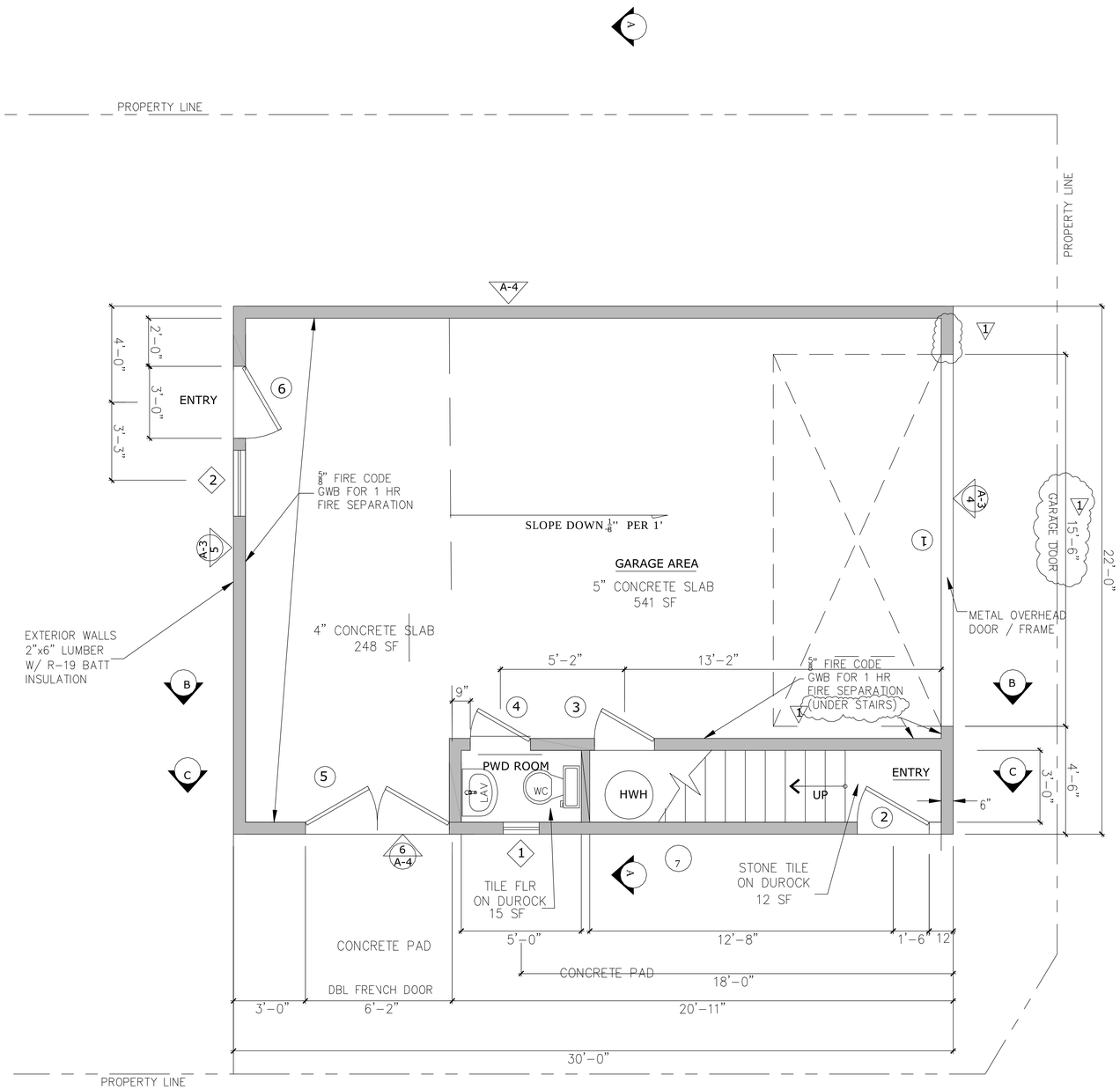
GENERAL ARCHITECTURAL NOTES

1 - SEE SHEET SP-1 TO SP-3 FOR GENERAL NOTES REGARDING CONSTRUCTION.

2 - CONTRACTOR IS RESPONSIBLE FOR SURVEYING ALL EXISTING CONDITIONS AND ALL RECORD DRAWINGS AND SHOULD NOTIFY THE ARCHITECT OF ANY DISCREPANCIES BETWEEN THE CONTRACT DOCUMENTS AND THE EXISTING CONDITIONS.

3 - ALL DIMENSIONS ARE SHOWN FROM FINISHED FACE OF GWB U.N.O. ALL CMU AND BRICK DIMENSIONS ARE SHOWN AS NOMINAL.



1 1ST FLOOR PLAN

SCALE: 1/4"=1-0"

DOOR SCHEDULE

NR	TYPE	SIZE	GLAZING	MANUF	MISC.	U VALUES	SHGC
	FIRST FLR	2-6X6-8				< .30	0.23
1	EXTERIOR	16-0X6-8	INSULATED	LOCK		< .30	0.23
2	EXTERIOR	3-0X6-8					
3	INTERIOR - MECH AREA	2-6X6-8					
4	INTERIOR – PWD RM	2-6X6-8		LOCK			
5	EXTERIOR – DBL	2-3-0X6-8	TEMPERED	LOCK	FRENCH	< .30	0.23
6	EXTERIOR	3-0X6-8	TEMPERED	LOCK		< .30	0.23
	SECOND FLR						
7	INTERIOR- CLOSET	2-6X6-8					
8	INTERIOR- W/D CLST	2-6X6-8					
9	INTERIOR - BATH	2-6 X6-8		LOCK			
10	INTERIOR-DBL POCKET	2-2-6X6-8		LOCK	POCKET		
11	INTERIOR-DBL CLOSET	2-2-6X6-8					

WINDOW SCHEDULE

	NR	TYPE	SIZE	GLAZING	MANUF	MISC.	U VALUES	SHGC
		FIRST FLR						
	1	DBL HUNG	18"X40"	INSULATED			< .30	0.23
	2	CASEMENT	33"X53.5"	INSULATED			< .30	0.23
		SECOND FLR						
1	3	DBL HUNG	23.5"X53.5"	TEMPERED			< .30	0.23
	4	FIXED	71.5"X53.5"	INSULATED			< .30	0.23
	5	CASEMENT	40"X71"	INSULATED			< .30	0.23
1	6	CASEMENT	60"X72"	TEMPERED		OPERATABLE (57.4SF)	< .30	0.23
	7	DBL HUNG	48.5"X60"	INSULATED			< .30	0.23

SCALE 1/4" = 1'

−2 0 2 4 8

JULY 5, 2016

4511 CHESAPEAKE ST NW
WASHINGTON, DC 20016

Owners:
Nick Alten

Engineer:
Better Space LLC
4511 Chesapeake St NW
Washington DC

REVISIONS

ITEM	DATE	DESCRIPTION
1	6-30-2016	PER COMMNETS

sheet name:
1ST FLOOR

A0001

Board of Zoning Adjustment
District of Columbia
CASE NO.19732
EXHIBIT NO.20

GENERAL ARCHITECTURAL NOTES

1 - SEE SHEET SP-1 TO SP-3 FOR GENERAL NOTES REGARDING CONSTRUCTION.

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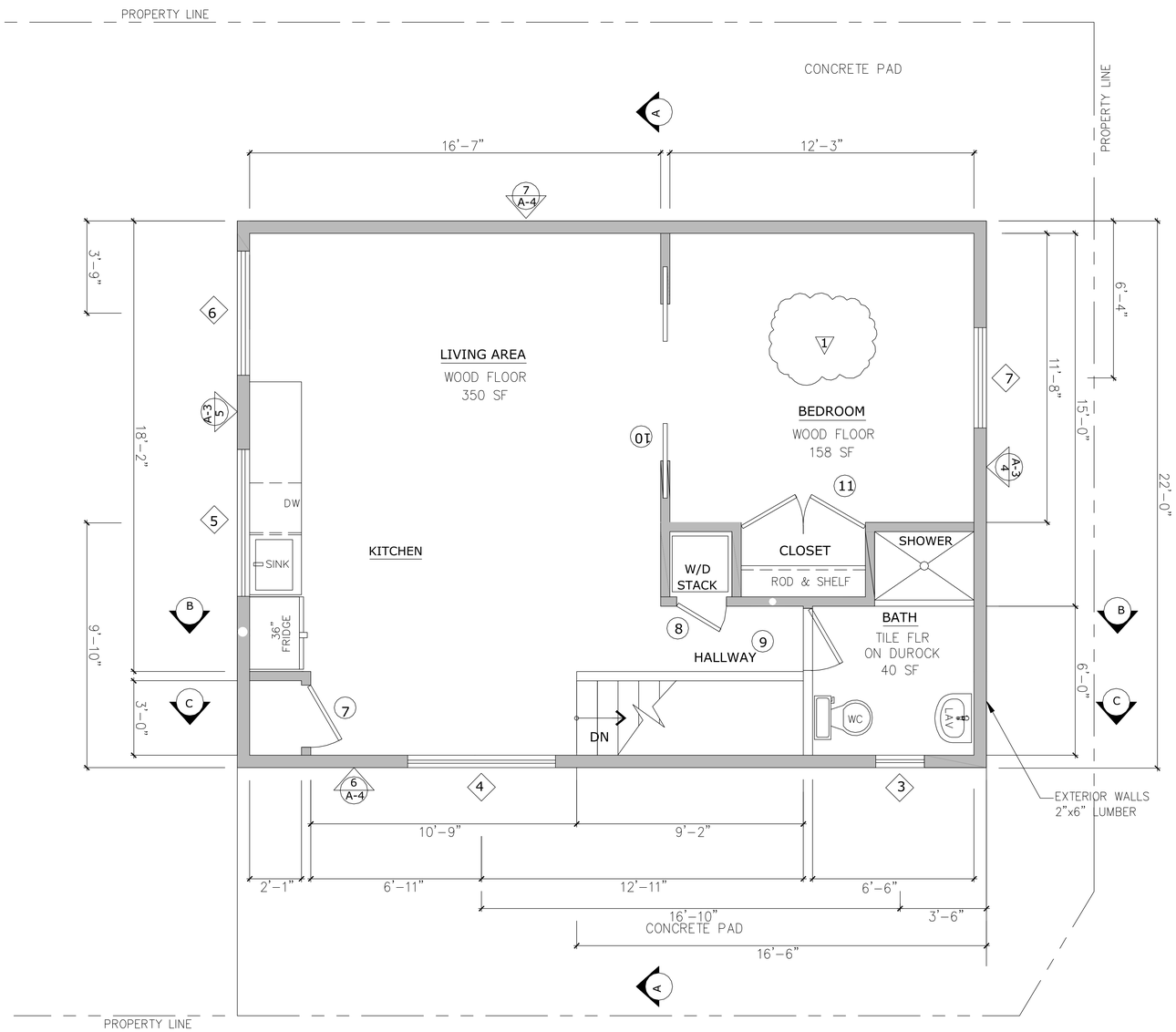
DOOR SCHEDULE

NR	TYPE	SIZE	GLAZING	MANUF	MISC.	U VALUES	SHGC
	FIRST FLR	2-6X6-8				< .30	0.23
1	EXTERIOR	16-0X6-8	INSULATED	LOCK		< .30	0.23
2	EXTERIOR	3-0X6-8					
3	INTERIOR - MECH AREA	2-6X6-8					
4	INTERIOR – PWD RM	2-6X6-8		LOCK			
5	EXTERIOR – DBL	2-3-0X6-8	TEMPERED	LOCK	FRENCH	< .30	0.23
6	EXTERIOR	3-0X6-8	TEMPERED	LOCK		< .30	0.23
	SECOND FLR						
7	INTERIOR- CLOSET	2-6X6-8					
8	INTERIOR- W/D CLST	2-6X6-8					
9	INTERIOR - BATH	2-6 X6-8		LOCK			
10	INTERIOR-DBL POCKET	2-2-6X6-8		LOCK	POCKET		
11	INTERIOR-DBL CLOSET	2-2-6X6-8					

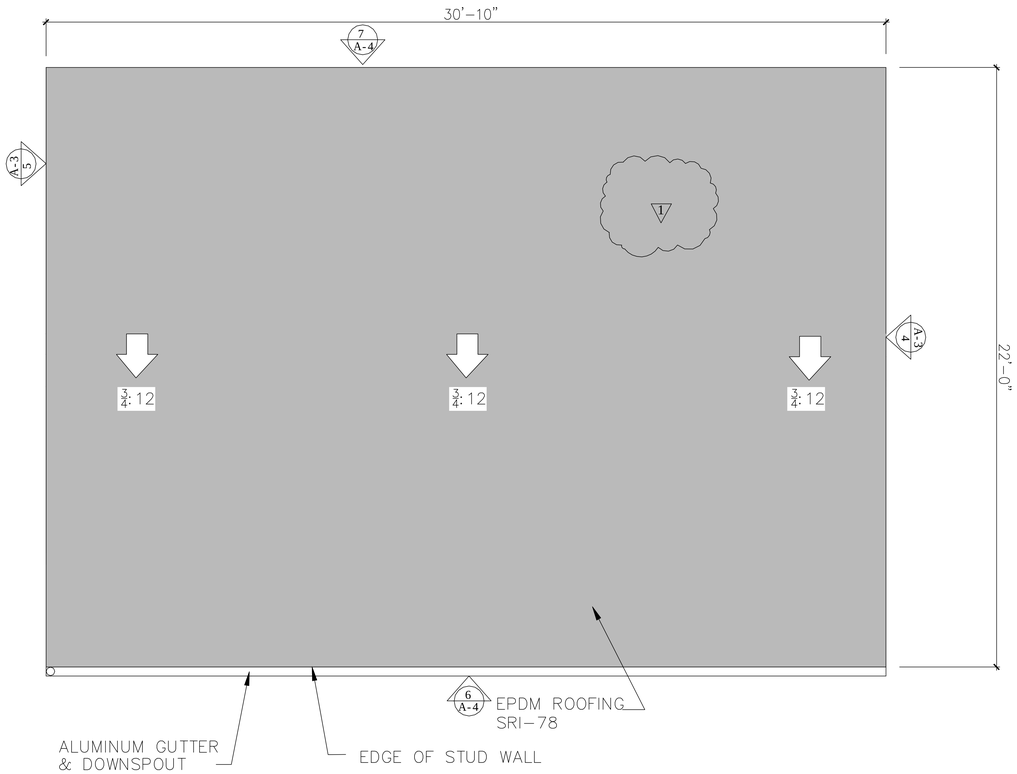
WINDOW SCHEDULE

NR	TYPE	SIZE	GLAZING	MANUF	MISC.	U VALUES	SHGC
	FIRST FLR						
1	DBL HUNG	18"X40"	INSULATED			< .30	0.23
2	CASEMENT	33"X53.5"	INSULATED			< .30	0.23
	SECOND FLR						
3	DBL HUNG	23.5"X53.5"	TEMPERED			< .30	0.23
4	FIXED	71.5"X53.5"	INSULATED			< .30	0.23
5	CASEMENT	40"X71"	INSULATED			< .30	0.23
6	CASEMENT	60"X72"	TEMPERED		OPERATABLE (57.4SF)	< .30	0.23
7	DBL HUNG	48.5"X60"	INSULATED			< .30	0.23



2 2ND FLOOR PLAN

SCALE: 1/4"=1-0"



EPDM ROOF SYSTEM
SRI 78 ON ROOFING FELT W/ ICE & WATER SHIELD AS SHOWN ON ROOF PLAN. INSTALL PER MANUFACTURER'S RECOMENDATION

3 ROOF PLAN

S CALE: 1/4"=1-0"

SCALE 1/4" = 1'

–2 0 2 4 8

DISTRICT OF COLUMBIA GEORGE CARL GERBER No. PE 907801 REGISTERED PROFESSIONAL ENGINEER

JULY 5, 2016

4511 CHESAPEAKE ST NW
WASHINGTON, DC 20016

Owners:
Nick Alten

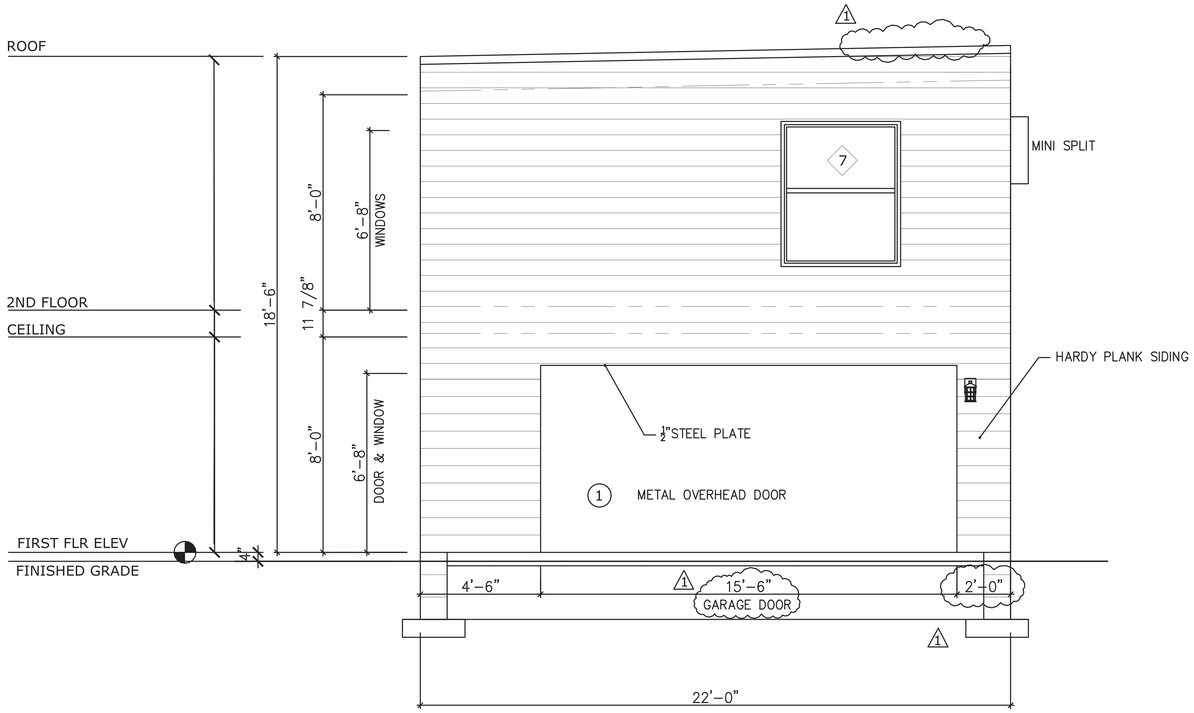
Engineer:
Better Space LLC
4511 Chesapeake St NW
Washington DC

REVISIONS

ITEM	DATE	DESCRIPTION
1	6-30-2016	PER COMMNETS

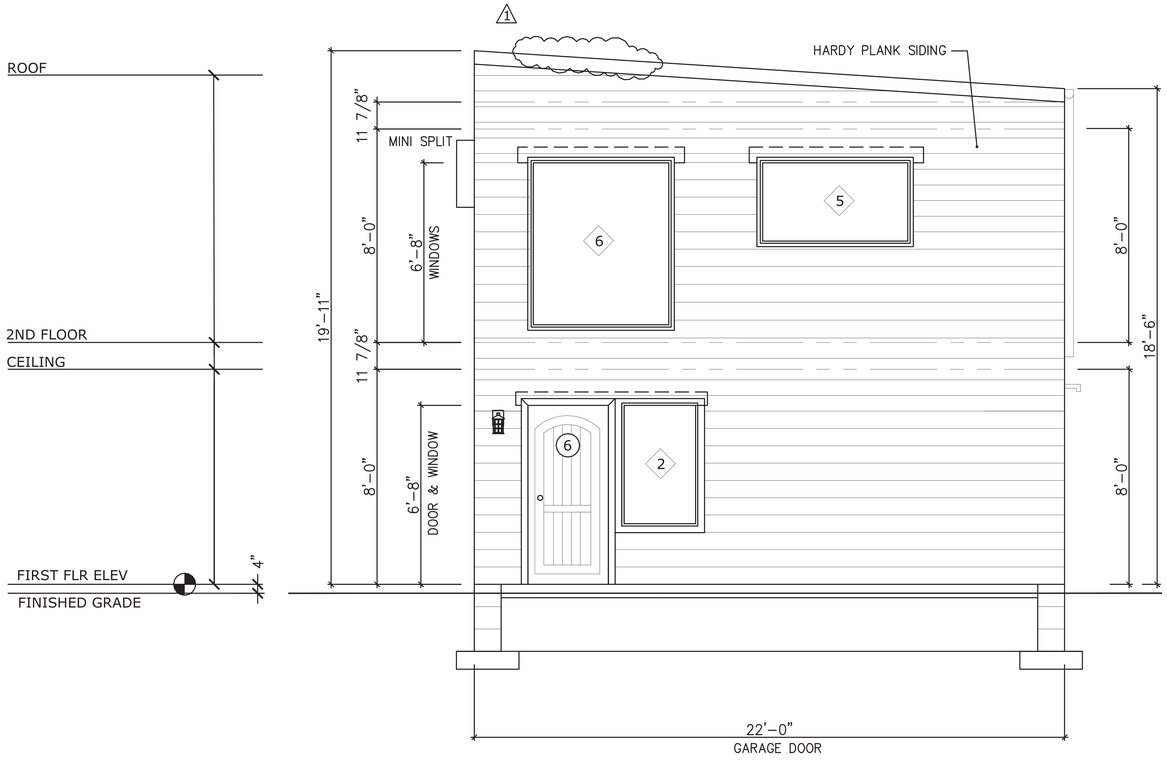
s heet name:
2ND FLOOR

A0002



4 NORTH ELEVATION

SCALE: 1/2"=1-0"



5 SOUTH ELEVATION

SCALE: 1/2"=1-0"

SCALE 1/2" = 1'

−1 0 1 2 4

DISTRICT OF COLUMBIA
GEORGE CARL BENZEL
No. PE 907801
REGISTERED
PROFESSIONAL ENGINEER
JULY 5, 2016

4511 CHESAPEAKE ST NW
WASHINGTON, DC 20016

Owners:
Nick Alten

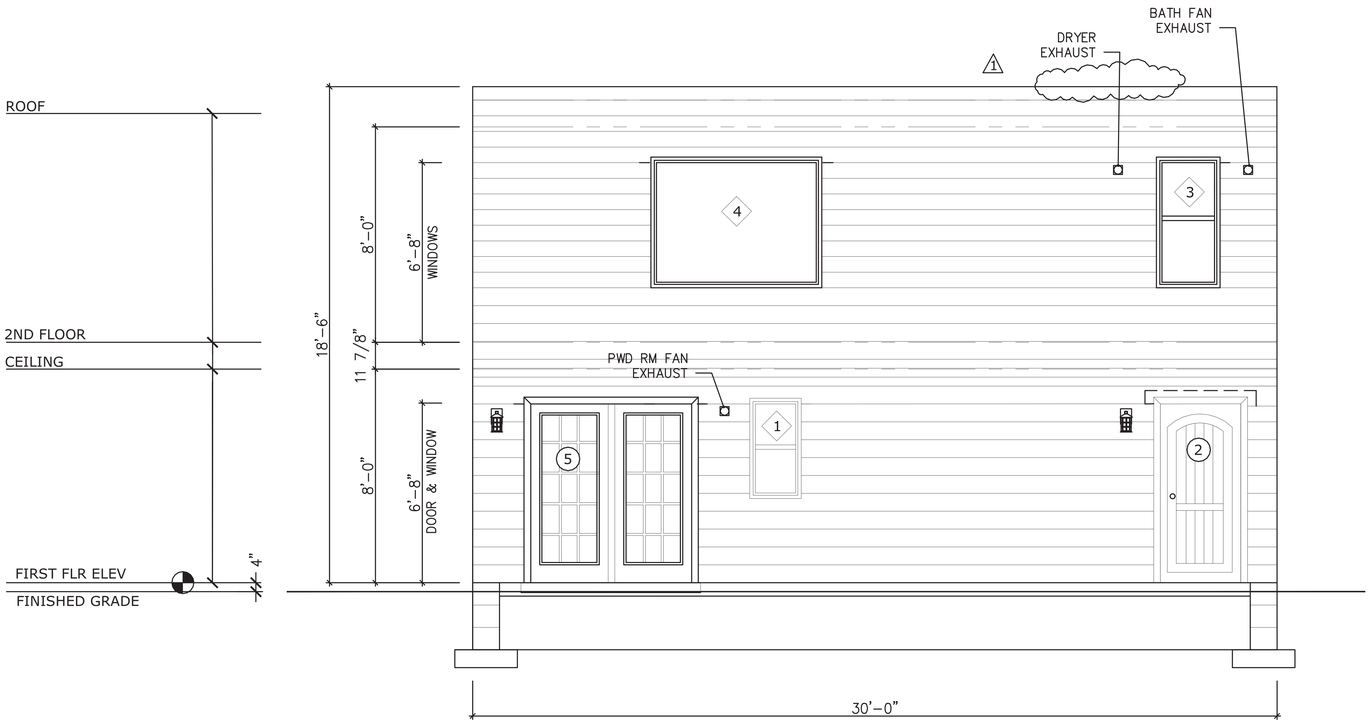
Engineer:
Better Space LLC
4511 Chesapeake St NW
Washington DC

REVISIONS

ITEM	DATE	DESCRIPTION
1	6-30-2016	PER COMMNETS

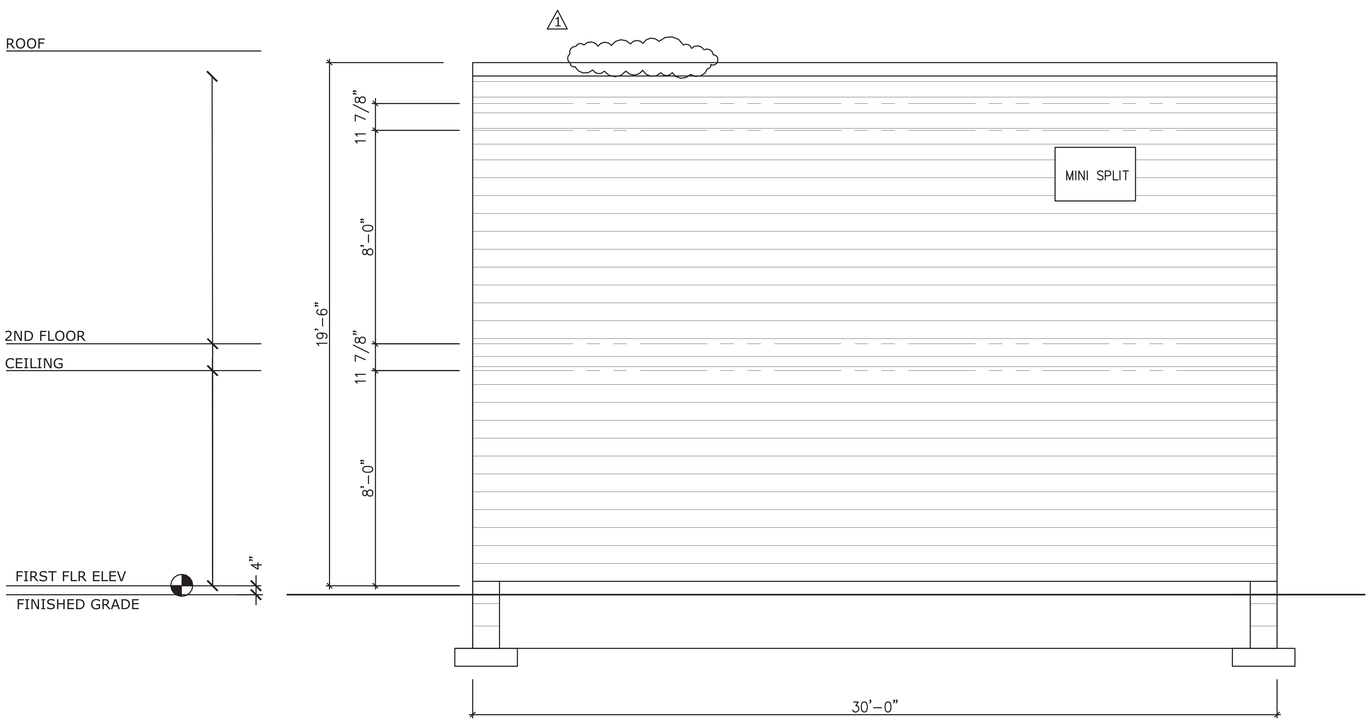
sheet name:
ELEVATIONS

A0003



6 EAST ELEVATION

SCALE: 1/2"=1-0"



7 WEST ELEVATION

SCALE: 1/2"=1-0"

SCALE 1/2" = 1'

–1 0 1 2 4

4511 CHESAPEAKE ST NW
WASHINGTON, DC 20016

Owners:
Nick Alten

Engineer:
Better Space LLC
4511 Chesapeake St NW
Washington DC

REVISIONS

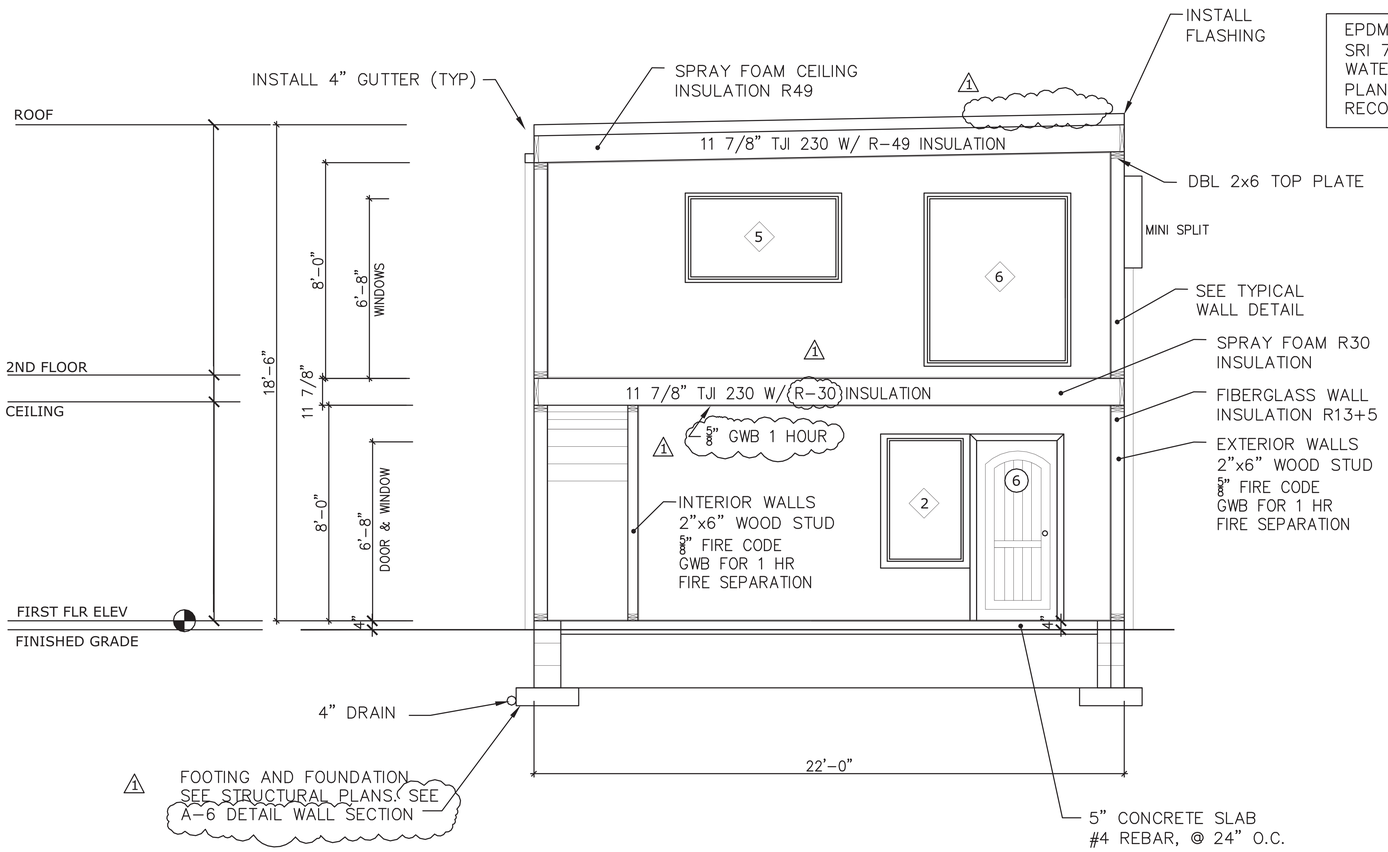
ITEM	DATE	DESCRIPTION
1	6-30-2016	PER COMMNETS

sheet name:
ELEVATIONS

A0004

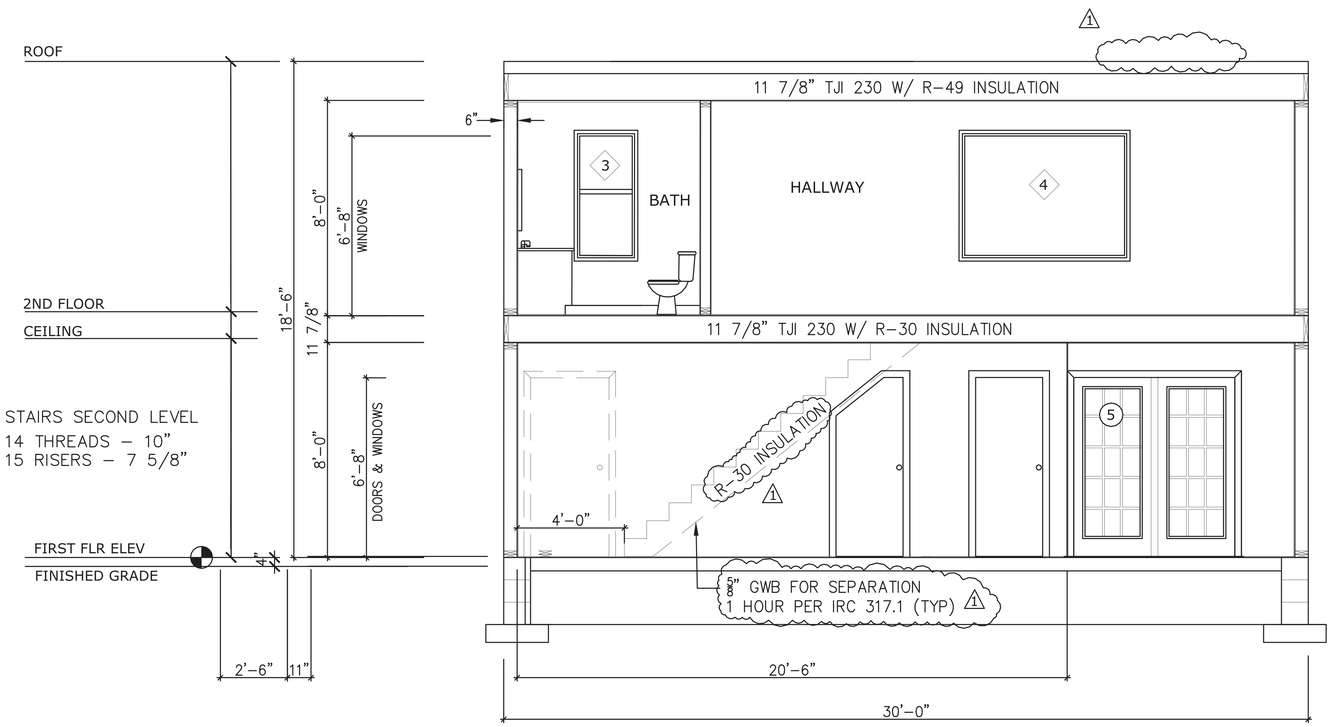
11 OF 20

DISTRICT OF COLUMBIA
GEORGE CARL BERGER
No. PE 907801
REGISTERED
PROFESSIONAL ENGINEER
JULY 6, 2016



8 CROSS SECTION A-A

SCALE: 1/2"=1-0"



9 CROSS SECTION B-B

SCALE: 1/2"=1-0"

SCALE 1/2" = 1'

−1 0 1 2 4

DISTRICT OF COLUMBIA GEORGE CARL BERGER No. PE 907801 REGISTERED PROFESSIONAL ENGINEER

JULY 5, 2016

4511 CHESAPEAKE ST NW
WASHINGTON, DC 20016

Owners:
Nick Alten

Engineer:
Better Space LLC
4511 Chesapeake St NW
Washington DC

REVISIONS

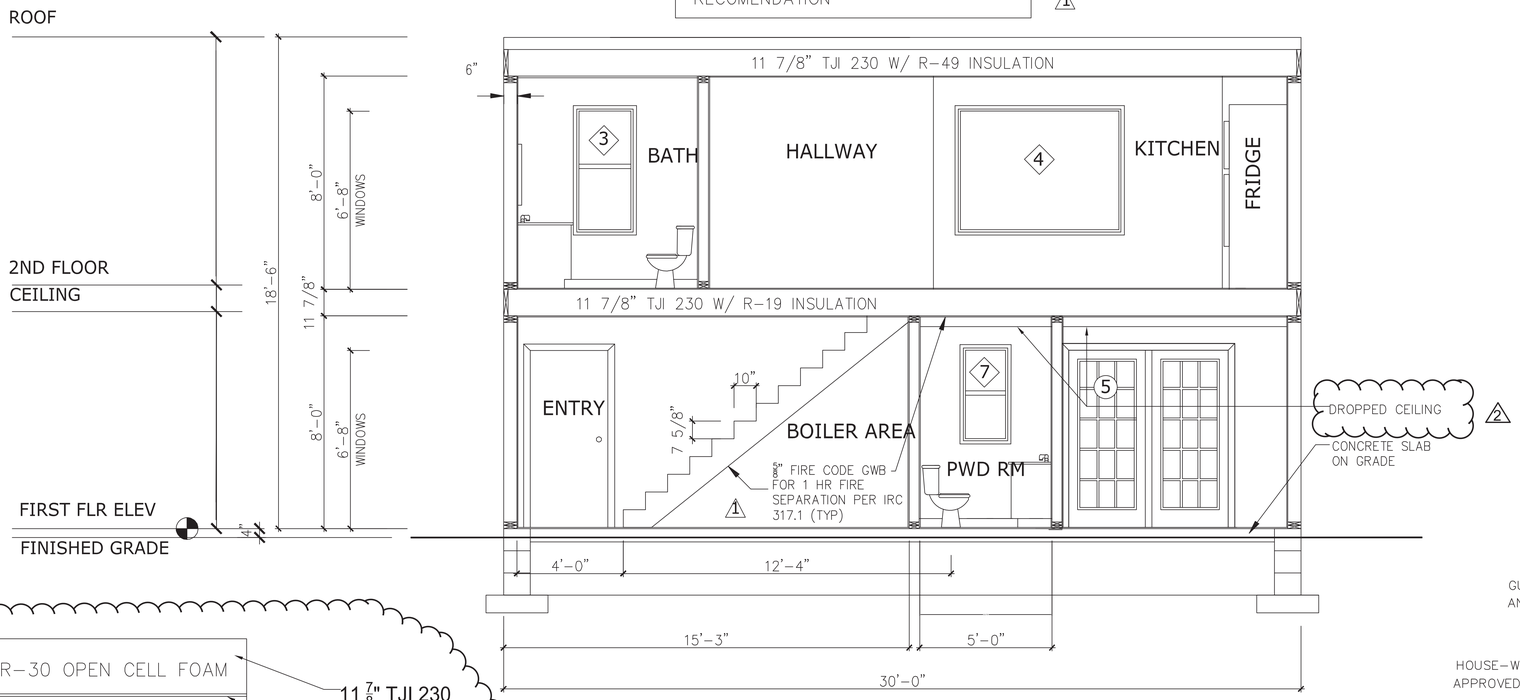
ITEM	DATE	DESCRIPTION
1	6-30-2016	PER COMMNETS

sheet name:
CROSS SECTIONS

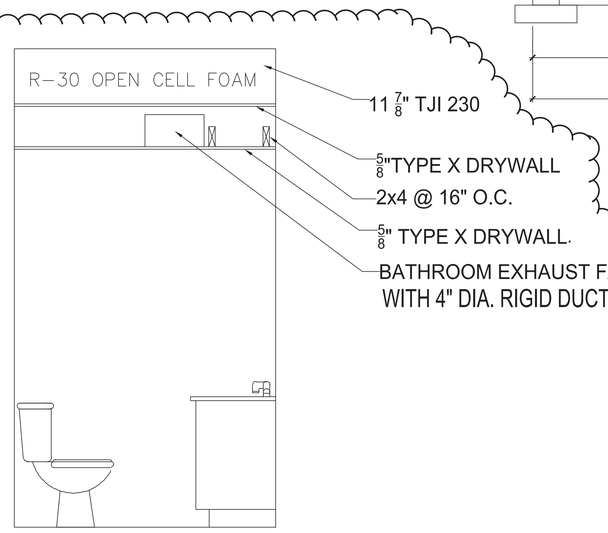
A0005

12 OF 20

EPDM ROOF SYSTEM
SRI 78 ON ROOFING FELT W/ ICE & WATER SHIELD AS SHOWN ON ROOF PLAN. INSTALL PER MANUFACTURER'S RECOMENDATION

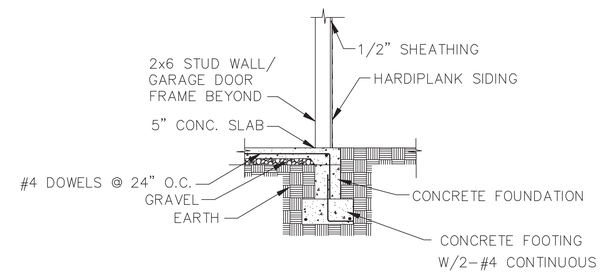


10 CROSS SECTION C-C
SCALE: 1/2"=1-0"

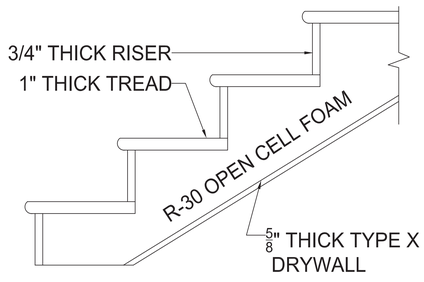


10A ENLARGED POWDER ROOM SECTION
SCALE: 1' = 1'-0"

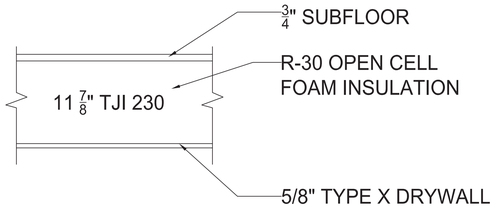
STAIRS SECOND LEVEL
14 TREADS - 10"
15 RISERS - 7 5/8'



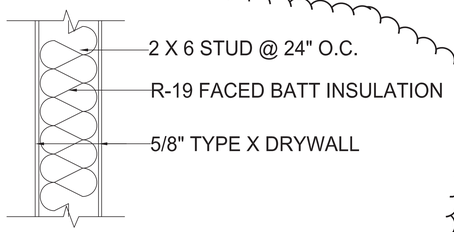
11A TYPICAL WALL SECTION 2
NOT TO SCALE



FIRE SEPARATION DETAIL
STAIR (NOT TO SCALE)

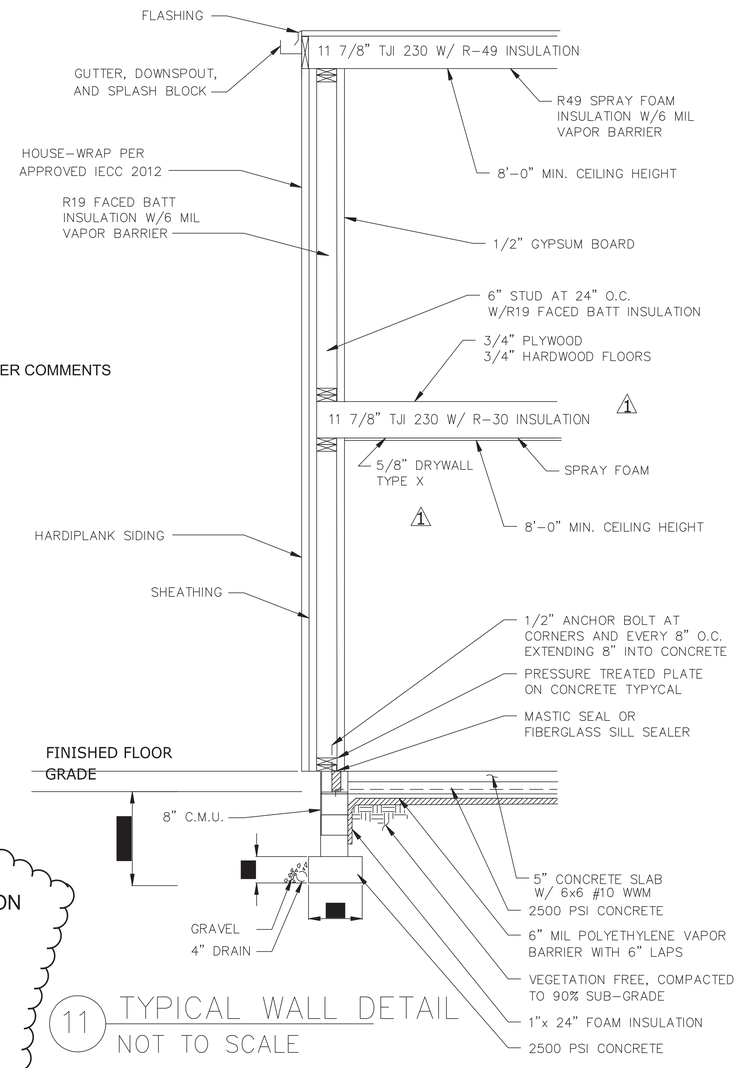


FIRE SEPARATION DETAIL
FLOOR (NOT TO SCALE)



FIRE SEPARATION DETAIL
WALL (NOT TO SCALE)

EPDM ROOF SYSTEM
SRI 78 ON ROOFING FELT W/ ICE & WATER SHIELD AS SHOWN ON ROOF PLAN. INSTALL PER MANUFACTURER'S RECOMENDATION



11 TYPICAL WALL DETAIL
NOT TO SCALE

PER COMMENTS

SCALE 1/2" = 1'

-1 0 1 2 4

APRIL 8, 2019

4511 CHESAPEAKE ST NW
WASHINGTON, DC 20016

Owners:
Nick Alten

Engineer:
Better Space LLC
4511 Chesapeake St NW
Washington DC

REVISIONS

ITEM	DATE	DESCRIPTION
1	6-30-2016	PER COMMNETS
2	04-08-2019	PER COMMENTS

sheet name:
CROSS SECTIONS

A0006
13 OF 20

ALTEN RESIDENCE
GARAGE ADDITION PROJECT
4511 CHESAPEAKE ST NW
WASHINGTON, DC

CODES:

ALL WORK TO BE IN ACCORDANCE WITH:

2013 DISTRICT OF COLUMBIA BUILDING CODE

CODE	ICC RESIDENTIAL CODE FOR ONE AND TWO FAMILY DWELLINGS	2012
	TITLE 12 DCMR DC CONSTRUCTION CODES SUPPLEMENT	2013
	DCMR 12 DC CONSTRUCTION CODES SUPPLEMENT	2008
	AMENDMENT TO DCMR 12 DC CONSTRUCTION CODE SUPPLEMENT	2008
	IECC	2012

SMOKE DETECTION - HARDWIRE, INTERCONNECTED SMOKE DETECTORS ON SEPARATE CIRCUIT FROM MAIN PANEL AND WITH BATTERY POWER BACKUP - INSTALLED IN ACCORDANCE WITH NFPA 72 (2)

THE FIRST AND SECOND FLOOR SHALL HAVE AN AUTOMATIC SPRINKLER SYSTEM PER NFPA 13D 2010 (1)

INSULATION REQUIREMENTS:

CEILING	R49
WOOD FRAME	R-13+5
MASS WALL	R8-13
FLOOR	R19
BASEMENT WALL	R10
SLAB	R10
CRAWL SPACE	R10/13

PROJECT DESCRIPTION:

NEW DETACHED ONE AND A HALF CAR GARAGE FOR THE PURPOSE OF PROVIDING LIVING QUARTERS FOR DOMESTIC HELP PER SECTION 2500.5 THE GARAGE WILL INCLUDE STORAGE AND INTERIOR STAIR PROVIDING ACCESS TO A LIVING AREA ABOVE.

SUBDIVISION

LOT - 30

SQUARE - 1570

LOT - 5667 SF

PROPOSED NEW

GARAGE - 660 SF

SECOND FLOOR CONDITIONED LIVING SPACE - 660 SF

TOTAL - 1451 SF

TOTAL VOLUME - 1500 CF

TOTAL HEIGHT = 19'-10 ½"

LOT OCCUPANCY

EXISTING HOUSE FOOTPRINT - 2086 SF

NEW GARAGE - 1320 SF

TOTAL COVERED - 3408 SF

LOT OCCUPANCY - 29%

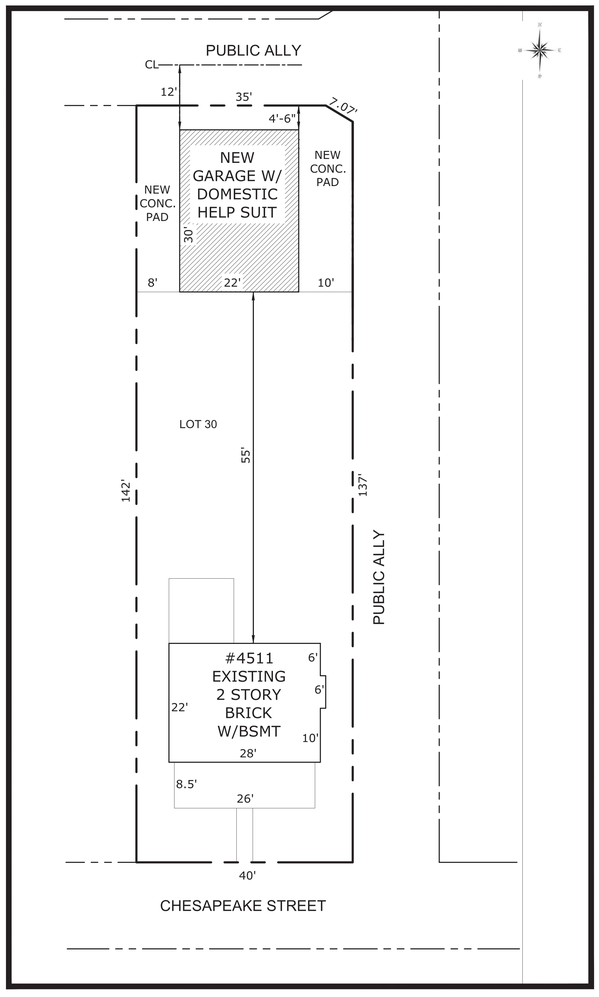
FLOOR AREA RATIO

EXISTING HOUSE GROSS FLOOR AREA - 2086 SF

NEW GARAGE GROSS FLOOR AREA - 1320 SF

TOTAL GFA - 3408 SF

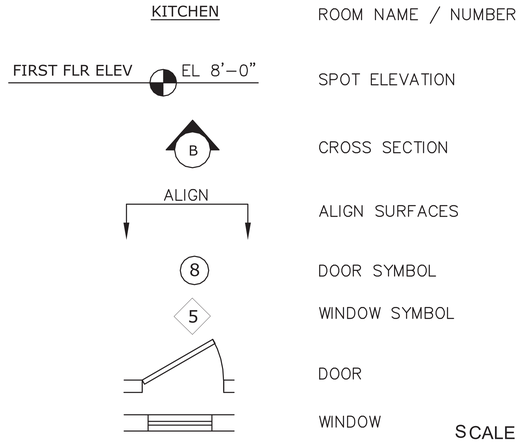
FLOOR AREA RATIO - 60%



SITE PLAN
1" = 20'

TABLE OF CONTENTS:

SYMBOLS LEGEND:



SCALE 1" = 20'

−10 0 10 20 40

DISTRICT OF COLUMBIA
GEORGE CARL BERGER
No. PE 907001
REGISTERED
PROFESSIONAL ENGINEER
APRIL 8, 2019

4511 CHESAPEAKE ST NW
WASHINGTON, DC 20016

Owners:
Nick Alten

Engineer:
Better Space LLC
4511 Chesapeake St NW
Washington DC

REVISIONS

ITEM	DATE	DESCRIPTION
(1)	6-30-2016	PER COMMNETS
(2)	04-08-2019	PER COMMENTS

sheet name:
COVER SHEET

C0001

ELECTRICAL CONTROL SCHEDULE

	SYMBOL	DESCRIPTION OF EQUIPMENT	MANUFACTURER	MODEL NO.	FINISH COLOR	REMARKS
	$	SINGLE POLE SWITCH			WHITE	
	$	THREE WAY SWITCH			WHITE	
	AFCI	RECEPTACLE				ALL RECEPTACLES TO BE AFCI
	3	RECEPTACLE 3-WAY SWITCH			WHITE	
	GFCI	GFCI RECEPTACLE			WHITE	
1	EF	EXHAUST FAN	PANASONIC	FV-0511VKS1	-----	DUCTED TO EXTERIOR
	DB	DOOR BELL			WHITE	
	SD	SMOKE DETECTOR HARD WIRE			-----	INTER-CONNECTED BY BATTERY BACK UP
	CM	CARBON MONOXIDE DETECTOR				INSTALLED ON EVERY FLOOR
	GD	GARBAGE DISPOSAL				
1		RECESSED LIGHT	HALO	H995ICAT	50 WATT LED'S	IC AIR TIGHT HOUSING
		PENDENT LIGHT				
		WALL HUNG LIGHT				
		CEILING LIGHT				
	C	CHANDELIER LIGHT				
1		SHOP LIGHT	MAT LIGHT	BLHT235VSD4820	WHITE	LED SHOP LIGHT
	WP GFCI	GFCI RECEPTICAL WATERPROOF				
	T	THERMOSTAT				

GENERAL ELECTRICAL NOTES

1 - SEE SHEET SP1 TO SP-3 FOR GENERAL NOTES REGARDING ELECTRICAL WORK.

2 - ALL ELECTRICAL INCLUDED EXCEPT DECORATIVE FIXTURES.

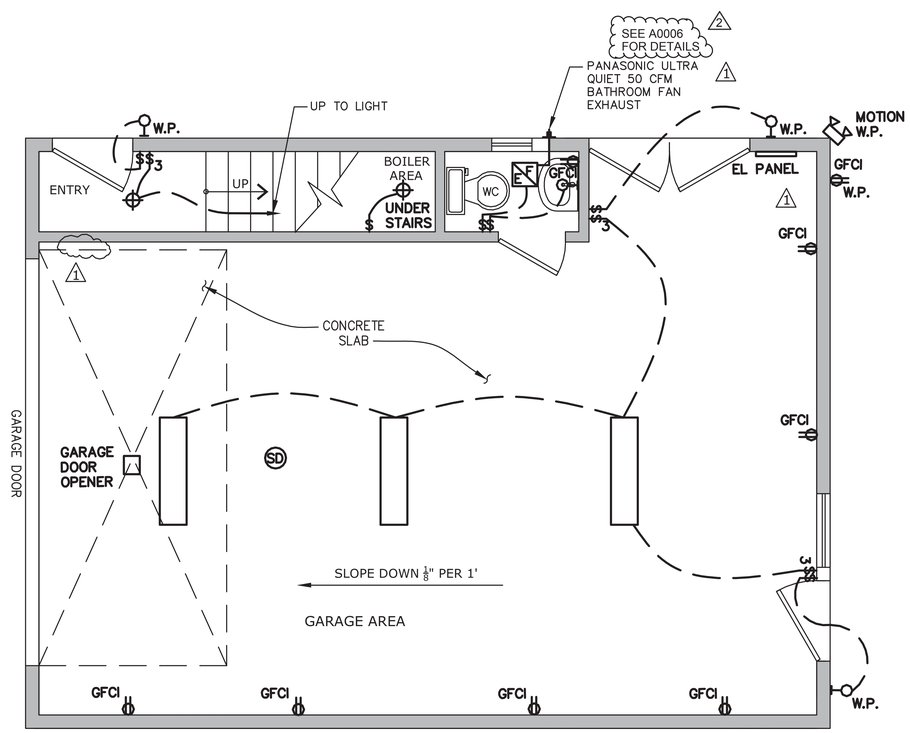
3 - DECORATIVE FIXTURES TO BE O.F.C.I.

4 - ELECTRICAL OUTLETS PLACED 18" ABOVE FINISHED FLOOR, U.O.N.

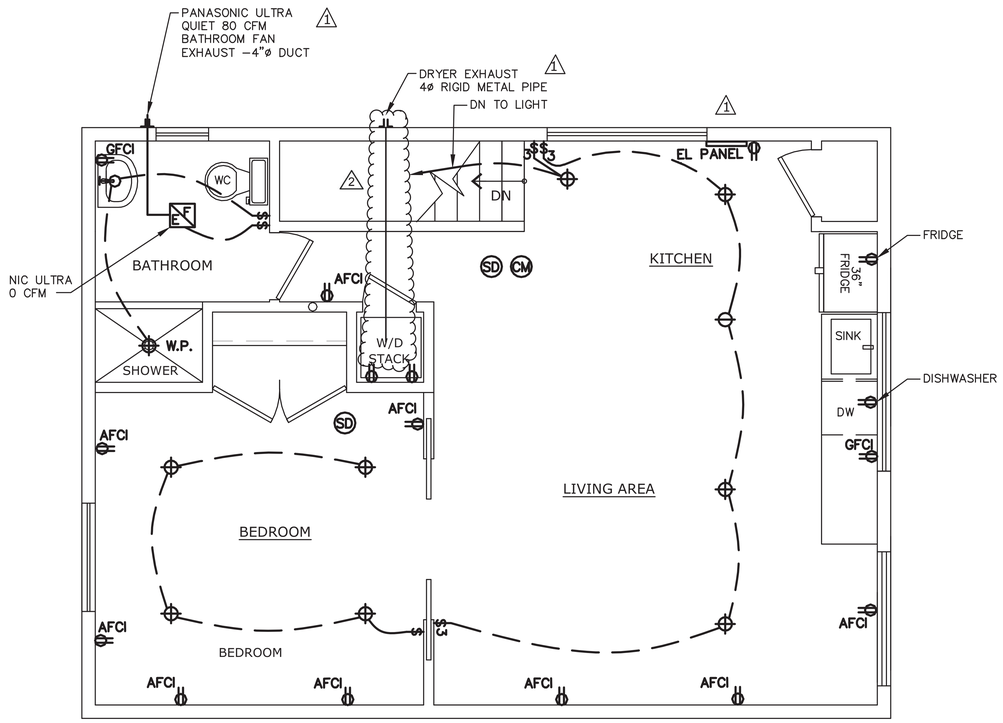
5 - ELECTRICAL OUTLETS AT WET AREAS TO BE G.F.I. U.O.N.

6 - SWITCHES TO BE MOUNTED AT 48" ABOVE FINISHED FLOOR. VERIFY TO MATCH EXISTING.

7 - ALL SWITCHES TO BE DIMMABLE IN LIVING SPACES - EXCLUDES UTILITY SPACE.



12 1ST FLOOR ELECTRICAL
SCALE: 1/4"=1-0"



13 2ND FLOOR ELECTRICAL
SCALE: 1/4"=1-0"

SCALE 1/4" = 1'

–2 0 2 4 8

DISTRICT OF COLUMBIA
GEORGE CARL GERBER
No. PE 907801
REGISTERED
PROFESSIONAL ENGINEER
APRIL 8, 2019

4511 CHESAPEAKE ST NW
WASHINGTON, DC 20016

Owners:
Nick Alten

Engineer:
Better Space LLC
4511 Chesapeake St NW
Washington DC

REVISIONS

ITEM	DATE	DESCRIPTION
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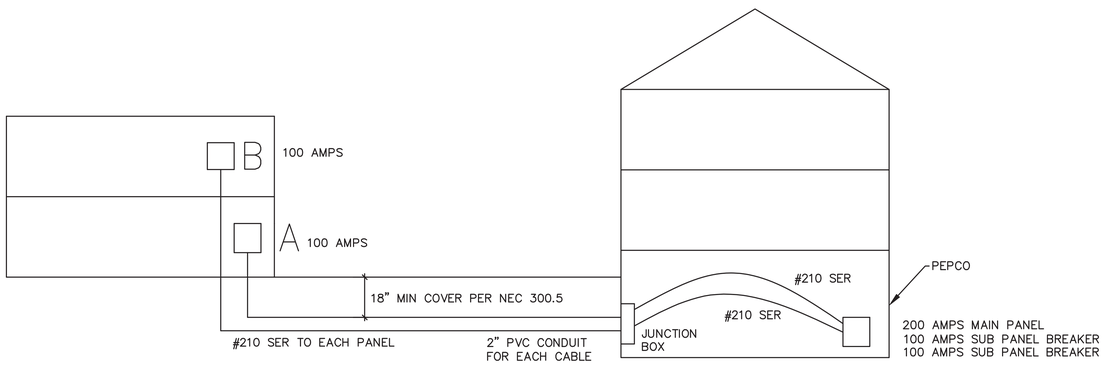
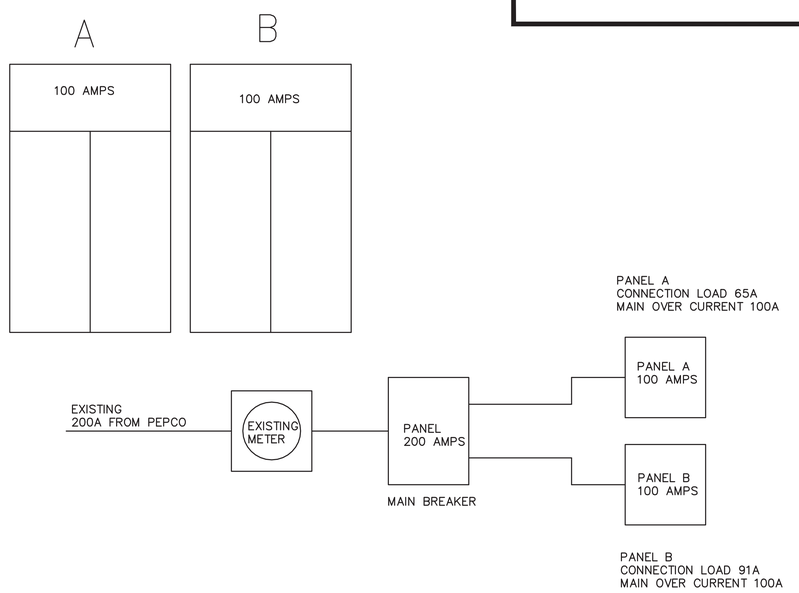
2	04-08-2019	PER COMMENTS

sheet name:
ELECTRICAL PLANS

E0001





1 ELECTRICAL PANELS A & B
NOT TO SCALE

1

PANEL A – First Floor

	VOLTS: 120/240 1-PHASE; 3 WIRE				
	Main 100 Amperes				
	Note all Circuits to have Arc-Fault interrupters				
Circuit Number	**Description**	**Volts**	**Wire size THHN**	**Circuit Breaker**	**Notes**
1	HOT WATER HEATER	240	10	30A	
2	HOT WATER HEATER				
3	BATHROOM LIGHTS AND FAN	120	14	15A	
4	BATHROOM OUTLETS	120	14	15A	GFI
5	OUTSIDE LIGHTS	120	14	15A	
6	SHOP PLUGS	120	12	20A	
7	SHOP PLUGS	120	12	20A	
8	SHOP PLUGS	120	12	20A	
9	GARAGE DOOR	120	14	15A	
10	GARAGE LIGHTS	120	14	15A	
11	Spare				
12	Spare				
13	Spare				
14	Spare				
15	Spare				
16	Spare				
17	Spare				
18	Spare				
19	Spare				
20	Spare				

1

PANEL B – Second Floor

	VOLTS: 120/240 1-PHASE; 3 WIRE				
	Main 100 Amperes				
	Note all Circuits to have Arc-Fault interrupters				
Circuit Number	**Description**	**Volts**	**Wire size THHN**	**Circuit Breaker**	**Notes**
1	CLOTHES DRYER	240	10	30A	
2	CLOTHES DRYER				
3	REFRIGERATOR RECEPTICLE	120	14	15A	
4	KITCHEN WALL RECEPTICALS / DISPOSAL	120	14	15A	GFI
5	DISHWASHER	120	14	15A	
6	CLOTHES WASHER	120	14	15A	
7	KITCHEN / LIVING ROOM / HALL LIGHTS	120	14	15A	
8	BEDROOM OUTLETS	120	14	15A	
9	BEDROOM LIGHT	120	14	15A	
10	BEDROOM (B04) OUTLETS	120	14	15A	
11	BATHROOM LIGHTS AND FAN	120	14	15A	
12	BATHROOM OUTLETS	120	14	15A	
13	OUTSIDE LIGHTS	120	14	15A	
14	Spare				
15	Spare				
16	Spare				
17	Spare				
18	Spare				
19	Spare				
20	Spare				

SCALE 1/4" = 1'

−2 0 2 4 8

DISTRICT OF COLUMBIA
GEORGE CARL BERGER
No. PE 907801
REGISTERED
PROFESSIONAL ENGINEER
JULY 5, 2016

4511 CHESAPEAKE ST NW
WASHINGTON, DC 20016

Owners:
Nick Alten

Engineer:
Better Space LLC
4511 Chesapeake St NW
Washington DC

REVISIONS

ITEM	DATE	DESCRIPTION
1	6-30-2016	PER COMMNETS

sheet name:
ELECTRICAL DETAILS

E0002

STANDARD EROSION CONTROL NOTES

1. SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSTALLED BEFORE THE START OF ANY EXCAVATION AND/OR CONSTRUCTION AS PER STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR THE DISTRICT OF COLUMBIA. IF AN ON-SITE INSPECTION REVEALS FURTHER EROSION CONTROL MEASURES ARE NECESSARY, THE SAME SHALL BE PROVIDED.
2. ALL DEBRIS IS TO BE REMOVED FROM SITE.
3. ALLEY AND/OR STREETS/SIDEWALKS SHALL BE SWEPT CLEAN AT ALL TIMES DURING DEMOLITION, EXCAVATION AND CONSTRUCTION.
4. ALL CATCH BASINS AND DRAIN AREAS SHALL BE PROTECTED DURING EXCAVATION AND CONSTRUCTION.
5. IF ANY CATCH BASINS OR DRAINS BECOME CLOGGED AS A RESULT OF DEMOLITION, EXCAVATION OR CONSTRUCTION THE CONTRACTOR SHALL BE RESPONSIBLE FOR ITS CLEANING.
6. WHEN SEDIMENT TRAP/SEDIMENT TANK HAS REACHED 67% CAPACITY, CLEANING OUT OF SAME IS REQUIRED.
7. ANY STOCKPILING, REGARDLESS OF LOCATION SHALL BE STABILIZED AND COVERED WITH PLASTIC OR CANVAS, AFTER ITS ESTABLISHMENT AND FOR DURATION OF THE PROJECT.
8. AFTER RAZING OR DEMOLITION, THERE IS THE NEED FOR GROUNDCOVER TO PREVENT EROSION AND SEDIMENT RUNOFF FROM OCCURRING. SUCH AS APPLYING SEED, SOD, PAVE, BRICKBAT OR MULCH, ETC.
9. THE SITE'S APPROVAL LETTER, APPROVED EROSION AND SEDIMENT CONTROL PLANS, DAILY LOG BOOKS AND TEST REPORTS SHALL BE AVAILABLE AT THE SITE FOR INSPECTION BY AUTHORIZED OFFICIALS OF DCRA RESPONSIBLE FOR PROJECT.
10. TEMPORARY SEDIMENT CONTROL DEVICES MAY BE REMOVED, WITH PERMISSION OF DCRA INSPECTOR, WITHIN THIRTY (30) CALENDAR DAYS FOLLOWING ESTABLISHMENT OF PERMANENT STABILIZATION IN ALL USED TEMPORARILY FOR SEDIMENT CONTROL SHALL BE CONVERTED TO THE PERMANENT CONFIGURATION WITHIN THIS TIME PERIOD AS WELL. CONTRIBUTORY DRAINAGE AREAS. STORMWATER MANAGEMENT STRUCTURES
11. VEGETATIVE STABILIZATION SHALL BE PERFORMED IN ACCORDANCE WITH THE DCRA STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL. REFER TO APPROPRIATE SPECIFICATIONS FOR TEMPORARY SEEDING, PERMANENT SEEDING, MULCHING, SODDING AND GROUND COVERS.
12. SEDIMENT REMOVED FROM TRAPS (AND BASINS) SHALL BE PLACED AND STABILIZED IN APPROVED AREAS, BUT NOT WITHIN A FLOODPLAIN, WETLAND OR TREE-SAVE AREA. WHEN PUMPING SEDIMENT LADEN WATER, THE DISCHARGE MUST BE DIRECTED TO A SEDIMENT TRAPPING DEVICE PRIOR TO RELEASE FROM THE SITE. A SUMP PIT MAY BE USED IF SEDIMENT TRAPS THEMSELVES ARE BEING PUMPED OUT.
13. WHERE DEEMED APPROPRIATE BY THE ENGINEER OR INSPECTOR, SEDIMENT BASINS AND TRAPS MAY NEED TO BE SURROUNDED WITH AN APPROVED SAFETY FENCE. THE FENCE MUST CONFORM TO LOCAL ORDINANCES AND REGULATIONS. THE DEVELOPER OR OWNER SHALL CHECK WITH LOCAL GUILDING OFFICIALS ON APPLICABLE SAFETY REQUIREMENTS. WHERE SAFETY FENCE IS DEEMED APPROPRIATE AND LOCAL ORDINANCES DO NOT SPECIFY FENCING SIZES AND TYPES, THE FOLLOWING SHALL BE USED AS A MINIMUM STANDARD: THE SAFETY FENCE MUST BE MADE OF WELDED WIRE AND AT LEAST 42 INCHES HIGH, HAVE POSTS SPACED NO FARTHER APART THAN 8 FEET, HAVE MESH OPENINGS NO GREATER THAN 2 " IN WIDTH & 4" IN HEIGHT WITH A MINIMUM OF 14 GAUGE WIRE. SAFETY FENCE MUST BE MAINTAINED AND IN GOOD CONDITION AT ALL TIMES.
14. SEDIMENT CONTROL FOR UTILITY CONSTRUCTION FOR AREAS OUTSIDE OF DESIGNED CONTROLS OR AS DIRECTED BY ENGINEER OR DCRA INSPECTOR:
    (A) CALL "MISS UTILITY" AT 1-800-257-7777 48 HOURS PRIOR TO THE START OF WORK.
    (B) EXCAVATED TRENCH MATERIAL SHALL BE PLACED ON THE HIGH SIDE OF THE TRENCH.
    (C) TRENCHES FOR UTILITY INSTALLATION SHALL BE BACKFILLED, COMPACTED AND STABILIZED AT THE END OF EACH WORKING DAY. NO MORE TRENCHES SHALL BE OPENED THAN CAN BE COMPLETED THE SAME DAY, UNLESS;
    (D) TEMPORARY SILT FENCE SHALL BE PLACED IMMEDIATELY DOWNSTREAM OF ANY DISTURBED AREA INTENDED TO REMAIN DISTURBED FOR MORE THAN ONE DAY.

OFF-SITE SPOIL, WASTE, OR BORROW AREAS IN THE DISTRICT OF COLUMBIA OR ON FEDERAL PROPERTY MUST HAVE PRIOR APPROVAL BY DCRA. ALL WASTE AN BORROW AREAS OFF-SITE MUST BE PROTECTED BY SEDIMENT CONTROL MEASURES AND STABILIZED IN ACCORDANCE WITH THE ORDINANCES AND REGULATIONS OF THE JURISDICATION WHERE THE SPOIL, WASTE, OR BORROW AREA IS LOCATED/STABILIZED.

STANDARD EROSION AND SEDIMENT CONTROL MEASURES AND SEQUENCE

1. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE PLACED PRIOR TO OR AS THE FIRST STEP IN GRADING.
2. PROVIDE TEMPORARY STONE CONSTRUCTION ENTRANCE WHERE SHOWN. PROVIDE WATER SOURCE AND HOSE TO CLEAN ALL EQUIPMENT LEAVING SITE.
3. INSTALL SILT FENCE AS SHOWN.
4. NO DISTURBED AREA WILL BE DENUDED FOR MORE THAN 7 CALENDAR DAYS. INSTALL THE NECESSARY TEMPORARY OR PERMANENT VEGETATIVE STABILIZATION MEASURES TO ACHIEVE ADEQUATE EROSION AND SEDIMENT CONTROL.
5. ALL CONSTRUCTION TO BE INSPECTED DAILY BY THE CONTRACTOR, AND ANY DAMAGED SILTATION OR EROSION CONTROL DEVICES OR MEASURES WILL BE REPAIRED AT THE CLOSE OF THE DAY.
6. ALL SILT FENCE TO BE MAINTAINED IN WORKING CONDITION. TO BE MAINTAINED IN WORKING CONDITION.
7. STABILIZED CONSTRUCTION ENTRANCES TO BE PERIODICALLY SUPPLEMENTED WITH ADDITIONAL STONE AS NEEDED.
8. CONTROLS CAN BE REMOVED AFTER THEIR CONTRIBUTING BASINS HAVE BEEN PERMANENTLY STABILIZED, AND APPROVAL OF INSPECTOR IS OBTAINED.

VEGETATIVE STABILIZATION

PERMANENT AND TEMPORARY SEEDING, SODDING AND MULCHING

I. SITE PREPARATION

PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN (A) SEVEN CALENDAR DAYS AS TO THE SURFACE OF ALL SEDIMENT CONTROL PRACTICES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, BERMS, DIKES, GRASSED WATERWAYS, SEDIMENT BASINS, PERIMETER SLOPES, AND ALL SLOPES GREATER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1) AND (B) FOURTEEN DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.

II. SEEDBED PREPARATION AND SEEDING APPLICATION

THE TOP LAYER OF SOIL SHALL BE LOOSENED, LIMED AND FERTILIZED BY RAKING, DISCING OR HARROWING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING. FLAT AREAS AND SLOPES UP TO 3 TO 1 GRADE SHALL BE LOOSE AND FRIABLE TO A DEPTH OF AT LEAST 3 INCHES SLOPES STEEPER THAN 3 TO 1 SHALL HAVE THE TOP 1-3 INCHES OF SOIL LOOSE AND FRIABLE BEFORE SEEDING. FLAT AREAS AND SLOPES UP TO 3 TO 1 GRADE SHALL BE LOOSE AND FRIABLE TO A DEPTH OF AT LEAST 3 INCHES SLOPES STEEPER THAN 3 TO 1 SHALL HAVE THE TOP 1-3 INCHES OF SOIL LOOSE AND FRIABLE BEFORE SEEDING.

APPLY SEED UNIFORMLY WITH A CYCLONE SEEDER, DRILL CULTIPACKER,SEEDER OR HYDROSEEDER ON A FIRM MOIST SEEDBED.

III. SOIL AMENDMENTS

LIME AND FERTILIZE ACCORDING TO SOIL TESTS. IN LIEU OF SOIL TEST APPLY THE FOLLOWING:

DOLOMITIC LIMESTONE — 2 TONS PER ACRE OR 92 LBS/1,000 (PERMANENT AND SODDING SQ.FT.)

FERTILIZER — 1 TON PER ACRE OR 46 LB/1,000 (TEMPORARY) 10-10-10 OR EQUIVALENT AT 1,000 LBS PER ACRE OR 23 LBS PER 1,000 SQ. FT. (PERMANENT AND SODDING)

IV. SEDIMENT CONTROL PRACTICES, SEEDING

SEED: "KENTUCKY 31" TALL FESCUE 60 LBS/ACRE OR 1.38 LBS/1,000 SQ. FT AND ITALIAN (ANNUAL) RYEGRASS 40 LBS/ACRE OR .91 LBS/1,000 SQ. FT.

DATES: 12 - 10/31 5/1 - 8/14 WITH IRRIGATION.

V. TEMPORARY SEEDING: PER GROWING SEASON

SEED: ITALIAN OR PERENNIAL RYEGRASS 40 LBS/ACRE OR .92 LBS/1,000 SQ. FT.

DATES: 2/1 - 4/30 AND 8/15 - 11/30

SEED: MILLET 40 LBS/ACRE OR 0.92 LBS/1,000 SQ. FT.

DATES: 5/1 - 8/14

VI. PERMANENT SEEDING

A. RESIDENTIAL AND HIGH MAINTENANCE AREAS

1. KENTUCKY BLUEGRASS, "PLUSH", "BIRKA", "PARADE", "VANTAGE", "COLUMBIA", "MERION", "ADELPHI", "SOUTH DAKOTA", "KENBLUE". ANY THREE VARIETIES AT 30 LBS. TO MAKE 90 LBS/ACRE OR 2 LBS/1,000 SQ.FT. AND RED FESCUE - "PENNLAWN" OR JAMESTOWN 10 LBS/1000 SQ.FT.

DATES: 2/1 - 4/30 AND 8/15 - 10/31.

2. "KENTUCKY 31" TALL FESCUE 220-260 LBS/ACRE OR 5-6 LBS/1,000 SQ. FT.

DATES: 2/1 - 10/31 5/1 - 8/14 IRRIGATION REQUIRED.

B. LOW MAINTENANCE AND MINING AREAS

"KENTUCKY 31" TALL FESCUE 40 LBS/ACRE OR 0.92 LBS/1,000 SQ. FT. AND "INTERSTATE" SERICEA LESPEDEZA (INOCULATED)20 LBS/ACRE OR 0.46 LBS/1,000 SQ. FT.

DATES: 2/1 - 4/30 AND 8/15 - 10/31

C. GENERAL AND LARGE ACREAGE

"KENTUCKY 31" TALL FESCUE 60 LBS./ACRE OR 1.38 LBS/1,000 SQ.FT.(0.5 kg/100 sq.m)

VII. MULCHING

ALL SEEDINGS REQUIRE MULCHING. USE MULCH ONLY DURING NON-SEEDING DATES UNTIL SEEDING CAN BE DONE.

MULCH SHALL BE UNROTTED, UNCHOPPED SMALL GRAIN STRAW APPLIED AT A RATE OF 1 TO 2 TONS/ACRE OR 70-90 LBS/1,000 SQ.FT. (2 BALES) MULCH MATERIALS SHALL BE RELATIVELY FREE OF ALL KINDS OF WEED BEDS AND SHALL BE FREE OF PROHIBITED MULCH ANCHORING SHALL BE ACCOMPLISHED IMMEDIATELY AFTER MULCH PLACEMENT NOXIOUS WEEDS. SPREAD MULCH UNIFORMLY MECHANICALLY OR BY HAND.

TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY MULCH NETTINGS, MULCH ANCHORING TOOL, PEG AND TWIN OR LIQUID MULCH BINDERS.

LIQUID MULCH BINDER SHALL BE RAPID CURING CUTBACK ASPHALT APPLIED AT A RATE OF 200 GAL/ACRE OR 5 GAL. PER 1,000 SQ. FT. SLOPES 8 FEET OR MORE HIGH USE 348 GAL./ACRE OR 8 GAL./1,000 SQ. FT.

VII. SODDING

CLASS OF TURFGRASS SOD SHALL BE MARYLAND OR VIRGINIA STATE CERTIFIED OR MARYLAND OR VIRGINIA STATE APPROVED SOD. SOD SHALL BE HARVESTED, DELIVERED AND INSTALLED WITHIN A PERIOD OF 36 HOURS. SOD IS TO BE LAID WITH THE LONG EDGES PARALLEL TO THE CONTOUR WITH STAGGERED JOINTS WITH ALL ENDS TIGHTLY ABUTTING AND NOT OVERLAPPING. SOD SHALL BE ROLLED AND THOROUGHLY WATERED WITHIN EIGHT HOURS OF INSTALLATION. DAILY WATERING TO MAINTAIN 4 INCH DEPTH OF MOISTURE FOR THE FIRST WEEK IS REQUIRED IN THE ABSENCE OF RAINFALL. SOD IS NOT TO BE APPLIED ON FROZEN GROUND.

IX. MAINTENANCE

A. IRRIGATION - WHEN SOIL MOISTURE BECOMES DEFICIENT, IRRIGATE TO PREVENT LOSS OF STAND OF PROTECTIVE VEGETATION.
B. REPAIRS - IF STAND IS INADEQUATE FOR EROSION CONTROL, OVERSEED AND FERTILIZE USING HALF OF THE RATES ORIGINALLY APPLIED. IF STAND IS OVER 60% DAMAGED, REESTABLISH FOLLOWING ORIGINAL RATES AND PROCEDURES.

NOTE: USE OF THIS INFORMATION DOES NOT PRECLUDE MEETING ALL OF THE REQUIREMENTS OF THE 1987 DISTRICT OF COLUMBIA DEPARTMENT OF CONSUMER AND REGULATORY AFFAIRS STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL VEGETATIVE PRACTICES.

FOR EROSION & SEDIMENT CONTROL ONLY

DISTRICT OF COLUMBIA — GEORGE CARL SERGER — No. PE 907801 — REGISTERED PROFESSIONAL ENGINEER

JULY 5, 2016

4511 CHESAPEAKE ST NW
WASHINGTON, DC 20016

Owners:
Nick Alten

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Better Space LLC
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REVISIONS

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1	6-30-2016	PER COMMNETS

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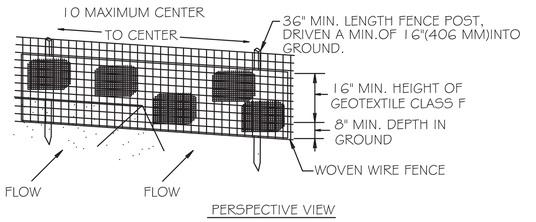
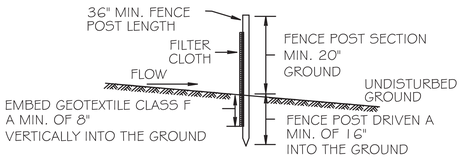
EROSION & SEDIMENT CONTROL NOTES & DETAILS

ES001

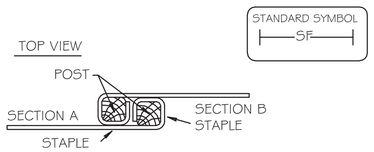
SILT FENCE DETAIL



PERSPECTIVE VIEW

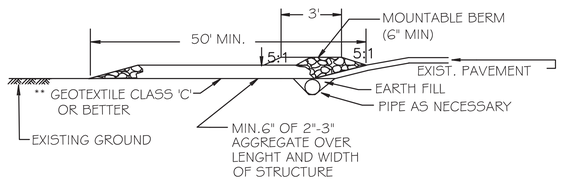


CROSS SECTION

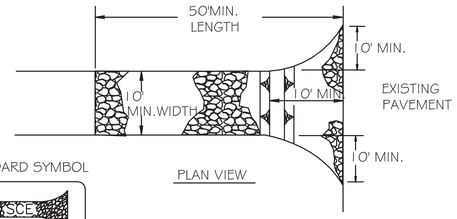


JOINING TWO ADJACENT SILT FENCE SECTIONS

STABILIZED CONSTRUCTION ENTRANCE DETAIL



PROFILE



PLAN VIEW

STANDARD SYMBOL

STANDARDS AND SPECIFICATIONS FOR DUST CONTROL

1. THE CONTRACTOR SHALL CONDUCT OPERATIONS AND MAINTAIN THE PROJECT SITE SO AS TO MINIMIZE THE CREATION AND DISPERSION OF DUST. DUST CONTROL SHALL BE USED THROUGHOUT THE WORK AT THE SITE.
2. THE CONTRACTOR MUST PROVIDE CLEAN WATER, FREE FROM SALT, OIL AND OTHER DELETERIOUS MATERIAL TO BE USED FOR ON-SITE DUST CONTROL.
3. THE CONTRACTOR SHALL SUPPLY WATER SPRAYING EQUIPMENT CAPABLE OF ACCESSING ALL WORK AREAS.
4. THE CONTRACTOR SHALL IMPLEMENT STRICT DUST CONTROL MEASURES DURING ACTIVE CONSTRUCTION PERIODS ON-SITE. THESE CONTROL MEASURES WILL GENERALLY CONSIST OF WATER APPLICATIONS THAT SHALL BE APPLIED A MINIMUM OF ONCE PER DAY DURING DRY WEATHER OR MORE OFTEN AS REQUIRED TO PREVENT DUST EMISSIONS.
5. FOR WATER APPLICATION TO UNDISTURBED SOIL SURFACES, THE CONTRACTOR SHALL:
   - A. APPLY WATER WITH EQUIPMENT CONSISTING OF TANK, SPRAY BAR,PUMP WITH DISCHARGE PRESSURE GAUGE.
   - B. ARRANGE SPRAY BAR HEIGHT, NOZZLE SPACING AND SPRAY PATTERN TO PROVIDE COMPLETE COVERAGE OF GROUND WITH WATER.
   - C. DISPERSE WATER THROUGH NOZZLES ON SPRAY BAR AT 20 PSI (137.8kPa), MINIMUM. KEEP AREAS DAMP WITHOUT CREATING NUISANCE CONDITIONS SUCH AS PONDING.
6. FOR WATER APPLICATION TO SOIL SURFACES DURING DEMOLITION AND/OR EXCAVATION, THE CONTRACTOR SHALL:
   - A. APPLY WATER WITH EQUIPMENT CONSISTING OF A TANK, PUMP WITH DISCHARGE GAUGE, HOSES AND MIST NOZZLES.
   - B. LOCATE TANK AND SPRAYING EQUIPMENT SO THAT THE ENTIRE EXCAVATION AREA CAN BE MISTED WITHOUT INTERFERING WITH DEMOLITION AND/OR EXCAVATION EQUIPMENT OR OPERATIONS. KEEP AREAS DAMP WITHOUT CREATING NUISANCE CONDITIONS SUCH AS PONDING.
   - C. APPLY WATER SPRAY IN A MANNER TO PREVENT MOVEMENT OF SPRAY BEYOND THE SITE BOUNDARIES.

SILT FENCE

SILT FENCE DESIGN CRITERIA

SLOPE STEEPNESS	(MAXIMUM) SLOPE LENGTH	(MAXIMUM) SILT FENCE LENGTH
FLATTER THAN 50:1	UNLIMITED	UNLIMITED
50:1 TO 10:1	125 FT.	1,000 FT.
10:1 TO 5:1	100 FT.	750 FT.
5:1 TO 3:1	60 FT.	500 FT.
3:1 TO 2:1	40 FT.	250 FT.
2:1 AND STEEPER	20 FT.	125 FT.

NOTE: IN AREAS OF LESS THAN 2% SLOPE AND SANDY SOILS (USDA GENERAL CLASSIFICATION SYSTEM,SOIL CLASS A) MAXIMUM SLOPE LENGTH AND SILT FENCE LENGTH WILL BE UNLIMITED. IN THESE AREAS SILT FENCE MAY BE THE ONLY PERIMETER CONTROL REQUIRED.

CONSTRUCTION SPECIFICATIONS

1. FENCE POST SHALL BE A MINIMUM OF 36' LONG DRIVEN 16" MINIMUM INTO THE GROUND. WOOD POST SHALL BE 1 1/2" SQUARE (MINIMUM) CUT, OR 1 3/4" DIAMETER (MINIMUM) ROUND AND SHALL BE OF SOUND QUALITY HARDWOOD. STEEL POST WILL BE STANDARD T OR U SECTION WEIGHTING NOT LESS THAN 1.00 POUND PER LINEAR FOOT.
2. GEOTEXTILE SHALL BE FASTENED SECURELY TO EACH FENCE POST WITH WIRE TIES OR STAPLES AT TOP AND MID-SECTION AND SHALL MEET THE FOLLOWING REQUIREMENTS FOR GEOTEXTILE CLASS F:

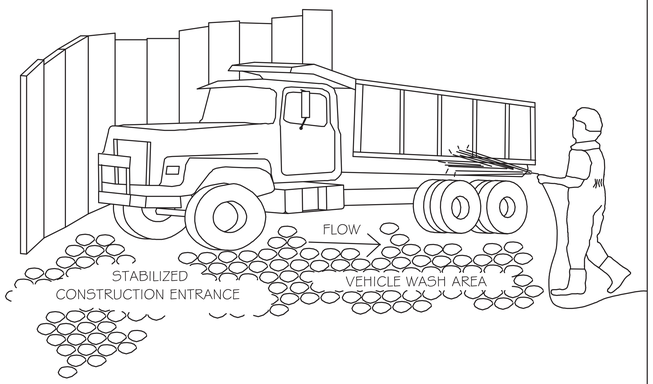
TENSILE STRENGTH	50 LBS/IN. (MIN)	TEST: MSMT 509
TENSILE MODULUS	20 LBS/IN (MIN.)	TEST: MSMT 509
FLOW RATE	0.3 GAL FT/MIN.2MAX)	TEST: MSMT 322
FILTERING EFFICIENCY	75% (MIN.)	TEST: MSMT 322

3. WHERE ENDS OF GEOTEXTILE FABRIC COME TOGETHER, THEY SHALL BE OVERLAPPED, FOLDED AND STAPLED TO PREVENT SEDIMENT BYPASS.
4. SILT FENCE SHALL BE INSPECTED AFTER EACH RAINFALL EVENT AND MAINTAINED WHEN BULGES OCCUR OR WHEN SEDIMENT ACCUMULATION REACHES 50% OF THE FABRIC HEIGHT.

CONSTRUCTION SPECIFICATION

1. LENGTH - MIN. OF 50' RAMP x 30' RAMP FOR SINGLE RESIDENCE LOT.
2. WIDTH - 10' MINIMUM, SHOULD BE FLARED AT THE EXISTING ROAD TO PROVIDE A TURNING RADIUS.
3. GEOTEXTILE FABRIC (FILTER CLOTH) SHALL BE PLACED OVER THE EXISTING GROUND PRIOR TO PLACING STONE.
4. STONE - CRUSHED AGGREGATE (2" TO 3") OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT SHALL BE PLACED AT LEAST 6" DEEP OVER THE LENGTH AND WIDTH OF THE ENTRANCE.
5. SURFACE WATER - ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED THROUGH THE ENTRANCE, MAINTAINING POSITIVE DRAINAGE. PIPE INSTALLED THROUGH THE STABILIZED CONSTRUCTION ENTRANCE SHALL BE PROTECTED WITH A MOUNTABLE BERM WITH 5:1 SLOPES AND MIN. OF 6" OF STONE OVER THE PIPE. PIPE HAS TO BE SIZED ACCORDING TO THE DRAINAGE. WHEN THE SCE IS LOCATED AT A HIGH SPOT AND HAS NO DRAINAGE TO CONVEY, A PIPE WILL NOT BE NECESSARY. PIPE SHOULD BE SIZED ACCORDING TO THE AMOUNT OF RUNOFF TO BE CONVEYED. A 6" MIN. WILL BE REQUIRED.
6. LOCATION - A STABILIZED CONSTRUCTION ENTRANCE SHALL BE LOCATED AT EVERY POINT WHERE CONSTRUCTION TRAFFIC ENTERS OR LEAVES A CONSTRUCTION SITE. VEHICLES LEAVING THE SITE MUST TRAVEL OVER THE ENTIRE LENGTH OF THE STABILIZED CONSTRUCTION ENTRANCE.
7. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. WASHING - WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY WHEN WASHING IS REQUIRED. IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE WHICH DRAINS INTO A APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

VEHICLE WASH DETAIL



PLAN NUMBER

THE APPROVAL IS FOR GRADING AND SEDIMENT CONTROL ONLY. PERMITTEE/CONTRACTOR IS REQUIRED TO CONSTRUCT DESIGN FEATURE SHOWN HEREON. HE SHALL NOTIFY THIS OFFICE AT 24 HOURS BEFORE START OF GRADING ACTIVITY AND WITHIN TWO WEEKS AFTER COMPLETION OF PROJECT FOR FINAL INSPECTION.

FOR EROSION & SEDIMENT CONTROL ONLY

DISTRICT OF COLUMBIA GEORGE CARL BENZEL No. PE 907801 REGISTERED PROFESSIONAL ENGINEER

JULY 5, 2016

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WASHINGTON, DC 20016

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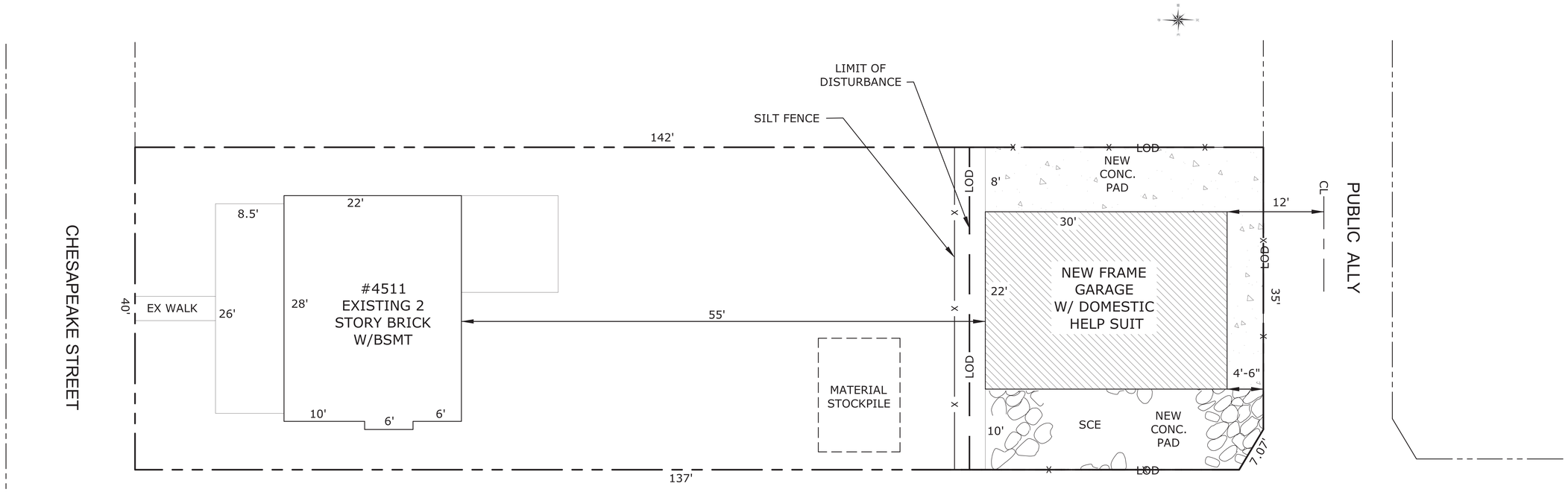
ES002



SITE PLAN
1" = 10'

LEGEND

Limit of Disturbance	LOD
Straw Bail Dike	x
Stabilized Construction Entrance	SCE

NOTES:

1. No Change in Grade Elevation/Contour
2. Install Tree Protection Fences at all Trees as Required.

LOT:
30

SQUARE:
1570

SITE INFORMATION:

Limit of Disturbance - 1451 SF
Fill - 0 CF
Cut - 1451 SF

SCALE 1" = 10'

−5 0 5 10 20

DISTRICT OF COLUMBIA
GEORGE CARL SEIDEL
No. PE 907801
REGISTERED
PROFESSIONAL ENGINEER
JULY 5, 2016

4511 CHESAPEAKE ST NW
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1	6-30-2016	PER COMMNETS

sheet name:
SOIL EROSION PLAN

ES003

4 OF 20

DCRA Energy Verification Sheet

Low-Rise Residential
Version 1.0_2014

Permit #: Address: 4511 CHESAPEAKE ST NW

Compliance Approach Used: x Prescriptive □ Trade Off □Performance

Project Type: x New Building □ Addition □Level 3 Alteration

2012 IECC Section #	Pre-Inspection Section Description	Prescriptive Code Value	Plan Value	Designer Identified Dwg Page	Plan Review	Field Insp.
302.1, 403.6 MR	Heating and Cooling equipment is sized per ACCA Manual S based on loads calculated per ACCA Manual J	N/A	N/A	M-1		
2012 IECC Section #	**Foundation Inspections**	**Prescriptive Code Value**	**Plan Value**	**Identified Dwg Page**	**Plan Review**	**Field Insp.**
402.1.1 SR	Slab Insulation R-value. Perimeter insulation extending downward from the top of the slab surface	Unheated R-10 Heated R-15	R-15	A-6		
402.1.1 SR	Slab Insulation depth.	2 feet	2	A-6		
402.1.1 SR	Conditioned basement wall insulation R-value. Where internal insulation is used, verification to occur during insulation inspection	Continuous R-10 Cavity: R-13	N/A	N/A		
303.2 I	Conditioned basement wall insulation installed per manufacturer instructions.	N/A	N/A	N/A		
402.2.8 SR	Conditioned basement wall insulation depth of burial or distance from top of wall.	10 ft or to bsmt. floor	N/A	N/A		
402.2.10 SR	Unvented crawlspace wall insulation R-value	Continuous: R-10 Cavity: R-13	N/A	N/A		
303.2 I	Unvented crawlspace installed per manufacturer's instructions	N/A	N/A	N/A		
402.2.10 SR	Unvented crawlspace continuous vapor retarder installed over exposed earth, joints overlapped by 6 in. and sealed, extending at lest 6 in. up and attached to the wall.	Continuous R-10 Cavity: R-13	N/A	N/A		
402.2.10 SR	Unvented crawlspace wall insulation depth of burial or distance from top of wall	To finished grade +24 in. vert. & / or horiz.	N/A	N/A		
303.2.1 S	A protective covering is installed to protect exposed exterior insulation and extends a minimum of 6 in. below grade.	N/A	N/A	N/A		
403.8 ER	Snow and Ice-melting system controls installed.		N/A	N/A		

2012 IECC Section #	Framing/ Rough-In Inspection	Prescriptive Code Value	Plan Value	Identified Dwg Page	Plan Review	Field Insp.
402.1.1, 402.3.4 SR	Door U-factor	U-0.35	0.35	A-1		
402.1.1, 402.3.1, 402.3.3 SR	Glazing U-factor (Area weighted average, show proof of average if any u-value is less than 0.35)	U-0.35	0.35	A-1		
402.1.1, 402.3.2, 402.3.3, 402.3.6, SR	Glazing SHGC value (Area weighted average)	SHGC: 0.4	0.4	A-1		

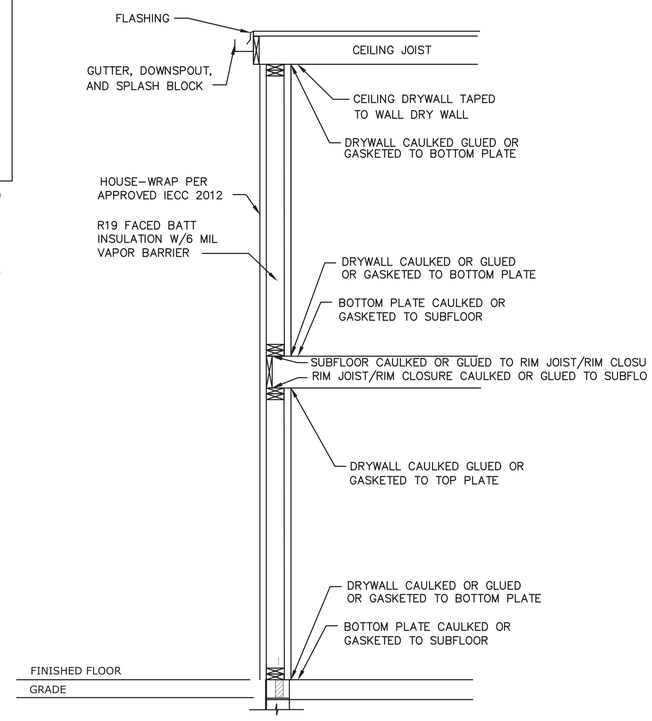
Key: Mandatory for all Compliance Approaches as Relevant to the Scope of Work

2012 IECC Section #	Framing/ Rough-In Inspection	Prescriptive Code Value	Plan Value	Designer Identified Dwg Page	Plan Review	Field Insp.
303.1.3 I	U-factors of fenestration products are determined in accordance with the NFRC or the default table values.		NFRC	A-1		
402.1.1, 402.3.3, 402.3.6 SR	Skylight U-factor	U-0.55 (15 square foot exemption)	0.46	A-2		
402.1.1, 402.3.3, 402.3.6 SR	Skylight SHGC	SHGC: 0.30 (0.5 max w/ tradeoff. 15ft²exempt	0.27	A-2		
303.1.3 I	SHGC values were determined in accordance with the NFRC or the default table values.		NFRC			
402.1.1 SR	Mass wall exterior insulation R-value.	R-13 Interior R-8 Exterior	N/A	N/A		
303.2 I	Mass wall exterior insulation installed per manufacturer's instructions.	N/A	N/A	N/A		
402.3.5 SR	Fenestration in thermally isolated sunrooms has a max. U-factor of 0.45. All other sunroom fenestration must meet code requirements.	Not Isolated 0.35 Isolated: 0.45	N/A	N/A		
402.3.5 SR	Skylights in thermally isolated sunrooms has a max. U-factor of 0.7. All other sunroom skylights must meet code requirements.	Not Isolated 0.55 Isolated: 0.7	N/A	N/A		
402.4.1.2 SR	Additions, alterations, renovations and replair shall be completed in accordance with Table 402.4.1.1.	Not Isolated 0.55 Isolated: 0.7	N/A	N/A		
402.4.1.1 I	Air and Thermal Barrier installed per Manufacturer's instructions.		N/A	A-1		
402.4.3 I	Fenestration is listed and labeled as meeting AAMA/ WDMA/CSA 101/I.S. 2/A440 or does not exceed code limits per NFRC 400.	0.3 CFM/ft²	0.3 CFM	A-1		
402.4.4 E	IC-rated recessed lighting fixtures sealed at housing/interior finish and labeled to indicate ≤ 2.0 CFM leakage at 75 Pa.		2 CFM	E-1		
403.2.1 MR	Supply Ducts in attic are insulated to ≥R-8. All other ducts in unconditioned spaces or outside the building envelope are ≥R-6.	Attic: R-8 Other: R-6	N/A	N/A		
403.2.2 MR	All joints and seams of air ducts, air-handlers, and filter boxes are sealed.		N/A	N/A		
403.2.3 MR	Building cavities are not used as ducts or plenums.		N/A	N/A		
403.3 MR	HVAC piping carrying fluids > 105°F or fluids < 55°F are insulated to ≥ R-3.	HVAC Pipe ≥ R-3	R-3	M-1		
403.3.1 MR	Protection of insulation on HVAC piping.		N/A	N/A		
403.4.2 MR	Hot water pipes are insulated to ≥ R-3.		R-3	M-0		
403.5 MR	Auto./ gravity dampers install on all intakes/ exhausts.		N/A	N/A		

2012 IECC Section #	Insulation Inspections	Prescriptive Code Value	Plan Value	Designer Identified Dwg Page	Plan Review	Field Insp.
303.1 I	All installed insulation labeled or installed R-values provided.		N/A	M-1		
402.1.1, 402.2.6 SR	Floor Insulation R-value	Wood: R-19 Steel: R-19+6	N/A	N/A		
303.2, 402.2.7 SR	Floor insulation installed per mnfr instructions, and substantial contact with underside of floor.		N/A	N/A		
402.1.1, 402.2.5 402.2.6 SR	Wall insulation R-value. If a mass wall with ½ insulation on the wall exterior. ext insulation applies.	Wood: R-20 or R-13+5 Mass: R-13 Int. R-8 Ext Steel: R19+8	R-13+5	A-6		
402.1.1 SR	Mass wall exterior insulation R-value.	R-13 Interior R-8 Exterior	N/A	N/A		
402.2.12 S	Walls of thermally isolated sunrooms have a min. R-13. All other sunrooms must meet code requirements.	Isolated: R13	N/A	N/A		
302.2 I	Sunroom walls insulation installed per manufacturer's instructions.		N/A	N/A		
402.2.12 S	Ceilings of thermally isolated sunrooms have min. R-24. All other sunroom ceilings must meet code requirements	Isolated: R-24	N/A	N/A		
302.2 I	Sunroom ceiling insulation installed per manufacturer's instructions.		N/A	N/A		
2012 IECC Section #	**Final Inspections**	**Prescriptive Code Value**		**Identified Dwg Page**	**Plan Review**	**Field Insp.**
402.2.1 402.2.6 SR	Ceiling insulation R-value	Wood: R-49 Steel: U-0.026	R-49	A-6		
303.1.1.1 303.2 I	Ceiling insulation installed per mnfrs instructions. Blown ins. marked every 300ft²		R-49	A-6		
402.2.3 SR	Baffle over air permeable insulation adjacent to soffit and eave vents.		N/A	N/A		
402.2.4 SR	Attic access hatch and door insulation ≥R-value of adjacent assembly	≥R-value of adjacent assembly	N/A	N/A		
402.4.1.2 I	Blower door test @ 50 Pa≤5 Air Changes per Hour. Applies to Level 3, Gut Rehab, New	ACH50≤5.0	5.0	A-1		
402.4.2 I	Wood burning fireplaces have tight fitting flue dampers and outdoor air for combustion.		N/A	N/A		
403.2.2 I	Total Duct leakage test ≤8 CFM/100 ft² with air-handler installed.	≤8 CFM/ 100 ft²	8	M-1		
403.2.2.1 I	Air-handler leakage designed by mfr. at ≤2% of air-flow.		N/A	M-1		
403.6 I	HVAC equipment type and capacity as per plans.		N/A	M-1		
403.1.1 MR	Programmable thermostats installed on forced air furnace		N/A	M-1		
403.1.2 MR	Heat pump thermostat installed on heat pumps.		N/A	M-1		
403.4.1 MR	Circulating hot water systems have auto. or accessible manual controls.		N/R	M-1		
404.1 ER	75% lamps in permanent fixtures or 75% permanent fixtures use high effic. lamps		N/R	E-1		

This Energy Verification Sheet is based on DDE's Store and Score spreadsheets and was adapted to fit the 2013 DC Energy Concervation Code. This verification sheet does not replace the 2013 DC ECC or 2012 IECC and is included for DCRA to verify significant requirements during permitting and inspection. The project team shall design and install the building to the full energy code whose measures specific to the project may not be included in this sheet. The project team shall also include this document into their drawings and fill it in for low-rise residential projects completing Level 3 Alterations or new construction. Elements that are not applicable to the scope of work shall be marked 'N/A' in the 'Designer Identified Drawing Page #' & 'Plan Value' columns. Elements that are applicable shall be marked with the relevant page number where the item is specified in the drawings. Exemptions to items on this sheet shall be indicated so that plan reviewers and inspectors may verify compliance by code section number references and brief description. Projects using the Performance Path need to fill in only the highlighted, mandatory rows. Other Compliance Approaches require filling in all rows. Completion of this page does not absolve project teams from providing other energy verification documentation.

EPDM ROOF SYSTEM
SRI 78 ON ROOFING FELT W/ ICE & WATER SHIELD AS SHOWN ON ROOF PLAN. INSTALL PER MANUFACTURER'S RECOMENDATION



TYPICAL

AIR SEALING DETAIL

NOT TO SCALE

4511 CHESAPEAKE ST NW
WASHINGTON, DC 20016

Owners:
Nick Alten

Engineer:
Better Space LLC
4511 Chesapeake St NW
Washington DC

REVISIONS

ITEM	DATE	DESCRIPTION
1	6-30-2016	PER COMMNETS

sheet name:
ENERGY VERIFICATION

EV003

DISTRICT OF COLUMBIA GEORGE CARL BERGER No. PE 907801 REGISTERED PROFESSIONAL ENGINEER

JULY 5, 2016

GENERAL NOTES

NOTES AND SYMBOLS INCLUDED IN THIS SET ARE STANDARD AND MAY NOT NECESSARILY BE APPLICABLE TO THIS PROJECT.

CODES AND REGULATIONS

ALL WORK AND MATERIALS SHALL CONFORM TO ALL GOVERNING CODES AND REGULATIONS, INCLUDING THE LATEST EDITIONS OF THE LOCAL BUILDING, ELECTRICAL AND PLUMBING CODES AS WELL THE NATIONAL ELECTRICAL CODE, THE NFFA 70 AND THE NATIONAL BOARD OF UNDERWRITERS.

INSURANCE

THE CONTRACTOR SHALL CARRY ALL NECESSARY LIABILITY AND WORKMEN'S COMPENSATION INSURANCE.

MEASUREMENTS

THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS ON SITE PRIOR TO ORDERING MATERIALS OR PERFORMING ANY WORK.

DRAWING DISCREPANCIES

SHOULD THE CONTRACTOR FIND AFTER VISITING THE SITE OR DURING CONSTRUCTION, ANY DISCREPANCIES, OMISSIONS, AMBIGUITIES OR CONFLICTS IN THE DRAWING, OR TO BE UNCLEAR AS TO THEIR MEANINGS, HE/SHE SHOULD IMMEDIATELY NOTIFY THE OWNER.

PROTECTION OF EXISTING INSTALLATION, MATERIALS, AND WORK

THE CONTRACTOR SHALL PROTECT ALL EXISTING STRUCTURES, UTILITIES, AND INSTALLATIONS OF ALL KINDS AGAINST DAMAGE. THE CONTRACTOR WILL BE REQUIRED TO RETURN IT TO ITS ORIGINAL CONDITION WHEN THE WORK IS COMPLETED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CUTTING, FILLING, OR PATCHING THAT MAY BE REQUIRED TO TO COMPLETE THE WORK. OR MAKE ITS SEVERAL PARTS FILL TOGETHER PROMPTLY. ANY UNAVOIDABLE CUTTING OF EXISTING WORK SHALL BE RESTORED AND REPAIRED EQUAL TO ORIGINAL AND EXISTING WORK BY WORKMEN SKILLED IN THE TRADE INVOLVED.

REINSTALLED MATERIALS AND EQUIPMENT

CAREFULLY REMOVE, STORE, AND PROTECT FOR REINSTALLATION MATERIALS AND EQUIPMENT AS DESCRIBED IN THESE DRAWINGS AND SPECIFICATIONS.

STRUCTURAL

NO STRUCTURAL MEMBERS WILL BE CUT, MOVED FRILLED, ROULED, OR REDUCED IN SIZE WITHOUT THE PROPER WRITTEN PERMISSION OF THE ARCHITECT / CONTRACTOR. ALL DRILLING AND PATCHING FOR THE EXPANSION BOLTS, SHIELDS, HANGERS, AND OTHER SUPPORTS SHALL BE PERFORMED SUBJECT TO THE PRIOR APPROVAL OF THE ARCHITECT / CONTRACTOR. REPLACE OR REFINISH DAMAGED PARTS TO HE SATISFACTION OF THE ARCHITECT / CONTRACTOR.

CLEAN UP

AT ALL TIMES THE CONTRACTOR SHALL KEEP THE PREMISES FREE FROM ACCUMULATION OF WASTE MATERIALS OR RUBBISH CAUSED BY HIS/HER OPERATIONS. THE COMPLETION OF THE WORK, THE CONTRACTOR SHALL REMOVE ALL WASTE MATERIALS AND RUBBISH, TOOLS, CONSTRUCTION EQUIPMENT, MACHINERY, AND SURPLUS MATERIALS FROM AND ABOUT THE PROJECT.

ENERGY CONSERVATION NOTES

1 - PROVIDE AND INSTALL ALL INSULATION AS REQUIRED BY IRC N1102.1
2 - INSTALL R-19 KRAFT FACED BATT INSULATION IN BETWEEN STUDS IN ALL EXTERIOR WALLS, UNO.
3 - INSTALL R-49 FACED PAPER BATT INSULATION ABOVE UPPER MOST CEILING SPACES AND IN ALL FLOORS OVER UNCONDITIONED SPACE. TAKE PRECAUTION TO ALLOW AIRSPACE BETWEEN INSULATION AND UNDERSIDE OF ROOF SHEATHING AT EAVES.
4 - FILL ALL VOIDS AT WINDOW AND DOOR SHIM SPACES WITH FOAM TYPE INSULATION.
5 - INSTALL SEALANT AT ALL WOODWORK JOINTS THAT ARE SUBJECT TO ALLOW AIR INFILTRATION.

GENERAL STRUCTURAL NOTES

ALL NOTES ON STRUCTURAL DRAWINGS SHALL BE ASSUMED TYPICAL UNLESS SHOWN OTHERWISE OR NOTED ON DRAWINGS OR SPECIFICATIONS.
ALL NOTES ARE FOR SUPPLEMENTING THE PLANS AND SPECIFICATIONS AND ARE IN NO WAY TO BE CONSIDERED AS EXCLUDING ANY ITEM IN THEM.

1 - IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE THE STRUCTURAL DRAWINGS AND THEIR DIMENSIONS WITH ALL OTHER DRAWINGS. IF CONFLICT EXISTS HE SHALL NOT CARRY OUT THE EFFECTED WORK UNTIL THE ARCHITECT / CONTRACTOR HAS RESOLVED THE CONFLICT.

2 - EXISTING CONDITIONS SHOWN OR IMPLIED ARE BASED ON BEST AVAILABLE BUT LIMITED INFORMATION. IF CONDITIONS ARE ENCOUNTERED THAT DIFFER FROM THOSE SHOWN, NOTED OR IMPLIED, ALL WORK IN THAT SPECIFIC AREA IS TO STOP AND THE ARCHITECT / CONTRACTOR IS TO BE NOTIFIED. NO WORK IS TO CONTINUE IN SUCH AREAS WITHOUT THE PERMISSION OF THE ARCHITECT / CONTRACTOR.

FOUNDATION NOTES

PRESUMPTIVE BEARING IS 2000 PSF IN ORIGINAL, UNDISTURBED SOIL OF THIS BEARING VALUE.

1 - FOOTING DEPTHS ARE SHOWN ON THE SECTIONS UNLESS OTHERWISE NOTED, FOOTINGS SHALL BEAR A MINIMUM OF 12" INTO ORIGINAL UNDISTURBED SOIL AND A MINIMUM OF 30" BELOW FINISHED GRADE. WHERE REQUIRED, STEP FOOTINGS TO RATIO OF 2 HORIZONTAL TO 1 VERTICAL.
2- WHERE CONDITIONS DEVELOP REQUIRING CHANGES IN EXCAVATIONS, SUCH CHANGES SHALL BE MADE AS DIRECTED BY THE GEO-TECHNICAL ENGINEER.
3 - ALL FOOTING EXCEPTIONS SHALL BE INSPECTED BY THE BUILDING OFFICIAL PRIOR TO PLACING OF ANY CONCRETE. THE BUILDING OFFICIAL SHALL BE GIVEN NOTICE FOR THIS OBSERVATION.
4 - SOIL INVESTIGATION AND REPORT: ALL EARTH WORK, COMPACTION AND SUPERVISION SHALL BE DONE PER RECOMMENDATIONS OF SOIL INVESTIGATION REPORT. IF NO REPORT GIVEN, CONCRETE SLAB AND FOOTING CALCULATIONS ARE BASED ON LOCAL CODE DESIGN FOR AN ALLOWABLE SOIL BEARING PRESSURE. CONTRACTOR TO VERIFY BEFORE CONSTRUCTION.
5 - IF THE SITE TEST BORINGS INDICATE LESSER VALUES, NOTIFY ENGINEER SO THAT NECESSARY STRUCTURAL MODIFICATIONS CAN BE MADE.

FOUNDATION NOTES

6 - ALL FOOTINGS SHALL EXTEND A MIN. REQUIRED DEPTH BELOW GRADE, REF. #1 ABOVE.
7 - USE BRICK PATTERN FORMS ON ALL EXPOSED CONCRETE FOUNDATION WALLS.
8 - PROVISIONS MUST BE TAKEN TO PROTECT ALL CONCRETE WORK FROM FROST DAMAGE WITH SPECIAL ATTENTION PAID TO FOOTINGS AND OTHER CONCRETE ON GRADE PRIOR TO THE BACK FILING AND ENCLOSING THE BUILDING.
9 - UNO, FLOOR SLABS ON GRADE TO BE 4 INCHES THICK WITH 6X6 -W1.4X1.4 WWF CENTERED IN SLAB. FLOOR SLABS TO BE POURED IN CHECKERBOARD FASHION OR AS NOTED BY THE ARCHITECT WITH NO POUR EXCEEDING 625SF IN AREA AND NO DIMENSION EXCEEDING 40 FT. CUT ALTERNATE STRANDS OF WWF AT POUR JOINTS OR USE SCREED KEYS, IN WHICH CASE ALL STRANDS AT THE KEYS MAY BE CUT.
10 - BACKFILLED WHERE REQUIRED, TO BE COMPACTED TO 95% MAXIMUM DRY DENSITY FOR COHESIVE SOIL AND 95% FOR GRANULATED SOIL IN ACCORDANCE WITH ASTM O-1557.
11 - BACKFILLING AGAINST RETAINING WALLS SHALL NOT BE CARRIED OUT UNTIL FRAMED FLOOR STRUCTURE AND SLAB ON GRADE HAVE BEEN INSTALLED AND HAVE REACHED THEIR DESIGN STRENGTH AND APPROVAL HAS BEEN RECEIVED FROM THE ARCHITECT. WHERE BACKFILL OCCURS ON BOTH SIDES OF WALL, BACKFILL BOTH SIDES AT SAME TIME.

POURED IN PLACE CONCRETE

1 - CONCRETE WORK SHALL CONFORM TO ALL REQUIREMENTS OF ACI-318-02 AND ACI 301-72, SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS.
2 - CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPREHENSIVE STRENGTH OF 3500 PSI.
3 - REINFORCING STEEL SHALL BE BILLET STEEL CONFORMING TO ASTM SPECS. A615-60. DEFORMATION IN ACCORDANCE WITH ASTM A-305. WWF SHALL CONFORM TO ASTM A-185.
4 - ALL CONTINUOUS REINFORCING SHALL BE CONTINUOUS AND LAPPED AT ALL SPLICES, CORNERS, AND INTERSECTIONS. A MINIMUM OF 30 BAR DIAMETERS, UNO.
5 - ALL REINFORCEMENT, ANCHOR BOLTS, PIPE SLEEVES AND OTHER INSERTS SHALL BE POSITIVELY SECURED IN PLACE BEFORE CONCRETE IS PLACED.
6 - PROVIDE 95% STD. PROCTOR SOIL BACKFILL COMPACTION AT 6" LAYERS AT ALL SLABS AND FOOTINGS. BACKFILL TO BE OF APPROVED MATERIAL.
7 - REFERENCE FOUNDATIONS NOTES FOR REINFORCEMENT REQUIREMENTS.
8 - TOOL EDGE OF CONTROL JOINTS AND AT SLAB TO WALL JOINTS.
9 - ALL EXTERIOR SLAB-ON-GRADE CONCRETE SHALL CONTAIN NOT LESS THAN 5% OR MORE THAN 7% AIR ENTRAINMENT.
10 - CONCRETE PROTECTION FOR REINFORCEMENT SHALL BE GIVEN ON ACI-318.
11 - PROVIDE NON-CORROSIVE DOVETAIL SLOTS, INSERTS, METAL ANCHORS AND OTHER FASTENING DEVICES REQUIRED FOR ATTACHING MASONRY AND OTHER WORK TO CONCRETE. SEE PLANS AND SPECIFICATIONS.
12 - IN ON GRADE CONCRETE SLABS THE WWF REINFORCEMENT SHOULD BE LOCATED MIDEAY IN SLAB THICKNESS.
13 - UNO, SUFFICIENT CAMBER SHALL BE PROVIDED FOR STRUCTURAL MEMBERS AND STRUCTURAL SLABS SO AS TO INSURE LEVEL SURFACES AFTER REMOVAL OF FORM WORK.
14 - UNO ON PLANS AND SPECIFICATIONS, ISOLATION, CONTROL AND CONSTRUCTION JOINTS IN CONCRETE WORK SHALL CONFORM TO THE LATEST RECOMMENDED PRACTICE OF THE ACI STANDARDS.
15 - UNO, REINFORCING STEEL SHALL BE SPACED AND LAYERED ACCORDING TO ACI-318.

MASONRY

PROVIDE VERTICAL WALL REINFORCING AS SPECIFIED ON PLANS AND IN SPECIFICATIONS. ALL HORIZONTAL WALL REINFORCING TO BE TRUSS TYPE , EVERY OTHER COURSE, EH GALVANIZED WALL REINFORCING. AT CORNERS AND INTERSECTIONS, HORIZONTAL WALL REINFORCING TO BE FULLY LAPPED WITH TRUSSES. EH GALVANIZED CORNERS AND TEES.
1 - UNO, CONCRETE MASONRY UNITS IN BEARING WALLS SHALL BE AS SPECIFIED BY THE ASTM AND SHOWN BELOW:
A. FOUNDATION WALLS - C145 GRADE N-1 (75% SOLID)
B. LOAD BEARING WALLS - C90 GRADE N-1 (54% SOLID)
C. BEAM BEARING TO FOOTING - C145 GRADE N-1 (100% SOLID)
D. JOIST BEARING TOP 8" - C145 GRADE N-1 (100% SOLID)
2 - MORTAR FOR LOAD BEARING AND RETAINING WALLS SHALL BE TYPE S.
3 - EXTREME CARE FOR PROPER MEASURES MUST BE USED SO AS TO NOT DAMAGE, BULDGE, OR TIP WALLS DUE TO ANY SUPERIMPOSED PRESSURE. SHORING, BRACING, ETC. SHALL BE EMPLOYED UNTIL THE FULL DEAD LOAD OF THE BUILDING IS ON THE WALLS.
4 - WHERE CHANGES ON MASONRY UNIT TYPES OCCUR, OR DECREASE IN WALL THICKNESS, THE TOP 8" SHALL BE 100% SOLID.
5 - SOLID MASONRY WALL SHALL HAVE "DUR-O-WALL" (OR APPROVED EQUAL) TRUSS TIES AT 16" O.C. VERTICALLY ABOVE GRADE AND 8" O.C. VERTICALLY BELOW GRADE.
6 - BRICK VENEER WALLS TO HAVE NON-CORROSIVE METAL TIES AT 16" O.C. VERTICALLY AND HORIZONTALLY, AND WEEP HOLES 24" O.C. AT BASE FLASHING.
7 - MORTAR TO CONFORM TO ASTM C270, TYPE N.
8 - PROVIDE AT LEAST ONE CONTINUOUS COURSE 100% SOLID MASONRY AT ALL SLAB BEARING LINES.

LINTELS

ALL STEEL LINTEL IN MASONRY WALLS SHALL BE STEEL ANGLES WITH SIZES AS FOLLOWS FOR EACH 4 INCHES OF WALL THICKNESS OR FRACTION THEREOF, UNO:

SPANS	ANGLE SIZES
UNDER 6'-0"	4"x 3 1/2" x 5/16"
6'-0" TO 7'-11"	6"x 3 1/2" x 5/16"
8'-0" TO 10'-0"	8"x 4" x 7/16"

1 - LINTEL ANGLES SHALL HAVE A MINIMUM END BEARING OF 8", BUT NOT LESS THAN 1" OF BEARING FOR EACH FOOT OPENING WIDTH.
2 - ALL STEEL ANGLE LINTELS SHALL BE TACK WELDED TOP AND BOTTOM IN SUCH A MANNER AS TO ENSURE THAT THE 2 OR 3 ANGLES WILL ACT AS ONE MEMBER.
3 - IN ADDITION TO THE LENTILS NOTED, PROVIDE LINTELS / AND / OR BEAMS AS REQUIRED FOR ANY OPENING SHOWN ON THE ARCHITECTURAL DRAWINGS AND OF ANY OPENING REQUIRED BY THE MECHANICAL DRAWINGS AND ANY OTHER AS THE ARCHITECT MAY SHOW ON THE DRAWINGS.
4 - WHERE 2 ADJACENT OPENINGS OCCUR BETWEEN WHICH MINIMUM BEARING DOES NOT OCCUR, USE SIZE OF LINTEL REQUIRED FOR LENGTH OF CONTINUOUS OPENINGS. FOR OPENINGS GREATER THAN THOSE LISTED AT BEGINING OF SECTION AND NOT SHOWN ON PLANS, CONSULT ARCHITECT.
5 - ALL LINTELS TO BE SET TRUE AND LEVEL.
10 - PROVIDE 100% SOLID MASONRY 8 INCHES BEYOND THE OPENING FOR THE FULL WALL WIDTH AT ALL LINTELS FROM THE LINTEL BEARING ON THE FLOOR BELOW.

STRUCTURAL STEEL

STEEL WORK IN GENERAL SHALL CONFORM TO THE CURRENT SPECIFICATIONS FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS ADOPTED BY THE AISC.
1 - ALL STRUCTURAL STEEL SHALL BE IN ACCORDANCE WITH ASTM SPECIFICATION A-36.
2 - ALL STEEL SHALL BE PAINTED WITH ONE SHOP COAT OF TNEMEC 99 PRIMER OR APPROVED EQUAL.
ABRADED PLACES AND FIELD WELDS TO BE FIELD PAINTED WITH TNEMEC 99 PRIMER OR EQUAL.
3 - ALL CONNECTIONS CONNECTIONS EXCEPT AS NOTED ON PLANS AND DETAILS SHALL HAVE BOLTED OR WELDED CONNECTIONS AS SHOWN IN THE CURRENT ADDITION OF THE AISC MANUAL.
4 - ALL BOLTS SHALL BE HIGH STRENGTH BOLTS IN ACCORDANCE WITH ASTM SPECIFICATIONS. A0325 AND SHALL BE INSTALL IN ACCORDANCE WITH THE APPLICABLE SPECIFICATIONS FOR STRUCTURAL BEAMS USING ASTM A-325 BOLTS.
5 - WELDING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE CODE FOR WELDING IN BUILDING CONSTRUCTION OF THE AMERICAN WELDING SOCIETY.
6 - ALL SHOP AND FIELD WELDING SHALL BE DONE BY CERTIFIED WELDERS QUALIFIED BY AMERICAN WELDING SOCIETY.
7 - UNO, ALL WELDS ARE TO DEVELOP THE FULL STRENGTH OF THE PARTICULAR MEMBER FOR THE TYPE CONNECTION REQUIRED.
8 - ANCHOR BOLTS LENGTHS SHOWN ARE EMBEDDED LENGTHS.
9 - NO HOLES ARE TO BE CUT IN STRUCTURAL MEMBRANES IN THE FIELD UNLESS AUTHORIZED BY THE ARCHITECT.
10 - STRUCTURAL DRAWINGS DO NOT NECESSARILY SHOW ALL OPENINGS IN THE STRUCTURAL WORK.
11 - EXTRA JOIST AND SPECIAL FRAMING HAS BEEN INDICATED IN MOST CASES WHERE REQUIRED BY SPECIAL APPLICATIONS. LOCATIONS SHOWN ARE SCHEMATIC ONLY AND REFERENCE MUST BE MADE TO OTHER DRAWINGS FOR EXACT LOCATION.

I-JOIST

1 - "I" JOISTS: PRE-ENGINEERED JOISTS. FLOOR JOISTS MANUFACTURER TO SUPPLY SHOP DRAWING AND ERECTION DRAWINGS AND MUST BE SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE GOVERNING JURISDICTION. FLOOR JOIST MANUFACTURER TO SUPPLY CONNECTION AND BEARING DETAILS, BRIDGING AND BRACING DETAILS,NOMINAL DIMENSIONS AND JOIST LAYOUT CONFIGURATIONS.
2 - BAND BOARD: 1 1/4" TIMBER STRAND OR EQUAL.
3 - FLOOR JOISTS SHALL BE DESIGNED TO LIMIT DEFLECTION TO L/480 LIVE LOAD EXCEPT IN ROOMS CONSISTING OF DIFFERENT LENGTHS SPANS OF WHICH THE DEFLECTION OF THE SHORTS SPAN SHALL GOVERN.
4 - PROVIDE SOLID WEBB FIBBERS ON ALL JOISTS PARALLEL TO EXTERIOR WALLS.
5 - PROVIDE SOLID BAND BOARD AT ALL END CONDITIONS AND 2 X 4 CRIPPLES @ ALL INTERIOR BEARING CONDITIONS.

LVL'S

ALL LVL'S SHALL COMPLY OR EXCEED THE FOLLOWING CRITERIA:
FB = 2900 PSI
FV = 280 PSI
E = 2.O X 10 6
GLUELAMS = 24FV3 SP /SP
MICROLAMS = 2.0E
NAILING / BOLTING OF LVL'S
UP TO 11 1/4" MEMBER - USE (2) ROWS OF A325 1/2" BOLTS @ 12" O.C. STAGGERED.
AND (3) ROWS OF 16D NAILS @ 9" O.C. STAGGERED ON EACH SIDE.
11 1/2" UP TO 18" MEMBER - USE (3) ROWS OF A325 1/2" BOLTS @ 12" O.C. STAGGERED.
AND (3) ROWS OF 1/4" DIA. "TIMBER LOK"S @ 9" O.C. STAGGERED.
MEMBER SHALL BE GLUED BEFORE BOLTING IN ALL CASES.

ROOFING

1 - SHINGLES SHALL BE AS NOTED ON PRODUCT SPECIFICATIONS. INSTALL OVER 1 LAYER OF 15# ASPHALT SATURATED FELT UNDERLAYMENT.
FLASHING
1 - ALL FLASHING TO BE OF THE APPROVED CORROSION-RESISTIVE TYPE AND SHALL BE PROVIDED WHERE EXTERIOR PORCHES, DECKS OR STAIRS ATTACH TO A WALL OR FLOOR ASSEMBLY OR WOOD-FRAMED CONSTRUCTION. FLASH AND CAULK WOOD BEAMS AND OTHER PROJECTIONS THROUGH EXTERIOR WALL OR ROOF SURFACES.
2 - ALL FLASHING, COUNTER FLASHING, AND COPING WHEN OF METAL SHALL BE OF NOT LESS THAN NO. 26 U.S. GAUGE APPROVED CORROSIONS-RESISTANT METAL.
3 - PROVIDE METAL FLASHING ABOVE ALL WINDOW, DOORS & CAPITALS.

FINISHES

GYPSUM WALLBOARD
1 - ALL GYPSUM WALLBOARD SHALL BE INSTALLED IN ACCORDANCE WITH THE PROVISIONS OF THE 20112 IRC, LATEST EDITION, STATE AND LOCAL CODES.
2 - GYPSUM WALLBOARD SHALL NOT BE INSTALLED UNTIL WEATHER PROTECTION FOR THE INSTALLATION IS PROVIDED.
3 - ALL EDGES AND ENDS OF GYPSUM WALLBOARD SHALL OCCUR ON THE FRAMING MEMBERS EXCEPT EDGES WHICH ARE PERPENDICULAR TO THE FRAMING MEMBERS.
ALL EDGES OF GYPSUM WALLBOARD SHALL BE IN MODERATE CONTACT EXCEPT IN CONCEALED SPACES WHERE FIRE RESISTING CONSTRUCTION IN NOT REQUIRED.
4 - THE SIZES AND SPACING OF FASTENERS SHALL COMPLY WITH 2012 IRC, LATEST EDITION, ALL STATE AND LOCAL CODES.
5 - PROVIDE MOISTURE RESISTANT DRYWALL AT TUBS AND SHOWERS.

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REVISIONS

ITEM	DATE	DESCRIPTION
1	6-30-2016	PER COMMNETS

sheet name:
SPECIFICATIONS

G0001

WOOD FRAMING

LIVE LOADS

ROOFS	30 PSF
FLOORS	40 PSF
DECKS	60 PSF
STAIRS	100 PSF

1 - HEADERS AND LINTEL FRAMING MARKED S.P. TO BE SOUTHERN PINE NO.2, MEDIUM GRADE, 19% M.C. LUMBER OR BETTER WITH MIN. LB=1250 PSI, LV=90 PSI, AND E=1.6X10 PSI OR EQUIVALENT. ALL OTHER FRAMING LUMBER TO BE EQUIVALENT TO HEM/FIR NO.2 AS DEFINED BT PS-20-70.

3 - ALL JOISTS, RAFTERS AND HEADERS SHALL BE, UNLESS OTHERWISE NOTED, HEM - FIR #2 WITH THE FOLLOWING MINIMUM ALLOWABLE STRESSES AND AND MODULUS OF ELASTICITY:

A. EXTREME FIBER STRESS: FB=2800 PSI

B. HORIZONTAL SHEAR: FV=285 PSI

C. COMPRESSION PERPENDICULAR TO GRAIN: FC=405 PSI

D. MODULUS OF ELASTICITY: E=1,2.1x10 PSI

3 - HEM - FIR MAY BE SUBSTITUTED, SUBSTITUTED SPECIFIES SHALL MEET OR EXCEED REQUIREMENTS NOTED ABOVE.

3 - MOISTURE CONTENT: ALL LUMBER 6" AND DEEPER SHALL HAVE A MOISTURE CONTENT NOT GREATER THAN 19%, AIR DRIED LUMBER IS DESIRED BUT NOT NECESSARY. LUMBER MAY BE KILN DRIED, HOWEVER DRYING PROCESS MUST BE SLOW AND REGULATED TO CAUSE A MINIMUM AMOUNT OF CHECKING, COMPARABLE WITH AIR DRIED STOCK.

4 - ALL EXTERIOR LUMBER AND LUMBER IN CONTACT WITH MASONRY OR CONCRETE SHALL BE PRESSURE PRESERVATIVE TREATED IN ACCORDANCE WITH AWPA STANDARDS.

5 - SOME COLUMNS, POSTS, AND JACKS ARE NOTED AND DESIGNATED ON THE PLANS. ALL JACKS REQUIRED, BUT NOT NOTED ON THE PLANS, TO BE THE SAME SIZE AS WALL IN WHICH THEY ARE INSTALLED AND IN QUANTITY AS NOTED IN THE FOLLOWING SCHEDULE:

4'-0" OPENING	1 JACK EACH
6'-0" OPENING	2 JACK EACH
8'-0" OPENING	3 JACK EACH

6 - ALL JACKS OR POSTS ARE TO LINE UP WITH THOSE AT FLOOR BELOW EVEN WHEN JACKS ARE NOT REQUIRED BY FRAMING OF THE FLOOR BELOW; THAT IS, ALL JACKS OR POSTS ABOVE ARE TO BE CONTINUOUS, OR INCREASED AS SHOWN, TO LOWEST LEVEL.

7 - WHERE BEAMS, JOISTS, LINTELS, ETC. BEAR ON MASONRY, THERE SHALL BE A MINIMUM OF 16" HORIZONTAL BY THE TOTAL WALL THICKNESS OF 100% SOLID MASONRY BEARING, OR PLAIN CONCRETE.

8- ALL STRUCTURAL WOODEN MEMBERS AND WOOD LOCATED WITHIN 8 INCHES OF SOIL SHALL BE PRESSURE IMPREGNATED TO RESIST DECAY AND INSECT INFESTATION, SUBJECT TO APPROVAL BY THE ARCHITECT.

9 - TIMBER, MICRO-LAM BEAMS AND HEADERS ARE TO BE CONNECTED TO THEIR BEARING POSTS WITH SIMPSON COLUMN / POST CONNECTION. BASES OF POSTS ARE TO BE FASTENED TO THEIR SUPPORT IN LIKE MANNER.

10- WHEN TWO OR MORE MICRO-LAM BEAMS ARE SHOWN AT ONE LOCATIONS, THEY ARE TO BE NAILED TOGETHER WITH 12D NAILS, PRE-DRILLED HOLE SPACES 12 INCHES ON CENTER AND STAGGERED 3 INCHES FROM TOP AND BOTTOM. MULIPLE "M.L.'S" ARE TO BE FASTENED TOGETHER WITH A MINIMUM OF 2 ROWS OF 16D NAILS AT 12" O.C.

11 - BEAMS, HEADERS AND LINTELS SPANNING ACROSS ADJACENT OPENINGS AND MARKED WITH SYMBOL "O.C.S " ARE TO BE CONTINUOUS OVER THE SUPPORT AT THE SYMBOL.

12 - PROVIDE AND INSTALL ALL SHEATHING PER IBC 2304.7.

13 - WOOD DECK PLYWOOD SHEATHING TO BE 3/4" PLYWOOD DOUGLAS FIR (OR EQUAL) GRADE CC (MIN) BONDED WITH 100% WATERPROOF GLUE FOR FLOOR AND ROOF.

14 - UNLESS SHOWN OTHERWISE, DOUBLE UP AS SHOWN SUPPORT STRUCTURE (JOISTS, ETC.) UNDER ALL PARTITIONS THAT RUN IN THE SAME DIRECTION AS THE FLOOR.

PLYWOOD

1 - ALL PLYWOOD SHALL BE PINE OR EQ. AND SHALL BE MANUFACTURED AND GRADED IN ACCORDANCE WITH "PRODUCT STANDARD P-1-66" FOR SOFT PLYWOOD CONSTRUCTION AND INDUSTRIAL.

2 - EACH PLYWOOD SHEET SHALL BEAR THE "APA" GRADE TRADEMARK.

3 - ALL END JOINTS SHALL BE STAGGERED AND SHALL BUTT ALONG THE CENTER LINES OF FARMING MEMBERS.

4 - THE FACE GRAIN OF THE PLYWOOD SHALL BE LAID AT RIGHT ANGLES TO THE JOISTS AND TRUSSES AND PARALLEL TO THE STUDS.

5 - NAILS SHALL BE PLACED 3/8" MINIMUM FROM THE EDGE OF THE SHEETS. THE MINIMUM NAIL PENETRATION INTO FRAMING MEMBERS SHALL BE 1-1/2" FOR 8D NAILS AND 1-3/8" FOR 10D NAILS.

6 - ALL FLOORS SHALL BE GLUED /SCREWED WITH #12 WD. SCREWS AT 6" O.C. ON DIRECT EDGES AT 10" O.C. AT INTERMEDIATE.

BOLTS IN WOOD FRAMING

1 - ALL BOLTS IN WOOD FRAMING SHALL BE ASTM A325 MACHINE BOLTS WITH STANDARD MALLEABLE IRON WASHERS OR STEEL PLATE WASHERS.

2 - STEEL PLATE WASHER SIZES SHALL BE AS FOLLOWS:

A. 1/2" AND 5/8" DIAM. BOLTS - 2-1/4" SQ. X 5/16".

B. 3/4" DIAM. BOLTS - 2-5/8" SQ. X 5/16".

3 - EACH BOLT HOLE IN WOOD SHALL BE DRILLED 1/16" LARGER THAN DIAMETER OF BOLT.

4 - FOR SILL BOLTS, SEE TYPICAL DETAILS.

LAG BOLTS AND SCREWS

1 - SHALL BE SQUARE HEADED AND OF STRUCTURAL GRADE STEEL.

2 - WASHERS SHALL BE PLACED UNDER THE HEAD OF LAG BOLTS BEARING ON WOOD.

3 - ALL SCREW, LAG SCREWS, BOLTS AND NAILS 20D AND GREATER TO BE DRILLED IN PRE-DRILLED HOLES OF APPROPRIATE SIZE. FOR SCREWS PRE-DRILLED BODY DIAMETER, FOR BOLTS PRE-DRILLED MAJOR DIAMETER, AND FOR NAILS, PRE DRILL 2/3 DIAMETER OF NAIL .

4 - BOLTS AND LAG SCREWS TO HAVE WASHERS AT ALL CONTACT SURFACE.

ALTERING STRUCTURAL MEMBERS

1 - NO STRUCTURAL MEMBER SHALL BE OMITTED; NOTCHED, CUT, BLOCKING OUT OR RELOCATED WITHOUT PRIOR APPROVAL BY THE ENGINEER. DO NOT ALTER SIZES OF MEMBERS NOTED WITHOUT APPROVAL OF ENGINEER.

BRIDGING AND BLOCKING

1 - THERE SHALL BE NOT LESS THAN ONE LINE OF BRIDGING IN EVERY EIGHT FEET OF SPAN IN FLOOR, ATTIC AND ROOF FRAMING. THE BRIDGING SHALL CONSIST OF NOT LESS THAN ONE BY SIX INCH LUMBER DOUBLE NAILED AT EACH END OR OF EQUIVALENT METAL BRACING OF EQUAL RIGIDITY. BLOCK SOLID AT ALL BEARING SUPPORTS WHERE ADEQUATE LATERAL SUPPORT IS NOT OTHERWISE PROVIDED.

CORNER BRACING

UNLESS OTHERWISE NOTED, BRACE EXTERIOR CONNER OF BUILDING WITH 1/2" STRUCTURAL SHEATHING, APA 24/16 PLYWOOD OR 7/16" OSB. ALL BRACING SHALL COMPLY W/ 2012 IRC AND CONFORM TO DETAILS PROVIDED ON WB-1 & WB-2. ENTIRE STRUCTURE SHALL BE SHEATHED PER METHOD #3 WITH 7/16" OSB PLYWOOD.

NAILING

1 - ALL NAILING SHALL COMPLY WITH 2015 IRC, LATEST EDITION AND ALL STATE AND LOCAL BUILDING CODES.

FIRE STOPPING

1 - FIRE STOPPING SHALL BE PROVIDED TO CUTOFF ALL CONCEALED DRAFT OPENINGS (BOTH VERTICAL AND HORIZONTAL) IN THE FOLLOWING LOCATIONS:

A. IN ALL STUD WALLS AND PARTITIONS INCLUDING FURRED SPACES AT FLOOR AND CEILING LEVELS AND NOT MORE THAN 10'-0" APART.

B. BETWEEN STAIR STRINGERS AT TOP AND BOTTOM AND BETWEEN STUDS IN LINE WITH STAIR RUN.

2 - FIRE-STOPS, WHEN OF WOOD, SHALL BE 2" NOMINAL THICKNESS AND MAY BE MADE OF GYPSUM BOARD, CEMENT ASBESTOS, MINERAL WOOL OR OTHER NONCOMBUSTIBLE MATERIAL (2" MINIMUM THICKNESS).

ALIGNMENT

1 - ALL RAFTERS AND JOISTS FRAMING FROM OPPOSITE SIDES SHALL LAP AT LEAST SIX (6) INCHES AND BE SPIKED TOGETHER.

2 - WHEN FRAMING END TO END JOISTS SHALL BE SECURED TOGETHER BY METAL STRAPS.

3 - ALIGN STUDS UNDER ALL JOISTS AND BLOCK BETWEEN FLOORS @ ALL BEARING WALLS.

4 - ALIGN STUDS UNDER ALL ROOF TRUSSES.

5 - PROVIDE ADDITIONAL STUDS AT POINT LOAD LOCATION TO MATCH NUMBER OF STUDS ABOVE - EXTEND TO FDN.

PARTITIONS

1 - LAP TOP PLATES AT CORNERS AND INTERSECTIONS.

2 - ALL TOP PLATES TO BE DOUBLE 2 X 4 (SPF). STAGGER SPLICE 48" AND LOCATE OVER WALL STUDS.

3 - ALL INTERIOR NON-BEARING WALLS TO BE 2 X 4 (SPF STUD GRADE) @ 24" O.C.

WOOD ROOF TRUSSES

WOOD TRUSSES SHALL BE DESIGNED IN ACCORDANCE WITH N.FO.P.A. STANDARD. CALCULATIONS, JOINT STRENGTH INFORMATION (ALLOWABLE LOAD PER SQUARE INCH OR PER NAIL, ALLOWABLE EDGE DISTANCE, ALLOWABLE EN DISTANCES) LOAD TEST DATA AND OTHER INFORMATION AS NECESSARY SHALL BE SUBMITTED TO LOCAL AUTHORITIES FOR APPROVAL PRIOR TO FABRICATION. EACH TRUSS SHALL BE SECURED AT BEARING AS REQUIRED BY TRUSS MANUFACTURE AND ABLE TO WITHSTAND LATERAL AND UPLIFT LOAD I INDICATED ON TRUSS SHOP DRAWINGS. TRUSS DESIGN SHALL BE CERTIFIED BY A PROFESSIONAL ENGINEER REGISTERED IN THE GOVERNING JURISDICTION. TRUSS DIAGRAMS SHOW DESIGN INTENT ONLY. TRUSS MANUFACTURER TO VERIFY ALL PLANS, DIMENSIONS, PITCHES, ETC. AND SUBMIT SHOP DRAWINGS TO BUILDER PRIOR TO FABRICATION.

WOOD ROOF TRUSSES TO BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS.

WOOD ROOF TRUSSES TO BE BRACED IN ACCORDANCE TO 2012 IRC

PLUMBING AND HVAC NOTES

GENERAL

INSTALL A COMPLETE PLUMBING AND HVAC SYSTEM IN THE BUILDING IN ACCORDANCE WITH THE DRAWINGS, SPECIFICATIONS AND THE INTENT OF THE DESIGN.

1 - DRAWINGS ARE SCHEMATIC. THE CONTRACTOR IS RESPONSIBLE TO COORDINATE HIS / HER WORK WITH THE ACTUAL FIELD CONDITIONS AND OTHER TRACES.

2 - PROVIDE ALL THE EQUIPMENT SHOWN ON THIS DRAWING SET.

CODES AND PERMITS

1 - COMPLY WITH CODES, LAWS AND ORDINANCES IN FORCE AT BUILDING.2 - SECURE AND PAY FOR PERMITS AND INSPECTION FEES REQUIRED FOR BUILDING REQUIREMENTS OF THESE SPECIFICATIONS.

SUBSTITUTION OF EQUIPMENT AND MATERIALS

1 - DRAWINGS ARE BASED UPON THE MANUFACTURER LISTED FIRST ON THE SPECIFICATIONS. WHERE ANY OTHER EQUIPMENT IS USED, THE CONTRACTOR IS RESPONSIBLE FOR ANY CHANGES IN THE PLUMBING AND HVAC SYSTEM IN THE BUILDING DUE TO PHYSICAL LIMITATIONS OF SUCH EQUIPMENT, AND SHALL PAY FOR ALL GENERAL, MECHANICAL AND ELECTRICAL CHANGES REQUIRED BY THE SUBSTITUTION..

SLEEVES, OPENINGS, CUTTING AND DRILLING

PLUMBING AND HVAC CONTRACTORS SHALL PROVIDE AND PATCH ALL DUCT AND PIPING OPENINGS REQUIRED IN NEW CONSTRUCTION. MAKE ARRANGEMENTS WITH ALL OTHER CONTRACTORS FOR SPECIAL SLEEVES, FRAMING, SPACES AND CHASES.

ELECTRICAL WORK

1 - ALL THE VOLTAGE WIRING FOR PLUMBING AND HVAC EQUIPMENT, FACTORY MOUNTED CONTROL PANELS AND TO INDIVIDUALLY MOUNTED STARTERS, AND FROM STARTERS TO MOTORS, SHALL BE PROVIDED BY ELECTRICAL CONTRACTOR. THIS CONTRACTOR SHALL TURN OVER ALL INDIVIDUALLY MOUNTED STARTERS AND DISCONNECTED SWITCHES FURNISHED UNDER THIS CONTRACT TO THE ELECTRICAL CONTRACTOR FOR INSTALLATION BY HIM.

2 - ALL LINES, OR LOW VOLTAGE WIRING REQUIRED FOR TEMPERATURE CONTROL SHALL BE PROVIDED BY THE PLUMBING AND HVAC CONTRACTOR.

3 - WIRING AND ELECTRICAL WORK SHALL COMPLY WITH THE NATIONAL ELECTRICAL CODE AND LOCAL REQUIREMENTS.

TEST

1 - ADJUST ALL FAN DRIVES AND AIR DISTRIBUTION DEVICES TO PROVIDE THE REQUIRED AIR QUANTITIES AS SHOWN ON THE DRAWINGS WITHIN +10% TO -5%.

GUARANTEE

1 - THIS CONTRACT SHALL GUARANTEE ALL WORK, MATERIALS, AND APPARATUS INSTALLED UNDER THIS CONTRACT FOR ONE YEAR FROM THE COMPLETION AND ACCEPTANCE OF THE ENTIRE HVAC SYSTEM.

DUCT INSTALLATION

1 - INSULATION SHALL BE 1 INCH THICK, MANSVILLE LINE - ACOUSTIC OR OWEN-CORNING AEROFLEX DUCT LINING, MINIMUM 1 1/2 LBS / SQ FT. DENSITY WITH A.K. FACTOR OF 0.23 AT 75 DEGREES, F MEAN TEMPERATURE AND SHALL MEET THE EROSION TEST METHOD DESCRIBED IN UL PUB-1B1. APPLY TO INSIDE SURFACE OF SUPPLY AND RETURN DUCT SHOWN ON PLANS.

2 - ALL WORK SHALL BE IN FULL ACCORDANCE WITH ALL CODES, RULES AND REGULATIONS OF THE GOVERNING AGENCIES PER 2015 IRC OR LATEST CODES.

3 - PREFABRICATED FIREPLACES AND CHIMNEYS SHALL CONFORM TO THE 2015 IRC, THEIR LISTING AND SHALL BE INSTALLED PER THE MANUFACTURER'S INSTRUCTIONS.

4 - THE INTENT OF THESE DRAWINGS IS TO PROVIDE COMPLETE AND PROPERLY FUNCTIONING HVAC SYSTEMS. PROVIDE ALL LABOR AND MATERIAL NECESSARY TO ACHIEVE SUCH ENDS. CONTRACTOR IS OBLIGATED TO EXAMINE THE PLANS.

5 - THESE DRAWINGS ARE SCHEMATIC AND INTENDED TO DEPICT THE GENERAL LOCATION OF THE HVAC SYSTEM COMPONENT. CONSULT ARCHITECTURAL PLANS FOR PROPER DIMENSIONS AND LOCATION OF EQUIPMENT.

6 - THE MECHANICAL CONTRACTOR SHALL COORDINATE THE INSTALLATION OF THE HVAC AND PLUMBING WORK WITH EXISTING CONDITIONS AND THE WORK OF OTHER TRADES. MINOR DEVIATIONS FROM THE PLANS MAY BE MADE TO AVOID MINOR CONFLICTS. WHEN MAJOR CONFLICTS ARE APPARENT, THE ARCHITECT SHALL BE ADVISED IMMEDIATELY, AND AFFECTED WORK SHALL NOT BE INSTALLED UNTIL THE CONFLICT HAS BEEN RESOLVED.

7 - PROVIDE OPENINGS IN BUILDING CONSTRUCTION FOR PASSAGE OF PIPING AND DUCTWORK. DO NOT PENETRATE STRUCTURAL MEMBRANE WITHOUT THE APPROVAL OF THE ARCHITECT.

8 - MECHANICAL CONTRACTOR SHALL THOROUGHLY CLEAN HIS WORK AREA DAILY OR AS REQUESTED BY THE GENERAL CONTRACTOR.

9 - MECHANICAL CONTRACTOR SHALL ALSO REMOVE ALL OF HIS TRASH AND DEBRIS AFTER THE COMPLETION OF THE WORK.

10 - ALL ROTATING MECHANICAL EQUIPMENT SHALL BE CONNECTED TO THE MECHANICAL EQUIPMENT USING RUBERIZED-CANVAS FLEXIBLE CONNECTIONS. ALL ROTATING MECHANICAL EQUIPMENT SHALL BE MOUNTED WITH VIBRATION ISOLATION FITTINGS. DUCTWORK SHALL BE INSTALLED TIGHT TO UNDERSIDE OF BUILDING STRUCTURE. ADJUST DUCT ELEVATION TO MAINTAIN TIGHT TO BOTTOM OF STRUCTURE WHERE STRUCTURE ELEVATIONS CHANGE.

PLUMBING AND HVAC NOTES

1 1 - ALL NECESSARY ALLOWANCES AND PROVISIONS SHALL BE MADE BY THE CONTRACTOR FOE BEAMS, COLUMNS, OR OTHER OBSTRUCTIONS OF THE BUILDING OR THE WORK OF THE OTHER CONTRACTOR WHETHER OR NOT SAME AS INDICATED. WHERE NECESSARY TO AVOID OBSTRUCTIONS THE DUCTS SHALL BE TRANSFORMED, DIVIDED, OFFSET, RAISED, OR LOWERED WITH THE REQUIRED FREE AREA BEING MAINTAINED.

1 2 - DOMESTIC WATER PIPING SHALL BE COPPER TUBING, TYPE L HARD TEMPER, WITH WROUGHT COPPER SOLDER JOINT FITTINGS AND 95-5 SOLDER.

1 3 - ALL SERVICE VALVES ON THIS PROJECT TO BE GATE VALVE.

1 4 - TEST AND DISINFECT DOMESTIC WATER SYSTEM IN ACCORDANCE WITH APPLICABLE CODE.

INSULATION

1 - HOT AND COLD WATER PIPING AND EXPOSED P-TRAPS SHALL BE INSULATED WITH:

DOMESTIC COLD WATER	1 /2" THICK
DOMESTIC HOT WATER.	1 /2" THICK

2 - VERIFY THE LOCATION, INVERT ELEVATION AND DIRECTION OF FLOW OF ALL PLUMBING PIPING BEFORE THE INSTALLATION OF THE NEW WORK.

SPECIAL NOTES

ALL EQUIPMENT AND THE SYSTEMS SHALL BE PROVIDED IN CONFORMANCE WITH NFPA, AGA, PDT, MANUFACTURER'S RECOMMENDATIONS, STATE AND LOCAL CODES AND ORDINANCE.

ELECTRICAL

THE INTENT OF THESE DRAWINGS IS TO PROVIDE A COMPLETE AND PROPERLY FUNCTIONING ELECTRICAL SYSTEM TO CONNECT TO EXISTING BUILDING SYSTEM. PROVIDE ALL LABOR MATERIAL NECESSARY TO ACHIEVE SUCH ENDS. THE CONTRACTOR IS OBLIGATED TO EXAMINE PLANS AND VISIT THE SITE. ANY OBSERVED FAULTS OR AMBIGUITIES IN THIS PLAN SHALL BE CALLED TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE IMMEDIATLEY SO THAT THE MATTER MAY BE RESOLVED PRIOR TO THE SUBMISSION OF BIDS.

WORKMANSHIP

1 - ALL WORK SHALL BE IN FULL ACCORDANCE WITH ALL CODES, RULES AND REGULATIONS OF GOVERNING AGENCIES AND SHALL COMPLY WITH 2015 IRC AND THE REQUIREMENTS OF THE SERVING POWER AND TELEPHONE COMPANIES.

2 - THE ELECTRICAL CONTRACTOR SHALL OBTAIN ALL PERMITS AND PAY SUCH FEES AS MAY BE NECESSARY FOR INSPECTIONS TESTS, AND OTHER SERVICES WHICH ARE REQUIRED FOR COMPLETION OF THE WORK.

INSTALLATION

1 - ALL EQUIPMENT INSTALLED OUTDOORS AND EXPOSED TO WEATHER SHALL BE WEATHER-PROOF.

2 - RECEPTACLES IN KITCHEN AND BATHROOMS SHALL BE INSTALLED ABOVE WORK TOP UNLESS OTHERWISE NOTED ON DRAWINGS.

3 - SMOKE DETECTORS TO BE INSTALLED OUTSIDE OF EACH SLEEPING AREA AND ON EACH FLOOR PER 2015 IRC, LATEST EDITION.

4 - ALL EQUIPMENT, DEVICES AND MATERIALS SHALL BE NEW AND SHALL BE LISTED WITH THE UNDERWRITERS LABORATORIES FOR ITS APPLICATION AS INSTALLED AND SHALL BEAR THE UL LABEL.

5 - THE WIRE AND CABLE SHALL BE COPPER HAVING 600 VOLTS WITH THW OR THWN INSULATION. ALL WIRE SIZES ARE BASED ON COPPER CONDUCTORS 75C DEGREES. MINIMUM WIRE SIZE SHALL BE #12AWG, UNO.

6 - ALL ELECTRICAL INSTALLATION, INCLUDING GROUNDING OF THE EQUIPMENT, SHALL COMPLY WITH THE NATIONAL ELECTRICAL CODE (NEC) AND ALL LOCAL CODES HAVING JURISDICTION.

7 - ELECTRICAL CONTRACTOR SHALL VERIFY HOME RUN SERVICE CAPACITY. NEW HOME RUN CIRCUITS SHALL BE ADDED AS NECESSARY.

8 - CIRCUIT NUMBERS ARE FOR IDENTIFICATION PURPOSE ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTLY PHASING THE CIRCUITS IN THE PANELS AND BALANCE THE LOAD UNDER NORMAL OPERATING CONDITIONS.

9 - ALL CIRCUITS 120 / 208 VOLT OVER 100 FEET AND ALL 277 / 480 VOLT CIRCUITS OVER 200 FEET FROM PANEL TO FIRST OUTLET SHALL HAVE CONDUCTORS ONE SIZE LARGER THAN NORMALLY REQUIRED WHETHER INDICATED ON PANEL SCHEDULE OR NOT.

10 - PROVIDE AN UPDATED TYPE / WRITTEN PANEL DIRECTORY IN ALL PANELS AFTER COMPLETION OF WORK.

11 - ALL CONDUCTORS, CABLES, AND RACEWAYS SHALL BE CONCEALED IN CEILING, OR WALL, UNO. ALL WIRING DEVICES SHALL BE INSTALLED RECESSED, UNO.

12 - ALL PENETRATIONS OF FLOORS AND WALLS SHALL BE FIRE STOPPED IN ACCORDANCE WITH IRC, NEC, AND NFPA.

13 - CAP ALL UNUSED PIPING IN CONCEALED SPACES.

14 - PATCHING AND REPAIRS SHALL MATCH EXISTING MATERIALS.

15 - THE CONTRACTORS SHALL PERFORM ALL TEST REQUIRED BY LOCAL AUTHORITIES.

16 - THE CONTRACTOR SHALL GUARANTEE ALL HIS /HER WORK AND MATERIALS FOR A PERIOD OF ONE YEAR AFTER THE ACCEPTANCE OF THE OWNER.

MISCELLANEOUS

WINDOWS

1 - ALL WINDOWS SHALL HAVE INSULATING GLASS, OR SINGLE GLASS WITH STORM WINDOWS OR EQUAL.

2 - SIZES INDICATED ON PLANS ARE NOMINAL ONLY. BUILDER TO CONSULT WITH WINDOW MANUFACTURER TO DETERMINE EXACT SIZES, ROUGH OPENINGS, ETC.

3 - EVERY SLEEPING ROOM SHALL HAVE AT LEAST ONE OPERABLE WINDOW OR EXTERIOR DOOR APPROVED FOR EMERGENCY EGRESS OR RESCUE. R310

5 - ALL EGRESS OR RESCUE WINDOWS FROM SLEEPING ROOMS MUST HAVE A MINIMUM NET CLEAR OPENING OF 5.7 SQUARE FEET. THE MINIMUM NET CLEAR OPENING HEIGHT DIMENSION SHALL BE 20 INCHES. R310

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G0002

HAZADOUS GLAZING LOCATIONS R308

THE FOLLOWING SHALL BE CONSIDERED SPECIFIC HAZARDOUS LOCATIONS FOR THE PURPOSES OF GLAZING:
1 - GLAZING IN SWINGING DOORS EXCEPT JALOUSIES.
2 - GLAZING IN FIXED AND SLIDING PANELS OF SLIDING DOOR ASSEMBLIES AND PANELS IN SLIDING AND BIFOLD CLOSET DOOR ASSEMBLIES.
3 - GLAZING IN STORM DOORS.
4 - GLAZING IN ALL UNFRAMED SWINGING DOORS.
5 - GLAZING IN DOORS AND ENCLOSURES FOR HOT TUBS, WHIRLPOOLS, SAUNAS, STEAM ROOMS, BATHTUBS AND SHOWERS. GLAZING IN ANY PART OF A BUILDING WALL ENCLOSING THESE COMPARTMENTS WHERE THE BOTTOM EDGE IS LESS THAN 60 INCHES MEASURED VERTICALLY ABOVE ANY STANDING G OR WALKING SURFACE.
6 - GLAZING, IN AN INDIVIDUAL FIXED OR OPERABLE PANEL ADJACENT TO A DOOR WHERE THE NEAREST VERTICAL EDGE IS WITHIN A 24-INCH ARC OF THE DOOR IN A CLOSED POSITION AND WHOSE BOTTOM EDGE IS LESS THAN 60 INCHES ABOVE THE FLOOR OR WALKING SURFACE.
7 - GLAZING IN AN INDIVIDUAL OR FIXED OR OPERABLE PANEL, OTHER THAN THOSE LOCATIONS DESCRIBED IN ITEMS 5 AND 6 ABOVE, THAT MEETS ALL OF THE FOLLOWING CONDITIONS:
A. EXPOSED AREA OF AN INDIVIDUAL PANE GREATER THAN 9 SQ. FT.
B. BOTTOM EDGE LESS THAN 18 INCHES ABOVE THE FLOOR.
C. TOP EDGE GREATER THAN 36 INCHES ABOVE THE FLOOR.
D. ONE OR MORE WALKING SURFACES WITHIN 36 INCHES HORIZONTALLY OF THE GLAZING.
8 - ALL GLAZING IN RAILING REGARDLESS OF AN AREA OR HEIGHT ABOVE A WALKING SURFACE. INCLUDED ARE STRUCTURAL BALUSTER PANELS AND NONSTRUCTURAL IN-FILL PANELS.
9 - GLAZING ADJACENT TO STAIRWAYS, LANDING AND RAMPS WITHIN 36 INCHES HORIZONTALLY OF A WALKING SURFACE WHEN THE EXPOSED SURFACE OF TRUE GLASS IS LESS THEN 60 INCHES ABOVE THE PLANE OF THE ADJACENT WALKING SURFACE.
10 - GLAZING ADJACENT TO STAIRWAYS WITHIN 60 INCHES HORIZONTALLY OF THE BOTTOM TREAD OF A STAIRWAY IN ANY DIRECTION WHEN THE EXPOSED SURFACE OF THE GLASS IS LESS THAN 60 INCHES ABOVE THE NOSE OF THE TREAD.

EXCEPTIONS

THE FOLLOWING PRODUCTS, MATERIALS AND USES ARE EXEMPT FROM THE ABOVE HAZARDOUS LOCATIONS:
1 - OPENING IN DOORS THROUGH WHICH A 3-INCH SPHERE IS UNABLE TO PASS.
2 - DECORATIVE GLASS IN ABOVE ITEMS 1, 6 OR 7.
3 - GLAZING IN ABOVE ITEM 6, WHEN THERE IS AN INTERVENING WALL OR OTHER PERMANENT BARRIER BETWEEN THE DOOR AND GLAZING.
4 - GLAZING IN ABOVE ITEM 6, IN WALLS PERPENDICULAR TO THE PLANE OF THE DOOR IN A CLOSED POSITION OR WHERE ACCESS THROUGH THE DOOR IS TO A CLOSET OR STORAGE AREA 3 FEET OR LESS IN DEPTH.
5 - GLAZING IN ABOVE ITEMS 7 AND 10, WHEN A PROTECTIVE BAR IS INSTALLED ON THE ACCESSIBLE SIDE(S) OF THE GLAZING 36 INCHES + 2 INCHES ABOVE THE FLOOR. THE BAR SHALL BE CAPABLE OF WITHSTANDING A HORIZONTAL LOAD OF 50 LBS. PER LINEAR FT. WITHOUT CONTACTING THE GLASS AND BE A MINIMUM OF 1-1/2 INCHES IN HEIGHT. 6 - OUTBOARD PANES IN INSULATING GLASS UNITS AND OTHER MULTIPLE GLAZED PANELS IN ABOVE ITEM 7 WHEN THE BOTTOM EDGE OF THE GLASS IS 25 FT OR MOVE ABOVE GRADE, A ROOF, WALKING SURFACE, OR OTHER HORIZONTAL (WITHIN 45 DEGREES OF HORIZONTAL) SURFACE ADJACENT TO THE GLASS EXTERIOR.
7 - LOUVERED WINDOWS AND JALOUSIES COMPLYING WITH THE REQUIREMENTS OF R308.2.
8 - MIRRORS AND OTHER GLASS PANELS MOUNTED OR HUNG ON A SURFACE THAT PROVIDES A CONTINUOUS BACKING SUPPORT.
9 - SAFETY GLAZING IN ABOVE ITEMS 10 AND 11 IS NOT REQUIRED WHERE:
A. THE SIDE OF A STAIRWAY, LANDING OR RAMP HAS A GUARDRAIL OR HANDRAIL, INCLUDING BALUSTERS OR IN-FILL PANELS, COMPLYING WITH THE PROVISIONS OF SECTIONS 1012 AND 1607.7 OF THE IBC.
B. THE PLANE OF THE GLASS IS GREATER THAN 18 INCHES FROM THE RAILING.

ATTIC VENTILAION

ENCLOSED ATTIC TRUSSES SPECIES AND ENCLOSED ROOF RAFTERS SHALL HAVE CROSS VENTILATION FOR EACH SEPARATE SPACE WITH SCREENED VENTILATING OPENING PROTECTED AGAINST THE ENTRANCE OF MOISTURE AND RAIN IN ACCORDANCE WITH THE 2015 IRC, LATEST EDITION AND ALL STATE LOCAL CODES.

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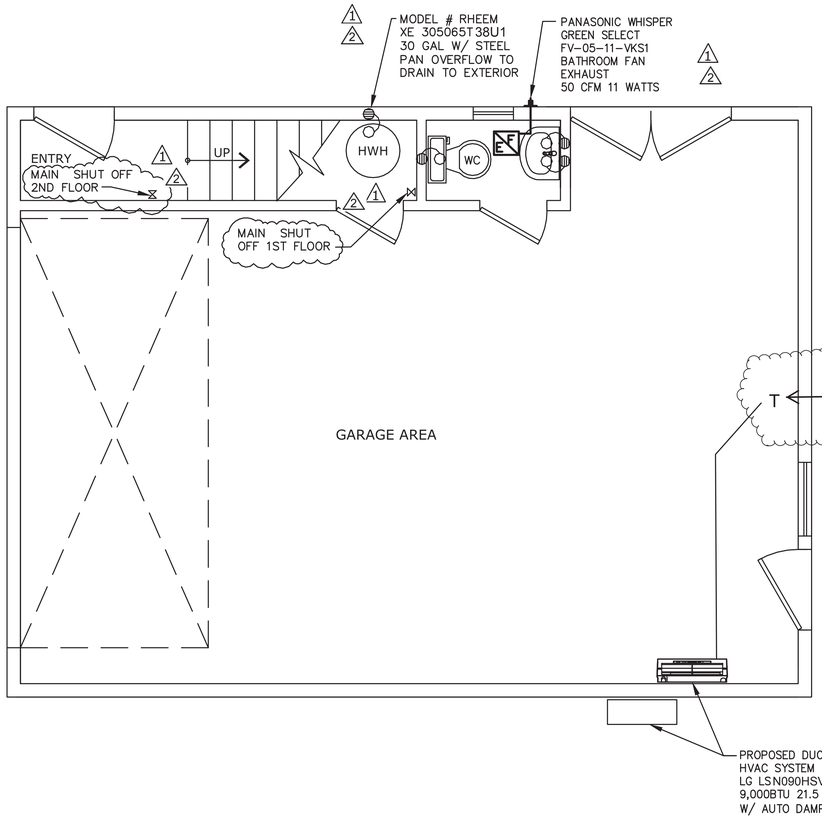
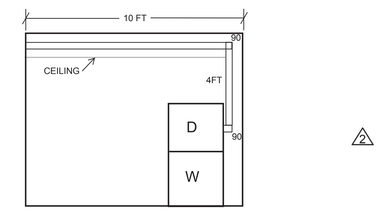
SPECIFICATIONS

G0003



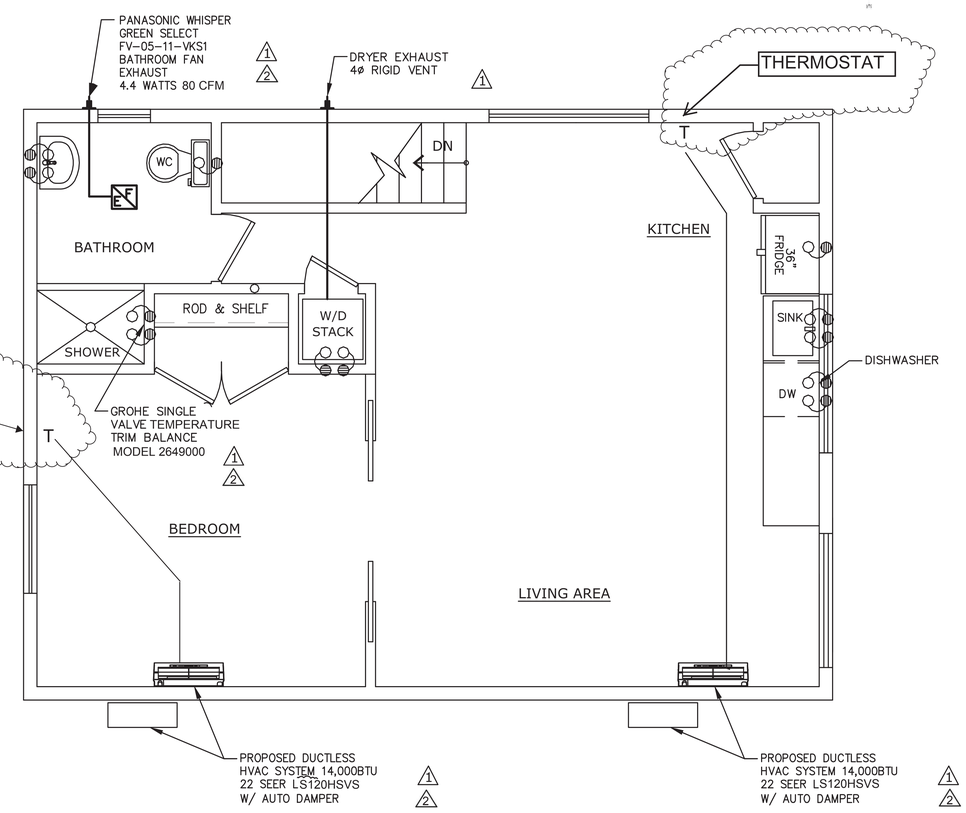
14 1ST FLOOR MECHANICAL

SCALE: 1/4"=1-0"



16 CROSS SECTION OF DRYER VENT

NOT TO SCALE



15 2ND FLOOR MECHANICAL

SCALE: 1/4"=1-0"

SCALE 1/4" = 1'

−2 0 2 4 8

DISTRICT OF COLUMBIA
GEORGE CARL GERBER
No. PE 907801
REGISTERED
PROFESSIONAL ENGINEER

APRIL 8, 2019

4511 CHESAPEAKE ST NW
WASHINGTON, DC 20016

Owners:
Nick Alten

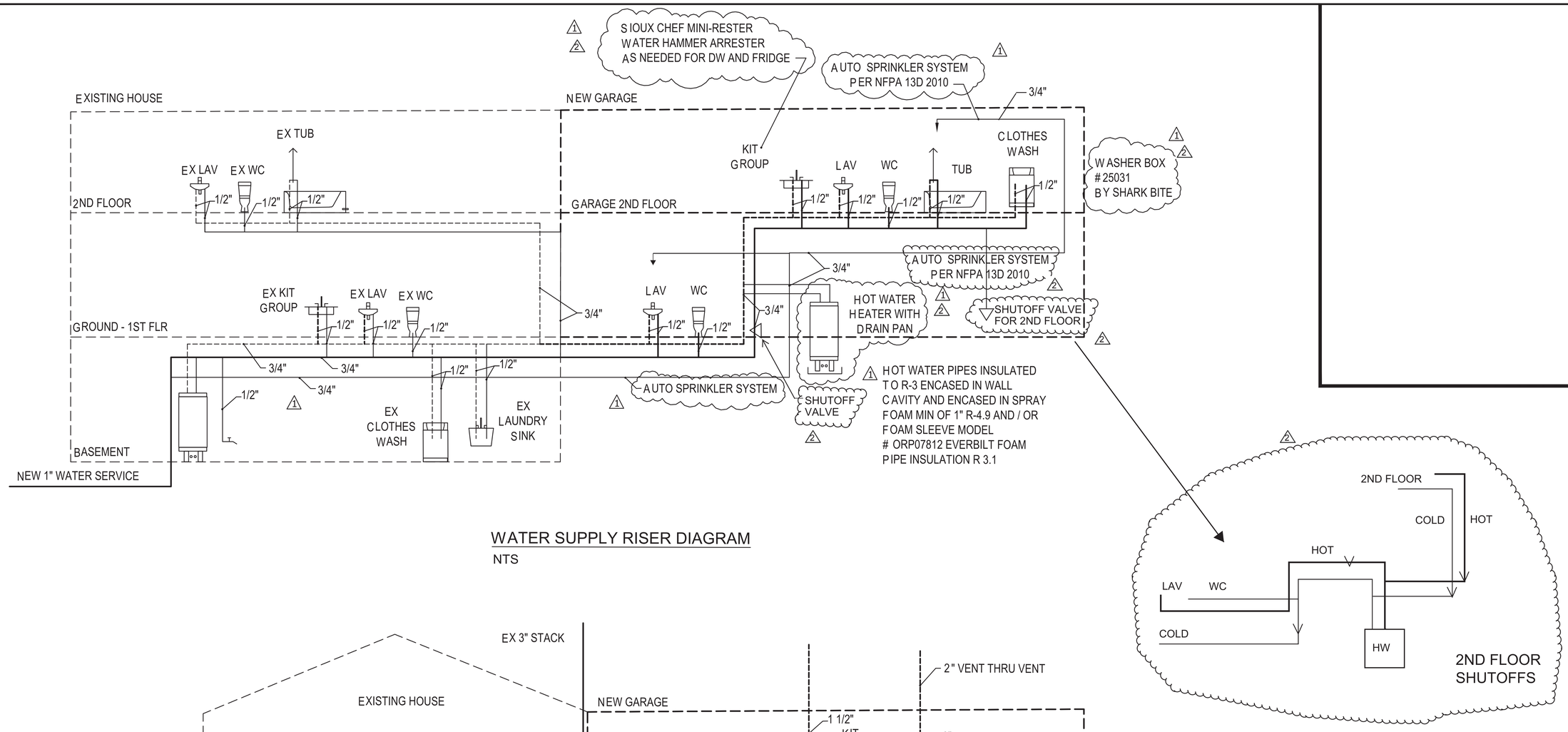
Engineer:
Better Space LLC
4511 Chesapeake St NW
Washington DC

REVISIONS

ITEM	DATE	DESCRIPTION
1	6-30-2016	PER COMMNETS
2	04-08-2019	PER COMMENTS
3	06-14-2019	PER COMMENTS

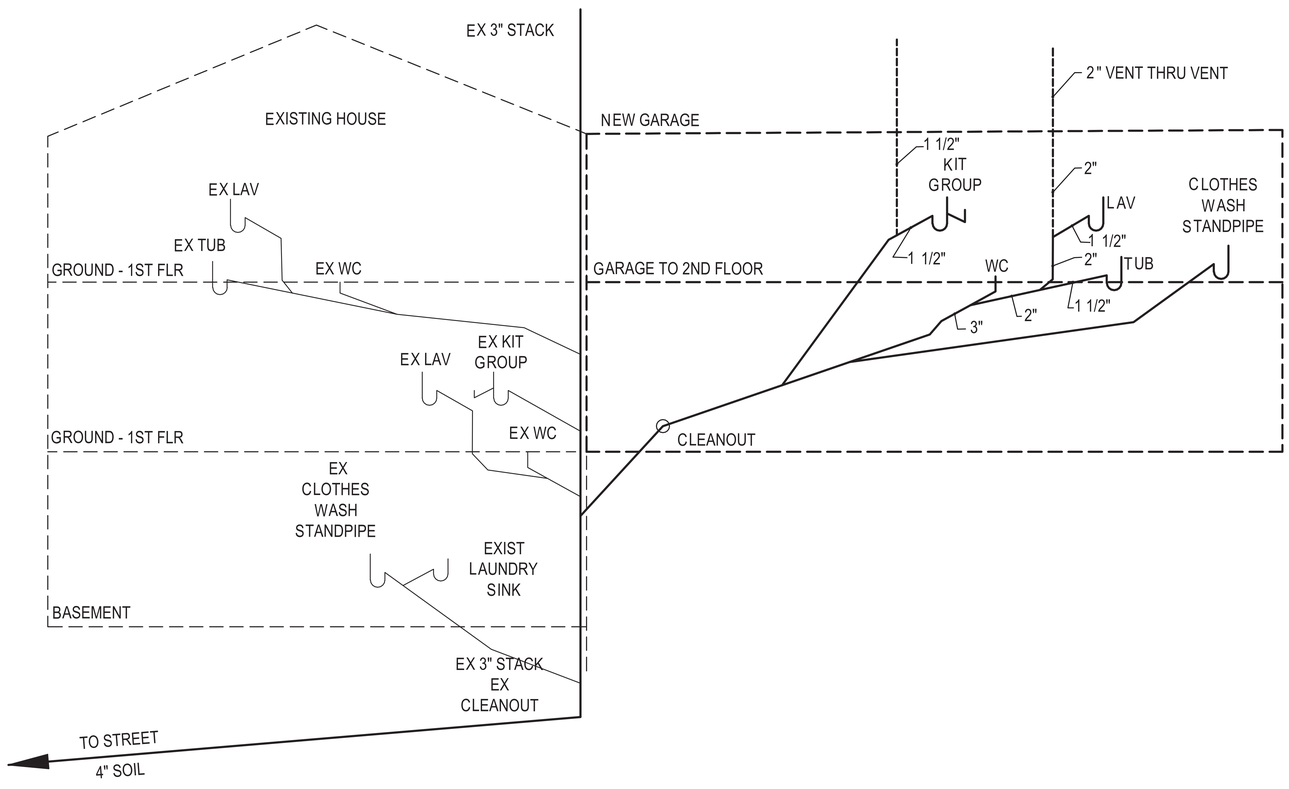
sheet name:
MECHANICAL PLANS

M0001



WATER SUPPLY RISER DIAGRAM

NTS



WASTE-VENT RISER DIAGRAM

NTS

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sheet name:
RISER DIAGRAMS

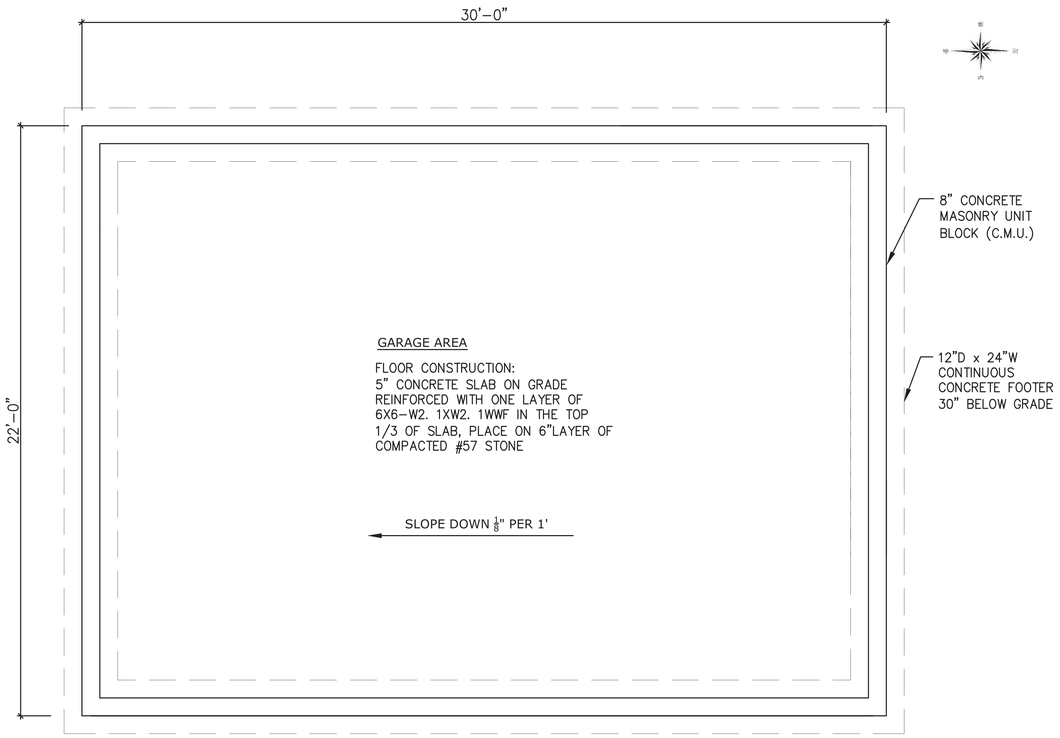
P0001

APRIL 8, 2019

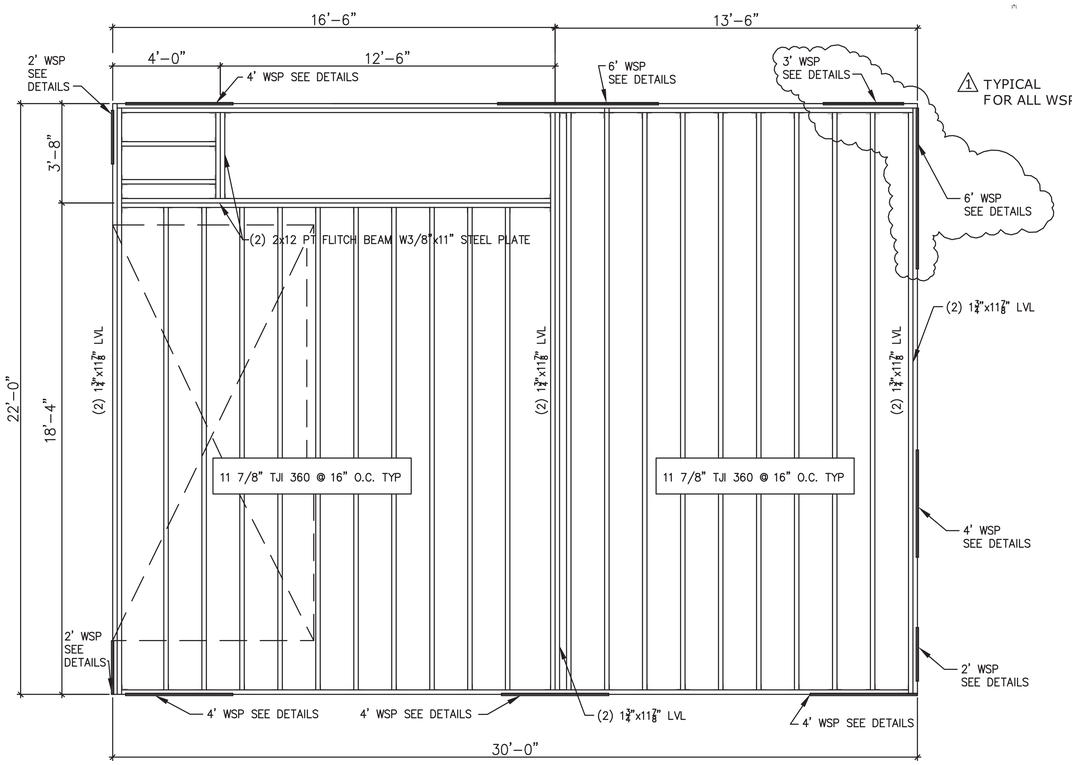
GEORGE C. GERBER, P.E.
Consulting Engineer
1309 Ballantrae Court
McLean, Virginia 22101
(703) 442-0309
(703) 821-8873 Fax

⚠1 STRUCTURAL NOTES

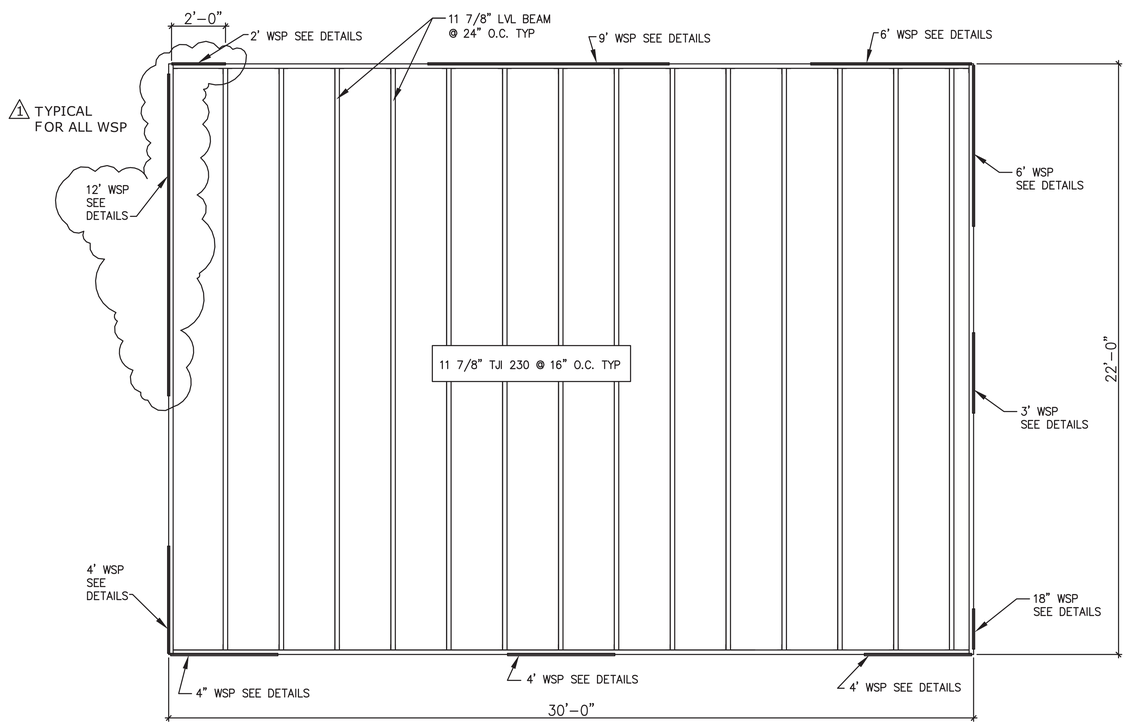
1. USE DISTRICT OF COLUMBIA BUILDING CODE - IRC 2012 WITH LATEST AMMENDMENTS.
2. LOADS- LIVE –FLOOR RESIDENTIAL 40 PSF; ROOF – 30 PSF, SNOW; WIND – 90 MPH, EXPOSURE B, IMPORTANCE 1; WIND BRACING BY CONTINUOUS SHEATHING METHOD AND PORTAL FRAME.
3. FOUNDATIONS ARE DESIGNED FOR A SOIL BEARING PRESSURE OF 1500 PSF. FOOTING BOTTOMS SHALL BE 30" BELOW GRADE OR 12" INTO NATURAL SOIL WHICHEVER IS GREATER.
4. CONCRETE SHALL BE 3000 PSI @ 28 DAYS. REINFORCING STEEL SHALL BE CONCRETE – 3000 PSI @ 28 DAYS. REINFORCING STEEL ASTM A615 GRADE 60. USE ACI STANDARDS.
5. FRAMING LUMBER SHALL BE STRUCTURAL GRADE, Fb = 1200 PSI MINIMUM. ANY LUMBER WITHIN 8" OF SOIL SHALL BE PRESSURE TREATED. WIND BRACING PANELS SHALL BE ½" PLYWOOD, WIDTH AS SHOWN ON THE DRAWINGS BY STORY HEIGHT. NAIL ALL EDGES WITH 8D NAILS @ 6" CENTERS AND 12" CENTERS ON INTERMEDIATES. ROOF RAFTERS SHALL HAVE HURRICANE CLIPS.
6. MANUFACTURED LUMBER, LVL'S SHALL HAVE Fb = 2650 PSI, E = 1.9MPSI. USE MANUFACTURER'S STANDARDS.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FIELD MEASUREMENTS.



16 FOUNDATION PLAN
SCALE: 1/4"=1-0"



⚠1 17 SECOND FLOOR FRAMING
SCALE: 1/4"=1-0"



18 ROOF FRAMING PLAN
SCALE: 1/4"=1-0"

SCALE 1/4" = 1'
–2 0 2 4 8

DISTRICT OF COLUMBIA
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PROFESSIONAL ENGINEER
JULY 5, 2016

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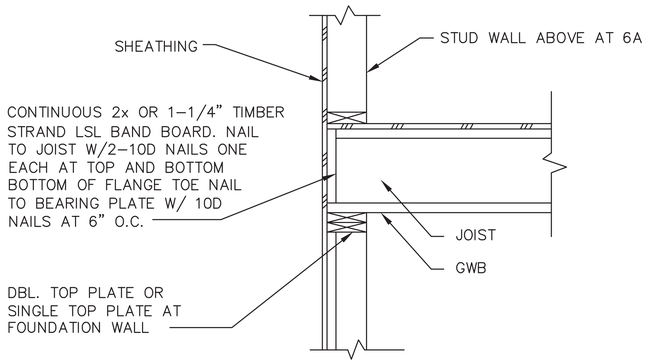
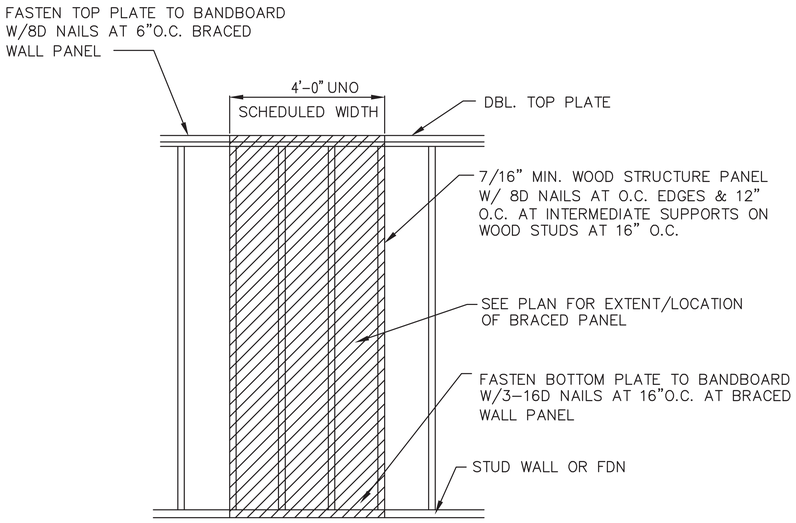
sheet name:
FOUNDATION & FRAMING

S0001

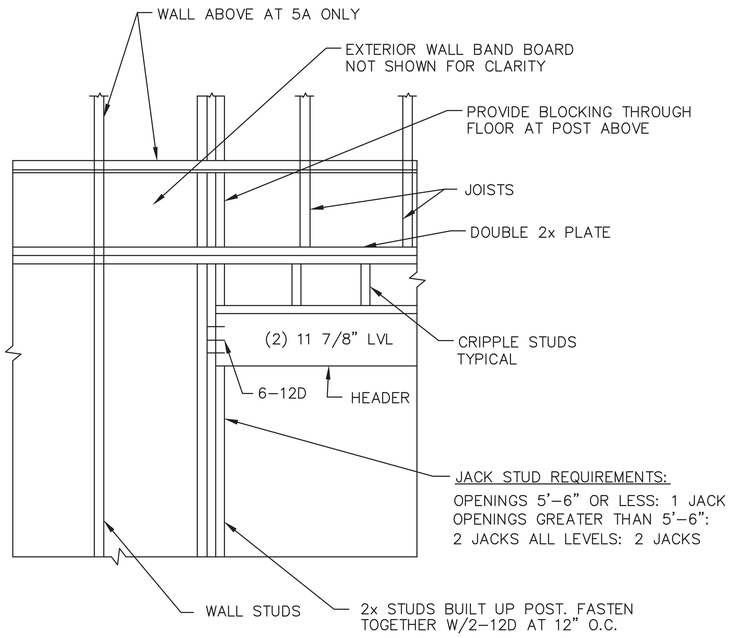


1 JOIST AT EXTERIOR WALL
NOT TO SCALE

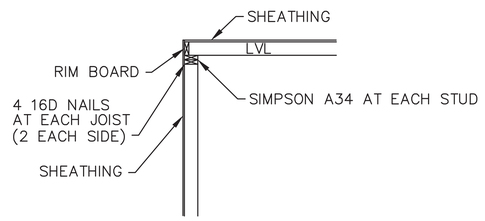


SEE PLAN FOR LOCATIONS

1 BRACED WALL PANEL ELEVATION (WSP)
NOT TO SCALE



1 TYPICAL DROPPED HEADER AT OPENING
NOT TO SCALE



1 ROOF DETAIL
NOT TO SCALE

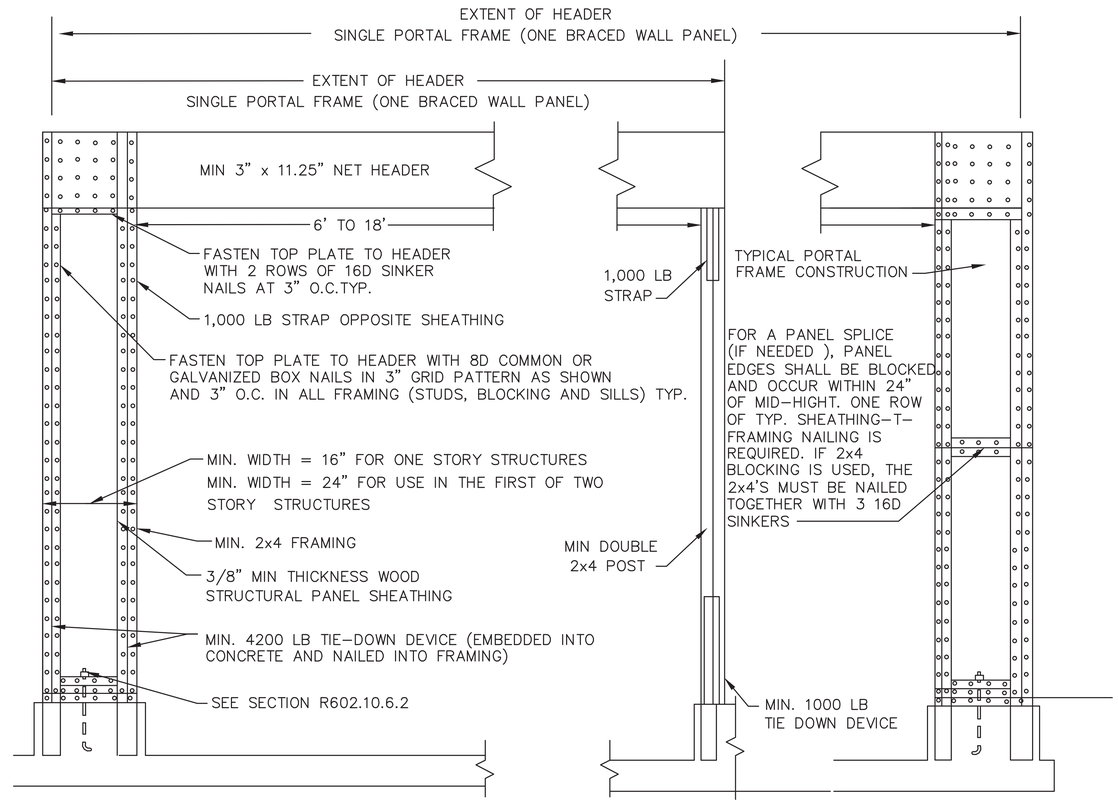


FIGURE 10.6.2
1 ADJACENT TO A DOOR OR WINDOW OPENING
2012 INTERNATIONAL RESIDENTIAL CODE

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JULY 5, 2016

sheet name:
STRUCTURAL DETAILS

S0002