161-1030 ZURN AQUAFUSH NO. Z-6003AV-WS1 SLOAN-ROYAL NO. 186-1 ZURN NO. Z-1222 WADE NO. W-400-AM11 J. R. SMITH NO. 637
P-4	SINK	1 1/2"		1/2"	1/2"	SINK: COUNTER MOUNTED, DOUBLE COMPARTMENT 20 GAUGE TYPE 302 STAINLESS STEEL, 33"x19 1/2"x6", SELF-RIMMING, HOLES ON 8" CENTERS TRIM: SINK FAUCET, WITH 8" CENTERS, SWIVEL SPOUT W/AERATOR, METAL LEVER HANDLES, INSTALL STAINLESS STEEL DRAIN WITH REMOVABLE CRUMB CUP STRAINER. PROVIDE STOPS, SUPPLIES, TRAP, ETC. TO MAKE A COMPLETE INSTALLATION	ELKAY NO. LRAD 3319 CHICAGO NO. 786-E3CP T & S BRASS NO. B-2866-05 SPEAKMAN NO. SC-5763
P-5	SERVICE SINK	3"		1/2"	1/2"	SINK: FLOOR MOUNTED, CORNER 24"x24"x12" WITH 6" DROP FRONT, PEARL GREY MARBLE CHIPS AND WHITE PORTLAND CEMENT GROUND SMOOTH, 20 GAUGE STAINLESS STEEL SPLASH GUARD & CAP ON THRESHOLD, PROVIDE 36" RUBBER HOSE, SILICONE SEALANT. TRIM: SINK FAUCET WITH VACUUM BREAKER, INTEGRAL STOPS AND ROUGH CHROME FINISH, SEAL WALL WITH SILICONE SEALANT.	STERN-WILLIAMS NO. SBC-1700 FIAT NO. TSBC-1610 FLORESTONE NO. 96 CHICAGO NO. 897-RCF T & S BRASS NO. B-665-BSTR SPEAKMAN NO. SC-5811-RCP
P-6	SHOWER	2" F.D.		1/2"	1/2"	SHOWER: PRESSURE BALANCING MIXING VALVE WITH INTEGRAL VOLUME CONTROL AND ADJUSTABLE STOP SCREW TO LIMIT HANDLE TURN, INTEGRAL CHECK STOPS, IN-LINE VACUUM BREAKER, SINGLE BLADE LEVER HANDLE, WALL/HAND SHOWER WITH FLEXIBLE METAL HOSE, WALL CONNECTION AND FLANGE. 30" SLIDE BAR FOR HAND SHOWER	SYMMONS NO. S-96-300-B30-X-V-L LEONARD NO. 4506
P-7	WASHER MACHINE OUTLET BOX	2"		1/2"	1/2"	WASHER MACHINE OUTLET BOX: HIGH IMPACT POLYSTYRENE WASHING MACHINE OUTLET BOX	OATEY QUADTRO

PLUMBING FIXTURE NOTES:

1. MOUNTING HEIGHT AS PER ARCHITECT.
2. TRAPS, SUPPLIES AND ALL OTHER EXPOSED PIPING SHALL BE CAST BRASS WITH A POLISHED CHROME FINISH. ACCEPTABLE MANUFACTURERS INCLUDE MCGUIRE OR APPROVED EQUAL.
3. FAUCETS WITH WRIST BLADE HANDLES SHALL PROVIDE 1/4 TURN FULL OPEN TO FULL CLOSED OPERATION.
4. COORDINATE INSTALLATION OF COUNTER MOUNTED SINKS WITH GENERAL CONTRACTOR. DO NOT CUT CABINET SUPPORT ELEMENTS WITHOUT THE APPROVAL OF THE ARCHITECT. VENT SIZES SHALL BE 2" UNLESS OTHERWISE NOTED.
5. PROVIDE CUT SHEETS ON ALL FIXTURE AND TRIM TO OWNER AND ARCHITECT FOR REVIEW AND APPROVAL BEFORE ORDERING.

PLUMBING GENERAL NOTES:

1. CONTRACTOR SHALL PROVIDE COMPLETE PLUMBING SYSTEMS AS DETAILED. WORK CONSISTS OF FURNISHING ALL MATERIALS, EQUIPMENT, AND SERVICES REQUIRED FOR COMPLETE SYSTEMS.
2. COORDINATE WORK WITH OTHER TRADES TO AVOID CONFLICTS.
3. COORDINATE FINAL LOCATIONS OF FLOOR DRAINS IN MECHANICAL ROOMS WITH MECHANICAL CONTRACTOR. COORDINATE LOCATIONS OF FLOOR DRAINS IN OTHER SPACES WITH ARCHITECTURAL DRAWINGS.
4. UNLESS OTHERWISE NOTED ALL PIPING SHALL BE RUN IN CONCEALED SPACES.
5. DOMESTIC WATER PIPING SHALL BE: TYPE-L COPPER ABOVE GRADE & TYPE-K COPPER BELOW GRADE. FITTINGS & JOINTS SHALL BE SOLDERED.
6. COPPER PIPING INSTALLED WITHIN BLOCK WALLS OR IN CONTACT WITH CONCRETE SHALL BE INSTALLED WITH 4 MIL POLYETHYLENE PIPE GUARD. BLUE FOR COLD WATER AND RED FOR HOT WATER.
7. ALL SOIL, WASTE, AND VENT PIPING SHALL BE HUBLESS CAST IRON.
8. GATE VALVES SHALL BE #125 BRONZE WITH UNION BONNET.
9. PROVIDE TRAP PRIMERS WHERE REQUIRED BY CODE.
10. PROVIDE CHROME PLATED STOPS AND SUPPLIES AT ALL WATER CLOSETS AND LAVATORIES.
11. ALL WORK SHALL COMPLY WITH ALL LOCAL AND STATE CODES.
12. PROVIDE COMMERCIAL MANUFACTURED CAST IRON TO PVC PIPE CONNECTORS AS REQUIRED.
13. PENETRATIONS THROUGH FIRE-RATED ASSEMBLIES SHALL BE SEALED IN AN APPROVED MANNER WHICH MAINTAINS THE REQUIRED FIRE RATING OF THE ASSEMBLY.
 - A. WHERE HOLES ARE CIRCULAR, THE PENETRATION SHALL BE PROTECTED WITH FIRE-SEAL SMOKE AND FIRE STOP FITTINGS MANUFACTURED BY O.Z. GEDNEY, LINK SEAL BY THUNDER LINE OR APPROVED EQUAL.
 - B. WHERE HOLES ARE RECTANGULAR, THE PENETRATION SHALL BE PROTECTED WITH DOW CORNING 3-6548, SILICONE RTV FOAM, 3M FIRE BARRIER PENETRATION SEAL SYSTEM, OR APPROVED EQUAL.
14. PLUMBING CONTRACTOR SHALL ARRANGE TO PAY FOR ALL NECESSARY PERMITS, LICENSES, AND INSPECTIONS AS REQUIRED BY THE CITY.
15. THE CONTRACTOR IS REQUIRED TO VERIFY ALL DATA AND PROPOSED LOCATIONS OF WATER AND SEWER SERVICES.
16. CHROME PLATED ESCUTCHEONS AND NIPPLES ARE REQUIRED AT ALL FLOOR AND WALL PENETRATIONS.
17. ALL NEW PLUMBING EQUIPMENT, MATERIALS, AND WORKMANSHIP SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR FROM DATE OF ACCEPTANCE.
18. ARCHITECTURAL DRAWINGS TAKE PRECEDENCE OVER PLUMBING DRAWINGS WITH REFERENCE TO BUILDING CONSTRUCTION. PLUMBING DRAWINGS (PLANS, DIAGRAMS, ETC.) ARE DIAGRAMMATIC AND SHOULD NOT BE SCALED. THE CONTRACTOR SHALL COORDINATE ALL WORK UNDER THIS CONTRACT.
19. MAINTAIN AS-BUILT DRAWINGS, DAILY. SUBMIT TO ARCHITECT/OWNER AFTER COMPLETION OF ALL WORK.
20. NECESSARY REQUIRED PLUMBING ITEMS THAT ARE NOT SHOWN ON THE DRAWINGS DOES NOT RELIEVE THE CONTRACTOR FROM HIS RESPONSIBILITY TO INSTALL A COMPLETE OPERATING PLUMBING SYSTEM.
21. IF ANY DISCREPANCIES SHOULD EXIST THE CONTRACTOR SHALL NOTIFY THE ARCHITECT PRIOR TO BIDDING.
22. THE PLUMBING CONTRACTOR SHALL COORDINATE ALL PLUMBING WORK WITH ALL TRADES THAT MAY BE AFFECTED BY HIS WORK.
23. ALL HORIZONTAL SOIL AND WASTE PIPING 2 1/2" IN DIAMETER AND LESS SHALL HAVE A SLOPE OF 1/4" PER ONE FOOT LENGTH OF PIPE. ALL PIPING 3" IN DIAMETER AND LARGER SHALL HAVE A SLOPE OF 1/8" PER ONE FOOT LENGTH OF PIPE.
24. ALL WATER PIPING SHALL BE SUPPORTED RIGIDLY AND IN LINE FROM BUILDING STRUCTURE. OFFSET PIPING TO AVOID STRUCTURAL MEMBERS, CANTS, FLASHING, MECHANICAL AND ELECTRICAL EQUIPMENT, ETC.
25. WHERE WATER PRESSURES ARE EXCESSIVE OR WHERE REQUIRED TO ELIMINATE WATER HAMMER OR WHEN DEEMED NECESSARY BY LOCAL AUTHORITIES, APPROVED ENGINEERED WATER HAMMER ARRESTOR SHALL BE PROVIDED.
26. CONTRACTOR SHALL COORDINATE ALL PIPING LOCATION AND INVERT ELEVATIONS WITH FOOTINGS AND FOUNDATIONS BEFORE INSTALLING AND ADJUST AS REQUIRED.
27. INSULATE ALL HOT WATER PIPING WITH 1" THICK HIGH DENSITY FIBERGLASS INSULATION WITH FACTORY APPLIED VAPOR BARRIER ALL SERVICE JACKET.
28. THE CONTRACTOR SHALL CLEAN/POLISH TOPS OF ALL FLOOR DRAINS AND CLEANOUTS. CONCRETE, DIRT AND TAPE SHALL BE COMPLETELY REMOVED OR THE TOPS SHALL BE REPLACED.
29. WHERE FLOOR PLANS SHOW LOCATION AND LAYOUT OF EXISTING SANITARY, WATER OR VENT PIPING, THE CONTRACTOR SHALL ASSUME THESE LOCATION ARE APPROXIMATE AND CONTRACTOR SHALL FIELD VERIFY LOCATIONS PRIOR TO BIDDING AND CONSTRUCTION AND PROVIDE ALL NECESSARY PIPING FOR A COMPLETE SYSTEM.

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CONSULTANT:



CLIENT / PROJECT NAME:

CITY OF KEY WEST
ALTERATIONS TO

FREDERICK DOUGLASS
RECREATION CENTER

KEY WEST, FL

Original drawing is 24"x36". Scale accordingly if reduced.

SHEET TITLE:

PLUMBING SCHEDULES, NOTES
AND LEGEND

REVISIONS:

DATE ISSUED: 02/20/2015
PROJECT NO.: 12.0D01

DRAWING NUMBER:

P-001 SHEET: 1 OF 3

ROBERT TINIERA
P.E. #6011

members of



CONSULTANT:



CLIENT / PROJECT NAME:

CITY OF KEY WEST
ALTERATIONS TO

FREDERICK DOUGLASS RECREATION CENTER

KEY WEST, FL

Original drawing is 24"x36". Scale accordingly if reduced.

SHEET TITLE:

PLUMBING DEMOLITION PLAN

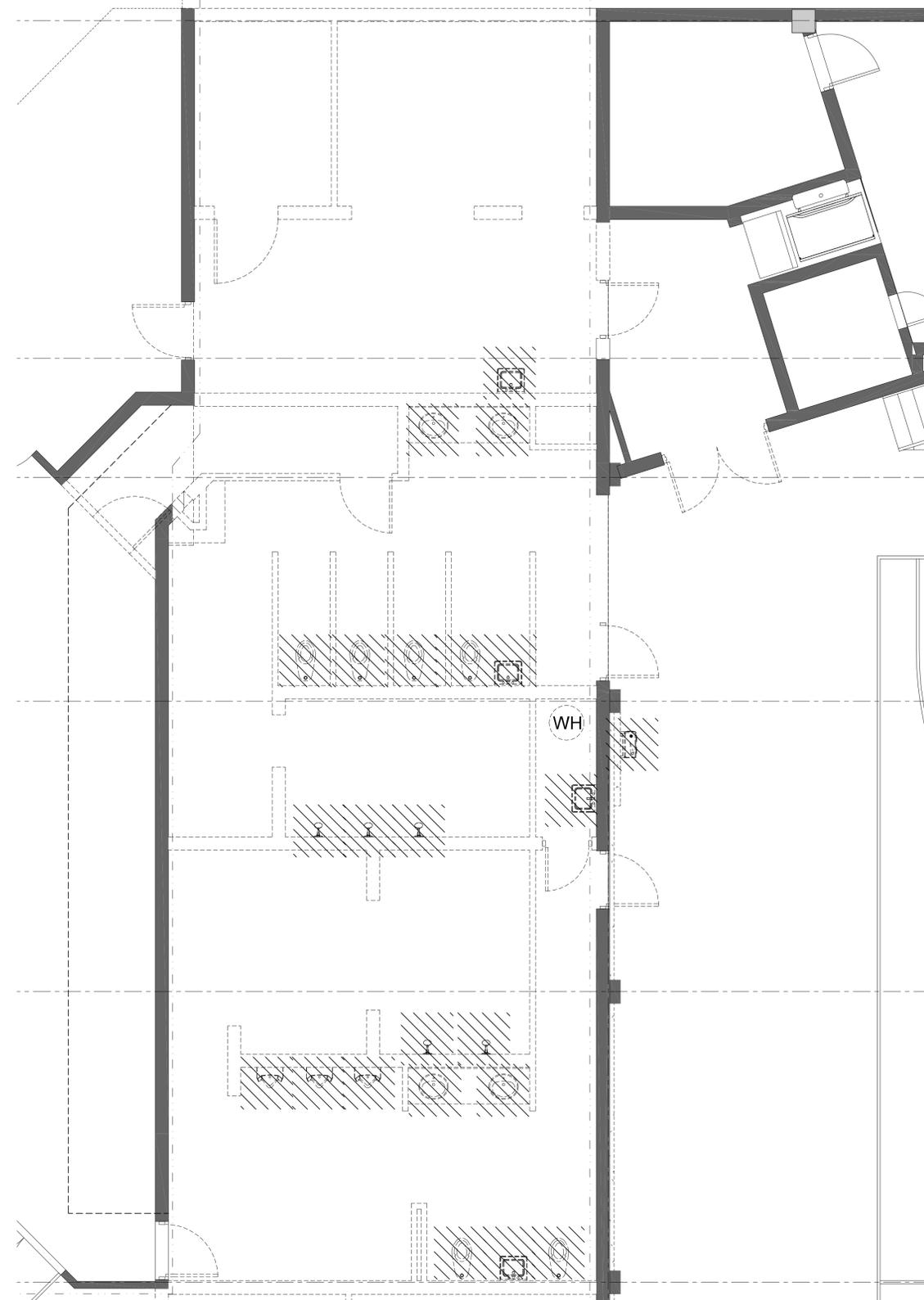
REVISIONS:

DATE ISSUED: 02/20/2015
PROJECT NO.: 12.0D01

DRAWING NUMBER:

P-002

SHEET: 2 OF 4



PLUMBING DEMOLITION PLAN

SCALE: 1/4"=1'-0" /14202

DEMOLITION KEYED NOTES:

- 1 REMOVE EXISTING PLUMBING FIXTURE AND ASSOCIATED PIPING. SANITARY PIPING SHALL BE CAPPED AT TAKE-OFF BELOW SLAB. REPAIR SLAB WHERE PIPE WAS REMOVED.

PLUMBING DEMOLITION GENERAL NOTES:

- 1. REMOVE EXISTING SANITARY, VENT AND WATER LINES FROM WALLS BEING DEMOLISHED (SEE ARCHITECTURAL PLANS FOR WALLS BEING DEMOLISHED). REMOVE PIPING BACK TO RISER ON BRANCH TAKEOFF AND CAP.
- 2. REMOVE EXISTING SANITARY VENT AND WATER LINES THAT ARE NO LONGER IN USE DUE TO THIS OR PREVIOUS RENOVATIONS. VERIFY PIPING IS INACTIVE BEFORE REMOVAL.
- 3. VERIFY ALL EXISTING SANITARY AND VENT LINES ARE CAPPED AND SUPPORTED PROPERLY BEFORE NEW CEILINGS ARE INSTALLED.

members of



CONSULTANT:



CLIENT / PROJECT NAME:
 CITY OF KEY WEST
 ALTERATIONS TO

**FREDERICK DOUGLASS
 RECREATION CENTER**

KEY WEST, FL

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SHEET TITLE:

PLUMBING SANITARY RISER
 AND DETAILS

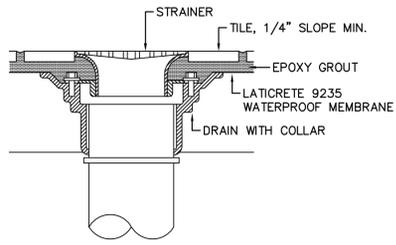
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DATE ISSUED: 02/20/2015
 PROJECT NO.: 12.0D01

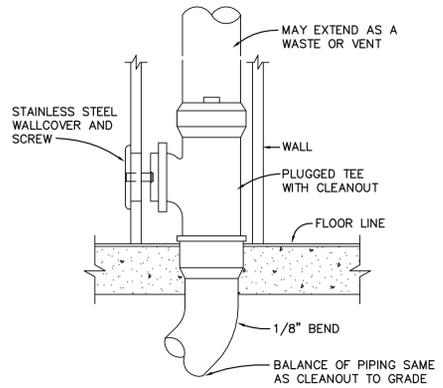
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P-004

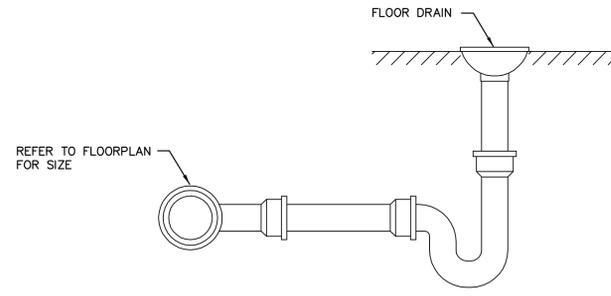
SHEET: 4 OF 4



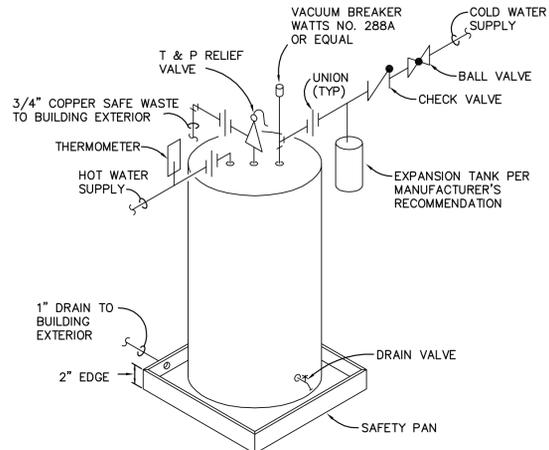
FLOOR DRAIN DETAIL
 SCALE: NTS /14202



WALL CLEANOUT DETAIL
 SCALE: NTS /14202

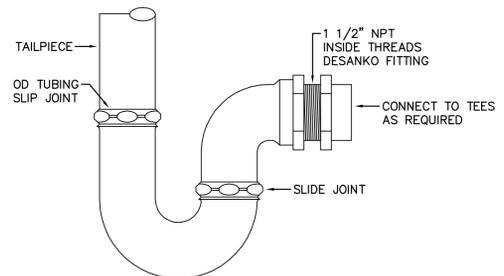


FLOOR DRAIN DETAIL
 SCALE: NTS /14202



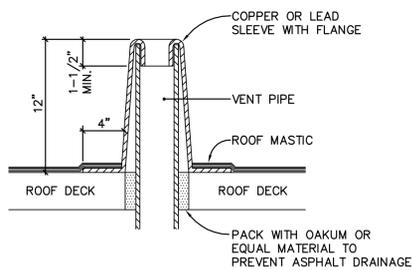
WATER HEATER PIPING DIAGRAM
 SCALE: NTS /14202

- NOTES:**
1. STORAGE WATER HEATER SYSTEMS THAT DO NOT INCLUDE A CIRCULATING SYSTEM SHALL EITHER HAVE AN INTEGRAL HEAT TRAP OR PIPED TRAP.
 2. TERMINATE DRAIN PIPING NO LESS THAN 6" OR NO MORE THAN 24" ABOVE GRADE.



"P" TRAP DETAIL
 SCALE: NTS /14202

- NOTES:**
1. THE ENTIRE P-TRAP ASSEMBLY, INCLUDING SLIP JOINT NUTS, SHALL BE 17 GAUGE, HEAVY CAST BRASS WITH A POLISHED CHROME PLATED FINISH.
 2. FOR BARRIER FREE LAVATORIES, INSTALL 1 1/4" OFFSET TAILPIECE.



VENT THRU ROOF DETAIL
 SCALE: NTS /14202

MECHANICAL LEGEND	
SYMBOL	DESCRIPTION
	NEW DUCTWORK, PIPING, OR EQUIPMENT
	FLEXIBLE DUCT
	SUPPLY OR OUTSIDE AIR DUCT SECTION
	RETURN DUCT SECTION
	EXHAUST DUCT SECTION
	DUCTWORK TRANSITION
	MANUAL AIR VOLUME CONTROL DAMPER
	MOTORIZED DAMPER
	SUPPLY AIR DEVICE. CLEAR TRIANGLE SIDES INDICATE AIR FLOW PATTERN
	RETURN AIR DEVICE
	EXHAUST AIR DEVICE
	NEW LINEAR SUPPLY DIFFUSER
	NEW FIRE DAMPER
	UNDERCUT DOOR 3/4"
	AIRFLOW DIRECTION
	MECHANICAL NOTE - NUMBER
	WALL MOUNTED THERMOSTAT
	LINE VOLTAGE THERMOSTAT
	WALL MOUNTED SENSOR
	HUMIDISTAT
	SMOKE DETECTOR
	AIR TRANSFER DUCT
	CONNECTION BETWEEN NEW AND EXISTING WORK
	OUTSIDE AIR
	TYPICAL
	REFRIGERANT PIPE ROUTING
	CONDENSATE DRAIN
	POSITIVE RELATIVE PRESSURE
	NEGATIVE RELATIVE PRESSURE

MECHANICAL GENERAL NOTES:

- IN GENERAL, PLANS AND DIAGRAM ARE SCHEMATIC ONLY AND SHOULD NOT BE SCALED.
- INTENT OF THESE NOTES AND MECHANICAL NOTES ON DRAWINGS IS TO CLARIFY THE SCOPE OF WORK AND ALERT CONTRACTOR OF EXISTING CONDITIONS. CONTRACTOR TO VISIT SITE AND VERIFY ALL CLEARANCES BEFORE FABRICATION OF DUCTWORK AND PROVIDE ADDITIONAL OFFSET AND/OR CHANGES IN DUCT SIZES TO MEET FIELD CONDITIONS AND COORDINATE WITH ELECTRICAL, PLUMBING AND FIRE PROTECTION SUBCONTRACTOR BEFORE ANY CONSTRUCTION WORK.
- BIDDERS SHALL VISIT THE SITE AND FAMILIARIZE THEMSELVES WITH ALL CONDITIONS INVOLVING THE WORK.
- SHOULD ANY CONFLICTS ARISE, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF THE CONFLICT BEFORE ANY CHANGES ARE MADE. THE CONTRACTOR SHALL OBTAIN WRITTEN APPROVAL BEFORE PROCEEDING WITH ANY CHANGES.
- THE GENERAL CONTRACTOR IS RESPONSIBLE FOR ALL TRADES INSTALLATION SCHEDULES. FIXED WORK SUCH AS DUCTWORK AND PLUMBING SHALL BE INSTALLED PRIOR TO ANY TRADE WORK THAT CAN BE EASILY RELOCATED OR OFFSET SUCH AS ELECTRICAL CONDUITS AND SMALL WATER AND GAS LINES ETC.
- ALL AIR CONDITIONING WORK SHALL NOT INTERFERE WITH CLEARANCES REQUIRED FOR GENERAL AND MECHANICAL CONSTRUCTION. SHOULD AIR CONDITIONING WORK BE INSTALLED WHICH INTERFERES WITH THE WORK OF OTHER CONTRACTORS, SUCH WORK SHALL BE CHANGED AT NO ADDITIONAL COST TO THE OWNER.
- ALL WORK COVERED IN THIS SECTION SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST PUBLISHED STANDARDS OF ASHRAE, AND NFPA.
- ALL MECHANICAL WORK SHALL MEET ALL THE REQUIREMENTS OF THE FLORIDA BUILDING CODE 2010.
- IN THE EVENT THAT THERE IS A CONFLICT BETWEEN THE CONTRACT DOCUMENTS AND THE CODE, THE CODE SHALL TAKE PRECEDENCE. THE MECHANICAL CONTRACTOR SHALL STUDY THE CONTRACT DOCUMENTS AND SUBMIT A BID BASED ON WORK WHICH COMPLIES WITH ALL CODE REQUIREMENTS. ANY CONFLICTS BETWEEN THE CONTRACTOR DOCUMENTS AND THE CODE SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO BID.
- THE MECHANICAL CONTRACTOR SHALL CHECK ALL EQUIPMENT FOR CORRECT VOLTAGE RATING BEFORE INSTALLATION.
- IT SHALL BE THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR FOR THE ADVANCE ORDERING OF LONG LEAD ITEMS SO AS NOT TO DELAY OTHER TRADES RESULTING IN ANY DOWN OR LAG TIME.
- THE MECHANICAL CONTRACTOR SHALL FURNISH AND INSTALL ALL MINOR ITEMS WHICH ARE OBVIOUSLY AND REASONABLY NECESSARY TO COMPLETE THE INSTALLATION WHETHER OR NOT SPECIFIED AS SHOWN ON THE PLANS.
- THE MECHANICAL CONTRACTOR SHALL THOROUGHLY CLEAN ALL AIR CONDITIONING EQUIPMENT PRIOR TO SUBSTANTIAL COMPLETION.
- MECHANICAL CONTRACTOR SHALL ARRANGE TO PAY FOR ALL NECESSARY PERMITS, LICENSES AND INSPECTIONS AS REQUIRED BY THE CITY.
- ALL NEW MECHANICAL EQUIPMENT, MATERIALS AND WORKMANSHIP SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF ACCEPTANCE.
- TO THE BEST OF THE ARCHITECT'S OR ENGINEER'S KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE MINIMUM BUILDING CODES.
- TURNING VANES SHALL BE PROVIDED IN ALL SUPPLY AND RETURN DUCT RECTANGULAR ELBOWS WITH ANGLES BETWEEN 15 DEGREES AND LESS THAN 90 DEGREES PER FIG. 2-5 OF THE SMACNA MANUAL.
- DUCT DIMENSIONS SHOWN ON DRAWINGS ARE CLEAR INSIDE DIMENSIONS.
- DUCTWORK, AHU'S, FCU'S AND OTHER ITEMS OF THE AIR HANDLING SYSTEM SHALL NOT BE SUPPORTED BY THE CEILING OR CEILING SUSPENSION SYSTEM.
- ALL SUPPLY AND RETURN DUCTWORK SHALL BE EXTERNALLY INSULATED SHEET METAL CONSTRUCTION IN ACCORDANCE WITH LATEST SMACNA STANDARDS.
- ALL OUTSIDE AIR AND EXHAUST AIR DUCT SHALL BE SHEETMETAL WITH 2" DUCT WRAP INSULATION.
- UNLESS OTHERWISE NOTED, INSTALL DUCTWORK AS HIGH AS POSSIBLE, TIGHT TO BOTTOM OF STRUCTURE. COORDINATE DUCT ELEVATION WITH RAIN LEADERS, WATER PIPING, SANITARY DRAINS AND MAJOR ELECTRICAL CONDUITS.
- MAXIMUM LENGTH OF FLEXIBLE DUCT SHALL BE 8'-0".
- VOLUME DAMPERS WITH LOCKING QUADRANTS SHALL BE INSTALLED IN ALL DUCT BRANCHES.
- ALL INSULATION SHALL HAVE A MAXIMUM FLAME SPREAD/SMOKE DEVELOPED RATING OF 25/50.
- DUCT WRAP INSULATION SHALL BE 2" THICK FLEXIBLE FIBERGLASS, 1.0 PCF DENSITY.
- COORDINATE AIR DEVICE LOCATIONS WITH LIGHTING FIXTURES AND FIRE SPRINKLER HEADS.
- ALL SUPPLY AIR DIFFUSERS SHALL BE 4-WAY THROW UNLESS OTHERWISE NOTED.
- INSULATE BACK PANS OF ALL DIFFUSERS.
- ALL WALL MOUNTED THERMOSTATS AND/OR TEMPERATURE SENSORS SHALL BE INSTALLED AT AN ELEVATION OF 48" ABOVE FINISHED FLOOR TO THE CENTERLINE UNLESS OTHERWISE NOTED ON DRAWINGS. LOCATION OF THE WALL MOUNTED THERMOSTAT SHALL BE COORDINATED WITH OTHER TRADES FOR A NEAT APPEARANCE. FINAL LOCATION OF THERMOSTAT SHALL BE SUBJECT TO THE APPROVAL OF THE ENGINEER OR HIS REPRESENTATIVE IN THE FIELD.

- CONTRACTOR SHALL PROVIDE ALL SUPPLEMENTARY STEEL REQUIRED TO SUSPEND MECHANICAL EQUIPMENT AND MATERIALS.
- LOCATIONS OF DUCT MOUNTED SMOKE DETECTORS SHOWN ON THE DRAWINGS ARE REFERENCE LOCATIONS ONLY. THE FINAL PLACEMENT OF THE DETECTORS IN THE DUCTWORK SHALL MEET THE REQUIREMENTS OF THE MANUFACTURER'S INSTALLATION INSTRUCTIONS. PROVIDE READILY ACCESSIBLE DUCT ACCESS DOOR FOR INSPECTING AND SERVICING THE DETECTOR. DIVISION 16 CONTRACTOR SHALL PROVIDE DETECTOR AND WIRE. DIVISION 15 CONTRACTOR SHALL INSTALL IN DUCTWORK.
- REFRIGERANT PIPING SHALL BE ACR TYPE - L, SOFT ANNEALED, TEMPERED FITTINGS. SOLDERING MATERIALS SHALL BE SILVER-LEAD SOLDER. INSULATE REFRIGERANT SUCTION PIPING WITH CLOSED CELL INSULATION. PROTECT EXTERIOR INSULATION WITH U.V. PROTECTANT PAINT.
- CONDENSATE DRAIN PIPING SHALL BE PVC. PROVIDE TRAP AT THE AIR HANDLING UNIT. INSULATE ALL INTERIOR CONDENSATE PIPING WITH 1/2" THICK CLOSED CELL FOAM INSULATION.
- PROVIDE ADDITIONAL DUCTWORK AND PIPING SUPPORTS ON BOTH SIDES AND WITHIN 18" OF FIRE RATED WALL. DUCTWORK OR PIPING SHALL NOT BE SUPPORTED FROM ANY FIRE RATED WALL.
- ALL DUCTWORK MUST BE INSTALLED 6" AWAY FROM ANY FIRE RATED WALL TO FACILITATE INSPECTION.
- PENETRATIONS THROUGH SMOKE OR FIRE-RATED ASSEMBLIES: PENETRATIONS FOR PIPES, CONDUITS OR OTHER PURPOSES THROUGH ASSEMBLIES (FLOORS, ROOF, WALLS, PARTITIONS, ETC.) WITH A REQUIRED FIRE RESISTANCE RATING SHALL BE SEALED TO THE PENETRATING MEMBER IN AN APPROVED MANNER WHICH MAINTAINS THE REQUIRED FIRE RESISTANCE RATING OF THE ASSEMBLY AS FOLLOWS:
 - WHERE HOLES FOR PENETRATIONS ARE FORMED CIRCULAR OR CORE-BORED, THE PENETRATION SHALL BE PROTECTED WITH FIRE-SEAL BRAND SMOKE AND FIRE STOP FITTINGS MFG. BY O-Z GEDLEY, LINK SEAL BRAND BY THUNDER LITE OR AN EQUAL APPROVED BY ENGINEER.
 - WHERE HOLES FOR PENETRATIONS ARE IRREGULAR (NON-CIRCULAR) IN SHAPE, THE PENETRATION SHALL BE PROTECTED WITH DOW CORNING 3-6548, SILICONE RTV FOAM, 3M FIRE BARRIER PENETRATION SEAL SYSTEM OR AN EQUAL APPROVED BY THE ENGINEER.
- AT THE CONCLUSION OF THE INSTALLATION THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR APPROVAL A COMPLETE CERTIFIED TEST AND BALANCE REPORT FROM AN AGENCY HAVING A MINIMUM OF THREE YEARS EXPERIENCE. REPORT SHALL ITEMIZE THE PERFORMANCE OF EACH AIR DEVICE AND A/C UNIT IN ACCORDANCE WITH ASHRAE GUIDELINES AND CERTIFYING AGENCIES GUIDELINES.
- CONTRACTOR SHALL MARK T-BAR WITH 1/4" ROUND, RED STICKER TO LOCATE EQUIPMENT AND FIRE DAMPERS.
- MAINTAIN AS-BUILT DRAWINGS, DAILY. SUBMIT TO ARCHITECT/OWNER AFTER COMPLETION OF ALL WORK.
- ALL EQUIPMENT SUBMITTED FOR APPROVAL SHALL BE SUBMITTED IN A NUMERICAL SEQUENCE CONSISTANT WITH THE CONTRACT DRAWINGS (IE... AHU-1 IS FOLLOWED BY AHU-2, ETC...). SHOP DRAWINGS (SUBMITTALS) NOT SUBMITTED IN THIS MANNER WILL BE REJECTED WITHOUT REVIEW.

VENTILATION RATE CALCULATIONS TABLE	
FLORIDA MECHANICAL CODE TABLE 403.3	
OCCUPATION CATEGORY - GYM	
BREATHING ZONE OUTSIDE AIR FLOW FOR GYM	
$V_{bz} = R_p P_z + R_a A_z$	
$V_{bz} = 7.5 \text{ CFM} \times 192 \text{ PEOPLE} + (.06)(5320)$	
$V_{bz} = 2,862 \text{ CFM}$	
$V_{oz} = V_{bz}/E_z$	
$V_{oz} = 2,862/1$	
$V_{oz} = 2,862 \text{ CFM (MIN REQUIRED)}$	
ACTUAL OUTSIDE AIR PROVIDED = 2,865 CFM	
OCCUPATION CATEGORY - LOCKER/COMMUNITY ROOM	
BREATHING ZONE OUTSIDE AIR FLOW FOR	
$V_{bz} = R_p P_z + R_a A_z$	
$V_{bz} = 5 \text{ CFM} \times 40 \text{ PEOPLE} + (.06)(-)$	
$V_{bz} = - \text{CFM}$	
$V_{oz} = V_{bz}/E_z$	
$V_{oz} = -/1$	
$V_{oz} = - \text{CFM (MIN REQUIRED)}$	
ACTUAL OUTSIDE AIR PROVIDED = - CFM	
EXHAUST = .7 CFM/SQ. FT. EXHAUST	
EXHAUST = .7 x - - - CFM	
EXHAUST = - CFM THROUGH FANS	
V_{bz} = BREATHING ZONE OUTDOOR AIRFLOW R_p = OUTDOOR AIR RATE REQUIRED PER PERSON P_z = ZONE POPULATION R_a = OUTDOOR AIR RATE PER UNIT AREA A_z = ZONE FLOOR AREA V_{oz} = ZONE OUTSIDE AIRFLOW E_{oz} = ZONE AIR DISTRIBUTION EFFECTIVENESS	



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CITY OF KEY WEST
ALTERATIONS TO

FREDERICK DOUGLASS
RECREATION CENTER

KEY WEST, FL

Original drawing is 24"x36". Scale accordingly if reduced.

SHEET TITLE:

MECHANICAL DEMOLITION
PLAN

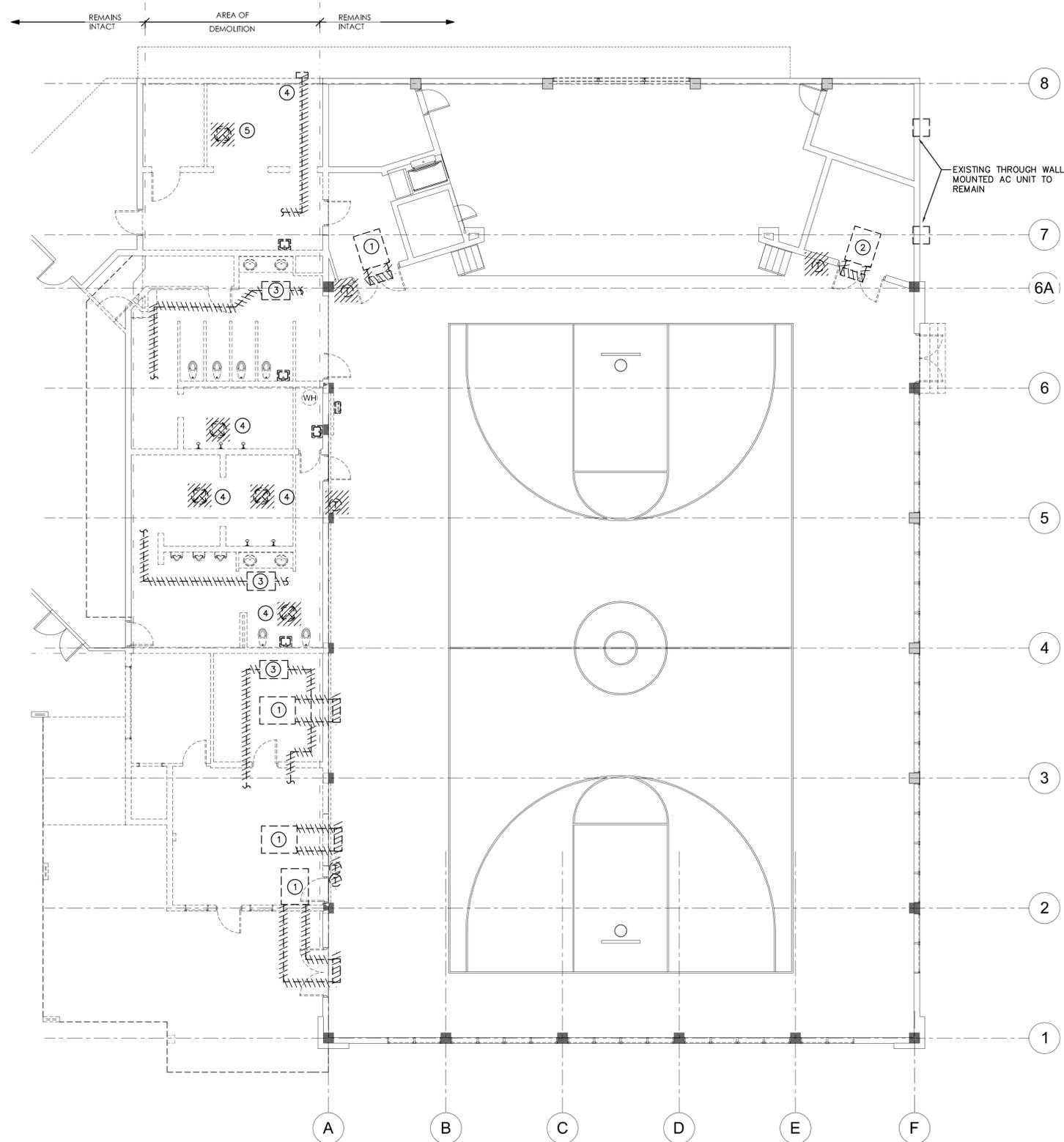
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DATE ISSUED: 02/20/2015
PROJECT NO.: 12.0D01

DRAWING NUMBER:

M-002

SHEET: 2 OF 4



DEMOLITION KEYED NOTES:

- ① EXISTING ROOF TOP UNIT (RTU) SHALL BE CAREFULLY REMOVED AND STORED IN A SECURE LOCATION FOR RE-USE. RTU SHALL BE RE-INSTALLED ON NEW ROOF. SEE NEW WORK PLAN.
- ② EXISTIN RTU SHALL BE REMOVED.
- ③ EXISTING ABOVE CEILING AHU AND ASSOCIATED ROOF MOUNTED CONDENSING UNIT SHALL BE REMOVED COMPLETE INCLUDING ALL ASSOCIATED SUPPLY AND RETURN AIR DISTRIBUTION SYSTEMS AND AIR DEVICES.
- ④ EXISTING EXHAUST FAN AND ASSOCIATED DUCTWORK AND AIR DEVICES SHALL BE REMOVED COMPLETE.
- ⑤ EXISTING KITCHEN HOOD EXHAUST SYSTEM SHALL BE REMOVED COMPLETE.

MECHANICAL DEMOLITION PLAN

SCALE: 1/8"=1'-0" /14202

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SHEET TITLE:

MECHANICAL PLAN

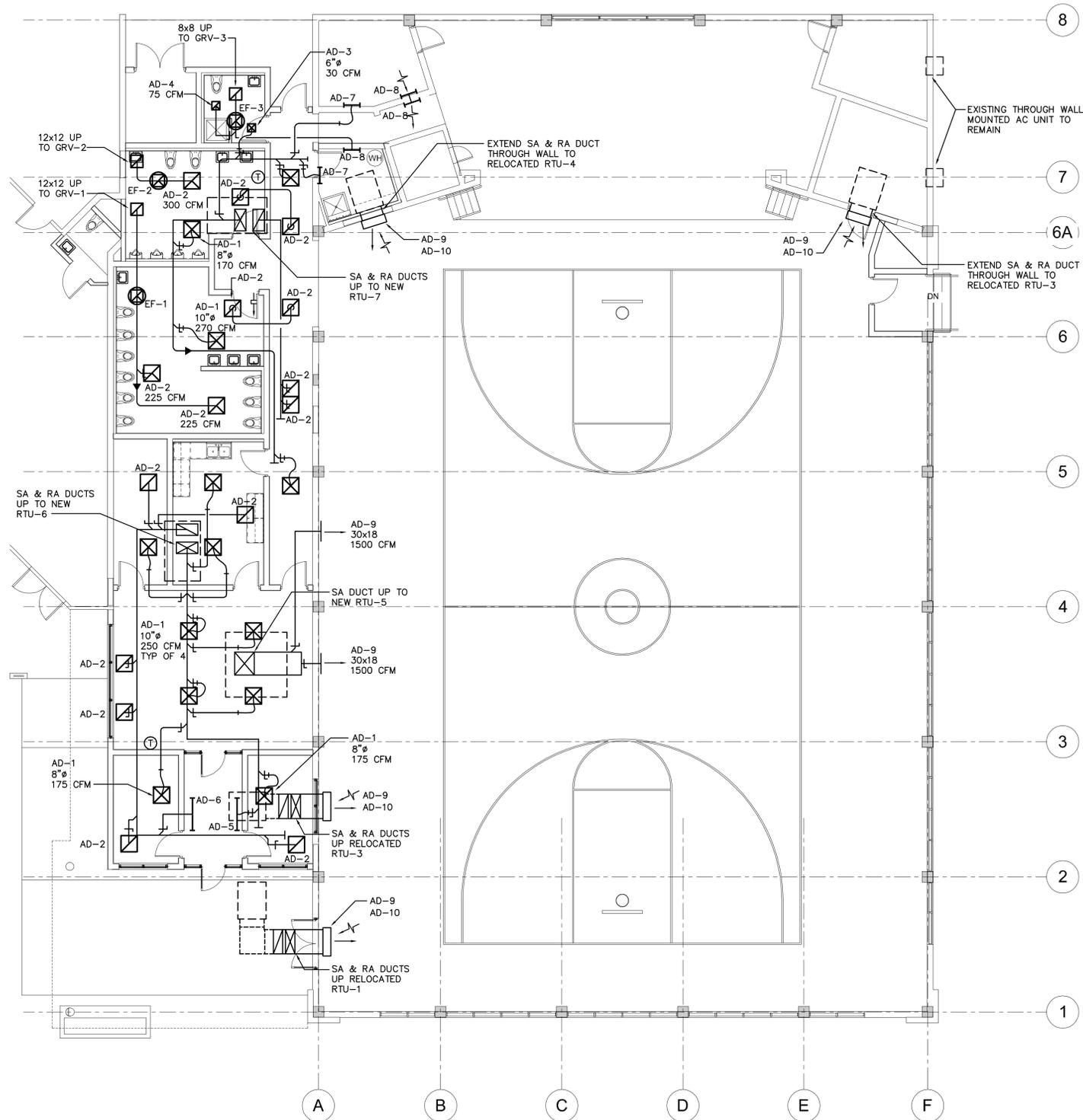
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DATE ISSUED: 02/20/2015
PROJECT NO.: 12.0D01

DRAWING NUMBER:

M-003

SHEET: 3 OF 6



MECHANICAL PLAN
SCALE: 1/8"=1'-0" /14202

ROOFTOP A/C UNIT SCHEDULE				
MARK		RTU-5	RTU-6	RTU-7
AREA SERVED		GYM	COMMUNITY RM	LOCKER AREAS
SUPPLY AIR	CFM	3000	1915	1175
OUTSIDE AIR	CFM	3000	330	190
EXT. STATIC PRESSURE	IN. H ₂ O	.75	1.0	1.0
MOTOR	H.P.	2	1	.75
ELECTRICAL	V/ø/HZ	240/3/60	240/3/60	240/3/60
FILTER TYPE		2"	2"	2"
TOTAL COOLING CAPACITY	BTUH		57,930	31,500
SENSIBLE COOLING CAPACITY	BTUH		42,600	21,940
ENT. AIR TEMP. (DB/WB)	F/F		78/67	78/67
LEAVING AIR TEMP. (DB/WB)	F/F		59/57	59/57
HEATER	KW/STAGES	20	9/2	4.5
AMBIENT TEMP.	F	95	95	95
EER/IEER			17.2	17.5
WEIGHT	LBS.	3000	916	656
MANUFACTURER		AAON	TRANE	TRANE
MODEL NO.		RN-025	THC067	THC037
NOTES	Ⓕ	① ② ③	① ② ③	① ② ③

ALL UNITS SHALL HAVE START UP PERFORMED BY FACTORY AUTHORIZED TECHNICIAN

- ① PROVIDE AND INSTALL IN DOWNFLOW CONFIGURATION. PROVIDE FACTORY ROOF CURB. ROOF CURB SHALL BE MIN. 14" HIGH TO PROVIDE THE REQUIRED CLEARANCE REQUIRED BY FMC SECTION 1509.7
- ② PROVIDE WITH OUTSIDE AIR INTAKE WITH MOTORIZED DAMPER AND BIRDSCREEN.
- ③ EVAPORATOR AND CONDENSER COILS SHALL BE PROVIDED WITH E-COAT CORROSION PROTECTION.

AIR DEVICE SCHEDULE					
MARK	TYPE	MATERIAL	FINISH	MANUFACTURER AND MODEL	REMARKS
AD-1	CEILING SUPPLY	ALUMINUM	WHITE BAKED ENAMEL	TITUS OMNI-AA	①
AD-2	CEILING RET./EXH.	ALUMINUM	WHITE BAKED ENAMEL	TITUS 350FL	②
AD-3	CEILING SUPPLY	ALUMINUM	WHITE BAKED ENAMEL	TITUS OMNI-AA	③
AD-4	CEILING RET./EXH.	ALUMINUM	WHITE BAKED ENAMEL	TITUS 350FL	④
AD-5	LINEAR SUPPLY	ALUMINUM	WHITE BAKED ENAMEL	TITUS ML-39	⑤
AD-6	LINEAR RET./EXH.	ALUMINUM	WHITE BAKED ENAMEL	TITUS ML-39	⑥
AD-7	SIDEWALL SUPPLY	ALUMINUM	WHITE BAKED ENAMEL	TITUS 300FL	⑥
AD-8	SIDEWALL RET./EXH.	ALUMINUM	WHITE BAKED ENAMEL	TITUS 350FL	②
AD-9	SIDEWALL SUPPLY	ALUMINUM	WHITE BAKED ENAMEL	TITUS 300FL	②
AD-9	SIDEWALL RET./EXH.	ALUMINUM	WHITE BAKED ENAMEL	TITUS 350FL	②

* APPROVED EQUALS SHALL BE PRICE AND METALAIR

NOTE:
ALL AIR DEVICE FRAME TYPES AND MOUNTING REQUIREMENTS SHALL BE COORDINATED WITH CEILING TYPE AND SUSPENSION SYSTEM PRIOR TO ORDERING.

- ① PROVIDE 24x24 MODULE WITH ROUND NECK TRANSITION. SEE PLANS FOR NECK SIZES. PROVIDE DIRECTIONAL BLOW CLIPS FOR DIFFUSERS SHOWN TO BE 1-WAY, 2-WAY OR 3-WAY DIRECTIONAL AIRFLOW PATTERN
- ② PROVIDE 24x24 MODULE, WITH 22x22 NECK.
- ③ PROVIDE 12x12 MODULE WITH ROUND NECK TRANSITION. SEE PLAN FOR NECK SIZES.
- ④ PROVIDE 12x12 MODULE WITH 10x10 NECK.
- ⑤ PROVIDE 4' LONG, 2 SLOT DIFFUSER WITH MPI-39 INSULATED PLENUM HOUSING
- ⑥ PROVIDE 4' LONG, 2 SLOT DIFFUSER WITH MPI-39 INSULATED PLENUM HOUSING
- ⑦ DUCT SIZE DICTATES FACE SIZE. REFER TO PLANS FOR DUCT SIZE
- ⑧ DUCT SIZE DICTATES FACE SIZE. REFER TO PLANS FOR DUCT SIZE
- ⑨ DUCT SIZE DICTATES FACE SIZE. REFER TO PLANS FOR DUCT SIZE
- ⑩ DUCT SIZE DICTATES FACE SIZE. REFER TO PLANS FOR DUCT SIZE

ROOF CAP SCHEDULE				
MARK		GRV-1	GRV-2	GRV-3
AIR QUANTITY	CFM			
SIZE	L x W			
THROAT	WIDTHxLENGTH	15"ø	15"ø	15"ø
VELOCITY	FPM	500	500	500
PRESSURE DROP	IN. H ₂ O	.125	.125	.125
MATERIALS				
MANUFACTURER		GREENHECK	GREENHECK	GREENHECK
MODEL		RCC-8	RCC-8	RCC-7
NOTES	Ⓕ			

PROVIDE HIGH WIND CONSTRUCTION, INSULATED ROOF CURB AND BIRD SCREEN.

RTU-5 ADDITIONAL NOTES:

1. PROVIDE PREMIUM EFFICIENCY ECM MOTORS FOR ALL SUPPLY FANS AND CONDENSER FANS
2. PROVIDE CLASS II SWSI ALUMINUM (NON-FERROUS) AIR FOIL BLADE CONSTRUCTION DIRECT DRIVE SUPPLY FAN WITH SLIDE OUT FAN ASSEMBLY
3. PROVIDE STAINLESS STEEL DOUBLE-SLOPED CONDENSATE DRAIN PAN
4. PROVIDE FACTORY INSTALLED MODULATING HOT GAS REHEAT
5. PROVIDE LOW AMBIENT OPERATION TO 0 DEG F
6. PROVIDE ALL UNITS WITH FACTORY INSTALLED PHASE FAILURE PROTECTION
7. PROVIDE REMOTE TEMPERATURE AND HUMIDITY SENSOR.
8. PROVIDE (1) ONE REMOTE USER INTERFACE PANEL TO BE INSTALLED IN - AND TIE INTO RTU 5
9. EVAPORATOR AND CONDENSER COILS SHALL BE PROVIDED WITH E-COAT CORROSION PROTECTION.

FAN SCHEDULE				
MARK		EF-1	EF-2	EF-3
SERVICE		EXHUAIST	EXHUAIST	EXHUAIST
AREA SERVED		RESTROOMS	RESTROOMS	RESTROOMS
AIR QUANTITY	CFM			
EXT. STATIC PRESS.	IN. H ₂ O			
FAN TYPE				
DRIVE				
SONES				
MOTOR	H.P./WATTS			
MOTOR SPEED	RPM			
ELECTRICAL	V/ø/HZ			
CONTROL		SWITCH WITH LIGHTS	SWITCH WITH LIGHTS	SWITCH WITH LIGHTS
MANUFACTURER		GREENHECK	GREENHECK	GREENHECK
MODEL				
NOTES	Ⓕ	① ②		

* APPROVED EQUALS SHALL BE COOK AND PENN.

- ① PROVIDE AND INSTALL WITH DISCONNECT, BACKDRAFT DAMPER, FLORIDA PRODUCT APPROVED HIGH WIND CONSTRUCTION, INSULATED ROOF CURB AND BIRD SCREEN.
- ② PROVIDE AND INSTALL SOLID STATE SPEED CONTROL AT FAN FOR BALANCING.

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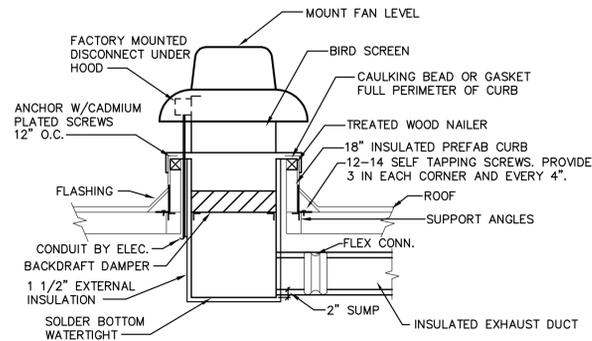
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MECHANICAL SCHEDULES

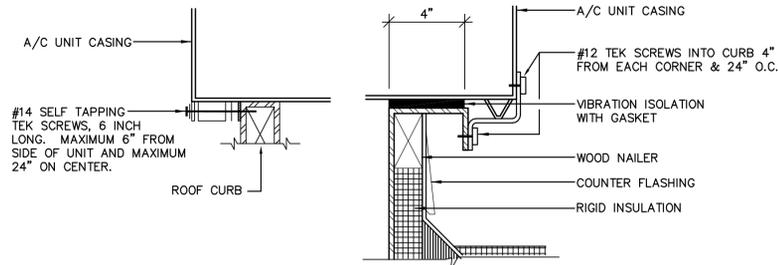
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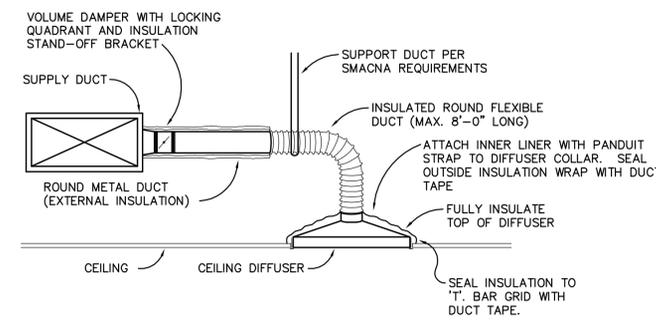
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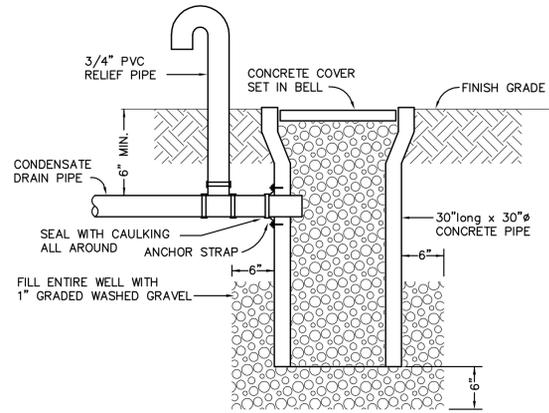
ROOF EXHAUST FAN DETAIL
SCALE: NTS 1/4202



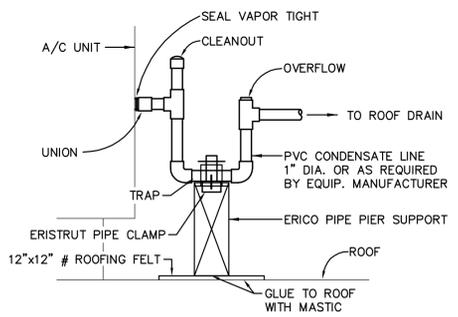
NOTE: SEE ARCHITECTURAL AND STRUCTURAL PLANS FOR EQUIPMENT CURB MOUNTING DETAILS.
RTU ANCHORING DETAILS
SCALE: NTS 1/4202



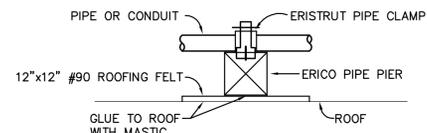
NOTE: TAKE-OFF FITTING EQUAL TO FLEXMASTER ST0-LDS-B03 OR FLEXMASTER CB-D-B03. VOLUME DAMPER BLADES SHALL BE MINIMUM 24 GAUGE CONSTRUCTION.
CEILING DIFFUSER RUNOUT DETAIL
SCALE: NTS 14202



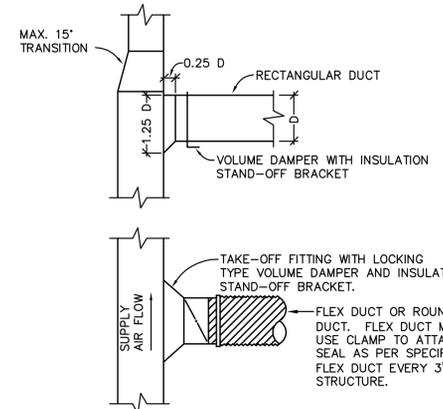
DRYWELL DETAIL
SCALE: NTS 14202



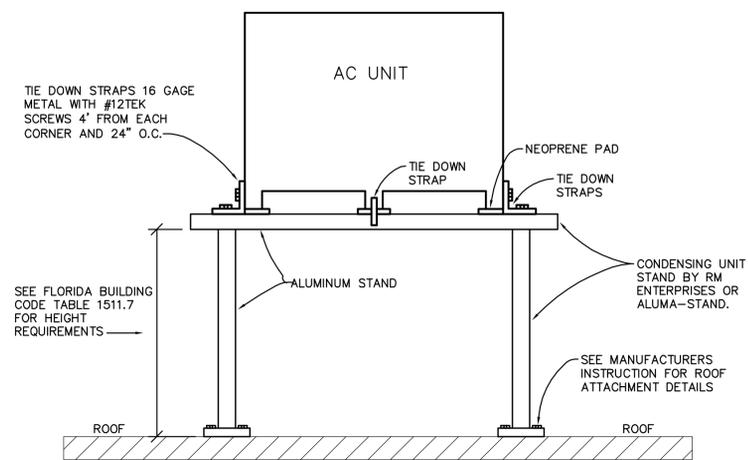
A/C CONDENSATE DETAIL
SCALE: NTS 14202



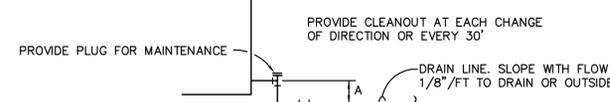
ROOF CONDENSATE PIPE SUPPORT
SCALE: NTS 14202



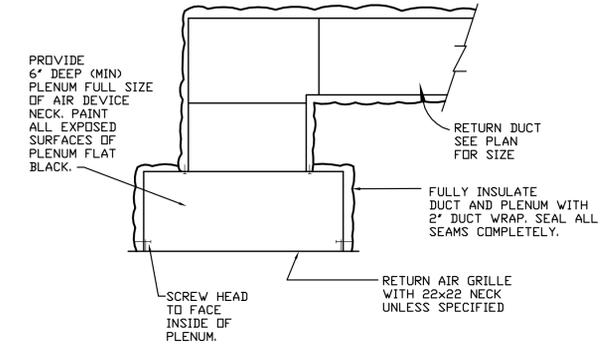
NOTE: TAKE-OFF FITTING EQUAL TO FLEXMASTER ST0-LDS-B03 OR FLEXMASTER CB-D-B03. VOLUME DAMPER BLADES SHALL BE MINIMUM 24 GAUGE CONSTRUCTION.
BRANCH DUCT DETAILS
SCALE: NTS 14202



CONDENSING UNIT SUPPORT DETAIL
SCALE: NTS 14202



CONDENSATE PIPE SIZE vs MAX. TONS table:
MAX. TONS | CONDENSATE PIPE SIZE
2 | 3/4"
5 | 1"
30 | 1 1/4"
50 | 1 1/2"
A = TOTAL FAN SUCTION PRESSURE + 1 INCH
CONDENSATE DRAIN TRAP DETAIL
SCALE: NTS 14202



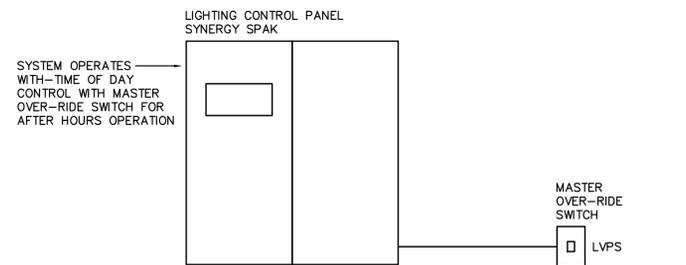
RETURN AIR DUCTWORK/AIR DEVICE CONNECTION DETAIL
SCALE: NTS 14202



FREDERICK DOUGLASS
RECREATION CENTER

ELECTRICAL SYMBOL LEGEND

SYMBOL	DESCRIPTION	MOUNTING
○	RECESSED CEILING MOUNTED DOWNLIGHT, LETTER INDICATES TYPE	SEE FIXTURE SCHEDULE
□	2'x4' FLUORESCENT FIXTURE, LETTER INDICATES TYPE.	SEE FIXTURE SCHEDULE
□	2'x4' FLUORESCENT FIXTURE WITH BATTERY BACKUP, LETTER INDICATES TYPE NL = NIGHTLIGHT	SEE FIXTURE SCHEDULE
□	LED FIXTURE HUNG WITH AIRCRAFT CABLE, LETTER INDICATES TYPE.	SEE FIXTURE SCHEDULE
□	LED FIXTURE HUNG WITH AIRCRAFT CABLE WITH BATTERY BACKUP, LETTER INDICATES TYPE. NL = NIGHTLIGHT	SEE FIXTURE SCHEDULE
— —	FLUORESCENT STRIP FIXTURE, LETTER INDICATES TYPE	SEE FIXTURE SCHEDULE
⊙	EXIT LIGHT WITH INDICATING ARROW, LETTER INDICATES TYPE	SEE FIXTURE SCHEDULE
⊕	EMERGENCY BATTERY PACK	SEE FIXTURE SCHEDULE
S	SINGLE POLE SWITCH (20 AMP) GROUNDING TYPE	FLUSH IN WALL M.H. 48" AFF TO CENTERLINE
S ^o	SWITCH WITH OCCUPANCY SENSOR - WATT STOPPER DWS-100	FLUSH IN WALL M.H. 48" AFF TO CENTERLINE
⊕	DUPLEX RECEPTACLE (20A., 125V.) GROUNDING TYPE C = FLUSH CEILING MOUNTED	M.H. 18" AFF TO CENTERLINE
⊕	SINGLE RECEPTACLE (20 A. 125 V.) FOR ELECTRIC WATER COOLER	M.H. 48" AFF TO TOP
⊕	DUPLEX RECEPTACLE (20 AMP, 125V.) GROUNDING TYPE	MOUNTED ABOVE COUNTER OR AS NOTED
⊕	TWO (2) DUPLEX RECEPTACLES. (20A., 125V.) IN COMMON BOX	M.H. 18" AFF TO CENTERLINE
⊕	TWO (2) DUPLEX RECEPTACLES. (20A., 125V.) IN COMMON BOX	MOUNTED ABOVE COUNTER OR AS NOTED
⊕	FLOOR OUTLET WITH DUPLEX RECEPTACLE. WALKER #880S1 FLUSH FLOOR BOX, #817B SINGLE GANG BRASS CARPET AND TILE FLANGE. PROVIDE #828R BRASS COVER PLATE	FLUSH
▽	VOICE/DATA OUTLET, 4 SQUARE BACKBOX, SINGLE GANG PLASTER RING AND TWO 1" CONDUIT TO 6" ABOVE ACCESSIBLE CEILING, PROVIDE END BUSHING	M.H. 18" AFF TO CENTERLINE
▽	VOICE/DATA OUTLET, 4 SQUARE BACKBOX, SINGLE GANG PLASTER RING AND TWO 1" CONDUIT TO 6" ABOVE ACCESSIBLE CEILING, PROVIDE END BUSHING	MOUNTED ABOVE COUNTER OR AS NOTED
— —	PANELBOARD	M.H. 6"-6" AFF MAX. TO TOP
— —	TELEPHONE PLYWOOD BOARD (4'x8'x3/4")	
○	JUNCTION BOX OR OUTLET BOX, 4" SQUARE BOX UNLESS OTHERWISE NOTED	SEE SPECIFICATIONS
— —	RACEWAY CONCEALED IN WALL OR CEILINGS	SEE SPECIFICATIONS
— —	RACEWAY CONCEALED UNDER FLOOR OR BELOW GRADE	SEE SPECIFICATIONS
— —	RACEWAY EXPOSED ON WALL OR CEILING	SEE SPECIFICATIONS
⊕	HOMERUN TO PANEL, LETTERS INDICATE PANEL, NUMBERS INDICATE CIRCUIT. NOTE: ANY CIRCUIT WITHOUT FURTHER DESIGNATION INDICATES A TWO WIRE CIRCUIT. A GREATER NUMBER OF WIRES IS INDICATED AS SHOWN: — — (3 WIRES & EQUIPMENT GROUND), — — (4 WIRES & EQUIPMENT GROUND), ETC.	SEE SPECIFICATIONS
⊙	MOTOR OR FAN	BY OTHER DIVISION
□	NON-FUSIBLE SAFETY SWITCH	SEE SPECIFICATIONS
□	FUSIBLE SAFETY SWITCH	SEE SPECIFICATIONS
R	FAN OR AIR HANDLER SHUTDOWN RELAY	ADJACENT TO EQUIP.
⊕	FLORIDA ACCESSIBILITY CODE COMPLIANT FIRE ALARM STROBE WITH HORN CANDELA INTENSITY INDICATED ADJACENT TO DEVICE	MOUNTED 80" TO BOTTOM OF LENS OR 6" BELOW CEILING WHICHEVER IS LOWER
⊕	FLORIDA ACCESSIBILITY CODE COMPLIANT FIRE ALARM STROBE CANDELA INTENSITY INDICATED ADJACENT TO DEVICE	MOUNTED 80" TO BOTTOM OF LENS OR 6" BELOW CEILING WHICHEVER IS LOWER
□ ^P	FIRE ALARM MANUAL STATION	WALL SURFACE M.H. 48" AFF TO CENTERLINE
FACP	FIRE ALARM SYSTEM MAIN CONTROL PANEL	M.H. 6"-6" AFF TO TOP
⊕	CEILING MOUNTED DUAL TECHNOLOGY OCCUPANCY SENSOR WATT STOPPER DT-305 - SENSITIVITY TO HIGH, 30 MINUTES TIME DELAY SETTING	CEILING SURFACE 6"-0" FROM SUPPLY DIFFUSER
PP	OCCUPANCY SENSOR POWER PACK. WATT STOPPER BZ-50	MOUNTED IN J-BOX ABOVE ACCESSIBLE CEILING
LV	PLENUM RATED LOW VOLTAGE CABLING PER OCCUPANCY SENSOR MANUFACTURERS RECOMMENDATIONS, SUPPORT FROM STRUCTURE	SEE SPECIFICATIONS
EX	EXISTING TO REMAIN	



DIMMING SYSTEM RISER DIAGRAM
SCALE: NTS /14202

DEMOLITION:

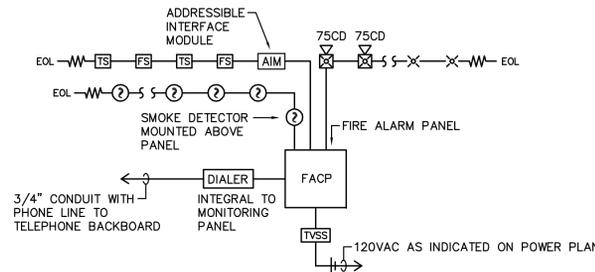
- REMOVE EXISTING WIRING AND EQUIPMENT/DEVICES WHICH ARE NOT NECESSARY FOR THE FUNCTION OF NEW EQUIPMENT/DEVICES AND THE FUNCTIONS OF EXISTING EQUIPMENT/DEVICES REMAINING.
- REMOVE ABANDONED WIRING ENTIRELY UNLESS NOTED AND REMOVE ACCESSIBLE RACEWAYS.
- CUT, CAP AND PATCH OVER CONCEALED CONDUITS AT POINT OF EMERGENCE.
- EXISTING EQUIPMENT AND MATERIALS THAT ARE REMOVED SHALL NOT BE REUSED EXCEPT WHERE SPECIFICALLY NOTED.
- DISPOSE OF SCRAP AND DEBRIS. MAINTAIN ELECTRICAL CONTINUITY TO EQUIPMENT/DEVICES WHICH SHALL REMAIN.
- CONTRACTORS SHALL BE GUIDED BY OWNER'S REPRESENTATIVE, THE ARCHITECT AND THE ENGINEER AS TO THE REQUIREMENT FOR THE REMOVAL OF EQUIPMENT/ DEVICES WHICH MAY NOT BE INDICATED.
- REMOVE EXISTING WIRING DEVICES AS REQUIRED FOR THE REMOVAL OF WALLS AND/OR THE INSTALLATION OF NEW WALL FINISHES.
- WHERE DEVICES ARE REMOVED, CONTRACTOR SHALL ALSO REMOVE OUTLET BOX, CONDUCTORS, CONDUIT AND MOUNTING HARDWARE. EXCEPTION TO THIS REQUIREMENT MAY BE WHERE CONTRACTOR PROPOSES TO RE-USE CONDUIT CONCEALED OR OUTLET BOX RECESSED IN EXISTING WALL OR FLOOR SLAB FOR NEW WORK IF APPROVED IN ADVANCE BY THE ARCHITECT/ENGINEER.
- WHERE WALLS ARE TO BEING REMOVED CONTRACTOR SHALL REMOVE EXISTING RECEPTACLES, DATA/TELEPHONE OUTLETS, CONDUIT, WIRING, ETC. REMOVE CONDUCTORS BACK TO PANEL AND CIRCUIT BREAKER MADE SPARE. CONTRACTOR SHALL MAINTAIN CONTINUITY TO EXISTING RECEPTACLES REMAINING. SEE ARCHITECTURAL DRAWINGS FOR WALLS TO BE REMOVED.
- WHERE EXISTING RECEPTACLES ARE TO BE REMOVED FROM PARTITIONS BEING REMOVED, CONTRACTOR SHALL MAINTAIN SERVICE TO REMAINING OUTLETS.
- EXIT LIGHTING FIXTURES AND EMERGENCY LIGHTING UNITS SHALL BE CHECKED FOR PROPER OPERATION OF BATTERY BACK-UP. CONTRACTOR SHALL REPLACE FAULTY BATTERIES AND LAMPS AS REQUIRED.

FIRE ALARM SYSTEM:

- COMPLETE ADDRESSABLE, MICROPROCESSOR - BASED FIRE DETECTION AND CONTROL SYSTEM WITH MANUAL AND AUTOMATIC ALARM INITIATION, NOTIFICATION APPLIANCES, MONITORS AND CONTROL DEVICES AS INDICATED ON THE DRAWINGS AND AS SPECIFIED HEREIN.
- SIGNAL TRANSMISSION: SHALL BE ADDRESSABLE TRANSMISSION DEDICATED TO FIRE ALARM SERVICE ONLY.
- AUDIBLE ALARM INDICATION: BY SOUNDING HORNS.
- TRANSMISSION TO REMOTE CENTRAL STATION: AUTOMATICALLY ROUTE ALARM, SUPERVISORY AND TROUBLE SIGNALS TO A REMOTE CENTRAL STATION SERVICE TRANSMITTER LOCATION IN FACP.
- UPON ACTIVATION OF THE FIRE ALARM SYSTEM BY AN ALARM INITIATING DEVICE THE FOLLOWING SHALL OCCUR:
 - SOUND THE AUDIBLE FIRE ALARM SIGNALS THROUGHOUT THE BUILDING.
 - FLASH THE VISUAL FIRE ALARM SIGNALS THROUGHOUT THE BUILDING.
 - A ZONE INDICATION ON ALPHA NUMERIC DISPLAY SHALL INDICATE ACTIVATED DEVICE ON FACP AND REMOTE ANNUNCIATOR.
 - SEIZE TELEPHONE LINE, ALERT THE LOCAL FIRE DEPARTMENT VIA THE OWNER PROVIDED MONITORING SERVICE.
 - SHUTDOWN ALL AIR MOVEMENT IN BUILDING.
 - TAMPER SWITCHES SHALL SOUND TROUBLE SIGNAL.
- THE FIRE ALARM SYSTEM SHALL BE MANUFACTURED BY NOTIFIER AND BE NFS-320 INTELLIGENT FIRE ALARM CONTROL PANEL WITH NEMA 1 ENCLOSURE.
- FIRE ALARM SMOKE DETECTOR FOR FACP SHALL BE SIMILAR TO NOTIFIER FSP-851 WITH APPROPRIATE BASE.
- FIRE ALARM DIALER SHALL BE INTEGRAL TO THE FACP AND BE NOTIFIER UDACT SERIES. PROVIDE REQUIRED RJ-31X INTERCONNECTION TO TELEPHONE SYSTEM.
- PULLSTATIONS SHALL BE NOTIFIER NBG-12LX ADDRESSABLE MANUAL PULLSTATION.
- 24 HOURS OF BATTERY BACKUP WITH 5 MINUTES OF ALARM SHALL BE PROVIDED.
- ALL FIRE ALARM WIRING SHALL BE 1/2" MINIMUM CONDUIT.
- ALL SLC WIRING SHALL BE #14 UNSHIELDED TWISTED PAIR SIMILAR TO GENESIS 4313 FPLR.
- ALL 120 VAC FIRE ALARM POWER SHALL BE PROVIDED WITH TRANSIENT VOLTAGE SURGE SUPPRESSION (TVSS). MOUNT IN NEMA 1 ENCLOSURE. DITEK-DTK-120S20A.
- ADDRESSIBLE INTERFACE MODULE SHALL BE NOTIFIER FMM-1 MOUNTED TO SUITABLE J-BOX.
- AUDIBLE VISUAL APPLIANCES SHALL BE SYSTEM SENSOR SPECTRALERT ADVANCE SERIES. HORNS SHALL BE WHITE IN COLOR, COMBINATION APPLIANCES SHALL BE RED.

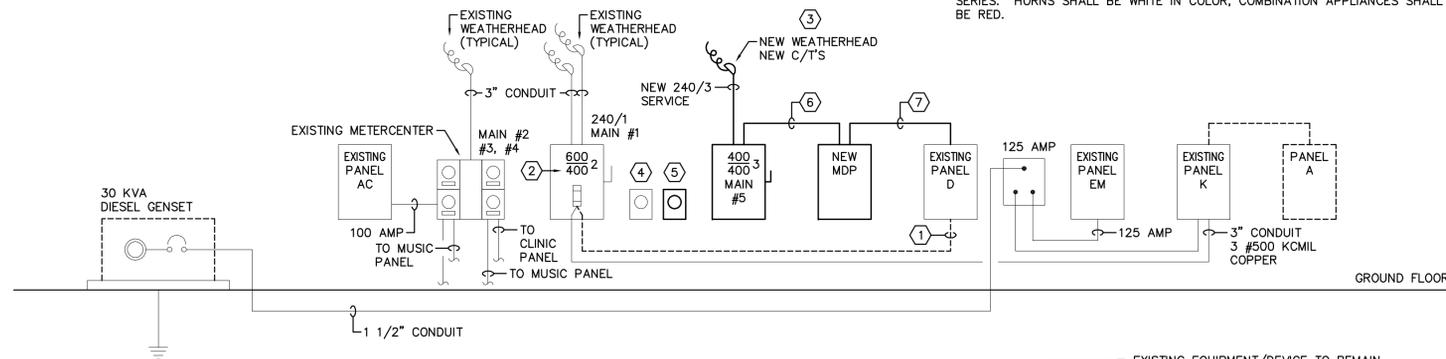
GENERAL NOTES:

- DO NOT SCALE FROM THESE DRAWINGS. CONDUIT RUNS SHOWN ARE DIAGRAMMATIC IN NATURE. CONTRACTOR IS RESPONSIBLE FOR SIZING AND LOCATING ALL PULL BOXES PER LOCAL AND NATIONAL CODE REQUIREMENTS. ALL PULL BOXES SHALL REMAIN ACCESSIBLE, COORDINATE PULL BOX LOCATIONS WITH ALL TRADES.
- ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH THE LATEST REQUIREMENTS OF THE NATIONAL ELECTRIC CODE, LOCAL UTILITY COMPANY'S REQUIREMENTS AND ALL LOCAL CODES AND ORDINANCES HAVING JURISDICTION.
- WHERE NON-FUSED DISCONNECT IS NOT PROVIDED WITHIN SIGHT OF MOTOR (OR HEATER UNIT) FEEDER (AND/OR BRANCH CIRCUIT) OVER-CURRENT DEVICE SERVING SUCH MOTOR (OR HEATER) SHALL HAVE APPROVED "LOCK-OFF" PROVISION.
- REFERENCE MECHANICAL DRAWINGS FOR ALL MECHANICAL EQUIPMENT NEEDING ELECTRICAL CONNECTIONS. MAKE ALL CONNECTIONS AND PROVIDE APPROPRIATE WIRE, CONDUIT AND OVERCURRENT PROTECTION FOR ALL EQUIPMENT. COORDINATE EXACT REQUIREMENTS WITH MECHANICAL CONTRACTOR PRIOR TO INSTALLATION.
- ALL WIRING NOT INSTALLED IN CONDUIT OR IN CABLE TRAY SHALL BE BUNDLED AND SUPPORTED BY STRUCTURE, CONDUIT SHALL NOT SERVE AS A SUPPORT.
- ALL BRANCH CIRCUIT WIRING SHALL BE A MINIMUM #12 THWN COPPER UNLESS OTHERWISE NOTED.
- COPPER EQUIPMENT GROUND CONDUCTORS ARE REQUIRED IN ALL RACEWAYS. REGARDLESS OF RACEWAY TYPE. EQUIPMENT GROUND CONDUCTORS SHALL BE SIZED IN ACCORDANCE WITH N.E.C. 250-122. BOND TO ALL EQUIPMENT IN ACCORDANCE WITH N.E.C. REQUIREMENTS.
- DISCONNECT SWITCHES FOR ALL MECHANICAL EQUIPMENT MOUNTED OUTDOORS SHALL BE NEMA 3R. PROVIDE CONNECTION TO UNIT WITH FLEXIBLE METALLIC WEATHERPROOF CONDUIT NOT LONGER THAN 6 FEET.
- ALL BRANCH CIRCUIT WIRING TO 120 VOLT LIGHTING FIXTURES AND RECEPTACLES SHALL BE AS FOLLOWS:
 - MAXIMUM LENGTH 85FT. - 2 #12, 1 #12 E.G.
 - MAXIMUM LENGTH 140FT. - 2 #10, 1 #10 E.G.
 - MAXIMUM LENGTH 225FT. - 2 #8, 1 #10 E.G.
 - MAXIMUM LENGTH 350FT. - 2 #6, 1 #10 E.G.
- MINIMUM CONDUIT SIZE 3/4".



NOTES: NEW FIRE ALARM SYSTEM SHALL REPLACE EXISTING NOTIFIER SPF-1024 WHICH SERVES EXISTING GYM COMPLEX AND ADJACENT CLINIC AND MUSIC STUDIO. CONNECT ALL EXISTING DEVICES TO NEW SYSTEM AS REQUIRED.

FIRE ALARM RISER DIAGRAM
SCALE: NTS /14202



KEYED NOTES:

- REMOVE EXISTING FEEDER CUT CONDUIT BACK FLUSH WITH GRADE CAP.
- REMOVE 600 AMP FUSE, INSTALL 400 AMP FUSE.
- C/T'S AT OVERHEAD PER UTILITIES REQUIREMENT.
- EXISTING KWH METER.
- NEW KWH METER.
- NEW 400 AMP FEEDER, 3 #500KCMIL, 1 #3 E.G. IN 3 1/2" CONDUIT RIGID GALVANIZED STEEL.
- NEW 100 AMP FEEDER, 2 #3, 1 #8 E.G. IN 1 1/4" CONDUIT

POWER RISER DIAGRAM
SCALE: NTS /14202

— = EXISTING EQUIPMENT/DEVICE TO REMAIN
— = NEW EQUIPMENT/DEVICE
- - - = EQUIPMENT/DEVICE TO BE REMOVED

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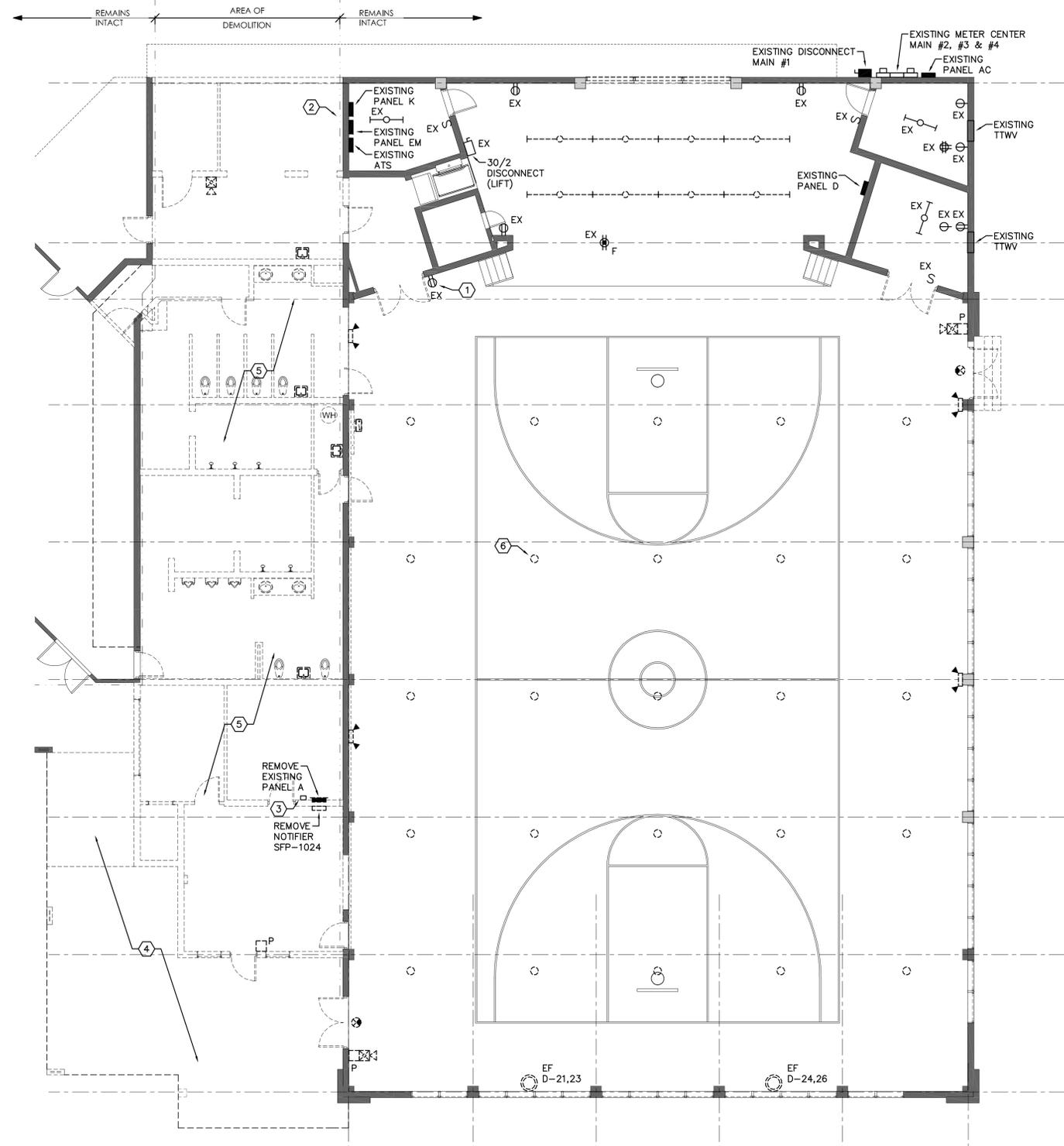
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SHEET TITLE:
ELECTRICAL DEMOLITION PLAN

REVISIONS:

DATE ISSUED: 02/20/2015
PROJECT NO.: 12.0D01

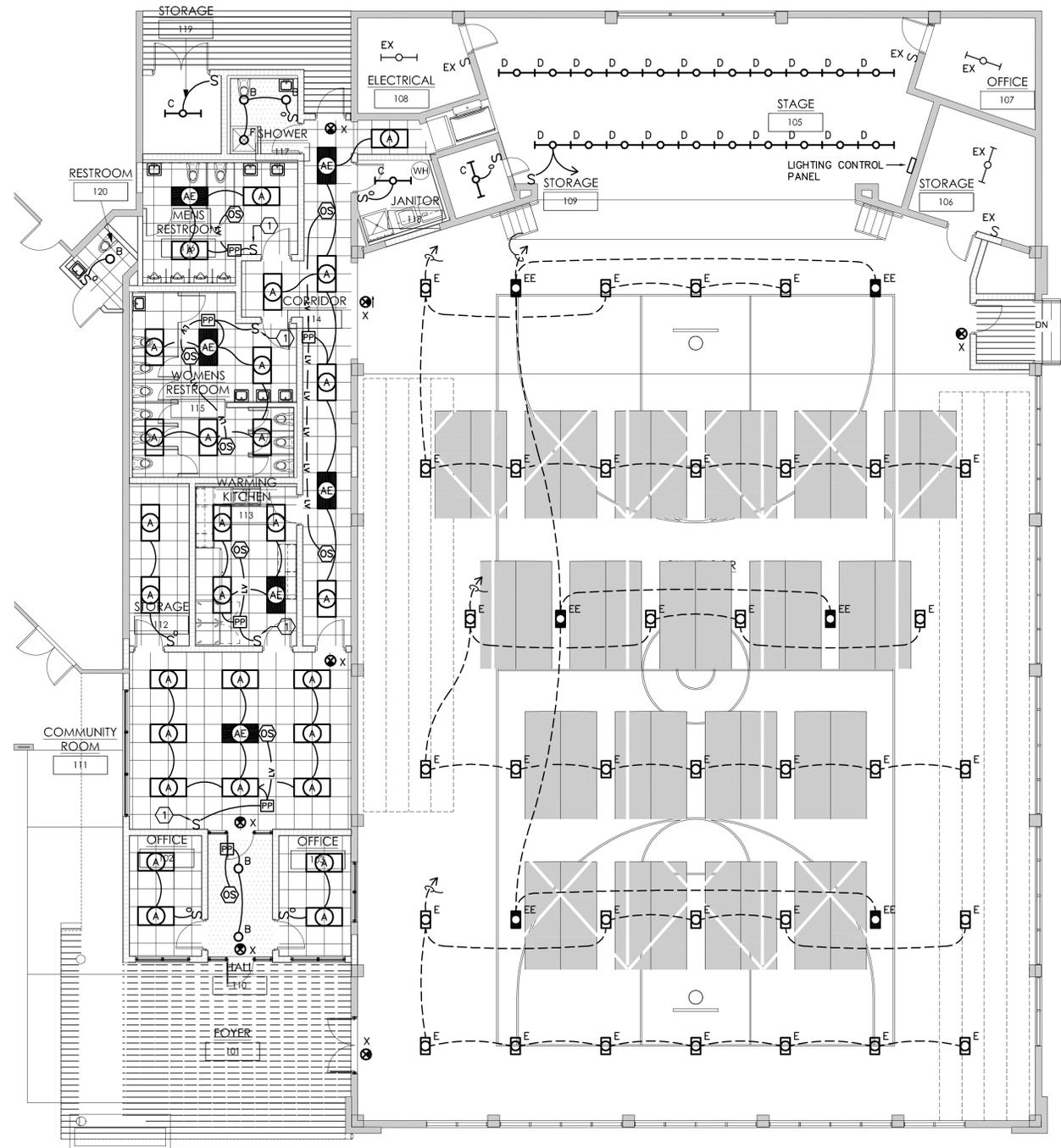
DRAWING NUMBER:



GENERAL NOTES:
1. REFER TO DEMOLITION NOTES ON E-001.

- KEYED NOTES:**
- ① MAINTAIN CIRCUIT CONTINUITY TO EXISTING SCOREBOARD.
 - ② EXISTING LB AND COMMUNICATIONS CONDUIT TO REMAIN.
 - ③ REMOVE EXISTING SOFFIT LIGHTING TIMECLOCK.
 - ④ REMOVE EXISTING SOFFIT LIGHTS WHICH ARE FED FROM PANEL A.
 - ⑤ REMOVE EXISTING POWER, LIGHTING AND FIRE ALARM DEVICES IN THIS AREA. MAINTAIN FIRE ALARM WIRING WHICH FEDS ADJACENT CLINIC. THIS SHALL BE EXTENDED TO NEW FIRE ALARM SYSTEM.
 - ⑥ REMOVE EXISTING HIGHBAY AND ASSOCIATED LOWERING SYSTEM.

ELECTRICAL DEMOLITION PLAN
SCALE: 1/8"=1'-0" /14202



LIGHTING PLAN
SCALE: 1/8"=1'-0" /14202

LIGHTING FIXTURE SCHEDULE					
TYPE	DESCRIPTION	MANUFACTURER CAT. NO.	VOLTAGE	LAMPS	MOUNTING
A	2'x4' RECESSED INDIRECT WITH PERFORATED CENTER BASKET	FOCAL POINT FLU-24-PS-2-T8-IC-120-E-G-L830-WH	120	62W T8 3500K	RECESSED IN LAYN CEILING
AE	2'x4' RECESSED INDIRECT WITH PERFORATED CENTER BASKET CONNECTED TO EMERGENCY GENERATOR CIRCUIT	FOCAL POINT FLU-24-PS-2-T8-IC-120-E-G-L830-WH	120	62W T8 3500K	RECESSED IN LAYN CEILING
B	RECESSED DOWNLIGHT	LITHONIA LIGHTING LFN-1/26TRT-F601-120	120	26W CFL	RECESSED IN HARD CEILING
C	STRIP FIXTURE	LITHONIA LIGHTING C-2-32-120-GE810IS	120	64W T8	SURFACE MOUNTED TO HARD CEILING
D	SUSEPENDED STRIP FIXTURE WITH WIREGUARD	LITHONIA LIGHTING C-2-32-120-GE810IS-WGUNNST-HC36	120	64W T8	CHAIN HANG TO 18'-0" TO BOTTOM OF LIGHT FIXTURE
E	LED SUSPENDED HIGH BAY	LITHONIA LIGHTING PTN-12000L-FD-MVOLT-LP740-IBAC120M20	120	146W 4000K	HUNG BY AIRCRAFT CABLE, LENGTH PER ARCHITECT DIRECTION
EE	LED SUSPENDED HIGH BAY CONNECTED TO EMERGENCY GENERATOR CIRCUIT	LITHONIA LIGHTING PTN-12000L-FD-MVOLT-LP740-IBAC120M20	120	146W 4000K	HUNG BY AIRCRAFT CABLE, LENGTH PER ARCHITECT DIRECTION
F	RECESSED WET LOCATION RATED DOWNLIGHT WITH CLEAR LENS	LITHONIA LIGHTING LFN-1/26TRT-F6LS1-120	120	26W CFL	RECESSED IN HARD CEILING
X	EXIT SIGN RED LETTERS WITH WHITE FACE, ARROWS AS DRAWINGS INDICATES	LITHONIA LIGHTING EXLEDM6	120	LED	WALL MOUNTED ABOVE DOOR



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SHEET TITLE:

POWER PLAN

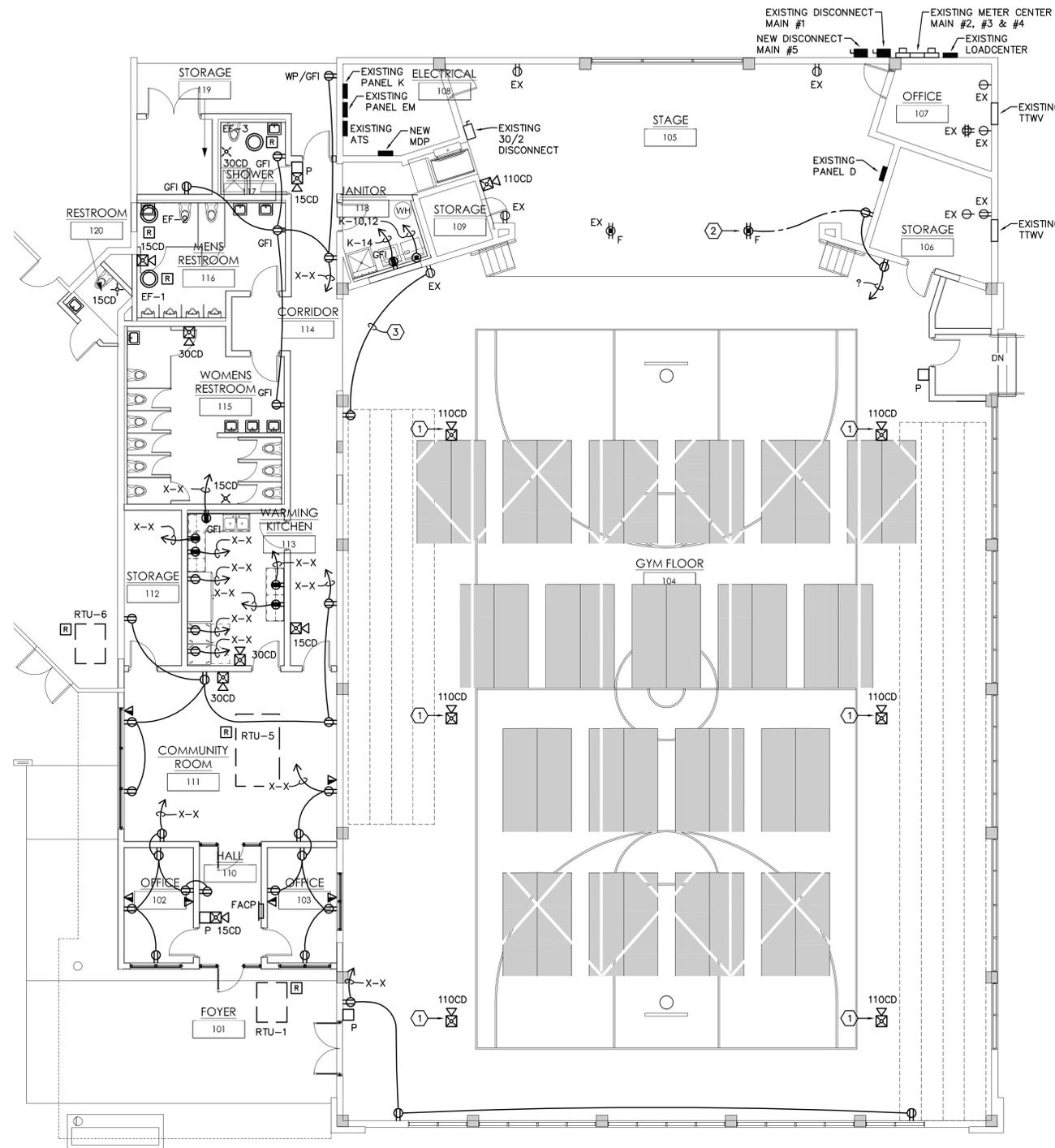
REVISIONS:

DATE ISSUED: 02/20/2015
PROJECT NO.: 12.0D01

DRAWING NUMBER:

E-004

SHEET: 4 OF 5



GENERAL NOTES:

1. DEVICES ARE NEW UNLESS OTHERWISE NOTED.

KEYED NOTES:

- ① FIRE ALARM DEVICE MOUNTED TO UNDER SIDE OF STEEL TRUSSES.
- ② FLOOR RECEPTACLE TO MATCH EXISTING TYPE THAT IS ALREADY INSTALLED IN STAGE AREA.
- ③ TIE INTO EXISTING CIRCUIT.

POWER PLAN

SCALE: 1/8"=1'-0" /14202

EXISTING

PANEL D					CIRCUIT BREAKER TYPE 120 / 240 V., 1 PH., 3W.					100A. MAIN LUGS ONLY SURFACE MTD. -- NEMA 1				
CKT. NO.	NO. OF POLES	TRIP AMPS	VOLT AMPS	LOAD	CKT. NO.	NO. OF POLES	TRIP AMPS	VOLT AMPS	LOAD					
1	2	100	--	PANEL LC	2	1	20	--	GYM RECEPTACLE					
3	--	--	--	--	4	1	20	--	GYM RECEPTACLE					
5	1	20	--	GYM LIGHTING	6	1	20	--	GYM RECEPTACLE					
7	1	20	--	GYM LIGHTING	8	1	20	--	EMERG LIGHTING					
9	1	20	--	GYM LIGHTING	10	2	20	--	SPARE					
11	1	20	--	ELECT PNL RM	12	--	--	--	--					
13	1	20	--	SPARE	14	2	20	--	SPARE					
15	1	20	--	SPARE	16	--	--	--	--					
17	1	20	--	SPARE	18	2	20	--	SPARE					
19	1	20	--	STAGE LIGHTING	20	--	--	--	--					
21	2	20	--	SPARE	22	1	20	--	STAGE LIGHTING					
23	--	--	--	--	24	2	20	--	SPARE					
25	1	20	--	TTWU	26	--	--	--	--					
27	1	20/20	--	--	28	2	20	--	NL					
29	1	--	--	SPACE	30	--	--	--	--					

ALL BREAKERS SHALL HAVE A MINIMUM OF 10,000 A.I.C. SYMMETRICAL AT 240 VOLTS
 REMOVE EXISTING 1P/20 AMP CIRCUIT BREAKER.
 NEW 2P/100 AMP CIRCUIT BREAKER TO MATCH EXISTING TYPE AND AIC RATING OF OTHER CIRCUIT BREAKERS IN THIS PANEL.

EXISTING

PANEL K					CIRCUIT BREAKER TYPE 120 / 240 V., 1 PH., 3W.					400A. MAIN LUGS ONLY SURFACE MTD. -- NEMA 1				
CKT. NO.	NO. OF POLES	TRIP AMPS	VOLT AMPS	LOAD	CKT. NO.	NO. OF POLES	TRIP AMPS	VOLT AMPS	LOAD					
1	1	20	--	SPARE	2	2	60	--	WH					
3	1	20	--	SPARE	4	--	--	--	--					
5	1	20	--	SPARE	6	2	60	--	SPARE					
7	1	20	--	SPARE	8	--	--	--	--					
9	1	20	--	SPARE	10	2	30	--	DRYER					
11	1	20	--	SPARE	12	--	--	--	--					
13	1	20	--	SPARE	14	1	20	--	WASHER					
15	1	20	--	SPARE	16	1	20	--	EXISTING ROOF RECEPTACLES					
17	2	125	--	EXISTING ATS	18	2	60	--	SPARE					
19	--	--	--	--	20	--	--	--	--					
21	1	20	--	EXISTING LIGHTING	22	2	60	--	SPARE					
23	1	20	--	--	24	--	--	--	--					
25	2	60	--	SPARE	26	2	30	--	SPARE					
27	--	--	--	--	28	--	--	--	--					
29	2	30	--	SPARE	30	1	20	--	--					
31	--	--	--	--	32	1	20	--	SPARE					
33	1	20	--	SPARE	34	2	100	--	LOAD CENTER A					
35	1	20	--	BC	36	--	--	--	--					
37	1	20	--	--	38	2	60	--	SPARE					
39	2	60	--	SPARE	40	--	--	--	--					
41	--	--	--	--	42	1	--	--	SPACE					

ALL BREAKERS SHALL HAVE A MINIMUM OF 10,000 A.I.C. SYMMETRICAL AT 240 VOLTS
 NEW PANEL A IS TO BE REFED FROM EXISTING 100 AMP CIRCUIT BREAKER IN THIS PANEL.

EXISTING

PANEL EM					CIRCUIT BREAKER TYPE 120 / 240 V., 1 PH., 3W.					125A. MAIN LUGS ONLY SURFACE MTD. -- NEMA 1				
CKT. NO.	NO. OF POLES	TRIP AMPS	VOLT AMPS	LOAD	CKT. NO.	NO. OF POLES	TRIP AMPS	VOLT AMPS	LOAD					
1	1	20	--	EXISTING ADA LIFT	2	1	20	--	CLING REFRIG					
3	1	20	--	SPARE	4	2	50	--	SPARE					
5	1	20/20	--	SPARE	6	--	--	--	--					
7	2	30	--	SPARE	8	1	20	--	SPARE					
9	--	--	--	--	10	1	20	--	SPARE					
11	1	20	--	LIGHTING COMMUNITY CENTER	12	1	20	--	PA SYSTEM					

ALL BREAKERS SHALL HAVE A MINIMUM OF 10,000 A.I.C. SYMMETRICAL AT 240 VOLTS

NEW

PANEL MDP					CIRCUIT BREAKER TYPE 120 / 240 V., 3 PH., 4W.					400A. MAIN LUGS ONLY SURFACE MTD. -- NEMA 1				
CKT. NO.	NO. OF POLES	TRIP AMPS	VOLT AMPS	LOAD	CKT. NO.	NO. OF POLES	TRIP AMPS	VOLT AMPS	LOAD					
1	1	--	--	--	2	1	--	--	--					
3	1	--	--	--	4	1	--	--	--					
5	1	--	--	--	6	1	--	--	--					
7	1	--	--	--	8	1	--	--	--					
9	1	--	--	--	10	1	--	--	--					
11	1	--	--	--	12	1	--	--	--					
13	1	--	--	--	14	1	--	--	--					
15	1	--	--	--	16	1	--	--	--					
17	1	--	--	--	18	1	--	--	--					
19	1	--	--	--	20	1	--	--	--					
21	1	--	--	--	22	1	--	--	--					
23	1	--	--	--	24	1	--	--	--					
25	1	--	--	--	26	1	--	--	--					
27	1	--	--	--	28	1	--	--	--					
29	1	--	--	--	30	1	--	--	--					
31	--	--	--	--	32	1	--	--	--					
33	1	--	--	--	34	1	--	--	--					
35	1	--	--	--	36	1	--	--	--					
37	1	--	--	--	38	1	--	--	--					
39	1	--	--	--	40	1	--	--	--					
41	1	--	--	--	42	1	--	--	--					

ALL BREAKERS SHALL HAVE A MINIMUM OF 10,000 A.I.C. SYMMETRICAL AT 240 VOLTS

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SHEET TITLE:

PANEL SCHEDULES

REVISIONS: