BARIUM SPRINGS HOME FOR CHILDREN:
"LITTLE JOE'S CHAPEL/TRAINING CENTER"

BARIUM SPRINGS, NORTH CAROLINA

INDEX OF DRAWINGS

CONSULTANTS

KING GUINN ASSOCIATES — STRUCTURAL

1309 AMBLE DRIVE
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WCM DESIGN INC.

ARCHITECTURE
MASTERPLANNING
INTERIOR DESIGN
IMAGE DESIGN

916 WEST FIFTH ST.
SUITE 200
CHARLOTTE, NC 28202

BARIUM SPRINGS HOME FOR CHILDREN

BARIUM SPRINGS home for children RT Dooley

"LITTLE JOE'S CHAPEL/ TRAINING CENTER"

PROGRESS SET - NOT FOR CONSTRUCTION

REV.	DATE	DESCRIPTION

DATE: OCTOBER 03, 2006

PROJECT NO.: 06100.02

TITLE:

DRAWING NO.

ABBREVIATIONS

A	A	AMPERE
	AB	ANCHOR BOLT
	AC	ALTERNATING CURRENT
	A/C	AIR CONDITIONING
	ACI	AMERICAN CONCRETE INSTITUTE
	ADJ	ADJACENT OR ADJUSTABLE
	AFF	ABOVE FINISH FLOOR
	ALUM	ALUMINUM
	APPROX	APPROXIMATELY
	ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
	AWG	AMERICAN WIRE GAGE
B	BD	BOARD
	BLDG	BUILDING
	BLK	BLOCK(ING)
	BM	BENCH MARK
	BOT	BOTTOM
	BRG	BEARING
C	C	CONDUIT
	CB	CATCH BASIN
	CI	CAST IRON
	CJ	CONTROL JOINT OR CONSTRUCTION JOINT
	CL, ℄	CENTER LINE
	CLG	CEILING
	CLO	CLOSET (RM)
	CLR	CLEAR
	CMU	CONCRETE MASONRY UNIT
	COL	COLUMN
	COMP	COMPRESSION
	CONC	CONCRETE
	CONST	CONSTRUCTION
	CONT	CONTINUOUS
	CONTR	CONTRACTOR
	CORR	CORRIDOR
	CPT	CARPET
	CSK	COUNTER-SINK
	CT	CERAMIC TILE
	CTR	COUNTER
	CU FT	CUBIC FOOT
	CW	COLD WATER
D	DET	DETAIL
	DIA, ⌀	DIAMETER
	DIM	DIMENSION(ED)
	DN	
	DWG	DRAWING
E	EA	EACH
	EC	EMPTY CONDUIT
	EJ	EXPANSION JOINT
	EL	ELEVATION
	ELEC	ELECTRIC/ELECTRICAL
	ELEV	ELEVATOR
	EOS	EDGE OF SLAB
	EQ	EQUAL
	EQUIP	EQUIPMENT
	EW	EACH WAY
	EWC	ELECTRICAL WATER COOLER
	EXH	EXHAUST
	EXT	EXTERIOR OR EXTERNAL
F	FD	FLOOR DRAIN
	FEC	FIRE EXTINGUISHER CABINET
	FFE	FINISHED FLOOR ELEVATION
	FHC	FIRE HOSE CABINET
	FIN FL	FINISHED FLOOR
	FOM	FACE OF MASONRY
	FRGWB	FIRE RATED GYPSUM WALL BOARD
	FSR	FLEXIBLE SHEET ROOFING
	FT	FOOT OR FEET
	FTG	FOOTING
G	GA	GAUGE
	GALV	GALVANIZED
	GB	GRAB BAR
	GFRC	GLASS FIBER REINFORCED CONCRETE
	GL	GLASS
	GWB	GYPSUM WALL BOARD
	GYP	GYPSUM
H	HB	HOSE BIB
	HCP	HANDICAP
	HDW	HARDWARE
	HID	HIGH INTENSITY DISCHARGE
	HM	HOLLOW METAL
	HOR	HORIZONTAL
	HP	HIGH POINT
	HR	HOUR
	HT	HEIGHT
	HTG	HEATING
	HTR	HEATER
	HVAC	HEATING, VENTILATION & AIR CONDITION
	HW	HOT WATER
I	ID	INSIDE DIAMETER
	INCAN	INCANDESCENT
	INCL	INCLUDING
	INFO	INFORMATION
	INSUL	INSULATION
	INT	INTERIOR OR INTERNAL
	INV	INVERT
J	JAN	JANITOR
	JT	JOINT
	JST	JOIST
K	KCP	KRAFT CEMENT PLASTER
	KIT	KITCHEN
	KSI	KIPS PER SQ IN
L	LAM	LAMINATE(D) OR LAMINATION
	LAV	LAVATORY
	LBS	POUND(S)
	LL	LIVE LOAD
	LP	LOW POINT
	LTG	LIGHTING
	LVR	LOUVER
M	MAS	MASONRY
	MAX	MAXIMUM
	MECH	MECHANICAL
	MET	METAL
	MFR	MANUFACTURE(D) OR MANUFACTURER
	MH	MANHOLE
	MIN	MINIMUM
	MISC	MISCELLANEOUS
	MO	MASONRY OPENING
	MRFRGWB	MOISTURE RESISTANT FIRE RATED GYPSUM WALL BOARD
	MRGWB	MOISTURE RESISTANT GYPSUM WALL BOARD
	MTD	MOUNTED
N	NEC	NATIONAL ELECTRICAL CODE
	NEMA	NATIONAL ELECTRIC MANUFACTURERS ASSOCIATION
	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
	NIC	NOT IN CONTRACT
	NO	NUMBER
	NOM	NOMINAL
	NTS	NOT TO SCALE
O	OC	ON CENTER
	OD	OUTSIDE DIAMETER
	OFF	OFFICE
	OH	OPPOSITE HAND
	OPNG	OPENING
	OZ	OUNCE
P	PEJ	PRE-MOLDED EXPANSION JOINT
	PL	PLATE OR PROPERTY LINE
	PLAS	PLASTER OR PLASTIC
	PLBG	PLUMBING
	PLWD	PLYWOOD
	PNL	PANEL
	PSF	POUNDS PER SQUARE FT
	PSI	POUNDS PER SQUARE INCH
	PTD	PAPER TOWEL DISPENSER
	PTN	PARTITION
	PVC	POLYVINYL CHLORIDE
R	@	RATE OR AT
	R	RADIUS OR RISER
	RCP	REFLECTED CEILING PLAN
	RD	ROOF DRAIN
	RECPT	RECEPTACLE
	REF	REFERENCE
	REINF	REINFORCED OR REINFORCING
	REQ'D	REQUIRED
	RL	ROOF LEADER
	RM	ROOM
	ROW	RIGHT OF WAY
	RP	REFERENCE POINT
S	SAT	SPRAYED ACOUSTICAL TREATMENT
	SATC	SUSPENDED ACOUSTICAL TILE CEILING
	SECT	SECTION
	SF	SQUARE FOOT OR FEET
	SHT	SHEET
	SIM	SIMILAR
	SPEC	SPECIFICATION(S)
	SS	STAINLESS STEEL
	STD	STANDARD
	STC	SOUND TRANSMISSION CLASS
	SYM	SIMILAR
	STL	STEEL
	STRUCT	STRUCTURE OR STRUCTURAL
	SQ	SQUARE
T	T	TREAD
	TA	TOILET ACCESSORY
	TEL	TELEPHONE
	T&G	TOUNGE & GROOVE
	TOC	TOP OF CONCRETE
	TOF	TOP OF FOOTING
	TOS	TOP OF STRUCTURAL SLAB
	TOW	TOP OF WALL
	TS	TOP OF STEEL
	TYP	TYPICAL
U	UL	UNDERWRITER'S LABORATORY
	UNO	UNLESS NOTED OTHERWISE
V	V	VOLT(S)
	VCT	VINYL COMPOSITION TILE
	VERT	VERTICAL
	VT	VINYL TILE
	VTR	VENT THROUGH ROOF
	VWC	VINYL WALL COVERING
W	W	WATT(S)
	W/	WITH
	WC	WATER CLOSET
	WD	WOOD
	WH	WATER HEATER, WALL HYDRANT, OR WEEPHOLE
	W/O	WITHOUT
	WP	WATERPROOF(ED) OR (ING)
	WWF	WELDED WIRE FABRIC
Y	YD	YARD
	YH	YARD HYDRANT

APPENDIX B

NAME OF PROJECT: BARIUM SPRINGS HOME FOR CHILDREN - CHAPEL/TRAINING CENTER

ADDRESS: P.O. BOX 1 BARIUM SPRINGS, NC. 28010

PROPOSED USE: CHAPEL/TRAINING CENTER

OWNER OR AUTHORIZED AGENT: DON KELLY PHONE #: 704-872-4157

OWNED BY: ☐ CITY/COUNTY PRIVATE ☒ STATE ☐

CODE ENFORCEMENT JURISDICTION: ☐ CITY: _____ ☒ COUNTY: LINCOLN

LEAD DESIGN PROFESSIONAL:

WGM DESIGN, INC.

DESIGNER	FIRM	NAME	LICENSE #	PHONE NO
ARCHITECTURAL	WGM DESIGN, INC.	GEOFFREY HASKELL	8234	(704)342-9976
CIVIL	WEST CONSULTANTS	BENJI THOMAS	20757	(828)433-5951
ELECTRICAL	OPTIMA ENGINEERING	KEITH PEHL	24237	(704)338-1292
FIRE ALARM	OPTIMA ENGINEERING	KEITH PEHL	24237	(704)338-1292
PLUMBING	OPTIMA ENGINEERING	RON ALMOND	17228	(704)338-1292
MECHANICAL	OPTIMA ENGINEERING	RON ALMOND	17228	(704)338-1292
SPRINKLER-STANDPIPE	OPTIMA ENGINEERING	RON ALMOND	17228	(704)338-1292
STRUCTURAL	KING QUINN	MICHAEL BAER	050605	(704)597-1340
RETAINING WALLS-5' HIGH	NA	NA	NA	NA
OTHER	NA	NA	NA	NA

YEAR EDITION OF CODE: 2002 NC BUILDING CODE

☒ NEW CONSTRUCTION ☐ RENOVATION (EXISTING BLDG.) ☐ UPFIT ☐ ALTERATION

BUILDING DATA:

CONSTRUCTION TYPE: ☐ I-A ☐ I-B ☐ II-A ☐ II-B ☐ III-A ☐ III-B ☐ IV ☐ V-A ☒ V-B

MIXED CONSTRUCTION: ☒ NO ☐ YES TYPES _____

SPRINKLERS: ☐ NO ☒ YES ☒ NFPA 13 ☐ NFPA 13R ☐ NFPA 13D

STANDPIPES: ☐ NO ☒ YES CLASS ☐ ☐ II ☐ III ☐ WET ☐ DRY

FIRE DISTRICT: ☒ NO ☐ YES

BUILDING HEIGHT: 32'-0" FEET 1 NUMBER OF STORIES ☐ UNLIMITED PER _____

MEZZANINE: ☒ NO ☐ YES

HIGH RISE: ☒ NO ☐ YES CENTRAL REFERENCE SHEET # (IF PROVIDED) _____

GROSS BUILDING AREA: 6,490

FLOOR	EXISTING (SQ. FT.)	NEW (SQ. FT.)	SUB-TOTAL
6TH FLOOR	NA	NA	NA
5TH FLOOR	NA	NA	NA
4TH FLOOR	NA	NA	NA
3RD FLOOR	NA	NA	NA
2ND FLOOR	NA	NA	NA
1ST FLOOR	NA	6,490 SQ. FT.	6,490 SQ. FT.
BASEMENT	NA	NA	NA
TOTAL			6,490 SQ. FT.

ALLOWABLE AREA:

PRIMARY OCCUPANCY: ☒ ASSEMBLY ☐ A-1 ☐ A-2 ☒ A-3 ☐ A-4 ☐ A-5
☐ BUSINESS ☐ EDUCATIONAL ☐ FACTORY- INDUSTRIAL ☐ F-1 ☐ F-2
☐ HIGH- HAZARD ☐ H-1 ☐ H-2 ☐ H-3 ☐ H-4 ☐ H-5
☐ INSTITUTIONAL ☐ I-1 ☐ I-2 ☐ I-3 ☐ I-4
I-3 USE CONDITION ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
☐ MERCANTILE ☐ RESIDENTIAL ☐ R-1 ☐ R-2 ☐ R-3 ☐ R-4
☐ STORAGE ☐ S-1 ☐ S-2 HIGH-PILED
☐ UTILITY & MISCELLANEOUS PARKING GARAGE ☐ OPEN ☐ ENCLOSED ☐ REPAIR

SECONDARY OCCUPANCY: NA

SPECIAL OCCUPANCY: ☐ 602.2 ☐ 602.3 ☐ 602.4 ☐ 602.5 ☐ 602.6 ☐ 602.7 ☐ 602.8

MIXED OCCUPANCY: ☒ NO ☐ YES SEPARATION: _____ HR. EXCEPTION: _____

STORY NO.	DESCRIPTION AND USE	(A) BLDG AREA PER STORY (ACTUAL)	(B) TABLE 503 AREA	(C) AREA FOR FRONTAGE INCREASE	(D) AREA FOR SPRINKLER INCREASE	(E) ALLOWABLE AREA OR UNLIMITED	(F) MAXIMUM BUILDING AREA
1ST FLOOR	ASSEMBLY - A-3	6,490	6,000	4,660 (SEE CALC'S BELOW)	NOT USED	10,500	10,500 ALLOWED

ALLOWABLE HEIGHT:

	ALLOWABLE (TABLE 503)	INCREASE FOR SPRINKLERS	SHOWN ON PLANS	CODE REFERENCE
TYPE OF CONSTRUCTION	TYPE VA	TYPE VA	TYPE VA	SECTION 503
BUILDING HT. IN FEET [1]	40'-0"	NOT USED	32'-0"	TABLE 503
BUILDING HT. IN STORIES	1	NOT USED	1	TABLE 503

[1] TOWER EXEMPT FROM HEIGHT LIMITATIONS PER 604.3 ROOF STRUCTURES

$$I_f = 100\left[\frac{F}{P} - 0.25\right]\frac{W}{30}$$

$$I_f = 100\left[\frac{100\%}{100\%} - 0.25\right]\frac{30}{30}$$

$$= 100\left[\frac{0.75}{1}\right]$$

$$= .75 \text{ OR } 75\%$$

WHERE:

I_f = AREA INCREASE DUE TO FRONTAGE

F = BUILDING PERIMETER WHICH FRONTS ON A PUBLIC WAY OR OPEN SPACE HAVING 20 FEET (6096 MM) OPEN MINIMUM WIDTH

P = PERIMETER OF ENTIRE BUILDING

W = MINIMUM WIDTH OF PUBLIC WAY OR OPEN SPACE

FIRE PROTECTION REQUIREMENTS:

BUILDING ELEMENT	FIRE SEPARATION DISTANCE (FT.)	RATING REQ'D	RATING PROVIDED NO REDUCTION	DETAIL # AND SHEET #	DESIGN # FOR RATED PENETRATION	DESIGN # FOR RATED JOINTS
STRUCTURAL FRAME, INCLUDING COLUMNS, GIRDERS, TRUSSES	NA	0	0			
BEARING WALLS @ EXTERIOR						
NORTH	>30'	0	0			
SOUTH	>30'	0	0			
EAST	>30'	0	0			
WEST	>30'	0	0			
BEARING WALLS @ INTERIOR	0 NA	NA	NA	NA	NA	NA
NON-BEARING WALLS AND PARTITIONS @ EXTERIOR						
NORTH	NA	NA	NA	NA	NA	NA
SOUTH	NA	NA	NA	NA	NA	NA
EAST	NA	NA	NA	NA	NA	NA
WEST	NA	NA	NA	NA	NA	NA
NON-BEARING WALLS & PARTITIONS @ INTERIOR	NA	NA	NA	NA	NA	NA
FLOOR CONSTRUCTION INCLUDING SUPPORT BEAMS & JOISTS	NA	0	0			
ROOF CONSTRUCTION INCLUDING SUPPORT BEAMS & JOISTS	NA	0	0			
SHAFTS- EXIT	NA	NA	NA	NA	NA	NA
SHAFTS- ELEVATOR	NA	NA	NA	NA	NA	NA
CORRIDOR SEPARATION	NA	0	0			
PARTY/FIREWALL SEPARATION	NA	NA	NA	NA	NA	NA
SMOKE BARRIER SEPARATION	NA	NA	NA	NA	NA	NA
TENANT SEPARATION	NA	NA	NA	NA	NA	NA
ELECTRICAL ROOM	NA	0	NA	NA	NA	NA

LIFE SAFETY SYSTEM REQUIREMENTS:

EMERGENCY LIGHTING:	NO ☐	YES ☒
EXIT SIGNS:	NO ☐	YES ☒
FIRE ALARM:	NO ☐	YES ☒
SMOKE DETECTION SYSTEM:	NO ☐	YES ☒
PANIC HARDWARE:	NO ☐	YES ☒
SPRINKLER:	NO ☐	YES ☒

EXIT REQUIREMENTS
NUMBER AND ARRANGEMENT OF EXITS

	MINIMUM # OF EXITS		TRAVEL DISTANCE		ARRANGEMENT MEANS OF EGRESS (SECTION 1004.2.2.1)	
FLOOR, ROOM OR SPACE DESIGNATION	REQUIRED	SHOWN ON PLANS	ALLOWABLE TRAVEL DISTANCE (TABLE A)	ACTUAL DISTANCE SHOWN ON PLANS	REQUIRED DISTANCE BETWEEN EXIT DOORS	ACTUAL DISTANCE SHOWN ON PLANS
1ST FLOOR	2	3	200'	65'	30'	54'

EXIT WIDTH

USE GROUP OR SPACE DESCRIPTION	(a) AREA SQ. FT.	(b) AREA PER OCCUPANT (1003.2.2.2)	(c) EGRESS WIDTH PER OCCUPANT (1003.2.2)		EXIT WIDTH (IN.) [1,2,3]			
					REQUIRED WIDTH (1003.2.2) (a ÷ b) x c		ACTUAL WIDTH SHOWN ON PLANS	
			STAIR	LEVEL	STAIR	LEVEL	STAIR	LEVEL
1ST FLOOR	6,490	240 SEE G2.0	NA	.2	NA	48.4"	NA	272"

1) SEE TABLE 1003.2.2.2 TO DETERMINE WHETHER NET OR GROSS AREA IS APPLICABLE. SEE DEFINITION "AREA, GROSS" AND "AREA, NET" (SECTION 1002)

2) MINIMUM STAIRWAY WIDTH (SECTION 1003.3.3); MIN. CORRIDOR WIDTH (SECTION 1004.3.2.2); MIN. DOOR WIDTH (SECTION 1003.3.1)

3) MINIMUM WIDTH OF EXIT PASSAGEWAY (SECTION 1005.3.3)

PLUMBING FIXTURE REQUIREMENTS

FLOOR	OCCUPANCY A		WATER CLOSETS		URINALS	LAVATORIES		SHOWERS/ TUBS	DRINKING FOUNTAINS	
	TOTAL	MALE/ FEMALE	MALE	FEMALE		MALE	FEMALE*		REGULAR	ACCESSIBLE
	100%	40% / 60%								
1ST FLOOR	242	97 / 146	1	2	0	1	1	0	1	1

ACTUAL PLUMBING FIXTURE COUNT

FLOOR	WATER CLOSETS			URINALS	LAVATORIES			SHOWERS/ TUBS	DRINKING FOUNTAINS	
	UNISEX	MALE	FEMALE		UNISEX	MALE	FEMALE		REGULAR	ACCESSIBLE
1ST FLOOR	0	2	5		2	0	3	3	0	2	2

USING CHURCHES (SANCTUARIES AND EDUCATIONSL BUILDINGS)

ACCESSIBLE PARKING - SEE CIVIL DRAWINGS

LOT OR PARKING AREA	TOTAL # OF PARKING SPACES REQUIRED	TOTAL # OF PARKING SPACES PROVIDED	# OF ACCESSIBLE SPACES PROVIDED		TOTAL # ACCESSIBLE PROVIDED
			REGULAR W/ 8' ACCESS AILE	VAN SPACES W/ 8' ACCESS AISLE	

SPECIAL APPROVALS

SPECIAL APPROVAL: (LOCAL JURISDICTION, DEPARTMENT OF INSURANCE, SBCCI, ICC, ETC., DESCRIBE BELOW)

NONE

SCHEDULE OF SPECIAL INSPECTION SERVICES

☒ NO SPECIAL INSPECTIONS REQUIRED FOR THIS PROJECT ☐ SPECIAL INSPECTIONS REQUIRED

THE FOLLOWING SHEETS COMPRISE THE REQUIRED SCHEDULE OF SPECIAL INSPECTIONS FOR THIS PROJECT. THE CONSTRUCTION DIVISIONS WHICH REQUIRED SPECIAL INSPECTIONS FOR THIS PROJECT ARE AS FOLLOWS:

- ☐ IT-1 VERIFICATION OF SOILS
- ☐ IT-2 EXCAVATION AND FILL
- ☐ IT-3 PILING AND DRILLING PIERS
- ☐ IT-4 MODULAR RETAINING WALLS
- ☐ IT-5 REINFORCED CONCRETE
- ☐ IT-6 POST TENSION SLAB
- ☐ IT-7 PRE-CAST CONCRETE ERECTION
- ☐ IT-8 PRE-STRESSED CONCRETE
- ☐ IT-9 INSPECTION OF PRE-CAST FABRICATORS
- ☐ IT-10 INSPECTION OF STRUCTURAL STEEL FABRICATORS
- ☐ IT-11 STRUCTURAL MASONRY
- ☐ IT-12 WELDING
- ☐ IT-13 HIGH STRENGHT BOLTS & STEEL FRAMING INSP.
- ☐ IT-14 SPRAYED FIRE-RESISTANCE MATERIALS
- ☐ IT-15 EXTERIOR INSULATION AND FINISH SYSTEM
- ☐ IT-16 SEISMIC RESISTANCE
- ☐ IT-17 SMOKE CONTROL
- ☐ IT-18 DETENTION BARN
- ☐ IT-19 SPECIAL CASES

CHECK THE ABOVE BOXES FOR THE SPECIAL INSPECTION REQUIRED FOR THIS PROJECT AND LIST BELOW SPECIFIC SPECIAL INSPECTIONS REQUIRED UNDER CHAPTER 17

STRUCTURAL DESIGN - SEE STRUCTURAL DRAWINGS

DESIGN LOADS:

IMPORTANCE FACTORS: WIND (Iw) _____ SNOW (Is) _____ SEISMIC (Ie) _____

LIVE LOADS: ROOF _____ MEZZANINE _____ FLOOR _____

SNOW LOAD: ____psf

WIND LOAD: BASIC WIND SPEED _____ EXPOSURE CATEGORY _____ WIND BASE SHEARS (FOR MWFRS) Vx= _____ Vy= _____

SEISMIC DESIGN CATEGORY A

COMPLIANCE WITH SECTION 1616.4 ONLY? YES ☐ NO ☐

SEISMIC DESIGN CATEGORY

PROVIDE THE FOLLOWING SEISMIC DESIGN PARAMETERS:

SEISMIC USE GROUP _____

SPECTRAL RESPONSE ACCELERATION SDS ____% SD1 ____%

SITE CLASSIFICATION _____

BASIC STRUCTURAL SYSTEM (CHECK ONE)

_____ BEARING WALL _____ DUAL W/ SPECIAL MOMENT FRAME
_____ BUILDING FRAME _____ DUAL W/ INTERMEDIATE R/C OR SPECIAL STEEL
_____ BEARING WALL _____ DUAL W/ SPECIAL MOMENT FRAME
_____ MOMENT FRAME _____ INVERTED PENDULUM

SEISMIC BASE SHEAR Vx= _____ Vy= _____

ANALYSIS PROCEDURE ___ SIMPLIFIED ___ EQUIVALENT LATERAL FORCE ___ MODAL

ARCHITECTURAL, MECHANICAL COMPONENTS ANCHORED? _____

LATERAL DESIGN CONTROL: ___EARTHQUAKE WIND___

SOIL BEARING CAPACITIES:

FIELD TEST (PROVIDE COPY OF TEST REPORT) _____PSF

PRESUMPTIVE BEARING CAPACITY _____PSF

PILE SIZE, TYPE, AND CAPACITY _____

ELECTRICAL SUMMARY SEE ELECTRICAL DRAWINGS

ELECTRICAL SYSTEM AND EQUIPMENT

METHOD OF COMPLIANCE:

PRESCRIPTIVE ☐ PERFORMANCE ☒ ENERGY COST BUDGET ☐

LIGHTING SCHEDULE

LAMP TYPE REQUIRED IN FIXTURE _____
NUMBER OF LAMPS IN FIXTURE _____
BALLAST TYPE USED IN THE FIXTURE _____
TOTAL WATTAGE PER FIXTURE _____
TOTAL INTERIOR WATTAGE SPECIFIED VS ALLOWED _____
EXTERIOR LIGHTING HAS A MIN. SOURCE EFFICACY OF _____

EQUIPMENT SCHEDULES WITH MOTORS (not used for mechanical systems)

MOTOR HORSEPOWER _____
NUMBER OF PHASES _____
MINIMUM EFFICIENCY _____
MOTOR TYPE _____
OF POLES _____

MECHANICAL SUMMARY SEE MECHANICAL DRAWINGS

MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT

METHOD OF COMPLIANCE:

PRESCRIPTIVE ☐ ENERGY COST BUDGET ☐

THERMAL ZONE 7A

EXTERIOR DESIGN CONDITIONS

WINTER DRY BULB _____
SUMMER DRY BULB _____

INTERIOR DESIGN CONDITIONS

WINTER DRY BULB _____
SUMMER DRY BULB _____
RELATIVE HUMIDITY _____

BUILDING HEATING LOAD _____

BUILDING COOLING LOAD _____

MECHANICAL SPACING CONDITIONING SYSTEM

UNITARY
DESCRIPTION OF UNIT _____
HEATING EFFICIENCY _____
COOLING EFFICIENCY _____
HEAT OUTPUT OF UNIT _____
COOLING OUTPUT OF UNIT _____

BOILER
TOTAL BOILER OUTPUT OF UNIT _____

CHILLER
TOTAL CHILLER CAPACITY _____

LIGHT EQUIPMENT EFFICIENCIES

EQUIPMENT SCHEDULES WITH MOTORS (MECHANICAL SYSTEMS)

MOTOR HORSEPOWER _____
NUMBER OF PHASES _____
MINIMUM EFFICIENCY _____
MOTOR TYPE _____
OF POLES _____

ENERGY REQUIREMENTS:

THERMAL ENVELOPE

METHOD OF COMPLIANCE:

PRESCRIPTIVE ☐ PERFORMANCE ☒ ENERGY COST BUDGET ☐

ROOF/CEILING ASSEMBLY (each assembly): SHINGLES/ROOFING FELTS/#" PLYWOOD/WOOD TRUSSES AR SPACES/#" BATT INSUL./5/#" ACOUSTICAL CEILING
DESCRIPTION OF ASSEMBLY
U-VALUE OF TOTAL ASSEMBLY 0.093
R-VALUE OF INSULATION 10.8
SKYLIGHTS IN EACH ASSEMBLY NONE
U-VALUE OF SKYLIGHT
TOTAL SQUARE FOOTAGE OF SKYLIGHTS IN EACH ASSEMBLY

EXTERIOR WALLS (each assembly): BRICK VENEER/1" AIR SPACE/1/2" EXTERIOR SHEATHING/ 8" WOOD STUDS/#" BATT INSUL./5/#" GYPSUM WALLBOARD
DESCRIPTION OF ASSEMBLY
U-VALUE OF TOTAL ASSEMBLY .093
R-VALUE OF INSULATION 13
OPENINGS (windows or doors with glazing)
U-VALUE OF ASSEMBLY 0.57
SHADING COEFFICIENT 0.68
PROJECTION FACTOR
LOW E REQUIRED, IF APPLICABLE
DOOR R-VALUES

WALLS ADJACENT TO UNCONDITIONED SPACE (each assembly)
DESCRIPTION OF ASSEMBLY NA
U-VALUE OF TOTAL ASSEMBLY
R-VALUE OF INSULATION
OPENINGS (windows or doors with glazing)
U-VALUE OF ASSEMBLY
LOW E REQUIRED, IF APPLICABLE
DOOR R-VALUES NA

WALLS BELOW GRADE (each assembly)
DESCRIPTION OF ASSEMBLY NA
U-VALUE OF TOTAL ASSEMBLY
R-VALUE OF INSULATION

FLOORS OVER UNCONDITIONED SPACE (each assembly)
DESCRIPTION OF ASSEMBLY NA
U-VALUE OF TOTAL ASSEMBLY
R-VALUE OF INSULATION

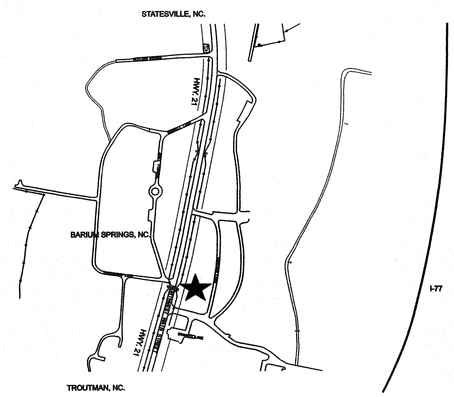
FLOORS SLAB ON GRADE
DESCRIPTION OF ASSEMBLY SLAB ON GRADE
U-VALUE OF TOTAL ASSEMBLY
R-VALUE OF INSULATION
HORIZONTAL/ VERTICAL REQUIREMENT
SLAB HEATED NO

DESIGNER STATEMENT 1:

TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE DESIGN OF THIS BUILDING COMPLIES WITH THE THERMAL ENVELOPE REQUIREMENTS OF THE NORTH CAROLINA STATE BUILDING CODE, VOLUME X ENERGY.

SIGNED: _____
NAME: _____
TITLE: _____

VICINITY MAP



LOCATION MAP

I-77 NORTH , EXIT 42 TO HWY 21 NORTH, GO 3 TO 4 MILES, RIGHT ON GRANIS LANE INTO CAMPUS

ARCHITECTURAL MATERIAL SYMBOLS

MARBLE/STONE
METAL STUD PARTITION
PLASTER
PLYWOOD
POROUS FILL
QUARRY TILE
SLATE, FLAGSTONE OR SOAPSTONE
STEEL
ALUMINUM
TERRAZZO
WOOD
FIRE SAFING
CARPET AND PAD

ACOUSTICAL TILE
BRICK
CERAMIC TILE (LARGE SCALE)
CERAMIC TILE (SMALL SCALE)
CONCRETE (with & without reinf. indicated) — W.W.F
CONCRETE MASONRY UNITS
CONCRETE, PRECAST
EARTH
RESILIENT FLOORING/ PLASTIC LAMINATE
GLASS
BATT / LOOSE FILL
RIGID INSULATION

DRAWING SYMBOLS

FINISHED FLOOR ELEVATION

DETAIL SECTION (2 / A4.3)

WALL SECTION (2 / A3.1)

BUILDING SECTION (1 / A3.3)

ELEVATION (2 / A2.1)

DIMENSION ON GRID LINE

DIMENSION NOT ON GRID LINE

DOOR NUMBER REFERENCING; SYMBOL POINTS TO DOOR FROM THE ROOM IT IS REFERENCED- THIS IS DOOR 101A (101 / V / 100)

COLUMN NUMBER OR LETTER (A)

PARTITION TYPE (1)

GLAZING TYPE (2)

ROOM NUMBER (306)

DRAWING REVISION NUMBER (1)

SPOT ELEVATION (20.80')

DETAIL NUMBER 2 ON SHEET A4.3 (2 / A4.3)

NORTH ARROW (N)

DRAWING NUMBERING SYSTEM

20	19	18	17	16
15	14	13	12	11
10	9	8	7	6
5	4	3	2	1

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IMAGE DESIGN
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BARIUM SPRINGS HOME FOR CHILDREN

BARIUM SPRINGS home for children

RT Dooley

"LITTLE JOE'S CHAPEL/ TRAINING CENTER"

PROGRESS SET - NOT FOR CONSTRUCTION

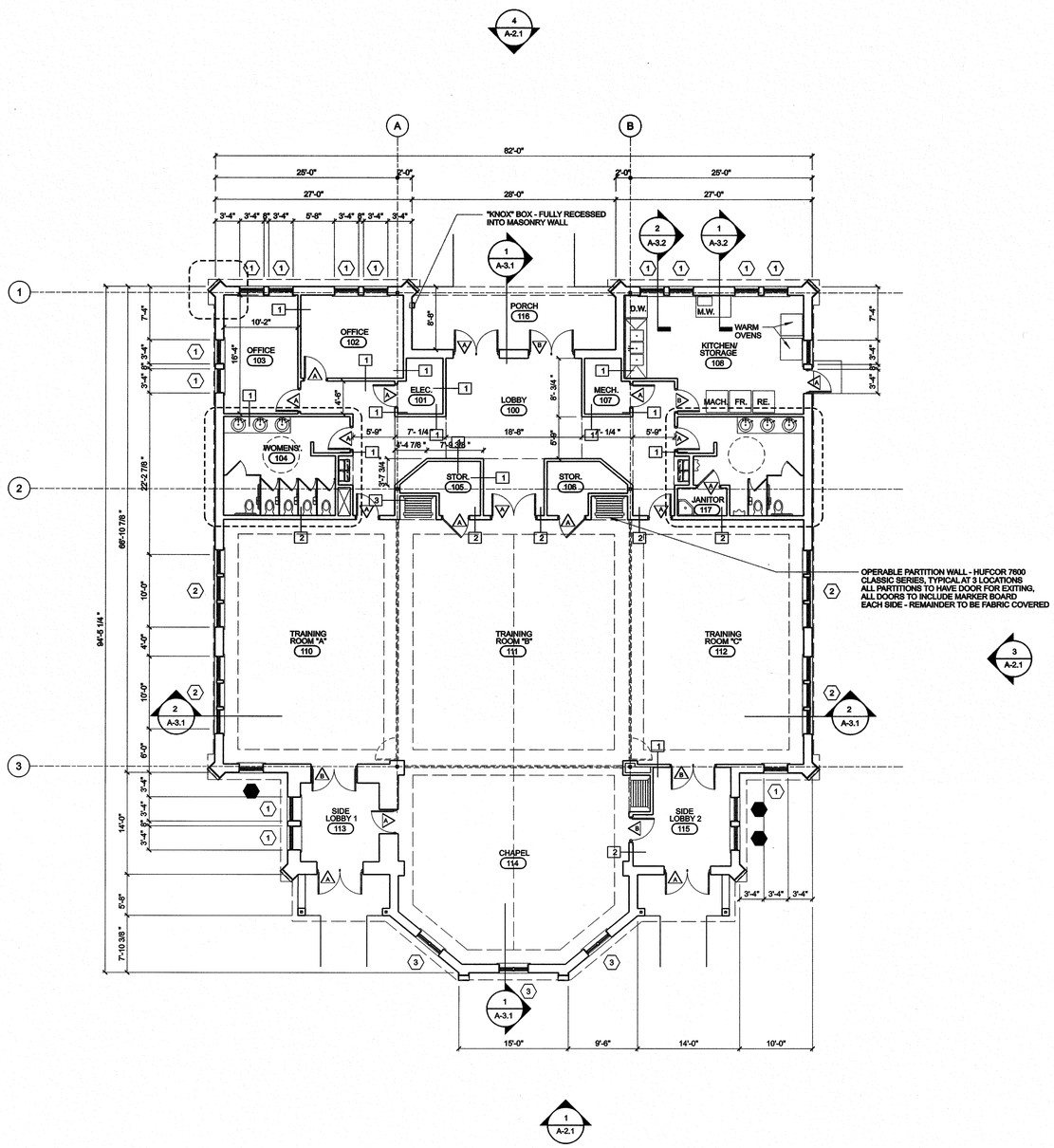
REV.	DATE	DESCRIPTION

DATE: OCTOBER 03, 2006

PROJECT NO.: 06100.02

TITLE: PROJECT INFORMATION

DRAWING NO. G-1.0



1 FLOOR PLAN
SCALE: 1/8" = 1'-0" 6,490 S.F.

PROJECT NORTH

TRUE NORTH

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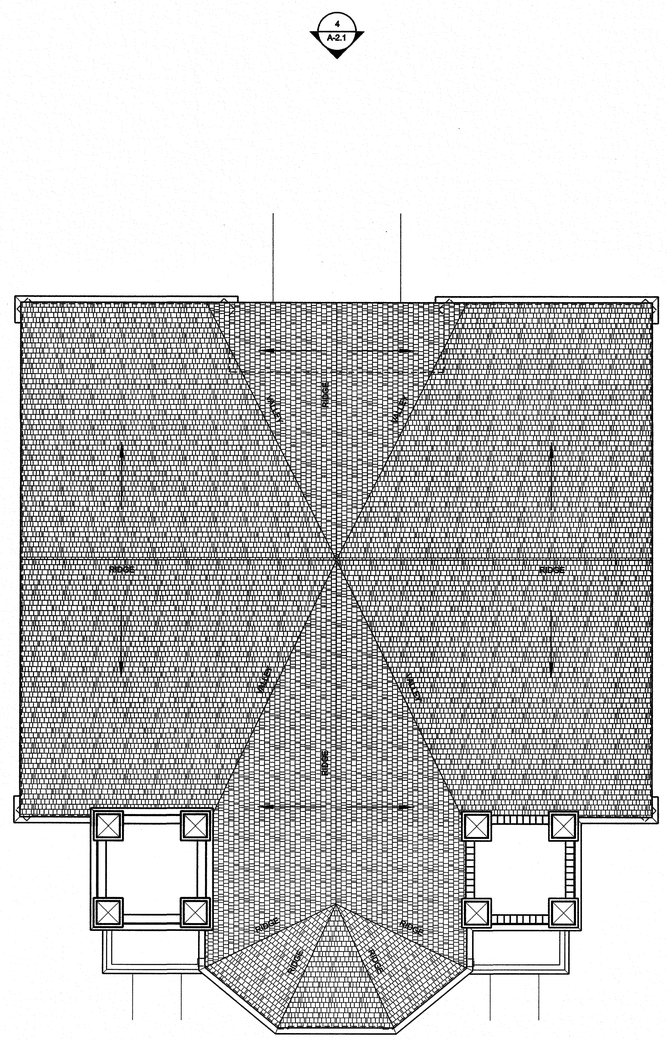
REV.	DATE	DESCRIPTION

DATE: OCTOBER 03, 2006

PROJECT NO.: 06100.02

TITLE: FLOOR PLAN

DRAWING NO. A-1.1



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

PROJECT NORTH

TRUE NORTH

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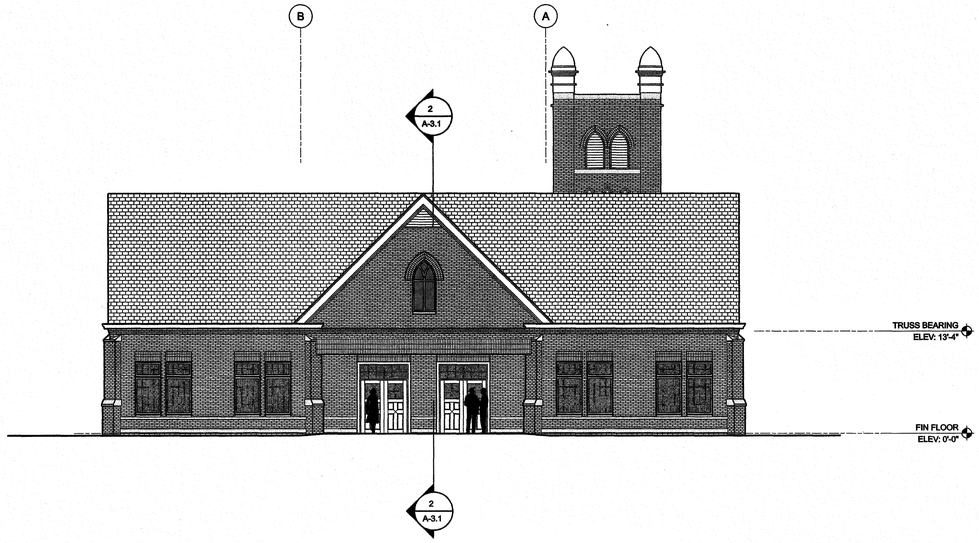
REV.	DATE	DESCRIPTION

DATE: OCTOBER 03, 2006

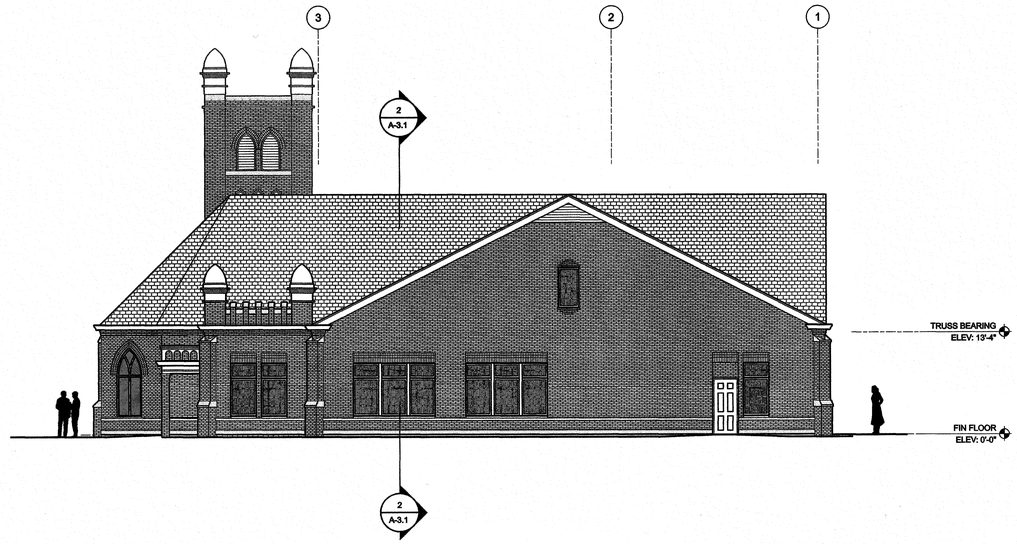
PROJECT NO.: 06100.02

TITLE: ROOF PLAN

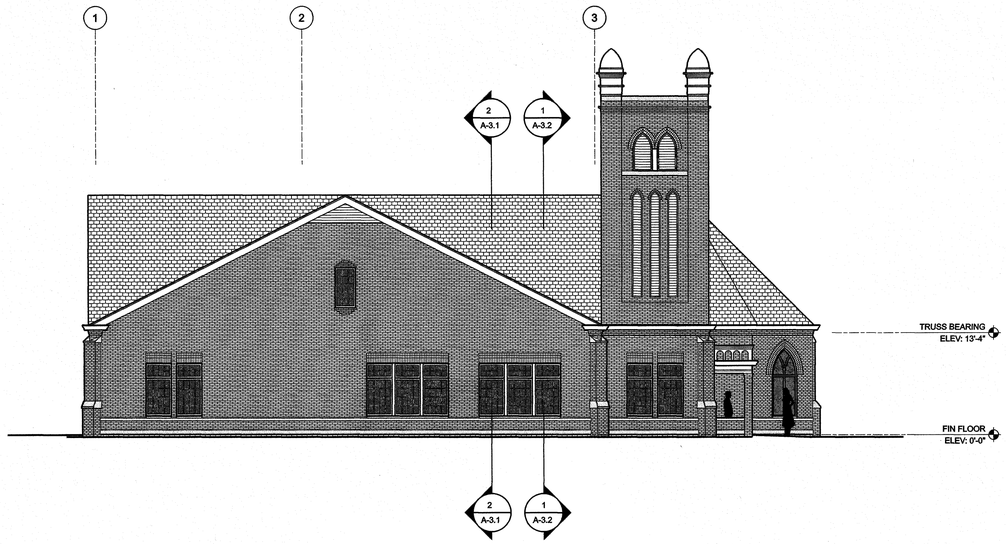
DRAWING NO.: A-1.2



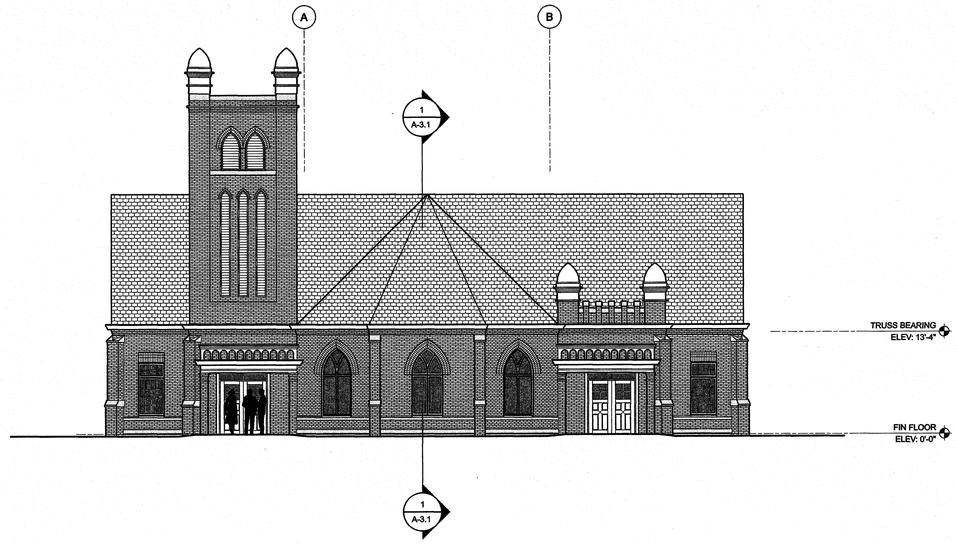
4 NORTH ELEVATION
SCALE: 1/8" = 1'-0"



3 EAST ELEVATION
SCALE: 1/8" = 1'-0"



2 WEST ELEVATION
SCALE: 1/8" = 1'-0"



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

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PROGRESS SET - NOT FOR CONSTRUCTION

REV.	DATE	DESCRIPTION

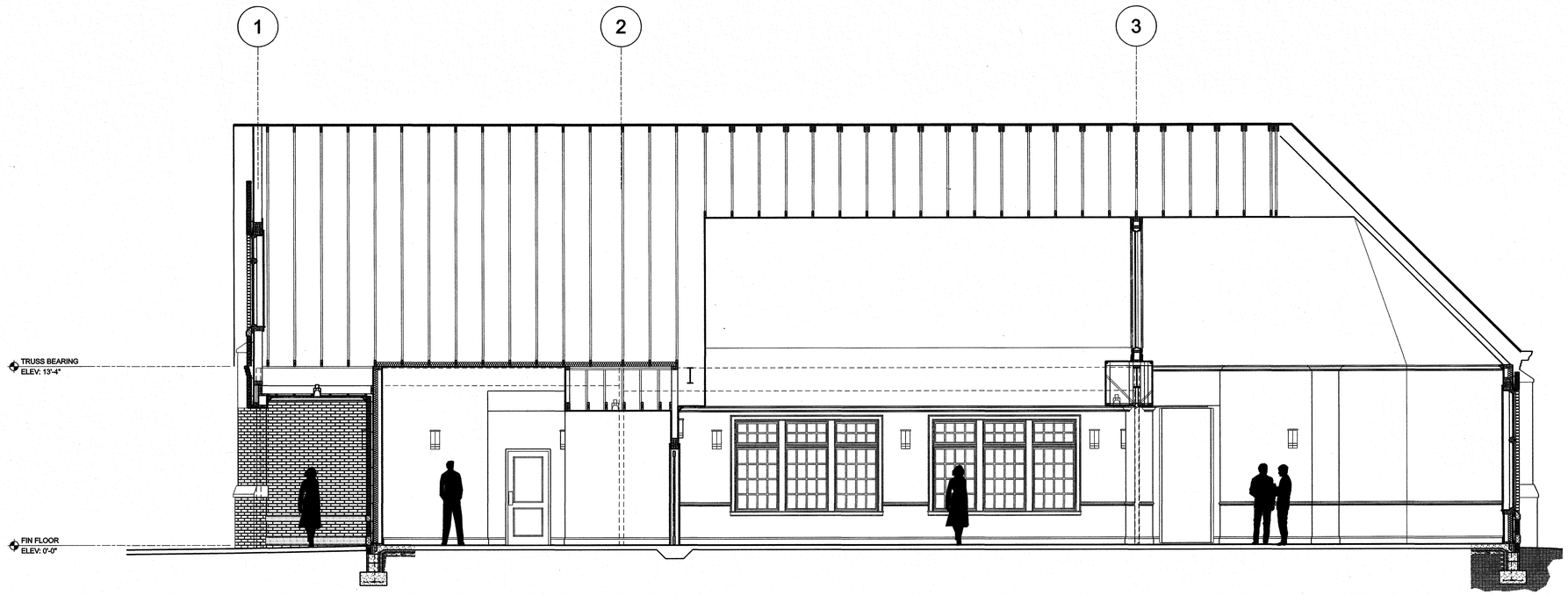
DATE: OCTOBER 03, 2006

PROJECT NO.: 06100.02

TITLE: ELEVATIONS

DRAWING NO. A-2.1

2 BUILDING SECTION
SCALE: 1/4" = 1'-0"



1 BUILDING SECTION
SCALE: 1/4" = 1'-0"

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PROGRESS SET - NOT FOR CONSTRUCTION

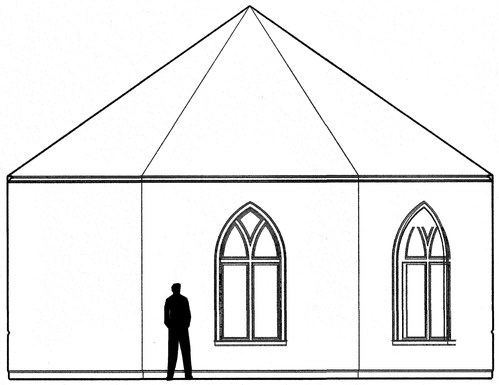
REV.	DATE	DESCRIPTION

DATE:
OCTOBER 03, 2006

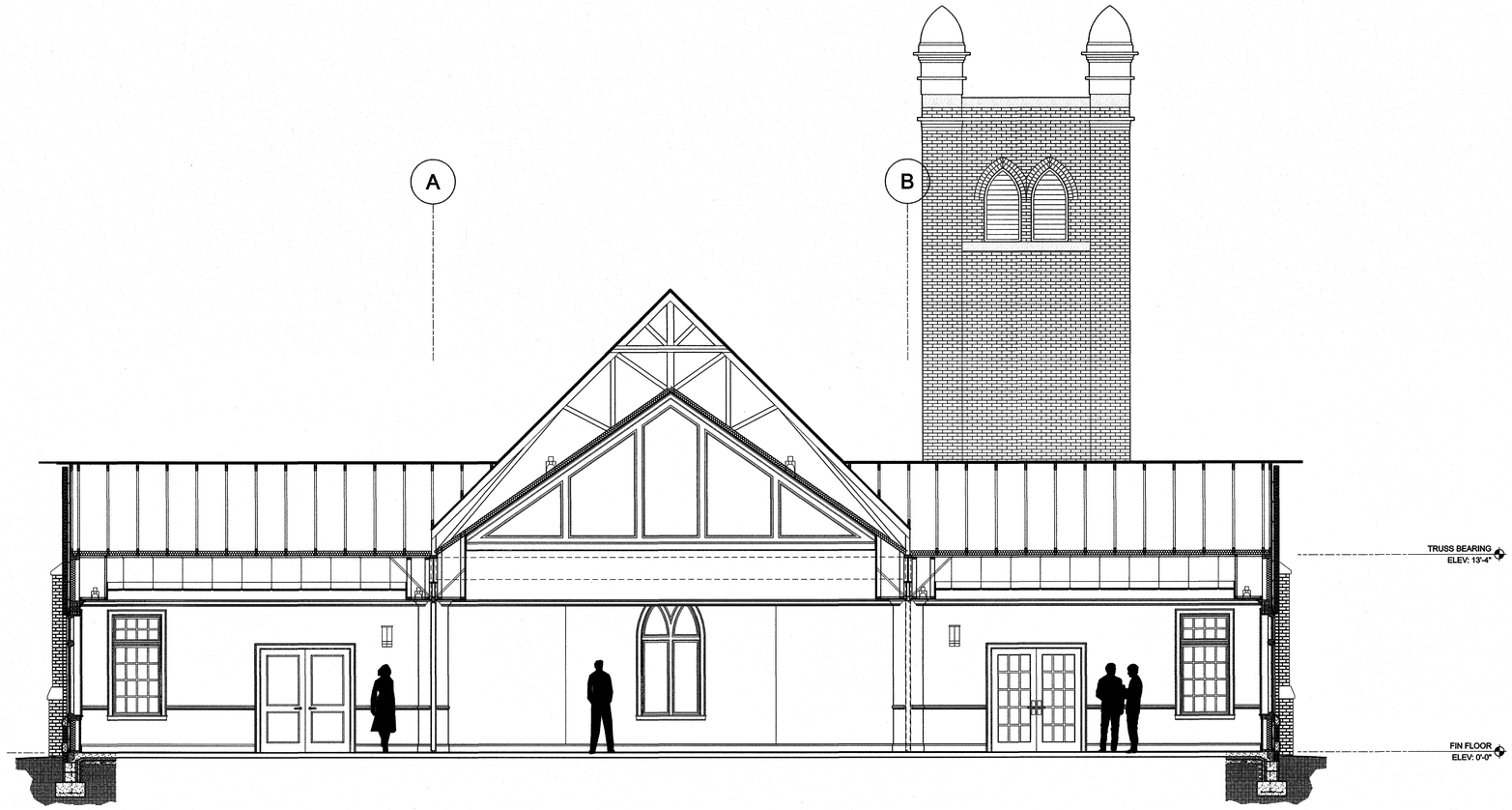
PROJECT NO.:
06100.02

TITLE:
BUILDING SECTIONS

DRAWING NO.
A-3.1



2 SECTION @ CHAPEL
SCALE: 1/4" = 1'-0"



2 BUILDING SECTION
SCALE: 1/4" = 1'-0"

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PROGRESS SET - NOT FOR CONSTRUCTION

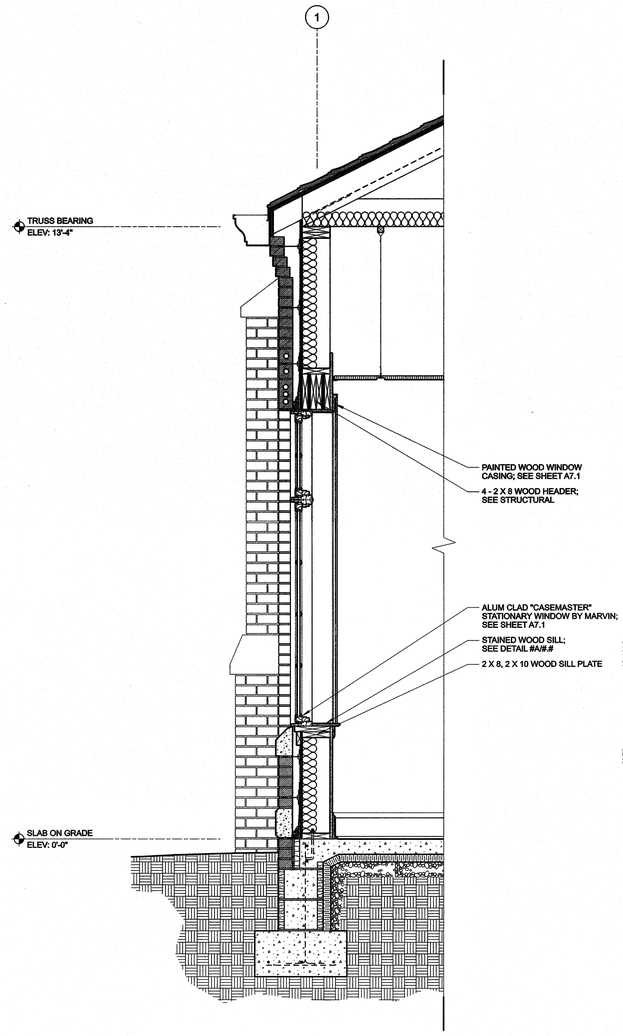
REV.	DATE	DESCRIPTION

DATE: OCTOBER 03, 2006

PROJECT NO.: 06100.02

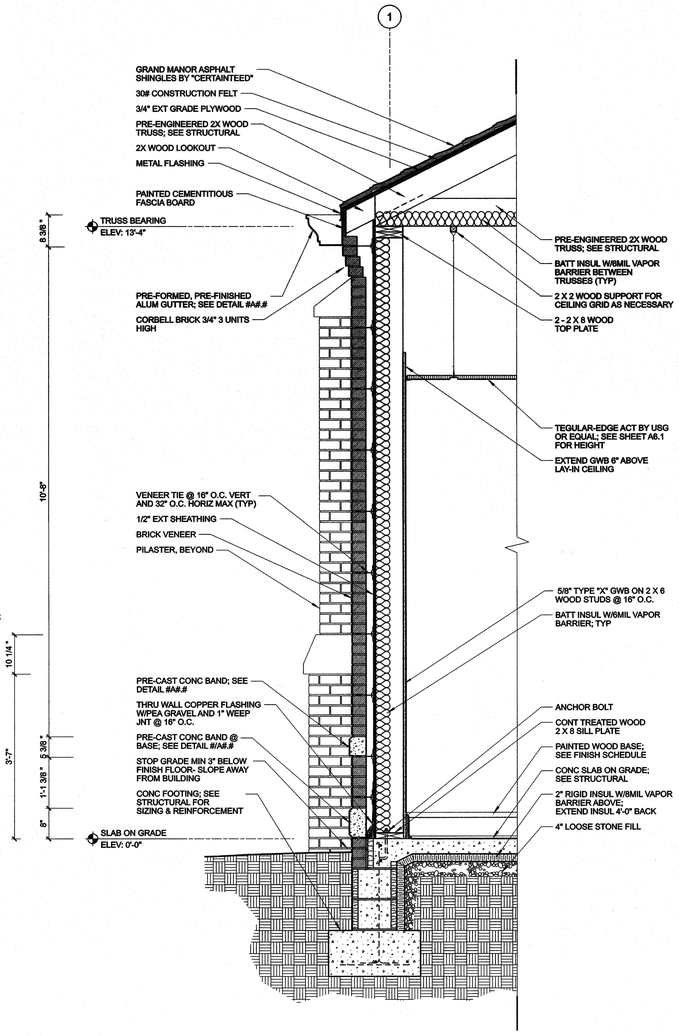
TITLE: BUILDING SECTIONS

DRAWING NO. A-3.2



2 WALL SECTION @ WINDOW

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



1 WALL SECTION - TYPICAL

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

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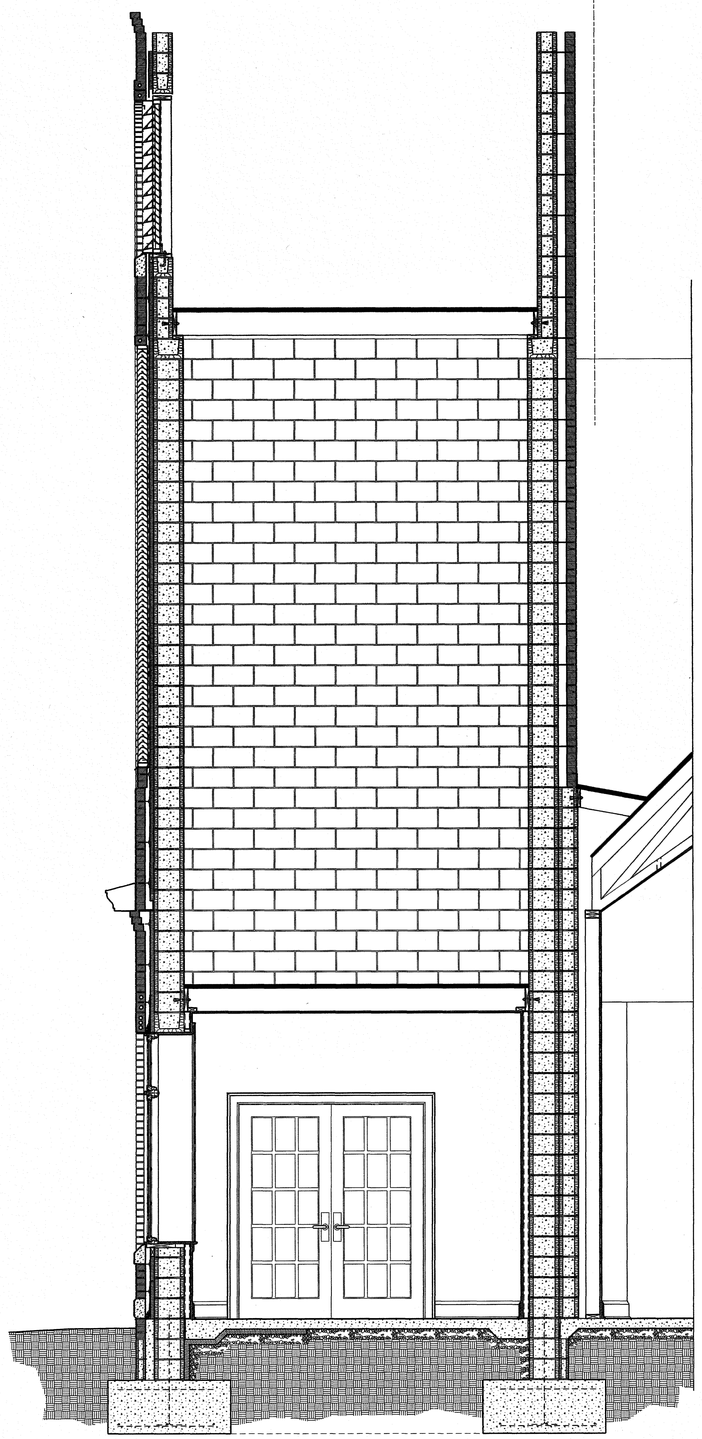
REV.	DATE	DESCRIPTION

DATE:
OCTOBER 03, 2006

PROJECT NO.:
06100.02

TITLE:
WALL SECTIONS

DRAWING NO.
A-3.3



1 WALL SECTION @ BELL TOWER
SCALE: 1/2" = 1'-0"

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PROGRESS SET - NOT FOR CONSTRUCTION

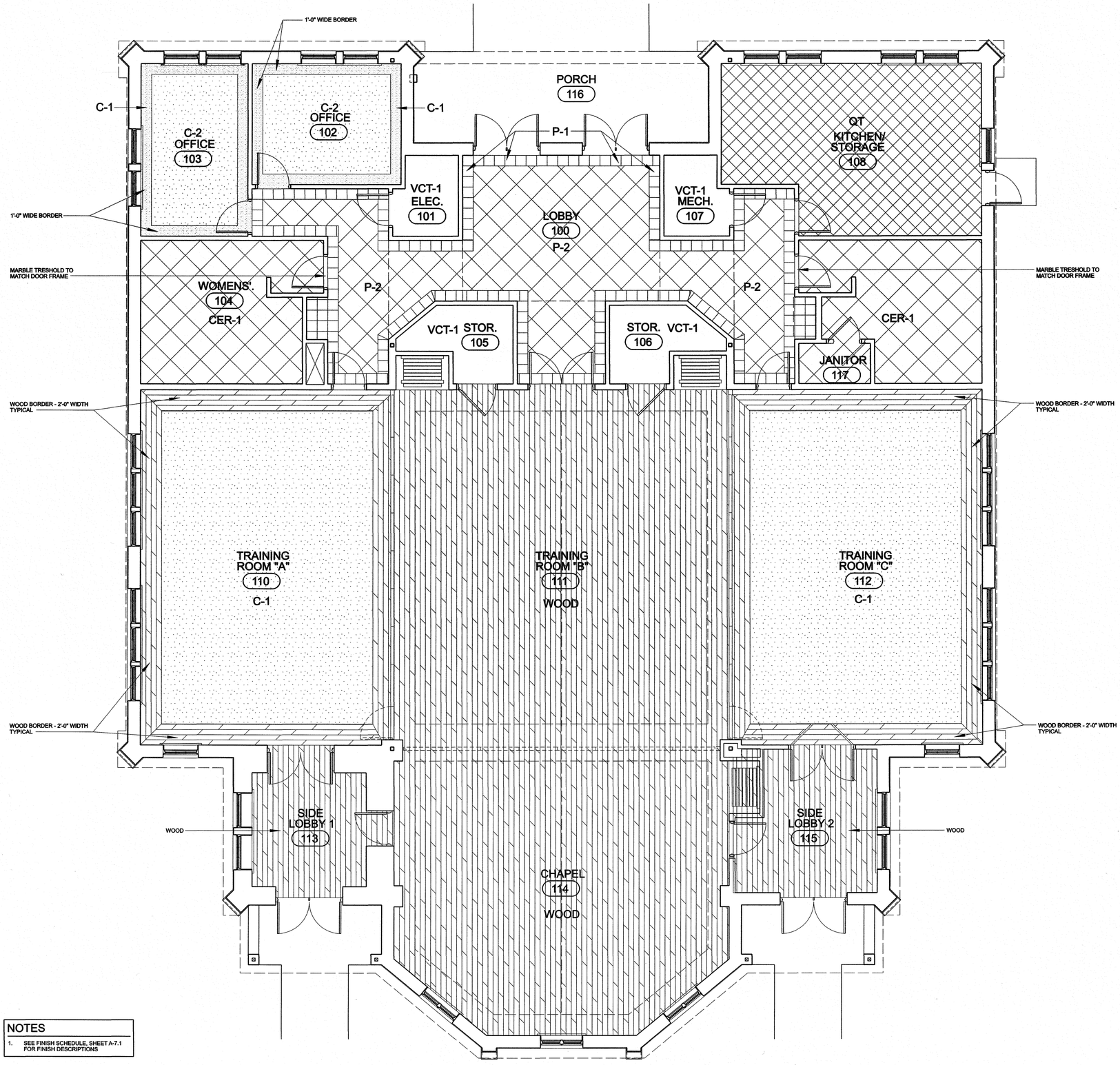
REV.	DATE	DESCRIPTION

DATE: OCTOBER 03, 2006

PROJECT NO.: 06100.02

TITLE: WALL SECTIONS

DRAWING NO. A-3.4



NOTES

1. SEE FINISH SCHEDULE, SHEET A-7.1 FOR FINISH DESCRIPTIONS

1 FINISH FLOOR PLAN
SCALE: 1/4" = 1'-0"

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PROGRESS SET - NOT FOR CONSTRUCTION

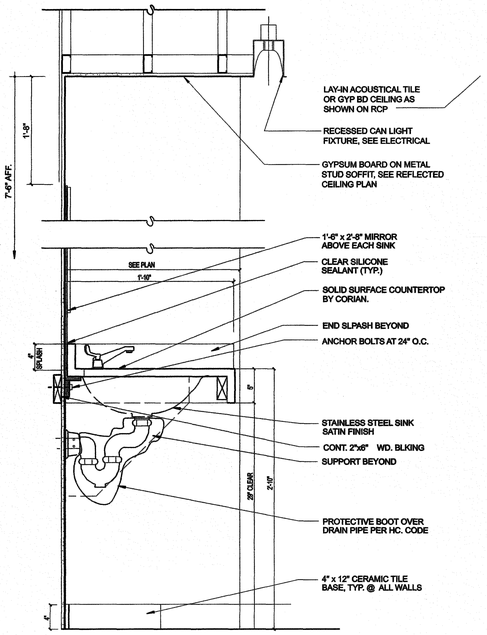
REV.	DATE	DESCRIPTION

DATE:
OCTOBER 03, 2006

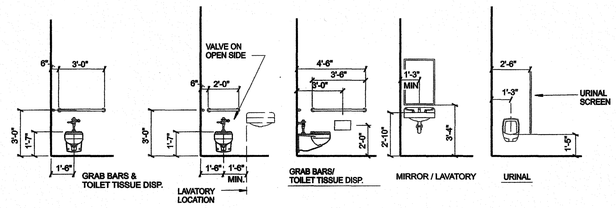
PROJECT NO.:
06100.02

TITLE:
FINISH PLAN

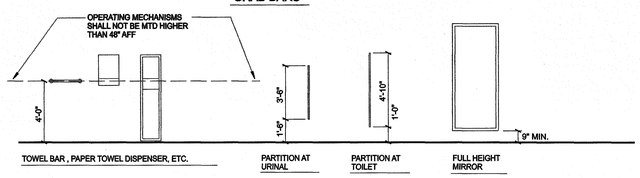
DRAWING NO.
A-5.1

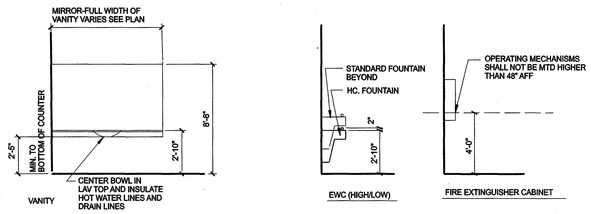


8 TOILET COUNTER SECTION
SCALE: 3/4" = 1'-0"



GRAB BARS

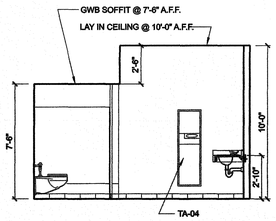




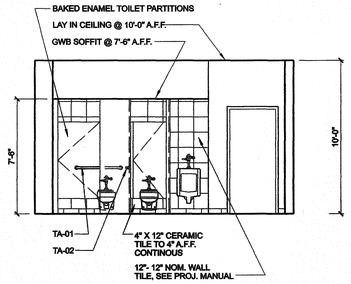
MOUNTING HEIGHTS - ADULT FACILITIES
SCALE: ½" = 1'-0"

TOILET ACCESSORY SCHEDULE

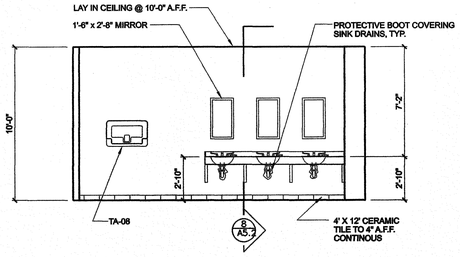
MARK	MODEL NUMBER-DESCRIPTION	MANUFACTURER	FURNISHED	INSTALLED	MOUNTING	REMARKS
TA-01	36" S.C. GRAB BAR, CONCEALED MOUNTING, PEENED GRIPPING SURFACE, B-5517.99 x 36	BOBRICK	CONTRACTOR	CONTRACTOR	SURFACE MOUNTED	
TA-02	42" S.C. GRAB BAR, CONCEALED MOUNTING, PEENED GRIPPING SURFACE, B-5517.99 x 42	BOBRICK	CONTRACTOR	CONTRACTOR	SURFACE MOUNTED	
TA-03	SURFACE MOUNTED TOILET TISSUE DISPENSER, BOBRICK B-2888	BOBRICK	CONTRACTOR	CONTRACTOR	SURFACE MOUNTED	
TA-04	RECESSED TOWEL DISPENSER AND WASTE RECEPTALE, B-3900	BOBRICK	CONTRACTOR	CONTRACTOR	RECESSED	
TA-05	LAVATORY MOUNTED SOAP DISPENSER, B-8221	BOBRICK	CONTRACTOR	CONTRACTOR	RECESSED	
TA-06	SANITARY NAPKIN DISPOSAL, B-254	BOBRICK	CONTRACTOR	CONTRACTOR	SURFACE MOUNTED	
TA-07	HOOK AND BUMPER, B-212	BOBRICK	CONTRACTOR	CONTRACTOR	SURFACE MOUNTED	
TA-08	DIAPER CHANGING STATION, B-2210					
TA-09	SURFACE MOUNTED CHROME FRAMED MIRROR 1'-6"(W) x 2'-8"(H)	BOBRICK	CONTRACTOR	CONTRACTOR	SURFACE MOUNTED	



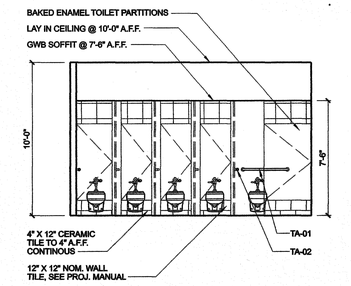
7 ELEVATION AT WOMEN RESTRO
SCALE: 1/4" = 1'-0"



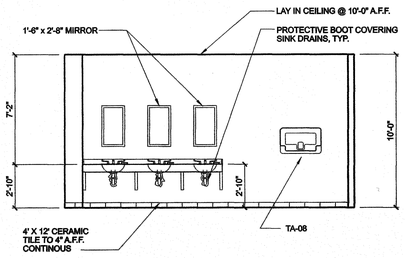
6 ELEVATION AT MEN TOILET
SCALE: 1/4" = 1'-0"



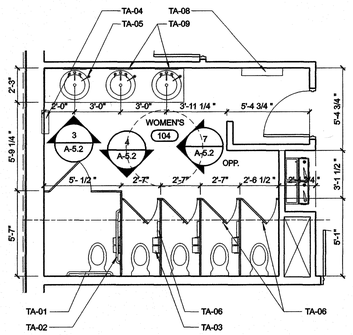
5 ELEVATION AT MEN SINK
SCALE: 1/4" = 1'-0"



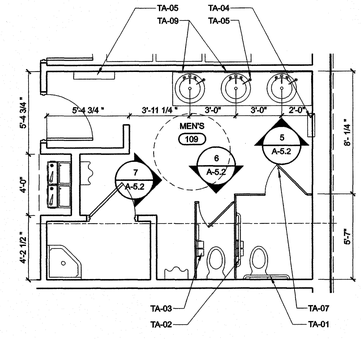
4 ELEVATION AT WOMEN TOILET
SCALE: 1/4" = 1'-0"



3 ELEVATION AT WOMEN SINK
SCALE: 1/4" = 1'-0"



2 ENLARGED WOMEN'S TOILET
SCALE: 1/4" = 1'-0"



1 ENLARGED MEN'S TOILET
SCALE: 1/4" = 1'-0"

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"LITTLE JOE'S CHAPEL/ TRAINING CENTER"

PROGRESS SET - NOT FOR CONSTRUCTION

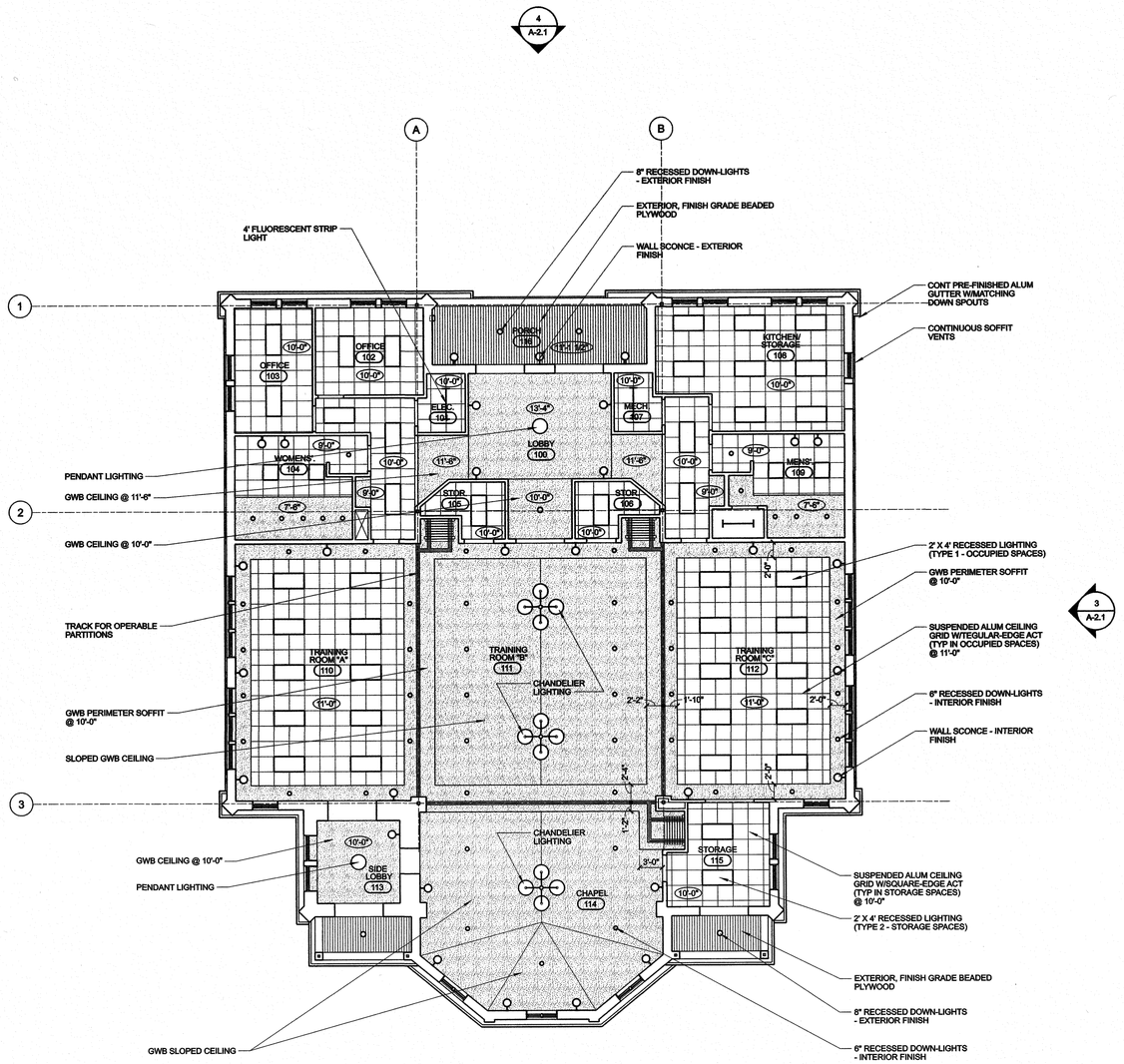
REV.	DATE	DESCRIPTION

DATE: OCTOBER 03, 2006

PROJECT NO.: 06100.02

TITLE: ENLARGED TOILET PLANS

DRAWING NO. A-5.2



1 REFLECTED CEILING PLAN

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

PROJECT NORTH

TRUE NORTH

WCM DESIGN INC.

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REV.	DATE	DESCRIPTION

DATE: OCTOBER 03, 2006

PROJECT NO.: 06100.02

TITLE: REFLECTED CEILING PLAN

DRAWING NO. A-6.1

ROOM FINISH SCHEDULE

ROOM NO.	ROOM NAME	FLOOR	BASE	WALLS N	WALLS E	WALLS S	WALLS W	CEILING FIN.	CEILING HGT.	REMARKS
										REMARKS
100	MAIN LOBBY	P-1	B-2	PT-1	PT-1	PT-1	PT-1	GBC	VARIES	VAULTED CEILING/CROWN MOULDING
101	ELEC.	VCT	B-1	PT-1	PT-1	PT-1	PT-1	ACT-1	VARIES	
102	OFFICE	C-1/C-2	B-1	PT-1	PT-1	PT-1	PT-1	ACT-1	10'	
103	OFFICE	C-1/C-2	B-1	PT-1	PT-1	PT-1	PT-1	ACT-1	10'	
104	WOMENS'	CER-1	B-4	PT-1/ CER-1	PT-1/ CER-1	PT-1/ CER-1	PT-1/ CER-1	GBC/ACT	9'/10'	SEE ALSO INTERIOR ELEVATIONS
105	STOR.	VCT	B-1	PT-1	PT-1	PT-1	PT-1	ACT-1	10'	
106	STOR.	VCT	B-1	PT-1	PT-1	PT-1	PT-1	ACT-1	10'	
107	MECH.	VCT	B-1	PT-1	PT-1	PT-1	PT-1	ACT-1	10'	
108	KITCHEN/STORAGE	QT	QT	PT-5	PT-5	PT-5	PT-5	ACT-3	10'	
109	MENS'	CER-1	B-4	PT-1/ CER-1	PT-1/ CER-1	PT-1/ CER-1	PT-1/ CER-1	GBC/ACT	9'/10'	SEE ALSO INTERIOR ELEVATIONS
110	TRAINING ROOM "A"	C-1/WOOD	B-3	PT-3/ PT-5	PT-3/ PT-5	PT-3/ PT-5	PT-3/ PT-5	GBC/ACT	10'/11'	WOOD WAINSCOT, FAB-1
111	TRAINING ROOM "B"	WOOD	B-3	PT-3/ PT-5	PT-3/ PT-5	PT-3/ PT-5	PT-3/ PT-5	GBC/ACT	10'/11'	WOOD WAINSCOT, FAB-1 , VAULTED CEILING @ CNTR.
112	TRAINING ROOM "C"	C-1/WOOD	B-3	PT-3/ PT-5	PT-3/ PT-5	PT-3/ PT-5	PT-3/ PT-5	GBC/ACT	10'/11'	WOOD WAINSCOT, FAB-1
113	SIDE LOBBY 1	WOOD	B-3	PT-3/ PT-5	PT-3/ PT-5	PT-3/ PT-5	PT-3/ PT-5	GBC	10'	WOOD WAINSCOT
114	CHAPEL	WOOD	B-3	PT-3/ PT-5	PT-3/ PT-5	PT-3/ PT-5	PT-3/ PT-5	GBC/GBC	VARIES	WOOD WAINSCOT, FAB-1 , VAULTED CEILING @ CNTR.
115	SIDE LOBBY 2	WOOD	B-3	PT-3/ PT-5	PT-3/ PT-5	PT-3/ PT-5	PT-3/ PT-5	GBC	10'	WOOD WAINSCOT
116	PORCH	CONC.	NA	NA	NA	NA	NA	WOOD	10'	

NOTES:
1. ALL INTERIOR WALLS TO BE ⅝" GYPSUM BOARD

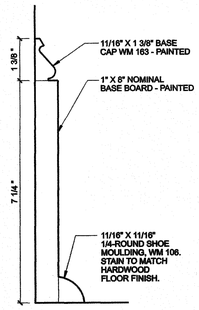
MOULDING NOTES

1. MOULDING PROFILES SHOWN REPRESENT GENERAL REQUIREMENTS IN SOME CASES SLIGHT MODIFICATIONS WILL BE REQUIRED IN ORDER TO MATCH EXISTING CONDITIONS.

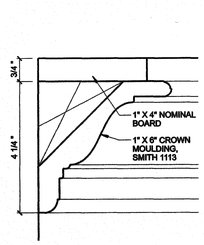
2. ALL MOULDING TO BE PAINTED POPLAR UNLESS SPECIFIED OTHERWISE

3. MOULDING PROFILES ARE BASED ON STANDARD OFFERINGS OF SMITH MILLWORK, INC. OF LEXINGTON, NORTH CAROLINA. EQUALS BY OTHER MANUFACTURERS ARE ACCEPTABLE

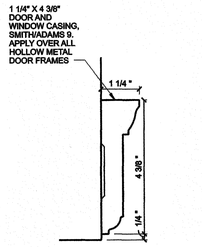
4. EXISTING WINDOW MOULDING TO BE LEFT IN PLACE. REPAIR AS NECESSARY. PAINT TO MATCH NEW MOULDING.



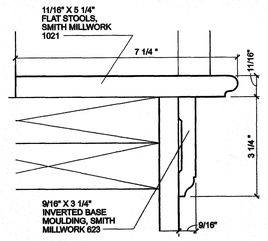
BASE



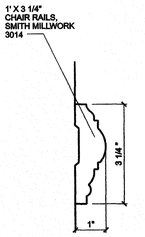
CROWN MOULDING



DOOR & WINDOW CASING



WINDOW SILL/STOOL



CHAIR RAIL

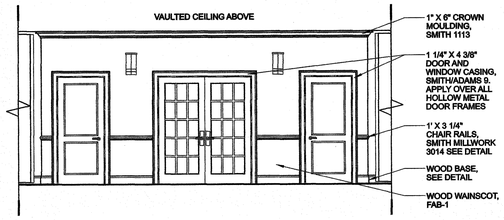
6 MOULDING PROFILES
SCALE: 6" = 1'-0"

FLOOR & BASE FINISHES

MARK	MATERIAL/ DESCRIPTION	MFR.	STYLE/ CAT. NO.	COLOR	REMARKS
C-1	CARPET	PATCRAFT			
C-2	CARPET	PATCRAFT			
WOOD	¾" TONGUE & GROOVE HARDWOOD FLOORING SYSTEM				
CER-1	12" X 12" CERAMIC TILE				
QT	6" X 6" QUARRY TILE				
P-1	12X12 PORCELAIN TILE	CROSSVILLE			
P-2	12X12 PORCELAIN TILE	CROSSVILLE			
VCT-1	12" VINYL COMP. TILE	ARMSTRONG			
B-1	4" RUBBER BASE	NORA			
B-2	PORCELAIN BASE	CROSSVILLE			
B-3	TWO PIECE PAINTED WOOD BASE				
B-4	4" X 12" CERAMIC TILE BASE	CROSSVILLE			
B-5	QUARRY TILE BASE TO MATCH FLOOR				

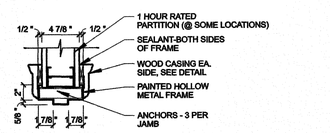
WALL & CEILING FINISHES

MARK	MATERIAL/ DESCRIPTION	MFR.	STYLE/ CAT. NO.	COLOR	REMARKS
PT-1	PAINT - WALLS, LATEX FLAT; COLOR 1	ICI PAINTS		TO BE CHOSEN	
PT-2	PAINT - WALLS, LATEX FLAT; COLOR 2	ICI PAINTS		TO BE CHOSEN	
PT-3	PAINT - WALLS, LATEX FLAT; COLOR 3	ICI PAINTS		TO BE CHOSEN	
PT-4	PAINT - WOOD TRIM, HIGH GLOSS	ICI PAINTS		TO BE CHOSEN	
PT-5	PAINT - EPOXY	ICI PAINTS		TO BE CHOSEN	
GBC	5/8" GYPSUM BOARD CEILING	USG CORP.			
ACT-1	LAY IN ACOUSTICAL CEILING SEE SCHEDULE A6.1	USG CORP.	SEE A6.1	SEE A6.1	
ACT-2	LAY IN ACOUSTICAL CEILING SEE SCHEDULE A6.1	USG CORP.	SEE A6.1	SEE A6.1	
ACT-3	LAY IN CEILING - ALUMINUM CAPPED GRID W/ VINYL SHEETROCK CEILING PANELS SEE SCHEDULE A6.1	USG CORP.	SEE A6.1	SEE A6.1	
WOOD	¾" TONGUE & GROOVE BEAD BOARD				
FAB-1	PANEL FABRIC	KNOLL TEXTILES	'REFLECT'	#W884/5 'ECRU'	ACOUSTICAL PANELS
SS-1	SOLID SURFACE	CORIAN		'RAFFIA (C)'	LAV TOPS



5 DOORS @ TRINING ROOM B
SCALE: 1/4" = 1'-0"

4 WINDOWS @ TRINING ROOM C
SCALE: 1/4" = 1'-0"



BUCK-1

3 BUCK TYPES
SCALE: 1 1/2" = 1'-0"

DOOR SCHEDULE

DOOR #	RATING	DOOR SIZES	DOOR TYPE ELEV.	DOOR TYPE MATERIAL	FRAME TYPE ELEV.	FRAME TYPE MATERIAL	BUCK TYPES	HARDWARE SET	REMARKS & NOTES
100A	-	PAIR 3'-0" X 7'-0"	D-2	SC WOOD	F-2	HM & WD TRM	B-1	HW-5	TRANSOM ABOVE, SEE WONDOW SCHE.
100B	-	PAIR 3'-0" X 7'-0"	D-2	SC WOOD	F-2	HM & WD TRM	B-1	HW-5	TRANSOM ABOVE, SEE WONDOW SCHE.
101A	-	3'-0" X 7'-0"	D-1	SC WOOD	F-1	HM & WD TRM	B-1	HW-6	
102A	-	3'-0" X 7'-0"	D-1	SC WOOD	F-1	HM & WD TRM	B-1	HW-1	
103A	-	3'-0" X 7'-0"	D-1	SC WOOD	F-1	HM & WD TRM	B-1	HW-1	
104A	-	3'-0" X 7'-0"	D-1	SC WOOD	F-1	HM & WD TRM	B-1	HW-7	
105A	-	3'-0" X 7'-0"	D-1	SC WOOD	F-1	HM & WD TRM	B-1	HW-6	
106A	-	3'-0" X 7'-0"	D-1	SC WOOD	F-1	HM & WD TRM	B-1	HW-6	
107A	-	3'-0" X 7'-0"	D-1	SC WOOD	F-1	HM & WD TRM	B-1	HW-6	
108A	-	3'-0" X 7'-0"	D-4	HOLLOW MTL.	F-1	HOLLOW MTL.	B-1	HW-4	
108B	-	3'-0" X 7'-0"	D-1	SC WOOD	F-1	HM & WD TRM	N/A	HW-1	
109A	-	3'-0" X 7'-0"	D-1	SC WOOD	F-1	HM & WD TRM	B-1	HW-7	
110A	-	3'-0" X 7'-0"	D-2	SC WOOD	F-1	HM & WD TRM	B-1	HW-2	
110B	-	PAIR 3'-0" X 7'-0"	D-2	SC WOOD	F-1	HM & WD TRM	B-1	HW-3	INCLUDE CLOSERS
111A	-	PAIR 3'-0" X 7'-0"	D-1	SC WOOD	F-1	HM & WD TRM	B-1	HW-3	
112A	-	3'-0" X 7'-0"	D-2	SC WOOD	F-1	HM & WD TRM	B-1	HW-2	
112B	-	PAIR 3'-0" X 7'-0"	D-1	SC WOOD	F-2	ALUM. CLA. WD.	N/A	HW-3	INCLUDE CLOSERS
113A	-	PAIR 3'-0" X 7'-0"	D-1	SC WOOD	F-1	HM & WD TRM	B-1	HW-5	TRANSOM ABOVE, SEE WONDOW SCHE.
114A	-	3'-0" X 7'-0"	D-1	SC WOOD	F-1	HM & WD TRM	B-1	HW-2	
114B	-	3'-0" X 7'-0"	D-1	SC WOOD	F-1	HM & WD TRM	B-1	HW-2	
115A	-	PAIR 3'-0" X 7'-0"	D-1	SC WOOD	F-2	ALUM. CLA. WD.	N/A	HW-5	
117A	-	3'-0" X 7'-0"	D-1	SC WOOD	F-1	HM & WD TRM	B-1	HW-6	

DOOR HARDWARE

HW - 1
1 LOCK SET - OFFICE
1 1/2 PAIR BUTT HINGES
1 DOOR STOP
3 SILENCERS

HW - 2
1 LOCK SET - CLASSROOM (SINGLE)
1 1/2 PAIR BUT HINGES
3 SILENCERS
1 WALL STOP

HW - 3
2 LOCK SETS - CLASSROOM (PAIR)
3 PAIR BUTT HINGES
6 SILENCERS
2 WALL STOPS

HW - 4
EXTERIOR DOOR HARDWARE (SINGLE) MORTISE LOCK WITH DEAD BOLT KEY CYLINDER, FULL HANDLE (EXTERIOR), & PANIC DEVIDE (INTERIOR)
1 1.2 PAIR PIVOT HINGES
1 CLOSER
1 SET WEATHERSTRIPPING
1 DOOR SWEEP

HW - 5
EXTERIOR DOOR HARDWARE (PAIR) MORTISE LOCK WITH DEAD BOLT KEY CILINDER, FULL HANDLE (EXTERIOR), PANIC DEVICE (INTERIOR)
3 PAIR PIVOT HINGES
2 CLOSERS
2 SETS WEATHERSTRIPPING
2 DOOR SWEEPS

HW - 6
1 LOCKSET - STOREROOM FUNCTION
1 1/2 PAIR BUTT HINGES
1 DOOR STOP
3 SILENCERS

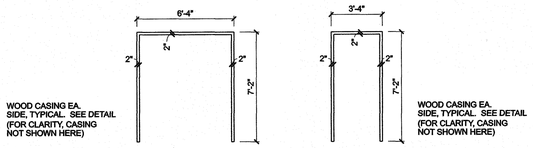
HW - 7 GROUP TOILET DOORS
1 PUSH PLATE/PULL
1 1/2 PAIR BUTT HINGES
1 CLOSER
1 DOOR STOP
3 SILENCERS
1 KICK PLATE

[1]DOOR NOTES:

2.
3. ALL WOOD DOORS TO BE SOLID CORE , 1 3/4 " THICK, GRADE A, STAINED RED OAK FACTORY FINISH.
4. ALL HARDWARE FINISHES TO BE SELECTED BY THE ARCHITECT.
5. KEYING TO BE PER THE OWNER'S INSTRUCTIONS.
6. ALL GLAZING FOR DOORS AND SIDELITES TO BE 1/4 " CLEAR TEMPERED WIRE GLASS UNLESS NOTED OTHERWISE .

ALL SEAMS IN HOLLOW METAL FRAMES TO BE WELDED AND GROUND SMOOTH.

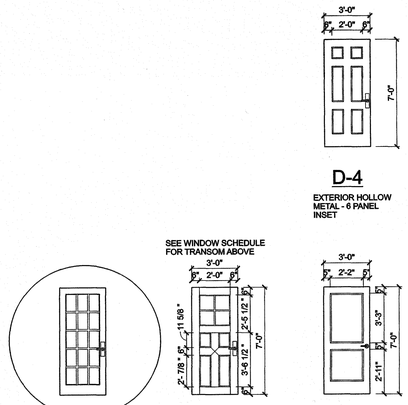
SIGNAGE TO MEET CHAPTER 18 VOLUME 1C.



F-2
ALUMINUM CLAD/ WOOD

F-1
H.M. WOOD TRIM

2 DOOR FRAME TYPES
SCALE: 1/4 = 1'-0"



D-4
EXTERIOR HOLLOW METAL - 6 PANEL INSET

D-3
WOOD FRENCH DOOR

D-2
EXTERIOR WOOD CUSTOM INSET PANEL DOOR/GLASS PANEL STAINED RED OAK

D-1
INTERIOR WOOD INSET PANEL DOOR STAINED RED OAK

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

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CHARLOTTE, NC 28202

BARIUM SPRINGS HOME FOR CHILDREN

BARIUM SPRINGS home for children
RT Dooley

"LITTLE JOE'S CHAPEL/ TRAINING CENTER"

PROGRESS SET - NOT FOR CONSTRUCTION

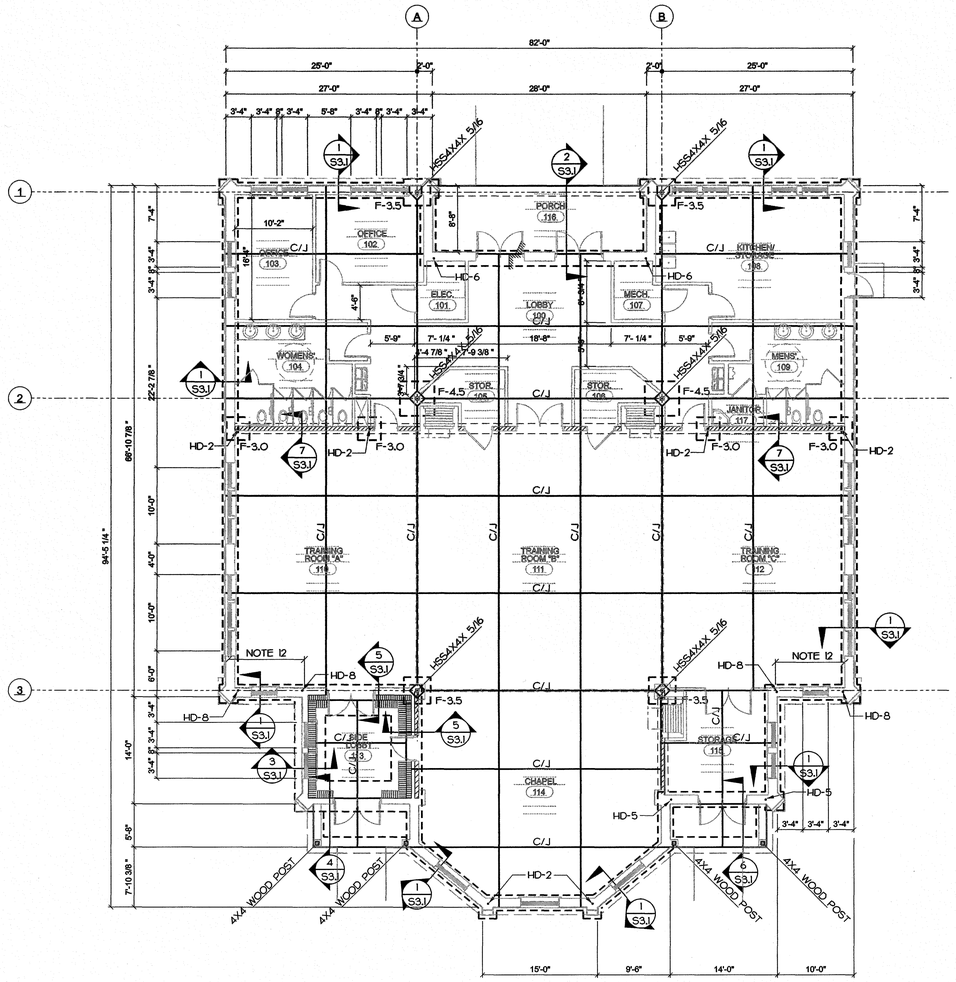
REV.	DATE	DESCRIPTION

DATE: OCTOBER 03, 2006

PROJECT NO.: 06100.02

TITLE: FINISH/DOOR SCHEDULES

DRAWING NO.: A-7.1



PLAN NOTES:

1. TOP OF CONCRETE FINISH FLOOR ELEVATION = 0'-0" = XXX.XX' MSL.
2. TOP OF FOOTING ELEVATION (-2'-0") REFERENCED FROM ELEVATION 0'-0" (U.N.O.)
3. SLAB ON GRADE TO BE 4" THICK, REINFORCED WITH 6X6-W1.4XW1.4 WWF.
4. C/J INDICATES CONSTRUCTION / CONTROL JOINT, SEE SECTION 1/S-2.1.
5. EXTERIOR WALL STUDS SHALL BE 2X8 AT 16" O.C.
6. INTERIOR BEARING WALL STUDS SHALL BE 2X6 AT 24" O.C., INDICATED THUS ON PLANS ////////
   1/2" (MIN.) GYPSUM SHEATHING SHALL BE ATTACHED TO FRAMING WITH 5D NAILS AT 7" O.C. E.F.
7. EXTERIOR WALL SHEATHING SHALL BE 15/32 INCH PLYWOOD OR OSB.
8. ATTACH WALL SHEATHING TO WALL FRAMING WITH 8D NAILS AT 6" O.C. AT ALL EDGE SUPPORTS AND AT 12" O.C. AT ALL INTERMEDIATE SUPPORTS. USE TONGUE-AND-GROOVE EDGES OR WOOD BLOCKING AT EDGES OF PANEL BETWEEN STUDS, TYP.U.N.O.
9. PROVIDE ONE (1) 2X BLOCKING AT 8'-0" MAX. O.C. OF ALL PERIMETER WALLS.
10. REFERENCE "GENERAL NOTES" ON DRAWING S-2.1 FOR CONNECTIONS AND MATERIAL DESIGNATIONS.
11. HSS4X4 COLUMNS SHALL HAVE A 3/4"X10"X10" BASE PLATE WITH 4- 3/4" DIA. ANCHOR BOLTS, SEE 3/S-2.1.
12. ATTACH WALL SHEATHING TO WALL FRAMING WITH 8D NAILS AT 3" O.C. AT EDGE SUPPORTS AND AT 6" O.C. AT INTERMEDIATE SUPPORTS. USE TONGUE-AND-GROOVE EDGES OR WOOD BLOCKING AT EDGES OF PANEL BETWEEN STUDS, WHERE INDICATED ON PLAN.
13. HD-X INDICATES SHEAR WALL LOCATION OF PREDEFLECTED HOLDDOWN ANCHORS, SEE 9/S2.1 FOR SCHEDULE.
14. PROVIDE 3-2X8 GANG STUDS AT EACH END OF WINDOW OPENING LARGER THAN 8'-0".

1 S-1.1 FOUNDATION / SLAB PLAN

1/8"=1'-0"

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NORTH CAROLINA PROFESSIONAL ENGINEER SEAL MICHAEL L. BAKER

PRELIMINARY
NOT FOR CONSTRUCTION

BARIUM SPRINGS HOME FOR CHILDREN

BARIUM SPRINGS home for children

RT Dooley

"LITTLE JOE'S CHAPEL/ TRAINING CENTER"

90% PROGRESS SET - NOT FOR CONSTRUCTION

REV.	DATE	DESCRIPTION

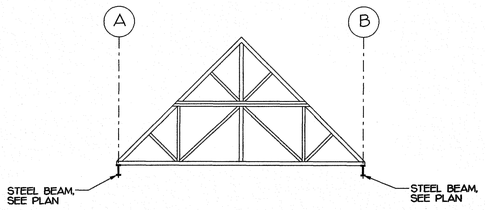
DATE: SEPTEMBER 19, 2006

PROJECT NO.: 06100.02

TITLE: FOUNDATION / SLAB PLAN

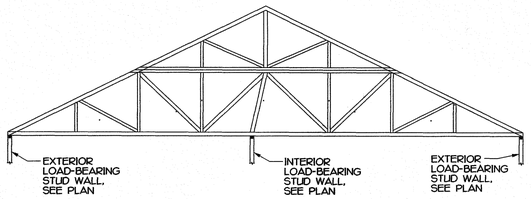
DRAWING NO. S-1.1

KGA 06-4121



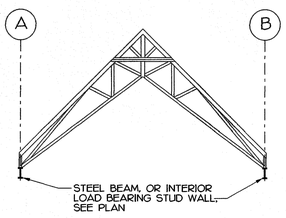
NOTES:
1. GABLE TRUSS AT SIM.
2. REFERENCE ARCH. FOR SLOPE AND TRUSS BEARING ELEVATION.

2 S-1.2 TRUSS T1 ELEVATION
1/8"=1'-0"



NOTES:
1. GABLE TRUSS AT SIM.
2. REFERENCE ARCH. FOR SLOPE AND TRUSS BEARING ELEVATION.

3 S-1.2 TRUSS T2 ELEVATION
1/8"=1'-0"



NOTES:
1. REFERENCE ARCH. FOR SLOPE AND TRUSS BEARING ELEVATION.

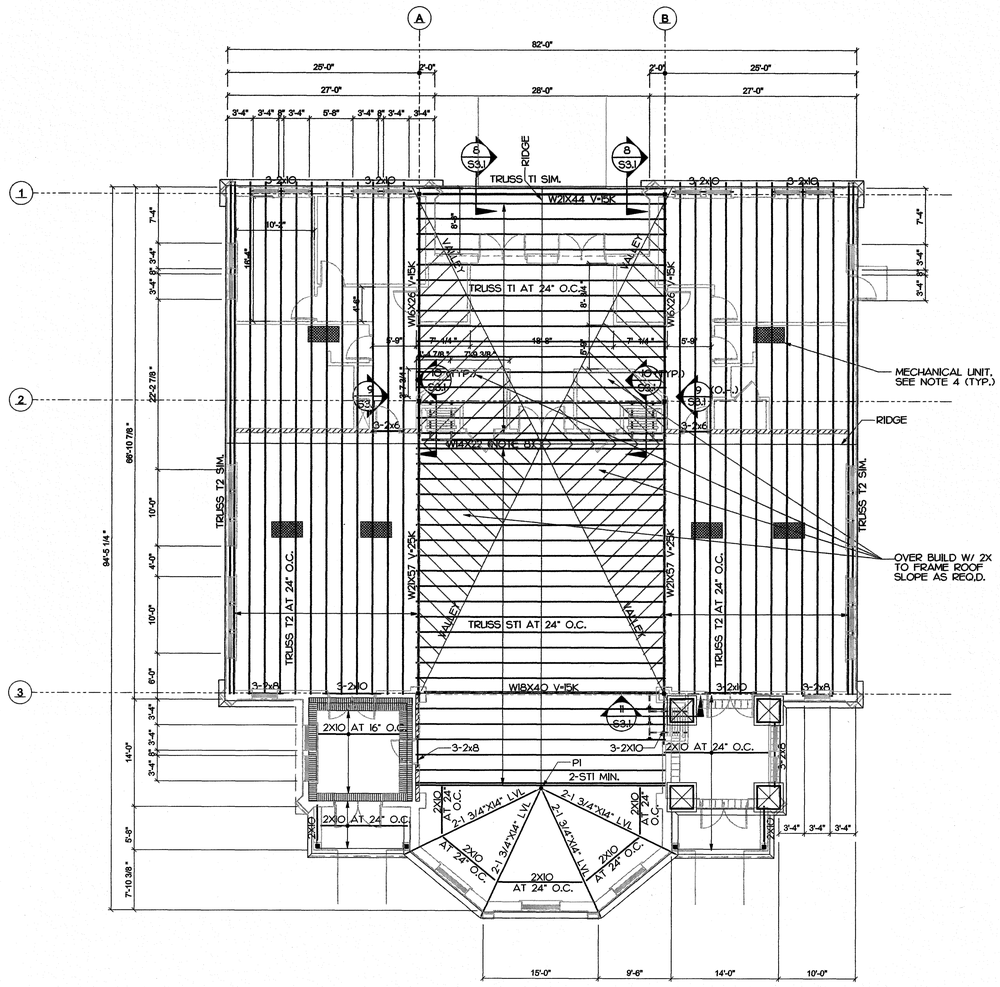
4 S-1.2 TRUSS ST1 ELEVATION
1/8"=1'-0"

1. ROOF TRUSSES SHALL BE DESIGNED AND FABRICATED IN ACCORDANCE WITH CHAPTER 23 OF THE 2006 NORTH CAROLINA BUILDING CODES.
2. WEB MEMBERS SHOWN IN TRUSS ELEVATIONS ARE FOR INFORMATION ONLY. FINAL TRUSS MEMBER DESIGN AND LAYOUT BY TRUSS MANUFACTURER.
3. MAXIMUM TRUSS SPACING SHALL BE 2'-0" O.C.
4. TRUSSES SHALL BE DESIGNED FOR THE LOADS INDICATED BELOW. IN ADDITION TO TRUSS SELF WEIGHT:

TOP CHORD	BOTTOM CHORD
DEAD LOAD = 10 PSF	DEAD LOAD = 10 PSF
LIVE LOAD = 12 PSF	LIVE LOAD = 0 PSF
WIND LOAD = SEE S-2.1	WIND LOAD = 0 PSF

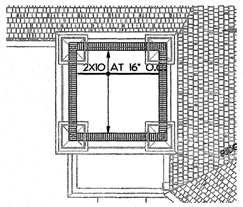
5. SEE PLAN FOR ADDITIONAL LOADING REQUIREMENTS.
6. VERIFY WEB MEMBER LAYOUT WILL ACCOMODATE MECHANICAL UNITS SHOWN ON PLAN BEARING ON BOTTOM CHORD.
7. GABLE TRUSS SHALL ALSO BE DESIGNED FOR HORIZONTAL WIND LOADS SHOWN ON S-2.1.

5 S-1.2 ROOF TRUSS NOTES
1/8"=1'-0"

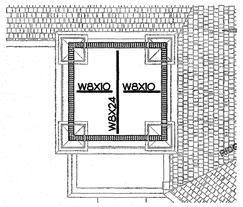


PLAN NOTES:
1. ALL EXTERIOR HEADERS IN NON-LOAD BEARING WALLS SHALL BE PER 12/S2.1.
2. ALL INTERIOR HEADERS IN NON-LOAD BEARING WALLS SHALL BE PER 12/S2.1.
3. REACTION AT PI = 8000 LBS. TRUSS MFR. TO VERIFY 2-ST1 WILL SUPPORT INDICATED LOAD.
4. MECHANICAL UNIT WEIGHT = 300 LBS. AND ARE APPROX. 2'x4'x2' (WxLxH). COORDINATE LOCATION W/ MECH.
5. ROOF SHEATHING SHALL BE 19/32 INCH PLYWOOD OR OSB, WITH A SPAN RATING OF 40 / 20.
6. ATTACH ROOF SHEATHING TO ROOF FRAMING WITH 8D NAILS AT 6" O.C. AT ALL EDGE SUPPORTS AND AT 12" O.C. AT ALL INTERMEDIATE SUPPORTS. PANEL EDGE SUPPORTS SHALL BE PROVIDED BY TONGUE-AND-GROOVE EDGES OR PANEL EDGE CLIPS (ONE BETWEEN SUPPORTS 24 INCHES ON CENTER) OR 2x4 LUMBER BLOCKING.
7. REFERENCE "GENERAL NOTES" ON DRAWING S-2.1 FOR CONNECTIONS AND MATERIAL DESIGNATIONS.
8. LOCATE STEEL BEAM AS REQUIRED FOR OPERABLE PARTITION TRACK SUPPORT.
9. SEE 10/S3.1 AND 11/S3.1 FOR OPERABLE WALL TRACK SUPPORT MISC. STEEL DETAIL.
10. FLOOR SHEATHING SHALL BE 1/2" PLYWOOD OR OSB, WITH A SPAN RATING OF 24 / 16.
11. ATTACH FLOOR SHEATHING TO FLOOR FRAMING WITH 6d NAILS AT 12"O.C. AT ALL EDGE SUPPORTS AND INTERMEDIATE SUPPORTS. GLUE WITH ADHESIVES MEETING APA SPECIFICATION AFG - 01. PANEL EDGE SUPPORTS SHALL BE PROVIDED BY TONGUE-AND-GROOVE EDGES OR 2X4 LUMBER BLOCKING.

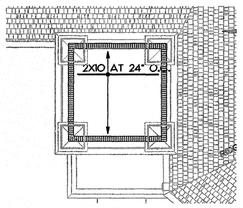
1 S-1.2 ROOF FRAMING PLAN
1/8"=1'-0"



6 S-1.2 BELL TOWER PARTIAL - FLOOR FRAMING PLAN
1/8"=1'-0"



7 S-1.2 BELL SUPPORT STEEL PLAN
1/8"=1'-0"



8 S-1.2 BELL TOWER ROOF PLAN
1/8"=1'-0"

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RT Dooley
"LITTLE JOE'S CHAPEL/ TRAINING CENTER"

90% PROGRESS SET - NOT FOR CONSTRUCTION

REV.	DATE	DESCRIPTION

DATE: SEPTEMBER 19, 2006
PROJECT NO.: 06100.02
TITLE: ROOF FRAMING PLAN
DRAWING NO.: S-1.2

KGA 06-4121

1. GENERAL

A. THE STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH AND COORDINATED WITH THE ARCHITECTURAL DRAWINGS

B. THE CONTRACTOR WILL BE SOLEY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND SHALL AT ALL TIMES TAKE ALL REASONABLE PRECAUTIONS FOR THE SAFETY OF ITS EMPLOYEES ON THE PROJECT, AND SHALL COMPLY WITH ALL APPLICABLE PROVISIONS OF FEDERAL, STATE, AND MUNICIPAL SAFETY LAWS AND BUILDING CONSTRUCTION CODES.

C. FOUNDATIONS ARE DESIGNED IN ACCORDANCE WITH THE GEOTECHNICAL STUDY PREPARED BY XXXXX DATED XXXX, 2006. FOOTINGS ARE DESIGNED FOR XXXX PSF BEARING (TYP.)

D. IF EXISTING CONDITIONS MAKE IT NECESSARY TO REVISE STRUCTURAL DETAILS, ADVISE STRUCTURAL ENGINEER BEFORE PROCEEDING WITH ANY CHANGE.

E. THE DETAILS SHOWN ON THE S2 SERIES SHEETS DESIGNED AS, "TYPICAL DETAILS" APPLY GENERALLY TO THE DRAWINGS IN AREAS WHERE CONDITIONS ARE SIMILAR TO THOSE DESCRIBED IN THE DETAILS, U.N.O.

F. NO PROVISIONS FOR FUTURE EXPANSION HAVE BEEN MADE.

2. DESIGN CRITERIA

A. BUILDING DESIGNED IN ACCORDANCE WITH THE 2003 INTERNATIONAL BUILDING CODE WITH 2006 NORTH CAROLINA AMENDMENTS

B. FLOOR LIVE LOADS:

1. ASSEMBLY	100 PSF
2. BELL TOWER	60 PSF

C. ROOF LIVE LOAD 12 PSF

D. ROOF SNOW LOAD

1. GROUND SNOW LOAD	Pg = 15 PSF
2. FLAT-ROOF SNOW LOAD	Pf = 10.5 PSF
3. SLOPED-ROOF SNOW LOAD	Ps=7.4 PSF
4. SNOW EXPOSURE FACTOR	Ce = 1.0
5. THERMAL FACTOR	Ct = 1.0
6. SNOW LOAD IMPORTANCE FACTOR	Is = 1.0
7. WARM-ROOF SLOPE FACTOR	Cs= 0.70

E. WIND LOADS DESIGNED IN ACCORDANCE WITH THE 2003 INTERNATIONAL BUILDING CODE WITH 2006 NORTH CAROLINA AMENDMENTS AND ANSI/ASCE 7-02

1. BASIC WIND SPEED (3-SECOND GUST)	90 MPH
2. WIND IMPORTANCE FACTOR	Iw = 1.0
3. WIND EXPOSURE	B
4. INTERNAL PRESSURE COEFFICIENT	GCpi = ±.18
5. WIND DIRECTIONALITY FACTOR	Kd = 0.85
6. WIND SPEED UP FACTOR	Kzt = 1.00
7. COMPONENTS AND CLADDING	HAVE BEEN / SHALL BE DESIGNED FOR THE WIND PRESSURE TABULATED BELOW:

$p = q[(GC_p) - (GC_{pi})]$, psf

Area, ft²	ZONE 1		ZONE 2		ZONE 3	
	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE
10	13.3	-14.6	13.3	-17.0	13.3	-17.0
20	13.0	-13.8	13.0	-16.3	13.0	-16.3
50	12.5	-12.8	12.5	-15.3	12.5	-15.3
100	12.1	-12.1	12.1	-14.6	12.1	-14.6
Area, ft²	ZONE 4		ZONE 5		DESIGN DATA	
	POSITIVE	NEGATIVE	POSITIVE	NEGATIVE	Kd = 0.85	
10	14.6	-15.8	14.6	-19.5	V = 90	
20	13.9	-15.1	13.9	-18.2	EXPOSURE = B	
50	13.0	-14.3	13.0	-16.5	USE GROUP - I	
100	12.4	-13.6	12.4	-15.1	I = 1.00	

8. WIND BASE SHEAR : V_{WX} = 23.2 KIPS ; V_{WY} = 20.4 KIPS

F. EARTHQUAKE DESIGN DATA

1. SEISMIC USE GROUP I
2. SEISMIC IMPORTANCE FACTOR : I_E = 1.00
3. SPECTRAL RESPONSE COEFFICIENTS: S_{DS} = 0.280 S_{D1} = 0.151
4. SITE CLASS D
5. BASIC SEISMIC-FORCE-RESISTING SYSTEM:
   LIGHT FRAMED WALLS W/ SHEAR PANELS - WOOD
6. RESPONSE MODIFICATION COEFFICIENT : R = 6.5
7. SEISMIC BASE SHEAR V_{EQ} = 11.8 KIPS
8. ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE
9. SEISMIC DESIGN CATEGORY : C

3. CONCRETE AND REINFORCEMENT NOTES

A. CLASSES OF CONCRETE SHALL BE AS FOLLOWS :

LOCATION	28-DAY f'c (PSI)	≡ CONC. TYPE	MAX. NOM. COARSE AGG. SIZE
ALL CONCRETE, U.N.O.	3,000	N.W.C.	1 1/2"
SLAB-ON-GRADE	3,000	N.W.C.	3/4"
PILASTERS AND WALLS	3,000	N.W.C.	1 1/2"
SLABS ON METAL DECK	3,500	L.W.C.	3/4"

N.W.C. - DENOTES NORMAL WEIGHT CONCRETE WITH A MAX. DRY DENSITY = 150PCF
L.W.C. - DENOTES LIGHT WEIGHT CONCRETE WITH A MAX. DRY DENSITY = 110PCF

B. CONCRETE PROTECTION FOR REINFORCEMENT SHALL BE AS NOTED BELOW. SEE SECTION 7.7 OF ACI 318 FOR CONDITIONS NOT NOTED.

CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO SOIL	3"
PILASTERS	1 1/2"
WALLS	1 1/2" BACKFILLED SIDES 1" NON-BACKFILLED SIDES
GRADE BEAMS	2" TOP AND SIDES 3" BOTTOM
SLABS-ON-GRADE	3" BOTTOM (MIN.) 1" TOP

C. GRADE BEAMS SHALL BE FORMED ON SIDES.

D. HORIZONTAL CONSTRUCTION JOINTS SHALL BE PERMITTED ONLY WHERE SHOWN ON THE STRUCTURAL DRAWINGS.

E. REINFORCING STEEL SHALL CONFORM TO ASTM A615 GRADE 60. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185 MESH.

F. REINFORCING BARS NOTED ON DRAWINGS AS "CONTINUOUS" SHALL BE SPLICED WITH A CLASS "B" LAP SPLICE , U.N.O.

G. LAPS IN WELDED WIRE FABRIC SHALL BE TWO MESH AT SPLICES.

4. STRUCTURAL STEEL

A. ALL WIDE FLANGE STRUCTURAL STEEL SHALL BE ASTM A992. ALL OTHER STEEL SHALL BE ASTM A36, UNLESS NOTED OTHERWISE. TUBE STEEL SHALL CONFORM TO ASTM A500, GRADE B (F_y = 46 KSI). PIPE STEEL SHALL BE ASTM A53, GRADE B OR ASTM 501 (F_y = 36 KSI). ALL STEEL SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH AISC LATEST EDITION. ALL BOLTED CONNECTIONS ARE TO BE WITH A-325 HIGH STRENGTH BOLTS, CONNECTIONS ARE TO DEVELOP THE REACTIONS SHOWN ON THE DRAWINGS OR ONE HALF OF THE TOTAL LOAD CAPACITY SHOWN IN THE ALLOWABLE UNIFORM LOAD TABLES OF THE AICS MANUAL OR 15 KIPS WHICHEVER IS GREATER. FIELD WELDS SHALL ONLY BE MADE BY OPERATORS CERTIFIED BY TESTS DESCRIBED IN AWS D1.1. SEE SPECIFICATIONS.

B. FABRICATORS SHOP DRAWING SHALL SHOW AND NOTE ALL MATERIAL REQUIRED WITH RELATIVE LOCATIONS AND SUFFICIENT DETAILS FOR PROPER FABRICATION AND ERECTION IN ACCORDANCE WITH ALL CONTRACT DRAWINGS AND DOCUMENTS. SEPIAS OF STRUCTURAL DRAWINGS SHALL NOT BE USED IN PREPARATION OF SHOP DRAWINGS.

C. ALL EXTERIOR EXPOSED STEEL LINTELS, BEAMS AND PLATES SHALL BE HOT DIPPED GALVANIZED.

D. EPOXY ANCHORS SHALL BE ONE OF THE FOLLOWING OR APPROVED EQUAL:
   a. HILTI HIT ADHESIVE ANCHORS
   b. ITW RAMSET/REDHEAD EPCON ADHESIVE ANCHORS
   c. RAWL POWER FAST ADHESIVE ANCHORS

E. BEAMS SHALL BE ERECTED WITH NATURAL CAMBER UP.

F. ANCHOR BOLTS HAVE NOT BEEN DESIGNED FOR ANY SPECIFIC ERECTION FORCES.

5. MASONRY

A. SPECIFIED COMPRESSIVE STRENGTH OF MASONRY : f'm 1500 psi , MASONRY MORTAR TO BE TYPE S. PROVIDE STANDARD (9 GAGE.) HORIZONTAL JOINT REINFORCING AT 16"O.C. AT ALL BLOCK WALLS. JOINT REINFORCEMENT AT EXTERIOR WALLS SHALL BE HOT DIPPED GALVANIZED AS PER SPECIFICATIONS. PROVIDE 1 # 4 BAR WITH CELL GROUTED SOLID AT ENDS, INTERSECTIONS, AND OPENINGS OF CMU WALLS.

B. GROUT FOR HOLLOW UNIT SHALL HAVE A 28 DAY COMPRESSIVE STRENGTH OF 3000 PSI AND SHALL CONFORM TO ASTM 476 FOR COARSE GROUT. SLUMP SHALL BE 10" PLUS OR MINUS 1".

C. ALL EXTERIOR WALLS AND INTERIOR CORRIDOR WALLS SHALL BE LAYED TIGHT TO BOTTOM OF ROOF DECK.

D. LAP SPLICES FOR REBAR IN MASONRY WALLS
   #4 - 25".
   #5 - 31".
   #6 - 47".
   #7 - 64".
   #8 - 83".
   #9 - 105".

E. SEISMIC REINFORCING SHALL BE PROVIDED IN ALL CMU WALLS. SEE DETAIL 10/S200

F. MASONRY CONTROL JOINTS SHALL BE AS SHOWN ON ARCHITECTURAL DRAWING, BUT SHALL NOT EXCEED 36 FEET ON CENTER.

G. EPOXY ADHESIVE SHALL BE ONE OF THE FOLLOWING OR APPROVED EQUAL:
   a. HILTI - HVA ADHESIVE SYSTEM
   b. ITW RAMSET/REDHEAD - EPCON SYSTEM
   c. RAWL - POWER FAST SYSTEM

6. WOOD

A. ALL WOOD FRAMING AND CONNECTIONS SHALL BE IN ACCORDANCE WITH "NATIONAL DESIGN SPECIFICATION FOR STRESS-GRADE LUMBER AND ITS FASTENINGS" AND CHAPTER 23 OF THE 2006 NORTH CAROLINA BUILDING CODE. STRUCTURAL WOOD MEMBERS SHALL CONFORM TO THE FOLLOWING TABLE FOR SPECIES AND GRADE.

1. TRUSSES	-#2 SOUTHERN YELLOW PINE (KILN DRY)
2. ROOF JOISTS	-#2 SOUTHERN YELLOW PINE OR #2 SPRUCE PINE FIR (KILN DRY)
3. STUDS AND WALL FRAMING	-#2 SPRUCE PINE FIR (KILN DRY)
4. WALL SHEATHING	-32/16 APA RATED SHEATHING EXPOSURE 1
5. POSTS & COLUMNS	-SHALL HAVE AN ALLOWABLE COMPRESSIVE STRESS PARALLEL TO GRAIN OF 900 PSI MIN.
6. GLUED-LAMINATED MEMBERS	-MEET REQ'S. OF PS56, AND SHALL PROVIDE ALLOWABLE STRESS VALUES OF 2400 PSI IN BENDING, 165PSI IN HORIZ. SHEAR, AND E= 1,800,000 PSI
7. LAMINATED VENEER LUMBER	-ALLOWABLE STRESS OF 2850 PSI IN BENDING, 285 PSI IN HORIZ. SHEAR, AND E= 2,000,000 PSI
8. ROOF SHEATHING	-40/20 APA RATED SHEATHING EXPOSURE 1

B. CONNECTIONS FOR WOOD CONSTRUCTION SHALL BE "SIMPSON STRONG-TIE CONNECTORS" OR EQUAL.

C. MULTIPLE MEMBER WOOD BEAMS SHALL BE BOLTED TOGETHER WITH ONE 3/4" DIA. BOLT TOP & BOTTOM OVER ALL SUPPORTS AND / OR AT ENDS OF BEAM. ALSO, PROVIDE 1/2" DIA. BOLTS AT 2'-0" O.C. STAGGERED (TOP & BOTTOM).

D. MULTIPLE MEMBER WOOD COLUMNS SHALL BE BOLTED TOGETHER WITH TWO 3/4" DIA. BOLTS TOP & BOTTOM AND TWO 1/2" DIA. BOLTS AT THIRD HEIGHT OF THE COLUMN, U.N.O.

E. BEAM-TO-COLUMN CONNECTIONS SHALL BE WITH "SIMPSON STRONG TIE" METAL COLUMN CAPS, NAILED FOR BEAMS 2" IN WIDTH OR LESS, AND BOLTED FOR BEAMS GREATER THAN 2" IN WIDTH.

F. PROVIDE RIDGE BOARDS, HIP AND VALLEY RAFTERS WITH MINIMUM DEPTH EQUAL TO THE CUT EDGE OF THE RAFTERS FRAMING INTO THEM, U.N.O.

G. WALL STUDDING SHALL BE DOUBLE AT ALL ANGLES, CORNERS, AND AROUND ALL OPENINGS. PROVIDE TRIPLE WALL STUDDING AT OPENINGS LARGER THAN 8'-0", U.O.

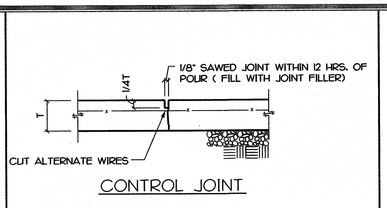
H. PROVIDE A SINGLE PLATE AT THE BOTTOM AND A DOUBLE PLATE AT THE TOP OF ALL STUD WALLS. BOTTOM SILL PLATES SHALL BE ANCHORED TO THE FOUNDATION WITH 1/2" DIA. BOLTS AT 4'-0" O.C. MAX. SPACING. TOP PLATES SHALL BE LAP SPLICED AT 4'-0" WITH EIGHT 16d NAILS. USE SIMPSON STRONG-TIE THA 12 STRAP TIES" EACH SIDE WHERE LAP NOT POSSIBLE.

I. PROVIDE ONE 2X BLOCKING AT THE MID HEIGHT OF ALL PERIMETER WALLS.

J. PROVIDE "SIMPSON STRONG-TIE H3" TIE DOWNS OR APPROVED EQUAL FOR ALL ROOF JOISTS (RAFTERS) OR TRUSSES AT EXTERIOR BEARING POINT, U.N.O.

REFERENCE DRAWINGS:

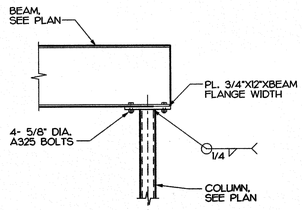
S-1.1 - FOUNDATION / GROUND FLOOR PLAN
S-1.2 - ROOF FRAMING PLAN
S-2.1 - GENERAL NOTES, TYPICAL SECTIONS AND DETAILS
S-3.1 - SECTIONS AND DETAILS



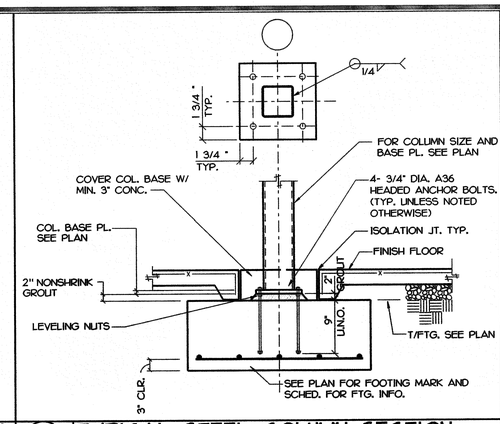
CONTROL JOINT

CONSTRUCTION JOINT

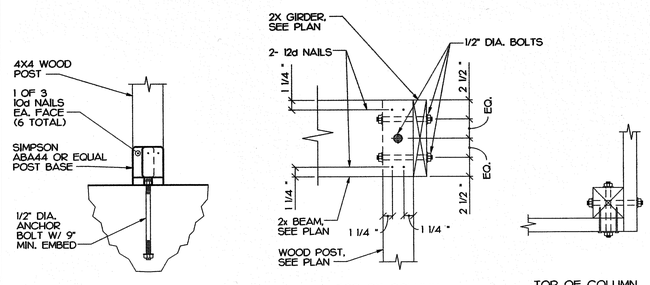
1 / S-2.1 SLAB ON GRADE JOINTS — NO SCALE



2 / S-2.1 TYP. TOP OF STEEL COLUMN — NO SCALE



3 / S-2.1 TYPICAL STEEL COLUMN SECTION — NO SCALE



BASE OF COLUMN — TOP OF COLUMN ELEVATION — TOP OF COLUMN PLAN

4 / S-2.1 TYPICAL WOOD COLUMN DETAIL — NO SCALE

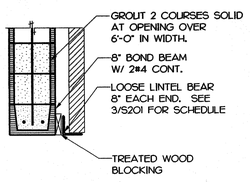
COLUMN FOOTING SCHEDULE

3000 PSF BEARING

MARK	SIZE	DEPTH	REINFORCING (EACH WAY BOTTOM)	SERVICE LOAD CAP.	REMARKS
F-3.0	3'-0"x3'-0"	18"	5#4	27K	
F-3.5	3'-6"x3'-6"	18"	5#5	36.8K	
F-4.0	4'-0"x4'-0"	18"	5#5	48K	
F-4.5	4'-6"x4'-6"	24"	6#5	60.8K	
F-5.0	5'-0"x5'-0"	24"	8#5	75K	
F-5.5	5'-6"x5'-6"	24"	8#6	90.8K	
F-6.0	6'-0"x6'-0"	24"	8#6	108K	

5 / S-2.1 COLUMN FOOTING SCHEDULE — NO SCALE

GALVANIZE ALL EXPOSED MASONRY LINTEL BEAMS, ANGLES AND PLATES.



6 / S-2.1 TYPICAL LINTEL SECTION — NO SCALE

LOOSE LINTEL SCHEDULE

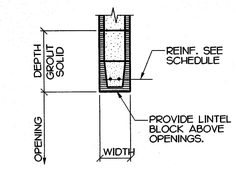
ROUGH OPENING	ANGLE SIZE
0'-0" TO 6'-0"	L3 1/2X3 1/2X 1/4
6'-0"	L5X3 1/2X 1/4 (LLV)
10'-0"	L6X3 1/2X 1/4 (LLV)

NOTE: BEAR 8" EACH END OF OPENING. ALL EXTERIOR LINTELS TO BE GALVANIZED.

7 / S-2.1 TYP. LOOSE LINTEL SCHEDULE — NO SCALE

CONCRETE MASONRY LINTEL SCHEDULE

NOMINAL WALL THICKNESS	CLEAR SPAN	NOMINAL LINTEL SECTION SIZE (WIDTH) X (DEPTH)	MINIMUM BEARING EACH END	STEEL REINFORCING (BOTTOM)
8"	2'-0" MAX.	8"X8"	8"	1#4
8"	4'-0" MAX.	8"X8"	8"	2#3
8"	6'-0" MAX.	8"X8"	8"	2#4
8"	8'-0" MAX.	8"X16"	8"	2#4
8"	10'-0" MAX.	8"X16"	10"	2#5



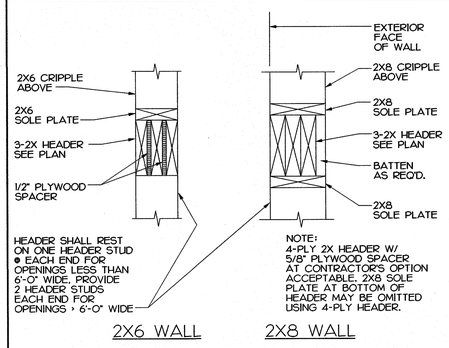
8 / S-2.1 TYPICAL CONCRETE MASONRY LINTEL SCHEDULE — NO SCALE

HOLD DOWN ANCHOR SCHEDULE

MARK	HOLDDOWN MODEL NO.	ANCHOR BOLT MODEL NO.	DIA.	EMBED	MIN. ALLOW. TENSILE CAPACITY
HD-2	PHD2	SSTB16	5/8"	12"	3000 LBS.
HD-5	PHD5	SSTB16	5/8"	12"	4000 LBS.
HD-6	PHD6	SSTB28	7/8"	24"	5000 LBS.
HD-8	HD08	SSTB28	7/8"	24"	6500 LBS.

NOTES:
1. MODEL NO. REFERS TO SIMPSON STRONG-TIE ANCHORS.
2. APPROVED EQUAL WILL BE ACCEPTED PENDING REVIEW OF HOLD DOWN CAPACITY.
3. MIN. ALLOW. TENSILE CAPACITY IS THE REQUIRED HOLD DOWN CAPACITY TO BE USED IF SIMPSON STRONG-TIE IS NOT USED.

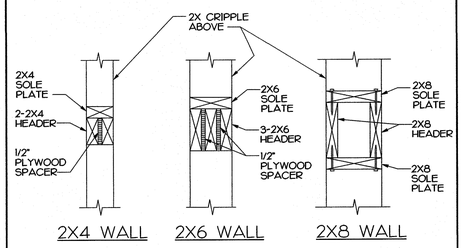
9 / S-2.1 TYPICAL WOOD SHEAR WALL HOLDDOWN SCHEDULE — NO SCALE



2X6 WALL 2X8 WALL

10 / S-2.1 GENERAL NOTES — NO SCALE

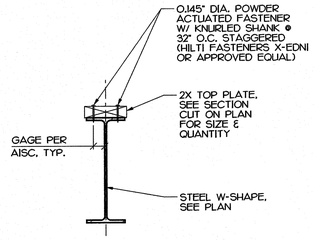
11 / S-2.1 TYPICAL HEADER DETAIL LOAD-BEARING WALLS — NO SCALE



2X4 WALL 2X6 WALL 2X8 WALL

NOTE: HEADERS IN NON LOAD-BEARING WALLS ARE NOT INDICATED ON PLANS. PROVIDE HEADERS AS REQ'D. AT ALL OPENINGS.

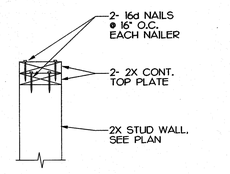
12 / S-2.1 TYPICAL HEADER DETAIL NON LOAD-BEARING WALLS — NO SCALE



NOTE: AT CONTRACTOR'S OPTION, 1/2" DIA. THRU BOLTS AT 32" O.C. STAGGERED MAY BE SUBSTITUTED FOR POWDER ACTUATED FASTENERS.

13 / S-2.1 TYPICAL WOOD NAILER ON STEEL BEAM — NO SCALE

NOTE: SEE WOOD GENERAL NOTES FOR TOP PLATE SPLICE DETAILS



14 / S-2.1 TYPICAL TOP OF STUD WALL — NO SCALE

WGM DESIGN INC.
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PRELIMINARY NOT FOR CONSTRUCTION

BARIUM SPRINGS HOME FOR CHILDREN

BARIUM SPRINGS home for children

RT Dooley

"LITTLE JOE'S CHAPEL/ TRAINING CENTER"

90% PROGRESS SET - NOT FOR CONSTRUCTION

REV.	DATE	DESCRIPTION

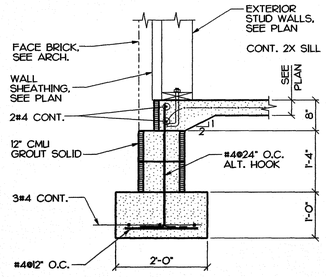
DATE: SEPTEMBER 19, 2006

PROJECT NO.: 06100.02

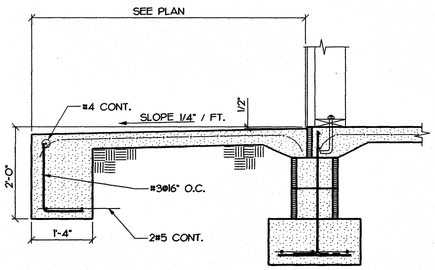
TITLE: GENERAL NOTES, TYPICAL SECTIONS & DETAILS

DRAWING NO. S-2.1

KGA 06-4121

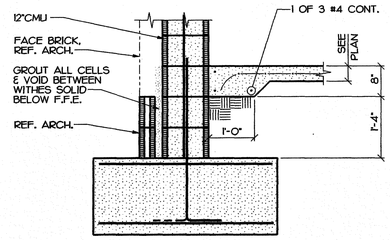


1 S-3.1 **SECTION** 3/4"=1'-0"

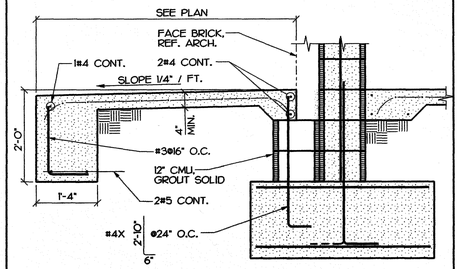


NOTE: SEE SECT. 1/S3.1 FOR DETAILS NOT SHOWN

2 S-3.1 **SECTION** 3/4"=1'-0"

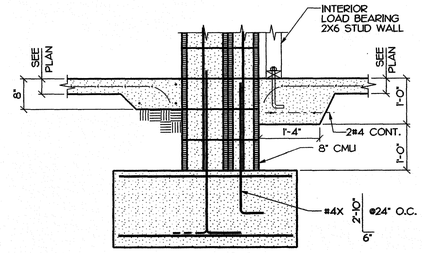


3 S-3.1 **SECTION** 3/4"=1'-0"



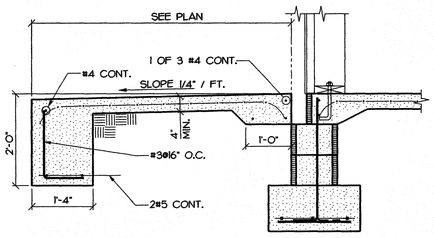
NOTE: SEE SECT. 3/S3.1 FOR DETAILS NOT SHOWN

4 S-3.1 **SECTION** 3/4"=1'-0"



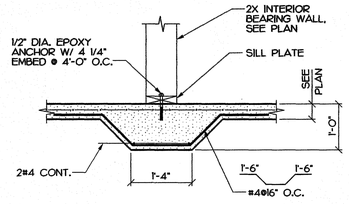
NOTE: SEE SECT. 3/S3.1 FOR DETAILS NOT SHOWN

5 S-3.1 **SECTION** 3/4"=1'-0"



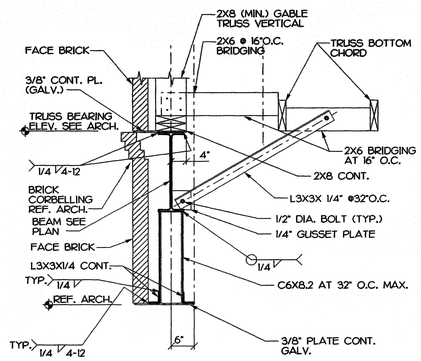
NOTE: SEE SECT. 1/S3.1 FOR DETAILS NOT SHOWN

6 S-3.1 **SECTION** 3/4"=1'-0"

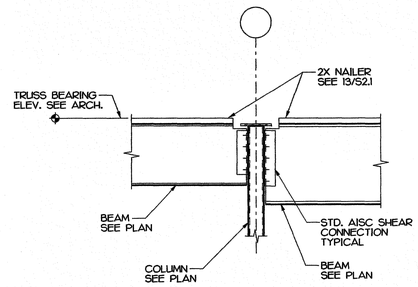


NOTE: STEP BOTTOM OF FOOTING UP 4" AS REQ'D. AT EXTERIOR WALL FOOTINGS

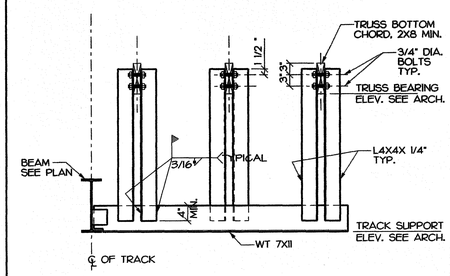
7 S-3.1 **SECTION** 3/4"=1'-0"



8 S-3.1 **SECTION** 3/4"=1'-0"

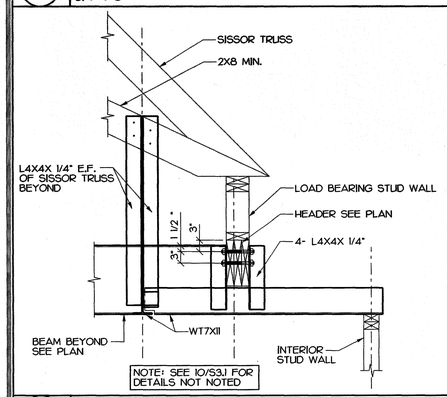


9 S-3.1 **ELEVATION** 3/4"=1'-0"



NOTE: 1. TRUSS TO BE DESIGNED FOR ADDITIONAL CONCENTRATED LOAD OF 1000 LBS. AT EACH SUPPORT.
2. ALTERNATE SIDES OF WT W/ HANGER SUPPORTS.

10 S-3.1 **SECTION** 3/4"=1'-0"



NOTE: SEE 10/S3.1 FOR DETAILS NOT NOTED.

11 S-3.1 **SECTION** 3/4"=1'-0"

12 S-3.1 **SECTION** 3/4"=1'-0"

13 S-3.1 **SECTION** 3/4"=1'-0"

14 S-3.1 **SECTION** 3/4"=1'-0"

15 S-3.1 **SECTION** 3/4"=1'-0"

16 S-3.1 **SECTION** 3/4"=1'-0"

17 S-3.1 **SECTION** 3/4"=1'-0"

18 S-3.1 **SECTION** 3/4"=1'-0"

19 S-3.1 **SECTION** 3/4"=1'-0"

20 S-3.1 **SECTION** 3/4"=1'-0"

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NORTH CAROLINA PROFESSIONAL ENGINEER SEAL MICHAEL L. GUINN

PRELIMINARY NOT FOR CONSTRUCTION

BARIUM SPRINGS HOME FOR CHILDREN

BARIUM SPRINGS home for children

RT Dooley

"LITTLE JOE'S CHAPEL/ TRAINING CENTER"

90% PROGRESS SET - NOT FOR CONSTRUCTION

REV.	DATE	DESCRIPTION

DATE: SEPTEMBER 19, 2006

PROJECT NO.: 06100.02

TITLE: SECTIONS AND DETAILS

DRAWING NO.: S-3.1

KGA 06-4121

CONDENSING FURNACE SCHEDULE

SYMBOL	CFM	O.A. CFM	E.S.P.	COOLING COIL				HEATING CAPACITY		FAN MOTOR		ELECTRICAL DATA			MANUFACTURER
				TC (BTUH)	SHC (BTUH)	MFG.	MODEL	INPUT (BTUH)	OUTPUT (BTUH)	H.P.	FLA	AMPS	FUSE	VOLTAGE	CARRIER MODEL
IDU-1	1400	170	0.4"	40,000	29,100	CARRIER	CK3AXA042	80,000	74,000	1/2	7.9	10.0	15	120V-1ø	58MCA080-16
IDU-2	1400	170	0.4"	40,000	29,100	CARRIER	CK3AXA042	80,000	74,000	1/2	7.9	10.0	15	120V-1ø	58MCA080-16
IDU-3	2000	240	0.4"	57,000	41,000	CARRIER	CK3AXA060	100,000	93,000	3/4	11.1	14.8	20	120V-1ø	58MCA100-20
IDU-4	1200	120	0.4"	34,000	25,700	CARRIER	CK3AXA036	60,000	56,000	1/3	5.8	7.1	15	120V-1ø	58MCA060-12
IDU-5	1200	120	0.4"	34,000	25,700	CARRIER	CK3AXA036	60,000	56,000	1/3	5.8	7.1	15	120V-1ø	58MCA060-12
IDU-6	2000	240	0.4"	57,000	41,000	CARRIER	CK3AXA060	100,000	93,000	3/4	11.1	14.8	20	120V-1ø	58MCA100-20
IDU-7	2000	240	0.4"	57,000	41,000	CARRIER	CK3AXA060	100,000	93,000	3/4	11.1	14.8	20	120V-1ø	58MCA100-20

NOTES:

1. COOLING CAPACITY BASED ON 80°/67° ENTERING AIR.
2. PROVIDE ALL UNITS WITH: ELECTRONIC 7-DAY PROGRAMMABLE THERMOSTAT AND 1" THICK DISPOSABLE FILTER.
3. ALL UNITS SHALL BE AGA CERTIFIED AND U.L. LABELED.
4. EACH FURNACE SHALL BE SUPPLIED WITH CONCENTRIC VENT/COMBUSTION-AIR KIT AS RECOMMENDED BY THE UNIT MANUFACTURER. PROVIDE FACTORY CONCENTRIC ROOF OR WALL CAP FOR TERMINATION OF COMBUSTION-AIR/VENT PIPING AS INDICATED ON THE DRAWINGS.
5. PROVIDE IDU-3 THRU IDU-7 WITH A IONIZATION TYPE SMOKE DETECTOR, INSTALLED IN THE RETURN DUCT WIRED TO SHUT DOWN THE UNIT UPON ACTIVATION. SMOKE DETECTOR SHALL BE SUPPLIED, WIRED FOR INTERFACE WITH FIRE ALARM SYSTEM AND UNIT SHUTDOWN BY THE ELECTRICAL CONTRACTOR. SMOKE DETECTOR SHALL BE INSTALLED IN THE RETURN DUCT BY THE MECHANICAL CONTRACTOR.
6. OUTSIDE AIR (ASHRAE 62-2004):

OFFICE SPACE:

$\frac{2500 \text{ SQ. FT. (5 PEOPLE)}}{1000 \text{ SQ. FT.}} = 13 \text{ PEOPLE}$

13 PEOPLE ($17 \frac{\text{CFM}}{\text{PERSON}}$) = 221 CFM

CHAPEL/TRAINING ROOMS:

$\frac{3400 \text{ SQ. FT. (50 PEOPLE)}}{1000 \text{ SQ. FT.}} = 170 \text{ PEOPLE}$

170 PEOPLE ($6 \frac{\text{CFM}}{\text{PERSON}}$) = 1020 CFM

TOTAL O.A. REQUIRED = 1241 CFM
TOTAL O.A. PROVIDED = 1300 CFM

NOTE:
ASHRAE 62-2004 USED AS AN ALTERNATE METHOD OF COMPLIANCE FOR VENTILATION REQUIREMENTS OF NCMC TABLE 403.3

FAN SCHEDULE

SYMBOL	TYPE	CFM	APPROX. S.P.	DRIVE	MAX RPM	ELECTRICAL DATA			MANUFACTURER	ACCESSORIES
						WATTS	H.P.	VOLTAGE	GREENHECK	
F-1	EXHAUST	375	0.25"	DIRECT	1070	224	---	120V-1ø	SP-A510	A,B,K,L,R
F-2	EXHAUST	100	0.25"	DIRECT	950	80	---	120V-1ø	SP-B110	A,B,L,R
F-3	EXHAUST	375	0.25"	DIRECT	1070	224	---	120V-1ø	SP-A510	A,B,K,L,R

ACCESSORIES

A: DISCONNECT SWITCH
B: BACKDRAFT DAMPER
C: PREFAB. ROOF CURB
D: BIRDSCREEN
E: ACOUSTICAL LINING
F: HANGING BRACKETS WITH VIBRATION ISOLATION
G: WALL MOUNTED PUSH BUTTON SWITCH/STARTER
H: WALL MOUNTED SWITCH (TIMER, 0-4 HOUR)
I: WALL MOUNTED THERMOSTAT
J: DISCHARGE HOOD
K: INTERLOCK WITH ROOM LIGHT SWITCH
L: WL, WALL LOUVER DISCHARGE
M: RCC OR GRS ROOF CAP (FLAT ROOF) OR RJ ROOF CAP (PITCHED ROOF)
N: WALL MOUNTING COLLAR
O: MOTORSIDE FAN GUARD
P: 2" WASHABLE ALUMINUM FILTERS
Q: DUCT ADAPTER
R: EXHAUST GRILLE
S: U.L. 762

NOTES:

1. ALL FANS SHALL BE U.L. LISTED AND LABELED AND SHALL BE AMCA CERTIFIED FOR SOUND AND AIR FLOW.
2. ALL FANS SHALL BE SUPPLIED BY ONE MANUFACTURER UNLESS NOTED OTHERWISE.

MECHANICAL GENERAL NOTES

1. DO NOT SCALE DRAWINGS. SEE ARCHITECTURAL DRAWINGS AND REFLECTED CEILING PLANS FOR EXACT LOCATION OF DOORS, WINDOWS, CEILING DIFFUSERS, ETC.
2. ALL DUCTWORK SHALL BE GALVANIZED SHEET METAL CONSTRUCTED IN ACCORDANCE WITH THE LATEST SMACNA STANDARDS. ALL SUPPLY, RETURN AND OUTSIDE AIR DUCTWORK SHALL BE WRAPPED WITH 2" THICK DUCT WRAP WITH VAPOR BARRIER. INSULATION (INCLUDING FLEXIBLE DUCT INSULATION) SHALL HAVE A MINIMUM INSTALLED R-VALUE OF 5.0. DUCT DIMENSIONS ON PLANS ARE SHEET METAL SIZE.
3. ALL PIPING, DUCTS, VENTS, ETC., EXTENDING THROUGH WALLS AND ROOF SHALL BE FLASHED AND COUNTERFLASHED IN A WATERPROOF MANNER.
4. ALL PIPING AND DUCTWORK LOCATIONS SHALL BE COORDINATED WITH THE WORK UNDER OTHER DIVISIONS OF THE SPECIFICATIONS, TO AVOID INTERFERENCE.
5. MECHANICAL CONTRACTOR SHALL HAVE SYSTEM BALANCED TO AIR QUANTITIES INDICATED ON PLANS AND PROVIDE THE ARCHITECT WITH THREE COPIES OF A COMPLETE TEST AND BALANCE REPORT.
6. PENETRATIONS OF NONRATED WALLS, PARTITIONS AND FLOORS OF NON-COMBUSTIBLE CONSTRUCTION SHALL BE FIRESTOPPED WITH NONCOMBUSTIBLE MATERIALS. PENETRATIONS OF NONRATED WALLS, PARTITIONS AND FLOOR OF COMBUSTIBLE CONSTRUCTION SHALL BE FIRESTOPPED WITH MATERIALS EQUIVALENT TO TWO INCHES OF WOOD. FIRESTOPPING SHALL COMPLY WITH ASTM E-814.
7. PROVIDE A ONE YEAR WARRANTY FOR ALL WORK PERFORMED BEGINNING ON THE DAY THE SYSTEM IS COMPLETELY OPERATIONAL AND ACCEPTABLE BY THE OWNER.
8. PROVIDE MANUFACTURER'S RECOMMENDED CLEARANCES AROUND AIR HANDLING UNITS FOR MAINTENANCE AND FILTER REMOVAL
9. PROVIDE TWO COPIES OF INSTALLATION, OPERATION, AND MAINTENANCE MANUALS TO THE OWNER WITHIN 15 CALENDAR DAYS OF ACCEPTANCE OF THE SYSTEM.
10. CONDENSATE DRAIN PIPING SHALL BE SCHEDULE 40 PVC PIPE AND FITTINGS. DRAINS FROM AIR HANDLING UNITS SHALL BE TRAPPED. MINIMUM DRAIN SIZE SHALL BE ¾".
11. ALL REFRIGERANT PIPE SHALL BE NITROGENIZED ACR COPPER TUBE. SIZE, INSULATE, AND INSTALL REFRIGERANT PIPING PER MANUFACTURER'S RECOMMENDATIONS.
12. ANY DEVICE REQUIRING A THERMOSTAT FOR CONTROL SHALL BE FURNISHED WITH A THERMOSTAT WHETHER INDICATED ON THE DRAWINGS OR NOT.
13. LOCATE ALL THERMOSTATS AND SWITCHES 4'-0" ABOVE FINISH FLOOR.
14. MECHANICAL CONTRACTOR SHALL VERIFY LOCATION OF ROOF PENETRATIONS FOR RELIEF HOODS AND OUTSIDE AIR HOODS WITH ARCHITECT & OWNER PRIOR TO INSTALLATION.
15. MECHANICAL CONTRACTOR SHALL LOCATE EXHAUST FANS, OUTLETS, AND GAS FLUES A MINIMUM OF 10'-0" FROM ANY OUTSIDE AIR INTAKE.
16. MINIMUM GAS PIPING SIZE SHALL BE ¾".
17. GAS PIPING AND FITTINGS SHALL BE BLACK STEEL, SCHEDULE 40, IN ACCORDANCE WITH ASTM SPECIFICATION A 106, WITH 150 PSI BLACK MALLEABLE IRON FITTINGS IN ACCORDANCE WITH ASTM SPECIFICATION A 47, GRADE 32510, AND ASA SPECIFICATION B16.3, 125 LB.
18. GAS PIPING SHALL BE INSTALLED TO THE REQUIREMENTS OF THE STATE BUILDING CODE AND NFPA STANDARD NO. 54. ALL PIPING TO BE SUPPORTED BY CLEVIS HANGERS WITH GALVANIZED ROD A MAXIMUM OF 8' ON CENTER. PIPING SHALL BE SUPPORTED BY ROD HANGERS IN THE PIPE RUN 12" OR LESS IN LENGTH FROM THE TOP OF THE PIPE TO THE SUPPORTING STRUCTURE PER BUILDING CODE SECTION 1621.3.10.2.1 EXCEPTION 2.1.
19. GAS PIPING SHALL BE TESTED IN ACCORDANCE WITH THE PROCEDURES DESCRIBED IN NFPA NO 54. ANY OTHER TEST AS REQUIRED BY THE LOCAL GAS INSPECTION DEPARTMENT OR GAS COMPANY SHALL ALSO BE PERFORMED.
20. PAINT ALL GAS PIPING WITH TWO COATS OF YELLOW ENAMEL AND STENCIL "2-PSI GAS" ON PIPE AT 6'-0" CENTERS.
21. GAS VALVES SHALL BE MIN. 125 PSI RATED, NON-LUBRICATED PLUG TYPE WITH BRONZE BODY AND BRONZE PLUG.
22. PROVIDE UNIONS, FLANGES OR COUPLINGS AT CONNECTION TO ALL VALVES AND EQUIPMENT. DO NOT USE DIRECT WELDED OR THREADED CONNECTIONS TO VALVES, EQUIPMENT OR OTHER APPARATUS.
23. PROVIDE NON-CONDUCTING DIELECTRIC UNIONS WHENEVER CONNECTING DISSIMILAR METALS.

CONDENSING UNIT SCHEDULE (AIR COOLED)

SYMBOL	COOLING CAPACITY		COMPRESSOR		FAN	ELECTRICAL DATA			MANUFACTURER	MATCHING
	TC (BTUH)	SHC (BTUH)	LRA	RLA	FLA	MCA	FUSE	VOLTAGE	CARRIER MODEL	INDOOR UNIT
CU-1	40,000	29,100	91.0	13.6	1.4	18.4	25	208V-3ø	38CKC042	IDU-1
CU-2	40,000	29,100	91.0	13.6	1.4	18.4	25	208V-3ø	38CKC042	IDU-2
CU-3	57,000	41,000	125.0	16.0	1.4	21.4	30	208V-3ø	38CKC060	IDU-3
CU-4	34,000	25,700	70.0	10.0	1.4	13.9	20	208V-3ø	38CKC036	IDU-4
CU-5	34,000	25,700	70.0	10.0	1.4	13.9	20	208V-3ø	38CKC036	IDU-5
CU-6	57,000	41,000	125.0	16.0	1.4	21.4	30	208V-3ø	38CKC060	IDU-6
CU-7	57,000	41,000	125.0	16.0	1.4	21.4	30	208V-3ø	38CKC060	IDU-7

NOTES:

1. COOLING CAPACITY @ 95° AMBIENT
2. ALL UNITS SHALL BE U.L. LISTED AND ASHRAE 90.1 COMPLIANT.
3. MOUNT UNITS ON A 4" THICK CONCRETE PAD AND PROVIDE MANUFACTURER'S RECOMMENDED CLEARANCES AROUND UNITS.
4. PROVIDE UNITS WITH LOW AMBIENT CONTROLS.
5. FOR REFRIGERANT LINE APPLICATIONS WITH A TOTAL EQUIVALENT LENGTH BETWEEN 50'-0" AND 175'-0" THE FOLLOWING ACCESSORIES SHALL BE PROVIDED;
   - COMPRESSOR CRANKCASE HEATER
   - FOR HORIZONTAL CONFIGURATION: PROVIDE LIQUID LINE SOLENOID WITHIN 2'-0" OF OUTDOOR UNIT WITH FLOW ARROW POINTING TOWARD OUTDOOR UNIT. VAPOR LINE SHOULD SLOPE TOWARD INDOOR UNIT.
   - FOR INDOOR UNIT LOCATED ABOVE OUTDOOR UNIT (50'-0" MAX); A LIQUID LINE (UP-FLOW) SOLENOID MUST BE INSTALLED WITHIN 2'-0" OF OUTDOOR UNIT WITH FLOW ARROW POINTING TOWARD OUTDOOR UNIT. AN INVERTED VAPOR LINE TRAP MUST BE INSTALLED AT INDOOR UNIT. THE TOP OF THE TRAP MUST BE GREATER THAN THE HEIGHT OF THE INDOOR COIL.

GRILLE & DIFFUSER SCHEDULE

SYMBOL	SERVICE	CFM RANGE	FACE SIZE	NECK SIZE	TYPE	OBD	METAL+AIRE
A	SUP/RET	8" HIGH GRILLE, SEE PLANS FOR LENGTH			LINEAR BAR	NO	2100
B	SUPPLY	0 - 280	---	9x9	LOUVERED	NO	5000
C	SUPPLY	285 - 500	---	12x12	LOUVERED	NO	5000
D	SUPPLY	0 - 100	24x24	6"ø	PERF.	NO	7600
E	SUPPLY	105 - 175	24x24	8"ø	PERF.	NO	7600
F	SUPPLY	180 - 270	24x24	10"ø	PERF.	NO	7600
G	SUPPLY	275 - 390	24x24	12"ø	PERF.	NO	7600
H	RETURN	0 - 270	24x24	10"ø	PERF.	NO	7650R
J	RETURN	275 - 500	24x24	12x12	PERF.	NO	7650R
K	RETURN	505 - 885	24x24	16x16	PERF.	NO	7650R
L	RETURN	890 - 1800	24x24	22x22	PERF.	NO	7650R
M	SUP/RET	0 - 1125	---	18x18	LOUVERED	NO	5000
TF	THERMA-FUSER (SEE NOTE #3)						

NOTES:

1. ALL DEVICES SHALL BE FURNISHED WITH AN ENAMEL OFF-WHITE FINISH.
2. ALL DEVICES SHALL BE FURNISHED WITH FRAMES SUITABLE FOR TYPE OF INSTALLATION REQUIRED.
5. GRILLES MARKED "TF" SHALL BE SQUARE THERMA-FUSERS (ACUTHERM MODEL TF-HC THERMALLY POWERED VARIABLE AIR VOLUME DIFFUSERS). BALANCE AIR QUANTITY TO DELIVER LISTED CFM AS A MAXIMUM WHEN GRILLE BLADES ARE WIDE OPEN IN EITHER HEATING OR COOLING MODE. PROVIDE WITH FACTORY RELIEF RING TO DIVERT UNUSED SUPPLY AIR INTO THE CEILING PLENUM. SEE PLANS FOR NECK SIZES.

NORTH CAROLINA STATE BUILDING CODE

APPENDIX B (IBC 2002 – CHAPTER 7)
MECHANICAL SUMMARY

MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT METHOD OF COMPLIANCE:

SIMPLIFIED APPROACH [X] PRESCRIPTIVE [ ] ENERGY COST BUDGET [ ]

THERMAL ZONE: 7A

EXTERIOR DESIGN CONDITIONS

winter dry bulb	18° F.
summer dry bulb	91° F.

INTERIOR DESIGN CONDITIONS

winter dry bulb	70° F.
summer dry bulb	72° F.
relative humidity	50% R.H.

BUILDING HEATING LOAD	118,000 BTUH (peak)
BUILDING COOLING LOAD	277,200 BTUH (peak)

MECHANICAL SPACING CONDITIONING SYSTEM

UNITARY

description of unit	SPLIT SYSTEM – GAS FURNACE
heating efficiency	92%
cooling efficiency	PER ASHRAE 90.1
heat output of unit	SEE EQUIPMENT SCHEDULE
cooling output of unit	SEE EQUIPMENT SCHEDULE

BOILER

total boiler output of unit	N/A

CHILLER

total chiller capacity	N/A

LIST EQUIPMENT EFFICIENCIES

Equipment schedules with motors (mechanical systems)

motor horsepower	n/a
number of phases	n/a
minimum efficiency	n/a
motor type	n/a
# of poles	n/a

SIGNED: Steven R. Daley

NAME: STEVEN R. DALEY, P.E.
TITLE: MECHANICAL ENGINEER

MECHANICAL LEGEND

SYMBOL	DESCRIPTION
T	THERMOSTAT (4'-0" ABOVE FLOOR)
	SUPPLY AIR DIFFUSER
	RETURN AIR GRILLE
	EXHAUST AIR GRILLE
	DOUBLE LINE DUCTWORK
	SINGLE LINE DUCTWORK
20x14	20"x 14" RECTANGULAR DUCT
8"ø	8" DIAMETER ROUND DUCT
SD	SMOKE DETECTOR

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BARIUM SPRINGS HOME FOR CHILDREN

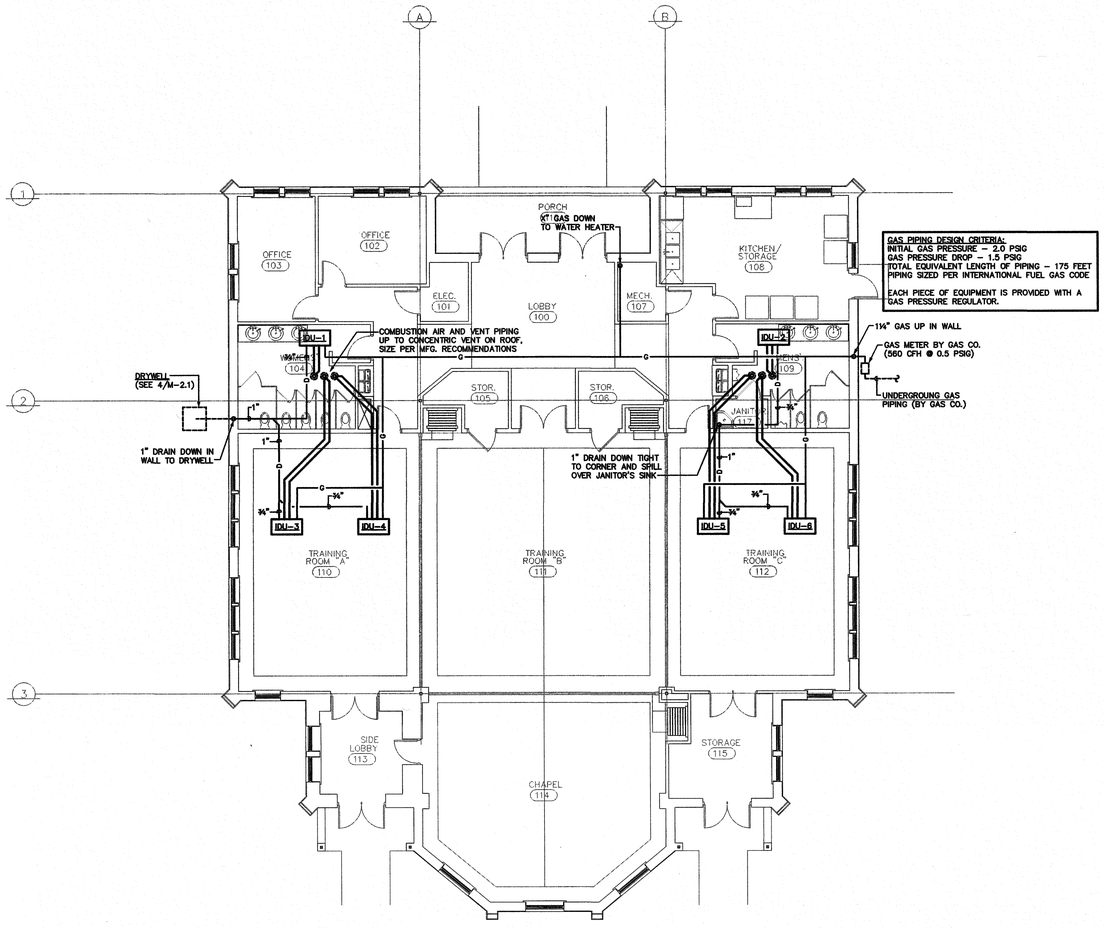
"LITTLE JOE'S CHAPEL/ TRAINING CENTER"

REV.	DATE	DESCRIPTION

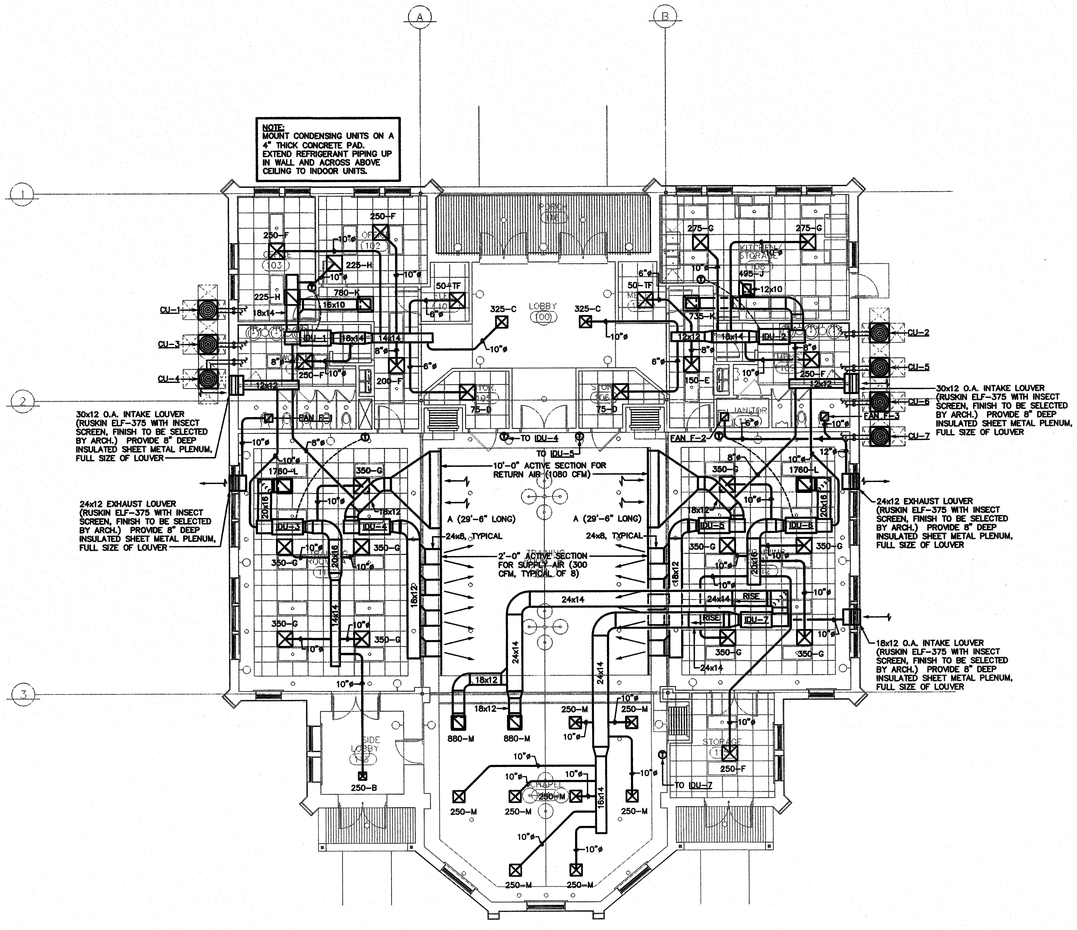
DATE: OCTOBER 3, 2006
PROJECT NO.: 06100.02
TITLE: MECHANICAL SCHEDULES
DRAWING NO.: M-0.1 1 OF 3

— PRELIMINARY —
NOT FOR CONSTRUCTION

OPTIMA No.: 06539



2 FLOOR PLAN - MECHANICAL PIPING
1/8" = 1'-0"



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

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BARIUM SPRINGS
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CHILDREN

"LITTLE JOE'S
CHAPEL/
TRAINING CENTER"

REV.	DATE	DESCRIPTION

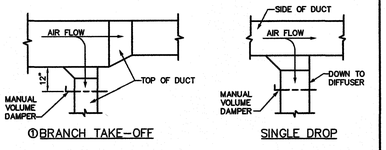
DATE:
OCTOBER 3, 2006

PROJECT NO.:
06100.02

TITLE:
FLOOR PLAN -
MECHANICAL

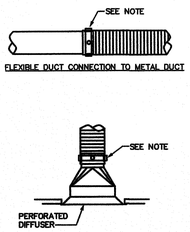
DRAWING NO.
M-1.1 2 OF 3

OPTIMA No.: 06539



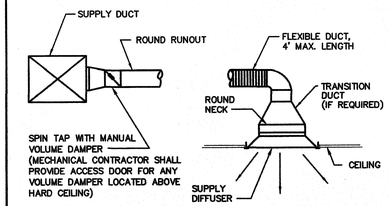
NOTE:
1. USE BRANCH TAKE-OFF ① WHEN MAIN AND BRANCH DUCTS ARE DIFFERENT DEPTHS
2. USE BRANCH TAKE-OFF ② WHEN MAIN AND BRANCH DUCTS ARE SAME DEPTHS

1 DUCTWORK DETAILS
NO SCALE

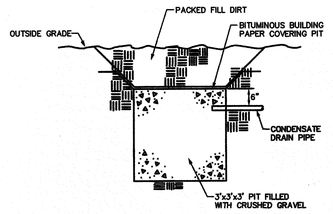


NOTE:
ALL FLEXIBLE DUCT CONNECTIONS TO SHEET METAL SHALL BE SECURED WITH NYLON STRAP AND 2 SHEET METAL SCREWS (MIN.).

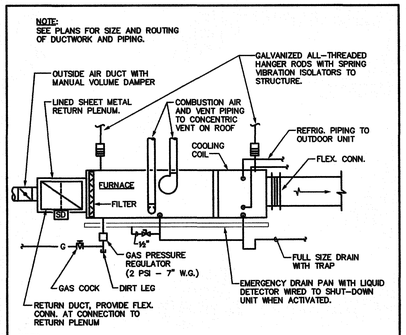
2 FLEX. CONNECTION DETAIL
NO SCALE



3 SPIN TAP TO ROUND NECK DIFFUSER
NO SCALE

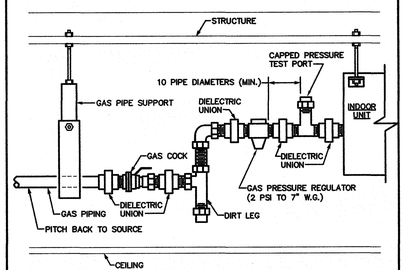


4 DRYWELL DETAIL
NO SCALE

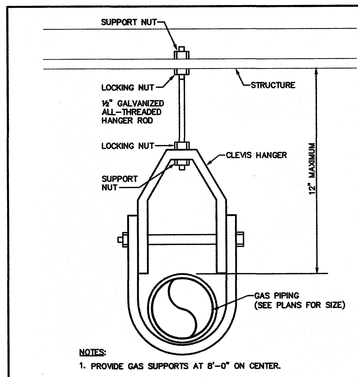


NOTE:
PROVIDE IDU-3 THRU IDU-6 WITH A IONIZATION TYPE SMOKE DETECTOR, INSTALLED IN THE RETURN DUCT WIRED TO SHUT DOWN THE UNIT UPON ACTIVATION. SMOKE DETECTOR SHALL BE SUPPLIED, WIRED FOR INTERFACE WITH FIRE ALARM SYSTEM. AND UNIT SHUTDOWN BY THE ELECTRICAL CONTRACTOR. SMOKE DETECTOR SHALL BE INSTALLED IN THE RETURN DUCT BY THE MECHANICAL CONTRACTOR.

5 HORIZONTAL FURNACE
NO SCALE



6 INDOOR EQUIPMENT GAS CONNECTION DETAIL
NO SCALE



NOTES:
1. PROVIDE GAS SUPPORTS AT 8'-0" ON CENTER.

7 INDOOR GAS PIPING SUPPORT
NO SCALE

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BARIUM SPRINGS HOME FOR CHILDREN

"LITTLE JOE'S CHAPEL/ TRAINING CENTER"

REV.	DATE	DESCRIPTION

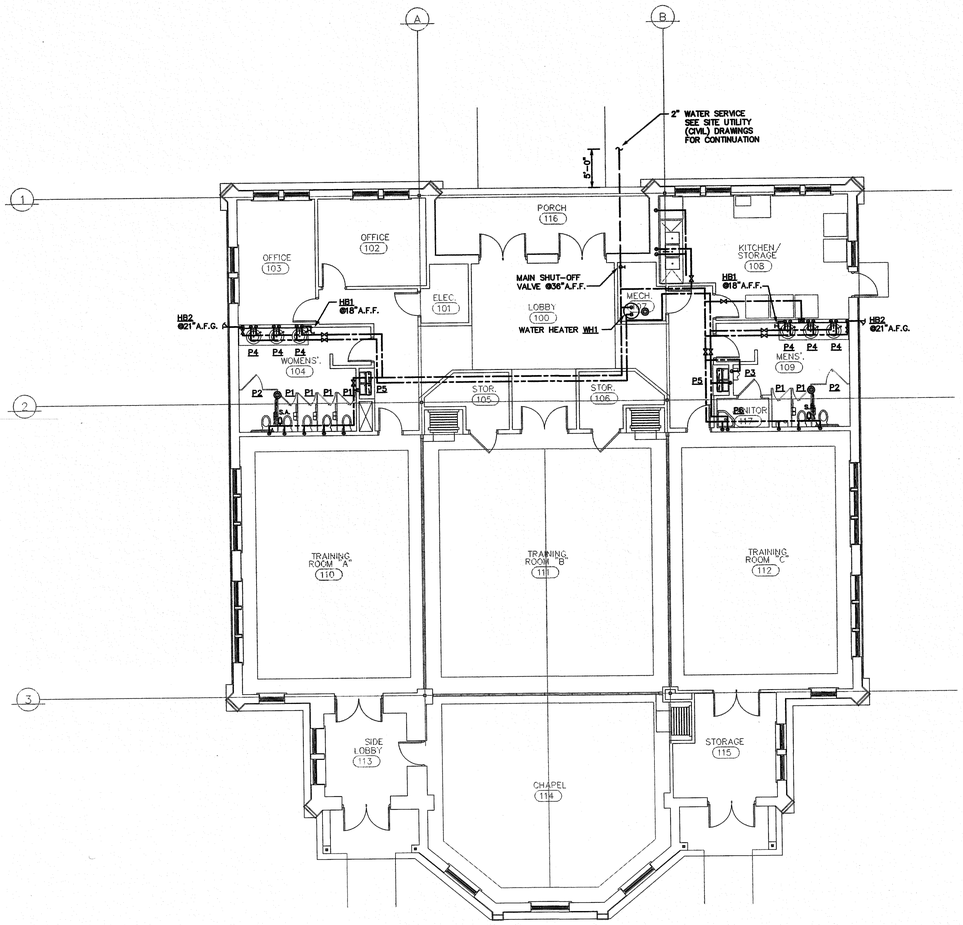
DATE: OCTOBER 3, 2006

PROJECT NO.: 06100.02

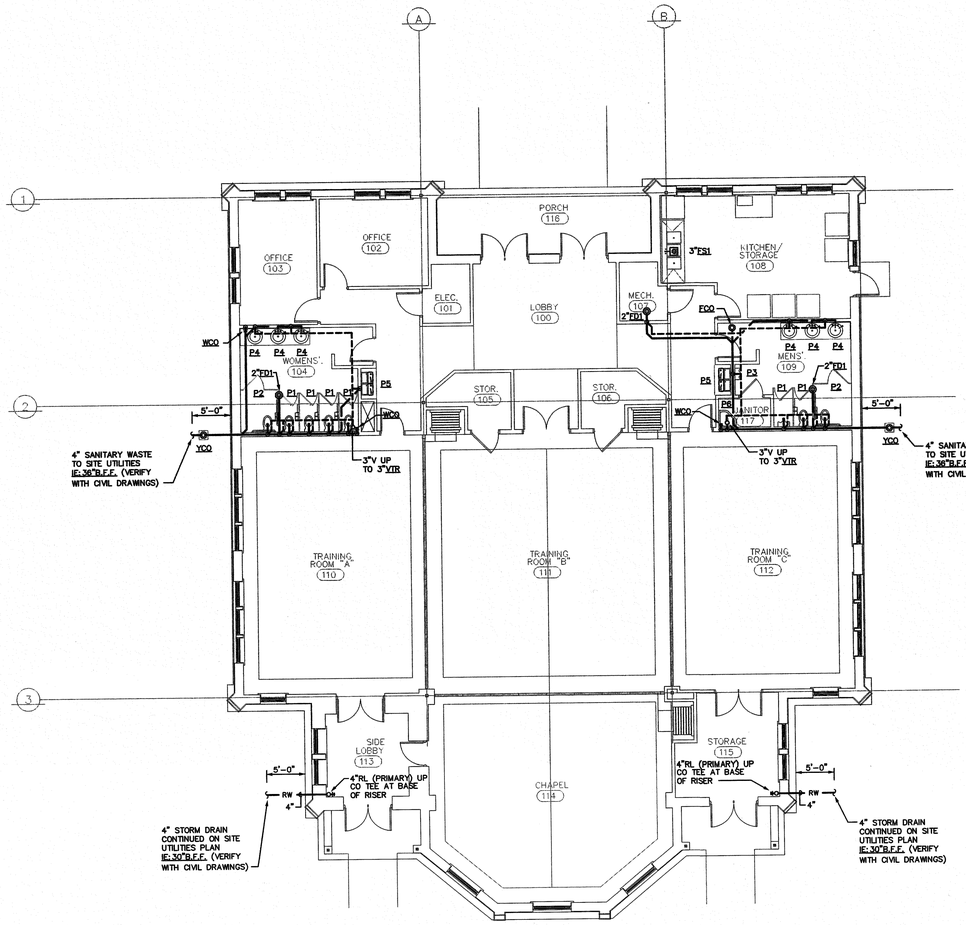
TITLE: MECHANICAL DETAILS

DRAWING NO.: M-2.1 3 OF 3

OPTIMA No.: 06539



WATER SUPPLY
1 FLOOR PLAN - PLUMBING
1/8" = 1'-0"



WASTE AND VENT
1 FLOOR PLAN - PLUMBING
1/8" = 1'-0"

— PRELIMINARY —
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REV.	DATE	DESCRIPTION

DATE:
OCTOBER 3, 2006

PROJECT NO.:
06100.02

TITLE:
PLUMBING
FLOOR PLANS

DRAWING NO.
P-1.1

OPTIMA No.: 06539

1 ELECTRIC WATER HEATER SCHEMATIC (WH1)
NO SCALE

PLUMBING LEGEND

PIPING	ABBREVIATIONS	DESCRIPTION
———	W	SANITARY WASTE PIPING – BELOW FLOOR/GRADE
- - - - - - -	V	SANITARY VENT PIPING – ABOVE CEILING
——RL——	RL	STORM DRAIN – ABOVE CEILING
——RW——	RW	STORM DRAIN – BELOW FLOOR/GRADE
——— — ———	CW	COLD WATER PIPING – ABOVE CEILING
——— — ———	HW	HOT WATER PIPING – ABOVE CEILING
———●	DN	ELBOW DOWN
———○	–	ELBOW UP
———┤	–	PIPE CONTINUES
———⋈———	–	BALL VALVE (FULL PORT)
———◁———	CV	CHECK VALVE
———⋈———	PRV	PRESSURE REDUCING VALVE
———◎———	YCO	YARD CLEANOUT
———◉———	FCO	FLOOR CLEANOUT
———◉———	FD	FLOOR DRAIN
———▣———	FS	FLOOR SINK
	AFF	ABOVE FINISHED FLOOR
	AFG	ABOVE FINISHED GRADE
	BFF	BELOW FINISHED FLOOR
	INV.	INVERT
	P.C.	PLUMBING CONTRACTOR
	M.C.	MECHANICAL CONTRACTOR
	U.G.	UNDER GROUND

SHOCK ARRESTOR SIZING TABLE

SIOUX CHIEF WATER HAMMER ARRESTOR SIZE	FIXTURE UNITS	CROSS REF. PDI
½"	1–11	A
¾"	12–32	B
1"	33–60	C
1¼"	61–113	D
1½"	114–154	E
2"	155–330	F

PLUMBING FIXTURE AND EQUIPMENT SCHEDULE

SYM.	DESCRIPTION	CONNECTIONS (IN.) W	V	CW	HW	SPECIFICATION	REMARKS
P1	WATER CLOSET, STANDARD FLUSH VALVE, 1.6 GAL/FLUSH FLOOR MOUNTED	4"	2"	1¼"	–	FIXTURE: A.S. 2234.015 "MADERA" SEAT: CHURCH 9500C FLUSH VALVE: SLOAN 111	
P2	WATER CLOSET, A.D.A. FLUSH VALVE, 1.6 GAL/FLUSH FLOOR MOUNTED	4"	2"	1¼"	–	FIXTURE: A.S. 2305.100 "MADERA" SEAT: CHURCH 9500C FLUSH VALVE: SLOAN 111	PROVIDE LEVER ON WIDE SIDE OF STALL
P3	URINAL, A.D.A. FLUSH VALVE, 1.0 GAL/FLUSH WALL HUNG	2"	1½"	1"	–	FIXTURE: A.S. 6541.132 "ALLBROOK" FLUSH VALVE: SLOAN 186–1 CARRIER: SMITH	MOUNT FIXTURE LIP 17"AFF.
P4	LAVATORY, A.D.A. 19" x 15¾" OVAL (BOWL SIZE 16½" x 13¼") UNDERMOUNT, WHITE CHINA	1½"	1½"	½"	½"	FIXTURE: A.S. 0482.000.020 "OVALYN" DRAIN: MCGUIRE 155A FAUCET: DELTA 501–WFHGMHDF P–TRAP: MCGUIRE 8902 1¼" x 1½" STOPS: MCGUIRE 175	PROVIDE INSULATION KIT FOR EXPOSED TRIM: TRUEBRO "LAV–GUARD" OR APPROVED EQUAL.
P5	ELECTRIC WATER COOLER, A.D.A. SURFACE MOUNTED, SPLIT LEVEL STEEL CABINET, ENAMEL FINISH	1½"	1¼"	½"	–	FIXTURE: HAWS HWUBCOOBL P–TRAP: MCGUIRE 8902 1¼" x 1½" STOP: MCGUIRE 175	COORDINATE FINISH WITH ARCHITECT FLEXIBLE BUBBLERS, MOUNT LOWER BUBBLER OUTLET 34" A.F.F.
P6	MOP SINK NEO ANGLE DROP FRONT 24" x 24" x 12" BUMPER GUARDS	3"	1½"	½"	½"	BASIN: FLORESTONE MODEL 95 DRAIN: FLORESTONE MR–375 FAUCET: FLORESTONE MR–371 ACCESSORIES: MR–370 HOSE & BRACKET ACCESSORIES: MR–372 MOP HANGER ACCESSORIES: MR–373 BUMPERGUARDS	
P7	UTILITY CONNECTION BOX (REFRIGERATOR ICEMAKER)	–	–	½"	–	FIXTURE: GUY GRAY BM875 FINISH: EPOXY	
HB1	HOSE BIBB	–	–	½"	–	FIXTURE: WOODFORD 24 FINISH: POLISHED CHROME	
HB2	HOSE BIBB FREEZE PROOF	–	–	¾"	–	FIXTURE: WOODFORD 65 FINISH: CHROME	
FCO	FLOOR CLEANOUT ADJUSTABLE, CAST IRON BODY, POLISHED NICKEL BRONZE TOP	4"	–	–	–	CLEANOUT: ZURN ZN–1400	GAS / WATER TIGHT ABS PLUG
WCO	WALL CLEANOUT CAST IRON BODY, STAINLESS STEEL WALL PLATE	–	–	–	–	CLEANOUT: ZURN ZN–1441	GAS / WATER TIGHT ABS PLUG
YCO	YARD CLEANOUT ADJUSTABLE, CAST IRON BODY, COATED CAST IRON TOP	4"	–	–	–	CLEANOUT: ZURN Z–1400 IN AN 18"L x 18"W x 6"D CONCRETE PAD.	GAS / WATER TIGHT ABS PLUG
FD1	FLOOR DRAIN CAST IRON BODY	2"	1½"	–	–	DRAIN: ZURN ZN–415 STRAINER: ZURN 6"ø TYPE B FINISH: POLISHED NICKEL BRONZE	PROVIDE TRAP PRIMER PPP P–1 AND ½" COPPER SUPPLY TO TRAP.
SA1	SHOCK ARRESTOR	–	–	–	–	EQUIPMENT: SIOUX CHIEF 650 SERIES SIZE PER P.D.I. REQUIREMENTS	

APPROVED EQUALS:		ACCEPTED EQUAL:
THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE MODEL WHICH MOST CLOSELY MATCHES THE SPECIFIED PRODUCT. PROVIDE PRODUCTS MADE BY THE MANUFACTURER'S LISTED.	AMERICAN STANDARD (A.S.) DELTA (FAUCETS) ELKAY (S.S. SINKS) ELKAY (WATER COOLERS) MCGUIRE (SUPPLY STOPS) SLOAN (FLUSH VALVES) ZURN (DRAINS, CARRIERS) FLORESTONE (UTILITY) A.O. SMITH (WATER HEATERS) AMTROL (EXPANSION TANKS) LEONARD (MIXING VALVES)	KOHLER, ELJER, TOTO MOEN, SYMMONS, ZURN JUST, AMERICAN STANDARD OASIS, HAWS, SUNROC BRASSCRAFT, E.B.C. ZURN, DELANEY J.R. SMITH, WADE, JOSAM ACORN, FIAT, STERN WILLIAMS LOCHINVAR, STATE, BRADFORD WHITE A.O. SMITH, WATTS, STATE LAWLER, SYMMONS

PLUMBING SPECIFICATIONS

GENERAL REQUIREMENTS:

1. GENERAL AND SPECIAL CONDITIONS: GENERAL AND SPECIAL CONDITIONS ARE HEREBY MADE AN INTEGRAL PART OF THIS DIVISION OF THE SPECIFICATIONS INSOFAR AS SAME ARE APPLICABLE TO THE WORK UNDER THIS DIVISION AND UNLESS OTHERWISE SPECIFIED.
2. SCOPE: PROVIDE ALL LABOR, MATERIAL AND EQUIPMENT REQUIRED FOR THE COMPLETION AND OPERATION OF ALL SYSTEMS IN THIS SECTION OF WORK IN ACCORDANCE WITH ALL APPLICABLE CODES.
3. PERMITS: APPLY FOR AND PAY FOR ALL NECESSARY PERMITS, FEES, AND INSPECTIONS REQUIRED BY ANY PUBLIC AUTHORITY HAVING JURISDICTION. ACREAGE CHARGES, BOND PROPERTY ASSESSMENTS AND FACILITIES CHARGE ARE NOT TO BE CONSTRUED TO BE A PART OF THIS CONTRACT.
4. WARRANTY: PROVIDE ALL MATERIALS AND EQUIPMENT UNDER THIS SECTION OF THE SPECIFICATIONS WITH A ONE YEAR WARRANTY FROM THE DATE OF ACCEPTANCE OF WORK BY THE OWNER.
5. COORDINATION: VERIFY ALL ROUGH–IN LOCATIONS AND COORDINATE PIPING AND EQUIPMENT LOCATIONS WITH WORK UNDER OTHER DIVISIONS OF THE SPECIFICATIONS TO AVOID CONFLICTS.
6. FIELD VERIFICATION: FIELD VERIFY EXISTING CONDITIONS BEFORE STARTING CONSTRUCTION AND NOTIFY THE ARCHITECT/ENGINEER OF RECORD OF ANY DISCREPANCIES BETWEEN THE CONSTRUCTION DOCUMENTS AND EXISTING CONDITIONS AND/OR ANY POTENTIAL PROBLEMS OBSERVED BEFORE CONTINUING WORK IN THE EFFECTED AREAS.
7. PLUMBING SYSTEMS INCLUDE, BUT ARE NOT LIMITED TO:
   - PLUMBING FIXTURES AND EQUIPMENT
   - FIRE STOPPING
   - DOMESTIC WATER SYSTEM
   - SANITARY WASTE AND VENT SYSTEM (CONDENSATE DRAIN)

FIXTURES:

1. PROVIDE COMPLETE FIXTURES AND INCLUDE SUPPLIES, STOPS, VALVES, FAUCETS, DRAINS, TRAPS, TAIL PIECES, ESCUTCHEONS, ETC.

FIRE STOPPING:

1. FIRE STOP ALL PENETRATIONS, BY PIPING OR CONDUITS, OF FIRE RATED WALLS, FLOORS AND PARTITIONS. PROVIDE A DEVICE(S) OR SYSTEM(S) WHICH HAS BEEN TESTED AND LISTED AS COMPLYING WITH ASTM E–814 AND INSTALL IN ACCORDANCE WITH THE CONDITIONS OF THEIR LISTING. PROVIDE A DEVICE(S) OR SYSTEM(S) WITH AN 'F' RATING EQUAL TO THE RATING OF THE ASSEMBLY BEING PENETRATED.

DOMESTIC WATER PIPING:

1. DOMESTIC WATER PIPING BELOW GRADE:
   SOFT ANNEALED SEAMLESS COPPER TUBING, TYPE 'K' WITH NO JOINTS BELOW GRADE (ASTM B 88).
2. DOMESTIC WATER PIPING AND JOINTS ABOVE GRADE:
   HARD DRAWN SEAMLESS COPPER TUBING, TYPE 'L' WITH 95–5 SILVER SOLDERED JOINTS (ASTM B 88).
3. STERILIZE DOMESTIC WATER PIPING IN ACCORDANCE WITH THE AMERICAN WATER WORKS ASSOCIATION'S SPECIFICATIONS AND LOCAL HEALTH DEPARTMENT REGULATIONS.
4. INSULATE DOMESTIC WATER PIPING ABOVE GRADE (EXCEPT EXPOSED CONNECTIONS TO PLUMBING FIXTURES) WITH ENGINEERED POLYMER FOAM INSULATION. FOLLOW THIS SCHEDULE:

SERVICE	PIPE SIZE	INSUL. THICKNESS
DOMESTIC HOT WATER (105'–140'F)	½" – 1½"	1"
DOMESTIC COLD WATER	ALL	½"

5. DOMESTIC WATER PIPING INSULATION, JACKETS, COVERINGS, SEALERS, MASTICS AND ADHESIVES ARE REQUIRED TO MEET A FLAME–SPREAD RATING OF 25 OR LESS AND A SMOKE–DEVELOPED RATING OF 50 OR LESS, AS TESTED BY ASTM E84 (NFPA 255) METHOD.
6. DO NOT INSTALL DOMESTIC WATER PIPING IN AREAS SUBJECT TO FREEZING TEMPERATURES. INSTALL WATER PIPING IN EXTERIOR WALLS ON THE CONDITIONED SIDE OF THE WALL INSULATION.
7. SHUT OFF VALVES: PROVIDE FULL PORT, BALL TYPE, AND INSTALL IN A LOCATION THAT PERMITS ACCESS FOR SERVICE WITHOUT DAMAGE TO THE BUILDING OR FINISHED MATERIALS. PROVIDE ACCESS DOORS IF REQUIRED.
8. PROTECT COPPER PIPING AGAINST CONTACT WITH DISSIMILAR METALS. ALL HANGERS, SUPPORTS, ANCHORS, AND CLIPS SHALL BE COPPER OR COPPER PLATED. WHERE COPPER PIPING IS CARRIED ON IRON TRAPEZE HANGERS WITH OTHER PIPING, PROVIDE A PERMANENT ELECTROLYTIC ISOLATION MATERIAL TO PREVENT CONTACT WITH OTHER METALS.
9. PROTECT COPPER PIPING AGAINST CONTACT WITH ALL MASONRY. WHERE COPPER IS SLEEVED THROUGH MASONRY, PROVIDE COPPER OR RED BRASS SLEEVES. WHERE COPPER MUST BE CONCEALED IN OR AGAINST MASONRY PARTITIONS, PROVIDE A HEAVY COATING OF ASPHALTIC ENAMEL ON THE COPPER PIPING AND 15# ASPHALT SATURATED FELT BETWEEN THE PIPING AND THE MASONRY PARTITION.
10. PROVIDE ACCESS DOORS FOR VALVE, WATER HAMMER ARRESTORS, ETC. CONCEALED IN MASONRY WALL OR ABOVE GYPBOARD CEILINGS.

SANITARY WASTE AND VENT PIPING:

1. SANITARY WASTE PIPING AND FITTINGS BELOW GRADE/FLOOR:
   SERVICE WEIGHT CAST IRON, HUB AND SPIGOT TYPE WITH COMPRESSION JOINTS (ASTM A 74) OR NO–HUB PIPING WITH COUPLINGS (CISPI 301).
   IF PERMITTED BY LOCAL CODES, SCHEDULE 40 PVC (ASTM D 2665) WITH SCHEDULE 40 SOCKET–TYPE PIPE FITTINGS (ASTM D 3311) MAY BE USED.
   **** PVC PIPE IS NOT PERMITTED IN APPLICATIONS WHERE WASTE WATER TEMPERATURE IS OR EXCEEDS 140° F. DO NOT USE PVC PIPING FOR UNDERSLAB WASTE PIPING IN COMMERCIAL KITCHENS.
2. SANITARY WASTE AND VENT PIPING AND FITTINGS ABOVE FLOOR:
   SERVICE WEIGHT CAST IRON, NO–HUB TYPE WITH COUPLINGS (CISPI 301).
   IF PERMITTED BY LOCAL CODES, SCHEDULE 40 PVC (ASTM D 2665) WITH SCHEDULE 40 SOCKET–TYPE PIPE FITTINGS (ASTM D 3311) MAY BE USED.
   **** DO NOT INSTALL PVC PIPING IN RETURN AIR PLENUMS.
3. SLOPE SANITARY WASTE PIPING 2½" AND SMALLER AT ¼" PER FOOT MIN. SLOPE SANITARY WASTE PIPING 3" AND LARGER AT ⅛" PER FOOT MINIMUM.
4. WHERE WASTE PIPING IS EXPOSED IN REST ROOM AREAS, PROVIDE CHROME PLATED BRASS PIPING, WITH MATCHING STOPS AND ESCUTCHEONS. PROVIDE REMOVABLE TRAPS WITH INTEGRAL CLEAN–OUT PLUG FOR ALL LAVATORIES.
5. INSTALL CLEAN–OUTS AT THE BASE OF ALL WASTE STACKS AND EVERY TURN IN PIPING IN EXCESS OF 45° AND NO FURTHER THAN 80'–0" APART IN A LOCATION THAT PERMITS ACCESS FOR SERVICE WITHOUT DAMAGE TO THE BUILDING OR FINISHED MATERIALS.

STORM DRAIN PIPING:

1. STORM DRAIN PIPING AND FITTINGS BELOW GRADE/FLOOR:
   SERVICE WEIGHT CAST IRON, HUB AND SPIGOT TYPE WITH COMPRESSION JOINTS (ASTM A 74) OR NO–HUB PIPING WITH COUPLINGS (CISPI 301).
   IF PERMITTED BY LOCAL CODES, SCHEDULE 40 PVC (ASTM D 2665) WITH SCHEDULE 40 SOCKET–TYPE PIPE FITTINGS (ASTM D 3311) MAY BE USED.
2. STORM DRAIN PIPING AND FITTINGS ABOVE FLOOR:
   SERVICE WEIGHT CAST IRON, NO–HUB TYPE WITH COUPLINGS (CISPI 301).
3. INSULATE HORIZONTAL STORM DRAIN PIPING ABOVE GRADE AND ROOF DRAIN BODIES WITH ½" ENGINEERED POLYMER FOAM INSULATION. THIS INCLUDES PRIMARY AND SECONDARY (OVERFLOW) STORM DRAIN SYSTEMS.
4. STORM DRAIN PIPING INSULATION, JACKETS, COVERINGS, SEALERS, MASTICS AND ADHESIVES ARE REQUIRED TO MEET A FLAME–SPREAD RATING OF 25 OR LESS AND A SMOKE–DEVELOPED RATING OF 50 OR LESS, AS TESTED BY ASTM E84 (NFPA 255) METHOD.
5. INSTALL CLEAN–OUTS AT THE BASE OF ALL WASTE STACKS AND STORM DRAIN LEADER AND EVERY TURN IN PIPING IN EXCESS OF 45° AND NO FURTHER THAN 100'–0" APART IN A LOCATION THAT PERMITS ACCESS FOR SERVICE WITHOUT DAMAGE TO THE BUILDING OR FINISHED MATERIALS.

SEISMIC REQUIREMENTS:

1. PROPERLY SUPPORT AND BRACE VERTICALLY AND HORIZONTALLY ALL PIPING, APPARATUS, EQUIPMENT, ETC. IN ACCORDANCE WITH APPLICABLE CODES TO PREVENT EXCESSIVE MOVEMENT DURING SEISMIC CONDITIONS.

— PRELIMINARY —
NOT FOR CONSTRUCTION

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BARIUM SPRINGS HOME FOR CHILDREN

"LITTLE JOE'S CHAPEL/ TRAINING CENTER"

REV.	DATE	DESCRIPTION

DATE: OCTOBER 3, 2006

PROJECT NO.: 06100.02

TITLE: PLUMBING FLOOR PLANS

DRAWING NO. P-1.2

OPTIMA No.: 06539

ELECTRICAL SPECIFICATIONS

1. GENERAL

A. PROVIDE ALL WORK AND MATERIALS FOR THE INSTALLATION OF COMPLETE WIRING SYSTEMS AS SPECIFIED HEREIN AND SHOWN ON THE DRAWINGS.

B. ALL ELECTRICAL PERMITS AND INSPECTION FEES SHALL BE OBTAINED AND PAID FOR BY THE ELECTRICAL CONTRACTOR.

C. ELECTRICAL CONTRACTOR SHALL GUARANTEE ALL WORK AND MATERIALS FOR ONE YEAR EFFECTIVE THE DAY THE PROJECT IS ACCEPTED BY THE OWNER.

D. ALL WORK SHALL BE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND APPLICABLE LOCAL AND STATE CODES.

E. ALL MATERIALS, APPLIANCES AND EQUIPMENT SHALL BE NEW, UNLESS NOTED AND SHALL BE LABEL LISTED BY A STATE APPROVED THIRD PARTY TESTING AGENCY.

F. PROVIDE ALL CUTTING AND PATCHING FOR INSTALLATION OF WORK AND REPAIR ANY DAMAGE DONE.

G. SHOP DRAWINGS AND CATALOG DATA SHALL BE SUBMITTED IN QUADRUPLICATE FOR LIGHTING FIXTURES, LAMPS, BALLASTS AND PANELBOARDS. CATALOG DATA SHALL BE SUBMITTED FOR DISCONNECT SWITCHES AND WIRING DEVICES.

H. PROVIDE ENGRAVED PHENOLIC NAMEPLATES FOR PANELBOARDS, WIRING TROUGHS, AND FUSED SWITCHES. WHITE LETTERS ON BLACK FOR 120/208 VOLT SYSTEMS. INDICATE NAME AND VOLTAGE ON NAMEPLATE. ALSO, LABEL ALL BREAKERS INSIDE THE PANEL NEXT TO THE BREAKER.

I. AN ELECTRICAL INSPECTION CERTIFICATE SHALL BE ISSUED BY THE LOCAL INSPECTION AUTHORITIES BEFORE WORK WILL BE APPROVED FOR FINAL PAYMENT.

J. THE CONDUIT AND NEUTRAL SYSTEM SHALL BE GROUNDED AT THE MAIN SERVICE EQUIPMENT. GROUNDING ELECTRODE SYSTEM SHALL BE INSTALLED PER N.E.C. 250.

K. WIRING SHALL BE TESTED FOR CONTINUITY AND GROUNDS BEFORE BEING ENERGIZED. FAULTY WIRING SHALL BE REPLACED.

L. IF, DURING THE COURSE OF WORK, THE ELECTRICAL CONTRACTOR DISCOVERS A PROBLEM WITH THE PERFORMANCE OF THE INSTALLATION RELATIVE TO THE PLANS AND SPECIFICATIONS OR NEC OR OTHER CODES, THE CONTRACTOR SHALL IMMEDIATELY BRING THE PROBLEM TO THE ATTENTION OF THE ARCHITECT OR ENGINEER FOR RESOLUTION PRIOR TO THE EXECUTION OF THE WORK.

M. THE ELECTRICAL CONTRACTOR SHALL CONNECT ALL EQUIPMENT REQUIRING ELECTRICAL CONNECTIONS (UNLESS OTHERWISE NOTED), EXCEPT FOR CONTROL WIRING FOR EQUIPMENT NOT PROVIDED BY THE ELECTRICAL CONTRACTOR. CONTROL WIRING FOR SUCH EQUIPMENT SHALL BE PROVIDED BY THE RESPECTIVE DISCIPLINE.

N. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING RESTRAINTS TO RESIST THE EARTHQUAKE EFFECTS ON THE ELECTRICAL SYSTEM. THE REQUIREMENTS FOR THOSE RESTRAINTS ARE FOUND IN THE INTERNATIONAL BUILDING CODE. THE ANCHORAGE OF THE EQUIPMENT SHALL COMPLY WITH SECTION 1621.1.7.

O. COORDINATE LOCATION AND REQUIREMENTS FOR ELECTRICAL SERVICE WITH THE POWER COMPANY. WHERE MORE THAN ONE SERVICE IS SUPPLIED TO A BUILDING, PROVIDE IDENTIFICATION AT EACH SERVICE PER NEC 230-2(6).

P. COORDINATE LOCATION AND REQUIREMENTS FOR TELEPHONE SERVICE WITH THE TELEPHONE COMPANY.

Q. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND PROVIDING TEMPORARY POWER.

2. RACEWAY

A. CONDUIT SHALL BE ZINC-COATED EMT INDOORS. EMT FITTINGS SHALL BE STEEL SET SCREW. MINIMUM SIZE SHALL BE 1/2", U.O.N. USE SCHEDULE 40 PVC OUTDOORS OR BELOW CONCRETE SLAB. USE IMC WHERE REQUIRED BY CODE OR WHERE SUBJECT TO PHYSICAL DAMAGE.

B. SUPPORT ALL CONDUITS WITH STRAPS AND CLAMPS. RUN ALL CONDUIT PARALLEL OR PERPENDICULAR TO BUILDING WALLS.

C. JUNCTION AND PULL BOXES SHALL BE CODE GAUGE GALVANIZED SHEET METAL.

D. LIQUID-TIGHT FLEXIBLE METAL CONDUIT SHALL BE USED FOR EQUIPMENT CONNECTIONS, BUT NOT AS A WIRING METHOD OTHERWISE.

E. RACEWAY PENETRATIONS THROUGH FLOOR SLABS AND FIRE-RATED WALLS SHALL BE FILLED WITH IMPERVIOUS, NON-SHRINK GROUT SUFFICIENTLY TIGHT TO PREVENT THE TRANSFER OF SMOKE, WATER AND DUST. ROOF PENETRATIONS SHALL BE WITHIN THE EQUIPMENT CURB.

F. CONDUIT INSTALLED UNDERGROUND OR IN CONCRETE SHALL HAVE JOINTS MADE WATERTIGHT BY USE OF POLYTETRA-FLUOROETHYLENE TAPE. ALL UNDERGROUND CONDUITS SHALL BE THOROUGHLY COATED WITH TWO COATS OF APHALTUM OF BITUMASTIC. APPROVED SEALS SHALL BE PROVIDED IN HAZARDOUS LOCATIONS AS REQUIRED BY THE N.E.C.

G. MC CABLE ASSEMBLIES MAY BE USED AS A SUBSTITUTE FOR CONDUIT AND WIRING WHERE PERMITTED BY CODE.

3. CONDUCTORS

A. ALL CONDUCTORS SHALL BE SINGLE CONDUCTOR COPPER. THHN/THWN, SOLID FOR SIZES #14 THROUGH #10. THW, STRANDED FOR SIZES #8 AND LARGER.

B. BRANCH CIRCUITS SHALL NOT BE SMALLER THAN #12 AWG. CONTROL WIRING MAY BE #14 AWG.

C. CONDUCTORS SHALL BE COLOR CODED BLACK/RED/BLUE FOR 120/208 VOLT SYSTEMS FOR A, B, AND C PHASES, RESPECTIVELY.

D. WIRING TO LIGHTING FIXTURES SHALL BE AS REQUIRED BY UL LABEL.

E. UNLESS OTHERWISE INDICATED ON THE DRAWINGS, ALL 20A MULTI-WIRE RECEPTACLE CIRCUITS CAN UTILIZE A #10 AWG NEUTRAL CONDUCTOR. MC CAN BE AFC "SUPER NEUTRAL", OR EQUAL, UNLESS OTHERWISE INDICATED ON THE DRAWINGS.

F. ALL BRANCH CIRCUIT CONDUITS OR CABLE ASSEMBLIES SHALL CONTAIN AN INSULATED GREEN GROUNDING CONDUCTOR SIZED PER NEC 250-122.

G. ALL CONDUCTORS INSTALLED IN VERTICAL RACEWAYS SHALL BE SUPPORTED AT INTERVALS AS REQUIRED PER NEC ARTICAL 300-19.

H. ALL EQUIPMENT AND DEVICE TERMINATIONS SHALL BE UL LISTED FOR USE WITH 75° INSULATED CONDUCTORS AT THEIR 75° AMPACITY.

4. WIRING DEVICES

A. WIRING DEVICES SHALL BE SPECIFICATION GRADE EQUAL TO THE COOPER QUALITY INDICATED. SWITCHES SHALL BE AS FOLLOWS:

SINGLE POLE 20 AMP	COOPER 1221
DOUBLE POLE 20 AMP	COOPER 1222
THREE WAY 20 AMP	COOPER 1223
FOUR WAY 20 AMP	COOPER 1224

DUPLEX RECEPTACLES SHALL HAVE A NYLON FACE AND SHALL BE AS FOLLOWS:

15 AMP DUPLEX	COOPER 5252
20 AMP DUPLEX	COOPER 5362
15 AMP DUPLEX - GFI	COOPER GF5262
20 AMP DUPLEX - GFI	COOPER GF5362

PART NUMBERS ARE FOR TYPE ONLY. SEE SYMBOL SCHEDULE FOR DEVICE AND PLATE COLOR.

B. DUPLEX RECEPTACLES ON DEDICATED CIRCUIT SHALL BE 20 AMP OTHER DUPLEX RECEPTACLES MAY BE 15 AMP, UNLESS OTHERWISE NOTED.

C. OUTLET BOXES SHALL NOT BE MOUNTED BACK-TO-BACK.

D. A MAXIMUM OF 10 RECEPTACLES SHALL BE ON EACH BRANCH CIRCUIT.

E. WEATHERPROOF COVERS SHALL HAVE A LID SO THAT PLUGS MAY BE INSTALLED WITHOUT COMPROMISING THE WP FUNCTION, EQUAL TO INTERMATIC #WP1020 (CLEAR).

F. ALL OUTLETS (INCLUDING TELEPHONE, CABLE TV, AND COMPUTER) SHALL HAVE COVER PLATES, BLANK IF NOT USED.

5. DISCONNECT SWITCHES

A. DISCONNECT SWITCHES SHALL BE HEAVY-DUTY TYPE IN NEMA 1 ENCLOSURES (UNLESS OTHERWISE INDICATED), FUSED OR NON-FUSED AS INDICATED. SWITCHES SHALL HAVE REJECTION-TYPE FUSE CLIPS. SWITCHES SHALL BE BY GENERAL ELECTRIC OR EQUAL. FUSES SHALL BE CLASS R-5, TIME DELAY. A SET OF 3 SPARE FUSES OF EACH SIZE AND TYPE SHALL BE FURNISHED TO THE OWNER.

6. PANELBOARDS

A. PANELBOARDS SHALL BE DEAD-FRONT SAFETY TYPE, ALL CIRCUIT BREAKERS SHALL BE MOLDED-CASE, BOLT-ON, AUTOMATIC THERMAL MAGNETIC TYPE, CALIBRATED FOR 40 DEGREE C, OR AMBIENT COMPENSATION, CABINET SHALL BE 20 INCHES WIDE MINIMUM, WITH NOT LESS THAN 4-INCH WIRING GUTTERS AT TOP, SIDES, AND BOTTOM. SQUARE D "NQOD", OR EQUAL. BUS SHALL BE COPPER WITH RATINGS AS INDICATED ON DRAWINGS. LUGS SHALL BE SIZED PER RISER DIAGRAM.

B. PROVIDE HANDLE LOCK-ON DEVICES ON ALL CIRCUIT BREAKERS CONNECTED TO EMERGENCY, EXIT, AND NIGHT LIGHTING, FIRE ALARM, TELEPHONE BOARDS, AND SECURITY SYSTEMS.

C. CIRCUIT BREAKERS USED FOR SWITCHING OF LIGHTING OR SIGN CIRCUITS SHALL BE SWITCHING DUTY RATED AND SHALL BE MARKED "SWD".

7. LIGHT FIXTURES

A. CATALOG NUMBERS GIVEN DENOTE MINIMUM QUALITY AND PERFORMANCE REQUIRED. EQUAL EQUIPMENT BY OTHER MANUFACTURERS IS ACCEPTABLE.

B. H.I.D. BALLASTS SHALL BE HIGH POWER FACTOR WITH QUIETEST SOUND RATING.

C. LAY-IN FIXTURES SHALL BE SUSPENDED FROM STRUCTURE WITH 2 WIRES AT OPPOSITE CORNERS. DO NOT SUPPORT FROM CEILING GRID.

D. SEE ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LOCATION OF LIGHT FIXTURES.

E. ALL RECESSED LIGHTING FIXTURES SHALL BE THERMALLY PROTECTED.

F. COMPACT FLUORESCENT BALLASTS SHALL BE ELECTRONIC.

8. TELEPHONE SYSTEM

A. FURNISH AND INSTALL A COMPLETE TELEPHONE CONDUIT SYSTEM AS INDICATED ON THE DRAWINGS. ALL J-BOXES FOR TELEPHONE JACKS SHALL BE 4" SQUARE, DEEP BOX WITH A SINGLE-GANG PLASTER RING.

B. PULL AND LEAVE IN EACH CONDUIT ONE PULL CORD FOR PULLING IN CABLE. TELEPHONE COMPANY WILL FURNISH AND INSTALL THE TELEPHONE WIRE AND INSTRUMENTS.

C. TELEPHONE SERVICE CONDUITS SHALL BE PROVIDED TO THE PROPERTY LINE OR POINT AS DIRECTED BY THE LOCAL UTILITY.

D. THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL A #6 AWG INSULATED GREEN COPPER WIRE IN A 3/4" CONDUIT FROM THE MAIN ELECTRICAL GROUNDING BAR MAIN TO A LUG AT THE TELEPHONE BOARD.

9. LIGHTING CONTROLS

A. FURNISH AND INSTALL WHERE SHOWN AN ELECTRONIC TIME CONTROLLER. CONTROLLER SHALL BE CAPABLE OF SWITCHING 40 AMPERES PER POLE CONTINUOUSLY AT 120 VOLTS AND SHALL BE SPST (DPST, 3PST, DPDT SPDT, AS REQUIRED).

B. LIGHTING CONTACTORS SHALL SWITCH A LOAD AT 120 VOLTS, 60 HZ AND SHALL HAVE THE NUMBER OF POLES INDICATED ON THE DRAWINGS. THE CONTACTOR SHALL BE CONTINUOUSLY RATED 20 AMPERES PER POLE FOR ALL TYPES OF BALLAST AND TUNGSTEN LIGHTING AND RESISTANCE LOADS.

C. ALL LIGHTING CONTACTORS SHALL BE ELECTRICALLY HELD AND HAVE A NEMA 1 ENCLOSURE.

10. FIRE ALARM SYSTEM

A. SYSTEM SHALL BE A CENTRALIZED, ANALOG, ADDRESSABLE, FULLY ELECTRONICALLY SUPERVISED (INCLUDING AUXILIARY SYSTEMS INTERCONNECT WIRING SYSTEM LISTED BY UL IN COMPLIANCE WITH ALL APPLICABLE NFPA 72 AND OTHER STANDARDS AS WELL AS THE AMERICAN'S WITH DISABILITIES ACT (ADA). ALL FINAL CONNECTIONS, TESTING AND ADJUSTMENTS SHALL BE PERFORMED BY OR UNDER DIRECT SUPERVISION OF AN AUTHORIZED FACTORY REPRESENTATIVE. SYSTEM SHALL BE SIMPLEX, NOTIFIER, FCI OR EQUAL, AS ACCEPTED BY THE ENGINEER. SYSTEM SHALL HAVE A 24HR MINIMUM BATTERY BACKUP.

B. INITIATING DEVICE ACTIVATION SHALL CAUSE OPERATION OF THE PROPER ZONE ALARM CIRCUIT IN THE CONTROL PANEL, AND OPERATE ALL AUDIBLE AND VISUAL INDICATING ALARMS. ALL AIR HANDLING UNITS SHALL BE STOPPED UPON ANY ALARM INPUT. EACH AIR HANDLER UNIT SHALL BE PROVIDED WITH A SYSTEM CONTROLLED RELAY TO EFFECT SHUTDOWN. ALL ALARM DEVICES AND LAMPS SHALL CONTINUE TO OPERATE UNTIL THE INITIATING DEVICE IS RESET. SUBSEQUENT ALARMS SHALL RESOUND THE SYSTEM. AN AUDIBLE AND VISUAL SIGNAL SHALL INDICATE SYSTEM TROUBLE. THE CONTROL PANEL SHALL PROVIDE FOR ACTIVATING A UL LISTED CENTRAL STATION SIGNAL FOR NOTIFYING THE FIRE DEPARTMENT.

C. MANUAL STATIONS SHALL BE NON-CODED, WITH PULL LEVER AND GLASS ROD, SEMI-FLUSH MOUNTED. COMBINATION LIGHT AND HORN SIGNALS SHALL BE FLUSH MOUNTED. WIRING SHALL BE IN CONDUIT AS PREVIOUSLY SPECIFIED, #14 AWG MINIMUM, THHN. ALL J-BOXES USED FOR THE FIRE ALARM SYSTEM SHALL BE PAINTED RED.

D. SPRINKLER SYSTEM TAMPER SWITCHES SHALL BE CONNECTED INTO A COMMON ZONE WHICH SHALL DISTINGUISH BETWEEN A CONDUIT FAULT AND A CLOSED VALVE. A CLOSED VALVE SHALL BE INDICATED AS AN ALARM CONDITION, BUT WILL NOT ACTIVATE THE AUDIO-VISUAL DEVICES OR CAUSE A SIGNAL TO BE TRANSMITTED TO THE FIRE DEPARTMENT.

11. FIRESTOPPING

A. ALL PENETRATIONS OF RATED ASSEMBLIES SHALL BE SEALED WITH RATED MATERIALS MEETING ASTM E-814.

B. PROVIDE FIRESTOPPING DEVICE(S) OR SYSTEM(S) WHICH HAVE BEEN TESTED AND LISTED AS COMPLYING WITH ASTM E-814. INSTALL THE DEVICE(S) OR SYSTEM(S) IN ACCORDANCE WITH THE CONDITIONS OF THEIR LISTING. PROVIDE THE APPROPRIATE DEVICE(S) OR SYSTEM(S) WITH AN "F" RATING EQUAL TO THE RATING OF THE ASSEMBLY BEING PENETRATED.

C. DEVICE(S) AND/OR SYSTEM(S) SHALL BE BY HILTI, 3M OR EQUIVALENT.

SYMBOL SCHEDULE

- WIRING SYSTEM CONCEALED IN WALL OR CEILING. CROSS LINES INDICATE NUMBER OF WIRES. NO CROSS LINES INDICATES TWO WIRES. (GROUND WIRES ARE NOT SHOWN)
- WIRING SYSTEM CONCEALED IN OR UNDER SLAB OR UNDERGROUND.
- CONDUIT TURNED UP TO FLOOR ABOVE.
- CONDUIT TURNED DOWN TO FLOOR BELOW.
- BRANCH CIRCUIT HOMERUN TO PANEL.
- JUNCTION BOX WITH CONNECTION TO EQUIPMENT SERVED.
- S — SINGLE POLE SWITCH, 20 AMP, 120/277 VOLT, COOPER 1221, OR EQUAL.
- S_2 — DOUBLE POLE SWITCH, 20 AMP, 120/277 VOLT, COOPER 1222, OR EQUAL.
- S_3 — THREE WAY SWITCH, 20 AMP, 120/277 VOLT, COOPER 1223, OR EQUAL.
- S_4 — FOUR WAY SWITCH, 20 AMP, 120/277 VOLT, COOPER 1224, OR EQUAL.
- S_D — DIMMER SWITCH. 120V. LUTRON NT-SERIES, UNLESS OTHERWISE NOTED. VERIFY LOAD ON CIRCUIT AND MATCH DIMMER SIZE TO LOAD. PROVIDE DOUBLE GANG J-BOX FOR 2000W DIMMERS.
- S_{LV} — LOW VOLTAGE DIMMER SWITCH. 120V. 600W LUTRON NT-SERIES, UNLESS OTHERWISE NOTED. PROVIDE DOUBLE GANG J-BOX FOR 2000W DIMMERS.
- SS — INDICATES TWO LEVEL SWITCHING. SWITCH OUTER TWO LAMPS OF FIXTURES TOGETHER AND THE INNER LAMP(S) TOGETHER.
- S_M — FRACTIONAL HORSEPOWER MANUAL MOTOR STARTER.
- DUPLEX RECEPTACLE, 15 AMP, 120 VOLT (USE 20 AMP FOR SINGLE RECEPTACLE ON A CIRCUIT.) COOPER 5252, PS 5252, OR EQUAL.
- DUPLEX RECEPTACLE MOUNTED ABOVE COUNTER BACKSPLASH, OR AT HEIGHT NOTED.
- QUAD RECEPTACLE. TWO NEMA 5-15R DUPLEX RECEPTACLES.
- SWC — STANDARD NEMA 5-15R DUPLEX RECEPTACLE FOR ELECTRIC WATER COOLER. COORDINATE LOCATION WITH PLUMBING CONTRACTOR.
- GFI — GROUND FAULT RECEPTACLE. NEMA 5-15R DUPLEX. ALL RECEPTACLES INSTALLED OUTSIDE, WITHIN 3' OF A SINK OR IN A KITCHEN SHALL BE GFCI.
- IG — ISOLATED GROUND RECEPTACLE. NEMA 5-15R DUPLEX.
- WP — WEATHERPROOF RECEPTACLE. NEMA 5-15R DUPLEX. COVER SHALL BE INTERMATIC #WP1020 (CLEAR) OR EQUAL, PS WILICIO-C (CLEAR).
- TELE/DATA OUTLET. 1" EC TO ABOVE ACCESSIBLE CEILING WITH PULL STRING. 4" SQUARE BOX WITH A SINGLE-GANG OPENING AND PLASTER RING.
- TELE/DATA OUTLET MOUNTED ABOVE COUNTER BACKSPLASH, OR AT HEIGHT NOTED.
- TV — TELEVISION OUTLET. 3/4" EC TO ABOVE ACCESSIBLE CEILING WITH PULL STRING. 4" SQUARE BOX WITH A SINGLE-GANG OPENING AND PLASTER RING.
- NON-FUSED HEAVY DUTY DISCONNECT SWITCH. NUMERALS INDICATE SWITCH RATING. NEMA 1 ENCLOSURE, UNLESS OTHERWISE NOTED.
- FUSED HEAVY DUTY DISCONNECT SWITCH. NUMERALS INDICATE SWITCH RATING/FUSE SIZE. NEMA 1 ENCLOSURE, UNLESS OTHERWISE NOTED.
- FUSED HEAVY DUTY DISCONNECT SWITCH. NUMERALS INDICATE SWITCH RATING/FUSE SIZE. NEMA 1 ENCLOSURE, UNLESS OTHERWISE NOTED. BUILT-IN DUPLEX RECEPTACLE. CUTLER HAMMER AUXILIARY POWER HEAVY-DUTY SAFETY SWITCH, OR EQUAL.
- CIRCUIT BREAKER. NUMERALS INDICATE RATING. NEMA 1 ENCLOSURE, UNLESS OTHERWISE NOTED.
- PLYWOOD TELEPHONE BACKBOARD. SIZE AS INDICATED ON RISER.
- PANELBOARD. SEE SCHEDULE FOR MOUNTING. TOP OF PANEL AT 6'-6" AFF.
- FLUORESCENT LIGHTING FIXTURE. SEE FIXTURE SCHEDULE. SUSPEND FOUR OPPOSITE CORNERS WITH WIRE TO STRUCTURE. DO NOT ALLOW GRID ALONE TO SUPPORT FIXTURE.
- FLUORESCENT STRIP FIXTURE. SEE FIXTURE SCHEDULE.
- INCANDESCENT OR H.I.D. LIGHTING FIXTURE. SEE FIXTURE SCHEDULE.
- WALL MOUNTED INCANDESCENT OR H.I.D. LIGHTING FIXTURE. SEE FIXTURE SCHEDULE.
- EMERGENCY BATTERY PACK FIXTURE. SEE FIXTURE SCHEDULE.
- FLUORESCENT FIXTURE WITH EMERGENCY BATTERY PACK. 1100 LUMEN INVERTER. SEE FIXTURE SCHEDULE.
- FLUORESCENT DOWNLIGHT WITH AN EMERGENCY BATTERY PACK. SEE FIXTURE SCHEDULE.
- EXIT LIGHT WITH ARROWS AND NUMBERS OF FACES AS INDICATED ON PLANS. SEE FIXTURE SCHEDULE.
- EXTERIOR EMERGENCY BATTERY PACK FIXTURE. SEE FIXTURE SCHEDULE.
- CONNECTION TO MOTOR. STARTER PROVIDED BY OTHERS UNLESS OTHERWISE NOTED.
- +42" — DIMENSION INDICATES HEIGHT ABOVE FINISHED FLOOR AT WHICH CENTER OF DEVICE IS TO MOUNTED.
- AFF — ABOVE FINISHED FLOOR.
- 3R — NEMA 3R
- EC — EMPTY CONDUIT WITH PULL WIRE.
- WP — WEATHERPROOF
- SINGLE HEAD POLE FIXTURE. SEE FIXTURE SCHEDULE.
- DOUBLE HEAD POLE FIXTURE. SEE FIXTURE SCHEDULE.
- LIGHT BOLLARD. SEE FIXTURE SCHEDULE.
- FLOODLIGHT. SEE FIXTURE SCHEDULE.
- SPECIAL OUTLET. SEE PLANS.
- MODULAR FURNITURE CONNECTION. PROVIDE DOUBLE-GANG BARRIERED J-BOX FOR POWER & TELE/DATA. EXTEND 1"EC TO ABOVE ACCESSIBLE CEILING FOR TELE/DATA. CONNECT POWER AS INDICATED.
- F — FIRE ALARM MANUAL STATION.
- FH — ADA COMPLIANT FIRE ALARM HORN WITH STROBE LIGHT, 75cd, UNLESS OTHERWISE NOTED. WHITE FINISH.
- FS — ADA COMPLIANT FIRE ALARM STROBE LIGHT, 75cd, UNLESS OTHERWISE NOTED. WHITE FINISH.
- SD — CEILING MOUNTED SMOKE DETECTOR.
- DUCT MOUNTED SMOKE DETECTOR. FURNISHED AND CONNECTED BY ELECTRICAL CONTRACTOR, INSTALLED BY MECHANICAL CONTRACTOR. CUTTING OF DUCT, INSTALLATION OF DETECTOR, AND DETERMINATION OF SAMPLING TUBE LENGTH SHALL BE THE MECHANICAL CONTRACTOR. PROVIDE REMOTE INDICATING LIGHT WITH EACH DETECTOR.
- HD — CEILING MOUNTED HEAT DETECTOR.
- FS — SPRINKLER SYSTEM FLOW SWITCH.
- TS — SPRINKLER SYSTEM TAMPER SWITCH.
- SD — SMOKE DAMPER. FURNISHED AND INSTALLED BY MECHANICAL CONTRACTOR, CONNECTED TO FIRE ALARM SYSTEM BY ELECTRICAL CONTRACTOR.
- DH — MAGNETIC DOOR HOLDER, PROVIDED BY GENERAL CONTR, INSTALLED BY ELEC. CONTR. PROVIDE A SMOKE DETECTOR WITHIN 5 FT. OF BOTH SIDES OF DOORS TO LOCALLY ACTIVATE DOOR UPON SMOKE SIGNAL.
- RA — FIRE ALARM REMOTE ANNUNCIATOR.
- R — DUCT DETECTOR REMOTE INDICATING LIGHT.
- WIREMOLD 2400 PLUGMOLD. NEMA 5-15R RECEPTACLES ON 12" CENTERS. ALTERNATE CIRCUITS.
- KITCHEN RECEPTACLE. SEE KITCHEN EQUIPMENT SCHEDULE.
- S — FLUSH-MOUNTED CEILING SPEAKER.
- FLUSH-MOUNTED FLOOR RECEPTACLE. HUBBELL B-2427.
- TV — FLUSH-MOUNTED FLOOR TELEPHONE JACK. HUBBELL B-2427.
- FLUSH-MOUNTED FLOOR DATA JACK. HUBBELL B-2427.
- A_M — AREA OF RESCUE MASTER STATION. LOCATE AS DIRECTED BY THE AHJ.
- A — AREA OF RESCUE CALL STATION. LOCATE AT EACH "AREA OF RESCUE" AS INDICATED ON THE ARCHITECTURAL PLANS. MOUNT SIGN ON WALL ABOVE.

RV	EXISTING ITEM TO BE REMOVED.
RM	EXISTING ITEM TO REMAIN.
RP	EXISTING ITEM TO BE REPLACED.
RL	EXISTING ITEM TO BE RELOCATED.
ER	EXISTING ITEM RELOCATED TO THIS LOCATION.

NOTES:
1. SEE DETAIL FOR STANDARD MOUNTING HEIGHTS OF ALL DEVICES, UNLESS OTHERWISE NOTED.
2. ALL DEVICES (SWITCHES AND RECEPTACLES) SHALL BE GREY WITH 302 STAINLESS STEEL COVER PLATES, UNLESS OTHERWISE NOTED.

NORTH CAROLINA ENERGY CODE

APPENDIX B (IBC 2002)
ELECTRICAL SUMMARY

METHOD OF COMPLIANCE:

☒ PRESCRIPTIVE ☐ PERFORMANCE ☐ ENERGY COST BUDGET

LIGHTING SCHEDULE

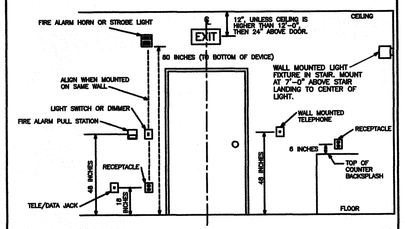
LAMP TYPE REQUIRED IN FIXTURE
NUMBER OF LAMPS IN FIXTURE
BALLAST TYPE USED IN THE FIXTURE
NUMBER OF BALLASTS IN FIXTURE
TOTAL WATTAGE PER FIXTURE
TOTAL INTERIOR WATTAGE SPECIFIED VS ALLOWED

→ SEE LIGHT FIXTURE SCHEDULE ON E-3.0.

1.51W/SF VS. 1.60W/SF

EQUIPMENT SCHEDULES WITH MOTORS (NOT USED FOR MECHANICAL SYSTEMS)

MOTOR HORSEPOWER	N/A
NUMBER OF PHASES	N/A
MINIMUM EFFICIENCY	N/A
MOTOR TYPE	N/A
NUMBER OF POLES	N/A



NOTES:
1. ALL DIMENSIONS ARE TO CENTER LINE OF DEVICE, UNLESS OTHERWISE NOTED.

1 MOUNTING HEIGHTS OF DEVICES — ELEVATION
NO SCALE

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MASTERPLANNING
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BARIUM SPRINGS HOME FOR CHILDREN

"LITTLE JOE'S CHAPEL/ TRAINING CENTER"

REV.	DATE	DESCRIPTION

DATE: OCTOBER 3, 2006

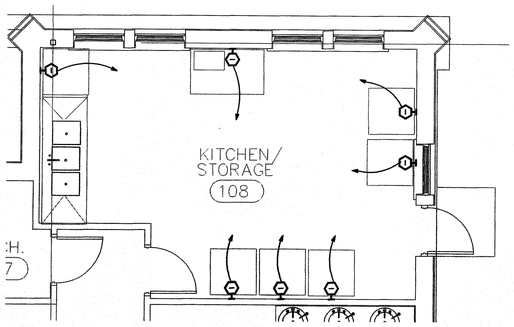
PROJECT NO.: 06100.02

TITLE: ELECTRICAL SPECIFICATIONS

DRAWING NO.: E-1.0

OPTIMA No.: 06539

— PRELIMINARY —
NOT FOR CONSTRUCTION

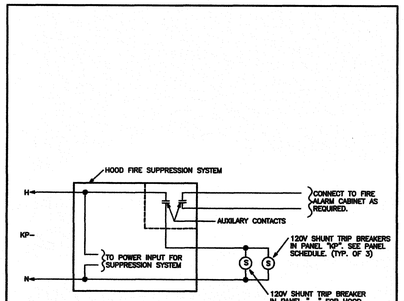


3 ENLARGED KITCHEN PLAN
1/4" = 1'-0"

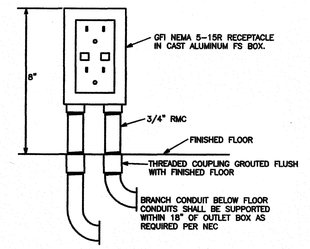
KITCHEN EQUIPMENT SCHEDULE

ITEM NO.	DESCRIPTION	LOAD KW	LOAD AMP	HP	VOLT	PHASE	MTG. HT.	REMARKS

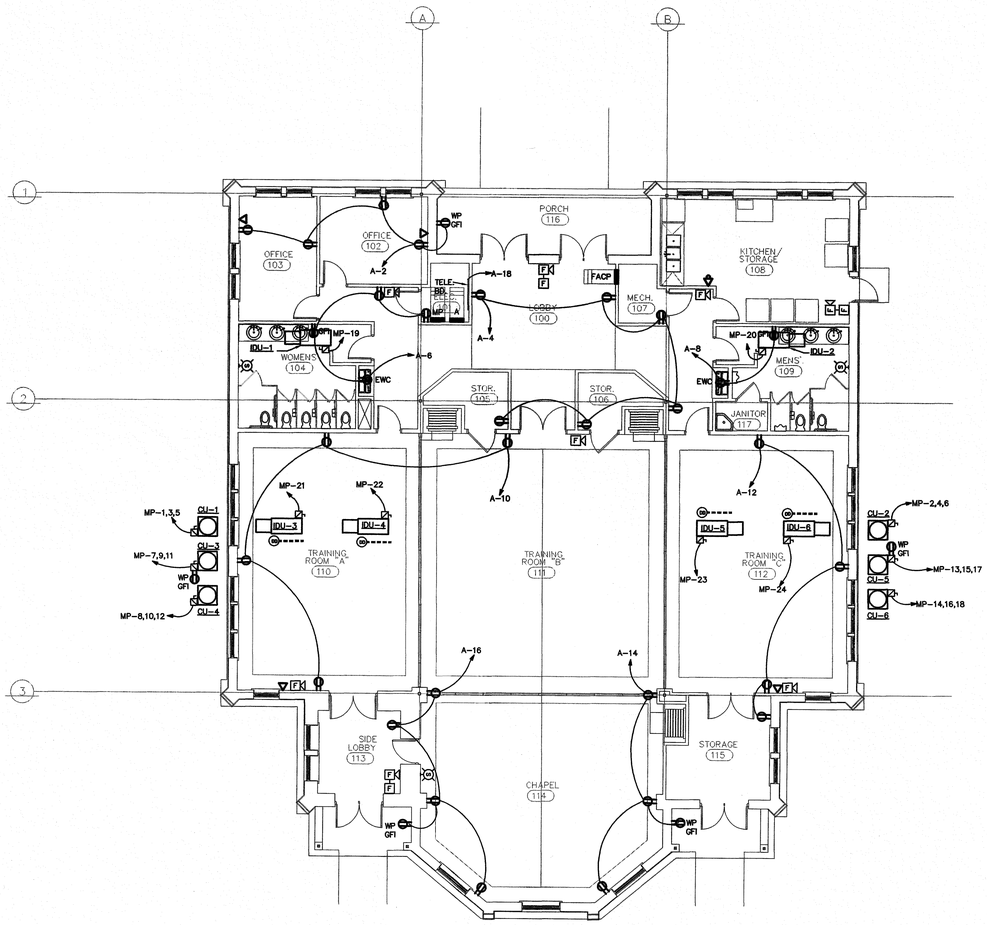
NOTES:
1. THE ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL ALL DISCONNECT SWITCHES, RECEPTACLE, ETC. TO MECHANICAL/PLUMBING AND KITCHEN EQUIPMENT AS REQUIRED. THE ELECTRICAL CONTRACTOR SHALL ALSO PROVIDE ALL CORDS, PLUGS, CABLES, ETC. ON EQUIPMENT REQUIRING SUCH ITEMS.
2. THE ELECTRICAL CONTRACTOR SHALL PROVIDE FINAL CONNECTIONS TO ALL MECHANICAL/PLUMBING AND KITCHEN EQUIPMENT AS REQUIRED.
3. ALL DISCONNECT SWITCHES, FUSE SIZES, PLUG CONFIGURATIONS, BREAKER SIZES, ETC., SHALL BE COORDINATED WITH SHOP DRAWINGS PRIOR TO INSTALLING. ANY EQUIPMENT INSTALLED INCORRECTLY BECAUSE OF LACK OF COORDINATION WILL BE REMOVED AND INSTALLED CORRECTLY AT THE ELECTRICAL CONTRACTOR'S EXPENSE.
4. ELEC. CONTRACTOR SHALL PULL A GROUND AND A NEUTRAL WITH ALL CIRCUITS, WHETHER SO DESIGNATED OR NOT.
5. ALL 15 AND 20 AMP RECEPTACLES IN KITCHEN SHALL BE GFI.
6. EXTEND FOUR 1"EC FROM KITCHEN PANEL TO ABOVE ACCESSIBLE CEILING FOR FUTURE.



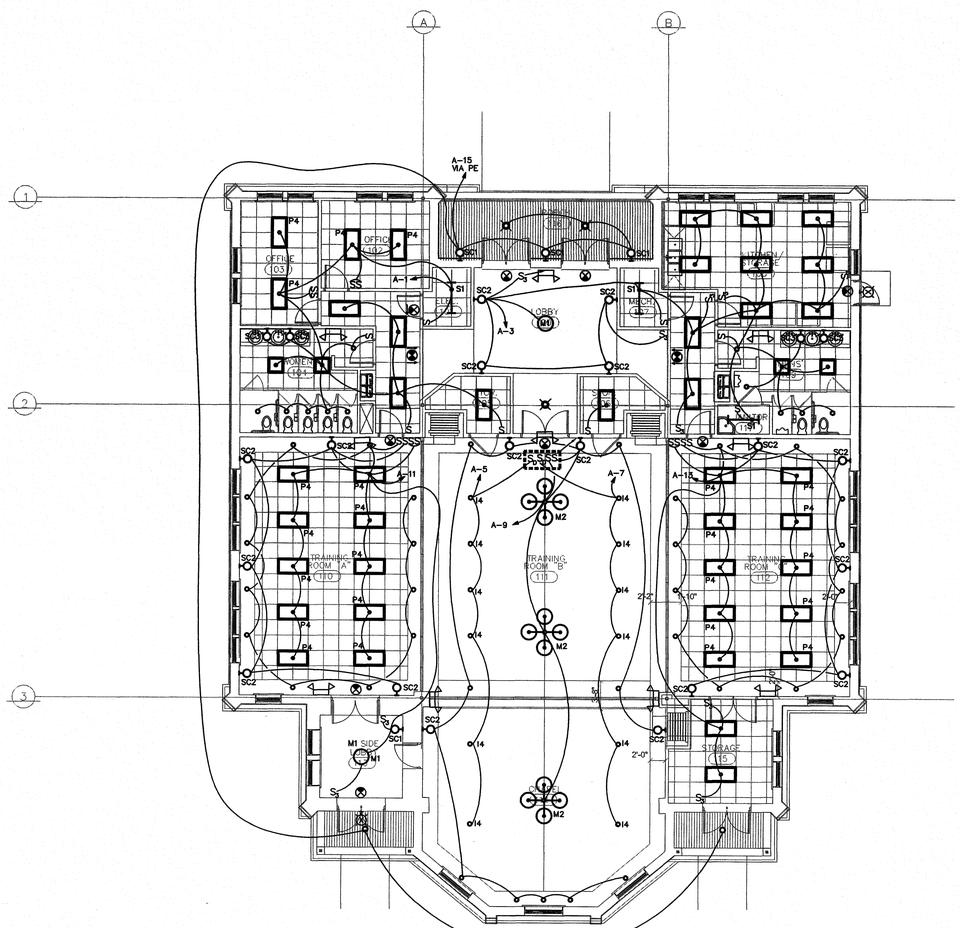
4 HOOD SHUTDOWN WIRING DETAIL
NO SCALE



5 STUBBED-UP RECEPTACLE DETAIL
NO SCALE



2 POWER PLAN
1/8" = 1'-0"



NOTES:
1. ALL 2X4 LIGHT FIXTURES ARE TYPE "B", UNLESS OTHERWISE NOTED.
2. ALL 2X2 LIGHT FIXTURES ARE TYPE "J-1", UNLESS OTHERWISE NOTED.
3. ALL DOWNLIGHT FIXTURES ARE TYPE "CF1", UNLESS OTHERWISE NOTED.
4. SEE REFLECTED CEILING PLAN FOR EXACT LIGHT FIXTURE LOCATIONS.
5. CONNECT ALL EMERGENCY AND EXIT LIGHT FIXTURES TO NEAREST 120V LIGHTING CIRCUIT AHEAD OF ANY SWITCHING.

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

— PRELIMINARY —
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BARIUM SPRINGS HOME FOR CHILDREN

"LITTLE JOE'S CHAPEL/ TRAINING CENTER"

REV.	DATE	DESCRIPTION

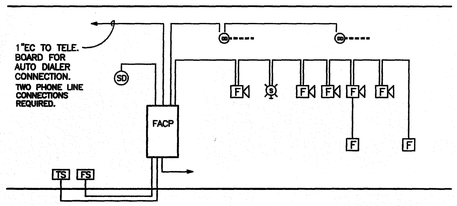
DATE: OCTOBER 3, 2006

PROJECT NO.: 06100.02

TITLE: ELECTRICAL PLANS

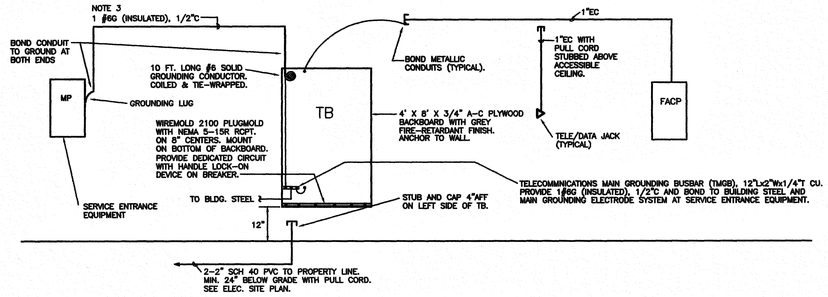
DRAWING NO. E-2.0

OPTIMA No.: 06539



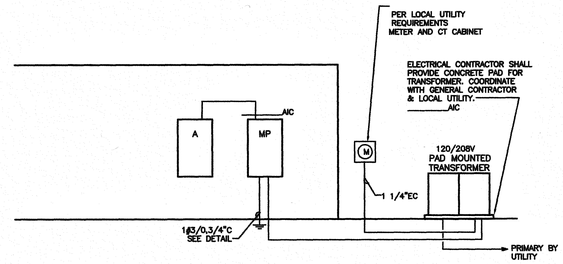
NOTES:
1. FACP SHALL HAVE A MINIMUM 24HR. BATTERY BACKUP.
2. FACP SHALL BE FULLY ANALOG ADDRESSIBLE.
3. FACP SHALL BE CONNECTED TO A UL APPROVED CENTRAL STATION.
4. ZONE PER NFPA 72 AND MANUFACTURER'S RECOMMENDATIONS WITH NO ONE ZONE EXCEEDING 15,000 S.F. PER FLOOR.
5. SEE PLANS FOR EXACT DEVICE QUANTITY AND LOCATIONS.
6. PROVIDE MULTI-TEMPORAL SOUNDING CAPABILITY AT ALL AUDIO DEVICES FOR EMERGENCY NOTIFICATION.
7. THE FIRE ALARM SYSTEM MANUFACTURER SHALL PROVIDE NOTIFICATION APPLIANCE CIRCUIT (NAC) POWER EXTENDERS AS REQUIRED.
8. THE DUCT SMOKE DETECTORS SHALL COMPLY WITH IFS 907.12.
9. COORDINATE LOCATIONS OF ALL SPRINKLER SYSTEM DEVICES, I.e. FLOW/TAMPER/PRESSURE SWITCHES, BELLS, ETC., WITH THE SPRINKLER CONTRACTOR.
10. THE EVACUATION TONE IS REQUIRED TO BE THREE BEAT TEMPORAL PATTERN.
11. PROVIDE REMOTE LIGHT FOR DUCT SMOKE DETECTOR ON CEILING WHERE UNIT IS ABOVE CEILING.
12. ALL STROBES WITHIN THE SAME AREA SHALL BE SYNCHRONIZED. CONTRACTOR SHALL INCLUDE UPDATING THE EXISTING STROBES WHERE REQUIRED.
13. ALL MAGNETIC DOOR HOLDERS SHALL BE OPERATED BY THE FIRE ALARM PANEL AND SHALL BE FAIL SAFE CLOSED.
14. THE CIRCUIT FEEDING THE FIRE ALARM PANEL IS DEDICATED FOR THE FIRE ALARM ONLY.
15. CONTRACTOR SHALL MODIFY EXISTING FIRE ALARM SYSTEM AS REQUIRED TO ACCOMODATE THE NEW FIRE ALARM DEVICES.

(3) FIRE ALARM RISER
DIAGRAMMATIC



NOTES: 1. FLOOR PLANS INDICATE THE EXACT QUANTITY AND LOCATION OF ALL TELEPHONE OUTLETS.
2. ALL TELEPHONE WIRING AND EQUIPMENT IS BY THE OWNER.
3. IF TB IS IN SAME ROOM AS SERVICE ENTRANCE DO NOT PROVIDE CONDUIT.

(2) TELEPHONE RISER DIAGRAM
NO SCALE



NOTES:
1. ALL DASHED ITEMS ARE EXISTING TO REMAIN, UNLESS OTHERWISE NOTED.

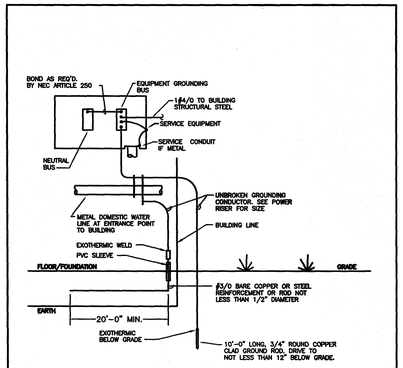
(1) POWER RISER DIAGRAM
NO SCALE

HVAC SCHEDULE

DEVICE	ELECTRICAL DATA WATTS	H.P.	VOLTAGE	
F-1	224W		120V-1ø	SWITCH W/ LIGHTS
F-2	80W		120V-1ø	
F-3	224W		120V-1ø	SWITCH W/ LIGHTS

DEVICE	FAN MOTOR H.P.	FLA	ELECTRICAL DATA AMPS	FUSE	VOLTAGE	DISCONNECT
IDU-1	½	7.9	10.0	15	120V-1ø	30/F15-1P
IDU-2	½	7.9	10.0	15	120V-1ø	30/F15-1P
IDU-3	¾	11.1	14.8	20	120V-1ø	30/F20-1P
IDU-4	¾	11.1	14.8	20	120V-1ø	30/F20-1P
IDU-5	¾	11.1	14.8	20	120V-1ø	30/F20-1P
IDU-6	¾	11.1	14.8	20	120V-1ø	30/F20-1P

DEVICE	COMPRESSOR LRA	RLA	FAN FLA	ELECTRICAL DATA MCA	FUSE	VOLTAGE	DISCONNECT
CU-1	91.0	13.6	1.4	18.4	25	208V-3ø	30/F25-3P-3R
CU-2	91.0	13.6	1.4	18.4	25	208V-3ø	30/F25-3P-3R
CU-3	125.0	16.0	1.4	21.4	30	208V-3ø	30/F30-3P-3R
CU-4	125.0	16.0	1.4	21.4	30	208V-3ø	30/F30-3P-3R
CU-5	125.0	16.0	1.4	21.4	30	208V-3ø	30/F30-3P-3R
CU-6	125.0	16.0	1.4	21.4	30	208V-3ø	30/F30-3P-3R



1 SERVICE GROUND DETAIL
NO SCALE

PANEL **MP**

120/208 VOLTS 3 ø 4 WIRE TYPE NQOD
SURFACE MOUNTING MAINS 600A MCB 10,000 AIC

LOAD (KVA)	LOAD SERVED	WIRE	TRIP	FRAME	CKT NO	A	B	C	CKT NO	FRAME	TRIP	WIRE	LOAD SERVED	LOAD (KVA)
		10		QOB	1				2	QOB		10		
5.3	CU-1	10	25	QOB	3				4	QOB	25	10	CU-2	5.3
		10		QOB	5				6	QOB		10		
		10		QOB	7				8	QOB		10		
6.2	CU-3	10	30	QOB	9				10	QOB	30	10	CU-4	6.2
		10		QOB	11				12	QOB		10		
		10		QOB	13				14	QOB		10		
6.2	CU-5	10	30	QOB	15				16	QOB	30	10	CU-6	6.2
		10		QOB	17				18	QOB		10		
1.0	IDU-1	12	20	QOB	19				20	QOB	20	12	IDU-2	1.0
1.5	IDU-3	12	20	QOB	21				22	QOB	20	12	IDU-4	1.5
1.5	IDU-5	12	20	QOB	23				24	QOB	20	12	IDU-6	1.5
0.0	SPARE	–	20	QOB	25				26	QOB	20	–	SPARE	0.0
0.0	SPARE	–	20	QOB	27				28	QOB	20	–	SPARE	0.0
0.0	SPARE	–	20	QOB	29				30	QOB	20	–	SPARE	0.0
0.0	SPACE ONLY	–	–	QOB	31				32	QOB	–	–	SPACE ONLY	0.0
0.0	SPACE ONLY	–	–	QOB	33				34	QOB	–	–	SPACE ONLY	0.0
0.0	SPACE ONLY	–	–	QOB	35				36	QOB	–	–	SPACE ONLY	0.0
		4/0		QOB	37				38	QOB	–	–	SPACE ONLY	0.0
0.0	PANEL 'A'	4/0	225	QOB	39				40	QOB	–	–	SPACE ONLY	0.0
		4/0		QOB	41				42	QOB	–	–	SPACE ONLY	0.0

LOAD	KVA
LIGHTS	0.0
HEATING	0.0
COOLING	43.4
VENTILLATION	0.0
MOTORS	0.0
KITCHEN	0.0
RECEPTACLES	0.0
WATER HEATER	0.0
MISC.	0.0
SPARE	0.0
TOTAL	0.0

NOTES
1. UL LISTED FOR SERVICE ENTRANCE.

PANEL **A**

120/208 VOLTS 3 ø 4 WIRE TYPE NQOD
SURFACE MOUNTING MAINS 225A MLO 10,000 AIC

LOAD (KVA)	LOAD SERVED	WIRE	TRIP	FRAME	CKT NO	A	B	C	CKT NO	FRAME	TRIP	WIRE	LOAD SERVED	LOAD (KVA)
0.9	LTG	12	20	QOB	1				2	QOB	20	12	RCPT	0.9
1.3	LTG	12	20	QOB	3				4	QOB	20	12	RCPT	1.1
1.5	LTG	12	20	QOB	5				6	QOB	20	12	RCPT	0.9
1.5	LTG	12	20	QOB	7				8	QOB	20	12	RCPT	0.6
1.1	LTG	12	20	QOB	9				10	QOB	20	12	RCPT	0.8
1.4	LTG	12	20	QOB	11				12	QOB	20	12	RCPT	0.8
1.4	LTG	12	20	QOB	13				14	QOB	20	12	RCPT	0.8
0.2	EXTERIOR LTG	10	20	QOB	15				16	QOB	20	12	RCPT	0.9
0.0	SPARE	–	20	QOB	17				18	QOB	20	12	TELEPHONE BOARD *	0.5
0.0	SPARE	–	20	QOB	19				20	QOB	20	–	SPARE	0.0
0.0	SPARE	–	20	QOB	21				22	QOB	20	–	SPARE	0.0
0.0	SPARE	–	20	QOB	23				24	QOB	20	–	SPARE	0.0
0.0	SPARE	–	20	QOB	25				26	QOB	20	–	SPARE	0.0
0.0	SPARE	–	20	QOB	27				28	QOB	20	–	SPARE	0.0
0.0	SPARE	–	20	QOB	29				30	QOB	20	–	SPARE	0.0
0.0	SPACE ONLY	–	–	QOB	31				32	QOB	–	–	SPACE ONLY	0.0
0.0	SPACE ONLY	–	–	QOB	33				34	QOB	–	–	SPACE ONLY	0.0
0.0	SPACE ONLY	–	–	QOB	35				36	QOB	–	–	SPACE ONLY	0.0
0.0	SPACE ONLY	–	–	QOB	37				38	QOB	–	–	SPACE ONLY	0.0
0.0	SPACE ONLY	–	–	QOB	39				40	QOB	–	–	SPACE ONLY	0.0
0.0	SPACE ONLY	–	–	QOB	41				42	QOB	–	–	SPACE ONLY	0.0

LOAD	KVA
LIGHTS	9.3
HEATING	0.0
COOLING	0.0
VENTILLATION	0.0
MOTORS	0.0
KITCHEN	0.0
RECEPTACLES	0.0
WATER HEATER	0.0
MISC.	0.5
SPARE	0.0
TOTAL	0.0

NOTES
1. * – INDICATES HANDLE LOCK-ON DEVICE.
2. ** – INDICATES SHUNT TRIP BREAKER.

LIGHT FIXTURE SCHEDULE

MARK	DESCRIPTION	LAMPS (NO SUBSTITUTIONS)	TOTAL FIXTURE WATTAGE	BALLASTS (NO SUBSTITUTIONS)	VOLTAGE	MANUFACTURER	DETAILS
A1	2X2 ACRYLIC LAY-IN FLUORESCENT.	3-F017/835/XPS/ECO 6/ECO T8 OCTRON	40W	OSRAM SYLVANIA QUICKTRONIC QHE3X32T8/UNV ISL-SC BALLAST. BALLAST FACTOR SHALL BE 0.78	120V	LITHONIA 2SPBG317-A12.125 METALUX 2GCB-317-A125 DAYBRIGHT 2SPG317-FS21 COLUMBIA STB22-317-FS-A12	0.125" THICK, #12 ACRYLIC LENS. WHITE BAKED ENAMEL FINISH.
A3	2X4 ACRYLIC LAY-IN FLUORESCENT.	2-F028/835/XP/SS/ECO T8 OCTRON	48W	OSRAM SYLVANIA QUICKTRONIC QHE2X32T8/UNV ISL-SC BALLAST. BALLAST FACTOR SHALL BE 0.78	120V	LITHONIA 2SPBG131-A12.125 METALUX 2GCB-232-A125 DAYBRIGHT 2SPG232-FS21 COLUMBIA STB24-232G-FS-A12	0.125" THICK, #12 ACRYLIC LENS. WHITE BAKED ENAMEL FINISH.
P4	2X4 18-CELL PARABOLIC LAY-IN FLUORESCENT.	3-F028/835/XP/SS/ECO T8 OCTRON	73W	OSRAM SYLVANIA QUICKTRONIC 1-QHE2X32T8/UNV ISL-SC BALLAST & 1-QHE1X32T8/UNV ISL-SC BALLAST. BALLAST FACTOR SHALL BE 0.78	120V	LITHONIA 2PM3WG-332-1BLD DAYBRIGHT 2LP3FS332-36AL COLUMBIA P4D24-332G-LD36-S METALUX 2EP3GX-332S36	3 INCH DEEP, SEMI-SPECULAR NATURAL ANODIZED ALUMINUM LOUVER. WHITE BAKED ENAMEL FINISH WITH A BLACK REVEAL AROUND LOUVER. 2 BALLAST COVERS. NOTE 4.
CF1	RECESSED FLUORESCENT DOWNLIGHT	CF26DT/E/835	30W	OSRAM SYLVANIA QUICKTRONIC QTP1X26/32/42CF/UNV BALLAST.	120V	GOTHAM AFV26TRT-6AR PORTFOLIO C6042-1E-6051-LI ARCHITECTUR CFTR32ED-STFB02 OMEGA OM626QPL-CS	6" APERATURE. VERTICALLY MOUNTED LAMP. ALZAK REFLECTOR.
I4	RECESSED INCANDESCENT DOWNLIGHT	250Q/CL HALOGEN	250W	N/A	120V	LITHONIA GQ-250-W-6AR	CLEAR ALZAK REFLECTOR. TEMPERED GLASS LENS. SOLID ALUMINUM HEAT SINK. SLOPE ADAPTER. 6" APERTURE.
M1	PENDANT MOUNTED FLUORESCENT	4-CF26DT/E/835	60W	ELECTRONIC BALLAST	120V	SHAPER 415D-LB-24-CFL/4/13-120V-SN	SATIN NICKEL FINISH W/ WHITE LUMINOUS BOWL. 24" DIAMETER. MOUNT @ 10'-0" A.F.F.
M2	PENDANT MOUNTED FLUORESCENT	16-CF26DT/E/835	240W	ELECTRONIC BALLAST	120V	SHAPER 415D-LB-24-CFL/4/13-120V-SN-TSS4B	SATIN NICKEL FINISH W/ 4-WHITE LUMINOUS BOWLS. 24" DIAMETER. MOUNT @ 14'-6" A.F.F.
SC1	FLUORESCENT SCONCE	2-14W T5 MINI BIPIN	40W	ELECTRONIC BALLAST	120V	SHAPER 674-WP-31-T5/2/14-120V-CAL	WHITE ACRYLIC SHADE. CLEAR ANODIZED ALUMINUM FINISH. WET LOCATION LABEL. MOUNT @ 7'-0" A.F.F.
SC2	FLUORESCENT SCONCE	13W COMPACT FL.	20W	ELECTRONIC BALLAST	120V	EUREKA 3211B-SC-WH	WHITE BLOWN GLASS SHADE. SATIN CHORME TRIM. MOUNT @ 6'-6" A.F.F.
SC3	FLUORESCENT SCONCE	14W T5 MINI BIPIN	20W	ELECTRONIC BALLAST	120V	EUREKA 3531-S-C-WH	WHITE BLOWN GLASS DIFFUSER. BRUSHED ALUMINUM TRIM. MOUNT BETWEEN MIRRORS.
S1	4 FT. FLUORESCENT STRIP	2-F028/835/XP/SS/ECO T8 OCTRON	48W	OSRAM SYLVANIA QUICKTRONIC QHE2X32T8/UNV ISL-SC BALLAST. BALLAST FACTOR SHALL BE 0.78	120V	LITHONIA C232-OCTRON METALUX SS232-OCTRON WILLIAMS 76-4-232OC LSI S232	
	EXTERIOR LED EMERGENCY LIGHT	LED	5.6W	N/A	12V	CHLORIDE SYSTEMS P1CBKO	SINGLE GANG J-BOX. DIE-CAST ALUMINUM HOUSING, BLACK FINISH. WET LABEL. MOUNT @ 18" ABOVE FINISH GRADE. SUPPLY WITH REMOTE MOUNTED EMERGENCY BATTERY PACK FOR 90 MIN OPERATION. MOUNT @ 18" ABOVE FINISH GRADE.
	LED EDGE LIT EXIT SIGN	LED	2.5W/FACE		120V	LITHONIA PRECISE – LRP ALKCO EDGE-GLO SURE-LITES ELX SERIES EVENLITE ES SERIES	CAST ALUMINUM HOUSING WITH SELF-CONTAINED POWER PACK FOR 90MIN OPERATION. NOTE 9. RED LETTERS. INJECTION MOLDED HIGH-IMPACT ACRYLIC PANEL
	EMERGENCY LIGHT	2-7.2W HALOGEN	20W		120V	DAYBRIGHT CF SERIES PRESCOLITE EMAX SURE-LITES CU-2	POLYCARBONATE HOUSING WITH SELF-CONTAINED POWER PACK FOR 90MIN OPERATION. WHITE HOUSING.

FIXTURE NOTES:

1. ALL LAMPS SHALL BE OSRAM/SYLVANIA, UNLESS OTHERWISE NOTED. ALL FLUORESCENT LAMPS SHALL BE 3500K AS SPECIFIED. ALL FLUORESCENT BALLASTS SHALL BE ELECTRONIC AS SPECIFIED. SUBMITTAL SHEETS SHALL BE SUBMITTED WITH FIXTURE SUBMITTALS. FLUORESCENT LAMP AND BALLAST WARRANTY SHALL BE COMPLETED BY CONTRACTOR AND TURNED OVER TO OWNER AT END OF PROJECT.
2. SUBSTITUTIONS APPROVED BY THE ENGINEER PREVIOUS TO BID ARE ACCEPTABLE AS LONG AS THEY ARE EQUAL TO THE FIXTURE SPECIFIED, UNLESS OTHERWISE NOTED. THIS INCLUDES LENS, COLORS, REFLECTORS, PHOTOMETRICS, HOUSING MATERIALS, FINISHES, ETC. ALL SUBSTITUTIONS SHALL BE SUBMITTED TO THE ENGINEER WITH CUT SHEETS FOR APPROVAL. SUBSTITUTE FIXTURES SHALL BE PRICED WITH THE SPECIFIED FIXTURE AND LISTED SEPARATELY SO THE ENGINEER AND OWNER CAN MAKE AN INFORMED DECISION.
3. ALL INCANDESCENT LIGHT FIXTURES SHALL HAVE AN U.L. LABEL INDICATING THAT THE LAMP WATTAGE SPECIFIED ABOVE IS THE MAXIMUM ALLOWABLE IN FIXTURE.
4. ALL 3 AND 4 LAMP ELECTRONIC BALLASTS SHALL HAVE INBOARD/OUTBOARD SWITCHING AS INDICATED ON THE DRAWINGS. TANDEM FIXTURES ARE ALLOWED TO FACILITATE INBOARD/OUTBOARD SWITCHING.
5. SEE ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT FIXTURE LOCATIONS.
6. ALIGN ALL HORIZONTAL FLUORESCENT DOWNLIGHTS SO THAT THE COMPACT FLUORESCENT LAMPS ARE ALIGNED IN THE SAME DIRECTION.
7. FIXTURES SHALL BE FIRE RATED.
8. FIXTURES SHALL BE AIR-RETURN.
9. ALL METAL HALIDE LAMPS SHALL HAVE A CRI OF NOT LESS THAN 70.
10. ALL ELECTRONIC BALLAST FOR T5(5/8" DIAMETER) LAMPS AND BELOW SHALL HAVE END OF LIFE SHUTDOWN PROTECTION.
11. PROVIDE LOW-TEMP (0°F MINIMUM) BALLAST(S) FOR ALL FIXTURES INSTALLED IN EXTERIOR LOCATIONS OR OTHER AREAS SUBJECT TO COLD WEATHER.
12. SUSPEND ALL FOUR CORNERS WITH WIRE TO STRUCTURE. DO NOT ALLOW GRID ALONE TO SUPPORT FIXTURE.
13. DIMMING OF FLUORESCENT FIXTURES SHALL BE WITH A SWITCH AS RECOMMENDED BY THE BALLAST MANUFACTURER.
14. MODULAR WIRING SYSTEMS (SUCH AS RELOC) ARE AN ACCEPTABLE WIRING METHOD FOR ANY OR ALL LIGHT FIXTURES IN THIS PROJECT. SUBMIT SHOP DRAWINGS FOR ANY SUCH SYSTEM FOR THE ENGINEER'S REVIEW PRIOR TO INSTALLATION.

— PRELIMINARY —
NOT FOR CONSTRUCTION

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BARIUM SPRINGS HOME FOR CHILDREN

"LITTLE JOE'S CHAPEL/ TRAINING CENTER"

REV.	DATE	DESCRIPTION

DATE: OCTOBER 3, 2006

PROJECT NO.: 06100.02

TITLE: ELECTRICAL RISERS

DRAWING NO. E-3.0

OPTIMA No.: 06539