

REVIEW PLAN
NOT FOR BUILDING PURPOSES

D.F.P. PLANNING & DESIGN
ARCHITECTS
1500 W. WYOMING AVE. SUITE 100
MINNEAPOLIS, MN 55440
PHONE: 763-780-8004
WWW.DFPDESIGN.COM
E-MAIL: INFO@DFPDESIGN.COM



© 2016 DFP PLANNING & DESIGN
UNAUTHORIZED USE OF THE PLAN
IS A VIOLATION OF THE U.S.
COPYRIGHT ACT



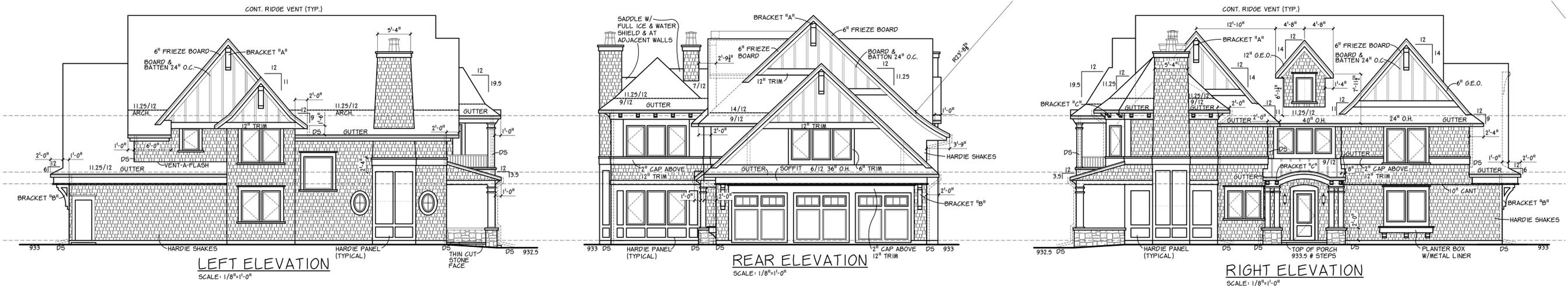
ROLCHIGO RESIDENCE
LOT X, BLOCK XX ADDITION
TONKA BAY, MINNESOTA

RHD: 12-9-16
PHD: 11-7-16
CHD: 10-11-16

DATE: 8-25-16
REVISIONS:
9-7-16 KH
9-13-16 CD
9-19-16 CD
9-28-16 KH
10-1-16 CD
10-21-16 KH
10-28-16 CD
11-10-16 CD
11-17-16 CD
12-2-16 KH

DRAWN BY: KH

COMM. NO. 216337
SHEET NO. 1



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

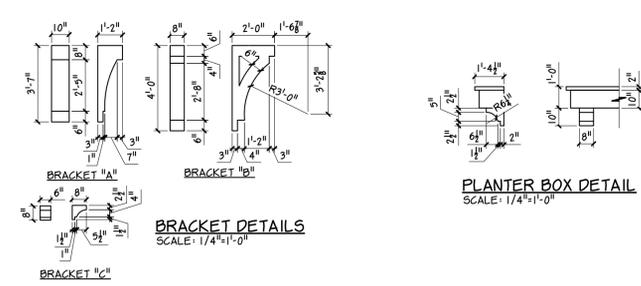
REAR ELEVATION
SCALE: 1/8"=1'-0"

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

ALL DOWNSPOUTS ARE TO BE DIRECTED INTO LANDSCAPE AND GREEN SPACE AREAS TO FRONT & REAR OF PROPERTY PROVIDE CATCH BASIN & DRAINTILE TO LANDSCAPE AREAS AS NEEDED



FRONT ELEVATION
SCALE: 1/4"=1'-0"
1ST FLOOR 1,349 SQ. FT.
2ND FLOOR 2,039 SQ. FT.
BONUS 304 SQ. FT. FIN.
TOTAL 3,688 SQ. FT.



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

PLANTER BOX DETAIL
SCALE: 1/4"=1'-0"

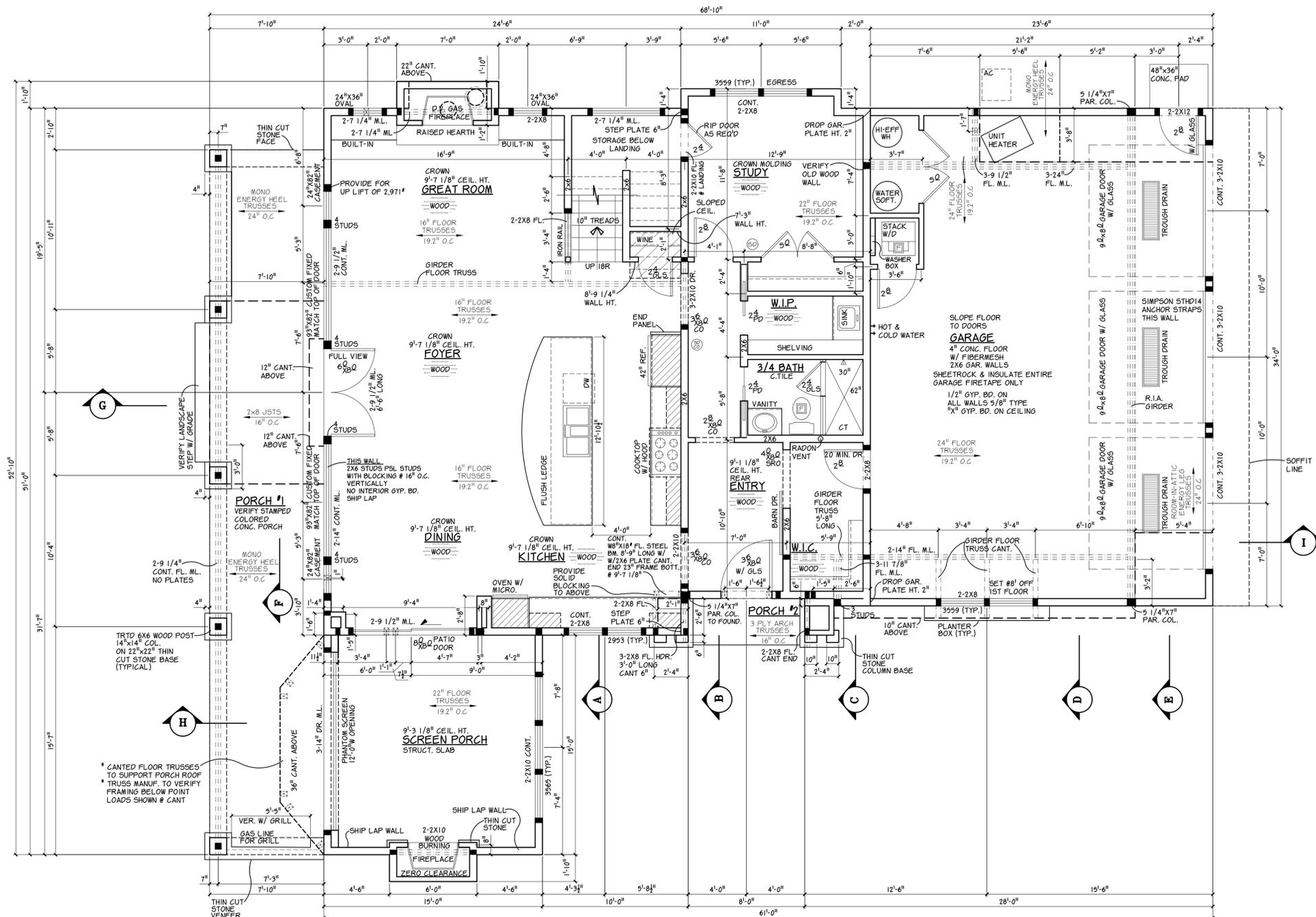
213230

EXTERIOR NOTES

- FLASHING NOTES**
- KICKOUT FLASHING TO BE INSTALLED AS NEEDED
 - EXTERIOR WALL FINISHER TO VERIFY KICKOUT FLASHING IS INSTALLED PRIOR TO FINISHING
 - CARPENTER TO FLASH ALL EXTERIOR WINDOWS AND DOORS PER MN & IRC CODE REQUIREMENTS
- WINDOW NOTES**
- PELLA PROLINE WINDOWS
 - BLDR. TO VERIFY ALL WINDOW, DOOR, & OPENING HDR. HTS.
- EXT. FINISHING NOTES**
- HARDIE SHAKES
 - ALUM. 8"x3" FASCIA UNLESS NOTED OTHERWISE
 - ALUM. SOFFIT W/ VENTS
 - HARDIE TRIM
 - TIMBERLINE SHINGLES

931.11 RECORD HIGH WATER 6-23-14
930.7 EXIST. GRADE 929.4

REVIEW PLAN
NOT FOR BUILDING PURPOSES



SEE ENGINEERING PAGES 51-54

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

EXTERIOR DIMENSIONS ARE SHEATHING TO SHEATHING

FIRST FLOOR FINISHED	1,349 SQ. FT.
GARAGE	799 SQ. FT.
SCREEN PORCH	225 SQ. FT.
PORCH #1	377 SQ. FT.
PORCH #2	27 SQ. FT.

- WINDOW NOTES**
- * PELLA PROLINE WINDOWS
 - * BLDG. TO VERIFY ALL WINDOW, DOOR, & OPENING HQR. HTS.
 - * ALL WINDOWS SET # 8'-0" UNLESS NOTED OTHERWISE
 - * FP = PROVIDE FALL PROTECTION @ OPERATING WINDOWS

- GUARDRAIL NOTES**
- * GUARDRAIL REQUIRED ON OPEN SIDE OF ANY STAIR MORE THAN 30" ABOVE FLOOR
 - * ALL OPENINGS LESS THAN 4" AT ALL GUARDRAILS

- FLOOR SYSTEM NOTES**
- * ALL FLOORS TO BE L/480
 - * FLOOR TRUSS MANUF. TO VERIFY FRAMING BELOW GRANITE TOPS ABOVE
 - * FLOOR TRUSS MANUF. TO PROVIDE HEAT SUPPLY & RETURN CHASE IN TRUSSES

- FRAMING NOTES**
- * 9'-1 1/8" PLATE HT. UNLESS NOTED OTHERWISE
 - * 2X4 STUDS @ POCKET DOOR WALLS UNLESS NOTED OTHERWISE
 - * DOUBLE STUDS AT ALL WINDOW & PATIO DOOR HEADERS UNLESS NOTED OTHERWISE
 - * PROVIDE LVL./LSL. SOLID BLOCKING AT ALL POINT LOADS, SUPPORT BEAMS, MICROLAMS, AND GIRDER TRUSSES TO FOUNDATION
 - * TIMBERSTRAND STRINGERS
 - * TIMBERSTRAND STUDS @ KITCHEN, STAIR & POCKET DOOR WALLS

- SMOKE AND CARBON MONOXIDE DETECTORS**
- * PROVIDE SMOKE DETECTORS IN EVERY BEDROOM AND THE CORRIDOR GIVING ACCESS TO THE BEDROOM, ON EACH FLOOR INCLUDING THE BASEMENT, AND IN ANY ROOM THAT HAS A CEILING HEIGHT MORE THAN 24' HIGHER THAN A CORRIDOR GIVING ACCESS TO THE BEDROOMS.
 - * PROVIDE CARBON MONOXIDE DETECTORS WITHIN 10'-0" OF ALL BEDROOMS

ROLCHIGO RESIDENCE
LOT-X, BLOCK-X XX ADDITION
TONKA BAY, MINNESOTA



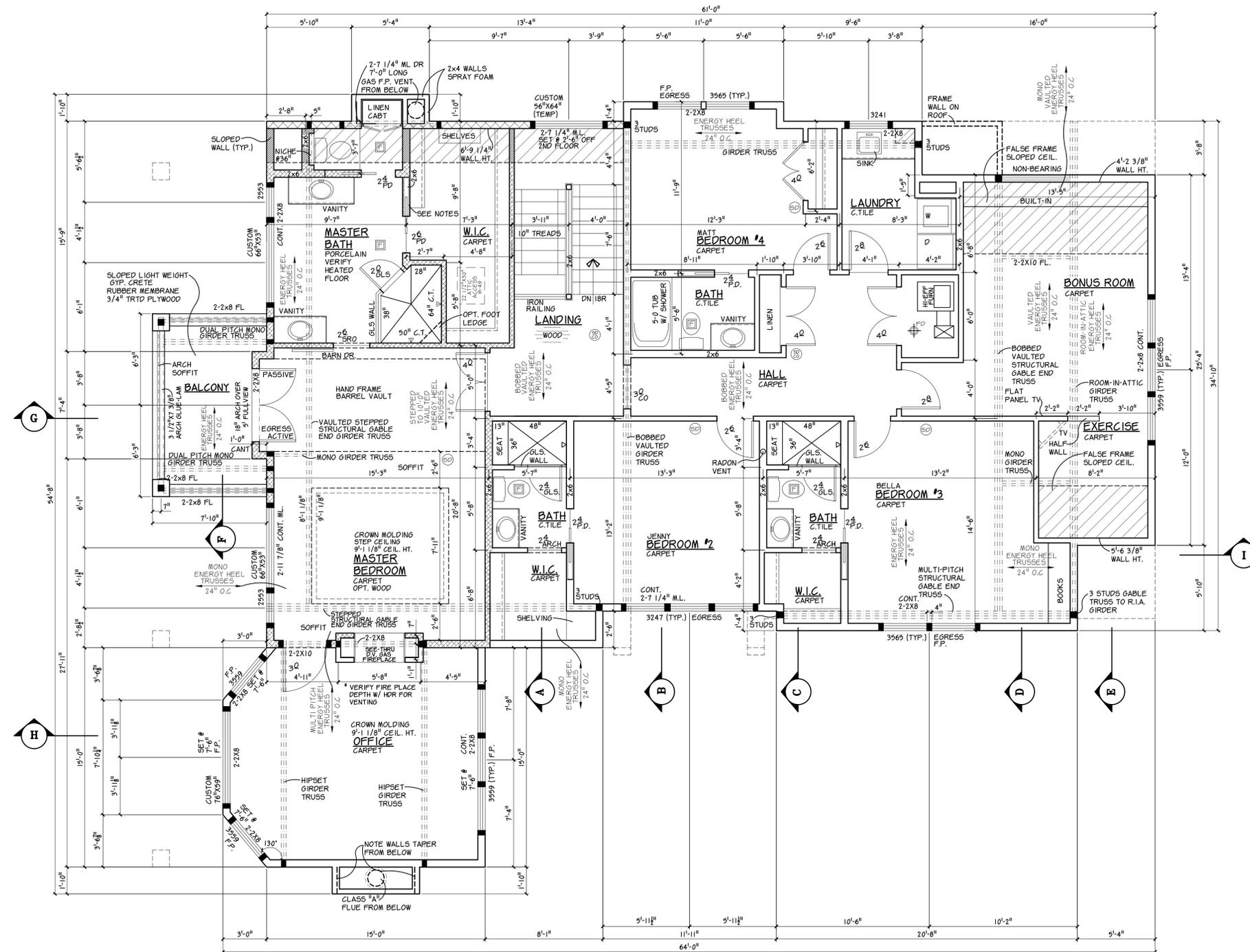
© 2016 DFP PLANNING & DESIGN
UNAUTHORIZED USE OF THE PLAN
IS A VIOLATION OF THE U.S.
COPYRIGHT ACT



DFP PLANNING & DESIGN
FOR PLANNING & DESIGN
1500 W. WISCONSIN AVE., SUITE 100
MINNEAPOLIS, MN 55440
WEB: WWW.DFPDESIGN.COM E-MAIL: INFO@DFPDESIGN.COM
PHONE: 763-780-8004 FAX: 763-780-8004

DATE: 8-25-16
REVISIONS:
9-7-16 KH
9-13-16 CD
9-19-16 CD
9-28-16 KH
10-1-16 CD
10-21-16 KH
10-28-16 CD
11-10-16 CD
11-17-16 CD
12-2-16 KH
DRAWN BY: KH
COMM. NO. 216337
SHEET NO. 3

REVIEW PLAN
NOT FOR BUILDING PURPOSES



SEE ENGINEERING PAGES SI-54

8'-1 1/8" PLATE HT.

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

EXTERIOR DIMENSIONS ARE SHEATHING TO SHEATHING	
SECOND FLOOR FINISHED	2,035 SQ. FT.
BONUS ROOM FINISHED	304 SQ. FT.

- WINDOW NOTES**
- * BELLA PROLINE WINDOWS
 - * BLDR. TO VERIFY ALL WINDOW, DOOR, & OPENING HDR. HTS.
 - * ALL WINDOWS SET @ 7'-0" UNLESS NOTED OTHERWISE
 - * FP = PROVIDE FALL PROTECTION @ OPERATING WINDOWS

- GUARDRAIL NOTES**
- * GUARDRAIL REQUIRED ON OPEN SIDE OF ANY STAIR MORE THAN 30" ABOVE FLOOR
 - * ALL OPENINGS LESS THAN 4" AT ALL GUARDRAILS

- FRAMING NOTES**
- * 9'-1 1/8" PLATE HT. UNLESS NOTED OTHERWISE
 - * 2X6 STUDS @ POCKET DOOR WALLS UNLESS NOTED OTHERWISE
 - * DOUBLE STUDS AT ALL WINDOW & PATIO DOOR HEADERS UNLESS NOTED OTHERWISE
 - * PROVIDE LVL/LSL SOLID BLOCKING AT ALL POINT LOADS, SUPPORT BEAMS, MICROLAMS, AND GIRDER TRUSSES TO FOUNDATION
 - * VERIFY SUPPORT OF ROD & SHELF W/ POCKET DOOR FRAME

- SMOKE AND CARBON MONOXIDE DETECTORS**
- * PROVIDE SMOKE DETECTORS IN EVERY BEDROOM AND THE CORRIDOR GIVING ACCESS TO THE BEDROOM, ON EACH FLOOR INCLUDING THE BASEMENT, AND IN ANY ROOM THAT HAS A CEILING HEIGHT MORE THAN 24" HIGHER THAN A CORRIDOR GIVING ACCESS TO THE BEDROOMS.
 - * PROVIDE CARBON MONOXIDE DETECTORS WITHIN 10'-0" OF ALL BEDROOMS

ROLCHIGO RESIDENCE
LOT-X, BLOCK-X XX ADDITION
TONKA BAY, MINNESOTA

DATE: 8-25-16
REVISIONS:
9-7-16 KH
9-13-16 CD
9-19-16 CD
9-28-16 KH
10-1-16 CD
10-21-16 KH
10-28-16 CD
11-10-16 CD
11-17-16 CD
12-2-16 KH
DRAWN BY: KH
COMM. NO. 216337
SHEET NO. 4

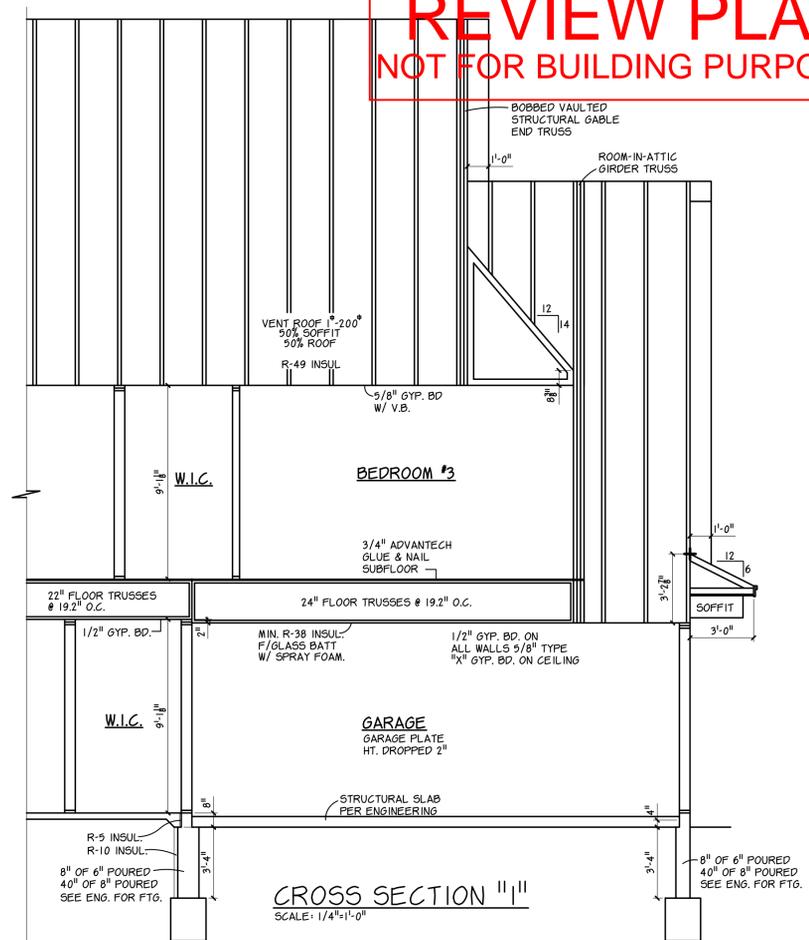
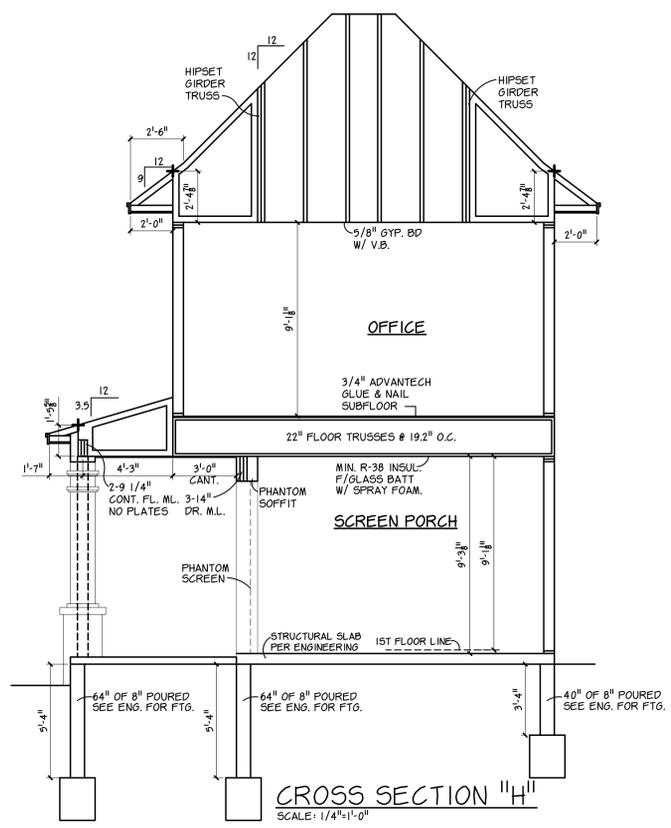
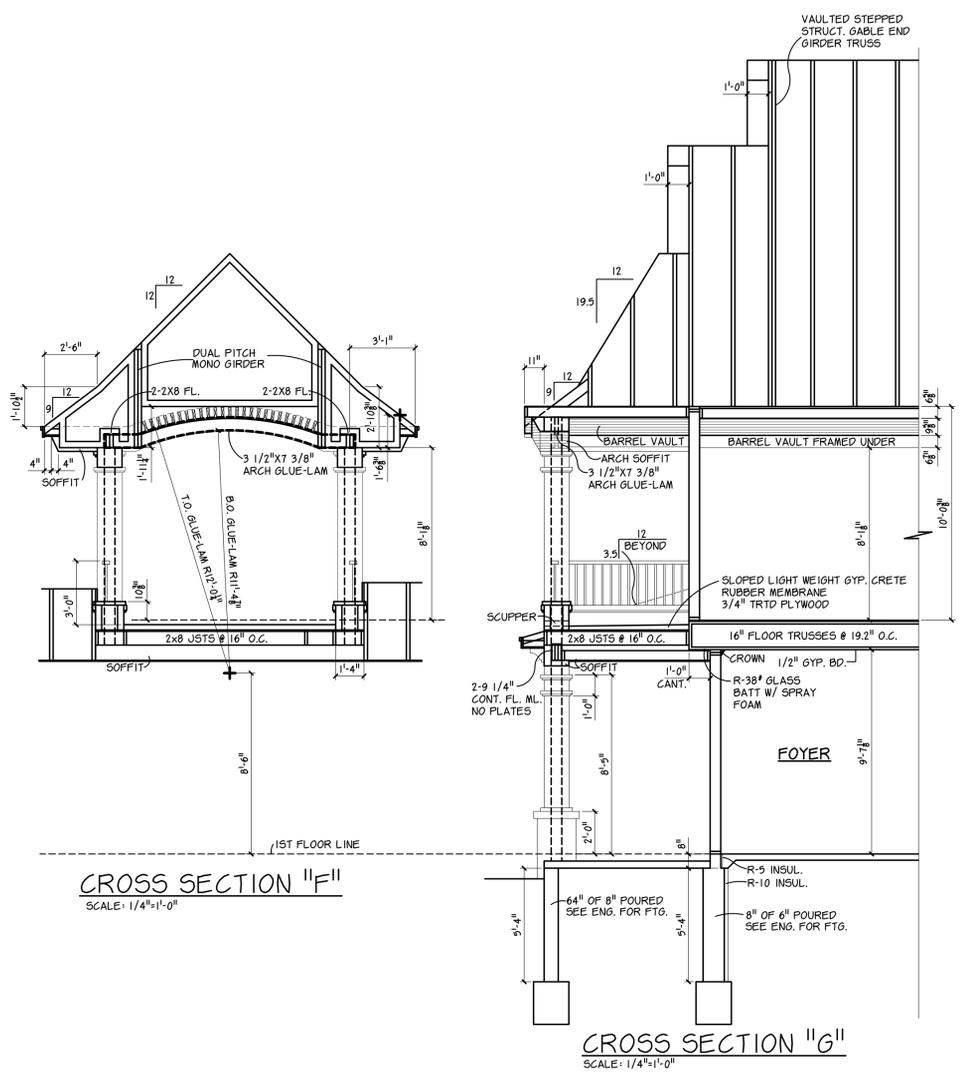
D.F.P. PLANNING & DESIGN
FOR ARCHITECTS
1500 W. WYOMING AVE. SUITE 100
MINNEAPOLIS, MN 55449
PHONE: 763-786-8004
WWW.DFPDESIGN.COM
E-MAIL: INFO@DFPDESIGN.COM
FAX: 763-786-8004

© 2016 DFP PLANNING & DESIGN
UNAUTHORIZED USE OF THE PLAN
IS A VIOLATION OF THE U.S.
COPYRIGHT ACT

Gordon James
ARCHITECT

REVIEW PLAN
NOT FOR BUILDING PURPOSES

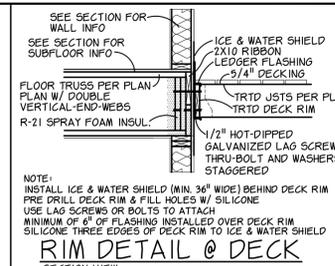
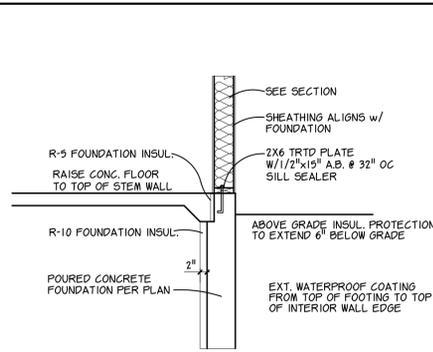
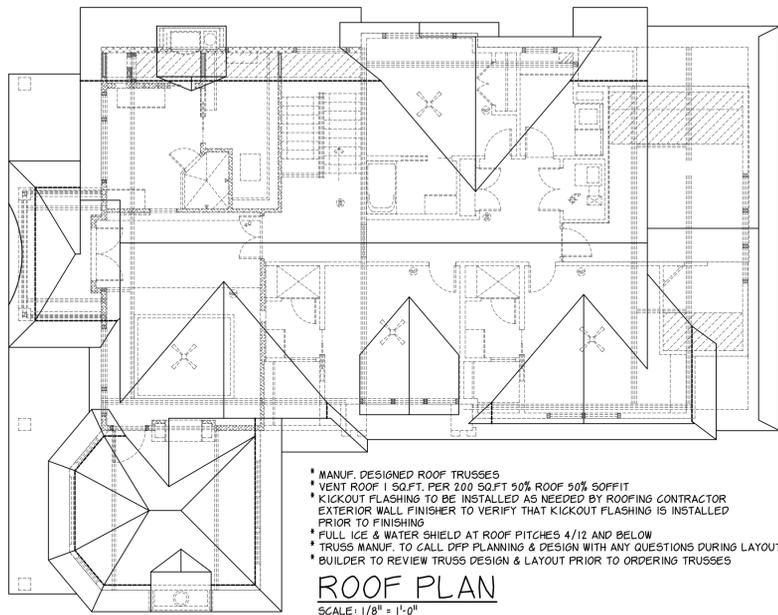
SEE ENGINEERING PAGES S1-S4



DATE: 8-25-16

REVISIONS:

9-7-16	KH
9-13-16	CD
9-19-16	CD
9-28-16	KH
10-1-16	CD
10-21-16	KH
10-28-16	CD
11-10-16	CD
11-17-16	CD
12-2-16	KH



FASTENER SPACING FOR A SOUTHERN PINE OR HEM-FIR DECK LEDGER & A 2" NOMINAL SOLID SAWN SPRUCE-PIN-FIR BAND JOIST (C.F. 6)

TABLE R507.2	RESIDENTIAL DECK JOIST SPAN CONNECTION DETAIL					
	1/2" DIAMETER LAG SCREWS W/ 1/2" MAX. SHEATHING	3/8" DIAMETER LAG SCREWS W/ 1/2" MAX. SHEATHING	3/8" DIAMETER LAG SCREWS W/ 1/2" MAX. SHEATHING	3/8" DIAMETER LAG SCREWS W/ 1/2" MAX. SHEATHING	3/8" DIAMETER LAG SCREWS W/ 1/2" MAX. SHEATHING	3/8" DIAMETER LAG SCREWS W/ 1/2" MAX. SHEATHING
1/2" DIAMETER LAG SCREWS W/ 1/2" MAX. SHEATHING	12" O.C.					
3/8" DIAMETER LAG SCREWS W/ 1/2" MAX. SHEATHING	12" O.C.					
3/8" DIAMETER LAG SCREWS W/ 1/2" MAX. SHEATHING	12" O.C.					
3/8" DIAMETER LAG SCREWS W/ 1/2" MAX. SHEATHING	12" O.C.					
3/8" DIAMETER LAG SCREWS W/ 1/2" MAX. SHEATHING	12" O.C.					
3/8" DIAMETER LAG SCREWS W/ 1/2" MAX. SHEATHING	12" O.C.					

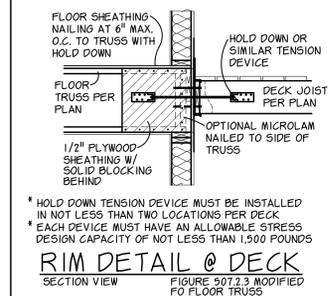
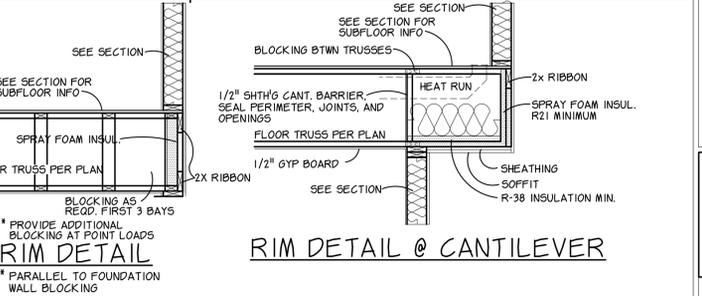
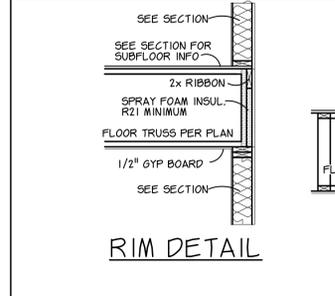


TABLE R507.2.1

LEADER	PLACEMENT OF LAG SCREWS & BOLTS IN DECK LEDGERS & BAND JOISTS			
	TOP EDGE	BOTTOM EDGE	ENDS	ROW SPACING
FLOOR TRUSS RIBBON	2 INCHES (D)	1/4 INCH	2 INCH (B)	1 5/8 INCH (B)
FLOOR TRUSS RIBBON	3/4 INCH	1 INCH	2 INCH (B)	1 5/8 INCH (B)

FIGURE R507.2.1(1) DECK CONNECTION NOTES

A. TABLES & FIGURE HAVE BEEN MODIFIED FROM CODE BOOK TO REFLECT FLOOR TRUSS CONDITIONS WITH 2X10 RIBBON WITH TREATED 2X10 DECK RIM



1. ICE & WATER SHIELD ALL VALLEYS
 ICE & WATER SHIELD 2" UP ALL WALLS WHERE ROOF RUNS ALONG WALL

* ALL SCREWS OR NAILS BEING DRILLED THROUGH STUCCO OR SIDING MUST BE PRE-DRILLED AND SEALED W/ SILICONE TO PREVENT WATER LEAKAGE

* ALL SUBCONTRACTORS MUST SEAL ALL PENETRATIONS TO EXTERIOR OF HOUSE WHEN ANY HOLES ARE CUT OR PENETRATIONS ARE COMPLETED

* FLASH ALL WINDOWS AND DOORS KICKOUT FLASHING TO BE INSTALLED BY ROOFERS

2. CONTINUOUS VAPOR BARRIER AT ALL WALL FRAMING TO EXTERIOR AND ON TOP OF ALL TOP PLATES

TAPE ALL VAPOR BARRIERS AROUND ALL WINDOWS AND DOORS TO ATTIC

ALL CANTILEVERS, CORNERS, & RIMS TO BE COVERED W/ BLDG. PAPER PRIOR TO SIDING.

STUCCO / STONE ATTACHMENT

1. CALL FOR INSPECTION TO VERIFY COMPLIANCE WHEN PAPER IS COMPLETE IN ONE WINDOW AREA.

2. WEATHER RESISTIVE BARRIERS:
 WEATHER RESISTIVE BARRIERS OVER WOOD BASED SHEATHING SHALL INCLUDE 2 LAYERS OF GRADE D PAPER. NOTE TYPE 15 OR 15' FELT IS NOT GRADE D PAPER. VERTICAL JOINTS IN PAPER SHALL BE LAPPED AT LEAST 2 INCHES

3. EXTERIOR OPENINGS FLASHED:
 EXTERIOR OPENINGS SHALL BE FLASHED. THE NAILING FLANGE ON WINDOWS WILL NOT BE ACCEPTED FOR FLASHING UNLESS THE MANUFACTURERS INSTALLATION INSTRUCTIONS ARE PROVIDED ON SITE STATING THE FLANGE IS ACCEPTABLE AS FLASHING.

4. WINDOW FLANGES:
 PAPER SHALL BE INSTALLED ON THE BOTTOM AND SIDES OF WINDOW BEFORE INSTALLING WINDOW. PAPER ON THE TOP OF WINDOW SHALL GO OVER THE WINDOW FLASHING. A SECOND LAYER OF PAPER SHALL BE INSTALLED OVER THE SIDE WINDOW FLANGES

5. WINDOW OPENINGS:
 CAULK OR TAPE WINDOW OPENINGS TO MAKE THEM WATERPROOF. OTHER OPENINGS MUST BE CAULKED WEATHERPROOF.

6. PAPER ENTIRE WALL:
 PAPER MUST BE INSTALLED ON THE ENTIRE WALL INCLUDING WITHIN THE SOFFIT FRAMING. ALL PAPER MUST BE INSTALLED SHINGLE FASHION TO DRAIN OUT.

7. FLASHING:
 KICKOUT FLASHING IS REQUIRED AT WALL/ROOF INTERSECTIONS WHERE THE ROOF LINE DOES NOT EXTEND PAST THE WALL. OTHER OPENINGS SHALL BE FLASHED TO MAKE THEM WEATHERPROOF.

8. WEEP SCREED:
 A CORROSION RESISTANT WEEP SCREED WITH A MINIMUM VERTICAL ATTACHMENT FLANGE OF 3 1/2" INCHES SHALL BE PROVIDED AT OR BELOW THE FOUNDATION PLATE. THE SCREED MUST BE PLACED A MINIMUM OF 4 INCHES ABOVE EARTH OR 2 INCHES ABOVE CONCRETE AND SHALL BE OF A TYPE THAT WILL ALLOW TRAPPED WATER TO DRAIN TO THE EXTERIOR. WEEP SCREEDS MAY BE JUST BELOW THE PLATE LINE OR MAY EXTEND ONTO THE FOUNDATION. PROVIDED THERE IS PAPER ON THE FOUNDATION. STUCCO MUST COVER, BUT NOT EXTEND BELOW, THE LATH AND PAPER

PLAN REVIEW AND INSPECTION ISSUES

This list of items may be helpful for Plan Reviewers and Building Inspectors to use as a guide for enforcing the Minnesota Energy Code. The items apply to IRC, one- and two-family residential dwellings. The items marked with * apply only to detached one- and two-family residential dwellings.

PLAN REVIEW ISSUES

FOUNDATION INSULATION

- exterior foundation wall insulation R-10 minimum
- foundation insulation extends from the top of the wall down to top of the footing
- exterior foundation insulation is covered protective product from top of exposed insulation to 6" below grade level

CONCRETE SLAB OR UNDER-SLAB INSULATION

- slab on grade perimeter insulation R-10 minimum
- slab insulation extends from top of slab to design frost line or top of footing
- floors over unheated space R-38 minimum

WINDOWS / DOORS / SKYLIGHTS

- average U-value is 0.32 maximum for windows and glass doors
- average U-value is 0.55 maximum for skylights
- window U-value consistent with Energy Compliance Certificate

MECHANICAL VENTILATION ISSUES

- residential mechanical ventilation system provides adequate ventilation per code requirements
- furnace efficiency is consistent with Energy Compliance Certificate
- protection against excessive depressurization is installed per code requirements

ENVELOPE INSULATION FOR PLAN REVIEW

- interior basement insulation of R-5 minimum & R-11 maximum
- ceilings with attics R-49 minimum. Roof/ceiling assemblies must have a minimum 6" energy heel. R-38 will be allowed when full height of uncompressed R-38 extends over the exterior wall top plate at eaves
- wood framed wall insulation of R-20 or R-13 + R-5. R-13 refers to wall cavity insulation, R-5 refers to continuous insulation

INSPECTION ISSUES

CONCEALED INSULATION

FRAMING AND SHEATHING

- wind wash barrier installed at attic edge
- exterior wall corners framed so that insulation can be installed after exterior sheathing is installed
- intersections of interior partition walls and exterior walls are framed so that insulation can be installed between the partition and exterior sheathing after exterior sheathing is installed
- gaps between framing less than one-half inch are eliminated by securing framing together and are insulated at the time of assembly
- all penetrations between conditioned and unconditioned spaces made prior to framing inspection are sealed
- windows must be insulated and sealed at installation

INTERIOR AIR BARRIER

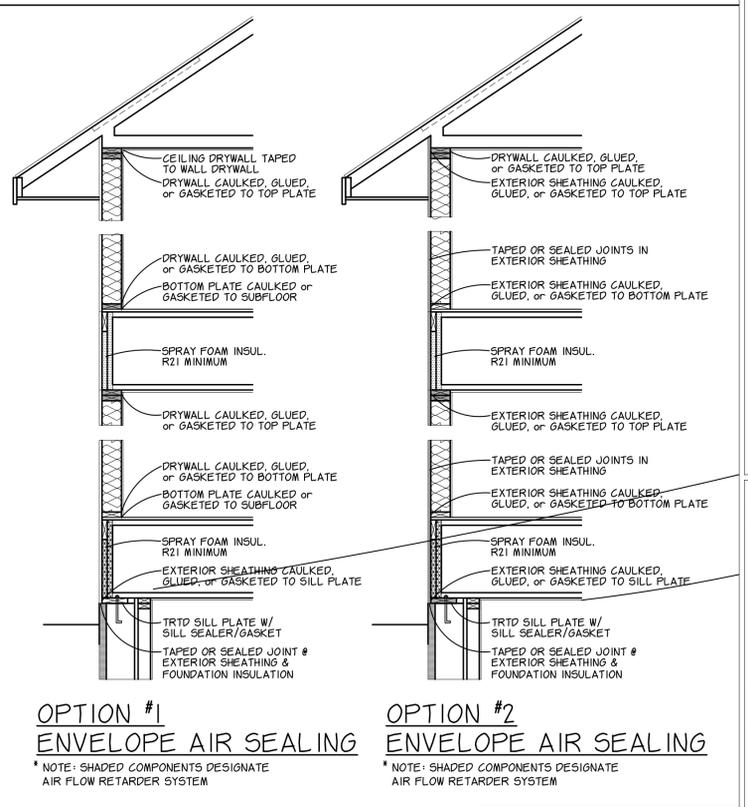
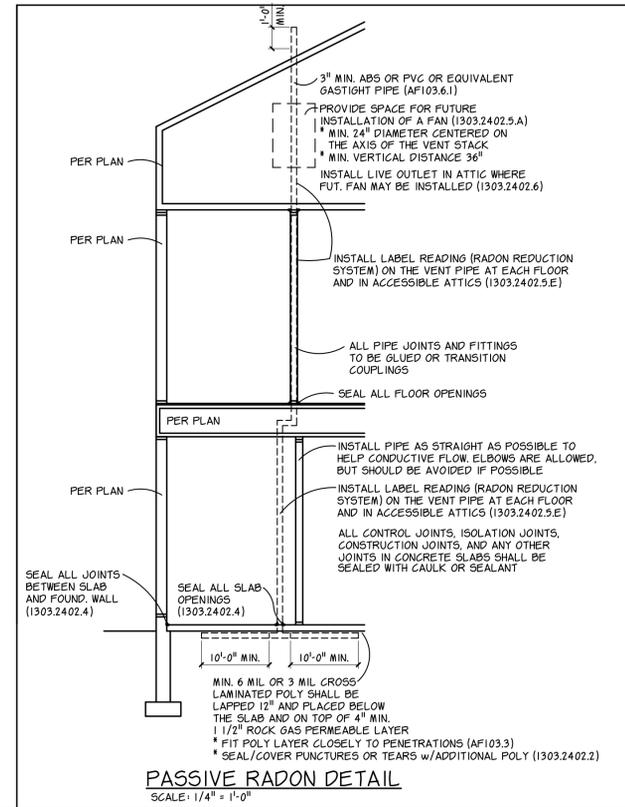
- all fire stops are air sealed
- pipes, ducts, wires, equipment and flues and chimneys through the interior air barrier are sealed
- a sealed continuous interior air barrier is installed on the warm side of the building envelope at ceilings, walls, and floor rim side of the building envelope
- air barrier behind tub and shower is sealed and protected
- recessed light fixtures are sealed

ENVELOPE INSULATION

- total basement wall insulation is R-15 minimum, minimum R-10 at exterior
- wind wash barrier on wall separating house and garage is sealed
- loose fill insulation is prevented from entering the eaves
- insulation on skylight shafts and walls exposed in attic is supported on the unconditioned side

ATTIC INSULATION

- attic access panel insulated to R-38 minimum for ceiling panel and R-21 minimum for wall panel
- attic card attached to framing near access opening
- notification of attic R-value and date of installation posted near building permit inspection card



DFP. PLANNING & DESIGN
 1500 W. WASHINGTON AVE. SUITE 100
 ST. CLOUD, MN 56449
 TEL: 763-780-8000 FAX: 763-780-8005
 WWW.DFPDESIGN.COM

© 2016 DFP PLANNING & DESIGN
 UNAUTHORIZED USE OF THE PLAN
 IS A VIOLATION OF THE U.S.
 COPYRIGHT ACT

Gordon James
 ARCHITECT

ROLCHIGO RESIDENCE
 LOT-X, BLOCK-X XX ADDITION
 TONKA BAY, MINNESOTA

DATE: 8-25-16
 REVISIONS:
 9-7-16 KH
 9-13-16 CD
 9-19-16 CD
 9-28-16 KH
 10-1-16 CD
 10-21-16 KH
 10-28-16 CD
 11-10-16 CD
 11-17-16 CD
 12-2-16 KH

DRAWN BY: KH
 COMM. NO. 216337
 SHEET NO. D1

REVIEW PLAN
NOT FOR BUILDING PURPOSES

D.F.P. Planning & Design
9100 Baltimore St NE, Suite 106
Blaine, MN 55449

PROJECT SCOPE
DESIGN OF CAST-IN-PLACE CONCRETE GRADE BEAM FOUNDATION AS WELL AS LAYOUT OF SUPPORTING HELICAL PIERS. CONSTRUCTION IS TO BE DONE IN ACCORDANCE WITH THESE DRAWINGS, STANDARD INDUSTRY PRACTICE, AND THE REQUIREMENTS OF THE CODE.

- GENERAL NOTES**
- THESE DOCUMENTS APPLY TO STRUCTURAL ONLY. REFER TO HOUSE PLANS PREPARED BY DFP PLANNING & DESIGN LAST DATED 10-21-16 FOR MORE INFORMATION.
 - IT IS THE RESPONSIBILITY OF THE BUILDER TO PROVIDE ALL FUTURE PLAN OR FIELD CHANGES TO THE HANSON GROUP FOR REVIEW. PROVIDE FINAL TRUSS LAYOUTS TO THE HANSON GROUP PRIOR TO CONSTRUCTION.
 - ADEQUATE SHORING DURING CONSTRUCTION IS THE RESPONSIBILITY OF THE CONTRACTOR.
 - CONTRACTOR AND BUILDER ARE TO VERIFY ALL DIMENSIONS AND CONDITIONS BEFORE PROCEEDING WITH WORK. NOTIFY THE HANSON GROUP IF DISCREPANCIES ARISE.
 - MEANS AND METHODS OF CONSTRUCTION ARE THE RESPONSIBILITY OF THE CONTRACTOR.

- FOUNDATION NOTES**
- DRAIN TILE, DAMPROOFING AND/OR WATERPROOFING, & INSULATION, AS WELL AS THEIR INSTALLATION, ARE TO BE IN ACCORDANCE WITH THE CODE.
 - INSTALL A MINIMUM OF (2) ANCHORS PER PORTION OF SILL PLATE AS WELL AS AN ANCHOR WITHIN 12" OF EACH END AS APPLICABLE.
 - BAR SPLICES ARE TO BE LAPPED A MINIMUM OF 48 BAR DIAMETERS. PROVIDE MATCHING HOOK BARS FOR ALL HORIZONTAL BARS AT WALL GRADE BEAM CORNERS AND INTERSECTIONS. SEE DETAIL 1/S1 & 2/S1.
 - CARE IS TO BE TAKEN DURING BACKFILLING TO MAINTAIN A PLUMB WALL ALIGNMENT.
 - BACKFILL BELOW EXTERIOR STOOB SLABS WITH COMPACTED GRANULAR MATERIAL TO FROST DEPTH (4'-0" MINIMUM). MAINTAIN ABOVE FREEZING TEMPERATURE IN GARAGE OR PROVIDE SIMILAR MATERIAL BELOW SLABS.
 - BULKHEAD GRADE BEAMS AT STEP LOCATIONS.
 - PROVIDE ADEQUATE FROST PROTECTION FOR ALL GRADE BEAMS.
 - HELICAL SCREW ANCHORS ARE TO BE DESIGNED BY THE MANUFACTURER FOR A WORKING LOAD AS DESIGNATED ON THE PLAN UNLESS NOTED OTHERWISE. INSTALL ANCHORS TO TWICE THIS VALUE FOR AN ULTIMATE LOAD RESPECTIVELY WITH A FACTOR OF SAFETY=2. DEPTH OF INSTALLATION TO BE DETERMINED BY THE INSTALLER AND/OR A GEOTECHNICAL ENGINEER. INCREASE LOAD FOR POTENTIAL DOWN DRAG AS REQUIRED.
 - INSTALL SCREW ANCHORS TO WITHIN 2" OF THE LOCATIONS SHOWN ON THE PLAN AND IN THE DETAILS. ANCHORS AND WALLS ARE TO BE CENTERED ON GRADE BEAM UNLESS OTHERWISE SHOWN.
 - UTILITY CONNECTIONS ARE BY OTHERS.
 - ELEMENTS NOT SUPPORTED BY DEEP FOUNDATION MAY SETTLE AND EXPERIENCE DISTRESS.
 - GRADE BEAM MAY BE PLACED AT ELEVATIONS LOWER THAN SHOWN IN THE DETAILS. MAINTAIN 6" HELICAL PIER EMBED AS SHOWN.
 - GRADE BEAM TO WALL CENTERLINES MAY BE OFFSET UP TO 2", HOWEVER, A MINIMUM OF 2" OF GRADE BEAM IS TO EXTEND BEYOND THE WALL FACE ON EACH SIDE, UNLESS NOTED OTHERWISE.
 - GARAGE AND EXTERIOR STOOB SLABS WITH THE POTENTIAL TO BE EXPOSED TO WATER AND DE-ICING SALTS ARE RECOMMENDED TO HAVE AN APPROPRIATE WATERPROOF, TRAFFIC RESILIENT COATING INSTALLED IN ACCORDANCE WITH THE MANUFACTURER REQUIREMENTS.
 - SLAB CLEAR COVER NOTED ASSUMES PLACEMENT OVER POLY OR ALTERNATIVE EARTH BARRIER.

MATERIALS

CONCRETE FOOTINGS: $f'_c = 5,000$ PSI @ 28 DAYS (OR 4,000 PSI WITH AN APPROVED ADMIXTURE THAT PROVIDES A WATER AND VAPOR RESISTANCE AT LEAST EQUIVALENT TO 5,000 PSI CONCRETE)

CONCRETE WALLS: $f'_c = 3,500$ PSI @ 28 DAYS

REINFORCING STEEL: ASTM A615 GRADE 60

AGGREGATE: FOOTINGS - 1/2" MAX WALLS/SLABS - 3/4" MAX CLAY (GROUP III ASSUMED)

ON-SITE SOIL: $\gamma_{min} = 80$ PSF/FT (ACTIVE)
 $\gamma_{min} = 85$ PSF/FT (AT-REST)

BACKFILL SOIL: SAND (GROUP I AS NEEDED);
 $\gamma_{min} = 30$ PSF/FT (ACTIVE)

LOADS

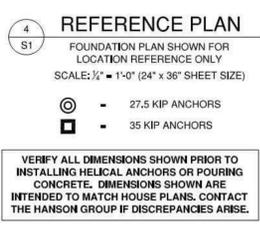
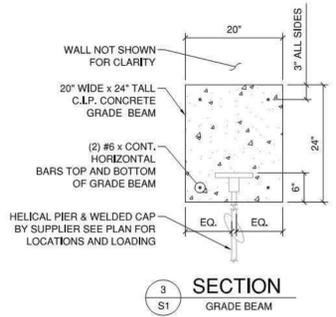
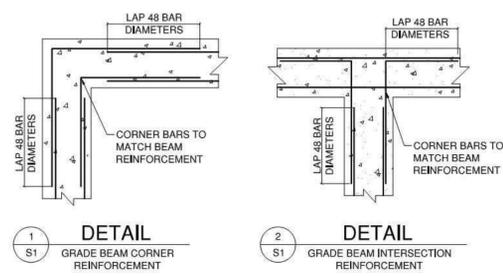
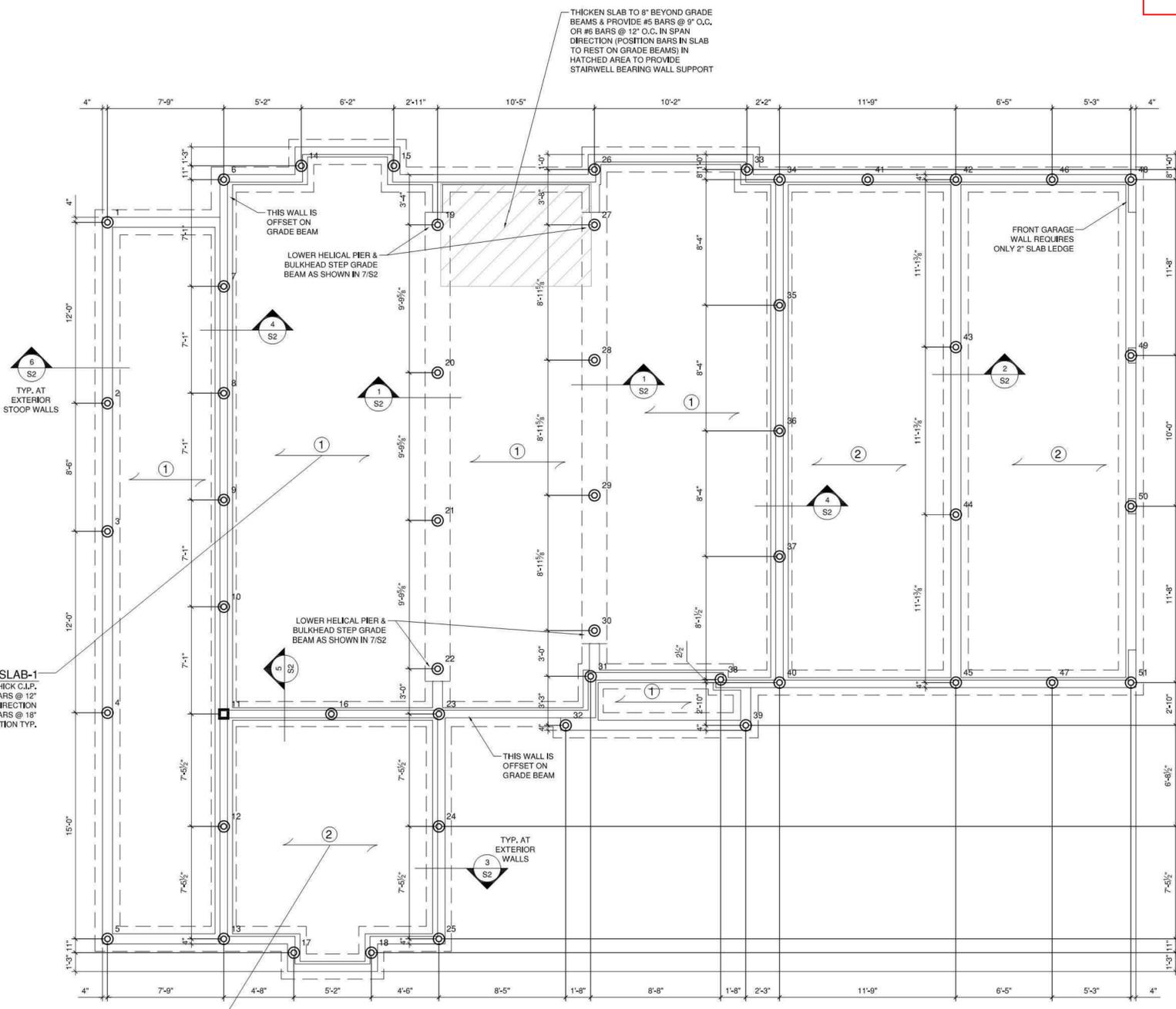
ROOF LIVE LOAD: 35 PSF (SNOW)
ROOF DEAD LOAD: 15 PSF
FLOOR LIVE LOAD: 40 PSF
FLOOR DEAD LOAD: 15 PSF
GARAGE FLOOR LIVE LOAD: 50 PSF (OR 2,000 LB)
SLAB DEAD LOAD: VARIES (150 PCF)
WOOD WALL LOAD: 10 PSF

CODES
2015 MINNESOTA RESIDENTIAL CODE

ABBREVIATIONS

TYP. = TYPICAL
SIM. = SIMILAR
U.N.O. = UNLESS NOTED OTHERWISE
MIN. = MINIMUM
MAX. = MAXIMUM
O.C. = ON CENTER
NTS = NOT TO SCALE
G.T. = GIRDER TRUSS

STRUCTURAL CONCRETE SLAB-1
INDICATES SPAN DIRECTION OF 6" THICK C.I.P. CONCRETE STRUCTURAL SLAB w/ #5 BARS @ 12" O.C. OR #6 BARS @ 18" O.C. IN SPAN DIRECTION (2" FROM BOTTOM OF SLAB) & #4 BARS @ 18" O.C. IN TRANSVERSE DIRECTION TYP.



Revision	Date	Description

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

Signed: *[Signature]*

Print Name: Ryan Mack

Date: 11-3-16 License Number: 46673

THE HANSON GROUP
structural engineers

3407 Kilmer Lane North
Suite 4
Plymouth, MN 55441
Tel 612-708-3572
www.hansongroupmn.com

Rolchigo Residence
Tonka Bay, MN

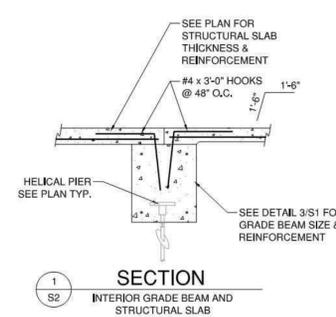
Project Number: 6.597
Date: November 3, 2016
Sheets: 1 of 4

S1

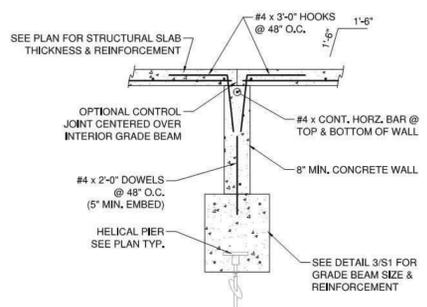
REVIEW PLAN
NOT FOR BUILDING PURPOSES

D.F.P. Planning & Design
9100 Baltimore St NE, Suite 106
Blaine, MN 55449

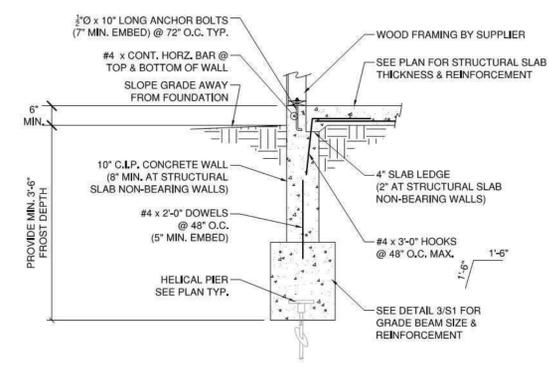
Revision	Date	Description



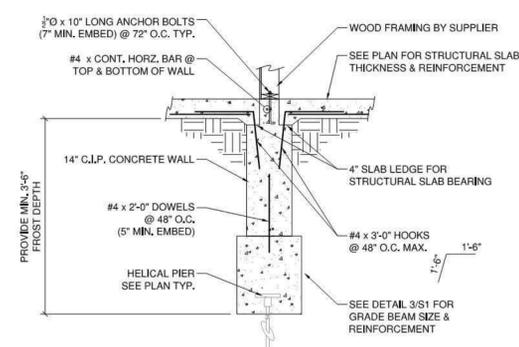
1 SECTION
S2 INTERIOR GRADE BEAM AND STRUCTURAL SLAB



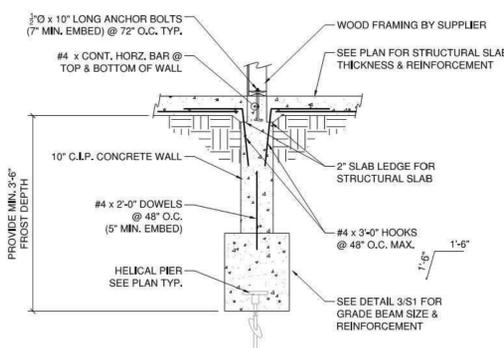
2 SECTION
S2 TYPICAL INTERIOR FOUNDATION WALL AND STRUCTURAL SLAB SECTION



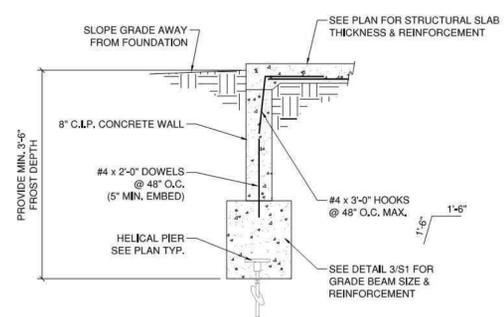
3 SECTION
S2 EXTERIOR FROST DEPTH FOUNDATION WALL



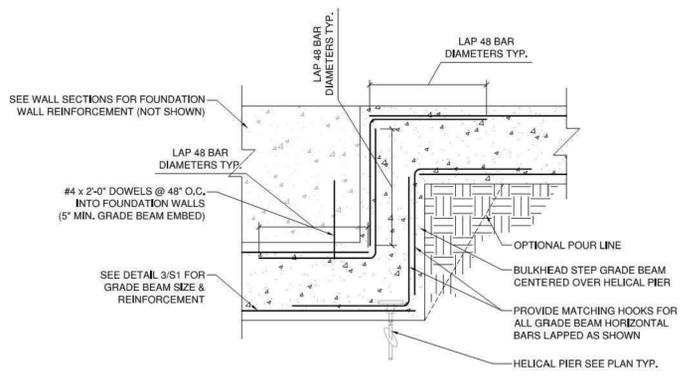
4 SECTION
S2 FROST DEPTH STRUCTURAL SLAB BEARING FOUNDATION WALL



5 SECTION
S2 FROST DEPTH STRUCTURAL SLAB NON-BEARING FOUNDATION WALL



6 SECTION
S2 EXTERIOR STOOP FOUNDATION WALL



7 STEP DETAIL
S2 ELEVATION VIEW AT GRADE BEAM STEP LOCATIONS

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.
Signed: *[Signature]*
Print Name: Ryan Mack
Date: 11-3-16 License Number: 46673

THE HANSON GROUP
structural engineers
3407 Kilmer Lane North
Suite 4
Plymouth, MN 55441
Tel 612-708-3572
www.hansongroupmn.com

Rolchigo Residence
Tonka Bay, MN

Project Number: 6597
Date: November 3, 2016
Sheets: 2 of 4

S2

D.F.P. PLANNING & DESIGN
9100 BALTIMORE ST NE, SUITE 106
BLAINE, MN 55449
WWW.DFPDESIGN.COM E-MAIL: INFO@DFPDESIGN.COM
PHONE: 763-780-8004 FAX: 763-780-8004



© 2016 DFP PLANNING & DESIGN
UNAUTHORIZED USE OF THE PLAN
IS A VIOLATION OF THE U.S.
COPYRIGHT ACT



ROLCHIGO RESIDENCE
LOT-X, BLOCK-X XX ADDITION
TONKA BAY, MINNESOTA

DATE:
8-25-16
REVISIONS:
9-7-16 KH
9-13-16 CD
9-19-16 CD
9-28-16 KH
10-1-16 CD
10-21-16 KH
10-28-16 CD
11-10-16 CD
11-17-16 CD
12-2-16 KH

DRAWN BY:
KH
COMM. NO.
216337
SHEET NO.

S2

REVIEW PLAN

NOT FOR BUILDING PURPOSES

D.F.P. Planning & Design
9100 Baltimore St NE, Suite 106
Blaine, MN 55449

SCOPE
DESIGN OF THE MAIN WINDFORCE RESISTING SYSTEM AND TALL WOOD WALL FRAMING FOR A SINGLE FAMILY RESIDENCE. CONSTRUCTION IS TO BE DONE IN ACCORDANCE WITH THESE DRAWINGS, STANDARD INDUSTRY PRACTICE, AND THE REQUIREMENTS OF THE CODE.

- NOTES**
- THESE DOCUMENTS APPLY TO STRUCTURAL ONLY. REFER TO HOUSE PLANS PREPARED BY DFP PLANNING & DESIGN LAST DATED 10-21-16 FOR MORE INFORMATION.
 - THE HANSON GROUP'S SCOPE IS LIMITED TO THE DESIGN OF THE ITEMS LISTED IN THE PROJECT SCOPE ABOVE. DESIGN OF THE REMAINING HOME IS BY OTHERS.
 - ALL EXTERIOR WALLS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE FOLLOWING CRITERIA, I.N.C., WHICH MEETS OR EXCEEDS THE REQUIREMENTS OF CODE SECTION R602.10.4-WSP AND CS-WSP.
 - 2x6 STUDS SPACED @ 16" O.C.
 - EXTERIOR SHEATHING: 1/2" MIN. STRUCTURAL PANEL SHEATHING w/ 8d NAILS @ 6" O.C. AT PANEL EDGES AND 12" O.C. AT INTERMEDIATE SUPPORTS OR 1 1/2" 16 GAUGE STAPLES @ 3" / 6" SPACING.
 - ALL INTERIOR WALLS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE FOLLOWING CRITERIA, I.N.C.
 - 2x4 OR 2x6 STUDS SPACED @ 16" O.C.
 - WALL SHEATHING: 1/2" MIN. GYPSUM SHEATHING FASTENED TO FRAMING w/ 5d COOLER NAILS @ 8" O.C. MAX. OR TYPE S/W WALLBOARD SCREWS @ 16" O.C. MAX. (1/2" MINIMUM STUD PENETRATION)
 - ALL FLOORS ARE TO BE IN CONSTRUCTION IN ACCORDANCE WITH THE FOLLOWING CRITERIA.
 - FLOOR FRAMING SPACED AT A MAXIMUM OF 24" O.C.
 - FLOOR SHEATHING: 3/4" STRUCTURAL PANEL SHEATHING w/ 8d NAILS @ 6" O.C. AT PANEL EDGES AND 12" O.C. AT INTERMEDIATE SUPPORTS.
 - ALL ROOFS ARE TO BE IN CONSTRUCTION IN ACCORDANCE WITH THE FOLLOWING CRITERIA.
 - ROOF FRAMING SPACED AT A MAXIMUM OF 24" O.C.
 - FASTEN ALL ROOF FRAMING TO TOP PLATES WITH SIMPSON H2.5 CLIPS OR EQUIVALENT AND (3) 8d TOENAILS.
 - ROOF SHEATHING: 1/2" STRUCTURAL PANEL SHEATHING w/ 8d NAILS @ 6" O.C. AT PANEL EDGES AND 12" O.C. AT INTERMEDIATE SUPPORTS OR 1 1/2" 16 GAUGE STAPLES @ 3" / 6" SPACING.
 - ALONG LENGTH OF WALLS, LAP WALL TOP PLATES A MINIMUM OF 24" AND FASTEN TOGETHER WITH (8) 16d NAILS IN LAP ZONE. AT CORNERS AND INTERSECTIONS, LAP PLATES AND PROVIDE (2) 10d FACE NAILS.
 - CONNECTIONS NOT SPECIFICALLY NOTED ARE TO BE IN ACCORDANCE WITH CODE TABLE R602.3(1).
 - TALL WOOD WALL FRAMING IS DESIGNED TO MEET L/180 DEFLECTION CRITERIA AT A MINIMUM.

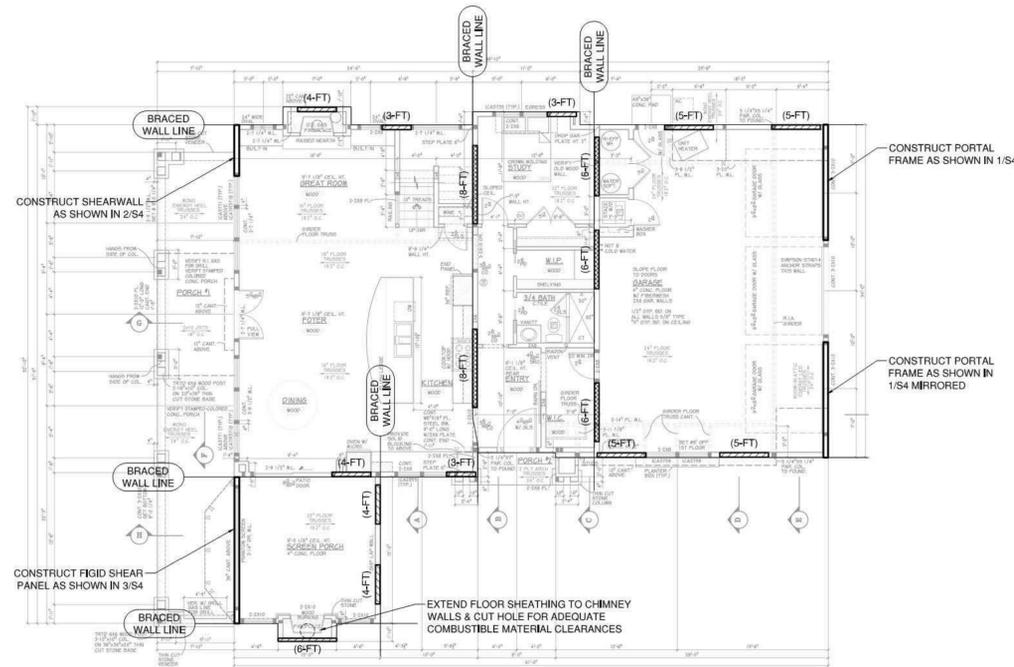
MATERIALS

WALL STUDS (10' OR LESS): SPF STUD GRADE OR BETTER
WALL STUDS OVER 10': SPF NO.2 GRADE OR BETTER
DIMENSIONAL LUMBER: SPF NO.2 GRADE OR BETTER
TREATED LUMBER: SYP NO.2 GRADE OR BETTER
LVL: 1 1/2" WIDTH - 1.3E OR BETTER
LSL STUDS: 1 1/2" WIDTH - 1.3E OR BETTER
LSL BEAMS: 1 1/2" WIDTH - 1.55E OR BETTER

LOADS

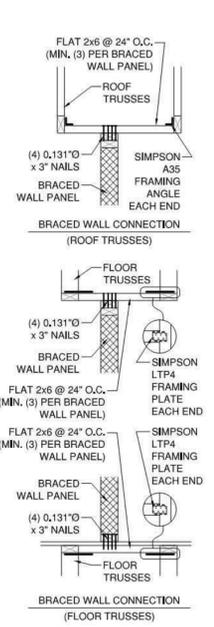
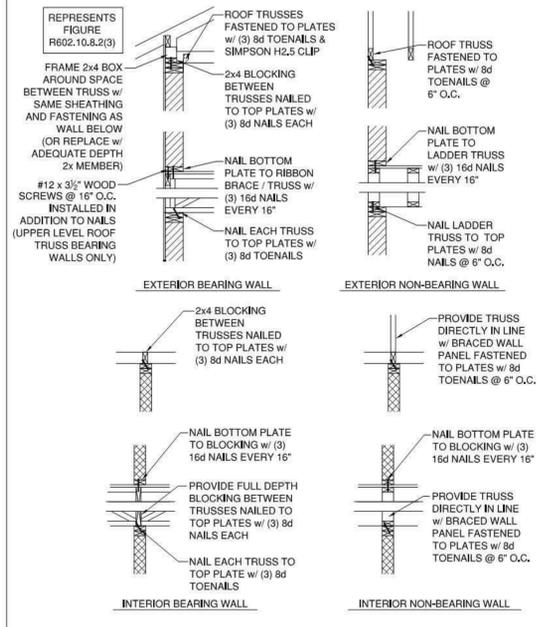
ROOF LIVE LOAD: 35 PSF
ROOF DEAD LOAD: 15 PSF
FLOOR LIVE LOAD: 40 PSF
FLOOR DEAD LOAD: 15 PSF
WIND: 90 MPH EXPOSURE B

CODES
2015 MINNESOTA RESIDENTIAL CODE



1 REFERENCE PLAN
S3 MAIN LEVEL HOUSE PLAN SHOWN FOR LOCATION REFERENCE ONLY

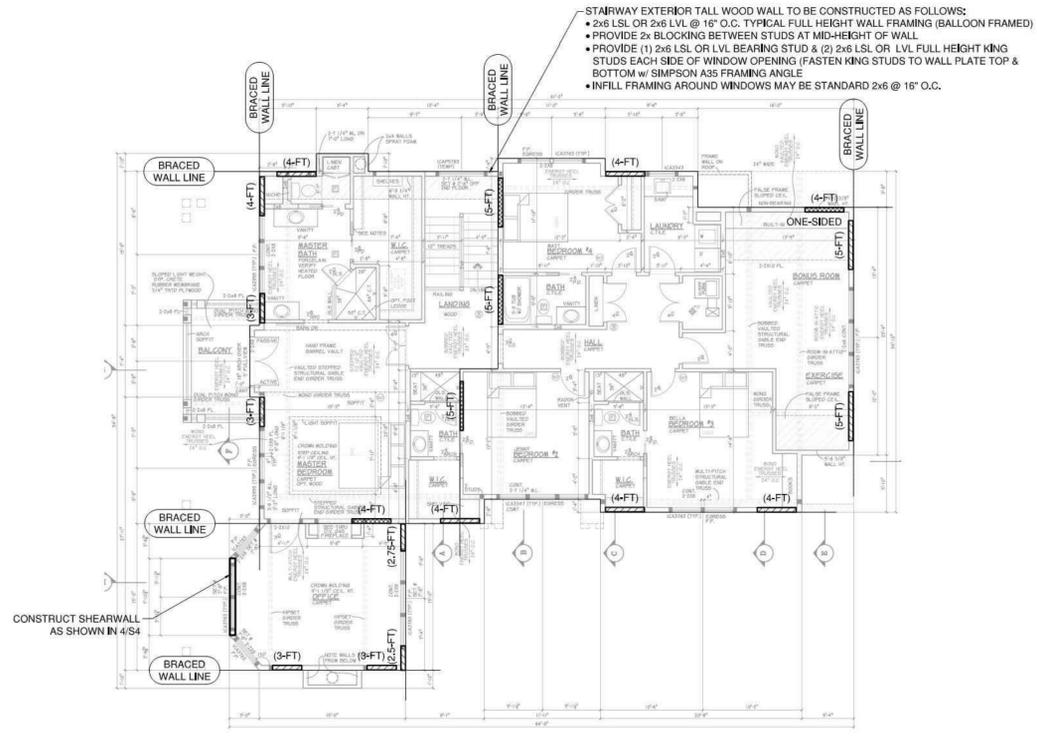
- (MIN. LENGTH) — INDICATES EXTERIOR BRACED WALL PANEL w/ SHEATHING ON EXTERIOR FACE IN ACCORDANCE w/ NOTE 3. PROVIDE INCREASED FASTENING REQUIREMENTS AS SHOWN BELOW.
- (MIN. LENGTH) — INDICATES INTERIOR BRACED WALL PANEL w/ GYPSUM SHEATHING BOTH FACES WITH EITHER FASTENER OPTION LISTED IN NOTE 4, SPACED AT 4" O.C. PROVIDE INCREASED FASTENING REQUIREMENTS AS SHOWN BELOW.
- INDICATES ENGINEERED WIND RESISTING ELEMENTS TO BE CONSTRUCTED AS SHOWN IN THE DETAIL SHEETS.



SECTIONS SHOWN DEPICT CONNECTIONS OF BRACED WALL PANELS TO ROOF TRUSSES ABOVE, TO JOISTS/TRUSSES/BLOCKING ABOVE, AND TO JOISTS/TRUSSES/BLOCKING BELOW. THESE PANELS ARE NOT NECESSARILY REQUIRED TO ALIGN, BUT MAY DEPENDING ON PLAN LAYOUT.

DETAILS SHOWN ABOVE ARE ALTERNATIVE CONNECTIONS TO BE USED WHEN BRACED WALL PANEL DOES NOT ALIGN WITH FRAMING.

THESE SHEETS REPRESENT A COMPLETE DESIGN OF THE "MAIN WINDFORCE RESISTING SYSTEM" FOR THE ENTIRE RESIDENTIAL STRUCTURE. THE LOCATION AND LENGTH OF EACH BRACED WALL PANEL AND ENGINEERED WIND RESISTING ELEMENT THAT IS REQUIRED FOR THE HANSON GROUP'S DESIGN IS SHOWN ON THE STRUCTURAL DRAWINGS. WALLS NOT SPECIFICALLY LABELED ON THE PLANS MAY BE STANDARD FRAMING.



2 REFERENCE PLAN
S3 UPPER LEVEL HOUSE PLAN SHOWN FOR LOCATION REFERENCE ONLY

Revision	Date	Description

PLANS SHOWN LIGHT IN BACKGROUND ARE FOR LOCATION REFERENCE ONLY. PLAN NOTES AND ELEMENTS SHOWN LIGHT MAY NOT NECESSARILY SUPPORT THE HANSON GROUP'S DESIGN.

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

Signed: *Ryan Mack*
Print Name: Ryan Mack
Date: 11-13-16 License Number: 46673

3407 Kilmer Lane North
Suite 4
Plymouth, MN 55441
Tel 612-708-3572
www.hansongroupmn.com

Rolchigo Residence
Tonka Bay, MN

Project Number: 6.597
Date: November 3, 2016
Sheets: 3 of 4

D.F.P. PLANNING & DESIGN
 9100 BALTIMORE ST NE, SUITE 106
 BLAINE, MN 55449
 TEL: 612-708-3572
 WWW.DFPDESIGN.COM
 E-MAIL: INFO@DFPDESIGN.COM
 FAX: 763-780-8004

© 2016 DFP PLANNING & DESIGN
 UNAUTHORIZED USE OF THE PLAN
 IS A VIOLATION OF THE U.S.
 COPYRIGHT ACT

Gordon James
 INDEPENDENT REGISTERED PROFESSIONAL ENGINEER

ROLCHIGO RESIDENCE
 LOT-X, BLOCK-X XX ADDITION
 TONKA BAY, MINNESOTA

DATE:
 8-25-16
 REVISIONS:
 9-7-16 KH
 9-13-16 CD
 9-19-16 CD
 9-28-16 KH
 10-1-16 CD
 10-21-16 KH
 10-28-16 CD
 11-10-16 CD
 11-17-16 CD
 12-2-16 KH

DRAWN BY:
 KH
 COMM. NO.
 216337
 SHEET NO.
 3 of 4

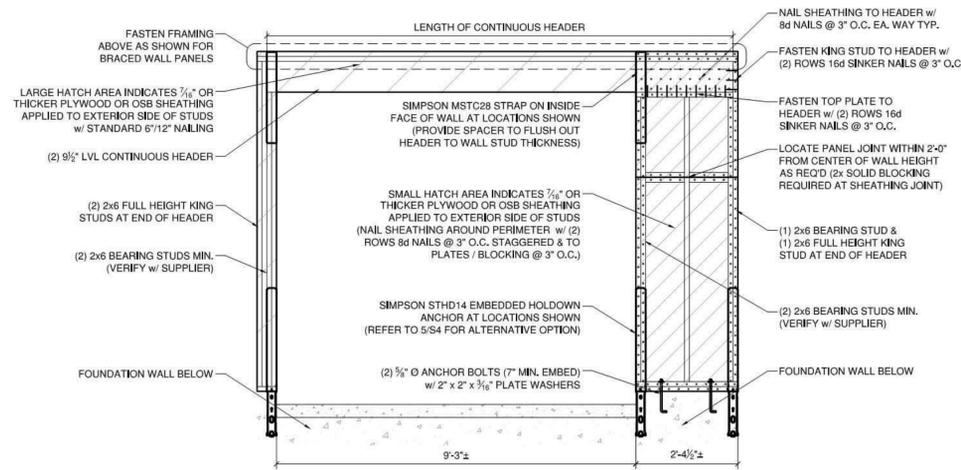
S3

REVIEW PLAN

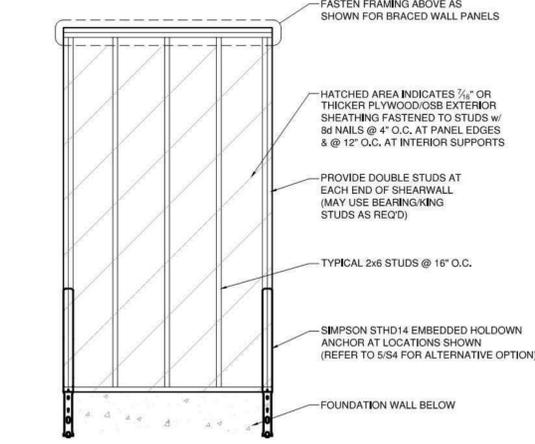
NOT FOR BUILDING PURPOSES

D.F.P. Planning & Design
 9100 Baltimore St NE, Suite 106
 Blaine, MN 55449

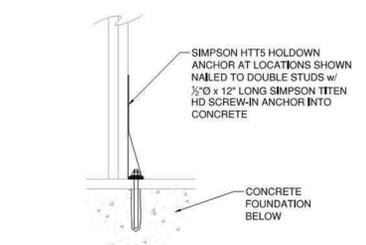
Revision	Date	Description



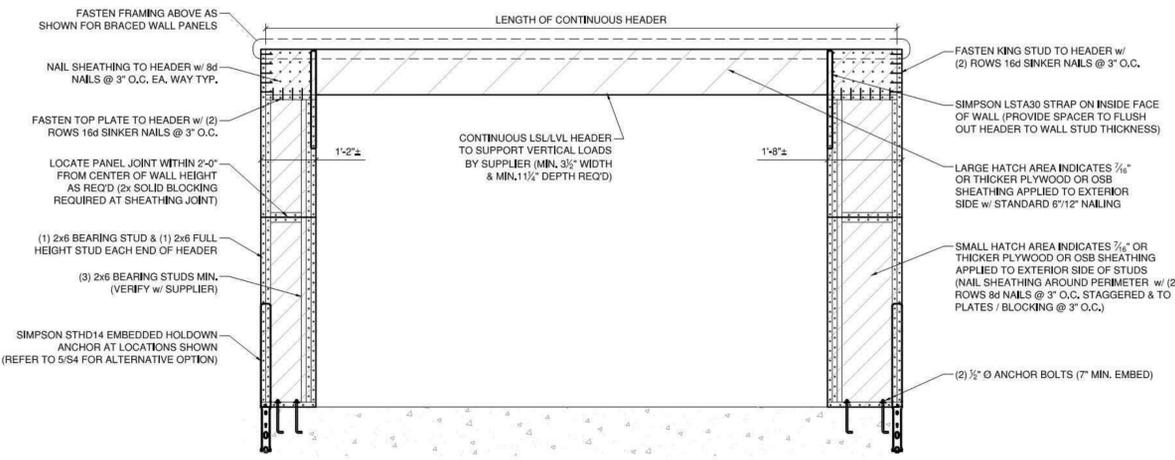
1
S4
FRAMING DETAIL
GARAGE FRONT PORTAL FRAME



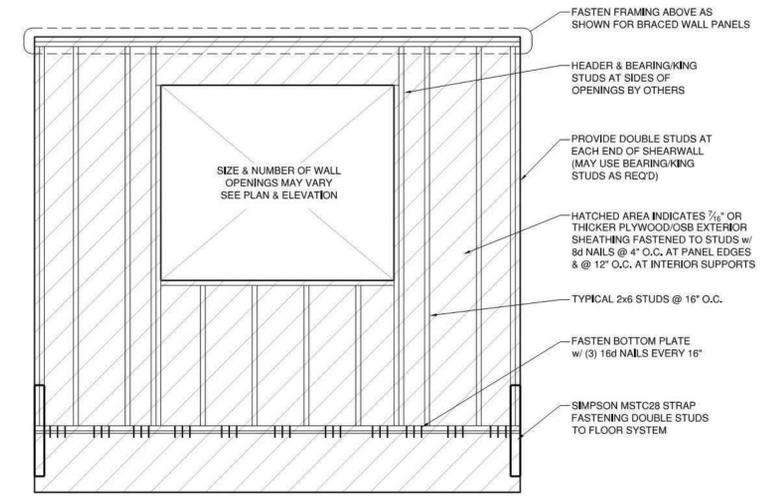
2
S4
FRAMING DETAIL
STANDARD SHEARWALL
NOTE: INFO APPLIES SYMMETRICALLY ACROSS DETAIL.



5
S4
FRAMING DETAIL
POST-INSTALLED HOLDOWN OPTION



3
S4
FRAMING DETAIL
RIGID SHEAR PANEL
NOTE: INFO APPLIES SYMMETRICALLY ACROSS DETAIL UNLESS NOTED OTHERWISE.



4
S4
FRAMING DETAIL
PERFORATED SHEARWALL RAISED ABOVE FLOOR SYSTEM
NOTE: INFO APPLIES SYMMETRICALLY ACROSS DETAIL.

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.
 Signed: *[Signature]*
 Print Name: Ryan Mack
 Date: 11-3-16 License Number: 46673


 3407 Kilmer Lane North
 Suite 4
 Plymouth, MN 55441
 Tel 612-708-3572
 www.hansongroupmn.com

Rolchigo Residence
Tonka Bay, MN

Project Number: 6.597
 Date: November 3, 2016
 Sheets: 4 of 4

D.F.P. PLANNING & DESIGN
 9100 BALTIMORE ST NE, SUITE 106
 BLAINE, MN 55449
 TEL: 763-786-8004
 FAX: 763-786-8004
 WWW.DFPDESIGN.COM
 INFO@DFPDESIGN.COM



© 2016 DFP PLANNING & DESIGN
 UNAUTHORIZED USE OF THE PLAN
 IS A VIOLATION OF THE U.S.
 COPYRIGHT ACT

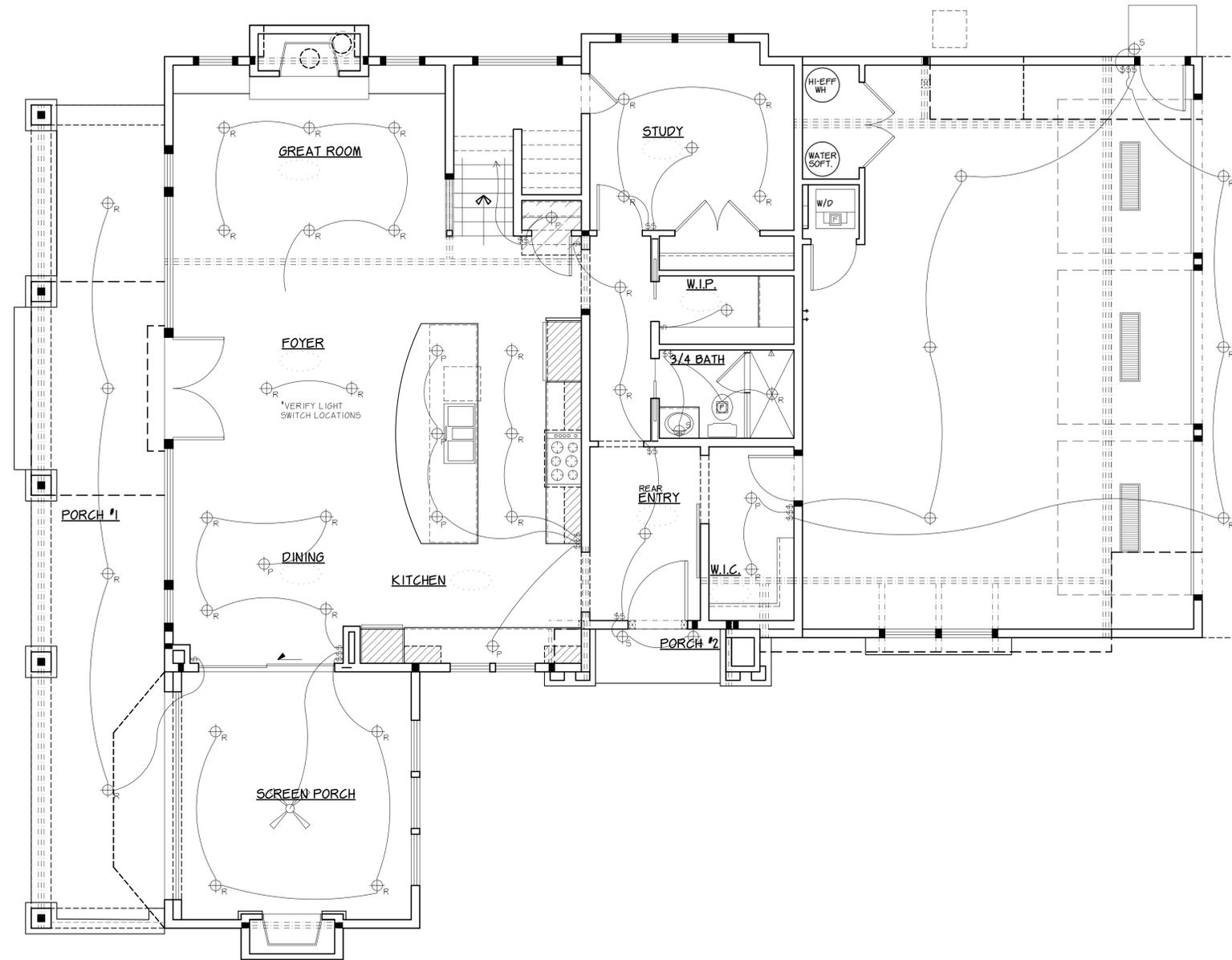


ROLCHIGO RESIDENCE
 LOT-X, BLOCK-X XX ADDITION
 TONKA BAY, MINNESOTA

DATE: 8-25-16
 REVISIONS:
 9-7-16 KH
 9-13-16 CD
 9-19-16 CD
 9-28-16 KH
 10-1-16 CD
 10-21-16 KH
 10-28-16 CD
 11-10-16 CD
 11-17-16 CD
 12-2-16 KH

DRAWN BY: KH
 COMM. NO. 216337
 SHEET NO. S4

REVIEW PLAN
NOT FOR BUILDING PURPOSES



- △ FLOOD
 - ⊕ DECORATIVE LIGHT
 - ⊕_R RECESSED LIGHT
 - ⊕_{MR} MINI RECESSED LIGHT
 - ⊕_{ME} MINI EYEBALL LIGHT
 - ⊕_S SCONCE LIGHT
 - ⊕_{PC} PULL CHAIN
 - ⊕_{LB} LIGHT BAR
 - ⊕_P PENDANT LIGHT
 - ⊕_{WS} WALL / CEILING SPEAKER
 - ⊕_{FC} FAN CAN
 - ⊕_P PUCK LIGHT
 - ⊕_A AUTO LIGHT
 - ▬ UNDER CABINET
 - ▬ FLUORESCENT
 - ⊕ FAN
 - ⊕ CEILING FAN
 - ⊕ SWITCH
 - ⊕₂ 2 WAY SWITCH
 - ⊕₃ 3 WAY SWITCH
 - ⊕ OUTLET
 - ⊕_{WP} OUTLET (WEATHER PROOF)
 - ⊕_{GFI} OUTLET (GROUND FAULT)
 - ▽ PHONE
- * ALL ELECTRICAL, LOW VOLT, THERMOSTATS ETC. MUST BE ON A CENTERLINE PLANE

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

* OUTLETS PER CODE

D.F.P. PLANNING & DESIGN
ARCHITECTS
1000 W. WYOMING AVE. SUITE 100
MINNEAPOLIS, MN 55440
PHONE: 763-786-8004
WWW.DFPDESIGN.COM
E-MAIL: INFO@DFPDESIGN.COM



© 2016 DFP PLANNING & DESIGN
UNAUTHORIZED USE OF THE PLAN
IS A VIOLATION OF THE U.S.
COPYRIGHT ACT



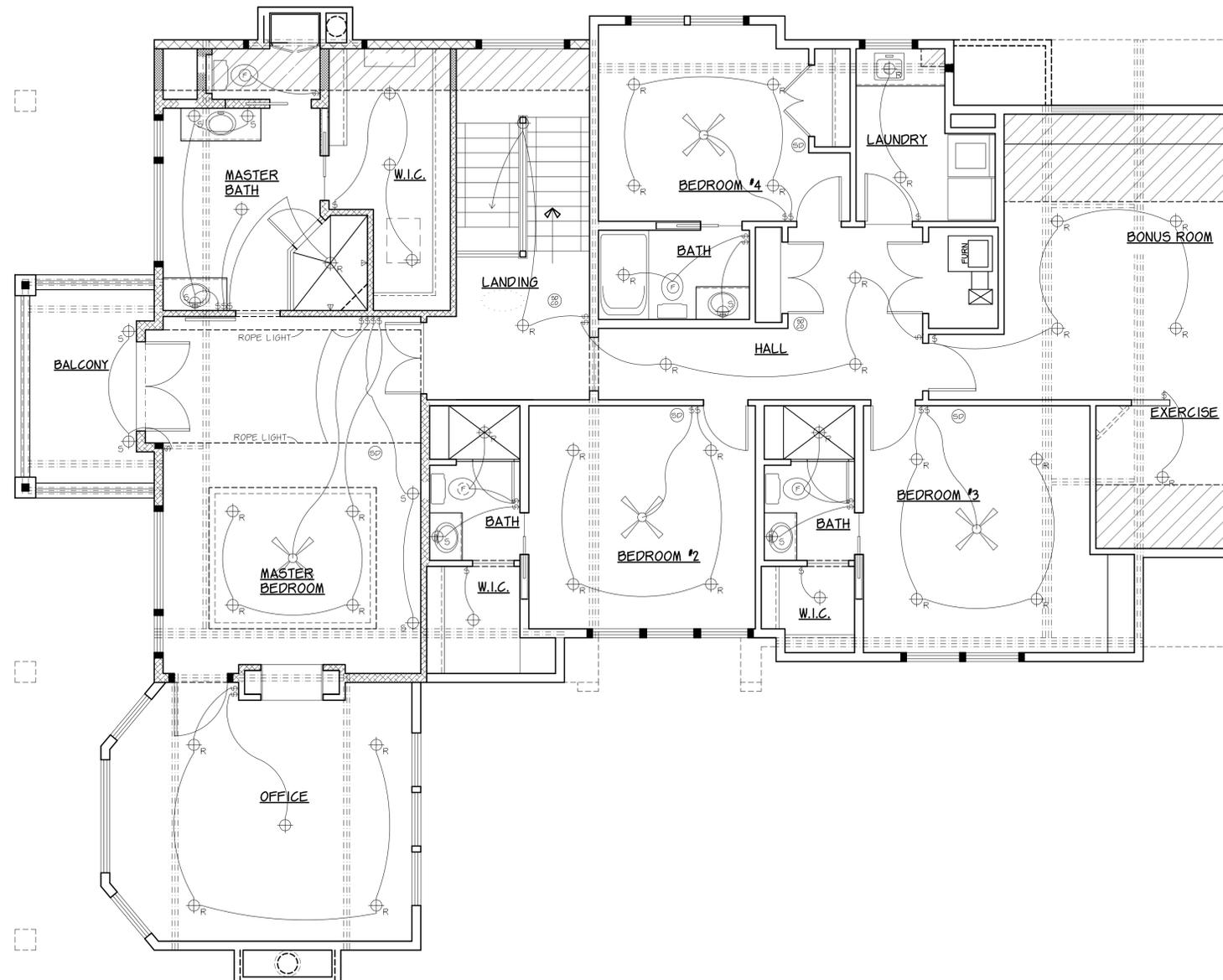
ROLCHIGO RESIDENCE
LOT X, BLOCK XX ADDITION
TONKA BAY, MINNESOTA

DATE:	8-25-16
REVISIONS:	9-7-16 KH
	9-13-16 CD
	9-19-16 CD
	9-28-16 KH
	10-1-16 CD
	10-21-16 KH
	10-28-16 CD
	11-10-16 CD
	11-17-16 CD
	12-2-16 KH

DRAWN BY:
KH
COMM. NO.
216337
SHEET NO.



REVIEW PLAN
NOT FOR BUILDING PURPOSES



- ▽ FLOOD
 - ⊕ DECORATIVE LIGHT
 - ⊕ RECESSED LIGHT
 - ⊕ MR MINI RECESSED LIGHT
 - ⊕ ME MINI EYEBALL LIGHT
 - ⊕ SCORCE LIGHT
 - ⊕ PC PULL CHAIN
 - ⊕ LB LIGHT BAR
 - ⊕ PENDANT LIGHT
 - ⊕ WALL / CEILING SPEAKER
 - ⊕ FAN CAN
 - ⊕ PUCK LIGHT
 - ⊕ AUTO LIGHT
 - ▬ UNDER CABINET
 - ▬ FLUORESCENT
 - ⊕ FAN
 - ⊕ CEILING FAN
 - ⊕ SWITCH
 - ⊕ 2 WAY SWITCH
 - ⊕ 3 WAY SWITCH
 - ⊕ OUTLET
 - ⊕ OUTLET (WEATHER PROOF)
 - ⊕ GFI OUTLET (GROUND FAULT)
 - ▽ PHONE
- * ALL ELECTRICAL, LOW VOLT, THERMOSTATS ETC. MUST BE ON A CENTERLINE PLANE

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

* OUTLETS PER CODE

D.F.P. PLANNING & DESIGN
FOR PLANNING & DESIGN
1000 W. WYOMING AVE. SUITE 100
MINNEAPOLIS, MN 55440
PHONE: 763-780-8004
WEB: WWW.DFPDESIGN.COM
E-MAIL: INFO@DFPDESIGN.COM



© 2016 DFP PLANNING & DESIGN
UNAUTHORIZED USE OF THE PLAN
IS A VIOLATION OF THE U.S.
COPYRIGHT ACT



ROLCHIGO RESIDENCE
LOT-X, BLOCK-X XX ADDITION
TONKA BAY, MINNESOTA

DATE:	8-25-16
REVISIONS:	9-7-16 KH
	9-13-16 CD
	9-19-16 CD
	9-28-16 KH
	10-1-16 CD
	10-21-16 KH
	10-28-16 CD
	11-10-16 CD
	11-17-16 CD
	12-2-16 KH

DRAWN BY:
KH

COMM. NO.
216337

SHEET NO.
E2

