

## PROJECT PARTICIPANTS

OWNER: CHARLES R. & SHIRLEY A. WITHERELL 4468 SPRINGBROOK ROAD JACKSON, MICHIGAN 49201

ECLIPSE DESIGN SERVICES

ENGINEER:

4468 SPRINGBROOK ROAD JACKSON, MICHIGAN 49201 TEL: (517) 782-4099

TITLE SHEET

GENERAL NOTES 1st FLOOR PLAN

FAX: (517) 782-1092

## DRAWING INDEX

6000-C/S-001SHEET 1 6000-C/S-001 SHEET 2 6000-C/S-001 SHEET 3 6000-C/S-001 SHEET 4 6000-C/S-001 SHEET 5 6000-C/S-001 SHEET 6 6000-C/S-001 SHEET 7 6000-C/S-001 SHEET 9 6000-C/S-001 SHEET 10 6000-C/S-001 SHEET 11 6000-C/S-001 SHEET 12

FOUNDATION PLAN FLOOR/ROOF FRAMING EXTERIOR ELEVATIONS EXTERIOR ELEVATIONS INTERIOR ELEVATIONS FOOTING/BLOCK DETAILS FRAMING DETAILS FRAMING DETAILS

# BUILDING INFORMATION

USE GROUP CLASSIFICATION: R-3

CONSTRUCTION TYPE: 5B UNPROTECTED

BUILDING IS ONE STORY RESIDENCE WITH FULL BASEMENT

## SQUARE FOOTAGE:

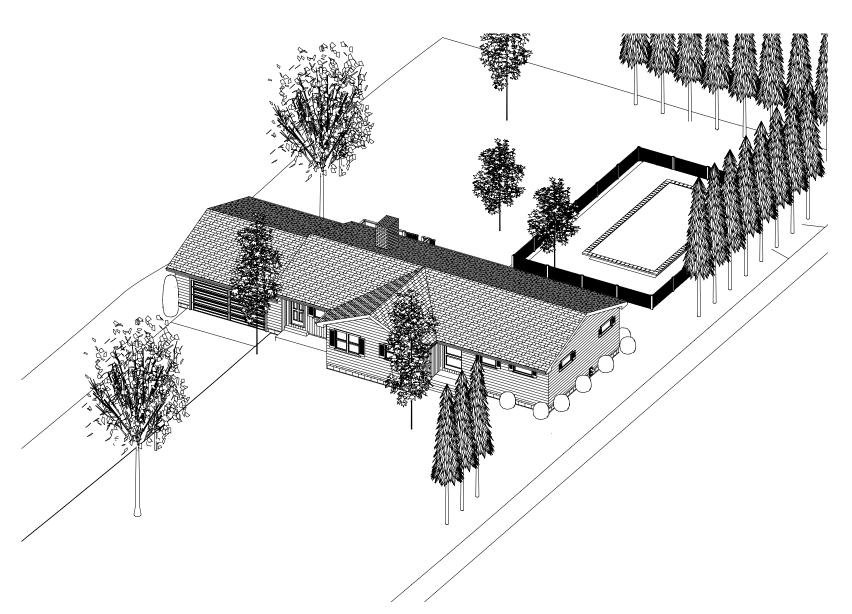
1,314 S.F. BASEMENT 1,314 S.F. 1st FLOOR

DESIGN LOADS:

FLOOR LIVE LOAD - 40 P.S.F. ROOF LIVE LOAD - 12 P.S.F. ROOF DEAD LOAD - 15 P.S.F. GROUND SNOW LOAD - 30 P.S.F. BASIC WIND SPEED - 75 M.P.H.

ALL MECHANICAL & ELECTRICAL SHALL BE INSTALLED PER ALL STATE & LOCAL BUILDING CODES

# HOUSE RENOVATION PLANS 4468 SPRINGBROOK ROAD JACKSON, MICHIGAN 49201



		0 04/1	5/04 ISSUED FOR CONSTRUCTION	C.R.W. (	. R W	Dr         Date           05/14/04         05/14/04           Des         C.R.W.           05/14/04         Ckr           App	<b>Eclipse</b> Design Services	CLIENT CHARLES R. WITHERELL 4468 Springbrook Road Jackson, Michigan 49201
Drawing No	Reference Drawings	Rev Da				C.R. WITHERELL, P.E. (MI-25411)	4468 Springbrook Road Jackson, Michigan 49201	TITLE PAGE



		Sheet Title		
.L	MAJOR RENOVATION			
		PRIVATE RESIDENCE		
	Scale	Drawing Number	Sheet	Rev
	Proj. No. 40-6000-000	6000-C/S-001	1	0

#### GENERAL

ALL WORK ON THIS PROJECT SHALL CONFORM TO ALL APPLIC ABLE LOCAL, STATE, COUNTY CODES, STANDARDS, REGULATIONS AND LAWS, INCLUDING BUT NOT LIMITED TO "MICHIGAN BUILDING CODE", LATEST EDITION BY THE MICHIGAN DEPARTMENT OF CONSUMER & INDUSTRY SERVICES, BUREAU OF CONSTRUCTION CODES.

COORDINATE ALL WORK WITH OWNER/BUILDER

ALL PRODUCTS AND MATERIALS TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND TRADE STANDARDS.

FIRE STOP ALL VERTICAL AND HORIZONTAL DRAFT OPENINGS AT EACH FLOOR AND CEILING AS REQUIRED BY CODE AND INSPECTOR.

THE STRUCTURAL DRAWINGS ARE FOR THE PLACEMENT AND SIZE OF STRUCTURAL COMPONENTS ONLY. OSHA AND SAFETY CODE REQUIREMENTS ARE TO BE DETERMINED AND PROVIDED BY THE CONTRACTOR.

THE STRUCTURE IS DESIGNED TO BE SELF SUPPORTING AND STABLE AFTER IT IS FULLY COMPLETED. IT IS THE CONTRACTORS SOLE RESPONSIBILITY TO DETERMINE ERECTION PROCEDURE AND SEQUENCE AND TO ENSURE SAFETY OF THE STRUCTURE AND ITS COMPONENT PARTS DURING ERECTION. THIS INCLUDES PROVIDING TEMPORARY BRACING, SHORING, GUYS OR THE-DOWNS. THESE TEMPORARY SUPPORTS SHALL REMAIN IN PLACE UNTIL ALL STRUCTURAL COMPONENTS ARE IN PLACE AND COMPLETED.

VERIFY ALL EXISTING ASSUMED DIMENSIONS AND CONDITIONS (I.E. EXISTING MATERIALS, FRAMING MEMBERS SIZES, LOCATIONS, METHODS OF CONSTRUCTION, ETC.) PRIOR TO CONSTRUCTION AND FABRICATION. IF DISCREPARCIES ARE FOUND NOTIFY OWNER/BUILDER/ENGINEER BEFORE PROCEEDING WITH WORK.

DESIGN LOADS:

# FLOOR LIVE LOADS - 40 PSF ROOF LIVE LOADS - 35 PSF ALL DEAD LOADS - 15 PSF

PROVIDE ALL LABOR AND MATERIALS AS REQUIRED ON THE DRAWINGS OR AS OTHERWISE REQUIRED FOR COMPLETE CONSTRUCTION OF THIS PROJECT.

ALL WORK SHALL BE DONE IN A MANNER AND QUALITY THAT IS NORMAL AND TYPICAL OF THE CONSTRUCTION INDUSTRY. ALL WORK SHALL BE ACCEPTABLE IN QUALITY TO THE OWNER ANDOR ENGINEER. LINACCEPTABLE WORK SHALL BE CORRECTED AT NO COST TO THE OWNER, UNTIL THE WORK IS SATISFACTORY TO THE OWNER.

#### SITEWORK

THE OWNER/BUILDER HAS NOT PROVIDED THE ENGINEER WITH SOIL BORINGS OR OTHER INFORMATION ON THIS SITE TO ESTABLISH A SAFE SOIL BEARING PRESSURE CAPACITY PRESUMPTIVE ALLOWABLE NET SOIL BEARING PRESSURE IS ZOOM OFS HAS BEEN USED FOR FOOTING DESIGN. IF UNDERLYING AND/OR UNSTABLE SOILS ARE EXPOSED DURING EXCAVATION IN AREAS WHICH WILL BE SUBJECTED TO IMPOSED STRUCTURAL LOADINGS. SUCH SOILS SHALL BE REMOVED AND/ OR MODIFIED AS DIRECTED BY THE ENGINEER.

ALL FOUNDATIONS ARE TO BEAR ON SOUND, UNDISTURBED SOIL AND THE BOTTOM OF ALL FOUNDATIONS SHALL BE A MINIMUM OF 42" BELOW FINISH GRADE.

THE SITE SHALL BE STRIPPED OF ALL TOPSOL AND ORGANIC MATERIALS TO A MINIMUM DISTANCE OF THREE FEET OUTSIDE THE BUILDING PERIMETER. AND DRIVE OR WALK AREAS. EXPOSED SOLIS UNDER DRIVEWAY, SIDEWALKS, GARAGE FLOOR, ETC. SHALL BE DENSIFIED BY PROOF ROLLING RRIVET ON TALLING STRUCTURAL FILL AS REQUIRED TO BRING THE GROUND UP TO THE DESIGN ELEVATION UNDER THE ON GRADE CONCRETE SLAB TO BE INSTALLED.

STOCKPILE ALL CLEAN TOPSOIL ON SITE FOR LANDSCAPING BACKFILL. BUILDER SHALL REMOVE ALL EXCESS SOIL AND ALL REFUSE FROM CONSTRUCTION SITE BY THE COMPLETION OF THE PRO LECT.

STRUCTURAL FILL MATERIAL SHALL BE INORGANIC GRANULAR SOIL CONTAINING LESS THAN 10 PERCENT FINES (MATERIAL PASSING THE NO. 200 SIEVE).

ALL FILL MATERIAL IN THE BUILDING AND DRIVEWAY AREAS SHALL BE PLACED IN LOOSE LIFTS NOT TO EXCEED B INCHES IN THICKNESS AND COMPACTED TO A MINIMUM OF NOT LESS THAN 95 % OF THE MAXIMUM DENSITY IN ACCORDANCE WITH ASTM D-1557, MODIFIED PROCTOR METHOD.

THE SPECIFIC ROLLER AND COMPACTION EQUIPMENT USED UNDER THE FIELD CONDITION SHALL HAVE BEEN SHOWN THAT THE REQUIRED COMPACTION CAN BE OBTAINED WITH THE EQUIPMENT AND METHODS PROPOSED TO PROVIDE A MINIMUM OF 3,000 POUNDS PER SQUARE FOOT BEARING CAPACITY.

ALL WORK SHALL BE STOPPED DURING RAINY PERIODS WHEN CONDITIONS WILL NOT ALLOW SATIFACTORY COMPACTION. WORK WILL BE STARTED AGAIN ONLY WHEN THE MOISTURE CONTENT AND THE CONDITION OF EACH LAYER SPREAD IS SATIFACTORY, IT SHALL BE ROLLED WITH AN APPROVED COMPACTING ROLLER.

PROTECT ALL SOIL BEARING SURFACES FORM FREEZING PRIOR TO CONCRETE PLACEMENT. PROTECT ALL CONCRETE WORK FROM FREEZING DURING AND AFTER PLACEMENT (MINIMUM 7 DAYS). BACKFILL AROUND GRADE WALLS OR PROVIDE OTHER MEANS OF PROTECTION TO PREVENT FREEZING OF GROUND BENEATH THE FOOTINGS.

PROVIDE NECESSARY SHEETING, SHORING BRACING, ETC. AS REQUIRED DURING EXCAVATIONS TO PROTECT THE SIDES OF THE EXCAVATIONS.

PROVIDE ADEQUATE AND PROPER BRACING OF ALL FOUNDATION BASEMENT WALLS PRIOR TO BACKFILLING. BRACING TO REMAIN IN PLACE UNTIL STRUCTURAL FLOOR DECK AND BASEMENT SLAB IS COMPLETELY INSTALLED BEFORE EXCAVATION CAN BE BACKFILLED.

THE USE OF ON SITE MATERIALS THAT HAVE NOT BEEN INSPECTED AND APPROVED BY THE ENGINEER FOR BACKFILLING OF BASEMENT WALLS IS STRICTLY PROHIBITTED. BACKFILLING OF EXCAVATIONS FOR BASEMENT WALLS SHALL BE PERFORMED IN ACCORDANCE WITH FOLLOWING:

AS A MINIMUM, THE FIRST 14" OF BACKFILL WILL BE WASHED PEA STONE GRAVEL. (INSTALL DRAIN TILE PER PLUMBING REQUIREMENTS)

REMAINDER WILL BE BACKFILLED TO FINISH GRADE WITH INORGANIC GRANULAR SOIL

AT COMPLETION OF WORK FINISH GRADING OF AREAS DISTURBED BY CONST

### UTILITIES

OWNER/BUILDER SHALL COORDINATE WITH UTILITY COMPANY FOR INSTALLATION. CONTACT MISS DIG BEFORE PERFORMING ANY EXCAVATION ACTIVITIES.

#### MECHANICAL

PROVIDE EXHAUST FANS IN ALL BATHROOMS

MECHANICAL SYSTEMS ARE TO BE DESIGNIBUILD BY THE MECHANICAL CONTRACTOR AND SHALL BE COORDINATED WITH OWNER/BUILDER. MECHANICAL CONTRACTOR SHALL BE PROPERLY LICENSED IN THE STATE OF MICHIGAN.

#### ELECTRICAL

Drawing No

ELECTRICAL SYSTEMS ARE TO BE DESIGN/BUILD BY THE ELECTRICAL CONTRACTOR AND SHALL BE COORDINATED WITH OWNER/BUILDER. ELECTRICAL CONTRACTOR SHALL BE PROPERLY LICENSED IN THE STATE OF MICHIGAN. ELECTRICAL CONTRACTOR TO PROVIDE SMOKE DETECTORS AS REQUIRED BY CODE. VERIFY LOCATION WITH BUILDING OFFICIAL ON APPROVED PLANS. HARDWIRE AND INTERCONNECT

ALL SMOKE DETECTORS.

ALL LIGHTING AND RECEPTACLE LOCATIONS SHOULD BE VERIFIED WITH OWNER.

Reference Drawings

CONCRETE

ALL CONCRETE WORK AND PLACEMENT SHALL BE PERFORMED IN ACCORDANCE WITH LATEST EDITION OF ACI301 "SPECIFICATION FOR STRUCTURAL CONCRETE FOR BUILDINGS".

CONCRETE DESIGN IS BASED ON THE ALTERNATE DESIGN METHOD OF "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE", ACI 318, OF THE AMERICAN CONCRETE

INSTITUTE. DETAILING OF REINFORCEMENT SHALL BE GOVERNED BY THE "ACI MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURE", UNLESS NOTED OTHERWISE

MATERIALS:

PORTLAND CEMENT SHALL CONFORM TO ASTM C 150 TYPE 1

- AGGREGATES SHALL CONFORM TO ASTM C 33
- AIR-ENTRAINING ADMIXTURES SHALL CONFORM TO ASTM C 260
- REINFORCING STEEL BARS, DOWELS AND TIES SHALL CONFORM TO ASTM-615, GRADE 60
- WELDED WIRE FABRIC SHALL CONFORM TO ASTM A 185
- MINIMUM ULTIMATE COMPRESSIVE STRENGTH OF CONCRETE AT 28 DAYS:
- FOUNDATIONS AND GRADE WALLS 3,000 PSI WITH A MINIMUM OF 5 BAGS OF CEMENT FLOOR SLAB-ON-GRADE - 3,500 PSI WITH A MINIMUM OF 6 BAGS OF CEMEN
- FINISHED CONCRETE WHICH HAS SURFACES THAT WILL BE EXPOSED TO WEATHER SHALL BE OF AIR-ENTRAINED TYPE. TOTAL AIR CONTENT SHALL BE 6 PERCENT, PLUS OR MINUS 1 PERCENT.

DESIGN MIX FOR CONCRETE SHALL BE PROPORTIONED TO RESULT IN CONCRETE SLUMP AT THE POINT OF DISCHARGE NOT TO EXCEED 3 INCHES.

COLD WEATHER CONCRETING - UNLESS ADEQUATE PROTECTION IS PROVIDED AND/OR APPROVAL GIVEN, CONCRETING SHALL NOT BE STARTED DURING RAIN, SLEET, OR SNOW, AND SHALL NOT BE CONTINUED DURING SUCH WEATHER AFTER HAVING STARTED EXCEPT LONG ENOUGH TO COME TO A SUITABLE CUT-OFF POINT. RAINWATER SHALL NOT BE ALLOWED TO INCREASE THE MIXING WATER WITHOUT INCREASING THE CEMENT PROPORTIONATELY. CONCRETE FINISH SHALL BE PROTECTED UNTL SUFFICIENT HARDNESS IS OBTAINED. THE MINIMUM TEMPERATURE OF CONCRETA & SPLACED SHALL BE OB ODERGES F. IN COLD WEATHER, IN ORDER TO MAINTAIN THE ABOVE MINIMUM, PLACING TEMPERATURE SHALL NOT BE LESS THAN THE FOLLOWING: BE LESS THAN THE FOLLOWING

AIR TEMPERATURE	CONCRETE TEMPERATUR
ABOVE 30 DEGREES F	55 DEGREES F
20 TO 30 DEGREES F	60 DEGREES F

COLD WEATHER CONCRETING - WINTER CONCRETING SHALL CONFORM TO RECOMMENDED PRACTICES (ACI STANDARD 306). WHEN THE MEAN DAILY TEMPERATURE OF THE ATMOSPHERE IS LESS THAN 40 DEGREES F. THE CONCRETE SHALL BE SO PROTECTED AS TO MAINTAIN WITHIN TA TEMPERATURE OF 50 DEGREES F. TO 70 DEGREES F. FOR THE CURING PERIOD RECURIED. WHEN NECESSARY, ARRANGEMENTS FOR HEATING. COVERING, INSULATING, OR HOUSING SHALL BE MADE IN ADVANCE OF PLACEMENT AND SHALL BE ADEQUATE TO MAINTAIN IN ALL PARTS OF THE CONCRETE THE RECOURED TEMPERATURE AND MOISTURE CONDITIONS AND NOT CAUSE INJURY DUE TO CONCENTRATION OF HEAT.

ANTI-FREEZE COMPOUNDS: SALT, CHEMICALS, OR OTHER FOREIGN MATERIAL SHALL NOT BE USED TO PREVENT FREEZING.

ACCELERATORS: PER ASTM C-494 MAY BE USED, WHEN APPROVED BY THE ENGINEER, WHICH WILL NOT CAUSE AN INJURIOUS EFFECT ON DESIRED QUALITIES.

HIGH ONDER TO ANDER TO ADDATE OF TO ECONFIDENCE ON DECIDING. HOT WEATHER CONCRETING IN HOT WEATHER THE CONCRETE WHEN DEPOSITED SHALL NOT HAVE A TEMPERATURE WHICH WILL CAUSE DIFFICULTY FROM LOSS OF SLUMP, FLASH SET, OR COLD JOINS MAX 90 EGREESE 51. WHEN HECKSSARY THE WATER ANDOR AGGREGATES SHALL BE COOLED TO PREVENT CONCRETE FROM HAVING EXCESSIVE TEMPERATURES. HOT WEATHER CONCRETING SHALL CONFORM TO DECOMMENDED PRACTICES (ALS STANDARD BOG) CONCRETE CAST DURING HOT WEATHER SHALL BE PROTECTED FROM PREMATURE DRYING OUT AND EXCESSIVE HEATING DURING THE CURING PERIOD ACCESSIVE TEMPERATURE CHANGES. THE CHANGE IN TEMPERATURE OF ANY PORTION OF THE CONCRETE DUE TO CHANGE IN WEATHER OR REDURING THE CURING PERIOD ACCESSIVE TEMPERATURE CHANGES. THE CHANGE IN TEMPERATURE OF ANY PORTION OF THE CONCRETE DUE TO CHANGE IN WEATHER OR REDURING THE CURING PERIOD ACCESSIVE TEMPERATURE AND SHALL NOT EXCEED 5 DEGREES F. IN ANY 24-HOUR PERIOD.

SLAB-ON-GRADE SHALL BE PLACED ON 4 INCHES OF COMPACTED SAN

CONCRETE FINISHES

TOP SUFACE OF SLAB-ON-GRADE SHALL RECEIVE A STEEL TROWEL FINISHED. TOP SUFACE OF EXTERIOR CONCRETE SLABS SHALL RECEIVE A BROOM FINISH

A WET CURED METHOD SHALL BE USED FOR CURING THE FLOOR SLAB-ON-GRADE, WHICH ARE TO RECEIVE A SURFACE HARDENER AND DUSTROOPER, SUCH AS "SURFHARD." AS MANUFACTURED BY THE FLOLD CHEMICAL COMPANY, OR APPROVED SUBSTITUTE. THE PRODUCT SHALL BE APPLIED IN STRICT ACCORDANCE WITH THE INSTRUCTIONS OF THE MANUFACTURE.

ALL REINFORCING STEEL SHALL BE FABRICATED AND PLACED IN ACCORDANCE WITH ACI 318, LATEST EDITION:

REINFORCING STEEL SHALL BE CONTINUOUS, UNLESS OTHERWISE NOTED, REINFORCING BAR SPLICES SHALL BE A MINIMUM OF 36 BAR DIAMETERS. HOOKS TO ACI STANDARD.

REINFORCED CONCRETE WALLS AND FOOTINGS SHALL HAVE CORNER BARS AT ALL INTERSECTIONS OF THE SAME SIZE AND SPACING AS THE MAIN HORIZONTAL REINFORCING.

PROVIDE (2) #5 x 4'-0" LONG DIAGONAL BARS AT EACH CORNER OF OPENINGS IN WALLS AND FLOOR SLABS.

CONSTRUCTION JOINTS AND CONTROL JOINTS SHALL BE PROVIDED IN SLAB-ON-GRADE AS SHOWN ON THE DRAWINGS.

CONCRETE POURED INTO VERTICAL FORMS SUCH AS FOUNDATION BASEMENT WALLS, RETAINING WALLS, ETC. SHALL BE CONSOLIDATED AROUND REINFORCING STEEL AND SIDES OF FORMS BY USE OF HAND HELD PORTABLE VIBRATORS.

INSTALL 6 MIL POLYETHYLENE VAPOR BARRIER UNDER ALL CONCRETE SLABS ON GRADE IN BASEMENTS AND OTHER LIVING AREAS.

#### FINISHES AND FIXTURES

0 04/15/04 ISSUED FOR CONSTRUCTION

Description

Rev Date

ALL INTERIOR FLOOR FINISHES, FIXTURE SELECTIONS, PAINT COLORS, TRIM AND CABINET SELECTIONS, ETC. ARE BY OWNER/BUILDER.

DROP SUB-FLOOR AT ALL BATHROOMS AND IN OTHER AREAS TO RECEIVE CERAMIC TILE AS SHOWN ON DRAWINGS. VERIFY WITH OWNER/BUILDER.

DRYWALL TO BE ½" THICK WHERE FRAMING IS 16" O.C. AND 5/6" WHERE ALL FRAMING IS 24 O.C. AND ON CEILINGS. DRYWALL SHALL BE TAPED, FILLED AND SANDED SMOOTH AT ALL WALL AND CEILING LOCATIONS UNLESS OTHERWISES NOTED ON DRAWINGS.

FIRECODE DRYWALL WHERE INDICATED ON DRAWINGS AND RECOMMENDED BY CODE IS TO BE 5/8" THICK AND INSTALLED AS REQUIRED BY CODE AND AS INDICATED BY MANUFACTURER CAULK ALL WOOD AND TRIM EDGES TO BRICK SURFACES. CAULK ALL JOINTS AND CORNERS

C.R.W.

C.R. WITHERELL, P.E. (MI-25411)

Des C.R.W.

App

File

C.R.W. C.R.W.

By App

05/14/04

05/14/04

<u>Eèlipse</u>

**Design Services** 

4468 Springbrook Road

Jackson, Michigan 49201

IN WOOD CONSTRUCTION. CAULK ALL WINDOW EDGES TO TRIM/BRICK. INSTALL METAL FLASHING AS MAY BE NEEDED TO PROVIDE A WATER-TIGHT BUILDING.

STRUCTURAL STEEL

ALL STEEL WORK AND ERECTION SHALL BE PERFORMED IN ACCORDANCE WITH LATEST EDITION OF AISC. 'CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES', 'SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL BUILDINGS', 'SPECIFICATIONS FOR STRUCTURAL JOINST AND BOLTS', 'STRUCTURAL WE CODE . STEEL'

ALL WELDED CONNECTIONS SHALL BE SHOP WELDED BY CERTIFIED WELDERS IN ACCORDANCE WITH THE LATEST A.W.S. CODE USING E70XX ELECTRODES. ROLLED STEEL, PLATES AND BARS ASTM A36 OR A572, GRADE 50

#### MATERIALS

- ANCHOR BOLTS COMPLY WITH ASTM A307, GRADE A
- STEEL TUBING ASTM A500 GRADE B OR ASTM A501
- BOLTS ASTM A325 OR A490 AS SHOWN ON DRAWINGS

PRIME ALL STEEL WITH RUST INHIBITING PRIMER PRIOR TO SHIPPING. PAINT LOWER PORTIONS OF ALL COLUMNS TO BE BURIED IN CONCRETE, AS WELL AS UNDERSIDE OF BASEPLATES TO BE IN CONTACT WITH CONCRETE WITH BLACK ASPHALTIC PAINT.

THE DESIGN OF ALL STRUCTURAL STEEL CONNECTIONS SHALL BE THE RESPONSIBILITY OF THE THE DEGISTION OF ALL STADOLOWAL STEEL CONNECTIONS SPIRLL BE THE REGROMSIBILITY OF THI STRUCTURAL STEEL FARRICATOR, FABRICATOR SHALL FIEL MAESURE AND PREPARE NECESSARY SHOP DRAWINGS FOR STEEL FABRICATION AND ERECTION. FABRICATOR SHALL SUBMIT 4 COPIES OF ALL SHOP DRAWINGS AND CALCULATIONS SEALED BY AREGISTERED REGISTERE THE STATE OF MICHIGAN TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO FABRICATION. APPROVAL OF THE SHOP DRAWINGS BY THE ENGINEER SHALL NOT CONSTITUTE APPROVAL OF THE ADEQUACY OR ERECTION SAFETY OF ANY STRUCTURAL STEEL CONNECTIONS

DESIGN BEAM END CONNECTIONS FOR A MINIMUM OF ONE-HALF OF THE TOTAL ALLOWABLE UNIFORM LOAD PER AISC BEAM LOAD TABLES.

ALL ANGLES, BEAMS AND OTHER STEEL SHAPES USED AS LINTELS IN EXTERIOR MASONRY WALLS SHALL BE GALVANIZED OR STAINLESS STEEL.

#### MASONRY

ALL MASONRY WORK SHALL BE IN ACCORDANCE WITH THE LATEST ACI AND NCMA SPECTIFICATIONS.

MATERIALS

ALL CONCRETE BLOCK, BOTH LOAD BEARING AND NON-LOADBEARING, SHALL CONFORM TO ASTM C90 AND CH5, TYPE 1, GRADE I OR II (1,500 PSI)

MORTAR SHALL BE TYPE S (2,000 PSI) CONFORMING TO ASTM C270 SAMPLED AND TESTED TO ASTM C1019

ALL REINFORCING BARS, DOWELS AND TIES SHALL CONFORM TO ASTM A615 GRADE 60 JOINT REINFORCEMENT - ASTM A82, LADDER CONFIGURATION, SIDE RODS AND CROSS RODS 9 GAUGE (0.1483 IN.), CROSS WIRES SPACED AT 16° O.C. CORROSION PROTECTION - INTERIOR: MILL GALVANIZED, ASTM A841, EXTERIOR OR HIGH HUMDITY CONDITIONS: HOT DIPPED GALVANIZED AFTER FABRICATION, ZINC COATED ASTM A153 (1.50 0Z. PER S.F.)

MASONRY GROUT SHALL CONFORM TO ASTM C476, WITH PEA GRAVEL AGGREGATE AND A MINIMU STRENGTH OF 2,000 PSI.

FLASHING - PIECE MEMBRANE (FLEXIBLE COMPOSITE) OR DRIP EDGE EXTENSION OF STAINLESS STEEL, ASTM A167 WITH MEMBRANE (FLEXIBLE COMPOSITE). FLASHING MATERIAL MUST BE IMPERVIOUS TO MOISTURE AND RESIST ABRASION, CORROSION, ULTRA-VIOLET (UV) EXPOSURE AND PUNCTURE. PVC FLASHING IS NOT RECOMMENDED.

JOINT SEALANTS SHALL BE COMPATIBLE TO FLASHINGS, PERFORM AT EXTREME TEMPERATURES AND NOT CAUSE MASONRY DISCOLORATION. THE CHOSEN MATERIAL SHALL LAST THE LIFE OF THE BUILDING

ALL BLOCK CORES SHALL BE GROUTED SOLID AROUND VERTICAL REINFORCING BARS.

ALL STEEL LINTELS SHALL HAVE A MINIMUM OF 8" BEARING AT EACH EN

PROVIDE WEEP-HOLES AT 48° O.C. AND FABRIC FLASHING AT BOTTOM OF ALL VENEER WALLS AND AT LINTELS. WEEPHOLES SHALL BE PARTIALLY OPEN HEAD JOINTS.

PROVIDE A LAYER OF WASHED PEA STONE GRAVEL ON THE FLASHING TO PREVENT MORTAR DROPPINGS FROM CLOGGING THE WEEPHOLES.

LOOSE INSULATION SHALL BE PROVIDED WHERE SHOWN ON THE DRAWINGS. LOOSE FILL INSULATION SHALL BE PLACED IN LIFTS TO COINCIDE WITH LAYING OF THE CONCRETE MASONRY UNTS TO PREVENT BUILD-UP OF MORTAR DROPPINGS, WHICH MAY HINDER DOWNWARD MIGRATION OF MOISTURE.

EXTERIOR DOOOR SILLS AT WALL WITH MASONRY TO BE NATURAL INDIANA LIMESONE SAW CUT AND POLISHED. PROVIDE WALL TIES AT 24° O.C. HORIZONTALLY AND 16' VERTICALLY. TIES TO BE HECKMANN #187 HOLE TYPE, 16 GAUGE ANCHOR AT WOOD STUD AND CONCRETE MASONRY WALL CONSTRUCTION.

ALL FINAL BRICK AND STONE MATERIAL SELECTIONS WILL BE MADE BY THE OWNER/BUILDER.

HORIZONAL LADDER STEEL REINFORCEMENT SHALL BE INSTALLED IN ALL MASONRY LOAD BEARING WALLS AT 16\* O.C. VERTICAL SPACING.

ALL WINDOWS SHALL BE VINYL CLAD WOOD WINDOWS WITH INSULATING GLASS. BRAND NAME SHALL BE PER OWNER/BUILDER REQUIREMENTS. WINDOW SIZES ARE NOTED ON DRAWINGS. PROVIDE OPERABLE SASH AS INDICATED ON DRAWINGS. PROVIDE SCHREENS FOR ALL OPERABLE SASH.

WINDOW SUPPLIER/MANUFACTURER TO VERIFY CODE COMPLIANCE FOR WINDOW EGRESS AND TEMPERED GLASS.

PROVIDE MINIMUM 12" FIBERGLASS BATT INSULATION IN ALL ATTIC SPACES. INSTALL INSULATION BAFFLES WHERE REQUIRED TO MAINTAIN A MINIMUM OF 2" CLEAR AIR SPACE FOR VENTILATION.

INSULATE RIM JOISTS AND BONDS AT ALL FLOORS WITH MINIMUM 9" FIBERGLASS BATT INSULATION.

PROVIDE MINIMUM 3  $\%^*$  R13 FIBERGLASS INSULATION IN ALL 2x4 EXTERIOR STUD WALL AND 5  $\%^*$  R19 FIBERGLASS INSULATION IN ALL 2x6 EXTERIOR WALLS.

WINDOWS AND DOORS

INSULATION

BEDROOM WINDOWS SHALL MEET FIRE EGRESS CODES.

INSULATE ALL FLOORS AT CANTILEVERS AND BOX-OUTS

PROVIDE SOUND ATTNUATION BLANKET IN ALL WALLS OF BATHROOMS

VERIFY WITH OWNER/BUILDER AS TO GARAGE INSULATION REQUIREMENTS

#### WOOD FRAMING LUMBER

ALL WOOD FRAMING SHALL PER AMERICAN INSTITUTE OF TIMBER CONSTRUCTION AND NATIONAL FOREST PRODUCT ASSOCIATION STANDARDS AND SPECIFICATIONS, LATEST

PRESERVATIVE TREATED LUMBER SHALL BE PRESSURE TREATED IN ACCORDANCE WITH AWPI STANDARD IP-2. ALL WOOD LUMBER IN CONTACT WITH EARTH OR CONCRETE SHALL BE PRESSURE TREATED.

FRAMING CONNECTIONS SHALL BE NAILED IN ACCORDANCE WITH NLMA STANDARDS MATERIALS

STRUCTURAL FRAMING LUMBER SHALL BE KILN DRIED, DOUGLAS FIR NO 2. MEETING OR EXCEEDING THE FOLLOWING STRUCTURAL CHARACTERISTICS BASED ON THE NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION PUBLISHED BY NEPA:

MODULUS OF ELASTICITY - 1,700 KSI EXTREME FIBER STRESS BENDING - 1 250 PSI HORIZONTAL SHEARING STRESS - 95 PSI COMPRESSION PERPENDICULAR TO GRAIN - 350 PSI COMPRESSION PARALLEL TO GRAIN 1,200 PSI

FASTENERS: NAILS - FS-FF-N-103 AND FF-N-105, SCREWS - FS-FF-S-111, BOLTS - FS-FF-8561 AND FF-B-671.

USE NON-CORROSIVE CASING NAILS WHEN INSTALLING SIDING AND EXTERIOR TRIM

ADHESIVES SHALL BE WATERPROOF, NON-STAINING, CASE-IN CONTACT THERMO SETTING TYPES RECOMMENDED BY AWI.

PLYWOOD ROOF DECKING SHALL BE ½\* 5 PLY., 48/24-C-D EXTERIOR GRAD AR WITH PLY CLIPS AT FRAMING SPACED 24\* O.C.

INTERIOR TRIM AND MILLWORK BY OWNER/BUILDER

ENGINEERED LUMBER - LVL'S (LAMINATED VENEER LUMBER), GLULAMS AND I-JOISTS SHALL BE BY WILLAMETTE INDUSTRIES OR EQUALL APPROVED BY ENGINEER.

FRAMING CONNECTORS SHALL BE SIMPSON STRONG-TIE CONNECTORS

PROVIDE FIRE RETARDANT LUMBER WHERE REQUIRED BY CODE

UNLESS OTHER WISE NOTED ON DRAWINGS, PROVIDE MINIMUM  $\%^*$  EXTERIOR PLYWOOD SHEATHING ON ALL EXTERIOR STUD WALLS. COVER SHEATHING WITH MINIMUM 1S POUND BULDING FELT OR TYVEK HOUSE WRAP.

PROVIDE DOUBLE BEARING STUD AT EACH END OF WOOD HEADERS, TYPICAL UNLESS NOTED OTHERWISE

ALL BEARING STUDS, POINT LOADS, ETC. SHALL BE BLOCKED SOLID TO OR PLACED DIRECTLY ON FOUNDATION WALLS, STEEL BEAMS OR WOOD BEAMS DESIGNED FOR SUCH LOADS. PROVIDE AT LEAST TWO FLOOR JOISTS MEMBERS DIRECTLY UNDER ALL WALLS WHICH RUN PARALLEL TO FLOOR JOISTS.

UNLESS NOTE OTHERWISE - ALL PARTITIONS ARE WOOD. ALL STUDS ARE MINIMUM 16' O.C. FOR 2x4 STUDS AND 24' O.C. FOR 2x6 STUDS. ALL INTERIOR WALLS ARE 4 '% '(2x4 STUDS W' %' DRYWALL BOTH SIDES). ALLE ATERIOR WALLS ARE 4 '% '(2x4 STUDS W' %' ORYWALL ON INSIDE, %' PLYWOOD OUTSIDE) OR 6 %' (2x6 STUDS W' %' DRYWALL INSIDE, %' PLYWOOD OUTSIDE'

ALL HEADERS SHALL BE MINIMUM 2 - 2x10 UNLESS NOTED OTHERWISE

PROVIDE BLOCKING IN WALL FOR ALL CABINETS, TOWEL AND CLOTHES RACKS AND SHELVES, LIGHTS, HANDRAILS, PLUMBING FIXTURES, ETC. VERIPY LOCATIONS WITH OWNER/BUILDER, FIREBLOCK ALL STUD SPACES AT 8:0° HEIGHT.

ENGINEERED LUMBER PRODUCTS - LVL'S, GLULAMS AND I-JOISTS SHALL BE HANDLED, STORED AND INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

#### SHINGLES/WATERPROOFING

ASHPALT SHINGLES SHALL BE SELECTED BY OWNER/BUILDER

INSTALL MINIMUM 15 POUND BUILDING FELT UNDER SHINGLES. INSTALL 90 POUND ROLL ROOFING AT ALL VALLEYS LINDER SHINGLES. INSTALL ICE AND WATER SHIELD AT ALL EAVES AND UP ROOF MINIMUM 24 "PAST INTERIOR FACE OF WALL. INSTALL ALUMINUM DRIP EDGING AT ALL EAVES AND RAKES.

ASPHALT SHINGLES SHALL BE FASTENED ACCORDING TO MANUFACTURER'S INSTRUCTIONS TO SOLIDLY SHEATHED ROOFS, BUT NOT LESS THAN 4 NALLS PER EACH 39' TO 44' STRIP OF SHINGLES AND 2 NAILS PER EACH 9' TO 10' OF INDIVIDUAL SHINGLE.

PROVIDE ALL CAULKING AND FLASHING AS REQUIRED TO ENSURE A WATERTIGHT ROOF SYSTEM.

INSTALL ROOF, GABLE END AND SOFFIT VENTS AS REQUIRED PER CODE, TO MEET MINIMUM OF 1 SQUARE FOOT OF CLEAR VENTILATION TO EVERY 150 SQUARE FEET OF ATTIC SPACE.

ALL BASEMENT WALLS TO BE WATERPROOFED WITH A PRODUCT SPECIFICALLY DESIGNED FOR WATERPROOFING OF BASEMENT WALLS. DAMPPROOFING IS NOT ACCEPTABLE. INSTALL INSULATIONDRAINAGE BOARD OVER WATERPROOFING.

#### TRUSSES

ALL TRUSSES SHALL BE STRUCTURALLY DESIGNED AND FABRICATED BY A QUALIFIED TRUSS MANUFACTURER AND SHALL CARRY MANUFACTURER'S STAMP.

TRUSS MANUFACTURER SHALL PROVIDE THE OWNER/BUILDER COMPLETE SHOP DRAWINGS SHOWING TRUSS DESIGN, LOADING AND DIMENSIONS PRIOR TO FABRICATING TRUSSES. ALL SHOWING TRUSS DESIGN, LOADING AND DIMENSIONS PICK TO PRICK TO PRICATING TRUSS TRUSS DESIGNS AND SHOP DRAWINGS WILL BE SEALED BY A STRUCTURAL REINIERER LICENSED IN THE STATE OF MICHIGAN. WHERE REQUIRED BY THE CONSTRUCTION DR. THE TRUSS MANUFACTURER WILL ALSO INCLUDE A COMPLETE ROOF PLAN SHOWING T LAYOUT WITH THE SHOP SHEETS.

ALL TRUSSES SHALL HAVE DESIGN DETAILS AND DRAWINGS ON SITE FOR FRAMING INSPECTION

DESIGN OF THE LUMBER AND THE CONNECTOR PLATES FOR TRUSSES SHALL BE IN ACCORDANCE WITH THE LATEST TRUSS PLATE INSTITUTE REQUIREMENTS.

TRUSS TOP CHORD MUST BE BRACED WITH ROOF SHEATHING OR CONTINUOUS LATERAL BRACING AT 3-0° O.C. BOTTOM CHORD SHALL BE BRACED WITH RIGID CEILING OR CONTINUOUS BRACING AT 10° O.C. PLYMOOD SHEATHING SHALL BE ANLED OR SCREWED TO TRUSS MEMBERS AT 8° O.C. MAXIMM SPACING. ALL BRACING SHALL COMPLY WITH TRUSS DATA SHEETS AND B WT-76 WITH BRACING AT GABLE ENDS AND WEB BRACING WHERE

TRUSSES SHALL BE LIFTED, INSTALLED AND TEMPORARILY BRACED IN STRICT COMPLIANCE WITH MANUFACTURER'S REQUIREMENTS.

TRUSSES SHALL NOT BE FIELD ALTERED WITHOUT PRIOR WRITTEN APPROVAL OF TRUSS MANUFACTURER.

NON-LOAD BEARING WALLS SHOULD BE HELD DOWN FROM THE TRUSS BOTTOM CHORD W/ SIMPSON STC BRACKETS TO INSURE THAT THE TRUSS BOTTOM CHORD WILL NOT BEAR ON THE WALL

ALL CONNECTIONS OF RAFTERS, JACK OR HIP TRUSSES TO MAIN GIRDER TO BE PROVIDED BY TRUSS MANUFACTURER.

ENGINEERED ROOF TRUSSES SHALL BE ATTACHED TO TOP PLATE OF SUPPORTING WALL WITH SIMPSON H-2 HURRICANE ANCHORS OR AS REQUIRED TO PROVIDE UPLIFT CAPACITY SPECIFIED ON TRUSS DATA SHEETS.

ALL ROOF TRUSSES/ROOF FRAMING SHALL BE SPACED AT 24" O.C.

ROOF PITCH SHALL BE PER DRAWINGS

CLIENT

4468 Springbrook Road Jackson, Michigan 49201

**GENERAL NOTES** 

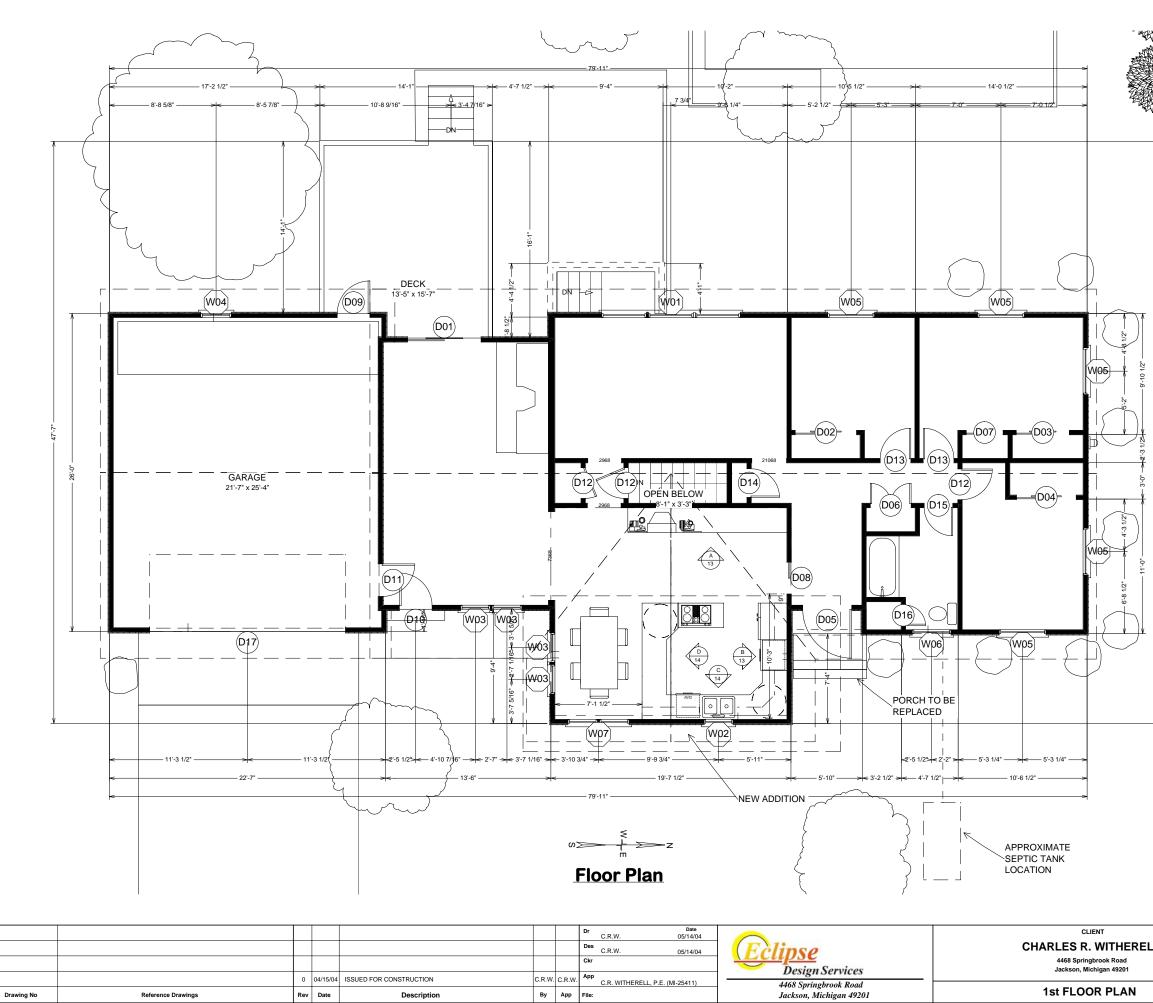
**CHARLES R. WITHEREL** 

SCISSORS TRUSS CEILING PITCH SHALL BE 2:12

TRUSSES SHALL BE MANUFACTURED BY MARQUETTE FABRICATORS, OR ENGINEER APPROVED EQUAL.

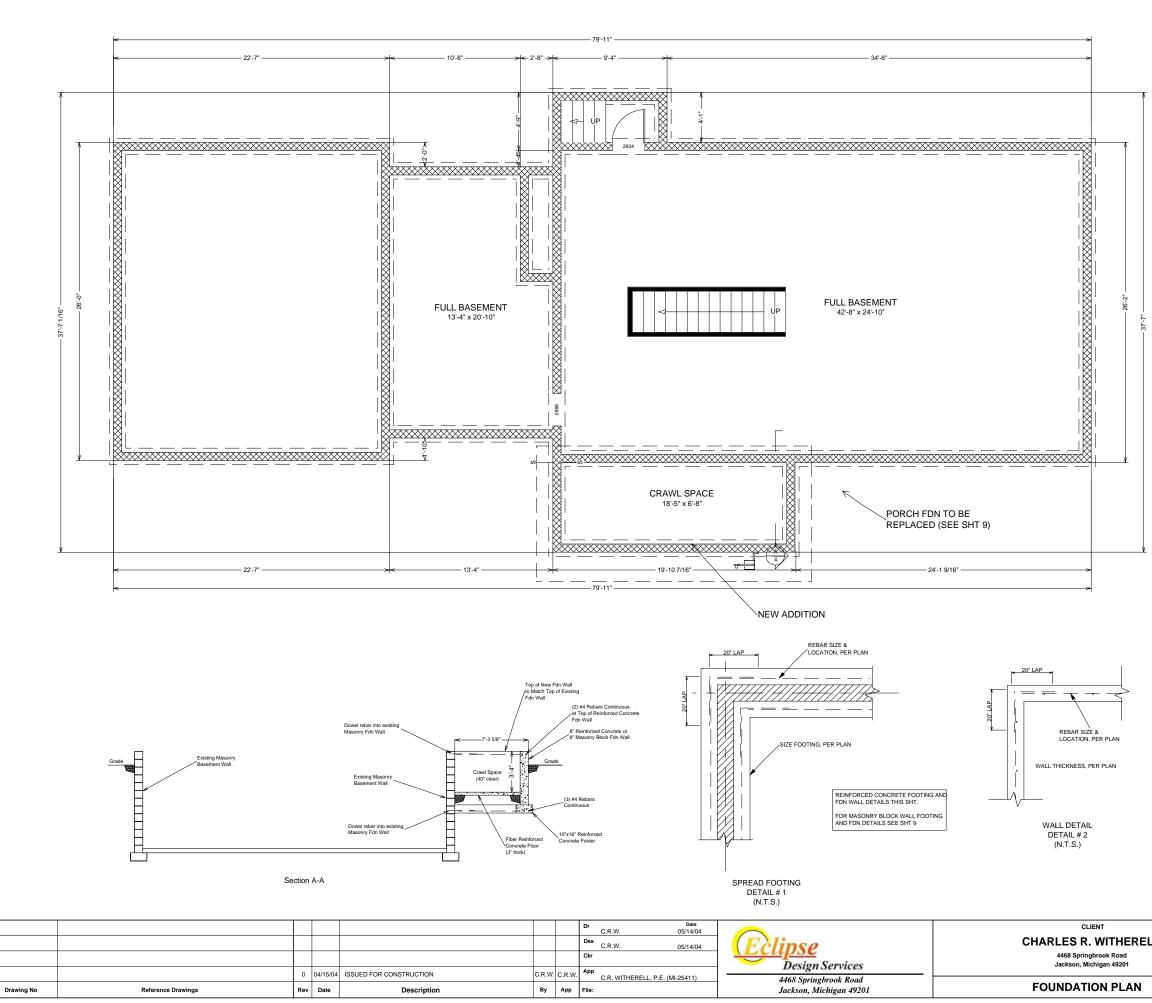
ALL OVERHANGS SHALL BE 16" UNLESS OTHERWISE NOTED ON DRAWINGS.

	Scale Proj. No. 40-6000-000	Drawing Number 6000-C/S-001	Sheet 2	Rev O				
L		MAJOR RENOVATION PRIVATE RESIDENCE OPTION #1						
		Sheet Title						

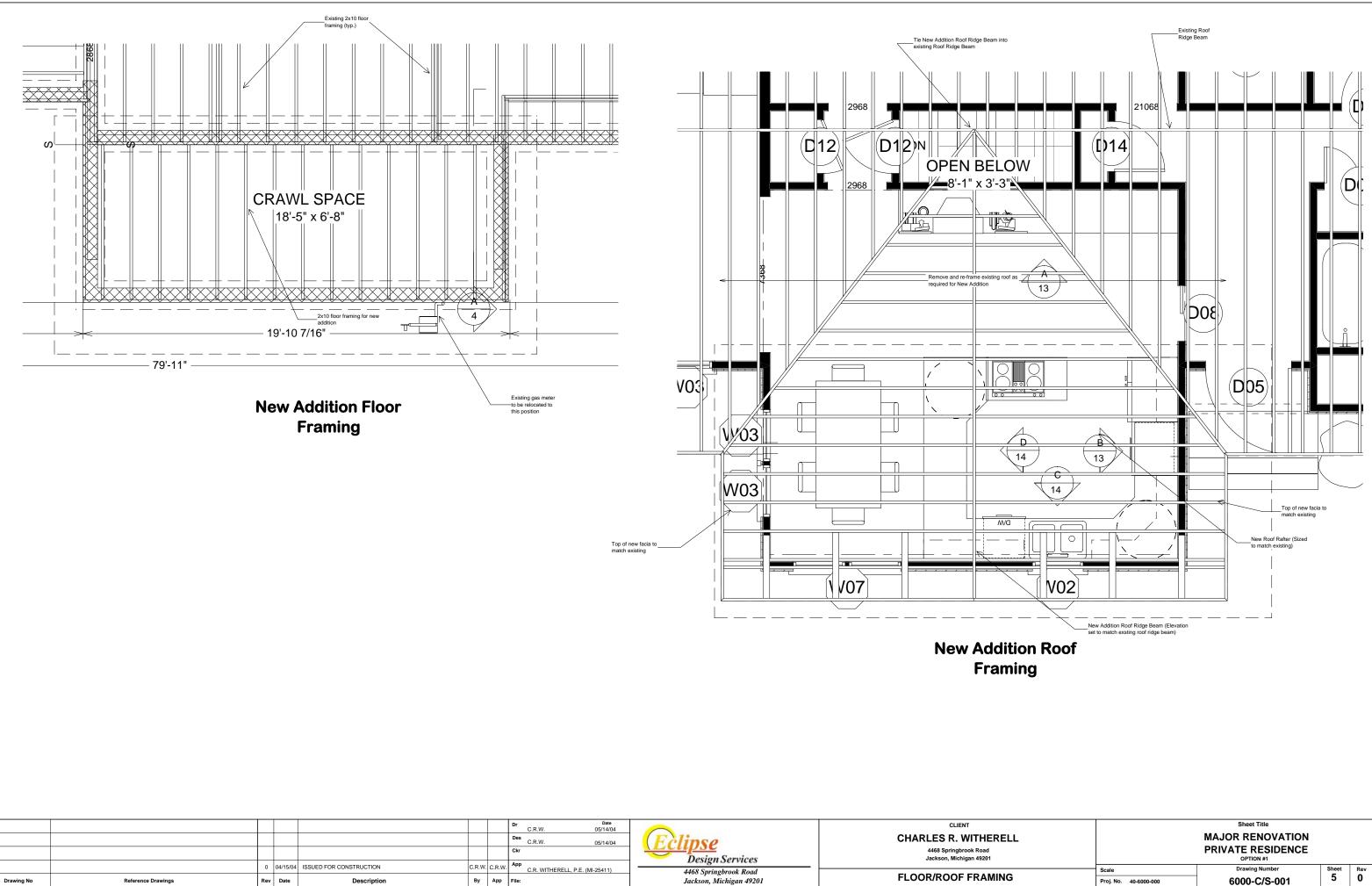




		Sheet Title		
L		MAJOR RENOVATION		
		PRIVATE RESIDENCE OPTION #1		
	Scale	Drawing Number	Sheet	Rev
	Proj. No. 40-6000-000	6000-C/S-001	3	0



		Sheet Title		
LL		MAJOR RENOVATION		
		PRIVATE RESIDENCE		
	Scale	Drawing Number	Sheet	Rev
	Proj. No. 40-6000-000	6000-C/S-001	4	0



Rev Date

Description

Drawing No

Reference Drawings

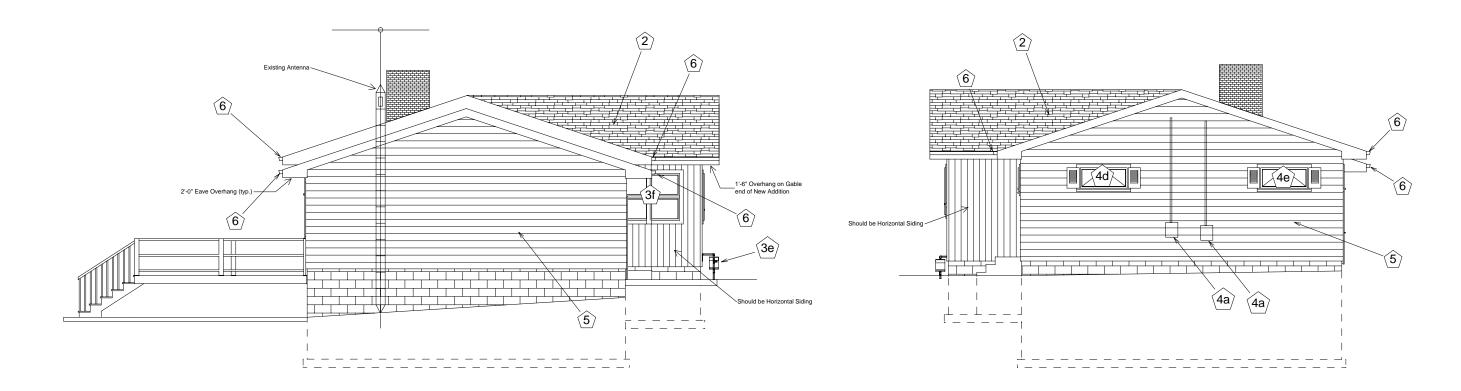
Ву Арр

File:

FLOOR/ROOF FRAMING

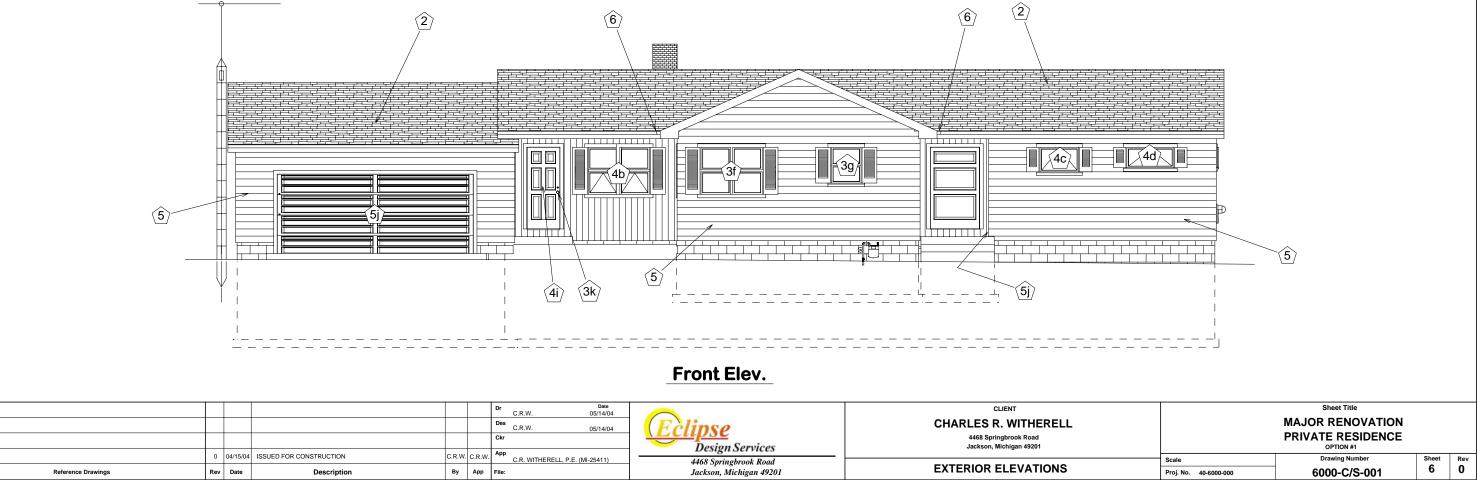
6000-C/S-001

Proj. No. 40-6000-000



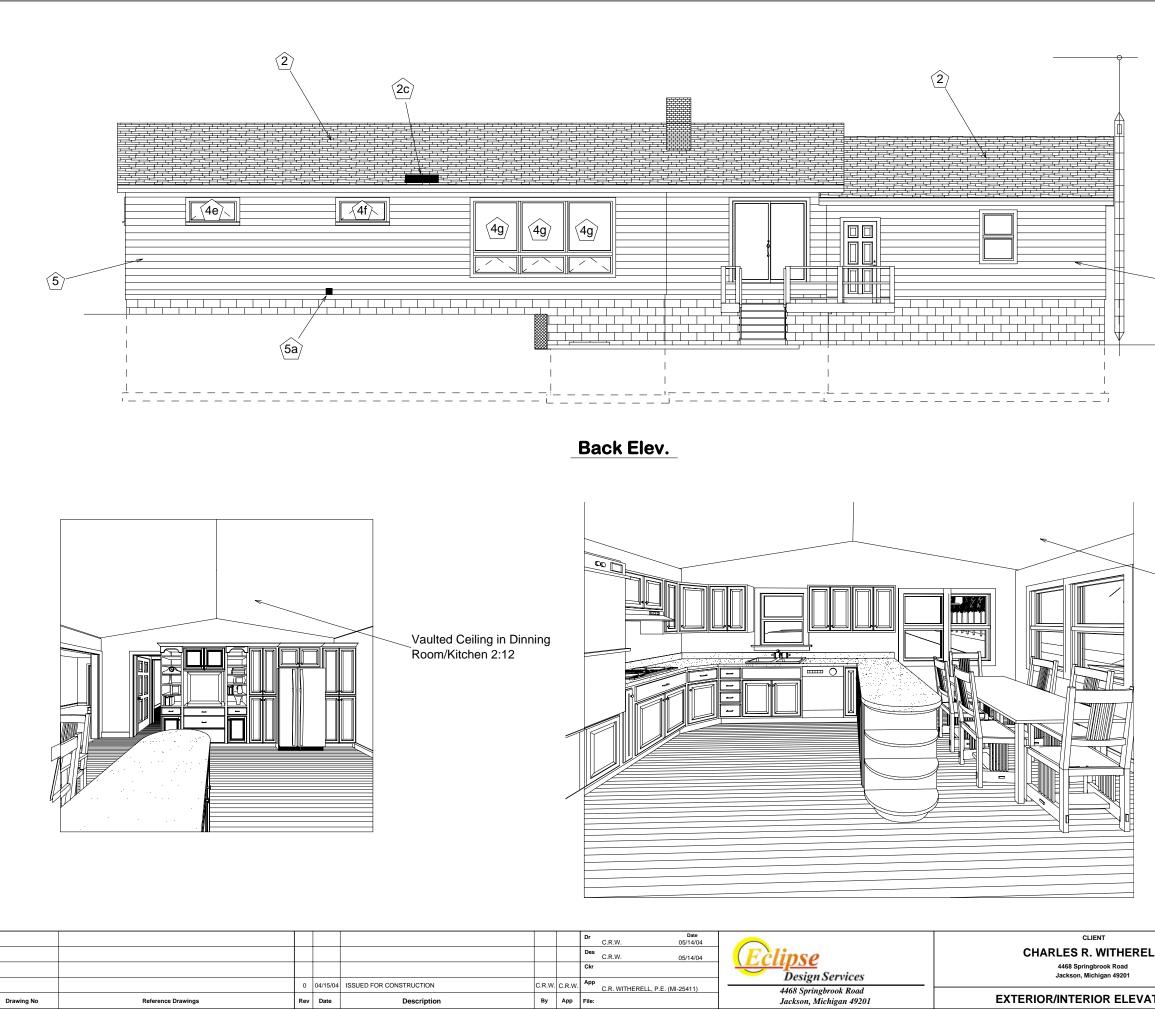
South Elev.

Drawing No



## EXTERIOR ELEVATIONS

# North Elev.



Vaulted Ceiling in Dinning Room/Kitchen 2:12

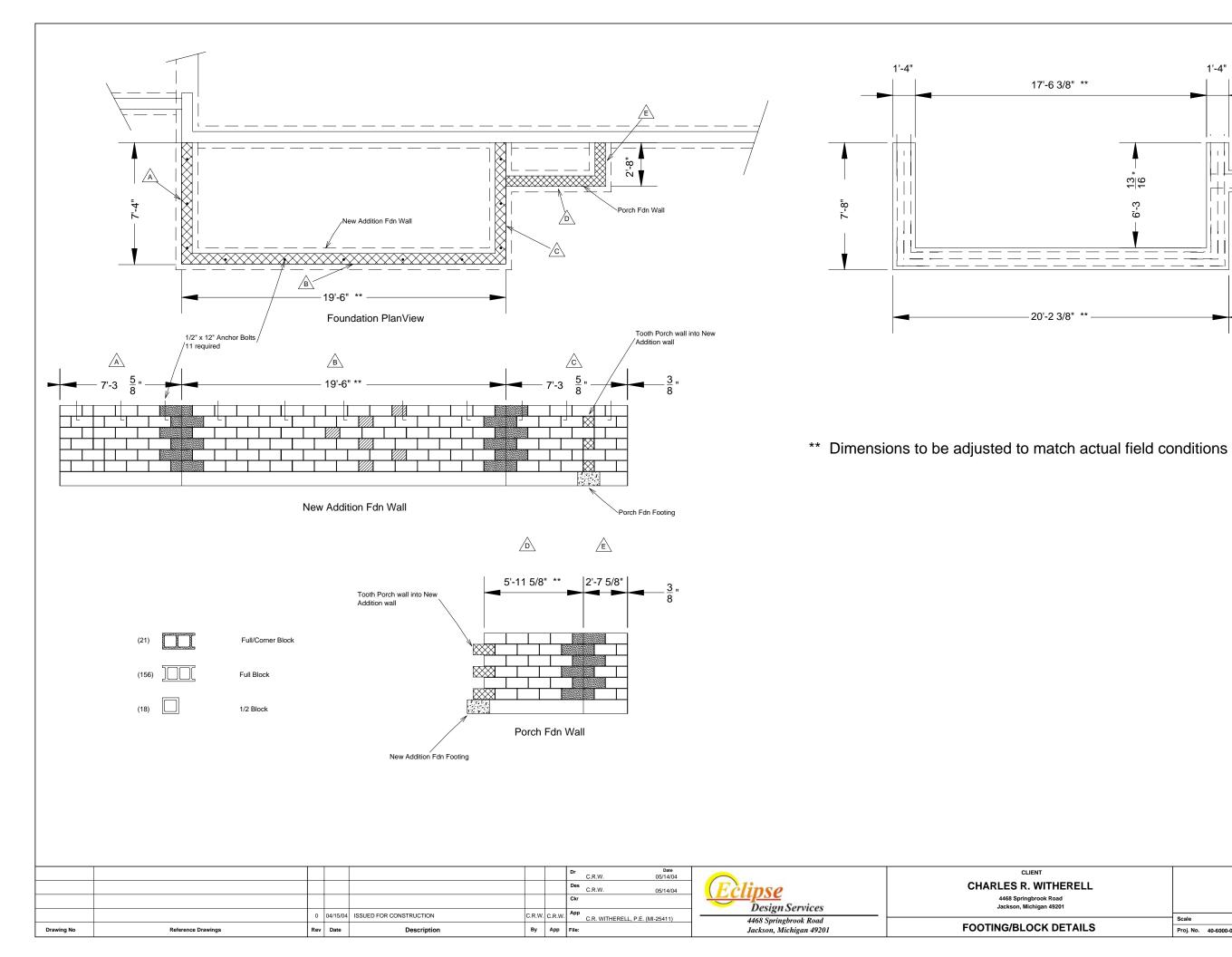
5

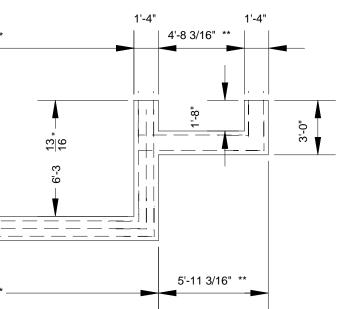
	Sheet Title					
.L		MAJOR RENOVATION				
		PRIVATE RESIDENCE				
	Scale	Drawing Number	Sheet	Rev		
TIONS	Proj. No. 40-6000-000	6000-C/S-001	7	0		



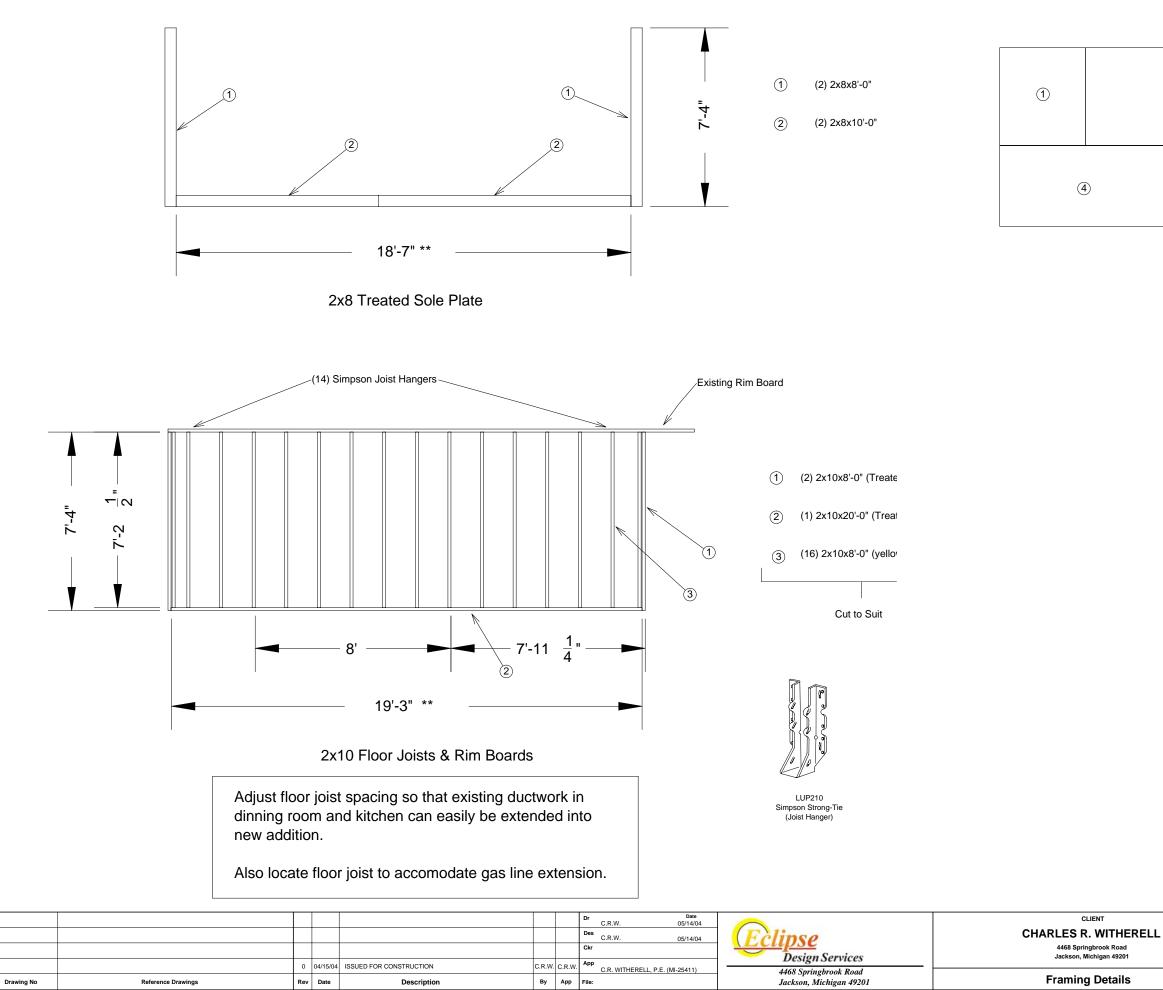
Image: Construction       Image: Construction<	Drawing No	Reference Drawings	 Date	Арр	-	C.R. WITHERELL, P.E. (MI-25411) File:	4468 Springbrook Road Jackson, Michigan 49201	INTERIOR ELEVATIONS
			04/15/04			Des C.R.W. 05/14/04 Ckr App	0	

	Sheet Title	
LL M.	AJOR RENOVATION	
PI	RIVATE RESIDENCE	
Scale	Drawing Number She	et Rev
Proj. No. 40-6000-000	6000-C/S-001 <sup>8</sup>	0





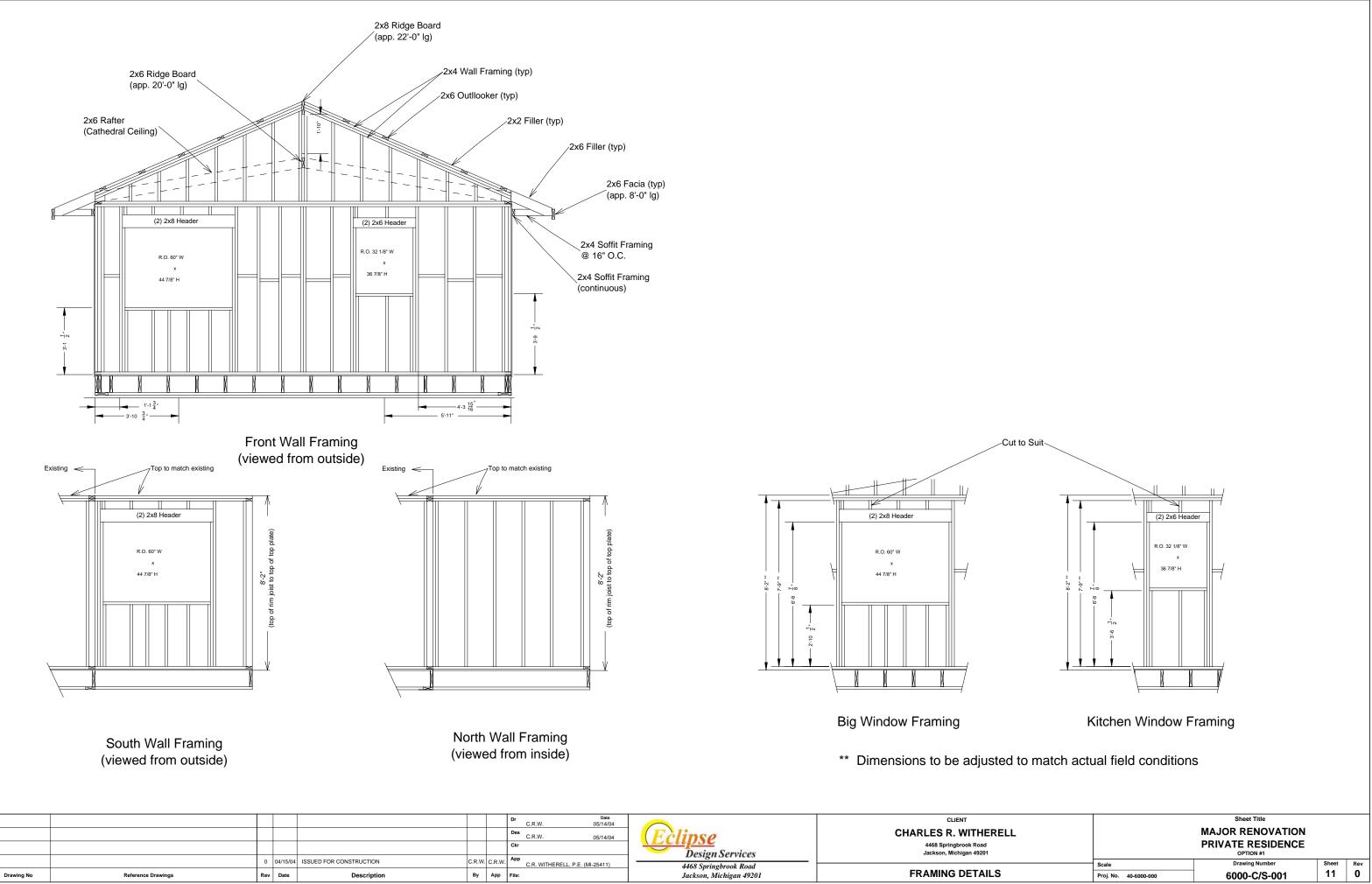
		Sheet Title MAJOR RENOVATION					
.L							
		PRIVATE RESIDENCE					
	Scale	Drawing Number	Sheet	Rev			
_S	Proj. No. 40-6000-000	6000-C/S-001	9	0			

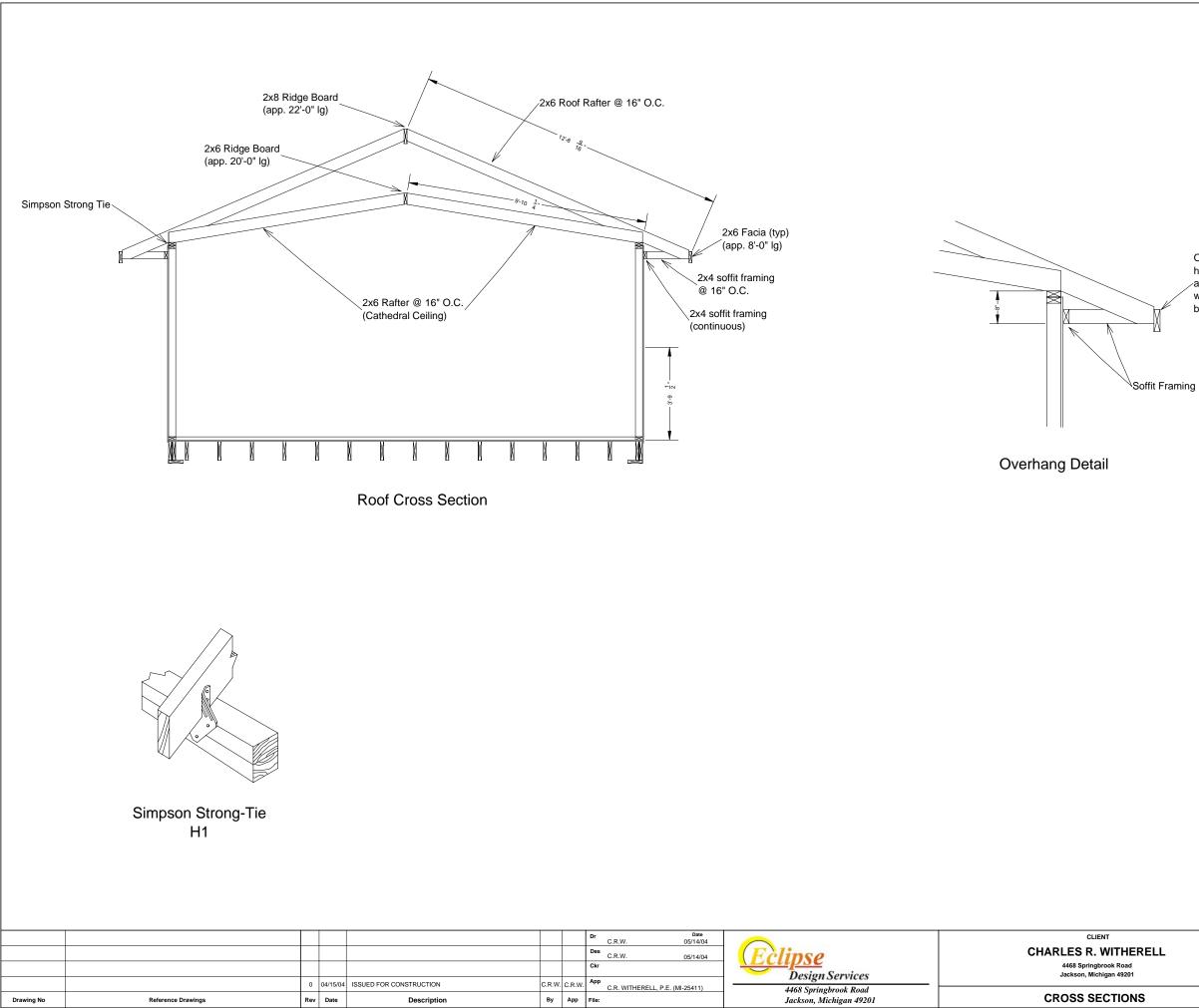


2		3
	5	(1)

1/2" T&G Flooring (4x8 Sheets - (5) req'd)

L		MAJOR RENOVATION PRIVATE RESIDENCE		
	Scale	Drawing Number	Sheet	Rev
	Proj. No. 40-6000-000	6000-C/S-001	10	0





By App File:

Rev Date

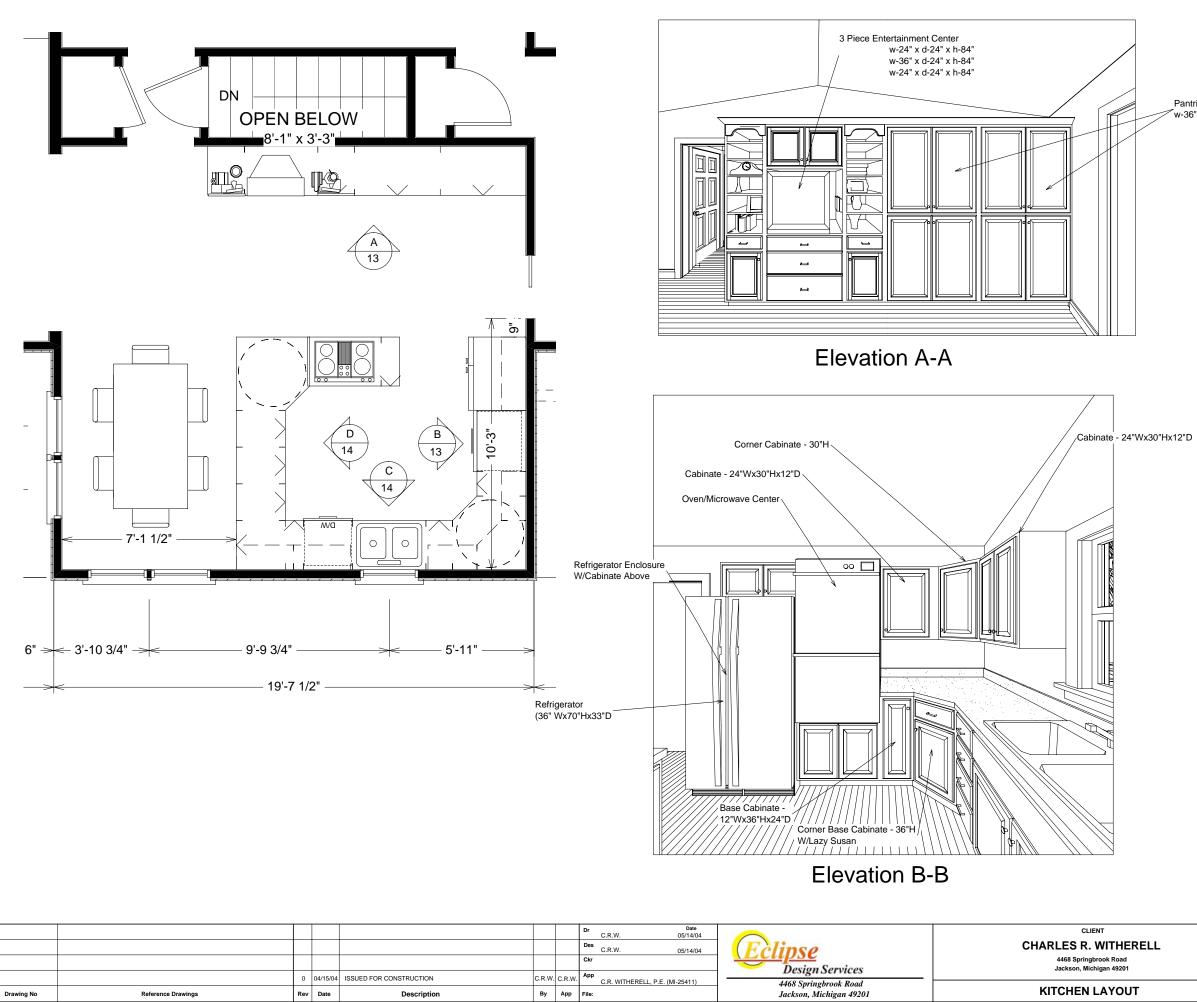
Description

Reference Drawings

Drawing No

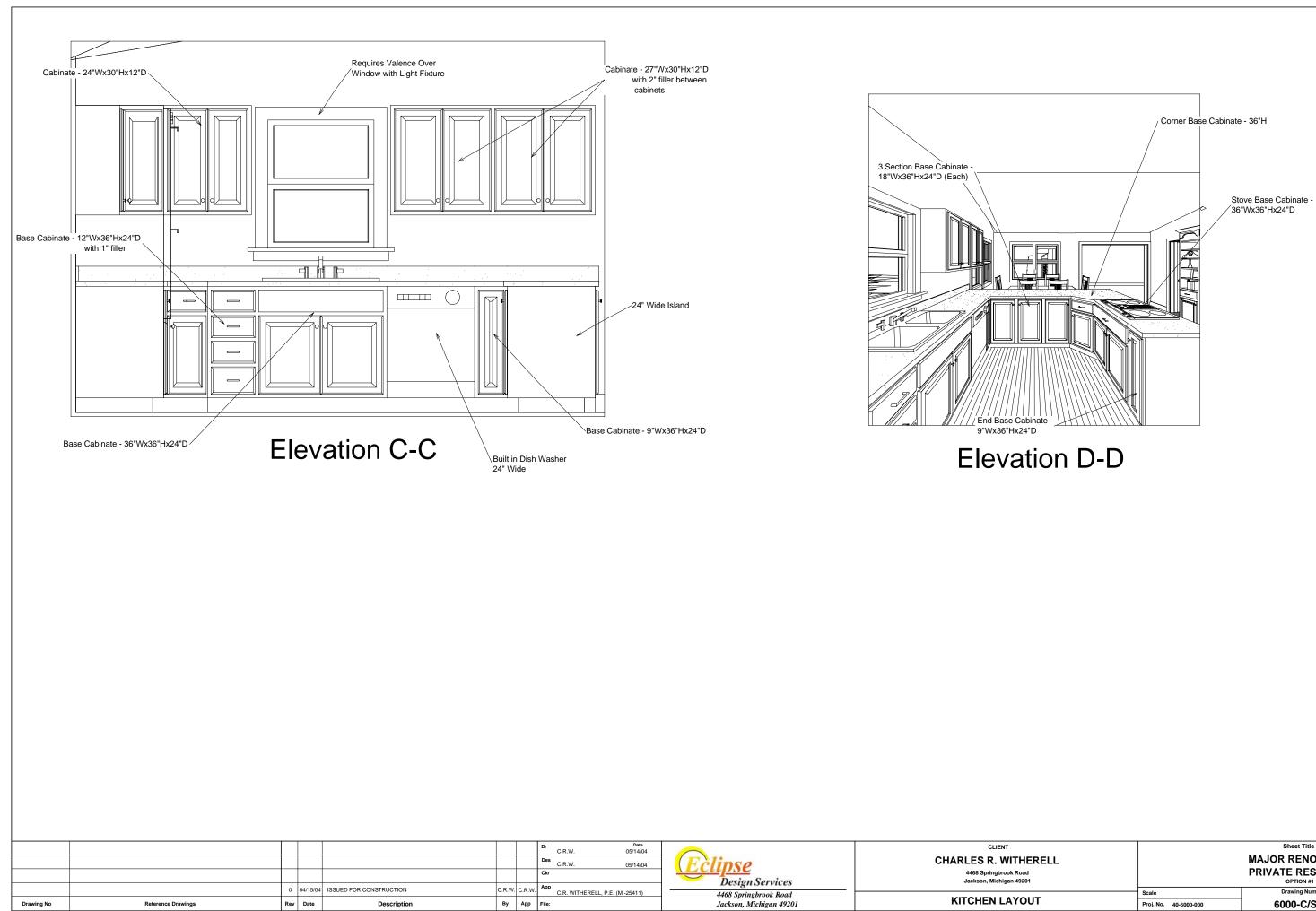
Overhan Extension to be set such that, upper right hand corner of facia plate is in line with top of rafter and top of facia plate matches top of Soffit Framing, while maintaining 8" dimension from top of plate to bottom of Soffit Framing.

	Sheet Title							
L.	MAJOR RENOVATION							
	PRIVATE RESIDENCE							
	Scale	Drawing Number	Sheet	Rev				
	Proj. No. 40-6000-000	6000-C/S-001	12	0				

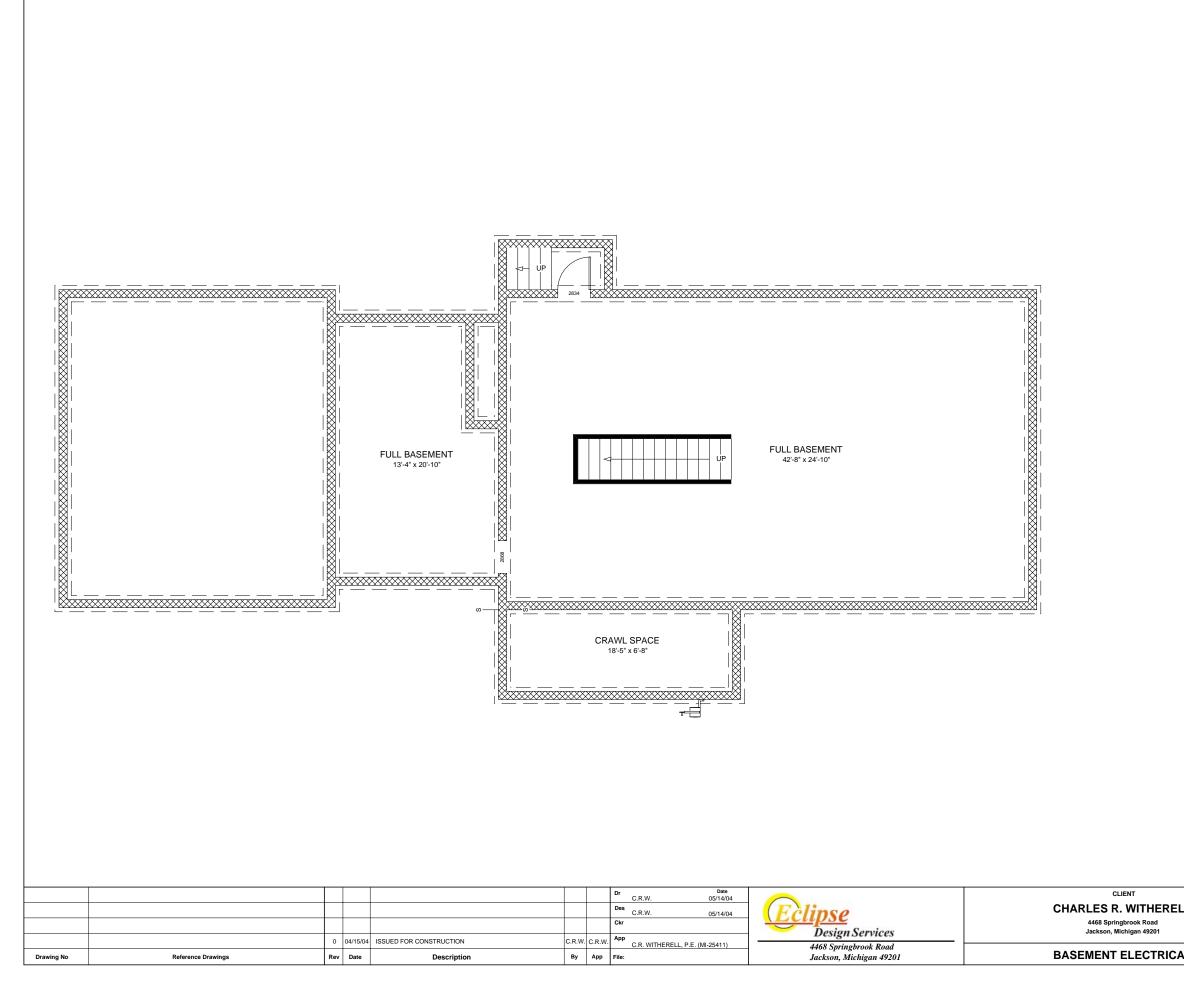


Pantries "w-36" x d-24" x h-84"

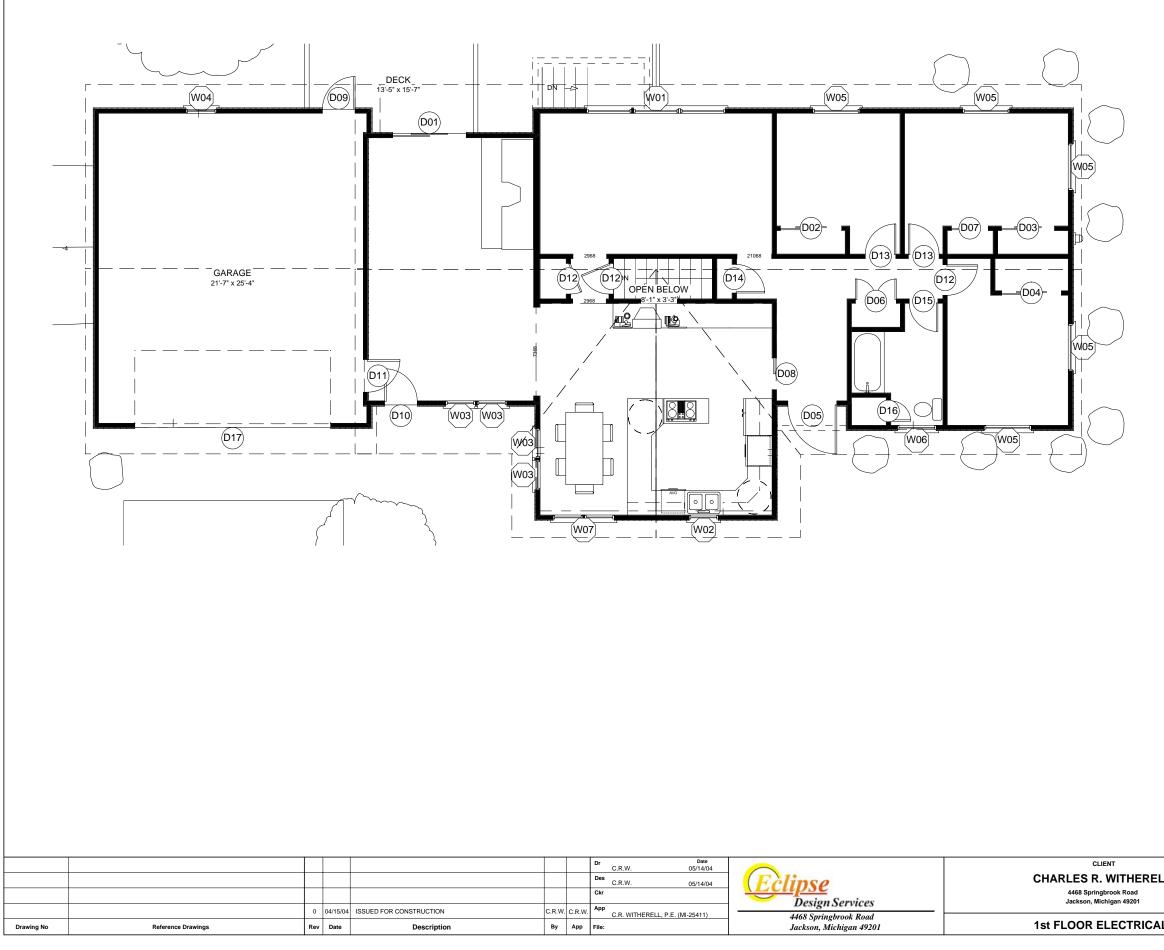
		Sheet Title						
L	MAJOR RENOVATION							
		PRIVATE RESIDENCE						
	Scale	Drawing Number	Sheet	Rev				
	Proj. No. 40-6000-000	6000-C/S-001	13	0				



L	Sheet Title MAJOR RENOVATION PRIVATE RESIDENCE					
	Scale	OPTION #1 Drawing Number	Sheet	Rev		
	Scale Proj. No. 40-6000-000	6000-C/S-001	14	O		



	Sheet Title							
_L	MAJOR RENOVATION							
	Scale	Drawing Number	Sheet	Rev				
AL	Proj. No. 40-6000-000	6000-C/S-001	15	0				



	Sheet Title MAJOR RENOVATION							
_L								
	Scale	Drawing Number	Sheet	Rev				
L	Proj. No. 40-6000-000	16	0					

Image: Construction       Image: Construction<	
Image: Constraint of the second se	
Image: CRW.     05/14/04       Image: CRW.     05/14/04       Image: CRW.     05/14/04	
C.R.W. 05/14/04	
Dr Date CLIEN	CLIENT

	Sheet Title							
_L		MAJOR RENOVATION						
	Scale Drawing Number Sheet							
DETAILS	Proj. No. 40-6000-000	17	0					

Simpson Strong-Tie H1

								C.R.W. 05/14/04 Des C.R.W. 05/14/04	Eclipse	CHARLES R. WITHERELL
								Ckr	Design Services	4468 Springbrook Road Jackson, Michigan 49201
		0	04/15/04	ISSUED FOR CONSTRUCTION	C.R.W	V. C.R.V	N. '	App C.R. WITHERELL, P.E. (MI-25411)	4468 Springbrook Road	
Drawing No	Reference Drawings	Rev	Date	Description	Ву	Арр	F	File:	Jackson, Michigan 49201	

	Sheet Title MAJOR RENOVATION								
LL									
		PRIVATE RESIDENCE							
	Scale	Drawing Number	Sheet	Rev					
	Proj. No. 40-6000-000	6000-C/S-001							