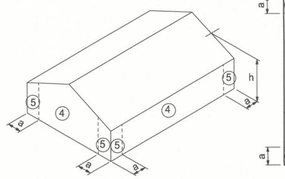
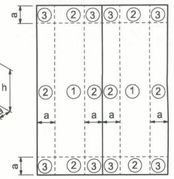
ALL WIND LOADS ARE IN ACCORDANCE WITH SECTION 1609, FLORIDA BUILDING CODE, 2010, WITH REVISIONS		
FLOOR AND ROOF LIVE LOADS		
UNINHABITABLE ATTICS:	20 PSF	
HABITABLE ATTICS, BEDROOM:	30 PSF	
ALL OTHER ROOMS:	40 PSF	
GARAGE:	40 PSF	
ROOFS:	20 PSF UNIFORM	
WIND DESIGN DATA		
ULTIMATE WIND SPEED:	120 MPH	
NOMINAL (BASIC) WIND SPEED:	93 MPH	
RISK CATEGORY:	II	
WIND EXPOSURE:	B	
ENCLOSURE CLASSIFICATION:	ENCLOSED	
INTERNAL PRESSURE COEFFICIENT:	0.18 +/-	
COMPONENTS AND CLADDING		
ROOFING ZONE 1:	16.0 PSF MAX.	-16.0 PSF MIN.
ROOFING ZONE 2:	16.0 PSF MAX.	-18.2 PSF MIN.
ROOFING ZONE 3:	16.0 PSF MAX.	-18.2 PSF MIN.
ROOFING AT ZONE 2 OVERHANGS:	-26.4 PSF MIN.	
ROOFING AT ZONE 3 OVERHANGS:	-26.4 PSF MIN.	
STUCCO, CLADDING, DOORS AND WINDOWS		
ROOFING ZONE 4:	16.0 PSF MAX.	-16.9 PSF MIN.
ROOFING ZONE 5:	16.0 PSF MAX.	-20.9 PSF MIN.
9' WIDE O/H DR.:	16.0 PSF MAX.	-16.0 PSF MIN.
16' WIDE O/H DR.:	16.0 PSF MAX.	-16.0 PSF MIN.

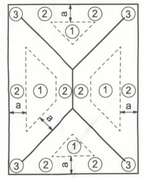
WALLS



GABLE ROOFS



HIP ROOFS



a: 10% of least horizontal dim. or 0.4h, whichever is smaller, but not less than either 4% of least horizontal dimension or 3 ft.
h: mean roof height, in feet.

COMPONENTS AND CLADDING

STRUCTURAL DESIGN CRITERIA

CODES: FLORIDA BUILDING CODE, 2010 EDITION WITH SUPPLEMENTS
BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318-05)
SPECIFICATIONS FOR STRUCTURAL CONCRETE BUILDINGS (ACI 301-05)
BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES (ACI 530-05)
NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION, 2001 EDITION
APA PLYWOOD DESIGN SPECIFICATION

LIVE LOADS:

ROOF	20 PSF (REDUCIBLE)
RESIDENTIAL FLOOR, UNLESS OTHERWISE INDICATED	40 PSF
BALCONIES	40 PSF
STAIRS	40 PSF
LIGHT PARTITIONS (DEAD LOAD), U.N.O.	20 PSF

WIND LOADS (F.B.C.): WIND LOADS BASED ON FBC, SECTION 1609
WIND VELOCITY: 120 M.P.H., USE FACTOR: 1.0

CONCRETE STRENGTH @ 28 DAYS:

ALL CONCRETE UNLESS OTHERWISE INDICATED	2500 PSI
PEA GRAVEL CONCRETE FOR MASONRY CELLS ONLY (DO NOT USE FOR CONCRETE COLUMNS OR TIE BEAMS)	3000 PSI

REINFORCING:

WELDED WIRE FABRIC SHALL CONFORM TO	ASTM A185
ALL REINFORCING BARS	ASTM A615-40 40,000 PSI
ALL STIRRUPS AND TIES	ASTM A615-40 40,000 PSI

CONCRETE MASONRY UNITS: ASTM C90-99b, STANDARD WEIGHT UNITS, fm=1500 PSI
MORTAR TYPE "S" 1800 PSI
CONCRETE GROUT 3000 PSI
CONTINUOUS MASONRY INSPECTION IS REQUIRED DURING CONSTRUCTION

STRUCTURAL STEEL: ALL STRUCTURAL AND MISCELLANEOUS STEEL A36 36,000 PSI, U.N.O
SHOP AND FIELD WELDS: E70XX ELECTRODES
ALL BOLTS CAST IN CONCRETE: ASTM A36 OR ASTM A-307

WOOD FRAMING: BEAMS, RAFTERS, JOIST, PLATES, ETC. U.N.O.
NO. 2 SOUTHERN YELLOW PINE (19% M.C.)
ROOF DECK: PLYWOOD C-C/C-D, EXTERIOR, or OSB
FLOOR SHEATHING: T&G A-C GROUP 1 APA RATED (48/24)
WALL SHEATHING: PLYWOOD C-C/C-D, EXTERIOR OR OSB
VERSA LAM BEAM Fb = 2900 PSI (2.0E)
WOOD COLS. PARALLAM 2.0E U.N.O.

WOOD ROOF TRUSSES: DESIGN LOADS:

TOP CHORD LIVE AND DEAD LOAD:	30 PSF
BOTTOM CHORD DEAD LOAD:	10 PSF
TOTAL:	40 PSF

SEE DRAWINGS FOR SPECIAL CONCENTRATED LOADS. DESIGN FOR NEW WIND UPLIFT AS PER SPECIFIED CODES, DEDUCTING A MAXIMUM OF 5 P.S.F. DEAD LOAD, BUT NOT EXCEEDING ACTUAL DEAD LOAD.

SOIL BEARING VALUE: ASSUMED ALLOWABLE SOIL BEARING PRESSURE AFTER COMPACTION: 1,500 PSF
SEE SOILS REPORT AND SPECIFICATIONS FOR COMPACTION REQUIREMENTS
IF SOIL CONDITIONS IN THE PROJECT DO NOT MEET OR EXCEED THE CAPACITY THE GENERAL CONTRACTOR SHALL CONTACT THE ENGINEER PRIOR TO FOUNDATION POUR FOR VERIFICATION OF FOUNDATION DESIGN.

PROJECT LOCATION

MCDUFFIE
RESIDENCE

ABBREVIATIONS

A.B.	Anchor Bolt	Flr.	Floor	Plt. Ht.	Plate Height
Abv.	Above	Fdn.	Foundation	Plt Sh.	Plant Shelf
A/C	Air-Conditioner	Flr. Sys.	Floor System	PSF	Pounds per square foot
Adj.	Adjustable	F.Pl.	Fireplace	P.T.	Pressure Treated
A.F.F.	Above Finished Floor	Ft.	Foot / Feet	Pwd.	Powder Room
A.H.U.	Air Handler Unit	Ftg.	Footing	Rad.	Radius
ALT.	Alternate	FX	Fixed	Ref.	Refrigerator
B.C.	Base Cabinet	Galv.	Galvanized	Req'd.	Required
B.F.	Bifold Door	G.C.	General Contractor	Rm.	Room
Bk Sh	Book Shelf	G.F.I.	Ground Fault Interrupter	Rnd.	Round
Bm.	Beam	G.T.	Girder Truss	R/SH	Rod and Shelf
BOT.	Bottom	Hdr.	Header	SD.	Smoke Detector
B.P.	Bypass door	Hgt.	Height	S.F.	Square Ft.
Brg.	Bearing	HB	Hose Bibb	Sh.	Shelves
Cir.	Circle	Int.	Interior	SHT	Sheet
Clg.	Ceiling	K/Wall	Kneewall	S.L.	Side Lights
Col.	Column	K.S.	Knee Space	S.P.F.	Spruce Pine Fir
Comp.	A/C Compressor	Laun.	Laundry	Sq.	Square
C.T.	Ceramic Tile	Lav.	Lavatory	S.Y.P.	Southern Yellow Pine
D	Dryer	L.F.	Linear Ft.	Temp.	Tempered
Dec.	Decorative	L.T.	Laundry Tub	Thik'n.	Thicken
Ded.	Dedicated Outlet	Mas.	Masonry	T.O.B.	Top of Block
Dbl.	Double	Max	Maximum	T.O.M.	Top of Masonry
Dia.	Diameter	M.C.	Medicine Cabinet	T.O.P.	Top of Plate
Disp.	Disposal	MDP	Master Distribution Panel	Trans.	Transom Window
Dist.	Distance	Mfgr.	Manufacturer	Typ.	Typical
D.S.	Drawer Stack	Micro.	Microwave	UCL	Under Cabinet Lighting
D.V.	Dryer Vent	Min	Minimum	U.N.O.	Unless Noted Otherwise
D.W.	Dishwasher	M.L.	Microlam	VB	Vanity Base
Ea.	Each	Mir.	Mirror	Vert.	Vertical
E.W.	Each Way	Mono	Monolithic	V.L.	Versalam
Elec.	Electrical	N.T.S.	Not to Scale	VTR	Vent through Roof
Elev.	Elevation	Opn'g.	Opening	W	Washer
Ext.	Exterior	Opt.	Optional	W/	With
Exp.	Expansion	Pc.	Piece	W/C	Water Closet
F.B.C.	Florida Bldg. Code	Ped.	Pedestal	W.A.	Wedge Anchor
Fin. Flr.	Finished Floor	P.L.	Parallam	Wd	Wood
F.G.	Fixed Glass	PLF	Pounds per linear foot	WP	Water Proof

COLUMBIA COUNTY BUILDING DEPARTMENT
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Date
Code Compliance
PLANS EXAMINER

INDEX OF SHEETS

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REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

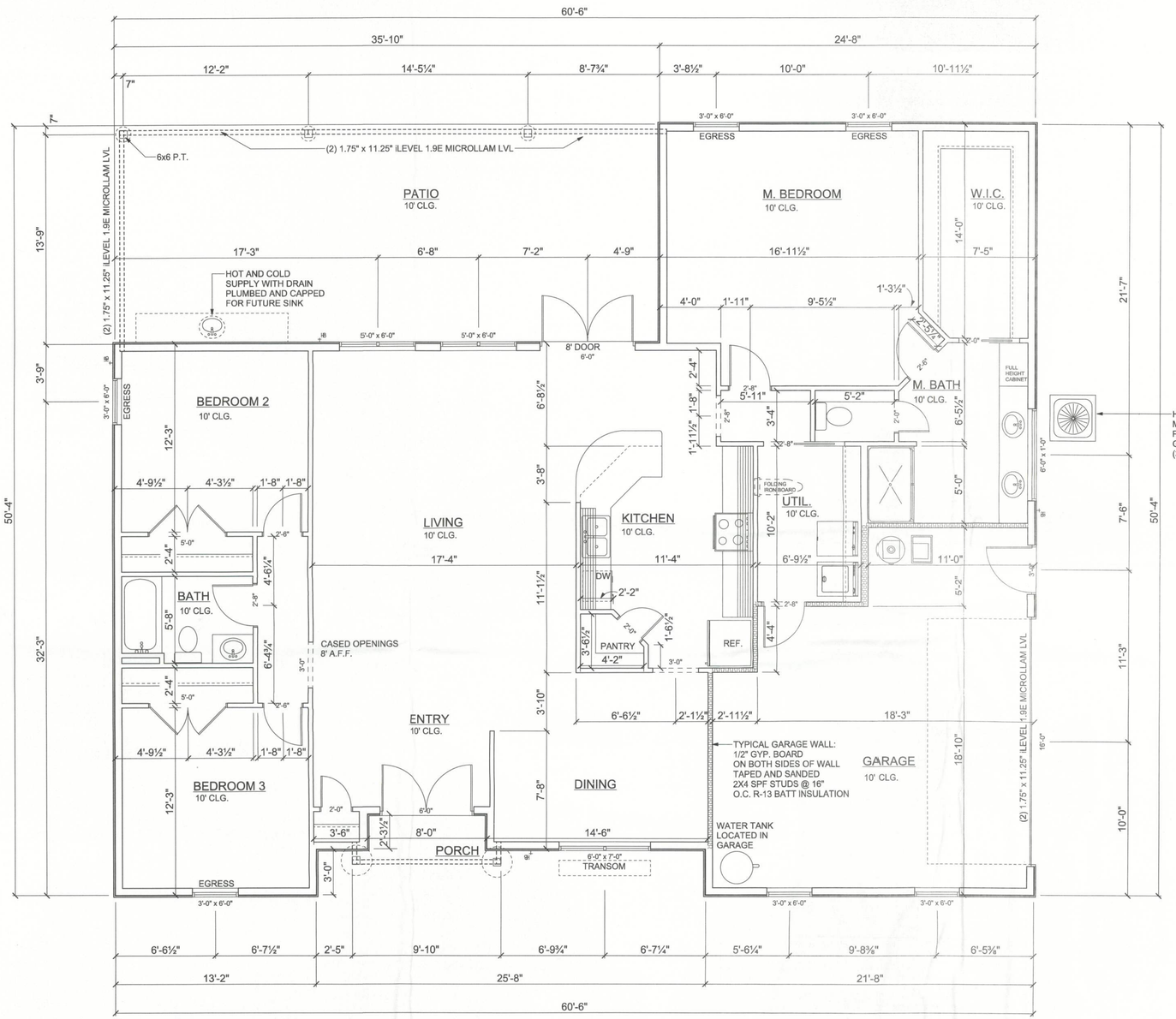
CES
Crews Engineering Services, LLC
CERTIFICATE OF AUTHORIZATION NO. 28022
P.O. BOX 970
LAKE CITY, FL 32056
PHONE: 386.754.4085
3-22-2013
Brett A. Crews, P.E. 65592

DRAWN BY: TM
APPROVED BY: BC

MCDUFFIE RESIDENCE

COVER SHEET

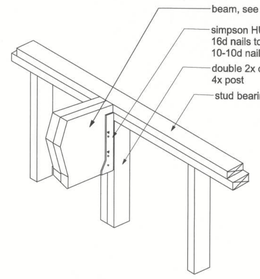
CES PROJECT NO.: 2013-011
SHEET:



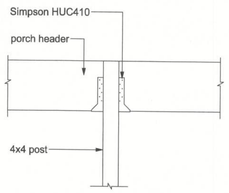
FLOOR PLAN
SCALE: 1/4" = 1'-0"

HVAC UNITS SHALL BE MOUNTED TO CONCRETE PAD w/ #14 SCREWS w/ GASKETED WASHERS, (3) PER SIDE

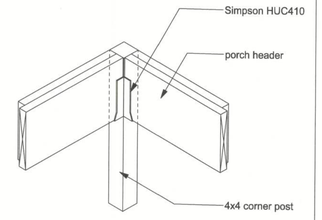
AREA SUMMARY	
HEATED	2,005 SF
GARAGE	452 SF
PORCH	26 SF
PATIO	508 SF
TOTAL	2,991 SF



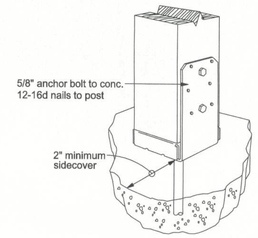
BEAM/WALL CONNECTION
MAX. CAPACITY - 3640# DOWN; 1810# UPLIFT NOT TO SCALE



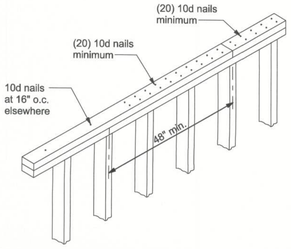
INTERMEDIATE POST
NTS



CORNER POST
NTS



Simpson ABU66

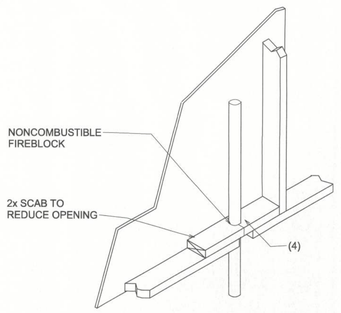


TOP PLATE SPLICE DETAILS
SCALE: 1/2" = 1'-0"

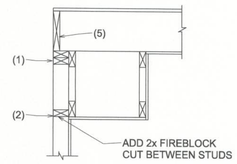
FIREBLOCKING NOTES:

FIREBLOCKING SHALL BE INSTALLED IN WOOD FRAME CONSTRUCTION IN THE FOLLOWING LOCATIONS:

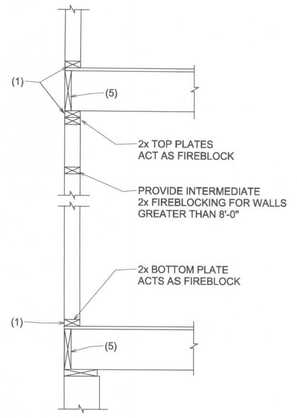
1. IN CONCEALED SPACES OF STUD WALLS AND PARTITIONS INCLUDING FURRED SPACES AT CEILING AND FLOOR LEVELS.
2. AT ALL INTERCONNECTIONS BETWEEN CONCEALED VERTICAL AND HORIZONTAL SPACES SUCH AS OCCUR AT SOFFITS, DROP CEILINGS, COVE CEILINGS, ETC.
3. IN CONCEALED SPACES BETWEEN STAIR STRINGERS AT THE TOP AND BOTTOM OF THE RUN.
4. AT OPENINGS AROUND VENTS, PIPES, DUCTS, CHIMNEYS AND FIREPLACES AT CEILING AND FLOOR LEVELS WITH PYROPANEL MULTIFLEX SEALANT
5. AT ALL INTERCONNECTIONS BETWEEN CONCEALED VERTICAL STUD WALL OR PARTITION SPACES AND CONCEALED SPACES CREATED BY AN ASSEMBLY OF FLOOR JOISTS, FIREBLOCKING SHALL BE PROVIDED FOR THE FULL DEPTH OF THE JOISTS AT THE ENDS AND OVER THE SUPPORTS.



PENETRATIONS



SOFFIT/DROPPED CLG.



PLATFORM FRAMING

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

CES
Crews Engineering Services, LLC
CERTIFICATE OF AUTHORIZATION NO. 28022
P.O. BOX 970
LAKE CITY, FL 32056
PHONE: 386.754.4085
3.22.2013
Brett A. Crews, P.E. 65592

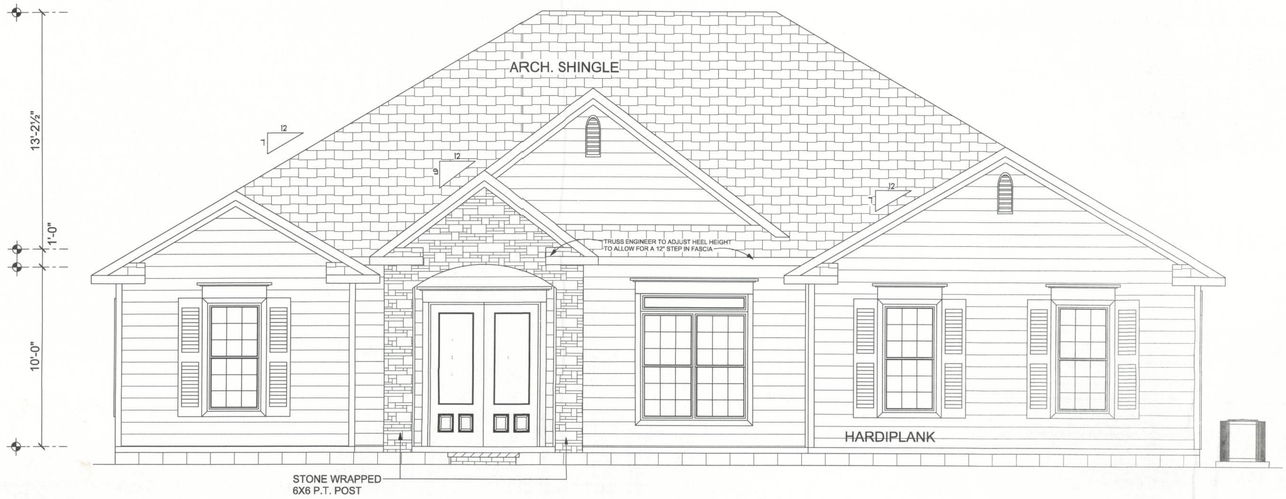
DRAWN BY:	APPROVED BY:
TM	BC

MCDUFFIE RESIDENCE

FLOOR PLAN

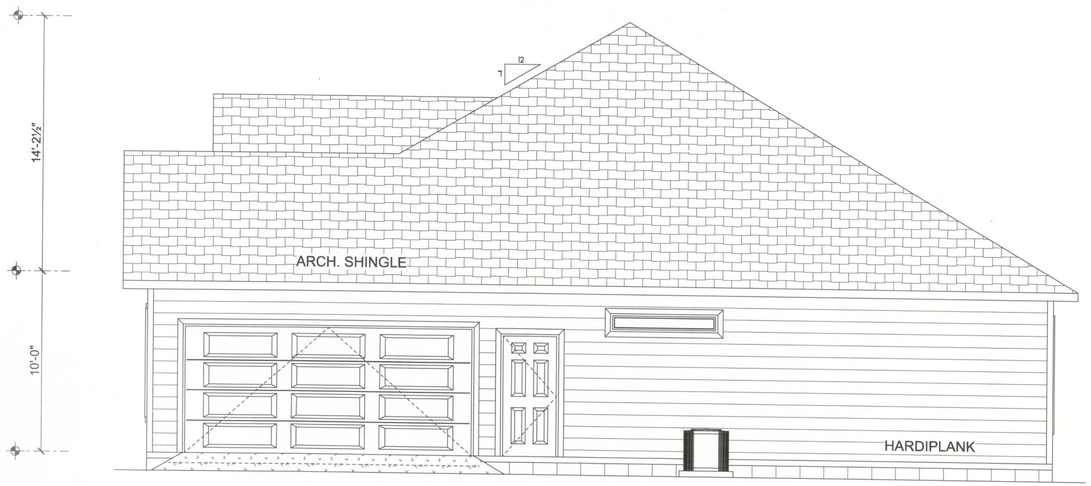
CES PROJECT NO.: 2013-011

SHEET: A-1

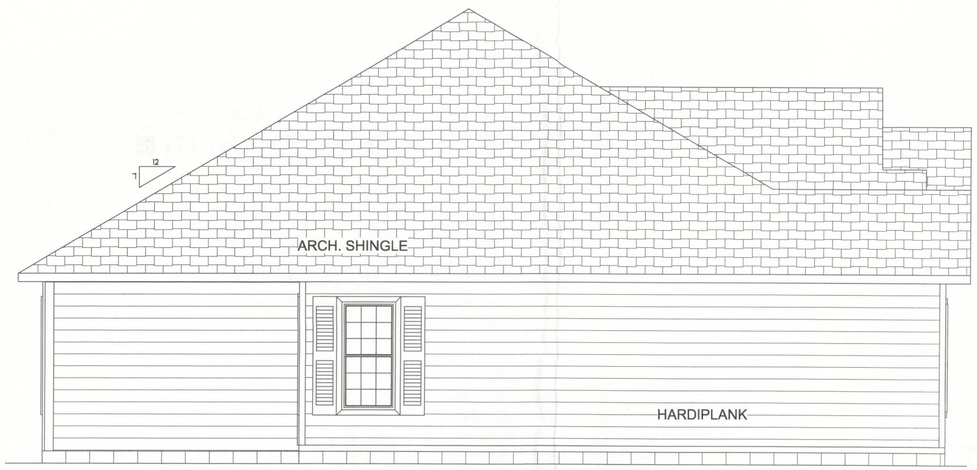


FRONT ELEVATION
SCALE: 1/4" = 1'-0"

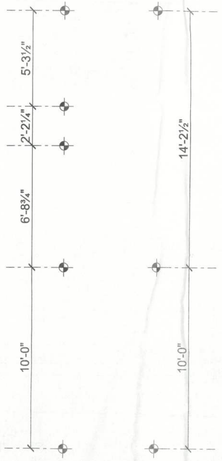
NOTE:
THESE ELEVATIONS ARE TO ACT AS A VISUAL REPRESENTATION OF THE PROJECT AND ARE NOT TO BE SCALED OR USED AS STRUCTURAL DRAWINGS OF ANY KIND.



RIGHT ELEVATION
SCALE: 1/4" = 1'-0"



LEFT ELEVATION
SCALE: 1/4" = 1'-0"



REAR ELEVATION
SCALE: 1/4" = 1'-0"

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DRAWN BY: TM

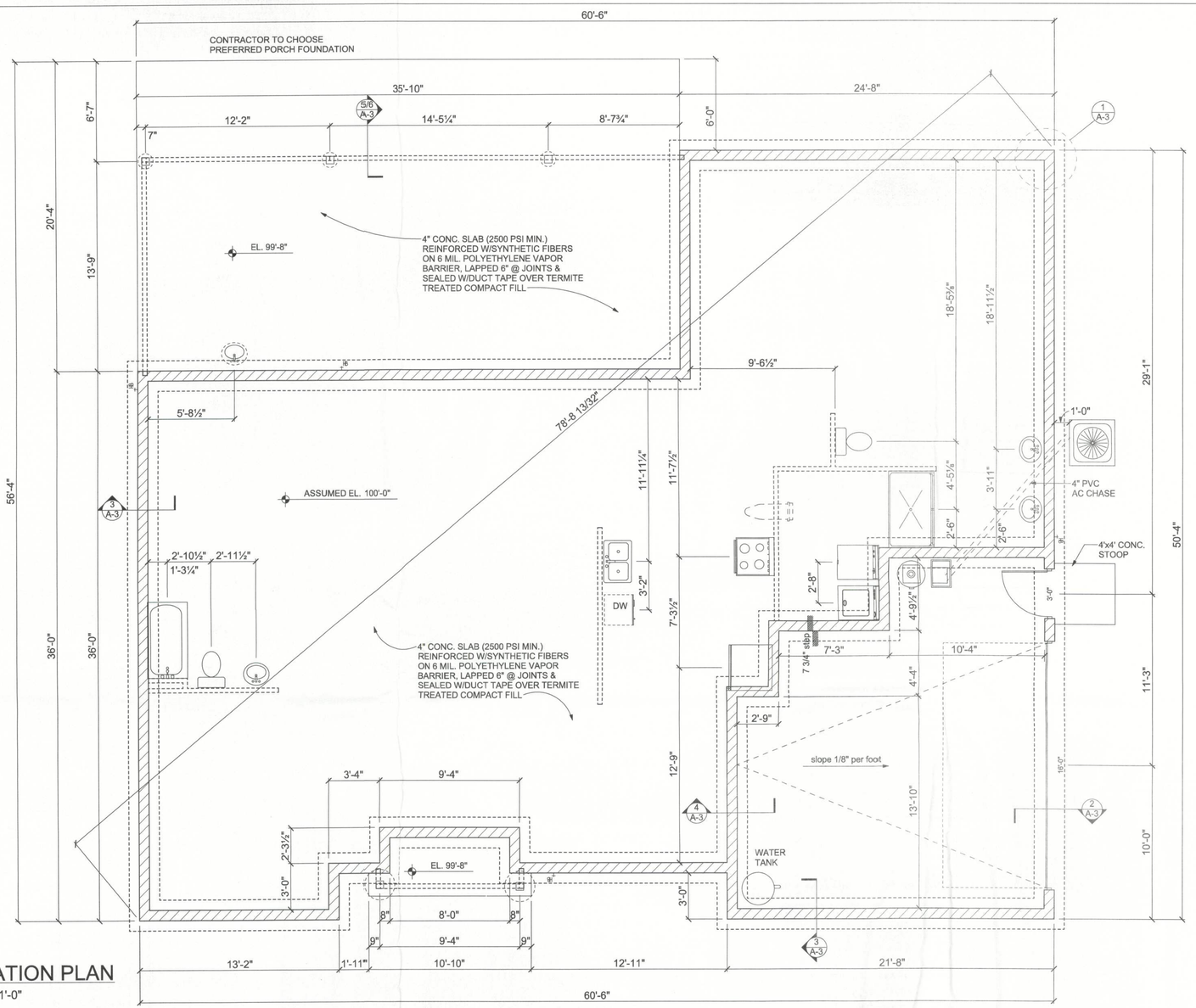
APPROVED BY: BC

MCDUFFIE RESIDENCE

ELEVATIONS

CES PROJECT NO.: 2013-011

SHEET: A-2



FOUNDATION PLAN

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

FOUNDATION NOTES

CONCRETE:
CONCRETE SHALL HAVE A MINIMUM SPECIFIED COMPRESSIVE STRENGTH OF 2500 PSI AT 28 DAYS.

REINFORCING STEEL:
THE REINFORCING STEEL SHALL BE MINIMUM GRADE 40.

COVER OVER REINFORCING STEEL
FOR FOUNDATIONS, MINIMUM CONCRETE COVER OVER REINFROCING BARS SHALL BE:
3 INCHES IN FOUNDATIONS WHERE THE CONCRETE IS CAST AGAINST AND PERMANENTLY IN CONTACT WITH THE EARTH OR EXPOSED TO THE EARTH OR WEATHER AND 1 1/2 INCHES ELSEWHERE. REINFORCING BARS EMBEDDED IN GROUTED CELLS SHALL HAVE A MINIMUM CLEAR DISTANCE OF 1/4 INCH FOR FINE GROUT OR 1/2 INCH FOR COARSE GROUT BETWEEN REINFORCING BARS AND ANY FACE OF A CELL. REINFORCING BARS USED IN MASONRY WALLS SHALL HAVE A MASONRY COVER (INCLUDING GROUT) OF NOT LESS THAN 2 INCHES FOR MASONRY UNITS WITH FACE EXPOSED TO EARTH OR WEATHER 1 1/2 INCHES FOR MASONRY UNITS NOT EXPOSED TO EARTH OR WEATHER

REINFORCEMENT MAY BE BENT IN THE SHOP OR THE FIELD PROVIDED:
1. ALL REINFORCEMENT IS BENT COLD,
2. THE DIAMETER OF THE BEND, MEASURED ON THE INSIDE OF THE BAR, IS NOT LESS THAN SIX-BAR DIAMETERS AND
3. REINFORCEMENT PARTIALLY EMBEDDED IN CONCRETE SHALL NOT BE FIELD BENT.
EXCEPTION: WHERE BENDING IS NECESSARY TO ALIGN DOWEL BARS WITH A VERTICAL CELL, BARS PARTIALLY EMBEDDED IN CONRETE SHALL BE PERMITTED TO BE BENT AT A SLOPE OF NOT MORE THAN 1 INCH OF HORIZONTAL DISPLACEMENT TO 6 INCHES OF VERTICAL BAR LENGTH.

GALVANIZATION:
METAL ACCESSORIES FOR USE IN EXTERIOR WALL CONSTRUCTION AND NOT DIRECTLY EXPOSED TO THE WEATHER SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A 153, CLASS B-2. METAL PLATE CONNECTORS, SCREWS, BOLTS AND NAILS EXPOSED DIRECTLY TO THE WEATHER SHALL BE STAINLESS STEEL OR HOT DIPPED GALVANIZED.

CONCRETE SLABS ON GRADE:

1. ALL INTERIOR AND EXTERIOR SLABS AND WALKWAYS AS SHOWN ON THE STRUCTURAL OR ARCHITECTURAL PLANS, SHALL BE FOUR INCHES THICK MINIMUM REINFORCED WITH 6 X 6 - W1.4 X W1.4 WELDED WIRE FABRIC (UNLESS OTHERWISE NOTED).

2. ALL SLABS ON GRADE TO BE CONSTRUCTED IN ACCORDANCE WITH LATEST A.C.I - "GUIDE FOR CONCRETE FLOOR AND SLAB CONSTRUCTION" (A.C.I. - 302.1R)

3. JOINTS SHALL BE PROVIDED IN ALL INTERIOR SLABS ON GRADE AT COLUMN CENTER-LINES DIVIDING THE SLAB INTO SQUARE PANELS NOT TO EXCEED 20 X 20 FT. IN SIZE. CAST SLAB IN LONG ALTERNATE STRIPS. PROVIDE A CONTRACTION JOINT BETWEEN EACH STRIP. SEE PLAN FOR SAW-CUT, CONTRACTION AND ISOLATION JOINT DETAILS.

4. PROVIDE SAW-CUT JOINTS AT ALL SIDEWALKS AT A MAXIMUM SPACING OF FIVE FEET ON CENTERS AND ISOLATION JOINTS AT 20 FEET O.C. (U.O.N.).

5. FILL MATERIAL SHALL BE PLACED IN LIFTS NOT EXCEEDING 12" AND COMPACTED TO 98 % MODIFIED PROCTOR (ASTM D-1557) WITHIN A DISTANCE OF 3 FEET BEYOND ALL FOOTING EDGES. TAKE AT LEAST ONE DENSITY TEST FOR EACH 1,600 SQ.FT. OF AREA AND 12" BELOW SURFACE. SEND RESULTS OF THE TEST TO OWNER, ARCHITECT AND ENGINEER.

6. ALL CONCRETE SHALL BE THOROUGHLY CONSOLIDATED BY MECHANICAL VIBRATION DURING PLACEMENT AND SHALL BE THOROUGHLY WORKED AROUND REINFORCEMENT AND EMBEDDED FIXTURES AND ALL FORMS AND KEYWAYS.

TERMITE PROTECTION NOTES:

SOIL CHEMICAL BARRIER METHOD:

1. A PERMANENT SIGN WHICH IDENTIFIES THE TERMITE TREATMENT PROVIDER AND NEED FOR REINSPECTION AND TREATMENT CONTRACT RENEWAL SHALL BE PROVIDED. THE SIGN SHALL BE POSTED NEAR THE WATER HEATER OR ELECTRIC PANEL. FBC 104.2.6

2. CONDENSATE AND ROOF DOWNSPOUTS SHALL DISCHARGE AT LEAST 1'-0" AWAY FROM BUILDING SIDE WALLS. FBC 1503.4.4

3. IRRIGATION/SPRINKLER SYSTEMS INCLUDING ALL RISERS AND SPRAY HEADS SHALL NOT BE INSTALLED WITHIN 1'-0" FROM BUILDING SIDE WALLS. FBC 1503.4.4

4. TO PROVIDE FOR INSPECTION FOR TERMITE INFESTATION, BETWEEN WALL COVERINGS AND FINAL EARTH GRADE SHALL NOT BE LESS THAN 6". EXCEPTION: PAINT AND DECORATIVE CEMENTIOUS FINISH LESS THAN 5/8" THICK ADHERED DIRECTLY TO THE FOUNDATION WALL. FBC 1403.1.6

5. INITIAL TREATMENT SHALL BE DONE AFTER ALL EXCAVATION AND BACKFILL IS COMPLETE. FBC 1816.1.1

6. SOIL DISTURBED AFTER THE INITIAL TREATMENT SHALL BE RETREATED INCLUDING SPACES BOXED OR FORMED. FBC 1816.1.2

7. BOXED AREAS IN CONCRETE FLOOR FOR SUBSEQUENT INSTALLATION OF TRAPS, ETC., SHALL BE MADE WITH PERMANENT METAL OR PLASTIC FORMS. PERMANENT FORMS MUST BE OF A SIZE AND DEPTH THAT WILL ELIMINATE THE DISTURBANCE OF SOIL AFTER THE INITIAL TREATMENT. FBC 1816.1.3

8. MINIMUM 6 MIL VAPOR RETARDER MUST BE INSTALLED TO PROTECT AGAINST RAINFALL DILUTION. IF RAINFALL OCCURS BEFORE VAPOR RETARDER PLACEMENT, RETREATMENT IS REQUIRED. FBC 1816.1.4

9. CONCRETE OVERPOUR AND MORTAR ALONG THE FOUNDATION PERIMETER MUST BE REMOVED BEFORE EXTERIOR SOIL TREATMENT. FBC 1816.1.5

10. SOIL TREATMENT MUST BE APPLIED UNDER ALL EXTERIOR CONCRETE OR GRADE WITHIN 1'-0" OF THE STRUCTURE SIDEWALLS. FBC 1816.1.6

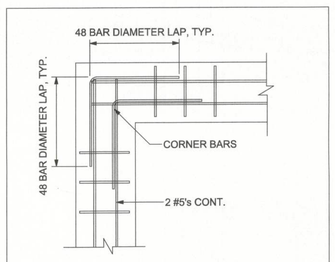
11. AN EXTERIOR VERTICAL CHEMICAL BARRIER MUST BE INSTALLED AFTER CONSTRUCTION IS COMPLETE INCLUDING LANDSCAPING AND IRRIGATION. ANY SOIL DISTURBED AFTER THE VERTICAL BARRIER IS APPLIED, SHALL BE RETREATED. FBC 1816.1.6

12. ALL BUILDINGS ARE REQUIRED TO HAVE PER-CONSTRUCTION TREATMENT. FBC 1816.1.7

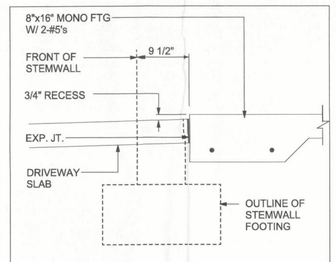
13. A CERTIFICATE OF COMPLIANCE MUST BE ISSUED TO THE BUILDING DEPARTMENT BY # LICENSED PEST CONTROL COMPANY BEFORE A CERTIFICATE OF OCCUPANCY WILL BE ISSUED. THE CERTIFICATE OF COMPLIANCE SHALL STATE: "THE BUILDING HAS RECEIVED A COMPLETE TREATMENT FOR THE PREVENTION OF SUBTERRANEAN TERMITES. THE TREATMENT IS IN ACCORDANCE WITH THE RULES AND LAWS OF THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES". FBC 1816.1.7

14. AFTER ALL WORK IS COMPLETED, LOOSE WOOD AND FILL MUST BE REMOVED FROM BELOW AND WITHIN 1'-0" OF THE BUILDING. THIS INCLUDES ALL GRADE STAKES, TUB TRAP BOXES, FORMS, SHORING OR OTHER CELLULOSE CONTAINING MATERIAL. FBC 2303.1.3

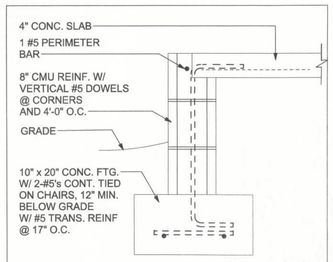
15. NO WOOD, VEGETATION, STUMPS, CARDBOARD, TRASH, ETC., SHALL BE BURIED WITHIN 15'-0" OF ANY BUILDING OR PROPOSED BUILDING. FBC 2303.1.4



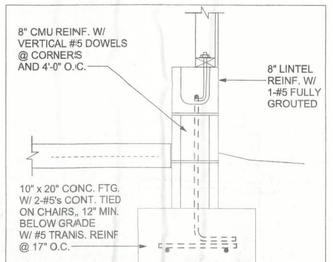
1 / A-3 FOOTING REINFORCING AT CORNER (NTS)



2 / A-3 FTG. SECTION AT GARAGE



3 / A-3 STEMWALL SECTION



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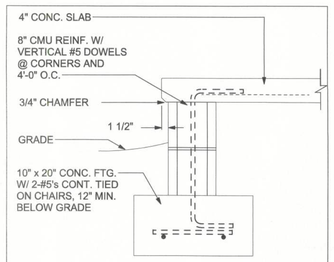
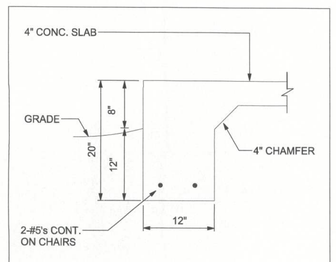
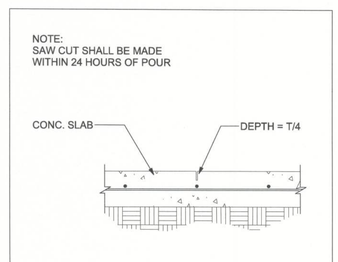


5 / A-3 STEMWALL SECTION AT PORCH (OPTIONAL)



6 / A-3 MONOLITHIC FOOTING AT PORCH



7 / A-3 SAW CUT DETAIL

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

CES
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CERTIFICATE OF AUTHORIZATION
NO. 28022
P.O. BOX 970
LAKE CITY, FL 32056
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3-22-2013
Brett A. Crews, P.E. 65592

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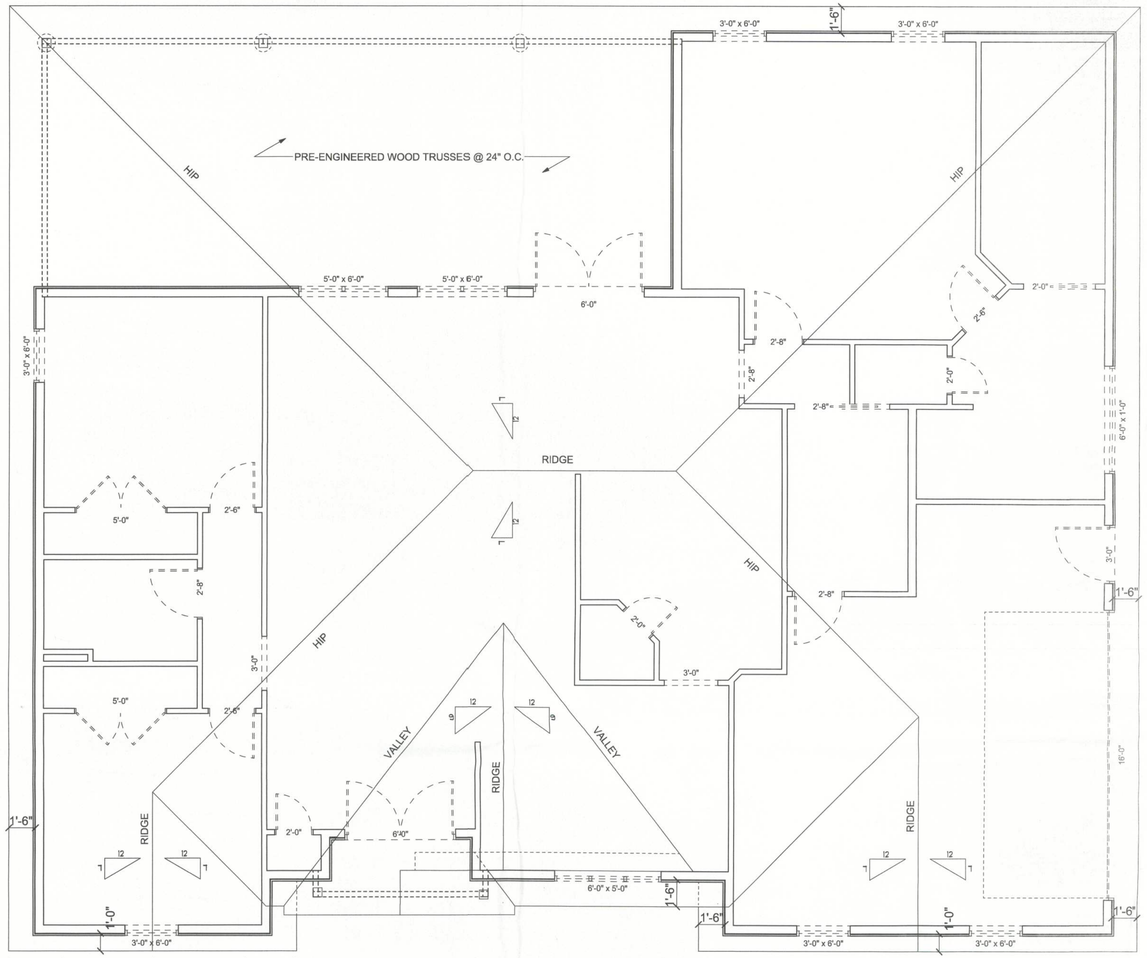
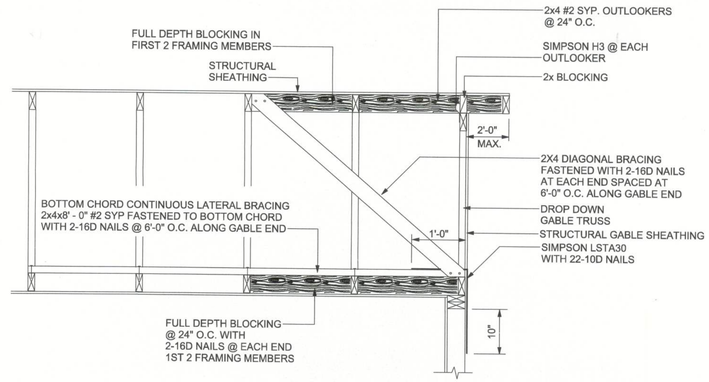
MCDUFFIE RESIDENCE

FOUNDATION PLAN

CES PROJECT NO.: 2013-011
SHEET: A-3

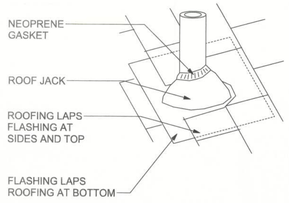




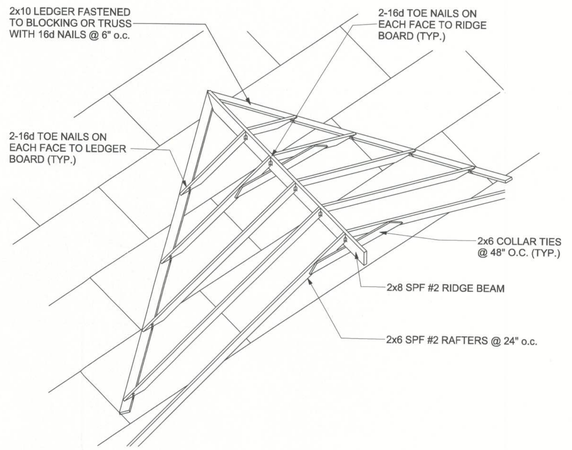
END WALL BRACING FOR CEILING DIAPHRAGM

NTS

NOTE: ALL WOOD TO BE NUMBER 2 GRADE SOUTHERN YELLOW PINE

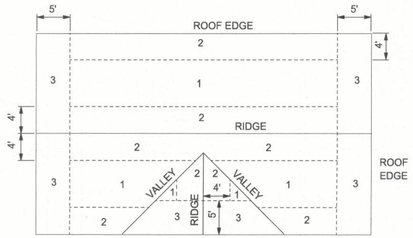


ROOF JACKS AND VENTS

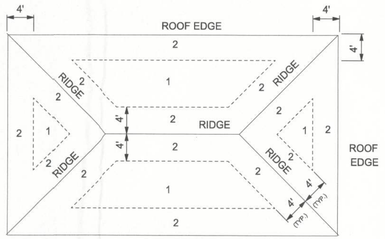


ROOF INTERSECTION CONNECTION DETAIL

NTS



ROOF SHEATHING NAILING ZONES (GABLE ROOF)



ROOF SHEATHING NAILING ZONES (HIP ROOF)

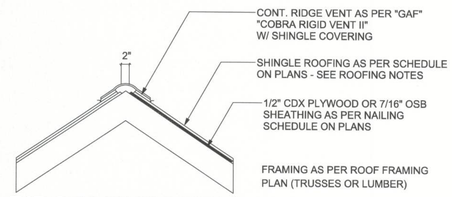
ROOF SHEATHING FASTENERS

NAILING ZONE	SHEATHING TYPE	FASTENER	SPACING
1	7/16" OSB	8D GALV. RING SHANK NAILS	6" O.C. EDGE 12" O.C. FIELD
2			6" O.C. EDGE 6" O.C. FIELD
3 (N/A)			4" O.C. @ GABLES 6" O.C. EDGE 6" O.C. FIELD

ROOF SHEATHING FASTENING

CONNECTOR SCHEDULE FOR TRUSS ANCHORAGE

CONNECTOR	TRUSS	TOP PLATE	UPLIFT PROVIDED	MANUFACTURER
H2.5	5-8d NAILS	5-8d NAILS	365 LBS	SIMPSON
H10	8-8d NAILS	8-8d NAILS	850 LBS	SIMPSON
MTS12	7-10d NAILS	7-10d NAILS	1,000 LBS	SIMPSON
H16	2-10d NAILS	10-10d NAILS	1,300 LBS	SIMPSON
(2)HTS20	10-10d NAILS	10-10d NAILS	2 x 1,450 = 2,900 LBS	SIMPSON



RIDGE VENT DETAIL

NOTE:
VENTING SHALL BE PROVIDED SUCH THAT TOTAL NET FREE VENTILATING AREA SHALL NOT BE LESS THAN 1/150 OF THE AREA OF THE SPACE VENTILATED

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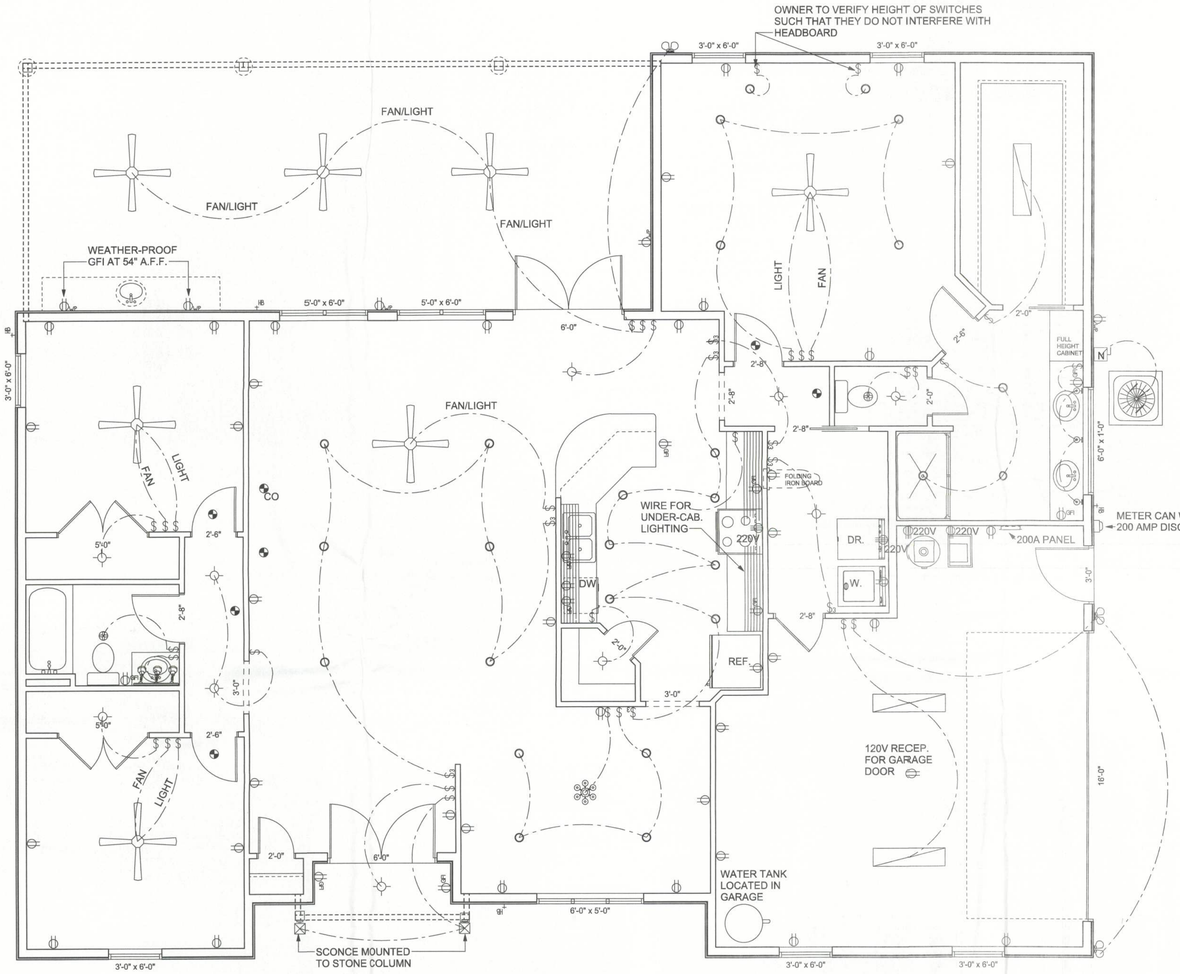
ROOF PLAN

CES PROJECT NO.: 2013-011

SHEET: A-4



ELECTRICAL LAYOUT
SCALE: 1/4" = 1'-0"

ELECTRICAL	COUNT	SYMBOL
ceiling fan	7	
double spotlight	3	
exterior light 2	2	
chandelier	1	
fluorescent fixture	3	
pot light	26	
Meter can	1	
electrical panel	1	
motor	1	
non-fused disconnect	1	N
50 cfm exhaust fan	2	
carbon monoxide detector	1	CO
light	10	
outlet	40	
outlet 220v	4	
outlet gfi	10	GFI
outlet wp	5	WP
smoke detector	6	
switch	31	$
switch 3 way	8	$3
vanity wall mount	1	
wall sconce	3	

WIRING NOTES:

WIRING, DISTRIBUTION EQUIPMENT AND DEVICES
A. CONDUCTORS: Copper, In accordance with ASTM Standards, size reference AWG. Conductors No. 10 and smaller size solid, No. 8 and Larger, Stranded. Insulation of conductor thermoplastic, type THHN (min. size No. 12) any wire installed outside, underground, in slabs or exposed to moisture shall have THWN insulation.
B. RACEWAYS: RIGID STEEL CONDUIT, full weight pipe galvanized, threaded, and minimum 1/2 inch except as noted or required for wiring. ELECTRICAL METALLIC TUBING (EMT), thin wall pipe, galvanized, threadless, compression fittings, and minim 1/2" size except as noted or required for wiring. FLEXIBLE STEEL CONDUIT: continuous single strip, galvanized, and minimum 1/2" size except as noted or required for wiring. PVC CONDUIT, heavy duty type, size as indicated. Separate raceways shall be used for each voltage system.
C: DISCONNECT SWITCHES: General Duty, horsepower rated for motor loads 250 volt rating, fused or non-fused as noted; number of poles as indicated. Enclosure NEMA 1 for indoor use and NEMA 3R for weatherproof applications. Switch to be Square "D" or equal.
D: CIRCUIT BREAKERS: molded case, thermal-magnetic, quick make, quick break, bolt-on type with manually operated insulated trip-free handle. Multi-pole types with internal common trip bar. Terminals suitable for copper or aluminum conductors. Interrupting capacity minimum 10,000 RMS symmetrical amperes circuit circuit breakers to be Square "D", Siemens or equal, type as required.
E: PANELBOARDS: Voltage, phasing, and ampere ratings as indicated, circuit breaker type as indicated, buss bars of hard drawn copper, minimum 98% conductivity, galvanized steel back box, door and trim. All corners lapped and welded, hardware chrome plated with flush lock and catch. Hinges semi-concealed, 5 knuckles steel with nonferrous pins. 180 degree openings. Minimum gutter space 5-3/4" sides, top and bottom. Increase size where required by code. Directory holder complete with clear plastic transparent cover indicating typwritten list of feeder cables, conduit sizes, circuit number, outlets of equipment supplied, and their location. Circuit breaker type panelboards to be Square "D" type NQOD or I-Line, or equal. A plastic label shall be located on exterior of panelboard identifying the system voltage, phase, and current rating.
F: WIRING DEVICES: All devices their product of the same manufacturer. Wall switches and receptacles to be 20 amp, 125 volt, unless noted otherwise. Color to be selected by Architect.
G: DEVICE PLATES: provide for all outlets where devices are installed. Provide engraved marking for special outlets (where noted). Provide blank plates for empty or future outlet boxes. DEVICE AND DEVICE PLATE COLORS TO BE VERIFIED WITH ARCHITECT AND OWNER.

GROUNDING SYSTEM:
a. EQUIPMENT: Ground non-current carrying metal parts of panel board, receways and all lighting fixtures. All conduit shall have equipment grounding conductors.

INSTALLATION:
A. Secure all supports to building structure as specified under raceways. Support horizontal runs of metallic conduit not more than 10 feet apart Run exposed raceways parallel with or at right angles to walls.
B. Pass raceways over water, steam or other piping when pull boxes are not required. no raceway within 3 inches of steam or hot water pipes, or appliances. expect crossing where the raceway shall be at least 2 inches from pipe cover.
C. Cut conduit ends square , ream smooth. Paint male threads of field threaded conduit with Graphite based pip compound. Draw up tight with conduit couplings.
D. Leave wire sufficiently long to permit making final connections. In raceway over 50 feet in which wiring is not installed, furnish pull wire.
E. Verify locations of outlets and switches.
F. Support panel, junction and pull boxes independently to building structure with no weight bearing on conduits.
G. Connect conduit to motor conduit terminal bases with flexible conduit; minimum 18 inches in length and 50% slack. Do not terminate in or fasten raceways to motor foundation.
H. This contractor shall provide a temporary electrical distribution system as required; 120/208 volt, 1 phase, 100 amp, for new construction. All temporary work shall be installed in a neat and safe manner.
I. Contractor to remove and salvage all abandoned electrical equipment.
J. This contractor shall warrant all labor and materials for one year from date of final written acceptance.

ELECTRICAL PLAN NOTES

WIRE ALL APPLIANCES, HVAC UNITS AND OTHER EQUIPMENT PER MANUF. SPECIFICATIONS.

CONSULT THE OWNER FOR THE NUMBER OF SEPERATE TELEPHONE LINES TO BE INSTALLED.

INSTALLATION SHALL BE PER NAT'L. ELECTRIC CODE.

ALL SMOKE DETECTORS SHALL BE 120V W/ BATTERY BACKUP OF THE PHOTOELECTRIC TYPE, AND SHALL BE INTERLOCKED TOGETHER. INSTALL INSIDE AND NEAR ALL BEDROOMS.

TELEPHONE, TELEVISION AND OTHER LOW VOLTAGE DEVICES OR OUTLETS SHALL BE AS PER THE OWNER'S DIRECTIONS, & IN ACCORDANCE W/ APPLICABLE SECTIONS OF NEC-LATEST EDITION.

ELECTRICAL CONT'R SHALL PREPARE "AS-BUILT" SHOP DWGS INDICATING ALL ELECTRICAL WORK, INCLUDING ANY CHANGES TO THE ELEC. PLAN, ADD'NS TO THE ELEC. PLAN, RISER DIAGRAM, AS-BUILT PANEL SCHEDULE W/ ALL CKTS IDENTIFIED W/ CKT Nr., DESCRIPTION & BRKR, SERVICE ENT. & ALL UNDERGROUND WIRE LOCATIONS/ROUTING/DEPTH. RISER DIA. SHALL INCLUDE WIRE SIZES/TYPE & EQUIPMENT TYPE W/ RATINGS & LOADS.
CONTRACTOR SHALL PROVIDE 1 COPY OF AS-BUILT DWGS TO OWNER & 1 COPY TO THE PERMIT ISSUING AUTHORITY.

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LAKE CITY, FL 32056
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Brett A. Crews, P.E. 65592

DRAWN BY: TM
APPROVED BY: BC

MCDUFFIE RESIDENCE

ELECTRICAL PLAN

CES PROJECT NO.: 2013-011
SHEET: A-5

SHINGLE NOTES:

DECK REQUIREMENTS:
ASPHALT SHINGLES SHALL BE FASTENED TO SOLIDLY SHEATHED DECKS.

SLOPE:
ASPHALT SHINGLES SHALL BE USED ONLY ON ROOF SLOPES OF 2:12 OR GREATER. FOR ROOF SLOPES FROM 2:12 TO 4:12, DOUBLE UNDERLAYMENT IS REQUIRED.

UNDERLAYMENT:
UNLESS OTHERWISE NOTED, UNDERLAYMENT SHALL CONFORM WITH ASTM D 226, TYPE 1, OR ASTM D 4869, TYPE 1.

SELF-ADHERING POLYMER MODIFIED BITUMEN SHEET:
SELF ADHERING POLYMER MODIFIED BITUMEN SHALL COMPLY WITH ASTM D 1970.

ASPHALT SHINGLES:
ASPHALT SHINGLES SHALL HAVE SELF SEAL STRIPS OR BE INTERLOCKING, AND COMPLY WITH ASTM D 225 OR ASTM D 3462.

FASTENERS:
FASTENERS FOR ASPHALT SHINGLES SHALL BE GALVANIZED, STAINLESS STEEL, ALUMINUM OR COPPER ROOFING NAILS, MINIMUM 12 GAUGE SHANK WITH A MINIMUM 3/8 INCH DIAMETER HEAD, OF A LENGTH TO PENETRATE THROUGH THE ROOFING MATERIAL AND A MINIMUM 3/4" INTO THE ROOF SHEATHING. WHERE ROOF SHEATHING IS LESS THAN 3/4" THICK, THE NAILS SHALL PENETRATE THROUGH THE SHEATHING.

ATTACHMENT:
ASPHALT SHINGLES SHALL BE SECURED TO THE ROOF WITH NOT LESS THAN FOUR FASTENERS PER STRIP SHINGLE OR TWO FASTENERS PER INDIVIDUAL SHINGLE. WHERE ROOFS LOCATED IN BASIC WIND SPEED OF 110 MPH OR GREATER, SPECIAL METHODS OF FASTENING ARE REQUIRED. UNLESS OTHERWISE NOTED, ATTACHMENT OF ASPHALT SHINGLES SHALL CONFORM WITH ASTM D 3161 OR M-DC PA 107-95.

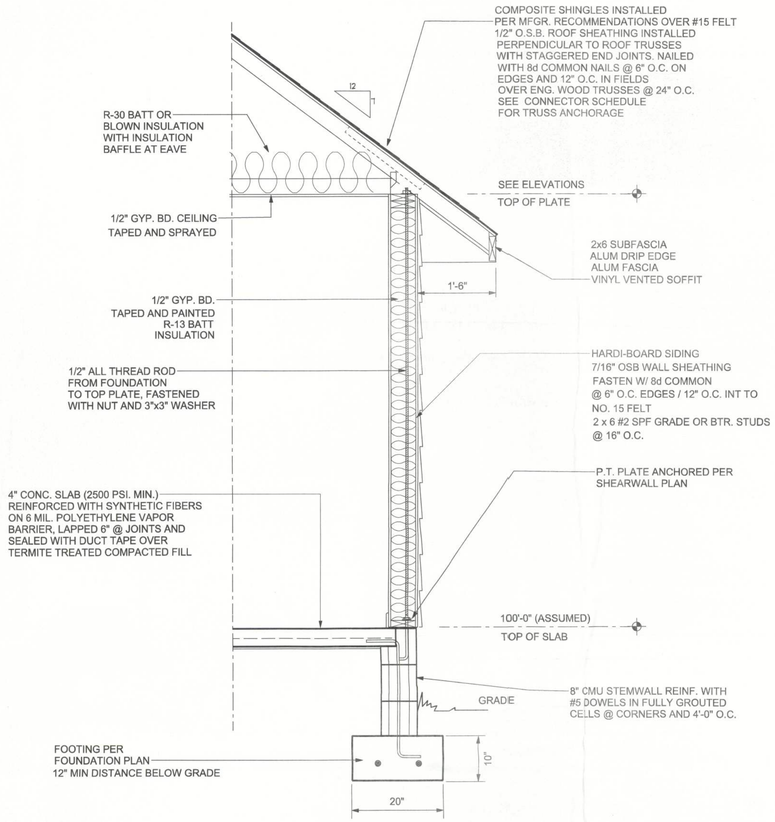
UNDERLAYMENT APPLICATION:
FOR ROOF SLOPES FORM 2:12 TO 4:12, UNDERLAYMENT SHALL BE A MINIMUM OF TWO LAYERS APPLIED AS FOLLOWS:
1. STARTING AT THE EAVE, A 19 INCH STRIP OF UNDERLAYMENT SHALL BE APPLIED PARALLEL WITH THE EAVE AND FASTENED SUFFICIENTLY TO STAY IN PLACE.
2. STARTING AT THE EAVE, 36 INCH WIDE STRIPS OF UNDERLAYMENT FELT SHALL BE APPLIED OVERLAPPING SUCCESSIVE SHEETS 19 INCHES AND FASTENED SUFFICIENTLY TO STAY IN PLACE.

FOR ROOF SLOPED 4:12 AND GREATER, UNDERLAYMENT SHALL BE A MINIMUM OF ONE LAYER OF UNDERLAYMENT FELT APPLIED AS FOLLOWS:
STARTING AT THE EAVE, UNDERLAYMENT SHALL BE APPLIED SHINGLE FASHION PARALLEL TO THE EAVE, LAPPED 2 INCHES, AND FASTENED SUFFICIENTLY TO STAY IN PLACE.

BASE AND CAP FLASHINGS:
BASE AND CAP FLASHING SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS. BASE FLASHING SHALL BE OF EITHER CORROSION RESISTANT METAL OF MINIMUM NOMINAL THICKNESS 0.019 INCH OR MINERAL SURFACE ROLL ROOFING WEIGHING A MINIMUM OF 77 LBS PER 100 SQUARE FEET. CAP FLASHING SHALL BE CORROSION RESISTANT METAL OF MINIMUM NOMINAL THICKNESS OF 0.019 INCH.

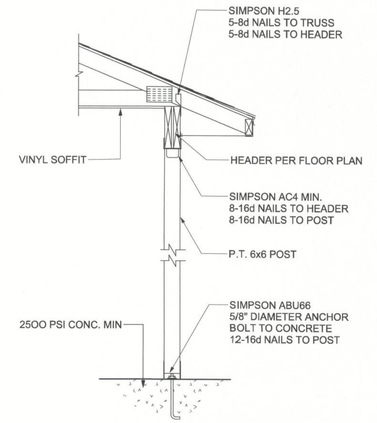
VALLEYS:
VALLEY LININGS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS BEFORE APPLYING ASPHALT SHINGLES. VALLEY LININGS OF THE FOLLOWING TYPES SHALL BE PERMITTED.
1. FOR OPEN VALLEYS LINED WITH METAL, THE VALLEY LINING SHALL BE AT LEAST 16 INCHES WIDE AND OF ANY OF THE CORROSION RESISTANT METALS IN TABLE 1507.3.9.2.
2. FOR OPEN VALLEYS, VALLEY LINING OF TWO PLIES OF MINERAL SURFACE ROLL ROOFING SHALL BE PERMITTED. THE BOTTOM LAYER SHALL BE 18 INCHES AND THE TOP LAYER A MINIMUM OF 36 INCHES WIDE.
3. FOR CLOSED VALLEYS VALLEY LINING SHALL BE ONE OF THE FOLLOWING:
   1. BOTH TYPES 1 AND 2 ABOVE, COMBINED.
   2. ONE PLY OF SMOOTH ROLL ROOFING AT LEAST 36 INCHES WIDE AND COMPLYING WITH ASTM D 224.
   3. SPECIALTY UNDERLAYMENT AT LEAST 36 INCHES WIDE AND COMPLYING WITH ASTM D 1970.

MATERIAL	MINIMUM THICKNESS (in)	GAGE	WEIGHT (LB)
COPPER			1
ALUMINUM	0.024		
STAINLESS STEEL		28	
GALVANIZED STEEL	0.0179	26 (zinc coated G90)	
ZINC ALLOY LEAD PAINTED TERNE	0.027		2 1/2 20



TYPICAL WALL SECTION

3/4" = 1'-0"



PORCH SECTION

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

UPLIFT CONNECTORS

1. UPLIFT CONNECTORS SUCH AS HURRICANE CLIPS, TRUSS ANCHORS AND ANCHOR BOLTS ARE ONLY REQUIRED ON MEMBERS IN WALLS THAT ARE EXPOSED TO UPLIFT FORCES. INTERIOR LOAD BEARING WALLS ARE NOT ALWAYS EXPOSED TO UPLIFT FORCES. THE MEMBERS OF THESE WALLS WOULD NOT NEED TO HAVE CONNECTORS APPLIED. PLEASE CONSULT THE TRUSS ENGINEERING FOR THE LOCATION OF THESE WALLS.

FIELD REPAIR NOTES

1. MISSED LINTEL STRAPS FOR MASONRY CONSTRUCTION MAY BE SUBSTITUTED W/ (1) "SIMPSON MTSM16 TWIST STRAP W/ (4) 1/4" X 2 1/4" DIA. TITENS TO THE BOND BEAM BLOCK AND (7) 10d TO THE TRUSS FOR UPLIFTS OF 1000 LBS. OR LESS. USE (2) FOR 2000 LBS. OR LESS. OTHERS MAY BE SUBSTITUTED ON A CASE BY CASE BASIS.
2. MISSED "J" BOLTS FOR WOOD BEARING WALLS MAY BE SUBSTITUTED W/ 1/2" DIA. ANCHOR BOLTS SET IN 3/4" DIA. X 6" DEEP UNITEX "PROPOXY" 300 ADHESIVE BINDER FOLLOWING ALL MANUFACTURERS RECOMMENDATIONS (OR 1/2" X 6" RAWL STUD EXPANSION ANCHORS.)
3. REGARDING MISSED REBAR IN VERTICAL FILLED CELLS: DRILL A 3/4" DIAMETER HOLE 6" DEEP AT THE LOCATION OF THE OMITTED REBAR, AND INSTALL A 32" LONG #5 BAR INTO THE EPOXY FILLED HOLE. USE A TWO PART EMBEDDEMENT EPOXY (SIMPSON "EPOXY TIE SET", OR HILTI " 2 PART" EMBEDDMENT EPOXY), MIXED PER MANUFACTURER'S INSTRUCTIONS. ASSURE THAT ALL DUST AND DEBRIS FROM DRILLING ARE REMOVED FROM THE HOLE BY BRUSHING AND AND USING COMPRESSED AIR PRIOR TO APPLYING THE EPOXY. ALLOW THE EPOXY TO CURE TO MANUFACTURER'S SPECIFICATIONS, THEN FILL THE CELL IN THE NORMAL WAY DURING BOND BEAM POUR.
4. HURRICANE STRAPS MAY BE SUBSTITUTED WITH A STRAP OF GREATER HOLDOWN VALUE OR GREATER UPLIFT VALUE IN THE FIELD WITHOUT VERIFICATION, PROVIDED ALL MANUFACTURERS INSTALLATION INSTRUCTIONS ARE FOLLOWED.
5. FOR MORTER JOINTS LESS THAN 1/4", PROVIDE (1) #5 VERT. IN CONC. FILLED CELL EACH SIDE OF THE JOINT (BAR DOES NOT HAVE TO BE CONT. TO FOOTING)

GENERAL NOTES:

THE CONTRACTOR SHALL INDEMNIFY THE OWNER AGAINST ALL CLAIMS, WHETHER FROM PERSONAL INJURY OR PROPERTY DAMAGE, ARISING FORM EVENTS ASSOCIATED WITH THE WORK PERFORMED UNDER THE CONTRACT FOR THIS PROJECT.

THE CONTRACTOR AND/OR SUB-CONTRACTORS SHALL WARRANT ALL WORK FOR A PERIOD OF ONE YEAR FOLLOWING THE WORK DATE OF FINAL COMPLETION AND ACCEPTANCE BY THE OWNER DEFECTS IN MATERIALS, EQUIPMENT, COMPONENTS AND WORKMANSHIP SHALL BE CORRECTED AT NO FURTHER COST TO THE OWNER DURING THE ONE YEAR WARRANTY PERIOD.

AT THE OWNER'S OPTION, A WARRANTY INSPECTION SHALL BE PERFORMED DURING THE ELEVENTH MONTH FOLLOWING THE COMMENCEMENT OF THE WARRANTY PERIOD, FOR THE PURPOSE OF DETERMINING ANY WARRANTY WORK THAT MAY BE REQUIRED. THE CONTRACTOR SHALL BE PRESENT DURING THIS INSPECTION IF REQUESTED BY THE OWNER.

THE CONTRACTOR SHALL PAY FOR ALL PERMITS, LICENSES, TESTS AND THE LIKE THAT MAY BE REQUIRED BY THE VARIOUS AUTHORITIES HAVING JURISDICTION OVER THIS PROJECT BE THEY CITY, COUNTY, STATE OR FEDERAL.

5. THE OWNER SHALL FILE A "NOTICE OF COMMENCEMENT" PRIOR TO THE BEGINNING OF THE PROJECT AND THE CONTRACTOR(S) SHALL FILE "NOTICE TO OWNER" AND PROVIDE "RELEASE OF LIEN" FOR ALL PAYMENT REQUESTS PRIOR TO DISBURSEMENT OF ANY FUNDS.
6. ANY AND ALL DISPUTES ARISING FROM EVENTS ASSOCIATED WITH THE CONSTRUCTION OF THIS PROJECT BETWEEN THE OWNER, CONTACTOR(S) AND SUPPLIERS SHALL BE RESOLVED THROUGH BINDING ARBITRATION.
7. ALL WORK SHALL BE IN ACCORDANCE WITH APPLICABLE CODES AND LOCAL REGULATIONS, INCLUDING APPLICABLE ENERGY CODES. ALL COMPONENTS OF THE BUILDING SHALL MEET WITH THE MINIMUM ENERGY REQUIREMENTS OF THE BUILDING CODE. ANY DISCREPANCIES SHALL BE REPORTED TO THE ARCHITECT IN WRITING PRIOR TO THE COMMENCEMENT OF THE WORK.
8. ALL INSULATION SHALL BE LEFT EXPOSED AND ALL LABELS LEFT INTACT ON THE WINDOWS AND DOORS UNTIL INSPECTED BY THE BUILDING OFFICIAL.
9. ALL WOOD IN CONTACT WITH CONCRETE SHALL BE PRESSURE TREATED.

CONSTRUCTION DOCUMENTS:

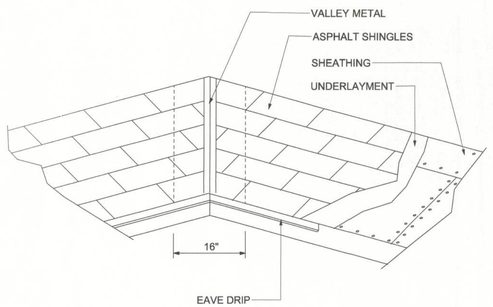
THE CUSTOMER IS RESPONSIBLE FOR DELIVERING THE REQUIRED SETS OF CONSTRUCTION DOCUMENTS TO THE PERMIT ISSUING AUTHORITY FOR THE ISSUANCE OF CONSTRUCTION PERMITS. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR REVIEWING THE PLANS AND VERIFYING ALL EXISTING CONDITIONS, ELEVATIONS, AND DIMENSIONS PRIOR TO COMMENCING CONSTRUCTION INCLUDING FABRICATION. ALL DISCREPANCIES SHALL BE REPORTED TO THE ARCHITECT/ENGINEER FOR RESOLUTION.

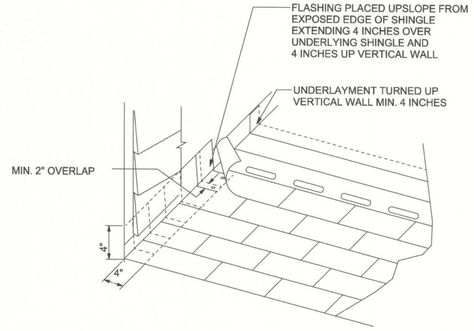
DO NOT SCALE THESE PLANS:

AMPLE DIMENSIONS ARE SHOWN ON THE PLANS TO LOCATE ALL ITEMS. SIMPLE ARITHMATIC MAY BE USED TO DETERMINE THE LOCATION OF THOSE ITEMS NOT DIMENSIONED.

CHANGES TO PLAN SETS:

PLEASE DO NOT MAKE ANY STRUCTURAL CHANGES TO THES PLANS WITHOUT CONSULTING WITH THE ARCHITECT/ENGINEER. THE OWNER SHALL ASSUME ANY AND ALL LIABILITY FOR STRUCTURAL DAMAGE RESULTING FROM CHANGES MADE TO THE PLANS OR BY SUBSTITUTION OF MATERIALS DIFFERENT FROM SPECIFICATIONS ON THE PLANS.





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CERTIFICATE OF AUTHORIZATION NO. 28022
P.O. BOX 970
LAKE CITY, FL 32056
PHONE: 386.754.4085
3-22-2013
Brett A. Crews, P.E. 65592

DRAWN BY: TM
APPROVED BY: BC

MCDUFFIE RESIDENCE

SECTIONS AND FRAMING DETAILS

CES PROJECT NO.: 2013-011

SHEET: A-6

RULES:
1. One all-thread rod at each corner.
2. One all-thread rod at each end of shearwalls.
3. One all-thread rod at each end of opening headers greater than 3'-0"
4. Check sub-sheathing to top plate connection for horizontal transfer capability.
5. If necessary, add all-thread rods to girders individually to exclude the from average uplift plf.
6. Check sole plate to slab connection, additional anchors may be required for lateral and shear load transfer.

ALLOWABLE VALUES	
Connection Type	Allowable Value
Foundation / S.Y.P. Top Plate	3840 lbs.
Foundation / Spruce-Pine-Fir Top Plate	3840 lbs.
Lintel or Bond Beam / S.Y.P. Top Plate	3840 lbs.
Lintel or Bond Beam / Spruce-Pine-Fir Top Plate	3840 lbs.

Placement at slab level:

Corners
When presetting the all-thread rod at a building corner, the rod should be placed 8 to 12 inches away from the corner so it does not set under the corner framing members. When a all-thread rod is specified at a building corner, it may be placed on either side of the corner.

Header ends
When presetting the all-thread rod at a header end, the rod should be placed 8 to 12 inches away from the header end so it does not fall under the stud pack framing members.

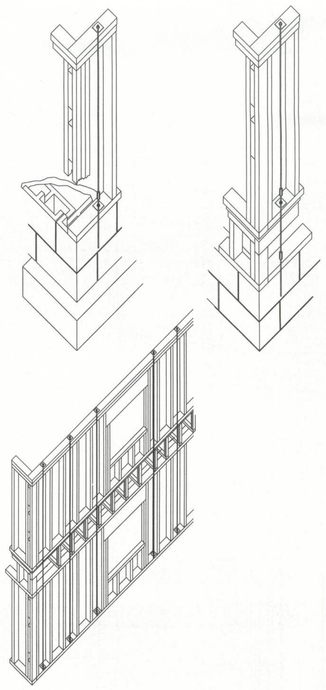
Top Connections
Top connections made at corners and header ends shall be made within 2 inches of the framing pack. A nut and 3X3 washer shall be applied to the top plates and tightened securely.

Intermediate Coupler Connections
When using the rod coupler, care should be taken to ensure full and equal thread engagement. This is easily achieved by threading the coupler all the way onto the rod, then standing the two rods end to end, then threading the coupler back over the rod joint so each rod is halfway into the coupler.

Retro-fits
In the case of an all thread rod misplacement, the rod may be epoxied into the concrete.

Sole plate to slab connection:
The slab level sole plate shall be connected to the slab with the connectors specified and at the spacing specified within the design documents. All-thread rods shall be placed as per the design specifications. All-thread rods with a nut and washer at the sole plate will qualify as a sole plate connection but may require other anchors intermediate of the all-thread rod locations to qualify the specified spacing requirements.

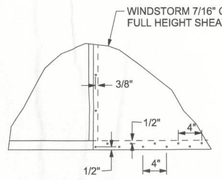
System Tightening:
On multiple story applications, the all-thread rod system shall be rechecked for proper tension just before the walls are veneered. This will allow the all-thread rod system to compensate for the buildings dead load compression.



SHEARWALL NOTES:

1. ALL SHEARWALLS SHALL BE TYPE 2 SHEARWALLS AS DEFINED BY STD 10-99 305.4.3.
2. THE WALL SHALL BE ENTIRELY SHEATHED WITH 7/16" O.S.B. INCLUDING AREAS ABOVE AND BELOW OPENINGS.
3. ALL SHEATHING SHALL BE ATTACHED TO FRAMING ALONG ALL FOUR EDGES WITH JOINTS FOR ADJACENT PANELS OCCURING OVER COMMON FRAMING MEMBERS OR ALONG BLOCKING.
4. NAIL SPACING SHALL BE 6" O.C. EDGES AND 12" O.C. IN THE FIELD.
5. TYPE 2 SHEARWALLS ARE DESIGNED FOR THE OPENING IT CONTAINS. MAXIMUM HEIGHT OF OPENING SHALL BE 5/6 TIMES THE WALL HEIGHT. THE MINIMUM DISTANCE BETWEEN OPENINGS SHALL BE THE WALL HEIGHT/3.5 ie. FOR 8'-0" WALLS - (2'-3").

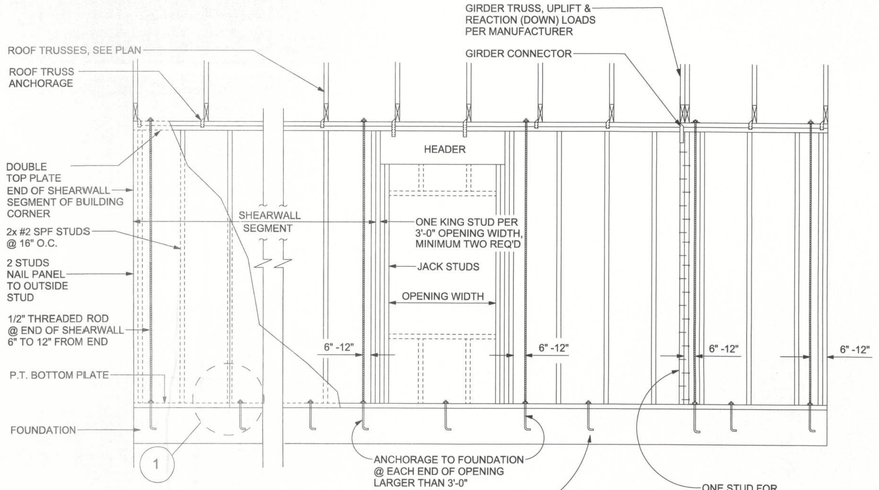
OPENING WIDTH	SILL PLATES	16d TOE NAILS EACH END
UP TO 6'-0"	(1) 2x4 OR (1) 2x6	1
> 6' TO 9'-0"	(3) 2x4 OR (1) 2x6	2
> 9' TO 12'-0	(5) 2x4 OR (2) 2x6	3



1 DOUBLE NAIL EDGE SPACING TOP AND BOTTOM PLATE

UPLIFT CAPACITY = 474 plf
(TABLE 305S1 SSTD10-99)

NOTE:
ALL WALL SHEATHING SHALL BE WINDSTORM 1 1/8" FULL HEIGHT SHEATHING-
SEE DETAIL 1 FOR NAILING

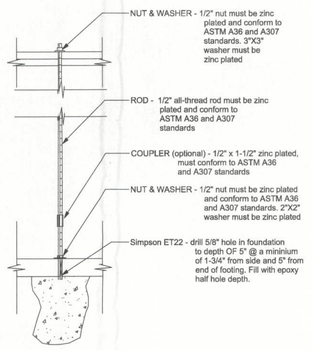


SHEARWALL DETAILS

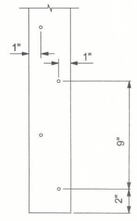
SCALE: 1/2" = 1'-0"

NOTE:
VERIFY GIRDER TRUSS LOCATION ON TRUSS LAYOUT FOR REQ'D ALL THREAD AT GIRDER LOCATION

OPENING CONNECTION REQUIREMENTS				
CLEAR OPENING WIDTH	HEADER SIZE #2 GRADE OR BETTER	END BEARING	CONNECTOR AT EACH END OF OPENING	ANCHORAGE TO FOUNDATION @ EACH END OF OPENING
0' - 3'	(2) 2x8	1.5"	N/A	N/A
>3' - 6'	(2) 2x10	3"	1/2" ALL THREAD ROD	1/2" ALL THREAD ROD
>6' - 9'	(2) 2x12	3"	1/2" ALL THREAD ROD	1/2" ALL THREAD ROD
>9' - 12'	(2) 1 3/4" x 11 1/4" LVL - 2.0E	3"	1/2" ALL THREAD ROD	1/2" ALL THREAD ROD
>12' - 15'	(2) 1 3/4" x 11 1/4" LVL - 2.0E	3"	1/2" ALL THREAD ROD	1/2" ALL THREAD ROD
>15' - 18'	(2) 1 3/4" x 11 1/4" LVL - 2.0E	4.5"	1/2" ALL THREAD ROD	1/2" ALL THREAD ROD



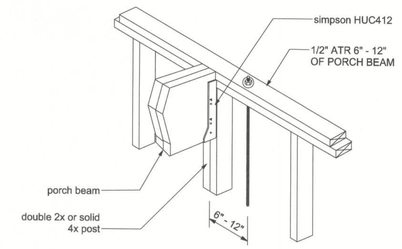
NOTE:
A SOLID MEMBER OF EQUAL OR GREATER SIZE THAN MULTIPLE MEMBERS MAY BE USED.
IF RATED SHEATHING IS APPLIED TO NARROW EDGES, NAILED TO EACH STUD AT 12" O.C. MAXIMUM, THE LAMINATION NAILING SHOWN HERE IS NOT REQUIRED.



END (TOP OR BOTTOM)

GIRDER COLUMN DETAIL

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

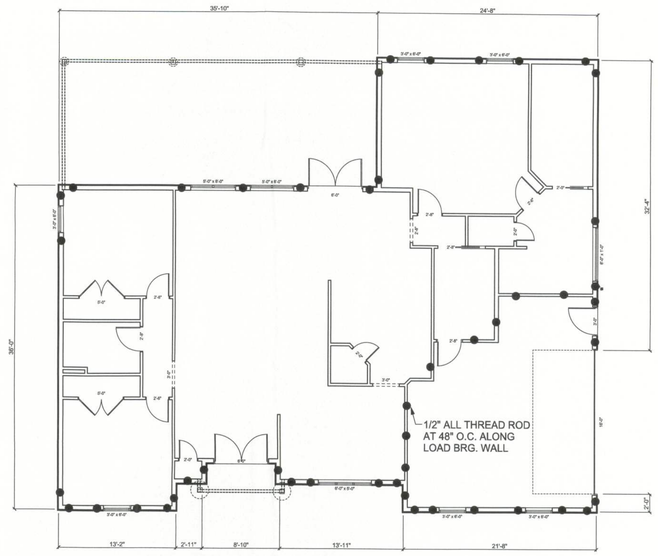


ALL THREAD @ PORCH BEAM

NTS

ALLOWABLE DEFLECTION OF STRUCTURAL MEMBERS

STRUCTURAL MEMBER	ALLOWABLE DEFLECTION
rafters having slopes greater than 2/12 with no finished ceiling attached to rafters	L/180
interior walls and partitions	H/180
floors and plastered ceilings	L/360
all other structural members	L/240
exterior walls with plaster or stucco finish	H/360
exterior walls - wind loads with brittle finishes	L/240
exterior walls - wind loads with flexible finishes	L/120



ALL THREAD DETAIL

● ALL THREAD LOCATION

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

CES
Crews Engineering Services, LLC

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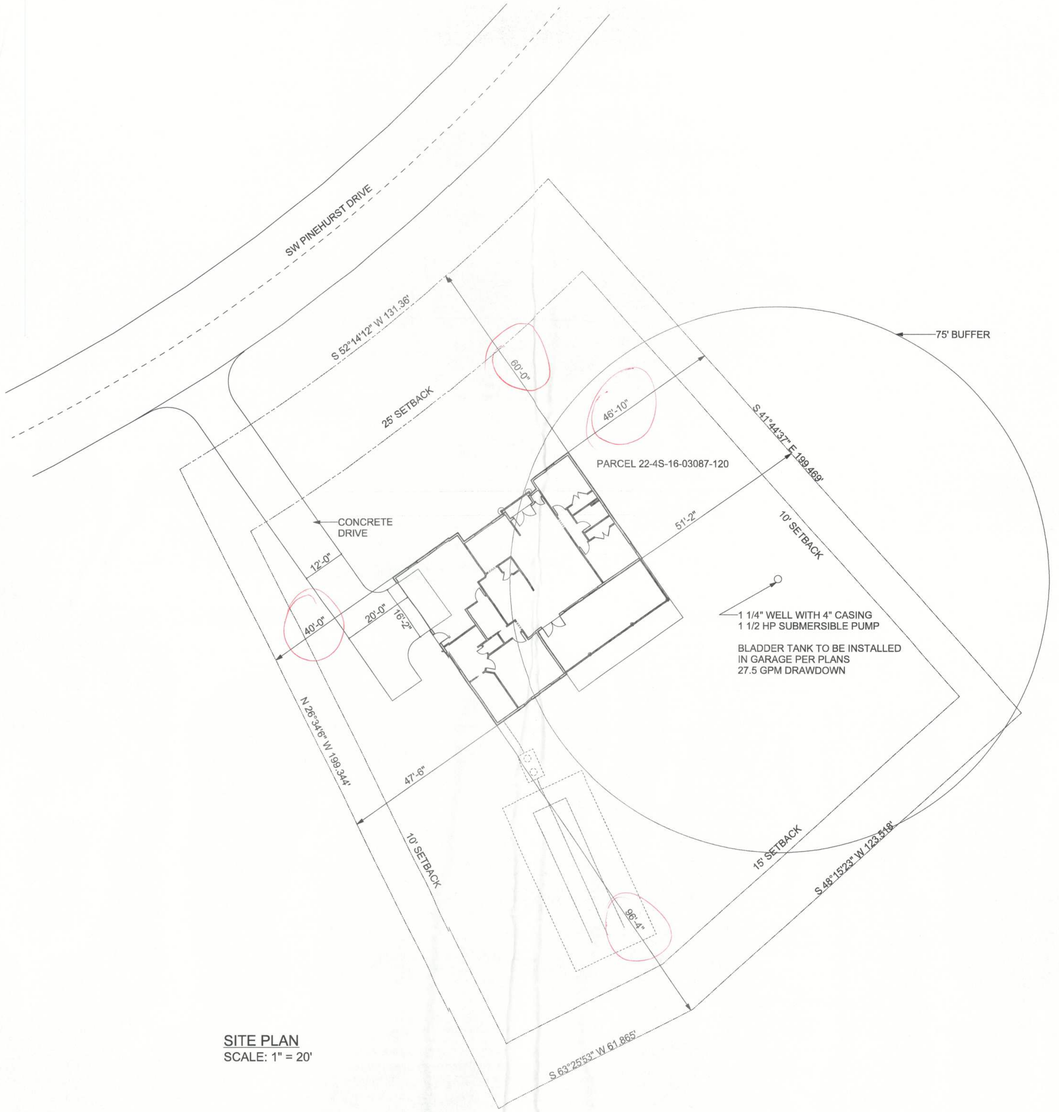
SHEARWALL DETAILS

CES PROJECT NO.: 2013-011
SHEET: A-7

DESCRIPTION:
LOT 20 FOREST COUNTRY 6TH ADDITION
& WD 1247-2680



SITE PLAN
SCALE: 1" = 20'

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

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SITE PLAN

CES PROJECT NO.: 2013-011

SHEET: S-1