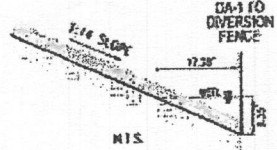


SYMBOL	NAME / DESCRIPTION	GROUP	4-FACTOR	PERMISSIBLE
1	CLAYEY SILT LOAM 1 TO 2 PERCENT SLOPES	E	.43	YES
2	CLAYEY SILT LOAM 3 TO 5 PERCENT SLOPES	E	.13	YES
3	SANDY SILT LOAM 3 TO 5 PERCENT SLOPES	E	.38	NO
4	SANDY SILT LOAM 15 TO 20 PERCENT SLOPES	E	.38	YES
5	SANDY SILT LOAM 0 TO 2 PERCENT SLOPES	C	.20	NO
6	SANDY SILT LOAM 1 TO 2 PERCENT SLOPES	C	.20	NO

NOTE: HIGHLY ERODIBLE SOILS ARE THOSE SOILS WITH A SHAPE FACTOR GREATER THAN 15 PERCENT OR THOSE SOILS WITH A SHAPE FACTOR GREATER THAN 0.20 AND WITH A SHAPE FACTOR GREATER THAN 0.20.

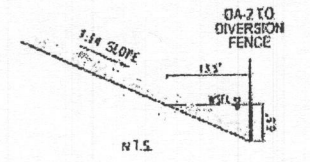
LEGEND:	
	PROPERTY LINE
	ADJACENT PROPERTY LINE
	EXISTING ROAD OR FENCE
	EXISTING STREAM
	EXISTING WELL
	EXISTING TRENCH
	PROPOSED TRENCH
	EXISTING TREE
	EXISTING WOOD FENCE
	12" OR 18" USE-IN-CORNER HOOT-OF-WAY TO BOUNDARY ROAD (L. 07/1/15-547)
	EXISTING 10' CONTOUR
	EXISTING 2' CONTOUR
	SOILS
	PROPOSED 10' CONTOUR
	PROPOSED 2' CONTOUR
	PROPOSED STABILIZED CONSTRUCTION ENTRANCE
	PROPOSED Silt FENCE
	PROPOSED SAFER Silt FENCE
	PROPOSED DIVERSION FENCE
	PROPOSED LIMIT OF DISTURBANCE
	EXISTING SLOPES (2% SLOPES OF GREATER)
	EXISTING MODERATE SLOPES (1% TO 2% SLOPES)
	PROPOSED TREE PROTECTION FENCE



$i_p = 5.9$
 $A = 0.67$ AC
 $C = 0.24$
 $Q_1 = (A)(C)(i_p)$
 $Q_2 = (0.67)(0.24)(5.9)$
 $Q_{2max} = 0.95$ CFS
 $V_{2max} = 1.80$ FPS
 $S = 1.48\%$
 $N = 0.35$

NOTE: STOCKPILING WILL BE PERMITTED ON PARCEL 243 ONLY

- NOTES:
1. LAMPY UNDERDRAIN SYSTEM TO BE DESIGNED AND PROVIDED BY THE LANDSCAPE ARCHITECT.
 2. MECHANICAL UNDERDRAIN TO BE DESIGNED AND PROVIDED BY THE ARCHITECT.
 3. SAME DAY STABILIZATION IS TO BE PROVIDED FOR THE GRADING SOUTH-EAST OF THE LANDSCAPE WHERE THE STEEP SLOPES ARE SHOWN.



$i_p = 5.9$
 $A = 0.73$ AC
 $C = 0.24$
 $Q_1 = (A)(C)(i_p)$
 $Q_2 = (0.73)(0.24)(5.9)$
 $Q_{2max} = 1.03$ CFS
 $S = 6.50\%$
 $N = 0.35$

Approved for UPT
B18000672
RAT 3/8/18

tank location

OWNER
CHRISTOPHER T. FORTUNE
ASHLEY A. ADAMS
4524 ALPINE ROSE BEND
ELLCOTT CITY, MD 21042
(410) 753-4454

BUILDER
SMITHOUSE CONSTRUCTION, LLC
232 COCKEYSVILLE RD., SUITE B203
COCKEYSVILLE, MD 21030
(410) 329-1262

NO.	REVISION	DATE

GRADING PLAN
GRADING, SOIL EROSION, AND SEDIMENT CONTROL PLAN AND SOILS MAP
FORTUNE PROPERTY
6902 BROOKS ROAD
HIGHLAND, MD 20777
(L. 16428 / F. 168)
BUILDING PERMIT #

ROBERT H. VOGEL ENGINEERING, INC.
ENGINEERS • SURVEYORS • PLANNERS
8007 MAIN STREET
ELLCOTT CITY, MD 21043
TEL: 410.461.7669
FAX: 410.281.6961

DEVELOPER'S CERTIFICATE

I HEREBY CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT FOR SEDIMENT AND EROSION CONTROL, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

SIGNATURE OF DEVELOPER _____ DATE _____

ENGINEER'S CERTIFICATE

I HEREBY CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

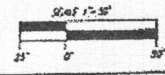
SIGNATURE OF ENGINEER _____ DATE _____

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

HOWARD SCD _____ DATE _____

GRADING PLAN

1" = 100'

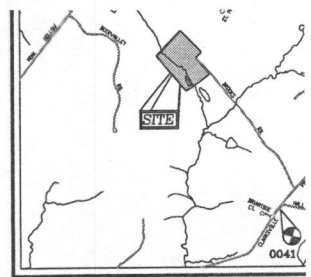


PROFESSIONAL CERTIFICATE

DESIGN BY: [Signature]
 DRAWN BY: [Signature]
 CHECKED BY: [Signature]
 DATE: JULY 2018
 SCALE: AS SHOWN
 W.O. NO: 14-00

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED BY ME OR UNDER MY CLOSE PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16495, EXPIRES 06/30/2024.

2 SHEET OF 4



VICINITY MAP
SCALE: 1"=2,000'

WILLIAM J. MISKOVIC
JOYCE M. MISKOVIC
TM: 40 PARCEL 36
HIGHLAND 0845
L: 2489 / F: 9
PLAT: 8494
LOT 3
9.83 AC.
USE: AGRICULTURAL
ZONED: RR-DEO

DMITRI WASILEWSKI
ALISA R. WASILEWSKI
TM: 40 PARCEL 35A
PASTINE PROPERTY
L: 824 / F: 103
PLAT: 8268
LOT 1
3.54 AC.
USE: RESIDENTIAL
ZONED: RR-DEO

CHRISTOPHER T. FORTUNE
ASHLEY A. ADAMS
TM: 40 PARCEL 243
L: 1401 / F: 18
2.37 AC. (CURRENT)
2.94 AC. (PROPOSED)
USE: RESIDENTIAL
ZONED: RR-DEO

CARLA ROBINSON
BETH E. ROBINSON
TM: 40 PARCEL 266
PASTINE PROPERTY
L: 2897 / F: 404
PLAT: 6288
LOT 1
1.79 AC.
USE: RESIDENTIAL
ZONED: RR-DEO

MARY L. OLIVER
DAVID D. OLIVER
TM: 40 PARCEL 507
L: 2883 / F: 358
1.79 AC.
USE: RESIDENTIAL
ZONED: RR-DEO

MICHAEL J. STUPPY
KRYSTINE E. STUPPY
TM: 40 PARCEL 493
CISSELL FARM
L: 1225 / F: 171
1.75 AC.
USE: RESIDENTIAL
ZONED: RR-DEO

CLIFFORD A. JENNINGS
TINA G. JENNINGS
TM: 40 PARCEL 236
CISSELL FARM
L: 3753 / F: 85
PLAT: 12182
LOT 43
3.00 AC.
USE: RESIDENTIAL
ZONED: RR-DEO

CURTIS E. JEWELL
JULIA A. BEAVER
TM: 40 PARCEL 215
CISSELL FARM
L: 14631 / F: 309
3.75 AC.
USE: RESIDENTIAL
ZONED: RR-DEO

BYONG CHEE
THERESA S. CHOI
TM: 40 PARCEL 283
L: 8617 / F: 342
3.97 AC.
USE: RESIDENTIAL
ZONED: RR-DEO

SCOTT V. RAUBINS
RACHEL M. RAUBINS
TM: 40 PARCEL 341
L: 6712 / F: 133
1.75 AC.
USE: RESIDENTIAL
ZONED: RR-DEO

KENNETH W. WILSON & SAFFE
TM: 40 PARCEL 407
L: 632 / F: 635
PARCEL 1
1.56 AC.
USE: RESIDENTIAL
ZONED: RR-DEO

THOMAS E. MILLER
FRANCES G. MILLER
TM: 40 PARCEL 438
L: 870 / F: 426
PARCEL 2
3.78 AC.
USE: AGRICULTURAL
ZONED: RR-DEO

THOMAS E. MILLER
FRANCES G. MILLER
TM: 40 PARCEL 438
L: 870 / F: 426
PARCEL 1
4.69 AC.
USE: AGRICULTURAL
ZONED: RR-DEO

OWNER
CHRISTOPHER T. FORTUNE
ASHLEY A. ADAMS
4524 ALPINE ROSE BEND
ELLCOTT CITY, MD 21042
410-733-4454

BUILDER
SMITHOUSE CONSTRUCTION, LLC
232 COCKEYSVILLE RD., SUITE B200
COCKEYSVILLE, MD 21030
(410) 329-1262

EXHIBIT TO ACCOMPANY WAIVER PETITION
FOR ADJOINER TRANSFER

FORTUNE PROPERTY
6902 BROOKS ROAD
HIGHLAND, MD 20777
(L. 16429 / F. 166)

TAX MAP: 40 GRID: 03
5TH ELECTION DISTRICT

ZONE
PARCELS
HOWARD COUNTY

ROBERT H. VOGI
ENGINEERS • SURVEYORS • PLANNERS
8407 MAIN STREET TEL: 410.461.1111
ELLCOTT CITY, MD 21043 FAX: 410.461.1111

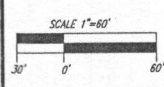
DESIGN BY: RHY
DRAWN BY: JMR
CHECKED BY: RHY
DATE: OCTOBER 2016
SCALE: AS SHOWN
W.D. NO.: 14-60

PROFESSIONAL CERTIFICATE
I HEREBY CERTIFY THAT THESE
WERE PREPARED OR APPROVED
BY ME OR A duly licensed P.
ENGINEER UNDER THE LAWS OF
THE STATE OF MARYLAND, LICENSE NO. 16
EXPIRATION DATE: 09-27-2018

ROBERT H. VOGEL, PE No. 16183

1 SHEET OF

WAIVER EXHIBIT
SCALE: 1"=60'



Fortune Residence

6902 Brooks Road, Highland, Maryland 20777

ARCHITECTURE
**JONATHAN
RIVERA**
Every detail matters
443-226-5745



NOTES

- DOUBLE ALL FLOOR JOISTS UNDER WALLS ABOVE, THAT ARE FRAMED PARALLEL TO FLOOR FRAMING UNLESS NOTED OTHERWISE ON THE PLANS.
- WHERE APPLICABLE, BALLOON FRAME EXTERIOR WALLS TO BE 2x6 SPF #2 OR BETTER STUDS @ 12" O.C. UNLESS OTHERWISE NOTED
- ALL FLOOR JOISTS, CEILING JOISTS & RAFTERS ARE TO BE ENGINEERED.
- ALL BEAMS, GIRDERS AND HEADERS ARE TO BE DOUG. FIR LARCH #2 OR BETTER WITH A Fb RATING OF 875 AND MODULUS OF ELASTICITY OF 1,600,000 MIN. U.N.O.
- ALL HEADERS TO BE 3-2x10'S UNLESS NOTED OTHERWISE
- ALL LAMINATED VENEER LUMBER (LVL) BEAMS, GIRDERS AND HEADERS LABELED ON THE PLANS, TO HAVE A Fb RATING OF 2,950 AND MODULUS OF ELASTICITY OF 2,000,000 MIN. UNLESS OTHERWISE NOTED. STRUCTURAL LAMINATED BEAMS TO BE INSTALLED AS PER MANUFACTURERS SPECIFICATIONS.
- ALL STRUCTURAL OPENINGS TO RECEIVE MIN. 3-2x10 HEADERS W/ 1/2" FILLER & 1 JACK STUD EACH END UNLESS NOTED OTHERWISE
- PROVIDE SOLID 2x10 BLOCKING TO BE LOCATED BETWEEN FLOOR JOISTS WHERE POSTS, FROM ABOVE, CARRYING STRUCTURAL HEADERS LAND BETWEEN FLOOR JOIST BELOW. BLOCKING TO BE BUILT UP TO THE SAME WIDTH AS POST IT IS CARRYING ABOVE.
- PROVIDE ADEQUATE CLEARANCE @ PLUMBING STACKS AS REQ.
- ALL DIMENSIONS MUST BE VERIFIED IN THE FIELD BY THE CONTRACTOR BEFORE START OF CONSTRUCTION. ANY DISCREPANCIES ON THE PLANS, OR SPECIFICATIONS, MUST BE REPORTED TO THE ARCHITECT OR ENGINEER PRIOR TO THE START OF CONSTRUCTION.
- ANY VARIATION FROM THESE PLANS THAT WILL REQUIRE CHANGES TO THE STRUCTURAL MEMBERS SHALL BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER IMMEDIATELY.
- WHERE APPLICABLE, REFER TO ENGINEERED LUMBER MFR'S SPECIFICATIONS FOR MULTI-MEMBER INSTALLATION & CONNECTION REQUIREMENTS
- FASTEN MULTIPLE MEMBER JACKS TOGETHER W/ MIN. 10d NAILS @ 8" O.C. STAGGERED ALONG ENTIRE LENGTH OF MEMBERS. PROVIDE NAILING W/IN 3" OF TOP OR BOTTOM OF MEMBERS.
- FASTEN MULTIPLE MEMBER BEAMS TOGETHER W/ MIN 16d NAILS @ 12" O.C. STAGGERED ALONG ENTIRE LENGTH OF MEMBERS. TWO ROWS REQUIRED FOR DEPTHS UP TO 12". THREE ROWS REQUIRED FOR DEPTHS OF 12-18". PROVIDE NAILING W/IN 22" OF EACH END OF MEMBERS. FOR BEAMS 7" OR GREATER IN WIDTH PROVIDE BOLTED CONNECTION W/ ASTM GRADE A-307 (OR BETTER) 1/2" DIA. BOLTS IN TWO ROWS 3" FROM EACH END OF BEAM @ 24" O.C. STAGGERED.

DESIGN CRITERIA

CLIMATE AND GEOGRAPHIC DESIGN CRITERIA - table 301.2 (1)

GROUND SNOW LOAD (lbs./s.f.)	30	
WIND PRESSURE (pounds per square foot)	17 +/- (90 m.p.h.)	
SEISMIC CONDITION BY ZONE	B	
SUBJECT TO DAMAGE	WEATHERING	SEVERE
	FROST LINE DEPTH	30
	TERMITE	MODERATE
	DECAY	MODERATE
WINTER DESIGN TEMP. FOR HEAT. FACILITIES	13°	
RADON RESISTANT CONSTRUCTION REQ		

CODE INFORMATION

ALL WORK SHALL COMPLY WITH INTERNATIONAL CODE W/ LOCAL AMENDMENTS

International Residential Code, 2015 Edition
 2011 National Electrical Code with Local Amendments (NFPS 70)
 International Mechanical Code, 2012 Edition
 The Life Safety Code, 2012 Edition
 2009 National Standard Plumbing Code Illustrated
 2009 National Fuel Gas Code (NFPA 54)
 International Energy Conservation Code, 2015 Edition

ITEMS OF PARTICULAR NOTE

- Contractor, sub-contractor or supplier shall verify all job conditions and measurements prior to commencing work or ordering materials. Discrepancies between dimensions shown on drawings and actual field conditions should be brought to the Architect and Owner's attention immediately for clarification prior to proceeding with work. These plans are not to be scaled for Construction purposes. Written dimensions and notes supersede all scaled reference. If there are any conflicts, discrepancies or ambiguity with dimensioning the Contractor shall notify the Architect immediately for clarification. Field verify ALL proposed dimensions

- As a matter of record, JRArchitecture, LLC shall not be responsible for construction means and methods or omissions by the contractor, sub-contractor or any other persons performing work in accordance with these drawings.

- On this Project, the Contractor shall have sole supervision over, and exclusive responsibility for: demolition and temporary construction; construction means, methods, techniques, sequences, procedures, safety precautions and safety programs in connection with all demolition and construction work; and protection of persons and property during construction until final completion is attained. Services performed by Architect or its consultants during construction, if any, are intended to promote the goal that, in general, the construction work, when fully completed, will be consistent with the design intent reflected in the permit or construction drawings.

DRAWING LIST

0.01	COVER SHEET
0.02	GENERAL INFO
0.03	SPECIFICATIONS/REVISIONS
1.01	ELEVATIONS
1.02	ELEVATIONS
1.03	ELEVATIONS
1.04	ELEVATIONS
2.01	FOUNDATION PLAN
2.02	FINISHED BASEMENT PLAN
3.01	FIRST FLOOR PLAN
3.02	SECOND FLOOR PLAN
3.03	PORCH HOLD DOWN DETAIL
4.01	ROOF PLAN
5.01	SECTIONS
5.02	SECTIONS
5.03	SECTIONS
5.04	SECTIONS
5.05	SECTIONS
5.06	SECTIONS
5.07	SECTIONS
5.0	STRUCTURAL SUMMARY
S1.0	FOUNDATION/ANCHOR BOLT PLAN
S2.0	FOUNDATION DETAILS
S2.1	FOUNDATION DETAILS
S2.2	FOUNDATION DETAILS
S3.0	STRUCTURAL FLOOR PLAN
S3.1	STRUCTURAL FLOOR PLAN
S4.0	FIRST FLOOR FRAMING PLAN
S4.1	SECOND FLOOR FRAMING PLAN
S5.0	ROOF FRAMING PLAN
S6.0	STRUCTURAL DETAILS
S6.1	STRUCTURAL DETAILS

AREA INFO

FLOOR	SQUARE FOOTAGE
SUB-BASEMENT	1,552 s.f.
BASEMENT	3,546 s.f.
FIRST FLOOR	3,698 s.f.

ARCHITECTURE
JONATHAN RIVERA
Every Detail Matters
 (443) 226-5745
 JONATHANRIVERA.COM

PROFESSIONAL CERTIFICATION
 I certify that these documents were prepared or approved by me, and that I am a duly licensed professional architect under the laws of the State of Maryland, License Number #14678, Expiration Date: 6/30/2016.



Fortune Residence
 P R O P O S E D R E S I D E N C E
 6902 Brooks Road, Highland, Maryland 20777

REVISIONS

△		
△		
△		
△		
△		
△		
△		
△		
△		

ISSUE DATES:

5-15-16 REVIEW

SCALE: N/A

COVER SHEET

PROFESSIONAL CERTIFICATION
 I certify that these documents were prepared or approved by me, and that I am a duly licensed professional architect under the laws of the State of Maryland, License Number #14678, Expiration Date: 6/30/2016.



Fortune Residence
 PROPOSED RESIDENCE
 6902 Brooks Road, Highland, Maryland 20777

REVISIONS

▲	
▲	
▲	
▲	
▲	
▲	
▲	
▲	
▲	
▲	

ISSUE DATES:
 5-15-16 REVIEW

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



NOTE:
 STAIRS WITH 2 OR MORE RISERS SHALL BE PROVIDED WITH HANDRAILS. HANDRAILS SHALL BE A MINIMUM OF 34" IN HEIGHT AND NOT MORE THAN 38" IN HEIGHT. RAILS ARE TO BE MEASURED VERTICALLY FROM THE NOSING OF THE TREADS.

PORCHES, DECKS, BALCONIES OR RAISED FLOOR SURFACES LOCATED MORE THAN 30" ABOVE THE FLOOR OR GRADE BELOW SHALL HAVE GUARDS A MINIMUM OF 36" HIGH.

RISERS ARE TO BE CLOSED SUCH THAT THE OPENING BETWEEN THE TREADS DOES NOT PERMIT THE PASSAGE OF A 4" DIA SPHERE.

PROFESSIONAL CERTIFICATION
 I certify that these documents were prepared or approved by me, and that I am a duly licensed professional architect under the laws of the State of Maryland, License Number #14678, Expiration Date: 6/30/2016.



Fortune Residence
 PROPOSED RESIDENCE
 6902 Brooks Road, Highland, Maryland 20777



NOTE:
 STAIRS WITH 2 OR MORE RISERS SHALL BE PROVIDED WITH HANDRAILS. HANDRAILS SHALL BE A MINIMUM OF 34" IN HEIGHT AND NOT MORE THAN 38" IN HEIGHT. RAILS ARE TO BE MEASURED VERTICALLY FROM THE NOSING OF THE TREADS.

PORCHES, DECKS, BALCONIES OR RAISED FLOOR SURFACES LOCATED MORE THAN 30" ABOVE THE FLOOR OR GRADE BELOW SHALL HAVE GUARDS A MINIMUM OF 36" HIGH.

RISERS ARE TO BE CLOSED SUCH THAT THE OPENING BETWEEN THE TREADS DOES NOT PERMIT THE PASSAGE OF A 4" DIA SPHERE.

REVISIONS

▲	
▲	
▲	
▲	
▲	
▲	
▲	
▲	

ISSUE DATES:

5-15-16	REVIEW

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

PROFESSIONAL CERTIFICATION
 I certify that these documents were prepared or approved by me, and that I am a duly licensed professional architect under the laws of the State of Maryland. License Number #14678 Expiration Date: 6/30/2016.



NOTE:
 STAIRS WITH 2 OR MORE RISERS SHALL BE PROVIDED WITH HANDRAILS. HANDRAILS SHALL BE A MINIMUM OF 34" IN HEIGHT AND NOT MORE THAN 38" IN HEIGHT. RAILS ARE TO BE MEASURED VERTICALLY FROM THE NOSING OF THE TREADS.

PORCHES, DECKS, BALCONIES OR RAISED FLOOR SURFACES LOCATED MORE THAN 30" ABOVE THE FLOOR OR GRADE BELOW SHALL HAVE GUARDS A MINIMUM OF 36" HIGH.

RISERS ARE TO BE CLOSED SUCH THAT THE OPENING BETWEEN THE TREADS DOES NOT PERMIT THE PASSAGE OF A 4" DIA SPHERE.

Fortune Residence

PROPOSED RESIDENCE
 6902 Brooks Road, Highland, Maryland 20777

REVISIONS

▲	
▲	
▲	
▲	
▲	
▲	
▲	
▲	
▲	
▲	

ISSUE DATES:

5-15-16	REVIEW

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



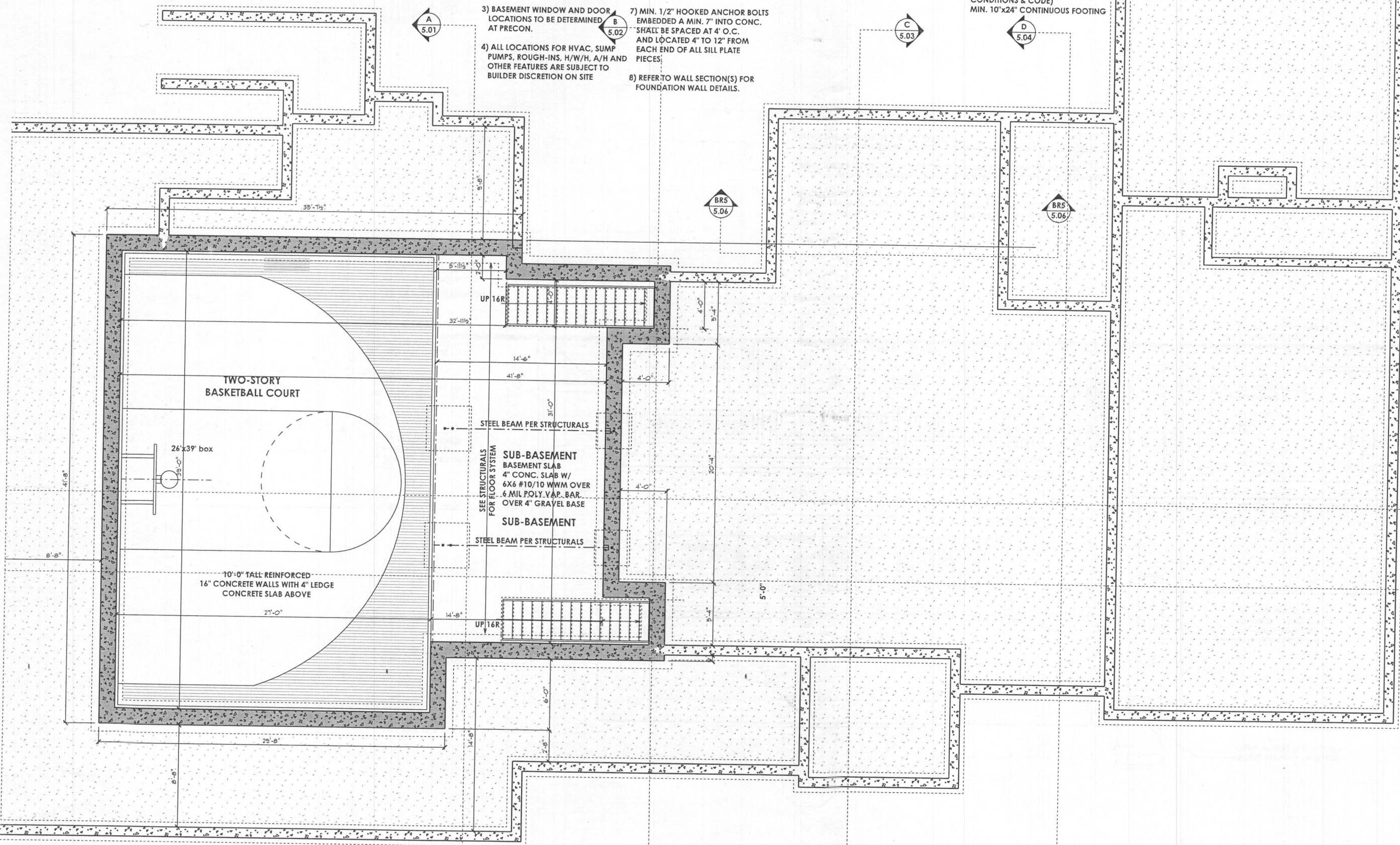
Fortune Residence
 PROPOSED RESIDENCE
 6902 Brooks Road, Highland, Maryland 20777

FOUNDATION NOTES

- 1) 2000 PSF MIN SOIL BEARING CAPACITY ASSUMED
- 2) BEAMS, JOISTS, HEADERS & RAFTERS TO BE SPF #1/#2 OR EQ. TYP THRUOUT U.N.O.
- 3) BASEMENT WINDOW AND DOOR LOCATIONS TO BE DETERMINED AT PRECON.
- 4) ALL LOCATIONS FOR HVAC, SUMP PUMPS, ROUGH-INS, H/W/H, A/H AND OTHER FEATURES ARE SUBJECT TO BUILDER DISCRETION ON SITE
- 5) FOUNDATION WALL MIN. THICKNESS 8" or 10" WHERE STEM WALL AT BRICK LEDGE EXCEEDS 12" HIGH
- 6) VERIFY SIZE AND LOCATION OF WINDOWS PER GRADE & BUILDER
- 7) MIN. 1/2" HOOKED ANCHOR BOLTS EMBEDDED A MIN. 7" INTO CONC. SHALL BE SPACED AT 4' O.C. AND LOCATED 4" TO 12" FROM EACH END OF ALL SILL PLATE PIECES
- 8) REFER TO WALL SECTION(S) FOR FOUNDATION WALL DETAILS.

TYPICAL 10'-0" HOUSE BOX FOUNDATION WALL

MIN. 16" REINFORCED CONCRETE FOUNDATION WALL (THICKNESS & REINFORCING PER SOIL & GRADE CONDITIONS & CODE)
 MIN. 10"x24" CONTINUOUS FOOTING



F 5.06

E 5.05

REVISIONS

ISSUE DATES:

5-15-16 REVIEW

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

SUB-FOUNDATION



Fortune Residence
 PROPOSED RESIDENCE
 6902 Brooks Road, Highland, Maryland 20777

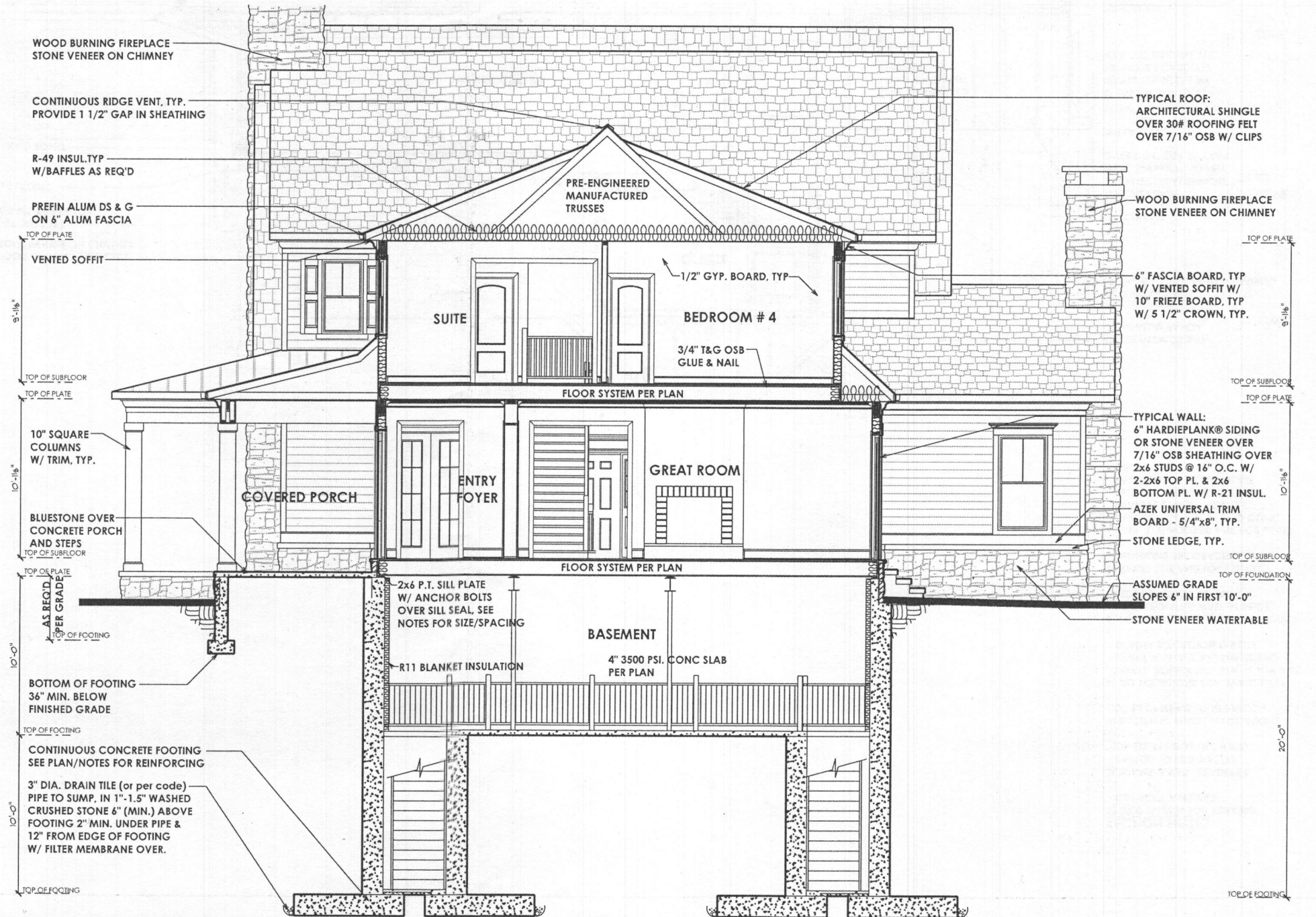
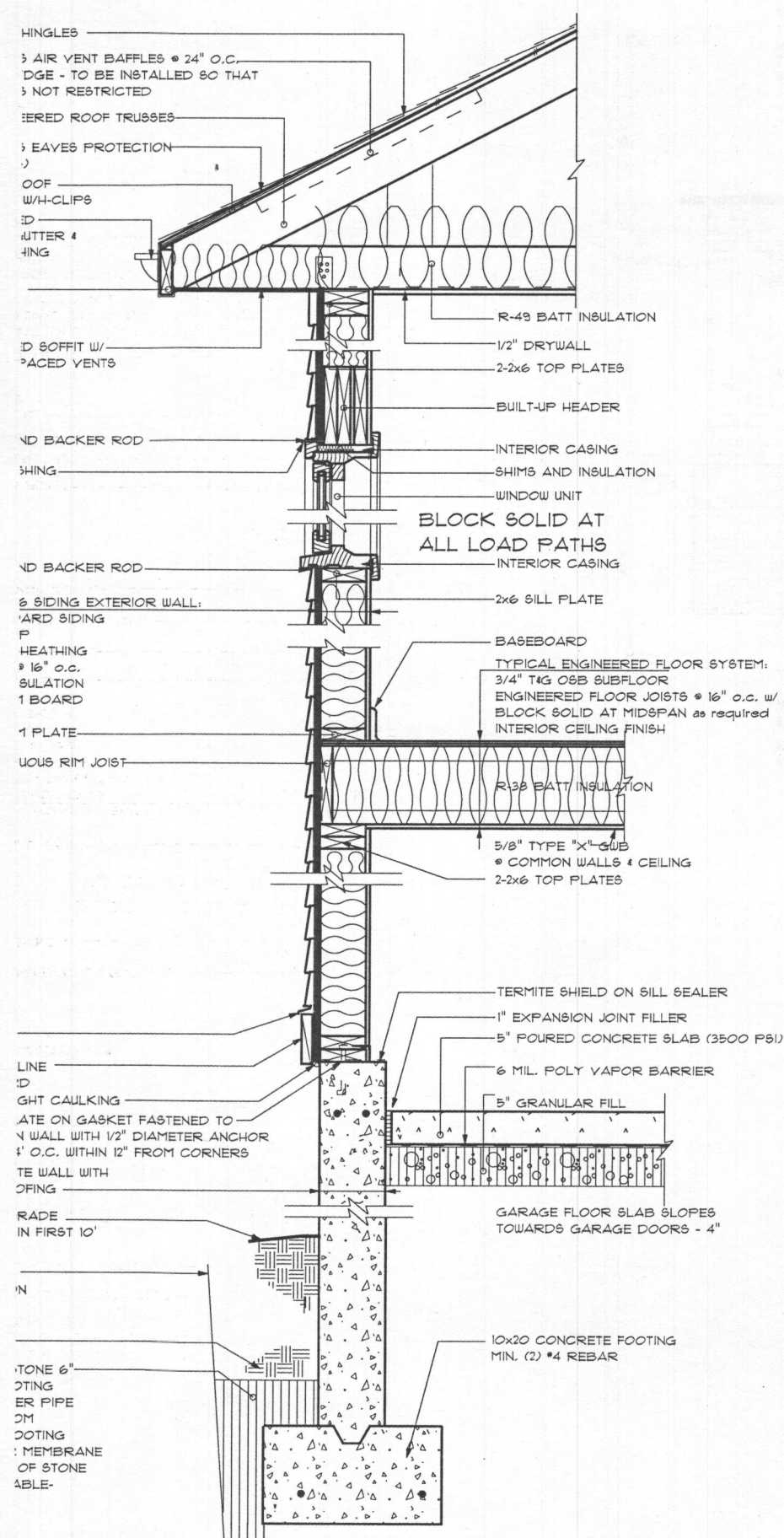
REVISIONS

ISSUE DATES:

5-15-16	REVIEW

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

- SECTION NOTES**
- 2000 PSF MIN SOIL BEARING CAPACITY ASSUMED
 - BEAMS, JOISTS, HEADERS & RAFTERS TO BE SPF #1/#2 OR EQ. TYP THROUGH U.N.O.
 - BASEMENT WINDOW LOCATIONS TO BE DETERMINED AT PRECON.
 - ALL LOCATIONS FOR HVAC, SUMP PUMPS, ROUGH-INS, H/W/H, A/H AND OTHER FEATURES ARE SUBJECT TO BUILDER DISCRETION ON SITE
 - FOUNDATION WALL MIN. THICKNESS 10" WHERE STEM WALL AT BRICK LEDGE EXCEEDS 16" HIGH
 - VERIFY SIZE AND LOCATION OF WINDOWS PER GRADE & BUILDER
 - MIN. 1/2" HOOKED ANCHOR BOLTS EMBEDDED A MIN. 7" INTO CONC. SHALL BE SPACED AT 4' O.C. AND LOCATED 4" & 12" FROM EACH END OF ALL SILL PLATE PIECES.



- SECTION NOTES**
- 2000 PSF MIN SOIL BEARING CAPACITY ASSUMED
 - BEAMS, JOISTS, HEADERS & RAFTERS TO BE SPF #1/#2 OR EQ. TYP THROUGH U.N.O.
 - BASEMENT WINDOW LOCATIONS TO BE DETERMINED AT PRECON.
 - ALL LOCATIONS FOR HVAC, SUMP PUMPS, ROUGH-INS, H/W/H, A/H AND OTHER FEATURES ARE SUBJECT TO BUILDER DISCRETION ON SITE
 - FOUNDATION WALL MIN. THICKNESS 10" WHERE STEM WALL AT BRICK LEDGE EXCEEDS 16" HIGH
 - VERIFY SIZE AND LOCATION OF WINDOWS PER GRADE & BUILDER
 - MIN. 1/2" HOOKED ANCHOR BOLTS EMBEDDED A MIN. 7" INTO CONC. SHALL BE SPACED AT 4' O.C. AND LOCATED 4" & 12" FROM EACH END OF ALL SILL PLATE PIECES.



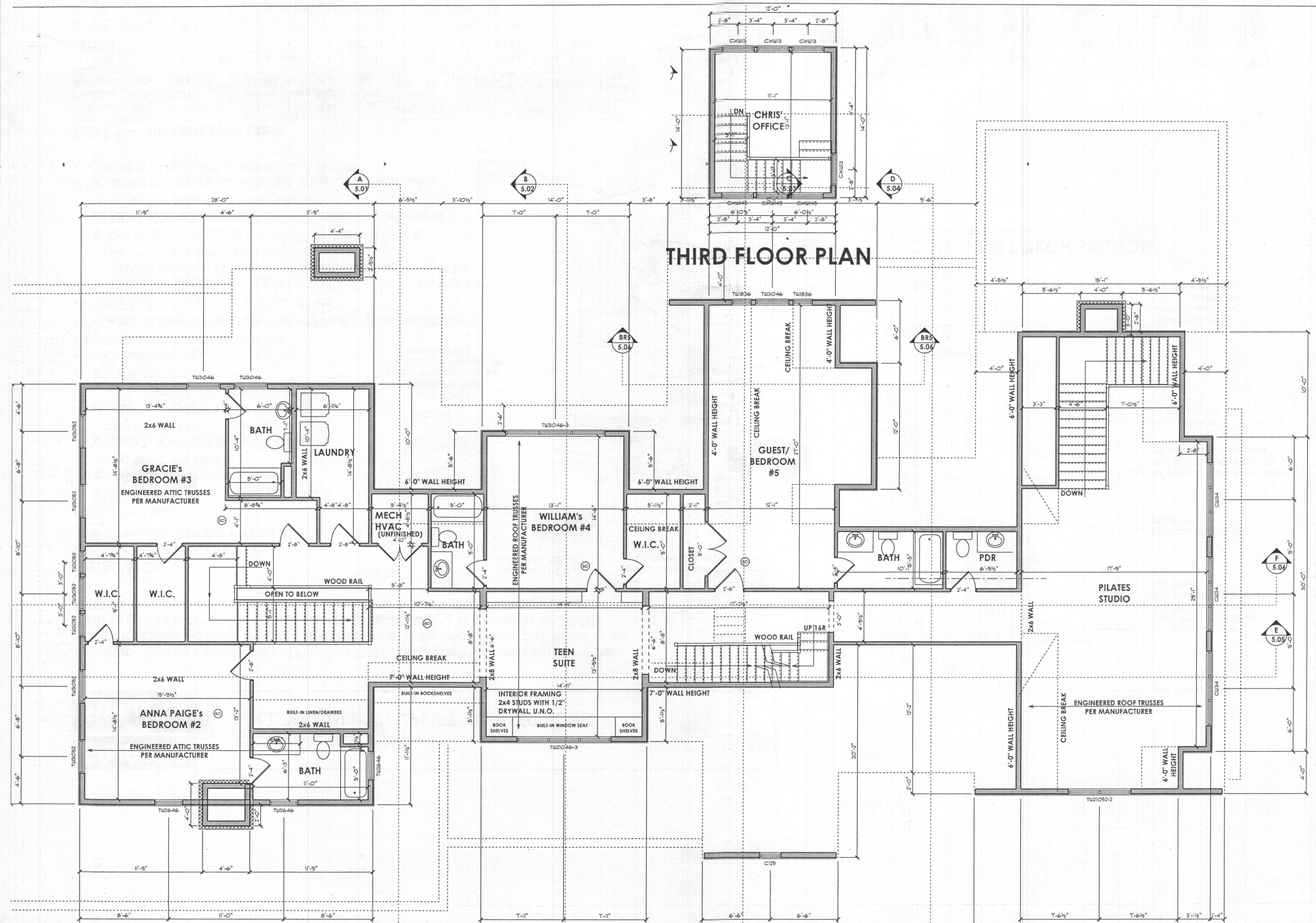
Fortune Residence
 PROPOSED RESIDENCE
 6902 Brooks Road, Highland, Maryland 20777

REVISIONS

ISSUE DATES:
 5-15-16 REVIEW

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

THIRD FLOOR PLAN

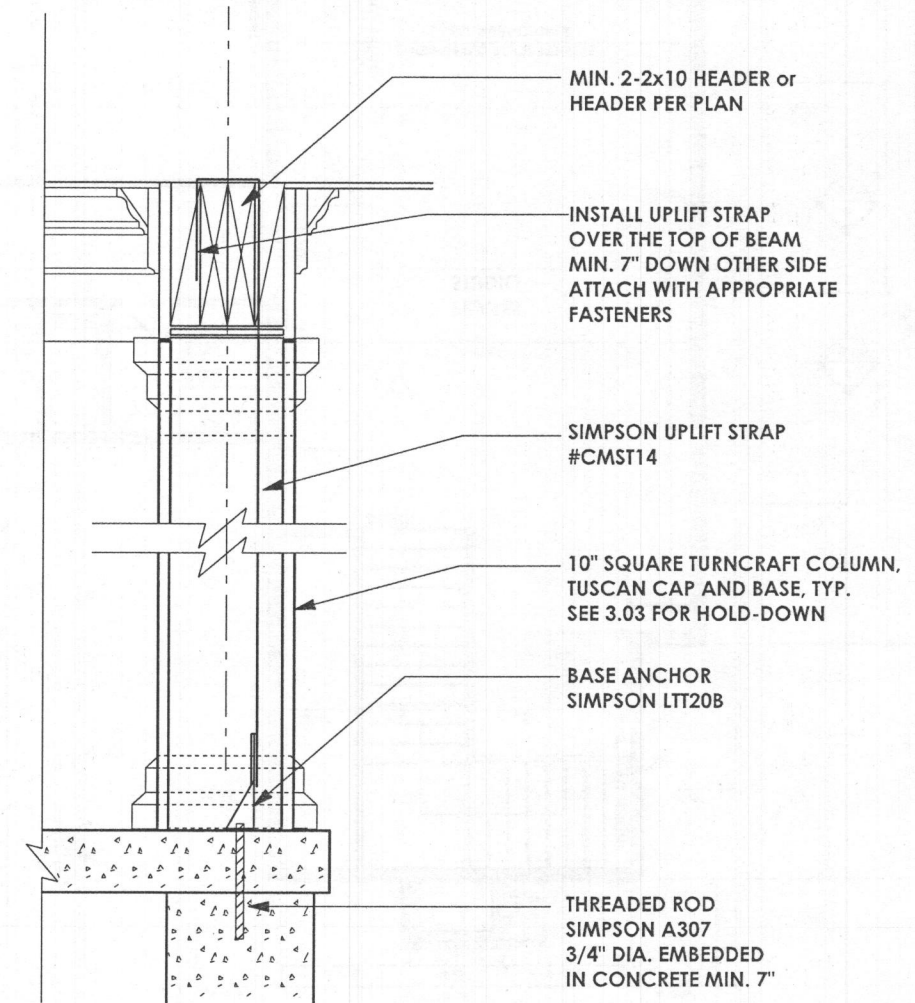
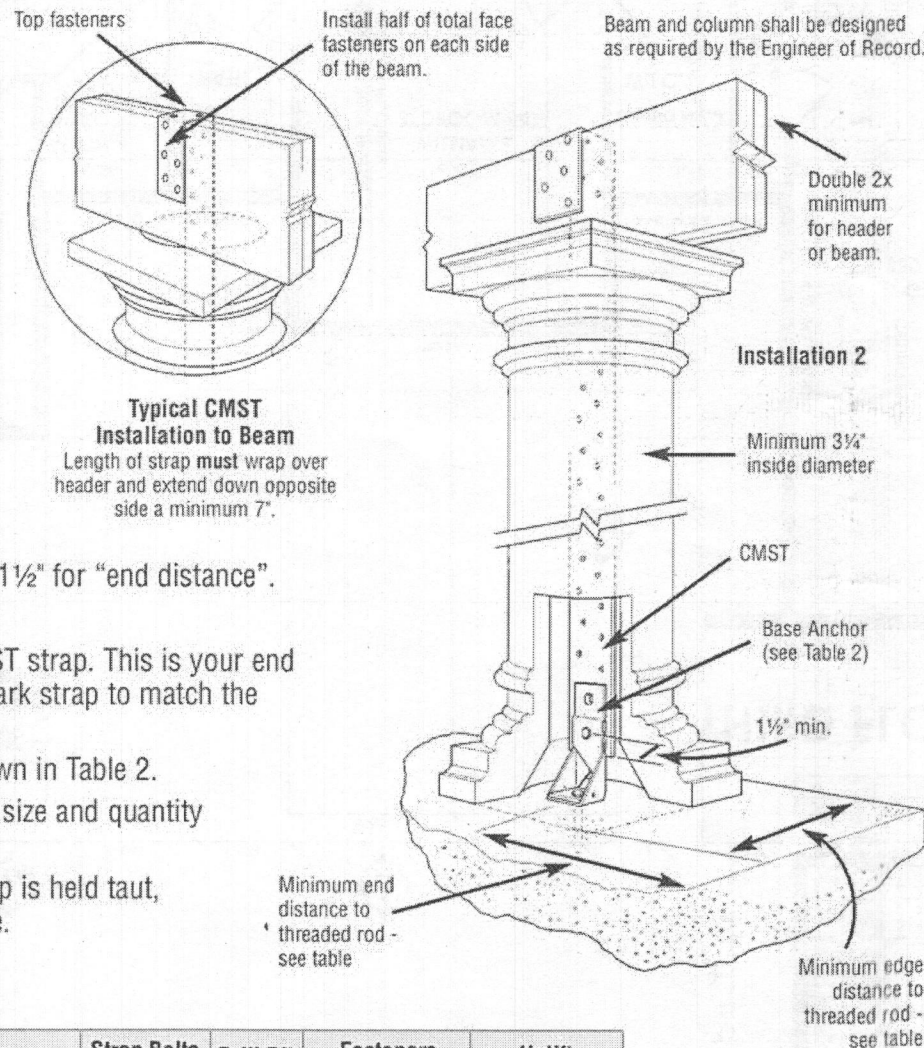


TECHNICAL BULLETIN
HOLLOW COLUMN UPLIFT CONNECTIONS

Installation requires a base anchor and Simpson's CMST strap. A concealed connection can be designed between foundation and beam. The minimum inside diameter of the hollow column must be 3 1/4" for the CMST strap and a minimum base opening diameter of approximately 7" is required for the LTT/HTT or HDA base anchors. Consult the column manufacturer for minimum column opening diameters.

INSTALLATION

- Select the appropriate strap and base anchor for the required uplift load from the table.
- Install base anchor:
 - a. Mark slab for center location of column.
 - b. Drill hole to the specified diameter and depth. See Table 2.
 - c. Clean hole and add Simpson's Epoxy-Tie. See Figures 1 through 6 on page 1.
 - d. Insert the required A307 threaded rod at the specified embedment depth.
 - e. Allow epoxy to cure.
- Attach base anchor to threaded rod and tighten nut after Epoxy-Tie has cured.
- Cut length of strap as required. Add an additional 1 1/2" for "end distance".
- Overlap CMST strap with strap of base anchor:
 - a. Mark a 1 1/2" distance from the end of the CMST strap. This is your end distance clearance. From the end distance, mark strap to match the location of base anchor stud bolts.
 - b. Drill strap bolt holes size and quantity as shown in Table 2.
 - c. Attach strap to base anchor with the required size and quantity of machine bolts (A307 bolts minimum).
- Set column in place and pull strap taut. While strap is held taut, fasten strap to beam with fasteners shown in table.



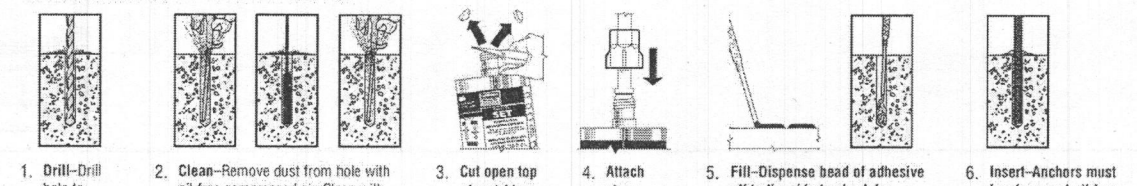
CONCRETE PORCH SECTION
COLUMNS AND ROOF PER ELEVATION

TABLE 2 — Allowable Uplift Loads

Base Anchor Model No.	Base Anchor Dia.	Anchor Drill Bit Dia.	Min. Embed.	Min. Anchor Length	Min. End Dist.	Min. Edge Dist.	Strap Model No.	Strap Bolts		Drill Bit Dia. (Strap)	Fasteners		Uplift	
								Qty	Dia.		Face (Total)	Top	100	(133 & 160)
LTT20B	3/4	7/8	6 3/4	8 3/4	10 1/8	5	CMST14	2	1/2	9/16	4-10d	2-10d	1750	1750
MTT28B	3/4	7/8	6 3/4	8 3/4	10 1/8	5	CMST14	4	1/2	9/16	8-10d	2-10d	3630	4455
HD2A	5/8	3/4	5	7	7 1/2	4	CMST14	2	5/8	1 1/16	4-10d	2-10d	2775	2775
HD5A	5/8 or 3/4	7/8	6 3/4	8 3/4	10 1/8	4	CMST14	2	3/4	1 3/16	8-10d	2-10d	3375	4010
HD8A	7/8	1	7 3/4	9 3/4	11 1/8	6	CMST14	3	7/8	1 5/16	8-10d	2-10d	3430	4435

1. See Simpson Anchor Systems catalog for complete Epoxy-Tie installation details.
2. 10d nails are common nails.
3. Allowable loads have been increased for wind or earthquake loading with no further

Installation into Concrete and Grout Filled CMU



PROFESSIONAL CERTIFICATION
I certify that these documents were prepared or approved by me, and that I am a duly licensed professional architect under the laws of the State of Maryland, License Number #14678, Expiration Date: 6/30/2016.



Fortune Residence
PROPOSED RESIDENCE
6902 Brooks Road, Highland, Maryland 20777

REVISIONS

ISSUE DATES:
5-15-16 REVIEW

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

PROFESSIONAL CERTIFICATION
 I certify that these documents
 were prepared or approved
 by me, and that I am a duly
 licensed professional
 architect under the laws of the
 State of Maryland.
 License Number #14478
 Expiration Date: 6/30/2016.



Fortune Residence
 PROPOSED RESIDENCE
 6902 Brooks Road, Highland, Maryland 20777

REVISIONS

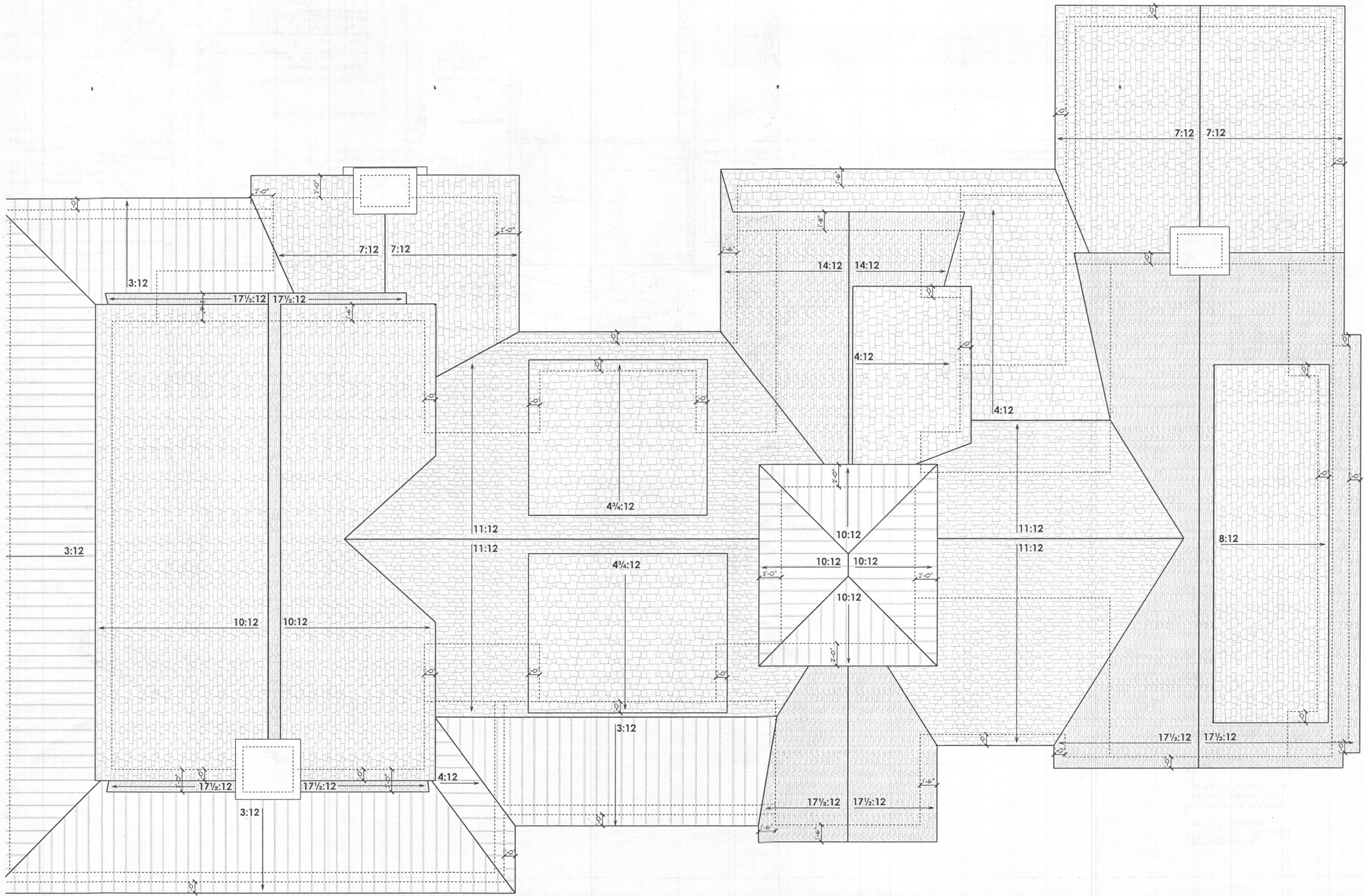
△	
△	
△	
△	
△	
△	
△	
△	
△	
△	

ISSUE DATES:

5-15-16	REVIEW

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

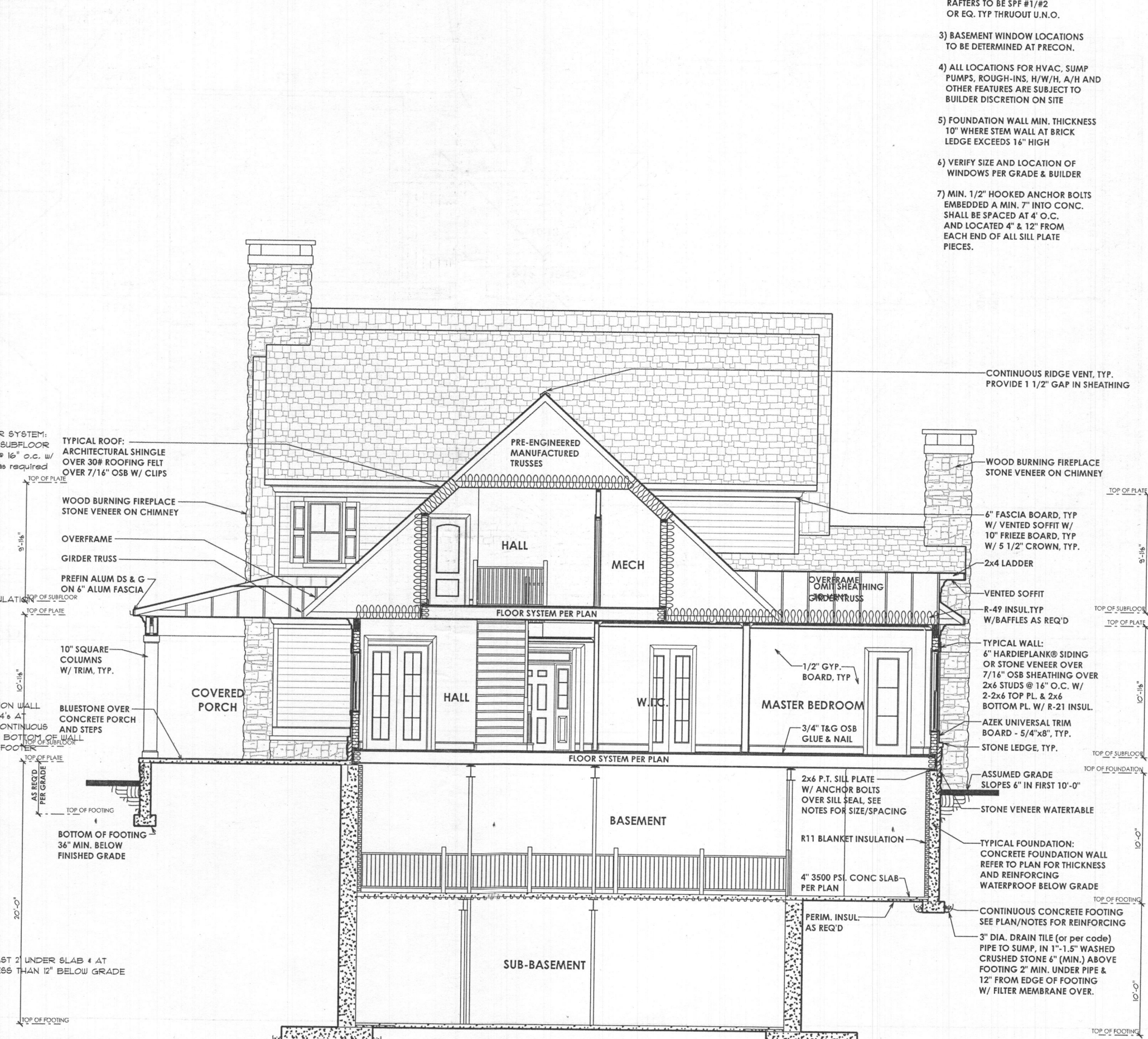
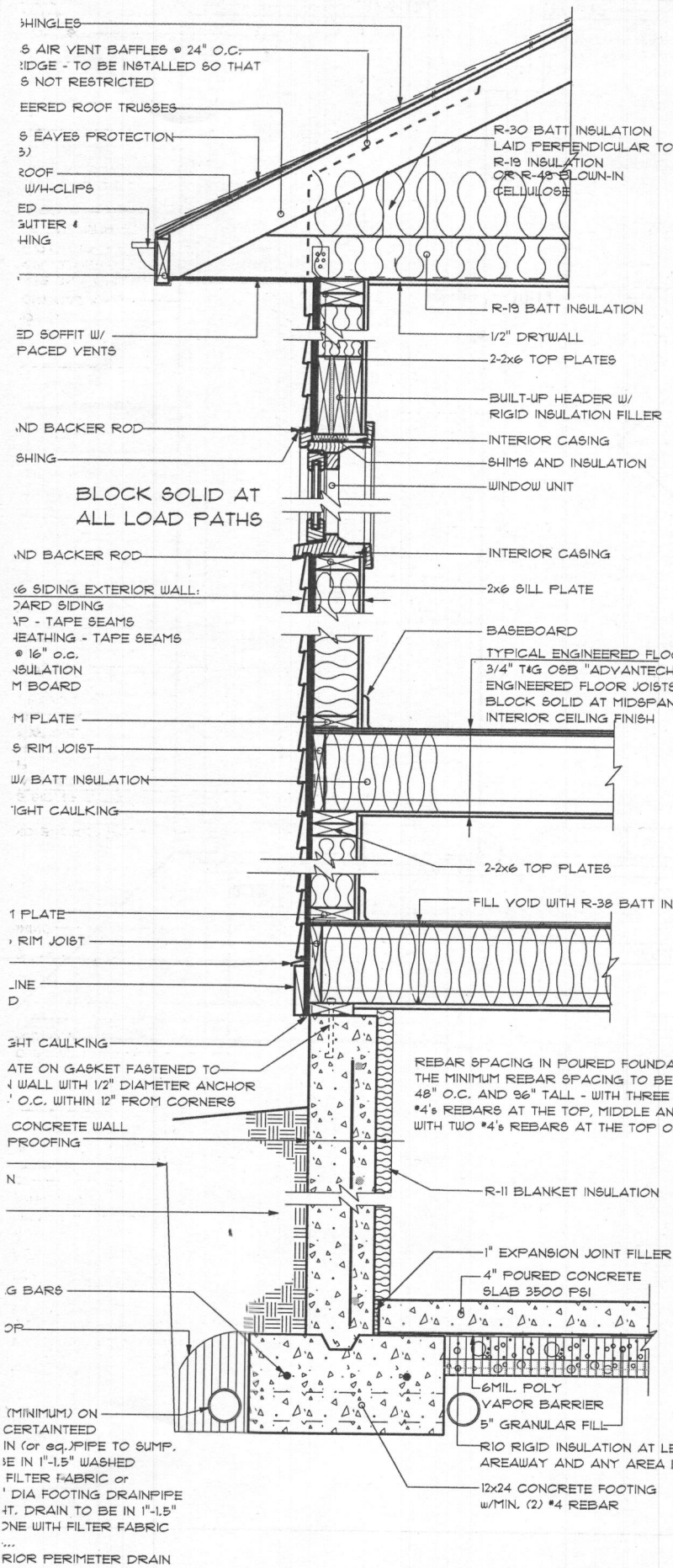
ROOF PLAN





SECTION NOTES

- 1) 2000 PSF MIN SOIL BEARING CAPACITY ASSUMED
- 2) BEAMS, JOISTS, HEADERS & RAFTERS TO BE SPF #1/#2 OR EQ. TYP THRUOUT U.N.O.
- 3) BASEMENT WINDOW LOCATIONS TO BE DETERMINED AT PRECON.
- 4) ALL LOCATIONS FOR HVAC, SUMP PUMPS, ROUGH-INS, H/W/H, A/H AND OTHER FEATURES ARE SUBJECT TO BUILDER DISCRETION ON SITE
- 5) FOUNDATION WALL MIN. THICKNESS 10" WHERE STEM WALL AT BRICK LEDGE EXCEEDS 16" HIGH
- 6) VERIFY SIZE AND LOCATION OF WINDOWS PER GRADE & BUILDER
- 7) MIN. 1/2" HOOKED ANCHOR BOLTS EMBEDDED A MIN. 7" INTO CONC. SHALL BE SPACED AT 4' O.C. AND LOCATED 4" & 12" FROM EACH END OF ALL SILL PLATE PIECES.



Fortune Residence
 PROPOSED RESIDENCE
 6902 Brooks Road, Highland, Maryland 20777

REVISIONS

ISSUE DATES:

5-15-16	REVIEW

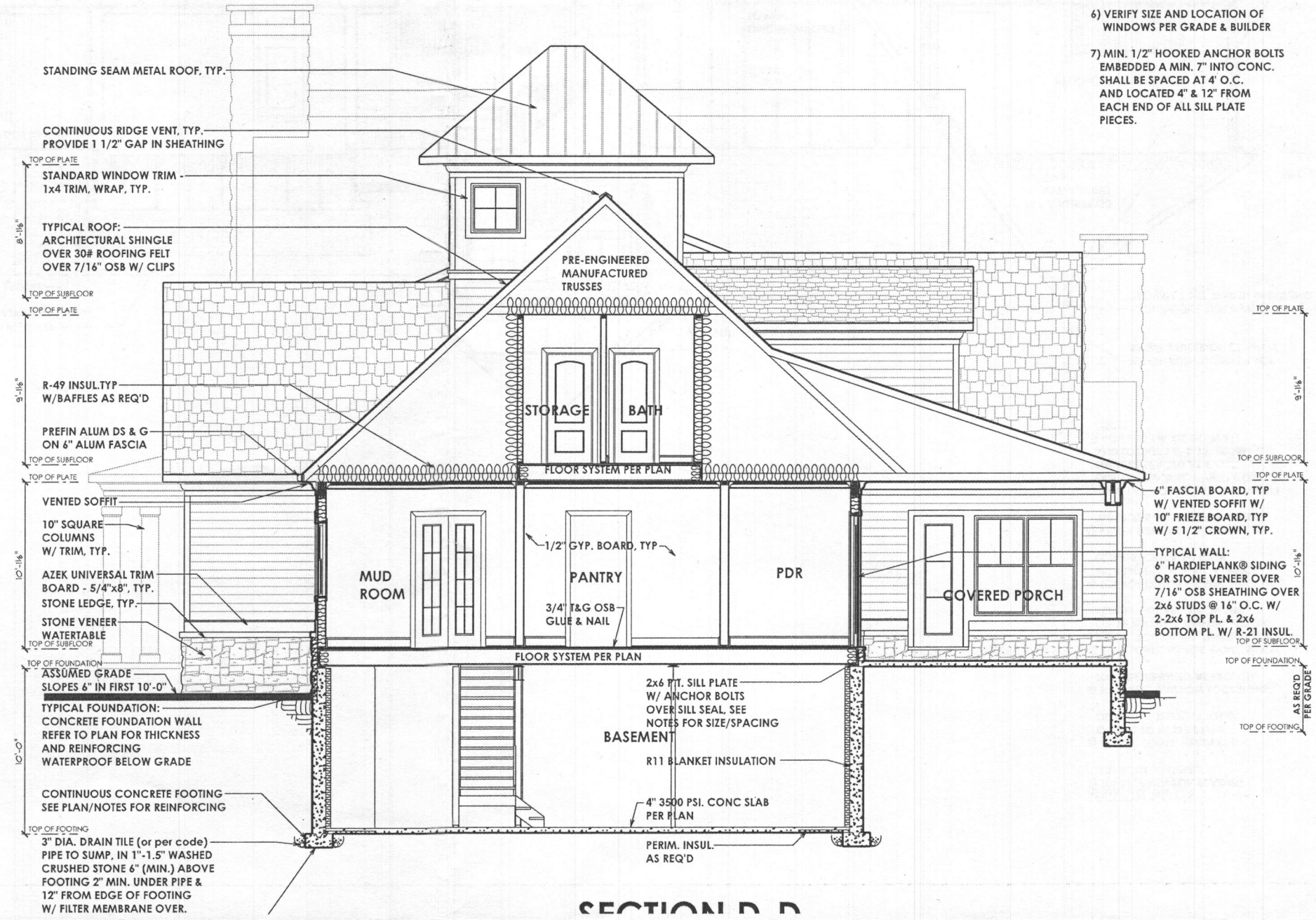
SCALE: 1/4" = 1'-0"

SECTION A-A

PROFESSIONAL CERTIFICATION
 I certify that these documents
 were prepared or approved
 by me, and that I am a duly
 licensed professional
 architect under the laws of the
 State of Maryland,
 License Number #14678
 Expiration Date: 6/30/2016.



- SECTION NOTES**
- 1) 2000 PSF MIN SOIL BEARING CAPACITY ASSUMED
 - 2) BEAMS, JOISTS, HEADERS & RAFTERS TO BE SPF #1/#2 OR EQ. TYP THRUOUT U.N.O.
 - 3) BASEMENT WINDOW LOCATIONS TO BE DETERMINED AT PRECON.
 - 4) ALL LOCATIONS FOR HVAC, SUMP PUMPS, ROUGH-INS, H/W/H, A/H AND OTHER FEATURES ARE SUBJECT TO BUILDER DISCRETION ON SITE
 - 5) FOUNDATION WALL MIN. THICKNESS 10" WHERE STEM WALL AT BRICK LEDGE EXCEEDS 16" HIGH
 - 6) VERIFY SIZE AND LOCATION OF WINDOWS PER GRADE & BUILDER
 - 7) MIN. 1/2" HOOKED ANCHOR BOLTS EMBEDDED A MIN. 7" INTO CONC. SHALL BE SPACED AT 4' O.C. AND LOCATED 4" & 12" FROM EACH END OF ALL SILL PLATE PIECES.



Fortune Residence
 PROPOSED RESIDENCE
 6902 Brooks Road, Highland, Maryland 20777

REVISIONS

ISSUE DATES:

5-15-16	REVIEW

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

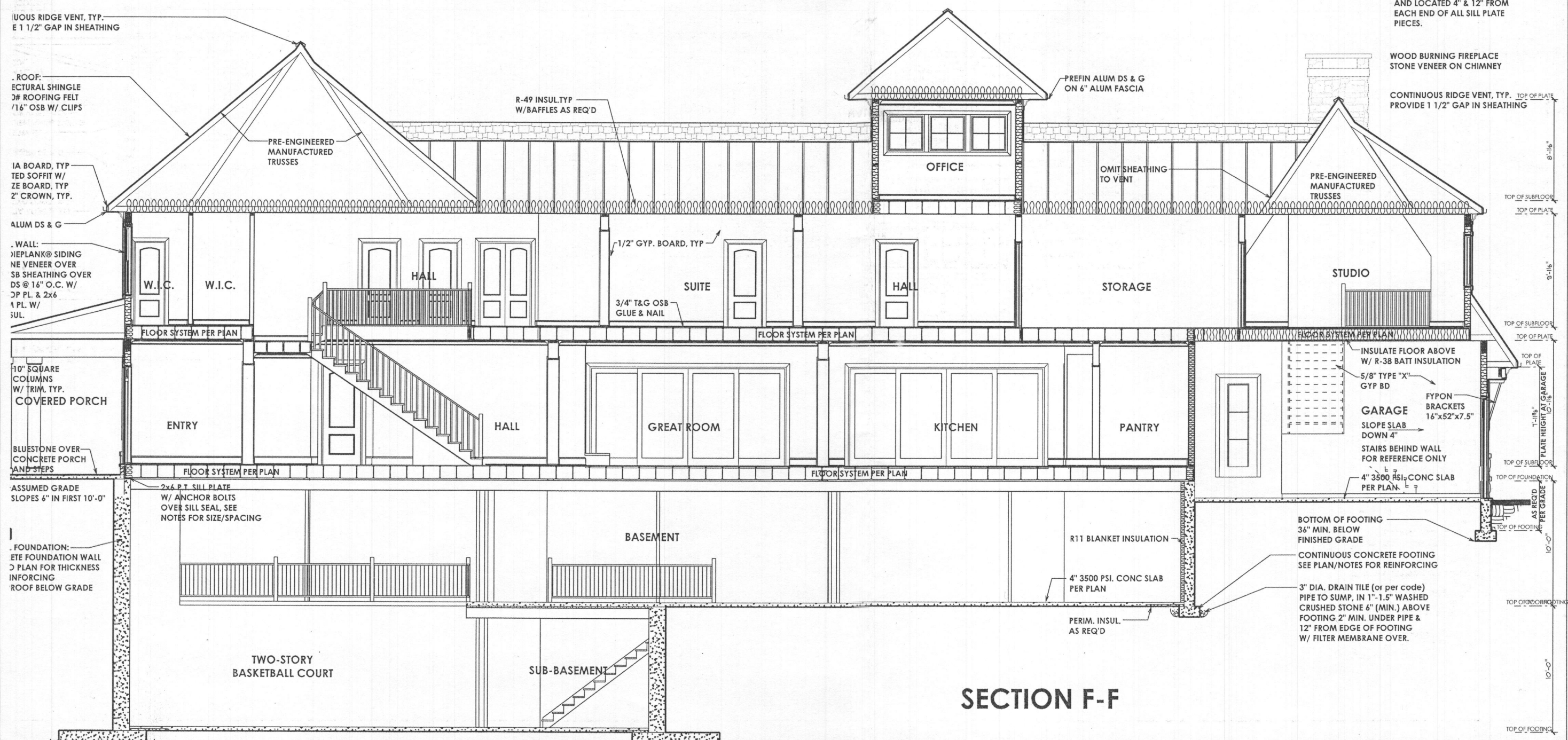
SECTION D-D



- SECTION NOTES**
- 2000 PSF MIN SOIL BEARING CAPACITY ASSUMED
 - BEAMS, JOISTS, HEADERS & RAFTERS TO BE SPF #1/#2 OR EQ. TYP THRUOUT U.N.O.
 - BASEMENT WINDOW LOCATIONS TO BE DETERMINED AT PRECON.
 - ALL LOCATIONS FOR HVAC, SUMP PUMPS, ROUGH-INS, H/W/H, A/H AND OTHER FEATURES ARE SUBJECT TO BUILDER DISCRETION ON SITE
 - FOUNDATION WALL MIN. THICKNESS 10" WHERE STEM WALL AT BRICK LEDGE EXCEEDS 16" HIGH
 - VERIFY SIZE AND LOCATION OF WINDOWS PER GRADE & BUILDER
 - MIN. 1/2" HOOKED ANCHOR BOLTS EMBEDDED A MIN. 7" INTO CONC. SHALL BE SPACED AT 4' O.C. AND LOCATED 4" & 12" FROM EACH END OF ALL SILL PLATE PIECES.

WOOD BURNING FIREPLACE
 STONE VENEER ON CHIMNEY

CONTINUOUS RIDGE VENT, TYP. PROVIDE 1 1/2" GAP IN SHEATHING



Fortune Residence
 PROPOSED RESIDENCE
 6902 Brooks Road, Highland, Maryland 20777

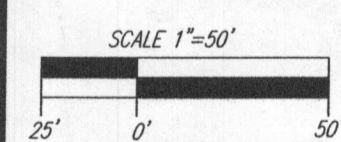
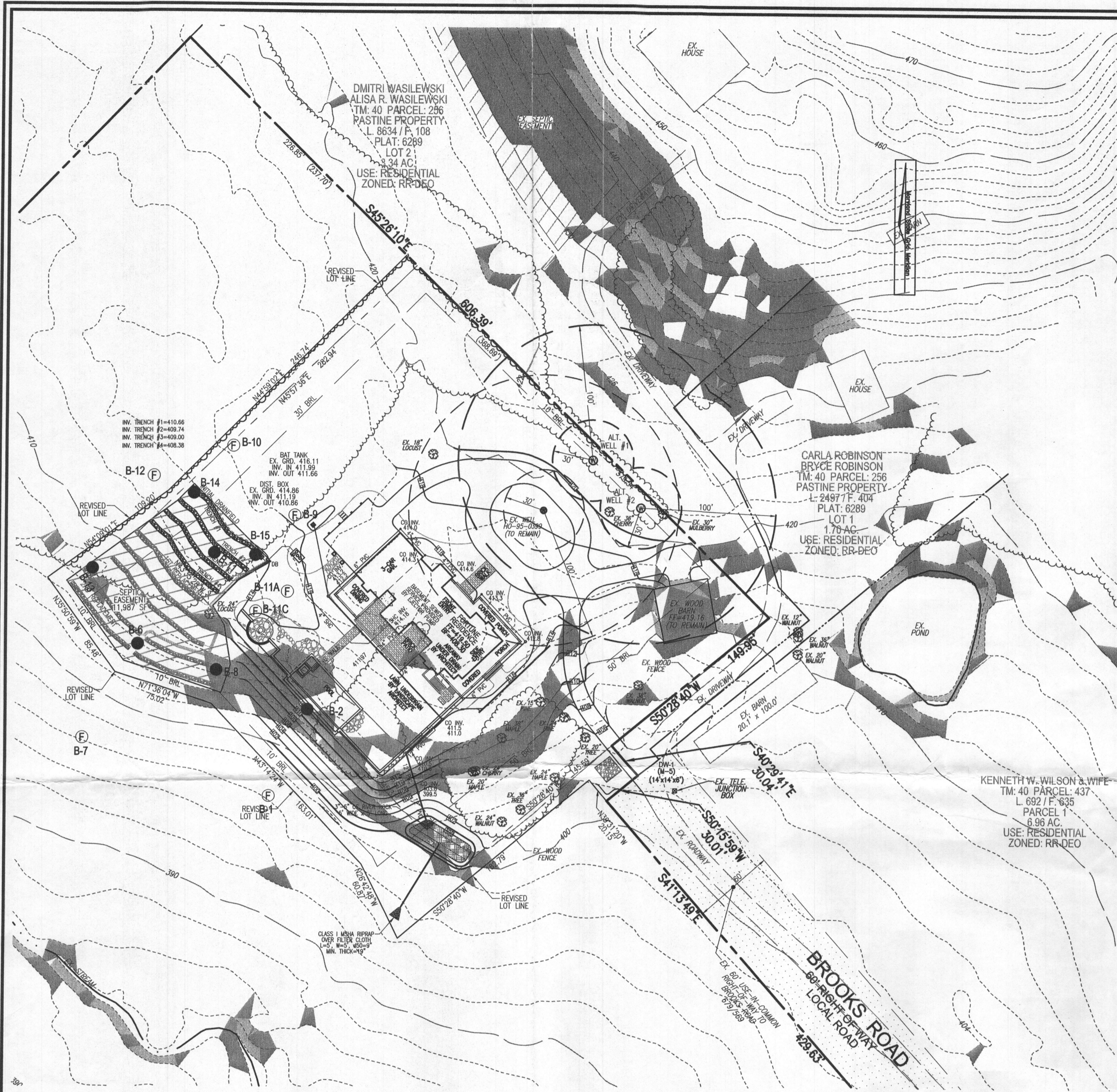
REVISIONS

ISSUE DATES:

5-15-16	REVIEW

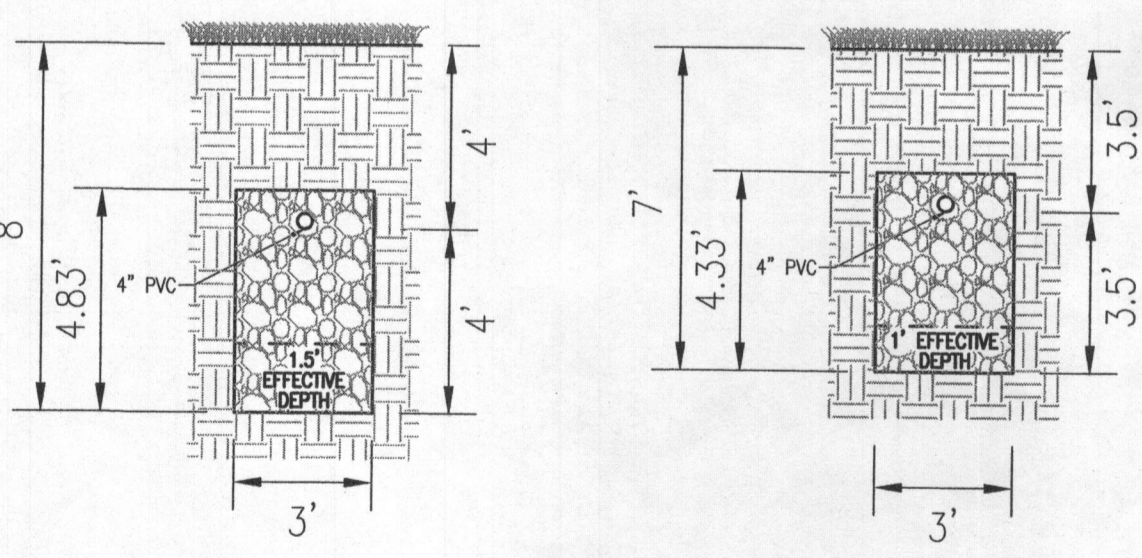
SCALE: 1/4" = 1'-0"

SECTION F-F



BAT PLAN
SCALE: 1"=50'

TRENCH INFO			
TRENCH	LENGTH	TRENCH	EXISTING
			GROUND
1	76'	410.66	406.66
2	74'	409.74	405.74
3	72'	409.00	405.00
4	74'	408.38	404.38



INITIAL SYSTEM TRENCH DETAIL
NOT TO SCALE

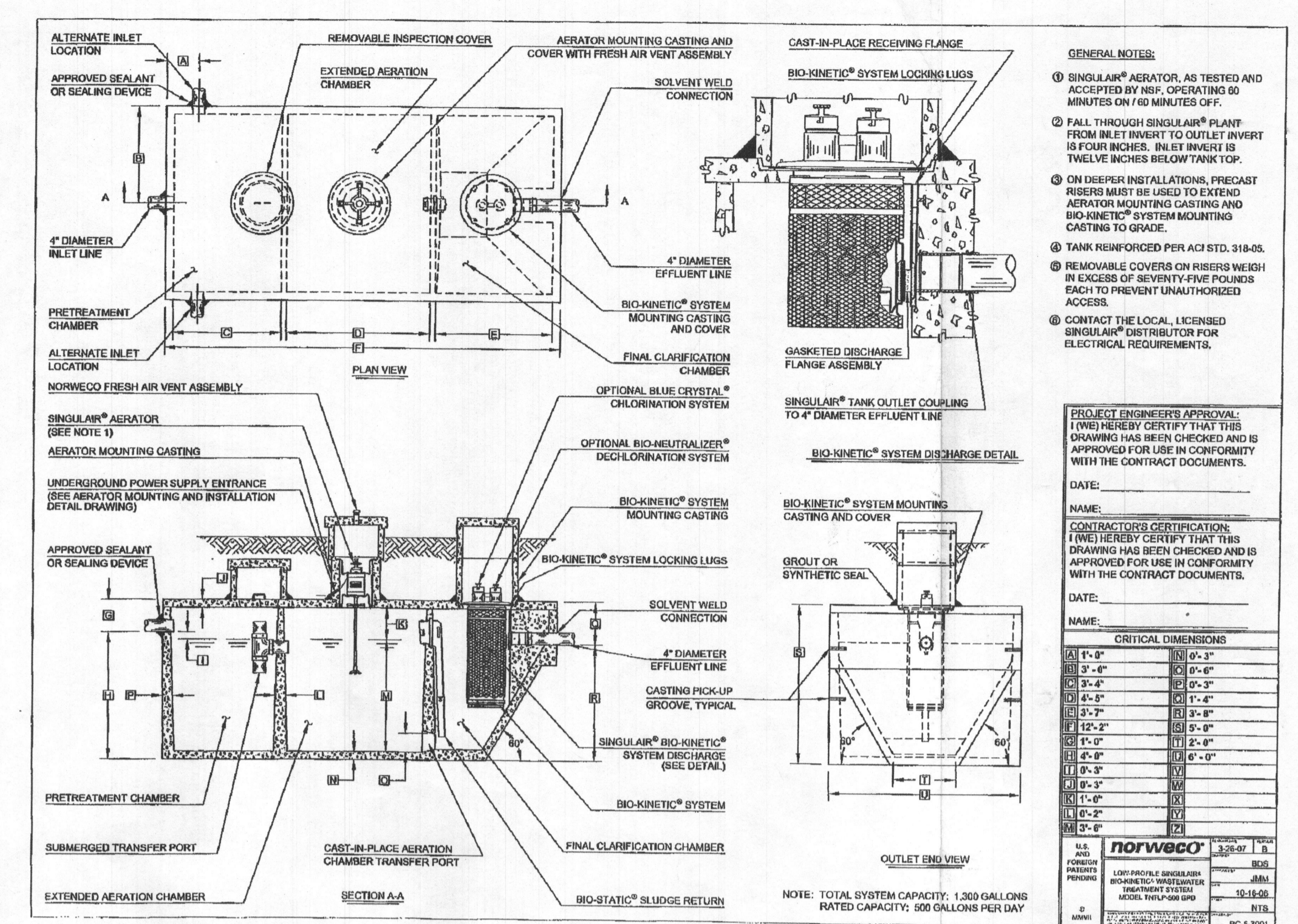
1ST REPLACEMENT TRENCH DETAIL
NOT TO SCALE

SYSTEM CALCULATIONS:

INITIAL SYSTEM:
5 BEDROOMS AT 750gpd / 0.6 ABSORPTION RATE = 1,250 SQ. FT.
1,250 SQ. FT. / 3 (TRENCH WIDTH) x .71 (SIDEWALL REDUCTION) = 296 LINEAR FEET
296 TOTAL LINEAR FEET OF TRENCH ARE PROVIDED WITH THE INITIAL SYSTEM.

FIRST REPLACEMENT SYSTEM:
5 BEDROOMS AT 750gpd / 0.8 ABSORPTION RATE = 938 SQ. FT.
938 SQ. FT. / 3 (TRENCH WIDTH) x .83 (SIDEWALL REDUCTION) = 260 LINEAR FEET
260 TOTAL LINEAR FEET OF TRENCH ARE PROVIDED WITH THE FIRST REPLACEMENT SYSTEM.

THIS AREA DESIGNATES A PRIVATE SEWAGE EASEMENT OF AT LEAST 10,000 SQ. FT. AS REQUIRED BY THE MARYLAND DEPARTMENT OF ENVIRONMENT FOR INDIVIDUAL SEWAGE DISPOSAL IMPROVEMENTS OF ANY NATURE IN THIS EASEMENT ARE RESTRICTED. THIS EASEMENT SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE AUTHORITY TO GRANT ADJUSTMENTS TO THE PRIVATE SEWAGE EASEMENT. RECORDATION OF A REVISED SEWAGE EASEMENT SHALL NOT BE NECESSARY.



- GENERAL NOTES:**
- SINGULAR® AERATOR, AS TESTED AND ACCEPTED BY NSF, OPERATING 60 MINUTES ON / 15 MINUTES OFF.
 - FALL THROUGH SINGULAR® PLANT FROM INLET INVERT TO OUTLET INVERT IS FOUR INCHES. INLET INVERT IS TWELVE INCHES BELOW TANK TOP.
 - ON DEEPER INSTALLATIONS, PRECAST RISERS MUST BE USED TO EXTEND AERATOR MOUNTING CASTING AND BIO-KINETIC® SYSTEM MOUNTING CASTING TO GRADE.
 - TANK REINFORCED PER ACI STD. 318-88.
 - REMOVABLE COVERS ON RISERS WEIGH IN EXCESS OF SEVENTY-FIVE POUNDS EACH TO PREVENT UNAUTHORIZED ACCESS.
 - CONTACT THE LOCAL LICENSED SINGULAR® DISTRIBUTOR FOR ELECTRICAL REQUIREMENTS.

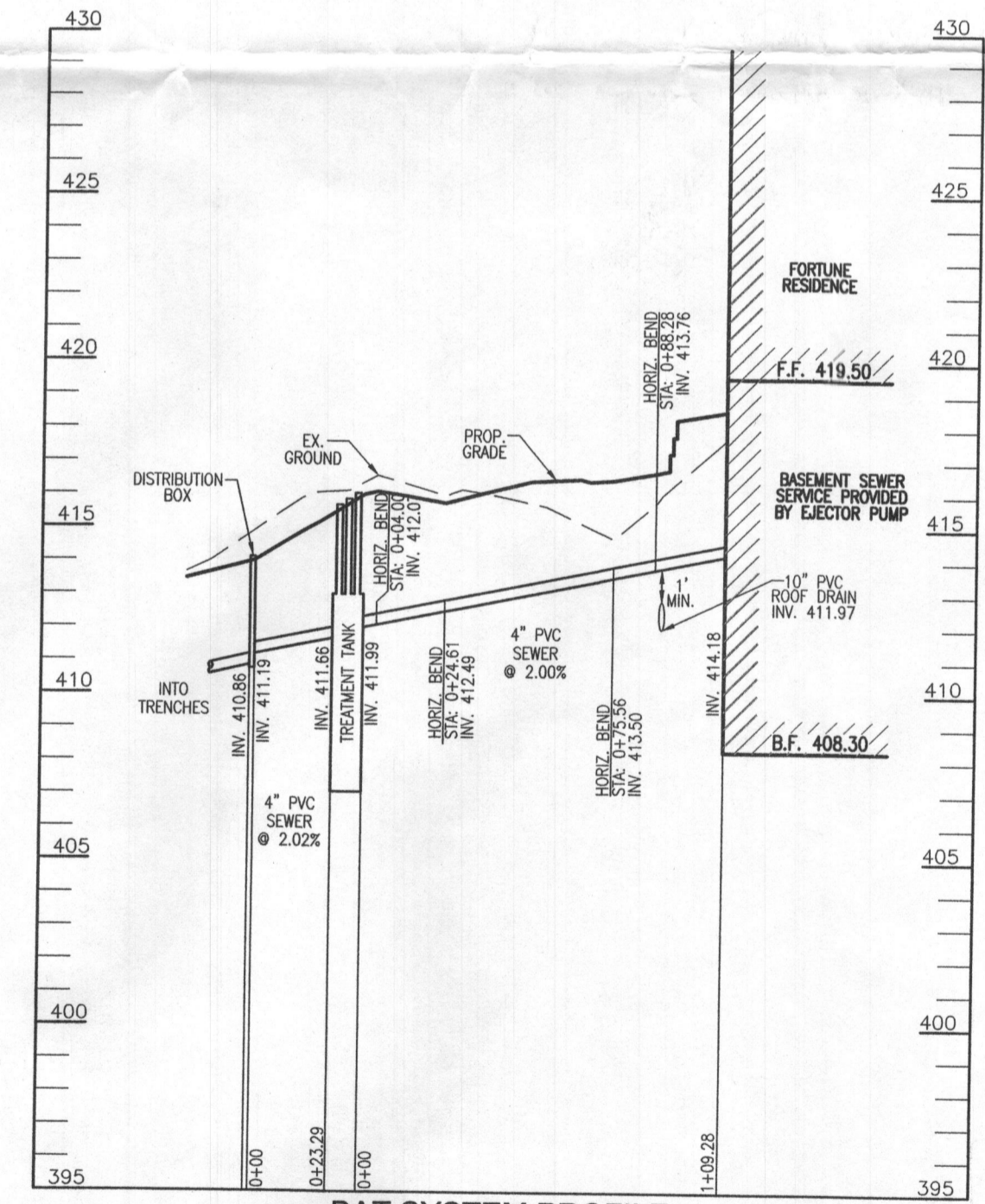
PROJECT ENGINEER'S APPROVAL:
I HEREBY CERTIFY THAT THIS DRAWING HAS BEEN CHECKED AND IS APPROVED FOR USE IN CONFORMITY WITH THE CONTRACT DOCUMENTS.

CONTRACTOR'S CERTIFICATION:
I HEREBY CERTIFY THAT THIS DRAWING HAS BEEN CHECKED AND IS APPROVED FOR USE IN CONFORMITY WITH THE CONTRACT DOCUMENTS.

CRITICAL DIMENSIONS

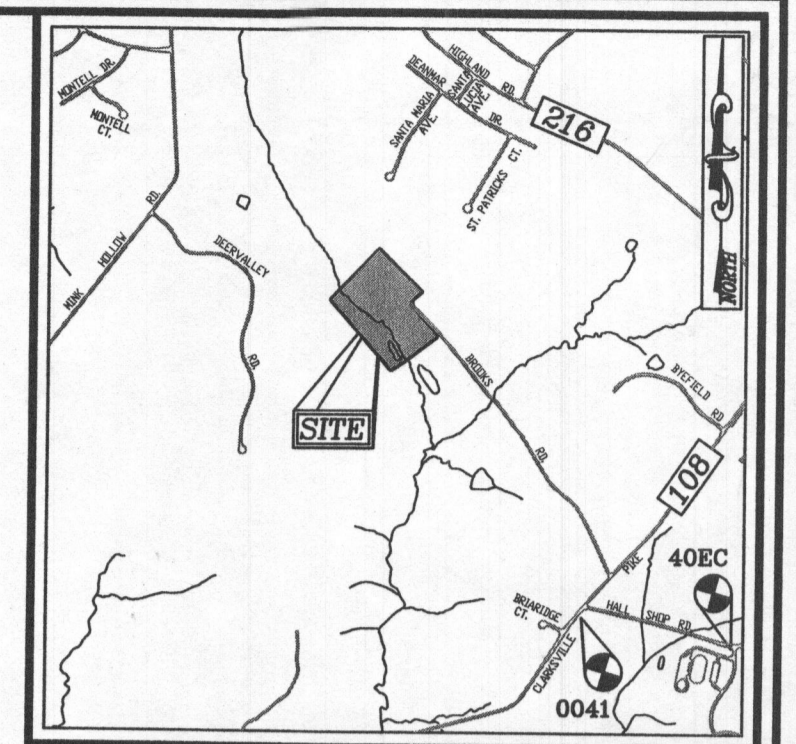
DESCRIPTION	MIN.	MAX.
1'-0"	0'-0"	0'-0"
2'-0"	0'-0"	0'-0"
3'-0"	0'-0"	0'-0"
4'-0"	0'-0"	0'-0"
5'-0"	0'-0"	0'-0"
6'-0"	0'-0"	0'-0"
7'-0"	0'-0"	0'-0"
8'-0"	0'-0"	0'-0"
9'-0"	0'-0"	0'-0"
10'-0"	0'-0"	0'-0"
11'-0"	0'-0"	0'-0"
12'-0"	0'-0"	0'-0"
13'-0"	0'-0"	0'-0"
14'-0"	0'-0"	0'-0"
15'-0"	0'-0"	0'-0"
16'-0"	0'-0"	0'-0"
17'-0"	0'-0"	0'-0"
18'-0"	0'-0"	0'-0"
19'-0"	0'-0"	0'-0"
20'-0"	0'-0"	0'-0"

NOTE: TOTAL SYSTEM CAPACITY: 1,300 GALLONS
RATED CAPACITY: 600 GALLONS PER DAY

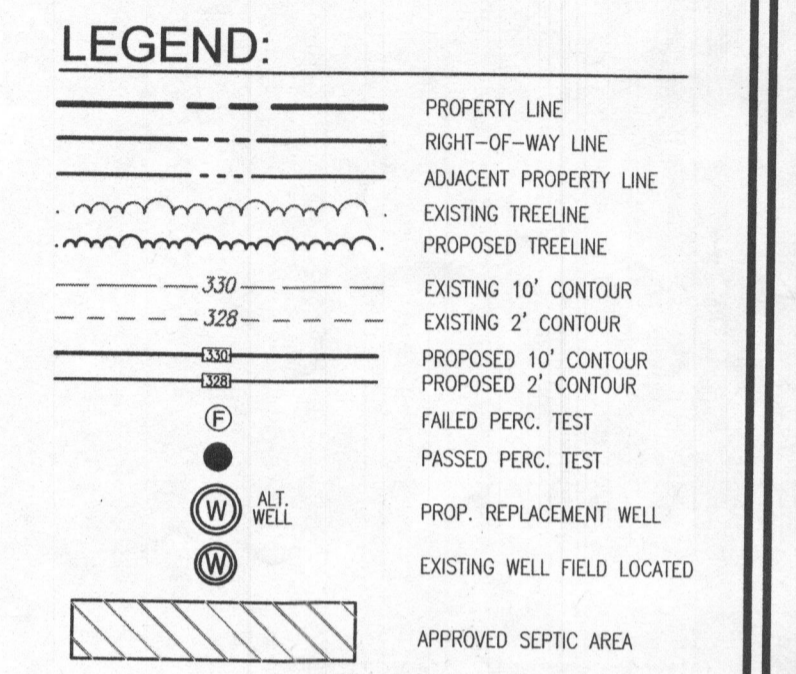


BAT SYSTEM PROFILE
SCALE: HORIZONTAL - 1"=50'
VERTICAL - 1"=5'

- GENERAL NOTES:**
- ANY CHANGE TO THE LOCATIONS OR DEPTHS TO ANY COMPONENTS MUST BE APPROVED BY THE ENGINEER AND THE HOWARD COUNTY HEALTH DEPARTMENT PRIOR TO INSTALLATION. A REVISED SITE PLAN MAY BE REQUIRED.
 - THE MAXIMUM DEPTH OF THE BAT PER THE MANUFACTURER'S SPECIFICATION IS 3 FEET.
 - NO BLOWER IS REQUIRED. THE NORWECO WASTEWATER TREATMENT SYSTEM HAS AN AERATOR MOUNTED IN THE TANK.
 - THE BAT SYSTEM SHALL BE MAINTAINED AND OPERATED FOR THE LIFE OF THE SYSTEM.
 - THE BAT SHALL BE OPERATED BY AND MAINTAINED BY A CERTIFIED SERVICE PROVIDER.
 - WITHIN ONE MONTH OF INSTALLATION, A PERSON INSTALLING THE BAT SYSTEM SHALL REPORT TO THE MARYLAND DEPARTMENT OF THE ENVIRONMENT (MDE) IN A MANNER ACCEPTABLE TO MDE, THE ADDRESS AND DATE OF COMPLETION OF THE BAT INSTALLATION AND THE TYPE OF BAT INSTALLED.
 - ELECTRICAL WORK FOR THE BAT INSTALLATION MUST BE PERFORMED BY A LICENSED ELECTRICIAN.
 - AN AGREEMENT AND EASEMENT MUST BE COMPLETED AND SIGNED BY ALL APPLICABLE PARTIES, AND RECORDED IN LAND RECORDS OF HOWARD COUNTY.
 - THE HEALTH DEPARTMENT REQUIRES DOCUMENTATION FOR THE START-UP CERTIFICATION FROM THE MANUFACTURER PRIOR TO FINAL APPROVAL OF THE INSTALLATION.



VICINITY MAP
SCALE: 1"=2,000'



OWNER:
CHRISTOPHER T. FORTUNE
ASHLEY A. ADAMS
4524 ALPINE ROSE BEND
ELLCOTT CITY, MD 21042
410-733-4454

BUILDER:
SMITHOUSE CONSTRUCTION, LLC
232 COCKEYSVILLE RD., SUITE B200
COCKEYSVILLE, MD 21030
(410) 329-1262

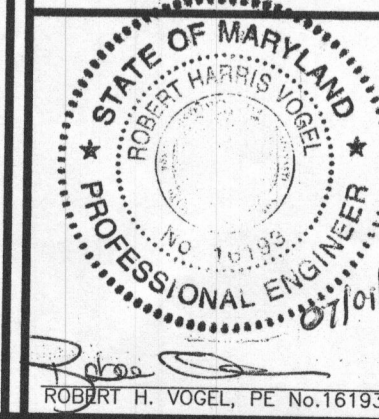
SITE PLAN FOR BAT INSTALLATION
FORTUNE PROPERTY GP-17-001
6902 BROOKS ROAD
HIGHLAND, MD 20777
(L. 16429 / F. 166)

BUILDING PERMIT
B16605454

TAX MAP: 40 GRID: 03
5TH ELECTION DISTRICT

ZONED: RR-BEO
PARCELS: 421 & 243
HOWARD COUNTY, MARYLAND

ROBERT H. VOGEL, INC.
ENGINEERS • SURVEYORS • PLANNERS
8407 MAIN STREET
ELLCOTT CITY, MD 21043
TEL: 410.461.7666
FAX: 410.461.8961



PROFESSIONAL CERTIFICATE

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DAILY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16193, EXPIRATION DATE: 06-27-2018

DESIGN BY: RHV
CHECKED BY: RHV
DATE: JULY 2016
SCALE: AS SHOWN
W.O. NO.: 14-60

1 SHEET OF 1

Health Dept.