Appendix A: Plan Sets

King County

Department of Permitting and Environmental Review

Residential Site Plan Template

Ref:KCC21a.12.030

Max. Impervious Surface Allowed	20% OR 43,758 SF
Max. Bldg. Height Allowed	40'
Ref: KCC21a.12.170	
Min. Bldg. setback from Street	30'
Min. Garage setback from Street	
Min. Bldg. setback from Interior	10'

Permit Center Validations:
- o Zoning
- o Site Review Not Applicable

Validated Signature _____

Login Initials _____ Date _____

Engineering/Drainage Approval

Signature _____

Date _____

Critical Areas Approval

Signature _____

Date _____

Clearing/Grading Approval

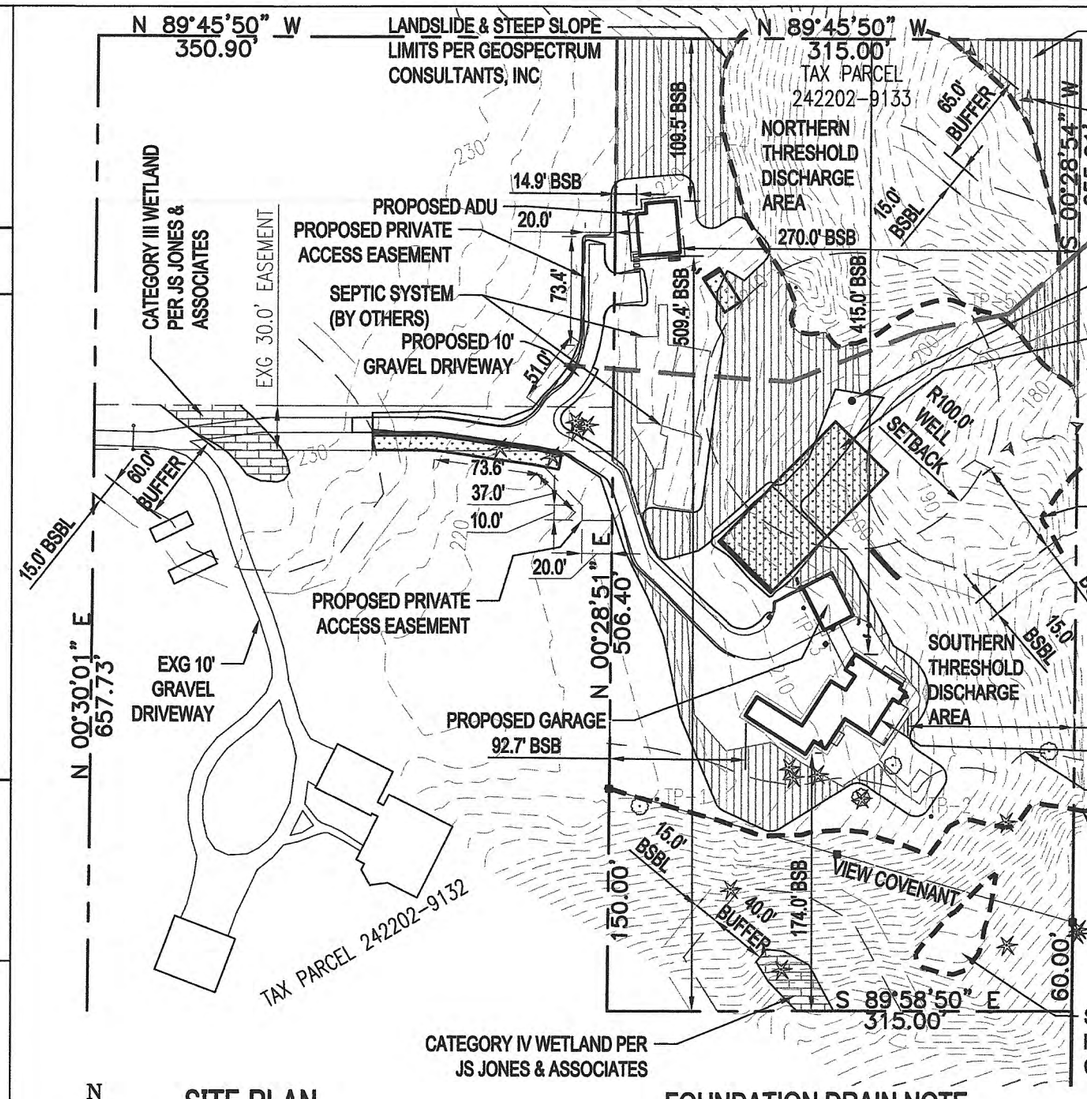
Signature _____

Date _____

Fire Approval

Signature _____

Date _____



SITE PLAN

SCALE 1" = 100 FT.

0 50 100 200 300

UNIT OF MEASUREMENT IN US FEET

PROJECT SITE SUMMARY

PARCEL NUMBER: 2422029133
SITE AREA: 218,790 SF (5.02 ACRES)
IMPERVIOUS SURFACE: 12,461 SF
ZONING : RA-5

PROJECT DESCRIPTION

CONSTRUCTION OF A NEW SINGLE-FAMILY RESIDENCE AND ADU TO BE BUILT AT LOCATIONS NOTED ON THESE PLANS.

LEGAL DESCRIPTION

E 315 FT OF NE 1/4 OF SW 1/4 OF NE 1/4 LESS C/M RGTS

SOIL LOGS

LOGS PROVIDED BY GEOSPECTRUM:

TP-1: 0"-6" DUFF W/ ORGANICS
6"-24"" SILTY FINE SAND, DENSE
24"-60" SILTY FINE SAND, VERY DENSE-HARD

TP-2: 0"-6" DUFF W/ ROOTS
6"-36"" SILTY FINE SAND, DENSE
36"-72" SILTY FINE SAND, VERY DENSE-HARD (CEMENTED)

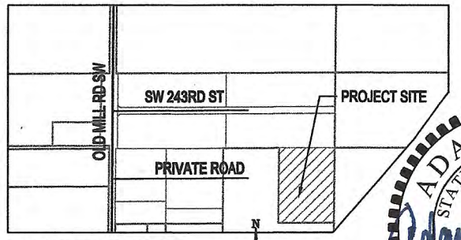
TP-3: 0"-6" DUFF W/ ORGANICS & ROOTS
6"-24"" SILTY FINE SAND, DENSE
24"-48 SILTY FINE SAND, HARD (CEMENTED)

TP-4: 0"-6" DUFF W/ ORGANICS & ROOTS
6"-42"" SILTY FINE SAND, DENSE
42"-66" FINE SILTY SAND, HARD (CEMENTED)

TP-5: 0"-6" DUFF W/ ORGANICS & ROOTS
6"-36"" SILTY FINE SAND, STIFF
36"-72" SILTY FINE SAND, VERY DENSE-HARD (CEMENTED)

FOUNDATION DRAIN NOTE

FOUNDATION DRAINS MAY NOT BE CONNECTED TO ANY STORMWATER BMP (IE. INFILTRATION, DETENTION FACILITIES). THEY SHOULD BE EITHER CONNECTED TO OFF-SITE STORMWATER CONVEYANCE SYSTEM OR BE DAYLIGHTED TO A LOCATION THAT WILL NOT CAUSE INCREASED EROSION, DAMAGE TO CRITICAL AREAS, OR HAVE OTHER NEGATIVE IMPACTS.



LOCATION MAP

TOPOGRAPHY NOTE

CONTOURS SHOWN ON THESE PLANS BEYOND THE WEST PROPERTY LINE ARE FROM KING COUNTY GIS. NO GUARANTEE IS PROVIDED BY APCE AS TO THEIR ACCURACY.

SOIL AMENDMENT NOTE

DECOMPACTION & SOIL AMENDMENT REQUIRED FOR ALL DISTURBED AREAS THAT WILL BE VEGETATED AFTER FINAL STABILIZATION. AMENDMENT TO BE PER OPTION 2 OF THE KING COUNTY "ACHIEVING THE POST-CONSTRUCTION SOIL STANDARD" HANDOUT.

ADAM E. PAUL
STATE OF WASHINGTON
43211
REGISTERED
PROFESSIONAL ENGINEER

AP CONSULTING ENGINEERS PLLC
CIVIL ENGINEERING

APCE@APConsultingEngineers.com (253) 737-4173 PO BOX 162, AUBURN, WA 98071

APCE PROJECT # 2020026

Permit Number: DWEL XX-XXXX Parcel Number: 2422029133 Applicant Name: JASON HOETGER Site Address: 244XX OLD MILL ROAD SW VASHON, WA 98070

Engineering Scale: 1" = 100

King County

Department of Permitting and Environmental Review

Residential Site Plan Template

Ref:KCC21a.12.030

Max. Impervious Surface Allowed	15% OR 105,197 SF
Max. Bldg. Height Allowed	40'

Ref: KCC21a.12.170

Min. Bldg. setback from Street	30'
Min. Garage setback from Street	
Min. Bldg. setback from Interior	10'

Permit Center Validations:
- o Zoning
- o Site Review Not Applicable

Validated Signature _____

Login Initials _____ Date _____

Engineering/Drainage Approval

Signature _____

Date _____

Critical Areas Approval

Signature _____

Date _____

Clearing/Grading Approval

Signature _____

Date _____

Fire Approval

Signature _____

Date _____

STORM STRUCTURE SCHEDULE:

SD#1: TYPE 1 CB, FRAME & GRATE
RIM = 208.20 (MATCH GRADE)
IE = 205.70

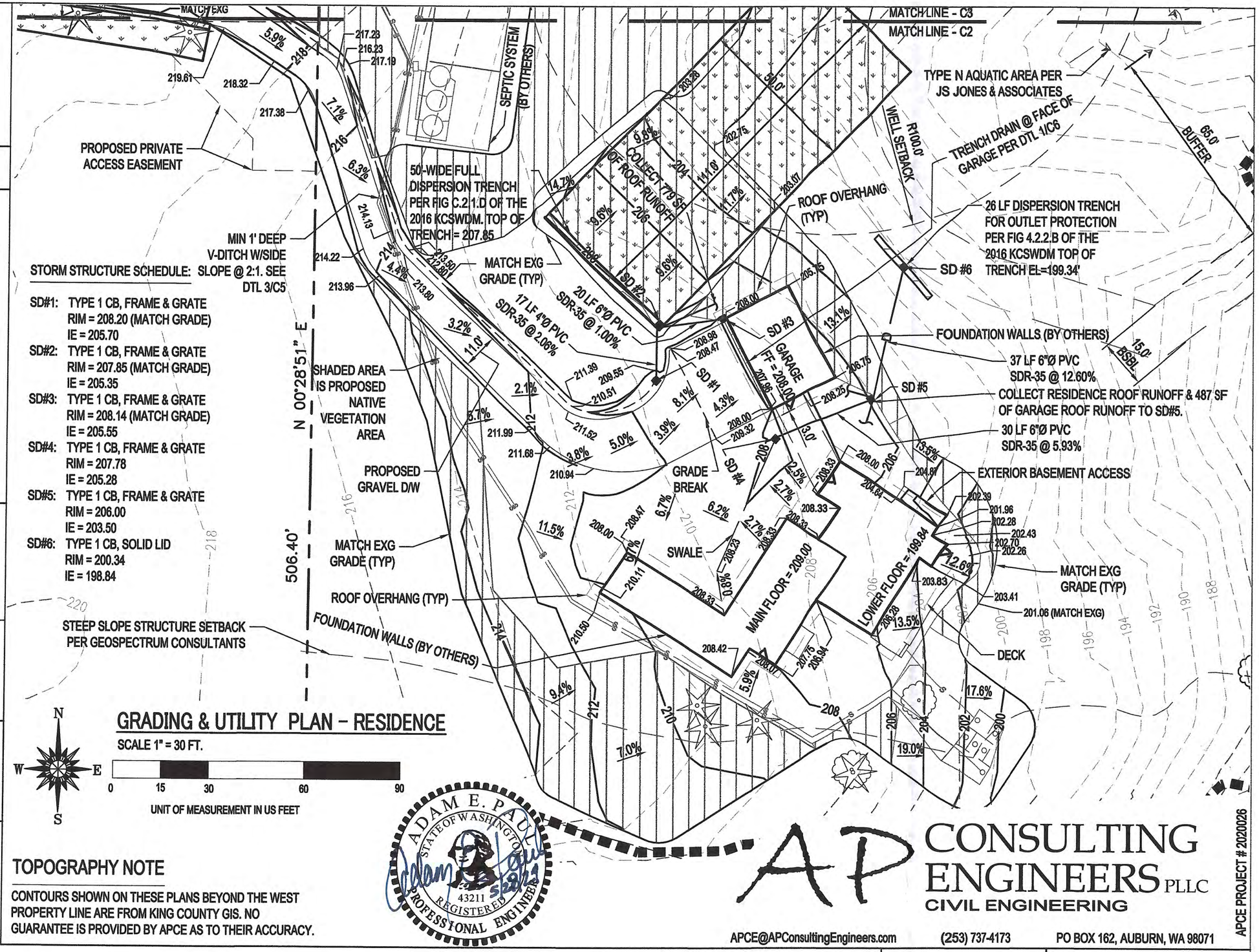
SD#2: TYPE 1 CB, FRAME & GRATE
RIM = 207.85 (MATCH GRADE)
IE = 205.35

SD#3: TYPE 1 CB, FRAME & GRATE
RIM = 208.14 (MATCH GRADE)
IE = 205.55

SD#4: TYPE 1 CB, FRAME & GRATE
RIM = 207.78
IE = 205.28

SD#5: TYPE 1 CB, FRAME & GRATE
RIM = 206.00
IE = 203.50

SD#6: TYPE 1 CB, SOLID LID
RIM = 200.34
IE = 198.84



N S E W

GRADING & UTILITY PLAN – RESIDENCE

SCALE 1" = 30 FT.

0 15 30 60 90

UNIT OF MEASUREMENT IN US FEET

TOPOGRAPHY NOTE

CONTOURS SHOWN ON THESE PLANS BEYOND THE WEST PROPERTY LINE ARE FROM KING COUNTY GIS. NO GUARANTEE IS PROVIDED BY APCE AS TO THEIR ACCURACY.

ADAM E. PAUL
STATE OF WASHINGTON
43211
REGISTERED
PROFESSIONAL ENGINEER

AP CONSULTING ENGINEERS PLLC
CIVIL ENGINEERING
APCE@APConsultingEngineers.com (253) 737-4173 PO BOX 162, AUBURN, WA 98071

APCE PROJECT # 20200026

Permit Number: DWEL XX-XXXX Parcel Number: 2422029133 Applicant Name: JASON HOETGER Site Address: 24426 OLD MILL ROAD SW VASHON, WA 98070

Engineering Scale: 1" = 30

King County

Department of Permitting and Environmental Review

Residential Site Plan Template

Ref:KCC21a.12.030

Max. Impervious Surface Allowed	20% OR 43,758 SF
Max. Bldg. Height Allowed	40'
Ref: KCC21a.12.170	
Min. Bldg. setback from Street	30'
Min. Garage setback from Street	
Min. Bldg. setback from Interior	10'

Permit Center Validations:
- o Zoning
- o Site Review Not Applicable

Validated Signature _____

Login Initials _____ Date _____

Engineering/Drainage Approval

Signature _____

Date _____

Critical Areas Approval

Signature _____

Date _____

Clearing/Grading Approval

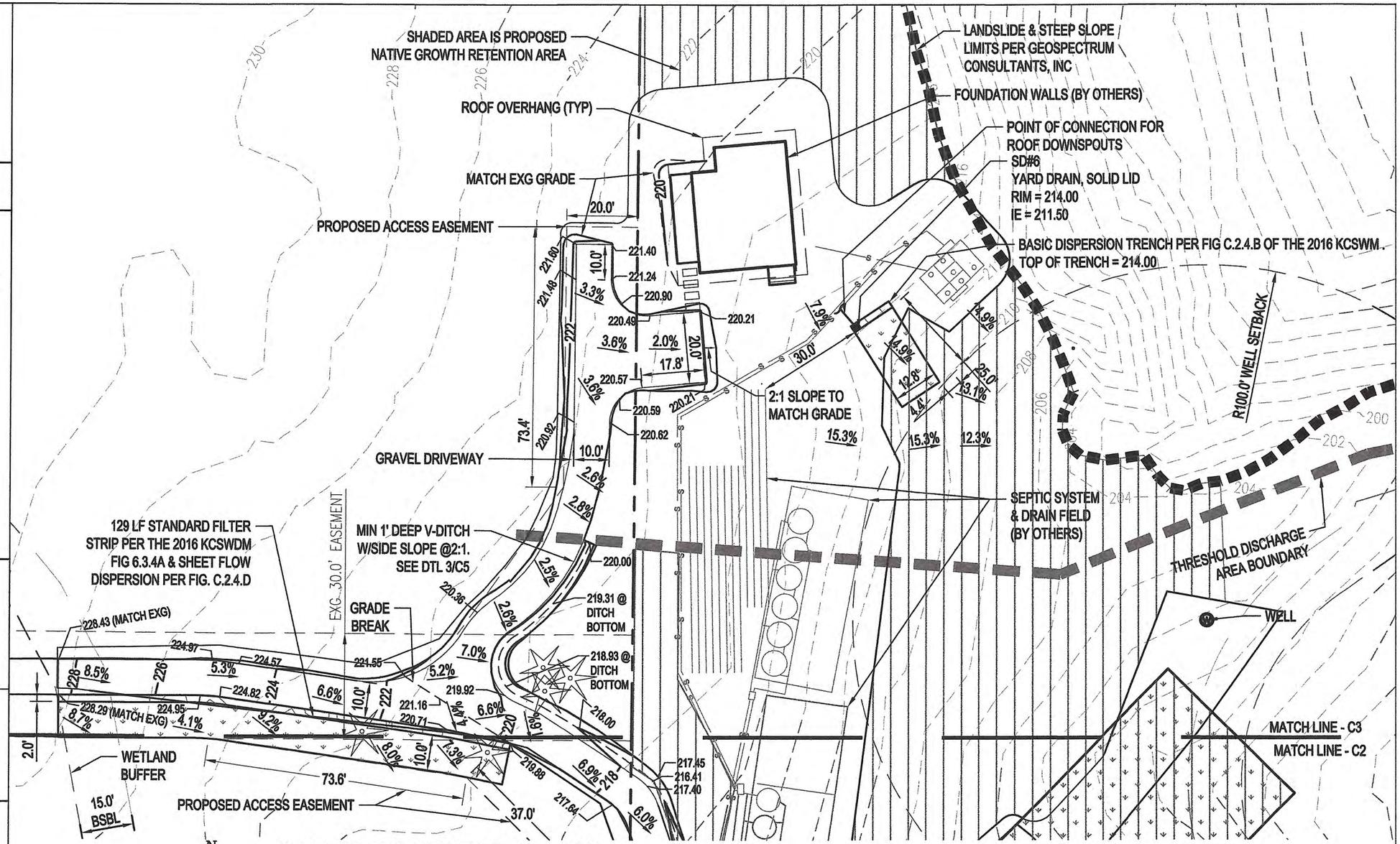
Signature _____

Date _____

Fire Approval

Signature _____

Date _____



N W E S

0 15 30 60 90

UNIT OF MEASUREMENT IN US FEET

GRADING AND UTILITY PLAN – ADU

SCALE 1" = 30 FT.

TOPOGRAPHY NOTE

CONTOURS SHOWN ON THESE PLANS BEYOND THE WEST PROPERTY LINE ARE FROM KING COUNTY GIS. NO GUARANTEE IS PROVIDED BY APCE AS TO THEIR ACCURACY.

ADAM E. PAUL STATE OF WASHINGTON 43211 REGISTERED PROFESSIONAL ENGINEER

AP CONSULTING ENGINEERS PLLC
CIVIL ENGINEERING

APCE@APConsultingEngineers.com (253) 737-4173 PO BOX 162, AUBURN, WA 98071

APCE PROJECT # 20200026

Permit Number: DWEL XX-XXXX Parcel Number: 2422029133 Applicant Name: JASON HOETGER Site Address: 244XX OLD MILL ROAD SW VASHON, WA 98070

Engineering Scale: 1" = 30

Sheet 3 of 6

King County
Department of Permitting
and Environmental Review

Residential TESC Template

RECOMMENDED CONSTRUCTION SEQUENCE

1. Hold the pre-construction meeting, if required
2. Post sign with name and phone number of TESC 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 pond and traps, if required.
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 King County standards and manufacture's recommendations.
11. Relocate erosion control measure, or install new measures so that as site conditions change, the erosion and sediment control is always in accordance with the King County Erosion and Sedimentation Control Standards.
12. Cover all areas that will be unworked for more than seven days during the dry season or two days during the wet season 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 BMP's if appropriate.

Engineering / Drainage Approval

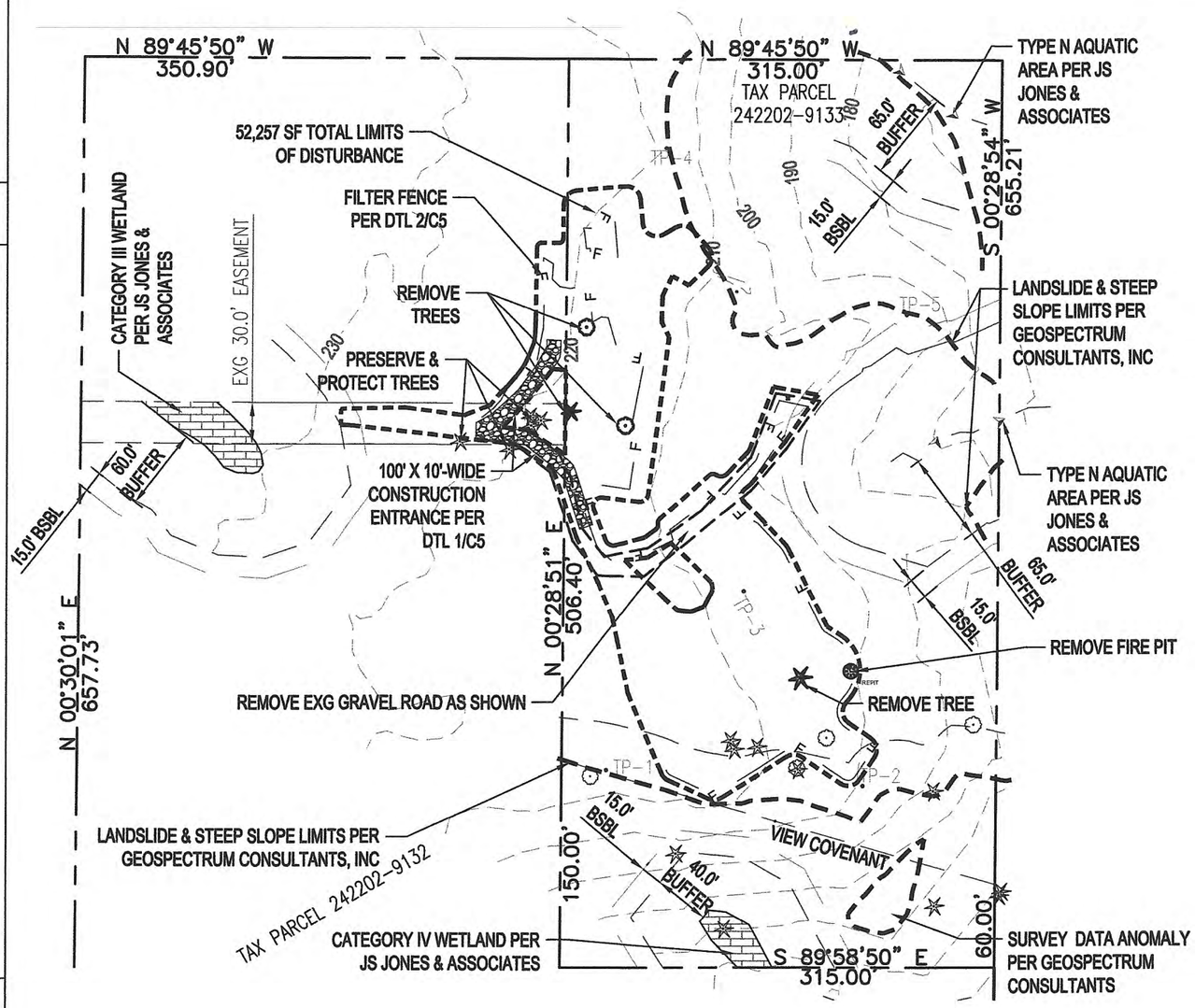
Signature: _____

Date: _____

Clearing / Grading Approval

Signature: _____

Date: _____



TESC & DEMO PLAN

SCALE 1" = 100 FT.

0 50 100 200 300

UNIT OF MEASUREMENT IN US FEET

N W E S

ADAM E. FAU
STATE OF WASHINGTON
43211
REGISTERED
PROFESSIONAL ENGINEER

TESC NOTES

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
5. 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 THIS PROJECT.
6. 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.
7. 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.).
8. 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.
9. ANY AREAS OF EXPOSED SOILS, INCLUDING ROADWAY EMBANKMENTS, THAT WILL NOT BE DISTURBED FOR TWO DAYS DURING THE WET SEASON OR SEVEN DAYS DURING THE DRY SEASON SHALL BE IMMEDIATELY STABILIZED WITH THE APPROVED ESC COVER METHODS (E.G., SEEDING, MULCHING, PLASTIC COVERING, ETC.).
10. ANY AREA NEEDING ESC MEASURES, NOT REQUIRING IMMEDIATE ATTENTION, SHALL BE ADDRESSED WITHIN SEVEN (7) DAYS.
11. THE ESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH OR WITHIN 24 HOURS FOLLOWING A STORM EVENT.
12. 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.
13. 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 PERMANENT 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.
14. COVER MEASURES WILL BE APPLIED IN CONFORMANCE WITH APPENDIX D OF THE SURFACE WATER DESIGN MANUAL.
15. PRIOR TO THE BEGINNING OF THE WET SEASON (OCT. 1), ALL DISTURBED AREAS SHALL BE REVIEWED TO IDENTIFY WHICH ONES CAN BE SEEDED IN PREPARATION FOR THE WINTER RAINS. DISTURBED AREAS SHALL BE SEEDED WITHIN ONE WEEK OF THE BEGINNING OF THE WET SEASON. A SKETCH MAP OF THOSE AREAS TO BE SEEDED AND THOSE AREAS TO REMAIN UNCOVERED SHALL BE SUBMITTED TO THE DDES INSPECTOR FOR REVIEW.

STOCKPILE NOTE

LOCATION OF STOCKPILE TO BE LOCATED WITHIN THE DESIGNATED AREAS OF DISTURBANCE. EXACT LOCATION TO BE DETERMINED BY CONTRACTOR

AP CONSULTING ENGINEERS PLLC
CIVIL ENGINEERING
APCE@APConsultingEngineers.com (253) 737-4173 PO BOX 162, AUBURN, WA 98071

APCE PROJECT # 2020026

Permit Number: DWEL XX-XXXX Parcel Number: 2422029133 Applicant Name: JASON HOETGER Site Address: 24426 OLD MILL ROAD SW VASHON, WA 98070 Engineering Scale: 1" = 100 Sheet 4 of 6

King County

Department of Permitting and Environmental Review

Residential TESC Template

RECOMMENDED CONSTRUCTION SEQUENCE

1. Hold the pre-construction meeting, if required
2. Post sign with name and phone number of TESC 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 pond and traps, if required.
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. Mainatain erosion control measures in accordance with King County standards and manufacture's recommendations.
11. Relocate erosion control measure, or install new measures so that as site conditions change, the erosion and sediment control is always in accordance with the King County Erosion and Sedimentation Control Standards.
12. Cover all areas that will be unworked for more than seven days during the dry season or two days during the wet season 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 projct, stabilize all disturbed areas and remove BMP's if apprpriate.

Engineering / Drainage Approval

Signature: _____

Date: _____

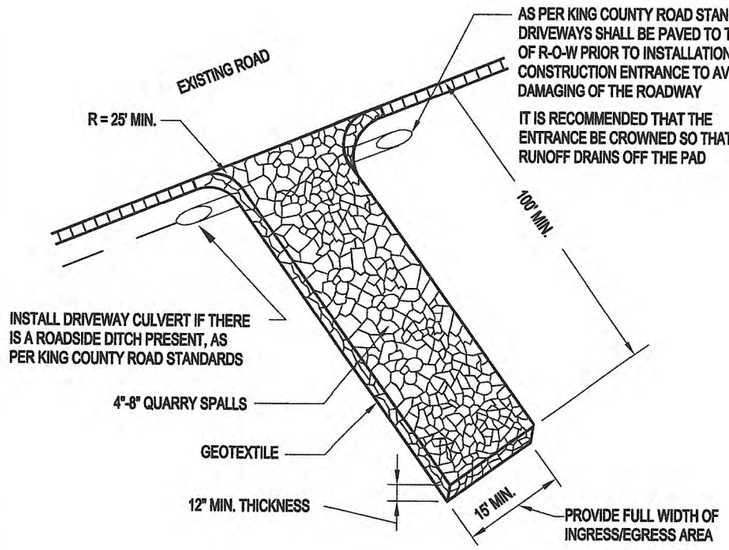
Clearing / Grading Approval

Signature: _____

Date: _____

STABILIZED CONSTRUCTION ENTRANCE MAINTENANCE STANDARDS

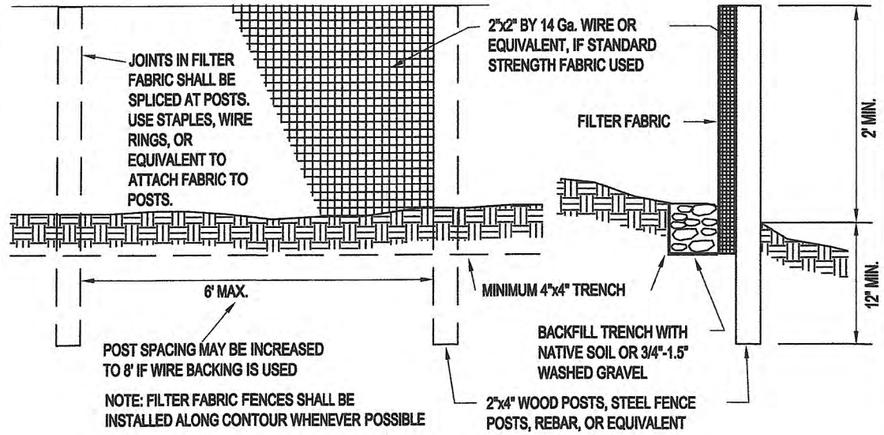
1. QUARRY SPALLS (OR HOG FUEL) SHALL BE ADDED IF THE PAD IS NO LONGER IN ACCORDANCE WITH THE SPECIFICATIONS.
2. IF THE ENTRANCE IS NOT PREVENTING SEDIMENT FROM BEING TRACKED ONTO PAVEMENT, THEN ALTERNATIVE MEASURES TO KEEP THE STREETS FREE OF SEDIMENT SHALL BE USED. THIS MAY INCLUDE STREET SWEEPING, AN INCREASE IN THE DIMENSIONS OF THE ENTRANCE, OR THE INSTALLATION OF A WHEEL WASH. IF WASHING IS USED, IT SHALL BE DONE ON AN AREA COVERED WITH CRUSHED ROCK, AND WASH WATER SHALL DRAIN TO A SEDIMENT TRAP OR POND.
3. ANY SEDIMENT THAT IS TRACKED ONTO PAVEMENT SHALL BE REMOVED IMMEDIATELY BY SWEEPING. THE SEDIMENT COLLECTED BY SWEEPING SHALL BE REMOVED OR STABILIZED ON SITE. THE PAVEMENT SHALL NOT BE CLEANED BY WASHING DOWN THE STREET, EXCEPT WHEN SWEEPING IS INEFFECTIVE AND THERE IS A THREAT TO PUBLIC SAFETY. IF IT IS NECESSARY TO WASH THE STREETS, THE CONSTRUCTION OF A SMALL SUMP SHALL BE CONSIDERED. THE SEDIMENT WOULD THEN BE WASHED INTO THE SUMP.
4. ANY QUARRY SPALLS THAT ARE LOOSENED FROM THE PAD AND END UP ON THE ROADWAY SHALL BE REMOVED IMMEDIATELY.
5. IF VEHICLES ARE ENTERING OR EXITING THE SITE AT POINTS OTHER THAN THE CONSTRUCTION ENTRANCE(S), FENCING (SEE SECTION D.4.1) SHALL BE INSTALLED TO CONTROL TRAFFIC.



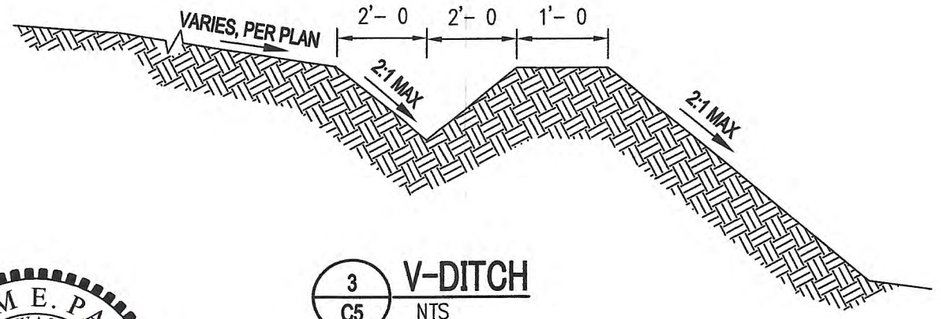
1 / C5 CONSTRUCTION ENTRANCE
NTS

SILT FENCE MAINTENANCE STANDARDS

1. ANY DAMAGE SHALL BE REPAIRED IMMEDIATELY
2. IF CONCENTRATED FLOWS ARE EVIDENT UPHILL OF THE FENCE, THEY MUST BE INTERCEPTED AND CONVEYED TO A SEDIMENT TRAP OR POND.
3. IT IS IMPORTANT TO CHECK THE UPHILL SIDE OF THE FENCE FOR SIGNS OF FENCE CLOGGING AND ACTING AS A BARRIER TO FLOW AND THEN CAUSING CHANNELIZATION OF FLOWS PARALLEL TO THE FENCE. IF THIS OCCURS, REPLACE THE FENCE OR REMOVE THE TRAPPED SEDIMENT.
4. SEDIMENT MUST BE REMOVED WHEN THE SEDIMENT IS 6 INCHES HIGH.
5. IF THE FILTER FABRIC (GEOTEXTILE) HAS DETERIORATED DUE TO ULTRAVIOLET BREAKDOWN, IT SHALL BE REPLACED.



2 / C5 FILTER FABRIC FENCE
NTS



3 / C5 V-DITCH
NTS

ADAM E. PAUL
STATE OF WASHINGTON
43211
REGISTERED
PROFESSIONAL ENGINEER

AP CONSULTING ENGINEERS PLLC
CIVIL ENGINEERING
APCE@APConsultingEngineers.com (253) 737-4173 PO BOX 162, AUBURN, WA 98071

APCE PROJECT # 20200026

Permit Number: DWEL XX-XXXX Parcel Number: 2422029133 Applicant Name: JASON HOETGER Site Address: 24426 OLD MILL ROAD SW VASHON, WA 98070

Engineering Scale: 1" = NTS

King County
Department of Permitting
and Environmental Review

Residential TESC Template

RECOMMENDED CONSTRUCTION SEQUENCE

1. Hold the pre-construction meeting, if required
2. Post sign with name and phone number of TESC 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 pond and traps, if required.
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. Mainatain erosion control measures in accordance with King County standards and manufacture's recommendations.
11. Relocate erosion control measure, or install new measures so that as site conditions change, the erosion and sediment control is always in accordance with the King County Erosion and Sedimentation Control Standards.
12. Cover all areas that will be unworked for more than seven days during the dry season or two days during the wet season 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 projct, stabilize all disturbed areas and remove BMP's if apprpriate.

Engineering / Drainage Approval

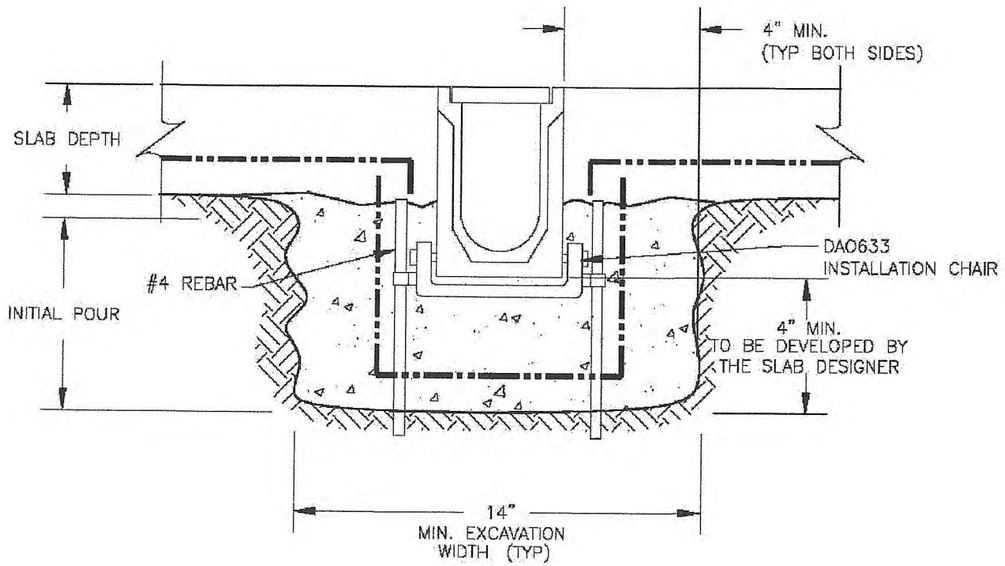
Signature: _____

Date: _____

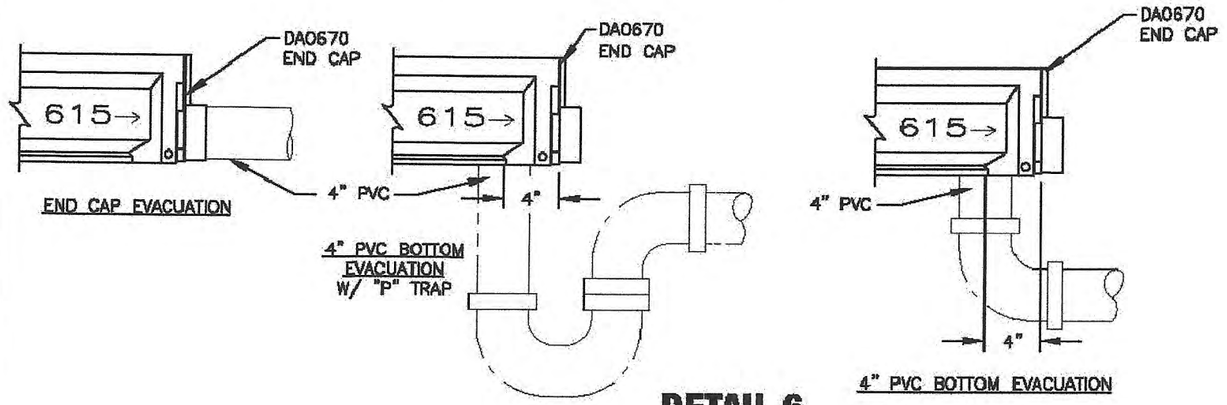
Clearing / Grading Approval

Signature: _____

Date: _____



DETAIL 2
STANDARD CHAIR INSTALLATION
(Secure chair in bottom dimples on the channels.)



DETAIL 6
CHANNEL EVACUATION DETAILS
(All end caps are to be secured with an adhesive.)

1 / C6 **POLYCAST TYPE 600 TRENCH DRAIN DETAIL**
NTS

ADAM E. PAU
STATE OF WASHINGTON
43211
REGISTERED
PROFESSIONAL ENGINEER

AP CONSULTING ENGINEERS PLLC
CIVIL ENGINEERING

APCE@APConsultingEngineers.com (253) 737-4173 PO BOX 162, AUBURN, WA 98071

APCE PROJECT # 2020026

Permit Number: DWEL XX-XXXX Parcel Number: 2422029133 Applicant Name: JASON HOETGER Site Address: 24426 OLD MILL ROAD SW VASHON, WA 98070

Engineering Scale: 1" = NTS

Sheet 6 of 6

King County

Department of Permitting and Environmental Review

Residential Site Plan Template

Ref: KCC 21a.12.030

Max. Impervious Surface Allowed _____

Max. Bldg. Height Allowed _____

Ref: KCC 21a.12.170

Min. Blg. Setback From Street _____

Min. Garage Setback From Street _____

Min. Blg. Setback From Interior _____

Permit Center validation:

- ○ Zoning
- ○ Site Review Not Applicable

Validated Signature _____

Login Initials _____ Date: _____

Engineering / Drainage Approval

Signature: _____

Date: _____

Critical Areas Approval

Signature: _____

Date: _____

Clearing / Grading Approval

Signature: _____

Date: _____

Fire Approval

Signature: _____

Date: _____

PROJECT INFORMATION

ADDRESS: 24530 OLD MILL ROAD SW
VASHON, WA 98070

OWNERS: JASON & MAUREEN HOETGER
3934 S EDMONDS ST
SEATTLE, WA 98199
TEL: 206-913-3256

LEGAL DESCRIPTION

E 315 FT OF NE 1/4 OF SW 1/4 OF NE 1/4 LESS C/M RGTS

IMPERVIOUS SURFACE

NEW IMPERVIOUS SURFACES

HOUSE & GARAGE	
HOUSE + GARAGE ROOF	5,307 SF
DRIVE + PARKING	6,556 SF
DECK/WALK/BALCONY	82 SF
ADU	
ADU ROOF	1,439 SF
PARKING	377 SF
WALK/STOOP	46 SF
TOTAL NEW IMPERVIOUS SURFACE	13,807 SF

TOTAL IMPERVIOUS SURFACE 13, 807 SF = 6.5% OF PARCEL AREA
ALLOWED PERCENTAGE 20 %

NEW PERVIOUS SURFACE = 49,704 SF CLEARING - 13,807 SF IMPERVIOUS =35,897 SF

LEGEND

- ELECTRICITY — ELEC —
- SITE SETBACK — — —
- AQUATIC AREA SETBACK & BUFFER — · — · —
- STEEP SLOPE & GEOTECH SETBACK — — —
- SITE CLEARING LMTS — — —
- SITE STREAM — ≻ — ≻ —
- DOWNSPOUT DS
- GRAVEL DRIVE

SITE PLAN

1" = 80'-0"

TRUE NORTH
PLAN NORTH

Permit Number: _____ Parcel Number: 242202-9133 Applicant Name: JASON & MAUREEN HOETGER Site Address: 24530 OLD MILL ROAD SW, VASHON, WA 98070

Engineering
Scale: 1" = 80'-0"

Sheet 1 of 3

King County
Department of Permitting
and Environmental Review

Residential Site Plan Template

Ref: KCC 21a.12.030

Max. Impervious Surface Allowed _____

Max. Bldg. Height Allowed _____

Ref: KCC 21a.12.170

Min. Blg. Setback From Street _____

Min. Garage Setback From Street _____

Min. Blg. Setback From Interior _____

Permit Center validation:

- o Zoning
- o Site Review Not Applicable

Validated Signature _____

Login Initials _____ Date: _____

Engineering / Drainage Approval

Signature: _____

Date: _____

Critical Areas Approval

Signature: _____

Date: _____

Clearing / Grading Approval

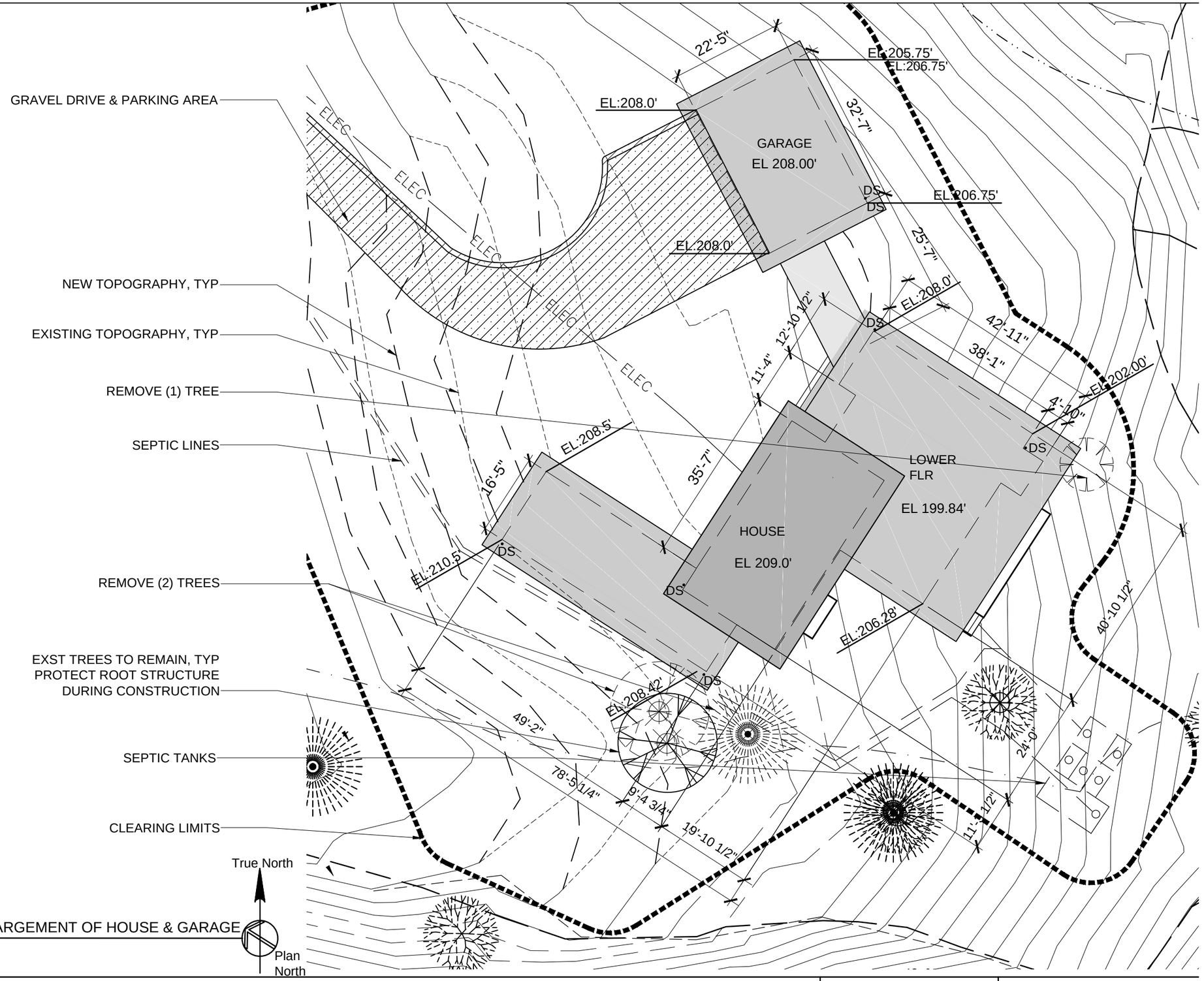
Signature: _____

Date: _____

Fire Approval

Signature: _____

Date: _____



SITE PLAN- ENLARGEMENT OF HOUSE & GARAGE

1" =20'

Permit Number: _____ Parcel Number: 242202-9133 Applicant Name: JASON & MAUREEN HOETGER Site Address: 24530 OLD MILL ROAD SW, VASHON, WA 98070

Engineering
Scale: 1" = 20'-0"

Sheet 2 of 3

King County
Department of Permitting
and Environmental Review

Residential Site Plan Template

Ref: KCC 21a.12.030

Max. Impervious Surface Allowed _____

Max. Bldg. Height Allowed _____

Ref: KCC 21a.12.170

Min. Blg. Setback From Street _____

Min. Garage Setback From Street _____

Min. Blg. Setback From Interior _____

Permit Center validation:

- o Zoning
- o Site Review Not Applicable

Validated Signature _____

Login Initials _____ Date: _____

Engineering / Drainage Approval

Signature: _____

Date: _____

Critical Areas Approval

Signature: _____

Date: _____

Clearing / Grading Approval

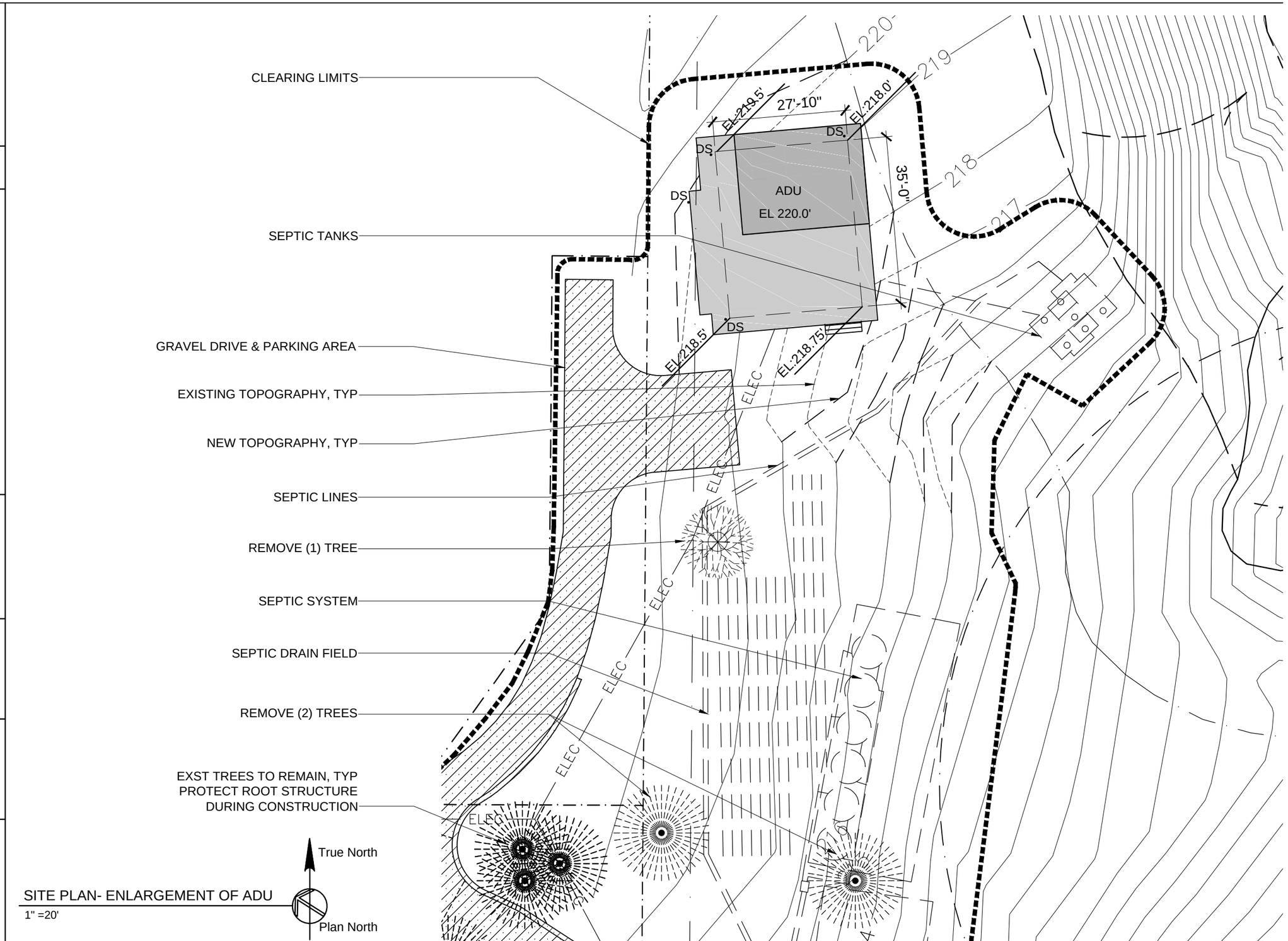
Signature: _____

Date: _____

Fire Approval

Signature: _____

Date: _____



SITE PLAN- ENLARGEMENT OF ADU
1" =20'

Permit Number: _____ Parcel Number: 242202-9133 Applicant Name: JASON & MAUREEN HOETGER Site Address: 24530 OLD MILL ROAD SW, VASHON, WA 98070

Engineering
Scale: 1" = 20'-0"

Sheet 3 of 3

Hoetger Residence & Accessory Dwelling Unit

VICINITY MAP

PROJECT INFORMATION

ADDRESS:	24530 OLD MILL ROAD SW VASHON, WA 98070
OWNERS:	JASON & MAUREEN HOETGER 15637 EDDY CREEK WAY APPLE VALLEY, MN 55124 206-913-3256
PARCEL NUMBER:	242202-9133
LEGAL DESCRIPTION:	E 315 FT OF NE 1/4 OF SW 1/4 OF NE 1/4 LESS C/M RGTS
ZONE:	RA5
SCOPE OF WORK:	CONSTRUCT NEW SINGLE FAMILY RESIDENCE WITH GARAGE, ACCESSORY DWELLING UNIT AND DRIVE.
OCCUPANCY:	R3, U
CONSTRUCTION TYPE:	V-B
AREA OF PARCEL:	218,790 SF, 5.02 ACRES

BUILDING AREAS

MAIN HOUSE

FLOOR	OCCUPANCY	PROPOSED
BASEMENT	R3	1,286 SF
MAIN FLOOR	R3	2,716 SF
UPPER FLOOR	R3	795 SF
GARAGE	U	600 SF
PORCH/DECK/BREEZEWAY		667 SF
TOTAL RESIDENCE		6,064 SF

ADU

FLOOR	OCCUPANCY	PROPOSED
MAIN FLOOR HEATED	R3	791 SF
UPPER FLOOR HEATED	R3	208 SF
TOTAL HEATED		999 SF
MAIN UNHEATED	R3	183 SF
PORCH/STOOP	U	145 SF
TOTAL RESIDENCE		1,327 SF

ASSOCIATED PERMITS

SEPTIC PERMIT, HOUSE - ON0163792
SEPTIC PERMIT, ADU - ON0163795

IMPERVIOUS SURFACE

NEW IMPERVIOUS SURFACES

HOUSE & GARAGE	
HOUSE + GARAGE ROOF	5,307 SF
DRIVE + PARKING	6,556 SF
DECK/BALCONY	82 SF
ADU	
ADU ROOF	1,439 SF
PARKING	377 SF
WALK/STOOP	46 SF
TOTAL NEW IMPERVIOUS SURFACE	13,807 SF
TOTAL IMPERVIOUS SURFACE	13,807 SF = 6.5% OF PARCEL AREA
ALLOWED PERCENTAGE:	20%

NEW PERVIOUS SURFACE = 49,704 SF CLEARING -13,807 SF IMPERVIOUS = 35,897 SF

CLEARING & GRADING

CLEARING	AREA
EXISTING CLEARING	0 SF
PROPOSED CLEARING	55,300 SF INCL ADJ PARCEL EASEMENT CLEARING 48,787 SF ON PARCEL
TOTAL SITE CLEARING	22% OF PARCEL AREA

GRADING	CUT	FILL
HOUSE	749 CY	0 CY
GARAGE	0 CY	42 CY
ADU	10 CY	97 CY
TOTAL	759 CY	139 CY

SPRINKLERS

1. RESIDENCE & ADU SHALL HAVE A FIRE SPRINKLER SYSTEM.
2. INSTALL PER NFPA 13D.

ENERGY NOTES

1. RESIDENCE SHALL COMPLY WITH THE ENERGY CREDITS OF THE WASHINGTON STATE ENERGY CODE AS FOLLOWS:

MAIN HOUSE 6.0 CREDITS REQ

OPTION 2 - HEAT PUMP	1.0
OPTION 2.1 - AIR LEAKAGE CONTROL	0.5
OPTION 3.5 - HIGH EFFICIENCY HVAC	1.5
OPTION 4.1 - HIGH EFFICIENCY HVAC DISTRIBUTION	0.5
OPTION 5.5 - EFFICIENT WATER HEATING	2.0
OPTION 7.1 - APPLIANCE PACKAGE	0.5

ADU 6.0 CREDITS REQ

OPTION 2 - HEAT PUMP	1.0
OPTION 2.1 - AIR LEAKAGE CONTROL	0.5
OPTION 3.6 - HIGH EFFICIENCY HVAC	2.0
OPTION 5.5 - EFFICIENT WATER HEATING	2.0
OPTION 7.1 - APPLIANCE PACKAGE	0.5

2. THE FOLLOWING U-VALUES SHALL APPLY:
VERTICAL GLAZING: .30
DOORS: .30
SKY LIGHT: .50

3. PROVIDE INSULATION PER WASHINGTON STATE ENERGY CODE (SEC) AS FOLLOWS:

ROOF/CEILINGS:	R-49
VAULTED CEILINGS:	R-38
EXTERIOR WALLS ABOVE GRADE:	R-21
INTERIOR WALL BELOW GRADE:	R-21
EXTERIOR WALL BELOW GRADE:	R-10
FLOOR/SOFFITS:	R-30
SLAB ON GRADE:	R-10
HOT WATER PIPES:	1/2"
HOT WATER HEATER:	R-16
DUCTS (UNHEATED SPACE):	R-4 (JOINTS TAPED)

4. UNVENTED ENCLOSED RAFTER ASSEMBLY-FOLLOW CURRENT IRC REQUIREMENTS
5. BATT INSULATION SHALL HAVE ALL TEARS AND JOINTS SEALED WITH TAPE.
6. AIR LEAKAGE: SEAL OR WEATHER-STRIP PER WSEC 502.4.
7. PROVIDE A PERMANENT CERTIFICATE POSTED WITHIN 3 FT OF THE ELECTRICAL PANEL LISTING R-VALUES OF INSULATION INSTALLED, U-FACTORS AND SOLAR HEAT GAIN COEFFICIENT FOR FENESTRATION, AND RESULTS OF BLOWER DOOR TEST IF CONDUCTED, PER WASHINGTON STATE ENERGY CODE 105.4.
8. ROOF / CEILING INSULATION MARKERS FOR BLOWN OR SPRAYED INSULATION SHALL BE PROVIDED IN ATTICS PER WSEC 502.1.4
9. SEAL RECESSED LUMINARIES PER WSEC 502.4.4.
10. BUILDING ENVELOPE TO BE TESTED WITH A BLOWER DOOR TEST PER WSEC 502.5.4.
11. DUCTING, OUTLETS AND FRESH-AIR INLETS TO BE INSTALLED STRICTLY IN ACCORDANCE WITH IRC CHAPTERS 15 AND 16 AND KING COUNTY REQUIREMENTS.

HVAC

MAIN HOUSE:
AIR SOURCE, (3) CENTRALLY DUCTED HEAT PUMPS WITH MIN HSPF OF 11.0

ADU:
HEATED FLOOR AREA 999 SF, DUCTLESS SPLIT SYSTEM HEAT PUMPS WITH A MIN HSPF OF 10.0

VENTILATION

MAIN HOUSE:
TESTED AIR LEAKAGE MAX 3.0 AIR CHANGES PER HOUR. WHOLE HOUSE VENTILATION MET WITH A HEAT RECOVERY VENTILATION SYSTEM WITH A MIN SENSIBLE HEAT RECOVERY OF 0.65

ADU:
TESTED AIR LEAKAGE MAX 3.0 AIR CHANGES PER HOUR. WHOLE HOUSE VENTILATION MET WITH A HIGH EFFICIENCY FAN INTERLOCKED WITH THE FURNACE FAN.

GENERAL NOTES

1. WRITTEN DIMENSIONS GOVERN, DO NOT SCALE DRAWINGS.
2. ALL DIMENSIONS ARE TO FACE OF STUD OR CONCRETE UNLESS NOTED OTHERWISE.
3. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE INTERNATIONAL RESIDENTIAL CODE (I.R.C.) AS PUBLISHED AND ADOPTED BY THE GOVERNING AUTHORITY. SHOULD A CONFLICT OCCUR BETWEEN GOVERNMENT ADOPTED CODES AND THESE DRAWINGS, THE CODES SHALL GOVERN.
4. THE ARCHITECT IS NOT RESPONSIBLE FOR EXISTING CONDITIONS CONCEALED FROM VIEW, INCLUDING SITE BOUNDARIES AND SITE CONDITIONS.
5. CONTRACTOR SHALL NOTIFY THE ARCHITECT IN WRITING IF ANY DISCREPANCIES ARE FOUND IN THE DRAWINGS, SPECIFICATIONS, OR EXISTING CONDITIONS.
6. PROVIDE FIREBLOCKING, DRAFTSTOPS AND FIRESTOPS PER I.R.C. REQUIREMENTS.
7. ALL FRAMING TO BE ADVANCED FRAMING IN ACCORDANCE WITH WSEC SECTION 1005.
8. CLOTHES DRYER, KITCHEN HOOD, BATH, LAUNDRY AND SIMILAR ROOMS, SHALL BE PROVIDED WITH MECHANICAL VENTILATION, VENTING DIRECTLY TO OUTSIDE, CAPABLE OF 5 AIR CHANGES PER HOUR.
9. CONTRACTOR TO COORDINATE LOCATIONS WITH ARCHITECT OF ALL THROUGH ROOF PENETRATIONS REQUIRED BY BY PLUMBING VENTS, EXHAUST FANS, FLUES, ETC. PRIOR TO THAT PORTION OF THE WORK.
10. ALL WOOD EXPOSED TO WEATHER, SUCH AS DECKS, RAILINGS, JOISTS, BEAMS AND POSTS TO BE PRESSURE TREATED OR CEDAR. ALL GALVANIZED HANGERS ON P.T. MATERIAL SHALL BE 'Z-MAX' OR P.T. MATERIAL SHALL BE WRAPPED IN A 'VY-CORE' BARRIER.
11. PROVIDE HARD WIRED SMOKE & CARBON MONOXIDE DETECTORS PER. I.R.C. REQUIREMENTS.
12. CONTRACTOR SHALL PROVIDE TEMPORARY SHORING AND BRACING AS REQUIRED DURING DEMOLITION AND / OR CONSTRUCTION.
13. CONTRACTOR TO FIELD VERIFY AND COORDINATE TOP OF NEW FOOTINGS WITH EXISTING GRADE AND SOILS CONDITIONS.

GLASS AND GLAZING

1. ALL WINDOWS TO BE DOUBLE PANE, INSULATED GLASS, MAX: U-VALUE AS SHOWN ON WINDOW SCHEDULE.
2. GLASS IN DOORS SHALL BE SAFETY, LAMINATED OR TEMPERED GLASS, MAX U-VALUE AS SHOWN ON DOOR SCHEDULE.
3. SAFETY GLAZING: SAFETY GLASS MUST MEET THE REQUIREMENTS OF IRC SECTION R308. GLAZING WITHIN 24" OF DOORS (R308.4.6), GLAZING IN STAIRWELLS(R308.4.10 & 11), GLAZING IN TUB/SHOWER AREAS (R308.4.5), AND GLAZING MEETING ALL REQUIREMENTS SET FORTH IN R308.4.7 TO BE TEMPERED GLASS.
4. NATURAL LIGHT AND VENTILATION: AGGREGATE GLAZING AREA MUST BE MINIMUM 8% OF FLOOR AREA TO PROVIDE NATURAL LIGHT. OPERABLE WINDOW AREA MUST BE MINIMUM 4% OF FLOOR AREA FOR NATURAL VENTILATION, PER IRC SECTION R303.
5. TYPICAL ROUGH HEAD HEIGHT OF DOORS AND WINDOWS SHALL BE 6'-10" ABOVE SUBFLOOR UNLESS NOTED OTHERWISE. SET WINDOWS SO THAT FINISHED WINDOW HEAD CASING ALIGNS WITH DOOR HEAD CASING.
6. REQUIRED EMERGENCY EGRESS WINDOWS SHALL HAVE A NET CLEAR AREA OF 5.7 SF, MINIMUM OPERABLE HEIGHT OF 24", MINIMUM OPERABLE WIDTH OF 20" AND A MAXIMUM FINISHED SILL HEIGHT OF 44" ABOVE FINISHED FLOOR PER IRC R310.

ABBREVIATIONS

AB	ANCHOR BOLT
BSMT	BASEMENT
CB	CATCH BASIN
CONC	CONCRETE
Ø	DIAMETER
DS	DOWNSPOUT
DTL	DETAIL
EG	EXISTING GRADE
EXST OR (E)	EXISTING
EXT	EXTERIOR
FDN	FOUNDATION
FG	FINISH GRADE
FO	FACE OF
FOC	FACE OF CONCRETE
FOS	FACE OF STUD
FV	FIELD VERIFY
FURN	FURNACE
GALV	GALVANIZED
GLB	GLU LAM BEAM
GWB	GYPSUM WALL BOARD
HB	HOSE BIBB
HDG	HOT DIP GALVANIZE
HT	HEIGHT
HWT	HOT WATER TANK
IE=	INVERT ELEVATION EQUALS
INT	INTERIOR
L=	LENGTH EQUALS
MAX	MAXIMUM
MIN	MINIMUM
NIC	NOT IN CONTRACT
OC	ON CENTER
OH	OVERHANG
PLAM	PLASTIC LAMINATE
PT	PRESSURE TREATED
REQ	REQUIRED
R & S	ROD & SHELF
SIM	SIMILAR
STRUC	STRUCTURAL
S=	SLOPE EQUALS
T	TEMPERED GLAZING
TBD	TO BE DETERMINED
TOS	TOP OF SLAB
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
W/	WITH
VIF	VERIFY IN FIELD

LEGEND

- WALLS
- A — WINDOW NUMBER
- 101 — DOOR NUMBER
- 1 / A1.0 — DETAIL NUMBER / SHEET NUMBER
- SD — SMOKE DETECTOR
- SD+CO — SMOKE DETECTOR + CARBON MONOXIDE DETECTOR
- EF — EXHAUST FAN
- T — TEMPERED GLAZING
- F — FALL PREVENTION REQUIRED
- E — EGRESS WINDOW
- 2 / A4.0 — SECTION NUMBER / SHEET NUMBER

PROJECT TEAM

ARCHITECT:
KIM GOFORTH AIA
GOFORTH GILL ARCHITECTS
PO BOX 650
VASHON, WA 98070
206.463.5222
KIM@GOFORTHGILL.COM

STRUCTURAL ENGINEER:
ERIC RICE P.E.
ELR ENGINEERING
1915 DAYTON AVE NE
RENTON, WA 98056
206.200.8764
ELRENG33@GMAIL.COM

CIVIL ENGINEER:
AP CONSULTING ENGINEERS
ADAM PAUL
PO BOX 162
AUBURN, WA 98071
253.737.4173
APCE98002@GMAIL.COM

GEOTECH :
JAMES DOOLITTLE
GEOSPECTRUM CONSULTANTS, INC.
PO BOX 276
ISSAQUAH, WA 98027
425.391.4228
GEOSPECTRUM.INC@GMAIL.COM

CONTRACTOR:
DAVID HALL
GUILD HALL BUILDERS
20028 WESTSIDE HWY SW
VASHON, WA 98070
206.463.4248
GUILDHALLINC@COMCAST.NET
REG: GUILDH1025R2

SURVEYOR:
JERRY O'HARE
O'HARE LAND SURVEY CO.
29911 131ST AVE SE
VASHON, WA 98070
206.469.5489

HVAC:
HOME ENERGY PARTNERS
ISAAC SAVAGE
825-C MERRIMON AVE PMB #147
ASHEVILLE, NC 28804
828.549.8755

INDEX TO DRAWINGS

A1.0	PROJECT INFORMATION
A1.1	SITE PLAN
	SURVEY
A2.0	HOUSE LOWER FLOOR PLAN
A2.1	HOUSE MAIN FLOOR PLAN
A2.2	GARAGE FLOOR PLAN
A2.3	HOUSE UPPER FLOOR PLAN
A3.0	HOUSE EXTERIOR ELEVATION - WEST & SOUTH
A3.1	HOUSE EXTERIOR ELEVATION - EAST & NORTH
A3.2	GARAGE EXTERIOR ELEVATIONS
A4.0	HOUSE BUILDING SECTIONS
A4.1	HOUSE BUILDING SECTIONS
A4.2	HOUSE, GARAGE & COVERED WALK BUILDING SECTIONS
A5.0	ADU MAIN & UPPER FLOOR PLANS
A6.0	ADU ELEVATIONS
A7.0	ADU SECTIONS
A8.0	WINDOW SCHEDULE
A8.1	DOOR SCHEDULE
A9.0	DETAILS
A9.1	DETAILS
A9.2	DETAILS
A9.3	DETAILS
A9.4	DETAILS
S1.0	STRUCTURAL NOTES
S2.0	HOUSE FOUNDATION & MAIN FLOOR FRAMING PLANS
S2.1	HOUSE UPPER FLOOR & LOWER ROOF FRAMING PLANS
S2.2	HOUSE UPPER ROOF FRAMING PLAN
S2.3	GARAGE FOUNDATION & ROOF FRAMING PLANS
S2.4	HOUSE LOWER FLOOR SHEARWALL PLANS
S2.5	HOUSE MAIN FLOOR SHEARWALL PLAN
S2.6	HOUSE UPPER FLOOR SHEARWALL PLAN
S3.0	ADU FOUNDATION PLAN
S3.1	ADU UPPER FLOOR & LOWER ROOF FRAMING PLANS
S3.2	ADU UPPER ROOF FRAMING PLAN & MAIN & UPPER FLOOR SHEARWALL PLANS
S4.0	STRUCTURAL DETAILS

Goforth Gill
ARCHITECTS

PO Box 650 Vashon Island, WA 98070
206.463.5222
info @ goforthgill.com

5294 REGISTERED ARCHITECT
KIMBERLY GOFORTH
STATE OF WASHINGTON

HOETGER RESIDENCE & ACCESSORY DWELLING UNIT

24530 OLD MILL ROAD
VASHON WA 98070

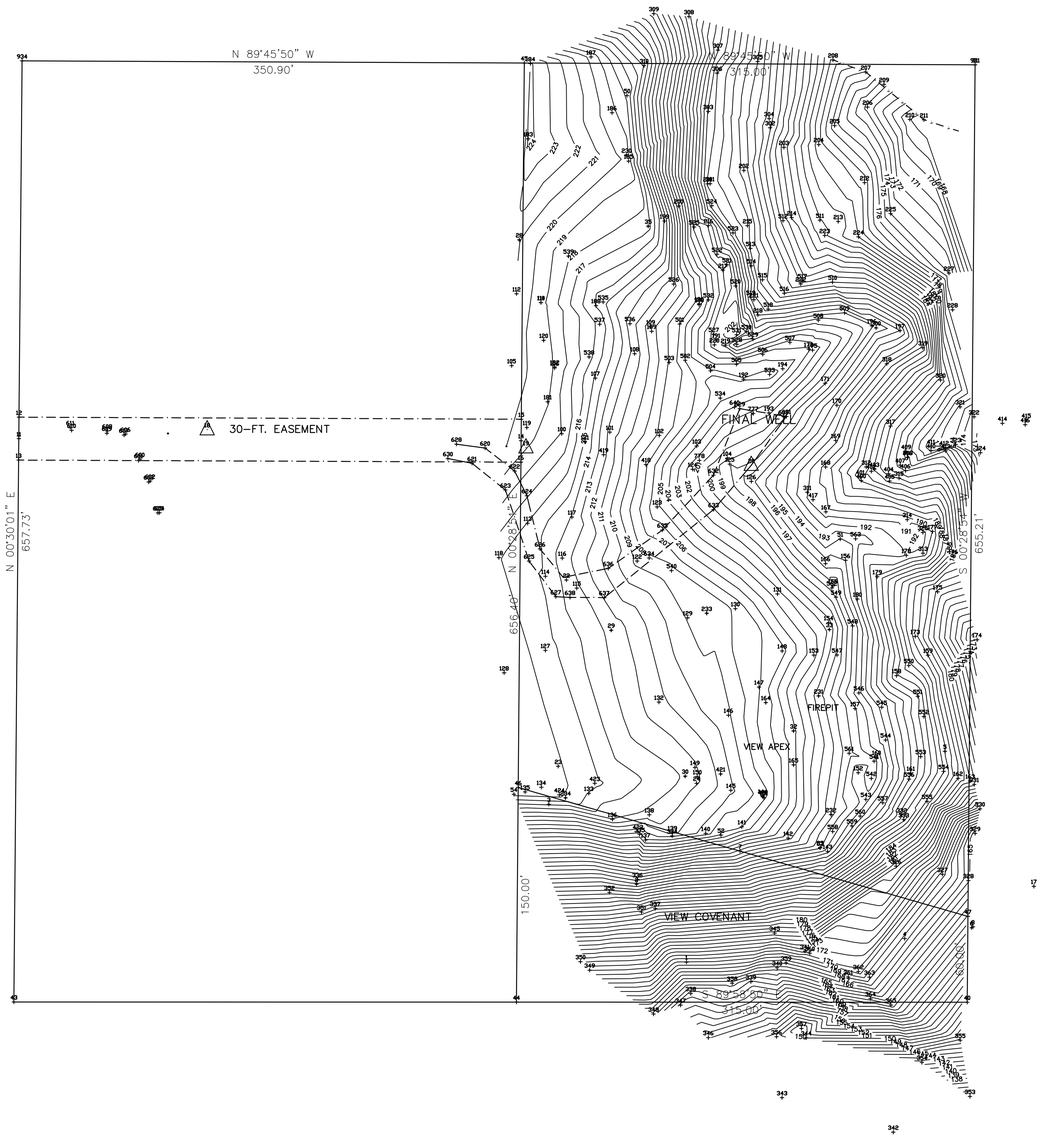
PHASE
PERMIT APPLICATION

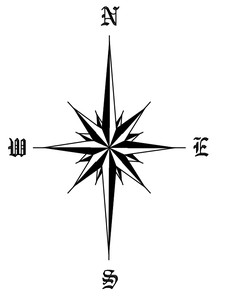
DATE
19 - OCT- 2021

DRAWING TITLE
PROJECT INFO

SHEET
A1.0

TAX PARCEL 242202-9133

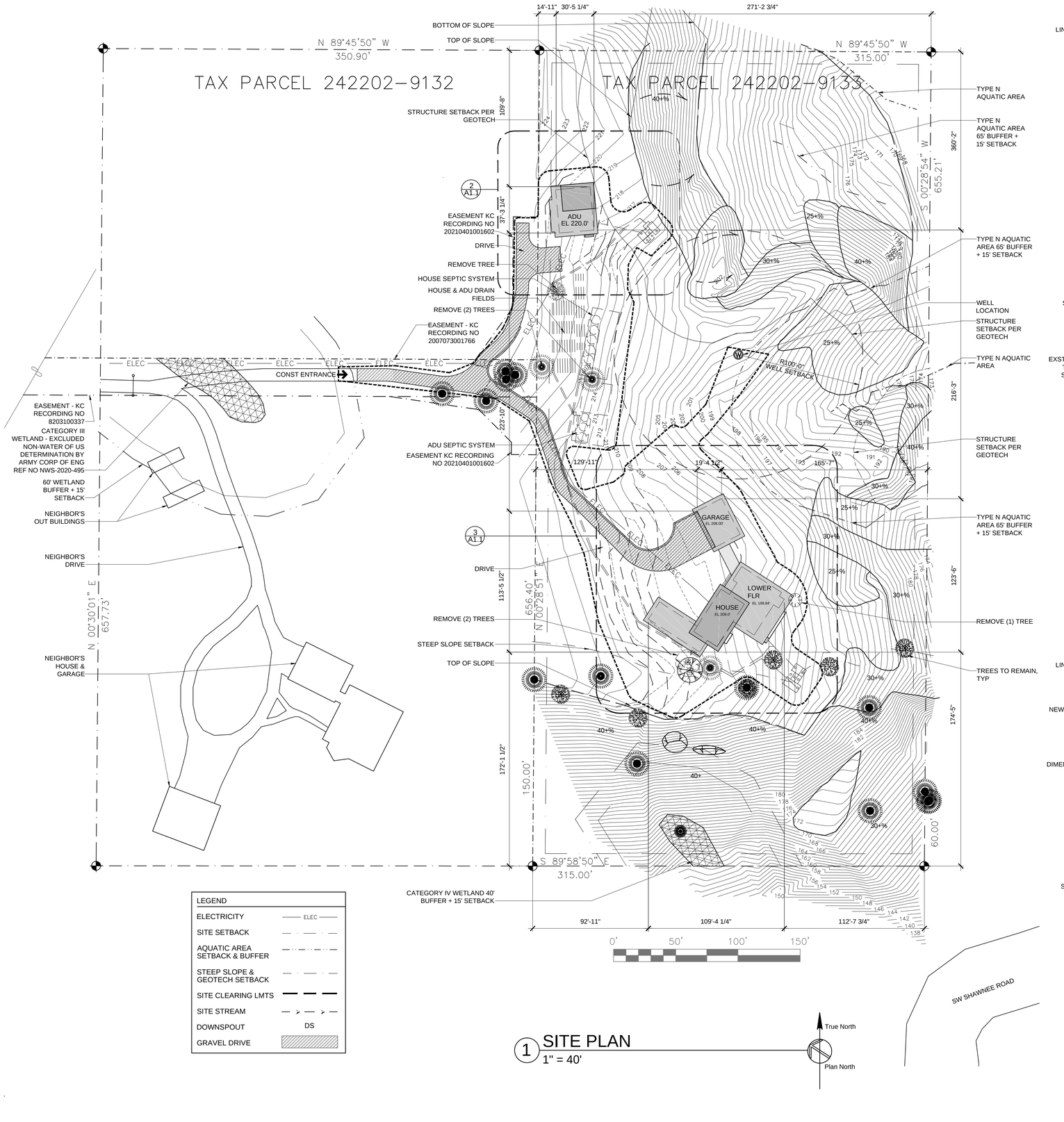




0' 50' 100' 150'

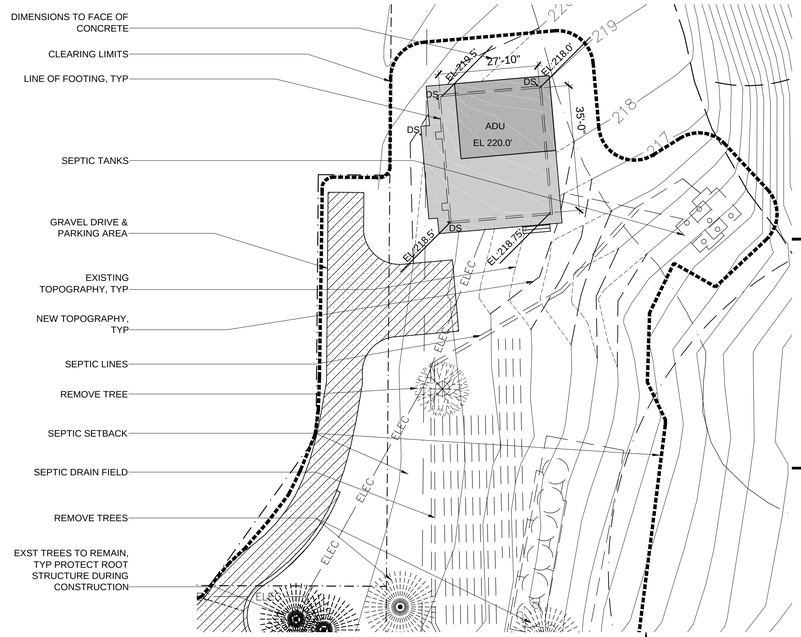
- WELL
- TEST PIT
- FIREPIT
- FIR TREE

JASON HOETGER		
DRAWN	DATE 04/08/19	JEROLD O'HARE P. O. BOX 13133 BURTON, WA 206 463 5489
APPROVED	DATE	
SCALE 1" = 50'	SHEET	PROJECT NO.



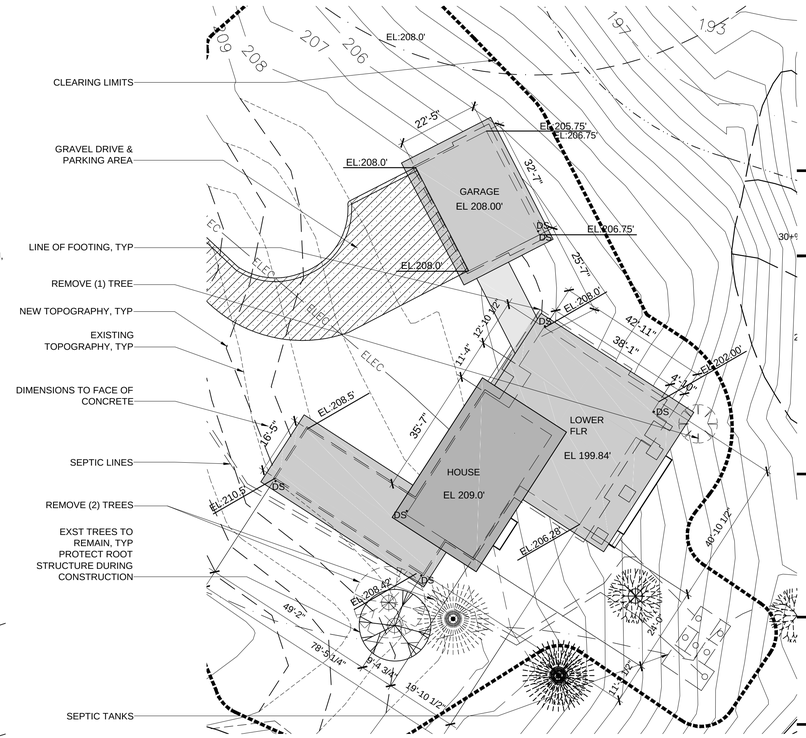
1 SITE PLAN
1" = 40'

True North
Plan North



2 SITE PLAN-ENLARGEMENT OF ADU
1" = 20'

True North
Plan North



3 SITE PLAN-ENLARGEMENT OF HOUSE
1" = 20'

True North
Plan North

Goforth Gill
ARCHITECTS

PO Box 650 Vashon Island, WA 98070
206.463.5222
info @ goforthgill.com

5294 REGISTERED ARCHITECT
KIMBERLY GOFORTH
STATE OF WASHINGTON

HOETGER RESIDENCE & ACCESSORY DWELLING UNIT

24530 OLD MILL ROAD
VASHON WA 98070

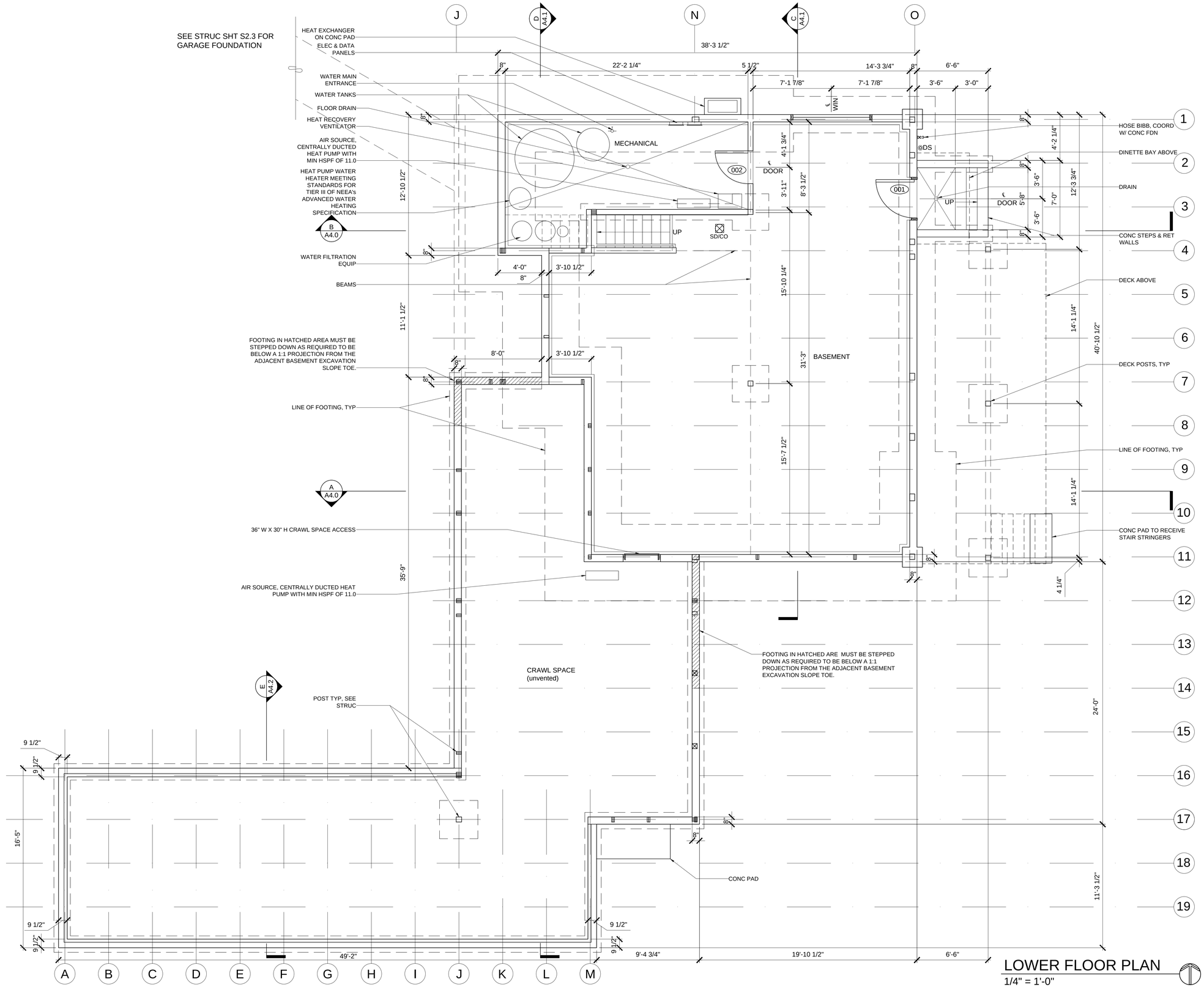
PHASE
PERMIT APPLICATION

DATE
19 - OCT- 2021

DRAWING TITLE
SITE PLAN
ENLARGED SITE PLANS

SHEET
A1.1

SEE STRUC SHT S2.3 FOR GARAGE FOUNDATION



LOWER FLOOR PLAN

1/4" = 1'-0"

Goforth Gill
ARCHITECTS

PO Box 650 Vashon Island, WA 98070
206.463.5222
info @ goforthgill.com

5294 REGISTERED ARCHITECT
KIMBERLY GOFORTH
STATE OF WASHINGTON

HOETGER RESIDENCE & ACCESSORY DWELLING UNIT

24530 OLD MILL ROAD
VASHON WA 98070

PHASE
PERMIT APPLICATION

DATE
19 - OCT- 2021

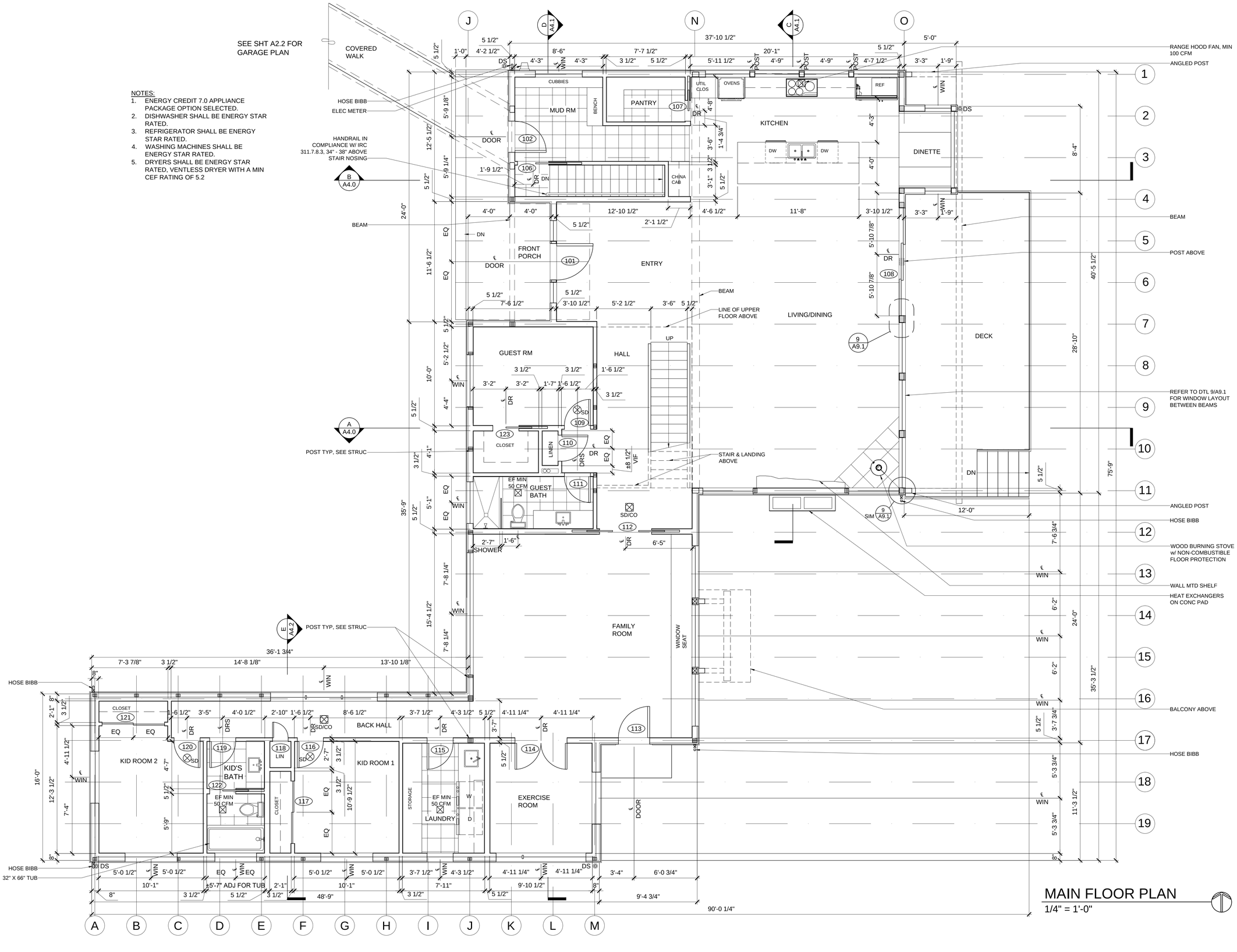
DRAWING TITLE
HOUSE LOWER PLAN

SHEET
A2.0

SEE SHT A2.2 FOR GARAGE PLAN

NOTES:

1. ENERGY CREDIT 7.0 APPLIANCE PACKAGE OPTION SELECTED.
2. DISHWASHER SHALL BE ENERGY STAR RATED.
3. REFRIGERATOR SHALL BE ENERGY STAR RATED.
4. WASHING MACHINES SHALL BE ENERGY STAR RATED.
5. DRYERS SHALL BE ENERGY STAR RATED, VENTLESS DRYER WITH A MIN CEF RATING OF 5.2



MAIN FLOOR PLAN

1/4" = 1'-0"

Goforth Gill
ARCHITECTS

PO Box 650 Vashon Island, WA 98070
206.463.5222
info @ goforthgill.com

5294 REGISTERED ARCHITECT
KIMBERLY GOFORTH
STATE OF WASHINGTON

HOETGER RESIDENCE & ACCESSORY DWELLING UNIT

24530 OLD MILL ROAD
VASHON WA 98070

PHASE

PERMIT APPLICATION

DATE

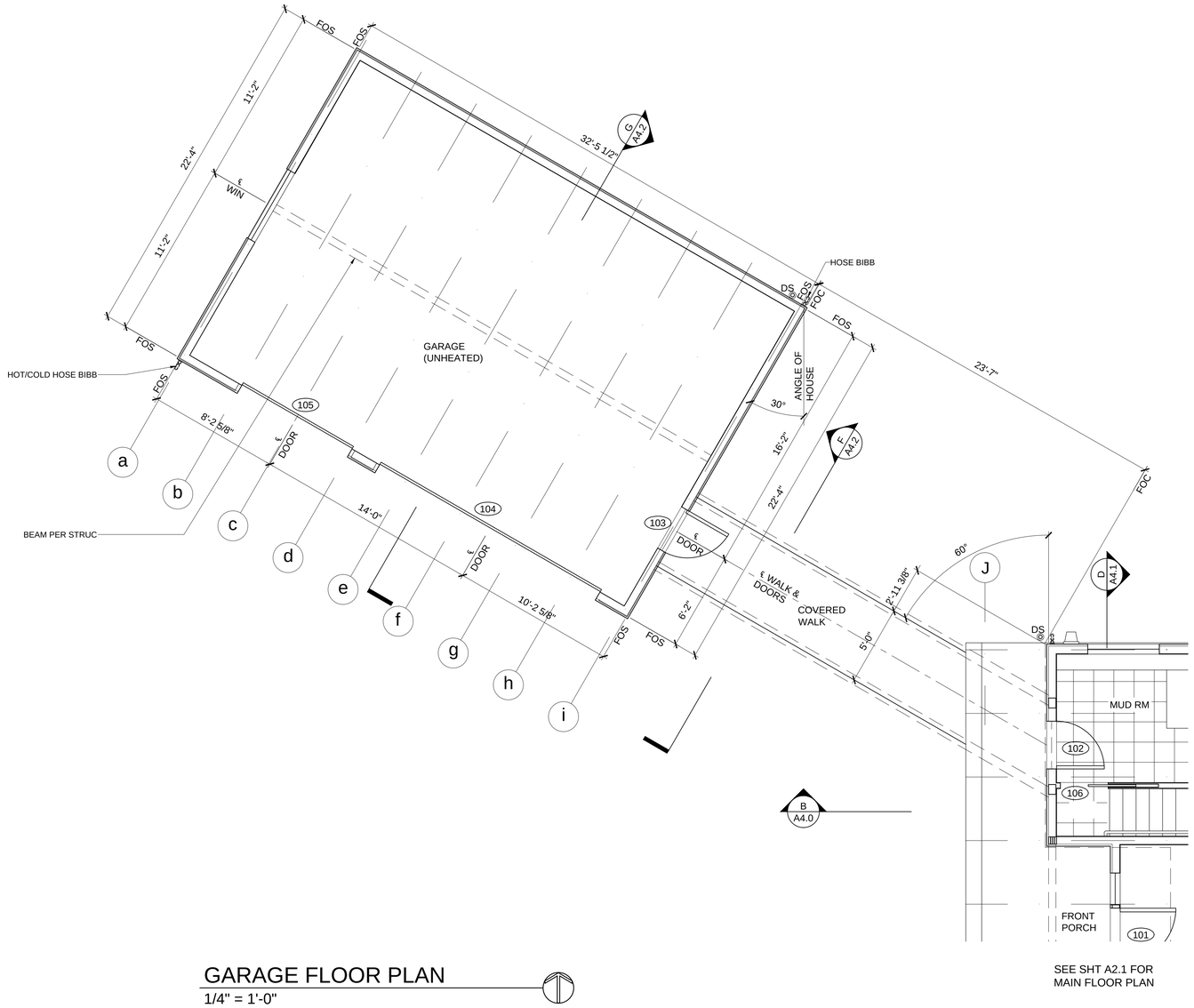
19 - OCT- 2021

DRAWING TITLE

HOUSE MAIN FLOOR PLAN

SHEET

A2.1



GARAGE FLOOR PLAN

1/4" = 1'-0"

SEE SHT A2.1 FOR MAIN FLOOR PLAN

GoforthGill
ARCHITECTS

PO Box 650 Vashon Island, WA 98070
206.463.5222
info @ goforthgill.com

5294 REGISTERED ARCHITECT
KIMBERLY GOFORTH
STATE OF WASHINGTON

HOETGER RESIDENCE & ACCESSORY DWELLING UNIT

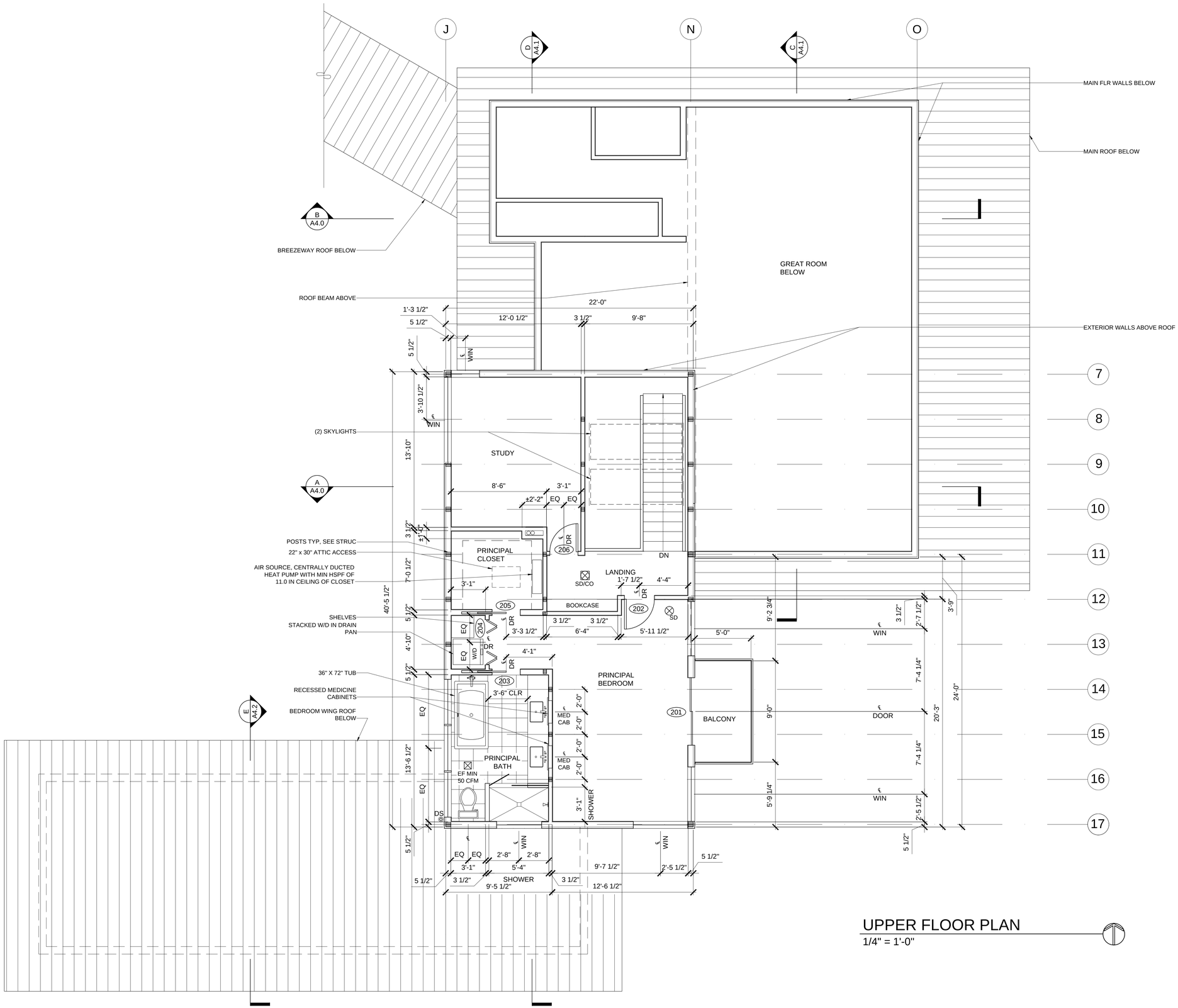
24530 OLD MILL ROAD
VASHON WA 98070

PHASE
PERMIT APPLICATION

DATE
19 - OCT- 2021

DRAWING TITLE
GARAGE FLOOR PLAN

SHEET
A2.2



UPPER FLOOR PLAN

1/4" = 1'-0"

Goforth Gill
ARCHITECTS

PO Box 650 Vashon Island, WA 98070
206.463.5222
info @ goforthgill.com

5294 REGISTERED ARCHITECT
KIMBERLY GOFORTH
STATE OF WASHINGTON

HOETGER RESIDENCE & ACCESSORY DWELLING UNIT

24530 OLD MILL ROAD
VASHON WA 98070

PHASE
PERMIT APPLICATION

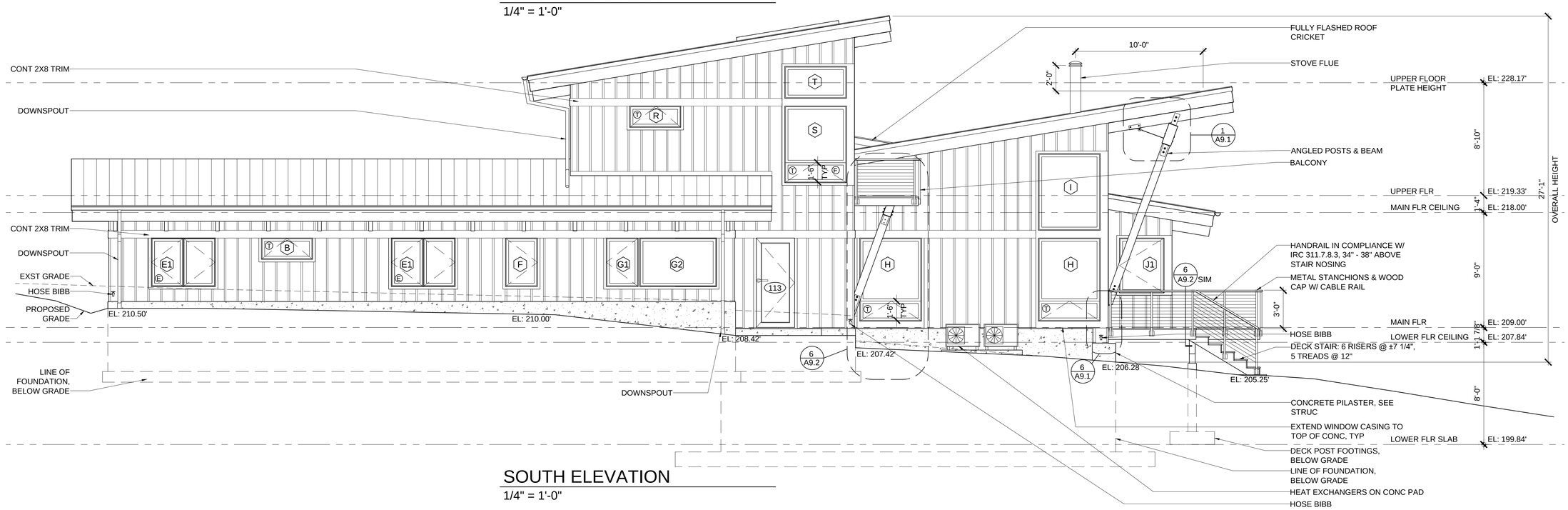
DATE
19 - OCT- 2021

DRAWING TITLE
HOUSE UPPER FLOOR PLAN

SHEET
A2.3

WEST ELEVATION

1/4" = 1'-0"



SOUTH ELEVATION

1/4" = 1'-0"

GoforthGill
ARCHITECTS

PO Box 650 Vashon Island, WA 98070
206.463.5222
info @ goforthgill.com

5294 REGISTERED ARCHITECT
KIMBERLY GOFORTH
STATE OF WASHINGTON

HOETGER RESIDENCE & ACCESSORY DWELLING UNIT

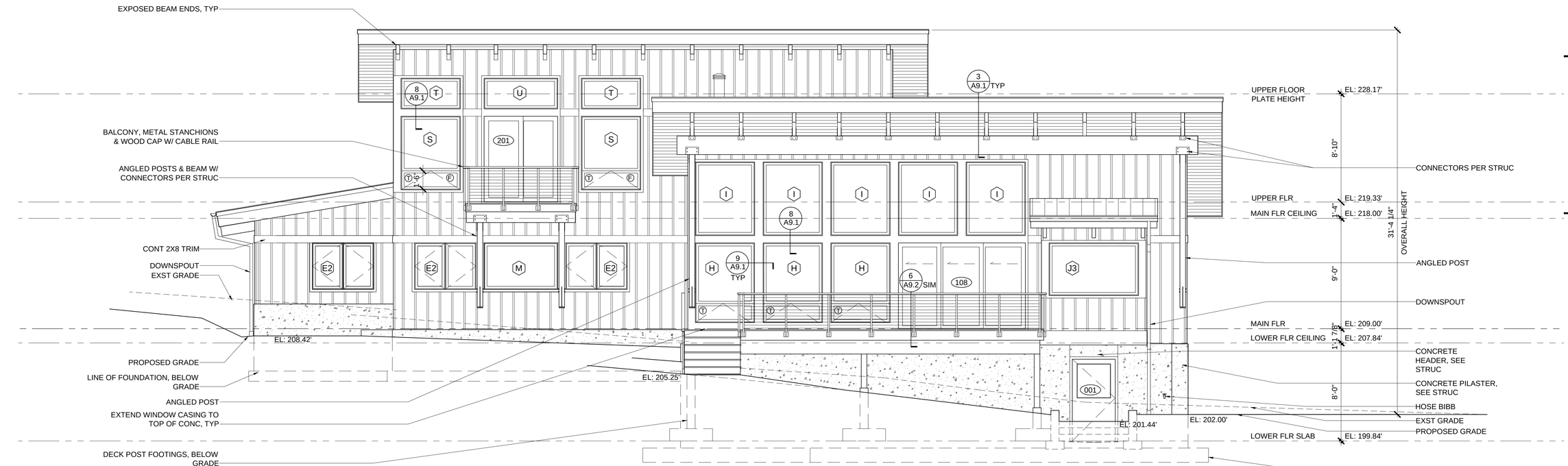
24530 OLD MILL ROAD
VASHON WA 98070

PHASE
PERMIT APPLICATION

DATE
19 - OCT- 2021

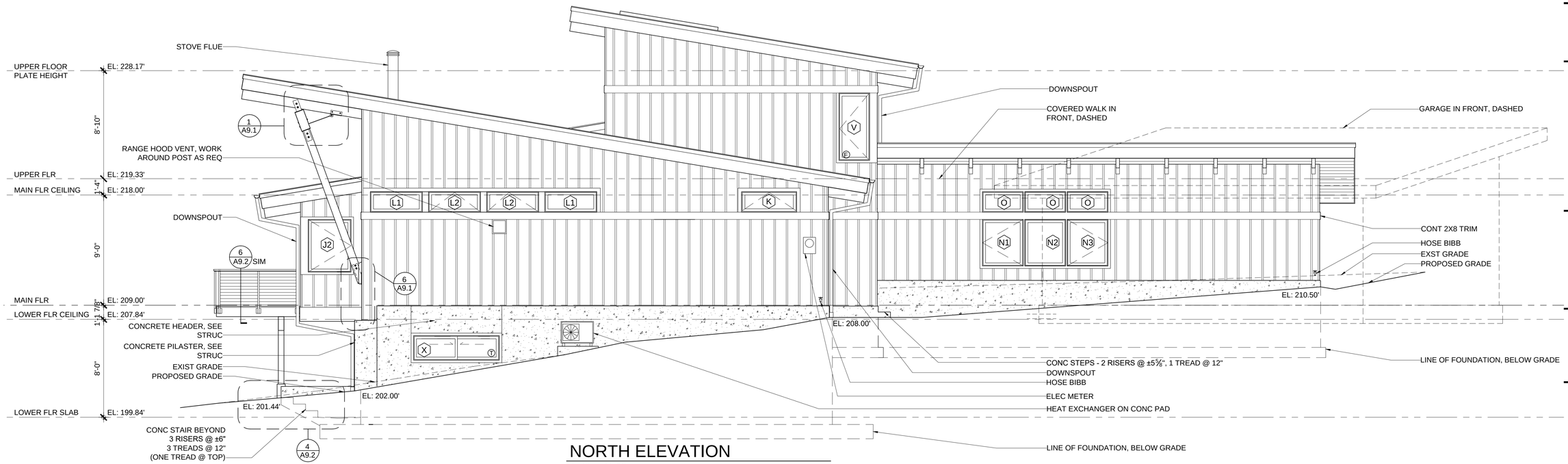
DRAWING TITLE
HOUSE WEST & SOUTH ELEVATIONS

SHEET
A3.0



EAST ELEVATION

1/4" = 1'-0"



NORTH ELEVATION

1/4" = 1'-0"

GoforthGill
ARCHITECTS

PO Box 650 Vashon Island, WA 98070
206.463.5222
info @ goforthgill.com

5294 REGISTERED ARCHITECT
KIMBERLY GOFORTH STATE OF WASHINGTON

HOETGER RESIDENCE & ACCESSORY DWELLING UNIT

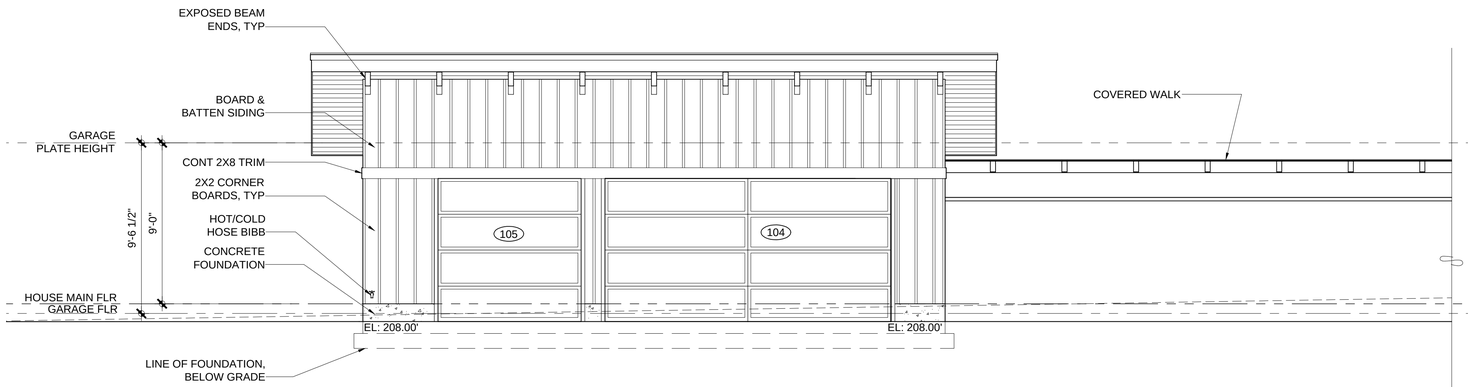
24530 OLD MILL ROAD
VASHON WA 98070

PHASE
PERMIT APPLICATION

DATE
19 - OCT- 2021

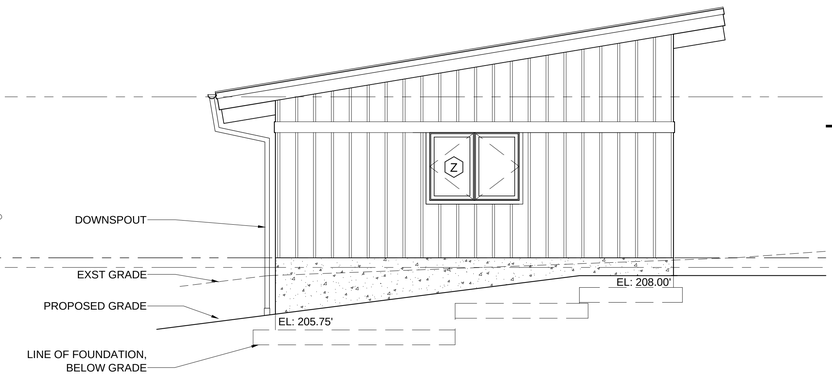
DRAWING TITLE
HOUSE EAST & NORTH ELEVATIONS

SHEET
A3.1



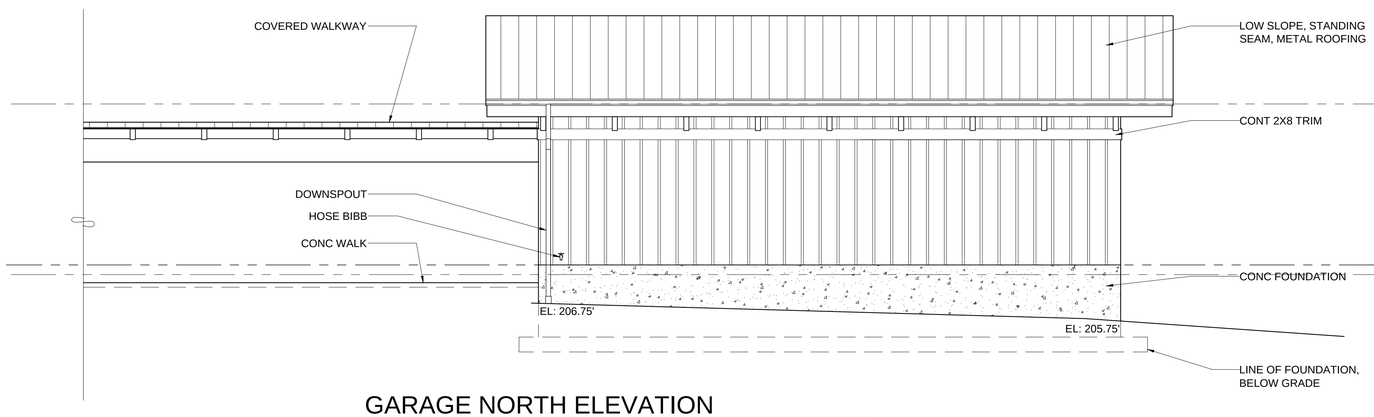
GARAGE SOUTH ELEVATION

1/4" = 1'-0"



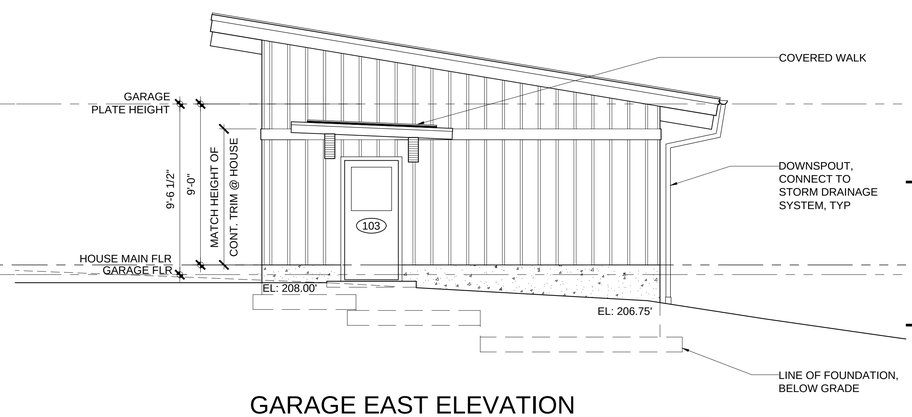
GARAGE WEST ELEVATION

1/4" = 1'-0"



GARAGE NORTH ELEVATION

1/4" = 1'-0"



GARAGE EAST ELEVATION

1/4" = 1'-0"

GoforthGill
ARCHITECTS

PO Box 650 Vashon Island, WA 98070
206.463.5222
info @ goforthgill.com

5294 REGISTERED ARCHITECT
KIMBERLY GOFORTH
STATE OF WASHINGTON

HOETGER RESIDENCE & ACCESSORY DWELLING UNIT

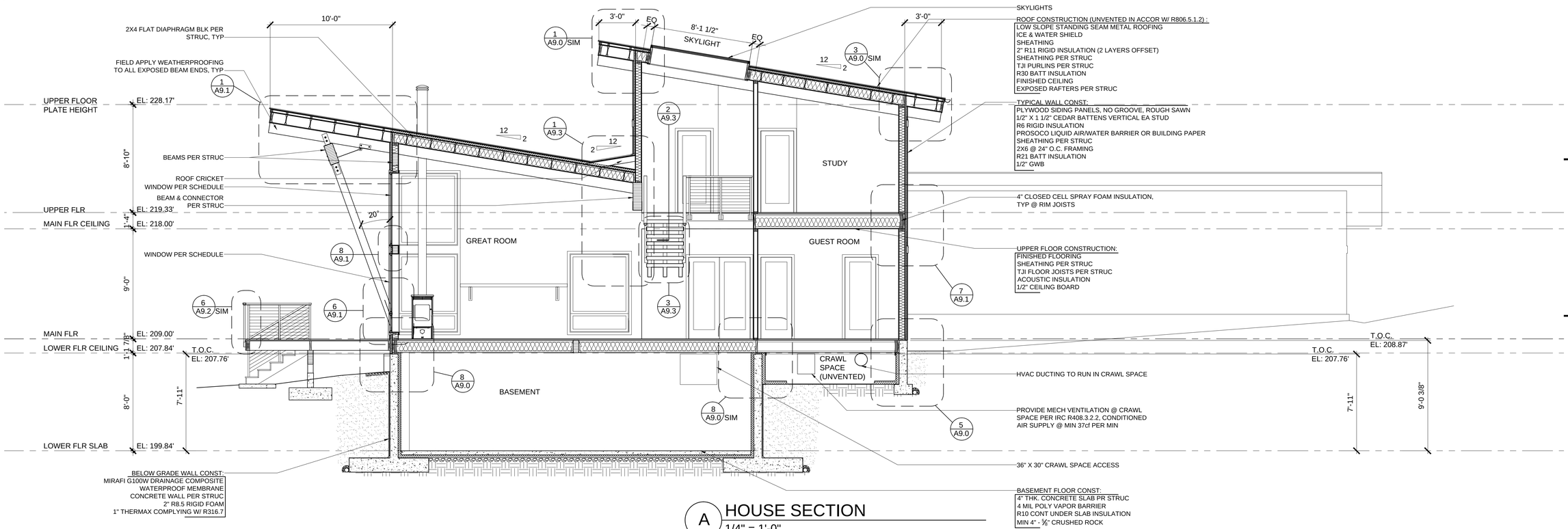
24530 OLD MILL ROAD
VASHON WA 98070

PHASE
PERMIT APPLICATION

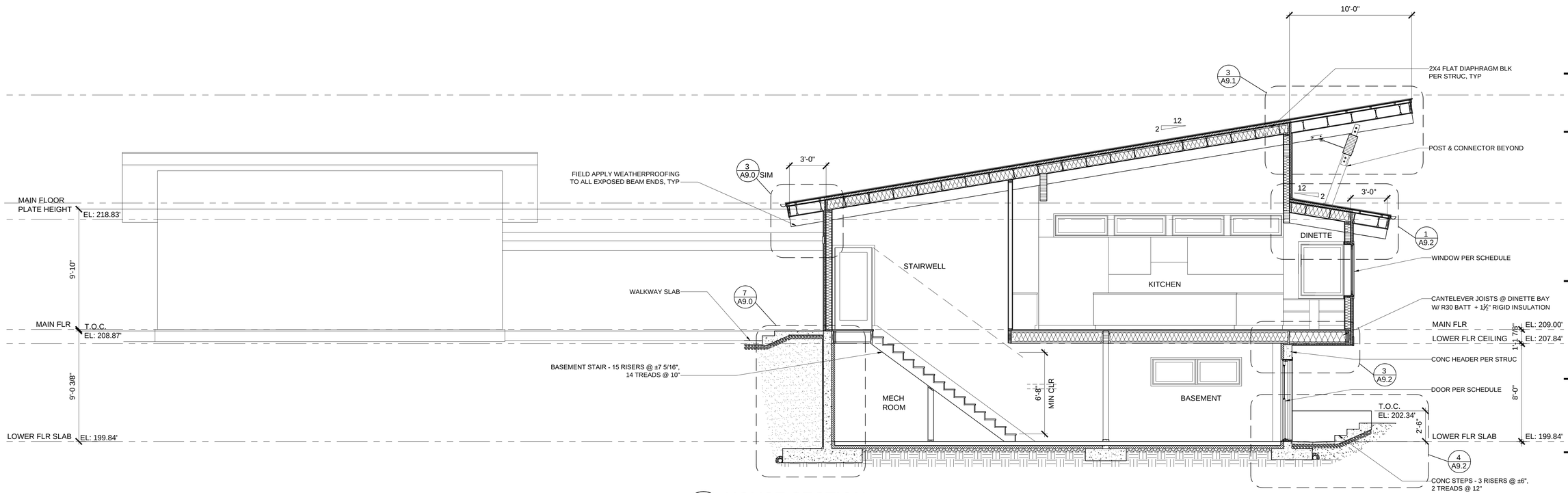
DATE
19 - OCT- 2021

DRAWING TITLE
GARAGE ELEVATIONS

SHEET
A3.2



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



B HOUSE SECTION
1/4" = 1'-0"

Goforth Gill
ARCHITECTS

PO Box 650 Vashon Island, WA 98070
206.463.5222
info @ goforthgill.com

5294 REGISTERED ARCHITECT
KIMBERLY GOFORTH
STATE OF WASHINGTON

HOETGER RESIDENCE & ACCESSORY DWELLING UNIT

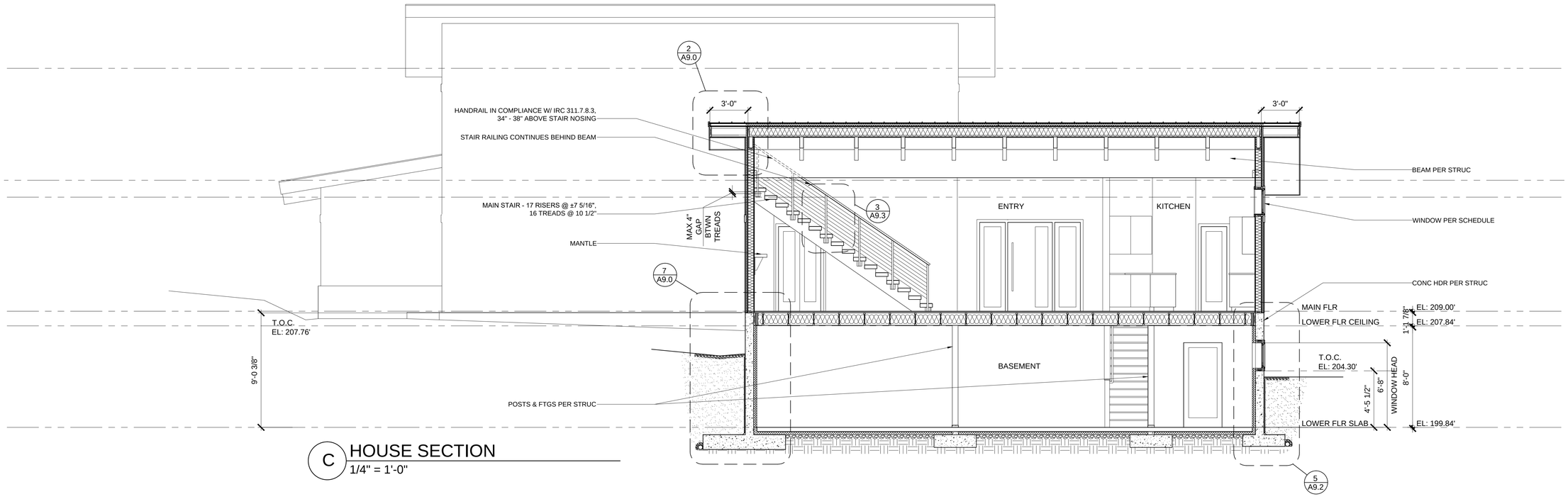
24530 OLD MILL ROAD
VASHON WA 98070

PHASE
PERMIT APPLICATION

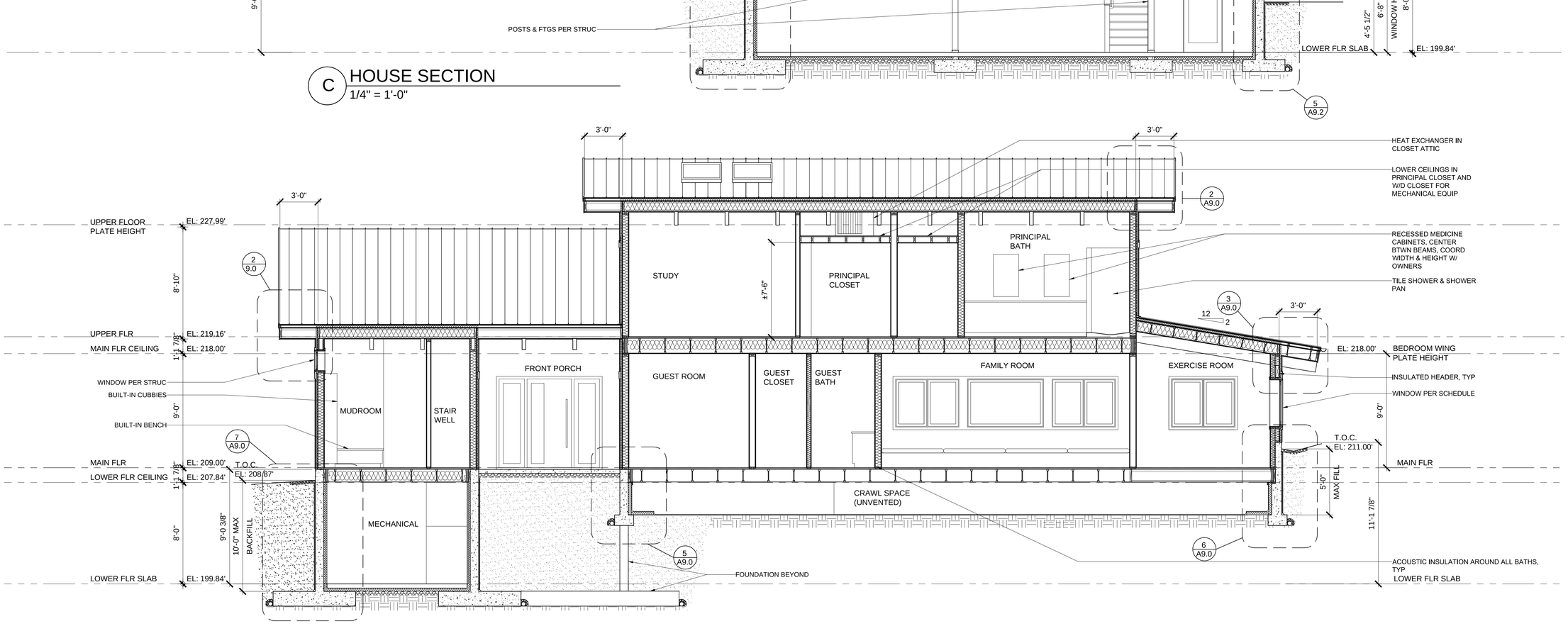
DATE
19 - OCT- 2021

DRAWING TITLE
HOUSE BUILDING SECTIONS

SHEET
A4.0



C HOUSE SECTION
1/4" = 1'-0"



D HOUSE SECTION
1/4" = 1'-0"

GoforthGill
ARCHITECTS

PO Box 650 Vashon Island, WA 98070
206.463.5222
info @ goforthgill.com

5294 REGISTERED ARCHITECT
KIMBERLY GOFORTH
STATE OF WASHINGTON

HOETGER RESIDENCE & ACCESSORY DWELLING UNIT

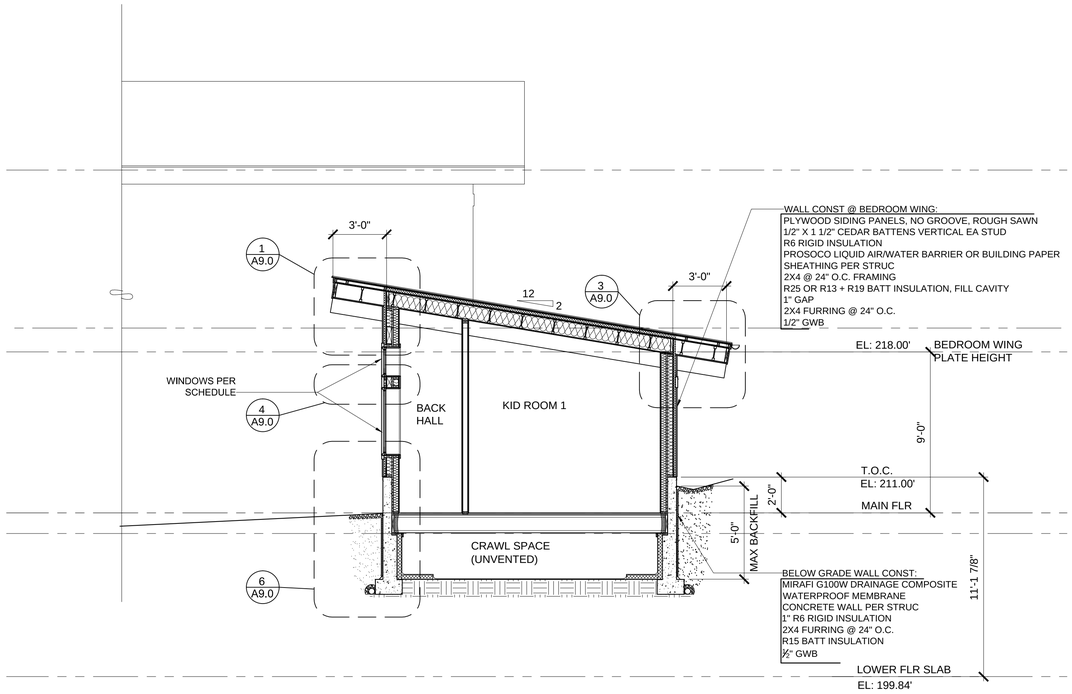
24530 OLD MILL ROAD
VASHON WA 98070

PHASE
PERMIT APPLICATION

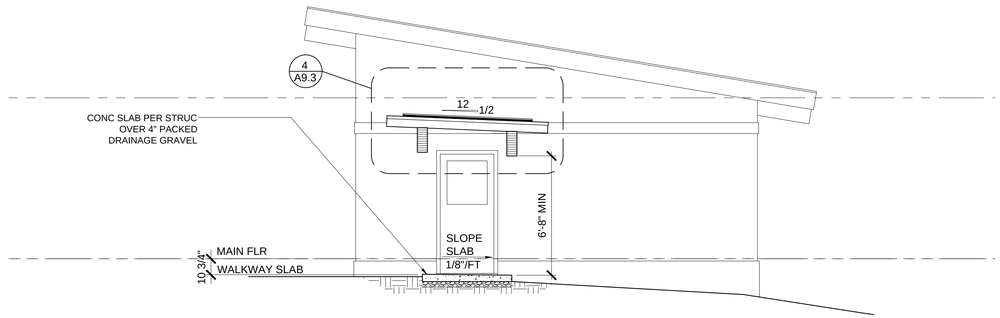
DATE
19 - OCT- 2021

DRAWING TITLE
HOUSE BUILDING SECTIONS

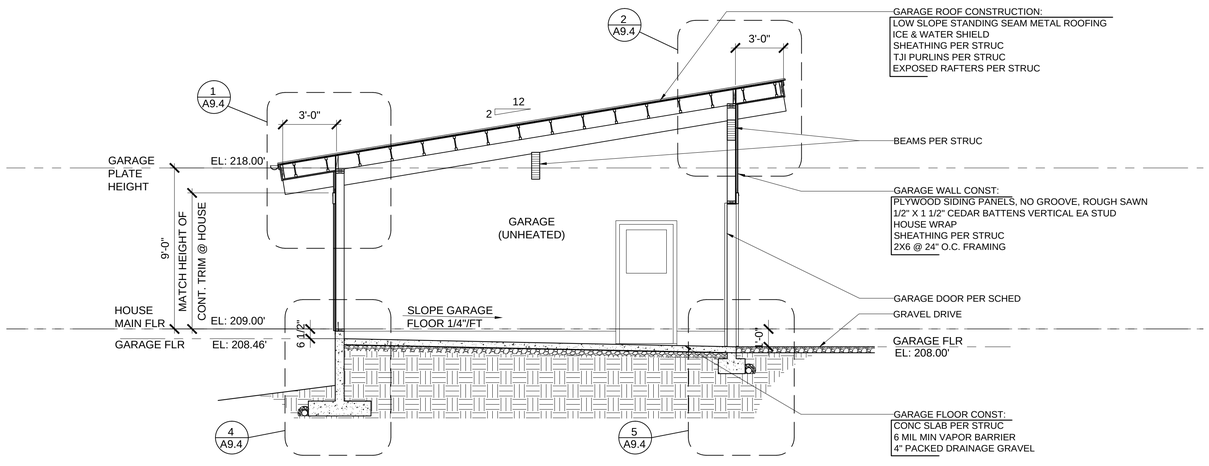
SHEET
A4.1



E HOUSE SECTION
1/4" = 1'-0"



F COVERED WALK SECTION
1/4" = 1'-0"



G GARAGE SECTION
1/4" = 1'-0"

NOTES:

1) SUBGRADE PREPARATION FOR SLABS-ON-GRADE AND PAVEMENTS SHALL BE AS RECOMMENDED IN THE **SITE GRADING** RECOMMENDATIONS PRESENTED IN THE **GEOTECHNICAL REPORT DATED 1/8/19.**

2) CONCRETE SLABS-ON-GRADE SHALL BE SUPPORTED ON A SUBGRADE CONSISTING OF GENERAL STRUCTURAL FILL OVER DENSE NATURAL SOILS. AS A MINIMUM SUBGRADE PREPARATION FOR SLABS-ON- GRADE FLOOR SHALL INCLUDE EXCAVATION OF ALL EXISTING FILL, ORGANIC AND LOOSE SOILS TO EXPOSE DENSE NATURAL SOILS OR TO A DEPTH OF 2 FEET BELOW FINAL SUBGRADE WHICHEVER IS LESS AND REPLACEMENT WITH STRUCTURAL FILL TO FINAL SLAB SUBGRADE. GENERAL STRUCTURAL FILL SHALL BE COMPACTED TO AT LEAST 90 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE ASTM D1557 TEST METHOD UNLESS OTHERWISE SPECIFIED. INTERIOR CONCRETE SLABS SHALL BE UNDERLAIN BY A POLYETHYLENE VAPOR BARRIER OF AT LEAST 6 MIL THICKNESS UNLESS.

3) PAVEMENT SECTIONS SHALL BE SUPPORTED ON A SUBGRADE CONSISTING OF AT LEAST 6 INCHES OF CRUSHED GRAVEL OVER GENERAL STRUCTURAL FILL COMPACTED AS SPECIFIED ABOVE. IN DRIVEWAY AREAS A MINIMUM 8-INCH DEPTH OF CRUSHED GRAVEL SHALL BE PROVIDED ABOVE THE GENERAL STRUCTURAL FILL. THE IMPORTED CRUSHED GRAVEL FILL SHALL BE COMPACTED TO AT LEAST 95 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE ASTM D1557 TEST METHOD.

Goforth Gill
ARCHITECTS

PO Box 650 Vashon Island, WA 98070
206.463.5222
info @ goforthgill.com

5294 REGISTERED ARCHITECT
KIMBERLY GOFORTH
STATE OF WASHINGTON

HOETGER RESIDENCE & ACCESSORY DWELLING UNIT

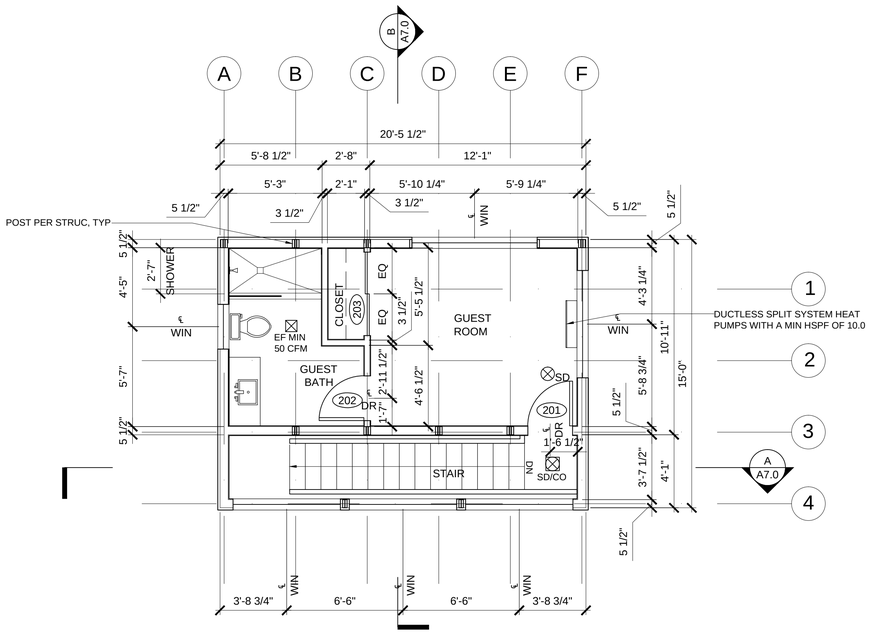
24530 OLD MILL ROAD
VASHON WA 98070

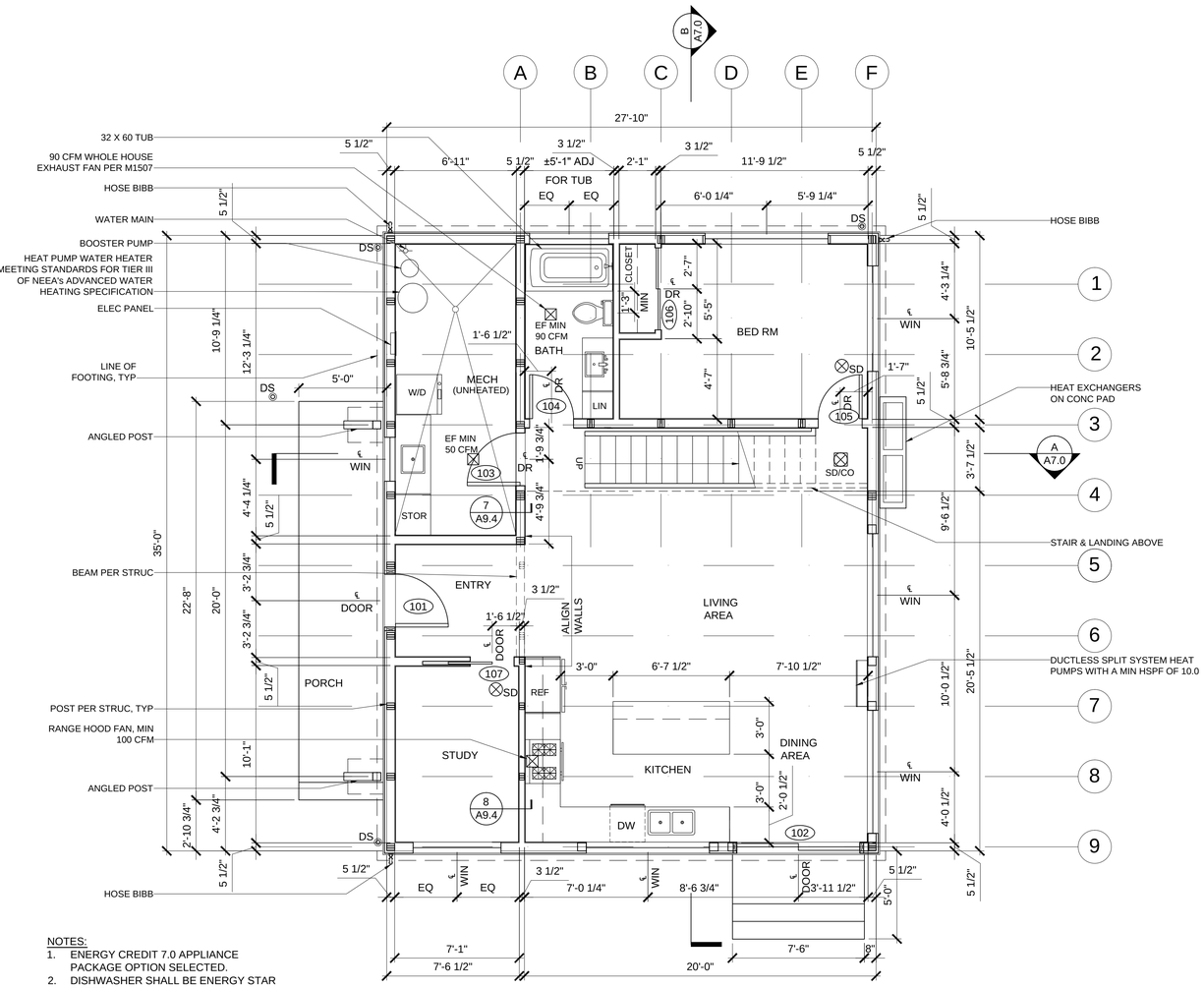
PHASE
PERMIT APPLICATION

DATE
19 - OCT- 2021

DRAWING TITLE
HOUSE & GARAGE BUILDING SECTIONS

SHEET
A4.2





NOTES:
1. ENERGY CREDIT 7.0 APPLIANCE PACKAGE OPTION SELECTED.
2. DISHWASHER SHALL BE ENERGY STAR RATED.
3. REFRIGERATOR SHALL BE ENERGY STAR RATED.
4. WASHING MACHINE SHALL BE ENERGY STAR RATED.
5. DRYER SHALL BE ENERGY STAR RATED, VENTLESS DRYER WITH A MIN CEF RATING OF 5.2

ADU UPPER FLOOR PLAN
1/4" = 1'-0"

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

Goforth Gill
ARCHITECTS

PO Box 650 Vashon Island, WA 98070
206.463.5222
info @ goforthgill.com

5294 REGISTERED ARCHITECT
KIMBERLY GOFORTH
STATE OF WASHINGTON

HOETGER RESIDENCE & ACCESSORY DWELLING UNIT

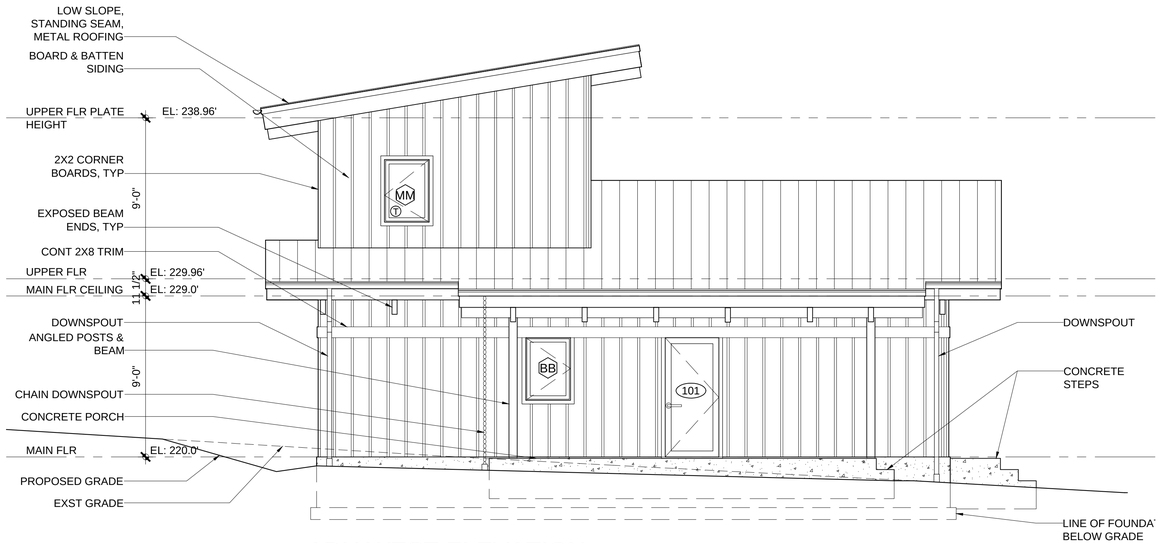
24530 OLD MILL ROAD
VASHON WA 98070

PHASE
PERMIT APPLICATION

DATE
19 - OCT- 2021

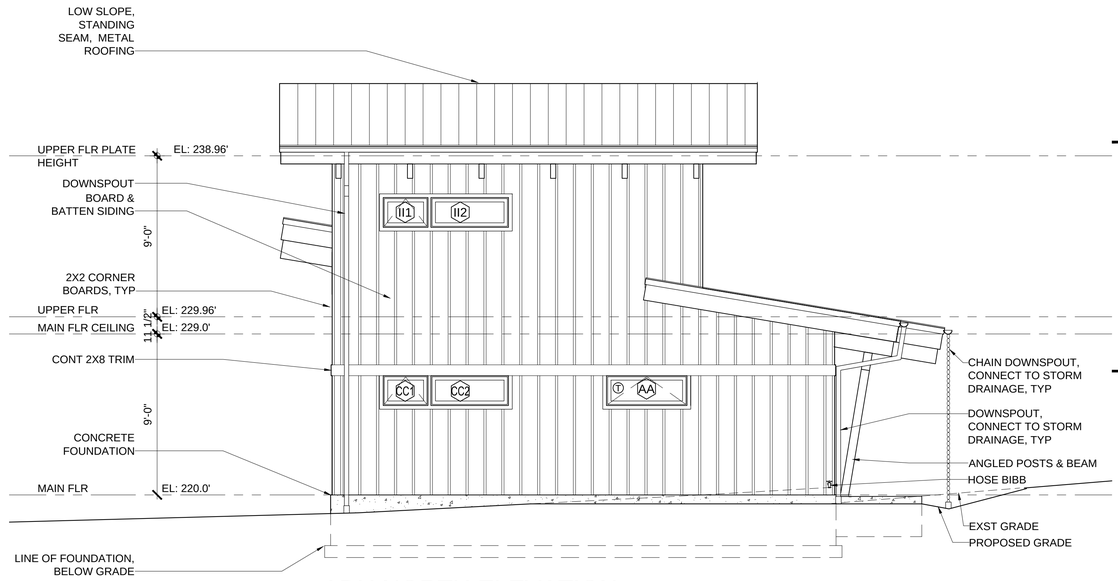
DRAWING TITLE
ADU FLOOR PLANS

SHEET
A5.0



ADU WEST ELEVATION

1/4" = 1'-0"

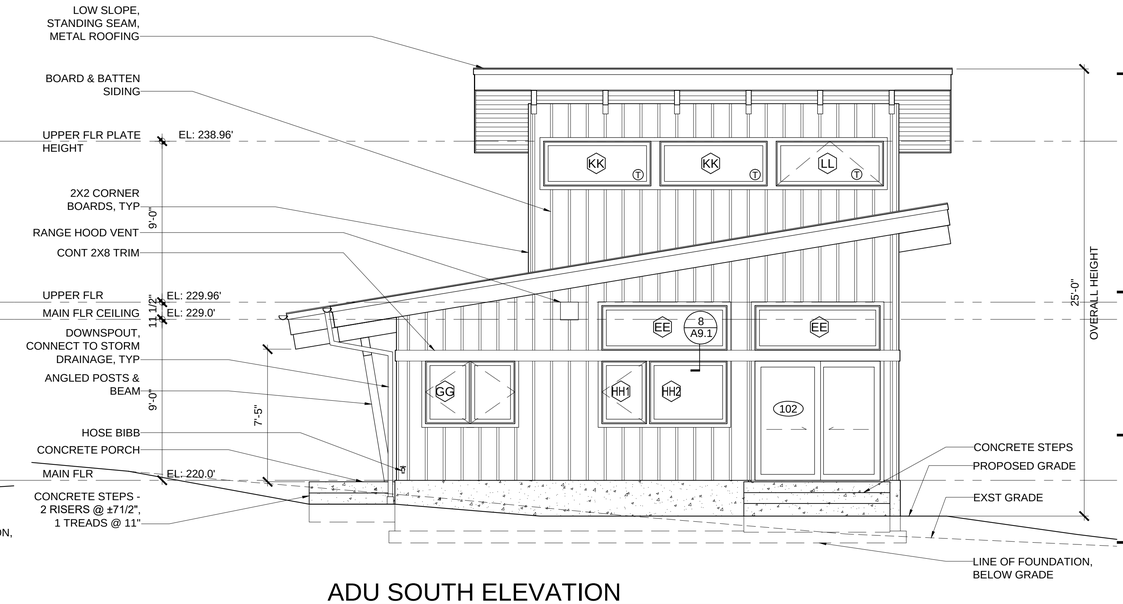


ADU NORTH ELEVATION

1/4" = 1'-0"

ADU EAST ELEVATION

1/4" = 1'-0"



ADU SOUTH ELEVATION

1/4" = 1'-0"

Goforth Gill
ARCHITECTS

PO Box 650 Vashon Island, WA 98070
206.463.5222
info @ goforthgill.com

5294 REGISTERED ARCHITECT
KIMBERLY GOFORTH
STATE OF WASHINGTON

HOETGER RESIDENCE & ACCESSORY DWELLING UNIT

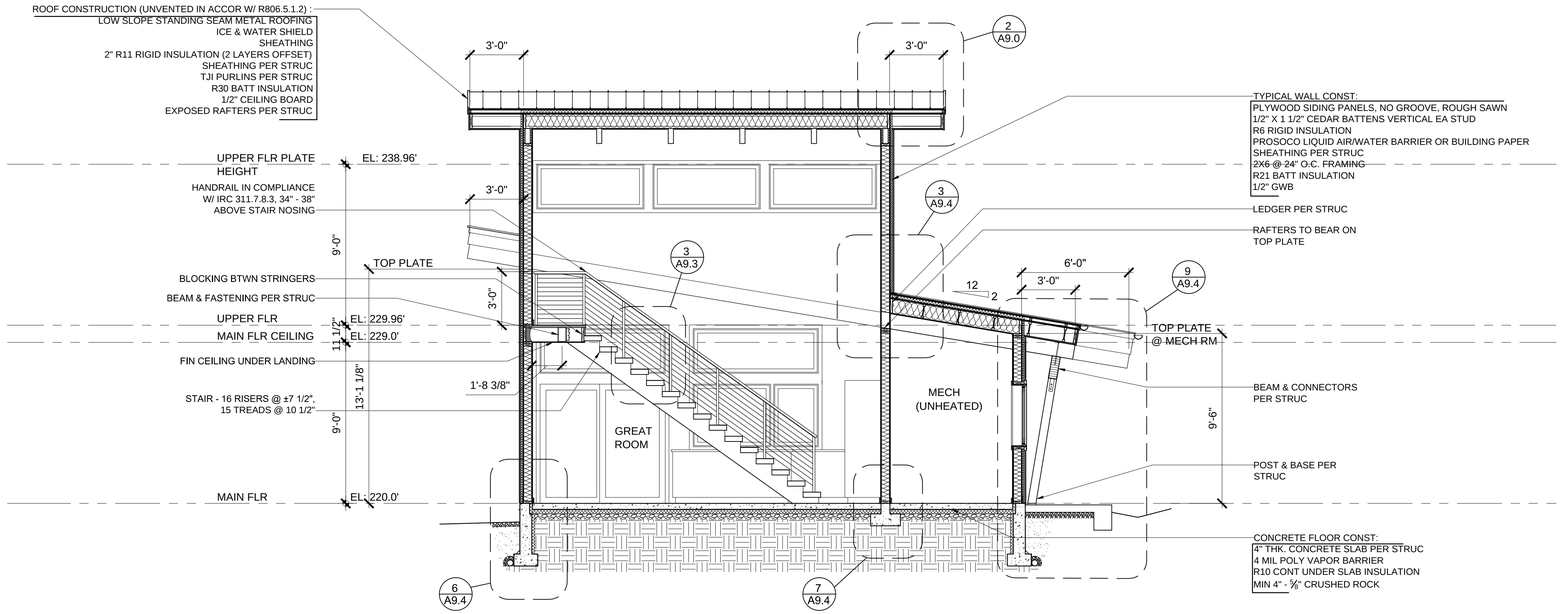
24530 OLD MILL ROAD
VASHON WA 98070

PHASE
PERMIT APPLICATION

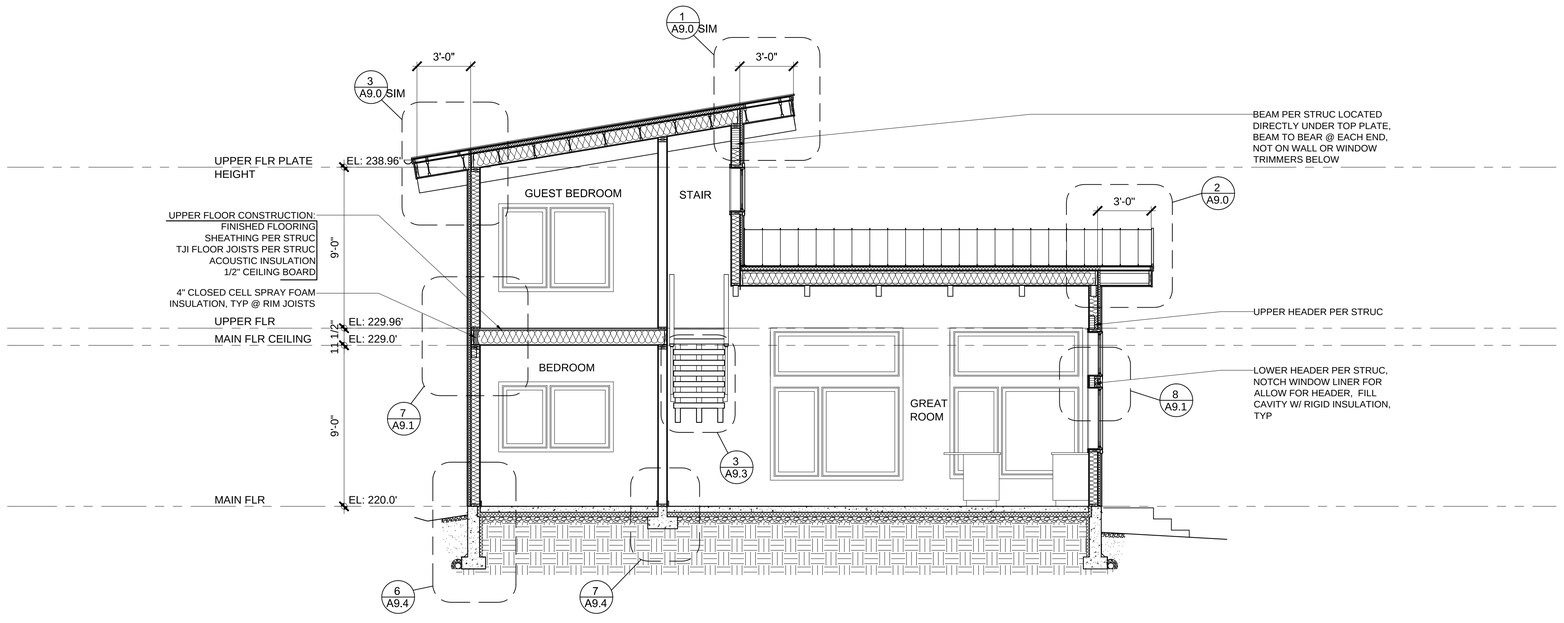
DATE
19 - OCT- 2021

DRAWING TITLE
ADU ELEVATIONS

SHEET
A6.0



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



B ADU SECTION
1/4" = 1'-0"

NOTES:

1) SUBGRADE PREPARATION FOR SLABS-ON-GRADE AND PAVEMENTS SHALL BE AS RECOMMENDED IN THE **SITE GRADING** RECOMMENDATIONS PRESENTED IN THE **GEOTECHNICAL REPORT DATED 1/8/19.**

2) CONCRETE SLABS-ON-GRADE SHALL BE SUPPORTED ON A SUBGRADE CONSISTING OF GENERAL STRUCTURAL FILL OVER DENSE NATURAL SOILS. AS A MINIMUM SUBGRADE PREPARATION FOR SLABS-ON- GRADE FLOOR SHALL INCLUDE EXCAVATION OF ALL EXISTING FILL, ORGANIC AND LOOSE SOILS TO EXPOSE DENSE NATURAL SOILS OR TO A DEPTH OF 2 FEET BELOW FINAL SUBGRADE WHICHEVER IS LESS AND REPLACEMENT WITH STRUCTURAL FILL TO FINAL SLAB SUBGRADE. GENERAL STRUCTURAL FILL SHALL BE COMPACTED TO AT LEAST 90 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE ASTM D1557 TEST METHOD UNLESS OTHERWISE SPECIFIED. INTERIOR CONCRETE SLABS SHALL BE UNDERLAIN BY A POLYETHYLENE VAPOR BARRIER OF AT LEAST 6 MIL THICKNESS UNLESS.

3) PAVEMENT SECTIONS SHALL BE SUPPORTED ON A SUBGRADE CONSISTING OF AT LEAST 6 INCHES OF CRUSHED GRAVEL OVER GENERAL STRUCTURAL FILL COMPACTED AS SPECIFIED ABOVE. IN DRIVEWAY AREAS A MINIMUM 8-INCH DEPTH OF CRUSHED GRAVEL SHALL BE PROVIDED ABOVE THE GENERAL STRUCTURAL FILL. THE IMPORTED CRUSHED GRAVEL FILL SHALL BE COMPACTED TO AT LEAST 95 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE ASTM D1557 TEST METHOD.

GoforthGill
ARCHITECTS

PO Box 650 Vashon Island, WA 98070
206.463.5222
info @ goforthgill.com

5294 REGISTERED ARCHITECT
KIMBERLY GOFORTH
STATE OF WASHINGTON

HOETGER RESIDENCE & ACCESSORY DWELLING UNIT

24530 OLD MILL ROAD
VASHON WA 98070

PHASE
PERMIT APPLICATION

DATE
19 - OCT- 2021

DRAWING TITLE
ADU SECTIONS

SHEET
A7.0

HOUSE WINDOW SCHEDULE

NO	QTY	LOCATION	MANUF/TYPE	OPERATION	WIDTH	HEIGHT	HEAD HEIGHT	EXT FIN	INT FIN	HARDWARE	GLAZING	U-VALUE	REMARKS
MAIN FLOOR													
A	1	GUEST ROOM	MILGARD ULTRA	FRENCH CSMT	5'-0"	3'-9 1/2"	7'2" (7'0" fin)	FIBERGLASS - COLOR TBD	FIBERGLASS - COLOR TBD	TBD	Dual Pane Low-E2/Argon	0.30	
B	2	GUEST & KID'S BATH	"	AWNING	4'-0"	1'-6"	7'2" (7'0" fin)	"	"	TBD	Dual Pane Low-E2/Argon	"	TEMPERED
C1	2	FAMILY ROOM	"	AWNING	3'-10"	1'-6"	7'2" (7'0" fin)	"	"	TBD	Dual Pane Low-E2/Argon	"	FACTORY MULL
C2	1	FAMILY ROOM	"	FIXED	3'-10"	1'-6"	7'2" (7'0" fin)	"	"	TBD	Dual Pane Low-E2/Argon	"	FACTORY MULL
E1	3	KID ROOM 1 & 2	"	FRENCH CSMT	5'-0"	3'-9 1/2"	7'2" (7'0" fin)	"	"	TBD	Dual Pane Low-E2/Argon	"	EGRESS
E2	3	EXERCISE, FAMILY	"	FRENCH CSMT	5'-0"	3'-9 1/2"	7'2" (7'0" fin)	"	"	TBD	Dual Pane Low-E2/Argon	"	
F	1	LAUNDRY ROOM	"	CSMT - RIGHT HAND	2'-6"	3'-9 1/2"	7'2" (7'0" fin)	"	"	TBD	Dual Pane Low-E2/Argon	"	
G1	1	EXERCISE ROOM	"	CSMT - LEFT HAND	2'-6"	3'-9 1/2"	7'2" (7'0" fin)	"	"	TBD	Dual Pane Low-E2/Argon	"	FACTORY MULL
G2	1	EXERCISE ROOM	"	FIXED	6'-0"	3'-9 1/2"	7'2" (7'0" fin)	"	"	TBD	Dual Pane Low-E2/Argon	"	FACTORY MULL
H	5	LIVING ROOM	"	FIXED/AWNING	4'-10"	6'-6"	7'2" (7'0" fin)	"	"	TBD	Dual Pane Low-E2/Argon	"	1'-6" HIGH TEMP AWNING
I	6	LIVING ROOM	"	FIXED	4'-10"	6'-0"	7'2" (7'0" fin)	"	"	TBD	Dual Pane Low-E2/Argon	"	
J1	1	DINETTE	"	CSMT - LEFT HAND	3'-6"	4'-3 1/2"	7'2" (7'0" fin)	"	"	TBD	Dual Pane Low-E2/Argon	"	
J2	1	DINETTE	"	CSMT - RIGHT HAND	3'-6"	4'-3 1/2"	7'2" (7'0" fin)	"	"	TBD	Dual Pane Low-E2/Argon	"	
J3	1	DINETTE	"	FIXED	7'-3 1/2"	4'-3 1/2"	7'2" (7'0" fin)	"	"	TBD	Dual Pane Low-E2/Argon	"	
K	1	MUD ROOM	"	AWNING	4'-6"	1'-8"	7'2" (7'0" fin)	"	"	TBD	Dual Pane Low-E2/Argon	"	
L1	2	KITCHEN	"	FIXED	4'-3"	1'-8"	7'2" (7'0" fin)	"	"	TBD	Dual Pane Low-E2/Argon	"	
L2	2	KITCHEN	"	AWNING	4'-3"	1'-8"	7'2" (7'0" fin)	"	"	TBD	Dual Pane Low-E2/Argon	"	
M	1	FAMILY ROOM	"	FIXED	6'-0"	3'-9 1/2"	7'2" (7'0" fin)	"	"	TBD	Dual Pane Low-E2/Argon	"	
N1	1	HALL	"	CSMT - LEFT HAND	3'-4"	3'-9 1/2"	7'2" (7'0" fin)	"	"	TBD	Dual Pane Low-E2/Argon	"	FACTORY MULL
N2	1	HALL	"	FIXED	3'-4"	3'-9 1/2"	7'2" (7'0" fin)	"	"	TBD	Dual Pane Low-E2/Argon	"	FACTORY MULL
N3	1	HALL	"	CSMT - RIGHT HAND	3'-4"	3'-9 1/2"	7'2" (7'0" fin)	"	"	TBD	Dual Pane Low-E2/Argon	"	FACTORY MULL
O	3	HALL	"	FIXED	3'-4"	1'-8"	7'2" (7'0" fin)	"	"	TBD	Dual Pane Low-E2/Argon	"	
UPPER FLOOR													
P1	1	STUDY	"	CSMT - LEFT HAND	2'-6"	5'-6"	7'2" (7'0" fin)	"	"	TBD	Dual Pane Low-E2/Argon	"	FACTORY MULL, FALL PROTECTION
P2	1	STUDY	"	FIXED	5'-0"	5'-6"	7'2" (7'0" fin)	"	"	TBD	Dual Pane Low-E2/Argon	"	FACTORY MULL
Q1	2	MASTER BATH	"	AWNING	4'-0"	1'-8"	7'2" (7'0" fin)	"	"	TBD	Dual Pane Low-E2/Argon	"	FACTORY MULL, TEMPERED
Q2	1	MASTER BATH	"	FIXED	4'-0"	1'-8"	7'2" (7'0" fin)	"	"	TBD	Dual Pane Low-E2/Argon	"	FACTORY MULL, TEMPERED
R	1	MASTER BATH	"	AWNING	4'-0"	1'-8"	7'2" (7'0" fin)	"	"	TBD	Dual Pane Low-E2/Argon	"	TEMPERED
S	3	MASTER BEDROOM	"	FIXED/AWNING	4'-10"	6'-0"	7'2" (7'0" fin)	"	"	TBD	Dual Pane Low-E2/Argon	"	1'-6" HIGH TEMPERED AWNING, FALL PROTECTION
T	3	MASTER BEDROOM	"	FIXED	4'-10"	2'-6"	7'2" (7'0" fin)	"	"	TBD	Dual Pane Low-E2/Argon	"	
U	1	MASTER BEDROOM	"	FIXED	6'-0"	2'-6"	7'2" (7'0" fin)	"	"	TBD	Dual Pane Low-E2/Argon	"	
V	1	STUDY	"	CSMT - LEFT HAND	2'-6"	5'-6"	7'2" (7'0" fin)	"	"	TBD	Dual Pane Low-E2/Argon	"	FALL PROTECTION
W	2	STAIRWELL SKYLIGHT	CRYSTALITE ES	3898	37 1/2"	97 1/2"					Dual Pane	0.50	
LOWER FLOOR													
X	1	BASEMENT	MILGARD ULTRA	SLIDER	7'-0"	2'-0"	7'2" (7'0" fin)	FIBERGLASS - COLOR TBD	FIBERGLASS - COLOR TBD	TBD	Dual Pane Low-E2/Argon	0.30	TEMPERED
GARAGE													
Z	1	GARAGE	"	FRENCH CSMT	5'- 0"	3'-9 1/2"	SEE REMARKS	"	"	TBD	Dual Pane Low-E2/Argon	0.30	ALIGN W/ HEAD HEIGHT OF MAIN HOUSE

ADU WINDOW SCHEDULE

NO	QTY	LOCATION	MANUF/TYPE	OPERATION	WIDTH	HEIGHT	HEAD HEIGHT	EXT FIN	INT FIN	HARDWARE	GLAZING	U-VALUE	REMARKS
MAIN FLOOR													
AA	2	BATH	MILGARD ULTRA	AWNING	1'-8"	4'-6"	6'10" (6'8" fin)	FIBERGLASS - COLOR TBD	FIBERGLASS - COLOR TBD	TBD	Dual Pane Low-E2/Argon	0.30	TEMPERED
BB	1	MECH ROOM	"	CSMT - RIGHT HAND	2'-6"	3'-6"	6'10" (6'8" fin)	"	"	TBD	Dual Pane Low-E2/Argon	"	
CC1	1	BEDROOM	"	AWNING	2'-6"	1'-8"	6'10" (6'8" fin)	"	"	TBD	Dual Pane Low-E2/Argon	"	FACTORY MULL
CC2	1	BEDROOM	"	FIXED	4'-4"	1'-8"	6'10" (6'8" fin)	"	"	TBD	Dual Pane Low-E2/Argon	"	FACTORY MULL
DD1	2	LIVING/DINING AREAS	"	FIXED	4'-4"	5'-0"	6'10" (6'8" fin)	"	"	TBD	Dual Pane Low-E2/Argon	"	FACTORY MULL
DD2	2	LIVING/DINING AREAS	"	CSMT - RIGHT HAND	2'-6"	5'-0"	6'10" (6'8" fin)	"	"	TBD	Dual Pane Low-E2/Argon	"	FACTORY MULL
EE	4	LIVING/DINING/KITCHEN	"	FIXED	7'-0"	2'-6"	6'10" (6'8" fin)	"	"	TBD	Dual Pane Low-E2/Argon	"	
FF1	1	BEDROOM	"	FIXED	3'-4"	3'-6"	6'10" (6'8" fin)	"	"	TBD	Dual Pane Low-E2/Argon	"	FACTORY MULL
FF2	1	BEDROOM	"	CSMT - RIGHT HAND	2'-6"	3'-6"	6'10" (6'8" fin)	"	"	TBD	Dual Pane Low-E2/Argon	"	FACTORY MULL, EGRESS
GG	1	STUDY	"	FRENCH CSMT	5'-0"	3'-6"	6'10" (6'8" fin)	"	"	TBD	Dual Pane Low-E2/Argon	"	
HH1	1	KITCHEN	"	CSMT - LEFT HAND	2'-6"	3'-6"	6'10" (6'8" fin)	"	"	TBD	Dual Pane Low-E2/Argon	"	FACTORY MULL
HH2	1	KITCHEN	"	FIXED	4'-4"	3'-6"	6'10" (6'8" fin)	"	"	TBD	Dual Pane Low-E2/Argon	"	FACTORY MULL
UPPER FLOOR													
II1	1	GUEST BEDROOM	"	AWNING	2'-6"	1'-8"	6'10" (6'8" fin)	"	"	TBD	Dual Pane Low-E2/Argon	"	FACTORY MULL
II2	1	GUEST BEDROOM	"	FIXED	4'-4"	1'-8"	6'10" (6'8" fin)	"	"	TBD	Dual Pane Low-E2/Argon	"	FACTORY MULL
JJ1	1	GUEST BEDROOM	"	FIXED	3'-4"	4'-6"	6'10" (6'8" fin)	"	"	TBD	Dual Pane Low-E2/Argon	"	FACTORY MULL
JJ2	1	GUEST BEDROOM	"	CSMT - RIGHT HAND	2'-6"	4'-6"	6'10" (6'8" fin)	"	"	TBD	Dual Pane Low-E2/Argon	"	FACTORY MULL, EGRESS
KK	2	STAIRWELL	"	FIXED	6'-0"	2'-6"	6'10" (6'8" fin)	"	"	TBD	Dual Pane Low-E2/Argon	"	TEMPERED
LL	1	STAIRWELL	"	AWNING	6'-0"	2'-6"	6'10" (6'8" fin)	"	"	TBD	Dual Pane Low-E2/Argon	"	TEMPERED
MM	1	GUEST BATH	"	CSMT - LEFT HAND	2'-6"	3'-6"	6'10" (6'8" fin)	"	"	TBD	Dual Pane Low-E2/Argon	"	TEMPERED, OBSCURE GLASS TBD

NOTES:

1. WINDOWS ARE REFERENCED ON THE EXTERIOR ELEVATIONS.
2. WINDOW DIMENSIONS REFER TO FRAME DIMENSIONS.
3. WINDOW HEAD HEIGHT VARIES, SEE ELEVATIONS
4. SEE BUILDING ELEVATIONS FOR OPERATION OF ALL WINDOWS.
5. ALL WINDOWS AT HEATED SPACES TO BE DOUBLE PANE, INSULATED GLASS W/ LOW-E2 COATING.
6. WINDOW MANUFACTURER: MILGARD ULTRA
7. VERIFY ALL WINDOW SIZES AFTER FRAMING AND BEFORE ORDERING WINDOWS.
8. GLAZING IN OR WITHIN 24" OF DOORS, IN STAIRWELLS AND BATHING AREAS, AND GLAZING WITHIN 18" FROM THE FLOOR TO BE TEMPERED PER IRC 308.3
9. ANY WINDOW THAT HAS AN OPENING 72" OR MORE ABOVE FINISHED GRADE, GLAZING BETWEEN THE FINISHED FLOOR AND 24" ABOVE FINISHED FLOOR SHALL BE FIXED OR HAVE OPENINGS LESS THAN 4 INCHES
10. NATURAL LIGHT AND VENTILATION: WINDOW AREA MUST BE 1/10 FLOOR AREA TO PROVIDE NATURAL LIGHT, (10 SF WINDOW AREA MIN.) OPEN WINDOW AREA MUST BE 1/20 OF FLOOR AREA FOR NATURAL VENTILATION (15 SF MIN.), U.B.C. 1997 SECTION 1203.
11. REQUIRED EMERGENCY EGRESS WINDOWS SHALL HAVE A NET CLEAR AREA OF 5.7 SF, MINIMUM OPENABLE HEIGHT OF 24", MINIMUM OPENABLE WIDTH OF 20" AND A MAXIMUM FINISHED SILL HEIGHT OF 44" ABOVE FINISHED FLOOR PER SBC 310.4.

Goforth Gill
ARCHITECTS

PO Box 650 Vashon Island, WA 98070
206.463.5222
info @ goforthgill.com

5294 REGISTERED ARCHITECT
KIMBERLY GOFORTH
STATE OF WASHINGTON

HOETGER RESIDENCE & ACCESSORY DWELLING UNIT

24530 OLD MILL ROAD
VASHON WA 98070

PHASE
PERMIT APPLICATION

DATE
19 - OCT- 2021

DRAWING TITLE
WINDOW SCHEDULES

SHEET
A8.0

HOUSE DOOR SCHEDULE

NO.	LOCATION	TYPE	MANUF/TYPE	OPERATION	WIDTH	HEIGHT	THK	EXT FIN	INT FIN	HARDWARE	GLAZING	U-VALUE	REMARKS
LOWER FLOOR													
001	BASEMENT	EXT.	TBD HALF GLASS	SWING	3'-6"	6'-8"	1 3/4"	ALUM CLAD - STD COLOR	TBD	TBD	Dual Pane Low-E/Argon	0.30	
002	BASEMENT MECH	INT.	SIMPSON DOORS OR EQ	SWING	6'-0"	6'-8"	1 3/8"		TBD	TBD			
MAIN FLOOR													
101	ENTRY	EXT.	"	INSWING	3'-6"	7'-0"	1 3/4"	WOOD/GLASS	WOOD	TBD	Dual Pane Low-E/Argon	0.30	
	ENTRY	EXT.	"	SIDELIGHT	2'-0"	7'-0"		WOOD	WOOD	-	Dual Pane Low-E/Argon	"	MATCH SIDELIGHT TO ENTRY DOOR
	ENTRY	EXT.	"	SIDELIGHT	2'-0"	7'-0"		WOOD	WOOD	-	Dual Pane Low-E/Argon	"	MATCH SIDELIGHT TO ENTRY DOOR
102	MUD ROOM	EXT.	"	SWING	3'-0"	7'-0"	1 3/4"	ALUM CLAD - STD COLOR	FIR - CLEAR	TBD	Dual Pane Low-E/Argon	"	
103	GARAGE	EXT.	" HALF GLASS	INSWING	3'-0"	6'-8"	1 3/4"	ALUM CLAD - STD COLOR	TBD	TBD	Dual Pane Low-E/Argon	"	
104	GARAGE DOOR	EXT.	"	OVERHEAD DOOR	16'-0"	8'-0"	2 1/8"	FIBERGLASS - COLOR TBD	FIBERGLASS	TBD			
105	GARAGE DOOR	EXT.	"	OVERHEAD DOOR	8'-0"	8'-0"	2 1/8"	FIBERGLASS - COLOR TBD	FIBERGLASS	TBD			
106	MUD ROOM	INT.	"	POCKET	3'-0"	6'-8"	1 3/8"		FIR - CLEAR	TBD			
107	PANTRY	INT.	"	POCKET	2'-0"	6'-8"	1 3/8"		FIR - CLEAR	TBD			
108	LIVING/DINING ROOM	EXT.	LA CANTINA	3 PANEL SLIDING DOOR	10'-4"	7'-0"	1 3/4"	ALUM - COLOR TBD	ALUM	TBD	Dual Pane Low-E/Argon	"	COORD THRESHOLD HEIGHT W/ INSTALLATION TO AVOID TRIP HAZARD
109	GUEST ROOM	INT.	SIMPSON DOORS OR EQ	SWING	2'-6"	6'-8"	1 3/8"		FIR - CLEAR	TBD			
110	LINEN CLOSET	INT.	"	SWING	2'-6"	6'-8"	1 3/8"		FIR - CLEAR	TBD			
111	GUEST BATHROOM	INT.	"	SWING	2'-6"	6'-8"	1 3/8"		FIR - CLEAR	TBD			
112	FAMILY ROOM	INT.	"	POCKET PAIR	5'-0"	6'-8"	1 3/8"		FIR - CLEAR	TBD			
113	FAMILY ROOM	EXT.	"	SWING	3'-0"	7'-0"	1 3/4"	ALUM CLAD - STD COLOR	FIR - CLEAR	TBD	Dual Pane Low-E/Argon	"	
114	EXERCISE ROOM	INT.	"	SWING PAIR	5'-0"	6'-8"	1 3/8"		FIR - CLEAR	TBD			
115	LAUNDRY ROOM	INT.	"	SWING	2'-6"	6'-8"	1 3/8"		FIR - CLEAR	TBD			
116	KID ROOM 1	INT.	"	SWING	2'-6"	6'-8"	1 3/8"		FIR - CLEAR	TBD			
117	KID ROOM CLOSET	INT.	"	BI-PASS	6'-0"	6'-8"	1 3/8"		FIR - CLEAR	TBD			SET HEADER HIGH TO OBSCURE HARDWARE BEHIND TRIM
118	LINEN CLOSET	INT.	"	SWING	1'-6"	6'-8"	1 3/8"		FIR - CLEAR	TBD			
119	KIDS BATH	INT.	"	SWING	2'-6"	6'-8"	1 3/8"		FIR - CLEAR	TBD			
120	KID ROOM 2	INT.	"	SWING	2'-6"	6'-8"	1 3/8"		FIR - CLEAR	TBD			
121	KID ROOM 2 CLOSET	INT.	"	BI-PASS	6'-0"	6'-8"	1 3/8"		FIR - CLEAR	TBD			SET HEADER HIGH TO OBSCURE HARDWARE BEHIND TRIM
122	KIDS BATH	INT.	"	POCKET	2'-6"	6'-8"	1 3/8"		FIR - CLEAR	TBD			
123	GUEST CLOSET	INT.	"	POCKET	2'-6"	6'-8"	1 3/8"		FIR - CLEAR	TBD			
UPPER FLOOR													
201	PRINCIPAL BEDROOM	EXT.	MILGARD	SLIDER	6'-0"	7'-0"	1 3/4"	FIBERGLASS - COLOR TBD	FIR - CLEAR	TBD	Dual Pane Low-E/Argon	"	
202	PRINCIPAL BEDROOM	INT.	SIMPSON DOORS OR EQ	SWING	2'-8"	6'-8"	1 3/8"		FIR - CLEAR	TBD			
203	PRINCIPAL BATH	INT.	"	POCKET	2'-6"	6'-8"	1 3/8"		FIR - CLEAR	TBD			
204	LAUNDRY	INT.	"	BI-FOLD	4'-0"	6'-8"	1 3/8"		FIR - CLEAR	TBD			SET HEADER HIGH TO OBSCURE HARDWARE BEHIND TRIM
205	PRINCIPAL CLOSET	INT.	"	POCKET	2'-6"	6'-8"	1 3/8"		FIR - CLEAR	TBD			
206	STUDY	INT.	"	SWING	2'-6"	6'-8"	1 3/8"		FIR - CLEAR	TBD			

ADU DOOR SCHEDULE

NO.	LOCATION	TYPE	MANUF/TYPE	OPERATION	WIDTH	HEIGHT	THK	EXT FIN	INT FIN	HARDWARE	GLAZING	U-VALUE	REMARKS
MAIN FLOOR													
101	ENTRY	EXT.	SIMPSON DOORS OR EQ	INSWING	3'-0"	6'-8"	1 3/4"	WOOD/GLASS	WOOD	TBD	Dual Pane Low-E/Argon	0.30	
102	DINING ROOM	EXT.	MILGARD	SLIDER	7'-0"	6'-8"	1 3/4"	ALUM CLAD - STD COLOR	ALUM CLAD	TBD	Dual Pane Low-E/Argon	0.30	
103	MECHANICAL	EXT.	SIMPSON DOORS OR EQ	SWING	3'-0"	6'-8"	1 3/4"		FIR - CLEAR	TBD			WEATHER STRIPPED
104	BATH	INT.	"	SWING	2'-6"	6'-8"	1 3/8"		FIR - CLEAR	TBD			
105	BEDROOM	INT.	"	SWING	2'-6"	6'-8"	1 3/8"		FIR - CLEAR	TBD			
106	BEDROOM CLOSET	INT.	"	BI-PASS	4'-8"	6'-8"	1 3/8"		FIR - CLEAR	TBD			SET HEADER HIGH TO OBSCURE HARDWARE BEHIND TRIM
107	STUDY	INT.	"	POCKET	2'-6"	6'-8"	1 3/8"		FIR - CLEAR	TBD			
UPPER FLOOR													
201	GUEST BEDROOM	INT.	"	SWING	2'-6"	6'-8"	1 3/8"		FIR - CLEAR	TBD			
202	GUEST BATHROOM	INT.	"	SWING	2'-6"	6'-8"	1 3/8"		FIR - CLEAR	TBD			
203	CLOSET	INT.	"	BI-PASS	4'-8"	6'-8"	1 3/8"		FIR - CLEAR	TBD			SET HEADER HIGH TO OBSCURE HARDWARE BEHIND TRIM

NOTES:

1. EXTERIOR ARE REFERENCED ON ELEVATIONS, ALL DOORS ARE REFERENCED ON FLOOR PLANS
2. DOOR SIZES REFER TO THE LEAF OR LEAVES THEMSELVES. REFER TO DOOR MANUFACTURER FOR ROUGH OPENINGS.
3. VERIFY ALL DOOR SIZES AFTER FRAMING AND BEFORE ORDERING DOORS.
4. DOOR MANUFACTURER: PER SCHEDULE.
5. SEE FLOOR PLAN FOR OPERATION OF ALL DOORS.
6. GLAZING NOTES ON WINDOW SCHEDULE APPLY TO GLAZED DOORS.
7. GLASS DOORS TO HAVE SAFETY, LAMINATED OR TEMPERED GLASS, MAX U-VALUE AS SHOWN ON SCHEDULE.

Goforth Gill
ARCHITECTS

PO Box 650 Vashon Island, WA 98070
206.463.5222
info @ goforthgill.com

5294 REGISTERED ARCHITECT
KIMBERLY GOFORTH
STATE OF WASHINGTON

HOETGER RESIDENCE & ACCESSORY DWELLING UNIT

24530 OLD MILL ROAD
VASHON WA 98070

PHASE

PERMIT APPLICATION

DATE

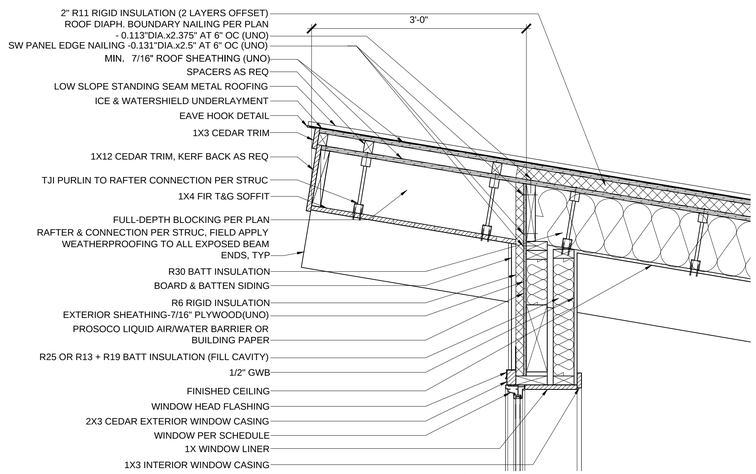
19 - OCT- 2021

DRAWING TITLE

DOOR SCHEDULES

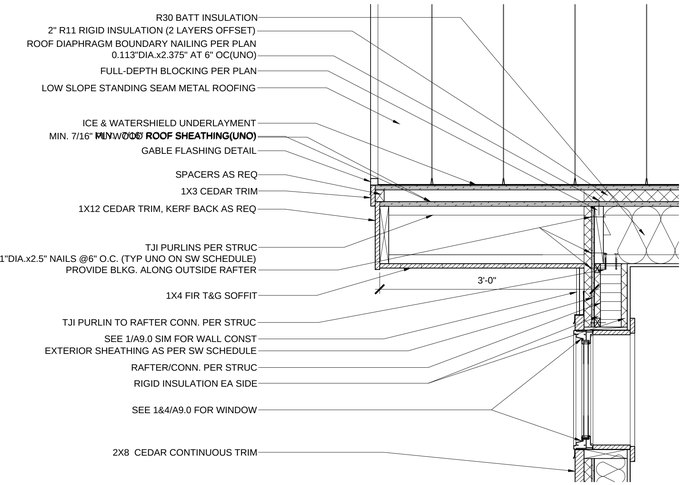
SHEET

A8.1

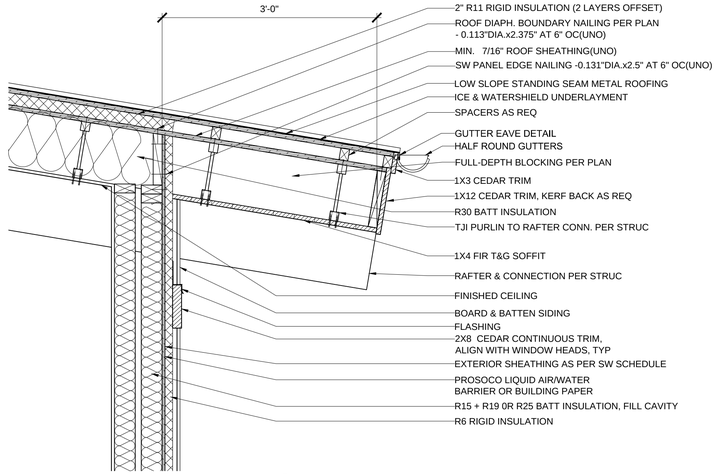


1 TYP UPPER EAVE & WINDOW HEAD

1 = 1'-0", UNO

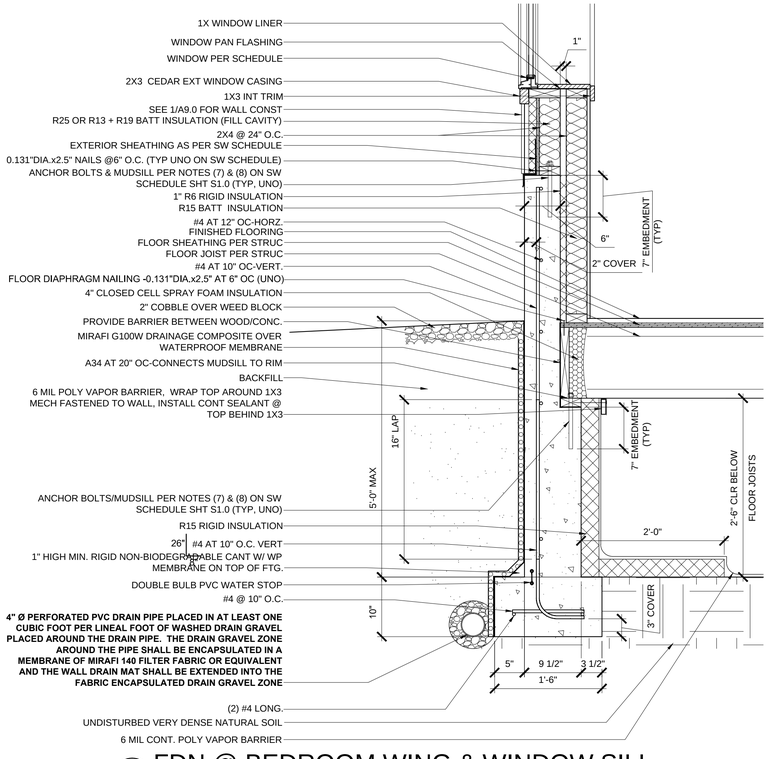


2 TYP RAKE

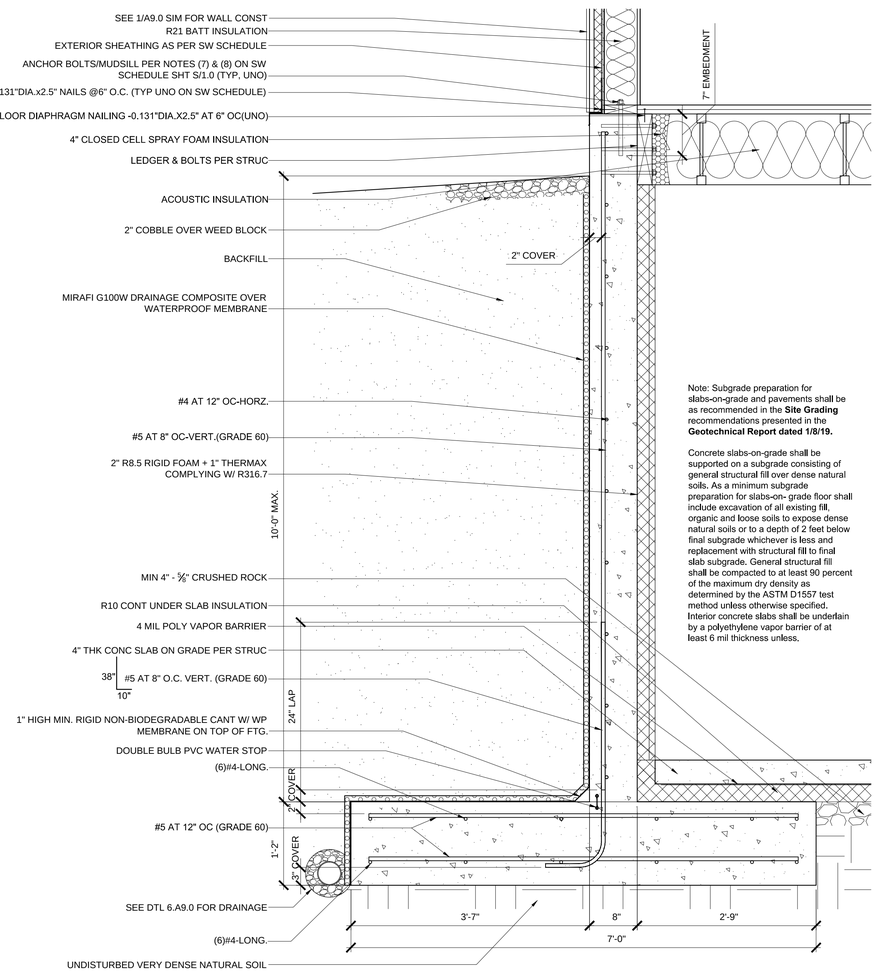


3 TYP LOWER EAVE

4 WINDOW HORIZ MULLION



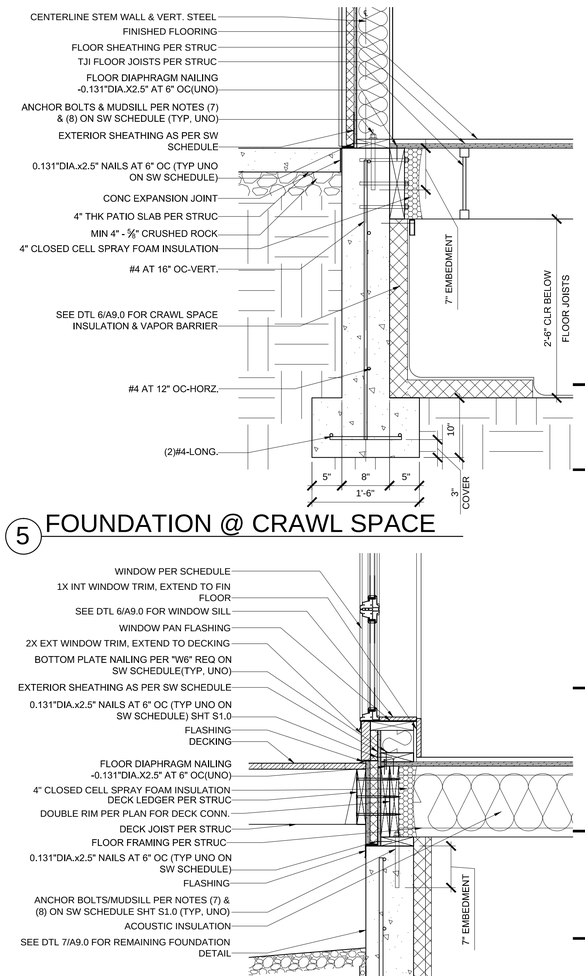
6 FDN @ BEDROOM WING & WINDOW SILL



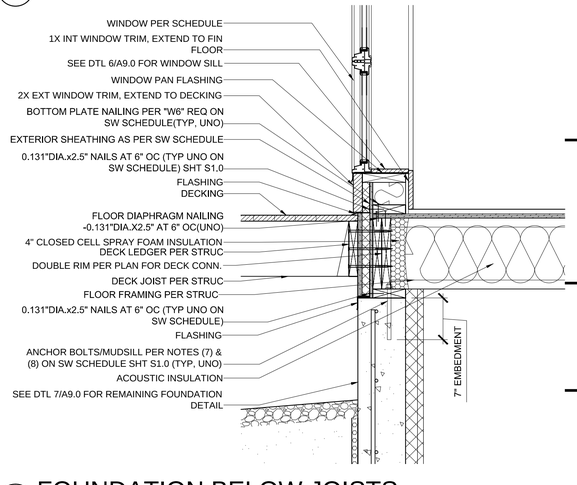
Note: Subgrade preparation for slabs-on-grade and pavements shall be as recommended in the **Site Grading** recommendations presented in the **Geotechnical Report dated 1/8/19.**

Concrete slabs-on-grade shall be supported on a subgrade consisting of general structural fill over dense natural soils. As a minimum subgrade preparation for slabs-on- grade floor shall include excavation of all existing fill, organic and loose soils to expose dense natural soils or to a depth of 2 feet below final subgrade whichever is less and replacement with structural fill to final slab subgrade. General structural fill shall be compacted to at least 90 percent of the maximum dry density as determined by the ASTM D1557 test method unless otherwise specified. Interior concrete slabs shall be underlain by a polyethylene vapor barrier of at least 6 mil thickness unless.

7 FOUNDATION WITH LEDGER



5 FOUNDATION @ CRAWL SPACE



8 FOUNDATION BELOW JOISTS

Goforth Gill
ARCHITECTS

PO Box 650 Vashon Island, WA 98070
206.463.5222
info @ goforthgill.com

5294 REGISTERED ARCHITECT
KIMBERLY GOFORTH
STATE OF WASHINGTON

HOETGER RESIDENCE & ACCESSORY DWELLING UNIT

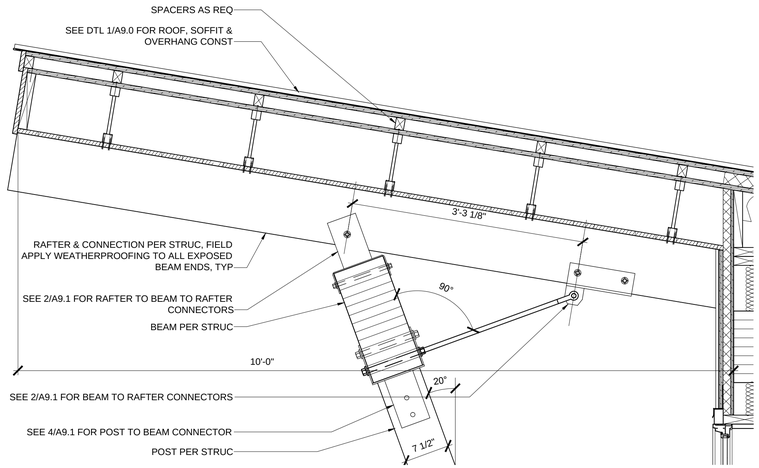
24530 OLD MILL ROAD
VASHON WA 98070

PHASE
PERMIT APPLICATION

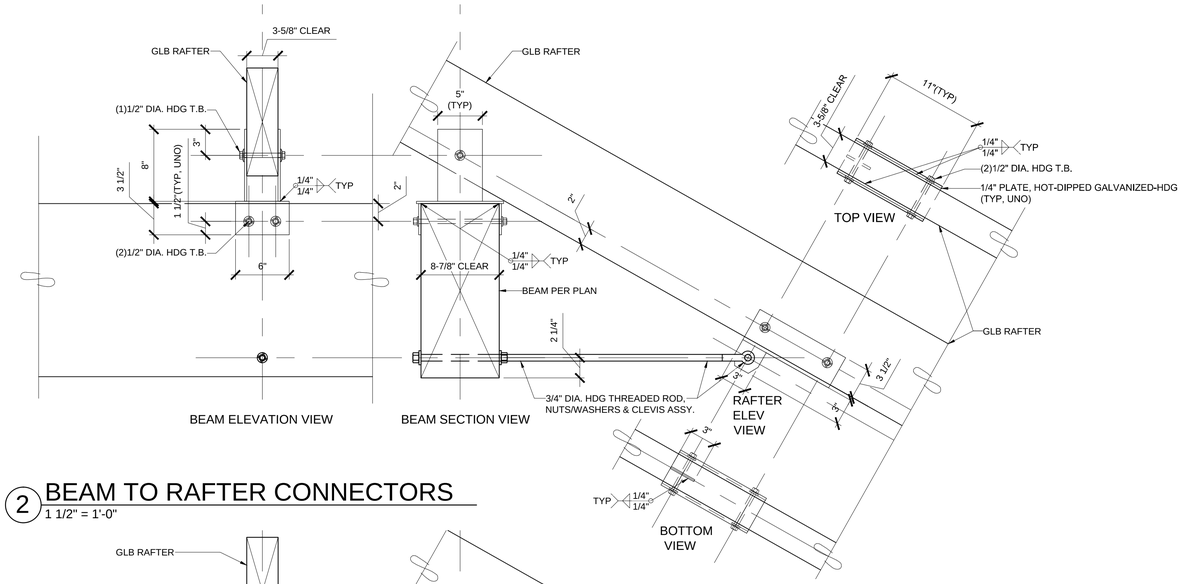
DATE
19 - OCT- 2021

DRAWING TITLE
DETAILS

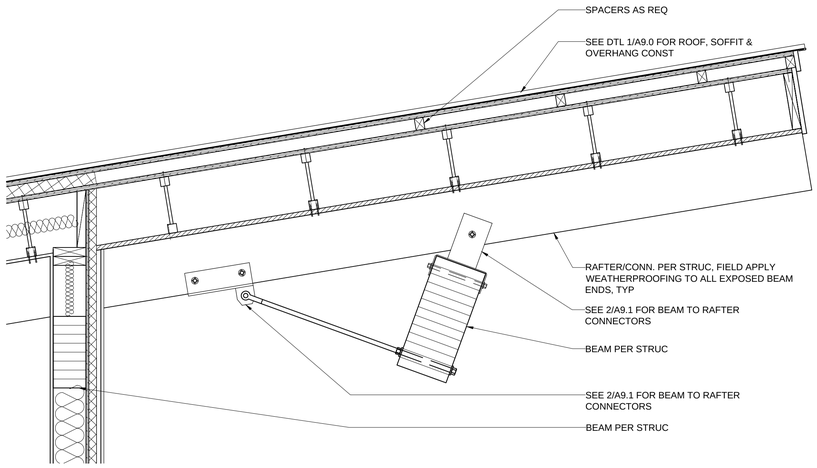
SHEET
A9.0



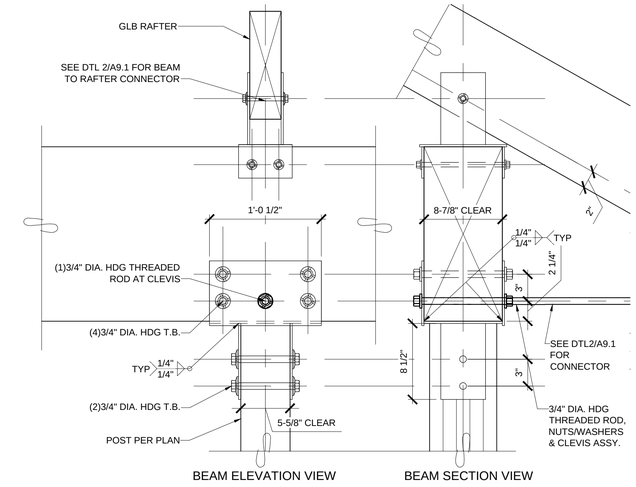
1 EAST OVERHANG @ POST
1 = 1'-0", UNO



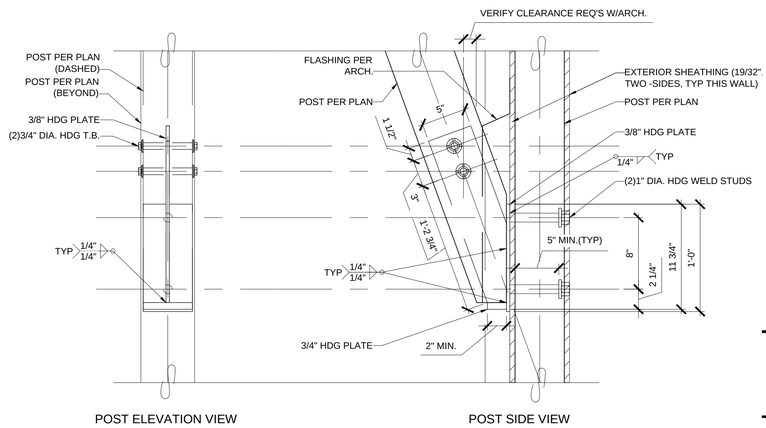
2 BEAM TO RAFTER CONNECTORS
1 1/2" = 1'-0"



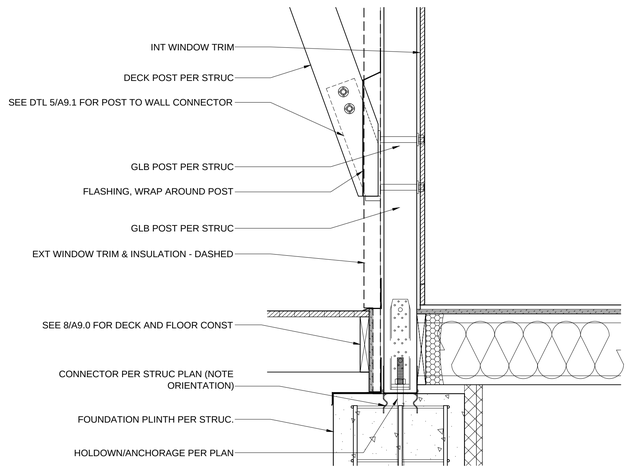
3 EAST OVERHANG @ EACH RAFTER



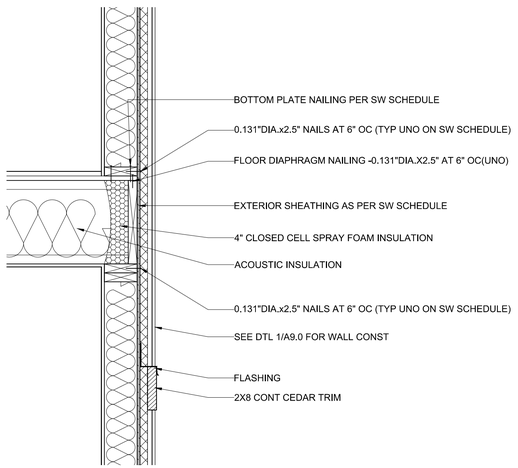
4 POST TO BEAM CONNECTOR
1 1/2" = 1'-0"



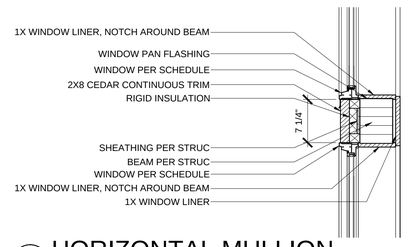
5 POST TO WALL CONNECTOR
1 1/2" = 1'-0"



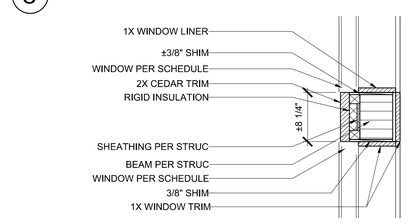
6 BASE OF DECK POST



7 UPPER FLOOR



8 HORIZONTAL MULLION



9 VERTICAL MULLION

Goforth Gill
ARCHITECTS

PO Box 650 Vashon Island, WA 98070
206.463.5222
info @ goforthgill.com

5294 REGISTERED ARCHITECT
KIMBERLY GOFORTH
STATE OF WASHINGTON

HOETGER RESIDENCE & ACCESSORY DWELLING UNIT

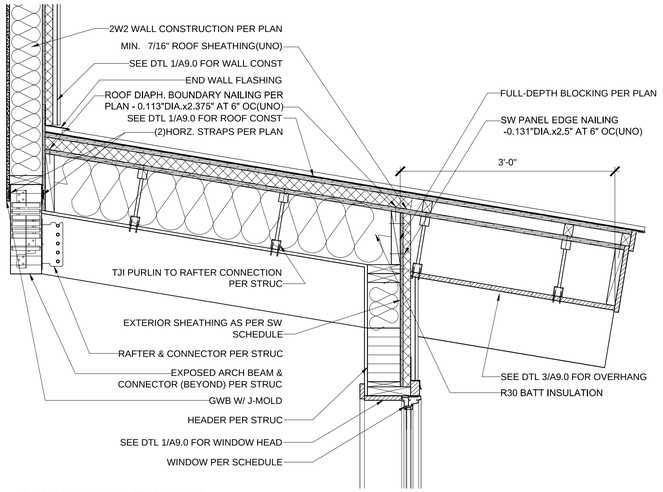
24530 OLD MILL ROAD
VASHON WA 98070

PHASE
PERMIT APPLICATION

DATE
19 - OCT- 2021

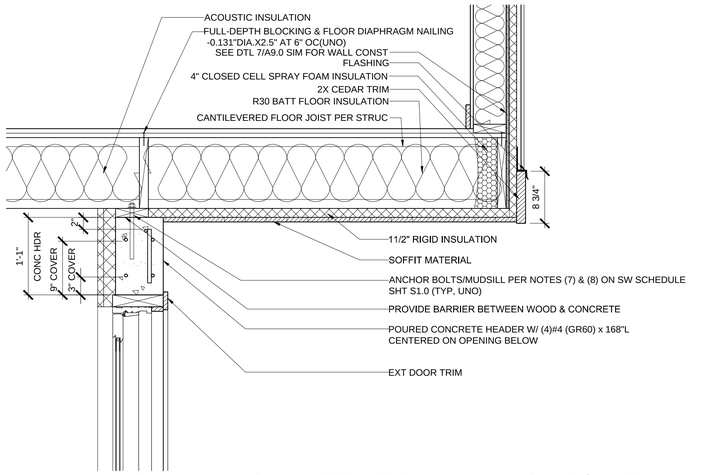
DRAWING TITLE
DETAILS

SHEET
A9.1

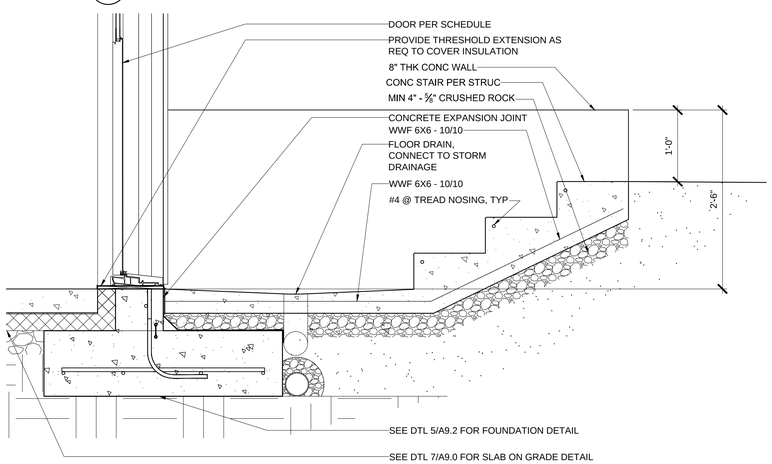


1 DINETTE ROOF

1 = 1'-0", UNO

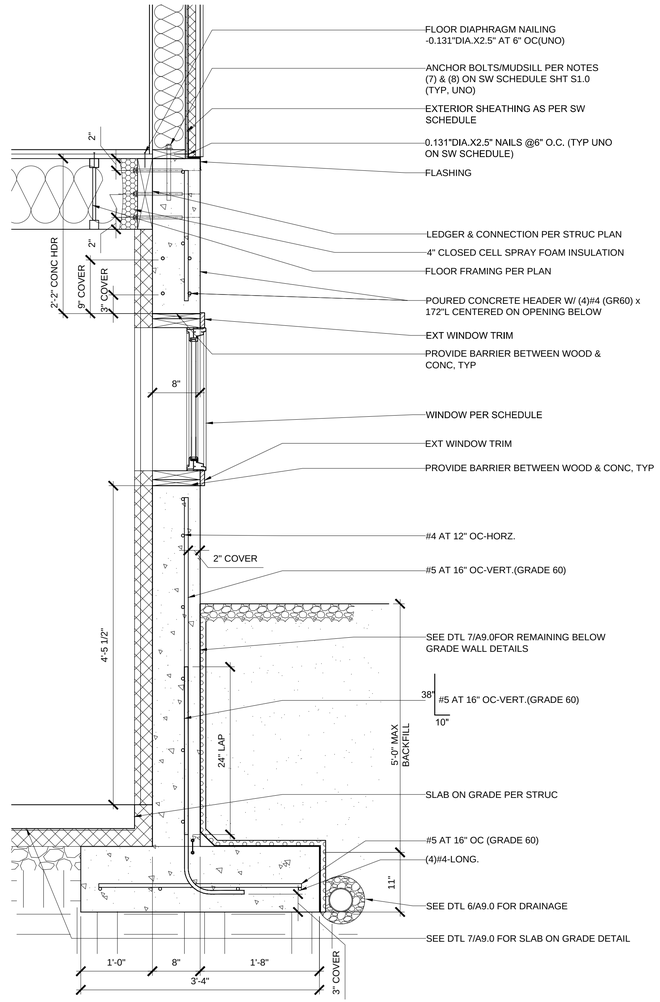


3 DINETTE BAY& CONCRETE HEADER (EAST WALL)

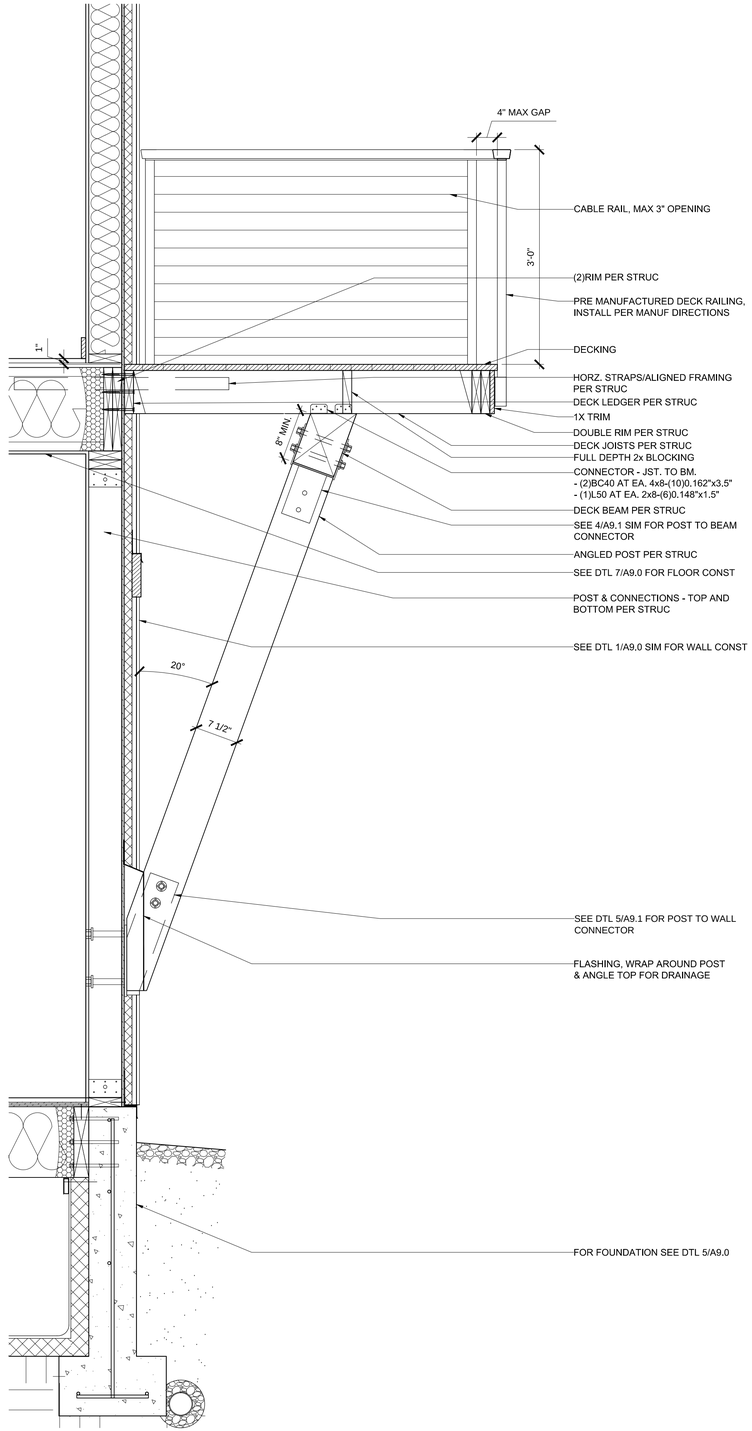


4 FOUNDATION & EXTERIOR STEPS

2 UNUSED



5 FOUNDATION & CONC HEADER (NORTH WALL)



6 BALCONY

Goforth Gill
ARCHITECTS

PO Box 650 Vashon Island, WA 98070
206.463.5222
info @ goforthgill.com

5294 REGISTERED ARCHITECT
KIMBERLY GOFORTH
STATE OF WASHINGTON

HOETGER RESIDENCE & ACCESSORY DWELLING UNIT

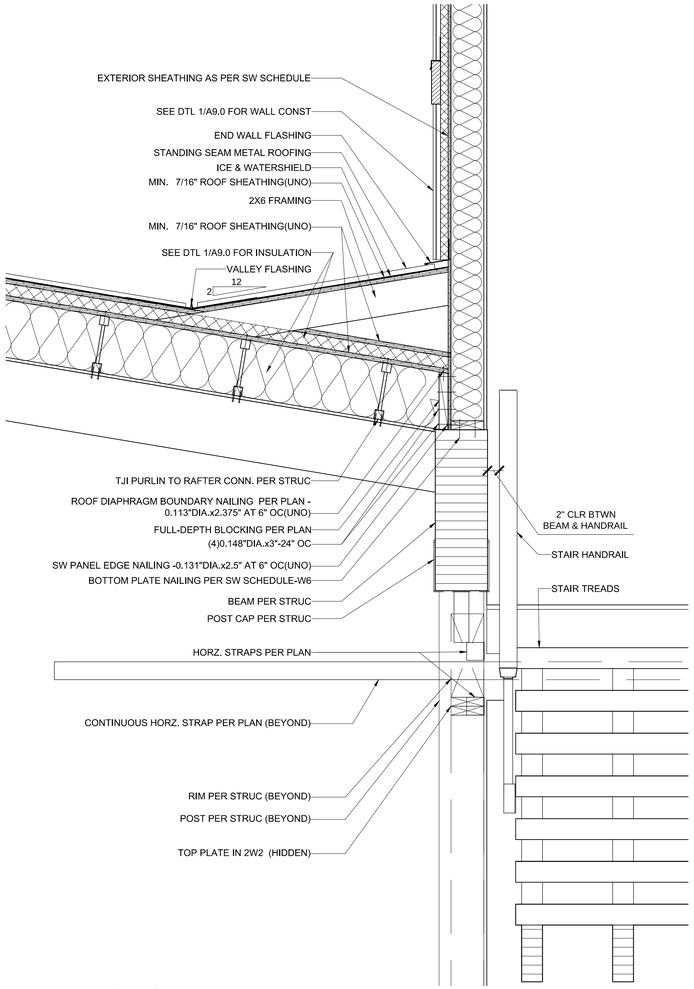
24530 OLD MILL ROAD
VASHON WA 98070

PHASE
PERMIT APPLICATION

DATE
19 - OCT- 2021

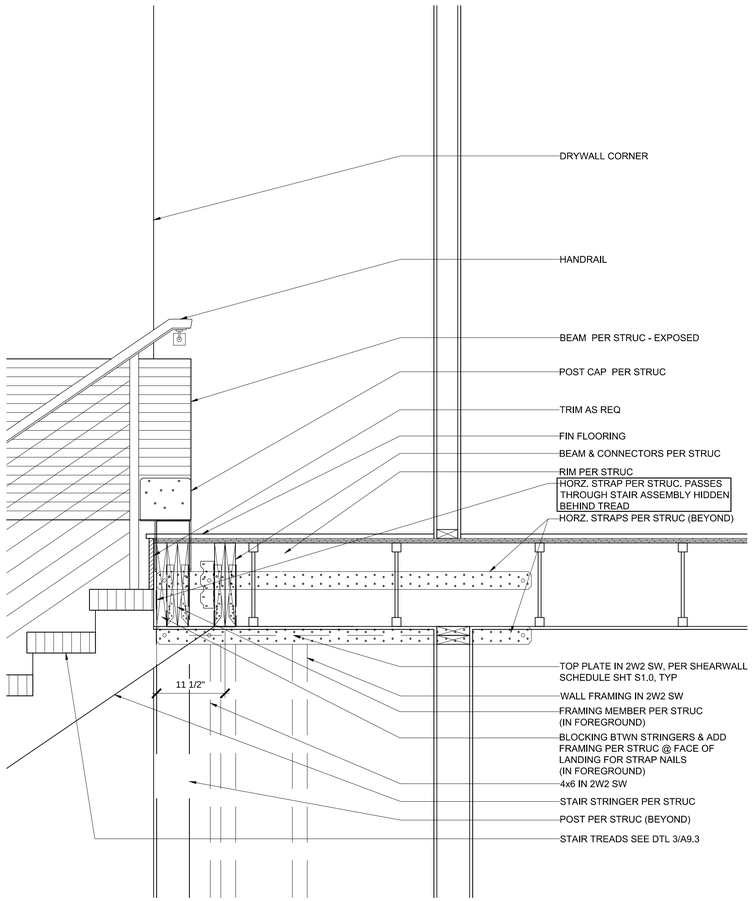
DRAWING TITLE
DETAILS

SHEET
A9.2

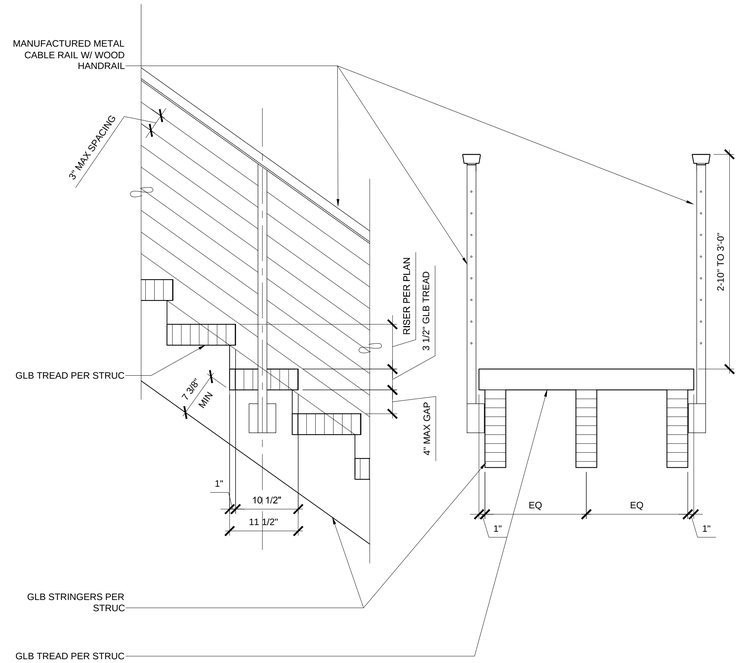


1 HOUSE BEAM

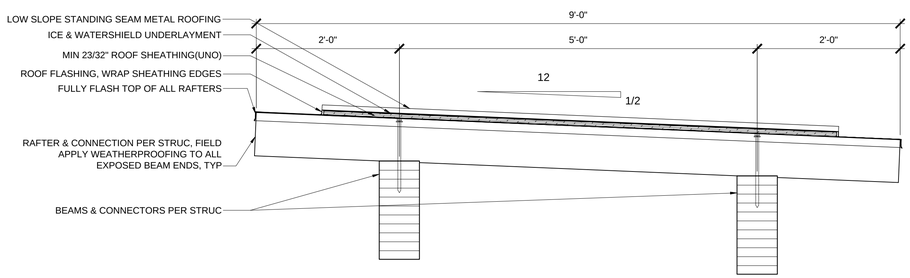
1 = 1'-0", UNO



2 STAIR LANDING



3 STAIR DETAIL



4 COVERED WALK ROOF

GoforthGill
ARCHITECTS

PO Box 650 Vashon Island, WA 98070
206.463.5222
info @ goforthgill.com

5294 REGISTERED ARCHITECT
KIMBERLY GOFORTH
STATE OF WASHINGTON

HOETGER RESIDENCE & ACCESSORY DWELLING UNIT

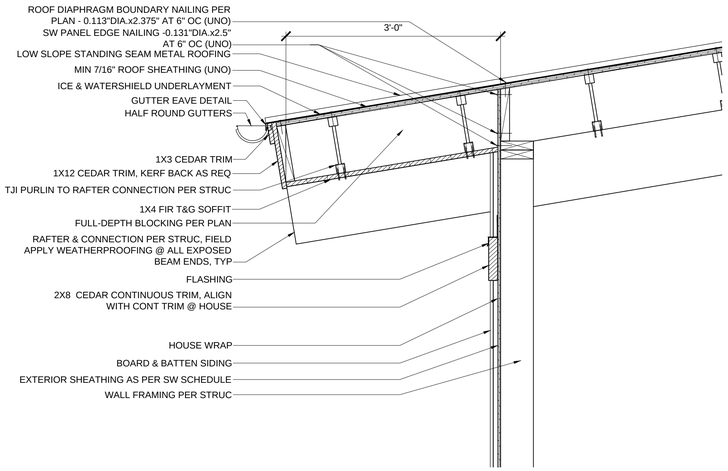
24530 OLD MILL ROAD
VASHON WA 98070

PHASE
PERMIT APPLICATION

DATE
19 - OCT- 2021

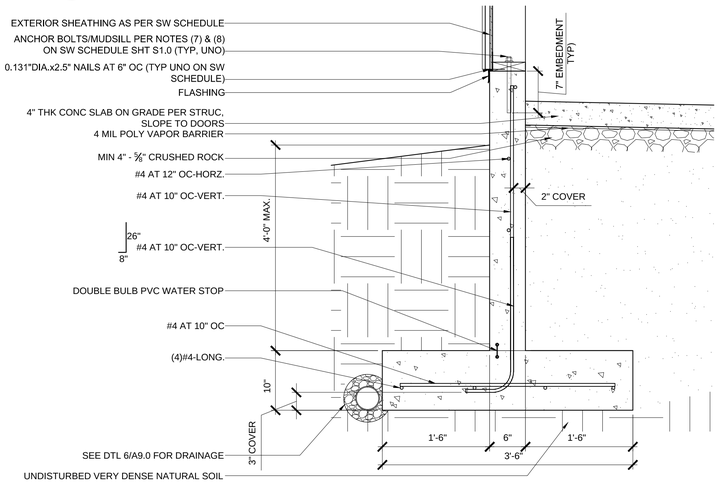
DRAWING TITLE
DETAILS

SHEET
A9.3

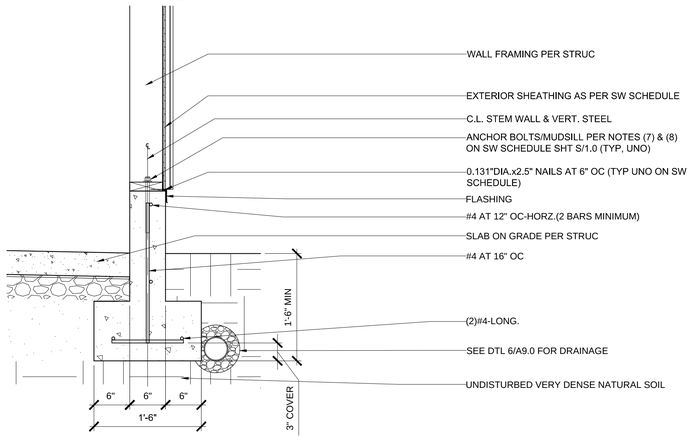


1 GARAGE LOWER EAVE

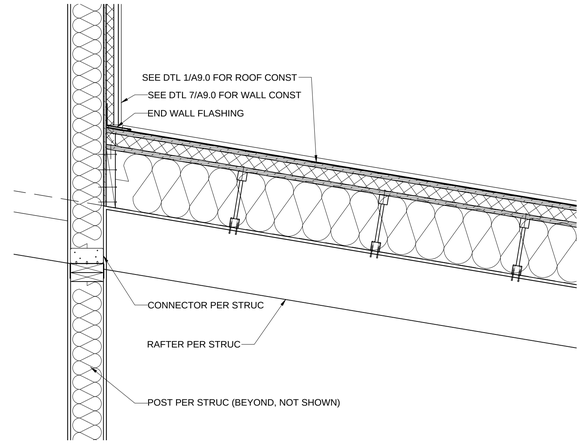
1 = 1'-0", UNO



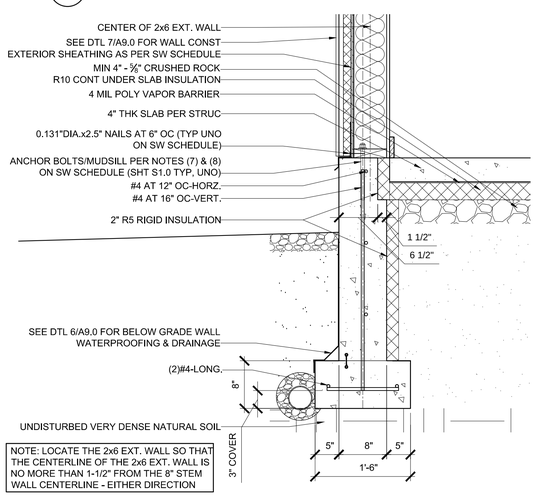
2 GARAGE UPPER EAVE



3 ADU SHED ROOF TO WALL CONNECTION



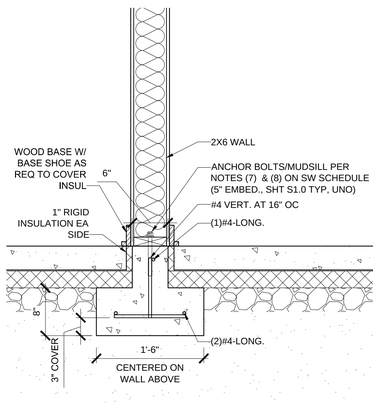
4 GARAGE FOUNDATION & RETAINING WALL



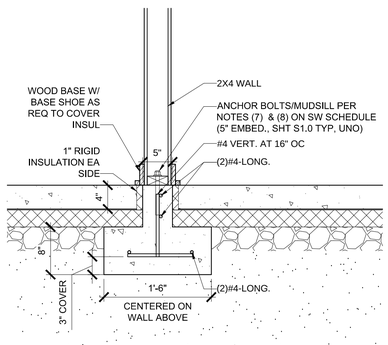
Note: Subgrade preparation for slabs-on-grade and pavements shall be as recommended in the **Site Grading** recommendations presented in the **Geotechnical Report dated 1/8/19.**

Concrete slabs-on-grade shall be supported on a subgrade consisting of general structural fill over dense natural soils. As a minimum subgrade preparation for slabs-on- grade floor shall include excavation of all existing fill, organic and loose soils to expose dense natural soils or to a depth of 2 feet below final subgrade whichever is less and replacement with structural fill to final slab subgrade. General structural fill shall be compacted to at least 90 percent of the maximum dry density as determined by the ASTM D1557 test method unless otherwise specified. Interior concrete slabs shall be underlain by a polyethylene vapor barrier of at least 6 mil thickness unless.

5 GARAGE FOUNDATION



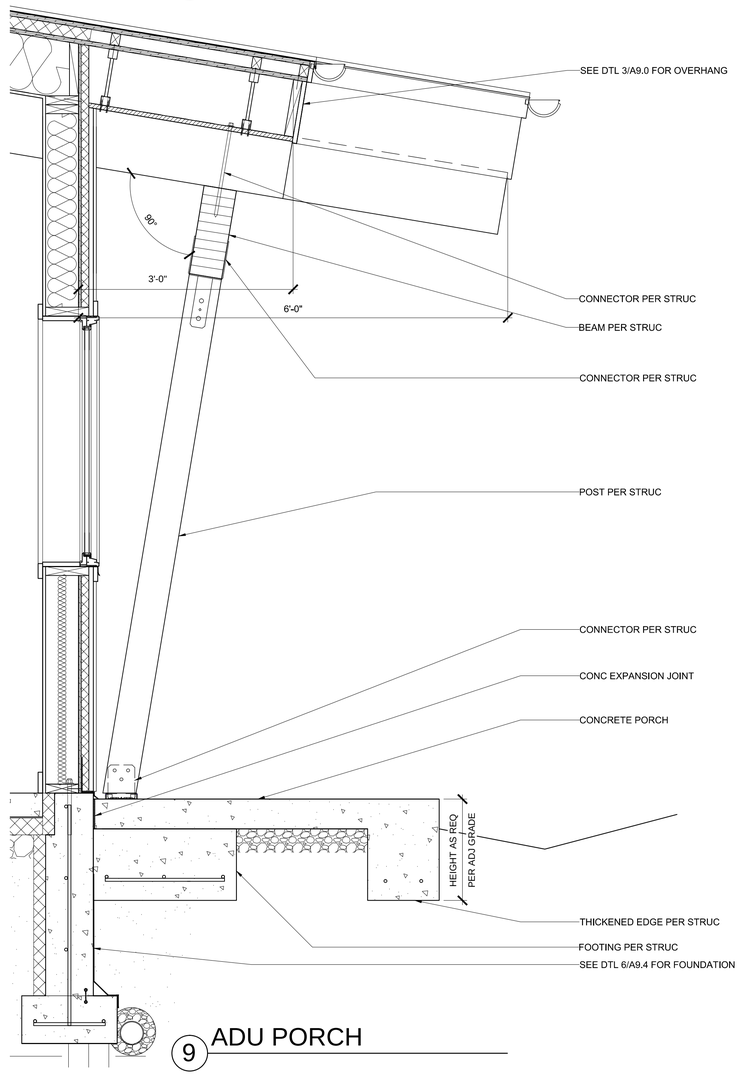
7 ADU BEARING WALL FDN



8 ADU BEARING WALL FDN

6 ADU FOUNDATION

9 ADU PORCH



Goforth Gill
ARCHITECTS

PO Box 650 Vashon Island, WA 98070
206.463.5222
info @ goforthgill.com

5294 REGISTERED ARCHITECT
KIMBERLY GOFORTH
STATE OF WASHINGTON

HOETGER RESIDENCE & ACCESSORY DWELLING UNIT

24530 OLD MILL ROAD
VASHON WA 98070

PHASE
PERMIT APPLICATION

DATE
19 - OCT- 2021

DRAWING TITLE
DETAILS

SHEET
A9.4

GENERAL STRUCTURAL NOTES
(UNLESS NOTED OTHERWISE ON PLANS AND DETAILS)

CODES AND SPECIFICATIONS
1. INTERNATIONAL BUILDING CODE (IBC)/INTERNATIONAL RESIDENTIAL CODE (IRC) – 2018 EDITIONS WITH LOCAL JURISDICTION AMENDMENTS AS APPLICABLE
2. ASCE/SEI 7–16 – MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES
3. ANSI AWC NDS–2018/AWC SPDWS 2015/AWC WFCM 2018 – NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION WITH 2018 NDS SUPPLEMENT/SPECIAL DESIGN PROVISIONS FOR WIND & SEISMIC/WOOD FRAME CONSTRUCTION MANUAL FOR ONE– AND TWO–FAMILY DWELLINGS
4. ACI 318–14 – BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
5. AISC 360–16/341–16 – SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS/SEISMIC PROVISIONS FOR STRUCTURAL STEEL BUILDINGS
6. AWS D1.4/D1.4M–2017/STRUCTURAL WELDING CODE
7. TMS 402–2016 – BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES

DESIGN CRITERIA
1. WIND – RISK CATEGORY=II, BASIC WIND SPEED (V)=100 MPH, WIND DIRECTIONALITY FACTOR=0.85, EXPOSURE CATEGORY=C, TOPOGRAPHIC FACTOR Kzt=1.00, GUST EFFECT FACTOR=0.85, ENCLOSURE CLASSIFICATION=ENCLOSED, INTERNAL PRESSURE COEFFICIENT (GCPI)=± 0.18
2. SEISMIC –RISK CATEGORY=II, SEISMIC IMPORTANCE FACTOR (Ie)=1.00, SITE CLASS=C, Ss=1.414, S1=0.542, Sds=1.131, Sd1=0.521, SEISMIC DESIGN CATEGORY=D, BASIC SEISMIC–FORCE–RESISTING SYSTEM=A.15 PER ASCE 7–10 TABLE 12.2–1, SEISMIC RESPONSE COEFFICIENT (Cs)=0.174 (ORTHOGONAL 1) & 0.174 (ORTHOGONAL 2), RESPONSE MODIFICATION FACTOR (R)=6.5 (ORTHOGONAL 1) & 6.5 (ORTHOGONAL 2), DESIGN PROCEDURE USED=EQUIVALENT LATERAL FORCE PROCEDURE
3. ROOF – DEAD: 15 PSF, LIVE: 20 PSF, SNOW: 25 PSF (Ps)
4. FLOOR – DEAD: 12 PSF & SLAB–ON–GRADE, LIVE: 40 PSF, LIVE (DECK): 60 PSF
5. SOILS – REFERENCE GEOSPECTRUM CONSULTANTS, INC. REPORT DATED 1/8/19.

VERTICAL BEARING PRESSURE (CAPACITY):	2000 PSF
LATERAL BEARING PRESSURE (CAPACITY):	150–250 PSF/FT OF DEPTH
COEFFICIENT OF FRICTION (CAPACITY):	0.4 (MULTIPLIED BY DEAD LOAD)
ACTIVE DESIGN LATERAL LOAD:	40 PSF/FT OF DEPTH
AT–REST DESIGN LATERAL LOAD:	60 PSF/FT OF DEPTH
SEISMIC LOADING:	28 PSF x "h" AT TOP OF INVERTED TRIANGULAR

STRUCTURAL OBSERVATION
1. STRUCTURAL OBSERVATION IS REQUIRED ONLY WHEN SPECIFICALLY DESIGNATED AS BEING REQUIRED BY THE REGISTERED DESIGN PROFESSIONAL OR THE BUILDING OFFICIAL.

SOIL CONSTRUCTION
1. REFERENCE GEOTECHNICAL REPORT DATED 1/8/19.
2. EXTEND ALL FOOTINGS TO UNDISTURBED VERY DENSE/HARD NATURAL SOILS. FOOTINGS SHALL BE 18" (MIN.) BELOW ADJACENT FINISH GRADE. FOOTINGS MUST BE DEEPENED AS REQUIRED TO FOUND BELOW A 1:1(H:V) PROJECTION FROM LOWER ADJACENT FOUNDATIONS AND THE TOE OF ADJACENT EXCAVATION SLOPES. FOUNDATION EXCAVATIONS SHALL BE OBSERVED AND APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACING REINFORCING STEEL AND CONCRETE.
3. CONCRETE SLABS–ON–GRADE SHALL BE SUPPORTED ON A SUBGRADE CONSISTING OF PROPERLY COMPACTED STRUCTURAL FILL OVER DENSE NATURAL SOILS. AS A MINIMUM, SUBGRADE PREPARATION FOR SLABS–ON–GRADE FLOOR SHALL INCLUDE EXCAVATION OF ALL EXISTING FILL, ORGANIC AND LOOSE SOILS TO EXPOSE DENSE NATURAL SOILS OR TO A DEPTH OF AT LEAST 2 FEET BELOW FINAL SUBGRADE, WHICHEVER IS LESS, AND REPLACEMENT WITH STRUCTURAL FILL TO THE FINAL SLAB SUBGRADE. GENERAL STRUCTURAL FILL SHALL BE COMPACTED TO AT LEAST 90 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE ASTM D1557 TEST METHOD UNLESS OTHERWISE SPECIFIED. INTERIOR CONCRETE SLABS SHALL BE UNDERLAIN BY A POLYETHYLENE VAPOR BARRIER OF AT LEAST 6 MIL THICKNESS.

PIPE PILES
1. PIPE SHALL CONFORM TO ASTM A53 GRADE B. UNLESS NOTED OTHERWISE, PIPE AND COUPLERS SHALL BE GALVANIZED.
2. PIPE SHALL BE DRIVEN TO REFUSAL AND TESTED (AS REQUIRED) PER GEOTECHNICAL ENGINEER'S REQUIREMENTS.

REINFORCED CONCRETE
1. f'c=3000 PSI(*) AT 28 DAYS. MIN 5–½ SACKS OF CEMENT PER CUBIC YARD OF CONCRETE AND MAXIMUM OF 6–3/4 GALLONS OF WATER PER 94 LB. SACK OF CEMENT. (*) SPECIAL INSPECTION IS NOT REQUIRED – 3000 PSI COMPRESSIVE STRENGTH IS SPECIFIED FOR WEATHERING PROTECTION ONLY – STRUCTURAL DESIGN IS BASED ON f'c=2500 PSI.
2. MAXIMUM AGGREGATE SIZE IS 7/8". MAXIMUM SLUMP= 4 INCHES.
3. ALL CONCRETE SHALL BE AIR ENTRAINED – 5% MINIMUM/7% MAXIMUM (PERCENT BY VOLUME OF CONCRETE).
4. MIXING AND PLACEMENT OF ALL CONCRETE SHALL BE IN ACCORDANCE WITH THE IBC AND ACI 318. PROPORTIONS OF AGGREGATE TO CEMENT SHALL BE SUCH AS TO PRODUCE A DENSE, WORKABLE MIX WHICH CAN BE PLACED WITHOUT SEGREGATION OR EXCESS FREE SURFACE WATER. PROVIDE 3/4 INCH CHAMFER ON ALL EXPOSED CONCRETE EDGES UNLESS OTHERWISE INDICATED ON ARCHITECTURAL DRAWINGS.
5. NO SPECIAL INSPECTION IS REQUIRED.
6. VIBRATE ALL CONCRETE WALLS. SEGREGATION OF MATERIALS SHALL BE PREVENTED.

REINFORCING STEEL
1. CONCRETE REINFORCEMENT SHALL BE DETAILED, FABRICATED AND PLACED IN ACCORDANCE WITH ACI 318.
2. REINFORCING STEEL SHALL BE GRADE 40 MINIMUM AND DEFORMED BILLET STEEL CONFORMING TO ASTM A615.
3. WELDED WIRE MESH SHALL CONFORM TO ASTM A185.
4. REINFORCING STEEL SHALL BE ACCURATELY PLACED AND ADEQUATELY SECURED IN POSITION. THE FOLLOWING PROTECTION FOR REINFORCEMENT SHALL BE PROVIDED:

	MIN COVER
CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH–	3"
EXPOSED TO EARTH OR WEATHER–	1.5" FOR #5 BAR AND SMALLER 2" FOR #6 BAR AND LARGER
SLABS AND WALLS AT INTERIOR FACE–	1.5"

5. LAP CONTINUOUS REINFORCING BARS 32 BAR DIAMETERS (1'–6" MIN) IN CONCRETE. CORNER BARS CONSISTING OF 32 BAR DIAMETER (1'–6" MIN) BEND SHALL BE PROVIDED FOR ALL HORIZONTAL REINFORCEMENT. LAP WELDED WIRE MESH EDGES 1.5 MESH MINIMUM. THIS CRITERIA APPLIES UNLESS NOTED OTHERWISE.

RETAINING WALLS
1. CONCRETE FLOOR SLABS TO BE POURED AND CURED AND FLOOR FRAMING ABOVE SHALL BE COMPLETE BEFORE BACKFILLING BEHIND RETAINING WALLS.

TIMBER
1. UNLESS NOTED OTHERWISE, ALL SAWN LUMBER SHALL BE KILN DRIED AND GRADED/MARKED IN CONFORMANCE WITH WCLIB STANDARD GRADING FOR WEST COAST LUMBER. LUMBER SHALL MEET THE FOLLOWING MINIMUM CRITERIA:
   4x AND LARGER– DF #2 (Fb=875 PSI)
   3x AND SMALLER– HF #2 (Fb=850 PSI) OR SPF #2 (Fb=875 PSI)
2. WALL STUDS SHALL BE:
   BEARING WALLS WITH 10'–0" MAXIMUM STUD LENGTH
   2x4 HF STUD GRADE OR BTR AT 24" (MAX) OC – CARRYING ONLY ROOF AND CEILING
   2x4 HF STUD GRADE OR BTR AT 16" (MAX) OC – CARRYING ONLY ONE FLOOR, ROOF AND CEILING
   2x6 HF STUD GRADE OR BTR AT 24" (MAX) OC – CARRYING ONLY ONE FLOOR, ROOF AND CEILING
   2x6 HF STUD GRADE OR BTR AT 16" (MAX) OC – CARRYING ONLY TWO FLOORS, ROOF AND CEILING
   NON–BEARING WALLS WITH MAXIMUM STUD LENGTH NOTED
   2x4 HF STUD GRADE OR BTR AT 24" (MAX) OC – 10'–0" MAXIMUM STUD LENGTH
   2x6 HF STUD GRADE OR BTR AT 24" (MAX) OC – 15'–0" MAXIMUM STUD LENGTH
3. PROVIDE 4x6 DF2 HEADER OVER OPENINGS NOT NOTED OTHERWISE. PROVIDE (1)2x TRIMMER AND (1)2x KING HEADER SUPPORT FOR CLEAR SPANS 5'–0" OR LESS. PROVIDE (2)2x TRIMMER AND (1)2x KING HEADER SUPPORT FOR CLEAR SPANS EXCEEDING 5'–0".
4. PROVIDE SOLID BLOCKING IN FLOOR SPACE UNDER ALL POSTS AND WALL MEMBERS CONNECTED TO HOLDOWNS. ORIENT BLOCKING SUCH THAT WOOD GRAIN IN BLOCKING IS ORIENTED VERTICALLY.
5. PROVIDE DOUBLE FLOOR JOISTS UNDER ALL PARTITION WALLS PARALLEL TO FLOOR JOISTS AND ALONG THE PERIMETER OF ALL DIAPHRAGM OPENINGS.
6. PROVIDE DOUBLE BLOCKING BETWEEN FLOOR JOISTS UNDER ALL PARTITION WALLS PERPENDICULAR TO FLOOR JOISTS.

WOOD CONNECTORS, FASTENERS AND PRESSURE TREATED WOOD
1. ALL WOOD CONNECTORS SHALL BE SIMPSON OR APPROVED EQUAL.
2. ALL NAILS SHALL BE COMMON WIRE NAILS UNLESS NOTED OTHERWISE.
3. ALL NAILING SHALL MEET THE MINIMUM NAILING REQUIREMENTS OF TABLE 2304.10.1 OF THE INTERNATIONAL BUILDING CODE.
4. ALL WOOD IN CONTACT WITH GROUND OR CONCRETE TO BE PRESSURE–TREATED WITH A WOOD PRESERVATIVE.
5. WOOD USED ABOVE GROUND SHALL BE PRESSURE TREATED IN ACCORDANCE WITH AWPA U1 FOR THE FOLLOWING CONDITIONS:
   a) JOISTS, GIRDERS, AND SUBFLOORS THAT ARE CLOSER THAN 18" TO EXPOSED GROUND IN CRAWL SPACES OR UNEXCAVATED AREAS LOCATED WITHIN THE PERIMETER OF THE BUILDING FOUNDATION.
   b) WOOD FRAMING INCLUDING SHEATHING THAT REST ON EXTERIOR FOUNDATION WALLS AND ARE LESS THAN 8 INCHES FROM EXPOSED EARTH.
   c) SLEEPERS, SILLS, LEDGERS, POSTS AND COLUMNS IN DIRECT CONTACT WITH CONCRETE OR MASONRY.
6. ALL FIELD–CUT ENDS, NOTCHES, AND DRILLED HOLES OF PRESERVATIVE–TREATED WOOD SHALL BE TREATED, FOR USE CATEGORY UC4A PER AWPA U1–07, IN THE FIELD USING A 9.08% COPPER NAPHTHENATE (CUN) SOLUTION SUCH AS "END CUT SOLUTION" (CUNAPSOL–1) IN ACCORDANCE WITH THE DIRECTIONS OF THE PRODUCT MANUFACTURER.
7. ALL WOOD CONNECTORS AND ASSOCIATED STEEL FASTENERS (EXCEPT ANCHOR BOLTS AND HOLDOWN ANCHORS, 1/2" DIAMETER AND LARGER) IN CONTACT WITH ANY PRESERVATIVE–TREATED WOOD SHALL CONFORM TO ONE OF THE FOLLOWING CORROSION PROTECTION CONFIGURATION OPTIONS:
   a) ALL WOOD CONNECTORS AND ASSOCIATED STEEL FASTENERS SHALL BE TYPE 303, 304, 306 OR 316 STAINLESS STEEL WHEN ACTUAL WOOD PRESERVATIVE RETENTION LEVELS EXCEED THE FOLLOWING LEVELS:

TREATMENT	RETENTION LEVEL (PCF)
ACQ (ALKALINE COPPER QUAT)	GREATER THAN 0.40
MCQ (MICRONIZED COPPER QUAT)	GREATER THAN 0.34
CA–B (COPPER AZOLE)	GREATER THAN 0.21
CA–C & MCA (COPPER AZOLE & AZOLE BIOCIDE)	GREATER THAN 0.15
µCA–C (AZOLE BIOCIDE)	GREATER THAN 0.14

   b) WHEN ACTUAL WOOD PRESERVATIVE RETENTION LEVELS DO NOT EXCEED THE LEVELS IN 7.a) ABOVE, ALL WOOD CONNECTORS AND FASTENERS SHALL, AT A MINIMUM, BE HOT–DIPPED GALVANIZED BY ONE OF THE FOLLOWING METHODS:
   i) CONTINUOUS HOT–DIPPED GALVANIZING PER ASTM A653, TYPE G185.
   ii) BATCH OR POST HOT–DIPPED GALVANIZING PER ASTM 123 FOR INDIVIDUAL CONNECTORS AND AS PER ASTM A153 FOR FASTENERS. FASTENERS, OTHER THAN NAILS, TIMBER RIVETS, WOOD SCREWS AND LAG SCREWS, MAY BE HOT–DIPPED GALVANIZED AS PER ASTM B695, CLASS 55 MINIMUM.
   c) PLAIN CARBON STEEL FASTENERS IN SBX/DOT AND ZINC BORATE PRESERVATIVE TREATED WOOD IN AN INTERIOR, DRY ENVIRONMENT SHALL BE PERMITTED.
8. DO NOT MIX STAINLESS STEEL AND HOT–DIPPED GALVANIZED WOOD CONNECTORS AND FASTENERS.
9. ALL ANCHOR BOLTS SHALL BE AS SPECIFIED IN THE GENERAL NOTES ON THE SHEARWALL SCHEDULE.
10. WHERE A CONNECTOR STRAP CONNECTS TWO WOOD MEMBERS, INSTALL ONE HALF OF THE TOTAL REQUIRED NAILS OR BOLTS IN EACH MEMBER.
11. ALL BOLTS IN WOOD MEMBERS SHALL CONFORM TO ASTM A307.
12. PROVIDE STANDARD CUT WASHERS UNDER THE HEAD OF ALL BOLTS AND LAG SCREWS BEARING ON WOOD.

ANCHORAGE
1. ALL ANCHOR BOLTS AND HOLDOWN BOLTS EMBEDDED IN CONCRETE OR MASONRY SHALL BE A307 UNLESS NOTED OTHERWISE. EXPANSION BOLTS INTO CONCRETE NOT OTHERWISE SPECIFIED SHALL BE SIMPSON STRONG–BOLT 2 WEDGE ANCHOR. INSTALL IN ACCORDANCE WITH ICC ESR–1771, INCLUDING MINIMUM EMBEDMENT DEPTH REQUIREMENTS.

NAILS
1. NAILING OF WOOD FRAMED MEMBERS TO BE IN ACCORDANCE WITH IBC 2015 TABLE 2304.10.1 UNLESS OTHERWISE NOTED. CONNECTION DESIGNS ARE BASED ON NAILS WITH THE FOLLOWING PROPERTIES:

PENNY WEIGHT	DIAMETER (INCHES)	LENGTH (INCHES)
8d SINKER	0.113	2–3/8
8d COMMON	0.131	2–1/2
10d BOX	0.131	3
16d SINKER	0.148	3–1/4
16d COMMON	0.162	3–1/2

SHEARWALLS
1. ALL SHEARWALL PLYWOOD NAILING AND ANCHORS SHALL BE AS DETAILED ON THE DRAWINGS AND NOTED IN THE SHEARWALL SCHEDULE. ALL EXTERIOR WALLS SHALL BE SHEATHED WITH 7/16" APA RATED SHEATHING (24/16) – BLOCKED – WITH MINIMUM NAILING 0.131" DIAMETER x 2.5" NAILS @ 6" OC EDGES/12" OC FIELD UNLESS NOTED OTHERWISE.
2. ALL HEADER/BEAM SHALL HAVE STRAP CONNECTORS TO THE TOP PLATE EACH END WHEN THE HEADER INTERRUPTS THE CONTINUOUS (2)2x TOP PLATE. USE (1) SIMPSON MSTA24 CONNECTOR EACH END UNLESS NOTED OTHERWISE.
3. ALL SHEARWALL HOLDOWNS SHALL BE AS NOTED ON THE PLANS AND SHALL BE SIMPSON OR APPROVED EQUAL.
4. ALL HOLDOWN ANCHORS SHALL BE INSTALLED AS SHOWN ON PLANS AND AS PER MANUFACTURER'S REQUIREMENTS. HOLDOWN ANCHORS MAY BE WET–SET OR DRILLED AND EPOXIED (SIMPSON "SET" EPOXY OR APPROVED EQUAL) WITH PRIOR APPROVAL FROM THE ENGINEER OF RECORD. PROVIDE THE FULL EMBEDMENT INTO CONCRETE AS STATED ON THE PLANS.

FLOOR AND ROOF DIAPHRAGMS
1. APPLY 23/32" APA RATED STURD–I–FLOOR(24" OC) NAILED TO FLOOR FRAMING MEMBERS WITH 0.131" DIAMETER x 2.5" NAILS AT 6" OC AT ALL SUPPORTED EDGES AND AT 12" OC AT INTERIOR SUPPORTS UNLESS NOTED OTHERWISE ON THE PLANS. OFFSET PANEL JOINTS BETWEEN PARALLEL ADJACENT RUNS OF SHEATHING.
2. APPLY 7/16" APA RATED SHEATHING(24/16) NAILED TO ROOF FRAMING MEMBERS WITH 0.113" DIAMETER x 2.375" NAILS AT 6" OC AT SUPPORTED EDGES AND AT 12" OC AT INTERIOR SUPPORTS UNLESS NOTED OTHERWISE ON THE PLANS. OFFSET PANEL JOINTS BETWEEN PARALLEL ADJACENT RUNS OF SHEATHING.
3. BLOCKING OF INTERIOR EDGES IS NOT REQUIRED UNLESS NOTED OTHERWISE ON THE PLANS.

BUILT–UP WOOD COLUMNS
1. ALL COLUMNS NOT SPECIFIED OR OTHERWISE NOTED ON THE PLANS SHALL BE (2)2x STUDS GANG FASTENED PER STANDARD DETAIL.
2. ALL COLUMNS NOT SPECIFIED OR OTHERWISE NOTED ON THE PLANS SUPPORTING GIRDER TRUSSES OR BEAMS SHALL BE (3)2x STUDS GANG FASTENED PER STANDARD DETAIL.

MANUFACTURED WOOD TRUSSES
1. TRUSSES SHALL BE DESIGNED, FABRICATED, AND INSTALLED IN ACCORDANCE WITH THE "DESIGN SPECIFICATIONS FOR LIGHT METAL PLATE CONNECTED WOOD TRUSSES" BY THE TRUSS PLATE INSTITUTE.
2. ALL TRUSSES SHALL BE DESIGNED AND STAMPED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF WASHINGTON.
3. ROOF TRUSSES SHALL BE FABRICATED OF DOUGLAS FIR–LARCH OR HEM–FIR.
4. ALL MECHANICAL CONNECTORS SHALL BE IBC APPROVED.
5. SUBMIT DESIGN CALCULATIONS, SHOP DRAWINGS AND INSTALLATION DRAWINGS STAMPED BY A LICENSED ENGINEER OF ALL TRUSSES TO THE OWNER'S REPRESENTATIVE FOR REVIEW AND BUILDING DEPARTMENT APPROVAL.
6. TRUSS MEMBERS AND COMPONENTS SHALL NOT BE CUT, NOTCHED, DRILLED, SPLICED OR OTHERWISE ALTERED IN ANY WAY WITHOUT WRITTEN APPROVAL OF THE REGISTERED DESIGN PROFESSIONAL.
7. WHERE TRUSSES ALIGN WITH SHEARWALLS, A SPECIAL TRUSS SHALL BE PROVIDED THAT HAS BEEN DESIGNED TO TRANSFER THE LOAD BETWEEN THE ROOF SHEATHING AND THE SHEARWALL BELOW. THIS TRUSS SHALL BE DESIGNED TO TRANSFER A MINIMUM OF 100 PLF ALONG THE FULL LENGTH OF THE TRUSS.
8. ALL TEMPORARY AND PERMANENT BRACING REQUIRED FOR THE STABILITY OF THE TRUSS UNDER GRAVITY LOADS AND IN–PLANE WIND OR SEISMIC LOADS SHALL BE DESIGNED BY THE TRUSS ENGINEER. ANY BRACING LOADS TRANSFERRED TO THE MAIN BUILDING SYSTEM SHALL BE IDENTIFIED AND SUBMITTED TO THE ENGINEER OF RECORD FOR REVIEW.

PARALLEL STRAND LUMBER (PSL)
1. PARALLEL STRAND LUMBER SHALL BE MANUFACTURED AS PER NER–292 AND MEET THE REQUIREMENTS OF ASTM D2559 – Fb=2900 PSI, E=2.2E6 PSI FOR BEAMS AND Fb=2400 PSI, E=1.8E6 PSI FOR COLUMNS.

LAMINATED VENEER LUMBER (LVL)
1. LAMINATED VENEER LUMBER SHALL BE DOUG FIR MEETING THE REQUIREMENTS OF ASTM D2559 – Fb=2600 PSI, E=2.0E6 PSI.
2. FOR TOP LOADED MULTIPLE MEMBER BEAMS ONLY, FASTEN WITH TWO ROWS OF 0.148" DIAMETER x 3" NAILS AT 12" OC. USE THREE ROWS OF 0.148" DIAMETER x 3" NAILS FOR BEAMS WITH DEPTHS OF 14" OR MORE.
3. PROVIDE FULL DEPTH BLOCKING FOR LATERAL SUPPORT AT BEARING POINTS.

LAMINATED STRAND LUMBER (LSL)
1. LAMINATED STRAND LUMBER SHALL BE MANUFACTURED AS PER NER–292 AND MEET THE REQUIREMENTS OF ASTM D2559 – Fb=2325 PSI, E=1.55E6 PSI FOR BEAMS AND Fb=1700 PSI, E=1.3E6 PSI FOR BEAMS/COLUMNS AND Fb=1900 PSI, E=1.3E6 PSI FOR PLANKS.

GLUED LAMINATED WOOD MEMBERS (GLB)
1. GLUED LAMINATED WOOD BEAMS SHALL BE DOUGLAS FIR, KILN–DRIED, STRESS GRADE COMBINATION 24F–V4 (Fb=2400 PSI, E=1.8E6 PSI) UNLESS OTHERWISE NOTED ON THE PLANS.
2. FABRICATION SHALL BE IN CONFORMANCE WITH ANSI/AITC A190.1–17 AND ASTM D3737.
3. AITC STAMP AND CERTIFICATION REQUIRED ON EACH AND EVERY MEMBER.

WOOD I–JOISTS
1. JOISTS BY TRUSS JOISTS/MACMILLAN OR APPROVED EQUAL.
2. JOISTS TO BE ERECTED IN ACCORDANCE WITH THE PLANS AND ANY MANUFACTURERS DRAWINGS AND INSTALLATION DRAWINGS.
3. CONSTRUCTION LOADS IN EXCESS OF THE DESIGN LOADS ARE NOT PERMITTED.
4. PROVIDE ERECTION BRACING UNTIL SHEATHING MATERIAL HAS BEEN INSTALLED.
5. SEE MANUFACTURER'S REFERENCES FOR LIMITATIONS ON THE CUTTING OF WEBS AND/OR FLANGES.

STEEL CONSTRUCTION
1. STRUCTURAL STEEL SHALL BE ASTM A992 (WIDE FLANGE SHAPES) OR A53–GRADE B (PIPE) OR A36 (OTHER SHAPES AND PLATE) UNLESS NOTED OTHERWISE.
2. ALL FABRICATION AND ERECTION SHALL COMPLY WITH AISC SPECIFICATIONS AND CODES.
3. ALL WELDING SHALL BE AS SHOWN ON THE DRAWINGS AND IN ACCORDANCE WITH AWS AND AISC STANDARDS. WELDING SHALL BE PERFORMED BY WABO CERTIFIED WELDERS USING E70xx ELECTRODES. ONLY PRE–QUALIFIED WELDS (AS DEFINED BY AWS) SHALL BE USED.

MASONRY
1. CONSTRUCTION SHALL MEET THE REQUIREMENTS OF IBC CHAPTER 21.
2. SPECIAL INSPECTION IS NOT REQUIRED.
3. ALL CONCRETE BLOCK MASONRY SHALL BE LAID UP IN RUNNING BOND AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF f'm = 1500 PSI, USING TYPE "S" MORTAR, f'c = 1800 PSI.
4. ALL CELLS CONTAINING REINFORCING BARS SHALL BE FILLED WITH CONCRETE GROUT WITH AN f'c = 2000 PSI IN MAXIMUM LIFTS OF 4'–0".
5. BOND BEAMS WITH TWO #5 HORIZONTALLY SHALL BE PROVIDED AT ALL FLOOR AND ROOF ELEVATIONS AND AT THE TOP OF THE WALL.
6. PROVIDE A LINTEL BEAM WITH TWO #5 HORIZONTALLY OVER ALL OPENINGS AND EXTEND THESE TWO BARS 2'–0" PAST THE OPENING AT EACH SIDE OR AS FAR AS POSSIBLE AND HOOK.
7. PROVIDE TWO #5 VERTICALLY FOR THE FULL STORY HEIGHT OF THE WALL AT WALL ENDS, INTERSECTIONS, CORNERS AND AT EACH SIDE OF ALL OPENINGS UNLESS OTHERWISE SHOWN.
8. DOWELS TO MASONRY WALLS SHALL BE EMBEDDED A MINIMUM OF 1'–6" OR HOOKED INTO THE SUPPORTING STRUCTURE AND OF THE SAME SIZE AND SPACING AS THE VERTICAL WALL REINFORCING.
9. PROVIDE CORNER BARS TO MATCH THE HORIZONTAL WALLS REINFORCING AT ALL WALL INTERSECTIONS.
10. REINFORCING STEEL SHALL BE SPECIFIED UNDER "REINFORCING STEEL". LAP ALL REINFORCING BARS 40 BAR DIAMETERS WITH A MINIMUM OF 1'–6".
11. MASONRY WALLS SHALL BE REINFORCED AS SHOWN ON THE PLANS AND DETAILS AND IF NOT SHOWN, SHALL HAVE (1)#5 AT 48" OC HORIZONTALLY AND (1) #5 @ 48" OC VERTICALLY.
12. EMBED ANCHOR BOLTS A MINIMUM OF 5".

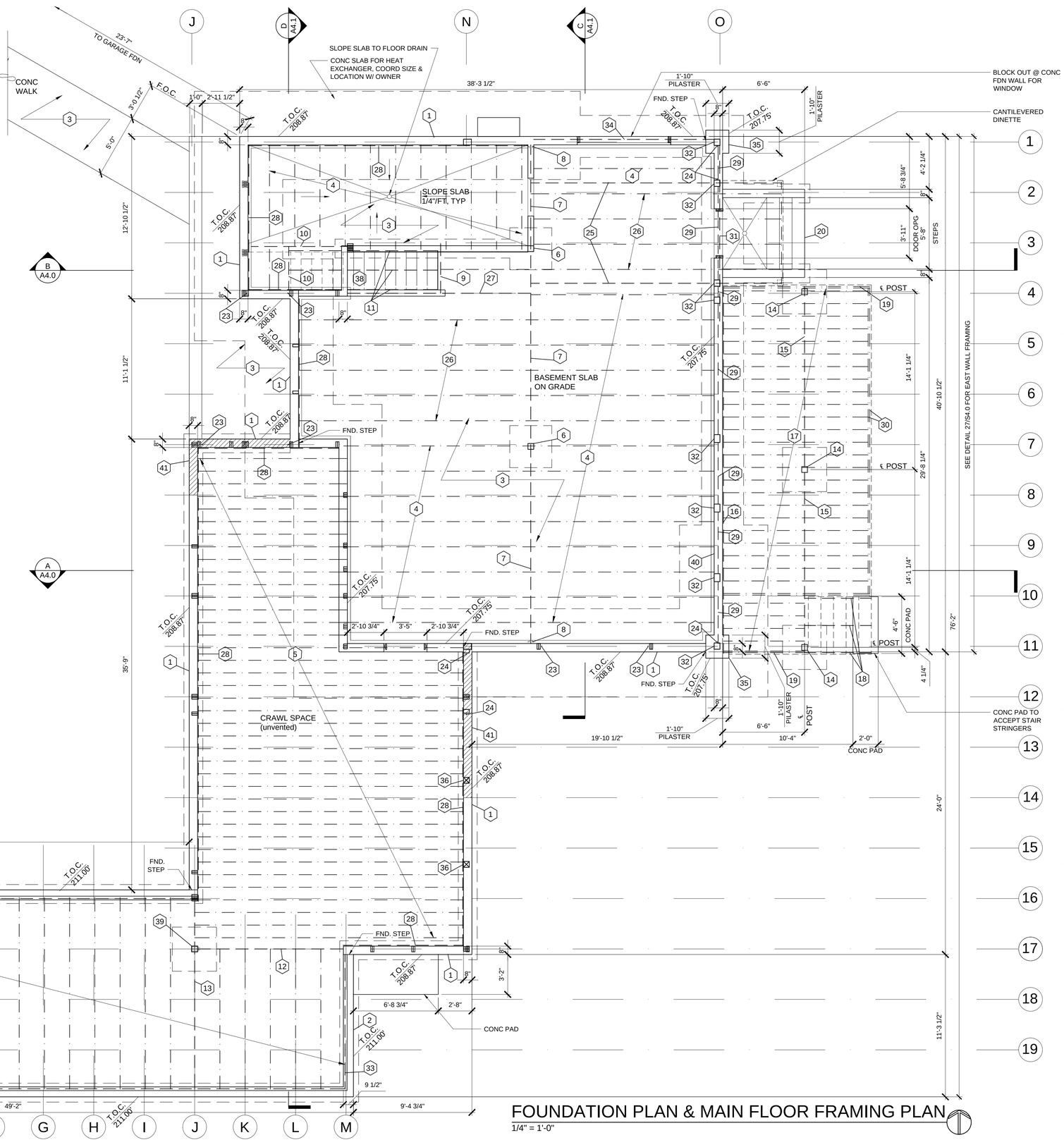
GENERAL CONSTRUCTION
1. ALL MATERIALS, WORKMANSHIP, DESIGN, AND CONSTRUCTION SHALL CONFORM TO THE PROJECT DRAWINGS, SPECIFICATIONS, AND THE INTERNATIONAL BUILDING CODE.
2. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH ARCHITECTURAL DRAWINGS FOR BIDDING AND CONSTRUCTION. CONTRACTOR SHALL VERIFY DIMENSIONS AND CONDITIONS FOR COMPATIBILITY AND SHALL NOTIFY THE ARCHITECT OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
   DISCREPANCIES: THE CONTRACTOR SHALL INFORM THE ENGINEER IN WRITING, DURING THE BIDDING PERIOD, OF ANY AND ALL DISCREPANCIES OR OMISSIONS NOTED ON THE DRAWINGS AND SPECIFICATIONS OR OF ANY VARIATIONS NEEDED IN ORDER TO CONFORM TO CODES, RULES AND REGULATIONS. UPON RECEIPT OF SUCH INFORMATION, THE ENGINEER WILL SEND WRITTEN INSTRUCTIONS TO ALL CONCERNED. ANY SUCH DISCREPANCY, OMISSION, OR VARIATION NOT REPORTED SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
3. THE CONTRACTOR SHALL PROVIDE TEMPORARY BRACING AS REQUIRED UNTIL ALL PERMANENT FRAMING AND CONNECTIONS HAVE BEEN COMPLETED.
4. THE CONTRACTOR SHALL COORDINATE WITH THE BUILDING DEPARTMENT FOR ALL PERMITS AND BUILDING DEPARTMENT REQUIRED INSPECTIONS.
5. DO NOT SCALE DRAWINGS. USE ONLY WRITTEN DIMENSIONS.
6. DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION. WHERE CONDITIONS ARE NOT SPECIFICALLY INDICATED BUT ARE OF SIMILAR CHARACTER TO DETAILS SHOWN, SIMILAR DETAILS OF CONSTRUCTION SHALL BE USED, SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND THE STRUCTURAL ENGINEER.
7. CONTRACTOR INITIATED CHANGES SHALL BE SUBMITTED IN WRITING TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR APPROVAL PRIOR TO FABRICATION OR CONSTRUCTION.
8. ALL STRUCTURAL SYSTEMS WHICH ARE TO BE COMPOSED OF FIELD ERECTED COMPONENTS SHALL BE SUPERVISED BY THE SUPPLIER DURING MANUFACTURING, DELIVERY, HANDLING, STORAGE, AND ERECTION IN ACCORDANCE WITH INSTRUCTIONS PREPARED BY THE SUPPLIER.
9. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SAFETY PRECAUTIONS AND THE METHODS, TECHNIQUES, SEQUENCES, OR PROCEDURES REQUIRED TO PERFORM THE WORK.
10. SHOP DRAWING REVIEW: DIMENSIONS AND QUANTITIES ARE NOT REVIEWED BY THE ENGINEER OF RECORD, THEREFORE, MUST BE REVIEWED BY THE CONTRACTOR. CONTRACTOR SHALL REVIEW AND STAMP ALL SHOP DRAWINGS PRIOR TO SUBMITTING FOR REVIEW BY THE ENGINEER OF RECORD. SUBMISSIONS SHALL INCLUDE A REPRODUCIBLE AND ONE COPY. REPRODUCIBLE WILL BE MARKED AND RETURNED. RE–SUBMITTALS OF PREVIOUSLY SUBMITTED SHOP DRAWINGS SHALL HAVE ALL CHANGES CLOUDED AND DATED WITH A SEQUENTIAL REVISION NUMBER. CONTRACTOR SHALL REVIEW AND STAMP ALL REVISED AND RESUBMITTED SHOP DRAWINGS PRIOR TO SUBMITTAL AND REVIEW BY THE ENGINEER OF RECORD. IN THE EVENT OF CONFLICT BETWEEN THE SHOP DRAWINGS AND DESIGN DRAWINGS/SPECIFICATIONS, THE DESIGN DRAWINGS/SPECIFICATIONS SHALL CONTROL AND BE FOLLOWED.

Shearwall Schedule [(1),(12)]

Mark per plan	Sheathing (ply/OSB)	No. sides sheathed	Fastener size (8d Common)	Edge fastener spacing (14)	Field fastener spacing	Framing member at adjoining panels(2)	Bottom plate when directly on wood (4,5)	Bottom plate nail size	Bottom plate nail spacing in each row	Bottom plate when directly on concrete (4,5)	Anchor bolt dia. (8)	Anchor bolt spacing–(2x sill) (3x sill)	Top plate connector (9,15)	Top plate connector spacing (11,15)	Vseismic (plf, ASD, (12))	Vwind (plf, +40%, ASD, (12))
W6	7/16"	1	0.131" dia.x 2.5"	6"	12"(3)	2x	2x or 3x	0.131" dia.x3"	(1) row 7"	2x or 3x	5/8"	48"(2x) 72"(3x)	A35 or LTP4	30"	242	339
W4	7/16"	1	0.131" dia.x 2.5"	4"	12"(3)	2x	2x or 3x	0.131" dia.x3"	(2) row 10" (6)	2x or 3x	5/8"	47"(2x) 58"(3x)	A35 or LTP4	20"	353	495
W3	7/16"	1	0.131" dia.x 2.5"	3"	12"(3)	3x (5,17)	2x or 3x	0.131" dia.x3"	(2) row 8" (6)	2x or 3x	5/8"	36"(2x) 45"(3x)	A35 or LTP4	16"	456	638
W2	7/16"	1	0.131" dia.x 2.5"	2"	12"(3)	3x (5,17)	2x or 3x	0.131" dia.x3"	(2) rows 6" (6)	2x or 3x	5/8"	28"(2x) 34"(3x)	A35 or LTP4	12"	595	833
2W3	7/16"	2	0.131" dia.x 2.5"	3"	12"(3)	3x(5, 16,17)	2x or 3x	0.131" dia.x3"	(3) rows 6" (6)	2x or 3x	5/8"	18"(2x) 22"(3x)	A35 or LTP4	8"	911	1276
2W2	19/32"	2	0.131" dia.x 2.5"	2"	12"	3x(5, 16,17)	2x or 3x	0.131" dia.x3"	(3) rows 4" (6)	2x or 3x	5/8"	12"(2x) 15"(3x)	A35 or LTP4	5"	1363	1908

GENERAL NOTES: (UNLESS NOTED OTHERWISE)
(1) WALL STUD FRAMING IS ASSUMED TO BE AS PER THE GENERAL STRUCTURAL NOTES.
(2) ALL PANEL EDGES ARE TO BE SUPPORTED BY FRAMING MEMBERS – STUDS, PLATES AND BLOCKING (UNLESS NOTED OTHERWISE IN THE TABLE ABOVE).
(3) ALLOWABLE SHEARS IN THE TABLE ABOVE ASSUME EITHER 1) WALL STUDS AT 16" OC WITH PANEL LONG–AXIS ORIENTED VERTICALLY OR HORIZONTALLY AND FIELD FASTENER SPACING AS PER THE TABLE ABOVE OR 2) WALL STUDS AT 24" OC WITH PANEL LONG–AXIS ORIENTED HORIZONTALLY AND 6" OC FIELD FASTENER SPACING.
(4) WHERE THE FULL THICKNESS OF (2)2x OR 3x MUDSILLS ARE DIRECTLY CONNECTED TO WALL STUDS, USE (2)0.148" DIA.x4" END NAILS (20d BOX) PER STUD.
(5) (2)2x MATERIAL CAN BE USED IN LIEU OF 3x MATERIAL PROVIDED THE (2)2x IS GANG NAILED AS PER THE ASSOCIATED SHEARWALL BOTTOM PLATE NAILING.
(6) WHERE BOTTOM PLATE ATTACHMENT SPECIFIES 2 OR MORE ROWS OF NAILS INTO THE WOOD FLOOR BELOW, PROVIDE RIM JOIST(S), JOIST(S

SEE SHT S2.3 FOR GARAGE FOUNDATION PLAN



FOUNDATION PLAN & MAIN FLOOR FRAMING PLAN

1/4" = 1'-0"

FOUNDATION/MAIN FLOOR FRAMING PLAN NOTES

1. 8" THK FOUNDATION WALL, SEE ARCH. DET.7/A9.0
2. 9 1/2" FOUNDATION WALL, SEE ARCH. DET 6/A9.0
3. BSMT SLAB ON GRADE - 4 INCH THICK W/WWF 6X6-W1.4/W1.4 SLOPE PER PLAN @ MECH ROOM
4. FLOOR JOISTS 11.875" TJI 110 @ 24" OC W/U14 HANGERS-TYP, WHERE APPLICABLE-2" MIN. BEARING LENGTH ELSEWHERE
5. FLOOR JOISTS 11.875" TJI 560 @ 16" OC W/U414 HANGERS-TYP, WHERE APPLICABLE-2" MIN. BEARING LENGTH ELSEWHERE
6. CCQ76SDS2.5 ON 6X6 DF1 POST ON CB66 ON 40"SQ.X12" THK. FTG. W/(5)#4 EACH WAY
7. BSMT BEAM 6.75 X 12 GLB FLUSH FRAME
8. LEG7 TOP FLANGE HGR. W/(4)3/4" DIA. EPOXIED (SET-3G W/6" EMBEDMENT) BOLTS INTO INSIDE FACE OF CONC. & (2)3/4" DIA. BOLTS THRU "7"
9. (1)1.75X11.875 2.0E LVL W/HU11 @ "10" & "27"
10. 3.5X11.875 2.2E PSL (PROVIDE HU412 HANGER AT 10 TO 10 CONNECTION)
11. 2X12 DF1 OPEN STRINGERS W/(1)LSCZ HANGER AT "9" (MID-SPAN SUPPORT ASSUMED)
12. 5.25X11.875 2.2E PSL W/HUCQ612-SDS AT "13" (3.5" MIN. BEARING LENGTH AT SUPPORTS-U.N.O.)
13. 5.25X11.875 2.2E PSL (3.5" MIN. BEARING LENGTH AT SUPPORTS)
14. DECK POSTS & FTGS - HDG EPC6Z/PC6Z ON PT 6X6 POST ON HDG PBS66 ON 3'-6"SQ.X12" THK. FTG. W/(5)#4 EACH WAY
15. DECK BEAM PT 5.5X13.5 GLB
16. PT 2X10 LEDGER W/(3)HORZ. ROWS SDS1/4X8 SCREWS AT 16" OC IN EACH ROW-STAGGER SCREW LOCATIONS.
17. DECK JOISTS PT 2X10 @ 12" O.C. W/HDG LUS210 HANGERS AT LEDGER-TYP
18. DECK STAIR STRINGERS (2)2X12 STAIR STRINGERS
19. DECK DOUBLE RIM JOISTS PT (2)2X10 W/HUC210-2 HANGERS AT LEDGER
20. CONC STAIRS, SEE ARCH. DET. X/XX
21. STHD14RJ
22. HOLDOWN AS PER SHEAR WALL PLAN
23. SB7/8"X24 HOLDOWN ANCHOR
24. SB1"X30 HOLDOWN ANCHOR
25. 5.25X11.875 2.2E PSL W/HU612 HANGER @ "7"
26. FLOOR JOISTS-11.875" TJI 560 @ 24" OC W/U414 HANGERS (WHERE APPLICABLE)
27. 3.5X11.875 2.2E PSL W/HU412 @ "7"
28. PT 3X12 LEDGER W/(3)HORZ. ROWS HDG 1/2" DIA. EPOXIED BOLTS AT 24" OC IN EACH ROW-STAGGER BOLT LOCATIONS. PROVIDE SET-3G EPOXY/5 INCH EMBED.
29. PROVIDE DOUBLE LSL RIM FOR LEDGER CONNECTION
30. PROVIDE PT (2)2X10 RIM WITH INVERTED HDG LUS210 HANGERS - CONNECTS "17" TO "30"
31. POURED CONCRETE HEADER - 4'-0" CLEAR SPAN X 8" WIDE X 13" TALL AS PER DETAIL 3/A9.2
32. PB66 W/(12)0.162"DIA.X3.5" NAILS (NOTE CONNECTOR ORIENTATION AS PER 27/S4.0)
33. PROVIDE PT 2X4 MUDSILL ON LEDGE AT STEM WALL TO BEAR FLOOR JOISTS
34. POURED CONCRETE HEADER - 7'-6" CLEAR SPAN X 8" WIDE X 26" TALL AS PER DETAIL 5/A9.2
35. 22" SQ. FULL-HEIGHT POURED CONC. PILASTER W/(8)#4 VERTICAL
36. 6X6 BLOCK
37. NOT USED
38. 2X STAIR TREADS
39. PC6Z ON PT 6X6 HF POST ON PBS66 ON 42"SQ.X12" THK. FTG. W/(6)#4 EACH WAY
40. 8" THK FOUNDATION WALL, SEE ARCH. DET.8/A9.0
41. FOOTING IN THESE HATCHED AREAS MUST BE STEPPED DOWN AS REQUIRED TO BE BELOW A 1:1 PROJECTION FROM THE ADJACENT BASEMENT EXCAVATION SLOPE TOE.

NOTES:

1) ALL FOOTINGS MUST BE SUPPORTED ON UNDISTURBED VERY DENSE/HARD NATURAL SOILS AND MUST BE STEPPED DOWN AS REQUIRED TO BE ENTIRELY BELOW A 1H:1V PROJECTION FROM ADJACENT LOWER FOOTINGS AND ADJACENT EXCAVATION SLOPE TOE.

2) SUBGRADE PREPARATION FOR SLABS-ON-GRADE AND PAVEMENTS SHALL BE AS RECOMMENDED IN THE **SITE GRADING** RECOMMENDATIONS PRESENTED IN THE **GEOTECHNICAL REPORT DATED 1/8/19.**

3) CONCRETE SLABS-ON-GRADE SHALL BE SUPPORTED ON A SUBGRADE CONSISTING OF GENERAL STRUCTURAL FILL OVER DENSE NATURAL SOILS. AS A MINIMUM SUBGRADE PREPARATION FOR SLABS-ON- GRADE FLOOR SHALL INCLUDE EXCAVATION OF ALL EXISTING FILL, ORGANIC AND LOOSE SOILS TO EXPOSE DENSE NATURAL SOILS OR TO A DEPTH OF 2 FEET BELOW FINAL SUBGRADE WHICHEVER IS LESS AND REPLACEMENT WITH STRUCTURAL FILL TO FINAL SLAB SUBGRADE. GENERAL STRUCTURAL FILL SHALL BE COMPACTED TO AT LEAST 90 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE ASTM D1557 TEST METHOD UNLESS OTHERWISE SPECIFIED. INTERIOR CONCRETE SLABS SHALL BE UNDERLAIN BY A POLYETHYLENE VAPOR BARRIER OF AT LEAST 6 MIL THICKNESS UNLESS.

4) PAVEMENT SECTIONS SHALL BE SUPPORTED ON A SUBGRADE CONSISTING OF AT LEAST 6 INCHES OF CRUSHED GRAVEL OVER GENERAL STRUCTURAL FILL COMPACTED AS SPECIFIED ABOVE. IN DRIVEWAY AREAS A MINIMUM 8-INCH DEPTH OF CRUSHED GRAVEL SHALL BE PROVIDED ABOVE THE GENERAL STRUCTURAL FILL. THE IMPORTED CRUSHED GRAVEL FILL SHALL BE COMPACTED TO AT LEAST 95 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE ASTM D1557 TEST METHOD.

Goforth Gill
ARCHITECTS

PO Box 650 Vashon Island, WA 98070
206.463.5222
info @ goforthgill.com

5294 REGISTERED ARCHITECT
KIMBERLY GOFORTH
STATE OF WASHINGTON

HOETGER RESIDENCE & ACCESSORY DWELLING UNIT

24530 OLD MILL ROAD
VASHON WA 98070

PHASE
PERMIT APPLICATION

DATE
19 - OCT- 2021

DRAWING TITLE
FOUNDATION PLAN & MAIN FLOOR FRAMING PLAN

SHEET
S2.0

UPPER FLOOR/ LOWER ROOF FRAMING PLAN NOTES

1. RAFTERS 3.5 X 10.5 GLB @ 4'-0" O.C. W/CBH2.37X5.5C AT EACH "1" TO "4" & EACH "1" TO "36" CONNECTION
2. 9.5" TJI 110 PURLINS @ 24" O.C W/9.5" TJI BLOCKING OVER BEAM SUPPORTS & IUS1.81/9.5 HGRS.(WHERE APPLICABLE)-TYP
3. FLOOR JOISTS 14" TJI 360 @ 16" O.C.-TYP
4. HOUSE BEAM 8.75X27 24F-V4 DF/DF GLB W/W/2000 FOOT RADIUS POSITIVE CAMBER
5. DECK ROOF BEAM PT 8.75X19.5 24F-V4 DF/DF GLB W/3000 FOOT RADIUS POSITIVE CAMBER (BM IS ROTATED 20 DEG. FROM PLUMB)
6. PT 5.5X7.5 GLB POST (COMB. 5-2.0E-GR. L1) ANGLED (20 DEG.) ROOF POST
7. UPPERMOST WALL HEADER - CONT. 5.5X12 GLB
8. 6X8 DF2 3-SPAN CONT. HEADER
9. 4X8 DF2
10. FAMILY ROOM WINDOW HEADER - 5.5X9 GLB
11. ADD'L 1.75X14" 2.0E LVL BUILT-UP LAM(S) AT RIM - MIN. (24)16d PER LAM
12. 4X12 DF2 (UPPER HEADER)
13. 3.5X13.5 APPEARANCE GRADE GLB OPEN STRINGERS(7-3/8" MIN. WOOD DEPTH) W/(2)LS90 PER STRINGER AT "67"
14. PT 8X12 HF1 BEAM (BM IS ROTATED 20 DEG. FROM PLUMB)
15. PT 6X8 HF1 ANGLED (20 DEG.) BALCONY POST
16. PT 2X8 AT 16" OC W/HDG LUS28 HANGERS - INVERT HANGERS AT "57"
17. REF. ARCH. DETAIL 1/A9.1
18. ECCQ98SDS2.5 (W/STRAPS ROTATED) & 6X8 DF1 POST
19. (2)1.75X14" 2.0E LVL UNDER POST ABOVE
20. (2)1.75X14" 2.0E LVL UNDER POST ABOVE
21. ECCQ96SDS2.5 & 6X8 DF1 POST
22. GLB RAFTER BEARS DIRECTLY ON "7" W/BC46 CONNECTOR OR PAIR LPC6Z CONNECTORS - TYP
23. 5.5X7.5 GLB POST (COMB. 5-2.0E-GR. L1) - FULL HEIGHT - W/EPC6Z OR PC6Z POST CAP
24. 5.5X7.5 GLB POST (COMB. 5-2.0E-GR. L1) - BETWEEN "7" AND "26" BELOW - W/PC6Z POST CAP @ "7" & INVERTED PC6Z @ "26"
25. 5.5X6 GLB POST (COMB. 5-2.0E-GR. L1) - FULL HEIGHT - W/EPC6Z OR PC6Z POST CAP
26. MID-HEIGHT WALL HEADER - 5.5X7.5 GLB W/HUC610 (26-16D) EACH END
27. MID-HEIGHT WALL BEAM - ARCH GRADE 5 1/8 X15 GLB W/ HCJTZ EACH END
28. POSTS ARE CONTINUOUS TO CONNECTOR AT CONCRETE BELOW
29. REF. ARCH. DETAIL 2/A9.1 TYP
30. 3X6 POST
31. 5.5X9 GLB
32. (4)2X6 POST IN WALL
33. 3.5X7.5 GLB
34. GLB RAFTER BEARS DIRECTLY ON TOP PLATE W/PAIR LPC4Z CONNECTORS & (3)2X4 POST/CRIPPLE BELOW - TYP
35. (2)1.5X14 1.3E LSL RIM/BEAM
36. 3.5X9.5 1.3E LSL LEDGER W/(3)HORZ. ROWS SDS1/4X6 SCREWS @ 16" OC IN EACH ROW
37. 5.5X13.5 GLB HEADER - (2)2X6 TRIMMER EACH END
38. 6X10 DF2 HEADER
39. (3)2X4 POST
40. HUC414 OR BA3.56/14 CONNECTS "67" TO RIM "53"
41. 6X6 DF2 POST IN WALL W/BC60 POST BASE & INVERTED BC60 POST CAP
42. CONNECT RAFTER W/ HDG 1/2" Ø x 15" LAG SCREW
43. (2)#10X3" WOOD SCREWS CONNECTS BOTTOM FLANGE OF PURLIN TO TOP OF RAFTER-TYP
44. EXTERIOR WALL STUDS - 2X4 DF2 AT 24" OC - TYP, UNO
45. EXTERIOR WALL STUDS - 2X6 DF2 AT 24" OC - TYP, UNO
46. EXTERIOR WALL STUDS UP TO 12'-6" TALL - 2X6 DF2 AT 24" OC - TYP, UNO
47. EXTERIOR WALL STUDS TALLER THAN 12'-6" TALL UP TO 15'-2" TALL - 2X6 DF1 AT 12" OC - TYP, UNO
48. FULL-HEIGHT CONTINUOUS 6X6 DF1 W/BC60 CONNECTOR TOP AND BOTTOM
49. MID-HEIGHT WALL HEADER - 5.5X7.5 GLB W/HUC610 (26-16D) EACH END
50. MID-HEIGHT WALL HEADER - 5.5X7.5 GLB W/HUC610 (26-16D) EACH END-UPPER/LOWER
51. 6X8 DF2 POST IN WALL - PROVIDE PAIR LTS12 AT BEAM CONNECTION
52. 6X16 (RIPPED TO MATCH FLOOR DEPTH) X5'-0" LONG DF2 RIM - PROVIDE IUS2.37/14 HGRS FOR "3" & U414 HGRS FOR "19"/"20"
53. PROVIDE (2)MSTC66B3 HORZ. STRAPS-CONNECTS "21" TO "52" & "21" TO SW TOP PLATE
54. CONNECT BOTTOM FLANGE OF EA. TJI BLOCK TO RAFTER BELOW W/(6)0.131"DIA.X2.5" NAILS (3 EA. SIDE OF WEB)-TYP
55. PT 4X8 HF2 WITH HDG HUS48 HANGERS - INVERT HANGERS AT "57"
56. (1)HDG MSTI36 HORZ. STRAP CONNECTS "55" TO "20" W/EQUAL STRAP LENGTH/NAILING ON EACH MEMBER
57. PROVIDE PT (2)2X8 FRAMING - 3 SIDES
58. 3.5X12 APPEARANCE-GRADE GLB TREADS (REF. ARCH. DETAIL 3/A9.3)
59. 1.5X9.5 1.3E LSL CONT. LEDGER - PROVIDE ROOF DIAPHRAGM EDGE NAILING AT TOP, (4)0.148"DIA.X3" NAILS AT 24" OC INTO WALL STUDS
60. ROOF DIAPHRAGM EDGE NAILING - 0.113"DIA.X2.375" NAILS AT 6" OC - TYP, UNO
61. BLOCKED ROOF DIAPHRAGM(2X4 INSTALLED FLAT) - 0.113"DIA.X2.375" NAILS @ 6" OC - ALL PANEL EDGES & ALL DIAPH. BOUNDARIES
62. 1.5X9.5 1.3E LSL CONT. RIM - PROVIDE ROOF DIAPHRAGM EDGE NAILING AT TOP & A35 @ 30" OC AT BOTTOM CONNECTION TO "4"
63. PT 2X8 LEDGER W/(3)HORZ. ROWS SDS1/4X6 SCREWS AT 16" OC IN EACH ROW-STAGGER SCREW LOCATIONS.
64. PROVIDE DOUBLE LSL RIM FOR LEDGER CONNECTION
65. CMSTC16X144"L HORZ. STRAP - CONNECTS "19" TO (2)2X BLOCKING IN ADJOINING WALL, SEE DTL 2/A9.3
66. PROVIDE (1) CS16X90" HORZ. STRAP EACH SIDE OF WALL-CONNECTS "27" TO 3X6 BLOCKING IN WALL
67. (2)1.75X14" 2.0E LVL
68. HUC414 CONNECTS "19" TO "13"
69. 4X8 DF2 (LOWER HEADER)
70. DINETTE ROOF RAFTERS 3.5 X 10.5 GLB W/ CJT5Z HANGER @ MEMBER 27

SEE SHT S2.3 FOR GARAGE FRAMING PLAN

SEE DETAIL 27/S4.0 FOR EAST WALL FRAMING

LINE OF BEARING WALL ABOVE

LINE OF BEARING WALL ABOVE

UPPER FLOOR/LOWER ROOF FRAMING PLAN

1/4" = 1'-0"

Goforth Gill
ARCHITECTS

PO Box 650 Vashon Island, WA 98070
206.463.5222
info @ goforthgill.com

5294 REGISTERED ARCHITECT
KIMBERLY GOFORTH
STATE OF WASHINGTON

HOETGER RESIDENCE & ACCESSORY DWELLING UNIT

24530 OLD MILL ROAD
VASHON WA 98070

PHASE
PERMIT APPLICATION

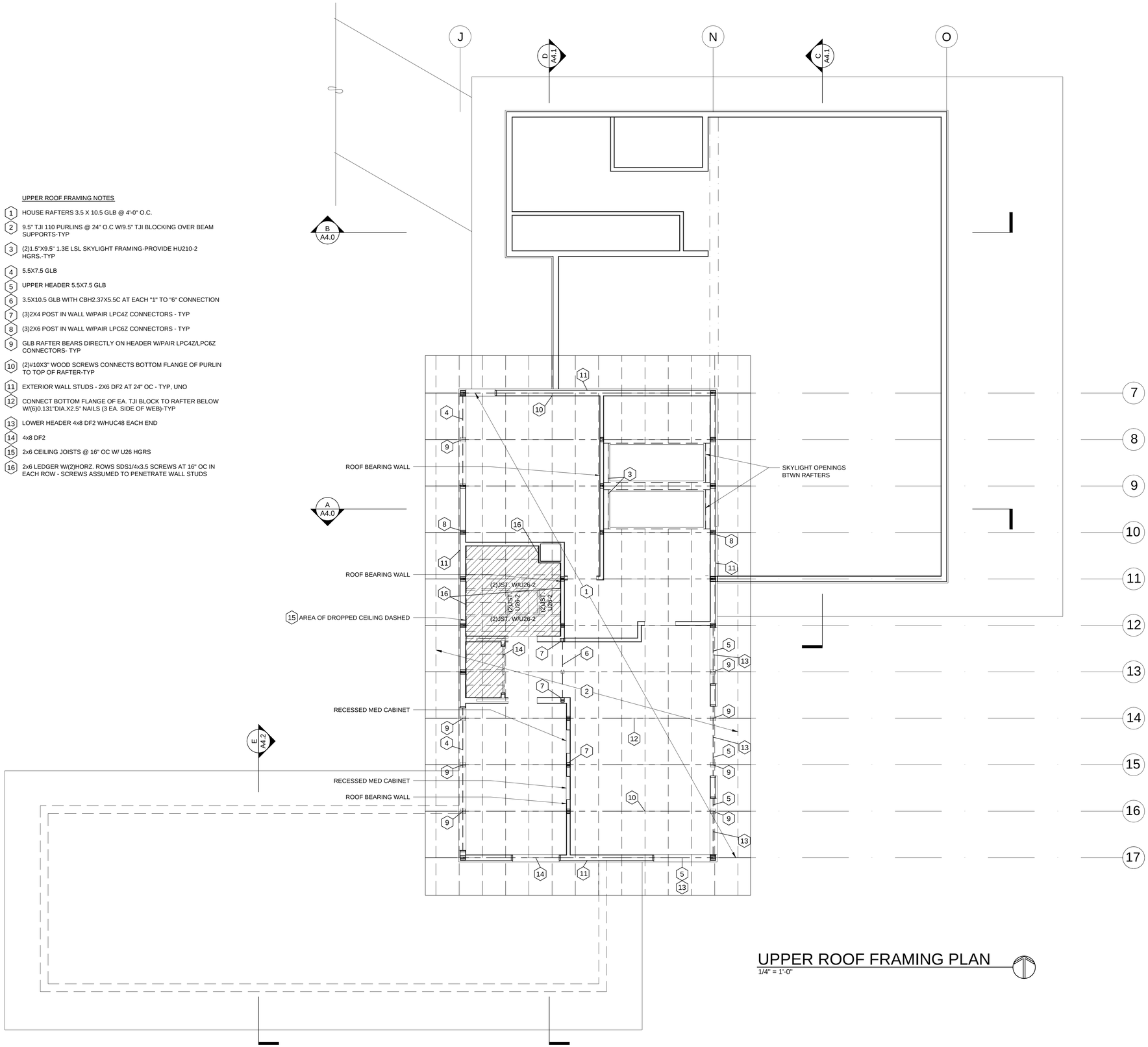
DATE
19 - OCT- 2021

DRAWING TITLE
UPPER FLOOR/LOWER ROOF FRAMING PLAN

SHEET
S2.1

UPPER ROOF FRAMING NOTES

1. HOUSE RAFTERS 3.5 X 10.5 GLB @ 4'-0" O.C.
2. 9.5" TJI 110 PURLINS @ 24" O.C W/9.5" TJI BLOCKING OVER BEAM SUPPORTS-TYP
3. (2)1.5"X9.5" 1.3E LSL SKYLIGHT FRAMING-PROVIDE HU210-2 HGRS.-TYP
4. 5.5X7.5 GLB
5. UPPER HEADER 5.5X7.5 GLB
6. 3.5X10.5 GLB WITH CBH2.37X5.5C AT EACH "1" TO "6" CONNECTION
7. (3)2X4 POST IN WALL W/PAIR LPC4Z CONNECTORS - TYP
8. (3)2X6 POST IN WALL W/PAIR LPC6Z CONNECTORS - TYP
9. GLB RAFTER BEARS DIRECTLY ON HEADER W/PAIR LPC4Z/LPC6Z CONNECTORS- TYP
10. (2)#10X3" WOOD SCREWS CONNECTS BOTTOM FLANGE OF PURLIN TO TOP OF RAFTER-TYP
11. EXTERIOR WALL STUDS - 2X6 DF2 AT 24" OC - TYP, UNO
12. CONNECT BOTTOM FLANGE OF EA. TJI BLOCK TO RAFTER BELOW W/(6)0.131"DIA.X2.5" NAILS (3 EA. SIDE OF WEB)-TYP
13. LOWER HEADER 4x8 DF2 W/HUC48 EACH END
14. 4x8 DF2
15. 2x6 CEILING JOISTS @ 16" OC W/ U26 HGRS
16. 2x6 LEDGER W/(2)HORZ. ROWS SDS1/4x3.5 SCREWS AT 16" OC IN EACH ROW - SCREWS ASSUMED TO PENETRATE WALL STUDS



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

GoforthGill
ARCHITECTS

PO Box 650 Vashon Island, WA 98070
206.463.5222
info @ goforthgill.com

5294 REGISTERED ARCHITECT
KIMBERLY GOFORTH
STATE OF WASHINGTON

HOETGER RESIDENCE & ACCESSORY DWELLING UNIT

24530 OLD MILL ROAD
VASHON WA 98070

PHASE
PERMIT APPLICATION

DATE
19 - OCT- 2021

DRAWING TITLE
UPPER ROOF FRAMING PLAN

SHEET
S2.2

GARAGE FOUNDATION & FLOOR FRAMING & SHEARWALL NOTES

A 6" THK FOUNDATION WALL, SEE DTL 6/A9.4

B GARAGE SLAB ON GRADE - 4 INCH THICK W/WWF 6x6-W1.4/W1.4
SLOPE PER PLAN

C CONCRETE WALK - 4 INCH THICK W/WWF 6x6-W1.4/W1.4
SLOPE PER PLAN

D SB5/8x24

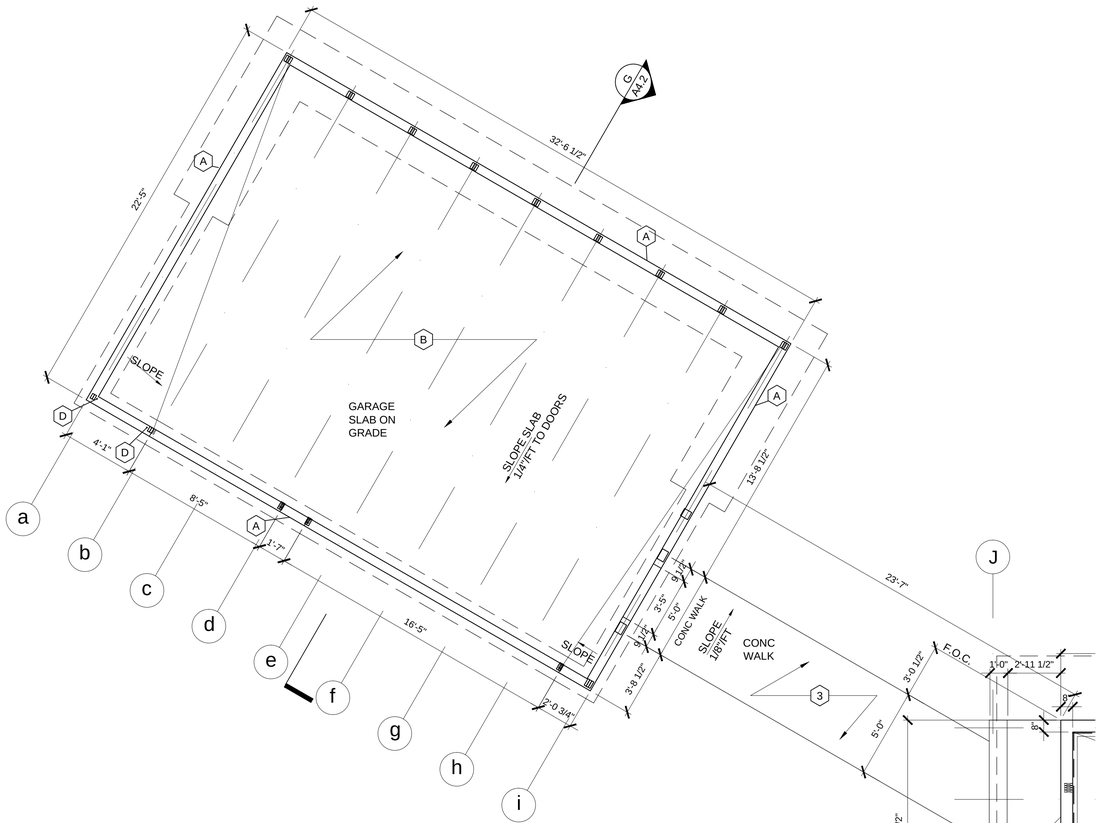
NOTES:

1) ALL FOOTINGS MUST BE SUPPORTED ON UNDISTURBED VERY DENSE/HARD NATURAL SOILS AND MUST BE STEPPED DOWN AS REQUIRED TO BE ENTIRELY BELOW A 1H:1V PROJECTION FROM ADJACENT LOWER FOOTINGS AND ADJACENT EXCAVATION SLOPE TOE.

2) SUBGRADE PREPARATION FOR SLABS-ON-GRADE AND PAVEMENTS SHALL BE AS RECOMMENDED IN THE **SITE GRADING** RECOMMENDATIONS PRESENTED IN THE **GEOTECHNICAL REPORT DATED 1/8/19.**

3) CONCRETE SLABS-ON-GRADE SHALL BE SUPPORTED ON A SUBGRADE CONSISTING OF GENERAL STRUCTURAL FILL OVER DENSE NATURAL SOILS. AS A MINIMUM SUBGRADE PREPARATION FOR SLABS-ON- GRADE FLOOR SHALL INCLUDE EXCAVATION OF ALL EXISTING FILL, ORGANIC AND LOOSE SOILS TO EXPOSE DENSE NATURAL SOILS OR TO A DEPTH OF 2 FEET BELOW FINAL SUBGRADE WHICHEVER IS LESS AND REPLACEMENT WITH STRUCTURAL FILL TO FINAL SLAB SUBGRADE. GENERAL STRUCTURAL FILL SHALL BE COMPACTED TO AT LEAST 90 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE ASTM D1557 TEST METHOD UNLESS OTHERWISE SPECIFIED. INTERIOR CONCRETE SLABS SHALL BE UNDERLAIN BY A POLYETHYLENE VAPOR BARRIER OF AT LEAST 6 MIL THICKNESS UNLESS.

4) PAVEMENT SECTIONS SHALL BE SUPPORTED ON A SUBGRADE CONSISTING OF AT LEAST 6 INCHES OF CRUSHED GRAVEL OVER GENERAL STRUCTURAL FILL COMPACTED AS SPECIFIED ABOVE. IN DRIVEWAY AREAS A MINIMUM 8-INCH DEPTH OF CRUSHED GRAVEL SHALL BE PROVIDED ABOVE THE GENERAL STRUCTURAL FILL. THE IMPORTED CRUSHED GRAVEL FILL SHALL BE COMPACTED TO AT LEAST 95 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE ASTM D1557 TEST METHOD.



GARAGE FOUNDATION PLAN
1/4" = 1'-0"

SEE SHT S2.0 FOR HOUSE FOUNDATION PLAN

GARAGE ROOF FRAMING NOTES

A GARAGE RAFTERS 3.5 X 10.5 GLB @ 4'-0" O.C. W/CBH2.37X5.5C AT EACH "A" TO "K" CONNECTION

B 9.5" TJI 110 PURLINS @ 24" O.C W/9.5" TJI BLOCKING OVER BEAM SUPPORTS-TYP

C COVERED WALK RAFTERS 3.5X7.5 GLB @ 4' -0" O.C.

D COVERED WALK BEAMS 6.75X16.5 24F-V4 DF/DF GLB W/4500 FOOT RADIUS POSITIVE CAMBER

E GARAGE DOOR HEADER 5.5X13.5 GLB W/(2)2X6 TRIMMER EACH END

F (2)#10X3" WOOD SCREWS CONNECTS BOTTOM FLANGE OF PURLIN TO TOP OF RAFTER-TYP

G (3)2X6 POST IN WALL W/PAIR LPC6Z CONNECTORS - TYP

H 6X8 DF2 POST IN WALL - PROVIDE PAIR LPC6Z AT BEAM CONNECTION

I GLB RAFTER BEARS DIRECTLY ON BEAM - CONNECT W/(1)HDG 1/2"DIA.X12" LAG SCREW-TYP

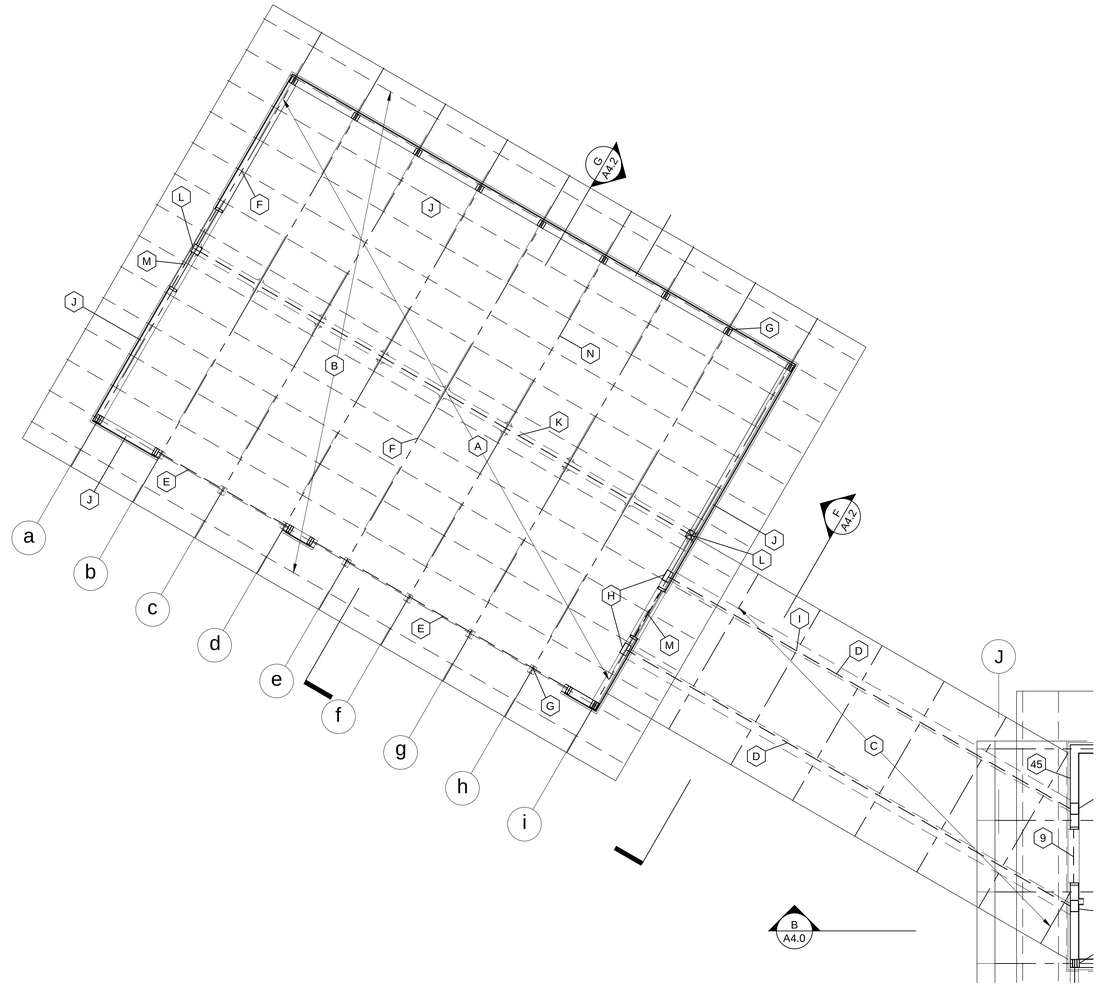
J EXTERIOR WALL STUDS UP TO 12'-6" TALL - 2X6 DF2 AT 24" OC - TYP, UNO

K 5.5X18 GLB W/2000 FOOT RADIUS POSITIVE CAMBER

L EPC6Z & 6X6 DF1 POST/CRIPPLE

M 6X10 DF2

N CONNECT BOTTOM FLANGE OF EA. TJI BLOCK TO RAFTER BELOW W/(6)0.131"DIA.X2.5" NAILS (3 EA. SIDE OF WEB)-TYP



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

SEE SHT S2.1 FOR HOUSE FRAMING PLAN

Goforth Gill
ARCHITECTS

PO Box 650 Vashon Island, WA 98070
206.463.5222
info @ goforthgill.com

5294 REGISTERED ARCHITECT
KIMBERLY GOFORTH
STATE OF WASHINGTON

HOETGER RESIDENCE & ACCESSORY DWELLING UNIT

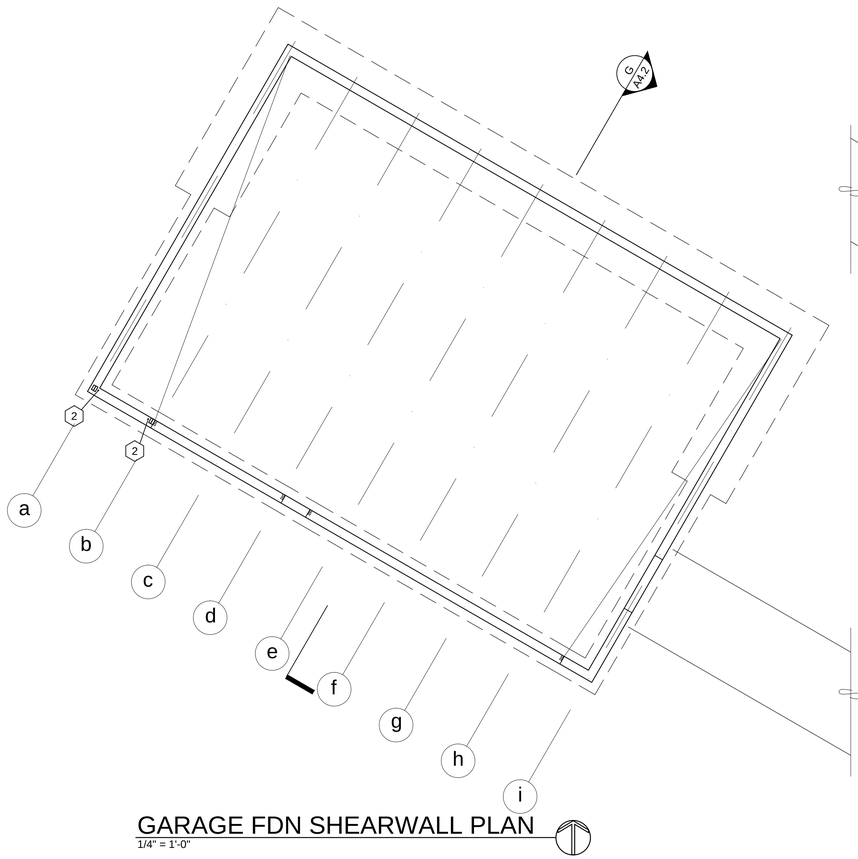
24530 OLD MILL ROAD
VASHON WA 98070

PHASE
PERMIT APPLICATION

DATE
19 - OCT- 2021

DRAWING TITLE
GARAGE FOUNDATION & ROOF FRAMING PLANS

SHEET
S2.3

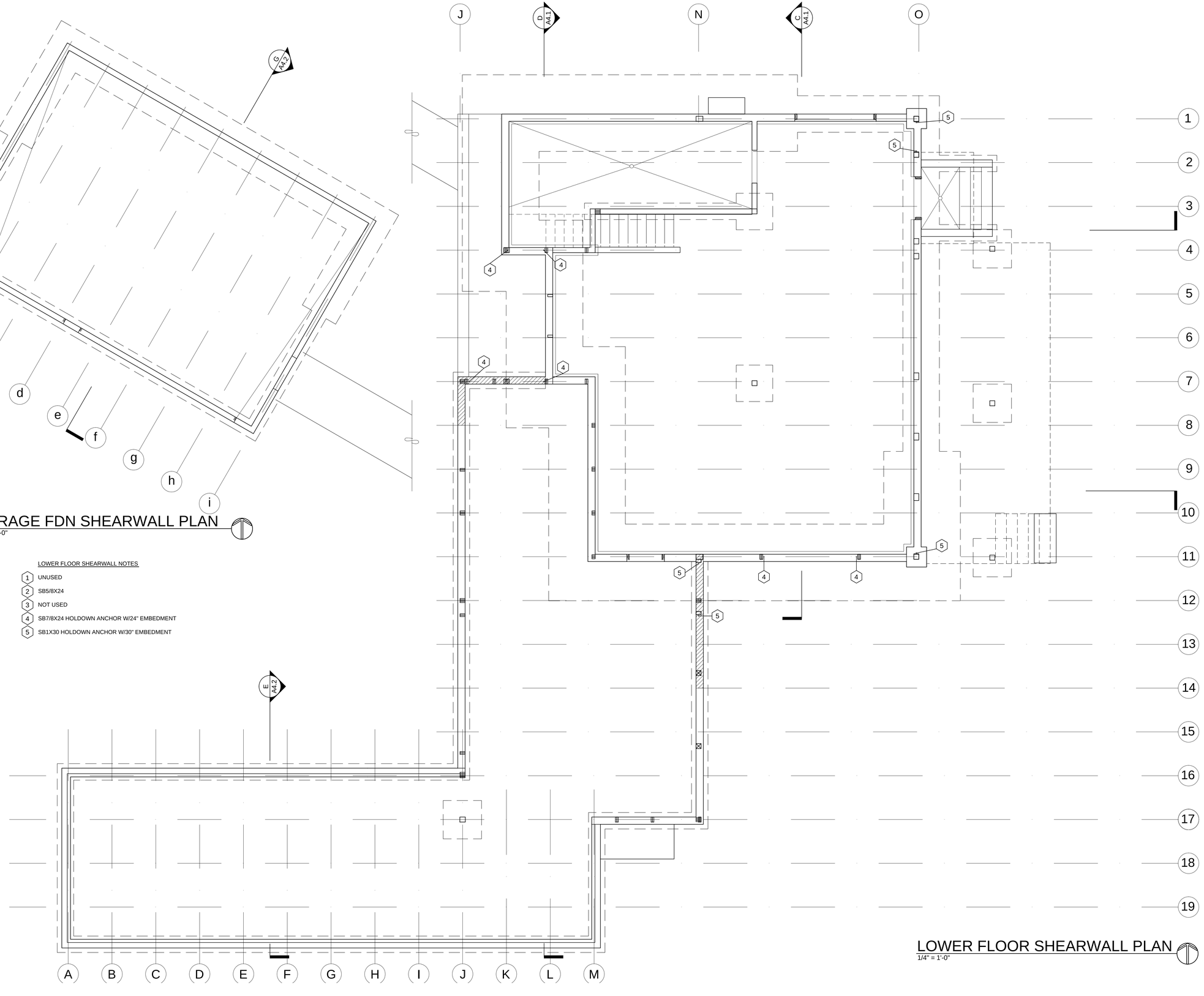


GARAGE FDN SHEARWALL PLAN

1/4" = 1'-0"

LOWER FLOOR SHEARWALL NOTES

1. UNUSED
2. SB5/8X24
3. NOT USED
4. SB7/8X24 HOLDOWN ANCHOR W/24" EMBEDMENT
5. SB1X30 HOLDOWN ANCHOR W/30" EMBEDMENT



LOWER FLOOR SHEARWALL PLAN

1/4" = 1'-0"

GoforthGill
ARCHITECTS

PO Box 650 Vashon Island, WA 98070
206.463.5222
info @ goforthgill.com

5294 REGISTERED ARCHITECT
KIMBERLY GOFORTH
STATE OF WASHINGTON

HOETGER RESIDENCE & ACCESSORY DWELLING UNIT

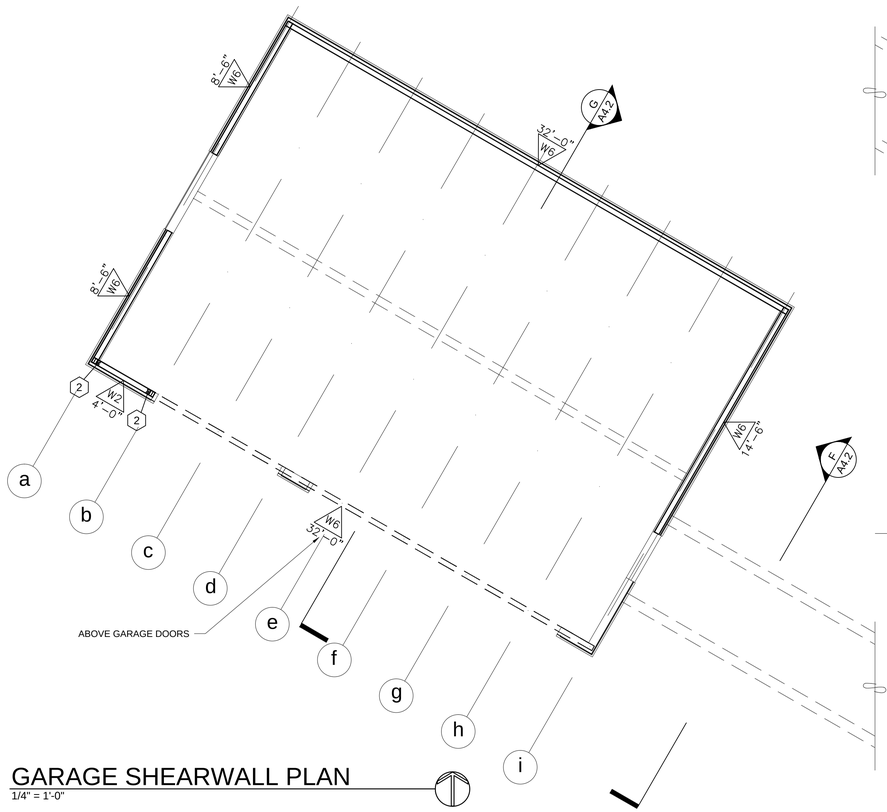
24530 OLD MILL ROAD
VASHON WA 98070

PHASE
PERMIT APPLICATION

DATE
19 - OCT- 2021

DRAWING TITLE
LOWER FLOOR SHEARWALL PLAN

SHEET
S2.4

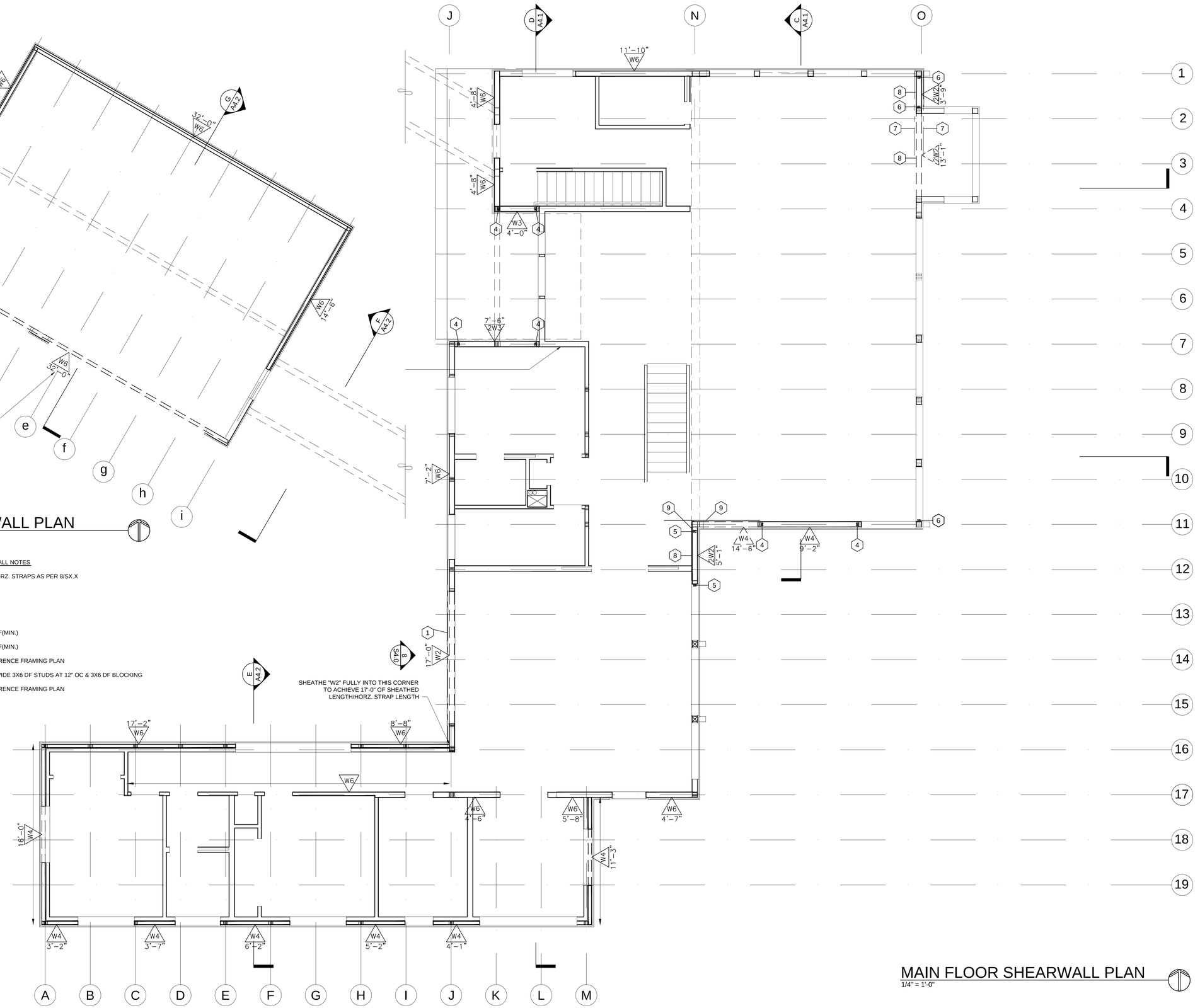


GARAGE SHEARWALL PLAN

1/4" = 1'-0"

MAIN FLOOR SHEARWALL NOTES

1. (2)CS16X204" LONG HORZ. STRAPS AS PER 8/SX.X
2. HTT5-(2)2X
3. NOT USED
4. HDU8-(2)2X6
5. HHDQ11-SDS2.5-4X6 DF(MIN.)
6. HHDQ11-SDS2.5-6X6 DF(MIN.)
7. HORIZ STRAPS - REFERENCE FRAMING PLAN
8. WALL FRAMING - PROVIDE 3X6 DF STUDS AT 12" OC & 3X6 DF BLOCKING
9. HORIZ STRAPS - REFERENCE FRAMING PLAN



MAIN FLOOR SHEARWALL PLAN

1/4" = 1'-0"

Goforth Gill
ARCHITECTS

PO Box 650 Vashon Island, WA 98070
206.463.5222
info @ goforthgill.com

5294 REGISTERED ARCHITECT
KIMBERLY GOFORTH
STATE OF WASHINGTON

HOETGER RESIDENCE & ACCESSORY DWELLING UNIT

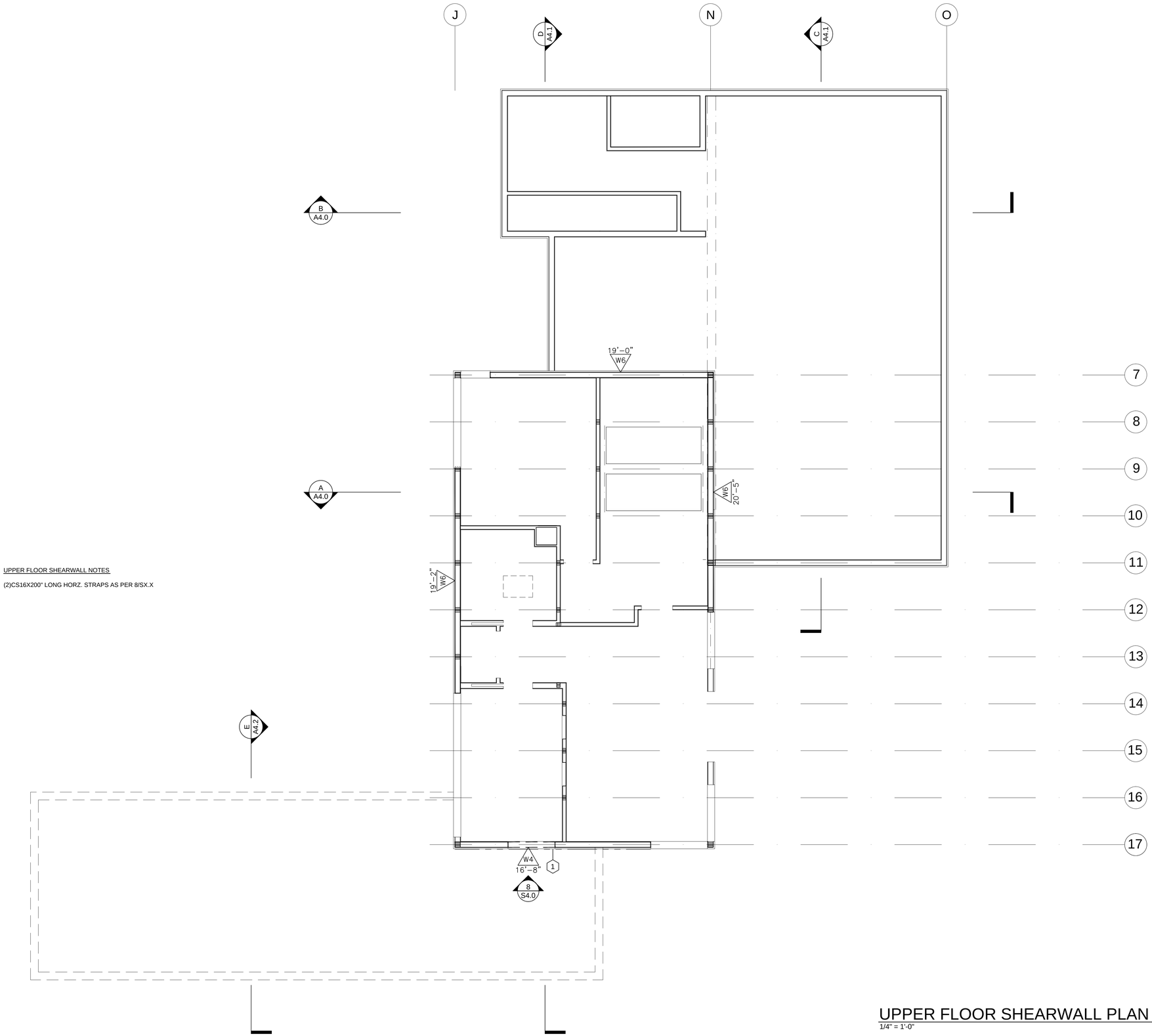
24530 OLD MILL ROAD
VASHON WA 98070

PHASE
PERMIT APPLICATION

DATE
19 - OCT- 2021

DRAWING TITLE
MAIN FLOOR SHEARWALL PLAN

SHEET
S2.5



UPPER FLOOR SHEARWALL NOTES

1 (2)CS16X200" LONG HORZ. STRAPS AS PER 8/SX.X

UPPER FLOOR SHEARWALL PLAN

1/4" = 1'-0"

GoforthGill
ARCHITECTS

PO Box 650 Vashon Island, WA 98070
206.463.5222
info @ goforthgill.com

5294 REGISTERED ARCHITECT
KIMBERLY GOFORTH
STATE OF WASHINGTON

HOETGER RESIDENCE & ACCESSORY DWELLING UNIT

24530 OLD MILL ROAD
VASHON WA 98070

PHASE
PERMIT APPLICATION

DATE
19 - OCT- 2021

DRAWING TITLE
UPPER FLOOR SHEARWALL PLAN

SHEET
S2.6

ADU FOUNDATION/MAIN FLOOR FRAMING NOTES

1. REF. ARCH. DETAIL 6/A9.4
2. SLAB ON GRADE - 4 INCH THICK W/WWF 6x6-W1.4/W1.4
3. SLOPE SLAB 1/8"/FT PER PLAN @ MECH ROOM
4. 4" THK CONC PATIO & STEPS W/ W/WWF 6x6-W1.4/W1.4 - PROVIDE THICKENED SLAB EDGE W/(2)#4 LONG, 12" WIDE x THICKNESS AS REQ, (MIN 12"). SEE DTL 9/A9.4
5. STHD14
6. SB5/8x24
7. 24"SQ.x12" THK. FTG. W/(3)#4 EACH WAY - MONO-POUR WITH STEMWALL
8. CPT66Z POST BASE W/(2)1/2" DIA.X8"L. HDG THREADED ROD (7" EMBED. INTO FTG.)
9. 2X6 WALL W/ 6" STEMWALL & FOOTING PER DETAIL 7/A9.4
10. 2X4 WALL W/ 5" STEMWALL & FOOTING PER DETAIL 8/A9.4
11. 26"SQ.x8" THK. FTG. W/(2)#4 EACH WAY

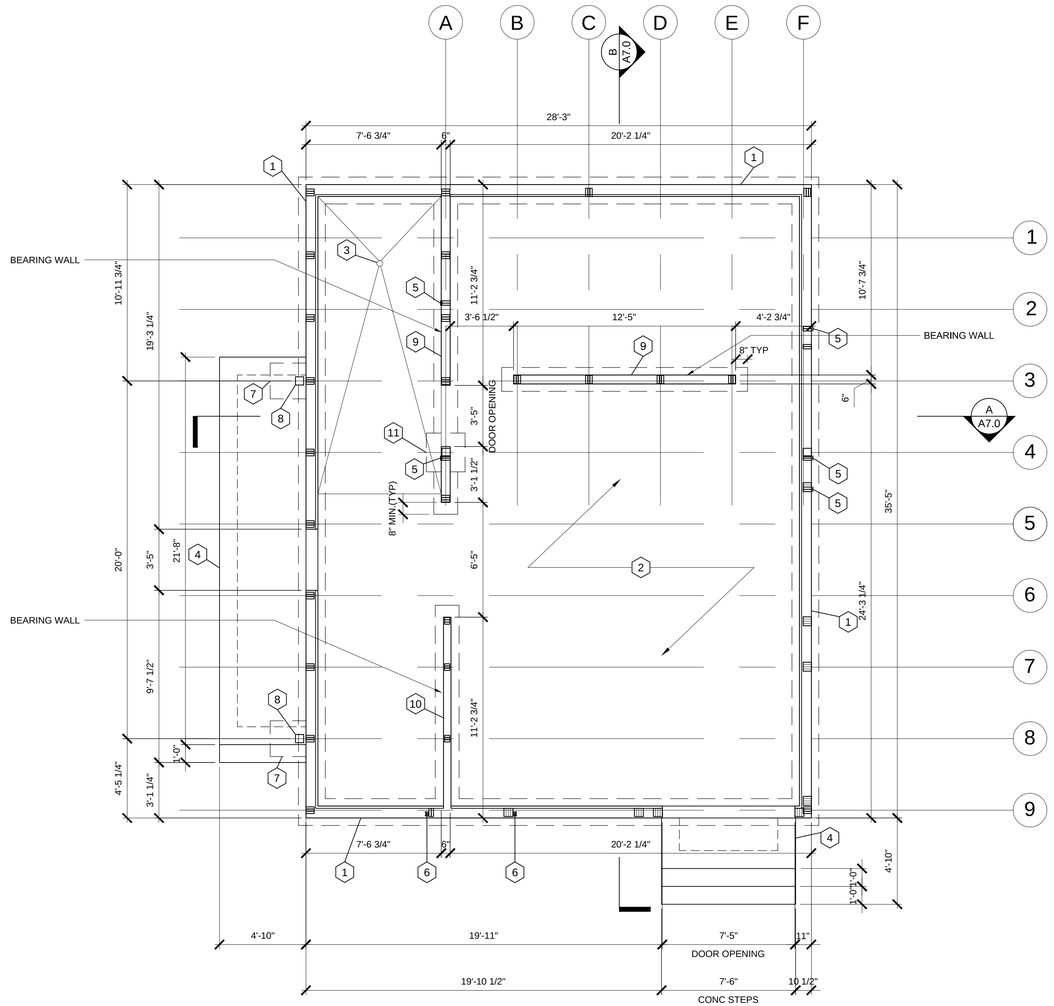
NOTES:

1) ALL FOOTINGS MUST BE SUPPORTED ON UNDISTURBED VERY DENSE/HARD NATURAL SOILS AND MUST BE STEPPED DOWN AS REQUIRED TO BE ENTIRELY BELOW A 1H:1V PROJECTION FROM ADJACENT LOWER FOOTINGS AND ADJACENT EXCAVATION SLOPE TOE.

2) SUBGRADE PREPARATION FOR SLABS-ON-GRADE AND PAVEMENTS SHALL BE AS RECOMMENDED IN THE **SITE GRADING** RECOMMENDATIONS PRESENTED IN THE **GEOTECHNICAL REPORT DATED 1/8/19.**

3) CONCRETE SLABS-ON-GRADE SHALL BE SUPPORTED ON A SUBGRADE CONSISTING OF GENERAL STRUCTURAL FILL OVER DENSE NATURAL SOILS. AS A MINIMUM SUBGRADE PREPARATION FOR SLABS-ON- GRADE FLOOR SHALL INCLUDE EXCAVATION OF ALL EXISTING FILL, ORGANIC AND LOOSE SOILS TO EXPOSE DENSE NATURAL SOILS OR TO A DEPTH OF 2 FEET BELOW FINAL SUBGRADE WHICHEVER IS LESS AND REPLACEMENT WITH STRUCTURAL FILL TO FINAL SLAB SUBGRADE. GENERAL STRUCTURAL FILL SHALL BE COMPACTED TO AT LEAST 90 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE ASTM D1557 TEST METHOD UNLESS OTHERWISE SPECIFIED. INTERIOR CONCRETE SLABS SHALL BE UNDERLAIN BY A POLYETHYLENE VAPOR BARRIER OF AT LEAST 6 MIL THICKNESS UNLESS.

4) PAVEMENT SECTIONS SHALL BE SUPPORTED ON A SUBGRADE CONSISTING OF AT LEAST 6 INCHES OF CRUSHED GRAVEL OVER GENERAL STRUCTURAL FILL COMPACTED AS SPECIFIED ABOVE. IN DRIVEWAY AREAS A MINIMUM 8-INCH DEPTH OF CRUSHED GRAVEL SHALL BE PROVIDED ABOVE THE GENERAL STRUCTURAL FILL. THE IMPORTED CRUSHED GRAVEL FILL SHALL BE COMPACTED TO AT LEAST 95 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE ASTM D1557 TEST METHOD.



ADU FOUNDATION PLAN

1/4" = 1'-0"

GoforthGill
ARCHITECTS

PO Box 650 Vashon Island, WA 98070
206.463.5222
info @ goforthgill.com

5294 REGISTERED ARCHITECT
KIMBERLY GOFORTH
STATE OF WASHINGTON

HOETGER RESIDENCE & ACCESSORY DWELLING UNIT

24530 OLD MILL ROAD
VASHON WA 98070

PHASE
PERMIT APPLICATION

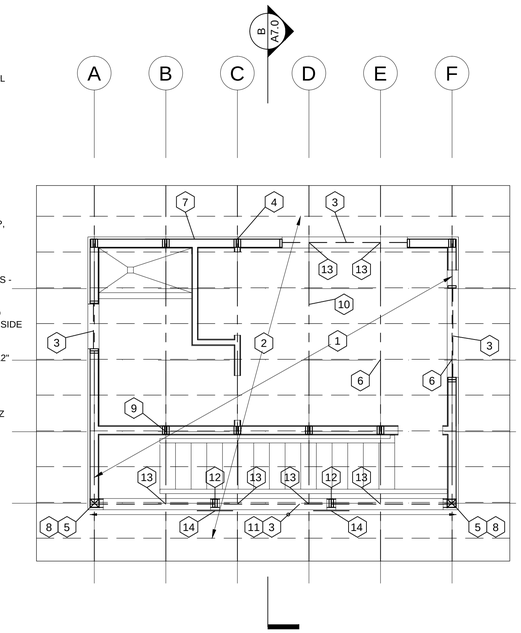
DATE
19 - OCT- 2021

DRAWING TITLE
ADU FOUNDATION PLAN

SHEET
S3.0

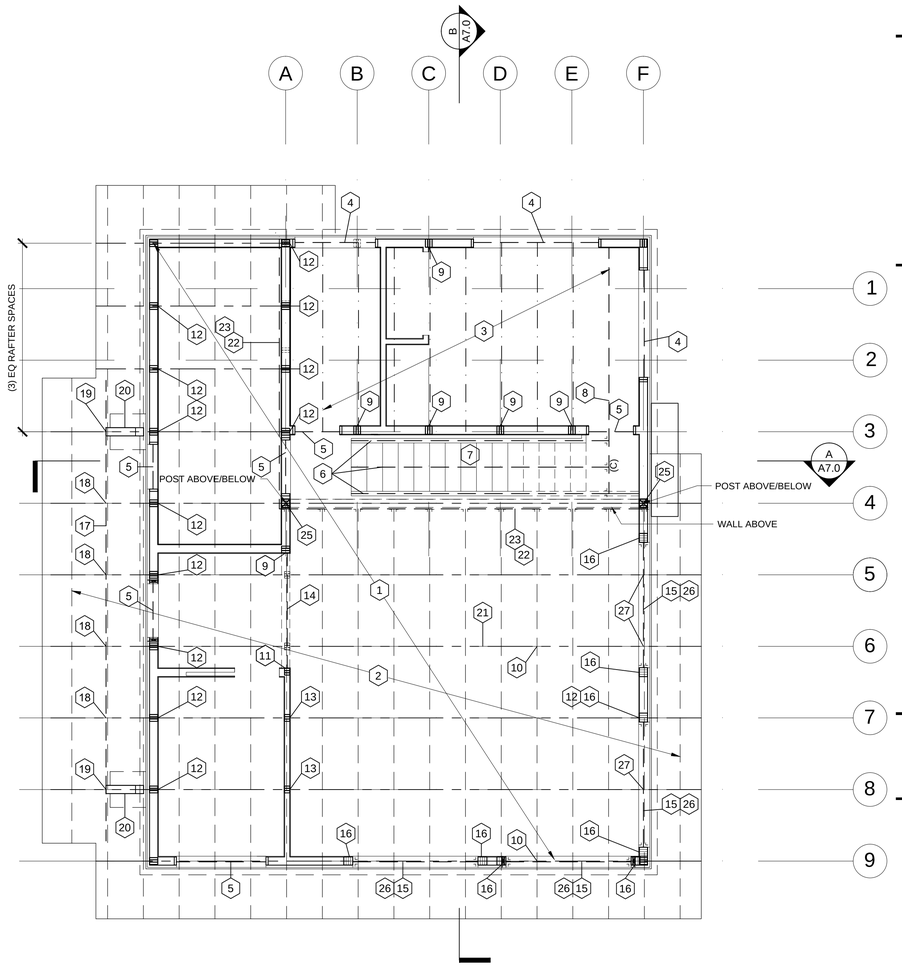
ADU UPPER ROOF FRAMING PLAN NOTES

1. RAFTERS 3.5 X 10.5 GLB @ 4'-0" O.C.
2. 9.5" TJI 110 PURLINS @ 24" O.C W/FULL-DEPTH LSL BLOCKING OVER BEAM SUPPORTS-TYP
3. 5.5x13.5 GLB HEADER
4. (3)2X6 POST IN WALL W/PAIR LPC6Z AT GLB/TOP PLATE CONN. - TYP, UNO
5. 6X6 DF2 - EXTENDS TO UNDERSIDE OF "3"
6. (2)#10X3" WOOD SCREWS CONNECTS BOTTOM FLANGE OF PURLIN TO TOP OF RAFTER-TYP
7. EXTERIOR WALL STUDS - 2X6 DF2 AT 24" OC - TYP, UNO
8. EPC6Z
9. (3)2X6 POST IN WALL W/PAIR LPC4Z CONNECTORS - TYP
10. CONNECT BOTTOM FLANGE OF EA. TJI BLOCK TO RAFTER BELOW W/(6)0.131"DIA.X2.5" NAILS (3 EA. SIDE OF WEB)-TYP
11. ELEVATE HEADER TO TOP OF WALL - TRIMMER "12" NOT TO BEAR "3"
12. (2)2x6 NON-BEARING WINDOW TRIMMER
13. GLB RAFTER BEARS ON TOP PLATE W/PAIR LPC6Z CONNECTORS - TYP, UNO
14. MSTA24 HORZ. STRAP AT BOTTOM OF R.O.



ADU UPPER FLOOR/LOWER ROOF FRAMING PLAN NOTES

1. CONTINUOUS RAFTERS 3.5 X 10.5 GLB @ 4'-0" O.C. W/CBH2.37X5.5C AT EACH "1" TO "24"
2. 9.5" TJI 110 PURLINS @ 24" O.C W/FULL-DEPTH LSL BLOCKING OVER BEAM SUPPORTS & IUS1.81/9.5 HGRS.(WHERE APPLICABLE)-TYP
3. FLOOR JOISTS 9.5" TJI 110 @ 24" O.C.-TYP
4. 4x10 DF2 HEADER
5. 4x10 DF2 HEADER
6. 3.5x13.5 APPEARANCE GRADE GLB OPEN STRINGERS(7-3/8" MIN. WOOD DEPTH) W/(2)LS90 PER STRINGER AT "8"
7. 3.5X12 APPEARANCE-GRADE GLB TREADS(REF. ARCH. DETAIL)
8. 5.25x9.5 2.2E PSL
9. (3)2x6 POST
10. (2)#10X3" WOOD SCREWS CONNECTS BOTTOM FLANGE OF PURLIN TO TOP OF RAFTER-TYP
11. (3)2x4 POST
12. (3)2X6 POST IN WALL W/PAIR LPC6Z AT GLB/TOP PLATE CONNECTION - TYP, UNO
13. (3)2X4 POST IN WALL W/PAIR LPC4Z AT GLB/TOP PLATE CONNECTION - TYP, UNO
14. 3.5x9 APPEARANCE GRADE GLB BEAM
15. 5.5x9 GLB W/HUC612 HGR. EACH END W/(26)0.162" DIA.x3.5 NAILS PER HUC612 (ABOVE WINDOWS)
16. 5.5X6 GLB POST (COMB. 5-2.0E-GR. L1) - FULL HEIGHT - CONTINUOUS
17. PORCH BEAM 5.5x15 24F-V4 DF/DF GLB W/1600 FOOT RADIUS POSITIVE CAMBER (BM IS ROTATED 9 DEG. FROM PLUMB)
18. GLB RAFTER BEARS DIRECTLY ON BEAM - CONNECT W/(1)HDG 1/2"DIA.x15" LAG SCREW - TYP
19. CC66 POST CAP (REF. ARCH. DETAIL)
20. PT 6x6 ANGLED (9 DEG.) ROOF POST
21. CONNECT BOTTOM FLANGE OF EA. TJI BLOCK TO RAFTER BELOW W/(6)0.131"DIA.X2.5" NAILS (3 EA. SIDE OF WEB)-TYP
22. 1.5X9.5 1.3E LSL LEDGER W/(5)0.148"DIA.X3" NAILS AT 24" OC
23. ROOF DIAPHRAGM EDGE NAILING - 0.113"DIA.X2.375" NAILS AT 6" OC - TYP, UNO
24. 3.5X9.5 1.3E LSL LEDGER W/(3)HORZ. ROWS SDS1/4X6 SCREWS AT 16" OC IN EACH ROW
25. 6x6 DF2 POST IN WALL W/PAIR LPC6Z AT GLB/TOP PLATE CONNECTION
26. 5.5X7.5 GLB W/HUC612 HGR. EACH END W/(26)0.162" DIA.X3.5 NAILS PER HUC612 (BETWEEN WINDOWS)
27. GLB RAFTER BEARS ON TOP PLATE W/PAIR LPC6Z CONNECTORS - TYP, UNO



ADU UPPER ROOF FRAMING PLAN
1/4" = 1'-0"

ADU UPPER FLOOR/LOWER ROOF FRAMING PLAN
1/4" = 1'-0"

Goforth Gill
ARCHITECTS

PO Box 650 Vashon Island, WA 98070
206.463.5222
info @ goforthgill.com

5294 REGISTERED ARCHITECT
KIMBERLY GOFORTH
STATE OF WASHINGTON

HOETGER RESIDENCE & ACCESSORY DWELLING UNIT

24530 OLD MILL ROAD
VASHON WA 98070

PHASE
PERMIT APPLICATION

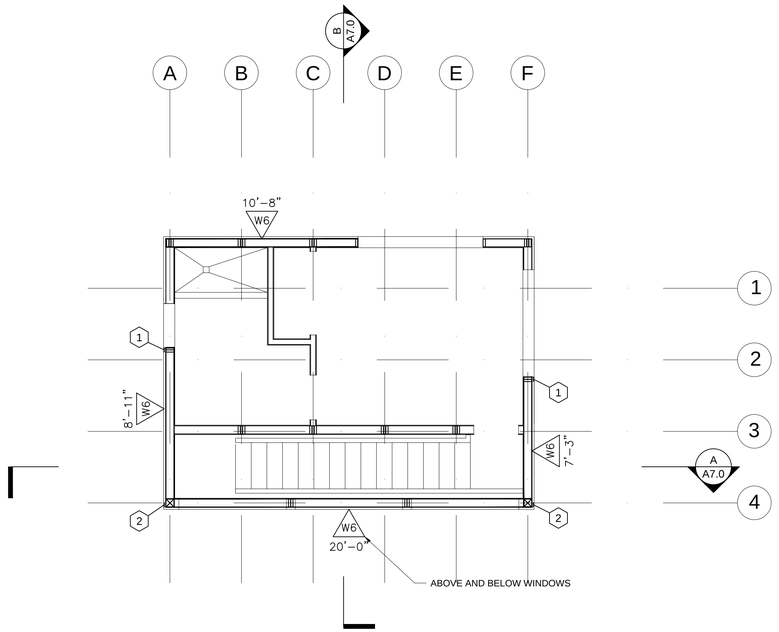
DATE
19 - OCT- 2021

DRAWING TITLE
ADU UPPER ROOF FRAMING PLAN
ADU UPPER FLOOR/LOWER ROOF FRAMING PLAN

SHEET
S3.1

ADU UPPER FLOOR SHEARWALL PLAN

1. CS16x40" LONG HOLDOWN STRAP-(2)2x
2. CS16x40" LONG HOLDOWN STRAP-6x6

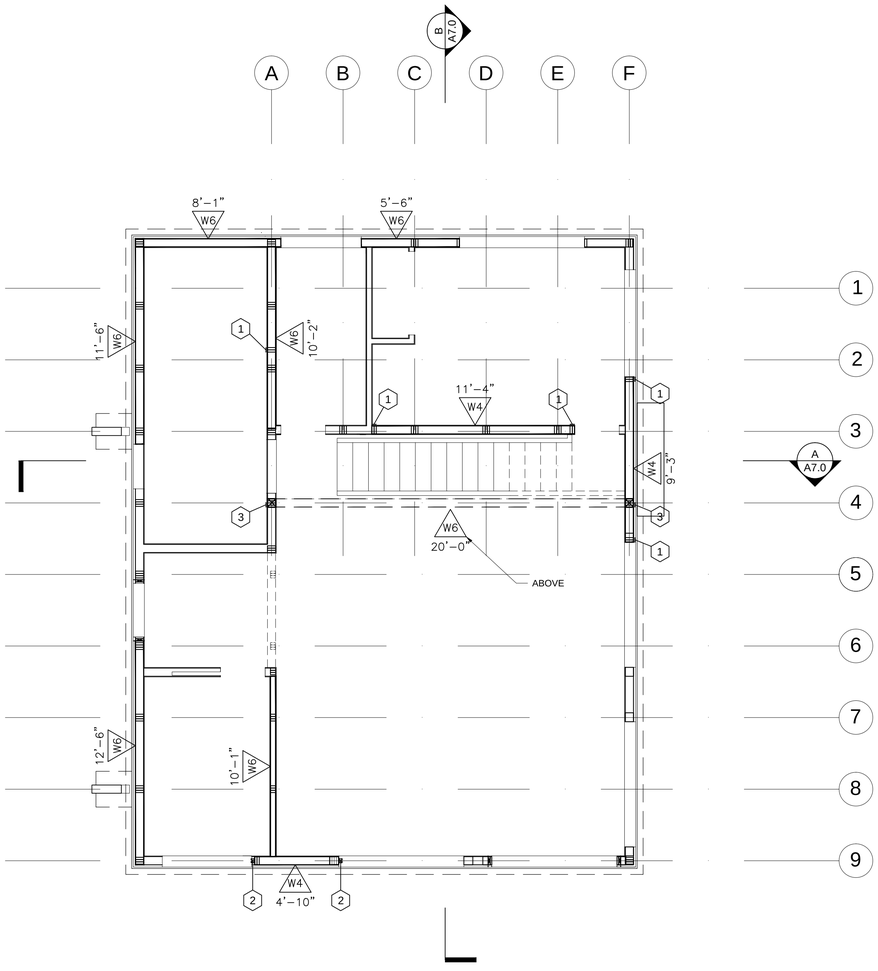


ADU UPPER ROOF SHEARWALL PLAN

1/4" = 1'-0"

ADU MAIN FLOOR SHEARWALL PLAN

1. STHD14-(2)2x
2. HDU5-(2)2x (MINIMUM)
3. STHD14-6x6



ADU MAIN FLOOR SHEARWALL PLAN

1/4" = 1'-0"

GoforthGill
ARCHITECTS

PO Box 650 Vashon Island, WA 98070
206.463.5222
info @ goforthgill.com

5294 REGISTERED ARCHITECT
KIMBERLY GOFORTH
STATE OF WASHINGTON

HOETGER RESIDENCE & ACCESSORY DWELLING UNIT

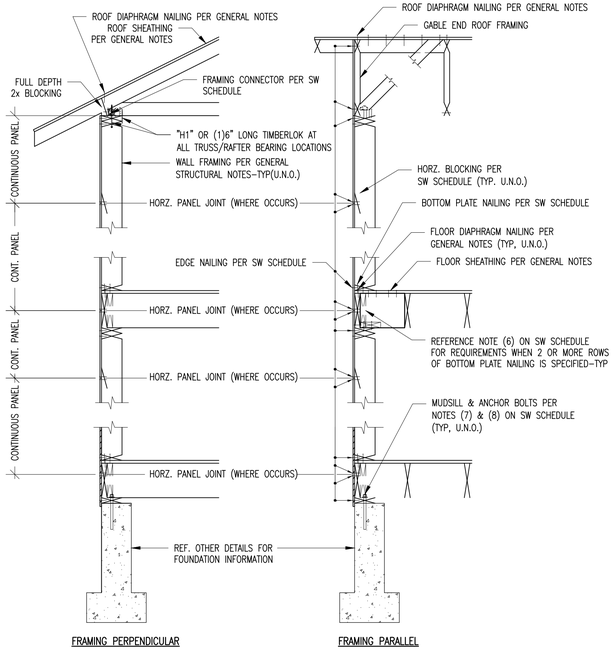
24530 OLD MILL ROAD
VASHON WA 98070

PHASE
PERMIT APPLICATION

DATE
19 - OCT- 2021

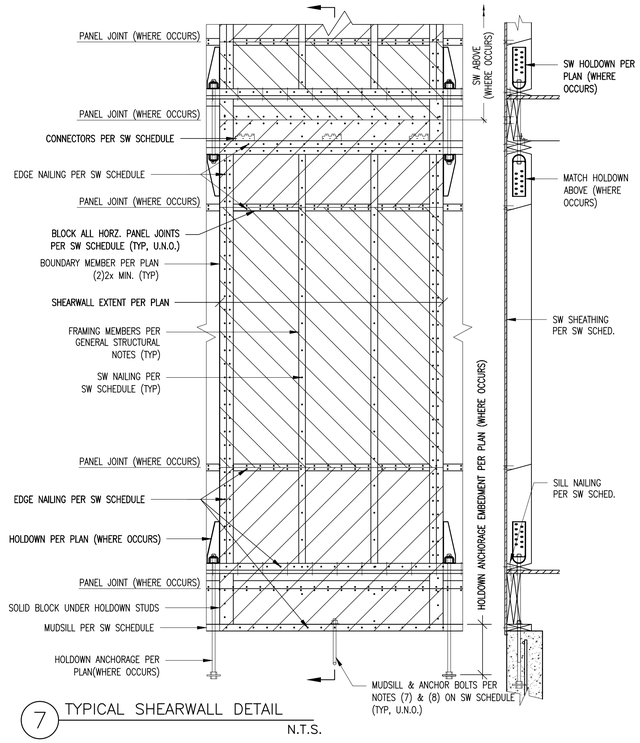
DRAWING TITLE
ADU MAIN AND UPPER FLOOR SHEARWALL PLANS

SHEET
S3.2

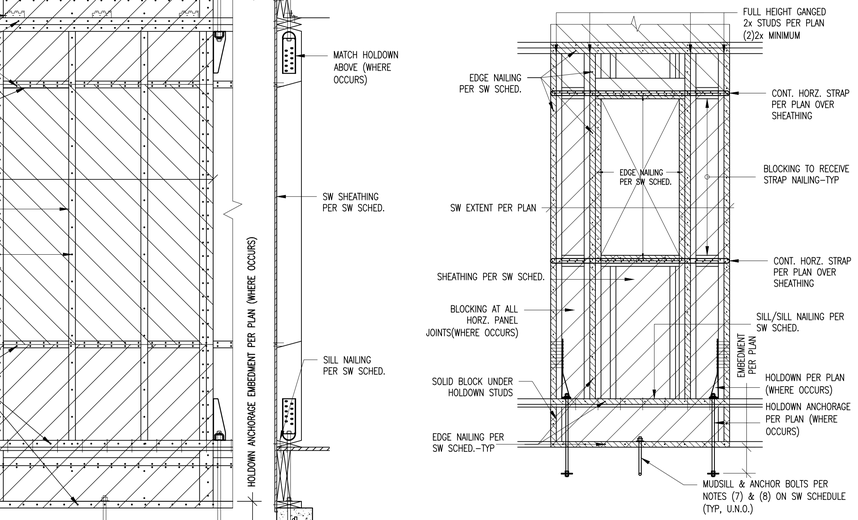


6 WALL FRAMING DETAILS
N.T.S.

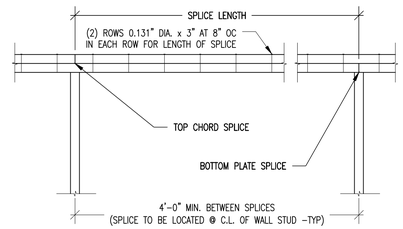
PROVIDE NAILING PER IBC TABLE 2304.10.1-TYP(U.N.O.)



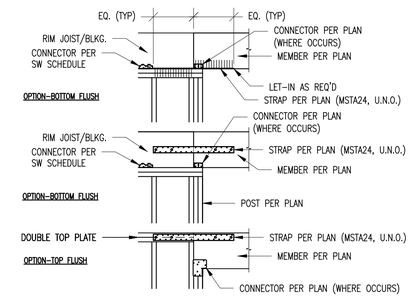
7 TYPICAL SHEARWALL DETAIL
N.T.S.



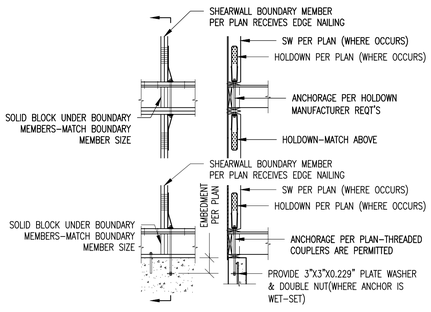
8 TYPICAL DETAIL OF SHEARWALL DESIGNED FOR FORCE TRANSFER AROUND OPENING
N.T.S.



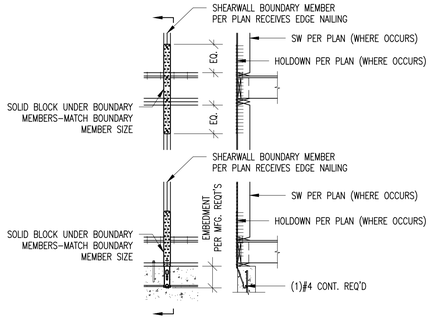
13 TOP PLATE SPLICE DETAIL
N.T.S.



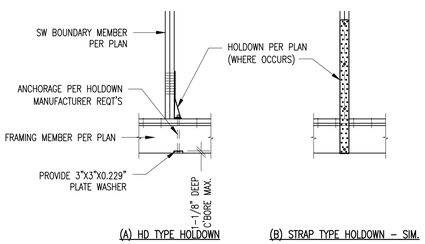
14 TYP. DRAG STRUT CONNECTION DETAIL
N.T.S.



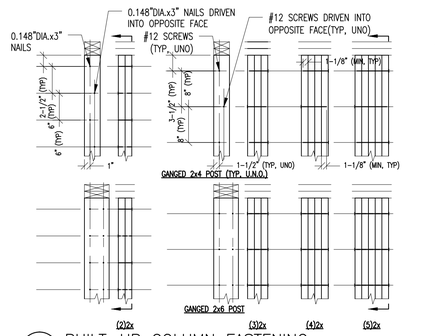
15 TYPICAL HOLDOWN CONNECTION DETAIL
N.T.S.



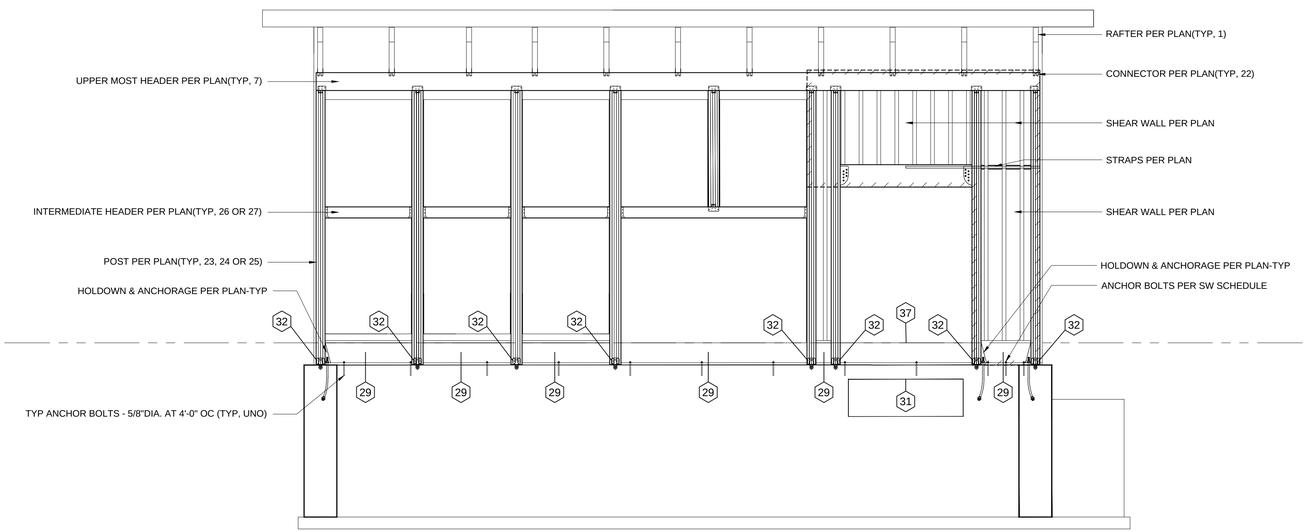
16 TYPICAL HOLDOWN CONNECTION DETAIL
N.T.S.



17 TYPICAL HOLDOWN CONNECTION DETAIL
N.T.S.



26 BUILT-UP COLUMN FASTENING
FASTENING REQT'S SHOWN ABOVE APPLY ALONG FULL POST HEIGHT
N.T.S.



ALL INFORMATION SHOWN IS IN THE PLANE OF THE EAST WALL

27 EAST WALL STRUC ELEVATION
N.T.S.

Goforth Gill
ARCHITECTS

PO Box 650 Vashon Island, WA 98070
206.463.5222
info @ goforthgill.com

5294 REGISTERED ARCHITECT
KIMBERLY GOFORTH
STATE OF WASHINGTON

HOETGER RESIDENCE & ACCESSORY DWELLING UNIT

24530 OLD MILL ROAD
VASHON WA 98070

PHASE
PERMIT APPLICATION

DATE
19 - OCT- 2021

DRAWING TITLE
TYPICAL STRUCTURAL DETAILS

SHEET
S4.0

Appendix B: Technical Information Report
Soils Information
Drainage Plan
TESC Site Plan
Operation and Maintenance Manual
Downstream Analysis
Drainage Calculations

AP CONSULTING ENGINEERS PLLC
CIVIL ENGINEERING

TECHNICAL INFORMATION REPORT

MAY 25, 2021
APCE PROJECT #2020026

PREPARED FOR:
HOETGER RESIDENCE
24426 OLD MILL ROAD SW
PARCEL #2422029133
VASHON, WA 98070

AT THE REQUEST OF:
MR. JASON HOETGER
3934 SOUTH EDMUNDS STREET
SEATTLE, WA 98118

APCE@APConsultingEngineers.com (253) 737-4173 PO Box 162, Auburn, WA 98071

TABLE OF CONTENTS

	PAGE
1.0 PROJECT OVERVIEW	1
2.0 CONDITIONS AND REQUIREMENTS SUMMARY	2
3.0 OFF-SITE ANALYSIS	5
4.0 FLOW CONTROL AND WATER QUALITY FACILITY ANALYSIS AND DESIGN	6
5.0 CONVEYANCE SYSTEM ANALYSIS AND DESIGN	10
6.0 SPECIAL REPORTS AND STUDIES	10
7.0 OTHER PERMITS	11
8.0 ESC ANALYSIS AND DESIGN	11
9.0 BOND QUANTITIES, FACILITY SUMMARIES, AND DECLARATION OF COVENANT	11
10.0 OPERATIONS AND MAINTENANCE MANUAL	11

TABLE OF APPENDICES

	APPENDIX
SOILS INFORMATION	A
DRAINAGE PLAN	B
TESC SITE PLAN	C
OPERATION AND MAINTENANCE MANUAL	D
DOWNSTREAM ANALYSIS	E
DRAINAGE CALCULATIONS	F

HOETGER RESIDENCE TECHNICAL INFORMATION REPORT

1.0 PROJECT OVERVIEW

This report accompanies the drainage review plan prepared for the Hoetger Residence project on parcel 2422029133 in Vashon, Washington. The project location is shown in Figure 1, below. The design has been prepared to meet the requirements of the 2016 King County Surface Water Design Manual (KCSWDM).

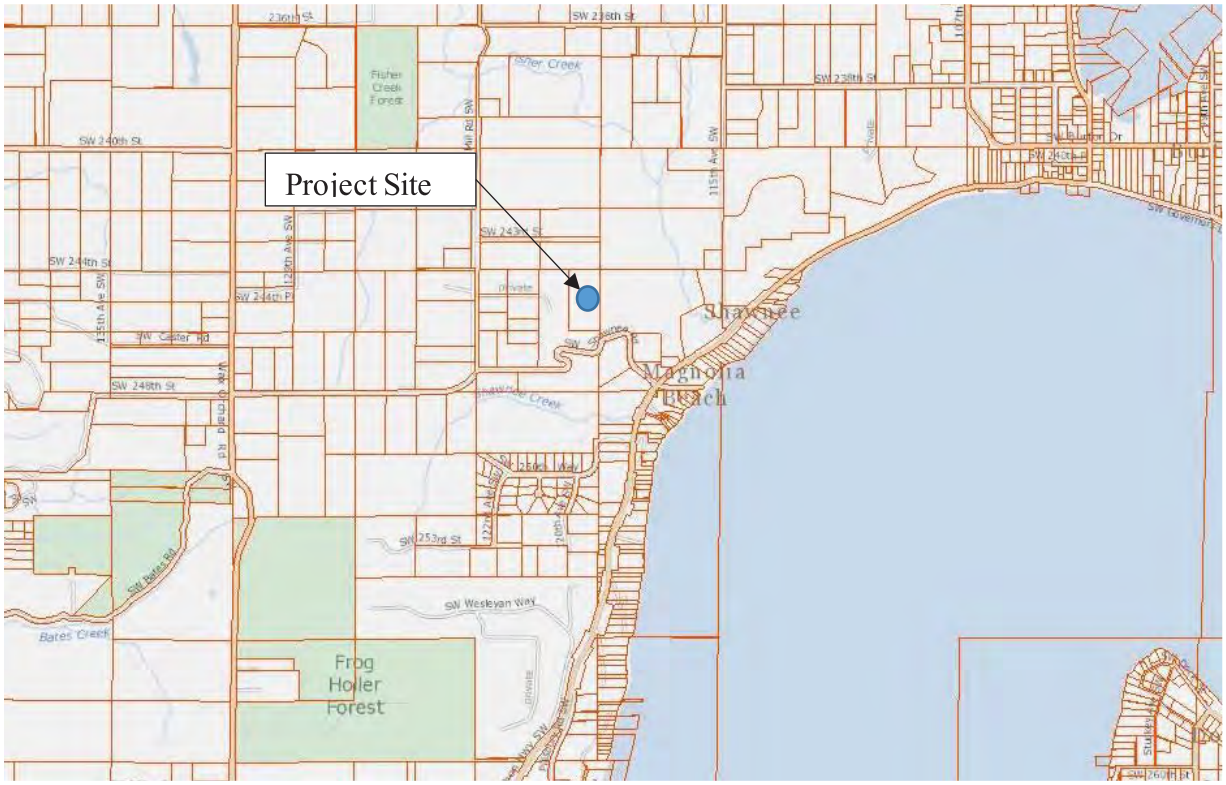


FIGURE 1 – Vicinity Map

The existing, approximately 5.02-acre property is currently undeveloped in a forested condition. The neighboring parcels are single-family lots. The parcels to the east and north are undeveloped, forested lots.

The property slopes towards the east based on topography from the County's GIS. The property has been identified as having a steep slope hazard area per the geotechnical report provided by Geospectrum Consultants, Inc. The property has also been identified as having a Category IV wetland and Type N aquatic areas per the wetland report provided by JS Jones & Associates, Inc. Copies of these reports are included in Appendix F of this report. Historic predeveloped land cover characteristics are provided below in Table 1.

TABLE 1 – PREDEVELOPED AREAS

	Description	Area (ft^2)	Total (ft^2)
Pervious	Forest	218,790	218,790
		Total	218,790

The project area consists of a new single-family residence, a new accessory dwelling unit (ADU), driveways, and landscaped areas. The project area is also divided into two threshold discharge areas. The developed areas draining to these threshold discharge areas are described below.

The developed areas draining to the northern threshold discharge area will consist of the new additional dwelling unit (ADU) which has an estimated roof area of 1,439 square feet, a driveway with an approximate area of 1,401 square feet, and a landscaped area of aproximatly 12,113 square feet. The developed land cover characteristics are tallied below in Table 2.

TABLE 2 – NORTHERN THRESHOLD DISCHARGE AREA - DEVELOPED AREAS

	Description	Area (ft^2)	Total (ft^2)
Impervious	ADU Roof Area	1,439	2,840
	Driveway & Walkway	1,401	
Pervious	Landscaping	9,273	9,273
			12,113

The developed areas draining to the southern threshold discharge area will consist of the new garage for the single-family residence which has an estimated roof area of 4,041 square feet, a garage roof area of 1,266 square feet, a driveway to the house and the garage with an approximate area of 4,195 square feet, a driveway along the easement to the west property line with an approximate area of 1,189 square feet, and a landscaped area of aproximately 20,559 square feet. The developed land cover characteristics are tallied below in Table 3.

TABLE 3 – SOUTHERN THRESHOLD DISCHARGE AREA - DEVELOPED AREAS

	Description	Area (ft^2)	Total (ft^2)
Impervious	New Roof Area	5,307	10,691
	New Driveway	5,384	
Pervious	Native Growth Vegetation	8,894	29,453
	Landscaping	20,559	
			40,144

2.0 CONDITIONS AND REQUIREMENTS SUMMARY

Within the limits of construction, the predeveloped project site is assumed to have consisted of 52,257 square feet of forest. The developed site will contain 13,531 square

feet of new impervious surfaces for the new structures and driveways. The developed site will also contain 38,726 square feet of new pervious area. There are two threshold discharge areas found within this site.

The project is located outside of the Urban Growth Area (UGA), exceeds 2,000 square feet of new impervious surface, has more than 5,000 square feet of pollution-generating impervious surface and is on predominantly glacial till soils. Thus, the project does not qualify for Simplified Drainage Review and is not subject to Large Project Drainage Review (which applies to projects with more than 50 acres of project area), therefore, Directed Drainage Review will be required for this project. This report will show how the project complies with Core Requirements 1 through 9 and Special Requirements 1 through 5, as follows:

Core Requirement #1: Discharge at Natural Location

Under existing conditions, stormwater runoff from the project site is naturally dispersed toward the east edge of the property. The property contains two threshold discharge areas. The existing runoff is conveyed east and south from two different on-site Type N aquatic areas/streams and a wetland separately within a quarter mile from the site. This project proposes to continue to discharge runoff from the developed areas along these two separate natural drainage paths.

Core Requirement #2: Off-site Analysis

The off-site analysis for the project is included in Section 3.0 of this report.

Core Requirement #3: Flow Control

A WWHM analysis of the historic and developed surfaces of two separate threshold discharge areas has been completed and included with this report. This analysis shows that the 15-minute, 100-year peak flow rate under historic conditions from the area that will be disturbed by this project will not be surpassed by the 15-minute, 100-year peak flow rate under developed conditions by more than 0.15 cfs. This project is, therefore, exempt from providing flow control facilities.

Core Requirement #4: Conveyance System

The conveyance system for this project consists of surface yard drains, catch basins, and 6-inch diameter PVC pipes. This stormwater system conveys the runoff to a dispersion trench and a gravel flow dissipater. They are sized appropriately to handle the stormwater that is anticipated.

Core Requirement #5: Erosion and Sediment Control

Erosion and sediment control requirements will be met for this project as described in Section 4.0.

Core Requirement #6: Maintenance and Operations

The on-site stormwater features will be maintained privately by the property owner. Operations and Maintenance provisions are addressed in Appendix D.

Core Requirement #7: Financial Guarantees and Liability

Financial guarantees are not anticipated to be required for this single-family project.

Core Requirement #8: Water Quality

This project proposes less than 5,000 square feet of new pollution generating impervious surface (PGIS) for the northern threshold discharge area. Therefore, Section 1.2.8 of the KCSWDM will not require water quality treatment for this threshold discharge area. For the southern threshold discharge area, there is more than 5,000 square feet of new pollution generating impervious surface. The on-site driveway runoff in the southern discharge area will be conveyed to the full dispersion trench and it is not subject to the water quality facility requirements per Section C.2.1 of the KCSWDM. The runoff from the new off-site driveway will be dispersed through standard filter strips per Section 6.3.4 of the KCSWDM.

Core Requirement #9: Flow Control BMPs

This project will be constructed on a lot that is greater than 22,000 square feet, larger than 5 acres in size, and outside of the Urban Growth Area and will, therefore, be subject to Large Rural Lot BMP Requirements, as discussed in Section 1.2.9.2.3 of the KCSWDM. This project will implement the BMPs found in the list in Section 1.2.9.2.3.

Special Requirement #1: Other Adopted Area-Specific Requirements

There are no known area-specific special requirements that apply to this project site.

Special Requirement #2: Floodplain/Floodway Analysis

There are no known flood hazard areas on or adjacent to the project site.

Special Requirement #3: Flood Protection Facilities

Flood protection facility special requirements do not apply to this project. The project does not propose to construct a new or modify an existing flood protection facility.

Special Requirement #4: Source Controls

Since the proposed project is a single-family residence, source control measures are not anticipated to be required in conjunction with this project. There is no significant proposed outside-use or storage of pollutants.

Special Requirement #5: Oil Control

The proposed project does not require oil control measures. The site is not considered high-use since it is a single-family residence.

3.0 OFF-SITE ANALYSIS

Downstream Basin of Threshold Discharge Area:

A Level 1 downstream analysis was completed for this project in June of 2020. A map is provided in Appendix E.

The overall natural slope of the property is towards the southeast and, eventually, discharges into the Puget Sound. Due to the existing topographic conditions of the site, the project runoff leaves the property at two locations. The two flow paths do not intersect each other within a quarter mile of the project site. Runoff from the northern threshold discharge area flows northeast to a Type N aquatic area/stream on the property. The northern Type N aquatic stream flows east from the property and then south to a point one quarter of a mile from the project site.

Runoff from the southern threshold discharge area flows northeast to a second Type N aquatic area/stream. This is Type N aquatic stream flows southeast at the east property line to a point one quarter of a mile from the project site.

There are no applicable drainage complaints known to exist that affect the properties adjacent to the downstream path of the runoff from the project site.

From a review of the information available relating to the downstream system, there did not appear to be any existing significant erosion or flooding problems and no significant problems are anticipated to the improvements proposed as part of this project.

Upstream Tributary Basin:

There are no known concentrated sources of stormwater discharge to this property.

4.0 APPLICATION OF FLOW CONTROL BMPS:

Flow Control

A WWHM analysis of the historic and developed surfaces has been completed and included with this report. This analysis shows that the 15-minute, 100-year peak flow rate under historic conditions (forest on type C soils) from the areas that will be disturbed by this project will not be surpassed by the 100-year peak flow rate under developed conditions by more than 0.15 cfs. This project is, therefore, exempt from providing flow control facilities. Credits from Table 1.2.9.A of the KCSWDM were applied to the analysis.

In the northern threshold discharge area, under developed conditions, the portion of the property that will be disturbed for construction will be developed with the following impervious surfaces: the new ADU's roof area (1,439 square feet; 0.033 acres) and new driveway area (1,401 square feet; 0.032 acres). The runoff from a portion of the new ADU's roof area (896 square feet; 0.021 acres) will be mitigated via basic dispersion and, therefore, will be modeled as 90% impervious and 10% grass in WWHM. The slopes (greater than 15%), onsite wetlands, proposed drainfield and sewer tanks, existing water well, and the steep slope setback per Geospectrum Consultants, limit the placement of BMPs and, therefore, the portion of the new driveway (1,401 square feet; 0.032 acres) and the new roof (461 square feet; 0.011 acres) that cannot be mitigated by BMPs is modeled in WWHM as fully impervious. The runoff from 9,273 square feet (0.212 acres) of the proposed septic drainfield and the remaining landscape area that cannot be mitigated by BMPs is modeled in WWHM as 50% grass and 50% pasture per Section 1.2.3.1 of the KCSWDM.

In the southern threshold discharge area, under developed conditions, the portion of the property that will be disturbed for construction will be developed with the following impervious surfaces: the new house roof area (4,041 square feet; 0.093 acres), the new garage roof area (1,266 square feet; 0.029 acres), the new driveway to the house and garage (4,195 square feet; 0.096 acres), and the new driveway to the existing access to the site (1,189 square feet; 0.027 acres). The runoff from the new driveway to the house and garage (4,195 square feet; 0.096 acres) and the new garage roof (805 square feet; 0.018 acres) will be mitigated via full dispersion and, therefore, will be modeled as 100% forest per Table 1.2.9.A of the KCSWDM. The runoff from the new driveway to the existing access to the site (1,186 square feet; 0.027 acres) will be mitigated with sheet flow basic dispersion and will, therefore, be modeled as 90% impervious and 10% grass in WWHM per Table 1.2.9.A of the KCSWDM. The runoff from the remaining new

garage roof (461 square feet; 0.011 acres) and the new house roof (4,041 square feet; 0.093 acres) that cannot be mitigated by BMPs is modeled in WWHM as fully impervious. The existing access to the well (5,090 square feet; 0.116 acres), and 8,894 square feet (0.204 acres) of the new landscape area will be revegetated with native vegetation. It will, therefore, not be required to be mitigated and it is modeled as forest per Table 1.2.9.A of the KCSWDM. The runoff from 20,559 square feet (0.311 acres) of the proposed landscape area that cannot be mitigated by BMPs is modeled in WWHM as 50% grass and 50% pasture per Section 1.2.3.1. of the KCSWDM.

These credits are applied to the model as allowed by the description of target surfaces in the discussion of Conservation Flow Control Areas.

NORTHERN THRESHOLD DISCHARGE AREA WWHM INPUT

WWHM Inputs	Total (ac)	Modeled as			
		Impervious (ac)	Lawn (ac)	Pasture (ac)	Forest (ac)
New ADU Roof	0.033	0.031	0.002	0.000	0.000
New Driveway	0.032	0.032	0.000	0.000	0.000
Landscaping	0.213	0.000	0.106	0.106	0.000
Totals	0.278	0.063	0.108	0.106	0.000

The results of the analysis of the northern threshold discharge area indicates a 15-minute, 100-year peak flow of 0.132 cfs. This is less than a 0.15 cfs increase over the predeveloped 15-minute, 100-year peak of 0.043 cfs. Therefore, the northern threshold discharge area is exempt from providing additional flow control facilities.

SOUTHERN THRESHOLD DISCHARGE AREA WWHM INPUT

WWHM Inputs	Total (ac)	Modeled as			
		Impervious (ac)	Lawn (ac)	Pasture (ac)	Forest (ac)
New House Roof	0.093	0.093	0.000	0.000	0.000
New Garage Roof	0.029	0.011	0.000	0.000	0.018
New Driveway to garage and house	0.096	0.000	0.000	0.000	0.096
New Driveway to entrance	0.027	0.024	0.003	0.000	0.000
Landscaping	0.677	0.000	0.131	0.131	0.415
Totals	0.922	0.128	0.134	0.131	0.529

The results of the analysis of the southern threshold discharge area indicates a 15-minute, 100-year peak flow of 0.277 cfs. This is less than a 0.15 cfs increase over the predeveloped 15-minute, 100-year peak of 0.144 cfs. This project is, therefore, exempt

from providing additional flow control facilities. Detailed WWHM results are included in Appendix F.

BMPs
Section 1.2.9.2.3 of the KCSWDM requires that a project that must comply with Core Requirement #9 and which is on a lot that has a size greater than 22,000 square feet, larger than 5 acres, and that is outside of the Urban Growth Area (Large Rural Lot) either demonstrate compliance with the LID Performance Standard or implement BMPs on the property in the order identified in the Large Rural Lot BMPs list in Section 1.2.9.3.2. This project will apply BMPs in the order identified in the Large Rural Lot BMPs list to the greatest extent feasible.

Mitigation of New and Replaced Impervious Surface:

Full Dispersion: Full Dispersion BMPs are not feasible in the northern threshold discharge area. There is no 100-foot long native vegetated flowpath available in this area with slopes of less than 15%. Full Dispersion BMPs are feasible in the southern threshold discharge area. Full dispersion will be applied to runoff from a portion of the driveway per KCSWDM Section C.2.1.5. A 50-foot-wide trench with a 100-foot flowpath will mitigate total 5,000 square feet of impervious area (4,221 square feet of new driveway area, and 779 square feet of the new garage roof area). The total area being fully dispersed can have an area of no more than 15% of the Native Growth Protection Area per Section C.2.1.1 and less than 35% of the site which will require 33,333 square feet for this project.

Full and limited infiltration: Infiltration BMPs are not feasible. The on-site till soil is mapped as Everett-Alderwood gravelly sandy loam per the NRCS web soil survey and the test pits conducted by Geospectrum Consultants, Inc. indicate the subsoils were silty fine to very fine sand. It became cemented and hard at depths of about 2 to 4 feet below the surface. For these reasons, Infiltration BMPs are not feasible per Section C.2.2 nor C.2.3. The NRCS web soil survey and the geotechnical report are attached in Appendix A.

Bioretention: Bioretention BMPs are not feasible. The test pits investigated by Geospectrum Consultants, Inc. indicate that the subsoils were silty fine to very fine sand. It became cemented and hard at depths of about 2 to 4 feet below the surface. For these reasons, Bioretention BMPs are not feasible per Section C.2.6 of the KCSWDM.

Basic Dispersion: Basic Dispersion BMPs are feasible. In the northern threshold discharge area, the new ADU roof (896 square feet; 0.021 acres) will be mitigated in accordance with C.2.4.4 of the KCSWDM. Smaller lengths of trench with notch board is allowed to be used at a ratio of 10 feet of trench per 700 square feet of impervious area. The required trench length for 896 square feet of impervious area is:

Total impervious area/700 x 10 = 896/700 x 10 = 12.8 feet

This is the maximum allowable length that could be placed in between the steep slope and the drainfield setbacks. In the southern threshold discharge area, the new driveway to the existing access to the site will be sheet flow dispersed in accordance with C.2.4.5 of the KCSWDM.

Permeable Pavement: Permeable Pavement BMPs are not feasible. The test pits investigated by Geospectrum Consultants, Inc. indicate that the subsoils were silty fine to very fine sand. It became cemented and hard at depths of about 2 to 4 feet below the surface. For this reason, Permeable Pavement BMPs are not feasible per Section C.2.7 of the KCSWDM.

Mitigation of New Pervious Surface:

Full Dispersion: Full Dispersion BMPs are not feasible. There is no area downslope of the proposed primary septic drainfield and new landscape areas where the slopes are less than 15%. For this reason, Full Dispersion BMPs are not feasible per Section C.2.1.6 of the KCSWDM.

Basic Dispersion: Basic Dispersion BMPs are not feasible. There is no area downslope of the proposed primary septic drainfield and landscape areas where the slopes are less than 15%. For this reason, Basic Dispersion BMPs are not feasible per Section C.2.4.5 of the KCSWDM.

Bioretention: Bioretention BMPs are not feasible. The test pits investigated by Geospectrum Consultants, Inc. indicate that the subsoils were silty fine to very fine sand. It became cemented and hard at depths of about 2 to 4 feet below the surface. For these reasons, Bioretention BMPs are not feasible per Section C.2.6 of the KCSWDM.

Limited infiltration: Limited Infiltration BMPs are not feasible. The on-site till soil is mapped as Everett-Alderwood gravelly sandy loam per the NRCS web soil survey and the test pits investigated by Geospectrum Consultants, Inc. indicate that the subsoils were silty fine to very fine sand. It became cemented and hard at depths of about 2 to 4 feet below the surface. For these reasons, Limited Infiltration BMPs are not feasible per Section C.2.3. The NRCS web soil survey and the geotechnical report are attached in Appendix A.

Also, the new pervious surfaces resulting from this project will be amended as required by KCC 16.82.100.

This project proposes 9,273 square feet of pervious surfaces in the northern threshold discharge area and 29,453 square feet of pervious surfaces in the southern threshold discharge area. Approximately 5,090 square feet of the existing access to the well and 8,894 square feet of the new landscape area will be revegetated with native vegetation. The new vegetated area will be considered to be forested area which does not require further mitigation.

It is infeasible to implement BMPs to mitigate the remaining pervious and impervious surfaces. The project will also amend disturbed soil within the project area. Therefore, the project will meet the conditions of Core Requirement #9, for which BMPs must be applied to all new pervious and impervious surfaces, where feasible and applicable, for a project site per Section 1.2.9.2.3 of the KCSWDM.

Mitigation of Water Quality Impacts:

The project will provide basic water quality treatment since more than 5,000 square feet of new or replaced pollution-generating impervious surface (PGIS) is proposed in the southern threshold area. The project proposes to mitigate stormwater runoff from 4,195 square feet of the proposed driveway using full dispersion and, therefore, water quality treatment is not required for those areas per Section C.2.1 of the 2016 KCSWDM. 1,189 square feet of new driveway to the existing access to the site will be mitigated with a filter strip. A 10-foot filter strip will be installed to treat this part of the driveway. The length of the filter strips is calculated per Section 6.3.4 of the KCSWDM. The design flow is calculated using WWHM to be 0.0057 cfs. A Manning's roughness coefficient 0.45 was chosen. The total width of the filter will be 127 feet. The longitudinal slope is approximately 6%. The design flow velocity is approximately 0.02 feet per second. The required length is approximately 8.67 feet. Calculations are provided in Appendix E.

The northern threshold discharge area will be exempt from the requirement to provide basic water quality treatment since less than 5,000 square feet of new or replaced pollution-generating impervious surface (PGIS) is proposed.

5.0 Conveyance System Analysis and Design

Conveyance pipes for this project will be 4-inch and 6-inch diameter PVC pipes conveying runoff to the dispersion systems. They are adequately sized to handle the flows that are anticipated from this project.

6.0 Special Reports and Studies

A geotechnical report prepared by Geospectrum Consultants, Inc. is attached in Appendix A. The wetland report prepared by J.S. Jones and Associates, Inc. is attached in Appendix F.

7.0 Other Permits

Building and septic permits for the proposed home will be required in conjunction with this project.

8.0 ESC Analysis and Design

Erosion and sediment control requirements will include the delineation of clearing limits via flagging, proper cover measures for the protection of disturbed areas, perimeter protection with silt fencing on an as-needed basis, and a stabilized construction entrance per King County standards. The Erosion and Sediment Control Plan has been included as part of the construction plans and is included in Appendix C.

9.0 Bond Quantities, Facility Summaries, and Declaration of Covenant

A bond is not expected to be required by the County for this single-family project.

10.0 Operations and Maintenance Manual

The site will be maintained privately by the property owner. The operation and maintenance details for the private facilities are provided in the Operation and Maintenance Manual found in Appendix D.

APPENDIX A:
SOILS INFORMATION

Soil Map—King County Area, Washington
(Hoetger Residence)

Map Scale: 1:1,560 if printed on A portrait (8.5" x 11") sheet.

N

Meters
0 20 40 80 120

Feet
0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 10N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: King County Area, Washington
Survey Area Data: Version 16, Jun 4, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Apr 1, 2016—Sep 27, 2016

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
AgB	Alderwood gravelly sandy loam, 0 to 8 percent slopes	1.4	17.7%
AkF	Alderwood and Kitsap soils, very steep	0.0	0.2%
EwC	Everett-Alderwood gravelly sandy loams, 6 to 15 percent slopes	6.4	82.1%
Totals for Area of Interest		**7.8**	**100.0%**

GEOSPECTRUM CONSULTANTS, INC.

Geotechnical Engineering and Earth Sciences

January 8, 2019

Mr. Jason Eric Klaes Hoetger
3934 South Edmunds Street
Seattle, WA 98118

SUBJECT: GEOTECHNICAL EVALUATION
Proposed Residential Development
King County Parcel No. 242202-9133
Old Mill Road SE
Vashon, Washington
Project No. 18-119-01

Dear Jason,

This report presents the results of our evaluation of your subject parcel for residential development . Our work was performed in accordance with the conditions of our proposal dated October 23, 2018. The purpose of our work was to evaluate the stability of onsite slopes and provide our recommendations for slope buffer and setbacks as well as recommendations for site grading and foundation design for residential development.

At this time we understand that development plans are preliminary. We have assumed the residential structures will be wood frame construction 1 or 2 stories in height and may or may not have a daylight basement. Based on our experience structural wall loads are assumed to be in the range of about 1 to 3 kips per foot and isolated column loads are assumed to be 25 kips or less. If actual loads are different our office should be notified.

P.O. Box 276, Issaquah, WA 98027-0276 • Phone: (425) 391-4228 Fax: (425) 391-4228

SCOPE OF WORK

Our scope of work included site reconnaissance, subsurface explorations, laboratory testing, engineering evaluations and the preparation of this report. The scope of work included the following specific tasks:

- o Reviewed published geologic mapping and iMap topographic mapping of the site and site vicinity as well as the recent site topographic mapping.
- o Performed a site reconnaissance to observe the surface conditions at the site and map geotechnically relevant features on the site.
- o Excavated five test pits to observe and sample the shallow subsurface conditions. Approximate locations of the test pits are shown on Figure 2 and logs of the test pits are included in Appendix A.
- o Performed laboratory testing including moisture content and classification.
- o Performed engineering evaluations and analyses based on the site conditions observed and encountered in our explorations and the results of our laboratory testing.
- o Prepared this geotechnical report summarizing our findings, evaluations and recommendations for development of the subject property.

OBSERVED SITE CONDITIONS

Surface Conditions

The subject lot is located near the top of the coastal bluff in the Shawnee area of Vashon adjacent to the incised ravines of Fisher Creek to the east and Shawnee Creek to the southwest (see site vicinity map of Figure 1). Our site reconnaissance was performed October 30, 2018.

Figures 2 and 3 show that the subject lot is a rectangular lot about 5 acres in size and includes gently sloped to flat lying areas in the west-central and western portions of the lot above moderate to steeply sloped areas along the south, east and north sides of the lot. Based on the topography of Figures 2 and 3, the subject property has about 72+ feet of elevation difference across the lot from the SE corner to the NW corner.

Our site observations and the topographic mapping of Figures 2 and 3 indicate the onsite slopes are quite variable. The upper west-central area of the subject lot

generally has gradients ranging from less than 5% up to about 20% and appears currently stable. However the southern, eastern and northern portions of the lot contain variable slopes with gradients ranging from about 20% up to 50+%. Approximate deliniation of the steep (40+%) slope areas based on our site observations and the topographic mapping are shown on Figures 2 and 3.The steep slope areas within the lot range from about 10 to 60+ feet in height.

The northern site topography shown on Figure 3 indicates shows an apparent bowl shaped slide scarp slope with an area of debris deposits below it in the north-central area of the lot. The scarp slope and debris area are mapped as landslide hazard on iMap. The steep slide scarp slope has gradients up to 50+ percent and a height of about 24+ feet. We also noted anomalous topography at the southeast corner of the slide scarp slope area that appears to be a more recent secondary slide area as shown in Figure 3. In addition we observed apparent shallow slide scars in the southern steep slope area as approximately shown in Figure 2. Please note that we did not observe the anomalous gently sloped area at the southeast corner of the lot shown on Figure 2 and communications with the surveyor Jerold O'Hare indicated that this area of the map is due to an inability to obtain proper data in that area and is not real.

The lot is generally forested with a high density of alder trees plus scattered fir trees and occasional cedar, maple and madrona trees that range from saplings up to about 2 to 3 feet in diameter. Many of the trees, particularly within the steep slope areas (40%+ to 50+% gradients) were bowed and/or leaning. Understory vegetation included alder and filbert saplings, holly, elderberry, blackberries, salmon berries, sword fern, braken fern and salal.

We noted that the upper portion of southern slope area had been cleared of understory vegetation and the southern slope was generally vegetated but not forested.

Subsoils

Subsurface conditions were explored by five test pits excavated at the approximate locations shown on Figures 2 and 3. More detailed descriptions of the subsurface conditions encountered at each test pit as well as laboratory test results are presented in Appendix A.

Based on our observations of the subsoils exposed in the test pits the subsoils encountered appear to be natural. The upper subsoils at the three southern test pit locations (TP-1, TP-2 and TP-3) were silty fine to very fine sand that became cemented and hard at depths of about 2 to 4 feet below the surface. However, at TP-4 in the northwestern area of the lot above the old slide scarp slope the subsoils were silty very fine sand to a depth of 3.5 feet and were underlain by less silty cemented very fine sand/silty sand. At the TP-5 location on a ridge in the northeastern area of the lot the subsoils encountered were more silty and were classified as very fine silty sand/sandy silt which became cemented and hard below a depth of about 4 feet.

A surface layer of organic duff was encountered at all of the test pit locations. The shallow soils were loose to medium dense to depths of about 1.5 to 3+ feet. Deeper soils typically were dense to very dense and subsoils at all of the test pit locations became cemented and hard below depths of about 2 to 4 feet.

The surface organic duff soils were dark brown and the deeper natural soils were generally brown to light brown and gray-brown with some red-brown staining to the depths explored.

Surface and Subsurface Water

No active surface seepage or springs were observed on the site and no free ground water was observed in any of the test pits. The upper subsoils were generally classified as moist and the deeper subsoils as slightly moist, generally became less moist with increasing depth. Measured moisture contents of the subsoils ranged from about 3 to 19 percent of dry weight.

Subsurface Variations

Based on our experience, it is our opinion that some variation in the continuity and depth of subsoil deposits and ground water levels should be anticipated due to natural deposition variations and previous onsite grading. Due to seasonal moisture changes, ground water conditions should be expected to change with time. Care should be exercised when interpolating or extrapolating subsurface soils and ground water conditions between or beyond our test pits.

SITE EVALUATIONS

General

The referenced geologic map of Figure 1 indicates the site to expose glacial till (Qvt) soils in the upper gently sloped western areas of the lot overlying advance outwash (Qva) soils exposed below in the southern and eastern slopes. The Qvt and Qva soils were deposited during the advance of the Vashon glaciation, the last glacial advance into the Puget Sound area, approximately 13,000 to 16,000 years ago. The referenced map describes the glacial till soils as typically mixtures of silt, sand and gravel and are very dense/hard and cemented in an un-weathered condition and Qva soils are described as mostly very dense sand and gravel deposits.

Based on the natural subsoils observed in our explorations it is our opinion that the natural subsoils underlying the upper portions of subject property are Qvt deposits. The referenced map indicates that the glacial till is typically a few tens of meters thick and review of water well drilling logs in the site vicinity indicate that the glacial till (hard pan) thickness ranges from about 40 to 75 feet.

Geologic Hazards Assessment

Slope Stability: As with all development on or near slopes, you must be aware of and accept the risk that future slope failures may occur and may result in damage to your property and/or neighboring property. The risk of structure damage resulting from a slope failure varies with the distance from the slope, the slope height and its steepness as well as other factors. We evaluated the stability of the slopes by performing stability analyses based on the subsurface conditions observed in our explorations and considering critical conditions including both static conditions and the IBC seismic criteria discussed below under the seismic evaluations.

Our site observations and the topographic mapping of Figures 2 and 3 indicate the onsite slopes are quite variable. The upper west-central area of the subject lot generally has gradients less than 20% and appears currently stable. However the southern, eastern and northern portions of the lot contain variable slopes with gradients ranging from about 25% up to 50+%. Approximate deliniation of the steep (40+%) slope areas as well as slope areas with gradients of 25+% (25% - 29%) and 30+% (30% - 39%) are shown on Figures 2 and 3. The steep (40+%) slope areas within the lot range from about 12+ to 60+ feet in height.

The geologic map of Figure 1 indicates no mapped major landslides within the site vicinity but King County iMap ECA overlays indicate the site includes areas of steep slope hazard within the eastern and southern slopes as well as an area of landslide hazard in the northern portion of the lot. Based on our site observations and review of the topographic mapping shown on Figures 2 and 3 we concur that the site does contains 40+% steep slope areas and our site reconnaissance confirmed that the steep northern slope (Figure 3) appears to be a landslide scarp and the area below it (east of the slope) appears to be an area of slide debris deposits. We also noted an apparent secondary slide scar to the SE of the of the large northern landslide scarp slope (see Figure 3) as well as evidence of small shallow slumps within the southern slope (see Figure 2).

Our subsurface explorations confirmed that the site is underlain by very dense/hard cemented glacially consolidated soils with a thin mantle of loose to medium dense weathered soils typically 2 to 4 feet thick. The very dense/hard cemented glacially consolidated soils have high strength and therefore the potential for deep seated slope failures that would involve these soils is considered very low. Results of our stability analyses indicate that the slopes on the subject lot have safety factors for deep seated slope failures greater than 2.5 under static conditions and greater than 1.2 under IBC seismic conditions.

In our opinion the most likely type of instability at the site will be shallow failures within the loose weathered surfical soils on the moderate to steep slopes as well as potential westward expansion of the apparent old landslide at the north end of the lot.

The critical condition for static failures of the thin mantle of weathered soils on the site will be the condition of full water saturation of the weathered soils resulting from a prolonged heavy rainfall event combined with possible septic and/or stormwater infiltration. Our analyses indicate that under full saturation conditions the potential for shallow failures within the moderate to steep gradient areas (30% to 39%) and the steep slope areas (40% to 50+%) is very high and under full saturation conditions the potential for shallow failures within the gentle to moderate gradient areas (25% to 29%) is moderate to high. However, our analyses indicate that under full saturation conditions the potential for shallow failures within the gentle to moderate gradient areas (gradients of 20% or less) is low.

The critical condition for seismic failures of the thin mantle of weathered soils on the site is the condition of strong ground shaking during the IBC Design Earthquake. Our analyses of the shallow failure potential of the onsite steep slopes indicate that for the IBC Design Earthquake peak ground acceleration (PGA) of 0.43g for this site (which is nearly the highest PGA for the entire Puget Sound region (see discussion below under the seismic evaluations) the onsite steep slopes can be expected to experience variable displacements of the loose shallow weathered soils that will generally vary depending on the local slope gradients.

Our stability analyses for seismic failures (assuming non-saturated conditions) indicated that seismic displacements during the IBC Design Earthquake within the steep slope areas with gradients of 40% to 50+% are expected to be on the order of several inches which we interpret as indicative of probable induced shallow slope failures and potential damage to any structures within those areas. Our analyses indicated that seismic displacements within the moderate to steep gradient areas (30% to 39%) are expected to be on the order of about ½" to 1+" which we interpret as indicative of induced ground cracking and probable damage to flat work, landscaping structures and other surface structures located within those slope areas. Within the moderate gradient areas (25% to 29%) we expect seismic displacements of the shallow soils on the order of about ¼" to ½" which could possibly damage flat work, landscaping structures and other surface structures within those slope areas. Within the upper gentle gradient (20% or less) areas we expect seismic displacements during the IBC Design Earthquake of less than ¼" .

Recommended Slope Buffers and Structure Setbacks: All structures should be founded on undisturbed very dense/hard cemented natural glacial soils and should be located upslope of our recommended steep slope and landslide buffer + setback lines shown Figures 2 and 3. Structures founded on undisturbed very dense/hard cemented natural glacial soils upslope of our recommended buffer + setback lines should not be affected by potential static or seismic failures within the shallow weathered soils overlying the very dense/hard soils, however based on our analyses we conclude that peripheral development around the structure(s) such as flat work, landscape walls and other surface structures may be damaged by shallow slope failures in slope areas that have 25% or higher gradients.

Therefore although structures founded on very dense/hard cemented natural glacial soils may technically be sited anywhere upslope of the recommended minimum steep slope buffer + setback, to minimize slope stability risk for the general development and specifically for peripheral surface improvements, development should be located as far as possible from the steeper onsite slopes and as a minimum within areas with slope gradients less than 25% which are generally located within the west-central area of the lot.

Due to the indicated high potential for slope failure resulting from full saturation of the shallow weathered soils within slope areas with gradients of 25% or greater, we recommend that storm water and septic systems be located as far as possible within development constraints from the steeper onsite slopes and as a minimum at least 35 feet from slope areas with gradients of 25% or greater.

We understand that you plan to drill a new well on the property at the possible locations labeled "WELL A" and "WELL B" on the ridge south of the landslide area shown on Figure 3. We recommend that the proposed new well be located as far as practical within development constraints from the landslide area the moderate to steep (30+%) slope area and as a minimum, at least 25 feet from those areas. From a geotechnical perspective the "WELL B" site appears to have the lower risk of the two.

Erosion Hazard: The King County iMap ECA overlays indicate the site includes mapped areas of erosion hazard within the eastern and southern slopes of the lot. We observed that the site is well vegetated and we observed no indication of any seepage or concentrated water flow or current or past erosion on the lot. Based on our site observations and explorations, it is our opinion that there is moderate erosion risk at the lot (under concentrated drainage flows) but erosion potential resulting from development should be mitigated by our recommended grading procedures and drainage/erosion control measures and by final re-vegetation/landscaping recommended to be incorporated into the proposed development plans.

Seismic Hazard: The King County iMap ECA overlays indicate the site is not mapped as a seismic hazard area but the general Puget Sound region is a seismically active area. About 17+ moderate to large earthquakes (M5 to M7+) have occurred in the Puget Sound and northwestern Cascades regions since 1872 (146 years) including the 2/28/01 M6.8 Nisqually earthquake and it is our opinion that the proposed structures will very likely experience significant ground shaking during their useful lives.

Based on published geologic studies, the site lies about 12 miles south of the southernmost surface trace of the Seattle fault which is a well documented fault zone passing through the Kitsap penninsula, Bainbridge Island and southern Seattle. An additional study of the Vashon-Tacoma area presents evidence for the east-west trending Tacoma Fault which is indicated to pass through the south end of Vashon and

Maury Island (see Figure 4). Review of Figure 4 indicates that your property lies near the northern edge of the Tacoma Fault zone. The study suggests that the Tacoma Fault and the Seattle fault may be linked by a master thrust fault at depth.

The Seattle fault has been documented to have moved at its west end (Bainbridge Island) about 1000 to 1100 years ago and evidence of movement at the east end has also been documented. Some experts feel that the recurrence interval between large events on the Seattle Fault may be on the order of several thousands of years but our calculations indicate it may be on the order of 1200 to 1400 years. The activity of the nearby Tacoma fault is considered to be on the same order as the Seattle fault. Due to the proximity of the site to the active Tacoma Fault as well as the Seattle Fault, the IBC seismic criteria for this site is nearly the highest in the entire Puget Sound region.

In addition to Puget Sound seismic sources, a great earthquake event (M8 to M9+) has been postulated for the Cascadia Subduction Zone (CSZ) along the northwest Pacific coasts of northern California, Oregon, Washington and Canada. Published studies (Goldfinger, et al) have indicated that the southern portion of the zone slips more frequently than the northern portion (2 to 6 southern slip events to each northern slip event) but the northern slip events are larger such that the total slip rate over time is approximately equal for both the northern and southern portions of the zone. Therefore the northern portion of the zone nearest Puget Sound has larger but less frequent earthquakes.

Goldfinger et al data indicates intervals between past CSZ events in the last 1500+ years on the southern portion of the CSZ have ranged from a minimum of 57 years to a maximum of 279 years and the interval between events on the northern portion has ranged from about 232 years to 446 years with an average of about 324 years. The risk of a future CSZ event is not precisely known at this time but the time of the last CSZ event which ruptured both the southern and northern portions of the CSZ has been well documented to have occurred about 319 years ago (January 1700) based on review of tsunami records in Japan. Considering the above, in our opinion a CSZ event should be expected in the near future.

Considering all of the above, it is our opinion that the site and the proposed structures will very likely experience significant ground shaking during their useful life. The 2018 International Building Code (IBC) which has been adopted by King County requires that a Maximum Considered Earthquake Geometric Mean (MCE_G) ground motion peak horizontal ground acceleration (PGA) be used for liquefaction evaluations but the 2018 IBC Design Earthquake defined as 2/3 of the MCE_G ground motions in ASCE 7 may be used for consideration in other geotechnical seismic site evaluations for new construction such as slope stability evaluations and retaining wall design.

The MCE_G PGA for the 2018 IBC per ASCE 7 is based on consideration of both probabilistic ground motions with a 2475-year recurrence interval and deterministic ground motions based on a model of known fault locations and characteristics adjusted for site specific soil conditions. Per section 1803.5.12(2) of the 2018 IBC, the MCE_G

PGA for this site is indicated to be about 0.64g based on USGS Seismic Design Web Service Documentation of Design Maps of ASCE 7-16. We estimate the IBC Design Earthquake ground motion PGA for this site to be 0.43g per the definition in Chapter 11 of ASCE 7. Please note that the Design Earthquake ground motion PGA is not intended for structural analyses. Spectral accelerations per the 2018 IBC should be considered in structural design.

This site is considered to be a Site Class C per the 2018 IBC and the referenced definitions presented in Chapter 20 of ASCE 7-10.

Secondary seismic hazards due to earthquake ground shaking include induced surface rupture, slope failure, liquefaction, lateral spreading and ground settlement. Considering the close proximity to the Tacoma fault zone the potential for surface rupture is considered low to moderate. Considering the lack of shallow ground water at the site and the cemented hard glacial till soils recommended for structure support, it is our evaluation that the potential for damage to the development due to liquefaction and lateral spreading is very low. Provided the structures are founded on very dense/hard natural glacial till soils as recommended, the potential for significant induced settlement is also considered very low. The potential for seismically induced shallow failures is considered low in the areas with gradients less than 25% and moderate to high in the areas with gradients ranging from 25% to 50+%.

Structure Support Considerations

Our explorations indicate that the site is underlain by glacial till soils that were found to be cemented and very dense/hard below depths of about 2 to 4 feet, however based on the dense growth of alder trees it is apparent that the site has likely been cleared and possibly graded at some time in the past and therefore it is possible that there may be fill deposits on the site. Structure support should be extended through any existing fill soils and loose to medium dense natural soils to bear on undisturbed very dense/hard cemented natural glacial till soils.

Preparation of slab-on-grade subgrade areas should include excavation of all fill soils and loose or organic surficial soils in the subgrade area and replacement with structural fill. Existing silty sand soils could likely be re-used as structural fill with proper compaction provided moisture content is suitable for proper compaction. As a minimum we recommend that subgrade preparation for a slab-on-grade floor include excavation of all existing fill, organic and loose soils to expose medium dense/dense natural soils and replacement with structural fill to final slab subgrade.

Recommendations for foundation design, retaining walls, subgrade preparation and structural fill placement and compaction are presented below in RECOMMENDATIONS.

RECOMMENDATIONS

Recommendations for foundation design, retaining wall design, site grading, drainage control, erosion control, plan review and recommended construction observations are presented below.

Spread Footing Foundations

Conventional spread footings for structure support should be founded on undisturbed very dense/hard cemented glacial till soils encountered at depths of about 2 to 4 feet in our test pit explorations. All existing fill and loose/medium dense shallow soils should be excavated as required to expose undisturbed very dense/hard cemented glacial till soils for foundation support. All footings should be founded at least 18 inches below the lowest adjacent final grade. Square footings should be at least 24 inches wide and continuous wall footings should be at least 18 inches wide. Footings may be designed based on a maximum allowable vertical bearing pressure of 2000 psf.

In addition, square footings and continuous footings located in slope areas should be deepened as required to provide a horizontal setback of at least 5 feet or two footing widths (whichever is greater) from the sloping surface of the very dense/hard cemented bearing soils (typically expected to be about 2 to 4 feet below the existing surface). Footings should also be deepened as required to be below a 1:1 (h:v) projection up from adjacent lower footings. Where the natural bearing soils slope, the footing excavation should be stepped to maintain a horizontal bearing surface.

As an alternative to deep spread footings to penetrate unsuitable soils and/or satisfy the footing setback requirements discussed above, foundation loads may be transferred from the recommended minimum foundation depths to the recommended bearing soils by a monolith of lean concrete having a minimum compressive strength of 1000 psi. The width of an un-reinforced lean concrete monolith should be at least as wide as the footing or at least one-third of the monolith height, whichever is greater. Reinforced monoliths should be designed by a structural engineer. A suitable width trench should be excavated with a smooth edged excavator bucket (no teeth) to expose the dense/very dense bearing soils under observation by our office and backfilled as soon as possible with the lean concrete to the footing elevation.

Settlement of spread footing foundations supported on undisturbed very dense/hard soils with bearing pressure of 2000 psf or less are expected to be less than ½ inch for loads up to 3 klf. Differential settlements between properly constructed adjacent foundations supported on undisturbed very dense/hard soils is expected to be about ¼ inch or less. Settlements are expected to occur primarily during construction.

For lateral design, resistance to lateral loads can be assumed to be provided by friction acting at the base of foundations and by passive earth pressure. A coefficient of friction of 0.4 may be assumed with the dead load forces in contact with onsite soils. An

allowable static passive earth pressure of 150 psf per foot of depth may be used for the sides of footings poured against existing loose soils but may be increased to 250 psf per foot for footings bearing laterally against properly compacted structural fill.

The bearing values indicated above are for the total dead load plus frequently applied live loads. If normal code requirements are applied for design, the vertical bearing pressure and the allowable lateral passive pressures may be increased by 33% for wind and seismic forces.

Retaining Walls

Cantilevered retaining walls as referred to in this report are walls which yield or move outward during and after backfilling. Actual wall movements will depend on the wall design and method of backfilling and can range from 0.1% to 0.3% of the wall height. Design pressures for cantilevered walls given below assume that the top of the wall will deflect at least 0.15% of the wall height. Design of wall foundations should be in accordance with the recommendations presented in this report.

Static design of permanent cantilevered retaining walls which support a horizontal surface of properly compacted clean free-draining granular material may be based on an equivalent fluid density of 40 pcf. These pressures assume that there is no water pressure with the wall backfill. For support of sloped backfill up to a 30% gradient slope a lateral pressure equivalent fluid density of 50 pcf is recommended. An additional uniform lateral pressure due to backfill surcharge should be computed using a coefficient of 0.27 times the uniform vertical surcharge load.

Static design of walls supporting horizontal backfill and structurally braced against movement should be based on an equivalent fluid density of 60 pcf. This pressure assumes that the wall supports a horizontal backfill of properly compacted free-draining granular material and that there is no water pressure behind the wall. For braced support of sloped backfill up to a 30% slope a lateral pressure equivalent fluid density of 80 pcf is recommended. Uniform lateral pressure due to a uniform vertical surcharge behind a braced wall should be computed using a coefficient of 0.43 times the uniform vertical surcharge load.

Seismic design of retaining walls should include a dynamic soil loading. Dynamic soil pressure should be assumed to have an inverted triangular distribution. Based on a 0.43g IBC design ground motion level the dynamic soil pressure at the top of the wall should be at least 28H (psf) where H is the height of the wall above the footing base. The dynamic soil pressure should diminish linearly to zero at the base of the wall. Combined static plus dynamic soil pressure should be used for seismic design of the walls.

Care should be exercised in compacting backfill against retaining walls. Heavy equipment should not approach retaining walls close enough to intrude within a 1:1 line

drawn upward from the bottom of the wall. Backfill close to walls should be placed and compacted with hand-operated equipment. Recommendations for placement and compaction of structural fill are presented under "Site Grading".

Design wall pressures given above assume no water pressure behind the wall. We recommend that a drainage zone be provided behind all walls and a adequate drain system be provided at the base of the walls. Wall drains should consist of a four-inch diameter perforated PVC drain pipe placed in at least one cubic foot of drain gravel per lineal foot along the base of the wall. Drain gravel should be washed material with particle sizes in the range of 3/4 to 1-1/2 inches.

As a minimum, the drainage zone within the upper wall should consist of a Miradrain drainage mat or equivalent attached to the wall surface for the full height and embedded into the drain gravel at the base of the wall. As an alternative a clean sand drainage zone could be placed the full height of the wall with a horizontal width equal to at least 1 foot. Backfill within the drainage zone should be a clean sand/gravel mixture with less than 5 percent fines based on the sand fraction. A membrane of Mirafi 140 filter fabric or equivalent should be provided between the drainage zone material and onsite silty soil backfill. The drainage zone backfill should be capped with 12 inches of silty soils to reduce surface water infiltration.

Site Grading

Site grading is expected to consist of driveway construction and subgrade preparation for construction of foundations, slabs and pavements. Recommendations for site preparation, temporary excavations, structural fill and subgrade preparation are presented below.

Site Preparation: All existing fill soils, organic and loose soils should be stripped from planned structural fill areas. Debris and trash, plus rocks and rubble over 6 inches in size, should be removed from the subgrade. Subsoil conditions on the site may vary from those encountered in the test pits. Therefore, the soils engineer should observe the prepared areas prior to placement of any new fills.

Temporary Excavations: Sloped temporary construction excavations may be used where planned excavation limits will not interfere with other construction. Based on the conditions observed at the site it is our opinion that temporary excavations which will require workers to enter them can be made vertically to 3 feet but deeper excavations in un-saturated soils should be sloped no steeper than 1:1 (horizontal:vertical) in the loose/medium dense soils and sloped no steeper than ½:1 (horizontal:vertical) within the very dense/hard cemented soils to a maximum depth of 10 feet. Where there is not enough room for sloped excavations, shoring should be provided. It should be noted that the contractor is responsible for maintaining safe construction excavations.

Structural Fill: On site soils may be used for general structural fill (subject to final approval during construction) provided that the soil moisture content is suitable for compaction and they do not contain any organics. All imported fill should be clean, sand and gravel materials free of organic debris and other deleterious material. Structural fill should be placed in horizontal lifts not exceeding 8 inches in loose depth and compacted to the required density.

General structural fill should be compacted to at least 90 percent of the maximum dry density as determined by the ASTM D1557 test method unless otherwise specified.

Pavement and Slab Subgrade Preparation: All topsoil, fill and organic soils in subgrade areas should be excavated to expose dense/very dense natural soils and replaced with compacted structural fill to final slab subgrade.

Concrete slabs-on-grade should be supported on a subgrade consisting of general structural fill over dense natural soils. As a minimum we recommend that subgrade preparation for a slab-on-grade floor include excavation of all existing fill, organic and loose soils to expose medium dense natural soils or to a depth of 2 feet whichever is less and replacement with structural fill to final slab subgrade.

Risk of slab cracking can be reduced by placing 2-way reinforcement steel, and greater excavation and replacement of the existing soils with new structural fill. If interior concrete slabs are constructed they should be underlain by a polyethylene vapor barrier of at least 6 mil thickness.

Asphalt pavement sections (AC and base course) should be supported on a subgrade consisting of at least 6 inches of crushed gravel over the general structural fill subgrade prepared as recommended above. In driveway areas a minimum 8-inch depth of crushed gravel should be provided above the general structural fill. The imported crushed gravel fill should be compacted to at least 95 percent of the maximum dry density as determined by the ASTM D1557 test method.

Drainage Control

Surface drainage from the adjoining upslope areas should be controlled and diverted around the subject lot in a non-erosive manner. Adequate positive drainage should be provided away from the structures and on the site in general to prevent water from ponding and to reduce percolation of water into subsoils. A desirable slope for surface drainage is 2% in landscaped areas and 1% in paved areas.

Roof drains should be tightlined into the storm drain system (no splash blocks) downslope of the structure and at least 15 feet laterally from the structure. A footing drain independent of the roof drain system should be placed adjacent to the base of the continuous exterior foundations. The footing drain should consist of a four-inch diameter perforated PVC drain pipe placed in at least one cubic foot of drain gravel per

lineal foot along the base of the foundations. The drain gravel zone around the pipe should be encapsulated with a membrane of Mirafi 140 filter fabric or equivalent between the drainage zone material and onsite silty soil backfill.

Erosion Control

Onsite materials are expected to be moderately erodible when exposed to concentrated water flow in slope areas. No excavated material should be wasted on the slopes downslope of the recommended development limits shown in Figure 3. Siltation fences or other suitable detention devices should be provided around soil stockpiles and around the lower sides of exposed soil areas during construction to control the transport of eroded material. The lower edge of the silt fence fabric should have "J" shaped embedment in a trench extending at least 12 inches below the ground surface. Surface drainage should be directed away from slopes and exposed soil areas should be planted immediately with grass and deep rooted plants to help reduce erosion potential.

No cutting and clearing should be performed in the steep slope areas and should be minimized in the non-steep slope areas. Pruning or cutting back of trees with a minimum of disturbance to the existing slope vegetation is recommended as opposed to felling. If felling is required, stumps should be left intact where possible to reduce disturbance to the shallow soils.

Observations and Testing During Construction

Recommendations presented in this report are based on the assumption that soil conditions exposed during construction will be observed by our office so that any necessary design changes or supplemental recommendations may be made. All footing excavations should be observed prior to placement of steel and concrete to see that they have penetrated into bearing soils and that excavations are free of loose and disturbed materials. Proper fill placement and compaction should be verified with field and laboratory density testing by a qualified testing laboratory. Drainage control systems construction should be observed to verify proper construction.

Plan Review

This report has been prepared to aid in the evaluation of this site and to assist the owners and their consultants in the design and construction of the project. It is recommended that this office be provided the opportunity to review the final design drawings and specifications to determine if the recommendations of this report have been properly implemented and to make any supplemental design recommendations which may be required.

CLOSURE

This report was prepared for specific application to the subject site and for the exclusive use of Mr. Jason Hoetger and his representatives. The findings and conclusions of this report were prepared with the skill and care ordinarily exercised by local members of the geotechnical profession practicing under similar conditions in the same locality. We make no other warranty, either express or implied.

Variations may exist in site conditions between those described in this report and actual conditions encountered during construction. Unanticipated subsurface conditions commonly occur and cannot be prevented by merely making explorations and performing reconnaissance. Such unexpected conditions frequently require additional expenditures to achieve a properly constructed project. If conditions encountered during construction appear to be different from those indicated in this report, our office should be notified.

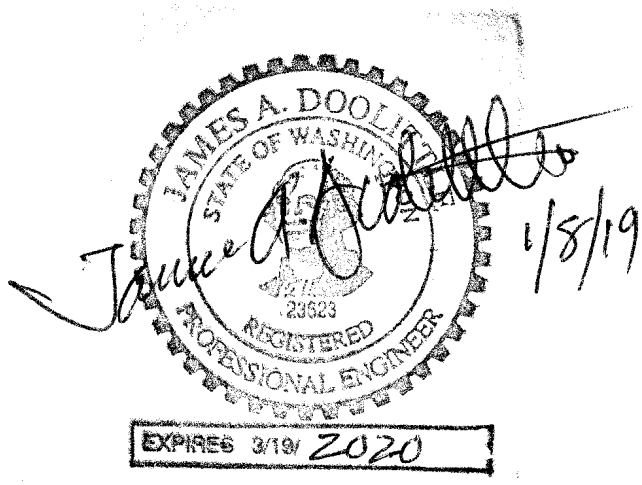
Respectfully submitted,

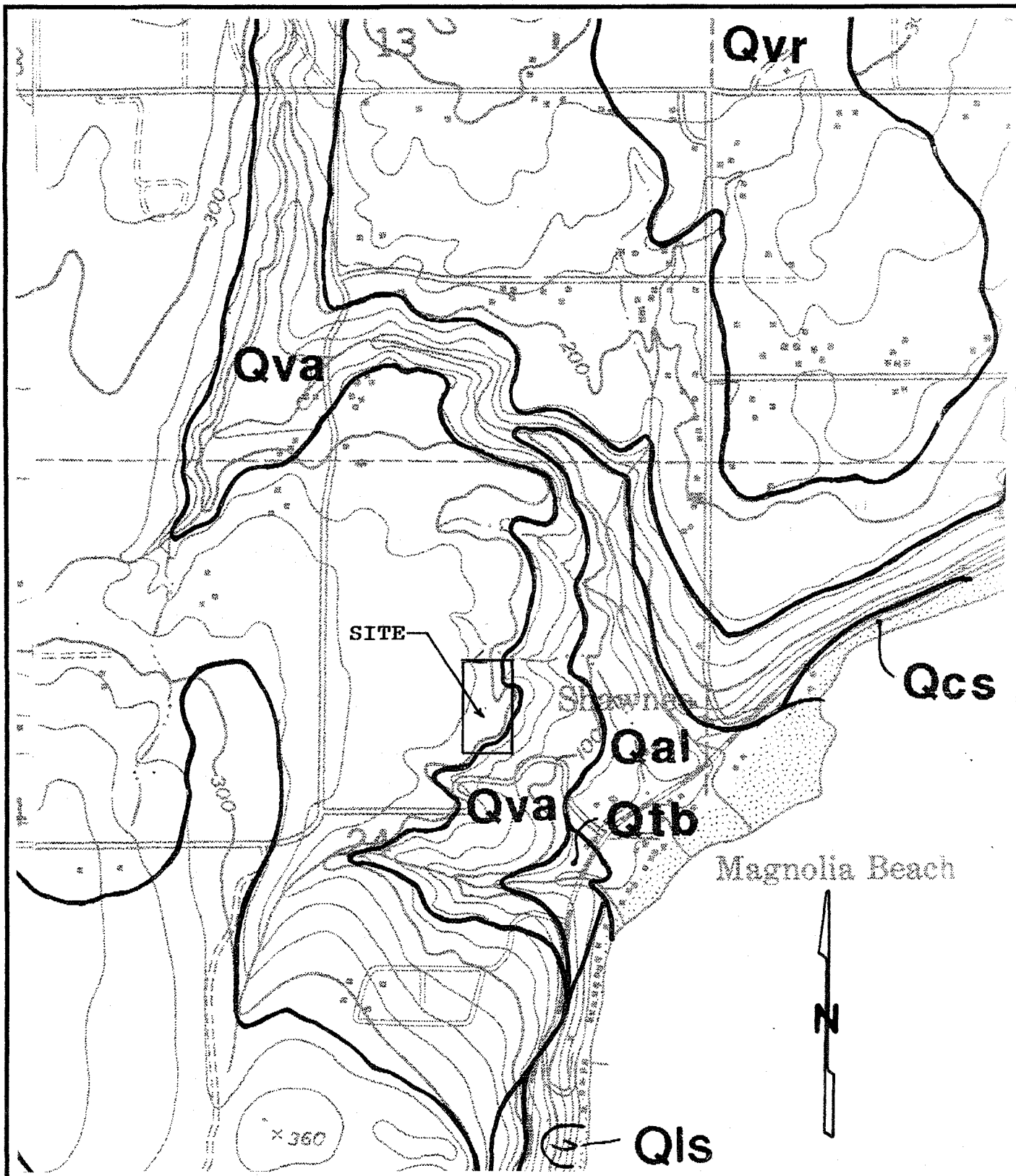
GEOSPECTRUM CONSULTANTS, INC.

James A. Doolittle
Principal Engineer

Encl: Figures 1 through 4
Appendix A

Dist: 1/Addressee via email





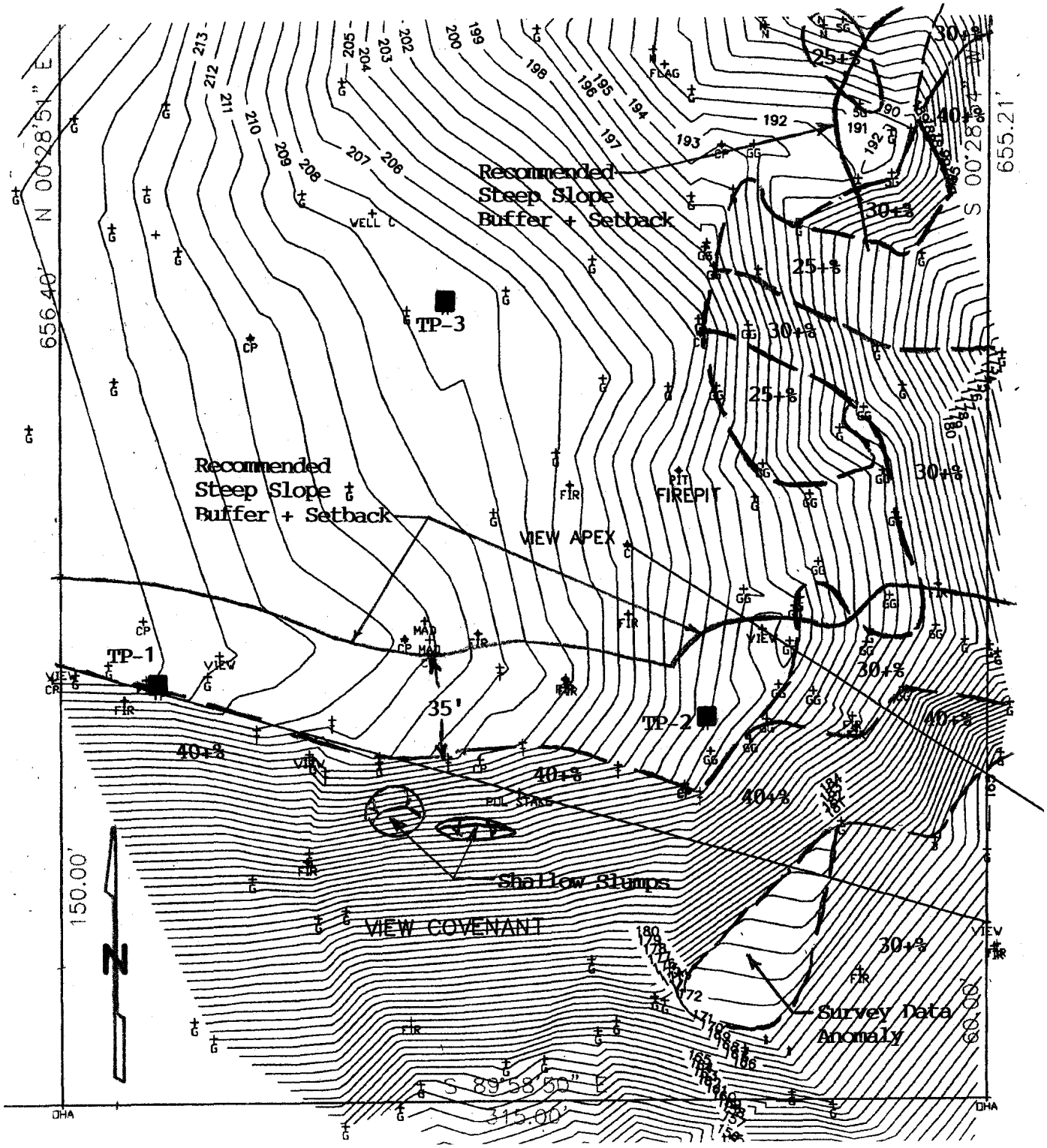
Ref: Geologic Map of Vashon & Maury Islands
prepared by Derek B. Booth, USGS, 1991
Enlarged Scale: 1" = 1000'

SITE VICINITY GELOGIC MAP

GEOSPECTRUM CONSULTANTS, INC.
Geotechnical Engineering and Earth Sciences

Proposed Residential Development
KCPN 242202-9133
Vashon, Washington

Proj. No.18-119	Date 1/19	Figure 1



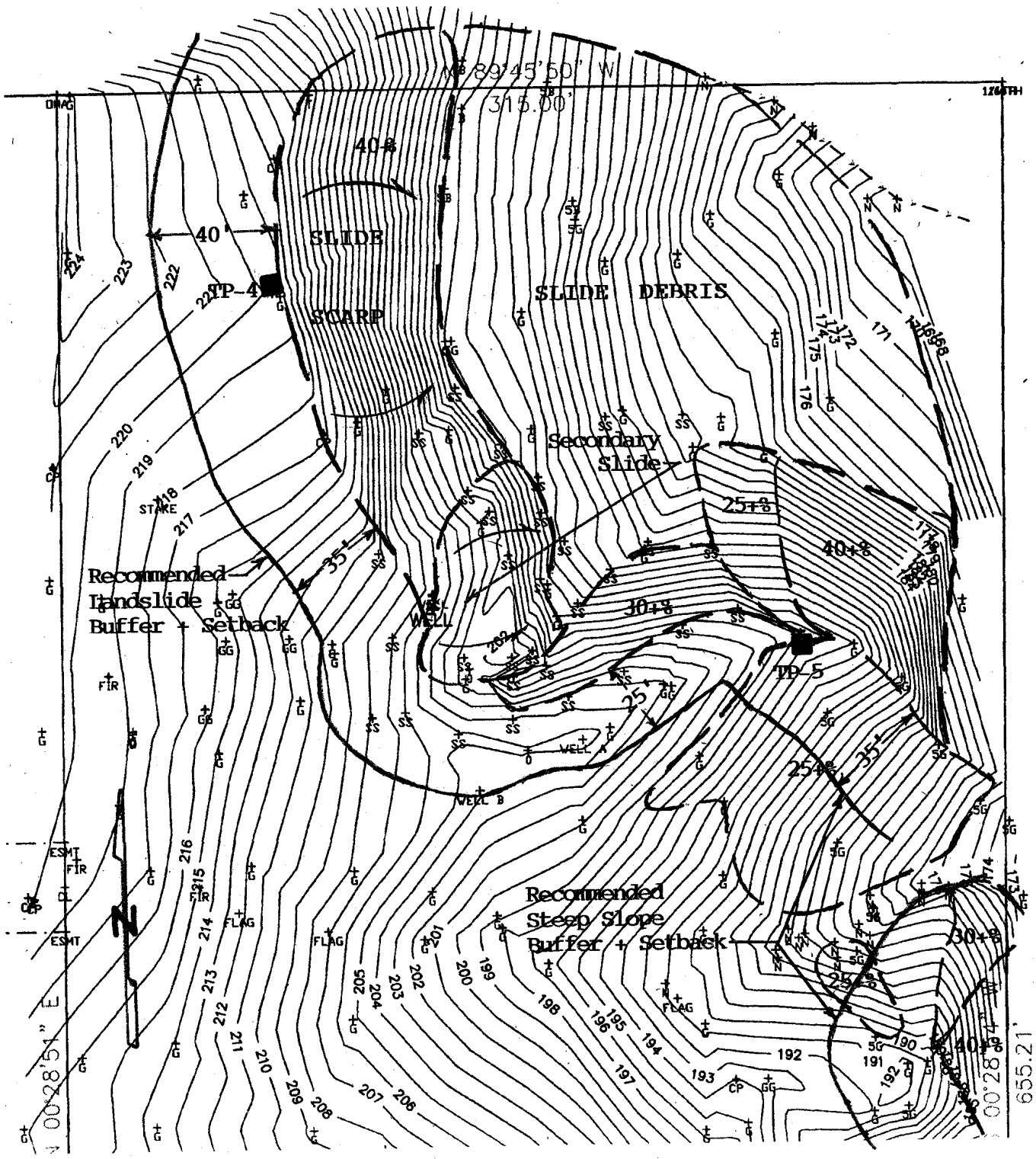
ref: Topographic Map for Jason Hoetger,
prepared by Jerold O'Hare, PLS,
Dated 01/04/19, Scale: 1"= 50'

SOUTHERN SITE AREA SLOPE CONDITIONS

GEOSPECTRUM CONSULTANTS, INC.
Geotechnical Engineering and Earth Sciences

Proposed Residential Development
KCPN 242202-9133
Vashon, Washington

Proj. No.18-119	Date 1/19	Figure 2



ref: Topographic Map for Jason Hoetger,
Prepared by Jerold O'Hare, PLS,
Dated 01/04/19, Scale: 1" 50'

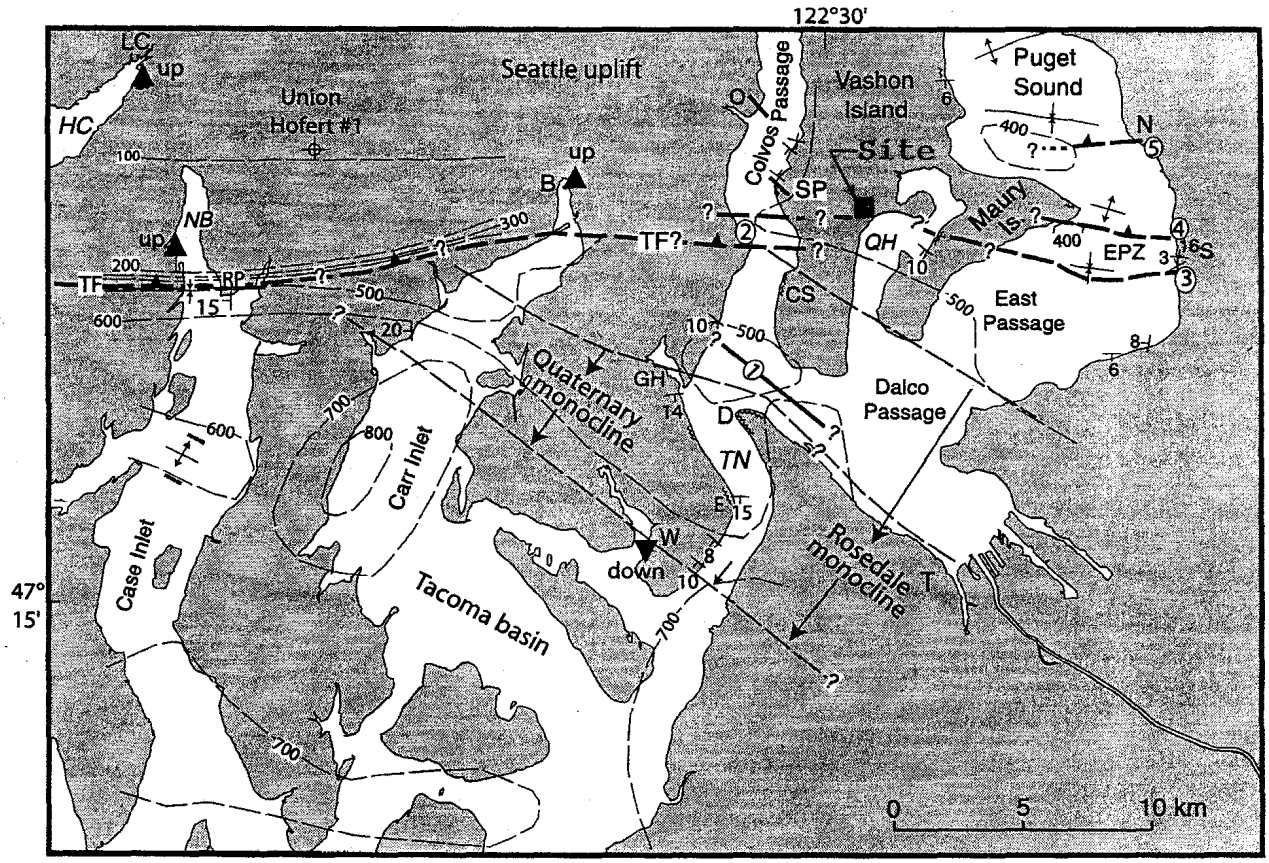
NORTHERN SITE AREA SLOPE CONDITIONS

GEOSPECTRUM CONSULTANTS, INC.

Geotechnical Engineering and Earth Sciences

Proposed Residential Development
KCPN 242202-9133
Vashon, Washington

Proj. No.18-119	Date 01/19	Figure 3



fault, dashed where inferred

numbered fault (see text)

fold axis

monoclinal ramp

15 strike and dip of bedding in Quaternary deposits

zone of concentrated deformation in Quaternary deposits at base of bluff outcrops

—400— structure contour (m) showing elevation below sea level of base of Quaternary

▲ up site of documented late Holocene uplift or subsidence

Map showing selected geologic features and structural interpretation of south central Puget Lowland (Figure 1). The entire area is underlain by Quaternary deposits. Dips plotted on map are all from discontinuous exposures of Pleistocene strata at the base of coastal bluffs; exposures with dipping strata are commonly separated by zones of flatlying Quaternary strata and are generally unconformably overlain by flatlying strata higher in the bluffs. Dips in Quaternary strata are generally minor (<5°) unless shown. B, Burley; CS, Camp Sealth; D, Point Defiance; E, Point Evans; EPZ, East Passage zone; GH, Gig Harbor; HC, Hood Canal; LC, Lynch Cove; N, Normandy Beach Park; NB, North Bay; O, Olalla; QH, Quartermaster Harbor, RP, Rocky Point; S, Saltwater State Park; SP, Sandford Point, T, Tacoma; TF, Tacoma fault; TN, The Narrows; W, Wollochet. Triangles show areas of ~A.D. 900 uplift and subsidence [*Bucknam et al.*, 1992; *Sherrod et al.*, 2002, 2003].

ref: Johnson, et al., "Active shortening of the Cascadia forearc and implications for seismic hazards of the Puget Lowland", Tectonics, Vol 23, TC1011, Jan 2004

SITE VICINITY FAULTING

GEOSPECTRUM CONSULTANTS, INC.

Geotechnical Engineering and Earth Sciences

Proposed Residential Development
KCPN 242202-9133
Vashon, Washington

Proj. No. 18-119	Date 1/19	Figure 4

APPENDIX A
FIELD EXPLORATION

Our field exploration included a site reconnaissance and subsurface exploration program. During the site reconnaissance, the surface site conditions were noted, and the locations of the test pits were approximately determined (see Figure 2). Elevations were based on the topography of Figure 2 and our own measurements.

Test pits were excavated using a Kubota KX 121-3 trackhoe. Soils were continuously logged and classified in the field by visual examination, in accordance with the ASTM Soil Classification system.

Logs of the test pits are presented on the test pit summary sheets A-1 through A-3. The test pit summaries include descriptions of the soils and pertinent field data. Soil consistency and moisture conditions indicated on the logs are interpretations based on the conditions observed in the field. Boundaries between soil strata indicated on the logs are approximate and actual transitions between strata may be gradual.

TEST PIT NO. 1

Logged by JAD

Date: 10/30/18

Elevation: 215'

Depth	Blows	Class.	Soil Description	Consistency	Moisture	Color	W(%)	Comments
0		OL	Duff w/organics	loose	moist	dark brn		
1		SM	Silty fine Sand			brown		
			with occ. gravel to 4"	m. dense	slightly	light		
2			with some cementation	dense	moist	brown		
			becomes cemented	very dense to hard	to moist		7.9	
3								
4			very cemented	hard		gray-brn & red-brn	7.7	difficult digging
5			Maximum depth 5 feet.					
			No ground water observed.					
6								
7								

TEST PIT NO. 2

Logged by JAD

Date: 10/30/18

Elevation: 200'

Depth	Blows	Class.	Soil Description	Consistency	Moisture	Color	W(%)	Comments
0		OL	Duff with roots	loose	moist	dark brn		
1		SM	Silty Sand, very fine " w/ occ gravel to 4"			brown		
2				m. dense		light brown	9.2	
3				dense				
			with some cementation	dense to	slightly moist		4.8	
4			becomes cemented	very dense/ hard				
5			very cemented	hard		gray-brown	3.3	difficult digging
6			Maximum depth 6 ft.					
			No ground water observed.					
7								

GEOSPECTRUM CONSULTANTS, INC.

Geotechnical Engineering and Earth Sciences

Proposed Residential Property Development
King County Parcel No. 242202-9133
Vashon, Washington

Proj. No. 18-119	Date 1/19	Figure A-1

TEST PIT NO. 3

Logged by JAD

Date: 10/30/18

Elevation: 208'

Depth	Blows	Class.	Soil Description	Consistency	Moisture	Color	W(%)	Comments
0		OL	Duff w/organics & roots	loose	moist	dark brn		
1		SM	Silty fine Sand with gravel to 2"			brown		
2			with some cementation	m. dense		light brown	10.2	
3			very cemented	dense hard	slightly moist	gray-brn & red-brn	5.5	difficult digging
4								
5			Maximum depth 4 feet.					
6			No ground water observed.					
7								

TEST PIT NO. 4

Logged by JAD

Date: 10/30/18

Elevation: 215'

Depth	Blows	Class.	Soil Description	Consistency	Moisture	Color	W(%)	Comments
0		OL	Duff with organics & roots	loose	moist	dark brn		
1		SM	Silty Sand, very fine w/ occ gravel to 1"			red-brown	12.9	
2		SM/ GM	becomes gravelly to 2" & some cementation	m. dense to dense	slightly moist	brown	6.9	
3								
4		SP/ SM	Sand/Silty Sand, very fine with occ gravel to 2" & very cemented	hard		gray-brown	6.2	
5								
6			Maximum depth 5.5 ft.					
7			No ground water observed.					

GEOSPECTRUM CONSULTANTS, INC.

Geotechnical Engineering and Earth Sciences

Proposed Residential Property Development
King County Parcel No. 242202-9133
Vashon, Washington

Proj. No. 18-119	Date 1/19	Figure A-2

TEST PIT NO. 5

Logged by JAD

Date: 10/30/18

Elevation 185'

Depth	Blows	Class.	Soil Description	Consistency	Moisture	Color	W(%)	Comments
0		OL	Duff with organics & toots	loose	moist	dk brn brown		
1		SM/ ML	Silty very fine Sand/Sandy Silt		to very moist	light brown		
2							19.0	
3				m. dense/ stiff				
			weakly cemented	dense/ v. stiff	moist	very light brown	12.1	
4								
			cemented	very dense/ hard				
5							11.8	
6			Maximum depth 6 feet.					
7			No ground water encountered.					

GEOSPECTRUM CONSULTANTS, INC.

Geotechnical Engineering and Earth Sciences

Proposed Residential Property Development
King County Parcel No. 242202-9133
Vashon, Washington

Proj. No.18-119	Date1/19	Figure A-3

APPENDIX B:
DRAINAGE PLAN

King County

Department of Permitting and Environmental Review

Residential Site Plan Template

Ref:KCC21a.12.030

Max. Impervious Surface Allowed	15% OR 105,197 SF
Max. Bldg. Height Allowed	40'

Ref: KCC21a.12.170

Min. Bldg. setback from Street	30'
Min. Garage setback from Street	
Min. Bldg. setback from Interior	10'

Permit Center Validations:
- o Zoning
- o Site Review Not Applicable

Validated Signature _____

Login Initials _____ Date _____

Engineering/Drainage Approval

Signature _____

Date _____

Critical Areas Approval

Signature _____

Date _____

Clearing/Grading Approval

Signature _____

Date _____

Fire Approval

Signature _____

Date _____

STORM STRUCTURE SCHEDULE:

SD#1: TYPE 1 CB, FRAME & GRATE
RIM = 208.20 (MATCH GRADE)
IE = 205.70

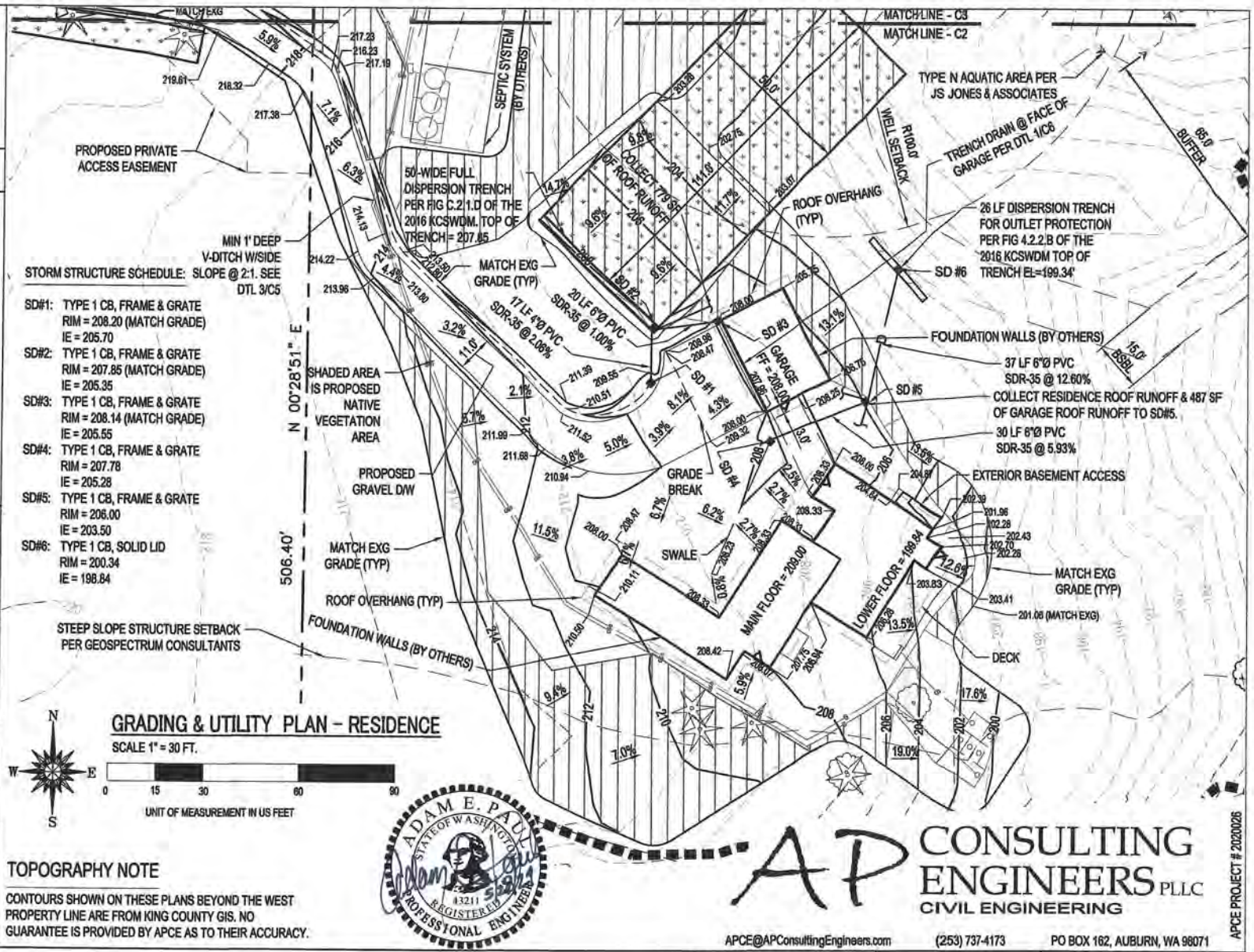
SD#2: TYPE 1 CB, FRAME & GRATE
RIM = 207.85 (MATCH GRADE)
IE = 205.35

SD#3: TYPE 1 CB, FRAME & GRATE
RIM = 208.14 (MATCH GRADE)
IE = 205.55

SD#4: TYPE 1 CB, FRAME & GRATE
RIM = 207.78
IE = 205.28

SD#5: TYPE 1 CB, FRAME & GRATE
RIM = 206.00
IE = 203.50

SD#6: TYPE 1 CB, SOLID LID
RIM = 200.34
IE = 198.84



N
W E
S

0 15 30 60 90

UNIT OF MEASUREMENT IN US FEET

GRADING & UTILITY PLAN - RESIDENCE

SCALE 1" = 30 FT.

TOPOGRAPHY NOTE

CONTOURS SHOWN ON THESE PLANS BEYOND THE WEST PROPERTY LINE ARE FROM KING COUNTY GIS. NO GUARANTEE IS PROVIDED BY APCE AS TO THEIR ACCURACY.

ADAM E. PAUL
STATE OF WASHINGTON
43211
REGISTERED PROFESSIONAL ENGINEER

AP CONSULTING ENGINEERS PLLC
CIVIL ENGINEERING
APCE@APConsultingEngineers.com (253) 737-4173 PO BOX 162, AUBURN, WA 98071

APCE PROJECT # 20200026

Permit Number: DWEL XX-XXXX Parcel Number: 2422029133 Applicant Name: JASON HOETGER Site Address: 24426 OLD MILL ROAD SW VASHON, WA 98070

Engineering Scale: 1" = 30

King County

Department of Permitting and Environmental Review

Residential Site Plan Template

Ref:KCC21a.12.030

Max. Impervious Surface Allowed	20% OR 43,758 SF
Max. Bldg. Height Allowed	40'

Ref: KCC21a.12.170

Min. Bldg. setback from Street	30'
Min. Garage setback from Street	
Min. Bldg. setback from Interior	10'

Permit Center Validations:
- o Zoning
- o Site Review Not Applicable

Validated Signature _____

Login Initials _____ Date _____

Engineering/Drainage Approval

Signature _____

Date _____

Critical Areas Approval

Signature _____

Date _____

Clearing/Grading Approval

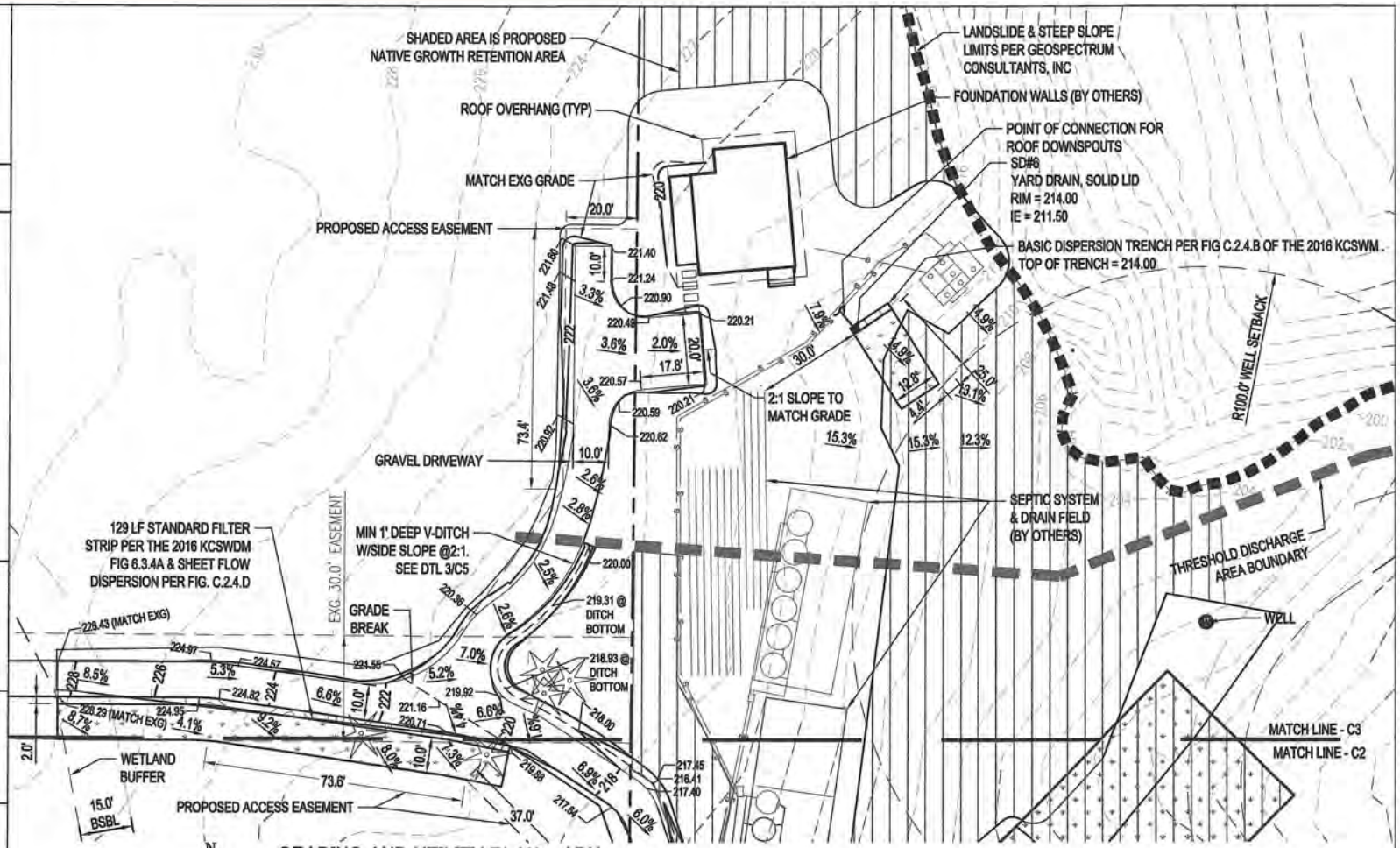
Signature _____

Date _____

Fire Approval

Signature _____

Date _____



GRADING AND UTILITY PLAN - ADU

SCALE 1" = 30 FT.

TOPOGRAPHY NOTE

CONTOURS SHOWN ON THESE PLANS BEYOND THE WEST PROPERTY LINE ARE FROM KING COUNTY GIS. NO GUARANTEE IS PROVIDED BY APCE AS TO THEIR ACCURACY.

ADAM E. PAUL STATE OF WASHINGTON 43211 REGISTERED PROFESSIONAL ENGINEER

AP CONSULTING ENGINEERS PLLC
CIVIL ENGINEERING
APCE@APConsultingEngineers.com (253) 737-4173 PO BOX 162, AUBURN, WA 98071

APCE PROJECT # 20200026

Permit Number: DWEL XX-XXXX Parcel Number: 2422029133 Applicant Name: JASON HOETGER Site Address: 244XX OLD MILL ROAD SW VASHON, WA 98070

Engineering Scale: 1" = 30

APPENDIX C:
TESC SITE PLAN

King County
Department of Permitting
and Environmental Review

Residential TESC Template

RECOMMENDED CONSTRUCTION SEQUENCE

1. Hold the pre-construction meeting, if required
2. Post sign with name and phone number of TESC 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 pond and traps, if required.
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 King County standards and manufacture's recommendations.
11. Relocate erosion control measure, or install new measures so that as site conditions change, the erosion and sediment control is always in accordance with the King County Erosion and Sedimentation Control Standards.
12. Cover all areas that will be unworked for more than seven days during the dry season or two days during the wet season 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 BMP's if appropriate.

Engineering / Drainage Approval

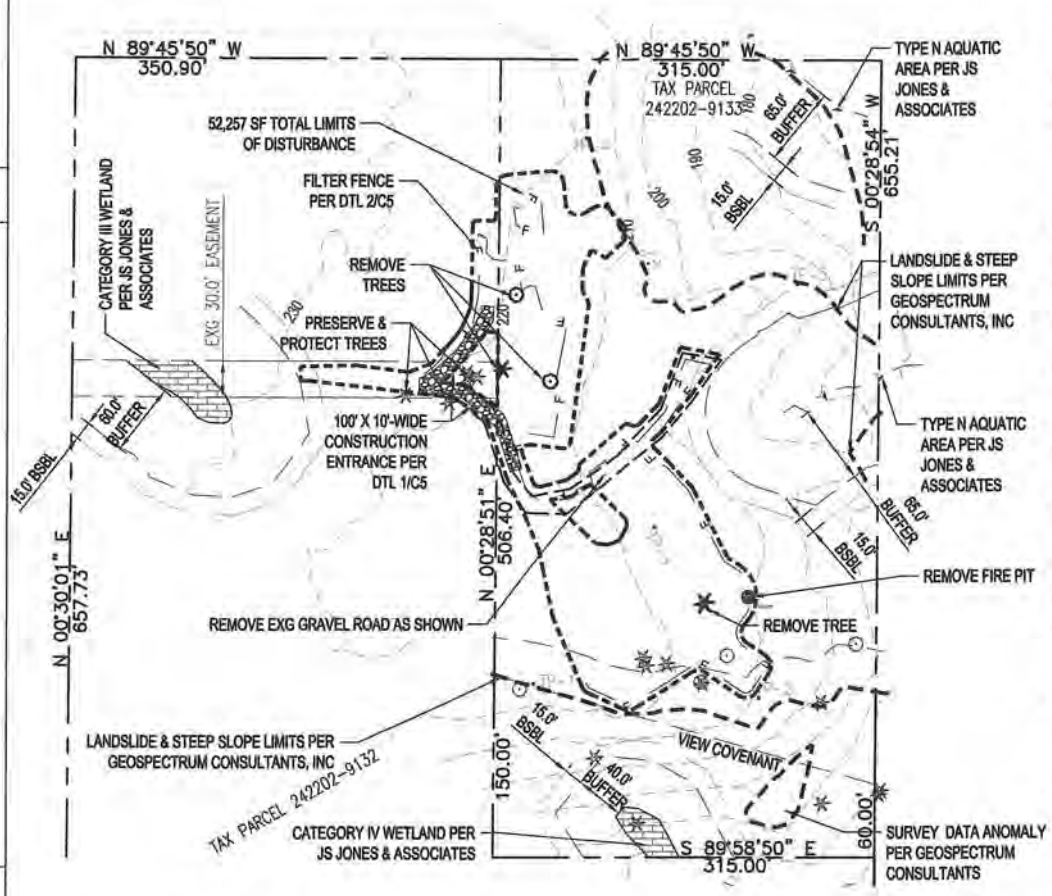
Signature: _____

Date: _____

Clearing / Grading Approval

Signature: _____

Date: _____



TESC & DEMO PLAN

SCALE 1" = 100 FT.

0 50 100 200 300

UNIT OF MEASUREMENT IN US FEET

TESC NOTES

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
5. 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 THIS PROJECT.
6. 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.
7. 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.).
8. 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.
9. ANY AREAS OF EXPOSED SOILS, INCLUDING ROADWAY EMBANKMENTS, THAT WILL NOT BE DISTURBED FOR TWO DAYS DURING THE WET SEASON OR SEVEN DAYS DURING THE DRY SEASON SHALL BE IMMEDIATELY STABILIZED WITH THE APPROVED ESC COVER METHODS (E.G., SEEDING, MULCHING, PLASTIC COVERING, ETC.).
10. ANY AREA NEEDING ESC MEASURES, NOT REQUIRING IMMEDIATE ATTENTION, SHALL BE ADDRESSED WITHIN SEVEN (7) DAYS.
11. THE ESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH OR WITHIN 24 HOURS FOLLOWING A STORM EVENT.
12. 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.
13. 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 PERMANENT 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.
14. COVER MEASURES WILL BE APPLIED IN CONFORMANCE WITH APPENDIX D OF THE SURFACE WATER DESIGN MANUAL.
15. PRIOR TO THE BEGINNING OF THE WET SEASON (OCT. 1), ALL DISTURBED AREAS SHALL BE REVIEWED TO IDENTIFY WHICH ONES CAN BE SEEDED IN PREPARATION FOR THE WINTER RAINS. DISTURBED AREAS SHALL BE SEEDED WITHIN ONE WEEK OF THE BEGINNING OF THE WET SEASON. A SKETCH MAP OF THOSE AREAS TO BE SEEDED AND THOSE AREAS TO REMAIN UNCOVERED SHALL BE SUBMITTED TO THE DDES INSPECTOR FOR REVIEW.

STOCKPILE NOTE

LOCATION OF STOCKPILE TO BE LOCATED WITHIN THE DESIGNATED AREAS OF DISTURBANCE. EXACT LOCATION TO BE DETERMINED BY CONTRACTOR

ADAM E. FAUL
STATE OF WASHINGTON
43211
REGISTERED
PROFESSIONAL ENGINEER

AP CONSULTING ENGINEERS PLLC
CIVIL ENGINEERING
APCE@APConsultingEngineers.com (253) 737-4173 PO BOX 182, AUBURN, WA 98071

APCE PROJECT # 20200026

Permit Number: DWEL XX-XXXX Parcel Number: 2422029133 Applicant Name: JASON HOETGER Site Address: 24426 OLD MILL ROAD SW VASHON, WA 98070 Engineering Scale: 1" = 100 Sheet 4 of 6