

DALE RESIDENCE

JAMES & HEATHER DALE

1417 YELLOW SPRINGS ROAD
CHESTER SPRINGS, PA 19425

WEST PIKELAND TOWNSHIP - CHESTER COUNTY

RENOVATIONS AND ADDITION



523 Kimberton Road, Suite 118 Phoenixville, PA 19460
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Robin J. Kohn, AIA
Commonwealth of Pennsylvania
License No. RA-11327-X

Contact Person:
Edward (Kipp) Happ
(610) 917-8831

LEGEND

ADJ. ADJUSTABLE	MIN. MINIMUM	USGS U.S. GEOLOGICAL SURVEY
AGL. ABOVE GROUND LEVEL	MTL. METAL	WWF. WELDED WIRE FABRIC
AMSL. ABOVE MEAN SEA LEVEL	NIC. NOT IN CONTRACT	A-1. ANTENNA MARK NUMBER
APPROX. APPROXIMATE	NTS. NOT TO SCALE	(E). EXISTING
CAB. CABINET	OC. ON CENTER	(N). NEW
CONC. CONCRETE	OHP. OVERHEAD POWER	(P). PROPOSED
CONT. CONTINUOUS	OHT. OVERHEAD TELCO	(C). CENTERLINE
CONST. CONSTRUCTION	PWR. POWER	(P). PLATE
COAX. COAXIAL	SF. SQUARE FOOT	B/W. BARBED WIRE
CJ. CONSTRUCTION JOINT	SHT. SHEET	C/L. CHAINLINK
DIA. DIAMETER	SIM. SIMILAR	#. DIAMETER
DTL. DETAIL	SS. STAINLESS STEEL	H. HEIGHT
DWG. DRAWING	STL. STEEL	W. WIDTH
EA. EACH	TELCO. TELEPHONE COMPANY	D. DEPTH
ELEC. ELECTRIC	TO. TOP OF	W/. WITH
ELEV. ELEVATION	TYP. TYPICAL	
EQ. EQUAL	UON. UNLESS OTHERWISE NOTED	
EQUIP. EQUIPMENT	VERT. VERTICAL	
EXT. EXTERIOR	VIF. VERIFY IN FIELD	
FF. FINISH FLOOR	XFMR. TRANSFORMER	
FTG. FOOTING		
GA. GAUGE		
GALV. GALVANIZED		
GC. GENERAL CONTRACTOR		
GRND. GROUND		
HORIZ. HORIZONTAL		
INT. INTERIOR		
LG. LONG		
MAX. MAXIMUM		
MFG. MANUFACTURER		

2	REVISION NUMBER
DATUM ELEVATION	
MATCH LINE	
(TB) TEST BORING	
(WP) WORK POINT	
(DP) DATUM POINT	

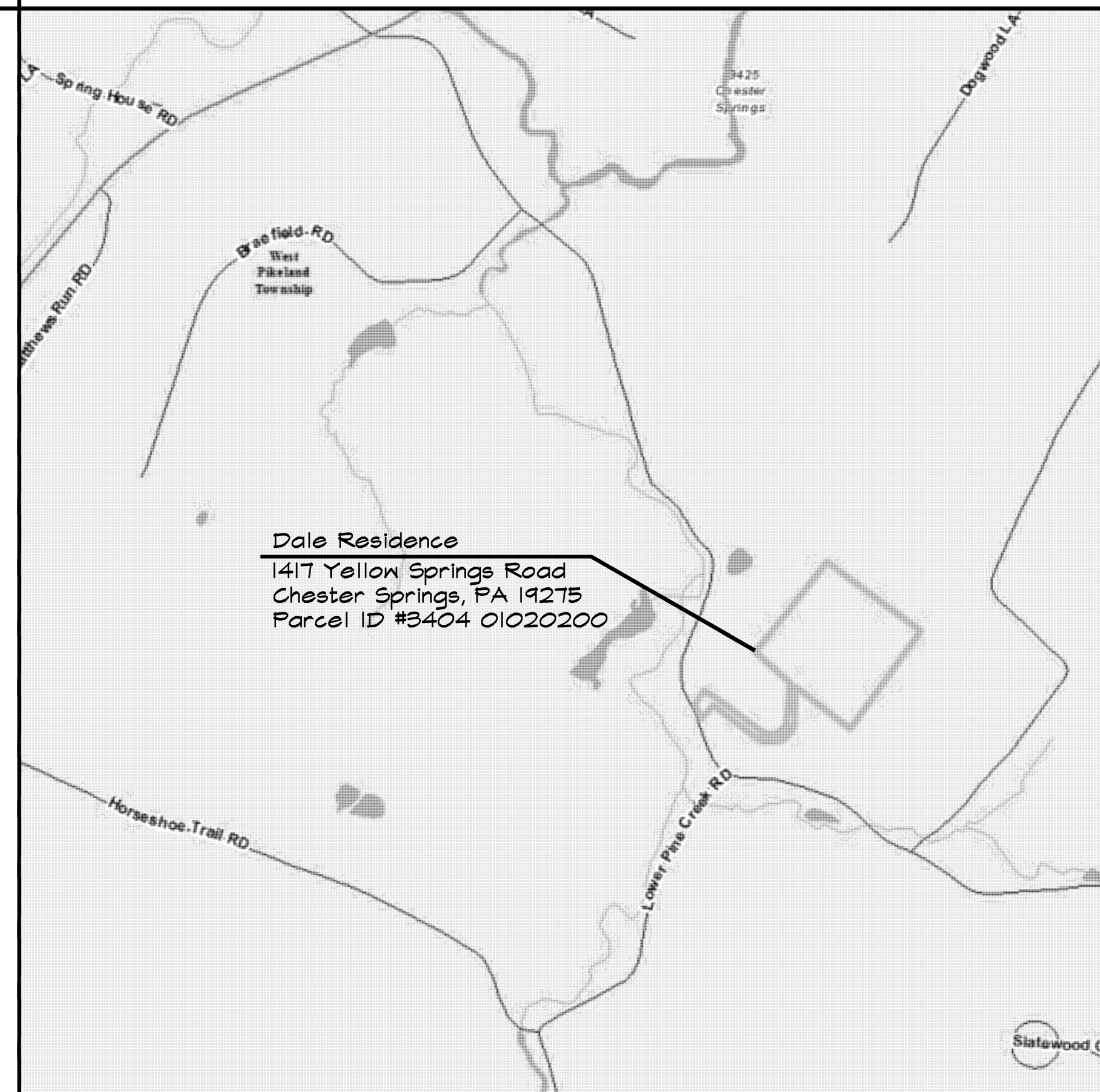
2	SECTION NUMBER
S-1	SHEET NUMBER
DRAWING SECTION	
4	SECTION NUMBER
S-1	SHEET NUMBER
DETAIL	
5	SECTION NUMBER
E-1	SHEET NO.
DETAIL ENLARGEMENT	

CAST IN PLACE OR PRE-CAST CONCRETE	CRUSHED STONE, GRAVEL OR POROUS FILL	STEEL
LIGHT WEIGHT CONCRETE	PLASTER CEMENT, SAND, GROUT	METAL, ALUMINUM, ETC.
EARTH UNDISTURBED	ROCK OR STONE	CONCRETE MASONRY UNIT
EARTH BACK FILL	RIGID INSULATION	SUPERIOR WALL

DRAWING INDEX

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S-4	STRUCTURAL - ROOF & CEILING FRAMING PLAN
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S-6	STRUCTURAL - DETAILS & NOTES
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E-2	ELECTRICAL - NEW WORK FIRST & SECOND FLOOR, SINGLE LINE AND LEGEND

VICINITY MAP



GENERAL NOTES

- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITION OF THE 2009 IRC CODE ADOPTED BY WEST PIKELAND TOWNSHIP IN THE COMMONWEALTH OF PENNSYLVANIA. CONTRACTOR TO HAVE ALL REQUIRED LOCAL LICENSES.
- GENERAL CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS, STRUCTURE AND MATERIALS, AND SHALL BRING ANY DISCREPANCIES TO THE IMMEDIATE ATTENTION OF THE ARCHITECT.
- CONTRACTOR TO HAVE INSURANCE AS REQUIRED BY OWNER.
- THE USE OF THE PENNSYLVANIA ONE-CALL SYSTEM, INC. IS REQUIRED PRIOR TO ANY EXCAVATION. COORDINATE RELOCATION OF UTILITIES AS REQUIRED.
- FOLLOWING NOTES ARE MINIMUM STANDARDS FOR THE PROJECT. ALL NOTES ON DRAWINGS SUPERSEDES ALL COVER SHEET GENERAL NOTES.
- PROVIDE PORTABLE JOB TOILET AND TELEPHONE ON SITE FOR THE DURATION OF THE PROJECT. (AS REQUIRED BY OWNER).
- RELOCATION OF EXISTING TREES AND SHRUBS TO BE BY OWNER. FINAL SEEDING AND LANDSCAPING TO BE PROVIDED BY OWNER.
- PROVIDE EXCAVATION AS REQUIRED BY DRAWINGS. SOIL BEARING STRENGTH TO BE MINIMUM 3000 P.S.F.
- CONTRACTOR TO LAYOUT PARTITIONS AND ALL ROUGH OPENINGS FOR ARCHITECT/OWNER TO REVIEW FOR DESIGN INTENT. DO NOT PROCEED WITH INSTALLATION OF STUDS WITHOUT THIS REVIEW APPROVAL. CONTRACTOR SHALL COORDINATE AND VERIFY CONDITIONS TO ENSURE PROPER FIT. REVIEW FOR DESIGN INTENT DOES NOT RELEASE CONTRACTOR FROM THE RESPONSIBILITY TO MAINTAIN CRITICAL DIMENSIONS AND CLEARANCES.
- NO BACKFILLING OR ROUGH GRADING SHALL BE DONE UNTIL THE FIRST FLOOR DECK IS COMPLETELY INSTALLED.
- ALL DIMENSIONS ARE TO ROUGH STUD FACE, CONCRETE OR C.M.U. FACE, AND EXTERIOR SHEATHING FACE.
- COORDINATE FINISH WALL DIMENSIONS WITH MILLWORK AND FURNITURE SYSTEM DIMENSIONS AS REQUIRED.
- REMOVE ALL CONSTRUCTION DEBRIS FROM PROPERTY AND PROVIDE DAILY CLEANUP TO SITE DUMPSTER.
- CONTRACTOR TO PROVIDE FINAL GRADING AND GRADE EARTH AWAY FROM FROM ALL PARTS OF NEW CONSTRUCTION AND MAINTAIN 8" (MIN) DISTANCE FROM TOP OF FINAL GRADE TO WOOD WALL FRAMING.
- VERIFY WITH OWNER CONSTRUCTION STAGING AND CONSTRUCTION DELIVERY LOCATIONS.
- PROVIDE ALL WALL, BASE, CAP, THROUGH-WALL, COUNTER FLASHINGS, GUTTERS AND DOWNSPOUTS ETC. AS REQUIRED TO PREVENT THE ENTRANCE OF MOISTURE AND WATER.
- BUILDING SHALL BE SHEATHED WITH (MIN.) WEATHER RESISTIVE BARRIER AND 15# ASPHALT-IMPREGNATED FELT.
- WINDOW SIZES ARE BASED UPON ANDERSON 400 SERIES WINDOWS. ALL GLAZING OVER 9 SQUARE FEET AND/OR WITHIN 18" OF FLOOR AND IN HAZARDOUS LOCATIONS SHALL BE TEMPERED.
- METAL HEAD FLASHING SHALL BE INSTALLED IN ALL WINDOWS. MINIMUM 6" WIDE FLASHING TAPE SHALL BE INSTALLED AROUND ALL WINDOWS. FOLLOW ALL MANUF. RECOMMENDATION.
- ALL STUD FRAMED WALLS GREATER THAN 8'-6" VERTICALLY SHALL BE Laterally BRACED AT THE MIDPOINT WITH SOLID BLOCKING.
- INTERIOR PARTITIONS SHALL RECEIVE 1/2" (MIN.) GYPSUM DRYWALL. GARAGE WALLS AND CEILINGS SHALL RECEIVE 5/8" (TYPE"X") FIRE RATED GYPSUM DRYWALL.
- ALL NEW WOODWORK TO BE PAINT GRADE FINGER JOINTED PINE (LINO) INSTALLED, SANDED AND READY FOR FINISH. VERIFY WITH OWNER BEFORE PURCHASE, ANY SUBSTITUTIONS IN FINISH WOODWORK MATERIALS. (IE HARD WOODS, STAIN GRADE, ECT.).
- PROVIDE ALL REQUIRED CEMENTIOUS BACKER-BOARD AS REQ'D AT ALL AREAS OF MARBLE/GRAVITE/ TILE WORK.
- VERIFY ALL FLOORING HARDWOOD, TILE & CARPETING AND PADDING WITH OWNER. PROVIDE SAMPLES AS REQUIRED.
- FILL, SPACKLE (3-COATES), SAND AND PRIME/PAINT ALL NEW DRYWALL WORK IN PREPARATION FOR FINAL FINISH.
- PAINT TO BE SHERWIN WILLIAMS OR APPROVED EQUAL, ACRYLIC LATEX. ALL NEW & EXISTING INTERIOR AND EXTERIOR WALLS AND CEILINGS TO RECEIVE ONE COAT PRIMER AND MINIMUM 2 COATS FINISH.
- ALLOW A MINIMUM OF 8" BETWEEN THE TOP OF FOUNDATION AND GRADE AND A MINIMUM OF 6" BETWEEN FINISH GRADE AND SHEATHING OR SIDING.
- PORTLAND CEMENT STUCCO SHALL CONSIST OF (3 COATS) SCRATCH, BROWN AND FINISH COATS (MIN 7/8" THK.) APPLIED OVER (MIN.) 2.4 SELF FURRING GALV. WIRE LATH AND TWO LAYERS OF 30# ASPHALT-IMPREGNATED FELT.
- MASONRY AND STONE VENEERS SHALL BE ANCHORED TO SHEATHING WITH GALVANIZED CORRUGATED METAL TIES AT 32" O.C. HORIZONTALLY AND 16" O.C. VERTICALLY. FLASHING SHALL EXTEND BELOW MASONRY OR STONE AT ALL SILLS; WEEP HOLES SHALL BE PROVIDED AT 2'-0" O.C. AT BASE OF CAVITY AND 6" ABOVE GRADE.
- NO STRUCTURAL CHANGES SHALL BE MADE WITHOUT PRIOR APPROVAL BY THE ARCHITECT / ENGINEER.
- ALL SMOKE & CARBON MONOXIDE DETECTORS SHALL BE INTERCONNECTED. ALL DETECTORS SHALL HAVE A PRIMARY 120 VOLT SUPPLY AND A SECONDARY SYSTEM CONSISTING OF A BATTERY BACK-UP.
- ELECTRICAL CONTRACTOR TO BE LICENSE AND INSURANCE WITH THE LOCAL MUNICIPALITY AND THE STATE AS REQUIRED. ELECTRICAL CONTRACTOR TO OBTAIN ALL PERMITS.
- ELECTRICAL CONTRACTOR TO VERIFY CAPACITY OF INCOMING SERVICE TO SERVE THE NEW SPACES/ROOMS AS INDICATED. PROVIDE ALL ATTENDANT WIRING, PANELS, ETC., AS REQ'D.
- ELECTRICAL CONTRACTOR TO VERIFY FINAL NO., STYLE, COLOR, TYPES AND LOCATIONS OF ALL OUTLETS, SWITCHES, FIXTURES, ETC., WITH OWNER PRIOR TO ORDERING/INSTALLATION.
- ALL MECHANICAL WORK TO BE DESIGN BUILD. MECHANICAL CONTRACTOR TO BE LICENSE AND INSURANCE WITH THE LOCAL MUNICIPALITY AND THE STATE AS REQUIRED. HVAC CONTRACTOR TO OBTAIN ALL PERMITS. OWNER TO APPROVE ALL NEW GRILLE LOCATIONS AND STYLES PRIOR TO INSTALLATION (INCLUDING ALL ATTENDANT EQUIPMENT LOCATIONS).
- PLUMBING CONTRACTOR TO BE LICENSE AND INSURANCE WITH THE LOCAL MUNICIPALITY AND THE STATE AS REQUIRED. PLUMBING CONTRACTOR TO OBTAIN ALL PERMITS.
- PLUMBING CONTRACTOR TO EXTEND ALL PLUMBING LINES AS REQUIRED FOR ALL FIXTURES. SCOPE OF WORK TO INCLUDE ALL HOT AND COLD WATER FEEDS, WASTE PIPES OUT, STACK & VENTS, SETTING OF FIXTURES, GAS PIPING AND ANY AND ALL HOOK-UPS/TIE-INS AS REQUIRED.

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1417 Yellow Springs Road
Chester Springs, PA 19425

West Pikefield Township
Chester County

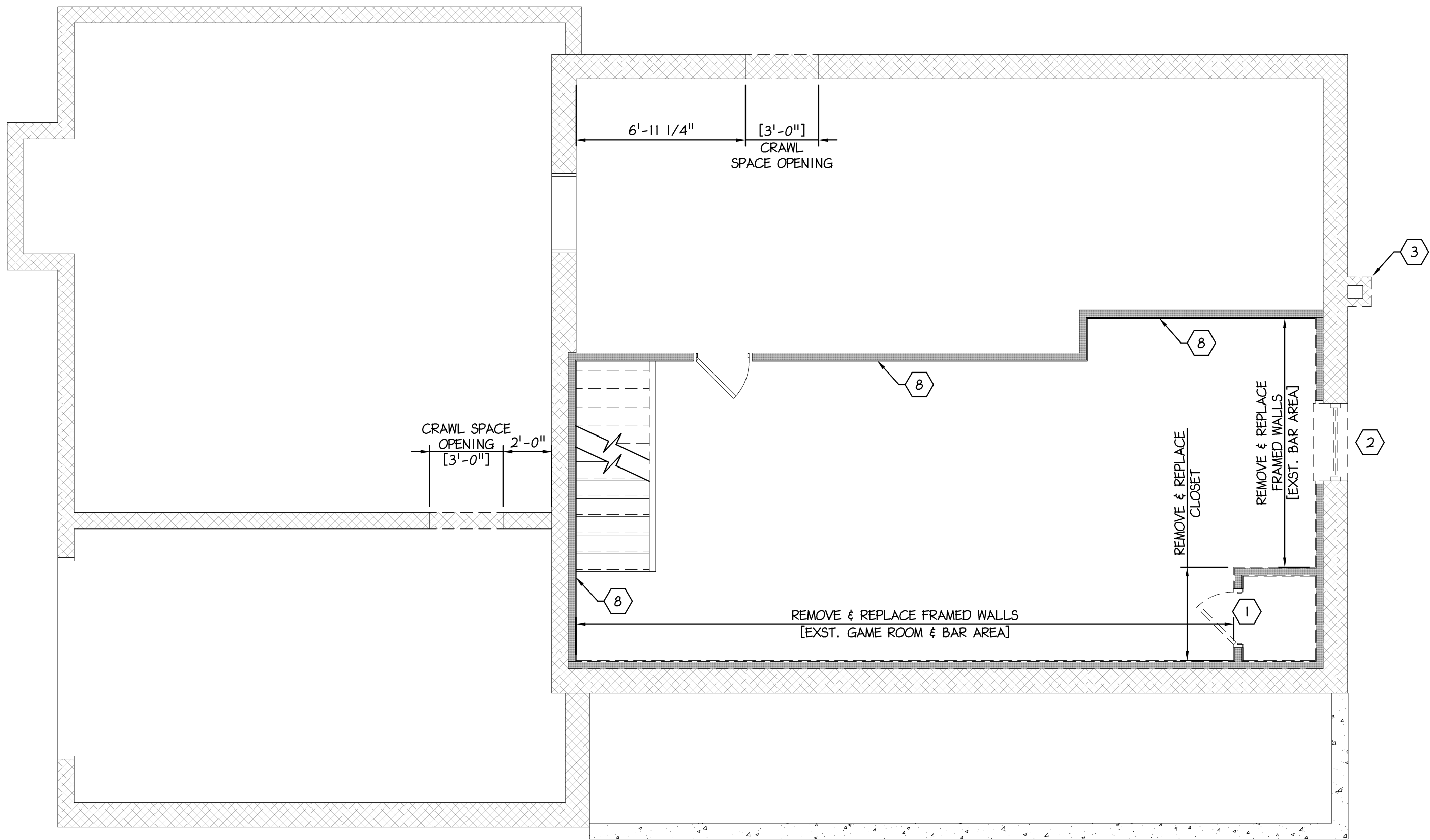
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TITLE SHEET

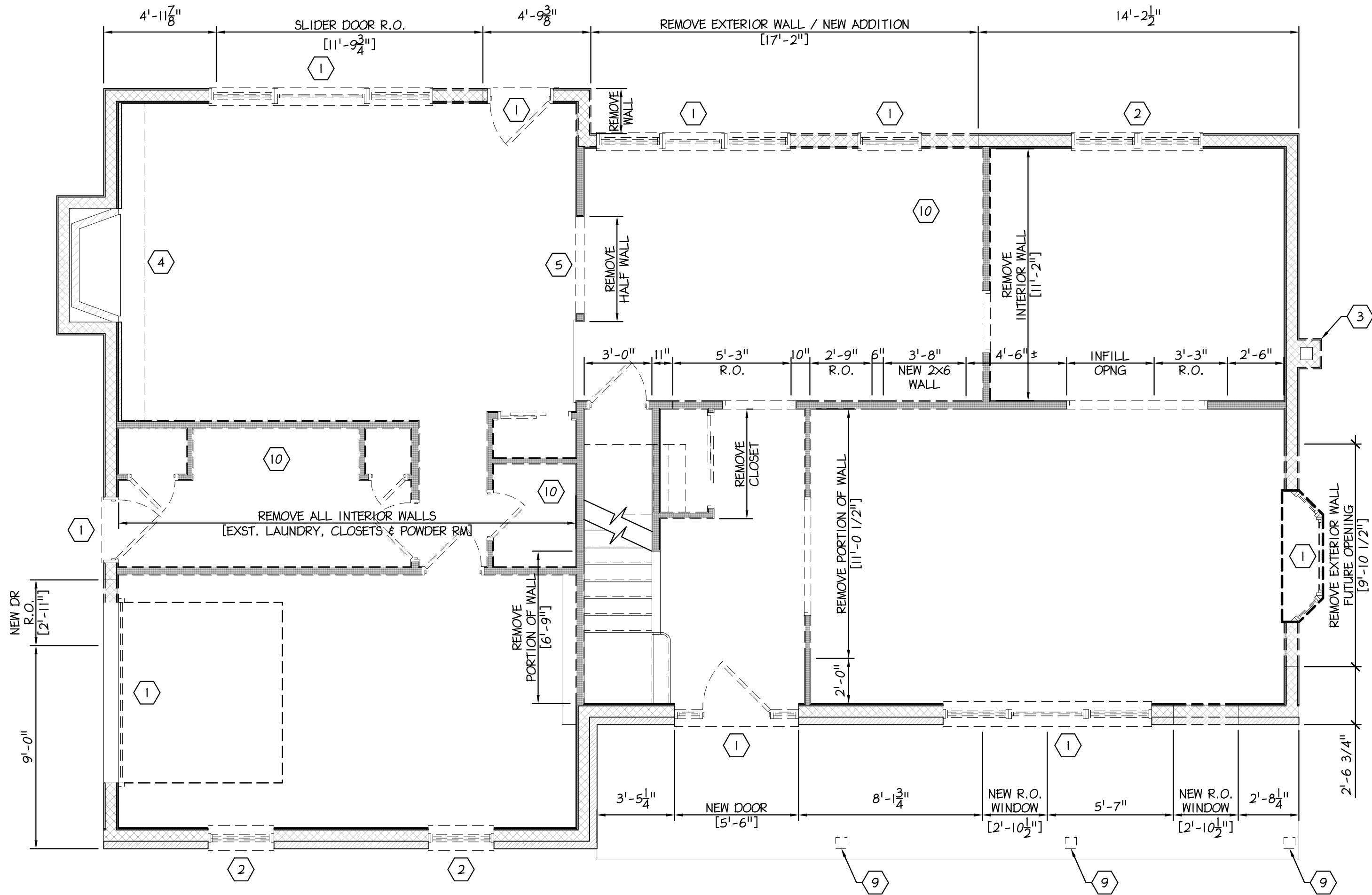
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T-1

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1 DEMOLITION - BASEMENT PLAN
D-1 Scale: 1/4" = 1'- 0"



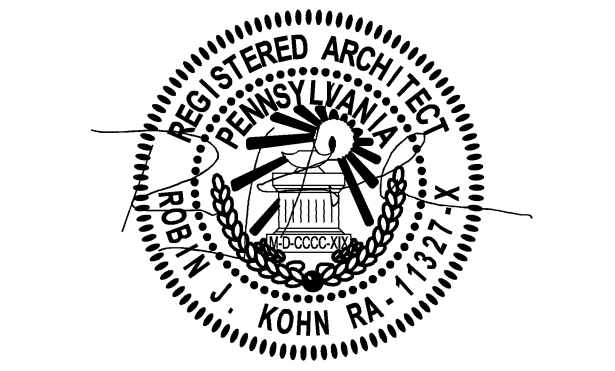
2 DEMOLITION - FIRST FLOOR PLAN
D-1 Scale: 1/4" = 1'- 0"

DEMOLITION NOTES	
1	REMOVE WINDOWS, DOORS OR OVERHEAD DOOR IN THERE ENTIRETY TO ACCOMMODATE NEW WORK. PATCH TO MATCH EXISTING WALL THICKNESS.
2	REMOVE WINDOW AND DROP SILL TO ACCOMMODATE NEW WINDOW REPLACEMENT.
3	REMOVE EXISTING CHIMNEY IN IT'S ENTIRETY.
4	REMOVE FIREPLACE RAISED HEARTH AND STONE SURROUND TO ACCOMMODATE NEW WORK.
5	ENLARGE FAMILY ROOM OPENING AND STEP TO ACCOMMODATE NEW WORK.
6	EXISTING STAIR LANDING TO BE ENLARGED TO 3'-6\"/>
7	EXTEND EXISTING CHIMNEY MASONRY FLUE TO ACCOMMODATE NEW 2ND FLOOR ADDITION HEIGHT.
8	REMOVE WALL FINISH (WOOD PANELING) TO ACCOMMODATE NEW WORK.
9	REMOVE PORCH COLUMNS TO ACCOMMODATE NEW WORK.
10	REMOVE ALL CABINETS, PLUMBING FIXTURES AND APPLIANCES TO ACCOMMODATE NEW WORK.

DEMOLITION GENERAL NOTES	
1.	INSTALL TEMPORARY SUPPORT WALLS PRIOR TO THE REMOVE OF BEARING WALLS.
2.	COORDINATE AND VERIFY THE NEW ROUGH OPENINGS WITH THE WINDOW AND DOOR MANUFACTURER.
3.	GENERAL CONTRACTOR SHALL BRING ALL DISCREPANCIES TO THE IMMEDIATE ATTENTION OF THE ARCHITECT OR ENGINEER.



Betzwood AssociatesPC
Architects & Engineers
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Regis W. Kubit, PE



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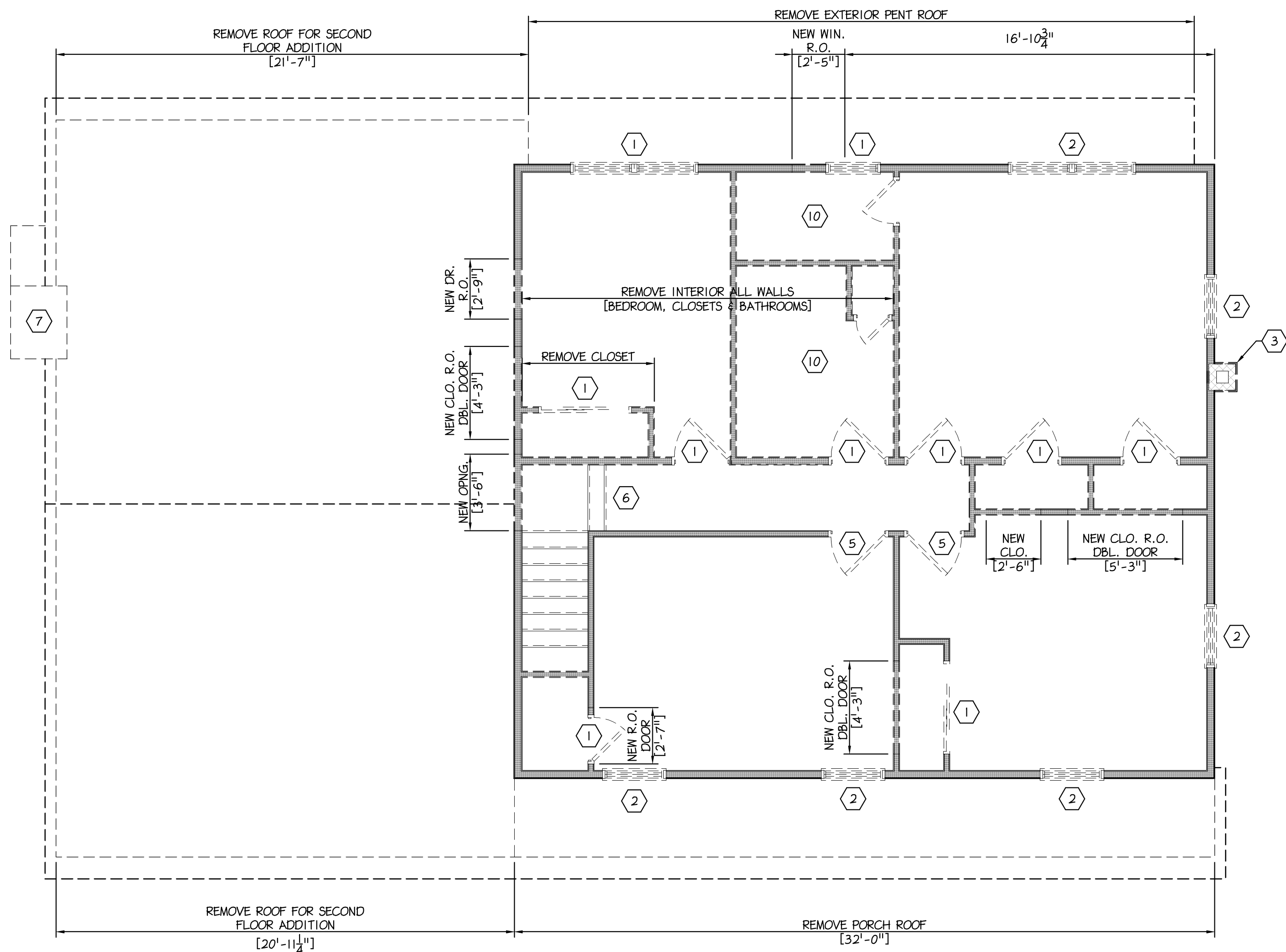
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Robin J. Kohn, AIA			September 17, 2015	

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SHEET TITLE
DEMOLITION - BASEMENT & FIRST FLOOR PLAN AND NOTES

SHEET NUMBER
D-1
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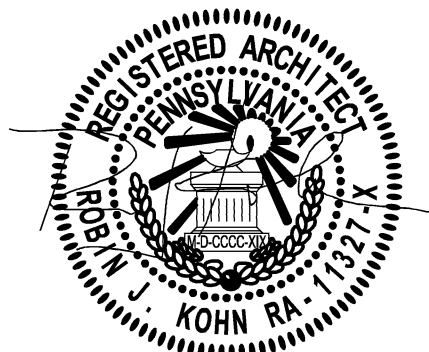
1 DEMOLITION - SECOND FLOOR PLAN
D-2 Scale: 1/4" = 1'- 0"

DEMOLITION NOTES

- 1 REMOVE WINDOWS, DOORS OR OVERHEAD DOOR IN THERE ENTIRETY TO ACCOMMODATE NEW WORK. PATCH TO MATCH EXISTING WALL THICKNESS.
- 2 REMOVE WINDOW AND DROP SILL TO ACCOMMODATE NEW WINDOW REPLACEMENT.
- 3 REMOVE EXISTING CHIMNEY IN IT'S ENTIRETY.
- 4 REMOVE FIREPLACE RAISED HEARTH AND STONE SURROUND TO ACCOMMODATE NEW WORK.
- 5 ENLARGE FAMILY ROOM OPENING AND STEP TO ACCOMMODATE NEW WORK.
- 6 EXISTING STAIR LANDING TO BE ENLARGED TO 3'-6" WIDE. REMOVE THE TWO RISER AND SINGLE TREAD TO ACCOMMODATE NEW WIDE STAIRS.
- 7 EXTEND EXISTING CHIMNEY MASONRY FLUE TO ACCOMMODATE NEW 2ND FLOOR ADDITION HEIGHT.
- 8 REMOVE WALL FINISH (WOOD PANELING) TO ACCOMMODATE NEW WORK.
- 9 REMOVE PORCH COLUMNS TO ACCOMMODATE NEW WORK.
- 10 REMOVE ALL CABINETS, PLUMBING FIXTURES AND APPLIANCES TO ACCOMMODATE NEW WORK.

DEMOLITION GENERAL NOTES

1. INSTALL TEMPORARY SUPPORT WALLS PRIOR TO THE REMOVAL OF BEARING WALLS.
2. COORDINATE AND VERIFY THE NEW ROUGH OPENINGS WITH THE WINDOW AND DOOR MANUFACTURER.
3. GENERAL CONTRACTOR SHALL BRING ALL DISCREPANCIES TO THE IMMEDIATE ATTENTION OF THE ARCHITECT OR ENGINEER.



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B3955A	EMH	RJK

NO.	DATE	BY	ISSUE
1	06-04-2015	EMH	SKETCH REVIEW
2	06-08-2015	EMH	REVISED SKETCH REVIEW
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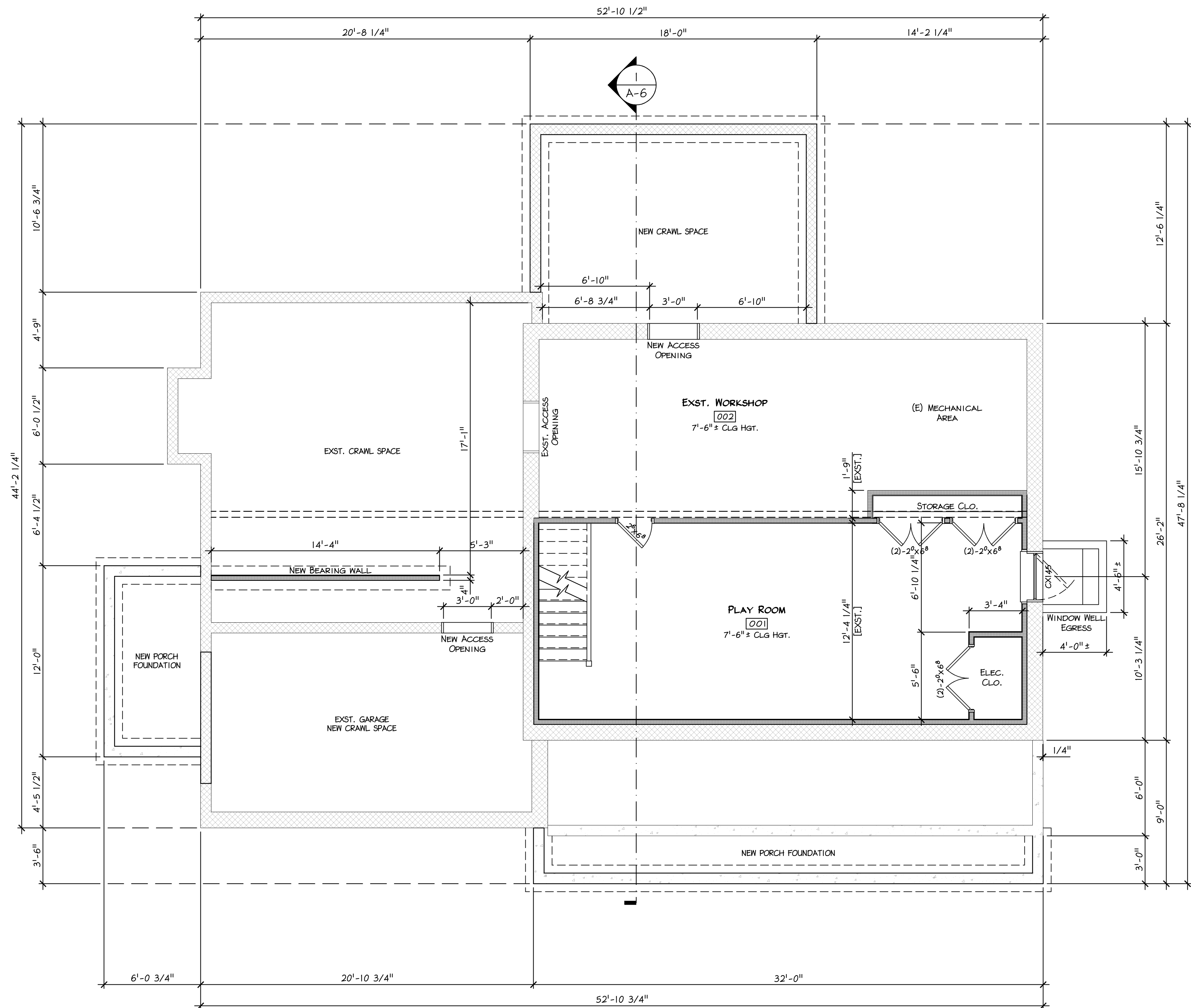
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DEMOLITION - SECOND
FLOOR PLAN AND
NOTES

SHEET NUMBER

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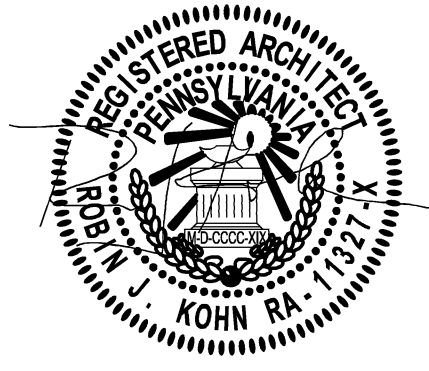
1 BASEMENT PLAN
A-1 Scale: 1/4" = 1'- 0"

GENERAL NOTES

- ALL DIMENSIONS ARE TO ROUGH FRAMING UNLESS NOTED OTHERWISE.
- ALL NEW EXTERIOR WALLS SHALL BE 2x6 STUDS AT 16" O.C. MAX. UNLESS NOTED OTHERWISE.
- ALL NEW INTERIOR WALLS SHALL BE 2x4 STUDS AT 16" O.C. MAX. UNLESS NOTED OTHERWISE.
- ALL LUMBER IN CONTACT WITH MASONRY OR CONCRETE SHALL BE PRESSURE TREATED.
- WHERE DRAWINGS ARE IN CONFLICT WITH OTHER DRAWINGS, CONTRACTOR SHALL NOTIFY THE ARCHITECT OR ENGINEER.
- AT RATED SEPARATION WALLS, 5/8" TYPE 'X' G.I.W.B. SHALL BE CONTINUOUS FROM SILL TO TOP PLATE.
- ALL SILLS AND PLATES SHALL BE SEALED.
- DOUBLE FLOOR JOIST SHALL BE INSTALLED UNDER ALL PARTITIONS WHICH ARE PARALLEL TO JOISTS.

FLOOR AREA

	GROSS AREA	NET AREA	
FIRST FLOOR	1767	1635	Sq.Ft.
SECOND FLOOR	1607	1529	Sq.Ft.
TOTAL	3374	3164	Sq.Ft.
ADDITION	237	202	Sq.Ft.
PLAYROOM	418	388	Sq.Ft.
WORKSHOP	326		Sq.Ft.
IMPERVIOUS INCREASE	339		Sq.Ft.



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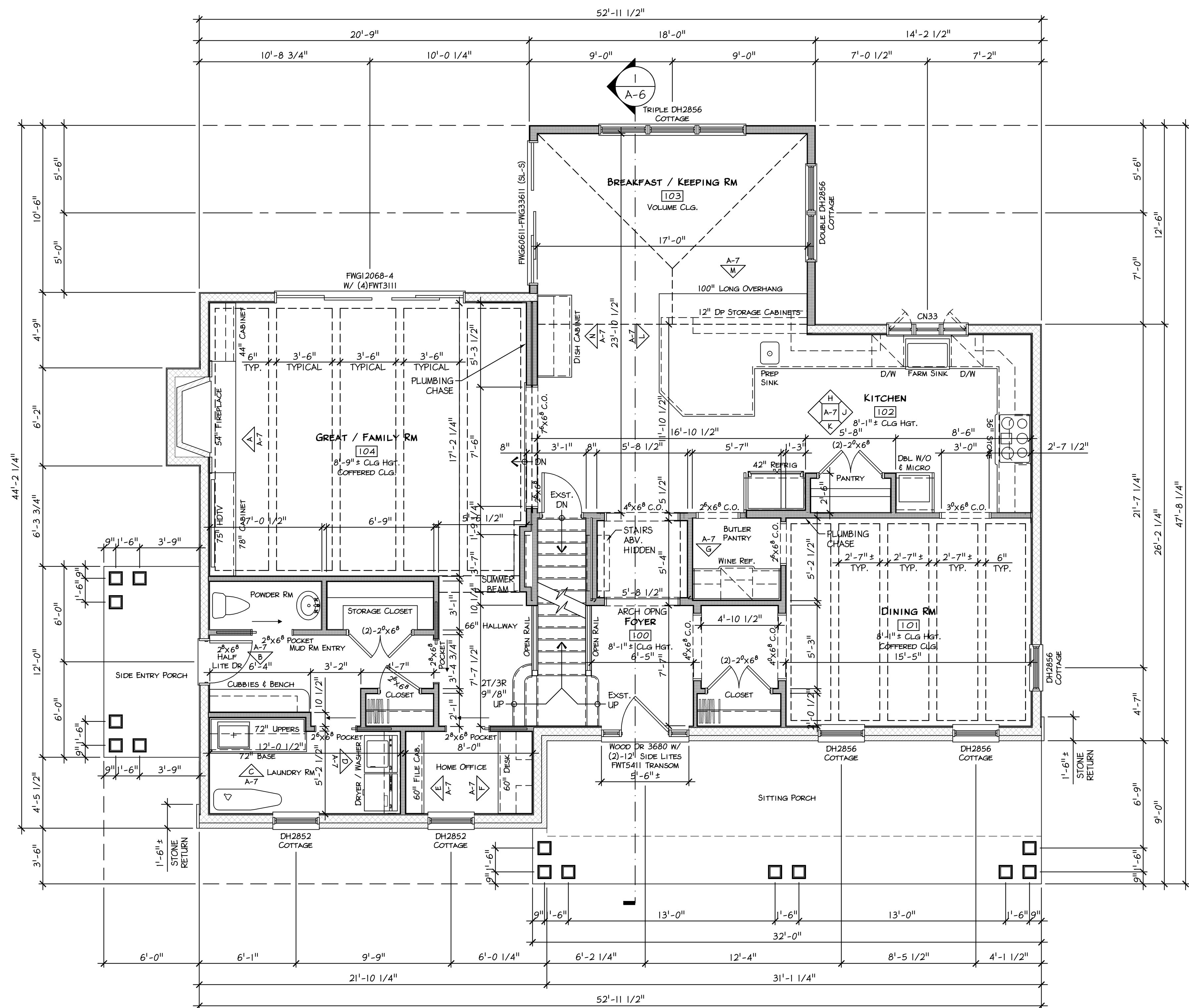
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FIRST FLOOR PLAN

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A-2

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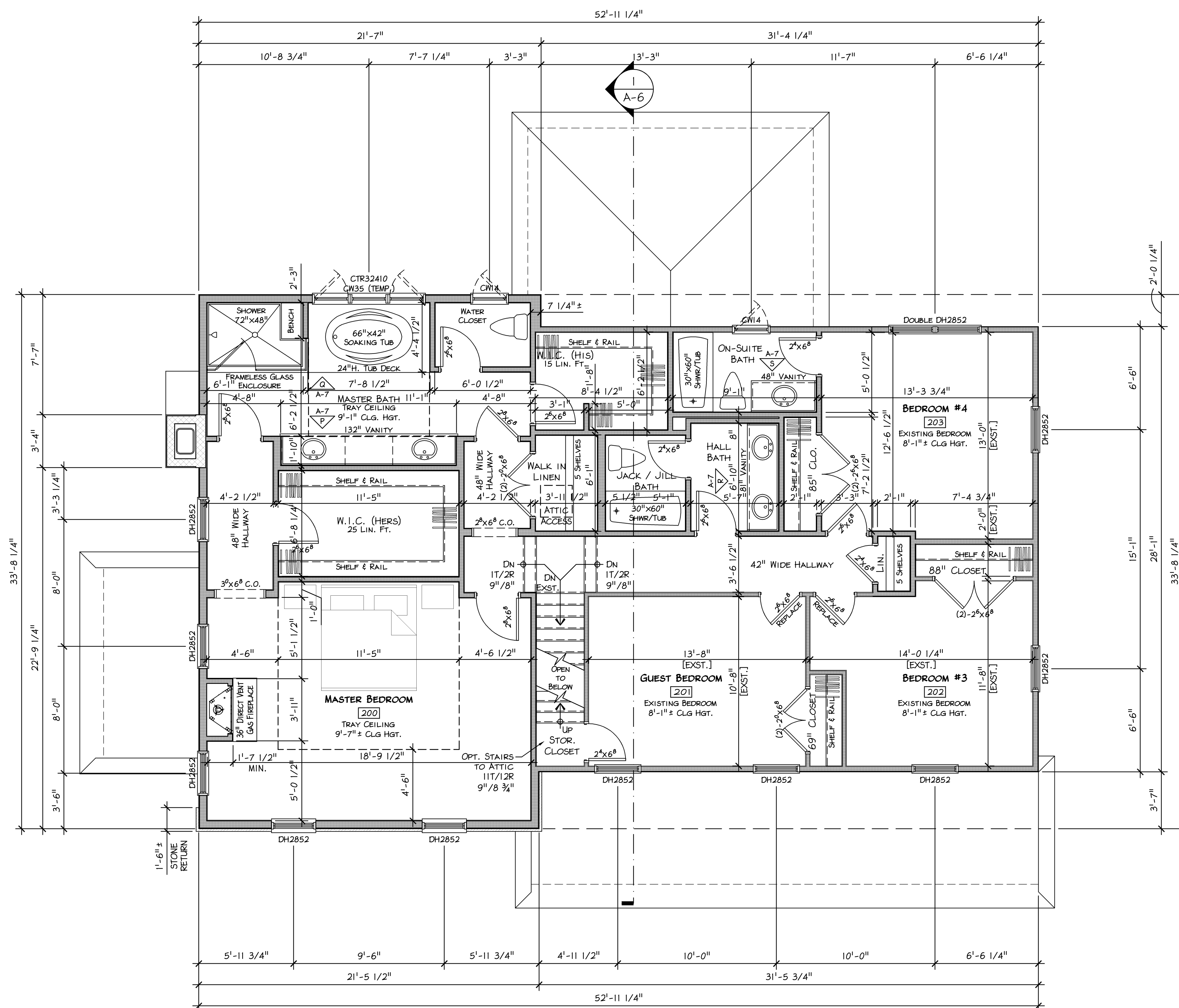
**West Pikeland Township
Chester County**

SHEET TITLE

SECOND FLOOR PLAN

SHEET NUMBER

A-3

RE
5

1 SECOND FLOOR PLAN
A-3 Scale: 1/4" = 1'- 0"

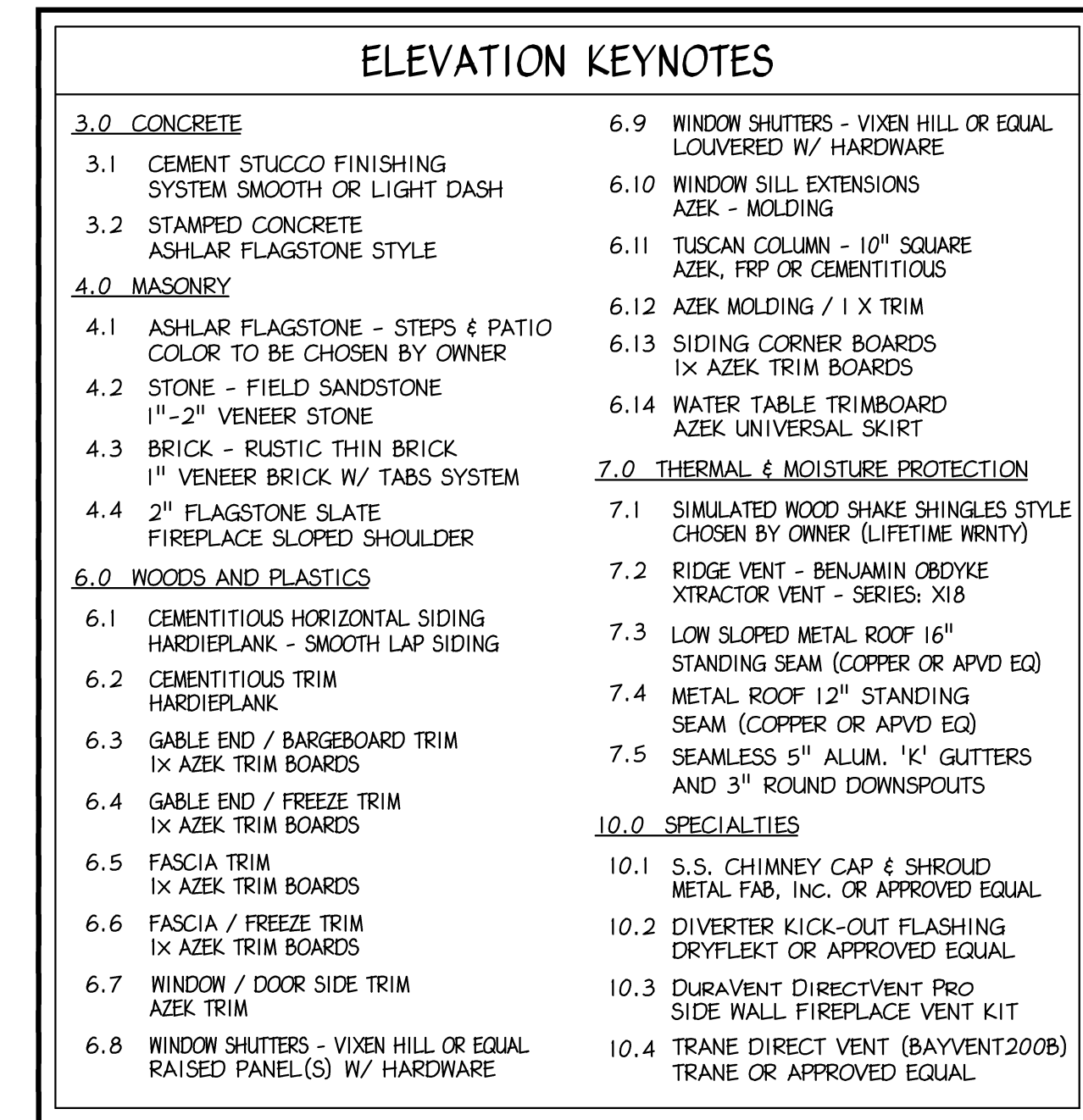
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- WHEN DRAWINGS CONFLICT WITH ANY OTHER DRAWINGS, CONTRACTOR SHALL NOTIFY THE ARCHITECT OR ENGINEER.
- AT RATED SEPARATION WALLS, 3/4" TYPE 'X' G.W.B. SHALL BE CONTINUOUS FROM SILL TO TOP PLATE.
- ALL SILLS AND FLATES SHALL BE SEALED.
- DOOR AND FLOOR JOISTS SHALL BE INSTALLED UNDER ALL PARTITIONS WHICH ARE PARALLEL TO JOISTS.

FLOOR AREA

	GROSS AREA	NET AREA	
FIRST FLOOR	1767	1635	Sq. Ft.
SECOND FLOOR	1607	1529	Sq. Ft.
TOTAL	3374	3164	Sq. Ft.
ADDITION	237	202	Sq. Ft.
PLAYROOM	418	388	Sq. Ft.
WORKSHOP	326		Sq. Ft.
IMPERVIOUS INCREASE	339		Sq. Ft.

ATTIC SPACE IS INTENDED FOR STORAGE ONLY
ATTIC DESIGN - MAX. 20 PSF LIVE LOAD



1 FRONT ELEVATION



2 LEFT SIDE ELEVATION
A-5 Scale: 1/4" = 1'- 0"



1 REAR ELEVATION
A-5 Scale: 1/4" = 1'- 0"

ELEVATION KEYNOTES

- 3.0 CONCRETE**
- 3.1 CEMENT STUCCO FINISHING SYSTEM SMOOTH OR LIGHT DASH
- 3.2 STAMPED CONCRETE ASHLAR FLAGSTONE STYLE
- 4.0 MASONRY**
- 4.1 ASHLAR FLAGSTONE - STEPS & PATIO COLOR TO BE CHOSEN BY OWNER
- 4.2 STONE - FIELD SANDSTONE 1"-2" VENEER STONE
- 4.3 BRICK - RUSTIC THIN BRICK 1" VENEER BRICK W/ TABS SYSTEM
- 4.4 2" FLAGSTONE SLATE FIREPLACE SLOPED SHOULDER
- 6.0 WOODS AND PLASTICS**
- 6.1 CEMENTITIOUS HORIZONTAL SIDING HARDIEPLANK - SMOOTH LAP SIDING
- 6.2 CEMENTITIOUS TRIM HARDIEPLANK
- 6.3 GABLE END / BARGEBOARD TRIM 1X AZEK TRIM BOARDS
- 6.4 GABLE END / FREEZE TRIM 1X AZEK TRIM BOARDS
- 6.5 FASCIA TRIM 1X AZEK TRIM BOARDS
- 6.6 FASCIA / FREEZE TRIM 1X AZEK TRIM BOARDS
- 6.7 WINDOW / DOOR SIDE TRIM AZEK TRIM
- 6.8 WINDOW SHUTTERS - VIXEN HILL OR EQUAL RAISED PANEL(S) W/ HARDWARE
- 6.9 WINDOW SHUTTERS - VIXEN HILL OR EQUAL LOUVERED W/ HARDWARE
- 6.10 WINDOW SILL EXTENSIONS AZEK - MOLDING
- 6.11 TUSCAN COLUMN - 10" SQUARE AZEK, FRP OR CEMENTITIOUS
- 6.12 AZEK MOLDING / 1 X TRIM
- 6.13 SIDING CORNER BOARDS 1X AZEK TRIM BOARDS
- 6.14 WATER TABLE TRIMBOARD AZEK UNIVERSAL SKIRT
- 7.0 THERMAL & MOISTURE PROTECTION**
- 7.1 SIMULATED WOOD SHAKE SHINGLES STYLE CHOSEN BY OWNER (LIFETIME WRNTY)
- 7.2 RIDGE VENT - BENJAMIN OBDYKE XTRACTOR VENT - SERIES: X18
- 7.3 LOW SLOPED METAL ROOF 16" STANDING SEAM (COPPER OR APVD EQ)
- 7.4 METAL ROOF 12" STANDING SEAM (COPPER OR APVD EQ)
- 7.5 SEAMLESS 5" ALUM. 'K' GUTTERS AND 3" ROUND DOWNSPOUTS
- 10.0 SPECIALTIES**
- 10.1 S.S. CHIMNEY CAP & SHROUD METAL FAB, INC. OR APPROVED EQUAL
- 10.2 DIVERTER KICK-OUT FLASHING DRYFLEK OR APPROVED EQUAL
- 10.3 DURAVENT DIRECTVENT PRO SIDE WALL FIREPLACE VENT KIT
- 10.4 TRANE DIRECT VENT (BAYVENT200B) TRANE OR APPROVED EQUAL



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B3955A		EMH		RJK
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APPROVED BY	CURRENT DATE
Robin J. Kohn, AIA	September 17, 2015

DALE RESIDENCE
1417 Yellow Springs Road
Chester Springs, PA 19425

West Pikeland Township
Chester County

SHEET TITLE
REAR & LEFT SIDE
ELEVATIONS

SHEET NUMBER

A-5

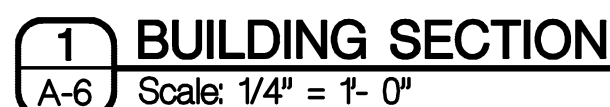
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5

Floor plan of the second floor showing rooms and dimensions:

- BSMT** (Basement) at the bottom left.
- 1ST FLR** (First Floor) at the bottom right.
- 2ND FLR** (Second Floor) in the center.
- T.O. CLG.** (Toilet Closet) at the top left.
- T.O. WIN. ATTIC** (Toilet Window Attic) at the top right.
- T.O. WIN. BEDROOM** (Toilet Window Bedroom) in the middle right.
- T.O. WIN. LIVING RM** (Toilet Window Living Room) at the bottom right.

Dimensions:

- Overall width: 7'-6"
- Overall depth: 8'-11"
- Room widths: 6'-8"
- Room depths: 7'-6"



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Architects & Engineers

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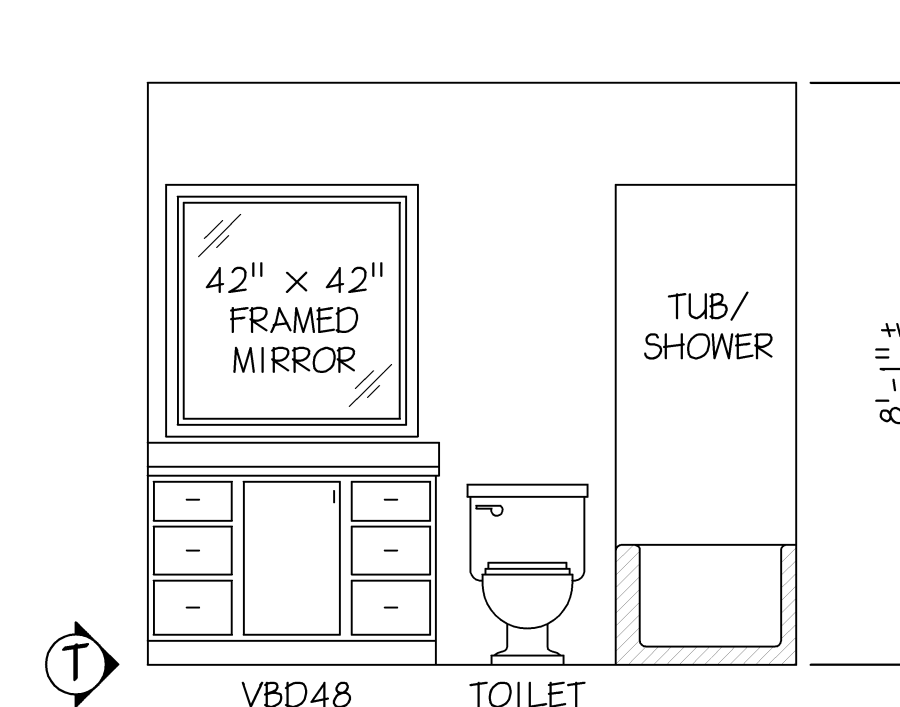
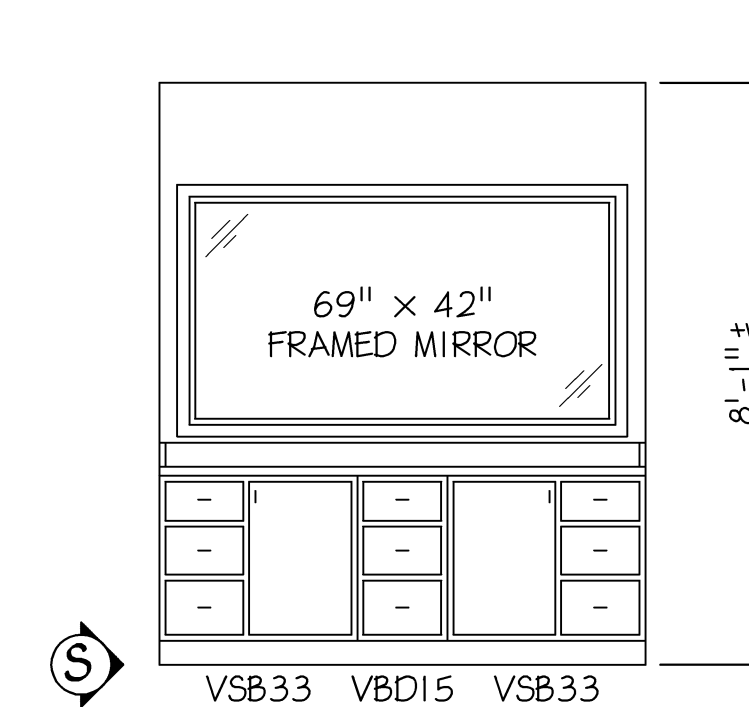
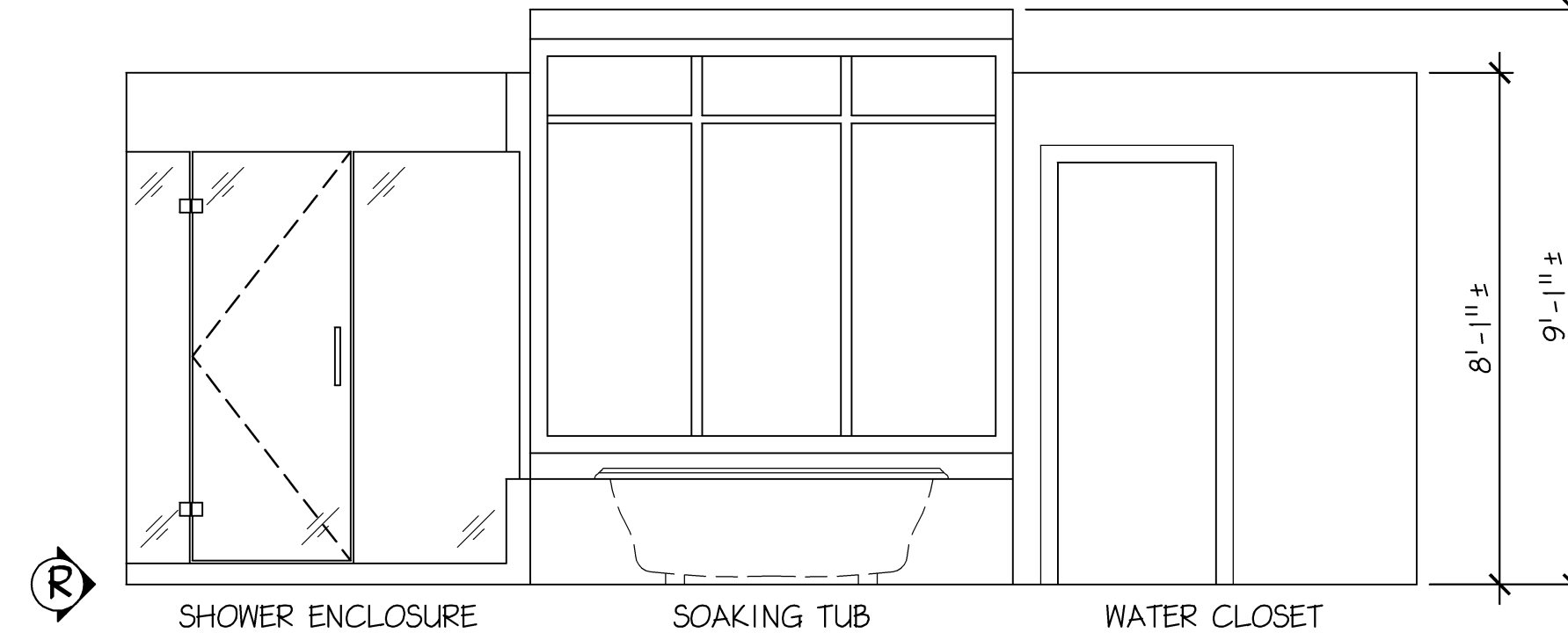
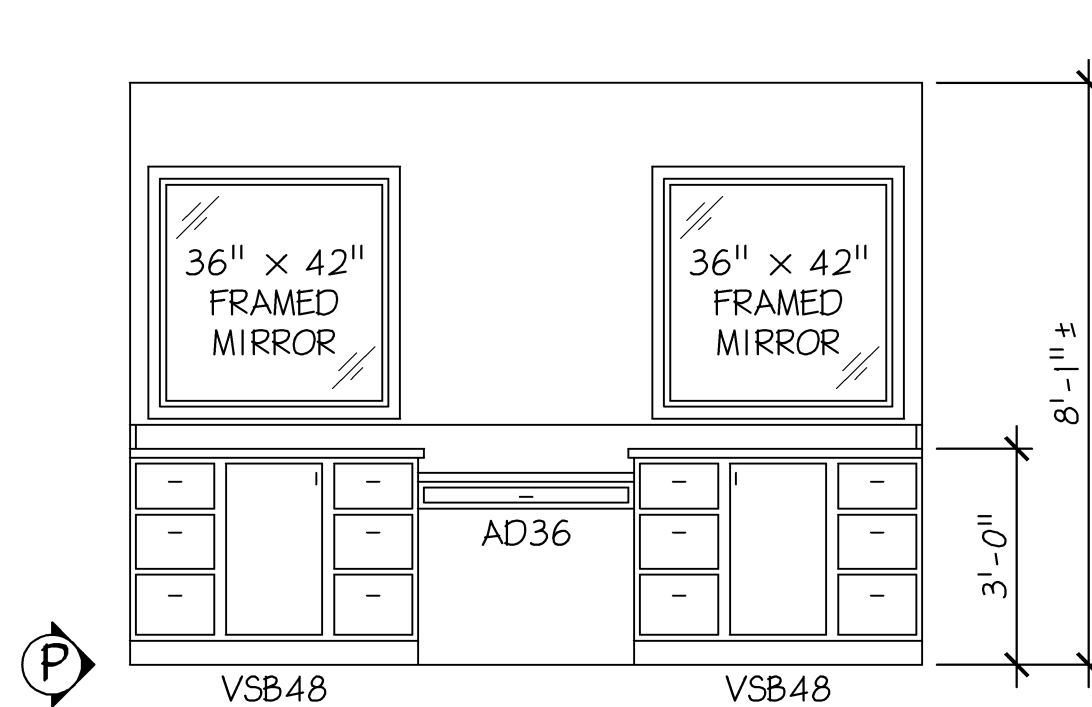
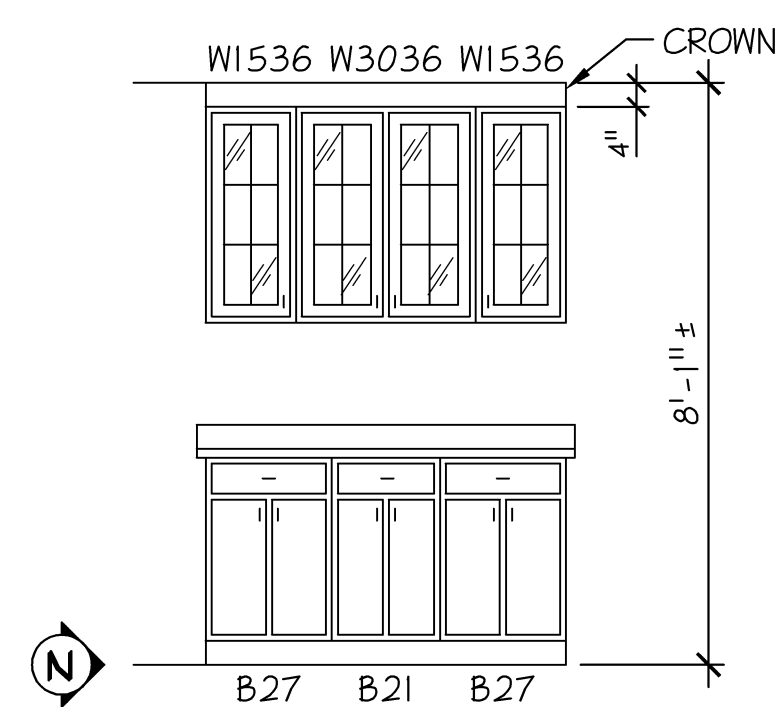
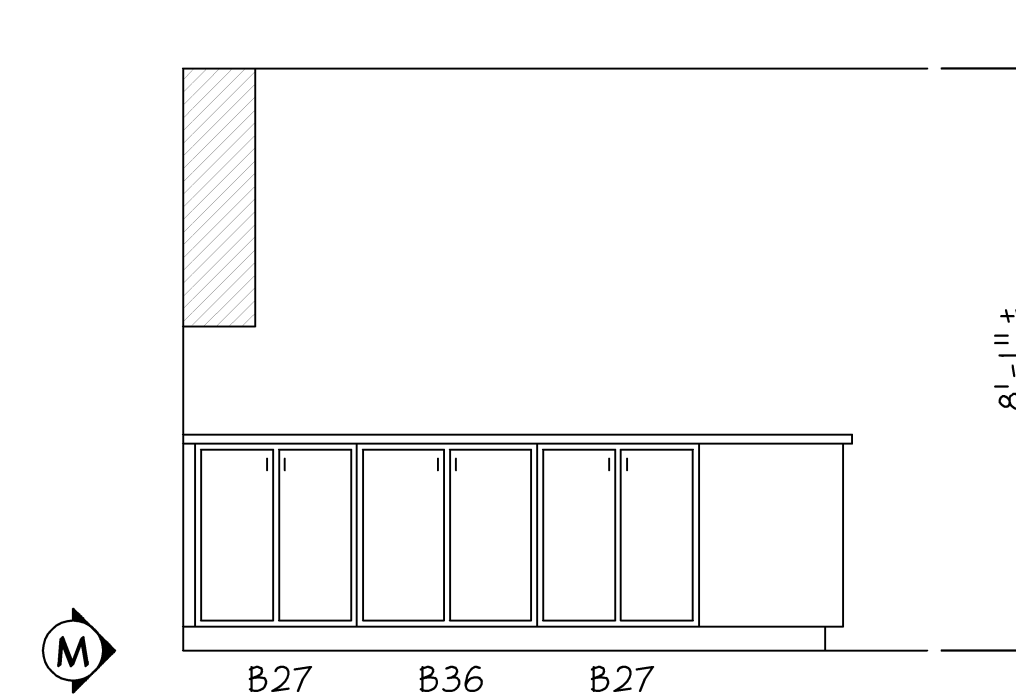
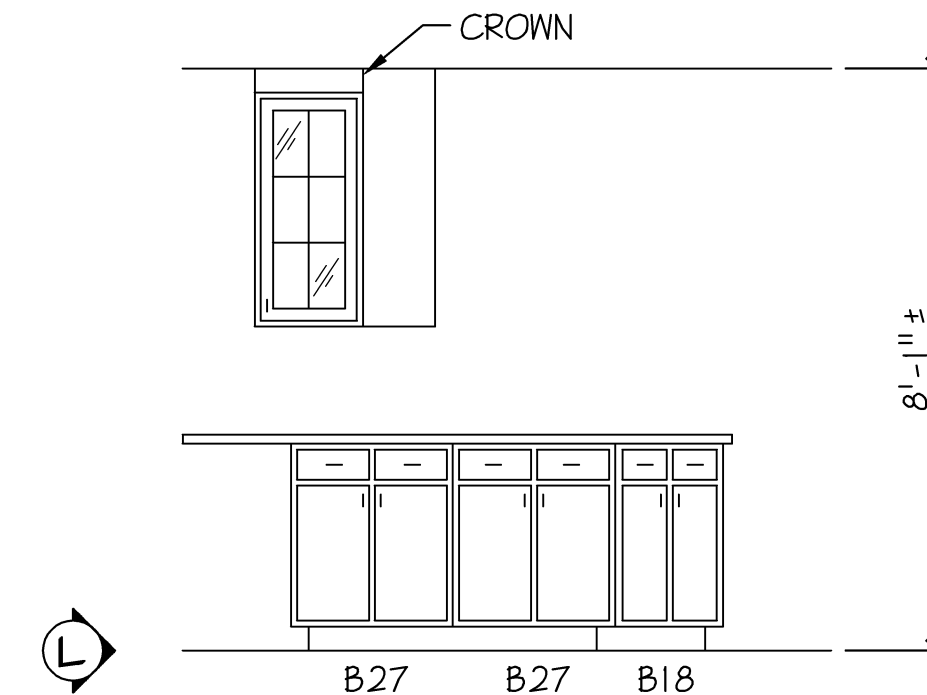
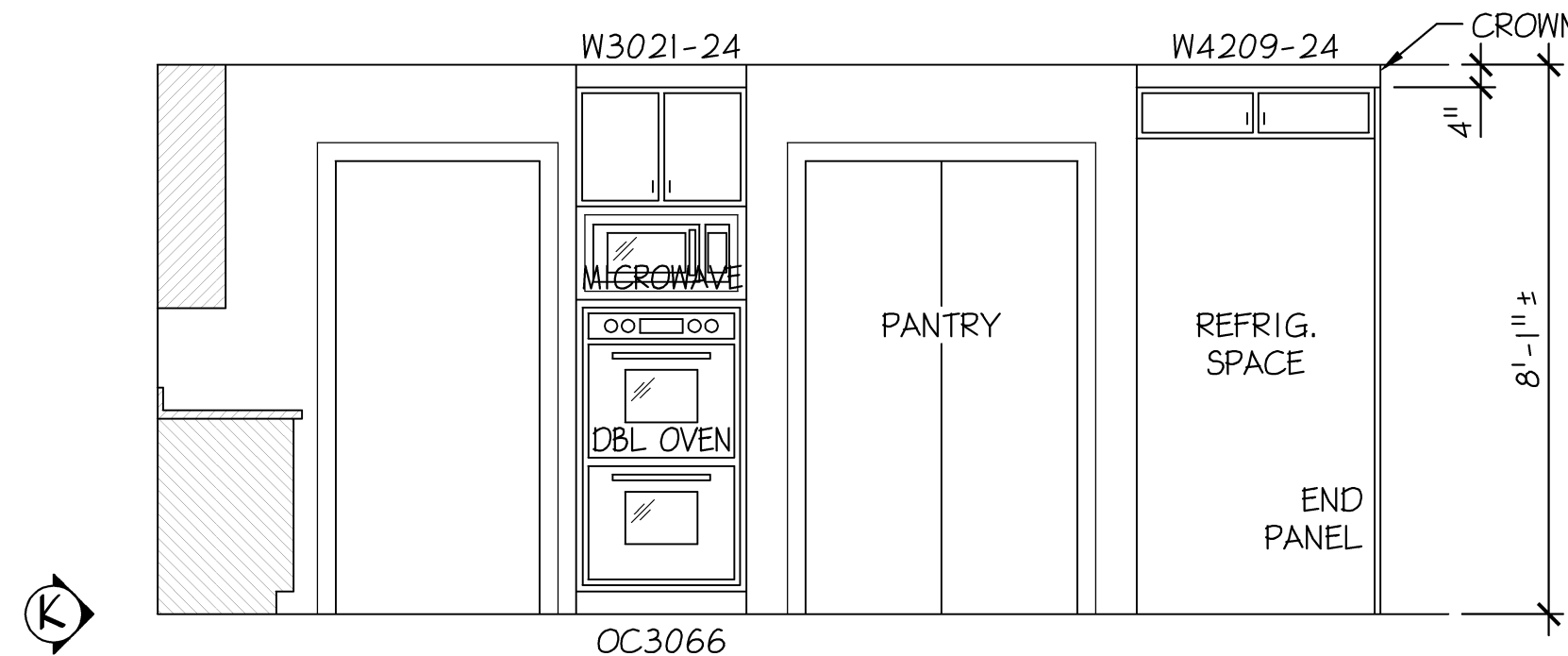
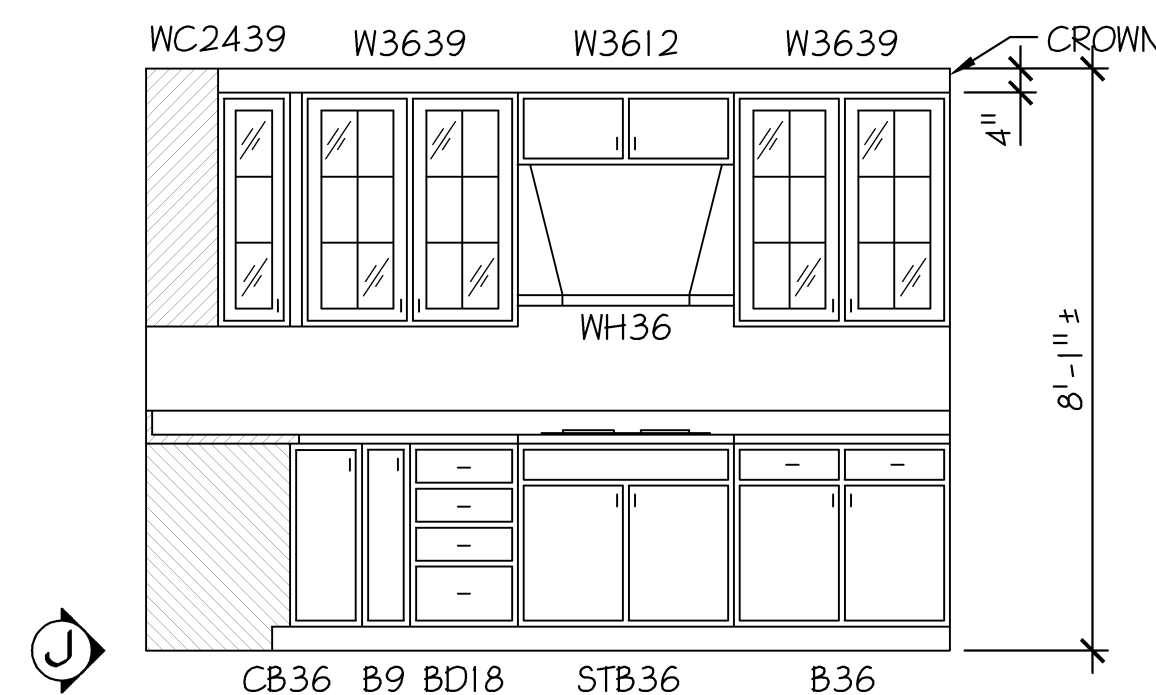
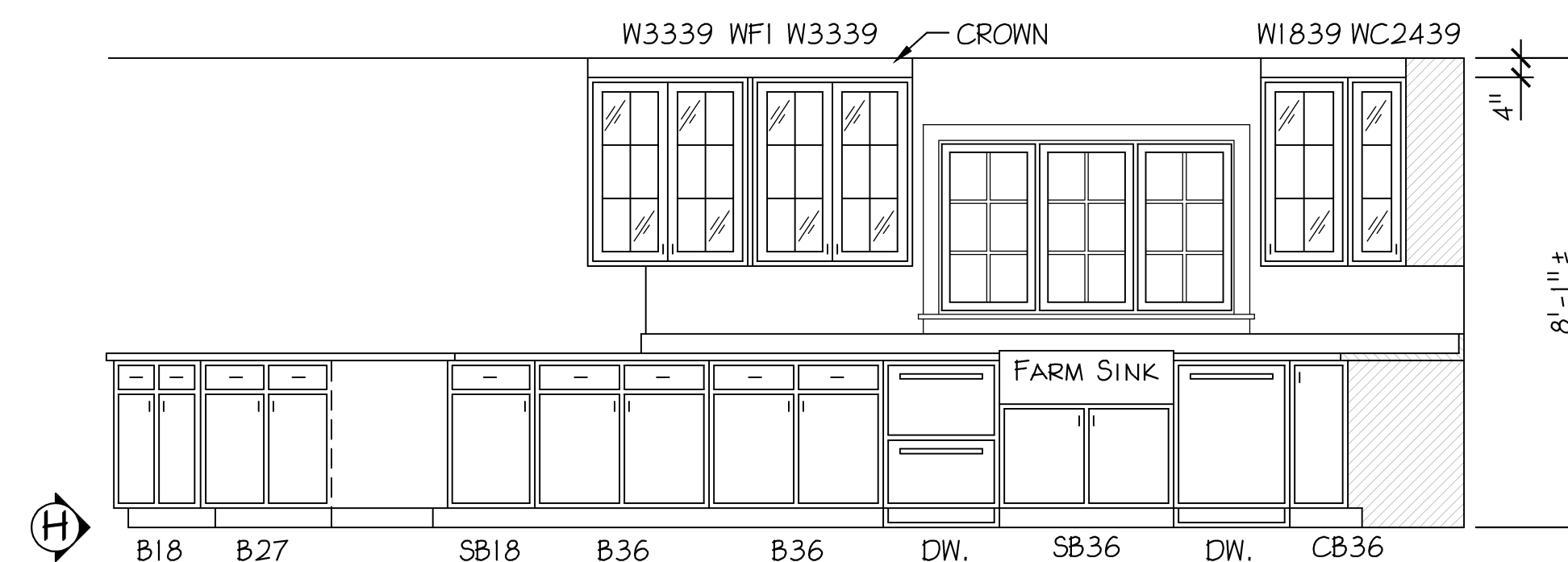
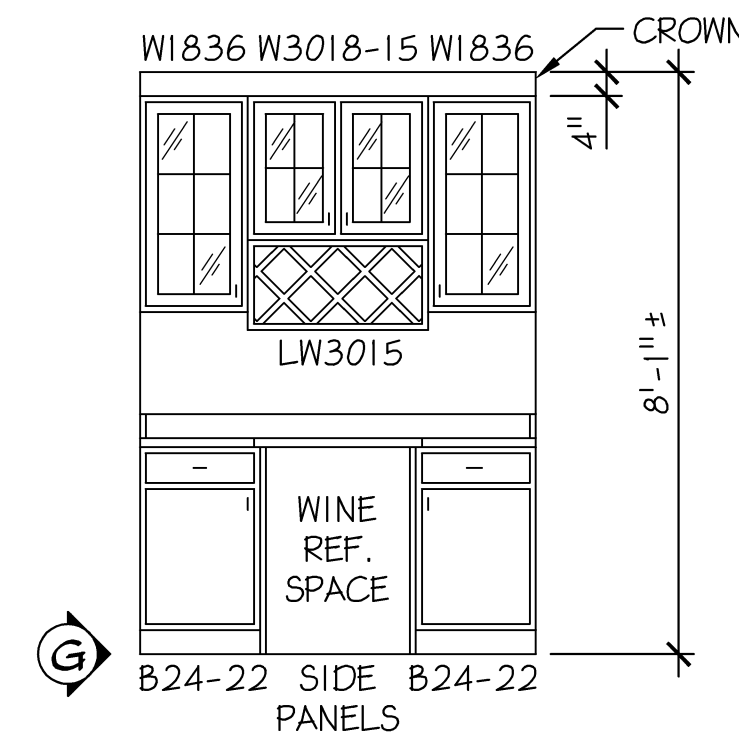
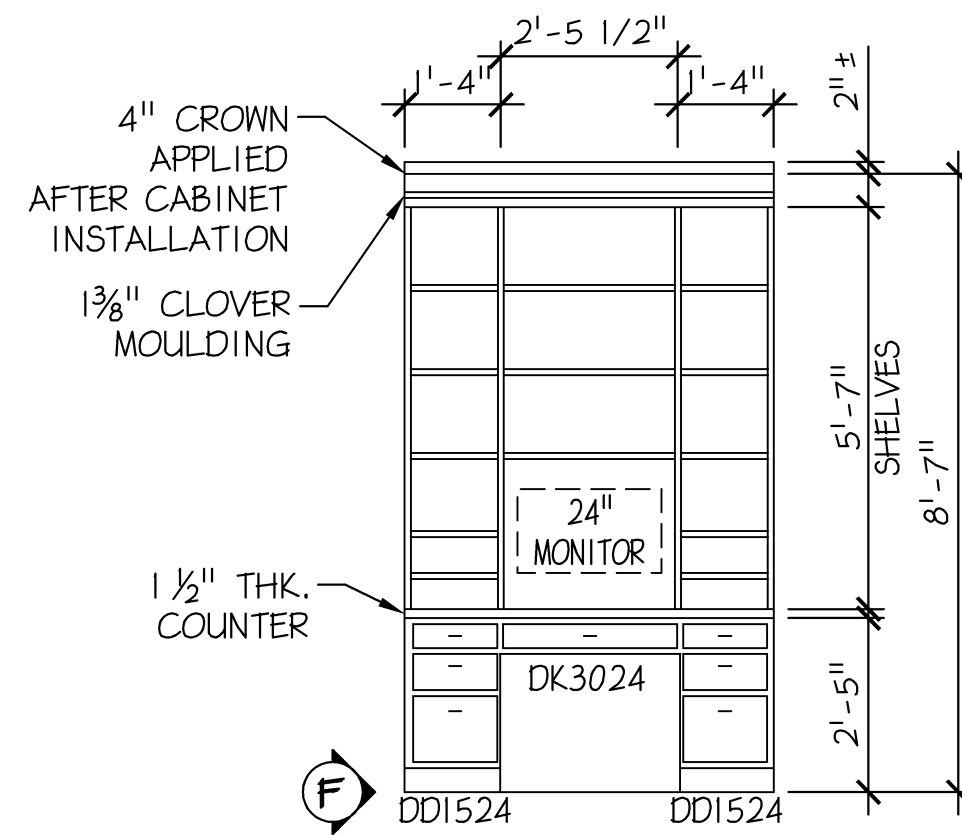
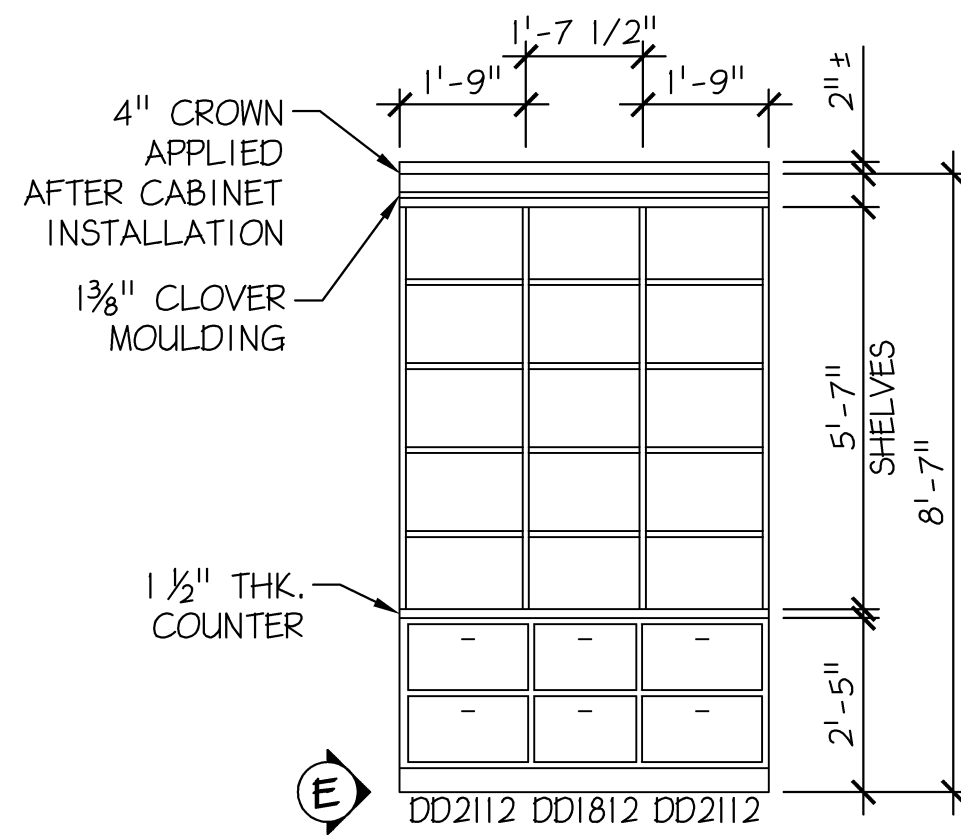
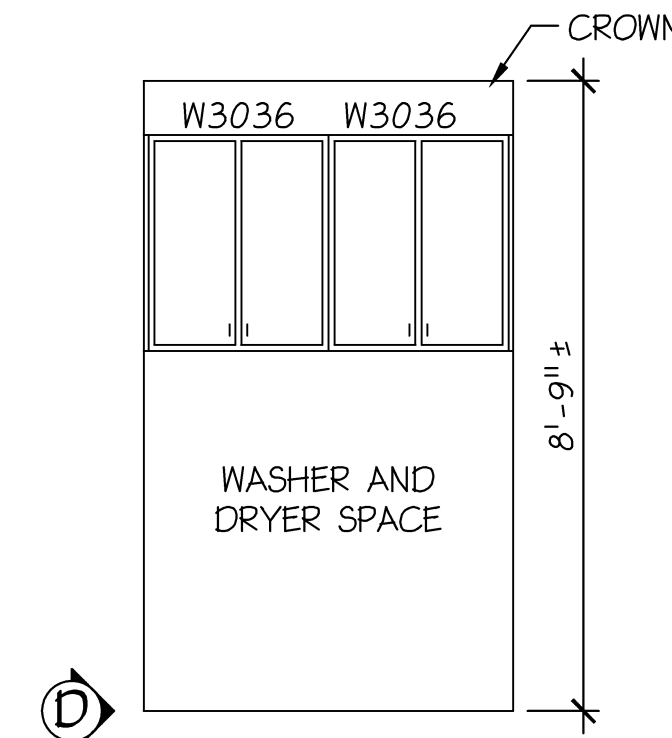
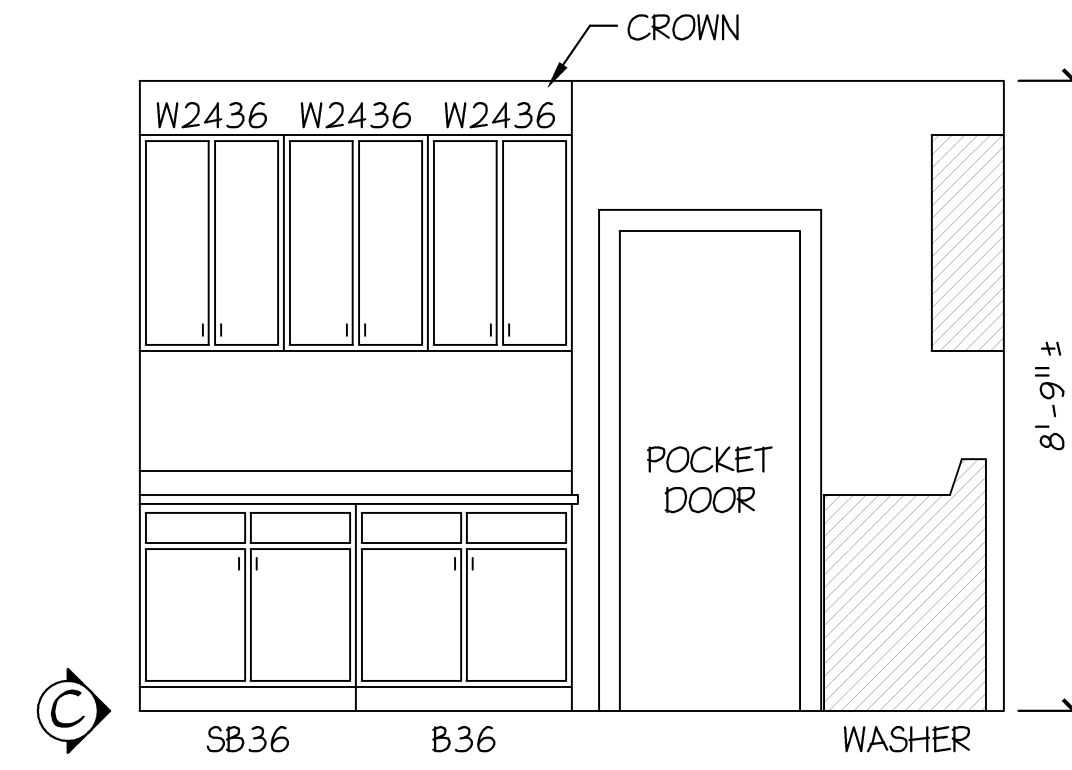
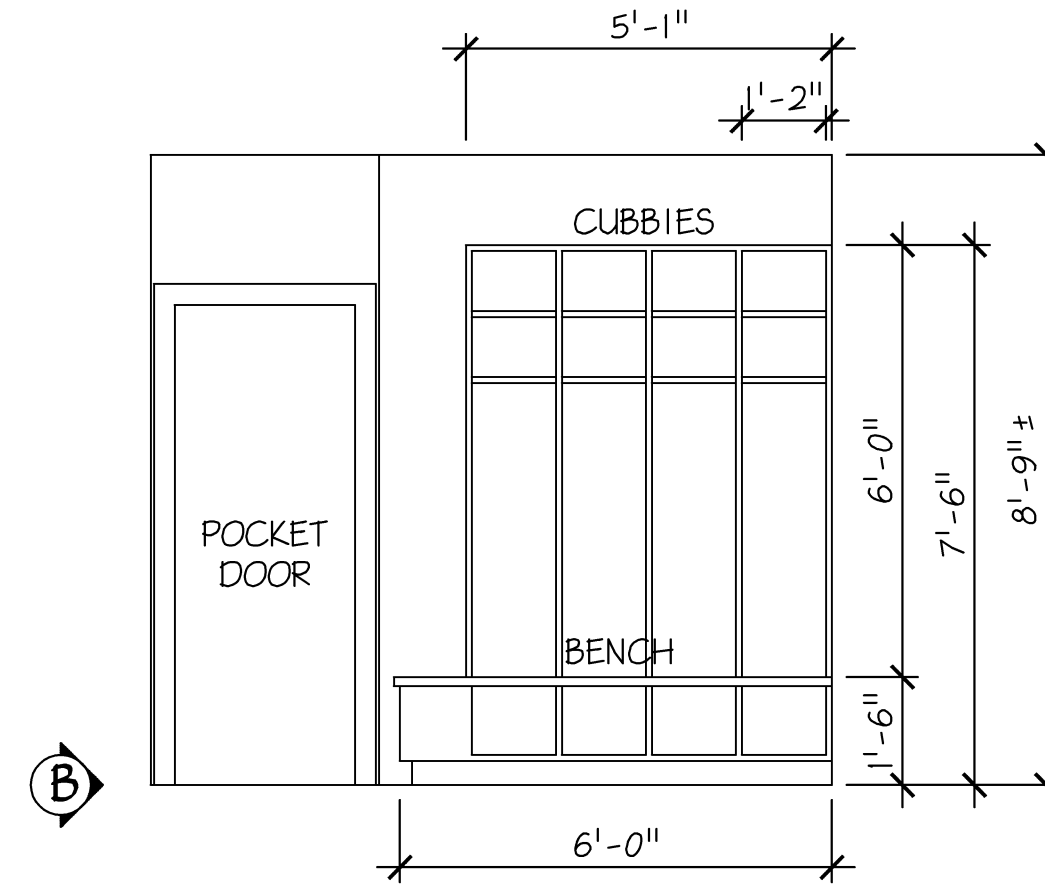
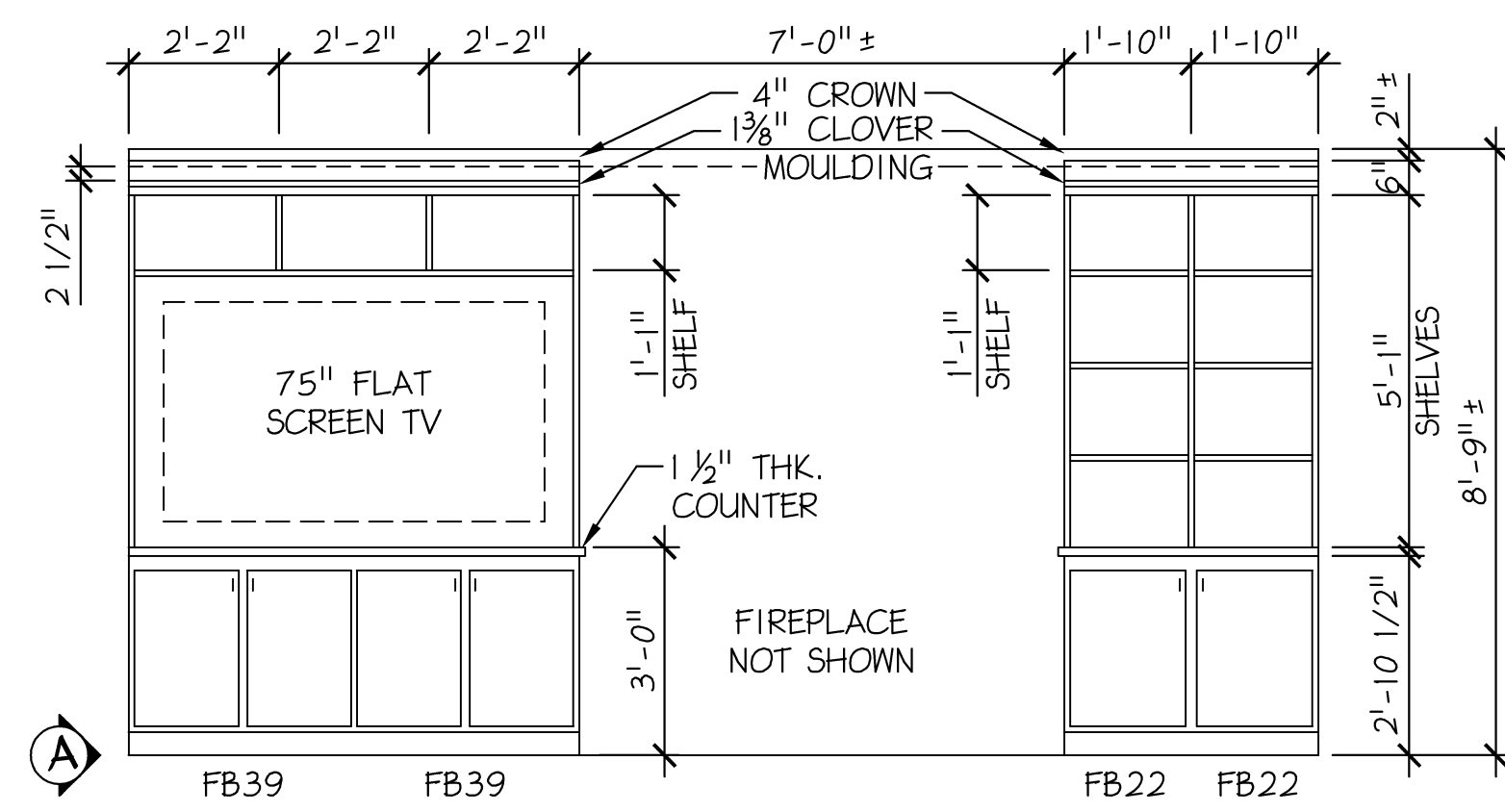
Contact Person:
Edward (Kipp) Happ
(610) 917-8831

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West Pikeland Township
Chester County

SHEET NUMBER

REV	
5	



1 INTERIOR ELEVATIONS
A-7 Scale: 3/8" = 1'-0"

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B3955A		EMH		RJK	
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1	06-04-2015	EMH	SKETCH REVIEW		
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APPROVED BY		CURRENT DATE			
Robin J. Kohn, AIA		September 17, 2015			

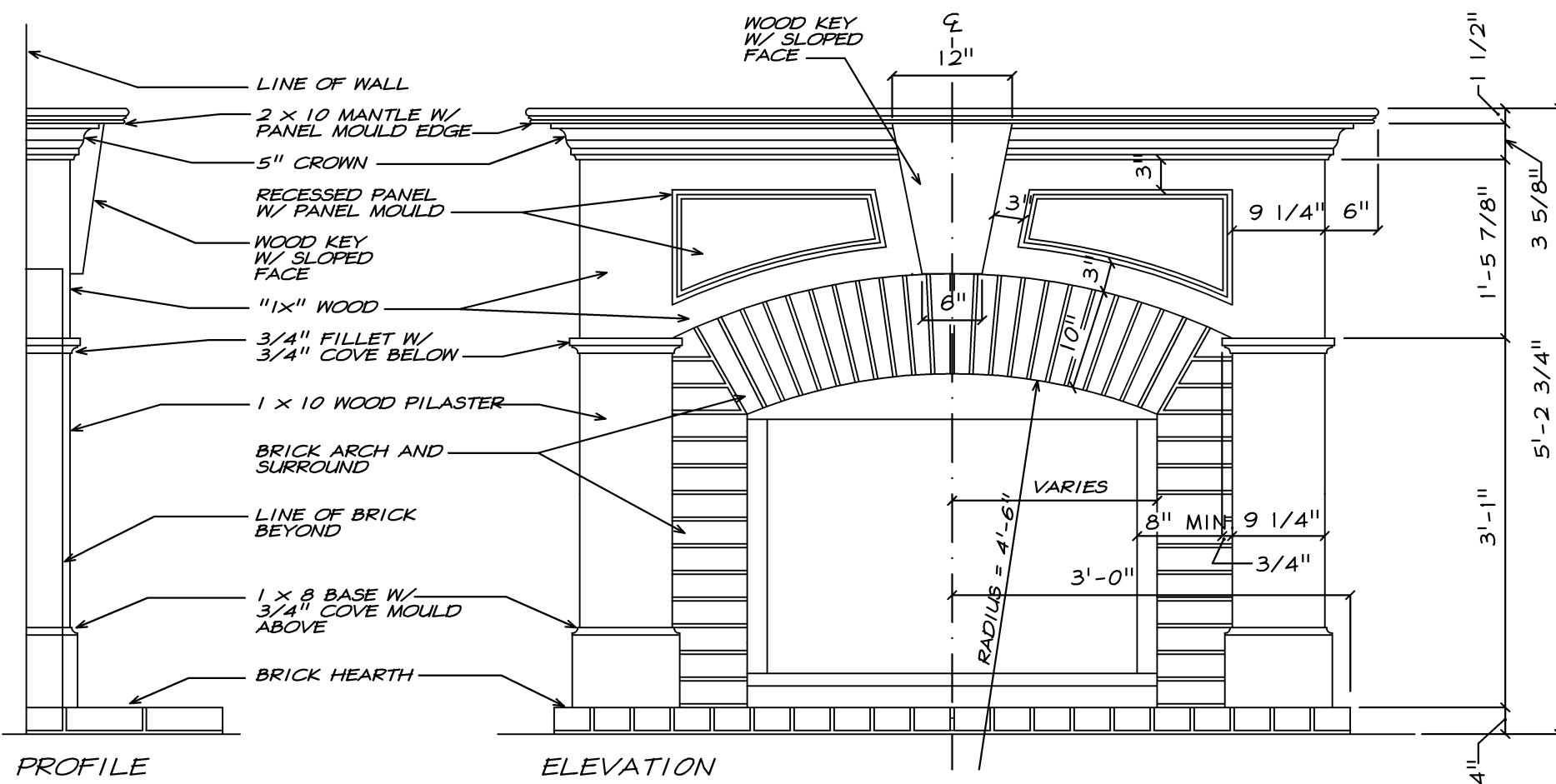
DALE RESIDENCE
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West Pikeland Township
Chester County

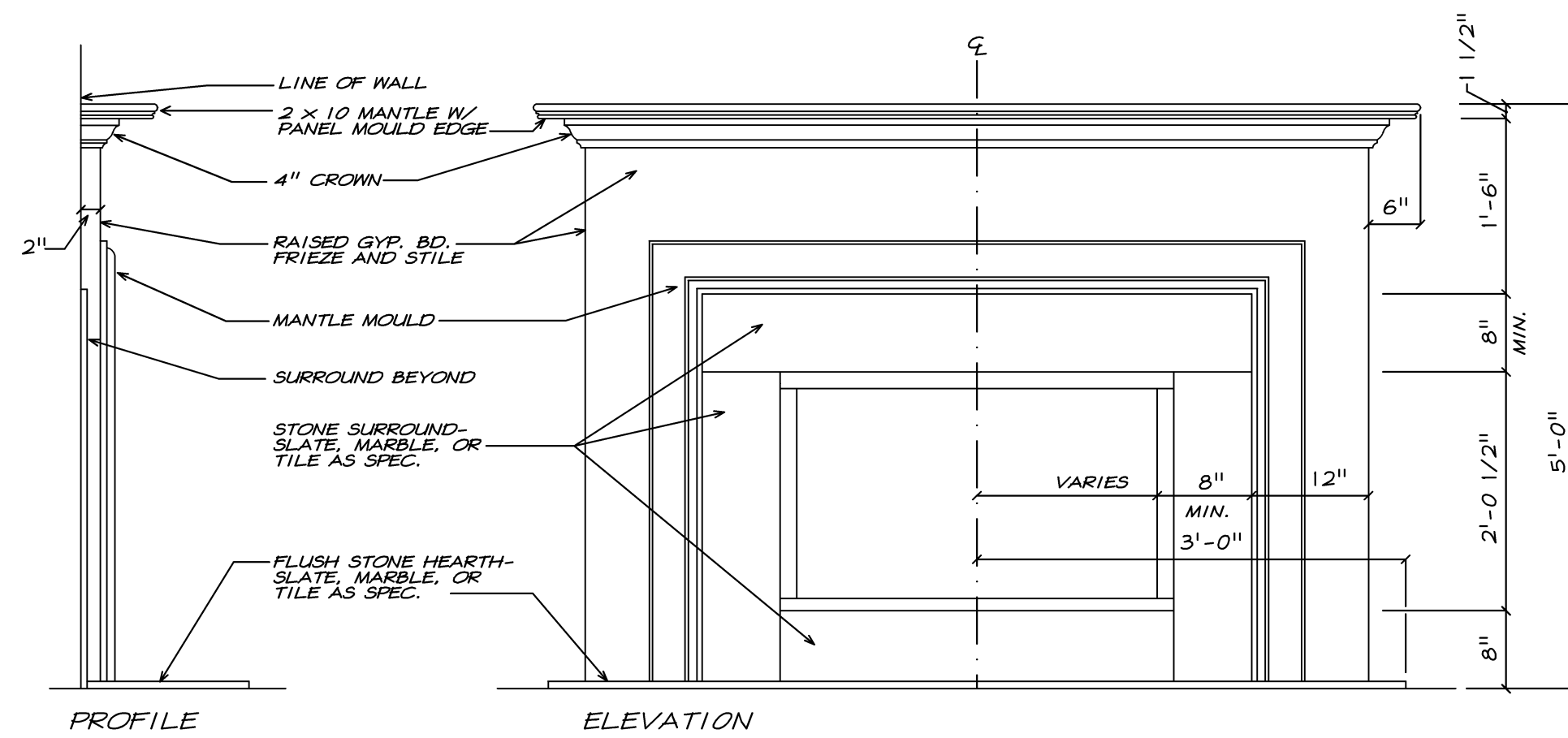
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INTERIOR ELEVATIONS

SHEET NUMBER
A-7

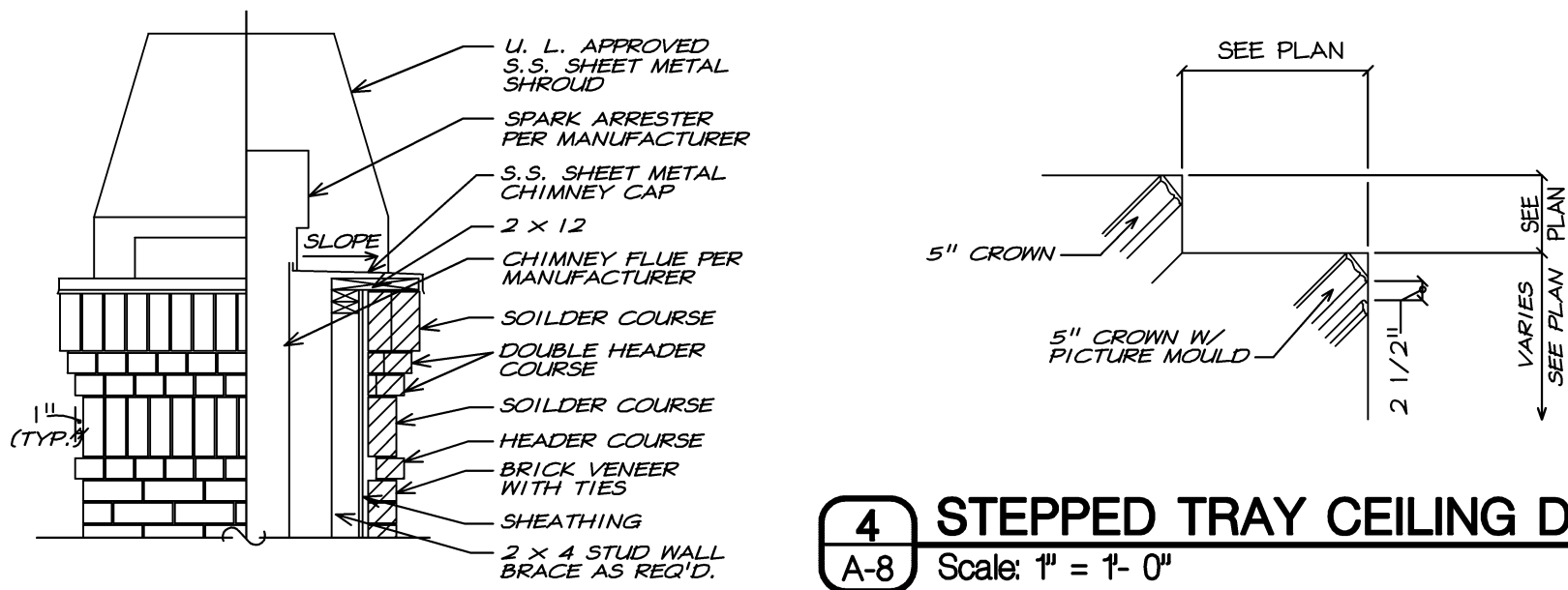
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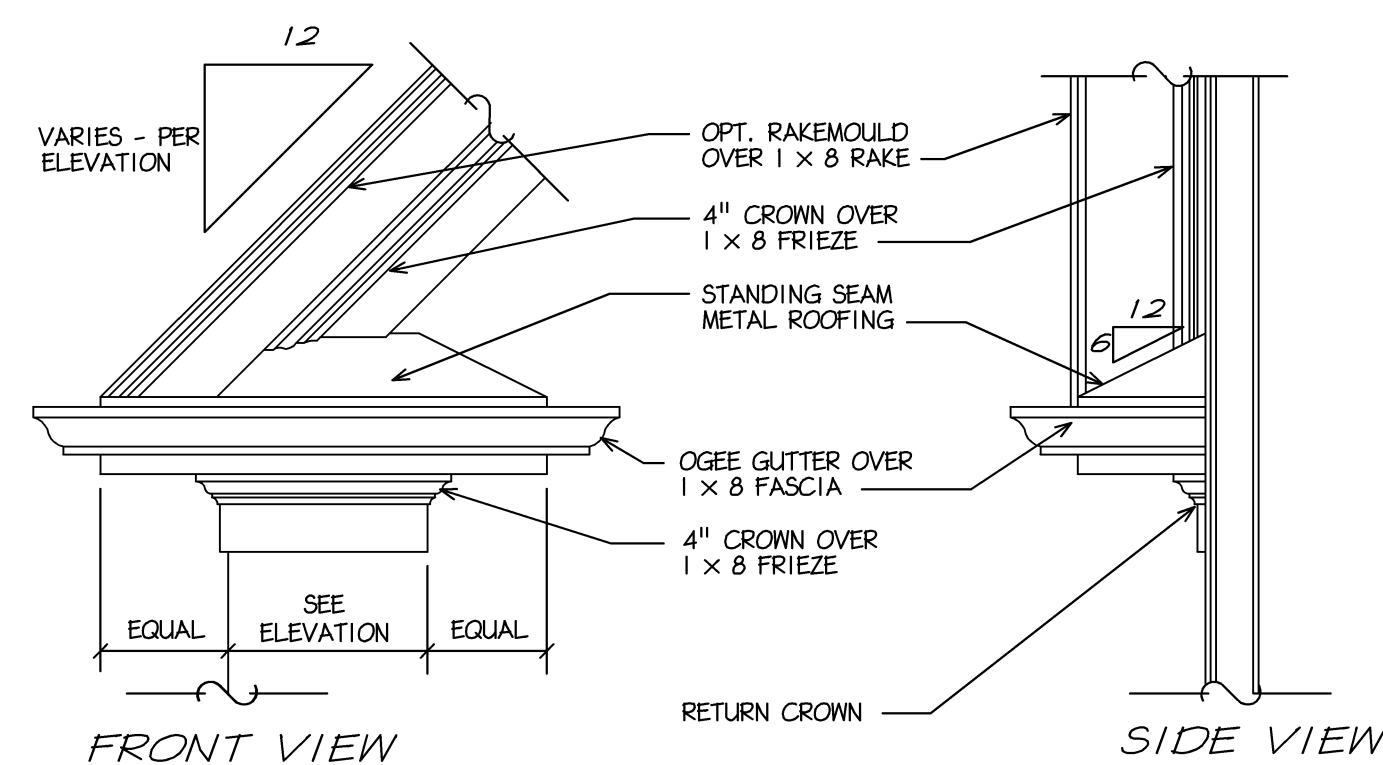
1 FAMILY ROOM FIREPLACE DETAIL
A-8 Scale: 3/4" = 1'-0"



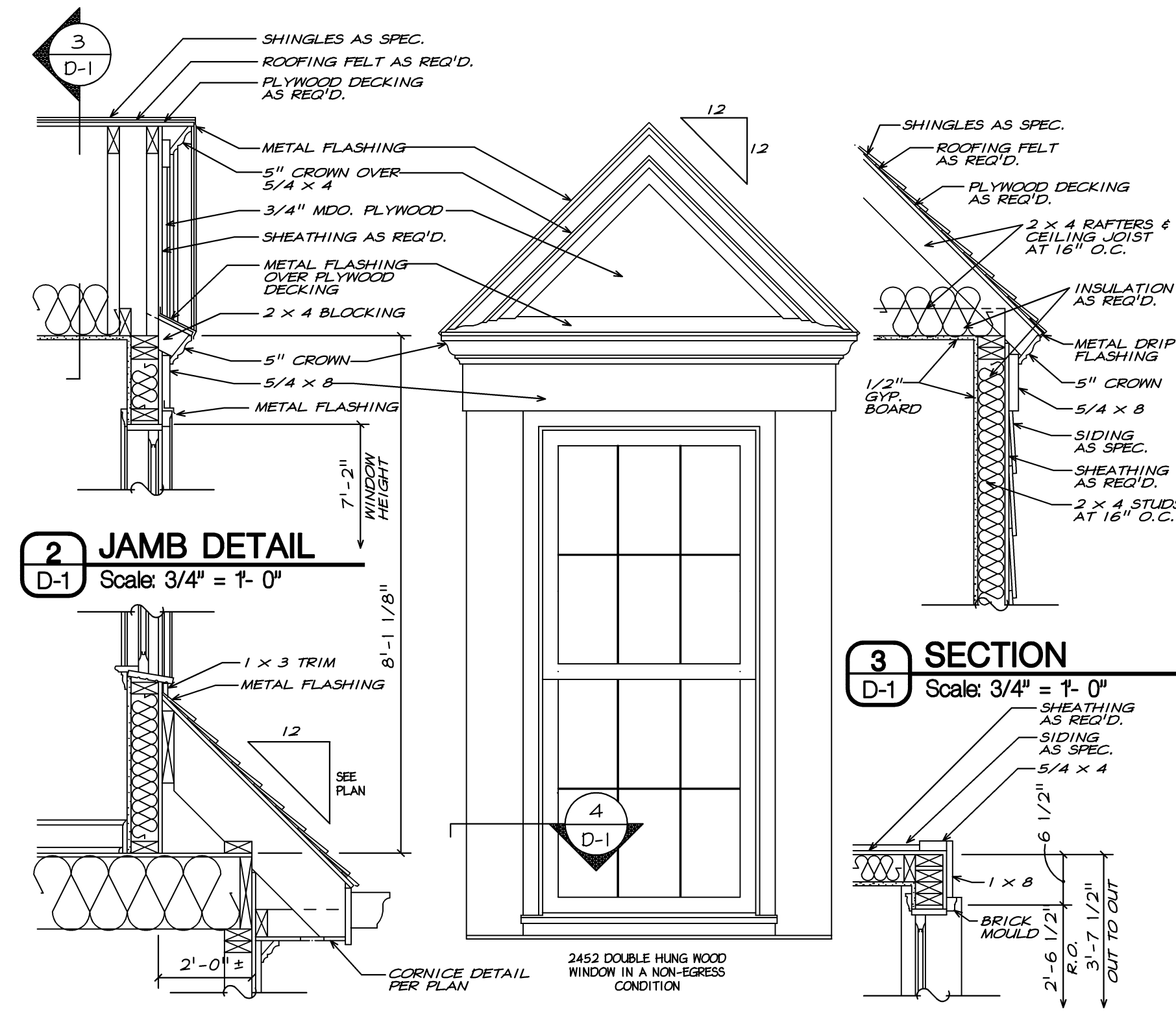
2 MASTER BEDRM FIREPLACE DETAIL
A-8 Scale: 3/4" = 1'-0"



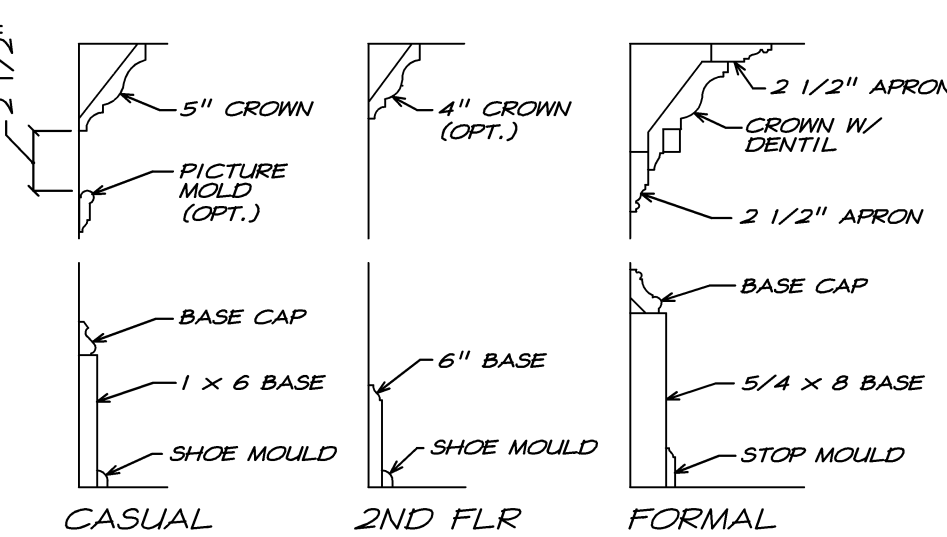
3 CHIMNEY DETAIL
A-8 Scale: 1" = 1'-0"



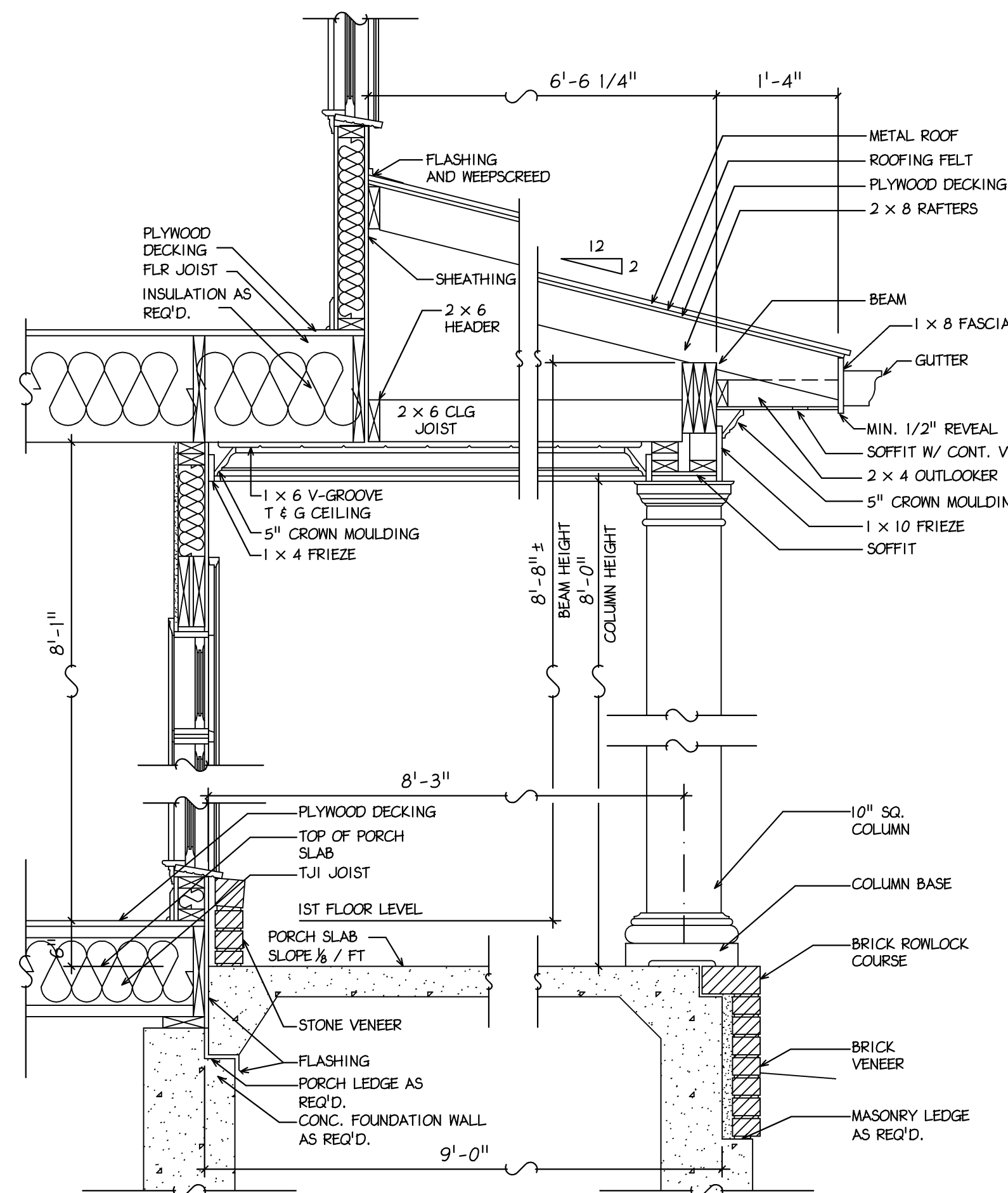
4 STEPPED TRAY CEILING DETAIL
A-8 Scale: 1" = 1'-0"



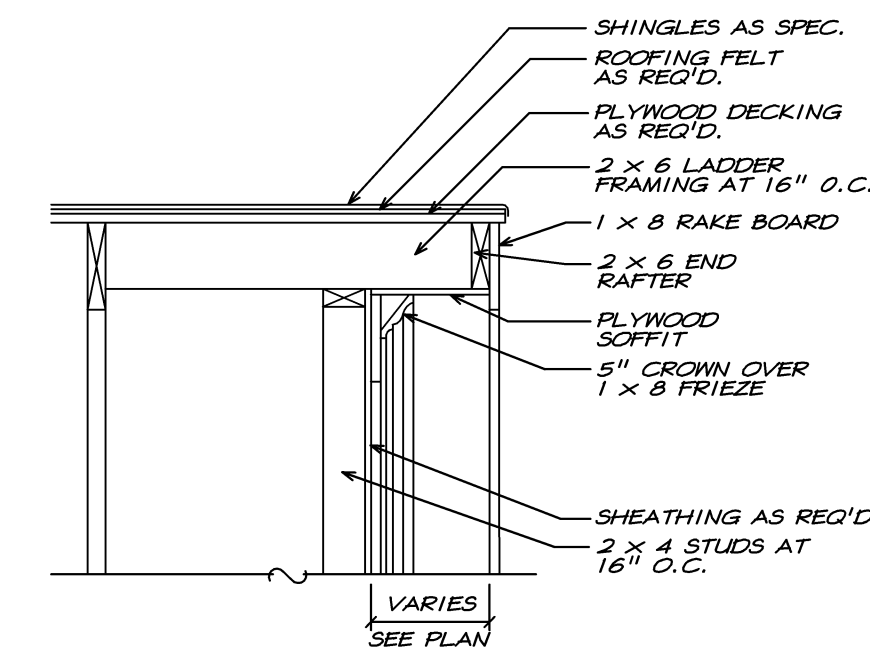
5 COFFERED CEILING DETAIL
A-8 Scale: 1" = 1'-0"



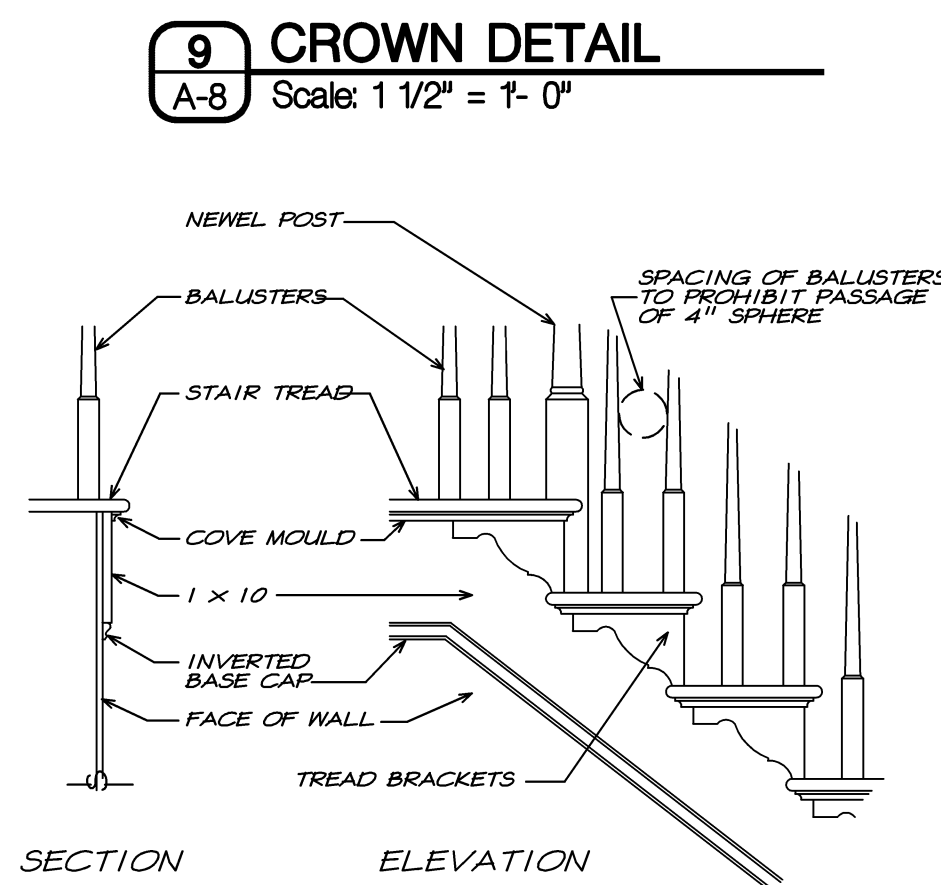
6 TYP. ROOF RETURN DETAIL
A-8 Scale: 3/4" = 1'-0"



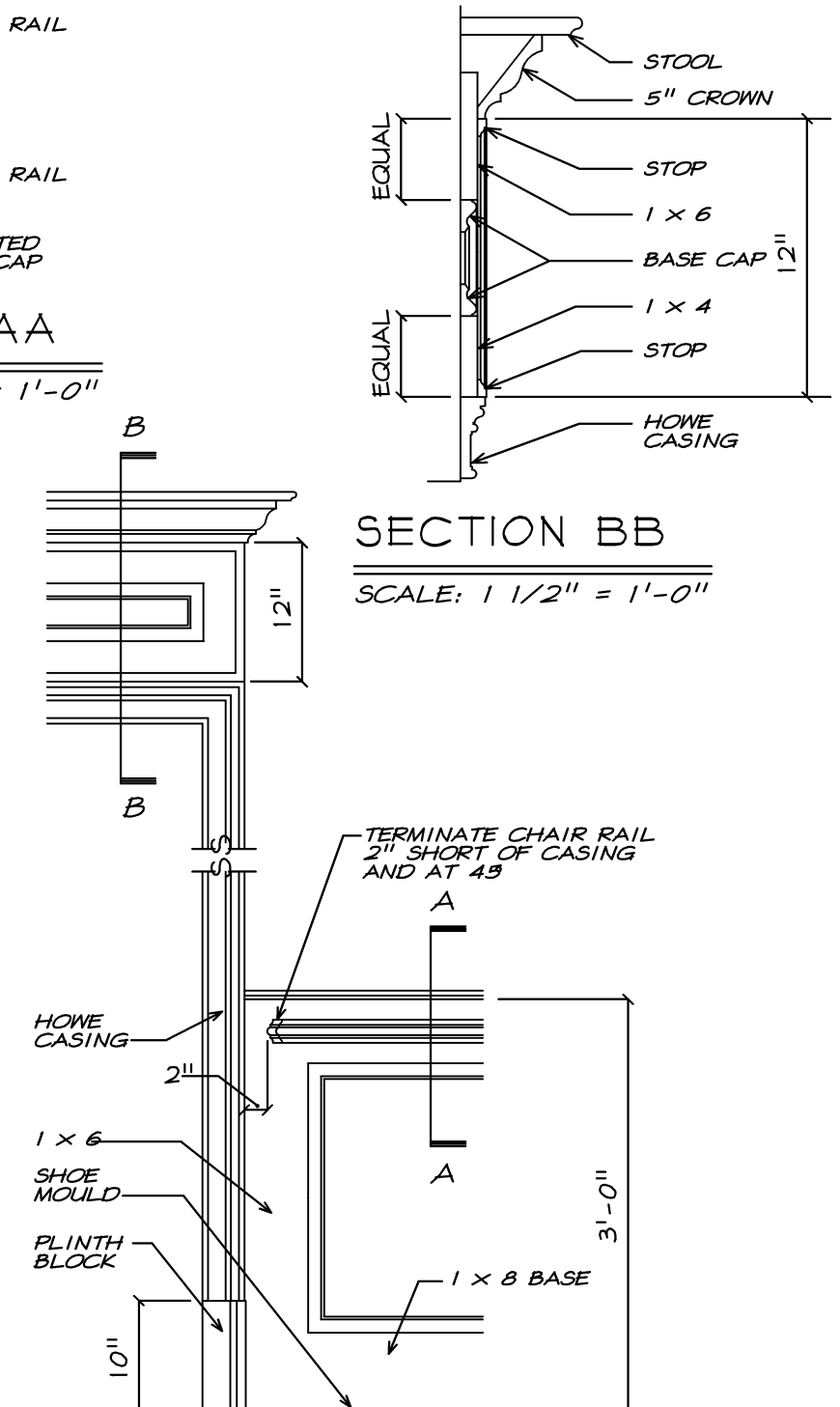
7 DORMER DETAIL
A-8 Scale: 3/4" = 1'-0"



8 TRIM DETAILS
A-8 Scale: 1 1/2" = 1'-0"



9 CROWN DETAIL
A-8 Scale: 1 1/2" = 1'-0"



10 FORMAL STAIR TRIM DETAIL
A-8 Scale: 3/4" = 1'-0"

13 ROOF RAKE DETAIL
A-8 Scale: 3/4" = 1'-0"

11 OPENING / WAINSCOT DETAIL
A-8 Scale: 3/4" = 1'-0"

12 FRONT PORCH SECTION
A-8 Scale: 3/4" = 1'-0"

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B3955A		EMH		RJK	
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Robin J. Kohn, AIA			September 17, 2015		

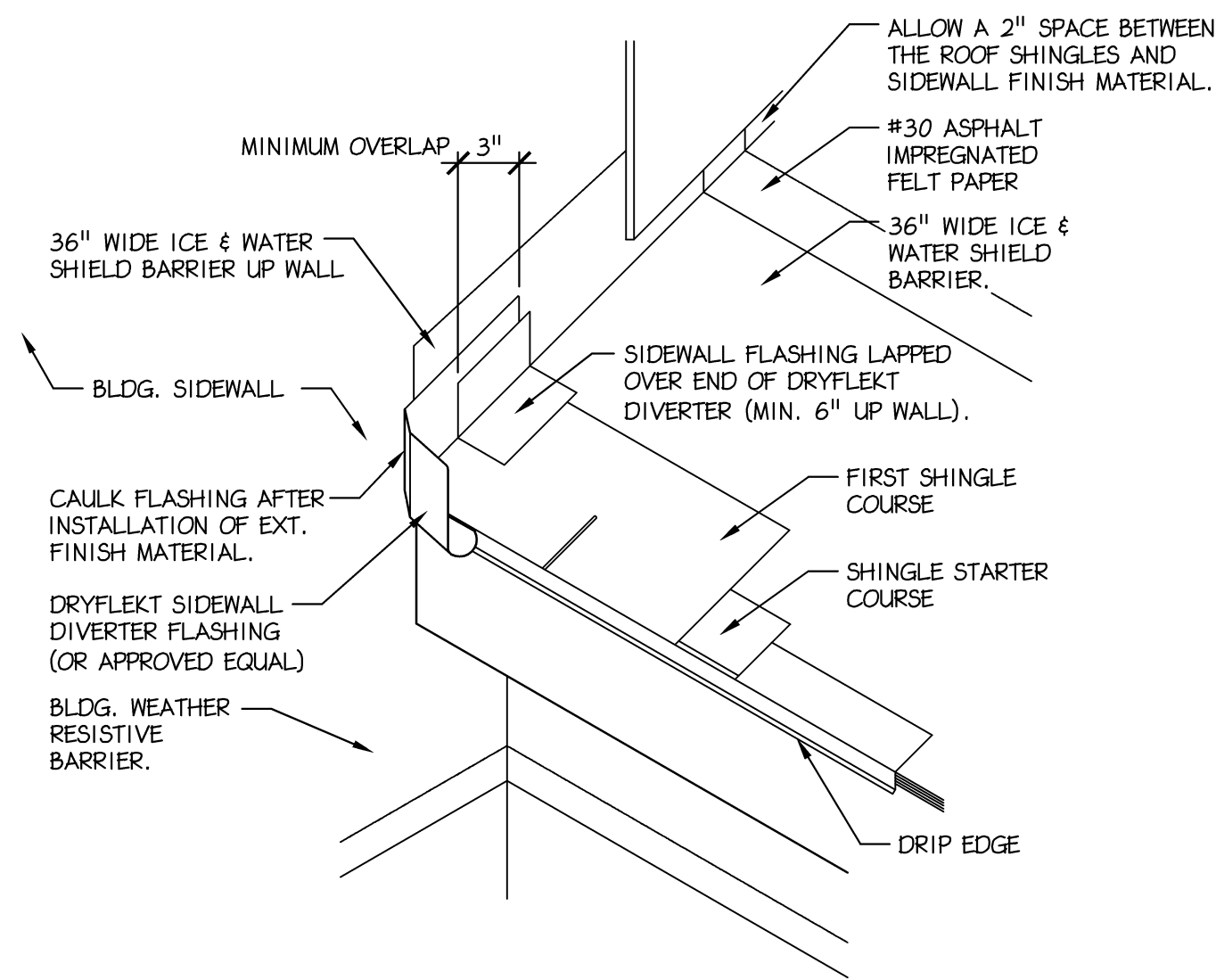
DALE RESIDENCE
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Chester Springs, PA 19425

West Pikeland Township
Chester County

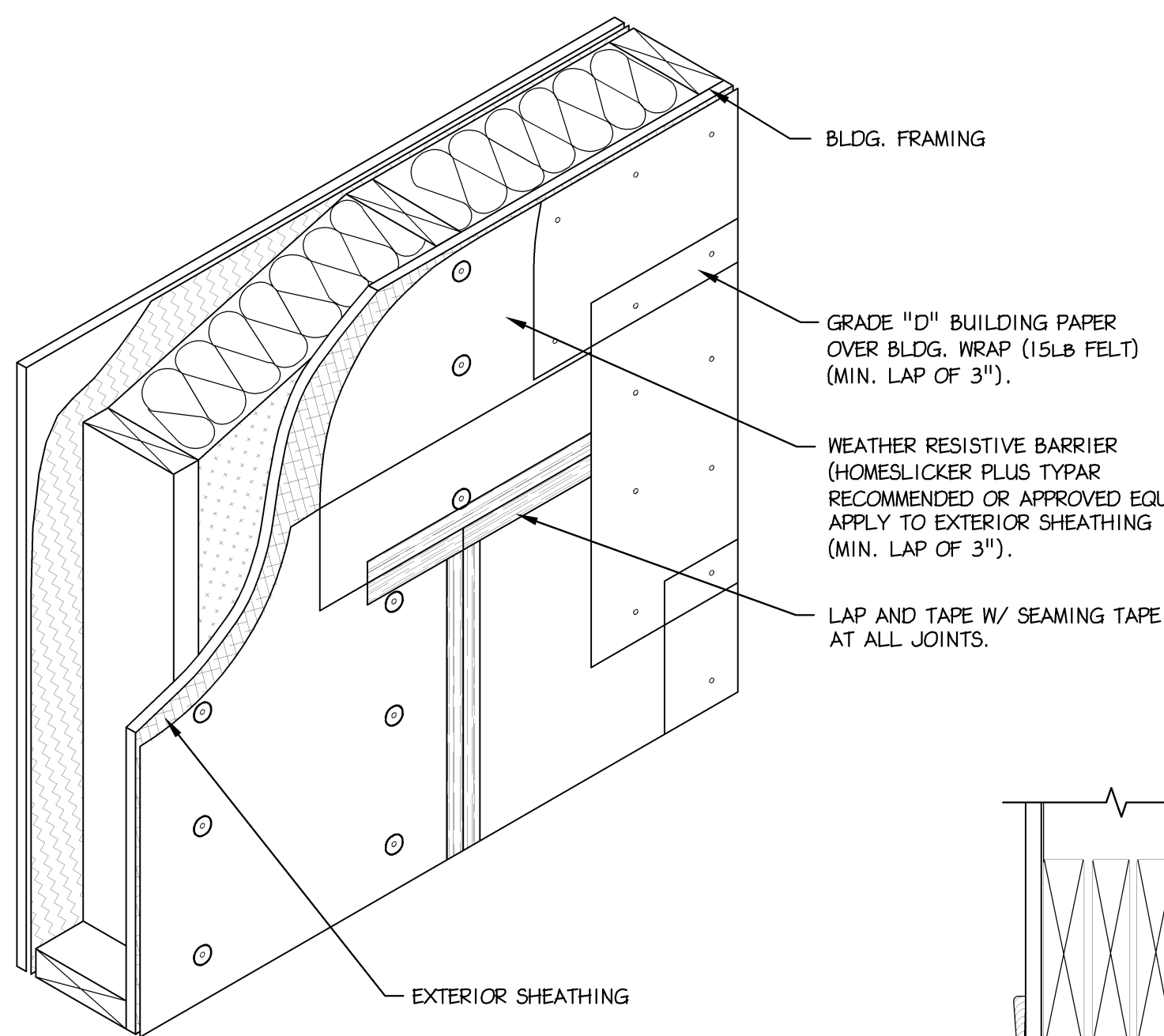
SHEET TITLE
DETAILS

SHEET NUMBER
A-8

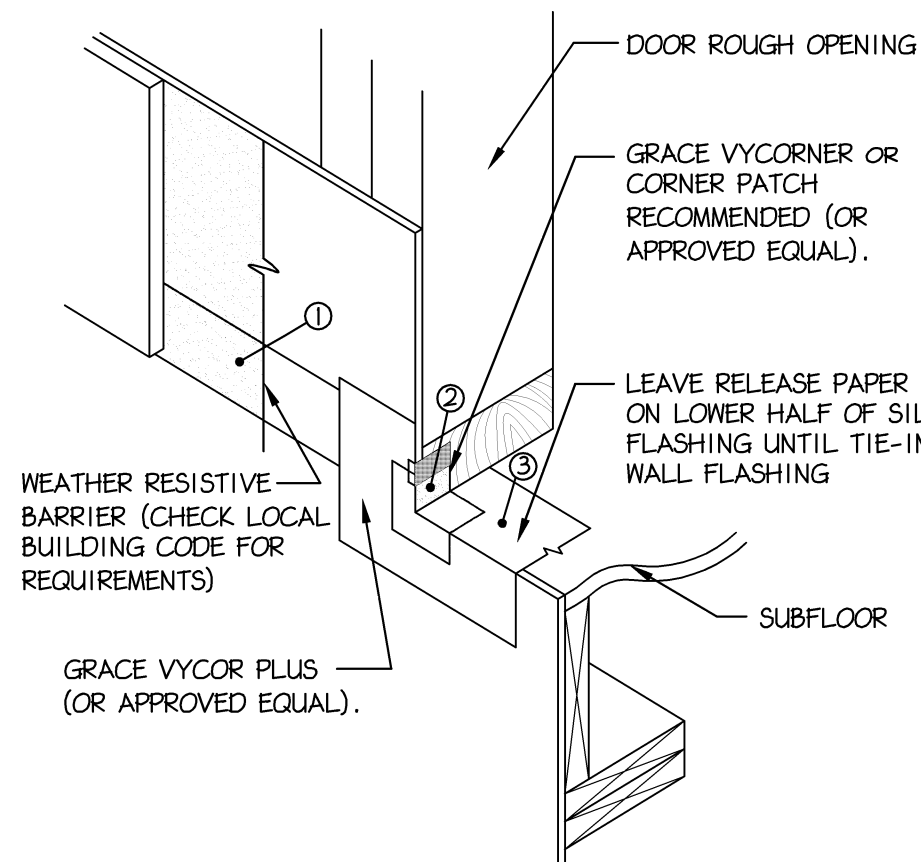
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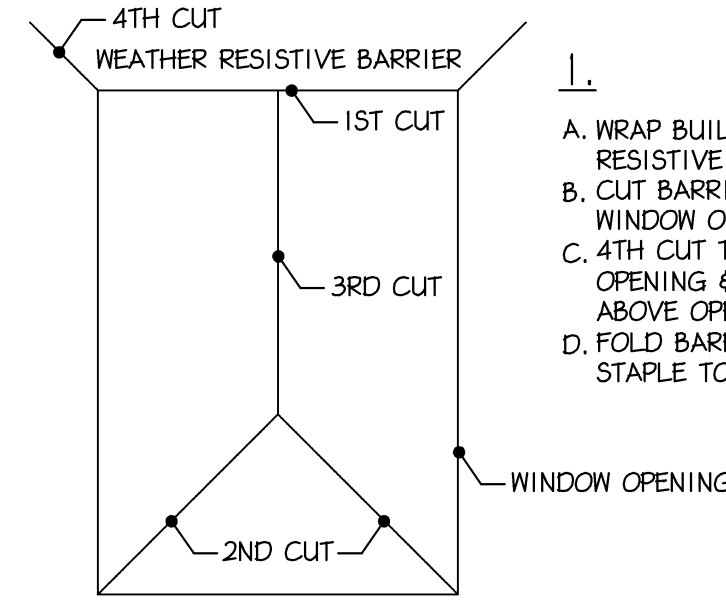
1 DIVERTER FLASHING DETAIL
A-9 Scale: 3/4" = 1'-0"



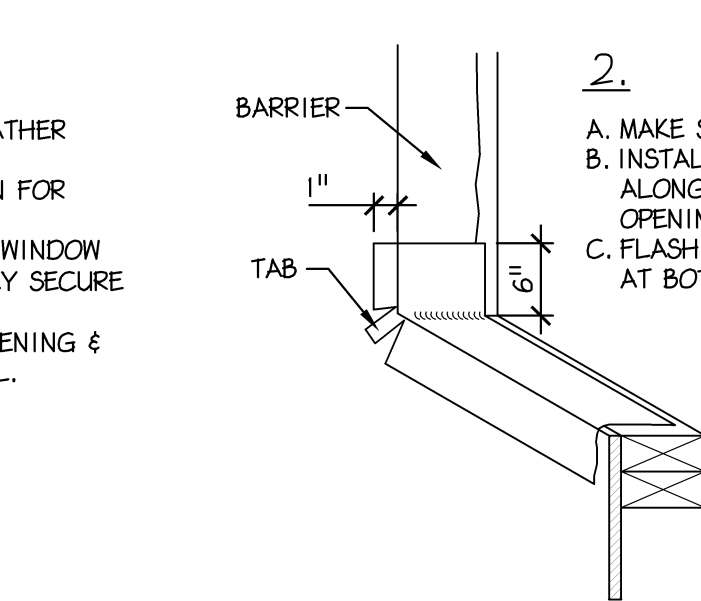
3 WEATHER BARRIER DETAIL
A-9 Scale: 3/4" = 1'-0"



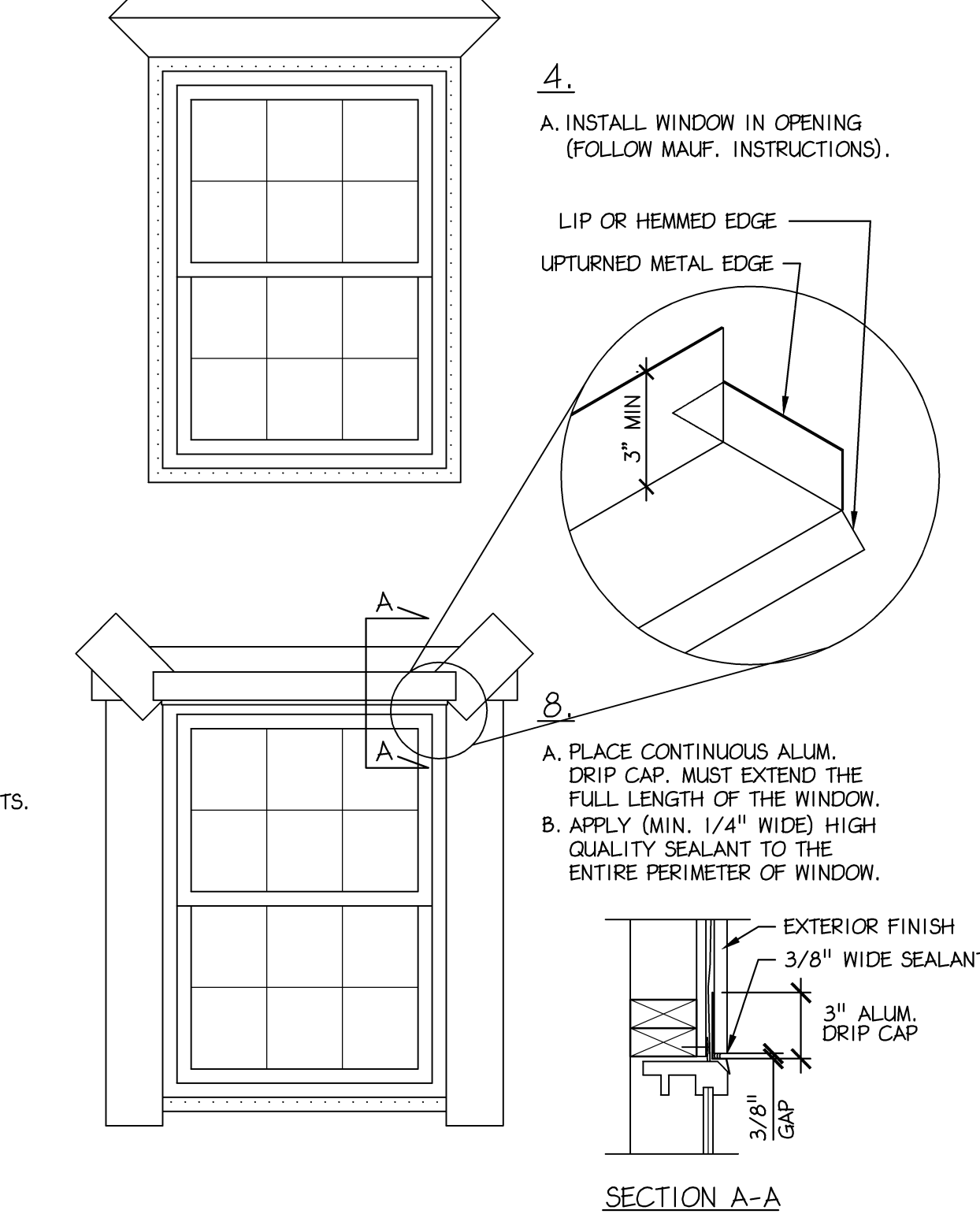
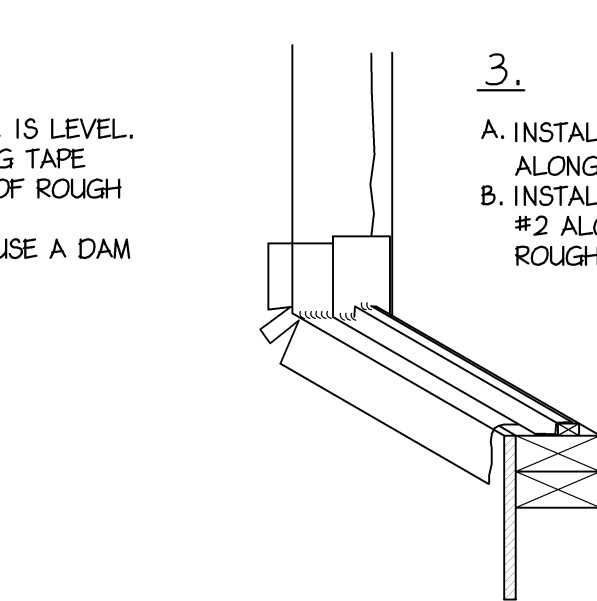
4 SILL FLASHING DETAIL
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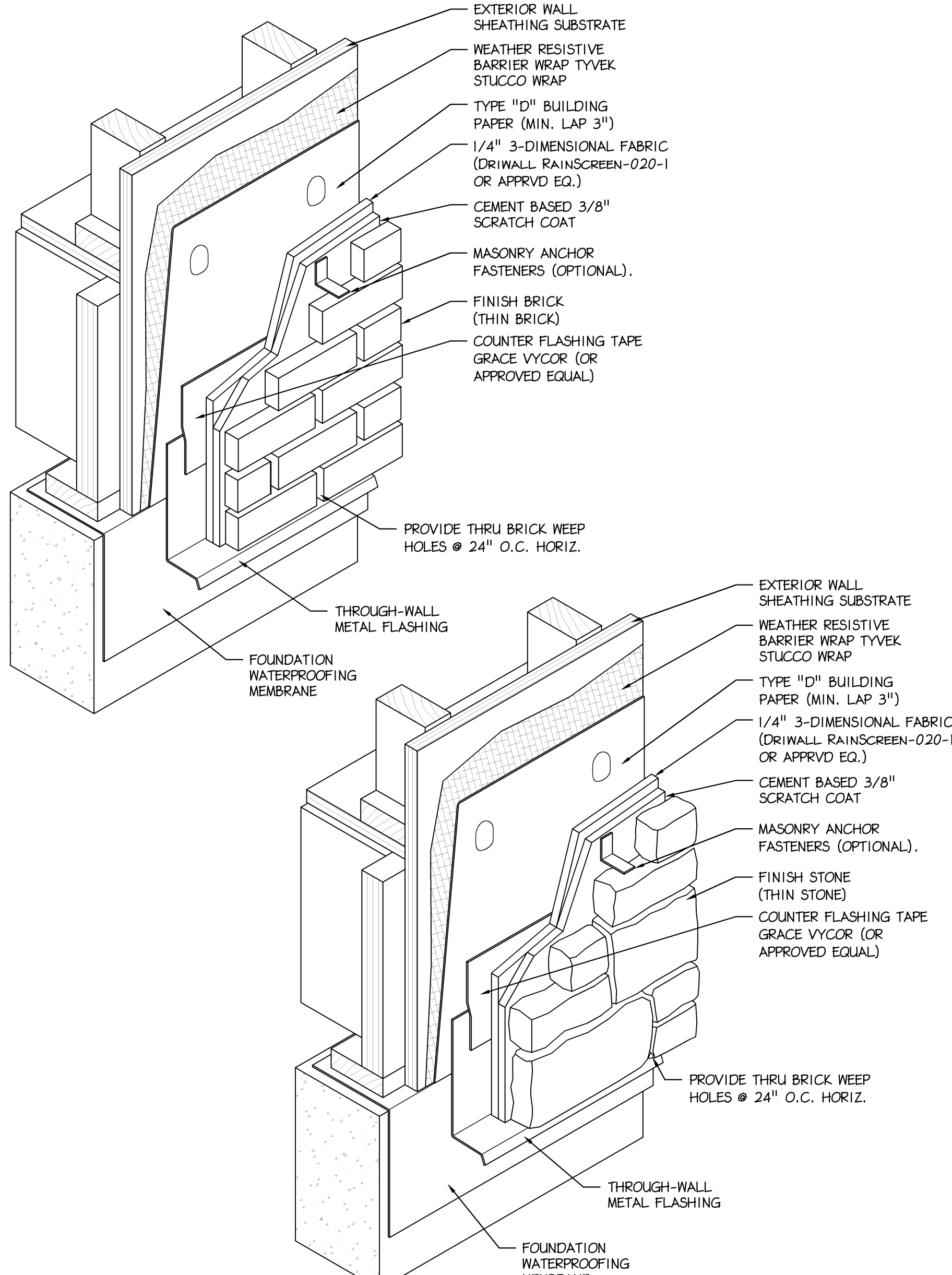
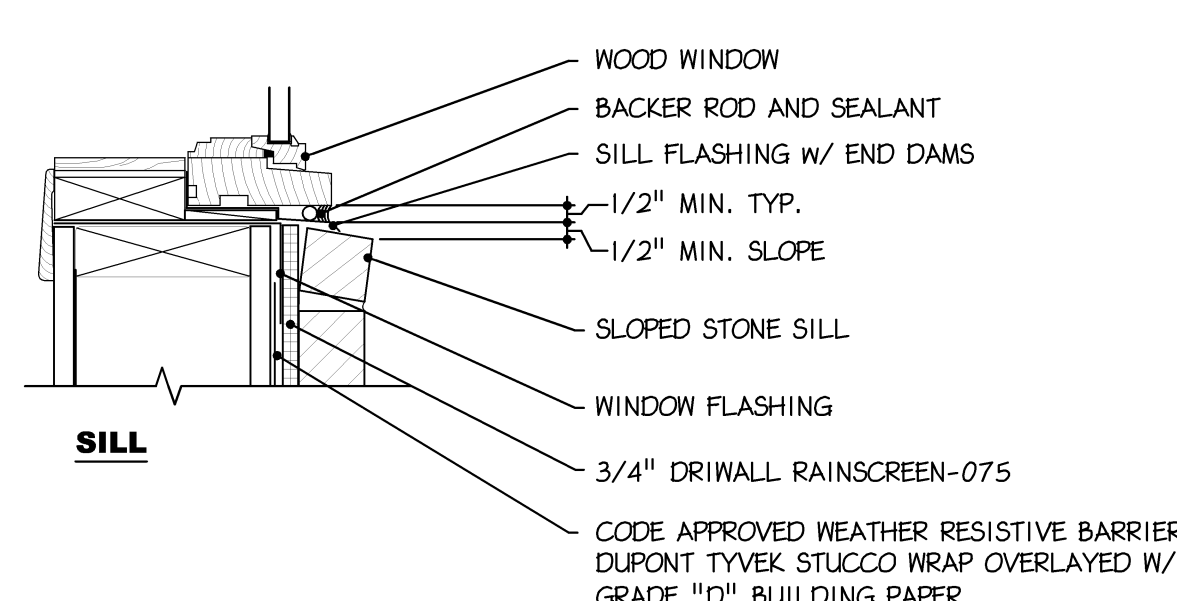
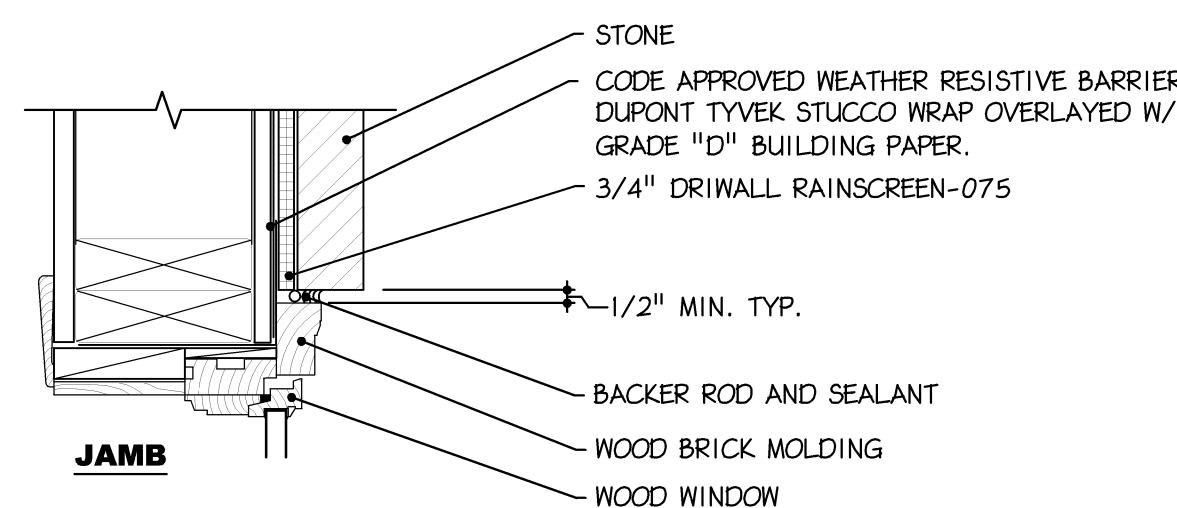
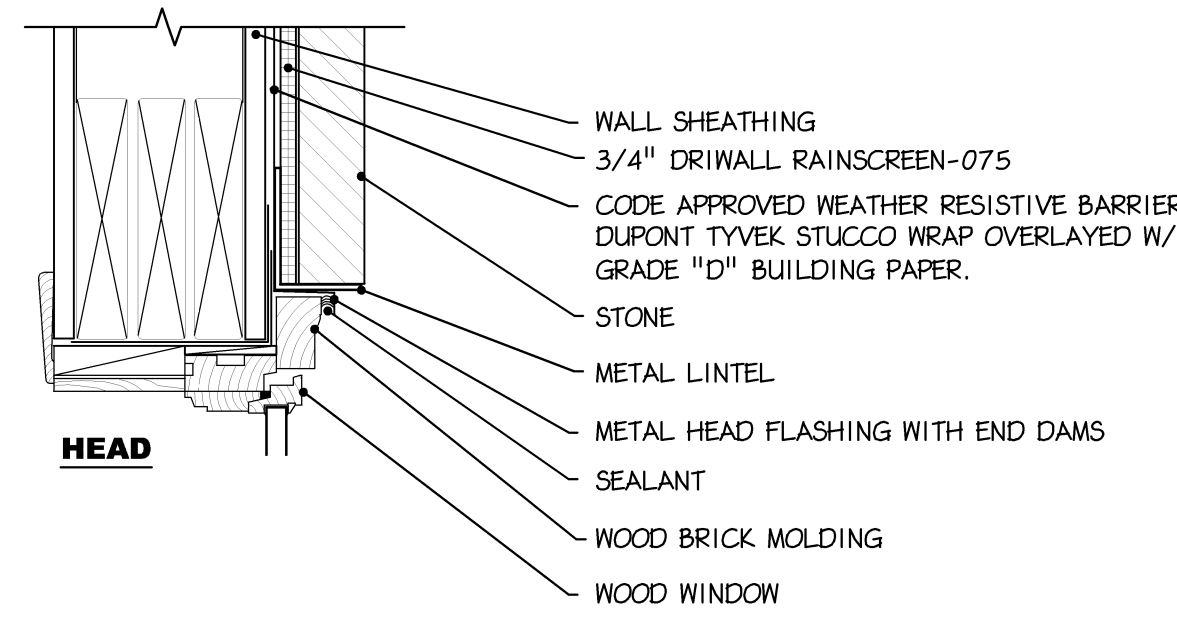
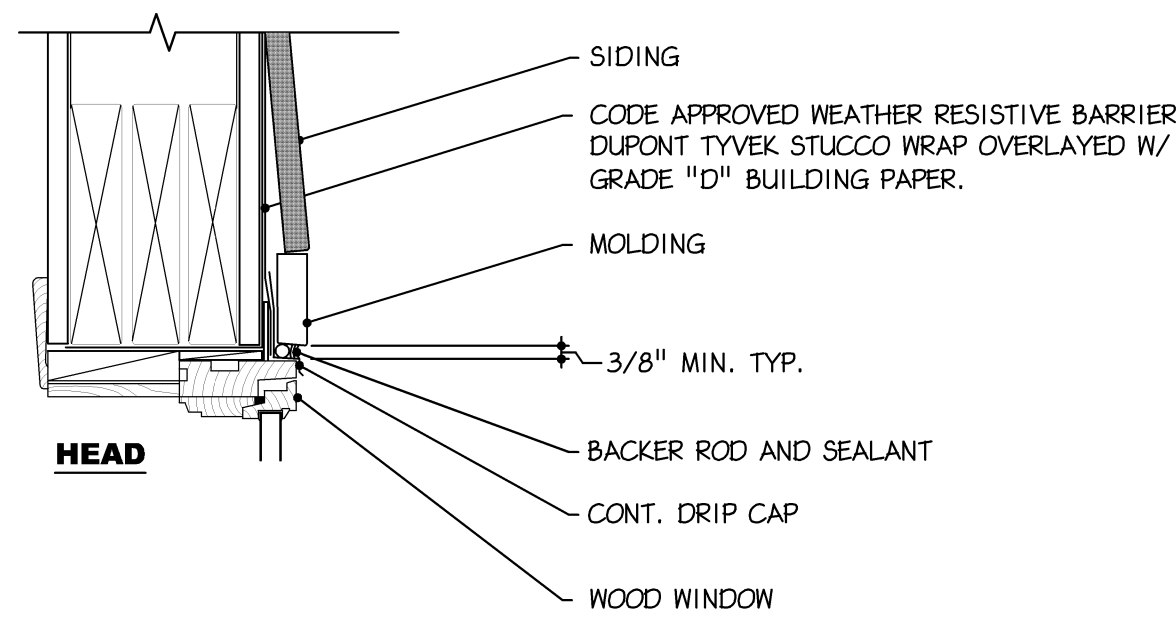
5 OPENING FLASHING DETAIL
A-9 Scale: 3/4" = 1'-0" HARDI SIDING FACADE



6 OPENING FLASHING DETAIL
A-9 Scale: 3/4" = 1'-0" STONE VENEER FACADE



7 STONE & BRICK VENEER DETAIL
A-9 Scale: 3/4" = 1'-0"



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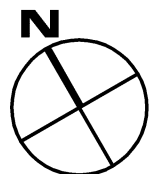
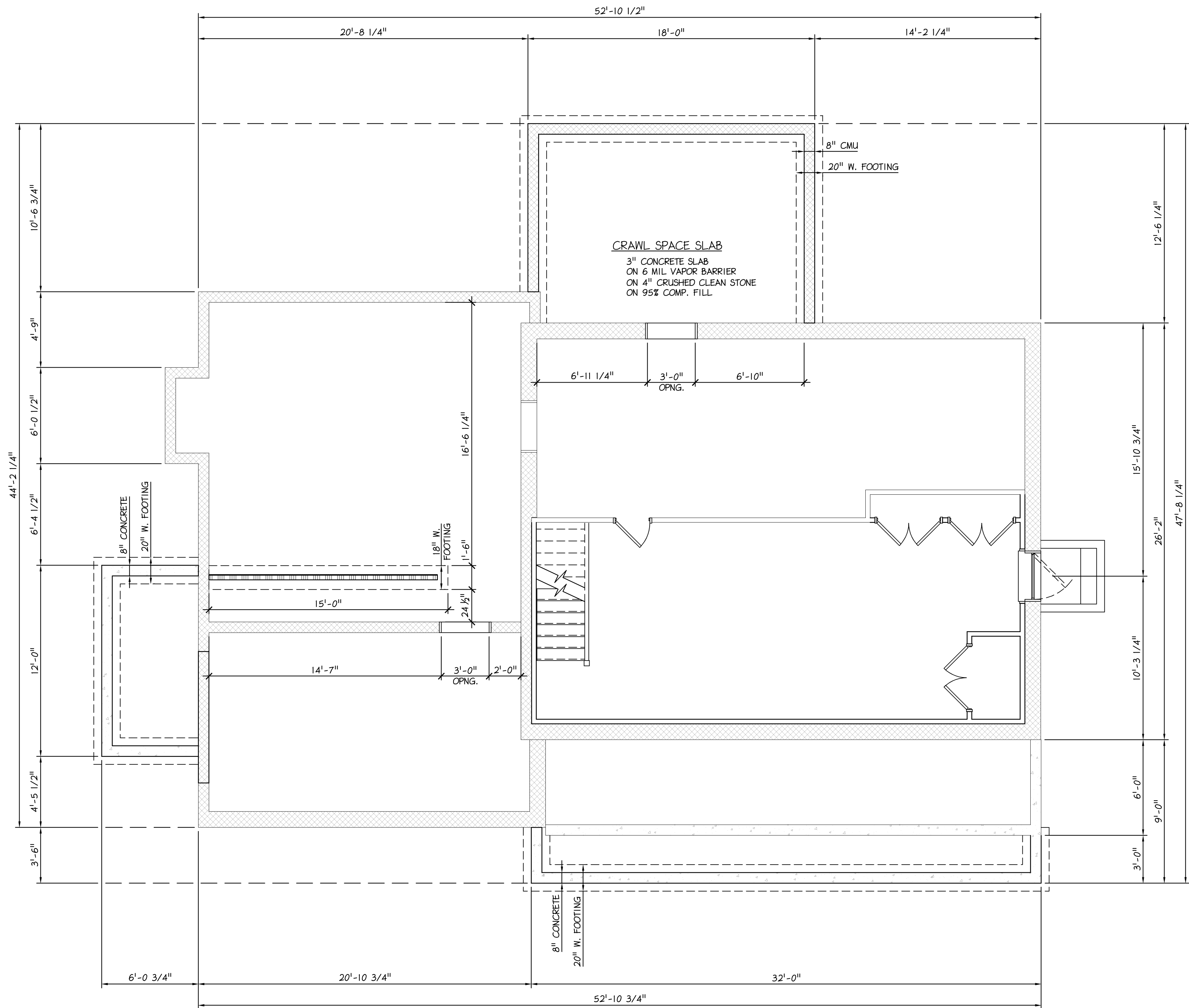
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Contact Person:
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Robin J. Kohn, AIA			September 17, 2015		

DALE RESIDENCE
1417 Yellow Springs Road
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West Pikeland Township
Chester County

SHEET TITLE
DETAILS
SHEET NUMBER
A-9
REV
5

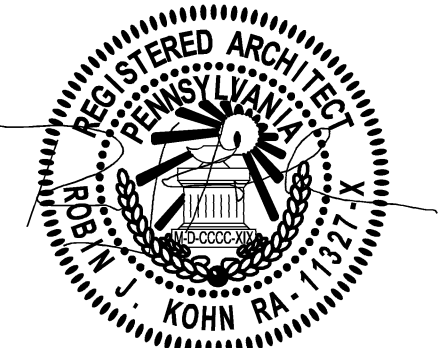


1 FOUNDATION PLAN
S-1 Scale: 1/4" = 1'- 0"

NOTES:

1. [Pattern] DENOTES LOAD BEARING WALL.

THIS DRAWING MUST BE USED
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ARCHITECTURAL DRAWINGS



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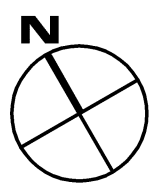
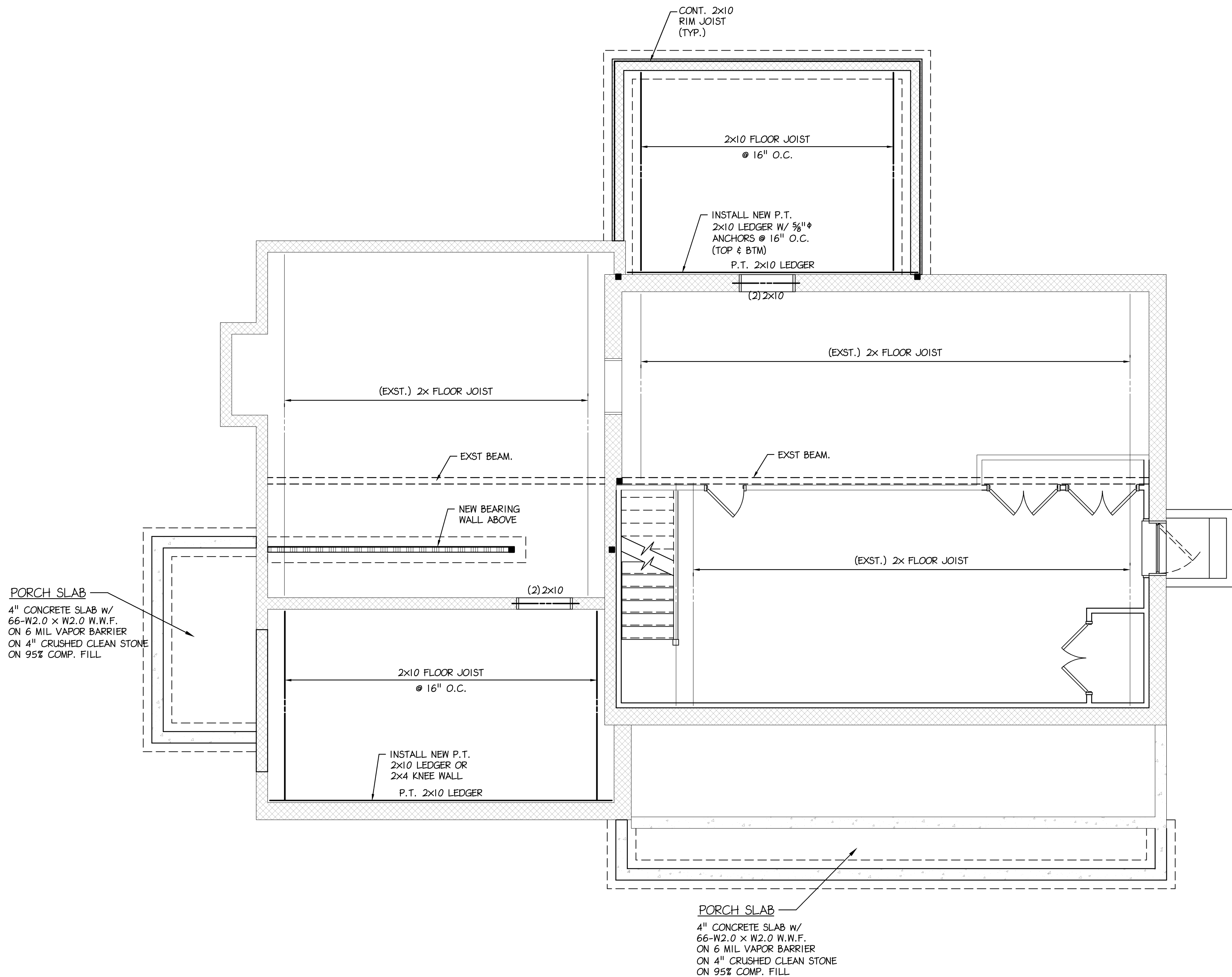
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West Pikeland Township
Chester County

SHEET TITLE
FOUNDATION PLAN

SHEET NUMBER
S-1
REV
5




1
S-2 **FIRST FLOOR FRAMING PLAN**
Scale: 1/4" = 1'- 0"

NOTES:

1. [Symbol] DENOTES LOAD BEARING WALL.
2. DOUBLE FLOOR JOIST SHALL BE INSTALLED UNDER ALL PARTITIONS WHICH ARE PARALLEL TO JOISTS.
3. ALL JOIST SHALL HAVE SOLID BRIDGING AT 6'-0" o.c. (MAX.). JOISTS SPANNING LESS THAN 12'-0" SHALL BE BRIDGED AT MIDSPAN.

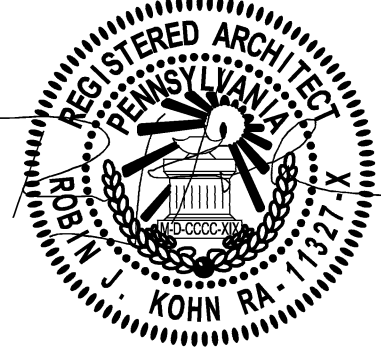
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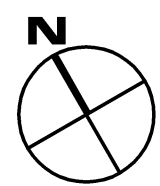
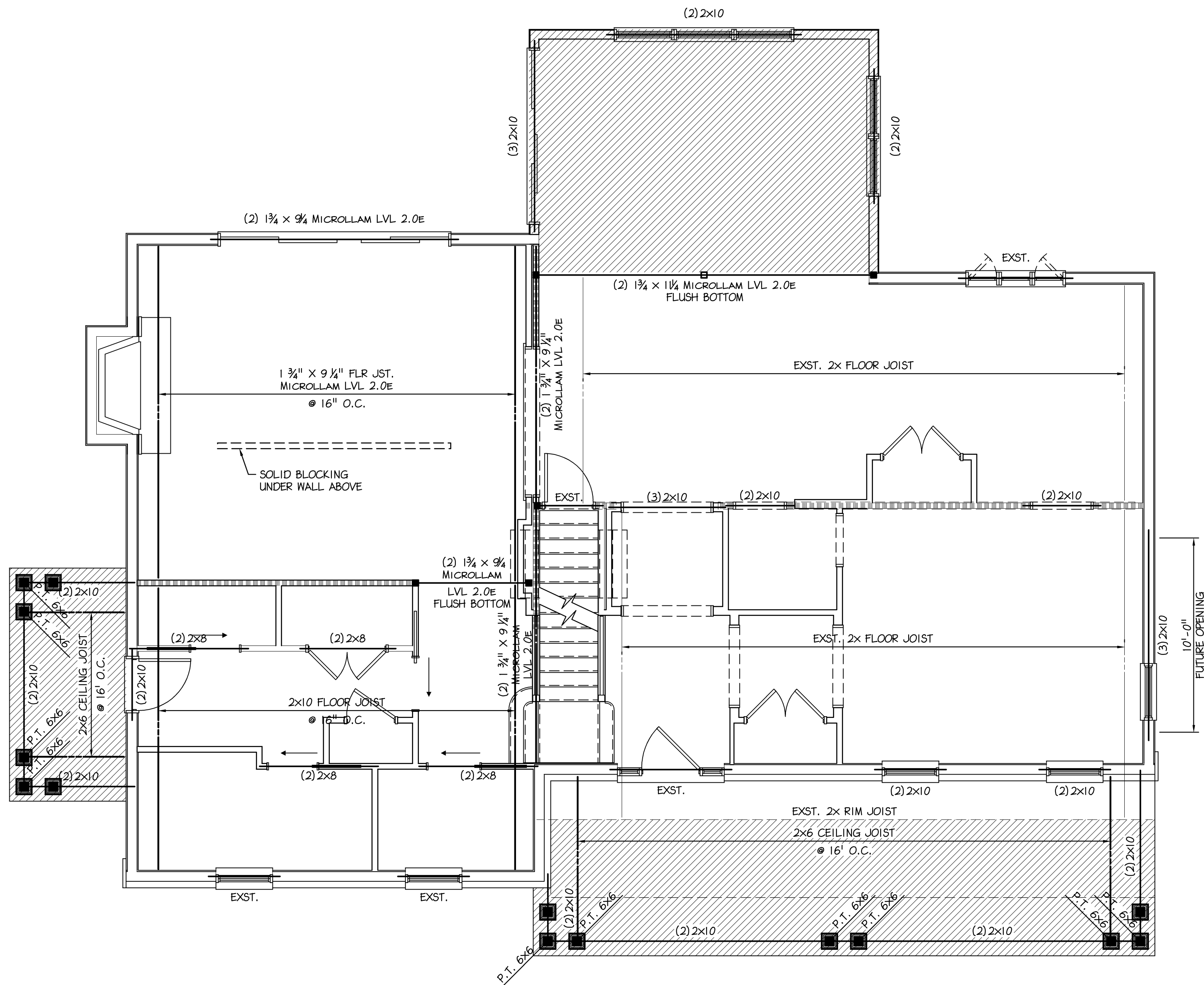
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5	09-17-2015	EMH	ISSUED FOR PERMIT & CONSTRUCTION
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APPROVED BY		CURRENT DATE	
Robin J. Kohn, AIA		September 17, 2015	

DALE RESIDENCE
1417 Yellow Springs Road
Chester Springs, PA 19425

West Pikeland Township
Chester County

SHEET TITLE
FIRST FLOOR FRAMING PLAN

SHEET NUMBER
S-2
REV
5

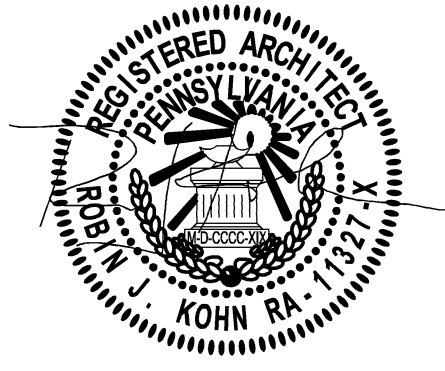


1 SECOND FLOOR FRAMING PLAN
S-3 Scale: 1/4" = 1'- 0"

NOTES:

1. DENOTES LOAD BEARING WALL
2. DENOTES ROOF FRAMING - PROVIDE 5/8" PLYWD. SHEATHING, OSB NOT PERMITTED, SEE ROOF FRAMING PLAN
3. DENOTES OVERFRAMING
4. SEE ARCH DRAWINGS FOR CEILING PROFILE, ROOF SLOPES, AND BEARING ELEVATIONS
5. DOUBLE FLOOR JOIST SHALL BE INSTALLED UNDER ALL PARTITIONS WHICH ARE PARALLEL TO JOISTS.
6. ALL JOIST SHALL HAVE SOLID BRIDGING AT 6'-0" o.c. (MAX.). JOISTS SPANNING LESS THAN 12'-0" SHALL BE BRIDGED AT MIDSPAN.

THIS DRAWING MUST BE USED
IN CONJUNCTION WITH THE
ARCHITECTURAL DRAWINGS



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PROJECT NO. DRAWN BY CHK'D BY

B3955A EMH RJK

NO. DATE BY ISSUE

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APPROVED BY CURRENT DATE

Robin J. Kohn, AIA September 17, 2015

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Chester County

SHEET TITLE

**SECOND FLOOR
FRAMING PLAN**

SHEET NUMBER

S-3

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PROJECT NO.		DRAWN BY		CHK'D BY	
B3955A		EMH		RJK	
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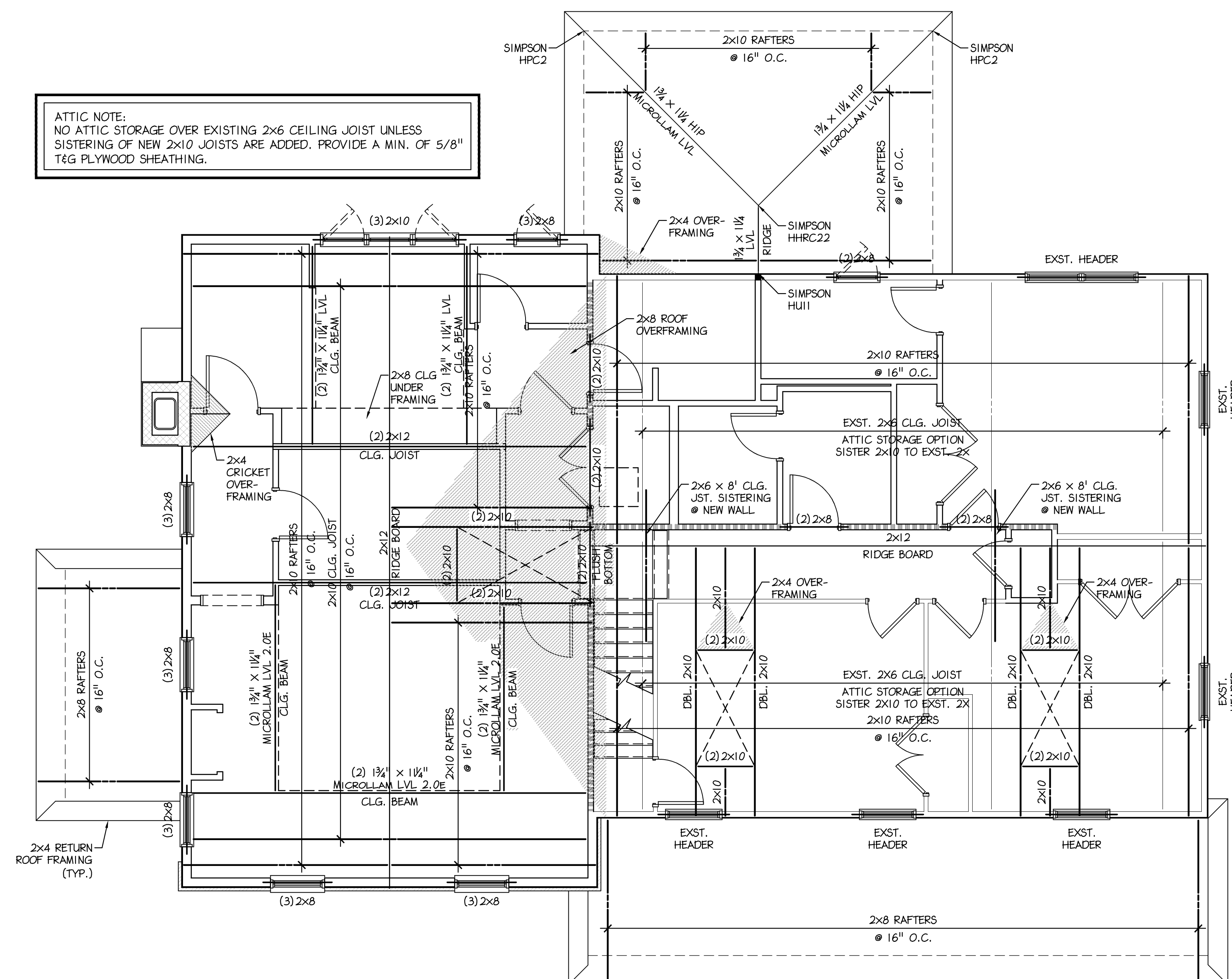
**West Pikeland Township
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SHEET TITLE

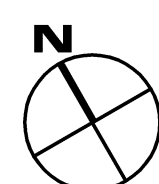
ROOF FRAMING PLAN

SHEET NUMBER

S-4

REV
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ATTIC NOTE:
NO ATTIC STORAGE OVER EXISTING 2X6 CEILING JOIST UNLESS
SISTERING OF NEW 2X10 JOISTS ARE ADDED. PROVIDE A MIN. OF 5/8"
T&G PLYWOOD SHEATHING.



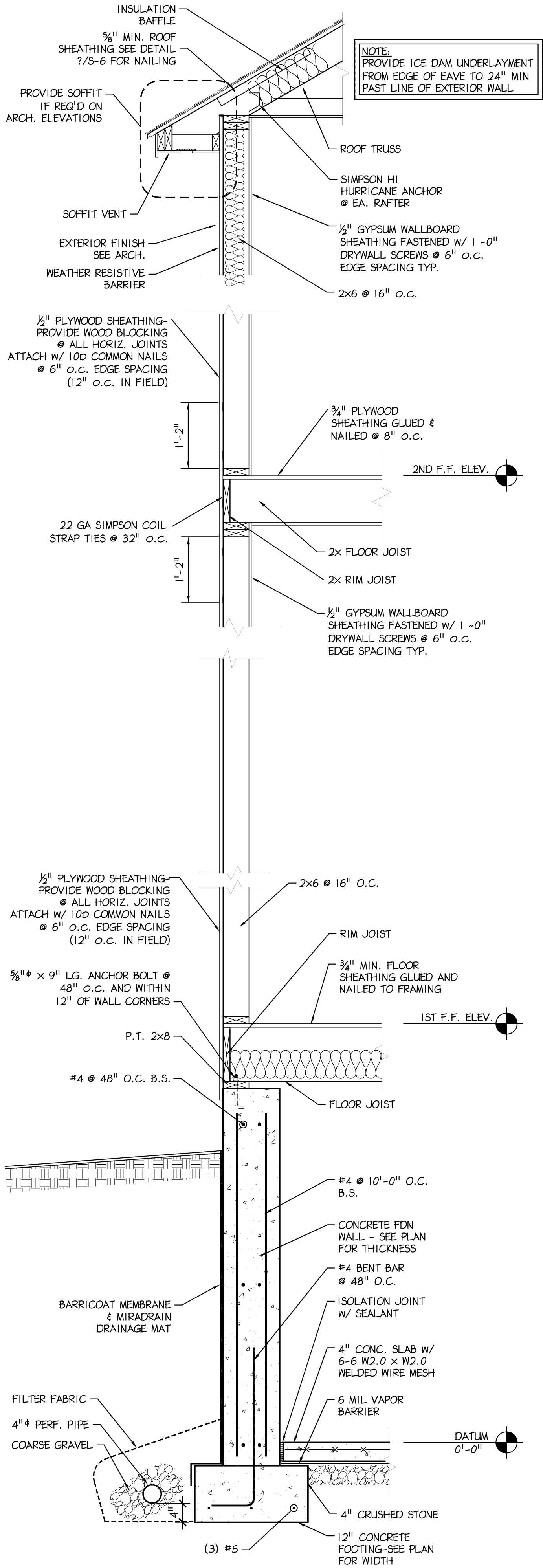
1 ROOF FRAMING PLAN

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

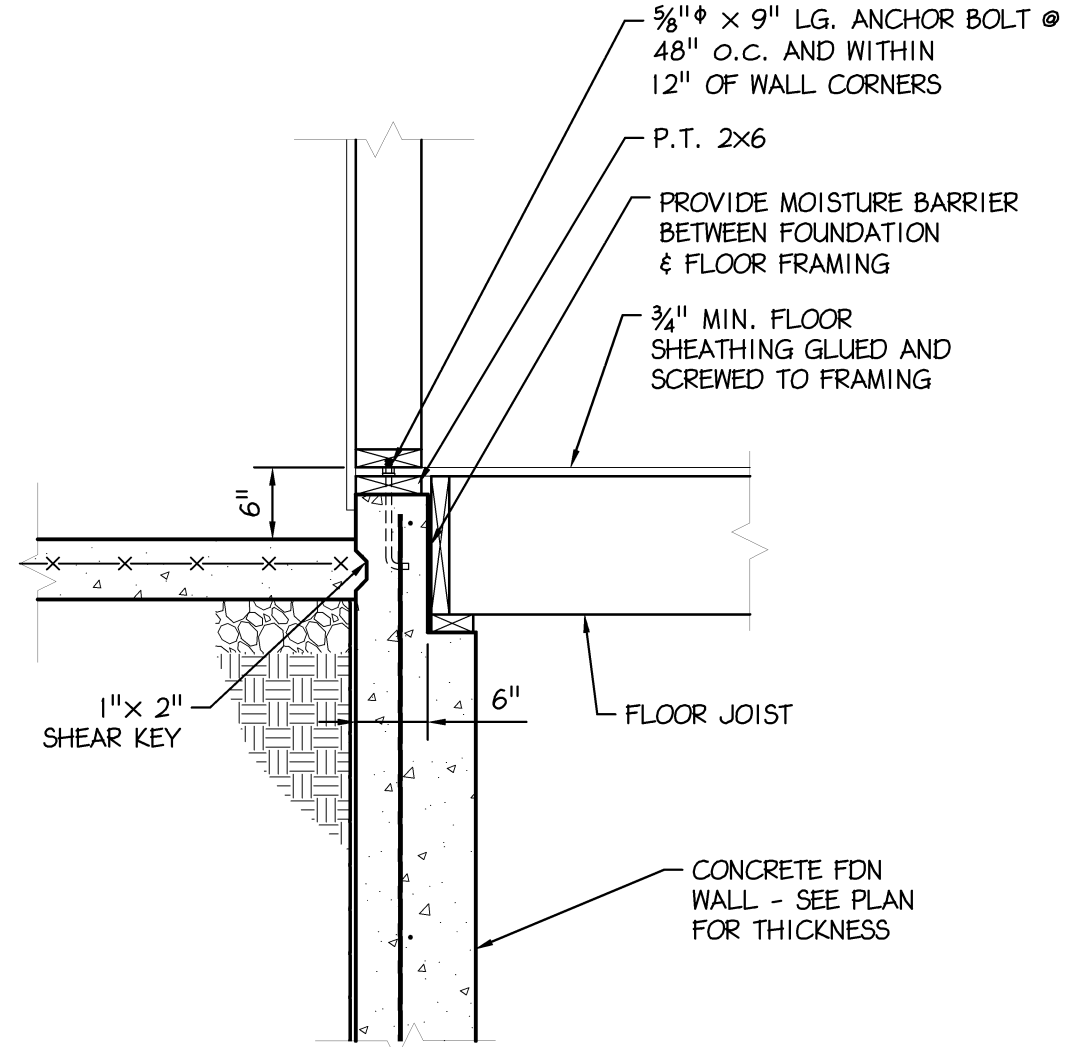
NOTES:

1.  DENOTES LOAD BEARING WALL
2.  DENOTES ROOF FRAMING - PROVIDE 5/8" PLYWOOD SHEATHING, OSB NOT PERMITTED
3.  DENOTES OVERFRAMING
4. SEE ARCH DRAWINGS FOR CEILING PROFILE, ROOF SLOPES, AND BEARING ELEVATIONS

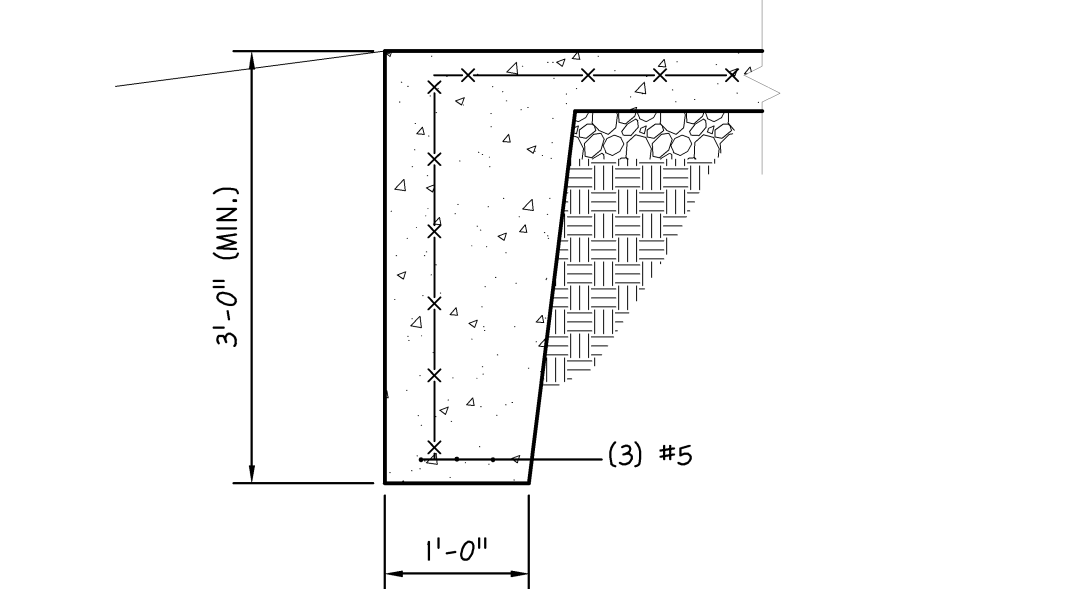
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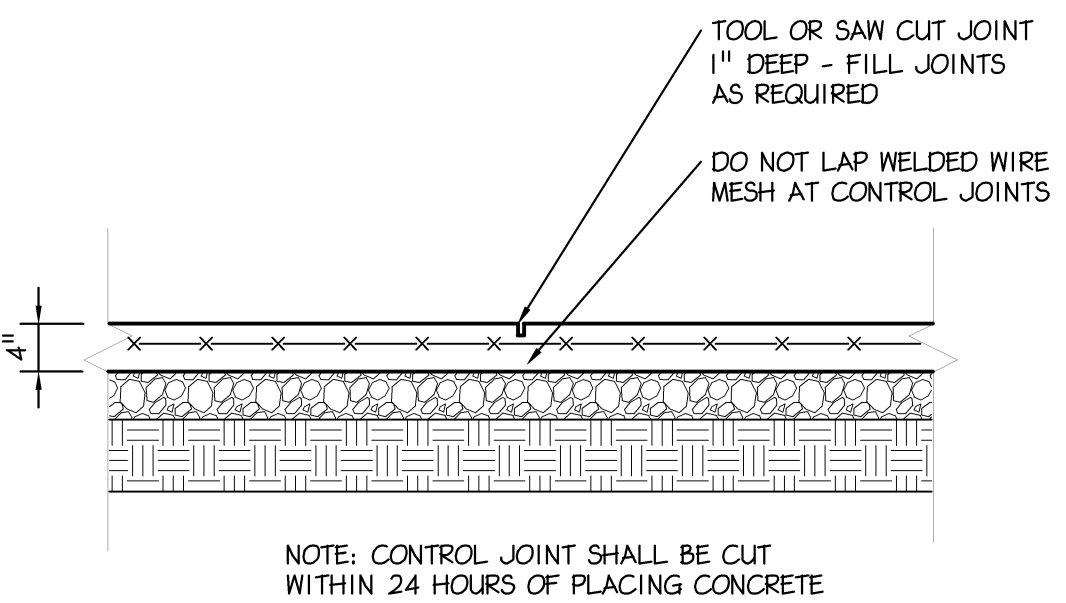
1 WALL SECTION DETAIL
S-5 Scale: 3/4" = 1'- 0"



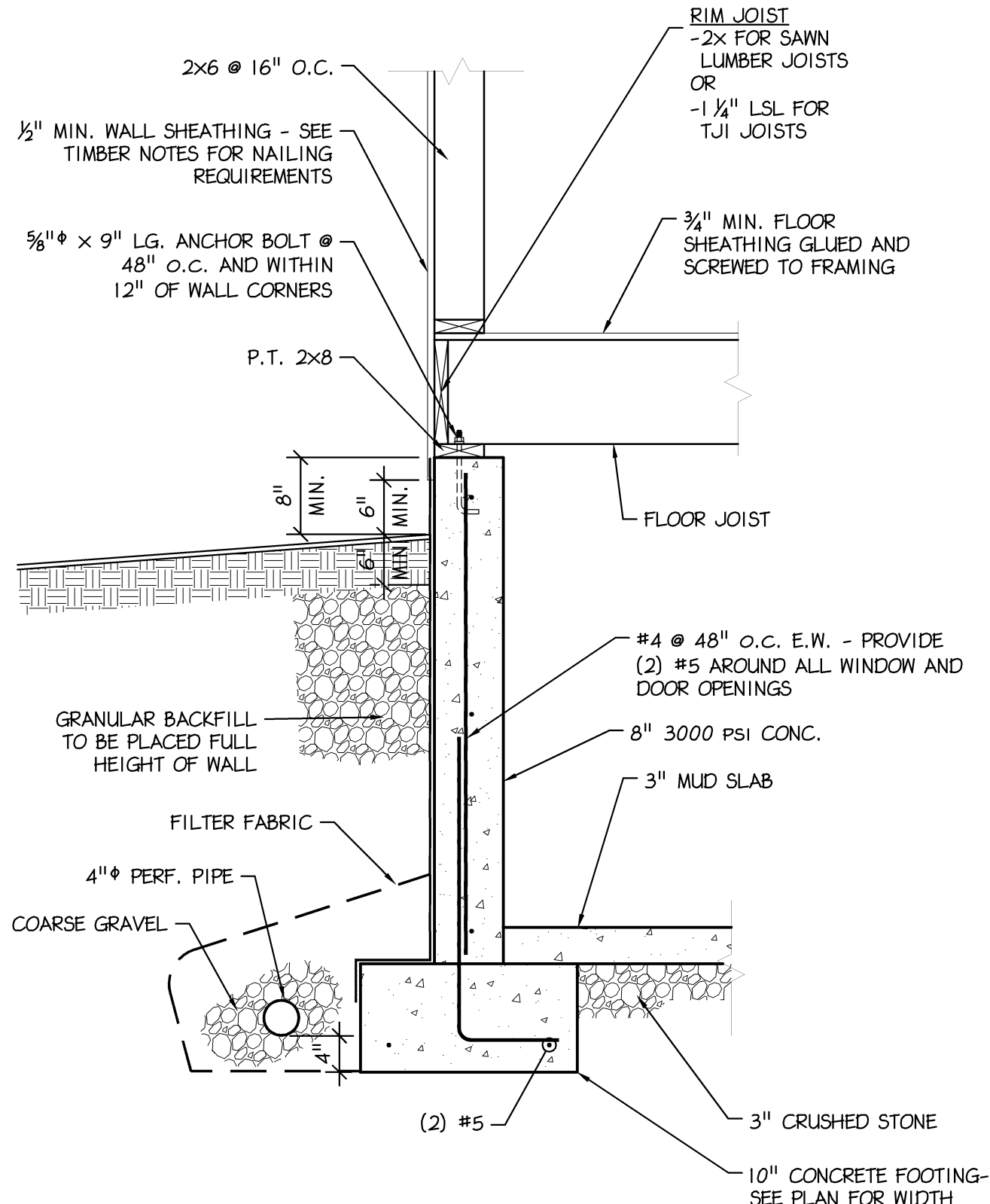
2 GARAGE & PORCH SLAB DETAIL
S-5 Scale: 3/4" = 1'- 0"



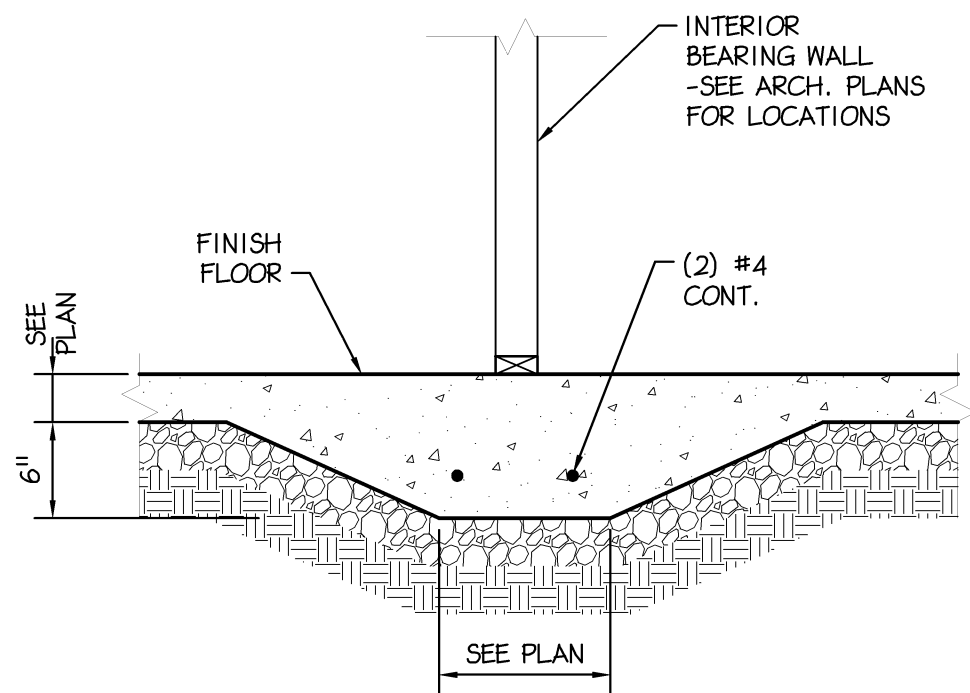
3 PORCH TURN DOWN DETAIL
S-5 Scale: 3/4" = 1'- 0"



5 SLAB CONTROL JOINT DETAIL
S-5 Scale: 3/4" = 1'- 0"



4 CRAWL SPACE DETAIL
S-5 Scale: 3/4" = 1'- 0"



6 THICKENED SLAB DETAIL
S-5 Scale: 3/4" = 1'- 0"

LIVE LOADS	APPLICABLE CODE: IRC 2009
FLOOR LIVE LOADS	40 PSF (LIVING AREAS)
LIVE LOAD	30 PSF (SLEEPING AREAS)
	60 PSF (DECK)
	20 PSF (ATTIC SPACE)
	100 PSF
	SEE DRAWINGS
STAIRWAY LIVE LOAD	20 PSF (MIN)
MECHANICAL UNIT LOAD	30 PSF + SNOW DRIFT
ROOF LOADS	30 PSF
ROOF LIVE LOAD	25 PSF
ROOF SNOW LOAD	1.0
GROUND SNOW LOAD - Pg:	1.0
FLAT ROOF SNOW LOAD - Pf:	1.0
SNOW EXPOSURE FACTOR - Ce:	1.0
SNOW LOAD IMPORTANCE FACTOR - I:	1.0
THERMAL FACTOR - Ct:	1.0
WIND LOAD	
BASIC WIND SPEED - V (3-SEC. GUST):	90 MPH
WIND LOAD IMPORTANCE FACTOR	1.0
WIND LOAD EXPOSURE CATEGORY	B
INTERNAL PRESSURE COEFFICIENT	± 0.25
WIND DESIGN PRESSURE	± 5 PSF
SEISMIC LOAD	
SEISMIC DESIGN CATEGORY:	C
SEISMIC USE GROUP:	II
SPECTRAL RESPONSE COEFFICIENT - SDS:	0.339
SPECTRAL RESPONSE COEFFICIENT - SDI:	0.133
SITE CLASS:	D
BASIC SEISMIC FORCE RESISTING SYSTEM:	LIGHT FRAME WALLS W/ SHEAR PANELS
ANALYSIS PROCEDURE:	EQUIVALENT LATERAL FORCE PROCEDURE
WIND LOAD CONTROLS DESIGNS FOR LATERAL FORCES	

- FOUNDATION NOTES
- FOUNDATION SOIL BEARING PRESSURE - 2,000 PSF
 - FOUNDATION SHALL BE PLACED ON VIRGIN SOIL AT ELEVATIONS INDICATED ON DRAWINGS.
 - THE ENGINEER SHALL APPROVE ALL BEARING STRATA PRIOR TO PLACEMENT OF THE CONCRETE FOOTINGS.
 - INSTALL CRACK CONTROL OR CONSTRUCTION JOINTS AT 30-FOOT MAXIMUM CENTERS IN WALLS. LOCATIONS SHALL BE APPROVED BY ENGINEER.
 - TOP OF FOOTING ELEVATIONS ARE NOTED (000.00')
 - TOP OF PIER OR WALL ELEVATIONS ARE NOTED (000.00')
 - ALL TOPSOIL, SOIL FILL, AND SOFT SUBSOIL SHALL BE REMOVED AND, IF NECESSARY, REPLACED WITH COMPACTED LOAD-BEARING FILL MATERIALS. TEST PITS OR SOIL BORINGS SHALL BE CONDUCTED TO DETERMINE THE LOCATION OF THE VIRGIN SOIL.
 - ANY UNDERCUT AND REPLACEMENT WITH COMPACTED LOAD-BEARING FILL SHALL EXTEND LATERALLY BEYOND FOOTINGS A DISTANCE AT LEAST EQUAL TO THE DEPTH OF THE UNDERCUT.
 - AFTER UNDERCUTTING AND REMOVAL OF UNSUITABLE SOIL, THE EXPOSED UNDERLYING RESIDUAL SOILS IN THE PROPOSED BUILDING AREA SHALL BE PROOFROLLED AND COMPACTED. SOFT AND/OR UNSTABLE AREAS DISCLOSED BY THE PROOFROLLING SHALL BE ROLLED UNTIL STABILITY IS OBTAINED OR UNTIL FURTHER UNDERCUT TO FIRM MATERIAL IS REACHED.
 - FOOTINGS SHALL BE BASED ON STIFF SUBSOIL OR LOAD-BEARING FILL MATERIALS WITH A MINIMUM DEPTH OF AT LEAST TWO FEET OR ONE-HALF THE FOOTING WIDTH, WHICHEVER IS GREATER, BELOW THE FOUNDATION BEARING LEVEL.
 - PLACE LOAD-BEARING FILL MATERIALS IN LAYERS NOT MORE THAN EIGHT INCHES IN LOOSE THICKNESS FOR MATERIAL COMPACTED BY HEAVY COMPACTION EQUIPMENT, AND NOT MORE THAN FOUR INCHES IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HAND OPERATED TAMPERS. FILL MATERIAL SHALL BE MOISTENED OR ABLATED AS NECESSARY.
 - EACH LIFT SHALL BE COMPACTED TO AN AVERAGE DRY DENSITY OF NOT LESS THAN 98% OF THE MAXIMUM DRY DENSITY ACCORDING TO ASTM D698 (STANDARD PROCTOR) FOR ALL FOOTING AND FLOOR SUBGRADES.
 - THE SUB-FLOOR MATERIALS SHALL CONSIST OF AT LEAST FOUR TO SIX INCHES OF GRAVEL OR CRUSHED STONE. THE SUB-FLOOR MATERIALS SHALL BE COMPACTED BY AT LEAST FOUR COVERAGES OF A HEAVY-DUTY VIBRATORY ROLLER OR UNTIL NO FURTHER COMPACTION IS OBSERVED. SEE THE DRAWINGS AND SPECIFICATIONS FOR THE VAPOR BARRIER SIZE, TYPE AND LOCATION.
 - IN AREAS WHERE SOFT/LOOSE ZONES OR POSSIBLE VOIDS EXIST AT DEPTH, NOTIFY THE STRUCTURAL ENGINEER IMMEDIATELY. SUCH AREAS SHOULD BE UNDERCUT AND REPLACED WITH COMPACTED LOAD-BEARING FILL, OR FLOWABLE CONCRETE FILL AS DIRECTED BY THE DESIGN PROFESSIONAL. IN ADDITION, FOOTINGS SHOULD BE OVERSIZED AND PROPORTIONED FOR A REDUCED ALLOWABLE BEARING CAPACITY, AS DETERMINED BY THE STRUCTURAL ENGINEER, TO BETTER DISTRIBUTE FOUNDATION LOADS AND SPAN ANY LOCALIZED SOFT/LOOSE ZONE OR VOID AREAS.

CONCRETE NOTES

1. REINFORCED CONCRETE CONSTRUCTION SHALL BE IN ACCORDANCE WITH ACI 318, LATEST EDITION

2. CONCRETE MATERIALS: $FC = 4000$ PSI FOR SLABS, ALL OTHER CONCRETE: $FC = 3000$ PSI
CEMENT: ASTM C150, TYPE I
AGGREGATE: ASTM C33
WATER: ASTM C94
EXTERIOR CONCRETE MIX: WATER CEMENT RATIO, 0.45 (AIR-ENTRAINED TO 4.5 % MIN)
INTERIOR CONCRETE MIX: WATER CEMENT RATIO, 0.50

3. REINFORCING MATERIALS:
REINFORCING BARS: ASTM A615, GRADE 60, DEFORMED

4. LAP SPLICES SHALL BE IN ACCORDANCE WITH THE FOLLOWING TABLE, UNLESS NOTED OTHERWISE. WHERE CLASSES ARE NOT CALLED OUT ON DRAWINGS, USE CLASS "B" SPLICES

TENSION SPLICES (INCHES)					COMPRESSION SPLICES (INCHES)				
BAR SIZE	TOP BARS A	B	OTHER A	BARS B					
#3	16	21	12	16			12		
#4	21	28	16	21			15		
#5	27	35	21	27			19		
#6	35	46	27	35			23		
#7	48	62	37	48			26		
#8	63	82	48	63			30		

5. MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCEMENT AS FOLLOWS:
CAST AGAINST EARTH: 3" CLEAR
CONCRETE EXPOSED TO EARTH OR WATER: 2" CLEAR
ALL OTHER CONCRETE: 3/4" CLEAR

6. MINIMUM CONCRETE SLAB REINFORCEMENT SHALL BE AS FOLLOWS:
(PLACE ALL REINFORCING AND WVF 1/2" BELOW TOP OF SLAB WHERE APPLICABLE)
3-8" FLOOR SLAB ON METAL DECK 66-W2.0xW2.0
4" FLOOR SLAB ON GRADE 66-W2.0xW2.0
5" FLOOR SLAB ON GRADE 44-W4.0xW4.0

7. SLUMP OF CONCRETE FOR FOUNDATIONS SHALL NOT EXCEED 4" UNLESS A HIGH RANGE WATER-REDUCING ADMIXTURE IS USED. THE SLUMP OF CONCRETE FOR FOUNDATIONS PRIOR TO ADDITION OF A HIGH RANGE WATER REDUCING ADMIXTURE SHALL NOT EXCEED 4". THE SLUMP OF CONCRETE CONTAINING HIGH RANGE WATER-REDUCING ADMIXTURE SHALL NOT EXCEED 10".

8. COLD-WEATHER PLACING SHALL COMPLY WITH THE PROVISIONS OF ACI-308R. THE USE OF CALCIUM CHLORIDE, SALT, AND OTHER MATERIALS CONTAINING ANTI FREEZE AGENTS OR CHEMICAL ACCELERATORS SHALL NOT BE PERMITTED UNLESS OTHERWISE ACCEPTED IN THE MIX DESIGN.

9. HOT-WEATHER PLACING SHALL COMPLY WITH THE PROVISIONS OF ACI-305.

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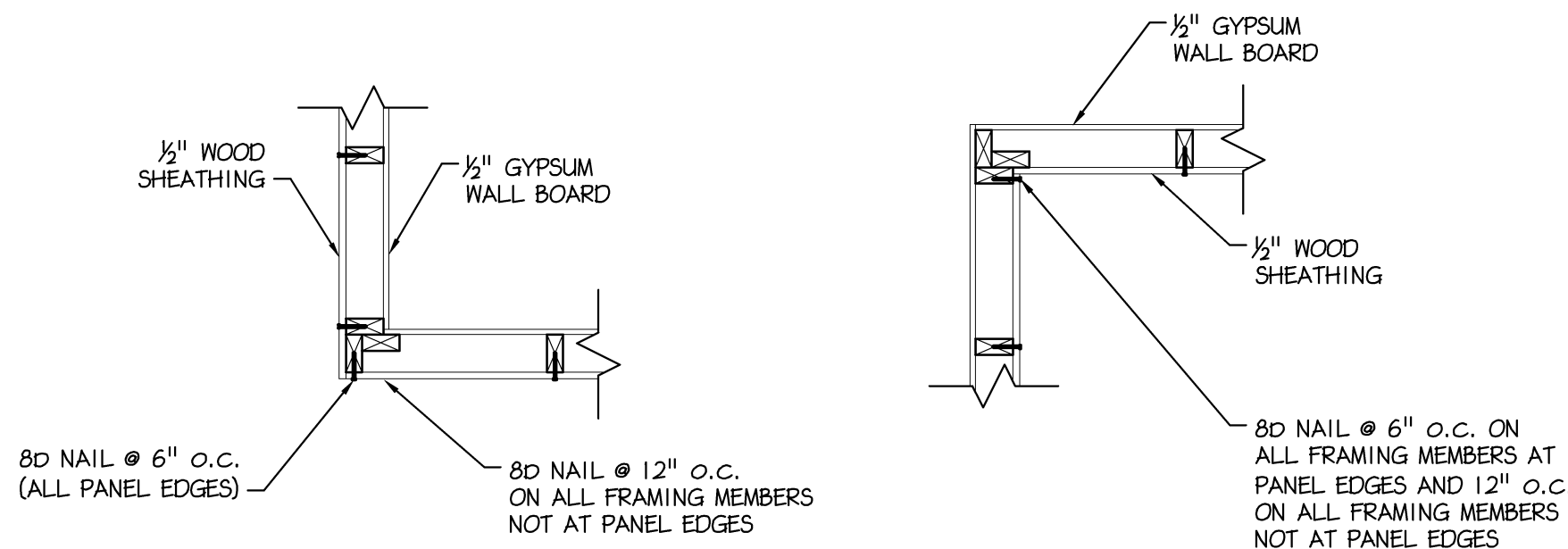
DALE RESIDENCE
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Chester Springs, PA 19425

West Pikeland Township
Chester County

SHEET TITLE
DETAILS & NOTES

SHEET NUMBER
S-5

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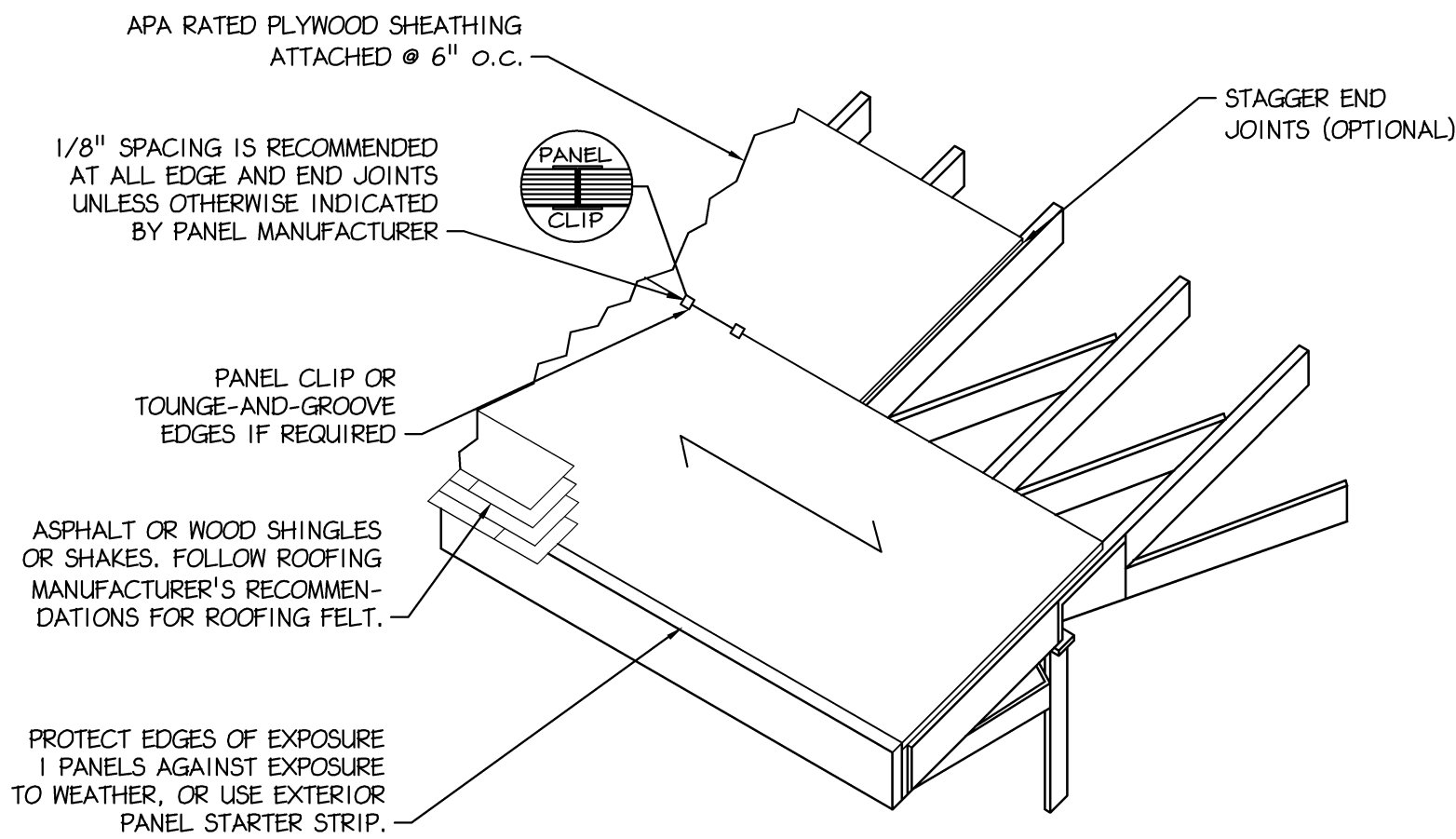


OUTSIDE CORNER DETAIL

INSIDE CORNER DETAIL

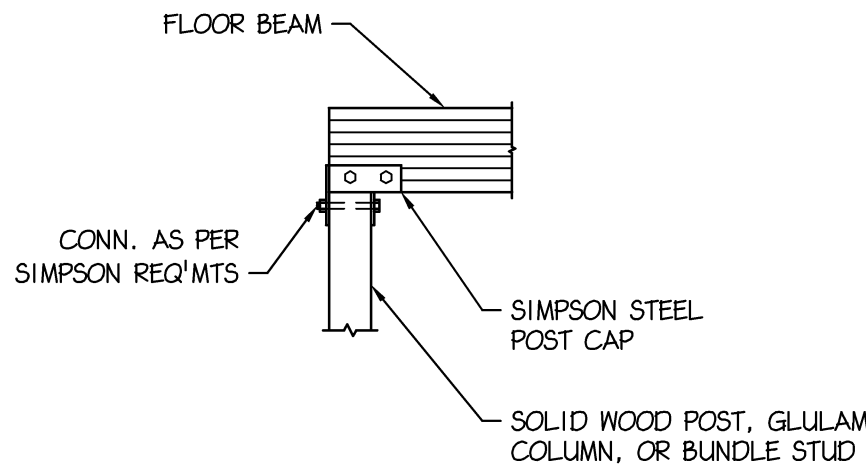
1 FRAMING • CORNERS DETAIL

S-6 Scale: 3/4" = 1'- 0"



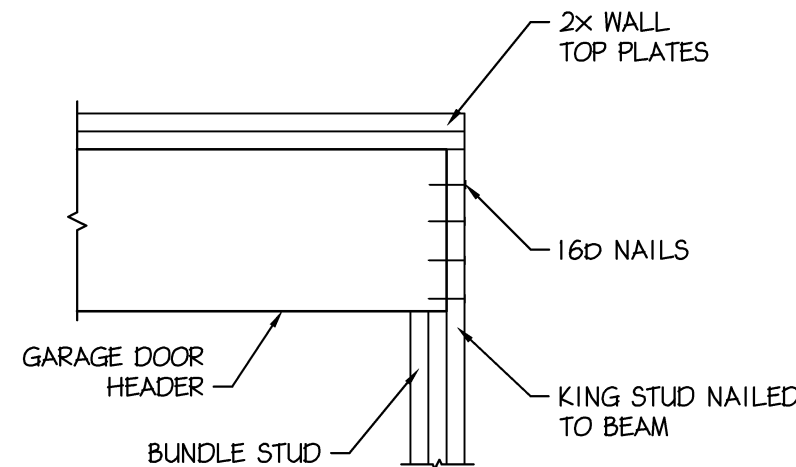
2 ROOF SHEATHING DETAIL

S-6 Scale: 3/4" = 1'- 0"



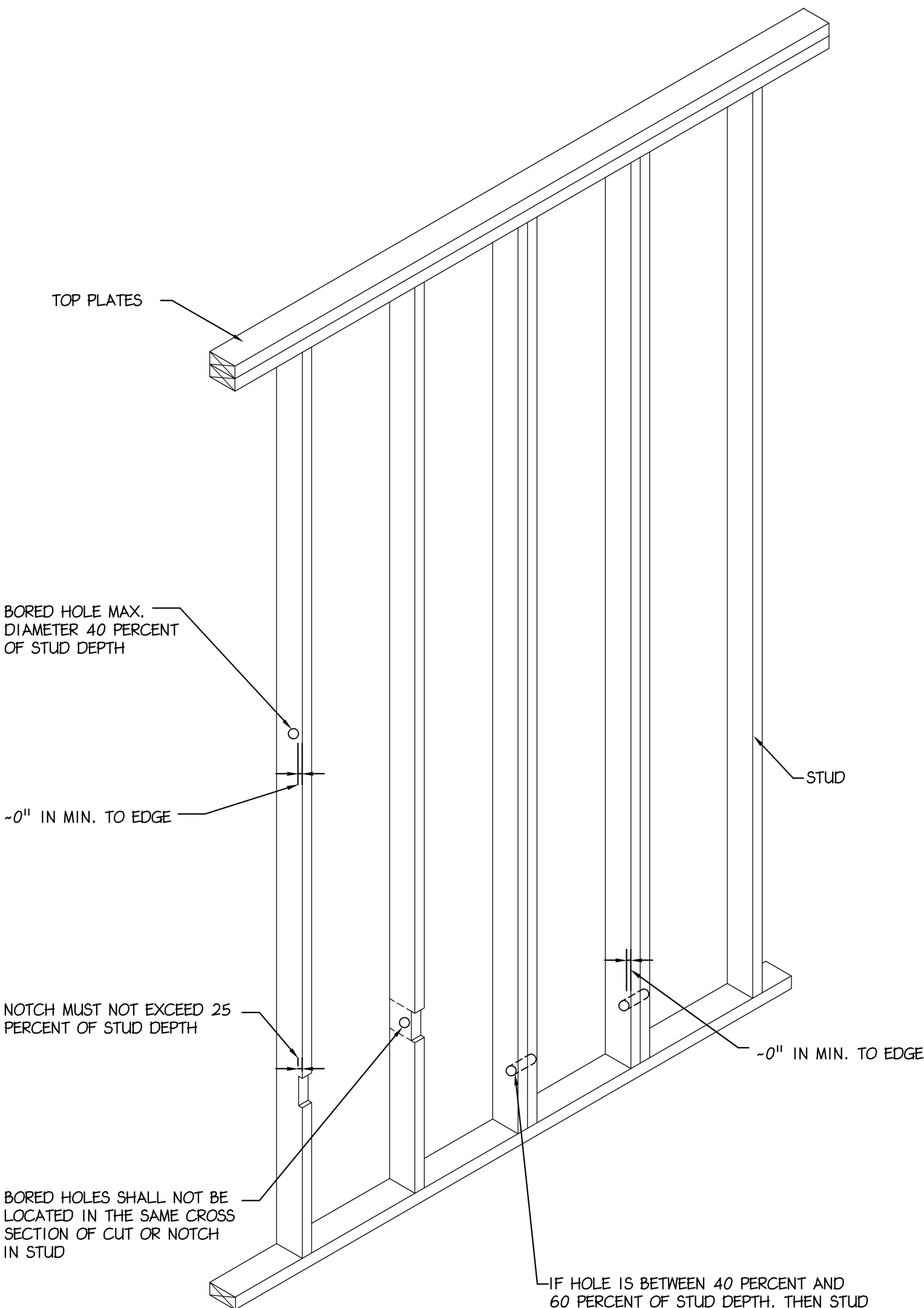
3 BEAM TO COLUMN DETAIL

S-6 Scale: 3/4" = 1'- 0"



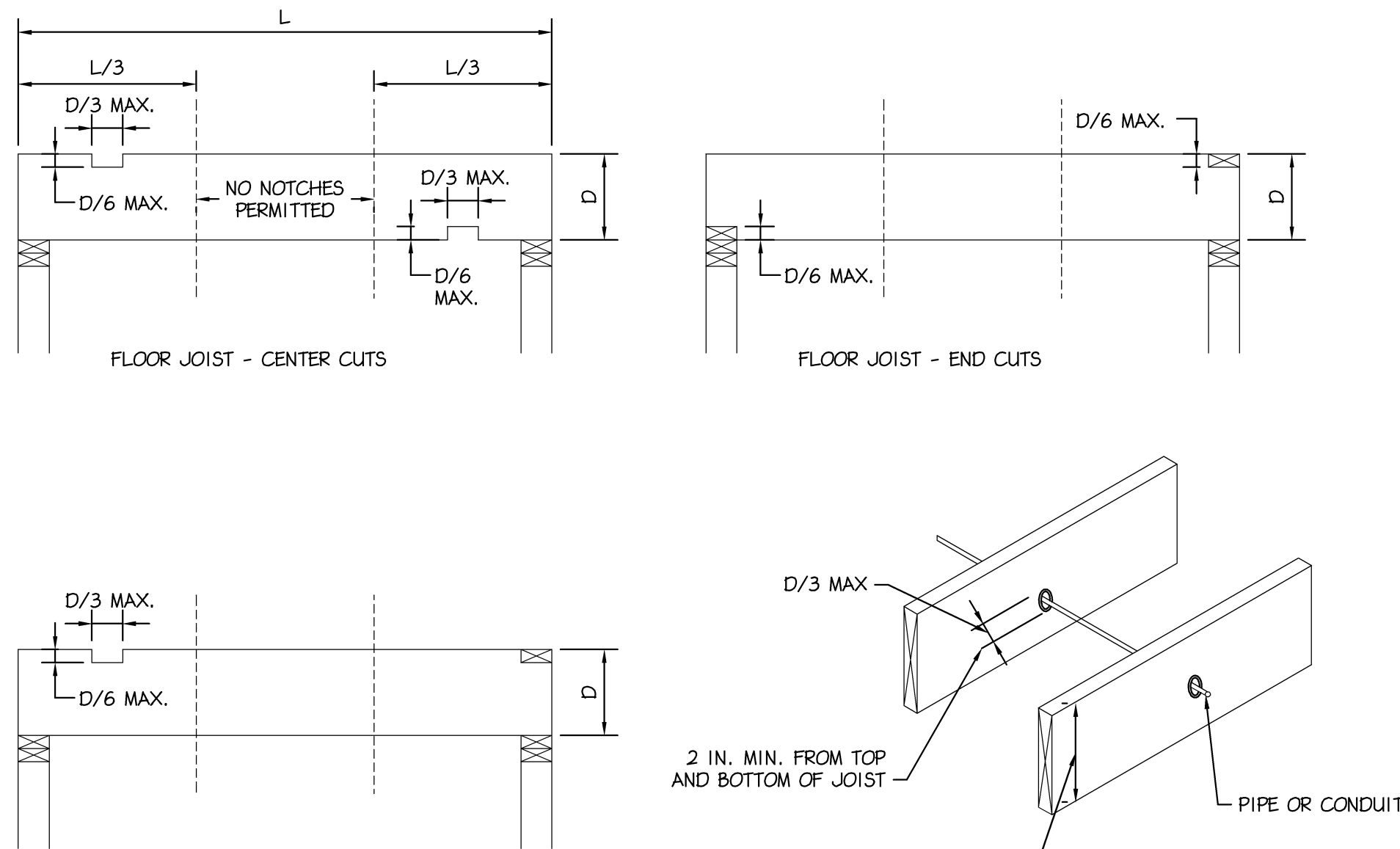
4 TYPICAL HEADER DETAIL

S-6 Scale: 3/4" = 1'- 0"



5 STUD BORED/NOTCH DETAIL

S-6 Scale: 3/4" = 1'- 0"



6 ALLOWED OPENINGS IN TJI DETAIL

S-6 Scale: 3/4" = 1'- 0"

TIMBER NOTES

- ALL WOOD FRAMING SHALL BE FABRICATED, ERECTED, AND BRACED IN ACCORDANCE WITH THE NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION, LATEST EDITION.
- ALL SAWN LUMBER SHALL BE HEM-FIR #2, 19% MAXIMUM MOISTURE CONTENT OR BETTER. THE MINIMUM DESIGN VALUES SHALL BE:
Fb = 850 PSI
Fv = 150 PSI
Fc = 1300 PSI
E = 1,300,000 PSI
MINIMUM DESIGN VALUES FOR PARALLAM (PSL) MEMBERS SHALL BE:
Fb = 2900 PSI
Fv = 290 PSI
Fc = 2900 PSI
E = 2,000,000 PSI
MINIMUM DESIGN VALUES FOR MICROLLAM (LVL) MEMBERS SHALL BE:
Fb = 2600 PSI
Fv = 285 PSI
Fc = 2510 PSI
E = 1,900,000 PSI
- ALL TIMBER CONNECTIONS SHALL BE MADE USING PREFABRICATED CONNECTORS. TOE-NAILING IS NOT PERMITTED. ALL STEEL TIMBER FASTENINGS AND JOIST HANGERS SHALL BE A MINIMUM OF 16 GA. GALVANIZED STEEL WITH A RATED LOAD CAPACITY EQUAL TO OR EXCEEDING THE IMPOSED LOADING REQUIREMENTS. SUBMIT MANUFACTURERS DATA FOR REVIEW. FASTENERS SHALL BE AS MANUFACTURED BY HECKMANN, KANT SAG, SIMPSON OR APPROVED EQUAL.
- ALL WOOD PLATES BEARING ON MASONRY OR CONCRETE WALLS SHALL BE PRESSURE TREATED LUMBER UNLESS NOTED OTHERWISE.
- DOUBLE FLOOR JOIST SHALL BE INSTALLED UNDER ALL PARTITIONS WHICH ARE PARALLEL TO JOISTS.
- ALL JOIST SHALL HAVE SOLID BRIDGING AT 6'-0" o.c. (MAX.). JOISTS SPANNING LESS THAN 12'-0" SHALL BE BRIDGED AT MIDSPAN.
- ALL DOUBLE TJ1 JOISTS SHALL BE ATTACHED AS PER MANUFACTURERS RECOMMENDATIONS. ALL WOOD BEAMS MADE UP OF 3 OR MORE MEMBERS SHALL BE BOLTED TOGETHER WITH 3/8" x BOLTS @ 32" o.c.
- AT ROOF RAFTER SPACING GREATER THAN 19.2" o.c. INSTALL PLY CLIPS AT CENTERLINE OF PLYWOOD SPAN AND AT ALL EDGES PARALLEL TO SPAN.
- PLYWOOD SHEATHING SHALL BE CONTINUOUS OVER A MINIMUM OF 3 SPANS.
- PLYWOOD SHALL BE SECURED USING 8d NAILS.
- ALL PLYWOOD SHALL MEET THE REQUIREMENTS OF THE PLYWOOD DESIGN SPECIFICATIONS AS PUBLISHED BY THE AMERICAN PLYWOOD ASSOCIATION AND THE REQUIREMENTS OF THE AMERICAN INSTITUTE OF TIMBER CONSTRUCTION, LATEST EDITION.
- WOOD TRUSS JOISTS ARE TO BE DESIGNED BY THE MANUFACTURER, ALL

GLUED LAMINATED TIMBER NOTES

- ALL STRUCTURAL GLUED LAMINATED TIMBER SHALL BE MANUFACTURED IN ACCORDANCE WITH ANSI/AITC A190.1-2002. EACH TIMBER SHALL BE MARKED WITH THE AITC QUALITY MARK OR BE ACCOMPANIED WITH AN AITC CERTIFICATE OF CONFORMANCE. ONLY TIMBERS SPECIFIED TO BE SURFACED ON ALL FOUR SIDES FOR APPEARANCE REQUIREMENTS SHALL NOT BE GRADE MARKED, BUT SHALL BE ACCOMPANIED BY AN AITC CERTIFICATE OF CONFORMANCE.
- ALL SOFTWOOD STRUCTURAL GLUED LAMINATED TIMBER BEAMS SHALL BE KILN-DRIED SOUTHERN YELLOW PINE. THE MINIMUM DESIGN VALUES SHALL BE:
Fb = 2200 PSI
Fv = 165 PSI
E = 1,500,000 PSI
- GLUED LAMINATED BEAMS SHALL HAVE A BALANCED LAYUP.
- ALL STRUCTURAL GLUED LAMINATED TIMBER COLUMNS SHALL MEET THE REQUIREMENTS FOR COMBINATION SYMBOL 24F-V4. SPECIAL TENSION LAMINATIONS SHALL NOT BE REQUIRED U.N.O.
- ALL SOFTWOOD STRUCTURAL GLUED LAMINATED ARCHES SHALL MEET THE REQUIREMENTS FOR COMBINATION SYMBOL 24F-V4 U.N.O.
- STRUCTURAL GLUED LAMINATED TIMBERS WILL BE SUBJECT TO WET USE CONDITIONS. STRUCTURAL GLUED LAMINATED BEAMS SHALL BE PRESSURE TREATED WITH ACQ PRESERVATIVE TREATMENT.
- APPEARANCE OF MEMBERS SHALL MEET THE REQUIREMENTS OF THE ARCHITECTURAL APPEARANCE GRADE IN ACCORDANCE WITH AITC 110-2001.
- MEMBERS SHALL BE SEALED WITH ONE COAT OF WATERSEAL.
- FABRICATION SHALL BE PERFORMED BY THE MANUFACTURER. SIGNED AND SEALED SHOP DRAWING SUBMITTALS SEALED BY AN ENGINEER LICENSED IN PENNSYLVANIA SHALL BE SUPPLIED BY THE MANUFACTURER FOR ENGINEERING REVIEW PRIOR TO FABRICATION.
- ALL STEEL CONNECTORS AND OTHER STEEL FABRICATIONS SHALL BE AUSTENITIC STAINLESS STEEL CONFORMING TO THE FOLLOWING ASTM STANDARDS:
BOLTS: ASTM F593
NUTS: ASTM F594
PLATES: ASTM A276
- ALL WELDING OF CONNECTORS SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE AMERICAN WELDING SOCIETY.
- EACH GLUED LAMINATED ARCH SHALL ARRIVE ON-SITE INDIVIDUALLY WRAPPED FOR PROTECTION DURING TRANSPORTATION, ERECTION AND STORAGE.

MISCELLANEOUS NOTES

- THESE GENERAL NOTES SUPPLEMENT THE PROJECT SPECIFICATIONS. REFER TO PROJECT SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
- DISCREPANCIES FOUND IN THESE DRAWINGS AND SPECIFICATIONS SHALL BE IMMEDIATELY REPORTED IN WRITING TO THE ENGINEER FOR CLARIFICATION.
- STRUCTURAL DRAWINGS ARE INTENDED TO BE USED WITH ARCHITECTURAL, MECHANICAL, PLUMBING, AND SPRINKLER DRAWINGS. CONTRACTOR IS RESPONSIBLE FOR COORDINATING SUCH REQUIREMENTS INTO THEIR SHOP DRAWINGS AND WORK.
- NO OPENINGS SHALL BE MADE IN ANY STRUCTURAL MEMBER WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER OF RECORD.
- NO CHANGE IN SIZE OR DIMENSION OF THE STRUCTURAL MEMBERS SHALL BE MADE WITHOUT WRITTEN APPROVAL OF THE ENGINEER OF RECORD.
- OPENINGS 1'-4" OR LESS ON A SIDE ARE GENERALLY NOT SHOWN ON THE STRUCTURAL DRAWINGS. REFER TO ARCHITECTURAL AND MECHANICAL DRAWINGS FOR SUCH OPENINGS. DO NOT SCALE THESE DRAWINGS, USE DIMENSIONS.
- THE CONTRACTOR SHALL INFORM THE ENGINEER OF RECORD IN WRITING OF ANY DEVIATION FROM THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL NOT BE RELIEVED OF THE RESPONSIBILITY OF SUCH DEVIATION BY THE ENGINEER OF RECORD REVIEW OF SHOP DRAWINGS, PROJECT DATA, ETC., UNLESS THE CONTRACTOR HAS SPECIFICALLY INFORMED THE ENGINEER OF RECORD OF SUCH DEVIATION AT THE SUBMISSION, AND THE ENGINEER OF RECORD HAS GIVEN WRITTEN APPROVAL TO THE SPECIFIC DEVIATION.

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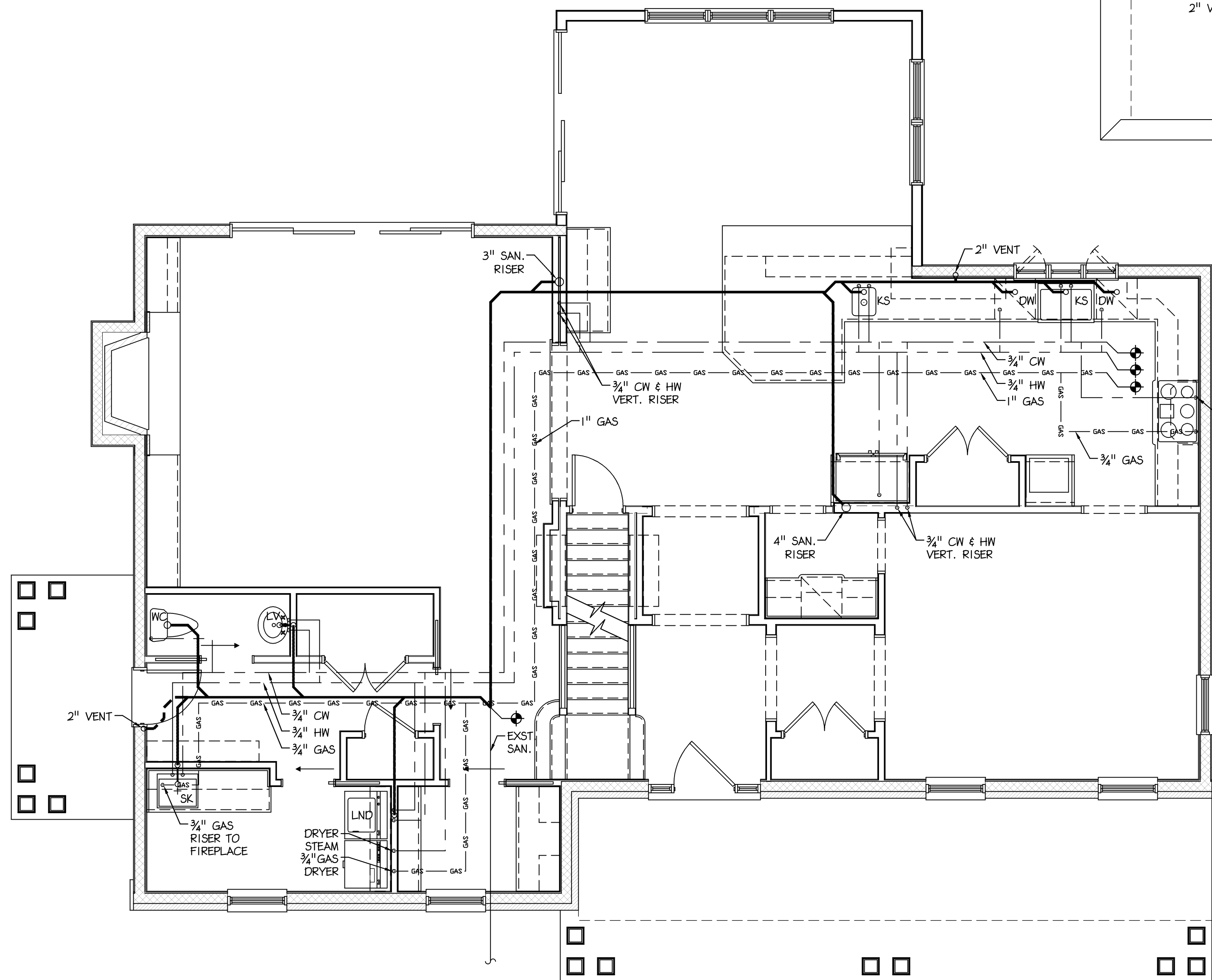
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SHEET TITLE
DETAILS & NOTES

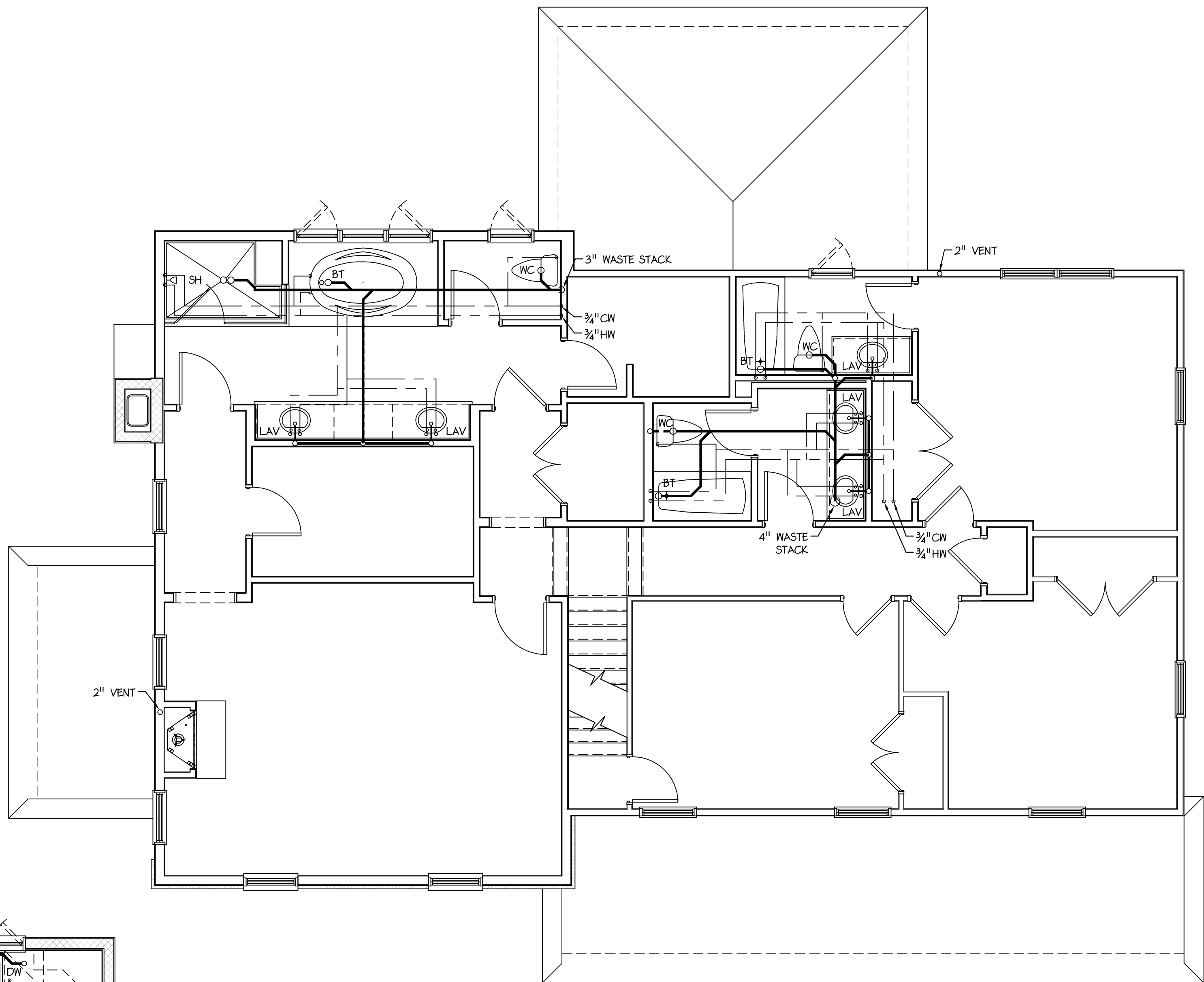
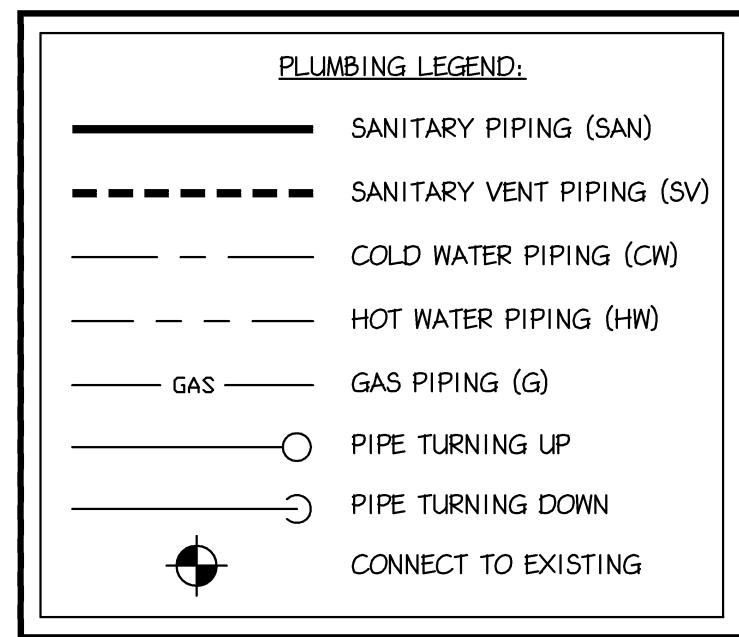
SHEET NUMBER

S-6

REV
5



1 PLUMBING - FIRST FLOOR
P-1 Scale: 1/4" = 1'- 0"



2 PLUMBING - SECOND FLOOR
P-1 Scale: 1/4" = 1'- 0"

FIXTURE CONNECTION SCHEDULE									
FIXTURE	DRAWING ABBREVIATIONS	TRAP	SOIL/WASTE	VENT	COLD WATER	HOT WATER	DFU	QUANTITY	TOTAL DFU
KITCHEN / SINK	KIT. SINK - KS & SK	1/2"	2"	1/4"	1/2"	1/2"	2.0	3	6.0
DISHWASHER	DISHWASH - D/W & ID/W	1/2"	2"	1/4"	-	1/2"	2.0	2	4.0
CLEAN OUT	CLEAN OUT - CO	-	-	-	-	-	-	-	-
BATH TUB	BATH TUB - BT	1/2"	2"	1/4"	1/2"	1/2"	2.0	3	6.0
LAUNDRY	LAUNDRY - LND	1/2"	2"	1/4"	1/2"	1/2"	2.0	1	2.0
WATER CLOSET	WATER CLOSET - WC	-	3"	2"	1/2"	-	3.0	4	12.0
SHOWER HEAD	SHOWER HEAD - SH	1/2"	2"	1/2"	1/2"	1/2"	2.0	1	2.0
LAVATORY	LAVATORY - LAV	1/4"	2"	1/2"	1/2"	1/2"	1.0	6	6.0
TOTAL FIXTURES								20	
TOTAL DFU'S									38.0

SANITARY NOTES:

- ALL SANITARY PIPING LESS THAN 3"Ø SHALL BE SLOPED AT 1/8"/1'-0". ALL SANITARY PIPING 3"Ø OR LARGER SHALL BE SLOPED AT 1/8"/1'-0" (IN ACCORDANCE WITH THE PLUMBING CODE AND ALL LOCAL REQUIREMENTS).
- ALL SANITARY PIPING LOCATED BELOW THE FLOOR SLAB SHALL BE NO LESS THAN 2"Ø.
- ALL VENT THROUGH ROOF PENETRATIONS (VTR'S) SHALL BE LOCATED NO LESS THEN 10'-0" FROM ALL EXISTING OR NEW OUTSIDE AIR INTAKES AND THE BACKSIDE (REAR) ROOFS. COORDINATE WITH MECHANICAL CONTRACTOR AND OWNER IN THE FIELD.

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PROJECT NO.		DRAWN BY		CHK'D BY	
B3955A		EMH		R.K.	
NO.	DATE	BY	ISSUE		
1	06-04-2015	EMH	SKETCH REVIEW		
2	06-08-2015	EMH	REVISED SKETCH REVIEW		
3	06-10-2015	EMH	REVISED SKETCH REVIEW		
4	09-15-2015	EMH	ISSUED FOR PERMIT REVIEW		
5	09-17-2015	EMH	ISSUED FOR PERMIT & CONSTRUCTION		
6					
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8					
9					
10					
11					
12					
13					
14					
15					
APPROVED BY			CURRENT DATE		
Robin J. Kohn, AIA			September 17, 2015		

DALE RESIDENCE
1417 Yellow Springs Road
Chester Springs, PA 19425

West Pikeland Township
Chester County

SHEET TITLE
**PLUMBING - NEW WORK
FIRST & SECOND FLOOR
FIXTURE SCHEDULE
AND NOTES**

SHEET NUMBER
P-1

REV
5

1. THE GENERAL CONDITIONS SHALL APPLY TO AND FORM A PART OF THIS SECTION OF THESE SPECIFICATION.
- 1.2. PROVIDE ALL MATERIALS, LABOR, EQUIPMENT, TOOLS AND SUPERVISION AND PERFORM ALL OPERATIONS NECESSARY FOR THE PROPER AND COMPLETE EXECUTION OF PLUMBING WORK IN STRICT ACCORDANCE WITH THE SPECIFICATIONS AND DRAWINGS.
- 1.3. ALL WORK SHALL BE IN ACCORDANCE WITH ALL APPLICABLE SECTIONS OF THE NATIONAL FIRE PROTECTION ASSOCIATION, NATIONAL ELECTRIC CODE, OSHA, 2009 INTERNATIONAL PLUMBING CODE AND ALL OTHER STATE AND LOCAL AUTHORITIES HAVING JURISDICTION AND APPLICABLE MANUFACTURER'S RECOMMENDATIONS.
- 1.4. THE CONTRACTOR SHALL VISIT THE SITE, EXAMINE ALL CONDITIONS, AND MAKE ALLOWANCES FOR DIFFICULTIES AND CONTINGENCIES AFFECTING THE PROPER EXECUTION OF THIS CONTRACT.
- 1.5. THE CONTRACTOR SHALL OBTAIN AND PAY ALL FEES NECESSARY FOR PERMITS AND INSPECTIONS REQUIRED WITH HIS WORK.
- 1.6. THE CONTRACTOR SHALL VERIFY ALL UTILITY SERVICE INFORMATION SHOWN ON THE DRAWINGS WITH THE LOCAL UTILITY COMPANY PRIOR TO SUBMITTING A BID. ANY CHANGES OR SERVICE CHARGES IMPOSED BY THE UTILITY COMPANY SHALL BE QUALIFIED AND INCLUDED IN THE BID.
- 1.7. ALL EQUIPMENT SHALL BE TESTED, LISTED AND LABELED BY AN APPROVED AUTHORITY (UL, AGA, ETC) AND SHALL BE INSTALLED IN ACCORDANCE WITH ITS LISTING.
- 1.8. ALL EQUIPMENT, MATERIALS, AND WORKMANSHIP SHALL BE GUARANTEED FOR A MINIMUM OF ONE (1) YEAR FROM THE DATE OF ACCEPTANCE BY THE OWNER.
- 1.9. WHERE PRODUCTS ARE SPECIFIED BY BRAND NAME, CATALOG NUMBERS OR BY NAMES OF MANUFACTURERS, THE REFERENCE IS INTENDED TO BE DESCRIPTIVE AND NOT RESTRICTIVE, AND IS SOLELY FOR THE PURPOSE OF INDICATING THE TYPE OF QUALITY OF ITEM THAT WILL BE ACCEPTABLE. AN APPROVED EQUAL WILL BE CONSIDERED UNLESS INDICATED OTHERWISE.
- 1.10. SHOP DRAWINGS SHALL BE SUBMITTED AND REVIEWED PRIOR TO ORDERING ANY EQUIPMENT.
- 1.11. THE CONTRACTOR RESPONSIBLE FOR WORK COVERED BY THESE SPECIFICATIONS SHALL COORDINATE AND COOPERATE WITH ALL OTHER TRADES. TRADES THAT HAVE WORK CONNECTED WITH THE PLUMBING WORK SHALL BE NOTIFIED FOR INSTALLATION REQUIREMENTS AND SCHEDULING. THE CONTRACTOR SHALL SCHEDULE HIS WORK TO AVOID ANY INTERRUPTION OF ANY UTILITY SERVICES TO THE OPERATION AREAS OF THE BUILDING DURING NORMAL WORKING HOURS. INTERRUPTION OF SERVICES SHALL BE DONE DURING OFF HOURS AT NO ADDITIONAL COST TO THE OWNER.
- 1.12. ALL CUTTING AND PATCHING OF EVERY NATURE REQUIRED IN CONNECTION WITH THIS CONTRACT SHALL BE DONE BY THIS CONTRACTOR WITH MECHANICS EXPERIENCED IN THEIR RESPECTIVE TRADES. ALL PATCHING SHALL MATCH ADJACENT FINISHES. ALL WORK SHALL BE COORDINATED TO AVOID CUTTING OF WORK IN PLACE AND INTERFERING WITH OTHER OPERATIONS.
- 1.13. IN COMPLIANCE WITH ACT 38, CONTACT INDIVIDUAL COMPANIES TO HAVE UTILITY LOCATIONS MARKED IN THE FIELD AND TO OTHERWISE LOCATE UNDERGROUND OBJECTS AS MAY BE NECESSARY PRIOR TO THE START OF CONSTRUCTION. PENNSYLVANIA LAW REQUIRES THREE WORKING DAYS NOTICE FOR THE CONSTRUCTION PHASE AND TEN WORKING DAYS IN DESIGN STAGE. CALL PENNSYLVANIA ONE CALL SYSTEM, INC. (1-800-242-1776, AS OF THIS WRITING).
- 1.14. ALL EXCAVATIONS REQUIRED FOR INSTALLATION OF PIPE SHALL HAVE SOLID, UNDISTURBED BOTTOMS, AND SHALL BE SUBJECT TO APPROVAL BY THE OWNER PRIOR TO PIPING PLACEMENT. SHOULD BOTTOMS BECOME SOFT OR WET BEFORE PIPING IS PLACED, ALL SUCH UNSUITABLE BOTTOMS SHALL BE REMOVED AT NO COST TO THE OWNER AND FILLED WITH CONCRETE.
- 1.15. BACKFILL ALL EXCAVATIONS PERFORMED UNDER THIS CONTRACT AS REQUIRED TO SATISFY FINISHED GRADE REQUIREMENTS.
- 1.16. THE CONTRACTOR SHALL PERFORM ALL DEMOLITION AS SHOWN ON THE DRAWINGS AND SHALL CUT AND PATCH AS REQUIRED TO PERFORM THE DEMOLITION WORK. ALL OPENINGS MUST BE REPAIRED TO MATCH ADJACENT FINISHES. THE OWNER SHALL BE GIVEN THE OPPORTUNITY TO RETAIN OWNERSHIP OF ALL REMOVED MATERIALS AND EQUIPMENT.

1. FURNISH AND INSTALL ALL NECESSARY HANGERS, INSERTS, SUPPORTS SUPPLEMENTARY STEEL, ETC., TO PROPERLY SUPPORT ALL EQUIPMENT AND PIPING IN AN APPROVED MANNER AND IN FULL ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- 1.18. ALL DOMESTIC HOT AND COLD WATER PIPING WITHIN THE BUILDING SHALL BE HARD DRAWN TYPE "U" COPPER TUBING IN ACCORDANCE WITH ASTM-B88. FITTINGS SHALL BE WROUGHT COPPER OR CAST BRASS. VALVES SHALL BE CAST BRASS UNLESS NOTED OTHERWISE. HANGERS FOR SUPPORTING COPPER TUBING SHALL BE COPPERIZED. ALL WATER SERVICE PIPING OUTSIDE THE BUILDING SHALL BE TYPE "K" COPPER ASTM B-88. FITTINGS SHALL BE WROUGHT COPPER. ALL JOINTS SHALL BE MADE WITH SOLDER AND FLUX HAVING A LEAD CONTENT OF NOT MORE THAN 0.2 PERCENT.
- 1.18.1. WHERE PERMITTED BY THE LOCAL AUTHORITY ALL DOMESTIC WATER PIPING INSIDE THE BUILDING SHALL BE CROSS-LINKED POLYETHYLENE (PEX), CONFORMING TO NSF61, PIPE AND TUBING IN ACCORDANCE WITH ASTM F876, ASTM F877 AND TESTED FOR COMPLIANCE BY AN INDEPENDENT THIRD-PARTY AGENCY. PEX TUBING SHALL HAVE A SMOKE DEVELOPED RATING OF LESS THAN 50 AND A FLAME SPREAD RATING OF LESS THAN 25 IN GENERAL ACCORDANCE WITH ASTM E-84.
- 1.18.1.1. FITTINGS: FOR SYSTEM COMPATIBILITY, USE FITTINGS OFFERED BY THE PEX TUBING MANUFACTURER. FITTINGS SHALL BE MANUFACTURED AND TESTED TO ASTM F1960. THESE FITTINGS SHALL BE APPROVED INSERT TYPE, WHICH UTILIZES COMPRESSION RINGS. THE RINGS SLIDE OVER THE END OF TUBING AND TOGETHER THE TUBING AND RING ARE EXPANDED. THE EXPANDED RING AND TUBING THEN SLIDE ONTO THE FITTING. FITTING AND INSTALLATION OF FITTINGS SHALL BE IN ACCORDANCE WITH THE MANUFACTURERS INSTALLATION INSTRUCTIONS FOR THE PIPING MATERIAL.
- 1.18.1.2. JOINTS: SHALL BE IN ACCORDANCE ASTM F1807 AND ASTM F1960 AND COMPLY WITH THE MANUFACTURERS INSTALLATION INSTRUCTIONS.
- 1.18.1.3. MANIFOLDS: DISTRIBUTION SHALL BE THROUGH MULTIPLE REMOTE BRASS MANIFOLD SYSTEM; EACH MANIFOLD SHALL CONTAIN ISOLATION VALVES ON COLD AND HOT WATER INLETS AND EACH PEX TUBE THAT SUPPLIES A FIXTURE SHALL TERMINATE WITH INDIVIDUAL FIXTURE WATER SUPPLY STOP VALVE AND A WATER SUPPLY RISER.
- 1.18.1.4. ACCESSORIES: FOR SYSTEM COMPATIBILITY, USE ACCESSORIES OFFERED BY THE PEX TUBING MANUFACTURER. ACCESSORIES SHALL INCLUDE BUT NOT BE LIMITED TO; ANGLE AND STRAIGHT STOP VALVES, BEND SUPPORTS DESIGNED FOR MAINTAINING TIGHT RADIUS BENDS, PROTECTIVE WALL SLEEVES AND/OR PLATES, CLIPS AND /OR RAILS FOR SUPPORTING TUBING SLIPS, TUBING HANGERS AND RISER CLAMPS, ACCESS PANELS AND ALL REQUIRED APPURTENANCES FOR A COMPLETE AND OPERATIONAL SYSTEM.
- 1.18.1.5. INSTALL. ALL IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- 1.19. ALL SANITARY WASTE STACK PIPING ABOVE THE FINISHED FLOOR SHALL BE NO-HUB SERVICE WEIGHT CAST IRON IN ACCORDANCE WITH ASTM A74; JOINTS SHALL BE A NEOPRENE GASKET WITH STAINLESS STEEL CLAMP AND SHIELD ASSEMBLY. INSTALL IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS. SANITARY AND VENT PIPING LOCATED BELOW THE FLOOR SHALL BE SERVICE WEIGHT CAST IRON WITH HUB AND SPIGOT ENDS. JOINTS SHALL BE CONNECTED WITH NEOPRENE PUSH-ON COMPRESSION GASKETS. INSTALL IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS.
- 1.20. ALL SANITARY AND VENT PIPING SHALL BE SCHEDULE 40 PVC, ASTM D2665, D2949, WITH PVC FITTINGS (DWV TYPE) AND SOLVENT WELD JOINTS. PVC PIPING SHALL NOT BE USED IN RETURN AIR PLENUM TYPE CEILINGS OR IN FIRE-RATED CEILING ASSEMBLIES (CONTRACTOR TO VERIFY THESE AREAS WITH ARCHITECT). PVC PIPING SHALL NOT BE USED WITHOUT WRITTEN AUTHORIZATION FROM THE LOCAL AUTHORITY HAVING JURISDICTION AND THE LOCAL FIRE MARSHALL.
- 1.21. FUEL GAS PIPING ABOVE THE FLOOR INSIDE THE BUILDING SHALL BE SCHEDULE 40 BLACK STEEL WITH MECHANICAL JOINTS UP TO 2-1/2 INCHES INSTALLED IN ACCORDANCE WITH THE INTERNATIONAL FUEL GAS CODE, WELDED FOR THREE (3) INCHES AND ABOVE. ALL FUEL GAS PIPING LOCATED OUTSIDE THE BUILDING BELOW GRADE SHALL BE POLYETHYLENE WITH HEAT-FUSION JOINTS IN ACCORDANCE WITH THE INTERNATIONAL FUEL GAS CODE. BRANCH PIPING TO APPLIANCES SHALL BE COMPLETE WITH A SHUTOFF VALVE, UNION, DIRT LEG AND ANY REGULATORS NECESSARY TO ENSURE PROPER EQUIPMENT OPERATION (COORDINATE WITH THE RECOMMENDATIONS OF THE EQUIPMENT MANUFACTURER).

- 1.22. ALL SHUTOFF VALVES SHALL BE BALL OR GATE VALVES, ALL BALL, GATE, GLOBE AND CHECK VALVES SHALL BE ALL BRONZE, SWEATED PATTERN SUITABLE FOR 125-PSI WORKING PRESSURE.
- 1.22.1. ALL VALVES AND PIPING EXPOSED TO VIEW SHALL BE CHROME PLATED BRASS.
- 1.23. ALL BACKFLOW PREVENTERS SHALL BE AS REQUIRED BY THE LOCAL AUTHORITY.
- 1.23.1. REDUCED PRESSURE BACKFLOW PREVENTERS: ANSI/ASSE 1013; BRONZE BODY WITH BRONZE AND PLASTIC INTERNAL PARTS AND STAINLESS STEEL SPRINGS; TWO INDEPENDENTLY OPERATING, SPRING LOADED CHECK VALVES; DIAPHRAGM TYPE DIFFERENTIAL PRESSURE RELIEF VALVE LOCATED BETWEEN CHECK VALVES; THIRD CHECK VALVE WHICH OPENS UNDER BACK PRESSURE IN CASE OF DIAPHRAGM FAILURE, NON-THREADED VENT OUTLET; ASSEMBLED WITH TWO GATE VALVES, STRAINER AND FOUR TEST COCKS; MODEL 909, MANUFACTURED BY WATTS. BACKFLOW PREVENTER SHALL BE INSTALLED WITH AN AIR GAP DRAIN ASSEMBLY, WATTS MODEL 909AG. EXTEND DRAIN LINE TO NEAREST FLOOR DRAIN.
- 1.23.2. DOUBLE CHECK VALVE ASSEMBLIES: ANSI/ASSE 1012; BRONZE BODY WITH CORROSION RESISTANT INTERNAL PARTS AND STAINLESS STEEL SPRINGS; TWO INDEPENDENTLY OPERATING CHECK VALVES WITH INTERMEDIATE ATMOSPHERIC VENT; MODEL 709, MANUFACTURED BY WATTS.
- 1.24. GAS SHUTOFF VALVES SHALL HAVE A QUARTER-TURN OPERATION AND SHALL BE AGA APPROVED FOR SYSTEM PRESSURE. INSTALL IN ACCORDANCE WITH THE NATIONAL FUEL GAS CODE REQUIREMENTS.
- 1.24.1. GAS PRESSURE REGULATING VALVES SHALL BE THE SIZE AND TYPE REQUIRED BY THE APPLIANCE AND THE LOCAL GAS SUPPLIER. VALVES SHALL BE AGA APPROVED.
- 1.25. WATER HAMMER ARRESTORS SHALL BE ZURN, MODEL NO. Z-1700 OR EQUAL AND SHALL BE INSTALLED WHERE INDICATED ON THE DRAWINGS.
- 1.26. INSULATION
- 1.26.1. ALL HOT WATER LINES SHALL BE INSULATED WITH MATERIALS HAVING A "K" FACTOR OF 0.27 AT 75 DEGREES F MEAN TEMPERATURE, A FLAME SPREAD RATING OF 25 OR LESS AND SMOKE DEVELOPED RATING OF 50 OR LESS.
- 1.26.1.1. THICKNESS:
 - 1.26.1.1.1. HOT WATER RUNOUTS UP TO TWO INCHES = 1/2-INCH THICK
 - 1.26.1.1.2. HOT WATER MAINS UP TO TWO INCHES = ONE INCH THICK
- 1.26.1.2. MATERIALS:
 - 1.26.1.2.1. FOAMED CELLULAR FLEXIBLE ELASTOMERIC INSULATION WITH MITER CUT FITTINGS WITH VAPOR BARRIER JACKET (FOR THICKNESS UP TO ONE INCH). ALL JOINTS SHALL BE GLUED IN ACCORDANCE WITH THE INSULATION MANUFACTURER'S RECOMMENDATIONS.
 - 1.26.1.2.2. MANUFACTURERS - CERTAINTED, MANVILLE, OWENS CORNING, KNAUF, ARMSTRONG OR APPROVED EQUAL.
- 1.27. FIXTURES AND FIXTURE TRIMMINGS SHALL BE FURNISHED AND INSTALLED AS SPECIFIED HEREIN. FIXTURES SHALL BE COMPLETE WITH ALL NECESSARY WALL HANGERS AND SUPPORTS, SUPPLY STOP VALVES, 17-GAUGE CHROME-PLATED BRASS DRAINAGE FITTINGS/P-TRAPS AND ONE-PIECE CHROME-PLATED ESCUTCHEONS. ALL PIPING EXPOSED TO VIEW SHALL BE CHROME-PLATED BRASS.
- 1.28. GAS TANKLESS WATER HEATER
 - 1.28.0.1. FURNISH AND INSTALL A GAS TANKLESS WATER HEATERS WHERE SHOWN ON THE PLANS.
 - 1.28.0.2. WATER HEATER SHALL BE GAS FIRED, TANKLESS DESIGN WITH A MODULATING POWER BURNER AND NEGATIVE PRESSURE GAS VALVE. BURNER SHALL BE CAPABLE OF 9:1 TURNDOWN OF FI RING, WITHOUT LOSS OF COMBUSTION EFFICIENCY. PRIMARY HEAT EXCHANGER/COMBUSTION CHAMBER SHALL INCORPORATE A MULTI PASS COPPER TUBE AND FIN DESIGN WITH INTERNAL TUBULATORS. HEAT EXCHANGER SHALL BE RATED FOR MAXIMUM WORKING PRESSURE NOT LESS THAN 150 PSIG. WATER HEATER SHALL BE EQUIPPED WITH A MODULATING WATER VALVE TO IMPROVE TEMPERATURE STABILITY.

- 1.28.0.3. EXHAUST OUTLET CONNECTOR SHALL BE OF CORROSION RESISTANT METAL, WITH A 3 INCH DIAMETER FLUE CONNECTION.
- 1.28.0.4. THE CONTROL SYSTEM SHALL CONTAIN; EMBEDDED CONTROL BOARD INCORPORATING LCD DISPLAY, AUTO READ TEMPERATURE, AND TACTILE BUTTONS, FOR OUTPUT POWER, TEMPERATURE, AND PROGRAMMING CONTROL; CPU BOARD WHICH HOUSES ALL CONTROL FUNCTIONS; POWER TRANSFORMER IGNITION SPARK MODULE; AND UNIQUE CONNECTIONS FOR EACH SENSOR OR COMPONENT. THE CONTROL BOARD SHALL BE FIELD REPLACEABLE.
- 1.28.0.5. THE HEAT EXCHANGERS SHALL CARRY A 15-YEAR LIMITED WARRANTY AGAINST LEAKAGE DUE TO DEFECTS IN MATERIALS OR WORKSMANSHIP OR CORROSION IN A COMMERCIAL INSTALLATION, SUBJECT TO THE MANUFACTURER'S WATER QUALITY REQUIREMENTS. ALL OTHER PARTS AND COMPONENTS SHALL CARRY A 15 YEAR LIMITED WARRANTY AGAINST DEFECTS IN MATERIALS OR WORKSMANSHIP.
- 1.28.0.6. WATER HEATER SHALL BE A TAKAGI MODEL T-H3-IN-P. HEATER SHALL BE CSA/ANSI 221.10.3 LISTED. HEATER SHALL HAVE AN INPUT OF 225 MBH WITH A GROSS OUTPUT OF 211 MBH WHEN FIRED WITH PROPANE GAS. UNIT SHALL OPERATE WITH A MINIMUM OF 94% ANSI Z-21 EFFICIENCY. TANKLESS WATER HEATER SHALL HAVE A RECOVERY OF 3.29 GALLONS PER HOUR AT A 77° F TEMPERATURE RISE. TANKLESS WATER HEATER SHALL HAVE LOW NOX EMISSIONS AND IS 2012 SCAQMD NOX CERTIFIED TO RULE 1146.2.
- 1.29. EXPANSION TANK
 - 1.29.1. WELDED STEEL, TESTED AND STAMPED IN ACCORDANCE WITH ASME SPECIFICATIONS, RATE FOR WORKING PRESSURE 125 PSIG, WITH FLEXIBLE DIAPHRAGM SEALED INTO TANK, INLINE MODEL (PROVIDE SUPPORT PER MANUFACTURER'S RECOMMENDATIONS). FOR USE WITH POTABLE WATER SYSTEMS.
 - 1.29.2. MODEL ST-5-C MANUFACTURED BY AMTROL..
- 1.30. TEST OF DRAINAGE SYSTEM
 - 1.30.1. ALL PLUMBING AND DRAINAGE PIPING SHALL BE TESTED BY PLUGGING ALL CRACKS AND FILL SYSTEM WITH WATER TO THE TOP OF ALL VENT PIPES. THE WATER SHALL STAND FOR 30 MINUTES FOR INSPECTION. ALL TESTS MUST COMPLY WITH LOCAL AUTHORITY REQUIREMENTS.
- 1.31. TEST OF DOMESTIC WATER PIPING
 - 1.31.1. ALL WATER LINES SHALL BE TESTED TO A HYDROSTATIC PRESSURE EQUAL TO 1-1/2 TIMES THE MAXIMUM OPERATING PRESSURE. THE SYSTEM SHALL BE LEAK-FREE FOR 24 HOURS AT THIS PRESSURE.

P-2 Scale: N.T.S.



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APPROVED BY	CURRENT DATE
Robin J. Kohn, AIA	September 17, 2015

**PLUMBING -
SANITARY RISER DIAGRAM
& SPECIFICATIONS**

SHEET NUMBER	
P-2	
REV	5

ELECTRICAL SPECIFICATIONS

- 1.1. THE GENERAL CONDITIONS SHALL APPLY TO AND FORM A PART OF THE ELECTRICAL SECTION OF THESE SPECIFICATIONS.
- 1.2. PROVIDE ALL MATERIALS, LABOR, EQUIPMENT, AND TOOLS NECESSARY FOR A COMPLETE AND WORKABLE ELECTRICAL SYSTEM AS INDICATED ON THE DRAWINGS. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE (NEC), LOCAL AND STATE CODES HAVING JURISDICTION, AND APPLICABLE MANUFACTURER'S RECOMMENDATIONS.
- 1.3. UNLESS NOTED OTHERWISE, THIS CONTRACTOR SHALL FURNISH AND INSTALL ALL CONTROL DEVICES TOGETHER WITH CONTROL WIRING, CONDUIT, AND ALL APPURTENANCES AND ACCESSORIES NECESSARY TO PERFORM THE OPERATING FUNCTIONS AS SPECIFIED. CONTROL DEVICES SHALL INCLUDE, BUT NOT BE LIMITED TO, THERMOSTATS, SWITCHING CONTROLS, AND TRANSFORMERS. WIRING MATERIALS AND INSTALLATION SHALL CONFORM WITH THE NATIONAL ELECTRICAL CODE. CONTROL WIRING SHALL INCLUDE, BUT IS NOT LIMITED TO, 120 VOLT CONTROL WIRING AS WELL AS LOW VOLTAGE DIMMING WIRING, OCCUPANCY SENSOR WIRING, AND OTHER LOW VOLTAGE WIRING. ALL CONTROL SYSTEM WIRING EXCEPT LOW VOLTAGE WIRING, SHALL BE 14 AWG MINIMUM NM, MC OR INSTALLED IN 3/4-INCH DIAMETER MINIMUM CONDUIT. FLEXIBLE METAL CONDUIT SHALL BE PERMITTED TO MAKE RUNS OF THREE FEET OR LESS FOR FINAL EQUIPMENT CONNECTIONS. LOW VOLTAGE, CONTROL WIRING SHALL BE OPEN, PLENUM RATED, CABLE, ROUTED IN ACCESSIBLE, CONCEALED SPACES ON J HOOKS WITH CLOSURE TIES ON FIVE FOOT CENTERS WHEREVER POSSIBLE. IN INACCESSIBLE SPACES, INCLUDING IN WALLS, LOW VOLTAGE CONTROL WIRING SHALL BE ROUTED IN 3/4-INCH CONDUIT. OPEN CONTROL WIRING SHALL NOT REST ON OR IMPEDE THE REMOVAL OF CEILING TILES.
- 1.4. THE CONTRACTOR SHALL VISIT THE SITE, EXAMINE ALL CONDITIONS, AND MAKE ALLOWANCES FOR DIFFICULTIES AND CONTINGENCIES AFFECTING THE PROPER EXECUTION OF THIS CONTRACT.
- 1.5. THE CONTRACTOR SHALL OBTAIN AND PAY ALL FEES NECESSARY FOR PERMITS AND INSPECTIONS REQUIRED WITH HIS WORK. ALL ELECTRICAL WORK SHALL BE INSPECTED AND CERTIFIED BY AN INDEPENDENT INSPECTION AGENCY SUCH AS THE MIDDLE DEPARTMENT INSPECTION AGENCY (MDIA).
- 1.6. ALL MATERIALS SHALL BE MANUFACTURED WITHIN THE SCOPE OF THE UNDERWRITER'S LABORATORIES, SHALL CONFORM TO UL STANDARDS, CARRY UL APPROVAL, AND SHALL BE USED FOR THE PURPOSE FOR WHICH THEY ARE APPROVED.
- 1.7. ALL EQUIPMENT, MATERIALS, AND WORKMANSHIP SHALL BE GUARANTEED FOR A MINIMUM OF ONE (1) YEAR FROM THE DATE OF ACCEPTANCE BY THE OWNER.
- 1.8. WHERE PRODUCTS ARE SPECIFIED BY BRAND NAME, CATALOG NUMBERS, OR BY NAMES OF MANUFACTURERS, THE REFERENCE IS INTENDED TO BE DESCRIPTIVE AND NOT RESTRICTIVE AND IS SOLELY FOR THE PURPOSE OF INDICATING THE TYPE OF QUALITY OF ITEM THAT WILL BE ACCEPTABLE. AN APPROVED EQUAL WILL BE CONSIDERED UNLESS INDICATED OTHERWISE.
- 1.9. SHOP DRAWINGS SHALL BE SUBMITTED AND REVIEWED PRIOR TO ORDERING ANY EQUIPMENT.
- 1.10. THE CONTRACTOR SHALL COORDINATE AND COOPERATE WITH ALL OTHER TRADES.

- 1.11. ALL CUTTING AND PATCHING OF EVERY NATURE REQUIRED IN CONNECTION WITH THIS CONTRACT SHALL BE DONE BY THE CONTRACTOR WITH MECHANICS EXPERIENCED IN THEIR RESPECTIVE TRADES. ALL PATCHING SHALL MATCH ADJACENT FINISHES.
- 1.12. WIRING AND CONDUIT SHALL BE CONCEALED WHERE POSSIBLE UNLESS APPROVED OTHERWISE BY THE OWNER.
- 1.13. EXPOSED CONDUIT SHALL BE 3/4-INCH MINIMUM, UNLESS NOTED OTHERWISE, AND SHALL BE IN ACCORDANCE WITH THE FOLLOWING TYPES OF USAGE:
- 1.13.1. EMT - USE FOR INTERIOR EXPOSED AND CONCEALED WORK NOT SUBJECT TO DAMPNESS OR SEVERE PHYSICAL DAMAGE. USE FOR EXTERIOR WORK NOT SUBJECT TO PHYSICAL DAMAGE. DO NOT USE WHEN IN CONTACT WITH CINDER FILL UNLESS PROTECTED BY AT LEAST TWO INCHES OF CONCRETE OR UNLESS TUBING IS AT LEAST 18 INCHES UNDER THE FILL. DO NOT USE EMT IN HAZARDOUS LOCATIONS. USE WITH COMPRESSION FITTINGS FOR EXTERIOR WORK. USE WITH SET SCREW FITTINGS FOR INTERIOR WORK.
- 1.13.2. RIGID METAL CONDUIT - USE FOR INTERIOR WORK SUBJECT TO CORROSIVE INFLUENCES, DAMPNESS AND/OR SEVERE PHYSICAL DAMAGE. USE FOR EXTERIOR WORK SUBJECT TO PHYSICAL DAMAGE.
- 1.13.3. PVC - EXTERIOR USE ONLY SUBJECT TO LIMITED PHYSICAL DAMAGE.
- 1.13.4. ALL CONCEALED BRANCH CIRCUIT WIRING ABOVE GRADE IN NON-HAZARDOUS LOCATIONS MAY BE METAL CLAD CABLE, TYPE NM, MINIMUM SIZE #14 AWG, MAXIMUM SIZE #8 AWG, UNLESS NOTED OTHERWISE. UNIVERSAL TYPE FASTENING DEVICES SHALL BE USED TO PROPERLY SECURE THE NM CABLES PARALLEL TO THE WOOD OR METAL FRAMING MEMBER. DEVICE SHALL BE INSTALLED IN CENTER OF MEMBER ON INTERVALS NO GREATER THAN FOUR FEET SIX INCHES.
- 1.14. INSTALL FLEXIBLE METALLIC CONDUIT AT ALL MOTOR CONNECTIONS INSIDE THE BUILDING AND LIQUID TIGHT FLEXIBLE METAL CONDUIT AT MOTOR CONNECTIONS OUTSIDE THE BUILDING. CONDUIT SHALL NOT EXCEED 36 INCHES IN LENGTH.
- 1.15. UNLESS OTHERWISE NOTED, ALL WIRE SHALL BE OF SOFT DRAWN COPPER, SOLID OR STRANDED OF 98 PERCENT CONDUCTIVITY WITH INSULATION RATED 600 VOLTS. ALL SIZES SHOWN ON THE DRAWINGS ARE BASED ON COPPER. ALUMINUM CONDUCTORS SHALL NOT BE USED. CONDUCTORS SHALL BE AS FOLLOWS:
- 1.15.1. #8 AND LARGER SHALL BE STRANDED WITH TYPE THHN/THWN INSULATION.
- 1.15.2. #10 AND SMALLER SHALL BE SOLID WITH TYPE THHN/THWN INSULATION.
- 1.15.3. #14 SHALL BE MINIMUM SIZE CONDUCTOR EXCEPT
- 1.15.4. #16 MAY BE USED FOR CONTROL CIRCUIT WIRING AND #12 SHALL BE THE MINIMUM SIZE FOR CIRCUITS OVER 100 FEET LONG.
- 1.16. ANY EMPTY CONDUIT INSTALLED FOR FUTURE USE SHALL HAVE A 200 POUND TEST NYLON PULL LINE.

- 1.17. WIRE CONNECTIONS FOR SPLICING #8 AWG AND SMALLER SHALL BE MADE WITH PRESSURE CONNECTORS CONSISTING OF CONE-SHAPED COIL SPRINGS WITH INSULATED COVERS. SPLICING OF CONDUCTORS LARGER THAN #8 SHALL BE MADE USING MECHANICAL SPLICING OR COMPRESSION TYPE DEVICES.
- 1.18. FLUORESCENT DIMMER SWITCHES SHALL BE UL LISTED, LINEAR SLIDE TYPE, SINGLE POLE, 960 WATT RATED AT 120 VOLTS AC AND 2,200 WATT RATED AT 240 VOLT AC FOR 100 TO 10 PERCENT DIMMING OF FLORESCENT LAMPS USING 0-10 VOLT ELECTRONIC DIMMING UNLESS OTHERWISE NOTED. THE DIMMER SWITCH SHALL BE MATCHED TO THE DIMMING BALLAST. UNIT SHALL HAVE A POSITIVE "OFF" SWITCH AND NECESSARY FILTERS TO PROTECT AGAINST RADIO FREQUENCY INTERFERENCE. DIMMER SWITCH AND COVERPLATE COLOR SHALL BE AS DIRECTED BY THE OWNER. DIMMERS AND SWITCHES SHALL WITHSTAND VOLTAGE SURGES OF UP TO 6000V AND CURRENT SURGES OF UP TO 200A WITHOUT DAMAGE. DIMMERS AND SWITCHES SHALL MEET THE UL 20 LIMITED SHORT CIRCUIT TEST REQUIREMENT FOR SNAP SWITCHES AND SHALL BE COMPATIBLE WITH ANY DRIVER OR BALLAST THAT IS COMPLIANT WITH IEC 60929 ANNEX E. FLUORESCENT DIMMER SWITCHES SHALL BE LUTRON, CATALOG NO. NSTSV-DV OR APPROVED EQUAL.
- 1.19. LED DIMMER SWITCHES SHALL BE MATCHED TO THE DIMMING DRIVER AND SHALL BE SIMILAR TO FLUORESCENT DIMMER SWITCHES ABOVE. ALL ADDITIONAL WIRING SHALL BE PROVIDED AS REQUIRED FOR DIMMING TYPE SELECTED; ELECTRONIC LOW VOLTAGE, 0-10V, FORWARD PHASE TRIAC, REVERSE PHASE DIMMING, ETC.
- 1.20. OUTLET BOXES OF PROPER TYPE AND NOT LESS THAN FOUR INCHES SQUARE SHALL BE USED AT ALL LIGHTING, RECEPTACLE AND SWITCH LOCATIONS. PLASTER RINGS SHALL BE USED AT EACH BOX LOCATION WHERE NECESSARY. SURFACE MOUNTED WIRING DEVICES SHALL BE INSTALLED IN "HANDY BOX" TYPE OUTLET BOXES WITH CORRESPONDING COVER PLATES. OUTLET BOXES SHALL BE AS MANUFACTURED BY AMERICAN ELECTRIC, RACO, CARLTON, OR APPROVED EQUAL.
- 1.21. JUNCTION BOXES OF AMPLE SIZE SHALL BE PROVIDED AS REQUIRED BY CONSTRUCTION IN ACCORDANCE WITH THE NEC. BOXES SHALL BE CONSTRUCTED OF CAST RUST-RESISTING METAL OR OF 14 GAUGE GALVANIZED STEEL WITH RIVETED OR WELDED JOINTS AND PROVIDED WITH COVERS OF THE SAME MATERIAL WHICH SHALL BE SCREWED OR HINGED TO THE BOX. BOXES SHALL BE FLANGED AND TAPPED TO RECEIVE MACHINE SCREWS. HOLES IN COVERS SHALL BE IN ALIGNMENT WITH TAPPED HOLES IN BOX. WHERE NO SIZES ARE GIVEN ON THE DRAWINGS, BOXES SHALL BE NO SMALLER THAN THE MINIMUM SIZE ALLOWED BY NEC. WHERE FEEDERS OF DIFFERENT SYSTEMS OR VOLTAGES PASS THROUGH THE SAME BOX, BARRIERS SHALL BE PROVIDED FOR PROPER SEPARATION.
- 1.22. SWITCHES SHALL BE SPECIFICATION GRADE, 120 VOLT AC, TOGGLE TYPE RATED 15 OR 20 AMPERES. DIMMER SWITCHES SHALL BE MATCHED TO THE DIMMING BALLAST OR DRIVER AND SHALL HAVE A CAPACITY GREATER THAN THE COMBINED FIXTURE LOAD TO BE DIMMED. SWITCH TYPE AND NUMBER OF POLES SHALL BE AS INDICATED ON THE DRAWINGS. SWITCHES SHALL BE AS MANUFACTURED BY LEVITON, HUBBELL, GENERAL ELECTRIC, OR APPROVED EQUAL.
- 1.23. DUPLEX RECEPTACLES SHALL BE SPECIFICATION GRADE, POLARIZED, GROUNDED, NEMA 5-20R, 15 OR 20 AMPERE, 125 VOLTS AC. RECEPTACLES SHALL BE AS MANUFACTURED BY LEVITON, HUBBELL, GENERAL ELECTRIC, OR APPROVED EQUAL. RECEPTACLES WITH INTEGRAL GROUND FAULT CIRCUIT INTERRUPTING CAPACITY SHALL BE PROVIDED AS INDICATED ON THE DRAWINGS. WEATHERPROOF DUPLEX RECEPTACLES SHALL BE WEATHER RESISTANT, GROUND FAULT CIRCUIT INTERRUPTING TYPE MOUNTED IN A WEATHERPROOF ENCLOSURE WHICH RETAINS ITS RATING WHILE IN USE.
- 1.24. WIRING DEVICES AND COVER PLATES ARE TO BE COLOR COORDINATED WITH THE OWNER'S REPRESENTATIVE. ONE-PIECE DEVICE COVER PLATES SHALL BE PROVIDED FOR ALL OUTLETS. PLATES SHALL BE STAINLESS STEEL TYPE AS MANUFACTURED BY LEVITON, HUBBELL, GENERAL ELECTRIC, OR APPROVED EQUAL.
- 1.25. SAFETY DISCONNECT SWITCHES SHALL BE THE SIZE AND TYPE AS SHOWN ON THE DRAWINGS. FUSE SIZE, IF REQUIRED, SHALL BE AS SHOWN ON THE DRAWINGS. SWITCHES SHALL BE HEAVY DUTY WITH QUICK-MAKE, QUICK-BREAK OPERATING MECHANISM. THE HANDLE AND MECHANISM SHALL BE AN INTEGRAL PART OF THE BOX AND NOT THE COVER WITH POSITIVE PAD LOCKING PROVISIONS IN THE "OFF" POSITION. SWITCHES SHALL BE NEMA 1 (INTERIOR) AND NEMA 3R (EXTERIOR) AND SHALL BE AS MANUFACTURED BY SQUARE D, SIEMENS, GENERAL ELECTRIC, OR APPROVED EQUAL.

- 1.26. CIRCUIT BREAKERS SHALL MATCH EXISTING AND SHALL BE ENCLOSED MOLDED CASE, BOLT-ON (EXCEPT THAT SQUARE D I-LINE BREAKERS ARE ACCEPTABLE), WITH QUICK-MAKE, QUICK-BREAK TOGGLE MECHANISM, NON-FUSIBLE CONTACTS, AND INVERSE TIME SHORT CIRCUIT CHARACTERISTICS. BREAKERS SHALL BE TRIP-FREE ON OVERLOAD AND SHALL INDICATE CLEARLY WHETHER THEY ARE OPENED, CLOSED, OR TRIPPED. MULTI-POLE UNITS SHALL HAVE THERMAL ELEMENT IN EACH POLE AND SHALL HAVE A SINGLE HANDLE. CIRCUIT BREAKER SHORT CIRCUIT RATINGS SHALL MATCH THE RATING OF THE EXISTING SYSTEM. BREAKERS SHALL BE COMPATIBLE WITH PANELBOARDS PROVIDED. ALL 15 AMPERE, SINGLE POLE CIRCUIT BREAKERS FOR LIGHTING CIRCUITS SHALL BE "SMD" RATED. CIRCUIT BREAKERS FOR DWELLING UNIT BEDROOMS SHALL BE AFCI RATED AND CIRCUIT BREAKERS FOR AIR CONDITIONING AND REFRIGERATION UNITS SHALL BE HACR RATED. MATCH EXISTING MANUFACTURER AND TYPE.
- 1.27. ALL PANELBOARDS SHALL CONTAIN AN UPDATED TYPENRITTEN PANEL DIRECTORY TO INDICATE AREA OR EQUIPMENT SERVED.
- 1.28. LIGHTING FIXTURES AND LAMPS SHALL BE AS SCHEDULED ON THE DRAWINGS OR APPROVED EQUAL.
- 1.29. FLUORESCENT LIGHTING FIXTURES THAT UTILIZE DOUBLE" ENDED LAMPS AND CONTAIN BALLAST(S) THAT CAN BE SERVICED IN PLACE SHALL HAVE A DISCONNECTING MEANS INTERNAL TO THE FIXTURE WHICH DISCONNECTS ALL CONDUCTORS TO THE BALLAST AND IS LOCATED TO ALLOW SERVICING THE BALLAST IN PLACE. FOR FIXTURES CONNECTED TO MULTIWIRE CIRCUITS, THE DISCONNECTING MEANS SHALL SIMULTANEOUSLY BREAK ALL SUPPLY CONDUCTORS TO THE BALLASTS, INCLUDING THE NEUTRAL.
- 1.30. FLUORESCENT LIGHTING FIXTURES SHALL HAVE LOW NOISE LEVEL, HIGH POWER FACTOR (HPF) ENERGY SAVING ELECTRONIC BALLASTS, BE CLASS "P" TYPE AND EMPLOY 39 WATT T5 LAMPS. DIMMING BALLASTS SHALL BE 0-10V, 10-100 PERCENT TYPE UNLESS OTHERWISE NOTED AND SHALL BE MATCHED TO THE DIMMER SWITCH.
- 1.31. ALL UNHEATED SPACES SHALL BE PROVIDED WITH A ZERO DEGREE MINIMUM STARTING TEMPERATURE BALLAST.
- 1.32. ALL ADDITIONAL WIRING AND/OR CONDUCTORS REQUIRED FOR LIGHTING CONTROL INCLUDING THAT REQUIRED FOR SWITCHED RECEPTACLES, THREE WAY SWITCHING, UNSWITCHED CONDUCTORS FOR NIGHT LIGHTS, AND OCCUPANCY SENSORS, AND LOW VOLTAGE WIRING FOR OCCUPANCY SENSING AND DIMMING CONTROL SHALL BE PROVIDED EVEN THOUGH NOT SPECIFICALLY SHOWN ON THE DRAWINGS.
- 1.33. TELEPHONE / CATV / DATA SYSTEM
- 1.33.1. TELEPHONE/CATV/DATA SYSTEM WIRING IN WALLS AND CONCEALED LOCATIONS SHALL BE PLENUM RATED WIRING AS FOLLOWS:
- 1.33.1.1. TELEPHONE - MIN. CAT3 23 AWG SOLID, CM RATED
- 1.33.1.2. CATV - RG6/U QUAD SHIELD, 18 AWG, CM RATED, SWEPT TO 3.0 GHZ
- 1.33.1.3. DATA SYSTEM - CAT6 23 AWG SOLID, CM RATED
- 1.33.2. THE CONTRACTOR SHALL LOCATE TELEPHONE, CATV AND/OR DATA OUTLETS AS INDICATED ON THE DRAWINGS AND IN ACCORDANCE WITH OWNER'S REQUIREMENTS. PROVIDE OUTLET BOX WITH BLANK COVER OR COVER WITH BUSHED OPENING AS DIRECTED BY THE OWNER OF THE SAME COLOR AS OTHER DEVICES IN THE AREA.
- 1.33.3. THE CONTRACTOR SHALL INSTALL OWNER FURNISHED TELEPHONE AND CATV EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND LOCAL TELEPHONE AND CATV COMPANY REQUIREMENTS.

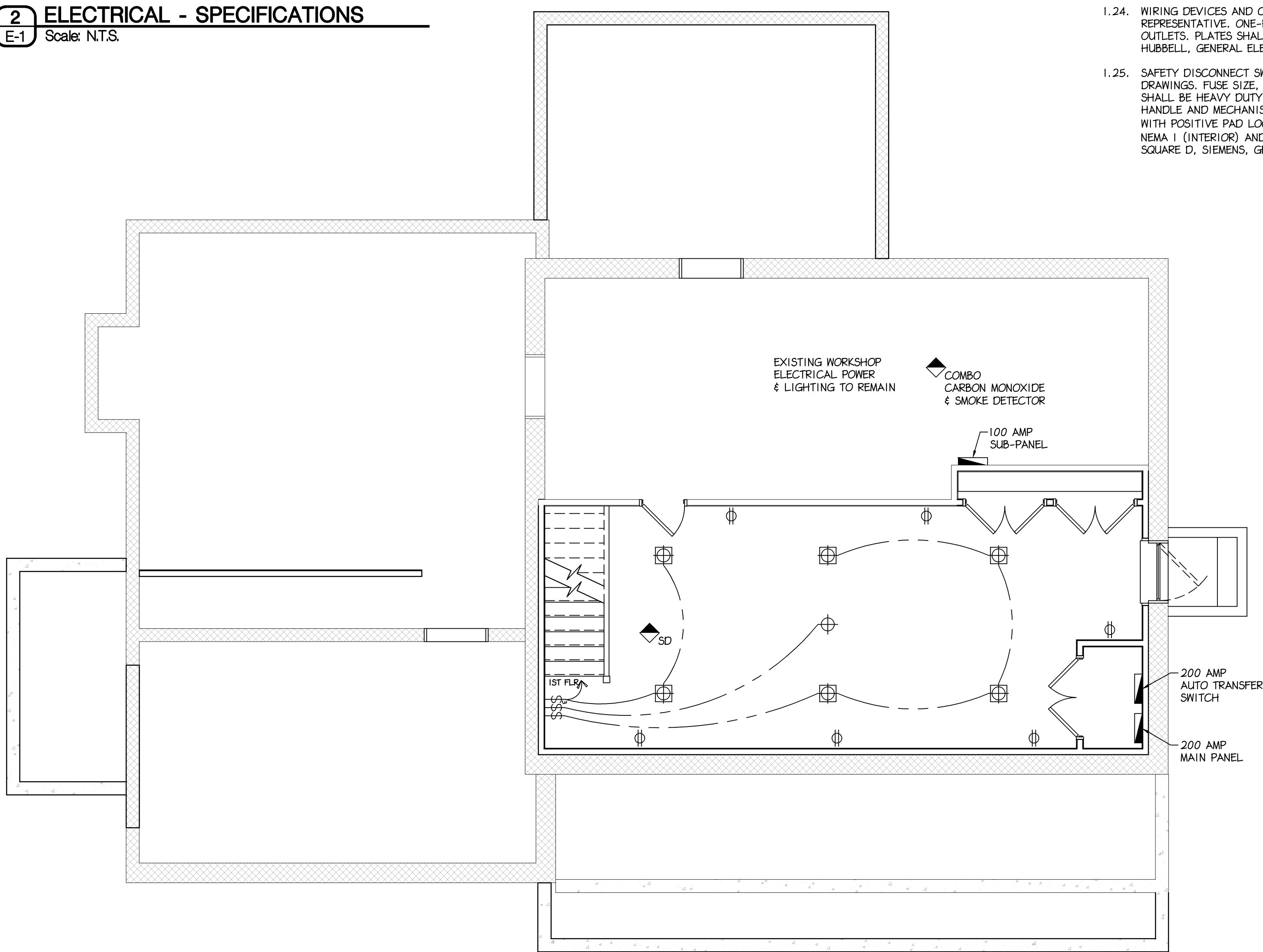
ELECTRICAL NOTES

- PROVIDE A 60 AMP BRACH CIRCUIT IN THE MAIN PANEL AND A 24 POSITION 100 AMP MLO 120/240V PANEL ON THE SECOND FLOOR.
- ALL DEVICES REQUIRING GROUND FAULT PROTECTION SHALL BE A GFCI (CIRCUIT BREAKERS).
- ALL RECEPTACLE CIRCUITS SHALL BE ARC FAULT PROTECTED EXCEPT FOR HALLWAYS, APPLIANCE AND SERVICE RECEPTACLES AND GFI CIRCUITS.
- ALL RECEPTACLES BELOW A WINDOW INCLUDING DORMER WINDOWS SHALL BE ON A TIMER LOCATED AS SHOWN ON THE ELECTRICAL PLAN AND SHALL HAVE A SPLIT SWITCHED RECEPTACLE ON A 15/2 GFCI CIRCUIT
- TELCO / CABLE / DATA BACKBOARD SHALL HAVE 42" STRUCTURED MEDIA DISTRIBUTION PANELS WITH LOCKABLE DOORS (LEVITON OR APPROVED EQUIV.)

ELECTRICAL SYMBOLS

	SINGLE POLE SWITCH		CEILING EXHAUST FAN
	THREE (3) POLE SWITCH		WALL EXHAUST FAN
	FOUR (4) POLE SWITCH		TELEPHONE OUTLET
	DIGITAL TIMER SWITCH		DATA/INTERNET PORT
	MOTION DETECTOR SWITCH		CABLE TV OUTLET
	SINGLE OUTLET		THERMOSTAT
	DUPLEX OUTLET		CENTRAL VAC INLET PORT
	DUPLEX OUTLET SURGE PROTECTED		DOOR BELL BUTTON
	DUPLEX OUTLET GROUND FAULT INTERRUPTED		DOOR BELL CHIMES
	DUPLEX OUTLET SPLIT WIRED TO SWITCH		CARBON MONOXIDE DETECTOR
	DUPLEX OUTLET WATER PROOF GROUND FAULT		SMOKE DETECTOR
	DUPLEX OUTLET WITH SWITCH		ELECTRIC PANEL
	220 SERVICE OUTLET		NON-FUSED DISCONNECT
	JUNCTION BOX		ELECTRIC METER
	CEILING LIGHT FIXTURE		ALARM KEYPAD
	RECESSED CEILING LIGHT FIXTURE		FLUORESCENT FIXTURE
	WALL LIGHT FIXTURE		LED STRIP FIXTURE
	GARBAGE DISPOSAL		

NOTES:
- CH INDICATES COUNTER HEIGHT
- DIMENSIONS ADJACENT TO SYMBOL INDICATES HEIGHT ABOVE FINISH FLOOR.



1 ELECTRICAL - BASEMENT
E-1 Scale: 1/4" = 1'- 0"

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PROJECT NO.		DRAWN BY		CHK'D BY	
B3955A		EMH		RJK	
NO.	DATE	BY	ISSUE		
1	06-04-2015	EMH	SKETCH REVIEW		
2	06-08-2015	EMH	REVISED SKETCH REVIEW		
3	06-10-2015	EMH	REVISED SKETCH REVIEW		
4	09-15-2015	EMH	ISSUED FOR PERMIT REVIEW		
5	09-17-2015	EMH	ISSUED FOR PERMIT & CONSTRUCTION		
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APPROVED BY			CURRENT DATE		
Robin J. Kohn, AIA			September 17, 2015		

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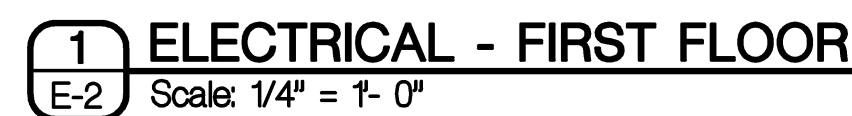
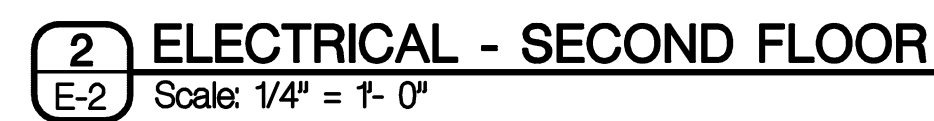
West Pikeland Township
Chester County

SHEET TITLE
ELECTRICAL - NEW WORK
BASEMENT, LEGEND
NOTES AND
SPECIFICATIONS

SHEET NUMBER

E-1

REV
5



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APPROVED BY	CURRENT DATE
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**ELECTRICAL - NEW WORK
FIRST, SECOND FLOOR
SINGLE LINE AND LEGEND**

E-2

REV
5