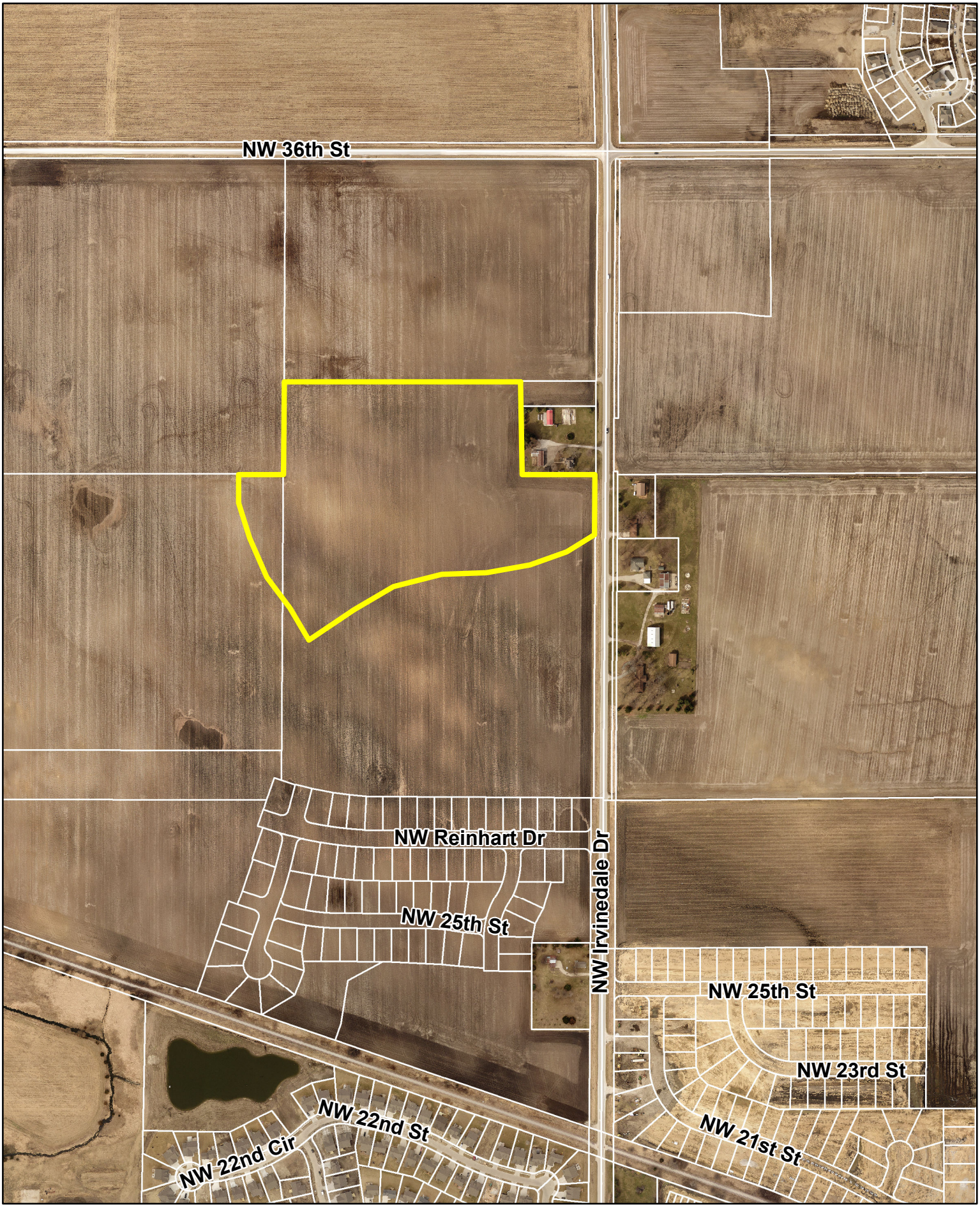


N

1 inch = 500 feet

Date: 3/15/2018

Trestle Ridge Estates PUD

Ankeny
bringing it all together.

city of Ankeny
bringing it all together

Plan and Zoning Commission
Staff Report

Meeting Date: March 20, 2018

Agenda Item: Trestle Ridge Estates Rezoning – Public Hearing
Report Date: March 14, 2018 EJC
Prepared By: Deb Gervais, AICP
Associate Planner

Discussion

Diamond Development, LLC is requesting to rezone property from R-3, Multiple-Family Residence District, restricted to single-family residential to PUD, Planned Unit Development.

The subject property is approximately 27.41 acres, located a quarter mile southwest of the intersection of NW 36th Street and NW Irvinedale Drive. Properties to the north and northeast are zoned R-3, restricted to 10 units per acre and restricted to 18 units per acre. The southern corners of NW 36th and NW Irvinedale are zoned C-1, Neighborhood Retail Commercial District. The properties west and south are zoned R-3 restricted to single family residential. The properties east of this site are zoned R-1, One-Family Residence District.

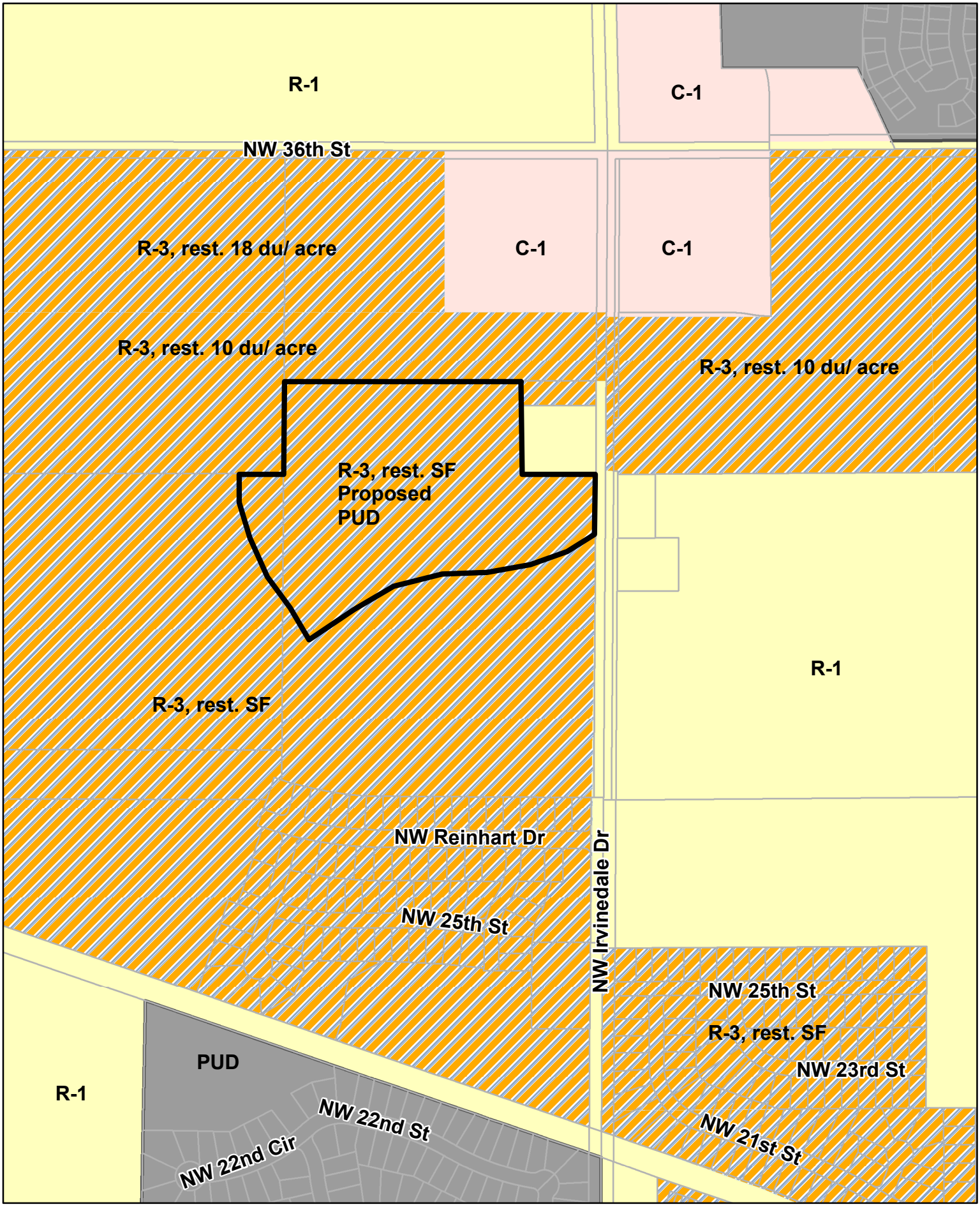
The PUD Concept Plan indicates the bulk regulations allowing single-family lots with 54-foot minimum lot widths. R-3 zoning regulations shall apply

The current Ankeny Comprehensive Plan Future Land Use Map indicates the subject area as Low Density Residential and Medium Density Residential. The proposed rezoning is consistent with the Future Land Use Map.

The developer has submitted the required rezoning petitions consisting of the signatures of more than 50% of the land area subject to the rezoning, as well as the signatures of the owners of at least 60% of the land within 250' of the subject property. Specifically, the developer has submitted the required rezoning petition owner signatures, consisting of 100% of the land area subject to the rezoning, as well as 78.76% of the land area within 250' of the subject property, not including City of Ankeny. Additionally, this encompasses 3 of 8 or 37.5% of the owners within 250' of the subject property, not including City of Ankeny.

Notifications of the public hearing were sent to the property owners within 250' of the property and a legal notice was published. The rezoning signs were posted on the property by the required date of March 12, 2018, which is at least seven days prior to this public hearing.

Staff will present a complete staff report at the next Plan and Zoning Commission meeting on April 3, 2018.



N

1 inch = 500 feet

Date: 3/15/2018

Trestle Ridge Estates PUD

Ankeny
bringing it all together.

CIVIL DESIGN ADVANTAGE L.L.C.
ENGINEERS, LANDSCAPE ARCHITECTS, PLANNERS & SURVEYORS

March 14, 2018

Honorable Mayor and City Council
City of Ankeny
Planning & Building Department
220 West 1st Street
Ankeny, Iowa 50023

RE: Trestle Ridge Estates Plat 3 Property Rezoning

Honorable Mayor, City Council and Planning and Zoning Commission:

On behalf of Diamond Development LLC, we submit herewith the following rezoning request to rezone approximately 27.41 acres located southwest of the intersection of NW Irvinedale Drive and NW 36th Street. The existing zoning on the property is R-3, restricted to single family residential and we are requesting to rezone the property to Planned Unit Development (PUD). Please accept this submittal for the next available City Council meeting. Let me know if you have any questions or require any further information to complete your review. Thanks.

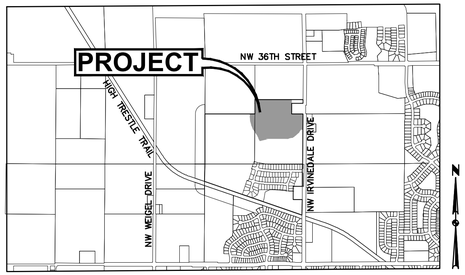
Sincerely,

CIVIL DESIGN ADVANTAGE, LLC

Ryan A. Hardisty, P.E.

3405 SE CROSSROADS DRIVE, SUITE G, GRIMES, IOWA 50111 • P 515+369+4400 • F 515+369+4410 • WWW.CDA-ENG.COM

VICINITY MAP



ANKENY, IA

OWNER/APPLICANT

DIAMOND DEVELOPMENT LLC
CONTACT: DARRYL BRESSON
309 EAST 1ST STREET
ANKENY, IOWA 50021
PH: (515) 963-4388

ZONING

EXISTING: R-3, WITH RESTRICTIONS TO SINGLE FAMILY RESIDENTIAL ONLY

PROPOSED: PLANNED UNIT DEVELOPMENT (PUD)
UNDERLYING ZONING: R-3

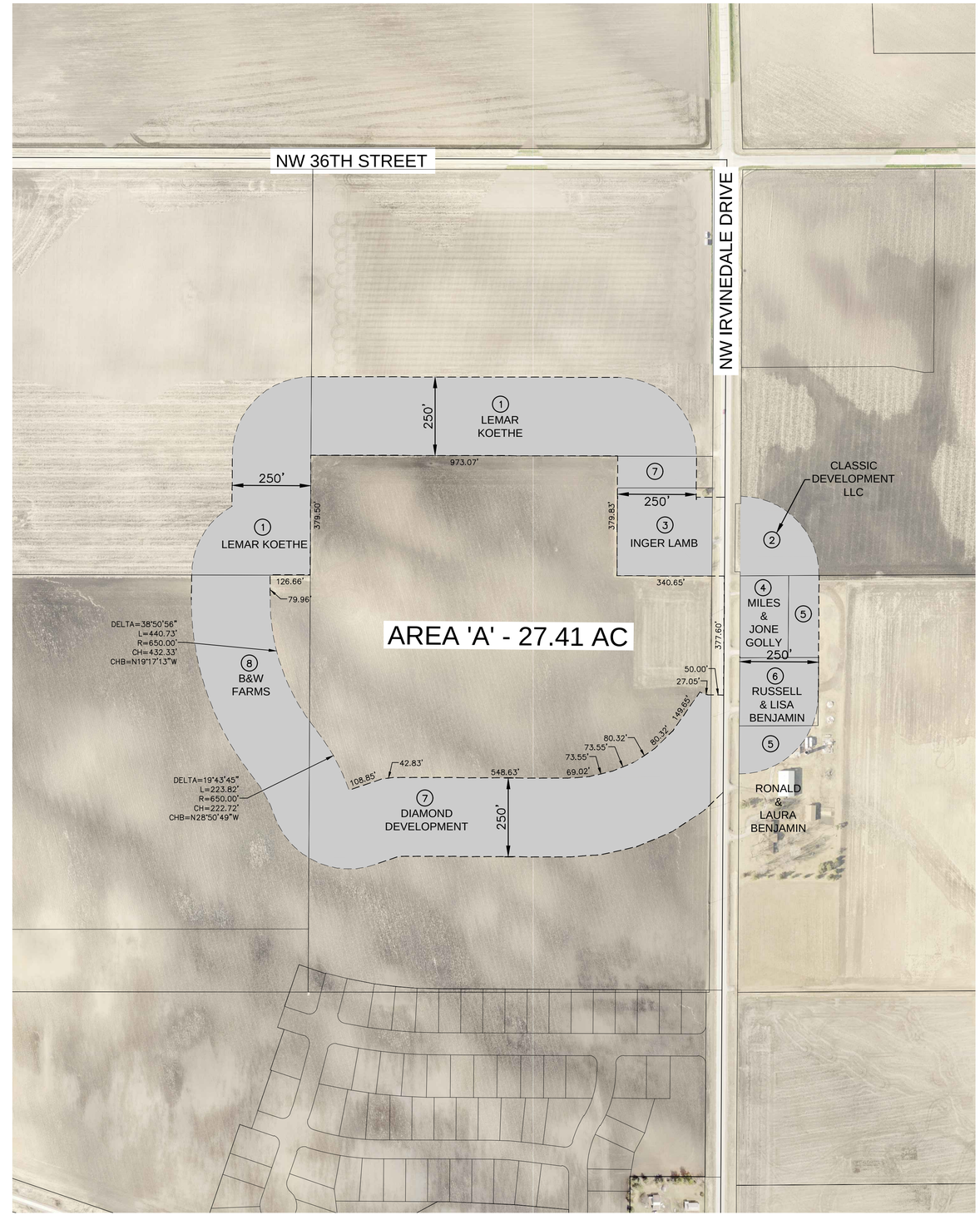
REZONING DESCRIPTION - AREA 'A'

A PART OF THE NORTHEAST QUARTER OF SECTION 9, TOWNSHIP 80 NORTH, RANGE 24 WEST OF THE FIFTH PRINCIPAL MERIDIAN IN THE CITY OF ANKENY, POLK COUNTY, IOWA AND MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE EAST QUARTER CORNER OF SAID SECTION 9; THENCE NORTH 0°20'08" EAST ALONG THE EAST LINE OF SAID EAST HALF OF THE NORTHEAST QUARTER, 945.96 FEET TO THE POINT OF BEGINNING; THENCE NORTH 89°39'52" WEST, 50.00 FEET; THENCE NORTH 70°23'19" WEST, 27.05 FEET; THENCE SOUTH 34°52'47" WEST, 149.65 FEET; THENCE SOUTH 45°31'21" WEST, 80.32 FEET; THENCE SOUTH 56°37'46" WEST, 80.32 FEET; THENCE SOUTH 68°02'53" WEST, 73.55 FEET; THENCE SOUTH 76°40'30" WEST, 73.55 FEET; THENCE SOUTH 85°36'02" WEST, 69.02 FEET; THENCE NORTH 89°43'26" WEST, 548.63 FEET; THENCE SOUTH 82°32'25" WEST, 42.83 FEET; THENCE SOUTH 71°16'27" WEST, 108.85 FEET; THENCE NORTHWESTERLY ALONG A CURVE CONCAVE SOUTHWESTERLY WHOSE RADIUS IS 650.00 FEET, WHOSE ARC LENGTH IS 223.82 FEET AND WHOSE CHORD BEARS NORTH 28°50'49" WEST, 222.72 FEET; THENCE NORTHERLY ALONG A CURVE CONCAVE EASTERLY WHOSE RADIUS IS 650.00 FEET, WHOSE ARC LENGTH IS 440.73 FEET AND WHOSE CHORD BEARS NORTH 19°17'13" WEST, 432.33 FEET; THENCE NORTH 00°08'15" EAST, 79.96 FEET TO THE NORTH LINE OF SAID SOUTHWEST QUARTER OF THE NORTHEAST QUARTER; THENCE SOUTH 89°54'24" EAST ALONG SAID NORTH LINE, 126.66 FEET TO THE NORTHEAST CORNER OF SAID SOUTHWEST QUARTER OF THE NORTHEAST QUARTER; THENCE NORTH 00°23'16" EAST ALONG THE WEST LINE OF SAID EAST HALF OF THE NORTHEAST QUARTER, 379.50 FEET; THENCE SOUTH 89°49'55" EAST, 973.07 FEET; THENCE SOUTH 00°22'14" WEST, 379.83 FEET; THENCE NORTH 89°53'15" WEST, 340.65 FEET TO THE EAST LINE OF SAID EAST HALF OF THE NORTHEAST QUARTER; THENCE SOUTH 00°22'08" WEST ALONG SAID EAST LINE, 377.60 FEET TO THE POINT OF BEGINNING AND CONTAINING 27.41 ACRES (1,194,125 SQUARE FEET). THE PROPERTY IS SUBJECT TO ANY AND ALL EASEMENTS OF RECORD.

ADJACENT OWNERSHIP - AREA 'A'

Owners	Acres	Percentage	Consenting
1. LEMAR KOETHE	10.468 AC	35.10%	35.10%
2. CLASSIC DEVELOPMENT	1.136 AC	3.81%	
3. INGER LAMB	1.894 AC	6.35%	
4. MILES & JONE GOLLY	0.918 AC	3.08%	
5. RONALD & LAURA BENJAMIN	1.161 AC	3.89%	
6. RUSSEL & LISA BENJAMIN	1.226 AC	4.11%	
7. DIAMOND DEVELOPMENT, LLC.	8.686 AC	29.13%	29.13%
8. B&W FARMS LLC.	4.334 AC	14.53%	14.53%
	29.823 AC	100.00%	78.76%



REVISIONS	DATE
REVISED	03/12/18
FIRST SUBMITTAL	02/19/18

3405 S.E. CROSSROADS DRIVE, SUITE G
GRIMES, IOWA 50111
PHONE: (515) 369-4400 FAX: (515) 369-4410
ENGINEER: RAH | EI: TWC
CIVIL DESIGN ADVANTAGE

TRESTLE RIDGE ESTATES
REZONING MAP

ANKENY, IOWA

1/1

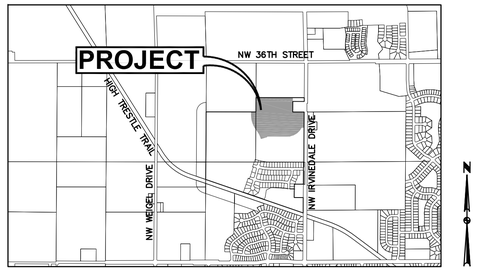
1701.021

FILE: H:\2017\1701021\DWG\PLAT 3 - CONSTRUCTION DRAWINGS\1701021-REZONING MAP-PLAT 3.DWG
PLOTTED: 3/12/18 DATE PLOTTED: 3/12/2018 2:16 PM COMMENT:
PLOTTED BY: RYAN HARDISTY TECH: ENG:

TRESTLE RIDGE ESTATES

P.U.D. CONCEPTUAL PLAN

VICINITY MAP



ANKENY, IA

OWNER/DEVELOPER

DIAMOND DEVELOPMENT LLC
CONTACT: DARRYL BRESSON
309 EAST 1ST STREET
ANKENY, IOWA 50021
PH: (515) 963-4388

ENGINEER/SURVEYOR

CIVIL DESIGN ADVANTAGE, LLC
CONTACT: RYAN HARDISTY
3405 S.E. CROSSROADS DRIVE, SUITE G
GRIMES, IA 50111
PH. (515) 369-4400

ZONING

EXISTING

R-3: WITH RESTRICTIONS TO SINGLE FAMILY RESIDENTIAL ONLY

PROPOSED

PLANNED UNIT DEVELOPMENT (PUD)

BULK REGULATIONS

MINIMUM LOT AREA = 6200 SF
MINIMUM LOT WIDTH = 54 FT

SETBACKS:
FRONT YARD = 30 FT
REAR YARD = 35 FT
SIDE YARD = 5 FT EACH SIDE/10 FT TOTAL

* A MINIMUM OF ONE OVERSTORY/ORNAMENTAL TREE SHALL BE PLANTED WITHIN THE FRONT YARD OF EACH LOT.
* R-3: WITH RESTRICTIONS TO SINGLE FAMILY RESIDENTIAL REGULATIONS SHALL APPLY

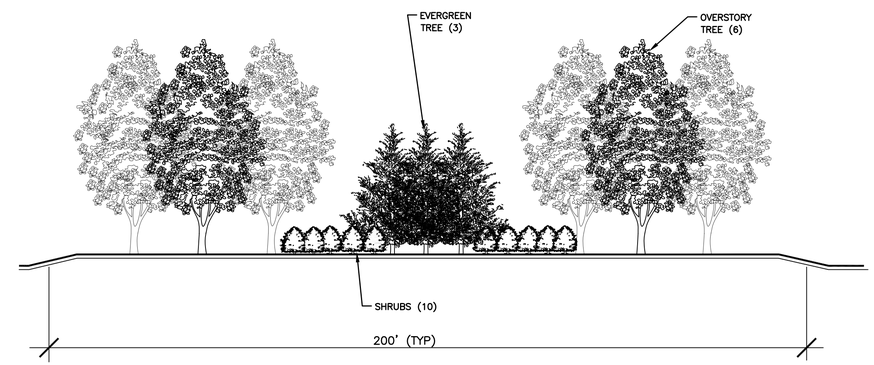
NOTES:

1. THE DEVELOPER WILL BE RESPONSIBLE FOR STREETLIGHTS ALONG ALL PUBLIC STREETS, INCLUDING NW IRVINEDALE DRIVE.
2. LOTS 1, 105, AND 106 WILL NOT BE ALLOWED DRIVEWAY ACCESS OFF OF NW IRVINEDALE DRIVE.
3. THE DEVELOPER WILL BE RESPONSIBLE FOR CONSTRUCTING A TURN LANE ON NW IRVINEDALE DRIVE.
4. FENCES ON LOTS ADJACENT TO NW IRVINEDALE DRIVE SHALL BE SETBACK 20' FROM NW IRVINENDALE DRIVE R.O.W. FENCES WILL BE ALLOWED AT A 10' SETBACK FROM THE NW IRVINEDALE DRIVE R.O.W. WITH THE CONDITION THAT TWO TREES ARE PLANTED BETWEEN THE FENCE AND THE NW IRVINEDALE DRIVE R.O.W.

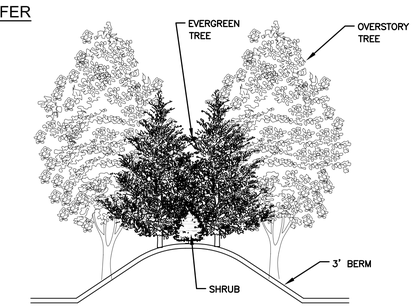
P.U.D. LEGAL DESCRIPTION

A PART OF THE NORTHEAST QUARTER OF SECTION 9, TOWNSHIP 80 NORTH, RANGE 24 WEST OF THE FIFTH PRINCIPAL MERIDIAN IN THE CITY OF ANKENY, POLK COUNTY, IOWA AND MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE EAST QUARTER CORNER OF SAID SECTION 9; THENCE NORTH 0°20'08" EAST ALONG THE EAST LINE OF SAID EAST HALF OF THE NORTHEAST QUARTER, 945.96 FEET TO THE POINT OF BEGINNING; THENCE NORTH 89°39'52" WEST, 50.00 FEET; THENCE NORTH 70°23'19" WEST, 27.05 FEET; THENCE SOUTH 34°52'47" WEST, 149.65 FEET; THENCE SOUTH 45°31'21" WEST, 80.32 FEET; THENCE SOUTH 56°37'46" WEST, 80.32 FEET; THENCE SOUTH 68°02'53" WEST, 73.55 FEET; THENCE SOUTH 76°40'30" WEST, 73.55 FEET; THENCE SOUTH 85°36'02" WEST, 69.02 FEET; THENCE NORTH 89°43'26" WEST, 548.63 FEET; THENCE SOUTH 82°32'25" WEST, 42.83 FEET; THENCE SOUTH 71°16'27" WEST, 108.85 FEET; THENCE NORTHWESTERLY ALONG A CURVE CONCAVE SOUTHWESTERLY WHOSE RADIUS IS 650.00 FEET, WHOSE ARC LENGTH IS 223.82 FEET AND WHOSE CHORD BEARS NORTH 28°50'49" WEST, 222.72 FEET; THENCE NORTHERLY ALONG A CURVE CONCAVE EASTERLY WHOSE RADIUS IS 650.00 FEET, WHOSE ARC LENGTH IS 440.73 FEET AND WHOSE CHORD BEARS NORTH 19°17'13" WEST, 432.33 FEET; THENCE NORTH 00°08'15" EAST, 79.96 FEET TO THE NORTH LINE OF SAID SOUTHWEST QUARTER OF THE NORTHEAST QUARTER; THENCE SOUTH 89°54'24" EAST ALONG SAID NORTH LINE, 126.66 FEET TO THE NORTHEAST CORNER OF SAID SOUTHWEST QUARTER OF THE NORTHEAST QUARTER; THENCE NORTH 00°23'16" EAST ALONG THE WEST LINE OF SAID EAST HALF OF THE NORTHEAST QUARTER, 379.50 FEET; THENCE SOUTH 89°49'55" EAST, 973.07 FEET; THENCE SOUTH 00°22'14" WEST, 379.83 FEET; THENCE NORTH 89°53'15" WEST, 340.65 FEET TO THE EAST LINE OF SAID EAST HALF OF THE NORTHEAST QUARTER; THENCE SOUTH 00°22'08" WEST ALONG SAID EAST LINE, 377.60 FEET TO THE POINT OF BEGINNING AND CONTAINING 27.41 ACRES (1,194,125 SQUARE FEET). THE PROPERTY IS SUBJECT TO ANY AND ALL EASEMENTS OF RECORD.



LANDSCAPE BUFFER
NOT TO SCALE



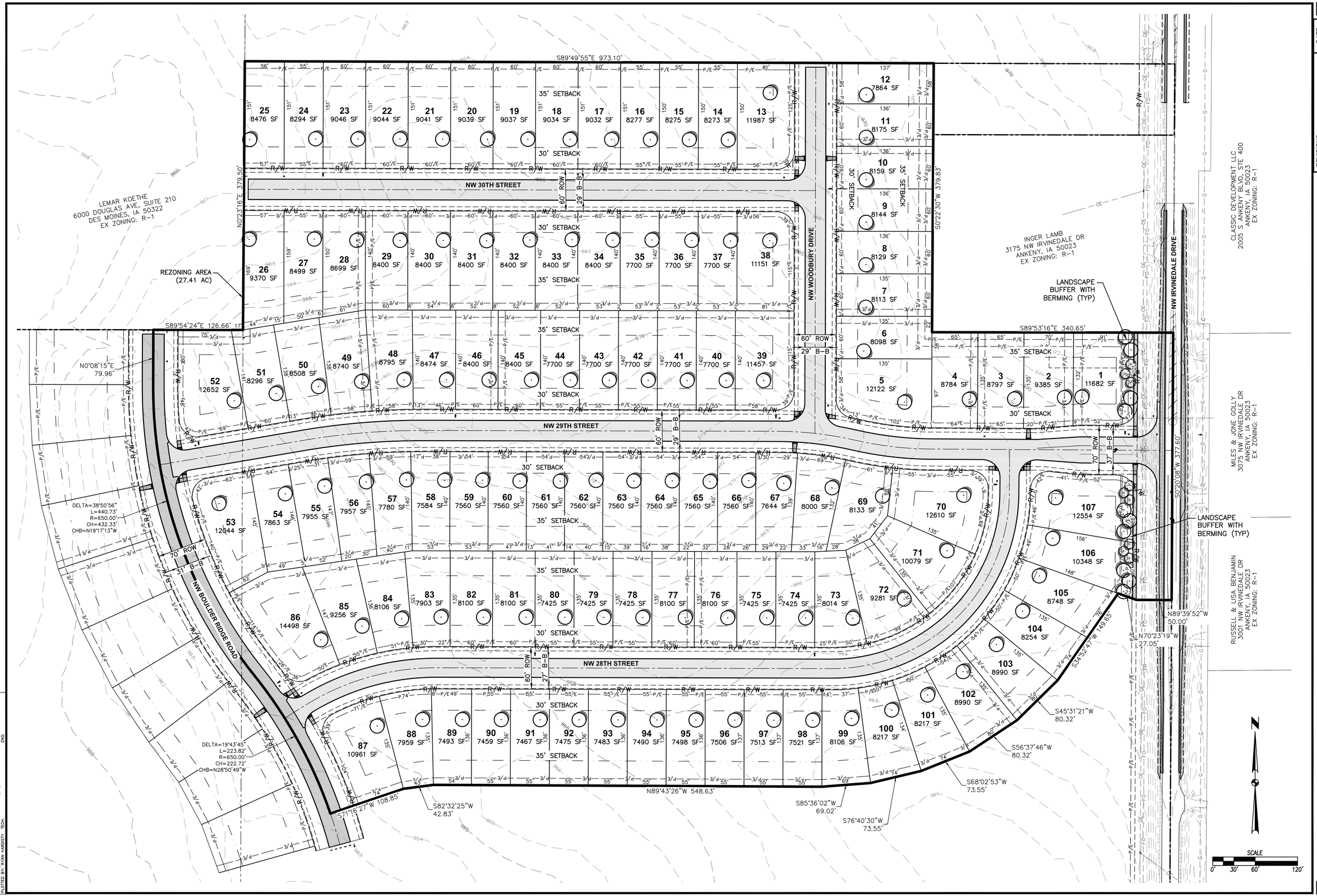
LANDSCAPE BUFFER
NOT TO SCALE

REVISIONS	DATE
SECOND SUBMITTAL	03-12-2018
FIRST SUBMITTAL	02-19-2018

3405 S.E. CROSSROADS DRIVE, SUITE G
GRIMES, IOWA 50111
PHONE: (515) 369-4400 FAX: (515) 369-4410
ENGINEER: RAH | EI: TWC
CIVIL DESIGN ADVANTAGE
ANKENY, IOWA

TRESTLE RIDGE ESTATES
P.U.D. CONCEPTUAL PLAN

FILE: H:\2017\170102\DWG\PLAT 2 - CONSTRUCTION DRAWINGS\170102-PUD-PLAT 3.DWG
XREF(S): PLAT2, PLAT2-XR, PLAT2-XR2, PLAT2-XR3 PLOTTED: 3/12/2018 2:17 PM DRAWN:
PLOTTED BY: RYAN HARDISTY TECH: ENG:



REVISIONS	DATE
SECOND SUBMITTAL	03-12-2018
FIRST SUBMITTAL	02-19-2018

3405 S.E. CROSSROADS DRIVE, SUITE G
GRIMES, IOWA 50111
PHONE: (515) 369-4400 FAX: (515) 369-4410

ENGINEER: RAH | EI: TWC

CIVIL DESIGN ADVANTAGE

TRESTLE RIDGE ESTATES

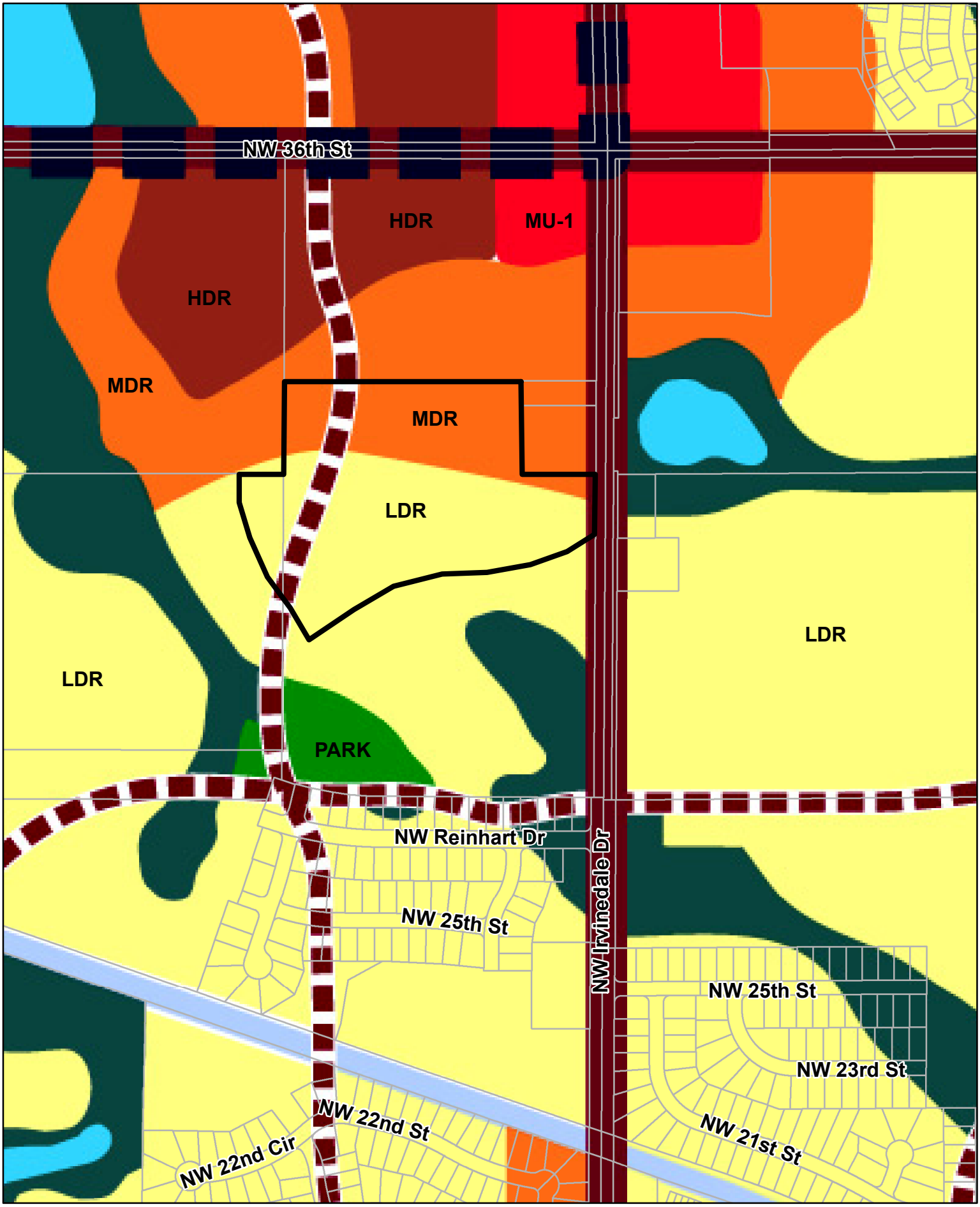
P.U.D. CONCEPTUAL PLAN

ANKENY, IOWA

2/2

1802.064

FILE: H:\2017\1701021\DWG\PLAT 3 - CONSTRUCTION DRAWINGS\1701021-PUD-PLAT 3.DWG
PLOT DATE: 3/12/2018 2:13 PM PLOTTED BY: RYAN HARDISTY



N

1 inch = 500 feet

Date: 3/15/2018

Trestle Ridge Estates PUD

Ankeny
bringing it all together.

GENERAL NOTES:

A. ALL CONSTRUCTION AND MATERIALS SHALL MEET OR EXCEED IRC 2015, LOCAL BUILDING CODES MAY HAVE DIFFERENT SPECIFICATIONS AND REQUIREMENTS THAN WHAT IS LISTED IN THE IRC 2015, THESE LOCAL REQUIREMENTS WILL SUPERSIDE THE IRC 2015. SEE THE LOCAL BUILDING DEPARTMENT FOR CHANGES.
B. CONTRACTOR TO CONFIRM THE SIZES, SPACING AND SPECIES OF LUMBER OF ALL STRUCTURAL AND FRAMING MEMBERS. ANY STRUCTURAL AND FRAMING MEMBERS NOT INDICATED ARE TO BE SIZED BY OWNER/CONTRACTOR.
C. THE OWNER/CONTRACTOR IS RESPONSIBLE FOR PREVENTIVE MEASURE OF THE BUILD UP OF MOISTURE OR MOLD
D. ALL PRODUCTS ARE TO BE INSTALLED PER THE MANUFACTURE'S RECOMMENDATIONS.
E. ALL MECHANICAL, PLUMBING, AND ELECTRICAL SYSTEMS ARE TO BE DESIGNED BY OTHERS.
F. ALL EXTERIOR STAIRS ARE SHOWN FOR CONCEPT, FINAL DESIGN DETERMINE ON SITE FOR FINAL GRADE.
G. THE FOLLOWING CODE INFORMATION IS INTENDED TO ASSIST AND INFORM YOU THROUGH CONSTRUCTION. THIS PROJECT HAS BEEN DRAWN TO PRESCIBE TO INDUSTRY STANDARDS.

CHAPTER 3 (BUILDING PLANNING)

A. BUILDING AND STRUCTURES, AND ALL PARTS THEREOF, SHALL BE CONSTRUCTED TO SAFELY SUPPORT ALL LOADS, INCLUDING DEAD LOADS, LIVE LOADS, ROOF LOADS, FLOOD LOADS, SNOW LOADS, WIND LOADS, AND SEISMIC LOADS AS PRESCRIBED BY THIS CODE (R301.1)
B. TABLE 301.2(1) IRC 2015, VALUES BASED FROM THE CITY OF DES MOINES, IOWA

GROUND SNOW LOAD	WIND DESIGN				SEISMIC DESIGN CATEGORY	SUBJECT TO DAMAGE FROM			WINTER DESIGN TEMP.	ICE BARRIER UNDERLAYMENT REQUIRED	FLOOD HAZARDS	AIR FREEZING INDEX	MEAN ANNUAL TEMP.
	SPEED (MPH)	TOPOGRAPHIC EFFECTS	SPECIAL WIND REGION	WINDBORNE DEBRIS ZONE		WEATHERING	FROST LINE DEPTH	TERMITE					
30 PSF	115	NO NE	NO NE	NO NE	A	SEVERE	42"	MODERATE TO HEAVY	-0 F °	YES	NATION 1984	1903	49.8 F

C. MINIMUM LIVE LOADS, (R301.5) IRC 2015

UNHABITABLE ATTIC WITHLIMITED STORAGE	20 PSF
UNHABITABLE ATTIC WITHOUT STORAGE	10 PSF
HABITABLE ATTIC AND SERVED WITH FIXED STAIRS	30 PSF
DECKS AND EXTERIOR BALCONIES	40 PSF
GUARDRAIL AND HANDRAILS	200 PSF
ROOM OTHER THAN SLEEPING ROOMS	40 PSF
SLEEPING ROOMS	30 PSF
STAIRS	40 PSF
DEFLECTION CRITERIA	
FLOOR LIVE LOAD	L/480
FLOOR TOTAL LOAD	L/360
ROOF LIVE LOAD	L/360
ROOF TOTAL LOAD	L/240
WALL	H/180

ALL BEAMS SUPPORTING FLOOR OR ROOF LOADS ARE TO BE DESIGNED WITH THE ABOVE DEFLECTION CRITERIA

MINIMUM ROOF LIVE LOADS(R301.6)IRC 2015	
ROOF TRUSS LIVE LOAD(Lr)	20 PSF
GROUND SNOW(Pg)	30 PSF
FLAT ROOF SNOW (Pf)	24 PSF
THERMAL CONDITION	CI = 1.0
TERRAIN EXPOSURE	B
DURATION OF LOAD-SNOW	1.15
UNBALANCED AND SNOW DRIFT LOADING ACCORDING TO ASCE/SEI 7-10	
WIND DESIGN METHOD	MWFRS/C-C HYBRID ACSE/SEI 7-10
EXPOSURE CATEGORY	B
DURATION OF LOAD-WIND	1.60

D. DEAD LOADS ADDITIONAL OR CHANGES TO MATERIAL NEEDS TO BE ADJUSTED TO THE BELOW CALCULATIONS.

FLOOR-TOP CHORD		ROOF-TOP CHORDS	
CARPET AND PAD	1.5 PSF	ROOFING-SHINGLES(220 LBS)/ 2 LAYER	4.40 PSF
3/8" CERAMIC TILE/ 1/2" BACKER BD.	10 PSF	30 LBS. FELT	0.30 PSF
3/4" HARDWOOD FLOOR	4.0 PSF	1/2" OSB OR COM PLYWOOD	1.65 PSF
SUBFLOOR-3/4" OSB OR COM-PLYWOOD	2.0 PSF	1/2 ROOF TRUSS-2/4	1.10 PSF
1/2 FLOOR TRUSS-8-JOIST SYSTEM	1.5 PSF	CORRECTION FOR SLOPE (12/12)	1.55 PSF
TOTAL WITH CARPET/PAD	5.5 PSF	TOTAL	9.00 PSF
TOTAL WITH TILE/BACKER BD.	13.5 PSF		
TOTAL WITH HARDWOOD FLOOR	7.5 PSF	ROOF-BOTTOM CHORDS	
		1/2 ROOF TRUSS-2/4	1.10 PSF
		5/8" GYPBOARD	2.8 PSF
FLOOR-BOTTOM CHORD		MINIMUM FOR MISC MECHANICAL/ELEC.	1.5 PSF
1/2 FLOOR TRUSS-JOIST SYSTEM	1.5 PSF	19" BATTIB LOWN INSULATION	1.60 PSF
5/8" GYPBOARD	2.8 PSF		
MINIMUM FOR MISC MECHANICAL/ELEC.	0.7 PSF		
TOTAL	5.0 PSF	TOTAL	7.00 PSF

SECTION R303: LIGHT AND VENTILATION IN HABITABLE ROOMS, PROVIDE NATURAL LIGHT AND VENTILATION WITH OPERABLE WINDOWS. WINDOW GLAZING SHALL NOT BE LESS THAN 8% OF THE FLOOR AREA OF EACH ROOM. 1/2 THE REQUIRED WINDOW AREA SHALL BE OPERABLE TO THE EXTERIOR FOR NATURAL VENTILATION.
R303.3 BATHROOMS MAY HAVE AN OPERABLE WINDOW OF 3 S.F. IN AREA.
- EXCEPTION
1. BATHROOM AND WATER CLOSET MAY BE VENTILATED WITH EXHAUST FANS AND ARTIFICIAL LIGHT.

SECTION R304: THE MINIMUM AREA OF ANY HABITABLE ROOM SHALL NOT BE LESS THAN 70 SQ. FEET, EXCEPT KITCHEN.
R304.2 THE MINIMUM LENGTH OR WIDTH OF ANY HABITABLE ROOM SHALL NOT BE LESS THAN 7'-0"

SECTION R305: CEILING HEIGHT HABITABLE SPACE, HALLWAYS, AND PORTION OF THE BASEMENT CONTAINING THESE SPACES SHALL HAVE A CEILING HEIGHT OF NOT LESS THAN 7 FEET. BATHROOMS, TOILER ROOM, AND LAUNDRY ROOMS SHALL HAVE A CEILING HGT OF NOT LESS THAN 6'-8"
-EXCEPTION
1. FOR ROOMS WITH SLOPED CEILING, THE REQUIRED FLOOR AREA OF THE ROOM SHALL HAVE A CEILING HEIGHT OF NOT LESS THAN 5'-0" AND NOT LESS THAN 50% OF THE REQUIRED FLOOR AREA SHALL HAVE A CEILING OF LESS THAN 7'-0"
2. THE CEILING ABOVE A BATHROOM AND TOILET ROOM FIXTURES SHALL BE 30CM THAT THE FIXTURE IS CAPABLE OF BEING USED FOR ITS INTENDED PURPOSE. A SHOWER OR TUB EQUIPPED WITH A SHOWERHEAD SHALL HAVE A CEILING HEIGHT OF NOT LESS THAN 6'-8" ABOVE THE AREA OF NOT LESS THAN 30"X30" AT THE SHOWERHEAD.
3. BEAMS, GIRDERS, DUCTS, OR OTHER OBSTRUCTIONS IN BASEMENT CONTAINING HABITABLE SPACE SHALL BE PERMITTED TO PROJECT TO WITHIN 6'-4" OF THE FINISH FLOOR.
R305.1.1 BASEMENT PORTION OF BASEMENT THAT DO NOT CONTAIN HABITABLE SPACE OR HALLWAYS SHALL HAVE A CEILING HEIGHT OF NOT LESS THAN 6'-8"
-EXCEPTION
1. BEAMS, GIRDERS, DUCTS, OR OTHER OBSTRUCTIONS IN BASEMENT CONTAINING HABITABLE SPACE SHALL BE PERMITTED TO PROJECT TO WITHIN 6'-4" OF THE FINISH FLOOR

SECTION R307.1 TOILET, BATH AND SHOWER SPACES, FIXTURES SHALL BE SPACED IN ACCORDANCE WITH FIGURE R307.1.
1. TOILET: MIN 15" FROM WALL OR TUB OR VANITY,
MIN 21" CLEARANCE IN FRONT OF TOILET
2. VANITY: MIN 21" CLEARANCE IN FRONT OF VANITY

SECTION R308 GLAZING, EXCEPT AS INDICATED IN SECTION R308.1.1 EACH PANE OF GLAZING INSTALLED IN HAZARDOUS LOCATION DEFINED IN SECTION R308.4 SHALL BE PROVIDED WITH A MANUFACTURING'S DESIGNATION SPECIFYING WHO APPLIED DESIGNATION, DESIGNATING THE TYPE OF GLASS AND THE SAFETY GLAZING STANDARD.
R308.4.2 GLAZING ADJACENT TO DOORS, GLAZING IN AN INDIVIDUAL FIXED OR OPERABLE PANEL ADJACENT TO A DOOR SHALL BE CONSIDERED TO BE A HAZARDOUS LOCATION WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 60" ABOVE THE FLOOR OR WALKING SURFACE AND MEETS EITHER OF THE FOLLOWING CONDITIONS:
1. WHERE THE GLAZING IS WITHIN 24 INCHES EITHER SIDE OF THE DOOR IN THE PLANE OF THE DOOR IN A CLOSED POSITION.
2. WHERE THE GLAZING IS ON THE WALL PERPENDICULAR TO THE PLANE OF THE DOOR IN A CLOSED POSITION AND WITHIN 24" OF THE HINGE SIDE OF AN IN-SWINGING DOOR.
-EXCEPTION
1. DECORATIVE GLASS
2. WHERE THERE IS AN INTERVENING WALL OR OTHER PERMANENT BARRIER BETWEEN DOOR AND THE GLAZING
3. WHERE ACCESS THROUGH THE DOOR IS TO A CLOSET OR STORAGE AREA 3 FEET OR LESS IN DEPTH
4. GLAZING THAT IS ADJACENT TO A FIXED PANEL OF PATIO DOORS.
R308.4.3 GLAZING IN WINDOWS, GLAZING IN AN INDIVIDUAL FIXED OR OPERABLE PANEL THAT MEETS ALL OF THE FOLLOWING CONDITIONS:
1. THE EXPOSED AREA OF AN INDIVIDUAL PLAN IS LARGER THAN 9 SQUARE FEET
2. THE BOTTOM EDGE OF THE GLAZING IS LESS THAN 18" ABOVE THE FLOOR
3. THE TOP EDGE OF THE GLAZING IS MORE THAN 36" ABOVE THE FLOOR AND
4. ONE OR MORE WALKING SURFACE ARE WITHIN 36", MEASURED HORIZONTALLY AND IN A STRAIGHT LINE, OF THE GLAZING
-EXCEPTION
1. DECORATIVE GLASS
2. WHERE HORIZONTAL RAIL IS INSTALLED.
R308.4.5 GLAZING IN WET SURFACES, GLAZING IN WALLS, ENCLOSURES OR FENCES CONTAINING OR FACING HOT TUBS, SPAS, WHIRLPOOL, SAUNAS, STEM ROOMS, BATHTUBS, SHOWERS AND INDOOR OR OUTSIDE POOLS WHERE THE BOTTOM EXPOSED EDGE OF GLAZING IS LESS THAN 60" MEASURED VERTICALLY ABOVE THE STANDING OR WALKING SURFACE
R308.4.6 GLAZING ADJACENT TO STAIRS AND RAMPS, GLAZING WHERE THE BOTTOM EDGE OF THE GLAZING IS LESS THAN 36" ABOVE THE PLANE OF THE ADJACENT WALKING SURFACE OF THE STAIRWAY, LANDING BETWEEN FLIGHTS OF STAIRS AND RAMPS.
-EXCEPTIONS
1. WHERE RAILING IS INSTALLED ON THE ACCESSIBLE SIDE OF THE GLAZING 34" TO 36" ABOVE WALKING SURFACE.

SECTION R310. EMERGENCY ESCAPE AND RESCUE OPENING, BASEMENT, HABITABLE ATTICS AND EVERY SLEEPING ROOM SHALL HAVE AN EMERGENCY ESCAPE AND RESCUE OPENING.
-EXCEPTION. STORM SHELTERS AND BASEMENT USED ONLY TO HOUSE MECHANICAL EQUIPMENT NOT EXCEEDING A TOTAL FLOOR AREA OF 200 SQUARE FEET.
R310.2.1 MINIMUM OPENING AREA. EMERGENCY AND ESCAPE OPENING SHALL HAVE A NET CLEAR OPENING OF NOT LESS THAN 5.7 SQUARE FEET. THE NET CLEAR AREA DIMENSIONS REQUIRED BY THIS SECTION SHALL BE OBTAINED BY NORMAL OPERATION FROM THE INSIDE. THE NET CLEAR HEIGHT OPENING SHALL NOT BE LESS THAN 24" AND THE NET CLEAR WIDTH SHALL NOT BE LESS THAN 20"
R310.2.2 WINDOW SILL HEIGHT. WHERE THE WINDOW IS PROVIDED AS THE EMERGENCY ESCAPE AND RESCUE OPENING, IT SHALL HAVE A SILL HEIGHT OF NOT MORE THEN 44" ABOVE THE FLOOR
R310.2.3 WINDOW WELLS. THE HORIZONTAL AREA OF THE WINDOW WELL SHALL NOT BE LESS THAN 9 SQ. FT., WITH THE HORIZONTAL PROJECTION AND WIDTH OF NOT LESS THAN 36" THE AREA OF THE WINDOW WELL SHALL ALLOW THE EMERGENCY ESCAPE AND RESCUE OPENING TO BE FULLY OPENED.
-EXCEPTION
1. THE LADDER OR STEPS SHALL BE PERMITTED TO ENCROACH NOT MORE THAN 6".
R310.2.3.1 WINDOW WELLS WITH A VERTICAL STEP GREATER THAN 44" SHALL BE EQUIPPED WITH A PERMANENT LADDER NOT LESS THAN 12" WIDE

SECTION 311
R311.7.1 STAIRWAYS. STAIRWAY ARE TO BE NOT LESS THAN 36" WIDE IN CLEAR WIDTH AT ALL POINTS ABOVE THE PERMITTED HANDRAIL HEIGHT, HANDRAILS SHOULD PROJECT MORE THAN 4 1/2" ON EITHER SIDE OF THE STAIRWAY.
R311.7.5 HEADROOM. THE HEADROOM IN THE STAIRWAY SHALL BE NOT LESS THAN 6'-8" MEASURED VERTICALLY FROM THE SLOPED LINE ADJOINING THE TREAD NOSING OR FROM THE FLOOR SURFACE OF THE LANDING
R311.7.3 VERTICAL RISE. A RUNT OF STAIRS SHALL NOT HAVE A VERTICAL RISE LARGER THAN 12'-3"
R311.7.5 THE MAXIMUM RISER IS 7 3/4" WITH A MINIMUM RUN OF 9".
R311.7.8 HANDRAILS SHALL BE ON NOT LESS THAN ONE SIDE OF EACH CONTINUES RUN OF TREADS

SECTION 314 SMOKE ALARMS, SMOKE ALARMS SHALL COMPLY WITH NFPA 72 AND UL 217
R314.3 LOCATION
1. IN EACH SLEEPING ROOM
2. OUTSIDE EACH SEPARATE SLEEPING AREA
3. ON EACH ADDITIONAL STORY OF THE DWELLING, INCLUDING BASEMENT AND HABITABLE ATTICS
4. SMOKE ALARMS SHALL BE INSTALLED NOT LESS THAN 3'-0" HORIZONTALLY FROM THE DOOR OR OPENING OF A BATHROOM THAT CONTAINS A BATHTUB OR SHOWER UNLESS THIS WOULD PREVENT PLACEMENT OF A SMOKE ALARM IN THAT LOCATION.
R314.3.1 SMOKE ALARMS SHALL NOT BE INSTALLED IN THE FOLLOWING AREAS
1. IONIZATION SMOKE ALARMS SHALL NOT BE INSTALLED LESS THAN 20'-0" HORIZONTALLY FROM A PERMANENTLY INSTALLED COOKING APPLIANCE
2. IONIZATION SMOKE ALARMS WITH AN ALARM-SILENCING SWITCH SHALL NOT BE INSTALLED LESS THAN 10'-0" HORIZONTALLY FROM A PERMANENTLY INSTALLED APPLIANCE
3. PHOTOELECTRIC SMOKE ALARMS SHALL NOT BE INSTALLED LESS THAN 6'-0" HORIZONTAL FROM A PERMANENTLY INSTALLED COOKING APPLIANCE.
SECTION R315 CARBON MONOXIDE ALARMS: SHALL COMPLY WITH UL 2034, COMBINATION CARBON MONOXIDE AND SMOKE ALARMS SHALL BE LISTED IN ACCORDANCE WITH UL 2034 AND UL 217
R315.2.1 CARBON MONOXIDE SHALL BE PROVIDED IN DWELLING UNITS WHERE EITHER OR BOTH OF THE FOLLOWING CONDITION EXIST:
1. CONTAINS A FUEL-FIRED APPLIANCE
2. ATTACHED GARAGE WITH AN OPENING THAT COMMUNICATES WITH THE DWELLING
PROTECTION OF WOOD AND WOOD BASED PRODUCTS AGAINST DECAY.
SECTION 317 R317.1 LOCATION REQUIRED. PROTECTION OF WOOD AND WOOD-BASED PRODUCTS FROM DECAY SHALL BE PROVIDING IN THE FOLLOWING LOCATIONS BY USE OF NATURALLY DURABLE WOOD OR WOOD THAT IS PRESERVATIVE-TREATED IN ACCORDANCE WITH AWPA U1 FOR THE SPECIES, PRODUCT, PRESERVATIVE AND END USE.
1. WOOD JOIST OR BOTTOM OF A WOOD STRUCTURAL FLOOR WHEN CLOSER THAN 18" OR WOOD GIRDERS WHEN CLOSER THAN 12" TO THE EXPOSED GROUND IN CRAWL SPACES OR UNEXCAVATED AREAS LOCATED WITHIN THE PERIPHERY OF THE BUILDING FOUNDATION.
2. WOOD FRAMING MEMBERS THAT REST ON CONCRETE OR MASONRY EXTERIOR FOUNDATION WALLS AND ARE LESS THAN 8" FROM EXPOSED GROUND.
3. SILLS AND SLEEPERS ON A CONCRETE OR MASONRY SLAB THAT IS IN DIRECT CONTACT WITH THE GROUND UNLESS SEPARATED FROM SUCH SLAB BY AN IMPERVIOUS MOISTURE BARRIER.
4. THE ENDS OF A WOOD GIRDER ENTERING CONCRETE WALLS HAVING CLEARANCE OF LESS THAN 1/2" ON TOP S, SIDES AND ENDS.
5. WOOD SIDING, SHEATHING AND WALL FRAMING ON THE EXTERIOR OF A BUILDING HAVING A CLEARANCE OF LESS THAN 6" FROM THE GROUND OR LESS THAN 2" MEASURED VERTICALLY FROM CONCRETE STEPS, PORCH SLABS, AND SIMILAR HORIZONTAL SURFACES EXPOSED TO THE WEATHER.
6. WOOD STRUCTURAL MEMBERS SUPPORTING MOISTURE-PERMEABLE FLOORS OR ROOFS THAT ARE EXPOSED TO THE WEATHER, SUCH AS CONCRETE SLABS.
7. WOOD FURRING STRIPS OR OTHER WOOD FRAMING MEMBERS ATTACHED DIRECTLY TO THE INTERIOR OF EXTERIOR MASONRY OR CONCRETE WALLS BELOW GRADE EXCEPT WHERE AN APPROVED VAPOR RETARDER IS APPLIED BETWEEN WALL AND THE FURRING STRIP.
R317.3.1 FASTENERS OF PRESERVATIVE-TREATED WOOD. FASTENERS, INCLUDING NUTS AND WASHERS, FOR PRESERVATIVE-TREATED WOOD SHALL BE OF HOT-DIPPED, ZINC-COATED GALVANIZED STEEL, STAINLESS STEEL, SILICON BRONZE OR COPPER. COATING TYPES AND WEIGHTS FOR CONNECTORS IN CONTACT WITH PRESERVATIVE-TREATED WOOD SHALL BE ACCORDANCE WITH THE CONNECTOR MANUFACTURER'S RECOMMENDATIONS.

CHAPTER 4 (FOUNDATIONS)

SECTION 401.4 SOIL TEST: WHERE QUANTIFIABLE DATA CREATED BY ACCEPTABLE SOIL SCIENCE METHODOLOGIES INDICATE EXPANSIVE, COMPRESSIBLE, SHIFTING OR OTHER UNKNOWN SOIL CHARACTERISTICS, THE BUILDING OFFICIAL SHALL DETERMINE WHETHER A SOIL TEST IS REQUIRED.
TABLE R401.4.1

CLASS OF MATERIAL	LOAD BEARING PRESSURE
CLAY, SILTY SAND, CLAYEY SAND, SILTY GRAVEL AND CLAYEY GRAVEL	2,000 POUNDS PER SQ FT
CLAYEY, SANDY, SLIGHTY CLAY, CLAYEY SILT, SILT, AND SANDY SILT CLAY	1,500 POUNDS PER SQ FT

THIS DESIGN IS BASED ON 2,000 POUNDS PER SQ FT, UNLESS NOTED OTHERWISE. IT IS THE BUILDER OR HOMEOWNER RESPONSIBLE TO LET PLUM DESIGN SERVICE KNOW IF THE CONDITION IN THE FIELD ARE DIFFERENT.

R402.2 CONCRETE: FROM TABLE R402.2
-FOUNDATION CONCRETE WALLS SHALL HAVE A MIN. STRENGTH OF 3000 PSI
-GARAGE FLOOR SLABS SHALL BE 3,500 PSI
-PORCHES, CARPORT SLABS AND STEPS EXPOSED TO THE WEATHER SHALL BE 3,500 psi AT 28 DAYS
-BASEMENT SLABS 2,500 PSI
(CONCRETE SHALL BE AIR ENTRANNED WITH 5%-7% TOTAL AIR CONTENT).
R403 ALL FOOTING SHALL BE PLACED ON UNDISTURBED SOIL OR CONTROLLED COMPACTED FILL. MINIMUM FOOTING TO BE 16" WIDE X 8"DEEP FOR A 2 STORY BUILDING AND 20" WIDE X 8" DEEP FOR A 3 STORY BUILDING (TABLE 403.1) BOTH WITH 2 CONTINUOUS HORIZONTAL #4 REBAR.
R403.1.6 ALL ANCHOR BOLTS SHALL BE APPROVED 1/2" IN DIAMETER AND SHALL EXTEND A MINIMUM OF 7" INTO CONCRETE. USE TWO BOLTS PER SILL PLATE WITH BOLTS SPACED AT A MAXIMUM OF 6 FEET ON CENTER WITH A MINIMUM OF ONE BOLT NOT MORE THAN 12 INCHES FROM THE END BUT AT LEAST 3 1/2 INCHES FROM END OF SILL PLATE. THE BOLTS SHALL BE LOCATED IN THE MIDDLE THIRD OF THE WIDTH OF THE PLATE.
- ALTERNATE FOUNDATION STRAPS MAY BE USED. SPECIFICATION TO PROVIDE EQUIVALENT ANCHOR TO A 1/2" DIAMETER ANCHOR BOLTS.
R404 CONCRETE FOUNDATION WALLS SHALL BE CONSTRUCTED AS SET FORTH IN TABLE R404.1.2(3). REFER TO TYPICAL WALL SECTION IN THIS PLAN FOR SPECIFICATION.
R406 FOUNDATION WATERPROOFING AND DAMPPROOFING
EXCEPT WHERE REQUIRED IN SECTION R406.2 TO BE WATERPROOFED, FOUNDATION WALLS THAT RETAIN EARTH AND ENCLOSED INTERIOR SPACES AND FLOORS ABOVE GRADE SHALL BE DAMPPROOFING FROM THE HIGHER OF THE TOP OF THE FOOTING, TO THE FINISHED GRADE.
R408 UNDER FLOOR SPACE
THE UNDER-FLOOR SPACE BETWEEN THE BOTTOM OF THE JOIST AND THE EARTH UNDER ANY BUILDING SHALL HAVE VENTILATION OPENING THROUGH THE FOUNDATION WALLS OR EXTERIOR WALLS. MIN. NET AREA OF VENTILATION SHALL NOT BE LESS THAN 1 SQ FT FOR EACH 150 SQ FT OF AREA UNDER THE FLOOR.
R408.4 ACCESS THROUGH THE FLOOR IS REQUIRED TO BE 18" X 24"

CHAPTER 5 (FLOORS)

FRAMING MATERIALS GRADES

A.	ROOF, FLOOR, AND WALL SHEATHING:	APA RATED SHEATHING. (LEAVE 1/8" SPACING AT PANEL ENDS AND EDGES)
B.	WALL STUDS:	MINIMUM SPF STUD OR DOUGLAS FIR LARCH STUD.
C.	WALL PLATES:	MINIMUM SPF #2 OR BETTER.
D.	DIMENSIONAL HEADERS:	DOUGLAS FIR #2 OR BETTER.
E.	LVL HEADERS:	2650 PSI/2E MINIMUM.
F.	STEEL	ASTM SPECIFICATION A992 GRADE-50 OR EQUAL

R502.4 JOIST UNDER PARALLEL BEARING PARTITIONS SHALL BE OF ADEQUATE SIZE TO SUPPORT THE LOAD.
R502.6 THE ENDS OF EACH JOIST, BEAM, OR GIRDER SHALL HAVE NOT LESS THAN 1.5 INCHES OF BEARING ON WOOD OR METAL AND NOT LESS THAN 3 INCHES ON CONCRETE.
R502.8 NO CUTS, NOTCHES, AND HOLES BORED INTO TRUSSES, STRUCTURAL COMPOSITE LUMBER, GLUE-LAMINATED MEMBERS, OR I-JOIST ARE PROHIBITED EXCEPT WHERE PERMITTED BY THE MANUFACTURER'S RECOMMENDATION OR DESIGN BY PROFESSIONAL.
R502.11 WOOD TRUSSES SHALL BE DESIGNED AND MANUFACTURED IN ACCORDANCE WITH ANSI/TPI-1. REFER TO THE INDIVIDUAL TRUSS DESIGN DRAWINGS FOR WEB BRACING AND MULTI-CONNECTION OF GIRDERS. BSCI SHOULD BE REFER TO FOR HANDLING INSTALLATION AND BRACING OF METAL PLATE TRUSSES.
R507.2 EXTERIOR DECK-SAEDCK LEDGER CONNECTION TO BAND JOIST, DECK LEDGER CONNECTION TO BAND JOIST SHALL BE IN ACCORDANCE WITH THIS SECTION TABLE R507.2 AND R507.2.1, AND FIGURES R507.2.1(1) AND R507.2.1(2)

CHAPTER 6 (WALL CONSTRUCTION)

R502.1 SAWN LUMBER SAWN LUMBER SHALL BE IDENTIFIED BY A GRADE MARK OF AN ACCREDITED LUMBER GRADING OR INSPECTION AGENCY AND HAVE DESIGN VALUES CERTIFIED BY ACCREDITATION AGENCY THAT COMPLIES WITH DOC PS 20
R602.3 REFER TO TABLE R602.3(1) THROUGH TABLE R602.3(6) FOR FRAMING MEMBER FASTENING
R602.6 DRILLING AND NOTCHING- REFER TO FIGURE R602.6 (1) AND R602.6 (2)-SEE DETAIL PAGE OF PLAN FOR FIGURES.
R602.7 THE ALLOWABLE SPANS OF GIRDERS/HEADERS FABRICATED FROM DIMENSIONAL LUMBER ON EXTERIOR WALLS SHALL NOT EXCEED THE VALUES OF TABLE R602.7(1)
R602.8 FIRE BLOCKING SHALL BE PROVIDED TO CUT OFF ALL CONCEALED DRAFT OPENING (BOTH VERTICAL AND HORIZONTAL) AND TO FORM AN EFFECTIVE FIRE BARRIER BETWEEN STORIES, AND BETWEEN A TOP STORY AND ROOF SPACE.
R602.10 WALL BRACING. BUILDING SHALL BE BRACE IN ACCORDANCE WITH SECTION OR R602.12 (SIMPLIED METHOD). FROM TABLE R602.10.4. USE CS-WSP BRACING METHOD WITH MIN 3/8" SHEATHING.

CHAPTER 7 (WALL COVERING)

R702.1 GENERAL. INTERIOR COVERING OR WALL FINISHES SHALL BE INSTALLED IN ACCORDANCE WITH THIS CHAPTER AND TABLE R702.1(1), TABLE R702.1(2), TABLE R702.1(3) AND TABLE R702.3.5. INTERIOR MASONRY VENEER SHALL COMPLY WITH THE REQUIREMENTS OF SECTION R703.7.1 FOR SUPPORT AND SECTION R703.7.4 FOR ANCHORAGE. INTERIOR FINISHES AND MATERIAL SHALL CONFORM TO THE FLAME SPREAD AND SMOKE DEVELOPMENT REQUIREMENTS OF SECTION R302.9
R703.1 GENERAL: EXTERIOR WALL SHALL PROVIDE THE BUILDING WITH A WEATHER-RESISTANT EXTERIOR WALL ENVELOPE. THE EXTERIOR WALL ENVELOPE SHALL INCLUDE FLASHING AS DESCRIBED IN SECTION R703.4
R703.3.1 WATER RESISTANCE. THE EXTERIOR WALL ENVELOPE SHALL BE DESIGNED AND CONSTRUCTED IN A MANNER THAT PREVENTS THE ACCUMULATION OF WATER WITHIN THE WALL ASSEMBLY BY PROVIDING A WATER-RESISTANT BARRIER BEHIND THE EXTERIOR VENEER AS REQUIRED IN SECTION R703.2 AND A MEANS OF DRAINING TO THE EXTERIOR WATER THAT ENTERS THE ASSEMBLY.
R703.1.2 WIND RESISTANCE. WALL COVERINGS, BACKING MATERIALS AND THEIR ATTACHMENT SHALL BE CAPABLE OF RESISTING LOADS IN ACCORDANCE WITH TABLE R301.2(2) AND R301.2(3).
R703.2 WATER-RESISTIVE BARRIER. APPROVED WATER-RESISTIVE BARRIER SHALL BE APPLIED OVER STUDS OR SHEATHING OF ALL EXTERIOR WALLS. SUCH MATERIAL SHALL BE APPLIED HORIZONTALLY, WITH UPPER LAPPED OVER THE LOWER NOT LESS THAN 2" INCHES, WHERE JOINT OCCUR, LAPPED NOT LESS THAN 6".
R703.3 NOMINAL THICKNESS AND ATTACHMENTS. THE MINIMUM THICKNESS AND ATTACHMENT OF EXTERIOR WALL COVERING SHALL BE IN ACCORDANCE WITH TABLE R703.3(1) AND THE WALL COVERING MATERIAL MANUFACTURER'S INSTALLATION REQUIREMENTS.
R703.4 FLASHING. APPROVED CORROSION-RESISTANT FLASHING SHALL BE APPLIED SHINGLE-FASHION IN A MANNER TO PREVENT ENTRY OF WATER INTO WALL CAVITY OR PENETRATION OF WATER TO THE BUILDING STRUCTURAL FRAMING COMPONENTS.
1. EXTERIOR WINDOWS AND DOORS OPENINGS. (SEE MANUFACTURE OF PRODUCT FOR INSTALLATION DETAILS)
2. AT INTERSECTION OF CHIMNEYS OR OTHER MASONRY CONSTRUCTION WITH FRAME OR STUCCO WALLS, WITH PROJECTING LIPS ON BOTH SIDES UNDER STUCCO OPENINGS.
3. UNDER AND AT ENDS OF MASONRY, WOOD OR METAL COPINGS AND SILLS.
4. CONTINUOUSLY ABOVE ALL PROJECTING WOOD TRIM
5. WHERE EXTERIOR PORCHES, DECKS OR STAIRS ATTACH TO A WALL OR FLOOR ASSEMBLY OF WOOD-FRAME CONSTRUCTION
6. AT WALL AND ROOF INTERSECTION

CHAPTER 8 (ROOF-CEILING)

SECTION R802.10.2 DESIGN. WOOD TRUSSES SHALL BE DESIGNED IN ACCORDANCE WITH ACCEPTED ENGINEERING PRACTICE. THE DESIGN AND MANUFACTURE OF METAL-PLATED WOOD TRUSS SHALL COMPLY WITH ANSI/TPI.
R802.10.3 BRACING. TRUSSES SHALL BE BRACED TO PREVENT ROTATION AND PROVIDE LATERAL STABILITY, REFER TO THE INDIVIDUAL TRUSS DESIGN DRAWINGS AND SBCA'S BCSI GUIDE TO GOOD PRACTICE FOR HANDLING, INSTALLING AND BRACING OF METAL PLATE CONNECTED WOOD TRUSSES.
R802.11.1.1 TRUSS UPLIFT. TRUSSES SHALL BE ATTACHED TO SUPPORTING WALL ASSEMBLIES BY CONNECTION CAPABLE OF RESISTING FORCES SPECIFIED ON THE TRUSS DESIGN DRAWINGS.
SECTION R806 ROOF VENTILATION. ENCLOSED ATTIC AND ENCLOSED RAFTER SPACES FORMED WHERE CEILING ARE APPLIED DIRECTLY TO THE UNDERSIDE OF THE ROOF RAFTERS SHALL HAVE CROSS VENTILATION FOR EACH SEPARATE SPACE BY VENTILATING OPENINGS PROTECTED AGAINST THE ENTRANCE OF RAIN OR SNOW. REQUIRED VENTILATION OPENINGS SHALL BE DIRECTLY TO THE OUTSIDE AIR.
R806.2 MINIMUM VENT AREA. THE MINIMUM NET FREE VENTILATION SHALL BE 1/150 (EXCEPTION 1 TAKEN)

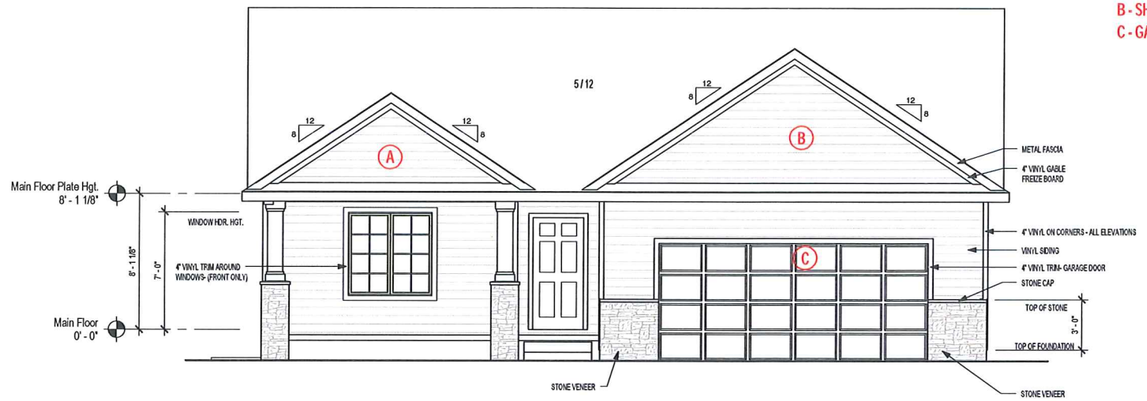
SECTION R807 ATTIC ACCESS. BUILDING WITH COMBUSTIBLE CEILING OR ROOF CONSTRUCTION SHALL HAVE AN ATTIC ACCESS OPENING TO ATTIC AREA THAT HAVE A VERTICAL HEIGHT OF 30" OR GREATER.
1. THE ROUGH-FRAMED OPENING SHALL NOT BE LESS THAN 22"X30".
2. SHALL BE LOCATED IN A HALLWAY OR OTHER READILY ACCESSIBLE LOCATION
3. MINIMUM UNOBSTRUCTED HEAD ROOM IN THE ATTIC SPACE SHALL BE 30" MEASURED VERTICALLY FROM BOTTOM OF CEILING MEMBER

CHAPTER 9 (ROOF ASSEMBLIES)

SECTION 903
R903.1 GENERAL. ROOF DECKS SHALL BE COVERED WITH THE APPROVED ROOF COVERING SECURED TO THE BUILDING OR STRUCTURE IN ACCORDANCE WITH THE PROVISION OF THIS CHAPTER. ROOF ASSEMBLIES SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH THIS CODE AND THE APPROVED MANUFACTURE'S INSTRUCTIONS.
R903.2 FLASHING. FLASHING SHALL BE INSTALLED IN MANNER THAT PREVENTS MOISTURE FROM ENTERING THE WALL AND ROOF THROUGH JOINTS IN OPENING, THROUGH MOISTURE PERMEABLE MATERIALS AND AT INTERSECTION WITH PARAPET WALLS AND OTHER PENETRATIONS THROUGH THE ROOF PLANE.
R903.2.1 LOCATION. FLASHING SHALL BE I INSTALLED AT WALL AND ROOF INTERSECTIONS, WHEREVER THERE IS A CHANGE IN ROOF OR DIRECTION AND AROUND ROOF OPENINGS.

SECTION 905
R905.1 ROOF COVERING APPLICATION. ROOF COVERING SHALL BE APPLIED IN ACCORDANCE WITH THE WITH THE APPLICABLE PROVISIONS OF THIS SECTION AND THE MANUFACTURES INSTALLATION INSTRUCTIONS.
R905.1.1 UNDERLAYMENT. UNDERLAYMENT FOR ASPHALT SHINGLES, CLAY, AND CONCRETE TILE, METAL ROOF SHINGLES, MINERAL SURFACED ROLL ROOFING, SLATE AND SLATE-TYPE SHINGLES

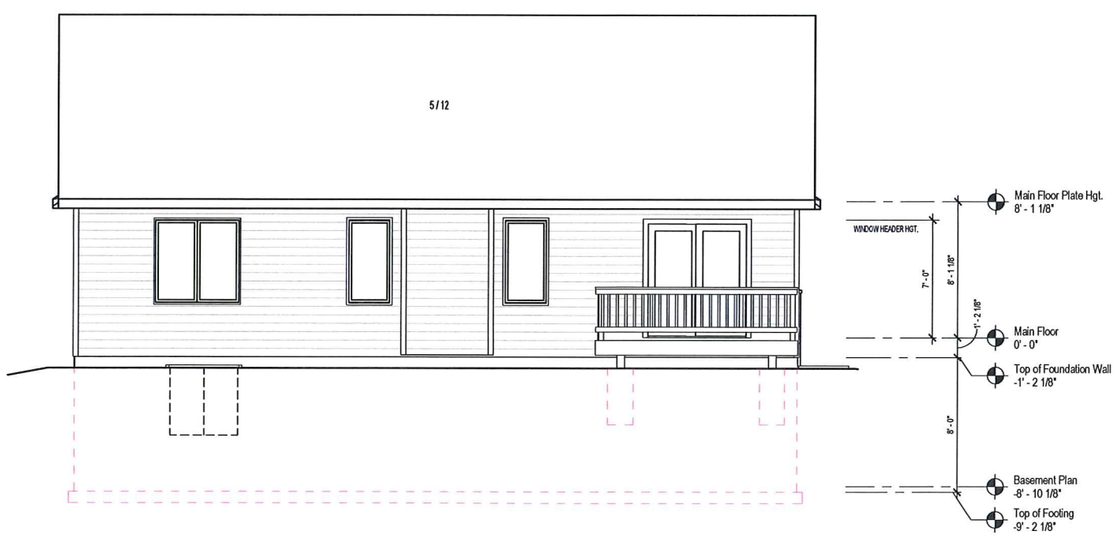
FRONT ELEVATION OPTIONS
A - SHAKE ABOVE PORCH
B - SHAKE ABOVE GARAGE
C - GARAGE DOOR WINDOWS



1 **FRONT ELEVATION**
Scale: 1/4" = 1'-0"

ESTIMATED WALL...	
Lap Siding	2202 SF
Stone Veneer	66 SF

* SQ.AFE PORTAGE OF ELEVATION IS BASED ON THE EXPOSED SURFACE OF THE WALL.
1. THE AREA INCLUDES SURFACES BELOW GRADE TO THE FIRST BOARD.
2. THE AREA INCLUDES WINDOW AND DOOR OPENINGS.



2 **REAR ELEVATION**
Scale: 1/4" = 1'-0"

plum
BUILDING SYSTEMS, LLC

PLUM DESIGN SERVICES
1100 ALICE'S ROAD. WAUKEE, IOWA 50263-1100
TELEPHONE 515 978 6260 FAX 515 978 6261

PLUM DESIGN SERVICE, INC. ASSUMES NO RESPONSIBILITY FOR STRUCTURAL OR DIMENSIONAL ERRORS OR OMISSIONS. WE ARE NOT A LICENSED ARCHITECT OR ENGINEER. THESE PLANS ARE PROVIDED ON AN "AS IS" BASIS AND IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR OWNER TO VERIFY AND CHECK ALL NOTES, DETAILS, ELEVATIONS, SECTIONS, AND FLOOR PLANS PRIOR TO CONSTRUCTION. THE CONTRACTOR AND/OR OWNER SHALL NOTIFY PLUM DESIGN SERVICE, INC. IMMEDIATELY IF ANY ERRORS OR OMISSION FOR POSSIBLE CORRECTION ARE IDENTIFIED PRIOR TO START OF CONSTRUCTION. NO WARRANTIES EXPRESS OR IMPLIED INCLUDING COMPLIANCE WITH THIS PLAN WITH APPLICABLE BUILDING CODES REQUIREMENTS ARE MADE.

Classic Builders
Stonehaven Hamilton II - Porch

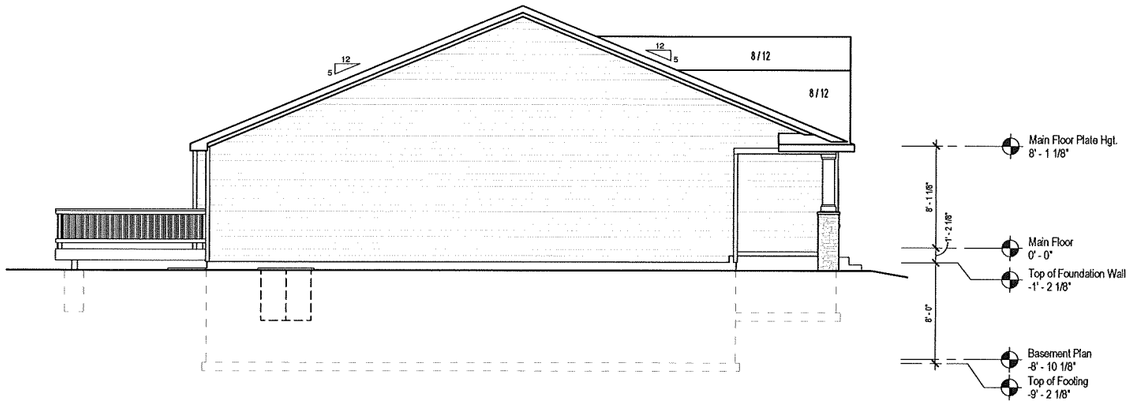
PROJECT ID: PDS 3301

ISSUE DATE:
DATE: 06-30-16
DATE: 08-08-16
DATE: 08-25-16
DATE: 11-17-16

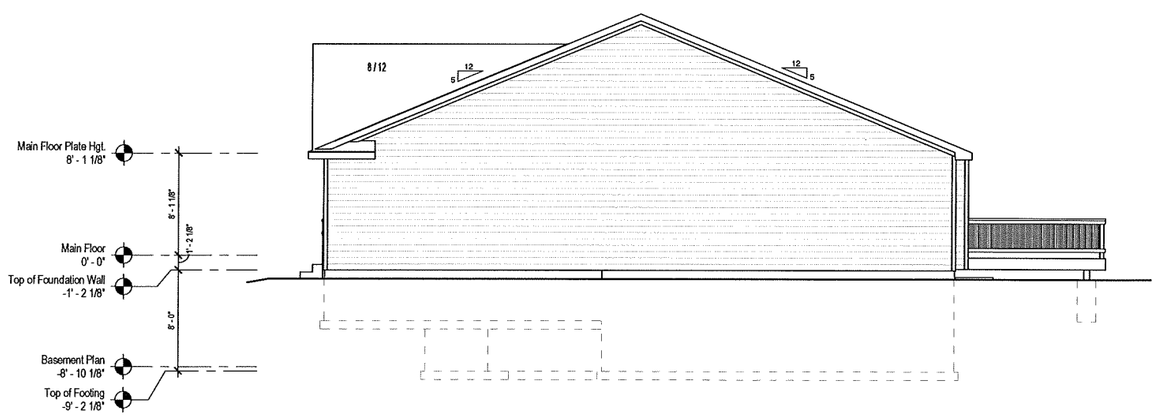
REVISIONS:
DATE:
DATE:
DATE:
DATE:

Elevations
1/4" = 1'-0"

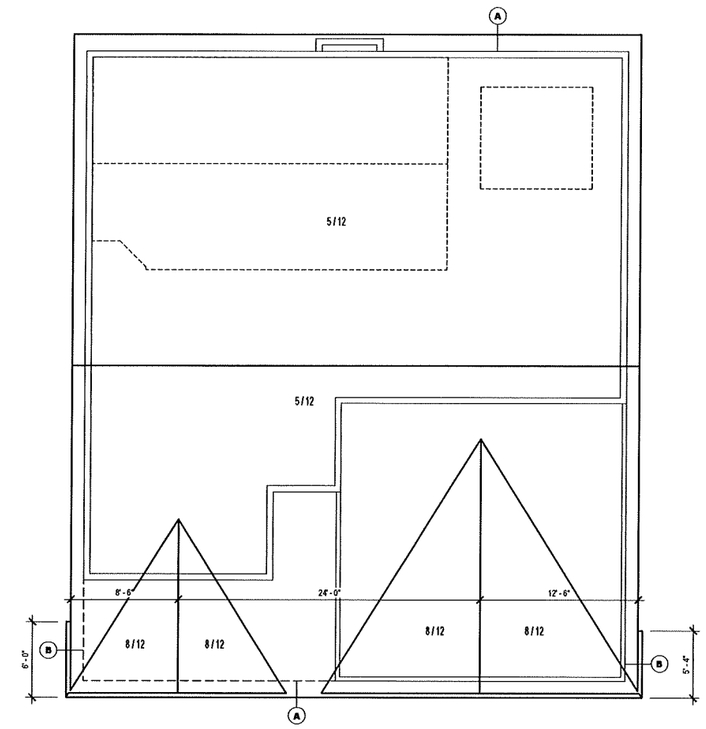
A.1



1 **LEFT ELEVATION**
Scale: 3/16" = 1'-0"



2 **RIGHT ELEVATION**
Scale: 3/16" = 1'-0"



3 **ROOF PLAN**
Scale: 3/16" = 1'-0"

ESTIMATED ROOF SF
2875 SF

* SQUARE FOOTAGE OF ROOF IS TAKEN FROM THE PROJECTED SURFACE OF THE ROOF. THE AREA OF CLOSED OVERHANG SURFACES BELOW RULER, 2' OR 4' ARE NOT INCLUDED

ROOF PLAN LEGEND

SYMBOL	WALL HGT.	PITCH	OVERHANG	HEEL HGT.
A	8'-1 1/8"	5/12	1'-4"	7"
B	8'-1 1/8"	8/12	1'-4"	7"
ALL RAKE OVERHANGS ARE 12" UNLESS NOTED				

plum
BUILDING SYSTEMS, LLC

PLUM DESIGN SERVICES
1100 ALICE'S ROAD. WAUKEE, IOWA 50263-1100
TELEPHONE 515 978 6260 FAX 515 978 6261

PLUM DESIGN SERVICE, INC. ASSUMES NO RESPONSIBILITY FOR STRUCTURAL OR DIMENSIONAL ERRORS OR OMISSIONS. WE ARE NOT A LICENSED ARCHITECT OR ENGINEER. THESE PLANS ARE PROVIDED ON AN "AS IS" BASIS AND IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR OWNER TO VERIFY AND CHECK ALL NOTES, DETAILS, ELEVATIONS, SECTIONS, AND FLOOR PLANS PRIOR TO CONSTRUCTION. THE CONTRACTOR AND/OR OWNER SHALL NOTIFY PLUM DESIGN SERVICE, INC. IMMEDIATELY IF ANY ERRORS OR OMISSION FOR POSSIBLE CORRECTION ARE IDENTIFIED PRIOR TO START OF CONSTRUCTION. NO WARRANTIES EXPRESS OR IMPLIED INCLUDING COMPLIANCE WITH THIS PLAN WITH APPLICABLE BUILDING CODES REQUIREMENTS ARE MADE.

Classic Builders
Stonehaven Hamilton II - Porch

PROJECT ID: PDS 3301

ISSUE DATE:
DATE: 06-30-16
DATE: 08-08-16
DATE: 08-25-16
DATE: 11-17-16

REVISIONS:
DATE:
DATE:
DATE:
DATE:

Elevations
As indicated

A.2

GENERAL NOTES:

A. ALL CONSTRUCTION AND MATERIALS SHALL MEET OR EXCEED IRC 2015, LOCAL BUILDING CODES MAY HAVE DIFFERENT SPECIFICATIONS AND REQUIREMENTS THAN WHAT IS LISTED IN THE IRC 2015, THESE LOCAL REQUIREMENTS WILL SUPERSEDE THE IRC 2015. SEE THE LOCAL BUILDING DEPARTMENT FOR CHANGES.
B. CONTRACTOR TO CONFIRM THE SIZES, SPACING AND SPECIES OF LUMBER OF ALL STRUCTURAL AND FRAMING MEMBERS. ANY STRUCTURAL AND FRAMING MEMBERS NOT INDICATED ARE TO BE SIZED BY OWNER/CONTRACTOR.
C. THE OWNER/CONTRACTOR IS RESPONSIBLE FOR PREVENTIVE MEASURE OF THE BUILD UP OF MOISTURE OR MOLD
D. ALL PRODUCTS ARE TO BE INSTALLED PER THE MANUFACTURE'S RECOMMENDATIONS.
E. ALL MECHANICAL, PLUMBING, AND ELECTRICAL SYSTEMS ARE TO BE DESIGNED BY OTHERS.
F. ALL EXTERIOR STAIRS ARE SHOWN FOR CONCEPT, FINAL DESIGN DETERMINE ON SITE FOR FINAL GRADE.
G. THE FOLLOWING CODE INFORMATION IS INTENDED TO ASSIST AND INFORM YOU THROUGH CONSTRUCTION. THIS PROJECT HAS BEEN DRAWN TO PRESCRIBE TO INDUSTRY STANDARDS.

CHAPTER 3 (BUILDING PLANNING)

A. BUILDING AND STRUCTURES, AND ALL PARTS THEREOF, SHALL BE CONSTRUCTED TO SAFELY SUPPORT ALL LOADS, INCLUDING DEAD LOADS, LIVE LOADS, ROOF LOADS, FLOOD LOADS, SNOW LOADS, WIND LOADS, AND SEISMIC LOADS AS PRESCRIBED BY THIS CODE (R301.1)
B. TABLE 301.2(1) IRC 2015, VALUES BASED FROM THE CITY OF DES MOINES, IOWA

GROUND SNOW LOAD	WIND DESIGN			SEISMIC DESIGN CATEGORY	SUBJECT TO DAMAGE FROM			WINTER DESIGN TEMP.	ICE SHIELD UNDERLAYMENT REQUIRED	FLOOD HAZARDS	AIR FREEZE INDEX	MEAN ANNUAL TEMP
	SPEED (MPH)	TOPOGRAPHIC EFFECTS	SPECIAL WIND REGION	WINDBORNE DEBRIS ZONE	WEATHERING	FROST LINE DEPTH	TERMITE					
30 PSF	110	NONE	NONE	NONE	A	36 INCHES	42"	MODERATE HEAVY	-6 F °	YES	1000 DEGREE DAYS	1000	49.8 F

C. MINIMUM LIVE LOADS, (R301.5) IRC 2015

UNHABITABLE ATTIC WITH LIMITED STORAGE	20 PSF
UNHABITABLE ATTIC WITHOUT STORAGE	10 PSF
HABITABLE ATTIC AND SERVED WITH FIXED STAIRS	30 PSF
DECKS AND EXTERIOR BALCONIES	40 PSF
GUARDRAIL AND HANDRAILS	200 PSF
ROOM OTHER THAN SLEEPING ROOMS	40 PSF
SLEEPING ROOMS	30 PSF
STAIRS	40 PSF
DEFLECTION CRITERIA	
FLOOR LIVE LOAD	L/480
FLOOR TOTAL LOAD	L/360
ROOF LIVE LOAD	L/360
ROOF TOTAL LOAD	L/240
WALL	H/180

ALL BEAMS SUPPORTING FLOOR OR ROOF LOADS ARE TO BE DESIGNED WITH THE ABOVE DEFLECTION CRITERIA

MINIMUM ROOF LIVE LOADS,R301.6,IRC 2015

ROOF TRUSS LIVE LOAD(Lr)	20 PSF
GROUND SNOW(Pg)	30 PSF
FLAT ROOF SNOW (Pf)	24 PSF
THERMAL CONDITION	Ct = 1.0
TERRAIN EXPOSURE	B
DURATION OF LOAD-SNOW	1.15
UNBALANCED AND SNOW DRIFT LOADING ACCORDING TO ASCE/SEI 7-10	
WIND DESIGN METHOD: MWFRS/C-C HYBRID ACSE/SEI 7-10	
EXPOSURE CATEGORY	B
DURATION OF LOAD-WIND	1.60

D. DEAD LOADS ADDITIONAL OR CHANGES TO MATERIAL NEEDS TO BE ADJUSTED TO THE BELOW CALCULATIONS.

FLOOR-TOP CHORD	
CARPET AND PAD	1.5 PSF
3/8" CERAMIC TILE/ 1/2" BACKER BD.	10 PSF
3/4" HARDWOOD FLOOR	4.0 PSF
SUBFLOOR-3/4" OSB OR COM PLYWOOD	2.0 PSF
1/2 FLOOR TRUSS-A JOIST SYSTEM	1.5 PSF
TOTAL WITH CARPET/PAD	5.5 PSF
TOTAL WITH TILE/BACKER BD.	13.5 PSF
TOTAL WITH HARDWOOD FLOOR	7.5 PSF

FLOOR-BOTTOM CHORD	
1/2 FLOOR TRUSS-A JOIST SYSTEM	1.5 PSF
5/8" GYPBOARD	2.0 PSF
MINIMUM FOR MISC MECHANICAL/ELEC.	0.7 PSF
TOTAL	5.0 PSF

ROOF-TOP CHORDS	
ROOFING-SHINGLES,(220 LBS) 2 LAYER	4.40 PSF
30 LBS. FELT	0.30 PSF
1/2" OSB OR COM PLYWOOD	1.65 PSF
1/2 ROOF TRUSS-2/4	1.10 PSF
CORRECTION FOR SLOPE (12/12)	1.55 PSF
TOTAL	9.00 PSF

ROOF-BOTTOM CHORDS	
1/2 ROOF TRUSS-2/4	1.10 PSF
5/8" GYPBOARD	2.0 PSF
MINIMUM FOR MISC MECHANICAL/ELEC.	1.5 PSF
19" BATTER LOWN INSULATION	1.60 PSF
TOTAL	7.00 PSF

SECTION R303: LIGHT AND VENTILATION IN HABITABLE ROOMS, PROVIDE NATURAL LIGHT AND VENTILATION WITH OPERABLE WINDOWS. WINDOW GLAZING SHALL NOT BE LESS THAN 8% OF THE FLOOR AREA OF EACH ROOM. 1/2 THE REQUIRED WINDOW AREA SHALL BE OPERABLE TO THE EXTERIOR FOR NATURAL VENTILATION.
R303.3 BATHROOMS MAY HAVE AN OPERABLE WINDOW OF 3.0 F. IN AREA.
- EXCEPTION:
1. BATHROOM AND WATER CLOSET MAY BE VENTILATED WITH EXHAUST FANS AND ARTIFICIAL LIGHT.

SECTION R304: THE MINIMUM AREA OF ANY HABITABLE ROOM SHALL NOT BE LESS THAN 70 SQ. FEET, EXCEPT KITCHEN.
R304.2 THE MINIMUM LENGTH OR WIDTH OF ANY HABITABLE ROOM SHALL NOT BE LESS THAN 7'-0"

SECTION R305: CEILING HEIGHT HABITABLE SPACE, HALLWAYS, AND PORTION OF THE BASEMENT CONTAINING THESE SPACES SHALL HAVE A CEILING HEIGHT OF NOT LESS THAN 7 FEET. BATHROOMS, TOILER ROOM, AND LAUNDRY ROOMS SHALL HAVE A CEILING HGT OF NOT LESS THAN 6'-8"
-EXCEPTION
1. FOR ROOMS WITH SLOPED CEILING, THE REQUIRED FLOOR AREA OF THE ROOM SHALL HAVE A CEILING HEIGHT OF NOT LESS THAN 5'-0" AND NOT LESS THAN 50% OF THE REQUIRED FLOOR AREA SHALL HAVE A CEILING OF LESS THAN 7'-0"
2. THE CEILING ABOVE A BATHROOM AND TOILET ROOM FIXTURES SHALL BE SUCH THAT THE FIXTURE IS CAPABLE OF BEING USED FOR ITS INTENDED PURPOSE, A SHOWER OR TUB EQUIPPED WITH A SHOWERHEAD SHALL HAVE A CEILING HEIGHT OF NOT LESS THAN 6'-8" ABOVE THE AREA OF NOT LESS THAN 30"X30" AT THE SHOWERHEAD.
3. BEAMS, GIRDERS, DUCTS, OR OTHER OBSTRUCTIONS IN BASEMENT CONTAINING HABITABLE SPACE SHALL BE PERMITTED TO PROJECT TO WITHIN 6'-4" OF THE FINISH FLOOR.
R305.1.1 BASEMENT PORTION OF BASEMENT THAT DO NOT CONTAIN HABITABLE SPACE OR HALLWAYS SHALL HAVE A CEILING HEIGHT OF NOT LESS THAN 6'-4"
-EXCEPTION
1. BEAMS, GIRDERS, DUCTS, OR OTHER OBSTRUCTIONS IN BASEMENT CONTAINING HABITABLE SPACE SHALL BE PERMITTED TO PROJECT TO WITHIN 6'-4" OF THE FINISH FLOOR

SECTION R307.1 TOILET, BATH AND SHOWER SPACES, FIXTURES SHALL BE SPACED IN ACCORDANCE WITH FIGURE R307.1.
1. TOILET: MIN 15" FROM WALL OR TUB OR VANITY.
. MIN 21" CLEARANCE IN FRONT OF TOILET
2. VANITY: MIN 21" CLEARANCE IN FRONT OF VANITY

SECTION R308 GLAZING, EXCEPT AS INDICATED IN SECTION R308.1.1 EACH PANE OF GLAZING INSTALLED IN HAZARDOUS LOCATION DEFINED IN SECTION R308.4 SHALL BE PROVIDED WITH A MANUFACTURING'S DESIGNATION SPECIFYING WHO APPLIED DESIGNATION, DESIGNATING THE TYPE OF GLASS AND THE SAFETY GLAZING STANDARD.
R308.4.2 GLAZING ADJACENT TO DOORS. GLAZING IN AN INDIVIDUAL FIXED OR OPERABLE PANEL ADJACENT TO A DOOR SHALL BE CONSIDERED TO BE A HAZARDOUS LOCATION WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 60" ABOVE THE FLOOR OR WALKING SURFACE AND MEETS EITHER OF THE FOLLOWING CONDITIONS:
1. WHERE THE GLAZING IS WITHIN 24 INCHES EITHER SIDE OF THE DOOR IN THE PLANE OF THE DOOR IN A CLOSED POSITION.
2. WHERE THE GLAZING IS ON THE WALL PERPENDICULAR TO THE PLANE OF THE DOOR IN A CLOSED POSITION AND WITHIN 24" OF THE HINGE SIDE OF AN IN-SWINGING DOOR.
-EXCEPTION
1. DECORATIVE GLASS
2. WHERE THERE IS AN INTERVENING WALL OR OTHER PERMANENT BARRIER BETWEEN DOOR AND THE GLAZING
3. WHERE ACCESS THROUGH THE DOOR IS TO A CLOSET OR STORAGE AREA 3 FEET OR LESS IN DEPTH
4. GLAZING THAT IS ADJACENT TO A FIXED PANEL OF PATIO DOORS.
R308.4.3 GLAZING IN WINDOWS. GLAZING IN AN INDIVIDUAL FIXED OR OPERABLE PANEL THAT MEETS ALL OF THE FOLLOWING CONDITIONS.
1. THE EXPOSED AREA OF AN INDIVIDUAL PLAN IS LARGER THAN 9 SQUARE FEET
2. THE BOTTOM EDGE OF THE GLAZING IS LESS THAN 18" ABOVE THE FLOOR
3. THE TOP EDGE OF THE GLAZING IS MORE THAN 36" ABOVE THE FLOOR. AND
4. ONE OR MORE WALKING SURFACE ARE WITHIN 36", MEASURED HORIZONTALLY AND IN A STRAIGHT LINE, OF THE GLAZING
-EXCEPTION
1. DECORATIVE GLASS
2. WHERE HORIZONTAL RAIL IS INSTALLED.
R308.4.5 GLAZING IN WET SURFACES. GLAZING IN WALLS, ENCLOSURES OR FENCES CONTAINING OR FACING HOT TUBS, SPAS, WHIRLPOOL, SAUNAS, STEM ROOMS, BATHTUBS, SHOWERS AND INDOOR OR OUTSIDE POOLS WHERE THE BOTTOM EXPOSED EDGE OF GLAZING IS LESS THAN 60" MEASURED VERTICALLY ABOVE THE STANDING OR WALKING SURFACE
R308.4.6 GLAZING ADJACENT TO STAIRS AND RAMPS.GLAZING WHERE THE BOTTOM EDGE OF THE GLAZING IS LESS THAN 36" ABOVE THE PLANE OF THE ADJACENT WALKING SURFACE OF THE STAIRWAY, LANDING BETWEEN FLIGHTS OF STAIRS AND RAMPS.
-EXCEPTIONS
1. WHERE RAILING IS INSTALLED ON THE ACCESSIBLE SIDE OF THE GLAZING 34" TO 36" ABOVE WALKING SURFACE.

SECTION R310. EMERGENCY ESCAPE AND RESCUE OPENING. BASEMENT, HABITABLE ATTICS AND EVERY SLEEPING ROOM SHALL HAVE AN EMERGENCY ESCAPE AND RESCUE OPENING.
-EXCEPTION. STORM SHELTERS AND BASEMENT USED ONLY TO HOUSE MECHANICAL EQUIPMENT NOT EXCEEDING A TOTAL FLOOR AREA OF 200 SQUARE FEET.
R310.2.1 MINIMUM OPENING AREA. EMERGENCY AND ESCAPE OPENING SHALL HAVE A NET CLEAR OPENING OF NOT LESS THAN 5.7 SQUARE FEET. THE NET CLEAR AREA DIMENSIONS REQUIRED BY THIS SECTION SHALL BE OBTAINED BY NORMAL OPERATION FROM THE INSIDE. THE NET CLEAR HEIGHT OPENING SHALL NOT BE LESS THAN 24" AND THE NET CLEAR WIDTH SHALL NOT BE LESS THAN 20"
R310.2.2 WINDOW SILL HEIGHT. WHERE THE WINDOW IS PROVIDED AS THE EMERGENCY ESCAPE AND RESCUE OPENING, IT SHALL HAVE A SILL HEIGHT OF NOT MORE THEN 44" ABOVE THE FLOOR
R310.2.3 WINDOW WELLS. THE HORIZONTAL AREA OF THE WINDOW WELL SHALL NOT BE LESS THAN 9 SQ. FT., WITH THE HORIZONTAL PROJECTION AND WIDTH OF NOT LESS THAN 36" THE AREA OF THE WINDOW WELL SHALL ALLOW THE EMERGENCY ESCAPE AND RESCUE OPENING TO BE FULLY OPENED.
-EXCEPTION
1. THE LADDER OR STEPS SHALL BE PERMITTED TO ENCROACH NOT MORE THAN 6".
R310.2.3.1 WINDOW WELLS WITH A VERTICAL STEP GREATER THAN 44" SHALL BE EQUIPPED WITH A PERMANENT LADDER NOT LESS THAN 12" WIDE

SECTION 311
R311.7.1 STAIRWAYS. STAIRWAY ARE TO BE NOT LESS THAN 36" WIDE IN CLEAR WIDTH AT ALL POINTS ABOVE THE PERMITTED HANDRAIL HEIGHT, HANDRAILS SHOULD PROJECT NOT MORE THAN 4 1/2" ON EITHER SIDE OF THE STAIRWAY.
R311.7.5 HEADROOM. THE HEADROOM IN THE STAIRWAY SHALL BE NOT LESS THAN 6'-8" MEASURED VERTICALLY FROM THE SLOPED LINE ADJOINING THE TREAD NOSING OR FROM THE FLOOR SURFACE OF THE LANDING
R311.7.3 VERTICAL RISE. A FLIGHT OF STAIRS SHALL NOT HAVE A VERTICAL RISE LARGER THAN 12'-3"
R311.7.5 THE MAXIMUM RISER IS 7 3/4" WITH A MINIMUM RUN OF 10".
R311.7.8 HANDRAILS SHALL BE ON NOT LESS THAN ONE SIDE OF EACH CONTINUES RUN OF TREADS

SECTION 314 SMOKE ALARMS. SMOKE ALARMS SHALL COMPLY WITH NFPA 72 AND UL 217
R314.3 LOCATION
1. IN EACH SLEEPING ROOM
2. OUTSIDE EACH SEPARATE SLEEPING AREA
3. ON EACH ADDITIONAL STORY OF THE DWELLING, INCLUDING BASEMENT AND HABITABLE ATTICS
4. SMOKE ALARMS SHALL BE INSTALLED NOT LESS THAN 3'-0" HORIZONTALLY FROM THE DOOR OR OPENING OF A BATHROOM THAT CONTAINS A BATHTUB OR SHOWER UNLESS THIS WOULD PREVENT PLACEMENT OF A SMOKE ALARM IN THAT LOCATION.
R314.3.1 SMOKE ALARMS SHALL NOT BE INSTALLED IN THE FOLLOWING AREAS
1. IONIZATION SMOKE ALARMS SHALL NOT BE INSTALLED LESS THAN 20'-0" HORIZONTALLY FROM A PERMANENTLY INSTALLED COOKING APPLIANCE
2. IONIZATION SMOKE ALARMS WITH AN ALARM-SILENCING SWITCH SHALL NOT BE INSTALLED LESS THAN 10'-0" HORIZONTALLY FROM A PERMANENTLY INSTALLED APPLIANCE
3. PHOTOELECTRIC SMOKE ALARMS SHALL NOT BE INSTALLED LESS THAN 6'-0" HORIZONTAL FROM A PERMANENTLY INSTALLED COOKING APPLIANCE.

SECTION R315 CARBON MONOXIDE ALARMS. SHALL COMPLY WITH UL 2034, COMBINATION CARBON MONOXIDE AND SMOKE ALARMS SHALL BE LISTED IN ACCORDANCE WITH UL 2034 AND UL 217
R315.2.1 CARBON MONOXIDE SHALL BE PROVIDED IN DWELLING UNITS WHERE EITHER OR BOTH OF THE FOLLOWING CONDITION EXIST:
1. CONTAINS A FUEL-FIRED APPLIANCE
2. ATTACHED GARAGE WITH AN OPENING THAT COMMUNICATES WITH THE DWELLING

SECTION 317 PROTECTION OF WOOD AND WOOD BASED PRODUCTS AGAINST DECAY.
R317.1 LOCATION REQUIRED. PROTECTION OF WOOD AND WOOD-BASED PRODUCTS FROM DECAY SHALL BE PROVIDING IN THE FOLLOWING LOCATIONS BY USE OF NATURALLY DURABLE WOOD OR WOOD THAT IS PRESERVATIVE-TREATED IN ACCORDANCE WITH AWPA U1 FOR THE SPECIES, PRODUCT, PRESERVATIVE AND END USE.
1. WOOD JOIST OR BOTTOM OF A WOOD STRUCTURAL FLOOR WHEN CLOSER THAN 18" OR WOOD GIRDERS WHEN CLOSER THAN 12" TO THE EXPOSED GROUND IN CRAWL SPACES OR UNEXCAVATED AREAS LOCATED WITHIN THE PERIPHERY OF THE BUILDING FOUNDATION.
2. WOOD FRAMING MEMBERS THAT REST ON CONCRETE OR MASONRY EXTERIOR FOUNDATION WALLS AND ARE LESS THAN 6" FROM EXPOSED GROUND.
3. SILLS AND SLEEPERS ON A CONCRETE OR MASONRY SLAB THAT IS IN DIRECT CONTACT WITH THE GROUND UNLESS SEPARATED FROM SUCH SLAB BY AN IMPERVIOUS MOISTURE BARRIER.
4. THE END S OF A WOOD GIRDER ENTERING CONCRETE WALLS HAVING CLEARANCE OF LESS THAN 1/2" ON TOPS, SIDES AND ENDS.
5. WOOD SIDING, SHEATHING AND WALL FRAMING ON THE EXTERIOR OF A BUILDING HAVING A CLEARANCE OF LESS THAN 6" FROM THE GROUND OR LESS THAN 2" MEASURED VERTICALLY FROM CONCRETE STEPS, PORCH SLABS, AND SIMILAR HORIZONTAL SURFACES EXPOSED TO THE WEATHER.
6. WOOD STRUCTURAL MEMBERS SUPPORTING MOISTURE-PERMEABLE FLOORS OR ROOFS THAT ARE EXPOSED TO THE WEATHER, SUCH AS CONCRETE SLABS.
7. WOOD FURRING STRIPS OR OTHER WOOD FRAMING MEMBERS ATTACHED DIRECTLY TO THE INTERIOR OF EXTERIOR MASONRY OR CONCRETE WALLS BELOW GRADE EXCEPT WHERE AN APPROVED VAPOR RETARDER IS APPLIED BETWEEN WALL AND THE FURRING STRIP.
R317.3.1 FASTENERS OF PRESERVATIVE-TREATED WOOD, FASTENERS, INCLUDING NUTS AND WASHERS, FOR PRESERVATIVE-TREATED WOOD SHALL BE OF HOT-DIPPED, ZINC-COATED GALVANIZED STEEL, STAINLESS STEEL, SILICON BRONZE OR COPPER.COATING TYPES AND WEIGHTS FOR CONNECTORS IN CONTACT WITH PRESERVATIVE-TREATED WOOD SHALL BE ACCORDANCE WITH THE CONNECTOR MANUFACTURER'S RECOMMENDATIONS.

CHAPTER 4 (FOUNDATIONS)

SECTION 401.4 SOIL TEST: WHERE QUANTIFIABLE DATA CREATED BY ACCEPTABLE SOIL SCIENCE METHODOLOGIES INDICATE EXPANSIVE, COMPRESSIBLE, SHIFTING OR OTHER UNKNOWN SOIL CHARACTERISTICS, THE BUILDING OFFICIAL SHALL DETERMINE WHETHER A SOIL TEST IS REQUIRED.
TABLE R401.4.1

CLASS OF MATERIAL	LOAD BEARING PRESSURE
SAND, SILTY SAND, CLAYEY SAND, SILTY GRAVEL AND CLAYEY GRAVEL	2,000 POUNDS PER SQ FT
CLAYEY, SANDY, SLIGHTLY CLAY, CLAYEY SILT, SILT, AND SANDY SILT CLAY	1,500 POUNDS PER SQ FT

THIS DESIGN IS BASED ON 2,000 POUNDS PER SQ FT, UNLESS NOTED OTHERWISE. IT IS THE BUILDER OR HOMEOWNER RESPONSIBLE TO LET PLUM DESIGN SERVICE KNOW IF THE CONDITION IN THE FIELD ARE DIFFERENT.

R402.2 CONCRETE: FROM TABLE R402.2
-FOUNDATION CONCRETE WALLS SHALL HAVE A MIN. STRENGTH OF 3000 PSI
-GARAGE FLOOR SLABS SHALL BE 3,500 PSI
-PORCHES, CARPORT SLABS AND STEPS EXPOSED TO THE WEATHER SHALL BE 3,500 psi AT 28 DAYS
-BASEMENT SLABS 2,500 PSI
(CONCRETE SHALL BE AIR ENTRAINED WITH 5%-7% TOTAL AIR CONTENT).
R403 ALL FOOTING SHALL BE PLACED ON UNDISTURBED SOIL OR CONTROLLED COMPACTED FILL. MINIMUM FOOTING TO BE 16" WIDE X 8"DEEP FOR A 2 STORY BUILDING AND 20" WIDE X 8" DEEP FOR A 3 STORY BUILDING (TABLE 403.1) BOTH WITH 2 CONTINUOUS HORIZONTAL #4 REBAR.
R403.1.6 ALL ANCHOR BOLTS SHALL BE APPROVED 1/2" IN DIAMETER AND SHALL EXTEND A MINIMUM OF 7" INTO CONCRETE. USE TWO BOLTS PER SILL PLATE WITH BOLTS SPACED AT A MAXIMUM OF 6 FEET ON CENTER WITH A MINIMUM OF ONE BOLT NOT MORE THAN 12 INCHES FROM THE END BUT AT LEAST 3 1/2 INCHES FROM END OF SILL PLATE. THE BOLTS SHALL BE LOCATED IN THE MIDDLE THIRD OF THE WIDTH OF THE PLATE.
- ALTERNATE FOUNDATION STRAPS MAY BE USED, SPECIFICATION TO PROVIDE EQUIVALENT ANCHOR TO A 1/2" DIAMETER ANCHOR BOLTS.
R404 CONCRETE FOUNDATION WALLS SHALL BE CONSTRUCTED AS SET FORTH IN TABLE R404.1.2(3), REFER TO TYPICAL WALL SECTION IN THIS PLAN FOR SPECIFICATION.
R406 FOUNDATION WATERPROOFING AND DAMPPROOFING
EXCEPT WHERE REQUIRED IN SECTION R406.2 TO BE WATERPROOFED, FOUNDATION WALLS THAT RETAIN EARTH AND ENCLOSED INTERIOR SPACES AND FLOORS ABOVE GRADE SHALL BE DAMPPROOFING FROM THE HIGHER OF THE TOP OF THE FOOTING, TO THE FINISHED GRADE.
R408 UNDER FLOOR SPACE
THE UNDER-FLOOR SPACE BETWEEN THE BOTTOM OF THE JOIST AND THE EARTH UNDER ANY BUILDING SHALL HAVE VENTILATION OPENING THROUGH THE FOUNDATION WALLS OR EXTERIOR WALLS. MIN. NET AREA OF VENTILATION SHALL NOT BE LESS THAN 1 SQ FT FOR EACH 150 SQ FT OF AREA UNDER THE FLOOR.
R408.4 ACCESS THROUGH THE FLOOR IS REQUIRED TO BE 18" X 24"

CHAPTER 5 (FLOORS)

FRAMING MATERIALS GRADES

A.	ROOF, FLOOR, AND WALL SHEATHING:	AFA RATED SHEATHING, (LEAVE 1/8" SPACING AT PANEL ENDS AND EDGES)
B.	WALL STUDS:	MINIMUM SPF STUD OR DOUGLAS FIR LARCH STUD.
C.	WALL PLATES:	MINIMUM SPF #2 OR BETTER.
D.	DIMENSIONAL HEADERS:	DOUGLAS FIR #2 OR BETTER.
E.	LVL HEADERS:	2950 PSI,2.0E MINIMUM.
F.	STEEL	ASTM SPECIFICATION A992 GRADE-50 OR EQUAL

R502.4 JOIST UNDER PARALLEL BEARING PARTITIONS SHALL BE OF ADEQUATE SIZE TO SUPPORT THE LOAD.
R502.6 THE ENDS OF EACH JOIST, BEAM, OR GIRDER SHALL HAVE NOT LESS THAN 1.5 INCHES OF BEARING ON WOOD OR METAL AND NOT LESS THAN 3 INCHES ON CONCRETE.
R502.8 NO CUTS, NOTCHES, AND HOLES BORED INTO TRUSSES, STRUCTURAL COMPOSITE LUMBER, GLUE-LAMINATED MEMBERS, OR I-JOIST ARE PROHIBITED EXCEPT WHERE PERMITTED BY THE MANUFACTURER'S RECOMMENDATION OR DESIGN BY PROFESSIONAL.
R502.11 WOOD TRUSSES SHALL BE DESIGNED AND MANUFACTURED IN ACCORDANCE WITH ANSI/TPI-1. REFER TO THE INDIVIDUAL TRUSS DESIGN DRAWINGS FOR WEB BRACING AND MULTI-CONNECTION OF GIRDERS. BSCI SHOULD BE REFER TO FOR HANDLING INSTALLATION AND BRACING OF METAL PLATE TRUSSES.
R507.2 EXTERIOR DECK JOISTS LEDGER CONNECTION TO BAND JOIST. DECK LEDGER CONNECTION TO BAND JOIST SHALL BE IN ACCORDANCE WITH THIS SECTION TABLE R507.2 AND R507.2.1, AND FIGURES R507.2.1(1) AND R507.2.1(2)

CHAPTER 6 (WALL CONSTRUCTION)

R602.1 SAWN LUMBER SAWN LUMBER SHALL BE IDENTIFIED BY A GRADE MARK OF AN ACCREDITED LUMBER GRADING OR INSPECTION AGENCY AND HAVE DESIGN VALUES CERTIFIED BY ACCREDITATION AGENCY THAT COMPLIES WITH DOC PS 20
R602.3 REFER TO TABLE R602.3(1) THROUGH TABLE R602.3(4) FOR FRAMING MEMBER FASTENING
R602.6 DRILLING AND NOTCHING- REFER TO FIGURE R602.6 (1) AND R602.6 (2)-SEE DETAIL PAGE OF PLAN FOR FIGURES.
R602.7 THE ALLOWABLE SPANS OF GIRDERS,HEADERS FABRICATED FROM DIMENSIONAL LUMBER ON EXTERIOR WALLS SHALL NOT EXCEED THE VALUES OF TABLE R602.7(1)
R602.8 FIRE BLOCKING SHALL BE PROVIDED TO CUT OFF ALL CONCEALED DRAFT OPENING (BOTH VERTICAL AND HORIZONTAL) AND TO FORM AN EFFECTIVE FIRE BARRIER BETWEEN STORIES, AND BETWEEN A TOP STORY AND ROOF SPACE.
R602.10 WALL BRACING. BUILDING SHALL BE BRACE IN ACCORDANCE WITH SECTION OR R602.12 (SIMPLIED METHOD). FROM TABLE R602.10.4, USE CS-WSP BRACING METHOD WITH MIN 3/8" SHEATHING.

CHAPTER 7 (WALL COVERING)

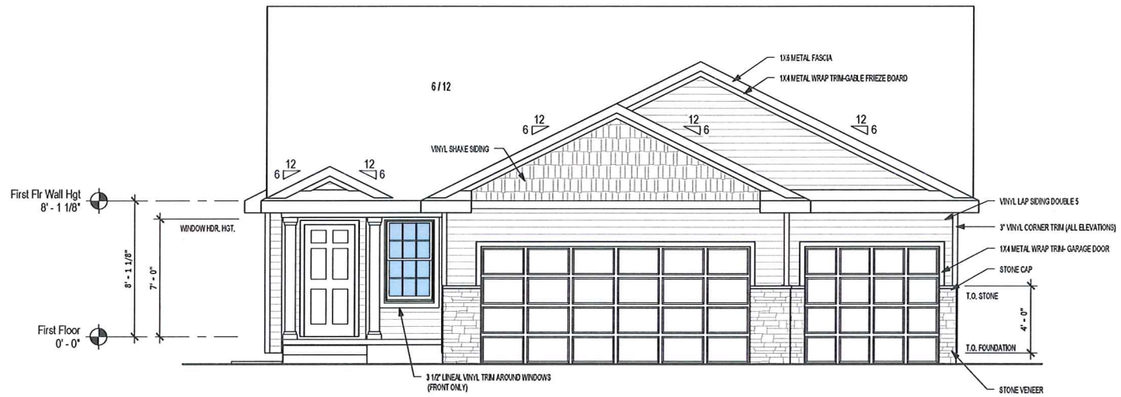
R702.1 GENERAL. INTERIOR COVERING OR WALL FINISHES SHALL BE INSTALLED IN ACCORDANCE WITH THIS CHAPTER AND TABLE R702.1(1), TABLE R702.1(2), TABLE R702.1(3) AND TABLE R702.3.5. INTERIOR MASONRY VENEER SHALL COMPLY WITH THE REQUIREMENTS OF SECTION R703.7.1 FOR SUPPORT AND SECTION R703.7.4 FOR ANCHORAGE. INTERIOR FINISHES AND MATERIAL SHALL CONFORM TO THE FLAME SPREAD AND SMOKE DEVELOPMENT REQUIREMENTS OF SECTION R302.9
R703.1 GENERAL: EXTERIOR WALL SHALL PROVIDE THE BUILDING WITH A WEATHER-RESISTANT EXTERIOR WALL ENVELOPE. THE EXTERIOR WALL ENVELOPE SHALL INCLUDE FLASHING AS DESCRIBED IN SECTION R703.4
R703.1.1 WATER RESISTANCE. THE EXTERIOR WALL ENVELOPE SHALL BE DESIGNED AND CONSTRUCTED IN A MANNER THAT PREVENTS THE ACCUMULATION OF WATER WITHIN THE WALL ASSEMBLY BY PROVIDING A WATER-RESISTANT BARRIER BEHIND THE EXTERIOR VENEER AS REQUIRED IN SECTION R703.2 AND A MEANS OF DRAINING TO THE EXTERIOR WATER THAT ENTERS THE ASSEMBLY.
R703.1.2 WIND RESISTANCE. WALL COVERINGS, BACKING MATERIALS AND THEIR ATTACHMENT SHALL BE CAPABLE OF RESISTING LOADS IN ACCORDANCE WITH TABLE R301.2(5) AND R301.2(3).
R703.2 WATER-RESISTIVE BARRIER. APPROVED WATER-RESISTIVE BARRIER SHALL BE APPLIED OVER STUDS OR SHEATHING OF ALL EXTERIOR WALLS. SUCH MATERIAL SHALL BE APPLIED HORIZONTALLY, WITH UPPER LAPPED OVER THE LOWER NOT LESS THAN 2" INCHES. WHERE JOINT OCCUR, LAPPED NOT LESS THAN 6".
R703.3 NOMINAL THICKNESS AND ATTACHMENTS. THE MINIMUM THICKNESS AND ATTACHMENT OF EXTERIOR WALL COVERING SHALL BE IN ACCORDANCE WITH TABLE R703.3(1) AND THE WALL COVERING MATERIAL MANUFACTURER'S INSTALLATION REQUIREMENTS.
R703.4 FLASHING. APPROVED CORROSION-RESIANT FLASHING SHALL BE APPLIED SHINGLE-FASHION IN A MANNER TO PREVENT ENTRY OF WATER INTO WALL CAVITY OR PENETRATION OF WATER TO THE BUILDING STRUCTURAL FRAMING COMPONENTS.
1. EXTERIOR WINDOWS AND DOORS OPENINGS. (SEE MANUFACTURE OF PRODUCT FOR INSTALLATION DETAILS)
2. AT INTERSECTION OF CHIMNEYS OR OTHER MASONRY CONSTRUCTION WITH FRAME OR STUCCO WALLS, WITH PROJECTING LIPS ON BOTH SIDES UNDER STUCCO OPENINGS.
3. UNDER AND AT ENDS OF MASONRY, WOOD OR METAL COPINGS AND SILLS.
4. CONTINUOUSLY ABOVE ALL PROJECTING WOOD TRIM
5. WHERE EXTERIOR PORCHES, DECKS OR STAIRS ATTACH TO A WALL OR FLOOR ASSEMBLY OF WOOD-FRAME CONSTRUCTION
6. AT WALL AND ROOF INTERSECTION

CHAPTER 8 (ROOF-CEILING)

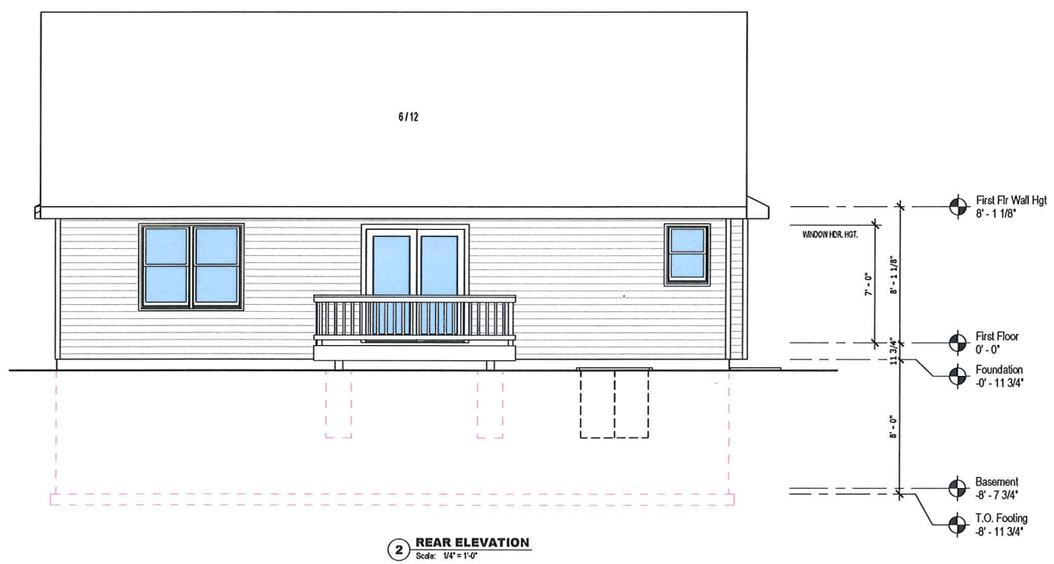
SECTION R802.10.2 DESIGN. WOOD TRUSSES SHALL BE DESIGNED IN ACCORDANCE WITH ACCEPTED ENGINEERING PRACTICE. THE DESIGN AND MANUFACTURE OF METAL-PLATED WOOD TRUSS SHALL COMPLY WITH ANSI/TPI1.
R802.10.3 BRACING. TRUSSES SHALL BE BRACED TO PREVENT ROTATION AND PROVIDE LATERAL STABILITY, REFER TO THE INDIVIDUAL TRUSS DESIGN DRAWINGS AND BSCA'S BCSI GUIDE TO GOOD PRACTICE FOR HANDLING, INSTALLING AND BRACING OF METAL PLATE CONNECTED WOOD TRUSSES.
R802.11.1.1 TRUSS UPLIFT. TRUSSES SHALL BE ATTACHED TO SUPPORTING WALL ASSEMBLIES BY CONNECTION CAPABLE OF RESISTING FORCES SPECIFIED ON THE TRUSS DESIGN DRAWINGS.
SECTION R806 ROOF VENTILATION, ENCLOSED ATTIC AND ENCLOSED RAFTER SPACES FORMED WHERE CEILING ARE APPLIED DIRECTLY TO THE UNDERSIDE OF THE ROOF RAFTERS SHALL HAVE CROSS VENTILATION FOR EACH SEPARATE SPACE BY VENTILATING OPENINGS PROTECTED AGAINST THE ENTRANCE OF RAIN OR SNOW. REQUIRED VENTILATION OPENINGS SHALL BE DIRECTLY TO THE OUTSIDE AIR.
R806.2 MINIMUM VENT AREA. THE MINIMUM NET FREE VENTILATION SHALL BE 1/150 (EXCEPTION 1 TAKEN)
SECTION R807 ATTIC ACCESS. BUILDING WITH COMBUSTIBLE CEILING OR ROOF CONSTRUCTION SHALL HAVE AN ATTIC ACCESS OPENING TO ATTIC AREA THAT HAVE A VERTICAL HEIGHT OF 30" OR GREATER.
1. THE ROUGH-FRAMED OPENING SHALL NOT BE LESS THAN 22"X30" .
2. SHALL BE LOCATED IN A HALLWAY OR OTHER READILY ACCESSIBLE LOCATION
3. MINIMUM UNOBSTRUCTED HEAD ROOM IN THE ATTIC SPACE SHALL BE 30" MEASURED VERTICALLY FROM BOTTOM OF CEILING MEMBER

CHAPTER 9 (ROOF ASSEMBLIES)

SECTION 903
R903.1 GENERAL. ROOF DECKS SHALL BE COVERED WITH THE APPROVED ROOF COVERING SECURED TO THE BUILDING OR STRUCTURE IN ACCORDANCE WITH THE PROVISION OF THIS CHAPTER. ROOF ASSEMBLIES SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH THIS CODE AND THE APPROVED MANUFACTURES INSTRUCTIONS.
R903.2 FLASHING. FLASHING SHALL BE INSTALLED IN MANNER THAT PREVENTS MOISTURE FROM ENTERING THE WALL AND ROOF THROUGH JOINTS IN COPING, THROUGH MOISTURE PERMEABLE MATERIALS AND AT INTERSECTION WITH PARAPET WALLS AND OTHER PENETRATIONS THROUGH THE ROOF PLANE.
R903.2.1 LOCATION. FLASHING SHALL BE I INSTALLED AT WALL AND ROOF INTERSECTIONS, WHEREVER THERE IS A CHANGE IN ROOF OR DIRECTION AND AROUND ROOF OPENINGS.
SECTION 905
R905.1 ROOF COVERING APPLICATION. ROOF COVERING SHALL BE APPLIED IN ACCORDANCE WITH THE WITH THE APPLICABLE PROVISIONS OF THIS SECTION AND THE MANUFACTURE'S INSTALLATION INSTRUCTIONS.
R905.1.1 UNDERLAYMENT. UNDERLAYMENT FOR ASPHALT SHINGLES, CLAY, AND CONCRETE TILE, METAL ROOF SHINGLES, MINERAL SURFACED ROLL



1 **FRONT ELEVATION**
Scale: 1/4" = 1'-0"



2 **REAR ELEVATION**
Scale: 1/4" = 1'-0"

ESTIMATED AREA - WALL CLADDING

MATERIAL TYPE	MATERIAL SF	MATERIAL %	MATERIAL ELEVATION
Lap Siding - 6"	1966 SF	100.0%	
Lap Siding - 6"	109 SF	65.6%	Front
Shake Material - Staggered	57 SF	34.4%	Front

- SQUARE FOOTAGE OF CLADDING GENERATED FROM THE EXPOSED SURFACE OF THE WALL
1. THE AREA INCLUDES SURFACE BELOW DECORATIVE TRIM BRACKETS
2. THE AREA EXCLUDES AREA OF HORIZONTAL OPENINGS

plum
BUILDING SYSTEMS, LLC

PLUM DESIGN SERVICES
1100 SE ALICE'S ROAD WALKER, IOWA 50263
TELEPHONE 515 978 6260 FAX 515 978 6261

PLUM DESIGN SERVICE, INC. ASSUMES NO RESPONSIBILITY FOR STRUCTURAL OR DIMENSIONAL ERRORS OR OMISSIONS. WE ARE NOT A LICENSED ARCHITECT OR ENGINEER. THESE PLANS ARE PROVIDED ON AN "AS IS" BASIS AND IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR OWNER TO VERIFY AND CHECK ALL NOTES, DETAILS, ELEVATIONS, SECTIONS, AND FLOOR PLANS PRIOR TO CONSTRUCTION. THE CONTRACTOR AND/OR OWNER SHALL NOTIFY PLUM DESIGN SERVICE, INC. IMMEDIATELY IF ANY ERRORS OR OMISSION FOR POSSIBLE CORRECTION ARE IDENTIFIED PRIOR TO START OF CONSTRUCTION. NO WARRANTIES EXPRESS OR IMPLIED (INCLUDING COMPLIANCE WITH THIS PLAN WITH APPLICABLE BUILDING CODES REQUIREMENTS ARE MADE.

MEMBER
AIBD
AMERICAN INSTITUTE of BUILDING DESIGN
Creating where people live

Classic Builders
U.S. Grant Plan

PROJECT ID:
PDS 3523

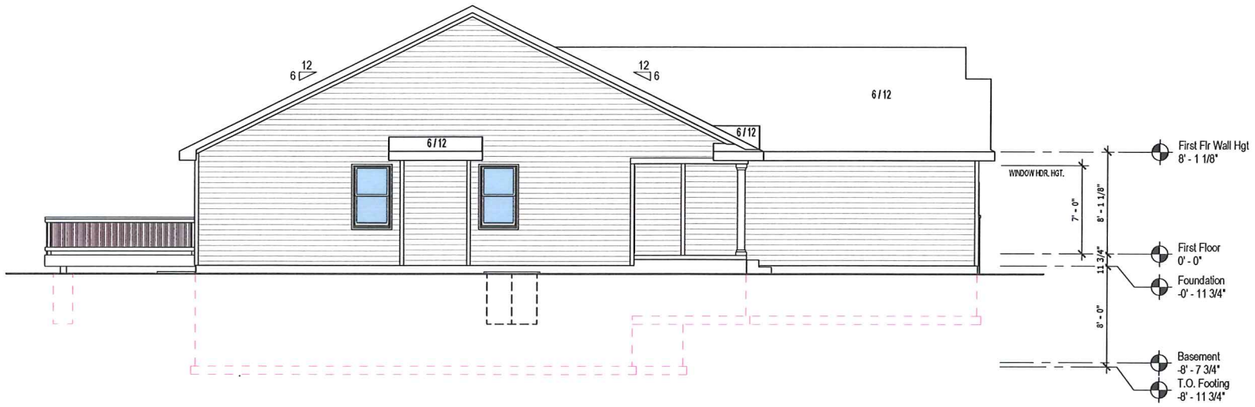
ISSUE DATE:
DATE: 10-10-16
DATE: 10-21-16
DATE: 10-25-16
DATE:
DATE:
DATE:
DATE:
DATE:

Elevations

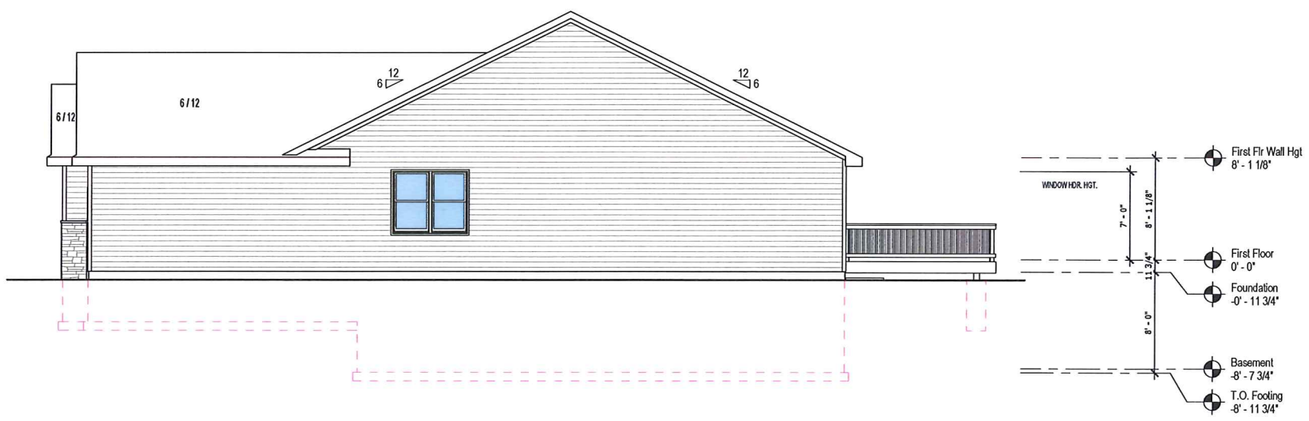
1/4" = 1'-0"

THIS PAGE IS INTENDED TO BE PRINTED ON 24"X36" PAPER TO BE TO SCALE

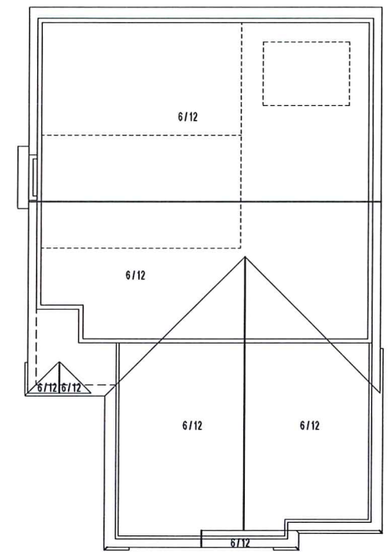
A.1



1 **LEFT ELEVATION**
Scale: 3/16" = 1'-0"



2 **RIGHT ELEVATION**
Scale: 3/16" = 1'-0"



3 **ROOF PLAN**
Scale: 1/8" = 1'-0"

ROOF PLAN LEGEND

SYMBOL	PLATE HGT.	PITCH	OVERHANG	HEEL HGT.
ALL	8'-1 1/8"	6/12	1'-4"	7"
ALL RAKE OVERHANGS ARE 12" UNLESS NOTED				

ESTIMATED AREA - ROOF

2921 SF

* SQUARE FOOTAGE OF ROOF IS THE PLAN FROM THE ENTIRE SURFACE OF THE ROOF, 1. THE VOID EXCLUDES WHERE THERE IS NO SURFACE BELOW A VALID.
2. NO WASTE FACTOR HAS BEEN INCLUDED

plum
BUILDING SYSTEMS, LLC

PLUM DESIGN SERVICES
1100 SE ALICE'S ROAD WALKER, IOWA 52263
TELEPHONE 515 978 6260 FAX 515 978 6261

PLUM DESIGN SERVICE, INC. ASSUMES NO RESPONSIBILITY FOR STRUCTURAL OR DIMENSIONAL ERRORS OR OMISSIONS. WE ARE NOT A LICENSED ARCHITECT OR ENGINEER. THESE PLANS ARE PROVIDED ON AN "AS IS" BASIS AND IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR OWNER TO VERIFY AND CHECK ALL NOTES, DETAILS, ELEVATIONS, SECTIONS, AND FLOOR PLANS PRIOR TO CONSTRUCTION. THE CONTRACTOR AND/OR OWNER SHALL NOTIFY PLUM DESIGN SERVICE, INC. IMMEDIATELY IF ANY ERRORS OR OMISSION FOR POSSIBLE CORRECTION ARE IDENTIFIED PRIOR TO START OF CONSTRUCTION. NO WARRANTIES EXPRESS OR IMPLIED INCLUDING COMPLIANCE WITH THIS PLAN WITH APPLICABLE BUILDING CODES REQUIREMENTS ARE MADE.

MEMBER
AIBD
AMERICAN INSTITUTE of BUILDING DESIGN
Creating where people live

Classic Builders
U.S. Grant Plan

PROJECT ID:
PDS 3523

ISSUE DATE:
DATE: 10-10-16
DATE: 10-21-16
DATE: 10-25-16
DATE:
DATE:
DATE:
DATE:
DATE:

Elevations

As indicated

THIS PAGE IS INTENDED TO BE PRINTED ON 24"X36" PAPER TO BE TO SCALE

A.2

CLASSIC BUILDERS

www.ClassicBuildersIowa.com

EXTERIOR COLOR PACKAGE

- Royal White
- Graphite
- Slate
- Greystone

JACKSON

ABBREVIATIONS

ADJ	ADJUSTABLE
AWN.	AWNING
BTM.	BOTTOM
BSMT.	BASEMENT
BTW.	BETWEEN
CA	CASEMENT
CANT.	CANTILEVER
CABL	CABINET
℄	CENTER LINE
CLG	CEILING
C.O.	CASED OPENING
COL.	COLUMN
CONC.	CONCRETE
D	DRYER
DIA.	DIAMETER
DN	DOWN
DH	DOUBLE HUNG
DW	DISHWASHER
F.D.	FLOOR DRAIN
FLR.	FLOOR
FT.	FEET
FURN.	FURNACE
HDR.	HEADER
HDWD	HARDWOOD
INSUL.	INSULATION
JST.	JOIST
L.V.	LAMINATED VENEER LUMBER
LIN.	LINEN
MAX.	MAXIMUM
MIN.	MINIMUM
O/C	ON CENTER
O.H.D.	OVERHEAD DOOR
OPNG.	OPENING
PED.	PEDESTAL
N.T.S.	NOT TO SCALE
REF	REFRIGERATOR
REQ	REQUIRED
RO	ROUGH OPENING
RM	ROOM
SH	SINGLE HUNG
S & R	SHELF AND ROD
S.F.	SQUARE FEET
S.P.	SUMP PIT
STL	STEEL
TYP.	TYPICAL
TRANS.	TRANSOM
UNEX.	UNEXCAVATED
VAN.	VANITY
W	WASHER
W/	WITH
W.H.	WATER HEATER

ELECTRIC SYMBOLS

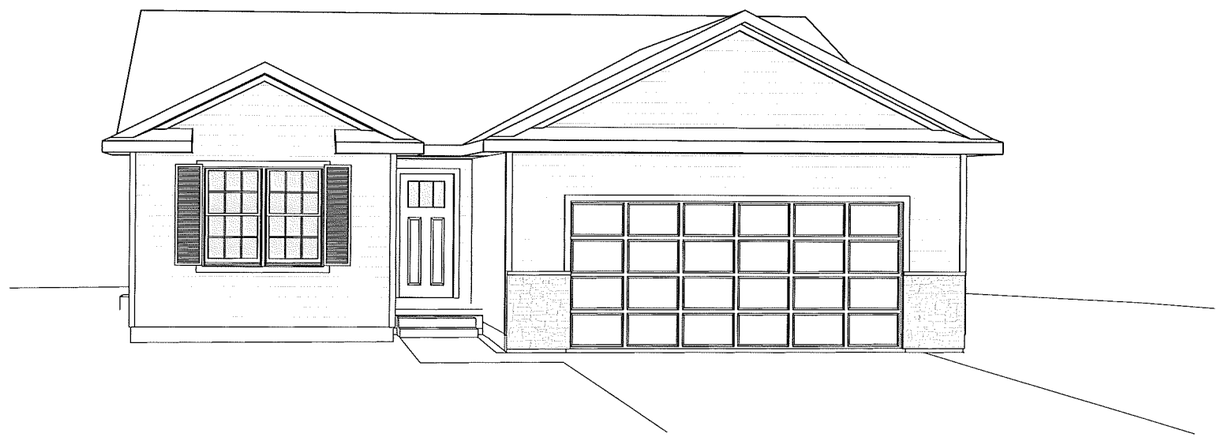
	SINGLE POLE SWITCH
	THREE WAY SWITCH
	DIMMER SWITCH
	SINGLE RECEPTACLE OUTLET
	DUPLEX RECEPTACLE OUTLET
	240 VOLT RECEPTACLE
	PHONE OUTLET
	CABLE OUTLET
	EXHAUST FAN
	LIGHT WITH E. FAN
	SMOKE/HEAT DETECTOR
	GARAGE DOOR OPENER
	ELECTRIC PANEL
	CEILING MOUNTED LIGHT
P/C	PULL CHAIN LIGHT
	RECESSED LIGHT
	WALL MOUNTED LIGHT
	W.M. MOTION DETECTOR LIGHT
	FLORESCENT LIGHT
	BAR LIGHT

MISC. SYMBOLS

	FROST PROOF HOSE BIB
	FLOOR LINE ABOVE
	STRUCTURAL BEAM/HEADER OR GIRDER TRUSS

DRAWING LIST

A.0	Cover Page
A.1	Elevations
A.2	Elevations
A.3	Foundation Plan
A.4	Main Floor Plan
A.5	Building Sections
A.6	Detail
E.1	Electrical
F.1	Floor Covering



plum
BUILDING SYSTEMS, LLC

PLUM DESIGN SERVICES
1100 ALICE'S ROAD. WAUKEE, IOWA 50263-1100
TELEPHONE 515 978 6260 FAX 515 978 6261

PLUM DESIGN SERVICE, INC. ASSUMES NO RESPONSIBILITY FOR STRUCTURAL OR DIMENSIONAL ERRORS OR OMISSIONS. WE ARE NOT A LICENSED ARCHITECT OR ENGINEER. THESE PLANS ARE PROVIDED ON AN "AS IS" BASIS AND IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR OWNER TO VERIFY AND CHECK ALL NOTES, DETAILS, ELEVATIONS, SECTIONS, AND FLOOR PLANS PRIOR TO CONSTRUCTION. THE CONTRACTOR AND/OR OWNER SHALL NOTIFY PLUM DESIGN SERVICE, INC. IMMEDIATELY IF ANY ERRORS OR OMISSION FOR POSSIBLE CORRECTION ARE IDENTIFIED PRIOR TO START OF CONSTRUCTION. NO WARRANTIES EXPRESS OR IMPLIED INCLUDING COMPLIANCE WITH THIS PLAN WITH APPLICABLE BUILDING CODES REQUIREMENTS ARE MADE.

GENERAL CONSTRUCTION NOTES

1. GENERAL
   A. ALL CONSTRUCTION AND MATERIALS SHALL MEET OR EXCEED IRC 2006, LOCAL BUILDING CODES MAY HAVE DIFFERENT SPECIFICATIONS AND REQUIREMENTS THAN WHAT IS LISTED IN THE IRC2006. THESE LOCAL REQUIREMENTS WILL SUPERSEDE THE IRC 2006. SEE THE LOCAL BUILDING DEPARTMENT FOR CHANGES.
   B. CONTRACTOR TO CONFIRM THE SIZES, SPACING AND SPECIES OF LUMBER OF ALL STRUCTURAL AND FRAMING MEMBERS. ANY STRUCTURAL AND FRAMING MEMBERS NOT INDICATED ARE TO BE SIZED BY OWNER/CONTRACTOR.
   C. THE OWNER/CONTRACTOR IS RESPONSIBLE FOR PREVENTIVE MEASURE OF THE BUILD UP OF MOISTURE OR MOLD
   D. ALL PRODUCTS ARE TO BE INSTALLED PER THE MANUFACTURE'S RECOMMENDATIONS.
   E. ALL MECHANICAL, PLUMBING, AND ELECTRICAL SYSTEMS ARE TO BE DESIGNED BY OTHERS.
2. DESIGN CRITERIA
   A. BUILDING AND STRUCTURES, AND ALL PARTS THEREOF, SHALL BE CONSTRUCTED TO SAFELY SUPPORT ALL LOADS, INCLUDING DEAD LOADS, LIVE LOADS, ROOF LOADS, FLOOD LOADS, SNOW LADDS, WIND LOADS, AND SEISMIC LOADS AS PRESCRIBED BY THIS CODE (R301.1)
   B. TABLE 301.2(1) (IRC 2006, VALUES BASED FROM THE CITY OF DES MOINES, IOWA.

GROUND SNOW LOAD	WIND SPEED (MPH)	SEISMIC DESIGN CATEGORY	SUBJECT TO DAMAGE FROM				WINTER DESIGN TEMP.	ICE SHIELD REQUIRED	FLOOD HAZARDS	AIR FREEZING INDEX	MEAN ANNUAL TEMP
			WEATHERING	FROST LINE DEPTH	TERMITE	DECAY					
30 PSF	90	A	SEVERE	42"	MODERATE TO HEAVY	SLIGHT TO MODERATE	0 F °	YES	NATIONAL FLOOD INSURANCE PROGRAM	1000	49.5 F

   C. MINIMUM LIVE LOADS, (R301.5) IRC 2006

ATTIC WITH LIMITED STORAGE	20 PSF
ATTIC WITHOUT STORAGE	10 PSF
DECKS	40 PSF
EXTERIOR BALCONIES	60 PSF
GUARDRAIL AND HANDRAILS	200 PSF
ROOM OTHER THAN SLEEPING ROOMS	40 PSF
SLEEPING ROOMS	30 PSF
STAIRS	40 PSF
DEFLECTION CRITERIA	
FLOOR LIVE LOAD	L/480
FLOOR TOTAL LOAD	L/360
ROOF LIVE LOAD	L/360
ROOF TOTAL LOAD	L/240

ALL BEAMS SUPPORTING FLOOR OR ROOF LOADS ARE TO BE DESIGNED WITH THE ABOVE DEFLECTION CRITERIA

MINIMUM ROOF LIVE LOADS(R301.6)IRC 2006

ROOF TRUSS LIVE LOAD(Lr)	20 PSF
GROUND SNOW(Pg)	30 PSF
FLAT ROOF SNOW (Pf)	24 PSF
THERMAL CONDITION	Ct = 1.0
TERRAIN EXPOSURE	B
DURATION OF LOAD-SNOW	1.15

UNBALANCED AND SNOW DRIFT LOADING ACCORDING TO ASCE 7-05

WIND DESIGN METHOD:	MWFRS/C-C H/BRD ACSE 7-05
EXPOSURE CATEGORY	B
DURATION OF LOAD-WIND	1.60

   D. DEAD LOADS ANY ADDITIONAL OR CHANGES TO MATERIAL NEEDS TO BE ADJUSTED TO THE BELOW CALCULATIONS.

FLOOR TOP CHORD	
CARPET AND PAD	1.5 PSF
3/8" CERAMIC TILE/0" BACKER BD.	19 PSF
3/4" HARDWOOD FLOOR	4.0 PSF
SUBFLOOR-3/4" OSB OR COM-PLYWOOD	2.0 PSF
1/2 FLOOR TRUSS-A JOIST SYSTEM	1.5 PSF
TOTAL WITH CARPET/PAD	5.5 PSF
TOTAL WITH TILE/BACKER BD.	13.5 PSF
TOTAL WITH HARDWOOD FLOOR	7.5 PSF
FLOOR BOTTOM CHORD	
1/2 FLOOR TRUSS-A JOIST SYSTEM	1.5 PSF
5/8" GYPBOARD	2.8 PSF
MINIMUM FOR MISC MECHANICAL/ELEC.	0.7 PSF
TOTAL	5.0 PSF

ROOF TOP CHORDS	
ROOFING-SHINGLES(220 LBS)/ 2 LAYER	4.40 PSF
30 LBS. FELT	0.30 PSF
1/2" OSB OR COM PLYWOOD	1.65 PSF
1/2 ROOF TRUSS-2X4	1.10 PSF
CORRECTION FOR SLOPE (10/12)	1.55 PSF
TOTAL	9.00 PSF
ROOF-BOTTOM CHORDS	
1/2 ROOF TRUSS-2X4	1.10 PSF
5/8" GYPBOARD	2.8 PSF
MINIMUM FOR MISC MECHANICAL/ELEC.	1.5 PSF
19" BATT BLOWN INSULATION	1.60 PSF
TOTAL	7.00 PSF

3. ROOM REQUIREMENTS
   A. CEILING HEIGHT (R305.1) HABITABLE ROOMS, HALLWAYS, CORRIDORS, BATHROOMS, TOILET ROOM LAUNDRY ROOMS, AND BASEMENTS SHALL HAVE A CEILING HEIGHT OF NOT LESS THAN 7 FEET. THE REQUIRED HEIGHT IS MEASURED FROM FINISH FLOOR TO THE LOWEST PROJECTION FROM THE CEILING.
   -EXCEPTION 1. BEAMS AND GIRDERS SPACED LESS THAN 4 FEET ON CENTER MAY PROJECT NOT MORE THAN 6 INCHES BELOW THE REQUIRED CEILING HGHT.
   2. CEILING IN BASEMENT WITHOUT HABITABLE SPACES MAY PROJECT WITHIN 6 FEET 8 INCHES OF FINISHED FLOOR.
   3. FOR ROOMS WITH SLOPED CEILING, AT LEAST 50 PERCENT OF THE REQUIRED FLOOR AREA OF THE ROOM MUST HAVE A CEILING HEIGHT OF AT LEAST 7 FEET AND NO PORTION OF THE REQUIRED FLOOR AREA MAY HAVE A CEILING HEIGHT, OF LESS THAN 5 FEET.
   4. BATHROOMS SHALL HAVE A MINIMUM CEILING HEIGHT OF 6 FEET 8 INCHES OVER THE FRONT OF THE FIXTURE
   B. ROOM DIMENSIONS (R304.3) THE MINIMUM LENGTH OR WIDTH OF ANY HABITABLE ROOM SHALL NOT BE LESS THAN 7'-0" CLEAR IN ANY HORIZONTAL DIMENSION. THE MINIMUM AREA OF ANY HABITABLE ROOM SHALL NOT BE LESS THAN 70 SQ. FEET, EXCEPT KITCHEN (R304.2).
   C. LIGHT AND VENTILATION (R303) IN HABITABLE ROOMS, PROVIDE NATURAL LIGHT AND VENTILATION WITH OPERABLE WINDOWS. WINDOWS SHALL NOT BE LESS THAN 8% OF THE FLOOR AREA OF EACH ROOM, 1/2 THE REQUIRED WINDOW AREA SHALL BE OPERABLE TO THE EXTERIOR FOR VENTILATION. BATHROOMS MAY HAVE AN OPERABLE WINDOW OF 3 S.F. IN AREA. NON-HABITABLE ROOMS, INCLUDING BATHROOMS, MAY BE VENTILATED WITH EXHAUST FANS AND ARTIFICIAL LIGHT.
   D. EMERGENCY ESCAPE WINDOWS (R310) BASEMENT AND EACH SLEEPING AREA SHALL HAVE AN EMERGENCY ESCAPE WINDOW THAT IS AT LEAST 20" IN WIDTH (NET), 24" IN HEIGHT (NET) WHEN OPEN AND HAVE AN OPERABLE AREA OF AT LEAST 5.7 SQUARE FEET IN AREA. ESCAPE WINDOWS SHALL BE INSTALLED WITH A SILL HEIGHT OF NO MORE THAN 44" ABOVE THE FLOOR. EGRESS WINDOW WELLS MUST PROJECT A MINIMUM OF 36" AND PROVIDED OVER 9 SQ. FT. OF NET CLEAR AREA. LADDERS ARE REQUIRED IF THE WELL IS OVER 44" DEEP. LADDERS SHALL BE A MIN. OF 12" WIDE.
4. BUILDING REQUIREMENTS
   A. ATTIC ACCESS (R317) PROVIDE ACCESS TO ATTIC SPACE WITH AN ACCESS DOOR AT LEAST 22" X 30" IN SIZE, LOCATE THE ACCESS DOOR WHERE THERE IS AT LEAST 30" OF CLEAR HEAD SPACE.
   B. ATTIC MUST BE VENTILATED WITH TOTAL AREA OF ATTIC VENTS AT LEAST 1.0 S.F. (NET) FOR EACH 150 S.F. OF ATTIC AREA TO BE VENTILATED. ATTIC VENTS ARE NOT SHOWN ON THE PLAN.(R806.2)
   C. SMOKE ALARMS ARE REQUIRED IN ALL BEDROOMS, AT ALL HALLWAYS LEADING TO BEDROOMS, AND AT EACH LEVEL INCLUDING THE BASEMENT. ADDITIONAL ALARMS MAY BE REQUIRED IN SEPARATED SPACE OF THE BASEMENT, SEE BUILDING DEPARTMENT. SMOKE ALARMS SHALL BE HARD WIRED TOGETHER IN SERIES WITH BATTERY BACK UP (R317).
   D. STAIRWAY ARE TO BE A MINIMUM OF 36" WIDE (FINISHED)(R311.5.1) WITH A MINIMUM HEADROOM OF 6 FEET 8 INCHES (R311.5.2). THE MAXIMUM RISER IS 7 3/4" (R311.5.3.1) WITH A MINIMUM RUN OF 10" (R311.5.3.2) HANDRAILS SHALL BE PROVIDED ON AT LEAST ONE SIDE OF EACH CONTINUOUS RUN OF TREADS OR FLIGHT WITH 4 OR MORE RISERS (R311.5.6), A FLIGHT OF STAIRS SHALL NOT HAVE A VERTICAL RISE LARGER THAN 12 FEET BETWEEN FLOORS OR LANDINGS(R311.5.4).
   E. PROVIDE GUTTERS, DOWN SPOUTS, AND SPLASH BLOCKS AS NECESSARY.
5. FOUNDATION/CONCRETE
   A. IN AREAS LIKELY TO HAVE EXPANSIVE, COMPRESSIBLE, SHIFTING OR OTHER UNKNOWN SOIL CHARACTERISTICS, THE BUILDING OFFICIAL SHALL DETERMINE WHETHER A SOIL TEST IS REQUIRED. (R401.4) A SOIL CAPACITY OF 2000 PSF IS ASSUMED.
   B. CONCRETE SHALL HAVE A MINIMUM STRENGTH OF 3000 psi AT 28 DAYS. GARAGE FLOOR SLABS SHALL BE 3,500 AT 28 DAYS. PORCHES, CARPORT SLABS AND STEPS EXPOSED TO THE WEATHER SHALL BE 3,500 psi AT 28 DAYS(R402.2). CONCRETE SHALL BE AIR ENTRAINED WITH 5%-7% TOTAL AIR CONTENT.
   C. ALL FOOTING SHALL BE PLACED ON UNDISTURBED SOIL OR CONTROLLED COMPACTED FILL. MINIMUM FOOTING TO BE 16" WIDE X 10"DEEP FOR A 2 STORY BUILDING AND 18" WIDE X 8" DEEP FOR A 1 STORY BUILDING (TABLE 403.1) BOTH WITH 2 CONTINUOUS HORIZONTAL #4 REBAR.
   D. ALL ANCHOR BOLTS SHALL BE 1/2" IN DIAMETER AND SHALL EXTEND A MINIMUM OF 7" INTO CONCRETE. USE TWO BOLTS PER SILL PLATE WITH BOLTS SPACED AT A MAXIMUM OF 6 FEET ON CENTER WITH A MINIMUM OF ONE BOLT NOT MORE THAN 12 INCHES FROM THE END BUT AT LEAST 3.1/0 INCHES FROM END OF SILL PLATE (R403.1.6). ALTERNATE FOUNDATION STRAPS MAY BE USED. SPECIFICATION TO PROVIDE EQUIVALENT ANCHOR TO A 1/2" DIAMETER ANCHOR BOLTS.
   F. CONCRETE FOUNDATION WALLS SHALL BE CONSTRUCTED AS SET FORTH IN TABLE R404.1.1(5). REFER TO TYPICAL WALL SECTION IN THIS PLAN FOR SPECIFICATION.
6. WOOD FRAMING
   A. ROOF, FLOOR, AND WALL SHEATHING: APA RATED SHEATHING.
   B. WALL STUDS: MINIMUM SPF STUD OR DOUGLAS FIR LARCH STUD.
   C. WALL PLATES: MINIMUM SPF #2 OR BETTER.
   D. DIMENSIONAL HEADERS: #2 DOUGLAS FIR OR BETTER.
   E. LVL HEADERS: 3950 Fb/20E MINIMUM.
   F. JOIST UNDER PARALLEL BEARING PARTITIONS SHALL BE OF ADEQUATE SIZE TO SUPPORT THE LOAD. (R502.4)
   G. THE ENDS OF EACH JOIST, BEAM, OR GIRDER SHALL HAVE NOT LESS THAN 1.5 INCHES OF BEARING ON WOOD OR METAL AND NOT LESS THAN 3 INCHES ON CONCRETE. (R502.6)
   H. WOOD TRUSSES SHALL BE DESIGNED AND MANUFACTURED IN ACCORDANCE WITH ANSI/TPI-1. REFER TO THE INDIVIDUAL TRUSS DESIGN DRAWINGS FOR WEB BRACING AND MULTI-CONNECTION OF GIRDERS. BCSI 1-03 SHOULD BE REFER TO FOR HANDLING INSTALLATION AND BRACING OF METAL PLATE TRUSSES.
   I. NO CUTS, NOTCHES, AND HOLES BORED INTO TRUSSES, STRUCTURAL COMPOSITE LUMBER, GLUE-LAMINATED MEMBERS, OR A JOIST ARE PROHIBITED EXCEPT WHERE PERMITTED BY THE MANUFACTURER'S RECOMMENDATION OR DESIGN BY PROFESSIONAL. (R502.8.2)
   J. FIRE BLOCKING SHALL BE PROVIDED TO CUT OFF ALL CONCEALED DRAFT OPENING (BOTH VERTICAL AND HORIZONTAL) AND TO FORM AN EFFECTIVE FIRE BARRIER BETWEEN STORIES, AND BETWEEN A TOP STORY AND ROOF SPACE. (R602.8)
   K. ALL EXTERIOR WALLS SHALL BE BRACED IN ACCORDANCE WITH SECTION R602.10, MINIMUM 3/8" PANEL SHEATHING.
   L. THE ALLOWABLE SPANS OF GIRDERS/HEADERS FABRICATED FROM DIMENSIONAL LUMBER ON EXTERIOR WALLS SHALL NOT EXCEED THE VALUES OF TABLE R502.5(1)

TABLE R502.5(1)

GIRDERS AND HEADERS SUPPORTING	GROUND SNOW LOAD 30 PSF					
	BUILDING WIDTH (FT)					
	20		28		36	
	SIZE	SPAN	SIZE	SPAN	SIZE	SPAN
ROOF AND CEILING	2x8	3'-5"	2x10	3'-11"	2x12	4'-6"
	2x10	3'-0"	2x12	3'-5"	2x12	3'-11"
	2x12	2'-6"	2x12	2'-11"	2x12	3'-4"
	2x10	6'-11"	2x12	8'-0"	2x12	9'-2"
	2x12	5'-11"	2x12	7'-0"	2x12	8'-0"
ROOF, CEILING AND ONE CENTER BEARING FLOOR	2x8	5'-4"	2x10	6'-10"	2x12	7'-11"
	2x10	4'-7"	2x12	5'-11"	2x12	6'-11"
	2x12	4'-1"	2x12	5'-1"	2x12	5'-11"
	2x10	9'-10"	2x12	11'-4"	2x12	12'-11"
	2x12	8'-5"	2x12	9'-11"	2x12	11'-4"
ROOF, CEILING AND ONE CLEAR SPAN FLOOR	2x8	4'-1"	2x10	5'-2"	2x12	6'-0"
	2x10	3'-6"	2x12	4'-6"	2x12	5'-3"
	2x12	3'-2"	2x12	3'-11"	2x12	4'-11"
	2x10	7'-6"	2x12	8'-11"	2x12	10'-2"
	2x12	6'-2"	2x12	7'-8"	2x12	8'-11"

TABLE R502.5(2)

GIRDERS AND HEADERS SUPPORTING	GROUND SNOW LOAD 30 PSF					
	BUILDING WIDTH (FT)					
	20		28		36	
	SIZE	SPAN	SIZE	SPAN	SIZE	SPAN
ROOF, CEILING AND ONE CLEAR SPAN FLOOR	2x8	4'-8"	2x10	6'-2"	2x12	7'-1"
	2x10	4'-0"	2x12	5'-11"	2x12	6'-7"
	2x12	3'-6"	2x12	5'-2"	2x12	5'-11"
	2x10	8'-2"	2x12	9'-8"	2x12	10'-11"
	2x12	7'-1"	2x12	8'-11"	2x12	10'-2"
ROOF, CEILING AND TWO CENTER BEARING FLOORS	2x8	3'-10"	2x10	5'-1"	2x12	5'-11"
	2x10	3'-3"	2x12	4'-11"	2x12	5'-11"
	2x12	2'-9"	2x12	4'-2"	2x12	4'-11"
	2x10	6'-10"	2x12	8'-2"	2x12	9'-3"
	2x12	5'-11"	2x12	6'-11"	2x12	8'-0"

A SPACE WHERE SNOW IS NOT ANTICIPATED
B THE LENGTH MEASURED PARALLEL TO THE RIDGE
C NUMBER OF JACK STUDS TO SUPPORT EACH END OF HEADER. NUMBER OF HEADER JACKS MAY BE REDUCED BY ONE FOR EACH 2 FEET OF HEADER LENGTH LESS THAN THE TABLE VALUE

   M. TRUSSES SHALL BE CONNECTED TO WALL BY USE OF APPROVED CONNECTORS HAVING A RESISTANCE TO UPLIFT OF NOT LESS THAN 175 POUNDS AND PER THE MANUFACTURE SPECIFICATIONS.
   N. PROTECTION FROM DECAY SHALL BE PROVIDED IN THE FOLLOWING LOCATION BY THE USE OF NATURALLY DURABLE OR PRESERVATIVE TREATED LUMBER. (R319.1)
   1. ALL WOOD FRAMING THAT REST ON CONCRETE EXTERIOR FOUNDATION WALLS AND ARE LESS THAN 8" FROM THE EXPOSED GROUND.
   2. SILLS AND SLEEPERS ON A CONCRETE SLAB THAT IS IN DIRECT CONTACT WITH THE GROUND UNLESS SEPARATED FROM SUCH SLAB BY AN IMPERVIOUS MOISTURE BARRIER.
   3. THE ENDS OF WOOD GIRDER ENTERING EXTERIOR CONCRETE WALLS HAVING CLEARANCE OF LESS THAN .5 INCH ON TOPS, SIDES AND ENDS.
   4. WOOD SIDING, SHEATHING AND WALL FRAMING ON THE EXTERIOR OF A BUILDING HAVING A CLEARANCE OF LESS THAN 6 INCHES FROM THE GROUND
   5. ALL LUMBER IN CONTACT WITH THE GROUND, EMBEDDED IN CONCRETE IN DIRECT CONTACT WITH THE GROUND OR EMBEDDED IN CONCRETE EXPOSED TO THE WEATHER THAT SUPPORTS PERMANENT STRUCTURES (R319.1.2)
   O. ALL RIM AND BOX JOIST SPACES BETWEEN TOP OF THE FOUNDATION WALL AND FLOOR/ROOF LINE SHALL BE INSULATED WITH THE SAME MATERIAL USED FOR EXTERIOR WALLS. ALL EXTERIOR CORNERS AND INTERIOR PARTIONS TO EXTERIOR WALLS THAT ARE CLOSED OFF TO FUTURE INSULATION MUST BE INSULATED DURING FRAMING OF WALL.
   P. ALL NAILING AND FASTENING SHOULD COMPLY WITH THE IRC TABLE R602.3(1) "FASTENER SCHEDULE FOR SCTRUCTURAL MEMBERS"
7. STRUCTURAL STEEL
   A. ALL STRUCTURAL STEEL SHALL CONFORM WITH ASTM SPECIFICATION A992 GRADE-50 OR EQUAL AND SHALL HAVE BRIDGE CLIPPING AT 4 FEET ON CENTER TO RESIST LATERAL DEFLECTION.
   B. ALL FRAMING TO BE ATTACHED TO STRUCTURAL STEEL IN ACCORDANCE WITH GOVERNING CODES.

NOT FOR CONSTRUCTION

THESE PLANS HAVE NOT BEEN APPROVED FOR FINAL CONSTRUCTION-
PLEASE CALL OR SEE OWNER FOR UPDATED PLANS.

Classic Builders
Jackson Base Plan-A
Villas @ Stone Haven

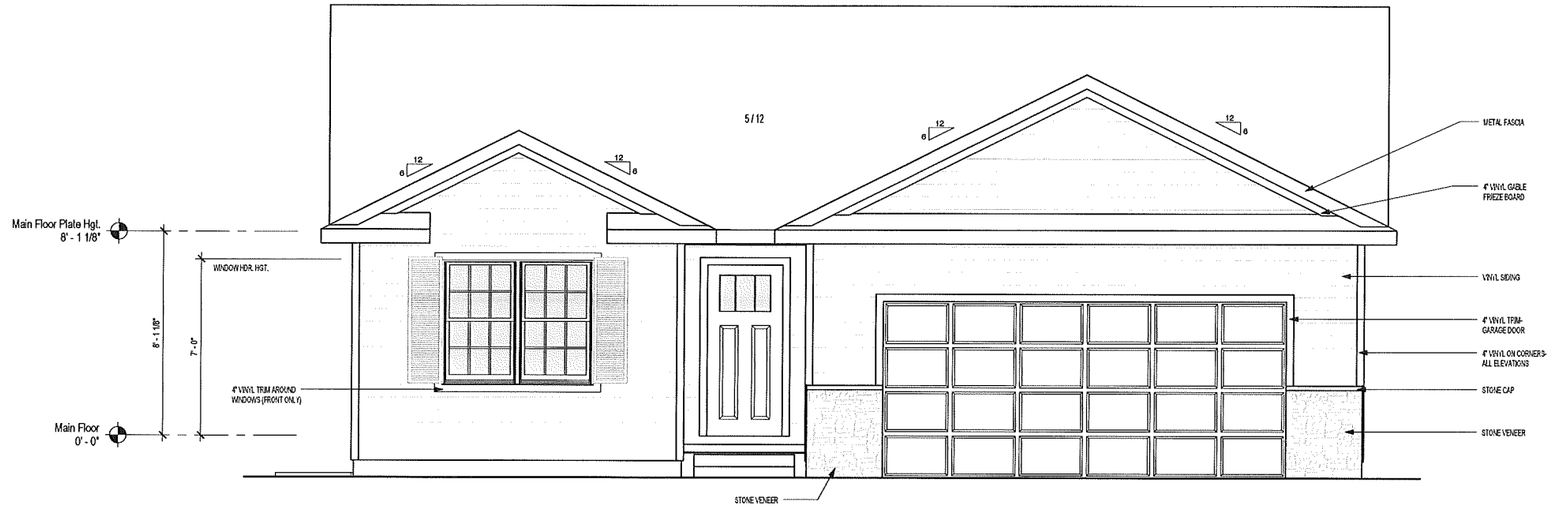
PROJECT ID: PDS 3005

ISSUE DATE:
DATE: 05-06-15
DATE: 11-13-15
DATE:
DATE:

REVISIONS:
DATE:
DATE:
DATE:
DATE:

Cover Page
As indicated

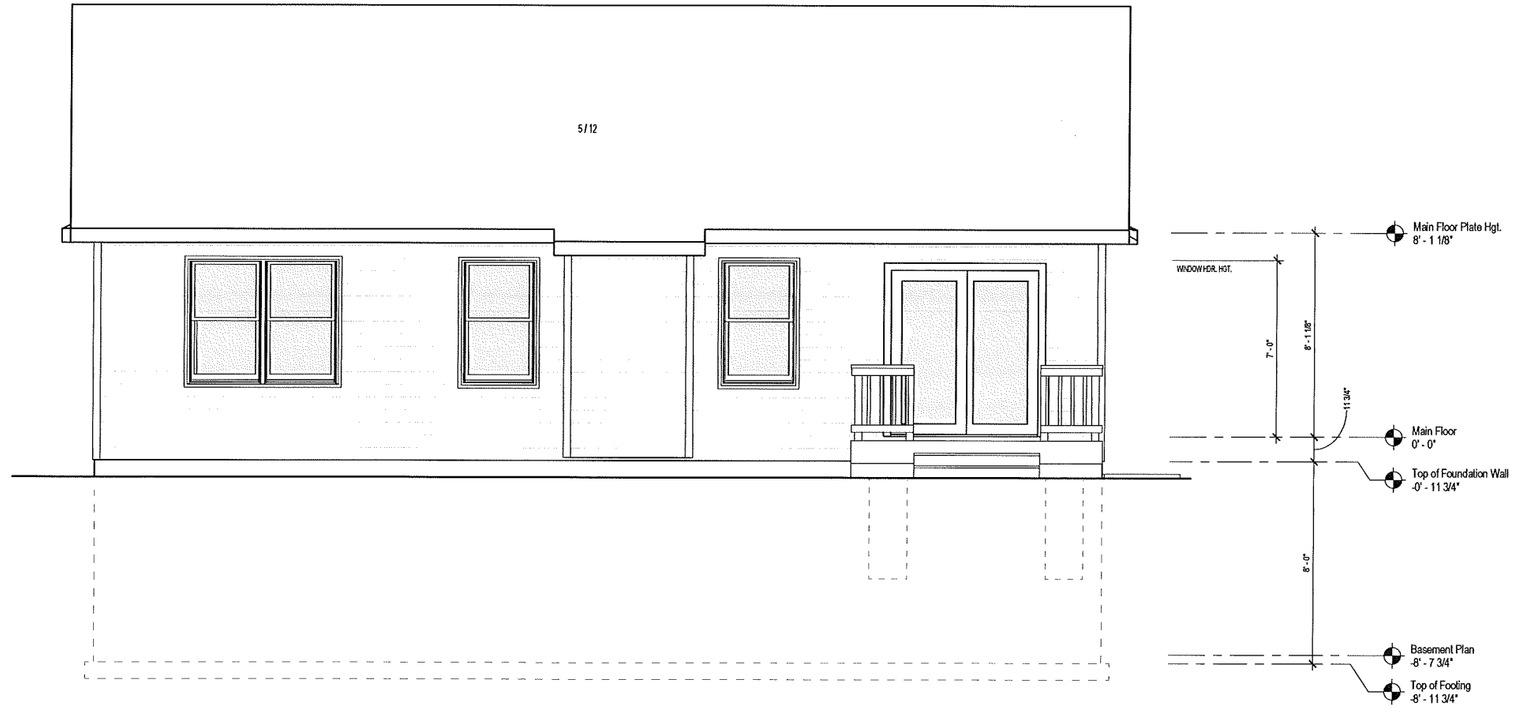
A.0



1 FRONT ELEVATION
Scale: 3/8" = 1'-0"

ESTIMATED WALL...	
Lap Siding	1909 SF
Stone Veneer	23 SF

* SQUARE FOOTAGE OF GABLE ACCORDED TO WALL FROM THE EXPOSED SURFACE OF THE WALL
1. THE HIGH GABLES SURFACES BELOW DECORATIVE TRUSS PICKS
2. THE AREA EXCLUDES WINDOW AND DOOR OPENINGS



2 REAR ELEVATION
Scale: 3/8" = 1'-0"

plum
BUILDING SYSTEMS, LLC

PLUM DESIGN SERVICES
1100 ALICE'S ROAD. WAUKEE, IOWA 50263-1100
TELEPHONE 515 978 6260 FAX 515 978 6261

PLUM DESIGN SERVICE, INC. ASSUMES NO RESPONSIBILITY FOR STRUCTURAL OR DIMENSIONAL ERRORS OR OMISSIONS. WE ARE NOT A LICENSED ARCHITECT OR ENGINEER. THESE PLANS ARE PROVIDED ON AN "AS IS" BASIS AND IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR OWNER TO VERIFY AND CHECK ALL NOTES, DETAILS, ELEVATIONS, SECTIONS, AND FLOOR PLANS PRIOR TO CONSTRUCTION. THE CONTRACTOR AND/OR OWNER SHALL NOTIFY PLUM DESIGN SERVICE, INC. IMMEDIATELY IF ANY ERRORS OR OMISSION FOR POSSIBLE CORRECTION ARE IDENTIFIED PRIOR TO START OF CONSTRUCTION. NO WARRANTIES EXPRESS OR IMPLIED INCLUDING COMPLIANCE WITH THIS PLAN WITH APPLICABLE BUILDING CODES REQUIREMENTS ARE MADE.

Classic Builders
Jackson Base Plan-A
Villas @ Stone Haven

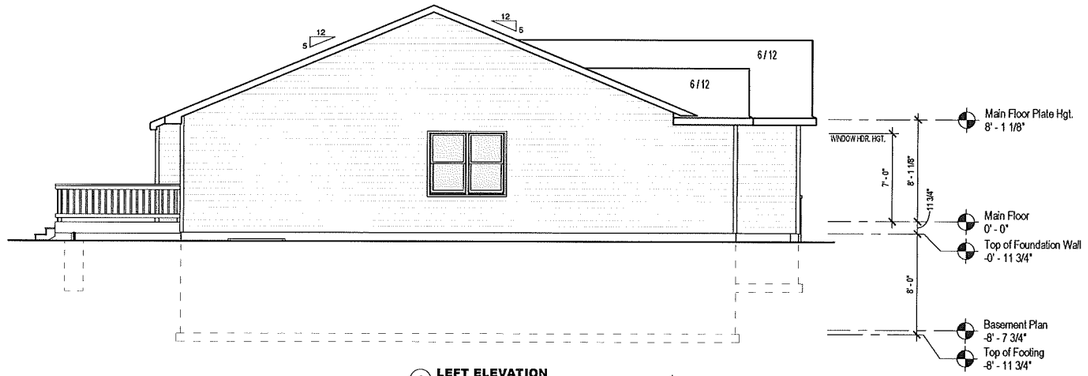
PROJECT ID: PDS 3005

ISSUE DATE:
DATE: 05-06-15
DATE: 11-13-15
DATE:
DATE:

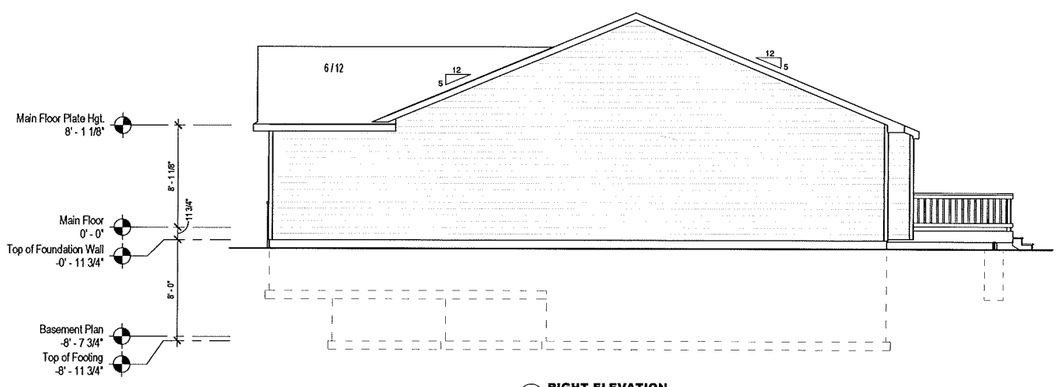
REVISIONS:
DATE:
DATE:
DATE:
DATE:

Elevations
3/8" = 1'-0"

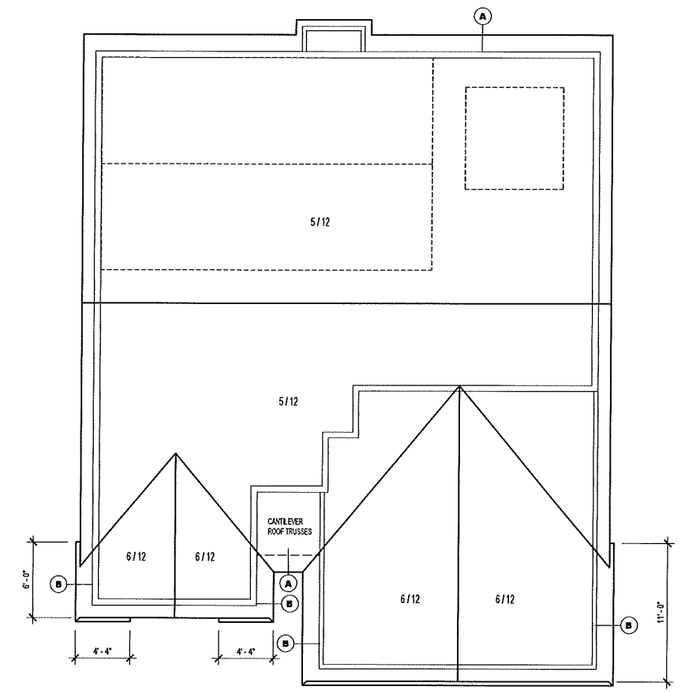
A.1



1 **LEFT ELEVATION**
Scale: 3/16" = 1'-0"



2 **RIGHT ELEVATION**
Scale: 3/16" = 1'-0"



3 **ROOF PLAN**
Scale: 3/16" = 1'-0"

ESTIMATED ROOF SF
2311 SF

- SQUARE FOOTAGE OF ROOF IS TAKEN FROM THE HEIGHT OF THE ROOF, THE HEIGHT IS CALCULATED WHEN THE ROOF APPROACHES THE FLOOR, 2 FOOT PITCH OR LESS IS NOT CALCULATED

ROOF PLAN LEGEND				
SYMBOL	WALL HGT.	PITCH	OVERHANG	HEEL HGT.
A	8'-1 1/8"	5/12	1'-4"	7"
B	8'-1 1/8"	5/12	1'-4"	8 5/16"
ALL RAKE OVERHANGS ARE 12" UNLESS NOTED				

plum
BUILDING SYSTEMS, LLC

PLUM DESIGN SERVICES
1100 ALICE'S ROAD, WAUKEE, IOWA 50263-1100
TELEPHONE 515 978 6260 FAX 515 978 6261

PLUM DESIGN SERVICE, INC. ASSUMES NO RESPONSIBILITY FOR STRUCTURAL OR DIMENSIONAL ERRORS OR OMISSIONS. WE ARE NOT A LICENSED ARCHITECT OR ENGINEER. THESE PLANS ARE PROVIDED ON AN "AS IS" BASIS AND IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR OWNER TO VERIFY AND CHECK ALL NOTES, DETAILS, ELEVATIONS, SECTIONS, AND FLOOR PLANS PRIOR TO CONSTRUCTION. THE CONTRACTOR AND/OR OWNER SHALL NOTIFY PLUM DESIGN SERVICE, INC. IMMEDIATELY IF ANY ERRORS OR OMISSION FOR POSSIBLE CORRECTION ARE IDENTIFIED PRIOR TO START OF CONSTRUCTION. NO WARRANTIES EXPRESS OR IMPLIED INCLUDING COMPLIANCE WITH THIS PLAN WITH APPLICABLE BUILDING CODES REQUIREMENTS ARE MADE.

Classic Builders
Jackson Base Plan-A
Villas @ Stone Haven

PROJECT ID: PDS 3005

ISSUE DATE:
DATE: 05-06-15
DATE: 11-13-15
DATE:
DATE:

REVISIONS:
DATE:
DATE:
DATE:
DATE:

Elevations
As indicated

A.2

ABBREVIATIONS

ADJ	ADJUSTABLE
AWN.	AWNING
BTM.	BOTTOM
BSMT.	BASEMENT
BTW.	BETWEEN
CA	CASEMENT
CANT.	CANTILEVER
CAB.	CABINET
℄	CENTER LINE
CLG	CEILING
C.O.	CASED OPENING
COL.	COLUMN
CONC.	CONCRETE
D	DRYER
DIA.	DIAMETER
DN	DOWN
DH	DOUBLE HUNG
DW	DISHWASHER
F.D.	FLOOR DRAIN
FLR.	FLOOR
FT.	FEET
FURN.	FURNACE
HDR.	HEADER
HDWD	HARDWOOD
INSUL.	INSULATION
JST.	JOIST
LVL	LAMINATED VENEER LUMBER
LIN.	LINEN
MAX.	MAXIMUM
MIN.	MINIMUM
O/C	ON CENTER
O.H.D.	OVERHEAD DOOR
OPNG.	OPENING
PED.	PEDESTAL
N.T.S.	NOT TO SCALE
REF	REFRIGERATOR
REQ	REQUIRED
RO	ROUGH OPENING
RM	ROOM
SH	SINGLE HUNG
S & R	SHELF AND ROD
S.F.	SQUARE FEET
S.P.	SUMP PIT
STL	STEEL
TYP.	TYPICAL
TRANS.	TRANSOM
UNEX.	UNEXCAVATED
VAN.	VANITY
W	WASHER
W/	WITH
W.H.	WATER HEATER

ELECTRIC SYMBOLS

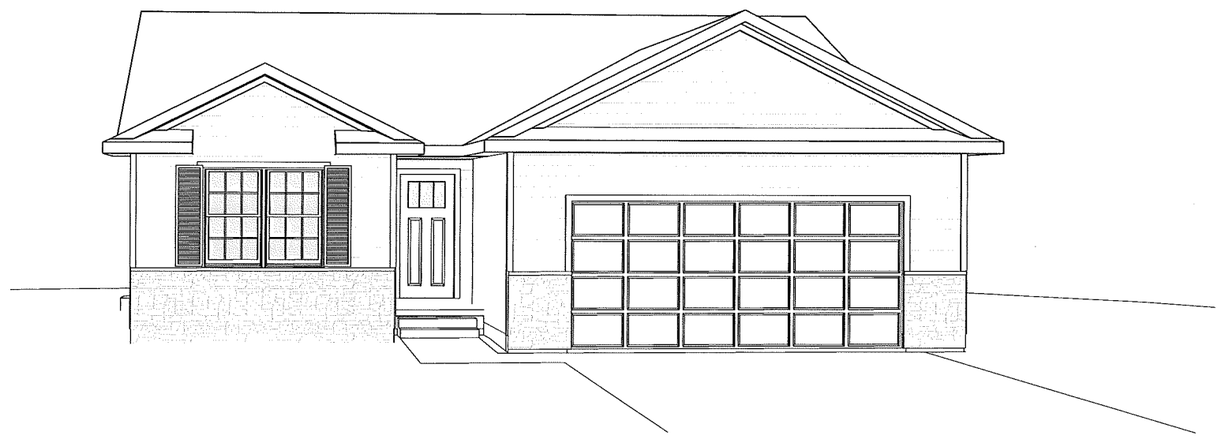
- SINGLE POLE SWITCH
- THREE WAY SWITCH
- DIMMER SWITCH
- SINGLE RECEPTACLE OUTLET
- DUPLEX RECEPTACLE OUTLET
- 240 VOLT RECEPTACLE
- PHONE OUTLET
- CABLE OUTLET
- EXHAUST FAN
- LIGHT WITH E. FAN
- SMOKE/HEAT DETECTOR
- GARAGE DOOR OPENER
- ELECTRIC PANEL
- CEILING MOUNTED LIGHT
- PULL CHAIN LIGHT
- RECESSED LIGHT
- WALL MOUNTED LIGHT
- W.M. MOTION DETECTOR LIGHT
- FLORESCENT LIGHT
- BAR LIGHT

MISC. SYMBOLS

- FROST PROOF HOSE BIB
- FLOOR LINE ABOVE
- STRUCTURAL BEAM/HEADER OR GIRDER TRUSS

DRAWING LIST

A.0	Cover Page
A.1	Elevations
A.2	Elevations
A.3	Foundation Plan
A.4	Main Floor Plan
A.5	Building Sections
A.6	Detail
E.1	Electrical
F.1	Floor Covering



plum BUILDING SYSTEMS, LLC

PLUM DESIGN SERVICES
1100 ALICE'S ROAD WAUKEE, IOWA 50263-1100
TELEPHONE 515 978 6260 FAX 515 978 6261

PLUM DESIGN SERVICE, INC. ASSUMES NO RESPONSIBILITY FOR STRUCTURAL OR DIMENSIONAL ERRORS OR OMISSIONS. WE ARE NOT A LICENSED ARCHITECT OR ENGINEER. THESE PLANS ARE PROVIDED ON AN "AS IS" BASIS AND IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR OWNER TO VERIFY AND CHECK ALL NOTES, DETAILS, ELEVATIONS, SECTIONS, AND FLOOR PLANS PRIOR TO CONSTRUCTION. THE CONTRACTOR AND/OR OWNER SHALL NOTIFY PLUM DESIGN SERVICE, INC. IMMEDIATELY IF ANY ERRORS OR OMISSION FOR POSSIBLE CORRECTION ARE IDENTIFIED PRIOR TO START OF CONSTRUCTION. NO WARRANTIES EXPRESS OR IMPLIED INCLUDING COMPLIANCE WITH THIS PLAN WITH APPLICABLE BUILDING CODES REQUIREMENTS ARE MADE.

GENERAL CONSTRUCTION NOTES

1. GENERAL
   - A. ALL CONSTRUCTION AND MATERIALS SHALL MEET OR EXCEED IRC 2006, LOCAL BUILDING CODES MAY HAVE DIFFERENT SPECIFICATIONS AND REQUIREMENTS THAN WHAT IS LISTED IN THE IRC2006, THESE LOCAL REQUIREMENTS WILL SUPERSEDE THE IRC 2006. SEE THE LOCAL BUILDING DEPARTMENT FOR CHANGES.
   - B. CONTRACTOR TO CONFIRM THE SIZES, SPACING AND SPECIES OF LUMBER OF ALL STRUCTURAL AND FRAMING MEMBERS. ANY STRUCTURAL AND FRAMING MEMBERS NOT INDICATED ARE TO BE SIZED BY OWNER/CONTRACTOR.
   - C. THE OWNER/CONTRACTOR IS RESPONSIBLE FOR PREVENTIVE MEASURE OF THE BUILD UP OF MOISTURE ON MOLD
   - D. ALL PRODUCTS ARE TO BE INSTALLED PER THE MANUFACTURE'S RECOMMENDATIONS.
   - E. ALL MECHANICAL, PLUMBING, AND ELECTRICAL SYSTEMS ARE TO BE DESIGNED BY OTHERS.
2. DESIGN CRITERIA
   - A. BUILDING AND STRUCTURES, AND ALL PARTS THEREOF, SHALL BE CONSTRUCTED TO SAFELY SUPPORT ALL LOADS, INCLUDING DEAD LOADS, LIVE LOADS, ROOF LOADS, FLOOD LOADS, SNOW LOADS, WIND LOADS, AND SEISMIC LOADS AS PRESCRIBED BY THIS CODE (R301.1)
   - B. TABLE 301.2(1) IRC 2006, VALUES BASED FROM THE CITY OF DES MOINES, IOWA.

GROUND SNOW LOAD	WIND SPEED (mph)	SEISMIC DESIGN CATEGORY	SUBJECT TO DAMAGE FROM				WINTER DESIGN TEMP.	ICE BARRIER UNDERLAYMENT REQUIRED	FLOOD HAZARDS	AIR FREEZING INDEX	MEAN ANNUAL TEMP
			WEATHERING	FROST LINE DEPTH	TERMITE	DECAY					
30 PSF	90	A	SEVERE	42"	MODERATE TO HEAVY	SLIGHT TO MODERATE	-4 F°	YES	NFIRM/ FIRM	1518	48.6 F

- C. MINIMUM LIVE LOADS, (R301.5) IRC 2006

ATTIC WITH LIMITED STORAGE	20 PSF
ATTIC WITHOUT STORAGE	10 PSF
DECKS	40 PSF
EXTERIOR BALCONIES	60 PSF
GUARDRAIL AND HANDRAILS	200 PSF
ROOM OTHER THAN SLEEPING ROOMS	40 PSF
SLEEPING ROOMS	30 PSF
STAIRS	40 PSF
DEFLECTION CRITERIA	
FLOOR LIVE LOAD	L/480
FLOOR TOTAL LOAD	L/360
ROOF LIVE LOAD	L/360
ROOF TOTAL LOAD	L/240

ALL BEAMS SUPPORTING FLOOR OR ROOF LOADS ARE TO BE DESIGNED WITH THE ABOVE DEFLECTION CRITERIA

MINIMUM ROOF LIVE LOADS(R301.6) IRC 2006	
ROOF TRUSS LIVE LOAD (L_r)	20 PSF
GROUND SNOW (P_g)	30 PSF
FLAT ROOF SNOW (P_f)	24 PSF
THERMAL CONDITION	C_t = 1.0
TERRAIN EXPOSURE	B
DURATION OF LOAD-SNOW	1.15
UNBALANCED AND SNOW DRIFT LOADING ACCORDING TO ASCE 7-05	
WIND DESIGN METHOD:	MWFRSC-C HYBRID ACSE 7-05
EXPOSURE CATEGORY	B
DURATION OF LOAD-WIND	1.60

- D. DEAD LOADS ANY ADDITIONAL OR CHANGES TO MATERIAL NEEDS TO BE ADJUSTED TO THE BELOW CALCULATIONS.

FLOOR-TOP CHORD	
CARPET AND PAD	1.5 PSF
3/8" CERAMIC TILE/1/2" BACKER BD.	10 PSF
3/4" HARDWOOD FLOOR	4.0 PSF
SUBFLOOR-3/4" OSB OR COM-PLYWOOD	2.0 PSF
1/2 FLOOR TRUSS-JOIST SYSTEM	1.5 PSF
TOTAL WITH CARPET/PAD	5.5 PSF
TOTAL WITH TILE/BACKER BD.	13.5 PSF
TOTAL WITH HARDWOOD FLOOR	7.5 PSF
FLOOR-BOTTOM CHORD	
1/2 FLOOR TRUSS-JOIST SYSTEM	1.5 PSF
5/8" GYPBOARD	2.0 PSF
MINIMUM FOR MISC MECHANICAL/ELEC.	0.7 PSF
TOTAL	5.0 PSF

ROOF-TOP CHORDS	
ROOFING-SHINGLES(220 LBS) 2 LAYER	4.40 PSF
30 LBS. FELT	0.30 PSF
1/2" OSB OR COM PLYWOOD	1.65 PSF
1/2 ROOF TRUSS-2X4	1.10 PSF
CORRECTION FOR SLOPE (12/12)	1.55 PSF
TOTAL	9.00 PSF
ROOF-BOTTOM CHORDS	
1/2 ROOF TRUSS-2X4	1.10 PSF
5/8" GYPBOARD	2.0 PSF
MINIMUM FOR MISC MECHANICAL/ELEC.	1.5 PSF
19" BATTIE/LOWN INSULATION	1.60 PSF
TOTAL	7.00 PSF

3. ROOM REQUIREMENTS
   - A. CEILING HEIGHT (R305.1) HABITABLE ROOMS, HALLWAYS, CORRIDORS, BATHROOMS, TOILET ROOM LAUNDRY ROOMS, AND BASEMENTS SHALL HAVE A CEILING HEIGHT OF NOT LESS THAN 7 FEET. THE REQUIRED HEIGHT IS MEASURED FROM FINISH FLOOR TO THE LOWEST PROJECTION FROM THE CEILING.
     - -EXCEPTION 1. BEAMS AND GIRDERS SPACED LESS THAN 4 FEET ON CENTER MAY PROJECT NOT MORE THAN 6 INCHES BELOW THE REQUIRED CEILING HGT.
     - 2. CEILING IN BASEMENT WITHOUT HABITABLE SPACES MAY PROJECT WITHIN 6 FEET 8 INCHES OF FINISHED FLOOR.
     - 3. FOR ROOMS WITH SLOPED CEILING, AT LEAST 50 PERCENT OF THE REQUIRED FLOOR AREA OF THE ROOM MUST HAVE A CEILING HEIGHT OF AT LEAST 7 FEET AND NO PORTION OF THE REQUIRED FLOOR AREA MAY HAVE A CEILING, HEIGHT, OF LESS THAN 5 FEET.
     - 4. BATHROOMS SHALL HAVE A MINIMUM CEILING HEIGHT OF 6 FEET 8 INCHES OVER THE FRONT OF THE FIXTURE
   - B. ROOM DIMENSIONS (R304.1) THE MINIMUM LENGTH OR WIDTH OF ANY HABITABLE ROOM SHALL NOT BE LESS THAN 7'-0" CLEAR IN ANY HORIZONTAL DIMENSION. THE MINIMUM AREA OF ANY HABITABLE ROOM SHALL NOT BE LESS THAN 70 SQ. FEET, EXCEPT KITCHEN (R304.2).
   - C. LIGHT AND VENTILATION (R303) IN HABITABLE ROOMS, PROVIDE NATURAL LIGHT AND VENTILATION WITH OPERABLE WINDOWS. WINDOWS SHALL NOT BE LESS THAN 8% OF THE FLOOR AREA OF EACH ROOM, 1/2 THE REQUIRED WINDOW AREA SHALL BE OPERABLE TO THE EXTERIOR FOR VENTILATION. BATHROOMS MAY HAVE AN OPERABLE WINDOW OF 3 S.F. IN AREA. NON-HABITABLE ROOMS, INCLUDING BATHROOMS, MAY BE VENTILATED WITH EXHAUST FANS AND ARTIFICIAL LIGHT.
   - D. EMERGENCY ESCAPE WINDOWS (R310). BASEMENT AND EACH SLEEPING AREA SHALL HAVE AN EMERGENCY ESCAPE WINDOW THAT IS AT LEAST 20" IN WIDTH (NET), 24" IN HEIGHT (NET) WHEN OPEN AND HAVE AN OPERABLE AREA OF AT LEAST 5.7 SQUARE FEET IN AREA. ESCAPE WINDOWS SHALL BE INSTALLED WITH A SILL HEIGHT OF NO MORE THAN 44" ABOVE THE FLOOR. EGRESS WINDOW WELLS MUST PROJECT A MINIMUM OF 36" AND PROVIDED OVER 9 SQ. FT. OF NET CLEAR AREA. LADDERS ARE REQUIRED IF THE WELL IS OVER 44" DEEP. LADDERS SHALL BE A MIN. OF 12" WIDE.
4. BUILDING REQUIREMENTS
   - A. ATTIC ACCESS (R807) PROVIDE ACCESS TO ATTIC SPACE WITH AN ACCESS DOOR AT LEAST 22" X 30" IN SIZE. LOCATE THE ACCESS DOOR WHERE THERE IS AT LEAST 30" OF CLEAR HEAD SPACE.
   - B. ATTIC MUST BE VENTILATED WITH TOTAL AREA OF ATTIC VENTS AT LEAST 1 S.F. (NET) FOR EACH 150 S.F. OF ATTIC AREA TO BE VENTILATED. ATTIC VENTS ARE NOT SHOWN ON THE PLAN.(R806.2)
   - C. SMOKE ALARMS ARE REQUIRED IN ALL BEDROOMS, AT ALL HALLWAYS LEADING TO BEDROOMS, AND AT EACH LEVEL INCLUDING THE BASEMENT. ADDITIONAL ALARMS MAY BE REQUIRED IN SEPARATED SPACE OF THE BASEMENT. SEE BUILDING DEPARTMENT. SMOKE ALARMS SHALL BE HARD WIRED TOGETHER IN SERIES WITH BATTERY BACK UP (R313).
   - D. STAIRWAY ARE TO BE A MINIMUM OF 36" WIDE (FINISHED) (R311.5.1) WITH A MINIMUM HEADROOM OF 6 FEET 8 INCHES (R311.5.2). THE MAXIMUM RISER IS 7 3/4" (R311.5.3.1) WITH A MINIMUM RUN OF 10" (R311.5.3.2) HANDRAILS SHALL BE PROVIDED ON AT LEAST ONE SIDE OF EACH CONTINUOUS RUN OF TREADS OR FLIGHT WITH 4 OR MORE RISERS (R311.5.6). A FLIGHT OF STAIRS SHALL NOT HAVE A VERTICAL RISE LARGER THAN 12 FEET BETWEEN FLOORS OR LANDINGS (R311.5.4).
   - E. PROVIDE G.I. GUTTERS, DOWN SPOUTS, AND SPLASH BLOCKS AS NECESSARY.
5. FOUNDATION/CONCRETE
   - A. IN AREAS LIKELY TO HAVE EXPANSIVE, COMPRESSIBLE, SHIFTING OR OTHER UNKNOWN SOIL CHARACTERISTICS, THE BUILDING OFFICIAL SHALL DETERMINE WHETHER A SOIL TEST IS REQUIRED. (R401.4) A SOIL CAPACITY OF 2000 PSF IS ASSUMED.
   - B. CONCRETE SHALL HAVE A MINIMUM STRENGTH OF 3000 psi AT 28 DAYS. GARAGE FLOOR SLABS SHALL BE 3,500 AT 28 DAYS. PORCHES, CARPORT SLABS AND STEPS EXPOSED TO THE WEATHER SHALL BE 3,500 psi AT 28 DAYS.(R402.2), CONCRETE SHALL BE AIR ENTRAINED WITH 5%-7% TOTAL AIR CONTENT.
   - C. ALL FOOTING SHALL BE PLACED ON UNDISTURBED SOIL OR CONTROLLED COMPACTED FILL. MINIMUM FOOTING TO BE 16" WIDE X 8"DEEP FOR A 2 STORY BUILDING AND 18" WIDE X 8" DEEP FOR A 3 STORY BUILDING (TABLE 403.1) BOTH WITH 2 CONTINUOUS HORIZONTAL #4 REBAR.
   - D. ALL ANCHOR BOLTS SHALL BE 1/2" IN DIAMETER AND SHALL EXTEND A MINIMUM OF 7" INTO CONCRETE. USE TWO BOLTS PER SILL PLATE WITH BOLTS SPACED AT A MAXIMUM OF 6 FEET ON CENTER WITH A MINIMUM OF ONE BOLT NOT MORE THAN 12 INCHES FROM THE END BUT AT LEAST 3 1/2 INCHES FROM END OF SILL PLATE (R403.1.6). ALTERNATE FOUNDATION STRAPS MAY BE USED, SPECIFICATION TO PROVIDE EQUIVALENT ANCHOR TO A 1/2" DIAMETER ANCHOR BOLTS.
   - F. CONCRETE FOUNDATION WALLS SHALL BE CONSTRUCTED AS SET FORTH IN TABLE R404.1.1(1). REFER TO TYPICAL WALL SECTION IN THIS PLAN FOR SPECIFICATION.
6. WOOD FRAMING
   - A. ROOF, FLOOR, AND WALL SHEATHING: APA RATED SHEATHING.
   - B. WALL STUDS: MINIMUM SPF STUD OR DOUGLAS FIR LARCH STUD.
   - C. WALL PLATES: MINIMUM SPF #2 OR BETTER.
   - D. DIMENSIONAL HEADERS: #2 DOUGLAS FIR OR BETTER.
   - E. LVL HEADERS: 1.9E9 PSI OR MINIMUM.
   - F. JOIST UNDER PARALLEL BEARING PARTITIONS SHALL BE OF ADEQUATE SIZE TO SUPPORT THE LOAD. (R502.4)
   - G. THE ENDS OF EACH JOIST, BEAM, OR GIRDER SHALL HAVE NOT LESS THAN 1.5 INCHES OF BEARING ON WOOD OR METAL AND NOT LESS THAN 3 INCHES ON CONCRETE. (R502.6)
   - H. WOOD TRUSSES SHALL BE DESIGNED AND MANUFACTURED IN ACCORDANCE WITH ANSI/TPI-1. REFER TO THE INDIVIDUAL TRUSS DESIGN DRAWINGS FOR WEB BRACING AND MULTI-CONNECTION OF GIRDERS, BSCI 1-03 SHOULD BE REFER TO FOR HANDLING INSTALLATION AND BRACING OF METAL PLATE TRUSSES.
   - I. NO CUTS, NOTCHES, AND HOLES BORED INTO TRUSSES, STRUCTURAL COMPOSITE LUMBER, GLUE-LAMINATED MEMBERS, OR I-JOIST ARE PROHIBITED EXCEPT WHERE PERMITTED BY THE MANUFACTURER'S RECOMMENDATION OR DESIGN BY PROFESSIONAL. (R502.8.2)
   - J. FIRE BLOCKING SHALL BE PROVIDED TO CUT OFF ALL CONCEALED DRAFT OPENING (BOTH VERTICAL AND HORIZONTAL) AND TO FORM AN EFFECTIVE FIRE BARRIER BETWEEN STORIES, AND BETWEEN A TOP STORY AND ROOF SPACE. (R602.8)
   - K. ALL EXTERIOR WALLS SHALL BE BRACED IN ACCORDANCE WITH SECTION R602.10. MINIMUM 3/8" PANEL SHEATHING.
   - L. THE ALLOWABLE SPANS OF GIRDERS/HEADERS FABRICATED FROM DIMENSIONAL LUMBER ON EXTERIOR WALLS SHALL NOT EXCEED THE VALUES OF TABLE R502.5(1)

TABLE R502.5(1)

GIRDERS AND HEADERS SUPPORTING	SPECIES AND GRADE					
	BALD CYPRESS AND HEM FIR					
	1		2		3	
	SIZE	SPAN	SIZE	SPAN	SIZE	SPAN
ROOF AND CEILING	2x6	6-05-11	2x6	5-11-11	2x6	5-4-11
	2x8	8-8-11	2x8	7-11-11	2x8	7-2-11
	2x10	10-11-11	2x10	9-8-11	2x10	8-8-11
	2x12	12-6-11	2x12	11-0-11	2x12	9-11-11
	2x14	13-7-11	2x14	12-3-11	2x14	10-9-11
ROOF, CEILING AND ONE CENTER BEARING PARTITION	2x6	4-8-11	2x6	4-2-11	2x6	3-8-11
	2x8	5-11-11	2x8	5-2-11	2x8	4-6-11
	2x10	7-2-11	2x10	6-3-11	2x10	5-5-11
	2x12	8-1-11	2x12	7-0-11	2x12	6-2-11
	2x14	8-11-11	2x14	7-8-11	2x14	6-8-11
ROOF, CEILING AND ONE CLEAR SPAN FLOOR	2x6	3-8-11	2x6	3-3-11	2x6	2-11-11
	2x8	4-11-11	2x8	4-3-11	2x8	3-8-11
	2x10	6-0-11	2x10	5-2-11	2x10	4-6-11
	2x12	6-11-11	2x12	6-0-11	2x12	5-2-11
	2x14	7-6-11	2x14	6-5-11	2x14	5-6-11

TABLE R502.5(1)(4)

GIRDERS AND HEADERS SUPPORTING	SPECIES AND GRADE					
	BALD CYPRESS AND HEM FIR					
	1		2		3	
	SIZE	SPAN	SIZE	SPAN	SIZE	SPAN
ROOF, CEILING AND TWO CLEAR SPAN FLOOR	2x6	3-3-11	2x6	2-11-11	2x6	2-6-11
	2x8	4-3-11	2x8	3-8-11	2x8	3-3-11
	2x10	5-2-11	2x10	4-6-11	2x10	3-11-11
	2x12	6-0-11	2x12	5-2-11	2x12	4-6-11
	2x14	6-5-11	2x14	5-6-11	2x14	4-11-11
ROOF, CEILING AND TWO CENTER BEARING PARTITIONS	2x6	2-11-11	2x6	2-6-11	2x6	2-2-11
	2x8	3-8-11	2x8	3-3-11	2x8	2-11-11
	2x10	4-6-11	2x10	3-11-11	2x10	3-6-11
	2x12	5-2-11	2x12	4-6-11	2x12	4-0-11
	2x14	5-6-11	2x14	4-11-11	2x14	4-3-11

A. SPACES ARE GIVEN IN FEET AND INCHES
B. TABLE ASSUMES NO SPACE LL LOAD
C. A NUMBER OF JACK STUDS TO SUPPORT BEARING THEREE HAVING 1/2K LF OF THE FULL TABLE THAT IS IN THE PICTURE

M. TRUSSES SHALL BE CONNECTED TO WALL BY USE OF APPROVED CONNECTORS HAVING A RESISTANCE TO UPLIFT OF NOT LESS THAN 175 POUNDS AND PER THE MANUFACTURE SPECIFICATIONS.

N. PROTECTION FROM DECAY SHALL BE PROVIDED IN THE FOLLOWING LOCATION BY THE USE OF NATURALLY DURABLE OR PRESERVATIVE TREATED LUMBER. (R319.1)
   1. ALL WOOD FRAMING THAT REST ON CONCRETE EXTERIOR FOUNDATION WALLS AND ARE LESS THAN 8" FROM THE EXPOSED GROUND.
   2. SILLS AND SLEEPERS ON A CONCRETE SLAB THAT IS IN DIRECT CONTACT WITH THE GROUND UNLESS SEPARATED FROM SUCH SLAB BY AN IMPERVIOUS MOISTURE BARRIER.
   3. THE ENDS OF WOOD GIRDER ENTERING EXTERIOR CONCRETE WALLS HAVING CLEARANCE OF LESS THAN .5 INCH ON TOPS, SIDES AND ENDS.
   4. WOOD SIDING, SHEATHING AND WALL FRAMING ON THE EXTERIOR OF A BUILDING HAVING A CLEARANCE OF LESS THAN 6 INCHES FROM THE GROUND
   5. ALL LUMBER IN CONTACT WITH THE GROUND, EMBEDDED IN CONCRETE IN DIRECT CONTACT WITH THE GROUND OR EMBEDDED IN CONCRETE EXPOSED TO THE WEATHER THAT SUPPORTS PERMANENT STRUCTURES (R319.1.2)

O. ALL RIM AND BLOCK JOIST SPACES BETWEEN TOP OF THE FOUNDATION WALL AND FLOOR/ROOF LINE SHALL BE INSULATED WITH THE SAME MATERIAL USED FOR EXTERIOR WALLS. ALL EXTERIOR CORNERS AND INTERIOR PARTIONS TO EXTERIOR WALLS THAT ARE CLOSED OFF TO FUTURE INSULATION MUST BE INSULATED DURING FRAMING OF WALL.

P. ALL NAILING AND FASTENING SHOULD COMPLY WITH THE IRC TABLE R602.3(1) "FASTENER SCHEDULE FOR SCTRUCTURAL MEMBERS"

7. STRUCTURAL STEEL
   - A. ALL STRUCTURAL STEEL SHALL CONFORM WITH ASTM SPECIFICATION A992 GRADE-50 OR EQUAL AND SHALL HAVE BRIDGE CLIPPING AT 4 FEET ON CENTER TO RESIST LATERAL DEFLECTION.
   - B. ALL FRAMING TO BE ATTACHED TO STRUCTURAL STEEL IN ACCORDANCE WITH GOVERNING CODES.

NOT FOR CONSTRUCTION

THESE PLANS HAVE NOT BEEN APPROVED FOR FINAL CONSTRUCTION-
PLEASE CALL OR SEE OWNER FOR UPDATED PLANS.

Classic Builders
Jackson Base Plan-B
Villas @ Stonehaven

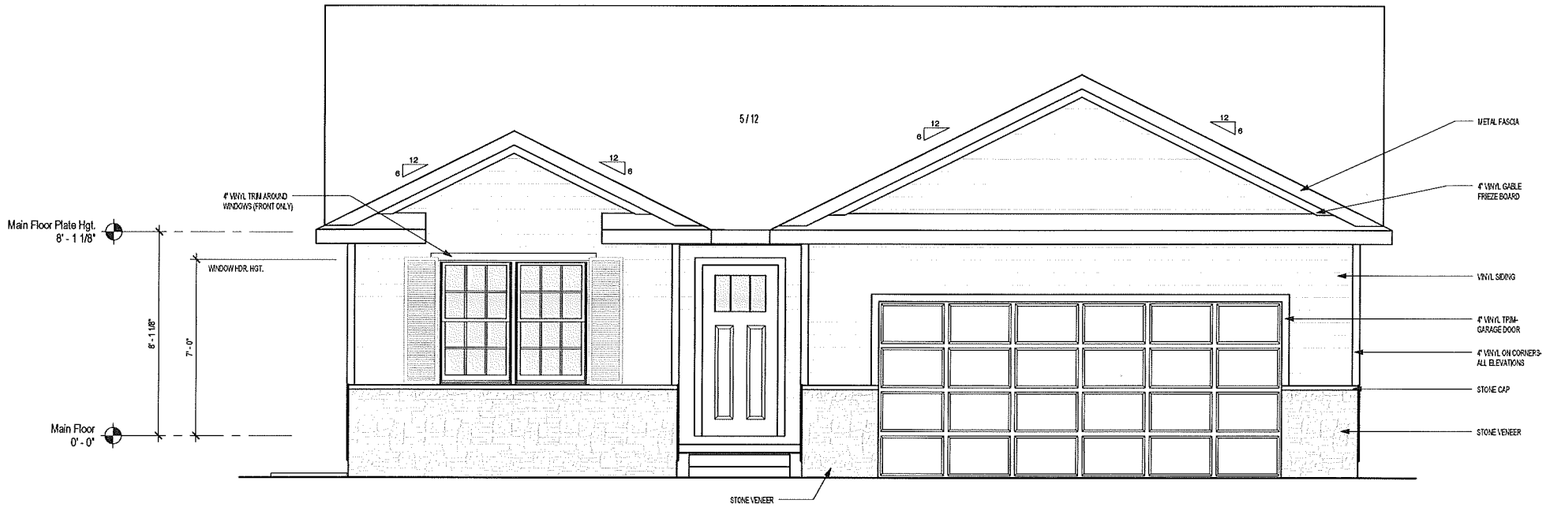
PROJECT ID: PDS 3005

ISSUE DATE:
DATE: 05-07-15
DATE: 11-13-15
DATE:
DATE:

REVISIONS:
DATE:
DATE:
DATE:
DATE:

Cover Page
As indicated

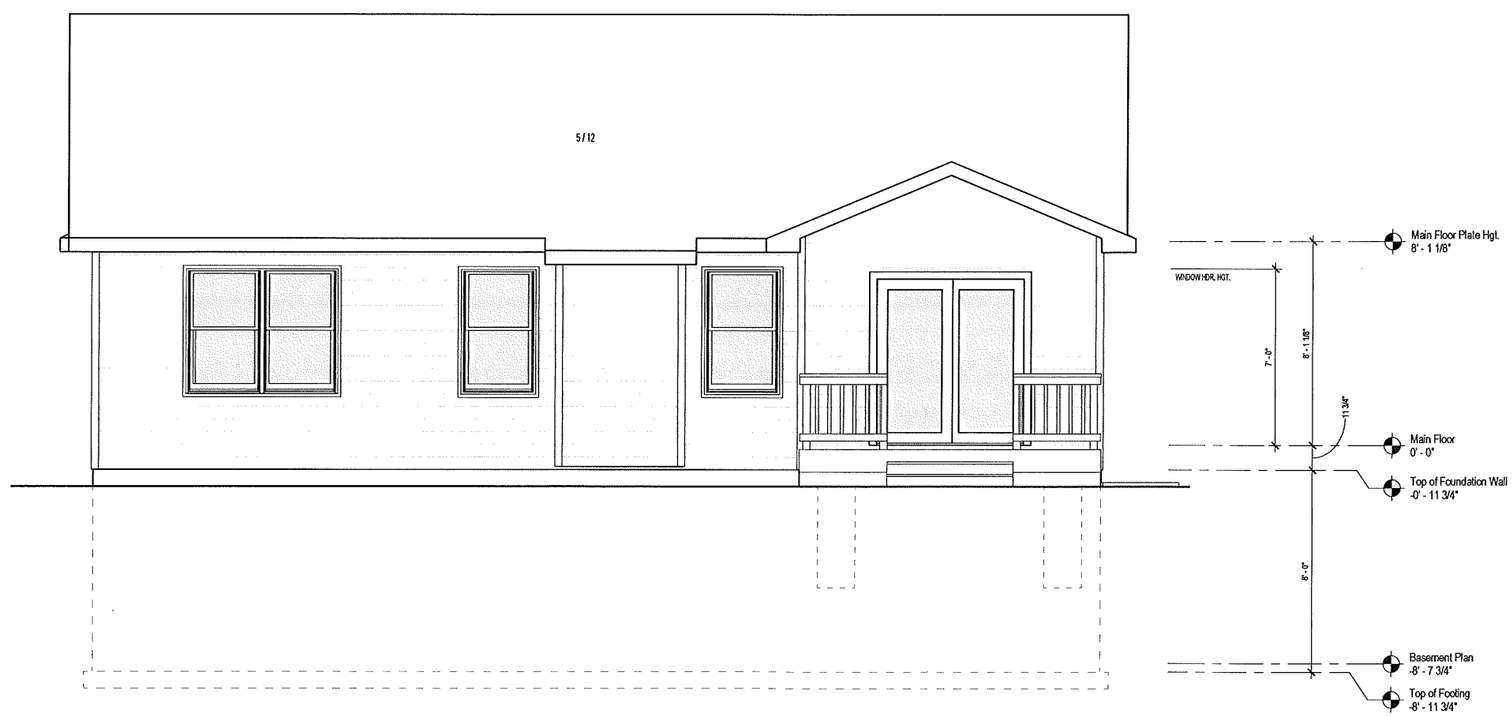
A.0



1 FRONT ELEVATION
Scale: 3/8" = 1'-0"

ESTIMATED WALL...	
Lap Siding	1935 SF
Stone Veneer	75 SF

- ESTIMATE OF SIDING REDUCED BY 5% FROM THE GROSS SURFACE OF THE WALL
1. THE HIGHLIGHTED AREAS BELOW DESCRIBE THE REVISIONS.
2. THE VIEW EXCLUDES WINDOW AND DOOR SHEETING.



2 REAR ELEVATION
Scale: 3/8" = 1'-0"

plum
BUILDING SYSTEMS, LLC

PLUM DESIGN SERVICES
1100 ALICE'S ROAD WAUKEE, IOWA 50263-1100
TELEPHONE 515 978 6260 FAX 515 978 6261

PLUM DESIGN SERVICE, INC. ASSUMES NO RESPONSIBILITY FOR STRUCTURAL OR DIMENSIONAL ERRORS OR OMISSIONS. WE ARE NOT A LICENSED ARCHITECT OR ENGINEER. THESE PLANS ARE PROVIDED ON AN "AS IS" BASIS AND IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR OWNER TO VERIFY AND CHECK ALL NOTES, DETAILS, ELEVATIONS, SECTIONS, AND FLOOR PLANS PRIOR TO CONSTRUCTION. THE CONTRACTOR AND/OR OWNER SHALL NOTIFY PLUM DESIGN SERVICE, INC. IMMEDIATELY IF ANY ERRORS OR OMISSION FOR POSSIBLE CORRECTION ARE IDENTIFIED PRIOR TO START OF CONSTRUCTION. NO WARRANTIES EXPRESS OR IMPLIED INCLUDING COMPLIANCE WITH THIS PLAN WITH APPLICABLE BUILDING CODES REQUIREMENTS ARE MADE.

Classic Builders
Jackson Base Plan-B
Villas @ Stonehaven

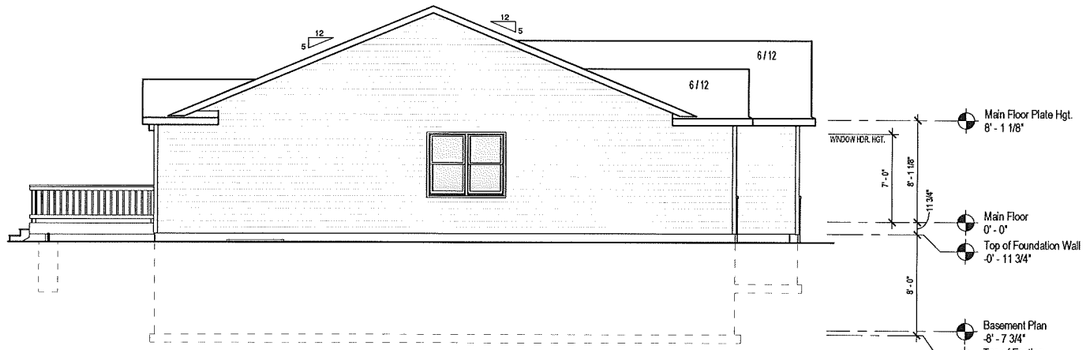
PROJECT ID: PDS 3005

ISSUE DATE:
DATE: 05-07-15
DATE: 11-13-15
DATE:
DATE:

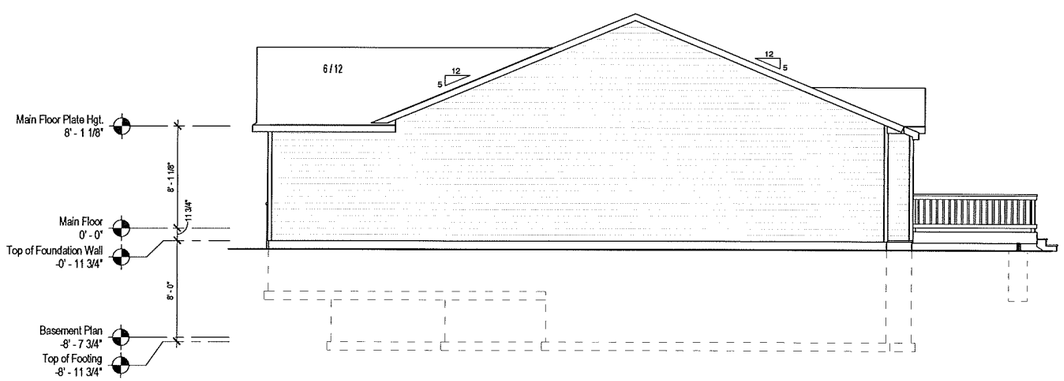
REVISIONS:
DATE:
DATE:
DATE:
DATE:

Elevations
3/8" = 1'-0"

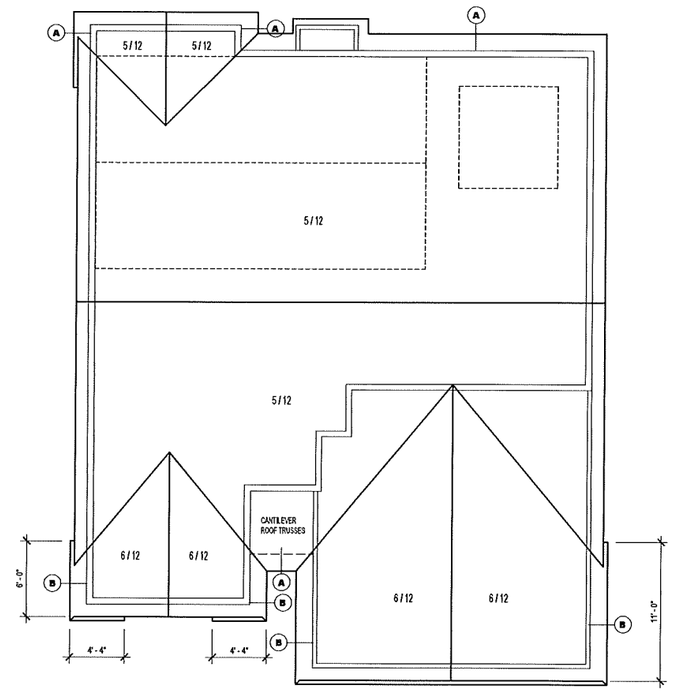
A.1



1 **LEFT ELEVATION**
Scale: 3/16" = 1'-0"



2 **RIGHT ELEVATION**
Scale: 3/16" = 1'-0"



3 **ROOF PLAN**
Scale: 3/16" = 1'-0"

ESTIMATED ROOF SF

2409 SF

- SQUARE FOOTAGE OF ROOF IS TAKEN FROM THE ENVELOPE SQUARE OF THE FLOOR. IT IS THE VIEW IS CLOSED 3/4" HEIGHT AVERAGED BELOW VALUES.
2/12 = 1.2 FACTOR WAS USED WHEN CALCULATED

ROOF PLAN LEGEND

SYMBOL	WALL HGT.	PITCH	OVERHANG	HEEL HGT.
A	8'-1 1/8"	5/12	1'-4"	7'
B	8'-1 1/8"	6/12	1'-4"	8 5/16"
ALL RAKE OVERHANGS ARE 12" UNLESS NOTED				

plum
BUILDING SYSTEMS, LLC

PLUM DESIGN SERVICES
1100 ALICE'S ROAD WAUKEE, IOWA 50263-1100
TELEPHONE 515 978 6260 FAX 515 978 6261

PLUM DESIGN SERVICE, INC. ASSUMES NO RESPONSIBILITY FOR STRUCTURAL OR DIMENSIONAL ERRORS OR OMISSIONS. WE ARE NOT A LICENSED ARCHITECT OR ENGINEER. THESE PLANS ARE PROVIDED ON AN "AS IS" BASIS AND IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR OWNER TO VERIFY AND CHECK ALL NOTES, DETAILS, ELEVATIONS, SECTIONS, AND FLOOR PLANS PRIOR TO CONSTRUCTION. THE CONTRACTOR AND/OR OWNER SHALL NOTIFY PLUM DESIGN SERVICE, INC. IMMEDIATELY IF ANY ERRORS OR OMISSION FOR POSSIBLE CORRECTION ARE IDENTIFIED PRIOR TO START OF CONSTRUCTION. NO WARRANTIES EXPRESS OR IMPLIED INCLUDING COMPLIANCE WITH THIS PLAN WITH APPLICABLE BUILDING CODES REQUIREMENTS ARE MADE.

Classic Builders
Jackson Base Plan-B
Villas @ Stonehaven

PROJECT ID: PDS 3005

ISSUE DATE:
DATE: 05-07-15
DATE: 11-13-15
DATE:
DATE:

REVISIONS:
DATE:
DATE:
DATE:
DATE:

Elevations
As indicated

A.2

ABBREVIATIONS

ADJ	ADJUSTABLE
AWN.	AWNING
BTM.	BOTTOM
BSMT.	BASEMENT
BTW.	BETWEEN
CA	CASEMENT
CANT.	CANTILEVER
CAB.	CABINET
℄	CENTER LINE
CLG	CEILING
C.O.	CASED OPENING
COL.	COLUMN
CONC.	CONCRETE
D	DRYER
DIA.	DIAMETER
DN	DOWN
DH	DOUBLE HUNG
DW	DISHWASHER
F.D.	FLOOR DRAIN
FLR.	FLOOR
FT.	FEET
FURN.	FURNACE
HDR.	HEADER
HDWD	HARDWOOD
INSUL.	INSULATION
JST.	JOIST
LVL	LAMINATED VENEER LUMBER
LIN.	LINEN
MAX.	MAXIMUM
MIN.	MINIMUM
O/C	ON CENTER
O.H.D.	OVERHEAD DOOR
OPNG.	OPENING
PED.	PEDESTAL
N.T.S.	NOT TO SCALE
REF	REFRIGERATOR
REQ	REQUIRED
RO	ROUGH OPENING
RM	ROOM
SH	SINGLE HUNG
S & R	SHELF AND ROD
S.F.	SQUARE FEET
S.P.	SUMP PIT
STL	STEEL
TYP.	TYPICAL
TRANS.	TRANSOM
UNEX.	UNEXCAVATED
VAN.	VANITY
W	WASHER
W/	WITH
W.H.	WATER HEATER

ELECTRIC SYMBOLS

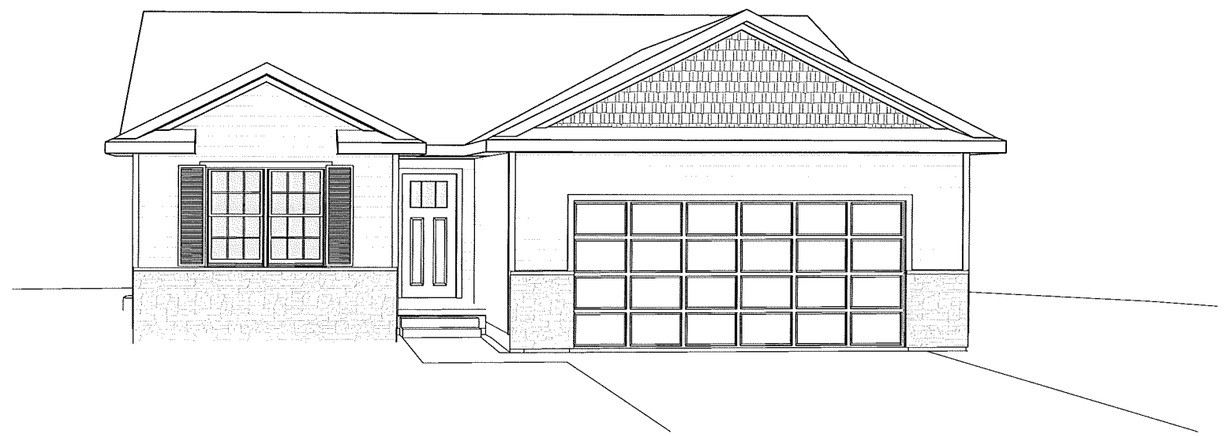
	SINGLE POLE SWITCH
	THREE WAY SWITCH
	DIMMER SWITCH
	SINGLE RECEPTACLE OUTLET
	DUPLEX RECEPTACLE OUTLET
	240 VOLT RECEPTACLE
	PHONE OUTLET
	CABLE OUTLET
	EXHAUST FAN
	LIGHT WITH E. FAN
	SMOKE/HEAT DETECTOR
	GARAGE DOOR OPENER
	ELECTRIC PANEL
	CEILING MOUNTED LIGHT
PC	PULL CHAIN LIGHT
	RECESSED LIGHT
	WALL MOUNTED LIGHT
	W.M. MOTION DETECTOR LIGHT
	FLORESCENT LIGHT
	BAR LIGHT

MISC. SYMBOLS

	FROST PROOF HOSE BIB
	FLOOR LINE ABOVE
	STRUCTURAL BEAM/HEADER OR GIRDER TRUSS

DRAWING LIST

A.0	Cover Page
A.1	Elevations
A.2	Elevations
A.3	Foundation Plan
A.4	Main Floor Plan
A.5	Building Sections
A.6	Detail
E.1	Electrical
F.1	Floor Covering



plum BUILDING SYSTEMS, LLC

PLUM DESIGN SERVICES
1100 ALICE'S ROAD WAUKEE, IOWA 50263-1100
TELEPHONE 515 978 6260 FAX 515 978 6261

PLUM DESIGN SERVICE, INC. ASSUMES NO RESPONSIBILITY FOR STRUCTURAL OR DIMENSIONAL ERRORS OR OMISSIONS. WE ARE NOT A LICENSED ARCHITECT OR ENGINEER. THESE PLANS ARE PROVIDED ON AN "AS IS" BASIS AND IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR OWNER TO VERIFY AND CHECK ALL NOTES, DETAILS, ELEVATIONS, SECTIONS, AND FLOOR PLANS PRIOR TO CONSTRUCTION. THE CONTRACTOR AND/OR OWNER SHALL NOTIFY PLUM DESIGN SERVICE, INC. IMMEDIATELY IF ANY ERRORS OR OMISSION FOR POSSIBLE CORRECTION ARE IDENTIFIED PRIOR TO START OF CONSTRUCTION. NO WARRANTIES EXPRESS OR IMPLIED INCLUDING COMPLIANCE WITH THIS PLAN WITH APPLICABLE BUILDING CODES REQUIREMENTS ARE MADE.

GENERAL CONSTRUCTION NOTES

1. GENERAL
   A. ALL CONSTRUCTION AND MATERIALS SHALL MEET OR EXCEED IRC 2006, LOCAL BUILDING CODES MAY HAVE DIFFERENT SPECIFICATIONS AND REQUIREMENTS THAN WHAT IS LISTED IN THE IRC2006, THESE LOCAL REQUIREMENTS WILL SUPERSEDE THE IRC 2006. SEE THE LOCAL BUILDING DEPARTMENT FOR CHANGES.
   B. CONTRACTOR TO CONFIRM THE SIZES, SPACING AND SPECIES OF LUMBER OF ALL STRUCTURAL AND FRAMING MEMBERS. ANY STRUCTURAL AND FRAMING MEMBERS NOT INDICATED ARE TO BE SIZED BY OWNER/CONTRACTOR.
   C. THE OWNER/CONTRACTOR IS RESPONSIBLE FOR PREVENTIVE MEASURE OF THE BUILD UP OF MOISTURE OR MOLD
   D. ALL PRODUCTS ARE TO BE INSTALLED PER THE MANUFACTURE'S RECOMMENDATIONS.
   E. ALL MECHANICAL, PLUMBING, AND ELECTRICAL SYSTEMS ARE TO BE DESIGNED BY OTHERS.
2. DESIGN CRITERIA
   A. BUILDING AND STRUCTURES, AND ALL PARTS THEREOF, SHALL BE CONSTRUCTED TO SAFELY SUPPORT ALL LOADS, INCLUDING DEAD LOADS, LIVE LOADS, ROOF LOADS, FLOOD LOADS, SNOW LADDS, WIND LOADS, AND SEISMIC LOADS AS PRESCRIBED BY THIS CODE (R301.1)
   B. TABLE 301.2(1) IRC 2006, VALUES BASED FROM THE CITY OF DES MOINES, IOWA.

GROUND SNOW LOAD	WIND SPEED (MPH)	SEISMIC DESIGN CATEGORY	SUBJECT TO DAMAGE FROM				WINTER DESIGN TEMP.	ICE BARRIER UNDERLAYMENT REQUIRED	FLOOD HAZARDS	AIR FREEZING INDEX	MEAN ANNUAL TEMP
			WEATHERING	FROST LINE DEPTH	TERMITE	DECAY					
30 PSF	90	A	SEVERE	42"	MODERATE TO HEAVY	SLIGHT TO MODERATE	-4 F °	YES	MAPS HERE	1500	48.6 F

   C. MINIMUM LIVE LOADS, (R301.5) IRC 2006

ATTIC WITH LIMITED STORAGE	20 PSF
ATTIC WITHOUT STORAGE	10 PSF
DECKS	40 PSF
EXTERIOR BALCONIES	60 PSF
GUARDRAIL AND HANDRAILS	200 PSF
ROOM OTHER THAN SLEEPING ROOMS	40 PSF
SLEEPING ROOMS	30 PSF
STAIRS	40 PSF

DEFLECTION CRITERIA	
FLOOR LIVE LOAD	L/480
FLOOR TOTAL LOAD	L/360
ROOF LIVE LOAD	L/360
ROOF TOTAL LOAD	L/240

ALL BEAMS SUPPORTING FLOOR OR ROOF LOADS ARE TO BE DESIGNED WITH THE ABOVE DEFLECTION CRITERIA

MINIMUM ROOF LIVE LOADS(R301.6)IRC 2006

ROOF TRUSS LIVE LOAD(Lr)	20 PSF
GROUND SNOW(Pg)	30 PSF
FLAT ROOF SNOW (Pf)	24 PSF
THERMAL CONDITION	Ct = 1.0
TERRAIN EXPOSURE	B
DURATION OF LOAD-SNOW	1.15

UNBALANCED AND SNOW DRIFT LOADING ACCORDING TO ASCE 7-05

WIND DESIGN METHOD:	MWFRS/C-C W/BRID ACSE 7-05
EXPOSURE CATEGORY:	B
DURATION OF LOAD-WIND	1.60

   D. DEAD LOADS: ANY ADDITIONAL OR CHANGES TO MATERIAL NEEDS TO BE ADJUSTED TO THE BELOW CALCULATIONS.

FLOOR-TOP CHORD	
CARPET AND PAD	1.5 PSF
3/8" CERAMIC TILE/1/2" BACKER BD.	10 PSF
3/4" HARDWOOD FLOOR	4.0 PSF
SUBFLOOR-3/4" OSB OR COM-PLYWOOD	2.0 PSF
1/2 FLOOR TRUSS/4-JOIST SYSTEM	1.5 PSF
TOTAL WITH CARPET/PAD	5.5 PSF
TOTAL WITH TILE/BACKER BD.	13.5 PSF
TOTAL WITH HARDWOOD FLOOR	7.5 PSF

FLOOR-BOTTOM CHORD	
1/2 FLOOR TRUSS/4-JOIST SYSTEM	1.5 PSF
5/8" GYPBOARD	2.0 PSF
MINIMUM FOR MISC MECHANICAL/ELEC.	0.7 PSF
TOTAL	5.0 PSF

ROOF-TOP CHORDS	
ROOFING-SHINGLES(220 LBS)/ 2 LAYER 30 LBS. FELT	4.40 PSF
1/2" OSB OR COM PLYWOOD	0.30 PSF
1/2 ROOF TRUSS-2X4	1.65 PSF
CORRECTION FOR SLOPE (12/12)	1.10 PSF
TOTAL	1.55 PSF
TOTAL	9.00 PSF

ROOF-BOTTOM CHORDS	
1/2 ROOF TRUSS-2X4	1.10 PSF
5/8" GYPBOARD	2.0 PSF
MINIMUM FOR MISC MECHANICAL/ELEC.	1.5 PSF
19" BATT ELOWN INSULATION	1.00 PSF
TOTAL	7.00 PSF

3. ROOM REQUIREMENTS
   A. CEILING HEIGHT (R305.1) HABITABLE ROOMS, HALLWAYS, CORRIDORS, BATHROOMS, TOILET ROOM, LAUNDRY ROOMS, AND BASEMENTS SHALL HAVE A CEILING HEIGHT OF NOT LESS THAN 7 FEET. THE REQUIRED HEIGHT IS MEASURED FROM FINISH FLOOR TO THE LOWEST PROJECTION FROM THE CEILING.
   -EXCEPTION 1. BEAMS AND GIRDERS SPACED LESS THAN 4 FEET ON CENTER MAY PROJECT NOT MORE THAN 6 INCHES BELOW THE REQUIRED CEILING HGHT.
   2. CEILING IN BASEMENT WITHOUT HABITABLE SPACES MAY PROJECT WITHIN 6 FEET 8 INCHES OF FINISHED FLOOR.
   3. FOR ROOMS WITH SLOPED CEILING, AT LEAST 50 PERCENT OF THE REQUIRED FLOOR AREA OF THE ROOM MUST HAVE A CEILING HEIGHT OF AT LEAST 7 FEET AND NO PORTION OF THE REQUIRED FLOOR AREA MAY HAVE A CEILING, HEIGHT, OF LESS THAN 5 FEET.
   4. BATHROOMS SHALL HAVE A MINIMUM CEILING HEIGHT OF 6 FEET 8 INCHES OVER THE FRONT OF THE FIXTURE
   B. ROOM DIMENSIONS (R304.3) THE MINIMUM LENGTH OR WIDTH OF ANY HABITABLE ROOM SHALL NOT BE LESS THAN 7-0" CLEAR IN ANY HORIZONTAL DIMENSION. THE MINIMUM AREA OF ANY HABITABLE ROOM SHALL NOT BE LESS THAN 70 SQ. FEET, EXCEPT KITCHEN (R304.2).
   C. LIGHT AND VENTILATION (R303) IN HABITABLE ROOMS, PROVIDE NATURAL LIGHT AND VENTILATION WITH OPERABLE WINDOWS. WINDOWS SHALL NOT BE LESS THAN 8% OF THE FLOOR AREA OF EACH ROOM, 1/2 THE REQUIRED WINDOW AREA SHALL BE OPERABLE TO THE EXTERIOR FOR VENTILATION. BATHROOMS MAY HAVE AN OPERABLE WINDOW OF 3 S.F. IN AREA. NONHABITABLE ROOMS, INCLUDING BATHROOMS, MAY BE VENTILATED WITH EXHAUST FANS AND ARTIFICIAL LIGHT.
   D. EMERGENCY ESCAPE WINDOWS (R310) BASEMENT AND EACH SLEEPING AREA SHALL HAVE AN EMERGENCY ESCAPE WINDOW THAT IS AT LEAST 20" IN WIDTH (NET), 24" IN HEIGHT (NET) WHEN OPEN AND HAVE AN OPERABLE AREA OF AT LEAST 5.7 SQUARE FEET IN AREA. ESCAPE WINDOWS SHALL BE INSTALLED WITH A SILL HEIGHT OF NO MORE THAN 44" ABOVE THE FLOOR. EGRESS WINDOW WELLS MUST PROJECT A MINIMUM OF 36" AND PROVIDED OVER 9 SQ. FT. OF NET CLEAR AREA. LADDERS ARE REQUIRED IF THE WELL IS OVER 44" DEEP. LADDERS SHALL BE A MIN. OF 12" WIDE.
4. BUILDING REQUIREMENTS
   A. ATTIC ACCESS (R337) PROVIDE ACCESS TO ATTIC SPACE WITH AN ACCESS DOOR AT LEAST 22" X 30" IN SIZE. LOCATE THE ACCESS DOOR WHERE THERE IS AT LEAST 30" OF CLEAR HEAD SPACE.
   B. ATTIC MUST BE VENTILATED WITH TOTAL AREA OF ATTIC VENTS AT LEAST 1.0 S.F. (NET) FOR EACH 150 S.F. OF ATTIC AREA TO BE VENTILATED. ATTIC VENTS ARE NOT SHOWN ON THE PLAN (R806.2).
   C. SMOKE ALARMS ARE REQUIRED IN ALL BEDROOMS, AT ALL HALLWAYS LEADING TO BEDROOMS, AND AT EACH LEVEL INCLUDING THE BASEMENT. ADDITIONAL ALARMS MAY BE REQUIRED IN SEPARATED SPACE OF THE BASEMENT. SEE BUILDING DEPARTMENT. SMOKE ALARMS SHALL BE HARD WIRED TOGETHER IN SERIES WITH BATTERY BACK UP (R313).
   D. STAIRWAY ARE TO BE A MINIMUM OF 36" WIDE (FINISHED)(R311.5.1) WITH A MINIMUM HEADROOM OF 6 FEET 8 INCHES (R311.5.2). THE MAXIMUM RISER IS 7 3/4" (R311.5.3.1) WITH A MINIMUM RUN OF 10" (R311.5.3.2) HANDRAILS SHALL BE PROVIDED ON AT LEAST ONE SIDE OF EACH CONTINUOUS RUN OF TREADS OR FLIGHT WITH 4 OR MORE RISERS (R311.5.6). A FLIGHT OF STAIRS SHALL NOT HAVE A VERTICAL RISE LARGER THAN 12 FEET BETWEEN FLOORS OR LANDINGS (R311.5.4).
   E. PROVIDE GIL GUTTERS, DOWN SPOUTS, AND SPLASH BLOCKS AS NECESSARY.
5. FOUNDATION/CONCRETE
   A. IN AREAS LIKELY TO HAVE EXPANSIVE, COMPRESSIBLE, SHIFTING OR OTHER UNKNOWN SOIL CHARACTERISTICS, THE BUILDING OFFICIAL SHALL DETERMINE WHETHER A SOIL TEST IS REQUIRED. (R401.4) A SOIL CAPACITY OF 2000 PSF IS ASSUMED.
   B. CONCRETE SHALL HAVE A MINIMUM STRENGTH OF 3000 psi AT 28 DAYS. GARAGE FLOOR (R.465 SHALL BE 3.500 AT 28 DAYS. PORCHES, CARPORT SLABS AND STEPS EXPOSED TO THE WEATHER SHALL BE 3.500 psi AT 28 DAYS (R402.2). CONCRETE SHALL BE AIR ENTRAINED WITH 5%-7% TOTAL AIR CONTENT.
   C. ALL FOOTING SHALL BE PLACED ON UNDISTURBED SOIL OR CONTROLLED COMPACTED FILL. MINIMUM FOOTING TO BE 16" WIDE X 8"DEEP FOR A 2 STORY BUILDING AND 18" WIDE X 8" DEEP FOR A 3 STORY BUILDING (TABLE 403.1) BOTH WITH 2 CONTINUOUS HORIZONTAL #4 REBAR.
   D. ALL ANCHOR BOLTS SHALL BE 1/2" IN DIAMETER AND SHALL EXTEND A MINIMUM OF 7" INTO CONCRETE. USE TWO BOLTS PER SILL PLATE WITH BOLTS SPACED AT A MAXIMUM OF 6 FEET ON CENTER WITH A MINIMUM OF ONE BOLT NOT MORE THAN 12 INCHES FROM THE END BUT AT LEAST 3 1/2 INCHES FROM END OF SILL PLATE (R403.1.6). ALTERNATE FOUNDATION STRAPS MAY BE USED, SPECIFICATION TO PROVIDE EQUIVALENT ANCHOR TO A 1/2" DIAMETER ANCHOR BOLTS.
   F. CONCRETE FOUNDATION WALLS SHALL BE CONSTRUCTED AS SET FORTH IN TABLE R404.1.1(1). REFER TO TYPICAL WALL SECTION IN THIS PLAN FOR SPECIFICATION.
6. WOOD FRAMING
   A. ROOF, FLOOR, AND WALL SHEATHING: AFA RATED SHEATHING.
   B. WALL STUDS: MINIMUM SPF STUD OR DOUGLAS FIR LARCH STUD.
   C. WALL PLATES: MINIMUM SPF #2 OR BETTER.
   D. DIMENSIONAL HEADERS: #2 DOUGLAS FIR OR BETTER.
   E. LVL HEADERS: 1555 Fb/20E MINIMUM.
   F. JOIST UNDER PARALLEL BEARING PARTITIONS SHALL BE OF ADEQUATE SIZE TO SUPPORT THE LOAD. (R502.4)
   G. THE ENDS OF EACH JOIST, BEAM, OR GIRDER SHALL HAVE NOT LESS THAN 1.5 INCHES OF BEARING ON WOOD OR METAL AND NOT LESS THAN 3 INCHES ON CONCRETE. (R502.6)
   H. WOOD TRUSSES SHALL BE DESIGNED AND MANUFACTURED IN ACCORANCE WITH ANSI/TPI-1. REFER TO THE INDIVIDUAL TRUSS DESIGN DRAWINGS FOR WEB BRACING AND MULTI-CONNECTION OF GIRDERS. BSCI 1-03 SHOULD BE REFER TO FOR HANDLING INSTALLATION AND BRACING OF METAL PLATE TRUSSES.
   I. NO CUTS, NOTCHES, AND HOLES BORED INTO TRUSSES, STRUCTURAL COMPOSITE LUMBER, GLUE-LAMINATED MEMBERS, OR I-JOIST ARE PROHIBITED EXCEPT WHERE PERMITTED BY THE MANUFACTURER'S RECOMENDATION OR DESIGN BY PROFESSIONAL. (R502.8.2)
   J. FIRE BLOCKING SHALL BE PROVIDED TO CUT OFF ALL CONCEALED DRAFT OPENING (BOTH VERTICAL AND HORIZONTAL) AND TO FORM AN EFFECTIVE FIRE BARRIER BETWEEN STORIES, AND BETWEEN A TOP STORY AND ROOF SPACE. (R602.8)
   K. ALL EXTERIOR WALLS SHALL BE BRACED IN ACCORDANCE WITH SECTION R602.10. MINIMUM 3/8" PANEL SHEATHING.
   L. THE ALLOWABLE SPANS OF GIRDERS/HEADERS FABRICATED FROM DIMENSIONAL LUMBER ON EXTERIOR WALLS SHALL NOT EXCEED THE VALUES OF TABLE R502.5(1)

TABLE R502.5(1)

GIRDERS AND HEADERS SUPPORTING	GROUND SNOW LOAD 30 psf					
	BUILDING WIDTH (FT)					
	20		28		36	
	SIDE	SPAN	SIDE	SPAN	SIDE	SPAN
ROOF-CEILING	2x8	4-11-1	3-11-1	3-4-1	3-4-1	2-11-1
	2x10	6-8-1	5-2-1	4-0-1	4-0-1	3-5-1
	2x12	7-11-1	6-1-1	4-11-1	4-11-1	4-2-1
	2x(10)	8-4-1	6-5-1	5-2-1	5-2-1	4-5-1
	2x(12)	9-8-1	7-6-1	6-0-1	6-0-1	5-2-1
	2x(14)	10-9-1	8-3-1	6-8-1	6-8-1	5-8-1
ROOF-CEILING AND ONE CENTER BEARING FLOOR	2x4	5-4-1	4-1-1	3-3-1	3-3-1	2-10-1
	2x6	7-2-1	5-6-1	4-5-1	4-5-1	3-10-1
	2x8	8-7-1	6-7-1	5-4-1	5-4-1	4-7-1
	2x10	10-2-1	7-9-1	6-3-1	6-3-1	5-5-1
	2x12	11-4-1	8-7-1	7-0-1	7-0-1	6-1-1
ROOF-CEILING AND TWO CENTER BEARING FLOORS	2x4	4-4-1	3-4-1	2-7-1	2-7-1	2-3-1
	2x6	5-11-1	4-6-1	3-7-1	3-7-1	3-0-1
	2x8	7-1-1	5-5-1	4-4-1	4-4-1	3-7-1
	2x10	8-4-1	6-4-1	5-1-1	5-1-1	4-2-1
	2x12	9-3-1	7-1-1	5-8-1	5-8-1	4-7-1

A. SPACE WIDER THAN 36 FEET IN WIDTH
B. THERE IS NO ATTIC STORAGE AVAILABLE
C. NUMBER OF JOISTS TO SUPPORT BEARING THERE IS A PARTIAL FLOOR OR PARTIAL FLOOR ON THE SECOND

   M. TRUSSES SHALL BE CONNECTED TO WALL BY USE OF APPROVED CONNECTORS HAVING A RESISTANCE TO UPLIFT OF NOT LESS THAN 175 POUNDS AND PER THE MANUFACTURE SPECIFICATIONS.
   N. PROTECTION FROM DECAY SHALL BE PROVIDED IN THE FOLLOWING LOCATION BY THE USE OF NATURALLY DURABLE OR PRESERVATIVE TREATED LUMBER. (R319.1)
      1. ALL WOOD FRAMING THAT REST ON CONCRETE EXTERIOR FOUNDATION WALLS AND ARE LESS THAN 8" FROM THE EXPOSED GROUND.
      2. SILLS AND SLEEPERS ON A CONCRETE SLAB THAT IS IN DIRECT CONTACT WITH THE GROUND UNLESS SEPARATED FROM SUCH SLAB BY AN IMPERVIOUS MOISTURE BARRIER.
      3. THE ENDS OF WOOD GIRDER ENTERING EXTERIOR CONCRETE WALLS HAVING CLEARANCE OF LESS THAN .5 INCH ON TOPS, SIDES AND ENDS.
      4. WOOD SIDING, SHEATHING AND WALL FRAMING ON THE EXTERIOR OF A BUILDING HAVING A CLEARANCE OF LESS THAN 6 INCHES FROM THE GROUND
      5. ALL LUMBER IN CONTACT WITH THE GROUND, EMBEDDED IN CONCRETE IN DIRECT CONTACT WITH THE GROUND OR EMBEDDED IN CONCRETE EXPOSED TO THE WEATHER THAT SUPPORTS PERMANENT STRUCTURES (R319.1.2)
   O. ALL RIM AND BOX JOIST SPACES BETWEEN TOP OF THE FOUNDATION WALL AND FLOOR/ROOF LINE SHALL BE INSULATED WITH THE SAME MATERIAL USED FOR EXTERIOR WALLS. ALL EXTERIOR CORNERS AND INTERIOR PARTITIONS TO EXTERIOR WALLS THAT ARE CLOSED OFF TO FUTURE INSULATION MUST BE INSULATED DURING FRAMING OF WALL.
   P. ALL NAILING AND FASTENING SHOULD COMPLY WITH THE IRC TABLE R602.3(1) "FASTENER SCHEDULE FOR SCTRUCTURAL MEMBERS"
7. STRUCTURAL STEEL
   A. ALL STRUCTURAL STEEL SHALL CONFORM WITH ASTM SPECIFICATION A992 GRADE-50 OR EQUAL AND SHALL HAVE BRIDGE CLIPPING AT 4 FEET ON CENTER TO RESIST LATERAL DEFLECTION.
   B. ALL FRAMING TO BE ATTACHED TO STRUCTURAL STEEL IN ACCORDANCE WITH GOVERNING CODES.

NOT FOR CONSTRUCTION

THESE PLANS HAVE NOT BEEN APPROVED FOR FINAL CONSTRUCTION+
PLEASE CALL OR SEE OWNER FOR UPDATED PLANS.

Classic Builders
Jackson Base Plan-C
Villas @ Stonehaven

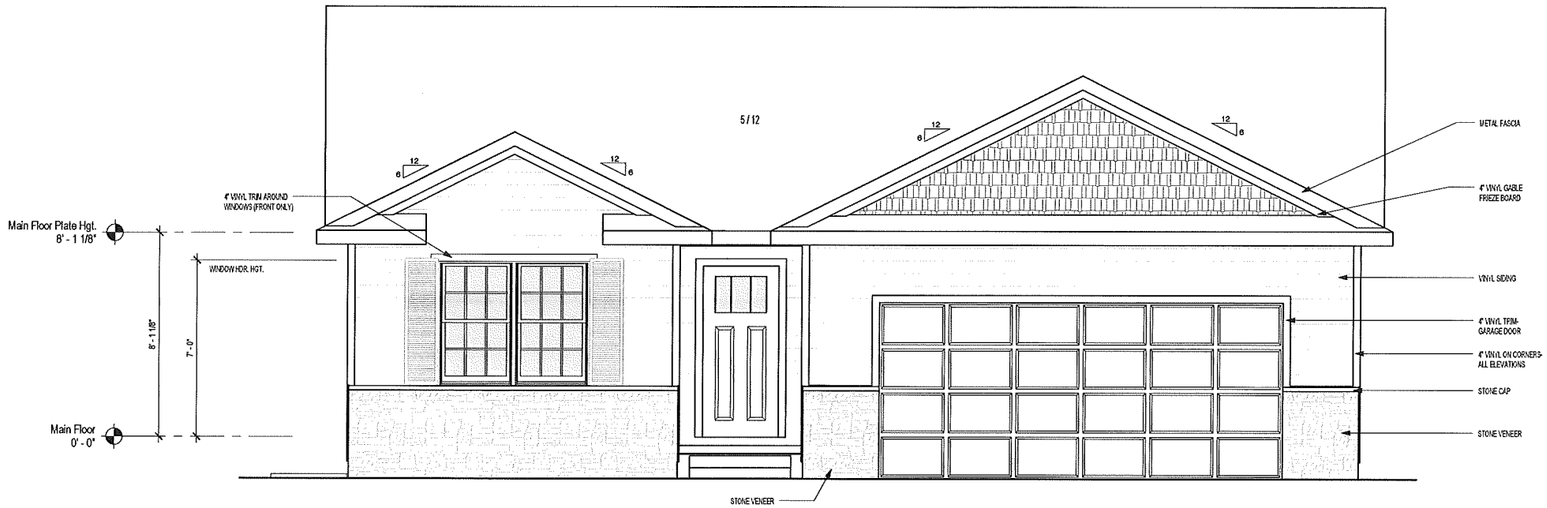
PROJECT ID: PDS 3005

ISSUE DATE:
DATE: 05-07-15
DATE: 11-13-15
DATE:
DATE:

REVISIONS:
DATE:
DATE:
DATE:
DATE:

Cover Page
As indicated

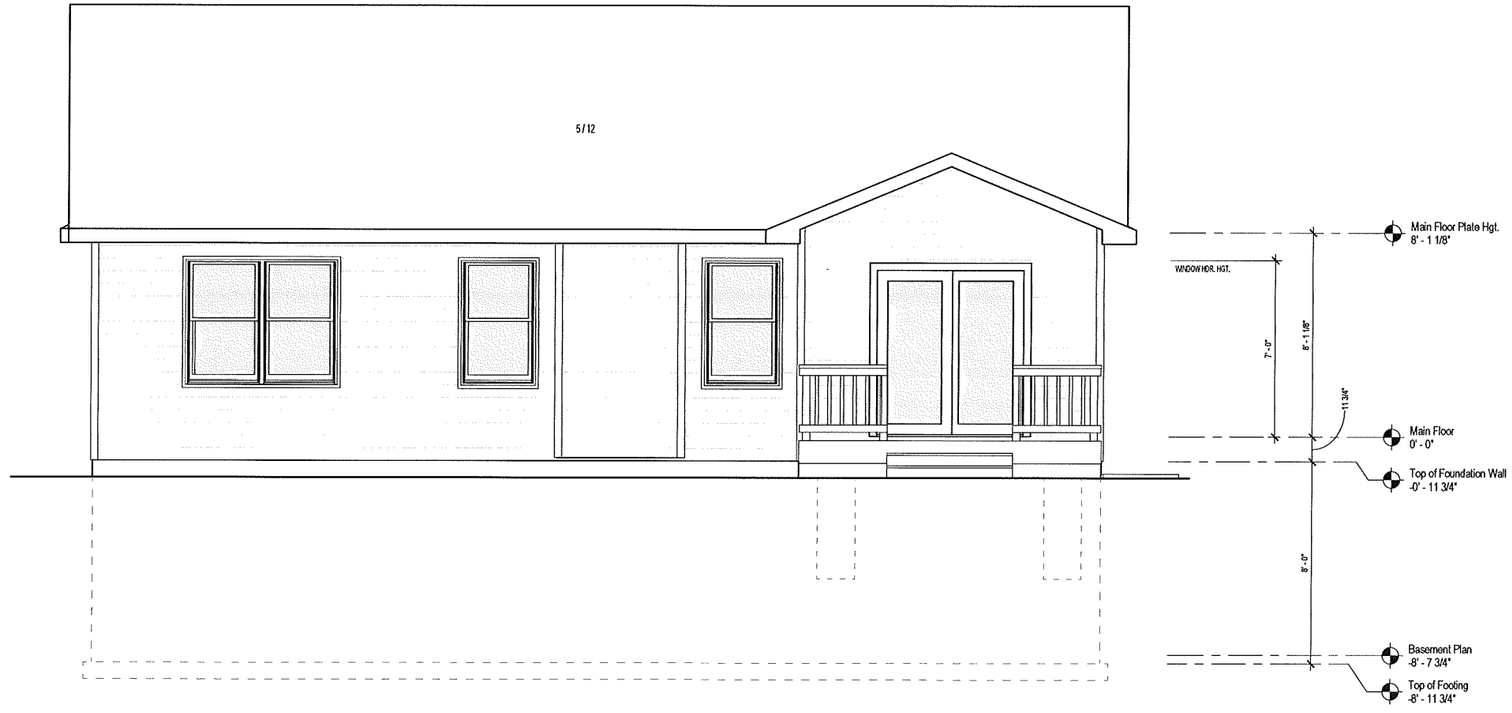
A.0



1 FRONT ELEVATION
Scale: 3/8" = 1'-0"

ESTIMATED WALL...	
Lap Siding	1863 SF
Stone Veneer	75 SF
Stone Veneer - Inset	59 SF

1. THE AREA IS FROM THE EXPOSED SURFACE OF THE WALL TO THE NEAREST EXPOSED BLOCK OR SECTION OF THE FOUNDATION.
2. THE AREA EXCLUDES WINDOW AND DOOR OPENINGS.



2 REAR ELEVATION
Scale: 3/8" = 1'-0"

plum
BUILDING SYSTEMS, LLC

PLUM DESIGN SERVICES
1100 ALICE'S ROAD WAUKEE, IOWA 50263-1100
TELEPHONE 515 978 6260 FAX 515 978 6261

PLUM DESIGN SERVICE, INC. ASSUMES NO RESPONSIBILITY FOR STRUCTURAL OR DIMENSIONAL ERRORS OR OMISSIONS. WE ARE NOT A LICENSED ARCHITECT OR ENGINEER. THESE PLANS ARE PROVIDED ON AN "AS IS" BASIS AND IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR OWNER TO VERIFY AND CHECK ALL NOTES, DETAILS, ELEVATIONS, SECTIONS, AND FLOOR PLANS PRIOR TO CONSTRUCTION. THE CONTRACTOR AND/OR OWNER SHALL NOTIFY PLUM DESIGN SERVICE, INC. IMMEDIATELY IF ANY ERRORS OR OMISSION FOR POSSIBLE CORRECTION ARE IDENTIFIED PRIOR TO START OF CONSTRUCTION. NO WARRANTIES EXPRESS OR IMPLIED INCLUDING COMPLIANCE WITH THIS PLAN WITH APPLICABLE BUILDING CODES REQUIREMENTS ARE MADE.

Classic Builders
Jackson Base Plan-C
Villas @ Stonehaven

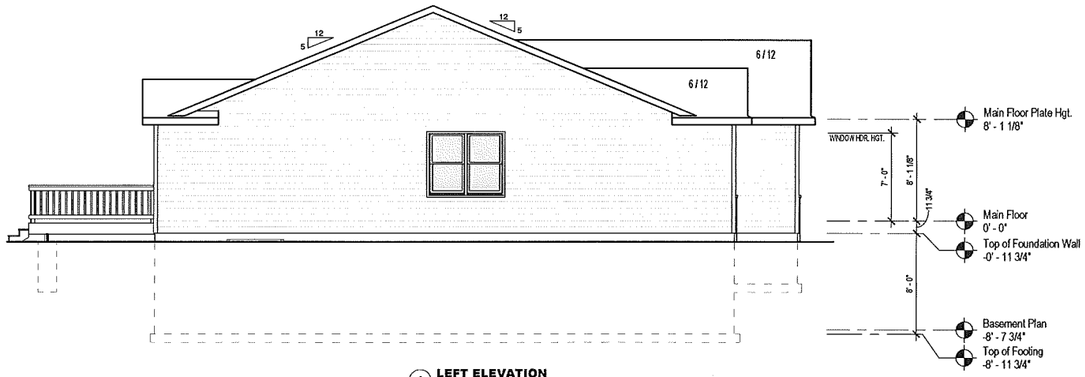
PROJECT ID: PDS 3005

ISSUE DATE:
DATE: 05-07-15
DATE: 11-13-15
DATE:
DATE:

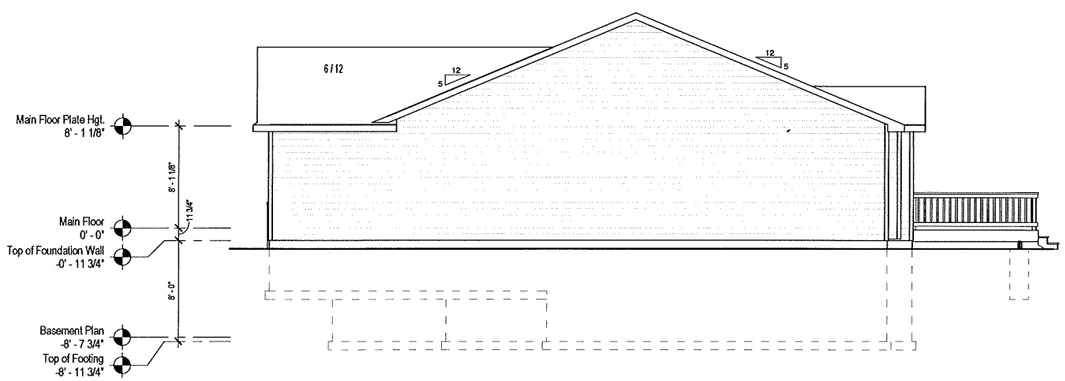
REVISIONS:
DATE:
DATE:
DATE:
DATE:

Elevations
3/8" = 1'-0"

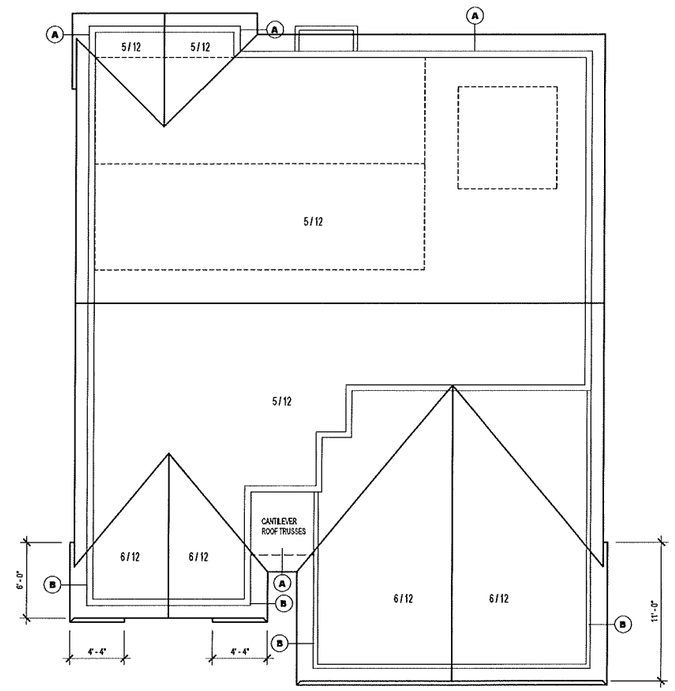
A.1



1 **LEFT ELEVATION**
Scale: 3/16" = 1'-0"



2 **RIGHT ELEVATION**
Scale: 3/16" = 1'-0"



3 **ROOF PLAN**
Scale: 3/16" = 1'-0"

ESTIMATED ROOF SF

2401 SF

1. SQUARE FOOTAGE OF ROOF BASED ON PLAN VIEW, INCLUDES OVERHANGS OF THE ROOF.
2. THE ATTIC SPACE BELOW 3'-6" HEIGHT IS NOT INCLUDED BELOW ALLEY.
3. NO ATTIC FACTOR HAS BEEN ADDED

ROOF PLAN LEGEND

SYMBOL	WALL HGT.	PITCH	OVERHANG	HEEL HGT.
A	8'-1 1/8"	5/12	1'-4"	7"
B	8'-1 1/8"	5/12	1'-4"	8 5/16"
ALL RAKE OVERHANGS ARE 12" UNLESS NOTED				

plum
BUILDING SYSTEMS, LLC

PLUM DESIGN SERVICES
1100 ALICE'S ROAD WAUKEE, IOWA 50263-1100
TELEPHONE 515 978 6200 FAX 515 978 6261

PLUM DESIGN SERVICE, INC. ASSUMES NO RESPONSIBILITY FOR STRUCTURAL OR DIMENSIONAL ERRORS OR OMISSIONS. WE ARE NOT A LICENSED ARCHITECT OR ENGINEER. THESE PLANS ARE PROVIDED ON AN "AS IS" BASIS AND IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR OWNER TO VERIFY AND CHECK ALL NOTES, DETAILS, ELEVATIONS, SECTIONS, AND FLOOR PLANS PRIOR TO CONSTRUCTION. THE CONTRACTOR AND/OR OWNER SHALL NOTIFY PLUM DESIGN SERVICE, INC. IMMEDIATELY IF ANY ERRORS OR OMISSION FOR POSSIBLE CORRECTION ARE IDENTIFIED PRIOR TO START OF CONSTRUCTION. NO WARRANTIES EXPRESS OR IMPLIED INCLUDING COMPLIANCE WITH THIS PLAN WITH APPLICABLE BUILDING CODES REQUIREMENTS ARE MADE.

Classic Builders
Jackson Base Plan-C
Villas @ Stonehaven

PROJECT ID: PDS 3005

ISSUE DATE:
DATE: 05-07-15
DATE: 11-13-15
DATE:
DATE:

REVISIONS:
DATE:
DATE:
DATE:
DATE:

Elevations
As indicated

A.2

CLASSIC BUILDERS

www.ClassicBuildersIowa.com

EXTERIOR COLOR PACKAGE

- Royal White
- Graphite
- Slate
- Greystone

MADISON

ABBREVIATIONS

ADJ.	ADJUSTABLE
AWN.	AWNING
BTM.	BOTTOM
BSMT.	BASEMENT
BTW.	BETWEEN
CA	CASEMENT
CANT.	CANTILEVER
CAB.	CABINET
℄	CENTER LINE
CLG	CEILING
C.O.	CASED OPENING
COL.	COLUMN
CONC.	CONCRETE
D	DRYER
DIA.	DIAMETER
DN	DOWN
DH	DOUBLE HUNG
DW	DISHWASHER
F.D.	FLOOR DRAIN
FLR.	FLOOR
FT.	FEET
FURN.	FURNACE
HDR.	HEADER
HDWD	HARDWOOD
INSUL.	INSULATION
JST.	JOIST
LVL	LAMINATED VENEER LUMBER
LIN.	LINEN
MAX.	MAXIMUM
MIN.	MINIMUM
O/C	ON CENTER
O.H.D.	OVERHEAD DOOR
OPNG.	OPENING
PED.	PEDESTAL
N.T.S.	NOT TO SCALE
REF	REFRIGERATOR
REQ	REQUIRED
RO	ROUGH OPENING
RM	ROOM
SH	SINGLE HUNG
S & R	SHELF AND ROD
S.F.	SQUARE FEET
S.P.	SUMP PIT
STL	STEEL
TYP.	TYPICAL
TRANS.	TRANSOM
UNEX.	UNEXCAVATED
VAN.	VANITY
W	WASHER
W/	WITH
W/H	WATER HEATER

ELECTRIC SYMBOLS

- SINGLE POLE SWITCH
- THREE WAY SWITCH
- DIMMER SWITCH
- SINGLE RECEPTACLE OUTLET
- DUPLEX RECEPTACLE OUTLET
- 240 VOLT RECEPTACLE
- PHONE OUTLET
- CABLE OUTLET
- EXHAUST FAN
- LIGHT WITH E. FAN
- SMOKE/HEAT DETECTOR
- GARAGE DOOR OPENER
- ELECTRIC PANEL
- CEILING MOUNTED LIGHT
- PULL CHAIN LIGHT
- RECESSED LIGHT
- WALL MOUNTED LIGHT
- W.M. MOTION DETECTOR LIGHT
- FLORESCENT LIGHT
- BAR LIGHT

MISC. SYMBOLS

- FROST PROOF HOSE BIB
- FLOOR LINE ABOVE
- STRUCTURAL BEAM/HEADER OR GIRDER TRUSS

DRAWING LIST

A.0	Cover Page
A.1	Elevations
A.2	Elevations
A.3	Foundation Plan
A.4	Main Floor Plan
A.5	Building Sections
A.6	Detail
E.1	Electrical
F.1	Floor Covering

plum
BUILDING SYSTEMS, LLC

PLUM DESIGN SERVICES
1100 ALICE'S ROAD. WAUKEE, IOWA 50263-1100
TELEPHONE 515 978 6260 FAX 515 978 6261

PLUM DESIGN SERVICE, INC. ASSUMES NO RESPONSIBILITY FOR STRUCTURAL OR DIMENSIONAL ERRORS OR OMISSIONS. WE ARE NOT A LICENSED ARCHITECT OR ENGINEER. THESE PLANS ARE PROVIDED ON AN "AS IS" BASIS AND IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR OWNER TO VERIFY AND CHECK ALL NOTES, DETAILS, ELEVATIONS, SECTIONS, AND FLOOR PLANS PRIOR TO CONSTRUCTION. THE CONTRACTOR AND/OR OWNER SHALL NOTIFY PLUM DESIGN SERVICE, INC. IMMEDIATELY IF ANY ERRORS OR OMISSION FOR POSSIBLE CORRECTION ARE IDENTIFIED PRIOR TO START OF CONSTRUCTION. NO WARRANTIES EXPRESS OR IMPLIED INCLUDING COMPLIANCE WITH THIS PLAN WITH APPLICABLE BUILDING CODES REQUIREMENTS ARE MADE.

GENERAL CONSTRUCTION NOTES

1. GENERAL
   - A. ALL CONSTRUCTION AND MATERIALS SHALL MEET OR EXCEED IRC 2004, LOCAL BUILDING CODES MAY HAVE DIFFERENT SPECIFICATIONS AND REQUIREMENTS THAN WHAT IS LISTED IN THE IRC2004, THESE LOCAL REQUIREMENTS WILL SUPERSEDE THE IRC 2004. SEE THE LOCAL BUILDING DEPARTMENT FOR CHANGES.
   - B. CONTRACTOR TO CONFIRM THE SIZES, SPACING AND SPECIES OF LUMBER OF ALL STRUCTURAL AND FRAMING MEMBERS. ANY STRUCTURAL AND FRAMING MEMBERS NOT INDICATED ARE TO BE SIZED BY OWNER/CONTRACTOR.
   - C. THE OWNER/CONTRACTOR IS RESPONSIBLE FOR PREVENTIVE MEASURE OF THE BUILD UP OF MOISTURE OR MOLD
   - D. ALL PRODUCTS ARE TO BE INSTALLED PER THE MANUFACTURE'S RECOMMENDATIONS.
   - E. ALL MECHANICAL, PLUMBING, AND ELECTRICAL SYSTEMS ARE TO BE DESIGNED BY OTHERS.
2. DESIGN CRITERIA
   - A. BUILDING AND STRUCTURES, AND ALL PARTS THEREOF, SHALL BE CONSTRUCTED TO SAFELY SUPPORT ALL LOADS, INCLUDING DEAD LOADS, LIVE LOADS, ROOF LOADS, FLOOD LOADS, SNOW LADDS, WIND LOADS, AND SEISMIC LOADS AS PRESCRIBED BY THIS CODE (R301.1)
   - B. TABLE 301.2(1) IRC 2004, VALUES BASED FROM THE CITY OF DES MOINES, IOWA.

GROUND SNOW LOAD	WIND SPEED (mph)	SEISMIC DESIGN CATEGORY	SUBJECT TO DAMAGE FROM			WINTER DESIGN TEMP.	ICE BARRIER UNDERLAYMENT REQUIRED	FLOOD HAZARDS	AIR FREEZING INDEX	MEAN ANNUAL TEMP
			WEATHERING	FROST LINE DEPTH	TERMITE					
30 PSF	90	A	MODERATE	42"	MODERATE-HEAVY	-4° F	YES	NO FEMA MAPS	1500	49.5° F

   - C. MINIMUM LIVE LOADS, (R301.5) IRC 2004

ATTIC WITH LIMITED STORAGE	20 PSF
ATTIC WITHOUT STORAGE	10 PSF
DECKS	40 PSF
EXTERIOR BALCONIES	60 PSF
GUARDRAIL AND HANDRAILS	200 PSF
ROOM OTHER THAN SLEEPING ROOMS	40 PSF
SLEEPING ROOMS	30 PSF
STAIRS	40 PSF

   - DEFLECTION CRITERIA

FLOOR LIVE LOAD	L/480
FLOOR TOTAL LOAD	L/360
ROOF LIVE LOAD	L/360
ROOF TOTAL LOAD	L/240

   - ALL BEAMS SUPPORTING FLOOR OR ROOF LOADS ARE TO BE DESIGNED WITH THE ABOVE DEFLECTION CRITERIA

   - MINIMUM ROOF LIVE LOADS, R301.6, IRC 2004

ROOF TRUSS LIVE LOAD (L)	20 PSF
GROUND SNOW (Pg)	30 PSF
FLAT ROOF SNOW (Pf)	24 PSF
THERMAL CONDITION	Ct = 1.0
TERRAIN EXPOSURE	B
DURATION OF LOAD-SNOW	1.15

   - UNBALANCED AND SNOW DRIFT LOADING ACCORDING TO ASCE 7-05

WIND DESIGN METHOD:	MWFRS/C-C HYBRID ACSE 7-05
EXPOSURE CATEGORY	B
DURATION OF LOAD-WIND	1.60

   - D. DEAD LOADS ANY ADDITIONAL OR CHANGES TO MATERIAL NEEDS TO BE ADJUSTED TO THE BELOW CALCULATIONS.

FLOOR-TOP CHORD		ROOF-TOP CHORDS	
CARPET AND PAD	1.5 PSF	ROOFING-SHINGLES(220 LBS)/ 2 LAYER	4.40 PSF
3/8" CERAMIC TILE/1/2" BACKER BD.	10 PSF	30 LBS. FELT	0.30 PSF
3/4" HARDWOOD FLOOR	4.0 PSF	1/2" OSB OR COM PLYWOOD	1.65 PSF
SUBFLOOR-3/4" OSB OR COM-PLYWOOD	2.0 PSF	1/2 ROOF TRUSS-2/X4	1.10 PSF
1/2 FLOOR TRUSS-4-JOIST SYSTEM	1.5 PSF	CORRECTION FOR SLOPE (12/12)	1.55 PSF
TOTAL WITH CARPET/PAD	5.5 PSF	TOTAL	9.00 PSF
TOTAL WITH TILE/BACKER BD.	13.5 PSF		
TOTAL WITH HARDWOOD FLOOR	7.5 PSF	ROOF-BOTTOM CHORDS	
		1/2 ROOF TRUSS-2/X4	1.10 PSF
FLOOR-BOTTOM CHORD		5/8" GYPBOARD	2.8 PSF
1/2 FLOOR TRUSS-4-JOIST SYSTEM	1.5 PSF	MINIMUM FOR MISC MECHANICAL/ELEC.	1.5 PSF
5/8" GYPBOARD	2.8 PSF	19" BATT BELOW INSULATION	1.60 PSF
MINIMUM FOR MISC MECHANICAL/ELEC.	0.7 PSF		
TOTAL	5.0 PSF	TOTAL	7.00 PSF

3. ROOM REQUIREMENTS
   - A. CEILING HEIGHT (R305.1) HABITABLE ROOMS, HALLWAYS, CORRIDORS, BATHROOMS, TOILET ROOM/LAUNDRY ROOMS, AND BASEMENTS SHALL HAVE A CEILING HEIGHT OF NOT LESS THAN 7 FEET. THE REQUIRED HEIGHT IS MEASURED FROM FINISH FLOOR TO THE LOWEST PRO ECTION FROM THE CEILING.
     - -EXCEPTION 1. BEAMS AND GIRDERS SPACED LESS THAN 4 FEET ON CENTER MAY PROJECT NOT MORE THAN 6 INCHES BELOW THE REQUIRED CEILING HGT.
     - 2. CEILING IN BASEMENT WITHOUT HABITABLE SPACES MAY PROJECT WITHIN 1 FEET 8 INCHES OF FINISHED FLOOR.
     - 3. FOR ROOMS WITH SLOPED CEILING, AT LEAST 50 PERCENT OF THE REQUIRED FLOOR AREA OF THE ROOM MUST HAVE A CEILING HEIGHT OF AT LEAST 7 FEET AND NO PORTION OF THE REQUIRED FLOOR AREA MAY HAVE A CEILING, HEIGHT, OF LESS THAN 5 FEET.
     - 4. BATHROOMS SHALL HAVE A MINIMUM CEILING HEIGHT OF 6 FEET 8 INCHES OVER THE FRONT OF THE FIXTURE
   - B. ROOM DIMENSIONS (R304.3) THE MINIMUM LENGTH OR WIDTH OF ANY HABITABLE ROOM SHALL NOT BE LESS THAN 7'-0" CLEAR IN ANY HORIZONTAL DIMENSION. THE MINIMUM AREA OF ANY HABITABLE ROOM SHALL NOT BE LESS THAN 70 SQ. FEET, EXCEPT KITCHEN (R304.2).
   - C. LIGHT AND VENTILATION (R303) IN HABITABLE ROOMS, PROVIDE NATURAL LIGHT AND VENTILATION WITH OPERABLE WINDOWS. WINDOWS SHALL NOT BE LESS THAN 8% OF THE FLOOR AREA OF EACH ROOM. 1/2 THE REQUIRED WINDOW AREA SHALL BE OPERABLE TO THE EXTERIOR FOR VENTILATION. BATHROOMS MAY HAVE AN OPERABLE WINDOW OF 3 S.F. IN AREA. NON-HABITABLE ROOMS, INCLUDING BATHROOMS, MAY BE VENTILATED WITH EXHAUST FANS AND ARTIFICIAL LIGHT.
   - D. EMERGENCY ESCAPE WINDOWS (R310). BASEMENT AND EACH SLEEPING AREA SHALL HAVE AN EMERGENCY ESCAPE WINDOW THAT IS AT LEAST 20" IN WIDTH (NET), 24" IN HEIGHT (NET) WHEN OPEN AND HAVE AN OPERABLE AREA OF AT LEAST 5.7 SQUARE FEET IN AREA. ESCAPE WINDOWS SHALL BE INSTALLED WITH A SILL HEIGHT OF NO MORE THAN 44" ABOVE THE FLOOR. EGRESS WINDOW WELLS MUST PROJECT A MINIMUM OF 36" AND PROVIDED OVER 9 SQ. FT. OF NET CLEAR AREA. LADDERS ARE REQUIRED IF THE WELL IS OVER 44" DEEP. LADDERS SHALL BE A MIN. OF 12" WIDE.
4. BUILDING REQUIREMENTS
   - A. ATTIC ACCESS (R317) PROVIDE ACCESS TO ATTIC SPACE WITH AN ACCESS DOOR AT LEAST 22" X 30" IN SIZE. LOCATE THE ACCESS DOOR WHERE THERE IS AT LEAST 30" OF CLEAR HEAD SPACE.
   - B. ATTIC MUST BE VENTILATED WITH TOTAL AREA OF ATTIC VENTS AT LEAST 1.0 S.F. (NET) FOR EACH 150 S.F. OF ATTIC AREA TO BE VENTILATED. ATTIC VENTS ARE NOT SHOWN ON THE PLAN.(R806.2)
   - C. SMOKE ALARMS ARE REQUIRED IN ALL BEDROOMS, AT ALL HALLWAYS LEADING TO BEDROOMS, AND AT EACH LEVEL INCLUDING THE BASEMENT. ADDITIONAL ALARMS MAY BE REQUIRED IN SEPARATED SPACE OF THE BASEMENT, SEE BUILDING DEPARTMENT. SMOKE ALARMS SHALL BE HARD WIRED TOGETHER IN SERIES WITH BATTERY BACK UP (R315).
   - D. STAIRWAY ARE TO BE A MINIMUM OF 36" WIDE (FINISHED) (R311.5.1) WITH A MINIMUM HEADROOM OF 6 FEET 8 INCHES (R311.5.2). THE MAXIMUM RISER IS 7 3/4" (R311.5.3.1) WITH A MINIMUM RUN OF 10" (R311.5.3.2) HANDRAILS SHALL BE PROVIDED ON AT LEAST ONE SIDE OF EACH CONTINUOUS RUN OF TREADS OR FLIGHT WITH 4 OR MORE RISERS (R311.5.6). A FLIGHT OF STAIRS SHALL NOT HAVE A VERTICAL RISE LARGER THAN 12 FEET BETWEEN FLOORS OR LANDINGS,(R311.5.4).
   - E. PROVIDE GL GUTTERS, DOWN SPOUTS, AND SPLASH BLOCKS AS NECESSARY.
5. FOUNDATION/CONCRETE
   - A. IN AREAS LIKELY TO HAVE EXPANSIVE, COMPRESSIBLE, SHIFTING OR OTHER UNKNOWN SOIL CHARACTERISTICS, THE BUILDING OFFICIAL SHALL DETERMINE WHETHER A SOIL TEST IS REQUIRED. (R401.4) A SOIL CAPACITY OF 2000 PSI IS ASSUMED.
   - B. CONCRETE SHALL HAVE A MINIMUM STRENGTH OF 3000 psi AT 28 DAYS. GARAGE FLOOR SLABS SHALL BE 3,500 AT 28 DAYS. PORCHES, CARPORT SLABS AND STEPS EXPOSED TO THE WEATHER SHALL BE 3,500 psi AT 28 DAYS,(R402.2). CONCRETE SHALL BE AIR ENTRAINED WITH 5%-7% TOTAL AIR CONTENT.
   - C. ALL FOOTING SHALL BE PLACED ON UNDISTURBED SOIL OR CONTROLLED COMPACTED FILL. MINIMUM FOOTING TO BE 16" WIDE X 8" DEEP FOR A 2 STORY BUILDING AND 18" WIDE X 8" DEEP FOR A 3 STORY BUILDING (TABLE 403.1) BOTH WITH 2 CONTINUOUS HORIZONTAL #4 REBAR.
   - D. ALL ANCHOR BOLTS SHALL BE 1/2" IN DIAMETER AND SHALL EXTEND A MINIMUM OF 7" INTO CONCRETE. USE TWO BOLTS PER SILL PLATE WITH BOLTS SPACED AT A MAXIMUM OF 4 FEET ON CENTER WITH A MINIMUM OF ONE BOLT NOT MORE THAN 12 INCHES FROM THE END BUT AT LEAST 3.10 INCHES FROM END OF SILL PLATE (R403.1.6). ALTERNATE FOUNDATION STRAPS MAY BE USED, SPECIFICATION TO PROVIDE EQUIVALENT ANCHOR TO A 1/2" DIAMETER ANCHOR BOLTS.
   - E. CONCRETE FOUNDATION WALLS SHALL BE CONSTRUCTED AS SET FORTH IN TABLE R404.1.1(1). REFER TO TYPICAL WALL SECTION IN THIS PLAN FOR SPECIFICATION.
6. WOOD FRAMING
   - A. ROOF, FLOOR, AND WALL SHEATHING: AFA RATED SHEATHING.
   - B. WALL STUDS: MINIMUM SPF STUD OR DOUGLAS FIR LARCH STUD.
   - C. WALL PLATES: MINIMUM SPF #2 OR BETTER.
   - D. DIMENSIONAL HEADERS: #2 DOUGLAS FIR OR BETTER.
   - E. LVL HEADERS: 1950 Fb/2.0E MINIMUM.
   - F. JOIST UNDER PARALLEL BEARING PARTITIONS SHALL BE OF ADEQUATE SIZE TO SUPPORT THE LOAD. (R502.4)
   - G. THE ENDS OF EACH JOIST, BEAM, OR GIRDER SHALL HAVE NOT LESS THAN 1.5 INCHES OF BEARING ON WOOD OR METAL AND NOT LESS THAN 3 INCHES ON CONCRETE. (R502.6)
   - H. WOOD TRUSSES SHALL BE DESIGNED AND MANUFACTURED IN ACCORDANCE WITH ANSI/TPI-1. REFER TO THE INDIVIDUAL TRUSS DESIGN DRAWINGS FOR WEB BRACING AND MULTI-CONNECTION OF GIRDERS. BSCI 1-03 SHOULD BE REFER TO FOR HANDLING INSTALLATION AND BRACING OF METAL PLATE TRUSSES.
   - I. NO CUTS, NOTCHES, AND HOLES BORED INTO TRUSSES, STRUCTURAL COMPOSITE LUMBER, GLUE-LAMINATED MEMBERS, OR I-JOIST ARE PROHIBITED EXCEPT WHERE PERMITTED BY THE MANUFACTURER'S RECOMMENDATION OR DESIGN BY PROFESSIONAL. (R502.8.2)
   - J. FIRE BLOCKING SHALL BE PROVIDED TO CUT OFF ALL CONCEALED DRAFT OPENING (BOTH VERTICAL AND HORIZONTAL) AND TO FORM AN EFFECTIVE FIRE BARRIER BETWEEN STORIES, AND BETWEEN A TOP STORY AND ROOF SPACE. (R602.8)
   - K. ALL EXTERIOR WALLS SHALL BE BRACED IN ACCORDANCE WITH SECTION R602.10. MINIMUM 3/8" PANEL SHEATHING.
   - L. THE ALLOWABLE SPANS OF GIRDERS/HEADERS FABRICATED FROM DIMENSIONAL LUMBER ON EXTERIOR WALLS SHALL NOT EXCEED THE VALUES OF TABLE R502.5(1)

TABLE R502.5(1)

GIRDERS AND HEADERS SUPPORTING	GROUND SNOW LOAD 30 PSF					
	BUILDING WIDTH (W)					
	20		28		36	
	SIZE	SPAN	SIZE	SPAN	SIZE	SPAN
ROOF AND CEILING	2X6	3-6	NR	3-0	NR	2-6
	2X8	4-9	2X6	4-1	NR	3-6
	2X10	6-3	2X8	5-3	2X6	4-6
	2X12	7-3	2X10	6-3	2X8	5-3
ROOF, CEILING AND ONE CENTER BEARING FLOOR	2X6	3-6	2X6	3-0	NR	2-6
	2X8	4-9	2X8	4-1	2X6	3-6
	2X10	6-3	2X10	5-3	2X8	4-6
	2X12	7-3	2X12	6-3	2X10	5-3
ROOF, CEILING AND ONE CLEAR SPAN FLOOR	2X6	3-0	2X6	2-6	NR	2-0
	2X8	4-1	2X8	3-6	2X6	3-0
	2X10	5-3	2X10	4-6	2X8	3-6
	2X12	6-3	2X12	5-6	2X10	4-6

TABLE R502.5(2)

GIRDERS AND HEADERS SUPPORTING	GROUND SNOW LOAD 50 PSF					
	BUILDING WIDTH (W)					
	20		28		36	
	SIZE	SPAN	SIZE	SPAN	SIZE	SPAN
ROOF, CEILING AND TWO CLEAR SPAN FLOOR	2X6	2-9	2X6	2-3	NR	1-9
	2X8	3-6	2X8	3-0	2X6	2-6
	2X10	4-6	2X10	3-9	2X8	3-0
	2X12	5-6	2X12	4-6	2X10	3-9
ROOF, CEILING AND TWO CENTER BEARING FLOORS	2X6	2-6	2X6	2-0	NR	1-6
	2X8	3-0	2X8	2-6	2X6	2-0
	2X10	3-9	2X10	3-3	2X8	2-6
	2X12	4-6	2X12	3-9	2X10	3-3
ROOF, CEILING AND ONE CLEAR SPAN FLOOR	2X6	2-0	2X6	1-9	NR	1-3
	2X8	2-9	2X8	2-3	2X6	1-9
	2X10	3-6	2X10	3-0	2X8	2-3
	2X12	4-3	2X12	3-6	2X10	3-0

4. SPACE WIDE BETWEEN INTERIOR BEARING WALLS AND TABLE ASSUMES 40 PSF DEAD LOAD
5. NUMBER OF JACK STUDS TO SUPPORT GIRDER IS DETERMINED BY THE APPLICABLE TABLE IN THE IRC 2004

   - M. TRUSSES SHALL BE CONNECTED TO WALL BY USE OF APPROVED CONNECTORS HAVING A RESISTANCE TO UPLIFT OF NOT LESS THAN 175 POUNDS AND PER THE MANUFACTURE SPECIFICATIONS.
   - N. PROTECTION FROM DECAY SHALL BE PROVIDED IN THE FOLLOWING LOCATION BY THE USE OF NATURALLY DURABLE OR PRESERVATIVE TREATED LUMBER. (R319.1)
     - 1. ALL WOOD FRAMING THAT REST ON CONCRETE EXTERIOR FOUNDATION WALLS AND ARE LESS THAN 8" FROM THE EXPOSED GROUND.
     - 2. SILLS AND SLEEPERS ON A CONCRETE SLAB THAT IS IN DIRECT CONTACT WITH THE GROUND UNLESS SEPARATED FROM SUCH SLAB BY AN IMPERVIOUS MOISTURE BARRIER.
     - 3. THE ENDS OF WOOD GIRDER ENTERING EXTERIOR CONCRETE WALLS HAVING CLEARANCE OF LESS THAN .5 INCH ON TOPS, SIDES AND ENDS.
     - 4. WOOD SIDING, SHEATHING AND WALL FRAMING ON THE EXTERIOR OF A BUILDING HAVING A CLEARANCE OF LESS THAN 6 INCHES FROM THE GROUND
     - 5. ALL LUMBER IN CONTACT WITH THE GROUND, EMBEDDED IN CONCRETE IN DIRECT CONTACT WITH THE GROUND OR EMBEDDED IN CONCRETE EXPOSED TO THE WEATHER THAT SUPPORTS PERMANENT STRUCTURES (R319.1.2)
   - O. ALL RIM AND BOX JOIST SPACES BETWEEN TOP OF THE FOUNDATION WALL AND FLOOR/ROOF LINE SHALL BE INSULATED WITH THE SAME MATERIAL USED FOR EXTERIOR WALLS. ALL EXTERIOR CORNERS AND INTERIOR PARTIONS TO EXTERIOR WALLS THAT ARE CLOSED OFF TO FUTURE INSULATION MUST BE INSULATED DURING FRAMING OF WALL.
   - P. ALL NAILING AND FASTENING SHOULD COMPLY WITH THE IRC TABLE R602.3(1) "FASTENER SCHEDULE FOR SCTRUCTURAL MEMBERS"
7. STRUCTURAL STEEL
   - A. ALL STRUCTURAL STEEL SHALL CONFORM WITH ASTM SPECIFICATION A992 GRADE-50 OR EQUAL AND SHALL HAVE BRIDGE CLIPPING AT 4 FEET ON CENTER TO RESIST LATERAL DEFLECTION.
   - B. ALL FRAMING TO BE ATTACHED TO STRUCTURAL STEEL IN ACCORDANCE WITH GOVERNING CODES.

NOT FOR CONSTRUCTION

THESE ARE PLANS ARE CONCEPTIONAL PLANS AND HAVE NOT BEEN APPROVED AS A BID SET OR FOR CONSTRUCTION

Classic Builders
Madison Base Plan
Villas at Stonehaven

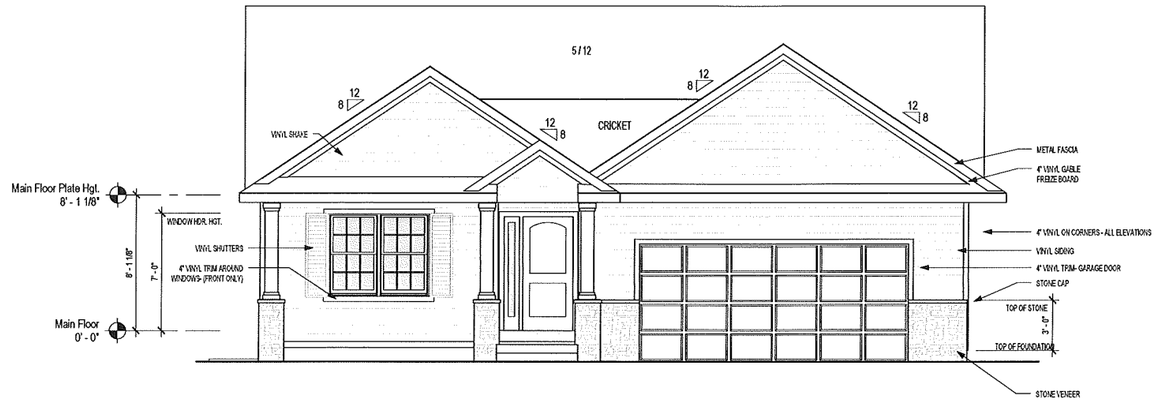
PROJECT ID: PDS 1904

ISSUE DATE:
DATE: 05-12-15
DATE:
DATE:
DATE:

REVISIONS:
DATE:
DATE:
DATE:
DATE:

Cover Page
As indicated

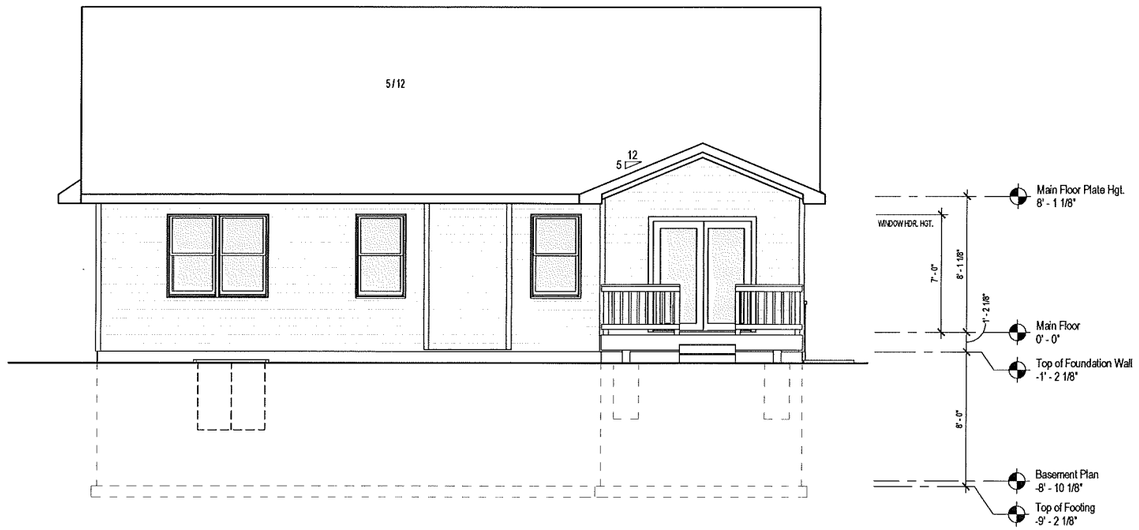
A.0



1 **FRONT ELEVATION**
Scale: 1/4" = 1'-0"

ESTIMATED WALL CLADDING SF	
Stone Veneer	70 SF
Vinyl Siding	2323 SF

* COUNTS FOOTAGE OF GABLE ABOVE ELEVATION FROM THE EXPOSED SURFACE OF THE WALL
1. THE VINYL INCLUDES SURFACES BELOW GROUND TO THE TOP OF THE FOOTING
2. THE VINYL EXCLUDES WINDOWS & DOOR OPENINGS



2 **REAR ELEVATION**
Scale: 1/4" = 1'-0"

plum
BUILDING SYSTEMS, LLC

PLUM DESIGN SERVICES
1100 ALICE'S ROAD WAUKEE, IOWA 50263-1100
TELEPHONE 515 978 6260 FAX 515 978 6261

PLUM DESIGN SERVICE, INC. ASSUMES NO RESPONSIBILITY FOR STRUCTURAL OR DIMENSIONAL ERRORS OR OMISSIONS. WE ARE NOT A LICENSED ARCHITECT OR ENGINEER. THESE PLANS ARE PROVIDED ON AN "AS IS" BASIS AND IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR OWNER TO VERIFY AND CHECK ALL NOTES, DETAILS, ELEVATIONS, SECTIONS, AND FLOOR PLANS PRIOR TO CONSTRUCTION. THE CONTRACTOR AND/OR OWNER SHALL NOTIFY PLUM DESIGN SERVICE, INC. IMMEDIATELY IF ANY ERRORS OR OMISSION FOR POSSIBLE CORRECTION ARE IDENTIFIED PRIOR TO START OF CONSTRUCTION. NO WARRANTIES EXPRESS OR IMPLIED INCLUDING COMPLIANCE WITH THIS PLAN WITH APPLICABLE BUILDING CODES REQUIREMENTS ARE MADE.

Classic Builders
Madison Base Plan
Villas at Stonehaven

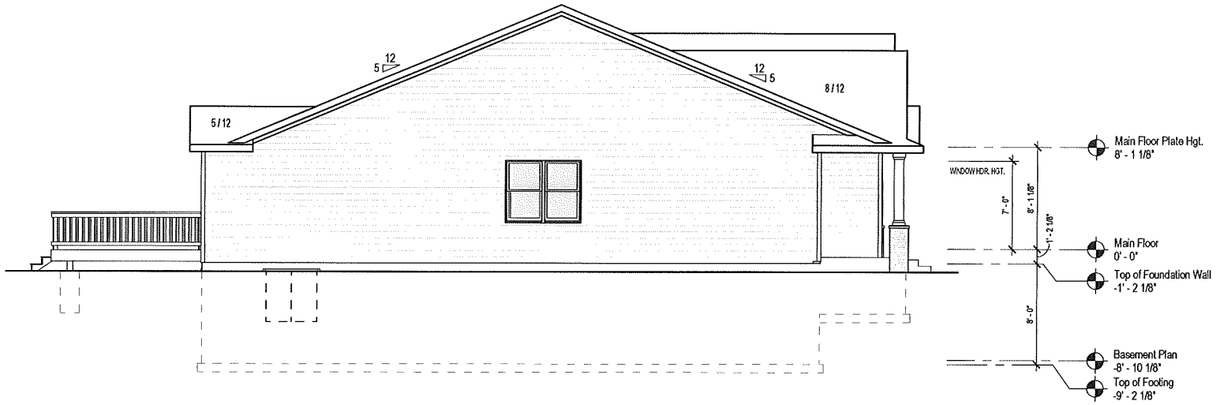
PROJECT ID: PDS 1904

ISSUE DATE:
DATE: 05-12-15
DATE:
DATE:
DATE:

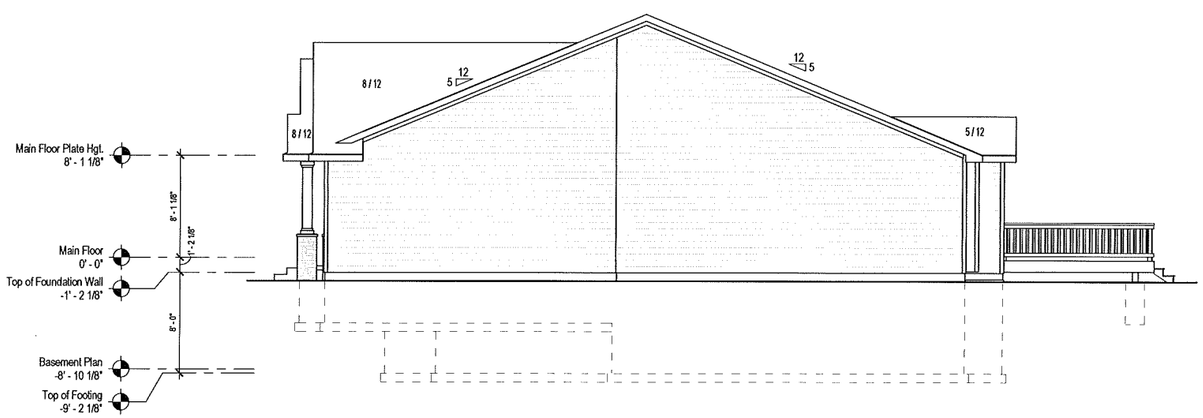
REVISIONS:
DATE:
DATE:
DATE:
DATE:

Elevations
1/4" = 1'-0"

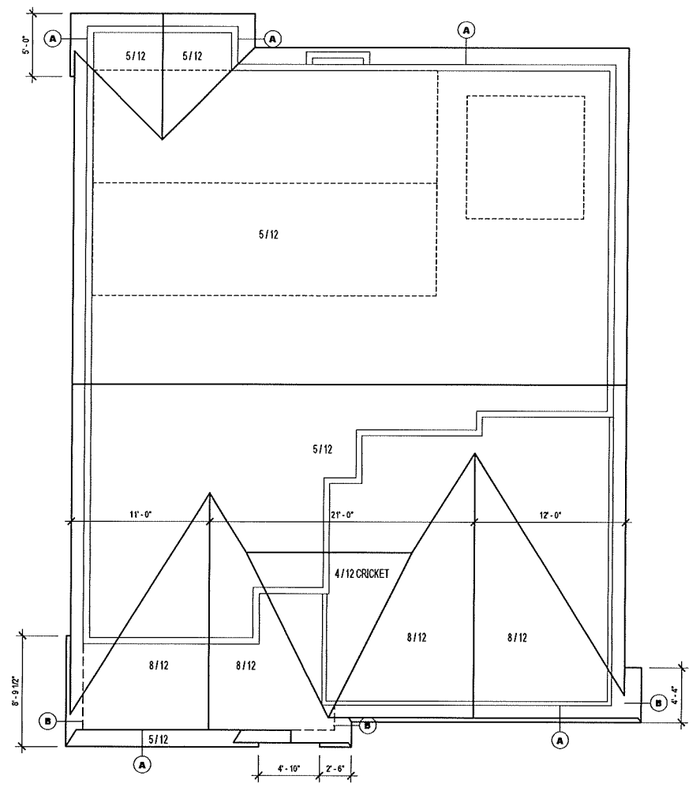
A.1



1 **LEFT ELEVATION**
Scale: 3/16" = 1'-0"



2 **RIGHT ELEVATION**
Scale: 3/16" = 1'-0"



3 **ROOF PLAN**
Scale: 3/16" = 1'-0"

ROOF PLAN LEGEND

SYMBOL	WALL HGT.	PITCH	OVERHANG	HEEL HGT.
A	8'-1 1/8"	5/12	1'-4"	7"
B	8'-1 1/8"	5/12	1'-4"	11"
ALL RAKE OVERHANGS ARE 12" UNLESS NOTED				

ESTIMATED ROOF SF

2820 SF

- ESTIMATED ROOF SF FOR ESTIMATION FROM THE EXPOSED SURFACE OF THE ROOF.
1. THE WATER TABLE DOES NOT NEED SURVEYED BELOW VALUES.
2. NO WATER EFFECT ON THIS BUILDING.

plum
BUILDING SYSTEMS, LLC

PLUM DESIGN SERVICES
1100 AIKES ROAD. WALKER, IOWA 52263-1100
TELEPHONE 515 978 6260 FAX 515 978 6261

PLUM DESIGN SERVICE, INC. ASSUMES NO RESPONSIBILITY FOR STRUCTURAL OR DIMENSIONAL ERRORS OR OMISSIONS. WE ARE NOT A LICENSED ARCHITECT OR ENGINEER. THESE PLANS ARE PROVIDED ON AN "AS IS" BASIS AND IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR OWNER TO VERIFY AND CHECK ALL NOTES, DETAILS, ELEVATIONS, SECTIONS, AND FLOOR PLANS PRIOR TO CONSTRUCTION. THE CONTRACTOR AND/OR OWNER SHALL NOTIFY PLUM DESIGN SERVICE, INC. IMMEDIATELY IF ANY ERRORS OR OMISSION FOR POSSIBLE CORRECTION ARE IDENTIFIED PRIOR TO START OF CONSTRUCTION. NO WARRANTIES EXPRESS OR IMPLIED INCLUDING COMPLIANCE WITH THIS PLAN WITH APPLICABLE BUILDING CODES REQUIREMENTS ARE MADE.

Classic Builders
Madison Base Plan
Villas at Stonehaven

PROJECT ID: PDS 1904

ISSUE DATE:
DATE: 05-12-15
DATE:
DATE:
DATE:

REVISIONS:
DATE:
DATE:
DATE:
DATE:

Elevations
As indicated

A.2

ABBREVIATIONS

ADJ.	ADJUSTABLE
AWN.	AWNING
BTM.	BOTTOM
BSMT.	BASEMENT
BTW.	BETWEEN
CA	CASEMENT
CANT.	CANTILEVER
CAB.	CABINET
℄	CENTER LINE
CLG	CEILING
C.O.	CASED OPENING
COL.	COLUMN
CONC.	CONCRETE
D	DRYER
DIA.	DIAMETER
DN	DOWN
DH	DOUBLE HUNG
DW	DISHWASHER
F.D.	FLOOR DRAIN
FLR.	FLOOR
FT.	FEET
FURN.	FURNACE
HDR.	HEADER
HDWD	HARDWOOD
INSUL.	INSULATION
JST.	JOIST
LVL	LAMINATED VENEER LUMBER
LIN.	LINEN
MAX.	MAXIMUM
MIN.	MINIMUM
O/C	ON CENTER
O.H.D.	OVERHEAD DOOR
OPNG.	OPENING
PED.	PEDESTAL
N.T.S.	NOT TO SCALE
REF	REFRIGERATOR
REQ	REQUIRED
RO	ROUGH OPENING
RM	ROOM
SH	SINGLE HUNG
S & R	SHELF AND ROD
S.F.	SQUARE FEET
S.P.	SUMP PIT
STL	STEEL
TYP.	TYPICAL
TRANS.	TRANSOM
UNEX.	UNEXCAVATED
VAN.	VANITY
W	WASHER
W/	WITH
W.H.	WATER HEATER

ELECTRIC SYMBOLS

- SINGLE POLE SWITCH
- THREE WAY SWITCH
- DIMMER SWITCH
- SINGLE RECEPTACLE OUTLET
- DUPLEX RECEPTACLE OUTLET
- 240 VOLT RECEPTACLE
- PHONE OUTLET
- CABLE OUTLET
- EXHAUST FAN
- LIGHT WITH E. FAN
- SMOKE/HEAT DETECTOR
- GARAGE DOOR OPENER
- ELECTRIC PANEL
- CEILING MOUNTED LIGHT
- PULL CHAIN LIGHT
- RECESSED LIGHT
- WALL MOUNTED LIGHT
- W.M. MOTION DETECTOR LIGHT
- FLORESCENT LIGHT
- BAR LIGHT

MISC. SYMBOLS

- FROST PROOF HOSE BIB
- FLOOR LINE ABOVE
- STRUCTURAL BEAM/HEADER OR GIRDER TRUSS

DRAWING LIST

A.0	Cover Page
A.1	Elevations
A.2	Elevations
A.3	Foundation Plan
A.4	Main Floor Plan
A.5	Building Sections
A.6	Detail
E.1	Electrical
F.1	Floor Covering

plum BUILDING SYSTEMS, LLC

PLUM DESIGN SERVICES
1900 ALICE'S ROAD WAUKEE, IOWA 50263-1100
TELEPHONE 515 978 6260 FAX 515 978 6261

PLUM DESIGN SERVICE, INC., ASSUMES NO RESPONSIBILITY FOR STRUCTURAL OR DIMENSIONAL ERRORS OR OMISSIONS. WE ARE NOT A LICENSED ARCHITECT OR ENGINEER. THESE PLANS ARE PROVIDED ON AN "AS IS" BASIS AND IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR OWNER TO VERIFY AND CHECK ALL NOTES, DETAILS, ELEVATIONS, SECTIONS, AND FLOOR PLANS PRIOR TO CONSTRUCTION. THE CONTRACTOR AND/OR OWNER SHALL NOTIFY PLUM DESIGN SERVICE, INC. IMMEDIATELY IF ANY ERRORS OR OMISSION FOR POSSIBLE CORRECTION ARE IDENTIFIED PRIOR TO START OF CONSTRUCTION. NO WARRANTIES EXPRESS OR IMPLIED INCLUDING COMPLIANCE WITH THIS PLAN WITH APPLICABLE BUILDING CODES REQUIREMENTS ARE MADE.

GENERAL CONSTRUCTION NOTES

1. GENERAL
   - A. ALL CONSTRUCTION AND MATERIALS SHALL MEET OR EXCEED IRC 2006, LOCAL BUILDING CODES MAY HAVE DIFFERENT SPECIFICATIONS AND REQUIREMENTS THAN WHAT IS LISTED IN THE IRC2006, THESE LOCAL REQUIREMENTS WILL SUPERSEDE THE IRC 2006. SEE THE LOCAL BUILDING DEPARTMENT FOR CHANGES.
   - B. CONTRACTOR TO CONFIRM THE SIZES, SPACING AND SPECIES OF LUMBER OF ALL STRUCTURAL AND FRAMING MEMBERS. ANY STRUCTURAL AND FRAMING MEMBERS NOT INDICATED ARE TO BE SIZED BY OWNER/CONTRACTOR.
   - C. THE OWNER/CONTRACTOR IS RESPONSIBLE FOR PREVENTIVE MEASURE OF THE BUILD UP OF MOISTURE OR MOLD
   - D. ALL PRODUCTS ARE TO BE INSTALLED PER THE MANUFACTURE'S RECOMMENDATIONS.
   - E. ALL MECHANICAL, PLUMBING, AND ELECTRICAL SYSTEMS ARE TO BE DESIGNED BY OTHERS.
2. DESIGN CRITERIA
   - A. BUILDING AND STRUCTURES, AND ALL PARTS THEREOF, SHALL BE CONSTRUCTED TO SAFELY SUPPORT ALL LOADS, INCLUDING DEAD LOADS, LIVE LOADS, ROOF LOADS, FLOOD LOADS, SNOW LOADS, WIND LOADS, AND SEISMIC LOADS AS PRESCRIBED BY THIS CODE (R301.1)
   - B. TABLE 301.2(1) IRC 2006, VALUES BASED FROM THE CITY OF DES MOINES, IOWA.

GROUND SNOW LOAD	WIND SPEED (mph)	SEISMIC DESIGN CATEGORY	SUBJECT TO DAMAGE FROM				WINTER DESIGN TEMP.	ICE BARRIER UNDERLAYMENT REQUIRED	FLOOD HAZARDS	AIR FREEZING INDEX	MEAN ANNUAL TEMP
			WEATHERING	FROST LINE DEPTH	TERMITE	DECAY					
30 PSF	90	A	SEVERE	42"	UNDERGROUND-HEAVY	SLIGHT-MODERATE	-4.0° F	YES	MAP/FIRM DATE	1500	46.6° F

   - C. MINIMUM LIVE LOADS, (R301.5) IRC 2006

ATTIC WITH LIMITED STORAGE	20 PSF
ATTIC WITHOUT STORAGE	10 PSF
DECKS	40 PSF
EXTERIOR BALCONIES	60 PSF
GUARDRAIL AND HANDRAILS	200 PSF
ROOM OTHER THAN SLEEPING ROOMS	40 PSF
SLEEPING ROOMS	30 PSF
STAIRS	40 PSF

DEFLECTION CRITERIA

FLOOR LIVE LOAD	L/480
FLOOR TOTAL LOAD	L/360
ROOF LIVE LOAD	L/360
ROOF TOTAL LOAD	L/240

ALL BEAMS SUPPORTING FLOOR OR ROOF LOADS ARE TO BE DESIGNED WITH THE ABOVE DEFLECTION CRITERIA

MINIMUM ROOF LIVE LOADS,(R301.6)IRC 2006

ROOF TRUSS LIVE LOAD(Lr)	20 PSF
GROUND SNOW(Pg)	30 PSF
FLAT ROOF SNOW (Pf)	24 PSF
THERMAL CONDITION	Ct = 1.0
TERRAIN EXPOSURE	B
DURATION OF LOAD-SNOW	1.15

UNBALANCED AND SNOW DRIFT LOADING ACCORDING TO ASCE 7-05

WIND DESIGN METHOD:	MWFRS/DC-C HYBRID ACSE 7-05
EXPOSURE CATEGORY	B
DURATION OF LOAD-WIND	1.60

   - D. DEAD LOADS,ANY ADDITIONAL OR CHANGES TO MATERIAL NEEDS TO BE ADJUSTED TO THE BELOW CALCULATIONS.

FLOOR-TOP CHORD

CARPET AND PAD	1.5 PSF
3/8" CERAMIC TILE/3/4" BACKER BD.	10 PSF
3/4" HARDWOOD FLOOR	4.0 PSF
SUBFLOOR-3/4" OSB OR CDX-PLYWOOD	2.0 PSF
1/2 FLOOR TRUSS-JOIST SYSTEM	1.5 PSF
TOTAL WITH CARPET/PAD	5.5 PSF
TOTAL WITH TILE/BACKER BD.	13.5 PSF
TOTAL WITH HARDWOOD FLOOR	7.5 PSF

FLOOR-BOTTOM CHORD

1/2 FLOOR TRUSS-JOIST SYSTEM	1.5 PSF
5/8" GYPBOARD	2.8 PSF
MINIMUM FOR MISC MECHANICAL/ELEC.	0.7 PSF
TOTAL	5.0 PSF

ROOF-TOP CHORDS

ROOFING-SHINGLES(220 LBS)/ 2 LAYER	4.40 PSF
30 LBS. FELT	0.30 PSF
1/2" OSB OR CDX PLYWOOD	1.65 PSF
1/2 ROOF TRUSS-2X4	1.10 PSF
CORRECTION FOR SLOPE (10/12)	1.55 PSF
TOTAL	9.00 PSF

ROOF-BOTTOM CHORDS

1/2 ROOF TRUSS-2X4	1.10 PSF
5/8" GYPBOARD	2.8 PSF
MINIMUM FOR MISC MECHANICAL/ELEC.	1.5 PSF
19" BATTS/LOWN INSULATION	1.60 PSF
TOTAL	7.00 PSF

3. ROOM REQUIREMENTS
   - A. CEILING HEIGHT (R305.1) HABITABLE ROOMS, HALLWAYS, CORRIDORS, BATHROOMS, TOILET ROOM,LAUNDRY ROOMS, AND BASEMENTS SHALL HAVE A CEILING HEIGHT OF NOT LESS THAN 7 FEET. THE REQUIRED HEIGHT IS MEASURED FROM FINISH FLOOR TO THE LOWEST PROJECTION FROM THE CEILING.
     -EXCEPTION 1. BEAMS AND GIRDERS SPACED LESS THAN 4 FEET ON CENTER MAY PROJECT NOT MORE THAN 6 INCHES BELOW THE REQUIRED CEILING HGT.
     2. CEILING IN BASEMENT WITHOUT HABITABLE SPACES MAY PROJECT WITHIN 4 FEET 6 INCHES OF FINISHED FLOOR.
     3. FOR ROOMS WITH SLOPED CEILING, AT LEAST 50 PERCENT OF THE REQUIRED FLOOR AREA OF THE ROOM MUST HAVE A CEILING HEIGHT OF AT LEAST 7 FEET AND NO PORTION OF THE REQUIRED FLOOR AREA MAY HAVE A CEILING HEIGHT, OF LESS THAN 5 FEET.
     4. BATHROOMS SHALL HAVE A MINIMUM CEILING HEIGHT OF 6 FEET 8 INCHES OVER THE FRONT OF THE FIXTURE
   - B. ROOM DIMENSIONS (R304.3) THE MINIMUM LENGTH OR WIDTH OF ANY HABITABLE ROOM SHALL NOT BE LESS THAN 7'-6" CLEAR IN ANY HORIZONTAL DIMENSION. THE MINIMUM AREA OF ANY HABITABLE ROOM SHALL NOT BE LESS THAN 70 SQ. FEET, EXCEPT KITCHEN (R304.2).
   - C. LIGHT AND VENTILATION (R303) IN HABITABLE ROOMS, PROVIDE NATURAL LIGHT AND VENTILATION WITH OPERABLE WINDOWS. WINDOWS SHALL NOT BE LESS THAN 5% OF THE FLOOR AREA OF EACH ROOM, 1/2 THE REQUIRED WINDOW AREA SHALL BE OPERABLE TO THE EXTERIOR FOR VENTILATION. BATHROOMS MAY HAVE AN OPERABLE WINDOW OF 3 S.F. IN AREA. NON-HABITABLE ROOMS, INCLUDING BATHROOMS, MAY BE VENTILATED WITH EXHAUST FANS AND ARTIFICIAL LIGHT.
   - D. EMERGENCY ESCAPE WINDOWS (R310) BASEMENT AND EACH SLEEPING AREA SHALL HAVE AN EMERGENCY ESCAPE WINDOW THAT IS AT LEAST 20" IN WIDTH (NET), 24" IN HEIGHT (NET) WHEN OPEN AND HAVE AN OPERABLE AREA OF AT LEAST 5.7 SQUARE FEET IN AREA. ESCAPE WINDOWS SHALL BE INSTALLED WITH A SILL HEIGHT OF NO MORE THAN 44" ABOVE THE FLOOR. EGRESS WINDOW WELLS MUST PROJECT A MINIMUM OF 36" AND PROVIDED OVER 9 SQ. FT. OF NET CLEAR AREA. LADDERS ARE REQUIRED IF THE WELL IS OVER 44" DEEP. LADDERS SHALL BE A MIN. OF 12" WIDE.
4. BUILDING REQUIREMENTS
   - A. ATTIC ACCESS (R307) PROVIDE ACCESS TO ATTIC SPACE WITH AN ACCESS DOOR AT LEAST 22" X 30" IN SIZE. LOCATE THE ACCESS DOOR WHERE THERE IS AT LEAST 30" OF CLEAR HEAD SPACE.
   - B. ATTIC MUST BE VENTILATED WITH TOTAL AREA OF ATTIC VENTS AT LEAST 1.0 S.F. (NET) FOR EACH 150 S.F. OF ATTIC AREA TO BE VENTILATED. ATTIC VENTS ARE NOT SHOWN ON THE PLAN.(R806.2)
   - C. SMOKE ALARMS ARE REQUIRED IN ALL BEDROOMS, AT ALL HALLWAYS LEADING TO BEDROOMS, AND AT EACH LEVEL INCLUDING THE BASEMENT. ADDITIONAL ALARMS MAY BE REQUIRED IN SEPARATED SPACE OF THE BASEMENT, SEE BUILDING DEPARTMENT. SMOKE ALARMS SHALL BE HARD WIRED TOGETHER IN SERIES WITH BATTERY BACK UP.(R313).
   - D. STAIRWAY ARE TO BE A MINIMUM OF 36" WIDE (FINISHED).(R311.5.1) WITH A MINIMUM HEADROOM OF 6 FEET 8 INCHES (R311.5.2). THE MAXIMUM RISER IS 7 3/4" (R311.5.3.1) WITH A MINIMUM RUN OF 10". (R311.5.3.2) HANDRAILS SHALL BE PROVIDED ON AT LEAST ONE SIDE OF EACH CONTINUOUS RUN OF TREADS OR FLIGHT WITH 4 OR MORE RISERS (R311.5.6). A FLIGHT OF STAIRS SHALL NOT HAVE A VERTICAL RISE LARGER THAN 12 FEET BETWEEN FLOORS OR LANDINGS.(R311.5.4)
   - E. PROVIDE G.I. GUTTERS, DOWN SPOUTS, AND SPLASH BLOCKS AS NECESSARY.
5. FOUNDATION/CONCRETE
   - A. IN AREAS LIKELY TO HAVE EXPANSIVE, COMPRESSIBLE, SHIFTING OR OTHER UNKNOWN SOIL CHARACTERISTICS, THE BUILDING OFFICIAL SHALL DETERMINE WHETHER A SOIL TEST IS REQUIRED. (R401.4) A SOIL CAPACITY OF 2000 PSF IS ASSUMED.
   - B. CONCRETE SHALL HAVE A MINIMUM STRENGTH OF 3000 psi AT 28 DAYS. GARAGE FLOOR SLABS SHALL BE 3,500 AT 28 DAYS. PORCHES, CARPORT SLABS AND STEPS EXPOSED TO THE WEATHER SHALL BE 3,500 psi AT 28 DAYS.(R402.2). CONCRETE SHALL BE AIR ENTRAINED WITH 5%-7% TOTAL AIR CONTENT.
   - C. ALL FOOTING SHALL BE PLACED ON UNDISTURBED SOIL OR CONTROLLED COMPACTED FILL. MINIMUM FOOTING TO BE 16" WIDE X 8"DEEP FOR A 2 STORY BUILDING AND 18" WIDE X 8" DEEP FOR A 3 STORY BUILDING (TABLE 403.1) BOTH WITH 2 CONTINUOUS HORIZONTAL #4 REBAR.
   - D. ALL ANCHOR BOLTS SHALL BE 1/2" IN DIAMETER AND SHALL EXTEND A MINIMUM OF 7" INTO CONCRETE. USE TWO BOLTS PER SILL PLATE WITH BOLTS SPACED AT A MAXIMUM OF 6 FEET ON CENTER WITH A MINIMUM OF ONE BOLT NOT MORE THAN 12 INCHES FROM THE END BUT AT LEAST 3 1/2 INCHES FROM END OF SILL PLATE.(R403.1.6). ALTERNATE FOUNDATION STRAPS MAY BE USED. SPECIFICATION TO PROVIDE EQUIVALENT ANCHOR TO A 1/2" DIAMETER ANCHOR BOLTS.
   - F. CONCRETE FOUNDATION WALLS SHALL BE CONSTRUCTED AS SET FORTH IN TABLE R404.1.1(5). REFER TO TYPICAL WALL SECTION IN THIS PLAN FOR SPECIFICATION.
6. WOOD FRAMING
   - A. ROOF, FLOOR, AND WALL SHEATHING: FSA RATED SHEATHING.
   - B. WALL STUDS: MINIMUM SPF STUD OR DOUGLAS FIR LARCH STUD.
   - C. WALL PLATES: MINIMUM SPF #2 OR BETTER.
   - D. DIMENSIONAL HEADERS: #2 DOUGLAS FIR OR BETTER.
   - E. LVL HEADERS: 3550 PA/20E MINIMUM.
   - F. JOIST UNDER PARALLEL BEARING PARTITIONS SHALL BE OF ADEQUATE SIZE TO SUPPORT THE LOAD. (R502.4)
   - G. THE ENDS OF EACH JOIST, BEAM, OR GIRDER SHALL HAVE NOT LESS THAN 1.5 INCHES OF BEARING ON WOOD OR METAL AND NOT LESS THAN 3 INCHES ON CONCRETE. (R502.6)
   - H. WOOD TRUSSES SHALL BE DESIGNED AND MANUFACTURED IN ACCORDANCE WITH ANSI/TPI-1. REFER TO THE INDIVIDUAL TRUSS DESIGN DRAWINGS FOR WEB BRACING AND MULTI-CONNECTION OF GIRDERS. BSCI 1-03 SHOULD BE REFER TO FOR HANDLING INSTALLATION AND BRACING OF METAL PLATE TRUSSES.
   - I. NO CUTS, NOTCHES, AND HOLES BORED INTO TRUSSES, STRUCTURAL COMPOSITE LUMBER, GLUE-LAMINATED MEMBERS, OR I-JOIST ARE PROHIBITED EXCEPT WHERE PERMITTED BY THE MANUFACTURER'S RECOMMENDATION OR DESIGN BY PROFESSIONAL. (R502.8.2)
   - J. FIRE BLOCKING SHALL BE PROVIDED TO CUT OFF ALL CONCEALED DRAFT OPENING (BOTH VERTICAL AND HORIZONTAL) AND TO FORM AN EFFECTIVE FIRE BARRIER BETWEEN STORIES, AND BETWEEN A TOP STORY AND ROOF SPACE. (R602.8)
   - K. ALL EXTERIOR WALLS SHALL BE BRACED IN ACCORDANCE WITH SECTION R602.10, MINIMUM 1/8" PANEL SHEATHING.
   - L. THE ALLOWABLE SPANS OF GIRDERS/HEADERS FABRICATED FROM DIMENSIONAL LUMBER ON EXTERIOR WALLS SHALL NOT EXCEED THE VALUES OF TABLE R502.5(1)

TABLE R502.5(1)

GIRDERS AND HEADERS SUPPORTING	GROUND SNOW LOAD 30 psf					
	BUILDING WIDTH (FEET)					
	20		28		36	
	SIZE	SPAN	SIZE	SPAN	SIZE	SPAN
ROOF AND CEILING	2x8	3'-11"	3x4	3'-1"	3x4	2'-7"
	2x10	5'-2"	3x4	4'-2"	3x4	3'-4"
	2x12	6'-2"	3x6	5'-3"	3x6	4'-3"
	3x8	6'-4"	3x6	5'-1"	3x6	4'-0"
	3x10	7'-9"	3x8	6'-3"	3x8	5'-1"
	3x12	9'-0"	3x10	7'-3"	3x10	5'-11"
ROOF, CEILING AND ONE CENTER BEARING FLOOR	2x8	5'-6"	3x6	4'-3"	3x6	3'-4"
	2x10	6'-10"	3x8	5'-2"	3x8	4'-2"
	2x12	8'-0"	3x10	6'-0"	3x10	4'-11"
	3x8	7'-3"	3x8	5'-7"	3x8	4'-6"
	3x10	8'-9"	3x10	6'-11"	3x10	5'-7"
	3x12	10'-0"	3x12	8'-0"	3x12	6'-5"
ROOF, CEILING AND ONE CLEAR SPAN FLOOR	2x8	4'-9"	3x4	3'-0"	3x4	2'-4"
	2x10	5'-11"	3x6	4'-2"	3x6	3'-3"
	2x12	7'-0"	3x6	5'-1"	3x6	4'-0"
	3x8	5'-11"	3x6	4'-2"	3x6	3'-3"
	3x10	7'-3"	3x8	5'-7"	3x8	4'-3"
	3x12	8'-4"	3x10	6'-5"	3x10	5'-0"

   - M. TRUSSES SHALL BE CONNECTED TO WALL BY USE OF APPROVED CONNECTORS HAVING A RESISTANCE TO UPLIFT OF NOT LESS THAN 175 POUNDS AND PER THE MANUFACTURE SPECIFICATIONS.
   - N. PROTECTION FROM DECAY SHALL BE PROVIDED IN THE FOLLOWING LOCATION BY THE USE OF NATURALLY DURABLE OR PRESERVATIVE TREATED LUMBER. (R319.1)
     1. ALL WOOD FRAMING THAT REST ON CONCRETE EXTERIOR FOUNDATION WALLS AND ARE LESS THAN 8" FROM THE EXPOSED GROUND.
     2. SILLS AND SLEEPERS ON A CONCRETE SLAB THAT IS IN DIRECT CONTACT WITH THE GROUND UNLESS SEPARATED FROM SUCH SLAB BY AN IMPERVIOUS MOISTURE BARRIER.
     3. THE ENDS OF WOOD GIRDER ENTERING EXTERIOR CONCRETE WALLS HAVING CLEARANCE OF LESS THAN .5 INCH ON TOP,S, SIDES AND ENDS.
     4. WOOD SIDING, SHEATHING AND WALL FRAMING ON THE EXTERIOR OF A BUILDING HAVING A CLEARANCE OF LESS THAN 6 INCHES FROM THE GROUND
     5. ALL LUMBER IN CONTACT WITH THE GROUND, EMBEDDED IN CONCRETE IN DIRECT CONTACT WITH THE GROUND OR EMBEDDED IN CONCRETE EXPOSED TO THE WEATHER THAT SUPPORTS PERMANENT STRUCTURES (R319.1.2)
   - O. ALL RIM AND BOX JOIST SPACES BETWEEN TOP OF THE FOUNDATION WALL AND FLOOR/ROOF LINE SHALL BE INSULATED WITH THE SAME MATERIAL USED FOR EXTERIOR WALLS. ALL EXTERIOR CORNERS AND INTERIOR PARTITIONS TO EXTERIOR WALLS THAT ARE CLOSED OFF TO FUTURE INSULATION MUST BE INSULATED DURING FRAMING OF WALL.
   - P. ALL NAILING AND FASTENING SHOULD COMPLY WITH THE IRC TABLE R602.3(1) "FASTENER SCHEDULE FOR SCTRUCTURAL MEMBERS"
7. STRUCTURAL STEEL
   - A. ALL STRUCTURAL STEEL SHALL CONFORM WITH ASTM SPECIFICATION A992 GRADE-50 OR EQUAL AND SHALL HAVE BRIDGE CLIPPING AT 4 FEET ON CENTER TO RESIST LATERAL DEFLECTION.
   - B. ALL FRAMING TO BE ATTACHED TO STRUCTURAL STEEL IN ACCORDANCE WITH GOVERNING CODES.

NOT FOR CONSTRUCTION

THESE ARE PLANS ARE CONCEPTIONAL PLANS AND HAVE NOT BEEN APPROVED AS A BID SET OR FOR CONSTRUCTION

Classic Builders
Madison Base Plan-B
Villas at Stonehaven

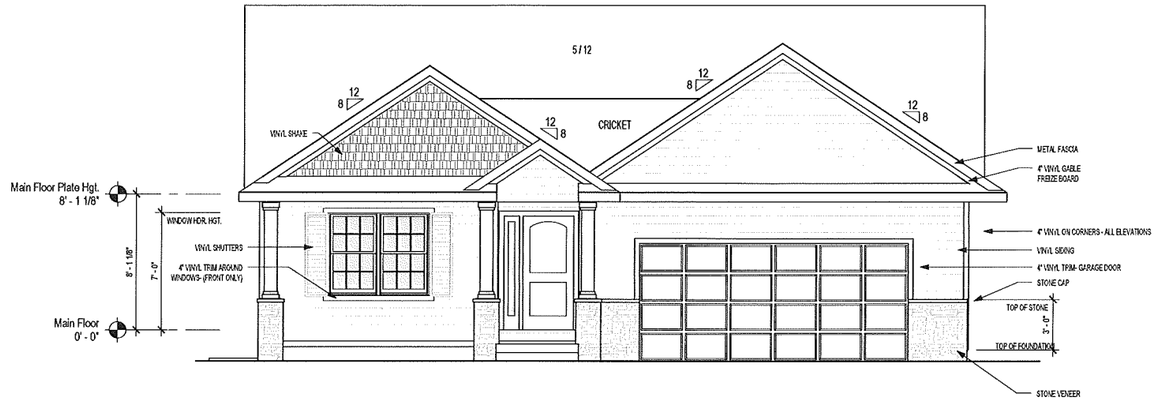
PROJECT ID: PDS 3006

ISSUE DATE:
DATE: 05-12-15
DATE: 11-13-15
DATE:
DATE:

REVISIONS:
DATE:
DATE:
DATE:
DATE:

Cover Page
As indicated

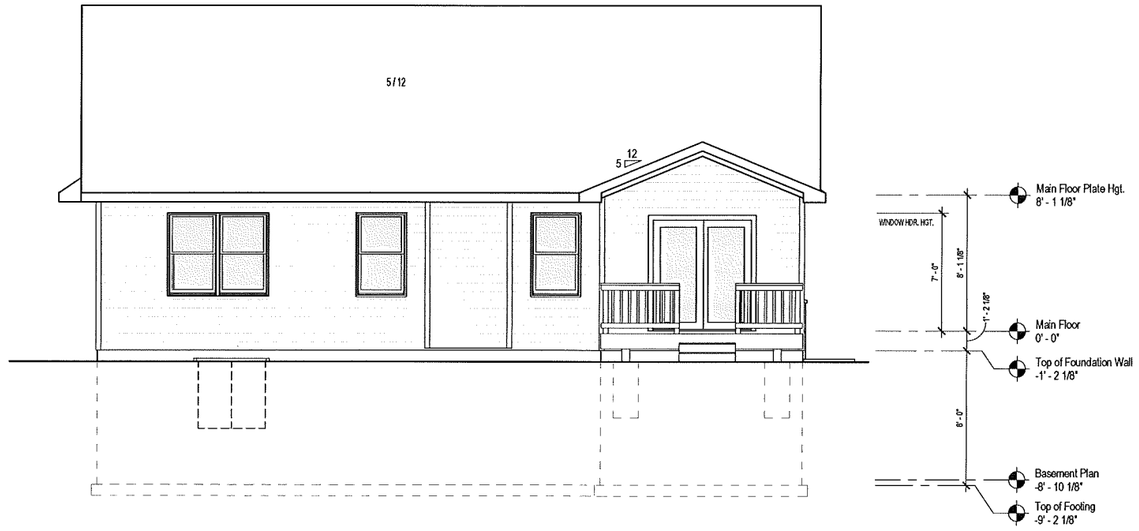
A.0



1 **FRONT ELEVATION**
Scale: 1/4" = 1'-0"

ESTIMATED WALL CLADDING SF	
Stone Veneer	70 SF
Vinyl Shake Material	61 SF
Vinyl Siding	2262 SF

* SQUARE FOOTAGE OF GABLE ENDS IS BASED ON THE ENTIRE EXPOSED SURFACE OF THE WALL
1. THE VIEW INCLUDES SURFACES BELOW GROUND WHERE THEY ARE VISIBLE.
2. THE VIEW EXCLUDES WINDOW AND DOOR TRIM, ETC.



2 **REAR ELEVATION**
Scale: 1/4" = 1'-0"

plum
BUILDING SYSTEMS, LLC

PLUM DESIGN SERVICES
1100 ALICE'S ROAD WAUKEE, IOWA 50263-1100
TELEPHONE 515 978 6260 FAX 515 978 6261

PLUM DESIGN SERVICE, INC. ASSUMES NO RESPONSIBILITY FOR STRUCTURAL OR DIMENSIONAL ERRORS OR OMISSIONS. WE ARE NOT A LICENSED ARCHITECT OR ENGINEER. THESE PLANS ARE PROVIDED ON AN "AS IS" BASIS AND IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR OWNER TO VERIFY AND CHECK ALL NOTES, DETAILS, ELEVATIONS, SECTIONS, AND FLOOR PLANS PRIOR TO CONSTRUCTION. THE CONTRACTOR AND/OR OWNER SHALL NOTIFY PLUM DESIGN SERVICE, INC. IMMEDIATELY IF ANY ERRORS OR OMISSION FOR POSSIBLE CORRECTION ARE IDENTIFIED PRIOR TO START OF CONSTRUCTION. NO WARRANTIES EXPRESS OR IMPLIED INCLUDING COMPLIANCE WITH THIS PLAN WITH APPLICABLE BUILDING CODES REQUIREMENTS ARE MADE.

Classic Builders
Madison Base Plan-B
Villas at Stonehaven

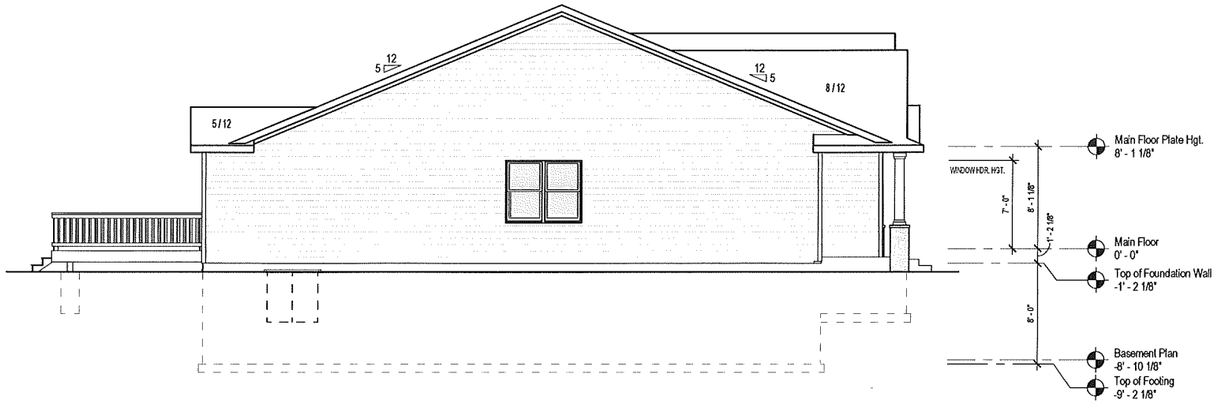
PROJECT ID: PDS 3006

ISSUE DATE:
DATE: 05-12-15
DATE: 11-13-15
DATE:
DATE:

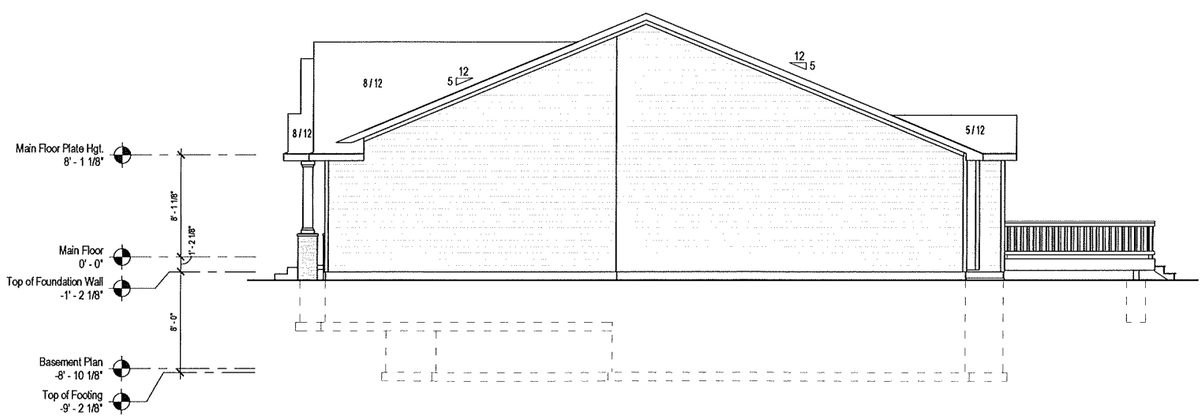
REVISIONS:
DATE:
DATE:
DATE:
DATE:

Elevations
1/4" = 1'-0"

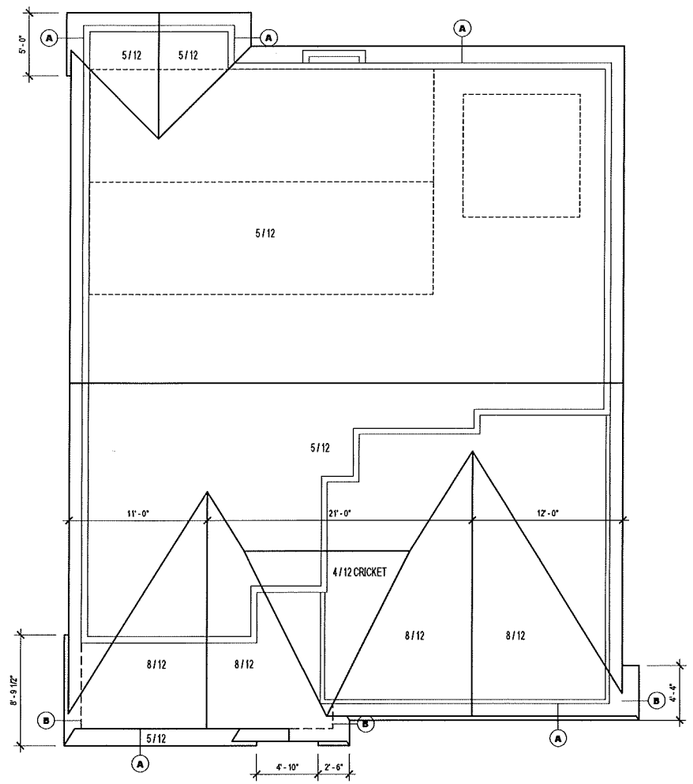
A.1



1 **LEFT ELEVATION**
Scale: 3/16" = 1'-0"



2 **RIGHT ELEVATION**
Scale: 3/16" = 1'-0"



3 **ROOF PLAN**
Scale: 3/16" = 1'-0"

ROOF PLAN LEGEND

SYMBOL	WALL HGT.	PITCH	OVERHANG	HEEL HGT.
A	8'-1 1/8"	5/12	1'-4"	7"
B	8'-1 1/8"	5/12	1'-4"	11"
ALL RAKE OVERHANGS ARE 12" UNLESS NOTED				

ESTIMATED ROOF SF

2820 SF

- TO ALTER THE ROOF SF YOU SHOULD ADD/SUBTRACT FROM THE ABOVE SQUARE SURFACE OF THE ROOF,
1. THE WIDTH OF GABLES WHICH HAVE SURFACES BELOW A VALLEY;
2. NO ADDITIONAL SF FOR GABLE ENDS

plum
BUILDING SYSTEMS, LLC

PLUM DESIGN SERVICES
1100 ALICE'S ROAD WAUKEE, IOWA 50263-1100
TELEPHONE 515 978 6260 FAX 515 978 6261

PLUM DESIGN SERVICE, INC. ASSUMES NO RESPONSIBILITY FOR STRUCTURAL OR DIMENSIONAL ERRORS OR OMISSIONS. WE ARE NOT A LICENSED ARCHITECT OR ENGINEER. THESE PLANS ARE PROVIDED ON AN "AS IS" BASIS AND IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR OWNER TO VERIFY AND CHECK ALL NOTES, DETAILS, ELEVATIONS, SECTIONS, AND FLOOR PLANS PRIOR TO CONSTRUCTION. THE CONTRACTOR AND/OR OWNER SHALL NOTIFY PLUM DESIGN SERVICE, INC. IMMEDIATELY IF ANY ERRORS OR OMISSION FOR POSSIBLE CORRECTION ARE IDENTIFIED PRIOR TO START OF CONSTRUCTION. NO WARRANTIES EXPRESS OR IMPLIED INCLUDING COMPLIANCE WITH THIS PLAN WITH APPLICABLE BUILDING CODES REQUIREMENTS ARE MADE.

Classic Builders
Madison Base Plan-B
Villas at Stonehaven

PROJECT ID: PDS 3006

ISSUE DATE:
DATE: 05-12-15
DATE: 11-13-15
DATE:
DATE:

REVISIONS:
DATE:
DATE:
DATE:
DATE:

Elevations
As indicated

A.2

ABBREVIATIONS

ADJ.	ADJUSTABLE
AWN.	AWNING
BTM.	BOTTOM
BSMT.	BASEMENT
BTW.	BETWEEN
CA	CASEMENT
CANT.	CANTILEVER
CAB.	CABINET
℄	CENTER LINE
CLG	CEILING
C.O.	CASED OPENING
COL.	COLUMN
CONC.	CONCRETE
D	DRYER
DIA.	DIAMETER
DN	DOWN
DH	DOUBLE HUNG
DW	DISHWASHER
F.D.	FLOOR DRAIN
FLR.	FLOOR
FT.	FEET
FURN.	FURNACE
HDR.	HEADER
HDWD	HARDWOOD
INSUL.	INSULATION
JST.	JOIST
LVL	LAMINATED VENEER LUMBER
LIN.	LINEN
MAX.	MAXIMUN
MIN.	MIMIMUM
O/C	ON CENTER
O.H.D.	OVERHEAD DOOR
OPNG.	OPENING
PED.	PEDESTAL
N.T.S.	NOT TO SCALE
REF	REFRIGERATOR
REQ	REQUIRED
RO	ROUGH OPENING
RM	ROOM
SH	SINGLE HUNG
S & R	SHELF AND ROD
S.F.	SQUARE FEET
S.P.	SUMP PIT
STL	STEEL
TYP.	TYPICAL
TRANS.	TRANSOM
UNEX.	UNEXCAVATED
VAN.	VANITY
W	WASHER
W/	WITH
W.H.	WATER HEATER

ELECTRIC SYMBOLS

- SINGLE POLE SWITCH
- THREE WAY SWITCH
- DIMMER SWITCH
- SINGLE RECEPTACLE OUTLET
- DUPLEX RECEPTACLE OUTLET
- 240 VOLT RECEPTACLE
- PHONE OUTLET
- CABLE OUTLET
- EXHAUST FAN
- LIGHT WITH E. FAN
- SMOKE/HEAT DETECTOR
- GARAGE DOOR OPENER
- ELECTRIC PANEL
- CEILING MOUNTED LIGHT
- PULL CHAIN LIGHT
- RECESSED LIGHT
- WALL MOUNTED LIGHT
- W.M. MOTION DETECTOR LIGHT
- FLORESCENT LIGHT
- BAR LIGHT

MISC. SYMBOLS

- FROST PROOF HOSE BIB
- FLOOR LINE ABOVE
- STRUCTURAL BEAM/HEADER OR GIRDER TRUSS

DRAWING LIST

A.0	Cover Page
A.1	Elevations
A.2	Elevations
A.3	Foundation Plan
A.4	Main Floor Plan
A.5	Building Sections
A.6	Detail
E.1	Electrical
F.1	Floor Covering

plum
BUILDING SYSTEMS, LLC

PLUM DESIGN SERVICES
1100 ALICE'S ROAD WAUKEE, IOWA 50263-1100
TELEPHONE 515 978 6260 FAX 515 978 6261

PLUM DESIGN SERVICE, INC. ASSUMES NO RESPONSIBILITY FOR STRUCTURAL OR DIMENSIONAL ERRORS OR OMISSIONS. WE ARE NOT A LICENSED ARCHITECT OR ENGINEER. THESE PLANS ARE PROVIDED ON AN "AS IS" BASIS AND IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR OWNER TO VERIFY AND CHECK ALL NOTES, DETAILS, ELEVATIONS, SECTIONS, AND FLOOR PLANS PRIOR TO CONSTRUCTION. THE CONTRACTOR AND/OR OWNER SHALL NOTIFY PLUM DESIGN SERVICE, INC. IMMEDIATELY IF ANY ERRORS OR OMISSION FOR POSSIBLE CORRECTION ARE IDENTIFIED PRIOR TO START OF CONSTRUCTION. NO WARRANTIES EXPRESS OR IMPLIED INCLUDING COMPLIANCE WITH THIS PLAN WITH APPLICABLE BUILDING CODES REQUIREMENTS ARE MADE.

GENERAL CONSTRUCTION NOTES

1. GENERAL
   - A. ALL CONSTRUCTION AND MATERIALS SHALL MEET OR EXCEED IRC 2006, LOCAL BUILDING CODES MAY HAVE DIFFERENT SPECIFICATIONS AND REQUIREMENTS THAN WHAT IS LISTED IN THE IRC2006, THESE LOCAL REQUIREMENTS WILL SUPERSEDE THE IRC 2006, SEE THE LOCAL BUILDING DEPARTMENT FOR CHANGES.
   - B. CONTRACTOR TO CONFIRM THE SIZES, SPACING AND SPECIES OF LUMBER OF ALL STRUCTURAL AND FRAMING MEMBERS. ANY STRUCTURAL AND FRAMING MEMBERS NOT INDICATED ARE TO BE SIZED BY OWNER/CONTRACTOR.
   - C. THE OWNER/CONTRACTOR IS RESPONSIBLE FOR PREVENTIVE MEASURE OF THE BUILD UP OF MOISTURE OR MOLD
   - D. ALL PRODUCTS ARE TO BE INSTALLED PER THE MANUFACTURE'S RECOMMENDATIONS.
   - E. ALL MECHANICAL, PLUMBING, AND ELECTRICAL SYSTEMS ARE TO BE DESIGNED BY OTHERS.
2. DESIGN CRITERIA
   - A. BUILDING AND STRUCTURES, AND ALL PARTS THEREOF, SHALL BE CONSTRUCTED TO SAFELY SUPPORT ALL LOADS, INCLUDING DEAD LOADS, LIVE LOADS, ROOF LOADS, FLOOD LOADS, SNOW LADDS, WIND LOADS, AND SEISMIC LOADS AS PRESCRIBED BY THIS CODE (R301.1)
   - B. TABLE 301.2(1) IRC 2006, VALUES BASED FROM THE CITY OF DES MOINES, IOWA.

GROUND SNOW LOAD	WIND SPEED (MPH)	SEISMIC DESIGN CATEGORY	SUBJECT TO DAMAGE FROM			WINTER DESIGN TEMP	ICE BARRIER UNDERLAYMENT REQUIRED	FLOOD HAZARDS	AIR FREEZING INDEX	MEAN ANNUAL TEMP
			WEATHERING	FROST LINE DEPTH	TERMITE					
30 PSF	90	A	SEVERE	42"	MODERATE TO HEAVY	-4 F °	YES	NO FLOOD HAZARD	1638	48.6 F

- C. MINIMUM LIVE LOADS, (R301.5) IRC 2006

ATTIC WITH LIMITED STORAGE	20 PSF
ATTIC WITHOUT STORAGE	10 PSF
DECKS	40 PSF
EXTERIOR BALCONIES	60 PSF
GUARDRAIL AND HANDRAILS	200 PSF
ROOM OTHER THAN SLEEPING ROOMS	40 PSF
SLEEPING ROOMS	30 PSF
STAIRS	40 PSF

MINIMUM ROOF LIVE LOADS(R301.6) IRC 2006	
ROOF TRUSS LIVE LOAD (Lr)	20 PSF
GROUND SNOW (Pg)	30 PSF
FLAT ROOF SNOW (Pf)	24 PSF
THERMAL CONDITION	Ct = 1.0
TERRAIN EXPOSURE	B
DURATION OF LOAD-SNOW	1.15

DEFLECTION CRITERIA

FLOOR LIVE LOAD	L/480
FLOOR TOTAL LOAD	L/360
ROOF LIVE LOAD	L/360
ROOF TOTAL LOAD	L/240

UNBALANCED AND SNOW DRIFT LOADING ACCORDING TO ASCE 7-05

WIND DESIGN METHOD:	MWFRS/C-C HYBRID ACSE 7-05
EXPOSURE CATEGORY	B
DURATION OF LOAD-WIND	1.60

ALL BEAMS SUPPORTING FLOOR OR ROOF LOADS ARE TO BE DESIGNED WITH THE ABOVE DEFLECTION CRITERIA

- D. DEAD LOADS ANY ADDITIONAL OR CHANGES TO MATERIAL NEEDS TO BE ADJUSTED TO THE BELOW CALCULATIONS.

FLOOR-TOP CHORD

CARPET AND PAD	1.5 PSF
3/8" CERAMIC TILE/1/2" BACKER BD.	10 PSF
3/4" HARDWOOD FLOOR	4.0 PSF
SUBFLOOR-3/4" OSB OR COM-PLYWOOD	2.0 PSF
1/2 FLOOR TRUSS-X-JOIST SYSTEM	1.5 PSF
TOTAL WITH CARPET/PAD	5.5 PSF
TOTAL WITH TILE/BACKER BD.	13.5 PSF
TOTAL WITH HARDWOOD FLOOR	7.5 PSF

FLOOR-BOTTOM CHORD

1/2 FLOOR TRUSS-X-JOIST SYSTEM	1.5 PSF
5/8" GYPBOARD	2.8 PSF
MINIMUM FOR MISC MECHANICAL/ELEC.	0.7 PSF
TOTAL	5.0 PSF

ROOF-TOP CHORDS

ROOFING-SHINGLES(220 LBS.) 2 LAYER	4.40 PSF
30 LBS. FELT	0.30 PSF
1/2" OSB OR COM PLYWOOD	1.65 PSF
1/2 ROOF TRUSS-2X4	1.10 PSF
CORRECTION FOR SLOPE (12/12)	1.55 PSF
TOTAL	9.00 PSF

ROOF-BOTTOM CHORDS

1/2 ROOF TRUSS-2X4	1.10 PSF
5/8" GYPBOARD	2.8 PSF
MINIMUM FOR MISC MECHANICAL/ELEC.	1.5 PSF
19" BATT/BLOWN INSULATION	1.60 PSF
TOTAL	7.00 PSF

3. ROOM REQUIREMENTS
   - A. CEILING HEIGHT (R305.1) HABITABLE ROOMS, HALLWAYS, CORRIDORS, BATHROOMS, TOILET ROOM LAUNDRY ROOMS, AND BASEMENTS SHALL HAVE A CEILING HEIGHT OF NOT LESS THAN 7 FEET. THE REQUIRED HEIGHT IS MEASURED FROM FINISH FLOOR TO THE LOWEST PROJECTION FROM THE CEILING.
     - -EXCEPTION 1. BEAMS AND GIRDERS SPACED LESS THAN 4 FEET ON CENTER MAY PROJECT NOT MORE THAN 6 INCHES BELOW THE REQUIRED CEILING HGT.
     - 2. CEILING IN BASEMENT WITHOUT HABITABLE SPACES MAY PROJECT WITHIN 6 FEET 8 INCHES OF FINISHED FLOOR.
     - 3. FOR ROOMS WITH SLOPED CEILING, AT LEAST 50 PERCENT OF THE REQUIRED FLOOR AREA OF THE ROOM MUST HAVE A CEILING HEIGHT OF AT LEAST 7 FEET AND NO PORTION OF THE REQUIRED FLOOR AREA MAY HAVE A CEILING, HEIGHT, OF LESS THAN 5 FEET.
     - 4. BATHROOMS SHALL HAVE A MINIMUM CEILING HEIGHT OF A FEET 8 INCHES OVER THE FRONT OF THE FIXTURE
   - B. ROOM DIMENSIONS (R304.1) THE MINIMUM LENGTH OR WIDTH OF ANY HABITABLE ROOM SHALL NOT BE LESS THAN 7'-0" CLEAR IN ANY HORIZONTAL DIMENSION. THE MINIMUM AREA OF ANY HABITABLE ROOM SHALL NOT BE LESS THAN 70 SQ. FEET, EXCEPT KITCHEN (R304.2).
   - C. LIGHT AND VENTILATION (R303) IN HABITABLE ROOMS, PROVIDE NATURAL LIGHT AND VENTILATION WITH OPERABLE WINDOWS. WINDOWS SHALL NOT BE LESS THAN 8% OF THE FLOOR AREA OF EACH ROOM. 1/2 THE REQUIRED WINDOW AREA SHALL BE OPERABLE TO THE EXTERIOR FOR VENTILATION. BATHROOMS MAY HAVE AN OPERABLE WINDOW OF 3 S.F. IN AREA. NON-HABITABLE ROOMS, INCLUDING BATHROOMS, MAY BE VENTILATED WITH EXHAUST FANS AND ARTIFICIAL LIGHT.
   - D. EMERGENCY ESCAPE WINDOWS (R310) BASEMENT AND EACH SLEEPING AREA SHALL HAVE AN EMERGENCY ESCAPE WINDOW THAT IS AT LEAST 22" IN WIDTH (NET), 24" IN HEIGHT (NET), WHEN OPEN AND HAVE AN OPERABLE AREA OF AT LEAST 5.7 SQUARE FEET IN AREA. ESCAPE WINDOWS SHALL BE INSTALLED WITH A SILL HEIGHT OF NO MORE THAN 44" ABOVE THE FLOOR. EGRESS WINDOW WELLS MUST PROJECT A MINIMUM OF 36" AND PROVIDED OVER 9 SQ. FT. OF NET CLEAR AREA. LADDERS ARE REQUIRED IF THE WELL IS OVER 44" DEEP. LADDERS SHALL BE A MIN. OF 12" WIDE.
4. BUILDING REQUIREMENTS
   - A. ATTIC ACCESS (R327) PROVIDE ACCESS TO ATTIC SPACE WITH AN ACCESS DOOR AT LEAST 22" X 30" IN SIZE. LOCATE THE ACCESS DOOR WHERE THERE IS AT LEAST 30" OF CLEAR HEAD SPACE.
   - B. ATTIC MUST BE VENTILATED WITH TOTAL AREA OF ATTIC VENTS AT LEAST 1.0 S.F. (NET) FOR EACH 150 S.F. OF ATTIC AREA TO BE VENTILATED. ATTIC VENTS ARE NOT SHOWN ON THE PLAN (R806.2).
   - C. SMOKE ALARMS ARE REQUIRED IN ALL BEDROOMS, AT ALL HALLWAYS LEADING TO BEDROOMS, AND AT EACH LEVEL INCLUDING THE BASEMENT. ADDITIONAL ALARMS MAY BE REQUIRED IN SEPARATED SPACE OF THE BASEMENT, SEE BUILDING DEPARTMENT. SMOKE ALARMS SHALL BE HARD WIRED TOGETHER IN SERIES WITH BATTERY BACK UP (R313).
   - D. STAIRWAY ARE TO BE A MINIMUM OF 36" WIDE (FINISHED) (R311.5.1) WITH A MINIMUM HEADROOM OF 6 FEET 8 INCHES (R311.5.2). THE MAXIMUM RISER IS 7 3/4" (R311.5.3.1) WITH A MINIMUM RUN OF 10" (R311.5.3.2) HANDRAILS SHALL BE PROVIDED ON AT LEAST ONE SIDE OF EACH CONTINUOUS RUN OF TREADS OR FLIGHT WITH 4 OR MORE RISERS (R311.5.6). A FLIGHT OF STAIRS SHALL NOT HAVE A VERTICAL RISE LARGER THAN 12 FEET BETWEEN FLOORS OR LANDINGS (R311.5.4).
   - E. PROVIDE GUTTERS, DOWN SPOUTS, AND SPLASH BLOCKS AS NECESSARY.
5. FOUNDATION/CONCRETE
   - A. IN AREAS LIKELY TO HAVE EXPANSIVE, COMPRESSIBLE, SHIFTING OR OTHER UNKNOWN SOIL CHARACTERISTICS, THE BUILDING OFFICIAL SHALL DETERMINE WHETHER A SOIL TEST IS REQUIRED. (R401.4) A SOIL CAPACITY OF 2000 PSI IS ASSUMED.
   - B. CONCRETE SHALL HAVE A MINIMUM STRENGTH OF 3000 psi AT 28 DAYS. GARAGE FLOOR SLABS SHALL BE 3,500 AT 28 DAYS. PORCHES, CARPORT SLABS AND STEPS EXPOSED TO THE WEATHER SHALL BE 3,500 psi AT 28 DAYS (R402.2), CONCRETE SHALL BE AIR ENTRAINED WITH 5%-7% TOTAL AIR CONTENT.
   - C. ALL FOOTING SHALL BE PLACED ON UNDISTURBED SOIL OR CONTROLLED COMPACTED FILL. MINIMUM FOOTING TO BE 16" WIDE X 8" DEEP FOR A 2 STORY BUILDING AND 18" WIDE X 8" DEEP FOR A 3 STORY BUILDING (TABLE 403.1) BOTH WITH 2 CONTINUOUS HORIZONTAL #4 REBAR.
   - D. ALL ANCHOR BOLTS SHALL BE 1/2" IN DIAMETER AND SHALL EXTEND A MINIMUM OF 7" INTO CONCRETE. USE TWO BOLTS PER SILL PLATE WITH BOLTS SPACED AT A MAXIMUM OF 6 FEET ON CENTER WITH A MINIMUM OF ONE BOLT NOT MORE THAN 12 INCHES FROM THE END BUT AT LEAST 3 1/2 INCHES FROM END OF SILL PLATE (R403.1.6). ALTERNATE FOUNDATION STRAPS MAY BE USED, SPECIFICATION TO PROVIDE EQUIVALENT ANCHOR TO A 1/2" DIAMETER ANCHOR BOLTS.
   - F. CONCRETE FOUNDATION WALLS SHALL BE CONSTRUCTED AS SET FORTH IN TABLE R404.1.1(5). REFER TO TYPICAL WALL SECTION IN THIS PLAN FOR SPECIFICATION.
6. WOOD FRAMING
   - A. ROOF, FLOOR, AND WALL SHEATHING: APA RATED SHEATHING.
   - B. WALL STUDS: MINIMUM SPF STUD OR DOUGLAS FIR LARCH STUD.
   - C. WALL PLATES: MINIMUM SPF #3 OR BETTER.
   - D. DIMENSIONAL HEADERS: #2 DOUGLAS FIR OR BETTER.
   - E. LVL HEADERS: 1950 Fb/2.0E MINIMUM.
   - F. JOIST UNDER PARALLEL BEARING PARTITIONS SHALL BE OF ADEQUATE SIZE TO SUPPORT THE LOAD. (R502.4)
   - G. THE ENDS OF EACH JOIST, BEAM, OR GIRDER SHALL HAVE NOT LESS THAN 1.5 INCHES OF BEARING ON WOOD OR METAL AND NOT LESS THAN 3 INCHES ON CONCRETE. (R502.6)
   - H. WOOD TRUSSES SHALL BE DESIGNED AND MANUFACTURED IN ACCORDANCE WITH ANSI/TPI-1. REFER TO THE INDIVIDUAL TRUSS DESIGN DRAWINGS FOR WEB BRACING AND MULTI-CONNECTION OF GIRDERS. BCSI 1-03 SHOULD BE REFER TO FOR HANDLING INSTALLATION AND BRACING OF METAL PLATE TRUSSES.
   - I. NO CUTS, NOTCHES, AND HOLES BORED INTO TRUSSES, STRUCTURAL COMPOSITE LUMBER, GLUE-LAMINATED MEMBERS, OR I-JOIST ARE PROHIBITED EXCEPT WHERE PERMITTED BY THE MANUFACTURER'S RECOMMENDATION OR DESIGN BY PROFESSIONAL. (R502.8.2)
   - J. FIRE BLOCKING SHALL BE PROVIDED TO CUT OFF ALL CONCEALED DRAFT OPENING (BOTH VERTICAL AND HORIZONTAL) AND TO FORM AN EFFECTIVE FIRE BARRIER BETWEEN STORIES, AND BETWEEN A TOP STORY AND ROOF SPACE. (R502.8)
   - K. ALL EXTERIOR WALLS SHALL BE BRACED IN ACCORDANCE WITH SECTION R602.10. MINIMUM 3/8" PANEL SHEATHING.
   - L. THE ALLOWABLE SPANS OF GIRDERS/HEADERS FABRICATED FROM DIMENSIONAL LUMBER ON EXTERIOR WALLS SHALL NOT EXCEED THE VALUES OF TABLE R502.5(1)

TABLE R502.5(1)

GIRDERS AND HEADERS SUPPORTING	GROUND SNOW LOAD 30 PSF BUILDING WIDTH (FT)					
	20		28		36	
	SIZE	SPAN	SIZE	SPAN	SIZE	SPAN
ROOF AND CEILING	2x8	3-11	3-11	3-0	4x6	3-0
	2x10	4-7	4-3	3-9	4x6	3-3
	2x12	5-1	4-9	4-3	4x8	3-9
	2x8	3-4	3-1	2-8	4x6	2-7
	2x10	4-0	3-7	3-2	4x8	2-11
	2x12	4-4	4-0	3-6	4x8	3-3
ROOF, CEILING AND ONE CENTER-BEARING FLOOR	2x8	3-2	2-10	2-6	4x6	2-3
	2x10	3-7	3-3	2-11	4x6	2-7
	2x12	4-1	3-8	3-3	4x8	2-10
	2x8	2-8	2-5	2-2	4x6	1-11
	2x10	3-2	2-11	2-6	4x6	2-3
	2x12	3-6	3-2	2-9	4x8	2-6
ROOF, CEILING AND ONE CLEAR SPAN FLOOR	2x8	2-6	2-3	2-0	4x6	1-8
	2x10	2-11	2-7	2-3	4x6	2-0
	2x12	3-3	2-11	2-6	4x6	2-3

TABLE R502.5(2)

GIRDERS AND HEADERS SUPPORTING	GROUND SNOW LOAD 30 PSF BUILDING WIDTH (FT)					
	20		28		36	
	SIZE	SPAN	SIZE	SPAN	SIZE	SPAN
ROOF, CEILING AND TWO CLEAR SPAN FLOORS	2x8	2-8	2-5	2-2	4x6	1-11
	2x10	3-3	2-11	2-7	4x6	2-3
	2x12	3-8	3-3	2-10	4x8	2-6
	2x8	2-3	2-0	1-8	4x6	1-5
	2x10	2-7	2-3	2-0	4x6	1-8
	2x12	2-11	2-6	2-3	4x6	2-0
ROOF, CEILING AND TWO CENTER-BEARING FLOORS	2x8	2-0	1-8	1-5	4x6	1-2
	2x10	2-4	2-0	1-8	4x6	1-5
	2x12	2-8	2-3	2-0	4x6	1-8

A. SPACED AND SUPPORTED AS NOTED
B. TABLE ACCOMMODATES SINGLE LAYER
C. NUMBER OF JACK STUDS TO SUPPORT GIRDERS THESE MAY BE ALL FROM ONE SIDE OF THE FAT TABLE WRITTEN IN THE SIZE.

- M. TRUSSES SHALL BE CONNECTED TO WALL BY USE OF APPROVED CONNECTORS HAVING A RESISTANCE TO UPLIFT OF NOT LESS THAN 175 POUNDS AND PER THE MANUFACTURE SPECIFICATIONS.
- N. PROTECTION FROM DECAY SHALL BE PROVIDED IN THE FOLLOWING LOCATION BY THE USE OF NATURALLY DURABLE OR PRESERVATIVE TREATED LUMBER. (R319.1)
  - 1. ALL WOOD FRAMING THAT REST ON CONCRETE EXTERIOR FOUNDATION WALLS AND ARE LESS THAN 6" FROM THE EXPOSED GROUND.
  - 2. SILLS AND SLEEPERS ON A CONCRETE SLAB THAT IS IN DIRECT CONTACT WITH THE GROUND UNLESS SEPARATED FROM SUCH SLAB BY AN IMPERVIOUS MOISTURE BARRIER.
  - 3. THE ENDS OF WOOD GIRDER ENTERING EXTERIOR CONCRETE WALLS HAVING CLEARANCE OF LESS THAN .5 INCH ON TOPS, SIDES AND ENDS.
  - 4. WOOD SIDING, SHEATHING AND WALL FRAMING ON THE EXTERIOR OF A BUILDING HAVING A CLEARANCE OF LESS THAN 6 INCHES FROM THE GROUND
  - 5. ALL LUMBER IN CONTACT WITH THE GROUND, EMBEDDED IN CONCRETE IN DIRECT CONTACT WITH THE GROUND OR EMBEDDED IN CONCRETE EXPOSED TO THE WEATHER THAT SUPPORTS PERMANENT STRUCTURES (R319.1.2)
- O. ALL RIM AND BOX JOIST SPACES BETWEEN TOP OF THE FOUNDATION WALL AND FLOOR/ROOF LINE SHALL BE INSULATED WITH THE SAME MATERIAL USED FOR EXTERIOR WALLS. ALL EXTERIOR CORNERS AND INTERIOR PARTITIONS TO EXTERIOR WALLS THAT ARE CLOSED OFF TO FUTURE INSULATION MUST BE INSULATED DURING FRAMING OF WALL.
- P. ALL NAILING AND FASTENING SHOULD COMPLY WITH THE IRC TABLE R602.3(1) "FASTENER SCHEDULE FOR SCTRUCTURAL MEMBERS"
7. STRUCTURAL STEEL
   - A. ALL STRUCTURAL STEEL SHALL CONFORM WITH ASTM SPECIFICATION A992 GRADE-50 OR EQUAL AND SHALL HAVE BRIDGE CLIPPING AT 4 FEET ON CENTER TO RESIST LATERAL DEFLECTION.
   - B. ALL FRAMING TO BE ATTACHED TO STRUCTURAL STEEL IN ACCORDANCE WITH GOVERNING CODES.

NOT FOR CONSTRUCTION

THESE ARE PLANS ARE CONCEPTIONAL PLANS AND HAVE NOT BEEN APPROVED AS A BID SET OR FOR CONSTRUCTION

Classic Builders
Madison Base Plan
Villas at Stonehaven

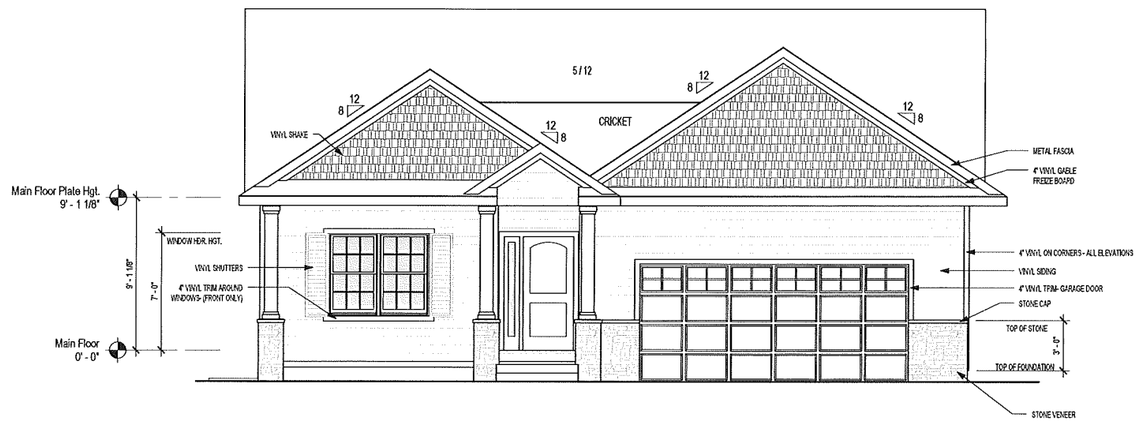
PROJECT ID: PDS 1904

ISSUE DATE:
DATE: 05-12-15
DATE:
DATE:
DATE:

REVISIONS:
DATE:
DATE:
DATE:
DATE:

Cover Page
As indicated

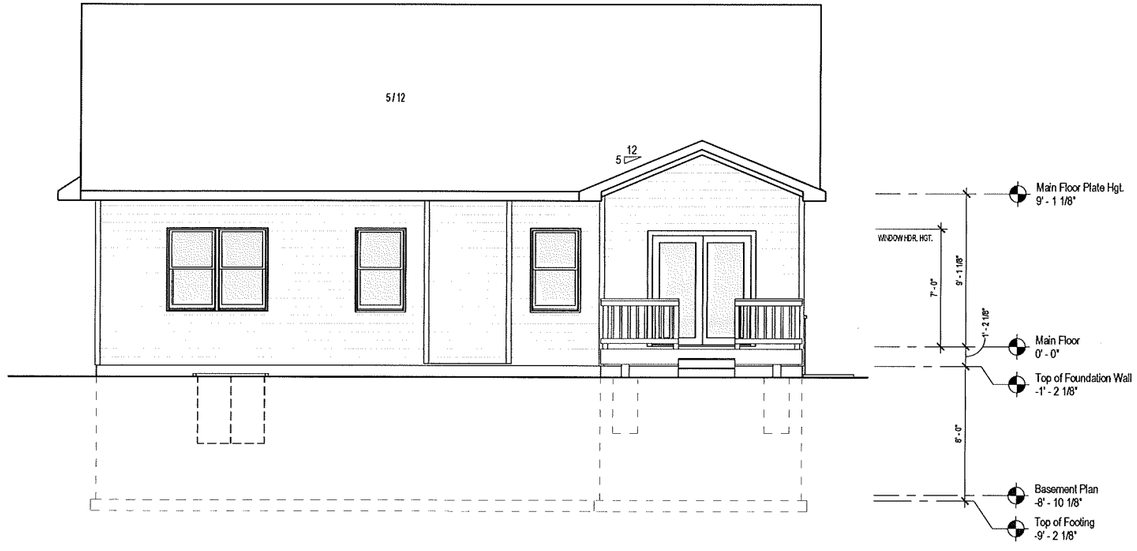
A.0



1 **FRONT ELEVATION**
Scale: 1/4" = 1'-0"

ESTIMATED WALL CLADDING SF	
Stone Veneer	70 SF
Vinyl Shake Material	168 SF
Vinyl Siding	2352 SF

- EQUATE FOOTAGE OF GABLE ENDS AS TAKEN FROM THE ENTIRE SURFACE OF THE WALL
1. THE HDR INCLUDES SURFACES BELOW DECORATIVE TRIM BOARDS.
2. THE HDR EXCLUDES HEIGHT OF DOOR SHEETS.



2 **REAR ELEVATION**
Scale: 1/4" = 1'-0"

plum
BUILDING SYSTEMS, LLC

PLUM DESIGN SERVICES
1100 ALICE'S ROAD. WAUKEE, IOWA 50263-1100
TELEPHONE 515 978 6260 FAX 515 978 6261

PLUM DESIGN SERVICE, INC. ASSUMES NO RESPONSIBILITY FOR STRUCTURAL OR DIMENSIONAL ERRORS OR OMISSIONS. WE ARE NOT A LICENSED ARCHITECT OR ENGINEER. THESE PLANS ARE PROVIDED ON AN "AS IS" BASIS AND IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR OWNER TO VERIFY AND CHECK ALL NOTES, DETAILS, ELEVATIONS, SECTIONS, AND FLOOR PLANS PRIOR TO CONSTRUCTION. THE CONTRACTOR AND/OR OWNER SHALL NOTIFY PLUM DESIGN SERVICE, INC. IMMEDIATELY IF ANY ERRORS OR OMISSION FOR POSSIBLE CORRECTION ARE IDENTIFIED PRIOR TO START OF CONSTRUCTION. NO WARRANTIES EXPRESS OR IMPLIED INCLUDING COMPLIANCE WITH THIS PLAN WITH APPLICABLE BUILDING CODES REQUIREMENTS ARE MADE.

Classic Builders
Madison Base Plan
Villas at Stonehaven

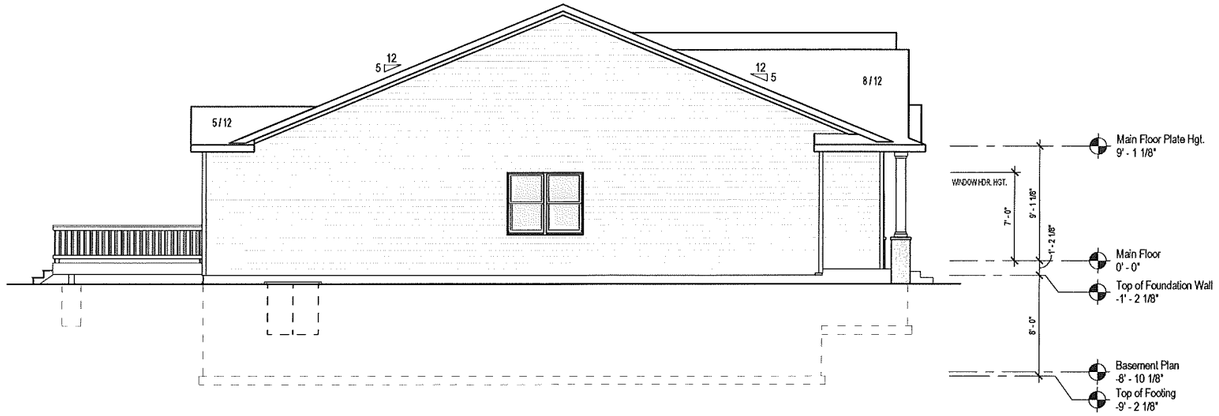
PROJECT ID: PDS 1904

ISSUE DATE:
DATE: 05-12-15
DATE:
DATE:
DATE:

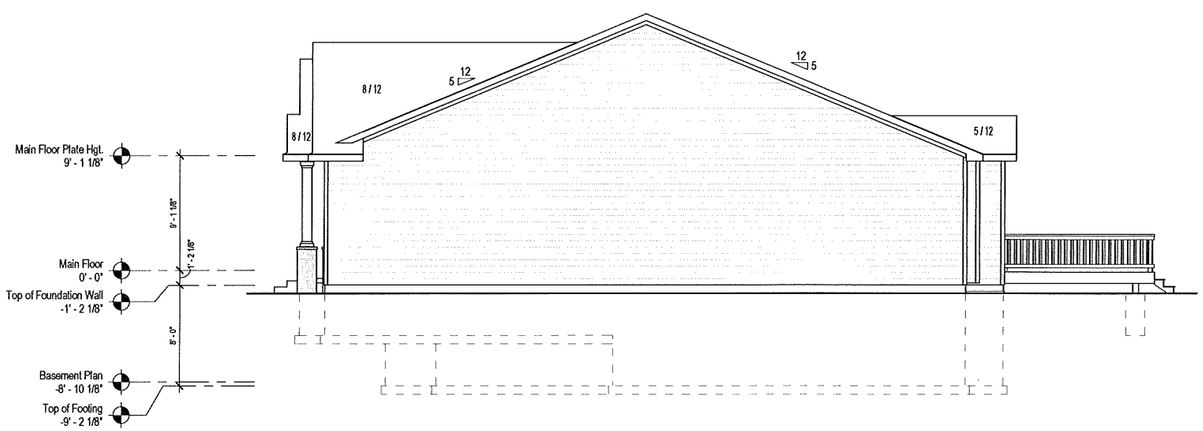
REVISIONS:
DATE:
DATE:
DATE:
DATE:

Elevations
1/4" = 1'-0"

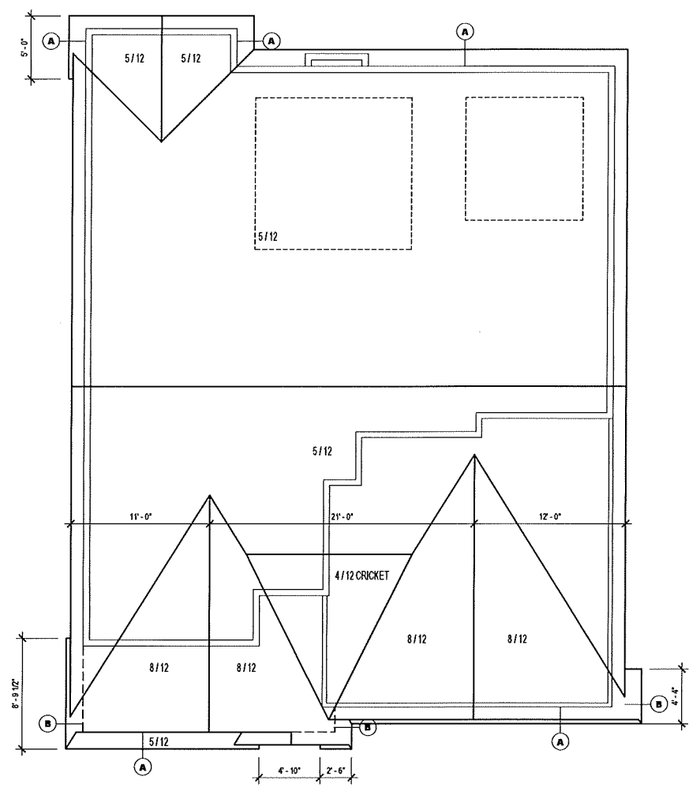
A.1



1 **LEFT ELEVATION**
Scale: 3/16" = 1'-0"



2 **RIGHT ELEVATION**
Scale: 3/16" = 1'-0"



3 **ROOF PLAN**
Scale: 3/16" = 1'-0"

ROOF PLAN LEGEND

SYMBOL	WALL HGT.	PITCH	OVERHANG	HEEL HGT.
A	8'-1 1/8"	5/12	1'-4"	7"
B	8'-1 1/8"	5/12	1'-4"	11"
ALL RAKE OVERHANGS ARE 12" UNLESS NOTED				

ESTIMATED ROOF SF

2820 SF

- TO APPROXIMATE SF OF ROOF WITH ALL PITCHES THE EXPOSED SURFACE OF THE ROOF IS THE AREA BY CLOSED SHAPES SURFACES BELOW VALUES.
2 1/2 AND THE ROOF IN FEET HAS BEEN ADJUSTED

plum
BUILDING SYSTEMS, LLC

PLUM DESIGN SERVICES
1100 ALICE'S ROAD WAUKEE, IOWA 50263-1100
TELEPHONE 515 978 6260 FAX 515 978 6261

PLUM DESIGN SERVICE, INC. ASSUMES NO RESPONSIBILITY FOR STRUCTURAL OR DIMENSIONAL ERRORS OR OMISSIONS. WE ARE NOT A LICENSED ARCHITECT OR ENGINEER. THESE PLANS ARE PROVIDED ON AN "AS IS" BASIS AND IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR OWNER TO VERIFY AND CHECK ALL NOTES, DETAILS, ELEVATIONS, SECTIONS, AND FLOOR PLANS PRIOR TO CONSTRUCTION. THE CONTRACTOR AND/OR OWNER SHALL NOTIFY PLUM DESIGN SERVICE, INC. IMMEDIATELY IF ANY ERRORS OR OMISSION FOR POSSIBLE CORRECTION ARE IDENTIFIED PRIOR TO START OF CONSTRUCTION. NO WARRANTIES EXPRESS OR IMPLIED INCLUDING COMPLIANCE WITH THIS PLAN WITH APPLICABLE BUILDING CODES REQUIREMENTS ARE MADE.

Classic Builders
Madison Base Plan
Villas at Stonehaven

PROJECT ID: PDS 1904

ISSUE DATE:
DATE: 05-12-15
DATE:
DATE:
DATE:

REVISIONS:
DATE:
DATE:
DATE:
DATE:

Elevations
As indicated

A.2