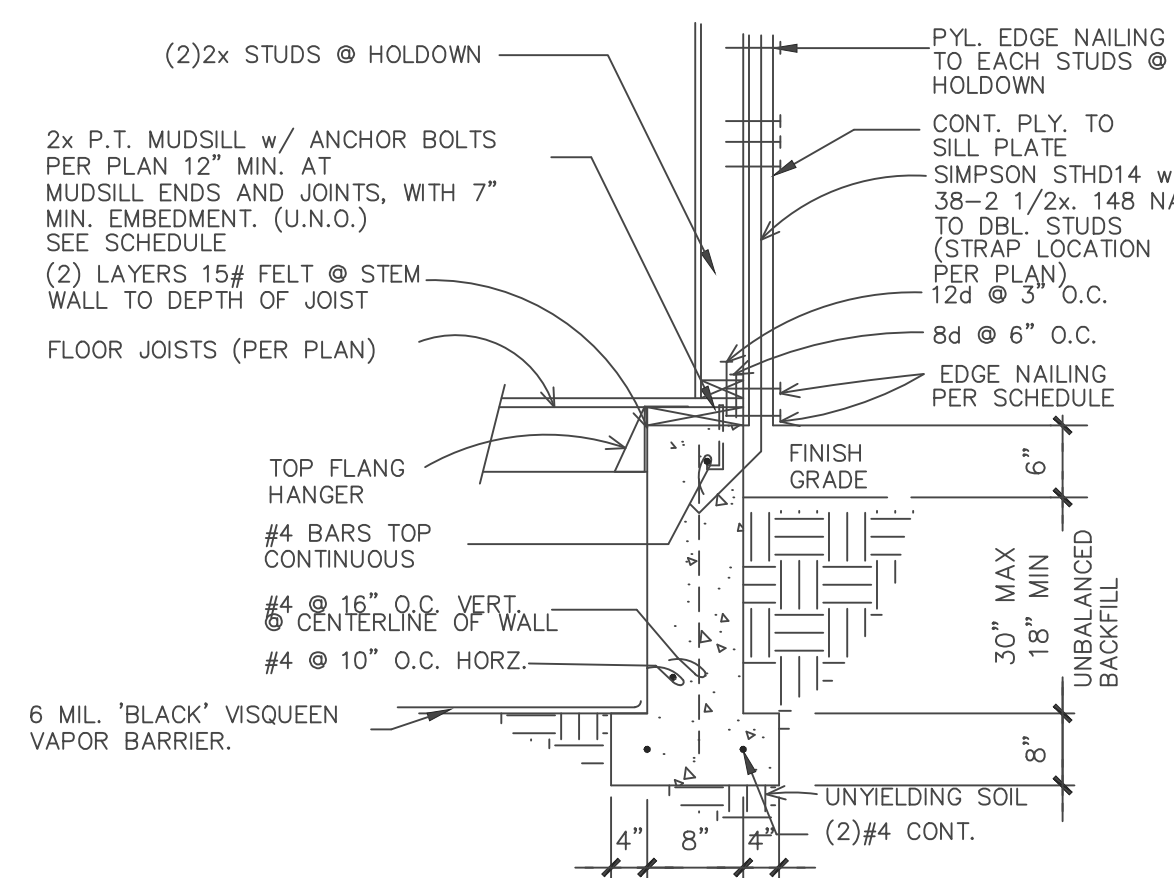
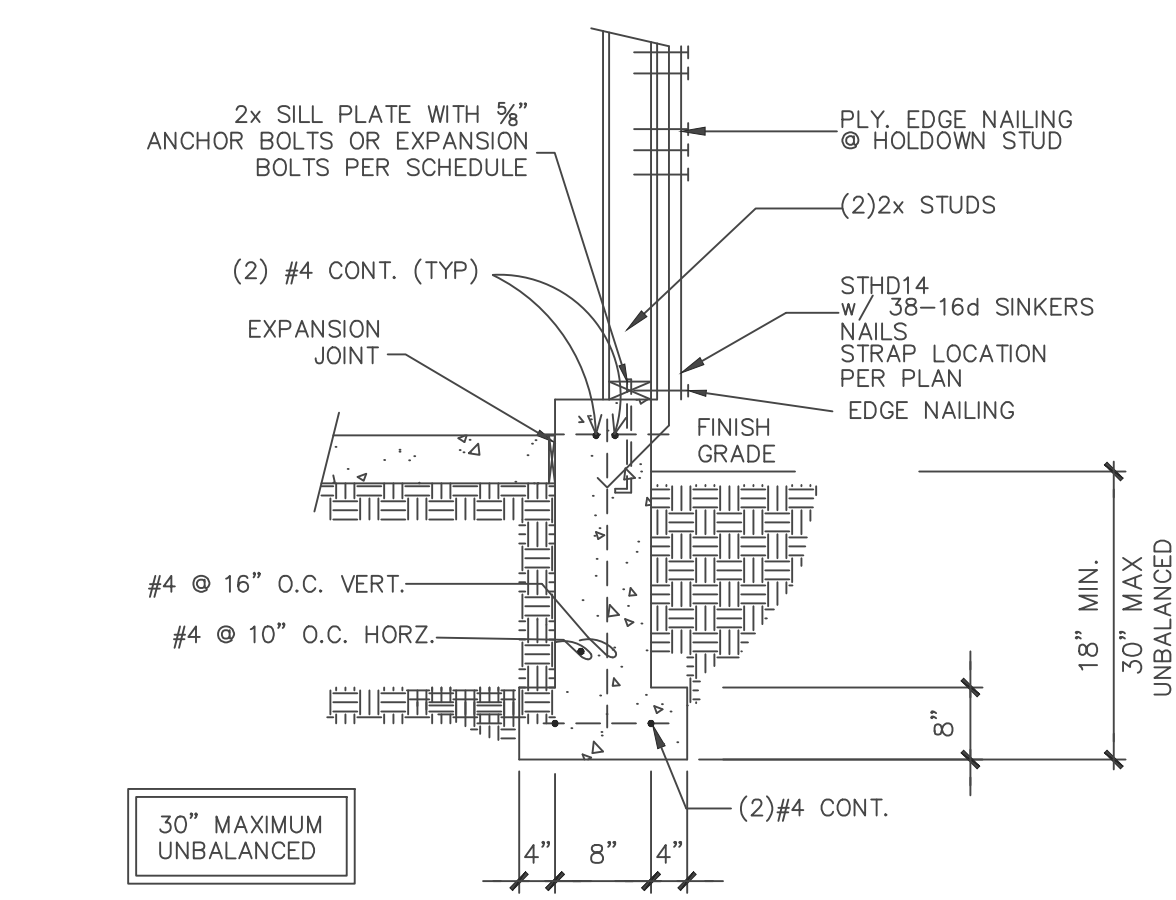


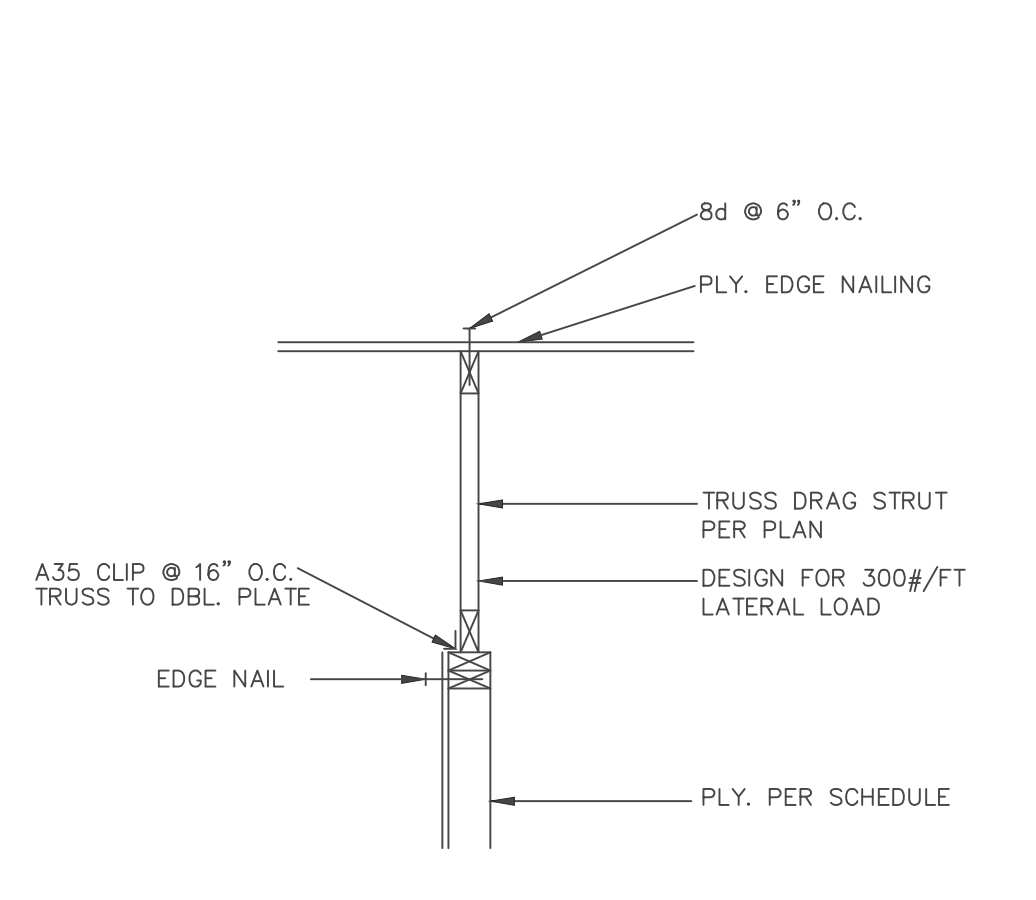
A EXTERIOR SHEARWALL
@ CRAWL SPACE
3/4"=1'-0"



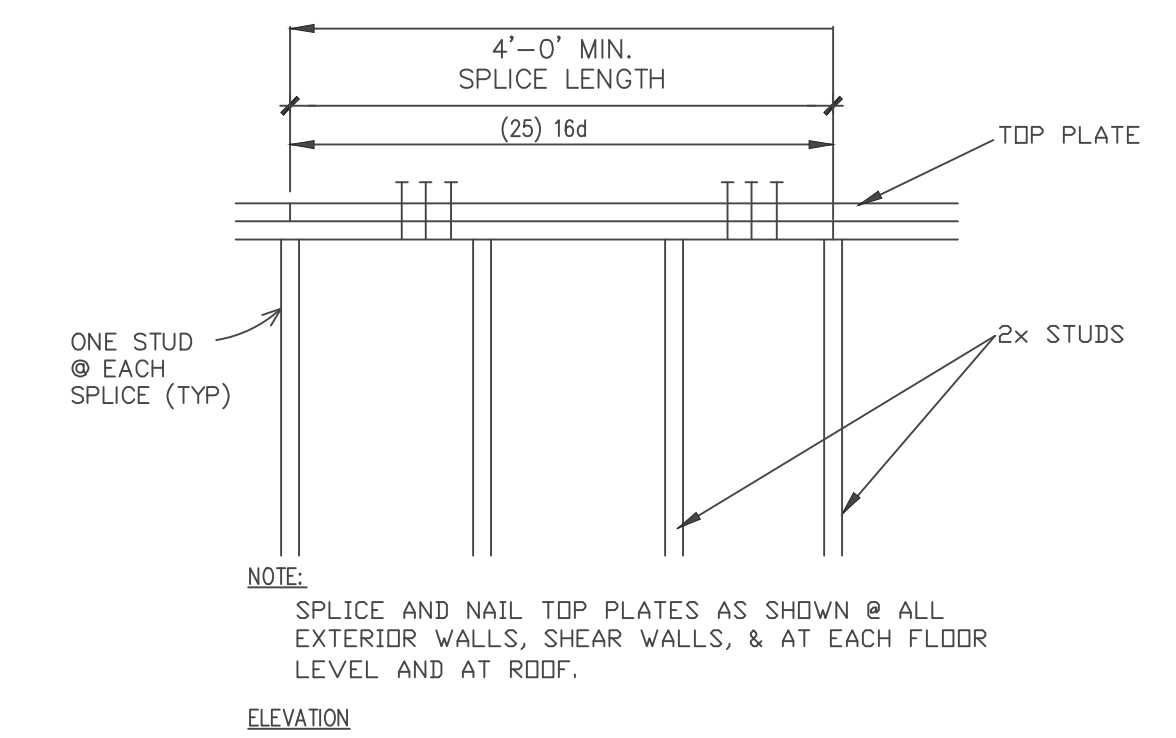
A1 EXTERIOR SHEARWALL
@ CRAWL SPACE
3/4"=1'-0"



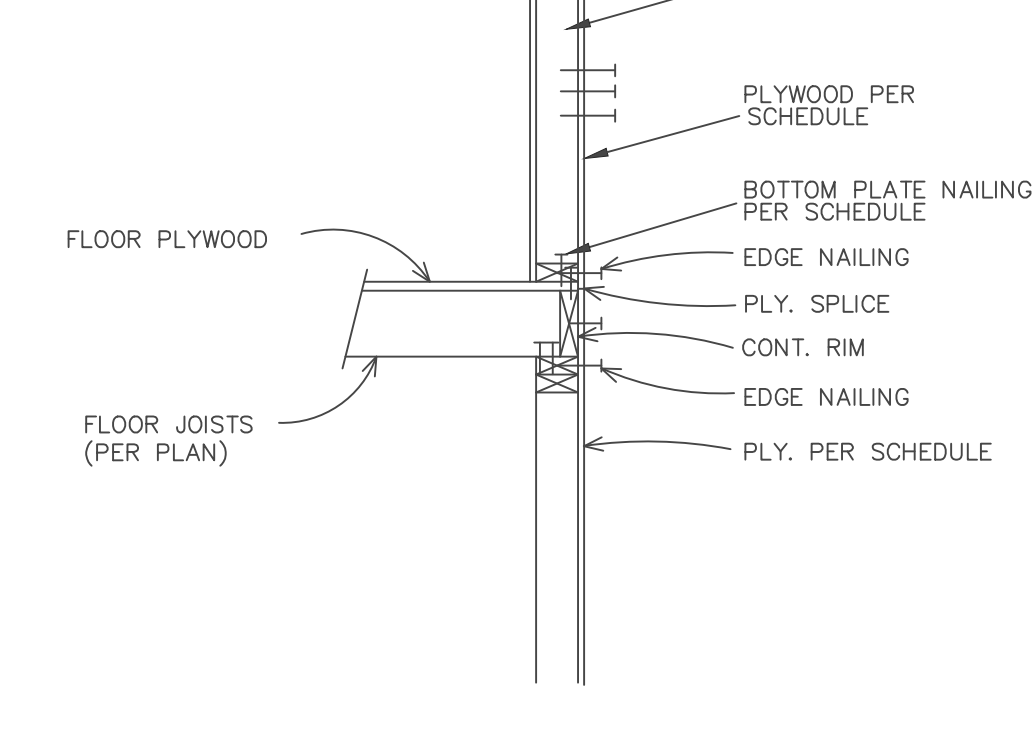
E EXT. SHEARWALL @ SLAB
3/4"=1'-0"



G DRAG STRUT TRUSS
3/4"=1'-0"



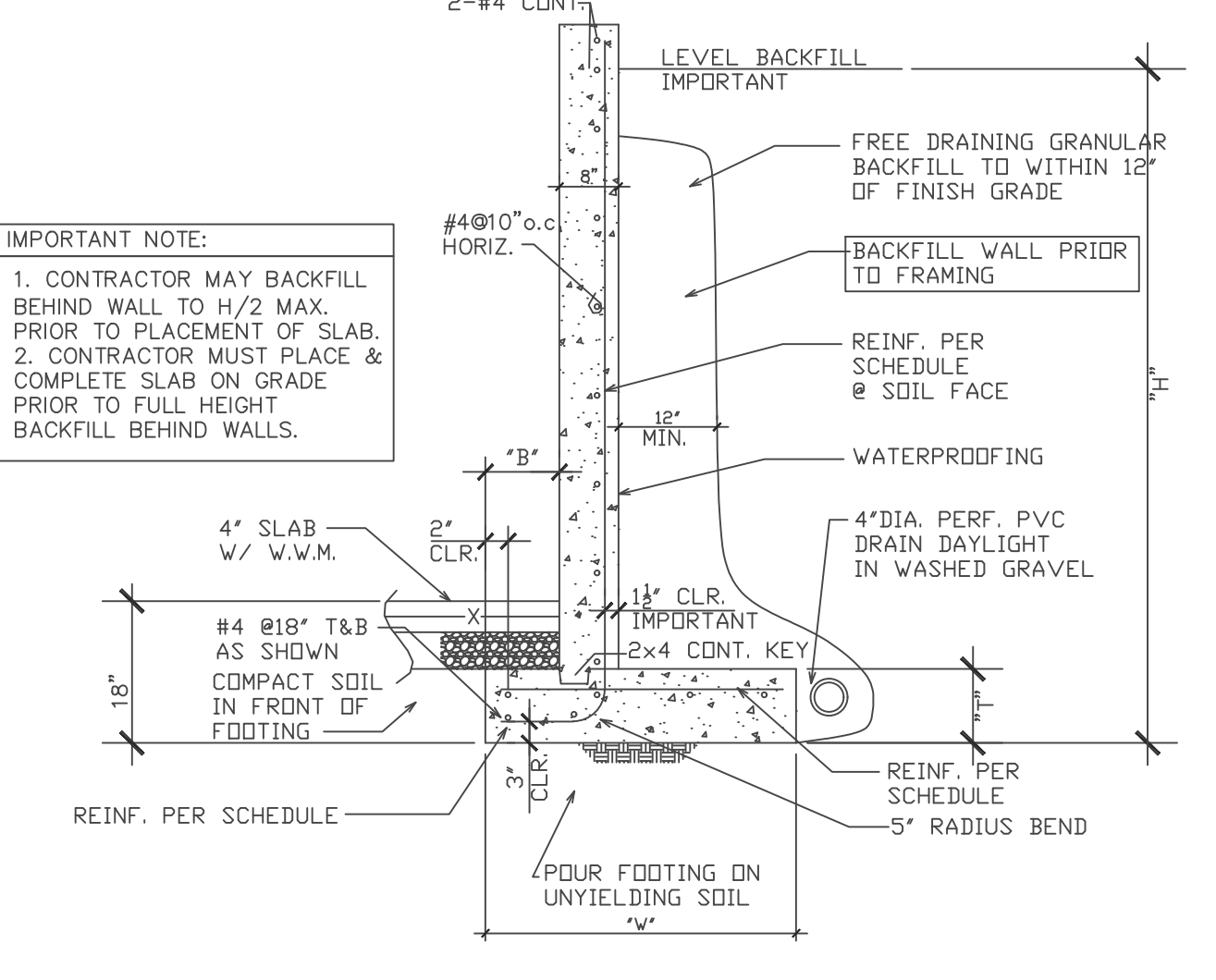
H DBL. TOP PLATE SPLICE
3/4"=1'-0"



I JOIST PERPENDICULAR TO EXTERIOR WALL
3/4"=1'-0"

RETAINING WALL NOTES:

- 2000 PSF SOIL BEARING, 0.4 CO. OF FRICTION (VERIFY).
- 35 PCF EQUIV. FLUID PRESSURE, 250 PCF PASSIVE PRESSURE (VERIFY).
- 2500 PSI CONCRETE.
- GRADE 60 REINF.
- CONTRACTOR SHALL VERIFY ALL EXISTING & FINISH GRADES PRIOR TO CONSTRUCTION.
- REINFORCING SHALL BE INSPECTED POURING CONCRETE. BLSG. INSPECTOR/SOILS ENGINEER TO INSPECT AND APPROVE SOILS BELOW FOOTING PRIOR TO CONSTRUCTION OF FOOTINGS & THIS DESIGN SHALL NOT BE CONSTRUCTED ON SILT OR CLAY BEARING SOILS, OR WITH SILT OR CLAY BACKFILL BEHIND WALLS.
- THIS DESIGN SHALL NOT BE CONSTRUCTED ON SILT OR CLAY BEARING SOILS, OR WITH SILT OR CLAY BACKFILL BEHIND WALLS.
- CONTRACTOR SHALL COMPLY WITH ALL DSHA AND WJSHA HEALTH AND SAFETY STANDARDS.
- BACKFILL SHOULD BE PLACED WITH EXTREME CARE TO AVOID EXCESSIVE HORIZONTAL LOADS ON THE WALL. THIS REQUIREMENT SHOULD TAKE PRECEDENCE OVER COMPLETE ADHERENCE TO THE CONSTRUCTION CRITERIA.

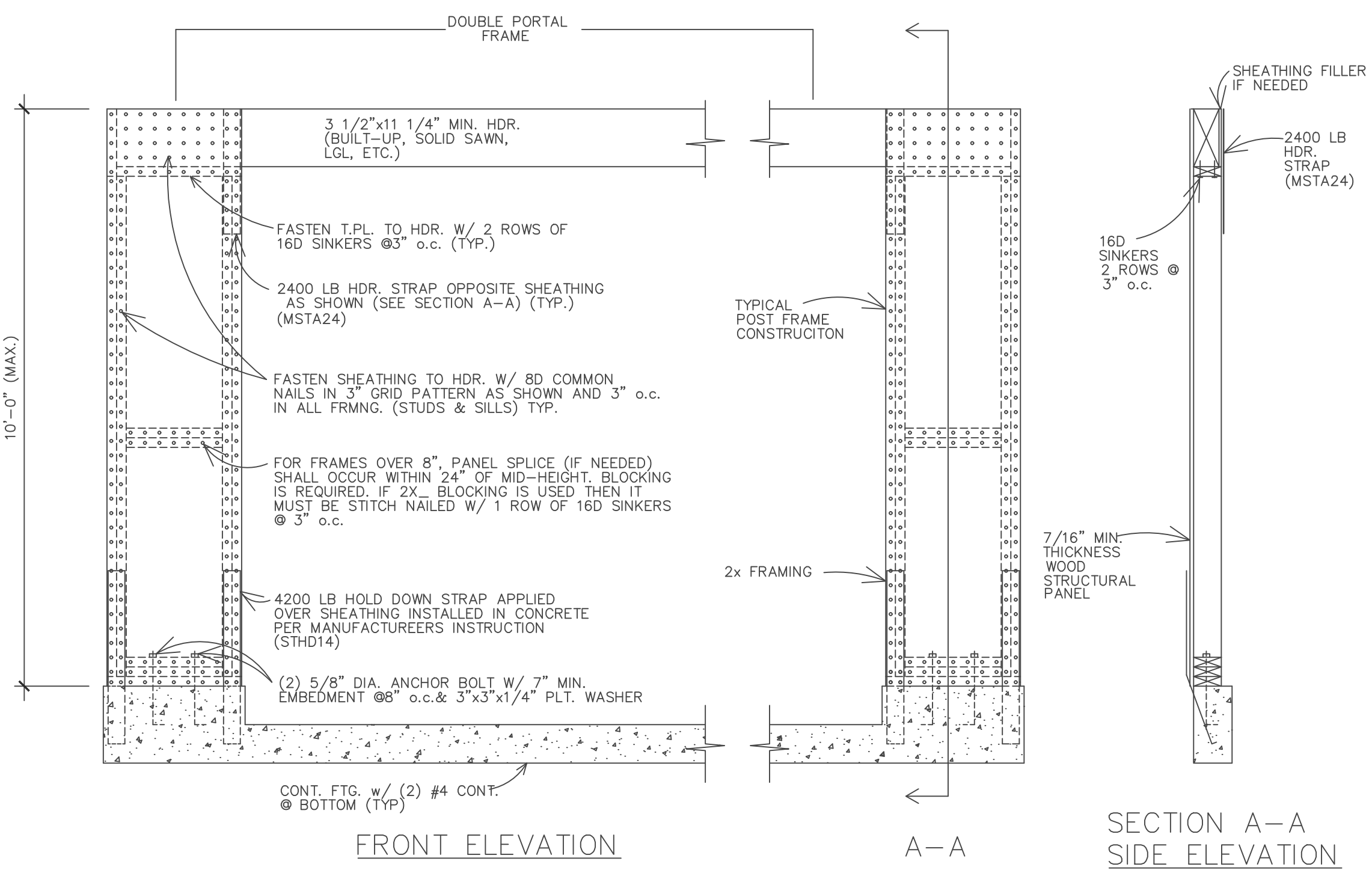


C TYP. RETAINING WALL

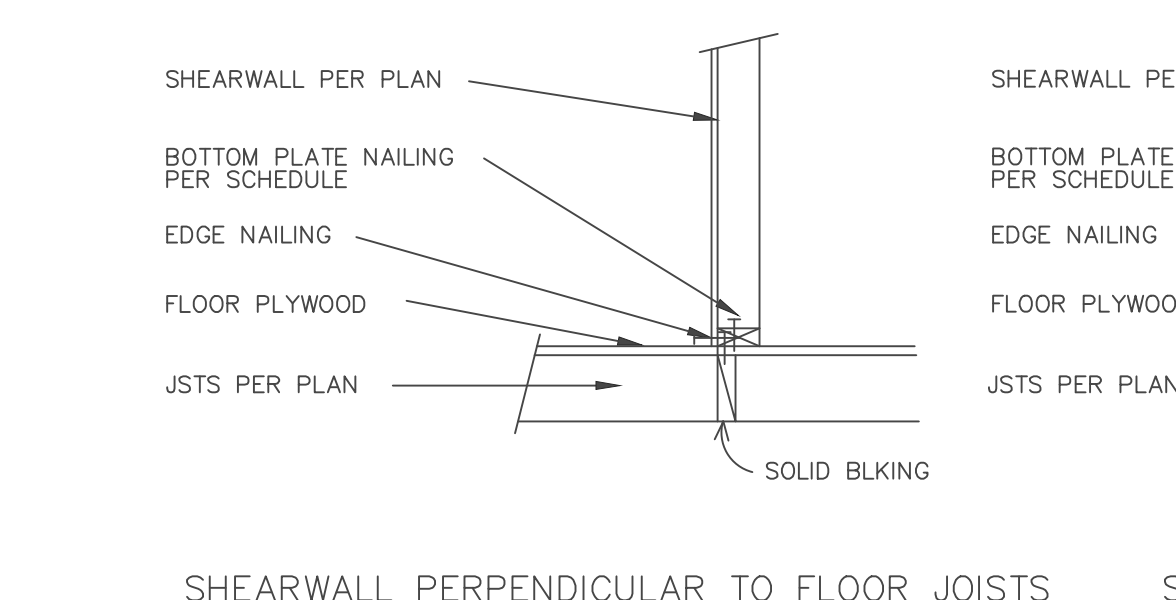
RETAINING WALL SCHEDULE

H	*W*	*B*	*T*	REINF.
4'	2'-0"	8'	11.5'	#4@16"
5'	2'-0"	10'	11.5'	#4@16"
6'	3'-0"	12'	11.5'	#4@16"
7'	3'-6"	1'-2"	11.5'	#4@14"
8'	3'-6"	1'-4"	11.5'	#4@12"
9'	4'-0"	1'-6"	11.5'	#4@10"
10'	4'-7"	1'-8"	11.5'	#4@9"
11'	5'-3"	2'-0"	14'	#5@10"
12'	5'-11"	2'-2"	14'	#5@7"

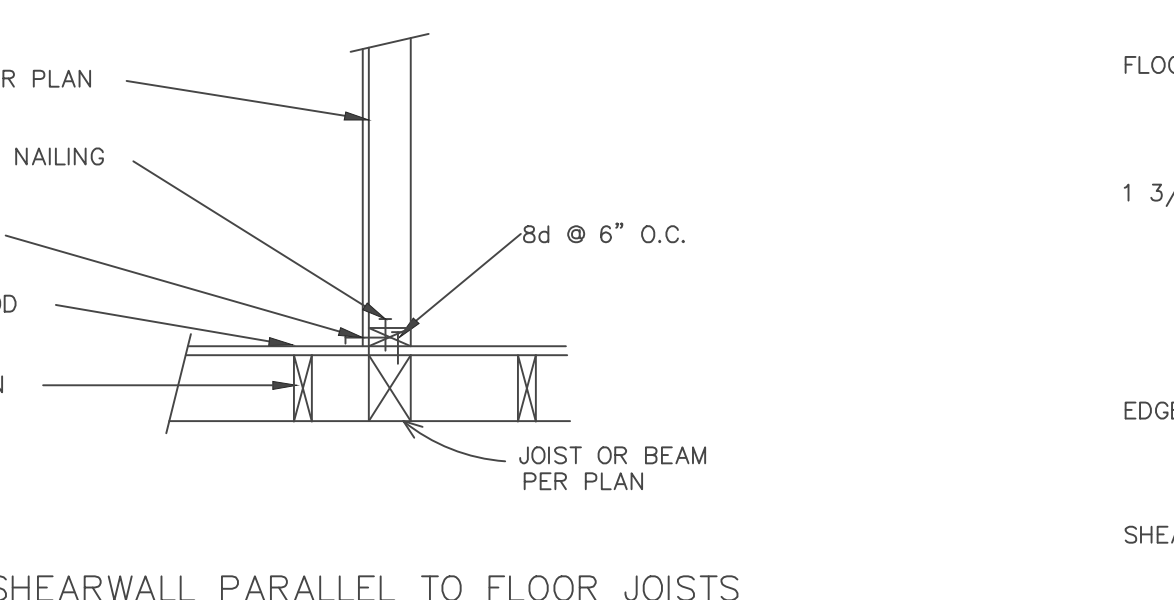
IMPORTANT NOTE:
1. CONTRACTOR MAY BACKFILL BEHIND WALL TO 1/2 MAX. PRIOR TO PLACEMENT OF SLAB.
2. CONTRACTOR MUST PLACE & COMPLETE SLAB ON GRADE PRIOR TO FULL HEIGHT BACKFILL BEHIND WALLS.



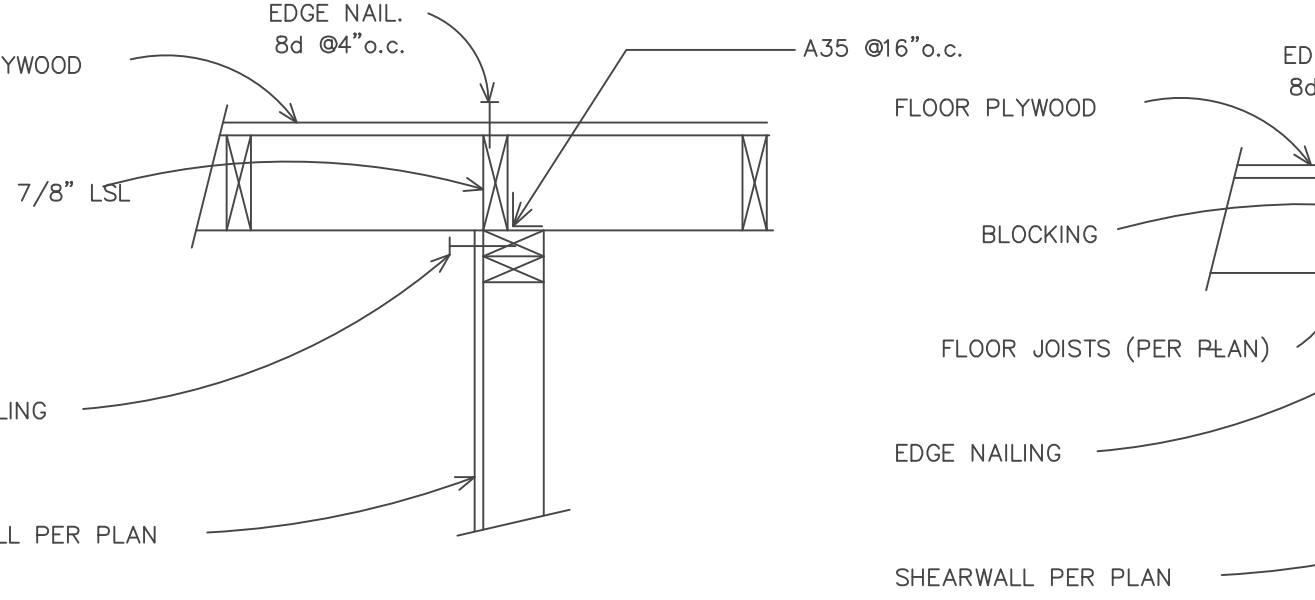
D MIN. LATERAL PANEL
3/4"=1'-0"



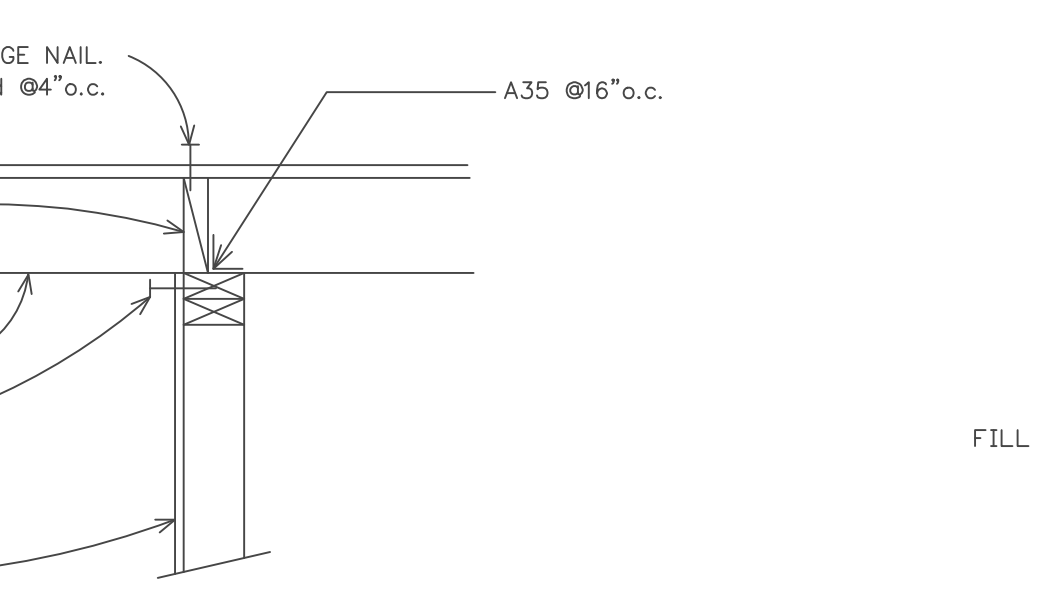
L INTERIOR SHEARWALL TO FLOOR BELOW
3/4"=1'-0"



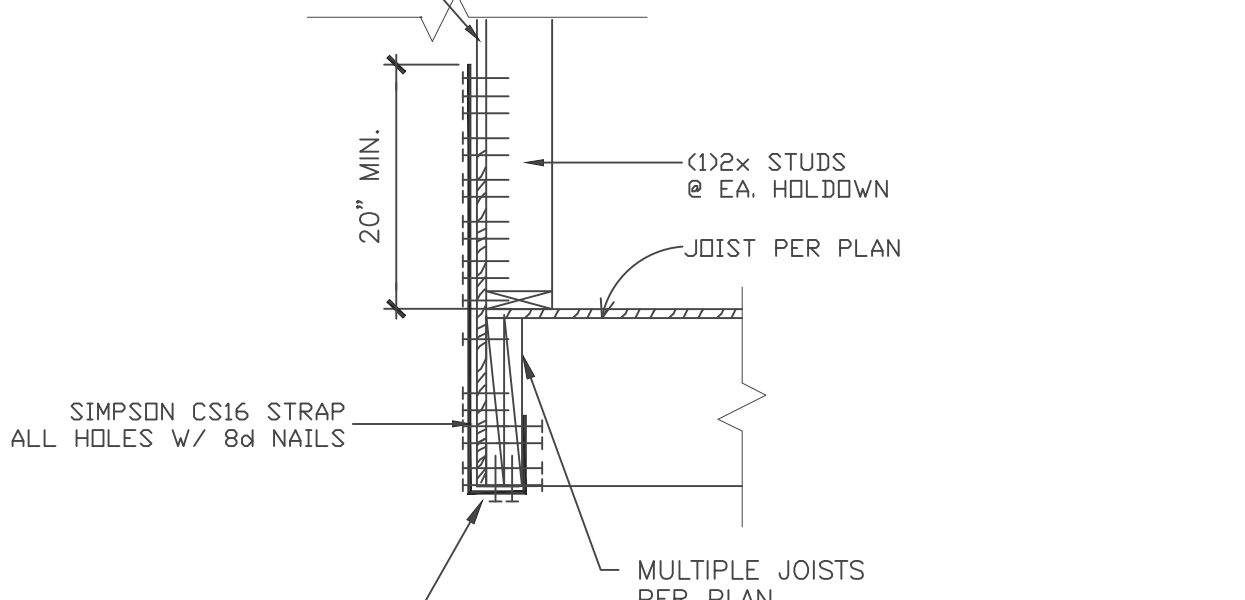
M INT. SHEARWALL TO FLOOR ABV.
N.T.S.



J JOIST PARALLEL TO EXTERIOR WALL
3/4"=1'-0"



K STRAP HOLDOWN AT FLOOR
3/4"=1'-0" SEE PLANS FOR # OF HOLD-DOWNS



P STRAP HOLDOWN AT HDR
3/4"=1'-0" SEE PLANS FOR # OF HOLD-DOWNS

RB ENGINEERS, INC
1312 2nd Street, Kirkland, WA
Tel: (425) 822-3009, Fax: (425) 822-2679
CELL: (425) 351-2085
EMAIL: RBE1992@GMAIL.COM

98033
City of Kirkland
Reviewed by D Harmon
01/10/2019

SPRINKLERS REQUIRED

11237 NE 95TH ST KIRK
STRUCTURAL DETAILS

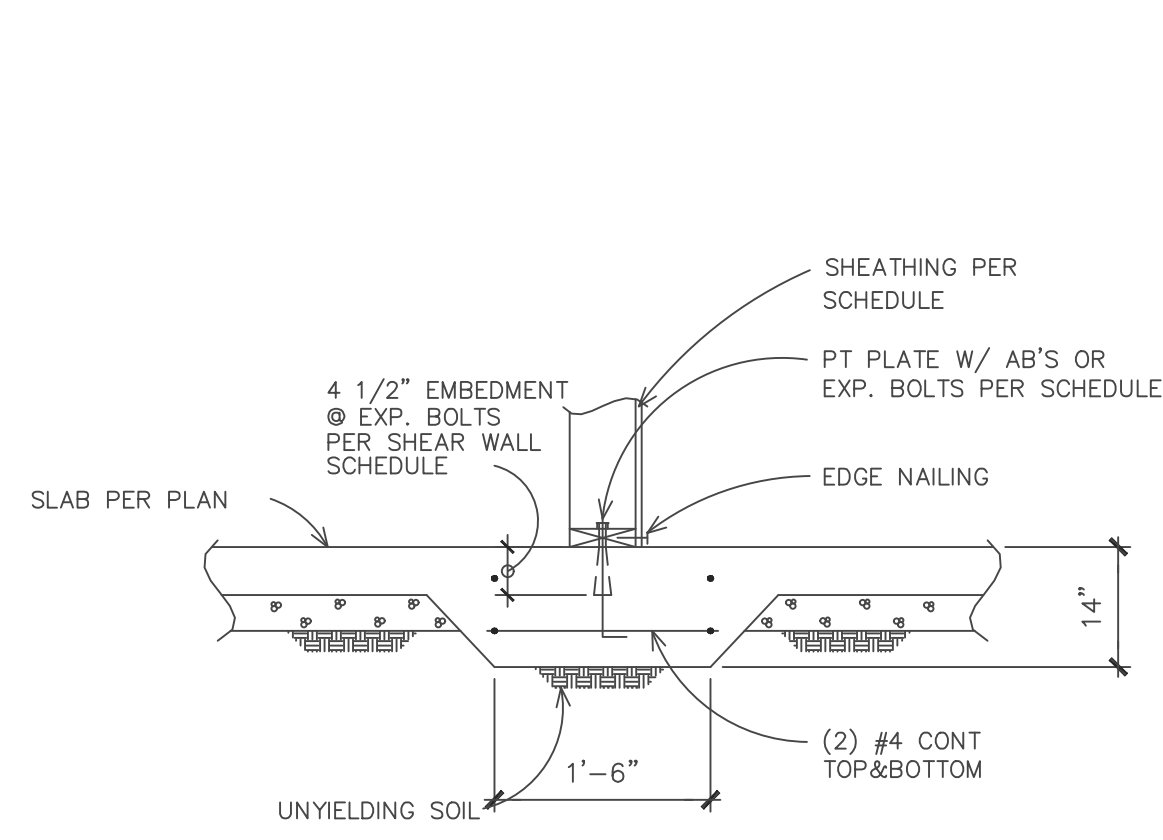


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HIGHLANDS RESIDENCE
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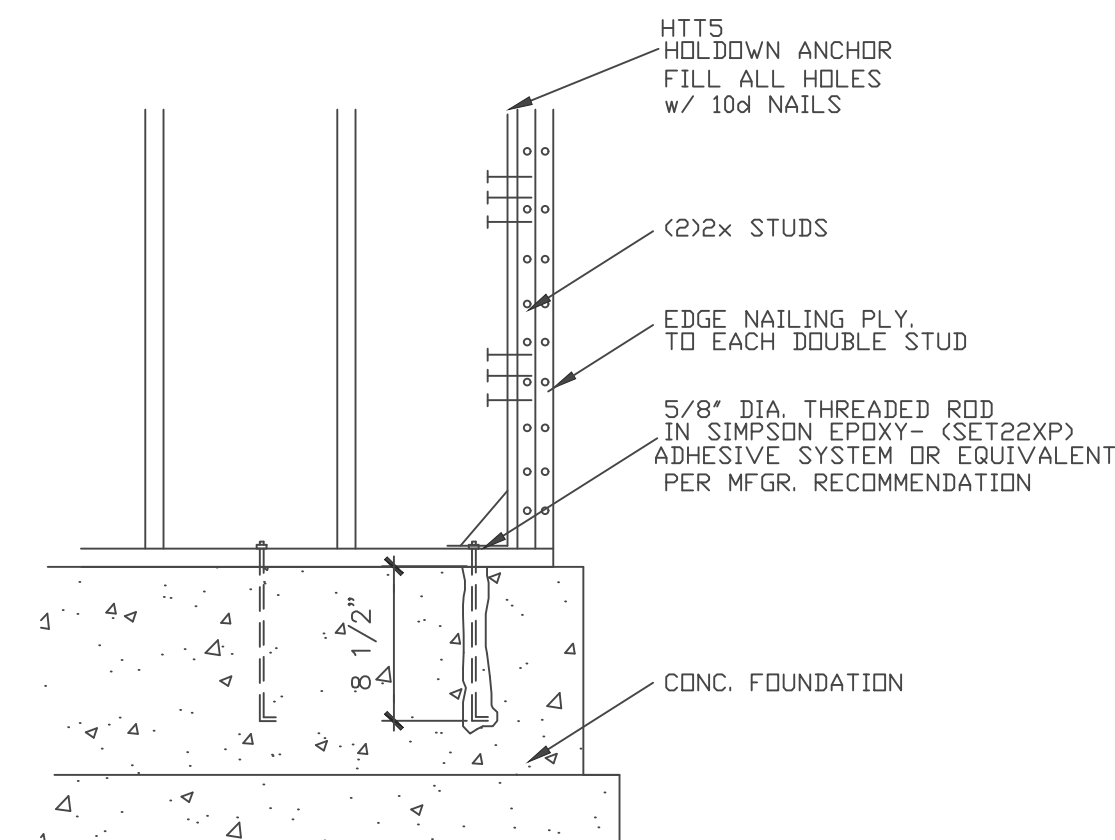
PROJECT
DATE
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18-6835
DRAWN BY
RBE

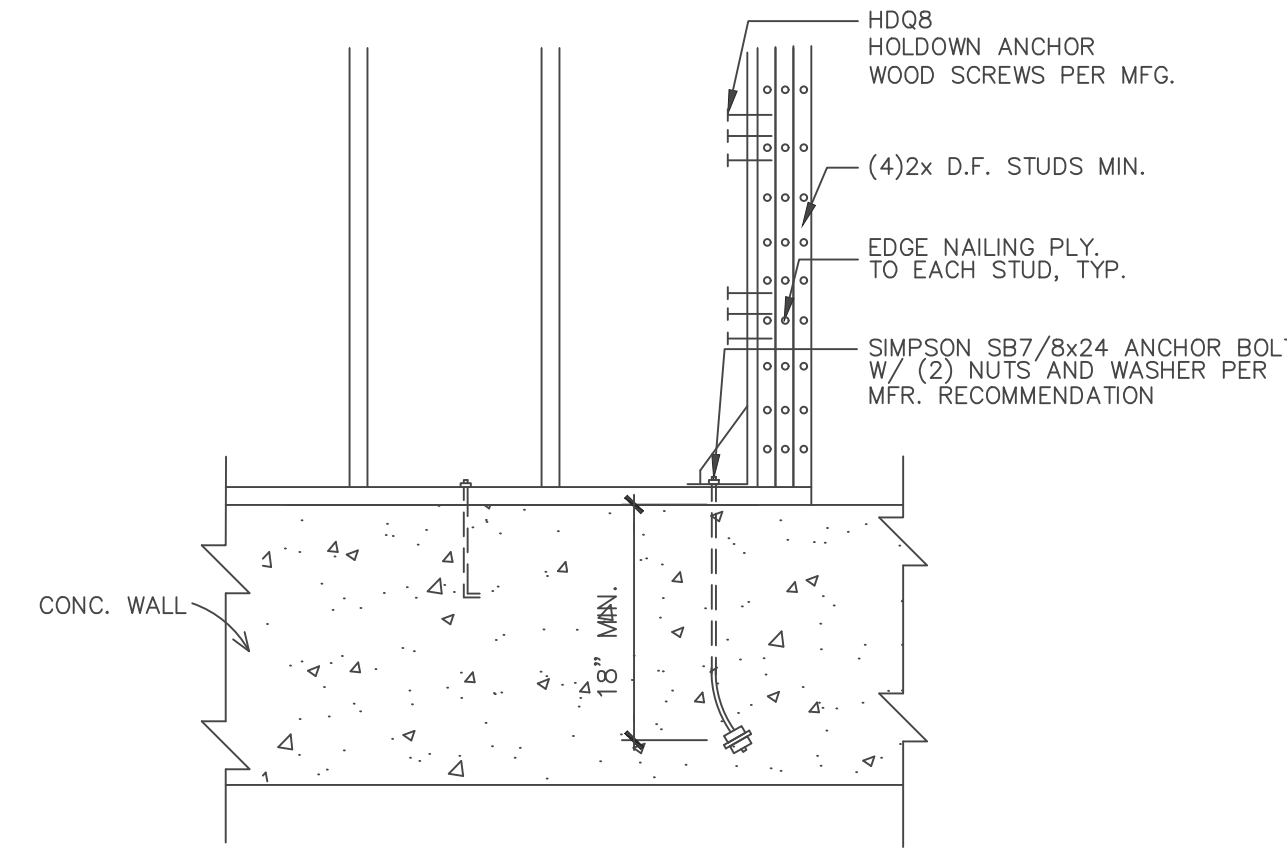
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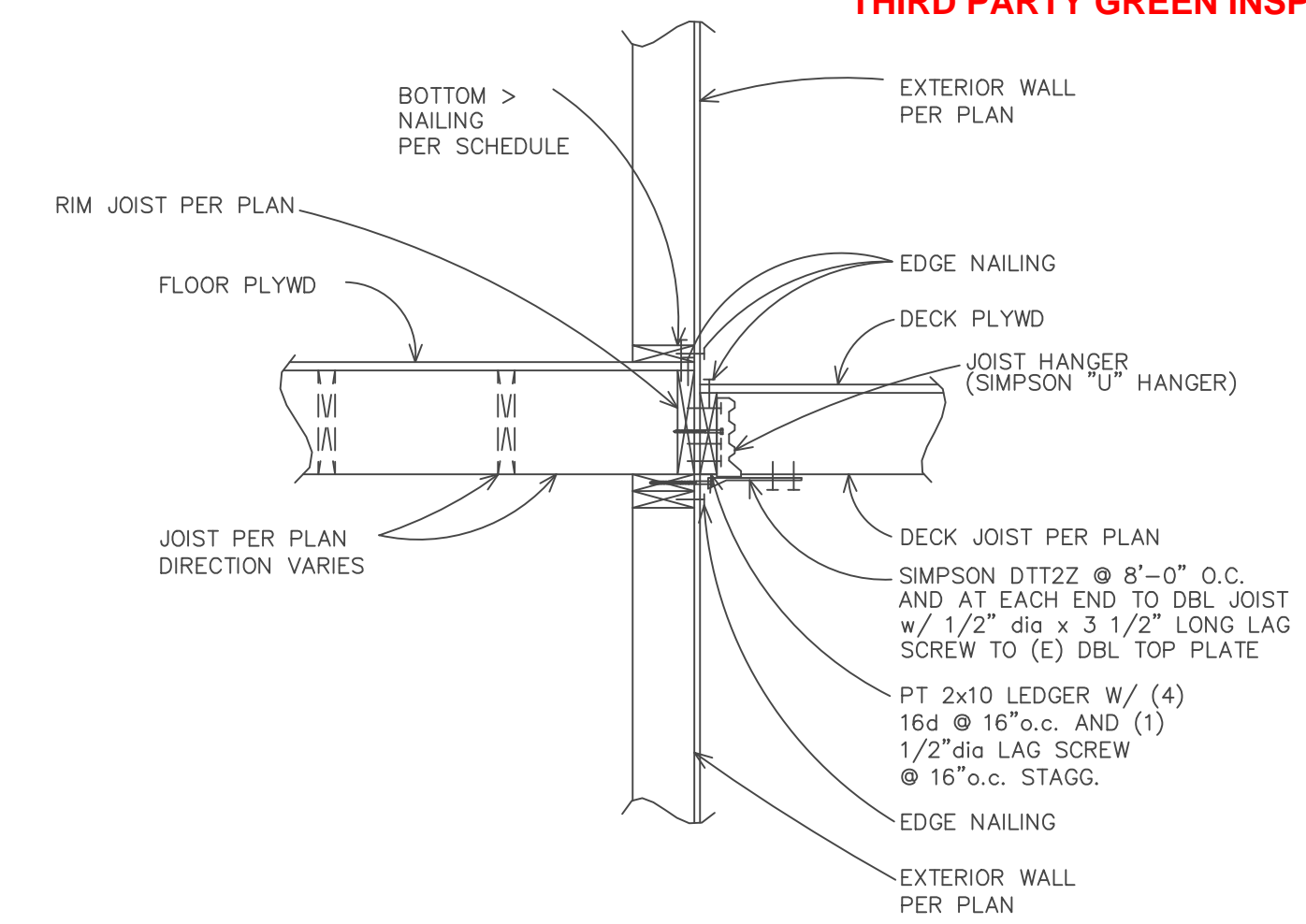
N THICKENED SLAB
3/4"=1'-0"



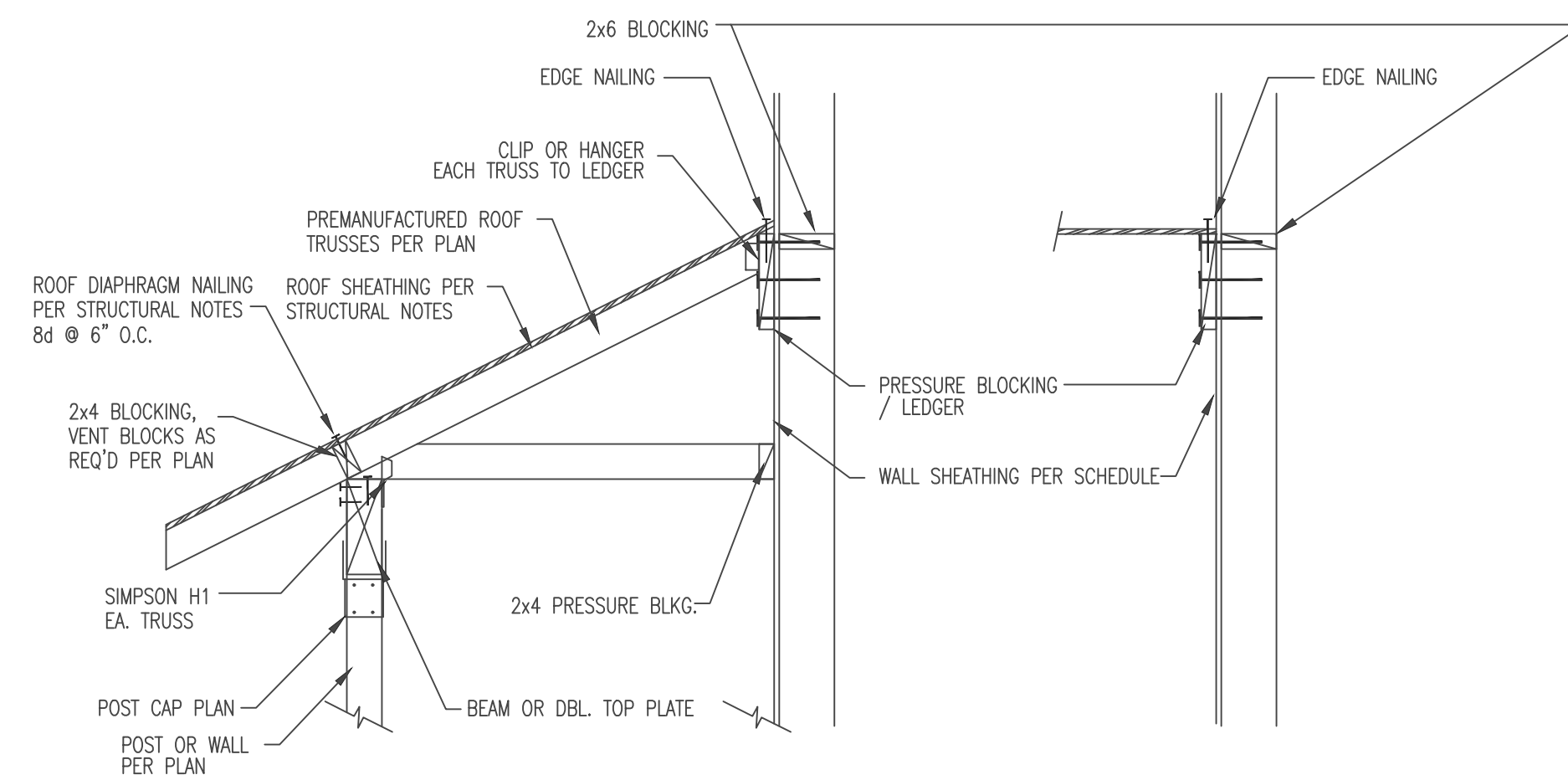
R TYP. HOLDOWN TO EXISTING FOOTING
3/4"=1'-0"
(SPECIAL INSPECTION REQUIRED)



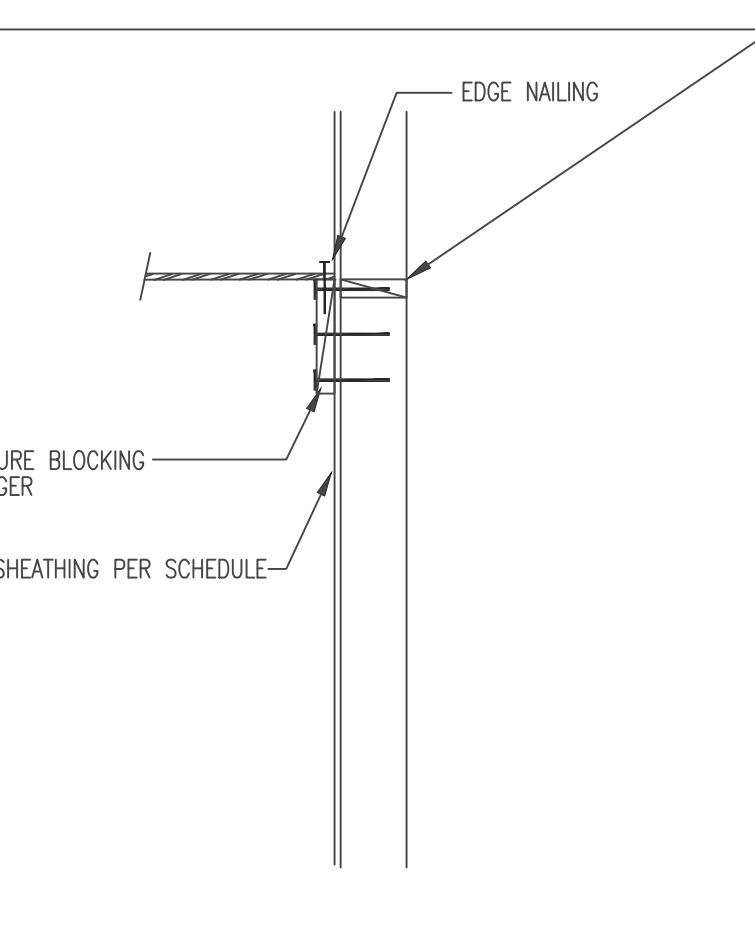
R1 HOLDOWN AT FOUNDATION
(WET-SET APPLICATION)



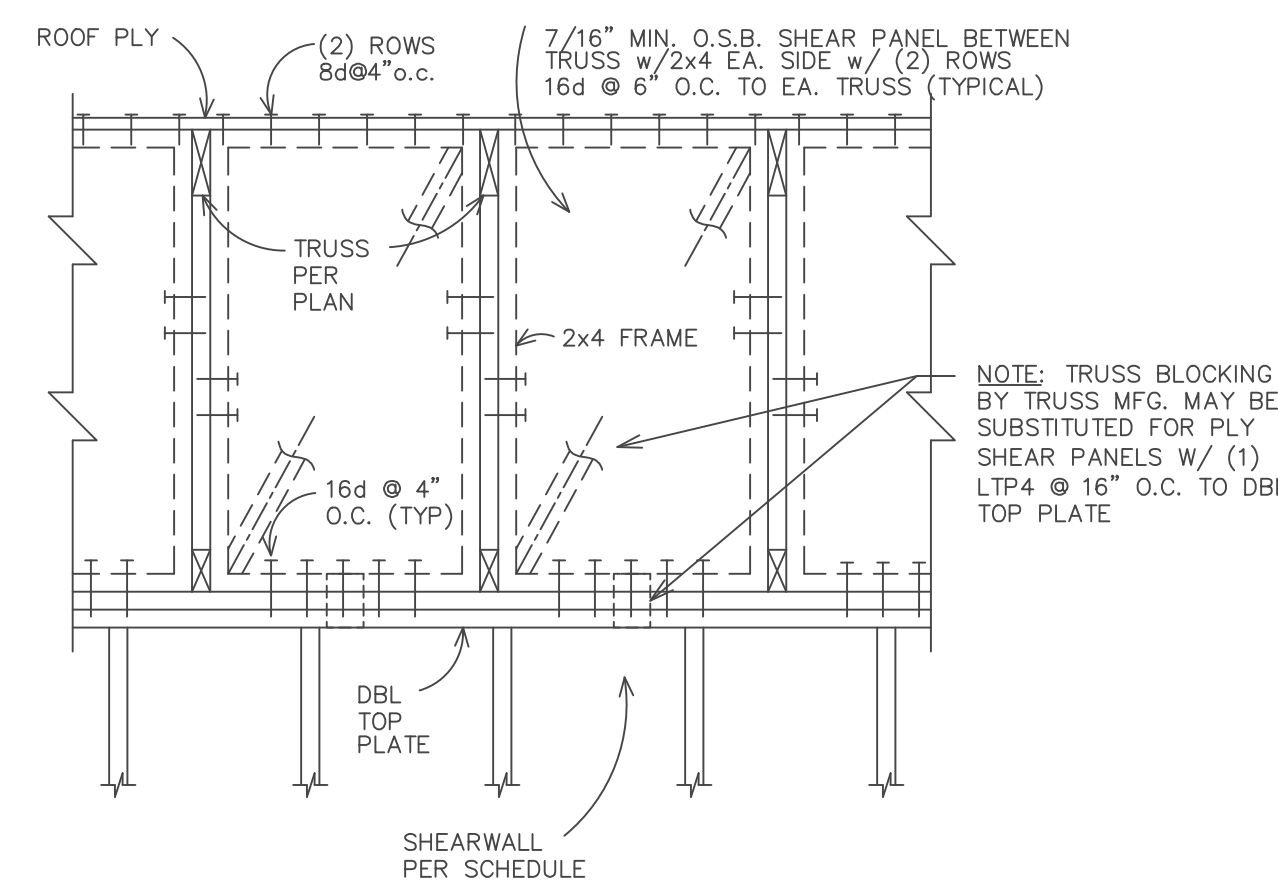
U DECK LEDGER



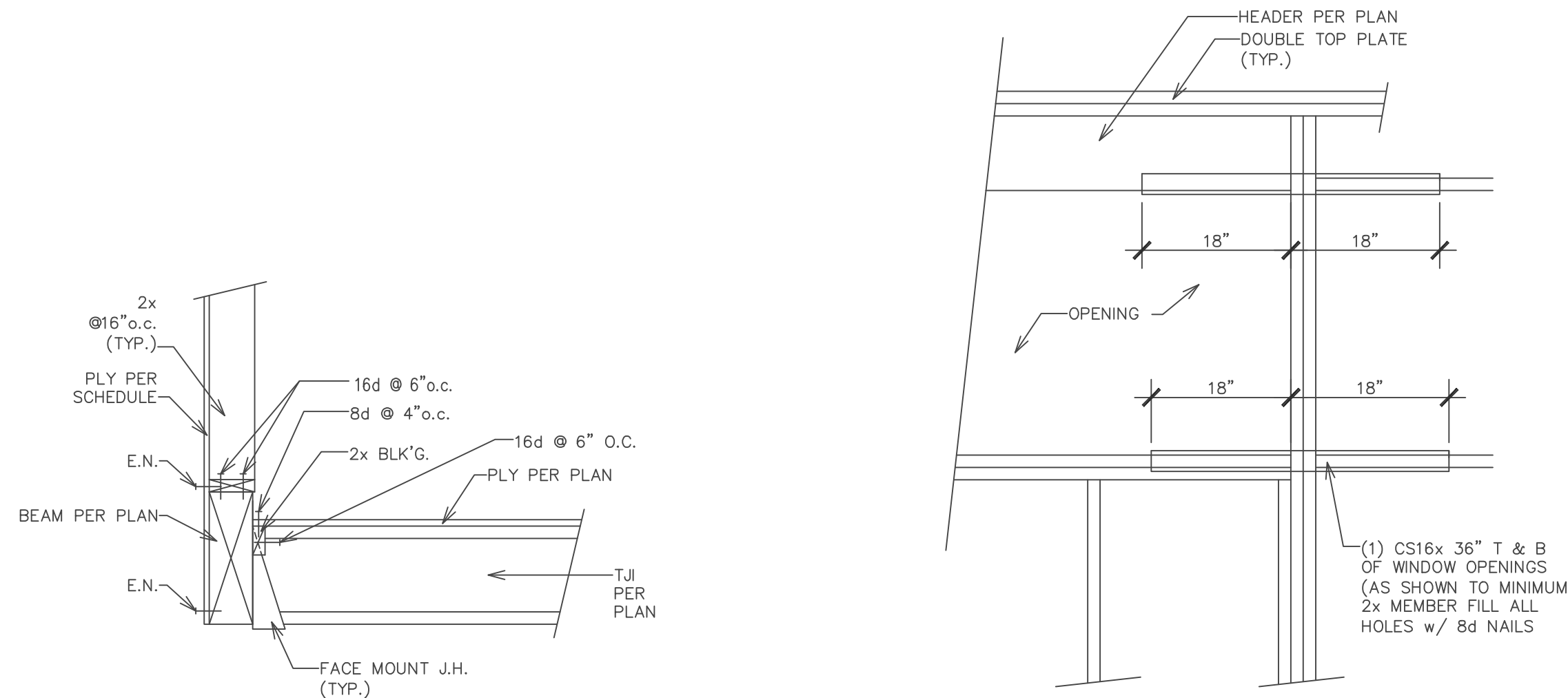
V TRUSS TO WALL
3/4"=1'-0"



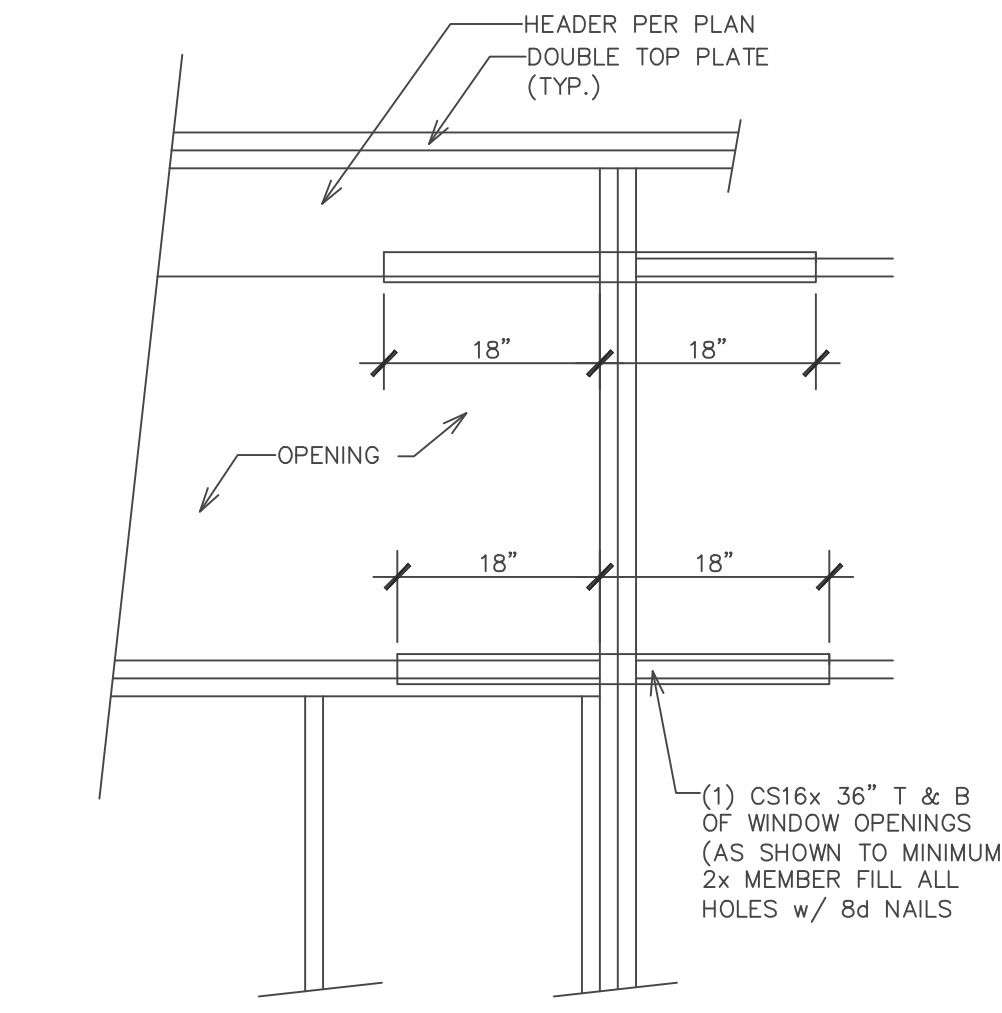
V1 LEDGER TO WALL
3/4"=1'-0"



W SHEAR PANEL DETAIL
S2



X UPSET BEAM @ FLR.
1"=1'-0"



Z1 CS16 STRAP @ OPENING

SHEARWALL SCHEDULE
SW4 INDICATES SHEARWALL w/ PLYWOOD ONE SIDE.

1. SHEATHING: 1/2" PLYWOOD OR 7/16" O.S.B., ONE SIDE, BLOCKED, NAIL w/ 8d @ 4" O.C. ALL EDGES AND 12" O.C. FIELD.
2. BOLT SILL PLATE TO CONCRETE w/ 5/8" DIA. x 10" A.B.'S @ 32" O.C.
3. NAIL BOTTOM PLATE TO FRAMING BELOW w/ 16d @ 4" O.C.
4. FASTEN DOUBLE PLATE TO JOIST OR BLOCKING ABOVE PER DTLS. ON S1 & S2 AND DETAILS ON S1 & S2.

SHEARWALL SCHEDULE
SW3 INDICATES SHEARWALL w/ PLYWOOD ONE SIDE.

1. SHEATHING: 1/2" PLYWOOD OR 7/16" O.S.B., ONE SIDE, BLOCKED, NAIL w/ 8d @ 3" O.C. ALL EDGES AND 12" O.C. FIELD.
2. a. BOLT (3)2x SILL PLATE TO CONCRETE w/ 5/8" DIA. x 12" A.B.'S @ 16" O.C. @ D/SI b. OR BOLT (2)x SILL PLATE TO CONCRETE w/ 5/8" DIA. x 10" @ 24" O.C.
3. NAIL BOTTOM PLATE TO FRAMING BELOW w/ 16d @ 4" O.C.
4. FASTEN DOUBLE PLATE TO JOIST OR BLOCKING ABOVE PER DTLS. ON S1 & S2.
5. USE (2)x STUDS @ 16" O.C. OR DETAIL D/ S1. & (2)x STUDS @ ABUTTING PANEL JOINTS.

TYPICAL ROOF SHEATHING
7/16" O.S.B. PLYWOOD, INDEX 40/20, UNBLOCKED, w/ FACE GRAIN PERPENDICULAR TO FRAMING BELOW. NAIL AS FOLLOWS:
DIAPHRAGM BOUNDARY, OVER EXTERIOR WALLS, SHEAR WALLS, & DRAG STRUTS. 8d @ 6" O.C.
ALL SUPPORTED EDGES 8d @ 6" O.C.
FIELD 8d @ 12" O.C.

TYPICAL FLOOR SHEATHING
3/4" T&G, O.S.B., INDEX 40/20, UNBLOCKED, LAID UP w/ FACE GRAIN PERPENDICULAR TO FRAMING BELOW. NAIL AS FOLLOWS:
DIAPHRAGM BOUNDARY AND OVER EXTERIOR WALLS, SHEARWALLS & DRAG STRUTS. 8d AT 6" O.C.
ALL SUPPORTED EDGES 8d AT 6" O.C.
FIELD 8d AT 10" O.C.

NOTES:

1. USE 3"x3"x1/4" PLATE WASHERS ON ALL ANCHOR BOLTS. CONNECT ALL RIM JOISTS @ EXT. WALLS w/ (2) CS16 STRAPS. FILL ALL HOLES WITH NAILS.
2. EDGE OF PLATE WASHERS MUST BE LOCATED WITHIN 1/2" OF THE INSIDE FACE OF THE STRUCTURAL SHEATHING.
3. ALL POWDER DRIVEN NAILS SHALL BE ≥ 3/4" LONG (MIN) x .156 SHANK DIA. w/ MINIMUM 1 1/4" PENETRATION.
4. a. 16d NAILS SHALL BE .162x3 1/2" LONG.
b. 8d NAILS SHALL BE .113x2 1/2" LONG.
c. 20d NAILS SHALL BE .192x4" LONG.
5. USE 20d NAILS @ 3x FRAMING MEMBERS

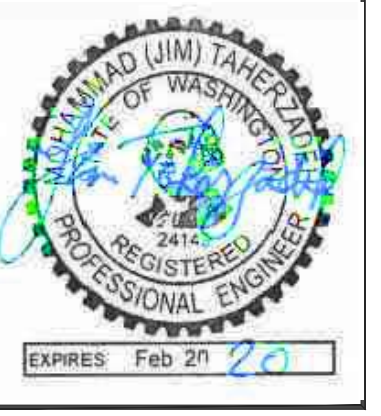
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PROJECT NO. 98033

City of Kirkland
Reviewed by D Harmon
01/10/2019

SPRINKLERS REQUIRED

11237 NE 95TH ST KIRKLAND, WA
STRUCTURAL DETAILS



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HIGHLANDS RESIDENCE
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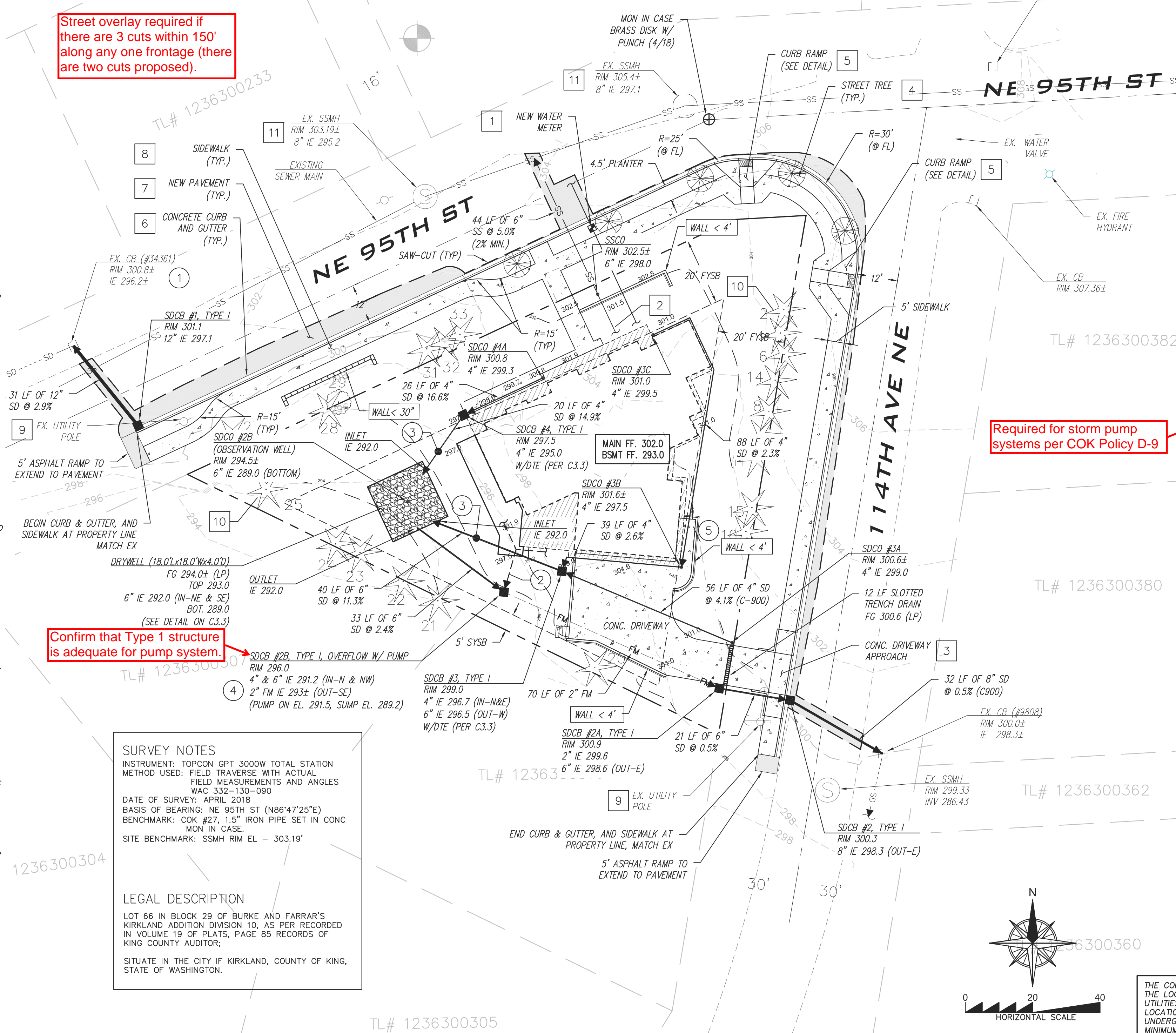
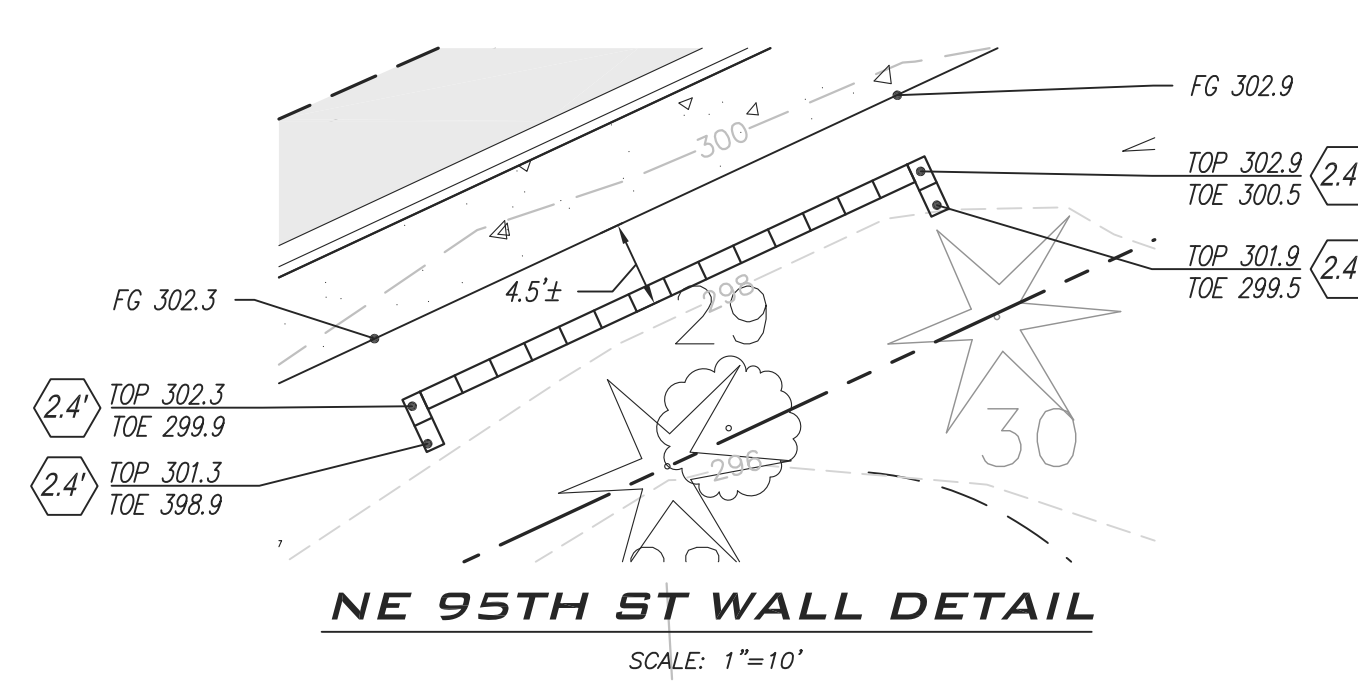
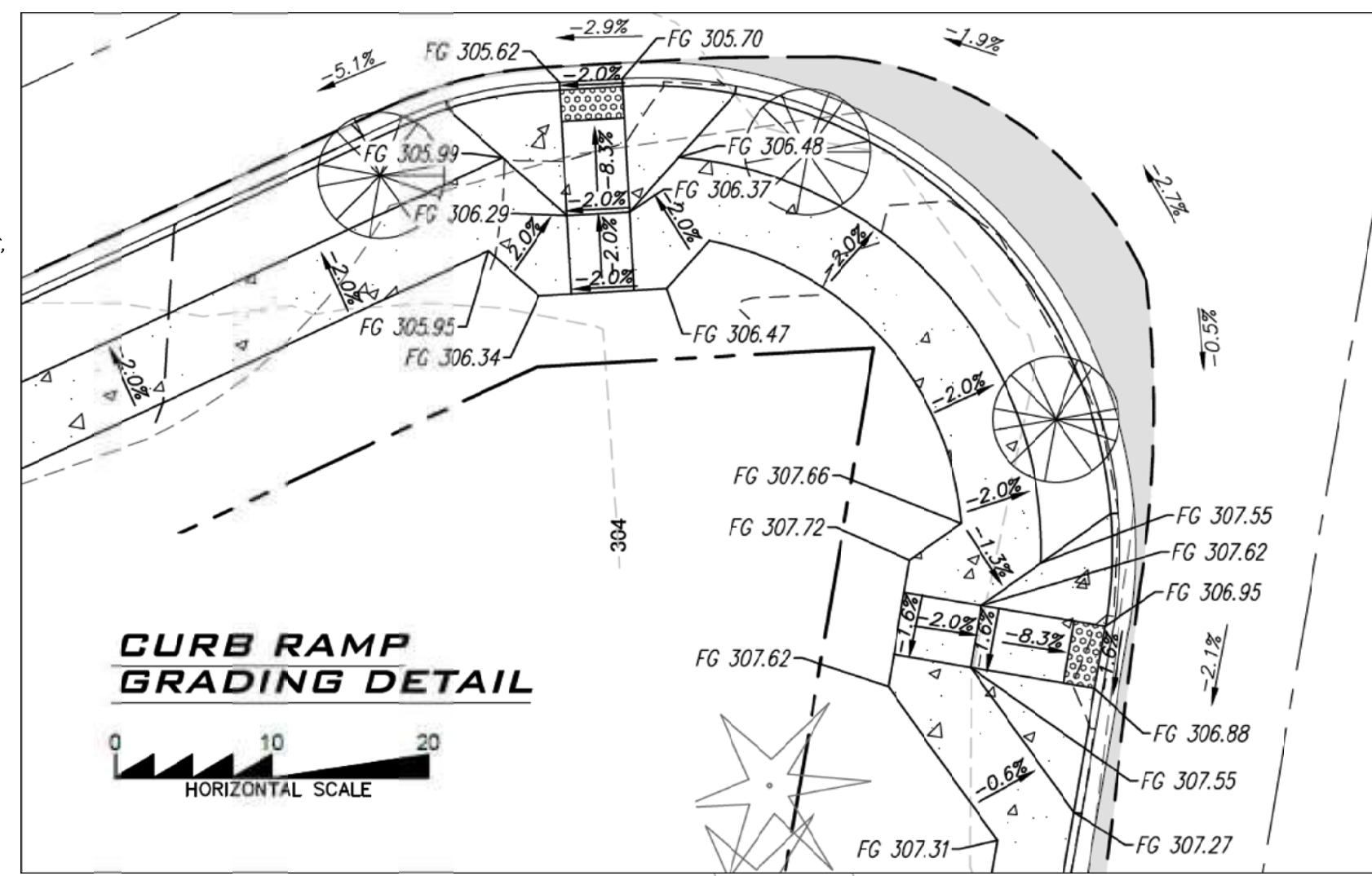
PROJECT: 11237 NE 95TH ST KIRKLAND, WA
DATE: 6-28-18

FILE NUMBER: 18-6835
DRAWN BY: RBE

Sheet: S2

CITY OF KIRKLAND STANDARD STORM DRAINAGE PLAN NOTES:

1. A PRE-CONSTRUCTION CONFERENCE SHALL BE HELD PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION.
2. BEFORE ANY CONSTRUCTION MAY OCCUR, THE CONTRACTOR SHALL HAVE PLANS WHICH HAVE BEEN SIGNED AND APPROVED BY THE CITY OF KIRKLAND PUBLIC WORKS DEPARTMENT, OBTAINED ALL CITY, COUNTY, STATE, FEDERAL AND OTHER REQUIRED PERMITS, AND HAVE POSTED ALL REQUIRED BONDS.
3. ALL STORM DRAINAGE IMPROVEMENTS SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE LATEST EDITION OF THE CITY OF KIRKLAND PUBLIC WORKS PRE-APPROVED PLANS AND POLICIES AND THE STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION, PREPARED BY WSDOT AND THE AMERICAN PUBLIC WORKS ASSOCIATION (APWA).
4. ANY DEVIATION FROM THE APPROVED PLANS WILL REQUIRE WRITTEN APPROVAL. ALL CHANGES SHALL BE SUBMITTED TO THE CITY.
5. A COPY OF THE APPROVED STORM WATER PLANS MUST BE ON THE JOB SITE WHENEVER CONSTRUCTION IS IN PROGRESS.
6. ALL DISTURBED AREAS SHALL BE SEEDED AND MULCHED OR SIMILARLY STABILIZED TO THE SATISFACTION OF THE CITY OF KIRKLAND DEPARTMENT OF PUBLIC WORKS FOR THE PREVENTION OF ON-SITE EROSION AFTER THE COMPLETION OF CONSTRUCTION.
7. MINIMUM COVER OVER STORM DRAINAGE PIPES IN ROW OR VEHICULAR PATH SHALL BE 18 INCHES, UNLESS OTHER DESIGN IS APPROVED.
8. STEEL PIPE SHALL HAVE ASPHALT TREATMENT #1 OR BETTER INSIDE AND OUTSIDE.
9. ALL CATCH BASINS SHALL BE TYPE I UNLESS OTHERWISE NOTED. CATCH BASINS WITH A DEPTH OF OVER FIVE FEET (5') TO THE PIPE INVERT SHALL BE A TYPE II CATCH BASIN. TYPE II CATCH BASINS EXCEEDING FIVE FEET (5') IN DEPTH SHALL HAVE A STANDARD LADDER INSTALLED.
10. ALL STORM DRAINAGE MAIN EXTENSIONS WITHIN THE PUBLIC RIGHT-OF-WAY OR IN EASEMENTS MUST BE STAKED FOR LINE AND GRADE PRIOR TO STARTING CONSTRUCTION.
11. ROCK FOR EROSION PROTECTION OF ROADWAY DITCHES, WHERE REQUIRED, MUST BE OF SOUND QUARRY ROCK, PLACED TO A DEPTH OF ONE FOOT (1') AND MUST MEET THE FOLLOWING SPECIFICATIONS: 4" - 8" ROCK/40% - 70% PASSING; 2" - 4" ROCK/100% - 40% PASSING; 2" - MINUS ROCK/100% - 20% PASSING. RECYCLED CONCRETE SHALL NOT BE USED FOR EROSION PROTECTION, INCLUDING FOR CONSTRUCTION ENTRANCE OR TEMPORARY STABILIZATION ELSEWHERE ON SITE.
12. ALL PIPE, MANHOLES, CATCH BASINS, AND APPURTENANCES SHALL BE LAID ON A PROPERLY PREPARED FOUNDATION IN ACCORDANCE WITH THE CURRENT STATE OF WASHINGTON STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (WSDOT). THIS SHALL INCLUDE NECESSARY LEVELING OF THE TRENCH BOTTOM OR THE TOP OF THE FOUNDATION MATERIAL AS WELL AS PLACEMENT AND COMPACTION OF REQUIRED BEDDING MATERIAL TO UNIFORM GRADE SO THAT THE ENTIRE LENGTH OF THE PIPE WILL BE SUPPORTED ON A UNIFORMLY DENSE, UNYIELDING BASE. IF THE NATIVE MATERIAL IN THE BOTTOM OF THE TRENCH MEETS THE REQUIREMENTS FOR "GRADEL BACKFILL" FOR PIPE BEDDING, THE FIRST LIFT OF PIPE BEDDING MAY BE OMITTED PROVIDED THE MATERIAL IN THE BOTTOM OF THE TRENCH IS LOOSENEED, REGRADED, AND COMPACTED TO FORM A DENSE UNYIELDING BASE. ALL PIPE BEDDING SHALL BE ARAW CLASS 3, TYPE I OR BETTER. PIPE SHALL NOT BE INSTALLED ON SOD, FROZEN EARTH, LARGE BOULDERS, OR ROCK. PIPE BEDDING FOR FLEXIBLE PIPES SHALL BE PEA GRAVEL TO THE SPRINGLINE OF THE PIPE.
13. CONSTRUCTION OF DEWATERING DISCHARGES SHALL ALWAYS MEET WATER QUALITY GUIDELINES LISTED IN COK POLICY E-1. SPECIFICALLY, DISCHARGES TO THE PUBLIC STORMWATER DRAINAGE SYSTEM MUST BE BELOW 20FT, AND NOT CONSIDERED PROHIBITED DISCHARGE (PER KMC 15.52.090). TEMPORARY DISCHARGES TO SANITARY SEWER REQUIRE PRIOR AUTHORIZATION AND PERMIT FROM KING COUNTY INDUSTRIAL WASTE PROGRAM (206-263-3000) AND NOTIFICATION TO THE PUBLIC WORKS CONSTRUCTION INSPECTOR.
14. ISSUANCE OF A BUILDING OR LAND SURFACE MODIFICATION PERMIT BY THE CITY OF KIRKLAND DOES NOT RELIEVE THE OWNER OF THE CONTINUING LEGAL OBLIGATION AND/OR LIABILITY CONNECTED WITH STORM SURFACE WATER DISPOSITION. FURTHER, THE CITY OF KIRKLAND DOES NOT OBLIGATE OR ASSUME ANY LIABILITY FOR THE PROPER FUNCTIONING AND MAINTENANCE OF THE SYSTEM DURING OR FOLLOWING CONSTRUCTION EXCEPT AS OUTLINED IN THE CITY OF KIRKLAND PUBLIC WORKS STANDARDS.
15. ALL TRENCH BACKFILL SHALL BE COMPACTED TO 95 PERCENT DENSITY IN ROADWAYS, ROADWAY SHOULDERS, ROADWAY PRISM AND DRIVEWAYS, AND 85 PERCENT DENSITY IN UNPAVED AREAS. ALL PIPE ZONE COMPACTION SHALL BE 95 PERCENT.
16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE SAFEGUARDS, SAFETY DEVICES, GUARDRAILS, CONE SPACE PROTECTION FLAGGERS, AND ANY OTHER NEEDED ACTIONS TO PROTECT THE LIFE, HEALTH, AND SAFETY OF THE PUBLIC, AND TO PROTECT PROPERTY IN CONNECTION WITH THE PERFORMANCE OF WORK COVERED BY THE CONTRACT. ANY WORK WITHIN THE TRAFFIC RIGHT-OF-WAY THAT MAY INTERRUPT NORMAL TRAFFIC FLOW SHALL REQUIRE A TRAFFIC CONTROL PLAN APPROVED BY THE CITY OF KIRKLAND. ALL SECTIONS OF THE WSDOT STANDARD SPECIFICATIONS, TRAFFIC CONTROL, AND THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) SHALL APPLY.
17. NO FINAL CUT OR FILL SLOPE SHALL EXCEED SLOPES OF TWO (2) HORIZONTAL TO ONE (1) VERTICAL, WITHOUT STABILIZATION BY ROCKERY OR BY A STRUCTURAL RETAINING WALL.
18. ALL MANHOLE LADDERS SHALL BE FIRMLY ATTACHED AND EXTEND TO WITHIN 1' OF THE BOTTOM OF THE STRUCTURE.
19. APPROXIMATE LOCATIONS OF EXISTING UTILITIES HAVE BEEN OBTAINED FROM AVAILABLE RECORDS AND ARE SHOWN FOR CONVENIENCE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF EXISTING UTILITY LOCATIONS WHETHER OR NOT THESE UTILITIES ARE SHOWN ON THE PLANS. THE CONTRACTOR SHALL EXERCISE ALL CARE TO AVOID DAMAGE TO ANY UTILITY. IF CONFLICTS WITH EXISTING UTILITIES ARISE DURING CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE CITY CONSTRUCTION INSPECTOR AND ADEQUATE PROTECTION SHALL BE PROVIDED BY THE DEVELOPMENT ENGINEER PRIOR TO COMMENCEMENT OF RELATED CONSTRUCTION ON THE PROJECT.
20. THE UNDERGROUND UTILITY LOCATION SERVICE SHALL BE CONTACTED FOR FIELD LOCATION OF EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION. THE OWNER OR HIS REPRESENTATIVE SHALL BE CONTACTED IF A UTILITY CONFLICT EXISTS. FOR UTILITY LOCATION IN KING COUNTY, CALL 1-800-424-5555. THE CONTRACTOR IS RESPONSIBLE TO ENSURE THAT UTILITY LOCATES ARE MAINTAINED THROUGHOUT THE LIFE OF THE PROJECT.
21. THE CONTRACTOR SHALL VERIFY THE LOCATIONS, WIDTHS, THICKNESSES, AND ELEVATIONS OF ALL EXISTING PAVEMENTS AND STRUCTURES THAT ARE TO INTERFACE WITH NEW WORK. PROVIDE ALL TRIMMING, CUTTING, SAW CUTTING, GRADING, LEVELING, SLOPING, COATING, AND OTHER WORK, INCLUDING MATERIALS AS NECESSARY, TO CAUSE THE INTERFACE WITH EXISTING WORK TO BE PROPER, ACCEPTABLE TO THE ENGINEER AND THE CITY OF KIRKLAND, COMPLETE IN PLACE AND READY TO USE.
22. ALL INLET, MANHOLE, AND CATCH BASIN FRAMES AND GRATES SHALL NOT BE ADJUSTED TO GRADE UNTIL IMMEDIATELY PRIOR TO FINAL PAVING. ALL CATCH BASIN GRATES SHALL BE SET 0.10' BELOW PAVEMENT LEVEL.
23. OPEN CUT ROAD CROSSINGS FOR UTILITY TRENCHES ON EXISTING TRAVELED ROADWAY SHALL BE BACKFILLED ONLY WITH 3/8" MINUS CRUSHED ROCK AND MECHANICALLY COMPACTED (UNLESS OTHERWISE APPROVED BY THE CITY). FOR STREETS CLASSIFIED AS ARTERIALS OR COLLECTORS, BACKFILL FOR CROSSINGS SHALL BE CDF. CUTS INTO THE EXISTING ASPHALT SHALL BE NEAT LINE CUT WITH SAW OR JACKHAMMER IN A CONTINUOUS LINE. A TEMPORARY COLD MIX PATCH MUST BE PLACED IMMEDIATELY AFTER BACKFILL AND COMPACTION. A PERMANENT HOT MIX PATCH SHALL BE PLACED WITHIN 30 DAYS AND SHALL BE A MINIMUM OF 1" THICKER THAN THE ORIGINAL ASPHALT WITH A MINIMUM THICKNESS OF 2". SEE STANDARD D.02.
24. ALL DAMAGES INCURRED TO PUBLIC AND/OR PRIVATE PROPERTY BY THE CONTRACTOR DURING THE COURSE OF CONSTRUCTION SHALL BE PROMPTLY REPAIRED TO THE SATISFACTION OF THE CITY CONSTRUCTION INSPECTOR BEFORE PROJECT APPROVAL AND/OR THE RELEASE OF THE PROJECT'S PERFORMANCE BOND.
25. GROUT ALL SEAMS AND OPENINGS IN ALL INLETS, CATCH BASINS, AND MANHOLES. JETSET GROUT IS NOT ALLOWED.
26. WHEN WIDENING AN EXISTING ROADWAY WHERE AN EXISTING TYPE I CATCH BASIN WILL REMAIN IN THE TRAVEL LANE, THE EXISTING FRAME AND COVER SHALL BE REPLACED WITH A ROUND, LOCKING FRAME AND COVER.
27. FOR OTHER THAN SINGLE-FAMILY DWELLINGS, ALL EXPOSED OR READILY EXPOSED INDOOR STORM DRAINAGE PIPING/PLUMBING SHALL BE LABELED WITH THE WORDS "STORM DRAIN" WITH MINIMUM 2 INCH HIGH LETTERS.
28. RECYCLED CONCRETE SHALL NOT BE USED AROUND STORMWATER FACILITIES.



Street overlay required if there are 3 cuts within 150' along any one frontage (there are two cuts proposed).

Confirm that Type 1 structure is adequate for pump system.

Required for storm pump systems per COK Policy D-9

SURVEY NOTES
 INSTRUMENT: TOPCON GPT 3000W TOTAL STATION
 METHOD USED: FIELD TRAVERSE WITH ACTUAL FIELD MEASUREMENTS AND ANGLES
 WAC 332-130-090
 DATE OF SURVEY: APRIL 2018
 BASIS OF BEARING: NE 95TH ST (N86°47'25"E)
 BENCHMARK: COK #27, 1.5" IRON PIPE SET IN CONC
 SITE BENCHMARK: SSMH RIM EL - 303.19'

LEGAL DESCRIPTION
 LOT 66 IN BLOCK 29 OF BURKE AND FARRAR'S KIRKLAND ADDITION DIVISION 10, AS PER RECORDED IN VOLUME 19 OF PLATS, PAGE 85 RECORDS OF KING COUNTY AUDITOR;
 SITUATE IN THE CITY IF KIRKLAND, COUNTY OF KING, STATE OF WASHINGTON.

LOT COVERAGE		
EXISTING	LOT AREA	13,375 SF
	ROOF	1,860 SF
	DRIVEWAYS, WALKWAYS, DECK, ETC.	1,482 SF
	TOTAL IMPERVIOUS	3,342 SF (25.0%)
DEVELOPED (ON-SITE)	LOT AREA	13,375 SF
	HOUSE AND GARAGE	2,848 SF
	DRIVEWAYS, WALKWAYS, DECK, ETC.	2,110 SF
	TOTAL IMPERVIOUS	4,958 SF (37.1%)
DEVELOPED (OFF-SITE)	ASPHALT, CURB & GUTTER	1,918 SF
	DRIVEWAYS & WALKWAYS	2,312 SF
	TOTAL IMPERVIOUS	4,230 SF

ABBREVIATIONS:

- EX. ARCH ARCHITECTURAL
- CB CATCH BASIN
- SODO STORM DRAIN CLEANOUT
- IE PIPE INVERT
- SLL SOLID LOCKING LID
- OTE DOWN-TURNED ELBOW
- UTE UP-TURNED ELBOW
- O.W. OBSERVATION WELL
- FG FINISH GRADE
- EG EXISTING GRADE
- HP HIGH POINT
- LP LOW POINT

NOTES:

1. ALL STORM MATERIALS AND STORM FACILITIES SHALL BE IN ACCORDANCE WITH CITY OF KIRKLAND STANDARDS.
2. ALL FRONTAGE AND UTILITY WORK SHALL BE IN ACCORDANCE WITH CITY OF KIRKLAND STANDARDS.
3. REFER TO ARCHITECTURAL PLANS PROVIDED BY MILTON LAM ARCHITECTS FOR PROPOSED UTILITIES, GRADES, AND TREES.
4. CONTRACTOR TO LOCATE AND VERIFY THAT THERE ARE NO CONFLICTS WITH EXISTING UTILITIES. POWER TO THE PROPERTY TO BE UNDERGROUND.
5. EXISTING STORM MANHOLE INFORMATION TAKEN FROM KIRKLAND GIS MAP. CONTRACTOR TO VERIFY IN THE FIELD EXACT LOCATION AND INVERT ELEVATIONS AND SHALL NOTIFY ENGINEER OF ANY ISSUES WITH PROPOSED CONNECTION.
6. SOILS OF DISTURBED PERVIOUS AREAS TO BE AMENDED.

STORM CALLOUTS:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ACTUAL LOCATION, ELEVATIONS, SIZE, AND INTEGRITY AT POINT OF CONNECTION. DEPTH OF EXISTING LINE SHALL BE LOW ENOUGH AT POINT OF CONNECTION TO PROVIDE A MINIMUM OF 0.5% SLOPE FOR MAIN FLOOR AND ABOVE.
2. CONNECT 4" FOOTING DRAIN TO SODO #2B (DRYWELL OVERFLOW WITH PUMP).
3. INFILTRATION FILTER PER CK-D.22B.
4. DUPLEX SUBMERSIBLE PUMP SHALL BE WELL 1607 0.5HP OR APPROVED EQUIVALENT. PUMP SHALL BE EQUIPPED WITH AN EXTERNAL VISUAL AND AUDIBLE ALARM SYSTEM.
5. NATURAL GAS GENERATOR SYSTEM FOR PUMP. APPROXIMATE LOCATION SHOWN.

SITE & UTILITY CALLOUTS:

1. 1" WATER METER FOR DOMESTIC AND FIRE PROTECTION TO BE LOCATED WITHIN PLANTER STRIP PER CK-W.17. SIZE OF METER AND LINE TO BE VERIFIED DEMANDS.
2. 6" SEWER SERVICE OUT OF THE BUILDING APPROXIMATED TO BE AT ELEVATION 300.0'. THIS PROVIDES GRAVITY DRAINAGE FOR MAIN FLOOR AND ABOVE. GRINDER PUMP REQUIRED FOR BASEMENT TO GRAVITY DRAIN TO SERVICE LINE FROM BUILDING. PUMP DESIGN BY OTHERS.
3. INSTALL CONCRETE DRIVEWAY ENTRANCE, TYPE 1, PER WSDOT STD PLAN F-40.10-04.
4. STREET TREES AT 30' SPACING (TYP).
5. INSTALL PERPENDICULAR CURB RAMP, TYPE A, PER WSDOT STD PLAN F-40.15.
6. INSTALL CURB AND GUTTER PER CITY DETAIL CK-R.17.
7. INSTALL PAVEMENT PATCH PER CITY DETAIL CK-R.09.
8. INSTALL SIDEWALK PER CITY DETAIL CK-R.23.
9. RELOCATE OR ADJUST UTILITY POLE AS REQUIRED. COORDINATE WITH PURVEYOR.
10. EXISTING TREES TO BE RETAINED IF POSSIBLE. REFER TO ARCHITECTURAL DRAWINGS FOR TREE RETENTION AND PROTECTION FENCING.
11. ELEVATIONS OF SEWER MAIN PER AS-BUILTS. CONTRACTOR TO VERIFY FOR CONNECTION AT MINIMUM 2.0% FOR SEWER SERVICE LINE.

REFERENCE:

- A. BOUNDARY & TOPOGRAPHY BY TOUMA, DATED 5/18.
- B. ARCHITECTURAL PLANS BY MILTON LAM ARCHITECTS.
- C. GEOTECH REPORT BY COBALL, DATED 10/21/18.

SHEET LIST

SHEET #	NAME	DESCRIPTION
1	C1.0	STORM, UTILITY, & FRONTAGE IMPROVEMENT PLAN
2	C2.0	TESC PLAN
3	C3.0	SITE DETAILS
4	C3.1	SITE DETAILS
5	C3.2	TESC DETAILS
6	C3.3	STORM DETAILS

MILTON LAM ARCHITECTS

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City of Kirkland
 Reviewed by D Harmon
 01/10/2019

SPRINKLERS REQUIRED

BSF18-06942 APPROVED
 HIGHLANDS RESIDENCE
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11237 NE 95TH ST

STORM, UTILITY, & FRONTAGE IMPROVEMENT PLAN

PHA Project number	18112
Date	12/26/18
Drawn by	DAW/SC
Checked by	SC

C1.0

Scale 1"=20'

CALL 48 HOURS BEFORE YOU DIG 811

THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION BY CALLING THE UNDERGROUND LOCATE LINE AT 1-800-424-5555. A MINIMUM OF 48 HOURS PRIOR TO ANY EXCAVATION.

