CARLISLE BAPTIST CHURCH
REBUILD
835 BERTHE AVENUE
PANAMA CITY, FL

PREPARED BY: BROWN
ISSUE DATE: 05-09-2024
REVIEWED BY: MERCER
SCALE: AS SHOWN

A1 SHEET 1 OF 43

PROJECT NO. 22004

COVER SHEET

CARLISLE BAPTIST CHURCH
REBUILD
835 BERTHE AVENUE
PANAMA CITY, FLORIDA

ABBREVIATIONS

A.B.	ANCHOR BOLT	EXIST.	EXISTING	LAV.	LAVATORY	S.F./SQ.FT.	SQUARE FOOT(FEET)
A/H	AIR HANDLER	EXT.	EXTERIOR	LBL.	LABEL	SHT.	SHEET
AHU	AIR HANDLING UNIT	F.A.C.	FIRE ALARM CABINET	L.F.	LINEAL FEET	SIM.	SIMILAR
A.F.F.	ABOVE FINISH FLOOR	F.A.P.	FIRE ALARM PULL STATION	MAX.	MAXIMUM	SPEC.	SPECIFICATION
BLDG.	BUILDING	F.D.	FLOOR DRAIN	MECH.	MECHANICAL	S.S.	STAINLESS STEEL
B.U.R.	BUILT UP ROOF	FDN.	FOUNDATION	MTL.	METAL	STD.	STANDARD
C.I.	CAST IRON	F.E.	FIRE EXTINGUISHER	M.H.	MANHOLE	ST./STL.	STEEL
C.J.	CONSTRUCTION JOINT	F.E.C.	FIRE EXTINGUISHER CABINET	MIN.	MINIMUM	STOR.	STORAGE
C.L.	CENTER LINE	FL.	FLOOR	MISC.	MISCELLANEOUS	SUSP.	SUSPENDED
CLG.	CEILING	FTG.	FOOTING	MLDG.	MOULDING	TEL.	TELEPHONE
CLO.	CLOSET	GA.	GAUGE	MTD.	MOUNTED	T & G	TONGUE & GROOVE
CLR.	CLEAR	GALV.	GALVANIZED	N.I.C.	NOT IN CONTRACT	TV	TELEVISION
C.M.U.	CONCRETE MASONRY UNIT	G.C.	GENERAL CONTRACTOR	NO.	NUMBER	TYP.	TYPICAL
CONC.	CONCRETE	GYP.	GYPSUM	N.T.S.	NOT TO SCALE	U.N.O.	UNLESS NOTED OTHERWISE
CONSTR.	CONSTRUTION	GYP. BD.	GYPSUM BOARD	O.C.	ON CENTER	V.C.T.	VINYL COMPOSITION TILE
C.O.	CASED OPENING	H.B.	HOSE BIBB	OPP.	OPPOSITE	VERT.	VERTICAL
C.T.	CERAMIC TILE	H.C.	HOLLOW CORE	PTD.	PAINTED	VEST.	VESTIBULE
DBL.	DOUBLE	HDW.	HARDWARE	PRE-FAB.	PRE-FABRICATED	W.C.	WATER CLOSET
DTL.	DETAIL	HGT.	HEIGHT	PR.	PAIR	WD.	WOOD
DIA.	DIAMETER	H.M.	HOLLOW METAL	P.T.	PRESSURE TREATED	W.H.	WATER HEATER
DISP.	DISPENSER	HORIZ.	HORIZONTAL	Q.T.	QUARRY TILE	W.P.	WATERPROOF
DN.	DOWN	HR.	HOUR	REINF.	REINFORCED	WT.	WEIGHT
DWG	DRAWING	HVAC	HEATING, VENTILATION & A/C	R.D.	ROOF DRAIN	W.W.F.	WELDED WIRE FABRIC
EA.	EACH	IN	INCH	RECEP.	RECEPTACLE	W.W.M.	WELDED WIRE MESH
E.J.	EXPANSION JOINT	INSUL.	INSULATION	REF.	REFRIGERATOR	YD.	YARD
EL.	ELEVATION	INT.	INTERIOR	REV.	REVISION		
ELEC.	ELECTRICAL	INV.	INVERT	RM.	ROOM		
ELEV.	ELEVATION	JAN.	JANITOR	S.A.T.	SUSPENDED ACOUSTICAL TILE		
EQ.	EQUAL	JT.	JOINT	S.C.	SOLID CORE		
EQUIP.	EQUIPMENT	LGT.	LENGTH	SCHED.	SCHEDULE		
E.W.C.	ELECTRIC WATER COOLER	LAM.	LAMINATE	SECT.	SECTION		

SYMBOLS

DETAIL
1 / A1 — DETAIL NO. / SHEET NO.

SECTION
1 / A1 — SECTION NO. / SHEET NO.

ELEVATION
1 / A1 — ELEVATION NO. / SHEET NO.

INTERIOR ELEVATIONS
ELEVATION NO.

REVISION
1 — REVISION NO.

BUILDING DATA

CLASSIFICATION/BUILDING AREA:

CLASSIFICATION OF OCCUPANCY: A-3 SUBGROUP: ____
CONSTRUCTION TYPE: II-B
____ UNSPRINKLERED ___X___ SPRINKLERED
MAXIMUM NO. STORIES: 3 MAXIMUM HEIGHT: 75'
28,500 SQUARE FEET UNSPRINKLERED ALLOWED
___X___ ACTUAL EXCEEDS UNSPRINKLERED ALLOWED
____ ACTUAL DOES NOT EXCEED UNSPRINKLERED ALLOWED

MAXIMUM OCCUPANCY

TOTAL OCCUPANT LOAD: 563

WORSHIP CENTER SQUARE FOOTAGE:	12,500
EDUCATION BUILDING - FIRST FLOOR SQUARE FOOTAGE:	8570
EDUCATION BUILDING - FIRST FLOOR SQUARE FOOTAGE:	8570
CONCOURSE SQUARE FOOTAGE:	3871
TOTAL NEW SQUARE FOOTAGE:	33,511 SF
EXISTING BUILDING SQUARE FOOTAGE:	24,500 SF

DESIGN CODES

FLORIDA BUILDING CODE: 2023 EDITION

STRUCTURAL INFORMATION

FLOOR LIVE LOAD:	SEE STRUCTURAL
ROOF LIVE LOAD:	SEE STRUCTURAL
BASIC WIND SPEED, MPH:	SEE STRUCTURAL
WIND IMPORTANCE FACTOR: BLDG CATEGORY:	SEE STRUCTURAL
WIND EXPOSURE:	SEE STRUCTURAL
INTERNAL PRESSURE COEFFICIENT:	SEE STRUCTURAL
WIND PRESSURE COMPONENTS & CLADDING:	SEE STRUCTURAL
DESIGN SOIL LOAD BEARING CAPACITY:	SEE STRUCTURAL

DRAWING INDEX

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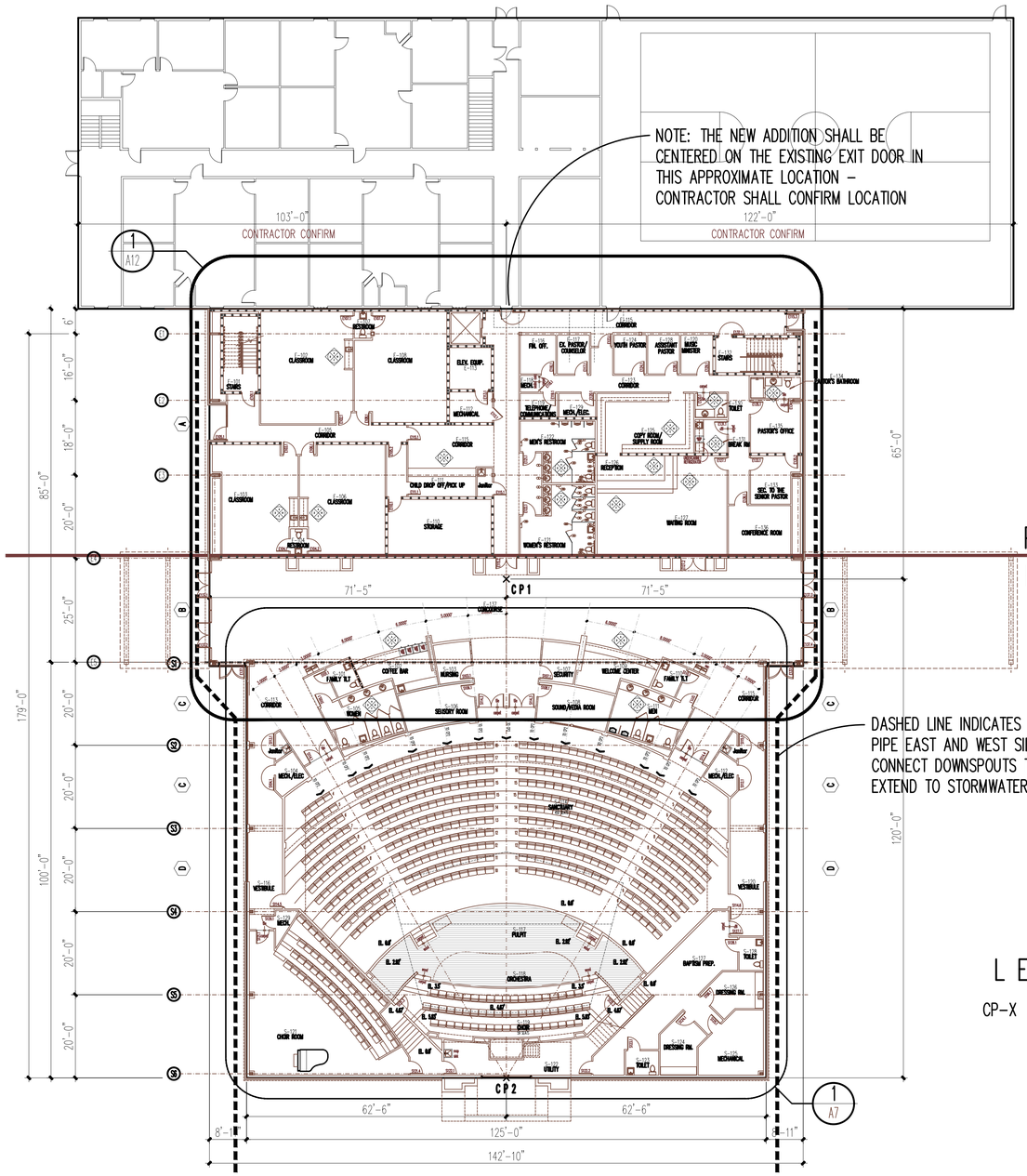
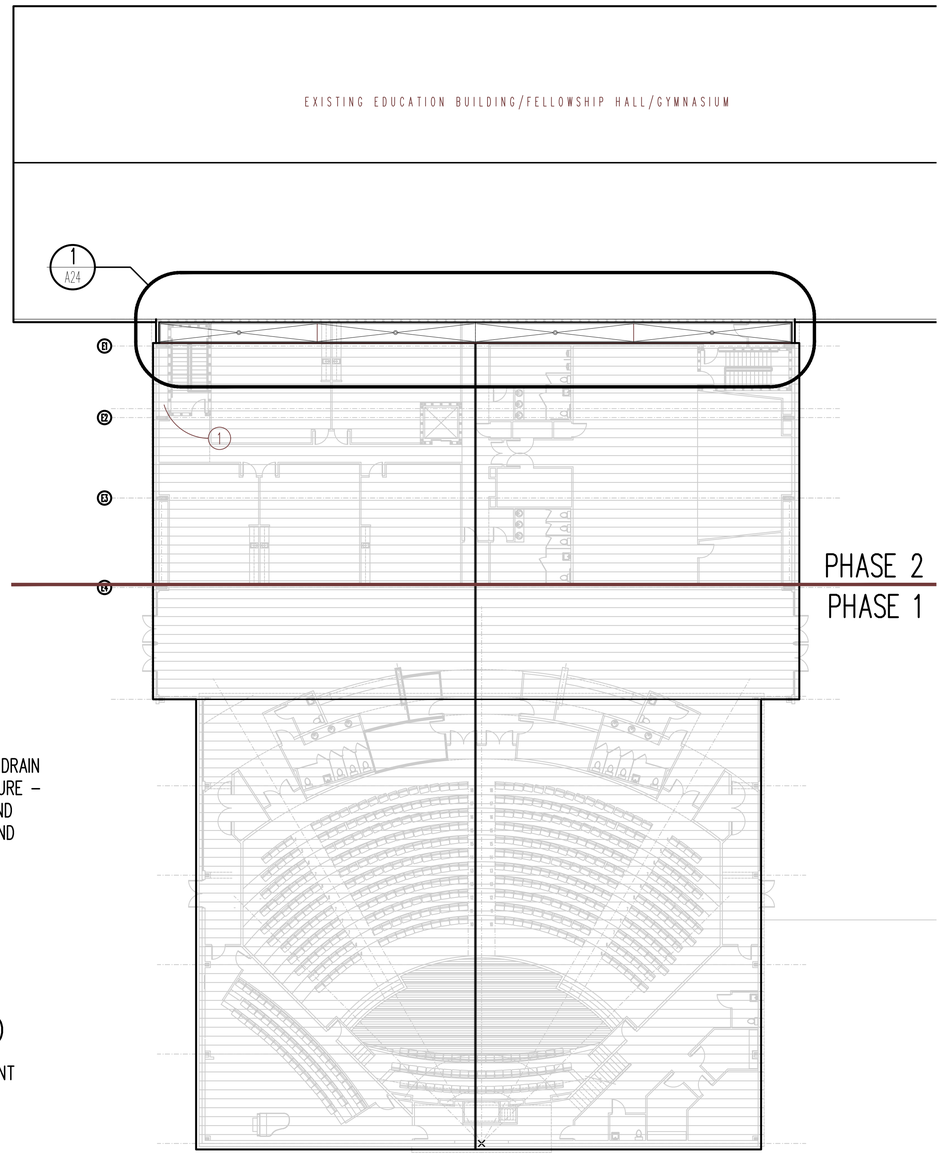


LEGEND

CP–X CONTROL POINT



NORTH

FLOOR PLAN–OVERALL

11 x 17 SCALE: 3/32"=1'-0"
24 x 36 SCALE: 3/16"=1'-0"
GRAPHIC SCALE 0 1' 4' 8' 12'

OVERALL FP KEYNOTES

1. GUTTER
2. NEW STANDING SEAM METAL ROOF

NORTH

ROOF PLAN–OVERALL

11 x 17 SCALE: 3/32"=1'-0"
24 x 36 SCALE: 3/16"=1'-0"
GRAPHIC SCALE 0 1' 4' 8' 12'

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A2
SHEET 2 OF 43

PROJECT NO. 22004

OVERALL FLOOR PLAN

CARLISLE BAPTIST CHURCH
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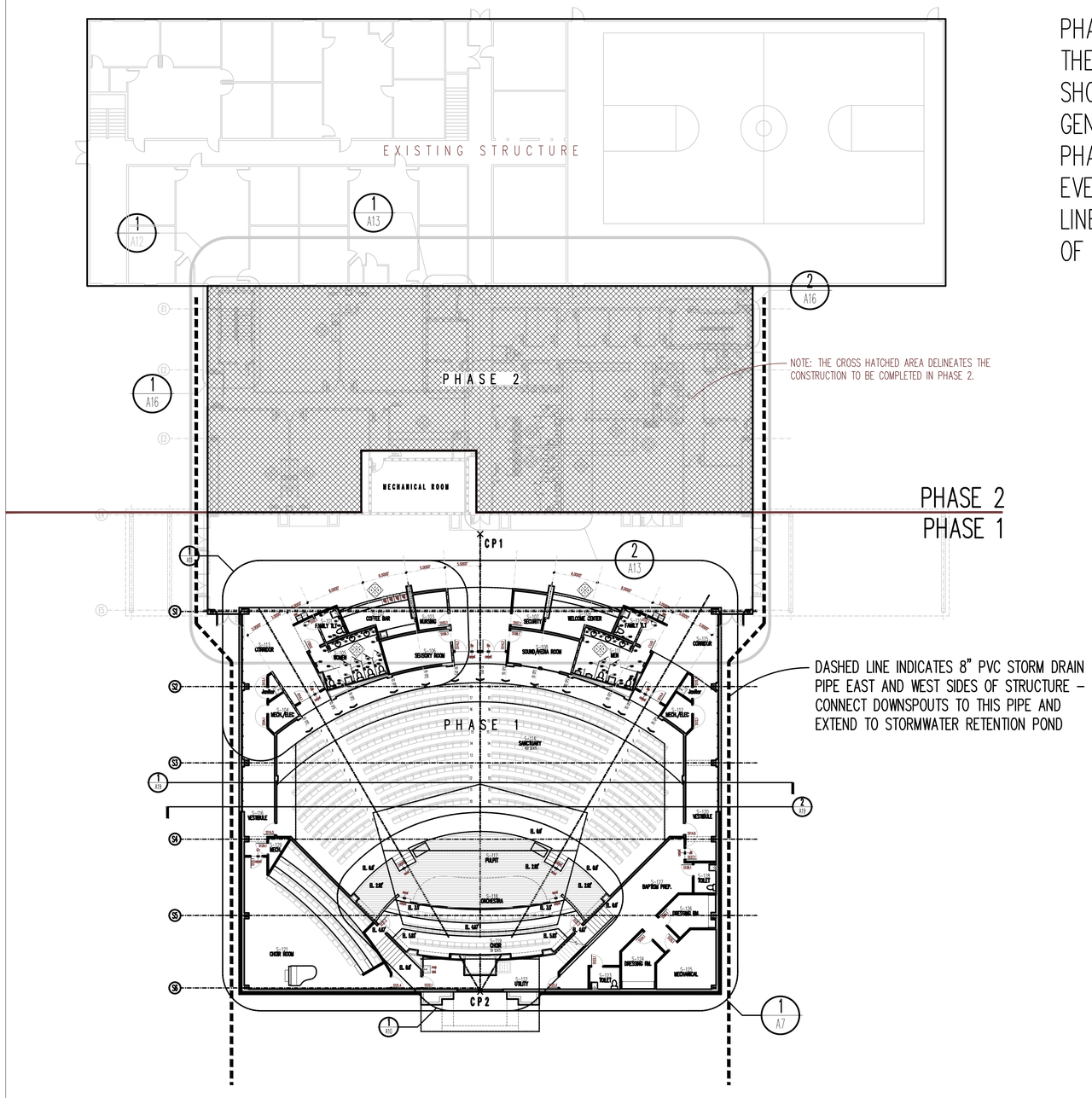

PHASE 1 SCOPE:
THE PHASE 1 SCOPE FOR THE BUILDING SHALL INCLUDE EVERYTHING SHOWN IN THE PHASE DELINEATION DIAGRAM AS INCLUDED IN PHASE 1. GENERALLY, EVERYTHING RELATED TO THE BUILDING, SOUTH OF THE PHASE DELINEATION LINE IS INCLUDED IN PHASE 1. GENERALLY, EVERYTHING RELATED TO THE BUILDING, NORTH OF THE PHASE DELINEATION LINE IS IN PHASE 2. ANY QUESTIONS REGARDING THE SCOPE AND EXTENT OF PHASE 1 SHALL BE CLARIFIED PRIOR TO CONSTRUCTION.

PHASE 1-FLOOR PLAN-OVERALL-PHASE DELINEATION

11 x 17 SCALE: 3/32"=1'-0"
24 x 36 SCALE: 3/16"=1'-0"

A2.2
SHEET 22 OF 43

PROJECT NO.
22004

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OVERALL FLOOR PLAN-PHASE DELINEATION

CARLISLE BAPTIST CHURCH
REBUILD
835 BERTHIE AVENUE
PANAMA CITY, FLORIDA

STATE OF FLORIDA REGISTERED ARCHITECT 12737 MARK MERCER

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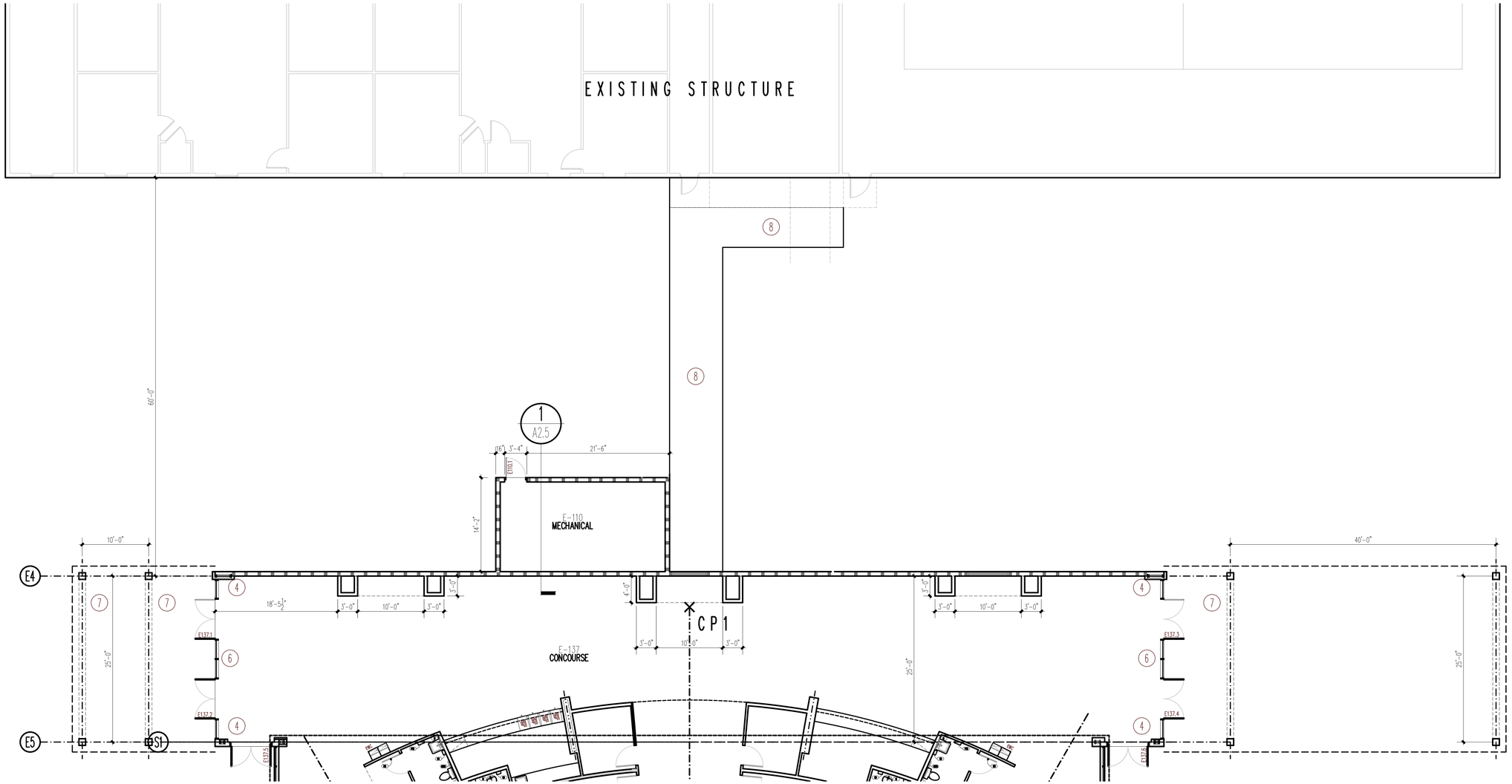

NORTH

1
A12

PHASE 1 - CONCOURSE 1st FLOOR PLAN

11 x 17 SCALE: 1"=16'-0"
24 x 36 SCALE: 1"=8'-0"

GRAPHIC SCALE
0 8' 16' 32'

PHASE 1
CONCOURSE 1st FLOOR PLAN KEYNOTES

1. PRE-FABRICATED STEEL STAIR
2. CASEWORK - SEE INTERIOR ELEVATIONS AND DETAILS
3. ELEVATOR
4. STEEL BUILDING COLUMN WRAPPED WITH METAL STUDS AND DRYWALL
5. 24 RISERS @ 6.5" = 13'-0" / 11" TREADS
6. ALUMINUM STOREFRONT - SEE WINDOW DETAILS
7. FABRICATED POWDER COATED STEEL CANOPY FRAME - SEE STRUCTURAL DRAWINGS - SUBMIT SHOP DRAWINGS PRIOR TO CONSTRUCTION
8. 8' WIDE X 4" THICK CONCRETE SIDEWALK REINFORCED WITH 6 X 6 10/10 W.W.F.

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A2.3
SHEET 23 OF 43

PROJECT NO. 22004

1ST FLOOR PLAN - PHASE 1 CONCOURSE

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PANAMA CITY, FLORIDA

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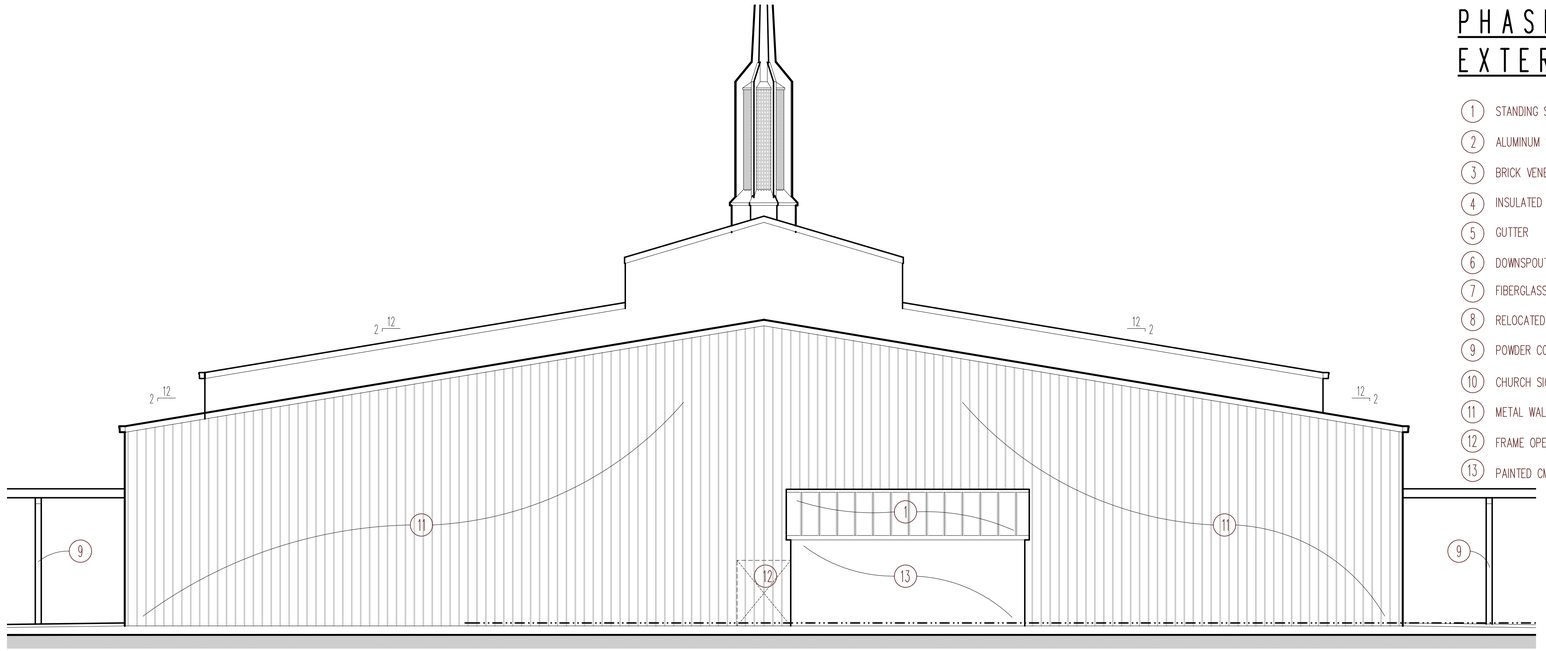
PHASE 1
EXTERIOR ELEVATION KEYNOTES

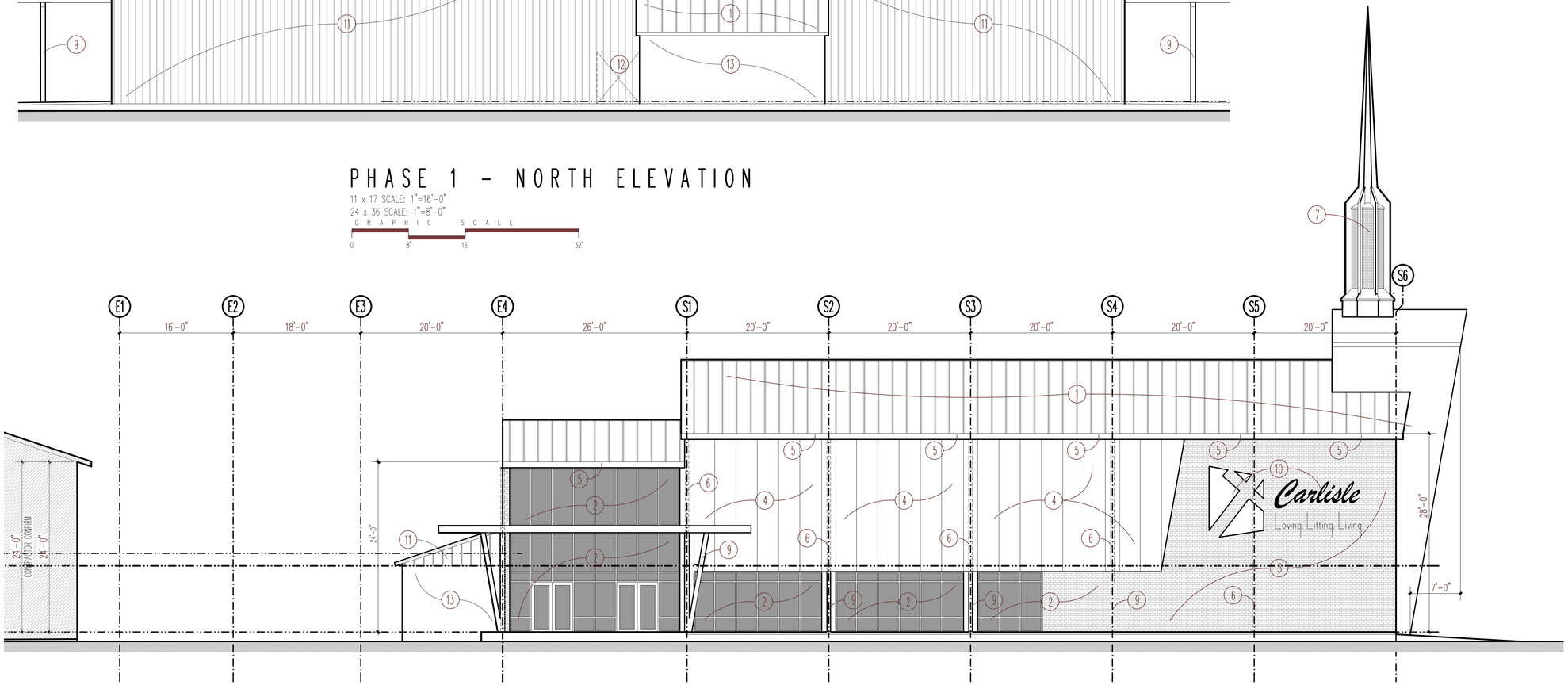
1. STANDING SEAM METAL ROOF
2. ALUMINUM STOREFRONT – 1" INSULATING LOW E GLAZING
3. BRICK VENEER
4. INSULATED METAL WALL PANELS
5. GUTTER
6. DOWNSPOUT/RAIN LEADER CONCEALED IN WALL
7. FIBERGLASS STEEPLE
8. RELOCATED EXISTING FACETED GLASS WINDOW
9. POWDER COATED STEEL CANOPY FRAME – SEE DETAIL AND STRUCTURAL DRAWINGS
10. CHURCH SIGN – BY OTHERS
11. METAL WALL PANELS
12. FRAME OPENING FOR FUTURE 6'–0"W. x 7'–0"H. DOOR
13. PAINTED CMU



PHASE 1 – NORTH ELEVATION

11 x 17 SCALE: 1"=16'–0"
24 x 36 SCALE: 1"=8'–0"

GRAPHIC SCALE
0 8' 16' 32'



PHASE 1 – WEST ELEVATION

11 x 17 SCALE: 1"=16'–0"
24 x 36 SCALE: 1"=8'–0"

GRAPHIC SCALE
0 8' 16'

A2.4 SHEET 24 OF 43

PROJECT NO. 22004

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ISSUE DATE 05-09-2024

SCALE AS SHOWN

1ST FLOOR PLAN – PHASE 1 CONCOURSE

CARLISLE BAPTIST CHURCH
REBUILD
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PANAMA CITY, FLORIDA

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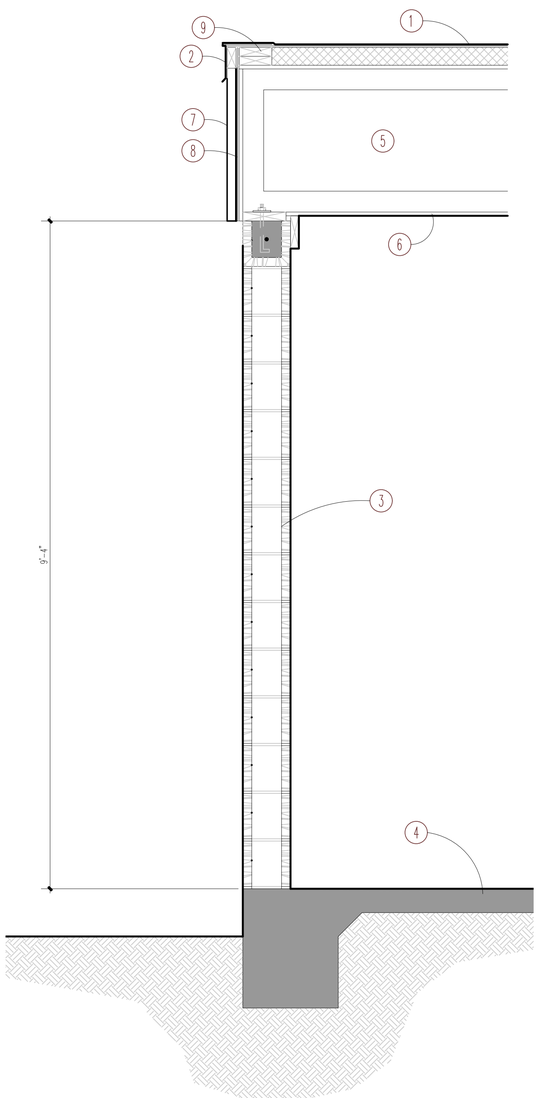
PHASE 1
MECHANICAL ROOM SECTION KEYNOTES

1. MEMBRANE ROOFING OVER TAPERED INSULATION
2. PREFINISHED METAL EAVE DRIP
3. 8" CMU – FILL ALL CELLS WITH CONCRETE AND REINFORCE WITH MIN. 1–#5 VERTICAL @ 24" O.C. – SEE STRUCTURAL DRAWINGS
4. REINFORCED CONCRETE FOUNDATION – SEE STRUCTURAL DRAWINGS
5. PRE–FAB PRE–ENG WOOD TRUSSES @ 24" O.C. – SEE STRUCTURAL DRAWINGS
6. 5/8" GYPSUM BOARD CEILING
7. METAL WALL PANELS – MATCH SANCTUARY
8. TYVEK OVER 5/8" CDX PLYWOOD
9. 2 – 2 X 6 BLOCKING – SEE STRUCTURAL DRAWINGS FOR ATTACHMENT METHOD



1
A2.5

PHASE 1 – SECTION @ MECHANICAL ROOM/CONCOURSE

11 x 17 SCALE: 1"=16'-0"
24 x 36 SCALE: 1"=8'-0"

GRAPHIC SCALE
0 8' 16' 32'

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SHEET A2.5 25 OF 43

PROJECT NO.
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1ST FLOOR PLAN – PHASE 1 CONCOURSE SECTION

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REBUILD
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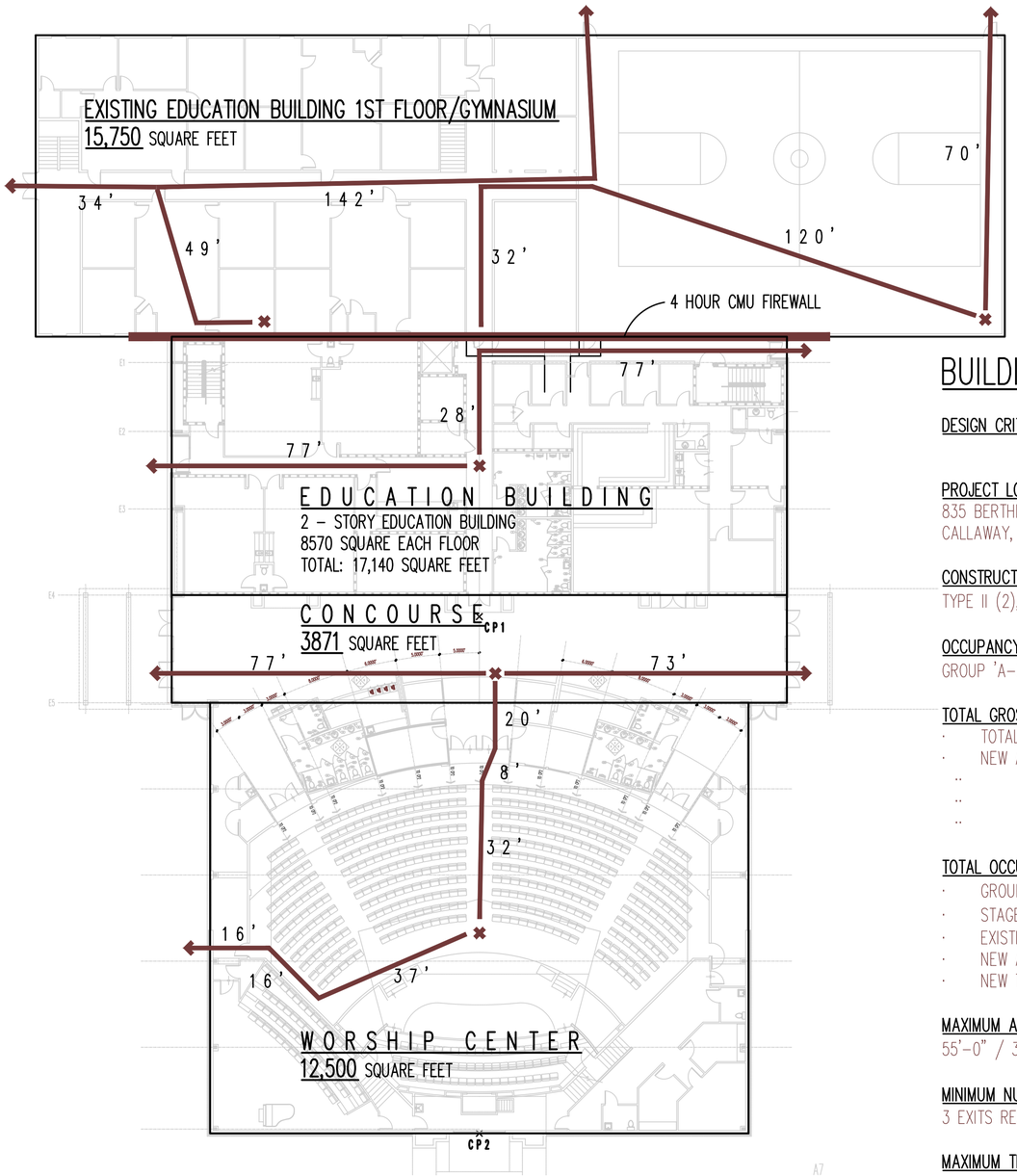
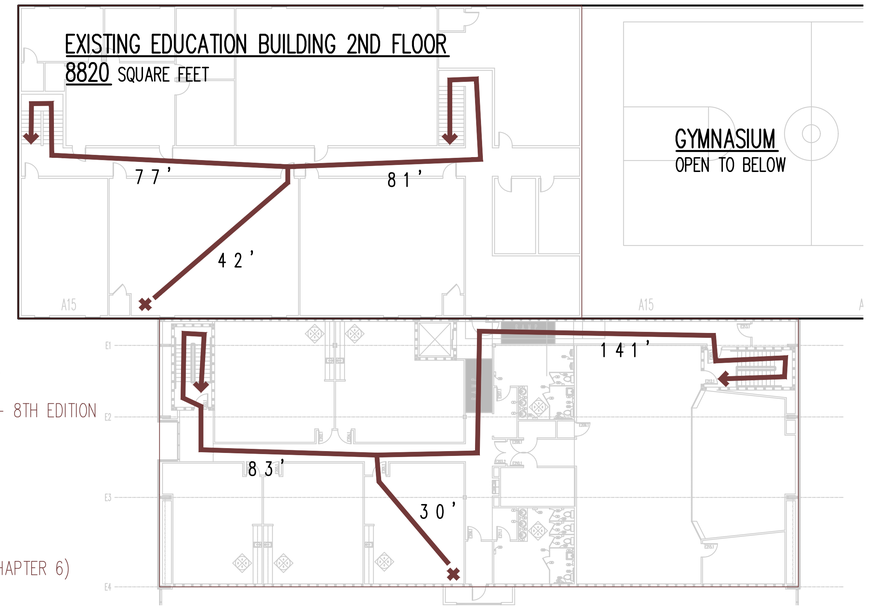


NORTH

LIFE SAFETY PLAN 1ST FLOOR PLAN - OVERALL

11 x 17 SCALE: 1/32"=1'-0"
24 x 36 SCALE: 1/16"=1'-0"

GRAPHIC SCALE
01" 16' 32' 48'



BUILDING DATA:

DESIGN CRITERIA: 2023 F.B.C. - 8TH EDITION

PROJECT LOCATION:
835 BERTHE AVENUE
CALLAWAY, FLORIDA

CONSTRUCTION TYPE: (F.B.C, CHAPTER 6)
TYPE II (2), B

OCCUPANCY CLASSIFICATION: (F.B.C. CHAPTER 3)
GROUP 'A-3', ASSEMBLY

TOTAL GROSS AREA SQUARE FOOTAGE:
- TOTAL EXISTING STRUCTURE = 24,500 S.F.
- NEW ADDITION TOTAL = 33,511 S.F.
  - 2 STORY EDUCATION BUILDING = 17,140 S.F.
  - CONCOURSE = 3871
  - WORSHIP CENTER = 12,500 S.F.

TOTAL OCCUPANT LOAD: (F.B.C. TABLE 1004 .5)
- GROUP 'A-3', ASSEMBLY - 508 FIXED CHAIRS
- STAGE OR PLATFORM, 1/15 S.F. = 829/15 = 55
- EXISTING OCCUPANT LOAD = 50 PERSONS
- NEW ADDITION OCCUPANT LOAD INCREASE = 563
- NEW TOTAL OCCUPANT LOAD = 66

MAXIMUM ALLOWABLE BUILDING HEIGHT: (F.B.C. - TABLE 504.3 / 504.4)
55'-0" / 3 STORIES

MINIMUM NUMBER OF EXITS: (F.B.C. TABLE 1006.3.2)
3 EXITS REQUIRED

MAXIMUM TRAVEL DISTANCE TO EXITS (F.B.C. TABLE 1017.2)
GROUP 'A-3', BUSINESS - 250.0' WITH SPRINKLER SYSTEM
GROUP 'A-3', BUSINESS - 200.0' WITHOUT SPRINKLER SYSTEM

FIRE PROTECTION : AUTOMATIC FIRE SPRINKLER SYSTEM PROVIDED.

ALARM, DETECTION, & NOTIFICATION : FIRE ALARM SYSTEM TO BE PROVIDED.

CORRIDOR FIRE RESISTANCE RATING: (F.B.C. TABLE 1020.1)
GROUP 'A-3', BUSINESS - NOT REQUIRED WITH SPRINKLER SYSTEM
GROUP 'A-3', BUSINESS- 1 HOUR RATING WITHOUT SPRINKLER SYSTEM

NORTH

LIFE SAFETY PLAN 2ND FLOOR PLAN - OVERALL

11 x 17 SCALE: 1/32"=1'-0"
24 x 36 SCALE: 1/16"=1'-0"

GRAPHIC SCALE
01" 16' 32' 48'

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SHEET 3 OF 43

PROJECT NO.
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LIFE SAFETY PLAN-OVERALL-1ST FLOOR

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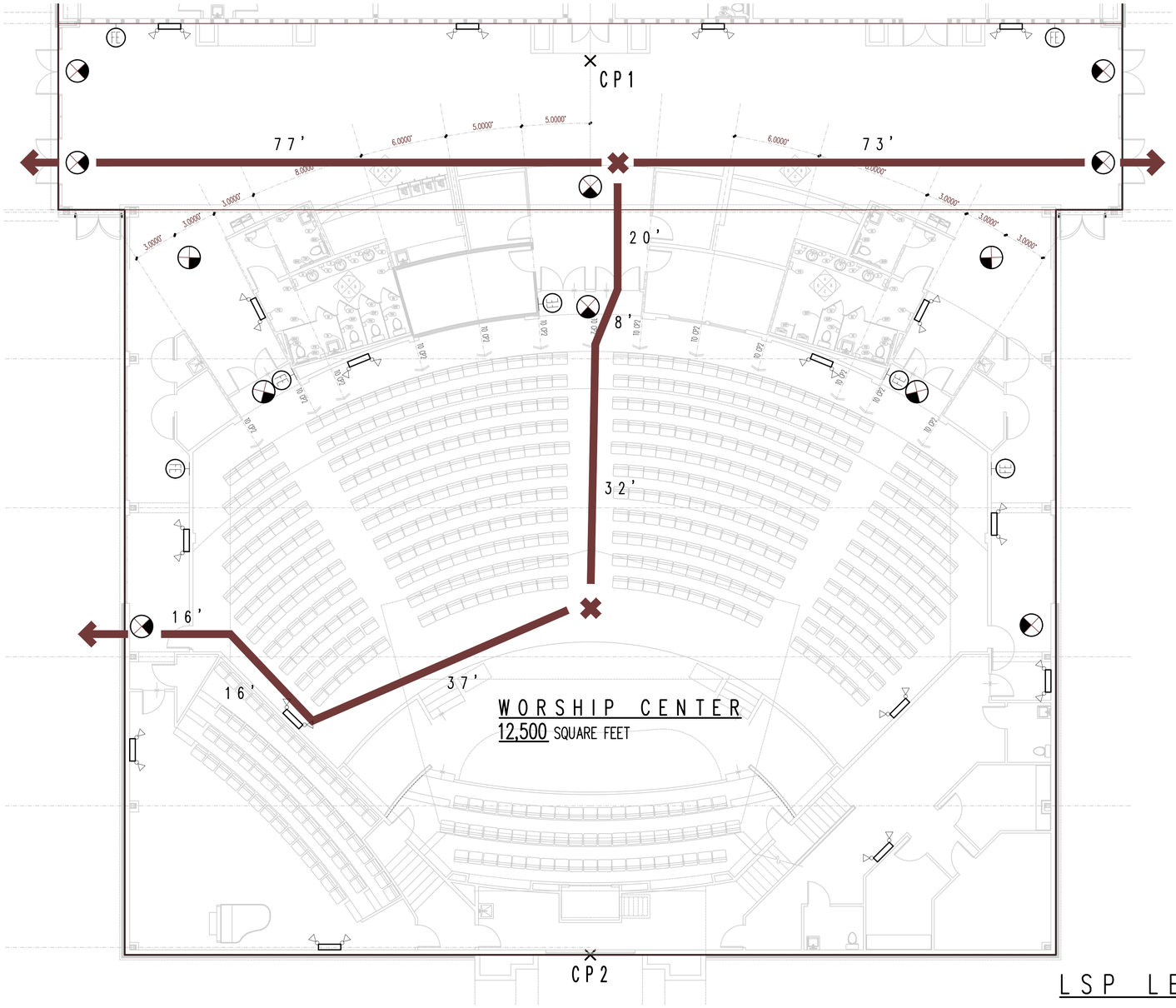
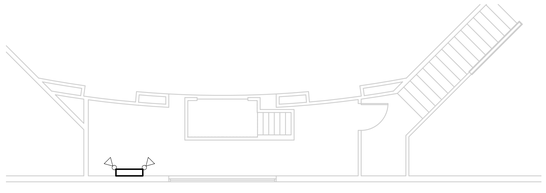


NORTH

LIFE SAFETY 1ST FLOOR PLAN - OVERALL

11 x 17 SCALE: 1/32"=1'-0"
24 x 36 SCALE: 1/16"=1'-0"

GRAPHIC SCALE
0' 16' 32' 48'



BAPTISTRY

BUILDING DATA:

DESIGN CRITERIA: 2023 F.B.C. - 8TH EDITION

PROJECT LOCATION:
835 BERTHE AVENUE
CALLAWAY, FLORIDA

CONSTRUCTION TYPE: (F.B.C, CHAPTER 6)
TYPE II (2), B

OCCUPANCY CLASSIFICATION: (F.B.C. CHAPTER 3)
GROUP 'A-3', ASSEMBLY

TOTAL GROSS AREA SQUARE FOOTAGE:
- TOTAL EXISTING STRUCTURE = 24,500 S.F.
- NEW ADDITION TOTAL = 33,511 S.F.
  - 2 STORY EDUCATION BUILDING = 17,140 S.F.
  - CONCOURSE = 3871
  - WORSHIP CENTER = 12,500 S.F.

TOTAL OCCUPANT LOAD: (F.B.C. TABLE 1004 .5)
- GROUP 'A-3', ASSEMBLY - 508 FIXED CHAIRS
- STAGE OR PLATFORM, 1/15 S.F. = 829/15 = 55
- EXISTING OCCUPANT LOAD = 50 PERSONS
- NEW ADDITION OCCUPANT LOAD INCREASE = 16
- NEW TOTAL OCCUPANT LOAD = 66

MAXIMUM ALLOWABLE BUILDING HEIGHT: (F.B.C. - TABLE 504.3 / 504.4)
55'-0" / 3 STORIES

MINIMUM NUMBER OF EXITS: (F.B.C. TABLE 1006.3.2)
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FIRE PROTECTION : AUTOMATIC FIRE SPRINKLER SYSTEM PROVIDED.

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GROUP 'A-3', BUSINESS - NOT REQUIRED WITH SPRINKLER SYSTEM
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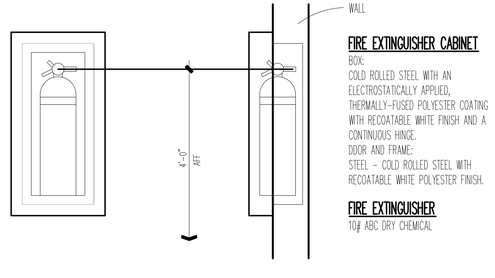
LSP LEGEND

- FE — FIRE EXTINGUISHER
- EXIT LIGHT
- EMERGENCY LIGHT
- TRAVEL PATH WITH DISTANCE



FIRE EXTINGUISHER CABINET
BOX:
COLD ROLLED STEEL WITH AN ELECTROSTATICALLY APPLIED, THERMALLY-FUSED POLYESTER COATING WITH RECOATABLE WHITE FINISH AND A CONTINUOUS HINGE.
DOOR AND FRAME:
STEEL - COLD ROLLED STEEL WITH RECOATABLE WHITE POLYESTER FINISH.

FIRE EXTINGUISHER
10# ABC DRY CHEMICAL

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A4
SHEET 4 OF 43

PROJECT NO.
22004

LIFE SAFETY PLAN-SANCTUARY

CARLISLE BAPTIST CHURCH
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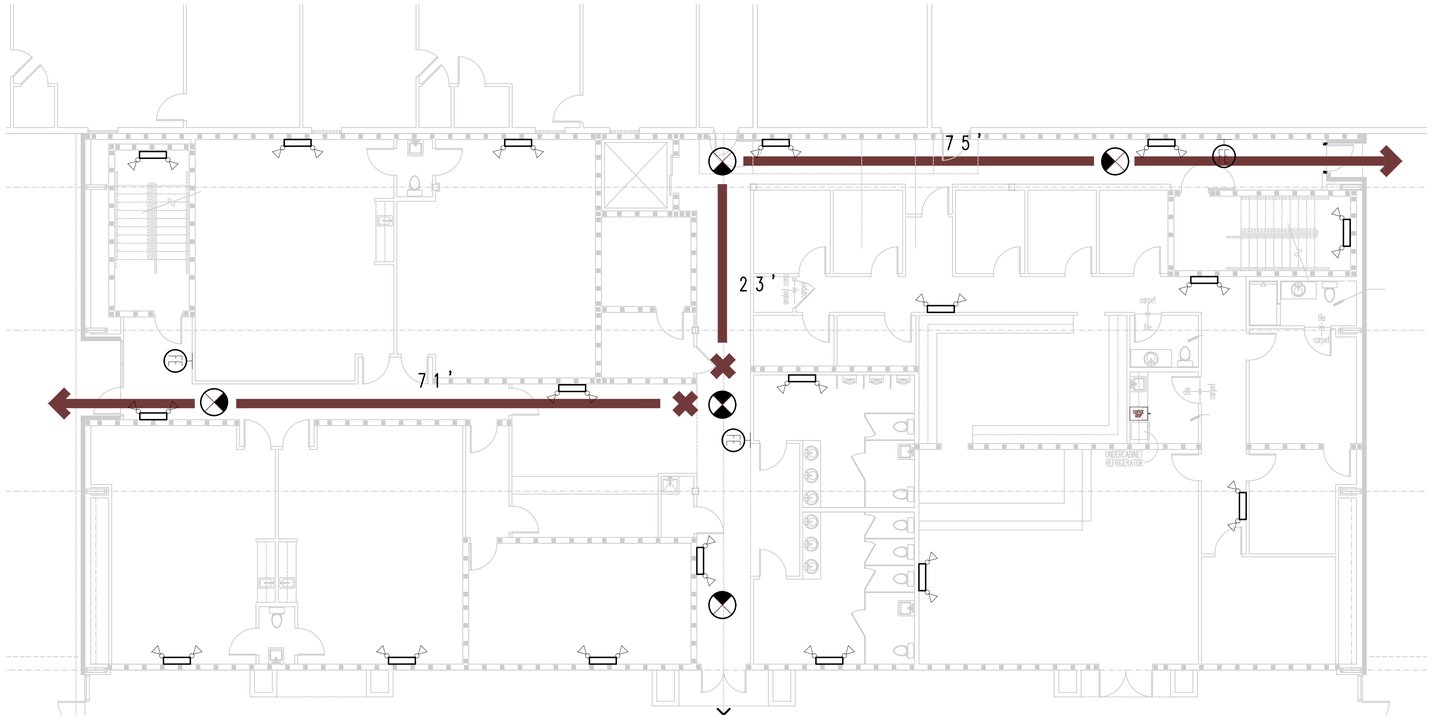


NORTH

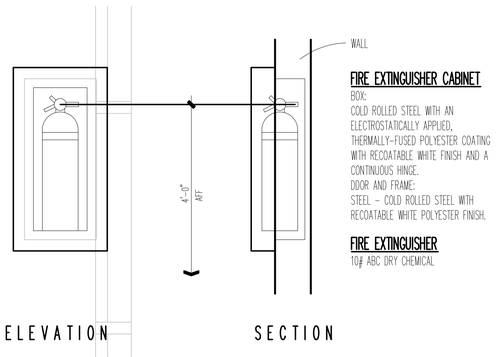
LIFE SAFETY 1ST FLOOR PLAN - EDUCATION BUILDING

11 x 17 SCALE: 1/16"=1'-0"
24 x 36 SCALE: 1/8"=1'-0"

GRAPHIC SCALE
0 1' 8' 16' 24'

EDUCATION BUILDING

2 - STORY EDUCATION BUILDING
8570 SQUARE EACH FLOOR
TOTAL: 17,140 SQUARE FEET



FIRE EXTINGUISHER CABINET
BOX:
COLD ROLLED STEEL WITH AN ELECTROSTATICALLY APPLIED, THERMALLY-FUSED POLYESTER COATING WITH RECOATABLE WHITE FINISH AND A CONTINUOUS HINGE.
DOOR AND FRAME:
STEEL - COLD ROLLED STEEL WITH RECOATABLE WHITE POLYESTER FINISH.

FIRE EXTINGUISHER
10# ABC DRY CHEMICAL

LSP LEGEND

FE — FIRE EXTINGUISHER

EXIT LIGHT

EMERGENCY LIGHT

TRAVEL PATH WITH DISTANCE

BUILDING DATA:

DESIGN CRITERIA: 2023 F.B.C. - 8TH EDITION

PROJECT LOCATION:
835 BERTHE AVENUE
CALLAWAY, FLORIDA

CONSTRUCTION TYPE: (F.B.C, CHAPTER 6)
TYPE II (2), B

OCCUPANCY CLASSIFICATION: (F.B.C. CHAPTER 3)
GROUP 'A-3', ASSEMBLY

TOTAL GROSS AREA SQUARE FOOTAGE:
- TOTAL EXISTING STRUCTURE = 24,500 S.F.
- NEW ADDITION TOTAL = 33,511 S.F.
  - 2 STORY EDUCATION BUILDING = 17,140 S.F.
  - CONCOURSE = 3871
  - WORSHIP CENTER = 12,500 S.F.

TOTAL OCCUPANT LOAD: (F.B.C. TABLE 1004 .5)
- GROUP 'A-3', ASSEMBLY - 508 FIXED CHAIRS
- STAGE OR PLATFORM, 1/15 S.F. = 829/15 = 55
- EXISTING OCCUPANT LOAD = 50 PERSONS
- NEW ADDITION OCCUPANT LOAD INCREASE = 16
- NEW TOTAL OCCUPANT LOAD = 66

MAXIMUM ALLOWABLE BUILDING HEIGHT: (F.B.C. - TABLE 504.3 / 504.4)
55'-0" / 3 STORIES

MINIMUM NUMBER OF EXITS: (F.B.C. TABLE 1006.3.2)
3 EXITS REQUIRED

MAXIMUM TRAVEL DISTANCE TO EXITS (F.B.C. TABLE 1017.2)
GROUP 'A-3', BUSINESS - 250.0' WITH SPRINKLER SYSTEM
GROUP 'A-3', BUSINESS - 200.0' WITHOUT SPRINKLER SYSTEM

FIRE PROTECTION : AUTOMATIC FIRE SPRINKLER SYSTEM PROVIDED.

ALARM, DETECTION, & NOTIFICATION : FIRE ALARM SYSTEM TO BE PROVIDED.

CORRIDOR FIRE RESISTANCE RATING: (F.B.C. TABLE 1020.1)
GROUP 'A-3', BUSINESS - NOT REQUIRED WITH SPRINKLER SYSTEM
GROUP 'A-3', BUSINESS- 1 HOUR RATING WITHOUT SPRINKLER SYSTEM

PREPARED BY: MERCER
ISSUE DATE: 05-09-2024
REVIEWED BY: MERCER
SCALE: AS SHOWN

SHEET A5 5 OF 43

PROJECT NO. 22004

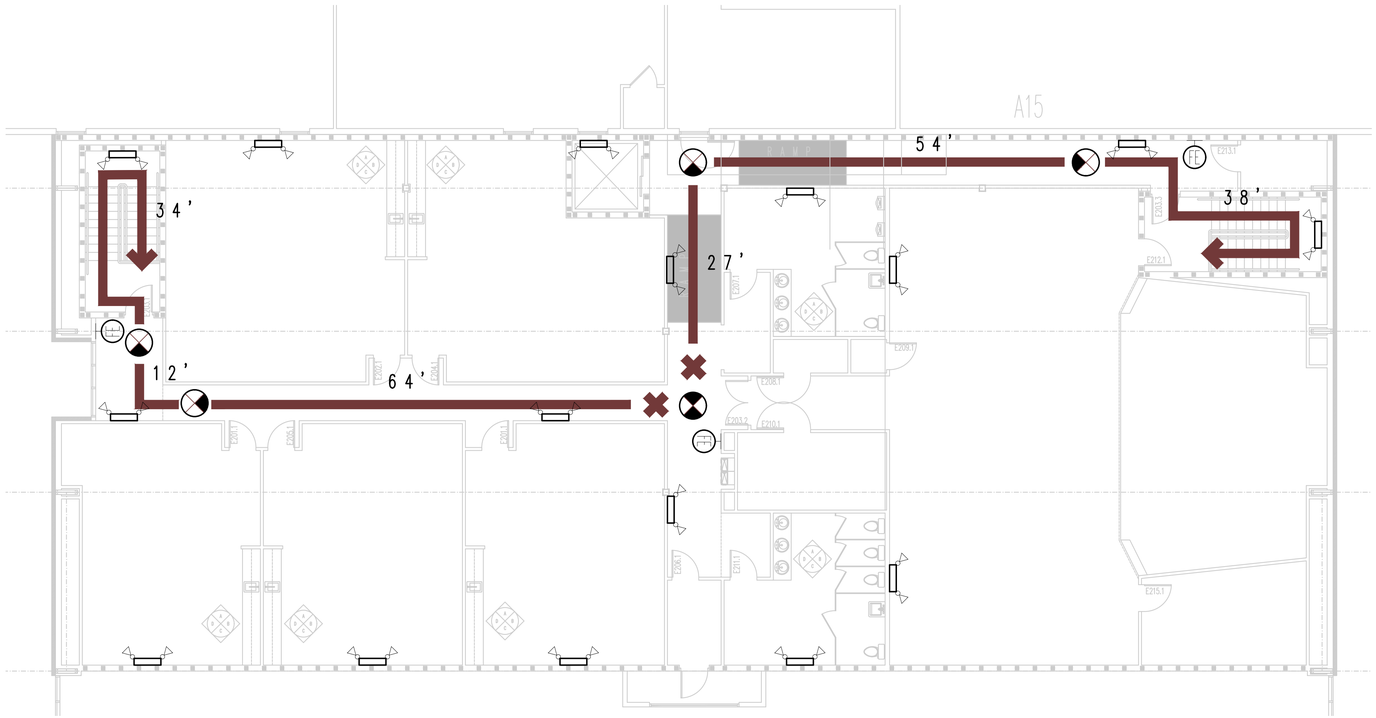
LIFE SAFETY PLAN-ED. BLDG.-1ST FLOOR

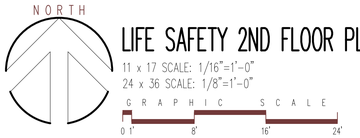
CARLISLE BAPTIST CHURCH
REBUILD
835 BERTHE AVENUE
PANAMA CITY, FLORIDA

STATE OF FLORIDA — MARK MERCER — REGISTERED ARCHITECT — 12731 — NOT VALID WITHOUT SIGNATURE AND SEAL

MARK MERCER & ASSOCIATES, INC.
1117 JENKS AVENUE / PANAMA CITY, FLORIDA 32401 / 850.763.8072

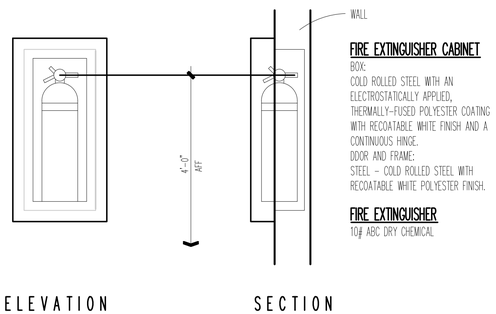
/Users/markmercer/Dropbox/current data/22004-CARLISLE BAPTIST CHURCH/Drawings/05-A5-LSP-EDL.dwg, Fri May 10 21:36:58 2024, AutoCAD PDF (General Documentation).pc3





LIFE SAFETY 2ND FLOOR PLAN – EDUCATION BUILDING

11 x 17 SCALE: 1/16"=1'-0"
24 x 36 SCALE: 1/8"=1'-0"



FIRE EXTINGUISHER CABINET
BOX:
COLD ROLLED STEEL WITH AN ELECTROSTATICALLY APPLIED, THERMALLY-FUSED POLYESTER COATING WITH RECOATABLE WHITE FINISH AND A CONTINUOUS HINGE.
DOOR AND FRAME:
STEEL - COLD ROLLED STEEL WITH RECOATABLE WHITE POLYESTER FINISH.

FIRE EXTINGUISHER
10# ABC DRY CHEMICAL

EDUCATION BUILDING

2 – STORY EDUCATION BUILDING
8570 SQUARE EACH FLOOR
TOTAL: 17,140 SQUARE FEET

LSP LEGEND

- FIRE EXTINGUISHER
- EXIT LIGHT
- EMERGENCY LIGHT
- TRAVEL PATH WITH DISTANCE

BUILDING DATA:

DESIGN CRITERIA: 2023 F.B.C. – 8TH EDITION

PROJECT LOCATION:
835 BERTHE AVENUE
CALLAWAY, FLORIDA

CONSTRUCTION TYPE: (F.B.C, CHAPTER 6)
TYPE II (2), B

OCCUPANCY CLASSIFICATION: (F.B.C. CHAPTER 3)
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GROUP 'A-3', BUSINESS – NOT REQUIRED WITH SPRINKLER SYSTEM
GROUP 'A-3', BUSINESS– 1 HOUR RATING WITHOUT SPRINKLER SYSTEM

A6
SHEET 6 OF 43

PROJECT NO.
22004

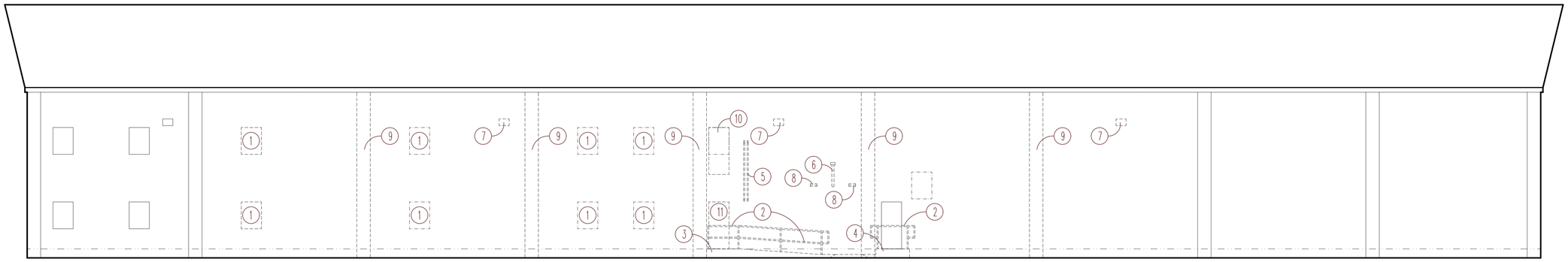
PREPARED BY
MERCER
ISSUE DATE
05-09-2024

REVIEWED BY
MERCER
SCALE
AS SHOWN

LIFE SAFETY PLAN-ED. BLDG.-2ND FLOOR

CARLISLE BAPTIST CHURCH
REBUILD
835 BERTHE AVENUE
PANAMA CITY, FLORIDA

MARK MERCER & ASSOCIATES, INC.
1117 JENKS AVENUE / PANAMA CITY, FLORIDA 32401 / 850.763.8072



SOUTH ELEVATION DEMOLITION KEYNOTES

1. EXISTING WINDOW TO BE REMOVED – INFILL WITH METAL STUDS AND FINISH INSIDE TO MATCH ADJACENT SURFACES
2. EXISTING STEEL RAILING TO BE REMOVED
3. EXISTING CONCRETE STOOP AND RAMP TO BE REMOVED
4. EXISTING CONCRETE STOOP TO BE REMOVED
5. EXISTING CONDUITS TO BE RELOCATED – SEE ELECTRICAL
6. EXISTING FLUE – SEE MECHANICAL
7. EXISTING WALL MOUNTED FLOOD LIGHT TO BE REMOVED – SEE ELECTRICAL
8. EXISTING VENT – SEE MECHANICAL DRAWINGS
9. EXISTING BRICK PILASTER TO BE REMOVED
10. EXISTING CONSTRUCTION TO BE REMOVED AS REQUIRED TO INSTALL NEW DOOR
11. EXISTING DOOR AND FRAME TO BE REMOVED. FINISH OPENING TO MATCH ADJACENT SURFACES.

SOUTH ELEVATION-DEMOLITION

11 x 17 SCALE: 1"=16'-0"
24 x 36 SCALE: 1"=8'-0"

GRAPHIC SCALE

0 8' 16' 32'

SOUTH ELEVATION - DEMOLITION SPECIFICATIONS

SELECTIVE DEMOLITION

DESCRIPTION OF WORK

Types of Selective Demolition Work: Demolition requires the selective removal and subsequent offsite disposal of the following:

Portions of existing building structure as required to accommodate new construction

Remodeling existing construction work and patching of work required by the respective trades,including removal of materials for re-use and incorporated into remodeling or new construction.

Relocation of pipes, conduits, ducts, other mechanical and electrical work required by respective trades.

Schedule: Submit schedule indicating proposed methods and sequence of operations for selective demolition work to Owner's Representative for review prior to commencement of work. Include coordination for shut-off, capping, and continuation of utility services as required, together with details for dust and noise control protection.

Provide detailed sequence of demolition and removal work to ensure uninterrupted progress of Owner's on-site operations.

Coordinate with Owner's continuing occupation of portions of existing building, with Owner's partial occupancy of completed new addition, and with Owner's reduced usage during certain months.

JOB CONDITIONS:

Occupancy: Owner will be continuously occupying areas in the building immediately adjacent to areas of selective demolition. Conduct selective demolition work in manner that will minimize need for disruption of Owner's normal operations. Provide minimum of 72 hours advance notice to Owner of demolition activities which will severely impact Owner's normal operations.

Conditions of Structures: Owner assumes no responsibility for actual condition of items or structure to be demolished.

Conditions existing at time of commencement of contract will be maintained by Owner insofar as practicable. However, variations within structure may occur by Owner's operations prior to start of selective demolition work.

Protections: Provide temporary barricades and other forms of protection as required to protect Owner's personnel and general public from injury due to selective demolition work.

Provide protective measures as required to provide free and safe passage of Owner's personnel and general public to and from occupied portions of building.

Erect temporary covered passageways as required by authorities having jurisdiction.

Protect from damage existing finish work that is to remain in place and becomes exposed during demolition operations.

Protect floors with suitable coverings when necessary.

Provide temporary weather protection during interval between demolition and removal of existing construction on exterior surfaces, and installation of new construction to insure that no water leakage or damage occurs to structure or interior areas of existing building.

Remove protections at completion of work.

Damages: Promptly repair damages caused to facilities by demolition work at no cost to Owner.

Traffic: Conduct selective demolition operations and debris removal in a manner to ensure minimum interference with drives, walks, and other adjacent occupied or used facilities.

Utility Services: Maintain existing utilities, keep in service, and protect against damage during demolition operations.

Environmental Controls: Use water sprinkling, temporary enclosures, and other suitable methods to limit dust and dirt rising and scattering in air to lowest practical level. Comply with governing regulations pertaining to environmental protection.

Do not use water when it may create hazardous or objectionable conditions.

Prior to commencement of selective demolition work, inspect areas in which work will be performed. Photograph existing conditions to structure surfaces, equipment or to surrounding properties which could be misconstrued as damage resulting from selective demolition work; file with Owner's Representative prior to starting work.

PREPARATION:

Provide interior and exterior shoring, bracing, or support to prevent movement, settlement or collapse of structures.

Cover and protect furniture, equipment and fixtures to remain from soiling or damage when demolition work is performed in rooms or areas from which such items have not been removed.

DEMOLITION:

Perform selective demolition work in a systematic manner. Use such methods as required to complete work indicated on Drawings in accordance with demolition schedule and governing regulations.

Demolish concrete and masonry in small sections. Cut concrete and masonry at junctures with construction to remain using power-driven masonry saw or hand tools; do not use power driven impact tools.

Provide services for effective air and water pollution controls as required by local authorities having jurisdiction.

If unanticipated mechanical, electrical or structural elements which conflict with intended function or design are encountered, investigate and measure both nature and extent of the conflict. Submit report to Owner's Representative in written, accurate detail. Pending receipt of directive from Owner's Representative rearrange selective demolition schedule as necessary to continue overall job progress without delay.

DISPOSAL OF DEMOLISHED MATERIALS:

Remove debris, rubbish and other materials resulting from demolition operations from building site. Transport and legally dispose of materials off site.

Burning of removed materials is not permitted on project site.

CLEAN UP AND REPAIR:

Upon completion of demolition work, remove tools, equipment and demolished materials from site.

Repair demolition performed in excess of that required. Return structures and surfaces to remain to condition existing prior to commencement of selective demolition work. Repair adjacent construction or surfaces soiled or damaged by selective demolition work.

END OF SECTION 02070

A7
SHEET 7 OF 43

PROJECT NO.
22004

SOUTH ELEVATION DEMOLITION

PREPARED BY
MERCER
ISSUE DATE
05-09-2024

REVIEWED BY
MERCER
SCALE
AS SHOWN

CARLISLE BAPTIST CHURCH
REBUILD
835 BERTHE AVENUE
PANAMA CITY, FLORIDA

STATE OF FLORIDA
MARK MERCER
REGISTERED
ARCHITECT
12737
NOT VALID WITHOUT RAISED SEAL

MARK MERCER & ASSOCIATES, INC.
1117 JENKS AVENUE / PANAMA CITY, FLORIDA 32401 / 850.763.8072

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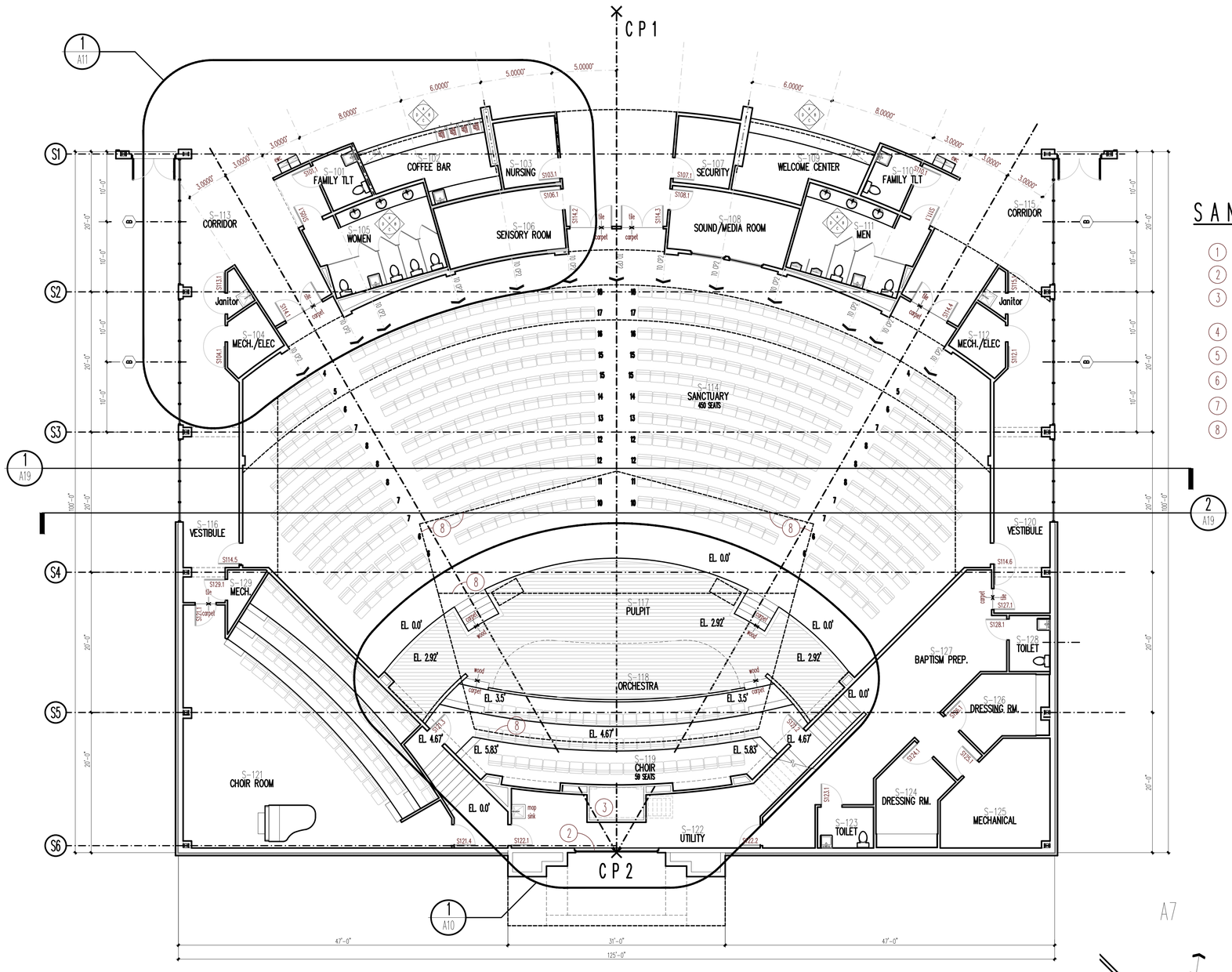


SANCTUARY FP KEYNOTES

1. FIBERGLASS BAPTISTRY
2. EXISTING FACETED GLASS WINDOW RELOCATED
3. FIBERGLASS BAPTISTRY ABOVE – LITTLE GIANT MANUFACTURING COMPANY – SINGLE ENTRY CHURCH BAPTISTRY 12-B
4. 2 X 12 TREAD AND 2 X 6 RISER – TYPICAL
5. 4 RISERS @ 7" = 2.33'/11 TREADS
6. 16 RISERS @ 6.75" = 9'-0"/11" TREADS
7. 6 RISERS @ 7" = 3'-6"/11" TREADS
8. LINE OF DROPPED CEILING ABOVE

1 / A8

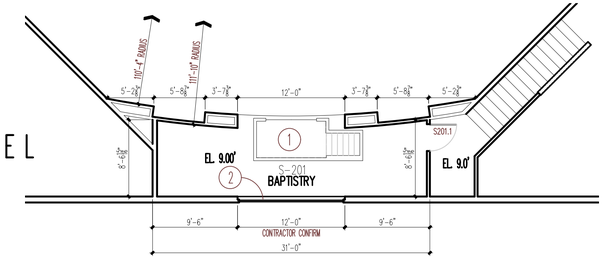
NORTH

FLOOR PLAN – WORSHIP CENTER

11 x 17 SCALE: 3/32"=1'-0"
24 x 36 SCALE: 3/16"=1'-0"

GRAPHIC SCALE
0 1' 4' 8' 12'

A7



NORTH

FLOOR PLAN – BAPTISTRY LEVEL

11 x 17 SCALE: 3/32"=1'-0"
24 x 36 SCALE: 3/16"=1'-0"

GRAPHIC SCALE
0 1' 4' 8' 12'

PREPARED BY	REVIEWED BY
MERCER	MERCER
ISSUE DATE	SCALE
05-09-2024	AS SHOWN

A8
SHEET 8 OF 43

PROJECT NO.
22004

FLOOR PLAN–SANCTUARY

CARLISLE BAPTIST CHURCH
REBUILD
835 BERTHIE AVENUE
PANAMA CITY, FLORIDA

MARK MERCER & ASSOCIATES, INC.
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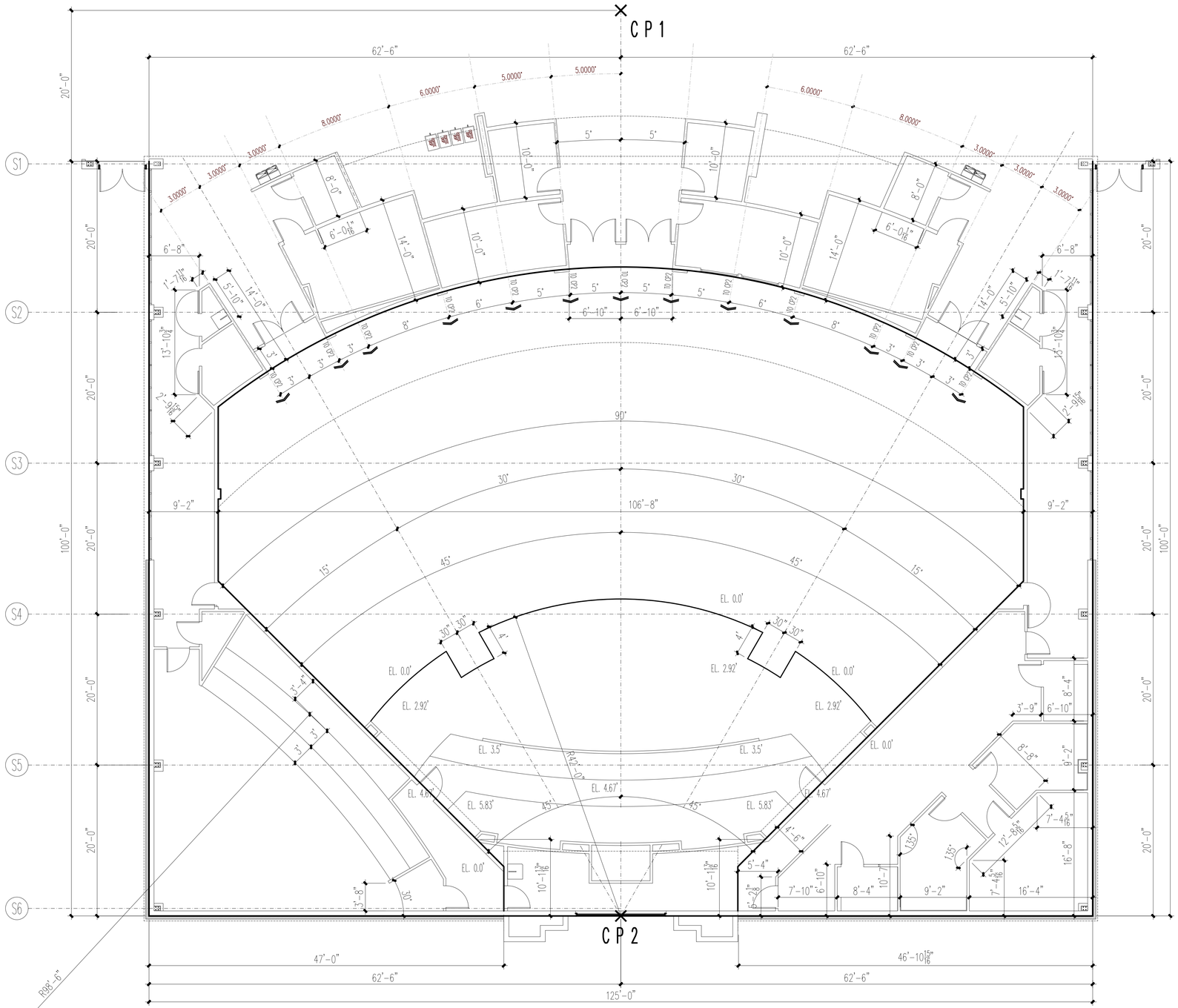


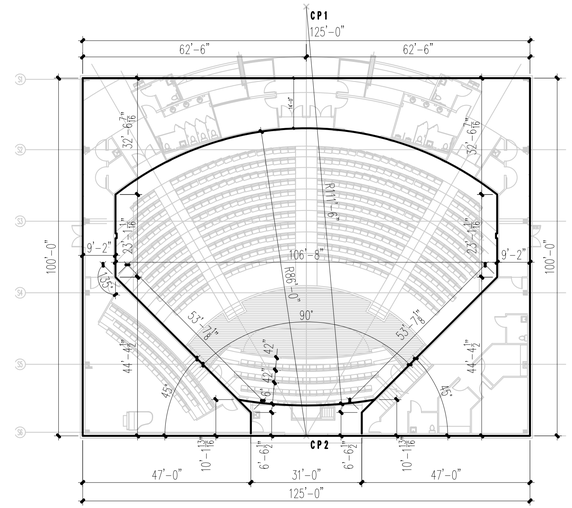
1
A9

NORTH

WORSHIP CENTER DIMENSION - FLOOR PLAN

11 x 17 SCALE: 3/32"=1'-0"
24 x 36 SCALE: 1/16"=1'-0"

GRAPHIC SCALE
0 1' 4' 8' 12'



WORSHIP CENTER ONLY DIMENSION - FLOOR PLAN

11 x 17 SCALE: 1"=40'-0"
24 x 36 SCALE: 1"=20'-0"

GRAPHIC SCALE
0 10' 20' 40' 60'

PREPARED BY	REVIEWED BY
MERCER	MERCER
ISSUE DATE	SCALE
05-09-2024	AS SHOWN

A9
SHEET 9 OF 43

PROJECT NO.
22004

FLOOR PLAN - WORSHIP CENTER DIMENSION

CARLISLE BAPTIST CHURCH
REBUILD
835 BERTHE AVENUE
PANAMA CITY, FLORIDA

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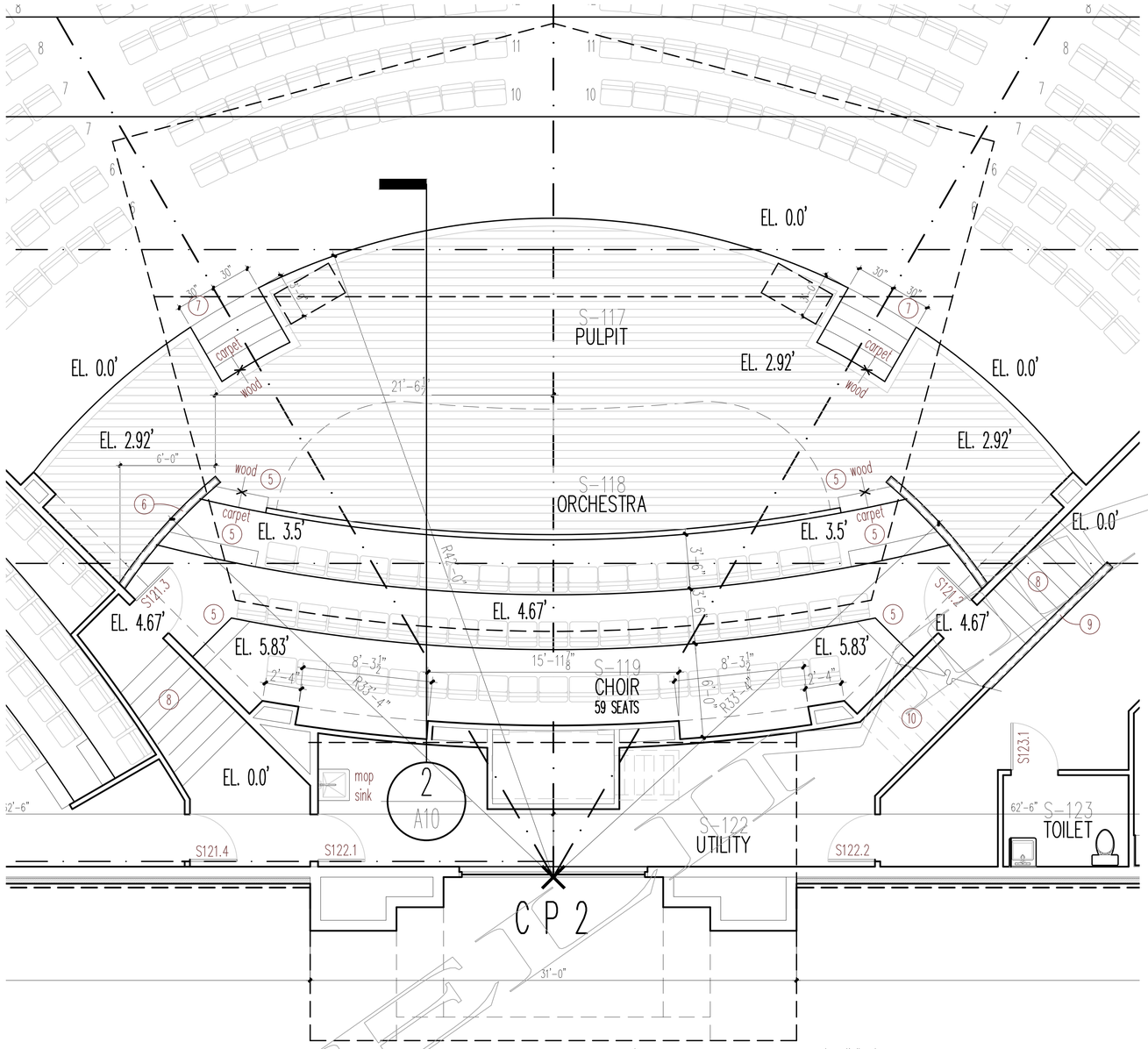
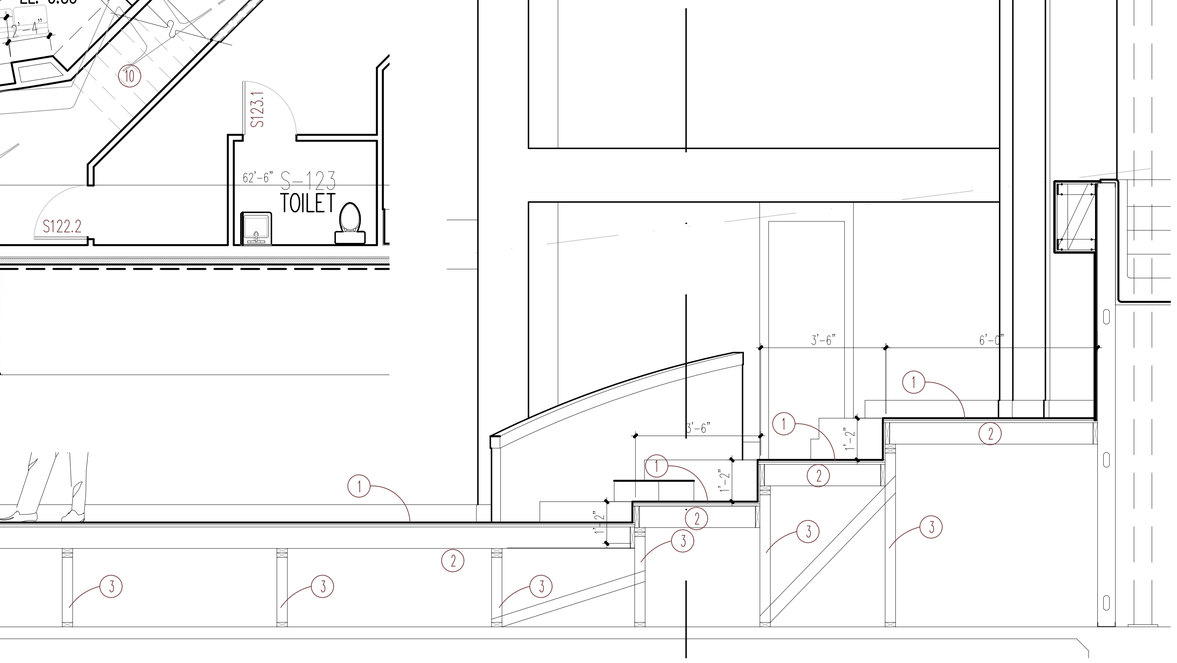


PLATFORM KEYNOTES

1. 3/4" T & G PLYWOOD SUBFLOOR GLUED AND SCREWED
2. 2 X 6 JOISTS @ 12" O.C.
3. KNEEWALL @ 4'-0" O.C., 2 X 4 STUDS @ 12" O.C.
4. 2 X 12 TREAD AND 2 X 6 RISER - TYPICAL
5. 2 - 7" RISERS
6. 42" GUARDRAIL
7. 4 - 7" RISERS
8. 8 - 7" RISERS
9. 42" HIGH RAIL
10. 8 - 6.5" RISERS



1 / A10 NORTH

FLOOR PLAN - PLATFORM DIMENSIONS

11 x 17 SCALE: 3/32"=1'-0"
24 x 36 SCALE: 3/16"=1'-0"

GRAPHIC SCALE
0 1' 4' 8' 12'

2 / A10

PLATFORM SECTION

11 x 17 SCALE: 1/4"=1'-0"
24 x 36 SCALE: 1/2"=1'-0"

GRAPHIC SCALE
0 1' 2' 4' 6'

PRELIMINARY - 03-06-2024

PREPARED BY	REVIEWED BY
MERCER	MERCER
ISSUE DATE	SCALE
05-09-2024	AS SHOWN

A10
SHEET 9 OF 43

PROJECT NO.
22004

FLOOR PLAN - PLATFORM DIMENSION

CARLISLE BAPTIST CHURCH
REBUILD
835 BERTHIE AVENUE
PANAMA CITY, FLORIDA

MARK MERCER & ASSOCIATES, INC.
1117 JENKS AVENUE / PANAMA CITY, FLORIDA 32401 / 850.763.8072

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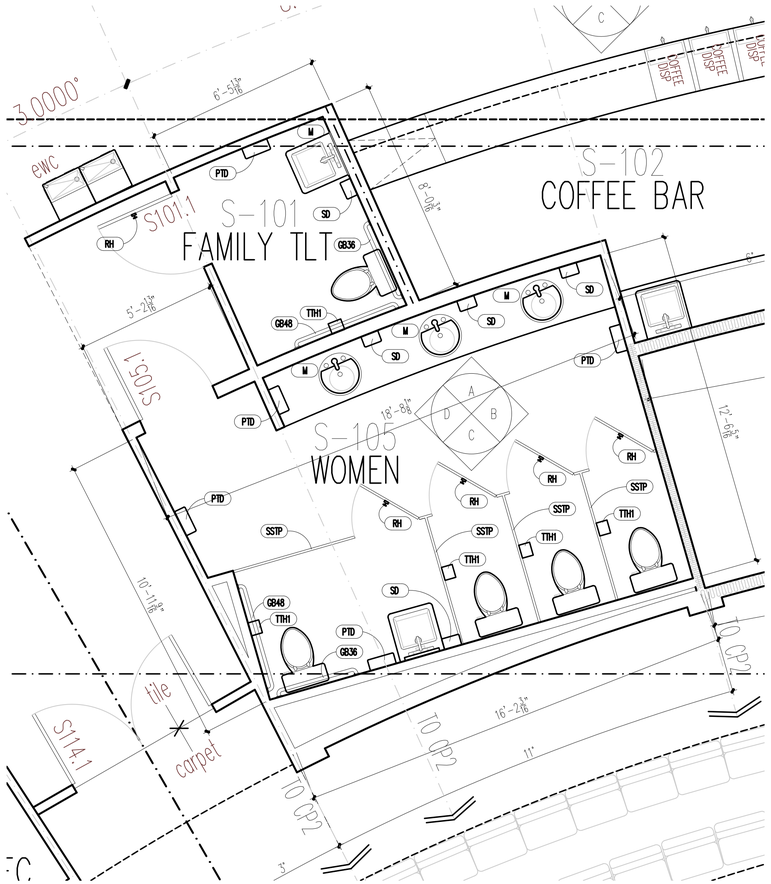
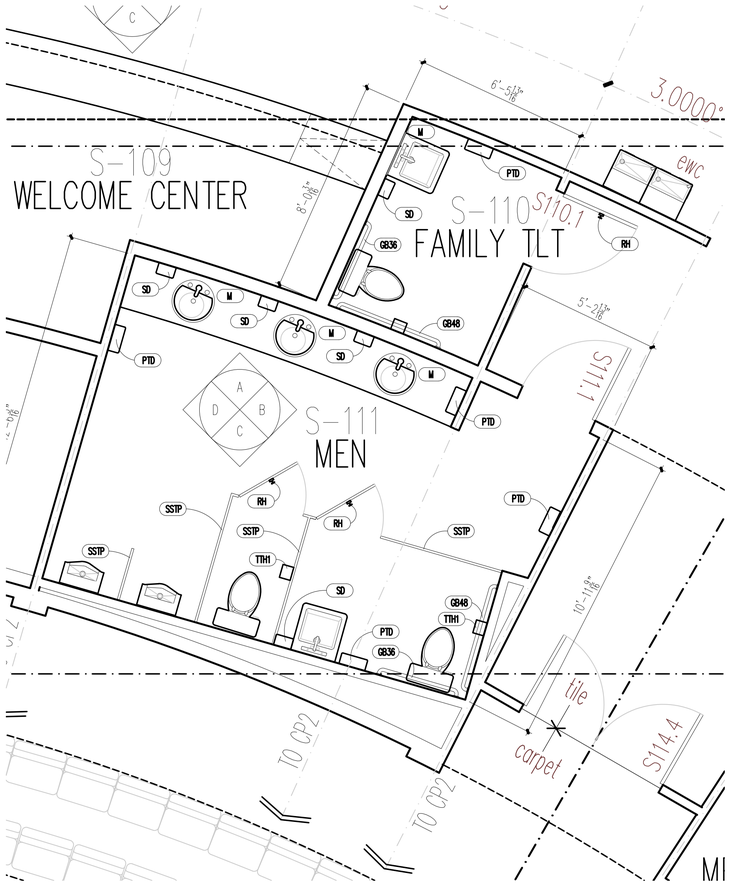
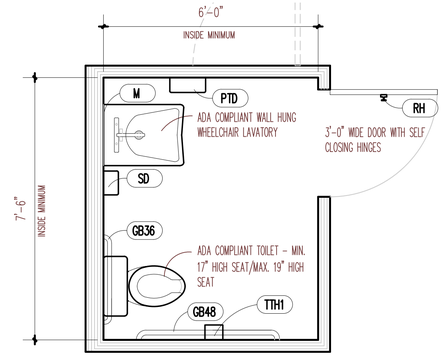




TOILET PLAN KEYNOTES

1. SOLID PHENOLIC COIUNTERTOP 24" DEEP WITH 4" BACKSPLASH



HC BATH ACCESSORY SCHEDULE		
ITEM	MANUFACTURER/MODEL	DESCRIPTION
GB36	BRADLEY/B120 – 00136	36" GRAB BAR
GB48	BRADLEY/B120 – 00148	48" GRAB BAR
TTH1	BRADLEY/5402–00	TOILET TISSUE HOLDER
RH	BRADLEY/9115 – 00	ROBE HOOK
HD	BRADLEY/2923–289M001 AERIX	HIGH SPEED SURFACE MOUNTED ADA HAND DRYER
SD	BRADLEY/9342	COMMERCIAL LIQUID SOAP DISPENSER
PTD	BRADLEY/252–00	PAPER TOWEL DISPENSER
SSTP	BRADLEY	STAINLESS STEEL TOILET PARTITION BRUSHED FINISH
M	BRADLEY	24" X 36" STAINLESS STEEL BRUSHED FINISH

TYPICAL HANDICAP STALL PLAN

11 x 17 SCALE: 1/4"=1'-0"
24 x 36 SCALE: 1/2"=1'-0"

GRAPHIC SCALE
0 1' 2' 4' 6'

1 / A11 LARGE SCALE TOILET ROOM PLAN

11 x 17 SCALE: 3/16"=1'-0"
24 x 36 SCALE: 3/8"=1'-0"

GRAPHIC SCALE
0 1' 2' 4' 6'

2 / A11 LARGE SCALE TOILET ROOM PLAN

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24 x 36 SCALE: 3/8"=1'-0"

GRAPHIC SCALE
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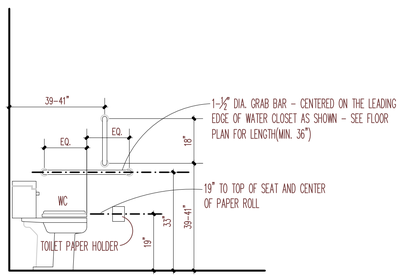

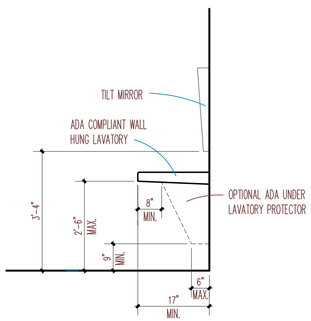

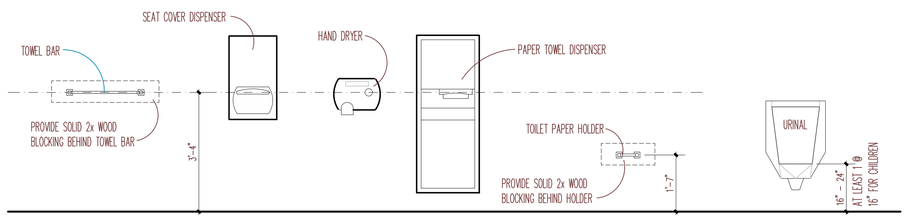

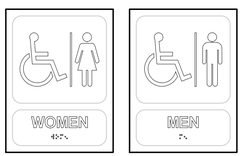

TYPICAL BATHROOM MOUNTING HEIGHTS

N.T.S

CARLISLE BAPTIST CHURCH
REBUILD
835 BERTHIE AVENUE
PANAMA CITY, FLORIDA

PREPARED BY: BROWN
REVIEWED BY: MERCER
ISSUE DATE: 05-09-2024
SCALE: AS SHOWN

SANCTUARY-LARGE SCALE TOILET ROOM PLAN

PROJECT NO. 22004

A11 SHEET 11 OF 43

STATE OF FLORIDA REGISTERED ARCHITECT 12737 MARK MERCER NOT VALID WITHOUT RAISED SEAL

MARK MERCER & ASSOCIATES, INC.
1117 JENKS AVENUE / PANAMA CITY, FLORIDA 32401 / 850.763.8072

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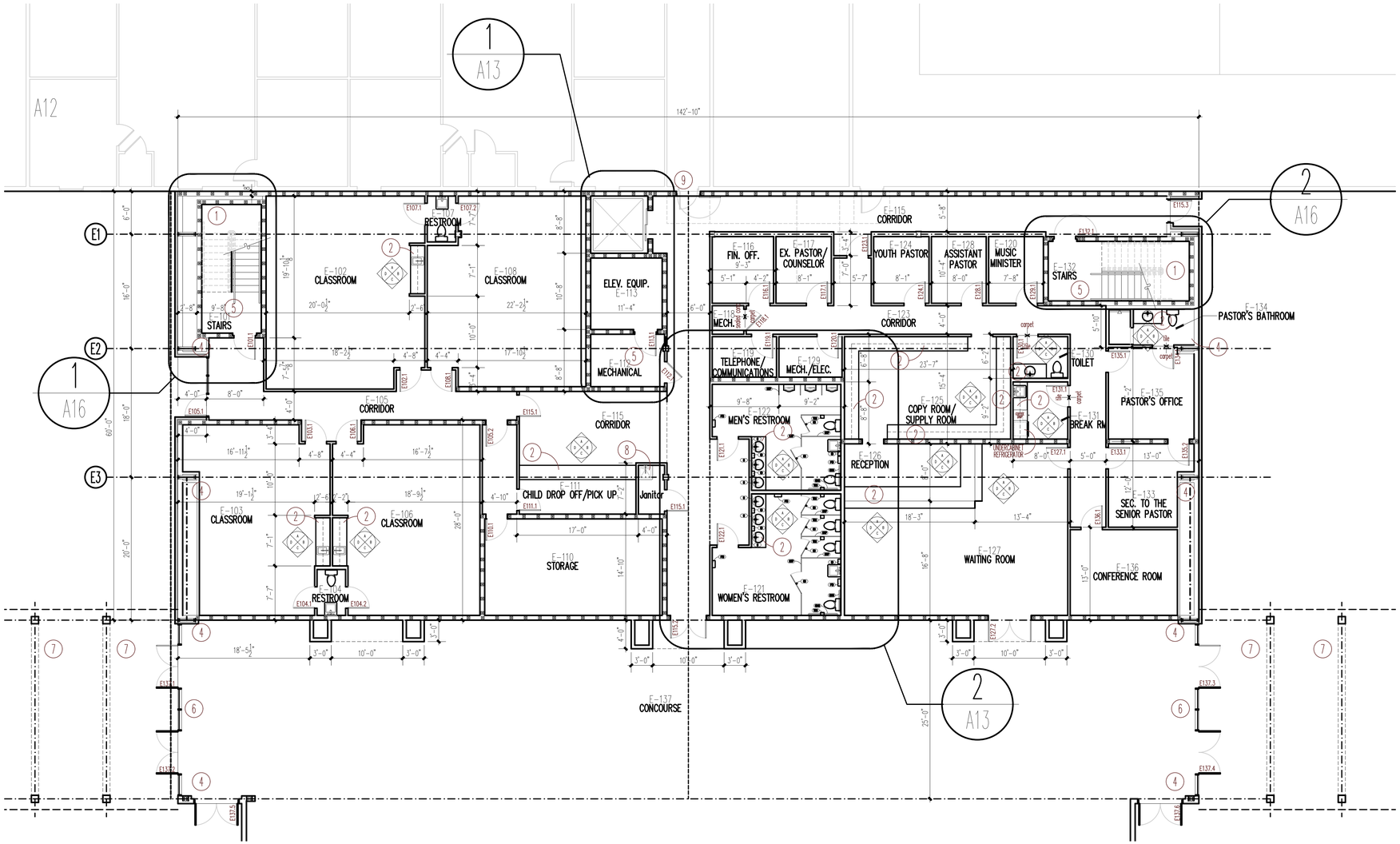

NORTH

1 / A12

1st FLOOR PLAN - EDUCATION BUILDING

11 x 17 SCALE: 1"=16'-0"
24 x 36 SCALE: 1"=8'-0"

GRAPHIC SCALE
0 8' 16' 32'

1ST FLOOR ED BUILDING KEYNOTES

1. PRE-FABRICATED STEEL STAIR
2. CASEWORK - SEE INTERIOR ELEVATIONS AND DETAILS
3. ELEVATOR
4. STEEL BUILDING COLUMN WRAPPED WITH METAL STUDS AND DRYWALL
5. 24 RISERS @ 6.5" = 13'-0" / 11" TREADS
6. ALUMINUM STOREFRONT - SEE WINDOW DETAILS
7. MOP SINK
8. WOOD STAGE - SEE DETAILS

PREPARED BY: MERCER
ISSUE DATE: 05-09-2024
REVIEWED BY: MERCER
SCALE: AS SHOWN

SHEET 12 OF 43
A12

PROJECT NO. 22004

1ST FLOOR PLAN - EDUCATION BUILDING

CARLISLE BAPTIST CHURCH
REBUILD
835 BERTHE AVENUE
PANAMA CITY, FLORIDA

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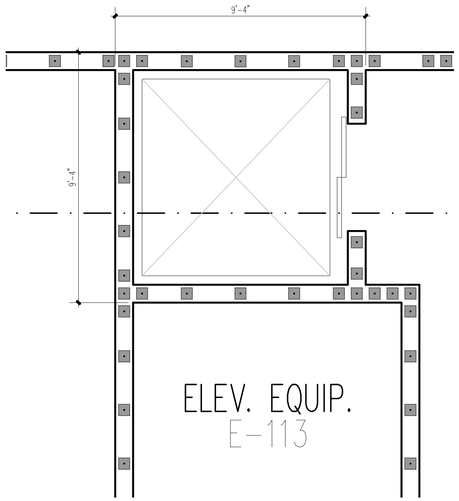
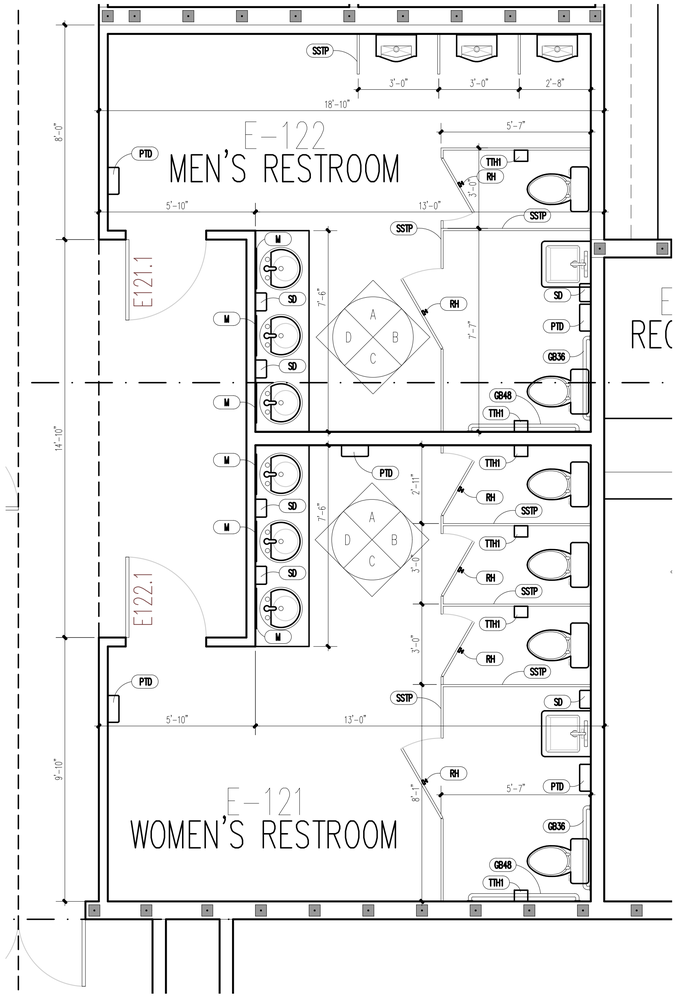


1 / A13

ELEVATOR PLAN - 1st FLOOR - EDUCATION BUILDING

11 x 17 SCALE: 3/8"=1'-0"
24 x 36 SCALE: 3/8"=1'-0"
GRAPHIC SCALE
0 1' 4' 8'



2 / A13

BATHROOM PLAN - 1st FLOOR - EDUCATION BUILDING

11 x 17 SCALE: 3/8"=1'-0"
24 x 36 SCALE: 3/8"=1'-0"
GRAPHIC SCALE
0 1' 4' 8'

HC BATH ACCESSORY SCHEDULE

ITEM	MANUFACTURER/MODEL	DESCRIPTION
GB36	BRADLEY/8120 - 00136	36" GRAB BAR
GB48	BRADLEY/8120 - 00148	48" GRAB BAR
TTH1	BRADLEY/5402-00	TOILET TISSUE HOLDER
RH	BRADLEY/9115 - 00	ROBE HOOK
HD	BRADLEY/2923-28W001 AERIX	HIGH SPEED SURFACE MOUNTED ADA HAND DRYER
SD	BRADLEY/6542	COMMERCIAL LIQUID SOAP DISPENSER
PTD	BRADLEY/252-00	PAPER TOWEL DISPENSER
SSTP	BRADLEY	STAINLESS STEEL TOILET PARTITION BRUSHED FINISH
M	BRADLEY	24" X 36" STAINLESS STEEL BRUSHED FINISH

PREPARED BY: MERCER
ISSUE DATE: 05-09-2024
REVIEWED BY: MERCER
SCALE: AS SHOWN

A13
SHEET 13 OF 43

PROJECT NO. 22004

ED. BLDG.-1ST FLOOR-LARGE SCALE PLANS

CARLISLE BAPTIST CHURCH
REBUILD
835 BERTHE AVENUE
PANAMA CITY, FLORIDA

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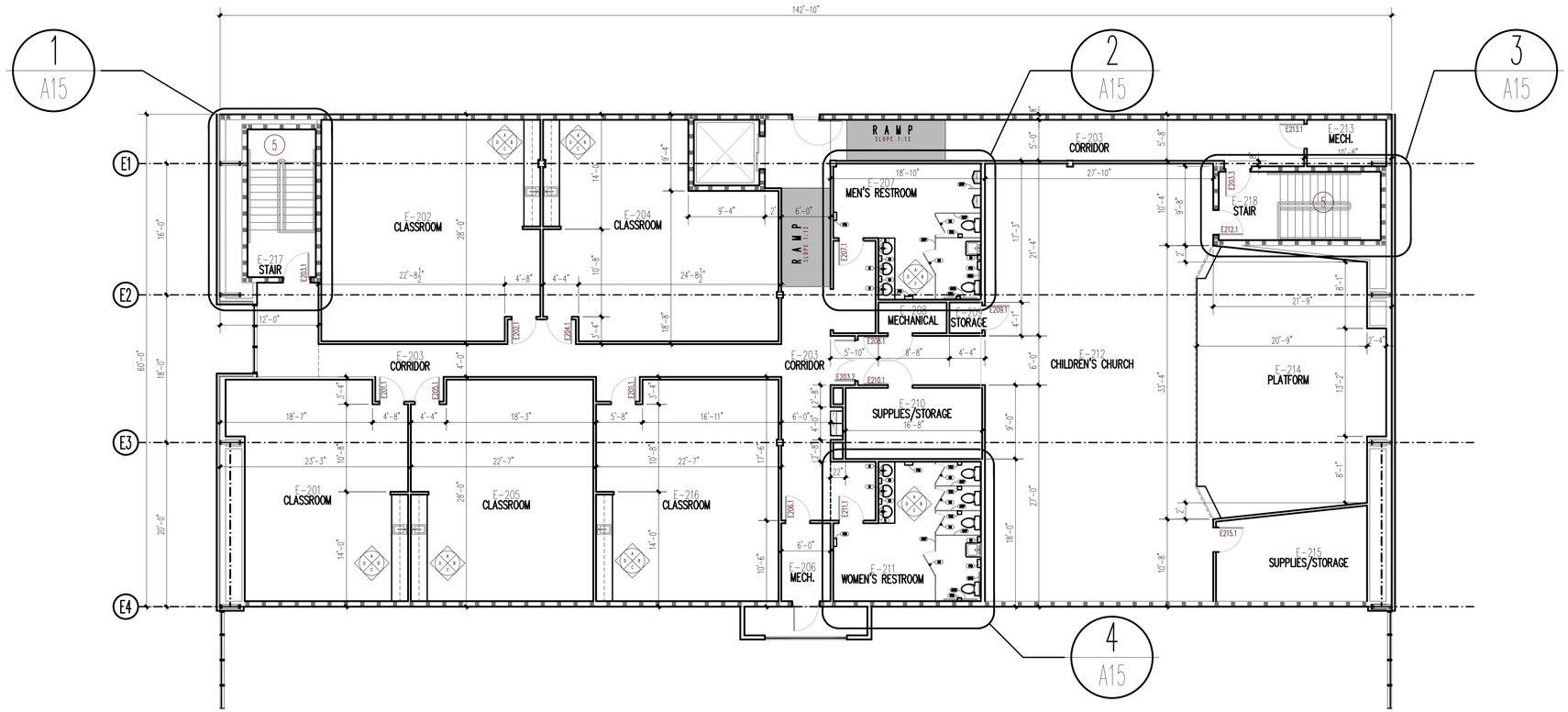

NORTH

2nd FLOOR PLAN - EDUCATION BUILDING

11 x 17 SCALE: 1"=16'-0"
24 x 36 SCALE: 1"=8'-0"

GRAPHIC SCALE
0 8' 16' 32'

2ND FLOOR ED BUILDING KEYNOTES

1. 3/4" T & G PLYWOOD SUBFLOOR GLUED AND SCREWED
2. 2 X 6 JOISTS @ 12" O.C.
3. KNEEWALL @ 4'-0" O.C., 2 X 4 STUDS @ 12" O.C.
4. 2 X 12 TREAD AND 2 X 6 RISER - TYPICAL
5. 24 RISERS @ 6.5" = 13'-0" / 11" TREADS

PREPARED BY
MERCER
ISSUE DATE
05-09-2024

REVIEWED BY
MERCER
SCALE
AS SHOWN

A14
SHEET 14 OF 43

PROJECT NO.
22004

EDUCATION BUILDING-2ND FLOOR PLAN

CARLISLE BAPTIST CHURCH
REBUILD
835 BERTHE AVENUE
PANAMA CITY, FLORIDA

STATE OF FLORIDA
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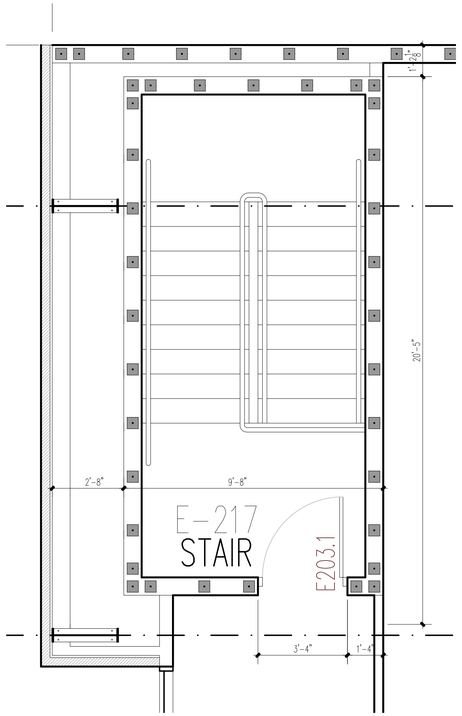
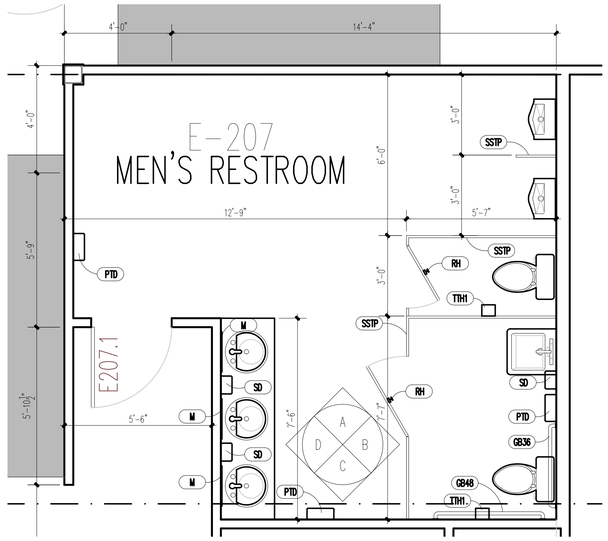


1 / A15

STAIR PLAN – 2nd FLOOR – EDUCATION BUILDING

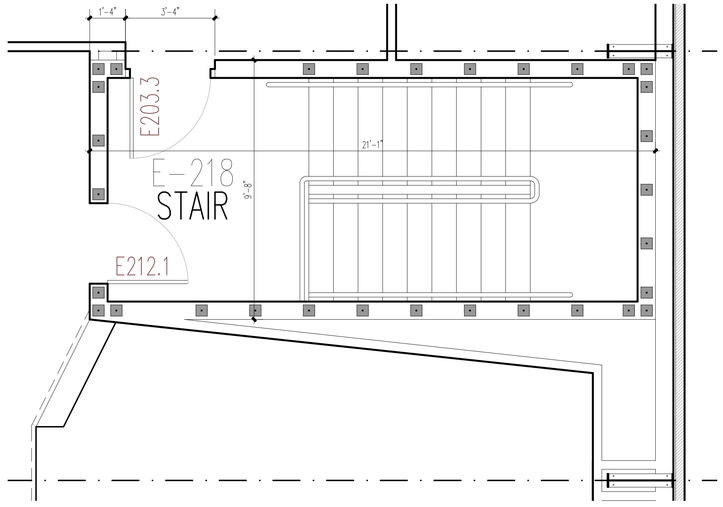
11 x 17 SCALE: 3/16"=1'-0"
24 x 36 SCALE: 3/8"=1'-0"
GRAPHIC SCALE
0 1' 4' 8' 12'



2 / A15

MEN'S RESTROOM – 2nd FLOOR – EDUCATION BUILDING

11 x 17 SCALE: 3/16"=1'-0"
24 x 36 SCALE: 3/8"=1'-0"
GRAPHIC SCALE
0 1' 4' 8' 12'

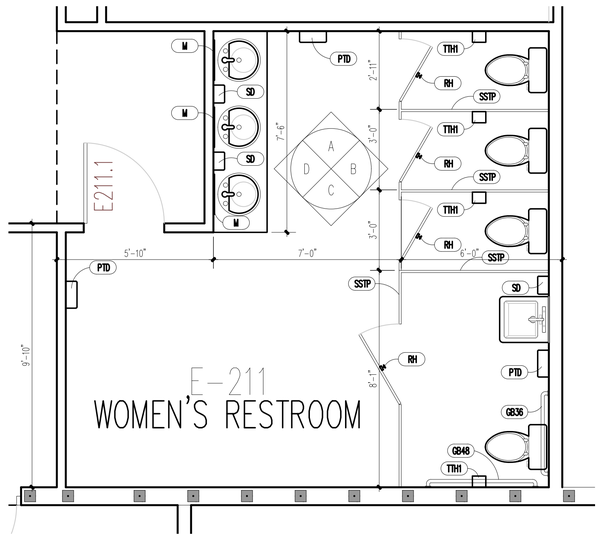


3 / A15

STAIR PLAN – 2nd FLOOR – EDUCATION BUILDING

11 x 17 SCALE: 3/16"=1'-0"
24 x 36 SCALE: 3/8"=1'-0"
GRAPHIC SCALE
0 1' 4' 8' 12'

NOTE: SEE SHEET A16 FOR SIMILAR STAIR DETAILS



4 / A15

WOMEN'S RESTROOM – 2nd FLOOR PLAN – EDUCATION BUILDING

11 x 17 SCALE: 3/16"=1'-0"
24 x 36 SCALE: 3/8"=1'-0"
GRAPHIC SCALE
0 1' 4' 8' 12'

NOTE: SEE SHEET A16 FOR SIMILAR STAIR DETAILS

HC BATH ACCESSORY SCHEDULE

ITEM	MANUFACTURER/MODEL	DESCRIPTION
GB36	BRADLEY/8120 – 00136	36" GRAB BAR
GB48	BRADLEY/8120 – 00148	48" GRAB BAR
TTH1	BRADLEY/5402-00	TOILET TISSUE HOLDER
RH	BRADLEY/9115 – 00	ROBE HOOK
HD	BRADLEY/2923-28W001 AERIX	HIGH SPEED SURFACE MOUNTED ADA HAND DRYER
SD	BRADLEY/6542	COMMERCIAL LIQUID SOAP DISPENSER
PTD	BRADLEY/252-00	PAPER TOWEL DISPENSER
SSTP	BRADLEY	STAINLESS STEEL TOILET PARTITION BRUSHED FINISH
M	BRADLEY	24" X 36" STAINLESS STEEL BRUSHED FINISH

PREPARED BY: MERCER
ISSUE DATE: 05-09-2024
REVIEWED BY: MERCER
SCALE: AS SHOWN

SHEET A15 15 OF 43

PROJECT NO. 22004

ED. BLDG.-2ND FLOOR-LARGE SCALE PLANS

CARLISLE BAPTIST CHURCH
REBUILD
835 BERTHE AVENUE
PANAMA CITY, FLORIDA

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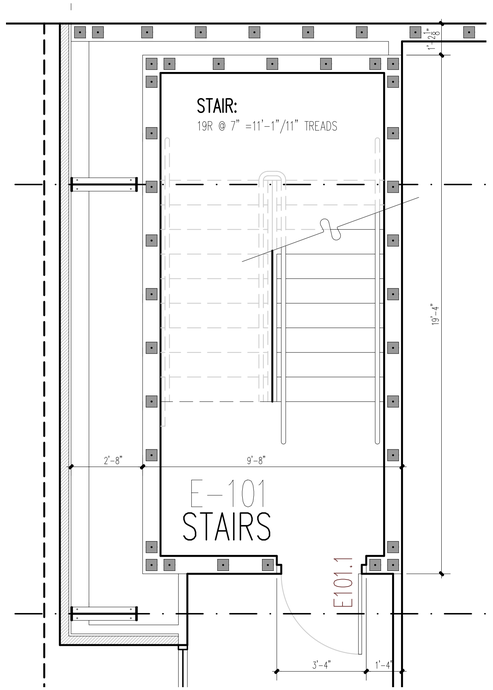
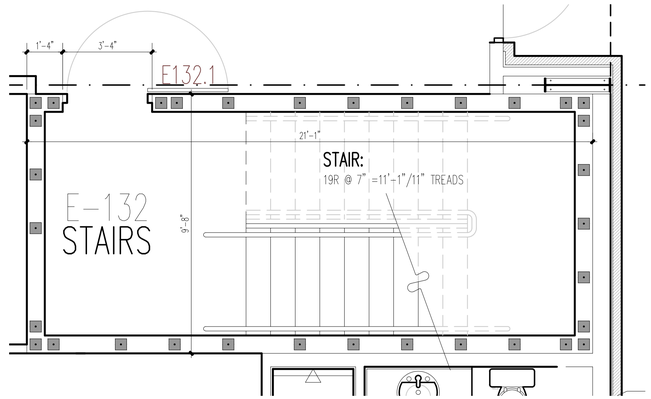


1 / A16

STAIR PLAN - 1st FLOOR - EDUCATION BUILDING

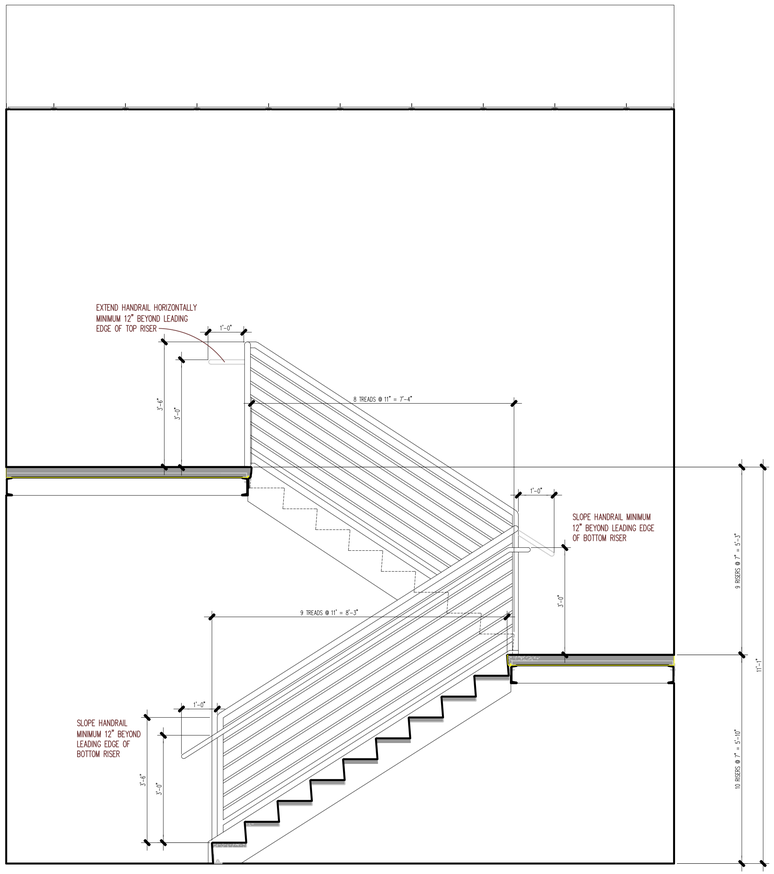
11 x 17 SCALE: 3/8"=1'-0"
24 x 36 SCALE: 3/8"=1'-0"
GRAPHIC SCALE
0 1' 4' 8'

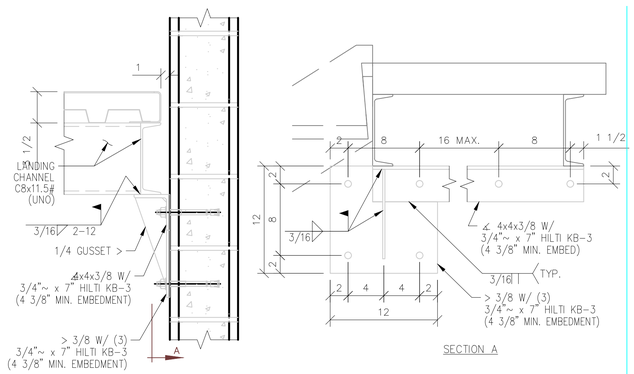


2 / A16

STAIR PLAN - 1st FLOOR - EDUCATION BUILDING

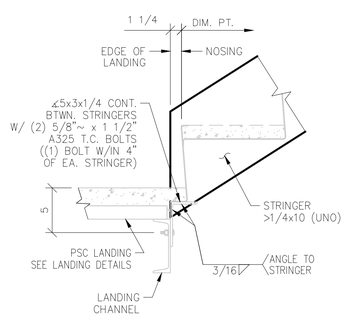
11 x 17 SCALE: 3/8"=1'-0"
24 x 36 SCALE: 3/8"=1'-0"
GRAPHIC SCALE
0 1' 4' 8'



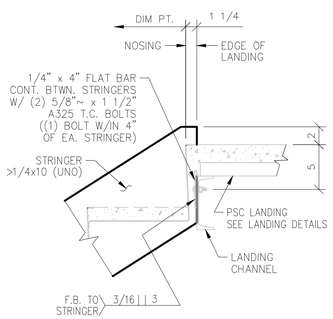


LANDING WALL CONNECTION

24 x 36: SCALE 1 - 1/2"=1'-0"
11 x 17: SCALE 3/4"=1'-0"
GRAPHIC SCALE
0 6" 1' 2' 3'



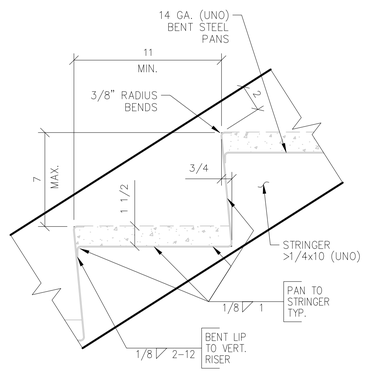
BOTTOM



TOP

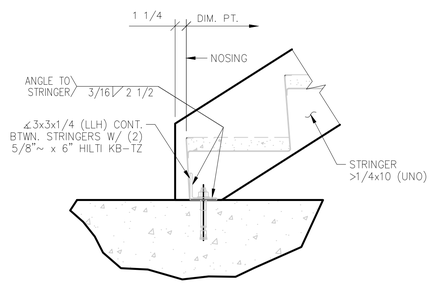
CONNECTION TO STEEL LANDING

24 x 36: SCALE 1 - 1/2"=1'-0"
11 x 17: SCALE 3/4"=1'-0"
GRAPHIC SCALE
0 6" 1' 2' 3'



TREAD/RISER

24 x 36: SCALE 1 - 1/2"=1'-0"
11 x 17: SCALE 3/4"=1'-0"
GRAPHIC SCALE
0 6" 1' 2' 3'



CONNECTION TO SLAB

24 x 36: SCALE 1 - 1/2"=1'-0"
11 x 17: SCALE 3/4"=1'-0"
GRAPHIC SCALE
0 6" 1' 2' 3'

PREPARED BY: MERCER
ISSUE DATE: 05-09-2024
REVIEWED BY: MERCER
SCALE: AS SHOWN
SHEET: A16 16 OF 43
PROJECT NO.: 22004

ED. BLDG.-1ST FLOOR-LARGE SCALE PLANS

CARLISLE BAPTIST CHURCH
REBUILD
835 BERTHE AVENUE
PANAMA CITY, FLORIDA

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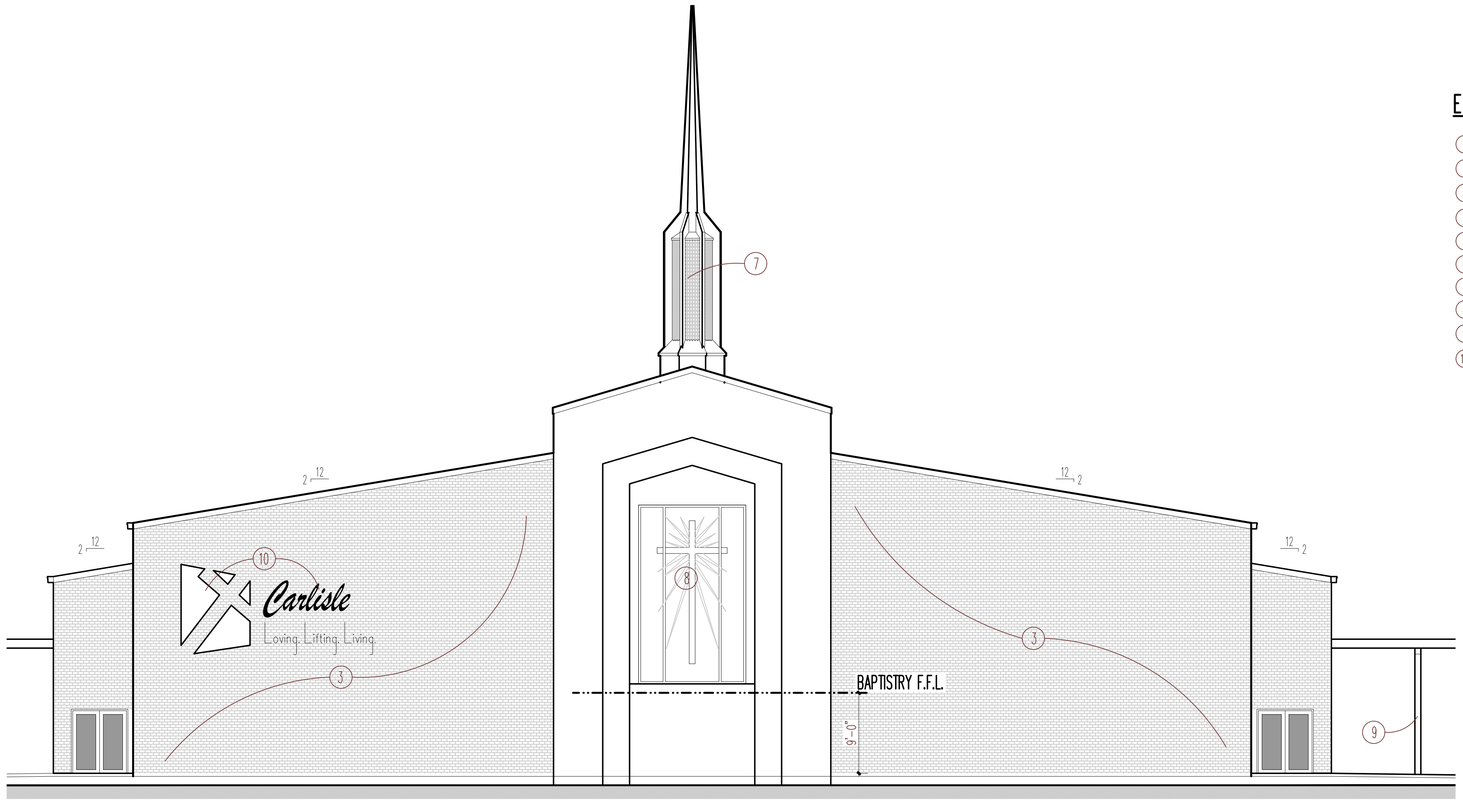


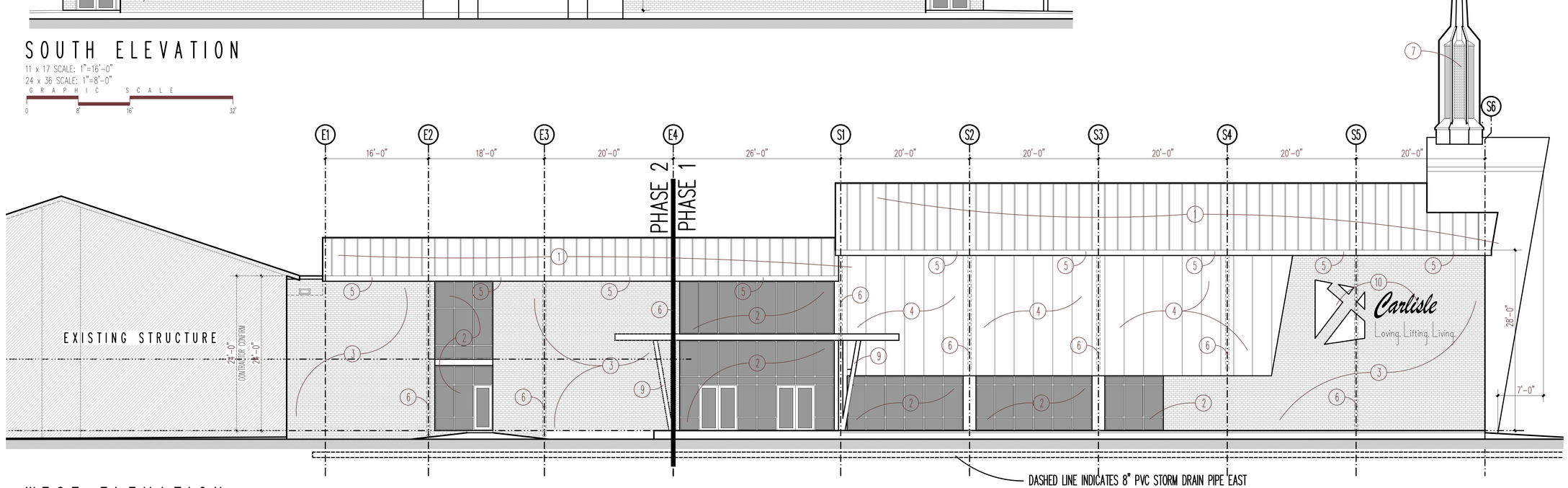
SOUTH ELEVATION

11 x 17 SCALE: 1"=16'-0"
24 x 36 SCALE: 1"=8'-0"

GRAPHIC SCALE
0 8' 16' 32'

EXTERIOR ELEVATION KEYNOTES

1. STANDING SEAM METAL ROOF
2. ALUMINUM STOREFRONT – 1" INSULATING LOW E GLAZING
3. BRICK VENEER
4. INSULATED METAL WALL PANELS
5. GUTTER
6. DOWNSPOUT/RAIN LEADER CONCEALED IN WALL
7. FIBERGLASS STEEPLE
8. RELOCATED EXISTING FACETED GLASS WINDOW
9. POWDER COATED STEEL CANOPY FRAME – SEE DETAIL
10. CHURCH SIGN – BY OTHERS



WEST ELEVATION

11 x 17 SCALE: 1"=16'-0"
24 x 36 SCALE: 1"=8'-0"

GRAPHIC SCALE
0 8' 16' 32'

DASHED LINE INDICATES 8" PVC STORM DRAIN PIPE EAST AND WEST SIDES OF STRUCTURE – CONNECT DOWNSPOUTS TO THIS PIPE AND EXTEND TO STORMWATER RETENTION POND

SHEET A17 17 OF 43

PROJECT NO. 22004

PREPARED BY MERCER
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EXTERIOR ELEVATIONS

CARLISLE BAPTIST CHURCH
REBUILD
835 BERTHIE AVENUE
PANAMA CITY, FLORIDA

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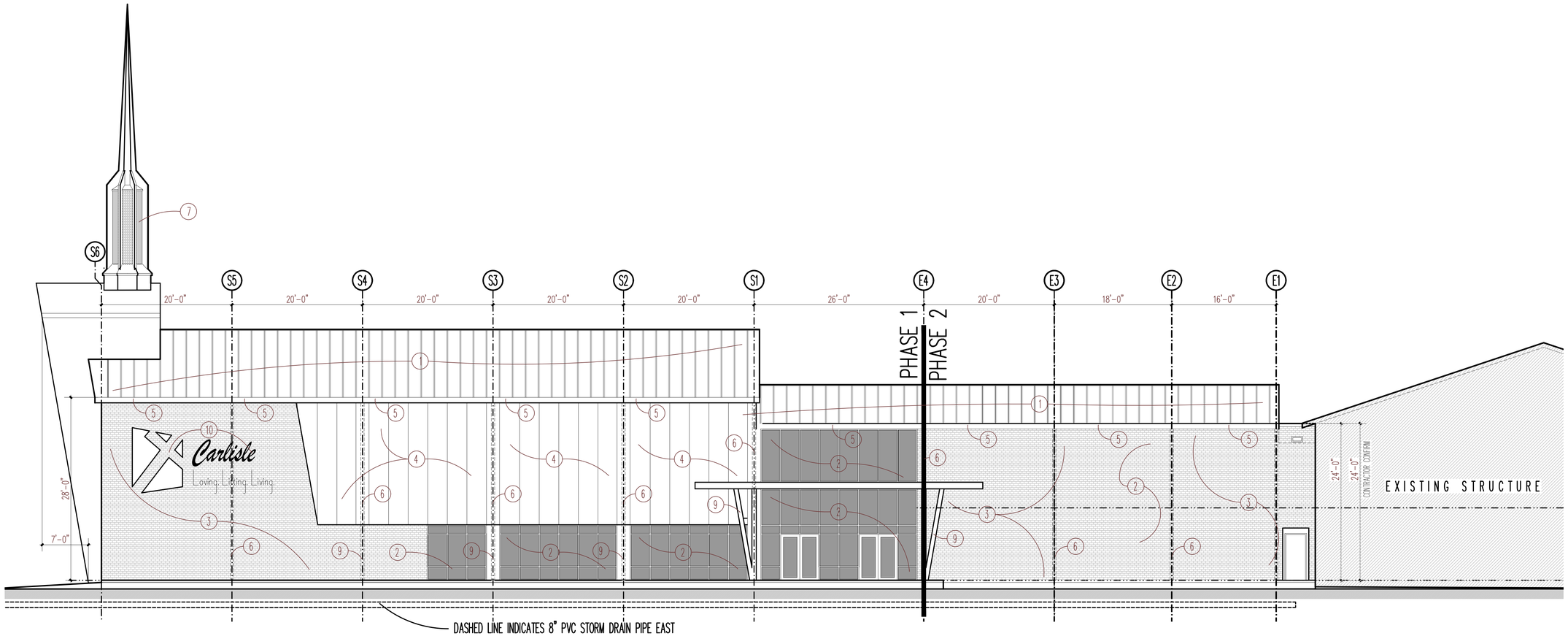

EAST ELEVATION

11 x 17 SCALE: 1"=16'-0"
24 x 36 SCALE: 1"=8'-0"

GRAPHIC SCALE
0 8' 16' 32'

EXTERIOR ELEVATION KEYNOTES

1. STANDING SEAM METAL ROOF
2. ALUMINUM STOREFRONT - 1" INSULATING LOW E GLAZING
3. BRICK VENEER
4. INSULATED METAL WALL PANELS
5. GUTTER
6. DOWNSPOUT/RAIN LEADER CONCEALED IN WALL
7. FIBERGLASS STEEPLE
8. RELOCATED EXISTING FACETED GLASS WINDOW
9. POWDER COATED STEEL CANOPY FRAME - SEE DETAIL
10. CHURCH SIGN - BY OTHERS

PREPARED BY: MERCER
ISSUE DATE: 05-09-2024
REVIEWED BY: MERCER
SCALE: AS SHOWN

SHEET A18 18 OF 43

PROJECT NO. 22004

EXTERIOR ELEVATIONS

CARLISLE BAPTIST CHURCH
REBUILD
835 BERTHIE AVENUE
PANAMA CITY, FLORIDA

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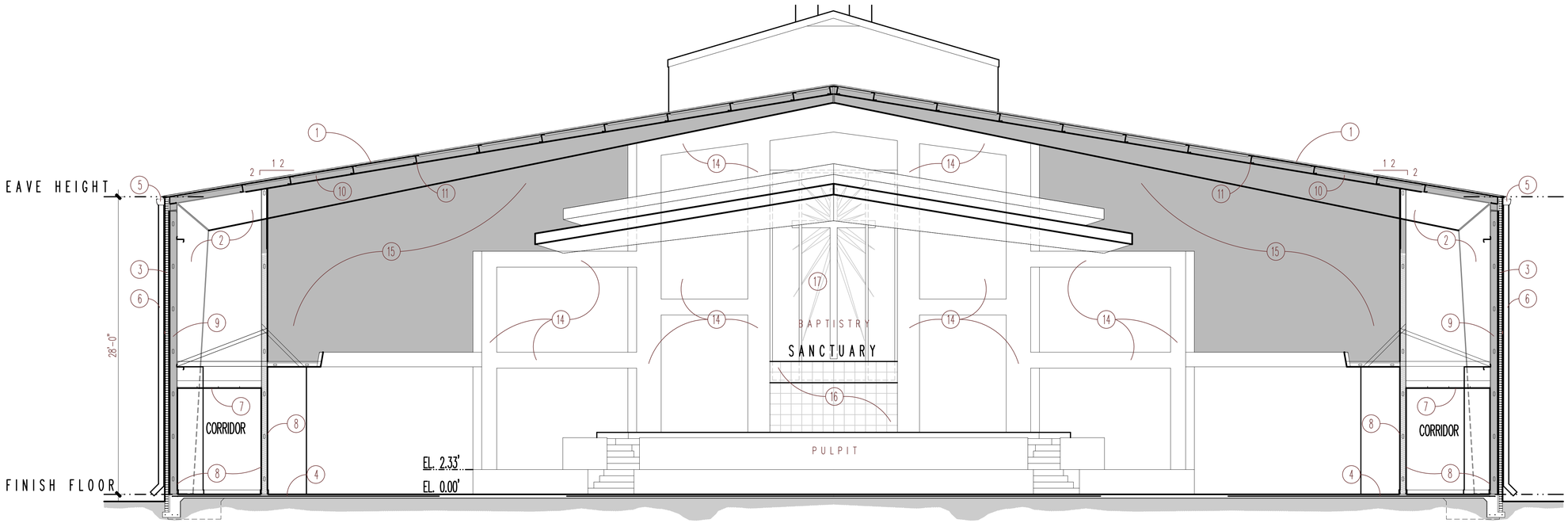
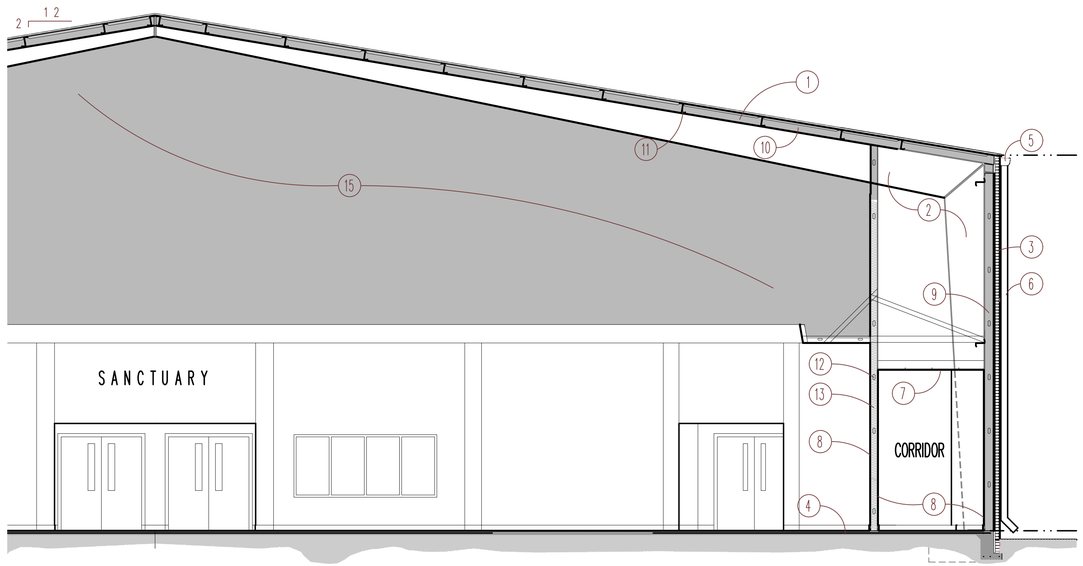


1 / A19 BUILDING SECTION

11 x 17 SCALE: 3/32"=1'-0"
24 x 36 SCALE: 3/16"=1'-0"

GRAPHIC SCALE
0 1' 4' 8' 16'



2 / A19 BUILDING SECTION

11 x 17 SCALE: 3/32"=1'-0"
24 x 36 SCALE: 3/16"=1'-0"

GRAPHIC SCALE
0 1' 4' 8' 16'

SANCTUARY SECTION/DETAIL KEYNOTES

1. STANDING SEAM METAL ROOF
2. PRE-ENG METAL BUILDING FRAME.
3. BRICK VENEER
4. CONCRETE SLAB – SEE STRUCTURAL DRAWINGS
5. 1/2" GYPSUM DRYWALL
6. R19 WALL INSULATION
7. FIBERGLASS BAPTISTRY
8. EXISTING FACETED GLASS WINDOW RELOCATED
9. 6" METAL STUDS @ 16" O.C.
10. SOUND ATTENUATION BLANKETS
11. PAINTED BLACK STRUCTURE
12. LACQUER PAINTED RED OAK
13. SHADING INDICATES BLACK PAINTED WALL
14. STAINED OAK PANELS – COLOR BY ARCHITECT
15. REINFORCED THICKENED SLAB UNDER BAPTISTRY – SEE STRUCTURAL DRAWINGS
16. GRANITE TILE OVER TILE BACKER BOARD – COLOR SELECTED BY ARCHITECT

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ISSUE DATE: 05-09-2024
REVIEWED BY: MERCER
SCALE: AS SHOWN

A19 SHEET 19 OF 43

PROJECT NO. 22004

SANCTUARY-BUILDING SECTIONS

CARLISLE BAPTIST CHURCH
REBUILD
835 BERTHE AVENUE
PANAMA CITY, FLORIDA

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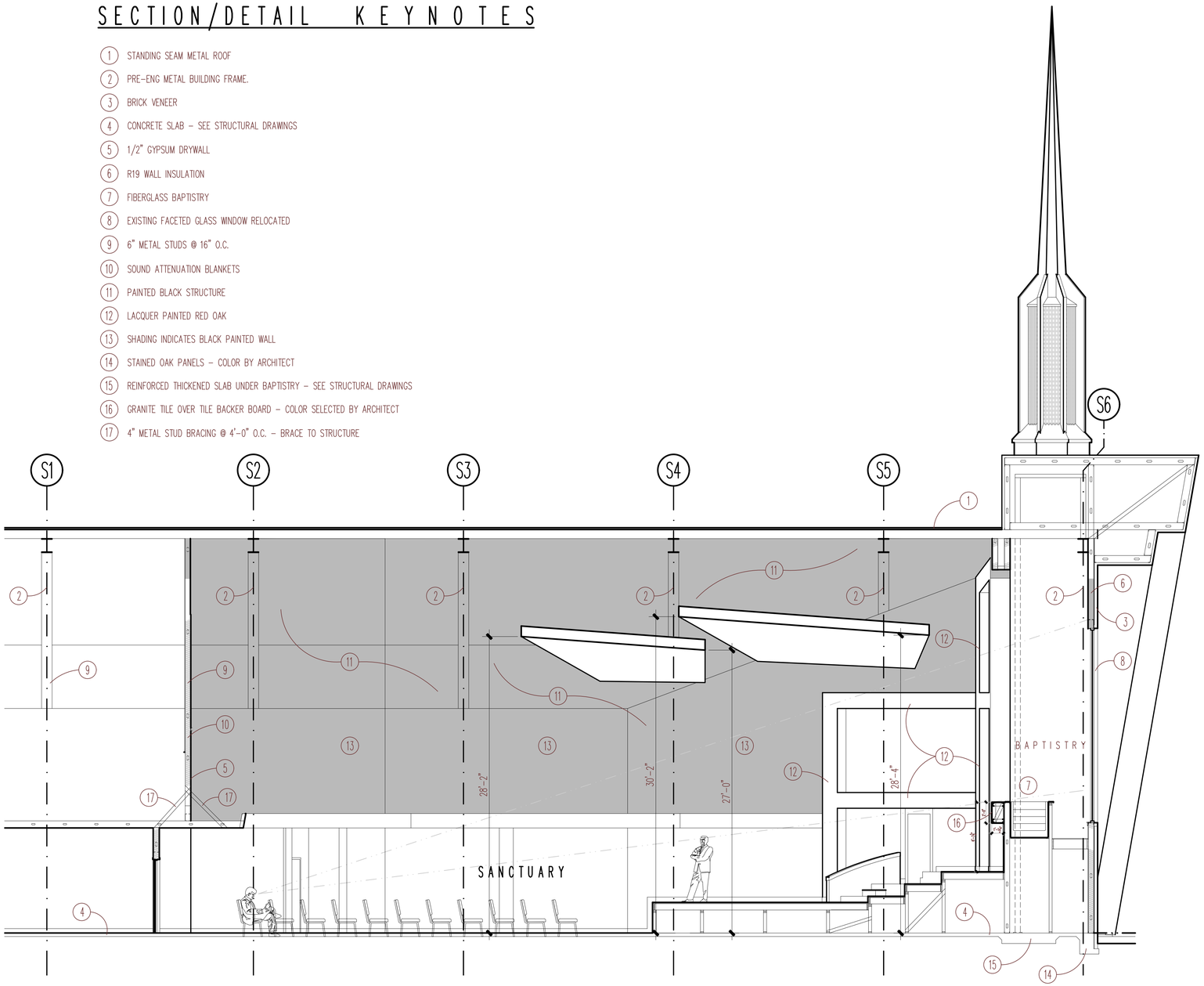
SANCTUARY
SECTION/DETAIL KEYNOTES

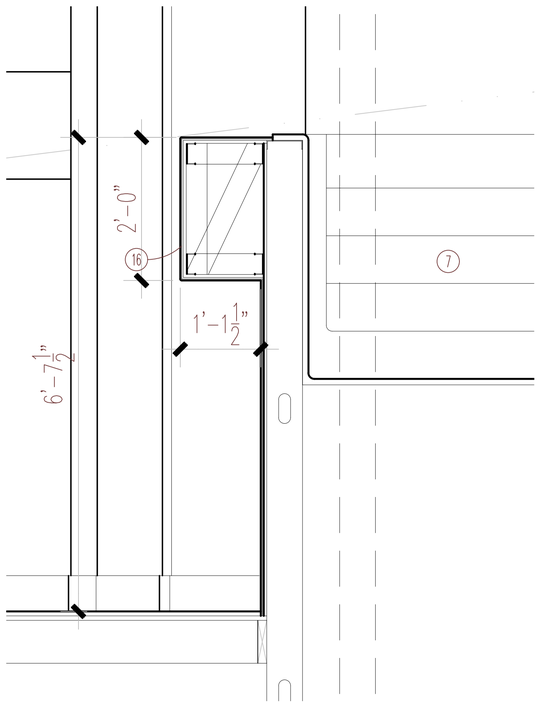
1. STANDING SEAM METAL ROOF
2. PRE-ENG METAL BUILDING FRAME.
3. BRICK VENEER
4. CONCRETE SLAB – SEE STRUCTURAL DRAWINGS
5. 1/2" GYPSUM DRYWALL
6. R19 WALL INSULATION
7. FIBERGLASS BAPTISTRY
8. EXISTING FACETED GLASS WINDOW RELOCATED
9. 6" METAL STUDS @ 16" O.C.
10. SOUND ATTENUATION BLANKETS
11. PAINTED BLACK STRUCTURE
12. LACQUER PAINTED RED OAK
13. SHADING INDICATES BLACK PAINTED WALL
14. STAINED OAK PANELS – COLOR BY ARCHITECT
15. REINFORCED THICKENED SLAB UNDER BAPTISTRY – SEE STRUCTURAL DRAWINGS
16. GRANITE TILE OVER TILE BACKER BOARD – COLOR SELECTED BY ARCHITECT
17. 4" METAL STUD BRACING @ 4'-0" O.C. – BRACE TO STRUCTURE



1 / A20 BUILDING SECTION

11 x 17 SCALE: 3/32"=1'-0"
24 x 36 SCALE: 3/16"=1'-0"

GRAPHIC SCALE 0 1' 4' 8' 16'



2 / A20 BUILDING SECTION

11 x 17 SCALE: 1/2"=1'-0"
24 x 36 SCALE: 1"=1'-0"

GRAPHIC SCALE 0 6" 1' 2' 3'

A20 SHEET 20 OF 43

PROJECT NO. 22004

PREPARED BY MERCER ISSUE DATE 05-09-2024

REVIEWED BY MERCER SCALE AS SHOWN

SANCTUARY-BUILDING SECTION

CARLISLE BAPTIST CHURCH
REBUILD
835 BERTHE AVENUE
PANAMA CITY, FLORIDA

STATE OF FLORIDA REGISTERED ARCHITECT MARK MERCER 12731 NOT VALID WITHOUT RAISED SEAL

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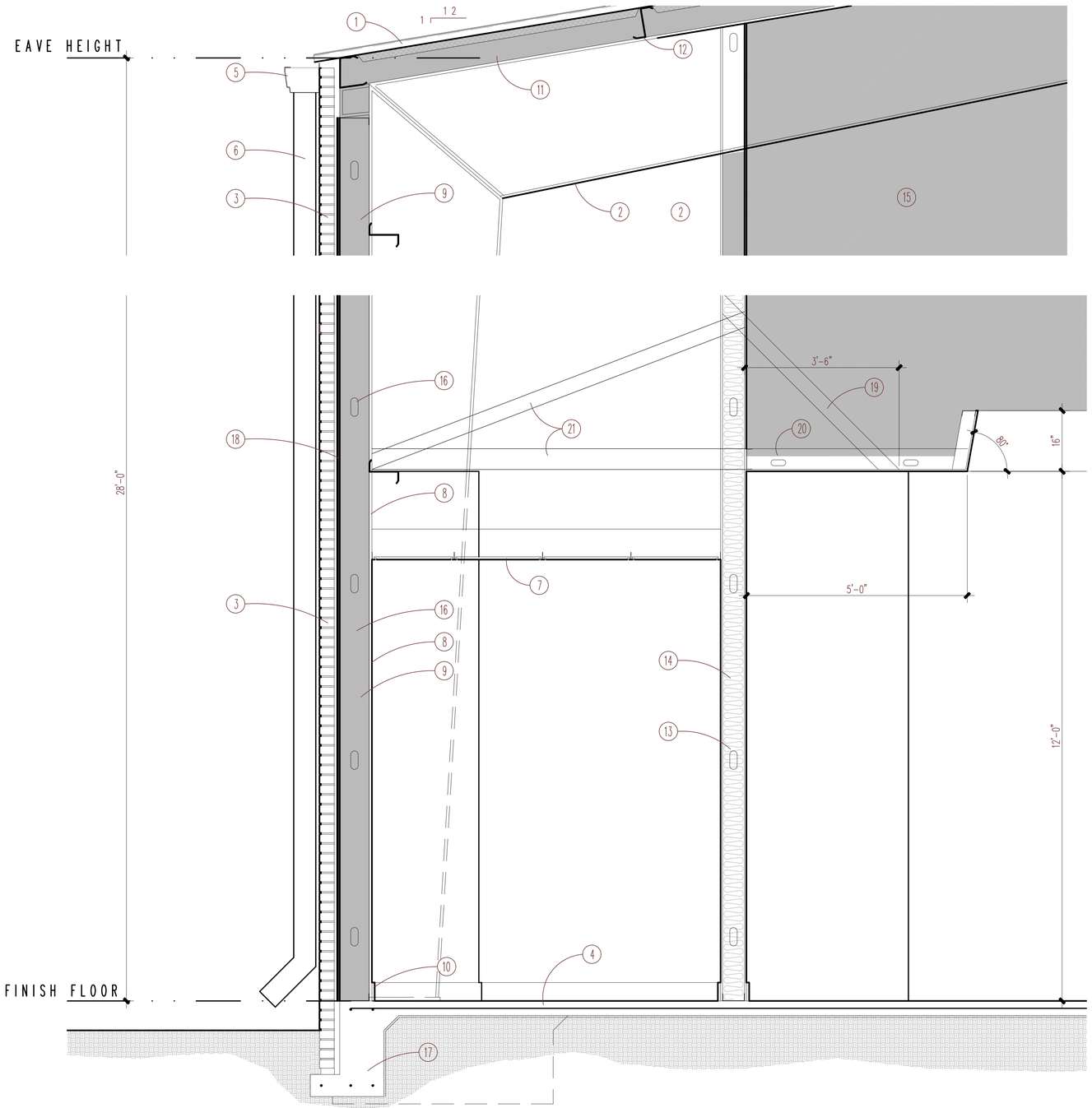


1 / A21 TYPICAL WALL SECTION SANCTUARY

11 x 17 SCALE: 3/8"=1'-0"
24 x 36 SCALE: 3/4"=1'-0"

GRAPHIC SCALE
0 6" 1' 2' 4'

SANCTUARY
SECTION/DETAIL KEYNOTES

1. STANDING SEAM METAL ROOF
2. PRE-ENG METAL BUILDING FRAME.
3. BRICK VENEER
4. CONCRETE SLAB - SEE STRUCTURAL DRAWINGS
5. GUTTER
6. DOWNSPOUT
7. SUSPENDED ACOUSTICAL TILE CEILING
8. 1/2" GYPSUM DRYWALL
9. R19 WALL INSULATION
10. RUBBER BASE - SEE FINISH SCHEDULE
11. R38 ROOF INSULATION
12. PURLIN - SEE STRUCTURAL DRAWINGS AND METAL BUILDING SHOP DRAWINGS
13. 6" METAL STUDS @ 16" O.C.
14. SOUND ATTENUATION BLANKETS
15. PAINTED BLACK STRUCTURE
16. 8" METAL STUDS @ 16" O.C.
17. REINFORCED CONCRETE FOUNDATION - SEE STRUCTURAL DRAWINGS
18. BUILDING WRAP ON 5/8" PLYWOOD SHEATHING
19. 4" METAL STUD SOFFIT SUPPORT @ 16" O.C.
20. 6" METAL STUD SOFFIT FRAMING @ 16" O.C.
21. 6" METAL STUD BRACING @ 4'-0" O.C. - BRACE TO STRUCTURE

PREPARED BY: MERCER; ISSUE DATE: 05-09-2024
REVIEWED BY: MERCER; SCALE: AS SHOWN

SHEET A21 OF 43

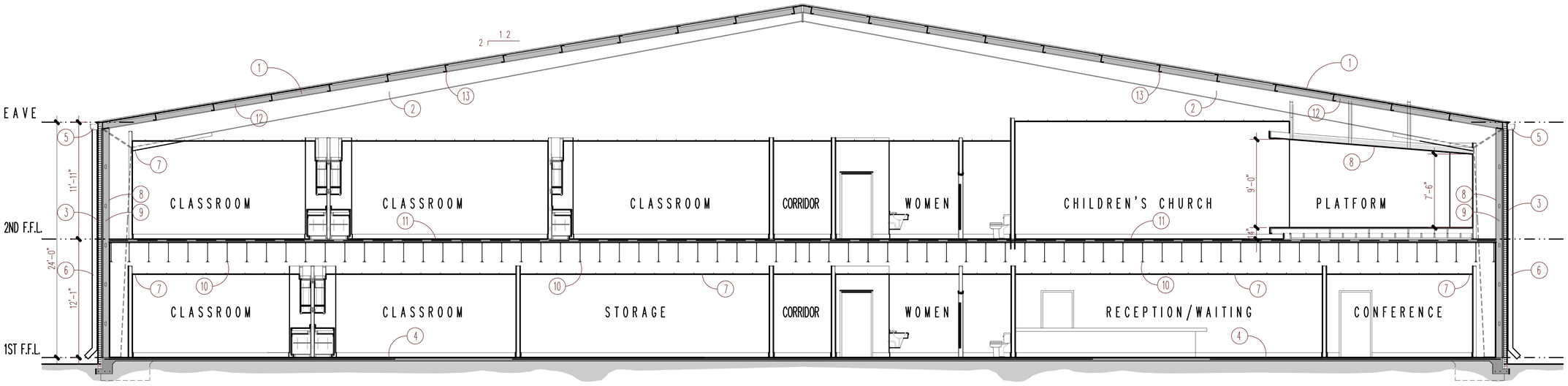
PROJECT NO. 22004

SANCTUARY-TYPICAL WALL SECTION

CARLISLE BAPTIST CHURCH
REBUILD
835 BERTHE AVENUE
PANAMA CITY, FLORIDA

STATE OF FLORIDA REGISTERED ARCHITECT MARK MERCER NOT VALID WITHOUT RAISED SEAL 12737

MARK MERCER & ASSOCIATES, INC.
1117 JENKS AVENUE / PANAMA CITY, FLORIDA 32401 / 850.763.8072



1
A22

BUILDING SECTION - EDUCATIONAL BUILDING

11 x 17 SCALE: 3/32"=1'-0"
24 x 36 SCALE: 3/16"=1'-0"

GRAPHIC SCALE
0 1' 4' 8' 16'

EDUCATIONAL BUILDING SECTION/DETAIL KEYNOTES

1. STANDING SEAM METAL ROOF
2. PRE-ENG METAL BUILDING FRAME.
3. BRICK VENEER
4. CONCRETE SLAB - SEE STRUCTURAL DRAWINGS
5. GUTTER
6. DOWNSPOUT
7. SUSPENDED ACOUSTICAL TILE CEILING
8. 1/2" GYPSUM DRYWALL
9. R19 WALL INSULATION
10. BAR JOISTS - SEE STRUCTURAL DRAWINGS
11. LIGHTWEIGHT CONCRETE ON METAL FLOOR DECKING - SEE STRUCTURAL DRAWINGS
12. R38 ROOF INSULATION
13. PURLIN - SEE STRUCTURAL DRAWINGS AND METAL BUILDING SHOP DRAWINGS

PREPARED BY: MERCER | REVIEWED BY: MERCER
ISSUE DATE: 05-09-2024 | SCALE: AS SHOWN

A22 SHEET 22 OF 43

PROJECT NO. 22004

ED. BLDG.-BUILDING SECTION

CARLISLE BAPTIST CHURCH
REBUILD
835 BERTHE AVENUE
PANAMA CITY, FLORIDA

STATE OF FLORIDA REGISTERED ARCHITECT MARK MERCER 12737 NOT VALID WITHOUT RAISED SEAL

MARK MERCER & ASSOCIATES, INC.
1117 JENKS AVENUE / PANAMA CITY, FLORIDA 32401 / 850.763.8072

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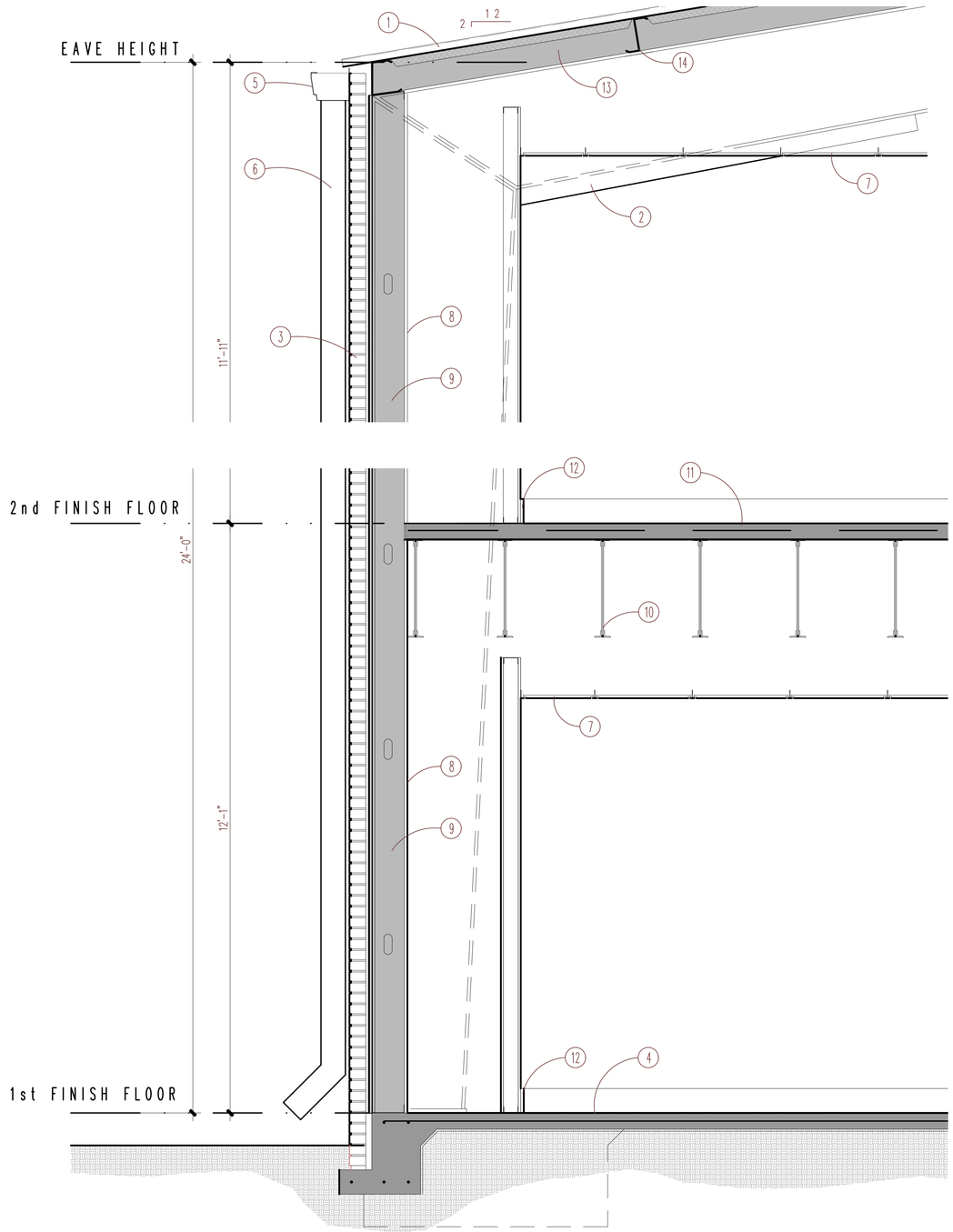

1
A23

BUILDING SECTION - EDUCATIONAL BUILDING

11 x 17 SCALE: 3/32"=1'-0"
24 x 36 SCALE: 3/16"=1'-0"

GRAPHIC SCALE
0 1' 4' 8' 16'

EDUCATIONAL BUILDING SECTION/DETAIL KEYNOTES

1. STANDING SEAM METAL ROOF
2. PRE-ENG METAL BUILDING FRAME.
3. BRICK VENEER
4. CONCRETE SLAB - SEE STRUCTURAL DRAWINGS
5. GUTTER
6. DOWNSPOUT
7. SUSPENDED ACOUSTICAL TILE CEILING
8. 1/2" GYPSUM DRYWALL
9. R19 WALL INSULATION
10. BAR JOISTS - SEE STRUCTURAL DRAWINGS
11. LIGHTWEIGHT CONCRETE ON METAL FLOOR DECKING - SEE STRUCTURAL DRAWINGS
12. RUBBER BASE - SEE FINISH SCHEDULE
13. R38 ROOF INSULATION
14. PURLIN - SEE STRUCTURAL DRAWINGS AND METAL BUILDING SHOP DRAWINGS

A23
SHEET 23 OF 43

PROJECT NO.
22004

PREPARED BY
MERCER
ISSUE DATE
05-09-2024

REVIEWED BY
MERCER
SCALE
AS SHOWN

ED. BLDG.-TYPICAL WALL SECTION

CARLISLE BAPTIST CHURCH
REBUILD
835 BERTHE AVENUE
PANAMA CITY, FLORIDA

STATE OF FLORIDA REGISTERED ARCHITECT 12737 NOT VALID WITHOUT RAISED SEAL

MARK MERCER & ASSOCIATES, INC.
1117 JENKS AVENUE / PANAMA CITY, FLORIDA 32401 / 850.763.8072

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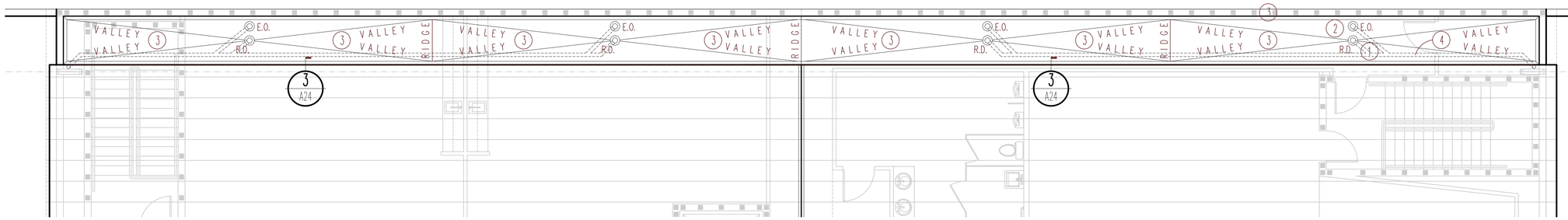
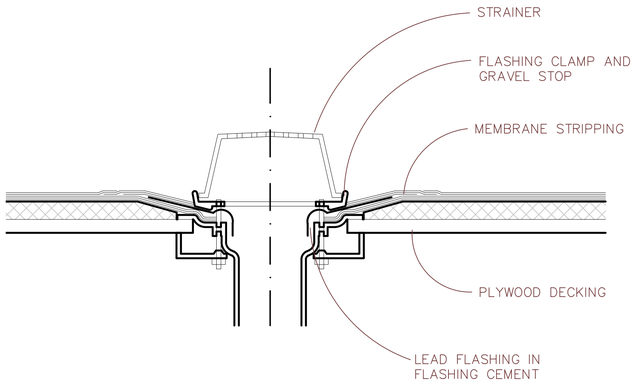


1 / A24 — NORTH

ROOF PLAN @ NEW/EXISTING BUILDING CONNECTION

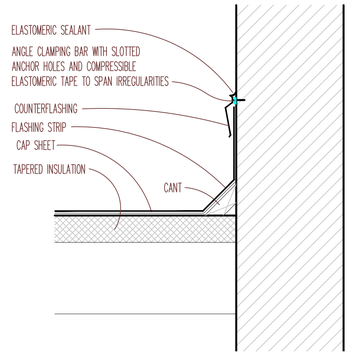
11 x 17 SCALE: 3/32"=1'-0"
24 x 36 SCALE: 3/16"=1'-0"

GRAPHIC SCALE
0 1' 4' 8' 12'



2 / A24 — TYPICAL ROOF DRAIN DETAIL

11 x 17 SCALE: 1/2"=1'-0"
24 x 36 SCALE: 3"=1'-0"



3 / A24 — ROOF/WALL INTERSECTION DETAIL

11 x 17 SCALE: 3/4"=1'-0"
24 x 36 SCALE: 1-1/2"=1'-0"

ROOF PLAN KEYNOTES

1. ROOF DRAIN
2. EMERGENCY OVERFLOW DRAIN
3. MEMBRANE ROOFING
4. 4" RAIN LEADER – SEE MECHANICAL DRAWINGS
5. 4" RAIN LEADER DOWN – SEE MECHANICAL DRAWINGS

PREPARED BY: MERCER
ISSUE DATE: 05-09-2024
REVIEWED BY: MERCER
SCALE: AS SHOWN

A24 — SHEET 24 OF 43

PROJECT NO. 22004

ED. BLDG.–PARTIAL ROOF PLAN

CARLISLE BAPTIST CHURCH
REBUILD
835 BERTHIE AVENUE
PANAMA CITY, FLORIDA

STATE OF FLORIDA REGISTERED ARCHITECT MARK MERCER 12737 NOT VALID WITHOUT RAISED SEAL

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DOOR & FRAME SCHEDULE

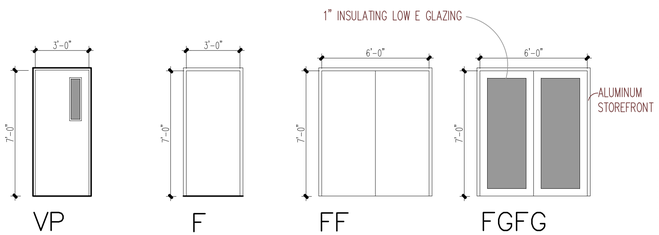
DOORS					FRAMES			HARDWARE										
NO.	SIZE	TYPE	CONST.	FINISH	CONST.	ELEV	FINISH	PASSAGE SET	LOCKSET	PRIVACY SET	DOOR STOP	CLOSER	KICKPLATE	PUSH/PULL	WEATHERSTRIPPING	PANIC HARDWARE	THRESHOLD	BUTTS	REMARKS
S101.1	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT			○	○							1.5 PR	
S103.1	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT			○	○							1.5 PR	
S104.1	6'-0" X 7'-0"	FF	SW	CLEAR	HM		PAINT		○		○							1.5 PR	
S105.1	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT				○			○				1.5 PR	
S106.1	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT	○			○							1.5 PR	
S107.1	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT		○		○							1.5 PR	
S108.1	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT		○		○							1.5 PR	
S110.1	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT			○	○							1.5 PR	
S111.1	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT				○			○				1.5 PR	
S112.1	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT		○		○							1.5 PR	
S113.1	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT		○		○							1.5 PR	
S114.1	6'-0" X 7'-0"	VPVP	SW	CLEAR	HM		PAINT				○			○				1.5 PR	
S114.2	6'-0" X 7'-0"	VPVP	SW	CLEAR	HM		PAINT				○			○				1.5 PR	
S114.3	6'-0" X 7'-0"	VPVP	SW	CLEAR	HM		PAINT				○			○				1.5 PR	
S114.4	6'-0" X 7'-0"	VPVP	SW	CLEAR	HM		PAINT				○			○				1.5 PR	
S114.5	3'-0" X 7'-0"	VP	SW	CLEAR	HM		PAINT				○			○				1.5 PR	
S114.6	3'-0" X 7'-0"	VP	SW	CLEAR	HM		PAINT				○			○				1.5 PR	
S115.1	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT		○		○							1.5 PR	
S116.1	NOT USED																		
S120.1	NOT USED																		
S121.1	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT			○	○							1.5 PR	
S121.2	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT	○			○							1.5 PR	
S121.3	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT	○			○							1.5 PR	
S121.4	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT	○			○							1.5 PR	
S122.1	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT		○		○							1.5 PR	
S122.2	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT		○		○							1.5 PR	
S123.1	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT			○	○							1.5 PR	
S124.1	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT			○	○							1.5 PR	
S125.1	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT		○		○							1.5 PR	
S126.1	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT			○	○							1.5 PR	
S127.1	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT		○		○							1.5 PR	
S128.1	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT			○	○							1.5 PR	
S129.1	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT		○		○							1.5 PR	
S201.1	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT		○		○							1.5 PR	

ABBREVIATIONS:

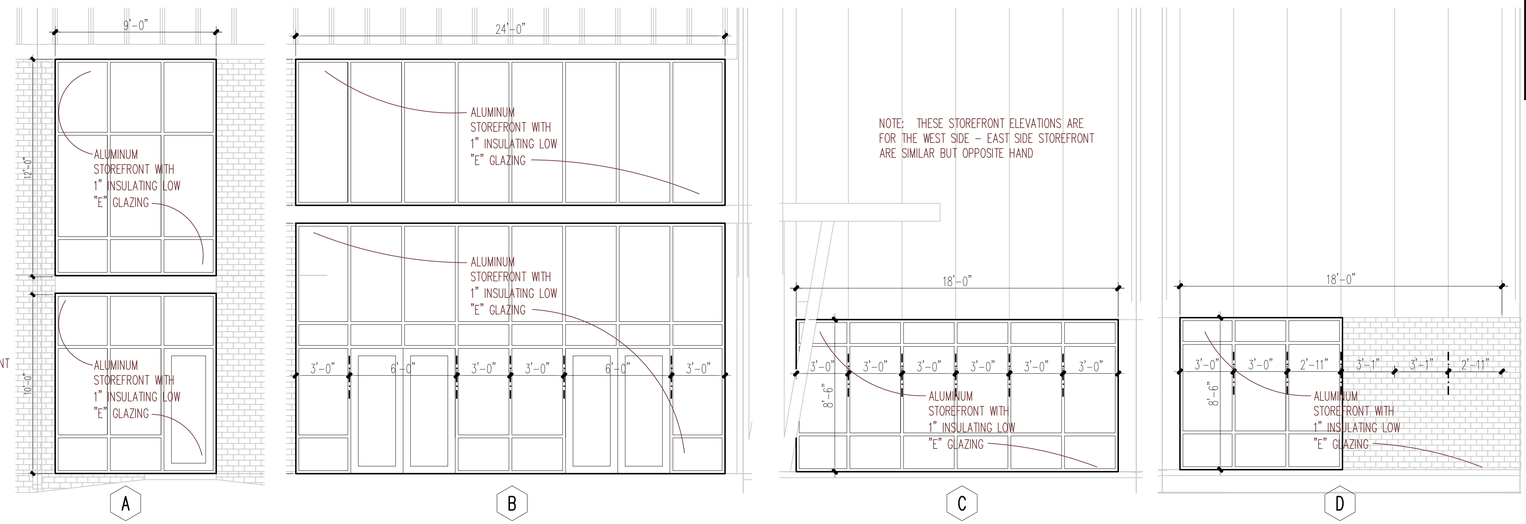
DOORS:

SW--SOLID CORE WOOD
HW--HOLLOW CORE WOOD
HM--HOLLOW METAL
VCT--VINYL COMPOSITION TILE
AL---ALUMINUM
G--GARAGE
STL--STEEL
IM--INSULATED METAL
FG--FULL GLASS
WHT--WHITE
HG--HALF GLASS
F--FLUSH
PBF--PANELED BI-FOLD
FBG--FIBERGLASS
CL---CLEAR
WD---WOOD

DOOR TYPES



STOREFRONT ELEVATIONS



11 x 17 SCALE: 3/32"=1'-0"
24 x 36 SCALE: 3/16"=1'-0"

PREPARED BY: MERCER
ISSUE DATE: 05-09-2024
REVIEWED BY: MERCER
SCALE: AS SHOWN

SHEET A25 25 OF 43

PROJECT NO. 22004

SANCTUARY-DOOR SCHEDULE

CARLISLE BAPTIST CHURCH REBUILD
835 BERTHE AVENUE
PANAMA CITY, FLORIDA

STATE OF FLORIDA REGISTERED ARCHITECT MARK MERCER 12737 NOT VALID WITHOUT RAISED SEAL

MARK MERCER & ASSOCIATES, INC.
1117 JENKS AVENUE / PANAMA CITY, FLORIDA 32401 / 850.763.8072

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DOOR & FRAME SCHEDULE

DOORS					FRAMES			HARDWARE										
NO.	SIZE	TYPE	CONST.	FINISH	CONST.	ELEV	FINISH	PASSAGE SET	LOCKSET	PRIVACY SET	DOOR STOP	CLOSER	KICKPLATE	PUSH/PULL	WEATHERSTRIPPING	PANIC HARDWARE	THRESHOLD	BUTTS	REMARKS
E101.1	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT	◯			◯							1.5 PR	
E102.1	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT	◯			◯							1.5 PR	
E103.1	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT	◯			◯							1.5 PR	
E104.1	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT			◯	◯							1.5 PR	
E104.2	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT	◯		◯	◯							1.5 PR	
E105.1	3'-0" X 7'-0"	FG	AL	CLEAR ANOD.	AL		CLEAR ANOD.		◯			◯			◯	◯	◯		2 HR FIRE DOOR
E105.2	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT	◯			◯							1.5 PR	
E106.1	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT	◯			◯							1.5 PR	
E107.1	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT			◯	◯							1.5 PR	
E107.2	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT			◯	◯							1.5 PR	
E108.1	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT	◯			◯							1.5 PR	
E110.1	3'-0" X 7'-0"	F	IM	PT	HM		PAINT		◯		◯							1.5 PR	
E111.1	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT	◯			◯							1.5 PR	
E112.1	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT		◯		◯							1.5 PR	
E113.1	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT		◯		◯							1.5 PR	
E115.1	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT	◯			◯							1.5 PR	
E115.2	6'-0" X 7'-0"	VP	SW	CLEAR	HM		PAINT		◯		◯	◯				◯		1.5 PR	3 HR FIRE DOOR
E115.3	3'-0" X 7'-0"	F	HM	PAINT	HM		PAINT		◯			◯			◯	◯	◯	1.5 PR	
E116.1	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT		◯		◯							1.5 PR	
E117.1	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT			◯	◯							1.5 PR	
E118.1	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT		◯		◯							1.5 PR	
E119.1	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT		◯		◯							1.5 PR	
E120.1	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT		◯		◯							1.5 PR	
E121.1	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT				◯			◯				1.5 PR	
E122.1	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT				◯			◯				1.5 PR	
E123.1	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT	◯			◯							1.5 PR	
E124.1	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT			◯	◯							1.5 PR	
E127.1	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT	◯			◯							1.5 PR	
E127.2	6'-0" X 7'-0"	FGFG	AL	CLEAR ANOD.	AL		CLEAR ANOD.		◯			◯						1.5 PR	
E128.1	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT			◯	◯							1.5 PR	
E129.1	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT		◯		◯							1.5 PR	
E130.1	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT			◯	◯							1.5 PR	
E131.1	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT	◯			◯							1.5 PR	
E132.1	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT	◯			◯					◯		1.5 PR	
E133.1	3'-0" X 7'-0"	VP	SW	CLEAR	HM		PAINT	◯			◯							1.5 PR	
E134.1	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT			◯	◯							1.5 PR	
E135.1	3'-0" X 7'-0"	VP	SW	CLEAR	HM		PAINT		◯		◯							1.5 PR	
E135.2	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT			◯	◯							1.5 PR	
E136.1	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT	◯			◯							1.5 PR	
E137.1	6'-0" X 7'-0"	FGFG	AL	CLEAR ANOD.	AL		CLEAR ANOD.		◯		◯	◯			◯	◯	◯		
E137.2	6'-0" X 7'-0"	FGFG	AL	CLEAR ANOD.	AL		CLEAR ANOD.		◯		◯	◯			◯	◯	◯		
E137.3	6'-0" X 7'-0"	FGFG	AL	CLEAR ANOD.	AL		CLEAR ANOD.		◯		◯	◯			◯	◯	◯		
E137.4	6'-0" X 7'-0"	FGFG	AL	CLEAR ANOD.	AL		CLEAR ANOD.		◯		◯	◯			◯	◯	◯		
E137.5	6'-0" X 7'-0"	FGFG	AL	CLEAR ANOD.	AL		CLEAR ANOD.		◯		◯	◯			◯	◯	◯		
E137.6	6'-0" X 7'-0"	FGFG	AL	CLEAR ANOD.	AL		CLEAR ANOD.		◯		◯	◯			◯	◯	◯		

ABBREVIATIONS:

DOORS:

SW--SOLID CORE WOOD
HW--HOLLOW CORE WOOD
HM--HOLLOW METAL
VCT--VINYL COMPOSITION TILE
AL---ALUMINUM

G--GARAGE
STL--STEEL
IM--INSULATED METAL
FG--FULL GLASS
WHT--WHITE
HG--HALF GLASS

F--FLUSH
PBF--PANELED BI-FOLD
FBG--FIBERGLASS
CL---CLEAR
WD---WOOD

PREPARED BY
MERCER
ISSUE DATE
05-09-2024

REVIEWED BY
MERCER
SCALE
AS SHOWN

SHEET A26
26 OF 43

PROJECT NO.
22004

EDUCATIONAL BUILDING-DOOR SCHEDULE

CARLISLE BAPTIST CHURCH
REBUILD
835 BERTHE AVENUE
PANAMA CITY, FLORIDA

STATE OF FLORIDA REGISTERED ARCHITECT MARK MERCER 12737 NOT VALID WITHOUT RAISED SEAL

MARK MERCER & ASSOCIATES, INC.
1117 JENKS AVENUE / PANAMA CITY, FLORIDA 32401 / 850.763.8072

DOOR & FRAME SCHEDULE

DOORS					FRAMES			HARDWARE										
NO.	SIZE	TYPE	CONST.	FINISH	CONST.	ELEV	FINISH	PASSAGE SET	LOCKSET	PRIVACY SET	DOOR STOP	CLOSER	KICKPLATE	PUSH/PULL	WEATHERSTRIPPING	PANIC HARDWARE	THRESHOLD	BUTTS	REMARKS
E201.1	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT	◯			◯							1.5 PR	
E202.1	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT	◯			◯							1.5 PR	
E203.1	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT	◯			◯					◯		1.5 PR	2 HR
E203.2	6'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT	◯			◯					◯		1.5 PR	
E203.3	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT	◯			◯					◯		1.5 PR	2 HR
E204.1	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT	◯			◯							1.5 PR	
E205.1	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT	◯			◯							1.5 PR	
E206.1	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT		◯		◯							1.5 PR	
E206.2	3'-0" X 7'-0"	F	HM	PAINT	HM		PAINT		◯		◯							1.5 PR	3 HR
E207.1	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT				◯			◯				1.5 PR	
E208.1	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT		◯		◯							1.5 PR	
E209.1	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT		◯		◯							1.5 PR	
E210.1	NOT USED	–	–	–	–		–												
E211.1	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT				◯			◯				1.5 PR	
E212.1	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT	◯			◯					◯		1.5 PR	2 HR
E213.1	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT		◯		◯							1.5 PR	
E215.1	3'-0" X 7'-0"	F	SW	CLEAR	HM		PAINT		◯		◯							1.5 PR	

ABBREVIATIONS:

DOORS:

SW--SOLID CORE WOOD
HW--HOLLOW CORE WOOD
HM--HOLLOW METAL
VCT--VINYL COMPOSITION TILE
AL---ALUMINUM

G--GARAGE
STL--STEEL
IM--INSULATED METAL
FG--FULL GLASS
WHT--WHITE
HG--HALF GLASS

F--FLUSH
PBF--PANELED BI-FOLD
FBG--FIBERGLASS
CL---CLEAR
WD---WOOD

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SHEET 27 OF 43
A27

PROJECT NO.
22004

EDUCATIONAL BUILDING-DOOR SCHEDULE CONT.

CARLISLE BAPTIST CHURCH
REBUILD
835 BERTHE AVENUE
PANAMA CITY, FLORIDA

STATE OF FLORIDA REGISTERED ARCHITECT MARK MERCER 12737 NOT VALID WITHOUT RAISED SEAL

MARK MERCER & ASSOCIATES, INC.
1117 JENKS AVENUE / PANAMA CITY, FLORIDA 32401 / 850.763.8072

C:\Users\markmercer\Dropbox\current data\22004-CARLISLE BAPTIST CHURCH\Drawings\27-A27 EDBLDG-DESCHED2.dwg, Wed May 8 20:12:56 2024, AutoCAD PDF (General Documentation).pc3

SANCTUARY FINISH SCHEDULE

ROOM NO.	ROOM NAME	FLOOR					BASE			WALL		CEILING			HEIGHT	REMARKS
		WOOD	SEALED CONCRETE	CARPET	CERAMIC TILE	VINYL TILE	TILE	RUBBER	WOOD	GYP. BD. (PAINTED)		S.A.T.	SMOOTH DRYWALL	EXPOSED TO ROOF STRUC		
S101	FAMILY TOILET				●				●	●		●			10'-0"	
S102	COFFEE BAR				●				●	●		●			10'-0"	
S103	NURSING			●					●	●		●			10'-0"	
S104	MECHANICAL/ELECTRICAL ROOM		●						●	●		●			10'-0"	
S105	WOMEN'S RESTROOM				●				●	●		●			10'-0"	
S106	SENSORY ROOM			●					●	●		●			10'-0"	
S107	SECURITY ROOM			●					●	●		●			10'-0"	
S108	SOUND/MEDIA ROOM			●					●	●		●			10'-0"	
S109	WELCOME CENTER				●				●	●		●			10'-0"	
S110	FAMILY TOILET				●				●	●		●			10'-0"	
S111	MEN'S RESTROOM				●				●	●		●			10'-0"	
S112	MECHANICAL/ELECTRICAL ROOM		●						●	●		●			10'-0"	
S113	CORRIDOR				●				●	●		●			10'-0"	
S114	SANCTUARY			●					●	●				●	VARIES	
S115	CORRIDOR				●				●	●		●			10'-0"	
S116	VESTIBULE				●				●	●		●			10'-0"	
S117	PULPIT	●							●	●			●		VARIES	
S118	ORCHESTRA	●							●	●			●		VARIES	
S119	CHOIR	●							●	●			●		VARIES	
S120	VESTIBULE				●				●	●		●			10'-0"	
S121	CHOIR ROOM			●					●	●		●			10'-0"	
S122	UTILITY		●						●	●		●			10'-0"	
S123	TOILET				●				●	●		●			10'-0"	
S124	DRESSING RM.			●					●	●		●			10'-0"	
S125	MECHANICAL ROOM		●						●	●		●			10'-0"	
S126	DRESSING RM.			●					●	●		●			10'-0"	
S127	BAPTISM PREP.			●					●	●		●			10'-0"	
S128	TOILET				●				●	●		●			10'-0"	
S129	MECHANICAL		●						●	●		●			10'-0"	
S201	BAPTISTRY			●					●	●		●			10'-0"	

SANCTUARY AREAS

SANCTUARY OVERALL SQUARE FOOTAGE: 12,500 S.F.

ROOM NO.	ROOM NAME	AREA IN S.F.
S101	FAMILY TOILET	54
S102	COFFEE BAR	182
S103	NURSING	85
S104	MECHANICAL/ELECTRICAL ROOM	87
S105	WOMEN'S RESTROOM	256
S106	SENSORY ROOM	171
S107	SECURITY ROOM	85
S108	SOUND/MEDIA ROOM	171
S109	WELCOME CENTER	182
S110	FAMILY TOILET	54
S111	MEN'S RESTROOM	256
S112	MECHANICAL/ELECTRICAL ROOM	87
S113	CORRIDOR	412
S114	SANCTUARY	4986
S115	CORRIDOR	412
S116	VESTIBULE	290
S117	PULPIT	771
S118	ORCHESTRA	230
S119	CHOIR	524
S120	VESTIBULE	290
S121	CHOIR ROOM	1341
S122	UTILITY	388
S123	TOILET	57
S124	DRESSING RM.	137
S125	MECHANICAL ROOM	236
S126	DRESSING RM.	137
S127	BAPTISM PREP.	607
S128	TOILET	57

FINISH KEY

FINISH	DESCRIPTION
FLOOR	ALL FLOOR FINISHES AS SELECTED BY OWNER OR AS SPECIFIED BELOW.
VCT –	AZROCK VINYL COMPOSITION TILE – REFERENCE SPECS; ASTM F1066 CLASS 2 THROUGH PATTERN (REPLACES FS SS-T-312B TYPE IV, COMPOSITION 1, NON-ASBESTOS FORMULATED) PS1 (25, ASTM DESIGNATION F 1066-95, COMPOSITION 1, CCMC NUMBER 12448-R EVALUATION APPLIES TO TILE TYPE A (PLAIN AND MOTTLED TILE), ACCORDING TO CSA A126.1-M1984. COLOR SELECTED BY OWNER OR ARCHITECT FROM MANUFACTURERS STANDARD COLOR SELECTIONS.
CARPET –	FIBER: 100% OLEFIN, CONSTRUCTION: LEVEL LOOP, FACE WEIGHT: 23.00 OZ./YD., TOTAL WEIGHT: 54.69 OZ./YD., GAUGE: 1/10, PILE HEIGHT: .149, STITCHES PER INCH: 8.00, DYE METHOD: PREDYE, AVERAGE DENSIY: 5557, PRIMARY BACKING: WOVEN POLYPROPYLENE, SECONDARY BACKING: WOVEN POLYPROPYLENE, SMOKE: 152 FLAME ONLY, WEAR WARRANTY: 10 YEAR/10 YEAR STAIN & FADE/10 YEAR ANTI-STATIC. COLOR & PATTERN SELECTED BY OWNER OR ARCHITECT FROM MANUFACTURERS STANDARDS, AVAILABLE MANUFACTURERS: ABBEY CARPET.
CERAMIC TILE 1 –	CERAMIC TILE SHALL BE MEDIUM GRADE QUALITY APPROPRIATE FOR HEAVY TRAFFIC AREAS INCLUDING ALL RESIDENTIAL INTERIORS AND COMMERCIAL APPLICATIONS. TILES SHALL BE NOMINAL 12x12x5/16" WITH SMOOTH SURFACE. USE APPROPRIATE INSTALLATION MORTARS ACCORDING TO ANSI A118-1999. TILE COLOR AND GROUT COLOR SHALL BE SELECTED BY OWNER OR ARCHITECT.
CERAMIC TILE 2 –	SKID INHIBITING SURFACE
SEALED CONCRETE –	SEALER SHALL PROVIDE A CLEAR, ACRYLIC WATERBASE FINISH DESIGNED TO PROTECT AND BEAUTIFY CONCRETE SURFACES. SEALER SHALL PENETRATE THE SURFACE TO PROTECT AGAINST ALL ORGANIC STAINS INCLUDING GREASE & OIL. SEALER SHALL HAVE A SEMIGLOSS FINISH WHICH ENHANCES THE COLOR OF THE SURFACE.
BASE	
WOOD –	1 x 6 PAINT GRADE WOOD.
WALL	
PAINT 1 –	LATEX PAINTED GYPSUM WALLBOARD. SEE PAINT SCHEDULE.
CEILING	
S.A.T. 1 –	SUSPENDED ACOUSTICAL TILES BY ARMSTRONG, CIRRUS ANGLED TEGULAR/FINE TEXTURE, 15/16" GRID FACE, 24"x24"x3/4" DIMENSIONS, 0.65 NRC, 35 CAC, CLASS A FIRE RESISTANCE, 0.83 LIGHT REFLECTANCE, TILE FACE & GRID FACE COLOR WHITE.

INTERIOR PAINT SCHEDULE

CONCRETE MASONRY UNITS –

GYPSUM DRYWALL SYSTEMS – SATIN EMULSION FINISH: 2 COATS OVER PRIMER

PRIME COAT: PREMIUM INTERIOR LATEX PRIMER COAT
FIRST & SECOND FINISH COATS: PREMIUM INTERIOR SATIN LATEX BASE PAINT.

FERROUS METAL –

ZINC COATED METAL – SEMI GLOSS FINISH: 2 COATS OVER PRIMER, WITH TOTAL DRY FILM THICKNESS NOT LESS THAN 2.5 MILS.

PRIME COAT: ZINC DUST-ZINC OXIDE PRIMER COATING
FIRST COAT: INTERIOR ENAMEL UNDERCOAT
SECOND COAT: ODORLESS INTERIOR ALKYD SEMIGLOSS ENAMEL

PAINTED WOODWORK – SEMI GLOSS ENAMEL FINISH: 3 COATS

PRIME COAT: PREMIUM INTERIOR ENAMEL UNDERCOAT
FIRST & SECOND FINISH COATS: PREMIUM ODORLESS INTERIOR SEMIGLOSS ENAMEL

EXTERIOR PAINT SCHEDULE

FERROUS METAL –

ZINC COATED METAL – HIGH GLOSS ALKYD ENAMEL: 2 FINISH COATS OVER PRIMER

PRIME COAT: ZINC DUST-ZINC OXIDE PRIMER
FIRST & SECOND FINISH COATS: HIGH GLOSS ALKYD ENAMEL

WOOD – ALKYD FLOSS FINISH: 2 FINISH COATS OVER PRIMER WITH TOTAL DRY FILM THICKNESS NOT LESS THAN 3.5 MILS.

PRIMER COAT: EXTERIOR PRIMER COATING
FIRST & SECOND FINISH COATS: ALKYD GLOSS ENAMEL

ALUMINUM – HIGH GLOSS ALKYD ENAMEL: 2 FINISH COATS OVER PRIMER

PRIME COAT: ALKYD-TYPE ZINC CHROMATE PRIMER
FIRST & SECOND FINISH COATS: ALKYD GLOSS ENAMEL

ABBREVIATIONS:

FLOOR FINISH MATERIALS:
C = CARPET
VT = VINYL TILE
CON = CONCRETE, SEALED

WALL FINISH MATERIALS:
DWP = DRYWALL, PAINTED
PM = MASONRY, PAINTED
VCD = VINYL COVERED DRYWALL
CT = CERAMIC TILE
WC = 48" HIGH WAINSCOT

BASE FINISH MATERIALS:
VC = TOPSET VINYL
CT = COVED CERAMIC TILE

CEILING FINISH MATERIALS:
D = DRYWALL, PAINTED
SC = SUSPENDED CEILING

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SHEET A28 28 OF 43

PROJECT NO.
22004

SANCTUARY-FINISH SCHEDULE

CARLISLE BAPTIST CHURCH
REBUILD
835 BERTHE AVENUE
PANAMA CITY, FLORIDA

STATE OF FLORIDA REGISTERED ARCHITECT MARK MERCER 12737 NOT VALID WITHOUT RAISED SEAL

MARK MERCER & ASSOCIATES, INC.
1117 JENKS AVENUE / PANAMA CITY, FLORIDA 32401 / 850.763.8072

FINISH SCHEDULE

ROOM NO.	ROOM NAME	FLOOR					BASE			WALL		CEILING			HEIGHT	REMARKS
		WOOD	SEALED CONCRETE	CARPET	TILE	VINYL TILE	TILE	RUBBER	WOOD	DRYWALL (PAINTED)		PAINTED GYP. BOARD	S.A.T.	EXPOSED TO ROOF		
E101	STAIRS		●				●			●			●		9'-0"	
E102	CLASSROOM			●				●		●			●		9'-0"	
E103	CLASSROOM			●				●		●			●		9'-0"	
E104	RESTROOM				●		●			●			●		9'-0"	
E105	CORRIDOR			●					●	●			●		8'-0"	
E106	CLASSROOM			●				●		●			●		9'-0"	
E107	RESTROOM				●		●			●			●		9'-0"	
E108	CLASSROOM			●				●		●			●		9'-0"	
E109	UN-USED															
E110	STORAGE		●				●			●			●		9'-0"	
E111	CHILD DROP OFF/PICK UP			●					●	●			●		9'-0"	
E112	MECHANICAL ROOM		●				●			●			●		9'-0"	
E113	ELEVATOR EQUIPMENT ROOM		●				●			●			●		9'-0"	
E114	ELEVATOR															
E115	CORRIDOR			●					●	●			●		8'-0"	
E116	FINANCIAL OFFICE			●				●		●			●		9'-0"	
E117	MECHANICAL CLOSET		●				●			●			●		9'-0"	
E118	EXECUTIVE PASTOR/COUNSELOR'S OFFICE			●				●		●			●		9'-0"	
E119	TELEPHONE/COMMUNICATIONS ROOM		●				●			●			●		9'-0"	
E120	MUSIC MINISTER'S OFFICE			●				●		●			●		9'-0"	
E121	WOMEN'S RESTROOM				●		●			●			●		9'-0"	
E122	MEN'S RESTROOM				●		●			●			●		9'-0"	
E123	CORRIDOR			●				●		●			●		8'-0"	
E124	YOUTH PASTOR			●				●		●			●		9'-0"	
E125	COPY ROOM/SUPPLY ROOM			●				●		●			●		9'-0"	
E126	RECEPTION/RECEPTIONIST			●				●		●			●		9'-0"	
E127	WAITING ROOM			●				●		●			●		9'-0"	
E128	ASSISTANT PASTOR'S OFFICE			●				●		●			●		9'-0"	
E129	MECHANICAL/ELECTRICAL ROOM		●				●			●			●		9'-0"	
E130	TOILET				●		●			●			●		9'-0"	
E131	BREAK ROOM				●		●			●			●		9'-0"	
E132	STAIRS		●				●			●			●		9'-0"	
E133	SECRETARY TO THE SENIOR PASTOR			●				●		●			●		9'-0"	
E134	PASTOR'S BATHROOM				●		●			●			●		9'-0"	
E135	PASTOR'S OFFICE			●				●		●			●		9'-0"	
E136	CONFERENCE ROOM			●				●		●			●			
E137	CONCOURSE			●				●		●			●		10'-0"	
E201	CLASSROOM			●				●		●			●		10'-0"	
E202	CLASSROOM			●				●		●			●		10'-0"	
E203	CORRIDOR			●				●		●			●		10'-0"	
E204	CLASSROOM			●				●		●			●		10'-0"	
E205	CLASSROOM			●				●		●			●		10'-0"	

EDUCATION BUILDING AREAS

EDUCATION BUILDING OVERALL SQUARE FOOTAGE: 20,931 S.F.
1ST FLOOR: 12,361 S.F.
2ND FLOOR: 8,570 S.F.

ROOM NO.	ROOM NAME	AREA IN S.F.
E101	STAIRS	200
E102	CLASSROOM	653
E103	CLASSROOM	568
E104	RESTROOM	36
E105	CORRIDOR	312
E106	CLASSROOM	565
E107	RESTROOM	36
E108	CLASSROOM	653
E109	NOT USED	NOT USED
E110	STORAGE	374
E111	CHILD DROP OFF/PICK UP	425
E112	MECHANICAL ROOM	81
E113	ELEVATOR EQUIPMENT ROOM	100
E114	NOT USED	NOT USED
E115	CORRIDOR	789
E116	FINANCIAL OFFICE	96
E117	EXECUTIVE PASTOR/COUNSELOR'S OFFICE	91
E118	MECHANICAL CLOSET	23
E119	TELEPHONE/COMMUNICATIONS ROOM	66
E120	MUSIC MINISTER'S OFFICE	95
E121	WOMEN'S RESTROOM	290
E122	MEN'S RESTROOM	240
E123	CORRIDOR	337
E124	YOUTH PASTOR	94
E125	COPY ROOM/SUPPLY ROOM	362
E126	RECEPTION	174
E127	WAITING ROOM	557
E128	ASSISTANT PASTOR'S OFFICE	90
E129	MECHANICAL/ELECTRICAL ROOM	65
E130	TOILET	54
E131	BREAK ROOM	70
E132	STAIRS	187
E133	SECRETARY TO THE SENIOR PASTOR	156
E134	PASTOR'S BATHROOM	76
E135	PASTOR'S OFFICE	172
E136	CONFERENCE ROOM	236
E137	CONCOURSE	3571
E201	CLASSROOM	638
E202	CLASSROOM	803
E203	CORRIDOR	1112
E204	CLASSROOM	802
E205	CLASSROOM	621

SHEET 29 OF 43 A29
PROJECT NO. 22004
PREPARED BY MERCER
REVIEWED BY MERCER
ISSUE DATE 05-09-2024
SCALE AS SHOWN
EDUCATIONAL BUILDING-FINISH SCHEDULE
CARLISLE BAPTIST CHURCH REBUILD
835 BERTHE AVENUE
PANAMA CITY, FLORIDA

MARK MERCER & ASSOCIATES, INC.
1117 JENKS AVENUE / PANAMA CITY, FLORIDA 32401 / 850.763.8072

FINISH SCHEDULE

ROOM NO.	ROOM NAME	FLOOR					BASE			WALL		CEILING			HEIGHT	REMARKS
		WOOD	SEALED CONCRETE	CARPET	TILE	VINYL TILE	TILE	RUBBER	WOOD	DRYWALL (PAINTED)		PAINTED GYP. BOARD	S.A.T.	EXPOSED TO ROOF		
E206	MECHANICAL ROOM		●				●			●			●		10'-0"	
E207	MEN'S RESTROOM				●		●			●			●		10'-0"	
E208	MECHANICAL ROOM		●				●			●			●		10'-0"	
E209	STORAGE		●				●			●			●		10'-0"	
E210	SUPPLIES/STORAGE			●			●			●			●		10'-0"	
E211	WOMEN'S RESTROOM				●		●			●			●		10'-0"	
E212	CHILDREN'S CHURCH			●				●		●			●		12'-0"	
E213	MECHANICAL ROOM		●				●			●			●		10'-0"	
E214	PLATFORM			●				●		●			●		10'-0"	
E215	SUPPLIES/STORAGE			●			●			●			●		10'-0"	
E216	CLASSROOM			●				●		●			●		10'-0"	
E217	STAIR		●				●			●			●		10'-0"	
E218	STAIR		●				●			●			●		10'-0"	

EDUCATION BUILDING AREAS

EDUCATION BUILDING OVERALL SQUARE FOOTAGE: 20,931 S.F.
1ST FLOOR: 12,361 S.F.
2ND FLOOR: 8,570 S.F.

ROOM NO.	ROOM NAME	AREA IN S.F.
E206	MECHANICAL ROOM	67
E207	MEN'S RESTROOM	284
E208	MECHANICAL ROOM	62
E209	STORAGE	18
E210	SUPPLIES/STORAGE	176
E211	WOMEN'S RESTROOM	290
E212	CHILDREN'S CHURCH	2340
E213	MECHANICAL ROOM	68
E214	PLATFORM	602
E215	SUPPLIES/STORAGE	226
E216	CLASSROOM	617
E217	STAIR	200
E218	STAIR	206

A30
SHEET 30 OF 43

PROJECT NO.
22004

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MERCER
ISSUE DATE
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EDUCATIONAL BUILDING-FINISH SCHEDULE CONT.

CARLISLE BAPTIST CHURCH
REBUILD
835 BERTHE AVENUE
PANAMA CITY, FLORIDA

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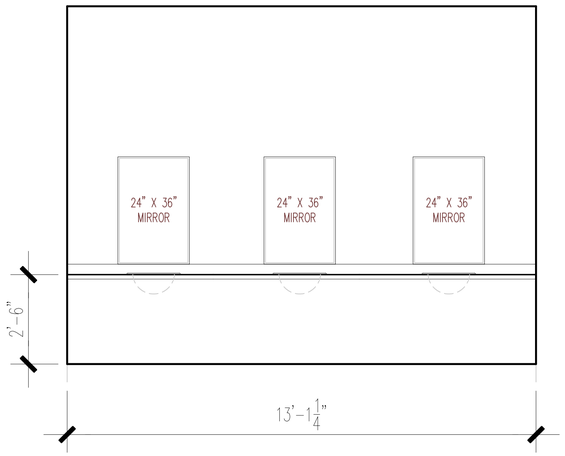
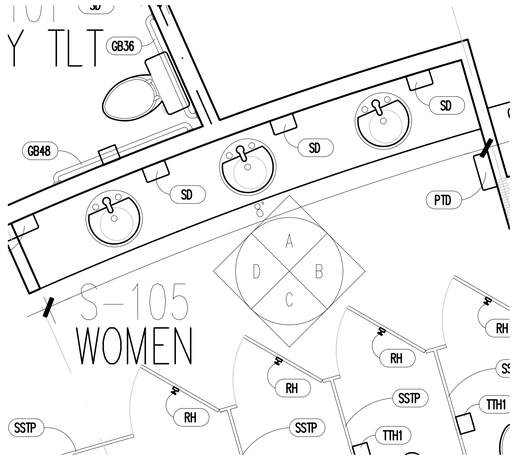


S-105A, S-111A CASEWORK ELEVATION

11 x 17 SCALE: 1/4"=1'-0"
24 x 36 SCALE: 1/2"=1'-0"

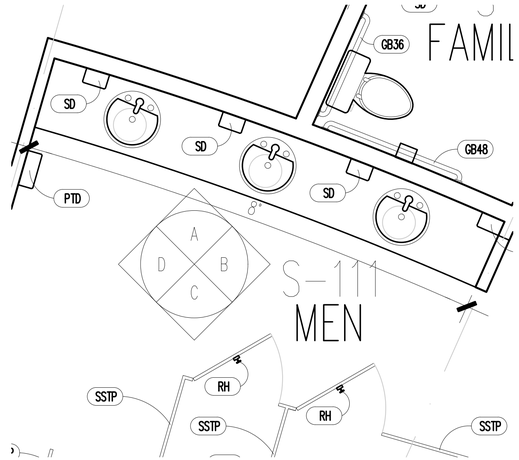
GRAPHIC SCALE
0 1' 2' 4' 8'



S-105 CASEWORK PLAN VIEW

11 x 17 SCALE: 1/4"=1'-0"
24 x 36 SCALE: 1/2"=1'-0"

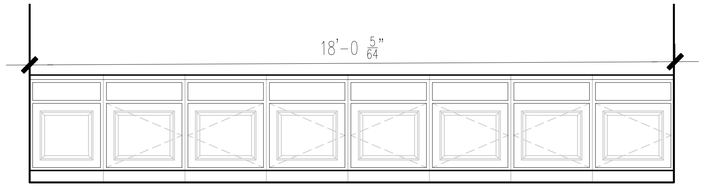
GRAPHIC SCALE
0 1' 2' 4' 8'



S-111 CASEWORK PLAN VIEW

11 x 17 SCALE: 1/4"=1'-0"
24 x 36 SCALE: 1/2"=1'-0"

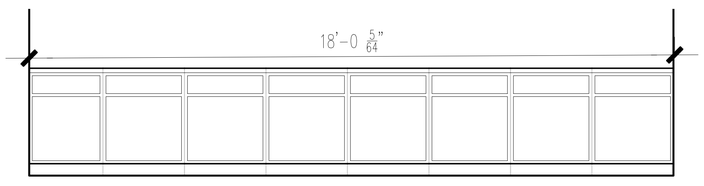
GRAPHIC SCALE
0 1' 2' 4' 8'



S-102A CASEWORK ELEVATION

11 x 17 SCALE: 1/4"=1'-0"
24 x 36 SCALE: 1/2"=1'-0"

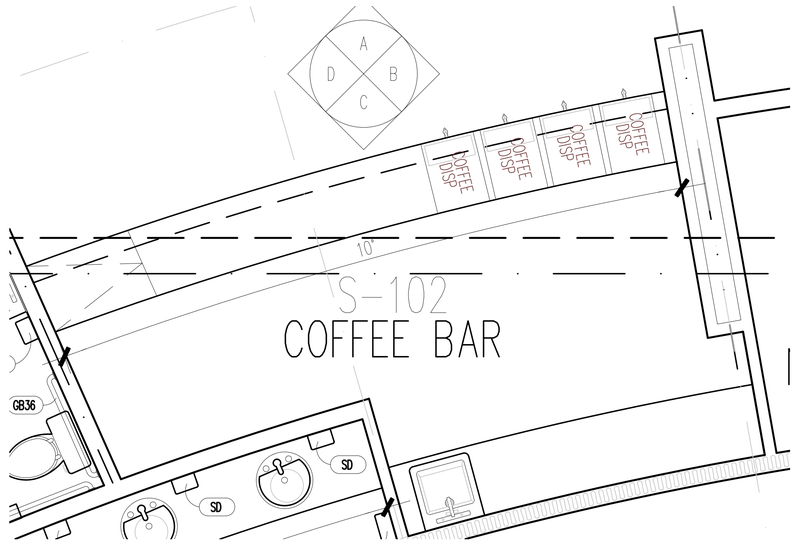
GRAPHIC SCALE
0 1' 2' 4' 8'



S-102C CASEWORK ELEVATION

11 x 17 SCALE: 1/4"=1'-0"
24 x 36 SCALE: 1/2"=1'-0"

GRAPHIC SCALE
0 1' 2' 4' 8'



S-102 CASEWORK PLAN VIEW

11 x 17 SCALE: 1/4"=1'-0"
24 x 36 SCALE: 1/2"=1'-0"

GRAPHIC SCALE
0 1' 2' 4' 8'

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05-09-2024

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SCALE
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SHEET 31 OF 43
A31

PROJECT NO.
22004

WORSHIP CENTER-CASEWORK DETAILS

CARLISLE BAPTIST CHURCH
REBUILD
835 BERTHIE AVENUE
PANAMA CITY, FLORIDA

STATE OF FLORIDA
MARK MERCER
12737
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1117 JENKS AVENUE / PANAMA CITY, FLORIDA 32401 / 850.763.8072

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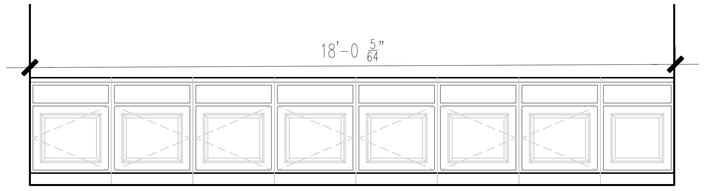
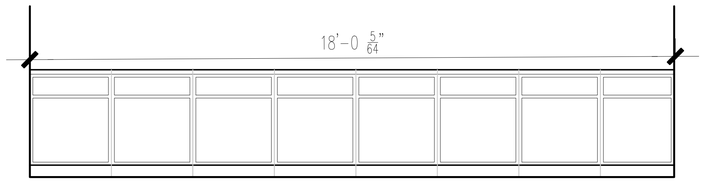


S-109A CASEWORK ELEVATION

11 x 17 SCALE: 1/4"=1'-0"
24 x 36 SCALE: 1/2"=1'-0"

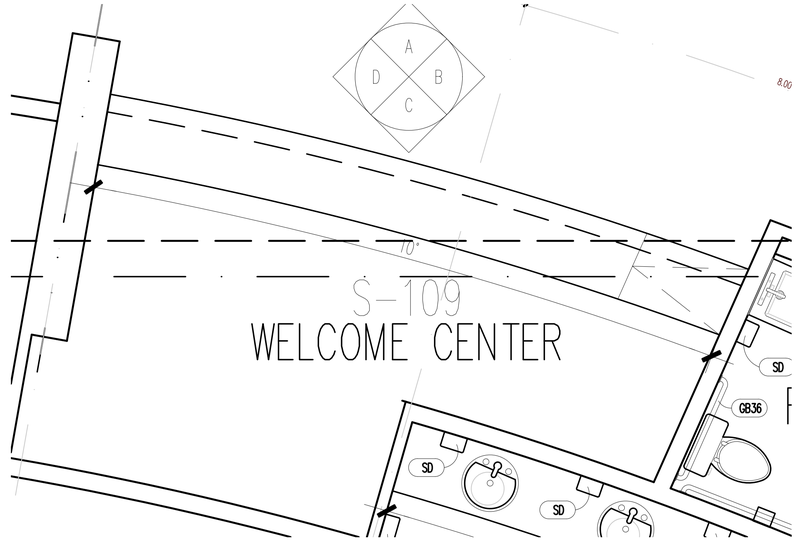
GRAPHIC SCALE
0 1' 2' 4' 8'



S-109C CASEWORK ELEVATION

11 x 17 SCALE: 1/4"=1'-0"
24 x 36 SCALE: 1/2"=1'-0"

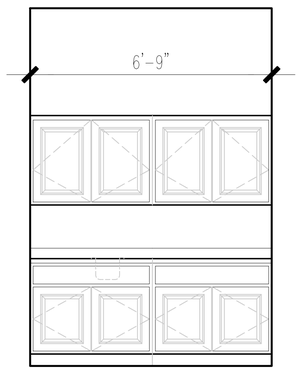
GRAPHIC SCALE
0 1' 2' 4' 8'



S-109 CASEWORK PLAN VIEW

11 x 17 SCALE: 1/4"=1'-0"
24 x 36 SCALE: 1/2"=1'-0"

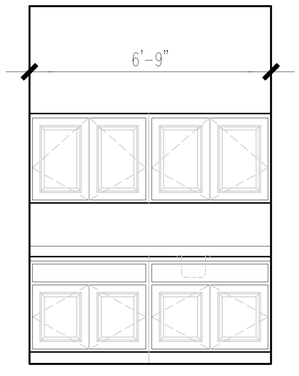
GRAPHIC SCALE
0 1' 2' 4' 8'



E-102B, E-106D CASEWORK ELEV.

11 x 17 SCALE: 1/4"=1'-0"
24 x 36 SCALE: 1/2"=1'-0"

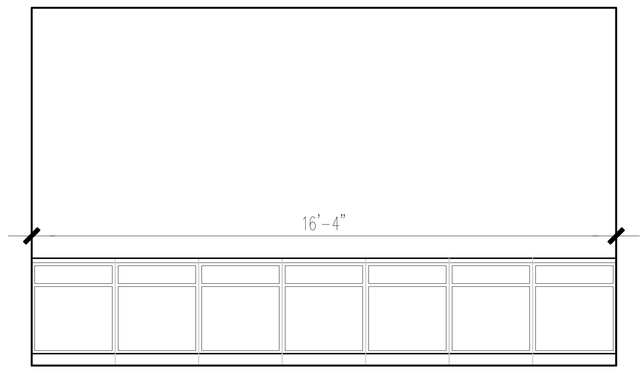
GRAPHIC SCALE
0 1' 2' 4' 8'



E-103B CASEWORK ELEV.

11 x 17 SCALE: 1/4"=1'-0"
24 x 36 SCALE: 1/2"=1'-0"

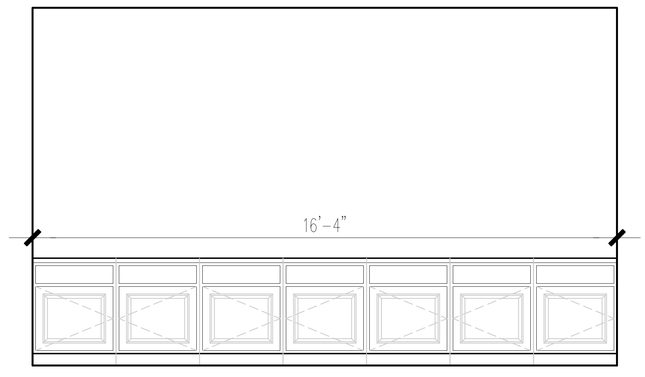
GRAPHIC SCALE
0 1' 2' 4' 8'



E-111C CASEWORK ELEVATION

11 x 17 SCALE: 1/4"=1'-0"
24 x 36 SCALE: 1/2"=1'-0"

GRAPHIC SCALE
0 1' 2' 4' 8'



E-111A CASEWORK ELEVATION

11 x 17 SCALE: 1/4"=1'-0"
24 x 36 SCALE: 1/2"=1'-0"

GRAPHIC SCALE
0 1' 2' 4' 8'

PREPARED BY
MERCER
ISSUE DATE
05-09-2024

REVIEWED BY
MERCER
SCALE
AS SHOWN

SHEET 32 OF 43
A32

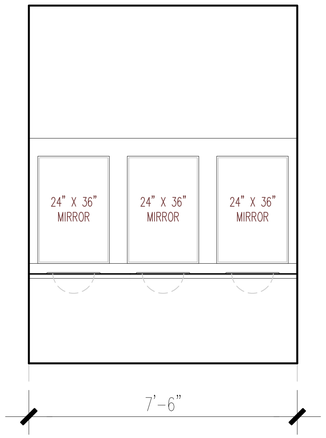
PROJECT NO.
22004

WORSHIP CENTER-CASEWORK DETAILS CONT.

CARLISLE BAPTIST CHURCH
REBUILD
835 BERTHE AVENUE
PANAMA CITY, FLORIDA

STATE OF FLORIDA REGISTERED ARCHITECT MARK MERCER 12713 NOT VALID WITHOUT RAISED SEAL

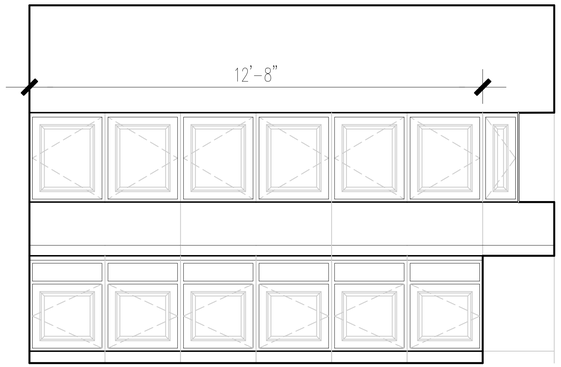
MARK MERCER & ASSOCIATES, INC.
1117 JENKS AVENUE / PANAMA CITY, FLORIDA 32401 / 850.763.8072



E-121D, E-122D, E-207D, E-211D CASEWORK ELEVATION

11 x 17 SCALE: 1/4"=1'-0"
24 x 36 SCALE: 1/2"=1'-0"

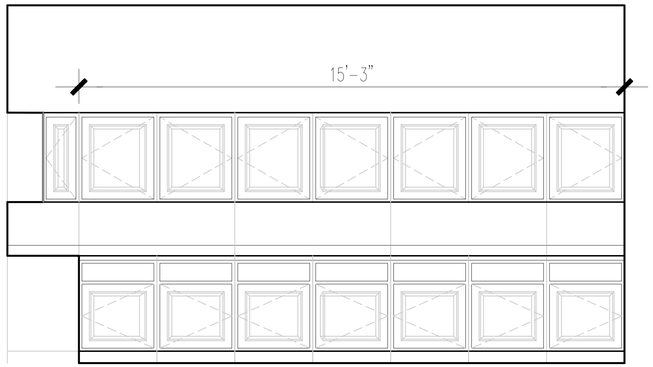
GRAPHIC SCALE
0 1' 2' 4' 8'



E-125B, E-125D CASEWORK ELEVATION

11 x 17 SCALE: 1/4"=1'-0"
24 x 36 SCALE: 1/2"=1'-0"

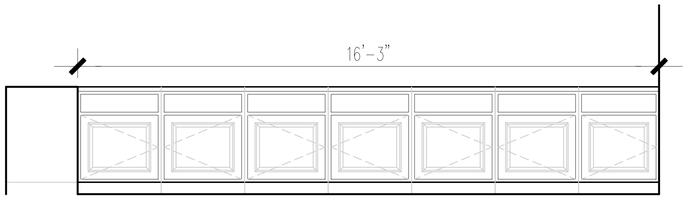
GRAPHIC SCALE
0 1' 2' 4' 8'



E-125A, E-125C CASEWORK ELEVATION

11 x 17 SCALE: 1/4"=1'-0"
24 x 36 SCALE: 1/2"=1'-0"

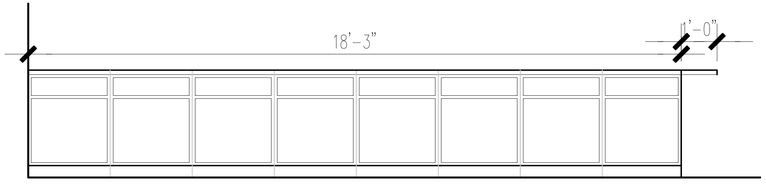
GRAPHIC SCALE
0 1' 2' 4' 8'



E-126C CASEWORK ELEVATION

11 x 17 SCALE: 1/4"=1'-0"
24 x 36 SCALE: 1/2"=1'-0"

GRAPHIC SCALE
0 1' 2' 4' 8'



E-127A CASEWORK ELEVATION

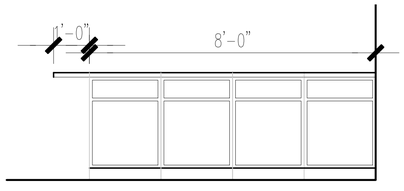
11 x 17 SCALE: 1/4"=1'-0"
24 x 36 SCALE: 1/2"=1'-0"

GRAPHIC SCALE
0 1' 2' 4' 8'

E-126B CASEWORK ELEVATION

11 x 17 SCALE: 1/4"=1'-0"
24 x 36 SCALE: 1/2"=1'-0"

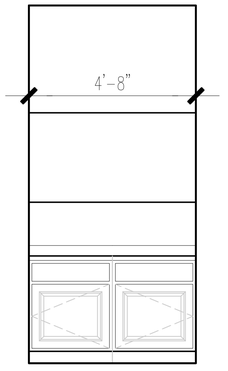
GRAPHIC SCALE
0 1' 2' 4' 8'



E-127D CASEWORK ELEVATION

11 x 17 SCALE: 1/4"=1'-0"
24 x 36 SCALE: 1/2"=1'-0"

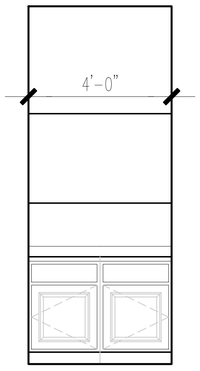
GRAPHIC SCALE
0 1' 2' 4' 8'



E-130C CASEWORK ELEVATION

11 x 17 SCALE: 1/4"=1'-0"
24 x 36 SCALE: 1/2"=1'-0"

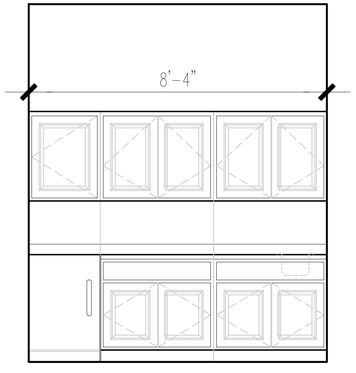
GRAPHIC SCALE
0 1' 2' 4' 8'



E-134A CASEWORK ELEVATION

11 x 17 SCALE: 1/4"=1'-0"
24 x 36 SCALE: 1/2"=1'-0"

GRAPHIC SCALE
0 1' 2' 4' 8'



E-131D CASEWORK ELEVATION

11 x 17 SCALE: 1/4"=1'-0"
24 x 36 SCALE: 1/2"=1'-0"

GRAPHIC SCALE
0 1' 2' 4' 8'

PREPARED BY	REVIEWED BY
MERCER	MERCER
ISSUE DATE	SCALE
05-09-2024	AS SHOWN

EDUCATION BUILDING-CASEWORK DETAILS

PROJECT NO. 22004

A33 SHEET 33 OF 43

CARLISLE BAPTIST CHURCH
REBUILD
835 BERTHE AVENUE
PANAMA CITY, FLORIDA

STATE OF FLORIDA
MARK WILLIAM MERCER
12737
REGISTERED ARCHITECT
NOT VALID WITHOUT SIGNATURE AND RAISED SEAL

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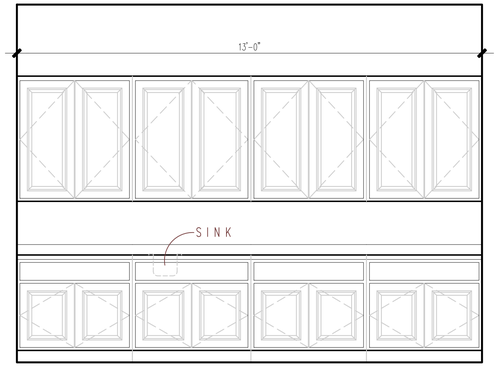
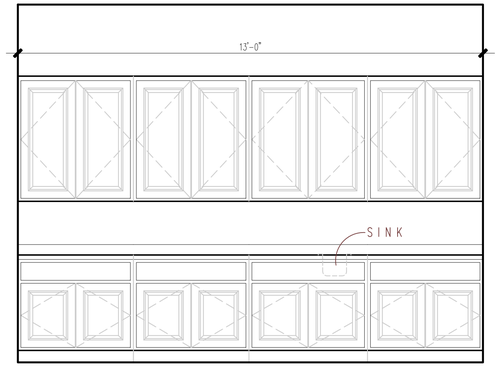
1117 JENKS AVENUE / PANAMA CITY, FLORIDA 32401 / 850.763.8072



E-201B, 204D CASEWORK ELEVATION

11 x 17 SCALE: 1/4"=1'-0"
24 x 36 SCALE: 1/2"=1'-0"

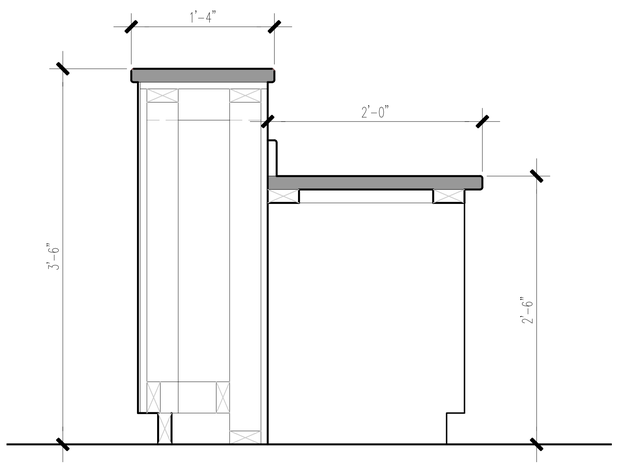
GRAPHIC SCALE
0 1' 2' 4' 8'



E-202B, 205D CASEWORK ELEVATION

11 x 17 SCALE: 1/4"=1'-0"
24 x 36 SCALE: 1/2"=1'-0"

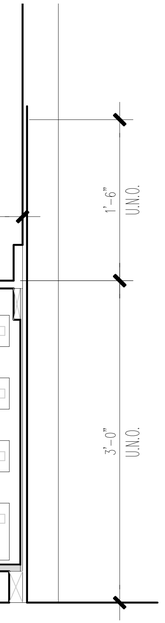
GRAPHIC SCALE
0 1' 2' 4' 8'



TYPICAL COUNTER SECTION

11 x 17 SCALE: 3/4"=1'-0"
24 x 36 SCALE: 1-1/2"=1'-0"

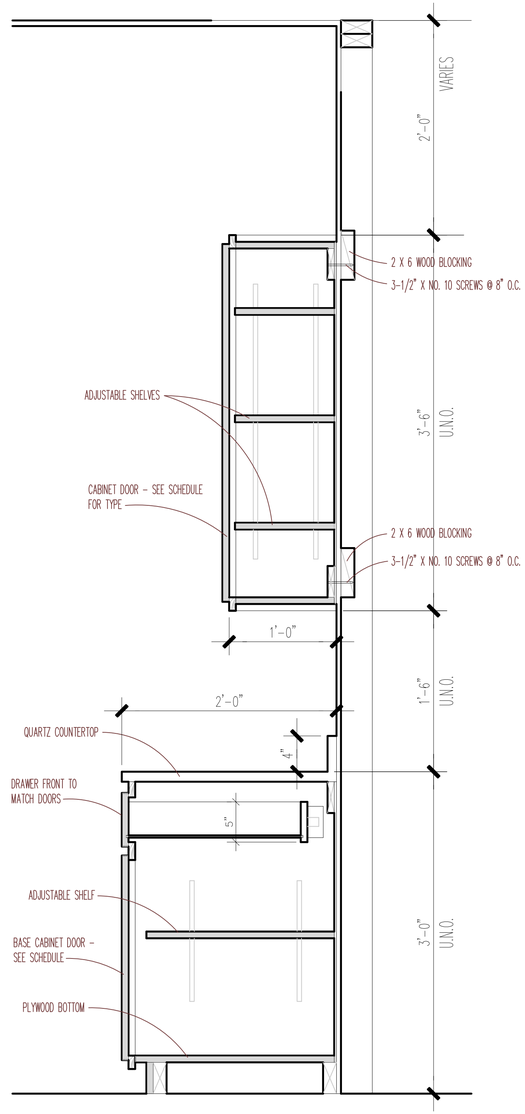
GRAPHIC SCALE
0 3/4" 1' 2' 3'



TYPICAL DRAWER STACK SECTION

11 x 17 SCALE: 3/4"=1'-0"
24 x 36 SCALE: 1-1/2"=1'-0"

GRAPHIC SCALE
0 3/4" 1' 2' 3'



TYPICAL CABINET SECTION

11 x 17 SCALE: 3/4"=1'-0"
24 x 36 SCALE: 1-1/2"=1'-0"

GRAPHIC SCALE
0 3/4" 1' 2' 3'

PREPARED BY
MERCER
ISSUE DATE
05-09-2024

REVIEWED BY
MERCER
SCALE
AS SHOWN

A34
SHEET 34 OF 43

PROJECT NO.
22004

ED. BLDG.-CASEWORK DETAILS CONT.

CARLISLE BAPTIST CHURCH
REBUILD
835 BERTHE AVENUE
PANAMA CITY, FLORIDA

STATE OF FLORIDA REGISTERED ARCHITECT 12737 MARK MERCER NOT VALID WITHOUT RAISED SEAL

MARK MERCER & ASSOCIATES, INC.
1117 JENKS AVENUE / PANAMA CITY, FLORIDA 32401 / 850.763.8072

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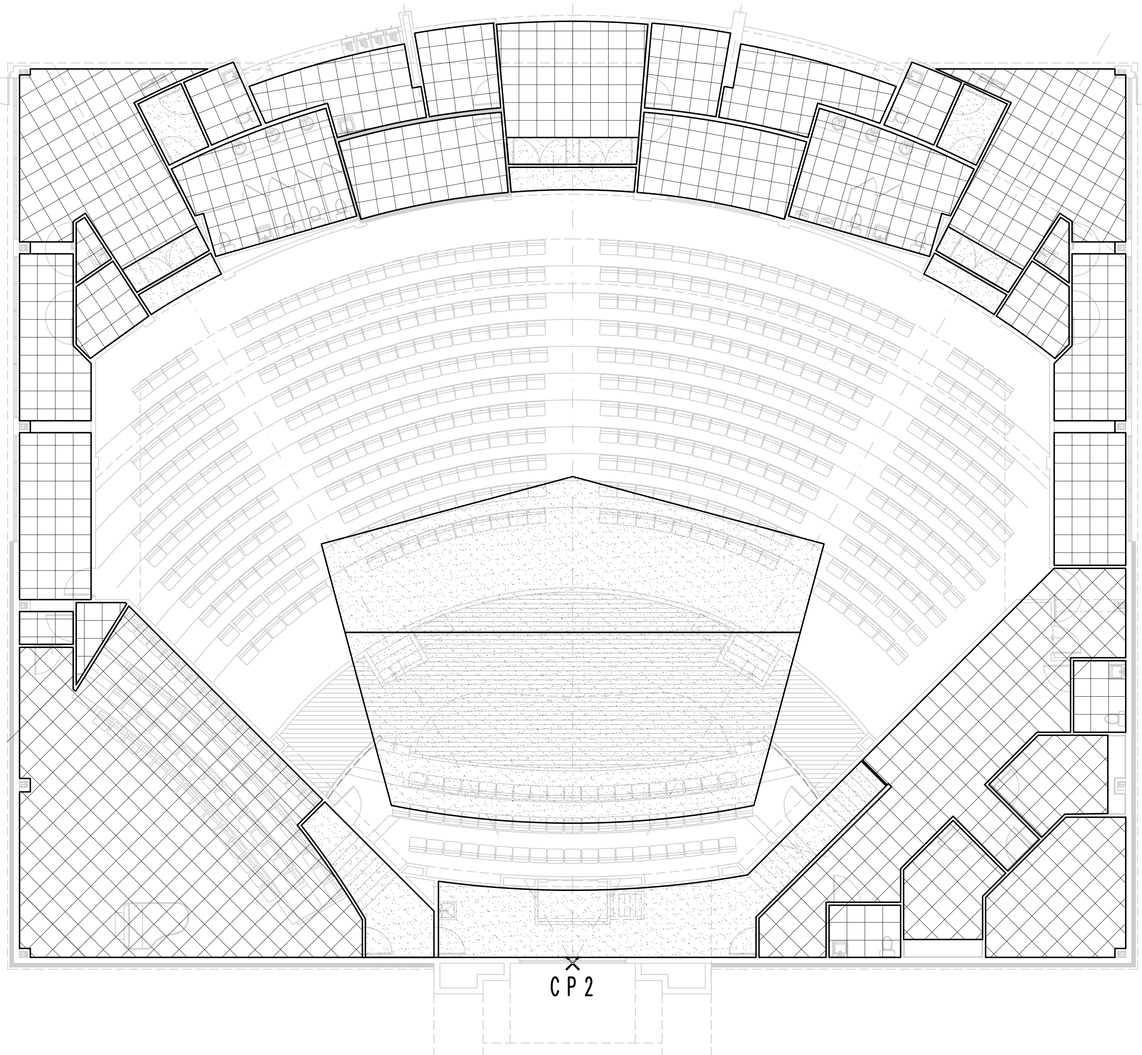


NORTH

REFLECTED CEILING PLAN
WORSHIP CENTER

11 x 17 SCALE: 3/32"=1'-0"
24 x 36 SCALE: 3/16"=1'-0"

GRAPHIC SCALE
0 1' 4' 8' 12'

L E G E N D

- SUSPENDED ACOUSTICAL TILE CEILING
- SUSPENDED GYPSUM CEILING
- FLUORESCENT TROFFER
- SUPPLY AIR DIFFUSER
- EXHAUST FAN

ACOUSTICAL CEILINGS

DESCRIPTION OF WORK:

Extent of each type of acoustical ceiling is shown and scheduled on drawings.

Types of acoustical ceilings specified in this section include the following:

Acoustical panel ceilings, exposed suspension.

PROJECT CONDITIONS:

Space Enclosure: Do not install interior acoustical ceilings until space is enclosed and weatherproof, wet-work in space is completed and nominally dry, work above ceilings is complete, and ambient conditions of temperature and humidity will be continuously maintained at values near those indicated for final occupancy.

PART 2 – PRODUCTS

ACOUSTICAL PANELS:

Mineral Fiber, Cast or Molded; with
Standard Washable Painted Finish: Provide Type II, Form 1 units per FS SSS118 and complying with the following requirements:

Embossed register pattern: Manufacturers standard embossed in register design; other panel characteristics as follows:

Color/Light Reflectance: White/LR 3 (65 © 69%)
Color: White
Grade: NRC 65
STC Range: 25 29
Edge Detail: Reveal.
Size: 24" x 24" x 3/4".

Available Products: Subject to compliance with requirements, products which may be incorporated in the work include, but are not limited to, the following:

Mineral Composition – Nodulated, Cast or Molded with Standard Washable Painted Finish, Embossed in Register, Pattern, Non-Fire Resistance Rated:

"Cirrus" Tegular Lay-in, Armstrong Industries, Inc. or equal – substitutes must be prior approved,

METAL SUSPENSION SYSTEMS, GENERAL:

Standard for Metal Suspension Systems: Provide metal suspension systems of type, structural classification and finish indicated which comply with applicable ASTM C 635 requirements.

Finishes and Colors: Provide manufacturer's standard factory applied finish for type of system indicated. For exposed suspension members and accessories with painted finish, provide color indicated or, if not otherwise indicated, as selected by Architect from manufacturer's full range of standard colors.

Attachment Devices: Size for 5 times design load indicated in ASTM C 635, Table 1, Direct Hung.

Hanger Wire: Galvanized carbon steel wire, ASTM A 641, soft temper, prestretched, Class 1 coating, sized so that stress at 3-times hanger design load (ASTM C 635, Table 1, Direct Hung), will be less than yield stress of wire, but provide not less than 12 gage.

Edge Moldings and Trim: Provide manufacturer's standard metal molding for edges and penetrations of ceiling which fits with type of edge detail and suspension system indicated.

For lay-in panels with reveal edge details, provide stepped edge molding which forms reveal of same depth and width as that formed between edge of panel and flange at exposed suspension member.

For circular penetrations of ceiling, provide edge moldings fabricated to diameter required to fit penetration exactly.

Hold-Down Clips for Non-Fire-Rated Ceilings: For interior ceilings composed of lay-in panels weighing less than 1 lb. per sq. ft., provide hold-down clips spaced 2'-0" o.c. on all cross tees.

EXPOSED METAL DIRECT-HUNG SUSPENSION SYSTEMS:

Non-Fire-Resistance Rated Double Web Steel Suspension System:

Structural Classification: Intermediate-Duty System.
Finish: Painted, white.

Manufacturers of Non Fire Resistance Rated double Web Steel Suspension Systems:

Chicago Metallic Corporation.
Donn Corporation.
Eastern Products Div., Armstrong World Industries, Inc.
National Rolling Mills, Inc.

PART 3 – EXECUTION

PREPARATION:

Measure each ceiling area and establish layout of acoustical units to balance border widths at opposite edges of each ceiling. Avoid use of less-than-half width units at borders, and comply with reflected ceiling plans wherever possible.

INSTALLATION:

General: Install materials in accordance with manufacturers' printed instructions, and to comply with governing regulations, fire resistance rating requirements as indicated, and CISCA standards applicable to work.

Arrange acoustical units and orient directionally-patterned units

PREPARED BY
MERCER
ISSUE DATE
05-09-2024

REVIEWED BY
MERCER
SCALE
AS SHOWN

SHEET A35 35 OF 43

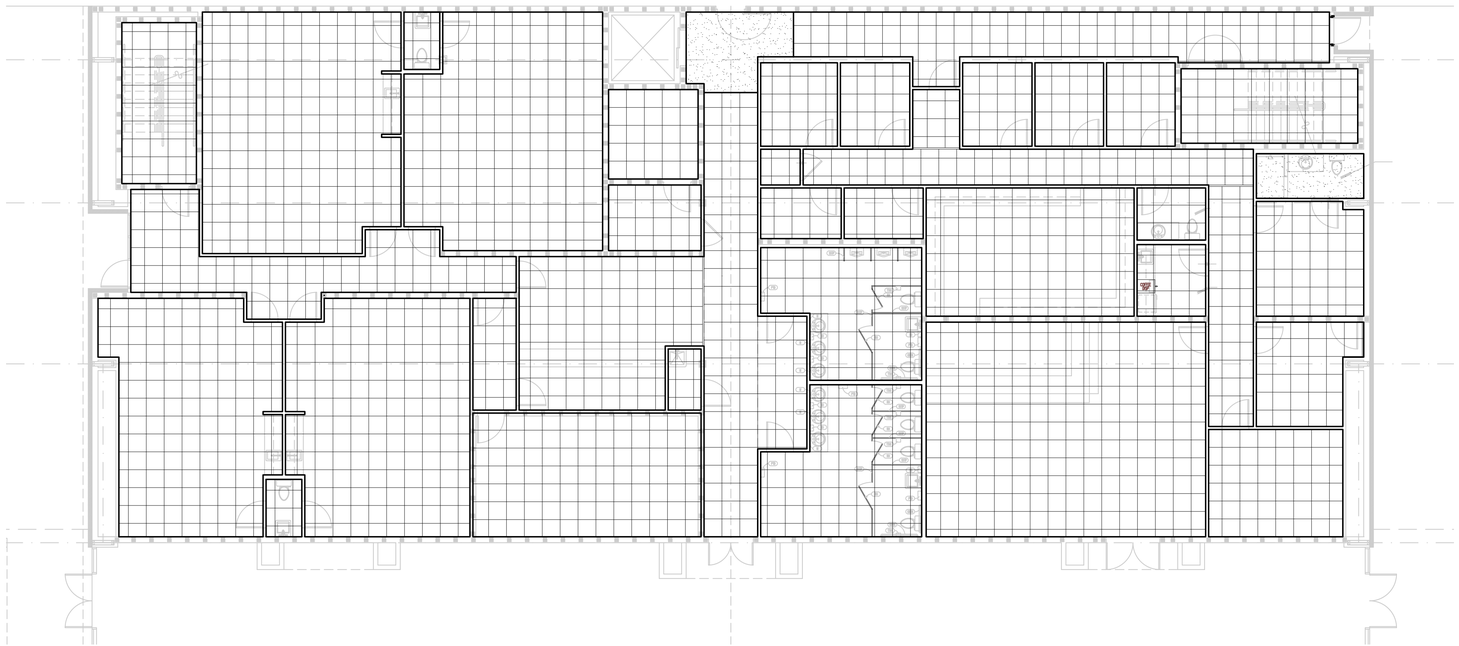
PROJECT NO.
22004

WORSHIP CENTER-REFLECTED CEILING PLAN

CARLISLE BAPTIST CHURCH
REBUILD
835 BERTHE AVENUE
PANAMA CITY, FLORIDA

STATE OF FLORIDA
CERTIFICATE OF AUTHORIZATION
MARK MERCER & ASSOCIATES, INC.
1273
NOT VALID WITHOUT RAISED SEAL

MARK MERCER & ASSOCIATES, INC.
1117 JENKS AVENUE / PANAMA CITY, FLORIDA 32401 / 850.763.8072



LEGEND

- SUSPENDED ACOUSTICAL TILE CEILING
- SUSPENDED GYPSUM CEILING
- FLUORESCENT TROFFER
- SUPPLY AIR DIFFUSER
- EXHAUST FAN

NORTH

REFLECTED CEILING PLAN
EDUCATION BUILDING 1ST FLOOR

11 x 17 SCALE: 3/32"=1'-0"
24 x 36 SCALE: 3/16"=1'-0"

GRAPHIC SCALE
0 1' 4' 8' 12'

PREPARED BY: MERCER
ISSUE DATE: 05-09-2024
REVIEWED BY: MERCER
SCALE: AS SHOWN

SHEET A36 36 OF 43

PROJECT NO. 22004

ED. BLDG. 1ST FLOOR-REFLECTED CEILING PLAN

CARLISLE BAPTIST CHURCH
REBUILD
835 BERTHE AVENUE
PANAMA CITY, FLORIDA

STATE OF FLORIDA REGISTERED ARCHITECT MARK MERCER 12737 NOT VALID WITHOUT RAISED SEAL

MARK MERCER & ASSOCIATES, INC.
1117 JENKS AVENUE / PANAMA CITY, FLORIDA 32401 / 850.763.8072

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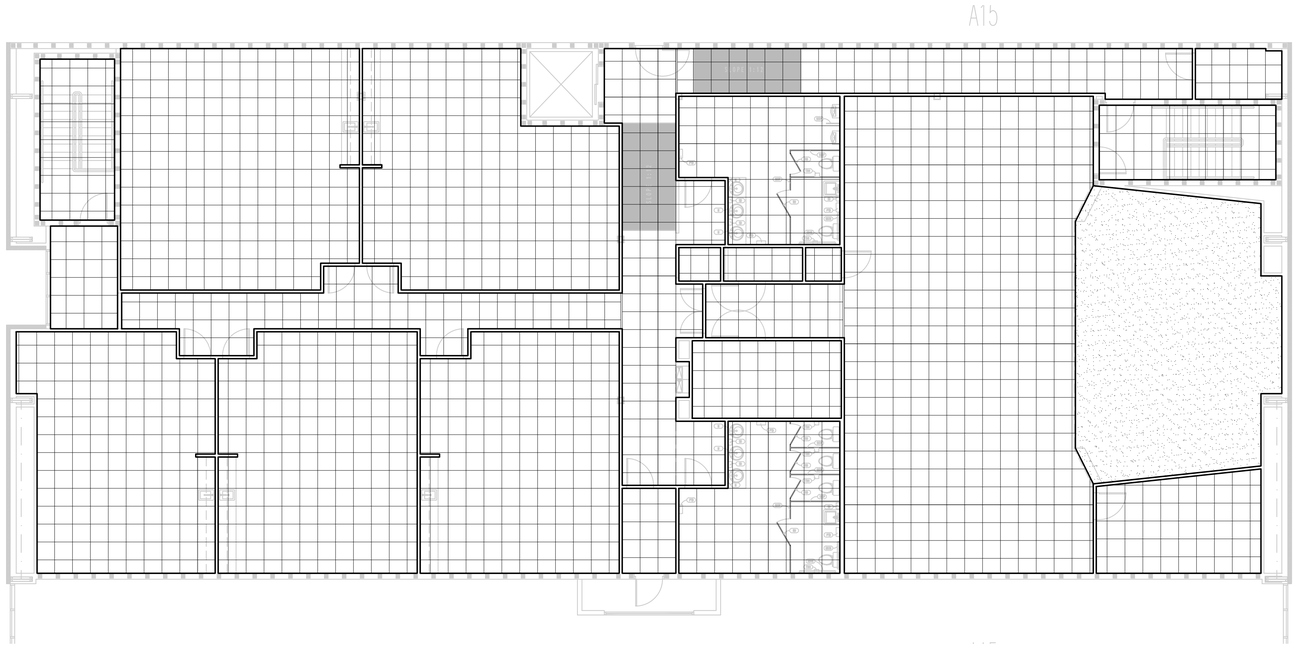

LEGEND

- SUSPENDED ACOUSTICAL TILE CEILING
- SUSPENDED GYPSUM CEILING
- FLUORESCENT TROFFER
- SUPPLY AIR DIFFUSER
- EXHAUST FAN

NORTH

EDUCATION BUILDING-2ND FLOOR REFLECTED CEILING PLAN

11 x 17 SCALE: 3/32"=1'-0"
24 x 36 SCALE: 3/16"=1'-0"

GRAPHIC SCALE
0 1' 4' 8' 12'

PREPARED BY: MERCER
ISSUE DATE: 05-09-2024
REVIEWED BY: MERCER
SCALE: AS SHOWN

SHEET A37 37 OF 43

PROJECT NO. 22004

ED. BLDG.-2ND FLOOR-REFLECTED CEILING PLAN

CARLISLE BAPTIST CHURCH
REBUILD
835 BERTHE AVENUE
PANAMA CITY, FLORIDA

STATE OF FLORIDA REGISTERED ARCHITECT MARK MERCER 12737 NOT VALID WITHOUT RAISED SEAL

MARK MERCER & ASSOCIATES, INC.
1117 JENKS AVENUE / PANAMA CITY, FLORIDA 32401 / 850.763.8072

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ACOUSTICAL CEILINGS

DESCRIPTION OF WORK:

Extent of each type of acoustical ceiling is shown and scheduled on drawings.

Types of acoustical ceilings specified in this section include the following:

Acoustical panel ceilings, exposed suspension.

PROJECT CONDITIONS:

Space Enclosure: Do not install interior acoustical ceilings until space is enclosed and weatherproof, wet-work in space is completed and nominally dry, work above ceilings is complete, and ambient conditions of temperature and humidity will be continuously maintained at values near those indicated for final occupancy.

PART 2 – PRODUCTS

ACOUSTICAL PANELS:

Mineral Fiber, Cast or Molded; with
Standard Washable Painted Finish: Provide Type II, Form 1 units per FS SSS118 and complying with the following requirements:

Embossed register pattern: Manufacturers standard embossed in register design; other panel characteristics as follows:

Color/Light Reflectance: White/LR 3 (65 © 69%)
Color: White
Grade: NRC 65
STC Range: 25 29
Edge Detail: Reveal.
Size: 24" x 24" x 3/4".

Available Products: Subject to compliance with requirements, products which may be incorporated in the work include, but are not limited to, the following:

Mineral Composition – Nodulated, Cast or Molded with Standard Washable Painted Finish, Embossed in Register, Pattern, Non-Fire Resistance Rated:

"Cirrus" Tegular Lay-in, Armstrong Industries, Inc.

METAL SUSPENSION SYSTEMS, GENERAL:

Standard for Metal Suspension Systems: Provide metal suspension systems of type, structural classification and finish indicated which comply with applicable ASTM C 635 requirements.

Finishes and Colors: Provide manufacturer's standard factory applied finish for type of system indicated. For exposed suspension members and accessories with painted finish, provide color indicated or, if not otherwise indicated, as selected by Architect from manufacturer's full range of standard colors.

Attachment Devices: Size for 5 times design load indicated in ASTM C 635, Table 1, Direct Hung.

Hanger Wire: Galvanized carbon steel wire, ASTM A 641, soft temper, prestretched, Class 1 coating, sized so that stress at 3-times hanger design load (ASTM C 635, Table 1, Direct Hung), will be less than yield stress of wire, but provide not less than 12 gage.

Edge Moldings and Trim: Provide manufacturer's standard metal molding for edges and penetrations of ceiling which fits with type of edge detail and suspension system indicated.

For lay-in panels with reveal edge details, provide stepped edge molding which forms reveal of same depth and width as that formed between edge of panel and flange at exposed suspension member.

For circular penetrations of ceiling, provide edge moldings fabricated to diameter required to fit penetration exactly.

Hold-Down Clips for Non-Fire-Rated Ceilings: For interior ceilings composed of lay-in panels weighing less than 1 lb. per sq. ft., provide hold-down clips spaced 2'-0" o.c. on all cross tees.

EXPOSED METAL DIRECT-HUNG SUSPENSION SYSTEMS:

Non-Fire-Resistance Rated Double Web Steel Suspension System:

Structural Classification: Intermediate-Duty System.
Finish: Painted, white.

Manufacturers of Non Fire Resistance Rated double Web Steel Suspension Systems:

Chicago Metallic Corporation.
Donn Corporation.
Eastern Products Div., Armstrong World Industries, Inc.
National Rolling Mills, Inc.

PART 3 – EXECUTION

PREPARATION:

Measure each ceiling area and establish layout of acoustical units to balance border widths at opposite edges of each ceiling. Avoid use of less-than-half width units at borders, and comply with reflected ceiling plans wherever possible.

INSTALLATION:

General: Install materials in accordance with manufacturers' printed instructions, and to comply with governing regulations, fire resistance rating requirements as indicated, and CISCA standards applicable to work.

Arrange acoustical units and orient directionally-patterned units (if any) in manner shown by reflected ceiling plans.

Install tile with pattern running in one direction.

Install suspension systems to comply with ASTM C 636, with hangers supported only from building structural members. Locate hangers not less than 6" from each end and spaced 4'-0" along each carrying channel or direct-hung runners, unless otherwise indicated, leveling to tolerance of 1/8" in 12'-0".

Secure wire hangers by looping and wire-tying, either directly to structures or to inserts, eye-screws or other devices which are secure and appropriate for substrate, and which will not deteriorate or fail with age or elevated temperatures.

Install hangers plumb and free from contact with insulation or other objects within ceiling plenum which are not part of supporting structural or ceiling suspension system. Splay hangers only where required to miss obstructions and offset resulting horizontal force by bracing, counter splaying or other equally effective means.

Install edge moldings of type indicated at perimeter of acoustical ceiling area and at locations where necessary to conceal edges of acoustical units.

Sealant Bed: Apply continuous ribbon of acoustical sealant, concealed on back of vertical leg before installing moldings.

Screw-attach moldings to substrate at intervals not over 16" o.c. and not more than 3" from ends, leveling with ceiling suspension system to tolerance of 1/8" in 12'-0". Miter corners accurately and connect securely.

Install acoustical panels in coordination with suspension system, with edges concealed by support of suspension members. Scribe and cut panels to fit accurately at borders and at penetrations.

Install hold-down clips in areas indicated, and in areas where required by governing regulations; space as recommended by panel manufacturer, unless otherwise indicated or required.

CLEANING:

Clean exposed surfaces of acoustical ceilings, including trim, edge moldings and suspension members; comply with manufacturers' instructions for cleaning and touch-up of minor finish damage. Remove and replace work which cannot be successfully cleaned and repaired to permanently eliminate evidence of damage.

PREPARED BY: MERCER
ISSUE DATE: 05-09-2024
REVIEWED BY: MERCER
SCALE: AS SHOWN

SHEET A38 38 OF 43

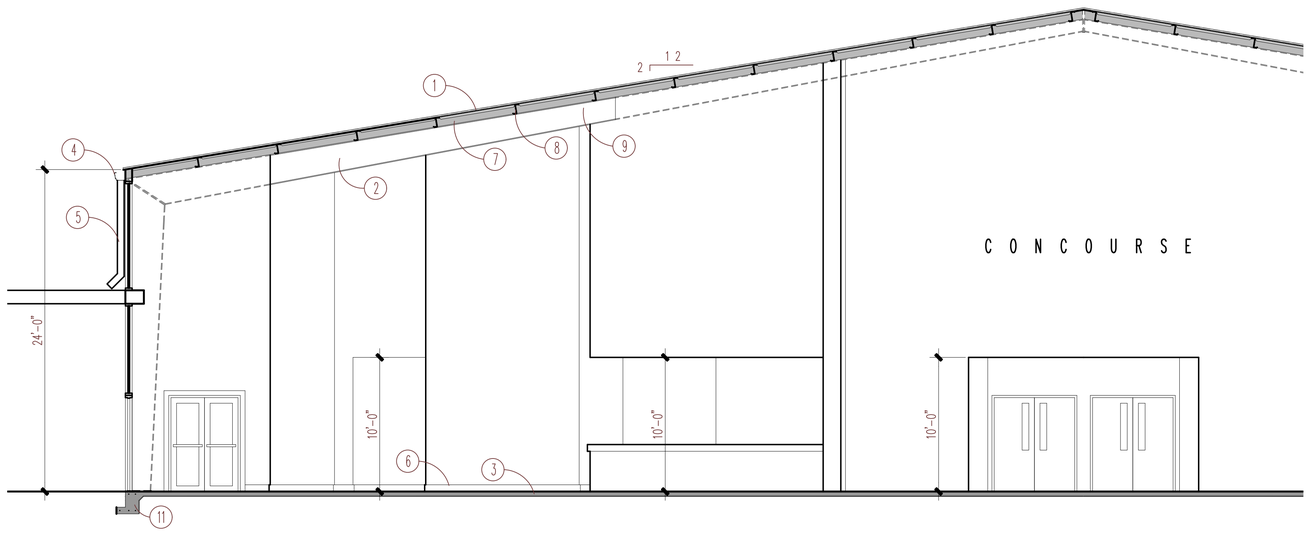
PROJECT NO. 22004

REFLECTED CEILING PLAN - SPECIFICATIONS

CARLISLE BAPTIST CHURCH
REBUILD
835 BERTHE AVENUE
PANAMA CITY, FLORIDA

STATE OF FLORIDA REGISTERED ARCHITECT MARK MERCER 12737 NOT VALID WITHOUT RAISED SEAL

MARK MERCER & ASSOCIATES, INC.
1117 JENKS AVENUE / PANAMA CITY, FLORIDA 32401 / 850.763.8072



1 / A39

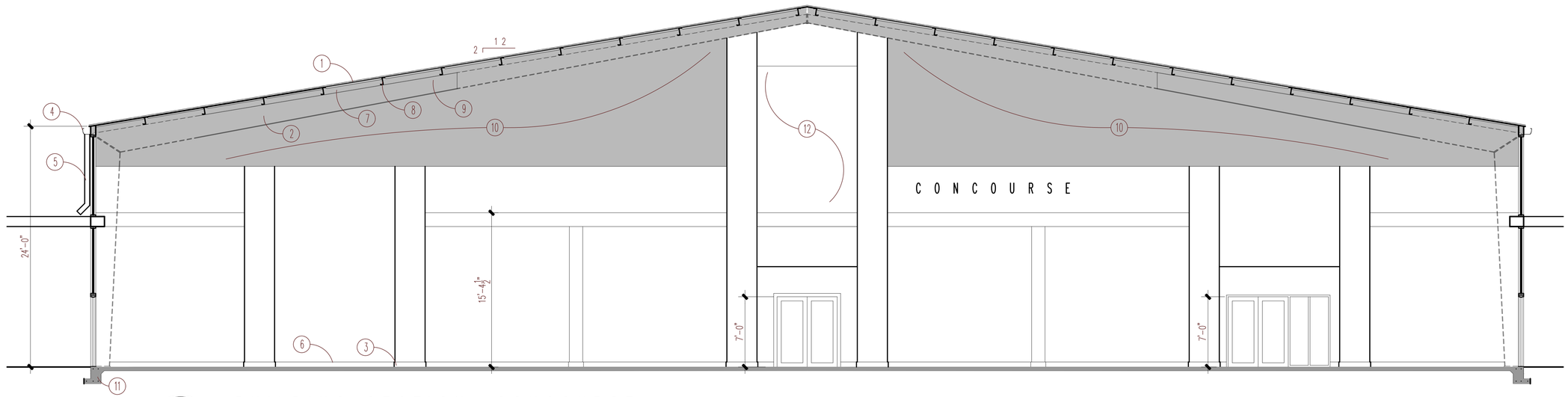
BUILDING SECTION - CONCOURSE

11 x 17 SCALE: 3/32"=1'-0"
24 x 36 SCALE: 3/16"=1'-0"

GRAPHIC SCALE
0 1' 4' 8' 16'

BUILDING SECTION KEYNOTES

1. STANDING SEAM METAL ROOF
2. PRE-ENG METAL BUILDING FRAME.
3. CONCRETE SLAB - SEE STRUCTURAL DRAWINGS
4. GUTTER
5. DOWNSPOUT
6. 6" WOOD BASE - SEE FINISH SCHEDULE
7. R38 ROOF INSULATION
8. PURLIN - SEE STRUCTURAL DRAWINGS AND METAL BUILDING SHOP DRAWINGS
9. OPEN STRUCTURE
10. SHADING INDICATES BLACK PAINTED WALL
11. REINFORCED CONCRETE FOUNDATION - SEE STRUCTURAL DRAWINGS
12. EXISTING/OWNER PROVIDED FACETED GLASS WINDOW RELOCATED



2 / A39

BUILDING SECTION - CONCOURSE

11 x 17 SCALE: 3/32"=1'-0"
24 x 36 SCALE: 3/16"=1'-0"

GRAPHIC SCALE
0 1' 4' 8' 16'

SHEET	A39 39 OF 43
PROJECT NO.	22004
PREPARED BY	REVIEWED BY MERCER
MERCER ISSUE DATE 05-09-2024	SCALE AS SHOWN

CONCOURSE - BUILDING SECTION

CARLISLE BAPTIST CHURCH
REBUILD
835 BERTHE AVENUE
PANAMA CITY, FLORIDA

STATE OF FLORIDA
MARK MERCER
12737
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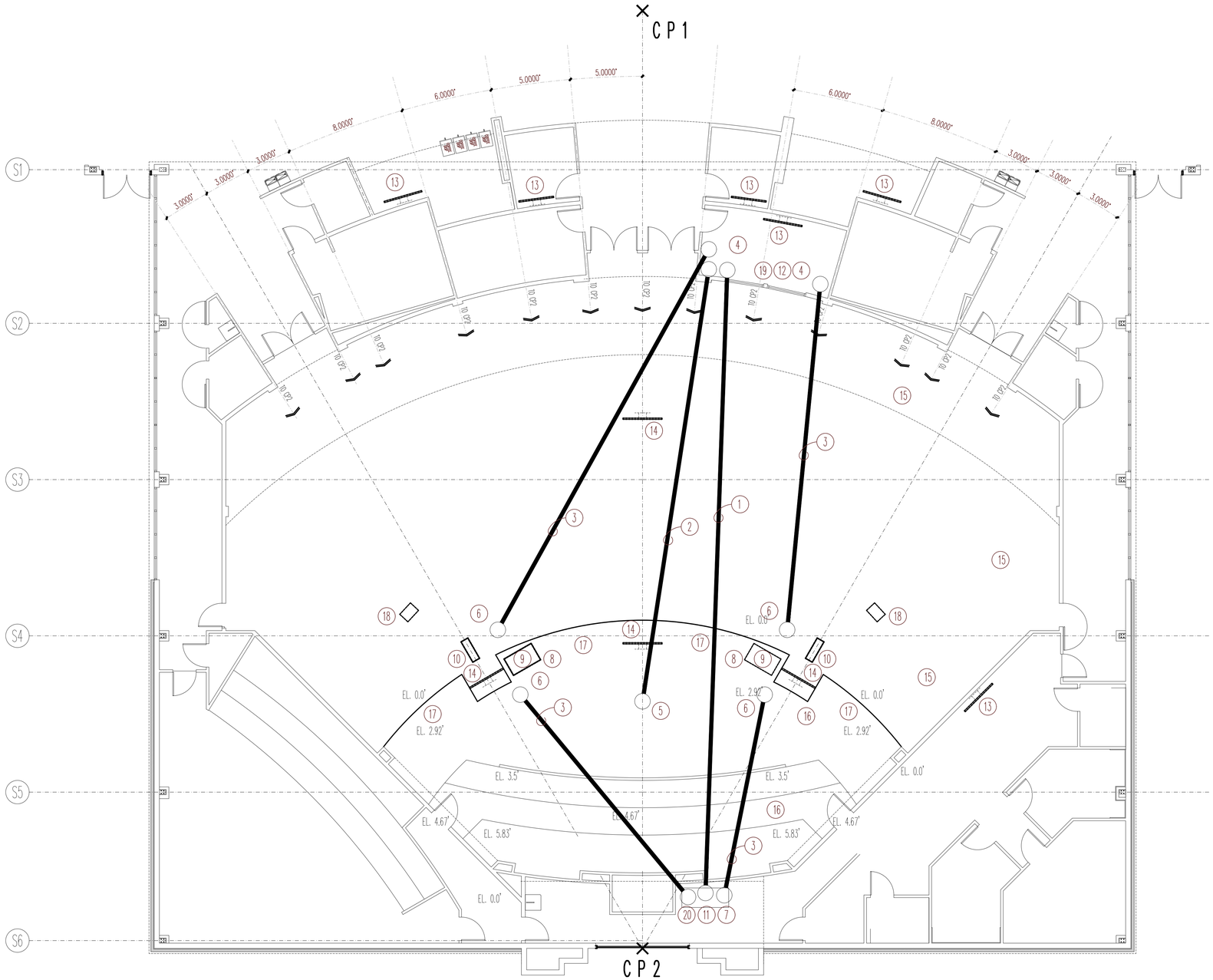

AUDIO/VIDEO/LIGHTING CONCEPT DRAWING KEYNOTES

1. 2 – 3" CONDUITS UNDER THE SLAB
2. 3 – 3" CONDUITS UNDER THE SLAB
3. 1 – 3" OVERHEAD
4. TERMINATE CONDUITS IN THE WALL AT 48" A.F.F.
5. TERMINATE CONDUIT ABOVE THE FLOOR LEVEL IN THE APPROXIMATE CENTER OF THE STAGE
6. TERMINATE CONDUIT IN THE OVERHEAD IN CLOSE PROXIMITY TO THE LINEAR ARRAY SPEACKERS
7. TERMINATE THE CONDUITS IN THE WALL APPROXIMATELY 3 FEET A.F.F. – COORDINATE WITH OWNER
8. CONSTRUCT OPENING UNDER STAGE TO RECEIVE SUBWOOFER – MINIMUM CLEAR DIMENSIONS 29"HIGH X 52" W. X 26" DP. – COORDINATE WITH OWNER
9. SUBWOOFER BY OTHERS
10. POWERED LINEAR ARRAY SPEAKERS LOCATED IN THE OVERHEAD BY OTHERS – PROVIDE 208V POWER SUPPLY.
11. AUDIO RACK BY OTHERS
12. PROVIDE 10 – 2 X 4 BOXES @ 48" A.F.F. WITH 1" EMPTY CONDUIT EACH – TERMINATE THE CONDUIT ABOVE THE CEILING.
13. TV BY OTHERS WALL MOUNTED 72" A.F.F. – FINAL LOCATION BY OWNER – INSTALL 2 X 4 EMPTY BOX WITH EMPTY 1" CONDUIT CAPABLE OF HOLDING MINIMUM 2 – CAT 6 CABLES BEHIND FINAL TV LOCATION – EXTEND CONDUIT ABOVE THE CEILING
14. SUSPENDED TV BY OTHERS – FINAL LOCATION BY OWNER – PROVIDE DUPLEX RECEPTACLE
15. PROVIDE 3 – 20A/208V LIGHTING CIRCUITS FOR HOUSE LIGHTING
16. PROVIDE 2 – 20A/208V LIGHTING CIRCUITS FOR STAGE LIGHTING – 1 CIRCUIT FOR EACH OF TWO SUSPENDED CEILING SOFFITS.
17. FILL SPEAKER BY OTHERS – PROVIDE DUPLEX RECEPTACLES, AT EACH LOCATION, UNDER THE STAGE.
18. VIDEO PROJECTOR BY OTHERS – FINAL LOCATION BY OWNER – PROVIDE DUPLEX RECEPTACLE CAPABLE OF PROVIDING 1100W POWER SUPPLY
19. PROVIDE 3 – DEDICATED 20A/120V CIRCUITS FOR AUDIO EQUIPMENT
20. PROVIDE 5 – DEDICATED 20A/120V CIRCUITS FOR AUDIO EQUIPMENT

WORSHIP CENTER – AUDIO/VIDEO/LIGHTING CONCEPT – FLOOR PLAN

11 x 17 SCALE: 3/32"=1'-0"
24 x 36 SCALE: 3/16"=1'-0"

GRAPHIC SCALE
0 1' 4' 8' 12'

NORTH

1 / A9

PREPARED BY	REVIEWED BY
MERCER	MERCER
ISSUE DATE	SCALE
05-09-2024	AS SHOWN

A40
SHEET 40 OF 43

PROJECT NO.
22004

FLOOR PLAN – WORSHIP CENTER – AUDIO/VIDEO/LIGHTING CONCEPTUAL

CARLISLE BAPTIST CHURCH
REBUILD
835 BERTHE AVENUE
PANAMA CITY, FLORIDA

STATE OF FLORIDA
MARK MERCER
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CONSTRUCTION PLANS FOR:

CARLISLE BAPTIST CHURCH REBUILD

COMMERCIAL DEVELOPMENT

835 SOUTH BERTHE AVENUE
PANAMA CITY, FLORIDA
PARCEL ID # 06946-000-000 & 06978-070-000
SECTION 17, TOWNSHIP 4 SOUTH, RANGE 13 WEST

RELEASED FOR CONSTRUCTION

1/10/2023 CARLISLE BAPTIST CHURCH REBUILD - JOB No. 15746

3 WORKING DAYS
BEFORE YOU DIG
Sunshine 811

VICINITY MAP
NOT TO SCALE

SITE MAP
NOT TO SCALE

NOTES

1) THE CONTRACTOR SHALL COMPLY WITH THE "FLORIDA TRENCH SAFETY ACT" (LAWS OF FLORIDA 90-96, OCTOBER 1, 1990) AND PROVIDE PROOF OF COMPLIANCE. THE CONTRACTOR MUST PROVIDE "NOTORIZED STATEMENT" TO THE OWNER, THAT THEY ARE IN COMPLIANCE WITH ALL APPLICABLE TRENCH SAFETY STANDARDS.

2) EVERY ATTEMPT TO LOCATE UNDERGROUND UTILITIES MUST BE MADE. THERE ARE THE POSSIBILITIES OF UNDERGROUND ELECTRICAL, TELEPHONE, ETC. THAT HAS NOT BEEN LOCATED. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATIONS, DEPTH AND TYPE OF ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION.

ENGINEER OF RECORD:

SCOT C. RUTHERFORD, PE
LICENSE No. 70041
SCR & ASSOCIATES
3445 HWY 389
PANAMA CITY, FL. 32405

SURVEYOR OF RECORD:

SKIPPER C. RUTHERFORD, PLS
LICENSE No. 3961
SCR & ASSOCIATES
3445 HWY 389
PANAMA CITY, FL. 32405

PREPARED FOR :

HOWARD CARLISLE MEMORIAL
BAPTIST CHURCH, INC.
832 S. BERTHE AVE.
CALLAWAY, FL. 32404-8404

PROPERTY OWNER :

HOWARD CARLISLE MEMORIAL
BAPTIST CHURCH, INC.
ALECIA CLAGETT, PRESIDENT
832 S. BERTHE AVE.
CALLAWAY, FL. 32404-8404
JOHNTREVILIAN@YAHOO.COM
850-866-1921

STATEMENT OF COMPATIBILITY:

THIS PROJECT IS COMPATIBLE WITH SURROUNDING DEVELOPMENTS. THE PROPOSED PROJECT IS PUBLIC INSTITUTION - CHURCH SUPPORTED BY THE SURROUND RESIDENTIAL AREA.

INDEX

SITE DATA

PARCEL ID NUMBER: 06946-000-000 & 06978-070-000
FUTURE LAND USE: PUB(CAL)
FLOOD ZONE: X

DESIGN CRITERIA

CITY OF CALLAWAY LAND DEVELOPMENT REGULATIONS
NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT APPLICANT HANDBOOK
FLORIDA ADMINISTRATIVE CODE

PREPARED BY :

SCR & Associates
UNCOMPROMISED
ENGINEERING - SURVEYING
FLORIDA CERTIFICATE OF AUTORIZATION No. 28715
4116 N. Hwy 231 E. Bldg. CALLAWAY, Florida 32404
Phone 850-265-6979 Fax 850-265-9942 SCR@scr.us.com www.SCR.us.com

JOB No. 15746
FILE No. R18478

WATER, SEWER CONSTRUCTION NOTES:

1) IT SHALL BE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE AND SCHEDULE THE ACTIVITIES OF THE UTILITY COMPANIES INCLUDING BUT NOT LIMITED TO TV, TELEPHONE, GAS, POWER, ETC., AND PROVIDE IN ACCORDANCE WITH THE UTILITY COMPANY ANY NECESSARY CONDUITS FOR CROSSINGS UNDER PAVEMENT. NO ADDITIONAL COMPENSATION SHALL BE PROVIDED FOR THIS SERVICE. ANY DAMAGE CAUSED BY THE UTILITY COMPANY TO THE IMPROVEMENTS OF THE CONTRACTOR SHALL BE REPAIRED IN ACCORDANCE WITH THESE CONTRACT DOCUMENTS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO INSURE THAT REPAIRS ARE PERFORMED, EITHER BY THE CONTRACTOR OR THE UTILITY COMPANY AT NO COST TO THE OWNER.
2) COPIES OF THE TEST REPORTS FOR ASPHALT, BASE, SUB GRADE, FILL AND BACK FILL UNDER ROADWAYS AND STRUCTURES, AND UTILITY TRENCHES SHALL BE PROVIDED DIRECTLY TO THE ENGINEER FOR REVIEW. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE TESTING AND INSURE THAT ALL APPLICABLE TESTS HAS BEEN PERFORMED. FAILURE TO OBTAIN TEST RESULTS AT ANY POINT OF CONSTRUCTION WILL REQUIRE THE REMOVAL OF THE IMPROVEMENT AND REPLACEMENT BY CONTRACTOR, AT NO ADDITIONAL COST TO THE OWNER. IT SHOULD BE NOTED THAT THE ENGINEER WILL REQUIRE COMPACTION TESTING IN ACCORDANCE WITH THE TESTING SCHEDULE FOR UTILITY TRENCH FILL AND BACKFILLED.
3) ALL SANITARY SEWER AND WATER MAIN CONSTRUCTION SHALL BE IN ACCORDANCE WITH STANDARDS SET FORTH BY THE AMERICAN WATER WORKS ASSOCIATION (AWWA), AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM).
4) IT SHALL BE THE RESPONSIBILITY OF THE UTILITY CONTRACTOR TO COORDINATE WITH THE APPROPRIATE UTILITY COMPANIES (48 HOUR NOTICE) PRIOR TO BEGINNING CONSTRUCTION. IT SHALL FURTHER BE THE RESPONSIBILITY OF THE UTILITY CONTRACTOR TO HAVE ALL EXISTING UTILITIES PHYSICALLY LOCATED TO INSURE THAT THIS CONSTRUCTION DOES NOT DAMAGE ANY EXISTING UTILITIES WITHIN THE PROJECT AREA.
5) IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, AT NO ADDITIONAL EXPENSE TO THE OWNER, TO REPAIR OR CAUSE TO BE REPAIRED, ANY EXISTING UTILITIES OR STRUCTURES DAMAGED AS A DIRECT RESULT OF THIS WORK.
6) ALL GRAVITY SEWER LINES SHALL BE OF THE SIZE NOTED ON THE PLANS AND PROFILES. PIPES SHALL BE SDR 35 PVC.
7) SOIL COVER OVER ANY GRAVITY SEWER LINE OR LATERAL SHALL NOT BE LESS THAN 36 INCHES, EXCEPT WHERE STUBBED OUT AT THE PROPERTY LINE. PLUGGED END OF LATERAL WHERE FUTURE CONNECTION IS TO BE MADE SHALL BE AT LEAST 36" BELOW EXISTING GRADE.
8) THE CONTRACTOR SHALL FIELD VERIFY THE EXACT HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES WITHIN THE PROJECT AREA TO INSURE NO CONFLICTS EXIST. SHOULD SUCH CONFLICTS OCCUR, THE CONTRACTOR SHALL CEASE OPERATIONS IN THE AFFECTED AREA AND NOTIFY THE OWNER'S ENGINEER, AND THE APPROPRIATE UTILITY TO RESOLVE THE CONFLICT BEFORE PROCEEDING WITH CONSTRUCTION IN THE AFFECTED AREA.
9) UPON COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL CALL FOR A "FLASH TEST" ON ALL SEWER MAINS. PIPE ALIGNMENT SHALL CONFORM TO THE REQUIREMENTS OF THE ENGINEER AND ANY LINES NOT MEETING THE CITY REQUIREMENTS SHALL BE UNCOVERED AND RESET TO THE PRESCRIBED LINE AND GRADE. INFILTRATION/EXFILTRATION LIMITS TESTING SHALL CONFORM WITH ENGINEER'S REQUIREMENTS. AIR TEST TO BE IN ACCORDANCE WITH ASTM F1417 AND CLEANED & TELEVISED. PROVIDE VIDEO INSPECTION REPORT AND DVD FOR REVIEW BY CITY UTILITIES STAFF.
10) ALL WATER MAINS LESS THAN 4" SHALL BE ASTM D2241 SDR-21, 4"-8" SHALL BE AWWA C900 DR18 (PRESSURE CLASS 235), 10"-12" SHALL BE AWWA C900 DR25 (PRESSURE CLASS 165). ALL PIPE SHALL BE RESTRAINED JOINT (MEGALUG OR APPROVED EQUAL).
11) ALL VALVES 12" AND SMALLER SHALL BE CAST-IRON BODY, FULLY BRONZE MOUNTED RESILIENT-SEATED GATE VALVES CONFORMING TO AWWA C509, WIDE FLANGE OR SPIGOT ENDS, DEPENDING ON INSTALLATION. FLANGED GATE VALVES SHALL BE PROVIDED WITH 250 LB. AMERICAN STANDARD FLANGES, AWWA STANDARD C-509 RESILIENT SEAT, ALL SHUTOFF VALVES 16" AND LARGER SHALL BE BUTTERFLY VALVES, BUTTERFLY VALVES AND OPERATORS SHALL CONFORM TO THE AWWA STANDARD SPECIFICATIONS FOR RUBBER SEATED BUTTERFLY VALVES, DESIGNATION C-504 CLASS 1150 A OR B.
12) ALL VALVES SHALL HAVE A MINIMUM WORKING PRESSURE OF 250 PSI, UNLESS OTHERWISE NOTED.
13) ALL VALVES SET BELOW GRADE, SHALL BE FITTED WITH HUB-TYPE OPERATORS AND SHALL HAVE A CAST IRON VALVE BOX INSTALLED CONCENTRICALLY OVER THE VALVE, BUTTERFLY VALVE OPERATOR SHALL CONFORM TO THE REQUIREMENTS OF AWWA C-504.
14) ALL HARDWARE ACCESSORIES FOR VALVES, SADDLES, AND FITTINGS SHALL BE AS FOLLOWS:
    - CLAMPS, STRAPS AND WASHERS: STEEL ANSI/ASTM A 506
    - RODS: STEEL, ANSI/ASTM A 575
    - ROD COUPLINGS: MALLEABLE IRON, ANSI/ASTM A 197
    - BOLTS: STEEL ANSI/ASTM A 307
    - CAST IRON WASHERS: ANSI/ASTM A 126, CLASS A
15) TAPPING SLEEVES SHALL BE MECHANICAL JOINT SLEEVES OR FABRICATED STEEL SLEEVES AS SPECIFIED BELOW.
    SLEEVES SHALL BE CAST OF GRAY-IRON OR DUCTILE IRON AND HAVE AN OUTLET FLANGE WITH THE DIMENSIONS OF THE CLASS 125 FLANGES SHOWN IN ANSI B16.1 PROPERLY RECESSED FOR TAPPING VALVE. GLANDS SHALL BE GRAY-IRON OR DUCTILE IRON. GASKETS SHALL BE VULCANIZED NATURAL OR SYNTHETIC RUBBER. BOLTS AND NUTS SHALL COMPLY WITH ANSI/AWWA C111/A21.11. SLEEVES SHALL BE CAPABLE OF WITHSTANDING A 200 PSI WORKING PRESSURE.
16) SLEEVES SHALL BE FABRICATED OF MINIMUM 3/8" CARBON STEEL MEETING ASTM A285 GRADE C. OUTLET FLANGE SHALL MEET AWWA C-270, CLASS "D" ANSI 150 LB. DRILLING AND BE PROPERLY RECESSED FOR THE TAPPING VALVE. BOLTS AND NUTS SHALL BE HIGH STRENGTH LOW ALLOY STEEL TO AWWA C111 (ANSI A21.11). GASKET SHALL BE VULCANIZED NATURAL OR SYNTHETIC RUBBER. SLEEVE SHALL HAVE MANUFACTURER APPLIED FUSION BONDED EPOXY COATING, MINIMUM 12 MIL THICKNESS.
17) MECHANICAL RESTRAINING DEVICES AS SPECIFIED HEREIN MAY BE SUBSTITUTED FOR THE RESTRAINED "LOCKED-TYPE" JOINTS MANUFACTURED BY THE DUCTILE IRON PIPE AND FITTING MANUFACTURER.
18) MECHANICAL JOINT RESTRAINT SHALL BE INCORPORATED IN THE DESIGN OF THE FOLLOWER GLAND AND SHALL INCLUDE A RESTRAINING MECHANISM WHICH, WHEN ACTUATED, IMPARTS MULTIPLE WEDGING ACTION AGAINST THE PIPE, INCREASING ITS RESISTANCE AS THE PRESSURE INCREASES. FLEXIBILITY OF THE JOINTS SHALL BE MAINTAINED AFTER BURIAL. GLANDS SHALL BE MANUFACTURED OF DUCTILE IRON CONFORMING TO ASTM A536. RESTRAINING DEVICES SHALL BE OF DUCTILE IRON HEAT TREATED TO A MINIMUM HARDNESS OF 370 BHN. DIMENSIONS OF THE GLAND SHALL BE SUCH THAT IT CAN BE USED WITH THE STANDARDIZED MECHANICAL JOINT BELL AND TEE-HEAD BOLTS CONFORMING TO ANSI A21.11 AND ANSI/AWWA C153/A21.53. TWIST-OFF NUTS SHALL BE USED TO INSURE PROPER ACTUATING OF THE RESTRAINING DEVICES. THE MECHANICAL JOINT RESTRAINT DEVICE SHALL HAVE A WORKING PRESSURE OF AT LEAST 250 PSI WITH A MINIMUM SAFETY FACTOR OF 2:1.
19) BACTERIOLOGICAL TESTING SHALL BE IN ACCORDANCE WITH AWWA STANDARDS, FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION RULES.
20) CONTRACTOR SHALL DELIVER TO ENGINEER A LEGIBLE COPY OF THE BACTERIOLOGICAL TEST WITHIN (2) WEEKS OF SAID TEST AND SHALL ALSO DELIVER TO UTILITIES DEPARTMENT ENGINEER TWO (2) LEGIBLE COPIES AS REQUIRED.
21) PRESSURE AND LEAKAGE TESTING SHALL BE IN ACCORDANCE WITH AWWA STANDARDS. BEFORE BEGINNING THE ACTUAL PRESSURE TESTING, THE CONTRACTOR SHALL NOTIFY THE ENGINEER, PRESSURE TESTING WILL BE DONE IN THE PRESENCE OF THE ENGINEER, AND WILL NOT BE CONSIDERED COMPLETE UNTIL APPROVED IN WRITING BY THE ENGINEER.
    PRESSURE TEST TO BE AT 150 PSI FOR 2 HOURS.
    TESTING, DISINFECTION AND FLUSHING SHALL BE DONE IN ACCORDANCE WITH AWWA C651 SPECIFICATIONS. FLUSHING TO BE AT 3 FPS MINIMUM, 6X PIPE VOLUME MINIMUM.
    ALL CORPORATION STOPS SHALL BE 1" FORD F1000.
    ALL CURB STOPS SHALL BE 3/4" FORD B43-444W.
    ALL FIRE HYDRANTS SHALL BE AMERICAN DARLING B-84B OR AVK 2780 NOSTALGIC.
    PIPE COLORS SHALL BE:
    - SEWER PIPE: GREEN
    - POTABLE WATER: BLUE
    - RECLAIMED WATER: PURPLE

    14 GAUGE COPPER WIRE TO BE INSTALLED OVER FORCEMAIN AND WATER LINES. IN ADDITION, A 2" WIDE DETECT TAPE SHALL BE INSTALLED 1' BELOW FINISH GRADE ELEVATION DIRECTLY OVER LOCATION OF FORCEMAIN AND WATER LINES.

GENERAL NOTES:

1) ALL DISTURBED AREAS ARE TO BE GRASSED. HYDROSEED @ 4:1 & FLATTER SOD @ STEEPER THAN 4:1 ALL SOD TO BE STAGGERED & PINNED.
2) CONTRACTOR TO FIELD VERIFY ALL UTILITIES ABOVE OR BELOW GROUND AND NOTIFY ALL UTILITY COMPANIES 2 DAYS PRIOR TO CONSTRUCTION.
3) ALL DEMOLISHED MATERIALS (i.e. SIGNS, CONCRETE, ASPHALT, ETC.) TO BE REMOVED AND DISPOSED OF IN LEGAL MANNER.
4) TESTING REQUIREMENTS SHALL BE IN ACCORDANCE WITH CITY OF CALLAWAY REQUIREMENTS. IT SHALL THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE AND SCHEDULE ALL TESTS.
5) BAY COUNTY TRAFFIC ENGINEERING TECHNICAL SPECIAL PROVISIONS (TSP's), DATED AUGUST 2010 WILL BE FOLLOWED AND TAKE PRECEDENCE OVER THE STANDARD FDOT PEDESTRIAN DESIGN CRITERIA WHERE APPLICABLE.
6) ALL TRAFFIC STRIPING TO BE THERMOPLASTIC PER STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION SEC: 711. (WAIT MINIMUM OF 30 DAYS AFTER ASPHALT CONCRETE PLACEMENT TO PLACE PERMANENT THERMOPLASTIC MARKING. TEMPORARY STRIPING TO BE PAINTED STOP BAR ONLY.)
7) PLACE DOUBLE 16" OR SINGLE ROLL 30" STRIP OF SOD ALONG THE EDGE OF ALL PAVEMENT, CURBING, SIDEWALKS, INLETS AND MITERED END SECTIONS.
8) NO LANE CLOSURES AT ANY TIME UNLESS APPROVED BY THE LOCAL FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) OFFICE. IF LANE CLOSURES ARE APPROVED BY FDOT, ALL LANES MUST BE REOPENED TO NORMAL TRAFFIC WITHIN 12 HOURS OF AN EVACUATION NOTICE FOR A HURRICANE OR ANY OTHER EMERGENCY EVENT AND SHALL REMAIN OPEN FOR THE DURATION OF THE EVENT AS DIRECTED BY FDOT.
9) CONTRACTOR TO FIELD VERIFY ALL UTILITIES ABOVE OR BELOW GROUND, REMOVE AND RELOCATE EXISTING UTILITIES AS REQUIRED. CONTRACTOR NOTIFY ALL UTILITY COMPANIES 48 HOURS PRIOR TO ANY CONSTRUCTION.
10) FOR MAINTENANCE OF TRAFFIC CONTROL THROUGH WORK ZONES REFER TO FDOT INDEX AS APPLICABLE.
11) THE CONTRACTOR IS REQUIRED TO REVIEW THE COMPLETE PERMIT PRIOR TO CONSTRUCTION COMMENCEMENT AND TO NOTIFY ALL NECESSARY PARTIES PRIOR TO CONSTRUCTION.
12) A COPY OF THE PERMIT WILL BE KEPT ON SITE.
13) AN 8 1/2"x11" WEATHER RESISTANT SIGN, INCLUDING THE PERMIT NUMBER SHALL BE PLACED ON THE PROPERTY FACING THE ROAD.
14) IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MONITOR ALL CONSTRUCTION ACTIVITY DURING THE ENTIRE CONSTRUCTION PROCESS.
15) IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN AN AS-BUILT SURVEY OF GRADING, DRAINAGE AND ALL STORMWATER MANAGEMENT FACILITIES. AS-BUILT SURVEY SHOULD MEET THE REQUIREMENTS OF CITY OF CALLAWAY, BAY COUNTY AND THE NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT STANDARDS.

GENERAL NOTES CONTINUES:

16) AS-BUILT DRAWINGS WILL BE SUBMITTED TO SCR & ASSOCIATES IN DIGITAL FORMAT (AUTOCAD R14 OR LATER), AS WELL AS PAPER COPY SIGNED AND SEALED BY THE PROFESSIONAL LAND SURVEYOR OF RECORD.
17) THE EXACT LOCATION AND ELEVATION OF EXISTING STRUCTURES, UTILITIES, AND PIPING SHALL BE PHYSICALLY VERIFIED IN THE FIELD BY THE CONTRACTOR BEFORE CONSTRUCTION BEGINS. THESE DRAWINGS DO NOT PURPORT TO SHOW IN COMPLETE DETAIL ALL EXISTING STRUCTURES, UTILITIES, OR PIPING. THE CONTRACTOR SHALL EXAMINE ALL AVAILABLE RECORDS AND MAKE ALL EXPLORATIONS AND EXCAVATIONS AS REQUIRED TO DETERMINE THE LOCATION OF EXISTING STRUCTURES, UTILITIES, AND PIPING, WHENEVER NECESSARY. THE OWNER RESERVES THE RIGHT TO CHANGE LOCATION OF LINES TO AVOID CONFLICT WITH EXISTING STRUCTURES, UTILITIES, OR PIPING.
18) THE CONTRACTOR SHALL CHECK PLANS FOR CONFLICTS AND DISCREPANCIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE OWNER OR OWNER'S ENGINEER OF ANY CONFLICT BEFORE PERFORMING ANY WORK IN THE AFFECTED AREA.
19) THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN AREAS OF BURIED UTILITIES AND SHALL PROVIDE AT LEAST 48 HOURS NOTICE TO THE VARIOUS UTILITY COMPANIES IN ORDER TO PERMIT MARKING THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES IN ADVANCE OF CONSTRUCTION.
20) THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO EXISTING FACILITIES ABOVE OR BELOW GROUND THAT MAY OCCUR AS A RESULT OF WORK CALLED FOR IN THESE CONTRACT DOCUMENTS.
21) IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LEARN, KNOW, AND COMPLY WITH THE REGULATIONS, ORDINANCES, PERMIT AND INSPECTION REQUIREMENTS OF THE VARIOUS GOVERNMENTAL AGENCIES HAVING JURISDICTION. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW AND COMPLY WITH THE CONDITIONS OF THE VARIOUS PERMITS OF THE GOVERNMENTAL AGENCIES. THE CONTRACTOR SHALL SCHEDULE THE REQUIRED INSPECTIONS AND APPROVALS IN ACCORDANCE WITH THE REQUIREMENTS OF THE PERMIT CONDITIONS. THE CONTRACTOR SHALL NOTIFY THE NECESSARY AGENCIES OF CONSTRUCTION COMMENCEMENT.
22) ALL SPECIFICATIONS AND DOCUMENTS REFERRED TO SHALL BE OF LATEST ISSUE AND SHALL BE CONSIDERED A PART OF THESE DOCUMENTS AS THOUGH INCLUDED.
23) THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SETTING OF CONSTRUCTION STAKES TO MARK THE LOCATION, ALIGNMENT, ELEVATION, AND GRADE OF THE WORK. THE STAKES PROVIDED SHALL BE ADEQUATE IN NUMBER, POSITION, AND ELEVATION SO THAT THE PHYSICAL ITEM CAN BE CONSTRUCTED IN ACCORDANCE WITH THE PLANS. THE CONSTRUCTION LAYOUT SURVEY SHALL MEET THE MINIMUM TECHNICAL STANDARDS FOR LAND SURVEYING IN THE STATE OF FLORIDA (CHAPTER 21HH-6, FLORIDA ADMINISTRATIVE CODE), AND SHALL BE PERFORMED BY A PERSON OF ADEQUATE EXPERTISE. FAILURE TO PERFORM THE CONSTRUCTION STAKEOUT IN ACCORDANCE WITH THE CONSTRUCTION PLANS MAY RESULT IN REMOVAL AND REPLACEMENT OF THE IMPROVEMENTS AT NO EXPENSE TO THE OWNER. IN NO CASE SHALL THE CONTRACTOR SCALE INFORMATION FROM THE PLANS OR ATTEMPT TO CONSTRUCT IMPROVEMENTS WITHOUT PERFORMING THE CONSTRUCTION LAYOUT IN ACCORDANCE WITH THE INFORMATION CONTAINED HEREIN. SYMBOLS MAY NOT BE TO SCALE. SEE STANDARD DETAILS FOR EXACT APPROPRIATE DIMENSIONS.
24) THE CONTRACTOR SHALL PROVIDE SCR & ASSOCIATES AND CITY OF CALLAWAY, AS-BUILT DRAWINGS, PREPARED BY A REGISTERED SURVEYOR, FOR ALL DRAINAGE AND STORMWATER IMPROVEMENTS.
25) IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO MAINTAIN ADEQUATE TRAFFIC CONTROL AND TO PROVIDE DETOURS AROUND CONSTRUCTION ACTIVITIES.
26) PRIOR TO COMMENCING CONSTRUCTION, CONTRACTOR SHALL INSTALL ANY REQUIRED SILT FENCING OR BALED HAY BARRIERS (FDOT INDEX 102) FOR SILT CONTROL. THERE WILL BE NO DIRECT PAYMENT FOR THIS WORK. COST SHALL BE INCLUDED IN OTHER ITEMS OF WORK. LOCATION SHALL BE AS SHOWN ON THE PLANS AS A MINIMUM AND AS NEEDED DURING CONSTRUCTION.
27) WHERE IT BECOMES NECESSARY TO TEMPORARILY REMOVE, REPOSITION, OR SUPPORT EXISTING FACILITIES. THIS WORK SHALL BE PERFORMED AT THE CONTRACTOR'S EXPENSE AND IN ACCORDANCE WITH REQUIREMENTS OF THE OWNER. THE CONTRACTOR SHALL PHYSICALLY EXAMINE THE ENTIRE PROJECT SITE AND INFORM HIMSELF FULLY IN REGARD TO ALL CONDITIONS PERTAINING TO THE PLACE WHERE THE WORK IS TO BE PERFORMED FOR PURPOSE OF DETERMINING HIS COST TO PERFORM THE WORK. THE CONTRACTOR SHOULD PAY SPECIAL ATTENTION TO AREAS INVOLVING CLEARING AND GRUBBING, EXISTING FACILITIES REMOVAL AND REPLACEMENT, OR RELOCATION.
28) WHEN WORK ALONG DRIVES REQUIRES THE REMOVAL AND REPLACEMENT OF EXISTING DRAINAGE STRUCTURES. THE COST OF THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR RELATED ITEMS OF WORK
29) ALL SODDING AND GRASSING SHALL BE IN ACCORDANCE WITH FDOT SPECIFICATION REGARDING MATERIALS, INSTALLATION AND INITIAL MAINTENANCE.
30) IF DURING CONSTRUCTION OR OPERATION OF THE STORMWATER MANAGEMENT SYSTEM, A STRUCTURAL FAILURE IS OBSERVED THAT HAS THE POTENTIAL TO CAUSE THE DIRECT DISCHARGE OF SURFACE WATER INTO THE FLORIDIAN AQUIFER SYSTEM, CORRECTIVE ACTIONS DESIGNED OR APPROVED BY A REGISTERED PROFESSIONAL SHALL BE TAKEN AS SOON AS PRACTICAL TO CORRECT THE FAILURE.
31) FOR WET POND CONSTRUCTION, IN AREAS CONTAINING FINE SANDS AND HIGH GROUND WATER TABLE, IT MAY BE NECESSARY TO STABILIZE POND SIDE SLOPES DURING CONSTRUCTION.
32) THE DEVELOPER OR DEVELOPER'S DESIGNATED AGENT MUST NOTIFY BAY COUNTY PUBLIC WORKS (JIM FAULKNER 850-248-8301 - jfaulkner@baycountyfl.gov) AT LEAST 48 HOURS PRIOR TO COMMENCEMENT OF CONSTRUCTION, INCLUDING LAND CLEARING OPERATIONS. A COPY OF NOTICE OF INTENT TO USE NPDES GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES WILL NEED TO BE PROVIDED TO PUBLIC WORKS ENGINEERING DIVISION.
33) IT IS UNLAWFUL FOR ANY PERSON TO DUMP, LEAVE OR BURY ANY SOLID WASTE ON PUBLIC OR PRIVATE PROPERTY. FAILURE TO DISPOSE OF SOLID WASTE AS SPECIFIED IN SECTION 22-149 OF BAY COUNTY MUNICIPAL CODE OF ORDINANCES IS PUNISHABLE UNDER SECTION 1-6.

TIMING OF CONTROLS/MEASURES:

AS INDICATED IN THE SEQUENCE OF MAJOR ACTIVITIES, THE SILT FENCES AND HAY BALES, STABILIZED CONSTRUCTION ENTRANCE AND SEDIMENT BASIN WILL BE CONSTRUCTED PRIOR TO CLEARING OR GRADING OF ANY OTHER PORTIONS OF THE SITE. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICAL IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED. ONCE CONSTRUCTION ACTIVITY CEASES PERMANENTLY IN AN AREA, THAT AREA WILL BE STABILIZED PERMANENTLY IN ACCORDANCE WITH THE PLANS. AFTER THE ENTIRE SITE IS STABILIZED, THE ACCUMULATED SEDIMENT WILL BE REMOVED FROM THE SEDIMENT TRAPS AND THE EARTH DIKE/SWALES WILL BE REGRADED/REMOVED AND STABILIZED IN ACCORDANCE WITH THE EROSION AND TURBIDITY CONTROL PLAN. SEE SWPPP.

ENVIRONMENTAL SEQUENCE:

THE CONTRACTOR SHALL AT A MINIMUM IMPLEMENT THE CONTRACTOR'S REQUIREMENTS OUTLINED BELOW AND THOSE MEASURES SHOWN ON THE EROSION CONTROL PLAN. IN ADDITION THE CONTRACTOR SHALL UNDERTAKE ANY ADDITIONAL MEASURES REQUIRED TO BE IN COMPLIANCE WITH APPLICABLE PERMIT CONDITIONS AND STATE WATER QUALITY STANDARDS, DEPENDING ON THE NATURE OF MATERIALS AND METHODS OF CONSTRUCTION THE CONTRACTOR MAY BE REQUIRED TO ADD FLOCCULANTS TO THE RETENTION SYSTEM PRIOR TO PLACING THE SYSTEM INTO OPERATION.

SEQUENCE OF MAJOR ACTIVITIES:

THE ORDER OF ACTIVITIES WILL BE AS FOLLOWS:

1) INSTALL STABILIZED CONSTRUCTION ENTRANCE.
2) INSTALL SILT FENCES AND HAY BALES, AS REQUIRED.
3) CONSTRUCT SEDIMENTATION BASIN.
4) CLEAR AND GRUB FOR DIVERSION SWALES/DIKES AND SEDIMENT BASIN AT PERMANENT POND LOCATION.
5) CONTINUE CLEARING AND GRUBBING.
6) STOCKPILE TOP SOIL IF REQUIRED.
7) PERFORM PRELIMINARY GRADING ONSITE, AS REQUIRED.
8) STABILIZE DENUDED AREA AND STOCKPILES AS SOON AS PRACTICABLE.
9) INSTALL UTILITIES, STORM SEWER, CURBS AND GUTTER.
10) APPLY BASE TO PROJECT.
11) COMPLETE GRADING AND INSTALL PERMANENT SEEDING/SOD AND PLANTING.
12) COMPLETE FINAL PAVING.
13) UPON SIGNIFICANT COMPLETION OF CONSTRUCTION, THE STORMWATER PIPING SYSTEM SHALL BE FLUSHED OUT TO REMOVE ACCUMULATED DEBRIS AND SEDIMENT.
14) UPON COMPLETION OF THE DEBRIS AND SEDIMENT REMOVAL FROM THE STORMWATER PIPING SYSTEM, THE PROPOSED STORMWATER MANAGEMENT FACILITY(S) SHALL BE FINE GRADED AND BE EXCAVATED A MINIMUM OF SIX INCHES BELOW THE DESIGN BOTTOM ELEVATION AND REPLACED WITH FILL HAVING A MINIMUM PERMEABILITY RATE OF 20 FEET/DAY WITH A MAXIMUM OF 5% SOIL FINES PASSING THE No. 200 SIEVE. THE BOTTOM SHALL BE SCARIFIED AND STABILIZED ACCORDING TO THESE PLANS. ONCE COMPLETED, NO HEAVY MACHINERY SHALL BE ALLOWED WITH THE STORMWATER MANAGEMENT FACILITY(S).
15) WHEN ALL CONSTRUCTION ACTIVITY IS COMPLETE AND THE SITE IS STABILIZED, REMOVE ANY TEMPORARY DIVERSION SWALES/DIKES AND RESEED/ SOD, AS REQUIRED.

RELEASED FOR CONSTRUCTION

PAVING, GRADING, AND EARTH WORK NOTES:

1) ANY DEFICIENCY IN THE QUANTITY OF MATERIAL FOR BACK FILLING THE TRENCHES, OR FOR FILLING DEPRESSIONS CAUSED BY SETTLEMENT, SHALL BE SUPPLIED BY THE CONTRACTOR AT NO COST TO THE OWNER. THIS ALSO APPLIES TO BASE COURSE UNDER PAVED STREETS.
2) ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITIES SHALL BE SEEDED, MULCHED, SODDED, STABILIZED, OR PLANTED WITH OTHER APPROVED LANDSCAPE MATERIAL, WITHIN FIVE (5) DAYS AFTER CONSTRUCTION.
3) PROPOSED SPOT ELEVATIONS REPRESENT PAVEMENT OR GROUND SURFACE GRADE UNLESS OTHERWISE NOTED ON DRAWINGS.
4) THE CONTRACTOR SHALL INSTALL ALL TRAFFIC CONTROL DEVICES REQUIRED FOR THE PROJECT IN ACCORDANCE WITH THE LATEST EDITION OF THE U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
5) ALL EXISTING CONCRETE, ASPHALT, TREES, STUMPS, AND OTHER DELETERIOUS MATERIAL TO BE REMOVED SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN ACCORDANCE WITH FLORIDA LAWS. NO DEMOLISHED MATERIAL SHALL BE BURIED ON-SITE.
6) ALL EXISTING PAVEMENT TO BE REMOVED SHALL BE SAW CUT.
7) ALL PAVEMENT MARKINGS WITHIN FDOT RIGHT-OF-WAY SHALL BE MADE WITH THERMOPLASTIC IN ACCORDANCE WITH FDOT STANDARD SPECIFICATION 711.

PAVEMENT TESTING AND INSPECTION REQUIREMENTS

1) TESTING REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE TESTING SCHEDULE CONTAINED WITHIN THESE PLANS. SELECTION AND CONTRACTING WITH THE TESTING FIRMS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE AND SCHEDULE ALL TESTS.
2) ACCEPTANCE TESTING FOR NEW PAVEMENT SHALL CONSIST OF ONE PASS OF A STANDARD 15-FOOT ROLLING STRAIGHT EDGE OPERATED WHILE THE PAVEMENT IS STILL HOT. ALL DEFICIENCIES IN EXCESS OF 3/16 INCH SHALL BE CORRECTED IN ACCORDANCE WITH FDOT STANDARD SPECIFICATION 330.

BENCHMARK & ELEVATION NOTES:

1) ELEVATIONS SHOWN HEREON ARE BASED ON THE PROJECT ELEVATION DATUM AS CONTAINED IN THE TITLE BLOCK AND THE SITE BENCHMARKS AS SHOWN. VERTICAL LAYOUT TO BE PERFORMED USING THE PROVIDED SITE BENCHMARKS AND NOTES.
2) BENCHMARKS SHOWN HEREON SHALL BE USED IN THE CONSTRUCTION OF THE PROJECT. IN NO CASE SHALL ANY OTHER BENCHMARK OR ELEVATION REFERENCE BE USED IN THE CONSTRUCTION OF THE PROJECT. CONTRACTOR SHALL NOT USE THE ELEVATION OF EXISTING IMPROVEMENTS SHOWN HEREON OR FROM OTHER SOURCES AS A BASIS FOR CONSTRUCTION. FAILURE TO COMPLY WITH THESE REQUIREMENTS MAY RESULT IN THE REMOVAL AND REPLACEMENT OF CONSTRUCTED IMPROVEMENTS AT NO COST TO THE OWNER.
3) IN THE EVENT THAT BENCHMARKS ARE DISTURBED OR DESTROYED DURING CONSTRUCTION, CONTRACTOR SHALL NOTIFY SCR & ASSOCIATES FOR REPAIR OR REPLACEMENT. USE OF THE PROVIDED BENCHMARKS FOR VERTICAL CONTROL SHOULD BE PREFORMED IN ACCORDANCE WITH STANDARD SURVEYING TECHNIQUES AND THE MINIMUM TECHNICAL STANDS FOR SURVEYING IN THE STATE OF FLORIDA, FAC 61G17. PRIOR TO UTILIZING THE BENCHMARKS FOR VERTICAL LAYOUT, CONTRACTOR SHALL CHECK BETWEEN MINIMUM OF TWO PROVIDED BENCHMARKS TO INSURE THEIR INTEGRITY.

REVISIONS

No.	DESCRIPTION	DATE
1		
2		
3		
4		

DESIGNED BY: SCOTT C. RUTHERFORD, P.E. — DATE: 5/10/2024
SCOTT C. RUTHERFORD, P.E. — No. 71004 — STATE OF FLORIDA — PROFESSIONAL ENGINEER

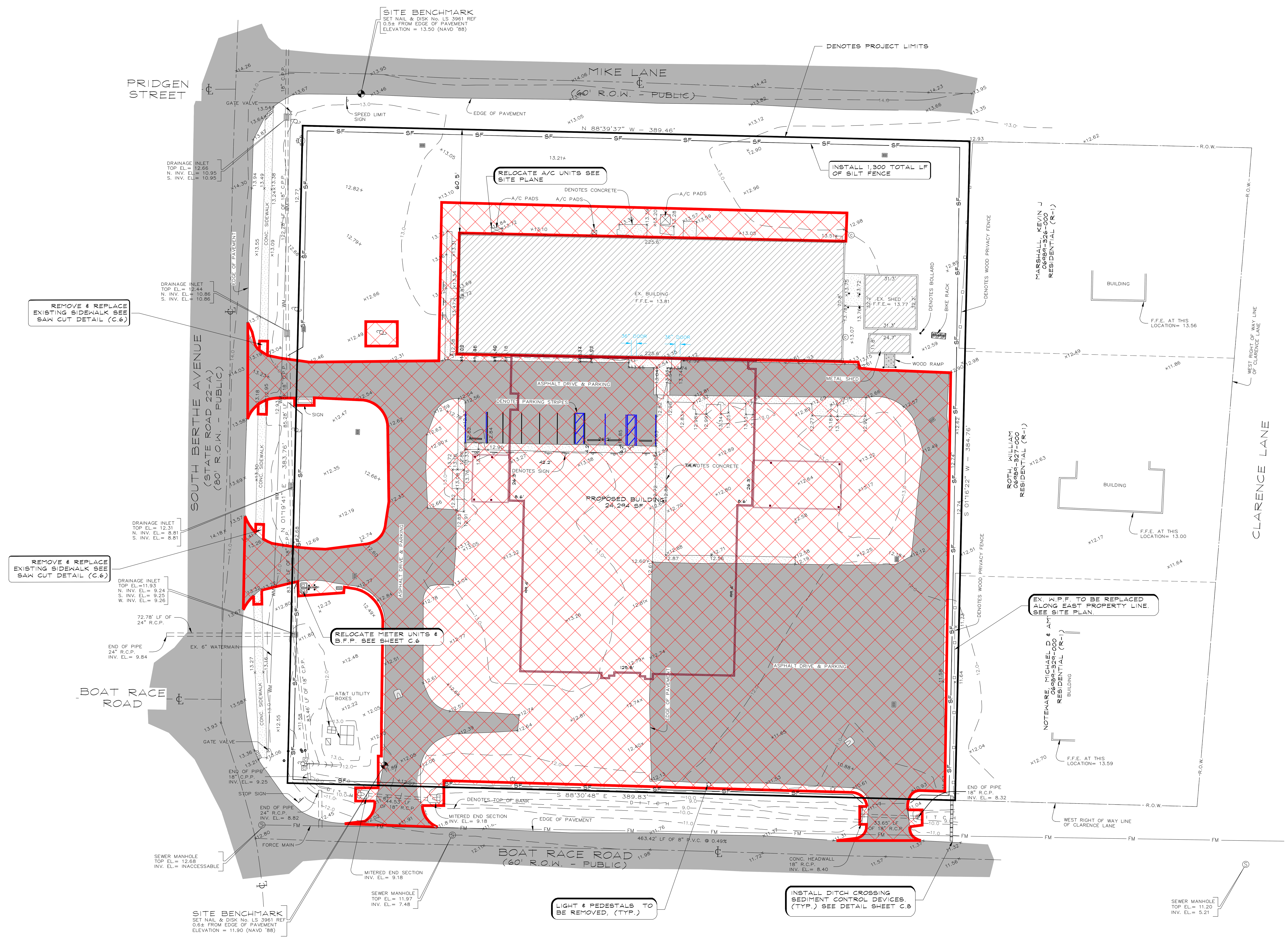
SCR & Associates
ENGINEERING - SURVEYING
3445 HWY 389, BLDG, CALLAWAY, FLORIDA 32405
Phone (850) 265-6979 Fax (850) 265-9942
FLORIDA LICENSE No. LB 7759 ; FLORIDA CA No. 28715

SHEET TITLE: NOTES

PROJECT NAME: CARLISLE BAPTIST CHURCH EXPANSION
CALLAWAY, FLORIDA

CLIENT NAME: CARLISLE BAPTIST CHURCH REBUILD

HRZ. SCALE: AS SHOWN
VRT. SCALE: N/A
PROJECT No.: 15746
FILE No.: R18478
ISSUE DATE: NOT ISSUED
SHEET: C.1


SITE BENCHMARK
SET NAIL & DISK No. LS 3961 REF
0.5± FROM EDGE OF PAVEMENT
ELEVATION = 13.50 (NAVD '88)
DENOTES PROJECT LIMITS
PRIDGEN STREET
MIKE LANE
(60' R.O.W. - PUBLIC)
N 88°39'37" W - 389.46'
RELOCATE A/C UNITS SEE SITE PLAN
INSTALL 1,300 TOTAL LF OF SILT FENCE
A/C PADS
DENOTES CONCRETE
EX. BUILDING
F.F.E.= 13.81
EX. SHED
F.F.E.= 13.77
METAL SHED
WOOD RAMP
ASPHALT DRIVE & PARKING
DENOTES PARKING STRIPES
PROPOSED BUILDING
24,294 SF
REMOVE & REPLACE EXISTING SIDEWALK SEE SAW CUT DETAIL (C.6)
SOUTH BERTHE AVENUE
(STATE ROAD 22-A)
(80' R.O.W. - PUBLIC)
MARSHALL, KEVIN J
06686-326-000
RESIDENTIAL (R-1)
ROTH, WILLIAM
06686-327-000
RESIDENTIAL (R-1)
NOTEWARE, MICHAEL D & AMY
06686-325-000
RESIDENTIAL (R-1)
CLARENCE LANE
BUILDING
F.F.E. AT THIS LOCATION= 13.56
F.F.E. AT THIS LOCATION= 13.00
F.F.E. AT THIS LOCATION= 13.59
WEST RIGHT OF WAY LINE OF CLARENCE LANE
EX. W.P.F. TO BE REPLACED ALONG EAST PROPERTY LINE. SEE SITE PLAN.
RELOCATE METER UNITS & B.F.P. SEE SHEET C.6
AT&T UTILITY BOXES
BOAT RACE ROAD
(60' R.O.W. - PUBLIC)
S 88°30'48" E - 389.83'
463.42' LF OF 8" P.V.C. @ 0.49%
LIGHT & PEDESTALS TO BE REMOVED, (TYP.)
INSTALL DITCH CROSSING SEDIMENT CONTROL DEVICES. (TYP.) SEE DETAIL SHEET C.8
SITE BENCHMARK
SET NAIL & DISK No. LS 3961 REF
0.6± FROM EDGE OF PAVEMENT
ELEVATION = 11.90 (NAVD '88)
RELEASED FOR CONSTRUCTION

[Limits of demolition hatch symbol] DENOTES LIMITS OF DEMOLITION. ALL PAVEMENT, CONCRETE, DRAINAGE STRUCTURES, UTILITY POLES, ANCHORS, FENCES, TREES, ETC. TO BE REMOVED AND PROPERLY DISPOSED OF. ANY TELEPHONE, ELECTRIC, OR FIBER OPTIC BOXES TO BE RELOCATED PROPERLY. IT IS CONTRACTORS RESPONSIBILITY TO COORDINATE THESE ACTIONS.

AFTER INSTALLATION OF DRAINAGE INLETS, CONTRACTOR TO PLACE SEDIMENT CONTROL DEVICES ON OR AROUND ALL DRAINAGE INLETS

LINETYPE & HATCHING LEGEND

EXISTING		PROPOSED
	BUILDING	
	ASPHALT PAVEMENT	
	CONCRETE	
	RIGHT OF WAY	
	BOUNDARY	
—WM—	POTABLE WATER MAIN	—W—
—FM—	SEWER FORCE MAIN	—FM—
	GRAVITY SEWER LINE	—S—
—OH—	OVERHEAD UTILITIES	
—25.0—	ELEVATION CONTOUR	—25—
	DRAINAGE PIPE	
	GRADE BREAK	—GB—

SYMBOLS & ABBREVIATIONS

(9)	No. OF COMMON AREA PARKING SPACES
18	DENOTES LOT No.
℄	CENTERLINE
±	MORE OR LESS
S.M.F.	STORMWATER MANAGEMENT FACILITY
HRZ.	HORIZONTAL
VRT.	VERTICAL
No.	NUMBER
LB	LICENSED BUSINESS
P.E.	PROFESSIONAL ENGINEER
R	RADIUS
EL.	ELEVATION
F.F.E.	FINISHED FLOOR ELEVATION
CONC.	CONCRETE
SF	SQUARE FEET
N	NORTH
E	EAST
S	SOUTH
W	WEST
EX.	EXISTING
LF	LINEAR FEET
U.E.	UTILITY EASEMENT
P.O.A.	PROPERTY OWNER'S ASSOCIATION
BNDY.	BOUNDARY
RPZBFP	REDUCED PRESSURE ZONE BACKFLOW PREVENTER
R.U.	RESIDENTIAL UNIT
L.A.	LANDSCAPE AREA
BTTM.	BOTTOM
INV.	INVERT
R.C.P.	REINFORCED CONCRETE PIPE
SEC.	SECTION
R.O.W.	RIGHT-OF-WAY
TYP.	TYPICAL
REQ.	REQUIREMENTS
P.V.C.	POLYVINYL CHLORIDE
UON	UNLESS OTHERWISE NOTED
SHWT	SEASONAL HIGH WATER TABLE
H.O.A.	HOME OWNERS ASSOCIATION
T.O.B.	TOP OF BANK
SMF	STORMWATER MANAGEMENT FACILITY
L.S.	GRINDER STATION
W.S.	WATER SERVICE
W.P.F.	WOOD PRIVACY FENCE

	PROPOSED SLOPE DIRECTION ARROW
12.0	TIE IN POINT OF PROPOSED GRADE TO EXISTING GRADE
~	PIPE CONTINUES OUTSIDE THE SURVEY'S SCOPE
12.0	PROPOSED SPOT ELEVATION
X23.40	EXISTING SPOT ELEVATION
HA1	GEOTECHNICAL BORING LOCATION
F.L.U.	FUTURE LAND USE
BR.	BEDROOM(S)
SP.	SPACE
(C)	CLEANOUT/INSPECTION PORT
	PROPOSED WATER VALVE
	PROPOSED CLEAN OUT
	EXISTING GATE VALVE
	EXISTING FIRE HYDRANT
	EXISTING BACKFLOW PREVENTOR
	EXISTING WATER METER
	AT&T BOX
	UNDERGROUND FIBER MARKER
	MAIL BOX
	BALLARD
C	AT&T PEDESTAL
	PULL BOX
	SIGN
	PROPOSED WHEELSTOP

NOTES:

SEE BOUNDARY & TOPOGRAPHIC SURVEY JOB No. 15746, FILE No. R17477, DATED 10-26-2021.

VERTICAL INFORMATION SHOWN HEREON IS REFERENCED TO THE STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION CONTROL, BEING A CONCRETE MONUMENT STAMPED "872-3385" HAVING A PUBLISHED ELEVATION OF 7.06 NAVD 88 DATUM.

A REVIEW OF THE FLOOD INSURANCE RATE MAP FOR BAY COUNTY, FLORIDA, MAP NO. 12005C0364H, REVISED JUNE 2, 2009 INDICATES THAT THE PARCEL SHOWN HEREON IS WITHIN ZONE X.

PIPE SIZES AND TYPES AS SHOWN HEREON, ARE SHOWN ACCORDING TO INFORMATION/DATA AS PROVIDED BY THE UTILITY CONTRACTOR AND WERE NOT FIELD EXCAVATED/UNCOVERED FOR VERIFICATION.

FEATURES SHOWN BY SYMBOL AS INDICATED IN THE LEGEND ARE NOT TO SCALE.

1/10/2023 CARLISLE BAPTIST CHURCH REBUILD - JOB No. 15746

REVISIONS

No.	DESCRIPTION	DATE
1		
2		
3		
4		

& Associates
ENGINEERING - SURVEYING
3445 HWY 389. BLDG, CALLAWAY, FLORIDA 32405
Phone (850) 265-6979 Fax (850) 265-9942
FLORIDA LICENSE No. LB 7759 ; FLORIDA CA No. 28715

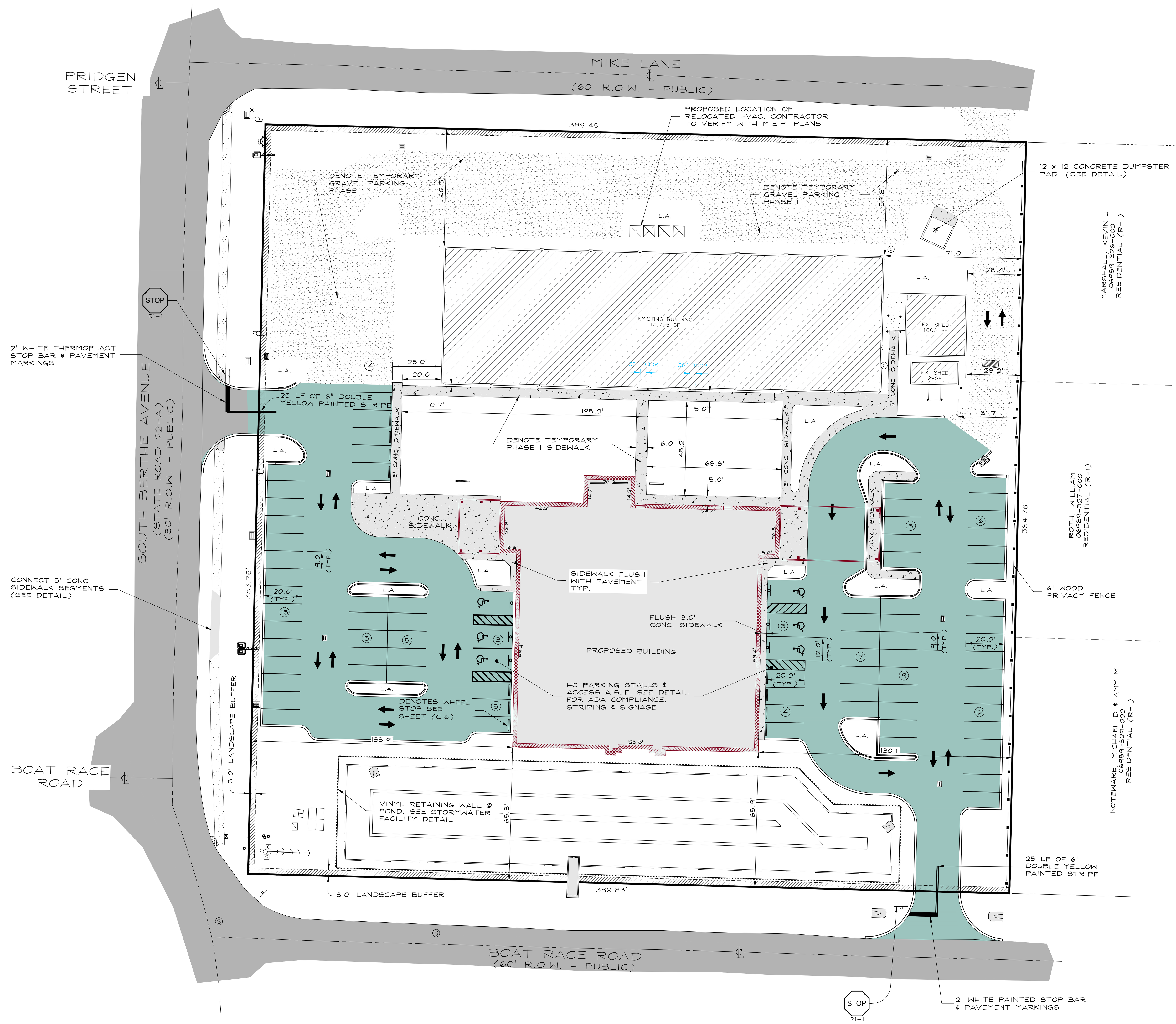
SHEET TITLE: EXISTING CONDITIONS & EROSION CONTROL

PROJECT NAME: CARLISLE BAPTIST CHURCH EXPANSION
CALLAWAY, FLORIDA

CLIENT NAME: CARLISLE BAPTIST CHURCH REBUILD

HRZ. SCALE: AS SHOWN
VRT. SCALE: N/A
PROJECT No.: 15746
FILE No.: R18478
ISSUE DATE: NOT ISSUED
SHEET: C.2

RELEASED FOR CONSTRUCTION



LINETYPE & HATCHING LEGEND

EXISTING		PROPOSED
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	CONCRETE	
	RIGHT OF WAY	
	BOUNDARY	
—WM—	POTABLE WATER MAIN	—W—
—FM—	SEWER FORCE MAIN	—FM—
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	EXISTING WATER METER
	AT&T BOX
	UNDERGROUND FIBER MARKER
	MAIL BOX
	BALLARD
C	AT&T PEDESTAL
	PULL BOX
	SIGN
	PROPOSED WHEELSTOP

IMPERVIOUS SURFACE

EXISTING*	65,353 SQ. FT.
PROPOSED	106,216 SQ FT.

*NOTE: EXIST. SF NUMBERS WERE DETERMINED USING A POST HURRICANE MICHAEL SURVEY AND DOES NOT ACCOUNT FOR STRUCTURES REMOVED DUE TO DAMAGE

PARKING SCHEDULE

	REQUIRED	PROVIDED
STANDARD PARKING SPACES	121	121
HANDICAP PARKING SPACES	6	6
TOTAL PARKING SPACES	127	127

SITE DATA SCHEDULE

AREA	149,724 SF, 3.44 AC
ZONE	INSTITUTIONAL-PROFESSIONAL (I-P)
FUTURE LAND USE	PUBLIC BUILDINGS & FACILITIES

REGULATION	REQUIRED	PROVIDED
MINIMUM LOT AREA	500 SQ. FT.	149,724 SQ. FT.
MINIMUM SETBACKS		
FRONT	20 FT.	187 FT.
NORTH SIDE	5 FT.	10 FT.
SOUTH SIDE	5 FT.	7.5 FT.
REAR	10 FT.	14.5 FT.
MAXIMUM BUILDING HEIGHT	50 FT.	<40 FT.
IMPERVIOUS SURFACE RATIO	90%	71%

REVISIONS

No.	DESCRIPTION	DATE
1		
2		
3		
4		

1/10/2023 CARLISLE BAPTIST CHURCH REBUILD - JOB No. 15746

& Associates
ENGINEERING - SURVEYING
3445 HWY 389, BLDG. CALLAWAY, FLORIDA 32405
Phone (850) 265-6979 Fax (850) 265-9942
FLORIDA LICENSE No. LB 7759 ; FLORIDA CA No. 28715

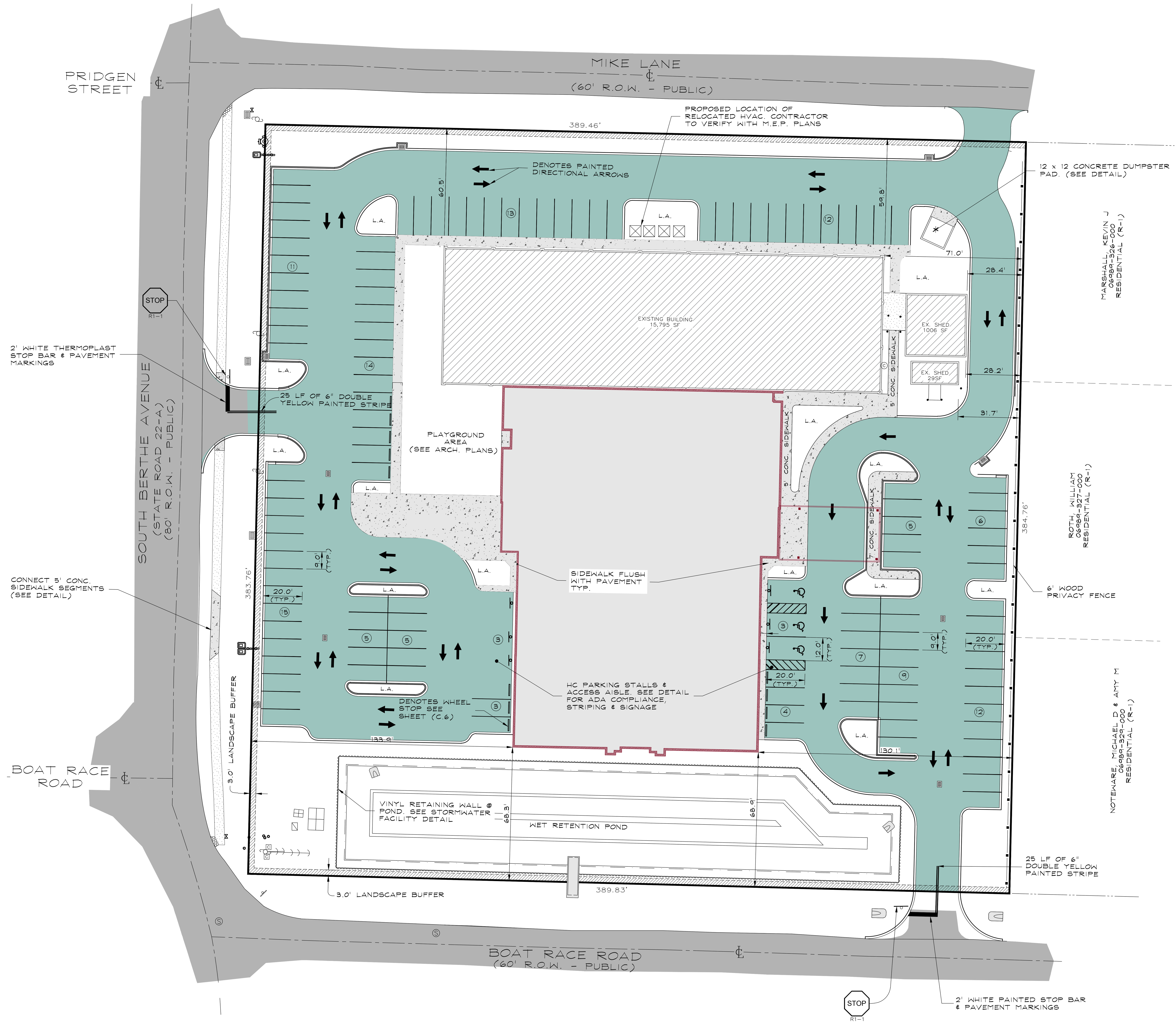
SHEET TITLE: SITE PLAN - PHASE 1

PROJECT NAME: CARLISLE BAPTIST CHURCH EXPANSION
CALLAWAY, FLORIDA

CLIENT NAME: CARLISLE BAPTIST CHURCH REBUILD

HRZ. SCALE	AS SHOWN
VRT. SCALE	N/A
PROJECT No.	15746
FILE No.	R18478
ISSUE DATE	NOT ISSUED
SHEET:	C.3

RELEASED FOR CONSTRUCTION



LINETYPE & HATCHING LEGEND

EXISTING		PROPOSED
	BUILDING	
	ASPHALT PAVEMENT	
	CONCRETE	
	RIGHT OF WAY	
	BOUNDARY	
—WM—	POTABLE WATER MAIN	—W—
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PARKING SCHEDULE

	REQUIRED	PROVIDED
STANDARD PARKING SPACES	121	121
HANDICAP PARKING SPACES	6	6
TOTAL PARKING SPACES	127	127

SITE DATA SCHEDULE

AREA	149,724 SF, 3.44 AC
ZONE	INSTITUTIONAL—PROFESSIONAL (I—P)
FUTURE LAND USE	PUBLIC BUILDINGS & FACILITIES

REGULATION	REQUIRED	PROVIDED
MINIMUM LOT AREA	500 SQ. FT.	149,724 SQ. FT.
MINIMUM SETBACKS		
FRONT	20 FT.	187 FT.
NORTH SIDE	5 FT.	10 FT.
SOUTH SIDE	5 FT.	7.5 FT.
REAR	10 FT.	14.5 FT.
MAXIMUM BUILDING HEIGHT	50 FT.	<40 FT.
IMPERVIOUS SURFACE RATIO	90%	71%

SYMBOLS & ABBREVIATIONS

(9)	No. OF COMMON AREA PARKING SPACES
18	DENOTES LOT No.
℄	CENTERLINE
±	MORE OR LESS
S.M.F.	STORMWATER MANAGEMENT FACILITY
HRZ.	HORIZONTAL
VRT.	VERTICAL
No.	NUMBER
LB	LICENSED BUSINESS
P.E.	PROFESSIONAL ENGINEER
R	RADIUS
EL.	ELEVATION
F.F.E.	FINISHED FLOOR ELEVATION
CONC.	CONCRETE
SF	SQUARE FEET
N	NORTH
E	EAST
S	SOUTH
W	WEST
EX.	EXISTING
LF	LINEAR FEET
U.E.	UTILITY EASEMENT
P.O.A.	PROPERTY OWNER'S ASSOCIATION
BNDY.	BOUNDARY
RPZBFP	REDUCED PRESSURE ZONE BACKFLOW PREVENTER
R.U.	RESIDENTIAL UNIT
L.A.	LANDSCAPE AREA
BTTM.	BOTTOM
INV.	INVERT
R.C.P.	REINFORCED CONCRETE PIPE
SEC.	SECTION
R.O.W.	RIGHT—OF—WAY
TYP.	TYPICAL
REQ.	REQUIREMENTS
P.V.C.	POLYVINYL CHLORIDE
UON	UNLESS OTHERWISE NOTED
SHWT	SEASONAL HIGH WATER TABLE
H.O.A.	HOME OWNERS ASSOCIATION
T.O.B.	TOP OF BANK
SMF	STORMWATER MANAGEMENT FACILITY
L.S.	GRINDER STATION
W.S.	WATER SERVICE
W.P.F.	WOOD PRIVACY FENCE

	PROPOSED SLOPE DIRECTION ARROW
12.0	TIE IN POINT OF PROPOSED GRADE TO EXISTING GRADE
~	PIPE CONTINUES OUTSIDE THE SURVEY'S SCOPE
12.0	PROPOSED SPOT ELEVATION
X23.40	EXISTING SPOT ELEVATION
HA1	GEOTECHNICAL BORING LOCATION
F.L.U.	FUTURE LAND USE
BR.	BEDROOM(S)
SP.	SPACE
(C)	CLEANOUT/INSPECTION PORT
	PROPOSED WATER VALVE
	PROPOSED CLEAN OUT
	EXISTING GATE VALVE
	EXISTING FIRE HYDRANT
	EXISTING BACKFLOW PREVENTOR
	EXISTING WATER METER
	AT&T BOX
	UNDERGROUND FIBER MARKER
	MAIL BOX
	BALLARD
C	AT&T PEDESTAL
	PULL BOX
	SIGN
	PROPOSED WHEELSTOP

REVISIONS

No. | DESCRIPTION | DATE

1/10/2023 CARLISLE BAPTIST CHURCH REBUILD - JOB No. 15746

& Associates
ENGINEERING - SURVEYING

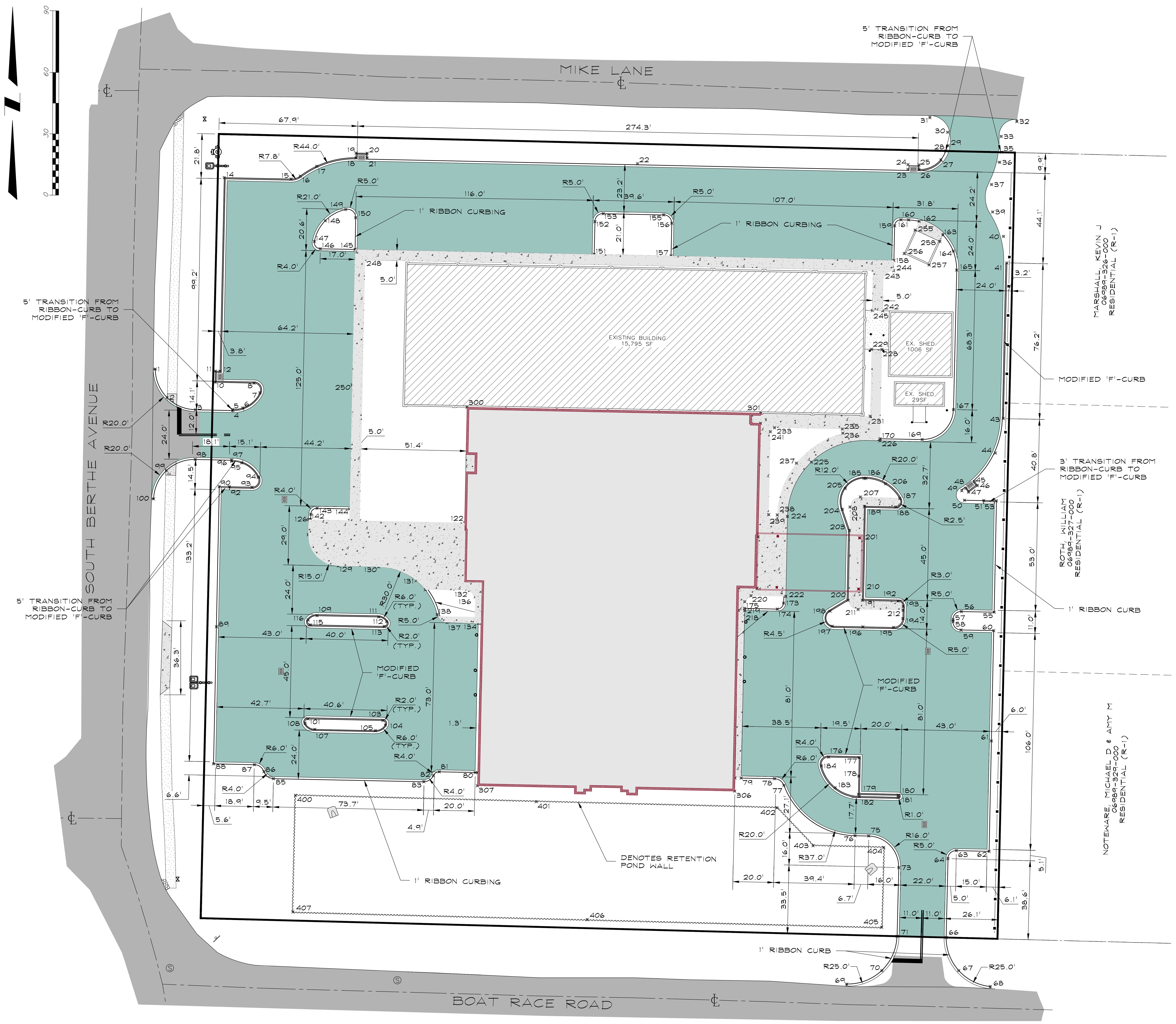
SHEET TITLE: SITE PLAN - PHASE 2

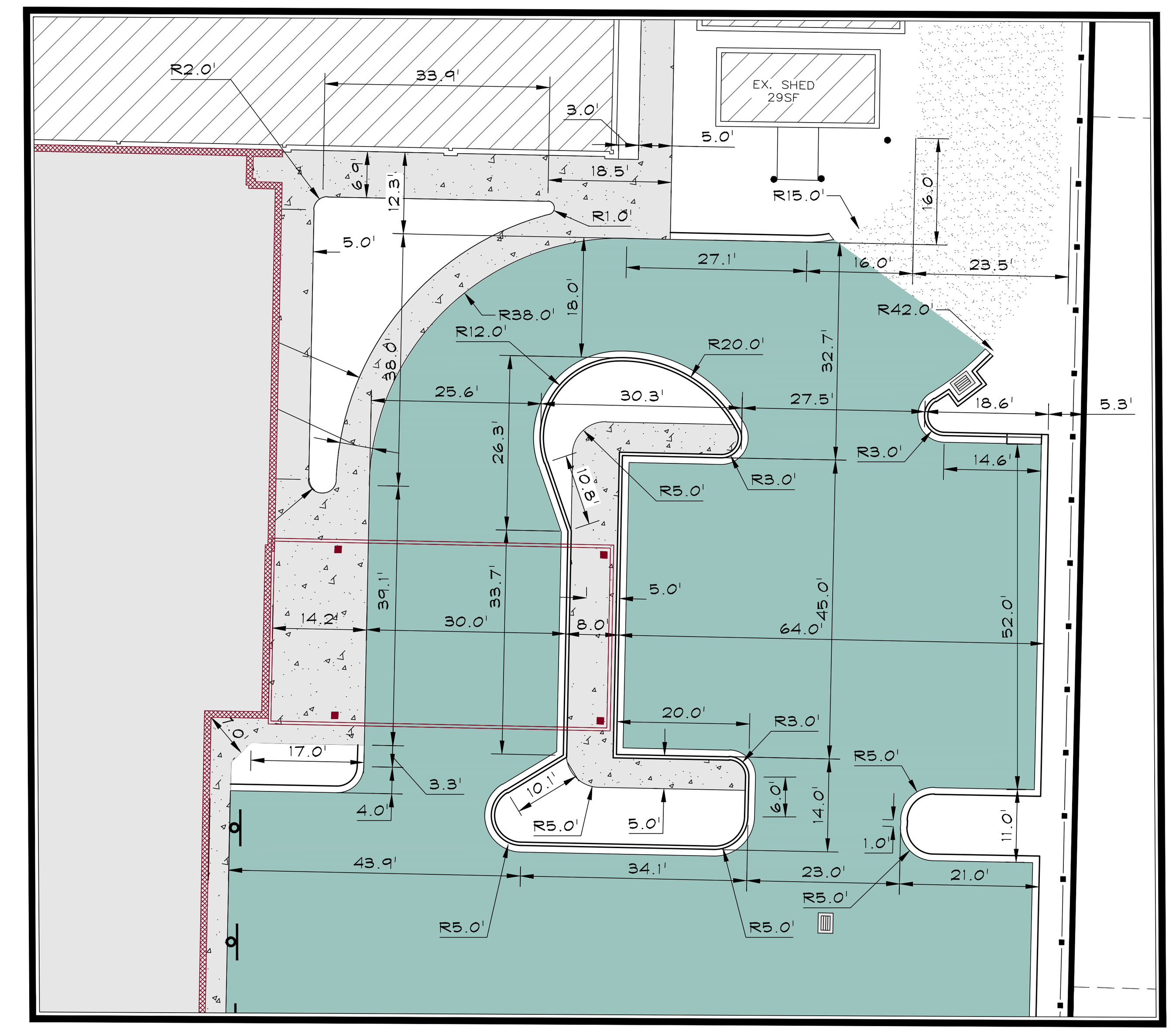
PROJECT NAME: CARLISLE BAPTIST CHURCH EXPANSION
CALLAWAY, FLORIDA

CLIENT NAME: CARLISLE BAPTIST CHURCH REBUILD

HRZ. SCALE AS SHOWN
VRT. SCALE N/A
PROJECT No. 15746
FILE No. R18478
ISSUE DATE NOT ISSUED
SHEET: C.4

RELEASED FOR CONSTRUCTION





DROP OFF AREA DETAIL

SCALE: 1"=20'

LINETYPE & HATCHING LEGEND

EXISTING		PROPOSED
	BUILDING	
	ASPHALT PAVEMENT	
	CONCRETE	
	RIGHT OF WAY	
	BOUNDARY	
—WM—	POTABLE WATER MAIN	—W—
—FM—	SEWER FORCE MAIN	—FM—
	GRAVITY SEWER LINE	—S—
—OH—	OVERHEAD UTILITIES	
—25.0—	ELEVATION CONTOUR	—25—
	DRAINAGE PIPE	
	GRADE BREAK	—GB—

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- No. — NUMBER
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- W — WEST
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- BTTM. — BOTTOM
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- SEC. — SECTION
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- REQ. — REQUIREMENTS
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- UON — UNLESS OTHERWISE NOTED
- SHWT — SEASONAL HIGH WATER TABLE
- H.O.A. — HOME OWNERS ASSOCIATION
- T.O.B. — TOP OF BANK
- SMF — STORMWATER MANAGEMENT FACILITY
- L.S. — GRINDER STATION
- W.S. — WATER SERVICE
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- EXISTING FIRE HYDRANT
- EXISTING BACKFLOW PREVENTOR
- EXISTING WATER METER
- AT&T BOX
- UNDERGROUND FIBER MARKER
- MAIL BOX
- BALLARD
- AT&T PEDESTAL
- PULL BOX
- SIGN
- PROPOSED WHEELSTOP

POINT TABLE

POINT No.	NORTHING	EASTING	DESCRIPTION
1	413142.45	1628819.50	BOC
2	413128.53	1628825.25	BOC
3	413122.57	1628839.09	BOC
4	413122.20	1628857.35	BOC
5	413122.70	1628857.36	BOC
6	413123.43	1628862.30	BOC
7	413130.85	1628870.70	BOC
8	413135.62	1628867.76	BOC
10	413136.01	1628848.76	BOC
11	413141.42	1628848.88	BOC
12	413141.37	1628851.21	BOC
14	413236.11	1628853.21	BOC
15	413235.42	1628885.90	BOC
16	413236.87	1628890.41	BOC
17	413241.69	1628898.47	BOC
18	413245.81	1628917.68	BOC
19	413248.14	1628917.73	BOC
20	413248.03	1628923.15	BOC
21	413245.70	1628923.10	BOC
22	413242.91	1629055.32	BOC
23	413240.12	1629187.54	BOC
24	413242.46	1629187.59	BOC
25	413242.34	1629193.01	BOC
26	413240.01	1629192.96	BOC
27	413244.80	1629203.67	BOC
28	413249.18	1629206.14	BOC

POINT TABLE

POINT No.	NORTHING	EASTING	DESCRIPTION
29	413251.79	1629207.25	BOC
30	413258.31	1629206.98	BOC
31	413265.48	1629198.28	BOC
32	413263.54	1629240.81	BOC
33	413256.26	1629233.15	BOC
35	413248.56	1629233.35	BOC
36	413243.59	1629232.46	BOC
37	413232.76	1629228.44	BOC
39	413219.30	1629229.01	BOC
40	413207.35	1629234.33	BOC
41	413194.37	1629235.96	BOC
43	413118.24	1629234.26	BOC
44	413101.37	1629230.35	BOC
45	413087.46	1629220.04	BOC
46	413085.50	1629221.53	BOC
47	413082.22	1629217.21	BOC
48	413084.12	1629215.77	BOC
49	413082.93	1629213.94	BOC
50	413078.30	1629215.19	BOC
51	413078.10	1629224.62	BOC
53	413077.98	1629230.82	BOC
55	413023.49	1629229.71	BOC
56	413023.82	1629213.72	BOC
57	413019.90	1629209.63	BOC
58	413018.90	1629209.61	BOC
59	413014.82	1629213.53	BOC
60	413014.49	1629229.53	BOC
61	412960.50	1629228.38	BOC
62	412906.51	1629227.24	BOC

POINT TABLE

POINT No.	NORTHING	EASTING	DESCRIPTION
63	412906.84	1629211.24	BOC
64	412902.96	1629207.16	BOC
66	412864.37	1629206.27	BOC
67	412848.18	1629212.42	BOC
68	412840.35	1629227.88	BOC
69	412841.52	1629157.60	BOC
70	412848.11	1629174.82	BOC
71	412864.97	1629182.28	BOC
73	412898.58	1629183.06	BOC
75	412913.99	1629168.39	BOC
76	412914.13	1629161.74	BOC
77	412938.80	1629126.93	BOC
78	412942.05	1629122.35	BOC
79	412942.38	1629106.01	BOC
80	412945.06	1628975.93	BOC
81	412945.42	1628958.35	BOC
82	412943.60	1628955.53	BOC
83	412940.57	1628950.83	BOC
85	412942.08	1628877.26	BOC
86	412945.49	1628872.62	BOC
87	412948.90	1628867.98	BOC
88	412949.32	1628847.99	BOC
89	413016.39	1628849.36	BOC
90	413084.96	1628850.77	BOC
92	413084.85	1628855.77	BOC
93	413084.63	1628866.77	BOC
94	413089.45	1628869.82	BOC
95	413096.54	1628861.77	BOC
96	413097.36	1628856.83	BOC

POINT TABLE

POINT No.	NORTHING	EASTING	DESCRIPTION
97	413097.86	1628856.84	BOC
98	413098.22	1628839.06	BOC
99	413092.76	1628824.91	BOC
100	413078.93	1628818.67	BOC
101	412971.31	1628894.14	BOC
103	412970.56	1628930.74	BOC
104	412968.31	1628932.01	BOC
105	412965.56	1628927.14	BOC
107	412966.17	1628897.54	BOC
108	412969.12	1628892.78	BOC
109	413021.83	1628898.57	BOC
111	413021.20	1628928.72	BOC
112	413018.93	1628932.63	BOC
113	413016.56	1628931.42	BOC
115	413017.30	1628895.39	BOC
116	413019.71	1628894.23	BOC
117	412945.03	1628977.18	CSW
119	413018.01	1628978.73	CSW
122	413067.26	1628970.77	CSW
124	413068.32	1628919.45	CSW
125	413068.42	1628914.44	CSW
126	413068.83	1628894.45	CSW
127	413061.46	1628894.30	CSW
129	413046.15	1628908.99	CSW
130	413045.72	1628928.78	CSW
131	413038.97	1628947.13	CSW
132	413034.10	1628973.07	CSW
134	413018.06	1628977.42	CSW
136	413031.04	1628976.01	BOC

POINT TABLE

POINT No.	NORTHING	EASTING	DESCRIPTION
137	413018.47	1628962.16	BOC
138	413022.36	1628957.42	BOC
140	413034.55	1628951.53	BOC
141	413068.81	1628895.45	BOC
142	413071.42	1628895.50	BOC
143	413074.35	1628898.56	BOC
144	413074.02	1628914.56	BOC
145	413200.99	1628917.17	BOC
146	413201.33	1628900.18	BOC
147	413204.92	1628897.29	BOC
148	413215.02	1628902.64	BOC
149	413220.54	1628912.65	BOC
150	413216.55	1628917.50	BOC
151	413198.59	1629034.14	BOC
152	413214.59	1629034.47	BOC
153	413218.51	1629038.55	BOC
155	413217.90	1629068.13	BOC
156	413213.82	1629072.05	BOC
157	413197.82	1629071.72	BOC
158	413195.58	1629180.70	BOC
159	413212.54	1629181.04	BOC
160	413215.48	1629184.11	BOC
161	413215.40	1629187.89	BOC
162	413214.73	1629193.07	BOC
163	413208.08	1629204.67	BOC
164	413200.15	1629209.75	BOC
165	413190.87	1629211.39	BOC
167	413122.62	1629209.88	BOC
169	413107.96	1629194.57	BOC

POINT TABLE

POINT No.	NORTHING	EASTING	DESCRIPTION
170	413108.38	1629173.92	BOC
173	413027.98	1629126.77	BOC
174	413025.04	1629123.71	BOC
175	413028.64	1629107.78	BOC
176	412952.64	1629148.74	BOC
177	412952.33	1629163.72	BOC
178	412943.33	1629163.54	BOC
179	412934.33	1629163.35	BOC
180	412933.93	1629182.85	BOC
181	412932.93	1629182.83	BOC
182	412933.32	1629163.83	BOC
183	412937.65	1629151.98	BOC
184	412948.33	1629145.26	BOC
185	413089.01	1629166.04	BOC
186	413089.02	1629167.03	BOC
187	413079.19	1629183.57	BOC
188	413074.99	1629181.60	BOC
189	413075.30	1629166.25	BOC
191	413029.31	1629165.31	BOC
192	413028.95	1629182.80	BOC
193	413026.40	1629185.25	BOC
194	413020.40	1629185.13	BOC
195	413016.00	1629180.54	BOC
196	413016.31	1629165.54	BOC
197	413016.61	1629150.54	BOC
198	413024.01	1629149.45	BOC
200	413029.39	1629158.31	BOC
201	413059.84	1629163.93	BOC
203	413063.48	1629159.01	BOC

POINT TABLE

POINT No.	NORTHING	EASTING	DESCRIPTION
204	413073.82	1629155.50	BOC
205	413084.07	1629156.94	BOC
206	413086.28	1629176.59	CSW
207	413079.84	1629164.34	CSW
208	413074.95	1629159.24	CSW
210	413034.84	1629163.40	CSW
211	413024.86	1629163.21	CSW
212	413024.40	1629185.21	CSW
213	412942.45	1629102.97	CSW
215	413024.43	1629104.66	CSW
218	413024.37	1629107.69	CSW
219	413025.37	1629107.71	CSW
220	413031.57	1629110.84	CSW
221	413060.37	1629114.33	CSW
222	413031.22	1629127.84	CSW
224	413070.30	1629128.64	CSW
225	413096.94	1629140.32	CSW
226	413107.39	1629173.90	CSW
228	413151.99	1629174.81	CSW
229	413152.10	1629169.81	CSW
231	413119.41	1629169.14	CSW
233	413113.77	1629122.35	CSW
235	413113.09	1629155.51	CSW
236	413111.12	1629155.74	CSW
237	413096.41	1629133.08	CSW
238	413071.09	1629123.66	CSW
239	413071.21	1629119.47	CSW
241	413111.81	1629120.31	CSW
242	413171.02	1629175.20	CSW

POINT TABLE

POINT No.	NORTHING	EASTING	DESCRIPTION
243	413190.69	1629175.61	CSW
244	413190.66	1629180.57	CSW
245	413171.12	1629170.20	CSW
246	413190.80	1629170.61	CSW
248	413195.90	1628922.06	CSW
250	413134.71	1628915.81	CSW
255	413210.49	1629191.11	DUMPSTER
256	413198.99	1629185.79	DUMPSTER
257	413193.39	1629197.90	DUMPSTER
258	413204.90	1629203.22	DUMPSTER
300	413123.81	1628971.93	BLDG
301	413120.85	1629115.57	BLDG
302	413119.86	1629111.13	BLDG
303	413115.94	1629115.47	BLDG
304	413035.21	1629113.81	BLDG
305	413035.39	1629104.80	BLDG
306	412935.99	1629102.85	BLDG
307	412938.58	1628977.05	BLDG
308	413037.97	1628979.15	BLDG
309	413038.15	1628970.59	BLDG
400	412933.86	1628888.06	POND
401	412930.84	1629005.81	POND
402	412927.82	1629123.56	POND
403	412909.27	1629141.19	POND
404	412908.38	1629175.71	POND
405	412869.38	1629174.71	POND
406	412873.11	1629030.75	POND
407	412876.85	1628886.79	POND

7/10/2023 CARLISLE BAPTIST CHURCH REBUILD - JOB No. 15746

REVISIONS

& Associates ENGINEERING · SURVEYING

CALLAWAY, FLORIDA

SHEET TITLE: DIMENSION PLAN

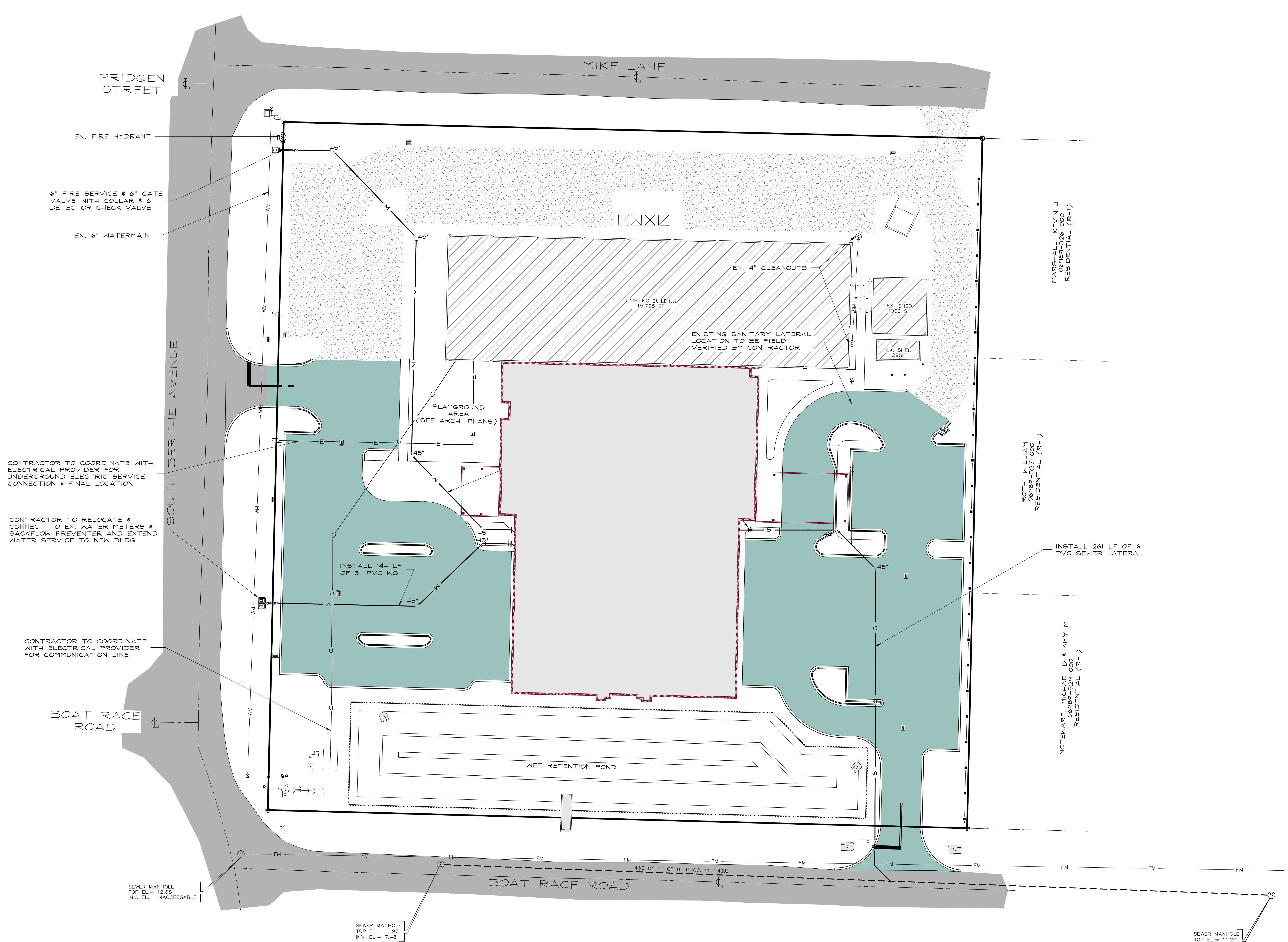
PROJECT NAME: CARLISLE BAPTIST CHURCH EXPANSION CALLAWAY, FLORIDA

CLIENT NAME: CARLISLE BAPTIST CHURCH REBUILD

HRZ. SCALE: AS SHOWN
VRT. SCALE: N/A
PROJECT No.: 15746
FILE No.: R18476
ISSUE DATE: NOT ISSUED
SHEET: C.5

UTILITY PLAN

RELEASED FOR CONSTRUCTION



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(symbol)	EXISTING BACKFLOW PREVENTOR
(symbol)	EXISTING WATER METER
(symbol)	AT&T BOX
(symbol)	UNDERGROUND FIBER MARKER
(symbol)	MAIL BOX
(symbol)	BALLARD
(symbol)	AT&T PEDESTAL
(symbol)	PULL BOX
(symbol)	SIGN
(symbol)	PROPOSED WHEELSTOP

LINETYPE & HATCHING LEGEND

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	ASPHALT PAVEMENT	
	CONCRETE	
	RIGHT OF WAY	
	BOUNDARY	
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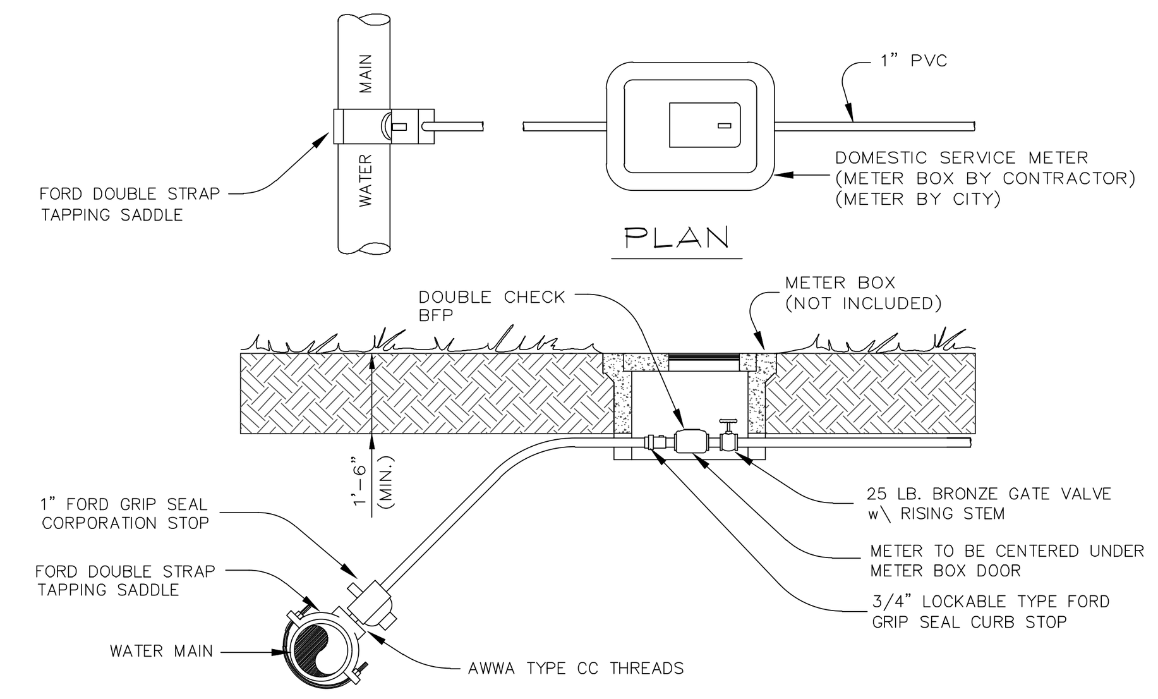
—OH—	OVERHEAD UTILITIES	
—25.0—	ELEVATION CONTOUR	—25—
	DRAINAGE PIPE	
	GRADE BREAK	—GB—

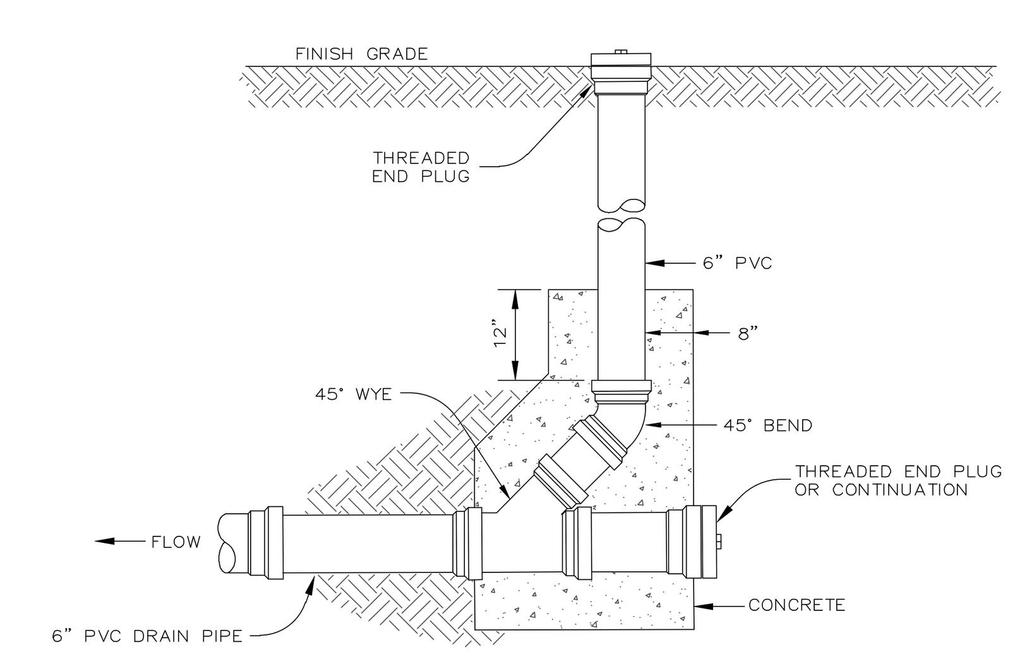


WATER SERVICE DETAILS

NOT TO SCALE

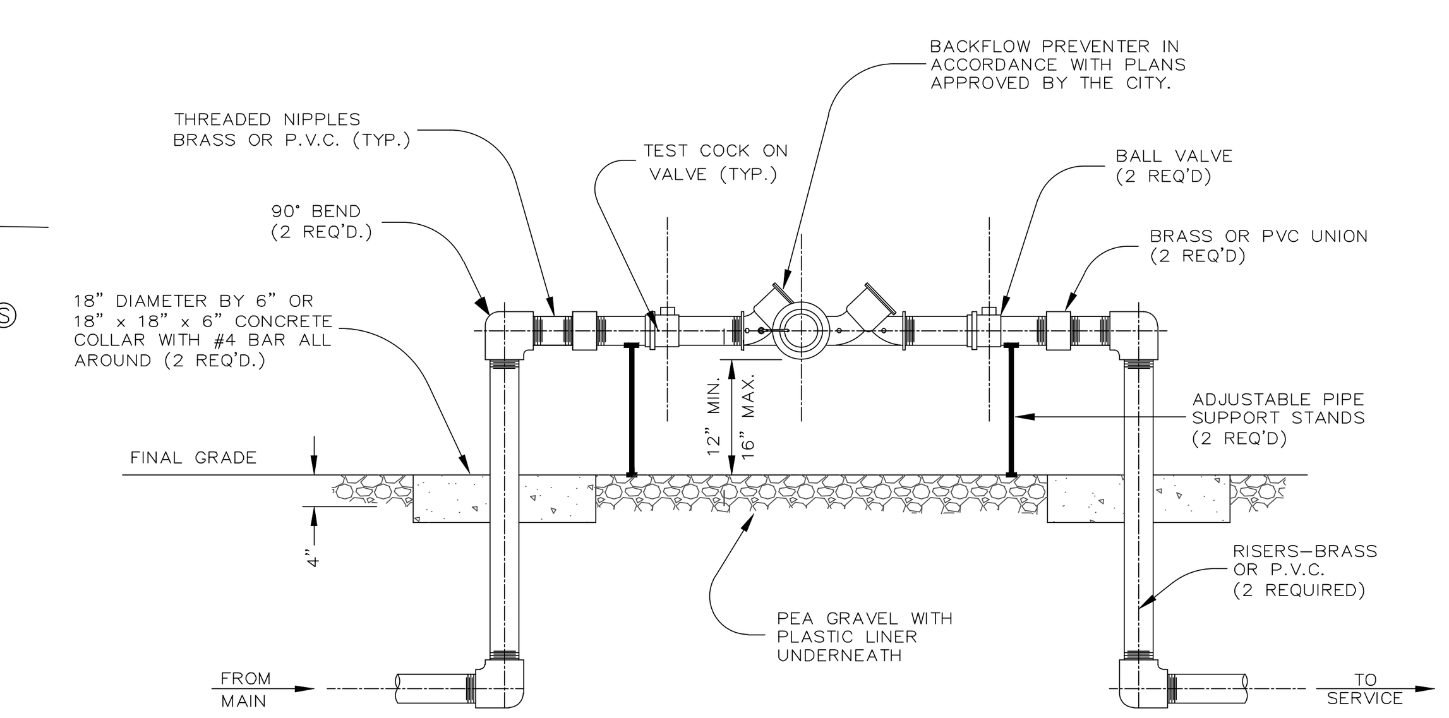
NOTES:

1. ALL FITTINGS SHALL BE BRASS WITH COMPRESSION/PACK JOINT TYPE CONNECTIONS.
2. ALL TUBING TO BE 200 PSI.
3. ALL CURB STOPS SHALL BE LOCKABLE TYPE FORD GRIP SEAL.
4. ALL CORPORATION STOPS SHALL BE FORD GRIP SEAL.
5. PROVIDE INSERTS AT ALL CORPORATION AND CURB STOPS.
6. PROVIDE #14AWG LOCATOR WIRE ALONG ENTIRE LENGTH OF TUBING.
7. NO SERVICE LINE SHALL TERMINATE UNDER A DRIVEWAY.
8. EACH SERVICE SHALL TERMINATE AT A CURB STOP WHICH SHALL BE BURIED APPROXIMATELY 3" BELOW FINAL GRADE AND SHALL BE CLEARLY MARKED WITH A 2" X 2" X 18" STAKE WITH THE TOP PAINTED BLUE AND MARKED WITH THE NUMBER OF THE LOT TO BE SERVED AND TYPE OF SERVICE PROVIDED, i.e., POTABLE WATER OR RECLAIMED WATER.



CLEAN-OUT DETAIL

NOT TO SCALE



NOTES:

1) ALL PIPE AND FITTINGS 2" AND SMALLER SHALL BE THREADED SCHEDULE 40 PVC OR BRASS.
2) PROVIDE PROTECTION AGAINST FREEZING.
3) TWO PIPE SUPPORTS REQUIRED.
4) ALL ITEMS ABOVE GRADE SHALL HAVE ONE COAT OF APPROVED RUST RESISTANT BLUE ENAMEL PAINT.

REDUCED PRESSURE BACKFLOW PREVENTER

1" P.V.C. WATER LINE

NOT TO SCALE

1/10/2023 CARLISLE BAPTIST CHURCH REBUILD - JOB No. 15746

REVISIONS

No.	DESCRIPTION	DATE
1		
2		
3		
4		

DATE: 5/10/2024

SCOT C. RUTHERFORD, P.E. LICENSE No. 70041 — STATE OF FLORIDA — PROFESSIONAL ENGINEER

& Associates
ENGINEERING · SURVEYING
3445 HWY 389, BLDG. CALLAWAY, FLORIDA 32405
Phone (850) 265-9979 Fax (850) 265-9942
FLORIDA LICENSE No. LB 7759 · FLORIDA CA No. 28715

SHEET TITLE: UTILITY PLAN

PROJECT NAME: CARLISLE BAPTIST CHURCH EXPANSION
CALLAWAY, FLORIDA

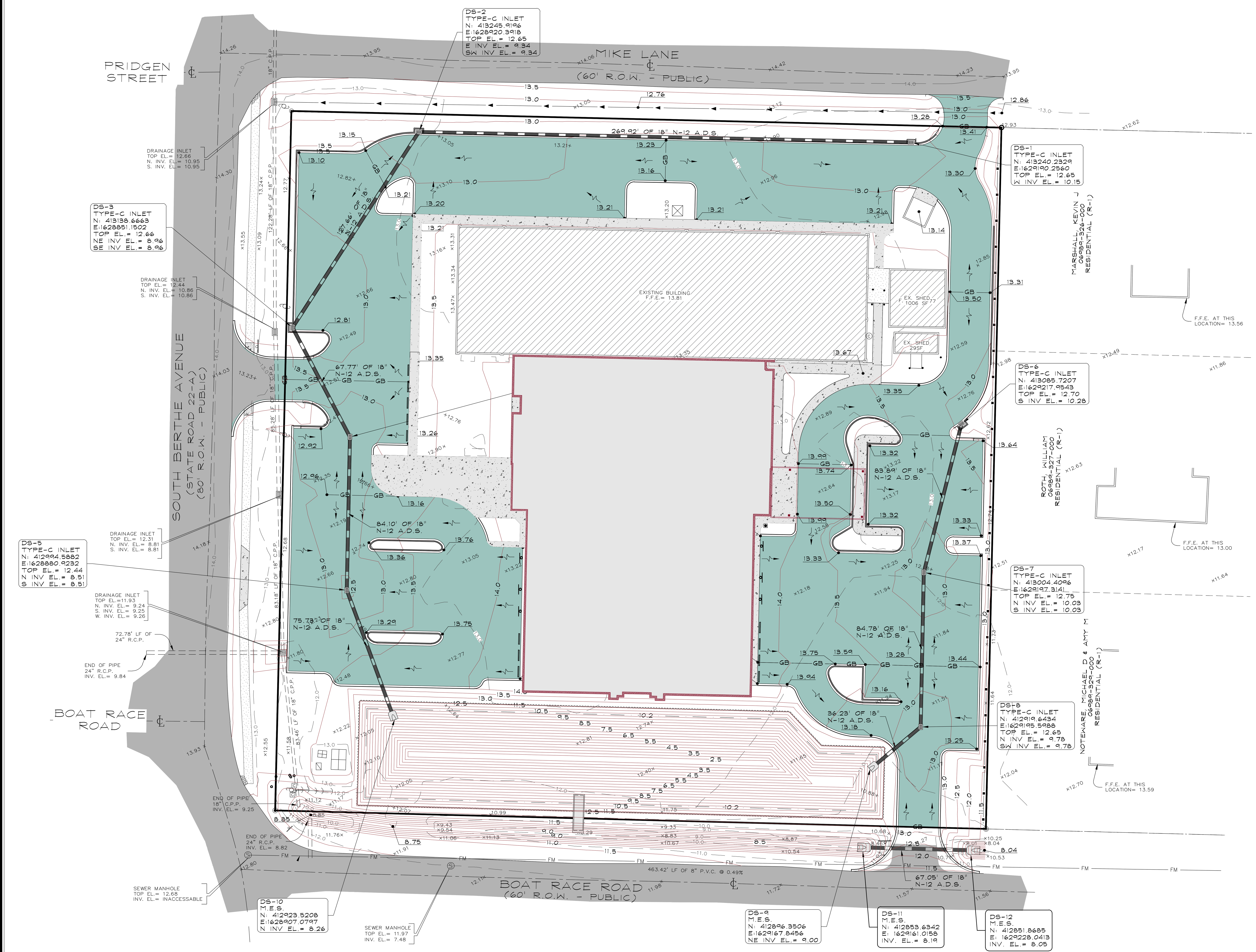
CLIENT NAME: CARLISLE BAPTIST CHURCH REBUILD

HRZ. SCALE	AS SHOWN
VRT. SCALE	N/A
PROJECT No.	15746
FILE No.	R18478
ISSUE DATE	NOT ISSUED
SHEET:	C.6

DIRECT ROOF DRAINS TO STORMWATER MANAGEMENT FACILITIES

AFTER INSTALLATION OF DRAINAGE INLETS, CONTRACTOR TO PLACE SEDIMENT CONTROL DEVICES ON OR AROUND ALL DRAINAGE INLETS

RELEASED FOR CONSTRUCTION



LINETYPE & HATCHING LEGEND

EXISTING		PROPOSED
	BUILDING	
	ASPHALT PAVEMENT	
	CONCRETE	
	RIGHT OF WAY	
	BOUNDARY	
—WM—	POTABLE WATER MAIN	—W—
—FM—	SEWER FORCE MAIN	—FM—
	GRAVITY SEWER LINE	—S—
—OH—	OVERHEAD UTILITIES	
—25.0—	ELEVATION CONTOUR	—25—
	DRAINAGE PIPE	
	GRADE BREAK	—GB—

SYMBOLS & ABBREVIATIONS

(9)	No. OF COMMON AREA PARKING SPACES
18	DENOTES LOT No.
℄	CENTERLINE
±	MORE OR LESS
S.M.F.	STORMWATER MANAGEMENT FACILITY
HRZ.	HORIZONTAL
VRT.	VERTICAL
No.	NUMBER
LB	LICENSED BUSINESS
P.E.	PROFESSIONAL ENGINEER
R	RADIUS
EL.	ELEVATION
F.F.E.	FINISHED FLOOR ELEVATION
CONC.	CONCRETE
SF	SQUARE FEET
N	NORTH
E	EAST
S	SOUTH
W	WEST
EX.	EXISTING
LF	LINEAR FEET
U.E.	UTILITY EASEMENT
P.O.A.	PROPERTY OWNER'S ASSOCIATION
BNDY.	BOUNDARY
RPZBFP	REDUCED PRESSURE ZONE BACKFLOW PREVENTER
R.U.	RESIDENTIAL UNIT
L.A.	LANDSCAPE AREA
BTTM.	BOTTOM
INV.	INVERT
R.C.P.	REINFORCED CONCRETE PIPE
SEC.	SECTION
R.O.W.	RIGHT-OF-WAY
TYP.	TYPICAL
REQ.	REQUIREMENTS
P.V.C.	POLYVINYL CHLORIDE
UON	UNLESS OTHERWISE NOTED
SHWT	SEASONAL HIGH WATER TABLE
H.O.A.	HOME OWNERS ASSOCIATION
T.O.B.	TOP OF BANK
SMF	STORMWATER MANAGEMENT FACILITY
L.S.	GRINDER STATION
W.S.	WATER SERVICE
W.P.F.	WOOD PRIVACY FENCE

	PROPOSED SLOPE DIRECTION ARROW
12.0	TIE IN POINT OF PROPOSED GRADE TO EXISTING GRADE
~	PIPE CONTINUES OUTSIDE THE SURVEY'S SCOPE
12.0	PROPOSED SPOT ELEVATION
X23.40	EXISTING SPOT ELEVATION
HA1	GEOTECHNICAL BORING LOCATION
F.L.U.	FUTURE LAND USE
BR.	BEDROOM(S)
SP.	SPACE
(C)	CLEANOUT/INSPECTION PORT
	PROPOSED WATER VALVE
	PROPOSED CLEAN OUT
	EXISTING GATE VALVE
	EXISTING FIRE HYDRANT
	EXISTING BACKFLOW PREVENTOR
	EXISTING WATER METER
	AT&T BOX
	UNDERGROUND FIBER MARKER
	MAIL BOX
	BALLARD
C	AT&T PEDESTAL
	PULL BOX
	SIGN
	PROPOSED WHEELSTOP

REVISIONS

No.	DESCRIPTION	DATE
1		
2		
3		
4		

DESIGN ... DATE: 5/10/2024

SCOTT C. RUTHERFORD
No. 70004
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FLORIDA LICENSE No. LB 7759 ; FLORIDA CA No. 28715

SHEET TITLE: GRADING & DRAINAGE PLAN

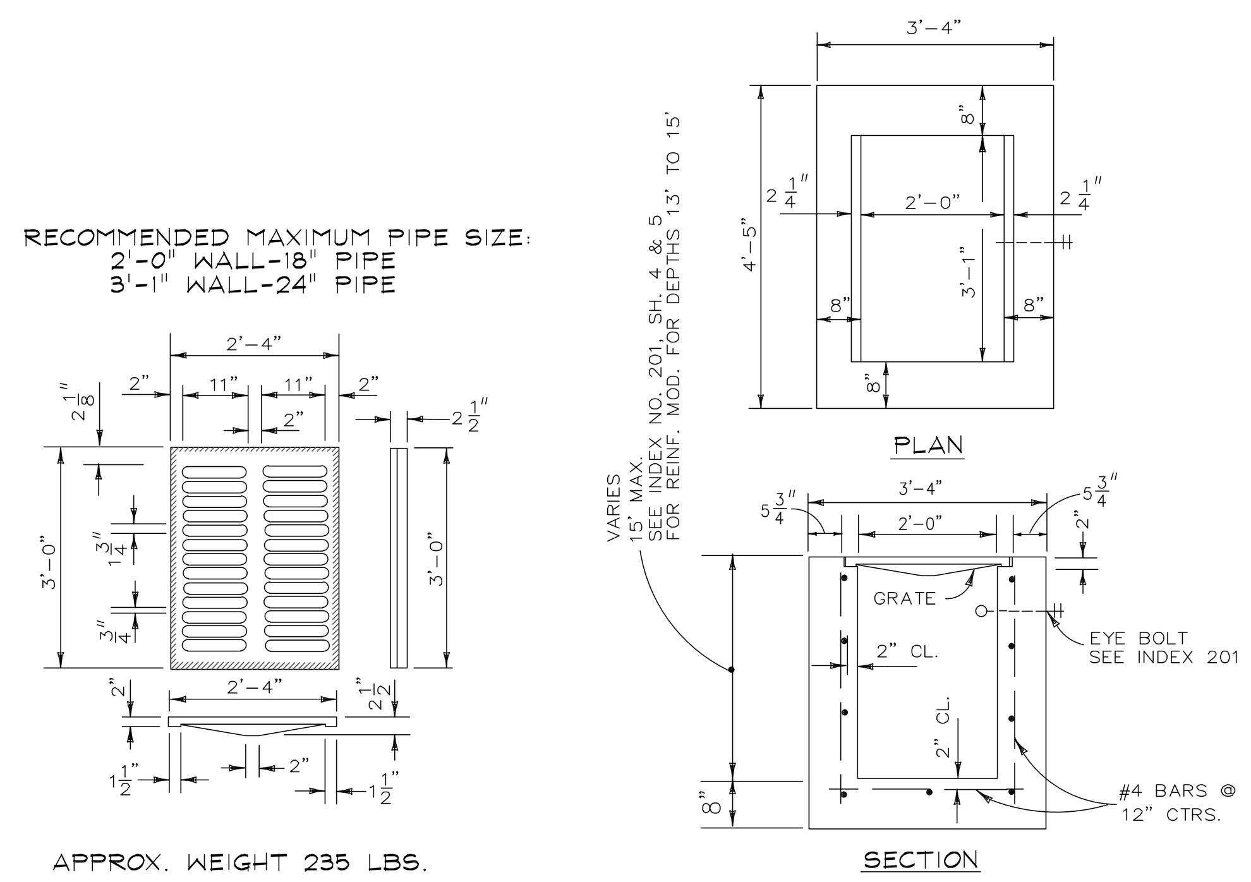
PROJECT NAME: CARLISLE BAPTIST CHURCH EXPANSION
CALLAWAY, FLORIDA

CLIENT NAME: CARLISLE BAPTIST CHURCH REBUILD

HRZ. SCALE: AS SHOWN
VRT. SCALE: N/A
PROJECT No.: 15746
FILE No.: R18478
ISSUE DATE: NOT ISSUED
SHEET: C.7

1/10/2023 CARLISLE BAPTIST CHURCH REBUILD - JOB No. 15746

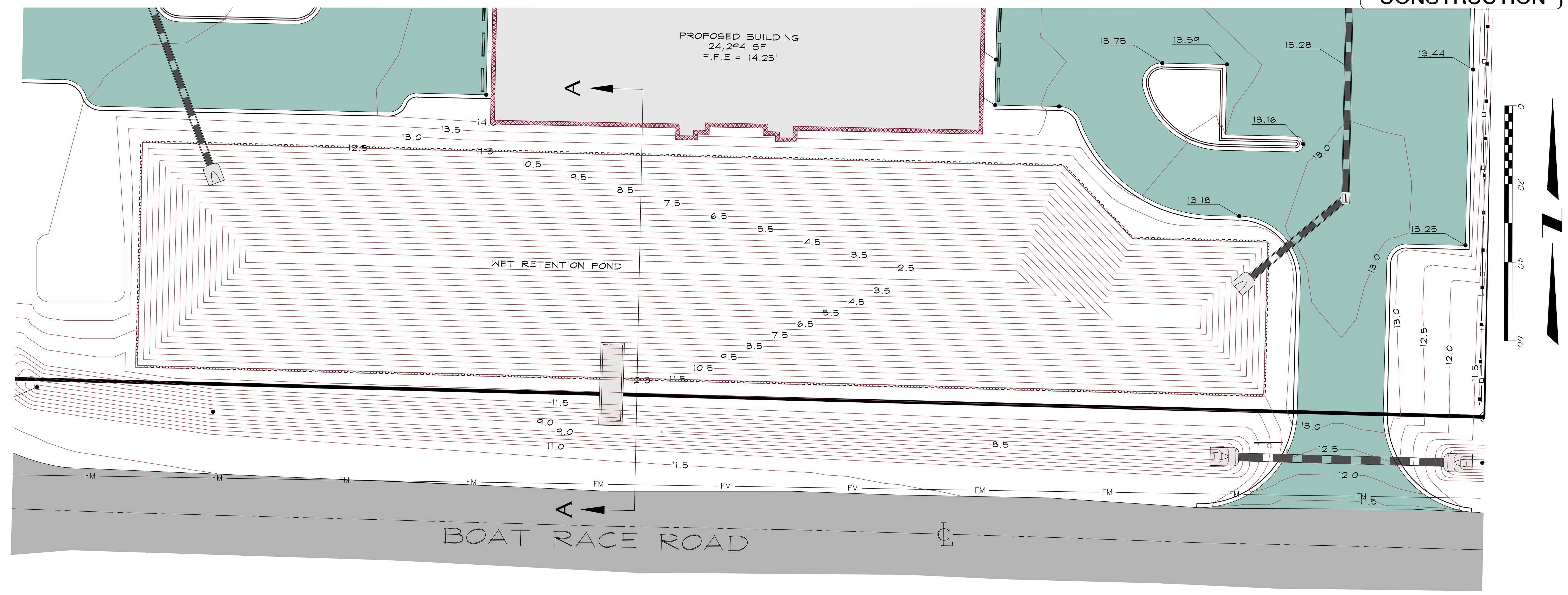
RELEASED FOR CONSTRUCTION

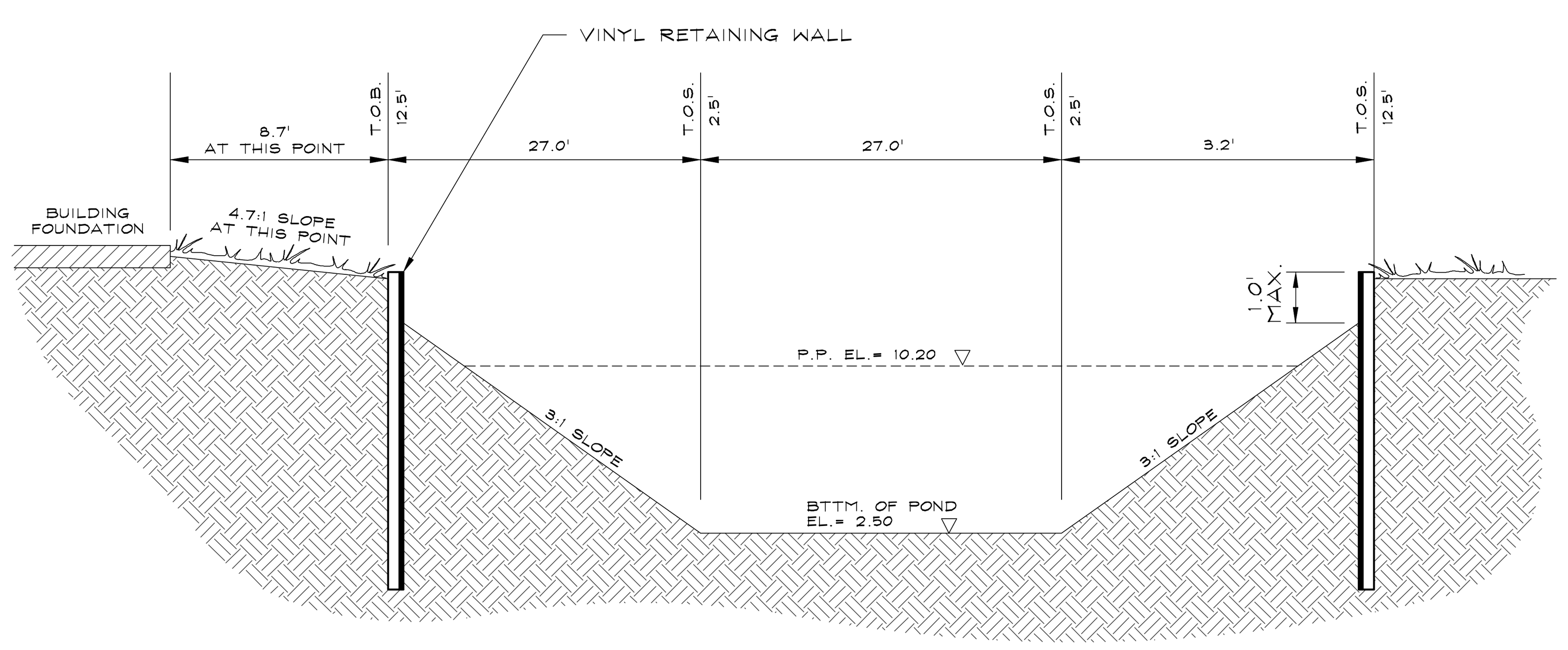


FDOT TYPE C INLET DETAIL

DITCH BOTTOM INLET FDOT No. 232

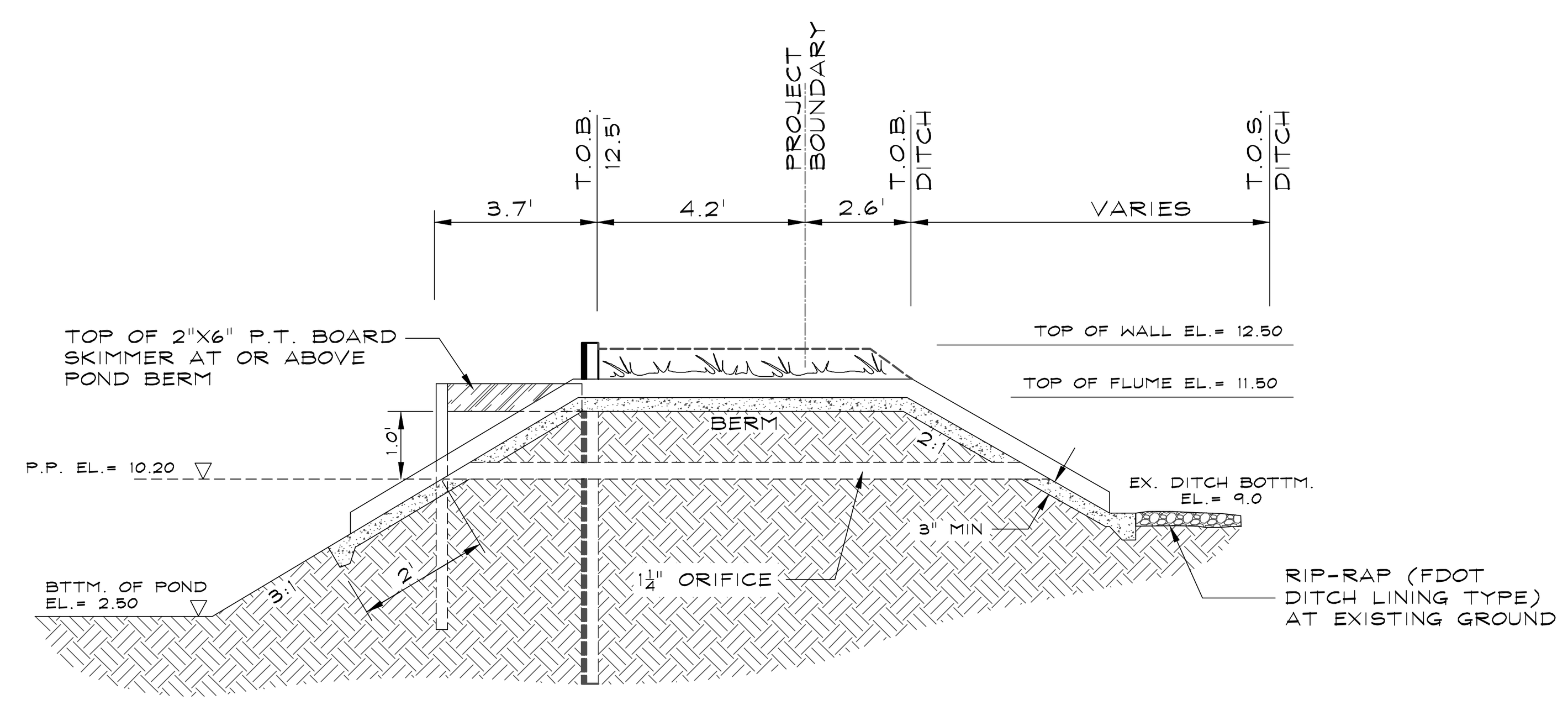
NOT TO SCALE





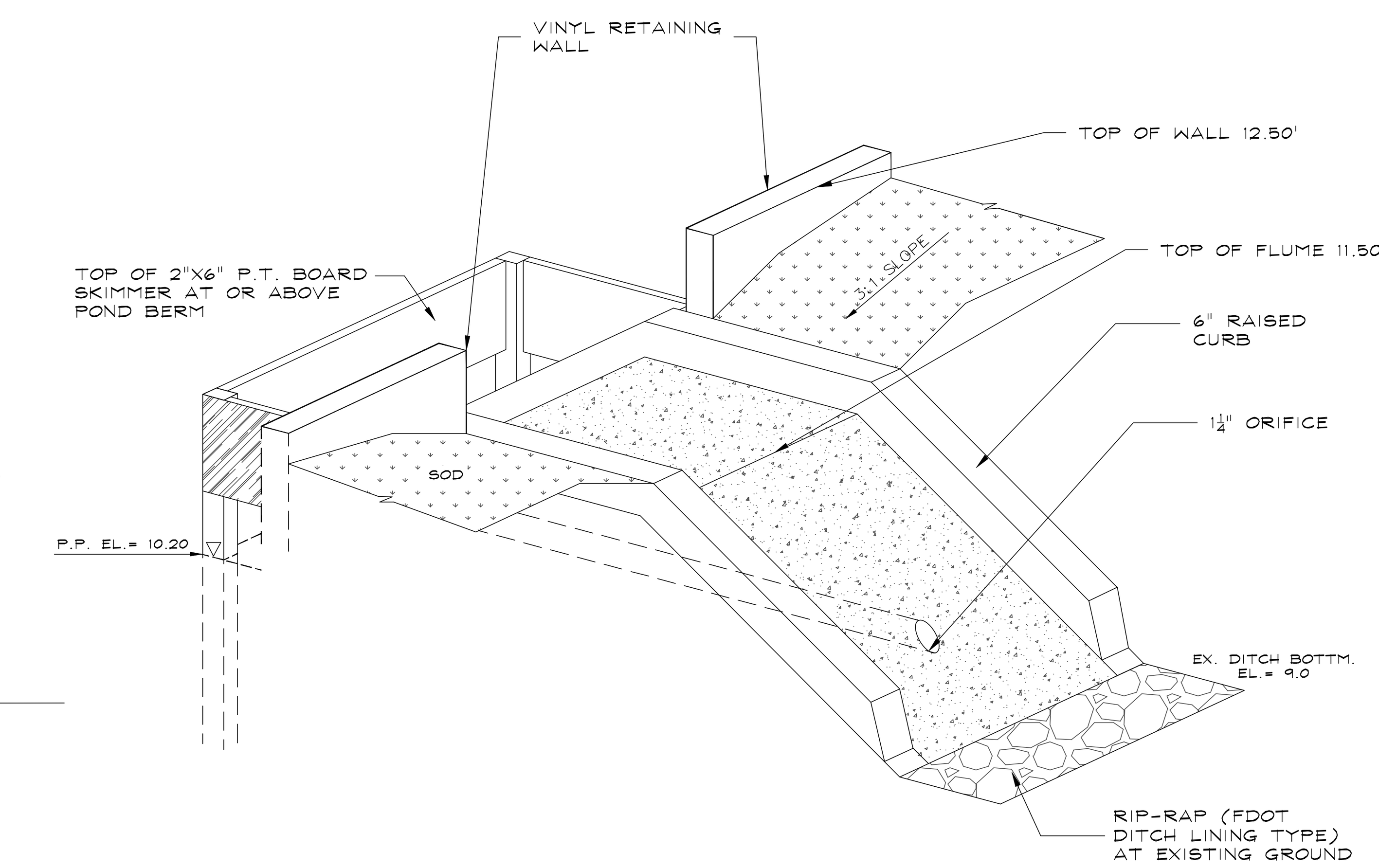
OUTFALL SECTION - SMF

NOT TO SCALE



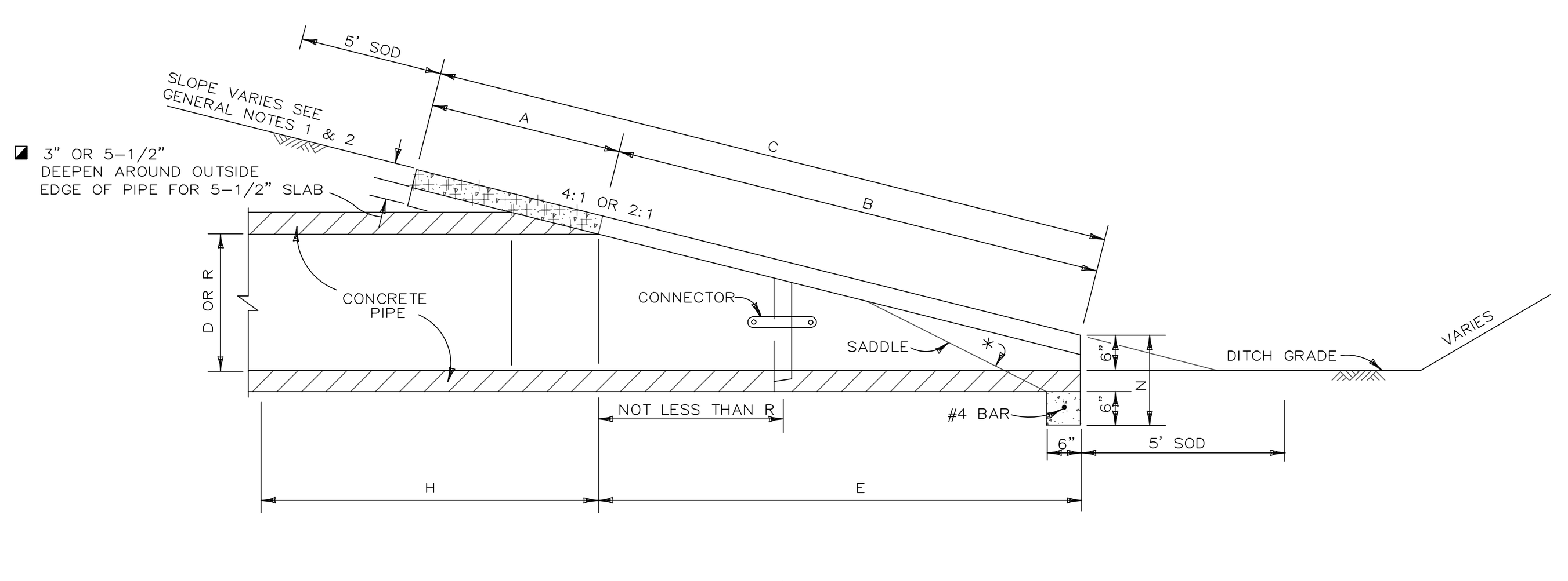
CONC. FLUME DISCHARGE STRUCTURE

NOT TO SCALE

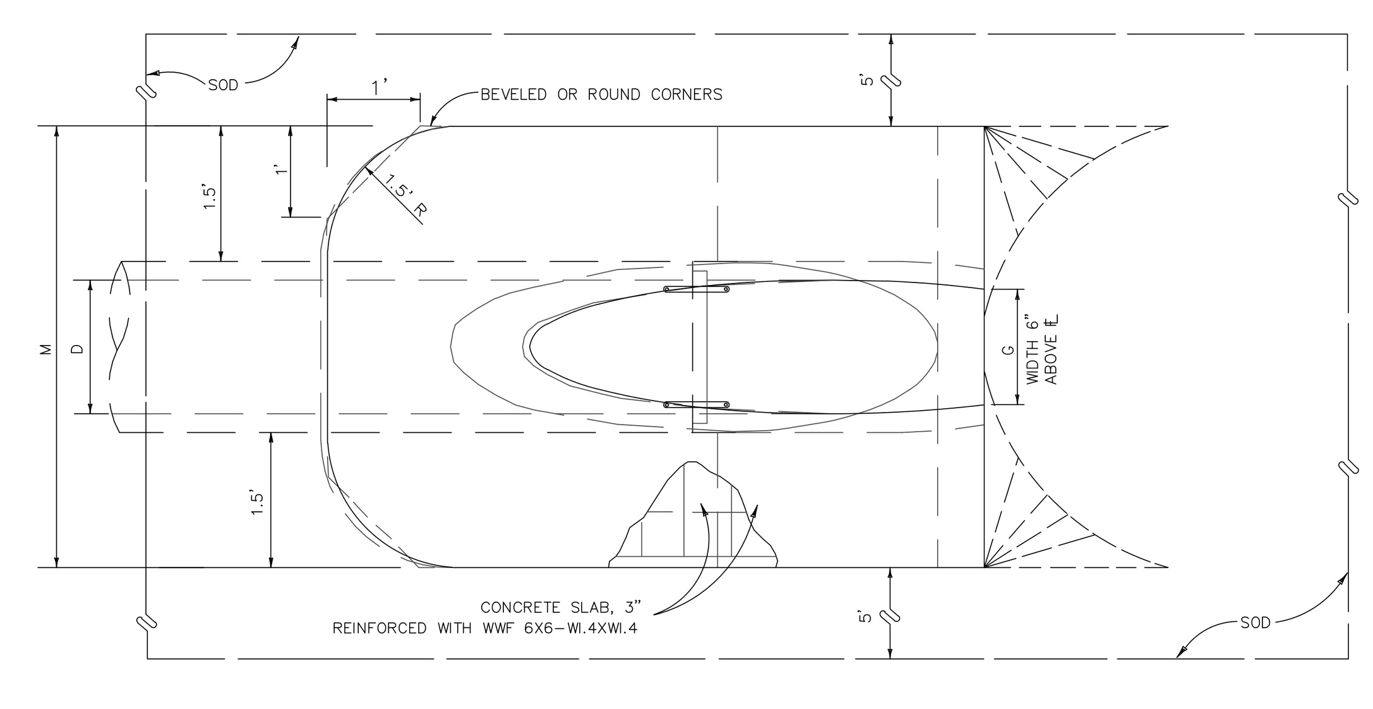


CONC. FLUME DISCHARGE STRUCTURE

NOT TO SCALE



ROUND
4:1 MITER: TO C PIPE FOR PIPES 18" AND SMALLER.
2:1 FOR PIPES 24" AND LARGER.
2:1 MITER: TO C PIPE FOR PIPES 18" AND SMALLER.
1:1 FOR PIPES 24" AND LARGER.

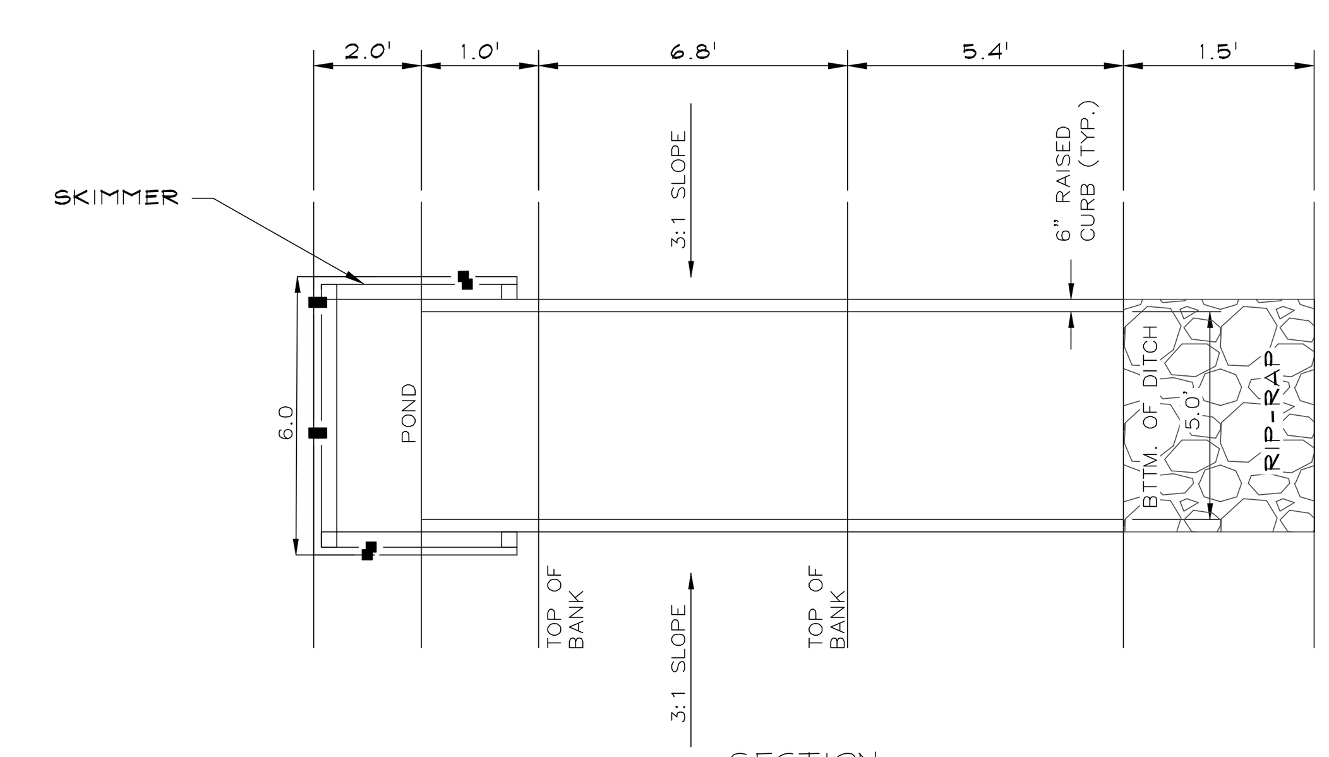


ROUND PIPE DIMENSIONS & QUANTITIES

	D	X	A	B	C	E	F	G	H	M SINGLE PIPE	M DOUBLE PIPE	M TRIPLE PIPE	M QUAD. PIPE	N	5-1/2" CONC. SLAB (CY) SINGLE PIPE	5-1/2" CONC. SLAB (CY) DOUBLE PIPE	5-1/2" CONC. SLAB (CY) TRIPLE PIPE	5-1/2" CONC. SLAB (CY) QUAD. PIPE	SODDING (SQ. YDS.) SINGLE PIPE	SODDING (SQ. YDS.) DOUBLE PIPE	SODDING (SQ. YDS.) TRIPLE PIPE	SODDING (SQ. YDS.) QUAD. PIPE
2:1 SLOPE	15"	2'-7"	1.92'	2.18'	4.10'	2.06'	5'	1.22'	3.4'	4.63'	7.21'	9.79'	12.37'	1.19'	0.38	0.58	0.77	0.96	21	24	27	30
	18"	2'-10"	1.97'	2.74'	4.71'	2.56'	6'	1.41'	3.4'	4.92'	7.75'	10.58'	13.42'	1.21'	0.44	0.65	0.87	1.09	22	25	28	31
	24"	3'-5"	2.06'	3.85'	5.91'	3.56'	7'	1.73'	3.4'	5.50'	8.92'	12.33'	15.75'	1.25'	0.54	0.83	1.12	1.42	24	28	32	35
4:1 SLOPE	15"	2'-7"	2.27'	4.09'	6.36'	4.03'	8'	1.22'		4.63'	7.21'	9.79'	12.37'	1.19'	0.57	0.87	1.15	1.44	23	26	29	32
	18"	2'-10"	2.36'	5.12'	7.48'	5.03'	9'	1.41'	4.0'	4.92'	7.75'	10.58'	13.42'	1.21'	0.66	0.99	1.31	1.65	25	28	31	35
	24"	3'-5"	2.53'	7.18' △	9.71'	7.03' △	11'	1.73'	4.0'	5.50'	8.92'	12.33'	15.75'	1.25'	0.85	1.30	1.75	2.20	28	32	36	40

MITERED END SECTION

NOT TO SCALE



CONC. FLUME DISCHARGE STRUCTURE

NOT TO SCALE

REVISIONS

No. | DESCRIPTION | DATE

1/10/2023 CARLISLE BAPTIST CHURCH REBUILD - JOB No. 15746

ENGINEERING · SURVEYING

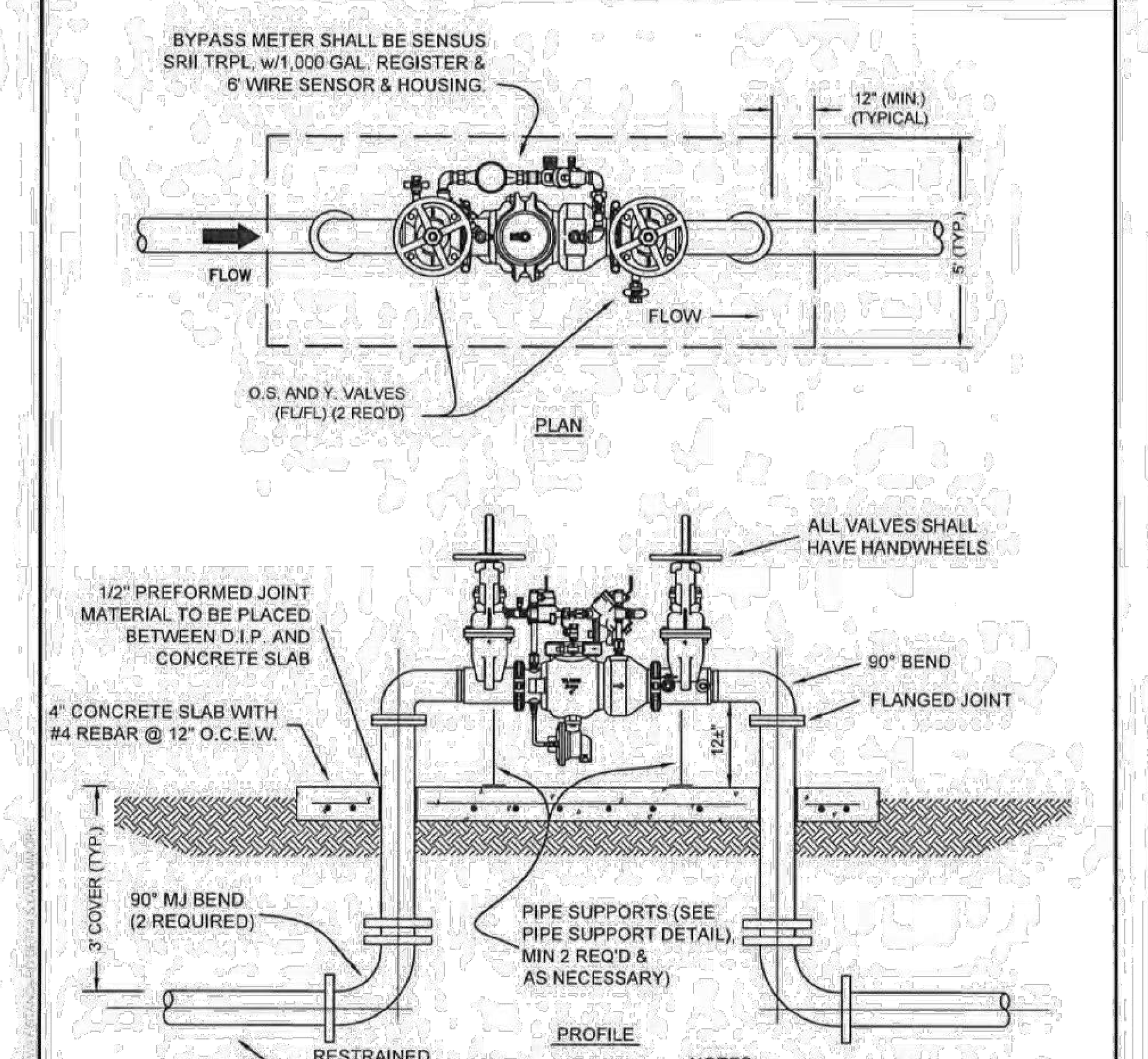
SHEET TITLE: STORMWATER FACLITY DETAILS

PROJECT NAME: CARLISLE BAPTIST CHURCH EXPANSION
CALLAWAY, FLORIDA

CLIENT NAME: CARLISLE BAPTIST CHURCH REBUILD

HRZ. SCALE: AS SHOWN
VRT. SCALE: N/A
PROJECT No: 15746
FILE No: R18476
ISSUE DATE: NOT ISSUED
SHEET: C.8

RELEASED FOR CONSTRUCTION

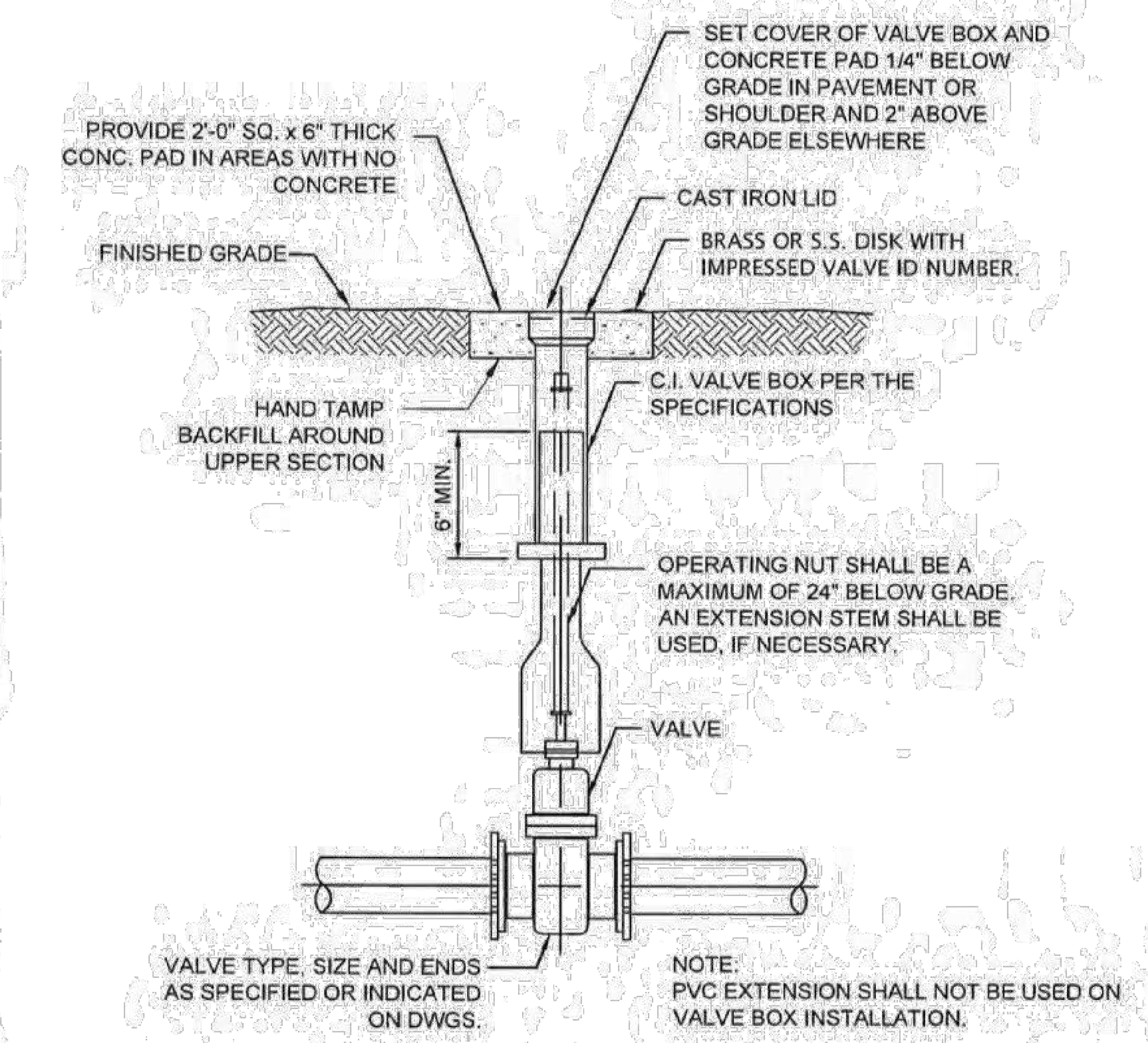


NOTES:
1. ALL ABOVE GROUND PIPE SHALL BE DUCTILE IRON w/ FLANGED JOINTS.
2. DUCTILE IRON PIPE SHALL BE PRESSURE CLASS 350.
3. ABOVE GROUND PIPE SHALL BE INSULATED PER THE SPECIFICATIONS

DOUBLE DETECTOR CHECK VALVE ASSEMBLY

N.T.S.

CALLAWAY, FLORIDA
STANDARD DETAILS
DOUBLE DETECTOR CHECK VALVE ASSEMBLY
DATE : MARCH 2021
SCALE : NTS
FIGURE : PW-23

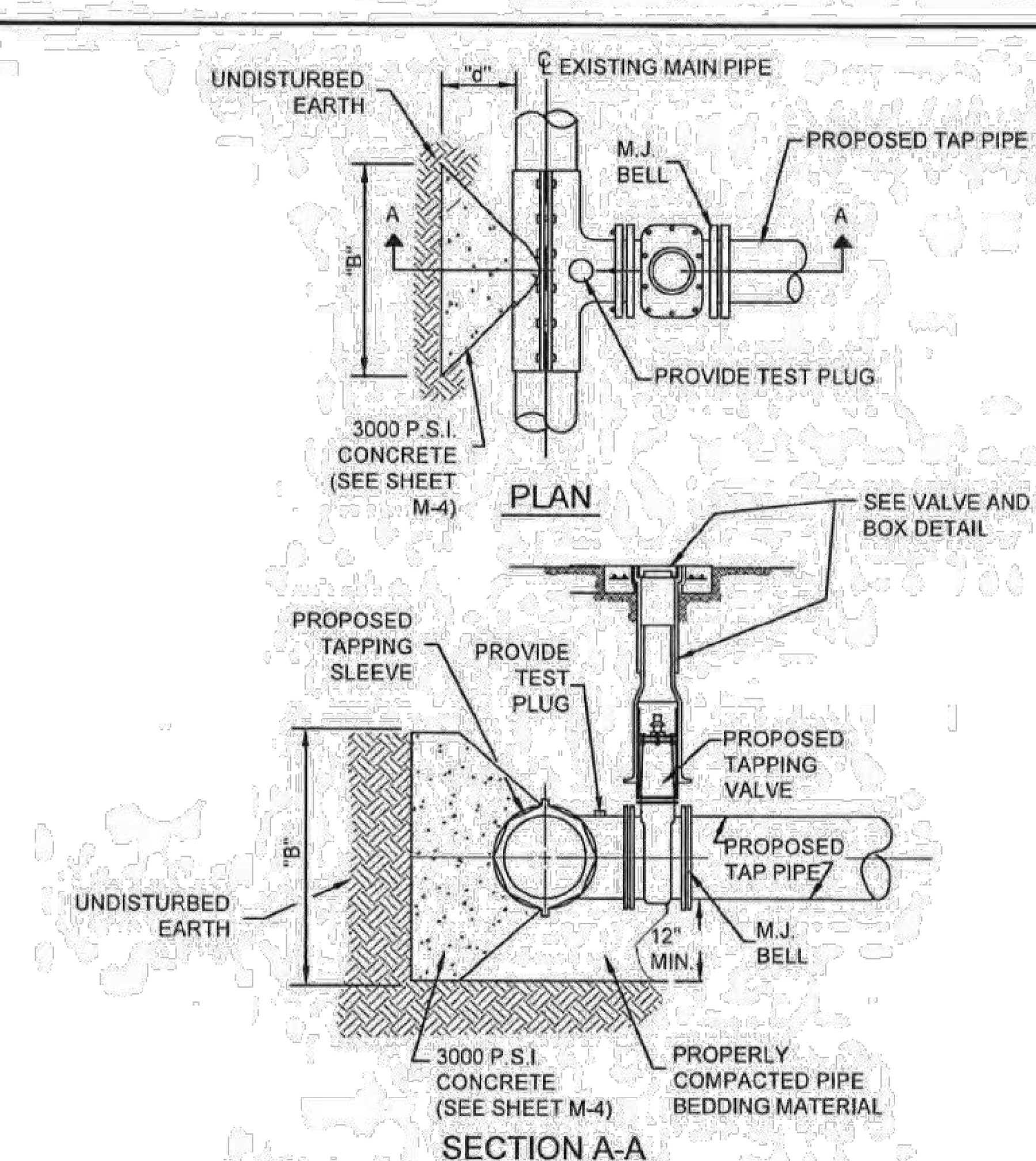


NOTE:
PVC EXTENSION SHALL NOT BE USED ON VALVE BOX INSTALLATION.

BURIED VALVE AND BOX

N.T.S.

CALLAWAY, FLORIDA
STANDARD DETAILS
WASTEWATER VALVE AND BOX
DATE : MARCH 2021
SCALE : NTS
FIGURE : WW-9



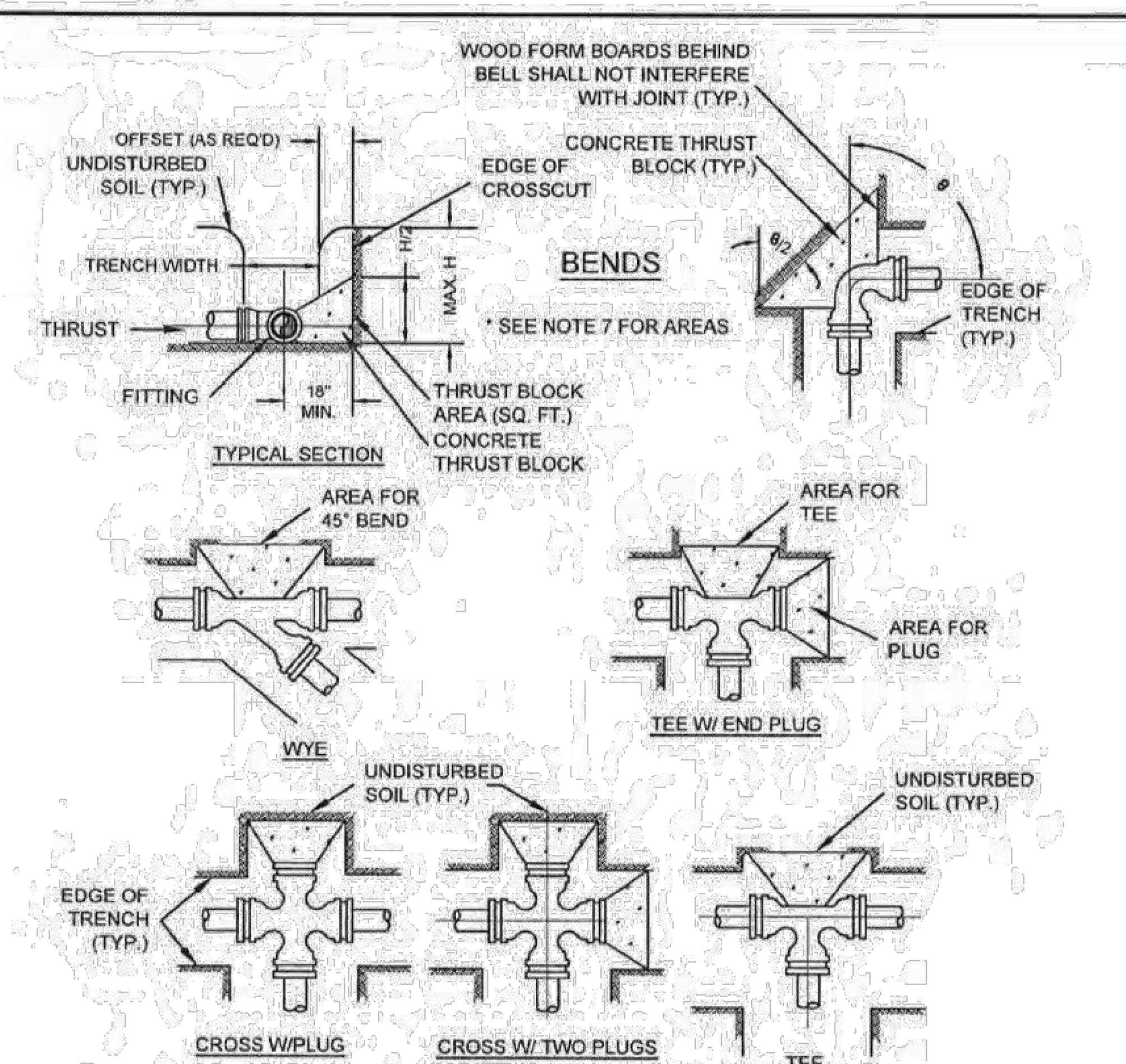
FOR DIMENSIONS "B" AND "d" SEE THRUST BLOCK REQUIREMENTS

NOTES:
1.) NO CUTS SHALL BE MADE BEFORE:
(A) A TEST ON THE SLEEVE AT 150 P.S.I. FOR 30 MINUTES IS MADE.
(B) ALL FITTINGS TO BE WRAPPED WITH 24 MIL POLYETHYLENE AT THE THRUST BLOCK
(C) ALL TAPS ARE TO BE MADE BY THE CITY OF PANAMA CITY UTILITIES DEPT. UNLESS OTHER ARRANGEMENTS ARE MADE. THE MATERIAL IS TO BE FURNISHED BY THE INFRASTRUCTURE CONTRACTOR.
2.) ALL TAPS MUST BE OF A SMALLER SIZE THAN THE MAIN BEING TAPPED & PLACED NO CLOSER THAN 30" OR A DISTANCE EQUAL TO ONE (1) MAIN PIPE DIAMETER PLUS TWO (2) TAP PIPE DIAMETERS (WHICHEVER IS LARGER) FROM A JOINT OR FITTING.
3.) CONTRACTOR TO SUPPLY A DRY HOLE FOR TAPPING CREW TO WORK AND A BACK-HOE TO LOWER MACHINE INTO HOLE.

TAPPING SLEEVE AND VALVE BLOCKING

N.T.S.

CALLAWAY, FLORIDA
STANDARD DETAILS
TAPPING SLEEVE AND VALVE BLOCKING
DATE : MARCH 2021
SCALE : NTS
FIGURE : G-24

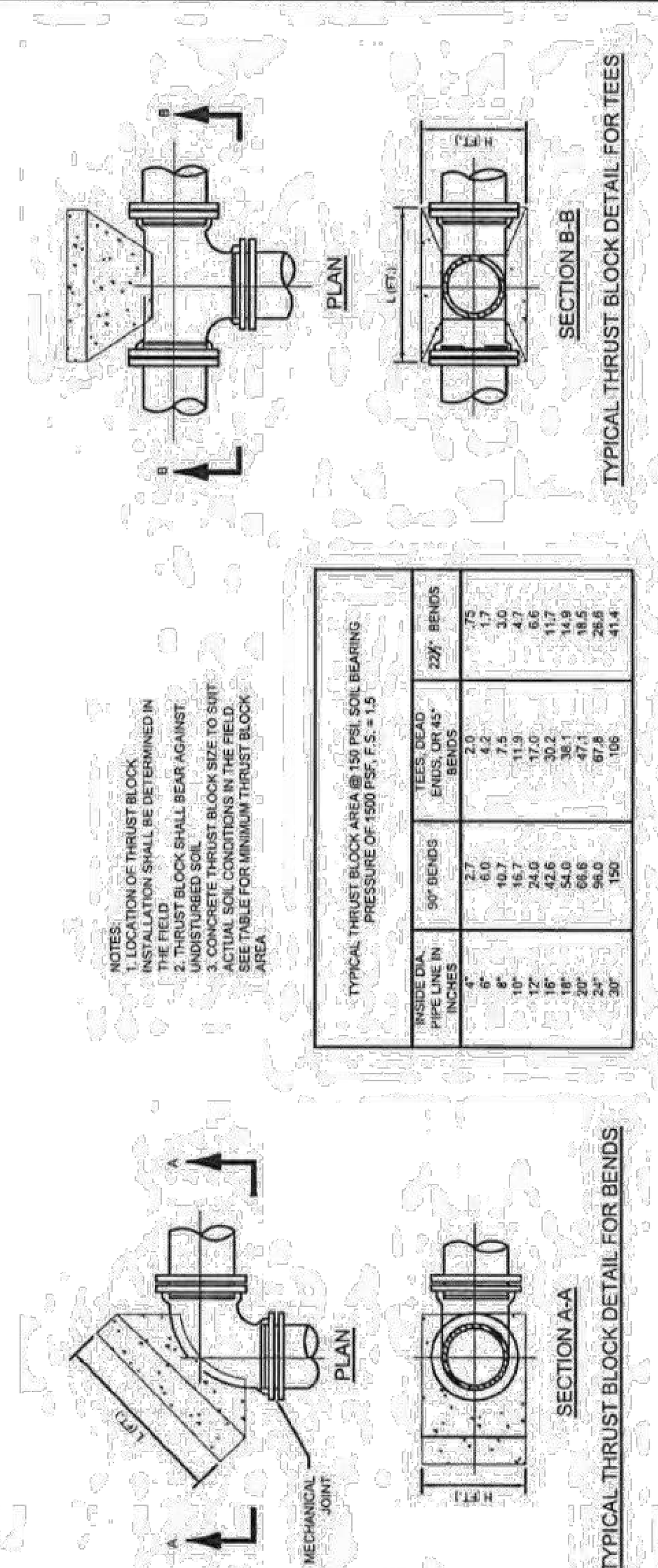


NOTES:
1. THRUST BLOCK BEARING AREAS SHALL BE POURED AGAINST UNDISTURBED MATERIAL. WHERE TRENCH WALL HAS BEEN DISTURBED, EXCAVATE ALL LOOSE MATERIAL AND EXTEND TO UNDISTURBED MATERIAL.
2. EXTEND THRUST BLOCK THE FULL LENGTH OF FITTINGS. JOINTS SHALL NOT BE COVERED BY THRUST BLOCKS. FITTINGS SHALL BE PROTECTED BY POLYETHYLENE FILM (24 MIL.) PRIOR TO PLACING CONCRETE THRUST BLOCK.
3. ROUGH BLOCKING FORMS SHALL BE USED ALONG SIDES OF THRUST BLOCKS, AS REQUIRED.
4. THRUST BLOCKS SHALL BE USED IN COMBINATION, AS REQUIRED, TO SUIT THE SPECIFIC FITTING ARRANGEMENT.
5. ALTERNATE DESIGNED RESTRAINING SYSTEMS SHALL BE PROVIDED WHERE STANDARD THRUST BLOCKING IS NOT SUITABLE AND/OR SOIL RESISTANCE BEARING IS LESS THAN 1,500 psf.
6. ALL WOOD BLOCKING SHALL BE PRESSURE TREATED WITH PRESERVATIVE.
7. FOR THRUST BLOCK AREAS, SEE PLANS

THRUST BLOCKS

N.T.S.

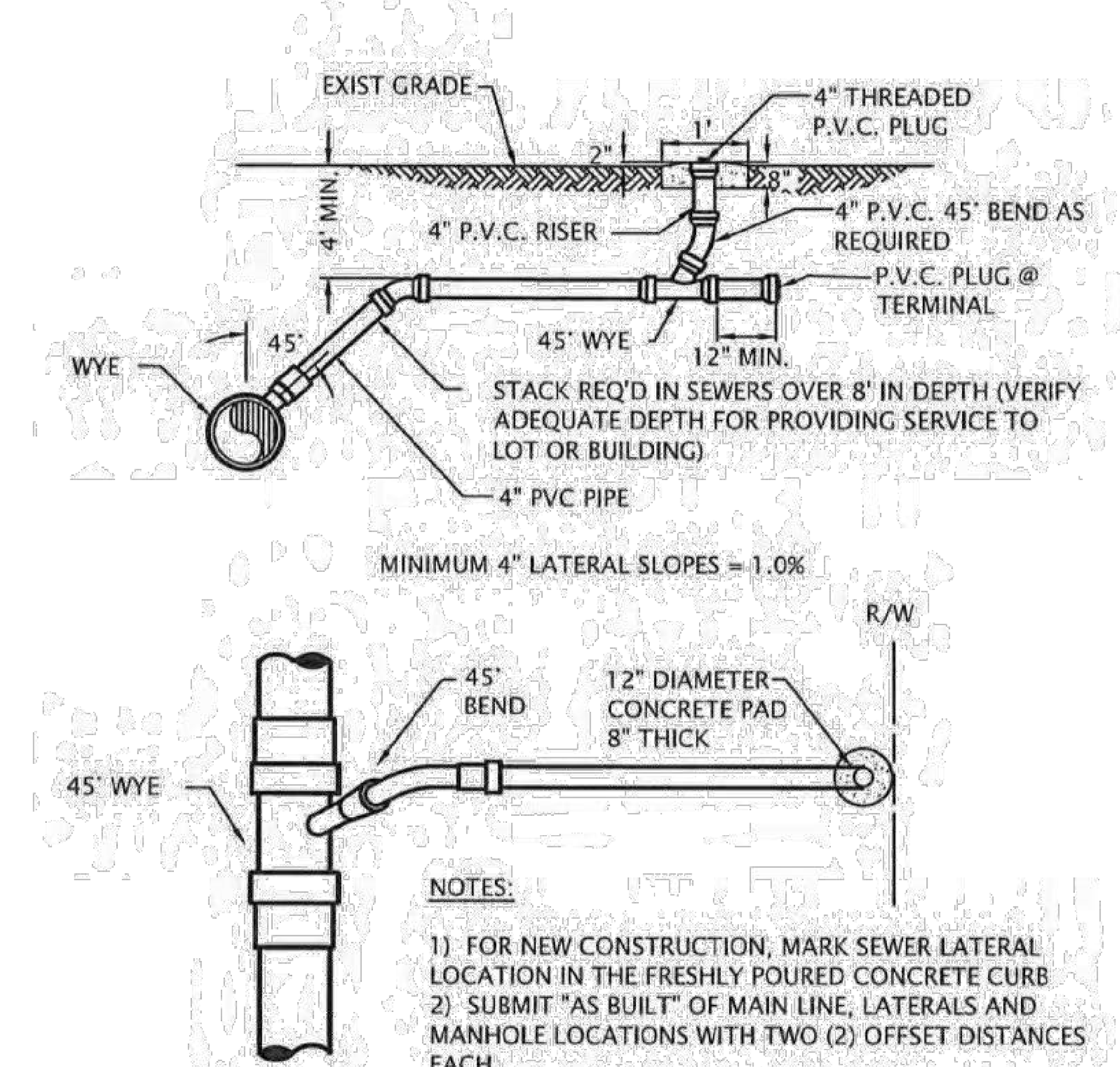
CALLAWAY, FLORIDA
STANDARD DETAILS
THRUST BLOCKS
DATE : MARCH 2021
SCALE : NTS
FIGURE : G-8



THRUST BLOCKS (2)

N.T.S.

CALLAWAY, FLORIDA
STANDARD DETAILS
THRUST BLOCKS (2)
DATE : MARCH 2021
SCALE : NTS
FIGURE : G-9



NOTES:
1) FOR NEW CONSTRUCTION, MARK SEWER LATERAL LOCATION IN THE FRESHLY POURED CONCRETE CURB
2) SUBMIT "AS BUILT" OF MAIN LINE, LATERALS AND MANHOLE LOCATIONS WITH TWO (2) OFFSET DISTANCES EACH.
3) SINGLE "HOUSE" CONNECTIONS ONLY
4) PIPE AND FITTINGS SHALL BE PUSH ON

TYPICAL WYE & LATERAL INSTALLATION

N.T.S.

CALLAWAY, FLORIDA
STANDARD DETAILS
SEWER SERVICE
DATE : MARCH 2021
SCALE : NTS
FIGURE : WW-8

7/10/2023 CARLISLE BAPTIST CHURCH REBUILD - JOB No. 15746

REVISIONS

& Associates
ENGINEERING · SURVEYING

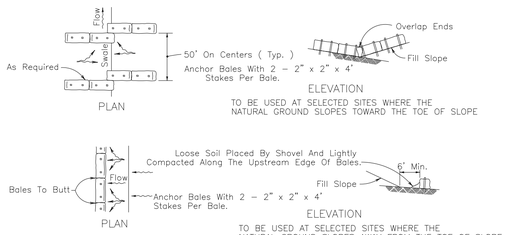
SHEET TITLE: UTILITY DETAILS

PROJECT NAME: CARLISLE BAPTIST CHURCH EXPANSION
CALLAWAY, FLORIDA

CLIENT NAME: CARLISLE BAPTIST CHURCH REBUILD

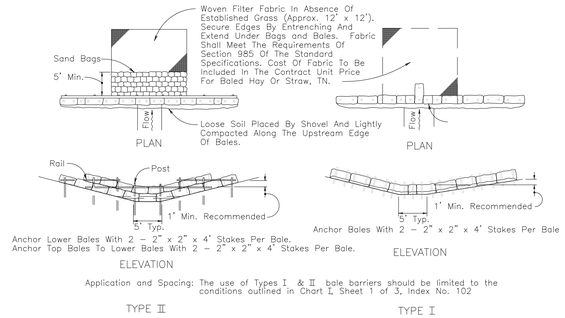
HRZ. SCALE AS SHOWN
VRT. SCALE N/A
PROJECT No. 15746
FILE No. R18476
ISSUE DATE NOT ISSUED
SHEET: C.9

RELEASED FOR CONSTRUCTION



BARRIERS FOR FILL SLOPES

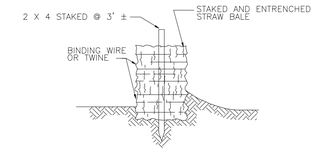
NOT TO SCALE



Application and Spacing: The use of Types I & II bale barriers should be limited to the conditions outlined in Chart I, Sheet 1 of 3, Index No. 102

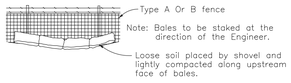
BARRIER FOR UNPAVED DITCHES

NOT TO SCALE



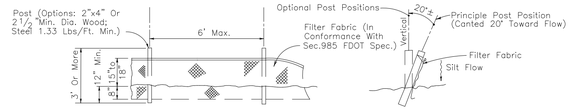
STRAW BALE BARRIER INSTALLATION DETAIL

NOT TO SCALE



BALES BACKED BY FENCE

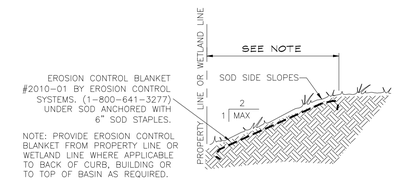
NOT TO SCALE



Note: Silt Fence to be paid for under the contract unit price for Staked Silt Fence (LF).

TYPE III SILT FENCE

NOT TO SCALE

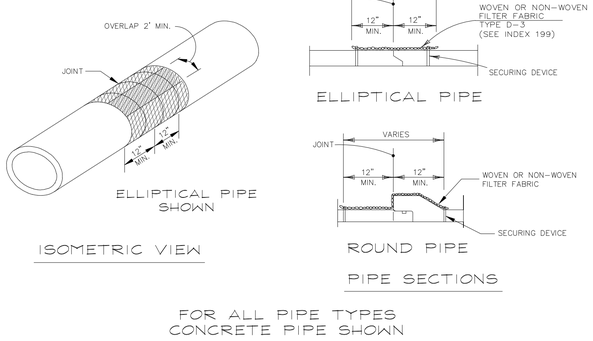


SLOPE STABILIZATION NOTES

FLAT TO 1:3 – SEED AND MULCH, HYDRO-SEED OR SOD.
1:3 TO 1:2 – SOD LAPPED AND PINNED.
1:2 TO 1:1 – EROSION CONTROL BLANKET AND SOD.
1:1 OR GREATER – RETAINING WALL OR ARMOR FORM.

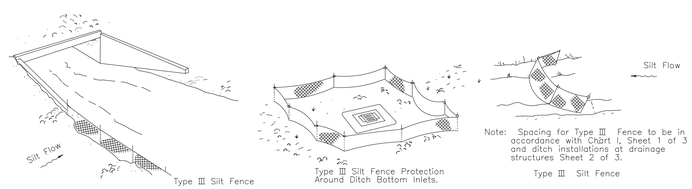
SLOPE STABILIZATION DETAIL

NOT TO SCALE



FILTER FABRIC JACKET

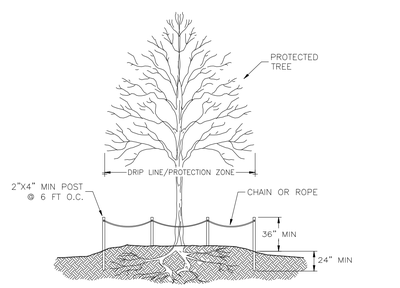
NOT TO SCALE



Do not deploy in a manner that silt fences will act as a dam across permanent flowing watercourses. Silt fences are to be used at upland locations and turbidity barriers used at permanent bodies of water.

SILT FENCE APPLICATIONS

NOT TO SCALE



NOTE: 1. AN EFFORT IS TO BE MADE TO PROTECT ANY TREE LOCATED IN THE STORMWATER MANAGEMENT AREA WHICH IS PROTECTED BY CODE

2. ALL DEVELOPMENT ACTIVITIES, PARKING AND MATERIAL STORAGE IS PROHIBITED IN TREE PROTECTION ZONES.

TREE PROTECTION ZONE DETAIL

NOT TO SCALE

REVISIONS

No.	DESCRIPTION	DATE
1		
2		
3		

DESIGN ENGINEER'S CERTIFICATION: I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED ENGINEER UNDER THE LAWS OF THE STATE OF FLORIDA. STATE OF FLORIDA PROFESSIONAL ENGINEER

& Associates
ENGINEERING - SURVEYING
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Phone (850) 265-6979 Fax (850) 265-9942
FLORIDA LICENSE No. EB 7759 / FLORIDA CA No. 13715

SHEET TITLE: EROSION CONTROL DETIAL

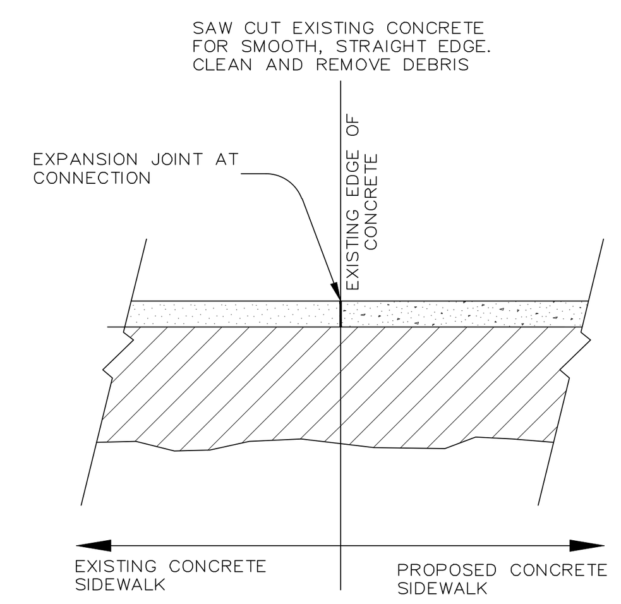
PROJECT NAME: CARLISLE BAPTIST CHURCH EXPANSION
CALLAWAY, FLORIDA

CLIENT NAME: CARLISLE BAPTIST CHURCH REBUILD

HRZ. SCALE AS SHOWN
VRT. SCALE N/A
PROJECT No. 15746
FILE No. R18478
ISSUE DATE NOT ISSUED
SHEET: C.10

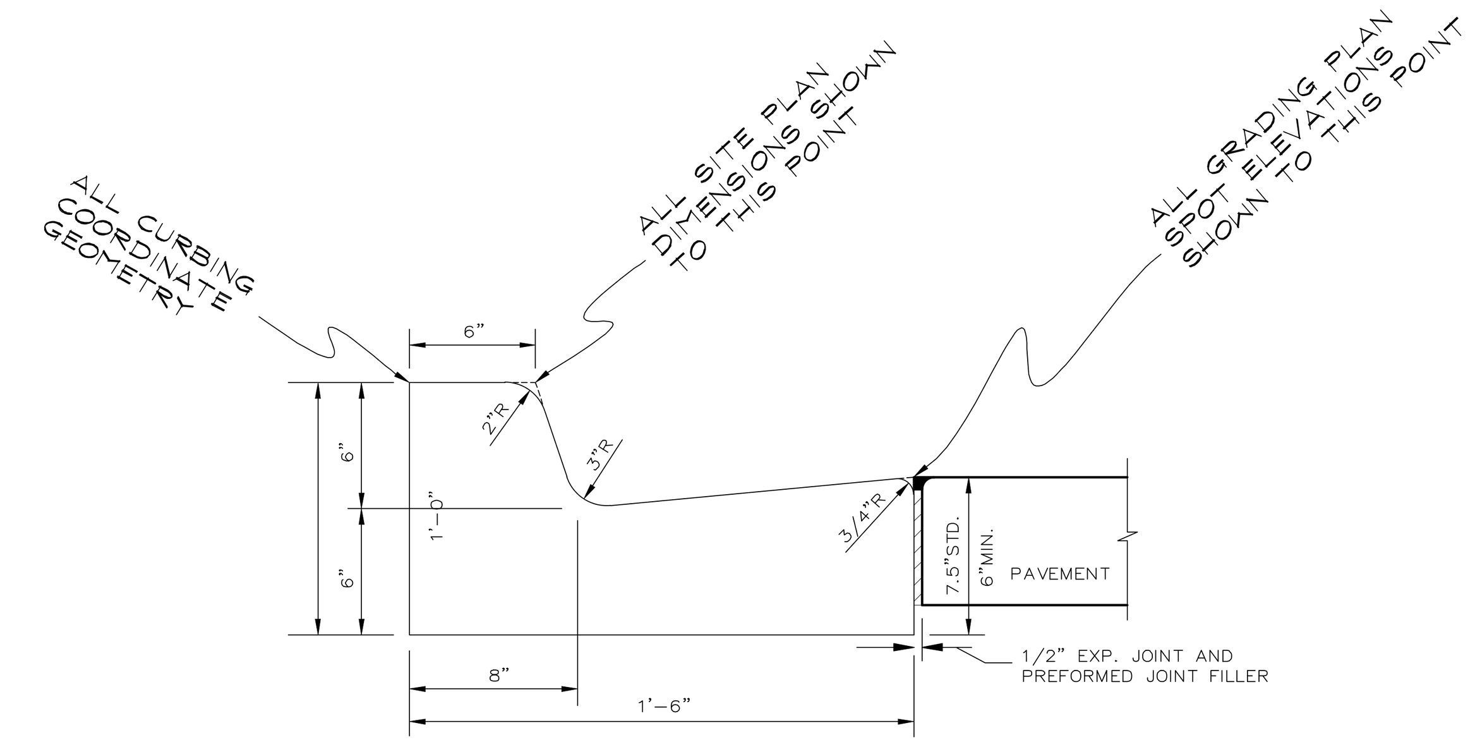
11/10/2023 CARLISLE BAPTIST CHURCH REBUILD - JOB No. 15746

RELEASED FOR CONSTRUCTION



CONCRETE TO CONCRETE JOINT DETAIL

NOT TO SCALE

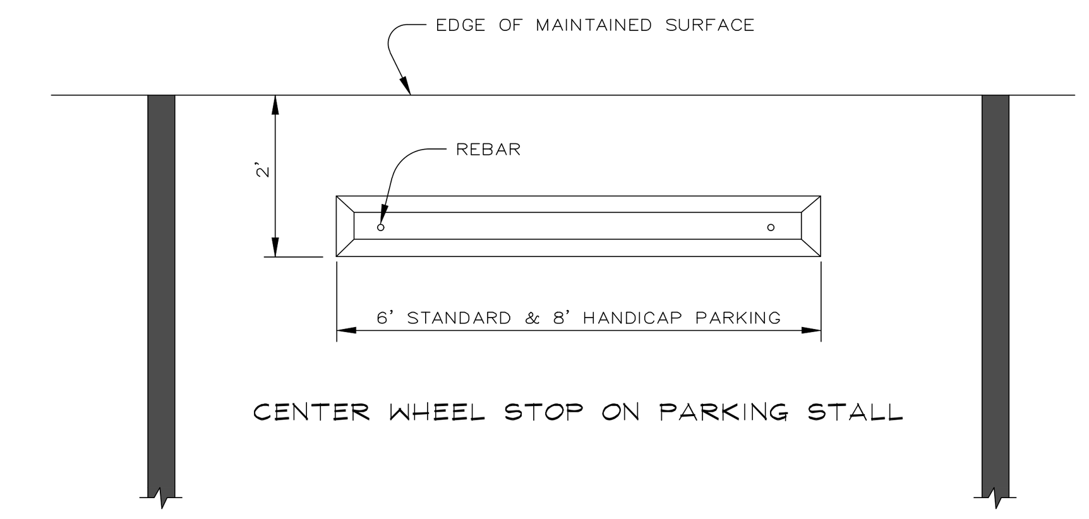


* DIMENSIONS TO EDGE OF PAVEMENT WHEN CURBING NOT PRESENT

WHEN USED ON HIGH SIDE OF ROADWAYS, THE CROSS SLOPE OF THE GUTTER SHALL MATCH THE CROSS SLOPE OF THE ADJACENT PAVEMENT. THE THICKNESS OF THE LIP SHALL BE 6", UNLESS OTHERWISE SHOWN ON PLANS.

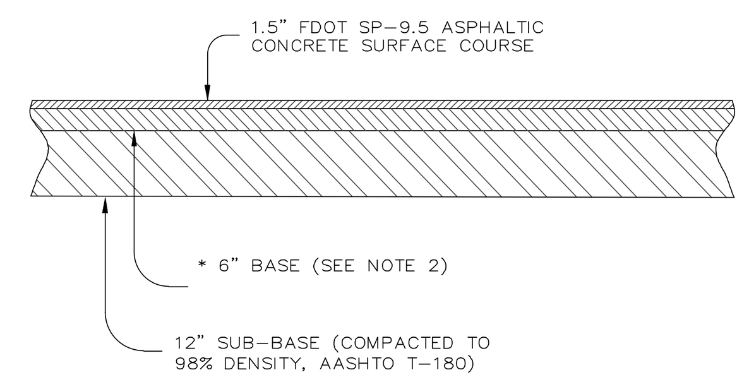
MODIFIED TYPE "F" CURB & GUTTER

NOT TO SCALE



WHEEL STOP DETAIL

NOT TO SCALE

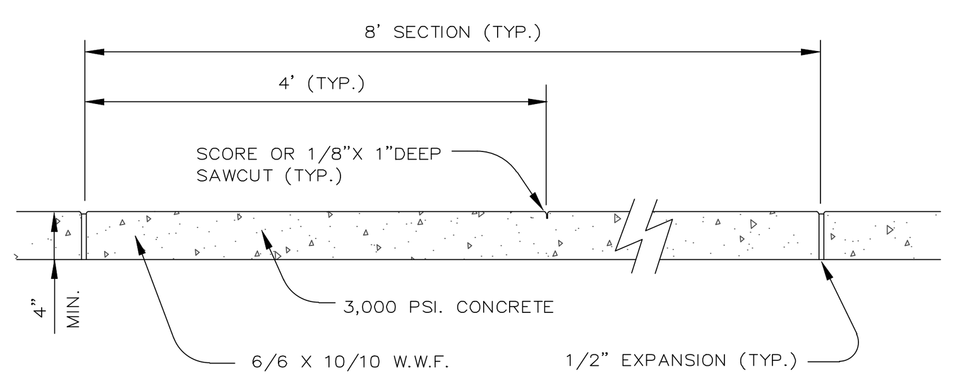


NOTE:

1. CONTRACTOR TO PROVIDE CORING SAMPLES TO ENGINEER OF RECORD FOR VERIFICATION THAT THE INSTALLED BASE AND SUB-BASE (IN-SITU WHENEVER POSSIBLE) MEET ACCEPTABLE DEPTH AND RANGE OF COMPACTION.
2. THE BASE COURSE SHOULD CONSIST OF CRUSHED LIMEROCK, GRADED AGGREGATE BASE (GAB), OR CRUSHED CONCRETE. THE BASE COURSE SHOULD HAVE A MINIMUM LIMEROCK BEARING RATIO (LBR) VALUE OF 100 FOR CRUSHED LIMEROCK AND GAB AND 120 FOR CRUSHED CONCRETE AND SHOULD BE COMPACTED TO 98 PERCENT OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY (ASTM D 1557, AASHTO T-180) VALUE.

TYPICAL ASPHALT PAVEMENT SECTIONS

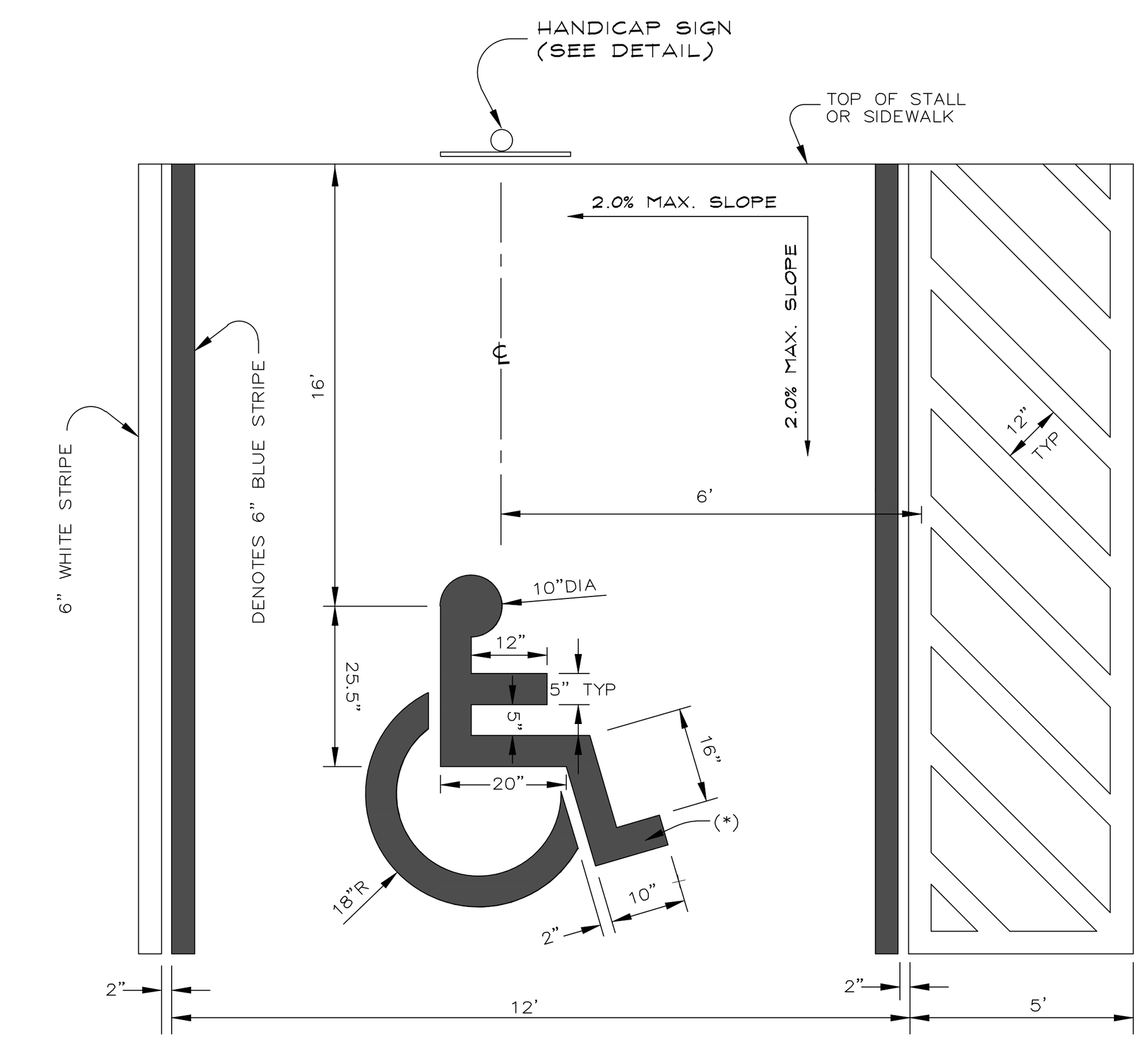
NOT TO SCALE



*CROSS SLOPE NOT TO EXCEED 2%

CONCRETE SIDEWALK DETAIL

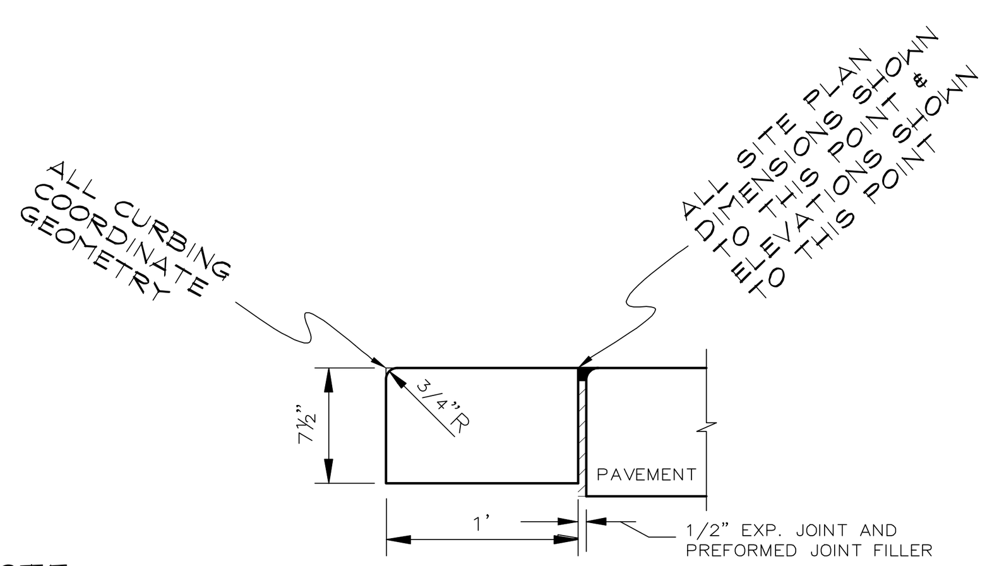
NOT TO SCALE



(*) INTERNATIONAL SYMBOL OF ACCESSIBILITY DISPLAY CONDITIONS. THE SYMBOL CONTRAST SHALL BE LIGHT ON DARK, OR DARK ON LIGHT.

HANDICAP STRIPING DETAIL

NOT TO SCALE

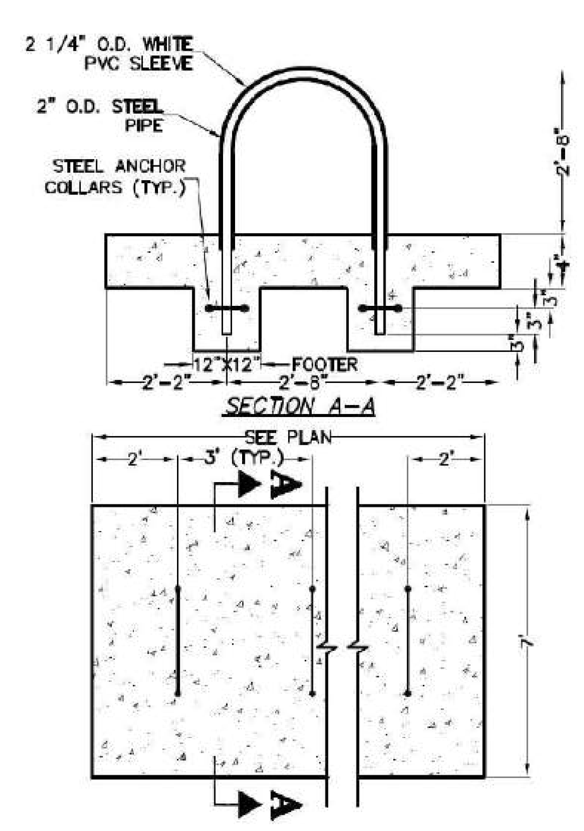


NOTE:

1. WHEN USED ON HIGH SIDE OF ROADWAYS, THE CROSS SLOPE OF THE GUTTER SHALL MATCH THE CROSS SLOPE OF THE ADJACENT PAVEMENT. THE THICKNESS OF THE LIP SHALL BE 6", UNLESS OTHERWISE SHOWN ON PLANS.
2. ALL CURBS TO BE CONSTRUCTED OF 28 DAY, 3,000 P.S.I. CONCRETE.
3. 1/2" PRE-MOLDED EXPANSION JOINT REQUIRED EVERY 500', CONSTRUCTION JOINT REQUIRED EVERY 10' MAXIMUM (4' MINIMUM).
4. 1/2" PRE-MOLDED EXPANSION JOINT REQUIRED AT EACH SIDE OF ALL STORM INLET STRUCTURES AND AT ALL RADIUS POINTS.
5. SUB-BASE TO BE COMPACTED AND TESTED TO 98% MINIMUM DENSITY WITH MINIMUM 40 BASED ON AASHTO T-180 MODIFIED PROCTOR TEST.
6. EXPANSION JOINT MATERIAL MUST COVER THE ENTIRE CROSS SECTION OF CURB

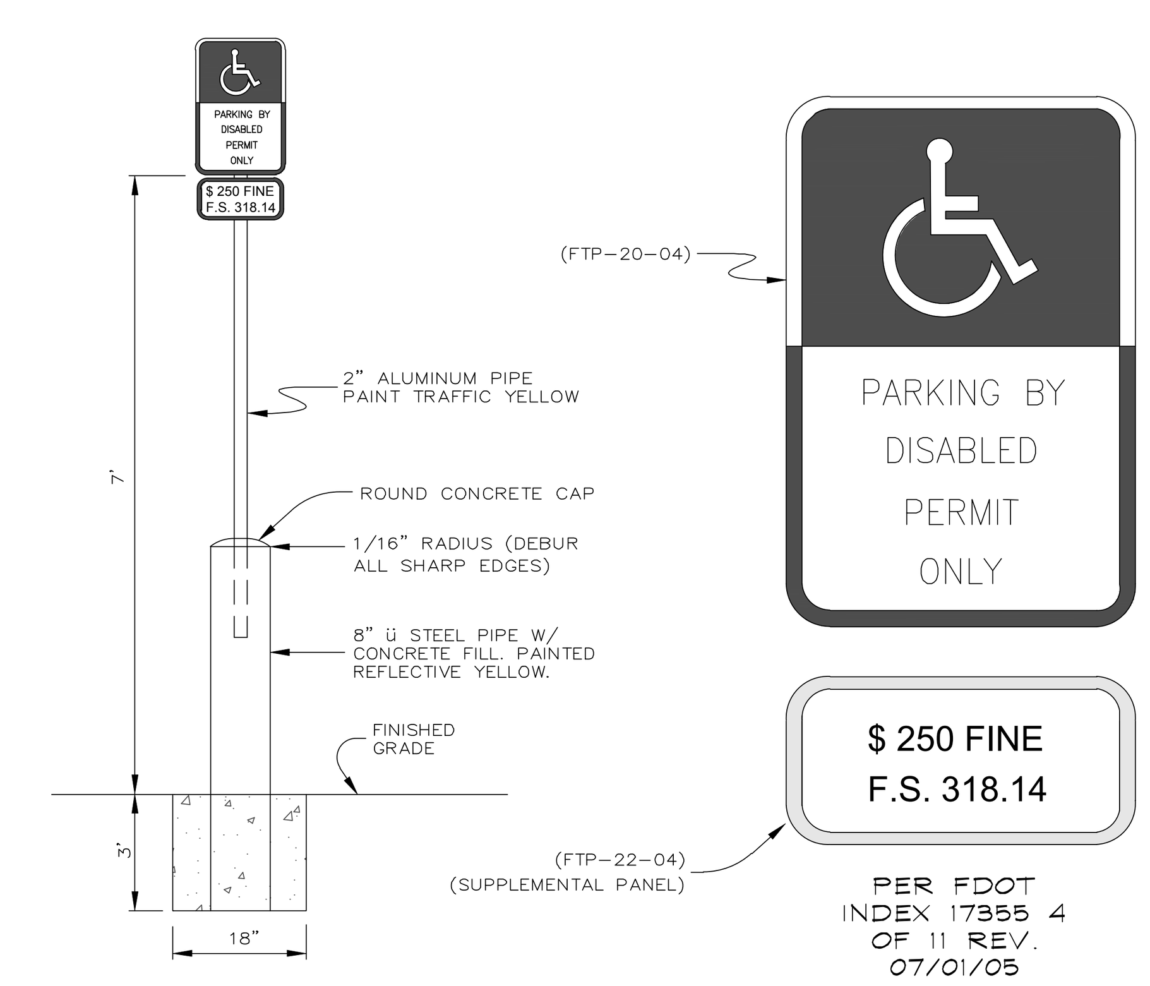
RIBBON CURBING DETAIL

NOT TO SCALE



U - SHAPE BIKE RACK DETAIL

NOT TO SCALE



HANDICAP SIGN DETAIL

NOT TO SCALE

REVISIONS

No.	DESCRIPTION	DATE
1		
2		
3		
4		

1/10/2023 CARLISLE BAPTIST CHURCH REBUILD - JOB No. 15746

DESIGN ENGINEER: SCOTT RUTHERFORD, P.E., LICENSE No. 70043, STATE OF FLORIDA, PROFESSIONAL ENGINEER

& Associates
ENGINEERING - SURVEYING
3445 HWY 389, BLDG. CALLAWAY, FLORIDA 32405
Phone (850) 265-6979 Fax (850) 265-9942
FLORIDA LICENSE No. LB 7759 : FLORIDA CA No. 28715

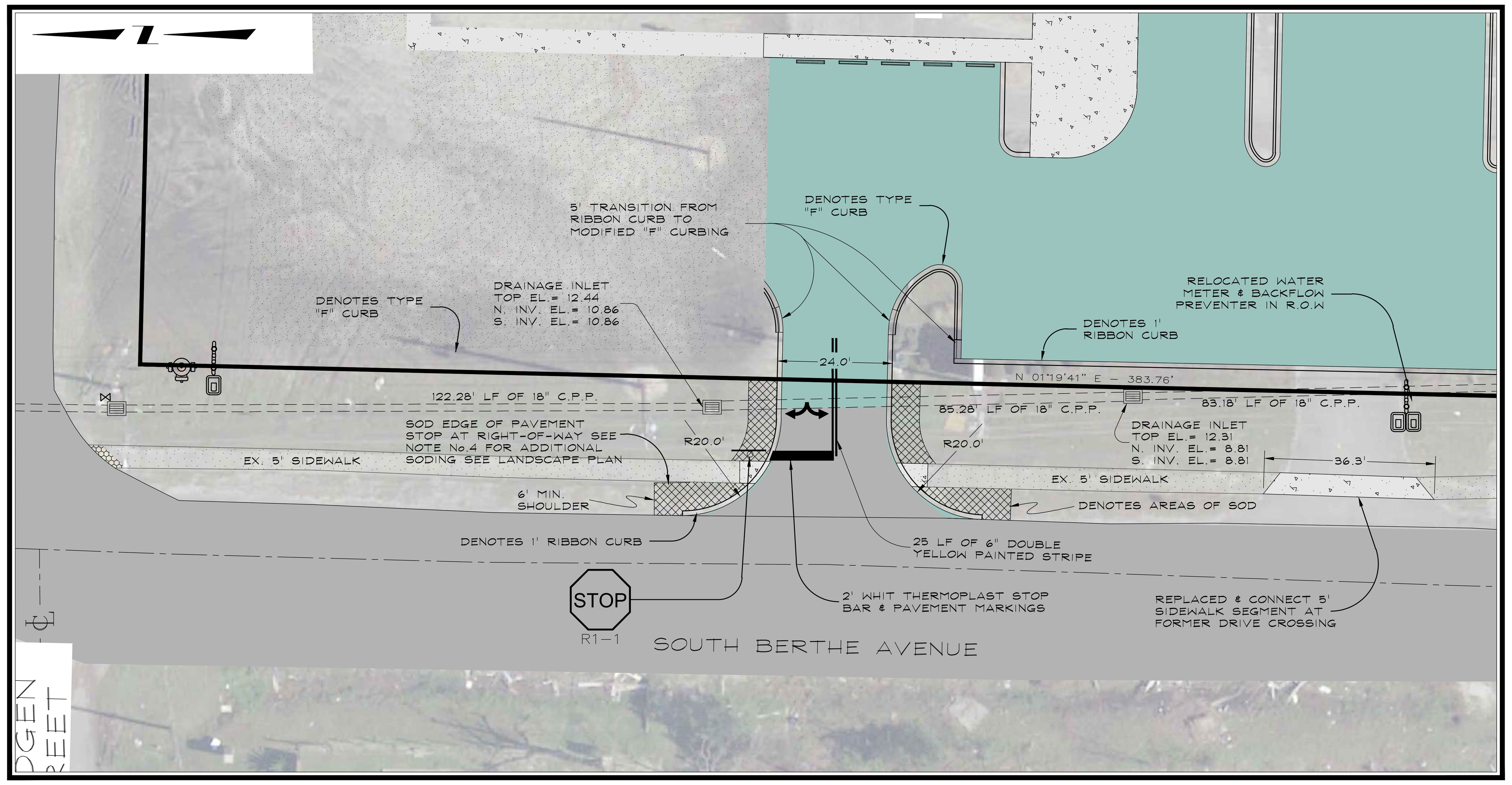
SHEET TITLE: SITE DETAILS

PROJECT NAME: CARLISLE BAPTIST CHURCH EXPANSION
CALLAWAY, FLORIDA

CLIENT NAME: CARLISLE BAPTIST CHURCH REBUILD

HRZ. SCALE	AS SHOWN
VRT. SCALE	N/A
PROJECT No.	15746
FILE No.	R18478
ISSUE DATE	NOT ISSUED
SHEET:	C.11

RELEASED FOR CONSTRUCTION



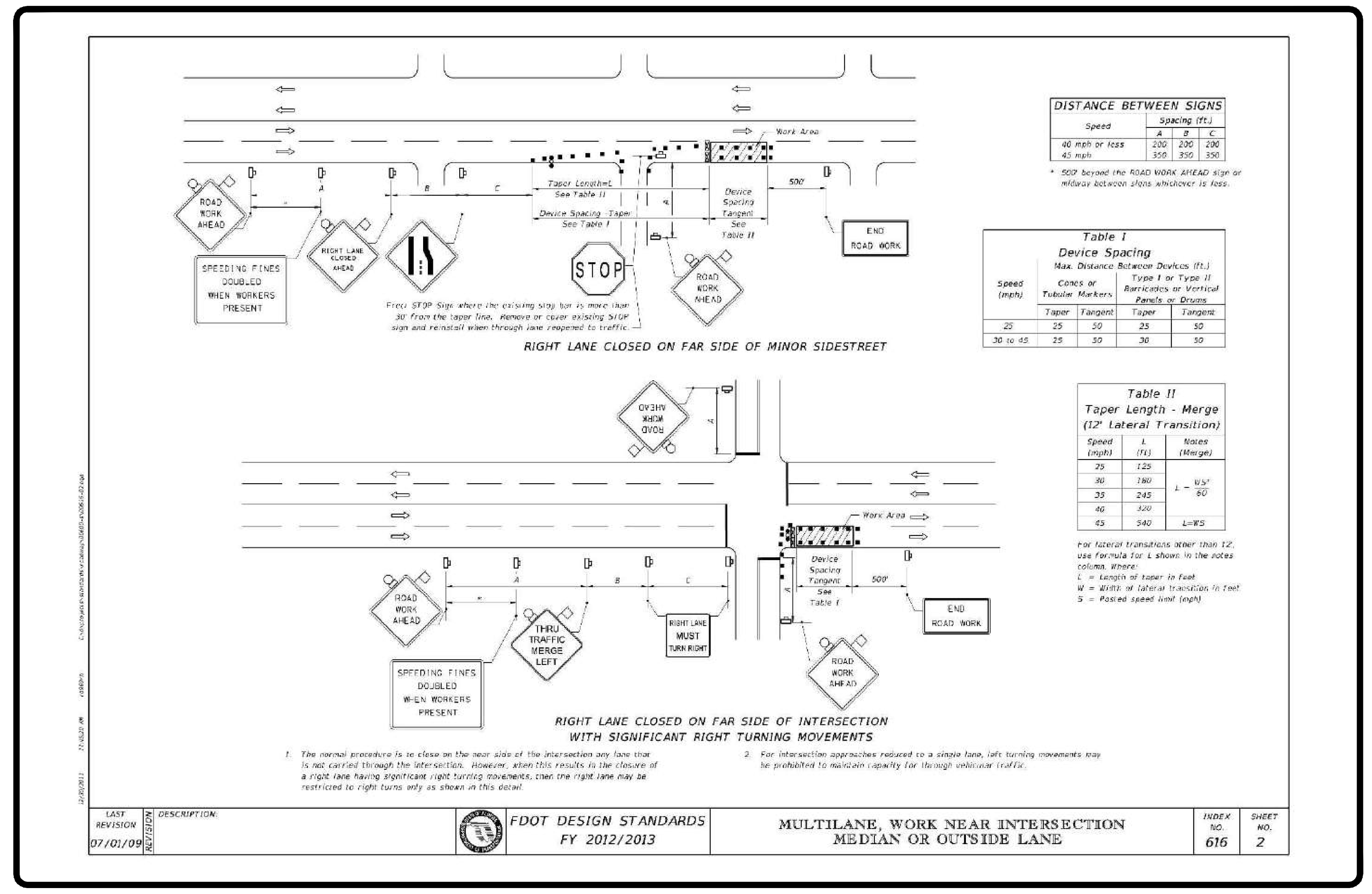
FDOT DRIVEWAY PLAN

SCALE: 1" = 20'

SYMBOL LEGEND

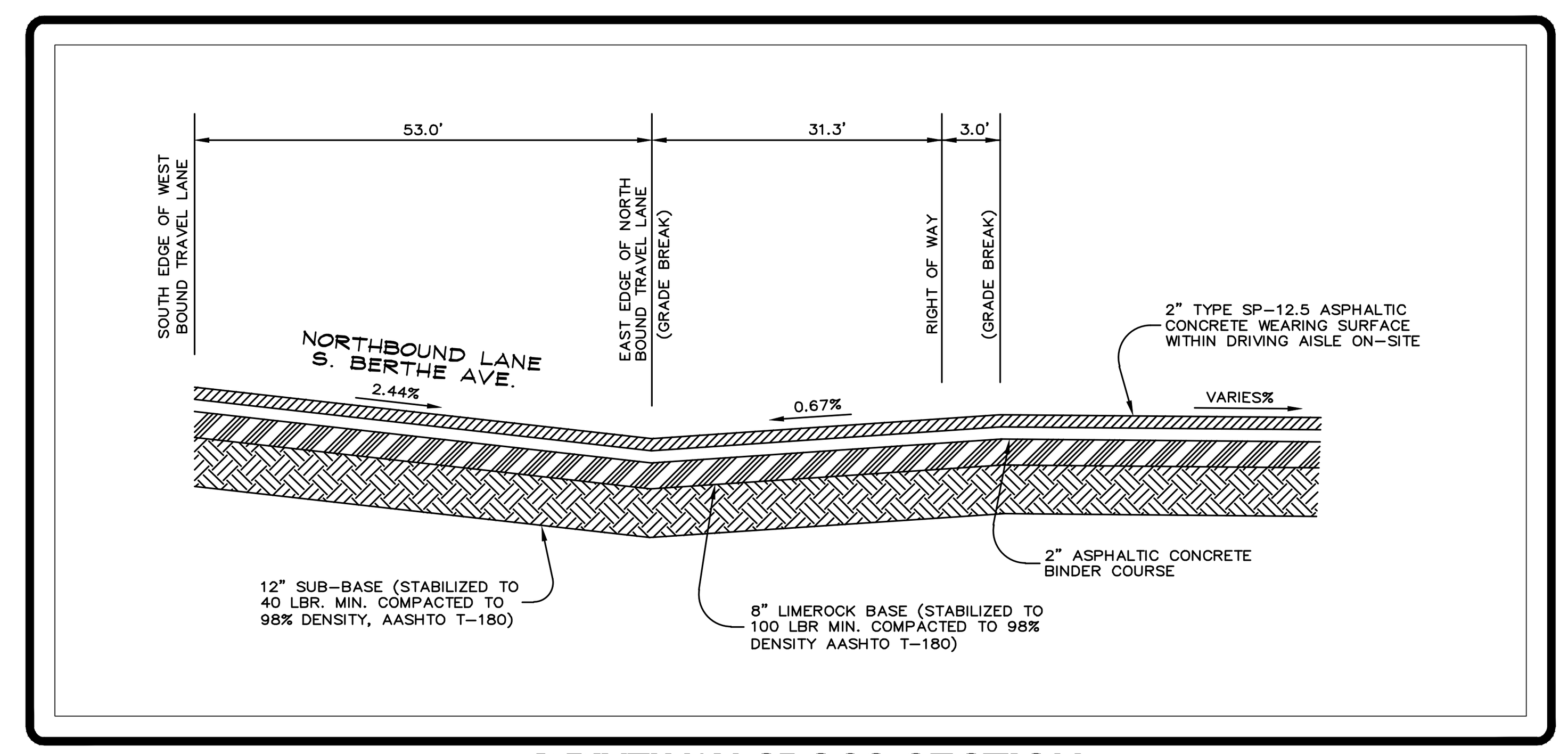
- PROPOSED FIRE HYDRANT
- EXISTING LIGHT POLE
- EXISTING TRAFFIC BOX

0 10 20 30



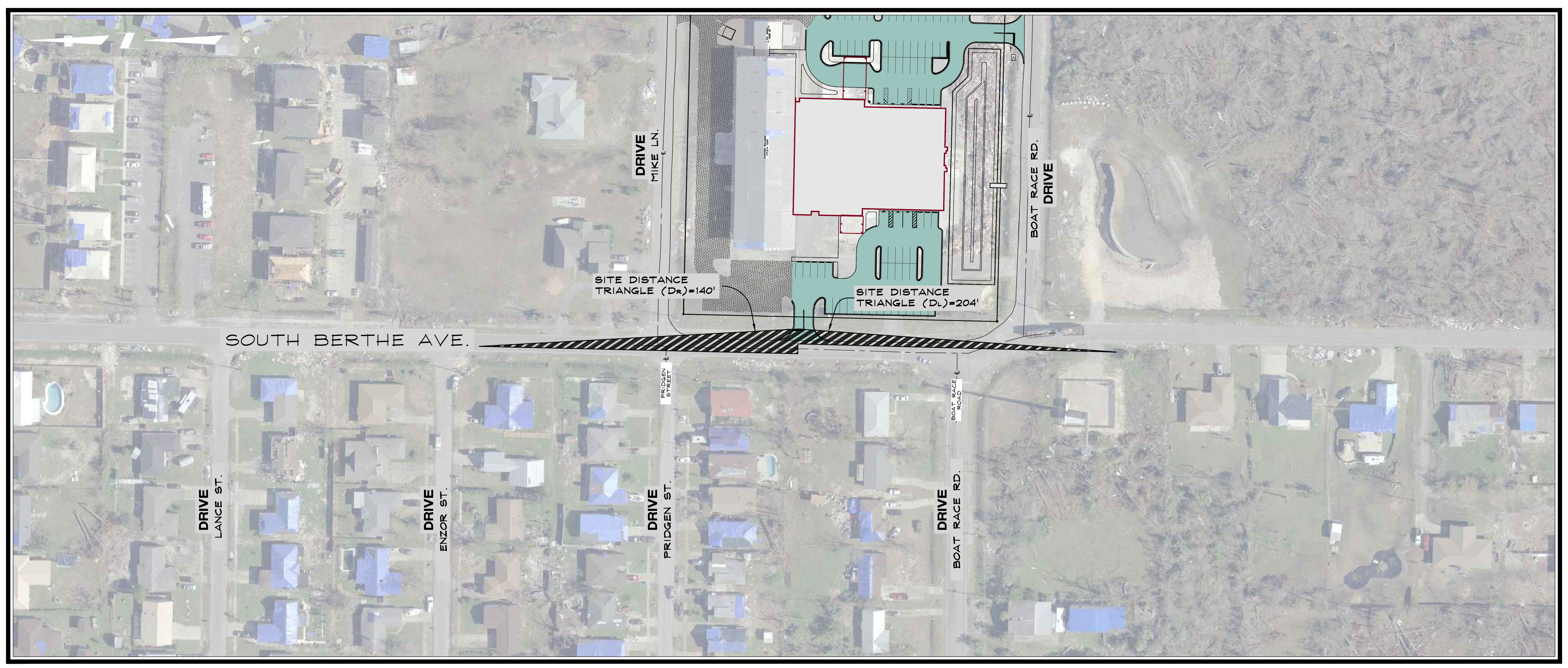
VICINITY MAP

NOT TO SCALE



DRIVEWAY CROSS-SECTION

NOT TO SCALE



FDOT DRIVEWAY EXHIBIT

SCALE: 1" = 100'

PASSENGER VEHICLE FOR 2 LANE UNDIVIDED PER FDOT INDEX No. 546 SHEET No. 5 OF 6.

SITE DISTANCE SCHEDULE

DESIGN SPEED	d (ft)	d_L (ft)	d_x (ft)
35	390	204	140

NOTES:

1) ALL TRAFFIC STRIPING TO BE THERMOPLASTIC PER STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION SEC: 711. (WAIT MINIMUM OF 30 DAYS AFTER ASPHALT CONCRETE PLACEMENT TO PLACE PERMANENT THERMOPLASTIC MARKING. TEMPORARY STRIPING TO BE PAINTED STOP BAR ONLY.)
2) ALL DIMENSIONED CURB IS SHOWN TO FACE OF CURB.
3) ALL DISTURB AREA GRASSED, HYDROSEED, OR SEEDED & MULCHED. SEE SLOPE STABILIZATION DETAIL FOR SLOPPED AREAS
4) PLACE DOUBLE 16" OR SINGLE ROLL 30" STRIP OF SOD AT EDGE OF DRIVE AND AROUND PERIMETER OF MITERED END SECTIONS
5) NO LANE CLOSURES AT ANY TIME UNLESS APPROVED BY THE LOCAL FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) OFFICE. IF LANE CLOSURES ARE APPROVED BY FDOT, ALL LANES MUST BE REOPENED TO NORMAL TRAFFIC WITHIN 12 HOURS OF AN EVACUATION NOTICE FOR A HURRICANE OR ANY OTHER EMERGENCY EVENT AND SHALL REMAIN OPEN FOR THE DURATION OF THE EVENT AS DIRECTED BY FDOT.
6) THE LOCATION OF ALL UTILITIES AVAILABLE AT THE TIME OF THIS PLAN ARE SHOWN; HOWEVER, MORE UTILITIES MAY EXIST WITHIN RIGHT OF WAY. CONTRACTOR TO FIELD VERIFY ALL UTILITIES ABOVE OR BELOW GROUND. ANY UTILITY RELOCATION SHALL BE PERFORMED BY THE UTILITY PROVIDER.
7) FOR MAINTENANCE OF TRAFFIC CONTROL THROUGH WORK ZONES REFER TO FDOT INDEX 612 AS APPLICABLE. (SEE SHEET C.11)
8) THE CONTRACTOR SHALL INSTALL ALL TRAFFIC CONTROL DEVICES REQUIRED FOR THE PROJECT IN ACCORDANCE WITH THE LATEST EDITION OF THE U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND THE LATEST ADDITION OF THE FDOT DESIGN STANDARDS AND SPECIFICATIONS.
9) A PRE-CONSTRUCTION MEETING WITH THE FDOTN IS REQUIRED PRIOR TO CONSTRUCTION.
10) SEE SITE DETAIL SHEET FOR ADDITIONAL DETAILS.

7/10/2023 CARLISLE BAPTIST CHURCH REBUILD - JOB No. 15746

REVISIONS

No. | DESCRIPTION | DATE

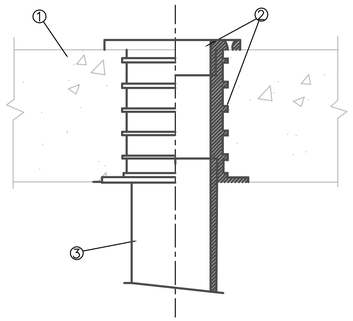
& Associates
ENGINEERING · SURVEYING
3445 HWY 389, BLDG, CALLAWAY, FLORIDA 32405

SHEET TITLE: FDOT DRIVEWAY CONNECTION PLAN

PROJECT NAME: CARLISLE BAPTIST CHURCH EXPANSION, CALLAWAY, FLORIDA

CLIENT NAME: CARLISLE BAPTIST CHURCH REBUILD

HRZ. SCALE	AS SHOWN
VRT. SCALE	N/A
PROJECT No.	15746
FILE No.	R18478
ISSUE DATE	NOT ISSUED
SHEET:	C.12



1. Floor Assembly – Min 4 in. thick reinforced lightweight or normal weight (100–150 pcf) concrete.

2. Firestop device* – Closet Stub – Cast in PVC coupling sized to accommodate nom 3 or 4 in. diam pipe with height equal to overall thickness of concrete floor. Deviice provided with closet flange to be cemented into top socket of cast–in coupling after concrete has cured. Device installed in accordance with accompanying installation instructions. When nom 4 in. diam closet stub is used, T Rating is 1–1/2 hr. When nom 3 in. diam closet is used, T Rating is 2 hr.

Proset Systems, Inc – Part No. P35448 or P45448

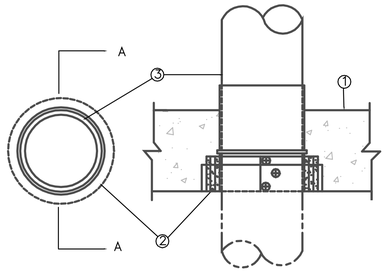
3. Drain Piping – Nom 3 in. or 4 in. diam Schedule 40 (or heavier) PVC drain piping. Drain poping cemented into bottom socket of cast–in coupling and rigidly supported.

4. Water Closet – (Not Shown) – Floor–mounted vitreous chine water closet.

*Bearing the UL Classification Marking

FIRE RATED CLOSET FLANGE PENETRATIONS

SCALE: NONE



1. Floor Assembly – Min 4–1/2 in. thick reinforced lightweight or normal weight (100–150 pcf) concrete.

2. Firestop Device* – Cast in place polyvinyl chloride (PVC) pipe coupling provided with an intumescent wrap mechanically–attached to the coupling with a steel restriction collar. Firestop device installed on removable concrete forms in accordance with accompanying installation instructions and permanently embedded during concrete placement.

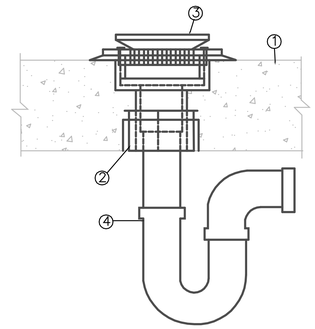
Specified Technologies Inc. – CPL125, CPL150, CPL200, CPL300, and CPL400 Firestop Coupling.

3. Nonmetallic Pipe – Nom 4 in. diam (or smaller) Schedule 40 polyvinyl chloride (PVC) for use in closed (process or supply) or vented (drain, waste or vent) piping systems. Pipe to be rigidly supported on both sides of floor assembly.

*Bearing the UL Classification Marking

FIRE RATED PIPING PENETRATIONS

SCALE: NONE



1. Floor Assembly – Min 4–1/2 in. thick reinforced lightweight or normal weight (100–150 pcf) concrete.

2. Firestop Device* – Coupling – Cast in place polyvinyl chloride (PVC) pipe coupling provided with an instumescent wrap mechanically–attached to the coupling with a steel restricting collar. Coupling sized to accommodate nom 2 in. diam pipe with height approx 3/4 in. less than overall thickness of concrete to accommodate height of shower/floor drain PVC body. The bottom coupling shall be installed flush with the bottom surface of the concrete floor in accordance with accompanying installation instructions. PVC body of shower/floor drain cemented to top of coupling after placement of concrete.
Specified Technologies Inc. – SD200 Firestop Shower Drain and FS200 Firestop Floor Drain

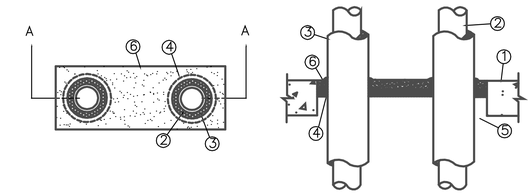
3. Shower/Floor Drain – Polyvinyl chlordie (PVC) body with polished brass or chromed steel shower drain or floor drain strainer. PVC body cemented to coupling (Item 2) after placement of concrete.

4. Drain Piping – Nom 2 in. diam Schedule 40 PVC drain piping. Drain piping cemented to bottom of firestop device (Item 2) and rigidly supported away from firestop device with suitable pipe hangers.

*Bearing the UL Classification Marking

FIRE RATED SHOWER AND FLOOR DRAIN PENETRATIONS

SCALE: NONE



1. Floor Assembly – Min 4–1/2 in. thick lightweight or normal weight (100–150 pcf) concrete. Max area of opening 192 sq in. with max length of 24 in. and max width of 8 in.

2. Pipe – Nom 4 in. diam (or smaller) Type L (or heavier) copper tubing, Schedule 10 (or heavier) steel pipe, steel conduit or steel EMT to be installed with a min clearance of 1 in. and a max clearance of 2 in. from the sides of the through openings. A min seperation 1 in. shall be maintained between adjacent pipes. Pipes to be rigidly supported on both sides of floor assembly.

3. Pipe Covering – Nom 1/2 in. to 1 in. thick hollow cylindrical heavy density (min 3.5 pcf) glass fiber units jacketed on factory–applied self–sealing lap tape. Transverse joints secured with metal fasteners or with butt strip tape supplied with the product.
See Pipe and Equipment Covering – Materials (BRGU) category in Building Materials Directory for names of manufacturers. Any pipe covering material meeting the above specifications and bearing the UL Classification Marking with a Flame Spread Index of 25 or less and a Smoke Developed Index of 50 or less may be used.

3A. Pipe Insulation – Plastics – As an alternate to Item 3, nom 3/4 in. thick acrylonitrile butadiene/polyvinyl chloride (AB/PVC) flexible foam furnished in the form of tubing with skin may be used on steel pipes.
See Plastics (QMFZ2) category in the Recognized Component Directory for names of manufacturers. Any Recognized Component tube insulation material meeting the above specifications and having a UL94 Flammability Classification of 94–5VA may be used.

4. Fill, Void or Cavity Materials* – Wrap Strip – Nom 1/4 in. thick untumescent elastomeric material faced on one side with aluminum foil, supplied in 2 in. wide strips. Nom 2 in. wide strip tightly–wrapped around pipe insulation (Item 3 or 3A) with the foil side exposed and slid into through opening such that the top edge is flush with the top surface of the floor. The wrap strip layer shall be secured in place with min No. 18 gauge galv steel tie wire.
Minnesota Mining & Mfg Co. – Types FS–195+

5. Packing Material – Min 1 in. thick mineral–wool batt material insulation firmly packed into opening as a permanent form with its top surface recessed min 1 in. from top surface of floor.

6. Fill, Void or Cavity Materials* – Caulk – Applied to fill through opening to a min depth of 1 in., flush with top surface of floor, with a min 1/8 in. thickness of caulk applied over top edge of wrap strip layer (Item 4) on insulated pipe.
Minnesota Mining & Mfg. Co. – Types CP–25 WB+. (Note: L Ratings apply only when Type CP–25 WB+caulk is used.)

*Bearing the UL Classification Marking

FIRE RATED PIPE PENETRATIONS

SCALE: NONE

P8

PROJECT NO. 22004

PREPARED BY JM

REVIEWED BY JM

ISSUE DATE 5/2/24

SCALE 1/8"=1'

PLUMBING FIRE PENETRATIONS

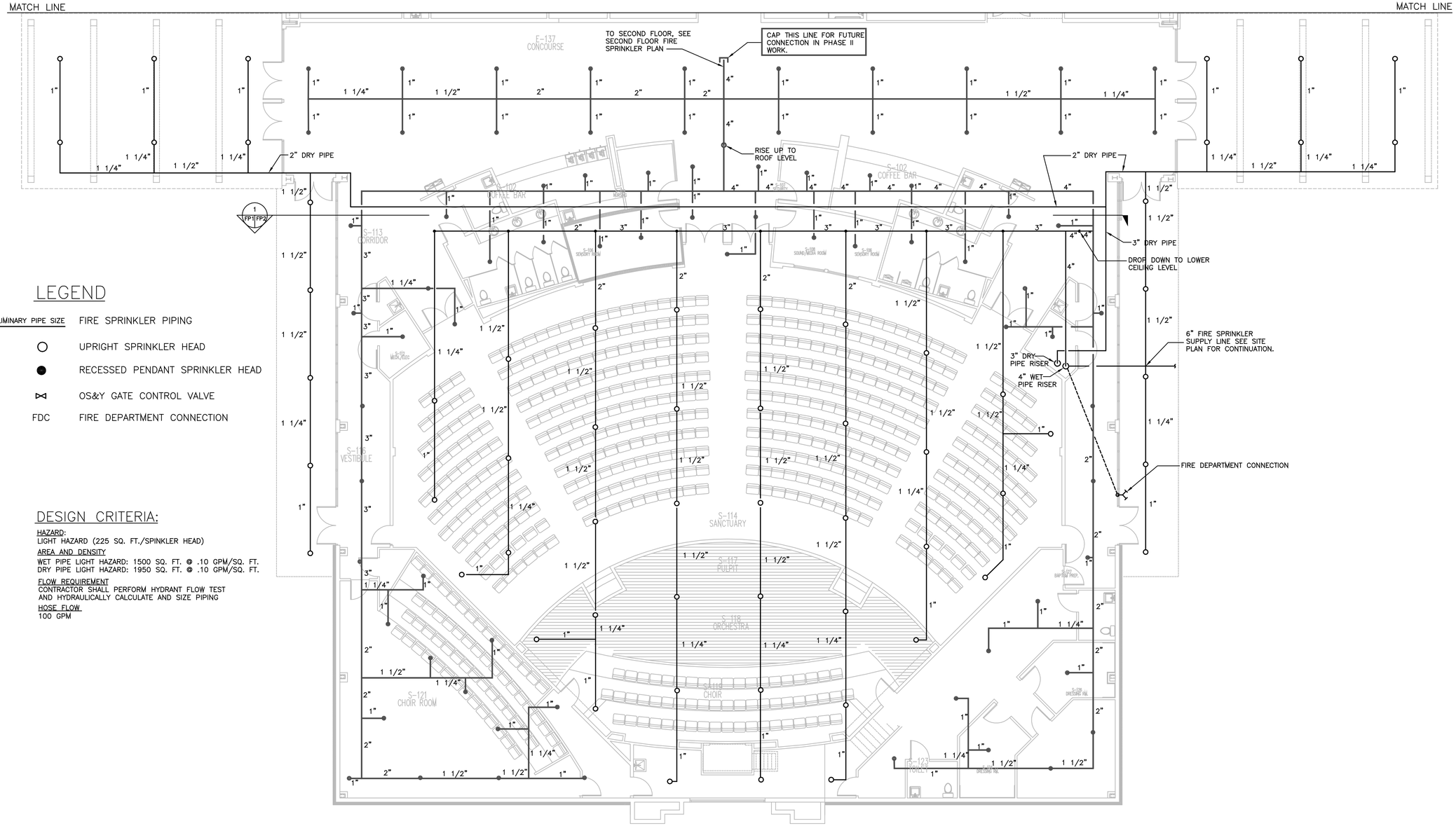
CARLISLE BAPTIST CHURCH
REBUILD
835 BERTHA AVENUE
PANAMA CITY FLORIDA

MCDOWELL ENGINEERING, INC.
1608 BECK AVENUE
PANAMA CITY, FLORIDA 32405
PHONE: (850) 872–0988
CA LIC. NO. 9955

JOHN ROGER MCDOWELL LICENSE No. 38727 STATE OF FLORIDA PROFESSIONAL ENGINEER

MARK MERCER & ASSOCIATES, INC.

MATCH LINE MATCH LINE



LEGEND

PRELIMINARY PIPE SIZE	FIRE SPRINKLER PIPING
○	UPRIGHT SPRINKLER HEAD
●	RECESSED PENDANT SPRINKLER HEAD
⋈	OS&Y GATE CONTROL VALVE
FDC	FIRE DEPARTMENT CONNECTION

DESIGN CRITERIA:

HAZARD:
LIGHT HAZARD (225 SQ. FT./SPINKLER HEAD)

AREA AND DENSITY
WET PIPE LIGHT HAZARD: 1500 SQ. FT. @ .10 GPM/SQ. FT.
DRY PIPE LIGHT HAZARD: 1950 SQ. FT. @ .10 GPM/SQ. FT.

FLOW REQUIREMENT
CONTRACTOR SHALL PERFORM HYDRANT FLOW TEST AND HYDRAULICALLY CALCULATE AND SIZE PIPING

HOSE FLOW
100 GPM

PARTIAL FIRST FLOOR FIRE SPRINKLER PLAN–PHASE I WORK

SCALE: 1/8"=1'

N

FP1

PROJECT NO. 22004

PREPARED BY	REVIEWED BY	ISSUE DATE	SCALE
JM	JM	5/2/24	1/8"=1'

FIRST FLOOR FIRE SPRINKLER PLAN

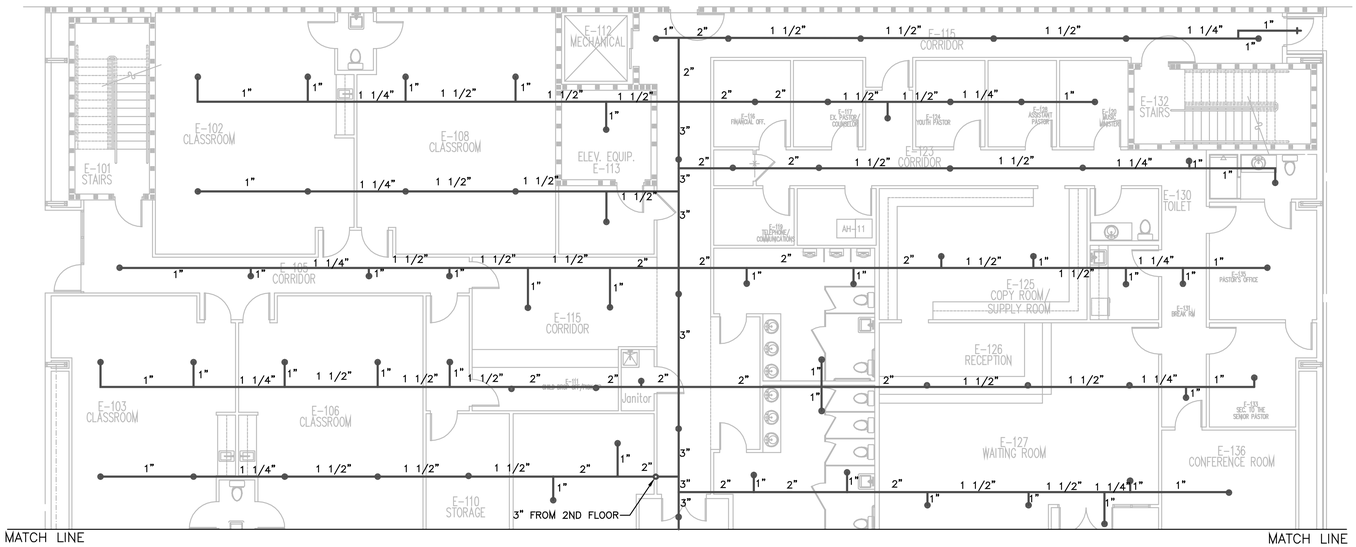
CARLISLE BAPTIST CHURCH
REBUILD
835 BERTHA AVENUE
PANAMA CITY FLORIDA

John R McDowell
Digitally signed by John R McDowell
Date: 2024.05.02 19:06:47 -05'00'

MCDOWELL ENGINEERING, INC.
1608 BECK AVENUE
PANAMA CITY, FLORIDA 32405
PHONE: (850) 872-0988
CA. LIC. NO. 9955

JOHN ROGER MCDOWELL LICENSE No. 38727 STATE OF FLORIDA PROFESSIONAL ENGINEER

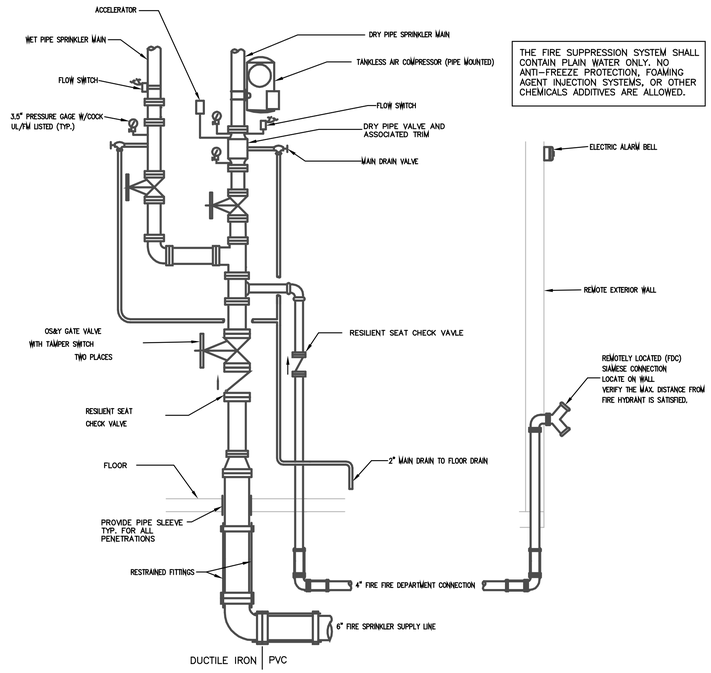
MARK MERCER & ASSOCIATES, INC.



N

PARTIAL FIRST FLOOR FIRE SPRINKLER PLAN–PHASE II WORK

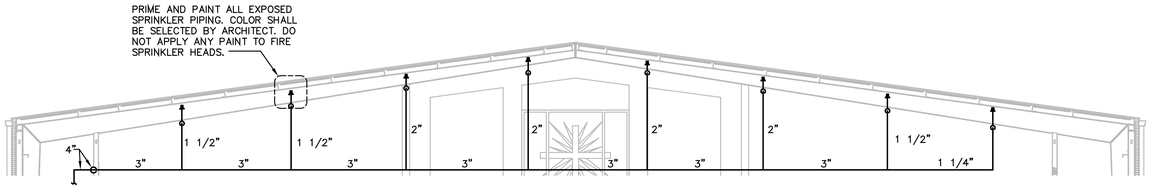
SCALE: 1/8"=1'



THE FIRE SUPPRESSION SYSTEM SHALL CONTAIN PLAIN WATER ONLY. NO ANTI-FREEZE PROTECTION, FOAMING AGENT INJECTION SYSTEMS, OR OTHER CHEMICALS ADDITIVES ARE ALLOWED.

FIRE SPRINKLER RISER DETAIL

SCALE: NONE



PARTIAL FIRST FLOOR FIRE SPRINKLER PLAN

SCALE: 1/8"=1'

SPRINKLER HEAD SCHEDULE

HEAD TYPE	MANUFACTURER/MODEL	RESPONSE	DISCHARGE COEF.	TEMPERATURE RATING
UPRIGHT	VIKING/VK301	QUICK	5.6 GPM/PSI$^{1/2}$	155 °F
RECESSED PENDANT	VIKING/VK317	QUICK	5.6 GPM/PSI$^{1/2}$	155 °F

FP2

PROJECT NO. 22004

PREPARED BY	REVIEWED BY	SCALE
JM	JM	1/8"=1'
ISSUE DATE		
5/2/24		

FIRST FLOOR FIRE SPRINKLER PLAN

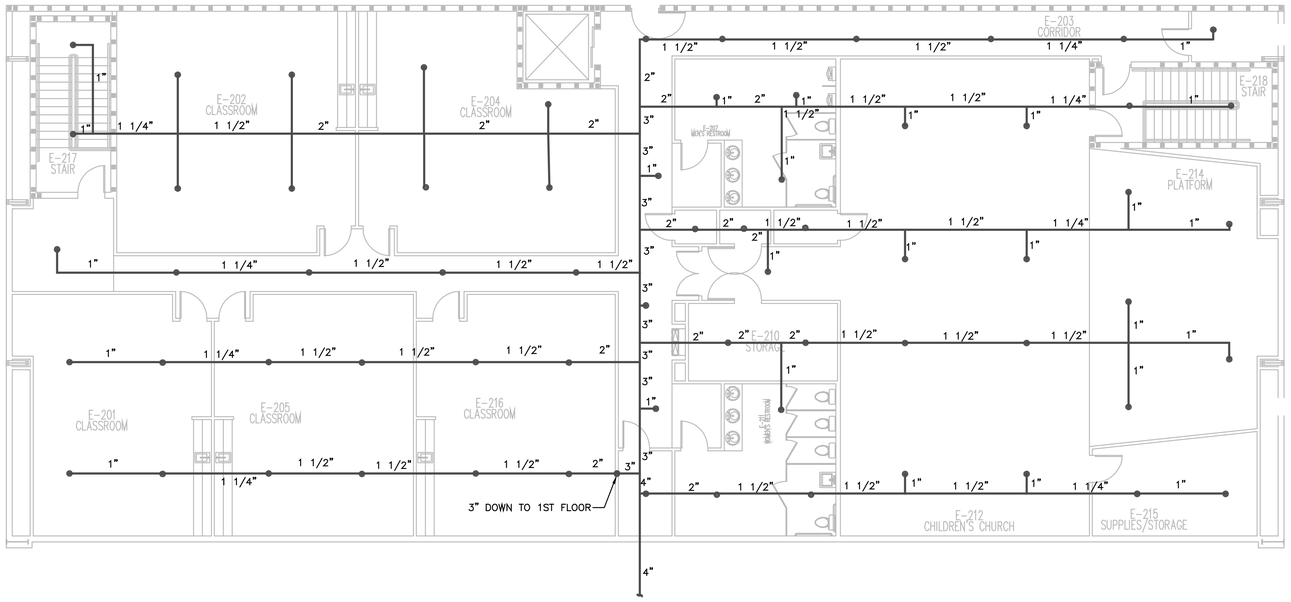
CARLISLE BAPTIST CHURCH
REBUILD
835 BERTHA AVENUE
PANAMA CITY FLORIDA

John R McDowell
Digitally signed by John R McDowell
Date: 2024.05.02 19:07:18 -05'00'

MCDOWELL ENGINEERING, INC.
1608 BECK AVENUE
PANAMA CITY, FLORIDA 32405
PHONE: (850) 872-0988
CA. LIC. NO. 9955

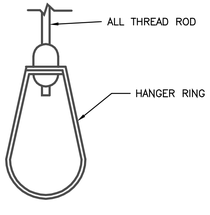
JOHN ROGER MCDOWELL LICENSE No. 38727 STATE OF FLORIDA PROFESSIONAL ENGINEER

MARK MERCER & ASSOCIATES, INC.



SECOND FLOOR FIRE SPRINKLER PLAN–PHASE II WORK

SCALE: 1/8"=1'



PIPE HANGER DETAIL

SCALE: NONE

FIRE SPRINKLER NOTES

1. ALL WORK SHALL BE IN ACCORDANCE WITH NFPA 13, 2016 EDITION.

2. DRAWINGS ARE DIAGRAMMATIC, SUBMIT 24" BY 36" SHOP DRAWINGS IN ACCORDANCE WITH NFPA 13 INDICATING LOCATION OF FIRE SPRINKLER HEADS, PIPING AND PUMPS IN PLAN VIEW, DETAILS, ELEVATION AND SECTIONS. COORDINATE WITH BUILDING STRUCTURE, CEILING SUPPORTS, LIGHTS, DUCTWORK, DIFFUSERS AND THE BUILDING OBSTRUCTIONS. SUBMIT NEW HYDRAULIC CALCULATIONS BY FIRE PROTECTION DESIGNER. FIRE PROTECTION ENGINEER SHALL BE A FLORIDA REGISTERED ENGINEER. THE SYSTEM DESIGN SHALL BE APPROVED BY THE AUTHORITY HAVING JURISDICTION PRIOR TO STARTING SYSTEM INSTALLATION. AFTER PROJECT COMPLETION, SUBMIT A COMPLETE SET OF 24" BY 36" AS–BUILT DRAWINGS. THE SYSTEM SHALL BE INSPECTED AND TESTED BY THE AUTHORITY HAVING JURISDICTION AND ALL DISCREPANCIES CORRECTED BY THE CONTRACTOR PRIOR TO BUILDING OCCUPANCY.

3. ALL DEVICES AND EQUIPMENT SHALL BE FIRE PROTECTION EQUIPMENT LISTED OR FM P7825 APPROVED FOR USE IN FIRE SPRINKLER AND STANDPIPE SYSTEMS. AND INSTALLED IN ACCORDANCE WITH MANUFACTURER'S SPECS.

4. PROVIDE ELECTRICAL SUPERVISORY TAMPER SWITCH FOR ALL CONTROL VALVES.

5. PROVIDE CHROME PLATED ESCUTCHEONS FOR ALL EXPOSED PIPING PASSING THRU WALLS, FLOORS OR CEILINGS.

6. SPRINKLER PIPING SHALL BE BLACK STEEL ASTM–A53 SCHEDULE 40. MAKE CHANGES IN PIPE SIZES THROUGH TAPERED REDUCING FITTINGS, DO NOT USE BUSHINGS. PITCH PIPE FOR PROPER DRAINAGE. FLUSH ALL PIPING IN ACCORDANCE WITH NFPA 13. PIPING LARGER THAN 2" MAY BE SCHEDULE 10 BLACK STEEL WITH GROOVED COUPLINGS AND GROOVED FITTINGS WITH WELDED OUTLETS.

7. O–RINGS WILL NOT BE PERMITTED IN SPRINKLER HEADS.

8. PROVIDE METAL CABINET WITH EXTRA SPRINKLER HEADS AS DICTATED BY NFPA 13. MOUNT CABINET IN MECHANICAL ROOM ADJACENT TO SPRINKLER RISER.

9. PRESSURE TEST THE SYSTEM TO 200 PSI FOR TWO HOURS.

10. A PLACKARD DETAILING HYDRAULIC INFORMATION, SHALL BE AFFIXED TO RISERS.

11. INSTALLING FIRE PROTECTION CONTRACTOR SHALL BE LICENSED IN THE INSTALLATION OF AUTOMATIC FIRE SPRINKLER SYSTEMS AND HAVE BEEN INSTALLING FIRE SPRINKLER SYSTEMS FOR FIVE YEARS.

12. PRIME AND PAINT EXPOSED STEEL PIPING AND HANGERS. OWNER SHALL SELECT COLOR.

13. TANKLESS AIR COMPRESSOR SHALL BE LISTED, OIL FREE WITH CORROSION RESISTANT INTERNAL COMPONENTS. AIR COMPRESSOR SHALL BE CAPABLE OF PUMPING A 600 GALLON CAPACITY TO 40 PSI IN 30 MINUTES. FLOW CAPACITY SHALL BE 5.9 CFM (1.0 HP) AT 40 PSI. EQUAL TO GAST MODEL 6LCF–46S–M616NEX.

14. PROVIDE PIPE SLEEVES WHERE PIPING PASSES THROUGH WALLS, FLOORS, ROOFS, AND PARTITIONS. SECURE SLEEVES IN PROPER POSITION AND LOCATION DURING CONSTRUCTION. PROVIDE SLEEVES OF SUFFICIENT LENGTH TO PASS THROUGH ENTIRE THICKNESS OF WALLS, ROOFS AND PARTITIONS. PROVIDE NOT LESS THAN .25 INCH SPACES BETWEEN EXTERIOR OF PIPING OR PIPE INSULATION AND INTERIOR OF SLEEVE. FIRMLY PACK SPACE WITH INSULATION AND CAULK AT BOTH ENDS OF THE SLEEVE WITH PLASTIC WATERPROOF CEMENT WITH WILL DRY TO A FIRM BUT PLIABLE MASS OR PROVIDE A SEGMENTED ELASTOMERIC SEAL.

15. MOUNT FIRE SPRINKLER PIPING TIGHT AGAINST BOTTOM OF ROOF TO AVOID CONFLICTS WITH OTHER TRADES.

16. DISINFECT PIPE IN ACCORDANCE WITH AWWA C651.

17. PROVIDE SUPPORT FOR PIPING IN ACCORDANCE WITH NFPA 13 BY FASTENING TO THE BUILDING STRUCTURE. HANGERS SHALL CONFORM TO MSS SP58 AND MSS SP69. MATERIAL FOR EXPOSED HANGERS SHALL BE GALVANIZED STEEL.

John R McDowell

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JOHN ROGER MCDOWELL LICENSE No. 38727 STATE OF FLORIDA PROFESSIONAL ENGINEER

FP3

PROJECT NO. 22004

PREPARED BY	REVIEWED BY
JM	JM

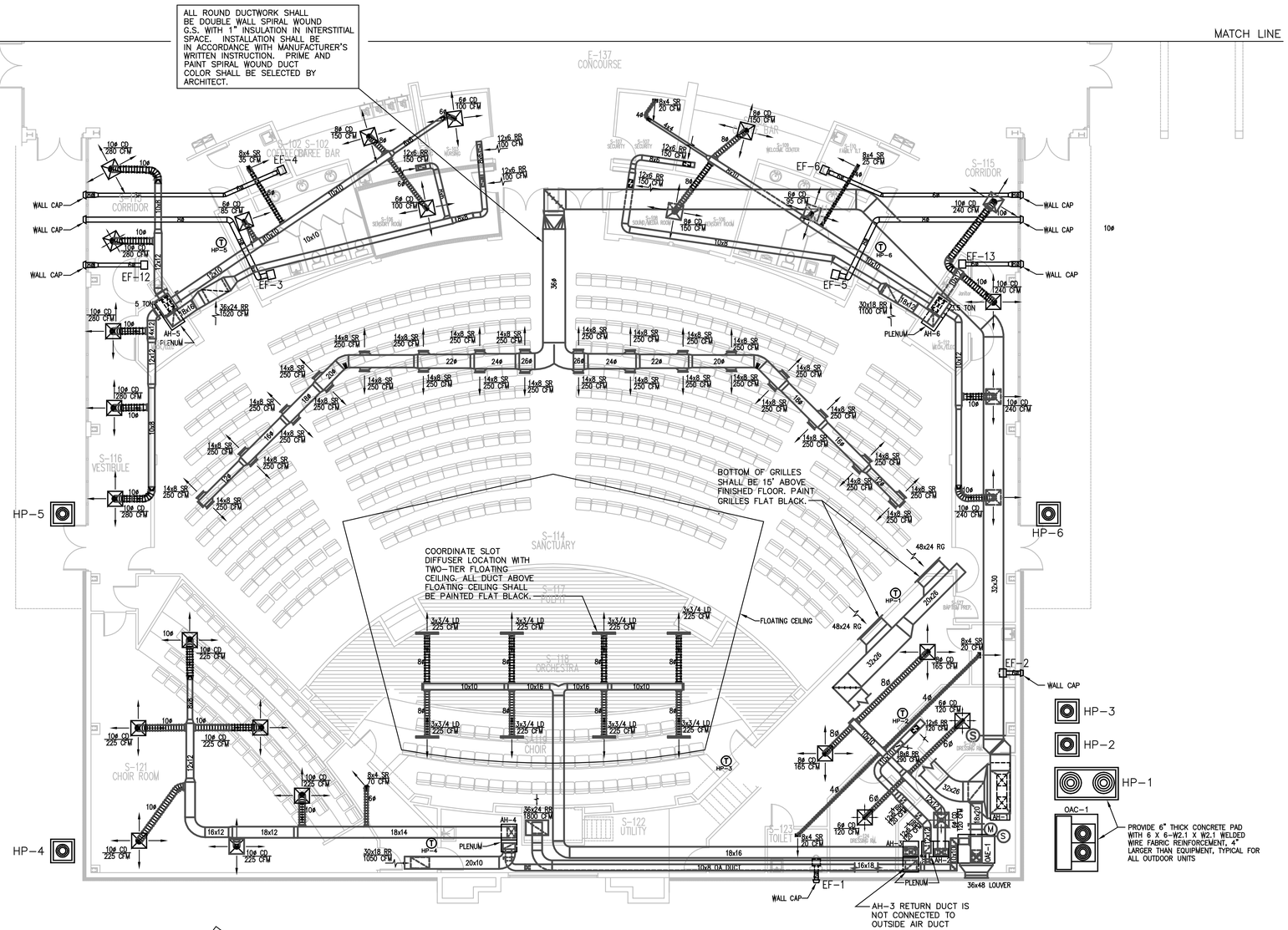
ISSUE DATE 5/2/24

SCALE 1/8"=1'

SECOND FLOOR FIRE SPRINKLER PLAN

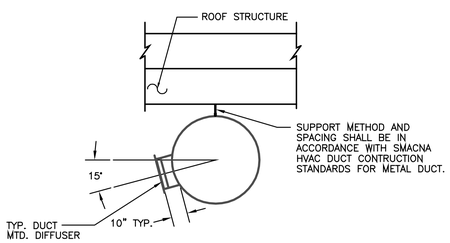
CARLISLE BAPTIST CHURCH
REBUILD
835 BERTHA AVENUE
PANAMA CITY FLORIDA

MARK MERCER & ASSOCIATES, INC.



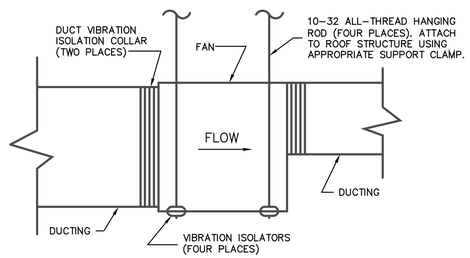
PARTIAL FIRST FLOOR MECHANICAL PLAN–PHASE I WORK

SCALE: 1/8"=1'



ROUND DUCT MOUNTING DETAIL

SCALE: NONE



CABINET FAN MOUNTING DETAIL

SCALE: NONE

MECHANICAL LEGEND

- CEILING DIFFUSER W/FLEX DUCT, NECK DIAMETER (INCHES) AND FLOW RATE INDICATED ARROWS INDICATED THROW PATTERN AND DIRECTION
- SUPPLY REGISTER W/FLEX DUCT, BOOT NECK DIAMETER (INCHES) AND FLOW RATE INDICATED ARROWS INDICATED THROW PATTERN AND DIRECTION
- 12 X 14 — RIGID DUCTING, WITH INSIDE CLEAR DIMENSIONS (INCHES) SHOWN. FIRST DIMENSION IS VIEWED.
- DUCT ELBOW
- MANUAL VOLUME DAMPER, OPPOSED BLADE TYPE
- DUCT TRANSITION
- SECTION OF DUCT UNDER POSITIVE PRESSURE
- SECTION OF DUCT UNDER NEGATIVE PRESSURE
- T HP–1 — THERMOSTAT W/ASSOCATED UNIT NUMBER
- TS HP–7 — THERMOSTAT SENSOR W/ASSOCATED UNIT NUMBER
- AH–1 — AIR HANDLER, SEE SCHEDULE
- HP–1 — HEAT PUMP, SEE SCHEDULE
- TG — TRANSFER GRILLE
- RG — RETURN GRILLE
- RR — RETURN REGISTER
- SR — SUPPLY REGISTER
- EF–1 — EXHAUST FAN
- 6ø — ROUND DUCT DIAMETER (INCHES)
- RECTANGULAR DUCT ELBOW WITH TURNING VANES
- DEU–1 — DUCTLESS SPIT A/C UNIT EVAPORATOR, SEE SCHEDULE
- DCU–1 — DUCTLESS SPIT A/C UNIT CONDENSER, SEE SCHEDULE
- M — MOTORIZED DAMPER
- SIDEWALL SUPPLY REGISTER
- F — FIRE DAMPER
- S — SMOKE DAMPER
- OAE–1 — OUTSIDE AIR UNIT EVAPORATOR, SEE SCHEDULE
- OAC–1 — OUTSIDE AIR UNIT CONDENSER, SEE SCHEDULE

MECHANICAL NOTES

1. MECHANICAL LAYOUTS ARE SCHEMATIC, PROVIDE ANY ADDITIONAL DROPS, RISERS, OFFSETS OR TRANSITIONS REQUIRED FOR COMPLETE INSTALLATION. COORDINDATE LOCATION OF CEILING MOUNTED WORK WITH LIGHTS, PLUMBING, CEILING JOISTS AND OTHER OBSTRUCTIONS. INSTALL EQUIPMENT AS RECOMMENDED BY EQUIPMENT MANUFACTURER.
2. CONTRACTOR SHALL INSTALL ALL EQUIPMENT, PIPING AND DUCTWORK SUCH THAT MANUFACTURER'S RECOMMENDED CLEARANCES ARE MET FOR ACCESS TO MOTORS, FANS, FILTERS, ETC.
3. RUN DUCTING CONCEALED IN MECHANICAL ROOMS AND ABOVE CEILING AREAS EXCEPT FOR AREAS INDICATED FOR EXPOSED DUCT IN OPEN CEILING AREAS.
4. PROVIDE FLEXIBLE ISOLATION COLLARS FOR ALL SUPPLY AND RETURN DUCT CONNECTIONS TO EQUIPMENT.
5. RUN REFRIGERANT LINES FROM SPLIT SYSTEM AIR HANDLER UNITS TO CORRESPONDING EXTERIOR UNITS. RUN REFRIGERANT LINES IN THE SHORTEST HIDDEN ROUTE POSSIBLE. RUN LINES ABOVE CEILING AND IN WALLS.
6. INSULATE REFRIGERANT SUCTION LINES WITH 1" FLEXIBLE UNICELLULAR INSULATION. ALL SEAMS SHALL BE GLUED WITH MANUFACTURER'S RECOMMEND GLUE TO MAKE ALL SEAMS WATER VAPOR PROOF. SIZE REFRIGERANT LINES PER MANUFACTURER'S REQUIREMENTS. DUCTLESS UNITS MAY REQUIRE SPECIAL INSULATING REQUIREMENTS, ADHERE TO MANUFACTURER'S INSTRUCTIONS. EXPOSED EXTERIOR LINES SHALL BE PROVIDED AN ALUMINUM JACKET, ASTM C921, TYPE II, METALLIC, TEMPER H14, 0.016–IN THICK, SMOOTH.
7. THERMOSTAT SHALL BE HONEYWELL VISIONPRO 8000 MODEL WITH REMOTE SENSORS. WHERE MULTIPLE SENSORS ARE INDICATED THE TEMPERATURE SHALL BE CONTROLLED BASED ON THE AVERAGE OF THE SENSORS.
8. PROVIDE SMOKE DETECTORS WHERE INDICATED. SMOKE DETECTORS SHALL STOP THE CORRESPONDING RTU WITH THE DETECTION OF SMOKE. SMOKE DETECTORS SHALL BE PHOTOELECTRIC TYPE AND LISTED BY UL FOR DUCT INSTALLATION.
9. FIRE DAMPERS SHALL COMPY WITH THE REQUIREMENTS OF UL 555.

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M1

PROJECT NO. 22004

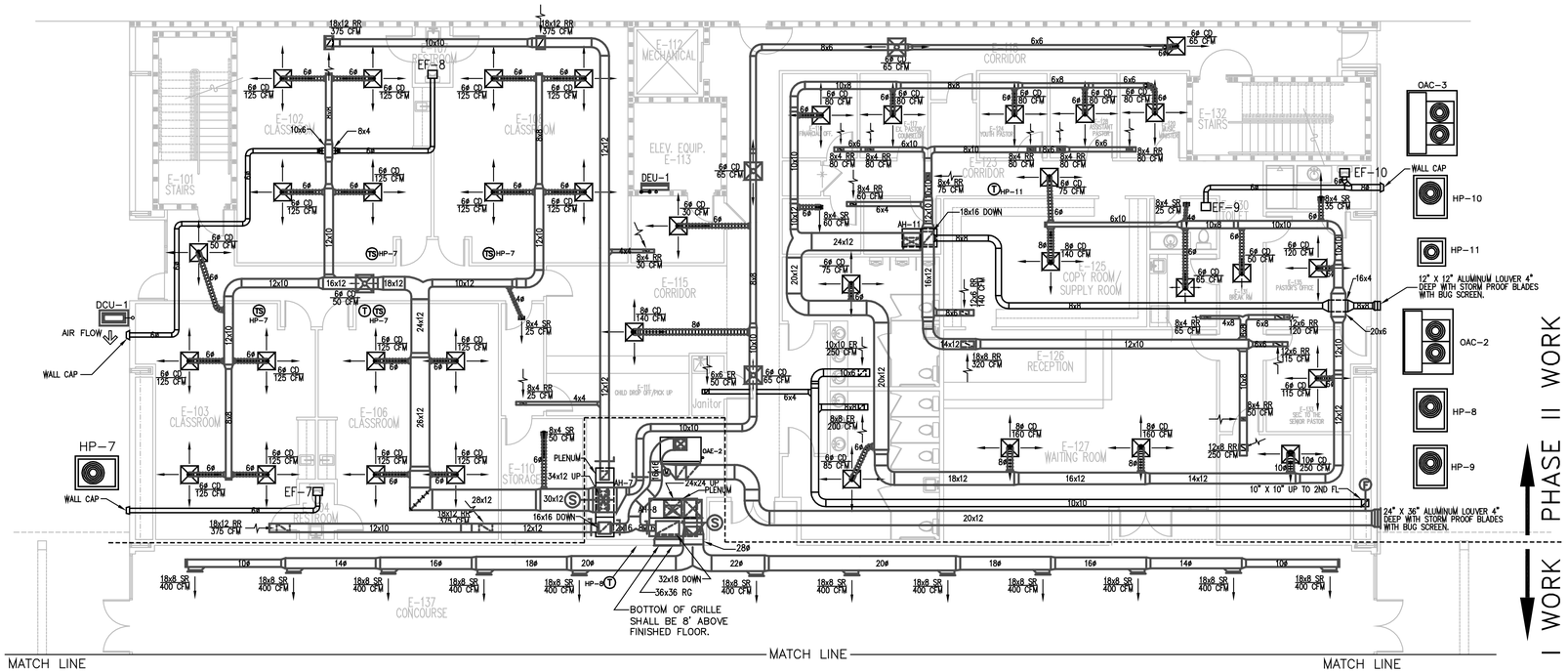
PREPARED BY	REVIEWED BY
JM	JM

ISSUE DATE	SCALE
5/2/24	1/8"=1'

PARTIAL FIRST FLOOR MECHANICAL

CARLISLE BAPTIST CHURCH
REBUILD
835 BERTHA AVENUE
PANAMA CITY FLORIDA

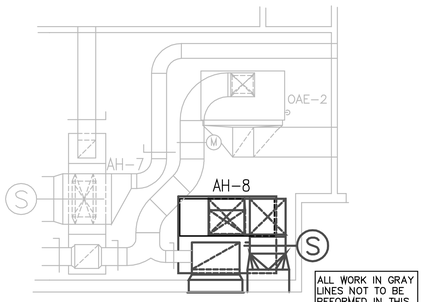
MARK MERCER & ASSOCIATES, INC.



PARTIAL FIRST FLOOR MECHANICAL PLAN–PHASE I/PHASE II WORK

SCALE: 1/8"=1'

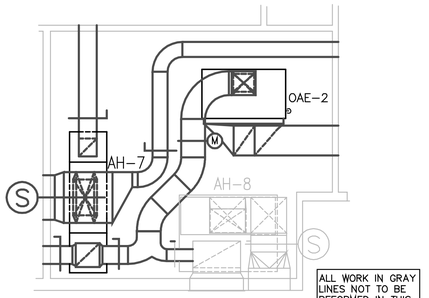
SEE ENLARGED MECHANICAL ROOM PLANS THIS SHEET FOR WORK IN PHASE I AND PHASE II IN MECHANICAL ROOM



ALL WORK IN GRAY LINES NOT TO BE PEFORMED IN THIS PHASE.

MECH. RM. PLAN–PHASE I

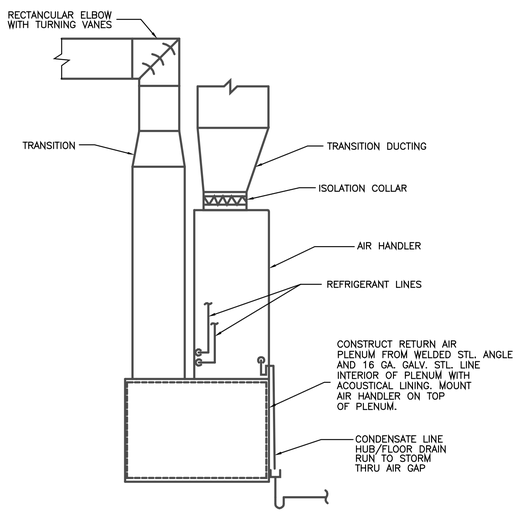
SCALE: 1/4"=1'



ALL WORK IN GRAY LINES NOT TO BE PEFORMED IN THIS PHASE.

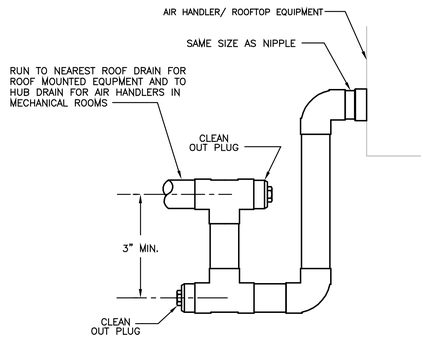
MECH. RM. PLAN–PHASE II

SCALE: 1/4"=1'



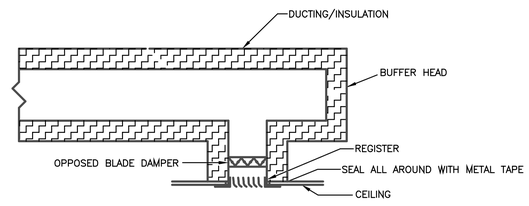
AIR HANDLER PLENUM DETAIL

SCALE: NONE



CONDENSATE DRAIN DETAIL

SCALE: NONE



RETURN REGISTER INSTALLATION DETAIL

SCALE: NONE

M2

PROJECT NO. 22004

PREPARED BY	REVIEWED BY	SCALE
JM	JM	1/8"=1'
ISSUE DATE		
5/2/24		

PARTIAL FIRST FLOOR MECHANICAL

CARLISLE BAPTIST CHURCH
REBUILD
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PANAMA CITY FLORIDA

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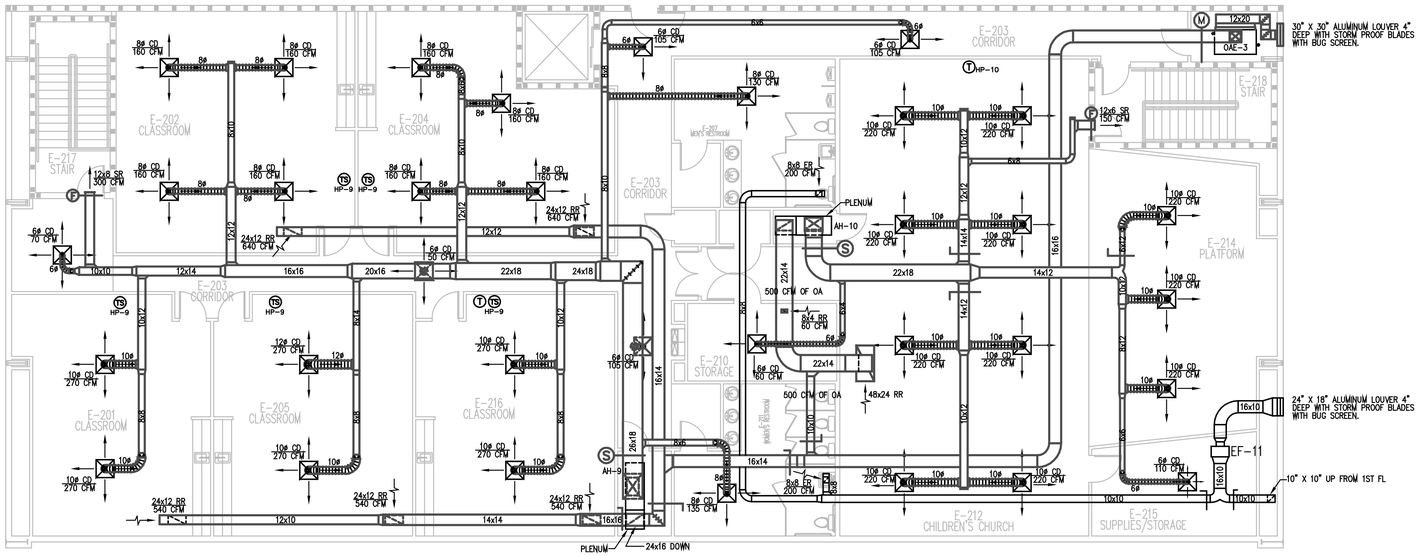
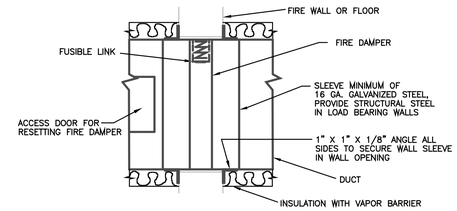


N

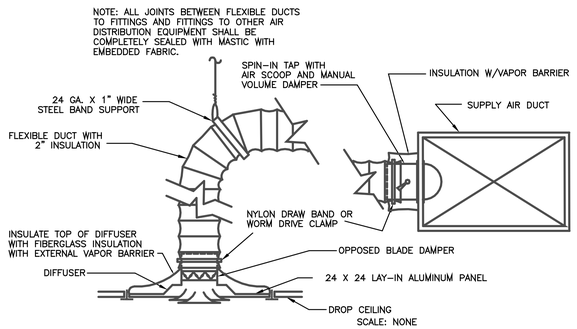
SECOND MECHANICAL FLOOR PLAN–PHASE II

SCALE: 1/8"=1'



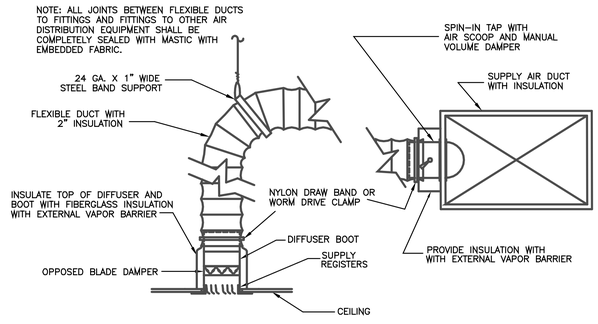
RECTANGULAR FIRE DAMPER DETAIL

SCALE: NONE



CEILING DIFFUSER INSTALLATION DETAIL

SCALE: NONE



SUPPLY REGISTER INSTALLATION DETAIL

SCALE: NONE

M3

PROJECT NO. 22004

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JM	JM

ISSUE DATE 5/2/24

SCALE 1/8"=1'

SECOND FLOOR MECHANICAL

CARLISLE BAPTIST CHURCH
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JOHN ROGER MCDOWELL LICENSE No. 38727 STATE OF FLORIDA PROFESSIONAL ENGINEER

MARK MERCER & ASSOCIATES, INC.

SPLIT SYSTEM HEAT PUMP SCHEDULE

MARK	EVAPORATOR SECTION						CONDENSER SECTION						ARI COOLING DATA		ARI HEATING DATA		AUXILIARY ELECTRIC HEATER		EQUAL TO MANUFACTURER HEATPUMP/AIR HANDLER MODEL
	CFM	CFM OF OUTSIDE AIR	EXT. STATIC PRESSURE (IN. WATER)	FAN MOTOR HP	ELECTRICAL V/ø/Hz	FILTER TYPE	COMPRESSOR DATA		CONDENSER FAN		STEPS OF CAPACITY	ELECTRICAL V/ø/Hz	MINIMUM CAPACITY BTU/HR	MINIMUM EER (SEER)	MINIMUM HIGH TEMPERATURE RATING (BTU/HR)	COP (HSPF)	NUMBER OF STEPS	KW PER STEP @ 208V	
							QUANTITY	R. L. AMPS	QUANTITY	F. L. AMPS									
AH-1/HP-1	8000	2400 (OAE-1)	.80	5.0	208/3/60	THROW AWAY	2	33.8 (EA.)	2	5.0	100%-50%-0%	208/3/60	246,000	12.2	236,000	3.2	2	11.2 (EA.)	TRANE TWA240E3/TWE240E3
AH-2/HP-2	730	80 (OAE-1)	.60	0.33	208/1/60	THROW AWAY	1	10.9	1	1.1	100%-0%	208/1/60	23,400	(14.0)	23,600	(8.2)	1	4.5	GOODMAN GSZ140241K/ASPT24B14
AH-3/HP-3	1800	--	.70	0.33	208/1/60	THROW AWAY	1	26.4	1	1.5	100%-0%	208/1/60	56,500	(14.0)	59,000	(8.5)	1	6.0	GOODMAN GSZ140601K/ASPT61D14
AH-4/HP-4	1420	300 (OAE-1)	.70	1.0	208/1/60	THROW AWAY	1	18.5	1	1.5	100%-0%	208/1/60	45,000	(14.5)	44,500	(8.5)	1	6.0	GOODMAN GSZ140481K/ASPT48D14
AH-5/HP-5	1870	--	.70	0.33	208/1/60	THROW AWAY	1	26.4	1	1.5	100%-0%	208/1/60	56,500	(14.0)	59,000	(8.5)	1	6.0	GOODMAN GSZ140601K/ASPT61D14
AH-6/HP-6	1400	--	.70	0.75	208/1/60	THROW AWAY	1	16.7	1	1.5	100%-0%	208/1/60	39,500	(14.0)	39,000	(8.5)	1	6.0	GOODMAN GSZ140421K/ASPT42D14
AH-7/HP-7	2605	1050 (OAE-2)	.80	2.0	208/3/60	THROW AWAY	1	26.5	1	3.1	100%-0%	208/3/60	90,000	10.1	85,000	3.3	2	9.4 (EA.)	TRANE TWA090D3/TWE090D3
AH-8/HP-8	4800	450 (OAE-2)	.80	3.0	208/3/60	THROW AWAY	1	33.0	1	5.0	100%-0%	208/3/60	124,000	12.7	105,000	3.3	1	11.2	TRANE TWA120D3/TWA120D3
AH-9/HP-9	3900	1100 (OAE-3)	.80	3.0	208/3/60	THROW AWAY	1	33.0	1	5.0	100%-0%	208/3/60	124,000	12.7	105,000	3.3	2	9.4 (EA.)	TRANE TWA120D3/TWA120D3
AH-10/HP-10	2740	500 (OAE-3)	.80	2.0	208/3/60	THROW AWAY	1	26.5	1	3.1	100%-0%	208/3/60	90,000	10.1	85,000	3.3	1	11.2	TRANE TWA090D3/TWE090D3
AH-11/HP-11	1815	200	.70	0.33	208/1/60	THROW AWAY	1	26.4	1	1.5	100%-0%	208/1/60	56,500	(14.0)	59,000	(8.5)	1	6.0	GOODMAN GSZ140601K/ASPT61D14

NOTES:
1. PROVIDE SINGLE POINT ELECTRICAL CONNECTION FOR AIR HANDLER AND AUXILIARY HEATER.
2. PROVIDE FLOAT SWITCH IN DRAIN PAN TO DISABLE UNIT IF PAN FILLS WITH WATER.
3. PROVIDE FOR EACH HEAT PUMP A LOCKOUT THERMOSTAT THAT SHALL PREVENT OPERATION OF THE AUXILIARY HEAT STRIPS WHEN THE OUTSIDE AIR TEMPERATURE IS ABOVE A PRESELECTED TEMPERATURE.
4. PROVIDE ALL ANCILLARY EQUIPMENT AS REQUIRED FOR A COMPLETE OPERATIONAL SYSTEM.
5. VALUES ARE APPROX. PROVIDE PROPER PULLEY SHEAVE TO PROVIDE THE INDICATED FLOW RATES TO MATCH INSTALLED CONDITIONS.

100% OUTSIDE-AIR AIR CONDITIONERS

MARK	AIR FLOW				HEAT REJECTION				COOLING DATA			ELECTRICAL	ELECTRIC HEATER		MANUFACTURER CONDENSER/EVAPORATOR MODEL
	CFM OF OUTSIDE AIR	EXT. STATIC PRESSURE (IN. WATER)	FAN MOTOR HP	FILTER TYPE	COMPRESSOR DATA		CONDENSER FAN		TOTAL CAPACITY BTU/HR (SEE NOTE 1)	LATENT CAPACITY BTU/HR (SEE NOTE 1)	MINIMUM EER	V/ø/Hz	NUMBER OF STEPS	KW PER STEP	
					QUANTITY	R. L. AMPS	QUANTITY	FLA							
OAC-1/OAE-1	2780	.3	5.0	2" 30% PLEATED	2	33.3 EA	2	3.7 EA	264,500	125,800	12.4	208/3/60	--	--	ADDISON MCOA/MAOA-240
OAC-2/OAE-2	1500	.3	2.4	2" 30% PLEATED	2	17.9 EA	2	3.7 EA	137,500	71,500	15.5	208/3/60	--	--	ADDISON MCOA/MAOA-120
OAC-3/OAE-3	1600	.3	2.4	2" 30% PLEATED	2	17.9 EA	2	3.7 EA	137,500	71,500	15.5	208/3/60	--	--	ADDISON MCOA/MAOA-120

NOTES
1. RATINGS ARE BASED ON 95°F D.B. AND 80°F W.B. AIR CONDITIONS ENTERING EVAPORATOR AND CONDENSER.
2. AMBIENT LOCKOUT THERMOSTAT SHALL ALLOW COMPRESSOR OPERATION DOWN TO AN AMBIENT TEMPERATURE OF 58° F.
3. PROVIDE HOT GAS REHEAT COILS. CONTROL THE HOT GAS REHEAT TO MAINTAIN THE AIR TEMPERATURE LEAVING THE OUTSIDE AIR UNIT AT 65°F.
4. PROVIDE INDEPENDENT REFRIGERANT CIRCUITS ON 9TONS AND HIGHER.
5. PROVIDE DIRECT DRIVE ODP PLENUM FAN OR ECM DRIVEN MOTORIZED IMPELLER.
6. PROVIDE A DIGITAL SCROLL COMPRESSOR IN LEAD AND LAG CIRCUIT.
7. PROVIDE 2" FOAM INJECTED DOUBLE WALL CONSTRUCTION W/ HINGED ACCESS DOORS WITH AN R-VALUE OF 13 WHICH HAS A TRUE THERMAL BREAK.
8. PROVIDE MODULATING HEAD PRESSURE CONTROL TO 35°F AMBIENT.
9. PROVIDE VOLTAGE MONITOR ON THE UNIT TO PROTECT COMPRESSOR AND ELECTRICAL SYSTEMS
10. PROVIDE SWITCHABLE LIQUID SUBCOOLING IN BOTH REFRIGERANT CIRCUITS TO ENHANCE THE DEHUMIDIFICATION CYCLE.
11. PROVIDE MODULATING HOT GAS REHEAT IN THE LEAD CIRCUIT AS A SECONDARY TRIM SOURCE OF REHEAT
12. PROVIDE LEAVING AIR DEWPOINT OF 54.2°F AT THE SPECIFIED CONDITIONS

FAN SCHEDULE

MARK	TYPE	DRIVE	CFM	STATIC PRESSURE (INCHES OF WATER)	POWER (WATTS)	RPM	VOLTS/PH.	SONES	MODEL NO.	NOTES
EF-1	CEILING MOUNTED EXHAUST	DIRECT	70	.25	27	1000	120v/1ø	1.0	GREENHECK SP-A90	1,3,4
EF-2	CEILING MOUNTED EXHAUST	DIRECT	70	.25	27	1000	120v/1ø	1.0	GREENHECK SP-A90	1,3,4
EF-3	CEILING MOUNTED EXHAUST	DIRECT	200	.25	56	900	120v/1ø	2.5	GREENHECK SP-A200	1,3,4
EF-4	CEILING MOUNTED EXHAUST	DIRECT	70	.25	27	1000	120v/1ø	1.0	GREENHECK SP-A90	1,3,4
EF-5	CEILING MOUNTED EXHAUST	DIRECT	200	.25	56	900	120v/1ø	2.5	GREENHECK SP-A200	1,3,4
EF-6	CEILING MOUNTED EXHAUST	DIRECT	70	.25	27	1000	120v/1ø	1.0	GREENHECK SP-A90	1,3,4
EF-7	CEILING MOUNTED EXHAUST	DIRECT	70	.25	27	1000	120v/1ø	1.0	GREENHECK SP-A90	1,3,4
EF-8	CEILING MOUNTED EXHAUST	DIRECT	70	.25	27	1000	120v/1ø	1.0	GREENHECK SP-A90	1,3,4
EF-9	CEILING MOUNTED EXHAUST	DIRECT	70	.25	27	1000	120v/1ø	1.0	GREENHECK SP-A90	1,3,4
EF-10	CEILING MOUNTED EXHAUST	DIRECT	70	.25	27	1000	120v/1ø	1.0	GREENHECK SP-A90	1,3,4
EF-11	INLINE CABINET	DIRECT	900	.375	425	1095	120v/1ø	2.5	GREENHECK MODEL CSP-A1050	1,2,3
EF-12	CEILING MOUNTED EXHAUST	DIRECT	70	.25	27	1000	120v/1ø	1.0	GREENHECK SP-A90	1,3,4
EF-13	CEILING MOUNTED EXHAUST	DIRECT	70	.25	27	1000	120v/1ø	1.0	GREENHECK SP-A90	1,3,4

NOTES
1. PROVIDE BACKDRAFT DAMPER.
2. INTERLOCK WITH CORRESPONDING OUTSIDE-AIR AIR CONDITIONER UNIT.
3. PROVIDE SOLID STATE SPEED CONTROLLER.
4. SWITCH WITH BATHROOM LIGHTS.

WALL MOUNTED DUCTLESS SPLIT SYSTEM AIR CONDITIONING SCHEDULE

MARK	EVAPORATOR		ELECTRICAL DATA			COOLING DATA		EQUAL TO MANUFACTURER INDOOR/OUTDOOR UNIT MODEL
	CFM	FILTER TYPE	INDOOR MCA	OUTDOOR MOCP	V/ø/Hz	MINIMUM CAPACITY BTU/HR	MINIMUM SEER	
DCU-1/DEU-1	232	REUSABLE	10	15	208/1/60	12,000	15	CARRIER 40MFC012-3/38MFC012-3

John R McDowell

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JOHN ROGER MCDOWELL LICENSE No. 38727 STATE OF FLORIDA PROFESSIONAL ENGINEER

M4

PROJECT NO. 22004

PREPARED BY JM | REVIEWED BY JM | ISSUE DATE 5/2/24 | SCALE 1/8"=1'

EQUIPMENT SCHEDULES

CARLISLE BAPTIST CHURCH
REBUILD
835 BERTHA AVENUE
PANAMA CITY FLORIDA

MARK MERCER & ASSOCIATES, INC.

GENERAL MECHANICAL NOTES

1. ALL HVAC WORK SHALL CONFORM WITH THE 2020 FLORIDA MECHANICAL CODE..

2. DUCTING SHALL BE CONSTRUCTED OF GALVANIZED SHEET METAL CONFORMING WITH ASTM–A653, COATING DESIGNATION G90. CONSTRUCTION, METAL GAUGE, HANGERS, AND SUPPORTS, AND REINFORCEMENTS SHALL CONFORM WITH SMACNA HVAC DUCT CONSTRUCTION STANDARD. COAT ALL DUCT SEAMS WITH MASTIC BEFORE APPLICATION OF INSULATION.

3. PROVIDE EXTERNAL MINERAL FIBER FLEXIBLE BLANKET INSULATION WITH A MAXIMUM THERMAL CONDUCTIVITY OF .31 BTU–IN/HR–SQ FT FOR DUCTING, 1 1/ 2" THICK FOR DUCT IN BETWEEN 1ST AND 2ND FLOORS AND 2" THICK FOR ALL OTHER DUCTWORK INCLUDING EXHAUST AND AND OUTSIDE AIR DUCTS. SECURE INSULATION TO DUCTING WITH ADHESIVE IN 6" WIDE STRIPS 12" ON CENTER. PROVIDE PINS, WASHERS AND CLIPS AT 18" ON CENTER AND NOT MORE THAN 4" FROM DUCT EDGE. INSTALL SPEED WASHERS WITH PINS. TRIM PIN TO WASHER. COAT WASHER WITH VAPOR BARRIER COATING MATERIAL. VAPOR SEAL ALL JOINTS WITH OPEN WEAVE GLASS MEMBRANE PROVIDE AN ALL PURPOSE JACKET WITH INTEGRAL VAPOR BARRIER AROUND INSULATED DUCTWORK. INSULATION SHALL MEET THE REQUIREMENTS OF NFPA 90A AND NFPA90B. VAPOR SEAL ALL JOINTS WITH OPEN WEAVE GLASS MEMBRANE COATED WITH VAPOR BARRIER COATING COMPOUND. COATED WITH VAPOR BARRIER COATING COMPOUND.

4. ALL ACOUSTICALLY LINED PLENUMS SHALL BE INTERNALLY LINED. LINING SHALL MEET THE REQUIREMENTS OF ASTM C1071, NFPA 90A AND NFPA 90B. DUCT LINER SHALL BE MANUFACTURED FROM GLASS FIBER BONDED WITH THERMOSETTING RESIN. INSULATION SHALL BE RESISTANT TO MICROBIAL GROWTH USING A "NO GROWTH CRITERIA" WHEN TESTED IN ACCORDANCE WITH ASTM C1338 AND ASTM G21. SURFACE EXPOSED TO AIR STREAM SHALL BE BE PROVIDED A BLACK MATT FACING. INSULATION SHALL BE SUPPORTED AGAINST DUCT SURFACE BY STUD WELDED PINS AND SPEED CLIPS 10" ON CENTER AND BY SHEET METAL ANGLES AT THE DUCT CORNERS. ADJACENT JOINT SECTIONS OF INSULATION BUTTED TOGETHER SHALL BE COVERED WITH SHEET METAL COVER STRIPS WITH EDGES TURNED DOWN AND PINNED TO CORNER ANGLES. LINING SHALL BE 1 1/2" THICK.

5. CEILING DIFFUSERS SHALL BE TITUS MODEL TMSA–AA, 24" X 24" LAY–IN CEILING MODULE FOR LAY–IN CEILINGS. SUPPLY REGISTERS SHALL BE EQUAL TO TITUS MODEL 250–AA, SURFACE MOUNT TYPE. SIDEWALL REGISTERS SHALL BE EQUAL TO TITUS AEROBLADE MODEL 272FS. EXHAUST AND RETURN GRILLES/REGISTERS SHALL BE EQUAL TO TITUS MODEL 55FL. PROVIDE OPPOSED BLADE DAMPER WITH SCREWDRIVER ADJUSTMENT ACCESSIBLE THOUGH FACE FOR ALL REGISTERS AND DIFFUSERS. SELECT EQUIPMENT TO OPERATE WITH A SOUND PRESSURE LEVEL OF NC 30 OR LESS.

6. TEST AND BALANCE AIR SYSTEMS TO ACHIEVE COMPLIANCE WITH DRAWINGS. TEST AND BALANCE IN ACCORDANCE WITH SMACNA "HVAC SYSTEMS – TESTING, ADJUSTING AND BALANCING." TEST AND BALANCE SHALL BE PERFORMED BY AN INDEPENDANT THIRD PARTY CERTIFIED TEST AND BALANCE CONTRACTOR. QUALIFICATIONS SHALL BE SUBMITTED BEFORE THE PERFORMANCE OF WORK. TEST AND BALANCE CONTRACTOR SHALL BE A SUBCONTRACTOR TO THE GENERAL CONTRACTOR. TEST AND BALANCE REPORT SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

7. PROVIDE 1" PLEATED 65% EFFICIENT THROW–AWAY FILTERS FOR AIR HANDLING UNITS. PROVIDE DISPOSABLE FILTERS FOR HEAT PUMP AIR HANDLERS AND REUSABLE FILTERS FOR OUTSIDE AIR EVAPORATOR UNITS. PROVIDE FILTER HOUSING AND AS REQUIRED TO HOLD FILTERS.

8. PROVIDE PIPE SLEEVES FOR ALL PIPING PENETRATING WALLS. PIPE SLEEVES SHALL BE SCHEDULE 40 GALVANIZED STEEL PIPE, PROVIDE A MINIMUM OF .25" CLEARANCE BETWEEN INSIDE DIAMETER OF SLEEVE AND OUTSIDE SURFACE OF PENETRATING PIPING. FIRMLY PACK WITH FIRE PROOF INSULATION AND CAULK WITH PLASTIC WATERPROOF CEMENT.

9. PROVIDE ACCESS DOORS IN DUCTWORK AT ALL DAMPERS.

10. PROVIDE MOTOR STARTERS THAT CONFORM TO NEMA ICS–1, NEMA ICS–2 AND UL 508.

11. AT THE CLOSE OF THE JOB, TWO BOUND COPIES OF EQUIPMENT WARRANTIES, CONTRACTOR'S WARRANTY, PARTS LIST AND MANUALS FOR ALL EQUIPMENT, BALANCE AND TEST READINGS, OPERATING INSTRUCTIONS (IN WRITING) AND WRITTEN INSTRUCTIONS ON MAINTENANCE AND CARE OF THE SYSTEM SHALL BE SUBMITTED TO THE OWNER.

12. ALL EQUIPMENT SHALL BE INSTALLED IN SUCH A WAY THAT ALL COMPONENTS REQUIRING ACCESS ARE SO LOCATED AND INSTALLED THAT THEY MAY BE SERVICED BY SERVICE PEOPLE WITH NORMAL SERVICE TOOLS AND EQUIPMENT. IF ANY EQUIPMENT OR COMPONENTS ARE SHOWN IN SUCH A POSITION THAT THIS CONTRACTOR CANNOT COMPLY WITH THE ABOVE, THE CONTRACTOR SHALL NOTIFY THE GENERAL CONTRACTOR AND ATTEMPT TO RESOLVE THE PROBLEM OF ACCESS. IF THIS CONSULTATION IS NOT SUCCESSFUL, THE ARCHITECT AND ENGINEER SHALL BE NOTIFIED IN WRITING AND A DECISION REQUESTED.

13. INSTALL VIBRATION ISOLATORS, FLEXIBLE CONNECTORS, EXPANSION JOINTS, AND OTHER SAFETY MEASURES TO PREVENT NOISE AND VIBRATION FROM BEING TRANSMITTED TO OCCUPIED AREAS. EQUIPMENT SHALL BE SELECTED TO OPERATE WITHIN THE NOISE LEVEL RECOMMENDED FOR THE PARTICULAR TYPE INSTALLATION IN RELATION TO ITS LOCATION. FOLLOWING INSTALLATION, MAKE PROPER ADJUSTMENTS TO ELIMINATE EXCESSIVE NOISE AND VIBRATION.

14. FLEXIBLE DUCT CONNECTING MAIN DUCTS TO REGISTERS SHALL BE UL 181, CLASS I UL LISTED, INTERLOCKING SPIRAL TYPE WITH STEEL WIRE HELIX PERMANENTLY BONDED TO A SMOOTH INNER LINING, WITH INSULATION HAVING A MAXIMUM THERMAL CONDUCTANCE OF .125 BTU/HR–DEG F–SQ FT (2" THICK) AND SHEATHED WITH A VAPOR BARRIER. FLEXIBLE DUCT SIZE SHALL BE AS INDICATED.

15. PROVIDE SINGLE THICKNESS TURNING VANES IN RECTANGULAR ELBOWS AND TEES.

16. PROVIDE DUCT SLEEVES FOR ALL WALL PENETRATIONS. FABRICATE FROM 20 GAUGE GALVANIZED STEEL FOR NON–BEARING WALLS, AND STRUCTURAL STEEL FOR LOAD BEARING WALLS. PACK CLEARANCE BETWEEN SLEEVE AND DUCT INSULATION WITH FIRE STOP MATERIAL.

17. EXHAUST FAN WALL CAPS SHALL BE CONSTRUCTED OF ALUMINUM SUITABLE FOR INTENDED USE AND SHALL HAVE INTEGRAL BIRD SCREEN, DO NOT PROVIDE SCREEN IN DRYER DUCTS. CAPS AND JACKS SHALL BE AESTHETICALLY COMPATIBLE WITH STRUCTURE. ANCHOR CAPS TO RESIST WIND PRESSURE IN ACCORDANCE WITH THE FLORIDA BUILDING CODE.

18. CONDENSATE LINES SHALL BE SCHEDULE 40 PVC.

SEQUENCE OF OPERATION

1. THERMOSTATS SHALL BE HONEYWELL VISIONPRO 8000. PROVIDE AVERAGING SENSORS AND CAPABILITY FOR HEAT PUMPS UNITS 7 AND 9.

2. THERMOSTATS SHALL BE SET TO OPERATE AS FOLLOWS: DURING OCCUPIED TIMES AIR HANDLERS SHALL BE SET TO RUN CONTINOUSLY. IN THE COOLING MODE THE HEAT PUMP COMPESSOR SHALL BE CYCLED AS REQUIRED TO SATISFY TEMPERATURE. UPON SATISFYING THE TEMPERATURE THE COMPRESSOR SHALL BE COMMANDED TO CONTINUE TO OPERATE IF THE HUMIDITY IN THE SPACE IS ABOVE THE HUMIDITY SETPOINT. CONTINUOUS OPERATION OF THE COMPRESSORS SHALL OCCUR IF THE HUMIDITY IS NOT SATISFIED UNTIL A TEMPERATURE OF 3°F BELOW THE TEMPERATURE SET POINT IS REACHED AT WHICH TIME THE COMPRESSORS SHALL BE COMMANDED OFF. UPON SATISFACTION OF THE SPACE HUMIDITY THE COMPRESSORS SHALL BE CYCLED OFF. IN THE UNOCCUPIED PERIODS ALL AIR HANDLERS SHALL CYCLE WITH THE COMPRESSORS. SETBACK TEMPERATURES AND HUMIDITIES IN THE UNOCCUPIED TIMES SHALL BE MAINTAINED IN ACCORDANCE WITH ABOVE.

3. PROVIDE ALL ELECTRICAL/ELECTRONIC EQUIPMENT NECESSARY TO PERFORM THE FOLLOWING: IN THE OCCUPIED MODE THE OUTSIDE AIR UNITS AND CORRESPONDING INTERLOCKED EXHAUST FANS SHALL BE ACTIVATED TO OPERATE CONTINUOUSLY. THE MOTORIZED DAMPERS IN THE OUTSIDE AIR DUCTS SHALL BE COMMANDED OPEN. THE OUTSIDE AIR UNITS SHALL CONDITION THE OUTSIDE AIR. THE CORRESPONDING HEATPUMP THERMOSTATS SHALL CYCLE THE COMPRESSORS OR ELECTRIC HEAT AS REQUIRED TO MAINTAIN THE OCCUPIED TEMPERATURE SETPOINT. IN THE UNOCCUPIED MODE THE OUTSIDE AIR UNITS SHALL BE DEACTIVATED AND THE OUTSIDE AIR MOTORIZED DAMPERS COMMANDED CLOSED.

M5

PROJECT NO. 22004

PREPARED BY	REVIEWED BY
JM	JM

ISSUE DATE	SCALE
5/2/24	1/8"=1'

MECHANICAL NOTES

CARLISLE BAPTIST CHURCH
REBUILD
835 BERTHA AVENUE
PANAMA CITY FLORIDA

John R McDowell

Digitally signed by John R McDowell
Date: 2024.05.02 19:10:56 -05'00'

MCDOWELL ENGINEERING, INC.
1608 BECK AVENUE
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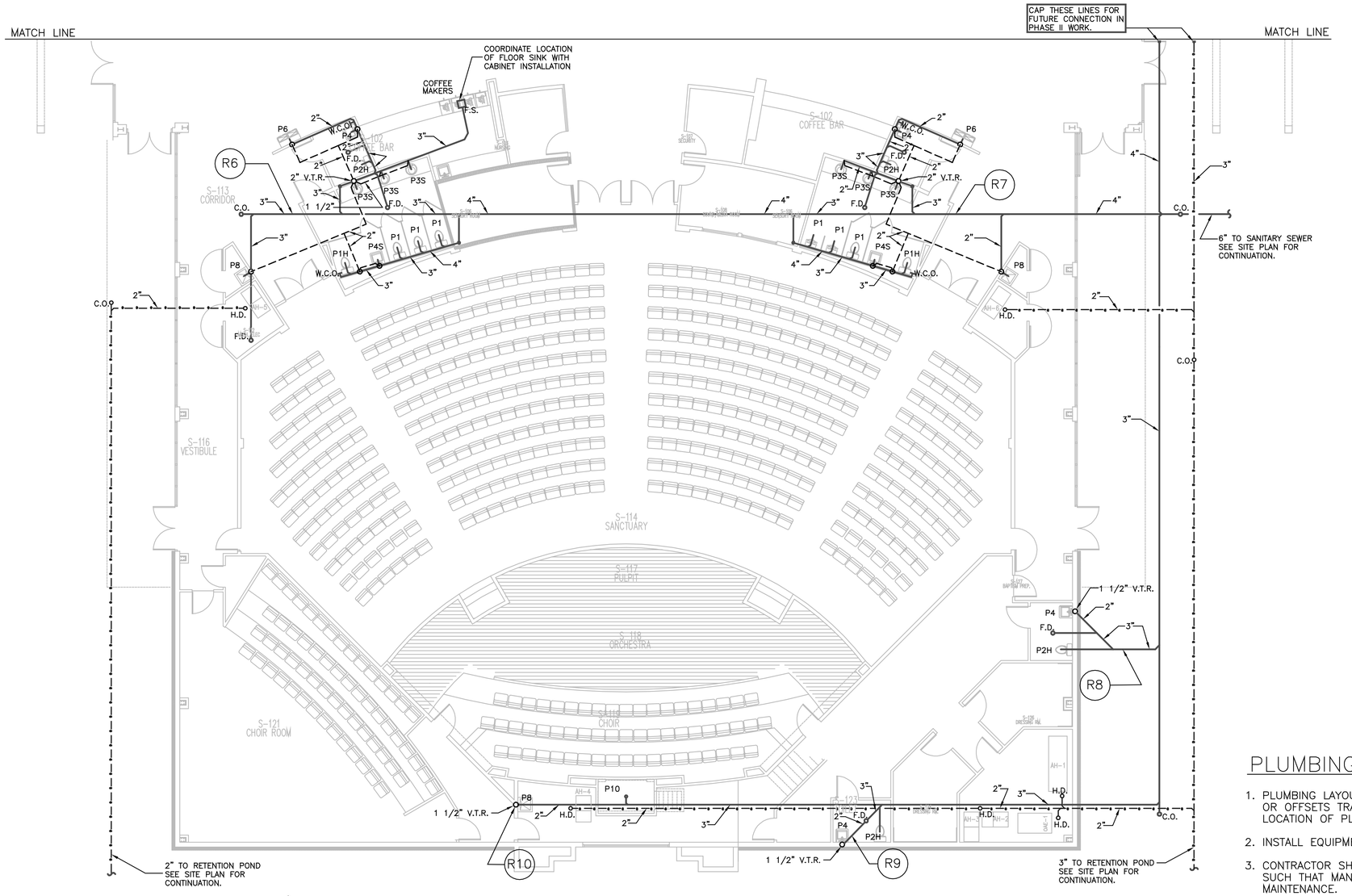
JOHN ROGER MCDOWELL LICENSE No. 38727 STATE OF FLORIDA PROFESSIONAL ENGINEER

MARK MERCER & ASSOCIATES, INC.



PARTIAL FIRST FLOOR WASTE AND VENT PLAN–PHASE I WORK

SCALE: 1/8"=1'

N

PLUMBING LEGEND

	COLD WATER PIPING
	HOT WATER PIPING
	HOT WATER PIPING RECIRCULATION LINE
	WASTE PIPING
	VENT PIPING
	CONDENSATE LINE
C.O.	CLEANOUT
W.C.O.	WALL CLEANOUT
F.D.	FLOOR DRAIN
P1	PLUMBING FIXTURE (SEE SCHEDULE)
V.T.R.	VENT THRU ROOF
	BALL VALVE
	ELBOW TURNED DOWN
	TEE TURNED UP
	TEE TURNED DOWN
W.H.	WALL HYDRANT
V.	VENT RISER
W.	WASTE RISER
OFCI	OWNER FURNISHED CONTRACTOR INSTALLED
H.D.	3" HUB DRAIN
IWH	INSTANTANEOUS WATER HEATER
F.S.	FLOOR SINK

PLUMBING NOTES

1. PLUMBING LAYOUTS ARE SCHEMATIC, PROVIDE ANY ADDITIONAL DROPS, RISERS, OR OFFSETS TRANSITIONS REQUIRED FOR COMPLETE INSTALLATION. COORDINATE LOCATION OF PLUMBING WITH OTHER DISCIPLINES.
2. INSTALL EQUIPMENT AS RECOMMENDED BY EQUIPMENT MANUFACTURER.
3. CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND PIPING SUCH THAT MANUFACTURER'S RECOMMENDED CLEARANCES ARE MET FOR MAINTENANCE.
4. INSULATE ROOF DRAINS LINES WITH 1/2" FLEXIBLE UNICELLULAR INSULATION. ALL SEAMS SHALL BE GLUED WITH MANUAFACTURER'S RECOMMEND GLUE TO MAKE ALL SEAMS WATER VAPOR PROOF.
5. PROVIDE A WATER HAMMER ARRESTOR AT EACH FIXTURE 'SIZE A' ON BOTH HOT AND COLD WATER SUPPLY.
6. PIPING INSULATION FROM WH TO COMPLY WITH C403.2.10 OF THE FLORIDA ENERGY CODE.

John R McDowell

Digitally signed by John R McDowell
Date: 2024.05.02 19:11:28 -05'00'

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P1

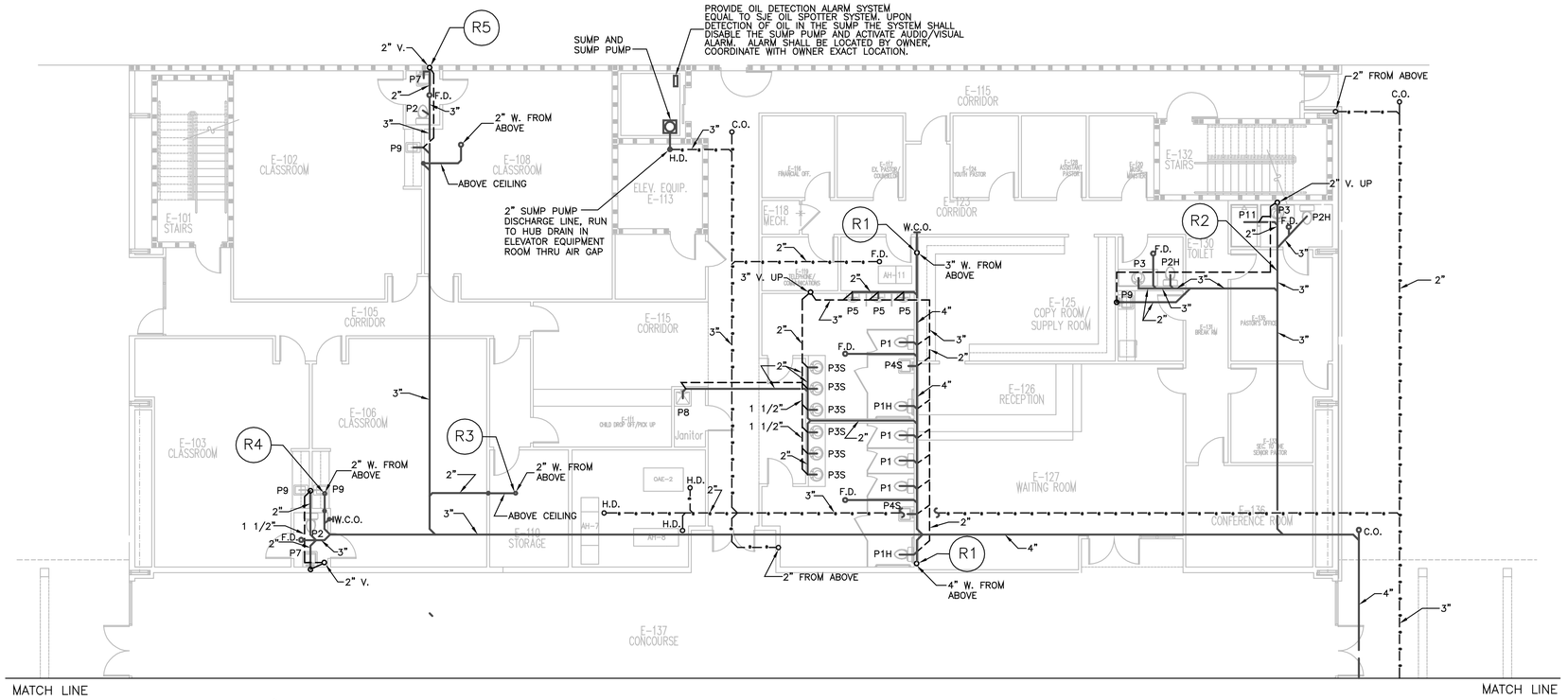
PROJECT NO. 22004

PREPARED BY	REVIEWED BY	ISSUE DATE	SCALE
JM	JM	5/2/24	1/8"=1'

FIRST FLOOR WASTE AND VENT PLAN

CARLISLE BAPTIST CHURCH
REBUILD
835 BERTHA AVENUE
PANAMA CITY FLORIDA

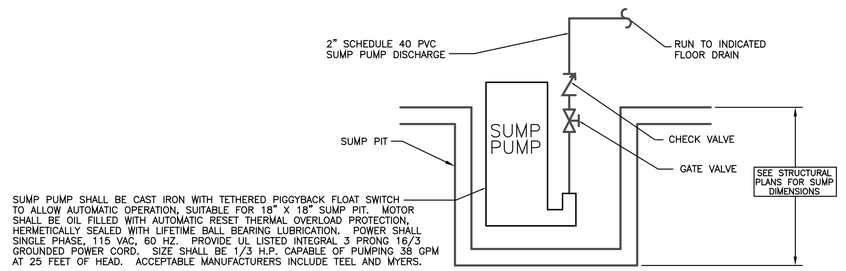
MARK MERCER & ASSOCIATES, INC.



N

PARTIAL FIRST FLOOR WASTE AND VENT PLAN–PHASE II WORK

SCALE: 1/8"=1'



SUMP PUMP DETAIL

SCALE: NONE

John R McDowell

Digitally signed by John R McDowell
Date: 2024.05.02 19:12:10 -05'00'

MCDOWELL ENGINEERING, INC.
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P2

PROJECT NO. 22004

PREPARED BY	REVIEWED BY
JM	JM

ISSUE	DATE	SCALE
	5/2/24	1/8"=1'

FIRST FLOOR WASTE AND VENT PLAN

CARLISLE BAPTIST CHURCH
REBUILD
835 BERTHA AVENUE
PANAMA CITY FLORIDA

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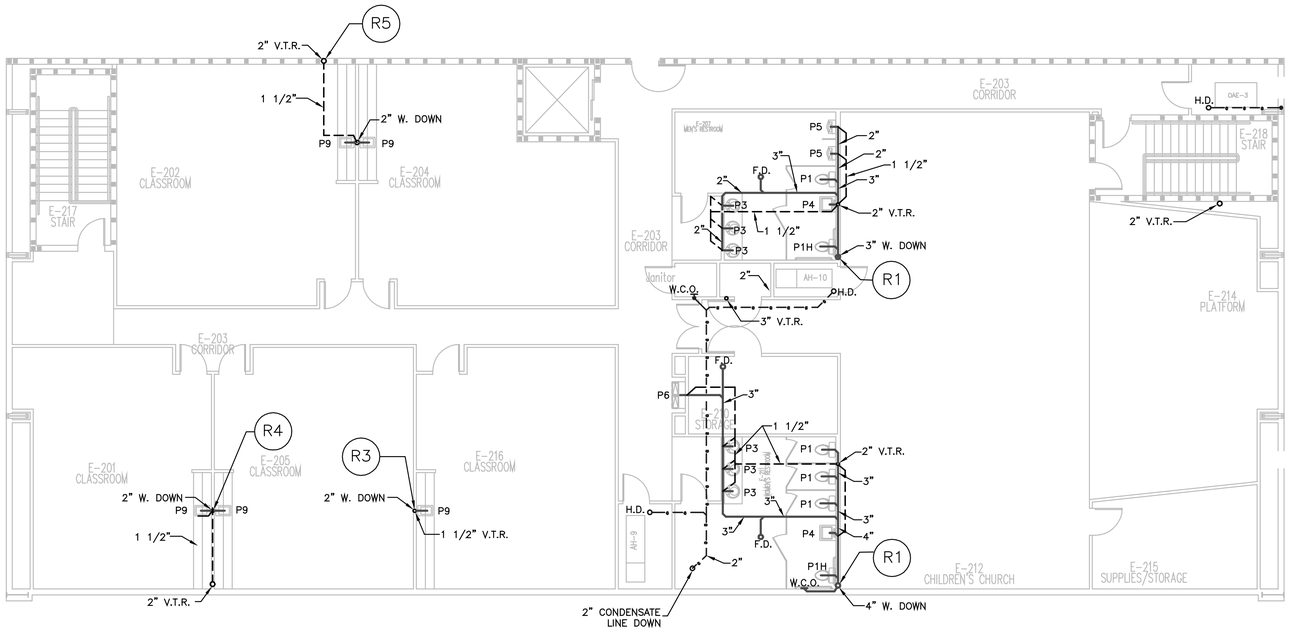


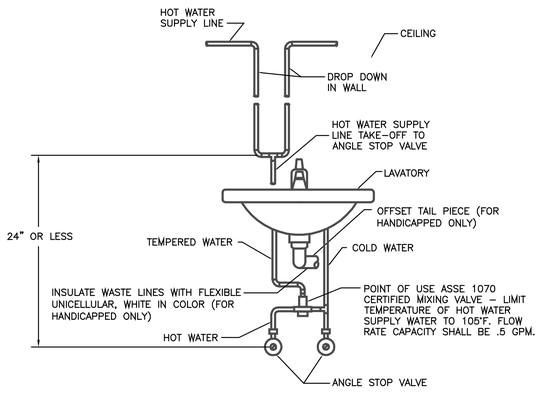
N

SECOND FLOOR WASTE AND VENT PLAN–PHASE II WORK

SCALE: 1/8"=1'

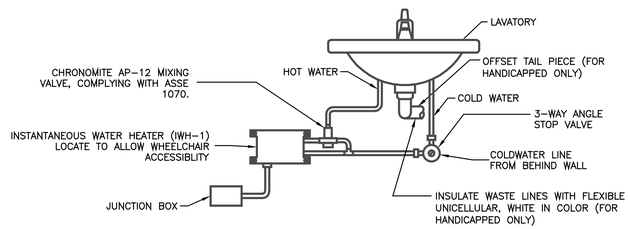
ELECTRIC WATER HEATER SCHEDULE					
MARK	EQUAL TO MANUF./MODEL	VOLUME GALLONS	POWER KW	DIMENSIONS HEIGHT X DIA.	ELECTRICAL V/ø/Hz
EWH–1	STATE ELD52	50	5.5	57" X 22"	208/1/60
EWH–2	STATE ELD52	50	5.5	57" X 22"	208/1/60
EWH–3	STATE ELD52	50	5.5	57" X 22"	208/1/60

INSTANTANEOUS WATER HEATER SCHEDULE					
MARK	FLOW (GPM)	POWER	VOLTS/PH.	AMPS	MANUFACTURER/ MODEL
IWH–1	1.0	3600 WATTS	120v/1ø	30	CHRONOMITE/SR–30L
IWH–2	2.0	6240 WATTS	208v/1ø	30	CHRONOMITE/SR–30



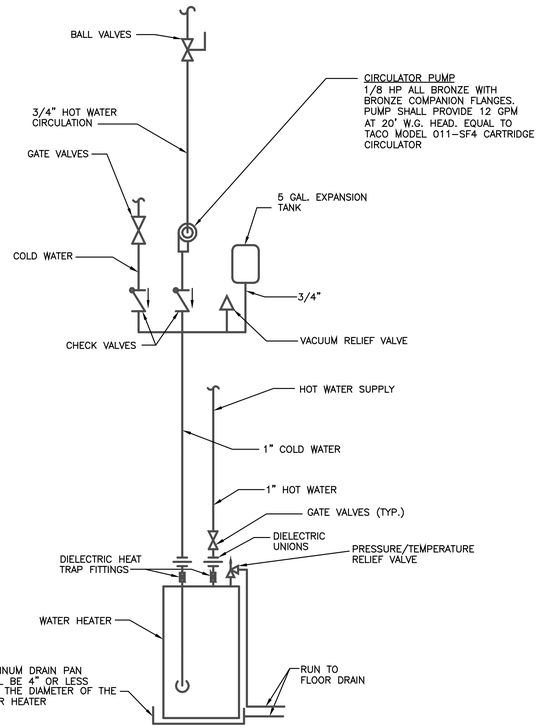
LAVATORY INSTALLATION ON RECIRC SYSTEM

SCALE: NONE



LAVATORY INSTALLATION WITH IWH

SCALE: NONE



WATER HEATER DETAIL

SCALE: NONE

John R McDowell

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Date: 2024.05.02 19:12:41 -05'00'

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P3

PROJECT NO. 22004

PREPARED BY	REVIEWED BY
JM	JM

ISSUE DATE	SCALE
5/2/24	1/8"=1'

SECOND FLOOR WASTE AND VENT PLAN

CARLISLE BAPTIST CHURCH
REBUILD
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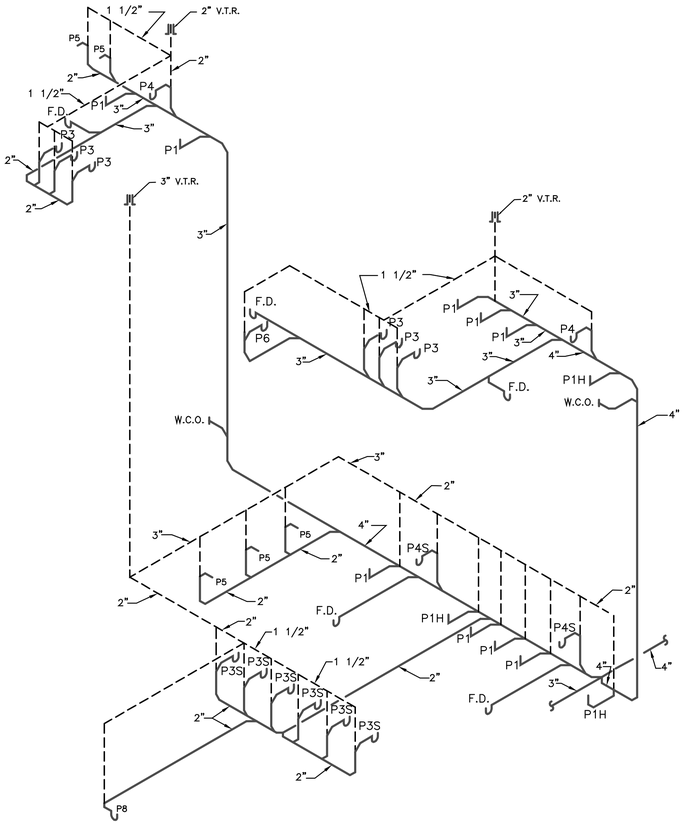
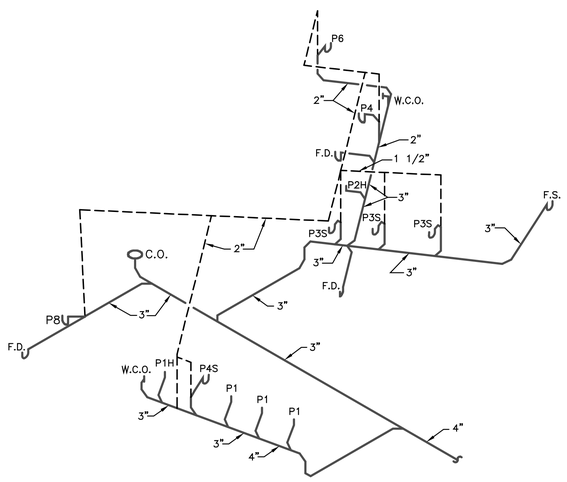
PANAMA CITY FLORIDA

MARK MERCER & ASSOCIATES, INC.



R1 WASTE AND VENT RISER
SCALE: NONE



R6 WASTE AND VENT RISER
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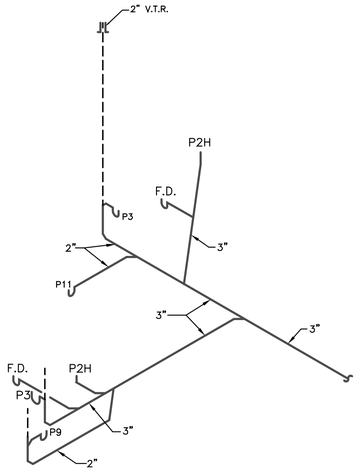

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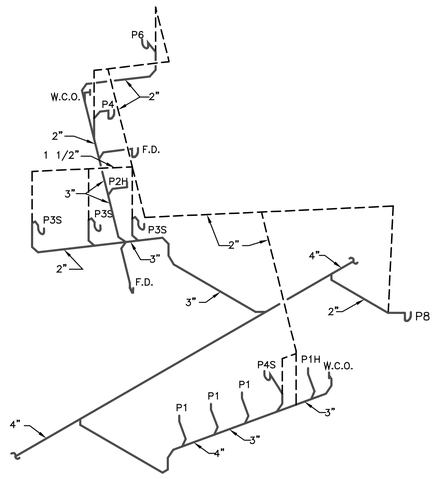
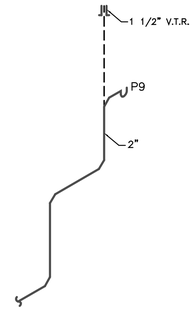
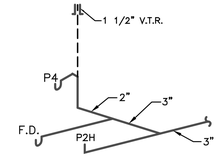


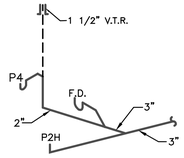
R7 WASTE AND VENT RISER
SCALE: NONE



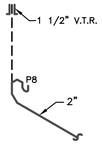
R3 WASTE AND VENT RISER
SCALE: NONE



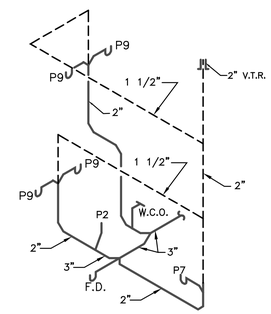
R8 WASTE AND VENT RISER
SCALE: NONE



R9 WASTE AND VENT RISER
SCALE: NONE



R10 WASTE AND VENT RISER
SCALE: NONE



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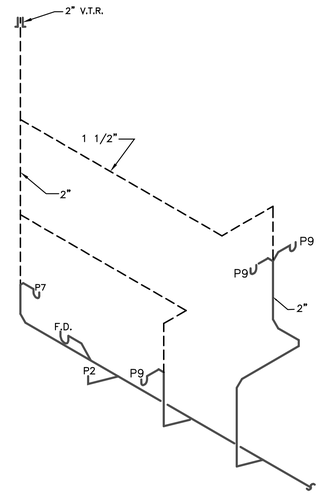
SCALE: NONE



R5 WASTE AND VENT RISER
SCALE: NONE

P4

PROJECT NO. 22004

PREPARED BY	REVIEWED BY
JM	JM
ISSUE DATE	SCALE
5/2/24	1/8"=1'

PLUMBING RISERS

CARLISLE BAPTIST CHURCH
REBUILD
835 BERTHA AVENUE
PANAMA CITY FLORIDA

John R McDowell
Digitally signed by John R McDowell
Date: 2024.05.02 19:13:16 -05'00'

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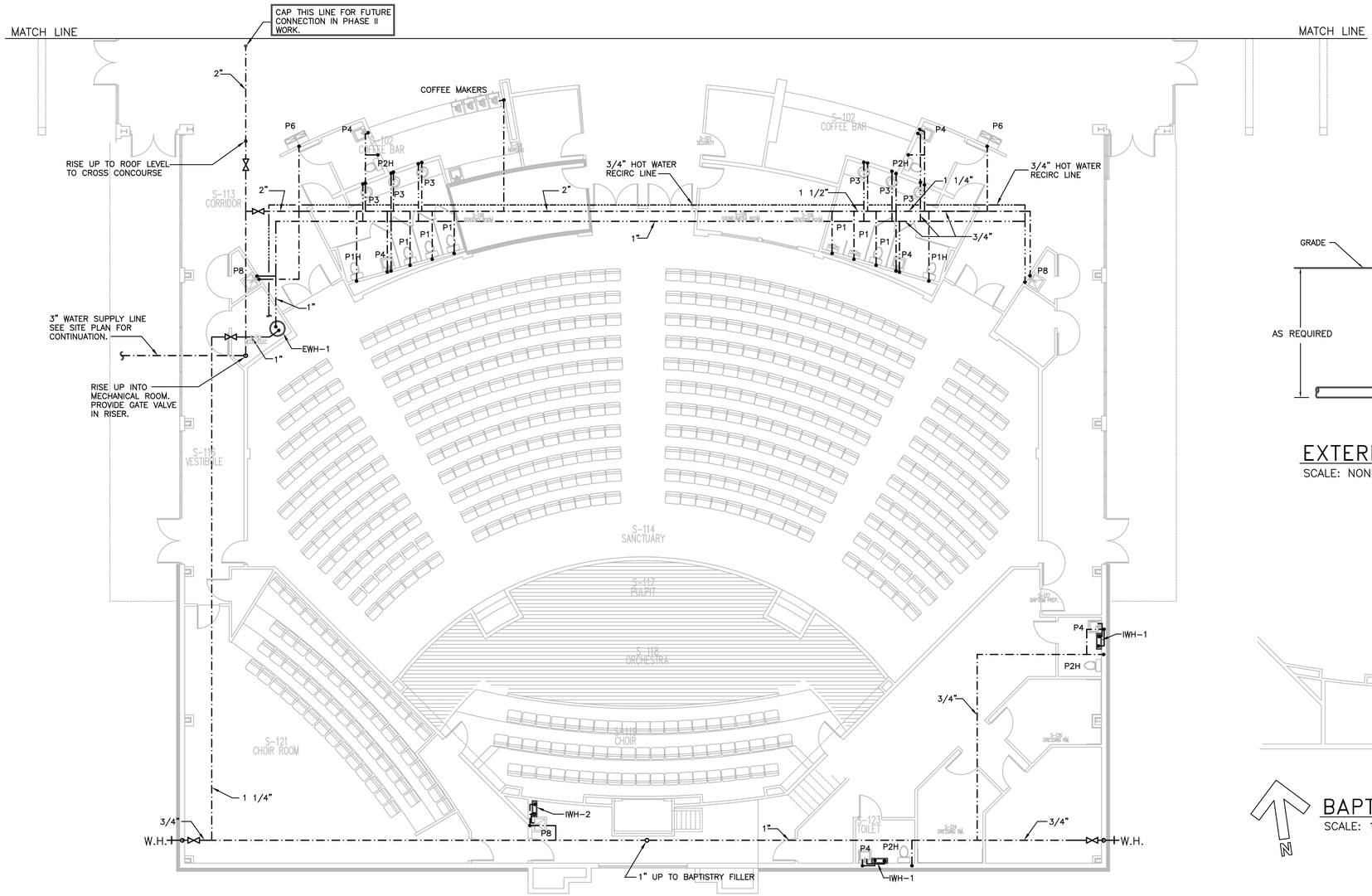
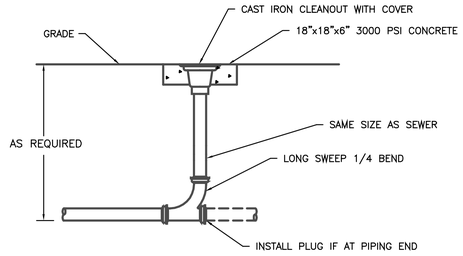


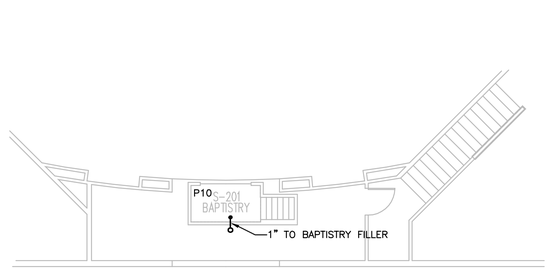
PARTIAL FIRST FLOOR HOT AND COLD WATER SUPPLY PLAN–PHASE I WORK

SCALE: 1/8"=1'



EXTERIOR CLEANOUT DETAIL

SCALE: NONE



BAPTISTRY WATER SUPPLY

SCALE: 1/8"=1'

P5

PROJECT NO. 22004

PREPARED BY	REVIEWED BY
JM	JM

ISSUE	DATE
	5/2/24

SCALE 1/8"=1'

FIRST FLOOR H&C WATER SUPPLY PLAN

CARLISLE BAPTIST CHURCH
REBUILD
835 BERTHA AVENUE
PANAMA CITY FLORIDA

John R McDowell

Digitally signed by John R McDowell
Date: 2024.05.02 19:13:52 -05'00'

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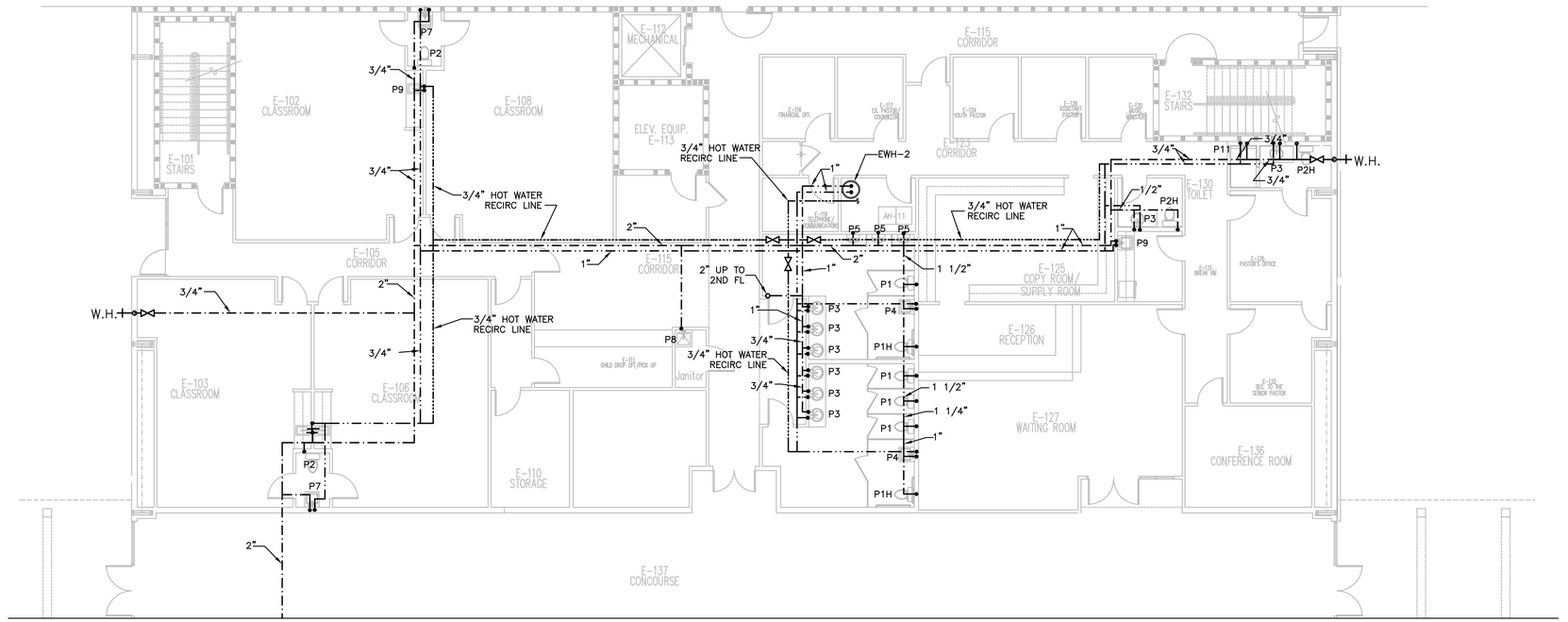
JOHN ROGER MCDOWELL LICENSE No. 38727 STATE OF FLORIDA PROFESSIONAL ENGINEER

MARK MERCER & ASSOCIATES, INC.



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PARTIAL FIRST FLOOR HOT AND COLD WATER SUPPLY PLAN–PHASE II WORK

SCALE: 1/8"=1'

PLUMBING GENERAL NOTES

1. ALL PLUMBING WORK SHALL CONFORM WITH THE 2020 FLORIDA PLUMBING CODE. RUN ALL PLUMBING ABOVE CEILING, CONCEALED IN WALLS AND BELOW GRADE.

2. WATER PIPING 2" AND SMALLER INSIDE THE BUILDING AND TO A POINT 5' OUTSIDE THE BUILDING SHALL BE COPPER TUBING, ASTM B 88, TYPE K FOR UNDERGROUND AND TYPE L FOR ABOVEGROUND, WITH ANSI B16.22 SOLDER JOINT FITTINGS USING ASTM B 32, 95–5 TIN ANTIMONY OR GRADE Sn96 TIN SILVER SOLDER, AND FLUX CONTAINING NOT MORE THAN .2% LEAD.

3. NOT USED.

4. DRAIN, WASTE, CONDENSATE AND VENT (DWV) PIPING SHALL BE POLYVINYL CHLORIDE (PVC) SYSTEM, ASTM D 2665. PLASTIC PIPE, FITTINGS AND COMPONENTS SHALL CONFORM TO AND BE IDENTIFIED WITH THE MARK INDICATING CONFORMANCE TO NSF 14.

5. GATE VALVES SHALL BE MSS SP–80, CLASS 125. BALL VALVES, COPPER ALLOY FULL PORT DESIGN MAY BE USED IN LIEW OF GATE VALVES.

6. PROVIDE 1/4 TURN CONTROL–STOP VALVES IN EACH SUPPLY TO EACH FIXTURE. THE FINISH OF FITTINGS, ACCESSORIES AND SUPPLIES EXPOSED TO VIEW SHALL BE CHROMIUM PLATED PER ANSI A122.18.1M.

7. PROVIDE CHROMIUM PLATED ESCUTCHEON PLATES FOR PIPING PASSING THROUGH WALLS EXPOSED TO VIEW.

8. COMBINATION PRESSURE/TEMPERATURE RELIEF VALVE SHALL BE BRONZE BODY, BRASS TRIM, STAINLESS STEEL SPRING AND SILICONE SEAT DISC WITH TEST LEVER. VALVES SHALL BE ASME LISTED AND RATED.

9. ALL HOT WATER LINES SHALL BE INSULATED WITH 1", AND COLD WATER LINES WITH 1/2" FLEXIBLE UNICELLULAR INSULATION, ASTM C 534.

10. FLOOR CLEANOUTS SHALL BE ANSI A112.36.2M, CAST–IRON OR DUCTILE–IRON CLEANOUT WITH FLANGE, ADJUSTABLE HEIGHT POLISHED BRONZE, NICKEL BRONZE, STAINLESS STEEL, OR CHROMIUM–PLATED COPPER ALLOY RIM AND SCORIATED FLOOR PLATE WITH "CO" CAST IN THE PLATE, AND COUNTERSUNK SCREWS FOR INSTALLING FLOOR PLATE FLUSH WITH FINISHED FLOOR. PROVIDE THREADED BRONZE OR THERMOPLASTIC OR PVC PLASTIC CLEANOUT PLUGS. FOR WALL CLEANOUTS PROVIDE POLISHED STAINLESS OR CHROMIUM–PLATED COPPER ALLOY COVER PLATE AND SECURE TO CLEANOUT PLUG WITH COUNTERSUNK STAINLESS STEEL SCREW.

11. WATER HAMMER ARRESTORS SHALL BE PDI WH201.

12. PROVIDE ADEQUATE SUPPORT FOR PIPING BY FASTENING TO THE BUILDING STRUCTURE. PROVIDE INSULATION PROTECTION SHIELDS FOR INSULATED PIPING. HANGERS SHALL CONFORM TO MSS SP58 AND MSS SP69. VERTICAL METAL PIPING SHALL BE SUPPORTED AT EACH FLOOR BUT NOT MORE THAN 10 FOOT INTERVALS. SUPPORT VERTICAL PLASTIC PIPING AT EACH FLOOR AND AT MIDPOINT BETWEEN FLOORS, BUT AT NO MORE THAN 5–FOOT INTERVALS. HORIZONTAL PLASTIC PIPE SHALL BE SUPPORTED AT 4 FOOT INTERVALS AND AT EACH CHANGE IN DIRECTION. SUPPORT COPPER AND STEEL PIPING AT 6 FOOT INTERVALS FOR 1 1/4" AND LESS AND AT 8 FOOT INTERVALS FOR 1 1/2" AND 2" PIPING.

13. WATER PIPING ROUTED ABOVE CELINGS AND IN EXTERIOR WALLS SHALL BE ROUTED ON HEATED SIDE (UNDERSIDE) OF CEILING INSULATION AND HEATED SIDE (INSIDE) OF WALL INSULATION.

14. PROVIDE PIPE SLEEVES WHERE PIPING PASSES THROUGH WALLS, FLOORS, ROOFS, AND PARTITIONS. SECURE SLEEVES IN PROPER POSITION AND LOCATION DURING CONSTRUCTION. PROVIDE SLEEVES OF SUFFICIENT LENGTH TO PASS THROUGH ENTIRE THICKNESS OF WALLS, FLOORS, ROOFS AND PARTITIONS. PROVIDE NOT LESS THAN .25 INCH SPACES BETWEEN EXTERIOR OF PIPING OR PIPE INSULATION AND INTERIOR OF SLEEVE. FIRMLY PACK SPACE WITH INSULATION AND CALK AT BOTH ENDS OF THE SLEEVE WITH PLASTIC WATERPROOF CEMENT WITH WILL DRY TO A FIRM BUT PLIABLE MASS OR PROVIDE A SEGMENTED ELASTOMERIC SEAL. SEAL BOTH ENDS OF PENETRATIONS THROUGH FIRE WALLS AND FIRE FLOORS TO MAINTAIN FIRE RESISTIVE INTEGRITY WITH UL LISTED FILL, VOID OR CAVITY MATERIAL. EXTEND SLEEVES IN FLOOR SLABS 3 INCHES ABOVE FINISHED FLOOR, EXCEPT SLEEVES ARE NOT REQUIRED WHERE DWV PASSES THROUGH CONCRETE FLOOR SLABS LOCATED ON GRADE.

15. FLOOR DRAINS FOR CONCRETE ON GRADE SHALL HAVE CLAMPING RINGS FOR USE WITH MEMBRANE WATERPROOPING WITH DOUBLE DRAINAGE FLANGE. OTHER FLOOR DRAINS SHALL BE SUITABLE WITH FLOORING MATERIAL. FLOOR DRAINS SHALL BE 5" ROUND NICKEL BRONZE STAINER, ADJUSTABLE COLLAR AND P–TRAP. FLOOR DRAINS SHALL HAVE RUBBER TRAP GUARD INSTALLED TO PROTECT TRAP SEAL AND PREVENT SEWER GASSES FROM ENTERING THE SPACE. DRAINS SHALL BE FOR PVC PIPE CONNECTION. UNLESS OTHERWISE INDICATED, FLOOR DRAINS SHALL BE 3" FOR SANITARY AND 2" FOR CONDENSATE. PIPE SIZE. TRAP GUARD SHALL BE EQUAL TO PROVENT TRAP GUARD SYSTEM.

16. WALL HYDRANTS SHALL BE WATTS HY–330 ENCASED SELF DRAINING RECESSED IN WALL, NARROW WALL HYDRANT WITH ANTI–SIPHON VANDAL RESISTANT VACUUM BREAKER. PROVIDE OPERATING KEY. PROVIDE A GATE VALVE AT AN ACCESSIBLE LOCATION FOR EACH WALL HYDRANT TO ALLOW SERVICING. MOUNT 24" ABOVE GRADE.

17. ICE MAKER BOXES SHALL BE SPECIFICALLY MADE FOR ICE MAKERS, WASHER BOXES NOT ALLOWED.

18. DISINFECT NEW WATER PIPING IN ACCORDANCE WITH FLORIDA PLUMBING CODE.

19. IN LIEU OF COPPER. WATER PIPING INSIDE THE BUILDING AND TO A POINT 5' OUTSIDE THE BUILDING MAY BE CPVC, ASTM D 2846, CPVC SHALL HAVE A FLAME AND SMOKE RATING LESS THAN 25/50 RESPECTIVELY WHEN TESTED TO UL ASTM E84 (TEST FOR SURFACE BURNING CHARACTERISTICS OF BUILDING MATERIALS) PROVIDE TRANSITION UNION CONNECTORS OR THREADED GATE VALVE BETWEEN COPPER TUBING AND CHLORINATED POLYVINYL CHLORIDE (CPVC) PIPING PROVIDE MALE THREADED ADAPTERS WITH PTFE (POLYTETRAFLUOROETHYLENE) PIPE THREAD PASTE FOR THREADED CONNECTIONS TO VALVES AND EQUIPMENT.

John R McDowell

Digitally signed by John R McDowell
Date: 2024.05.02 19:14:23 -05'00'

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JOHN ROGER MCDOWELL LICENSE No. 38727 STATE OF FLORIDA PROFESSIONAL ENGINEER

MARK MERCER & ASSOCIATES, INC.

CARLISLE BAPTIST CHURCH
REBUILD
835 BERTHA AVENUE
PANAMA CITY FLORIDA

PREPARED BY	REVIEWED BY
JM	JM

ISSUE	DATE	SCALE
	5/2/24	1/8"=1'

PROJECT NO. 22004

FIRST FLOOR H&C WATER SUPPLY PLAN

P6

PLUMBING FIXTURES

(P1H) WHEEL CHAIR FLUSH VALVE TYPE CLOSETS, ASME A112.19.2M, FLOOR MOUNTED WHITE VITREOUS CHINA, SIPHON JET, WHITE ELONGATED OPEN–FRONT SEAT AND ASME A112.19.5 TRIM. PROVIDE LARGE DIAPHRAGM (NOT LESS THAN 2.625 INCHES UPPER CHAMBER INSIDE DIAMETER AT THE POINT WHERE THE DIAPHRAGM IS SEALED BETWEEN THE UPPER AND LOWER CHAMBERS) NONHOLD–OPEN FLUSH VALVE OF CHROME PLATED CAST BRASS, INCLUDING VACUUM BREAKER AND ANGLE (CONTROL–STOP) VALVE WITH BACK CHECK, MOUNTED APPROX. 39 TO 44 INCHES ABOVE FLOOR. THE WATER FLUSHING VOLUME OF THE FLUSH VALVE AND WATER CLOSET COMBINATION SHALL NOT EXCEED 1.6 GALLONS PER FLUSH. HEIGHT TO TOP OF SEAT SHALL BE 17 TO 19 INCHES ABOVE FLOOR. FLUSH VALVE SHALL BE ACTIVATED WITH INFRARED HANDS OFF SENSING, HARD WIRED WITH BATTERY BACKUP.

(P1) FLUSH VALVE TYPE CLOSETS, ASME A112.19.2M, FLOOR MOUNTED WHITE VITREOUS CHINE, SIPHON JET, WHITE ELONGATED OPEN–FRONT SEAT AND ASME A112.19.5 TRIM. PROVIDE LARGE DIAPHRAGM (NOT LESS THAN 2.625 INCHES UPPER CHAMBER INSIDE DIAMETER AT THE POINT WHERE THE DIAPHRAGM IS SEALED BETWEEN THE UPPER AND LOWER CHAMBERS) NOHOLD–OPEN FLUSH VALVE OF CHROME PLATED CAST BRASS, INCLUDING VACUUM BREAKER AND ANGLE (CONTROL–STOP) VALVE WITH BACK CHECK, MOUNTED APPROX. 39 TO 44 INCHES ABOVE FLOOR. THE WATER FLUSHING COLUMN OF THE FLUSH VALVE AND WATER CLOSET COMBINATION SHALL NOT EXCEED 1.6 GALLONS PER FLUSH. FLUSH VALVE SHALL BE ACTIVATED WITH INFRARED HANDS OFF SENSING, HARD WIRED WITH BATTERY BACKUP.

(P2) TANK TYPE WATER CLOSETS SHALL BE ASME A112.19.2M, CLOSE COUPLED, VITREOUS CHINA, WASTER CONSERVATION TYPE, FLOOR–MOUNTED, WALL OUTLET, SIPHON JET ELONGATED BOWL SOLID PLASTIC ELONGATED CLOSED FRONT SEAT WITH COVER, AND ANSI A112.19.5 TRIM. NON–FLOAT SWING TYPE FLUSH VALVES ARE NOT ACCEPTABLE. WATER FLUSHING VOLUME SHALL NOT EXCEED 1.6 GALLONS PER FLUSH.

(P2H) TANK TYPE WATER CLOSETS SHALL BE ASME A112.19.2M, CLOSE COUPLED, VITREOUS CHINA, WASTER CONSERVATION TYPE, FLOOR–MOUNTED, WALL OUTLET, SIPHON JET ELONGATED BOWL SOLID PLASTIC ELONGATED CLOSED FRONT SEAT WITH COVER, AND ANSI A112.19.5 TRIM. NON–FLOAT SWING TYPE FLUSH VALVES ARE NOT ACCEPTABLE. WATER FLUSHING VOLUME SHALL NOT EXCEED 1.6 GALLONS PER FLUSH. HEIGHT TO TOP OF SEAT SHALL BE 17 TO 19 INCHES ABOVE FLOOR.

(P3S) LAVATORY SHALL BE COUNTERTOP, ASME/ANSI A112.19.1M, WHITE VITREOUS CHINA, MINIMUM DIMENSIONS OF 19 INCHES WIDE BY 16 INCHES FRONT TO REAR, AND SELF RIMMING TYPE. PROVIDE SINGLE LEVER FAUCET, PERFORATED GRID STRAINERS, ADJUSTABLE P–TRAP, FURNISH TEMPLATE AND MOUNTING BY LAV MANUFACTURER. FAUCET VALVE SHALL BE ACTIVATED WITH INFRARED HANDS OFF SENSING, HARD WIRED WITH BATTERY BACKUP.

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(P4S) HANDICAPPED WALL HUNG LAVATORY – SHALL BE ASME/ANSI A112.19.2M LAVATORY WHITE VITREOUS CHINA WITH ASME A112.6.1M CONCEALED ARM CARRIER SUPPORT, STRAIGHT BACK TYPE, MINIMUM DIMENSIONS OF 20 INCHES WIDE BY 18 INCHES FRONT TO REAR, 29 INCHES MINIMUM CLEARANCE FROM BOTTOM OF FRONT RIM TO FLOOR, 34 INCHES FRONT TIM HEIGHT ABOVE FLOOR. PROVIDE ASME A112.18.1M COPPER ALLOY CENTER SET FAUCETS, GOOSENECK SPOUT WITH AERATOR 5 INCHES ABOVE RIM, 4–INCH WRIST ACTION HANDLES, PERFORATED GRID STRAINERS WITH OFFSET TAILPIECE, AND 1.25–INCH ADJUSTABLE P–TRAP. FAUCETS WITH WRIST ACTION HANDLES SHALL OPEN WITHIN ON–QUARTER TURN IN OPPOSITE DIRECTIONS. INSULATE EXPOSED WASTE LINES AND SUPPLY LINES BELOW LAVATORY. FAUCET VALVE SHALL BE ACTIVATED WITH INFRARED HANDS OFF SENSING, HARD WIRED WITH BATTERY BACKUP.

(P4) HANDICAPPED WALL HUNG LAVATORY – SHALL BE ASME/ANSI A112.19.2M LAVATORY WHITE VITREOUS CHINA WITH ASME A112.6.1M CONCEALED ARM CARRIER SUPPORT, STRAIGHT BACK TYPE, MINIMUM DIMENSIONS OF 20 INCHES WIDE BY 18 INCHES FRONT TO REAR, 29 INCHES MINIMUM CLEARANCE FROM BOTTOM OF FRONT RIM TO FLOOR, 34 INCHES FRONT TIM HEIGHT ABOVE FLOOR. PROVIDE ASME A112.18.1M COPPER ALLOY CENTER SET FAUCETS, GOOSENECK SPOUT WITH AERATOR 5 INCHES ABOVE RIM, 4–INCH WRIST ACTION HANDLES, PERFORATED GRID STRAINERS WITH OFFSET TAILPIECE, AND 1.25–INCH ADJUSTABLE P–TRAP. FAUCETS WITH WRIST ACTION HANDLES SHALL OPEN WITHIN ON–QUARTER TURN IN OPPOSITE DIRECTIONS. INSULATE EXPOSED WASTE LINES AND SUPPLY LINES BELOW LAVATORY.

(P5) FLUSH VALVE TYPE URINALS SHALL BE ASME A112.19.2M, WHITE VITREOUS CHINA, WALL MOUNTED, WALL OUTLET, SIPHON JET, INTEGRAL TRAP, EXTENDED SIDE SHIELDS, AND ASME A112.19.5 TRIM. PROVIDE LARGE DIAPHRAGM (NOT LESS THAN 2.625 INCHES UPPER CHAMBER INSIDE DIAMETER AT THE POINT WHERE THE DIAPHRAGM IS SEALED BETWEEN THE UPPER AND LOWER CHAMBERS), NONHOLD–OPEN FLUSH VALVE OF CHROME PLATED CAST BRASS, INCLUDING VACUUM BREAKER AND ANGLE (CONTROL–STOP) VALVE WITH BACK CHECK. WATER FLUSHING VOLUME OF THE FLUSH VALVE AND URINAL COMBINATION SHALL NOT EXCEED 1.0 GALLONS PER FLUSH FROM 10 TO 90 PSI. PROVIDE ASME A112.6.1M CONCEALED WALL HANGERS WITH THRU–BOLTS AND BACK PLATES FOR MOUNTING. AMERICAN STANDARD WASH BROOK URINAL. IN BATHROOMS WHERE THERE ARE MULTIPLE URINALS MOUNT ONE END URINAL AT HANDICAPPED HEIGHT STANDARDS. FLUSH VALVE SHALL BE ACTIVATED WITH INFRARED HANDS OFF SENSING, HARD WIRED WITH BATTERY BACKUP.

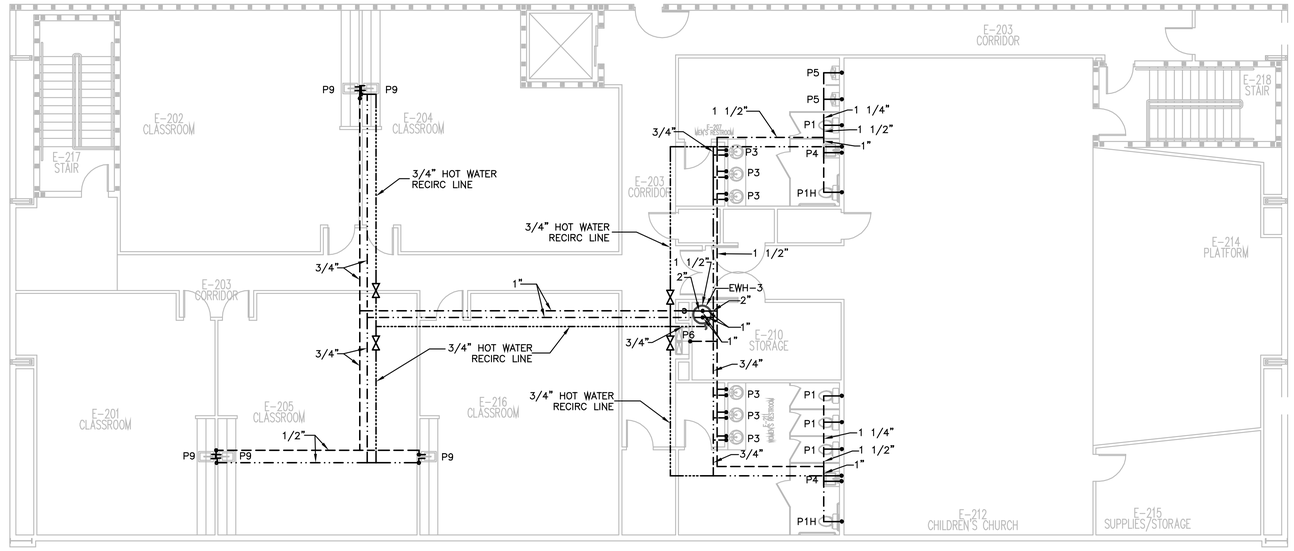
(P6) TWO LEVEL WATER COOLER ARI 1010, TWO LEVEL WALL–MOUNTED BUBBLER STYLE AIR–COOLED CONDENSING UNIT, 8.0 GPH MINIMUM CAPACITY, STAINLESS STEEL SPLASH RECEPTOR, AND ALL STAINLESS STEEL CABINET, WITH 27" MIN. KNEE CLEARANCE FROM FRONT BOTTOM OF UNIT TO FLOOR AND 36 INCH MAX. SPOUT HEIGHT ABOVE FLOOR FOR LOWER BUBBLER. BUBBLERS SHALL ALSO BE CONTROLLED BY PUSH LEVERS, BY PUSH BARS OR TOUCH PADS. EQUAL TO OASIS TO OASIS MODEL PACSL, PROVIDE APRON ACCESSORY FOR UPPER UNIT.

(P7) HANDICAPPED WALL HUNG LAVATORY – SHALL BE ASME/ANSI A112.19.2M LAVATORY WHITE VITREOUS CHINA WITH ASME A112.6.1M CONCEALED ARM CARRIER SUPPORT, STRAIGHT BACK TYPE, MINIMUM DIMENSIONS OF 20 INCHES WIDE BY 18 INCHES FRONT TO REAR, 29 INCHES MINIMUM CLEARANCE FROM BOTTOM OF FRONT RIM TO FLOOR, 34 INCHES FRONT TIM HEIGHT ABOVE FLOOR. PROVIDE ASME A112.18.1M COPPER ALLOY CENTER SET FAUCETS, GOOSENECK SPOUT WITH AERATOR 5 INCHES ABOVE RIM, 4–INCH WRIST ACTION HANDLES, PERFORATED GRID STRAINERS WITH OFFSET TAILPIECE, AND 1.25–INCH ADJUSTABLE P–TRAP. FAUCETS WITH WRIST ACTION HANDLES SHALL OPEN WITHIN ON–QUARTER TURN IN OPPOSITE DIRECTIONS. INSULATE EXPOSED WASTE LINES AND SUPPLY LINES BELOW LAVATORY.

(P8) MOP SINK PRE CAST TERRAZZO: TERRAZZO SHALL BE MADE OF MARBLE CHIPS CAST IN WHITE PORTLAND CEMENT. PROVIDE BRASS BODY DRAINS WITH NICKEL BRONZE STRAINERS CAST INTEGRAL WITH TERRAZZO. DIMENSIONS 24" X 24" X 10". EQUAL TO MUST DURASTONE MODEL 63M. PROVIDE ANSI A112.18.1M COPPER ALLOY BACK–MOUNTED COMBINATION FAUCETS WITH VACUUM BREAKER AND 0.75–INCH HOSE THREADS.

(P9) STAINLESS STEEL HAND SINK SHALL BE 20–GAUGE STAINLESS STEEL APPROX. 17"x 15" WITH 14"x 10" BOWL, 5" DEEP, WITH NO–DRIP COUNTERTOP EDGE. PROVIDE CHROME PLATED BRASS GOOSENECK FAUCET MOUNTED ON THE SPLASH BACK. PROVIDE 3 1/2" BASKET DRAIN AND WALL MOUNTING BRACKET.

(P11) SHOWER FITTINGS, ASME A112.18.1M, BALL JOINT, SELF CLEANING, ADJUSTABLE SPRAY PATTERN SHOWER HEAD WITH 2.5 GPM FLOW CONTROL DEVICE, CONNECTED TO CONCEALED PIPE CONNECTED TO COPPER ALLOY ANTI–SCALD PRESSURE BALANCED SINGLE CONTROL TYPE MIXING VALVES WITH FRONT ACCESS INTEGRAL SCREWDRIVER STOPS. ANCHOR THE MIXING VALVES AND PIPE TO SHOWER HEAD IN WALL TO PREVENT MOVEMENT. PROVIDE BRASS BODY DRAIN WITH NICKEL BRONZE STRAINER.



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SECOND FLOOR HOT AND COLD WATER SUPPLY PLAN–PHASE II WORK

SCALE: 1/8"=1'

PLUMBING FIXTURE SCHEDULE

MARK	FIXTURE	ROUGH–IN SIZE (INCHES) HW	CW	WASTE	VENT	REMARKS
P1H	WATER CLOSET	––	1	3	2	HANDICAPPED, FLOOR MOUNTED, FLUSH VALVE, TOUCHLESS
P1	WATER CLOSET	––	1	3	2	FLOOR MOUNTED, FLUSH VALVE, TOUCHLESS
P2H	WATER CLOSET	––	1/2	3	2	HANDICAPPED, FLOOR MOUNTED, TANK TYPE
P2	WATER CLOSET	––	1/2	3	2	FLOOR MOUNTED, TANK TYPE
P3S	LAVATORY	1/2	1/2	1 1/4	1 1/4	COUNTERTOP, TOUCHLESS
P3	LAVATORY	1/2	1/2	1 1/4	1 1/4	COUNTERTOP
P4S	LAVATORY	1/2	1/2	1 1/4	1 1/4	WALL HUNG HANDICAPPED ACCESSIBLE, TOUCHLESS
P4	LAVATORY	1/2	1/2	1 1/4	1 1/4	WALL HUNG HANDICAPPED ACCESSIBLE
P5	URINAL	––	3/4	2	1 1/2	WALL MOUNTED FLUSH VALVE
P6	WATER COOLER	––	1/2	1 1/4	1 1/4	TWO LEVEL WATER COOLER (HANDICAPPED ACCESSIBLE)
P7	LAVATORY	1/2	1/2	1 1/4	1 1/4	WALL HUNG
P8	MOP SINK	1/2	1/2	2	1 1/2	FLOOR MOUNTED
P9	SINK	1/2	1/2	1 1/2	1 1/2	SINGLE COMPARTMENT STAINLESS STEEL SINK
P10	BAPTISTRY	==	1	2	––	OFCI
P11	SHOWER	1/2	1/2	2	1 1/2	
	COFFEE MAKER	––	1/2	3/4	NOTE 1	
F.D.	FLOOR DRAIN	––	––	3	––	

NOTES:
1. INDIRECT WASTE, RUN FIXTURE WASTE LINE TO NEAREST FLOOR SINK.
2. USE STAINLESS STEEL BRAIDED SUPPLY LINES TO ALL FIXTURES.
3. ALL FIXTURES SHALL BE APPROVED BY OWNER.

John R McDowell

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Date: 2024.05.02 19:14:59 -05'00'

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JOHN ROGER MCDOWELL LICENSE No. 38727 STATE OF FLORIDA PROFESSIONAL ENGINEER

P7

PROJECT NO. 2210024

PREPARED BY	REVIEWED BY
SKH	JM

ISSUE DATE 5/28/23

SCALE 1/8"=1'

SECOND FLOOR H&C WATER SUPPLY PLAN

CARLISLE BAPTIST CHURCH REBUILD
835 BERTHA AVENUE
PANAMA CITY FLORIDA

MARK MERCER & ASSOCIATES, INC.

STRUCTURAL NOTES:

1. GENERAL
- 1.1. COORDINATE ALL INFORMATION CONTAINED IN THIS STRUCTURAL SET WITH THE ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING AND OTHER TRADES. CONTACT BTK ENGINEERING IF CONFLICT IS FOUND.
- 1.2. SEE ARCHITECTURAL DRAWINGS FOR FINISHES.
- 1.3. REVIEW OF SUBMITTALS AND/OR SHOP DRAWINGS BY THE STRUCTURAL ENGINEER DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY TO REVIEW AND CHECK SHOP DRAWINGS BEFORE SUBMITTAL TO THE STRUCTURAL ENGINEER. THE CONTRACTOR REMAINS SOLELY RESPONSIBLE FOR ERRORS AND OMISSIONS ASSOCIATED WITH THE PREPARATION OF SHOP DRAWINGS AS THEY PERTAIN TO MEMBER SIZES, DETAILS, AND DIMENSIONS SPECIFIED IN THE CONTRACT DOCUMENTS.
- 1.4. SHOP DRAWINGS REQUIRED:
  - 1.4.1. CONCRETE REINFORCEMENT/EMBEDS FABRICATION DRAWINGS
  - 1.4.2. STRUCTURAL STEEL - FABRICATION/ERECTION DRAWINGS
  - 1.4.3. STAIRS - FABRICATION/ERECTION DRAWINGS
  - 1.4.4. LIGHT GAUGE METAL STUD FRAMING (EXTERIOR) - ENGINEERED
  - 1.4.5. METAL BUILDING - ENGINEERED SYSTEM.
  - 1.4.6. MASONRY - PRODUCT DATA AND REINFORCEMENT
- 1.5. SUBMITTALS REQUIRED:
  - 1.5.3. SOILS COMPACTION REPORTS.
  - 1.5.4. CONCRETE MIX DESIGN.
  - 1.5.5. MORTAR MIX DESIGN
  - 1.5.6. CONCRETE TEST REPORTS.
  - 1.5.7. MASONRY UNIT - PRODUCT DATA
  - 1.5.8. METAL DECK - PRODUCT DATA
- 1.6. CONTRACTOR IS RESPONSIBLE FOR MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES OF CONSTRUCTION.
- 1.7. SITE AND CONSTRUCTION SHALL COMPLY WITH OSHA OR EM385 AT ALL TIMES.
- 1.8. SITE SHALL BE MAINTAINED IN A CLEAN, ORDERLY, AND SAFE MANNER AT ALL TIMES.

2. SOILS
- 2.1. CONTRACTOR SHALL PROVIDE A GEOTECHNICAL REPORT WITH A MINIMUM OF 4 SOIL BORING TO A MINIMUM DEPTH OF 25' INCLUDING SPT WITH BLOW COUNT NUMBERS.
- 2.2. CONTRACTOR SHALL VERIFY SOIL IS FREE OF MUCK, CLAY, SILT, ORGANICS, OR OTHER UNSUITABLE MATERIALS.
- 2.3. CONTRACTOR SHALL REMOVE ALL LAYERS OF SOIL THAT CONTAIN ORGANICS.
- 2.4. CONTRACTOR SHALL VERIFY FLOOD ZONES AND WATER TABLES AND ASSURE FINISH FLOOR IS AT THE REQUIRED ELEVATION.
- 2.5. CONTRACTOR SHALL VERIFY AND COMPLY WITH ALL BUILDING SETBACKS AND EASEMENTS.
- 2.6. SOIL SHALL BE CAPABLE OF SUPPORTING AND ALLOWABLE BEARING PRESSURE OF 2000 PSF.
- 2.7. CONTRACTOR SHALL VERIFY ALL SOILS ARE COMPACTED TO 98% MAXIMUM DENSITY (MODIFIED PROCTOR).
- 2.8. ALL SOILS UNDER SLABS SHALL BE TREATED FOR TERMITES.
- 2.9. STRUCTURAL BACKFILL AND FILL SOILS
  - 2.9.1. COMPLY WITH GEOTECHNICAL REPORT FOR STRUCTURAL FILL OR FILL REQUIRED FOR SITE DEVELOPMENT. THIS SHOULD BE PLACED IN LOOSE LIFTS NOT EXCEEDING 12 INCHES IN THICKNESS WHEN COMPACTED BY THE USE OF A VIBRATORY DRUM ROLLER. THE LIFT THICKNESS SHOULD BE REDUCED TO 8 INCHES IF THE ROLLER OPERATES IN THE STATIC MODE OR IF TRACK-MOUNTED COMPACTION EQUIPMENT IS USED. IF HAND-HELD COMPACTION EQUIPMENT IS USED, THE LIFT THICKNESS SHOULD BE FURTHER REDUCED TO 6 INCHES. STRUCTURAL FILL IS DEFINED AS A NON-PLASTIC, INORGANIC, GRANULAR SOIL HAVING LESS THAN 10 PERCENT MATERIAL PASSING THE NO. 200 MESH SIEVE AND CONTAINING LESS THAN 4 PERCENT ORGANIC MATERIAL. TYPICALLY, THE MATERIAL SHOULD EXHIBIT MOISTURE CONTENTS WITHIN ±2 PERCENT OF THE MODIFIED PROCTOR OPTIMUM MOISTURE CONTENT (ASTM D 1557) DURING THE COMPACTION OPERATIONS. COMPACTION SHOULD CONTINUE UNTIL DENSITIES OF AT LEAST 98 PERCENT OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY (ASTM D 1557) HAVE BEEN ACHIEVED WITHIN EACH LIFT OF THE COMPACTED STRUCTURAL FILL.

3. CONCRETE
- 3.1. FOOTINGS SHOWN IN THIS SET OF DRAWINGS NOT FINAL SUBJECT TO CHANGE PENDING THE METAL BUILDING SUPPORT REACTIONS AND THE GEOTECHNICAL REPORT. NO CONSTRUCTION MAY TAKE PLACE UNTIL THESE TWO SUBMITTALS HAVE BEEN REVIEWED AND ANY ADJUSTMENT MADE TO THESE DRAWINGS.
- 3.2. CAST IN PLACE CONCRETE SHALL BE IN ACCORDANCE WITH ACI 318-14.
- 3.3. CONCRETE SHALL HAVE THE FOLLOWING MINIMUM COMPRESSIVE BREAK STRENGTH AFTER 28 DAYS.
  - 3.3.1. COLUMN FOOTINGS 3000 PSI
  - 3.3.2. WALL FOOTINGS 4000 PSI
  - 3.3.3. BOND BEAMS AND HEADERS 4000 PSI 450 PSI FLEXURAL
  - 3.3.4. SLAB 4500 PSI 500 PSI FLEXURAL
- 3.4. CONCRETE MIX DESIGN SHALL BE SUBMITTED TO BTK ENGINEERING FOR APPROVAL PRIOR TO PROCUREMENT. ALLOW ONE WEEK FOR REVIEW.
- 3.5. CONCRETE SHALL HAVE FIELD CYLINDERS TAKEN AND TESTED IN ACCORDANCE WITH ACI 318.
- 3.6. CONCRETE SLUMP SHALL BE BETWEEN 3 AND 6 INCHES AT THE TIME OF PLACEMENT.
- 3.7. CONCRETE COVER SHALL BE IN ACCORDANCE WITH SECTION 7.7.1, ACI318-14:

CONCRETE EXPOSED TO EARTH OR WEATHER	
#6 THROUGH #18 BARS	2"
#5 BAR W31 OR D31 WIRE OR SMALLER	1 ½"
CONCRETE NOT EXPOSED TO EARTH OR WEATHER	
#11 BARS OR SMALLER	¾"

FOOTINGS AND GRADE BEAMS SHALL HAVE 3" REGARDLESS OF THE BAR SIZE OR THE DIRECTION TO THE EDGE.
- 3.8. ALL FOUNDATION REINFORCING BARS SHALL BE GRADE 60, ASTM616 AND LAP 36 BAR DIAMETERS.
- 3.9. ALL CAST IN PLACE NOT ASSOCIATED WITH THE FOUNDATION SHALL BE GRADE 60, ASTM615 AND HAVE A CLASS B TENSION LAP SPLICE
- 3.10. WELDED WIRE REINFORCEMENT SHALL CONFORM TO ASTM A185 AND LAP A MINIMUM OF 6".
- 3.11. WELDED WIRE REINFORCEMENT SHALL BE PLACED IN THE UPPER ONE HALF OF THE SLAB ON SUPPORTS (NOT PULLED INTO PLACE.)
- 3.12. PROPORTION NORMAL-WEIGHT CONCRETE MIXTURE AS FOLLOWS:
  - 3.12.1. PORTLAND CEMENT: ASTM C 150, TYPE I/II, **NO FLY ASH PERMITTED**
  - 3.12.2. MINIMUM COMPRESSIVE STRENGTH: 3000, 4000, AND 4500 PSI AT 28 DAYS.
  - 3.12.3. MAXIMUM WATER-CEMENTITIOUS MATERIALS RATIO: 0.51.
  - 3.12.4. SLUMP LIMIT: 3" TO 6".
  - 3.12.5. NORMAL-WEIGHT AGGREGATES: ASTM C 33, CLASS 3M COARSE AGGREGATE OR BETTER, GRADED.
  - 3.12.6. MAXIMUM COARSE-AGGREGATE SIZE: 3/4" MAXIMUM UNLESS NOTED.
  - 3.12.7. FINE AGGREGATE: FREE OF MATERIALS WITH DELETERIOUS REACTIVITY TO ALKALI IN CEMENT.
  - 3.12.8. AIR CONTENT: 4 PERCENT, PLUS OR MINUS 1.5 PERCENT AT POINT OF DELIVERY FOR 3/4-INCH (38-MM) NOMINAL MAXIMUM AGGREGATE SIZE.
  - 3.12.9. NO CALCIUM CHLORIDE PERMITTED.
  - 3.12.10. HIGH EARLY SET ADMIXTURES ARE ENCOURAGED IF THEY ARE NON CORROSIVE TO THE REINFORCEMENT.
- 3.13. FINISH TEXTURE SHALL BE VERIFIED WITH ARCHITECT.
- 3.14. CONCRETE SURFACE SHALL BE UNIFORM AND STRAIGHT AND LEVEL TO WITHIN 1/8" IN A TEN FOOT STRAIGHT EDGE.

4. MASONRY
- 4.1. ALL CMU BELOW FINISH FLOOR SHALL BE POURED SOLID WITH 3000 PSI GROUT CONFORMING TO ASTM C476.
- 4.2. CONCRETE MASONRY WORK SHALL CONFORM TO ACI 530, BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES AND ACI 530.1 SPECIFICATION FOR MASONRY STRUCTURES.
- 4.3. CONCRETE MASONRY SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 1,500 PSI.
- 4.4. MORTAR SHALL COMPLY WITH THE BUILDING CODE REQUIREMENTS FOR CONCRETE MASONRY AND SHALL BE.
  - 4.4.1. WALLS BELOW GRADE TYPE M
  - 4.4.2. WALLS ABOVE GRADE TYPE S
- 4.5. REINFORCED CONCRETE MASONRY UNITS SHALL BE GROUTED WITH 3,000 PSI COURSE GROUT CONFORMING TO ASTM C476.
- 4.6. WALL HORIZONTAL REINFORCEMENT SHALL BE 9 GA TRUSS TYPE AT 16" O/C.
- 4.7. ALL WALL REINFORCEMENT SHALL BE LAPPED A MINIMUM OF 48 BAR DIAMETER.
- 4.8. MASONRY CONTROL JOINTS SHALL BE LOCATED BY ARCHITECT AT NATURAL BREAKS OR BENDS IN THE STRUCTURE AND 20'-0" O/C MAX.

5. STRUCTURAL STEEL
- 5.1. STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED AND ERECTED ACCORDING TO AISC 360-10 "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS."
- 5.2. STEEL FABRICATOR'S SPECIALTY ENGINEER SHALL DESIGN ANY CONNECTIONS NOT DETAILED IN THESE DOCUMENTS. THE SPECIALTY ENGINEER SHALL BE REGISTERED IN THE PROJECT STATE. CONNECTION DESIGN CALCULATIONS AND STEEL DETAILER'S SHOP DRAWINGS SHALL BE SIGNED AND SEALED BY THE SPECIALTY ENGINEER AND SUBMITTED TO THE STRUCTURAL ENGINEER FOR REVIEW. SUBMIT SHOP DRAWINGS PREPARED IN ACCORDANCE WITH AISC MANUAL "DETAILING FOR STEEL CONSTRUCTION", LATEST EDITION. STEEL
- 5.3. STRUCTURAL STEEL WIDE FLANGE SHAPES SHALL CONFORM TO ASTM A992, 50 KSI. STRUCTURAL STEEL SHAPES, PLATES, ANGLES, AND CHANNELS SHALL CONFORM TO ASTM A36 UNLESS NOTED OTHERWISE. STRUCTURAL TUBING SHALL CONFORM TO ASTM A500, GRADE B, FY = 46 KSI, UNLESS NOTED OTHERWISE. ANCHOR BOLTS SHALL CONFORM TO ASTM F1554-07a GRADE 36 UNLESS NOTED OTHERWISE.
- 5.4. BOLTS SHALL CONFORM TO ASTM A325, TYPE 3 (CORROSION RESISTANCE), ¾-INCH DIAMETER MINIMUM, UNLESS NOTED OTHERWISE. BOLTS IN BEARING CONNECTIONS SHALL BE DESIGNATED TYPE N, TENSIONED, SNUG-TIGHT AS DEFINED BY AISC. ALL OTHER BOLTS SHALL BE PRE-TENSIONED.
- 5.5. USE PRE-QUALIFIED WELDED JOINTS AS PER AISC, AND AWS D1.1 "STRUCTURAL WELDING CODE." USE ONLY CERTIFIED WELDERS; ALL ELECTRODES SHALL CONFORM TO AWS A5 GRADE E70XX. BARE ELECTRODE AND GRANULAR FLUX SHALL CONFORM TO AWS A5, F70 AWS FLUX CLASSIFICATION. MINIMUM WELD SIZE TO BE 3/16" FILLET WELD, U.N.O.
- 5.6. CUTS, BOLTS, COPING, ETC. REQUIRED FOR WORK OR OTHER TRADES SHALL BE SHOWN ON THE SHOP DRAWINGS AND MADE IN THE SHOP. CUTS OR BURNING HOLES IN STRUCTURAL STEEL MEMBERS IN THE FIELD WILL ONLY PERMITTED ON AN INDIVIDUAL, REVIEWED BASES.
- 5.7. SHOP CONNECTIONS NOT SPECIFICALLY DETAILED ON THE DRAWINGS MAY BE WELDED OR BOLTED. FIELD CONNECTIONS NOT SPECIFICALLY DETAILED ON THE DRAWINGS SHALL BE BOLTED, WHERE POSSIBLE.
- 5.8. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH ARCHITECTURAL AND MECHANICAL DRAWINGS AND DRAWINGS RELATED TO OTHER TRADES. CONTRACTOR SHALL BE RESPONSIBLE TO CHECK AND COORDINATE DIMENSIONS, CLEARANCES, ETC. WITH THE WORK OF OTHER TRADES. THE STRUCTURAL STEEL CONTRACTOR SHALL PROVIDE FRAMING AROUND OPENINGS IN ROOF AS INDICATED IN THE MECHANICAL AND ARCHITECTURAL DRAWINGS.
- 5.9. STRUCTURAL STEEL CONTRACTOR SHALL COORDINATE THE BOTTOM OF BASE PLATE ELEVATION WITH THE TOP OF CONCRETE ELEVATION. IN CASE OF CONFLICT, THE CONTRACTOR SHALL MAKE ALLOWANCE IN HIS BID FOR MORE STRINGENT REQUIREMENTS.
- 5.10. STRUCTURAL STEEL SHALL BE PRIMED AND PAINTED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.
- 5.11. ALL STRUCTURAL STEEL FOR THIS PROJECT SHALL BE HOT DIPPED GALVANIZED MINIMUM OF G90 COATING.
- 5.12. ALL WELDS OR FIELD CUTTING AND FITTING SHALL BE GROUND CLEAN AND COATED WITH COLD APPLIED GALVANIZING.
- 5.13. ALL STRUCTURAL STEEL TO BE GROUNDED TO PROJECT ELECTRICAL GROUND.

EAVE HEIGHT	22.67'
ROOF SLOPE	3:12
COLLATERAL/GRAVITY	15 PSF
ROOF LIVE LOAD (REDUCIBLE)	20 PSF
FIRST FLOOR LIVE LOAD	100 PSF

TABLE OF CONTENTS

APPLICABLE CODES

Florida Building Code, Building (FBC-B)	2023
Minimum Design Loads For Building and Other Structures	ASCE 7-22

Cast in Place Reinforcement Lap Splices

			Lap splice			
Bar #	Dia	Foundation	Other Locations (f'c) Class B			
			3000	4000	4500	5000
	in	in	in	in	in	in
#3	0.375	12	21.4	18.5	17.4	16.5
#4	0.5	15	28.5	24.7	23.3	22.1
#5	0.625	18.75	35.6	30.8	29.1	27.6
#6	0.75	22.5	42.7	37.0	34.9	33.1

Cast in Place Hook Development Lengths

				90	180
Bar #	Dia	Ldh	radius	ext	ext
	in	in	in	in	in
#3	0.375	8.2	1.1	4.5	2.5
#4	0.5	11.0	1.5	6.0	2.5
#5	0.625	13.7	1.9	7.5	2.5
#6	0.75	16.4	2.3	9.0	3

CARLISLE BAPTIST CHURCH STRUCTURAL PHASE I.DWG

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Building Dimensions

Width	Length	Height	Slope	Angle
ft	ft	ft	on 12	Degrees
125.33	144	33	2	9.5

Calculating "a"

Least Horizontal Dimension	125.33 ft
Minimum of	
10% of Least Horizontal Dimension	12.533 ft
40% of Height	13.2 ft
But,	
Not less than 4% of Least Horizontal Dimension	5.0132 ft
Not Less than 3'-0"	3 ft
Therefore "a" =	12.533 ft

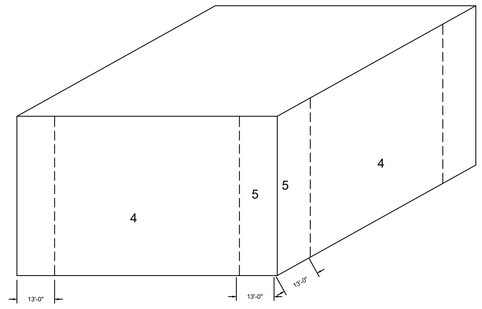
Calculating Base Pressure

Wind Velocity	140.00 mph
Risk Category	II
Exposure Category	C
Enclosure	Enclosed
ALFA	9.50
Zg	900.00 ft
Zstes	33.00 ft
Kz	1.00
Kd	0.85
Kzt	1.00
Base Pressure	42.74 psf

Component and Cladding Pressures (Effective Wind Area ≤ 10 sqft)

Zone	GCp	GCpi	qh psf	(GCp+GCpi)	qh[(GCp+GCpi)] psf (ult)	qh[(GCp+GCpi)] psf (asd)
Roof Zones+	0.6	0.18	42.74	0.78	33.34	20.00
1-	-2	-0.18	42.74	-2.18	-93.18	-55.91
2-	-2.7	-0.18	42.74	-2.88	-123.10	-73.86
3-	-3.6	-0.18	42.74	-3.78	-161.56	-96.94
4+	1	0.18	42.74	1.18	50.44	30.26
4-	-1.1	-0.18	42.74	-1.28	-54.71	-32.83
5+	1	0.18	42.74	1.18	50.44	30.26
5-	-1.4	-0.18	42.74	-1.58	-67.53	-40.52

NOTE: DESIGN PRESSURES FOR ALLOWABLE STRESS PRESSURES HAVE ALREADY BEEN REDUCED BY THE 0.6 FACTOR IN THE LOAD COMBINATIONS AS DEPICTED IN ASCE 7-22 SECTION 2.4. COMPONENT DESIGNER MAY NOT TAKE A 0.6 FACTOR AS A DOUBLE REDUCTION.



WALLS

WM-1 / S-2 WIND MAP
SCALE: 1/16"=1'

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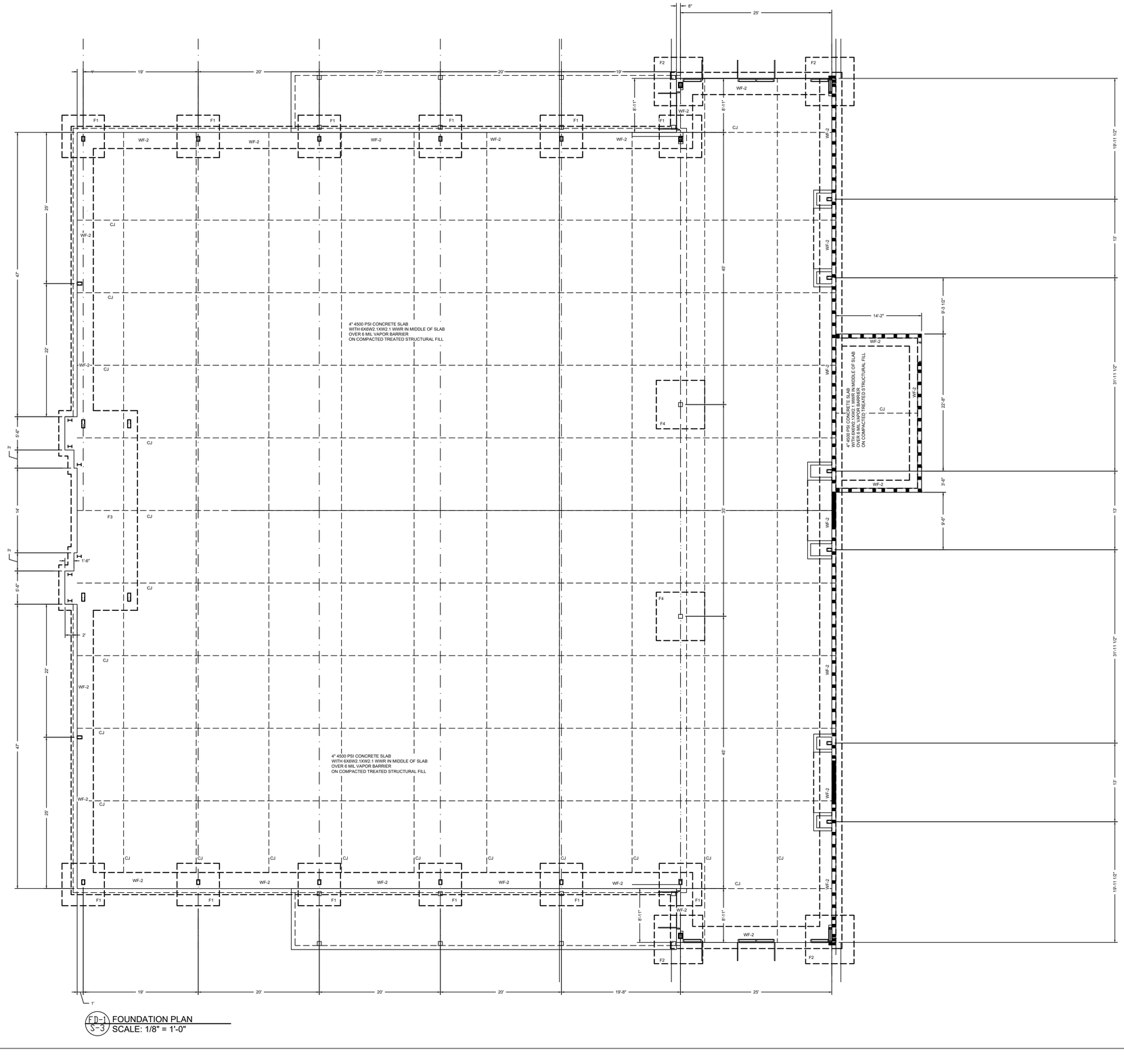

F1-1 / S-3 FOUNDATION PLAN
SCALE: 1/8" = 1'-0"

DENOTES MINIMUM LOCATIONS OF SLAB CONTROL JOINTS. ADDITIONAL SAW CUT JOINTS SHALL BE SPACED AT 12 FT O/C TO SUPPRESS SHRINKAGE CRACKS. NO PORTION OF THE SLAB MAY HAVE A LENGTH TO WIDTH RATIO GREATER THAN 1.5 TO 1. CONTROL JOINTS SHALL BE POSITIONED A EACH INSIDE CORNER OR REINFORCE THE SLAB WITH (3) #5 REBAR "L"S WITH 25" EACH WAY AT 8" O/C STARTING 8" FROM SLAB EDGE.

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STATE OF FLORIDA

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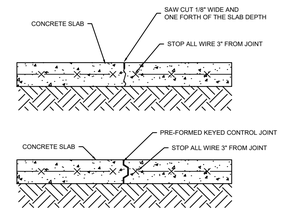
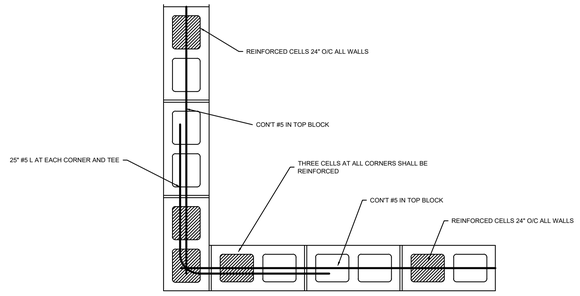
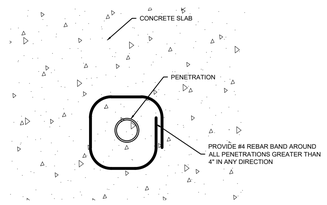


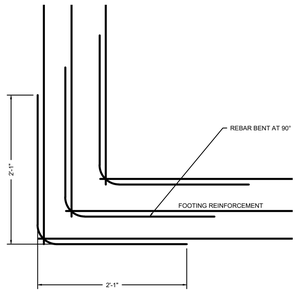
CJ-1 / S-4 CONTROL JOINT OPTIONS
SCALE: 1" = 1'-0"



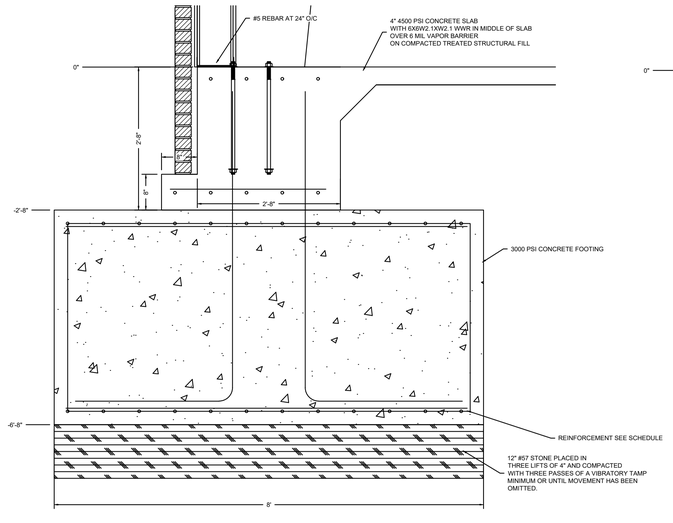
SWC / S-4 MASONRY CORNER REINFORCEMENT
SCALE: 1" = 1'-0"



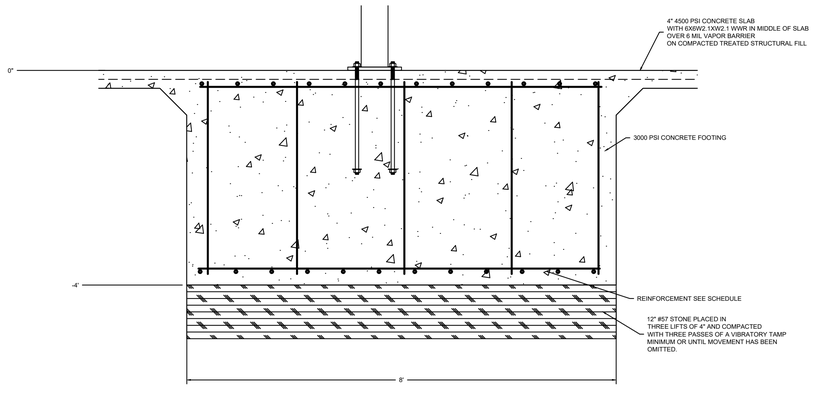
SP-1 / S-4 SLAB PENETRATION DETAIL
SCALE: 1" = 1'-0"



CR / S-4 CORNER REINFORCEMENT AT FOOTING
SCALE: 1" = 1'-0"



FD-X / S-4 TYPICAL FOOTING/WALL FOOTING DETAIL
SCALE: 3/4" = 1'-0"



FD-X / S-4 TYPICAL INTERIOR GRADE FOOTING DETAIL
SCALE: 3/4" = 1'-0"

Footing Schedule								
Mark	Depth	Length	Width	ELEVATION	Rebar			Anchor Bolts
					Top	Bottom	Sides	
F-1	4'-0"	7'-0"	7'-0"	-2'-8"	#6 REBAR 8" O/C EACH WAY	#6 REBAR 8" O/C EACH WAY	#6 REBAR (4) PER FACE	(4) 1 1/4" X 24"
F-2	4'-0"	8'-0"	8'-0"	-2'-8"	#6 REBAR 8" O/C EACH WAY	#6 REBAR 8" O/C EACH WAY	#6 REBAR (4) PER FACE	(4) 1 1/4" X 24"
F-3	2'-0"	33'-0"	13'-0"	0'-0"	#5 REBAR 12" O/C EACH WAY	#5 REBAR 12" O/C EACH WAY	N/A	(4)3/4" x 18"
F-4	4'-0"	8'-0"	8'-0"	0'-0"	#6 REBAR 8" O/C EACH WAY	#6 REBAR 8" O/C EACH WAY	#6 REBAR (4) PER FACE	(4) 1 1/4" X 24"
WF-1	1'-8"	CONT	1'-8"	0'-0"	#5 REBAR CONT	(3) #5 REBAR CONT	N/A	N/A
WF-2	2'-8"	CONT	2'-8"	0'-0"	#5 REBAR CONT AT 8" O/C	#5 REBAR CONT AT 8" O/C	#3 STIRRUP AT 16" O/C	N/A

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ENGINEER

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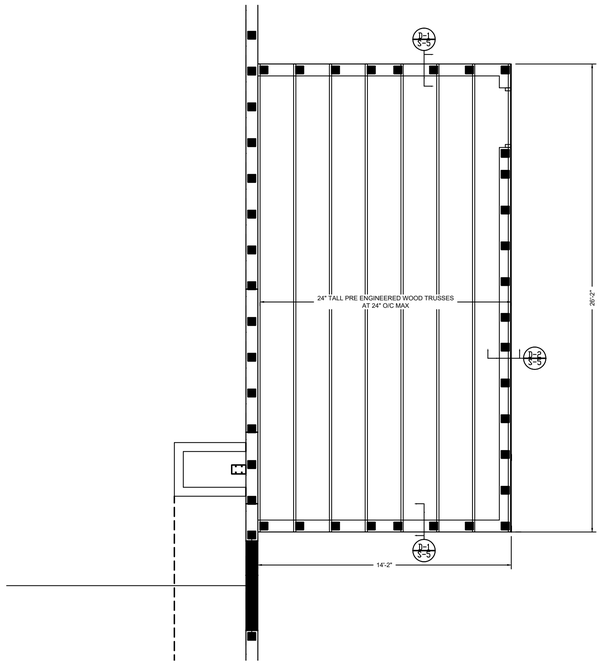
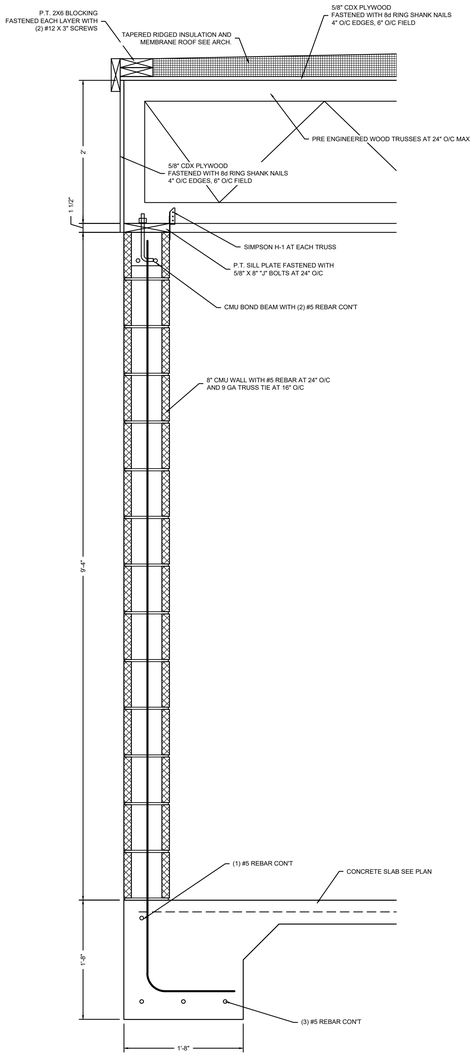
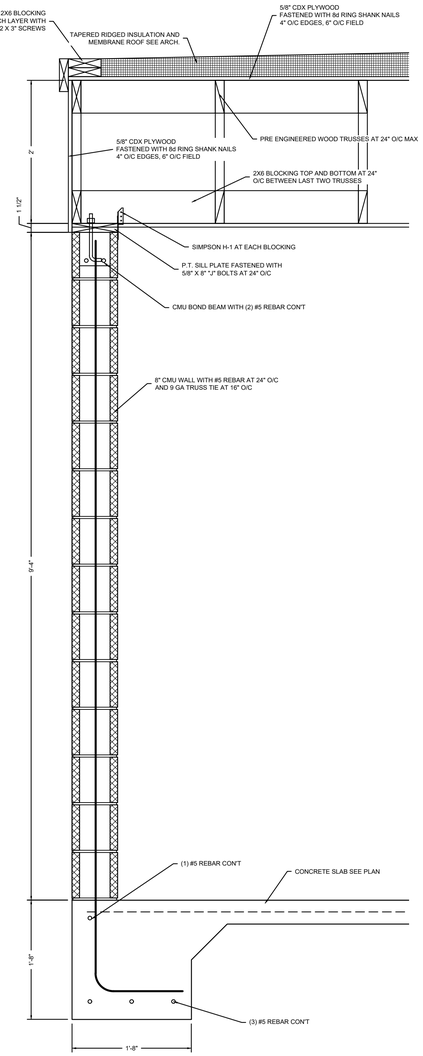


FR-1 / S-5 ACCESSORY ROOM ROOF FRAMING PLAN
SCALE: 1/4" = 1'-0"



D-1 / S-5 ACCESSORY ROOM STRUCTURAL WALL DETAIL
SCALE: 1" = 1'-0"



D-2 / S-5 ACCESSORY ROOM STRUCTURAL WALL DETAIL
SCALE: 1" = 1'-0"

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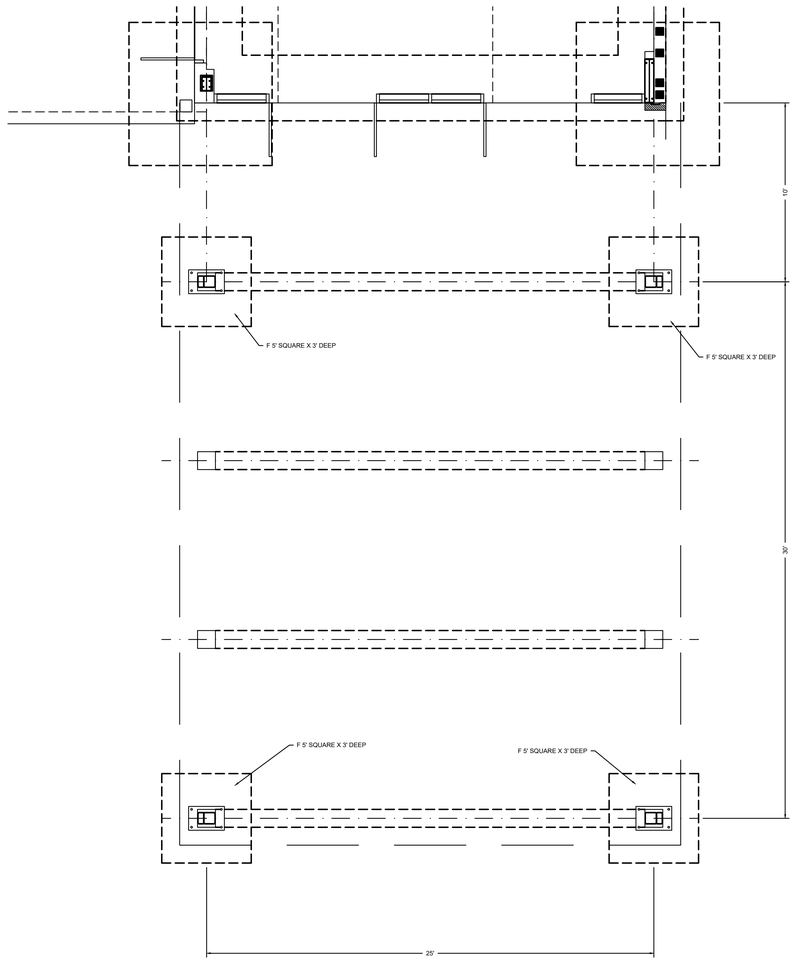
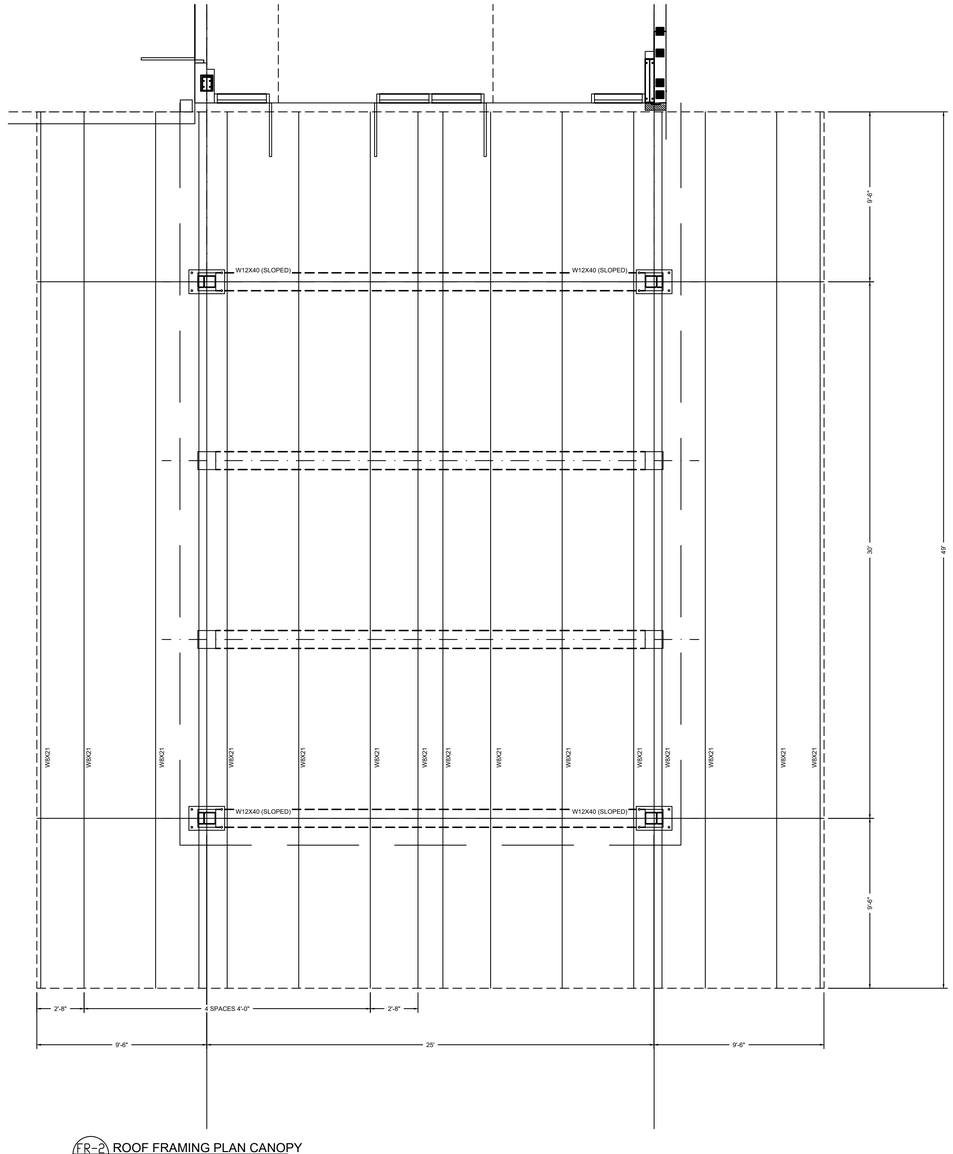


FD-2 / S-6 FOUNDATION PLAN CANOPY
SCALE: 1/4" = 1'-0"



FR-2 / S-6 ROOF FRAMING PLAN CANOPY
SCALE: 1/4" = 1'-0"

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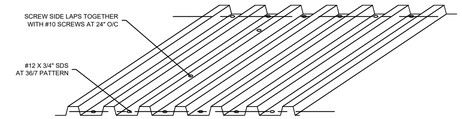
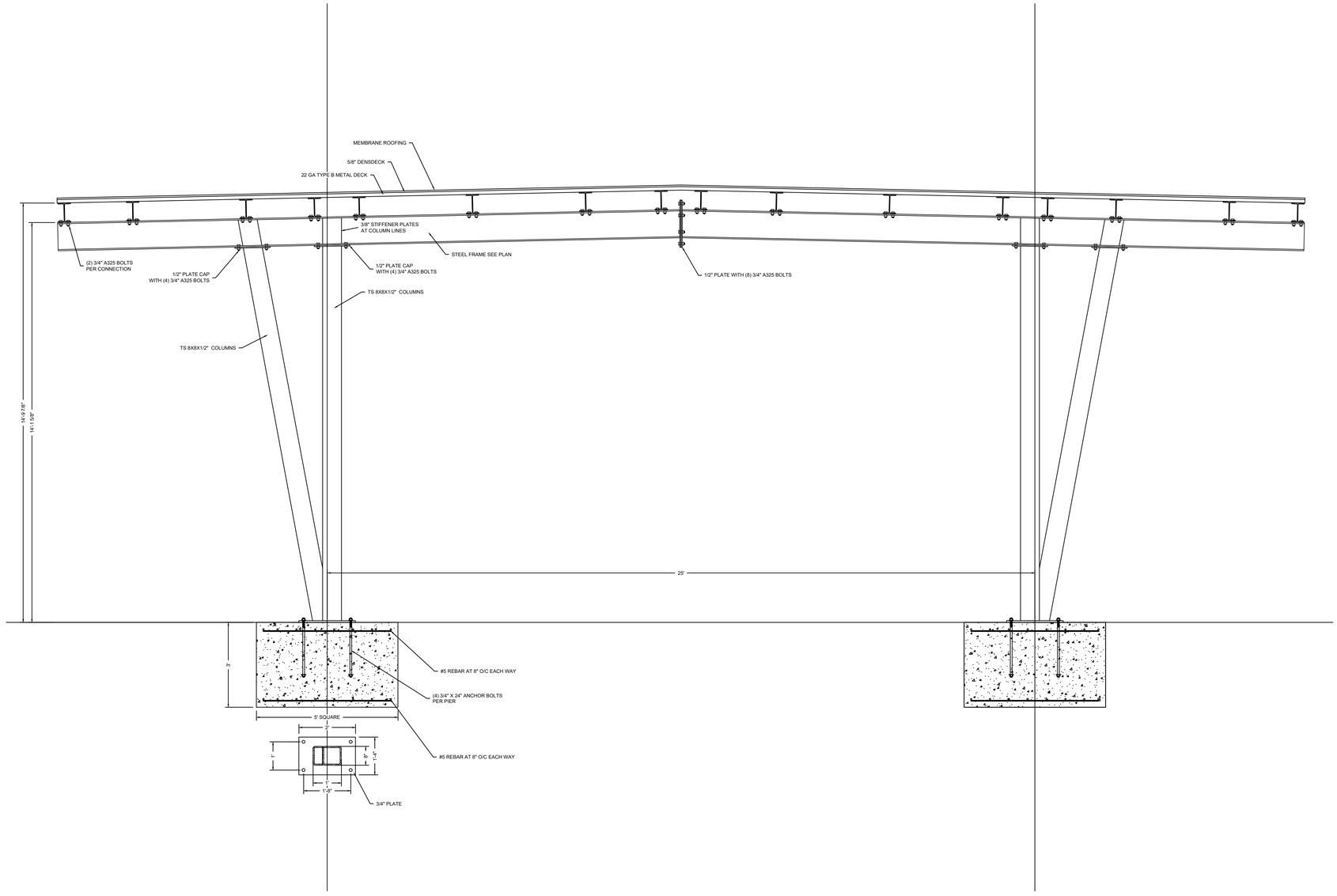


VULCRAFT 1.5B22 OR EQUAL

MD-1 / S-7 DECK FASTENING PATTERNS
SCALE: 1" = 1'-0"



SC-1 / S-7 CANOPY SECTION
SCALE: 1/2" = 1'-0"

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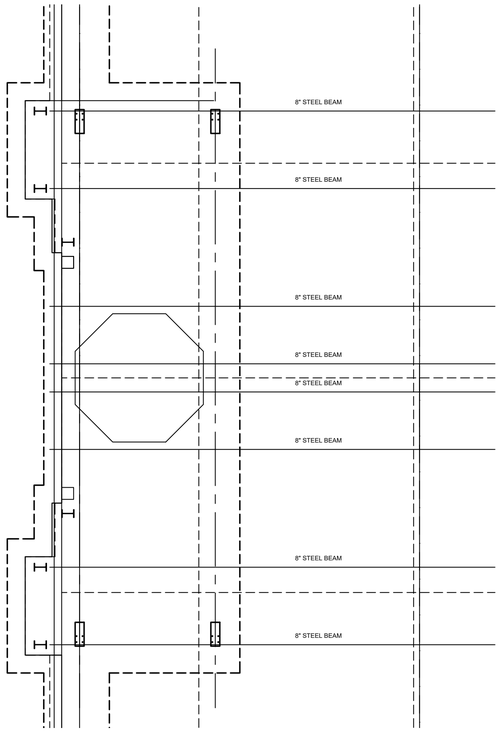
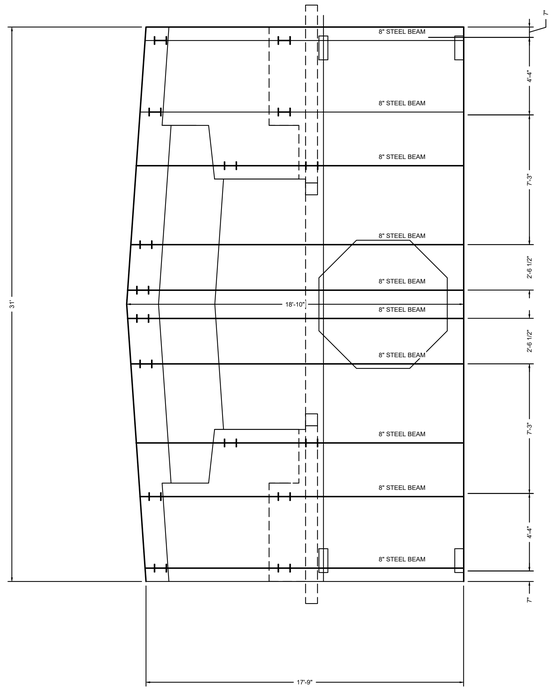
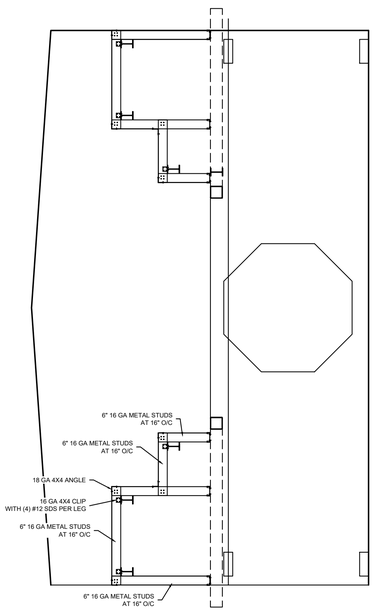
REGISTRATION #59384 / EXP. FEB. 28, 2025



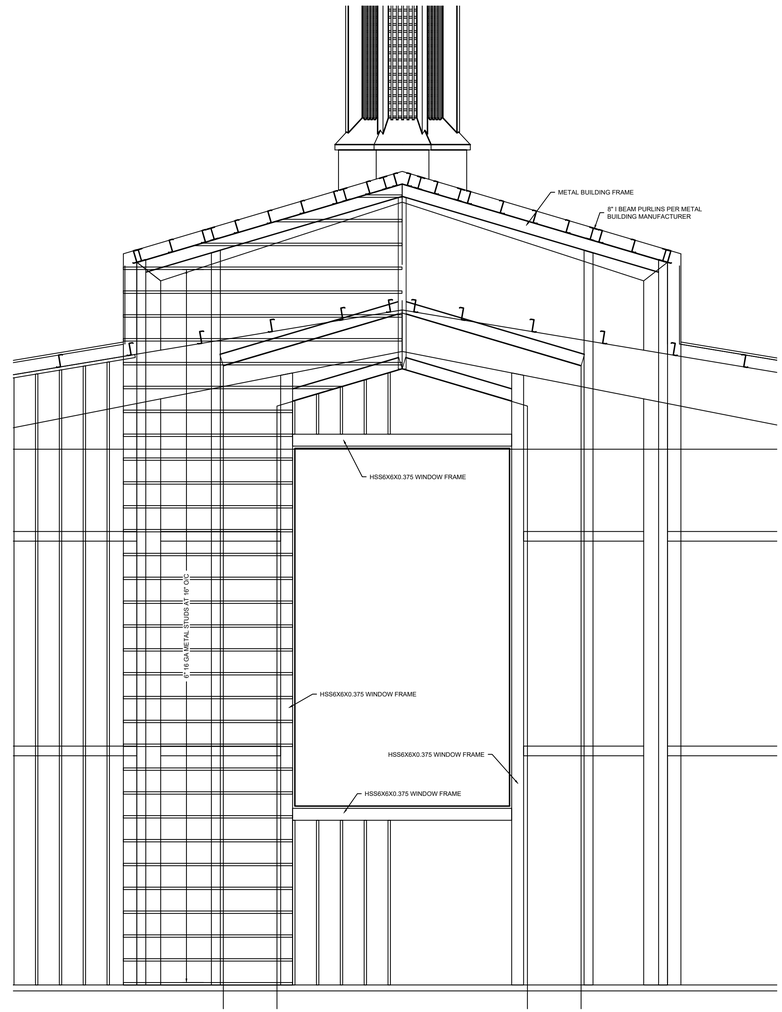
RF-3 / S-8 STEEPLE FOUNDATION PLAN
SCALE: 1/4" = 1'-0"



RF-3 / S-8 STEEPLE ROOF FRAMING PLAN
SCALE: 1/4" = 1'-0"



RF-3 / S-8 STEEPLE LIGHT GAUGE FRAMING PLAN
SCALE: 1/4" = 1'-0"



RF-4 / S-8 STEEPLE WALL FRAMING PLAN
SCALE: 1/4" = 1'-0"

CARLISLE BAPTIST CHURCH STRUCTURAL PHASE I.DWG

BRADLEY TODD KENT LICENSED PROFESSIONAL ENGINEER

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CARLISLE BAPTIST CHURCH PHASE I STRUCTURAL
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PAGE # S-8

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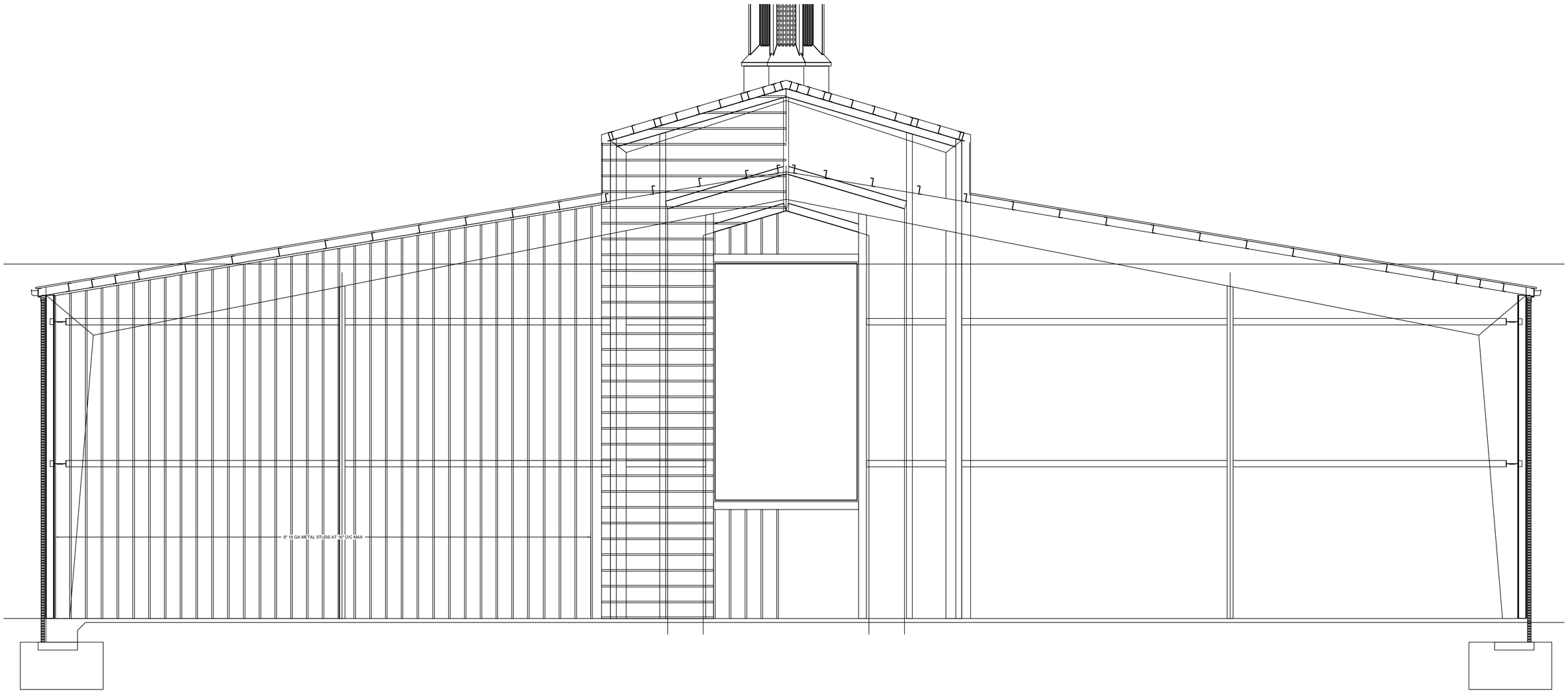

WF-1 / S-9 WALL FRAMING PLAN
SCALE: 1/4" = 1'-0"

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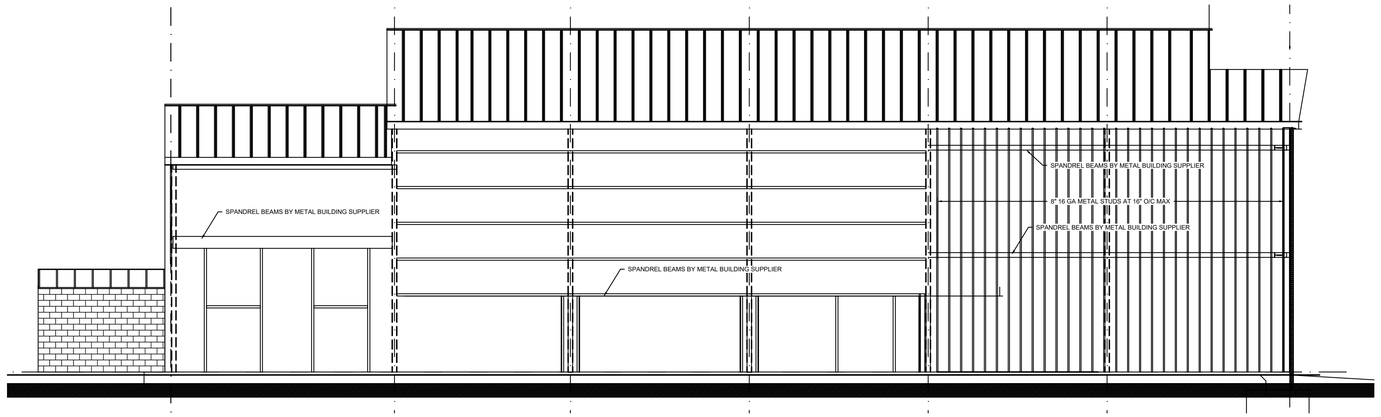
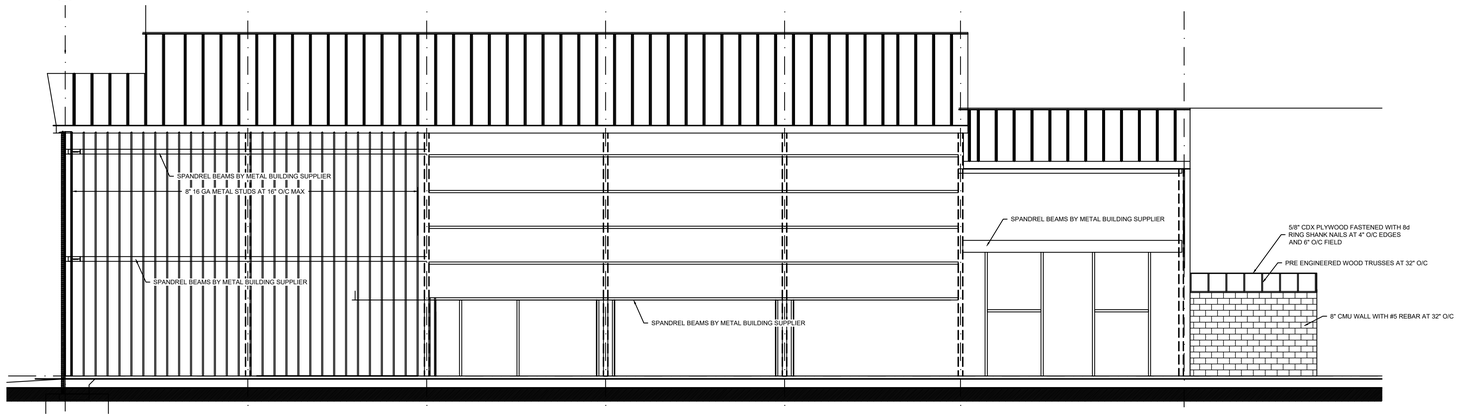
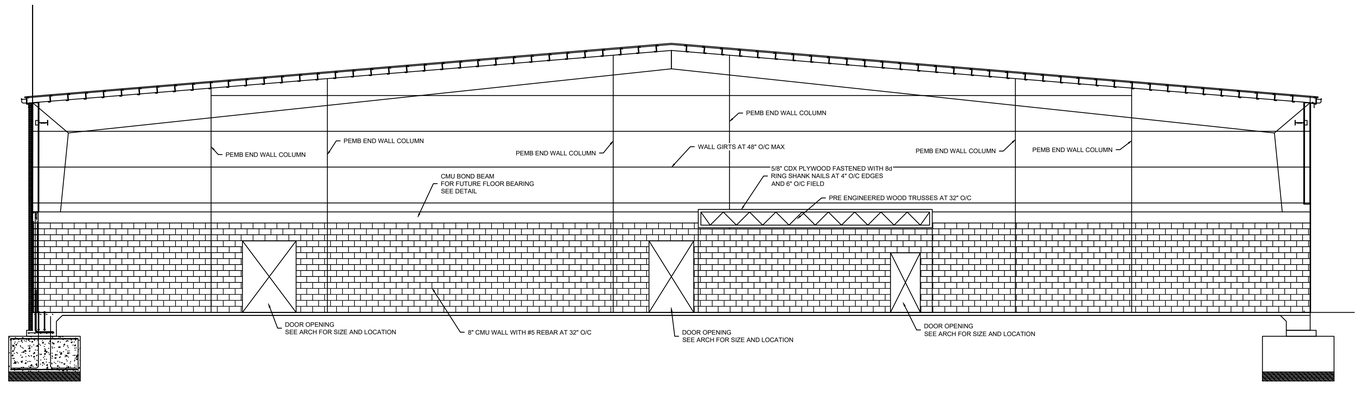


WF-2 / S-10 WALL FRAMING PLAN
SCALE: 1/8" = 1'-0"



WF-3 / S-10 WALL FRAMING PLAN
SCALE: 1/8" = 1'-0"



WF-4 / S-10 WALL FRAMING PLAN
SCALE: 1/8" = 1'-0"

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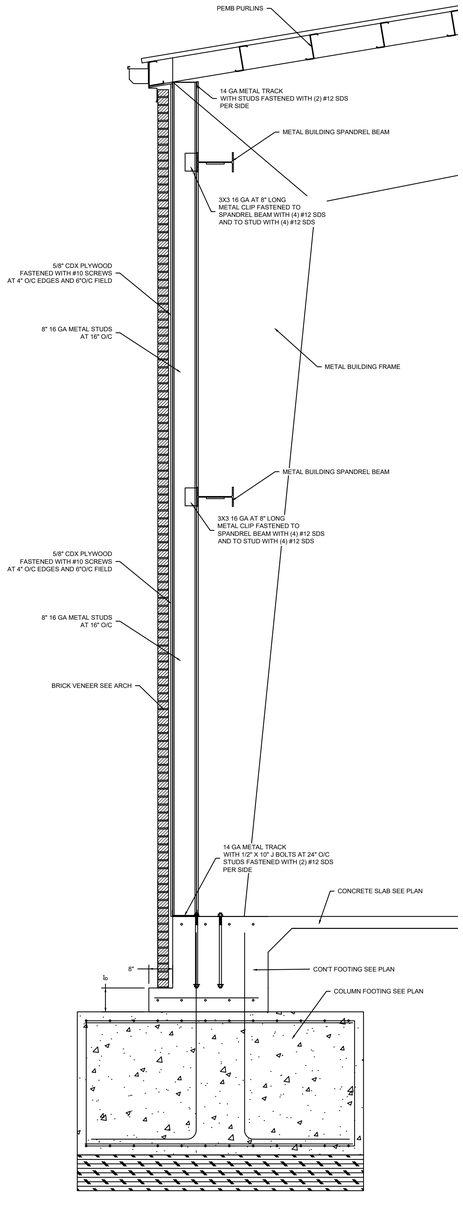
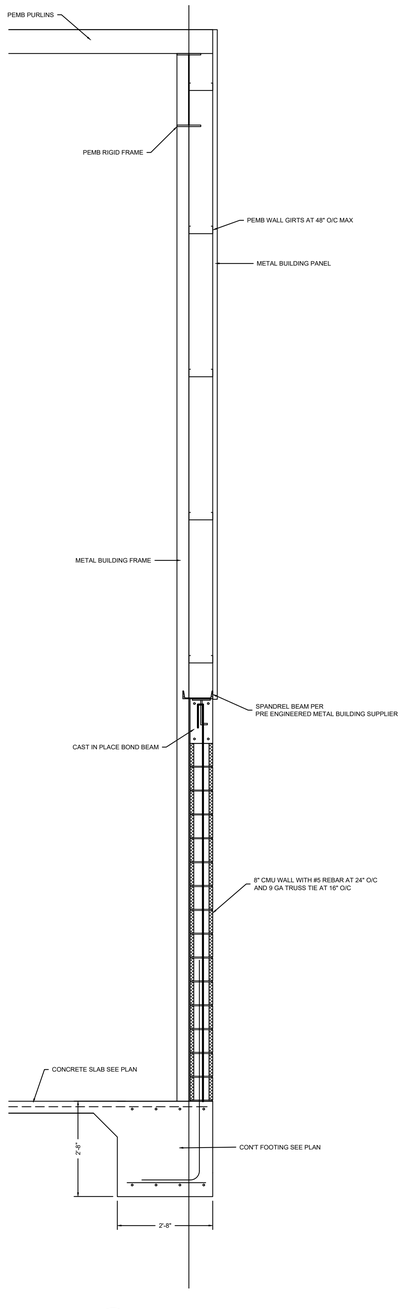
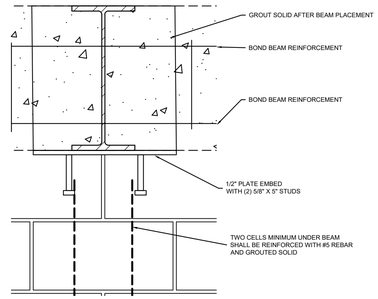


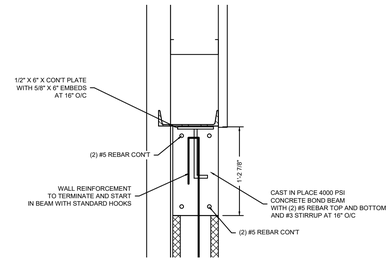
D-1 / S-11 EAVE DETAIL
SCALE: 1/2" = 1'-0"



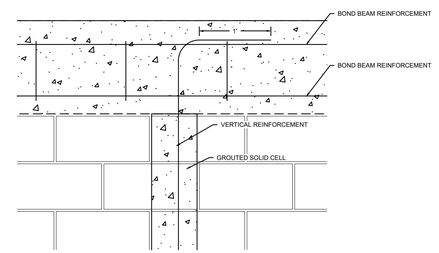
D-2 / S-11 WALL DETAIL
SCALE: 1/2" = 1'-0"



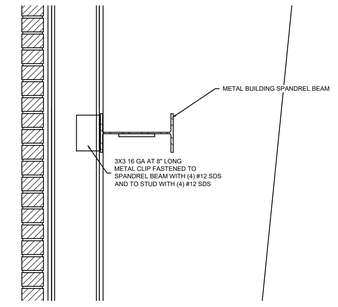
MP-1 / S-11 MASONRY POCKET DETAIL
SCALE: 1 1/2" = 1'-0"



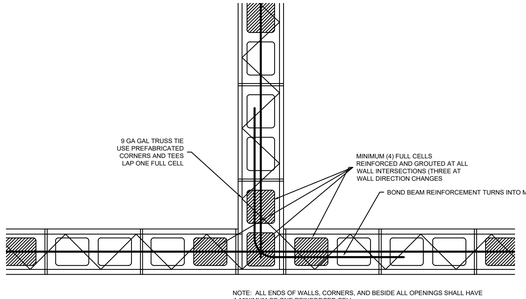
BB-1 / S-11 BOND BEAM FIRST FLOOR (INT. AND EXT.)
SCALE: 1" = 1'-0"



MT-1 / S-11 BOND BEAM VERTICAL BAR TERMINATION DETAIL
SCALE: 1" = 1'-0"



WSA-1 / S-11 WALL STUD ATTACHMENT DETAIL
SCALE: 1" = 1'-0"



NOTE: ALL ENDS OF WALLS, CORNERS, AND BESIDE ALL OPENINGS SHALL HAVE A MINIMUM OF ONE REINFORCED CELL.

MT-2 / S-11 MASONRY WALL INTERSECTION DETAIL
SCALE: 1" = 1'-0"

MASONRY VENEER LOOSE LINTEL SCHEDULE

OPENING	LINTEL	BEARING EACH END
6' OR LESS	L4x3-1/2x1/4	8"
OVER 6' TO 10'-0"	L7x4x3/8	12"

NOTES:
1. FOR OPENINGS 6'-0" AND LARGER, PROVIDE SOLID MASONRY JAMB UNDER LINTEL EACH SIDE OF OPENING.
2. FOR OPENINGS LARGER THAN 10'-0", PROVIDE (1) 5/8"Ø x1'-0" ANCHOR BOLT EACH END OF LINTEL.
3. ALL STEEL ANGLES USED FOR BRICK VENEER LOOSE LINTELS SHALL BE HOT DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A123.

CARLISLE BAPTIST CHURCH STRUCTURAL PHASE I.DWG

BRADLEY TODD KENT
REGISTERED
FLORIDA
LICENSED
ENGINEER

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CARLISLE BAPTIST CHURCH PHASE I STRUCTURAL
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PAGE # S-11

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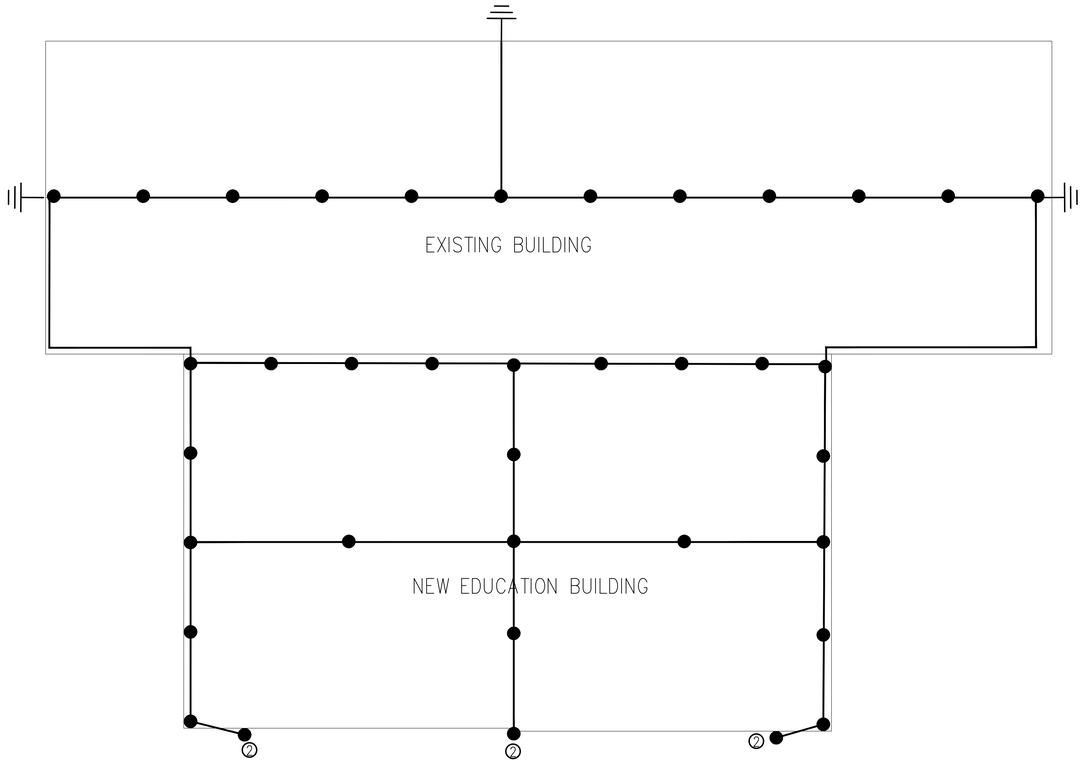
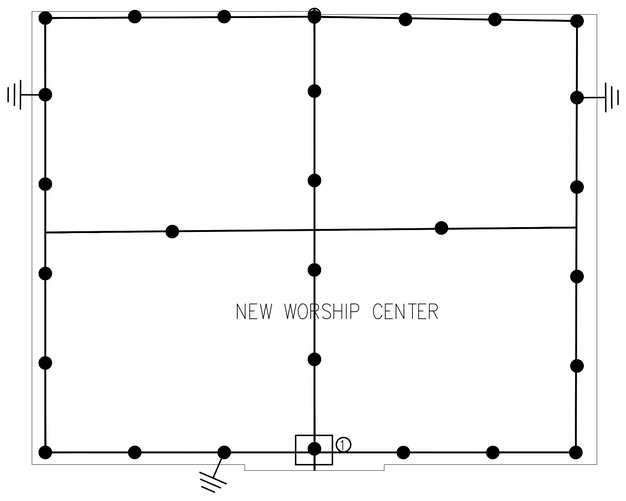


LIGHTNING PROTECTION PLAN - EDUCATION BUILDING- PHASE TWO

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



LIGHTNING PROTECTION PLAN - WORSHIP CENTER - PHASE ONE

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

LIGHTNING PROTECTION LEGEND

- AIR TERMINAL
- DOWN CONDUCTOR & GROUNDING ELECTRODE
- CONDUCTOR

PLAN NOTES

1. PROVIDE TERMINAL FOR STEEPLE IAW STEEPLE MANUFACTURER'S INSTRUCTIONS AND NFPA 780. SEE ARCHITECTURAL DRARWINGS FOR APPROXIMATE HEIGHT.
2. CONNECT TO EXISTING AIR TERMINAL (PHASE ONE).

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MARK MERCER & ASSOCIATES, INC.
1117 JENKS AVENUE/PANAMA CITY, FLORIDA 32401/850.763.8072

CARLISLE BAPTIST CHURCH
IRJEBUILD
835 BERTHIE AVENUE
PANAMA CITY, FLORIDA

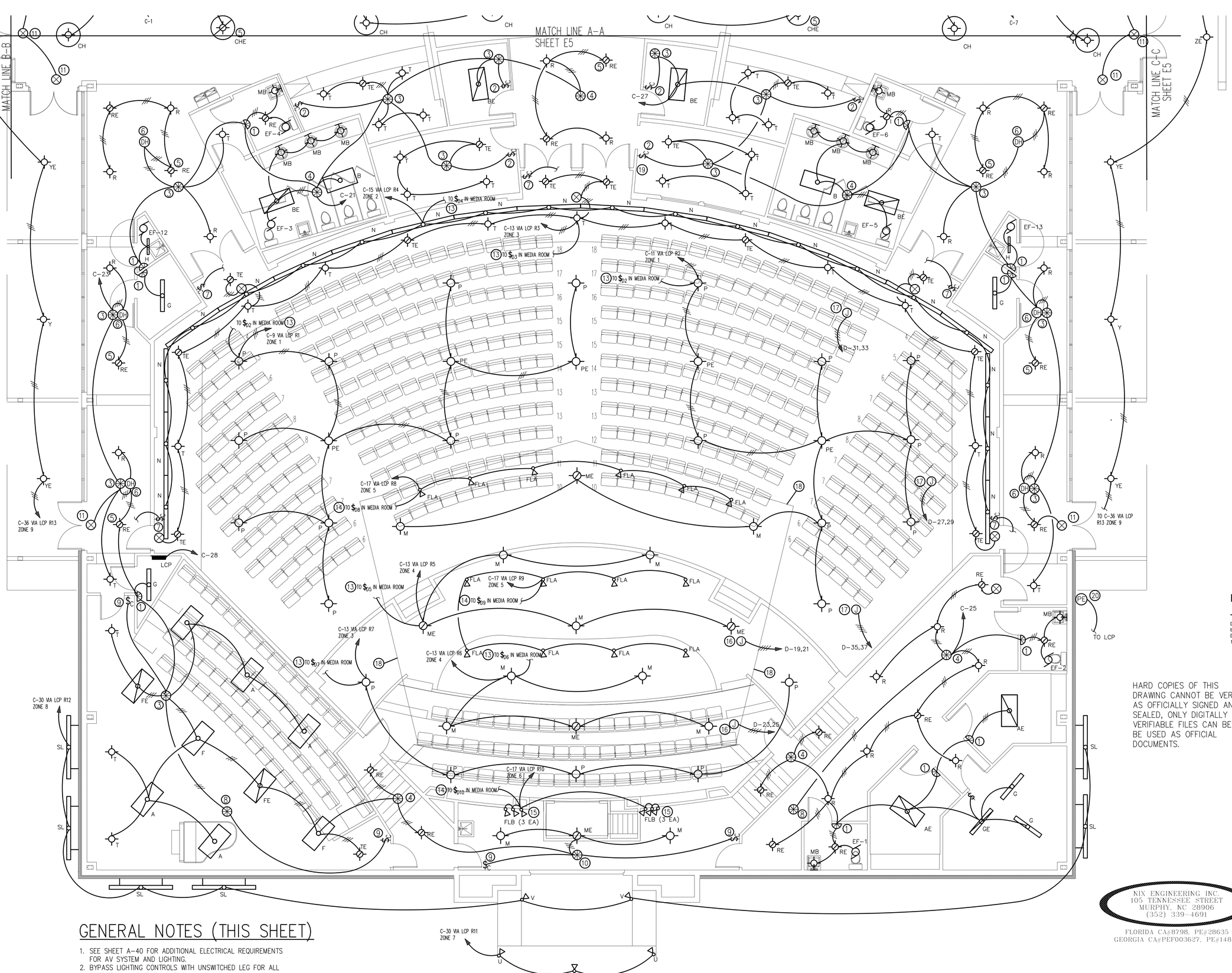
PREPARED BY	REVIEWED BY
NIX	RN

ISSUE DATE 05/06/2024
SCALE 1/16"=1'

LIGHTNING PROTECTION PLAN

PROJECT NO. 2236

E1
SHEET 1 OF 20



GENERAL NOTES (THIS SHEET)

1. SEE SHEET A-40 FOR ADDITIONAL ELECTRICAL REQUIREMENTS FOR AV SYSTEM AND LIGHTING.
2. BYPASS LIGHTING CONTROLS WITH UNSWITCHED LEG FOR ALL EMERGENCY AND EXIT LIGHTS.
3. SEE SHEET E6 FOR PLAN NOTES
4. SEE SHEET E5 FOR MATCH LINE PLANS

LIGHTING PLAN - WORSHIP CENTER - PHASE ONE

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

E2
SHEET 2 OF 20

PROJECT NO.
2236

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ISSUE DATE	SCALE
05/06/2024	3/16"=1'

SECOND FLOOR LIGHTING PLAN - EDUCATION BUILDING

CARLISLE BAPTIST CHURCH
IRIEBUILD
835 BERTHIE AVENUE
PANAMA CITY, FLORIDA

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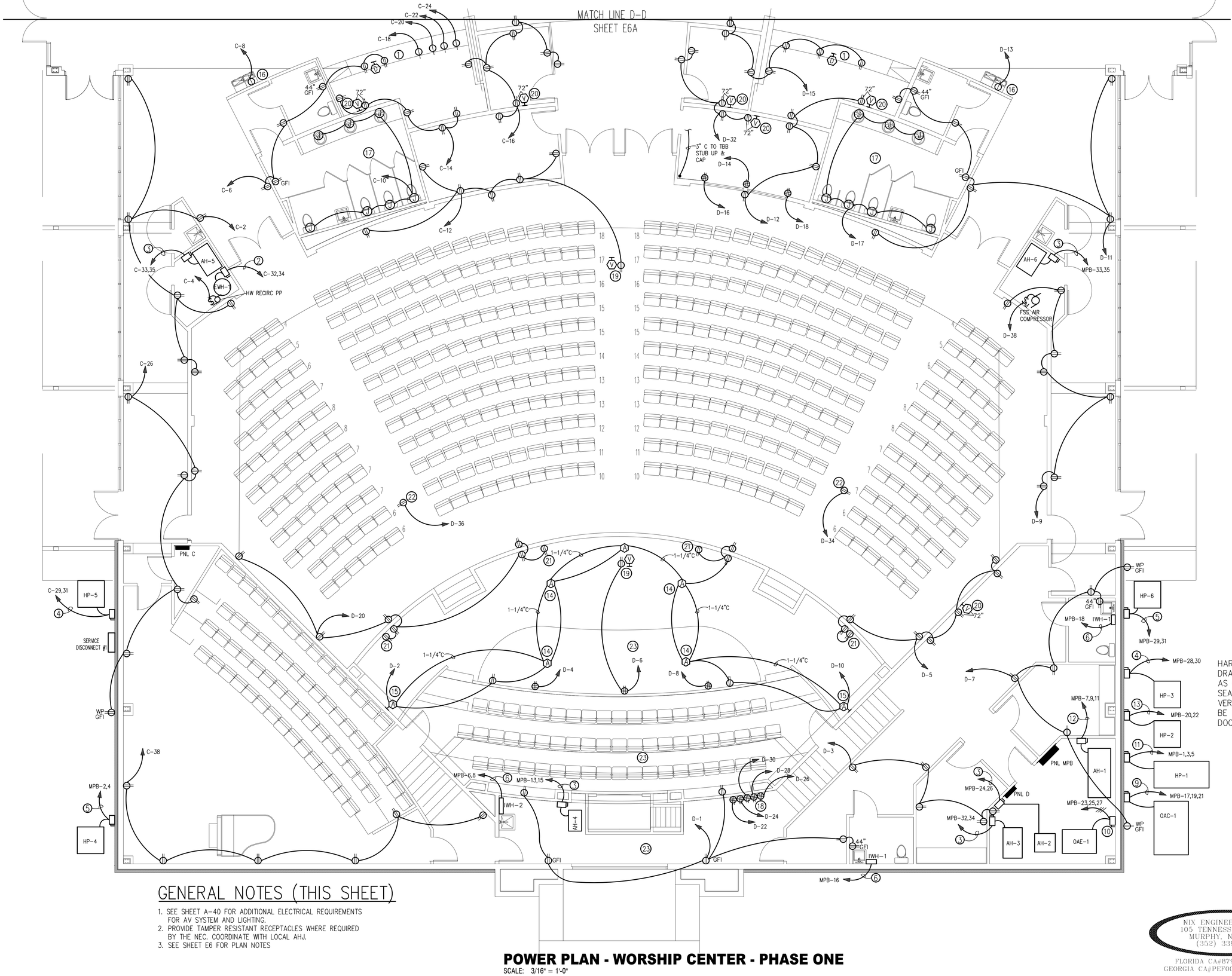

GENERAL NOTES (THIS SHEET)

1. SEE SHEET A-40 FOR ADDITIONAL ELECTRICAL REQUIREMENTS FOR AV SYSTEM AND LIGHTING.
2. PROVIDE TAMPER RESISTANT RECEPTACLES WHERE REQUIRED BY THE NEC. COORDINATE WITH LOCAL AHJ.
3. SEE SHEET E6 FOR PLAN NOTES

POWER PLAN - WORSHIP CENTER - PHASE ONE

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

E3
SHEET 3 OF 20

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ISSUE DATE	SCALE
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POWER PLAN - WORSHIP CENTER

CARLISLE BAPTIST CHURCH
IREBUILD
835 BERTHIE AVENUE
PANAMA CITY, FLORIDA

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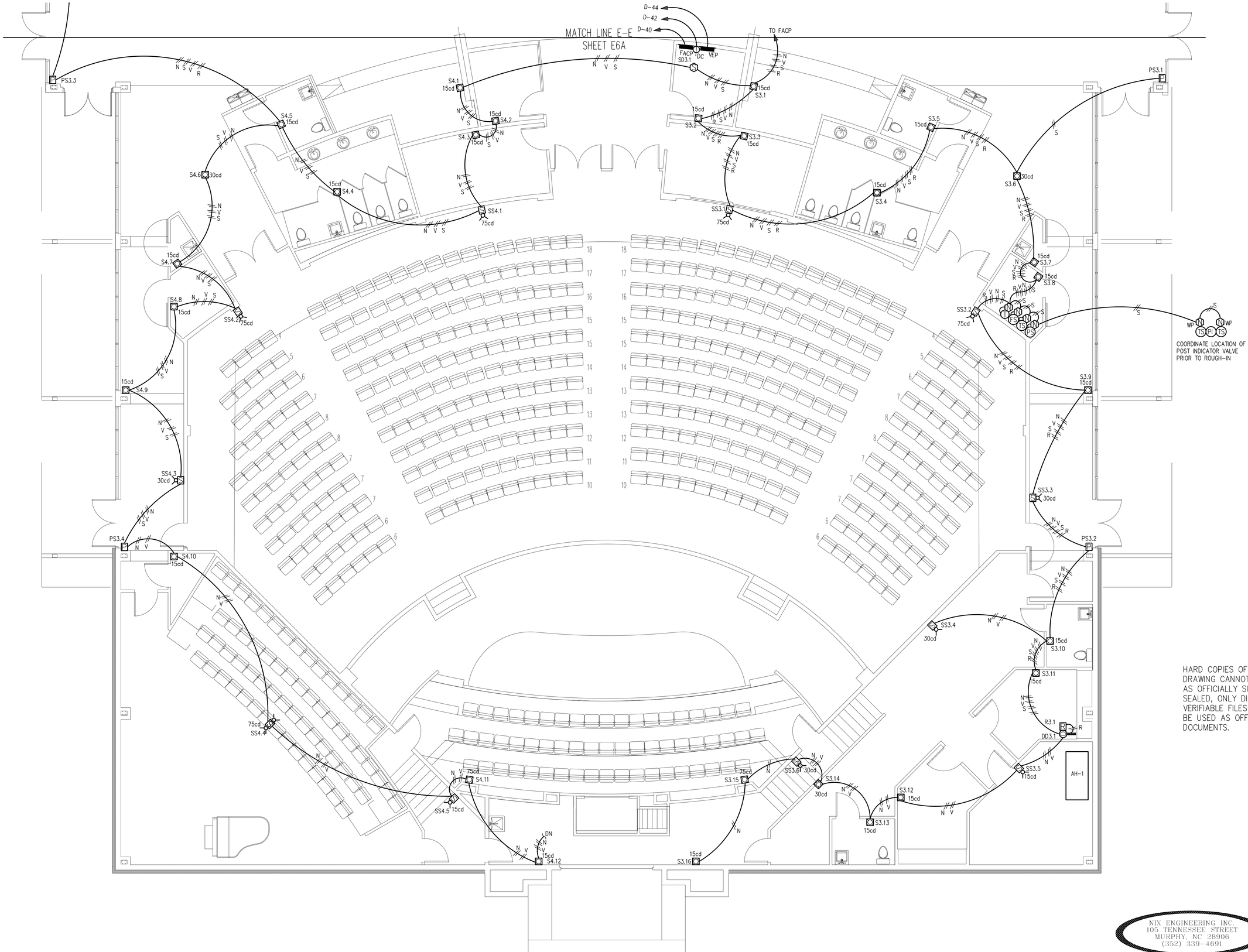

FIRE ALARM PLAN - WORSHIP CENTER - PHASE ONE

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

E4

SHEET 4 OF 20

PROJECT NO.
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NIX	RN

ISSUE DATE: 05/06/2024

SCALE: 3/16"=1'

FIRE ALARM PLAN - WORSHIP CENTER

CARLISLE BAPTIST CHURCH
IRREVOCABLE BUILD
835 BERTHIE AVENUE
PANAMA CITY, FLORIDA

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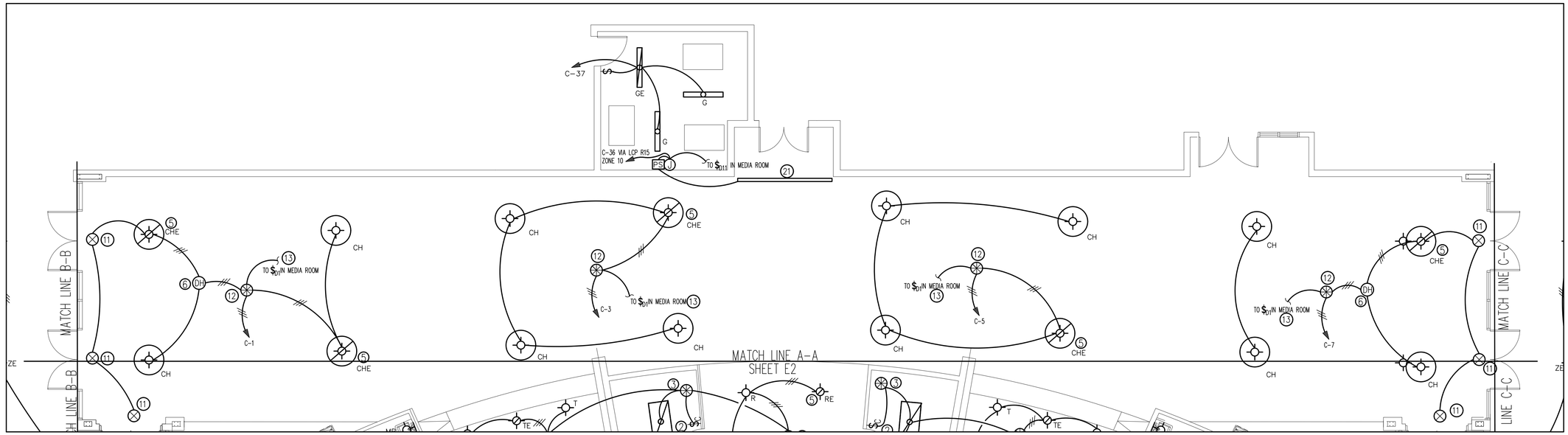
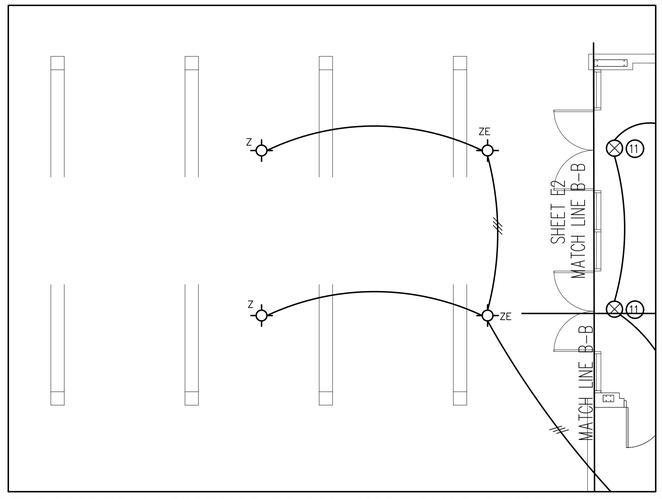


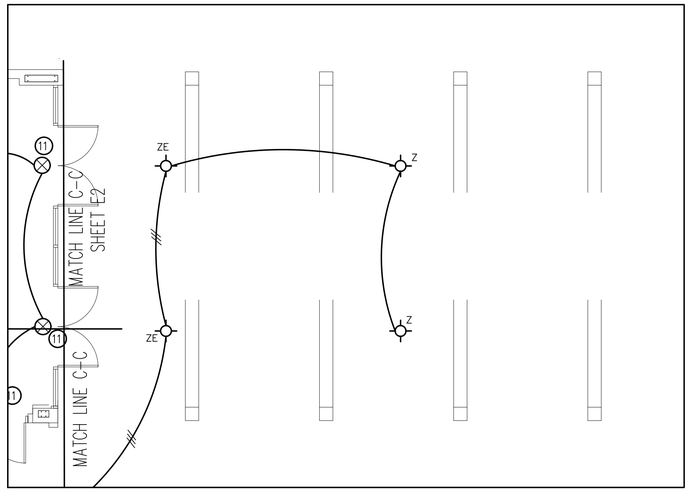
CONCOURSE LIGHTING PLAN - WORSHIP CENTER - PHASE ONE

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



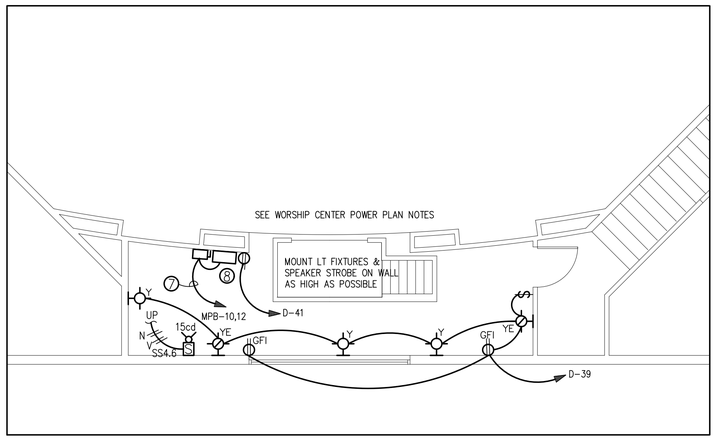
WEST CANOPY LIGHTING PLAN - WORSHIP CENTER - PHASE ONE

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



EAST CANOPY LIGHTING PLAN - WORSHIP CENTER - PHASE ONE

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



BAPTISTRY ELECTRICAL PLAN - WORSHIP CENTER - PHASE ONE

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

GENERAL NOTE

SEE SHEET E6 FOR PLAN NOTES.

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E5
SHEET 5 OF 20

PROJECT NO.
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ISSUE DATE	SCALE
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CONCOURSE & CANOPY LIGHTING PLANS, BAPTISTRY
ELECTRICAL PLAN - WORSHIP CENTER

CARLISLE BAPTIST CHURCH
IREBUILD
835 BERTHE AVENUE
PANAMA CITY, FLORIDA

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POWER PLAN NOTES
WORSHIP CENTER

1. MOUNT RECEPTACLE BELOW COUNTER TOP WITH BUSHED ACCESS OPENING, OR FLUSH MOUNTED IN BACK-SPLASH. – COORDINATE WITH MILLWORK. AND ARCHITECT.
2. TWO 8 AWG THWN CU AND ONE 10 AWG CU GND IN ¾"C. PROVIDE 60A/2P DISCONNECT AND CONNECT WATER HEATER. PROVIDE MOTOR RATED TOGGLE SWITCH FOR RECIRC PUMP DISCONNECT.
3. TWO 8 AWG THWN CU AND ONE 10 AWG CU GND IN 3/4"C. PROVIDE 60A/2P DISCONNECT AND CONNECT AIR HANDLER.
4. TWO 8 AWG THWN CU AND ONE 10 AWG CU GND IN 3/4"C. PROVIDE 60A/2P NEMA 3R DISCONNECT AND CONNECT HEAT PUMP.
5. TWO 10 AWG THWN CU AND ONE 10 AWG CU GND IN 3/4"C. PROVIDE 60A/2P NEMA 3R DISCONNECT AND CONNECT HEAT PUMP.
6. TWO 10 AWG THWN CU AND ONE 10 AWG CU GND IN 3/4"C. CONNECT INSTANTANEOUS WATER HEATER. PROVIDE CIRCUIT BREAKER LOCK-OFF DEVICE FOR DISCONNECT.
7. THREE 4 AWG THWN CU AND ONE 8 AWG CU GND IN 1-1/4"C. PROVIDE 100A/2P DISCONNECT WITH NEUTRAL KIT AND GROUND LUG. CONNECT BAPTISTRY HEATER
8. COORDINATE LOCATION OF BAPTISTRY HEATER AND PUMP RECEPTACLE PRIOR TO ROUGH-IN.
9. THREE 3 AWG THWN CU AND ONE 8 CU GND IN 1-1/4"C. PROVIDE 100A/3P NEMA 3R DISCONNECT AND CONNECT UNIT.
10. PROVIDE 30A/3P DISCONNECT AND CONNECT INDOOR UNIT.
11. THREE 2 AWG THWN CU AND ONE 6 CU GND IN 1-1/2"C. PROVIDE 200A/3P NEMA 3R DISCONNECT AND CONNECT UNIT.
12. THREE 2 AWG THWN CU AND ONE 8 CU GND IN 1-1/2"C. PROVIDE 100A/3P DISCONNECT AND CONNECT UNIT
13. PROVIDE 30A/2P NEMA 3R DISCONNECT AND CONNECT UNIT.
14. PROVIDE AUDIO STAGE POCKET FLOOR BOX WITH DUPLEX RECEPTACLE AND UP TO SIX AUDIO CONNECTORS. COORDINATE WITH OWNER'S REPRESENTATIVE PRIOR TO ROUGH-IN AND ORDER.
15. PROVIDE AUDIO STAGE POCKET WALL BOX WITH DUPLEX RECEPTACLE AND UP TO SIX AUDIO CONNECTORS. COORDINATE WITH OWNER'S REPRESENTATIVE PRIOR TO ORDER. STUB UP 1-1/4"C TO ROOF STRUCTURE WITH ELL AND BUSHING.
16. COORDINATE WATER COOLER OUTLET LOCATION PRIOR TO ROUGH-IN.
17. COORDINATE ELECTRIC VALVES CONNECTIONS WITH PLUMBING CONTRACTOR PRIOR TO ROUGH-IN. EC TO INSTALL TRANSFORMERS SUPPLIED BY PLUMBING CONTRACTOR AND MAKE FINAL CONNECTION TO VALVES IAW MANUFACTURER'S INSTRUCTIONS.
18. LOCATE RECEPTACLES FOR AV EQUIPMENT. COORDINATE WITH OWNER'S REPRESENTATIVE PRIOR TO ROUGH-IN. MAINTAIN SIX FEET CLEAR FROM EDGE OF BAPTISTRY.
19. LOCATE FOR SUSPENDED TV. COORDINATE LOCATION WITH OWNER'S REPRESENTATIVE PRIOR TO ROUGH-IN.
20. PROVIDE SINGLE GANG BOX WITH 1" CONDUIT STUBBED ABOVE CEILING WITH PULL STRING, ELL, AND BUSHING FOR TV.
21. PROVIDE RECEPTACLE UNDER STAGE FOR FILL SPEAKER. COORDINATE PRIOR TO ROUGH-IN.
22. LOCATE FOR VIDEO PROJECTOR. COORDINATE PRIOR TO ROUGH-IN.
23. MOUNTING HEIGHTS OF WALL MOUNTED OUTLETS IN THIS AREA TO BE MEASURED FROM TOP OF PLATFORM. SEE ARCHITECTURAL DRAWINGS.
24. THREE 6 AWG THWN CU AND ONE 10 CU GND IN 1"C. PROVIDE 60A/3P DISCONNECT AND CONNECT UNIT
25. THREE 6 AWG THWN CU AND ONE 8 CU GND IN 1"C. PROVIDE 100A/3P NEMA 3R DISCONNECT AND CONNECT UNIT. MOUNT DISCONNECT ON 6"X6"X72" PRESSURE TREATED POST WITH 36" BELOW GRADE AND MOUNT TOP OF DISCONNECT FLUSH WITH TOP OF POST.

LIGHTING PLAN NOTES
WORSHIP CENTER

1. DUAL TECHNOLOGY WALL MOUNT OCCUPANCY SENSOR.
2. LIGHTING CONTROL STATION WITH MANUAL ON AND OFF AND 0-10 VOLT DIMMING. 0-10V DIMMING SHALL BE COMPATIBLE WITH LIGHT FIXTURE PROVIDED. INTERCONNECT ALL FIXTURES CONTROLLED WITH 18/2 CONTROL CABLE. DO NOT RUN CONTROLS IN POWER CONDUIT.
3. DUAL TECHNOLOGY OCCUPANCY SENSOR WITH POWER PACK. WIRE TO TURN ON MANUALLY AND TURN OFF AUTOMATICALLY.
4. DUAL TECHNOLOGY OCCUPANCY SENSOR WITH POWER PACK. WIRE TO TURN ON AND OFF AUTOMATICALLY
5. LIGHT FIXTURE TO DIM TO 20%+/- OUTPUT DURING UNOCCUPIED PERIODS (SCHEDULED OR SENSOR CONTROLLED).
6. DAYLIGHT HARVESTING SENSOR WITH POWER PACK. CONNECT IN SERIES WITH OCCUPANCY CONTROLS. CALIBRATE TO MAINTAIN LIGHT LEVEL AT 45 FOOTCANDLES AND TO TURN OFF ASSOCIATED LIGHT FIXTURES WHEN DAYLIGHT LEVEL EXCEEDS 50 FOOTCANDLES. BYPASS LIGHTING CONTROLS WITH UNSWITCHED LEG FOR EMERGENCY LIGHTING.
7. EIGHT BUTTON DIGITAL SWITCH COMPATIBLE WITH LIGHTING CONTROL PANEL. CONNECT TO LIGHTING CONTROL PANEL PER MANUFACTURER'S INSTRUCTIONS. ENGRAVE BUTTONS: SANCTUARY, COVE UP LTS, COVE DOWN LTS, STAGE DOWN LTS, STAGE FLOODS, ALL ON, ALL OFF. COORDINATE ENGRAVING WITH OWNER'S REPRESENTATIVE.
8. OCCUPANCY SENSOR SLAVE
9. LIGHTING CONTROL STATION AS IN NOTE 2 ABOVE EXCEPT CAPABLE OF CONTROL FROM MULTIPLE LOCATIONS.
10. HIGH BAY OCCUPANCY SENSOR WITH POWER PACK. WIRE TO TURN ON MANUALLY AND TURN OFF AUTOMATICALLY.
11. COORDINATE INSTALLATION OF EXIT LIGHTS ON STORE FRONT WITH ARCHITECT PRIOR TO ROUGH-IN. AS A MINIMUM PENDANT MOUNT TO REQUIRED HEIGHT AND ATTACH TO STORE FRONT PER ARCHITECT'S INSTRUCTIONS.
12. HIGH BAY OCCUPANCY SENSOR WITH POWER PACK. WIRE TO TURN ON AND OFF AUTOMATICALLY.
13. PROVIDE 0-10V DIMMER COMPATIBLE WITH LIGHT FIXTURES PROVIDED. PROVIDE ENGRAVED PLATE. COORDINATE LOCATION AND PLATE ENGRAVING WITH OWNER'S REPRESENTATIVE. INTERCONNECT ALL FIXTURES ON THIS CIRCUIT WITH 18/2 CONTROL CABLE. DO NOT RUN CONTROLS IN POWER CONDUIT.
14. PROVIDE ELV DIMMER COMPATIBLE WITH LIGHT FIXTURES PROVIDED. PROVIDE ENGRAVED PLATE. COORDINATE LOCATION AND PLATE ENGRAVING WITH OWNER'S REPRESENTATIVE.
15. MOUNT THREE FIXTURES VERTICALLY ON WALL EVEN WITH QUARTER POINTS OF THE CROSS.
16. LOCATE FOR STAGE LIGHTING. COORDINATE PRIOR TO ROUGH-IN.
17. LOCATE FOR ALTERNATE HOUSE LIGHTING BY OTHERS. COORDINATE PRIOR TO BID AND ROUGH-IN.
18. FLOATING CEILING. SEE ARCHITECTURAL DETAILS.
19. DIMMING SWITCHES LOCATION. PROVIDE SCENE CONTROLLER FOR PRESET LIGHTING SCENES. COORDINATE CIRCUITS ON SCENE CONTROLLER WITH OWNER'S REPRESENTATIVE.
20. PROVIDE DIGITAL PHOTO CELL COMPATIBLE WITH LIGHTING CONTROL PANEL. MOUNT 12FT +/- AFF AND AIM NORTHEAST.
21. PROVIDE BACKLIGHT PANEL FOR 10FT WIDE X 14FT HIGH STAINED GLASS. PANEL TO BE BY GLOWBACKLED OR EQUAL AND SHALL BE 4000 DEGREE KELVIN WITH 0-10V POWER SUPPLIES. PROVIDE 0-10V DIMMER SWITCH IN MEDIA ROOM AS IN NOTE 13 ABOVE. MOUNT POWER SUPPLIES IN EDUCATION BUILDING SECOND FLOOR MECHANICAL ROOM. COORDINATE INSTALLATION WITH ARCHITECT.

LCP – 16 RELAY DIGITAL LIGHTING CONTROL PANEL

BELOW IS A LIST OF RELAYS, CONNECTED CIRCUITS, AND CONNECTED LOADS.

RELAY		HOURS OF OPERATION* START		HOURS OF OPERATION* END		BREAKER	BREAKER	HOURS OF OPERATION* START		HOURS OF OPERATION* END		DESCRIPTION	RELAY
R1	SANCTUARY (ZONE 1)		AM/PM		AM/PM	C-9	C-11		AM/PM		AM/PM	SANCTUARY (ZONE 1)	R2
R3	PERIMETER DNLTS (ZONE 3)		AM/PM		AM/PM	C-13	C-15		AM/PM		AM/PM	COVE UPLTS (ZONE 2)	R4
R5	ROSTRUM DOWNLTS (ZONE 4)		AM/PM		AM/PM	C-13	C-13		AM/PM		AM/PM	CHOIR DOWNLTS (ZONE 4)	R6
R7	FRONT WALL PENDANTS (ZONE 4)		AM/PM		AM/PM	C-13	C-17		AM/PM		AM/PM	RSOTRUM FLOODS (ZONE 5)	R8
R9	ORCH/CHOIR FLOODS (ZONE 5)		AM/PM		AM/PM	C-17	C-17	PHOTO CELL	AM/PM	(1)	AM/PM	CROSS INTERIOR FLOODS (ZONE 6)	R10
R11	CROSS EXTERIOR FLOODS (ZONE 7)	PHOTO CELL	AM/PM	(2)	AM/PM	C-30	C-30	PHOTO CELL	AM/PM		AM/PM	STEEPLE AND SIGN LTS (ZONE 8)	R12
R13	WALKWAY LTS (ZONE 9)	PHOTO CELL	AM/PM		AM/PM	C-36			AM/PM		AM/PM	PARKING LOT LIGHTS (ZONE 11)	R14
R15	STAINED GLASS "JESUS WITH CHILDREN" (ZONE 10)		AM/PM		AM/PM	C-36			AM/PM		AM/PM	PARKING LOT LIGHTS (ZONE 11)	R16

LIGHTING FIXTURE SCHEDULE

TYPE	MANUFACTURER	CATALOG No.	LAMPS No.	LAMPS TYPE	MOUNTING	REMARKS
A	LSI LIGHTING	LPEC24 113768 LED 60L UNV DIM1 35	1	47 WATT 6,133 LUMEN LED ARRAY	CEILING RECESSED	
B	LSI LIGHTING	SFP24 424 LED 50 UE DIM 35	1	50 WATT 5052 LUMEN LED ARRAY	CEILING RECESSED	
C	LSI LIGHTING	SFP22 424 LED 30 UE DIM 35	1	30 WATT 2953 LUMEN LED ARRAY	CEILING RECESSED	
CH	LIGHTSMITH	PD-9611-WHA-SBB-120-77 CUSTOM-DIM-L623	4 6	23 WATT LED 23 WATT LED DNLT	PENDANT TO 18 FT AFF	
D	LSI LIGHTING	LPEC22 113768 LED 32L UNV DIM1 35	1	26 WATT 3367 LUMEN LED ARRAY	CEILING RECESSED	
E	LSI LIGHTING	SFP24 424 LED FS 35W UNV DIM 35	1	35 WATT 3926 LUMEN LED ARRAY	CEILING RECESSED	
F	LSI LIGHTING	LPEC24 113768 LED 48L UNV DIM1 35	1	37 WATT 4908 LUMEN LED ARRAY	CEILING RECESSED	
FLA	JESCO LIGHTING	CM-208-L562L-3590-24D-WH	1	36 WATT 2700 LUMEN LED ARRAY	CEILING CANOPY MOUINT	
FLB	JESCO LIGHTING	CM-208-L562L-3590-38D-WH	1	36 WATT 2700 LUMEN LED ARRAY	CEILING CANOPY MOUINT	
G	LSI LIGHTING	SDL4 424 LED 50L FL UNV DIM1 35 80CRI	1	38 WATT 5017 LUMEN LED ARRAY	CEILING SURFACE	
H	LSI LIGHTING	SDL2 424 LED 30L FL UNV DIM1 35 80CRI	1	24 WATT 3077 LUMEN LED ARRAY	CEILING SURFACE	
J	LSI LIGHTING	W444 113768 LED SS NW UE EM	1	35 WATT 3770 LUMEN LED ARRAY	WALL @ 8'-0" ABOVE NEAREST STEP OR LANDING	NO PART OF FIXTURE TO BE CLOSER THAN 96" ABOVE ANY STEP OR LANDING
K	WF HARRIS	100-18-LED-4K4-LSS-3	1	40 WATT 4400 LUMEN LED ARRAY	WALL @ 18" BELOW ELEVATOR STOP	
L	LSI LIGHTING	LAD6-424-LED-25L-UNV-DIM1-35-WF-TR6R-SF HAZ & 786277 EM BATT	1	22 WATT 2333 LUMEN LED ARRAY	CEILING RECESSED	REMOTE EMERGENCY BATTERY
M	JESCO	RLET 8150 SW3 35K 50W HZWH 208 & RLH 8150-A	1	50 WATT 5000 LUMEN LED ARRAY	CEILING RECESSED	
MB	LUM-TECH	LT32170 315 24"	1	24 WATT 1700 LUMEN LED ARRAY	WALL @ 6"-8" ABOVE MIRROR	
N	LSI	SDL8 424 LED 80L FL UNV DIM1 35 80CRI	1	62 WATT 8212 LUMEN LED ARRAY	COVE	
P	LIGHTRSMITH	PD 10003 MOD8W-MOD16H SBP ACC48 010V ACC W 77	1	80 WATT 7500 LUMEN LED ARRAY	AIRCRAFT CABLE TO 25'-6" AFF	**FIELD DETERMINE – LENGTH VARIES WITH LOCATION
R	JESCO	RLET-8150-208 SW3-35K-40W-HZWH & RLH-8150-A	1	42 WATT 4300 LUMEN LED ARRAY	CEILING RECESSED	
S	JESCO	RLH 208 60 12 JB NIC 3080 WHWH	1	12.5 WATT 910 LUMEN LED ARRAY	CEILING RECESSED	
SL	LSI	LAW2 424 W 8 15L 830 FA N 1 UNV BRZ	1	96 WATT 11,800 LUMEN LED ARRAY	WALL ABOVE SIGN	PROVIDE STAINLESS STEEL FASTENERS. COORDINATE W/MFGR
T	JESCO	RLET-6130-SW3-35K-23W-HZWH 208 & RLH-6130-A	1	23 WATT 2500 LUMEN LED ARRAY	CEILING RECESSED	
U	LSI	XFLM 113768 VF LED 49 HO NW UNV BRZ/BKA XFLM SMC BRZ	1	64 WATT 5197 LUMEN LED ARRAY	STANCHION MOUNT APPROX 18" AFF. PROVIDE 12" DIA X 18"D CONCRETE BASE 4" AFG	AIM TO BEST ILLUMINATE CROSS
V	LSI	XFLM 113768 VF LED 28 HO NW UNV BRZ YM	1	36 WATT 3155 LUMEN LED ARRAY	YOKE MOUNT ON ROOF PER ARCHITECT AND ROOFER INSTRUCTIONS	AIM TO BEST ILLUMINATE STEEPLE
W	LSI LIGHTING	XWS 424 LED 5L SIL FT UNV DIM 40 70CRI PCI120 BRZ SP1	1	39 WATT 5383 LUMEN LED ARRAY	WALL APPROX 20 FT AFF	
Y	WF HARRIS	300-18-LED-1K-OW-HB-C4	1	10 WATT 1200 LUMEN LED ARRAY	CEILING OF CANOPY. PROVIDE MOUNTING STRUT FOR CONDUIT AND FIXTURE	
Z	WF HARRIS	1200-18-LED-4K-HB-C4-18	1	40 WATT 4000 LUMEN LED ARRAY	CEILING OF CANOPY. PROVIDE MOUNTING STRUT FOR CONDUIT AND FIXTURE	
⊗	TELESIS	TLX-2206-EM-RU-W-SD1	1	2W LED ARRAY	WALL OR CEILING APPROX 12" ABOVE DOOR	

NOTE: SUFFIX 'E' TO FIXTURE TYPE DENOTES EMERGENCY BATTERY PACK INSTALLED AND CONNECTED AHEAD OF ALL SWITCHING

E6
SHEET 6 OF 20

PROJECT NO.
2236

PREPARED BY	REVIEWED BY
NIX	RN
ISSUE DATE	SCALE
05/06/2024	3/16"=1'

WORSHIP CENTER LIGHTING & POWER PLAN NOTES
LIGHT FIXTURE & LIGHTING CONTROL PANEL SCHEDULES

CARLISLE BAPTIST CHURCH
IRIEJEBUILD
835 BERTHE AVENUE
PANAMA CITY, FLORIDA

Ronald J Nix
Digitally signed by Ronald J Nix
Date: 2024.05.06 16:43:53 -04'00'

RONALD JAMES NIX LICENSE No. 28635 STATE OF FLORIDA PROFESSIONAL ENGINEER

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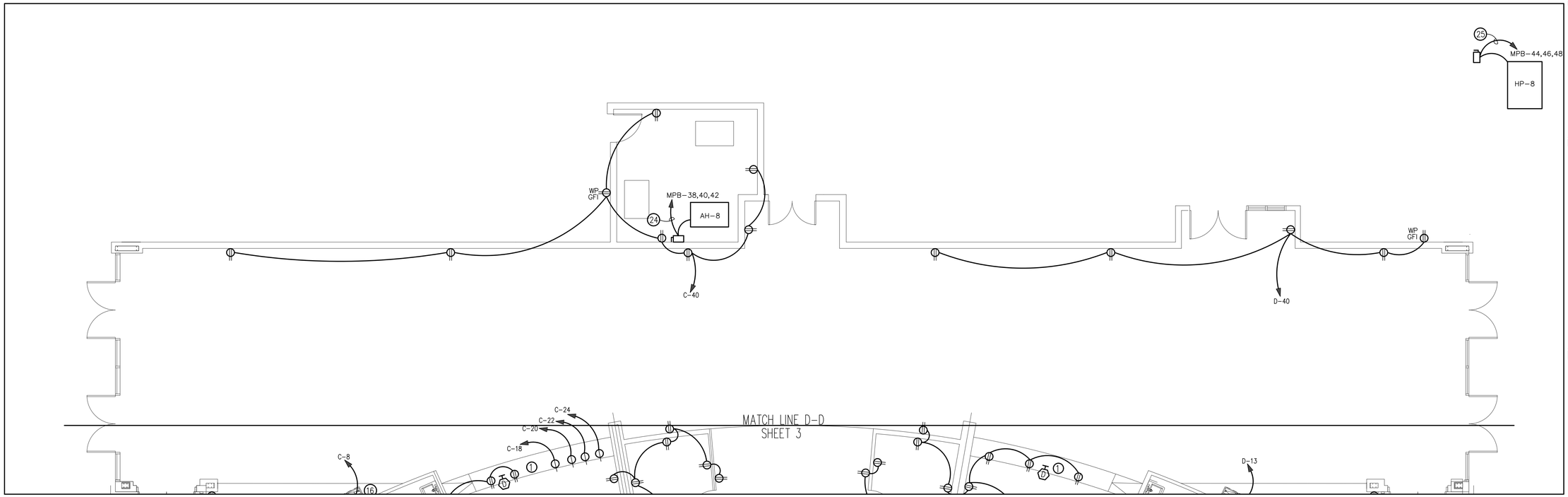
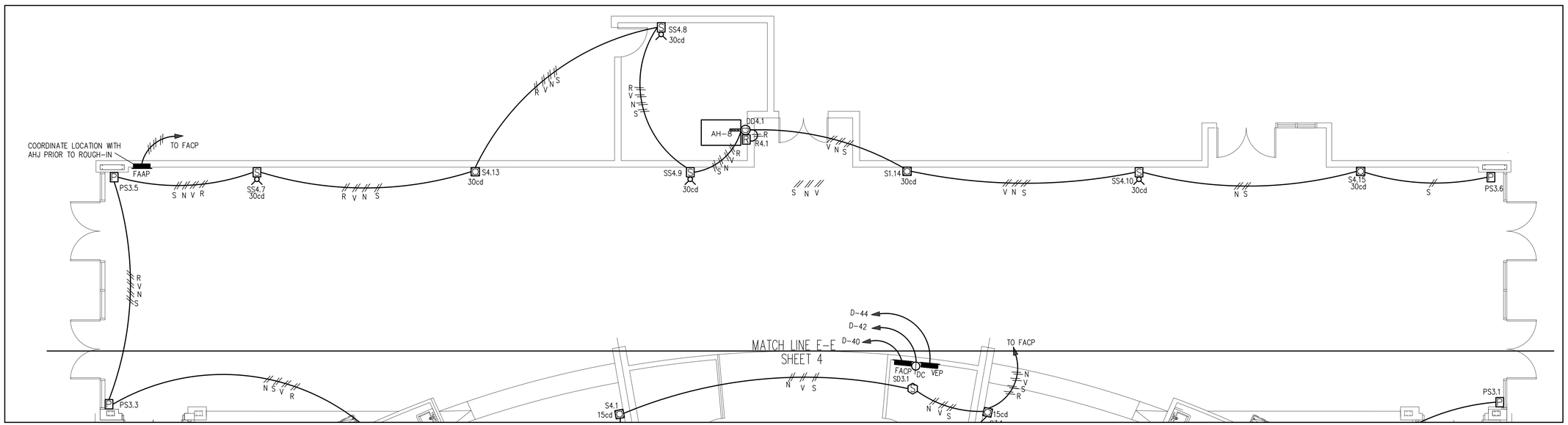


CONCOURSE POWER PLAN - WORSHIP CENTER - PHASE ONE

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



CONCOURSE FIRE ALARM PLAN - WORSHIP CENTER - PHASE ONE

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

GENERAL NOTES (THIS SHEET)

1. PROVIDE TAMPER RESISTANT RECEPTACLES WHERE REQUIRED BY THE NEC. COORDINATE WITH LOCAL AHJ.

2. SEE SHEET E6 FOR PLAN NOTES

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E7
SHEET 7 OF 20

PROJECT NO.
2236

PREPARED BY	REVIEWED BY
NIX	RN

ISSUE DATE 05/06/2024
SCALE 3/16"=1'

CONCOURSE POWER AND FIRE ALARM PLANS

CARLISLE BAPTIST CHURCH
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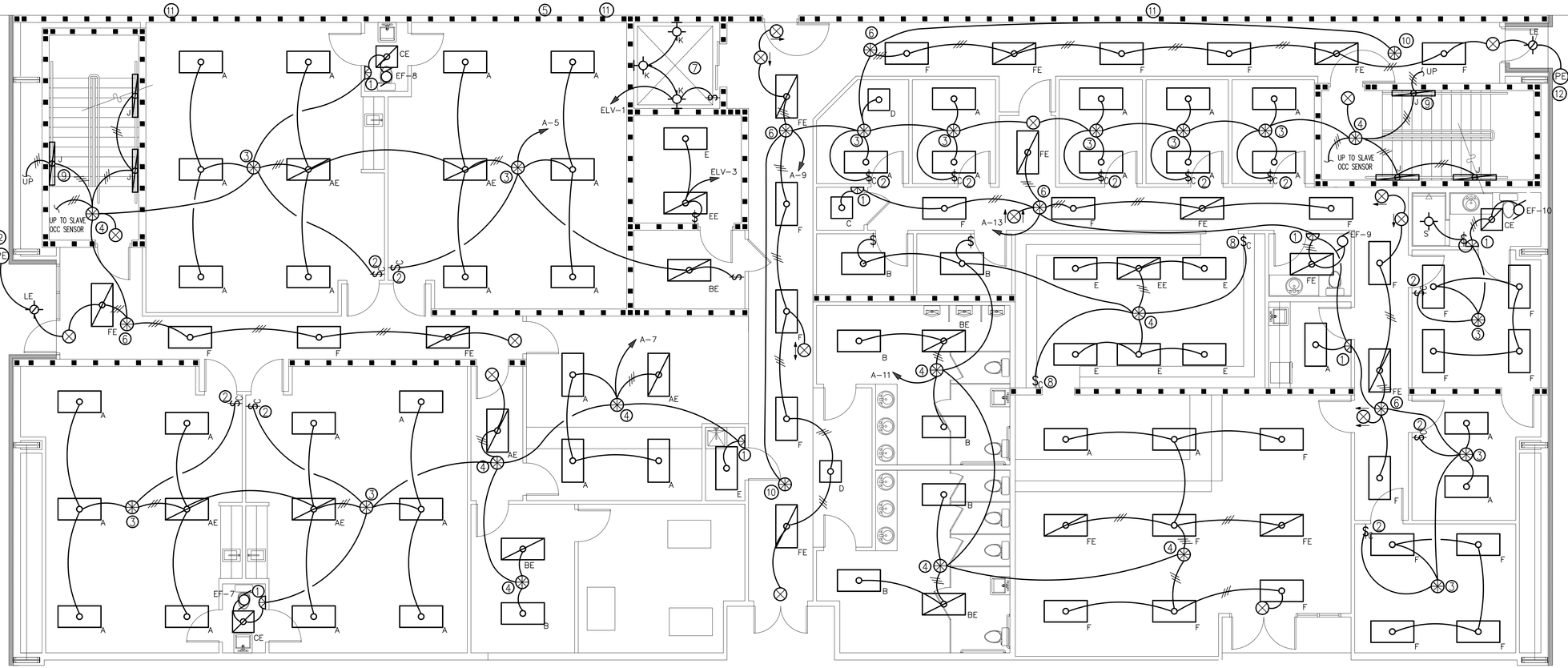

FIRST FLOOR LIGHTING PLAN - EDUCATION BUILDING - PHASE TWO

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

PLAN NOTES

1. DUAL TECHNOLOGY WALL MOUNT.OCCUPANCY SENSOR.
2. LIGHTING CONTROL STATION WITH MANUAL ON AND OFF AND 0-10 VOLT DIMMING. 0-10V DIMMING SHALL BE COMPATIBLE WITH LIGHT FIXTURE PROVIDED. INTERCONNECT ALL FIXTURES CONTROLLED WITH 18/2 CONTROL CABLE. DO NOT RUN CONTROLS IN POWER CONDUIT.
3. DUAL TECHNOLOGY OCCUPANCY SENSOR EQUAL TO WITH POWER PACK. WIRE TO TURN ON MANUALLY AND TURN OFF AUTOMATICALLY.
4. DUAL TECHNOLOGY OCCUPANCY SENSOR WITH POWER PACK. WIRE TO TURN ON AND OFF AUTOMATICALLY
5. TWO VERTICAL CONDUITS ON EXTERIOR OF EXISTING BUILDING TO BE REROUTED TO INTERIOR OF EXISTING BUILDING. ALL WORK IN EXISTING BUILDING TO BE CONCEALED. COORDINATE WITH ARCHITECT. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS PRIOR TO BID.
6. OCCUPANCY SENSOR WITH POWER PACK AND HALLWAY COVERAGE PATTERN (10FT X 90 FT). WIRE TO TURN ON AND OFF AUTOMATICALLY.
7. MOUNT LIGHTS AND RECEPTACLE IN ELEVATOR PIT 18" BELOW ELEVATOR STOP. MOUNT SWITCH 42" ABOVE THE SEAL PLATE ADJACENT TO THE LADDER. FIELD COORDINATE.
8. LIGHTING CONTROL STATION AS IN NOTE 2 ABOVE EXCEPT CAPABLE OF CONTROL FROM MULTIPLE LOCATIONS.
9. MOUNT AS HIGH AS POSSIBLE BELOW STAIR RISER.
10. OCCUPANCY SENSOR SLAVE WITH HALLWAY COVERAGE.
11. EXISTING SECURITY LIGHT FIXTURE APPROXIMATELY 20FT AFG ON EXISTING BUILDING TO BE REMOVED. REMOVE CONDUCTORS TO FIRST OUTLET REMAINING IN SERVICE. EXTEND CIRCUIT AS REQUIRED TO MAINTAIN EXISTING OUTLETS TO REMAIN IN SERVICE. ALL WORK IN EXISTING BUILDING TO BE CONCEALED. COORDINATE WITH ARCHITECT. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS PRIOR TO BID.
12. PHOTOCELL EQUAL TO TORK 2100 SERIES. MOUNT APPROXIMATELY 10FT AFF. PROVIDE WEATHERPROOF INSTALLATION AND AIM NORTH.

GENERAL NOTES

1. BYPASS LIGHTING CONTROLS WITH UNSWITCHED LEG FOR ALL EMERGENCY AND EXIT LIGHTS.

E8
SHEET 8 OF 20

PROJECT NO.
2236

PREPARED BY	REVIEWED BY
NIX	RN
ISSUE DATE	SCALE
05/06/2024	3/16"=1'

FIRST FLOOR LIGHTING PLAN - EDUCATION BUILDING

CARLISLE BAPTIST CHURCH
IRREBUILD
835 BERTHIE AVENUE
PANAMA CITY, FLORIDA

Ronald J Nix
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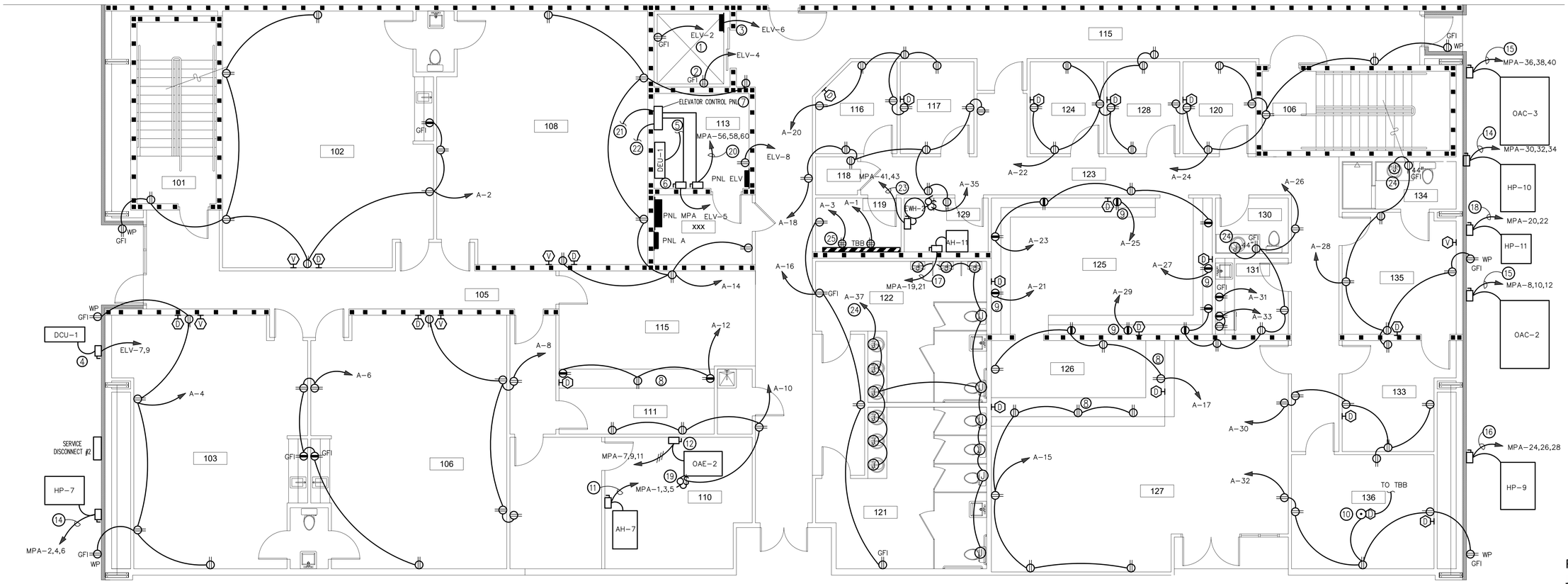

FIRST FLOOR POWER PLAN - EDUCATION BUILDING - PHASE TWO

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

PLAN NOTES (THIS SHEET)

(1) RECEPTACLES TO BE MOUNTED 18" BELOW ELEVATOR STOP.

(2) LOCATE RECEPTACLE FOR SUMP PUMP.

(3) CONNECT OIL DETECTION ALARM SYSTEM.

(4) PROVIDE 30A/2P NEMA 3R DISCONNECT AND CONNECT CONDENSING UNIT.

(5) CONNECT INDOOR UNIT TO OUTDOOR UNIT PER MANUFACTURER'S INSTRUCTIONS.

(6) PROVIDE 30A/2P HD DISCONNECT WITH DOOR INTERLOCK FOR CAB LIGHTS. CONNECT TO ELEVATOR CONTROL PANEL.

(7) COORDINATE LOCATION WITH ELEVATOR INSTALLATION PRIOR TO ROUGH-IN.

(8) MOUNT RECEPTACLE BELOW COUNTER TOP WITH BUSHED ACCESS OPENING, OR FLUSH MOUNTED IN BACK-SPLASH. COORDINATE WITH MILLWORK AND ARCHITECT.

(9) PROVIDE ENGRAVED PLATE: "DEDICATED CIRCUIT"

(10) PROVIDE FLOOR BOX EQUAL TO LEGRAND RFB2-OG WITH BLANK FLANGED COVER ASSEMBLY, DUPLEX RECEPTACLE AND TWO CAT 6 DATA JACKS. RUN TWO CAT 6 DATA CABLES TO DATA EQUIPMENT RACK IN 3/4" PVC.

(11) THREE 3 AWG THWN CU AND ONE 8 AWG CU GND IN 1-1/4"C. PROVIDE 100A/3P DISCONNECT AND CONNECT AIR HANDLER.

(12) PROVIDE 30A/3P DISCONNECT AND CONNECT INDOOR UNIT.

(13) NOT USED

(14) THREE 8 AWG THWN CU AND ONE 10 AWG CU GND IN 3/4"C. PROVIDE 60A/3P NEMA 3R DISCONNECT AND CONNECT HEAT PUMP.

(15) THREE 6 AWG THWN CU AND ONE 10 AWG CU GND IN 1"C. PROVIDE 60A/3P NEMA 3R DISCONNECT AND CONNECT OUTSIDE AIR UNIT.

(16) THREE 6 AWG THWN CU AND ONE 10 AWG CU GND IN 1"C. PROVIDE 100A/3P NEMA 3R DISCONNECT AND CONNECT HEAT PUMP.

(17) TWO 8 AWG THWN CU AND ONE 10 AWG CU GND IN 3/4"C. PROVIDE 60A/2P DISCONNECT AND CONNECT AIR HANDLER.

(18) TWO 8 AWG THWN CU AND ONE 10 AWG CU GND IN 3/4"C. PROVIDE 60A/2P NEMA 3R DISCONNECT AND CONNECT HEAT PUMP.

(19) PROVIDE TOGGLE SWITCH FOR DAMPER MOTOR DISCONNECT AND CONNECT DAMPER MOTOR.

(20) THREE 4 AWG THWN CU AND ONE 8 AWG CU GND IN 1-1/2"C. PROVIDE 100A/3P HD DISCONNECT FUSED AT 90 AMPS RK-5. PROVIDE DOOR INTERLOCK AND AUXILIARY CONTACT. CONNECT CONTACT TO ELEVATOR CONTROL PANEL WITH TWO 14 AWG STRANDED COPPER AND ONE 14 AWG CU GND IN 1/2"C. COORDINATE ELECTRICAL REQUIREMENTS PRIOR TO ROUGH-IN AS NO VENDOR DRAWINGS WERE AVAILABLE AT TIME OF DESIGN.

(21) CAT 5 CABLE IN 3/4"C TO TBB.

(22) FOUR 14 AWG THWN CU IN 3/4"C TO FCP. COORDINATE WITH FIRE ALARM SYSTEM.

(23) TWO 8 AWG THWN CU AND ONE 10 AWG CU GND IN 3/4"C. PROVIDE 60A/2P DISCONNECT AND CONNECT WATER HEATER. PROVIDE MOTOR RATED TOGGLE SWITCH FOR RECIRC PUMP DISCONNECT.

(24) COORDINATE ELECTRIC VALVES CONNECTIONS WITH PLUMBING CONTRACTOR PRIOR TO ROUGH-IN. EC TO INSTALL TRANSFORMERS SUPPLIED BY PLUMBING CONTRACTOR AND MAKE FINAL CONNECTION TO VALVES IAW MANUFACTURER'S INSTRUCTIONS.

(25) PROVIDE 72 PORT CAT 6 PATCH PANEL WITH CABLE MANAGEMENT. PROVIDE CABLE TERMINATION AND TESTING

GENERAL NOTES

1. PROVIDE TAMPER RESISTANT RECEPTACLES WHERE REQUIRED BY THE NEC. COORDINATE WITH LOCAL AHJ.

Ronald J Nix
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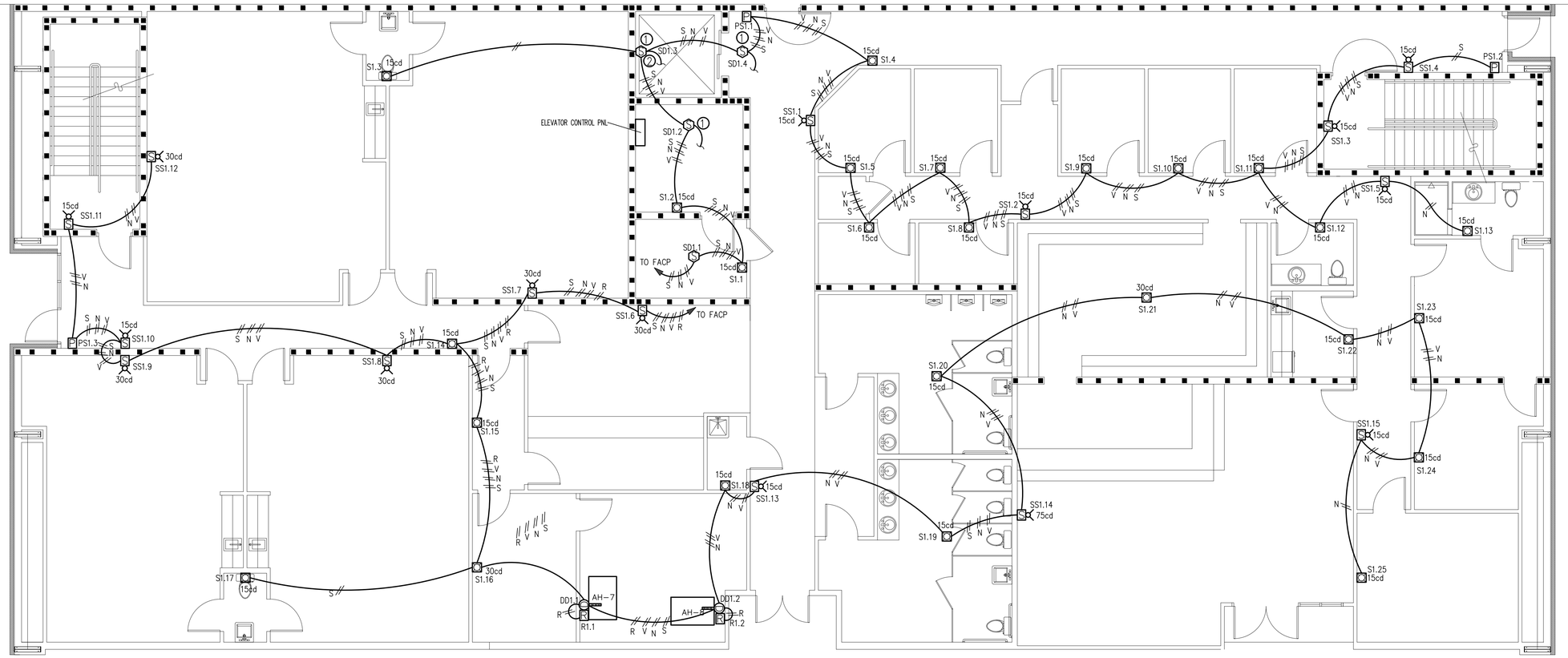
CARLISLE BAPTIST CHURCH
REBUILD
835 BERTHE AVENUE
PANAMA CITY, FLORIDA

PREPARED BY: NIX
REVIEWED BY: RN
ISSUE DATE: 05/06/2024
SCALE: 3/16" = 1'

FIRST FLOOR POWER PLAN - EDUCATION BUILDING

PROJECT NO. 2236

E9
SHEET 9 OF 20



FIRST FLOOR FIRE ALARM PLAN - EDUCATION BUILDING - PHASE TWO

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

PLAN NOTES

1. PROVIDE SMOKE DETECTOR WITH AUXILIARY CONTACT. CONNECT CONTACT TO ELEVATOR CONTROL PANEL WITH TWO 14 AWG THWN STRANDED COPPER CONDUCTORS IN 1/2"C.
2. WALL MOUNT 18" BELOW ELEVATOR STOP

F10
SHEET 10 OF 20

PROJECT NO.
2236

PREPARED BY
NIX

REVIEWED BY
RN

ISSUE DATE
05/06/2024

SCALE
3/16"=1'

FIRST FLOOR FIRE ALARM PLAN - EDUCATION BUILDING

CARLISLE BAPTIST CHURCH
IREBUILD
835 BERTHIE AVENUE
PANAMA CITY, FLORIDA

Ronald J Nix
Digitally signed by Ronald J Nix
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FLORIDA CA#8798, PE#28635
GEORGIA CA#PEF003627, PE#14888

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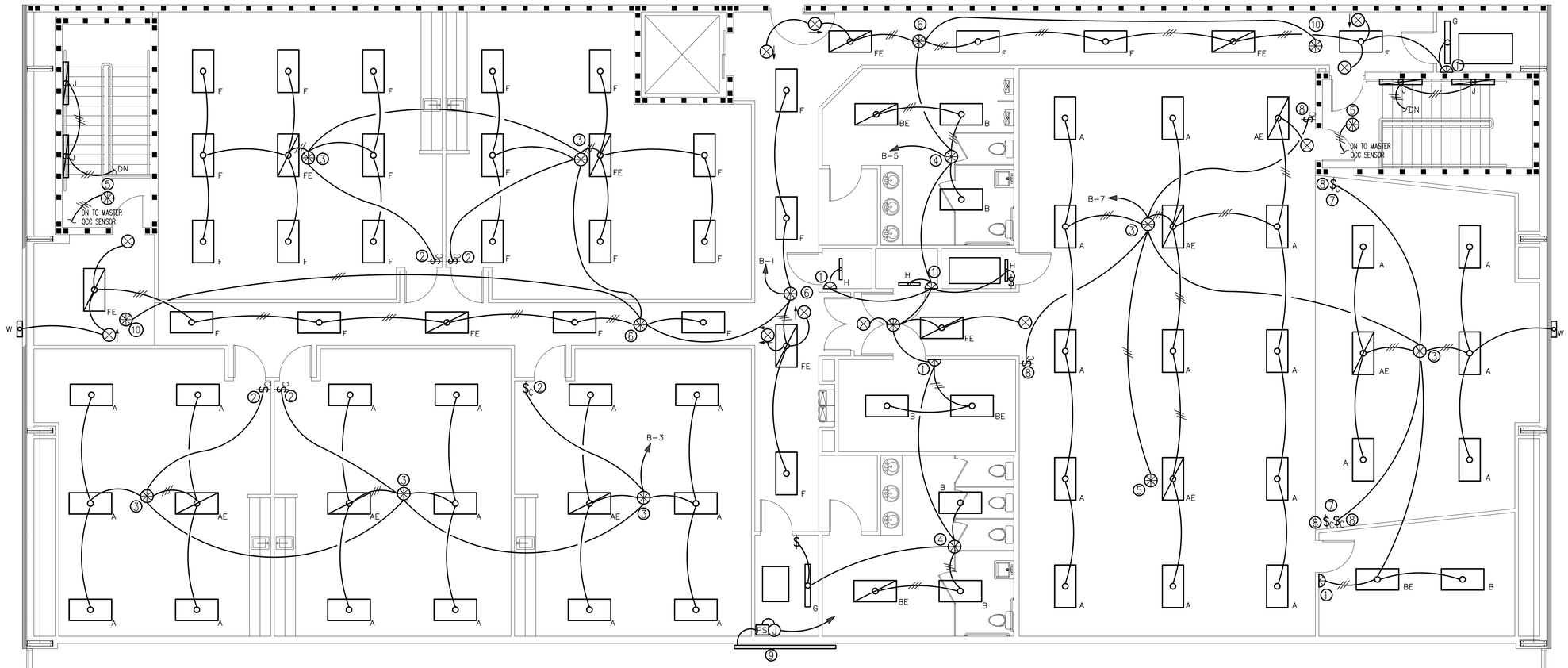

SECOND FLOOR LIGHTING PLAN - EDUCATION BUILDING - PHASE TWO

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

PLAN NOTES

1. DUAL TECHNOLOGY WALL MOUNT OCCUPANCY SENSOR.
2. LIGHTING CONTROL STATION WITH MANUAL ON AND OFF AND 0-10 VOLT DIMMING. 0-10V DIMMING SHALL BE COMPATIBLE WITH LIGHT FIXTURE PROVIDED. INTERCONNECT ALL FIXTURES CONTROLLED WITH 18/2 CONTROL CABLE. DO NOT RUN CONTROLS IN POWER CONDUIT.
3. DUAL TECHNOLOGY OCCUPANCY SENSOR EQUAL TO WITH POWER PACK. WIRE TO TURN ON MANUALLY AND TURN OFF AUTOMATICALLY.
4. DUAL TECHNOLOGY OCCUPANCY SENSOR WITH POWER PACK. WIRE TO TURN ON AND OFF AUTOMATICALLY
5. OCCUPANCY SENSOR SLAVE
6. OCCUPANCY SENSOR WITH POWER PACK AND HALLWAY COVERAGE PATTERN (10FT X 90 FT). WIRE TO TURN ON AND OFF AUTOMATICALLY.
7. MOUNTING HEIGHTS OF WALL MOUNTED OUTLETS IN THIS AREA TO BE MEASURED FROM TOP OF PLATFORM. SEE ARCHITECTURAL DRAWINGS.
8. LIGHTING CONTROL STATION AS IN NOTE 2 ABOVE EXCEPT CAPABLE OF CONTROL FROM MULTIPLE LOCATIONS.
9. BACKLIGHT PANEL AND POWER SUPPLY. SEE SHEET E5.
10. OCCUPANCY SENSOR SLAVE WITH HALLWAY COVERAGE.

GENERAL NOTES

1. BYPASS LIGHTING CONTROLS WITH UNSWITCHED LEG FOR ALL EMERGENCY AND EXIT LIGHTS.

E11
SHEET 11 OF 20

PROJECT NO.
2236

PREPARED BY	REVIEWED BY	SCALE
NIX	RN	3/16"=1'
ISSUE DATE		
05/06/2024		

SECOND FLOOR LIGHTING PLAN - EDUCATION BUILDING

CARLISLE BAPTIST CHURCH
REBUILD
835 BERTHE AVENUE
PANAMA CITY, FLORIDA

Ronald J Nix
Digitally signed by Ronald J Nix
Date: 2024.05.06 16:41:37 -04'00'

RONALD JAMES NIX LICENSE No. 28635 STATE OF FLORIDA PROFESSIONAL ENGINEER

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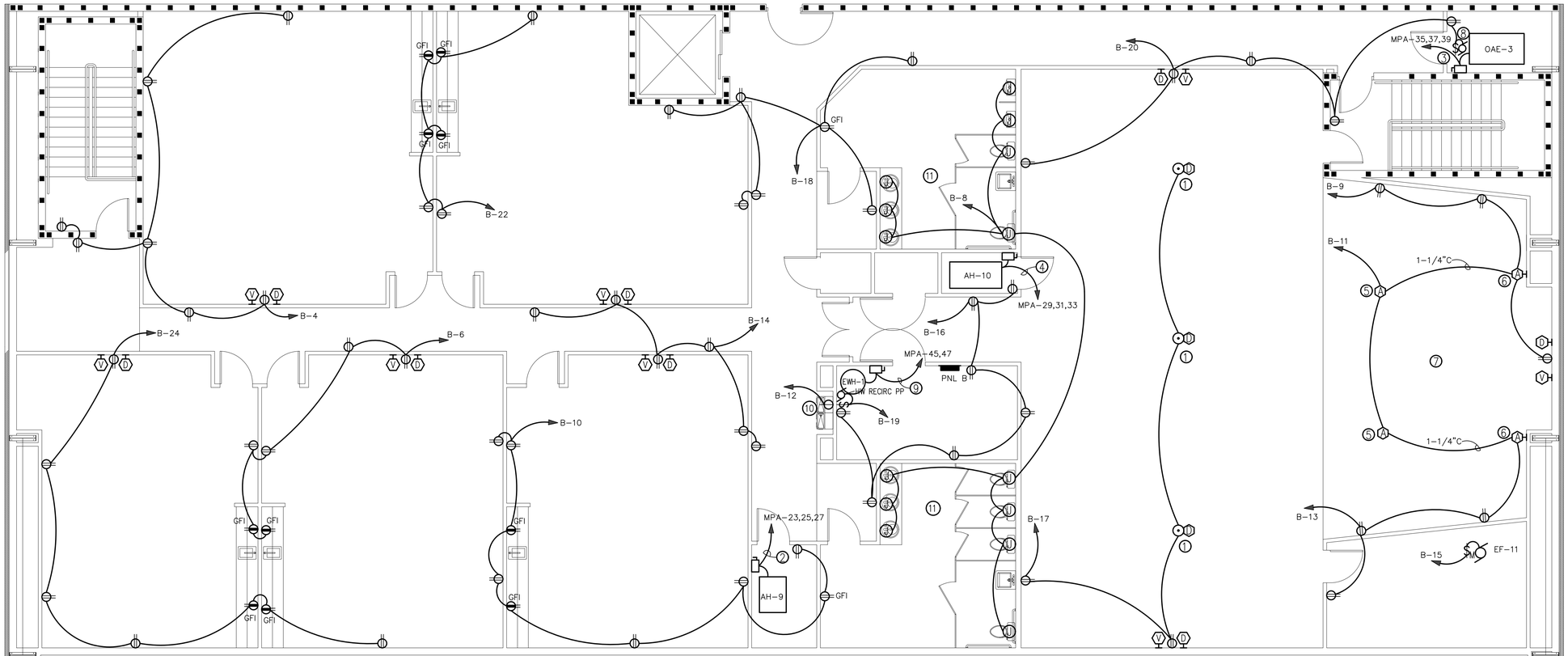

SECOND FLOOR POWER PLAN - EDUCATION BUILDING - PHASE TWO

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

PLAN NOTES (THIS SHEET)

1. PROVIDE FLOOR BOX EQUAL TO LEGRAND RFB2-SS WITH BLANK FLANGED COVER ASSEMBLY, DUPLEX RECEPTACLE AND TWO CAT 6 DATA JACKS. RUN TWO CAT 6 DATA CABLES TO DATA EQUIPMENT RACK IN 3/4" PVC.
2. THREE 3 AWG THWN CU AND ONE 8 AWG CU GND IN 1-1/4"C. PROVIDE 100A/3P DISCONNECT AND CONNECT AIR HANDLER.
3. PROVIDE 30A/3P DISCONNECT AND CONNECT INDOOR UNIT.
4. THREE 6 AWG THWN CU AND ONE 10 AWG CU GND IN 1"C. PROVIDE 60A/3P DISCONNECT AND CONNECT AIR HANDLER.
5. PROVIDE AUDIO STAGE POCKET FLOOR BOX WITH DUPLEX RECEPTACLE AND UP TO SIX AUDIO CONNECTORS. COORDINATE WITH OWNER'S REPRESENTATIVE PRIOR TO ORDER.
6. PROVIDE AUDIO STAGE POCKET WALL BOX WITH DUPLEX RECEPTACLE AND UP TO SIX AUDIO CONNECTORS. COORDINATE WITH OWNER'S REPRESENTATIVE PRIOR TO ORDER. STUB OUT 1-1/4"C TO ABOVE CEILING WITH ELL AND BUSHING.
7. MOUNTING HEIGHTS OF WALL MOUNTED OUTLETS IN THIS AREA TO BE MEASURED FROM TOP OF PLATFORM. SEE ARCHITECTURAL DRAWINGS.
8. PROVIDE TOGGLE SWITCH FOR DAMPER MOTOR DISCONNECT AND CONNECT DAMPER MOTOR.
9. TWO 8 AWG THWN CU AND ONE 10 AWG CU GND IN 3/4"C. PROVIDE 60A/2P DISCONNECT AND CONNECT WATER HEATER. PROVIDE MOTOR RATED TOGGLE SWITCH FOR RECIRC PUMP DISCONNECT.
10. COORDINATE WATER COOLER OUTLET LOCATION PRIOR TO ROUGH-IN.
11. COORDINATE ELECTRIC VALVES CONNECTIONS WITH PLUMBING CONTRACTOR PRIOR TO ROUGH-IN. EC TO INSTALL TRANSFORMERS SUPPLIED BY PLUMBING CONTRACTOR AND MAKE FINAL CONNECTION TO VALVES IAW MANUFACTURER'S INSTRUCTIONS.

GENERAL NOTES

1. PROVIDE TAMPER RESISTANT RECEPTACLES WHERE REQUIRED BY THE NEC. COORDINATE WITH LOCAL AHJ.

E12
SHEET 12 OF 20

PROJECT NO.
2236

PREPARED BY	REVIEWED BY
NIX	RN
ISSUE DATE	SCALE
05/06/2024	3/16"=1'

SECOND FLOOR POWER PLAN - EDUCATION BUILDING

CARLISLE BAPTIST CHURCH
REBUILD
835 BERTHE AVENUE
PANAMA CITY, FLORIDA

Ronald J Nix
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Date: 2024.05.06 16:41:08 -04'00'

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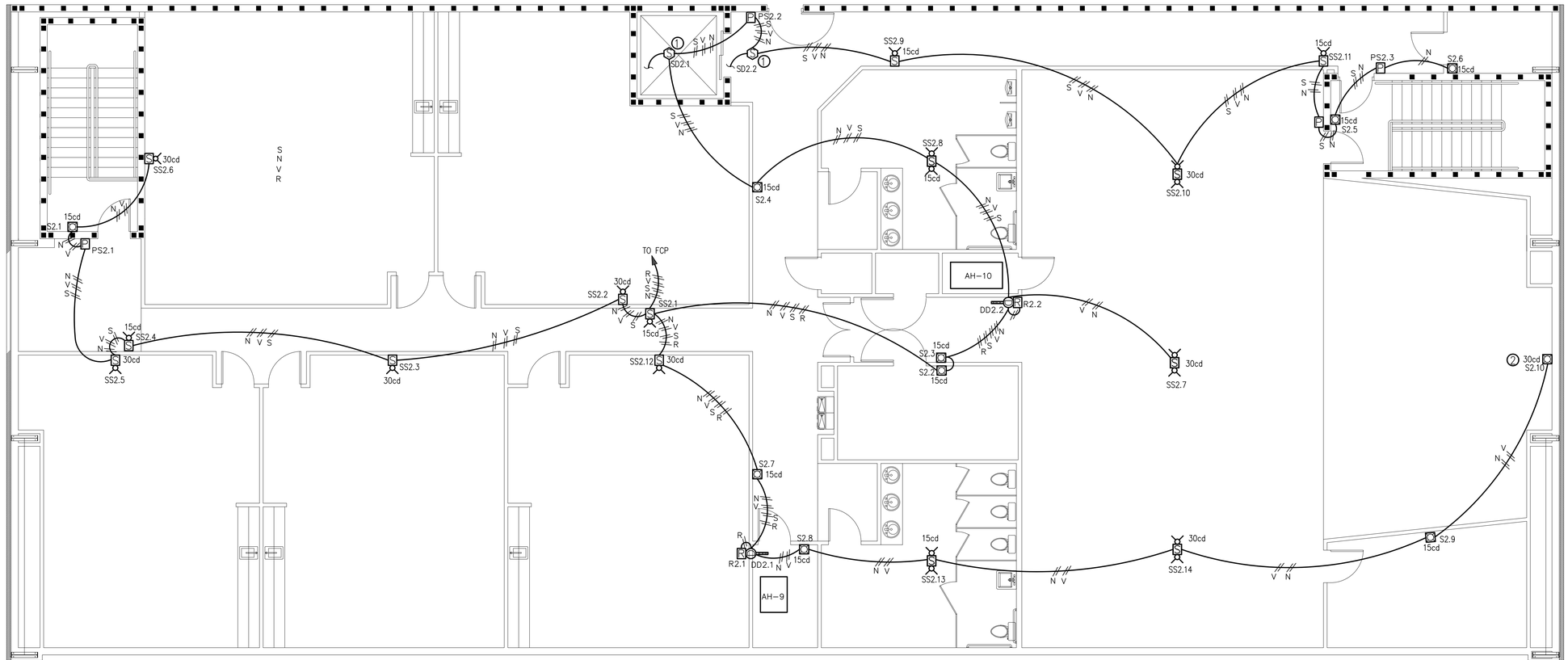

SECOND FLOOR FIRE ALARM PLAN - EDUCATION BUILDING - PHASE TWO

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

PLAN NOTES

1. PROVIDE SMOKE DETECTOR WITH AUXILIARY CONTACT. CONNECT CONTACT TO ELEVATOR CONTROL PANEL WITH TWO 14 AWG THWN STRANDED COPPER CONDUCTORS IN 1/2"C.
2. MOUNTING HEIGHTS OF WALL MOUNTED OUTLETS IN THIS AREA TO BE MEASURED FROM TOP OF PLATFORM. SEE ARCHITECTURAL DRAWINGS.

E13
SHEET 13 OF 20

PROJECT NO.
2236

PREPARED BY	REVIEWED BY
NIX	RN
ISSUE DATE	SCALE
05/06/2024	3/16"=1'

SECOND FLOOR FIRE ALARM PLAN
EDUCATION BUILDING

CARLISLE BAPTIST CHURCH
IRIJEBUILD
835 BERTHE AVENUE
PANAMA CITY, FLORIDA

Ronald J Nix
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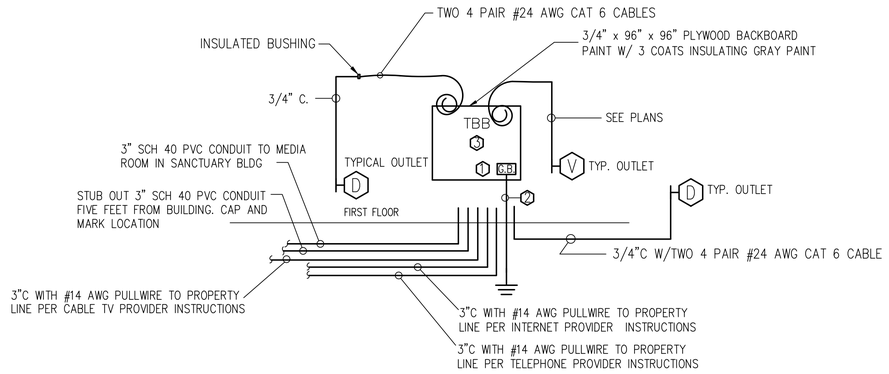
ELECTRICAL LEGEND

- $ A.C. TOGGLE SWITCH, SINGLE POLE, 120–277VAC, 20A. SPECIFICATION GRADE, 48" AFF
- $_C LOW VOLTAGE LIGHTING CONTROL STATION OR DIGITAL SWITCH, SEE PLAN NOTES. MT 48" AFF
- (PE) PHOTOCELL EQUAL TO TORK 2100 SERIES OR DIGITAL PHOTOCELL IF NOTED. MOUNT ON WEATHERPROOF BOX
- $_M MANUAL MOTOR STARTING TOGGLE SWITCH WITH OVERLOAD PROTECTION. MOUNT ADJACENT TO MOTOR.
- CEILING MOUNTED VACANCY/OCCUPANCY SENSOR WITH POWER PACK AND RELAY KIT. SEE PLAN NOTES SET TIME DELAY FOR TWENTY MINUTES.
- WALL MOUNTED VACANCY/OCCUPANCY SENSOR. SEE PLAN NOTES. SET TIME DELAY FOR TWENTY MINUTES.
- (DH) DAYLIGHT HARVESTING SENSOR WITH POWER PACK MOUNTED ON CEILING.
- A ○ LED LIGHT FIXTURE. CAPITAL LETTER INDICATES FIXTURE TYPE (SEE FIXTURE SCHEDULE),
- CEILING MOUNTED LIGHT FIXTURE
- WALL MOUNTED LIGHT FIXTURE
- DUPLEX RECEPTACLE – 3 WIRE GROUNDING TYPE, 125V., 15A. OR 20A. AS REQUIRED, SPECIFICATION GRADE, 18" AFF
- DUPLEX RECEPTACLE AS ABOVE, MOUNT HORIZONTALLY 4" ABOVE COUNTER BACKSPLASH TO CENTER LINE
- GFI DUPLEX RECEPTACLE WITH GROUND FAULT CIRCUIT INTERRUPTER
- SINGLE RECEPTACLE, 3W GROUNDING TYPE, 125V., 20A. SPECIFICATION GRADE, COORDINATE MOUNTING HEIGHT WITH EQUIPMENT
- QUAD RECEPTACLE– TWO DUPLEX RECEPTACLES UNDER ONE COVER
- CAST FLOOR BOX WITH POWER OUTLET(S). SEE PLANS.
- (D) CAST FLOOR BOX WITH DATA AND POWER. SEE PLANS.
- (V)H TELEVISION OUTLET WITH 1" CONDUIT TO ABOVE CEILING WITH ELL AND BUSHING.
- H(D) DUPLEX CAT 6 DATA/COM OUTLET. 4" SQ BOX WITH DEVICE RING MT 18" AFF. PROVIDE 3/4"C WITH TWO CAT 6 CABLES TO DATA EQUIPMENT RACK. PROVIDE TERMINATIONS AND TESTING.
- BRANCH CIRCUIT CONCEALED ABOVE CEILING OR IN WALLS, NUMBER OF CROSS LINES INDICATES NUMBER OF #12 CONDUCTORS WHEN MORE THAN TWO. ARROW INDICATES HOMERUN TO PANEL AND CIRCUIT INDICATED.
- BRANCH CIRCUIT CONCEALED IN SLAB OR BELOW SLAB ON GRADE.
- DISCONNECT SWITCH, SIZE AND ENCLOSURE TYPE SHOWN.
- POWER PANEL
- DATA/COM BACKBOARD, SEE RISER DIAGRAM
- (J) JUNCTION BOX SIZED PER NEC WITH FLEXIBLE EQUIPMENT CONNECTION
- MOTOR, HORSEPOWER INDICATED BY NUMBER INSIDE OR AS SCHEDULED.
- GROUND AS REQUIRED BY NEC & LOCAL CODES & AS INDICATED AS A MINIMUM

TBB – DATA/COM BACKBOARD
WP – WEATHERPROOF
AFF – ABOVE FINISHED FLOOR
AFG – ABOVE FINISHED GRADE
NEC – NATIONAL ELECTRICAL CODE
SPD – SURGE PROTECTION DEVICE

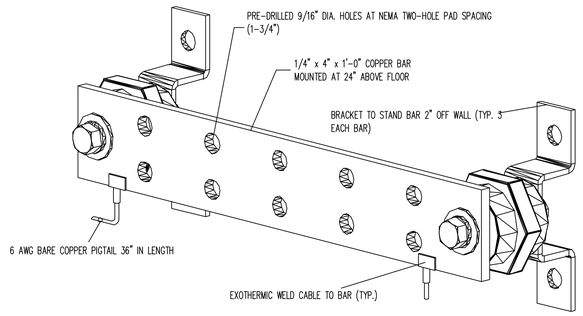


DATA/COMM RISER

NOT TO SCALE
NOTE: COORDINATE CONDUIT ROUTING WITH CIVIL SITE WORK AND SERVING UTILITIES. PROVIDE PULL BOX(ES) AS REQUIRED.

KEY TO DATA/COMM RISER

1. PROVIDE GROUNDING BUS BAR AT BACKBOARD, AND CONNECT TO BUILDING GROUNDING ELECTRODE SYSTEM. SEE GROUND BUS BAR DETAIL.
2. 6 AWG COPPER TO BUILDING GROUNDING ELECTRODE SYSTEM.
3. CONTRACTOR TO COORDINATE BACKBOARD SPACE ALLOCATION w/ TELEPHONE, INTERNET, AND CABLE TV PROVIDERS



TYPICAL GROUND BAR DETAIL

E14
SHEET 14 OF 20

PROJECT NO. 2236

PREPARED BY: NIX
REVIEWED BY: RN
ISSUE DATE: 05/06/2024
SCALE: N/A

ELECTRICAL LEGEND & DATA/COMM RISER

CARLISLE BAPTIST CHURCH
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835 BERTHIE AVENUE
PANAMA CITY, FLORIDA

Ronald J Nix
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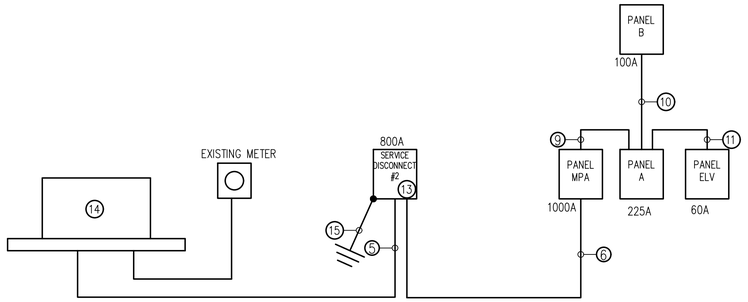
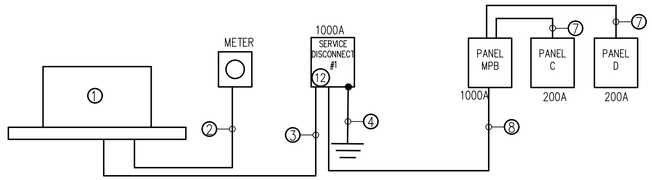


PHASE TWO POWER RISER – EDUCATION BUILDING

NO SCALE



PHASE ONE POWER RISER – WORSHIP CENTER

NO SCALE

KEY NOTES TO POWER RISERS

1. PAD MOUNTED TRANSFORMER BY UTILITY COMPANY. CONTRACTOR PROVIDE CONCRETE PAD AND GROUNDING PER UTILITY COMPANY SPECIFICATIONS. LEAVE SIX FT SLACK CONDUCTOR AT TRANSFORMER FOR UTILITY COMPANY CONNECTION. CONTRACTOR PAY ANY UNDERGROUND UTILITY CHARGES. SEE SITE UTILITY PLAN.
2. 1–1/4" RGS CONDUIT TO METER ENCLOSURE ON PEDESTAL. PROVIDE PEDESTAL PER UTILTY COMPANY SPECIFICATIONS.
3. THREE 3–1/2" CONDUITS WITH FOUR 500 KCMIL THWN–2 CU IN EACH CONDUIT. LEAVE SIX FEET SLACK CONDUCTOR AT TRANSFORMER FOR UTILITY COMPANY CONNECTION.
4. #3/0 COPPER. CONNECT TO BUILDING STEEL, METAL WATER LINE, & TO CONCRETE ENCASED ELECTRODE PER NEC 250.50 & TO THREE 3/4" X 30FT SOLID COPPER GROUND RODS DRIVEN IN A TRIANGULAR PATTERN & SPACED 10FT ON CENTER.
5. THREE 3" CONDUITS WITH FOUR 350 KCMIL THWN–2 CU IN EACH CONDUIT. LEAVE SIX FEET SLACK CONDUCTOR AT TRANSFORMER FOR UTILITY COMPANY CONNECTION. N
6. THREE 3" CONDUITS WITH FOUR 350 KCMIL THWN–2 CU AND ONE 1/0 AWG COPPER GROUND IN EACH CONDUIT.
7. FOUR 3/0 AWG THWN–2 CU AND ONE 6 AWG CU GND IN 2–1/2"C.
8. THREE 3–1/2" CONDUITS WITH FOUR 500 KCMIL THWN–2 CU AND ONE 2/0 AWG COPPER GROUND IN EACH CONDUIT
9. FOUR 250 KCMIL AWG THWN–2 CU AND ONE 4 AWG COPPER GROUNDING CONDUCTOR IN 2–1/2"C.
10. FOUR 2 AWG THWN–2 CU AND ONE 8 AWG CU GND IN 1–1/2"C.
11. THREE 6 AWG THWN–2 CU AND ONE 10 AWG CU GND IN 1"C.
12. 1000A/3P 65KAIC CIRCUIT BREAKER IN NEMA 4X ENCLOSURE WITH NEUTRAL BUS. GROUND LUG, AND SERVICE ENTRANCE LABEL. PROVIDE 3"X 5" RED MICARTA LABEL ENGRAVED WITH 3/4" WHITE LETTERS: "SERVICE DISCONNECT #1 OF 2 AND ATTACH TO COVER WITH STAINLESS STEEL POP RIVETS
13. 800A/3P 65KAIC CIRCUIT BREAKER IN NEMA 4X ENCLOSURE WITH NEUTRAL BUS. GROUND LUG, AND SERVICE ENTRANCE LABEL. PROVIDE 3"X 5" RED MICARTA LABEL ENGRAVED WITH 3/4" WHITE LETTERS: "SERVICE DISCONNECT #2 OF 2". ATTACH TO COVER WITH STAINLESS STEEL POP RIVETS. PROVIDE PERMANENT WEATHERPROOF SERVICE DISCONNECT MAPS AT BOTH SERVICE DISCONNECT LOCATIONS AS REQUIRED BY THE NEC AND THE LOCAL AHJ.
14. EXISTING PAD MOUNTED TRANSFORMER. SEE NOTE #1 ABOVE.
15. 3/0 AWG COPPER IN 1" SCH 80 PVC CONDUIT TO EXISTING GROUNDING ELECTRODE SYSTEM. SEE NOTE 4 ABOVE.

E15
SHEET 15 OF 20

PROJECT NO.
2236

PREPARED BY	REVIEWED BY
NIX	RN
ISSUE DATE	SCALE
05/06/2024	N/A

POWER RISERS

CARLISLE BAPTIST CHURCH
REBUILD
835 BERTHIE AVENUE
PANAMA CITY, FLORIDA

Ronald J Nix
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PANEL 'MPA'

120/208V, 3PH, 4W, 800 AMP MLO, SURFACE MT PANELBOARD, 60 CKT, 65,000 MIN A.I.C.

CKT	SERVING	LOAD VA	TRIP	POLE	PHASE A B C	TRIP	POLE	LOAD VA	SERVING	CKT
1	AH-7	6990	80	3		50	3	3380	HP-7	2
3		6990	–	–		–	–	3380		4
5		6990	–	–		–	–	3380		6
7	OAC-2	1200	20	3		60	3	5190	OAC-2	8
9		1200	–	–		–	–	5190		10
11		1200	–	–		–	–	5190		12
13	BUSSED SPACE		100	3		100	3		BUSSED SPACE	14
15			–	–		–	–			16
17			–	–		–	–			18
19	AH-11	4020	45	2		60	2	3330	HP-11	20
21		4020	–	–		–	–	3330		22
23	AH-9	7370	80	3		70	3	4560	HP-9	24
25		7370	–	–		–	–	4560		26
27		7370	–	–		–	–	4560		28
29	AH-10	4490	50	3		50	3	3380	HP-10	30
31		4490	–	–		–	–	3380		32
33		4490	–	–		–	–	3380		34
35	OAC-3	1200	20	3		60	3	5190	OAC-3	36
37		1200	–	–		–	–	5190		38
39		1200	–	–		–	–	5190		40
41	EWH-2	2750	40	2		15	1	10	SHUNT TRIP	42
43		2750	–	–		225	3	19730	PANEL A	44
45	EWH-1	2750	40	2		–	–	19640		46
47		2750	–	–		–	–	19150		48
49	BUSSED SPACE		225	3		225	3		BUSSED SPACE	50
51			–	–		–	–			52
53			–	–		–	–			54
55	SPD		30	3		100	3	① 7460	ELEVATOR	56
57			–	–		–	–	7460		58
59			–	–		–	–	7460		60

CONNECTED LOADS: PHASE A = 80240 VA + 1870
PHASE B = 80150 VA + 1870
PHASE C = 75070 VA + 1870
TOTAL = 241070 VA = 670 AMPS

① PROVIDE SHUNT TRIP AND AUXILIARY CONTACT. CONNECT TO ELEVATOR CONTROL PANEL WITH FOUR 14 AWG STRANDED COPPER AND ONE 14 AWG CU GND IN 1/2"C.

PANEL 'A'

120/208V, 3PH, 4W, 225 AMP MLO SURFACE MT PANELBOARD, 60 CKT, 65,000 MIN A.I.C.

CKT	SERVING	LOAD VA	TRIP	POLE	PHASE A B C	TRIP	POLE	LOAD VA	SERVING	CKT
1	TBB	400	20	1		20	1	1620	CL RM 102 RECEPTS	2
3	TBB	400	20	1		20	1	1080	CL RM 103 RECEPTS	4
5	LTS CR 108	1130	20	1		20	1	900	CL RM 106 RECEPTS	6
7	LTS CHILD DROP OFF	1120	20	1		20	1	900	CL RM 106 RECEPTS	8
9	LTS CORR 115	1170	20	1		20	1	600	DROP-OFF 111 RECEPTS	10
11	LTS MEN'S RR	1060	20	1		20	1	600	DROP-OFF COUNTER RECEPTS	12
13	LTS CORR 123	1030	20	1		20	1	1260	CL RM 108 RECEPTS	14
15	WAITING/RECEPTION RECEPTS	1080	20	1		20	1	720	RESTROOM RECEPTS	16
17	RECEPTION RECEPTS	720	20	1		20	1	1440	FIN/COUNSELOR RECEPTS	18
19	SPARE		20	1		20	1	1080	FIN/COUNSELOR RECEPTS	20
21	COPIER?	1200	20	1		20	1	1440	YOUTH/ASST PASTOR RECEPTS	22
23	COPY RECEPTS	720	20	1		20	1	1440	MUSIC MINISTER RECEPTS	24
25	COPIER?	1200	20	1		20	1	1260	TOILET, BREAK, COPY RECEPTS	26
27	COPIER?	1200	20	1		20	1	1260	PASTOR RECEPTS	28
29	COPIER?	1200	20	1		20	1	1080	SECRETARY RECEPTS	30
31	BREAK RM COUNTER RECEPTS	1500	20	1		20	1	1080	CONFERENCE RECEPTS	32
33	BREAK RM COUNTER RECEPTS	1500	20	1		20	1	② 400	FCP	34
35	HW RECIRC PP	250	15	1		20	1	② 400	DIGITAL COMMUNICATOR	36
37	ELECTRIC VALVES	750	20 GFI	1		20	1	② 400	VEP	38
39	PANEL ELV	1590	60	2		20	1		SPARE	40
41		2140	–	–		20	1		SPARE	42
43	SPARE		20	1		20	1		SPARE	44
45	SPARE		20	1		20	1		SPARE	46
47	SPARE		20	1		20	1		SPARE	48
49	SPARE		20	1		20	1		SPARE	50
51	SPARE		20	1		20	1		SPARE	52
53	SPARE		20	1		20	1		SPARE	54
55	SPD		30	3		100	3	6130	PANEL B	56
57			–	–		–	–	6000		58
59			–	–		–	–	6070		60

CONNECTED LOADS: PHASE A = 19730 VA
PHASE B = 19640 VA
PHASE C = 19150 VA
TOTAL = 58520 VA = 163 AMPS

② PROVIDE CIRCUIT BREAKER LOCK-ON DEVICE PAINTED RED AND VISIBLY MARKED "FIRE ALARM"

PANEL 'C'

120/208V, 3PH, 4W, 225 AMP MLO, SURFACE MT PANELBOARD, 60 CKT, 65,000 MIN A.I.C.

CKT	SERVING	LOAD VA	TRIP	POLE	PHASE A B C	TRIP	POLE	LOAD VA	SERVING	CKT
1	CONCOURSE LTS	1020	20	1		20	1	1260	CORR 113 RECEPTS	2
3	CONCOURSE LTS	1020	20	1		15	1	250	HW RECIRC PP	4
5	CONCOURSE LTS	1020	20	1		20	1	1080	WOMEN RECEPTS	6
7	CONCOURSE LTS	1020	20	1		20 GFI	1	500	EWC	8
9	SANCTUARY LTS	1090	20	1		20	1	① 350	WOMEN ELECTRIC VALVES	10
11	SANCTUARY LTS	1070	20	1		20	1	1260	SENSORY RECEPTS	12
13	PERIMETER AND FRONT LTS	1350	20	1		20	1	900	COFFEE RECEPTS	14
15	COVE LTS	1370	20	1		20	1	1440	NURSING RECEPTS	16
17	STAGE & CROSS LTS	800	20	1		20	1	1500	COFFEE URN	18
19	FLOODS	800	20	1		20	1	1500	COFFEE URN	20
21	WEST RRM LTS	1200	20	1		20	1	1500	COFFEE URN	22
23	WEST CORR/CHOIR LTS	1040	20	1		20	1	1500	COFFEE URN	24
25	BAPTISM PREP LTS	1060	20	1		20	1	1260	VESTIBULE 116 RECEPTS	26
27	EAST RRM LTS	1290	20	1		20	1	400	LCP	28
29	HP-5	3300	60	2		20	1	930	SIGN/STEEPLE/CROSS LTS	30
31		3300	–	–		40	2	2750	EWH-1	32
33	AH-5	4020	45	2		–	–	2750		34
35		4020	–	–		20	1	750	CANOPY, BLDG LTS & STAIN GLASS BACKLT	36
37	MECH LTS	120	20	1		20	1	1080	CHOIR RECEPTS	38
39	SPARE		20	1		20	1	1440	CONCOURSE RECEPTS	40
41	SPARE		20	1		20	1		SPARE	42
43	SPARE		20	1		20	1		SPARE	44
45	SPARE		20	1		20	1		SPARE	46
47	SPARE		20	1		20	1		SPACE	48
49	SPARE		20	1		20	1		SPACE	50
51	SPARE		20	1		20	1		SPACE	52
53	SPARE		20	1		20	1		SPACE	54
55	SPD		30	3		20	1		SPACE	56
57			–	–		20	1		SPACE	58
59			–	–		20	1		SPACE	60

CONNECTED LOADS: PHASE A = 17920 VA
PHASE B = 18120 VA
PHASE C = 18270 VA
TOTAL = 54310 VA = 151 AMPS

① PROVIDE CIRCUIT BREAKER LOCK-OFF DEVICE FOR DISCONNECT

PANEL 'MPB'

120/208V, 3PH, 4W, 1200 AMP MLO, SURFACE MT PANELBOARD, 60 CKT, 65,000 MIN A.I.C.

CKT	SERVING	LOAD VA	TRIP	POLE	PHASE A B C	TRIP	POLE	LOAD VA	SERVING	CKT
1	HP-1	9320	110	3		40	2	2380	HP-4	2
3		9320	–	–		–	–	2380		4
5		9320	–	–		30	2	① 3120	IWH-2	6
7	AH-1	9100	100	3		–	–	3120		8
9		9100	–	–		70 GFI	2	5500	BAPTISTRY HEATER	10
11		9100	–	–		–	–	5500		12
13	AH-4	3830	45	2		20	1		SPARE	14
15		3830	–	–		30	1	① 3600	IWH-1	16
17	OAC-1	7520	90	3		30	1	① 3600	IWH-1	18
19		7520	–	–		25	2	1430	HP-2	20
21		7520	–	–		–	–	1430		22
23	OAE-1	1320	20	3		35	2	2780	AH-2	24
25		1320	–	–		–	–	2780		26
27		1320	–	–		60	2	3300	HP-3	28
29	HP-6	2140	35	2		–	–	3300		30
31		2140	–	–		45	2	4020	AH-3	32
33	AH-6	3940	45	2		–	–	4020		34
35		3940	–	–		20	1		SPARE	36
37	PANEL C	17920	200	3		60	3	4880	AH-8	38
39		18120	–	–		–	–	4880		40
41		18270	–	–		–	–	4880		42
43	PANEL D	14400	200	3		70	3	4560	HP-8	44
45		12780	–	–		–	–	4560		46
47		11530	–	–		–	–	4560		48
49	BUSSED SPACE		225	3		225	3		BUSSED SPACE	50
51			–	–		–	–			52
53			–	–		–	–			54
55	SPD		30	3		225	3		BUSSED SPACE	56
57			–	–		–	–			58
59			–	–		–	–			60

CONNECTED LOADS: PHASE A = 88720 VA
PHASE B = 96600 VA
PHASE C = 90880 VA
TOTAL = 275200 VA = 764 AMPS

① PROVIDE CIRCUIT BREAKER LOCK-OFF DEVICE FOR DISCONNECT

PANEL 'B'

120/208V, 3PH, 4W, 225 AMP MLO, SURFACE MT PANELBOARD, 42 CKT, 65,000 MIN A.I.C.

CKT	SERVING	LOAD VA	TRIP	POLE	PHASE A B C	TRIP	POLE	LOAD VA	SERVING	CKT
1	LTS CR 202,204, COOR 203	1100	20	1		20	1		SPARE	2
3	LTS CR201, 205, 216,	930	20	1		20	1	1260	CR 202 RECEPTS	4
5	LTS RESTROOMS	850	20	1		20	1	1080	CR 205 RECEPTS	6
7	LTS CHILDREN'S CHURCH	1200	20	1		20	1	① 700	ELECTRIC VALVES	8
9	PLATFORM RECEPTS	720	20	1		20	1	1620	CR 216 RECEPTS	10
11	PLATFORM RECEPTS	400	20	1		20 GFI	1	400	EWC	12
13	PLATFORM RECEPTS	720	20	1		20	1	1080	CORR RECEPTS @ 216	14
15	EF-11	850	20	1		20	1	1260	SUPPLIES RECEPTS	16
17	CHILDREN'S CHURCH RECEPTS	900	20	1		20	1	1260	CORR RECEPTS @ 204	18
19	HW RECIRC PP	250	15	1		20	1	900	CORR RECEPTS @ 212	20
21	SPARE		20	1		20	1	1260	CR 204 RECEPTS	22
23	SPARE		20	1		20	1	1260	CR 201 RECEPTS	24
25	SPARE		20	1		20	1		SPACE	26
27	SPARE		20	1		20	1		SPACE	28
29	SPARE		20	1		20	1		SPACE	30
31	SPARE		20	1		20	1		SPACE	32
33	SPARE		20	1		20	1		SPACE	34
35	SPARE		20	1		20	1		SPACE	36
37	SPD		30	3		20	1		SPACE	38
39			–	–		20	1		SPACE	40
41			–	–		20	1		SPACE	42

CONNECTED LOADS: PHASE A = 6130 VA
PHASE B = 6000 VA
PHASE C = 6070 VA
TOTAL = 18200 VA = 51 AMPS

① PROVIDE CIRCUIT BREAKER LOCK-OFF DEVICE FOR DISCONNECT

PANEL 'ELV'

120/208V, 1PH, 3W, 100 AMP MLO, SURFACE MT PANELBOARD, 18 CKT, 65,000 MIN A.I.C.

CKT	SERVING	LOAD VA	TRIP	POLE	PHASE A B	TRIP	POLE	LOAD VA	SERVING	CKT
1	LTS ELEV PIT	100	20	1		20	1	200	ELEV PIT RECEPT	2
3	LTS ELEV EQUIP RM	100	20	1		20	1	850	ELEV PIT SUMP PP	4
5	ELEV CAB LTS	100	20	1		20	1	200	OIL DETECTION ALARM SYSTEM	6
7	DCU-1	990	15	2		20	1	200	ELEV EQUIP RM RECEPT	8
9		990	–	–		20	1		SPACE	10
11	SPARE		20	1		20	1		SPACE	12
13	SPARE		20	1		20	1		SPACE	14
15	SPD		30	2		20	1		SPACE	16
17			–	–		20	1		SPACE	18

CONNECTED LOADS: PHASE A = VA
PHASE B = VA
TOTAL = VA = AMPS

PANEL 'D'

120/208V, 3PH, 4W, 225 AMP MLO, SURFACE MT PANELBOARD, 60 CKT, 65,000 MIN A.I.C.

CKT	SERVING	LOAD VA	TRIP	POLE	PHASE A B C	TRIP	POLE	LOAD VA	SERVING	CKT
1	UTILITY RECEPTS	1080	20	1		20	1	900	ROSTRUM RECEPTS	2
3	BAPTISM PREP RECEPTS	900	20	1		20	1	400	ORCH RECEPTS	4
5	BAPTISM PREP RECEPTS	1440	20	1		20	1	600	ORCH RECEPTS	6
7	BAPTISM PREP RECEPTS	1260	20	1		20	1	400	ORCH RECEPTS	8
9	VESTIBULE 120 RECEPTS	1260	20	1		20	1	1260	ROSTRUM RECEPTS	10
11	CORR 115 RECEPTS	1440	20	1		20	1	900	SOUND RM RECEPTS	12
13	EWC	500	20 GFI	1		20	1	400	SOUND RM RECEEPTS	14
15	WELCOME CNTR RECEPTS	1260	20	1		20	1	400	SOUND RM RECEEPTS	16
17	MENS ELEC VALVES	350	① 20	1		20	1	400	SOUND RM RECEPTS	18
19	STAGE LIGHTING	1200	20	2		20	1	1440	ROSTRUM RECEPTS	20
21		1200	–	–		20	1	400	AV EQUIP	22
23	STAGE LIGHTING	1200	20	2		20	1	400	AV EQUIP	24
25		1200	–	–		20	1	400	AV EQUIP	26
27	ALT HOUSE LIGHTING	1200	20	2		20	1	400	AV EQUIP	28
29		1200	–	–		20	1	400	AV EQUIP	30
31	ALT HOUSE LIGHTING	1200	20	2		20	1	900	SECURITY RECEPTS	32
33		1200	–	–		20	1	1100	VIDEO PROJECTOR	34
35	ALT HOUSE LIGHTING	1200	20	2		20	1	1100	VIDEO PROJECTOR	36
37		1200	–	–		30	1	1920	FIRE SPRINKLER AIR COMPRESSOR	38
39	BAPTISTRY EQUIP RM LTS & RECEPTS	500	20	1		20	1	900	CONCOURSE RECEPTS	40
41	BAPTISTRY PUMP RECEPT	500	15 GFI	1		20	1	400	FCP	42
43	SPARE		20	1		20	1	400	DIGITAL COMMUNICATOR	44
45	SPARE		20	1		20	1	400	VEP	46
47	SPARE		20	1		20	1		SPACE	48
49	SPARE		20	1		20	1		SPACE	50
51	SPARE		20	1		20	1		SPACE	52
53	SPARE		20	1		20	1		SPACE	54
55	SPD		30	3		20	1		SPACE	56
57			–	–		20	1		SPACE	58
59			–	–		20	1		SPACE	60

CONNECTED LOADS: PHASE A = 14400 VA
PHASE B = 12780 VA
PHASE C = 11530 VA
TOTAL = 38710 VA = 108 AMPS

① PROVIDE CIRCUIT BREAKER LOCK-OFF DEVICE FOR DISCONNECT

E16
SHEET 16 OF 20

PROJECT NO.
2236

PREPARED BY
NIX

REVIEWED BY
RN

ISSUE DATE
05/06/2024

SCALE
N/A

PANEL SCHEDULES

CARLISLE BAPTIST CHURCH
IRIEBUILD
835 BERTHE AVENUE
PANAMA CITY, FLORIDA

Ronald J Nix
Digitally signed by Ronald J Nix
Date: 2024.05.06 16:39:18 -04'00'

RONALD JAMES NIX LICENSE No. 28635 STATE OF FLORIDA PROFESSIONAL ENGINEER

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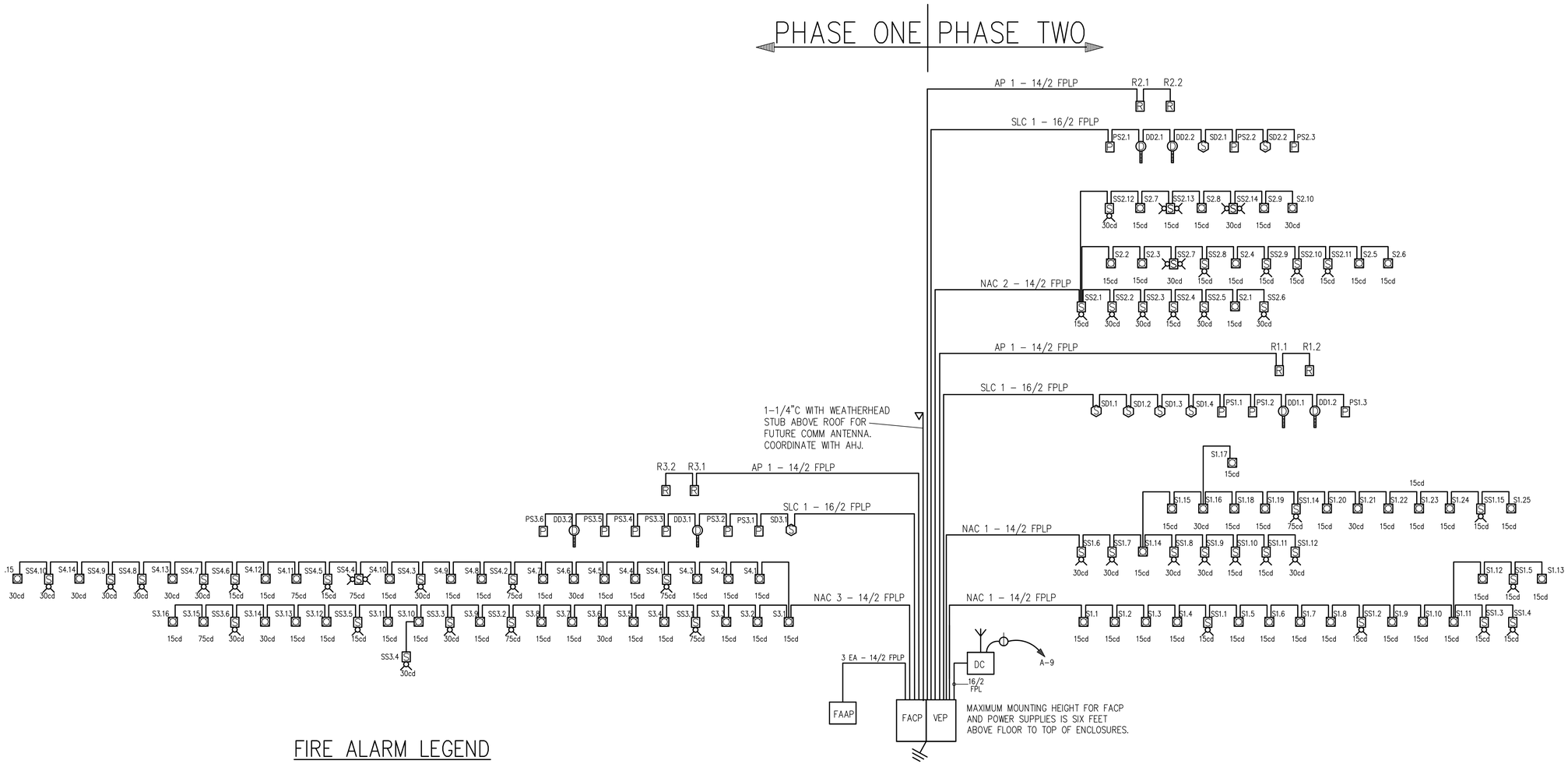
FLORIDA CA#8798, PE#28635
GEORGIA CA#PEF003627, PE#14888

MARK MERCER & ASSOCIATES, INC.
1117 JENKS AVENUE/PANAMA CITY, FLORIDA 32401/850.763.8072



FIRE ALARM RISER

NOT TO SCALE

FIRE ALARM LEGEND

- P — FIRE ALARM SYSTEM ADDRESSABLE MANUAL PULL STATION. MT 48" AFF
- S — FIRE ALARM SYSTEM SPEAKER/STROBE (CANDELA RATING AS NOTED). WALL MT 80" AFF
- S — FIRE ALARM SYSTEM SPEAKER/STROBE (CANDELA RATING AS NOTED). CEILING MT
- FIRE ALARM VISIBLE STROBE SIGNAL (CANDELA RATING AS NOTED). WALL OR CEILING MT AS INDICATED
- S — FIRE ALARM SYSTEM ADDRESSABLE PHOTOELECRIC TYPE SMOKE DETECTOR, CEILING MT.
- R — FIRE ALARM SYSTEM ADDRESSABLE RELAY MODULE
- D — FIRE ALARM SYSTEM ADDRESSABLE DUCT MOUNTED SMOKE DETECTOR
- FS — FIRE SPRINKLER SYSTEM FLOW SWITCH
- TS — FIRE SPRINKLER SYSTEM TAMPER SWITCH.
- N — FIRE ALARM SYSTEM ADDRESSABLE MONITOR MODULE.
- PS — FIRE SPRINKLER SYSTEM PRESSURE SWITCH
- T — FIRE SPRINKLER ROOM TEMPERATURE MONITOR
- PI — FIRE SPRINKLER SYSTEM POST INDICATOR VALVE
- $/_S$ — FIRE ALARM SYSTEM SIGNAL LINE CIRCUIT – 16/2 FPLP TWISTED PAIR – PLENUM RATED
- $/_N$ — FIRE ALARM SYSTEM NOTIFICATION APPLIANCE CIRCUIT – 14/2 FPLP TWISTED PAIR PLENUM RATED
- $/_V$ — FIRE ALARM SYSTEM VOICE EVACUATION CIRCUIT – 16/2 FPLP TWISTED PAIR PLENUM RATED
- $/_R$ — FIRE ALARM SYSTEM RELAY POWER CIRCUIT (AP, NAC) – 14/2 FPLP TWISTED PAIR PLENUM RATED
- SINGLE RECEPTACLE 120V, 15A, SPECIFICATION GRADE ON DEDICATED CIRCUIT FOR WIRELESS COMMUNICATOR. MOUNT ABOVE FACP

FACP FIRE ALARM CONTROL PANEL (SURFACE MOUNTED ENCLOSURE, TOP @ 72" AFF MAX)

FAAP FIRE ALARM ANNUNCIATGOR PANEL (FLUSH MOUNTED ENCLOSURE, TOP @ 60" AFF)

VEP FIRE ALARM VOICE EVACUATION PANEL WITH 75 WATT MINIMUM AMPLIFIER (SURFACE MOUNTED ENCLOSURE, TOP @ 72" AFF MAX)

DC FIRE DIGITAL COMMUNICATOR (SURFACE MOUNTED ENCLOSURE)

FIRE ALARM RISER GENERAL NOTES

CLASS

SLC – CLASS B
NAC – CLASS B

CONDUCTORS

NAC – 14/2 FPLP
SLC – 16/2 FPLP

E17
SHEET 17 OF 20

PROJECT NO.
2236

PREPARED BY
NIX

REVIEWED BY
RN

ISSUE DATE
05/06/2024

SCALE
3/16"=1'

FIRE ALARM RISER AND LEGEND

CARLISLE BAPTIST CHURCH
IREJBUILD
835 BERTHIE AVENUE
PANAMA CITY, FLORIDA

Ronald J Nix
Digitally signed by Ronald J Nix
Date: 2024.05.06 16:38:36 -04'00'

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SECTION 16050 – GENERAL ELECTRICAL

PART 1 GENERAL

The General and Supplementary Conditions, Sections 1 and 2 of these specifications, shall apply to and form a part of this section as if written in full herein.

1.01 SCOPE OF WORK:

A. The work covered by this section of the specifications shall include the furnishing of all labor, equipment, supplies, tools and materials, and the performance of all operations necessary for the installation of complete wiring systems, lighting, power connections to equipment specified in other sections, and electrical equipment in strict accordance with this section of the specifications and applicable drawings.

1.02 RELATED WORK SPECIFIED ELSEWHERE:

Mechanical Division 15

1.03 DEFINITIONS Provide means to furnish and install.

1.04 WARRANTY

A. Contractor shall fully instruct Owner in operation and maintenance of electrical system.

B. Contractor shall assemble and bind manufacturers' operating and maintenance literature for inclusion in Maintenance Manual. Literature shall include record shop drawings, wiring diagrams, instruction sheets, replacement parts list, warranties, and guarantee for all equipment furnished under this section of the specifications. Three sets of such literature shall be provided.

C. Contractor shall warrant all work for a period of one year from date of substantial completion. Contractor shall rectify any defects due to faulty materials or workmanship and pay for any damage to other work resulting there from which occurs within said period. Work shall be performed by journeyman electrician or an electrician with 8,000 hours experience as an apprentice electrician and with new materials as approved by the Architect. The Owner will give notice of observed defects with reasonable promptness. The above warranty is in addition to any guarantee of equipment by a manufacturer.

D. Contractor shall furnish written warranty that all systems have been installed complete and are functioning properly and that all materials and workmanship are free from defects.

E. The General Conditions and Supplementary Conditions to the overall specifications are made a part of the electrical specifications where applicable.

1.05 DRAWINGS:

A. The drawings are schematic showing relative locations and connections and shall not be scaled for exact locations. Unless specified dimensions are shown, the structural, architectural and site conditions shall govern the exact locations.

B. Should any difficulty occur in the running of cables and/or conduits, setting of outlets or any other devices or connections at the points shown, provide necessary minor deviations there from as approved without additional cost.

C. Where conflicts occur between the requirements of the drawings, specifications, and applicable codes, the contractor shall provide an installation that conforms with the most stringent requirement.

1.06 AS–BUILT DRAWINGS AND RECORDS:

Maintain a complete set of electrical prints for indicating all changes. Use a colored pen or pencil to mark changes at the time of execution. Deliver the set to the Owner's representative upon completion. Elevations and dimensioned locations of underground work shall be indicated. Dimension to permanent references.

1.07 SUBMITTALS

The contractor shall submit a list of principal material items, giving manufacturers' names, catalog cuts and approval of the submittal data shall be obtained from the Architect before orders are placed. Submittals are required on the following: Panels, and circuit breakers, disconnect switches, light fixtures, wiring devices, device plates, conduit, fittings, boxes, and cables.

PART 2 PRODUCTS

2.01 MATERIALS

A. Materials and equipment shall be new, standard current products of manufacturers regularly engaged in the production of such equipment, and shall be the manufacturer's latest design.

B. All materials shall bear the label of the Underwriter's Laboratory for the intended use or shall be materials approved by the code enforcing authorities and the Architect/Engineer.

C. The contractor shall coordinate sizes indicated for electrical components such as circuit breakers, disconnects, feeders and starters with requirements for equipment actually provided and shall notify the Architect if any item is inadequate in size for equipment installed or proposed. Contractor shall install as a minimum the size indicated unless he receives in writing from the Architect directions to reduce the component in size.

D. When the equipment to be installed has a requirement which is greater than shown, the Contractor shall increase the size of the electrical component as work under the section of this specification which installs the equipment requiring the same. Modifications to the contract will not be issued for failure to coordinate with other trades or with the requirements of owner furnished equipment.

2.02 HARDWARE:

All hardware and accessory fittings shall be of a type designed, intended or appropriate for the use, and complement the items with which they are used, and shall have corrosion protection suitable for the atmosphere in which they are installed. All such hardware shall be U.S. Standard sizes.

2.03 EQUIPMENT

Equipment of a similar nature shall be identical. Example: All panelboards shall be of the same manufacturer and of the same style.

2.04 MATERIAL PROTECTION

Store and protect all materials from injury prior to installation. Materials shall not be stored directly on the ground or floor, and shall be kept as clean and dry as possible and free from damage or deteriorating elements. Damaged materials shall not be installed.

PART 3 EXECUTION

3.01 INSTALLATION:

A. All work will be installed in accordance with regulations of the National Electrical Code, the Life Safety Code, and ordinances of the state and local governments.

B. Contractor shall obtain all necessary permits and inspections as required and pay all charges for same, and shall turn over to the Architect Certificate of final inspection. Should any part of the design fail to comply with such requirements, discrepancy shall be called to the attention of the Architect prior to submission of bid.

C. Follow the installation directions and recommendations of the material and equipment manufacturers.

D. Materials damaged during installation shall be repaired to a new condition or shall be replaced. Finishes on equipment which have been scratched or marred shall be touched up to match finish or shall be completely refinished.

3.02 SCHEDULING OF WORK:

A. Electrical work shall be scheduled to correspond with the sequence of work necessary to construct new work.

B. Electrical work shall be scheduled to provide an orderly installation without causing any delays in the overall construction of the project.

C. Contractor shall coordinate and schedule all electrical service, telephone service, and cable television service disconnects and reconnects. Contractor shall pay any associated disconnect and reconnect charges.

3.03 IDENTIFICATION:

Use Brady markers on conductors. Use Manufacturer's nameplates and directories where available. Use of Dymo Labels will not be permitted. Use of uniform painted stencils will be permitted. Use of micarta nameplates will be permitted: 1/4" white letters on black background.

3.04 TEMPORARY SERVICE AND SUPERVISION:

A. Temporary power and construction lighting shall be provided as needed under this section of the specifications. Both shall be provided in a safe and sufficient manner for the orderly completion of the work. The cost of power shall be paid for by the general contractor.

B. All work shall be performed under the direct supervision of a journeyman electrician or an electrician with 8,000 hours experience as an electrician's apprentice.

END OF SECTION 16050

SECTION 16060 – GROUNDING

PART 1 GENERAL

1.01 GENERAL REQUIREMENTS This section includes basic materials and methods for all of Division 16.

1.02 APPLICABLE REQUIREMENTS:

A. NEC Article 250

PART 2 PRODUCTS

2.01 CONDUCTORS

A. Equipment grounding conductors shall be copper with green colored insulation or bare in NM cables. For conductor sizes #8 and larger, green colored tape may be used to cover the exposed insulation of the equipment grounding conductor in all panels, junction boxes and equipment connection compartments.

B. The grounding electrode conductor shall be soft drawn bare copper. The grounding electrode conductor shall be sized in accordance with the drawings and requirements of section 250 of the NEC.

2.02 GROUND RODS

A. Ground rods shall be 3/4" diameter in ten foot sections with threaded end for screw couplings. Material for ground rods shall be solid copper.

PART 3 EXECUTION

3.01 EQUIPMENT GROUNDING

A. All exposed non–current carrying metallic parts of electrical equipment, metallic raceway systems, grounding conductor in non–metallic raceway systems and the neutral conductor of wiring systems shall be grounded.

B. A separate equipment grounding conductor shall be installed in all conduits and cables and shall be sized in accordance with NEC Table 250.122. The equipment grounding conductor shall be separate from the electrical system neutral conductor.

3.2. GROUNDING ELECTRODE SYSTEM

A. Test and inspect the existing grounding electrode system. The maximum resistance to ground of the grounding system shall not exceed twenty–five ohms under normal dry conditions. Where the resistance obtained exceeds twenty–five ohms, a change order may be issued by the owner to provide a new grounding electrode system in accordance with these specifications and the NEC. The cost of obtaining the required minimum resistance to ground of the ground system may be paid by the owner and shall not be the responsibility of the Engineer or the Contractor.

B. Ground connection shall be made in accordance with NEC 250.50 to a metal underground water pipe in direct contact with the earth for 10 ft or more and electrically continuous.

C. Supplement the metallic water service grounding system with an additional driven electrode system. The driven electrode system shall consist of three ground rods driven on 10 ft centers. Rods shall be connected together with the grounding electrode conductor.

D. Connections shall be made so that the contact between the grounding electrode and the grounding electrode conductor is maximized. Exothermic welding process or Burndy Hyground system is required.

E. Test the installed grounding system to assure continuity and that the resistance to ground is not excessive. Test each ground rod for resistance to ground before making any connections to the rod; then tie entire grounding system together and test for resistance to ground. Make resistance measurements in normally dry weather, not less than 48 hours after rainfall. Make ground resistance measurements with a ground resistance test meter equal to AEMC Model 6416 and calibrated within the last twelve months.

F. Test forms for each grounding electrode system shall be delivered to the Architect prior to substantial completion of project. Test form shall include test data, test meter model and manufacturer, calibration date, and signature of person performing the test.

END OF SECTION 16060

SECTION 16070 – ELECTRICAL SUPPORTING DEVICES

PART 1 ELECTRICAL SUPPORTING DEVICES

1.01 GENERAL REQUIREMENTS:

This Section includes basic materials and methods for all of Division 16.

1.02 SELECTION OF PRODUCTS:

A. Devices, including anchors, fasteners, hangers and supports, shall be of a type designed or fabricated for the purpose, and shall adequately and safely secure the material and equipment and present a neat appearance.

B. Make job fabricated hangers or supports from standard structural shapes and hardware.

C. All bolts, screws, nuts and other threaded devices shall have U.S. standard threads and head as appropriate.

D. All fasteners in exterior locations shall be stainless steel.

PART 2 EXECUTION

2.01 INSTALLATION:

A. Install equipment, including switches, and controllers such that removal or replacement may be readily accomplished without damage to equipment or fasteners.

B. Internal and external threads of parts that are screwed or bolted together shall be made of the same material including coatings and method of applying coatings. For example, if the threads of bolts or rods are hot dipped galvanized, the nuts must also be hot dipped galvanized. If they are electro_galvanized, the nuts must also be electro_galvanized. All threads shall be fully engaged. All parts so installed shall be made up tight using tools intended for the purpose.

2.02 FASTENERS:

A. Fasten all materials and equipment with approved devices. Generally fasteners shall be as follows:

1. Wood: fasten to wood with screws except nails may be used on wood partitions for outlet boxes, cables, and raceways up to 1" diameter.

2. Masonry: Fasten to masonry with threaded metal inserts, metal expansion screws, toggle bolts, or approved means.

3. Steel: Fasten to steel with machine screws, welded threaded studs, or spring tension clamps. Threaded C–clamps may be used on rigid steel conduit only, conduit or pipe straps shall not be welded to steel structure.

END OF SECTION 16070

SECTION 16120 – CONDUCTORS

PART 1 GENERAL REQUIREMENTS:

1.01 SCOPE

This section includes basic materials and methods for all of Division 16, electrical and related work.

1.02 APPLICABLE REQUIREMENTS:

A. NEC Articles 310 and 400

PART 2 PRODUCTS

2.01 CONDUCTORS

A. All conductors shall be copper, shall conform to applicable ASTM specifications as to conductivity, and shall be free from kinks and defects when installed. Minimum size conductor shall be #12 AWG. For home runs over 100 feet, minimum size conductor shall be #10 AWG.

B. Conductors #10 AWG and smaller shall be solid with color coded insulation.

C. Insulation for general building wiring and feeders shall be THW or THWN.

D. Insulation for wiring in the vicinity of heat producing equipment shall be type AF or other type suitable for the application.

E. Where permitted by the National Electrical Code, type MC cable may be used for interior wiring.

F. All cables must be protected in accordance with Article 300 of the NEC. Type MC cables must be supported within 12 inches of every box, cabinet, or fitting and at intervals not exceeding six feet.

2.02 SPLICES AND TERMINATIONS:

A. Connections shall comply with Federal Specification W–S–61b. Connectors for temperatures to 105 degrees C. shall be Ideal Wing Nut or 3M Scotchloc. Connectors for temperatures to 150 degrees C. for use in fixtures shall be Ideal Wire Nut.

B. Tape shall be Scotch 33 or equal. Voids shall be filled with rubber tape.

PART 3 EXECUTION

3.01 CONDUCTORS:

A. Conductors size #10 and smaller shall be copper and have insulation colored for phases A, B, C, and N respectively as follows for three phase systems: 120/208 Volts – black, red, blue, and white

B. Bonding conductors size #10 and smaller shall have a green covering and shall be the same size as the circuit conductors unless otherwise indicated. Bonding conductors shall be installed as required by the NEC.

C. Equipment grounding conductors shall have green colored insulation or shall be bare copper.

D. Installation of conductors shall be made only in completed raceway systems and all conductors in any conduit shall be pulled together.

E. Use wire pulling compounds or lubricants as listed by Underwriter's Laboratories.

F. Where type MC cable is used, the installations shall comply with Articles 300 and 330 of the National Electrical Code.

3.02 SPLICES AND TERMINATIONS:

A. Use solderless terminal lugs on all stranded conductors. Use approved solderless connectors for all splices. Keep splices to a minimum. Splices shall not be pulled in conduits. Use approved junction boxes.

B. Splice all neutrals prior to connection to wiring devices. Splices other than pre_insulated connectors shall be covered neatly with insulation tape equivalent in value to the conductor insulation. Use minimum of two layers of tape.

END OF SECTION 16120

SECTION 16130 – RACEWAYS AND BOXES

PART 1 GENERAL

1.01 This section includes basic materials and electrical methods for all of Division 16, electrical related work.

PART 2 PRODUCTS

2.01 RACEWAYS AND FITTINGS:

A. Rigid or Intermediate Grade Steel conduit shall be mild steel produced to ANSI C80.1 and Federal Specification WW–C–581 and shall be Underwriter's approved hot dipped galvanized, zinc metalized or sheradized inside and out. The threaded ends of the conduit shall be zinc coated. Conduit fittings shall be zinc coated and shall be threaded type. Fittings shall be all steel. "Erikson" couplings shall be used where necessary. Running threads are not allowed. Connections shall be made with double locknuts except at threaded hubs. Terminations shall utilize insulated bushings.

B. Thin wall conduit shall be Underwriter's approved galvanized electrical metallic tubing. Fittings for EMT shall be steel set screw or steel compression type. Connectors shall have insulated throats.

C. Flexible Metal Conduit (Greenfield) shall be galvanized and conform to Federal Specification WW–C–566 and fittings shall conform to Federal Specification W–F–406, Type 1, Class 1. Liquid tight flexible conduit shall conform to NEC Article 350 as manufactured by Anamet, Thomas & Betts, or Electri–Flex. Fittings shall be as manufactured by Appleton, EFCor, or Thomas & Betts and conform to Federal Specification W–F–406, Type 1, Class 3.

D. PVC conduit shall be schedule 40 or schedule 80, 90 degrees C UL listed, and UL listed for aboveground and underground uses. Conduit shall conform to NEMA TC–2 and UL–651 standards. All joints shall be solvent cemented in accordance with the recommendations of the manufacturer.

E. Wireways and Auxiliary Gutters: Galvanized steel with removable covers unless indicated as hinged. Components shall be as manufactured by Square "D", Hoffman, Arlington, or Cooper B–Line.

2.02 BOXES AND ACCESSORIES:

A. Sheet steel boxes and accessories shall conform to Federal Specification W–C–568; as manufactured by Appleton, Arlington, or Crouse–Hinds.

B. Pull boxes and junction boxes larger than 4–11/16" shall be constructed of galvanized steel in accordance with NFPA 70, Article 314. Boxes shall be as manufactured by Hoffman, Appleton, Arlington, or Crouse–Hinds.

C. Cast outlet boxes shall have threaded conduit entrances and gasketed covers. Boxes shall have a minimum of two hubs, except where noted otherwise.

PART 3 EXECUTION

3.01 RACEWAYS:

A. Rigid conduit shall be used in areas subject to physical damage, where run exposed, in damp or wet locations, in slabs and concrete and buried in earth.

B. Paint metal conduits in or below ground floor slab or in ground with 2 coats of asphaltum up to 2" above finished floor slab inside the building or 6" above finished grade outside the building.

C. Use flexible conduit for all connections to vibrating equipment such as motors, valves, and devices on piping and ductwork. Flexible conduit may be used for short connections to control devices, recessed fixtures, and similar items. The connection between structure and the first point of attachment to vibrating equipment shall be flexible. Machinery connections shall not exceed three feet. Fixture whips shall not exceed six feet and shall be supported from structure so as not to lay on ceiling tile.

D. Use liquid–tight flexible conduit connections to all equipment in damp or wet locations.

E. Electrical metallic tubing may be used for branch circuit wiring in areas above grade and within the building except in wet areas, slabs and as indicated otherwise.

F. Install exposed conduit parallel with or at right angles to the building lines. Conduit in concrete shall be located so as not to affect the structural strength of the slabs as determined by the Architect. Conceal conduits in walls, above ceilings, in or under slabs or in furring, except in mechanical and electrical rooms and where indicated as exposed on existing walls. In areas with exposed structure and no finished ceiling, conduits shall be run as high as possible and held tight to walls or underside of roof.

G. Changes in direction of runs shall be made with symmetrical bends or cast metal fittings. Field made bends and offsets shall be made with an approved conduit bending device. Damaged or deformed conduits shall not be installed. No bend shall exceed 90 degrees. Proper offsets shall be used to prevent strain on connectors at conduit termination points. All raceway runs shall be capped during the course of construction to prevent accumulation of dirt and debris. All conduits shall be cleared of all dirt and water before conductors may be pulled in.

H. Schedule 40, PVC will be permitted where allowed by applicable codes and as outlined below. PVC may be used only in concrete and in earth, and may not be used in wall or ceiling spaces. Exposed conduit in exterior locations shall be schedule 80. PVC may be used for service laterals if encased in a minimum of two inches of 3000 psi concrete. All bends in PVC larger than 1" nominal trade size shall be made with rigid metal conduit. Penetrations through concrete slabs shall be made with rigid galvanized steel conduit.

I. Aluminum conduit is not permitted in the ground or in slabs.

J. ENT is not permitted.

K. All raceway shall be supported at code required intervals with brackets and/or clamps as manufactured for conduit supports. Tie wire is not an acceptable means of support.

3.02 BOXES AND ACCESSORIES:

A. Use cast metal outlets with gasketed covers for all exterior and for all damp locations, and for all exposed outlets. Material for boxes in exterior locations shall be aluminum, fiberglass, PVC, or stainless steel.

B. Boxes over two inches in width installed in stud walls shall be supported from two sides.

C. All boxes shall be rigidly supported.

D. Gangable type boxes shall not be used.

E. Use masonry boxes in all block walls. At the individual cell where each box is located, fill the cell entirely with mortar. Switch boxes are not permitted in block walls.

3.03 MISCELLANEOUS:

A. Provide approved fire stopping materials at all chases to prevent drafts.

B. Provide expansion fittings in conduit runs crossing expansion joints in the structure.

C. Fire Rating: Restore Fire Rating where piercing occurs through fire rated ceilings or between fire rated walls. Firestop material shall be as manufactured by 3M Company and UL listed for use in the construction assembly in which it is to be used. See architectural plans for locations of fire rated walls and ceilings.

D. Provide 230 pound tensile strength polyolefin pull line in all empty conduits ½" to 1". Provide #14 gauge pullwire in all empty conduits over 1".

END OF SECTION 16130

SECTION 16140 – WIRING DEVICES

PART 1 WIRING DEVICES PRODUCTS

1.01 WIRING DEVICES

A. All receptacles shall be the grounding type with ground connection made through an extra pole which shall be permanently connected to the raceway system.

B. Receptacles for 120 volt circuits shall be rated for 15 or 20 Amperes as required and shall be tamper proof. A 20 amp receptacle is required when a single receptacle is connected to a 20 amp circuit breaker. Specification grade is required.

C. Special receptacles shall be rated for amperage, voltage and have NEMA configuration as indicated or scheduled or shall be selected to meet the particular requirements. Coordinate selection with shop drawings and equipment to be furnished by the Owner.

D. Toggle switches shall be heavy duty quiet type rated at 20 amperes 120/277 V AC only. Interior plates shall be stainless steel.

Cover plates for damp location application shall have spring hinged covers to close automatically when not in use. Cover shall be of lexan or heavy duty die cast zinc and plated aluminum. Cover plates for wet location application shall have spring hinged covers and shall be listed as weatherproof while in use. Cover shall be of heavy duty die cast metal.

E. Device colors shall be selected by owner's representative from standard colors.

PART 3 EXECUTION

3.01 OUTLETS:

A. Install plates and covers on all outlets. Install all devices uniformly in each area.

3.02 MOUNTING:

A. Mounting heights (to center line of box): Generally mount outlets at 18" above finished floor unless noted otherwise. Mount switches at 48" above finished floor.

B. Test each socket of each outlet with a device intended for the purpose.

C. Devices shall be pulled up tight to outlet box. Device shall not be supported by cover plate.

D. Outlet boxes recessed behind finished surfaces shall meet code requirements for maximum allowable distance between front of box and finished surface.

E. Outlets mounted above counters shall be mounted horizontally 4" above the back splash to the center of the device.

F. Outlets shall be installed plumb within 1/16" from top to bottom.

G. Outlets in block walls shall be cut into one block only.

H. Outlets shall be entirely in or entirely out of wainscoting.

END OF SECTION 16140

HARD COPIES OF THIS DRAWING CANNOT BE VERIFIED AS OFFICIALLY SIGNED AND SEALED, ONLY DIGITALLY VERIFIABLE FILES CAN BE CAN BE USED AS OFFICIAL DOCUMENTS.

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E18 SHEET 18 OF 20

PROJECT NO. 2236

PREPARED BY	REVIEWED BY	
NIX	RN	
	ISSUE DATE	SCALE
	05/06/2024	N/A

ELECTRICAL SPECIFICATIONS

CARLISLE BAPTIST CHURCH
REBUILD
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PANAMA CITY, FLORIDA

RONALD JAMES NIX LICENSE No. 28635 STATE OF FLORIDA PROFESSIONAL ENGINEER

Ronald J Nix
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SECTION 16410 – SAFETY SWITCHES AND CIRCUIT BREAKERS

PART 1 GENERAL

1.01 RELATED WORK SPECIFIED ELSEWHERE:

Panelboards.....SECTION 16440

1.02 SUBMITTALS:

Submit shop drawings for approval including catalog cuts showing sizes types, and characteristics of all products.

PART 2 PRODUCTS

2.01 SAFETY SWITCHES:

A. Safety Switches shall be general–duty type unless specifically noted on the drawings. Fusible switches shall be provided with one–time cartridge or ferrule–type fuses of capacities shown on drawings. An extra set of fuses of each size shall be provided and turned over to the Owner. Fusible switches shall be 240 volt rated for the 208 volt system and shall be provided with general purpose enclosures unless noted otherwise. All switches for motors shall be horse–power rated. Fusible switches for motors shall be furnished with dual element fuses of the recommended size for the particular motor installed to provide motor running over current protection. Switches shall be labeled with black micarta tags engraved with white letters identifying component protected and power source. Tags shall be attached with machine screws or rivets.

2.02 CIRCUIT BREAKERS, MOLDED CASE:

A. Circuit breakers shall be of the ampere rating, voltage rating, number of poles and class or interrupting capacity (I.C.) as indicated. Contractor shall coordinate interrupting capacity with the serving utility company and the characteristics of their distribution system. Interrupting ratings are given in root mean square (RMS), symmetrical amperes based on NEMA test procedures. Lugs and terminals shall be UL approved for copper–aluminum.

B. Each circuit breaker shall have a trip unit for each pole with elements providing inverse time delay under overload conditions and instantaneous magnetic trip for short circuit protection unless indicated as non–automatic. Trip elements shall operate a common trip bar to open all elements.

C. Circuit breakers shall be bolt–on type or equal to Square D I–Line plug on type.

D. The Service Disconnect shall be a molded case circuit breaker of the frame as indicated and/or service entrance rated, heavy duty, fused disconnect switch with fuses and enclosure type as indicated. Circuit breaker overload trip rating shall be as indicated. Each pole of the breaker shall provide inverse time delay and instantaneous circuit protection. Breaker operator shall be a toggle handle to provide quick–make and quick–break operation. Handle shall be trip free.

E. All main switches rated 1000 amps or more for any service voltage shall be equipped with a ground fault sensing unit to trip the switch upon the system fault to ground. Trip rating of the ground fault system shall be set at not more than 40% of the normal rating or 800 amps whichever is smaller. Time delay shall be adjustable from 0.1 to 0.5 seconds. Manufacturer shall provide all settings to the contractor and provide field support as required to ensure proper adjustment and operation of the ground fault equipment.

F. See Drawings for breaker sizes and interrupting ratings.

G. Use HACR labeled breakers for heating and air conditioning loads.

H. All breakers used on lighting circuits shall be switching duty rated.

I. All breakers and safety switches shall have a 75 deg. C rating.

PART 3 EXECUTION

3.01 INSTALLATION:

A. Mount grouped switches, disconnects and controls on backboards or unistrut.

B. Generally, mount switches and disconnects between 4' and 5' up, readily accessible.

END OF SECTION 16410

ELECTRICAL

SECTION 16440 – PANELBOARDS

PART 1 _ GENERAL

1.1 RELATED WORK SPECIFIED ELSEWHERE:

A. SAFETY SWITCHES AND CIRCUIT BREAKERS.....SECTION 16410

1.2 SUBMITTALS:

A. Submit shop drawings for approval on each panelboard indicating cabinet dimensions, component arrangements, characteristics, and sizes.

PART 2 _ PRODUCTS

2.1 PANELBOARDS FOR LIGHTING AND POWER:

A. Panels shall be standard dead front circuit breaker panels with main circuit breaker or main lugs as shown. Bus shall be copper or aluminum of ampere rating as shown arranged for voltage, phase and number of wires called for by the drawings. Front shall be complete with door and flush chrome plated lock and catch. Panels shall be flush or surface mounted as indicated. Proper trim shall be furnished for each panel. Branch circuit breakers shall be toggle type, quick make, quick break, thermal magnetic trip. All multi–pole breakers shall be single handle, common trip type. Minimum AIC of circuit breakers shall be as indicated on the drawings.

B. Directory shall be neatly typed and enclosed in plastic envelope on inside of panel door. The directory shall indicate the owner's room number or room name. Coordinate with final room identification plaques. Circuit breakers on large panelboards without doors shall be identified with permanently applied micarta labels.

C. Circuit breakers shall be arranged as indicated on the panel schedules on the drawings. Deviations shall be approved by the engineer and shall be documented on the as–built drawings.

D. Panels shall be constructed of code gauge steel. Box shall be treated with a rust inhibitor, front shall have gray finish over a rust inhibitor. Indoor units shall be NEMA 1 enclosure. Outdoor units shall be in weatherproof enclosure. All cabinet panels, closures, doors, structural frames and fasteners shall be coated, plated, and fabricated from rust resisting materials which will stand up under interior damp locations, or where outside will resist the elements of the weather and protect the interior parts.

E. Locks on all panelboards shall be keyed alike. Provide a minimum of six keys to the owner's representative.

F. Panelboards shall be factory assembled and tested. Circuit breaker panelboards shall be as manufactured by Square D, General Electric, Siemens, or Cutler–Hammer. Provide grounding terminal bus. Service equipment shall have Service Entrance Label.

G. Where panels are placed in areas which may be used for storage, mark a rectangle on the floor in front of the panels with 3" wide yellow paint corresponding to the clearance required by the National Electrical Code. Fill the interior of the rectangle with diagonal 3" yellow stripes on 8" centers. Mark the interior of the rectangle with 3" black letters: "NO STORAGE". Coordinate with the Architect prior to painting any floor finish.

H. Contractor shall coordinate with all trades to insure space required by NEC 110.26 is maintained for all panelboards. The dedicated space extends from the floor to six feet above the equipment or to the structural ceiling (not a suspended ceiling) with a width and depth that of the equipment. No piping, ducts, or equipment foreign to the electrical equipment or architectural appurtenances shall be permitted to be installed in, enter, or pass through such spaces.

I. All service entrance equipment and sub panels shall have UL 1449 fourth edition listed Surge Protection Devices (SPD's). UL voltage protection rating shall be as low as 600 volts for 120/208 volt panels. Response time shall be less than 1.0 nanosecond. Main panel protection shall be equal to ASCO 430120YP20ACAJ20. Sub–panel protection shall be equal to ASCO 430120YP10ACAJ20. Provide flush mount trim for SPD units at flush mounted panelboards. Provide NEMA 4X enclosures for SPD units in exterior locations. Provide a separate thirty amp three pole circuit breaker in each panel for SPD connection. Provide SPD with integral disconnect for exterior service entrance disconnects where no branch circuit breaker is available. Leads between the SPD and circuit breaker shall be less than fifteen inches total length with no sharp bends and no bend over ninety degrees.

J. All lugs and breaker terminals shall be rated at 75 degrees C.

END OF SECTION 16440

SECTION 16500 LUMINAIRES

PART 1 _ GENERAL

1.1 SCOPE:

A. This Section includes the lighting fixtures, lamps, trim, ballasts, and accessories.

1.2 QUALIFICATIONS

A. Photometric data of independent, nationally recognized testing agencies will be accepted.

B. Photometric data of testing laboratories of fixture manufacturers may be accepted if certified and approved by the Engineer.

1.3 SUBMITTALS:

A. Submit Shop Drawings for each fixture assembly consisting of catalog cuts, photometric data, dimensions, ballasts data, voltage, materials, finishes and installation data. Submittals shall be bound in a manual, indexed and identified in accordance with schedules.

1.4 LUMINAIRES, GENERAL REQUIREMENTS:

A. Light fixtures shall be furnished complete with lamps and all necessary mounting hardware and trim and installed as shown on the drawings.

B. Light fixtures shall be neatly and firmly mounted, using standard supports for outlets and fixtures. Suitable support members shall be provided for all fixtures, outlet boxes and hangers under this section of specification.

C. Except as indicated or specified otherwise, the metal parts of light fixtures shall be of corrosion resistant metal or shall be suitably finished to resist corrosion; metal portions of fixtures which will be visible after installation shall have an unblemished finish.

D. Lens frames shall be supported so as to avoid sagging, and shall be readily removable with suitable hinges and latches. Removable frames shall have adequate retention for use when servicing.

E. Plastic lens shall be made of heat resistant acrylic. Minimum thickness shall be 0.125 inch.

F. Emergency battery units shall have a five year unconditional warranty.

G. Emergency lighting ballasts shall be sealed nickel cadmium battery units. The battery shall be maintenance free with special cell construction to withstand high temperatures. The inverter shall be a highly efficient solid state inaudible high_frequency unit which will operate the fixture in the emergency mode at approximately 10 watts. The unit shall automatically disconnect the normal fixture source and instantly energize the fixture load upon power failure of the AC supply. Minimum emergency illumination time shall be 90 minutes. The emergency battaery unit shall be provided with self–testing electronic circuitry and shall automatically test emergency lighting for a minimum of 30 seconds every 30 days, and 90 minutes once a year. An embedded micro controller will continually monitor the battery charging current and voltage. An audible alarm and light–emitting diode shall be provided to indicate test results and status conditions.

PART 3 EXECUTION

3.1 INSTALLATION:

A. Adjust directional fixtures to obtain the most uniform distribution. Orient all similar fixtures consistently. Coordinate fixtures with air grilles, pipes and ductwork.

B. Fixture bottoms, edges, and ends shall be even. Clean all fixtures of debris and fingerprints and adjust trim to fit surfaces snug.

C. Provide all necessary hangers and mounting accessories for a complete installation.

D. Locate the fixture in the equipment rooms to best illuminate the equipment installed. Use chains or rods to support below ducts and pipes as required. Install after pipes and ducts are in.

E. Test all fixtures, switches and controls for operation.

F. Fire rated suspended ceiling grid systems shall be supported with a vertical hanger from each corner of each Lay–in troffer or as required by the ceiling system UL listing.

G. Troffers shall be fastened to the ceiling grid members by approved methods per Section 410.16(C) of the NEC.

H. Recessed fixtures that are not IC rated, must have three inches of clear air space all around the fixture. In insulated ceilings, the contractor shall provide an insulation dam around the fixture to keep insulation at least three inches from the fixture.

I. For installation of lay–in troffers provide as a minimum two hanger wires on opposite corners of the troffer and secured to the structure.

END OF SECTION 16500

SECTION 16710 – TELEPHONE AND CABLE TV RACEWAY AND WIRING SYSTEMS

PART 1 GENERAL

1.01 SCOPE: This section includes conduit and wiring systems including backboards, cabinets, outlets and plates as required.

PART 2 PRODUCTS

2.01 PLATES

A. Match adjacent wiring devices.

2.02 WIRING

A. Telephone and cable television outlets shall be pre–wired by the electrical contractor for a modular type system.

B. Telephone wiring shall consist of four pair 24 AWG UTP category 5 cables.

C. Television system cable shall be type RG–6 as manufactured by Belden or West Penn Wire, or as required by the local cable service provider. Contractor shall install cables and provide a plate per cable service provider directions. Cable service provider shall install jacks and terminate cables on each end. Contractor shall leave three feet slack conductor at each outlet and ten feet of slack at the backboard.

2.03 OUTLETS

A. Telephone outlets shall be flush mounted modular type duplex RJ–45 jacks.

B. Cable television jacks shall be furnished and installed by the cable service provider.

PART 3 EXECUTION

3.01 INSTALLATION:

A. Minimum size outlet box shall be as required by the wiring devices.

B. Provide outlets and plates to match adjacent outlet covers.

C. Provide bushings on the ends of cut conduits. Conduits may be PVC underground as allowed by section 16130.

D. Conform to Telephone Company and cable service provider requirements.

E. Provide a #6 ground to all backboards and terminals boxes from the building grounding electrode system. Ground wire need not be in a raceway.

F. Provide #14 TW pull wire or 230 lb. test Polyolefin pull line in all empty conduits.

G. Install backboards and cabinets as shown on the drawings. Unless shown otherwise on the drawings, the minimum size backboard shall be 3/4" x 96" x 96" plywood. Paint backboard with three coats insulating gray paint on both sides. Provide surge protected punch down blocks.

H. Provide as a minimum one 3" PVC conduit from the telephone backboard to the property line at a location indicated by the local telephone company. See telephone riser diagram for additional conduit requirements for the telephone service entrance.

I. Provide as a minimum one 3" PVC conduit from the telephone backboard to the property line at a location indicated by the local cable service provider. See telephone riser diagram for additional conduit requirements for the cable television service entrance.

END OF SECTION 16710

SECTION 16610 – FIRE ALARM SYSTEM

PART 1 _ GENERAL

1.01 APPLICABLE DOCUMENTS:

NFPA_72 National Fire Alarm Code
NFPA_101 Life Safety Code

1.02 REQUIREMENTS:

A. The installation shall conform to the referenced editions of the National Fire Protective Association Standards #72 and #101 as listed above.

B. The system shall not require manual intervention upon actuation of any sending station or detector.

1.03 SUBMITTALS:

A. Submit Shop Drawings of all equipment for approval including a system wiring diagram. Submit manuals for approval.

B. Submit evidence that fire alarm control units, equipment, and components are of a type listed and/or approved for the purpose intended as determined by a nationally recognized agency such as Underwriters Laboratories Inc., or Factory Mutual Research Corporation.

1.04 TYPE OF SYSTEM:

A. Provide and install electrically supervised, non–coded, continuous ringing, remote alarm system with voice evacuation. The system shall include but shall not be limited to all detection devices, initiating devices, audible and visual alarm signaling devices, conduit, wire, fittings and all accessories required to provide a complete operating Fire Alarm System.

B. Trouble and alarm signals shall be transmitted wirelessly to a remote station receiving station located at a fire department, answering service, or other locations which are manned 24 hours a day and capable of response upon receipt of signal via digital communicator. The contractor shall be responsible for all installation charges. Owner shall be responsible for lease and/or service payments as required by the system. System shall meet the approval of the local and state fire marshal.

1.05 INSTALLATION CONTRACTOR REQUIREMENTS

A. Submit a company resume showing years in business, certification stating that he is an authorized representative for the manufacturer of the equipment he is submitting for approval and that he maintains a fully equipped and stocked service shop and shall respond to service calls within twelve normal working hours, list of key personnel, copies of appropriate licenses and list of recently completed jobs during the normal prior approval period.

B. Qualifications: Systems Contractor responsible for furnishing and installing systems specified herein to meet the following minimum requirements:

1. Contractor to be a manufacturer authorized dealer/representative for products furnished.
2. Contractor shall have been in the business of furnishing, installing and maintaining systems specified herein for a minimum of five consecutive years.
3. Contractor shall have successfully completed a minimum of five projects of size and complexity equal to work required under this contract. Contractor shall submit, as part of shop drawing phase, a list of these projects.
4. Contractor shall maintain a fully staffed and equipped service office within 100 miles of project site. Office shall have been in existence for a minimum of five years.

C. The Contractor shall plan on one visit to the site for training.

D. Emergency Service: The Systems Contractor shall guarantee the owner that, when emergency service is requested by owner, that a qualified manufacturer trained and properly equipped service technician will be on site within four hours of notice of an emergency.

PART 2 _ PRODUCTS

2.01 SENDING STATIONS:

A. The addressable manual fire alarm pull station shall incorporate a custom microprocessor based integrated circuit which shall provide communication with its compatible control panel.

B. The addressable manual fire alarm pull station shall be constructed of durable molded polycarbonate material which is matte finished in red with raised white lettering. The housing shall accommodate a pull down lever, which when operated locks in position after releasing a spring loaded switch. To indicate the fire alarm box has been activated, the pull down lever shall be reset only by opening the hinged housing cover with an allen key and then closing and locking the cover.

C. The addressable manual fire alarm box shall be UL listed.

D. The addressable manual fire alarm box shall be dynamically supervised and uniquely identifiable by the control panel.

E. The addressable manual fire alarm box's address shall be programmed with the use of a portable programming accessory. The portable programmer shall be menu driven. Once the desired address is entered, the programmer shall set and verify the address. The programming accessory shall also be capable of testing the device's functionality. The manual fire alarm box shall be compatible with all other detectors and interface modules on the same circuit.

2.02 ALARM SIGNALING DEVICES

A. Alarms shall be audible and/or visual flush and/or surface mount types as indicated.

B. Visual signals shall be xenon strobe type UL 1971 listed at 75 candela polar output that meets ADA requirements for regular lighted public areas. Strobe mounting plate shall completely cover the electrical box and shall provide adjustment for out of plumb electrical boxes. Basis of requirement is Gentex GEC/WR series.

C. Speakers and speaker–strobes shall be UL listed for use on fire alarm systems. Minimum output shall be 87 db at ten feet. The maximum output shall be approximately 100 db at ten feet with a maximum tap setting

2.03 IONIZATION SMOKE DETECTORS

A. Provide where indicated on the plans dual chamber, addressable ionization smoke detectors. The addressable ionization detector shall incorporate a custom microprocessor based integrated circuit which shall provide communication with its compatible control panel. All of the detector's communication circuits shall be contained within the detector. No communication electronics or address identification mechanisms shall be contained within the detector's base. The detector shall be a plug–in unit which mounts to a twist–lock base. The detector shall operate on a two wire circuit and shall contain an LED which shall blink to signal alarm actuation. The detector shall be UL listed.

B. The detector shall contain two ionization chambers and an LED alarm indicator. The reference chamber and the microcomputer chip's software shall compensate against sensitivity changes caused by environmental factors such as temperature, humidity, and barometric pressure.

C. The detector's address shall be programmed with the use of a portable programming accessory. The portable programmer shall be menu driven. Once the desired address is entered, the programmer shall set and verify the address. The programming accessory shall also be capable of testing the detector's functionality.

D. The detector shall be capable of bi–directional communication with the control panel.

E. The detector shall be dynamically supervised and uniquely identifiable by the control panel. The control panel shall be capable of analyzing the signal of the detector's analog value for calibration, identification and sensitivity. These values can be displayed by the control panel and monitored for processing according to control panel instructions. The detector's sensitivity shall be individually adjustable from the control panel. Should the detector sensitivity voltage shift beyond an acceptable level and stay there for a predetermined length of time, a discrete detector trouble signal shall be annunciated at the control panel.

F. The detector shall be compatible with all other manual stations and interface modules on the same circuit.

G. The detector shall be capable of operating one remote alarm indicator, auxiliary relay, or audible base. The relay or remote alarm indicator, or audible base is normally activated by the associated detector. The system shall be capable of being programmed to operate the relay or remote alarm indicator, or audible base independently of the associated detector. All detectors and/or relays connected to the circuit can be in alarm or activated simultaneously.

H. The addressable ionization detectors shall insert into a standard base, a relay base, or an audible base. The base assembly in which the detector is installed shall be of the twist–lock design with screw–clamp terminals. The base shall use self–wiping contacts and shall accept other compatible detectors.

2.04 PHOTOELECTRIC SMOKE DETECTORS

A. Provide where indicated on the plans addressable photoelectric smoke detectors. The addressable photoelectric detector shall have a plug–in head unit which mounts to a twist–lock base. The detector head shall incorporate microprocessor based circuitry which shall perform all detection and communication functions. No communication electronics or address identification mechanisms shall be contained within the detector's base. The detector shall operate on a two wire circuit and shall contain an LED which will flash to signal an alarm condition. The detector shall be UL listed.

B. The photoelectric detector shall utilize a light emitting diode (LED), mirror and light sensing photodiode assembled in a fixed array so that under normal conditions, light transmitted by the LED is directed away from the photodiode and scattered throughout the smoke chamber in a controlled pattern. The smoke chamber design should effectively manage light dissipation and extraneous reflections from dust particles or other airborne contaminants in such a way as to maintain stable, consistent detector operation.

C. The detector's address shall be programmed with the use of a portable programming accessory. The portable programmer shall be menu driven. Once the desired address is entered, the programmer shall set and verify the address. The programming accessory shall also be capable of testing the detector's functionality.

D. The detector shall be capable of bidirectional communications with the control panel and shall be dynamically supervised and uniquely identifiable by the control panel. The control panel shall be capable of analyzing the signal of the detector's analog value for calibration, identification and sensitivity. These values can be displayed by the control panel and monitored for processing according to control panel instructions. The detector's sensitivity shall be individually adjustable from the control panel. Should the detector sensitivity voltage shift beyond an acceptable level and stay there for a predetermined length of time, a discrete detector trouble signal shall be annunciated at the control panel.

E. The detector shall be capable of operating one remote alarm indicator or auxiliary relay or audible base. The relay or remote alarm indicator, or audible base is normally activated by the associated detector. The system shall be capable of being programmed to operate the relay or remote alarm indicator, or audible base independently of the associated detector. All detectors, remote alarm indicators, audible bases and or relays connected to the initiating circuit can be in alarm or activated simultaneously.

F. The addressable photoelectric detectors shall insert into a standard base, a relay base, or an audible base. The base assembly in which the detector is installed shall be of the twist–lock design with screw–clamp terminals. The base shall use self–wiping contacts and shall accept other compatible detectors.

2.05 DUCT DETECTOR HOUSING

A. The air duct housing shall incorporate the use of the photoelectric smoke detector specified above.

B. The air duct housing unit shall be designed for detection of combustion products and/or smoke in air conditioning and ventilation system ducts in compliance with NFPA standard 90A. The assembly shall consist of a housing to accommodate sampling tubes which extend into and across the duct of the ventilation system.

C. While the fans are operating, a continuous cross–sectional sampling of air from the duct shall flow through the selected photoelectric detector, after which the sampled air shall be returned to the duct.

D. Air handling equipment shall be shut down by a signal from the fire detection system control equipment. When the air duct housing incorporates the optional relay, the shut down of air handling devices may be accomplished by a signal directly from the detector.

E. The air duct housing shall utilize a plug–in detector head located in the air sampling chamber. The detector shall be photoelectric. There shall be provisions to check the detector sensitivity in place under actual air flow conditions.

F. The air duct housing shall be mounted directly outside of the air duct by means of four bolts (supplied). A template shall be provided for making necessary cut–outs and holes. Complete instructions shall be supplied with the unit.

2.06 ADDRESSABLE INTERFACE MODULE

A. The addressable interface module shall incorporate a custom microprocessor based integrated circuit that shall provide communication with its compatible control panel.

B. The intelligent interface modules shall provide the means of interfacing direct shorting devices to the control panel's addressable circuits. The intelligent interface modules shall be available in configurations to monitor a single normally open or normally closed dry contact and report the contact's status to the control panel; incorporate an addressable Form C relay and the relay and device input shall be controlled as a separate function at the same address by the control panel; provide a dual input module designed to supervise and monitor two sets of dry contacts which shall require two address settings. Only one trouble message per device shall be annunciated. This trouble message shall be annunciated using the lower numerical assigned address message. The addressable interface module shall be UL listed.

C. The addressable interface module shall be dynamically supervised and uniquely identifiable by the control panel.

D. The addressable interface module's address shall be programmed with the use of a portable programming accessory. The portable programmer shall be menu driven. Once the desired address is entered the programmer shall set and verify the address. The programming accessory shall also be capable of testing the interface's functionality.

E. The interface module shall be compatible with other intelligent detectors, addressable interfaces, addressable manual stations or any other addressable intelligent module.

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E19
SHEET 19 OF 20

PROJECT NO.
2236

PREPARED BY
NIX

REVIEWED BY
RN

ISSUE DATE
05/06/2024

SCALE
N/A

ELECTRICAL SPECIFICATIONS

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1117 JENKS AVENUE/PANAMA CITY, FLORIDA 32401/850.763.8072

2.07 FIRE ALARM CONTROL PANEL: The Fire Alarm Control Panel shall have the following features:

A. Automatic Environmental Compensation for Smoke Detectors.

B. Capacity for up to 198 intelligent analog devices.

C. Dynamic Supervision of Intelligent Devices.

D. Security Device Monitoring.

E. Sprinkler Supervision.

F. Intelligent/Analog Detection Circuits, Style 6 (Class A) or Style 4 (Class B).

G. Detector Sensitivity Readout/Printout per NFPA 72 Chapter 7.

H. Style D (Class A) or Style B (Class B) Conventional Initiating Circuits.

I. Style Z (Class A) or Style Y (Class B) Notification Appliance Circuits.

J. Degrade Mode Operation.

K. Distributed Processing.

L. 80 Character Backlit Alphanumeric Display.

M. Supervised Remote Printer.

N. 32 Character Device Custom Messages.

O. Multiple Command Stations.

P. Compare System Software.

Q. Fully Field Programmable Via Laptop Computer

R. Menu Driven Operator Commands.

S. Central Architecture.

T. 800 Event History Logging With On Line & Off Line Reports.

U. User Help Screens.

V. Multiple Levels of Password Protection.

W. One Person Walk Test by Zone or System.

X. Alarm Verification by Device or Zone.

Y. Logic Controlled Output Functions.

Z. Time Base Controlled Output Functions.

AA. Holiday Schedule.

BB. City Tie/Lease Line.

CC. Coded Outputs.

DD. Supervised Serial Annunciator Driver/Input Interface.

EE. Interactive VDT – Monochrome & Color.

FF. Color Graphics Option.

GG. Complies with NFPA 72.

HH. NEC 760 Power Limited Circuits (UL 864 Compliant).

II. 16 Gauge Steel Enclosure.

JJ. UL Listed 864 and 1076.

KK. Pre-action Releasing and Deluge (NFPA 13).

LL. FM Approved for Sprinkler and Deluge.

MM. Pre-alarm Operation.

NN. Intelligent Link to Air Sampling Detection System.

OO. Multi-Language Display.

PP. Intelligent Interface to Building Management Systems.

QQ. Operates as an Interactive Peer with other similar Fire Alarm Control Panels in a Network.

RR. Command Center Monitoring.

2.08 BATTERY STANDBY POWER

A. Battery standby power shall be provided with internal nickel cadmium or gel type batteries.

B. Provide battery standby calculations showing total standby power needed to meet the system requirements. Provide a complete list of current drain requirements during normal supervisory conditions, trouble conditions, and alarm conditions.

C. Batteries shall provide power for the entire system upon loss of 120 VAC power. Batteries shall be capable of supplying power for a period of twenty-four (24) hours with five (5) minutes of alarm signaling at the end of this 24 hour period as required by NFPA 72.

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2.09 VOICE EVACUATION SYSTEM

A. The system shall contain a voice evacuation system with a pre-recorded evacuation message chip. The voice evacuation section shall be furnished with a one hundred watt minimum amplifier module, pre-recorded evacuation message chip, supervised speaker line, signal generator, and amplifier.

B. A message repeater package shall repeat the evacuation message for a duration as prescribed by the Authority Having Jurisdiction (AHJ) and then sound a slow whoop alarm signal for a duration prescribed by the AHJ. At the end of this duration, the above sequence continues to repeat until the alarm panel is reset

PART 3 _ EXECUTION

3.01 WIRING AND INSTALLATION

A. Provide in accordance with manufacturer's instructions and requirements of these specifications, all wiring, conduit, boxes etc., required for the erection of a complete system as described herein and as shown on the drawings. All wires shall be color coded and tagged at all junction points and shall test free from opens, grounds or crosses between conductors. Wiring and cable shall be in accordance with manufacturer's specifications. System shall be installed in accordance with all city, county and state codes.

B. Work shall be executed in a neat and workmanlike manner by experienced and capable electricians so as to present a neat installation upon completion.

C. Do all cutting, sleeving, excavation and backfilling necessary for installation of equipment and patching thereafter but do not cut other work without consent of the Architect/Engineer.

D. A factory_trained representative shall supervise the final testing of the system and it shall be subject to the approval and acceptance of the responsible engineer. Upon completion of the acceptance tests, the owner or his representative shall be instructed in the proper operation and testing of the system.

E. The equipment manufacturer shall be represented by a local service organization and the name of this organization shall be furnished to the architect, engineer and the owner.

3.02 GUARANTEE

A. A written guarantee shall be submitted to Owner that all workmanship and material executed under this contract shall be free from defects for a period of one year after final acceptance of the job. There will be no additional cost to Owner to repair or replace any such work which is found to be defective within guarantee period.

END OF SECTION 16610

SECTION 16800 – COMMUNICATIONS STRUCTURED CABLING SYSTEM

1.0 GENERAL

1.1 CONTRACTOR QUALIFICATIONS

The Structured Cabling System Contractor shall be an experienced firm regularly engaged in the layout and installation of structured cabling systems of similar size and complexity as required for this installation. The Structure Cabling Contractor, under the same company name, shall have successfully completed the layout, installation, testing and warranty of not less than five Structured Cabling Systems of the scope of the largest system on this project for a minimum period of three years prior to the bid date, and shall have been regularly engaged in the business of Structure Cabling System contracting continuously since. The Contractor shall have an existing permanent office located within 200 miles of the job site from which installation and warranty service operations will be performed.

Structure Cabling System Contractor shall present, with his bid, the name and certification number of a BICSI certified Registered Communications Distribution Designer (RCDD) who will be a consultant to the Contractor. The RCDD shall have overall responsibility for certifying that the installed structured cabling system conforms to these contract documents and to the referenced EIA/TIA, IEEE, BICSI, and UL standards. Specific requirements for the RCDD are:

1.1.1 The RCDD shall be, in the judgment of the Engineer, thoroughly experienced in the design, layout, and installation of structured cabling systems of similar size and complexity as required for this installation. The RCDD shall submit evidence of these qualifications to the Engineer upon request.

1.1.2 The RCDD shall affix his stamp to the Contractor's pre-installation submittal drawings, indicating that he has reviewed and approved the drawings for conformance to the contract documents and to the referenced codes and standards.

1.1.3 The RCDD shall periodically visit the site and inspect the work in progress.

1.1.4 The RCDD shall sign off on all cable test results, indicating that he was in responsible charge of all cable testing procedures and that all cables were tested in compliance with the contract documents and met or exceeded the requirements stated therein.

1.1.5 The RCDD shall affix his stamp to the Contractor's as_built drawings, indicating that he has reviewed and approved the drawings as being complete, accurate, and representative of the system as actually installed.

1.2 BID REQUIREMENTS

The Structure Cabling System Contractor shall provide the following documentation, to be presented with the bid, as evidence that the requirements for Structure Cabling System Contractor qualifications listed above are satisfied.

If the bidder does not meet the requirements of this specification section for structured cabling system work, he shall provide the following documentation, to be presented with the bid, as evidence that the requirements listed above are satisfied by the Structure Cabling System Contractor he proposes to use as a subcontractor to perform work under this section. In either case, all work under this section shall be performed by permanent employees of the Structure Cabling System Contractor listed on the bid form, and shall not be performed by another subcontractor, employees of another company, or by temporary employees.

1.2.1 A list of not less than five (5) references for jobs of similar size and complexity including project name, location, contact person and phone number.

1.2.2 RCDD name, BICSI certification number, and qualifications.

1.2.3 Location of office from which installation and warranty work will be performed.

1.3 RELATED REQUIREMENTS

Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this section.

Section 16010, "Electrical General", applies to this section, with the additions and modifications specified herein and on the drawings.

Conduit and raceways shall be provided under Division 16. The contractor shall be responsible for coordination with the electrical contractor for specific locations and requirements.

1.4 DESCRIPTION OF WORK

The work consists of all labor, materials, equipment and services necessary to provide, install, test and certify a new structured cabling system as described in the contract documents.

1.5 QUALITY ASSURANCE

Materials shall be new and shall be the best of their respective kinds. All work shall be accomplished in a workmanlike manner in keeping with the best practices and highest standards of the telecommunications industry.

Protect materials and equipment from physical or environmental damage during shipping, storage and installation. Equipment and materials shall be received at the site in new condition and shall be maintained in new condition throughout the installation process. Damaged or deteriorated equipment and materials will not be acceptable. The Contractor shall be responsible for the safety and condition of all materials and equipment, whether stored or installed, until final acceptance by the Engineer and the Owner. All materials and equipment shall be UL listed for the intended application.

2.0 PRODUCTS

2.1 MATERIALS AND EQUIPMENT, GENERAL

All materials, equipment, and devices shall, as a minimum, meet the requirements of UL where UL standards are established for those items, and the requirements of NFPA 70.

All like items of material or equipment shall be the same product of the same manufacturer.

All materials and equipment shall be a standard catalogued products of a manufacturer regularly engaged in the manufacture of similar products.

2.2 PRODUCT SPECIFICATIONS

See contract drawings for all product requirements not indicated in these specifications.

3.0 EXECUTION

3.1 INSTALLATION

3.1.1 General:

The installation shall be in strict accordance with all applicable codes and standards, the respective manufacturer's written recommendations, and the contract drawings and these specifications.

All materials, equipment, and devices shall be new and unused, of current manufacture and of the highest grade, free from defects. Workmanship shall be of the highest grade in accordance with modern practice. The installed system shall be neat, clean, and well organized in appearance.

3.1.2 Cabling Installation:

Route cabling in conduit and wireway as indicated. Do not pull cables in conduits until plastic insulating bushings have been installed. Cables installed in conduits without plastic insulating bushings shall be removed and replaced with new cables. All materials, equipment, and devices shall be new and unused, of current manufacture and of the highest grade, free from defects. Workmanship shall be of the highest grade in accordance with modern practice. The installed system shall be neat, clean, and well organized in appearance.

3.1.3 Identification:

All labels shall be produced using a laser printer and shall be easily readable from floor level when viewing a backboard, panel, or communications outlet from the front. Handwritten labels are not acceptable. Provide data sheets describing proposed labeling products for cable and conduit with pre-installation submittals. Label each cable at each end based on room number and destination telcom room number using write-on mylar wrap wire markers.

3.2 SYSTEM VERIFICATION AND ACCEPTANCE

3.2.1 Cable Testing – General:

The Contractor's RCDD shall be in responsible charge of all cable testing procedures and shall provide a letter to the Engineer at the completion of successful testing certifying that all cables have been tested in compliance with the contract documents and have met or exceed the requirement stated therein.

The requirement for this project is full compliance/zero tolerance. Cables which do not comply shall be removed and replaced. Partial use of cables by claiming good pairs or strands and abandoning others is not allowable.

Tests shall be performed in strict accordance with the test instrument manufacturer's printed instructions.

Technicians performing testing shall be thoroughly trained in the use of the test instruments employed. Factory certification of technicians is desirable.
The Contractor shall provide evidence of training if requested. Test instruments shall meet the approval of the Engineer for accuracy, stability, and general suitability for the test performed. The Contractor shall be required to retest installed cables in the Engineer's presence to verify the Contractor's test documentation. The percentage of cables to be retested shall be determined by the Engineer based on compliance of the installation with the contract documents, quality of workmanship, and results of initial cable retests. Retesting shall be performed as required until all cables comply with the requirements of the contract documents.

3.2.2 Category 6 UTP Cable Testing:

After installation and termination of the Category 6 UTP cable, test each cable in accordance with TIA/EIA TSB 67. Test each conductor for end-to-end continuity and for correct termination on a pin-by-pin basis.

Test each cable from both ends with a Category 6 tester, Microtest Penta Scanner+ with Microtest 2-Way Injector+, to verify compliance with TIA/EIA specifications for Category 6 UTP, "Basic Link" configuration, Level II accuracy, with no allowable deviation. Test at the full range of frequencies indicated by TIA/EIA. Use the tester manufacturer's 2-way injector to measure near-end crosstalk (NEXT) and attenuation-to-crosstalk (ACR) from both ends of each cable. Make connections at each end using access cables provided by the tester manufacturer.

3.2.3 Multi-pair Telephone Cable Testing:

Test each conductor for end-to-end continuity. Test each cable for correct termination on a pin-by-pin basis. Document results of testing and submit to Engineer for review and approval. The test log shall include outlet identifiers as indicated on the drawings, the test date, the initials of the technician who tested the cable, and the test results.

3.3 WARRANTY

The installed structured cabling system shall be guaranteed against defects in materials and installation for a period of three years from the date of acceptance by the Engineer. The services of a qualified technician shall be available to make necessary warranty repairs in a timely manner during the warranty period.

END OF SECTION 16800

SECTION 16610 – LIGHTNING PROTECTION SYSTEM

PART 1 _ GENERAL

1.01 SCOPE OF WORK:

A. The work covered by this section of the specifications consists of furnishing all labor, materials and items of service required for the completion of a functional and unobtrusive lightning protection system in strict accordance with this section of the specifications and the applicable drawings.

B. The system shall consist of air terminals, interconnecting conductors, proper downleads to ground with their groundings and bonding of grounded metal objects on or within the building as necessary. The system shall be designed to appear as a part of the building. Conductor runs shall be concealed within the column, wall, and roof construction where possible and practical. Exposed roof conductors should be placed so as to require a minimum of displacement for future repair and maintenance of roofing.

C. The following specifications and standards of the latest issue form a part of this specification:

1. Lightning Protection Institute Installation Code LPI_175

2. NFPA 780

1.02 QUALITY ASSURANCE:

A. The lightning protection system shall comply with the specifications and standards of the current edition of the NFPA 780.

B. The system to be furnished under this specification shall be standard product of a manufacturer regularly engaged in the production of lightning protection systems and shall be the manufacturer's latest approved design. The equipment manufacturer shall also be a UL listed and approved manufacturer and a full certified manufacturer member in good standing of the Lightning Protection Institute.

1.03 SUBMITTALS:

A. The contractor shall submit to the Architect a complete shop drawing of the proposed system for approval before fabricating materials or starting the installation work. Submittal shall include catalog data with complete description of material components. Shop drawings are to include a layout of the roof system with air terminal locations, interconnecting circuits, locations for downleads and locations of metal equipment to be bonded.

B. Samples and pertinent catalog shall be submitted for approval upon request.

PART 2 _ PRODUCTS

2.01 STANDARD

A. The materials used shall be manufactured especially for Lightning Protection Systems by an accredited member of the Lightning Protection Institute. All materials shall be in strict compliance with the U.L. material Code #96.

2.02 EQUIPMENT

A. System components shall be of copper or aluminum complying with the requirements of L.P.I., U.L. and N.F.P.A. for Class II materials. Bare aluminum materials shall not be embedded in concrete or masonry and shall not come in contact with the soil. Copper materials are not recommended for installation on aluminum surfaces or in locations near aluminum where moisture can run off copper onto aluminum trim or surfaces.

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A. System components shall be of copper or aluminum complying with the requirements of L.P.I., U.L. and N.F.P.A. for Class II materials. Bare aluminum materials shall not be embedded in concrete or masonry and shall not come in contact with the soil. Copper materials are not recommended for installation on aluminum surfaces or in locations near aluminum where moisture can run off copper onto aluminum trim or surfaces.

B. Conductors of copper or aluminum of the size required by code shall interconnect all air terminals and provide a two-way path to ground from each air terminal. Conductors shall maintain a horizontal and/or downward path from the air terminals to ground without forming "U" or "V" pockets.

C. Air terminals may be of copper or aluminum and shall be mounted to extend a minimum of 12 inches above the object to be protected. Spacing of air terminals on ridges or edges of roofs shall not exceed 20 feet on centers nor be more than 24 inches from the ridge ends or roof edges. On flat or gently sloping roofs, additional air terminals shall be located at intervals not exceeding 50 feet on centers. Air terminals shall be installed on all prominent metal bodies made of metal less than 3/16" thick.

D. Each downlead from roof circuits shall terminate in a properly made ground connection below finished grade.

E. Fasteners shall be placed on each run of exposed conductor not more than three (3) feet apart. Concealed runs of conductor shall be anchored as necessary to maintain position and hold permanently in place.

F. Cable fasteners shall be substantial in construction, electrolytically compatible with the conductor and mounting surface and shall be spaced according to L.P.I. and NFPA Code Requirements.

G. Splices in main conductor runs and connections to branches shall be made with pressure type bolted or compression type connectors.

H. Underground connections shall be exothermic welded connectors.

I. All metal bodies permanently affixed to a structure that are subject to a direct lightning strike shall be provided with two-way paths to the lightning protection system using full size conductor.

All grounded metal bodies within a zone of protection shall be bonded if they are within the calculated bonding distance for the building. This bonding distance is to be determined according to code requirements regarding the length and number of downleads on the building.

All ungrounded metal bodies which from a short-circuit path between the lightning protection system and a grounded metal body causing the grounded metal body to be within the bonding distance calculated for the building may be bonded to the lightning protection system and to the grounded metal body. If the grounded metal body is connected directly to the lightning protection system, no connection to the ungrounded body is required.

PART 3 _ EXECUTION

3.01 INSTALLATION

A. All equipment shall be installed in a neat workmanlike manner in the most inconspicuous manner possible. The system shall consist of a complete cable network on the roof including all air terminals, splices and bonds with cable downleads routed in conduit to ground.

3.02 COORDINATION

A. The lightning protection installer will work with other trades to insure a correct, neat and unobtrusive installation.

B. It shall be the responsibility of the lightning protection installer to assure a sound bond to the main water service and to assure interconnection with other building ground systems, including both telephone and electrical and also to insure proper arresters have been installed on the power service.

3.03 COMPLETION

A. The installing contractor and a representative of the owner shall complete the Underwriters' Laboratories, Inc. application for inspection. The owner's representative will witness and sign for the concealed grounding portion of the system. The installer and owner's representative will sign the form to signify the information being submitted as correct and their authorization of a completed project inspection by a U.L. representative.

B. Any items of product, design or installation noted by the Underwriters' Laboratories, Inc. field inspector as not being in compliance with the current code requirements shall be corrected by the installer at no additional charge to the owner. The project shall not be considered complete until final approval is received from U.L.

C. The owner shall develop a program of inspection and maintenance in association with the installer and/or the material manufacturer to ensure the future integrity of the lightning protection system. As a minimum on the fifth anniversary of the original installation and at successive three-year intervals the system shall be re-inspected against defects by the original installation company or trained maintenance personnel of the owner. The inspection shall include a visual check of all exposed components of the lightning protection system along with continuity and ground testing as accessible to verify the concealed equipment. Any alternation to the exterior structure, such as a building addition, new process lines, venting equipment or reroofing may necessitate additional items for incorporation into the lightning protection system. The system shall be maintained current to the requirements of NFPA 780.

END OF SECTION 16610

E20
SHEET 20 OF 20

PROJECT NO.
2236

PREPARED BY
NIX

REVIEWED BY
RN

ISSUE DATE
05/06/2024

SCALE
N/A

ELECTRICAL SPECIFICATIONS

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