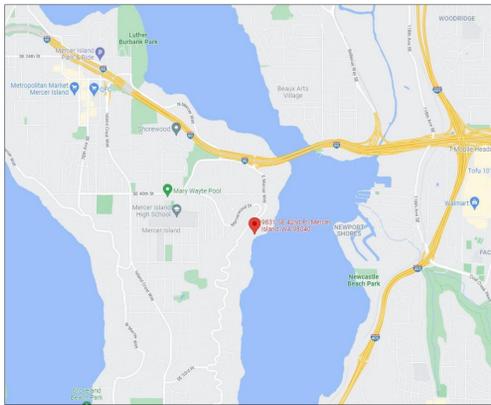


## VICINITY PLAN



## ABBREVIATIONS

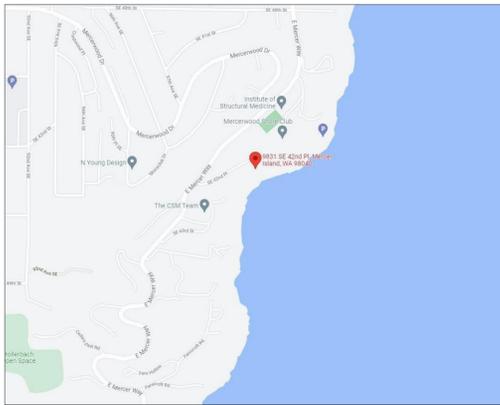
|              |                                   |
|--------------|-----------------------------------|
| ABV          | ABOVE                             |
| AFF          | ABOVE FINISH FLOOR                |
| ADDL         | ADDITIONAL                        |
| ADJ          | ADJUSTABLE                        |
| ALT          | ALTERNATE                         |
| ARCH         | ARCHITECT, ARCHITECTURAL          |
| BLW          | BELOW                             |
| BSMT         | BASEMENT                          |
| BTW          | BETWEEN                           |
| BLD          | BUILDING                          |
| CAB          | CABINET                           |
| CALC         | CALCULATION                       |
| CLG          | CEILING                           |
| CL           | CENTERLINE                        |
| CLR          | CLEAR                             |
| COL          | COLUMN                            |
| CONC         | CONCRETE                          |
| CONST        | CONSTRUCTION                      |
| CONT         | CONTINUOUS                        |
| CONTR        | CONTRACTOR                        |
| DEMO         | DEMOLISH                          |
| DIA          | DIAMETER                          |
| DM           | DIMENSION                         |
| DW           | DISHWASHER                        |
| DBL          | DOUBLE                            |
| EA           | EACH                              |
| ELEC         | ELECTRIC, ELECTRICIAN             |
| ELEV         | ELEVATION                         |
| ENGR         | ENGINEER                          |
| EQUIV        | EQUIVALENT                        |
| EXIST OR (E) | EXISTING                          |
| EXT          | EXTERIOR                          |
| FF           | FINISH FLOOR                      |
| GALV         | GALVANIZED                        |
| GWB          | GYPSUM WALL BOARD                 |
| HDR          | HEADER                            |
| HT           | HEIGHT                            |
| HORIZ        | HORIZONTAL                        |
| INSUL        | INSULATION                        |
| INT          | INTERIOR                          |
| LOC          | LOCATE, LOCATION                  |
| MAX          | MAXIMUM                           |
| MFR          | MANUFACTURER                      |
| MECH         | MECHANICAL                        |
| MTL          | METAL                             |
| MIN          | MINIMUM                           |
| NTS          | NOT TO SCALE                      |
| O.C.         | ON CENTER                         |
| PLY          | PLYWOOD                           |
| PRELIM       | PRELIMINARY                       |
| PT           | PRESSURE-TREATED                  |
| PL           | PROPERTY LINE                     |
| REFR         | REFRIGERATOR                      |
| REINF        | REINFORCE, REINFORCING            |
| REQD         | REQUIRED                          |
| SCHED        | SCHEDULE                          |
| SW           | SHEARWALL                         |
| SIM          | SIMILAR                           |
| SF           | SQUARE FOOT                       |
| SPECS        | SPECIFICATIONS                    |
| SSTL         | STAINLESS STEEL                   |
| STL          | STEEL                             |
| STRUCT       | STRUCTURE, STRUCTURAL             |
| TEMP         | TEMPORARY                         |
| TOW          | TOP OF WALL                       |
| TYP          | TYPICAL                           |
| UNO          | UNLESS NOTED OTHERWISE            |
| VER          | VERIFY IN FIELD                   |
| WP           | VERTICAL WATERPROOF, WEATHERPROOF |
| WNW          | WINDOW                            |
| W/           | WITH                              |
| W/O          | WITHOUT                           |
| WD           | WOOD                              |

## GRAPHIC KEY

(NOT TO SCALE)

|  |          |  |                       |
|--|----------|--|-----------------------|
|  | GLASS    |  | BATT INSULATION       |
|  | CONCRETE |  | RIGID INSULATION      |
|  | STEEL    |  | PLYWOOD               |
|  | EARTH    |  | FINISH WOOD           |
|  | GRAVEL   |  | STUCCO                |
|  | WATER    |  | SPRAY FOAM INSULATION |
|  | BRICK    |  | GYPSUM WALLBOARD      |
|  | ALUMINUM |  |                       |

## LOCATION PLAN



## SYMBOLS KEY

|                                |  |  |
|--------------------------------|--|--|
| GRID LINES                     |  |  |
| ROOM REFERENCE                 |  | ROOM NAME<br>ROOM NUMBER   |
| DOOR REFERENCE                 |  | DOOR NUMBER  |
| WINDOW REFERENCE               |  | ROOM NUMBER<br>WINDOW NUMBER   |
| EXTERIOR ELEVATIONS            |  | DRAWING NUMBER<br>SHEET NUMBER   |
| BUILDING SECTION               |  | DRAWING NUMBER<br>SHEET NUMBER   |
| WALL SECTION                   |  | DRAWING NUMBER<br>SHEET NUMBER   |
| SECTION DETAIL                 |  | DRAWING NUMBER<br>SHEET NUMBER   |
| AREA DETAIL                    |  | DRAWING NUMBER<br>SHEET NUMBER   |
| INTERIOR ELEVATION             |  | DRAWING NUMBER<br>SHEET NUMBER   |
| ELEVATION DATUM                |  | LOCATION<br>ELEVATION  |
| FINISH MATERIAL                |  | FINISH TYPE: SEE FINISH SCHEDULE<br>FINISH NUMBER  |
| REVISION BUG                   |  | NOTE: ONLY MOST RECENT REVISION SHOWN CLOUDED. FOR PREVIOUS REVISIONS DELTAS REMAIN. DATE OF REVISIONS INDICATED AT RIGHT MARGINS. |
| ASSEMBLY TYPE                  |  | W4a  |
| EXHAUST FAN                    |  | R: ROOF TYPE<br>W: WALL TYPE<br>F: FLOOR TYPE<br>SEE ASSEMBLIES FOR MORE INFO  |
| SMOKE DETECTOR                 |  |  |
| SMOKE/CARBON MONOXIDE DETECTOR |  |  |
| CENTERLINE                     |  |  |

## GENERAL NOTES

ALL WORK SHALL BE IN COMPLIANCE WITH THE 2018 INTERNATIONAL RESIDENTIAL CODE AS ADOPTED AND MODIFIED BY THE JURISDICTIONAL LAND USE CODE, AND ALL OTHER LAWS, CODES, ORDINANCES AND REGULATIONS OF THE COUNTY, STATE, AND FEDERAL JURISDICTIONS. (LATEST EDITION AND AMENDMENTS)

ALL UNDERGROUND UTILITIES MUST BE VERIFIED AS TO EXACT LOCATIONS SO AS NO INTERFERENCE BY DISRUPTION WILL BE CAUSED. GENERAL CONTRACTOR SHALL PROTECT EXISTING FACILITIES, STRUCTURES AND UTILITIES BY THE METHODS RECOMMENDED AT THE PRE-CONSTRUCTION SITE MEETING. DAMAGE THAT MAY BE CAUSED BY GENERAL CONTRACTOR OR SUBCONTRACTOR TO ANY OF THE ABOVE MENTIONED SHALL BE REPAIRED BY HIM AND LEFT IN AS GOOD A CONDITION AS EXISTED PRIOR TO DAMAGING.

CONTRACTOR SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND JOB CONDITIONS RELATED TO THIS WORK. ALL DIMENSIONS SHALL BE CONSIDERED "NOMINAL" UNLESS NOTED OTHERWISE. DO NOT SCALE DRAWINGS. USE WRITTEN DIMENSIONS ONLY. DIMENSIONS ON LARGE SCALE DRAWINGS OR DETAILS WILL PREVAIL OVER SMALLER SCALED DRAWINGS. WRITTEN DIMENSIONS ARE DRAWN TO THE FACE OF STUD. U.N.O. VERIFY ALL ROUGH-IN DIMENSIONS FOR EQUIPMENT, PROVIDE ALL BUCKETS, BLOCKING, AND JACKS AS REQUIRED BY THE DRAWINGS AND OTHER TRADES. ANY DISCREPANCY IN DIMENSIONS SHALL BE REPORTED IN WRITING TO THE PROJECT MANAGER/ DESIGNER FOR CLARIFICATION, OR APPROVAL OF MODIFICATION BEFORE COMMENCING WORK. THE RESPONSIBILITY TO THE PROJECT MANAGER/DESIGNER. SHALL REST WITH THE CONTRACTOR OR ANY OTHER PERSON APPROVING SUCH A CHANGE.

ALL WORKMANSHIP AND MATERIALS SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR FROM THE DATE OF CERTIFICATE OF OCCUPANCY UNLESS SPECIFIED FOR A LONGER PERIOD OF TIME ON SPECIFIED ITEMS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING OR REPAIRING HIS OWN DEFECTIVE WORK AS WELL AS PAY ALL COSTS INCIDENTAL THERETO INCLUDING DAMAGE TO OTHER WORK, FURNISHINGS OR EQUIPMENT.

ALL WARRANTIES OR GUARANTEES AS TO MATERIALS OR WORKMANSHIP ON OR WITH RESPECT TO THE OWNER'S WORK SHALL BE CONTAINED IN THE CONTRACT OR SUBCONTRACT WHICH SHALL BE SO WRITTEN THAT SUCH GUARANTEE OR WARRANTIES SHALL INSURE TO THE BENEFIT OF OWNER.

INSURANCE: PRIOR TO THE COMMENCEMENT OF WORK THE GENERAL CONTRACTOR SHALL DELIVER TO THE OWNER CERTIFICATES OF INSURANCE FOR BOTH COMPREHENSIVE GENERAL LIABILITY AND WORKMAN'S COMPENSATION INCLUDING THE TOTAL AMOUNT OF COVERAGE AND CONDITIONS STIPULATED AND AGREED BY BOTH PARTIES.

THE OWNER SHALL BE RESPONSIBLE FOR PAYING FOR THE BUILDING PERMIT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL OTHER PERMITS REQUIRED OR NECESSARY FOR THE COMPLETION OF THE WORK FROM THE RESPECTIVE AGENCIES. THE CONTRACTOR SHALL NOTIFY THE GOVERNING AGENCIES AS REQUIRED FOR SITE INSPECTIONS.

ALL TRADES SHALL REFER TO THE ARCHITECTURAL DRAWINGS REGARDING LOCATIONS OF WORK TO BE INSTALLED.

UNLESS OTHERWISE NOTED, PROVIDE ALL MISCELLANEOUS FASTENERS, HARDWARE AND ACCESSORIES AS REQUIRED FOR COMPLETE INSTALLATION. EVEN THOUGH SUCH ITEMS MAY NOT HAVE BEEN SPECIFICALLY MENTIONED IN THE DRAWINGS AND SPECIFICATIONS, NOTIFY THE ARCHITECT OF ANY REVISIONS OR ADDITIONAL INFORMATION OBTAINED FROM THE MANUFACTURER OF SPECIFIED MATERIALS OR EQUIPMENT WHICH MAY AFFECT THE CONTRACT TIME, COST OR QUALITY OF WORK.

GENERAL CONDITIONS  
THE GENERAL CONTRACTOR, ALL SUB-CONTRACTORS AND ALL MAJOR SUPPLIERS SHALL SUBMIT TO THE OWNER WITHIN 30 DAYS AFTER COMPLETION ALL "RELEASE OF LIENS" FOR ALL WORK PERFORMED PRIOR TO FINAL PAYMENT.

PARTIAL LIEN WAIVERS TO BE SUBMITTED WITH MONTHLY REQUESTION.

ALL MANUFACTURERS AND/OR SUPPLIERS SHALL SUBMIT SHOP DRAWINGS AND/OR MATERIAL SAMPLES TO THE DESIGNER/OWNER FOR APPROVAL PRIOR TO FABRICATION.

ALL OF THE GENERAL CONTRACTOR'S EQUIPMENT, SCAFFOLDING HOISTS, ETC., SHALL BE AVAILABLE TO THE OWNER/ DESIGNER AND THEIR STAFF FOR INSPECTION OF ANY AND ALL WORK DURING NORMAL WORKING HOURS.

THE GENERAL CONTRACTOR IS RESPONSIBLE FOR ALL DELIVERY POINTS, HOISTS LOCATIONS, ACCESS TO AND FROM THE SITE OF THE BUILDING AND UTILITY SERVICES.  
BID TO INCLUDE ALL NECESSARY AND REQUIRED PERMITS, LICENSES, FEES, BONDS AND INSURANCE - EVIDENCE OF WHICH MUST BE SUBMITTED TO OWNER/ DESIGNER PRIOR TO ANY CONSTRUCTION.

GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SUBCONTRACTORS WORKING AT JOB SITE AND FOR ALL COORDINATION OF WORK.

THE MECHANICAL, PLUMBING AND ELECTRICAL CONTRACTOR SHALL FULLY COORDINATE ALL EQUIPMENT WITH THE OTHER TRADES. THESE CONTRACTORS SHALL BE RESPONSIBLE FOR FINAL HOOK-UP OF ALL EQUIPMENT NOT FURNISHED BY THEM BUT REQUIRING THE SAME FOR FINAL COMPLETION.

GENERAL CONTRACTOR TO BE RESPONSIBLE FOR SECURITY OF ALL MATERIALS AT JOB SITE UNTIL FINAL ACCEPTANCE OF WORK BY OWNER.

ANY SUBCONTRACTOR CUTTING INTO WORK ALREADY COMPLETED, CUTTING CHASES AND TRENCHES FOR THE INTRODUCTION OF HIS WORK AND EQUIPMENT IN THE BUILDING SHALL DO OR PAY FOR ALL BACK FILLING, REPAIRATION OF WALLS, FLOOR, ETC., DAMAGE BY SUCH A COMPANY. ALL REPAIRS SHALL MATCH EXISTING SURFACES.

CONSTRUCTION SPECIFICATIONS  
NO SUBSTITUTIONS ARE ALLOWED FOR MATERIALS WHERE SPECIFIC MANUFACTURERS ARE INDICATED, UNLESS APPROVED BY THE OWNER/ARCHITECT. REQUESTS FOR SUBSTITUTIONS SHALL BE MADE IN WRITING PRIOR TO ORDERING MATERIALS OR COMMENCING WORK. SUCH REQUESTS SHALL INCLUDE THE DATE, SCOPE OF WORK, ANY ADDITIONAL COSTS TO THE OWNER, AND ANY ANTICIPATED DELAYS CAUSED BY SUCH CHANGES.

NO EXTRA WORK OR CHANGE SHALL BE MADE UNLESS A WRITTEN CHANGE ORDER IS SUBMITTED AND SIGNED BY THE OWNER AND ARCHITECT. THE ORDER SHALL STATE THAT THE OWNER HAS AUTHORIZED THE EXTRA WORK OR CHANGE, AND NO CLAIM FOR AN ADDITIONAL SUM SHALL BE VALID UNLESS SO OFFERED AS DESCRIBED ABOVE.

ALL WOOD IN CONTACT WITH MASONRY OR CONCRETE OR EXPOSED TO WEATHER SHALL BE PRESSURE TREATED.

WOOD SPECIFICATIONS TO CONFORM TO OUTLINE SPECIFICATIONS, STRUCTURAL PLANS, NOTES, AND GENERAL CONDITIONS.

CAULKING AND SEALANTS: INSTALLED SHALL BE GUARANTEED WATERTIGHT. EXTERIOR METAL WORK, INCLUDING WINDOWS AND DOOR FRAMES AND ALL JUNCTIONS BETWEEN MASONRY, CONCRETE AND METAL SHALL BE SEALED WITH NEOPRENE OR POLYURETHANE FILLER AND APPROVED SEALANT COMPOUNDS.

PROVIDE GALVANIC INSULATION BETWEEN ALL DISSIMILAR METALS.

PROVIDE WATERPROOFING MEMBRANE OVER PROTECTIVE BOARD AT ALL WALLS EXPOSED TO EARTH.

ALL PIPING AND CONDUIT UNDER SLAB SHALL BE A MINIMUM OF 2'-0" CLEAR OF UNDERSIDE OF FOOTING.

ALL FINAL SURFACE GRADING SHALL BE COMPLETED TO FACILITATE POSITIVE DRAINAGE AWAY FROM THE BUILDING UNLESS NOTED OTHERWISE.

PROVIDE AND INSTALL INSULATION AT EXTERIOR WALLS, ROOF, FLOOR LOCATIONS AS SHOWN, SPECIFIED AND IN ACCORDANCE WITH WASHINGTON STATE ENERGY CODE.

WATER PIPES TO BE INSULATED IN ALL UNHEATED AREAS.

INSULATE ALL ROUGH-IN PLUMBING IN WALLS, FLOORS, AND CEILINGS FOR SOUND TRANSMISSION.

## GENERAL INFORMATION

|                     |   |
|---------------------|---|
| PROJECT ADDRESS     | 9831 SE 42ND PL<br>MERCER ISLAND, WA 98040  |
| PROJECT NUMBER      | T80   |
| ASSESSOR'S PARCEL # | 777670-0035   |
| LEGAL DESCRIPTION   | LOT 7 OF SHORERIDGE ADDITION, ACCORDING TO THE PLAT RECORDED IN VOLUME 49 OF PLATS ON PAGE 2, RECORDS OF KING COUNTY, WASHINGTON, TOGETHER WITH THE SHORELANDS ADJOINING; |
| PROJECT DESCRIPTION | DEMOLITION OF AN EXISTING SINGLE FAMILY RESIDENCE AND NEW CONSTRUCTION OF A SINGLE FAMILY RESIDENCE   |
| ZONE                | R-15  |
| BUILDING TYPE       | SINGLE FAMILY RESIDENCE   |

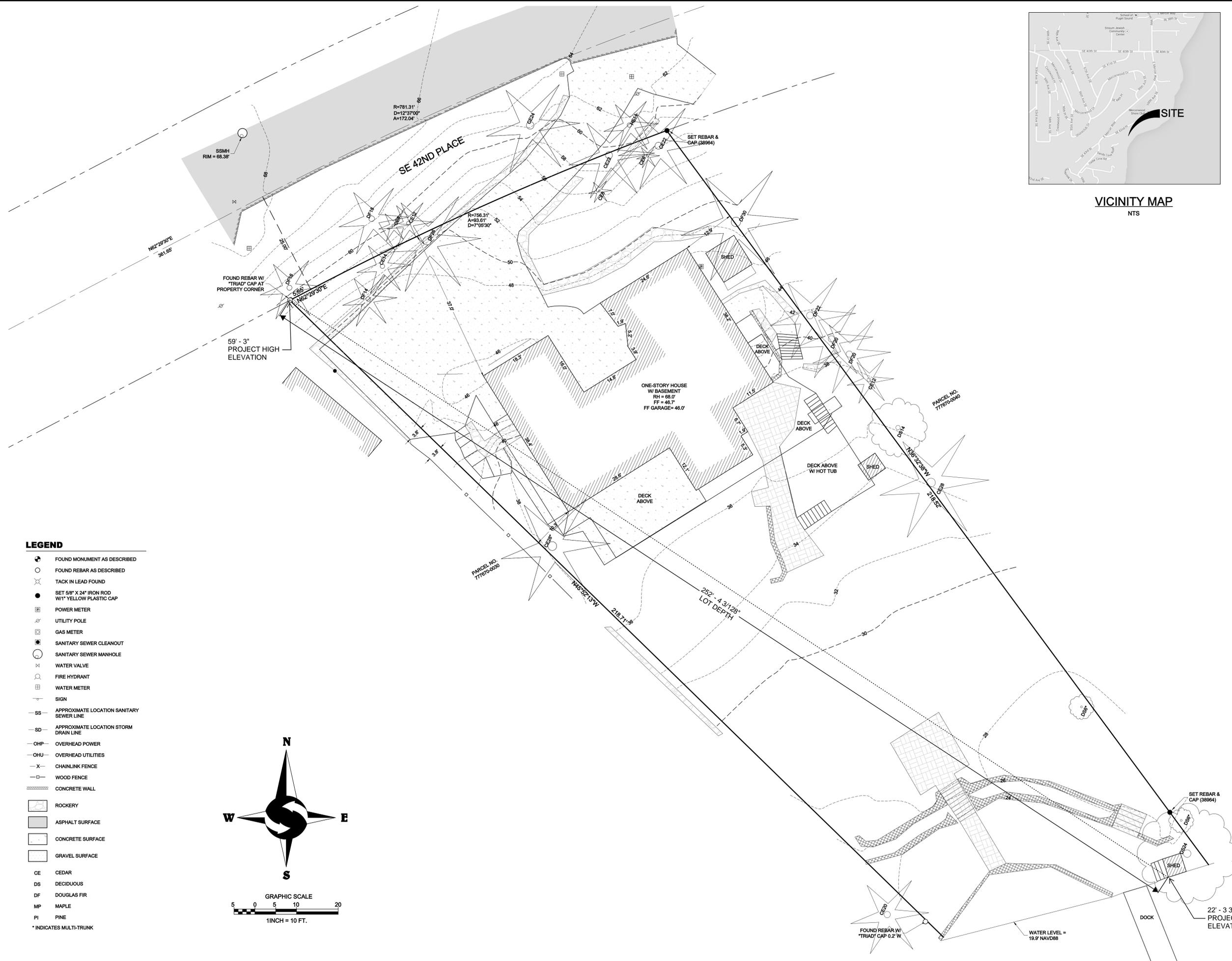
## PROJECT DATA

|   |  |
|---|--|
| <b>EXISTING LOT AREA SUMMARY</b>  |  |
| GROSS LOT AREA  | 16,953 SF  |
| ACCESS EASEMENTS  | 0 SF   |
| NET LOT AREA  | 16,953 SF  |
| LOT SLOPE   | 36.94 / 252.34 = 14.6%                                   |
| <b>OCCUPANCY SUMMARY</b>  |  |
| EXISTING TYPE   | R-3  |
| OCCUPANT LOAD   | SINGLE FAMILY  |
| <b>SETBACKS</b>   |  |
| SIDE YARD (PER 19.02.020.C.1.c.)  | 15'  |
| MINIMUM:  | 5'   |
| FRONT YARD  | 20'  |
| SHORELINE   | 25' FROM ORDINARY HIGH WATER MARK                        |
| <b>TREE REMOVAL</b>   |  |
| (E) TREES TO BE REMOVED   | 3  |
| (N) TREES TO BE PLANTED AS REPLACEMENT  | 6  |
| <b>EXISTING LOT COVERAGE</b>  |  |
| (E) RESIDENCE, GARAGE, AND OVERHANGS  | 2,684.80 SF  |
| (E) DRIVING SURFACES  | 1,855.63 SF  |
| (E) SHEDS   | 180.52 SF  |
| <b>(E) TOTAL LOT COVERAGE</b>   | <b>4,720.95 SF = 27.9 % OF LOT AREA</b>                  |
| <b>PROPOSED LOT COVERAGE</b>  |  |
| (N) RESIDENCE, GARAGE, AND OVERHANGS  | 4,533.06 SF  |
| (N) DRIVING SURFACES  | 2,024.82 SF  |
| (E) SHEDS TO REMAIN   | 203.52 SF  |
| <b>(N) TOTAL LOT COVERAGE</b>   | <b>6,578.40 SF = 38.8 % OF LOT AREA</b>                  |
| <b>ALLOWABLE LOT COVERAGE</b>   |  |
| 40% OF LOT AREA BASED ON LOT SLOPE, PER 19.02.020.F.3.g.  | 16,953 SF * 0.40 = 6,781.20 SF                           |
| <b>EXISTING HARDSCAPE</b>   |  |
| STAIRS  | 329.91 SF  |
| DECKS   | 964.04 SF  |
| PATIOS / WALKWAYS   | 603.63 SF  |
| GRAVEL AREAS  | 117.11 SF  |
| ROCKERIES   | 369.70 SF  |
| SITE WALLS  | 274.49 SF  |
| <b>TOTAL EXISTING</b>   | <b>2,658.88 SF = 15.7 % OF LOT AREA</b>                  |
| <b>DEMOLISHED HARDSCAPE</b>   |  |
| STAIRS  | 162.13 SF  |
| DECKS   | 964.04 SF  |
| PATIOS / WALKWAYS   | 397.33 SF  |
| GRAVEL AREAS  | 117.11 SF  |
| ROCKERIES   | 234.11 SF  |
| SITE WALLS  | 37.39 SF   |
| <b>TOTAL DEMOLISHED</b>   | <b>1,912.11 SF</b>                                       |
| <b>PROPOSED HARDSCAPE</b>   |  |
| (E) HARDSCAPE TO REMAIN   |  |
| STAIRS  | 167.78 SF  |
| PATIOS / WALKWAYS   | 206.30 SF  |
| ROCKERIES   | 135.59 SF  |
| SITE WALLS  | 237.10 SF  |
| TOTAL REMAIN  | 746.77 SF  |
| (N) ADDED HARDSCAPE   |  |
| STAIRS  | 170.33 SF  |
| DECKS   | 82.50 SF   |
| PATIOS / WALKWAYS   | 246.93 SF  |
| SITE WALLS  | 97.59 SF   |
| TOTAL ADDED   | 597.35 SF  |
| <b>TOTAL HARDSCAPE</b>  | <b>(746.77+597.35) = 1,344.12 SF = 7.9 % OF LOT AREA</b> |
| <b>ALLOWABLE HARDSCAPE</b>  |  |
| 9% OF LOT AREA  | 16,953 SF * 0.09 = 1,525.77 SF                           |
| PER 19.02.020.F.3.b.ii., HARDSCAPE IMPROVEMENTS ARE PERMITTED IN THE MAXIMUM LOT COVERAGE AREA  |  |
| REMAINING LOT COVERAGE  | 6,781.20 SF - 6,578.40 SF = 202.80 SF                    |
| TOTAL ALLOWABLE HARDSCAPE   | 1,525.77 SF + 202.80 SF = 1,728.57 SF                    |
| <b>EXISTING BUILDING AREA SUMMARY (GFA) (PER KING COUNTY ASSESSOR)</b>  |  |
| (E) BASEMENT LEVEL  | 1,330 SF   |
| (E) MAIN LEVEL  | 1,810 SF   |
| (E) UPPER LEVEL   | 650 SF   |
| (E) ATTACHED GARAGE   | 390 SF   |
| TOTAL EXISTING BUILDING AREA (GSF)  | 4,110 SF   |
| <b>EXISTING FLOOR AREA RATIO:</b>   | <b>4,110 / 16,953 = 24.2 % OF LOT AREA</b>               |
| <b>PROPOSED BUILDING AREA SUMMARY (GFA)</b>   |  |
| PROPOSED BASEMENT LEVEL   | 1,546.75 SF  |
| PROPOSED MAIN LEVEL   | 2,140.67 SF  |
| (EXCLUDES STAIR PER MICC 19.02.020.D.2.c.)  |  |
| PROPOSED MAIN LEVEL COVERED DECK  | 251.62 SF  |
| (PER MICC CHAPTER 19.16.010.G.1.a.)   |  |
| PROPOSED UPPER LEVEL  | 1,704.17 SF  |
| PROPOSED UPPER LEVEL COVERED DECK   | 17.31 SF   |
| PROPOSED ATTACHED GARAGES   | 1,096.62 SF  |
| TOTAL PROPOSED BUILDING AREA (GSF)  | 6,757.14 SF  |
| <b>PROPOSED FLOOR AREA RATIO:</b>   | <b>6,757.14 / 16,953 = 39.9 % OF LOT AREA</b>            |
| 40% ALLOWABLE GROSS FLOOR AREA:   | 16,953 SF x 0.40 = 6,781 SF                              |
| <b>ENERGY CODE SUMMARY (2018 WSEC, RESIDENTIAL PROVISIONS)</b>  |  |
| CLIMATE ZONE: 4C PER TABLE R301.1   |  |
| PROJECT CONSIDERED A MEDIUM DWELLING UNIT PER R404.3 (4,997.27 SF OF CONDITIONED FLOOR AREA)  |  |
| 403.B.5.1 OF THE INTERNATIONAL MECHANICAL CODE.   |  |
| OPTIONAL COMPLIANCE BASED ON SECTION R402.4.1.2, REDUCE THE TESTED AIR LEAKAGE TO 0.3 CMF/SF MAXIMUM AT 50 PASCALS AND ALL WHOLE HOUSE VENTILATION REQUIREMENTS AS DETERMINED BY SECTION M1507.3 OF THE INTERNATIONAL RESIDENTIAL CODE SECTION 403.8 OF THE INTERNATIONAL CODE MECHANICAL CODE SHALL BE MET WITH HIGH EFFICIENCY FAN(S) (MAXIMUM 0.35 WATTS/CFM); NOT INTERLOCKED WITH THE FURNACE FAN (IF PRESENT). VENTILATION SYSTEM USING A FURNACE INCLUDING AN ECM MOTOR ARE ALLOWED, PROVIDED THAT THEY ARE CONTROLLED TO OPERATE AT LOW SPEED IN VENTILATION ONLY MODE.   |  |
| PRESCRIPTIVE THERMAL ENVELOPE PER TABLE R402.1.1 (WITH ADJUSTMENTS PER EFFICIENT ENVELOPE OPT. 1.3)   |  |
| FENESTRATION U-FACTOR (VERTICAL):   | 0.28   |
| SKYLIGHT U-FACTOR (OVERHEAD):   | 0.50   |
| CEILING:  | R-49   |
| VAULTED CEILING:  | R-38   |
| WALL ABOVE GRADE:   | R-21   |
| WALL BELOW GRADE (INT.):  | R-21 (INT.) OR R-10 (EXT.)                               |
| FLOOR ABOVE GRADE:  | R-38   |
| SLAB ON GRADE @ BASEMENT:   | R-10 PERIMETER AND UNDER ENTIRE SLAB                     |
| <b>HEATING</b>  |  |
| INSTALLED PER INTERNATIONAL MECHANICAL CODE. WORK TO BE COMPLETED UNDER A SEPARATE PERMIT.  |  |
| <b>VENTILATION</b>  |  |
| FANS ON TIMERS, PER PLANS. VOLUME OF REQUIRED OUTDOOR VENTILATION AIR TO BE PROVIDED BASED ON TABLE 403.B.5.1 OF THE INTERNATIONAL MECHANICAL CODE.   |  |
| * PLUMBING, MECHANICAL, ELECTRICAL WORK TO BE PERMITTED SEPARATELY.   |  |
| SEE SHEET G001 FOR VENTILATION & ENERGY CALCULATIONS.   |  |
| <b>FIRE DEPARTMENT NOTES</b>  |  |
| PROJECT TO BE EQUIPPED WITH A NFPA-13D FIRE SPRINKLER SYSTEM.   |  |
| PROJECT TO BE EQUIPPED WITH A NFPA-72 HOUSEHOLD MONITORED SMOKE ALARM SYSTEM.   |  |
| PROJECT TO HAVE 5/8" TYPE X GYPSUM WALL BOARD AT GARAGE WALLS AND CEILING.  |  |
| PROJECT TO HAVE SELF CLOSING, RATED FIRE DOOR FROM GARAGE TO RESIDENCE.   |  |
| PROJECT TO USE SOLID CORE DOORS THROUGHOUT.   |  |
| <b>EFFICIENT BUILDING ENVELOPE (OPTION 1.3 - 0.5)</b>   |  |
| COMPLIANCE WITH THE CONDUCTIVE UA TARGETS IS DEMONSTRATED USING SECTION R402.1.1.   |  |
| PRESCRIPTIVE COMPLIANCE IS BASED ON TABLE R402.1.1 WITH THE FOLLOWING MODIFICATIONS:  |  |
| VENTILATION U = 0.28, FLOOR R-38  |  |
| SLAB ON GRADE R-10 PERIMETER AND UNDER ENTIRE SLAB BELOW GRADE SLAB R-10 PERIMETER AND UNDER ENTIRE SLAB OR COMPLIANCE BASED ON SECTION R402.1.4. REDUCE THE TOTAL CONDUCTIVE UA BY 5%.   |  |
| <b>AIR LEAKAGE CONTROL AND EFFICIENT VENTILATION (OPTION 2.1 - 0.5 CREDITS)</b>   |  |
| COMPLIANCE BASED ON R402.4.1.2: REDUCE THE TESTED AIR LEAKAGE TO 3.0 AIR CHANGES PER HOUR MAXIMUM AT 50 PASCALS OR FOR R-2 OCCUPANCIES. OPTIONAL COMPLIANCE BASED ON SECTION R402.4.1.2: REDUCE THE TESTED AIR LEAKAGE TO 0.3 CMF/SF MAXIMUM AT 50 PASCALS AND ALL WHOLE HOUSE VENTILATION REQUIREMENTS AS DETERMINED BY SECTION M1507.3 OF THE INTERNATIONAL RESIDENTIAL CODE SECTION 403.8 OF THE INTERNATIONAL CODE MECHANICAL CODE SHALL BE MET WITH HIGH EFFICIENCY FAN(S) (MAXIMUM 0.35 WATTS/CFM); NOT INTERLOCKED WITH THE FURNACE FAN (IF PRESENT). VENTILATION SYSTEM USING A FURNACE INCLUDING AN ECM MOTOR ARE ALLOWED, PROVIDED THAT THEY ARE CONTROLLED TO OPERATE AT LOW SPEED IN VENTILATION ONLY MODE. |  |
| <b>HIGH EFFICIENCY HVAC EQUIPMENT (OPTION 3.3 - 1.5 CREDITS)</b>  |  |
| CLOSED-LOOP GROUND SOURCE HEAT PUMP, WITH A MINIMUM COP OF 3.3 OR OPEN LOOP WATER SOURCE HEAT PUMP WITH A MAXIMUM PUMPING HYDRAULIC HEAD OF 150 FEET AND MINIMUM COP OF 3.6.  |  |
| <b>HIGH EFFICIENCY HVAC DISTRIBUTION SYSTEM (OPTION 4.2 - 1.0 CREDITS)</b>  |  |
| HVAC EQUIPMENT AND ASSOCIATED DUCT SYSTEM(S) INSTALLATION SHALL COMPLY WITH THE REQUIREMENTS OF SECTION R403.3.7. LOCATING SYSTEM COMPONENTS IN CONDITIONED CRAWL SPACES IS NOT PERMITTED UNDER THIS OPTION. ELECTRIC RESISTANCE HEAT AND DUCTLESS HEAT PUMPS ARE NOT PERMITTED UNDER THIS OPTION. DIRECT COMBUSTION HEATING EQUIPMENT WITH AFUE LESS THAN 80% IS NOT PERMITTED UNDER THIS OPTION.  |  |

## PROJECT DIRECTORY

|                              |   |
|------------------------------|---|
| <b>OWNER</b>                 | SHARON & DZON NGUYEN<br>9831 SE 42ND PL.,<br>MERCER ISLAND, WA 98040  |
| <b>ARCHITECT</b>             | COLIN BRANDT<br>BRANDT DESIGN GROUP<br>66 BELL ST., UNIT 1<br>SEATTLE, WA 98121<br>206.239.0850<br>colin@brandtdesigninc.com              |
| <b>OWNER'S AGENT/CONTACT</b> | BREE MEDLEY<br>BRANDT DESIGN GROUP<br>66 BELL ST., UNIT 1<br>SEATTLE, WA 98121<br>206.239.0850 ext. 0012<br>bree@brandtdesigninc.com      |
| <b>GENERAL CONTRACTOR</b>    | ED KOROLAK<br>WOODLAND HOMES<br>18835 SE 134TH PL<br>RENTON, WA 98059<br>206.713.8288<br>woodlandhomes@comcast.net                        |
| <b>STRUCTURAL ENGINEER</b>   | BRETT MOZDEN<br>SWENSON SAY FAGET<br>2124 THIRD AVENUE, SUITE 100<br>SEATTLE, WA 98121<br>206.443.6212<br>bmozden@sfsngineers.com         |
| <b>CIVIL ENGINEER</b>        | DUFFY ELLIS<br>CIVIL ENGINEERING SOLUTIONS<br>102 NW CANAL ST<br>SEATTLE, WA 98107<br>206.930.0342<br>duffy@esolutions.us                 |
| <b>GEOTECHNICAL ENGINEER</b> | MARC MCGINNIS<br>GETOCH CONSULTANTS, INC.<br>2401 10TH AVENUE EAST<br>SEATTLE, WA 98102<br>425.260.1116<br>mcm@getotech.com               |
| <b>ARBORIST</b>              | JOHN HUSHAGEN<br>SEATTLE ARBORICULTURAL ASSOCIATES<br>18032 17TH AVE NW<br>SHORELINE, WA 98177<br>206.510.4107<br>hushagenjohnd@gmail.com |
| <b>SURVEYOR</b>              | THOMAS WOLDENDORP<br>SITE SURVEYING, INC.<br>21923 NE 11TH STREET<br>SAMMAMISH, WA 9  |

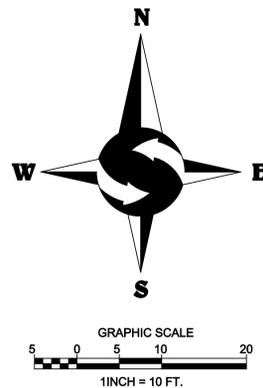




VICINITY MAP  
NTS

**LEGEND**

- FOUND MONUMENT AS DESCRIBED
- FOUND REBAR AS DESCRIBED
- TACK IN LEAD FOUND
- SET 5/8" X 24" IRON ROD W/1" YELLOW PLASTIC CAP
- POWER METER
- UTILITY POLE
- GAS METER
- SANITARY SEWER CLEANOUT
- SANITARY SEWER MANHOLE
- WATER VALVE
- FIRE HYDRANT
- WATER METER
- SIGN
- APPROXIMATE LOCATION SANITARY SEWER LINE
- APPROXIMATE LOCATION STORM DRAIN LINE
- OHP - OVERHEAD POWER
- OHU - OVERHEAD UTILITIES
- CHAINLINK FENCE
- WOOD FENCE
- CONCRETE WALL
- ROCKERY
- ASPHALT SURFACE
- CONCRETE SURFACE
- GRAVEL SURFACE
- CE CEDAR
- DS DECIDUOUS
- DF DOUGLAS FIR
- MP MAPLE
- PI PINE
- \* INDICATES MULTI-TRUNK



SE 1/4, NE 1/4, SEC 18, TWP 24N, RNG 5E, W.M.



**TOPOGRAPHIC SURVEY**

SHARON NGUYEN  
9831 SE 42ND PLACE  
MERCER ISLAND, WA 98040

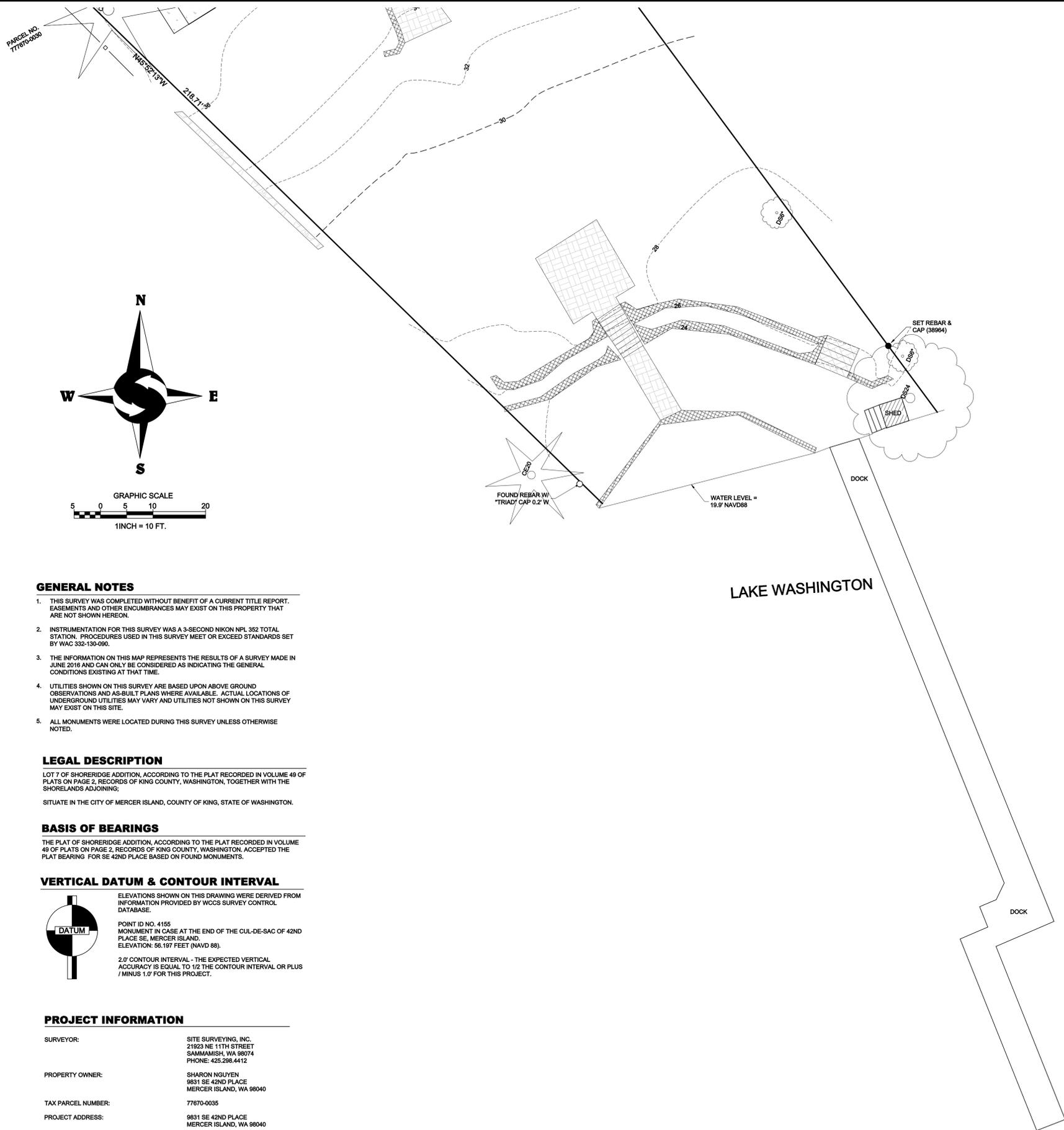
PROJECT NO. 16-207

DRAWN BY: EFJ  
CHECKED BY: TNW  
DATE: 6/20/16

SHEET 1 OF 2

| DATE | REVISION | DRN |
|------|----------|-----|
|      |          |     |
|      |          |     |
|      |          |     |
|      |          |     |
|      |          |     |

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VICINITY MAP  
NTS

**GENERAL NOTES**

1. THIS SURVEY WAS COMPLETED WITHOUT BENEFIT OF A CURRENT TITLE REPORT. EASEMENTS AND OTHER ENCUMBRANCES MAY EXIST ON THIS PROPERTY THAT ARE NOT SHOWN HEREON.
2. INSTRUMENTATION FOR THIS SURVEY WAS A 3-SECOND NIKON NPL 352 TOTAL STATION. PROCEDURES USED IN THIS SURVEY MEET OR EXCEED STANDARDS SET BY WAC 332-130-090.
3. THE INFORMATION ON THIS MAP REPRESENTS THE RESULTS OF A SURVEY MADE IN JUNE 2016 AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME.
4. UTILITIES SHOWN ON THIS SURVEY ARE BASED UPON ABOVE GROUND OBSERVATIONS AND AS-BUILT PLANS WHERE AVAILABLE. ACTUAL LOCATIONS OF UNDERGROUND UTILITIES MAY VARY AND UTILITIES NOT SHOWN ON THIS SURVEY MAY EXIST ON THIS SITE.
5. ALL MONUMENTS WERE LOCATED DURING THIS SURVEY UNLESS OTHERWISE NOTED.

**LEGAL DESCRIPTION**

LOT 7 OF SHORERIDGE ADDITION, ACCORDING TO THE PLAT RECORDED IN VOLUME 49 OF PLATS ON PAGE 2, RECORDS OF KING COUNTY, WASHINGTON, TOGETHER WITH THE SHORELANDS ADJOINING;  
SITUATE IN THE CITY OF MERCER ISLAND, COUNTY OF KING, STATE OF WASHINGTON.

**BASIS OF BEARINGS**

THE PLAT OF SHORERIDGE ADDITION, ACCORDING TO THE PLAT RECORDED IN VOLUME 49 OF PLATS ON PAGE 2, RECORDS OF KING COUNTY, WASHINGTON, ACCEPTED THE PLAT BEARING FOR SE 42ND PLACE BASED ON FOUND MONUMENTS.

**VERTICAL DATUM & CONTOUR INTERVAL**



ELEVATIONS SHOWN ON THIS DRAWING WERE DERIVED FROM INFORMATION PROVIDED BY WCCS SURVEY CONTROL DATABASE.

POINT ID NO. 4155  
MONUMENT IN CASE AT THE END OF THE CUL-DE-SAC OF 42ND PLACE SE, MERCER ISLAND.  
ELEVATION: 56.197 FEET (NAVD 88).

2.0' CONTOUR INTERVAL - THE EXPECTED VERTICAL ACCURACY IS EQUAL TO 1/2 THE CONTOUR INTERVAL OR PLUS / MINUS 1.0' FOR THIS PROJECT.

**PROJECT INFORMATION**

|                    |  |
|--------------------|--|
| SURVEYOR:          | SITE SURVEYING, INC.<br>21923 NE 11TH STREET<br>SAMMAMISH, WA 98074<br>PHONE: 425.286.4412 |
| PROPERTY OWNER:    | SHARON NGUYEN<br>9831 SE 42ND PLACE<br>MERCER ISLAND, WA 98040                             |
| TAX PARCEL NUMBER: | 777670-0035  |
| PROJECT ADDRESS:   | 9831 SE 42ND PLACE<br>MERCER ISLAND, WA 98040  |
| ZONING:            | R15  |
| JURISDICTION:      | CITY OF MERCER ISLAND  |
| PARCEL ACREAGE:    | 16,953 S.F. (± 0.389 ACRES)<br>UPLAND AS SURVEYED  |



**TOPOGRAPHIC SURVEY**  
SHARON NGUYEN  
9831 SE 42ND PLACE  
MERCER ISLAND, WA 98040

| DATE | REVISION | DRN |
|------|----------|-----|
|      |          |     |
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|             |         |
|-------------|---------|
| PROJECT NO. | 16-207  |
| DRAWN BY:   | EFJ     |
| CHECKED BY: | TNW     |
| DATE:       | 6/20/16 |
| SHEET       | 2 OF 2  |

ORGANIC SOIL REQUIREMENT

**MINIMUM 10% ORGANIC MULCH & COMPOST SOIL REQUIRED**

SOIL INSPECTION REQUIRED BY ENGINEER

A POST CONSTRUCTION INSPECTION & CERTIFICATION OF AMENDED SOILS IS REQUIRED BY A LICENSED CIVIL ENGINEER. THIS IS REQUIRED BEFORE FINAL SIGN-OFF BY CITY.

TREE INVENTORY TABLE

SEE C1.1

EROSION CONTROL LEGEND

|   |      |               |
|---|------|---------------|
| FILTER FABRIC FENCE (SILT FENCE)                                | (SF) | X — X         |
| STABILIZED CONSTRUCTION ENTRANCE                                | (CE) | [Pattern]     |
| CATCH BASIN INLET PROTECTION                                    | (IP) | □             |
| INTERCEPTOR SWALE<br>SEE COR DWG 504,<br>TYPE A TEMPORARY SWALE | (IS) | ← — ←         |
| TREE PROTECTION FENCING   | (TP) | — ○ —         |
| CHECK DAM   | (CD) | [Symbol]      |
| STRAW WATTLES   | (SW) | [Symbol]      |
|   |      | USE AS NEEDED |

LEGAL DESCRIPTION

LOT 7 OF SHORERIDGE ADDITION, ACCORDING TO THE PLAT RECORDED IN VOLUME 49 OF PLATS ON PAGE 2, RECORDS OF KING COUNTY, WASHINGTON, TOGETHER WITH THE SHORELANDS ADJOINING;

SITUATE IN THE CITY OF MERCER ISLAND, COUNTY OF KING, STATE OF WASHINGTON.

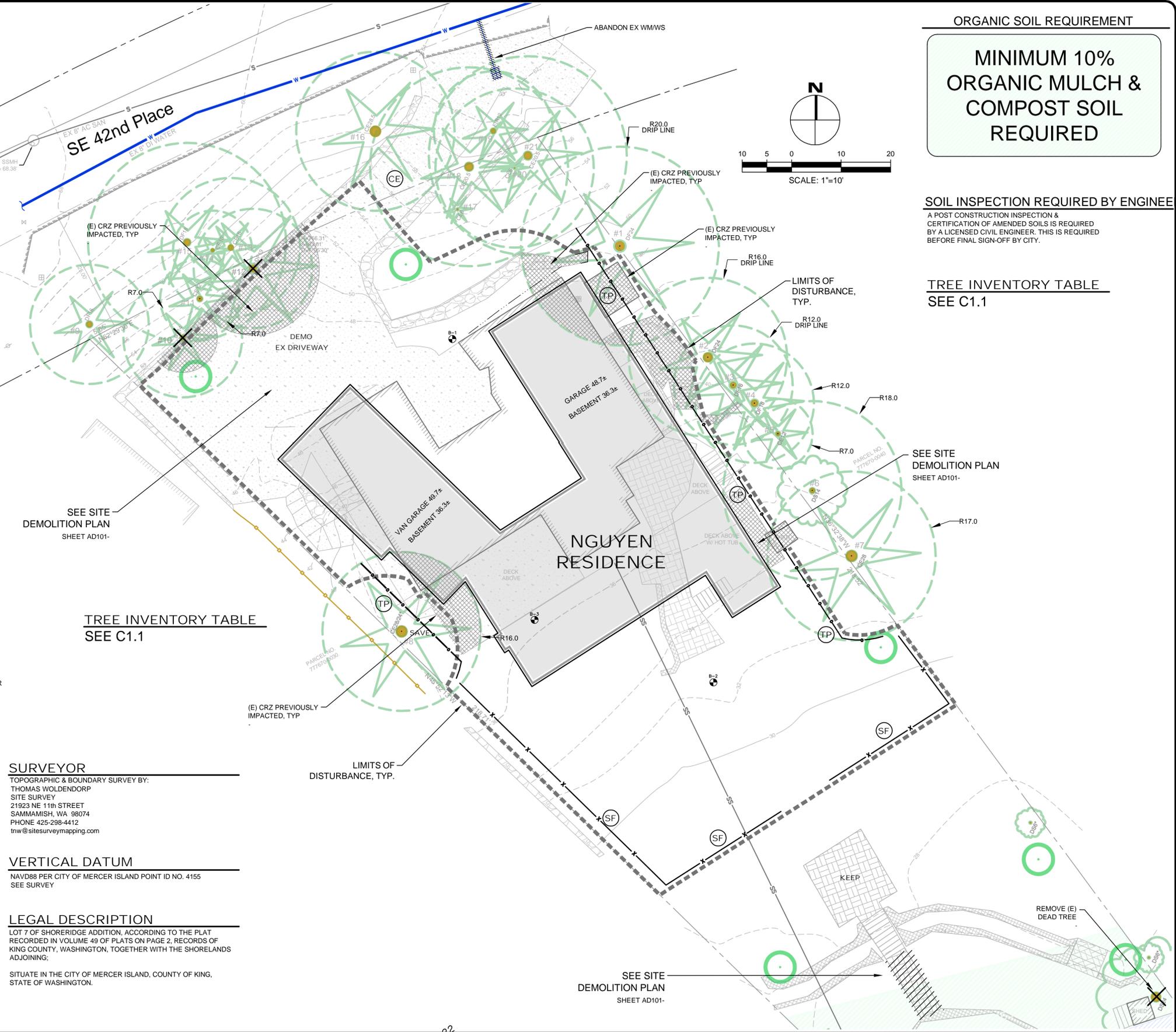
ARBORIST REPORT

SEE REPORT BY JOHN HUSHAGEN, CONSULTING ARBORIST, SEATTLE ARBORICULTURAL ASSOCIATES, MARCH 22, 2021

ARBORIST RECOMMENDATIONS

- FOR THE TREES BEING RETAINED, TREE PROTECTION FENCING SHOULD BE INSTALLED AT THE OUTER EDGE OF THE DRIP LINE OR AS CLOSE TO IT AS IS PRACTICALLY POSSIBLE.
- FENCING SHOULD BE INSTALLED PRIOR TO CONSTRUCTION ACTIVITIES AND REMAIN IN PLACE FOR THE DURATION OF THE PROJECT. FENCING SHOULD ONLY BE MOVED TEMPORARILY IF MINOR DISTURBANCES MUST OCCUR WITHIN THE DRIP LINE AND THE FENCING SHOULD BE REPLACED IMMEDIATELY ONCE THAT PORTION OF THE WORK IS COMPLETED.
- THE TREE PROTECTION AREA IS DESIGNATED TO BE AN AREA OF NO IMPACT, NO STORING OF MATERIALS, NO ENCROACHMENT AND NO STAGING OF DEBRIS.
- THE TREE PROTECTION FENCING SHOULD HAVE SIGNS EVERY 8' FACING ACCESS THAT INDICATE THE AREA IS A TREE PROTECTION ZONE.
- TRENCHING THROUGH THE CRZ FOR UTILITIES IS NOT PERMITTED (TUNNELING IS THE PREFERRED METHOD).
- GRADE CHANGES IN THE CRZ ARE NOT PERMITTED.
- VEHICLE MAINTENANCE AND WASHING OF EQUIPMENT (ESPECIALLY CONCRETE), IS NOT PERMITTED.
- NO ATTACHING ANYTHING TO THE TREE WITH CINCHING KNOTS OR HARDWARE.
- ROOT FLARE SHOULD BE PROTECTED WITH CHIPS SO THAT LAWN MAINTENANCE EQUIPMENT DOES NOT HAVE TO WORK CLOSE TO THE SYSTEM.
- PROPER CLEARANCES SHOULD BE MONITORED.
- THE CRZ OR CRITICAL ROOT ZONE NEEDS TO BE PROTECTED. THE INNER CRZ IS 50% OF THE RADIUS OF THE CRZ AND THERE SHOULD BE ZERO DISTURBANCE IN THIS ZONE. A DISTURBANCE OF UP TO 35% OF THE OUTER CRZ IS PERMISSIBLE PROVIDED THAT ANY HEAVY DIGGING EQUIPMENT WORKS TOWARD THE TREE, AND THAT ANY ROOTS ENCOUNTERED THAT ARE OVER 1" IN DIAMETER ARE EXCAVATED AROUND WITH HAND TOOLS AND CUT CLEAN WITH A SHARP SAW BEHIND THE EXCAVATION ZONE SO THAT THE ROOT CAN BIFURGATE AND CONTINUE TO GROW. IN SOME CASES, IF EXCESSIVE PRUNING HAS BEEN DONE, THE CRZ CAN BE LARGER THAN THE DRIP LINE RADIUS.

(TP) .....CHAIN LINK FENCE REQ FOR TREE PROTECTION



TREE INVENTORY TABLE  
SEE C1.1

**SURVEYOR**  
TOPOGRAPHIC & BOUNDARY SURVEY BY:  
THOMAS WOLDENDORP  
SITE SURVEY  
21923 NE 11th STREET  
SAMMAMISH, WA 98074  
PHONE 425-298-4412  
tw@sitesurveymapping.com

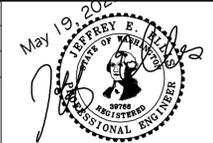
**VERTICAL DATUM**  
NAVD88 PER CITY OF MERCER ISLAND POINT ID NO. 4155  
SEE SURVEY

**LEGAL DESCRIPTION**  
LOT 7 OF SHORERIDGE ADDITION, ACCORDING TO THE PLAT RECORDED IN VOLUME 49 OF PLATS ON PAGE 2, RECORDS OF KING COUNTY, WASHINGTON, TOGETHER WITH THE SHORELANDS ADJOINING;  
SITUATE IN THE CITY OF MERCER ISLAND, COUNTY OF KING, STATE OF WASHINGTON.

| NO. | DATE | BY | REVISIONS |
|-----|------|----|-----------|
|     |      |    |           |

APPLICANT  
SHARON AND DZON NGUYEN  
9831 SE 42nd PLACE  
MERCER ISLAND, WA 98040

DATE: May 19, 2022  
JOB# 2031  
DRAFTED: SS DESIGN: SS  
DIGITAL SIGNATURE



**CIVIL ENGINEERING SOLUTIONS**  
102 NW CANAL STREET SEATTLE, WA 98107  
PHONE: 206.930.0342 DUFFY@CESOLUTIONS.US

**EROSION CONTROL & TREE RETENTION PLAN**  
NGUYEN RESIDENCE  
9831 SE 42nd PLACE, MERCER ISLAND, WA 98040

DRAWING NO:  
**C1.0**  
APN 531510-0110

## TREE REPLACEMENT

### TREE REPLACEMENT REQUIREMENTS:

Replacement conifer trees shall be 6-8 feet tall, each with a single, straight trunk without defect or deformity. Each tree shall have even branch distribution around and along the trunk's axis, with a minimum 90% live crown ratio (percent of trunk with foliage-bearing branches).  
Deciduous trees shall be minimum 2" caliper, a trunk free from defect or injury, even and uniform branch distribution, and a LCR of 30% or greater.

The trees shall have foliage that is normal in color and density, and shoot growth evident of good tree vitality. Tree planting activities shall comply with ANSI A-300 Part 6: Tree, Shrub, and Other Woody Plant Maintenance - Standard Practice (Transplanting). And shall follow ISAs Best Management Practices - Tree Planting (2005).

Rootballs shall be set on undisturbed or packed soil to prevent sinking, and the root crowns shall be exposed prior to planting and set level with finished grade. All wires, cords and burlap shall be removed at planting. If staking is required to keep the tree upright during establishment, all cores, stakes and wires shall be removed after one year. See replacement legend for tree species.

### TREE PROTECTION MEASURES AROUND RETAINED TREES

Prior to site clearing or demolition, minimum six (6) foot temporary chain-link fence shall be installed at the driplines of all retained trees, or at the limits of disturbance, when construction or access is required within the dripline. Fence shall completely encircle the retained trees. Install fence posts using pier block only. A City planner must approve any modifications to the fencing material and location. Fencing must be in accordance with the tree protection standards as outlined in KZC 95.34.

No stockpiling of materials, vehicular or pedestrian traffic, material storage or use of equipment or machinery shall be allowed within the protective fencing. Fencing shall not be moved or removed unless approved by a City planner. Any work, activity or soil disturbance within the protection fencing, or critical root zone, shall be reviewed, approved and monitored by the project arborist.

Protection guidelines be implemented on this project.

1. Root Zone Mulching: I recommend that prior to beginning demolition; enough arborist wood chips be brought in to cover the South areas of the drip line radius or CRZ of Trees #1-7 by 4-5". Available CRZ areas to East and North of Tree #8 should also be mulched. The purpose of mulching is to cool the soil, preserve the moisture and protect the roots. It will not be necessary to add mulch to the CRZ areas near Trees #9-20.

2. Root Zone Fencing: Simultaneously with mulching, a 6' tall, moveable chain link fence should be installed at the outer edge of the drip line radius of CRZ. The purpose of the fencing is to create a NO GO ZONE where no construction materials may be stored or equipment staged. Trees #1-8 and #9-16 should be fenced off in this way.

3. Excavation: During excavation, if roots of protected trees that are 3" diameter or greater are encountered, they should be cut cleanly to the edge of the trench and not ripped from the ground.

4. Irrigation: Providing extra water to the root zones of trees is the MOST CRITICAL factor in preserving trees during and after construction. If the project takes place during the growing season, I recommend that all available CRZ areas receive, either from rainfall or supplemental irrigation, the equivalent of 1" of water per week from at least MAY 1 - SEPTEMBER 30. This watering program should continue for TWO YEARS following completion of the project.

Fencing signage as detailed (see attached) must be posted every fifteen (15) feet along the fencing.

Tree Protection Signage must include the following language:

### WARNING TREE PROTECTION ZONE (TPZ)

This fence shall not be removed/moved from the approved location without written authorization from the City Arborist and supervision by the Project Arborist.

No pruning shall be performed unless under the direction of a Project Arborist.

No grading, excavation, storage (materials, equipment, vehicles, etc.), or other unpermitted activity shall occur inside the protective fencing.

Unauthorized activities in tree protection areas may require immediate evaluation by the Project Arborist to identify impacts and potential mitigation.

Penalties for damaging or removing a saved tree may be a fine up to three times the value of the tree plus restoration (MICC 19.10.160).

Any work in approved TPZ must be with the permission of the City Arborist (206) 275-7713, john.kennedy@mercergov.org.

Per MICC 19.02.020(F)(3)(d), the project shall remove Japanese knotweed (*Polygonum cuspidatum*) and Regulated Class A, Regulated Class B, and Regulated Class C weeds identified on the King County Noxious Weed list, as amended, from required landscaping areas established pursuant to subsection (F)(3)(a) of this section. New landscaping associated with new single-family home shall not incorporate any weeds identified on the King County Noxious Weed list, as amended. Provided, that removal shall not be required if the removal will result in increased slope instability or risk of landslide or erosion.

## TREE RETENTION CALCULATION

### TREE RETENTION CALCULATION

8 ONSITE TREES

30% RETENTION REQUIRED = (2.4) 3 TREES

PROPOSED REMOVAL = 3 TREES

PROPOSED RETAINAGE = 5 TREES (> 3 REQUIRED)

## TREE INVENTORY TABLE

| TREE # | OFFSITE | REMAIN | REMOVED | LARGE/REGULATED >10" | SIZE EXCEPTIONAL >24" | SIZE EXCEPTIONAL .36" | DBH (INCHES) | SPECIES           | UNIMPACTED ROOT ZONE (SF) | PROPOSED IMPACT (SF) | HEALTH  | COMMENT                 | REPLACEMENT |
|--------|---------|--------|---------|----------------------|-----------------------|-----------------------|--------------|-------------------|---------------------------|----------------------|---------|-------------------------|-------------|
| 1      |         | X      |         | X                    | X                     |                       | 24"          | DOUGLAS FIR       | 1,012                     | 90                   | GOOD    |                         |             |
| 2      | X       | X      |         | X                    | X                     |                       | 24"          | DOUGLAS FIR       | 694                       | 48                   | GOOD    |                         |             |
| 3      | X       | X      |         | X                    |                       |                       | 16"          | DOUGLAS FIR       | 452                       | 0                    | GOOD    | NO PROPOSED IMPACT      |             |
| 4      | X       | X      |         | X                    |                       |                       | 18"          | DOUGLAS FIR       | 439                       | 0                    | GOOD    | NO PROPOSED IMPACT      |             |
| 5      | X       | X      |         | X                    |                       |                       | 12"          | WESTERN RED CEDAR | 154                       | 0                    | GOOD    | NO PROPOSED IMPACT      |             |
| 6      | X       | X      |         | X                    |                       |                       | 14"          | FLOWERING CHERRY  | 930                       | 25                   | GOOD    |                         |             |
| 7      |         | X      |         | X                    | X                     |                       | 28"          | FLOWERING CHERRY  | 220                       | 4                    | V. GOOD |                         |             |
| 8      |         | X      |         | X                    | X                     | X                     | 37"          | WESTERN CEDAR     | 647                       | 5                    | V. GOOD | DOUBLE STEMMED          |             |
| 9      | X       | X      |         | X                    |                       |                       | 16"          | DOUGLAS FIR       | N/A                       | N/A                  | FAIR    | NO PROPOSED IMPACT      |             |
| 10     |         |        | X       | X                    |                       |                       | 14"          | DOUGLAS FIR       | 72                        | 0                    | FAIR    | PROPOSED TO BE REMOVED  | 2:1         |
| 11     |         | X      |         | X                    |                       |                       | 12"          | WESTERN RED CEDAR | 112                       | 0                    | GOOD    | NO PROPOSED IMPACT      |             |
| 12     |         |        | X       | X                    |                       |                       | 19"          | DOUGLAS FIR       | 302                       | 0                    | FAIR    | PROPOSED TO BE REMOVED  | 2:1         |
| 13     | X       | X      |         | X                    |                       |                       | 16"          | WESTERN RED CEDAR | N/A                       | N/A                  | FAIR    | NO PROPOSED IMPACT      |             |
| 14     | X       | X      |         |                      |                       |                       | 10"          | WESTERN RED CEDAR | N/A                       | N/A                  | FAIR    | NO PROPOSED IMPACT      |             |
| 15     | X       | X      |         | X                    |                       |                       | 18"          | DOUGLAS FIR       | N/A                       | N/A                  | FAIR    | NO PROPOSED IMPACT      |             |
| 16     | X       | X      |         | X                    | X                     |                       | 28.5"        | WESTERN RED CEDAR | N/A                       | N/A                  | FAIR    | NO PROPOSED IMPACT      |             |
| 18     |         | X      |         | X                    |                       |                       | 20.5"        | WESTERN RED CEDAR | N/A                       | N/A                  | FAIR    | NO PROPOSED IMPACT      |             |
| 19     | X       | X      |         | X                    |                       |                       | 12"          | TRUE FIR          | N/A                       | N/A                  | POOR    | NO PROPOSED IMPACT      |             |
| 20     |         | X      |         | X                    |                       |                       | 18"          | WESTERN RED CEDAR | N/A                       | N/A                  | POOR    | NO PROPOSED IMPACT      |             |
| 21     |         |        | X       |                      |                       |                       | 19"          | WILLOW            | N/A                       | N/A                  | DEAD    | FELL IN STORM 2017-2018 | 2:1         |

| NO. | DATE | BY | REVISIONS |
|-----|------|----|-----------|
|     |      |    |           |

APPLICANT  
SHARON AND DZON NGUYEN  
9831 SE 42nd PLACE  
MERCER ISLAND, WA 98040

DATE: May 19, 2022  
JOB# 2031  
DRAFTED: SS DESIGN: SS  
DIGITAL SIGNATURE



**CIVIL ENGINEERING SOLUTIONS**

102 NW CANAL STREET SEATTLE, WA 98107  
PHONE: 206.930.0342 DUFFY@CESOLUTIONS.US

## TREE RETENTION NOTES

NGUYEN RESIDENCE  
9831 SE 42nd PLACE, MERCER ISLAND, WA 98040

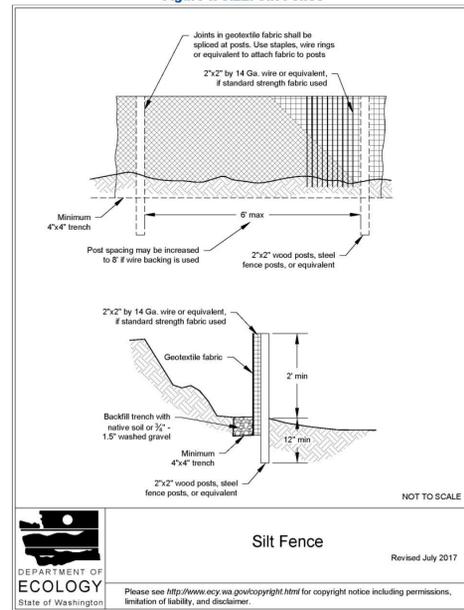
DRAWING NO:

**C1.1**

APN 531510-0110

**SILT FENCE DETAIL** **DOE**

**Figure II-3.22: Silt Fence**



**Silt Fence**  
 DEPARTMENT OF ECOLOGY  
 State of Washington  
 Revised July 2017  
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2019 Stormwater Management Manual for Western Washington  
 Volume II - Chapter 3 - Page 371

**RECOMMENDED CONSTRUCTION SEQUENCE**

A DETAILED CONSTRUCTION SEQUENCE IS NEEDED TO ENSURE THAT EROSION AND SEDIMENT CONTROL MEASURES ARE APPLIED AT THE APPROPRIATE TIMES. A RECOMMENDED CONSTRUCTION SEQUENCE IS PROVIDED BELOW:

1. HOLD AN ONSITE PRE-CONSTRUCTION MEETING.
2. POST SIGN WITH NAME AND PHONE NUMBER OF ESC SUPERVISOR (MAY BE CONSOLIDATED WITH THE REQUIRED NOTICE OF CONSTRUCTION SIGN).
3. FLAG OR FENCE CLEARING LIMITS.
4. INSTALL CATCH BASIN PROTECTION, IF REQUIRED.
5. GRADE AND INSTALL CONSTRUCTION ENTRANCE(S).
6. INSTALL PERIMETER PROTECTION (SILT FENCE, BRUSH BARRIER, ETC.).
7. CONSTRUCT SEDIMENT PONDS AND TRAPS.
8. GRADE AND STABILIZE CONSTRUCTION ROADS.
9. CONSTRUCT SURFACE WATER CONTROLS (INTERCEPTOR DIKES, PIPE SLOPE DRAINS, ETC.) SIMULTANEOUSLY WITH CLEARING AND GRADING FOR PROJECT DEVELOPMENT.
10. MAINTAIN EROSION CONTROL MEASURES IN ACCORDANCE WITH CITY OF MERCER ISLAND STANDARDS AND MANUFACTURER'S RECOMMENDATIONS.
11. RELOCATE SURFACE WATER CONTROLS OR TESC MEASURES, OR INSTALL NEW MEASURES SO THAT AS SITE CONDITIONS CHANGE, THE TESC IS ALWAYS IN ACCORDANCE WITH CITY OF MERCER ISLAND TESC REQUIREMENTS.
12. COVER ALL AREAS THAT WILL BE UN-WORKED FOR MORE THAN SEVEN DAYS DURING THE DRY SEASON (MAY 1 TO SEPT 30) OR TWO DAYS DURING THE WET SEASON (OCT 1 TO APRIL 30) WITH STRAW, WOOD FIBER MULCH, COMPOST, PLASTIC SHEETING, OR EQUIVALENT.
13. STABILIZE ALL AREAS WITHIN SEVEN DAYS OF REACHING FINAL GRADE.
14. SEED, SOD, STABILIZE, OR COVER ANY AREAS TO REMAIN UNWORKED FOR MORE THAN 30 DAYS.
15. UPON COMPLETION OF THE PROJECT, STABILIZE ALL DISTURBED AREAS AND REMOVE BMPs IF APPROPRIATE.

**EROSION CONTROL NOTES**

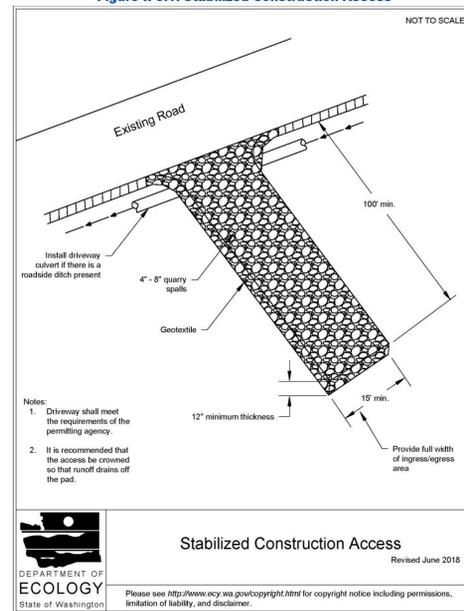
- D.8.2 STANDARD ESC PLAN NOTES  
 THE STANDARD ESC PLAN NOTES MUST BE INCLUDED ON ALL ESC PLANS. AT THE APPLICANT'S DISCRETION, NOTES THAT IN NO WAY APPLY TO THE PROJECT MAY BE OMITTED; HOWEVER, THE REMAINING NOTES MUST NOT BE RENUMBERED. FOR EXAMPLE, IF ESC NOTE #3 WERE OMITTED, THE REMAINING NOTES SHOULD BE NUMBERED 1, 2, 4, 5, 6, ETC.
1. APPROVAL OF THIS EROSION AND SEDIMENTATION CONTROL (ESC) PLAN DOES NOT CONSTITUTE AN APPROVAL OF PERMANENT ROAD OR DRAINAGE DESIGN (E.G., SIZE AND LOCATION OF ROADS, PIPES, RESTRICTORS, CHANNELS, RETENTION FACILITIES, UTILITIES, ETC.).
  2. THE IMPLEMENTATION OF THESE ESC PLANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE APPLICANT/ESC SUPERVISOR UNTIL ALL CONSTRUCTION IS APPROVED.
  3. THE BOUNDARIES OF THE CLEARING LIMITS SHOWN ON THIS PLAN SHALL BE CLEARLY FLAGGED BY SURVEY TAPE OR FENCING, IF REQUIRED, PRIOR TO CONSTRUCTION (SWDM APPENDIX D). DURING THE CONSTRUCTION PERIOD, NO DISTURBANCE BEYOND THE CLEARING LIMITS SHALL BE PERMITTED. THE CLEARING LIMITS SHALL BE MAINTAINED BY THE APPLICANT/ESC SUPERVISOR FOR THE DURATION OF CONSTRUCTION.
  4. STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES, SUCH AS CONSTRUCTED WHEEL WASH SYSTEMS OR WASH PADS, MAY BE REQUIRED TO ENSURE THAT ALL PAVED AREAS ARE KEPT CLEAN AND TRACK OUT TO ROAD RIGHT OF WAY DOES NOT OCCUR FOR THE DURATION OF THE PROJECT.
  5. THE ESC FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED PRIOR TO OR IN CONJUNCTION WITH ALL CLEARING AND GRADING SO AS TO ENSURE THAT THE TRANSPORT OF SEDIMENT TO SURFACE WATERS, DRAINAGE SYSTEMS, AND ADJACENT PROPERTIES IS MINIMIZED.
  6. THE ESC FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE ESC FACILITIES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND MODIFIED TO ACCOUNT FOR CHANGING SITE CONDITIONS (E.G. ADDITIONAL COVER MEASURES, ADDITIONAL SUMP PUMPS, RELOCATION OF DITCHES AND SILT FENCES, PERIMETER PROTECTION ETC.) AS DIRECTED BY CITY OF MERCER ISLAND.
  7. THE ESC FACILITIES SHALL BE INSPECTED DAILY BY THE APPLICANT/ESC SUPERVISOR AND MAINTAINED TO ENSURE CONTINUED PROPER FUNCTIONING. WRITTEN RECORDS SHALL BE KEPT OF WEEKLY REVIEWS OF THE ESC FACILITIES.
  8. ANY AREAS OF EXPOSED SOILS, INCLUDING ROADWAY EMBANKMENTS, THAT WILL NOT BE DISTURBED FOR TWO CONSECUTIVE DAYS DURING THE WET SEASON OR SEVEN DAYS DURING THE DRY SEASON SHALL BE IMMEDIATELY STABILIZED WITH THE APPROVED ESC METHODS (E.G., SEEDING, MULCHING, PLASTIC COVERING, ETC.).
  9. ANY AREA NEEDING ESC MEASURES THAT DO NOT REQUIRE IMMEDIATE ATTENTION SHALL BE ADDRESSED WITHIN SEVEN (7) DAYS.
  10. THE ESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH DURING THE DRY SEASON, BI-MONTHLY DURING THE WET SEASON, OR WITHIN TWENTY FOUR (24) HOURS FOLLOWING A STORM EVENT.
  11. AT NO TIME SHALL MORE THAN ONE (1) FOOT OF SEDIMENT BE ALLOWED TO ACCUMULATE WITHIN A CATCH BASIN. ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE CLEANED PRIOR TO PAVING. THE CLEANING OPERATION SHALL NOT FLUSH SEDIMENT-LADEN WATER INTO THE DOWNSTREAM SYSTEM.
  12. ANY PERMANENT RETENTION/DETENTION FACILITY USED AS A TEMPORARY SETTLING BASIN SHALL BE MODIFIED WITH THE NECESSARY EROSION CONTROL MEASURES AND SHALL PROVIDE ADEQUATE STORAGE CAPACITY. IF THE FACILITY IS TO FUNCTION ULTIMATELY AS AN INFILTRATION SYSTEM, THE TEMPORARY FACILITY MUST BE ROUGH GRADED SO THAT THE BOTTOM AND SIDES ARE AT LEAST THREE FEET ABOVE THE FINAL GRADE OF THE PERMANENT FACILITY.
  13. COVER MEASURES WILL BE APPLIED IN CONFORMANCE WITH APPENDIX D OF THE SURFACE WATER DESIGN MANUAL.
  14. PRIOR TO THE BEGINNING OF THE WET SEASON (OCT. 1), ALL DISTURBED AREAS SHALL BE REVIEWED TO IDENTIFY WHICH ONES CAN BE SEEDING IN PREPARATION FOR THE WINTER RAINS. DISTURBED AREAS SHALL BE SEEDING WITHIN ONE WEEK OF THE BEGINNING OF THE WET SEASON.

**CITY NOTES**

1. ANY CHANGES TO THE APPROVED PLANS REQUIRES CITY APPROVAL THROUGH A REVISION.
2. APPLICANT IS RESPONSIBLE FOR ANY DAMAGES TO UNDERGROUND UTILITIES CAUSED FROM THIS CONSTRUCTION.
3. CATCH BASIN FILTERS SHOULD BE PROVIDED FOR ALL STORM DRAIN CATCH BASINS/INLETS DOWNSLOPE AND WITHIN 500 FEET OF THE CONSTRUCTION AREA. CATCH BASIN FILTERS SHOULD BE DESIGNED BY THE MANUFACTURER FOR USE AT CONSTRUCTION SITES AND APPROVED BY THE CITY INSPECTOR. CATCH BASIN FILTERS SHOULD BE INSPECTED FREQUENTLY, ESPECIALLY AFTER STORM EVENTS. IF THE FILTER BECOMES CLOGGED, IT SHOULD BE CLEANED OR REPLACED.
4. CONTRACTORS SHALL VERIFY LOCATIONS AND DEPTHS OF UTILITIES.
5. AT LEAST 48 HOURS PRIOR TO CONSTRUCTION, CALL "ONE CALL" AT 1.800.424.5555
6. DO NOT BACKFILL WITH NATIVE MATERIAL ON PUBLIC RIGHT-OF-WAY. ALL MATERIAL MUST BE IMPORTED
7. EROSION CONTROL: ALL "LAND DISTURBING ACTIVITY" IS SUBJECT TO PROVISIONS OF MERCER ISLAND ORDINANCE 95C-118 "STORM WATER MANAGEMENT." SPECIFIC ITEMS TO BE FOLLOWED AT YOUR SITE:
8. PROTECT ADJACENT PROPERTIES FROM ANY INCREASED RUNOFF OR SEDIMENTATION DUE TO THE CONSTRUCTION PROJECT THROUGH THE USE OF APPROPRIATE "BEST MANAGEMENT PRACTICES" (BMP) EXAMPLES INCLUDE, BUT ARE NOT LIMITED TO, SEDIMENT TRAPS, SEDIMENT PONDS, FILTER FABRIC FENCES, VEGETATIVE BUFFER STRIPS OR BIOENGINEERED SWALES.
9. CONSTRUCTION ACCESS TO THE SITE SHOULD BE LIMITED TO ONE ROUTE. STABILIZE ENTRANCE WITH QUARRY SPALLS TO PREVENT SEDIMENT FROM LEAVING THE SITE OR ENTERING THE STORM DRAINS.
10. PREVENT SEDIMENT, CONSTRUCTION DEBRIS, PAINTS, SOLVENTS, ETC., OR OTHER TYPES OF POLLUTION FROM ENTERING PUBLIC STORM DRAINS. KEEP ALL POLLUTION ON YOUR SITE.
11. ALL EXPOSED SOILS SHALL REMAIN DENUDED FOR NO LONGER THAN SEVEN (7) DAYS AND SHALL BE STABILIZED WITH MULCH, HAY, OR THE APPROPRIATE GROUND COVER. ALL EXPOSED SOILS SHALL BE COVERED IMMEDIATELY DURING ANY RAIN EVENT.
12. INSTALLATION OF CONCRETE DRIVEWAYS, TREES, SHRUBS, IRRIGATION, BOULDERS, BERMS, WALLS, GATES, AND OTHER IMPROVEMENTS ARE NOT ALLOWED IN THE PUBLIC RIGHT-OF-WAY WITHOUT PRIOR APPROVAL, AND AN ENCROACHMENT AGREEMENT AND RIGHT OF WAY PERMIT FROM THE SENIOR DEVELOPMENT ENGINEER.
13. OWNER SHALL CONTROL DISCHARGE OF SURFACE DRAINAGE RUNOFF FROM EXISTING AND NEW IMPERVIOUS AREAS IN A RESPONSIBLE MANNER. CONSTRUCTION OF NEW GUTTERS AND DOWNSPOUTS, DRY WELLS, LEVEL SPREADERS OR DOWNSTREAM CONVEYANCE PIPE MAY BE NECESSARY TO MINIMIZE DRAINAGE IMPACT TO YOUR NEIGHBORS. CONSTRUCTION OF MINIMUM DRAINAGE IMPROVEMENTS SHOWN OR CALLED OUT ON THIS PLAN DOES NOT IMPLY RELIEF FROM CIVIL LIABILITY FOR YOUR DOWNSTREAM DRAINAGE.
14. POT HOLING THE PUBLIC UTILITIES IS REQUIRED PRIOR TO ANY GRADING ACTIVITIES LESS THAN 6" OVER THE PUBLIC MAINS (WATER, SEWER AND STORM SYSTEMS). IF THERE IS A CONFLICT, THE APPLICANT IS REQUIRED TO SUBMIT A REVISION FOR APPROVAL PRIOR TO ANY GRADING ACTIVITIES OVER THE PUBLIC MAINS.
15. REMEMBER: EROSION CONTROL IS YOUR FIRST INSPECTION.
16. ROOF DRAINS MUST BE CONNECTED TO THE STORM DRAIN SYSTEM AND INSPECTED BY THE PUBLIC WORKS DEPARTMENT PRIOR TO ANY BACKFILLING OF PIPE.
17. SILENT FENCE: CLEAN AND PROVIDE REGULAR MAINTENANCE OF THE SILT FENCE. THE FENCE IS TO REMAIN VERTICAL AND IS TO FUNCTION PROPERLY THROUGHOUT THE TERM OF THE PROJECT.
18. WORK IN PUBLIC RIGHT OF WAY REQUIRES A RIGHT-OF-WAY USE PERMIT.
19. REFER TO WATER SERVICE PERMIT FOR ACTUAL LOCATION OF NEW WATER METER AND SERVICE LINE DETERMINED BY MERCER ISLAND WATER DEPARTMENT.
20. THE TV INSPECTION OF THE EXISTING SIDE SEWER TO THE CITY SEWER MAIN IS REQUIRED. IF THE RESULT OF THE TV INSPECTION IS NOT IN SATISFACTORY CONDITION, AS DETERMINED BY THE CITY OF MERCER ISLAND INSPECTOR, THE REPLACEMENT OF THE EXISTING SIDE SEWER IS REQUIRED. ALTERNATELY, A PRESSURE TEST OF THE SIDE SEWER, FROM SEWER MAIN TO POINT OF CONNECTION, MAY BE SUBSTITUTED FOR THE VIDEO INSPECTION.
21. NEWLY INSTALLED SIDE SEWER REQUIRES A 4 P.S.I. AIR TEST OR PROVIDE 10' OF HYDROSTATIC HEAD TEST.
22. POT HOLING THE PUBLIC UTILITIES IS REQUIRED PRIOR TO ANY GRADING ACTIVITIES LESS THAN 6" OVER THE PUBLIC MAINS (WATER, SEWER AND STORM SYSTEMS). IF THERE IS A CONFLICT, THE APPLICANT IS REQUIRED TO SUBMIT A REVISION FOR APPROVAL PRIOR TO ANY GRADING ACTIVITIES OVER THE PUBLIC MAINS.
23. THE LIMITS AND EXTENTS OF THE PAVEMENT IN THE PUBLIC RIGHT OF WAY SHALL BE DETERMINED BY THE CITY ENGINEER PRIOR TO FINALIZE THE PROJECT.

**CONSTRUCTION ENTRANCE** **DOE**

**Figure II-3.1: Stabilized Construction Access**



**Stabilized Construction Access**  
 DEPARTMENT OF ECOLOGY  
 State of Washington  
 Revised June 2018  
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2019 Stormwater Management Manual for Western Washington  
 Volume II - Chapter 3 - Page 279

**DENUDED AREAS REQUIREMENTS**

APRIL 1 TO SEPT 30  
 ALL DENUDED AREAS MUST BE STABILIZED WITHIN 7 DAYS OF CONSTRUCTION. PLEASE READ ALL CITY TESC NOTES ON SHEET C1.2.

OCT 1 TO MARCH 31  
 ALL DENUDED AREAS MUST BE STABILIZED WITHIN 2 DAYS OF GRADING. IF AN EROSION PROBLEM ALREADY EXISTS ON THE SITE, OTHER COVER PROTECTION AND EROSION CONTROL WILL BE REQUIRED.

| NO. | DATE | BY | REVISIONS |
|-----|------|----|-----------|
|     |      |    |           |

APPLICANT  
 SHARON AND DZON NGUYEN  
 9831 SE 42nd PLACE  
 MERCER ISLAND, WA 98040

DATE: May 13, 2022  
 JOB#: 2031  
 DRAFTED: SS DESIGN: DE  
 DIGITAL SIGNATURE



**CIVIL ENGINEERING SOLUTIONS**  
 102 NW CANAL STREET SEATTLE, WA 98107  
 PHONE: 206.930.0342 DUFFY@CESOLUTIONS.US

**TESC & CITY NOTES**  
**TESC DETAILS**  
 NGUYEN RESIDENCE  
 9831 SE 42nd PLACE, MERCER ISLAND, WA 98040

DRAWING NO:  
**C1.2**  
 APN 531510-0110

**SANITARY SEWER IMPROVEMENTS**

- ① -
- ② -6" SDR 35 PVC SANITARY SEWER(SS) @ MIN 1.0 %.
- ③ -
- ④ -
- ⑦ -LOCATE AND VIDEO CONDITION OF EXISTING SANITARY SIDE SEWER. REPLACE LINE IF FOUND DEFECTIVE AS DETERMINED BY CITY INSPECTOR.

**WATER IMPROVEMENTS**

- ⑩ -NEW SF RESIDENTIAL WATER SERVICE & METER PIT. CONFIRM REQUIRED SIZE WITH BUILDING PERMIT REVIEW. INSTALL PER MERCER ISLAND DETAIL W-13, W-14, OR W-14A DEPENDING ON SIZE REQUIREMENT.
- ⑪ -PRIVATE WATER SERVICE FROM METER TO HOUSE. SEE PLAN FOR SIZE. CONFIRM ADEQUATE TO MEET FIRE FLOW REQUIREMENTS. HDPE WATER (ASTM D2239). RECOMMENDED DEPTH=36".
- ⑬ -REDUCED PRESSURE BACKFLOW ASSEMBLY (RPBA) REQUIRED. PROVIDE FROST PROTECTION IN ACCORDANCE WITH UPC (UNIFORM PLUMBING CODE)
- ⑭ -THE EXISTING WATER SERVICE LINE THE CITY WATER MAIN AND EXISTING WATER METER ARE REQUIRED TO BE ABANDONED. NEW WATER SERVICE LINE, NEW WATER METER AND NEW WATER SUPPLY LINE ARE REQUIRED. THE LOCATION OF THE NEW WATER METER WILL BE DETERMINED BY THE CITY PUBLIC WORKS.

**STORM DRAIN**

- ⑳ -4" STORM DRAIN (3034 PVC) @ MIN 2 % GRADE
- ㉑ -4" FOUNDATION DRAIN (3034 PVC) @ MIN 1 % GRADE
- ㉒ -6" STORM DRAIN (3034 PVC) @ MIN 2 % GRADE
- ㉓ -
- ㉔ -
- ㉕ -
- ㉖ -

**STORM DRAIN STRUCTURES**

- ㉗ -
- ㉘ -
- ㉙ -
- ㉚ -
- ㉛ -
- ㉜ -
- ㉝ -TYPE 1 CB (WATER QUALITY) WITH STANDARD GRATE TOP. PROVIDE RISOR WITH TURNED-DOWN ELBOW FOR IMPROVED WATER QUALITY FUNCTION.
- ㉞ -
- ㉟ -
- ㊱ -18" YARD DRAIN (OR EQUAL) WITH SOLID LID
- ㊲ -6" WIDE NDS DURASLOPE CHANNEL DRAIN KIT OR EQUAL. CLASS B VEHICLE RATED GRATE. DRAIN TO PUMP BASIN.
- ㊳ -
- ㊴ -
- ㊵ -
- ㊶ -
- ㊷ -
- ㊸ -
- ㊹ -

**STORM BMP'S**

- ㊺ -COMPOST AMENDED SOIL TO ALL DISTURBED AREAS (SEE DETAIL SHEET C3.5). TILL 2-3" OF COMPOST INTO UPPER 8" OF SOIL. LOOSEN COMPACTED SUBSOIL, IF NEEDED BY RIPPING TO 12" DEPTH. MULCH LANDSCAPE BEDS AFTER PLANTING.

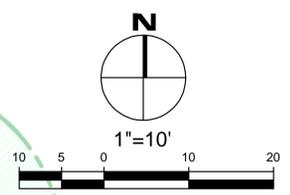
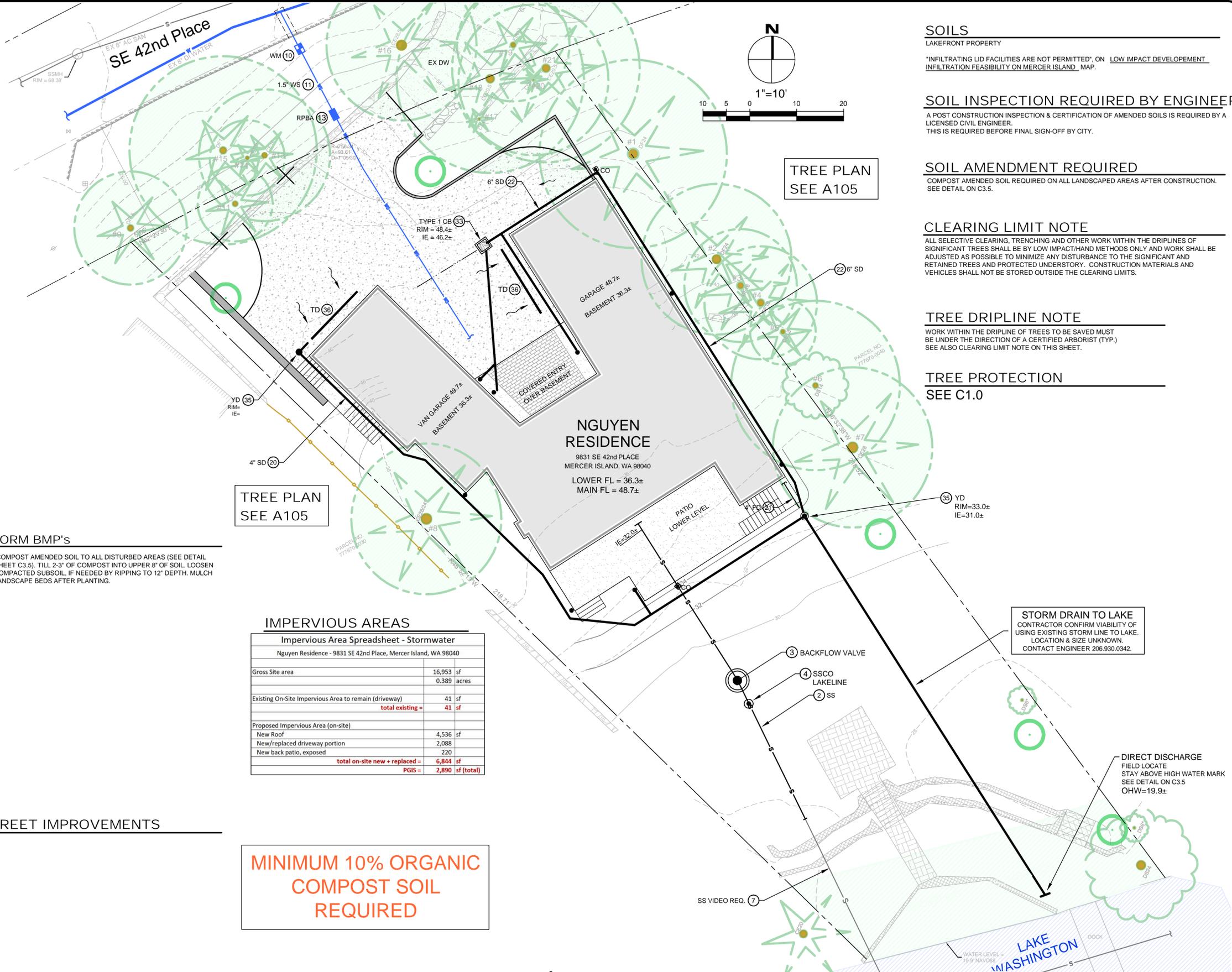
**STREET IMPROVEMENTS**

- ㊻ -
- ㊼ -
- ㊽ -
- ㊾ -

**IMPERVIOUS AREAS**

| Impervious Area Spreadsheet - Stormwater                       |  |
|--|--|
| Nguyen Residence - 9831 SE 42nd Place, Mercer Island, WA 98040 |  |
| Gross Site area  | 16,953 sf                                      |
|  | 0.389 acres                                    |
| Existing On-Site Impervious Area to remain (driveway)          | 41 sf  |
|  | <b>total existing = 41 sf</b>                  |
| Proposed Impervious Area (on-site)                             |  |
| New Roof   | 4,536 sf                                       |
| New/replaced driveway portion                                  | 2,088  |
| New back patio, exposed  | 220  |
|  | <b>total on-site new + replaced = 6,844 sf</b> |
|  | <b>PGIS = 2,890 sf (total)</b>                 |

**MINIMUM 10% ORGANIC COMPOST SOIL REQUIRED**



TREE PLAN SEE A105

TREE PLAN SEE A105

**SOILS**  
LAKEFRONT PROPERTY  
\*INFILTRATING LID FACILITIES ARE NOT PERMITTED\*, ON LOW IMPACT DEVELOPMENT INFILTRATION FEASIBILITY ON MERCER ISLAND MAP.

**SOIL INSPECTION REQUIRED BY ENGINEER**  
A POST CONSTRUCTION INSPECTION & CERTIFICATION OF AMENDED SOILS IS REQUIRED BY A LICENSED CIVIL ENGINEER. THIS IS REQUIRED BEFORE FINAL SIGN-OFF BY CITY.

**SOIL AMENDMENT REQUIRED**  
COMPOST AMENDED SOIL REQUIRED ON ALL LANDSCAPED AREAS AFTER CONSTRUCTION. SEE DETAIL ON C3.5.

**CLEARING LIMIT NOTE**  
ALL SELECTIVE CLEARING, TRENCHING AND OTHER WORK WITHIN THE DRIPLINES OF SIGNIFICANT TREES SHALL BE BY LOW IMPACT/HAND METHODS ONLY AND WORK SHALL BE ADJUSTED AS POSSIBLE TO MINIMIZE ANY DISTURBANCE TO THE SIGNIFICANT AND RETAINED TREES AND PROTECTED UNDERSTORY. CONSTRUCTION MATERIALS AND VEHICLES SHALL NOT BE STORED OUTSIDE THE CLEARING LIMITS.

**TREE DRIPLINE NOTE**  
WORK WITHIN THE DRIPLINE OF TREES TO BE SAVED MUST BE UNDER THE DIRECTION OF A CERTIFIED ARBORIST (TYP.) SEE ALSO CLEARING LIMIT NOTE ON THIS SHEET.

**TREE PROTECTION**  
SEE C1.0

**STORM DRAIN TO LAKE**  
CONTRACTOR CONFIRM VIABILITY OF USING EXISTING STORM LINE TO LAKE. LOCATION & SIZE UNKNOWN. CONTACT ENGINEER 206.930.0342.

**DIRECT DISCHARGE**  
FIELD LOCATE STAY ABOVE HIGH WATER MARK SEE DETAIL ON C3.5 OHW=19.9±

| NO. | DATE | BY | REVISIONS |
|-----|------|----|-----------|
|     |      |    |           |

APPLICANT  
SHARON AND DZON NGUYEN  
9831 SE 42nd PLACE  
MERCER ISLAND, WA 98040

DATE: May 13, 2022  
JOB# 2031  
DRAFTED: DE DESIGN: DE  
DIGITAL SIGNATURE



**CIVIL ENGINEERING SOLUTIONS**  
102 NW CANAL STREET SEATTLE, WA 98107  
PHONE: 206.930.0342 DUFFY@CESOLUTIONS.US

**SITE CIVIL PLAN**  
NGUYEN RESIDENCE  
9831 SE 42nd PLACE, MERCER ISLAND, WA 98040

DRAWING NO:  
**C2.0**  
APN 531510-0110



# MINIMUM 10% ORGANIC - COMPOST SOIL REQUIRED

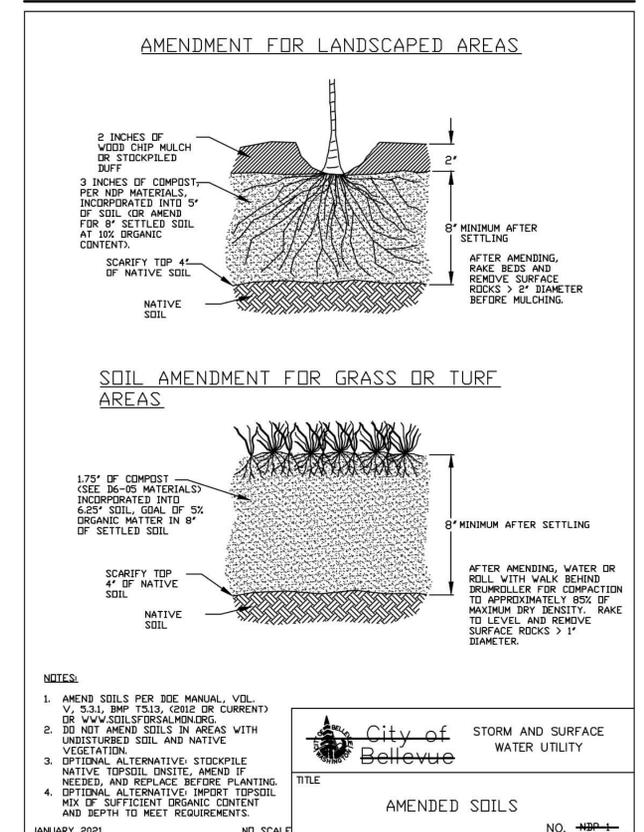
### SOIL AMENDMENT REQUIRED

COMPOST AMENDED SOIL REQUIRED ON ALL LANDSCAPED AREAS AFTER CONSTRUCTION. SEE DETAIL BELOW.

### SOIL INSPECTION REQUIRED BY ENGINEER

A POST CONSTRUCTION INSPECTION & CERTIFICATION OF AMENDED SOILS IS REQUIRED BY A LICENSED CIVIL ENGINEER. THIS IS REQUIRED BEFORE FINAL SIGN-OFF BY CITY.

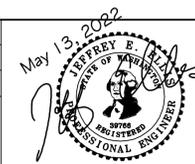
### COMPOST AMENDED SOIL SPEC



| NO. | DATE | BY | REVISIONS |
|-----|------|----|-----------|
|     |      |    |           |

APPLICANT  
 SHARON AND DZON NGUYEN  
 9831 SE 42nd PLACE  
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**CIVIL ENGINEERING SOLUTIONS**

102 NW CANAL STREET SEATTLE, WA 98107  
 PHONE: 206.930.0342 DUFFY@CESOLUTIONS.US

**BMP DETAILS**

NGUYEN RESIDENCE

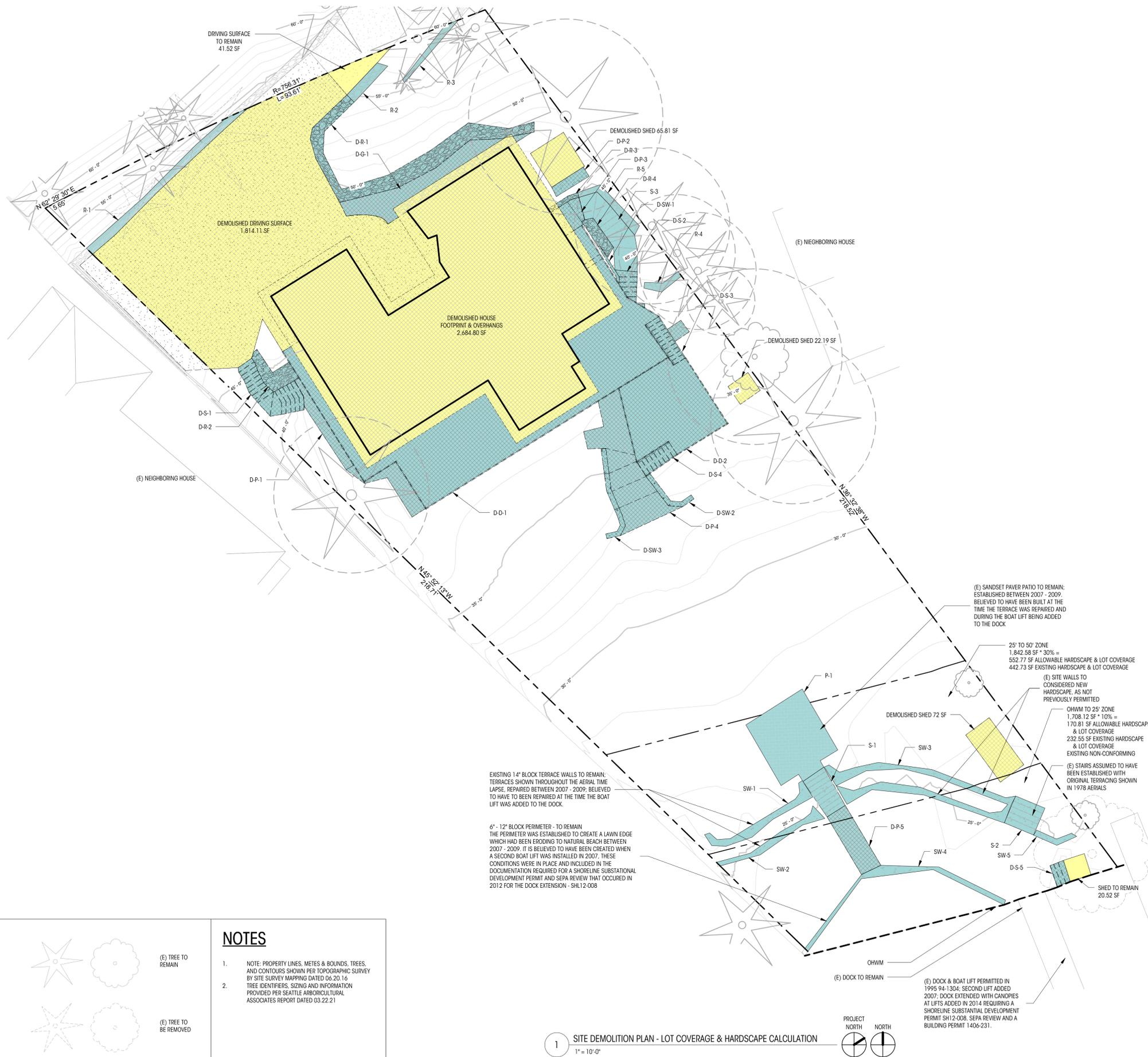
9831 SE 42nd PLACE, MERCER ISLAND, WA 98040

DRAWING NO:

**C3.5**

APN 531510-0110





**CALCULATIONS**

(E) LOT COVERAGE TO REMAIN

|                      |                 |
|----------------------|-----------------|
| (E) DRIVING SURFACES | 41.52 SF        |
| (E) SHEDS            | 20.52 SF        |
| <b>TOTAL</b>         | <b>62.04 SF</b> |

(E) LOT COVERAGE TO BE DEMOLISHED

|                             |                    |
|-----------------------------|--------------------|
| ROOF, GARAGE, AND OVERHANGS | 2,684.80 SF        |
| DRIVING SURFACES            | 1,814.11 SF        |
| SHEDS                       | 160 SF             |
| <b>TOTAL</b>                | <b>4,658.91 SF</b> |

(E) HARDSCAPE TO REMAIN

|                   |           |                  |
|-------------------|-----------|------------------|
| STAIRS            |           | 167.78 SF        |
| S-1               | 42.64 SF  |                  |
| S-2               | 39.04 SF  |                  |
| S-3               | 86.10 SF  |                  |
| PATIOS / WALKWAYS |           | 206.30 SF        |
| P-1               | 206.30 SF |                  |
| ROCKERIES         |           | 135.59 SF        |
| R-1               | 64.01 SF  |                  |
| R-2               | 20.02 SF  |                  |
| R-3               | 16.28 SF  |                  |
| R-4               | 11.32 SF  |                  |
| R-5               | 23.96 SF  |                  |
| SITE WALLS        |           | 237.10 SF        |
| SW-1              | 40.37 SF  |                  |
| SW-2              | 30.71 SF  |                  |
| SW-3              | 106.19 SF |                  |
| SW-4              | 49.88 SF  |                  |
| SW-5              | 9.95 SF   |                  |
| <b>TOTAL</b>      |           | <b>746.77 SF</b> |

(E) HARDSCAPE TO DEMOLISHED

|                   |           |                    |
|-------------------|-----------|--------------------|
| STAIRS            |           | 162.13 SF          |
| D-S-1             | 72.23 SF  |                    |
| D-S-2             | 19.15 SF  |                    |
| D-S-3             | 31.39 SF  |                    |
| D-S-4             | 25.96 SF  |                    |
| D-S-5             | 13.40 SF  |                    |
| DECKS             |           | 964.04 SF          |
| D-D-1             | 673.60 SF |                    |
| D-D-2             | 290.44 SF |                    |
| PATIOS / WALKWAYS |           | 397.33 SF          |
| D-P-1             | 85.54 SF  |                    |
| D-P-2             | 17.03 SF  |                    |
| D-P-3             | 20.98 SF  |                    |
| D-P-4             | 211.87 SF |                    |
| D-P-5             | 61.91 SF  |                    |
| GRAVEL AREAS      |           | 117.11 SF          |
| D-G-1             | 117.11 SF |                    |
| ROCKERIES         |           | 234.11 SF          |
| D-R-1             | 175.03 SF |                    |
| D-R-2             | 35.16 SF  |                    |
| D-R-3             | 4.64 SF   |                    |
| D-R-4             | 19.28 SF  |                    |
| SITE WALLS        |           | 37.39 SF           |
| D-SW-1            | 3.96 SF   |                    |
| D-SW-2            | 12.60 SF  |                    |
| D-SW-3            | 20.83 SF  |                    |
| <b>TOTAL</b>      |           | <b>1,912.11 SF</b> |

**LEGEND**

|  |                          |  |                                   |  |   |
|--|--------------------------|--|-----------------------------------|--|---|
|  | ELEVATION DATUM          |  | CONTOUR MAJOR                     |  | (E) TREE TO REMAIN                      |
|  | MAIN LEVEL FIN. FLR.     |  | CONTOUR MINOR                     |  | (E) TREE TO BE REMOVED                  |
|  | ORDINARY HIGH WATER MARK |  | (E) HARDSCAPE TO BE DEMOLISHED    |  | (E) TREE CRZ ZONE (PER ARBORIST REPORT) |
|  | PROPERTY LINE            |  | (E) HARDSCAPE TO REMAIN           |  |   |
|  | SETBACK LINE             |  | (E) LOT COVERAGE TO BE DEMOLISHED |  |   |
|  | ROOF OVERHANG            |  | (E) LOT COVERAGE TO REMAIN        |  |   |
|  | TREE PROTECTION FENCE    |  |                                   |  |   |
|  | (E) SITE WALL TO REMAIN  |  |                                   |  |   |

**NOTES**

- NOTE: PROPERTY LINES, METES & BOUNDS, TREES, AND CONTOURS SHOWN PER TOPOGRAPHIC SURVEY BY SITE SURVEY MAPPING DATED 06.20.16. TREE IDENTIFIERS, SIZING AND INFORMATION PROVIDED PER SEATTLE ARBORICULTURAL ASSOCIATES REPORT DATED 03.22.21
- EXISTING 1" BLOCK TERRACE WALLS TO REMAIN. TERRACES SHOWN THROUGHOUT THE AERIAL TIME LAPSE, REPAIRED BETWEEN 2007 - 2009; BELIEVED TO HAVE BEEN REPAIRED AT THE TIME THE BOAT LIFT WAS ADDED TO THE DOCK.

6" - 12" BLOCK PERIMETER - TO REMAIN THE PERIMETER WAS ESTABLISHED TO CREATE A LAWN EDGE WHICH HAD BEEN ERODING TO NATURAL BEACH BETWEEN 2007 - 2009. IT IS BELIEVED TO HAVE BEEN CREATED WHEN A SECOND BOAT LIFT WAS INSTALLED IN 2007. THESE CONDITIONS WERE IN PLACE AND INCLUDED IN THE DOCUMENTATION REQUIRED FOR A SHORELINE SUBSTANTIAL DEVELOPMENT PERMIT AND SEPA REVIEW THAT OCCURED IN 2012 FOR THE DOCK EXTENSION - SHL12-008

(E) SANDSET PAVER PATIO TO REMAIN; ESTABLISHED BETWEEN 2007 - 2009; BELIEVED TO HAVE BEEN BUILT AT THE TIME THE TERRACE WAS REPAIRED AND DURING THE BOAT LIFT BEING ADDED TO THE DOCK

25' TO 50' ZONE  
1,842.58 SF \* 30% =  
552.77 SF ALLOWABLE HARDSCAPE & LOT COVERAGE  
442.73 SF EXISTING HARDSCAPE & LOT COVERAGE

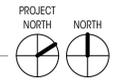
(E) SITE WALLS TO CONSIDERED NEW HARDSCAPE, AS NOT PREVIOUSLY PERMITTED

OHWM TO 25' ZONE  
1,708.12 SF \* 10% =  
170.81 SF ALLOWABLE HARDSCAPE & LOT COVERAGE  
232.55 SF EXISTING HARDSCAPE & LOT COVERAGE  
EXISTING NON-CONFORMING

(E) STAIRS ASSUMED TO HAVE BEEN ESTABLISHED WITH ORIGINAL TERRACING SHOWN IN 1978 AERIALS

(E) DOCK & BOAT LIFT PERMITTED IN 1995 94-1304; SECOND LIFT ADDED 2007; DOCK EXTENDED WITH CANopies AT LIFTS ADDED IN 2014 REQUIRING A SHORELINE SUBSTANTIAL DEVELOPMENT PERMIT SH12-008, SEPA REVIEW AND A BUILDING PERMIT 1406-231.

1 SITE DEMOLITION PLAN - LOT COVERAGE & HARDSCAPE CALCULATION  
1" = 10'-0"





**NGUYEN RESIDENCE**  
9831 SE 42nd PLACE  
MERCER ISLAND, WA 98040  
© COPYRIGHT 2022 BRANDT DESIGN, INC. SEATTLE, WA

PERMIT DOCUMENTS

DATE: 05.19.22

SHEET SIZE: D (24X36)

REVISIONS

NO. DATE:

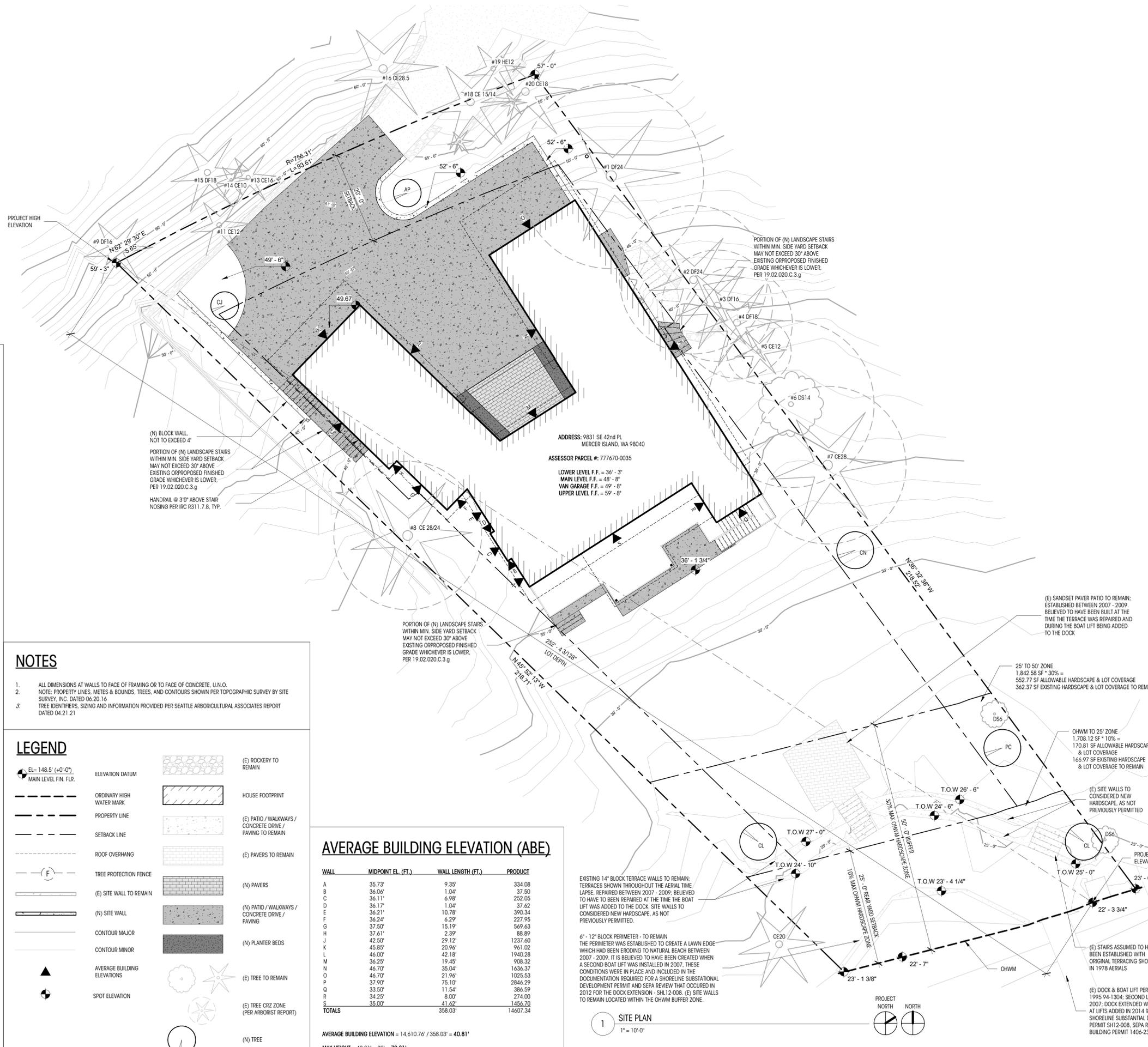
DRAWN BY:  
CHECKED BY:

SITE PLAN

SCALE: As indicated

**A101**

DEDICATED  
APPROVAL  
STAMP SPACE



**PROJECT DATA**

**EXISTING LOT AREA SUMMARY**

|                  |                        |
|------------------|------------------------|
| GROSS LOT AREA   | 16,953 SF              |
| ACCESS EASEMENTS | 0 SF                   |
| NET LOT AREA     | 16,953 SF              |
| LOT SLOPE        | 36.94 / 252.34 = 14.6% |

**OCCUPANCY SUMMARY**

|               |               |
|---------------|---------------|
| EXISTING TYPE | R-3           |
| OCCUPANT LOAD | SINGLE FAMILY |

**SETBACKS**

|                                  |                                   |
|----------------------------------|-----------------------------------|
| SIDE YARD (PER 19.02.020.C.1.c.) | 15'                               |
| MINIMUM:                         | 5'                                |
| FRONT YARD                       | 20'                               |
| SHORELINE                        | 25' FROM ORDINARY HIGH WATER MARK |

**TREE REMOVAL**

|  |   |
|--|---|
| (E) TREES TO BE REMOVED                | 3 |
| (N) TREES TO BE PLANTED AS REPLACEMENT | 6 |

**EXISTING LOT COVERAGE**

|                                      |   |
|--------------------------------------|---|
| (E) RESIDENCE, GARAGE, AND OVERHANGS | 2,684.80 SF                             |
| (E) DRIVING SURFACES                 | 1,855.63 SF                             |
| (E) SHEDS                            | 180.52 SF                               |
| <b>(E) TOTAL LOT COVERAGE</b>        | <b>4,720.95 SF = 27.9 % OF LOT AREA</b> |

**PROPOSED LOT COVERAGE**

|                                      |   |
|--------------------------------------|---|
| (N) RESIDENCE, GARAGE, AND OVERHANGS | 4,533.06 SF                             |
| (N) DRIVING SURFACES                 | 2,024.82 SF                             |
| (E) SHEDS TO REMAIN                  | 20.52 SF                                |
| <b>(N) TOTAL LOT COVERAGE</b>        | <b>6,578.40 SF = 38.8 % OF LOT AREA</b> |

**ALLOWABLE LOT COVERAGE**

|  |                                |
|--|--------------------------------|
| 40% OF LOT AREA BASED ON LOT SLOPE, PER 19.02.020.F.3.a. | 16,953 SF * 0.40 = 6,781.20 SF |
|--|--------------------------------|

**EXISTING HARDSCAPE**

|                       |   |
|-----------------------|---|
| STAIRS                | 329.91 SF                               |
| DECKS                 | 964.04 SF                               |
| PATIOS / WALKWAYS     | 603.63 SF                               |
| GRAVEL AREAS          | 117.11 SF                               |
| ROCKERIES             | 309.70 SF                               |
| SITE WALLS            | 274.49 SF                               |
| <b>TOTAL EXISTING</b> | <b>2,588.88 SF = 15.7 % OF LOT AREA</b> |

**DEMOLISHED HARDSCAPE**

|                         |                    |
|-------------------------|--------------------|
| STAIRS                  | 162.13 SF          |
| DECKS                   | 964.04 SF          |
| PATIOS / WALKWAYS       | 397.33 SF          |
| GRAVEL AREAS            | 117.11 SF          |
| ROCKERIES               | 234.11 SF          |
| SITE WALLS              | 37.39 SF           |
| <b>TOTAL DEMOLISHED</b> | <b>1,912.11 SF</b> |

**PROPOSED HARDSCAPE**

|                         |  |
|-------------------------|--|
| (E) HARDSCAPE TO REMAIN |  |
| STAIRS                  | 167.78 SF  |
| PATIOS / WALKWAYS       | 206.30 SF  |
| ROCKERIES               | 135.59 SF  |
| SITE WALLS              | 237.10 SF  |
| TOTAL TO REMAIN         | 746.77 SF  |
| (N) ADDED HARDSCAPE     |  |
| STAIRS                  | 170.33 SF  |
| DECKS                   | 82.50 SF   |
| PATIOS / WALKWAYS       | 246.93 SF  |
| SITE WALLS              | 97.59 SF   |
| TOTAL ADDED             | 597.35 SF  |
| <b>TOTAL HARDSCAPE</b>  | <b>(746.77+597.35) = 1,344.12 SF = 7.9 % OF LOT AREA</b> |

**ALLOWABLE HARDSCAPE**

|  |  |
|--|--|
| 9% OF LOT AREA   | 16,953 SF * 0.09 = 1,525.77 SF               |
| PER 19.02.020.F.3.b.ii., HARDSCAPE IMPROVEMENTS ARE PERMITTED IN THE MAXIMUM LOT COVERAGE AREA |  |
| REMAINING LOT COVERAGE   | 6,781.20 SF - 6,578.40 SF = 202.80 SF        |
| <b>TOTAL ALLOWABLE HARDSCAPE</b>   | <b>1,525.77 SF + 202.80 SF = 1,728.57 SF</b> |

**EXISTING BUILDING AREA SUMMARY (GFA) (PER KING COUNTY ASSESSOR)**

|                                    |  |
|------------------------------------|--|
| (E) BASEMENT LEVEL                 | 1,330 SF                                   |
| (E) MAIN LEVEL                     | 1,810 SF                                   |
| (E) UPPER LEVEL                    | 650 SF                                     |
| (E) ATTACHED GARAGE                | 320 SF                                     |
| TOTAL EXISTING BUILDING AREA (GSF) | 4,110 SF                                   |
| <b>EXISTING FLOOR AREA RATIO:</b>  | <b>4,110 / 16,953 = 24.2 % OF LOT AREA</b> |

**PROPOSED BUILDING AREA SUMMARY (GFA)**

|  |   |
|--|---|
| PROPOSED BASEMENT LEVEL                    | 1,546.75 SF                                   |
| PROPOSED MAIN LEVEL                        | 2,140.67 SF                                   |
| (EXCLUDES STAIR PER MICC 19.02.020.D.2.c.) |   |
| PROPOSED MAIN LEVEL COVERED DECK           | 251.62 SF                                     |
| (PER MICC CHAPTER 19.16.010.G.1.e.)        |   |
| PROPOSED UPPER LEVEL                       | 1,704.17 SF                                   |
| PROPOSED UPPER LEVEL COVERED DECK          | 17.31 SF                                      |
| PROPOSED ATTACHED GARAGES                  | 1,096.62 SF                                   |
| TOTAL PROPOSED BUILDING AREA (GSF)         | 6,757.14 SF                                   |
| <b>PROPOSED FLOOR AREA RATIO:</b>          | <b>6,757.14 / 16,953 = 39.9 % OF LOT AREA</b> |
| 40% ALLOWABLE GROSS FLOOR AREA:            | 16,953 SF * 0.40 = 6,781 SF                   |

**NOTES**

- ALL DIMENSIONS AT WALLS TO FACE OF FRAMING OR TO FACE OF CONCRETE, U.N.O.
- NOTE: PROPERTY LINES, METES & BOUNDS, TREES, AND CONTOURS SHOWN PER TOPOGRAPHIC SURVEY BY SITE SURVEY, INC. DATED 06.20.16
- TREE IDENTIFIERS, SIZING AND INFORMATION PROVIDED PER SEATTLE ARBORICULTURAL ASSOCIATES REPORT DATED 04.21.21

**LEGEND**

|  |                             |  |  |
|--|-----------------------------|--|--|
|  | ELEVATION DATUM             |  | (E) ROCKERY TO REMAIN                                    |
|  | ORDINARY HIGH WATER MARK    |  | HOUSE FOOTPRINT  |
|  | PROPERTY LINE               |  | (E) PATIO / WALKWAYS / CONCRETE DRIVE / PAVING TO REMAIN |
|  | SETBACK LINE                |  | (E) PAVERS TO REMAIN                                     |
|  | ROOF OVERHANG               |  | (N) PLANTER BEDS   |
|  | TREE PROTECTION FENCE       |  | (N) PAVERS   |
|  | (E) SITE WALL TO REMAIN     |  | (N) PATIO / WALKWAYS / CONCRETE DRIVE / PAVING           |
|  | (N) SITE WALL               |  | (N) PLANTER BEDS   |
|  | CONTOUR MAJOR               |  | (E) TREE TO REMAIN                                       |
|  | CONTOUR MINOR               |  | (E) TREE CRZ ZONE (PER ARBORIST REPORT)                  |
|  | AVERAGE BUILDING ELEVATIONS |  | (N) TREE   |
|  | SPOT ELEVATION              |  |  |

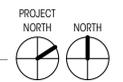
**AVERAGE BUILDING ELEVATION (ABE)**

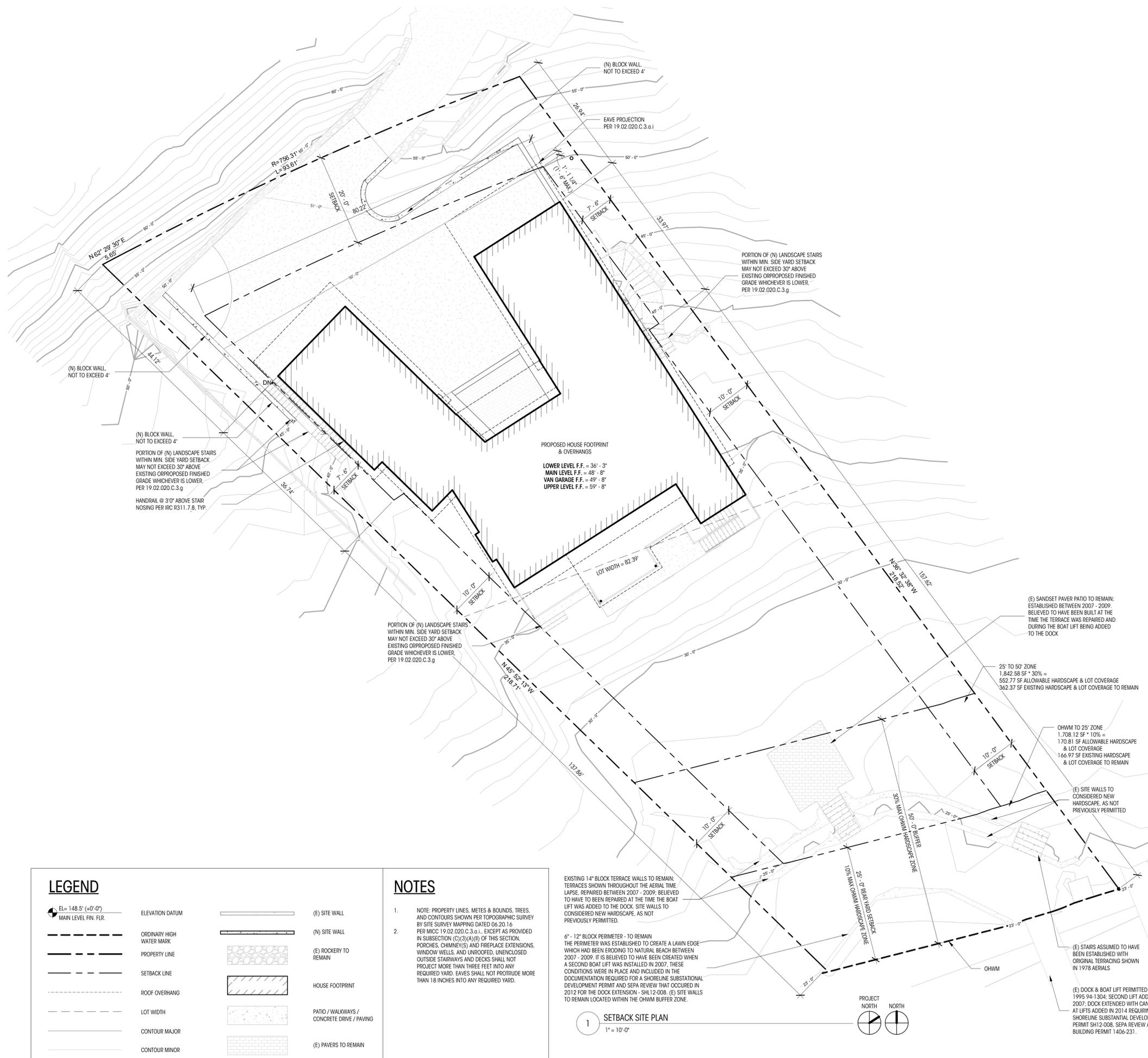
| WALL          | MIDPOINT EL. (FT.) | WALL LENGTH (FT.) | PRODUCT         |
|---------------|--------------------|-------------------|-----------------|
| A             | 35.73              | 9.35              | 334.08          |
| B             | 36.06              | 1.04              | 37.50           |
| C             | 36.11              | 6.98              | 252.05          |
| D             | 36.17              | 1.04              | 37.62           |
| E             | 36.21              | 10.78             | 390.34          |
| F             | 36.24              | 6.29              | 227.95          |
| G             | 37.50              | 15.19             | 569.63          |
| H             | 37.61              | 2.39              | 88.89           |
| J             | 42.50              | 29.12             | 1237.60         |
| K             | 45.85              | 20.96             | 961.02          |
| L             | 46.00              | 42.18             | 1940.28         |
| M             | 36.25              | 19.45             | 908.32          |
| N             | 46.70              | 35.04             | 1636.37         |
| O             | 46.70              | 21.96             | 1025.53         |
| P             | 37.90              | 75.10             | 2846.29         |
| Q             | 33.50              | 11.54             | 386.59          |
| R             | 34.25              | 8.00              | 274.00          |
| S             | 35.00              | 41.62             | 1456.70         |
| <b>TOTALS</b> |                    | <b>358.03</b>     | <b>14607.34</b> |

AVERAGE BUILDING ELEVATION = 14,610.76' / 358.03' = 40.81'  
MAX HEIGHT = 40.81' + 30' = 70.81'

**1 SITE PLAN**

1" = 10'-0"





| LEGEND |  |
|--------|--|
|        | ELEVATION DATUM                            |
|        | MAIN LEVEL FIN. FLR.                       |
|        | ORDINARY HIGH WATER MARK                   |
|        | PROPERTY LINE                              |
|        | SETBACK LINE                               |
|        | ROOF OVERHANG                              |
|        | LOT WIDTH                                  |
|        | CONTOUR MAJOR                              |
|        | CONTOUR MINOR                              |
|        | (N) SITE WALL                              |
|        | (E) ROCKERY TO REMAIN                      |
|        | HOUSE FOOTPRINT                            |
|        | PATIO / WALKWAYS / CONCRETE DRIVE / PAVING |
|        | (E) PAVERS TO REMAIN                       |

**NOTES**

- NOTE: PROPERTY LINES, METES & BOUNDS, TREES, AND CONTOURS SHOWN PER TOPOGRAPHIC SURVEY BY SITE SURVEY MAPPING DATED 06.20.16 PER MDC 19.02.020 C.3 a.l. EXCEPT AS PROVIDED IN SUBSECTION (C)(3)(A)(II) OF THIS SECTION, PORCHES, CHIMNEY(S) AND FIREPLACE EXTENSIONS, WINDOW WELLS, AND UNROOFED, UNENCLOSED OUTSIDE STAIRWAYS AND DECKS SHALL NOT PROJECT MORE THAN THREE FEET INTO ANY REQUIRED YARD. EAVES SHALL NOT PROTRUDE MORE THAN 18 INCHES INTO ANY REQUIRED YARD.
- (E) STAIRS ASSUMED TO HAVE BEEN ESTABLISHED WITH ORIGINAL TERRACING SHOWN IN 1976 AERIALS

EXISTING 14" BLOCK TERRACE WALLS TO REMAIN: TERRACES SHOWN THROUGHOUT THE AERIAL TIME LAPSE, REPAIRED BETWEEN 2007 - 2009, BELIEVED TO HAVE BEEN REPAIRED AT THE TIME THE BOAT LIFT WAS ADDED TO THE DOCK. SITE WALLS TO CONSIDERED NEW HARDSCAPE, AS NOT PREVIOUSLY PERMITTED.

6" x 12" BLOCK PERIMETER - TO REMAIN THE PERIMETER WAS ESTABLISHED TO CREATE A LAWN EDGE WHICH HAD BEEN ERODING TO NATURAL BEACH BETWEEN 2007 - 2009. IT IS BELIEVED TO HAVE BEEN CREATED WHEN A SECOND BOAT LIFT WAS INSTALLED IN 2007. THESE CONDITIONS WERE IN PLACE AND INCLUDED IN THE DOCUMENTATION REQUIRED FOR A SHORELINE SUBSTANTIAL DEVELOPMENT PERMIT AND SEPA REVIEW THAT OCCURRED IN 2012 FOR THE DOCK EXTENSION - SH12-008. (E) SITE WALLS TO REMAIN LOCATED WITHIN THE OHWM BUFFER ZONE.

(E) DOCK & BOAT LIFT PERMITTED IN 1995 94-1304; SECOND LIFT ADDED 2007; DOCK EXTENDED WITH CANOPIES AT LIFTS ADDED IN 2014 REQUIRING A SHORELINE SUBSTANTIAL DEVELOPMENT PERMIT SH12-008, SEPA REVIEW AND A BUILDING PERMIT 1406-231.

PROJECT NORTH NORTH

1 SETBACK SITE PLAN  
1" = 10'-0"



NGUYEN RESIDENCE

9831 SE 42nd PLACE  
MERCER ISLAND, WA 98040  
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PERMIT DOCUMENTS

DATE: 05.19.22

SHEET SIZE: D (24X36)

REVISIONS  
NO. DATE:

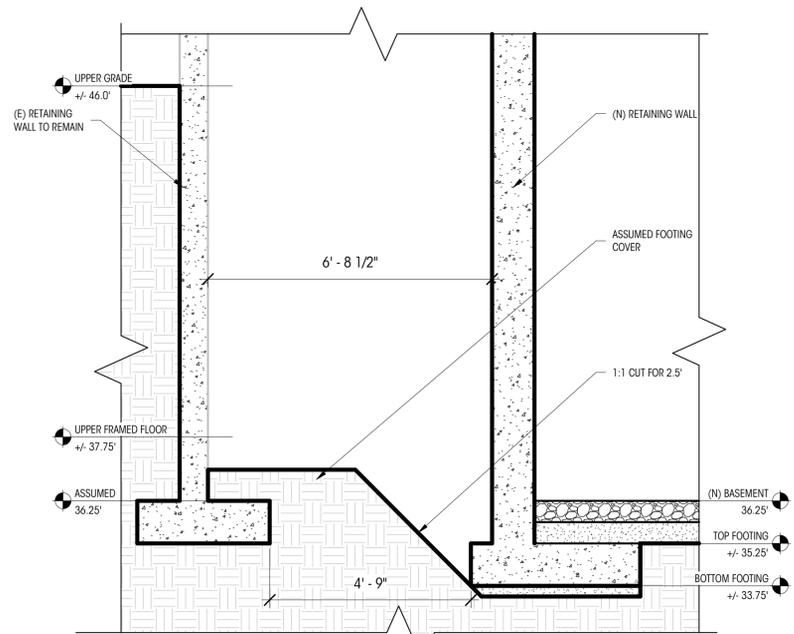
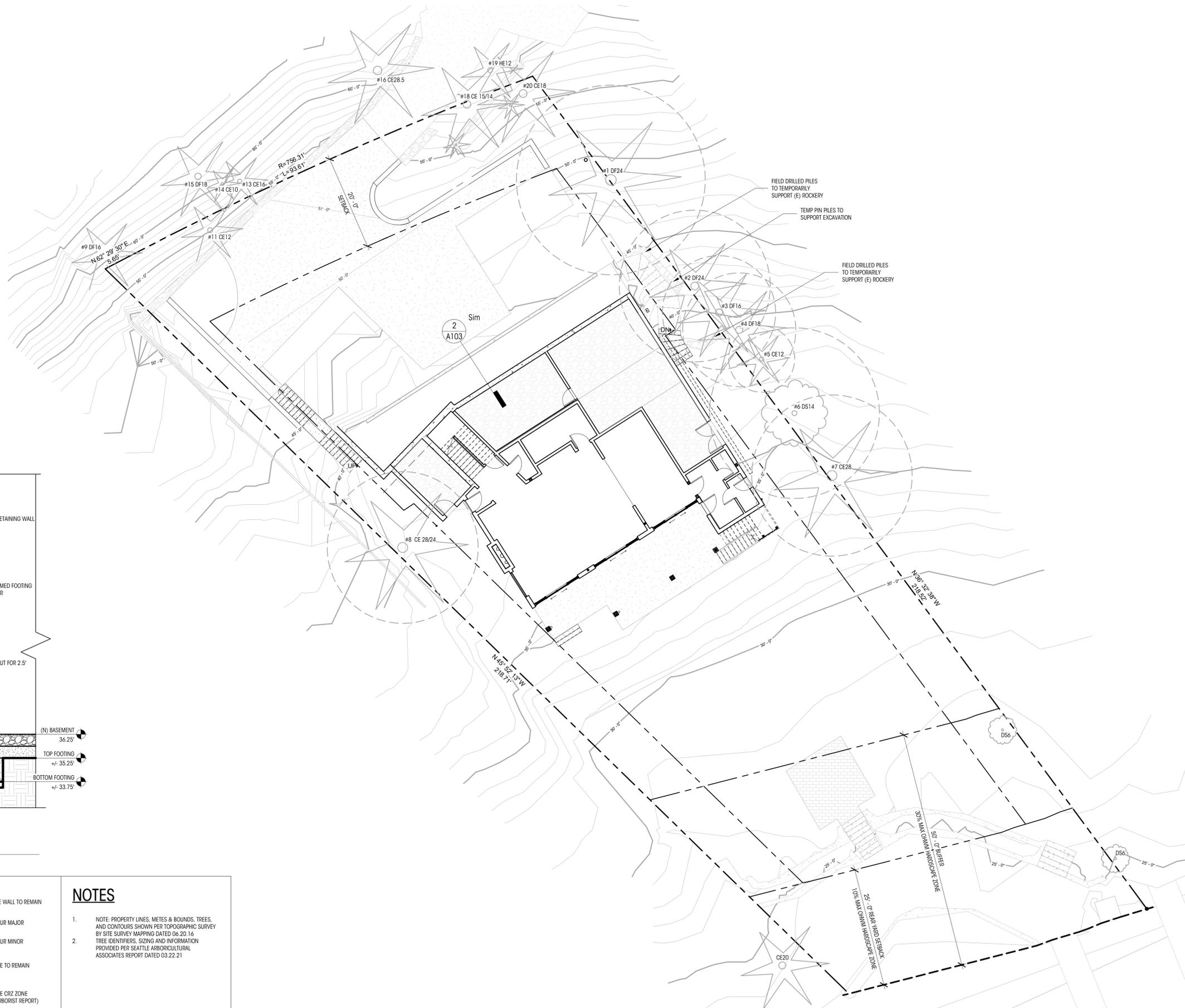
DRAWN BY:  
CHECKED BY:

SHORING PLAN

SCALE: As indicated

A103

DEDICATED  
APPROVAL  
STAMP SPACE



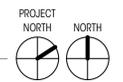
2 SHORING SECTION  
1/2" = 1'-0"

| LEGEND |   |
|--------|---|
|        | ELEVATION DATUM                         |
|        | MAIN LEVEL FIN. FLR.                    |
|        | ORDINARY HIGH WATER MARK                |
|        | PROPERTY LINE                           |
|        | SETBACK LINE                            |
|        | ROOF OVERHANG                           |
|        | TREE PROTECTION FENCE                   |
|        | (N) SITE WALL                           |
|        | (E) SITE WALL TO REMAIN                 |
|        | CONTOUR MAJOR                           |
|        | CONTOUR MINOR                           |
|        | (E) TREE TO REMAIN                      |
|        | (E) TREE CRZ ZONE (PER ARBORIST REPORT) |
|        | (N) TREE                                |

**NOTES**

- NOTE: PROPERTY LINES, METES & BOUNDS, TREES, AND CONTOURS SHOWN PER TOPOGRAPHIC SURVEY BY SITE SURVEY MAPPING DATED 06.20.14
- TREE IDENTIFIERS, SIZING AND INFORMATION PROVIDED PER SEATTLE ARBORICULTURAL ASSOCIATES REPORT DATED 03.22.21

1 SHORING PLAN  
1" = 10'-0"





# TREE REPLACEMENT

- TREE REPLACEMENT REQUIREMENTS:**
- Replacement conifer trees shall be 6-8 feet tall, each with a single, straight trunk without defect or deformity. Each tree shall have even branch distribution around and along the trunk's axis, with a minimum 90% live crown ratio (percent of trunk with foliage-bearing branches).
  - Deciduous trees shall be minimum 2" caliper, a trunk free from defect or injury, even and uniform branch distribution, and a LCR of 30% or greater.
  - The trees shall have foliage that is normal in color and density, and shoot growth evident of good tree vitality.
  - Tree planting activities shall comply with ANSI A-300 Part 6: Tree, Shrub, and Other Woody Plant Maintenance - Standard Practice (Transplanting). And shall follow ISA's Best Management Practices - Tree Planting (2005).
  - Rootballs shall be set on undisturbed or packed soil to prevent sinking, and the rootballs shall be exposed prior to planting and set level with finished grade. All wires, cords and burp shall be removed at planting. If staking is required to keep the tree upright during establishment, all cores, stakes and wires shall be removed after one year.
  - See replacement legend for tree species

**TREE PROTECTION MEASURES AROUND RETAINED TREES**  
 Prior to site clearing or demolition, minimum six (6) foot temporary chain-link fence shall be installed at the driplines of all retained trees, or at the limits of disturbance, when construction or access is required within the dripline. Fence shall completely encircle the retained trees. Install fence posts using pier block only. A City planner must approve any modifications to the fencing material and location. Fencing must be in accordance with the tree protection standards as outlined in KCC-95.34.

No stockpiling of materials, vehicular or pedestrian traffic, material storage or use of equipment or machinery shall be allowed within the protective fencing. Fencing shall not be moved or removed unless approved by a City planner. Any work, activity or soil disturbance within the protection fencing, or critical root zone, shall be reviewed, approved and monitored by the project arborist.

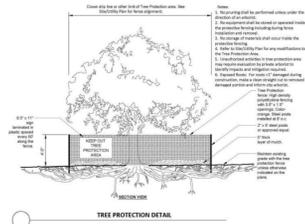
- Protection guidelines to be implemented on this project:
1. Root Zone Mulching: I recommend that prior to beginning demolition: enough arborist wood chips be brought in to cover the South areas of the drip line radius or CRZ of Trees #1-7 by 4'-5". Avoidable CRZ areas to East and North of Tree #8 should also be mulched. The purpose of mulching is to cool the soil, preserve the moisture and protect the roots. It will not be necessary to add mulch to the CRZ areas near Trees #9-20.
  2. Root Zone Fencing: Simultaneously with mulching, a 6' tall, moveable chain link fence should be installed at the outer edge of the drip line radius of CRZ. The purpose of the fencing is to create a NO GO ZONE where no construction materials may be stored or equipment staged. Trees #1-8 and #9-16 should be fenced off in this wall.
  3. Excavation: During excavation, if roots of protected trees that are 3" diameter or greater are encountered, they should be cut cleanly to the edge of the trench and not ripped from the ground.
  4. Irrigation: Providing extra water to the root zones of trees is the MOST CRITICAL factor in preserving trees during and after construction. If the project takes place during the growing season, I recommend that all available CRZ areas receive, either from rainfall or supplemental irrigation, the equivalent of 1" of water per week from at least MAY 1 - SEPTEMBER 30. This watering program should continue for TWO YEARS following completion of the project.

Fencing signage as detailed (see attached) must be posted every fifteen (15) feet along the fencing.

- Tree Protection Signage must include the following language:  
**WARNING TREE PROTECTION ZONE (TPZ)**  
 • This fence shall not be removed/moved from the approved location without written authorization from the City Arborist and supervision by the Project Arborist.  
 • No pruning shall be performed unless under the direction of a Project Arborist.  
 • No grading, excavation, storage (materials, equipment, vehicles, etc.) or other unpermitted activity shall occur inside the protective fencing.  
 • Unauthorized activities in tree protection areas may require immediate evaluation by the Project Arborist to identify impacts and potential mitigation.  
 • Penalties for damaging or removing a saved tree may be a fine up to three times the value of the tree plus restoration (MICC 19.10.160).  
 • Any work in approved TPZ must be with the permission of the City Arborist (206) 275-7713, john.kennedy@mercergov.org.

Per MICC 19.02.020(F)(3)(d), the project shall remove Japanese knotweed (*Polygonum cuspidatum*) and Regulated Class A, Regulated Class B, and Regulated Class C weeds identified on the King County Noxious Weed list, as amended, from required landscaping areas established pursuant to subsection (F)(3)(e) of this section. New landscaping associated with new single-family home shall not incorporate any weeds identified on the King County Noxious Weed list, as amended. Provided, that removal shall not be required if the removal will result in increased slope instability or risk of landslide or erosion.

# TREE RETENTION



# REPLACEMENT TREE LEGEND

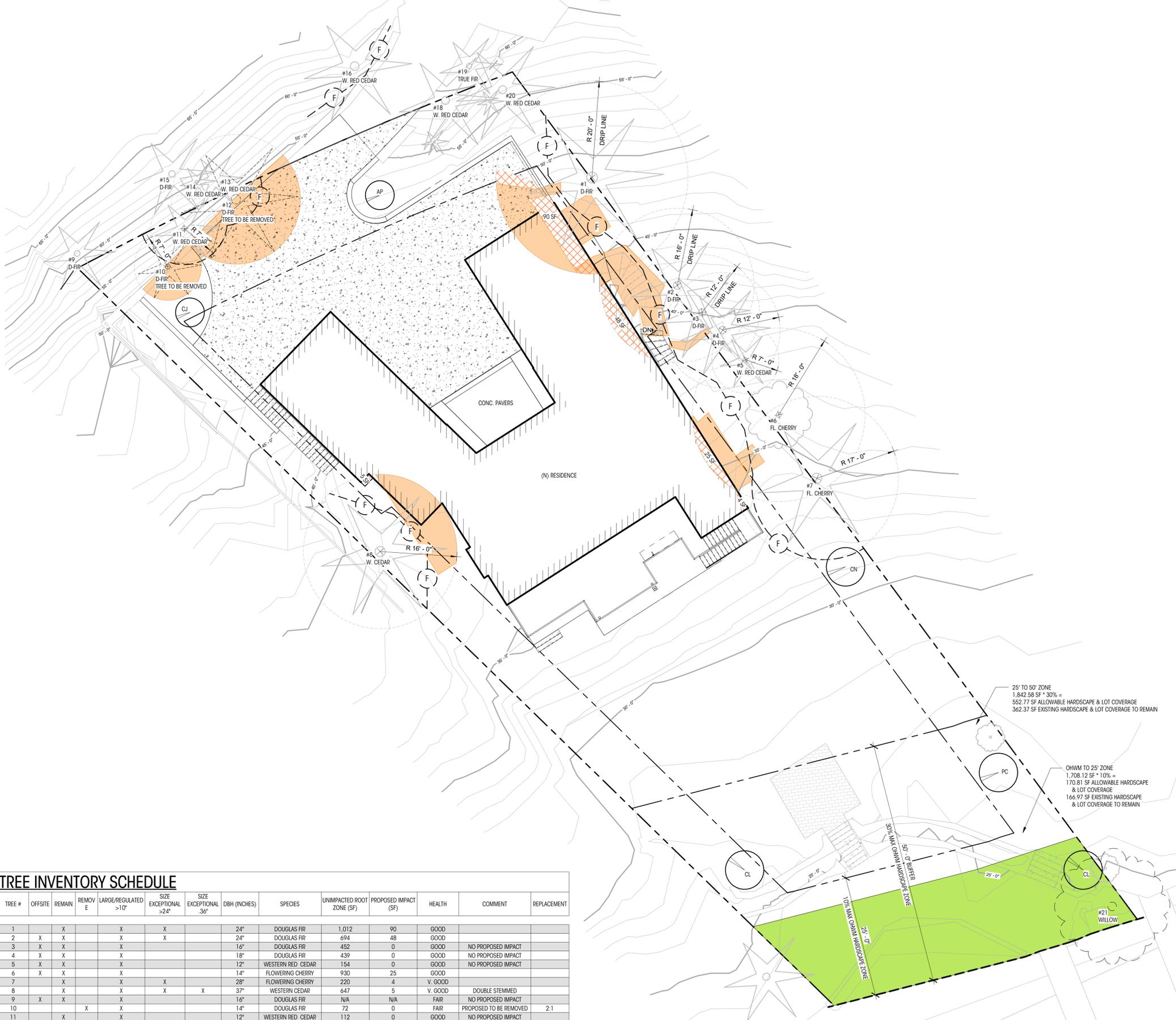
- CJ** KATSURA: *CORCIDIAPHYLUM JAPONICA*
- PC** SHORE PINE: *PINUS CONTORTA*
- AP** RED JAPANESE MAPLE: *ACER PALMATUM*
- CN** 'EDDIES WHITE WONDER' DOGWOOD: *CORNUS NUTALIX FLORIDA*
- CL** WEeping BLUE ATLAS CEDAR: *CEDRUS LIBANI (GLAUCA PENDULA)*

# TREE RETENTION CALCULATION

**TREE RETENTION CALCULATION**  
 8 ON-SITE TREES  
 30% RETENTION REQUIRED = (2.4) 3 TREES  
 PROPOSED REMOVAL = 3 TREES  
 PROPOSED RETAINANCE = 5 TREES (> 3 REQUIRED)

# SURFACE LEGEND

- F** TREE PROTECTION FENCE
- 20' PLANTING ZONE**
- (E) TREE TO REMAIN**
- (E) TREE CRZ ZONE (PER ARBORIST REPORT)**
- MAIN LEVEL FOOTPRINT**
- DRIVEWAY FOOTPRINT**
- PORTION OF (E) CRZ PREVIOUSLY IMPACTED**
- PROPOSED IMPACT TO CRITICAL ROOT ZONE (CRZ)**



# TREE INVENTORY SCHEDULE

| TREE # | OFFSITE | REMAIN | REMOVED | LARGE/REGULATED >10" | SIZE EXCEPTIONAL >24" | SIZE EXCEPTIONAL .36" | DBH (INCHES) | SPECIES           | UNIMPACTED ROOT ZONE (SF) | PROPOSED IMPACT (SF) | HEALTH | COMMENT                 | REPLACEMENT |
|--------|---------|--------|---------|----------------------|-----------------------|-----------------------|--------------|-------------------|---------------------------|----------------------|--------|-------------------------|-------------|
| 1      |         | X      |         | X                    | X                     |                       | 24"          | DOUGLAS FIR       | 1,012                     | 90                   | GOOD   |                         |             |
| 2      | X       | X      |         | X                    | X                     |                       | 24"          | DOUGLAS FIR       | 694                       | 48                   | GOOD   |                         |             |
| 3      | X       | X      |         | X                    |                       |                       | 16"          | DOUGLAS FIR       | 452                       | 0                    | GOOD   | NO PROPOSED IMPACT      |             |
| 4      | X       | X      |         | X                    |                       |                       | 18"          | DOUGLAS FIR       | 439                       | 0                    | GOOD   | NO PROPOSED IMPACT      |             |
| 5      | X       | X      |         | X                    |                       |                       | 12"          | WESTERN RED CEDAR | 154                       | 0                    | GOOD   | NO PROPOSED IMPACT      |             |
| 6      | X       | X      |         | X                    |                       |                       | 14"          | FLOWERING CHERRY  | 930                       | 25                   | GOOD   |                         |             |
| 7      | X       | X      |         | X                    | X                     |                       | 28"          | FLOWERING CHERRY  | 220                       | 4                    | V GOOD |                         |             |
| 8      | X       | X      |         | X                    |                       | X                     | 37"          | WESTERN CEDAR     | 647                       | 5                    | V GOOD | DOUBLE STEMMED          |             |
| 9      | X       | X      |         | X                    |                       |                       | 16"          | DOUGLAS FIR       | N/A                       | N/A                  | FAIR   | NO PROPOSED IMPACT      |             |
| 10     |         |        | X       | X                    |                       |                       | 14"          | DOUGLAS FIR       | 72                        | 0                    | FAIR   | PROPOSED TO BE REMOVED  | 2:1         |
| 11     |         | X      |         | X                    |                       |                       | 12"          | WESTERN RED CEDAR | 112                       | 0                    | GOOD   | NO PROPOSED IMPACT      |             |
| 12     |         |        | X       | X                    |                       |                       | 19"          | DOUGLAS FIR       | 302                       | 0                    | FAIR   | PROPOSED TO BE REMOVED  | 2:1         |
| 13     | X       | X      |         | X                    |                       |                       | 16"          | WESTERN RED CEDAR | N/A                       | N/A                  | FAIR   | NO PROPOSED IMPACT      |             |
| 14     | X       | X      |         | X                    |                       |                       | 10"          | WESTERN RED CEDAR | N/A                       | N/A                  | FAIR   | NO PROPOSED IMPACT      |             |
| 15     | X       | X      |         | X                    |                       |                       | 18"          | DOUGLAS FIR       | N/A                       | N/A                  | FAIR   | NO PROPOSED IMPACT      |             |
| 16     | X       | X      |         | X                    | X                     |                       | 28.5"        | WESTERN RED CEDAR | N/A                       | N/A                  | FAIR   | NO PROPOSED IMPACT      |             |
| 18     | X       | X      |         | X                    |                       |                       | 20.5"        | WESTERN RED CEDAR | N/A                       | N/A                  | FAIR   | NO PROPOSED IMPACT      |             |
| 19     | X       | X      |         | X                    |                       |                       | 12"          | TRUE FIR          | N/A                       | N/A                  | POOR   | NO PROPOSED IMPACT      |             |
| 20     |         | X      |         | X                    |                       |                       | 18"          | WESTERN RED CEDAR | N/A                       | N/A                  | POOR   | NO PROPOSED IMPACT      |             |
| 21     |         |        | X       |                      |                       |                       | 19"          | WILLOW            | N/A                       | N/A                  | DEAD   | FELL IN STORM 2017-2018 | 2:1         |

2 PROPOSED TREE PLAN  
 1" = 10'-0"

**Brandt**  
 Design Group  
 66 Bell Street  
 Unit 1  
 Seattle, WA  
 98121  
 206.239.0850  
 brandtdesigninc.com

8843 REGISTERED ARCHITECT  
 STATE OF WASHINGTON

**NGUYEN RESIDENCE**  
 9831 SE 42nd PLACE  
 MERCER ISLAND, WA 98040  
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# PERMIT DOCUMENTS

DATE: 05.19.22  
 SHEET SIZE: D (24X36)  
**REVISIONS**  
 NO. DATE:

DRAWN BY:  
 CHECKED BY:  
**TREE RETENTION PLAN**

SCALE: As indicated

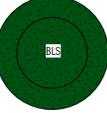
# A105

DEDICATED APPROVAL STAMP SPACE



# SHORELINE RESTORATION PLANTIN PALETTE

VEGETATION SPECIES COMMON NAME SPECIES LATIN NAME

-  DUNEGRASS *ELYMUS MOLLI*
-  DOUGLAS ASTER *ASTER SUBSPICATUS*
-  BROAD-LEAVED STONECROP *SEDUM SPATHULIFOLIUM*
-  BEACH STRAWBERRY *FRAGARIA CHILOENSIS*
-  LYNGBYE'S SEDGE *CAREX LYNGBYEI*
-  TUFTED HAIRGRASS *DESCHAMPSIA CESPITOSA*
-  THRIFT: SEA PINK *ARMERIA MARITIMA*
-  HENDERSON'S CHECKER MALLOW *SIDALCEA HENDERSONII*
-  WEeping BLUE ATLAS CEDAR: *CEDRUS LIBANI GLAUCAPENDULA*
-  SHORE PINE: *PINUS CONTORTA*
-  (E) TREE TO REMAIN

| LEGEND  |   |
|---|---|
|  | PROPERTY LINE   |
|  | SETBACK LINE  |
|  | CONTOUR MAJOR   |
|  | CONTOUR MINOR   |
|  | ORDINARY HIGH WATER MARK  |
|  | (E) NATIVE SHORELINE AREA   |
|  | (E) HARDSCAPE   |
|  | 20' PLANTING ZONE   |
|  | ADDITIONAL 157 SF OF PLANTING BEYOND 20' PLANTING ZONE TO PROVIDE NATIVE REVEGETATION AREA REQUIRED |
|  | (E) SITE WALLS AND STEPS TO REMAIN  |

**NOTES**

- PROPERTY LINE METES, METES & BOUNDS TREES AND CONTOURS SHOWN PER TOPOGRAPHIC SURVEY BY SITE SURVEY MAPPING DATED 06/20/14.
- TREE IDENTIFIERS, SIZING AND INFORMATION PROVIDED PER SEATTLE ARBORICULTURAL ASSOCIATES REPORT DATED 04/21/21.
- SEE SHEET A101 FOR ADDITIONAL PROJECT DATA & SQUARE FOOTAGE CALCULATIONS.
- SEE CIVIL PLANS FOR SITE PROTECTION (TSSC), STORM WATER CONTROL, AND GRADING.
- (19.13.020 a) LEGAL NONCONFORMING USES AND STRUCTURES MAY CONTINUE.
- MAXIMUM OF 10% HARDSCAPE AND LOT COVERAGE PERMITTED BETWEEN 0 AND 25 FEET FROM OHWM.
- MAXIMUM OF 30% HARDSCAPE AND LOT COVERAGE PERMITTED BETWEEN 25 AND 50 FEET FROM OHWM.

PER MICC 19.02.020(F)(3)(D), THE PROJECT SHALL REMOVE JAPANESE KNOTWEED (*POLYGONUM CUSPIDATUM*) AND REGULATED CLASS A, REGULATED CLASS B, AND REGULATED CLASS C WEEDS IDENTIFIED ON THE KING COUNTY NOXIOUS WEED LIST, AS AMENDED, FROM REQUIRED LANDSCAPING AREAS ESTABLISHED PURSUANT TO SUBSECTION (F)(3)(A) OF THIS SECTION. NEW LANDSCAPING ASSOCIATED WITH NEW SINGLE-FAMILY HOME SHALL NOT INCORPORATE ANY WEEDS IDENTIFIED ON THE KING COUNTY NOXIOUS WEED LIST, AS AMENDED, PROVIDED, THAT REMOVAL SHALL NOT BE REQUIRED IF THE REMOVAL WILL RESULT IN INCREASED SLOPE INSTABILITY OR RISK OF LANDSLIDE OR EROSION.

**PLANTING SQUARE FOOTAGE DATA 19.13.050(K)(4)(i)**

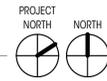
|                                    |   |
|------------------------------------|---|
| 20' PLANTING ZONE                  | 1,359 SF  |
| NATIVE VEGETATION COVERAGE REQ'D   | 1,019 SF (75%)  |
| 20' PLANTING ZONE                  | 1,359 SF  |
| (E) NATIVE SHORELINE AREA          | -329.29 SF  |
| (E) HARDSCAPE IN 20' PLANTING ZONE | -166.97 SF  |
| REMAINING PLANTING AREA            | 862.74 SF   |
| NATIVE VEGETATION COVERAGE REQ'D   | 1,019 SF (75%)  |
| REMAINING PLANTING AREA            | -862.74 SF  |
|                                    | 156.26 SF ADDITIONAL TO MEET 75% NATIVE VEGETATION COVERAGE REQ |

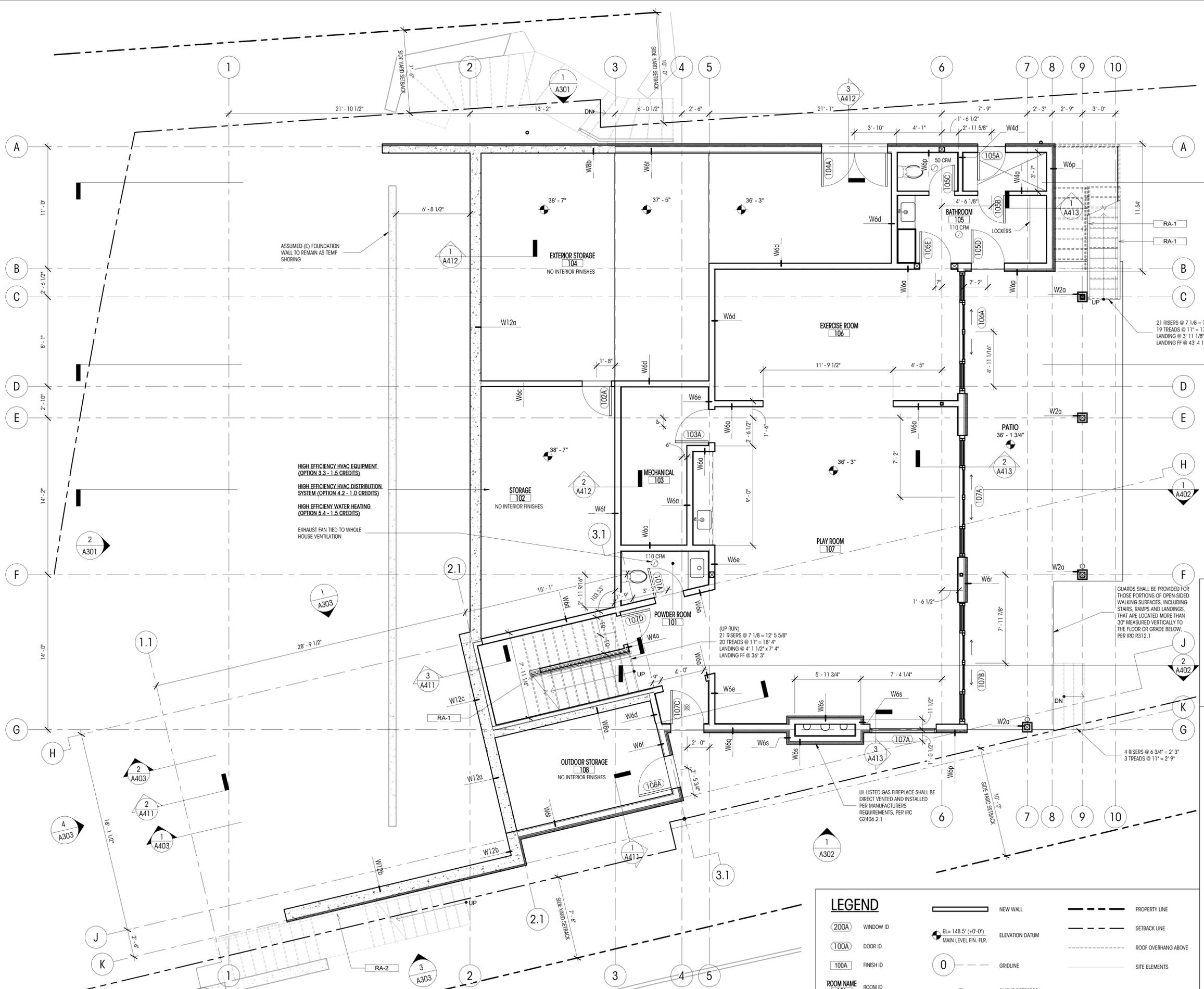


4'-12" BLOCK PERIMETER - TO REMAIN THE PERIMETER WAS ESTABLISHED TO CREATE A LAWN EDGE WHICH HAD BEEN ERODING TO NATURAL BEACH BETWEEN 2007 - 2009. IT IS BELIEVED TO HAVE BEEN CREATED WHEN A SECOND BOAT LIFT WAS INSTALLED IN 2007. THESE CONDITIONS WERE IN PLACE AND INCLUDED IN THE DOCUMENTATION REQUIRED FOR A SHORELINE SUBSTANTIAL DEVELOPMENT PERMIT AND SEPA REVIEW THAT OCCURRED IN 2012 FOR THE DOCK EXTENSION - SH12-008. (E) SITE WALLS TO REMAIN LOCATED WITHIN THE OHWM BUFFER ZONE.

(E) DOCK & BOAT LIFT PERMITTED IN 1995 94-1304; SECOND LIFT ADDED 2007; DOCK EXTENDED WITH CANOPIES AT LIFTS ADDED IN 2014 REQUIRING A SHORELINE SUBSTANTIAL DEVELOPMENT PERMIT SH12-008, SEPA REVIEW AND A BUILDING PERMIT 1406-231.

1 CRITICAL AREAS SITE PLANTING PLAN  
1/4" = 1'-0"





ASSUMED (E) FOUNDATION WALL TO REMAIN AS TEMP SHORING

HIGH EFFICIENCY HVAC EQUIPMENT (OPTION 3.3 - 1.5 CREDITS)  
HIGH EFFICIENCY HVAC DISTRIBUTION SYSTEM (OPTION 4.2 - 1.0 CREDITS)  
HIGH EFFICIENCY WATER HEATING (OPTION 5.4 - 1.5 CREDITS)  
EXHAUST FAN TIED TO WHOLE HOUSE VENTILATION

GUARDS SHALL BE PROVIDED FOR THOSE PORTIONS OF OPEN-SIDED WALKING SURFACES, INCLUDING STAIRS, RAMPS AND LANDINGS, THAT ARE LOCATED MORE THAN 30" MEASURED VERTICALLY TO THE FLOOR OR GRADE BELOW, PER IRC R312.1

(UP RUN)  
21 RISERS @ 7 1/8" = 12' 5 5/8"  
20 TREADS @ 11" = 18' 4"  
LANDING @ 4' 1 1/2" x 7' 4"  
LANDING FF @ 3' 3"

4 RISERS @ 6 3/4" = 2' 3"  
3 TREADS @ 11" = 2' 9"

UL LISTED GAS FIREPLACE SHALL BE DIRECT VENTED AND INSTALLED PER MANUFACTURERS REQUIREMENTS, PER IRC G2406.2.1

**KEYNOTE LEGEND**

|      |   |
|------|---|
| RA-1 | PRE-MANUFACTURED 3'-0" HIGH GUARDRAIL TO RESTRICT PASSAGE OF A 4" SPHERE PER IRC R312.1.3. CONTRACTOR SHALL VERIFY TO INSPECTOR ALL GUARDS AND RAILINGS SHALL BE CAPABLE OF RESISTING 200LB LOAD ON TOP OF RAIL ACTING IN ANY DIRECTION AS REQUIRED BY IRC R301.5, TYP. DESIGN AND CONNECTION UNDER DEFERRED SUBMITTAL. |
| RA-2 | HANDRAIL @ 3'-0" ABOVE STAIR NOSE PER IRC R311.7.8, TYP.  |
| CH-1 | CHIMNEYS SHALL EXTEND NOT LESS THAN 2 FEET (610 MM) HIGHER THAN ANY PORTION OF A BUILDING WITHIN 10 FEET (3048 MM), BUT SHALL NOT BE LESS THAN 3 FEET (914 MM) ABOVE THE HIGHEST POINT WHERE THE CHIMNEY PASSES THROUGH THE ROOF.   |

- NOTES**
- ALL DIMENSIONS AT WALLS TO FACE OF FRAMING OR TO FACE OF CONCRETE, U.N.O.
  - ALL DIMENSIONS AT KITCHEN TO EDGE OF COUNTERTOPS, U.N.O.
  - ALL NEW WALLS TYPE W60 UNLESS NOTED OTHERWISE
  - ALL DIMENSIONS ASSOCIATED WITH (E) CONSTRUCTION ARE ASSUMED. CONTRACTOR TO VERIFY ALL DIMS IN FIELD AND CONTACT ARCHITECT WITH ANY DISCREPANCIES PRIOR TO CONSTRUCTION
  - CONTRACTOR TO VERIFY CARBON MONOXIDE ALARMS ARE OUTSIDE OF EACH BEDROOM IN THE IMMEDIATE VICINITY ON EACH FLOOR LEVEL PER IRC SECTION 315.3
  - CONTRACTOR TO VERIFY SMOKE ALARMS ARE OUTSIDE OF EACH BEDROOM IN THE IMMEDIATE VICINITY ON EACH FLOOR LEVEL PER IRC SECTION 314.2.2
  - FLOOR, CEILING, AND WALL ASSEMBLIES ARE LISTED ON SHEETS A701 & A702
  - UL LISTED GAS FIREPLACE SHALL BE DIRECT VENTED AND INSTALLED PER MANUFACTURERS REQUIREMENTS, PER IRC G2406.2.1

- ENERGY CREDIT NOTES**
- HIGH EFFICIENCY HVAC EQUIPMENT (OPTION 3.3 - 1.5 CREDITS)**  
CLOSED-LOOP GROUND SOURCE HEAT PUMP WITH A MINIMUM COP OF 3.3 OR OPEN LOOP WATER SOURCE HEAT PUMP WITH A MAXIMUM PUMPING HYDRAULIC HEAD OF 150 FEET AND MINIMUM COP OF 3.6.
- HIGH EFFICIENCY HVAC DISTRIBUTION SYSTEM (OPTION 4.2 - 1.0 CREDITS)**  
HVAC EQUIPMENT AND ASSOCIATED DUCT SYSTEM(S) INSTALLATION SHALL COMPLY WITH THE REQUIREMENTS OF SECTION R403.3.7. LOCATING SYSTEM COMPONENTS IN CONDITIONED SPACES IS NOT PERMITTED UNDER THIS OPTION. ELECTRIC RESISTANCE HEAT AND DUCTLESS HEAT PUMPS ARE NOT PERMITTED UNDER THIS OPTION. DIRECT COMBUSTION HEATING EQUIPMENT WITH AFUE LESS THAN 80% IS NOT PERMITTED UNDER THIS OPTION.
- HIGH EFFICIENCY WATER HEATING (OPTION 5.4 - 1.5 CREDITS)**  
WATER HEATING SYSTEM SHALL INCLUDE ONE OF THE FOLLOWING: ELECTRIC HEAT PUMP WATER HEATER MEETING THE STANDARDS FOR TIER 1 NEEA'S ADVANCED WATER HEATING SPECIFICATION OR FOR R-2 OCCUPANCY, ELECTRIC HEAT PUMP WATER HEATER(S), MEETING THE STANDARDS FOR TIER 1 OF NEEA'S ADVANCED WATER HEATING SPECIFICATION, SHALL SUPPLY DOMESTIC HOT WATER TO ALL UNITS. IF ONE WATER HEATER IS SERVING MORE THAN ONE DWELLING UNIT, ALL HOT WATER SUPPLY AND RECIRCULATION PIPING SHALL BE INSULATED WITH R-8 MINIMUM PIPE INSULATION.

**LEGEND**

|           |                      |                     |                                |     |                      |
|-----------|----------------------|---------------------|--------------------------------|-----|----------------------|
| (200A)    | WINDOW ID            | —                   | NEW WALL                       | --- | PROPERTY LINE        |
| (100A)    | DOOR ID              | EL= 148.5' (+0'-0') | ELEVATION DATUM                | --- | SETBACK LINE         |
| 100A      | FINISH ID            | 0                   | GRIDLINE                       | --- | ROOF OVERHANGS ABOVE |
| ROOM NAME | ROOM ID              | ○                   | SMOKE DETECTOR                 | --- | SITE ELEMENTS        |
| W4a       | ASSEMBLY ID          | ⊗                   | SMOKE/CARBON MONOXIDE DETECTOR |     |                      |
| ○         | FAN - 100 CFM U.N.O. |                     |                                |     |                      |

1 LOWER FLOOR PLAN  
1/4" = 1'-0"





NGUYEN RESIDENCE

9831 SE 42nd PLACE  
MERCER ISLAND, WA 98040  
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PERMIT DOCUMENTS

DATE: 05.19.22

SHEET SIZE: D (24X36)

REVISIONS

NO. DATE:

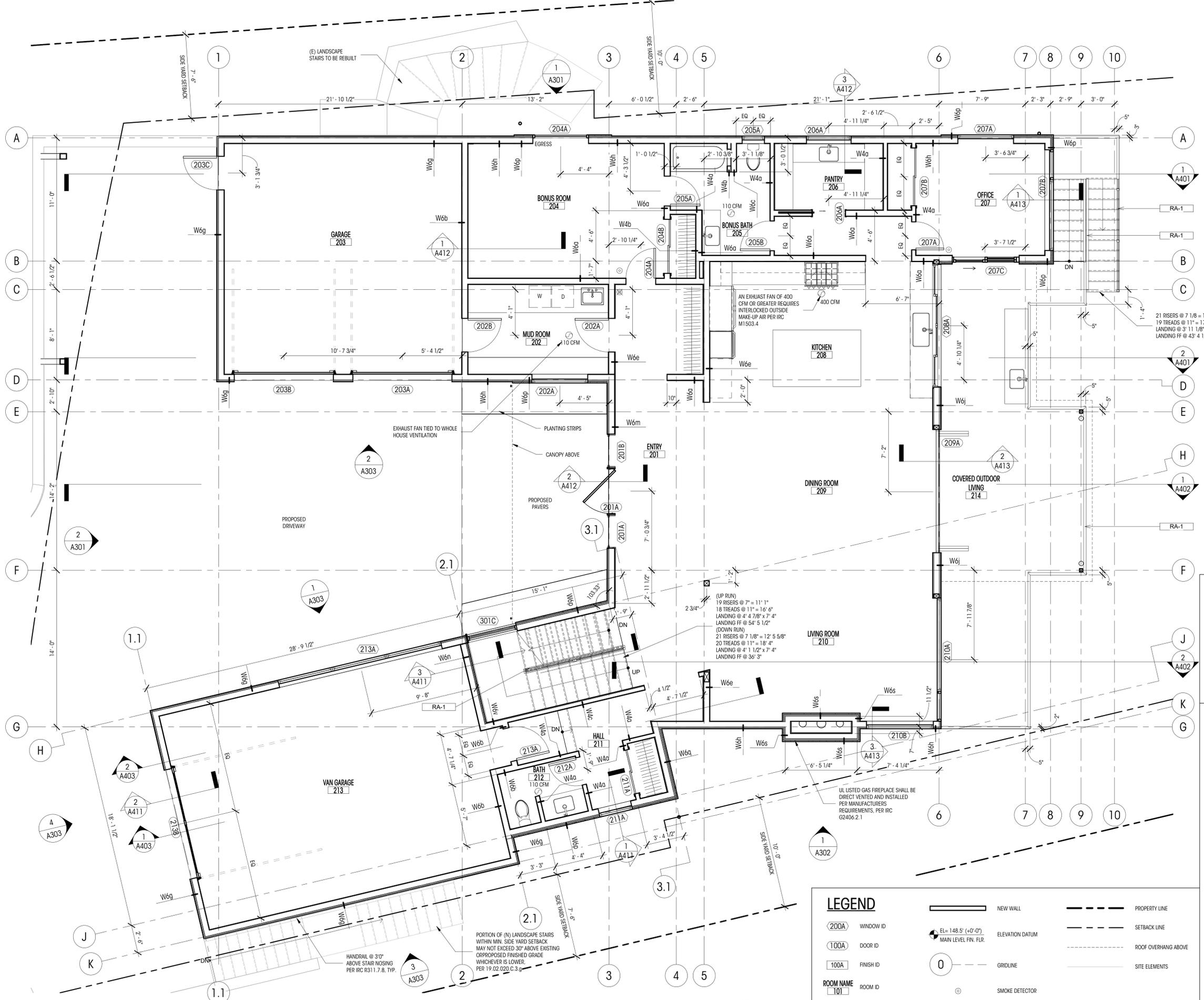
DRAWN BY:  
CHECKED BY:

MAIN FLOOR PLAN

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

A212

DEDICATED  
APPROVAL  
STAMP SPACE



1 MAIN FLOOR PLAN  
1/4" = 1'-0"

**LEGEND**

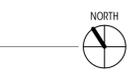
|           |                      |                     |                                |     |                      |
|-----------|----------------------|---------------------|--------------------------------|-----|----------------------|
| (200A)    | WINDOW ID            | —                   | NEW WALL                       | --- | PROPERTY LINE        |
| (100A)    | DOOR ID              | EL= 148.5' (+0'-0') | ELEVATION DATUM                | --- | SETBACK LINE         |
| 100A      | FINISH ID            | 0                   | GRIDLINE                       | --- | ROOF OVERHANGS ABOVE |
| ROOM NAME | ROOM ID              | ○                   | SMOKE DETECTOR                 | --- | SITE ELEMENTS        |
| W4a       | ASSEMBLY ID          | ⊗                   | SMOKE/CARBON MONOXIDE DETECTOR |     |                      |
| ○         | FAN - 100 CFM U.N.O. |                     |                                |     |                      |

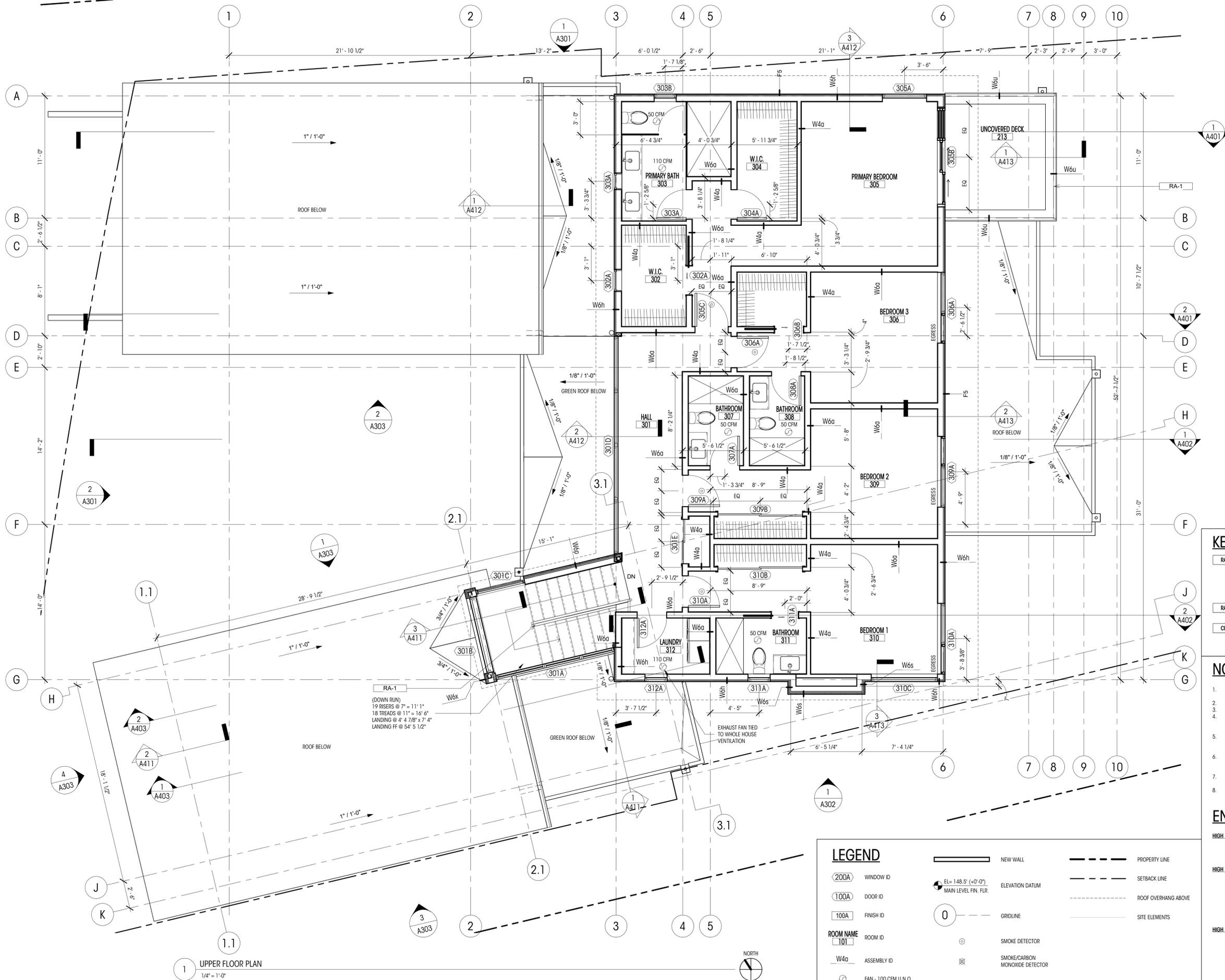
**KEYNOTE LEGEND**

|      |   |
|------|---|
| RA-1 | PRE-MANUFACTURED 3'-0" HIGH GUARDRAIL TO RESTRICT PASSAGE OF A 4" SPHERE PER IRC R312.1.3. CONTRACTOR SHALL VERIFY TO INSPECTOR ALL GUARDS AND RAILINGS SHALL BE CAPABLE OF RESISTING 200LB LOAD ON TOP OF RAIL ACTING IN ANY DIRECTION AS REQUIRED BY IRC R301.5, TYP. DESIGN AND CONNECTION UNDER DEFERRED SUBMITTAL. |
| RA-2 | HANDRAIL @ 3" ABOVE STAIR NOSING PER IRC R311.7.8, TYP.   |
| CH-1 | CHIMNEYS SHALL EXTEND NOT LESS THAN 2 FEET (610 MM) HIGHER THAN ANY PORTION OF A BUILDING WITHIN 10 FEET (3048 MM), BUT SHALL NOT BE LESS THAN 3 FEET (914 MM) ABOVE THE HIGHEST POINT WHERE THE CHIMNEY PASSES THROUGH THE ROOF.   |

- NOTES**
- ALL DIMENSIONS AT WALLS TO FACE OF FRAMING OR TO FACE OF CONCRETE, U.N.O.
  - ALL DIMENSIONS AT KITCHEN TO EDGE OF COUNTERTOPS, U.N.O.
  - ALL NEW WALLS TYPE W60 UNLESS NOTED OTHERWISE.
  - ALL DIMENSIONS ASSOCIATED WITH (E) CONSTRUCTION ARE ASSUMED. CONTRACTOR TO VERIFY ALL DIMS IN FIELD AND CONTACT ARCHITECT WITH ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
  - CONTRACTOR TO VERIFY CARBON MONOXIDE ALARMS ARE OUTSIDE OF EACH BEDROOM IN THE IMMEDIATE VICINITY ON EACH FLOOR LEVEL PER IRC SECTION 315.3.
  - CONTRACTOR TO VERIFY SMOKE ALARMS ARE OUTSIDE OF EACH BEDROOM IN THE IMMEDIATE VICINITY ON EACH FLOOR LEVEL PER IRC SECTION 314.2.2.
  - FLOOR, CEILING, AND WALL ASSEMBLIES ARE LISTED ON SHEETS A701 & A702.
  - UL LISTED GAS FIREPLACE SHALL BE DIRECT VENTED AND INSTALLED PER MANUFACTURERS REQUIREMENTS, PER IRC G2406.2.1

- ENERGY CREDIT NOTES**
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HVAC EQUIPMENT AND ASSOCIATED DUCT SYSTEM(S) INSTALLATION SHALL COMPLY WITH THE REQUIREMENTS OF SECTION R403.3.7. LOCATING SYSTEM COMPONENTS IN CONDITIONED CRAWL SPACES IS NOT PERMITTED UNDER THIS OPTION. ELECTRIC RESISTANCE HEAT AND DUCTLESS HEAT PUMPS ARE NOT PERMITTED UNDER THIS OPTION. DIRECT COMBUSTION HEATING EQUIPMENT WITH AFUE LESS THAN 80% IS NOT PERMITTED UNDER THIS OPTION.
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1 UPPER FLOOR PLAN  
1/4" = 1'-0"

KEYNOTE LEGEND

- RA-1 PRE-MANUFACTURED 3'-0" HIGH GUARDRAIL TO RESTRICT PASSAGE OF A 4' SPHERE PER IRC R312.1.3. CONTRACTOR SHALL VERIFY TO INSPECTOR ALL GUARDS AND RAILINGS SHALL BE CAPABLE OF RESISTING 200LB LOAD ON TOP OF RAIL ACTING IN ANY DIRECTION AS REQUIRED BY IRC R301.5, TYP. DESIGN AND CONNECTION UNDER DEFERRED SUBMITTAL.
- RA-2 HANDRAIL @ 3'-0" ABOVE STAIR NOSE PER IRC R311.7.8, TYP.
- CH-1 CHIMNEYS SHALL EXTEND NOT LESS THAN 2 FEET (610 MM) HIGHER THAN ANY PORTION OF A BUILDING WITHIN 10 FEET (3048 MM), BUT SHALL NOT BE LESS THAN 3 FEET (914 MM) ABOVE THE HIGHEST POINT WHERE THE CHIMNEY PASSES THROUGH THE ROOF

NOTES

- ALL DIMENSIONS AT WALLS TO FACE OF FRAMING OR TO FACE OF CONCRETE, U.N.O.
- ALL DIMENSIONS AT KITCHEN TO EDGE OF COUNTERTOPS, U.N.O.
- ALL NEW WALLS TYPE W6a UNLESS NOTED OTHERWISE
- ALL DIMENSIONS ASSOCIATED WITH (E) CONSTRUCTION ARE ASSUMED. CONTRACTOR TO VERIFY ALL DIMS IN FIELD AND CONTACT ARCHITECT WITH ANY DISCREPANCIES PRIOR TO CONSTRUCTION
- CONTRACTOR TO VERIFY CARBON MONOXIDE ALARMS ARE OUTSIDE OF EACH BEDROOM IN THE IMMEDIATE VICINITY ON EACH FLOOR LEVEL PER IRC SECTION 315.3
- CONTRACTOR TO VERIFY SMOKE ALARMS ARE OUTSIDE OF EACH BEDROOM IN THE IMMEDIATE VICINITY ON EACH FLOOR LEVEL PER IRC SECTION 314.2.2
- FLOOR, CEILING, AND WALL ASSEMBLIES ARE LISTED ON SHEETS A701 & A702
- UL LISTED GAS FIREPLACE SHALL BE DIRECT VENTED AND INSTALLED PER MANUFACTURERS REQUIREMENTS, PER IRC G2406.2.1

ENERGY CREDIT NOTES

- HIGH EFFICIENCY HVAC EQUIPMENT (OPTION 3.3 - 1.5 CREDITS)**  
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LEGEND

- (200A) WINDOW ID
- (100A) DOOR ID
- 100A FINISH ID
- ROOM NAME ROOM ID
- W4a ASSEMBLY ID
- FAN - 100 CFM U.N.O.
- NEW WALL
- ELEVATION DATUM
- GRIDLINE
- SMOKE DETECTOR
- SMOKE/CARBON MONOXIDE DETECTOR
- PROPERTY LINE
- SETBACK LINE
- ROOF OVERHANGS ABOVE
- SITE ELEMENTS



**NGUYEN RESIDENCE**

9831 SE 42nd PLACE  
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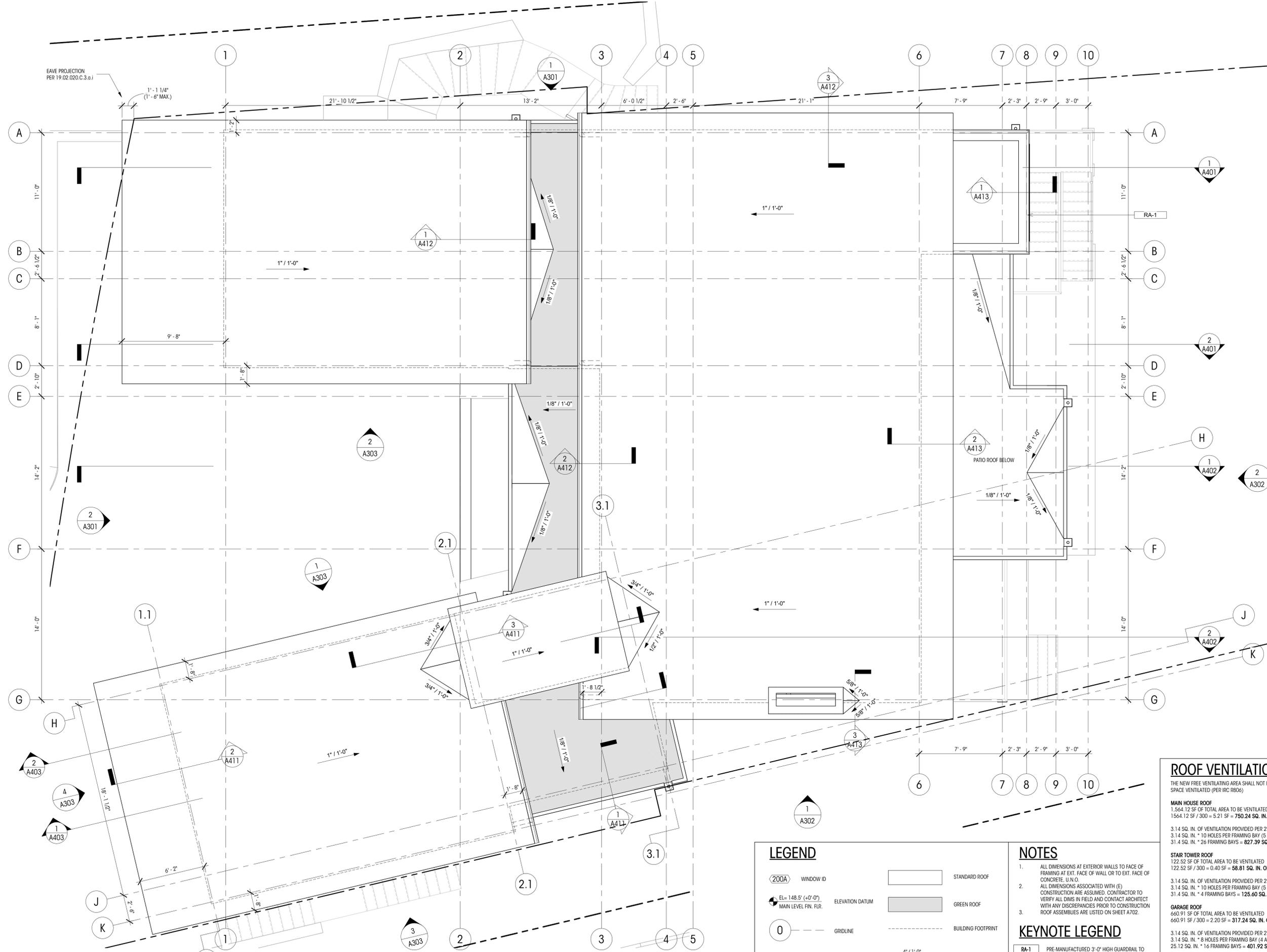
DRAWN BY:  
CHECKED BY:

ROOF PLAN

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

**A214**

DEDICATED  
APPROVAL  
STAMP SPACE



1 ROOF PLAN  
1/4" = 1'-0"

| LEGEND                                      |                    |
|---|--------------------|
| (200A) WINDOW ID                            | STANDARD ROOF      |
| El. 148.5' (+0'-0')<br>MAIN LEVEL FIN. FLR. | ELEVATION DATUM    |
| 0 GRIDLINE                                  | BUILDING FOOTPRINT |
| --- PROPERTY LINE                           | SPOT SLOPE         |
| --- PROPERTY SETBACK                        | SITE ELEMENTS      |
|   | GREEN ROOF         |

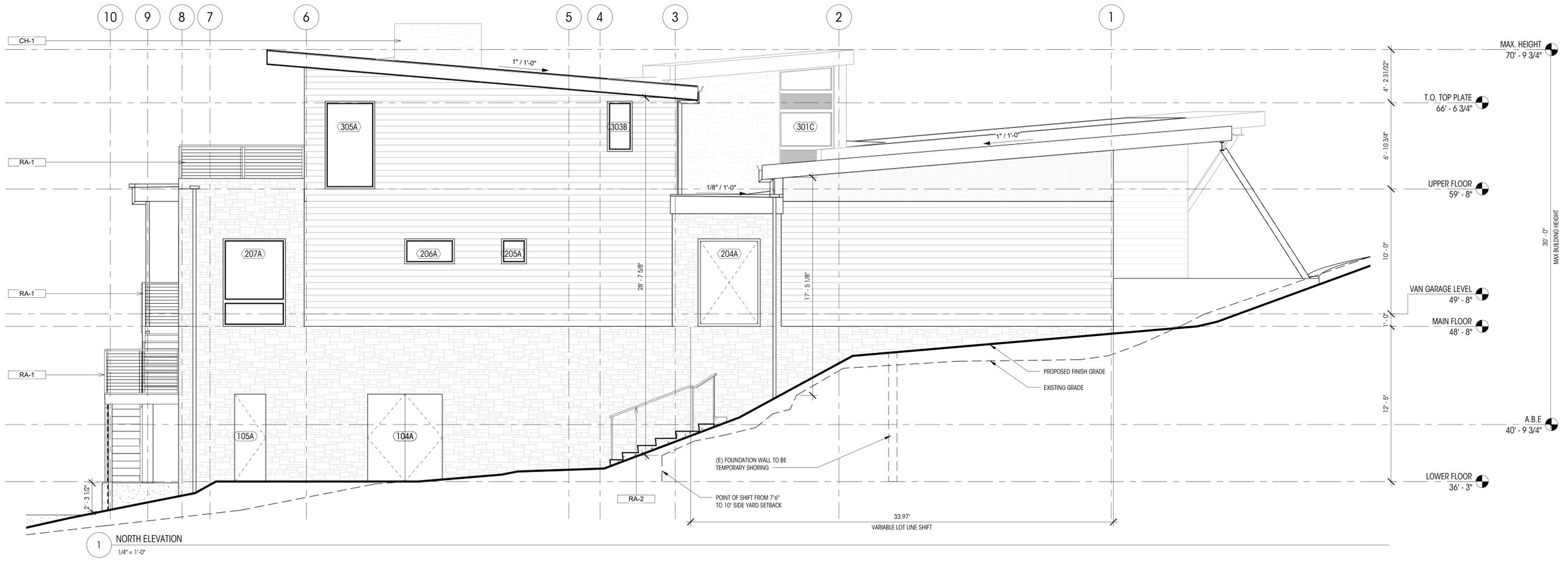
**NOTES**

- ALL DIMENSIONS AT EXTERIOR WALLS TO FACE OF FRAMING AT EXT. FACE OF WALL OR TO EXT. FACE OF CONCRETE, U.N.C.
- ALL DIMENSIONS ASSOCIATED WITH (E) CONSTRUCTION ARE ASSUMED. CONTRACTOR TO VERIFY ALL DIMS IN FIELD AND CONTACT ARCHITECT WITH ANY DISCREPANCIES PRIOR TO CONSTRUCTION. ROOF ASSEMBLIES ARE LISTED ON SHEET A702.
- PRE-MANUFACTURED 3'-0" HIGH GUARDRAIL TO RESTRICT PASSAGE OF A 4" SPHERE PER IRC R312.1.3. CONTRACTOR SHALL VERIFY TO INSPECTOR ALL GUARDS AND RAILINGS SHALL BE CAPABLE OF RESISTING 200LB LOAD ON TOP OF RAIL ACTING IN ANY DIRECTION AS REQUIRED BY IRC R301.5, TYP. DESIGN AND CONNECTION UNDER DEFERRED SUBMITTAL.

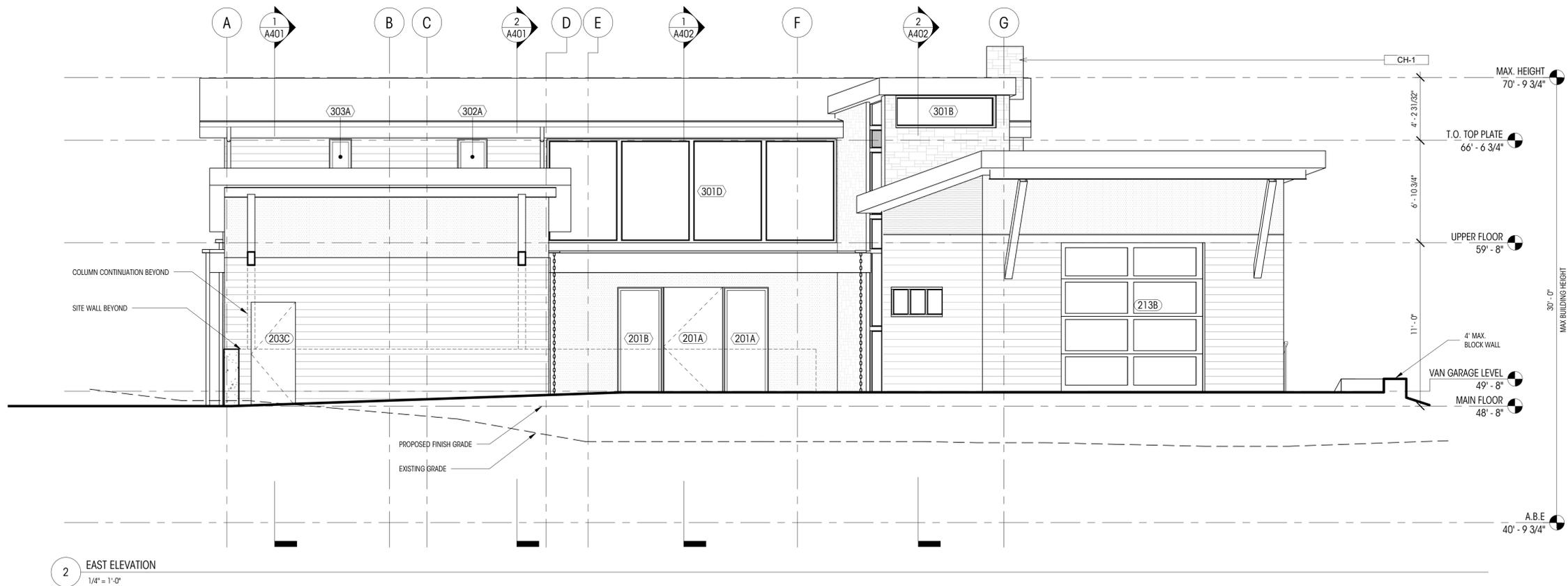
**ROOF VENTILATION CALC**

THE NEW FREE VENTILATING AREA SHALL NOT BE LESS THAN 1/300 OF THE AREA OF THE SPACE VENTILATED (PER IRC R806)

| Roof Type        | Total Area  | Ventilation Required | Provided       |
|------------------|-------------|----------------------|----------------|
| MAIN HOUSE ROOF  | 1,564.12 SF | 5.21 SF              | 750.24 SQ. IN. |
| STAIR TOWER ROOF | 122.52 SF   | 0.41 SF              | 58.81 SQ. IN.  |
| GARAGE ROOF      | 660.91 SF   | 2.20 SF              | 317.24 SQ. IN. |
| VAN GARAGE ROOF  | 600.03 SF   | 2.00 SF              | 288.01 SQ. IN. |



1 NORTH ELEVATION  
1/4" = 1'-0"



2 EAST ELEVATION  
1/4" = 1'-0"

PERMIT DOCUMENTS

DATE: 05.19.22  
SHEET SIZE: D (24X36)  
**REVISIONS**  
NO. DATE:

**LEGEND**

|  |           |  |                |
|--|-----------|--|----------------|
|  | WINDOW ID |  | PROPOSED GRADE |
|  | DOOR ID   |  |                |
|  | GRIDLINE  |  |                |

- NOTES**
- ALL DIMENSIONS AT WALLS TO FACE OF FRAMING OR TO FACE OF CONCRETE, U.N.O.
  - ALL DIMENSIONS ASSOCIATED WITH (E) CONSTRUCTION ARE ASSUMED. CONTRACTOR TO VERIFY ALL DIMS IN FIELD AND CONTACT ARCHITECT WITH ANY DISCREPANCIES PRIOR TO CONSTRUCTION

**KEYNOTE LEGEND**

|  |   |
|--|---|
|  | PRE-MANUFACTURED 3'-0" HIGH GUARDRAIL TO RESTRICT PASSAGE OF A 4' SPHERE PER IRC R312.1.3. CONTRACTOR SHALL VERIFY TO INSPECTOR ALL GUARDS AND RAILINGS SHALL BE CAPABLE OF RESISTING 200LB LOAD ON TOP OF RAIL ACTING IN ANY DIRECTION AS REQUIRED BY IRC R301.5, TYP. DESIGN AND CONNECTION UNDER DEFERRED SUBMITTAL. |
|  | HANDRAIL @ 3'-0" ABOVE STAIR NOSING PER IRC R311.7.8, TYP.  |
|  | CHIMNEYS SHALL EXTEND NOT LESS THAN 2 FEET (610 MM) HIGHER THAN ANY PORTION OF A BUILDING WITHIN 10 FEET (3048 MM), BUT SHALL NOT BE LESS THAN 3 FEET (914 MM) ABOVE THE HIGHEST POINT WHERE THE CHIMNEY PASSES THROUGH THE ROOF  |

DRAWN BY:  
CHECKED BY:

EXTERIOR ELEVATIONS (N&E)

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

**A301**

DEDICATED APPROVAL STAMP SPACE



1 SOUTH ELEVATION  
1/4" = 1'-0"



2 WEST ELEVATION  
1/4" = 1'-0"

**LEGEND**

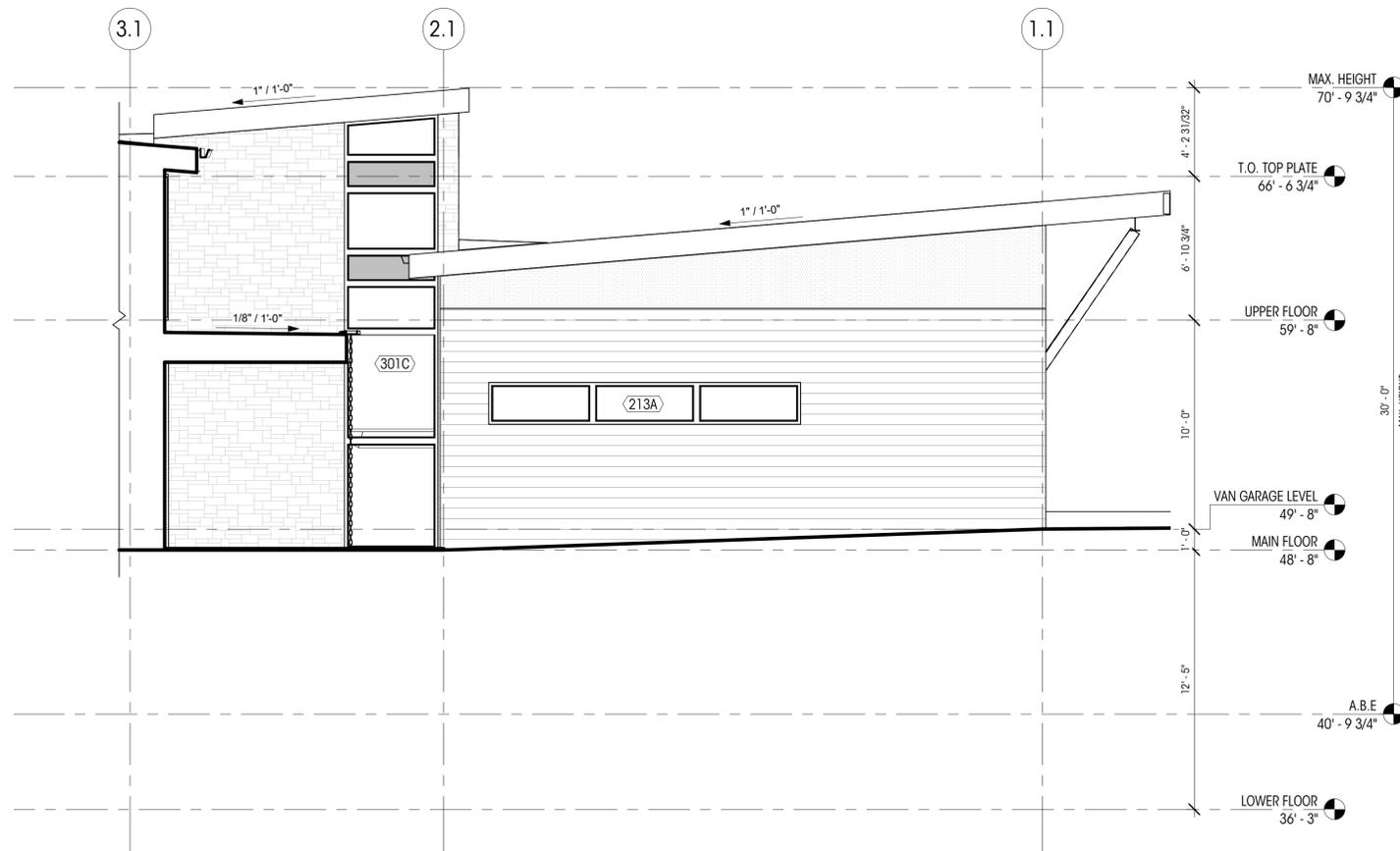
- (200A) WINDOW ID
- (100A) DOOR ID
- 0 GRIDLINE

**NOTES**

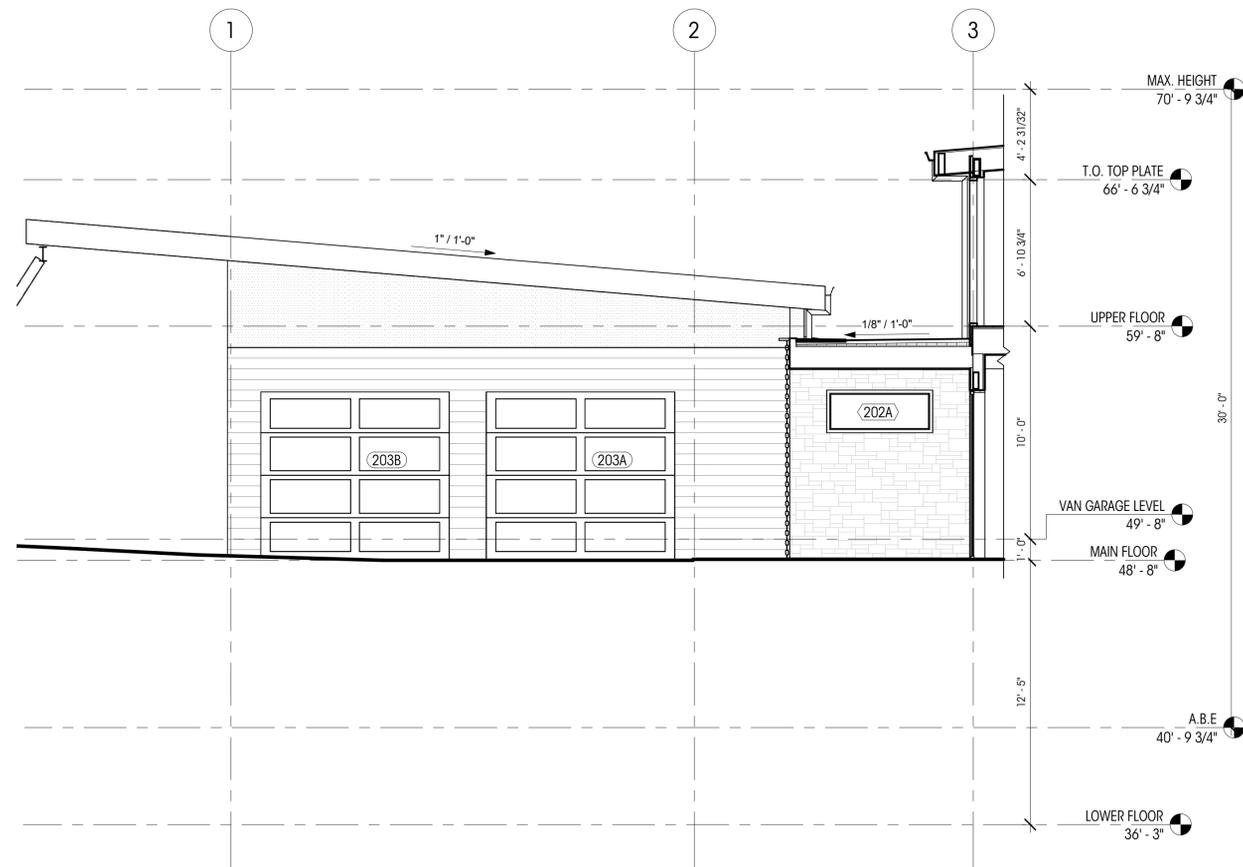
- ALL DIMENSIONS AT WALLS TO FACE OF FRAMING OR TO FACE OF CONCRETE, U.N.O.
- ALL DIMENSIONS ASSOCIATED WITH (E) CONSTRUCTION ARE ASSUMED. CONTRACTOR TO VERIFY ALL DIMS IN FIELD AND CONTACT ARCHITECT WITH ANY DISCREPANCIES PRIOR TO CONSTRUCTION

**KEYNOTE LEGEND**

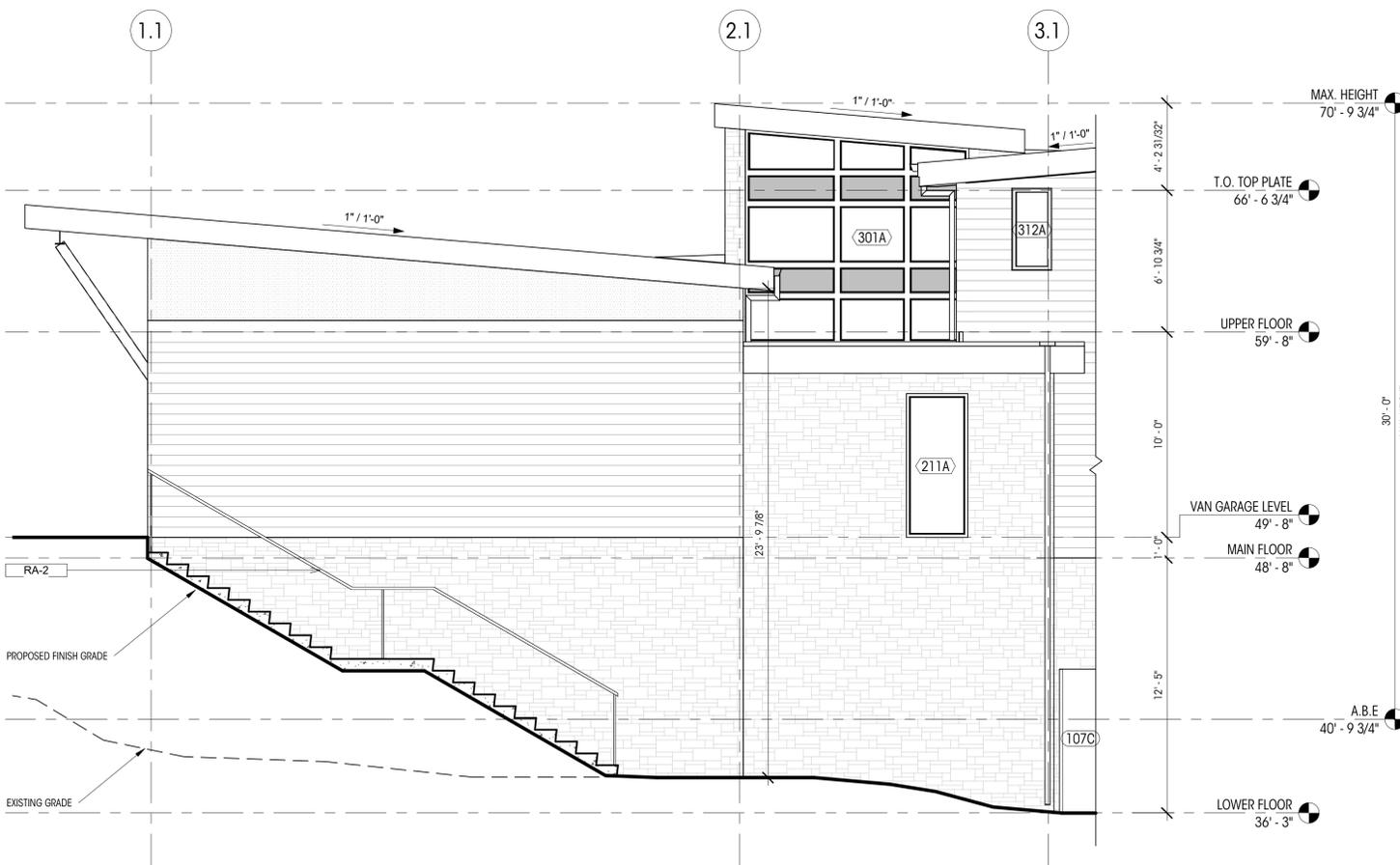
- RA-1 PRE-MANUFACTURED 3'-0" HIGH GUARDRAIL TO RESTRICT PASSAGE OF A 4" SPHERE PER IRC R312.1.3. CONTRACTOR SHALL VERIFY TO INSPECTOR ALL GUARDS AND RAILINGS SHALL BE CAPABLE OF RESISTING 200LB LOAD ON TOP OF RAIL ACTING IN ANY DIRECTION AS REQUIRED BY IRC R301.5. TYP. DESIGN AND CONNECTION UNDER DEFERRED SUBMITTAL.
- RA-2 HANDRAIL @ 3'-0" ABOVE STAIR NOSING PER IRC R311.7.8. TYP.
- CH-1 CHIMNEYS SHALL EXTEND NOT LESS THAN 2 FEET (610 MM) HIGHER THAN ANY PORTION OF A BUILDING WITHIN 10 FEET (3048 MM), BUT SHALL NOT BE LESS THAN 3 FEET (914 MM) ABOVE THE HIGHEST POINT WHERE THE CHIMNEY PASSES THROUGH THE ROOF



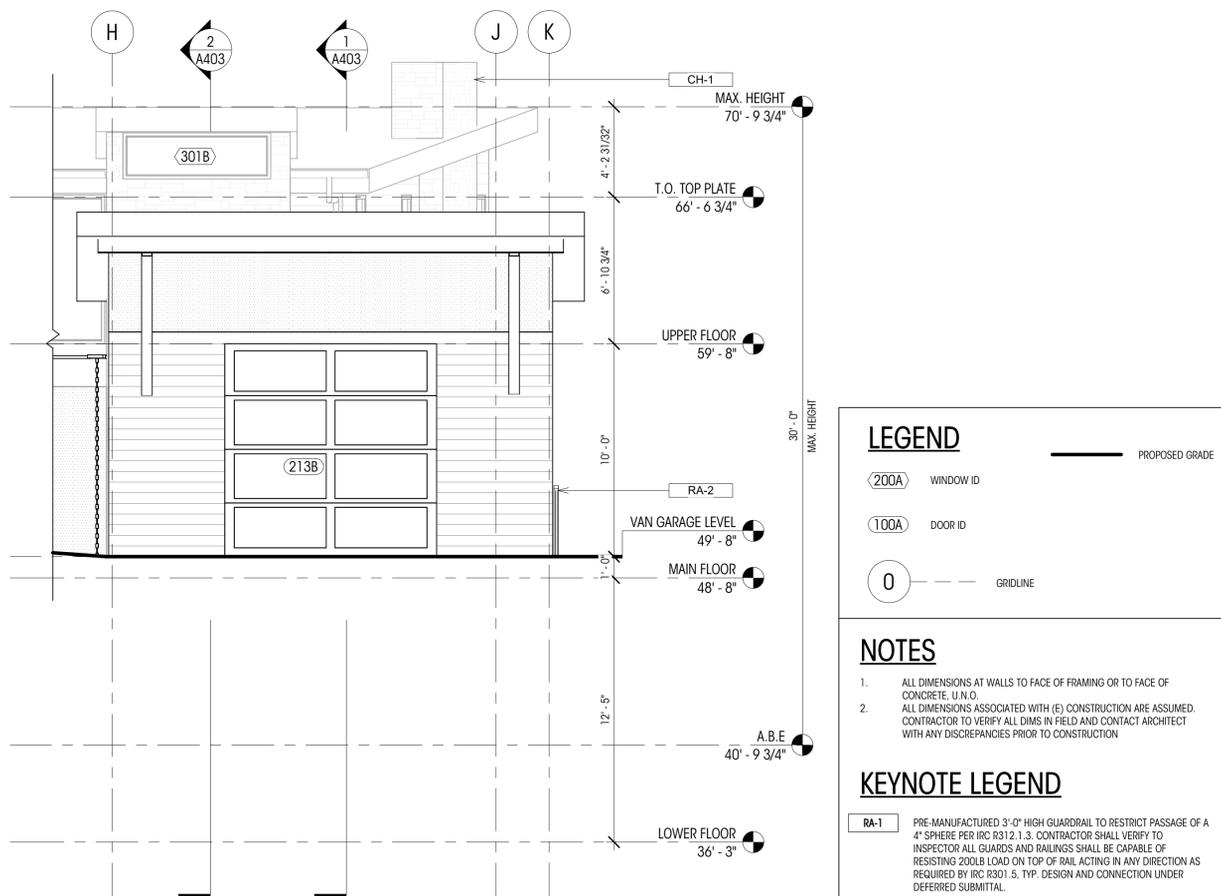
1 VAN GARAGE NORTH ELEVATION  
1/4" = 1'-0"



2 GARAGE SOUTH ELEVATION  
1/4" = 1'-0"



3 VAN GARAGE SOUTH ELEVATION  
1/4" = 1'-0"



4 VAN GARAGE EAST ELEVATION  
1/4" = 1'-0"

**LEGEND**

— PROPOSED GRADE

◊ WINDOW ID

◊ DOOR ID

○ GRIDLINE

**NOTES**

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**KEYNOTE LEGEND**

RA-1 PRE-MANUFACTURED 3'-0" HIGH GUARDRAIL TO RESTRICT PASSAGE OF A 4" SPHERE PER IRC R312.1.3. CONTRACTOR SHALL VERIFY TO INSPECTOR ALL GUARDS AND RAILINGS SHALL BE CAPABLE OF RESISTING 200LB LOAD ON TOP OF RAIL ACTING IN ANY DIRECTION AS REQUIRED BY IRC R301.5, TYP. DESIGN AND CONNECTION UNDER DEFERRED SUBMITTAL.

RA-2 HANDRAIL @ 3'-0" ABOVE STAIR NOSING PER IRC R311.7.8, TYP.

CH-1 CHIMNEYS SHALL EXTEND NOT LESS THAN 2 FEET (610 MM) HIGHER THAN ANY PORTION OF A BUILDING WITHIN 10 FEET (3048 MM), BUT SHALL NOT BE LESS THAN 3 FEET (914 MM) ABOVE THE HIGHEST POINT WHERE THE CHIMNEY PASSES THROUGH THE ROOF





NGUYEN RESIDENCE

9831 SE 42nd PLACE  
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PERMIT DOCUMENTS

DATE: 05.19.22

SHEET SIZE: D (24X36)

REVISIONS  
NO. DATE:

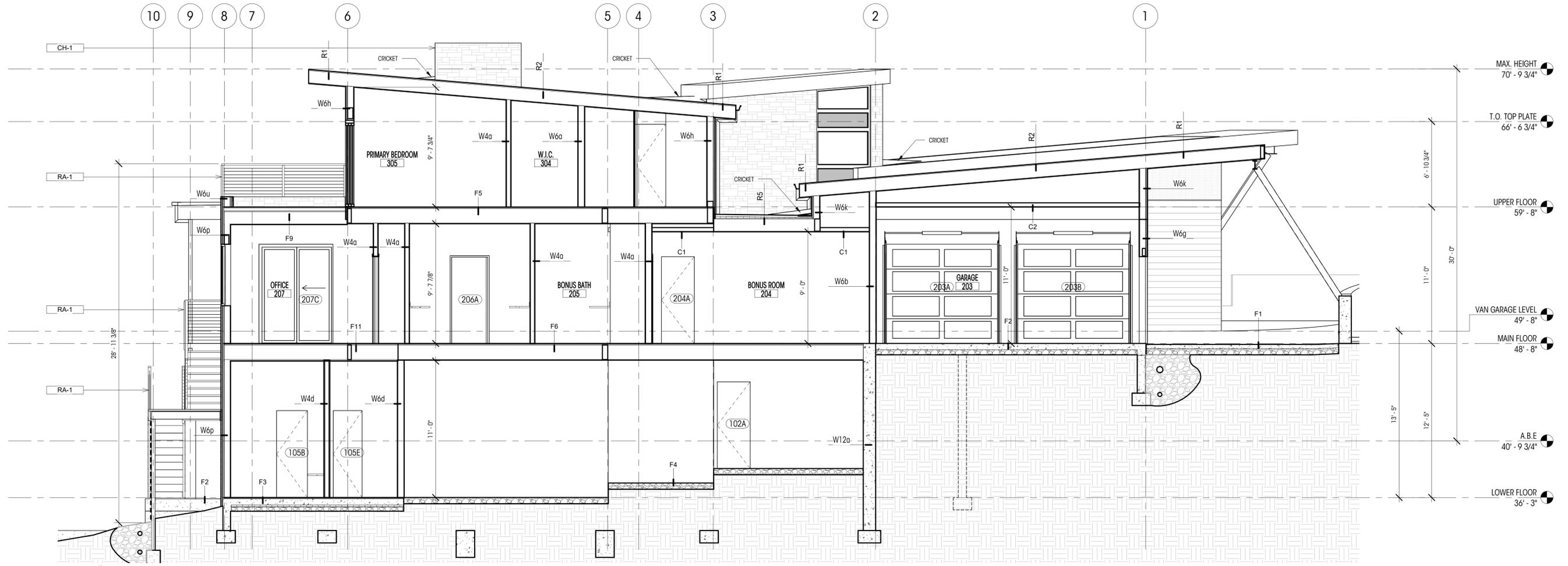
DRAWN BY:  
CHECKED BY:

BUILDING SECTIONS

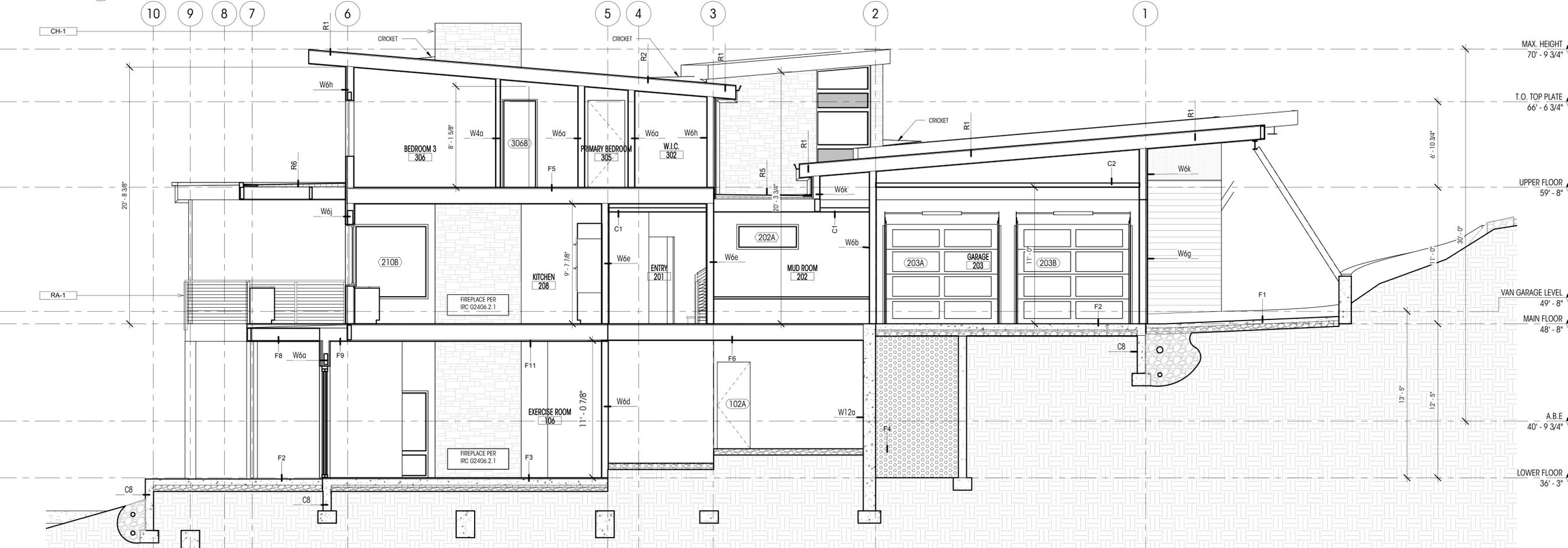
SCALE: 1/4" = 1'-0"

A401

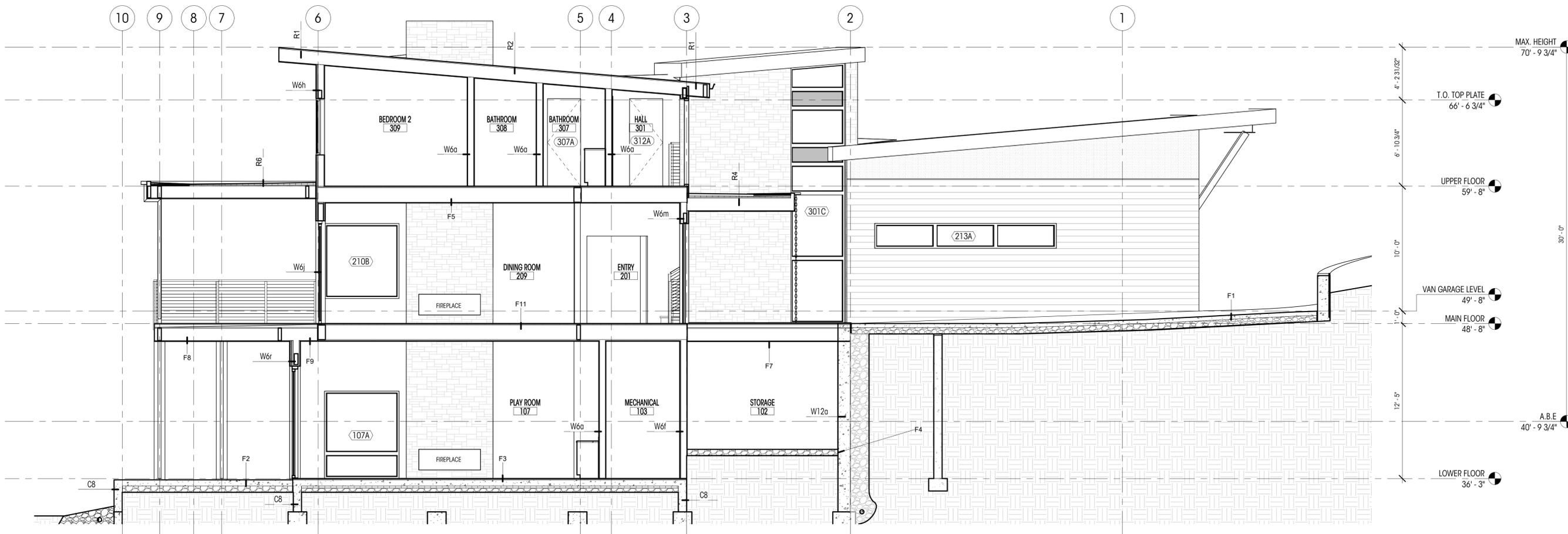
DEDICATED  
APPROVAL  
STAMP SPACE



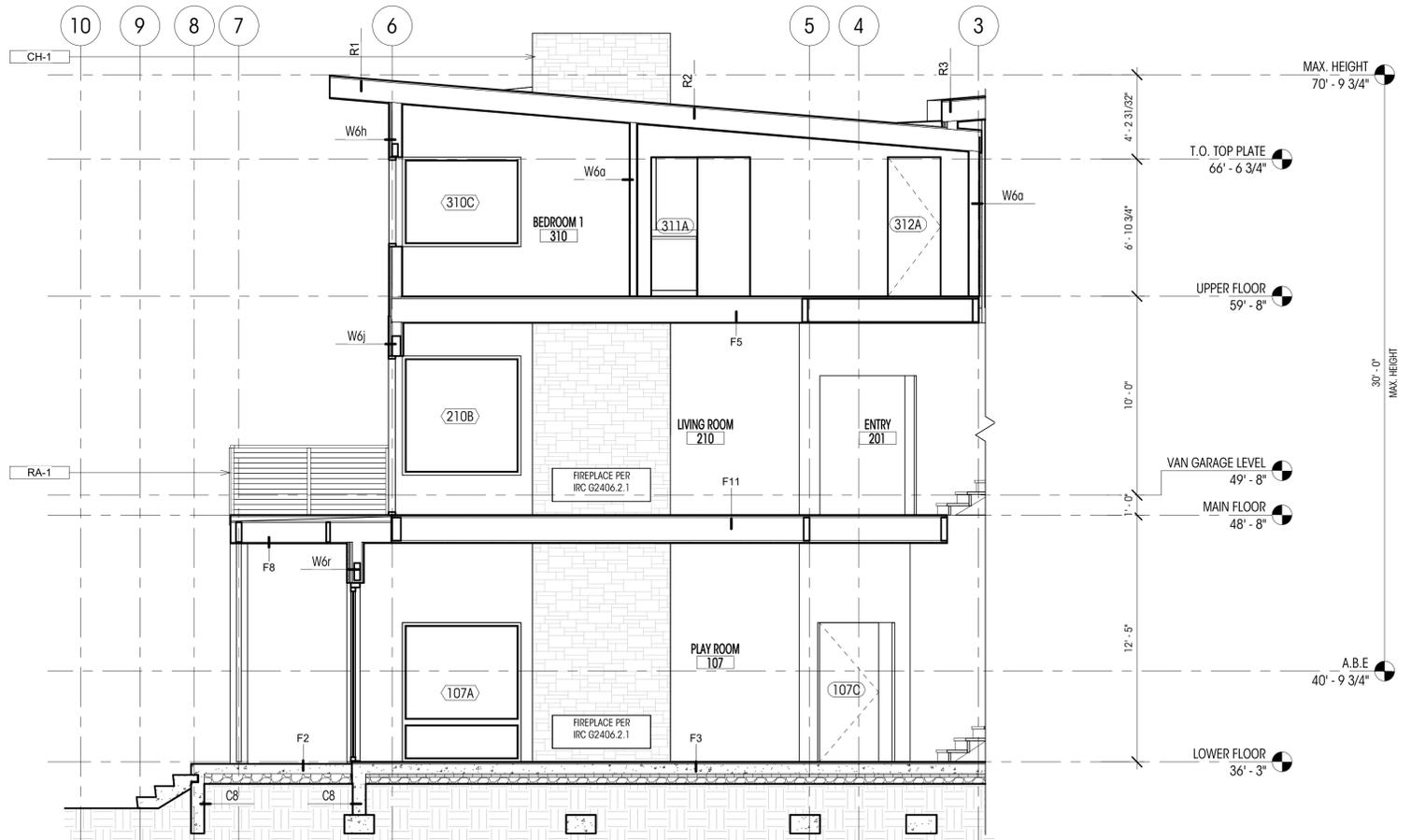
1 BUILDING SECTION A  
1/4" = 1'-0"



2 BUILDING SECTION B  
1/4" = 1'-0"



**1** BUILDING SECTION C  
1/4" = 1'-0"



**2** BUILDING SECTION D  
1/4" = 1'-0"

**LEGEND**

|  |                |  |                 |
|--|----------------|--|-----------------|
|  | 200A WINDOW ID |  | EARTH           |
|  | 100A DOOR ID   |  | STRUCTURAL FOAM |
|  | 0 GRIDLINE     |  |                 |

**NOTES**

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- ALL DIMENSIONS ASSOCIATED WITH (E) CONSTRUCTION ARE ASSUMED. CONTRACTOR TO VERIFY ALL DIMS IN FIELD AND CONTACT ARCHITECT WITH ANY DISCREPANCIES PRIOR TO CONSTRUCTION

**KEYNOTE LEGEND**

|  |   |
|--|---|
|  | PRE-MANUFACTURED 3'-0" HIGH GUARDRAIL TO RESTRICT PASSAGE OF A 4" SPHERE PER IRC R312.1.3. CONTRACTOR SHALL VERIFY TO INSPECTOR ALL GUARDS AND RAILINGS SHALL BE CAPABLE OF RESISTING 200LB LOAD ON TOP OF RAIL ACTING IN ANY DIRECTION AS REQUIRED BY IRC R301.5, TYP. DESIGN AND CONNECTION UNDER DEFERRED SUBMITTAL. |
|  | HANDRAIL @ 3'-0" ABOVE STAIR NOSING PER IRC R311.7.8, TYP.  |
|  | CHIMNEYS SHALL EXTEND NOT LESS THAN 2 FEET (610 MM) HIGHER THAN ANY PORTION OF A BUILDING WITHIN 10 FEET (3048 MM), BUT SHALL NOT BE LESS THAN 3 FEET (914 MM) ABOVE THE HIGHEST POINT WHERE THE CHIMNEY PASSES THROUGH THE ROOF  |



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NO. DATE:

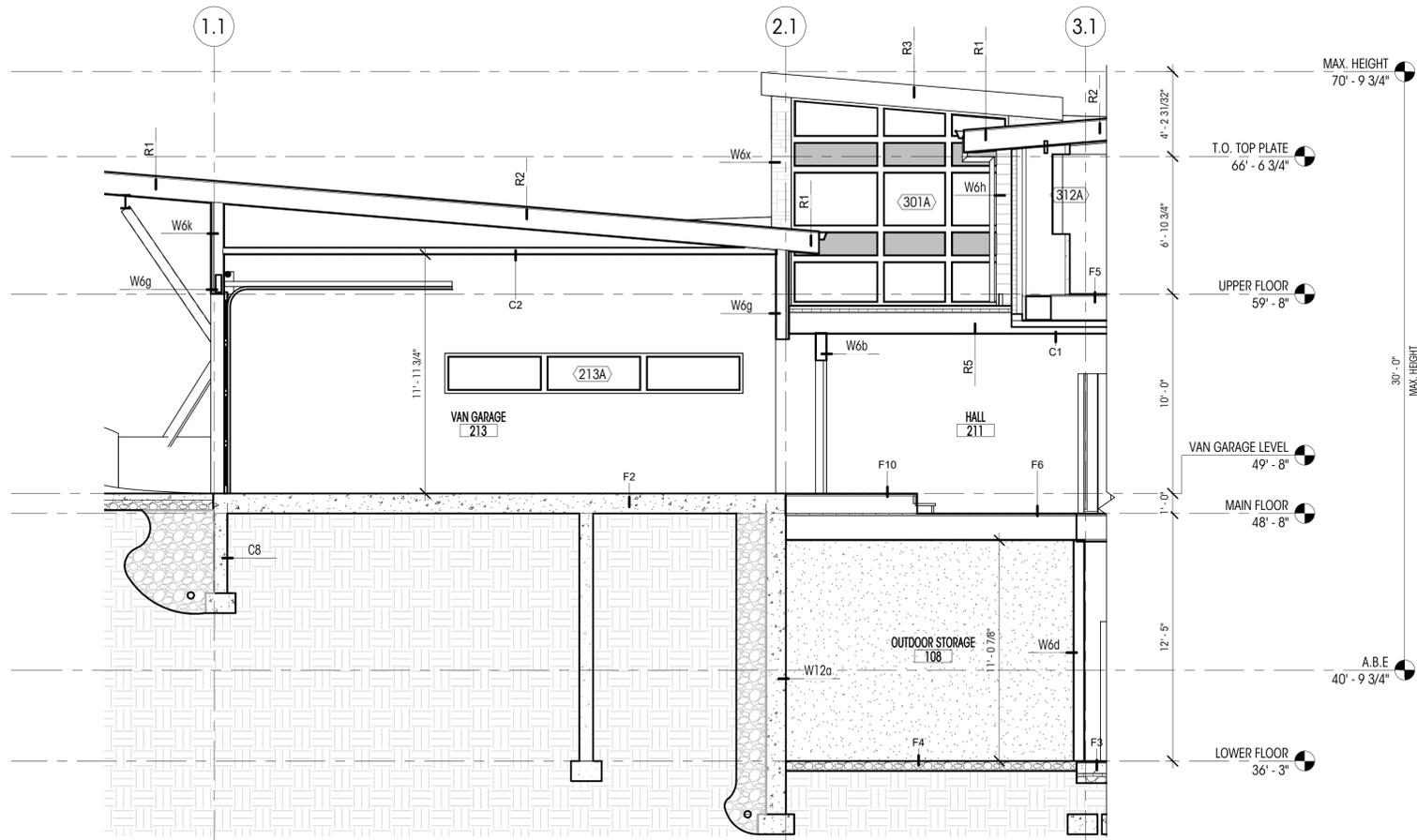
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CHECKED BY:

BUILDING SECTIONS

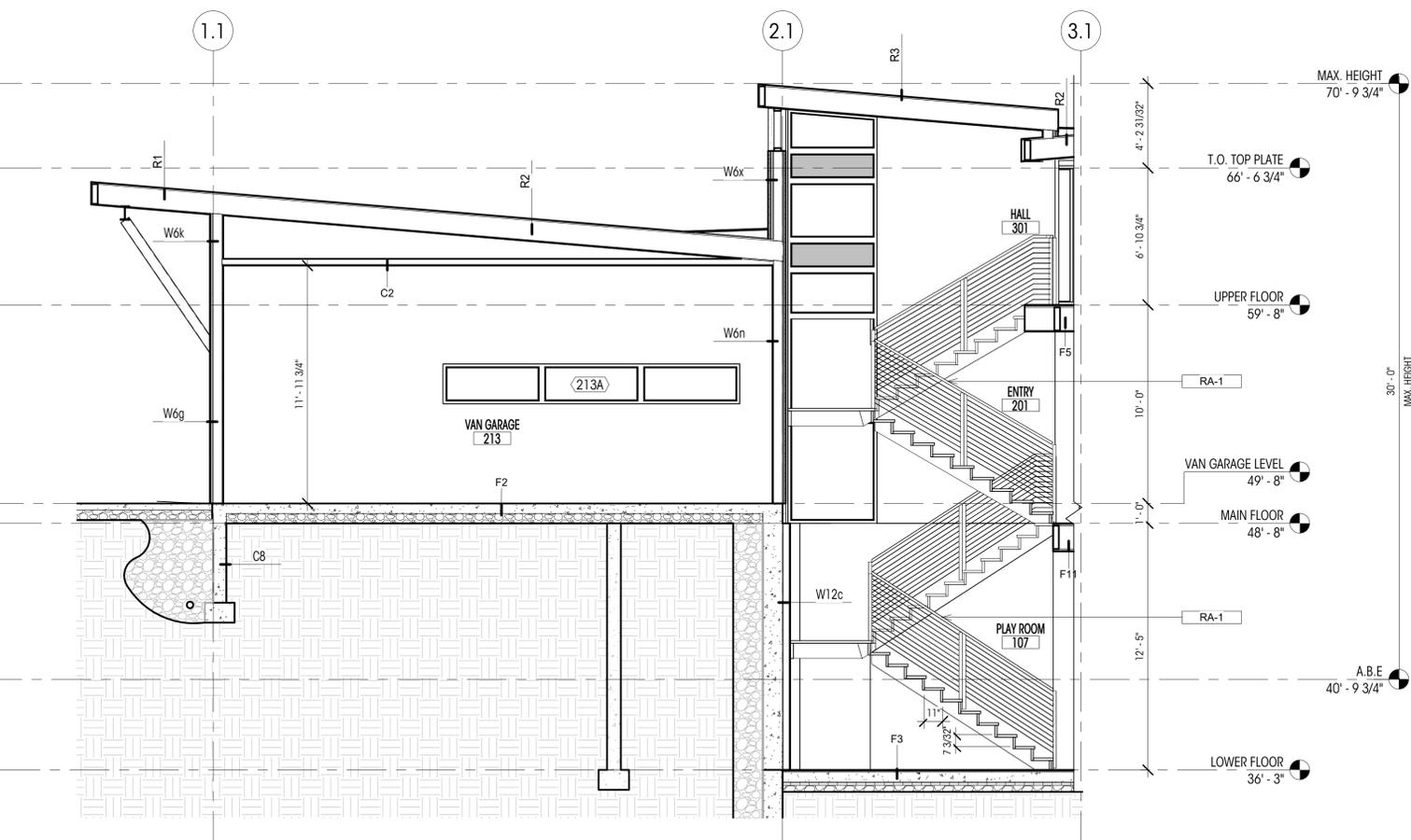
SCALE: 1/4" = 1'-0"

**A403**

DEDICATED  
APPROVAL  
STAMP SPACE



1 VAN GARAGE SECTION A  
1/4" = 1'-0"



2 VAN GARAGE/ STAIR TOWER  
1/4" = 1'-0"

**LEGEND**

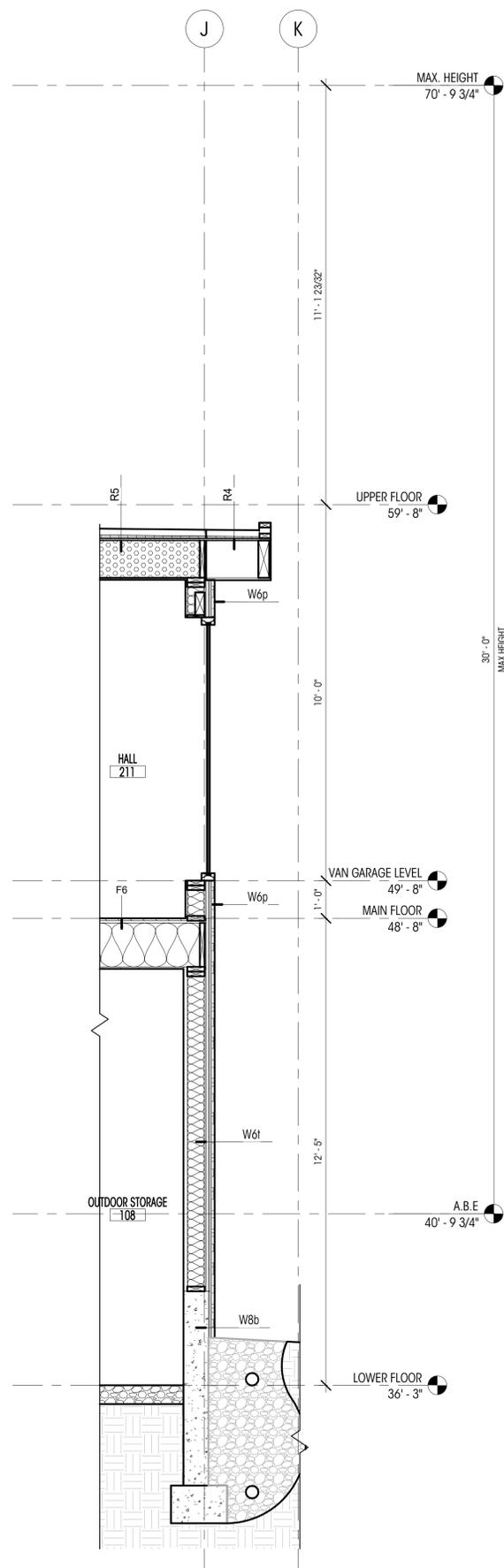
- ◊ 200A WINDOW ID
- ◻ 100A DOOR ID
- GRIDLINE
- ▨ EARTH
- ▤ STRUCTURAL FOAM

**NOTES**

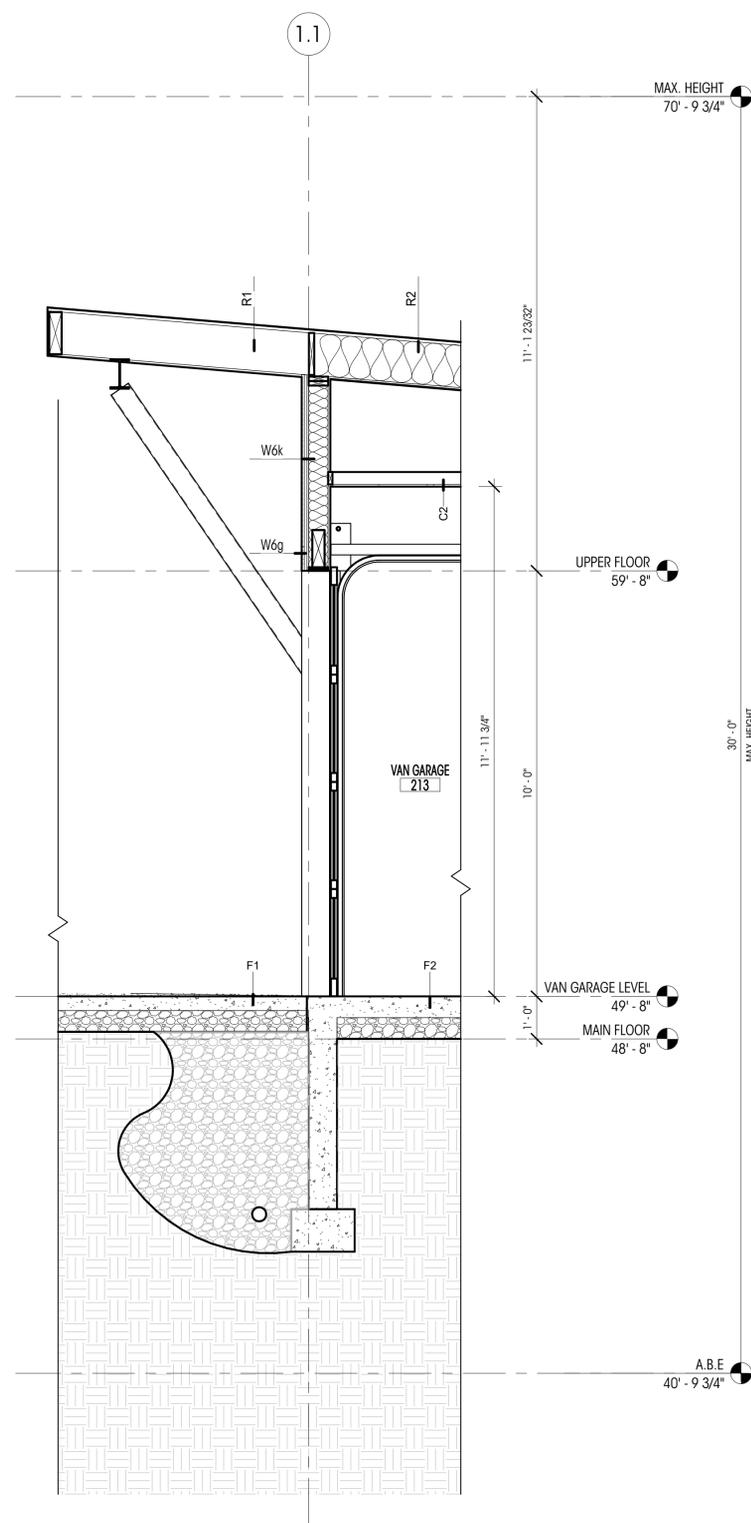
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**KEYNOTE LEGEND**

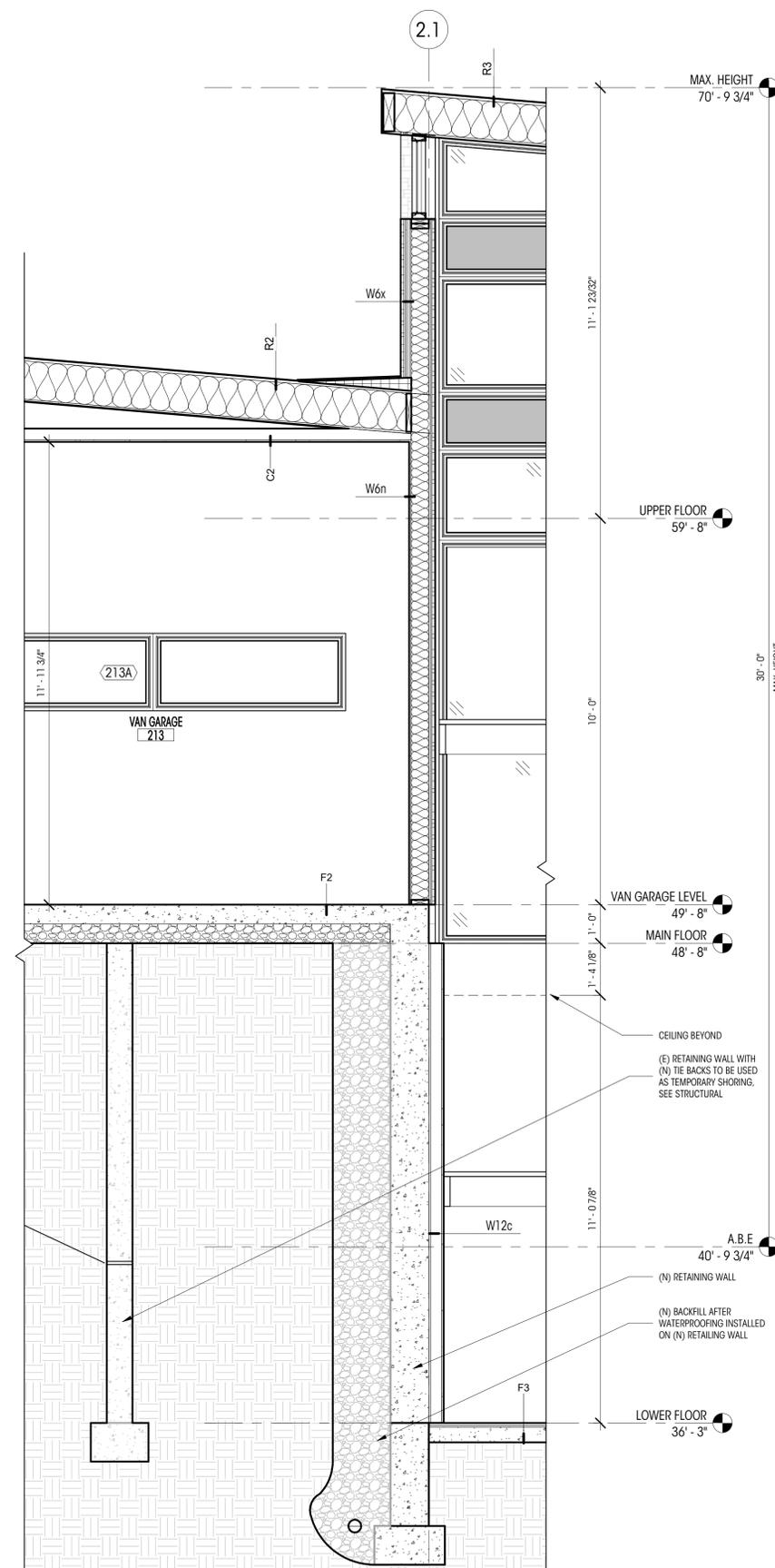
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1 SECTION @ OUTDOOR STORAGE & ENTRY  
1/2" = 1'-0"



2 SECTION @ VAN GARAGE DOOR  
1/2" = 1'-0"



3 SECTION @ VAN GARAGE/STAIR TOWER  
1/2" = 1'-0"



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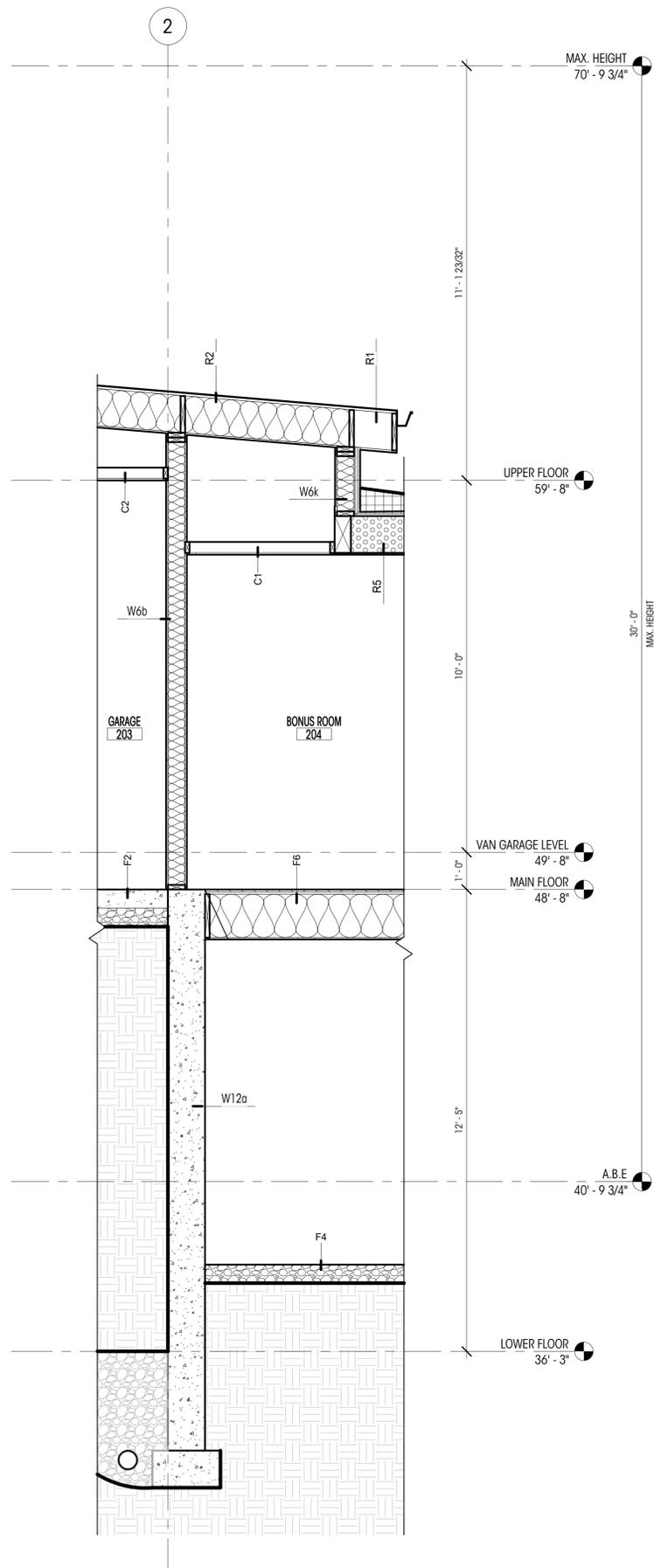
DRAWN BY:  
CHECKED BY:

WALL SECTIONS

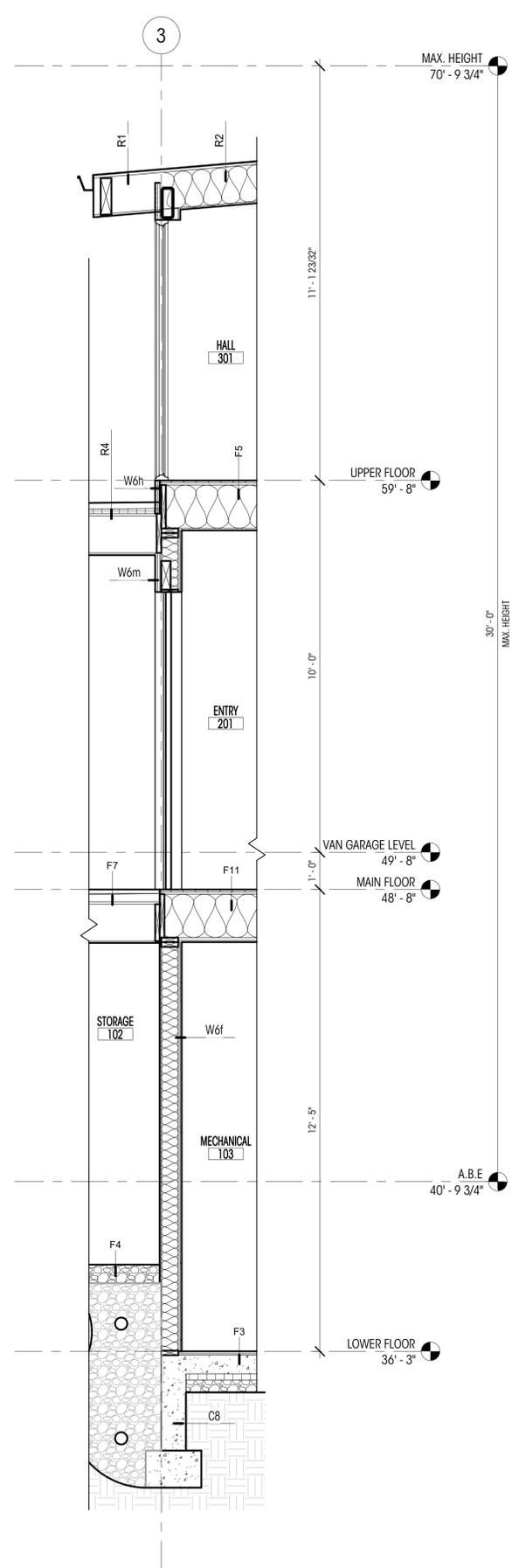
SCALE: 1/2" = 1'-0"

**A412**

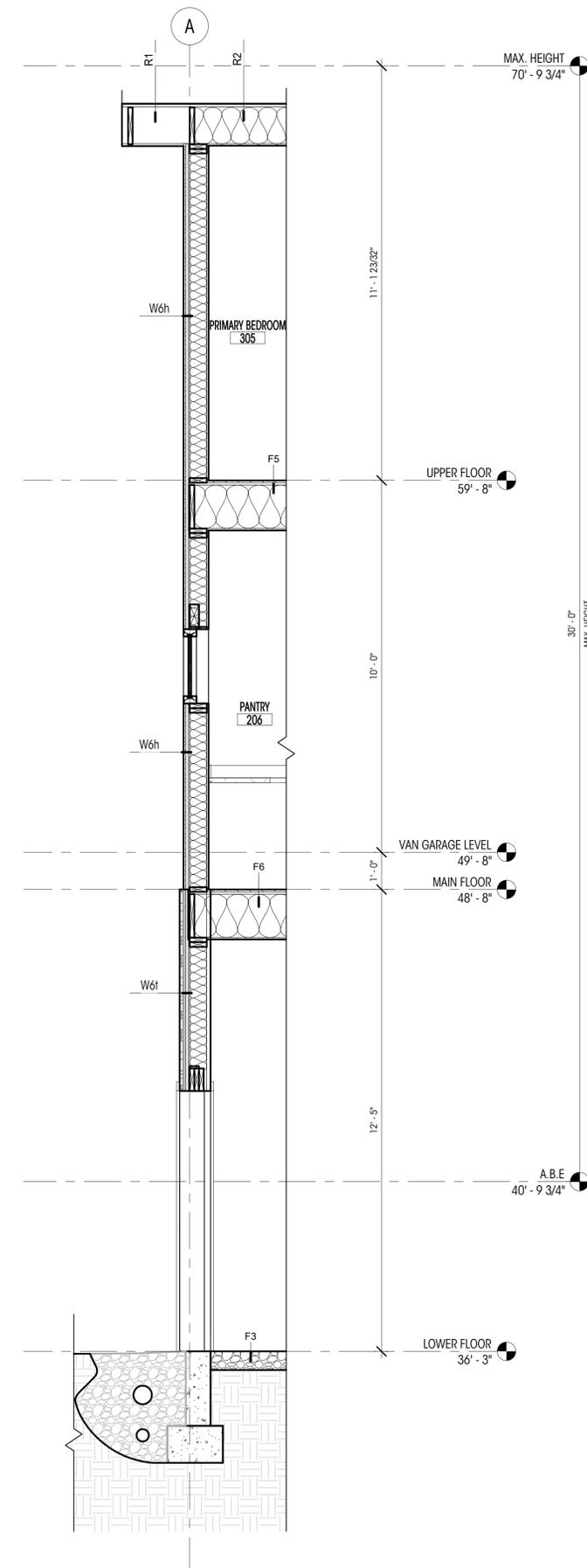
DEDICATED  
APPROVAL  
STAMP SPACE



1 SECTION @ GARAGE & BONUS ROOM  
1/2" = 1'-0"

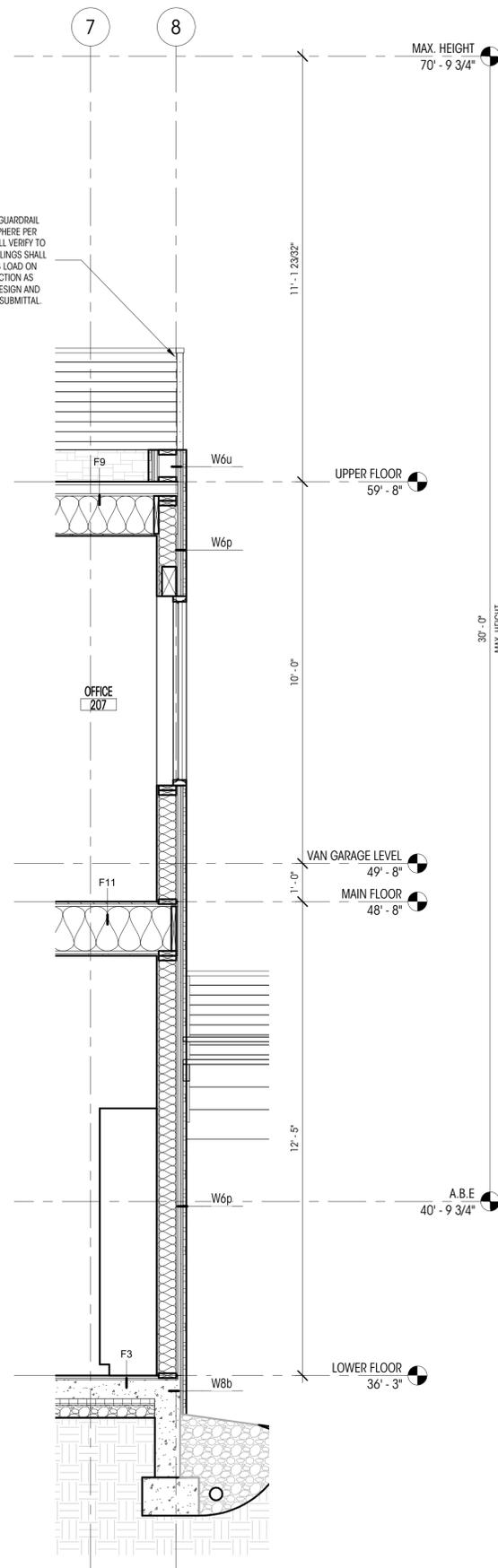


2 SECTION @ MECHANICAL & ENTRY  
1/2" = 1'-0"

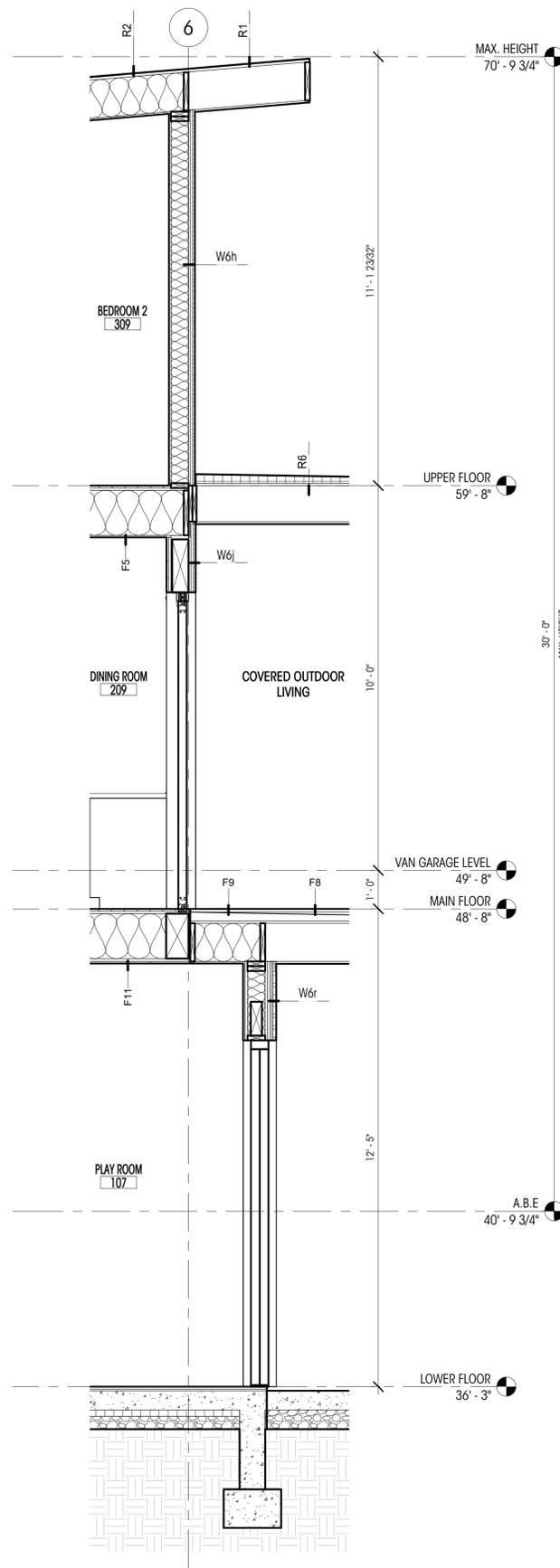


3 SECTION @ PANTRY & PRIMARY BEDROOM  
1/2" = 1'-0"

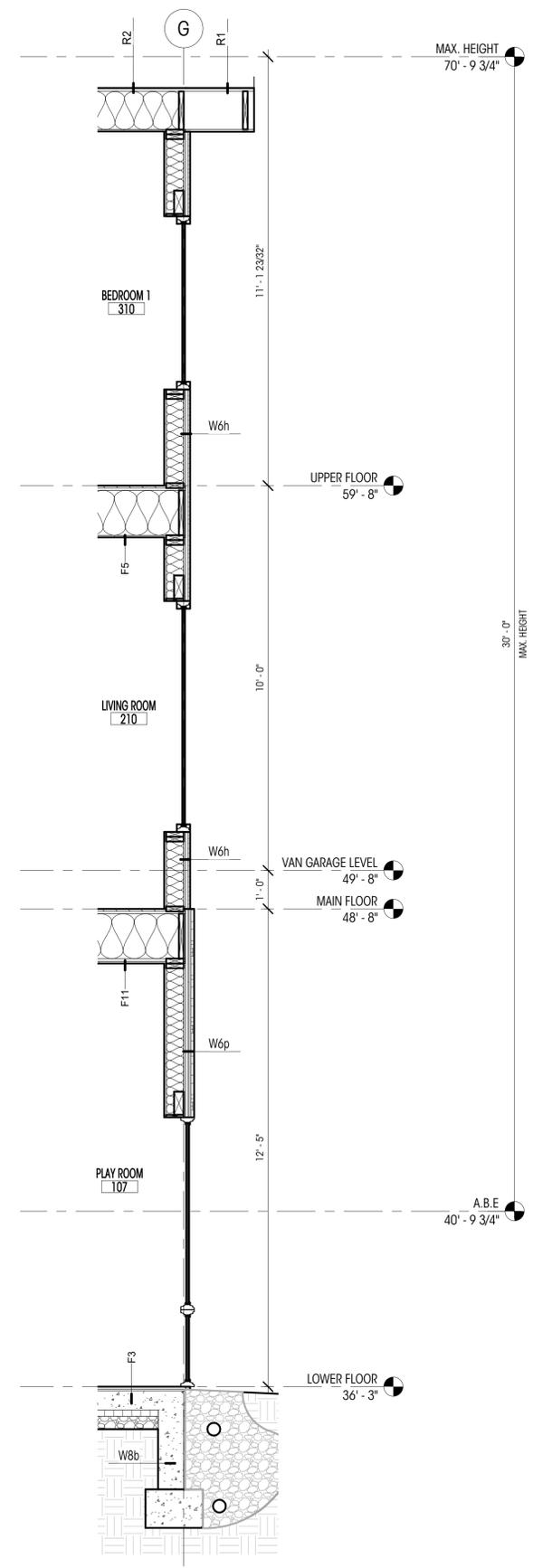
PRE-MANUFACTURED 3'-0" HIGH GUARDRAIL TO RESTRICT PASSAGE OF A 4" SPHERE PER IRC R312.1.3. CONTRACTOR SHALL VERIFY TO INSPECTOR ALL GUARDS AND RAILINGS SHALL BE CAPABLE OF RESISTING 200LB LOAD ON TOP OF RAIL ACTING IN ANY DIRECTION AS REQUIRED BY IRC R301.5, TYP. DESIGN AND CONNECTION UNDER DEFERRED SUBMITTAL.



1 SECTION @ OFFICE/EXTERIOR STAIRS  
1/2" = 1'-0"



2 SECTION @ DINING ROOM/DECK  
1/2" = 1'-0"



3 SECTION @ LIVING ROOM & BEDROOM  
1/2" = 1'-0"

**Brandt**

Design Group

66 Bell Street  
Unit 1  
Seattle, WA  
98121

206.239.0850

brandtdesigninc.com



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MERCER ISLAND, WA 98040

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DATE: 05.19.22

SHEET SIZE: D (24X36)

**REVISIONS**  
NO. DATE:

DRAWN BY:  
CHECKED BY:

WALL SECTIONS

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

**A413**

DEDICATED  
APPROVAL  
STAMP SPACE

# WINDOW SCHEDULE

| PLAN ID | TYPE | WIDTH (ft)  | HEIGHT (ft) | HEAD HT     | UNIT AREA (sf) | U VALUE | UA | HEAD DETAIL | JAMB DETAIL | SILL DETAIL | SAFETY GLAZING | EGRESS | NOTES |
|---------|------|-------------|-------------|-------------|----------------|---------|----|-------------|-------------|-------------|----------------|--------|-------|
| 107A    | B    | 6'-0"       | 7'-0"       | 7'-0"       | 42 SF          |         |    |             |             |             |                |        |       |
| 201A    | A    | 3'-0"       | 8'-0"       | 8'-0"       | 24 SF          |         |    |             |             |             |                |        |       |
| 201B    | A    | 3'-0"       | 8'-0"       | 8'-0"       | 24 SF          |         |    |             |             |             | •              |        |       |
| 202A    | A    | 5'-0"       | 2'-0"       | 8'-0"       | 10 SF          |         |    |             |             |             |                |        |       |
| 204A    | K    | 5'-0"       | 7'-0"       | 7'-0"       | 35 SF          |         |    |             |             |             | •              | •      |       |
| 205A    | A    | 2'-0"       | 2'-0"       | 7'-0"       | 4 SF           |         |    |             |             |             |                |        |       |
| 206A    | A    | 4'-0"       | 2'-0"       | 7'-0"       | 8 SF           |         |    |             |             |             |                |        |       |
| 207A    | B    | 5'-0"       | 7'-0"       | 7'-0"       | 35 SF          |         |    |             |             |             |                |        |       |
| 207B    | F    | 9'-0"       | 4'-11 1/2"  | 8'-0"       | 45 SF          |         |    |             |             |             | •              |        |       |
| 208A    | D    | 11'-0"      | 4'-11 1/2"  | 8'-0"       | 55 SF          |         |    |             |             |             |                |        |       |
| 210A    | G    | 11'-0"      | 8'-0"       | 8'-0"       | 88 SF          |         |    |             |             |             | •              |        |       |
| 210B    | A    | 6'-0"       | 6'-0"       | 8'-0"       | 36 SF          |         |    |             |             |             | •              |        |       |
| 211A    | A    | 3'-0"       | 7'-0"       | 8'-0"       | 21 SF          |         |    |             |             |             | •              |        |       |
| 213A    | C    | 15'-0"      | 2'-0"       | 7'-0 1/4"   | 30 SF          |         |    |             |             |             |                |        |       |
| 301A    | H    | 10'-11 1/4" | 10'-5"      | 20'-10 1/4" | 114 SF         |         |    |             |             |             |                |        |       |
| 301B    | A    | 6'-11 3/4"  | 2'-2"       | 9'-11"      | 15 SF          |         |    |             |             |             |                |        |       |
| 301C    | J    | 4'-6"       | 20'-10 1/4" | 20'-10 1/4" | 94 SF          |         |    |             |             |             | •              |        |       |
| 301D    | E    | 19'-7"      | 7'-0"       | 7'-0"       | 137 SF         |         |    |             |             |             | •              |        |       |
| 302A    | A    | 2'-0"       | 6'-0"       | 7'-0"       | 12 SF          |         |    |             |             |             |                |        |       |
| 303A    | A    | 1'-6"       | 4'-0"       | 7'-0"       | 6 SF           |         |    |             |             |             |                |        |       |
| 303B    | A    | 2'-0"       | 4'-0"       | 7'-0"       | 8 SF           |         |    |             |             |             |                |        |       |
| 305A    | A    | 4'-0"       | 7'-0"       | 7'-0"       | 28 SF          |         |    |             |             |             | •              |        |       |
| 306A    | F    | 6'-4 1/2"   | 4'-6"       | 7'-0"       | 29 SF          |         |    |             |             |             |                | •      |       |
| 309A    | F    | 6'-4 1/2"   | 4'-6"       | 7'-0"       | 29 SF          |         |    |             |             |             |                | •      |       |
| 310A    | F    | 6'-4 1/2"   | 4'-6"       | 7'-0"       | 29 SF          |         |    |             |             |             |                | •      |       |
| 310C    | A    | 6'-0"       | 4'-6"       | 7'-0"       | 27 SF          |         |    |             |             |             |                |        |       |
| 311A    | A    | 2'-0"       | 4'-0"       | 7'-0"       | 8 SF           |         |    |             |             |             |                |        |       |
| 312A    | A    | 2'-0"       | 4'-0"       | 7'-0"       | 8 SF           |         |    |             |             |             |                |        |       |

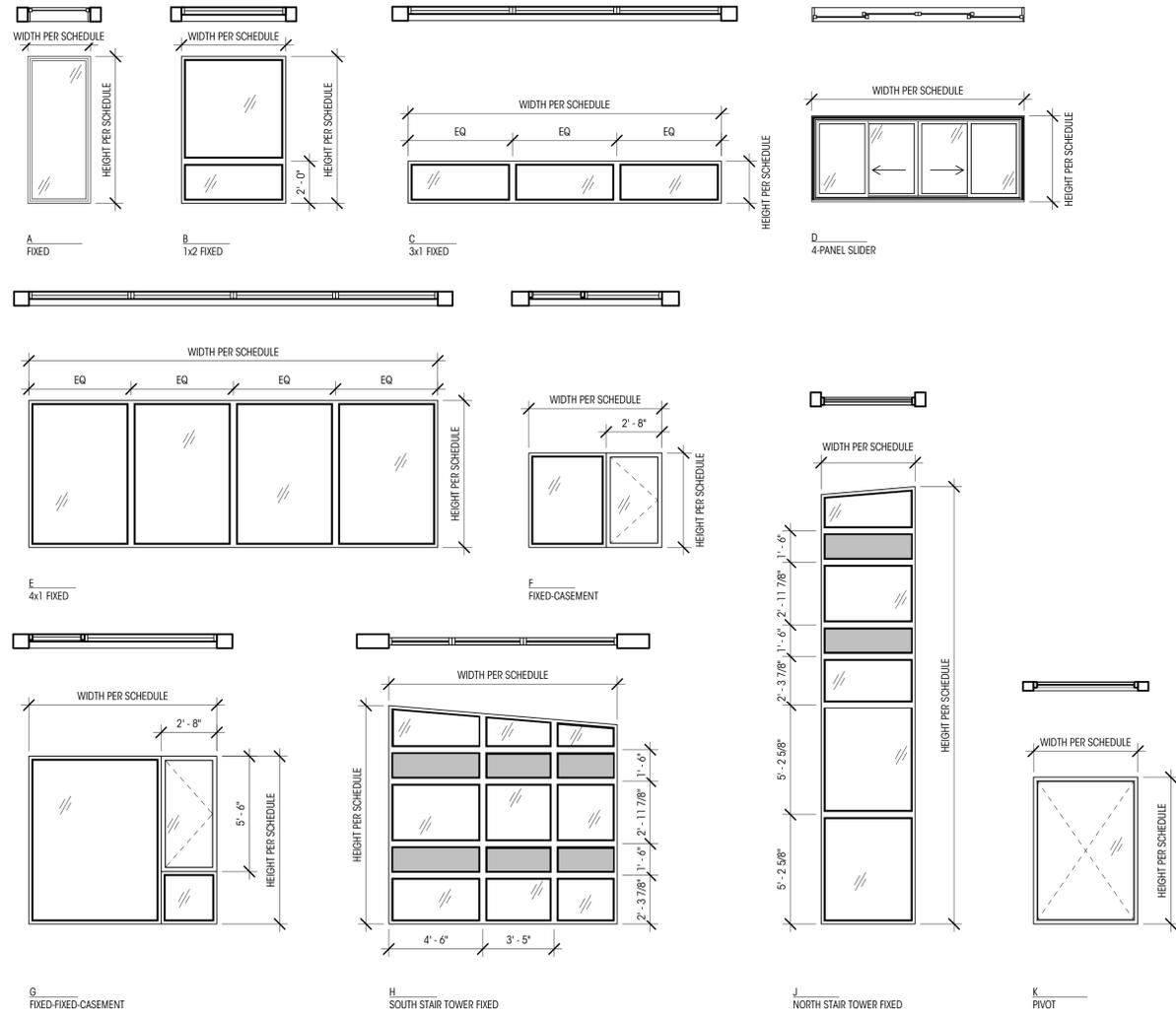
### GENERAL NOTES

- ALL DIMENSIONS SHOWN ARE FINISHED DIMENSIONS, R.O. PER CONTRACTOR.
- CONTRACTOR TO VERIFY ALL SIZES AND DIMENSIONS IN FIELD WITH OWNER BEFORE ORDERING.
- ALL NEW WINDOWS TO BE NFRC CERTIFIED.
- ALL WINDOW WALL IS TEMPERED GLASS.
- REFER TO PLANS AND TAGS FOR LOCATION AND SWINGS.
- ALL ELEVATIONS ARE FROM THE EXTERIOR.
- ALL NEW VERTICAL FENESTRATION U-VALUE TO MEET ENERGY COMPLIANCE. SEE SHEET G001.
- PER IRC R310.2 ALL EGRESS OPENINGS SHALL HAVE A NET CLEAR OPENING OF NOT LESS THAN 5.7 SF. NET CLEAR HEIGHT OPENING SHALL NOT BE LESS THAN 24" AND THE NET CLEAR WIDTH SHALL BE NOT LESS THAN 20". THE WINDOW SILL SHALL HAVE HEIGHT OF NOT MORE THAN 44" ABOVE THE FLOOR.
- PER IRC R308.4.3, GLAZING IN AN INDIVIDUAL FIXED OR OPERABLE PANEL NEEDS TO BE TEMPERED GLASS / SAFETY GLAZING IF ALL OF THE FOLLOWING CONDITIONS ARE PRESENT:
  - THE EXPOSED AREA OF AN INDIVIDUAL PANE IS LARGER THAN 9 SF.
  - THE BOTTOM EDGE OF THE GLAZING IS LESS THAN 18" ABOVE THE FLOOR.
  - THE TOP EDGE OF THE GLAZING IS MORE THAN 36" ABOVE THE FLOOR, AND
  - ONE OR MORE WALKING SURFACES ARE WITHIN 36", MEASURE HORIZONTALLY IN A STRAIGHT LINE OF THE GLAZING.

### SPECIFIC NOTES

- FROSTED / OPAQUE GLAZING

### GLAZING LEGEND



### ARCH - WINDOW TYPES

1/4" = 1'-0"

# DOOR SCHEDULE

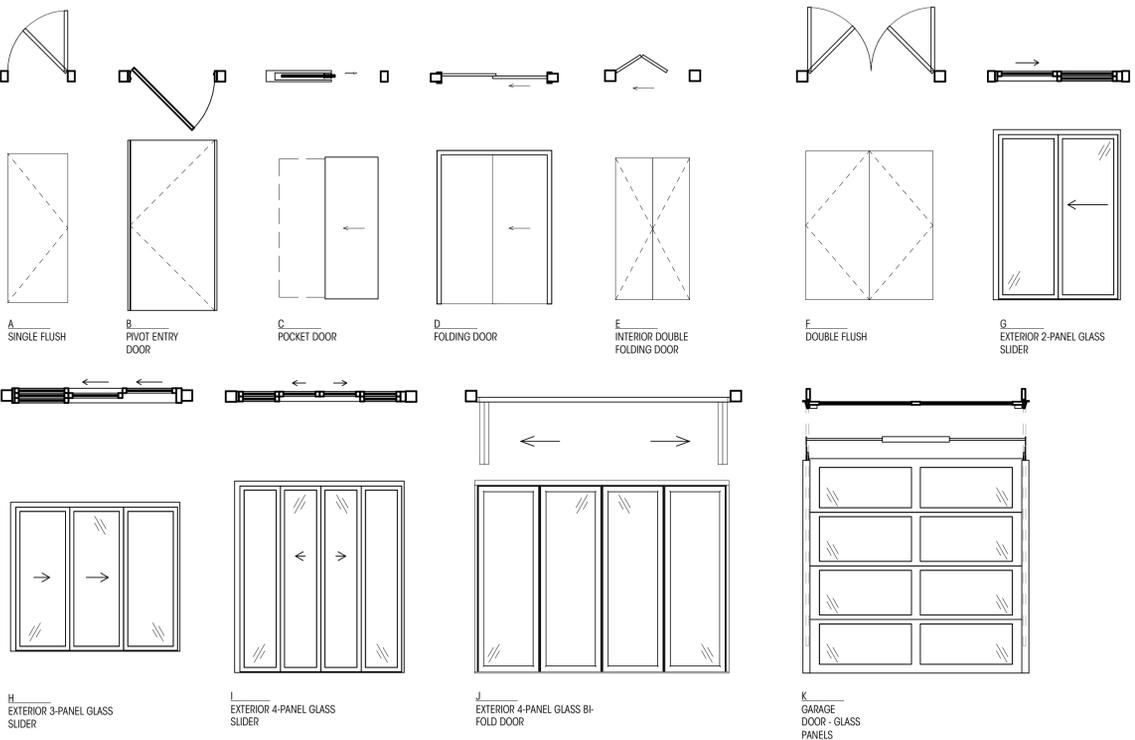
| PLAN ID | ROOM NAME       | TYPE | WIDTH (ft.) | HEIGHT (ft.) | AREA (sf.) | U VALUE | UA | HEAD DETAIL | JAMB DETAIL | SILL DETAIL | EGRESS | CLOSER | RATED | NOTES |
|---------|-----------------|------|-------------|--------------|------------|---------|----|-------------|-------------|-------------|--------|--------|-------|-------|
| 101A    | POWDER ROOM     | A    | 2'-8"       | 7'-0"        | 19 SF      |         |    |             |             |             |        |        |       |       |
| 102A    | STORAGE         | A    | 2'-8"       | 7'-0"        | 19 SF      |         |    |             |             |             |        |        |       |       |
| 103A    | MECHANICAL      | A    | 3'-0"       | 7'-0"        | 21 SF      |         |    |             |             |             |        |        |       |       |
| 104A    |                 | F    | 6'-0"       | 7'-0"        | 42 SF      |         |    |             |             |             |        |        |       |       |
| 105A    | BATHROOM        | A    | 2'-6"       | 7'-0"        | 18 SF      |         |    |             |             |             |        |        |       |       |
| 105B    | BATHROOM        | A    | 2'-6"       | 7'-0"        | 18 SF      |         |    |             |             |             |        |        |       |       |
| 105C    | BATHROOM        | A    | 2'-4"       | 7'-0"        | 16 SF      |         |    |             |             |             |        |        |       |       |
| 105D    | BATHROOM        | A    | 3'-0"       | 7'-0"        | 21 SF      |         |    |             |             |             |        |        |       |       |
| 105E    | BATHROOM        | A    | 2'-10"      | 7'-0"        | 20 SF      |         |    |             |             |             |        |        |       |       |
| 106A    | EXERCISE ROOM   | I    | 11'-0"      | 9'-0"        | 99 SF      |         |    |             |             |             |        |        |       |       |
| 107A    | PLAY ROOM       | I    | 11'-0"      | 9'-0"        | 99 SF      |         |    |             |             |             |        |        |       |       |
| 107B    | PLAY ROOM       | I    | 11'-0"      | 9'-0"        | 99 SF      |         |    |             |             |             |        |        |       |       |
| 107C    | PLAY ROOM       | A    | 3'-0"       | 7'-0"        | 21 SF      |         |    |             |             |             |        |        |       |       |
| 107D    | PLAY ROOM       | A    | 2'-8"       | 7'-0"        | 19 SF      |         |    |             |             |             |        |        |       |       |
| 108A    | OUTDOOR STORAGE | A    | 3'-0"       | 7'-0"        | 21 SF      |         |    |             |             |             |        |        |       |       |
| 201A    | ENTRY           | B    | 4'-0"       | 8'-0"        | 32 SF      |         |    |             |             |             |        | •      |       |       |
| 202A    | MUD ROOM        | A    | 3'-0"       | 7'-0"        | 21 SF      |         |    |             |             |             |        |        | •     |       |
| 202B    | MUD ROOM        | A    | 3'-0"       | 6'-8"        | 20 SF      |         |    |             |             |             |        |        |       | •     |
| 203A    | GARAGE          | K    | 9'-0"       | 8'-0"        | 72 SF      |         |    |             |             |             |        |        |       |       |
| 203B    | GARAGE          | K    | 9'-0"       | 8'-0"        | 72 SF      |         |    |             |             |             |        |        |       |       |
| 203C    | GARAGE          | A    | 3'-0"       | 7'-0"        | 21 SF      |         |    |             |             |             |        |        |       |       |
| 204A    | BONUS ROOM      | A    | 2'-8"       | 7'-0"        | 19 SF      |         |    |             |             |             |        |        |       |       |
| 204B    | BONUS ROOM      | D    | 4'-10"      | 7'-0"        | 34 SF      |         |    |             |             |             |        |        |       |       |
| 205A    | BONUS BATH      | A    | 2'-8"       | 7'-0"        | 19 SF      |         |    |             |             |             |        |        |       |       |
| 205B    | BONUS BATH      | A    | 2'-8"       | 7'-0"        | 19 SF      |         |    |             |             |             |        |        |       |       |
| 206A    | PANTRY          | C    | 3'-0"       | 7'-0"        | 21 SF      |         |    |             |             |             |        |        |       |       |
| 207A    | OFFICE          | A    | 2'-6"       | 7'-0"        | 18 SF      |         |    |             |             |             |        |        |       |       |
| 207B    | OFFICE          | D    | 5'-2"       | 7'-0"        | 36 SF      |         |    |             |             |             |        |        |       |       |
| 207C    | OFFICE          | G    | 6'-0"       | 8'-0"        | 48 SF      |         |    |             |             |             |        |        |       |       |
| 209A    | DINING ROOM     | J    | 11'-0"      | 8'-0"        | 88 SF      |         |    |             |             |             |        |        |       |       |
| 211A    | HALL            | D    | 4'-0"       | 6'-8"        | 27 SF      |         |    |             |             |             |        |        |       |       |
| 212A    | BATH            | A    | 2'-6"       | 6'-8"        | 17 SF      |         |    |             |             |             |        |        |       |       |
| 213A    | HALL            | A    | 3'-0"       | 6'-8"        | 20 SF      |         |    |             |             |             |        |        |       |       |
| 213B    | VAN GARAGE      | K    | 10'-1 1/4"  | 10'-1"       | 102 SF     |         |    |             |             |             |        |        |       |       |
| 301E    | HALL            | D    | 4'-0"       | 7'-0"        | 28 SF      |         |    |             |             |             |        |        |       |       |
| 302A    | W.I.C.          | C    | 2'-8"       | 7'-0"        | 19 SF      |         |    |             |             |             |        |        |       |       |
| 303A    | PRIMARY BATH    | A    | 2'-8"       | 7'-0"        | 19 SF      |         |    |             |             |             |        |        |       |       |
| 304A    | W.I.C.          | A    | 2'-8"       | 7'-0"        | 19 SF      |         |    |             |             |             |        |        |       |       |
| 305B    | PRIMARY BEDROOM | H    | 9'-0"       | 7'-0"        | 63 SF      |         |    |             |             |             |        |        |       |       |
| 305C    | PRIMARY BEDROOM | A    | 3'-0"       | 7'-0"        | 21 SF      |         |    |             |             |             |        |        |       |       |
| 306A    | BEDROOM 3       | A    | 2'-10"      | 7'-0"        | 20 SF      |         |    |             |             |             |        |        |       |       |
| 306B    | BEDROOM 3       | C    | 2'-8"       | 7'-0"        | 19 SF      |         |    |             |             |             |        |        |       |       |
| 307A    | BATHROOM        | A    | 2'-8"       | 7'-0"        | 19 SF      |         |    |             |             |             |        |        |       |       |
| 308A    | BATHROOM        | A    | 2'-8"       | 7'-0"        | 19 SF      |         |    |             |             |             |        |        |       |       |
| 309A    | BEDROOM 2       | A    | 2'-10"      | 7'-0"        | 20 SF      |         |    |             |             |             |        |        |       |       |
| 309B    | BEDROOM 2       | D    | 7'-8"       | 7'-0"        | 54 SF      |         |    |             |             |             |        |        |       |       |
| 310A    | BEDROOM 1       | A    | 2'-10"      | 7'-0"        | 20 SF      |         |    |             |             |             |        |        |       |       |
| 310B    | BEDROOM 1       | D    | 7'-8"       | 7'-0"        | 54 SF      |         |    |             |             |             |        |        |       |       |
| 311A    | BATHROOM        | C    | 2'-6"       | 7'-0"        | 18 SF      |         |    |             |             |             |        |        |       |       |
| 312A    | HALL            | A    | 2'-8"       | 7'-0"        | 19 SF      |         |    |             |             |             |        |        |       |       |

### GENERAL NOTES

- ALL NEW DOORS TO BE NFRC CERTIFIED.
- ALL NEW VERTICAL FENESTRATION U-VALUE TO MEET ENERGY COMPLIANCE. SEE SHEET G001.
- ALL DOORS TO BE SOLID-CORE WOOD VENEER FLAT PANELS UNO.
- ALL GLAZED DOORS TO RECEIVE TEMPERED / SAFETY GLAZING.

### SPECIFIC NOTES

- FROSTED / OPAQUE GLAZING



### ARCH - DOOR TYPES

1/4" = 1'-0"

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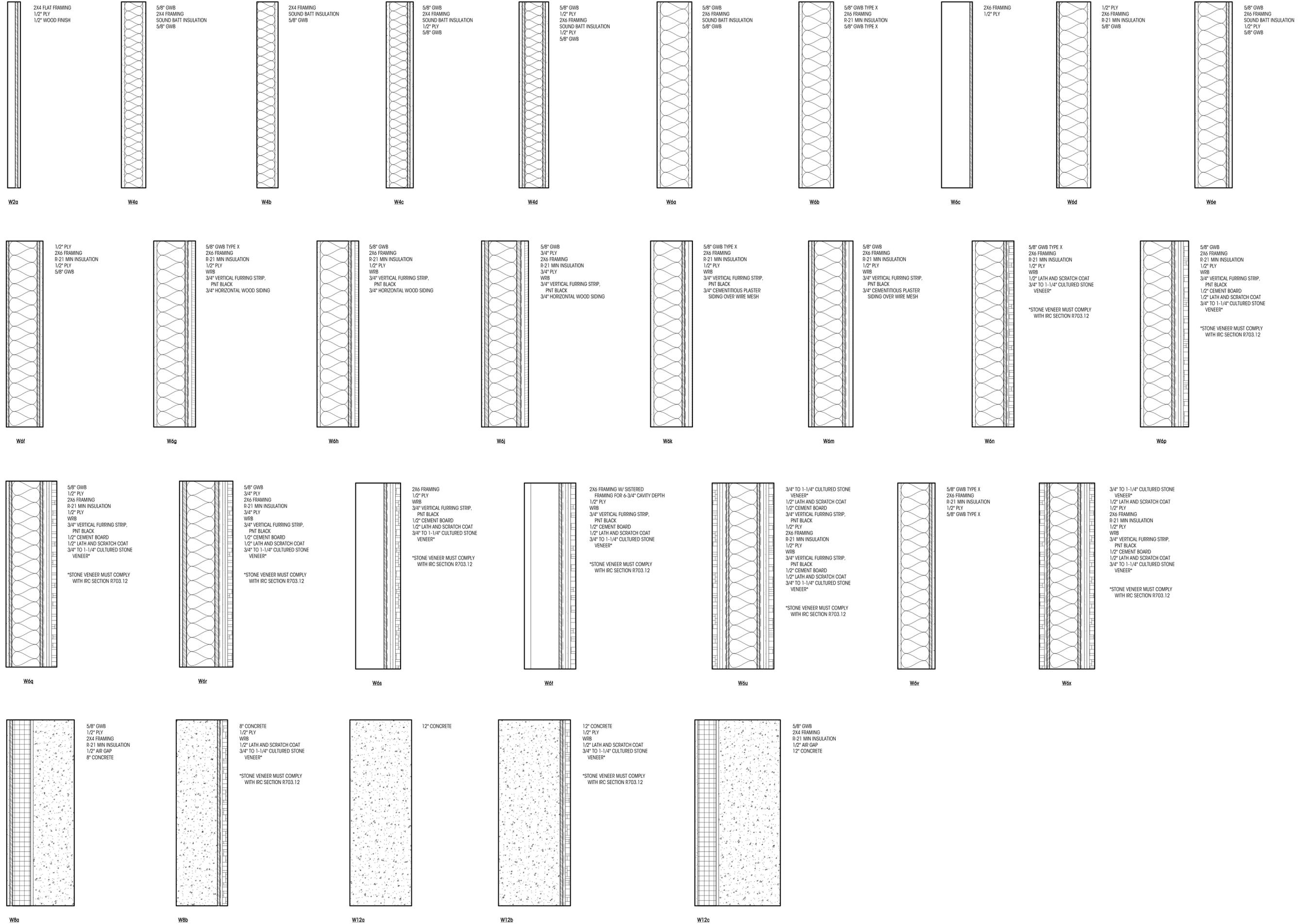
DOOR / WINDOW  
SCHEDULES,  
LEGENDS, & NOTES

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

# A601

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**VERTICAL ASSEMBLIES**



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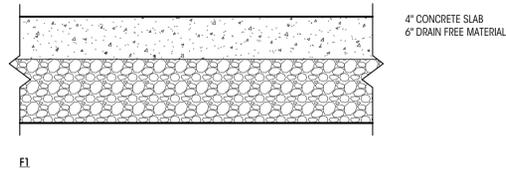
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**A701**

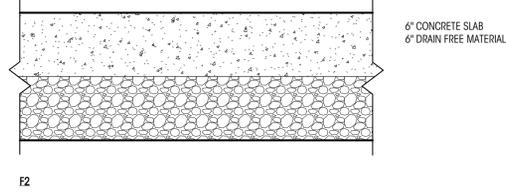
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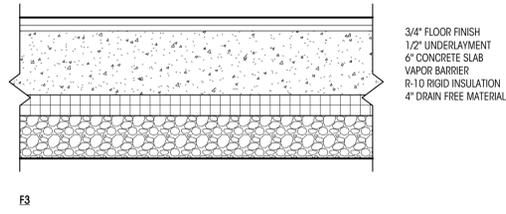
# HORIZONTAL ASSEMBLIES



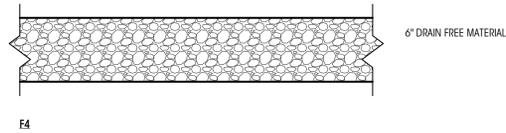
4" CONCRETE SLAB  
6" DRAIN FREE MATERIAL



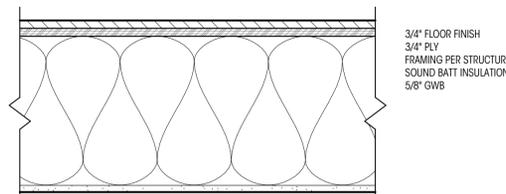
6" CONCRETE SLAB  
6" DRAIN FREE MATERIAL



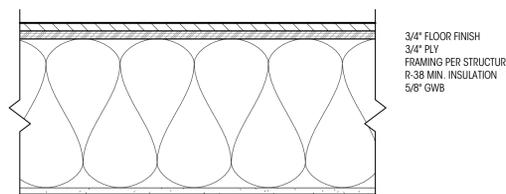
3/4" FLOOR FINISH  
1/2" UNDERLAYMENT  
6" CONCRETE SLAB  
VAPOR BARRIER  
R-10 RIGID INSULATION  
4" DRAIN FREE MATERIAL



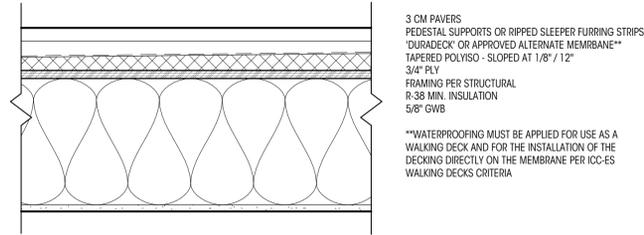
6" DRAIN FREE MATERIAL



3/4" FLOOR FINISH  
3/4" PLY  
FRAMING PER STRUCTURAL  
SOUND BATT INSULATION  
5/8" GWB

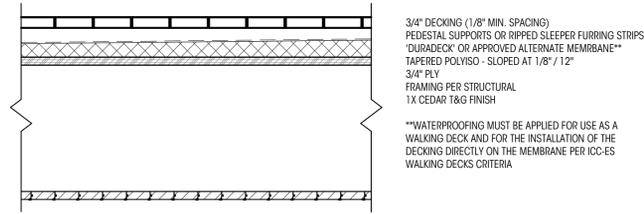


3/4" FLOOR FINISH  
3/4" PLY  
FRAMING PER STRUCTURAL  
R-38 MIN. INSULATION  
5/8" GWB



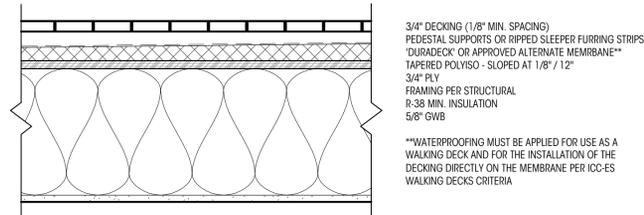
3 CM PAVERS  
PEDESTAL SUPPORTS OR RIPPED SLEEPER FURRING STRIPS  
"DURADECK" OR APPROVED ALTERNATE MEMBRANE\*\*  
TAPERED POLYISO - SLOPED AT 1/8" / 12"  
3/4" PLY  
FRAMING PER STRUCTURAL  
R-38 MIN. INSULATION  
5/8" GWB

\*\*WATERPROOFING MUST BE APPLIED FOR USE AS A WALKING DECK AND FOR THE INSTALLATION OF THE DECKING DIRECTLY ON THE MEMBRANE PER ICC-ES WALKING DECKS CRITERIA



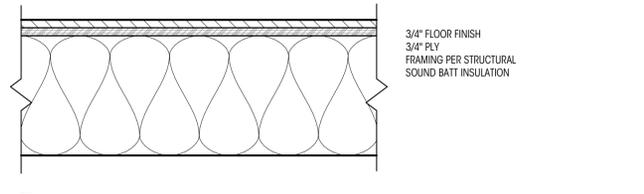
3/4" DECKING (1/8" MIN. SPACING)  
PEDESTAL SUPPORTS OR RIPPED SLEEPER FURRING STRIPS  
"DURADECK" OR APPROVED ALTERNATE MEMBRANE\*\*  
TAPERED POLYISO - SLOPED AT 1/8" / 12"  
3/4" PLY  
FRAMING PER STRUCTURAL  
1X CEDAR T&G FINISH

\*\*WATERPROOFING MUST BE APPLIED FOR USE AS A WALKING DECK AND FOR THE INSTALLATION OF THE DECKING DIRECTLY ON THE MEMBRANE PER ICC-ES WALKING DECKS CRITERIA

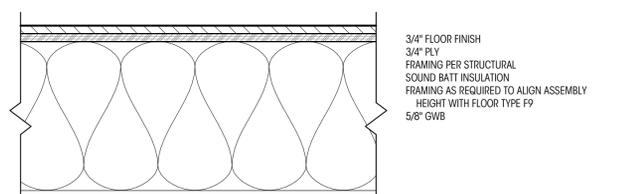


3/4" DECKING (1/8" MIN. SPACING)  
PEDESTAL SUPPORTS OR RIPPED SLEEPER FURRING STRIPS  
"DURADECK" OR APPROVED ALTERNATE MEMBRANE\*\*  
TAPERED POLYISO - SLOPED AT 1/8" / 12"  
3/4" PLY  
FRAMING PER STRUCTURAL  
R-38 MIN. INSULATION  
5/8" GWB

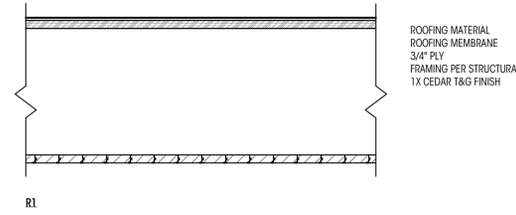
\*\*WATERPROOFING MUST BE APPLIED FOR USE AS A WALKING DECK AND FOR THE INSTALLATION OF THE DECKING DIRECTLY ON THE MEMBRANE PER ICC-ES WALKING DECKS CRITERIA



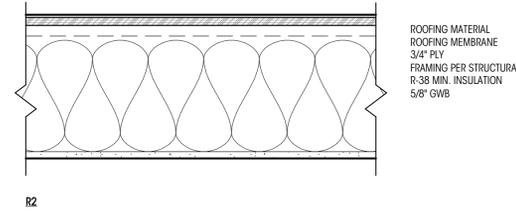
3/4" FLOOR FINISH  
3/4" PLY  
FRAMING PER STRUCTURAL  
SOUND BATT INSULATION



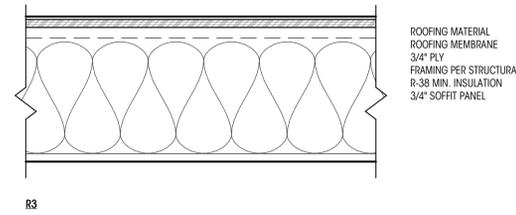
3/4" FLOOR FINISH  
3/4" PLY  
FRAMING PER STRUCTURAL  
SOUND BATT INSULATION  
FRAMING AS REQUIRED TO ALIGN ASSEMBLY  
HEIGHT WITH FLOOR TYPE F9  
5/8" GWB



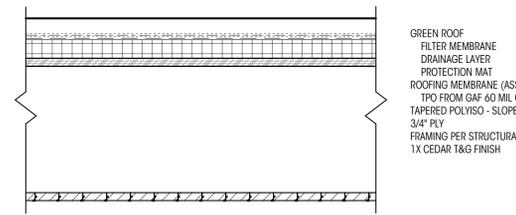
ROOFING MATERIAL  
ROOFING MEMBRANE  
3/4" PLY  
FRAMING PER STRUCTURAL  
1X CEDAR T&G FINISH



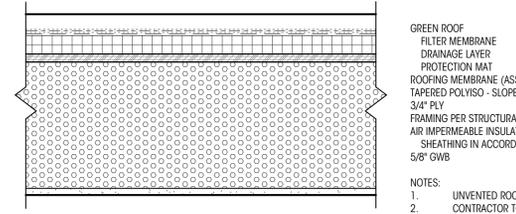
ROOFING MATERIAL  
ROOFING MEMBRANE  
3/4" PLY  
FRAMING PER STRUCTURAL  
R-38 MIN. INSULATION  
5/8" GWB



ROOFING MATERIAL  
ROOFING MEMBRANE  
3/4" PLY  
FRAMING PER STRUCTURAL  
R-38 MIN. INSULATION  
3/4" SOFFIT PANEL

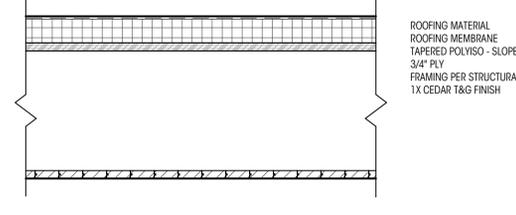


GREEN ROOF  
FILTER MEMBRANE  
DRAINAGE LAYER  
PROTECTION MAT  
ROOFING MEMBRANE (ASSUME EVERGUARD EXTREME TPO FROM GAF 60 MIL OR GREATER)  
TAPERED POLYISO - SLOPED AT 1/8" / 12"  
3/4" PLY  
FRAMING PER STRUCTURAL  
1X CEDAR T&G FINISH



GREEN ROOF  
FILTER MEMBRANE  
DRAINAGE LAYER  
PROTECTION MAT  
ROOFING MEMBRANE (ASSUME EVERGUARD EXTREME TPO FROM GAF 60 MIL OR GREATER)  
TAPERED POLYISO - SLOPED AT 1/8" / 12"  
3/4" PLY  
FRAMING PER STRUCTURAL  
AIR IMPERMEABLE INSULATION, R-38 MIN., APPLIED DIRECTLY TO THE UNDERSIDE OF THE ROOF  
SHEATHING IN ACCORDANCE WITH R806.5.1.1  
5/8" GWB

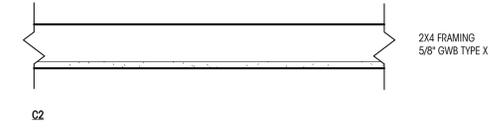
NOTES:  
1. UNVENTED ROOF ASSEMBLY  
2. CONTRACTOR TO SEAL ALL AIR GAPS. ROOF ASSEMBLY TO COMPLY WITH IRC SECTION R806.5. CONTRACTOR TO COORDINATE WITH ARCHITECT AND INSPECTOR IF ALL CONDITIONS CANNOT BE MET.



ROOFING MATERIAL  
ROOFING MEMBRANE  
TAPERED POLYISO - SLOPED AT 1/8" / 12"  
3/4" PLY  
FRAMING PER STRUCTURAL  
1X CEDAR T&G FINISH



2X4 FRAMING  
5/8" GWB



2X4 FRAMING  
5/8" GWB TYPE X

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

A702

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**General Structural Notes**

THE FOLLOWING APPLY UNLESS SHOWN OTHERWISE ON THE DRAWINGS

**WOOD**

36. FRAMING LUMBER SHALL BE S-DRY, KD, OR MC-19, AND GRADED AND MARKED IN CONFORMANCE WITH WCLIB STANDARD No. 17, GRADING RULES FOR WEST COAST LUMBER, 2018, OR WMPA STANDARD, WESTERN LUMBER GRADING RULES 2017. FURNISH TO THE FOLLOWING MINIMUM STANDARDS:

|                                |                       |  |
|--------------------------------|-----------------------|--|
| JOISTS AND BEAMS               | (2X & 3X MEMBERS)     | DOUGLAS-FIR No. 2<br>MINIMUM BASE VALUE, Fb = 900 PSI        |
|                                | (4X MEMBERS)          | DOUGLAS FIR-LARCH No. 1<br>MINIMUM BASE VALUE, Fb = 1000 PSI |
| BEAMS                          | (INCL. 6X AND LARGER) | DOUGLAS FIR-LARCH No. 1<br>MINIMUM BASE VALUE, Fb = 1350 PSI |
| POSTS                          | (4X MEMBERS)          | DOUGLAS FIR-LARCH No. 2<br>MINIMUM BASE VALUE, Fc = 1350 PSI |
|                                | (6X AND LARGER)       | DOUGLAS FIR-LARCH No. 1<br>MINIMUM BASE VALUE, Fc = 1000 PSI |
| STUDS, PLATES & MISC. FRAMING: |                       | DOUGLAS FIR-LARCH No. 2                                      |

37. GLUED LAMINATED MEMBERS SHALL BE FABRICATED IN CONFORMANCE WITH ASTM AND ANSI/AITC STANDARDS. EACH MEMBER SHALL BEAR AN AITC OR APA IDENTIFICATION MARK AND SHALL BE ACCOMPANIED BY AN AITC OR APA CERTIFICATE OF CONFORMANCE. ALL SIMPLE SPAN BEAMS SHALL BE DOUGLAS FIR COMBINATION 24F-V4, Fb = 2,400 PSI, Fv = 265 PSI. ALL CANTILEVERED BEAMS SHALL BE DOUGLAS FIR COMBINATION 24F-V8, Fb = 2400 PSI, Fv = 265 PSI.

38. MANUFACTURED LUMBER, PSL, LVL, AND LSL SHOWN ON PLAN ARE BASED PRODUCTS MANUFACTURED BY THE WEYERHAEUSER CORPORATION IN ACCORDANCE WITH ICC-ES REPORT ESR-1387. MEMBERS SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES:

|                      |   |
|----------------------|---|
| PSL (2.0E WS)        | Fb = 2900 PSI, E = 2000 KSI, Fv = 290 PSI |
| LVL (2.0E-2600FB WS) | Fb = 2600 PSI, E = 2000 KSI, Fv = 285 PSI |
| LSL (1.55E)          | Fb = 2325 PSI, E = 1550 KSI, Fv = 310 PSI |

ALTERNATE MANUFACTURED LUMBER MANUFACTURERS MAY BE USED SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND STRUCTURAL ENGINEER. ALTERNATE MANUFACTURER'S PRODUCTS SHALL BE COMPATIBLE WITH THE JOIST HANGERS AND OTHER HARDWARE SPECIFIED ON PLANS, OR ALTERNATE HANGERS AND HARDWARE SHALL SUBMITTED FOR REVIEW AND APPROVAL. SUBSTITUTED ITEMS SHALL HAVE ICC-ES REPORT APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES.

MANUFACTURED LUMBER PRODUCTS SHALL BE INSTALLED WITH A MOISTURE CONTENT OF 12% OR LESS. THE CONTRACTOR SHALL MAKE PROVISIONS DURING CONSTRUCTION TO PREVENT THE MOISTURE CONTENT OF INSTALLED BEAMS FROM EXCEEDING 12%. EXCESSIVE DEFLECTIONS MAY OCCUR IF MOISTURE CONTENT EXCEEDS THIS VALUE.

39. PREFABRICATED PLYWOOD WEB JOIST DESIGN SHOWN ON PLANS IS BASED ON JOISTS MANUFACTURED BY THE WEYERHAEUSER CORPORATION, IN ACCORDANCE WITH ICC-ES REPORT ESR-1157. ALTERNATE PLYWOOD WEB JOIST MANUFACTURERS MAY BE USED SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND STRUCTURAL ENGINEER. ALTERNATE MANUFACTURER'S PRODUCTS SHALL BE COMPATIBLE WITH THE JOIST HANGERS AND OTHER HARDWARE SPECIFIED ON PLANS, OR ALTERNATE HANGERS AND HARDWARE SHALL SUBMITTED FOR REVIEW AND APPROVAL. SUBSTITUTED ITEMS SHALL HAVE ICC-ES REPORT APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES.

40. PLYWOOD SHEATHING SHALL BE GRADE C-D, EXTERIOR GLUE OR STRUCTURAL II, EXTERIOR GLUE IN CONFORMANCE WITH DOC PS 1 OR PS 2. ORIENTED STRAND BOARD OF EQUIVALENT THICKNESS, EXPOSURE RATING AND PANEL INDEX MAY BE USED IN LIEU OF PLYWOOD.

ROOF SHEATHING SHALL BE 1/2" (NOMINAL) WITH SPAN RATING 32/16.

FLOOR SHEATHING SHALL BE 3/4" (NOMINAL) WITH SPAN RATING 48/24.

WALL SHEATHING SHALL BE 1/2" (NOMINAL) WITH SPAN RATING 24/0.

PROVIDE APPROVED PLYWOOD EDGE CLIPS CENTERED BETWEEN JOISTS/TRUSSES AT UNBLOCKED ROOF SHEATHING EDGES. ALL FLOOR SHEATHING EDGES SHALL HAVE APPROVED T&G JOINTS OR SHALL BE SUPPORTED WITH SOLID BLOCKING. ALLOW 1/8" SPACING AT ALL PANEL EDGES AND ENDS OF FLOOR AND ROOF SHEATHING.

REFER TO WOOD FRAMING NOTES BELOW FOR TYPICAL NAILING REQUIREMENTS.

41. ALL WOOD IN DIRECT CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESSURE-TREATED WITH AN APPROVED PRESERVATIVE OR (2) LAYERS OF ASPHALT IMPREGNATED BUILDING PAPER SHALL BE PROVIDED BETWEEN UNTREATED WOOD AND CONCRETE OR MASONRY.

42. PRESERVATIVE TREATED WOOD SHALL BE TREATED PER AWPA STANDARD U1 TO THE USE CATEGORY EQUAL TO OR HIGHER THAN THE INTENDED APPLICATION. TREATED WOOD FOR ABOVE GROUND USE SHALL BE TREATED TO AWPA UC3B. WOOD IN CONTINUOUS CONTACT WITH FRESH WATER OR SOIL SHALL BE TREATED TO AWPA UC4A. WOOD FOR USE IN PERMANENT FOUNDATIONS SHALL BE TREATED TO AWPA UC4B.

43. FASTENERS AND TIMBER CONNECTORS USED WITH TREATED WOOD SHALL HAVE CORROSION RESISTANCE AS INDICATED IN THE FOLLOWING TABLE, UNLESS OTHERWISE NOTED.

|                                       |                        |  |
|---------------------------------------|------------------------|--|
| WOOD TREATMENT HAS NO AMMONIA CARRIER | CONDITION INTERIOR DRY | PROTECTION 690 GALVANIZED  |
| CONTAINS AMMONIA CARRIER              | INTERIOR DRY           | G185 OR A185 HOT DIPPED OR CONTINUOUS HOT-GALVANIZED PER ASTM A653 |
| CONTAINS AMMONIA CARRIER              | INTERIOR WET           | TYPE 304 OR 316 STAINLESS  |
| CONTAINS AMMONIA CARRIER              | EXTERIOR               | TYPE 304 OR 316 STAINLESS  |
| AZCA                                  | ANY                    | TYPE 304 OR 316 STAINLESS  |

INTERIOR DRY CONDITIONS SHALL HAVE WOOD MOISTURE CONTENT LESS THAN 19%. WOOD MOISTURE CONTENT IN OTHER CONDITIONS (INTERIOR WET, EXTERIOR WET, AND EXTERIOR DRY) IS EXPECTED TO EXCEED 19%. CONNECTORS AND THEIR FASTENERS SHALL BE THE SAME MATERIAL. COMPLY WITH THE TREATMENT MANUFACTURERS RECOMMENDATIONS FOR PROTECTION OF METAL.

44. TIMBER CONNECTORS CALLED OUT BY LETTERS AND NUMBERS SHALL BE "STRONG-TIE" BY SIMPSON COMPANY, AS SPECIFIED IN THEIR CATALOG NUMBER C-G-2019. EQUIVALENT DEVICES BY OTHER MANUFACTURERS MAY BE SUBSTITUTED, PROVIDED THEY HAVE ICC-ES APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES. PROVIDE NUMBER AND SIZE OF FASTENERS AS SPECIFIED BY MANUFACTURER FOR MAXIMUM LOAD CARRYING CAPACITY. CONNECTORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

ALL 2X JOISTS SHALL BE CONNECTED TO FLUSH BEAMS WITH "LUS" SERIES JOIST HANGERS. ALL TJI JOISTS SHALL BE CONNECTED TO FLUSH BEAMS WITH "TITS" SERIES JOIST HANGERS. ALL DOUBLE-JOIST BEAMS SHALL BE CONNECTED TO FLUSH BEAMS WITH "MIT" SERIES JOIST HANGERS.

WHERE CONNECTOR STRAPS CONNECT TWO MEMBERS, PLACE ONE-HALF OF THE NAILS OR BOLTS IN EACH MEMBER.

ALL SHIMS SHALL BE SEASONED AND DRIED AND THE SAME GRADE (MINIMUM)AS MEMBERS CONNECTED.

45. WOOD FASTENERS

A. NAIL SIZES SPECIFIED ON DRAWINGS ARE BASED ON THE FOLLOWING SPECIFICATIONS:

| SIZE    | LENGTH | DIAMETER |
|---------|--------|----------|
| 6d      | 2"     | 0.113"   |
| 8d      | 2-1/2" | 0.131"   |
| 10d     | 3"     | 0.148"   |
| 12d     | 3-1/4" | 0.148"   |
| 16d BOX | 3-1/2" | 0.135"   |

IF CONTRACTOR PROPOSES THE USE OF ALTERNATE NAILS, THEY SHALL SUBMIT NAIL SPECIFICATIONS TO THE STRUCTURAL ENGINEER (PRIOR TO CONSTRUCTION) FOR REVIEW AND APPROVAL.

NAILS - PLYWOOD (APA RATED SHEATHING) FASTENERS TO FRAMING SHALL BE DRIVEN FLUSH TO FACE OF SHEATHING WITH NO COUNTERSINKING PERMITTED. TOE-NAILS SHALL BE DRIVEN AT AN ANGLE OF 30 DEGREES WITH THE MEMBER AND STARTED 1/3 THE LENGTH OF THE NAIL FROM THE MEMBER END.

B. ALL BOLTS IN WOOD MEMBERS SHALL CONFORM TO ASTM A307. PROVIDE WASHERS UNDER THE HEADS AND NUTS OF ALL BOLTS AND LAG BOLTS BEARING ON WOOD. INSTALLATION OF LAG BOLTS SHALL CONFORM TO THE NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION WITH A LEAD BORE HOLE OF 60 TO 70 PERCENT OF THE SHANK DIAMETER. LEAD HOLES ARE NOT REQUIRED FOR 3/8" AND SMALLER LAG SCREWS.

46. NOTCHES AND HOLES IN WOOD FRAMING:

A. NOTCHES ON THE ENDS OF SOLID SAWN JOISTS AND RAFTERS SHALL NOT EXCEED ONE-FOURTH THE JOIST DEPTH. NOTCHES IN THE TOP OR BOTTOM OF SOLID SAWN JOISTS SHALL NOT EXCEED ONE-SIXTH THE DEPTH AND SHALL NOT BE LOCATED IN THE MIDDLE THIRD OF THE SPAN. HOLES BORED IN SOLID SAWN JOISTS AND RAFTERS SHALL NOT BE WITHIN 2 INCHES OF THE TOP OR BOTTOM OF THE JOIST, AND THE DIAMETER OF ANY SUCH HOLE SHALL NOT EXCEED ONE-THIRD THE DEPTH OF THE JOIST.

B. IN EXTERIOR WALLS AND BEARING PARTITIONS, ANY WOOD STUD IS PERMITTED TO BE CUT OR NOTCHED TO A DEPTH NOT EXCEEDING 25 PERCENT OF ITS WIDTH. A HOLE NOT GREATER IN DIAMETER THAN 40 PERCENT OF THE STUD WIDTH IS PERMITTED TO BE BORED IN ANY WOOD STUD. IN NO CASE SHALL THE EDGE OF THE BORED HOLE BE NEARER THAN 5/8 INCH TO THE EDGE OF THE STUD. BORED HOLES SHALL NOT BE LOCATED AT THE SAME SECTION OF STUD AS A CUT OR NOTCH.

C. NOTCHES AND HOLES IN MANUFACTURED LUMBER AND PREFABRICATED PLYWOOD WEB JOISTS SHALL BE PER THE MANUFACTURERS RECOMMENDATIONS UNLESS OTHERWISE NOTED.

47. WOOD FRAMING NOTES--THE FOLLOWING APPLY UNLESS OTHERWISE SHOWN ON THE PLANS:

A. ALL WOOD FRAMING DETAILS NOT SHOWN OTHERWISE SHALL BE CONSTRUCTED TO THE MINIMUM STANDARDS OF THE INTERNATIONAL BUILDING CODE, THE AITC "TIMBER CONSTRUCTION MANUAL" AND THE AWC "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION". MINIMUM NAILING, UNLESS OTHERWISE NOTED, SHALL CONFORM TO IBC TABLE 2304.10.1. COORDINATE THE SIZE AND LOCATION OF ALL OPENINGS WITH MECHANICAL AND ARCHITECTURAL DRAWINGS.

B. WALL FRAMING: REFER ARCHITECTURAL DRAWINGS FOR THE SIZE OF ALL WALLS. ALL STUDS SHALL BE SPACED AT 16" O.C. UNO. TWO STUDS MINIMUM SHALL BE PROVIDED AT THE END OF ALL WALLS AND AT EACH SIDE OF ALL OPENINGS, AND AT BEAM OR HEADER BEARING LOCATIONS. TWO 2x8 HEADERS SHALL BE PROVIDED OVER ALL OPENINGS NOT OTHERWISE NOTED. SOLID BLOCKING FOR WOOD COLUMNS SHALL BE PROVIDED THROUGH FLOORS TO SUPPORTS BELOW. PROVIDE CONTINUOUS SOLID BLOCKING AT MID-HEIGHT OF ALL STUD WALLS OVER 10'-0" IN HEIGHT.

ALL WALLS SHALL HAVE A SINGLE BOTTOM PLATE AND A DOUBLE TOP PLATE. END NAIL TOP PLATE TO EACH STUD WITH TWO 16d NAILS, AND TOENAIL OR END NAIL EACH STUD TO BOTTOM PLATE WITH TWO 16d NAILS. FACE NAIL DOUBLE TOP PLATE WITH 16d @ 12" O.C.. LAP TOP PLATES AT JOINTS A MINIMUM 4'-0" AND NAIL WITH TWELVE 16d NAILS @ 4" O.C. EACH SIDE JOINT.

ALL STUD WALLS SHALL HAVE THEIR LOWER WOOD PLATES ATTACHED TO WOOD FRAMING BELOW WITH TWO ROWS OF 16d NAILS @ 12" ON-CENTER, OR ATTACHED TO CONCRETE BELOW WITH 5/8" DIAMETER ANCHOR BOLTS @ 4'-0" ON-CENTER EMBEDDED 7" MINIMUM, UNLESS INDICATED OTHERWISE. INDIVIDUAL MEMBERS OF BUILT-UP POSTS SHALL BE NAILED TO EACH OTHER WITH TWO ROWS OF 16d @12" ON-CENTER. UNLESS OTHERWISE NOTED, GYPSUM WALLBOARD SHALL BE FASTENED TO THE INTERIOR SURFACE OF ALL STUDS AND PLATES WITH NO. 6 X 1-1/4" TYPE S OR W SCREWS @ 8" ON-CENTER. UNLESS INDICATED OTHERWISE, 1/2" (NOMINAL)APA RATED SHEATHING (SPAN RATING 24/0) SHALL BE NAILED TO ALL EXTERIOR SURFACES WITH 8d NAILS @ 6" ON-CENTER AT PANEL EDGES AND TOP AND BOTTOM PLATES (BLOCK UN-SUPPORTED EDGES)AND TO ALL INTERMEDIATE STUDS AND BLOCKING WITH 8d NAILS @ 12" ON-CENTER ALLOW 1/8" SPACING AT ALL PANEL EDGES AND PANEL ENDS.

C. FLOOR AND ROOF FRAMING: PROVIDE DOUBLE JOISTS UNDER ALL PARALLEL PARTITIONS THAT EXTEND OVER MORE THAN HALF THE JOIST LENGTH AND AROUND ALL OPENINGS IN FLOORS OR ROOFS UNLESS OTHERWISE NOTED. PROVIDE SOLID BLOCKING BETWEEN RAFTERS AND JOISTS AT ALL BEARING POINTS WITH A MINIMUM OF (3) 16d TOE NAILS EACH END. TOE-NAIL JOISTS TO SUPPORTS WITH TWO 16d NAILS. ATTACH TIMBER JOISTS TO FLUSH HEADERS OR BEAMS WITH SIMPSON METAL JOIST HANGERS IN ACCORDANCE WITH NOTES ABOVE. NAIL ALL MULTI JOIST BEAMS TOGETHER WITH TWO ROWS 16d @ 12" ON-CENTER.

UNLESS OTHERWISE NOTED ON THE PLANS, PLYWOOD ROOF AND FLOOR SHEATHING SHALL BE LAID UP WITH GRAIN PERPENDICULAR TO SUPPORTS AND NAILED AT 6" ON-CENTER WITH 8d NAILS TO FRAMED PANEL EDGES, STRUTS AND OVER STUD WALLS AS SHOWN ON PLANS AND @ 12" ON-CENTER TO INTERMEDIATE SUPPORTS. PROVIDE APPROVED PLYWOOD EDGE CLIPS CENTERED BETWEEN JOISTS/TRUSSES AT UNBLOCKED ROOF SHEATHING EDGES. ALL FLOOR SHEATHING EDGES SHALL HAVE APPROVED T&G JOINTS OR SHALL BE SUPPORTED WITH SOLID BLOCKING. ALLOW 1/8" SPACING AT ALL PANEL EDGES AND ENDS OF FLOOR AND ROOF SHEATHING. TOENAIL BLOCKING TO SUPPORTS WITH 16d @ 12" ON-CENTER, MINIMUM TWO NAILS PER BLOCK, UNLESS OTHERWISE NOTED.



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P: 253.284.9470 ssfengineers.com

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| DESIGN:   | LAN |
| DRAWN:    | NHD |
| CHECKED:  | SRW |
| APPROVED: | BDM |

REVISIONS:

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DPD:

PROJECT TITLE:

**Nguyen Residence**  
9831 SE 42nd Place  
Mercer Island, WA 98040

ARCHITECT:  
**Brandt Design Group**  
66 Bell Street, Unit 1  
Seattle, WA 98121  
PH 206.239.0850  
brandtdesigninc.com

ISSUE:  
**PERMIT**

SHEET TITLE:  
**General Structural Notes**

SCALE: -  
DATE: May 19, 2022  
PROJECT NO: 01519-2022-01  
SHEET NO:

**S1.2**



|           |     |
|-----------|-----|
| DESIGN:   | LAN |
| DRAWN:    | NHD |
| CHECKED:  | SRW |
| APPROVED: | BDM |

REVISIONS:

| NO. | DESCRIPTION |
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PROJECT TITLE:  
**Nguyen Residence**  
 9831 SE 42nd Place  
 Mercer Island, WA 98040

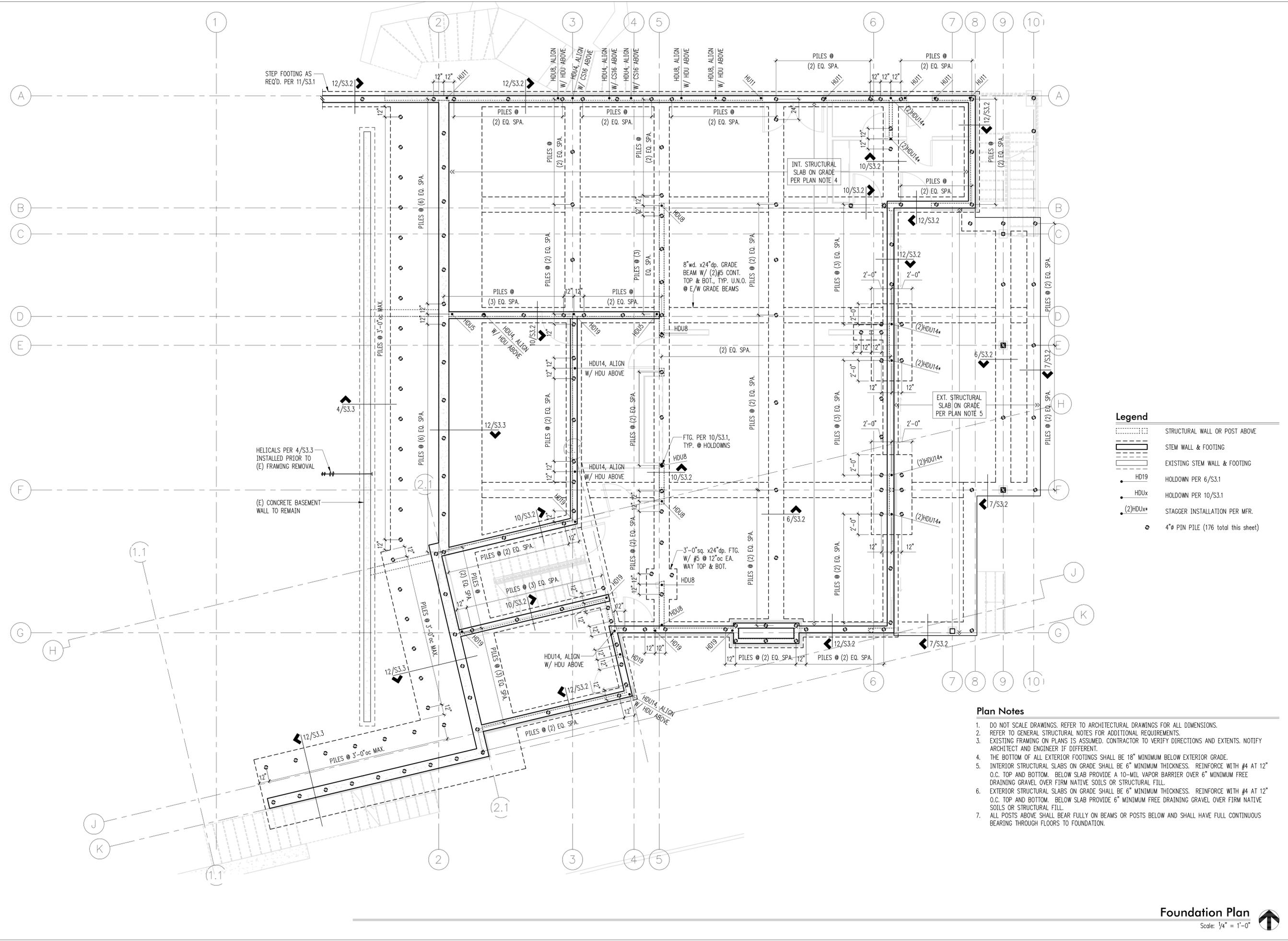
ARCHITECT:  
**Brandt Design Group**  
 66 Bell Street, Unit 1  
 Seattle, WA 98121  
 PH 206.239.0850  
 brandtdesigninc.com

ISSUE:  
**PERMIT**  
 SHEET TITLE:

**Foundation Plan**

SCALE: 1/4" = 1'-0" U.N.O.  
 DATE: May 19, 2022  
 PROJECT NO: 01519-2022-01  
 SHEET NO:

**S2.1**



**Legend**

|  |                                    |
|--|------------------------------------|
|  | STRUCTURAL WALL OR POST ABOVE      |
|  | STEM WALL & FOOTING                |
|  | EXISTING STEM WALL & FOOTING       |
|  | HOLDOWN PER 6/S3.1                 |
|  | HOLDOWN PER 10/S3.1                |
|  | STAGGER INSTALLATION PER MFR.      |
|  | 4" PIN PILE (176 total this sheet) |

- Plan Notes**
- DO NOT SCALE DRAWINGS. REFER TO ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS.
  - REFER TO GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.
  - EXISTING FRAMING ON PLANS IS ASSUMED. CONTRACTOR TO VERIFY DIRECTIONS AND EXTENTS. NOTIFY ARCHITECT AND ENGINEER IF DIFFERENT.
  - THE BOTTOM OF ALL EXTERIOR FOOTINGS SHALL BE 18" MINIMUM BELOW EXTERIOR GRADE.
  - INTERIOR STRUCTURAL SLABS ON GRADE SHALL BE 6" MINIMUM THICKNESS. REINFORCE WITH #4 AT 12" O.C. TOP AND BOTTOM. BELOW SLAB PROVIDE A 10-MIL VAPOR BARRIER OVER 6" MINIMUM FREE DRAINING GRAVEL OVER FIRM NATIVE SOILS OR STRUCTURAL FILL.
  - EXTERIOR STRUCTURAL SLABS ON GRADE SHALL BE 6" MINIMUM THICKNESS. REINFORCE WITH #4 AT 12" O.C. TOP AND BOTTOM. BELOW SLAB PROVIDE 6" MINIMUM FREE DRAINING GRAVEL OVER FIRM NATIVE SOILS OR STRUCTURAL FILL.
  - ALL POSTS ABOVE SHALL BEAR FULLY ON BEAMS OR POSTS BELOW AND SHALL HAVE FULL CONTINUOUS BEARING THROUGH FLOORS TO FOUNDATION.

**Foundation Plan**  
 Scale: 1/4" = 1'-0"





DESIGN: LAN  
 DRAWN: NHD  
 CHECKED: SRW  
 APPROVED: BDM

REVISIONS:

DPD:

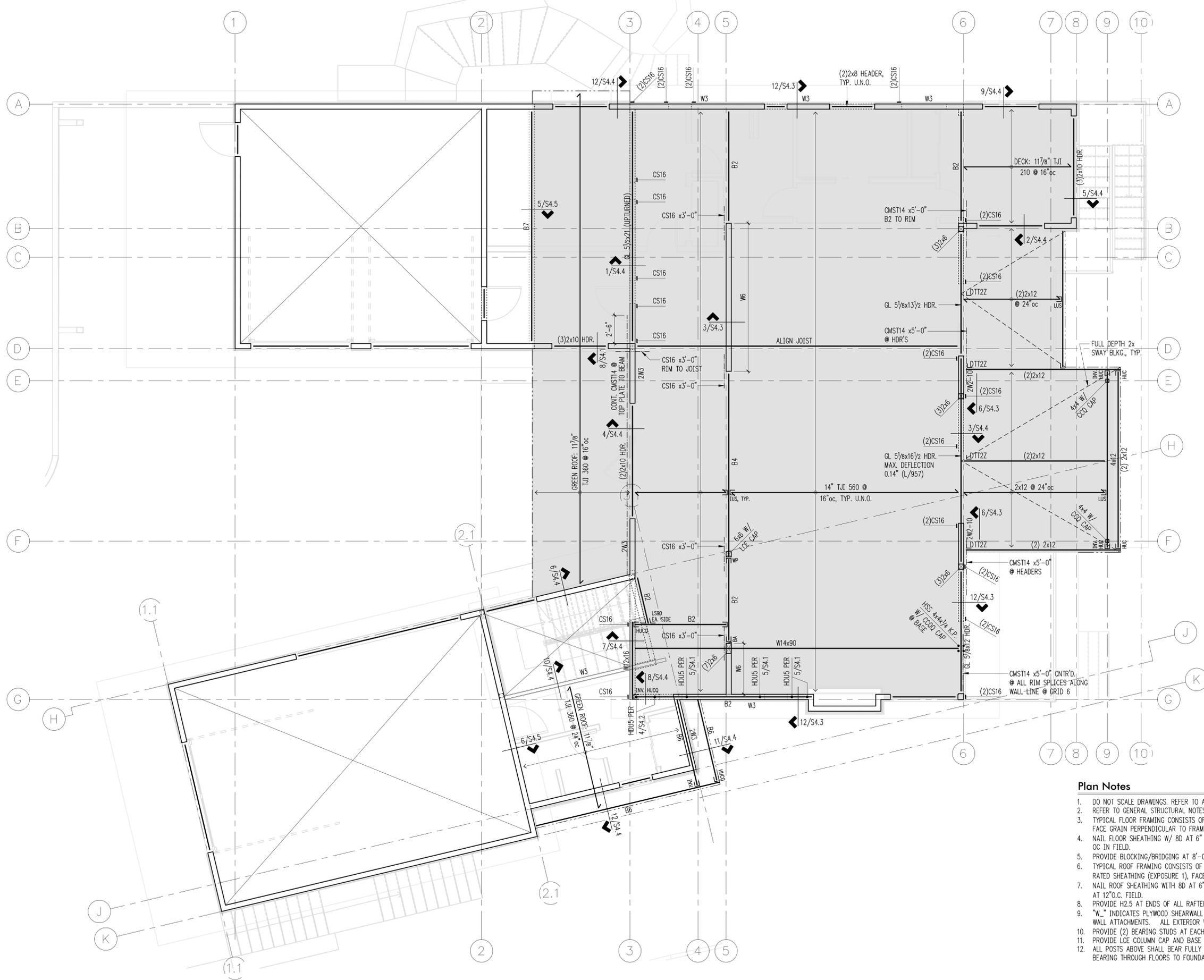
PROJECT TITLE:  
**Nguyen Residence**  
 9831 SE 42nd Place  
 Mercer Island, WA 98040

ARCHITECT:  
**Brandt Design Group**  
 66 Bell Street, Unit 1  
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ISSUE:  
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SHEET TITLE:  
**Upper Floor Framing Plan**

SCALE: 1/4" = 1'-0" U.N.O.  
 DATE: May 19, 2022  
 PROJECT NO: 01519-2022-01  
 SHEET NO:



**Beam Schedule**

| MARK | BEAM                | HANGER      | BRG. STUDS |
|------|---------------------|-------------|------------|
| B1   | LVL 1 3/4x14        | HU14        | 2          |
| B2   | LSL 3 1/2x14        | HHUS410     | 3          |
| B3   | (3)LVL 1 3/4x14     | HGUS5.50/14 | 4          |
| B4   | (4)LVL 1 3/4x14     | HGUS7.25/14 | 5          |
| B5   | LSL 1 3/4x11 7/8    | HU11        | 2          |
| B6   | LSL 3 1/2x11 7/8    | HHUS412     | 3          |
| B7   | (3)LVL 1 3/4x11 7/8 | HGUS5.50/12 | 4          |
| B8   | (4)LVL 1 3/4x11 7/8 | HGUS7.25/12 | 5          |

- Legend**
- STRUCTURAL WALL OR POST BELOW
  - NON-STRUCTURAL WALL BELOW
  - STRUCTURAL WALL OR POST ABOVE
  - SHEARWALL PER 4/S4.1
  - SPAN DIRECTION
  - EXTENT OF JOISTS
  - HEADER/BEAM PER PLAN
  - HANGER
  - INVERTED HANGER
  - BEAM PER SCHEDULE, THIS SHEET
  - BLOCKED FLOOR DIAPHRAGM:  
2x4 FLAT BLKG. AT ALL PLYWOOD  
PANEL EDGES. NAIL ALL PLYWOOD  
PANEL EDGES W/ 8d @ 4" oc &  
@ 12" oc FIELD
  - HOLDOWN STRAP PER 10/S4.1

- Plan Notes**
- DO NOT SCALE DRAWINGS. REFER TO ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS.
  - REFER TO GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.
  - TYPICAL FLOOR FRAMING CONSISTS OF FLOORING PER ARCHITECT OVER 3/4" T&G APA RATED PLYWOOD FACE GRAIN PERPENDICULAR TO FRAMING PER PLAN, U.O.N.
  - NAIL FLOOR SHEATHING W/ 8D AT 6" OC AT FRAMED PANEL EDGES AND OVER SHEARWALLS, AND AT 12" OC IN FIELD.
  - PROVIDE BLOCKING/BRIDGING AT 8'-0" O.C. IN FLOOR FRAMING
  - TYPICAL ROOF FRAMING CONSISTS OF ROOFING PER ARCHITECTURAL DRAWINGS OVER 1/2" APA RATED SHEATHING (EXPOSURE 1), FACE GRAIN PERPENDICULAR TO FRAMING PER PLAN, U.O.N.
  - NAIL ROOF SHEATHING WITH 8D AT 6" O.C. AT ALL FRAMED PANEL EDGES AND OVER SHEARWALLS, AND AT 12" O.C. FIELD.
  - PROVIDE H2.5 AT ENDS OF ALL RAFTERS, U.O.N.
  - "W\_" INDICATES PLYWOOD SHEARWALL BELOW FRAMING SHOWN. REFER TO SHEARWALL SCHEDULE FOR WALL ATTACHMENTS. ALL EXTERIOR WOOD FRAMED WALLS ARE W6, U.O.N.
  - PROVIDE (2) BEARING STUDS AT EACH END OF ALL HEADERS AND BEAMS OVER 3'-0" IN LENGTH, U.O.N.
  - PROVIDE LCE COLUMN CAP AND BASE AT ALL ISOLATED BEAM TO COLUMN CONNECTIONS U.O.N.
  - ALL POSTS ABOVE SHALL BEAR FULLY ON BEAMS OR POSTS BELOW AND SHALL HAVE FULL CONTINUOUS BEARING THROUGH FLOORS TO FOUNDATION.

**Upper Floor Framing Plan**  
 Scale: 1/4" = 1'-0"











DESIGN: LAN  
 DRAWN: NHD  
 CHECKED: SRW  
 APPROVED: BDM

REVISIONS:

DPD:

PROJECT TITLE:  
**Nguyen Residence**  
 9831 SE 42nd Place  
 Mercer Island, WA 98040

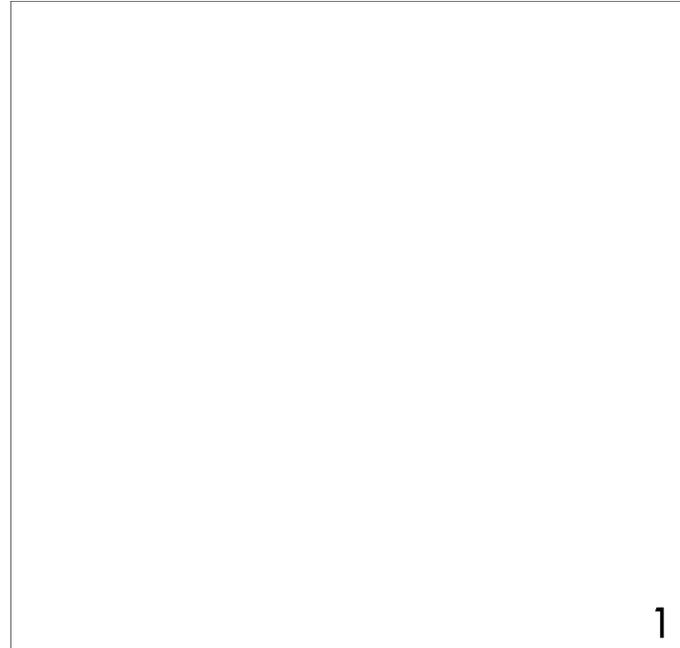
ARCHITECT:  
**Brandt Design Group**  
 66 Bell Street, Unit 1  
 Seattle, WA 98121  
 PH 206.239.0850  
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ISSUE:  
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 SHEET TITLE:

**Concrete Details**

SCALE: 3/4" = 1'-0" U.N.O.  
 DATE: May 19, 2022  
 PROJECT NO: 01519-2022-01  
 SHEET NO:

**S3.2**



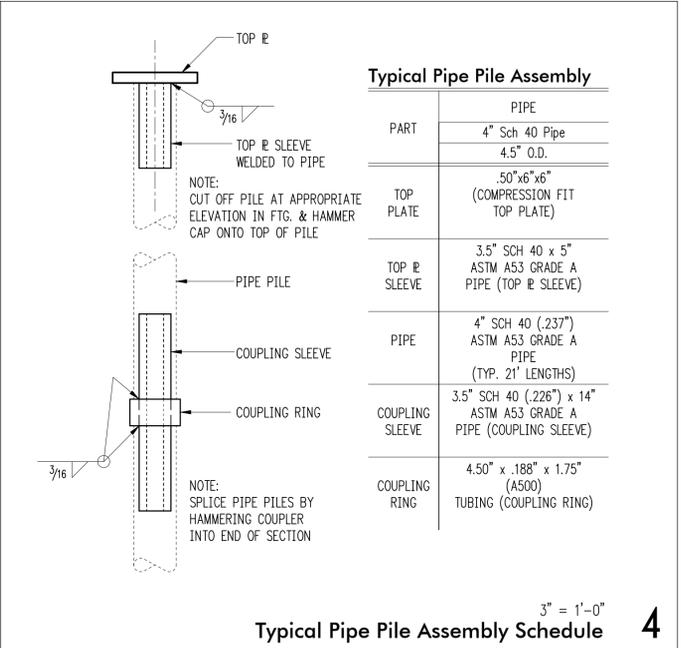
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2



3



3" = 1'-0"  
**Typical Pipe Pile Assembly Schedule**

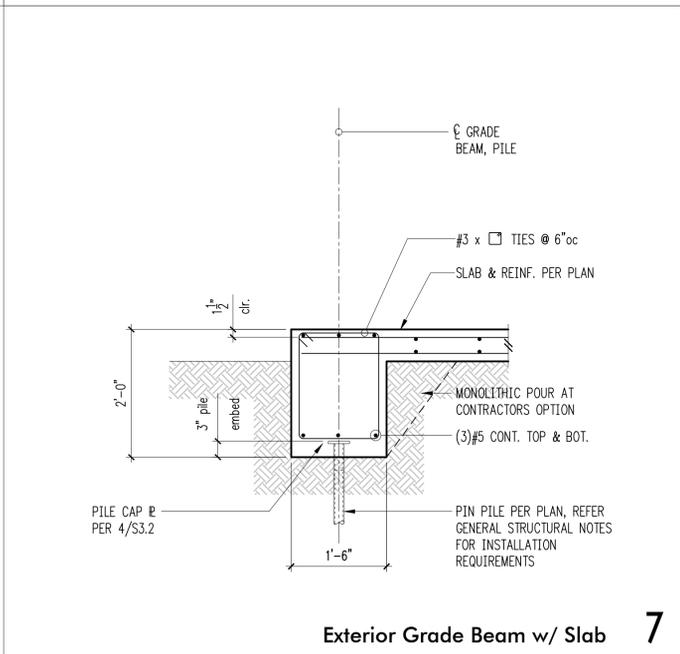
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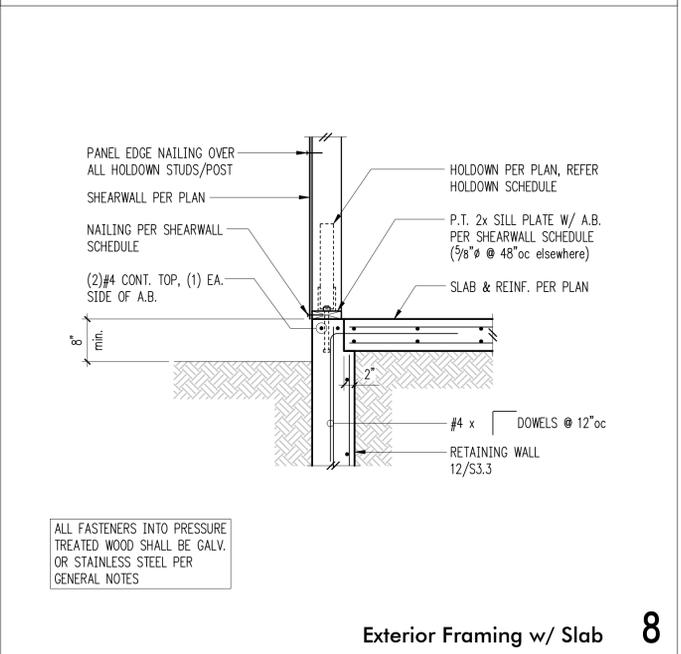


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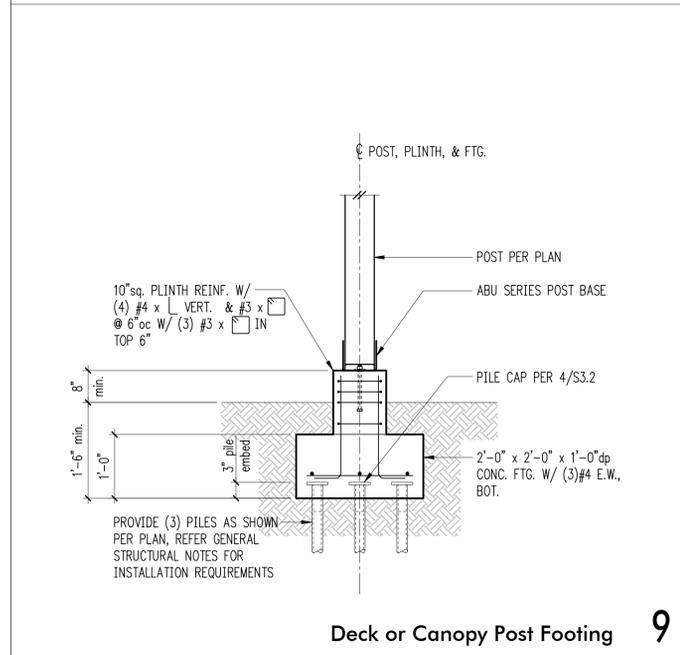
**Exterior Grade Beam w/ Slab**

7



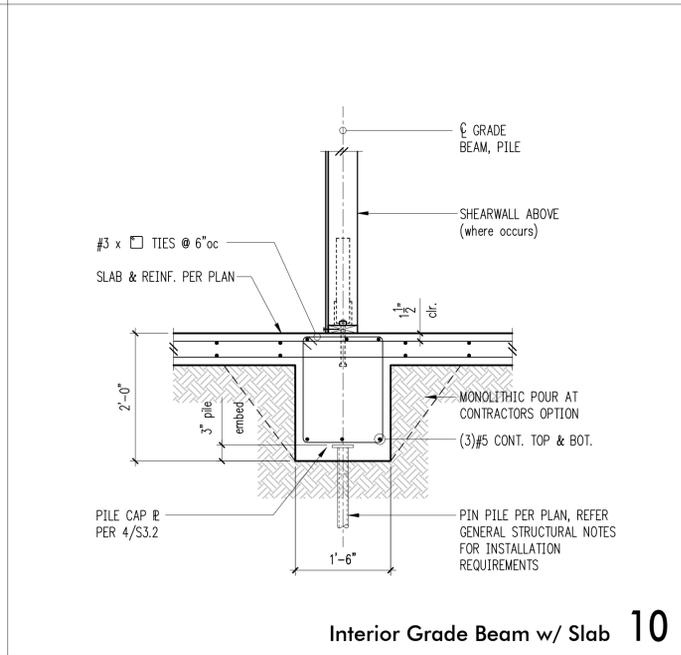
**Exterior Framing w/ Slab**

8



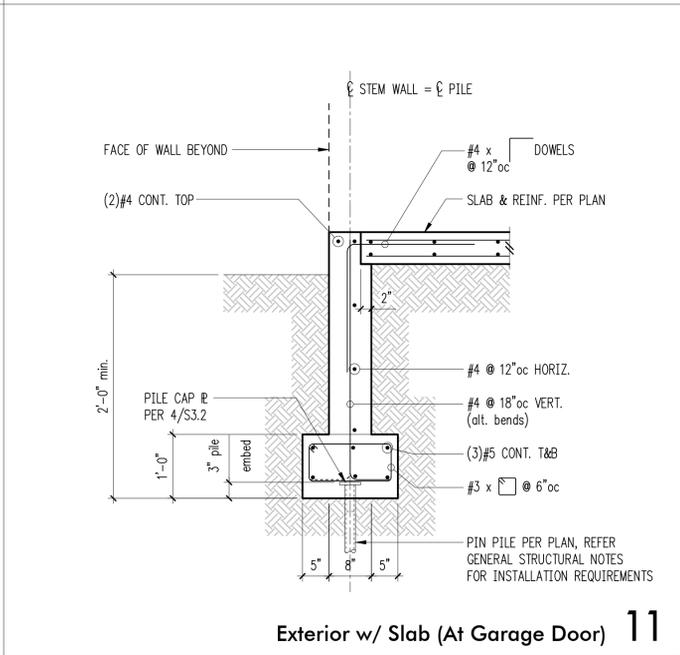
**Deck or Canopy Post Footing**

9



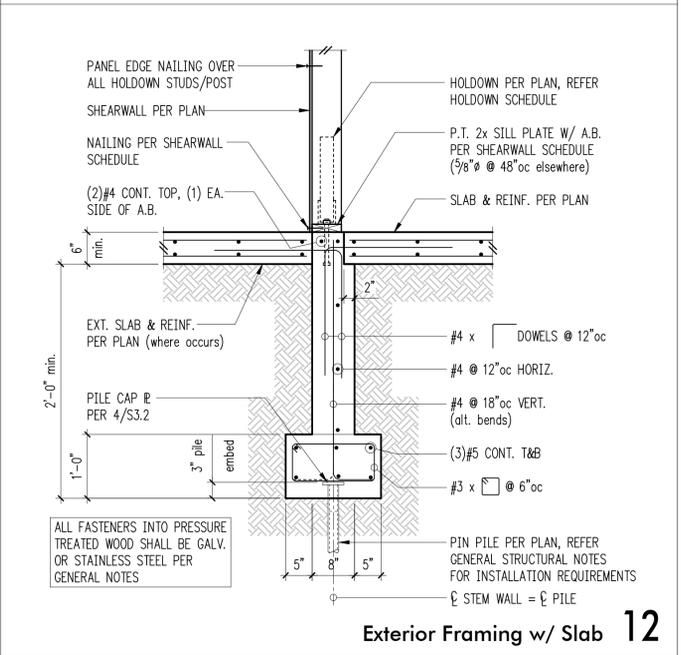
**Interior Grade Beam w/ Slab**

10



**Exterior w/ Slab (At Garage Door)**

11



**Exterior Framing w/ Slab**

12



DESIGN: LAN  
DRAWN: NHD  
CHECKED: SRW  
APPROVED: BDM

REVISIONS:

DPD:

PROJECT TITLE:  
**Nguyen Residence**  
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Mercer Island, WA 98040

ARCHITECT:  
**Brandt Design Group**  
66 Bell Street, Unit 1  
Seattle, WA 98121  
PH 206.239.0850  
brandtdesigninc.com

ISSUE:  
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SHEET TITLE:

**Concrete  
Details**

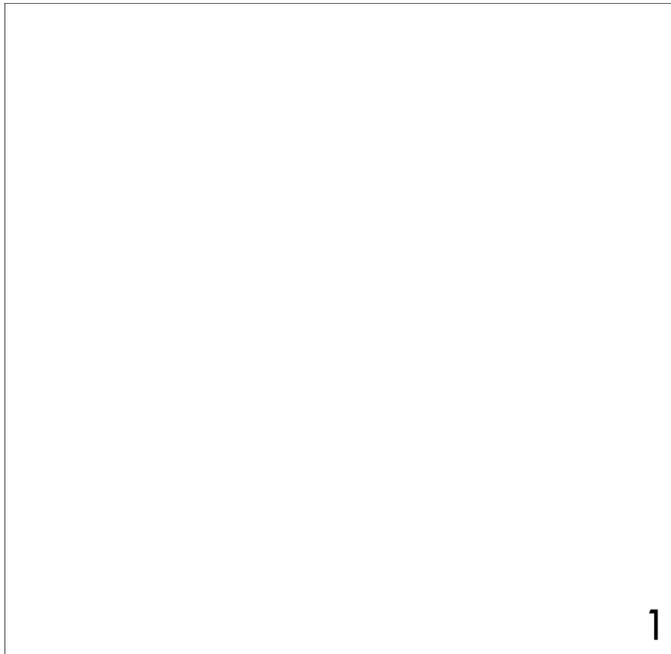
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3/4" = 1'-0" U.N.O.

DATE:  
May 19, 2022

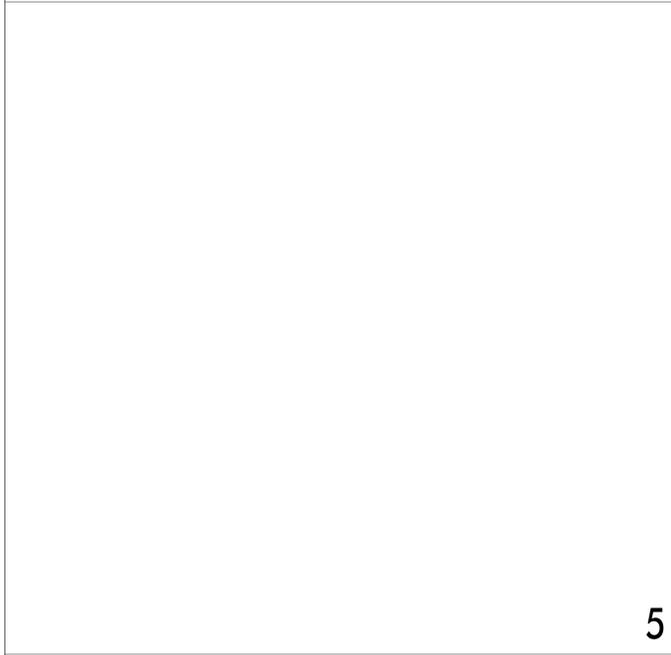
PROJECT NO:  
01519-2022-01

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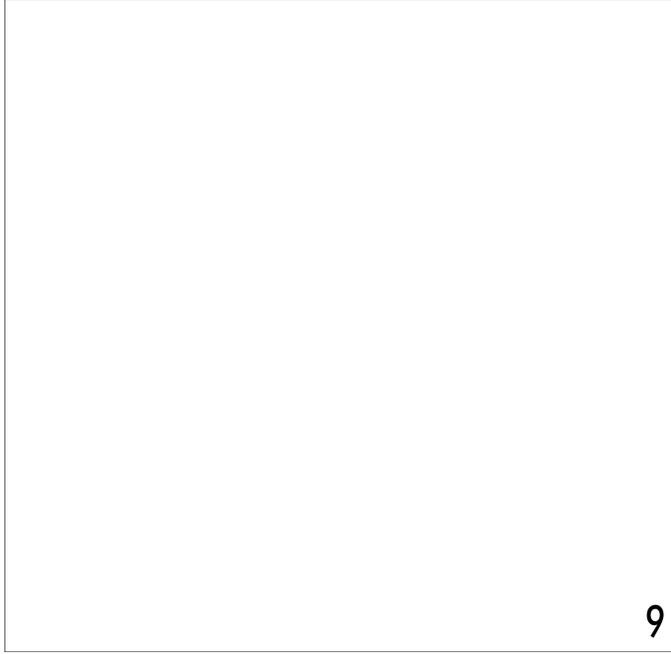
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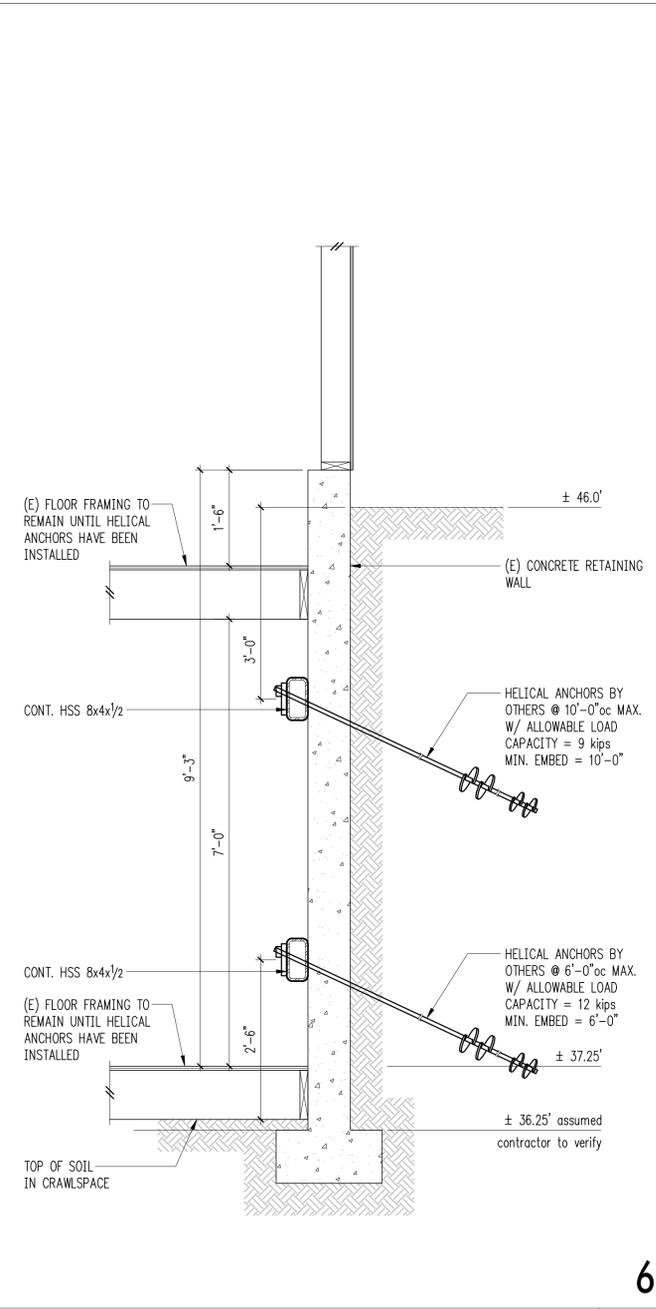
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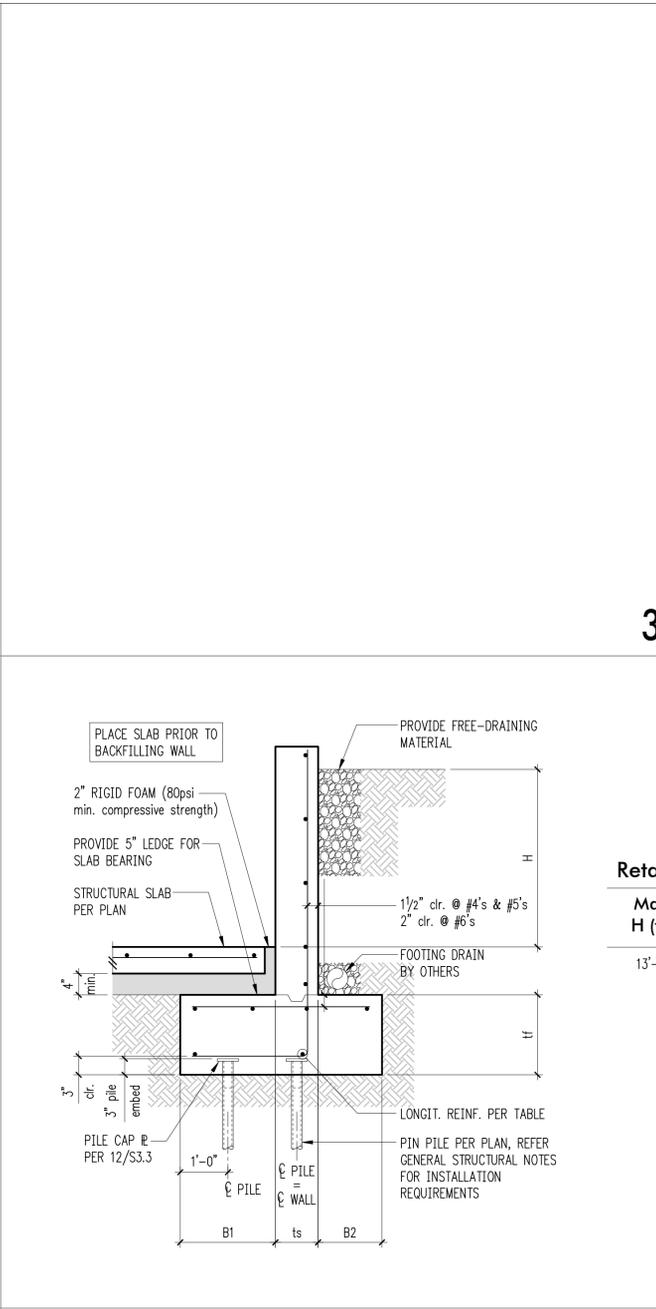
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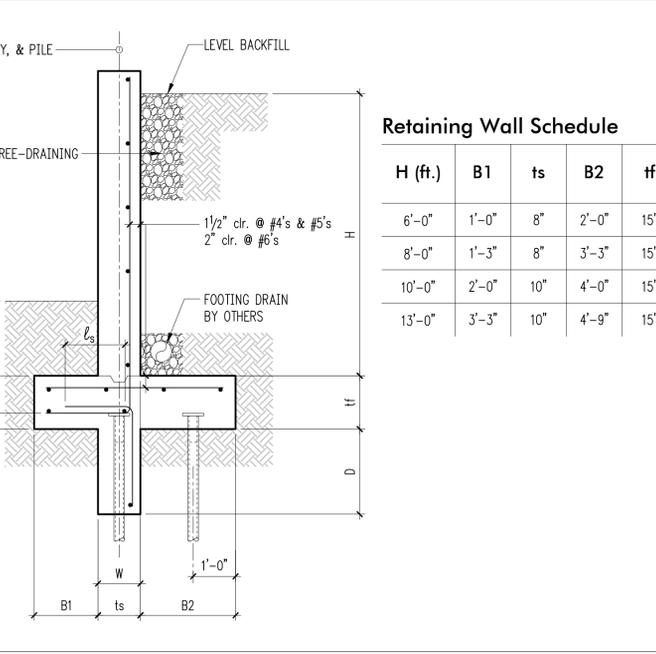
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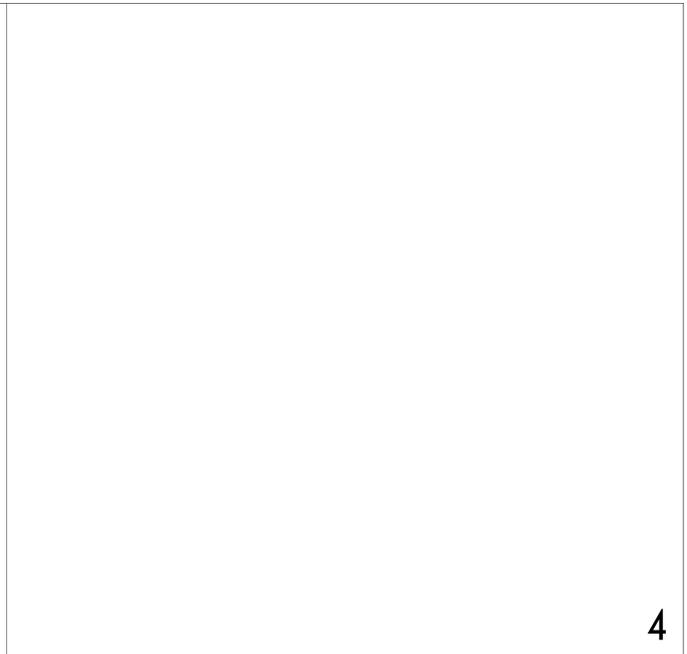
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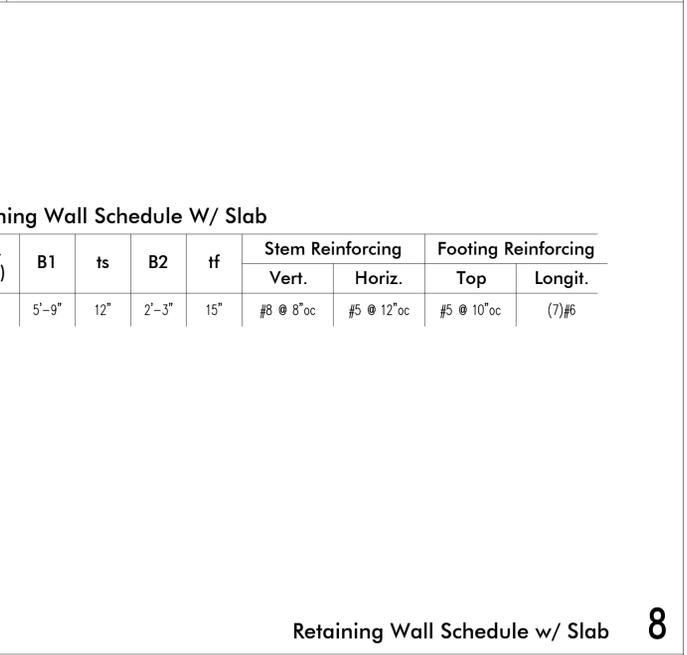
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10



4



8

**Retaining Wall Schedule W/ Slab**

| Max. H (ft.) | B1    | ts  | B2    | ff  | Stem Reinforcing |            | Footing Reinforcing |         |
|--------------|-------|-----|-------|-----|------------------|------------|---------------------|---------|
|              |       |     |       |     | Vert.            | Horiz.     | Top                 | Longit. |
| 13'-0"       | 5'-9" | 12" | 2'-3" | 15" | #8 @ 8"oc        | #5 @ 12"oc | #5 @ 10"oc          | (7)#6   |

**Retaining Wall Schedule**

| H (ft.) | B1    | ts  | B2    | ff  | D      | W   | Stem Reinforcing |            | Footing Reinforcing |         | Key Reinforcing |         |
|---------|-------|-----|-------|-----|--------|-----|------------------|------------|---------------------|---------|-----------------|---------|
|         |       |     |       |     |        |     | Vert.            | Horiz.     | Top                 | Longit. | Vert.           | Longit. |
| 6'-0"   | 1'-0" | 8"  | 2'-0" | 15" | 2'-4"  | 8"  | #5 @ 12"oc       | #4 @ 12"oc | #5 @ 10"oc          | (4)#5   | #5 @ 12"oc      | (3)#4   |
| 8'-0"   | 1'-3" | 8"  | 3'-3" | 15" | 3'-0"  | 10" | #5 @ 10"oc       | #4 @ 12"oc | #5 @ 10"oc          | (6)#5   | #5 @ 12"oc      | (4)#4   |
| 10'-0"  | 2'-0" | 10" | 4'-0" | 15" | 3'-10" | 12" | #7 @ 12"oc       | #5 @ 12"oc | #5 @ 10"oc          | (8)#5   | #7 @ 10"oc      | (5)#4   |
| 13'-0"  | 3'-3" | 10" | 4'-9" | 15" | 5'-1"  | 14" | #8 @ 9"oc        | #5 @ 12"oc | #6 @ 12"oc          | (11)#5  | #7 @ 8"oc       | (5)#5   |

12

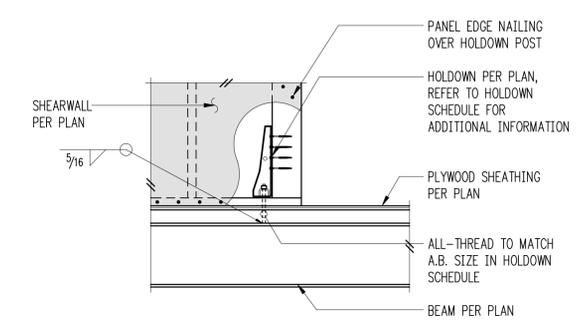




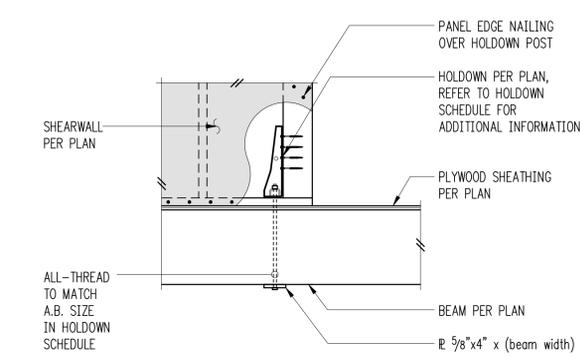
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| DESIGN:   | LAN |
| DRAWN:    | NHD |
| CHECKED:  | SRW |
| APPROVED: | BDM |

1

2



Holdown at WF Beam - HDU 3



HDU at Floor Beam 4

5

6

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8

REVISIONS:

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DPD:

PROJECT TITLE:  
**Nguyen Residence**  
9831 SE 42nd Place  
Mercer Island, WA 98040

ARCHITECT:  
**Brandt Design Group**  
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Seattle, WA 98121  
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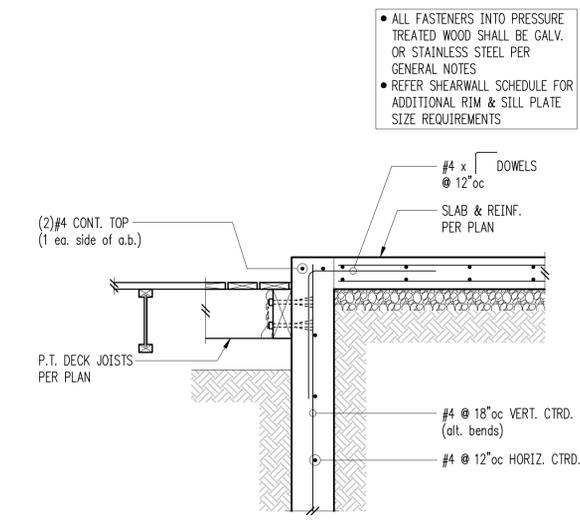
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**PERMIT**

SHEET TITLE:  
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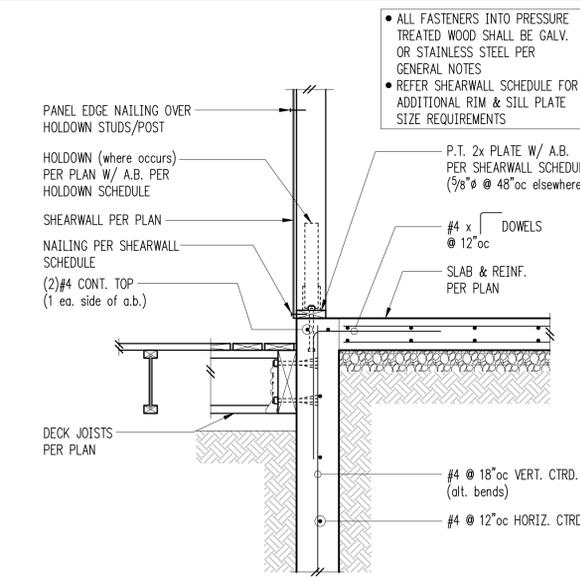
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DATE: May 19, 2022  
PROJECT NO: 01519-2022-01  
SHEET NO:

9

10



11



Exterior Wall w/ Slab on Grade 12

**S4.2**







DESIGN: LAN  
DRAWN: NHD  
CHECKED: SRW  
APPROVED: BDM

REVISIONS:

DPD:

PROJECT TITLE:  
**Nguyen Residence**  
9831 SE 42nd Place  
Mercer Island, WA 98040

ARCHITECT:  
**Brandt Design Group**  
66 Bell Street, Unit 1  
Seattle, WA 98121  
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SHEET TITLE:

**Wood  
Details**

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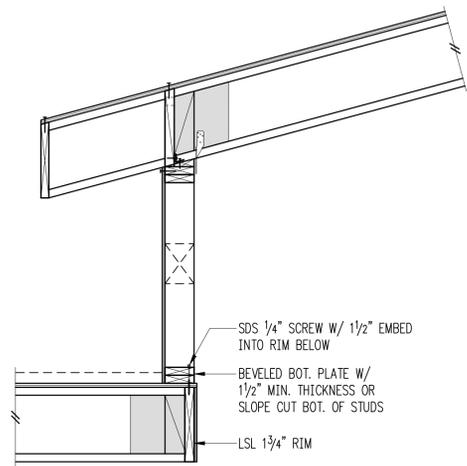
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PROJECT NO: 01519-2022-01

SHEET NO:

**S4.5**

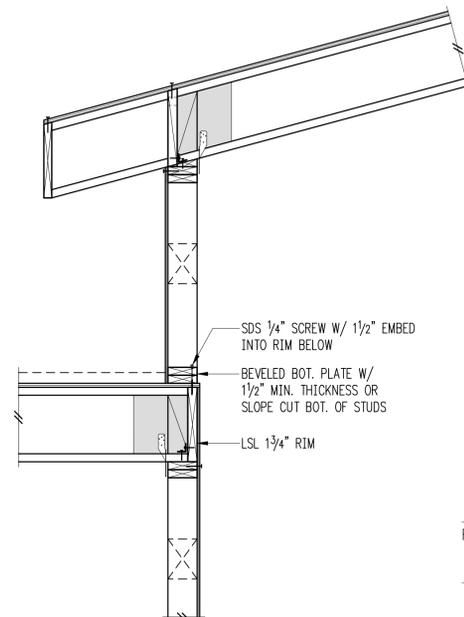
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FOR CALLOUTS  
IN COMMON  
SEE 11/S4.5

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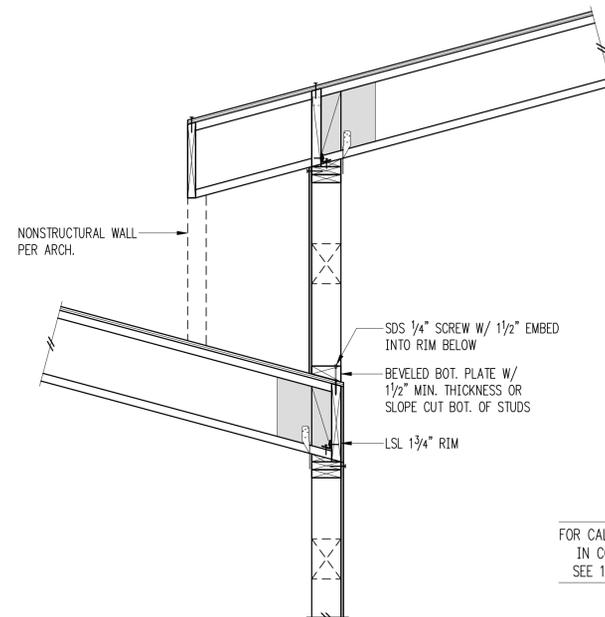
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FOR CALLOUTS  
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SEE 11/S4.5

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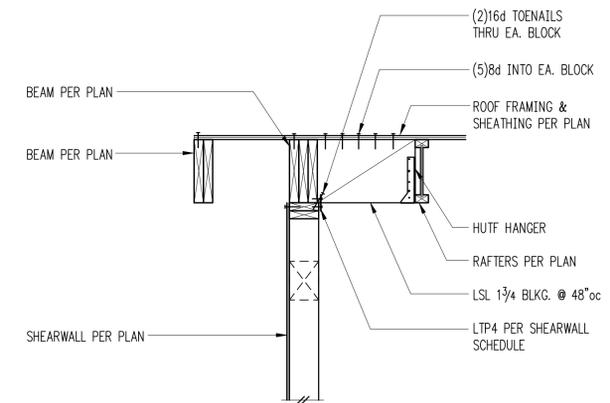
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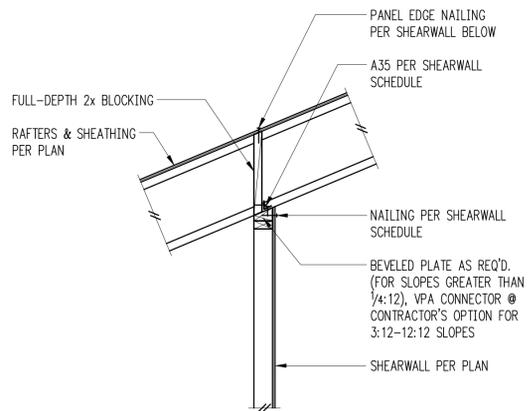
FOR CALLOUTS  
IN COMMON  
SEE 11/S4.5

7

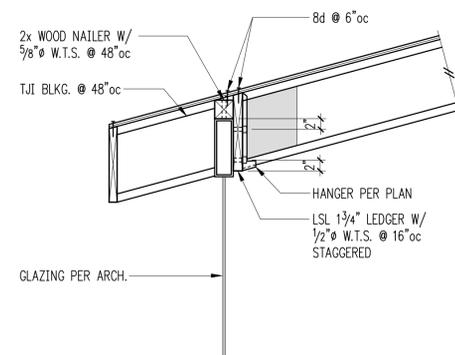
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**Exterior Non-Bearing Wall 8**

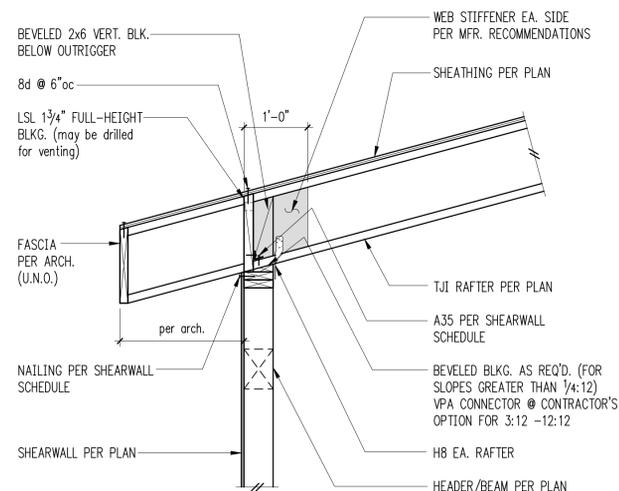


**Interior Bearing Wall 9**

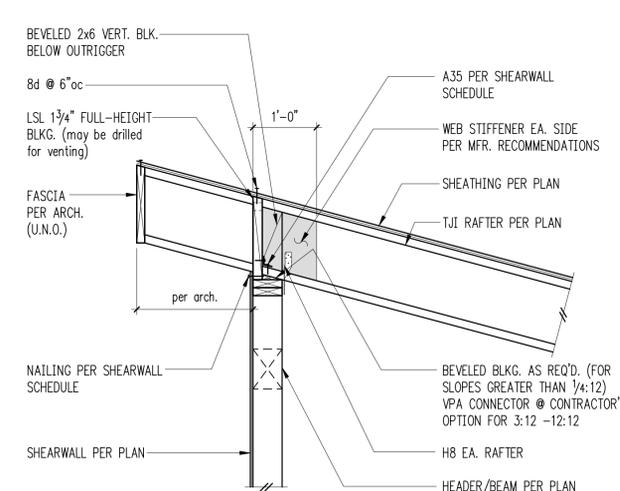


FOR CALLOUTS  
IN COMMON  
SEE 11/S4.5

10



**Exterior Bearing Wall 11**



12





DESIGN: LAN  
 DRAWN: NHD  
 CHECKED: SRW  
 APPROVED: BDM

REVISIONS:

DPD:

PROJECT TITLE:

**Nguyen Residence**

9831 SE 42nd Place  
 Mercer Island, WA 98040

ARCHITECT:

**Brandt Design Group**  
 66 Bell Street, Unit 1  
 Seattle, WA 98121  
 PH 206.239.0850  
 brandtdesigninc.com

ISSUE:

**PERMIT**

SHEET TITLE:

**Steel Details**

SCALE:

3/4" = 1'-0" U.N.O.

DATE:

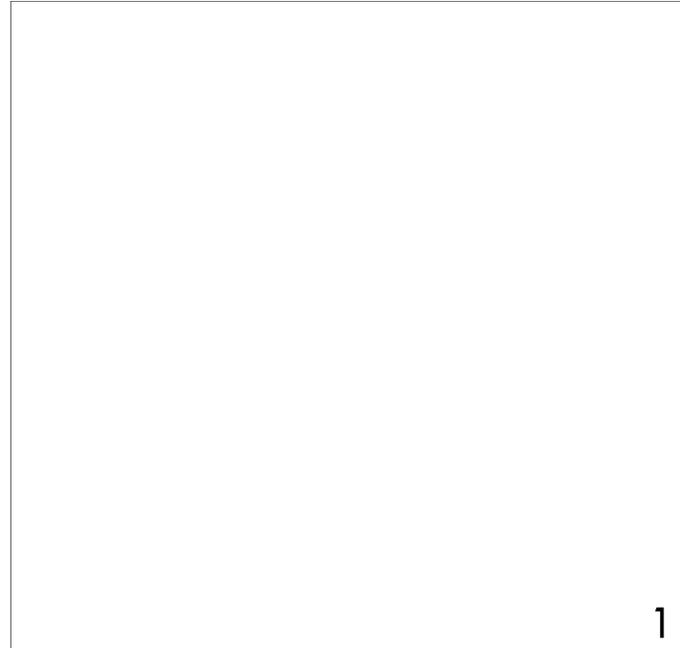
May 19, 2022

PROJECT NO:

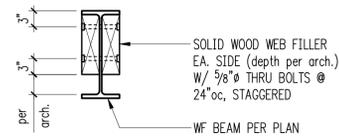
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SHEET NO:

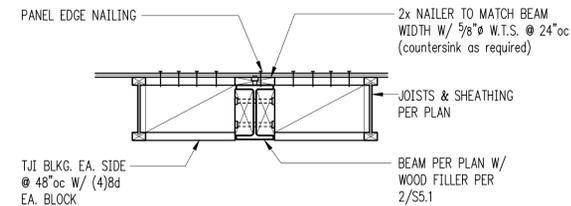
**S5.1**



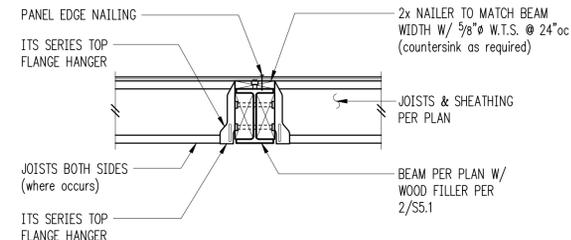
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Typical Wood Filler at WF Beam 2

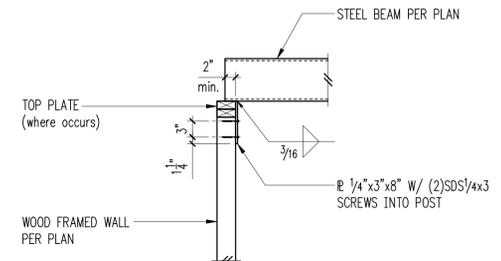


WF Beam Parallel to Framing



WF Beam Perpendicular to Framing

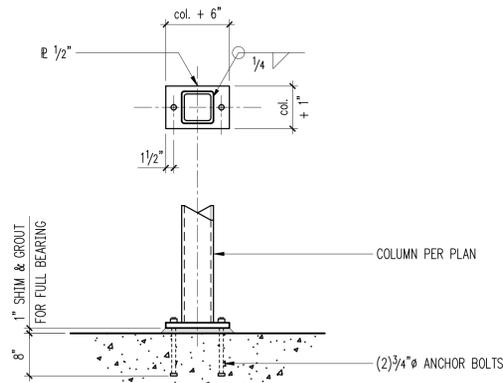
Flush Steel WF Beam with Nailers 3



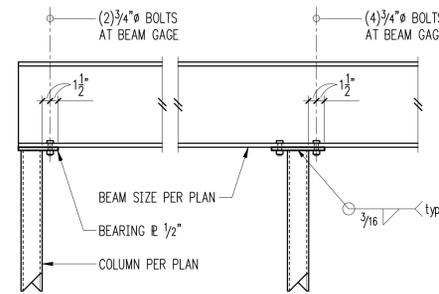
Steel Beam on Wood Post 4



5



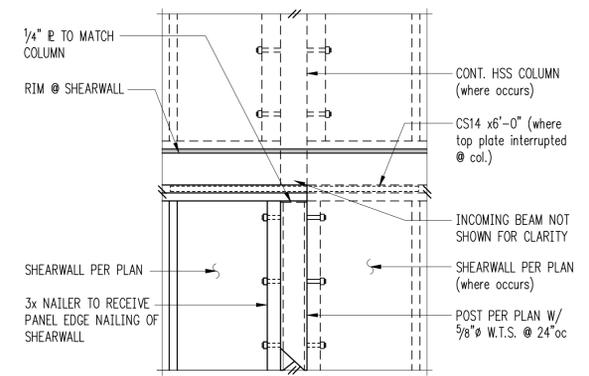
Baseplate - HSS Column 6



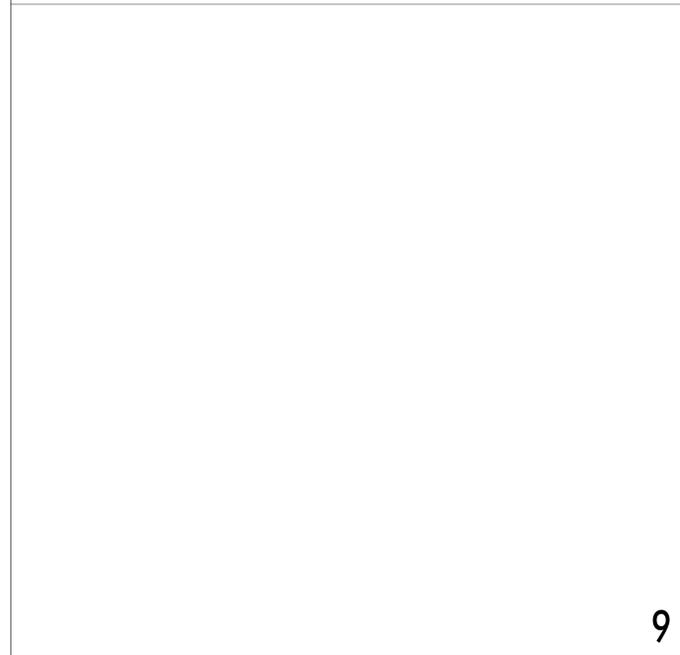
Where Beam Stops Where Beam Continues

NOTE:  
 BEARING PLATE THICKNESS SHALL BE  
 3/4" WHERE DEPTH OF SUPPORTED  
 MEMBER EXCEEDS 24"

Typical Beam Bearing on HSS or Pipe Column 7



Typical HSS Post Within Shearwall 8



9

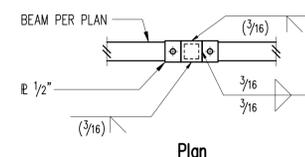
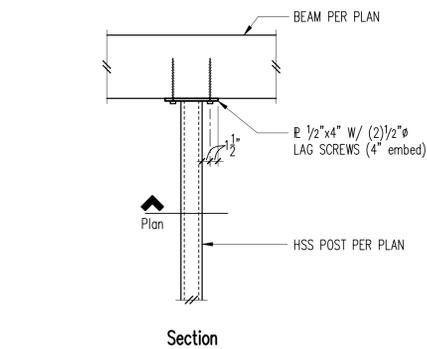
**Shear Plate Schedule**

| Beam Size                               | No. of Bolts | Bolt Size         | Plate Thickness | Weld Size |
|---|--------------|-------------------|-----------------|-----------|
| C6, W6, MC7                             | 2            | 5/8" @ 2" SPACING | 1/4"            | 3/16"     |
| MC8, MC9, MC10 C7, C8, C9, C10, W8, W10 | 2            | 5/8"              | 1/4"            | 3/16"     |
| C12, C15, MC12, W12, W14                | 3            | 3/4"              | 1/4"            | 3/16"     |
| W16                                     | 4            | 3/4"              | 1/4"            | 3/16"     |
| W18                                     | 4            | 3/4"              | 3/16"           | 1/4"      |
| W21                                     | 4            | 7/8"              | 3/8"            | 5/16"     |
| W24                                     | 5            | 7/8"              | 3/8"            | 5/16"     |
| W27                                     | 6            | 7/8"              | 3/8"            | 5/16"     |
| W30                                     | 7            | 7/8"              | 3/8"            | 5/16"     |

**NOTES:**

- STANDARD OR SLOTTED HOLES MAY BE USED.
- BOLT TYPE A325N.
- PLATE MATERIAL - A36
- SEE EXTENDED DETAIL FOR COLUMN WEB CONNECTIONS.

Typical Single Shear Plate Connection and Schedule 11



Typical Single Shear Plate Connection and Schedule 12



DESIGN: LAN  
 DRAWN: NHD  
 CHECKED: SRW  
 APPROVED: BDM

REVISIONS:

| NO. | DESCRIPTION |
|-----|-------------|
|     |             |
|     |             |
|     |             |
|     |             |
|     |             |

DPD:

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SCALE:  
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 May 19, 2022

PROJECT NO:  
 01519-2022-01

SHEET NO:

**S5.2**

|   |    |    |    |
|---|----|----|----|
| 1 | 2  | 3  | 4  |
| 5 | 6  | 7  | 8  |
| 9 | 10 | 11 | 12 |

