

(20) 4" STORM DRAIN (3034 PVC) @ MIN 1 %
 (22) -6" STORM DRAIN (3034 PVC) @ MIN 1 %
 (30) -
 (35) -PRIVATE 18" YARD DRAIN OR EQUAL
 (36) -
 (40) PRIVATE TYPE 40 CATCH BASIN OR EQUAL

- 50. -SOIL IMPROVEMENT ON ALL DISTURBED AREAS POST CONSTRUCTION TO A MAXIMUM EXTENT FEASIBLE (REF: KCC 16.82.100 (F) & KCC 16.82.100 (F)). TILL IN 4" COMPOST INTO THE TOP 8 INCHES OF SOIL IS REQUIRED. MIN ORGANIC CONTENT IS 5-10 %. SEE MORE DETAILED DESCRIPTION SHEET 5.
- 51. -N/A
- 52. -
- 53. -DISPERSION TRENCH (FULL DISPERSION) WITH LEVEL SPREADER PER APPENDIX C, 2.1.5. SEE SIZING CALCULATOR ON SHEET 1. SEE DETAILS ON THIS SHEET. NGRA COVENANT AREA IS REQUIRED.
- 54. FULL (100%) INFILTRATION DRYWELL. OUTWASH SOILS PER GEOLOGIC MAPPING AND SEPTIC LOGS. SEE SIZING TABLE THIS SHEET
- 55. 2.0' X 24" DEEP INFILTRATION TRENCH PARALLEL TO DRIVEWAY.
- 56. -10' GRASS FILTER STRIP FOR WATER QUALITY TREATMENT VIA SEDIMENTATION. SEE DETAIL SHEET 2. WIDTH =10-FEET. AMEND SOILS BY TILLING IN 2" COMPOST INTO UPPER 6 INCH. CAREFULLY GRASS SHOULDER. MAX GRADE=5 %
- 59. -PERVIOUS DISPERSION 25' FLOWPATH (KCSWDM C.2.4.5)



Residential Site Plan Template

Engineering / Drainage Approval

ING COUNTY DEPARTMENT OF LOCAL SERVICES PERMITTING DIVISION
GEOLOGICAL CRITICAL AREAS REVIEW
APPROVED
 By:  Date: **05/26/2023**
 Ryan Scheffler, PE, Engineer II

Signature: _____

Date: _____

Signature: _____

Date: _____

FULL DISPERSION SIZING

FULL Dispersion Length Sizing Calculator			
Input flowpath length per plan=	130	LF	
Size adjustment calculation			
5,000 sf allowed=	100		
10,000 sf allowed=	200		
multiplier=	1.3		
adjusted allowed impervious=	6500		
sizing multiplier	0.008		
Max tributary Area (sf)	4,600	SF	tributary impervious area to dispersion
50 LF / 6500 sf Unit Length REQ	0.008		
Required minimum Length=	35	LF	
Pervious area Tributary=	5000	SF	Allowed tributary pervious area to dispersion
50 lf/17,500 UNIT LENGTH REQ=	0.002857		
Required Length=	14.3	LF	
TOTAL REQ. LENGTH=	50	LF	See PLAN for trench location



FIGURE C.2.2.C TYPICAL DRYWELL INFILTRATION SYSTEM

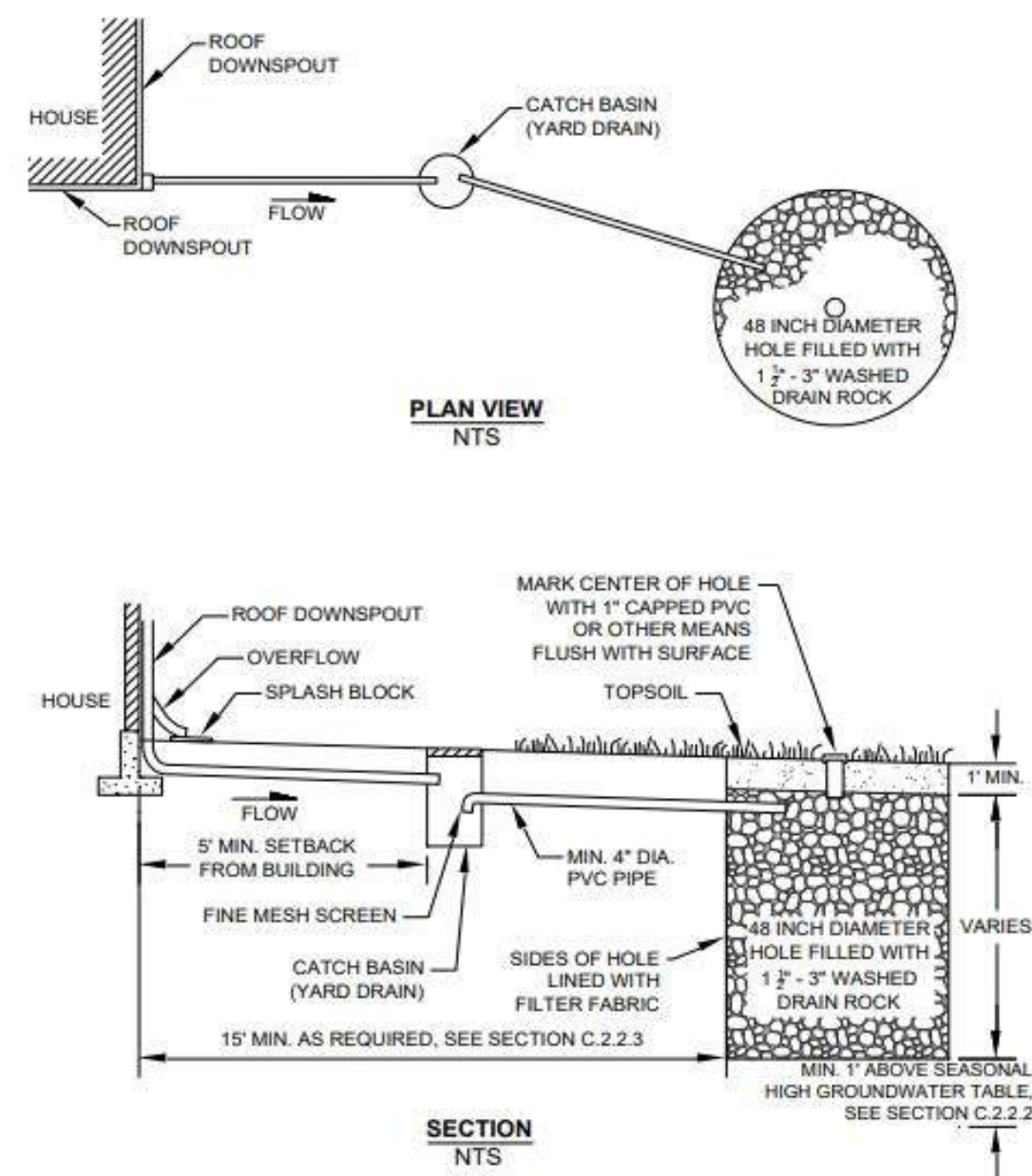
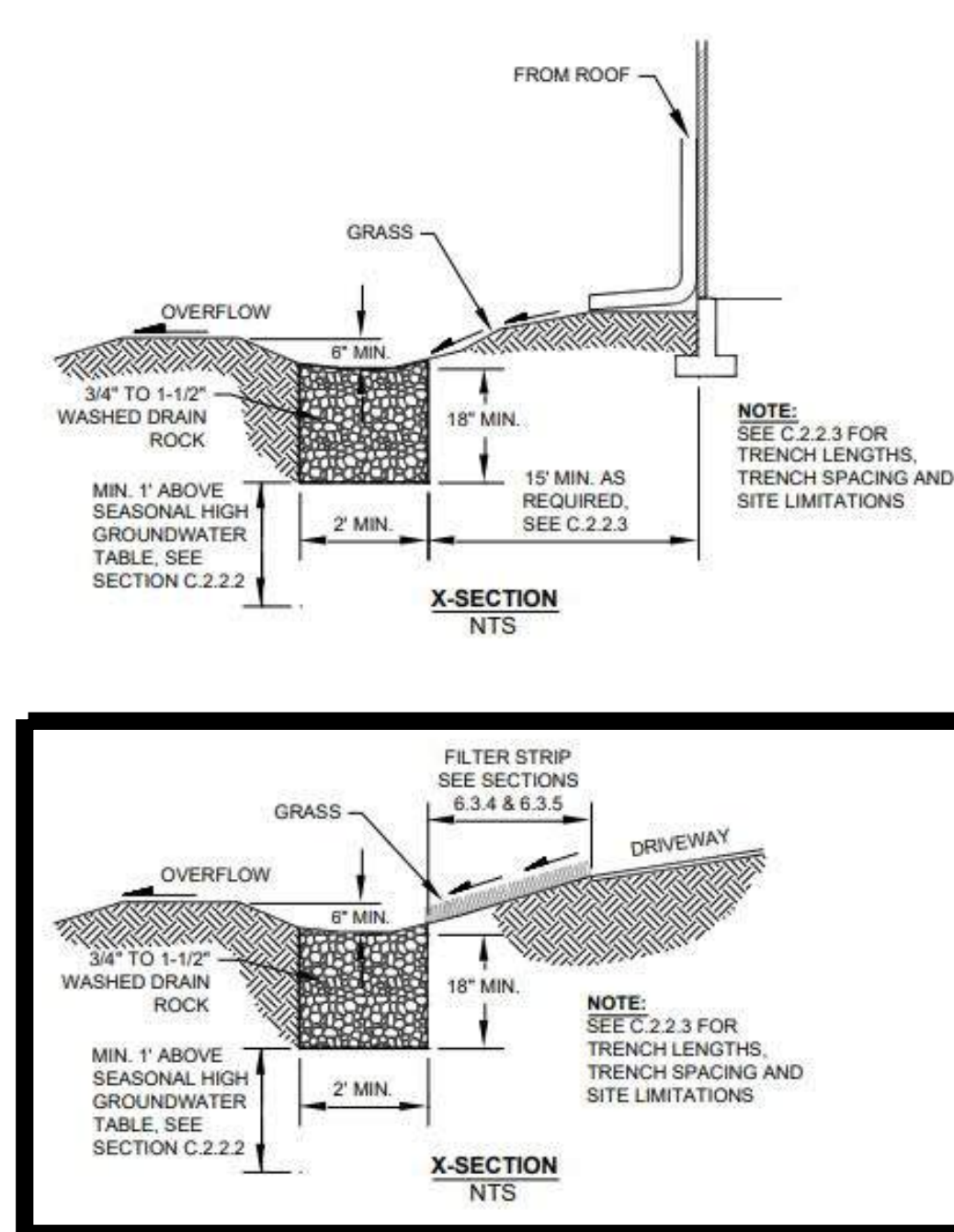
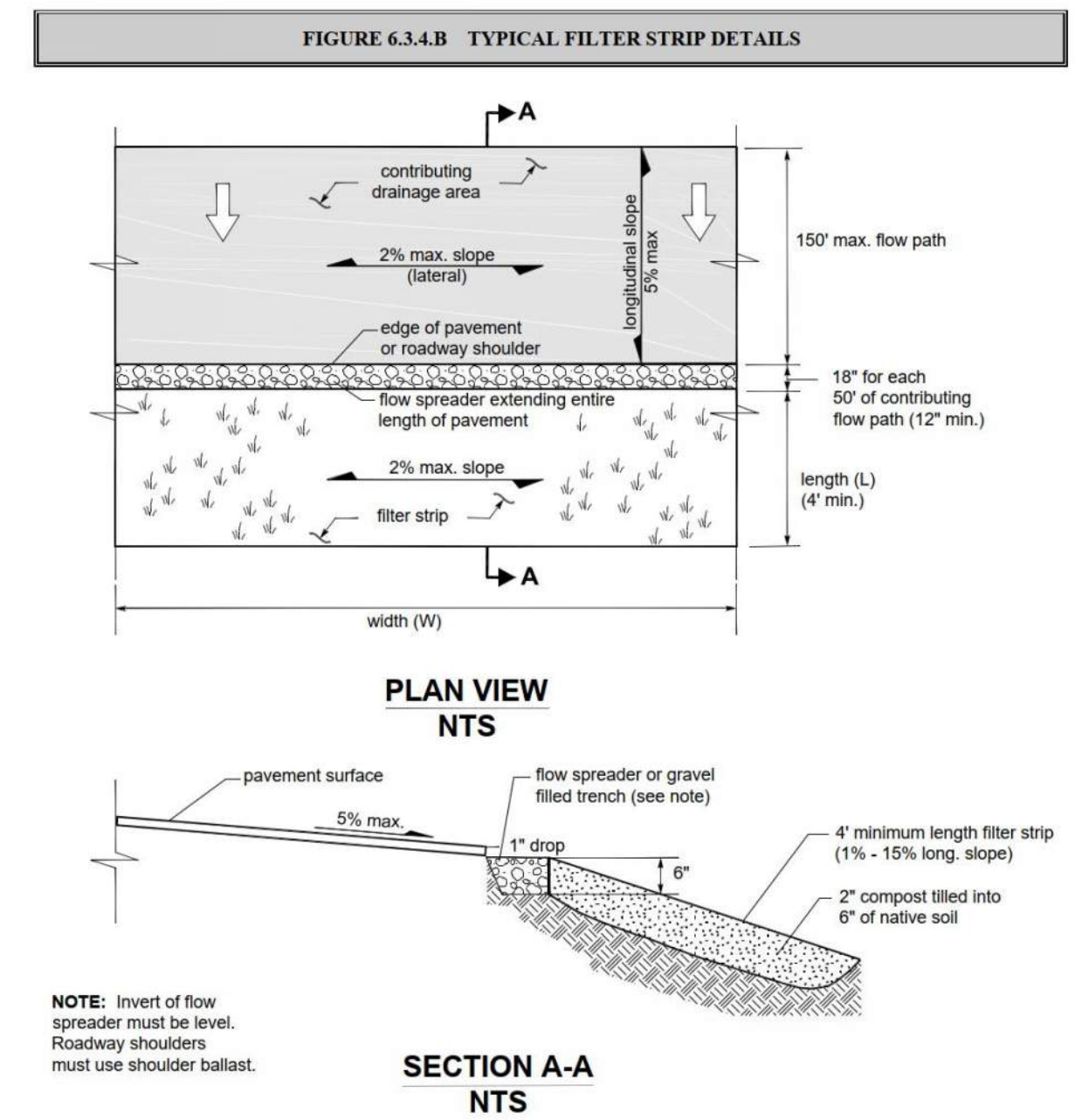


FIGURE C.2.2.B ALTERNATIVE TRENCH INFILTRATION SYSTEM



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. Bldg. Setback From Street _____

Min. Garage Setback From Street _____

Min. Bldg. Setback From Interior _____

Permit Center validation:

- Zoning
- Site Review Not Applicable

Validated Signature _____

Login Initials _____ Date: _____


Engineering / Drainage Approval

ENGINEERING/DRAINAGE REVIEW

APPROVED

By: Date: **05/26/2023**
Kevin Fitts, PE Engineer III

KING COUNTY DEPARTMENT OF LOCAL SERVICES PERMITTING DIVISION
GEOLOGICAL CRITICAL AREAS REVIEW
APPROVED

By:  Date: **05/26/2023**
Ryan Scheffler, PE, Engineer II

Clearing / Grading Approval

Signature: _____

Date: _____

Fire Approval

Signature: _____

Date: _____

PARCEL D, KING COUNTY BOUNDARY LINE
ADJUSTMENT, RECORDED NOVEMBER 25, 1996,
UNDER RECORDING NUMBER 9611259005, BEING THE

PARCEL D, KING COUNTY BOUNDARY LINE
ADJUSTMENT, RECORDED NOVEMBER 25, 1996,
UNDER RECORDING NUMBER 9611259005, BEING THE
SOUTH HALF OF GOVERNMENT LOT 6, SECTION 4,
TOWNSHIP 21 NORTH, RANGE 7 EAST, W.M., IN KING
COUNTY, WASHINGTON;

SITUATE IN THE COUNTY OF KING, STATE OF
WASHINGTON.

042107-9187

GEOFFREY AND JULIE SWEET
27805 217TH AVENUE SE
MAPLE VALLEY, WA 98026

GEOFFREY AND JULIE SWEET
27805 217TH AVENUE SE
MAPLE VALLEY, WA 98038

PLAN PREPARED BY:
DUFFY ELLIS, PE
CIVIL ENGINEERING SOLUTIONS
102 NW CANAL STREET
SEATTLE, WA 98107
(206) 930-0342

VERTICAL DATUM & CONTOUR INTERVAL

SEE SURVEY BY SITE SURVEYING



DATAUM & CONTOUR INTERVAL

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

THE MARK IS AN IRON PIPE SOUTHWEST OF THE SOUTH EDGE OF ASPHALT ON RETREAT-KANASAKI ROAD, SOUTHWEST OF THE SOUTHEAST CORNER OF A FENCE THAT SURROUNDS THE POWER SUB STATION.

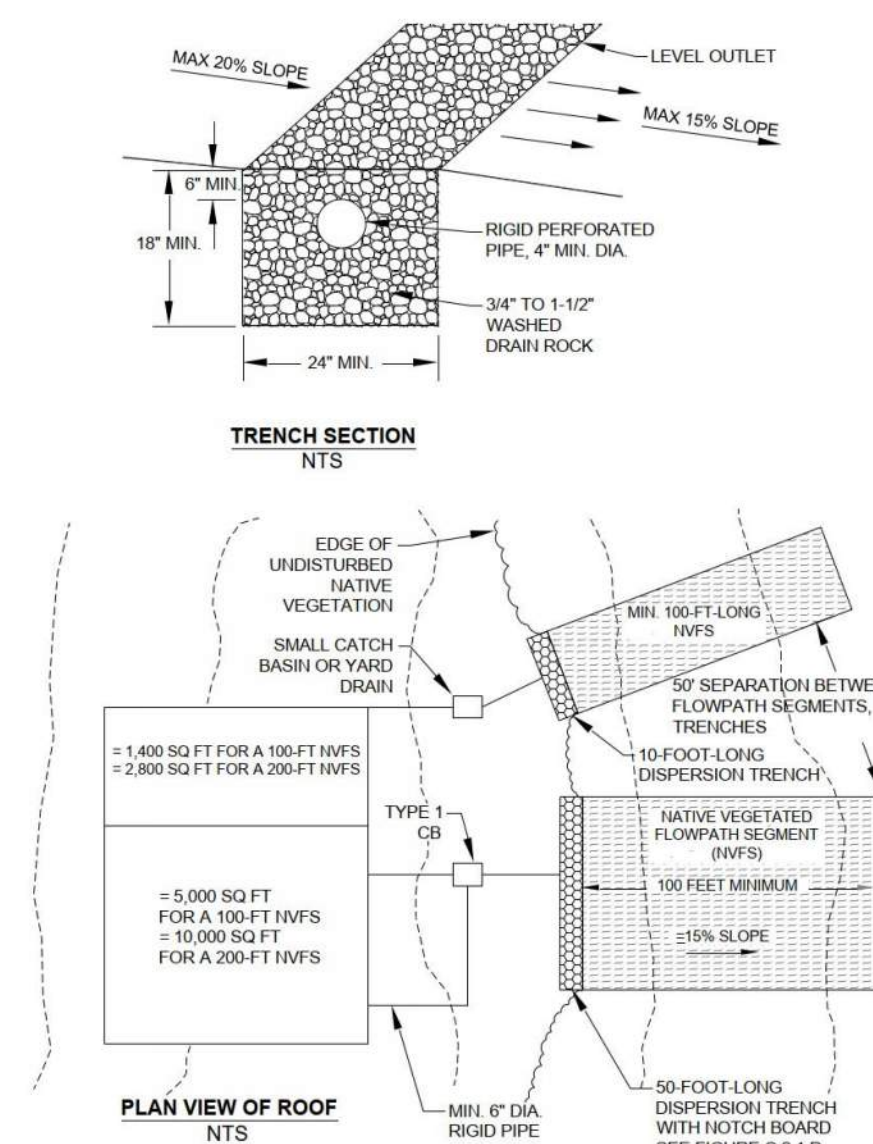
POINT ID NO. 7718; ELEVATION: 818.312 - NAVD 88

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

LEVEL SPREADER REQUIRED

FIGURE C.2.1.C 10-FOOT DISPERSION TRENCH CROSS-SECTION AND ROOF APPLICATION

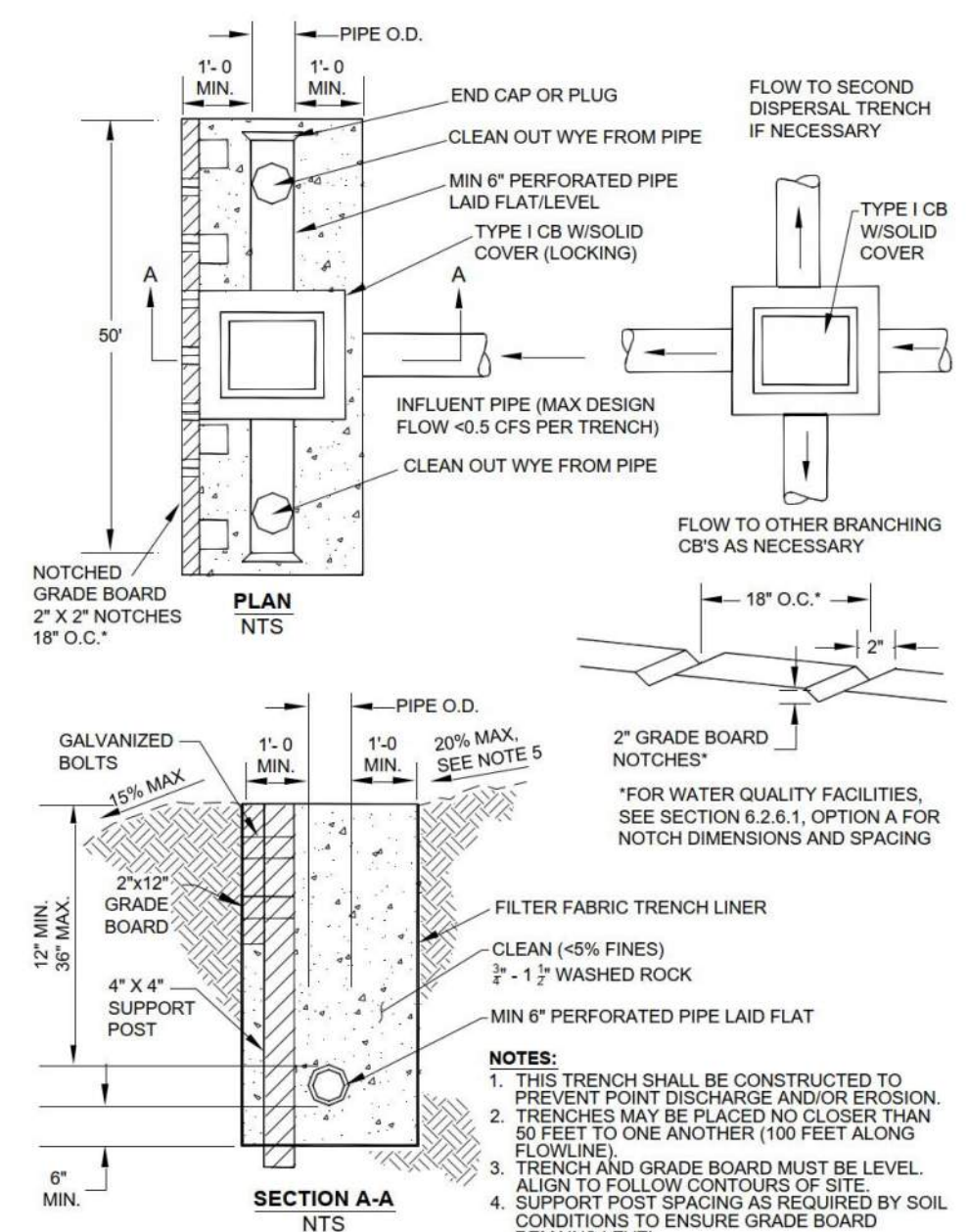
FIGURE C.2.1.C 10-FOOT DISPERSION TRENCH CROSS-SECTION AND ROOF APPLICATION



2021 Surface Water Design Manual – Appendix C 7/23/2021

FIGURE C.2.1.D 50-FOOT DISPERSION TRENCH WITH NOTCHED BOARD

FIGURE C.2.1.D 50-FOOT DISPERSION TRENCH WITH NOTCHED BOARD



7/23/2021 C-42 2021 Surface Water Design Manual – Appendix C

SHEET 2
CONSTRUCTION DETAILS

Permit Number: DWEL21-0051 Parcel Number: 042107-9187 Applicant Name: GEOFFREY AND JULIE SWEET Site Address: 29120 310th Ave SE

Engineering Scale: 1" = N/A Sheet 2 of



Residential TESC Template

1. Hold the pre-construction meeting, if required
2. Post sign with name and phone number of TESC representative who will be contacted with the required notice of construction sign
3. Flag or fence clearing limits.
4. Obtain all necessary permits if required.
5. Grade and install protection entrance(s)
6. Install perimeter construction (silt fence, brush barrier, etc.)
7. Construct sediment pond and traps, if required.
8. Grade and stabilize construction area.
9. Construct surface water controls (interceptor ditches, pipe culverts, etc.) in accordance with clearing and grading for project development.
10. Maintain erosion control measures in accordance with all applicable standards and manufacturer's recommendations.
11. Relocate erosion control measure, or install new measures, if necessary.
12. Stabilize exposed soil surface with seed, mulch, erosion and sediment control is always in accordance with the King County Erosion and Sediment Control Manual.
12. Cover all areas that will be unworked for more than seven days during the dry season or for two days during the wet season with straw, mulch, brush, 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 project, stabilize all disturbed areas and remove BMPs if appropriate.


KING COUNTY DEPARTMENT OF LOCAL SERVICES PERMITTING DIVISION
ENGINEERING/DRAINAGE REVIEW

ENGINEERING/DRAINAGE REVIEW APPROVED

By:  Date: 05/26/2023

Kevin Fitz, PE Engineer III

APPROVED

By:  Date: **05/26/2023**
Ryan Scheffler, PE, Engineer II

LOD....LIMITS OF DISTURBANCE

(CE) CONSTRUCTION ENTRANCE
 (SF) SILT FENCE
 (CD) CHECK DAM

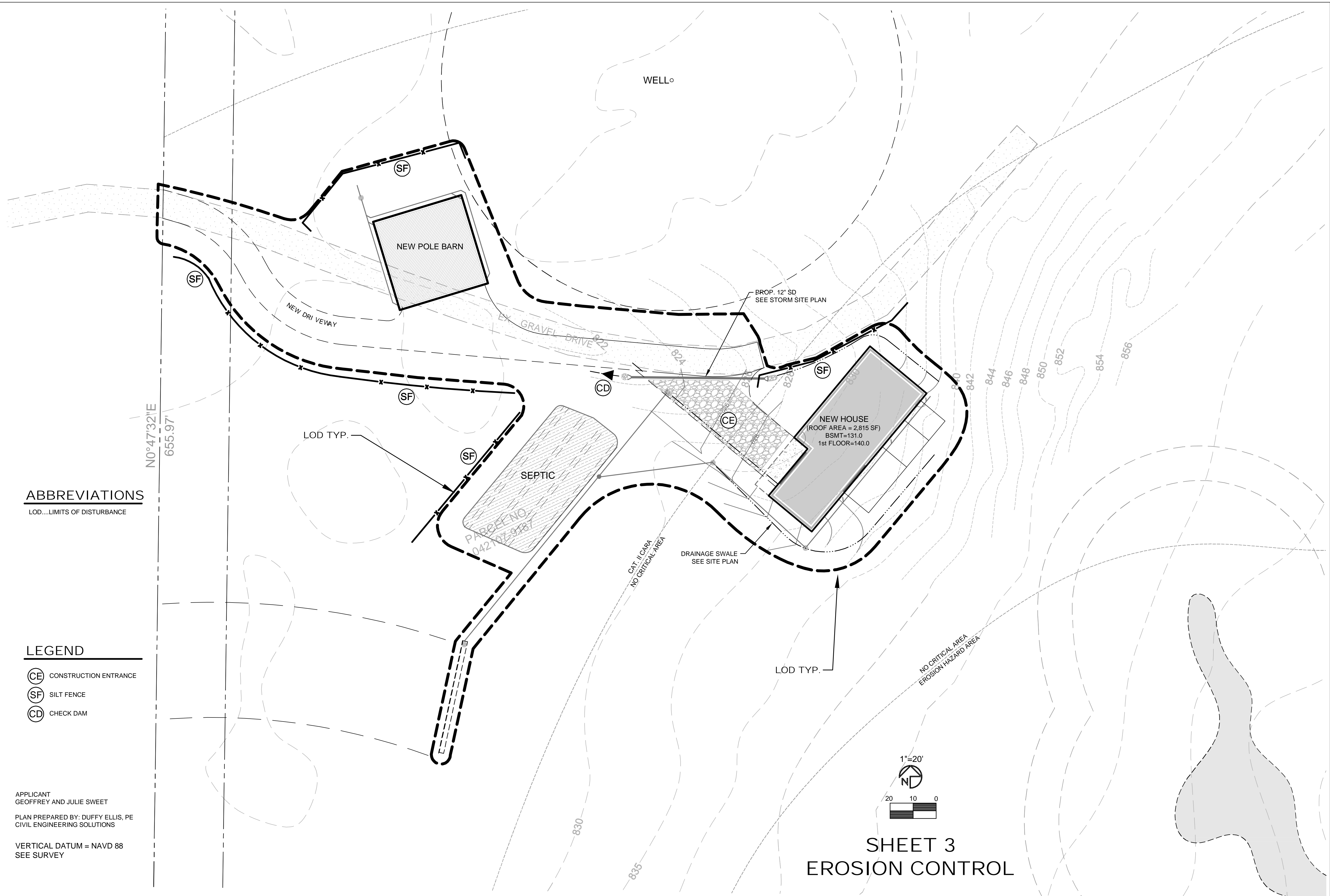
PLAN PREPARED BY: DUFFY ELLIS, PE
CIVIL ENGINEERING SOLUTIONS

VERTICAL DATUM = NAVD 88
SEE SURVEY

Permit Number: DWEL21-0051 Parcel Number: 042107-9187 Applicant Name: GEOFFREY AND JULIE SWEET Site Address: 29120 310th Ave SE

Engineering
Scale: 1" = 20'

Sheet 3 of





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


KING COUNTY DEPARTMENT OF LOCAL SERVICES PERMITTING DIVISION

ENGINEERING/DRAINAGE REVIEW
APPROVED

By:  Date: **05/26/2023**
Kevin Fitts, PE, Engineer III

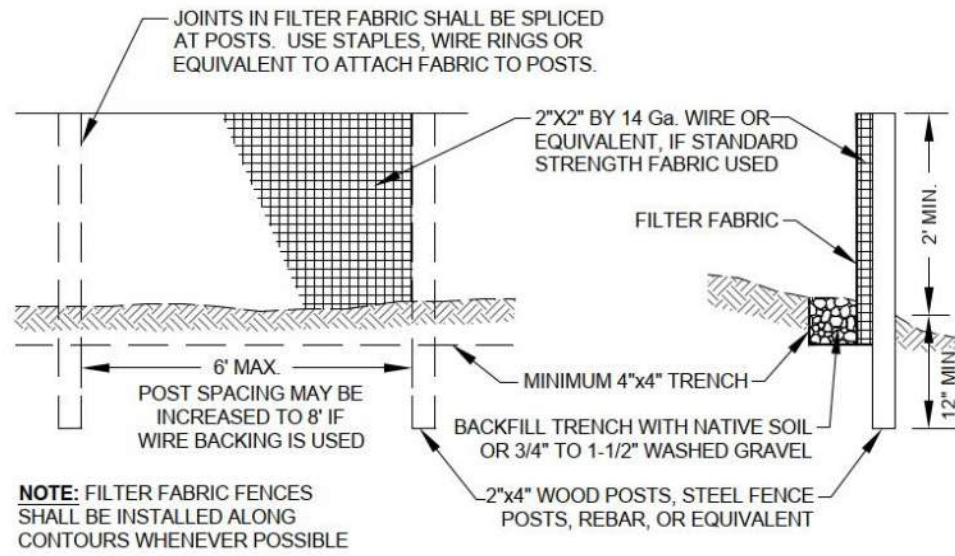
KING COUNTY DEPARTMENT OF LOCAL SERVICES PERMITTING DIVISION

GEOLOGICAL CRITICAL AREAS REVIEW
APPROVED

By:  Date: **05/26/2023**
Ryan Schaeffer, PE, Engineer II

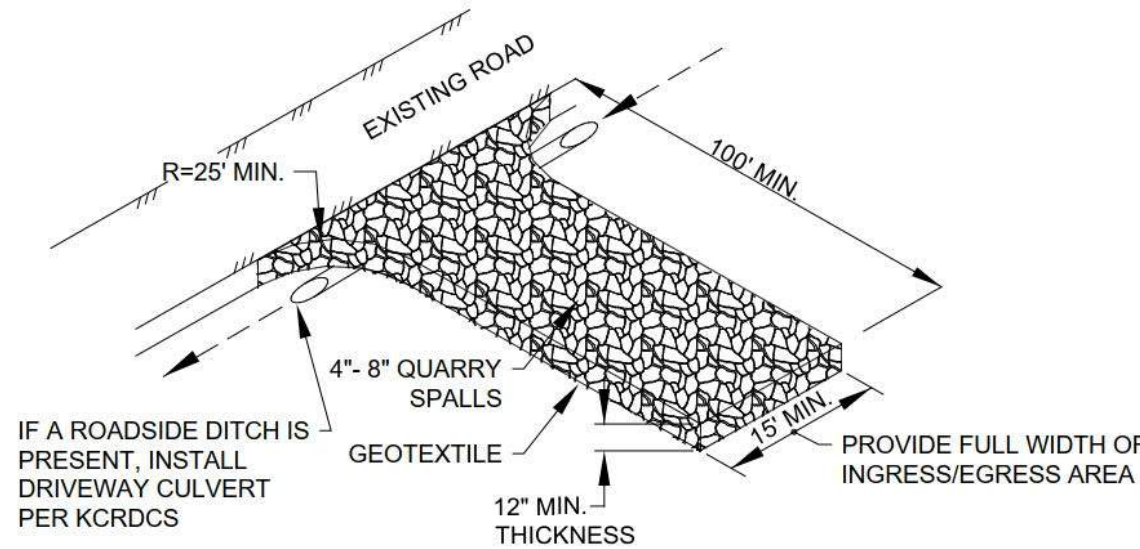
SILT FENCE

FIGURE D.2.1.3.A SILT FENCE



CONSTRUCTION ENTRANCE

FIGURE D.2.1.4.A STABILIZED CONSTRUCTION ENTRANCE

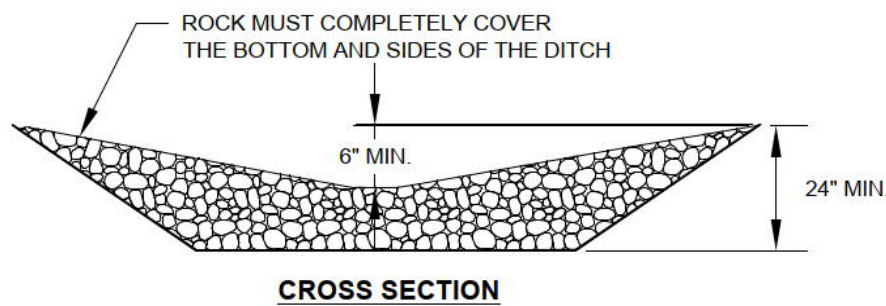


NOTES:

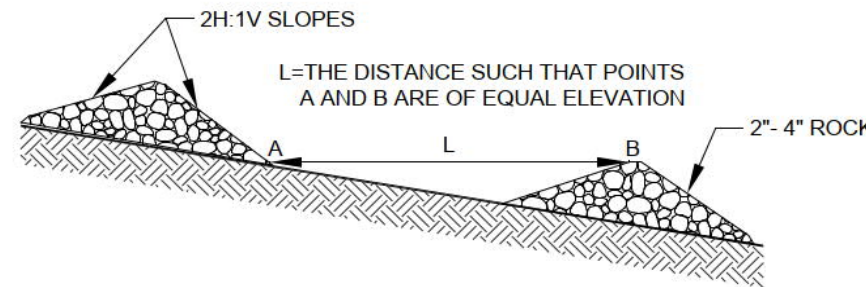
- PER KING COUNTY ROAD DESIGN AND CONSTRUCTION STANDARDS (KCRDCS), DRIVEWAYS SHALL BE PAVED TO EDGE OF R-O-W PRIOR TO INSTALLATION OF THE CONSTRUCTION ENTRANCE TO AVOID DAMAGING OF THE ROADWAY.
- IT IS RECOMMENDED THAT THE ENTRANCE BE CROWNED SO THAT RUNOFF DRAINS OFF THE PAD.

CHECK DAM

FIGURE D.2.1.6.E CHECK DAMS



CROSS SECTION



CHECK DAM SPACING

SHEET 3A
TESC DETAILS

Permit Number: DWEL21-0051 Parcel Number: 042107-9187 Applicant Name: GEOFFREY AND JULIE SWEET Site Address: 29120 310th Ave SE

Engineering
Scale: 1" =

Sheet 3A of



Residential Site Plan Template

Engineering / Drainage Approval

By:  Date: **05/26/2023**
Kevin Flitts, PE Engineer III

Clearing / Grading Approval

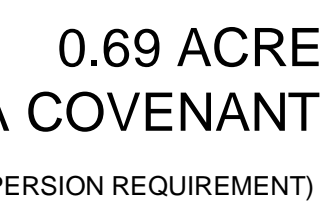
Fire Approval

APPLICANT
GEOFFREY AND JULIE SWEET

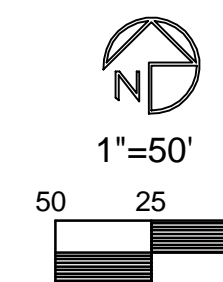
PLAN PREPARED BY: DUFFY ELLIS, PE
CIVIL ENGINEERING SOLUTIONS

Permit Number: DWEL21-0051 Parcel Number: 042107-9187 Applicant Name: GEOFFREY AND JULIE SWEET Site Address: 29120 310th Ave SE

Engineering
Scale: 1" = 50'

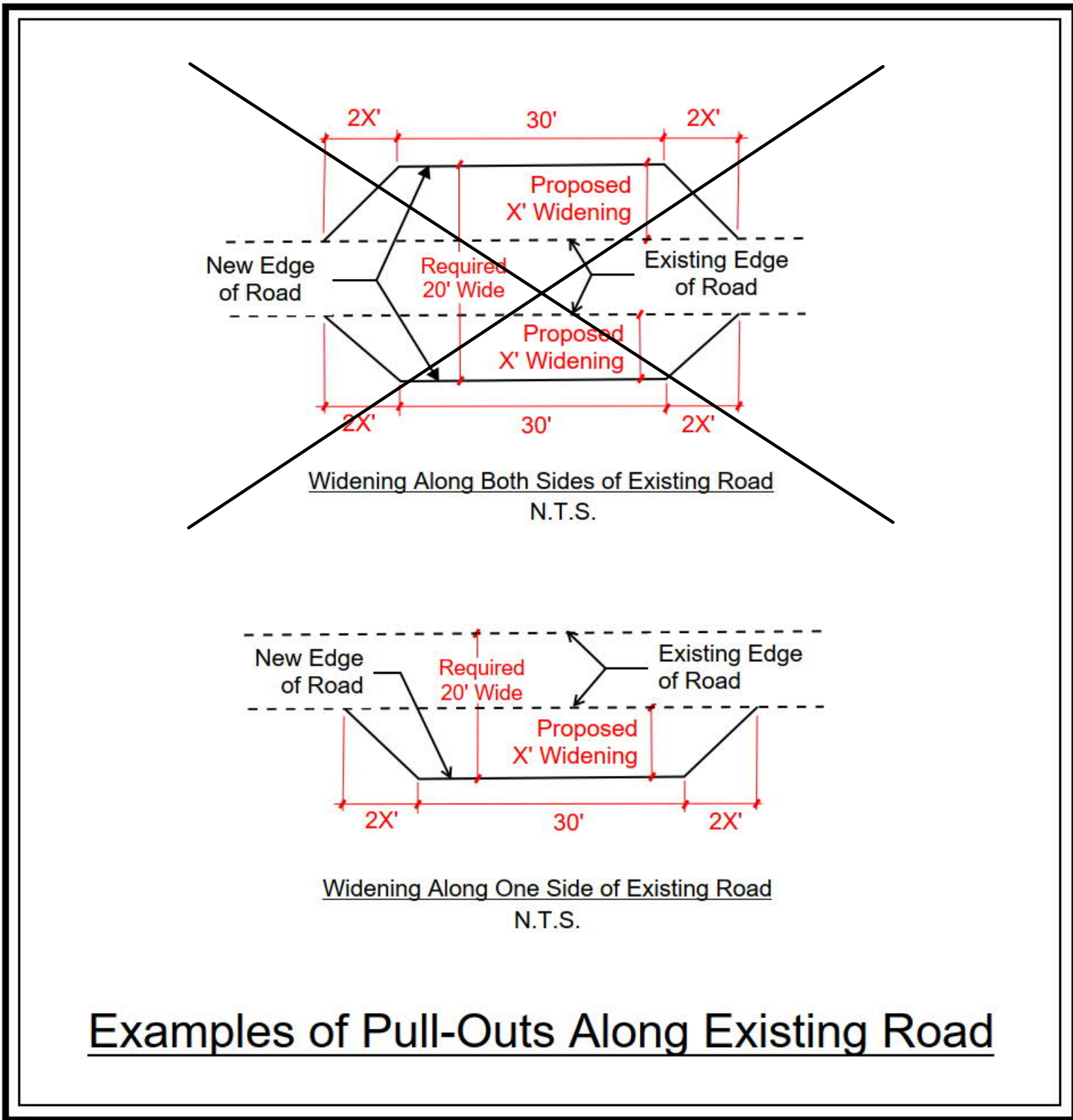
Sheet 4 of 

NGRA Calculator			
Rooftop to Full Dispersion	2,815	sf	to full dispersion
Rear Patio to Full Dispersion	423	sf	
Driveway to Full Dispersion	1,280	sf	
subtotal=	4,518	sf	to full dispersion
Divide by .15	0.15		Impervious/NGRA ratio
Required NGRA=	30,120	sf	see plans for location & size
Required NGRA=	0.69	AC	see plans for location & size



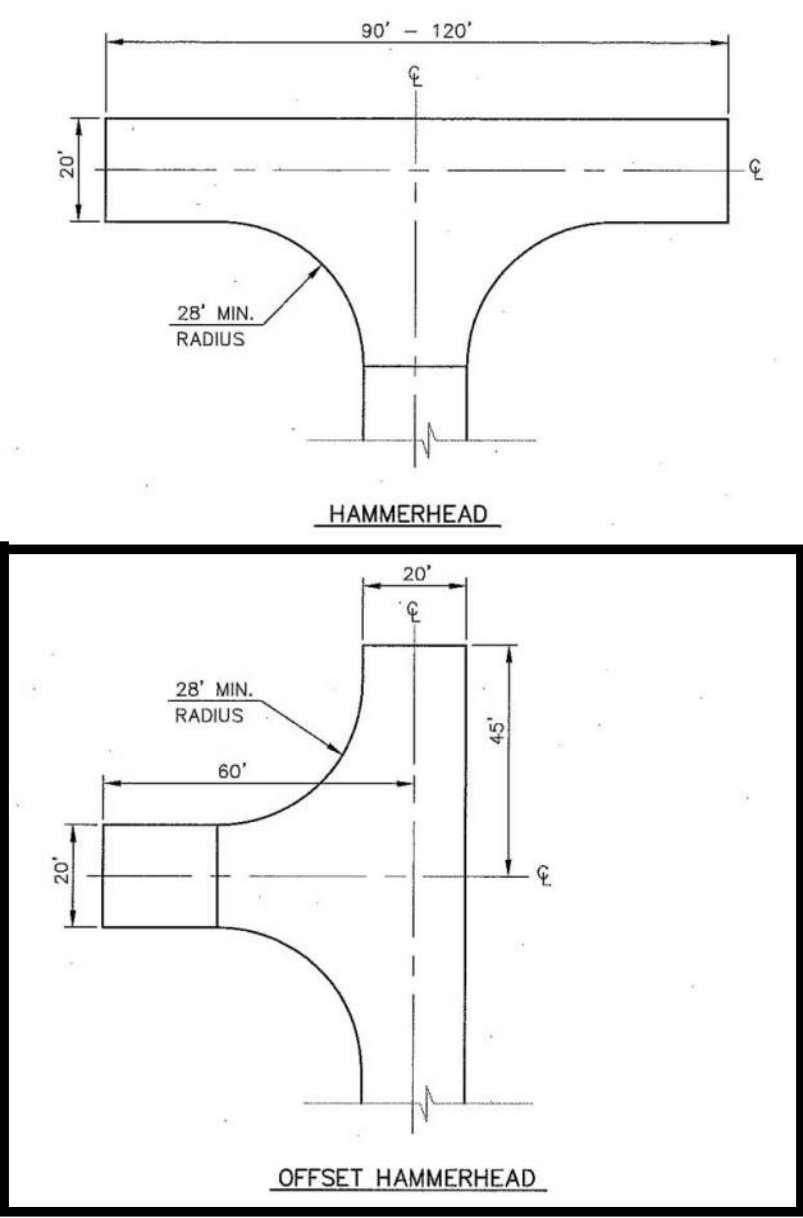
FULL BOUNDARY SITE PLAN
SHEET 4

PULL-OUT REQUIRED



Questions? Contact Mazen Haidar, PE at (206) 477 - 0352, or at mazen.haidar@kingcounty.gov for assistance.

HAMMERHEAD TURNAROUND



- NOTES:
1. HAMMERHEAD WIDTH RANGES BETWEEN 90' TO 120', DEPENDENT UPON ROADWAY LENGTH. SIDEWALKS AND UTILITIES MAY BE LOCATED WITHIN PUBLIC EASEMENTS.
 2. ALTERNATIVE DESIGNS BY APPROVAL OF THE COUNTY ROAD ENGINEER AND FIRE MARSHAL.
 3. TURNAROUND FACILITIES CANNOT BE LOCATED ON DRIVEWAYS.
 4. ALL STREET ENDS SHALL BE SIGNED PER THE MUTCD.



Department of Transportation
Road Service Division
2016 Design and
Construction Standards

HAMMERHEAD TURNAROUND

FIG. 2-012

2-37

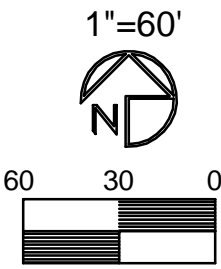
HAMMERHEAD
HAMMERHEAD
TURNAROUND REQ.
FIGURE 2-012

29238 ADDRESS

SWEET PROPERTY
DWEL21-0051

TURNOUT
TURNOUT/PULL REQUIRED
SEE DETAIL THIS SHEET

29326 ADDRESS



SHEET 5
OFFSITE IMPROVEMENTS
DWEL21-0051



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. Bldg. Setback From Street _____
Min. Garage Setback From Street _____
Min. Bldg. Setback From Interior _____

Permit Center validation:
o Zoning
o Site Review Not Applicable

Validated Signature _____
Login Initials _____ Date: _____

Engineering / Drainage Approval

KING COUNTY DEPARTMENT OF LOCAL SERVICES PERMITTING DIVISION
ENGINEERING/DRAINAGE REVIEW
APPROVED

By: Date: 05/26/2023
Kevin Finn, PE, Engineer III

KING COUNTY DEPARTMENT OF LOCAL SERVICES PERMITTING DIVISION
GEOLOGICAL CRITICAL AREAS REVIEW
APPROVED

By: Date: 05/26/2023
Ryan Schaffer, PE, Engineer II

Clearing / Grading Approval

Signature: _____
Date: _____

Fire Approval

Signature: _____
Date: _____

Permit Number: DWEL21-0051 Parcel Number: 042107-9187 Applicant Name: GEOFFREY AND JULIE SWEET Site Address: 29120 310th Ave SE

Engineering Scale: 1" = 20'

Sheet 5 of 5