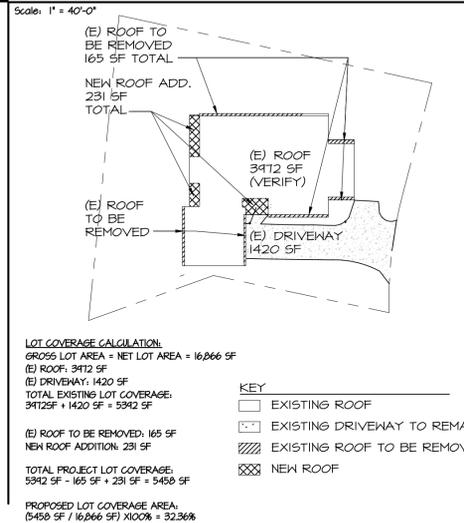


# LAWLER RESIDENCE

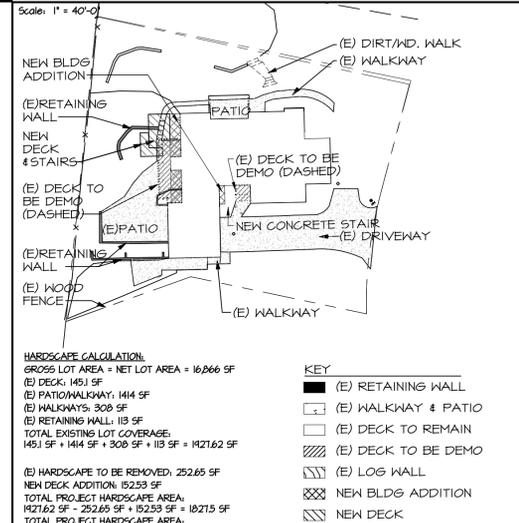
## ABBREVIATIONS

1	AND	H.B.	HOSE BIB	T.B.	TONE BAR
2	ANGLE	H.C.	HOLLOW CORE	T.B.S., T.B.D.	TO BE SELECTED/DECIDED
3	AT	HDR.	HEADER	T.C.	TOP OF CURB
4	CENTERLINE	HDM.	HARDWOOD	TEL.	TELEPHONE
5	PROPERTY LINE	HDR.	HARDWARE	TEMP.	TEMPORARY
6	DIAMETER	H.M.	HOLLOW METAL	TER.	TERRAZZO
7	FOUND OR NUMBER	H.R.	HORIZONTAL	T.G.	TONGUE & GROOVE
8		H.R.	HORIZONTAL	THK.	THICK
9	ANCHOR BOLT	H.H.	HEIGHT	T.O.	TOP OF
10	ACROSTIC	I.D.	INSIDE DIAMETER (DIM)	T.P.	TOP OF PAVEMENT
11	ACROSTIC	I.N.	INCH	T.P.D.	TOILET PAPER DISPENSER
12	AREA DRAIN	I.N.C.L.	INCLUDED	T.R.	TREAD
13	ASPHALT CONCRETE	I.S.O.	ISOLATION	T.V.	TELEVISION
14	ADJ.	I.S.U.L.	INSULATION	TYP.	TYPICAL
15	ADJUST.	I.N.T.	INTERIOR	I.B.C.	INTERNATIONAL BUILDING CODE
16	A.F.F.	J.T.	JOIST	I.R.C.	INTERNATIONAL RESIDENTIAL CODE
17	AGGR.	J.T.	JOIST	U.N.F.	UNFINISHED
18	A.I.B.	J.T.	JOIST	U.O.N., U.N.O.	UNLESS OTHERWISE NOTED
19	AL.	J.T.	JOIST	U.R.	URINAL
20	APPROX.	J.T.	JOIST	V.A.C.	VACUUM
21	APPROX.	J.T.	JOIST	V.B.	VAPOR BARRIER
22	APPROX.	J.T.	JOIST	V.C.T.	VINYL COMPOSITION TILE
23	APPROX.	J.T.	JOIST	V.G.R.	VINYL CARPET REMOVED
24	APPROX.	J.T.	JOIST	V.L.V.	LIVING
25	APPROX.	J.T.	JOIST	V.L.D.R.Y.	LAUNDRY
26	APPROX.	J.T.	JOIST	V.L.T.	LIGHT
27	APPROX.	J.T.	JOIST	V.V.T.	VERIFY
28	APPROX.	J.T.	JOIST	V.V.T.O.	VENT TO OUTSIDE
29	APPROX.	J.T.	JOIST	W.	WEST
30	APPROX.	J.T.	JOIST	W.C.	WATER CLOSET
31	APPROX.	J.T.	JOIST	W.R.B.	WATER RESISTANT BARRIER
32	APPROX.	J.T.	JOIST	W.	WOOD
33	APPROX.	J.T.	JOIST	W.D.	WOOD
34	APPROX.	J.T.	JOIST	W.M.	WINDON
35	APPROX.	J.T.	JOIST	W.M.	WATER METER
36	APPROX.	J.T.	JOIST	W.O.	WITHOUT
37	APPROX.	J.T.	JOIST	W.O.	WHERE OCCURS
38	APPROX.	J.T.	JOIST	W.P.	WATERPROOF
39	APPROX.	J.T.	JOIST	W.S.C.T.	WAINSCOT
40	APPROX.	J.T.	JOIST	W.T.	WEIGHT
41	APPROX.	J.T.	JOIST		
42	APPROX.	J.T.	JOIST		
43	APPROX.	J.T.	JOIST		
44	APPROX.	J.T.	JOIST		
45	APPROX.	J.T.	JOIST		
46	APPROX.	J.T.	JOIST		
47	APPROX.	J.T.	JOIST		
48	APPROX.	J.T.	JOIST		
49	APPROX.	J.T.	JOIST		
50	APPROX.	J.T.	JOIST		
51	APPROX.	J.T.	JOIST		
52	APPROX.	J.T.	JOIST		
53	APPROX.	J.T.	JOIST		
54	APPROX.	J.T.	JOIST		
55	APPROX.	J.T.	JOIST		
56	APPROX.	J.T.	JOIST		
57	APPROX.	J.T.	JOIST		
58	APPROX.	J.T.	JOIST		
59	APPROX.	J.T.	JOIST		
60	APPROX.	J.T.	JOIST		
61	APPROX.	J.T.	JOIST		
62	APPROX.	J.T.	JOIST		
63	APPROX.	J.T.	JOIST		
64	APPROX.	J.T.	JOIST		
65	APPROX.	J.T.	JOIST		
66	APPROX.	J.T.	JOIST		
67	APPROX.	J.T.	JOIST		
68	APPROX.	J.T.	JOIST		
69	APPROX.	J.T.	JOIST		
70	APPROX.	J.T.	JOIST		
71	APPROX.	J.T.	JOIST		
72	APPROX.	J.T.	JOIST		
73	APPROX.	J.T.	JOIST		
74	APPROX.	J.T.	JOIST		
75	APPROX.	J.T.	JOIST		
76	APPROX.	J.T.	JOIST		
77	APPROX.	J.T.	JOIST		
78	APPROX.	J.T.	JOIST		
79	APPROX.	J.T.	JOIST		
80	APPROX.	J.T.	JOIST		
81	APPROX.	J.T.	JOIST		
82	APPROX.	J.T.	JOIST		
83	APPROX.	J.T.	JOIST		
84	APPROX.	J.T.	JOIST		
85	APPROX.	J.T.	JOIST		
86	APPROX.	J.T.	JOIST		
87	APPROX.	J.T.	JOIST		
88	APPROX.	J.T.	JOIST		
89	APPROX.	J.T.	JOIST		
90	APPROX.	J.T.	JOIST		
91	APPROX.	J.T.	JOIST		
92	APPROX.	J.T.	JOIST		
93	APPROX.	J.T.	JOIST		
94	APPROX.	J.T.	JOIST		
95	APPROX.	J.T.	JOIST		
96	APPROX.	J.T.	JOIST		
97	APPROX.	J.T.	JOIST		
98	APPROX.	J.T.	JOIST		
99	APPROX.	J.T.	JOIST		
100	APPROX.	J.T.	JOIST		

## LOT COVERAGE CALCULATION



## HARDSCAPE CALCULATION



## PROJECT INFORMATION

PERMIT NUMBER: XXX

SITE ADDRESS: 8456 N MERCER WAY, MERCER ISLAND, 98040.

PARCEL NUMBER: 545260-0100

LEGAL DESCRIPTION: MERGER PARK LANE TOWN AND INT IN TRACTS A B C LESS FOR DAF BEG AT MOST SLY COR TH N 15-50-02 N 14.61 FT TH S 73-50-00 E 62.94 FT TH S 42-31-53 N 84.66 FT T POB TOW 1/6 INT IN POR LOT 5 SD PLAT L'Y NLY OF FOLG DESG LN BEG AT W COR LOT 5 TH N 73-54-51 E 67.31 FT TH N 41-40-01 E 12.82 FT TO ROB TH S 61-41-94 E 15.43 FT TH N 41-40-01 E TO OUTER LIMITS OF 2ND CL SH LDS & TERMINUS OF SD LN

ZONING: R-15

LOT COVERAGE: LOT AREA = 16,266 SF

GROSS FLOOR AREA: ALLOWED GROSS FLOOR AREA: ALLOWED GROSS FLOOR AREA: TOTAL GROSS FLOOR AREA:

OCCUPANCY: TYPE R-3

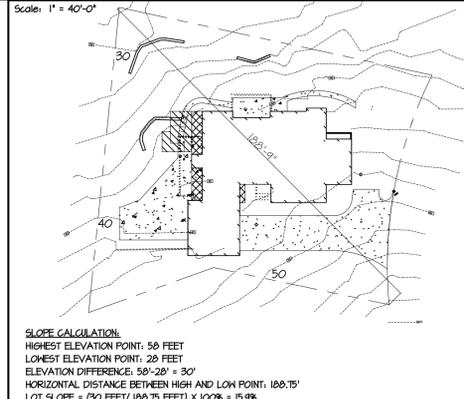
CONSTRUCTION TYPE: TYPE VB, (E) NON RATED, SPRINKLER TO BE ADDED DURING REMODEL

CONSTRUCTION CODES: 2015 INTERNATIONAL RESIDENTIAL CODE, MERCER ISLAND MUNICIPAL CODE, HREC 2015

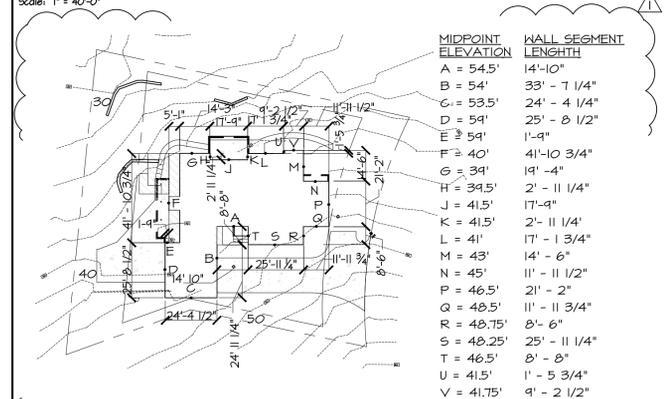
6211 Roosevelt Way N.E.  
Seattle, WA. 98115  
(206) 522-3830

REGISTERED ARCHITECT  
STEPHEN REED RISING  
STATE OF WASHINGTON  
5/11/2022

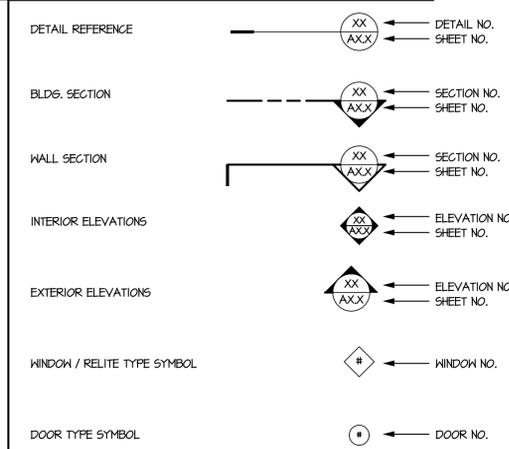
## SLOPE CALCULATION



## AVERAGE BLDG. ELEV. CALC.



## DRAWING SYMBOLS



## VICINITY MAP



## PROJECT TEAM

OWNER: MCDONALD LAWLER  
2165 40TH AVE. SE  
MERCER ISLAND, WA 98040  
PHONE: (206) 718-3216  
mcdon@live.com

GENERAL CONTRACTOR: HOBENKNER ACTING AS GENERAL CONTRACTOR

CONSTRUCTION MANAGER: NORTHEROCK CONSTRUCTION MANAGEMENT LLC  
13212 40TH AVE. SE  
NORTH BEND, WA 98045  
PHONE: (206)910-5801  
CONTACT: KEN BROOKS  
northbrooksllc@comcast.net  
M.L. BUSINESS LICENSE# 0404946

ARCHITECT: TGA ARCHITECTURE PLANNING  
6211 ROOSEVELT WAY NORTHEAST  
SEATTLE, WASHINGTON 98115  
PHONE: 206-522-3830  
CONTACT: STEPHEN RISING  
stephen@tga-inc.com

STRUCTURAL ENGINEER: SEF STRUCTURAL ENGINEERING  
2124 3RD AVE.  
SEATTLE, WA 98121  
PHONE: (206) 443-6212  
CONTACT: GREG COONS  
GCOONS@SEFENGINEERS.COM

SURVEYOR: TYEE SURVEYORS  
10071 GREENWOOD AV. N.  
SEATTLE, WA 98103  
PHONE: 206-525-3860  
CONTACT: REED GRIFFIN  
REED@TYEESURVEYORS.COM

GEOTECHNICAL ENGINEER: GEOTECH CONSULTANTS, INC.  
2401 10TH AVE. E.  
SEATTLE, WA 98102  
PHONE: (206)747-5616  
CONTACT: ROB WARD  
rob@geotech.com

## PERMIT SET

Revisions: \_\_\_\_\_ Date: \_\_\_\_\_  
△ PERMIT - REV 10/30/2020

## SHEET INDEX

T1	TITLE SHEET & PROJECT DATA
T1.1	GENERAL NOTES
T1.2	GROSS FLOOR AREA PLANS & CALCS.
T1.3	HARD SURFACE AREA DIAGRAM & CALCS.
T1.4	
-X-	SURVEY
A1	SITE PLAN
A1.2	BASEMENT DEMO PLAN
A1.3	FIRST FLOOR DEMO PLAN
A1.4	ROOF DEMO PLAN
A2.1	BASEMENT FLOOR PLAN
A2.2	FIRST FLOOR PLAN
A2.3	ROOF PLAN
A3.1	EXT. ELEVATIONS
A3.2	EXT. ELEVATIONS
A4.1	BUILDING SECTIONS
A4.1	WINDOW DOOR SCHEDULE, ENERGY CODE WORKSHEET
A4.1	EXTERIOR DETAILS
S1.1	STRUCTURAL NOTES
S2.1	BSMT FOUNDATION PLAN
S2.2	FIRST FLR. FRAMING / FDN. PLAN
S2.3	ROOF FRAMING PLAN
S3.1	CONCRETE STRUCTURAL DETAILS
S3.2	CONCRETE STRUCTURAL DETAILS
S4.1	STRUCTURAL DETAILS
S4.2	STRUCTURAL DETAILS
S4.3	STRUCTURAL DETAILS

Sheet Title: T1.1  
TITLE SHEET & PROJECT DATA

Scale: NOT TO SCALE  
20-05

Date: 06/30/2020

Sheet Number: T1.1

Modifications to  
**LAWLER RESIDENCE**  
8456 N MERCER WAY,  
MERCER ISLAND, WA, 98040



**GENERAL NOTES**

- THESE DRAWINGS ARE THE EXCLUSIVE PROPERTY OF THE ARCHITECT AND MAY ONLY BE REPRODUCED WITH THE WRITTEN PERMISSION OF THE ARCHITECT. AUTHORIZED REPRODUCTIONS MUST BEAR THE NAME OF THE ARCHITECT. COPYRIGHT 2020 BY TGA ARCHITECTURE-PLANNING, THESE DRAWINGS ARE FULLY PROTECTED BY FEDERAL AND STATE COPYRIGHT LAWS. ANY INFRINGEMENT OF THESE LAWS WILL BE PROSECUTED. ALL CONSTRUCTION SHALL CONFORM TO THE 2015 INTERNATIONAL RESIDENTIAL CODE, MERCER ISLAND MUNICIPAL CODE AND 2015 WASHINGTON STATE ENERGY CODE AND BE IN ACCORDANCE WITH ALL WASHINGTON STATE LAWS AND REGULATIONS AND ALL CODES IMPOSED BY LOCAL AUTHORITIES. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY WORK KNOWINGLY PERFORMED CONTRARY TO SUCH LAWS, ORDINANCES OR REGULATIONS.
- THE CONTRACTOR SHALL CHECK ALL DRAWINGS AND VERIFY ALL DIMENSIONS (INCLUDING ROUGH OPENINGS), DATUMS, LEVELS, AND STRUCTURAL MEMBER SIZES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL IMMEDIATELY INFORM THE ARCHITECT OF ANY DISCREPANCIES IN THE DRAWINGS OR WITH THE CODES. CHANGES INITIATED BY THE CONTRACTOR SHALL BE SUBMITTED IN WRITING TO THE ARCHITECT AND STRUCTURAL ENGINEER PRIOR TO PROCEEDING WITH FABRICATION OR CONSTRUCTION. CHANGES INDICATED SOLELY ON THE DRAWINGS WILL NOT SATISFY THIS REQUIREMENT. IN CASES OF DISCREPANCIES BETWEEN EXISTING CONDITIONS AND THE DRAWINGS, THE CONTRACTOR SHALL OBTAIN DIRECTIONS FROM THE ARCHITECT PRIOR TO PROCEEDING.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES REQUIRED TO PERFORM HIS OR HER WORK, AS WELL AS BEING RESPONSIBLE FOR ALL REQUIRED SAFETY PRECAUTIONS. STRUCTURAL SYSTEMS WHICH ARE COMPOSED OF COMPONENTS TO BE ERECTED IN THE FIELD, SHALL BE ACCOMPANIED BY SUPPLIER SUPERVISION DURING MANUFACTURE, DELIVERY, HANDLING, STORAGE AND ERECTION ACCORDING TO THE INSTRUCTIONS PREPARED BY THE SUPPLIER.
- CONTRACTOR SHALL BE FAMILIAR WITH ANY GENERAL STRUCTURAL NOTES ELSEWHERE IN THESE DOCUMENTS, WHERE BETWEEN THESE GENERAL NOTES AND STRUCTURAL NOTES, THE GENERAL STRUCTURAL NOTES SHALL SUPERSEDE.
- NOTED DIMENSIONS AND VERIFIED EXISTING DIMENSIONAL CONDITIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE DRAWINGS.
- REPETITIVE FEATURES DRAWN OR NOTED ONLY ONCE SHALL BE COMPLETELY PROVIDED AS IF DRAWN OR NOTED IN FULL.
- INTERIOR DIMENSIONS ARE TO SURFACE OF FINISH UNLESS NOTED OTHERWISE ON THE DRAWINGS. EXTERIOR DIMENSIONS ARE FACE OF STUD UNLESS NOTED OTHERWISE ON DRAWINGS. DOORS, WINDOWS AND COLUMNS ARE DIMENSIONED TO THE CENTERLINE UNLESS NOTED OTHERWISE ON THE DRAWINGS.
- EACH SUBCONTRACTOR IS RESPONSIBLE FOR COORDINATING HIS WORK WITH ALL OTHER TRADES AND SHALL VERIFY ALL FIELD DIMENSIONS WITH CONDITIONS FOR ITEMS FURNISHED AND INSTALLED BY HIMSELF.
- EACH SUBCONTRACTOR, AT THE COMPLETION OF HIS WORK, SHALL REMOVE ALL DEBRIS RESULTING FROM HIS WORK.
- EACH SUBCONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE HE DOES TO ADJACENT WORK AND SHALL MAKE GOOD AT HIS OWN EXPENSE AND AT HIS OWN RISK. DAMAGE CAUSED AS A RESULT OF WORK DONE UNDER THIS CONTRACT SHALL BE REPAIRED AND FINISHED TO MATCH ADJACENT FINISHES.
- FIRE-STOP WALLS, FLOORS AND FURRED AREAS PER 2015 IRC SECTION R302.
- ALL DUCTS, EQUIPMENT, UTILITY LINES AND CONDUITS SHALL BE HELD AS CLOSE AS POSSIBLE TO STRUCTURAL CEILING AND BEAMS.
- GENERAL CODE NOTES:
  - FIRE DAMPER DUCTWORK PASSING THROUGH RATED WALLS AND FLOORS SHALL COMPLY W/ IRC SECTION R302.4
  - PROVIDE SAFETY GLASS PER IRC SECTION R308
  - FLAME SPREAD OF CARPETING AND INTERIOR FINISHES SHALL COMPLY W/ IRC SECTION R302.4
- PRIOR TO CONSTRUCTION THERE SHALL BE A PRE-CONSTRUCTION CONFERENCE ARRANGED BY THE APPLICANT WITH GEOTECHNICAL ENGINEERS, SITE INSPECTOR, PROJECT SPECIAL INSPECTORS AND CONTRACTOR AND ALL OTHER ENGINEERS OR INSPECTORS
- FIRST OPD SITE INSPECTION IS REQUIRED FOR TEMPORARY EROSION AND SEDIMENT CONTROL AND MUST BE SCHEDULED PRIOR TO STARTING ANY CONSTRUCTION ACTIVITY.

**CONSTRUCTION NOTES**

- ALL INTERIOR SLABS-ON-GRADE SHOULD BE UNDERLAIN BY A CAPILLARY BREAK DRAINAGE LAYER CONSISTING OF A MINIMUM 4-INCH THICKNESS OF CLEAN GRAVEL OR CRUSHED ROCK THAT HAS A FINES CONTENT (PERCENT PASSING THE NO. 200 SIEVE) OF LESS THAN 3 PERCENT AND A SAND CONTENT (PERCENT PASSING THE NO. 4 SIEVE) OF NO MORE THAN 10 PERCENT. PEA GRAVEL OR CRUSHED ROCK ARE TYPICALLY USED FOR THIS LAYER. SLOPE ALL DECKS, WALKS, DRIVEWAYS AND PATIOS AWAY FROM BUILDINGS.
- ALL WOOD IN CONTACT WITH CONCRETE SHALL BE PRESSURE TREATED. PRESSURE TREATED WOOD SHALL ALSO BE USED FOR WOOD MEMBERS WHICH FORM THE STRUCTURAL SUPPORT OF BALCONIES, PORCHES, ETC. WHEN SUCH MEMBERS ARE EXPOSED TO THE WEATHER
- ALL EXPOSED EXTERIOR METAL SHALL BE GALVANIZED.  
PROVIDE FIRE BLOCKS AND DRAFT STOPS PER APPLICABLE CODES.
- PROVIDE AND INSTALL SMOKE DETECTORS. CARBON MONOXIDE DETECTORS, SMOKE DETECTORS SHALL RECEIVE PRIMARY POWER FROM BUILDING WIRING AND BE EQUIPPED WITH BATTERY BACK-UP.
- KITCHEN RANGE AND CLOTHES DRYER SHALL EXHAUST DIRECTLY TO OUTSIDE. VENTS SHALL BE SMOOTH NON-COMBUSTIBLE, NON-ABSORBENT AND EQUIPPED WITH BACKDRAFT DAMPER. (SEE MECHANICAL NOTES)
- EXTERIOR JOINTS SHALL BE SEALED, CALKED, GASKETED, OR HEATHER-STRIPPED IN SUCH A MANNER TO MAKE THEM WEATHERTIGHT AT THE FOLLOWING LOCATIONS: WINDOW AND DOOR FRAMES, OPENINGS BETWEEN HALL AND FOUNDATION, OPENINGS BETWEEN HALL AND ROOF, OPENINGS AT PENETRATION OF UTILITY SERVICES, ALL OTHER OPENINGS IN THE BUILDING ENVELOPE.
- BRIDGING CROSSBRACINGS, PROVIDE SOLID BLOCKING OVER BEARING PARTITIONS, WALLS, AND BEAMS.
- COLUMNS AND POSTS, FRAMED TO TRUE AND BEARING ADEQUATELY ANCHORED AT THE TOP AND BOTTOM, WITH A POSITIVE DIRECT CONNECTION TO ASSURE AGAINST UPLIFT AND LATERAL DISPLACEMENT.
- WHEN DECKS, LANDINGS OR PORCHES ARE MORE THAN 30 INCHES ABOVE GRADE, PROVIDE GUARDRAILS NOT LESS THAN 36 INCHES HIGH W/ INTERMEDIATE MEMBERS SPACED SUCH THAT A SHERE 4 INCHES IN DIAMETER CANNOT PASS THROUGH. GUARDRAILS TO BE DESIGNED TO WITHSTAND A HORIZONTAL FORCE OF 20 POUNDS PER LINEAL FOOT WHEN APPLIED AT A RIGHT ANGLE TO THE TOP OF THE RAILINGS.
- PLYWOOD ROOF SHEATHING EXPOSED ON THE UNDERSIDE SHALL BE BONDED WITH EXTERIOR GLUE.
- APPLICATION OF ROOF COVERING MATERIALS SHALL BE IN ACCORDANCE PER IRC SECTION R312.
- EXTERIOR WALL COVERINGS SHALL BE APPLIED PER MANUFACTURER SPECIFICATIONS.
- ANCHORED MASONRY VENEER SHALL COMPLY WITH PROVISIONS OF IRC SECTION R703.9.9
- ADHERED MASONRY VENEER SHALL COMPLY WITH PROVISIONS OF IRC SECTION R703.12
- VENEER SHALL SUPPORT NO LOAD OTHER THAN ITS OWN HEIGHT AND THE VERTICAL DEAD LOAD OF VENEER ABOVE.
- MASONRY SHALL NOT BE SUPPORTED BY WOOD MEMBERS EXCEPT AS PROVIDED FOR IN IRC.

**BATHROOMS**

- ALL TUB AND SHOWER STALLS SHALL HAVE FIRE BLOCKING BETWEEN STUDS.
- ALL GLAZING WITHIN 60" OF DRAIN INLET SHALL BE SAFETY GLASS.
- SHOWER STALL MAINSCOT SHALL BE 6'-0" (MIN) HIGH SURROUND WITH WATER RESISTANT BACKING.
- SHOWERS SHALL BE EQUIPPED WITH FLOW CONTROL DEVICES THAT LIMIT THE WATER FLOW TO 2.5 GPM.

**STAIRS**

- HEADROOM 6'-8" (MIN), WIDTH 3'-0" (MIN)
- WHERE A GUARD RAIL OCCURS, THE CLEAR SPACE BETWEEN INTERMEDIATE RAILS SHALL NOT ALLOW A SHERE 4" IN DIAMETER PASS THROUGH
- TREAD 10" MINIMUM, RISER 7 3/4" MAXIMUM.
- TOP OF HANDRAIL SHALL BE 34" (MIN) AND 38" (MAX) ABOVE THE STAIR NOSING. HANDRAIL SHALL BE SPACED NOT LESS THAN 1-1/2" FROM HALL AND MAY PROJECT INTO THE REQUIRED STAIR WIDTH 3-1/2" (MAX) RETURN ENDS OF HANDRAILS OR TERMINATE IN NEEL POST. HANDRAIL SHALL BE 1-1/2" (MIN) AND 2" (MAX) IN CROSS SECTION.
- INSTALL FIRE BLOCKING IN CONCEALED SPACES BETWEEN STRINGERS AT THE TOP AND BOTTOM OF THE RUN AND BETWEEN STUDS ALONG AND IN LINE WITH THE RUN OF THE STAIRS. COVER USABLE SPACE UNDER STAIR WITH 1/2" 6MB PER IRC SECTION R302.7

**ATTIC**

- PROVIDE ATTIC VENTILATION AS INDICATED ON ROOF FRAMING PLAN. THE MINIMUM NET FREE VENTILATING AREA SHALL BE NOT LESS THAN 1 SQ. FT. PER 150 SQ. FT. OF ATTIC AREA (OR 1 SQ. FT. PER 300 SQ. FT. IF 50% OF THE REQUIRED VENTILATING AREA IS AT LEAST 3 FT. ABOVE THE EAVE VENTS OR 1 SQ. FT. PER 300 SQ. FT. OF ATTIC AREA IF A VAPOR RETARDER HAVING A TRANSMISSION RATE NOT EXCEEDING 1.0 PERM IS INSTALLED ON THE WARM SIDE OF THE ATTIC INSULATION). IRC SECTION R908
- IN ATTIC SPACES WITH 30" OR MORE OF HEIGHT, PROVIDE ATTIC ACCESS, 22" X 30" (MIN) WITH 30" MIN. HEADROOM. THE OPENING SHALL BE UNOBSTRUCTED AND READILY ACCESSIBLE PER APPLICABLE CODE.

**GLAZING - IRC SECTION R308.4**

- GLAZING SHALL COMPLY WITH THE WA. STATE SAFETY GLASS LAW. GLAZING IN LOCATIONS SUBJECT TO HUMAN IMPACT, SUCH AS PANES IN DOORS, WITHIN 24" EITHER SIDE OF A DOOR OPENING, CLOSER THAN 18" TO THE FLOOR, ON SHOWER DOORS AND ON TUB ENCLOSURES, SHALL BE WIRE REINFORCED, TEMPERED GLASS, LAMINATED SAFETY GLASS OR SHATTER RESISTANT PLASTIC. SLIDING GLASS DOORS TO BE SAFETY GLAZING, LAMINATED, OR TEMPERED GLASS. SHOWER ENCLOSURES TO BE MADE OF APPROVED HIRE REINFORCED, TEMPERED, OR LAMINATED SAFETY GLASS, OR SHATTER RESISTANT PLASTIC.
- GLAZING WITHIN 18" OF THE FLOOR AND GREATER THAN 18" IN THE LEAST DIMENSION SHALL COMPLY WITH IMPACT LOADS.
- ALL EXTERIOR WALL GLAZING SHALL BE DOUBLE GLAZED.
- SKYLIGHTS SHALL BE BE OF LAMINATED GLASS, 1/32" THICKNESS (MIN) AND A 30 MIL (MIN) APPROVED.
- EGRESS WINDOWS: EVERY SLEEPING ROOM SHALL HAVE AT LEAST ONE OPERABLE WINDOW WITH A NET CLEAR OPENING OF 5 1/2 SQ. FT. THE OPENABLE HEIGHT SHALL BE 24" (MIN) AND WIDTH 20" (MIN) WITH A FINISHED SILL HEIGHT NOT MORE THAN 44" A.F.F.

**FIREPLACE AND CHIMNEY**

- ALL CHIMNEYS SHALL EXTEND AT LEAST 2 FT. ABOVE THE HIGHEST ELEVATION OF ANY PART OF THE BUILDING WITHIN 10 FT. AND AT LEAST 3 FT. ABOVE ANY ROOF LESS THAN 3:12 SLOPE.
- CHIMNEYS SHALL BE ENCLOSED ABOVE THE STORY IN WHICH THE APPLIANCE SERVED IS LOCATED PER THE REQUIREMENTS OF M.M.C. CHAPTER 8, AND THE INTERPRETATION OF THE GOVERNING JURISDICTION.
- PROVIDE FIRE BLOCKING AT CHIMNEY PER APPLICABLE CODE.
- INSTALL METAL FIREPLACES PER MANUFACTURERS SPECIFICATIONS AND UL LISTING REQUIREMENTS. GAS VENTING PER APPLICABLE CODE.
- COMBUSTIBLE FRAMING MATERIAL SHALL NOT BE PLACED WITHIN 2 INCHES OF FIREPLACE, SMOKE CHAMBER, OR CHIMNEY HALL FOR INTERIOR INSTALLATION AND WITHIN 1 INCH FOR EXTERIOR INSTALLATION. NO COMBUSTIBLE MATERIAL SHALL BE PLACED WITHIN 6 INCHES OF THE FIREPLACE OPENING. COMBUSTIBLE MATERIAL WITHIN 12 INCHES OF THE FIREPLACE OPENING SHALL NOT EXTEND 20 INCHES IN FRONT OF AND 12 INCHES TO EACH SIDE (MIN).
- THE HEARTH SHALL EXTEND AT LEAST 16 INCHES IN FRONT OF AND 8 INCHES TO EACH SIDE OF THE FIREPLACE OPENING WHEN THE OPENING IS SMALLER THAN 6 SQ. FT. IF THE OPENING IS 6 SQ. FT. OR LARGER, THE HEARTH SHALL EXTEND 20 INCHES IN FRONT AND 12 INCHES TO EACH SIDE MIN.
- PROVIDE FRESH AIR INTAKE WITH A 6 SQ. IN. DUCT, WITH DAMPER, FROM THE OUTSIDE TO THE FIREBOX PER MANUFACTURERS REQUIREMENTS
- PROVIDE TIGHT-FITTING GLASS OR METAL DOORS, TIGHT-FITTING FLUE DAMPER WITH MANUAL OR AUTOMATIC CONTROLS (FIREPLACE) AND AN OUTSIDE SOURCE OF COMBUSTION AIR (DIRECT TO FIREBOX FOR FIREPLACE).

**SITE**

- PIPE ALL STORM DRAINAGE FROM THE BUILDING TO A DISPOSAL POINT APPROVED BY THE BUILDING DEPARTMENT AND AUTHORITIES HAVING JURISDICTION. PROVIDE 4" INDEPENDENT TIGHTLINE FOR ALL ROOF DRAINAGE AROUND PERIMETER TO APPROVED STORM DRAINAGE SYSTEM. DOWNSPOUTS SHALL BE CAPPED AT RISER CONNECTIONS. FOOTING DRAINS SHALL BE 4" PERFORATED PIPE WRAPPED IN FILTER FABRIC SET IN CLEAN FREE DRAINING GRAVEL FILL. FOOTING DRAINS SHALL BE PLACED AT THE BASE OF THE FOOTING AND CONNECT INTO AN APPROVED STORM DRAINAGE SYSTEM DRAINS AND TIGHTLINES SHALL SLOPE AT A MINIMUM OF 1/8"/FT.
- BOUNDARY AND TOPOGRAPHY INFORMATION HAS BEEN PROVIDED BY THE OWNER. THE ARCHITECT SHALL NOT BE HELD RESPONSIBLE LIABLE FOR THE ACCURACY OF THIS INFORMATION. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL SITE CONDITIONS INCLUDING ANY FILL PLACED ON THE SITE PRIOR TO WORK. THE CONTRACTOR MUST INFORM THE ARCHITECT OF ANY POTENTIAL FIELD MODIFICATIONS NOT SPECIFIED ON THE PLANS PRIOR TO WORK.
- MAXIMUM NON-STABILIZED FILL NOT TO EXCEED 2:1 SLOPE PER GEOTECH REPORT.
- CUT SLOPES FOR PERMANENT EXCAVATIONS SHALL NOT BE STEEPER THAN 2 HORIZONTAL TO 1 VERTICAL AND SLOPES FOR PERMANENT FILLS SHALL NOT BE STEEPER THAN 2 HORIZONTAL TO 1 VERTICAL UNLESS SUBSTANTIATING DATA JUSTIFYING STEEPER SLOPES ARE SUBMITTED. DEVIATION FROM THE FOREGOING LIMITATIONS FOR SLOPES SHALL BE PERMITTED ONLY UPON THE PRESENTATION OF A SOIL INVESTIGATION REPORT ACCEPTABLE TO THE BUILDING OFFICIAL.
- EXCAVATION MATERIAL REMAINING ON SITE IS TO BE CONTAINED BY AN APPROVED SEDIMENT BARRIER. THE CONTRACTOR MUST VERIFY LOCATION WITH APPROPRIATE BUILDING OFFICIAL. PROTECT ALL STOCK PILED MATERIAL FROM EROSION
- FOUNDATION SETBACKS FROM ASCENDING AND DESCENDING SLOPES SHALL COMPLY WITH SECTIONS R403.1.11 AND R403.1.12 S.R.C.

**INSULATION**

ALL INSULATION MATERIALS, INCLUDING FACINGS SUCH AS VAPOR BARRIERS OR BREATHER PAPERS, INSTALLED WITHIN FLOOR/CEILING ASSEMBLIES, ROOF/CEILING ASSEMBLIES, WALLS, CRAWL SPACES OR ATTICS SHALL HAVE A FLAME SPREAD RATING NOT TO EXCEED 25 AND A SMOKE DENSITY NOT TO EXCEED 450 WHEN TESTED IN ACCORDANCE WITH APPLICABLE CODES. WHEN SUCH MATERIALS ARE INSTALLED IN CONCEALED SPACES, THE FLAME SPREAD AND SMOKE-DEVELOPED LIMITATIONS DO NOT APPLY TO THE FACING, PROVIDED THAT THE FACINGS IS INSTALLED IN SUBSTANTIAL CONTACT WITH THE UNEXPOSED SURFACE OF THE CEILING, FLOOR, OR WALL FINISH.

- CEILING (R-44 BATT INSULATION U.O.N)
  - THE ROOF AND CEILING SHALL BE INSULATED WITH R-44 BATT INSULATION WHERE POSSIBLE. PROVIDE INSULATION IN THE CEILING AND IN THE RAFTERS. IF A VAULTED CEILING CONDITION OCCURS, PROVIDE R-30 INSULATION.
  - MAINTAIN A MINIMUM OF 1" CLEARANCE BETWEEN TOP OF INSULATION AND BOTTOM OF SHEATHING FOR VENTING. VENTING MUST OCCUR IN EACH JOIST SPACE. WHERE CONTINUOUS VENTING WITHIN A JOIST SPACE IS INTERRUPTED BY A HEADER (I.E. AT A SKYLIGHT OR HIP END), PROVIDE (2) 1/2" VENTING HOLES AT THE TOP OF THE RAFTER AT THE HEADER TO ALLOW FOR CONTINUAL THROUGH-VENTING INTO THE NEXT JOIST SPACE.
  - CEILINGS TO HAVE INSULATION Baffles. Baffles ARE TO EXTEND 6" ABOVE BATT INSULATION, 12" ABOVE BLOXX INSULATION.
- WALLS (R-21 INSULATION U.O.N)
  - RIGID BOARD INSULATION IS TO BE PLACED BEHIND ALL RECESSED FIXTURES IN EXTERIOR WALLS.
  - INSULATE BEHIND TUB/SHOWER PARTITIONS AND CORNERS.
- FLOORS (R-30 BATT, U.O.N)
  - FACED BATTS ARE LAPPED AND SHALL BE FACE STAPLED TO FACE OF JOISTS.
- SOUND INSULATION
  - PROVIDE 3 1/2" FRICTION FIT SOUND INSULATION BATTS AS NOTED ON PLANS AND AROUND ALL WALL GLAZING, FRAMED AND UNFRAMED 5 & 6 FLOORS
  - PROVIDE FULL DEPTH SOUND INSULATION BATTS IN ALL INTERMEDIATE FRAMED FLOORS AND IN BATHROOM AND CLOSET WALLS.
- GENERAL
  - INSULATION SHALL BE PROVIDED WITH CLEARANCES FOR VENTING, CHIMNEYS, LIGHTS, FANS, ETC. IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

**MOISTURE CONTROL**

- ATTIC ACCESS AND CRAWL SPACE ACCESS DOORS ARE TO BE BAFFLED, HEATHER-STRIPPED, AND INSULATED.
- EXTERIOR DOORS AND WINDOWS ARE TO BE CALKED AND HEATHER-STRIPPED.
- RECESSED LIGHT FIXTURES TO LIMIT AIR LEAKAGE PER WEG 502.4.4
- ALL PLUMBING, ELECTRICAL, AND HVAC PENETRATIONS IN FLOORS, WALLS, AND CEILING ARE TO BE CALKED AND SEALED.
- ELECTRICAL OUTLET AND LIGHT SWITCH BOXES ON EXTERIOR WALLS MUST BE SEALED AT THE BACK OF THE RECEPTACLE WITH A FACE PLATE GASKET.
- SILLPLATE TO BE CALKED OR GLEED TO SUB-FLOOR.
- CAULK/SEAL RM JOISTS BETWEEN STORIES.
- WHEN PENETRATIONS NEED FIRESTOPPING, REVEAL AND DISCUSS WITH BUILDING DEPARTMENT INSPECTOR.
- AN APPROVED VAPOR BARRIER SHALL BE INSTALLED AT EXTERIOR WALLS (EXCEPT FOR BASEMENT WALLS PER WA ENERGY CODE PRESCRIPTIVE CHECKLIST, SECTION R402.2.2.8), ROOF DECKS, BELOW ENCLOSED JOIST SPACES WHERE CEILING FINISHES ARE DIRECTLY INSTALLED TO JOISTS, AND ANY OTHER WALL OR CEILING SURFACE WHICH RECEIVES INSULATION. THE VAPOR BARRIER MAY BE COMPONENT OF THE INSULATION MATERIAL. APPLICATION AND INSTALLATION OF INSULATION AND VAPOR BARRIERS SHALL COMPLY WITH APPLICABLE CODES.
- WHEN GYPSUM IS USED AS A BASE FOR TILE OR PANELS FOR TUB, SHOWER OR WATER CLOSET COMPARTMENT WALLS, WATER RESISTANT GYPSUM BACKING SHALL BE USED. REGULAR GYPSUM WALLBOARD IS PERMITTED UNDER TILE OR WALL PANELS IN OTHER WALL AND CEILING AREAS WHEN INSTALLED IN ACCORDANCE WITH TABLE 25-6 AND TILE COUNCIL OF AMERICA STANDARDS WATER RESISTANT GYPSUM BOARD SHALL NOT BE USED IN THE FOLLOWING AREAS:
  - OVER A VAPOR BARRIER.
  - IN AREAS SUBJECT TO CONTINUOUS HUMIDITY, SUCH AS SAUNAS, STEAM ROOMS OR TILED SHOWER ROOMS.
  - ON CEILING WHERE FRAME SPACING EXCEEDS 12 INCHES ON CENTER
- USE INSTALLATION METHOD "AI" AS DESCRIBED IN "FORTIFIBER" BUILDING PRODUCT SYSTEMS INSTALLATION GUIDE FOR DOORS AND WINDOWS

**FIRE PROTECTION**

PROVIDE FIRE PROTECTION AT ALL PENETRATIONS OF FIRE-RATED ELEMENTS AS REQUIRED BY CODE AND/OR BUILDING OFFICIAL.

PROVIDE FIRE SPRINKLER SYSTEM THROUGHOUT RESIDENCE IN COMPLIANCE WITH ALL APPLICABLE CODES.

**FINISHES**

- ALL PAINT, WALL COVERINGS AND WALL PANELS SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- SAMPLES OF ALL FINISH COLORS SPECIFIED SHALL BE SUBMITTED FOR APPROVAL TO THE ARCHITECT PRIOR TO COMMENCEMENT OF THE WORK.
- FLOOR COVERING IN CLOSETS SHALL BE THE SAME AS THAT OF THE SPACE INTO WHICH THE CLOSET DOOR OPENS, U.O.N.
- PREPARE FLOOR PER FLOORING AND CARPET MANUFACTURER'S RECOMMENDATIONS TO PROVIDE LEVEL AREA FOR FLOORING INSTALLATION AND LEVEL FLOORING TRANSITIONS.

**MILLWORK**

- ALL MILLWORK (WOODWORK AND CABINERY) SPECIFIED ON THESE DRAWINGS SHALL BE FURNISHED AND INSTALLED BY THE MILLWORK CONTRACTOR(S) U.O.N.
- MILLWORK CONTRACTOR SHALL BE RESPONSIBLE FOR FINISHING ALL MILLWORK IN HISHER SHOP. FINISH SHALL MATCH SAMPLE TO BE PROVIDED BY ARCHITECT IN COLOR AND GLOSS LEVEL. DO NOT FIELD FINISH.
- MILLWORK CONTRACTOR SHALL SUBMIT (2) FINISH SAMPLES FOR ARCHITECT PRIOR TO FABRICATION.
- MILLWORK CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND SPECIFICATIONS FOR ARCHITECT APPROVAL PRIOR TO FABRICATION. ARCHITECT RESERVES THE RIGHT TO REJECT ANY MILLWORK ITEMS THAT HAVE BEEN FABRICATED WITHOUT APPROVED SHOP DRAWINGS.
- ALL MATERIALS AND WORKMANSHIP MUST BE EQUAL IN ALL RESPECTS TO THE STANDARDS SET FORTH IN THE ARCHITECTURAL WOODWORK QUALITY STANDARDS AND ARCHITECTURAL WOODWORK INSTITUTE (A.A.W.), MOST CURRENT EDITION.
- PLYWOOD SHALL BEAR THE GRADE AND TRADEMARK IDENTIFICATION OF THE AMERICAN PLYWOOD ASSOCIATION (A.P.A.). PLYWOOD 3/4" THICK U.O.N.
- ALL VENEERS WITHIN PANEL FACES SHALL BE ONE PIECE FLITCHES. SHOULD JOINTS BE REQUIRED, THEY SHALL BE END MATCHED AND/OR SLIP MATCHED AS APPROVED BY ARCHITECT.
- HAND SELECT ALL EXPOSED HARDWOODS, SOLID STOCK AND VENEERS FOR GRAIN APPEARANCE CONFORMING TO ARCHITECT'S APPROVED SAMPLES. SUBMIT SAMPLES TO ARCHITECT FOR APPROVAL TO SHOW GRAIN VARIATION PRIOR TO PROCEEDING.
- PROVIDE CUT-OUTS IN MILLWORK AS DETAILED AND REQUIRED FOR ALL PLUMBING FIXTURES, KITCHEN EQUIPMENT, AND ELECTRICAL ITEMS BASED ON INFORMATION SUPPLIED FROM THE PLUMBING AND ELECTRICAL CONTRACTORS. VERIFY ALL REQUIREMENTS PRIOR TO FABRICATION.
- CUT-OUTS AND OPENINGS FOR ALL KITCHEN EQUIPMENT SHALL FOLLOW TEMPLATES OBTAINED FROM EQUIPMENT INSTALLERS.
- SPECIAL METAL WORK AND FINISHING ITEMS SHALL BE FABRICATED BY COMPETENT MECHANICS SKILLED IN METAL WORK. WORKMANSHIP SHALL BE EQUAL IN ALL RESPECTS TO THE BEST QUALITY FOR THIS TYPE OF WORK. GRIND ALL HELDS SMOOTH.
- FIT AND SECURE CABINET HARDWARE PER MANUFACTURER'S PRINTED INSTRUCTIONS. EXERCISE CAUTION NOT TO MAR OR INJURE SURFACES. REPAIR ANY AND ALL DAMAGED SURFACES TO LIKE-NEW CONDITIONS.
- GLASS MIRRORS: MIRROR-QUALITY FLOAT GLASS, 1/4" THICKNESS, U.O.N.
- ALL MILLWORK ELECTRICAL MATERIAL, WORKMANSHIP, AND INSTALLATION SHALL BE IN CONFORMANCE WITH APPLICABLE LOCAL, STATE, AND NATIONAL ORDINANCES AND CODES. ALL MATERIAL TO BE UL APPROVED.
- GENERAL CONTRACTOR TO FURNISH ALL WOOD BLOCKING. THIS SHALL INCLUDE BLOCKING TO SECURELY MOUNT ALL CASES, EQUIPMENT, AND ACCESSORIES INDICATED ON THE DRAWINGS.
- ALL FINISHED HARDWOOD VENEERS TO BE RIFT CUT U.O.N.

**FURNACE AND WATER HEATING**

- PROVIDE SCHEDULE "C" WATER SUPPLY PIPING THROUGH OUT.
- PROVIDE FROST FREE HOSE BIBS WITH ANTI-SIPHON DEVICE, SHUT OFF AND DRAIN.
- ALL HEATING DUCTS IN UNCONDITIONED SPACE SHALL BE INSULATED TO A R-8 (MIN), DUCTWORK SEAM JOINTS ARE TO BE TAPED, SEALED, AND FASTENED WITH A MINIMUM OF FASTENERS.
- PROVIDE A READILY ACCESSIBLE, AUTOMATIC OR MANUAL SHUT-OFF SWITCH AND THERMOSTAT TO FURNACE.
- WATER HEATER STORAGE TANK AND BOILERS TO BE LABELLED
- WATER HEATER STORAGE TANK PLACED ON CONCRETE SLAB MUST HAVE RIGID INSULATION (R-10) BETWEEN TANK AND FLOOR.
- LAVATORIES, TUBS, AND SHOWERS SHALL HAVE FLOW RESTRICTIONS LIMITING WATER FLOW TO 2.5 GPM.
- PROVIDE A RECIRCULATING RMP SYSTEM HOT WATER PLUMBING LINE. ALL HOT WATER PIPING SHALL BE INSULATED WITH R-4 INSULATION. ALL COLD WATER PIPING IN UNCONDITIONED SPACE SHALL BE INSULATED WITH R-3 INSULATION
- SEISMICALLY BRACE ALL WATER HEATERS AND BOILERS
- APPLIANCES DESIGNED TO BE IN A FIXED POSITION SHALL BE SECURELY FASTENED IN PLACE. SUPPORTS FOR APPLIANCES SHALL BE DESIGNED AND CONSTRUCTED TO SUSTAIN VERTICAL AND HORIZONTAL LOADS WITHIN THE STRESS LIMITATION IN THE BUILDING CODE.
- APPLIANCES INTENDED FOR INSTALLATION IN CLOSETS, ALCOVES OR CONFINED SPACES SHALL BE SO LISTED.
- ALL WARM AIR FURNACES SHALL BE LISTED AND LABELED BY AN APPROVED AGENCY AND INSTALLED TO LISTED SPECIFICATIONS.
- NO WARM AIR FURNACE SHALL BE INSTALLED IN A CLOSET OR ALCOVE LESS THAN 12 INCHES WIDER THAN THE FURNACE OR FURNACES INSTALLED THEREIN WITH A MINIMUM CLEAR WORKING SPACE LESS THAN 3 INCHES ALONG THE SIDES, BACK AND TOP OF THE FURNACE.
- HEATING EQUIPMENT LOCATED WITHIN THE BUILDING ENVELOPE SHALL BE THERMALLY ISOLATED FROM THE HEATED AREA.
- APPLIANCES INSTALLED IN GARAGES OR OTHER AREAS THAT MAY BE SUBJECTED TO MECHANICAL DAMAGE, SHALL BE SUBSTANTIALLY GUARDED AGAINST SUCH DAMAGE BY BEING INSTALLED BEHIND PROTECTIVE BARRIERS OR BY BEING ELEVATED OR LOCATED OUT OF THE NORMAL PATH OF VEHICLES.
- HEATING AND COOLING EQUIPMENT LOCATED IN GARAGE AND WHICH GENERATES A GLOW, SPARK, OR FLAME CAPABLE OF IGNITING FLAMMABLE VAPOR SHALL BE INSTALLED WITH THE PILOTS AND BURNERS OR HEATING ELEMENTS AND SWITCHES AT LEAST 18 INCHES ABOVE THE FLOOR LEVEL.
- GAS FURNACE TO HAVE MINIMUM AFUE OF 80%

**VENTILATION NOTES**

ALL MECHANICAL SYSTEMS SHALL COMPLY WITH TITLE 24, INTL. MECHANICAL CODE AND INTL. PLUMBING CODE

- SOURCE-SPECIFIED VENTILATION REQUIREMENTS
  - EXHAUST FAN REQUIREMENTS
    - BATHS, LAUNDRIES, AND POWDER ROOMS: 50 C.F.M. AT 025 H.G. MIN.
    - KITCHENS: 100 C.F.M. AT 025 H.G. MIN.
  - EXHAUST DUCT REQUIREMENTS
    - BE INSULATED TO R-4 IN UNCONDITIONED SPACES.
    - BE EQUIPPED WITH A BACK DRAFT DAMPER.
    - TERMINATE OUTSIDE THE BUILDING.
- DESIGN / BUILD WHOLE HOUSE VENTILATION SYSTEM TO BE PROVIDED
- UNDER FLOOR SPACE SHALL BE VENTILATED PER IRC SECTION R408.1.1 W/ MIN. (1) SQ. FT. NET FREE VENTILATING AREA PER 150 SQ. FT. SPACE VENTILATED.
- ATTIC AND ENCLOSED RAFTER SPACE SHALL BE VENTILATED PER IRC R06.1.1 W/ MIN. (1) SQ. FT. NET FREE VENTILATING AREA PER 150 SQ. FT. SPACE VENTILATED WITH WITH VAPOR BARRIER.

**MECHANICAL/ ELECTRICAL/ PLUMBING**

- NO PENETRATIONS OF PLUMBING OR ELECTRICAL OR MECHANICAL ALLOWED IN STAIR ENCLOSURES.
- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN AND PROPER FUNCTION OF PLUMBING, HVAC AND ELECTRICAL SYSTEMS. THE GENERAL CONTRACTOR SHALL NOTIFY THE ARCHITECT OF ANY PLAN CHANGES REQUIRED FOR PROPER DESIGN AND FUNCTION OF PLUMBING, HVAC AND ELECTRICAL.
- MECHANICAL AND ELECTRICAL CONTRACTORS SHALL BE RESPONSIBLE FOR MAINTAINING COMPLIANCE WITH APPLICABLE CODES AND STANDARDS. OBTAIN ALL NECESSARY PERMITS AND APPROVALS.
- DEVIATIONS FROM DIMENSIONED LOCATIONS MUST BE APPROVED BY THE ARCHITECT.
- SPECIAL MOUNTING HEIGHTS FOR ELECTRICAL OUTLETS ARE NOTED ADJACENT TO THE OUTLET.
- DISCREPANCIES BETWEEN EXISTING CONDITIONS AND CONTRACT DOCUMENTS SHOULD BE CALLED TO THE ATTENTION OF THE ARCHITECT.
- CONTRACTOR TO COORDINATE AND INSTALL ELECTRICAL SERVICE ENTRANCE.
- DUCT SYSTEMS SHALL BE OF METAL PER S.M.C. TABLE 603.4 OR FACTORY-MADE DUCTS COMPLYING WITH S.M.C. SECTIONS 603. ALL JOINTS AND SEAMS SHALL BE SUBSTANTIALLY AIRTIGHT. DUCTS IN UNHEATED SPACES SHALL BE INSULATED PER WEG TABLE E.1.
- MOISTURE EXHAUST DUCTS FOR CLOTHES DRYERS SHALL TERMINATE ON THE OUTSIDE OR THE BUILDING AND SHALL BE EQUIPPED WITH A BACK-DRAFT DAMPER. SCREENS SHALL NOT BE INSTALLED AT THE DUCT TERMINATION. DUCTS FOR EXHAUSTING CLOTHES DRYERS SHALL NOT BE CONNECTED OR INSTALLED WITH SHEET METAL SCREWS OR OTHER FASTENERS WHICH WILL OBSTRUCT THE FLOW. CLOTHES DRYERS MOISTURE EXHAUST DUCTS SHALL NOT BE CONNECTED TO A GAS VENT OR CHIMNEY. CLOTHES DRYER MOISTURE EXHAUST SHALL NOT EXTEND THROUGH DUCTS OR FLENUMS.
- LENGTH LIMITATION. UNLESS OTHERWISE PERMITTED OR REQUIRED BY THE DRYER MANUFACTURER'S INSTALLATION INSTRUCTIONS AND APPROVED BY THE LOCAL BUILDING OFFICIAL, DOMESTIC DRYER MOISTURE EXHAUST DUCTS SHALL NOT EXCEED A TOTAL CORNERED HORIZONTAL AND VERTICAL LENGTH OF 35 FEET. 2 1/2 FEET DEDUCTED FOR EACH 45 DEGREE BEND AND 5 FEET FOR EACH 90 DEGREE BEND. IRC SECTION M102.4.5.1
- UNLESS OTHERWISE ADOPTED BY LOCAL AUTHORITIES, ALL SOLID FUEL BURNING APPLIANCES SHALL COMPLY WITH THE PROVISIONS OF IRC CHAPTER 11, 18, AND SECTION M306.
- LISTED APPLIANCES: THE INSTALLER SHALL LEAVE THE MANUFACTURER'S INSTALLATION INSTRUCTIONS ATTACHED TO THE APPLIANCE. CLEARANCES OF LISTED APPLIANCES FROM COMBUSTIBLE MATERIALS SHALL BE AS IN THE LISTING OR ON THE RATINGS PLATE. IRC SECTION M107.1 & M140.1
- EVERY APPLIANCE DESIGNED TO BE VENTED SHALL BE CONNECTED TO A VENTING SYSTEM COMPLYING WITH IRC CHAPTER 18.
- EVERY FACTORY BUILT CHIMNEY, TYPE L VENT, TYPE B GAS VENT, OR TYPE BH GAS VENT SHALL BE INSTALLED IN ACCORDANCE WITH THE TERMS OF ITS LISTING, MANUFACTURER'S INSTRUCTIONS, AND THE APPLICABLE PROVISIONS OF IRC CHAPTER 18.
- CONNECTORS SHALL BE INSTALLED WITHIN THE SPACE OR AREA IN WHICH THE APPLIANCE IS LOCATED AND SHALL BE CONNECTED TO A CHIMNEY OR VENT IN SUCH A MANNER AS TO MAINTAIN THE CLEARANCE TO COMBUSTIBLES PER IRC CHAPTER 18, AND SECTION 624.2.
- GAS VENT CAPS HAVING AN INTERNAL DIAMETER GREATER THAN 12 INCHES SHALL TERMINATE NOT LESS THAN 2 FEET ABOVE THE HIGHEST POINT WHERE THE VENT PASSES THROUGH THE ROOF AND NOT LESS THAN 2 FEET ABOVE OR 10 FEET AWAY FROM ANY OTHER PORTION OF A BUILDING WHICH EXTENDS AT AN ANGLE MORE THAN 45 DEGREES UPWARD FROM THE HORIZONTAL.
- GAS VENT CAPS HAVING AN INTERNAL DIAMETER OF 12 INCHES OR LESS SHALL TERMINATE AT LEAST 2 FEET ABOVE OR 8 FEET AWAY FROM ANY PORTION OF A BUILDING WHICH EXTENDS AT AN ANGLE MORE THAN 45 DEGREES UPWARD FROM THE HORIZONTAL. GAS VENT CAPS MAY TERMINATE IN ACCORDANCE WITH TABLE 6-A, PROVIDED THAT IN NO CASE SHALL ANY DISCHARGE OPENING ON THE CAP BE LESS THAN 2 FEET HORIZONTALLY FROM THE ROOF SURFACE.
- PROVIDE COMBUSTION AIR FOR FUEL BURNING APPLIANCES PER IRC CHAPTER 11. APPLIANCES LOCATED WITHIN THE BUILDING ENVELOPE SHALL OBTAIN COMBUSTION AIR FROM OUTDOORS.

**PERMIT SET**

Revisions: \_\_\_\_\_ Date: \_\_\_\_\_  
 △ PERMIT - REV 10/30/2020

Project Title: \_\_\_\_\_

Modifications to  
**LAWLER RESIDENCE**  
 8466 N MERCER WAY,  
 MERCER ISLAND, WA, 98040

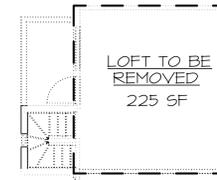
Sheet Title:  
GENERAL NOTES

Scale: NOT TO SCALE

Project No.: 20-05

Date: 6/30/2020

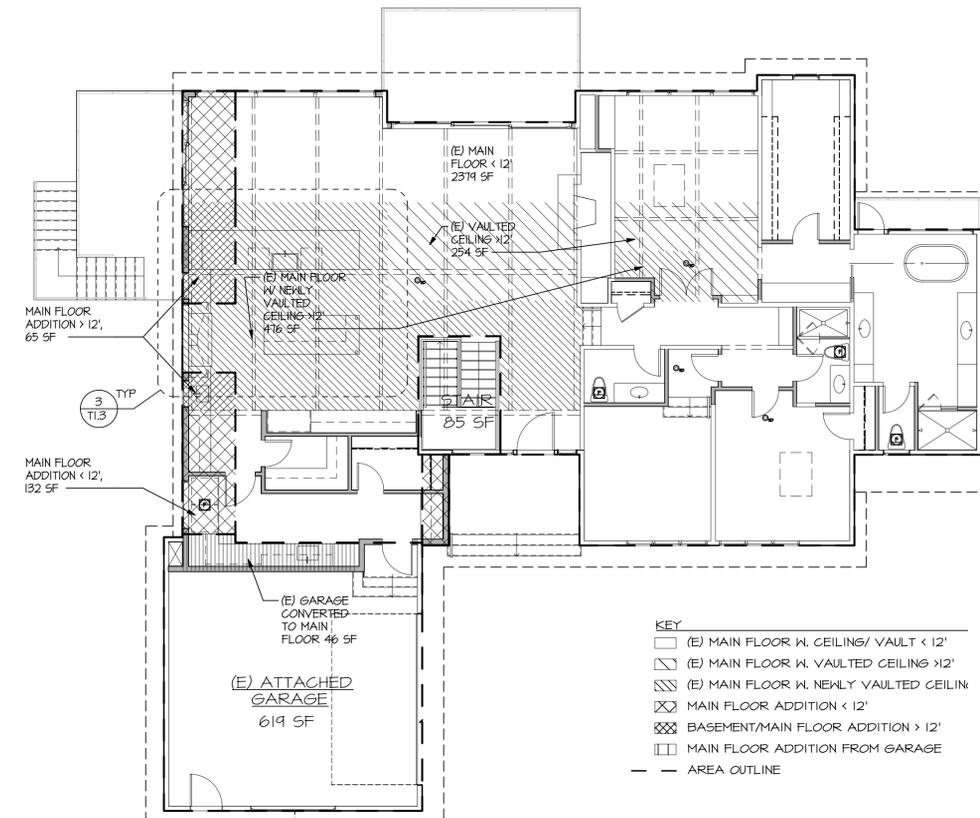
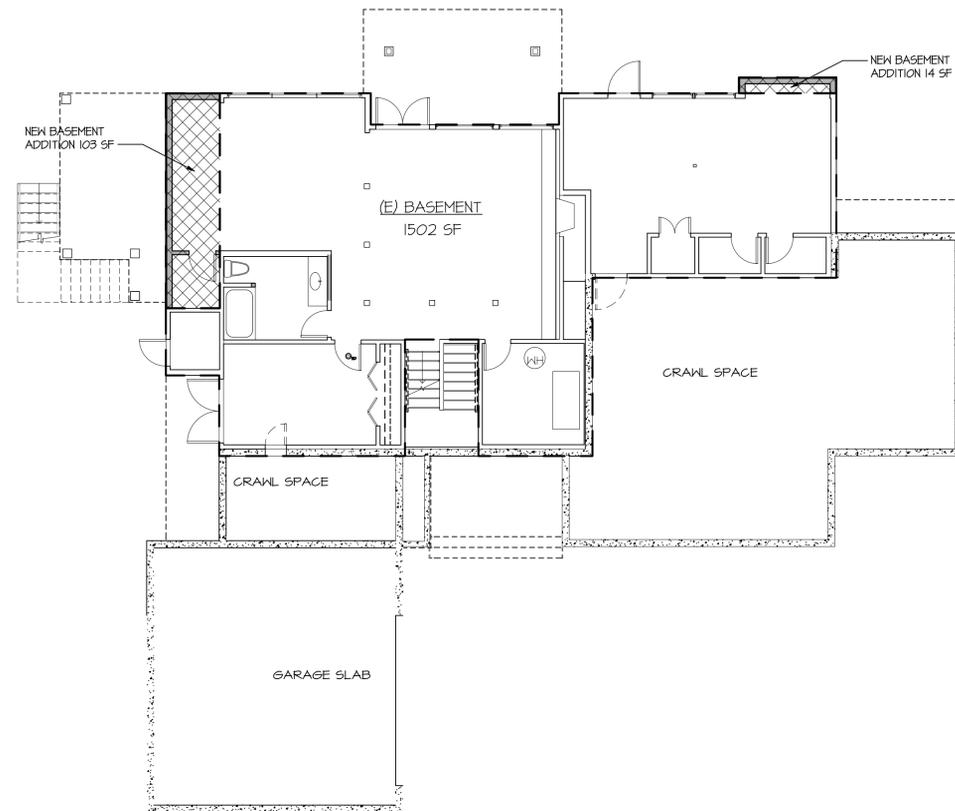
Sheet Number: \_\_\_\_\_



GROSS FLOOR AREA CALCULATION

LOT AREA = 16,866 SF	
ALLOWED GROSS FLOOR AREA:	40%
ALLOWED GROSS FLOOR AREA:	0.4 (16,866 SF) = 6,746.4
(E) UPPER FLOOR GFA:	225 SF
(E) UPPER FLOOR TO BE DEMO	225 SF
(E) MAIN FLOOR GFA < 12'	2,244 SF
(E) MAIN FLOOR GFA > 12'	(2,54 SF) 1.5 = 3,81
(E) MAIN FLOOR GFA NEWLY VAULTED > 12'	(476 SF) 1.5 = 714 SF
(E) GARAGE FLOOR AREA	619 SF
GARAGE FLOOR AREA TO MAIN FLOOR	46 SF
(E) BASEMENT GFA:	1,502 SF
(E) STAIR CASE	85 SF
NEW BASEMENT ADDITION < 12'	117 SF
NEW MAIN FLOOR ADDITION < 12'	178 SF
NEW MAIN FLOOR ADDITION > 12'	(65 SF) 1.5 = 97.5 SF
<b>TOTAL GROSS FLOOR AREA:</b>	<b>6,023.5 SF</b>
225SF - 225SF + 2,244SF - 476SF + 3,81SF + (619SF - 46SF) + 1,502SF + 85SF + 117SF + 178SF + 97.5SF = 5,465.5 SF	
5,465.5 SF < 6,746.4 SF	
(5,465.5 SF / 16,866 SF) 100% = 32.40 = 32%	

3 LEVEL 2  
SCALE: 1/8" = 1'-0"



KEY

[Symbol]	(E) MAIN FLOOR W. CEILING/ VAULT < 12'
[Symbol]	(E) MAIN FLOOR W. VAULTED CEILING > 12'
[Symbol]	(E) MAIN FLOOR W. NEWLY VAULTED CEILING
[Symbol]	MAIN FLOOR ADDITION < 12'
[Symbol]	BASEMENT/MAIN FLOOR ADDITION > 12'
[Symbol]	MAIN FLOOR ADDITION FROM GARAGE
[Symbol]	AREA OUTLINE

1 BSMT. PLAN  
SCALE: 1/8" = 1'-0"

2 FIRST FLR. ADD./MODIFICATION  
SCALE: 1/8" = 1'-0"

PERMIT SET

Revisions: \_\_\_\_\_ Date: \_\_\_\_\_

Project Title: \_\_\_\_\_

Modifications to  
**LAWLER RESIDENCE**  
8466 N MERCER WAY,  
MERCER ISLAND, WA, 98040

Sheet Title:  
GROSS FLR. AREA PLANS & CALCS

Scale: 1/8" = 1'-0"  
20-05

Date: 06/30/2020

Sheet Number:

T1.3

**ROOF AREA:**

**ROOF 1**  
(E) ROOF 1: 1388 SF  
1388 SF - 26 SF = 1362 SF  
ROOF AREA ADDED TO EXISTING ROOF 1: 231 SF  
REPLACED/NEW ROOF 1:  
1362 SF + 231 SF = 1593 SF

**ROOF 2**  
(E) ROOF 2: 422 SF  
ROOF 2 REVISED:  
422 SF - 50 SF = 372 SF

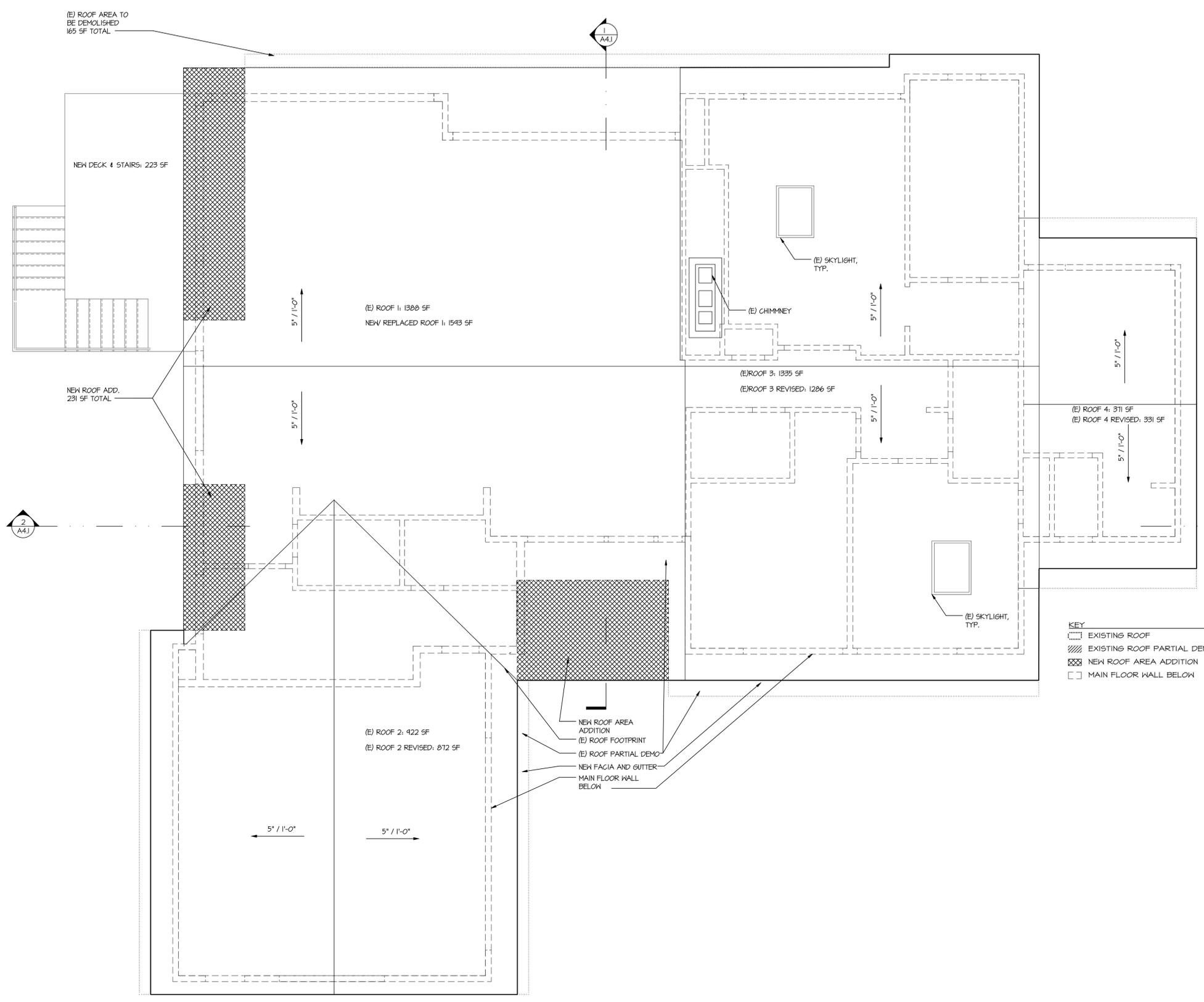
**ROOF 3**  
(E) ROOF 3: 1335 SF  
ROOF 3 REVISED:  
1335 SF - 44 SF = 1291 SF

**ROOF 4**  
(E) ROOF 4: 371 SF  
ROOF 4 REVISED:  
371 SF - 40 SF = 331 SF

(E) TOTAL ROOF AREA REMOVED:  
50 SF + 44 SF + 40 SF + 26 SF = 160 SF

NEW DECK & STAIRS: 223 SF

TOTAL NEW REPLACED HARD SURFACE AREA:  
1593 SF + 223 SF = 1816 SF



- KEY**
- EXISTING ROOF
  - EXISTING ROOF PARTIAL DEMO
  - NEW ROOF AREA ADDITION
  - MAIN FLOOR WALL BELOW

**PERMIT SET**

Revisions: \_\_\_\_\_ Date: \_\_\_\_\_  
 △ PERMIT - REV 10/30/2020

Project Title: \_\_\_\_\_

Modifications to  
**LAWLER RESIDENCE**  
 8466 N MERCER WAY,  
 MERCER ISLAND, WA, 98040

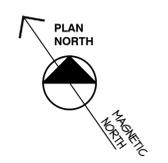
Sheet Title:  
 HARD SURFACE AREA DIAGRAM

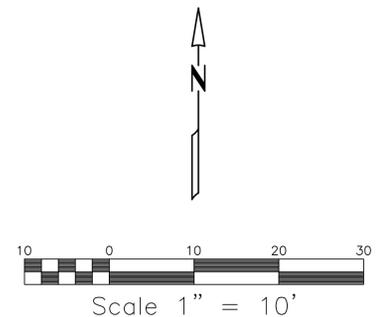
Scale: 1/4" = 1'-0"  
 20-05

Date: 06/30/2020

Sheet Number:

**T1.4**





**MERIDIAN**

ASSUMED

**DATUM**

NAVD 88

**CONTOUR INTERVAL = 2'**

**EQUIPMENT & PROCEDURES**

FIELD SURVEY CONDUCTED USING A COMBINATION OF GPS USING A REFERENCE NETWORK AND A 5" ELECTRONIC TOTAL STATION WAS USED FOR THIS FIELD TRAVERSE SURVEY. SURVEY PROCEDURES MEET OR EXCEED STATE STANDARDS AS SPECIFIED BY W.A.C. 332-130 WITH REGARD TO LINEAR AND ANGULAR CLOSURES. ALL MEASURING INSTRUMENTS FOR THIS SURVEY HAVE BEEN MAINTAINED ACCORDING TO MANUFACTURERS SPECIFICATIONS AND HAVE BEEN COMPARED WITH A NATIONAL GEODETIC SURVEY CALIBRATED BASELINE WITHIN THE LAST 12 MONTHS.

**BENCHMARKS**

ORIGINAL BM: FOUND INVERTED NAIL IN 2" IRON PIPE EAST OF INTERSECTION OF 90TH PL SE AND SHOREWOOD DR. ELEV. = 108.93

TBM - A: SET MAG NAIL. ELEV. = 42.31

TBM - B: SET HUB + MAG NAIL. ELEV. = 36.37

**GENERAL NOTES**

1. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF A SURVEY MADE ON THE DATE INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITION EXISTING AT THAT TIME.
2. UNDERGROUND UTILITIES WERE LOCATED BASED ON THE SURFACE EVIDENCE OF UTILITIES (I.E. PAINT MARKS, SAW CUTS IN PAVEMENT, COVERS, LIDS ETC.) THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION, ELEVATION AND SIZE OF EXISTING UTILITIES PRIOR TO CONSTRUCTION.
3. TREE SIZES WERE LOCATED & SPECIES DETERMINED TO THE BEST OF OUR ABILITY; HOWEVER, TREE SURVEYORS DOES NOT WARRANT THE ACCURACY OF SIZE & SPECIES SHOWN HEREON. ANY TREES CONSIDERED TO BE CRITICAL SHOULD BE VERIFIED BY A TRAINED ARBORIST.
4. LOCATION OF GRASS IS APPROXIMATE ONLY.
5. NO PROPERTY CORNERS WERE SET IN CONJUNCTION WITH THIS SURVEY.
6. THE BOUNDARY FOR THIS SURVEY WAS COMPUTED FROM FOUND MONUMENTATION, THE PLAT OF MERCER PARK LANE, RECORDED IN VOL. 92 OF PLATS, PG. 37, SURVEY AS RECORDED IN VOLUME 328 OF SURVEYS, PAGE 147, ALL IN RECORDS OF KING COUNTY, WASHINGTON.

**LEGAL DESCRIPTION**

LOT 10, MERCER PARK LANE, ACCORDING TO THE PLAT THEREOF, RECORDED IN VOLUME 92 OF PLATS, PAGE 37, IN KING COUNTY, WASHINGTON.

EXCEPT THAT PORTION THEREOF MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE MOST SOUTHERLY CORNER OF SAID LOT 10; THENCE NORTH 55°50'02" WEST ALONG THE SOUTHWESTERLY LINE THEREOF 141.87 FEET; THENCE SOUTH 73°58'00" EAST 62.59 FEET; THENCE SOUTH 42°31'53" EAST 84.66 FEET TO THE POINT OF BEGINNING.

**LEGEND:**

- GM GAS METER
  - LP LAMP POST
  - PM POWER METER
  - TR TELEPHONE RISER
  - WM WATER METER
  - YD YARD DRAIN
  - AP APPLE
  - C CEDAR
  - D DECIDUOUS
  - F FIR
- 
- CONCRETE HATCH
  - DECK HATCH
  - GAS LINE

**HOUSE TO BOUNDARY TIES**

LINE	BEARING	DISTANCE
L1	N 38°11'05" W	23.98
L2	N 48°18'31" E	24.12
L3	N 48°18'31" E	37.00
L4	N 47°18'06" W	43.65
L5	N 47°18'06" W	45.32
L6	N 35°32'43" E	9.04
L7	N 48°40'00" E	45.53



TOPOGRAPHIC SURVEY  
for  
**MIDORI LAWLER**

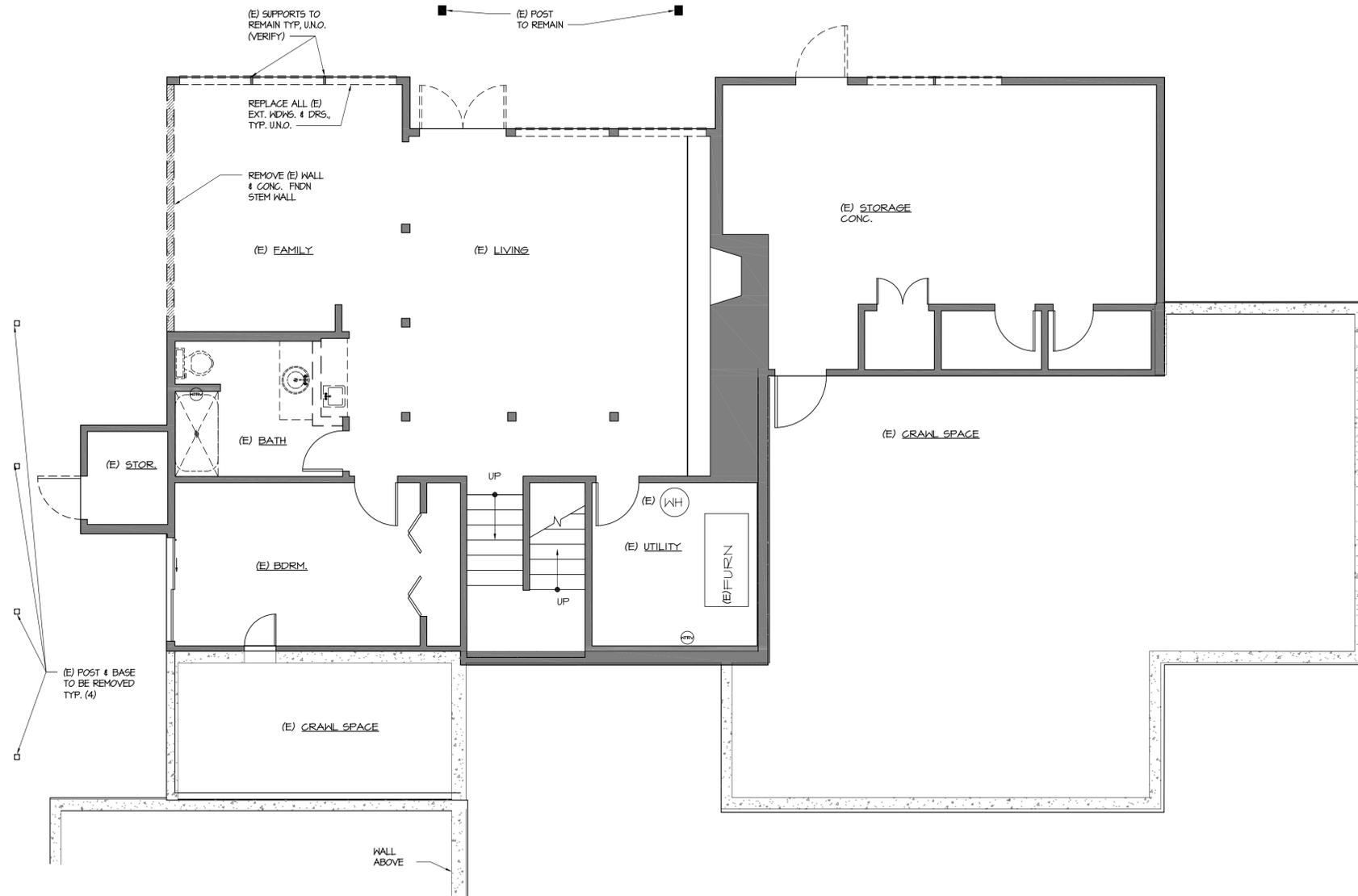
8456 N MERCER WAY  
MERCER ISLAND, WASHINGTON 98040

PARCEL # 545260010008  
SW1/4, NW1/4, SEC. 7, T. 24 N., R. 5 E., W.M.  
MERCER ISLAND, WASHINGTON

**Tye Surveyors**  
PROFESSIONAL LAND SURVEYORS  
10007 GREENWOOD AV. N. SEATTLE, WA. 98133 206-525-3660

DRAWN BY: RG	DATE: 3-3-2020	JOB NO.: 20030
CHKD BY: TG	SCALE: 1" = 10'	SHEET: 1 OF 1



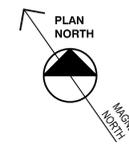


ARCHITECTURAL LEGEND

	EXIST. WALL TO REMAIN
	EXIST. WALL TO BE REMOVED IN ENTIRETY
	EXIST. HDWL TO BE REMOVED
	EXIST. FLR. FIN, SHEATHING & FRAMING TO BE REMOVED
	EXIST. CONC. MASONRY WALL OR FLRING TO BE REMOVED IN ENTIRETY

NOTES:

- ALL EXIST. PLUMBING FIXT TO BE REMOVED, UNO



PERMIT SET

Revisions: \_\_\_\_\_ Date: \_\_\_\_\_  
 ▲ PERMIT - REV 10/30/2020

Project Title: \_\_\_\_\_

Modifications to  
**LAWLER RESIDENCE**  
 8456 N MERCER WAY,  
 MERCER ISLAND, WA, 98040

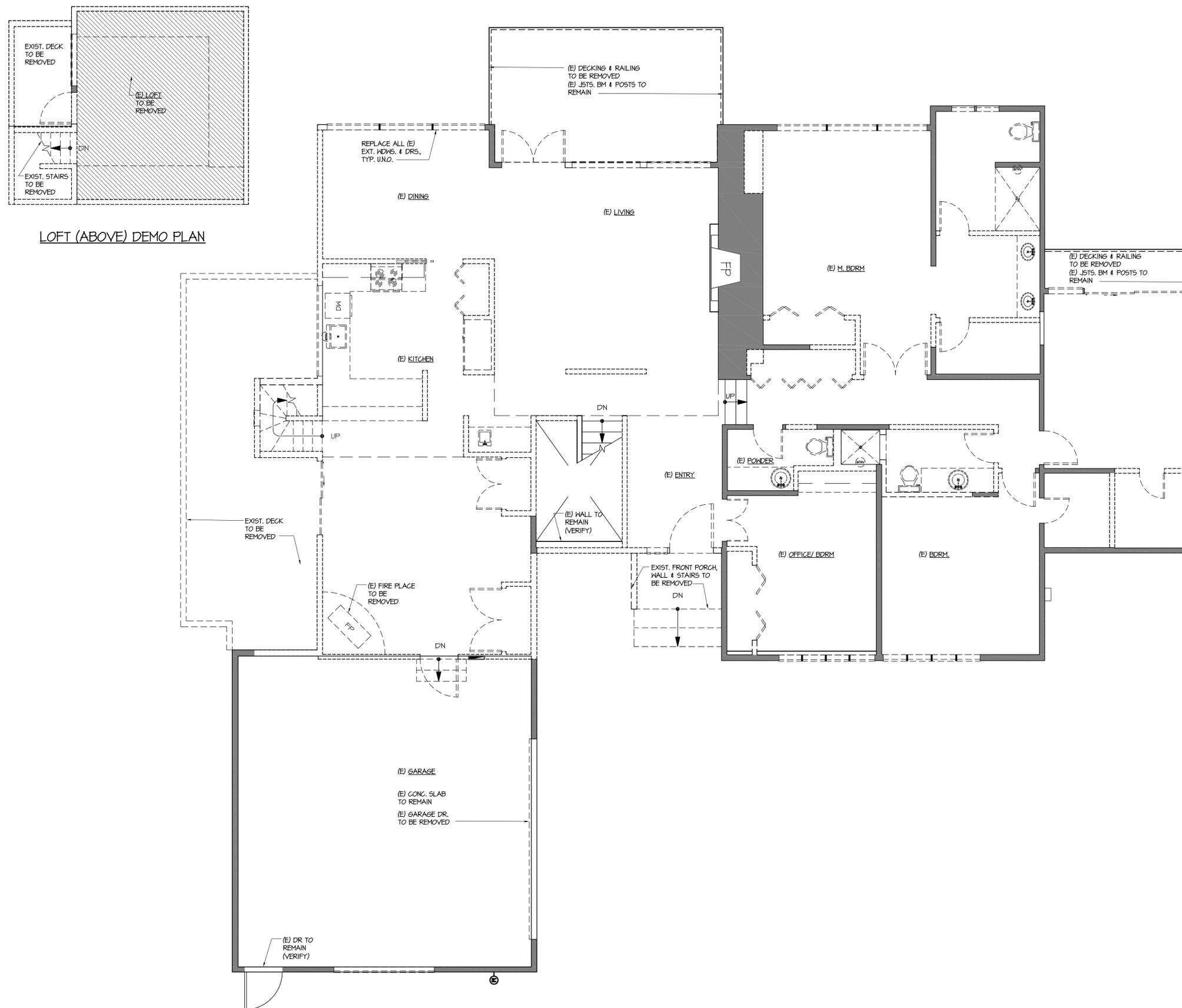
Sheet Title:  
 BSMT. DEMO PLAN

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

Project No.: 20-05

Date: 6/30/2020

Sheet Number:



LOFT (ABOVE) DEMO PLAN

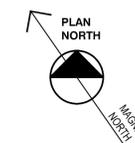
ARCHITECTURAL LEGEND

	EXIST. WALL TO REMAIN
	EXIST. WALL TO BE REMOVED IN ENTIRETY
	EXIST. WDW. TO BE REMOVED
	EXIST. FLR. FIN, SHEATHING & FRAMING TO BE REMOVED

NOTES:

1. ALL EXIST. PLUMBING FIXT TO BE REMOVED, UNO
2. ALL EXIST. CASEWORK IS TO BE REMOVED, UNO
3. ALL EXIST. APPLIANCES ARE TO BE REMOVED, UNO.

1 FIRST FLR./ LOFT DEMO PLAN  
SCALE: 1/4" = 1'-0"



PERMIT SET

Revisions: \_\_\_\_\_ Date: \_\_\_\_\_  
 ▲ PERMIT - REV 10/30/2020

Project Title:

Modifications to  
**LAWLER RESIDENCE**  
 8456 N MERCER WAY,  
 MERCER ISLAND, WA, 98040

Sheet Title:  
 FIRST FLR. DEMO PLAN

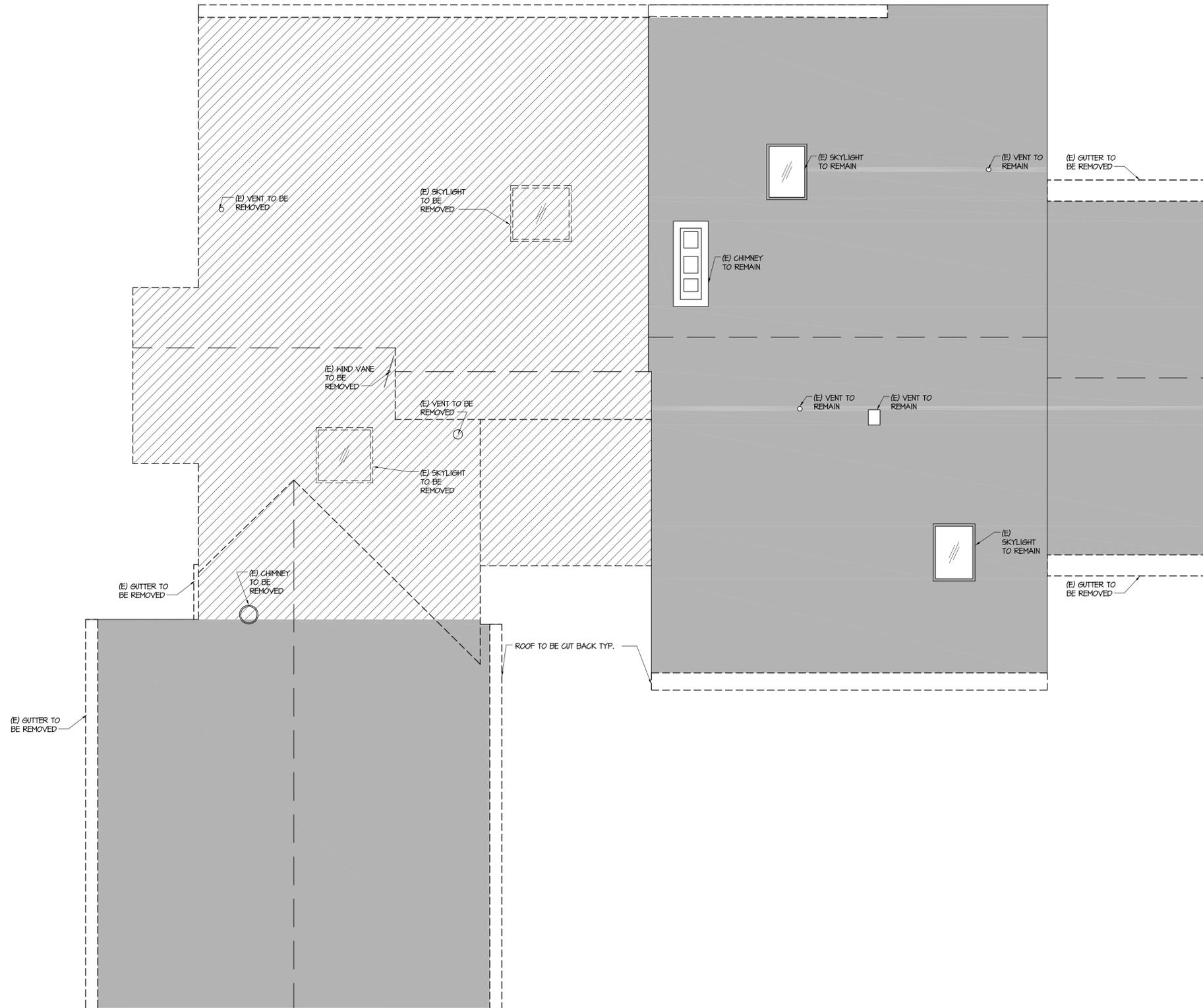
Scale: 1/4" = 1'-0"

Project No.: 20-05

Date: 6/30/2020

Sheet Number:

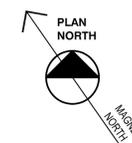
**A1.3**



ARCHITECTURAL LEGEND

	EXIST. ROOF TO BE CUT BACK
	EXIST. ROOF TO BE REMOVED IN ENTIRETY
	EXIST. ROOFING MATERIALS, FLASHING, GUTTERS, HEATHER BARRIER TO BE REMOVED AND REPLACED. EXIST. FRAMING/ SHEATHING TO REMAIN

1 ROOF DEMO PLAN  
SCALE: 1/4" = 1'-0"



PERMIT SET

Revisions: \_\_\_\_\_ Date: \_\_\_\_\_  
 △ PERMIT - REV 10/30/2020

Project Title: \_\_\_\_\_

Modifications to  
**LAWLER RESIDENCE**  
 8466 N MERCER WAY,  
 MERCER ISLAND, WA, 98040

Sheet Title:  
 ROOF DEMO, PLAN

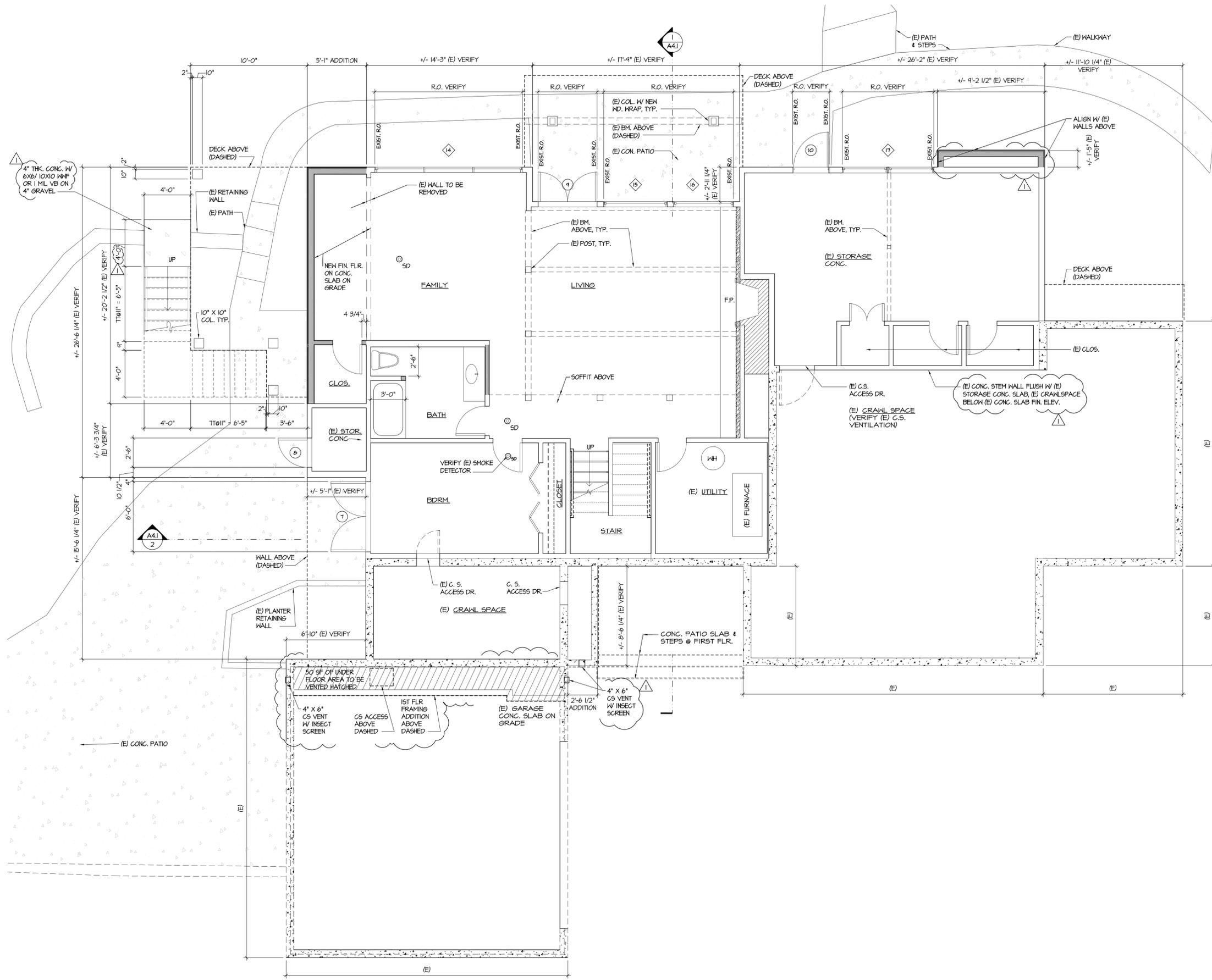
Scale: 1/4" = 1'-0"

Project No.: 20-05

Date: 6/30/2020

Sheet Number:

**A1.4**

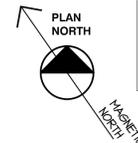


2015 IRC SECTION R402 UNDER FLR. VENTILATION  
THE NET AREA OF VENTILATION OPENING SHALL NOT BE LESS THAN 1/300TH OF UNDER-FLOOR AREA.  
UNDER FLOOR AREA: 50 SQFT  
50 SQFT / 300 SQFT = 0.1665SQFT = 24 SQIN  
(2) 4"x6" VENT = 48 SQIN VENT AREA

WALL TYPE LEGEND

	NEH TYP. EXT. 2 X 6 WALL CONST. UNO. • BOARD AND BATTEN SIDING • WEATHER BARRIER • 1/2" FLY. HD. SHEATHING • 2X6 STUDS @ 16" O.C. MAX W/ R-21 BATT. INSUL. • 1/2" GYP. BD. W/ PVA PAINT
	NEH TYP. INT. 2 X 6 WALL CONST. UNO. • 1/2" GYP. BD. • 2X6 STUDS @ 16" O.C. MAX W/ R-21 BATT. INSUL. • 1/2" GYP. BD.
	NEH TYP. INT. 2 X 4 WALL CONST. UNO. • 1/2" GYP. BD. • 2X4 STUDS @ 16" O.C. • 1/2" GYP. BD.
	(E) EXT. 2 X 4 WALL CONST. UNO. • (E) BOARD AND BATTEN SIDING TO REMAIN • (E) WEATHER BARRIER TO REMAIN • (E) 1/2" FLY. HD. SHEATHING • (E) 2X4 STUDS @ 16" O.C. ADD R-21 BATT INSULATION IN EXPOSED CAVITIES. • (E) GYP. BD.
	(E) INT. 2 X 4 WALL CONST. UNO. • (E) GYP. BD. • (E) 2X4 STUDS @ 16" O.C. • (E) GYP. BD.
	(E) FOUNDATION WALL • (E) FOUNDATION WALL TO REMAIN
	(E) INT. BRICK WALL CONST. UNO. • (E) 4" (VERIFY) BRICK • (E) MORTAR • (E) CEMENT BD. • (E) 2X4 STUDS @ 16" O.C. • (E) GYP. BD.

BSMT. PLAN  
SCALE: 1/4" = 1'-0"



PERMIT SET

Revisions: Date:  
▲ PERMIT - REV 10/30/2020

Project Title:

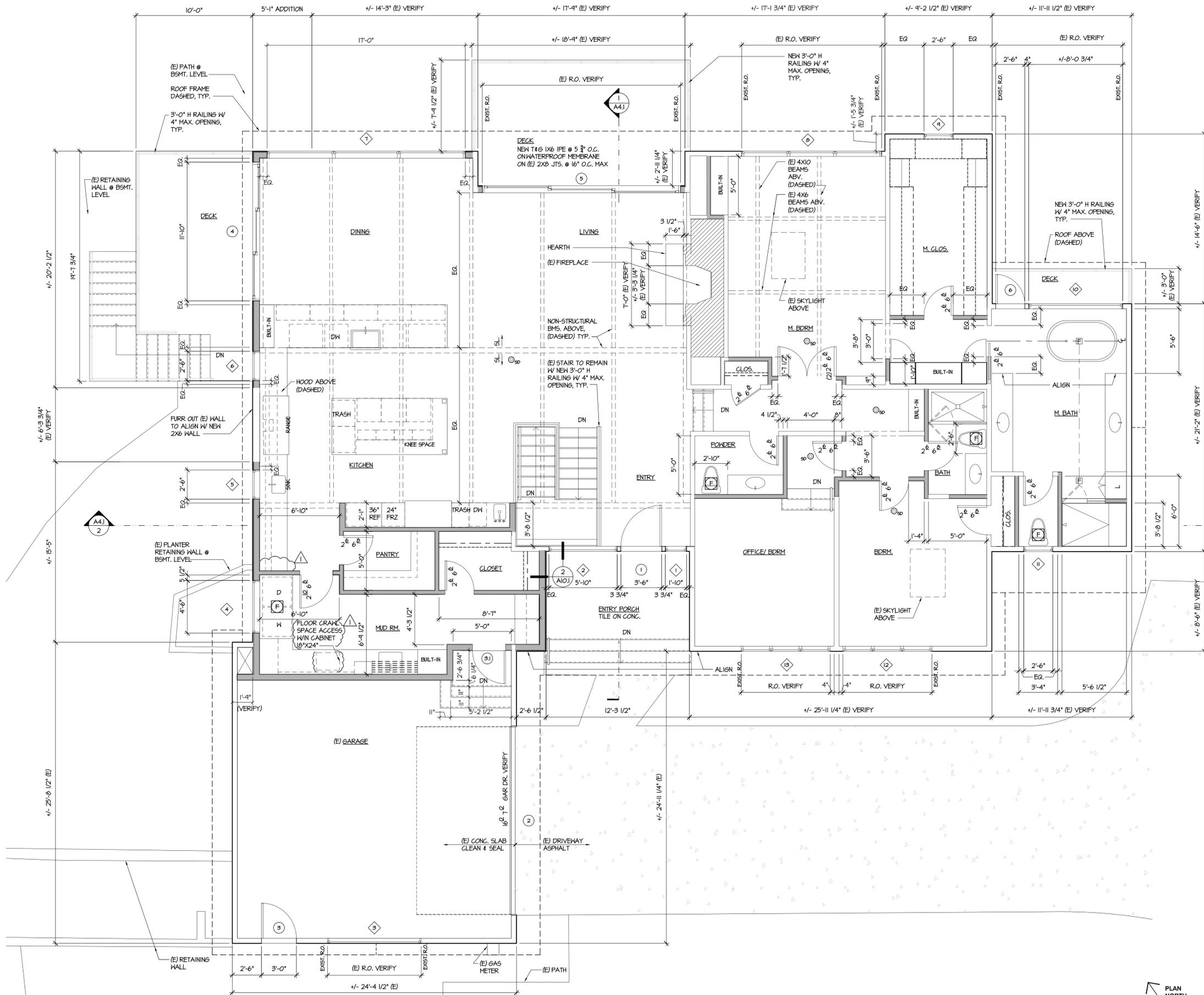
Modifications to  
**LAWLER RESIDENCE**  
8486 N MERCER WAY,  
MERCER ISLAND, WA, 98040

Sheet Title:  
BSMT. FLOOR PLAN

Scale: 1/4" = 1'-0"  
Project No.: 20-05  
Date: 6/30/2020

Sheet Number:

A2.1



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

**WALL TYPE LEGEND**

	NEH TYP. EXT. 2 X 6 WALL CONST. UNO. • BOARD AND BATTEN SIDING • WEATHER BARRIER • 1/2" PLY. WD. SHEATHING • 2X6 STUDS @ 16" O.C. MAX W R-21 BATT. INSUL. • 1/2" GYP. BD. W PVA PAINT
	NEH TYP. INT. 2 X 6 WALL CONST. UNO. • 1/2" GYP. BD. • 2X6 STUDS @ 16" O.C. MAX W R-21 BATT. INSUL. • 1/2" GYP. BD.
	NEH TYP. INT. 2 X 4 WALL CONST. UNO. • 1/2" GYP. BD. • 2X4 STUDS @ 16" O.C. • 1/2" GYP. BD.
	(E) EXT. 2 X 4 WALL CONST. UNO. • (E) BOARD AND BATTEN SIDING, TO REMAIN • (E) WEATHER BARRIER TO REMAIN. • (E) 1/2" PLY. WD. SHEATHING • (E) 2X4 STUDS @ 16" O.C. ADD R-21 BATT INSULATION IN EXPOSED CAVITIES. • (E) GYP. BD.
	(E) INT. 2 X 4 WALL CONST. UNO. • (E) GYP. BD. • (E) 2X4 STUDS @ 16" O.C. • (E) GYP. BD.
	(E) FOUNDATION WALL • (E) FOUNDATION WALL, TO REMAIN
	(E) INT. BRICK WALL CONST. UNO. • (E) 4" (VERIFY) BRICK. • (E) MORTAR • (E) CEMENT BD. • (E) 2X4 STUDS @ 16" O.C. • (E) GYP. BD.

**PERMIT SET**

Revisions: \_\_\_\_\_ Date: \_\_\_\_\_  
 1 PERMIT - REV \_\_\_\_\_ 10/30/2020

Project Title: \_\_\_\_\_

Modifications to  
**LAWLER RESIDENCE**  
 8456 N MERCER WAY,  
 MERCER ISLAND, WA, 98040

Sheet Title:  
 FIRST FLR. PLAN

Scale: 1/4" = 1'-0"  
 Project No.: 20-05  
 Date: 6/30/2020  
 Sheet Number:

2015 IRC SECTION R906 ROOF VENTILATION MINIMUM VENT AREA REQUIREMENT:  
THE NET FREE VENTILATION AREA SHALL NOT BE LESS THAN 1/150TH OF THE AREA OF THE SPACE VENTILATED, OR THE NET FREE VENTILATION AREA SHALL NOT BE LESS THAN 1/300TH OF THE AREA OF THE SPACE VENTILATED IF A VAPOR RETARDER HAVING A TRANSMISSION RATE NOT EXCEEDING 1.0 PERM IS INSTALLED ON THE WARM SIDE OF THE CEILING, NOT LESS THAN 40% AND NOT MORE THAN 50% OF THE REQUIRED VENTILATION IS PROVIDED BY VENTILATORS LOCATED IN THE UPPER PORTION OF THE RAFTER SPACE, MAX 3FT BELOW RIDGE OR HIGHEST POINT.

**RIDGE VENT:**  
4" CONT. VENT STRIP W/INSECT SCREEN W/ 40% NFVA  
= 4"X(12"/LF)X.4 = 19.2 SQ. IN/LF

**EAVE VENT:**  
2" VENT W/INSECT SCREEN = 5 VENTS IN 24"O.C. TRUSSES  
= 5 (1"X1"X 3.14)(12"/24") = 7.85 SQ. IN/ LF

**SOFFIT VENT:**  
1" CONT. STRIP VENT W/BIRD & INSECT SCREEN  
= 1"X 12" = 12 SQ. IN/LF

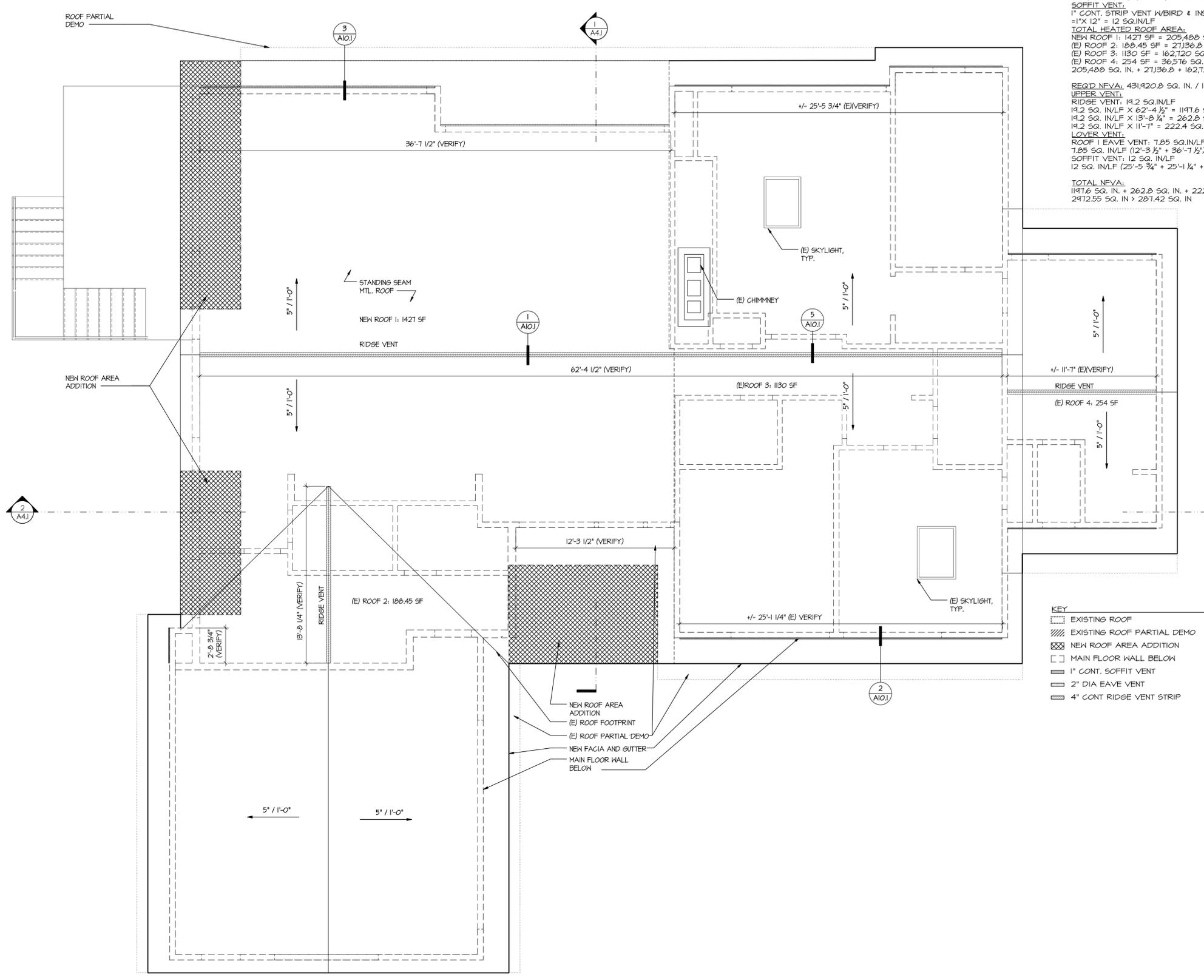
**TOTAL HEATED ROOF AREA:**  
NEW ROOF 1: 1421 SF = 205,488 SQ. IN.  
(E) ROOF 2: 188.45 SF = 27,136.8 SQ. IN.  
(E) ROOF 3: 1130 SF = 162,720 SQ. IN.  
(E) ROOF 4: 254 SF = 36,576 SQ. IN.  
205,488 SQ. IN. + 27,136.8 + 162,720 SQ. IN. + 36,576 SQ. IN. = 431,920.8 SQ. IN.

**REQ'D NFVA:** 431,920.8 SQ. IN. / 150 = 2879.472 SQ. IN.

**UPPER VENT:**  
RIDGE VENT: 19.2 SQ. IN/LF  
19.2 SQ. IN/LF X 62'-4 1/2" = 1197.6 SQ. IN.  
19.2 SQ. IN/LF X 13'-8 1/4" = 262.8 SQ. IN.  
19.2 SQ. IN/LF X 11'-7" = 222.4 SQ. IN.

**LOWER VENT:**  
ROOF 1 EAVE VENT: 7.85 SQ. IN/LF  
7.85 SQ. IN/LF (12'-3 1/2" + 36'-1 1/2") = 384 SQ. IN.  
SOFFIT VENT: 12 SQ. IN/LF  
12 SQ. IN/LF (25'-5 3/4" + 25'-1 1/4" + (2)(11'-7") + 2'-8 3/4") = 905.75 SQ. IN.

**TOTAL NFVA:**  
1197.6 SQ. IN. + 262.8 SQ. IN. + 222.4 SQ. IN. + 384 SQ. IN. + 905.75 SQ. IN. = 2972.55 SQ. IN.  
2972.55 SQ. IN. > 287.42 SQ. IN.



- KEY**
- EXISTING ROOF
  - EXISTING ROOF PARTIAL DEMO
  - NEW ROOF AREA ADDITION
  - MAIN FLOOR WALL BELOW
  - 1" CONT. SOFFIT VENT
  - 2" DIA EAVE VENT
  - 4" CONT RIDGE VENT STRIP

**PERMIT SET**

Revisions: \_\_\_\_\_ Date: \_\_\_\_\_  
 △ PERMIT - REV \_\_\_\_\_ 10/30/2020

Project Title: \_\_\_\_\_

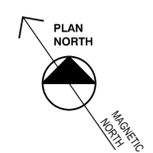
Modifications to  
**LAWLER RESIDENCE**  
 8466 N MERCER WAY,  
 MERCER ISLAND, WA, 98040

Sheet Title:  
 ROOF PLAN

Scale: 1/4" = 1'-0"  
 Project No.: 20-05  
 Date: 6/30/2020  
 Sheet Number: \_\_\_\_\_

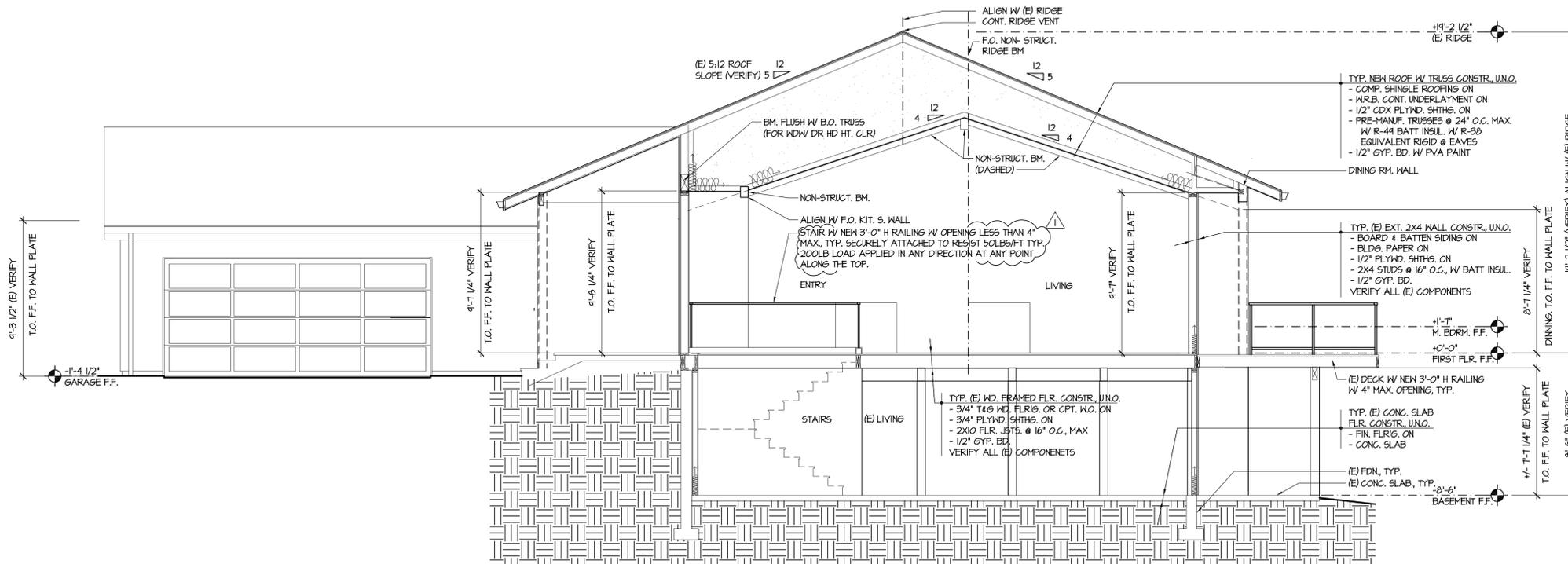
**A2.3**

**1 ROOF PLAN**  
 SCALE: 1/4" = 1'-0"

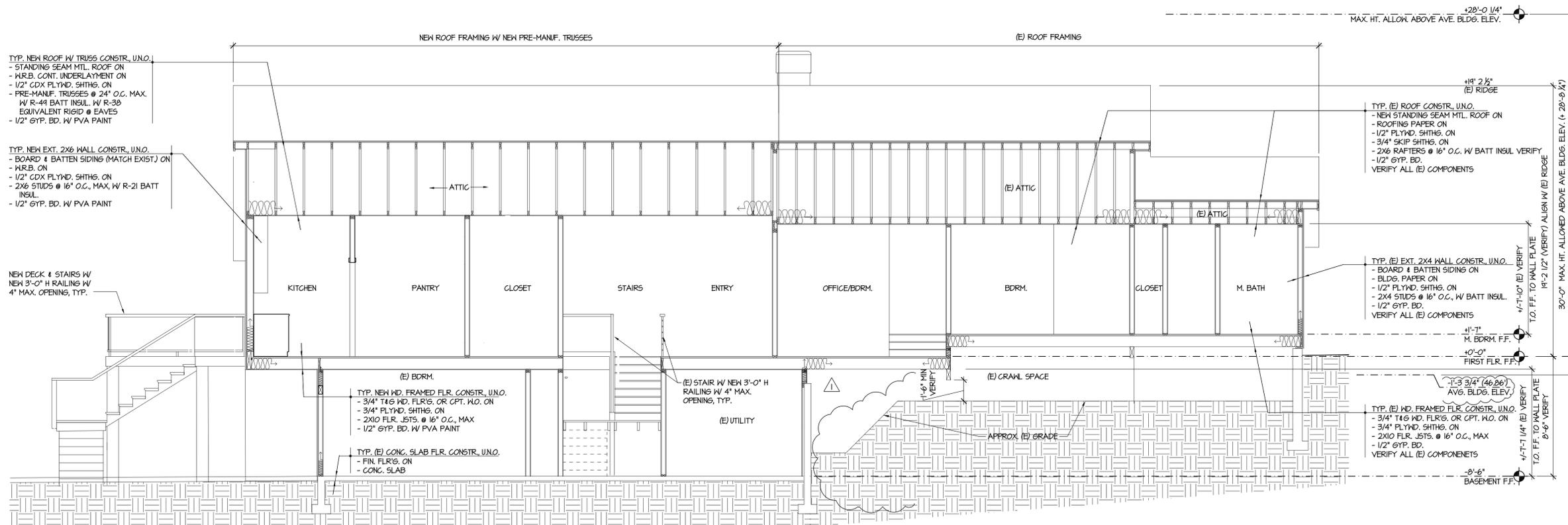








1 SECTION  
SCALE: 1/4" = 1'-0"



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

PERMIT SET

Revisions: \_\_\_\_\_ Date: \_\_\_\_\_  
 △ PERMIT - REV 10/30/2020

Project Title: \_\_\_\_\_

Modifications to  
**LAWLER RESIDENCE**  
 8466 N MERCER WAY,  
 MERCER ISLAND, WA, 98040

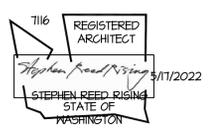
Sheet Title:  
 BLDG. SECTIONS

Scale: NOT TO SCALE

Project No.: 20-05

Date: 6/30/2020

Sheet Number:



**Alterations Worksheet 2015 Washington State Energy Code**

**Project Information**  
 Lawler Residence Remodel & Addition  
 Site Address: 8456 N. Mercer Way  
 Mercer Island, WA 98040

**Contact Information**  
 Architect: TCA Architecture  
 6211 Roosevelt Way NE Seattle, WA 98115  
 (206) 522-3830 (attn: Stephen Rising)

The Washington State Energy Code requirements for alterations are located in Chapter 5. **Alterations (remodels) do not need to obtain energy credits from Table R406.2**

Additions must meet the requirements for new construction. This includes nonconditioned space being altered to become conditioned space.

**Will the wall cavities be exposed?**  Yes  No  
 If yes: Exposed wall cavities must be insulated -  
 2 X 4 wall studs require R-15 insulation  
 2 X 6 wall studs require R-21 insulation

**Will the roof/ceiling framing cavities or attic be exposed?**  Yes  No  
 If yes: Exposed roof/ceiling assemblies must be insulated -  
 Vaulted ceilings: Insulate to the full depth of the framing member while allowing for the minimum 1" ventilated space  
 Flat ceilings: Install R-49 insulation or what the attic space can accommodate based on the roof pitch

**Will the floor framing cavities be exposed?**  Yes  No  
 If yes: Exposed floor cavities must be insulated to R-30

**Are the windows and/or doors being replaced?**  Yes  No  
 (Includes both window or door and frames)  
 If yes: New windows and doors must have an area weighted average U-factor of ≤0.30

**Will the heating or cooling system be replaced?**  Yes  No  
 If yes: New equipment must meet current requirements and ducts need to be tested

**Will the hot water system be altered?**  Yes  No  
 If yes: New water heating equipment must meet current code requirements

**Are more than 50% of the light fixtures being changed?**  Yes  No  
 If yes: 75% of all lamps must be high efficacy (LED or CFL)

**R503.1.1 Building envelope.** Building envelope assemblies that are part of the alteration shall comply with Section R402.1.1 or R402.1.4, Sections R402.2.1 through R402.2.11, R402.3.1, R402.3.2, R402.4.3 and R402.4.4.  
**Exception:** The following alterations need not comply with the requirements for new construction provided the energy use of the building is not increased:  
 1. Storm windows installed over existing fenestration.  
 2. Existing ceiling, wall or floor cavities exposed during construction provided that these cavities are filled with insulation. 2x4 framed walls shall be insulated to a minimum of R-15 and 2x6 framed walls shall be insulated to a minimum of R-21.  
 3. Construction where the existing roof, wall or floor cavity is not exposed.  
 4. Roof recover.  
 5. Roofs without insulation in the cavity and where the sheathing or insulation is exposed during reroofing shall be insulated either above or below the sheathing.  
 6. Surface-applied window film installed on existing single pane fenestration assemblies to reduce solar heat gain provided the code does not require the glazing fenestration to be replaced.

**R503.1.1.1 Replacement fenestration.** Where some or all of an existing fenestration unit is replaced with a new fenestration product, including sash and glazing, the replacement fenestration unit shall meet the applicable requirements for U-factor and SHGC in Table R402.1.1.

**R502.1.1.2 Heating and cooling systems.** New heating, cooling and duct systems that are part of the addition shall comply with Sections R403.1, R403.2, R403.3, R403.5 and R403.6.  
**Exception:** The following need not comply with the testing requirements of Section R403.3.3:  
 1. Additions of less than 750 square feet.  
 2. Duct systems that are documented to have been previously sealed as confirmed through field verification and diagnostic testing in accordance with procedures in WSU RS-33.  
 3. Ducts with less than 40 linear feet in unconditioned spaces.  
 4. Existing duct systems constructed, insulated or sealed with asbestos.

**R503.1.3 Service hot water systems.** New service hot water systems that are part of the alteration shall comply with Section R403.4.

**R503.1.4 Lighting.** New lighting systems that are part of the alteration shall comply with Section R404.1.  
**Exception:** Alterations that replace less than 50 percent of the luminaires in a space, provided that such alterations do not increase the installed interior lighting power.

**R503.2 Change in space conditioning.** Any nonconditioned or low-energy space that is altered to become conditioned space shall be required to be brought into full compliance with this code.

**WINDOW / SKYLIGHT SCHEDULE**

NO.	NOMINAL UNIT SIZE	ROUGH OPENING		R.O. HD. HT. (ASH. FIN. FL. INCLUDES TRANSOM WINDOW)	FIXED TRANSOM FACTORY MULL TO UNIT BELOW	TYPE	FRAME	SCREENS	DETAILS				REMARKS	(ARGON + LOW E) NFRC CERTIFIED U-VALUE
		WIDTH	HEIGHT						HEAD	JAMB	MULL	SILL		
1	1'-10 1/4" x 7'-11 1/2"	1'-10 3/4"	8'-0"	8'-1/2"		FIXED W/ S.D.L., S.G.	ALUM. CLAD / WD.					HD. HT. ALIGNS W/ DR.	0.21	
2	5'-6 3/4" x 7'-11 1/2"	5'-7 1/4"	8'-0"	8'-1/2"		FIXED W/ S.D.L., S.G.	ALUM. CLAD / WD.					HD. HT. ALIGNS W/ DR.	0.21	
3	4'-8'-0" x 4'-2'-5 1/2" VERIFY (E) OPNG.	4'-8'-1/2" (E) VERIFY	4'-2'-6" (E) VERIFY	4'-8'-2 1/2" (E) VERIFY		FIXED	ALUM. CLAD / WD.					VERIFY (E) R.O. # UNIT SIZE	0.21	
4	3'-11 1/8" x 3'-0"	3'-11 3/8"	3'-1/2"	6'-7 1/2"		CSMNT./CSMNT. W/ S.D.L.	ALUM. CLAD / WD.					FACTORY MULL	0.24	
5	2'-5 1/2" x 4'-5 1/2"	2'-6"	4'-6"	7'-11 3/8"		CSMNT. W/ S.D.L.	ALUM. CLAD / WD.					FACTORY MULL	0.24	
6	2'-5 1/2" x 4'-5 1/2"	2'-6"	4'-6"	7'-11 3/8"		CSMNT. W/ S.D.L.	ALUM. CLAD / WD.					FACTORY MULL	0.24	
7A	3'-10 3/4" x 7'-2"	3'-11 1/4"	7'-2 1/2"	7'-11 3/4"		FIXED W/ S.D.L., S.G.	ALUM. CLAD / WD.					FACTORY MULL	0.21	
7B	8'-2 3/4" x 7'-2"	8'-3 1/4"	7'-2 1/2"	7'-11 3/4"		FIXED W/ S.D.L., S.G.	ALUM. CLAD / WD.					FACTORY MULL	0.21	
7C	3'-10 3/4" x 7'-2"	3'-11 1/4"	7'-2 1/2"	7'-11 3/4"		FIXED W/ S.D.L., S.G.	ALUM. CLAD / WD.					FACTORY MULL	0.21	
8A	4'-3'-5 1/2" x 4'-5'-5 1/2" VERIFY (E) OPNG.	4'-3'-6" (E) VERIFY	4'-5'-6" (E) VERIFY	4'-6'-7 3/4" (E) VERIFY		CSMNT. W/ S.D.L., S.G.	ALUM. CLAD / WD.					EGRESS / FACTORY MULL / (NEW OPENING CONTROL DEVICE)	0.24	
8B	4'-3'-10" x 4'-5'-5 1/2" VERIFY (E) OPNG.	4'-3'-10 1/2" (E) VERIFY	4'-5'-6" (E) VERIFY	4'-6'-7 3/4" (E) VERIFY		FIXED W/ S.D.L., S.G.	ALUM. CLAD / WD.						0.24	
8C	4'-3'-5 1/2" x 4'-5'-5 1/2" VERIFY (E) OPNG.	4'-3'-6" (E) VERIFY	4'-5'-6" (E) VERIFY	4'-6'-7 3/4" (E) VERIFY		CSMNT. W/ S.D.L., S.G.	ALUM. CLAD / WD.					EGRESS / FACTORY MULL / (NEW OPENING CONTROL DEVICE)	0.24	
9	2'-11 1/2" x 3'-11 1/2"	3'-0"	4'-0"	6'-7 3/4" (E) VERIFY		CSMNT. W/ S.D.L.	ALUM. CLAD / WD.					FACTORY MULL	0.24	
10A	3'-10" x 6'-5 1/2" VERIFY (E) OPNG.	3'-10 1/2"	6'-6"	4'-6'-8 1/4" (E) VERIFY		FIXED/FIXED W/ S.D.L., S.G.	ALUM. CLAD / WD.						0.21	
10B	3'-10" x 6'-5 1/2" VERIFY (E) OPNG.	3'-10 1/2"	6'-6"	4'-6'-8 1/4" (E) VERIFY		FIXED/FIXED W/ S.D.L., S.G.	ALUM. CLAD / WD.						0.21	
11	1'-11 1/2" x 2'-5 1/2"	2'-0"	2'-6"	6'-8 1/4"		CSMNT. W/ S.D.L.	ALUM. CLAD / WD.						0.24	
12	4'-7'-10 3/8" x 4'-5'-8" VERIFY (E) OPNG.	4'-7'-11 1/8" (E) VERIFY	4'-5'-8 1/2" (E) VERIFY	4'-6'-8 3/4" (E) VERIFY		CSMNT./FIXED/CSMNT. W/ S.D.L., S.G.	ALUM. CLAD / WD.					EGRESS	0.24	
13	4'-7'-10 3/8" x 4'-5'-8" VERIFY (E) OPNG.	4'-7'-11 1/8" (E) VERIFY	4'-5'-8 1/2" (E) VERIFY	4'-6'-8 3/4" (E) VERIFY		CSMNT./FIXED/CSMNT. W/ S.D.L.	ALUM. CLAD / WD.					EGRESS	0.24	
14A	4'-3'-10 3/8" x 4'-5'-6 1/2" VERIFY (E) OPNG.	4'-3'-11 1/8" (E) VERIFY	4'-5'-6 3/4" (E) VERIFY	4'-6'-7 1/4" (E) VERIFY		FIXED/FIXED/FIXED W/ S.D.L., S.G.	ALUM. CLAD / WD.						0.21	
14B	4'-3'-10 3/8" x 4'-5'-6 1/2" VERIFY (E) OPNG.	4'-3'-11 1/8" (E) VERIFY	4'-5'-6 3/4" (E) VERIFY	4'-6'-7 1/4" (E) VERIFY		FIXED/FIXED/FIXED W/ S.D.L., S.G.	ALUM. CLAD / WD.						0.21	
14C	4'-3'-10 3/8" x 4'-5'-6 1/2" VERIFY (E) OPNG.	4'-3'-11 1/8" (E) VERIFY	4'-5'-6 3/4" (E) VERIFY	4'-6'-7 1/4" (E) VERIFY		FIXED/FIXED/FIXED W/ S.D.L., S.G.	ALUM. CLAD / WD.						0.21	
15	4'-5'-3 1/2" x 4'-5'-6 1/2" VERIFY (E) OPNG.	4'-5'-4" (E) VERIFY	4'-5'-6 3/8" (E) VERIFY	4'-7'-7 3/8" (E) VERIFY		FIXED W/ S.D.L., S.G.	ALUM. CLAD / WD.						0.21	
16	4'-5'-3 1/2" x 4'-5'-6 1/2" VERIFY (E) OPNG.	4'-5'-4" (E) VERIFY	4'-5'-6 3/8" (E) VERIFY	4'-7'-7 3/8" (E) VERIFY		FIXED W/ S.D.L., S.G.	ALUM. CLAD / WD.						0.21	
17A	4'-3'-8" x 4'-3'-5 1/2" VERIFY (E) OPNG.	4'-3'-8 1/2" (E) VERIFY	4'-3'-5 3/4" (E) VERIFY	4'-6'-8 3/8" (E) VERIFY		FIXED/FIXED W/ S.D.L.	ALUM. CLAD / WD.					FACTORY MULL	0.21	
17B	4'-3'-8" x 4'-3'-5 1/2" VERIFY (E) OPNG.	4'-3'-8 1/2" (E) VERIFY	4'-3'-5 3/4" (E) VERIFY	4'-6'-8 3/8" (E) VERIFY		FIXED/FIXED W/ S.D.L., S.G.	ALUM. CLAD / WD.					FACTORY MULL	0.21	

**EXTERIOR DOOR SCHEDULE**

NO.	NOMINAL SIZE	ROUGH OPENING		FRAME HT. OF FIXED TRANSOM FACTORY MULL TO UNIT BELOW	TYPE	THK.	FRAME	FINISH	DETAILS			REMARKS	NFRC CERTIFIED U-VALUE
		WIDTH	HEIGHT						HEAD	JAMB	SILL		
1	3'-6" x 8'-0"	3'-8"	8'-1 1/2"		SINGLE		WD./ALUM. CLAD				INSWING, FULL GLAZED TEMPERED	0.30	
2	16'-0" x 7'-0"	VERIFY	VERIFY		OVERHEAD GARAGE		ALUMINUM				OVERHEAD, GLAZED, TEMP. (E) OPENING		
3	3'-0" x 6'-8"	3'-2"	6'-4 1/2"		SINGLE		WD. / FT.				INSWING, NOT GLAZED	0.20	
3.1	2'-10" x 6'-8"	3'-0"	6'-4 1/2"		SINGLE		WD. / FT.				OUTSWING, NOT GLAZED, 20 MIN. SOLID CORE	0.20	
4	(3) LEAF 11'-8 1/4" x 7'-11 3/8"	11'-4 1/4"	8'-1/8"		(3) LEAF SLIDE		WD./ALUM. CLAD				(3) LEAF, SLIDING FULL GLAZED TEMP.	0.30	
5	(3) LEAF 14'-8 1/4" x 7'-11 3/8"	14'-4 1/4"	8'-1/8"		(3) LEAF SLIDE		WD./ALUM. CLAD				(3) LEAF, SLIDING FULL GLAZED TEMP. (E) OPENING	0.30	
6	2'-8" x 6'-7 1/2"	4'-2'-4 1/2" (E) VERIFY	4'-6'-8 1/4" (E) VERIFY		FRENCH		WD./ALUM. CLAD				OUTSWING, FULL GLAZED TEMP.	0.30	
7	5'-11 1/4" x 6'-7 1/2"	4'-6'-1/4" (E) VERIFY	4'-6'-7 3/8" (E) VERIFY		(2) FRENCH		WD./ALUM. CLAD				OUTSWING, FULL GLAZED TEMP. (E) OPENING	0.30	
8	2'-6" x 6'-8"	3'-2 1/2"	6'-4 1/2"		SINGLE		WD. / FT.				OUTSWING, NOT GLAZED	0.20	
9	4'-11 1/4" x 6'-7 1/2"	4'-5'-3 3/4" (E) VERIFY	4'-6'-8 3/8" (E) VERIFY		(2) FRENCH		WD./ALUM. CLAD				OUTSWING, FULL GLAZED TEMP. (E) OPENING	0.30	
10	3'-0" x 6'-7 1/2"	4'-3'-3 3/4" (E) VERIFY	4'-6'-8 3/8" (E) VERIFY		SINGLE		WD. / FT.				OUTSWING, NOT GLAZED (E) OPENING	0.30	

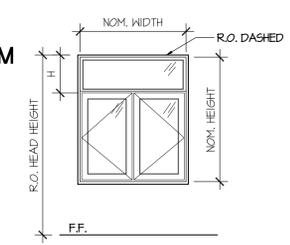
**NOTES:**

- ALL DIMS. TO BE VERIFIED PRIOR TO CONSTR.
- WEATHER SHIELD, CONTEMPORARY COLLECTION WINDOWS USED FOR BASIS OF DESIGN FOR ALL WINDOWS, TERRACE DECKS AND LIFT SLIDE DR. SYSTEMS AND ACCORDION DR. SYSTEMS.
- CASEMENT WINDOWS TO BE MIN. EGRESS WIDTH OF 2'-4 1/2" WITHIN CSMT. TYPE.
- CRYSTALLITE SKYLIGHTS USED FOR DESIGN BASIS.

**ENERGY CALCULATION NOTES:**

- 2015 IECC (ALTERATIONS), MERCER ISLAND, PRESCRIPTIVE CODE COMPLIANCE**
- ALL VERT. GLAZING TO HAVE A MAX. U-VALUE OF 0.30
  - ALL OVERHEAD GLAZING IS TO HAVE A MAX. U-VALUE OF 0.50
  - ALL SOLID PANEL DR.S ARE TO HAVE A MAX. U-VALUE OF 0.20 (EXCEPT GLAZE DR.S, MAX. U-VALUE OF 0.30)
  - ALL GL.S AT EXT. ROOFS ARE TO HAVE A MIN. INSUL. VALUE OF R-49, SINGLE RAFTER OR JOIST-VAULTED GL.S MAY REDUCE INSUL. TO R-38
  - FOR VENTED ATTICS, A BAFFLE SHALL BE INSTALLED ADJACENT TO SOFFITS AND EAVE VENTS
  - ALL EXT. WALLS ABOVE GRADE TO HAVE A MIN. INSUL. VALUE OF R-21
  - ALL FRAMED FLRS R-30
  - ALL BSMT. BELOW GRADE WALLS SHALL BE INSULATED PER 10/15/21-TB (MSECC, TABLE R402.11)
  - NEW HEATED SLABS ON GRADE TO HAVE CONT. MIN. INSUL. VALUE OF R-10
  - IF GREATER THAN 50% OF LIGHT FIXTURES REPLACED 75% OF LAMPS MUST BE LED
  - NEW HOT WATER TANK MUST MEET CURRENT CODE REQUIREMENTS
  - NEW HVAC EQUIPMENT MUST MEET CURRENT CODE REQUIREMENTS

**WINDOW DIMENSION REFERENCE DIAGRAM**



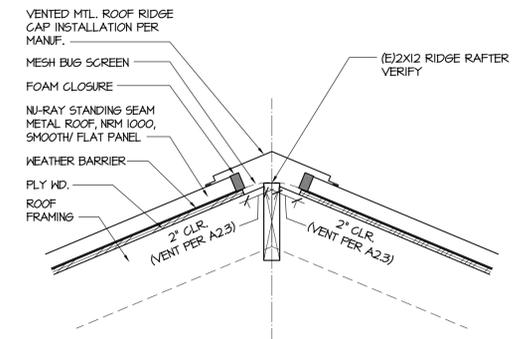
**PERMIT SET**

Revisions: \_\_\_\_\_ Date: \_\_\_\_\_  
 Δ PERMIT - REV 10/30/2020

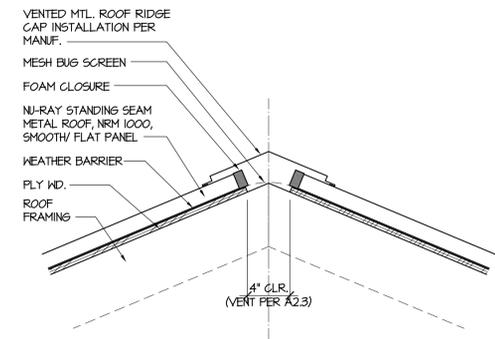
Project Title: \_\_\_\_\_

Modifications to  
**LAWLER RESIDENCE**  
 8456 N. MERCER WAY,  
 MERCER ISLAND, WA, 98040

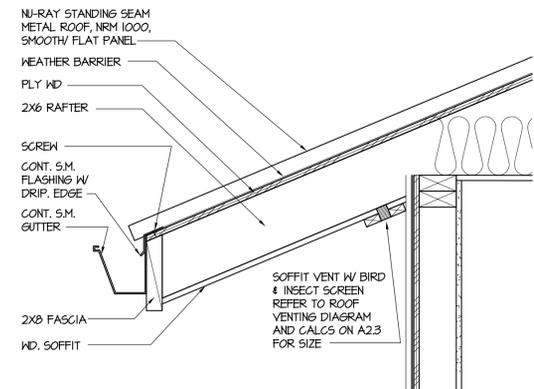
Sheet Title: \_\_\_\_\_  
 WINDOW/DR. SCHEDULE  
 ENERGY CODE  
 Scale: \_\_\_\_\_  
 Project No.: 20-05  
 Date: 6/30/2020  
 Sheet Number: \_\_\_\_\_



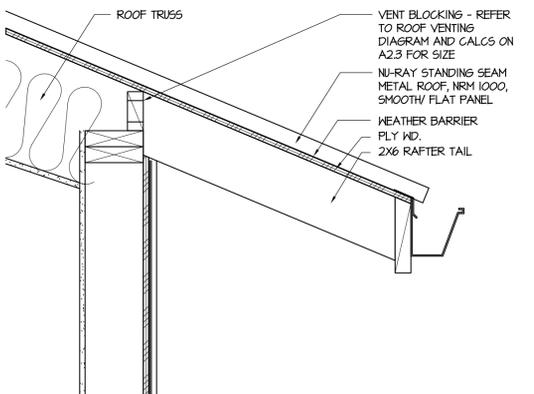
5 (E) ROOF RIDGE VENT - SECT.  
SCALE: 1/2" = 1'-0"



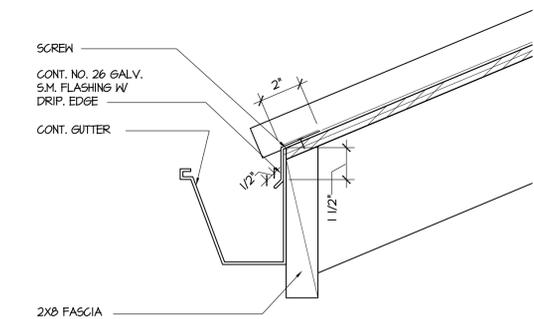
1 RIDGE VENT - SECT.  
SCALE: 1/2" = 1'-0"



2 SOFFIT VENT - SECT.  
SCALE: 1/2" = 1'-0"



3 EAVE VENT - SECT.  
SCALE: 1/2" = 1'-0"



4 EAVE FLASHING - SECT.  
SCALE: 3/8" = 1'-0"

PERMIT SET

Revisions: \_\_\_\_\_ Date: \_\_\_\_\_  
△ PERMIT - REV 10/30/2020

Project Title: \_\_\_\_\_

Modifications to  
**LAWLER RESIDENCE**  
8466 N MERCER WAY,  
MERCER ISLAND, WA, 98040

Sheet Title:  
EXTERIOR DETAILS  
ROOF VENTING

Scale: AS NOTED  
Project No.: 20-05  
Date: 6/30/2020

Sheet Number:

**A10.1**