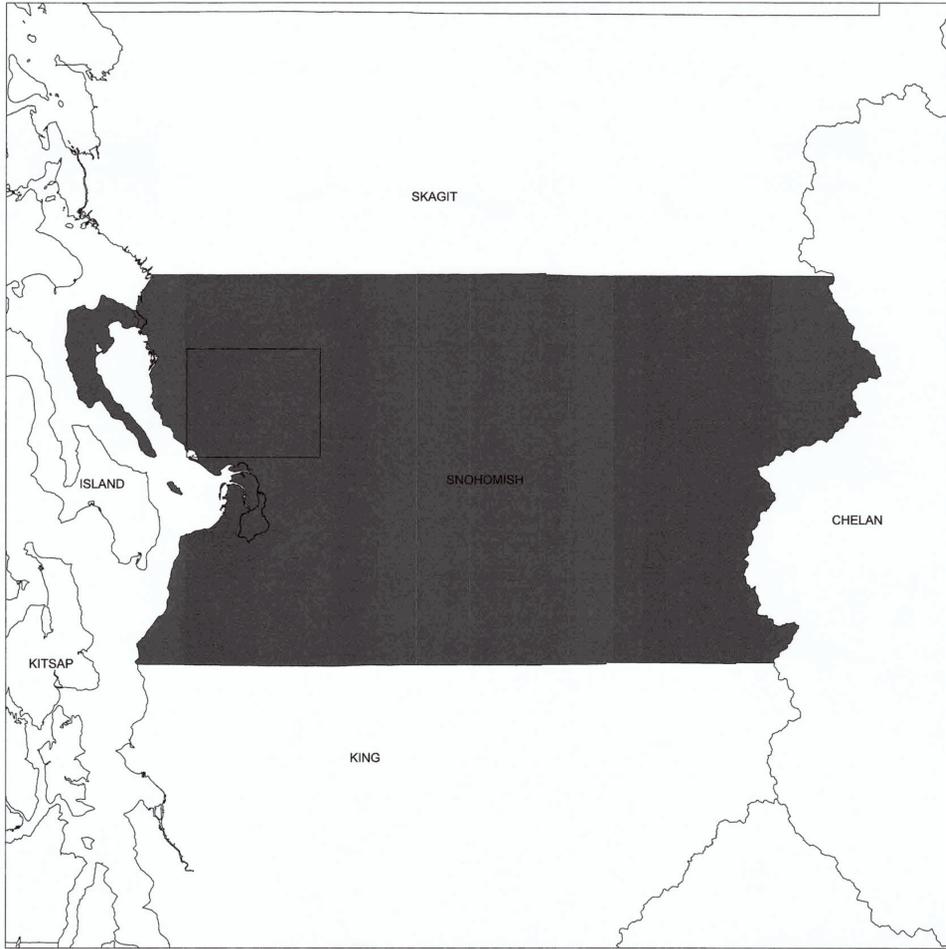


# 100% DESIGN PLAN SET EDGECOMB CREEK RESTORATION

ARLINGTON  
SNOHOMISH COUNTY, WA  
05/19/2021



SHEET #	SHEET	SHEET #	SHEET
1	COVER	26	UNKNOWN TRIB X PP - (2)
2	GENERAL NOTES	27	UNKNOWN TRIB X PP - (3)
3	QUANTITIES	28	UNKNOWN TRIB X PP - (4)
4	EXISTING CONDITION OVERVIEW	29	CROSS SECTIONS OVERVIEW
5	PROPOSED GROUND OVERVIEW	30	REACH 1 SECTIONS -(1)
6	CONSTRUCTION OVERVIEW	31	REACH 1 SECTIONS -(2)
7	REACH 1 PLAN AND PROFILE - (1)	32	REACH 2 SECTIONS -(1)
8	REACH 1 PLAN AND PROFILE - (2)	33	REACH 2 SECTIONS -(2)
9	REACH 1 PLAN AND PROFILE - (3)	34	REACH 2 SECTIONS -(3)
10	REACH 1 PLAN AND PROFILE - (4)	35	REACH 3 SECTIONS -(1)
11	REACH 2 PLAN AND PROFILE - (1)	36	REACH 3 SECTIONS -(2)
12	REACH 2 PLAN AND PROFILE - (2)	37	REACH 4 SECTIONS -(1)
13	REACH 2 PLAN AND PROFILE - (3)	38	REACH 4 SECTIONS -(2)
14	REACH 2 PLAN AND PROFILE - (4)	39	DETAILS - TYPICAL XS EDGECOMB
15	REACH 2 PLAN AND PROFILE - (5)	40	DETAILS - TYPICAL XS UT X
16	REACH 2 PLAN AND PROFILE - (6)	41	DETAILS - BRUSH AND ROLL RIFFLE
17	REACH 2 PLAN AND PROFILE - (7)	42	DETAILS - ROCK AND ROLL RIFFLE
18	REACH 2 PLAN AND PROFILE - (8)	43	DETAILS - FASCINE TOE PROTECTION
19	REACH 3 PLAN AND PROFILE - (1)	44	DETAILS - LOG VANE
20	REACH 3 PLAN AND PROFILE - (2)	45	DETAILS - ROUGHENED LOG TOE
21	REACH 3 PLAN AND PROFILE - (3)	46	DETAILS - SPANNER LOG
22	REACH 3 PLAN AND PROFILE - (4)	47	DETAILS - FLOODPLAIN DEPRESSION
23	REACH 4 PLAN AND PROFILE - (1)	48	DETAILS - DENDRITE CHANNEL
24	REACH 4 PLAN AND PROFILE - (2)	49	DETAILS - SWPPP (1)
25	UNKNOWN TRIB X PP - (1)	50	DETAILS - SWPPP (2)
		51	DETAILS - FLOOD TERRACE WOODY DEBRIS

**CITY OF ARLINGTON  
CONSTRUCTION DRAWING REVIEW ACKNOWLEDGMENT**

THIS PLAN HAS BEEN REVIEWED AND EVALUATED FOR GENERAL COMPLIANCE WITH THE CITY OF ARLINGTON CODES AND ORDINANCES. CONFORMANCE OF THE DESIGN WITH ALL APPLICABLE LAWS AND REGULATIONS IS THE FULL AND COMPLETE RESPONSIBILITY OF THE LICENSED DESIGN ENGINEER WHOSE STAMP AND SIGNATURE APPEAR ON THIS SHEET. ACKNOWLEDGEMENT OF CONSTRUCTION DRAWING REVIEW DOES NOT IMPLY CITY APPROVAL FOR CONSTRUCTION ACTIVITIES THAT REQUIRE OTHER COUNTY, STATE OR FEDERAL PERMIT REVIEW AND APPROVAL. THE PROPERTY OWNER AND LICENSED DESIGN ENGINEER SHALL BE RESPONSIBLE FOR THE ACQUISITION AND COMPLIANCE OF ALL APPLICABLE PERMITS AND/OR AUTHORIZATION WHICH MAY INCLUDE, BUT ARE NOT LIMITED TO, WSDPW HYDRAULIC PROJECT APPROVAL (HPA), WSDOE NOTICE OF INTENT (NOI), ARMY CORP OF ENGINEERS FILL PERMITS AND THE REQUIREMENTS OF THE (NOI), ENDANGERED SPECIES ACT.

BY: *Nova Heaton* DATE: *6/22/21*  
 Nova Heaton, PE, Development Services Manager

THESE APPROVED CONSTRUCTION PLANS EXPIRE AFTER 18 MONTHS FROM THE DATE SHOWN ABOVE OR UPON EXPIRATION OF PRELIMINARY PLAN OR SITE PLAN APPROVAL.



Digitally signed on 5/21/2021

C:\USERS\JOSHUA.ALLEN\SWCA\ERED - DOCUMENTS\92897 - EDGECOMB CREEK\3D\SHEETS\EDGECOMBCK COVER SHEET.DWG | JOSHUA ALLEN | WEDNESDAY, JUNE 2, 2021 8:14:44 AM | BDO STANDARD CDTB | PLOTTED: MONDAY, JUNE 7, 2021 8:24:54 AM

GENERAL CONSTRUCTION NOTES

- 1. INSTREAM STRUCTURES SHALL BE INSTALLED AS THE CHANNEL IS BEING CONSTRUCTED AND NOT POST CONSTRUCTION.
2. WHERE PRACTICABLE, EXISTING TREES AND NATIVE VEGETATION SHOULD BE LEFT IN PLACE TO FACILITATE NATURAL REGENERATION AND SOIL STABILIZATION.
3. DEFINITIONS
A. BANKFULL ELEVATION IS THE POINT OF INCIPENT FLOODING IN AN ALLUVIAL CHANNEL. THIS ELEVATION IS THE REFERENCE FOR DEPTHS ON OR ALONG THE CHANNEL PROFILE AND STRUCTURES DESCRIBED IN THESE SHEETS.
B. THE BANKFULL BENCH IS A CONSTRUCTED FLOODPLAIN ADJACENT TO THE CHANNEL. THE BANKFULL BENCH IS CONSTRUCTED AT THE BANKFULL ELEVATION.
C. THE THALWEG IS THE LOWEST PORTION OF THE CHANNEL.
D. THE VANE LENGTH IS THE STRAIGHT LINE DISTANCE BETWEEN THE VANE ARM AND A LINE TANGENT TO THE STREAMBANK AT THE POINT WHERE THE VANE ARM INTERSECTS THE STREAMBANK.
E. THE VANE ANGLE IS THE ANGLE BETWEEN THE VANE ARM AND A LINE TANGENT TO THE STREAMBANK AT THE POINT WHERE THE VANE ARM INTERSECTS THE STREAMBANK.
F. A FLOODPLAIN SILL IS THE BURIED EXTENSION OF THE STRUCTURE PERPENDICULAR TO THE FLOW DIRECTION OF THE BANKFULL CHANNEL BENEATH THE FLOODPLAIN.
G. ROOT WADS ARE THE ROOT MASS OF A TREE AND ATTACHED TRUNK. ROOT WADS AND LOGS MAY BE HARVESTED FROM THE SITE AS APPROVED BY THE ENGINEER. IF ROOT WADS OR LOGS ARE HARVESTED ON-SITE, THE REMOVAL OF TREES SHALL BE IN ACCORDANCE WITH APPLICABLE PERMITS. HARVESTING SHALL BE EXECUTED IN A MANNER AS TO ONLY DISTURB TREES THAT MUST BE REMOVED FOR GRADING PURPOSES OR SPECIFIC SPECIES REMOVAL.
H. LOG STRUCTURES SHALL BE CONSTRUCTED FROM LOGS THAT ARE INTACT AND IN NON-DECOMPOSED CONDITION AND APPROVED BY ENGINEER.
5. THE CONTRACTOR SHALL STAKE OUT THE PROPOSED STREAM CENTERLINE FOR REVIEW BY THE ENGINEER BEFORE INITIATING EXCAVATION. DEPENDING ON ENCOUNTERED CONDITIONS SOME REVISIONS TO THE DESIGN OF THE STREAM MAY BE NECESSARY. ANY COST ASSOCIATED WITH CHANGING STRUCTURE LOCATIONS OR ALIGNMENT SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION. STAKING MAY BE OMITTED FOR PORTIONS OF THE STREAM WHEN SURVEY-GRADE GPS IS USED TO CONSTRUCT THE CHANNEL. IF GPS IS USED IN LIEU OF STAKING THE CHANNEL IN THE FIELD, THE CONTRACTOR ASSUMES ALL RESPONSIBILITY FOR THE STREAM BEING CONSTRUCTED AS DESIGNED, INCLUDING ANY ISSUES RELATED TO PROJECTIONS, BASE POINTS OR CONVERSION OF DIGITAL TERRAIN MODELS.
6. PRIOR TO CLEARING AND GRUBBING, CONTRACTOR SHALL MARK THE LIMITS OF CLEARING NEAR TREES FOR VERIFICATION OF INTENT BY THE ENGINEER. SOME MINOR ADJUSTMENT OF CHANNEL ALIGNMENT MAY BE REQUIRED TO PRESERVE TREES OR MINIMIZE IMPACT TO TREES.
7. ANY HARVESTING OF TREES FROM ONSITE MUST BE APPROVED BY THE ENGINEER.
8. CONTRACTOR SHALL MINIMIZE, TO THE MAXIMUM EXTENT POSSIBLE, IMPACTS TO THE ADJACENT TREES. CONSTRUCTION EQUIPMENT TRACKS AND PATHWAYS SHALL BE GRADED AND RECONTOURED AFTER CONSTRUCTION TO PREVENT RILL AND GULLY EROSION.
9. THE PROPOSED GRADING IS SHOWN ON THESE PLAN SHEETS. THE CONTRACTOR MAY EXTEND THE LIMITS OF DISTURBANCE ONLY WITH THE APPROVAL OF THE ENGINEER.
10. CONTRACTOR SHALL USE AN EXCAVATOR WITH A HYDRAULIC THUMB TO INSTALL IN-STREAM STRUCTURES.
11. ELEVATIONS OF TRIBUTARIES AT CONFLUENCES MAY NEED TO BE ADJUSTED TO MEET CONSTRUCTED CONDITIONS. PROFILES MAY NEED TO BE ADJUSTED TO AVOID ABRUPT CHANGES IN ELEVATION. CHANGES SHALL BE MADE IN CONJUNCTION WITH AN ENGINEER.
12. CHANNEL RELOCATION WORK SHALL BE COMPLETED AND STABILIZED PRIOR TO ALLOWING FLOW TO ENTER INTO THE NEWLY CONSTRUCTED STREAM CHANNEL. THE CONTRACTOR SHALL NOT OPEN UP MORE THAN 200 FEET OF CHANNEL WITHOUT COIR FIBER MATTING IN PLACE OR BY APPROVAL OF THE ENGINEER. IF THE CHANNEL RELOCATION WORK IS NOT COMPLETED PRIOR TO ABANDONING THE OLD CHANNEL, A TEMPORARY DAM AND PUMP-AROUND SHALL BE INSTALLED TO FACILITATE CONSTRUCTION OF THE CHANNEL "IN THE DRY". DIVERSION PUMP SHALL BE CAPABLE OF PUMPING LOW FLOW. DAM SHALL BE PLACED SUCH THAT IT CAN BE OVERTOPPED DURING HIGH FLOWS WITHOUT RESULTING IN FLOODING. THE USE OF A TEMPORARY DAM AND PUMP-AROUND SHALL BE AT THE CONTRACTOR'S EXPENSE. A DIVERSION DITCH MAY ALSO BE USED WITH APPROVAL OF ENGINEER.
13. THE PROPOSED STREAM CHANNEL SHALL BE CONSTRUCTED BY FIRST GRADING THE FLOODPLAIN ADJACENT TO THE CHANNEL TO THE ELEVATION INDICATED ON THESE PLANS. THIS MAY BE DONE AS GENERAL EXCAVATION. THE PROPOSED STREAM CHANNEL SHALL THEN BE EXCAVATED TO THE PROPER DEPTHS INDICATED ON THE PROFILE AND PROPOSED CONTOURS. THIS SHALL BE DONE AS SPECIALIZED EXCAVATION AND IS TYPICALLY ACCOMPLISHED WITH A TRACK EXCAVATOR. THE PROFILES AND CONTOURS SHOWN PROVIDE WIDTHS AND SLOPES FOR AID IN CONSTRUCTING THE CHANNEL TO THE APPROPRIATE DIMENSIONS. THE THALWEG CAN FIRST BE EXCAVATED TO THE POINT INDICATED ON THE PROFILE. EXCAVATION AND FINE GRADING OF THE CROSS SECTIONS SHALL THEN BE PERFORMED AS SHOWN ON THE TYPICAL CROSS SECTIONS AND PROPOSED CONTOURS. ANY STOCKPILING OF MATERIALS OR "DOUBLE HANDLING" NECESSARY TO BUILD THE CHANNEL SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION.
14. IF THE EXISTING GROUND IS WITHIN 0.2 FEET OF PROPOSED BANKFULL ELEVATION, IT IS NOT NECESSARY TO EXCAVATE MATERIAL TO THE PROPOSED ELEVATION SHOWN ON THE PROFILE.
15. THE SURFACE OF ALL IN-STREAM, FLOODPLAIN, AND WETLAND STRUCTURES SHALL BE FINISHED TO A SMOOTH LINE IN ACCORDANCE WITH THE LINES, GRADES, AND CROSS SECTIONS OR ELEVATIONS SHOWN ON THE DRAWINGS. THE DEGREE OF FINISH FOR THE VANE SLOPES AND INVERT ELEVATIONS SHALL BE WITHIN 0.1 VERTICAL FEET OF THE GRADES AND ELEVATIONS INDICATED. LOG STRUCTURES WILL BE AUGMENTED WITH ADDITIONAL PLACEMENT OF SMALL WOODY DEBRIS TO INCREASE HABITAT COMPLEXITY AND STABILITY.
16. CONSTRUCTION SPECIFICATIONS FOR BANKFULL CHANNEL DIMENSIONS OR CROSS SECTIONS WILL BE HELD TO THE DIMENSIONS SHOWN ON THE TYPICAL CROSS SECTIONS. ELEVATIONS SHALL BE CONSTRUCTED WITHIN 0.1 VERTICAL FEET; WIDTHS AND MAX DEPTHS MUST FALL WITHIN THE RANGES SHOWN IN THE DRAWINGS.
17. THE IN-STREAM, FLOODPLAIN AND WETLAND STRUCTURE BID ITEMS SHALL INCLUDE ALL LABOR AND MATERIALS NECESSARY TO CONSTRUCT THE STRUCTURE. BID ITEMS INCLUDE SEEDING, PLANTING, MULCH AND EROSION CONTROL BLANKETS INCLUDE ALL LABOR AND MATERIALS NECESSARY TO STABILIZE AREAS DISTURBED DURING CONSTRUCTION OF STRUCTURES. AFTER THE STRUCTURE IS COMPLETE AND FLOW IS RESTORED TO THE CHANNEL SOME ADJUSTMENT TO THE STRUCTURE OR ADDITIONAL STABILIZATION MEASURES MAY BE NECESSARY TO ACHIEVE DESIRED EFFECT. ANY COSTS ASSOCIATED WITH THESE ADJUSTMENTS SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION.
18. THE CONSTRUCTED STREAM CHANNEL SHALL BE STABILIZED AS SOON AS POSSIBLE BY SEEDING IN ACCORDANCE WITH THE PLOT SCHEDULE. ADDING STRAW TO BARE SOIL, AND BY INSTALLING COIR FIBER MATTING FROM THE INNER BERM TO BEYOND THE TOP OF THE BANKFULL CHANNEL. REFER TO THE PLANTING PLAN PREPARED BY SOUNDVIEW CONSULTING, LCC FOR INFORMATION REGARDING SEED MIXES. PRIOR TO INSTALLING MATTING, PREPARE THE BED BY LOOSENING THE SOIL 3 TO 6 INCHES, APPLY NATIVE SEED AND THEN STRAW. NATIVE SEED SHALL BE BROADCAST EVENLY OVER THE AREA USING A BROADCAST SPREADER PRIOR TO COVERING WITH THE COIR FIBER MATTING. THE MATTING SHALL BE ROLLED OUT IN THE DIRECTION OF THE ANTICIPATED RUN-OFF FLOW. INSTALL MATTING IN ACCORDANCE WITH DETAIL SHOWN HEREIN. REWORKING OF AREAS THAT DO NOT ESTABLISH VEGETATION OR BECOME UNSTABLE SHALL BE NECESSARY IF THE COIR FIBER MATTING SEPARATES FROM THE SOIL. SEEDING OF THE BANKFULL BENCH SHALL BE IN ACCORDANCE WITH THE PLANTING TABLE. REFER TO COIR FIBER MATTING DETAIL FOR PLACEMENT OF COIR FIBER MATTING.
19. IF THE TIMING OF PROJECT IS SUCH THAT RIPARIAN SEED MIX CANNOT BE PLACED IN THE FALL, THEN THE CONTRACTOR SHALL REFERENCE THE SOUNDVIEW PLANTING PLAN UNTIL RIPARIAN MIX CAN BE SEED IN THE SPRING.
20. THE HARVESTING AND INSTALLATION OF LIVE STAKES SHALL BE PERFORMED ONLY DURING THE DORMANT SEASON TYPICALLY BETWEEN OCTOBER AND APRIL. CONTRACTOR SHALL NOTIFY ENGINEER 7 DAYS PRIOR TO HARVESTING TO REVIEW AND APPROVE ALL HARVESTING SITES. UPON APPROVAL BY ENGINEER, THE CONTRACTOR SHALL BE RESPONSIBLE FOR HARVESTING AND TRANSPORTING THE LIVE STAKE CUTTINGS TO THE JOB SITE.
21. LIVE STAKES SHALL BE INSTALLED OUTSIDE MEANDER BENDS, AND ALONG RIFFLES WHERE INDICATED ON THE DRAWINGS AND DETAILS. LIVE STAKES SHALL BE INSTALLED INTO THE COIR FIBER MATTING IN ADDITION TO THE DEAD STAKES.
22. TOPSOIL SHALL BE REMOVED FROM EXCAVATION AND SPOIL AREAS PRIOR TO CUT OR FILL AND RE-APPLIED TO AREAS AFTER ROUGH GRADING IS COMPLETE. SIX INCHES OF TOPSOIL SHALL BE PLACED ON DISTURBED AREAS TO MEET GRADE. STOCKPILING AND PLACEMENT OF TOPSOIL SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION AND APPROVED BY THE ENGINEER.
23. BORROW AREAS SHALL BE SEEDDED WITH TEMPORARY VEGETATION WITHIN 7 DAYS FOLLOWING GRADING.
24. CONTRACTOR SHALL CALL FOR UTILITY MARKING AT LEAST 48 HOURS PRIOR TO START OF CONSTRUCTION. IT MAY BE NECESSARY FOR THE CONTRACTOR TO CONTACT THE COUNTY CLERK TO DETERMINE WHAT UTILITY COMPANIES HAVE FACILITIES IN THE PROJECT AREA. THE LOCATIONS OF THE UTILITIES SHOWN ON THESE DRAWINGS ARE APPROXIMATE ONLY AND MAY NOT BE ACCURATE. LOCATING UTILITIES IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE ENGINEER AND PROJECT OWNER WILL NOT BE RESPONSIBLE FOR ANY DAMAGES TO UTILITIES.

CITY OF ARLINGTON CONSTRUCTION DRAWING REVIEW APPROVAL
THIS PLAN SHEET HAS BEEN REVIEWED AND APPROVED PER THE CONDITIONS ON THE TITLE SHEET.
BY: Nova Heaton, PE, Development Services Manager
DATE: 6/22/21 THIS APPROVAL IS VALID FOR 18 MONTHS

- 25. CONTRACTOR SHALL UTILIZE NATIVE MATERIAL FROM THE SITE WHERE AVAILABLE AND ALLOWED BY THE ENGINEER. NATIVE MATERIAL THAT CAN BE FOUND ON SITE INCLUDES LIVE STAKES HARVESTED FROM THE APPROPRIATE TREE SPECIES, LOGS, WOODY DEBRIS, AND NATIVE STREAMBED MATERIAL.
26. AFTER CONSTRUCTION, THE ACCESS ROADS LEADING TO THE PROJECT SITE SHALL BE RESTORED TO AS GOOD OR BETTER CONDITION THAN BEFORE CONSTRUCTION.
27. FOOTER DEPTH ON ALL STRUCTURES SHALL BE A MINIMUM OF 12" BELOW THE STREAMBED ELEVATION IMMEDIATELY DOWNSTREAM OF THE STRUCTURE.

EROSION/SEDIMENTATION CONTROL NOTES

- 1. ALL CONTROL MEASURES SHALL BE CHECKED, AND REPAIRED AS NECESSARY, MONTHLY IN DRY PERIODS, AND WITHIN 24 HOURS AFTER ANY RAINFALL AT THE SITE OF .75 INCHES OR GREATER WITHIN A 24 HOUR PERIOD. DAILY CHECKING AND, IF NECESSARY, REPAIRING SHALL BE DONE DURING PROLONGED RAINFALLS. THE PERMITTEE SHALL MAINTAIN WRITTEN RECORDS OF SUCH CHECKS AND REPAIRS ON SITE AT ALL TIMES, AND RECORDS SHALL BE SUBJECT TO INSPECTION AT ANY REASONABLE TIME.
2. THE CONSTRUCTION ENTRANCE SHALL BE MAINTAINED AS REQUIRED TO PREVENT SILT/SEDIMENT FROM LEAVING THE SITE. THIS INCLUDES BUT IS NOT LIMITED TO WASH DOWN OF THE CONSTRUCTION ENTRANCE, INSTALLING AND UTILIZING A VEHICLE WASH DOWN AREA, INSTALLING ADDITIONAL STONE, ETC.
3. ANY AND ALL SILT/SEDIMENTATION SHALL BE FREQUENTLY REMOVED FROM THE SILT FENCE, DITCHES, CHECK DAMS AND RETENTION AREAS. AT THE END OF CONSTRUCTION THESE AREAS SHALL BE COMPLETELY FREE OF SILT/SEDIMENTATION AND SHALL BE STABILIZED AS STATED IN THE PLANS AND SPECIFICATIONS.
4. ALL BMP'S SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH THE WASHINGTON HANDBOOK FOR EROSION CONTROL, SEDIMENT CONTROL AND STORM WATER MANAGEMENT ON CONSTRUCTION SITES AND URBAN AREAS, LOCAL STANDARDS FOR EROSION AND SEDIMENT CONTROL AND THE PLANS AND SPECIFICATIONS. IF CONFLICTS ARISE BETWEEN THESE REQUIREMENTS, THE MORE STRINGENT SHALL APPLY.
5. BMP'S SHOWN ALONG THE PERIMETER OF THE DISTURBED AREAS SHALL BE INSTALLED PRIOR TO DISTURBANCE ACTIVITY. OTHER BMP'S SHALL BE INSTALLED AS SOON AS CONSTRUCTION SEQUENCES ALLOW.
6. TEMPORARY DIVERSION OF RUNOFF/RUNON WATER SHALL BE INSTALLED AS NEEDED TO FACILITATE CONSTRUCTION OR AS DIRECTED ON-SITE BY THE ENGINEER.
7. ALL DISTURBED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY AFTER THE COMPLETION OF THE GRADING OPERATION. AREAS REQUIRING COCONUT COIR MATTING, SHALL BE SEEDDED AND MULCHED FOR STABILIZATION PRIOR TO THE INSTALLATION OF THE MATTING.
8. TEMPORARY STABILIZATION OF DISTURBED AREAS MUST BE INITIATED IMMEDIATELY WHENEVER WORK TOWARD PROJECT COMPLETION AND FINAL STABILIZATION OF ANY PORTION OF THE SITE HAS TEMPORARILY CEASED AND WILL NOT RESUME FOR A PERIOD EXCEEDING THIRTEEN (13) CALENDAR DAYS. THOSE AREAS SHALL BE SEEDDED AND MULCHED IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.
9. NECESSARY MEASURES SHALL BE TAKEN TO PRODUCE AND MAINTAIN AN ACCEPTABLE STAND OF GRASS. SAID MEASURES TO INCLUDE (BUT NOT LIMITED TO) WATERING, RE-SEEDING, REGRADING ERODED AREAS, RE-FERTILIZING, ETC.
10. CONTRACTOR IS RESPONSIBLE FOR KEEPING MUD AND DEBRIS OFF CITY/STATE STREETS AND ROW. CLEANUP IS REQUIRED DAILY.
11. CONTRACTOR SHALL KEEP A COPY OF THE NPDES CONSTRUCTION GENERAL PERMIT AND THE "CONSTRUCTION BEST MANAGEMENT PRACTICES PLAN" ON SITE AT ALL TIMES FOR THE LIFE OF THE PROJECT.
12. ALL HAZARDOUS SUBSTANCES USED FOR THIS PROJECT (PAINT, OIL, GREASE, AND OTHER PETROLEUM PRODUCTS) SHALL BE STORED IN ACCORDANCE WITH SPOC REGULATIONS. THESE SUBSTANCES SHALL BE STORED AWAY FROM DRAINS AND DITCHES IN WATERTIGHT CONTAINERS. DISPOSAL OF THESE SUBSTANCES SHALL BE IN ACCORDANCE WITH ADEM REGULATIONS. DAILY INSPECTIONS SHALL BE PERFORMED FOR LEAK DETECTION. IF LEAKS OCCUR, APPROPRIATE ACTION SHALL BE TAKEN TO CONTAIN AND REMEDIATE THE SPILL. ADEQUATE TRASH CONTAINERS SHALL BE KEPT ON SITE FOR THE DISPOSAL OF CONSTRUCTION MATERIALS WASTE. NECESSARY MEASURES SHALL BE TAKEN TO PREVENT ANY TRASH OR OTHER POLLUTANTS FROM ENTERING "WATERS OF THE UNITED STATES."
13. ALL TEMPORARY MEASURES SHALL BE REMOVED ONCE ACCEPTABLE PERMANENT STABILIZATION IS ACHIEVED. THE ENGINEER SHALL DETERMINE IF THE PERMANENT STABILIZATION IS ACCEPTABLE.

SPECIAL NOTES:

- 1. DESIGN IS SUBJECT TO CHANGE BASED ON SITE CONDITIONS WITH APPROVAL FROM ENGINEER - SPECIFICALLY STRUCTURE LOCATIONS & POOL DEPTHS.
2. THE ELEVATIONS SHOWN HEREIN ARE BASED ON SURVEY PROVIDED BY LDC, INC. IT ENCOMPASSES THE EXISTING GROUND SURFACE FROM WHICH ALL COMPUTATIONS FOR CUT/FILL ARE BASED. SLIGHT DISCREPANCIES BETWEEN THE EXISTING GROUND DIGITAL SURFACE AND FIELD CONDITIONS CAN RESULT IN SIGNIFICANT VARIATIONS IN TOTAL EXCAVATED QUANTITIES. THUS, QUANTITIES OF MATERIAL EXCAVATED SHOULD BE COMPARED TO THOSE SHOWN ON THE DRAWINGS TO MANAGE THE MOVEMENT OF MATERIAL ACROSS THE SITE.
3. PRIOR TO ORDERING THE PROPOSED CULVERT STRUCTURES, THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND SUPPORTING STRUCTURAL CALCULATIONS SEALED BY A P.E. REGISTERED IN THE STATE OF WASHINGTON TO THE ENGINEER DEMONSTRATING THE PERTINENT VERTICAL LOADS ARE SUPPORTED BY THE CULVERT STRUCTURE.

TOPOGRAPHIC INFORMATION:

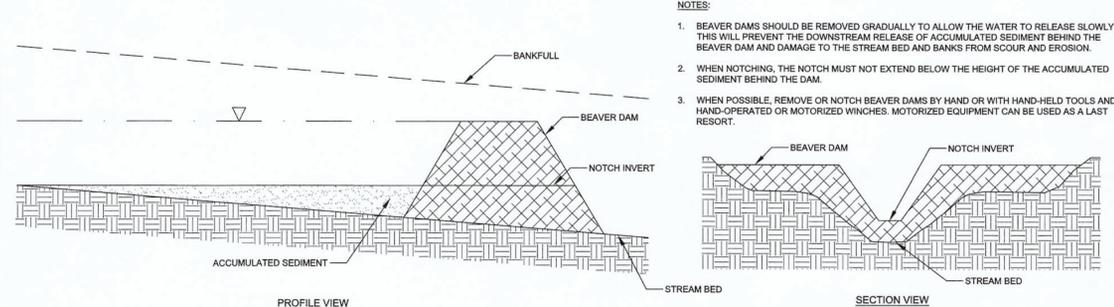
EXISTING GROUND SURFACES ARE BASED ON A SURVEY COMPLETED IN AUGUST 2020. SOME SITE CHANGES MAY HAVE OCCURRED SINCE THE SITE SURVEY ESPECIALLY IN HEADCUT AREAS. CHANGES IN EXISTING SURFACES SHALL BE INCIDENTAL TO CONSTRUCTION. THE ENGINEER MAKES NO WARRANTY FOR THE ACCURACY OF ANY SURVEY INFORMATION SHOWN IN THESE DRAWINGS. IF DISCREPANCIES EXIST BETWEEN THE THREE DIMENSIONAL DIGITAL SURFACE AND THE ACTUAL GROUND SURFACE, SIGNIFICANT VARIATIONS IN THE EXCAVATIONS QUANTITIES CAN BE EXPECTED, WHICH COULD AFFECT HANDLING AND PHASING CONSIDERATIONS FOR THE PROJECT. THE ENGINEER ACCEPTS NO RESPONSIBILITY FOR CHANGES TO EXCAVATION QUANTITIES THAT CHANGE AS A RESULT OF ANY DISCREPANCIES BETWEEN THE DIGITAL SURFACE AND EXISTING GROUND.

SPECIAL GRADING NOTE:

THE AGREED UPON INTENT OF THIS GRADING PLAN IS TO MAINTAIN A "LIVE" SURFACE SO THAT ANY CHANGES THAT ARISE DURING CONSTRUCTION CAN BE QUICKLY ENCOMPASSED INTO THE THREE-DIMENSIONAL SURFACE GENERATED DURING THIS DESIGN PROCESS. AS SUCH, FINE TUNING OF THE SURFACE THAT WOULD ELIMINATE THE APPEARANCE OF JAGGED CONTOUR LINES WHERE SLIGHT VARIATIONS BETWEEN THE EXISTING AND PROPOSED SURFACES WAS NOT COMPLETED.

BEAVER DAM MANAGEMENT NOTES:

BEAVER DAMS ARE CURRENTLY LOCATED ALONG EDGECOMB CREEK ON THE SUBJECT PROPERTY, AND BEAVER USE OF THE PROPOSED REALIGNED EDGECOMB CREEK IS ANTICIPATED. BEAVER MANAGEMENT ACTIONS MAY BE REQUIRED TO ENSURE THAT THE PROPOSED RIPARIAN CORRIDOR MEETS MITIGATION PERFORMANCE STANDARDS THROUGHOUT THE 10-YEAR MONITORING PERIOD OR THAT FLOODING ASSOCIATED WITH BEAVER DAMS DOES NOT POSE A HAZARD TO THE PROPOSED DEVELOPMENT, ADJACENT PUBLIC ROADWAYS, OR THE BNSF RAILROAD. THE EFFECTS OF BEAVERS ON THE PROPOSED RIPARIAN CORRIDOR WILL BE ASSESSED DURING FORMAL AND INFORMAL MONITORING VISITS. QUALITATIVE OBSERVATIONS WILL FOCUS ON BEAVER ACTIVITIES SUCH AS PONDING AND PLANT GIRDLING OR FELLING THAT AFFECT THE SURVIVAL AND COMPOSITION OF PLANTINGS IN THE RIPARIAN CORRIDOR. EXAMPLES OF BEAVER MANAGEMENT ACTIONS INCLUDE BEAVER TRAPPING BY A QUALIFIED SPECIALIST, MODIFICATIONS OF BEAVER DAMS, OR REMOVAL OF BEAVER DAMS. BEAVER TRAPPING BY A QUALIFIED SPECIALIST MAY BE PERMITTED WITHOUT A HYDRAULIC PROJECT APPROVAL (HPA) FROM THE WASHINGTON DEPARTMENT OF FISH AND WILDLIFE (WDFW). IF BEAVER MANAGEMENT ACTIONS REQUIRING BEAVER DAM REMOVAL OR MODIFICATION OR OTHER IN-WATER WORK ARE NECESSARY, THESE ACTIONS WILL BE PERFORMED SUBJECT TO THE CONDITIONS OF AN APPROVED HPA AND IN ACCORDANCE WITH THE FOLLOWING DETAIL:



NOTES:

- 1. BEAVER DAMS SHOULD BE REMOVED GRADUALLY TO ALLOW THE WATER TO RELEASE SLOWLY. THIS WILL PREVENT THE DOWNSTREAM RELEASE OF ACCUMULATED SEDIMENT BEHIND THE BEAVER DAM AND DAMAGE TO THE STREAM BED AND BANKS FROM SCOUR AND EROSION.
2. WHEN NOTCHING, THE NOTCH MUST NOT EXTEND BELOW THE HEIGHT OF THE ACCUMULATED SEDIMENT BEHIND THE DAM.
3. WHEN POSSIBLE, REMOVE OR NOTCH BEAVER DAMS BY HAND OR WITH HAND-HELD TOOLS AND HAND-OPERATED OR MOTORIZED WINCHES. MOTORIZED EQUIPMENT CAN BE USED AS A LAST RESORT.

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NorthPoint DEVELOPMENT logo

Professional Engineer Seal for Joshua Allen, State of Washington, No. 20110871, Registered Professional Engineer. Digitally signed on 5/21/2021.

EDGECOMB CREEK 100% DESIGN

GENERAL NOTES

Table with columns: Date, Scale, Drawn by, Checked by, File #. Values: 04/08/2021, NTS, JYZ, JCA.

Table with columns: Date, By, Note. Lists revision history from 09/30/20 to 03/26/21.

C:\USERS\JOSHUA.ALLEN\SWCA-ERED - DOCUMENTS\02287\_EDGECOMB\CREEK\C30\SHETS\EDGECOMBCK COVER SHEET.DWG | JOSHUA.ALLEN | ACAD.CTB | PLOTTED: Monday, June 7, 2021 8:25:11 AM | SAVED: Wednesday, June 2, 2021 8:14:44 AM |

QUANTITY ESTIMATION		
ITEM #	SHORT DESCRIPTION	QUANTITY
1	MOBILIZATION	LUMP SUM 1
2	EROSION CONTROL	LUMP SUM 1
3	CLEARING AND GRUBBING	ACRE 13
4	EXCAVATION & FILL (ON-SITE)	CUBIC YARD 129,019
5	2.5-INCH-MINUS WELL-GRADED RIVER ROCK	TONS 1,100
6	COIR FIBER MATTING (STREAM BANKS)	SY 11,673
7	BRUSH AND ROLL RIFFLE (EDGEComb CK)	EACH 9
8	BRUSH AND ROLL RIFFLE (UT X)	EACH 4
9	SPANNER LOG (EDGEComb CK)	EACH 40
10	SPANNER LOG (UT X)	EACH 11
11	ROUGHENED LOG TOE (EDGEComb CK)	EACH 64
12	ROUGHENED LOG TOE (UT X)	EACH 18
13	FASCINE TOE PROTECTION (EDGEComb CK)	EACH 61
14	FASCINE TOE PROTECTION (UT X)	EACH 18
15	ROCK AND ROLL RIFFLE (EDGEComb CK)	EACH 26
16	ROCK AND ROLL RIFFLE (UT X)	EACH 10
17	LOG VANE	EACH 24
18	21'-10"W x 5'-8"H ALUMINUM BOX CULVERT (EDGEComb CREEK)	LF 100
19	8'w X 4'h OPEN BOTTOM CULVERT (UT X)	LF 280
20	TEMPORARY SEEDING	AC
21	PERMANENT SEEDING	AC
22	CONTAINERIZED PLANTINGS (1 GALLON)	EA
23	CONTAINERIZED PLANTINGS (2 GALLON)	EA
24	LIVE STAKES	EA

SEE NOTE

NOTE: PLEASE REFER TO PLANTING PLAN PREPARED BY SOUNDVIEW CONSULTANTS, LLC FOR PLANTING QUANTITIES

EDGEComb CREEK WOOD PIECES TABLE

Habitat Structures	# of Structures	# of Key Pieces/Structure	# of Key Pieces	# of Small Wood Pieces/Structure	# of Small Wood Pieces	Description
Brush and Roll Riffle	9	5	45	---	---	5 12" diameter logs (13-15 FT in length) & 4 CY of fine/small brush material
Rock and Roll Riffle	26	5	130	---	---	5 12" diameter logs (13-15 FT in length)
Fascine Toe Protection	61	---	---	---	---	12 LF of fascine
Log Vane	24	3	72	---	---	2 12" diameter logs (25-30 FT in length) & 1 root wad (5-10 FT in length)
Roughened Toe Log	64	---	---	11	704	7.5 CY of coarse/large brush material & 2.5 CY of fine/small brush material
Spanner Log	40	3	120	---	---	3 12" diameter logs (22-25 FT in length) & 12 6" diameter logs (4-6 FT in length)
Random Woody Debris Habitat	---	---	---	5*	476	*pieces/100 linear feet
<b>Total</b>	<b>224</b>	<b>---</b>	<b>367</b>	<b>---</b>	<b>1,180</b>	
	Stream Length (ft)	# of Key Pieces/100 m	# of Key Pieces	# of Small Wood Pieces/100m	# of Small Wood Pieces	Description
Required Pieces	9,513	11	320	27	784	Based on Fox & Bolton LWD Frequency Criteria (2007)
Surplus (Deficit)	---	---	47	---	396	
Required Volume	9,513	---	---	---	---	
Surplus (Deficit)	---	---	---	---	---	

UT X WOOD PIECES TABLE

Habitat Structures	# of Structures	# of Key Pieces/Structure	# of Key Pieces	# of Small Wood Pieces/Structure	# of Small Wood Pieces	Description
Brush and Roll Riffle	4	3	12	---	---	3 8" diameter logs (8-10 FT in length) & 1 CY of fine/small brush material
Rock and Roll Riffle	10	3	30	---	---	3 8" diameter logs (8-10 FT in length)
Fascine Toe Protection	18	0	0	---	---	8 LF of fascine
Roughened Toe Log	18	0	0	6	108	4 CY of coarse/large brush material & 1 CY of fine/small brush material
Spanner Log	12	3	36	---	---	3 8" diameter logs (13-15 FT in length) & 6 6" diameter logs (2-3 FT in length)
Random Woody Debris Habitat	---	---	---	5*	112	*pieces/100 linear feet
<b>Total</b>	<b>62</b>	<b>---</b>	<b>78</b>	<b>---</b>	<b>220</b>	
	Stream Length (ft)	# of Key Pieces/100 m	# of Key Pieces	# of Small Wood Pieces/100m	# of Small Wood Pieces	Description
Required Pieces	2240	11	76	27	185	Based on Fox & Bolton LWD Frequency Criteria (2007)
Surplus (Deficit)	---	---	2	---	35	
Required Volume	2240	---	---	---	---	
Surplus (Deficit)	---	---	---	---	---	

REACH NAME	PROPOSED LENGTH (FT)
EDGEComb CREEK REACH 1	2217
EDGEComb CREEK REACH 2	4260
EDGEComb CREEK REACH 3	2334
EDGEComb CREEK REACH 4	702
UNKNOWN TRIB X	2240
<b>TOTAL EDGEComb CREEK</b>	<b>9513</b>
<b>TOTAL RESTORED STREAM</b>	<b>11753</b>

Stamp:



*Joshua Allen*  
 Digitally signed on 5/21/2021

Project Title:  
**EDGEComb CREEK  
 100% DESIGN**

Sheet Title:  
**QUANTITIES**

Date: 04/08/2021  
 Scale: NTS  
 Drawn by: JYZ  
 Checked by: JCA  
 File #

REVISIONS

Date:	By:	Note:
09/30/20	JYZ	30% CONCEPT DESIGN
10/21/20	JYZ	30% REVISION
12/04/20	JYZ	60% DESIGN
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02/12/21	JYZ	90% DESIGN
03/26/21	JYZ	100% DESIGN

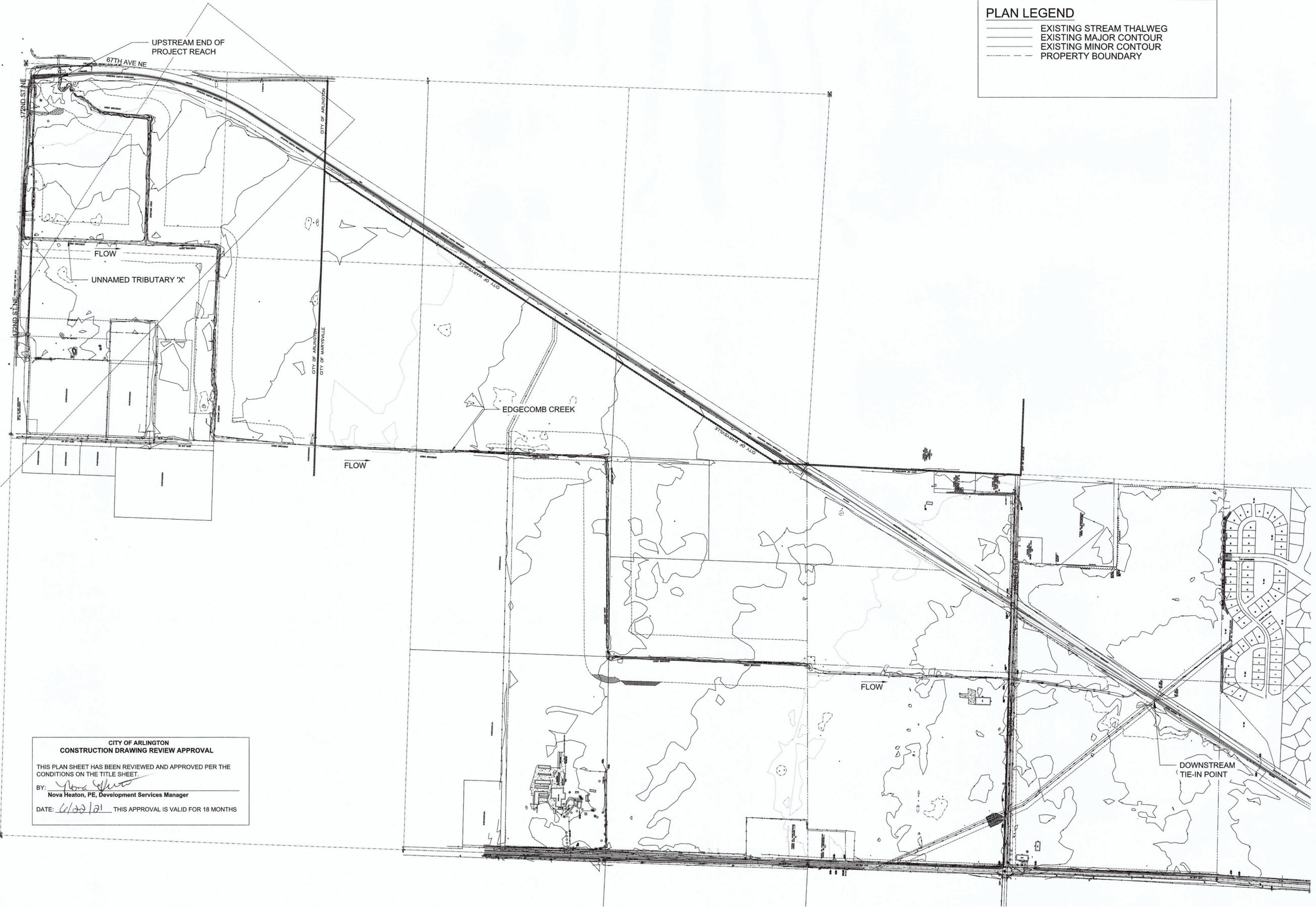
**CITY OF ARLINGTON  
 CONSTRUCTION DRAWING REVIEW APPROVAL**

THIS PLAN SHEET HAS BEEN REVIEWED AND APPROVED PER THE CONDITIONS ON THE TITLE SHEET.

BY: *Nova Heaton*  
 Nova Heaton, PE Development Services Manager

DATE: *4/22/21* THIS APPROVAL IS VALID FOR 18 MONTHS

CUISERS\JOSHUA.ALLEN\CA\A-ERED - DOCUMENTS\62897 - EDGECOMB\CREEK\C3\SHETS\EDGECOMBCK 90PERCENT OVERVIEW.DWG | JOSHUA.ALLEN | SAVED: Friday, May 21, 2021 9:51:30 AM | BDG STANDARD.CTB | PLOTTED: Monday, June 7, 2021 8:23:49 AM



**PLAN LEGEND**

- EXISTING STREAM THALWEG
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- - - - - PROPERTY BOUNDARY

**CITY OF ARLINGTON  
CONSTRUCTION DRAWING REVIEW APPROVAL**

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Nova Heaton, PE, Development Services Manager

DATE: 6/22/21 THIS APPROVAL IS VALID FOR 18 MONTHS

Prepared by:  
**SWCA**  
ENVIRONMENTAL & ENGINEERING

Operating in North Carolina as  
SWCA Environmental Consulting  
and Engineering of NC, PC

116 Alexandria Drive  
Mooresville, NC 28115  
(p) 919.824.1458

Prepared for:  
**NorthPoint**  
DEVELOPMENT

ANSI D (22"x34") SCALE: 1" = 300'

0 150 300 600

TABLOID (11"x17") SCALE: 1" = 600'

0 300 600 1200

Stamp:

*Joshua Allen*  
Digitally signed on 5/21/2021

Project Title:  
**EDGECOMB CREEK  
100% DESIGN**

Sheet Title:  
**OVERVIEW  
EXISTING CONDITION**

Date:	04/02/2021
Scale:	AS SHOWN
Drawn by:	JCA/JYZ
Checked by:	JCA
File #	

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Date:	By:	Note:
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12/04/20	JYZ	60% DESIGN
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02/12/21	JYZ	90% DESIGN
03/28/21	JYZ	100% DESIGN

Sheet No:  
**4 OF 51**



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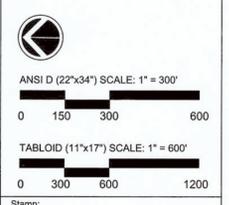


**PLAN LEGEND**

- PROPOSED STREAM CENTER LINE
- - - EXISTING MAJOR CONTOUR
- - - EXISTING MINOR CONTOUR
- - - PROPERTY BOUNDARY
- - - STABILIZED CONSTRUCTION ENTRANCE
- ☁ CONSTRUCTION STAGING AREA
- SILT FENCE
- - - UPLAND PERIMETER BOUNDARY
- STORMWATER DISPERSION STRUCTURE

Prepared by:  
**SWCA**  
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 DEVELOPMENT



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*Joshua Allen*  
 Digitally signed on 5/21/2021

Project Title:  
**EDGECOMB CREEK  
 100% DESIGN**

Sheet Title:  
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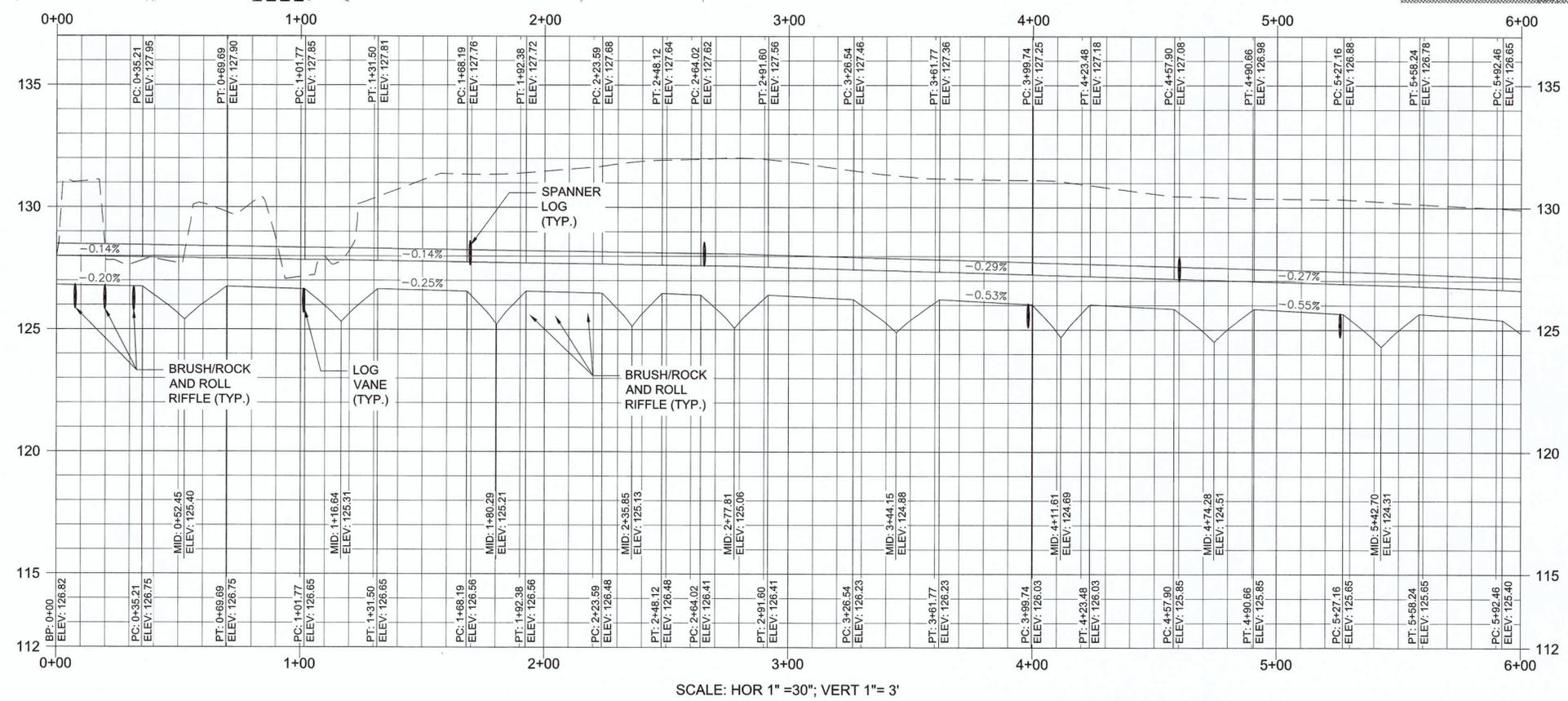
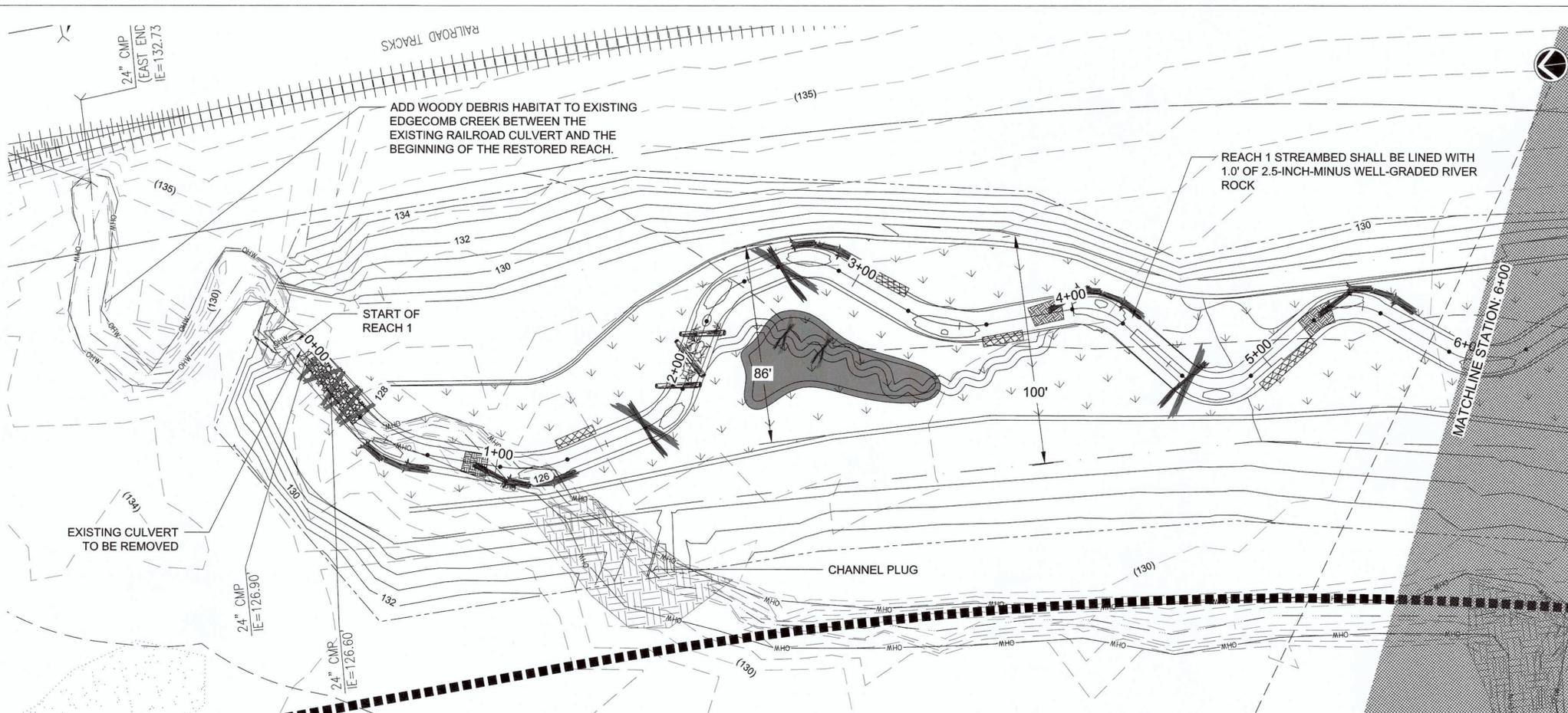
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Checked by:	JCA
File #	

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12/04/20	JYZ	60% DESIGN
12/09/20	JYZ	80% REVISION
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03/26/21	JYZ	100% DESIGN

Sheet No:  
**6 OF 51**

**CITY OF ARLINGTON  
 CONSTRUCTION DRAWING REVIEW APPROVAL**  
 THIS PLAN SHEET HAS BEEN REVIEWED AND APPROVED PER THE  
 CONDITIONS ON THE TITLE SHEET.  
 BY: *Nova Heaton*  
 Nova Heaton, PE, Development Services Manager  
 DATE: *6/22/21* THIS APPROVAL IS VALID FOR 18 MONTHS

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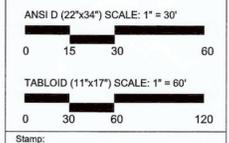
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- PROPOSED MINOR CONTOUR
- LIMIT OF DISTURBANCE
- PROPOSED FLOOD TERRACE TOE/TOP
- PROPOSED FLOODPLAIN TOE
- EXISTING CONTOUR ELEVATION
- FLOODPLAIN DEPRESSION
- BRUSH AND ROLL RIFFLE
- ROCK AND ROLL RIFFLE
- FASCINE TOE PROTECTION
- LOG VANE
- SPANNER LOG
- ROUGHENED TOE LOG
- DENDRITE CHANNEL
- WETLAND AREA
- UPLAND PERIMETER BOUNDARY
- STORMWATER DISPERSION STRUCTURE

### PROFILE LEGEND

- PROPOSED STREAM THALWEG
- PROPOSED CHANNEL TOB
- EXISTING GROUND
- FLOOD TERRACE TOP/FLOODPLAIN TOE

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**NorthPoint**  
 DEVELOPMENT



NOTE:  
 WOODY DEBRIS HABITAT SHALL BE  
 RANDOMLY PLACED THROUGHOUT  
 THE BANKFULL CHANNEL AS SHOWN IN  
 THE DETAIL ON SHEET 51.

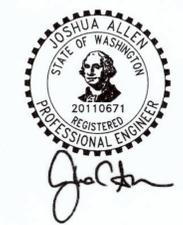
ADD WOODY DEBRIS HABITAT TO EXISTING  
 EDGECOMB CREEK BETWEEN THE EXISTING  
 RAILROAD CULVERT AND THE BEGINNING OF  
 THE RESTORED REACH.

CITY OF ARLINGTON  
 CONSTRUCTION DRAWING REVIEW APPROVAL

THIS PLAN SHEET HAS BEEN REVIEWED AND APPROVED PER THE  
 CONDITIONS ON THE TITLE SHEET.

BY: *Nona Heaton*  
 Nona Heaton, PE, Development Services Manager

DATE: 6/22/21 THIS APPROVAL IS VALID FOR 18 MONTHS



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Project Title:  
**EDGECOMB CREEK  
 100% DESIGN**



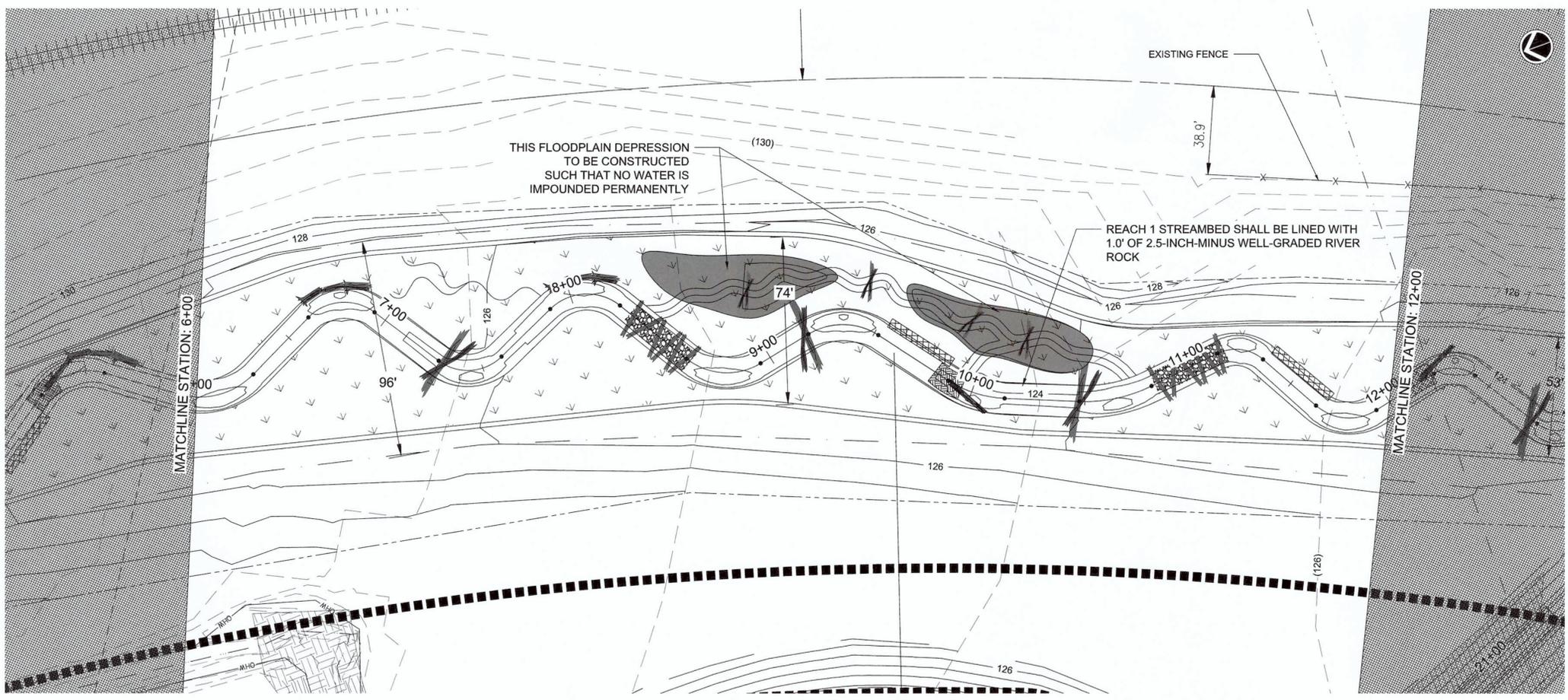
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Drawn by:	JYZ
Checked by:	JCA
File #	

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Date:	By:	Note:
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10/21/20	JYZ	30% REVISION
12/04/20	JYZ	60% DESIGN
12/10/20	JYZ	60% REVISION
02/12/21	JYZ	90% DESIGN
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**7 OF 51**

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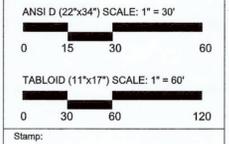
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- ROUGHENED TOE LOG
- DENDRITE CHANNEL
- WETLAND AREA
- UPLAND PERIMETER BOUNDARY
- STORMWATER DISPERSION STRUCTURE

### PROFILE LEGEND

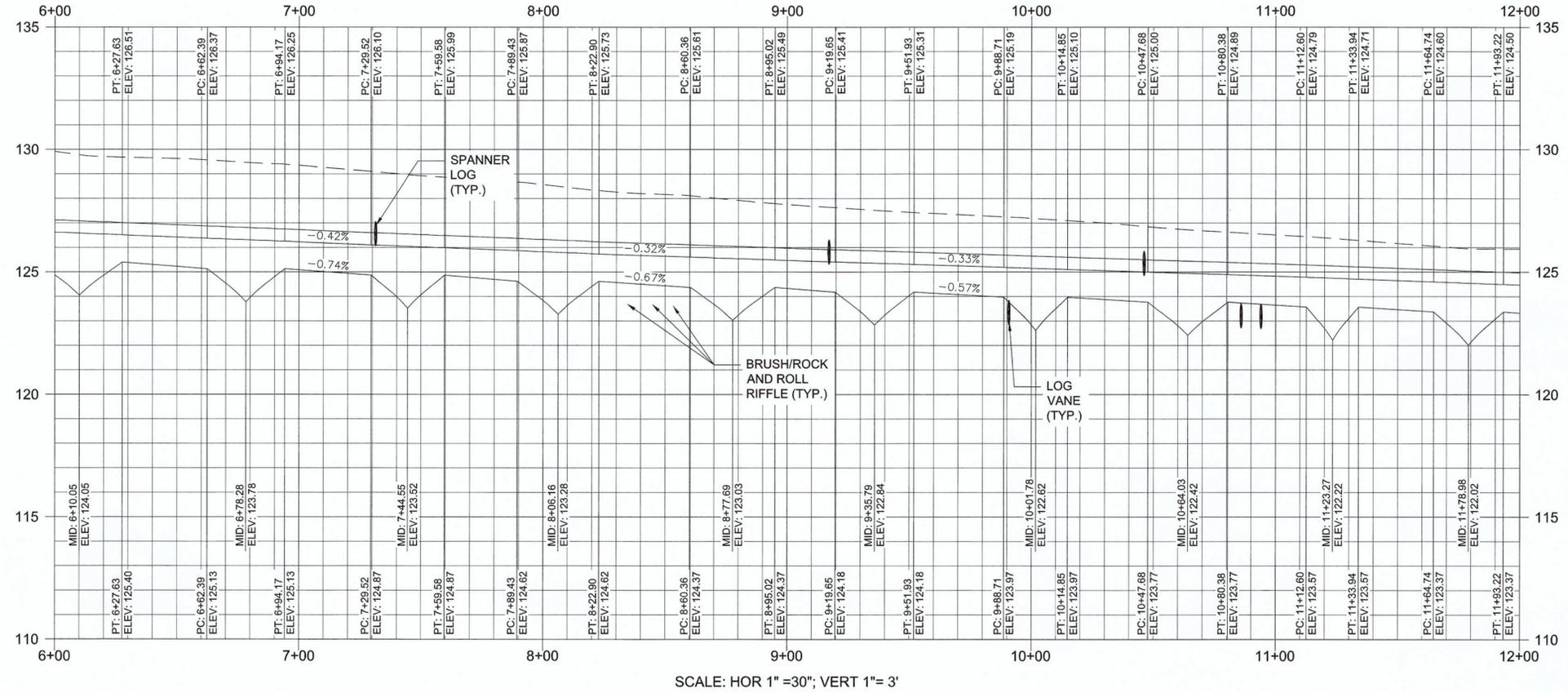
- PROPOSED STREAM THALWEG
- PROPOSED CHANNEL TOB
- EXISTING GROUND
- FLOOD TERRACE TOP/FLOODPLAIN TOE

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Prepared for:



NOTE:  
 WOODY DEBRIS HABITAT SHALL BE  
 RANDOMLY PLACED THROUGHOUT  
 THE BANKFULL CHANNEL AS SHOWN IN  
 THE DETAIL ON SHEET 51.



SCALE: HOR 1" = 30"; VERT 1" = 3'

CITY OF ARLINGTON  
 CONSTRUCTION DRAWING REVIEW APPROVAL  
 THIS PLAN SHEET HAS BEEN REVIEWED AND APPROVED PER THE  
 CONDITIONS ON THE TITLE SHEET.  
 BY:   
 Nova Heaton, PE, Development Services Manager  
 DATE: 6/22/21 THIS APPROVAL IS VALID FOR 18 MONTHS



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 Project Title:

**EDGECOMB CREEK  
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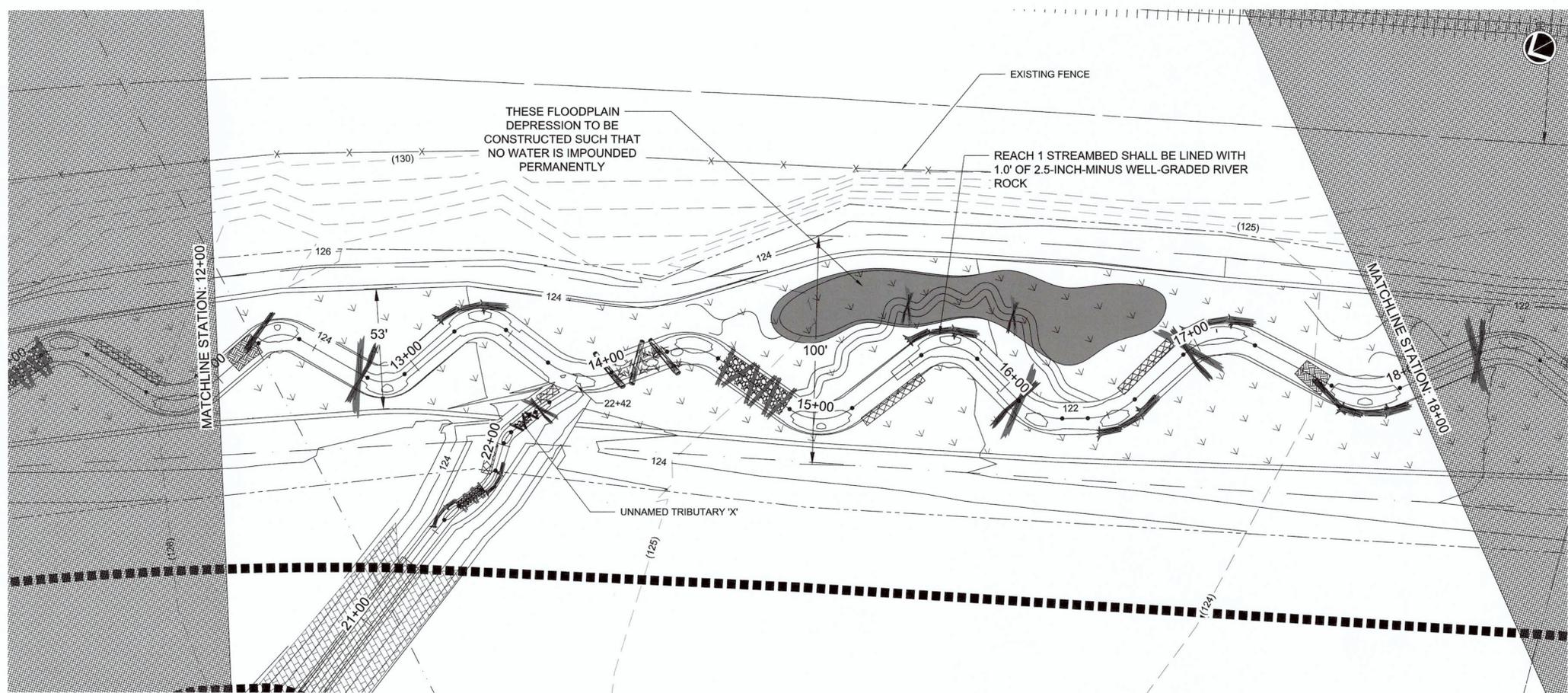
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File #:	

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12/04/20	JYZ	60% DESIGN
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02/12/21	JYZ	90% DESIGN
03/26/21	JYZ	100% DESIGN

Sheet No:  
**8 OF 51**

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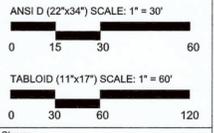
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- LIMIT OF DISTURBANCE
- PROPOSED FLOOD TERRACE TOE/TOP
- PROPOSED FLOODPLAIN TOE
- EXISTING CONTOUR ELEVATION
- FLOODPLAIN DEPRESSION
- BRUSH AND ROLL RIFFLE
- ROCK AND ROLL RIFFLE
- FASCINE TOE PROTECTION
- LOG VANE
- SPANNER LOG
- ROUGHENED TOE LOG
- DENDRITE CHANNEL
- WETLAND AREA
- UPLAND PERIMETER BOUNDARY
- STORMWATER DISPERSION STRUCTURE

### PROFILE LEGEND

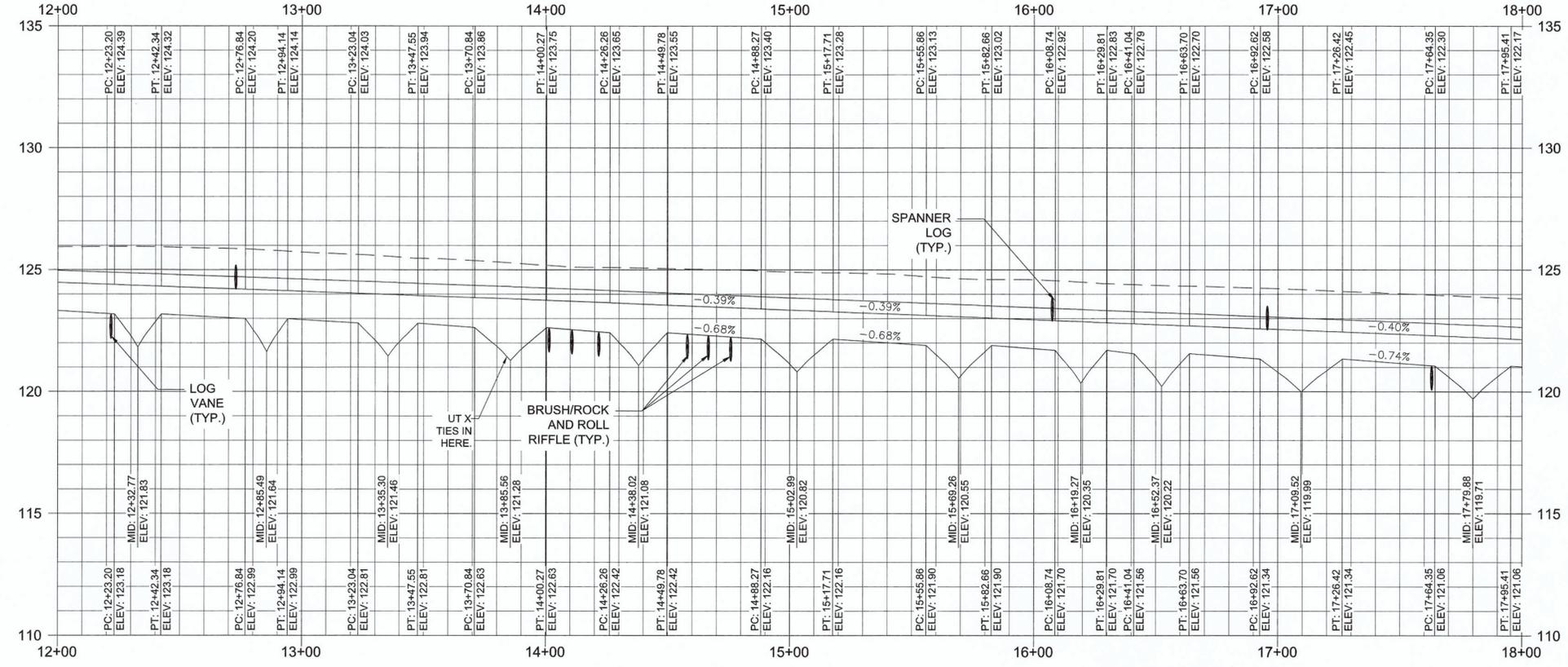
- PROPOSED STREAM THALWEG
- PROPOSED CHANNEL TOB
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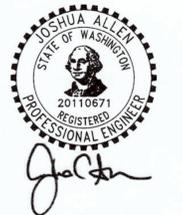


NOTE:  
 WOODY DEBRIS HABITAT SHALL BE  
 RANDOMLY PLACED THROUGHOUT  
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SCALE: HOR 1" = 30"; VERT 1" = 3'

CITY OF ARLINGTON  
**CONSTRUCTION DRAWING REVIEW APPROVAL**  
 THIS PLAN SHEET HAS BEEN REVIEWED AND APPROVED PER THE  
 CONDITIONS ON THE TITLE SHEET.  
 BY: *Nova Heaton*  
 Nova Heaton, PE, Development Services Manager  
 DATE: 6/22/21 THIS APPROVAL IS VALID FOR 18 MONTHS



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EDGECOMB CREEK  
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Sheet Title:  
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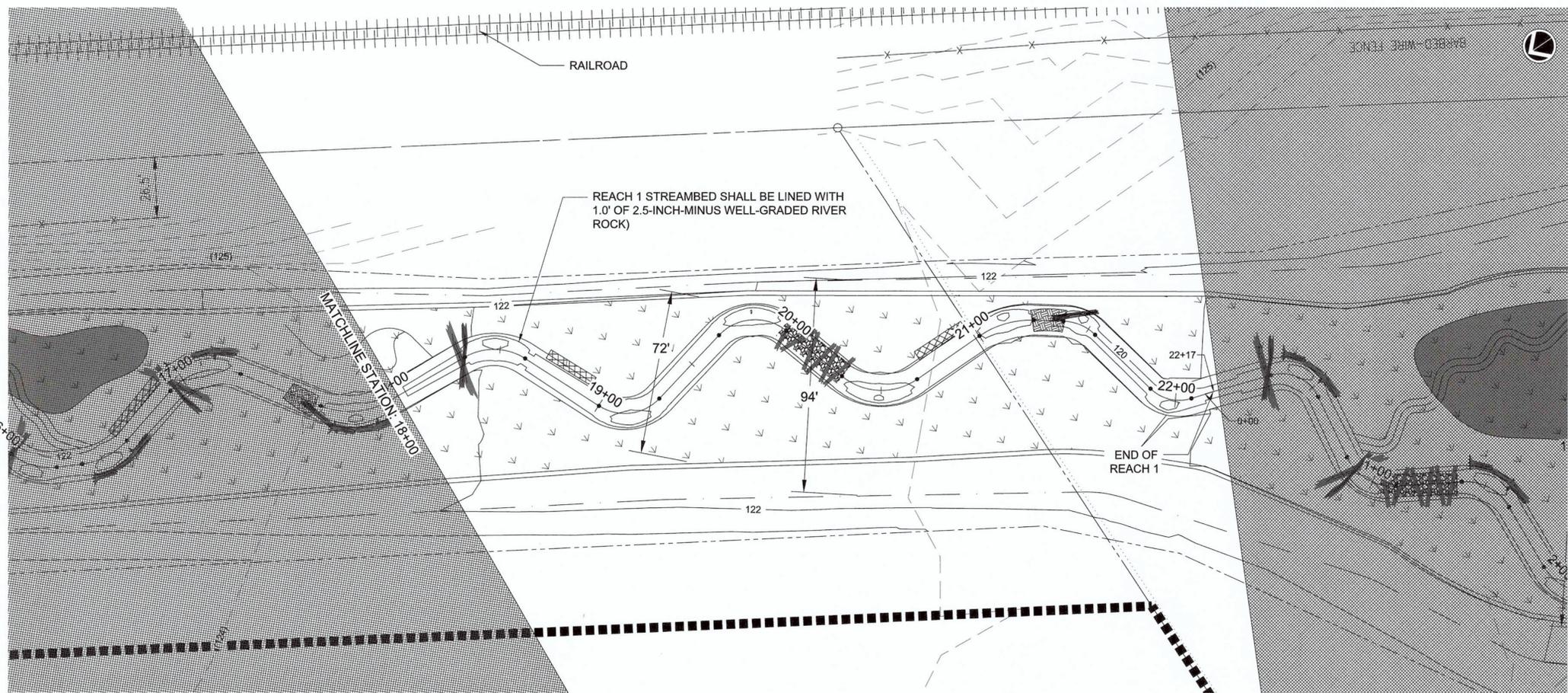
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03/26/21	JYZ	100% DESIGN	

Sheet No:  
**9 OF 51**



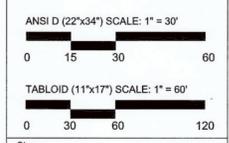
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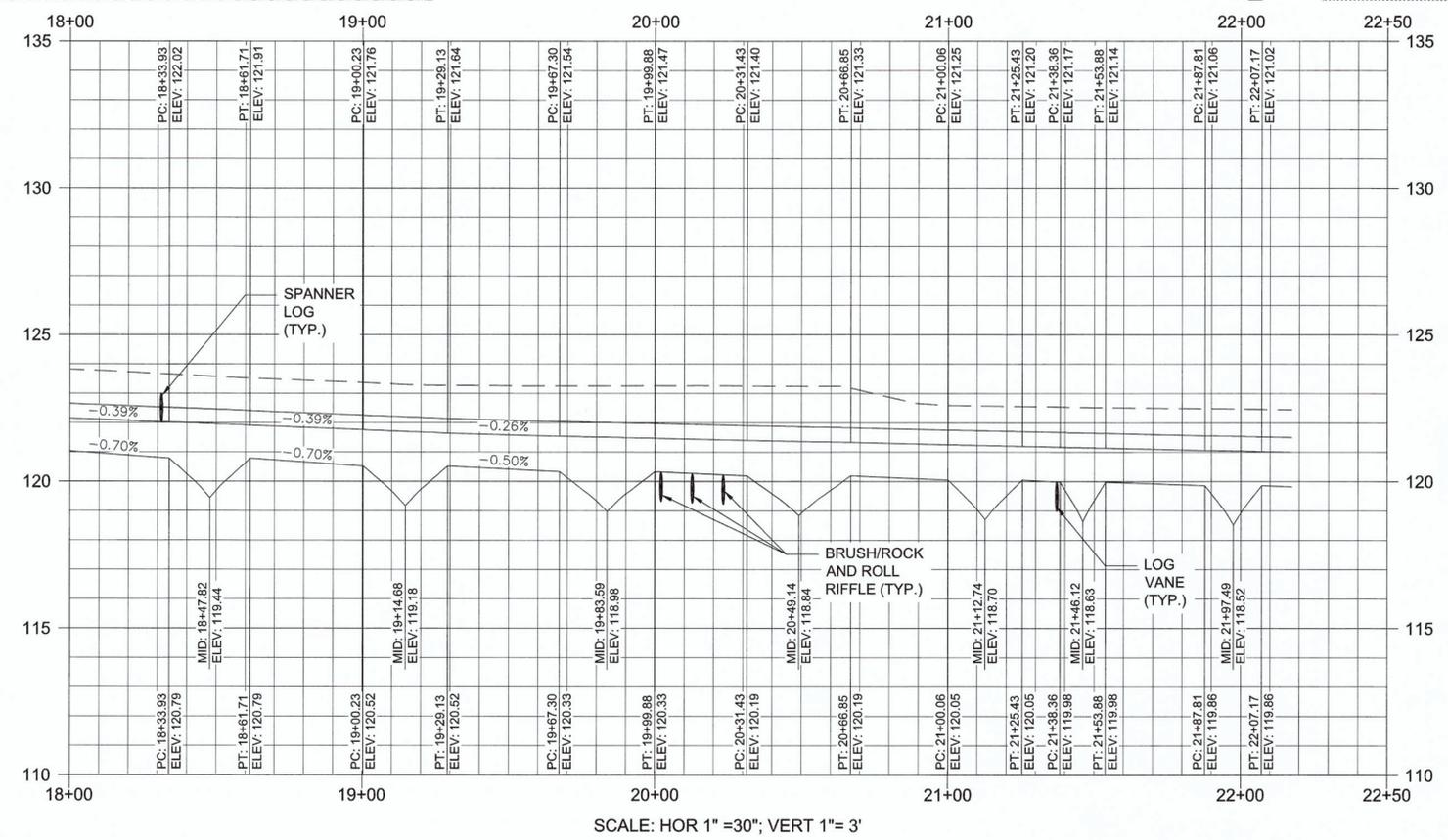
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  - - - EXISTING MAJOR CONTOUR
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  - PROPOSED MAJOR CONTOUR
  - PROPOSED MINOR CONTOUR
  - - - LIMIT OF DISTURBANCE
  - PROPOSED FLOOD TERRACE TOE/TOB
  - PROPOSED FLOODPLAIN TOE
  - - - EXISTING CONTOUR ELEVATION
  - FLOODPLAIN DEPRESSION
  - BRUSH AND ROLL RIFFLE
  - ROCK AND ROLL RIFFLE
  - FASCINE TOE PROTECTION
  - LOG VANE
  - SPANNER LOG
  - ROUGHENED TOE LOG
  - DENDRITE CHANNEL
  - WETLAND AREA
  - UPLAND PERIMETER BOUNDARY
  - STORMWATER DISPERSION STRUCTURE
- ### PROFILE LEGEND
- PROPOSED STREAM THALWEG
  - PROPOSED CHANNEL TOB
  - - - EXISTING GROUND
  - FLOOD TERRACE TOP/FLOODPLAIN TOE

Prepared by:  
**SWCA**  
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 116 Alexandria Drive  
 Mooresville, NC 28115  
 (p) 919.624.1458

Prepared for:  
 NorthPoint  
 DEVELOPMENT



NOTE:  
 WOODY DEBRIS HABITAT SHALL BE  
 RANDOMLY PLACED THROUGHOUT  
 THE BANKFULL CHANNEL AS SHOWN IN  
 THE DETAIL ON SHEET 51.



CITY OF ARLINGTON  
 CONSTRUCTION DRAWING REVIEW APPROVAL

THIS PLAN SHEET HAS BEEN REVIEWED AND APPROVED PER THE  
 CONDITIONS ON THE TITLE SHEET.

BY: Nova Heaton, PE, Development Services Manager

DATE: 6/22/21 THIS APPROVAL IS VALID FOR 18 MONTHS

JOSHUA ALLEN  
 STATE OF WASHINGTON  
 20110671  
 REGISTERED  
 PROFESSIONAL ENGINEER

Digitally signed on 5/21/2021

Project Title:  
**EDGECOMB CREEK  
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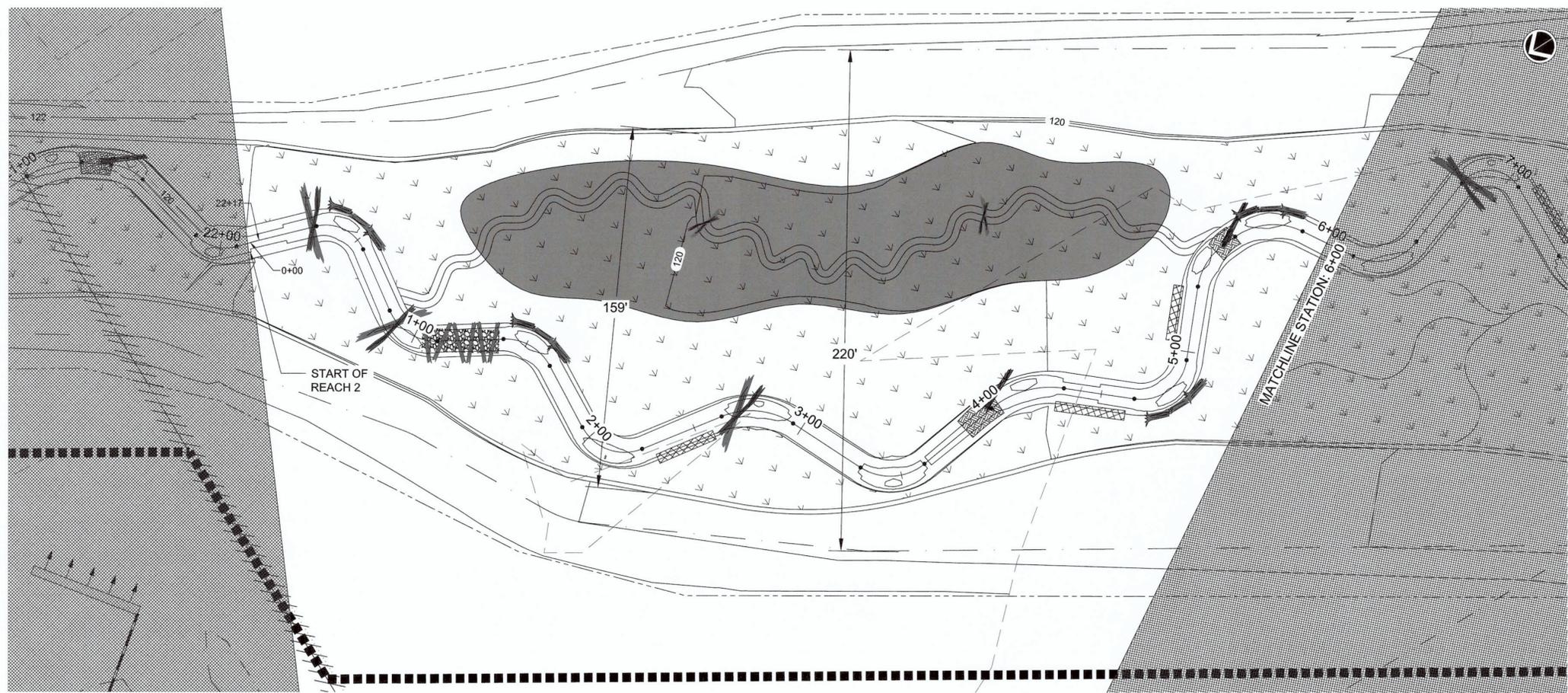
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12/04/20	JYZ	60% DESIGN
12/10/20	JYZ	60% REVISION
02/12/21	JYZ	90% DESIGN
03/26/21	JYZ	100% DESIGN

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**10 OF 51**

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- ### PLAN LEGEND
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  - PROPOSED CHANNEL TOB
  - EXISTING MAJOR CONTOUR
  - EXISTING MINOR CONTOUR
  - PROPOSED MAJOR CONTOUR
  - PROPOSED MINOR CONTOUR
  - LIMIT OF DISTURBANCE
  - PROPOSED FLOOD TERRACE TOE/TOB
  - PROPOSED FLOODPLAIN TOE
  - EXISTING CONTOUR ELEVATION
  - FLOODPLAIN DEPRESSION
  - BRUSH AND ROLL RIFFLE
  - ROCK AND ROLL RIFFLE
  - FASCINE TOE PROTECTION
  - LOG VANE
  - SPANNER LOG
  - ROUGHENED TOE LOG
  - DENDRITE CHANNEL
  - WETLAND AREA
  - UPLAND PERIMETER BOUNDARY
  - STORMWATER DISPERSION STRUCTURE
- ### PROFILE LEGEND
- PROPOSED STREAM THALWEG
  - PROPOSED CHANNEL TOB
  - EXISTING GROUND
  - FLOOD TERRACE TOP/FLOODPLAIN TOE

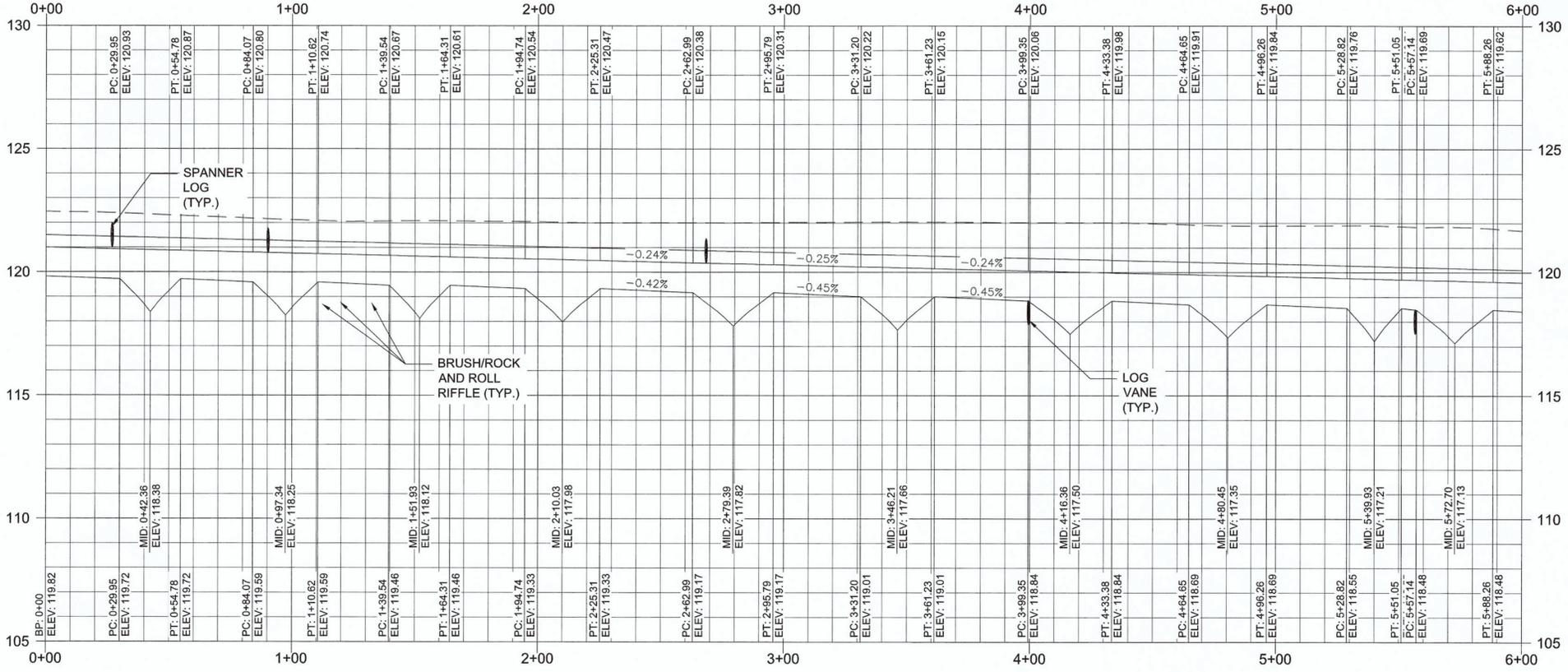
Prepared by:  
**SWCA**  
 ENVIRONMENTAL & ENGINEERING  
 Operating in North Carolina as  
 SWCA Environmental Consulting  
 and Engineering of NC, PC  
 116 Alexandria Drive  
 Mooresville, NC 28115  
 (p) 919.624.1459

Prepared for:  
**NorthPoint**  
 DEVELOPMENT

ANSI D (22"x34") SCALE: 1" = 30'

TABLOID (11"x17") SCALE: 1" = 60'

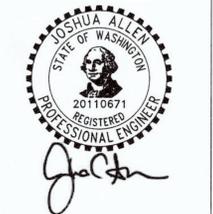
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 THE BANKFULL CHANNEL AS SHOWN IN  
 THE DETAIL ON SHEET 51.



SCALE: HOR 1" = 30"; VERT 1" = 3'

CITY OF ARLINGTON  
 CONSTRUCTION DRAWING REVIEW APPROVAL  
 THIS PLAN SHEET HAS BEEN REVIEWED AND APPROVED PER THE  
 CONDITIONS ON THE TITLE SHEET.  
 BY: *Nova Heaton*  
 Nova Heaton, PE, Development Services Manager  
 DATE: 6/22/21 THIS APPROVAL IS VALID FOR 18 MONTHS

Stamp:



Digitally signed on 5/21/2021

Project Title:  
**EDGEComb CREEK  
 100% DESIGN**

Sheet Title:  
**PLAN AND PROFILE  
 REACH 2 - (1)**

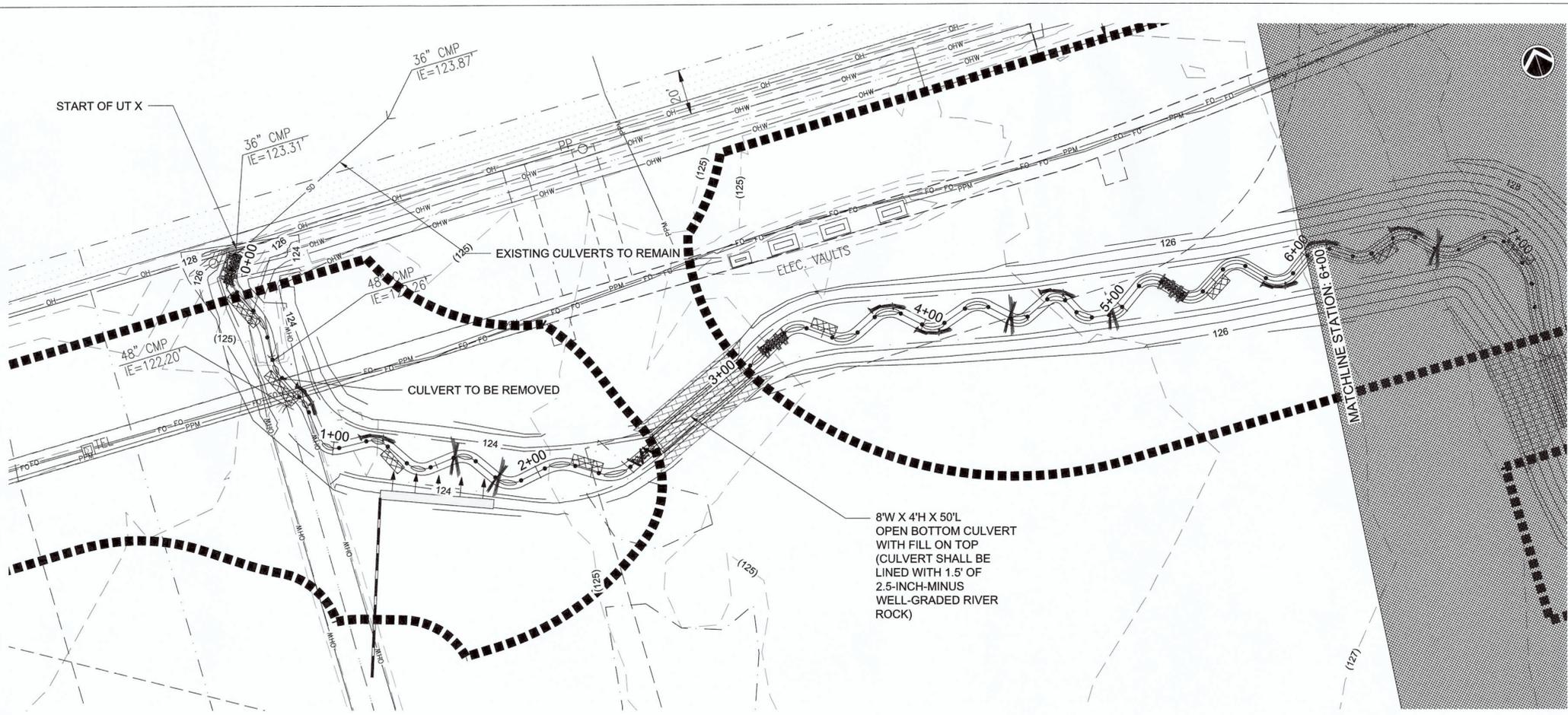
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 Drawn by: JYZ  
 Checked by: JCA  
 File #

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Date:	By:	Note:
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10/21/20	JYZ	30% REVISION
12/04/20	JYZ	60% DESIGN
12/10/20	JYZ	60% REVISION
02/12/21	JYZ	90% DESIGN
03/26/21	JYZ	100% DESIGN

Sheet No:  
 11 OF 51



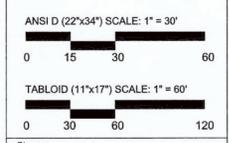
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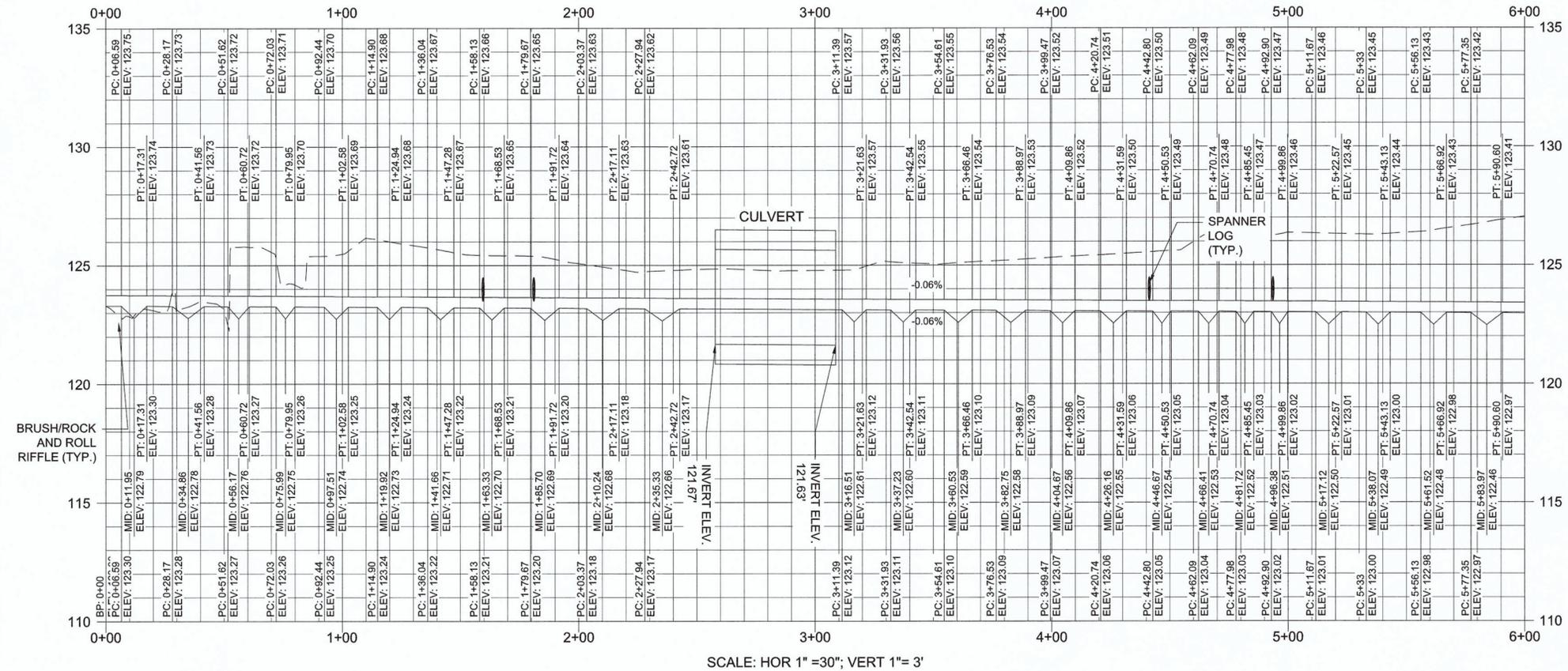
- ### PLAN LEGEND
- PROPOSED STREAM CENTER LINE
  - PROPOSED CHANNEL TOB
  - EXISTING MAJOR CONTOUR
  - EXISTING MINOR CONTOUR
  - PROPOSED MAJOR CONTOUR
  - PROPOSED MINOR CONTOUR
  - LIMIT OF DISTURBANCE
  - PROPOSED FLOOD TERRACE TOE/TOP
  - PROPOSED FLOODPLAIN TOE
  - EXISTING CONTOUR ELEVATION
  - BRUSH AND ROLL RIFFLE
  - ROCK AND ROLL RIFFLE
  - FASCINE TOE PROTECTION
  - LOG VANE
  - SPANNER LOG
  - ROUGHENED TOE LOG
  - UPLAND PERIMETER BOUNDARY
  - STORMWATER DISPERSION STRUCTURE
- ### PROFILE LEGEND
- PROPOSED STREAM THALWEG
  - PROPOSED CHANNEL TOB
  - EXISTING GROUND
  - FLOOD TERRACE TOP/FLOODPLAIN TOE

Prepared by:  
**SWCA**  
 ENVIRONMENTAL & ENGINEERING  
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 and Engineering of NC, PC  
 116 Alexandria Drive  
 Mooresville, NC 28115  
 (p) 919.624.1458

Prepared for:  
**NorthPoint**  
 DEVELOPMENT



NOTE:  
 WOODY DEBRIS HABITAT SHALL BE  
 RANDOMLY PLACED THROUGHOUT  
 THE BANKFULL CHANNEL AS SHOWN IN  
 THE DETAIL ON SHEET 51.



CITY OF ARLINGTON  
 CONSTRUCTION DRAWING REVIEW APPROVAL

THIS PLAN SHEET HAS BEEN REVIEWED AND APPROVED PER THE  
 CONDITIONS ON THE TITLE SHEET.

BY: *Nova Heaton*  
 Nova Heaton, PE, Development Services Manager

DATE: 6/22/21 THIS APPROVAL IS VALID FOR 18 MONTHS

Project Title:  
**EDGECOMB CREEK**  
 100% DESIGN

Stamp:  
  
*Joshua Allen*  
 Digitally signed on 5/21/2021



Sheet Title:  
**PLAN AND PROFILE**  
**UNNAMED**  
**TRIBUTARY X - (1)**

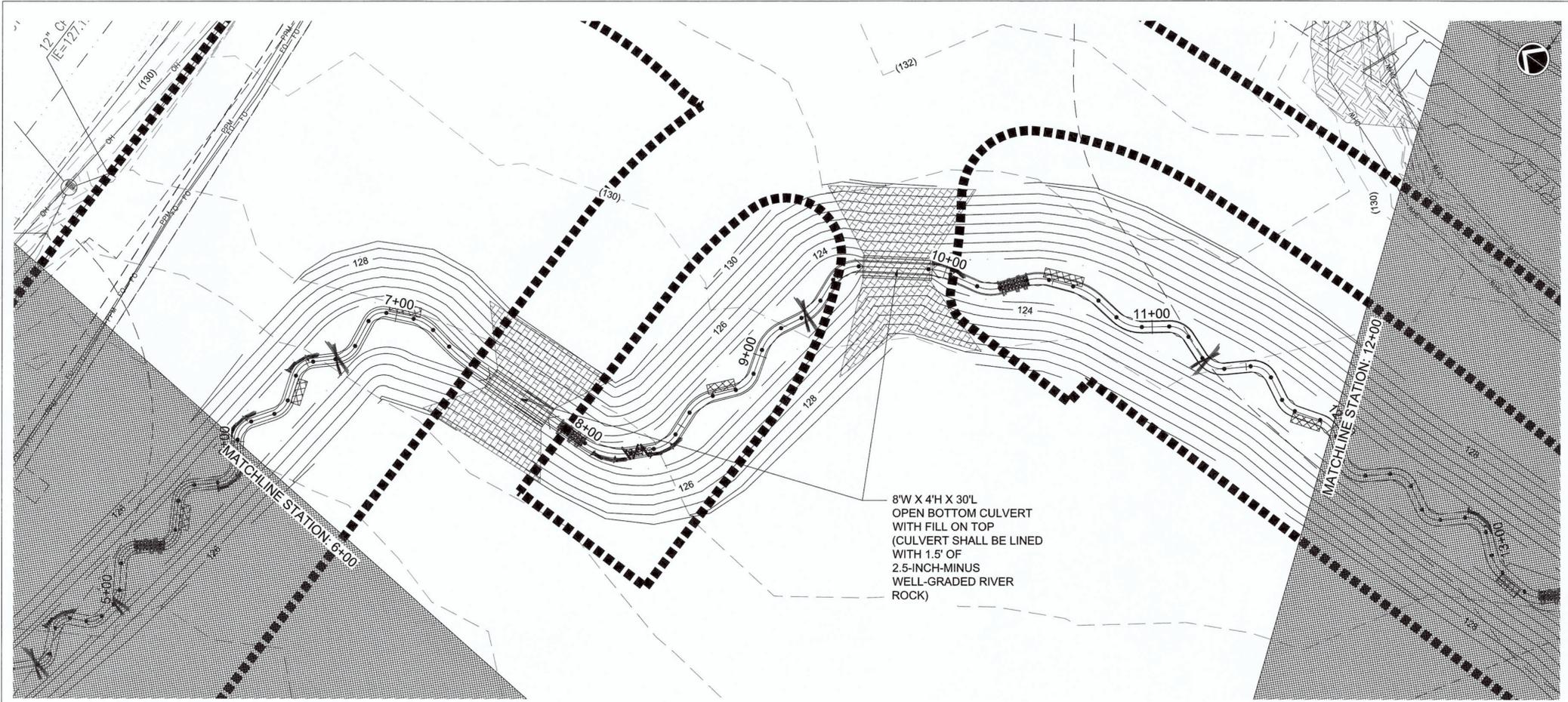
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Checked by:	JCA
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10/21/20	JYZ	30% REVISION
12/04/20	JYZ	60% DESIGN
12/10/20	JYZ	60% REVISION
02/12/21	JYZ	90% DESIGN
03/28/21	JYZ	100% DESIGN

Sheet No:  
 25 OF 51



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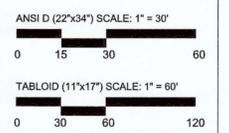
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- PROPOSED CHANNEL TOB
- - - EXISTING MAJOR CONTOUR
- - - EXISTING MINOR CONTOUR
- - - PROPOSED MAJOR CONTOUR
- - - PROPOSED MINOR CONTOUR
- - - LIMIT OF DISTURBANCE
- - - PROPOSED FLOOD TERRACE TOE/TOB
- - - PROPOSED FLOODPLAIN TOE
- - - EXISTING CONTOUR ELEVATION
- ▨ BRUSH AND ROLL RIFFLE
- ▨ ROCK AND ROLL RIFFLE
- ▨ FASCINE TOE PROTECTION
- ▨ LOG VANE
- ▨ SPANNER LOG
- ▨ ROUGHENED TOE LOG
- ▨ UPLAND PERIMETER BOUNDARY
- ▨ STORMWATER DISPERSION STRUCTURE

**PROFILE LEGEND**

- PROPOSED STREAM THALWEG
- PROPOSED CHANNEL TOB
- - - EXISTING GROUND
- - - FLOOD TERRACE TOP/FLOODPLAIN TOE

Prepared by:  
**SWCA**  
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 116 Alexandria Drive  
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 (p) 919.624.1458

Prepared for:  
**NorthPoint**  
 DEVELOPMENT

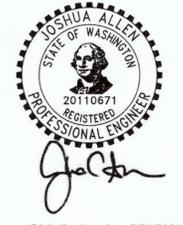


NOTE:  
 WOODY DEBRIS HABITAT SHALL BE  
 RANDOMLY PLACED THROUGHOUT  
 THE BANKFULL CHANNEL AS SHOWN IN  
 THE DETAIL ON SHEET 51.

Station	PC	PT	MID	INVERT ELEV.	Channel Type
6+00	6+00.72	6+11.39	6+06.06	122.86	CULVERT
6+00	6+22.23	6+30.93	6+26.58	122.96	
6+00	6+42.42	6+52.85	6+47.63	122.95	
6+00	6+62.76	6+73.65	6+68.20	122.92	
6+00	6+86.15	6+95.40	6+90.77	122.91	
6+00	7+07.73	7+17.90	7+12.82	122.89	
6+00	7+28.16	7+38.34	7+34.36	122.88	
6+00	7+40.56	7+40.56	7+40.56	122.89	
6+00	7+40.56	7+40.56	7+40.56	121.39	
6+00	7+40.56	7+40.56	7+40.56	121.35	
8+00	8+01.98	8+23.23	8+12.61	122.84	BRUSH/ROCK AND ROLL RIFFLE (TYP.)
8+00	8+33.62	8+45.47	8+39.54	122.83	
8+00	8+56.94	8+69.87	8+66.94	122.80	
8+00	8+80.40	8+91.49	8+85.94	122.80	
8+00	9+02.69	9+15.83	9+09.26	122.79	
8+00	9+25.89	9+37.39	9+31.64	122.77	
8+00	9+48.17	9+61.58	9+54.88	122.75	
8+00	9+61.58	9+61.58	9+61.58	121.27	
8+00	9+61.58	9+61.58	9+61.58	121.24	
8+00	9+61.58	9+61.58	9+61.58	121.24	
10+00	10+15.46	10+25.79	10+20.63	122.72	SPANNER LOG (TYP.)
10+00	10+38.23	10+48.17	10+43.20	122.71	
10+00	10+59.18	10+72.22	10+65.70	122.70	
10+00	10+83.08	10+95.42	10+90.25	122.66	
10+00	11+07.52	11+17.65	11+12.58	122.67	
10+00	11+28.94	11+40.25	11+34.60	122.66	
10+00	11+51.99	11+62.85	11+57.42	122.64	
10+00	11+73.95	11+81.65	11+77.80	122.63	
10+00	11+83.58	11+93.59	11+88.82	122.62	
10+00	11+93.58	11+93.58	11+93.58	122.11	

SCALE: HOR 1" = 30"; VERT 1" = 3'

**CITY OF ARLINGTON**  
**CONSTRUCTION DRAWING REVIEW APPROVAL**  
 THIS PLAN SHEET HAS BEEN REVIEWED AND APPROVED PER THE  
 CONDITIONS ON THE TITLE SHEET.  
 BY: *Nova Heaton*  
 Nova Heaton, PE, Development Services Manager  
 DATE: 6/22/21 THIS APPROVAL IS VALID FOR 18 MONTHS



Digitally signed on 5/21/2021

Project Title:  
**EDGECOMB CREEK**  
**100% DESIGN**

Sheet Title:  
**PLAN AND PROFILE**  
**UNNAMED**  
**TRIBUTARY 'X'**  
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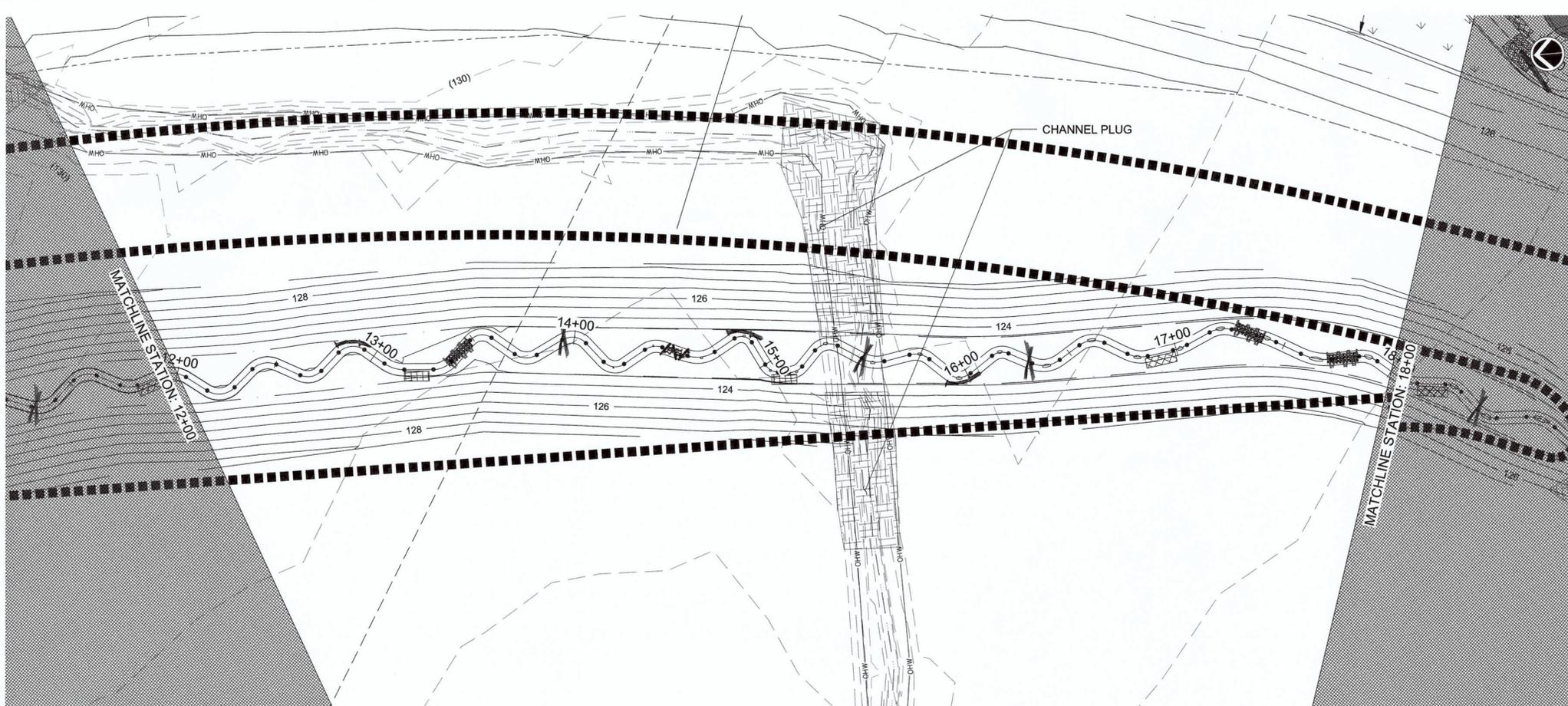
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Scale:	AS SHOWN
Drawn by:	JYZ
Checked by:	JCA
File #	

REVISIONS		
Date:	By:	Note:
09/30/20	JYZ	30% CONCEPT DESIGN
10/21/20	JYZ	30% REVISION
12/04/20	JYZ	60% DESIGN
12/10/20	JYZ	60% REVISION
02/12/21	JYZ	90% DESIGN
03/28/21	JYZ	100% DESIGN

Sheet No:  
 26 OF 51



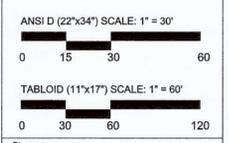
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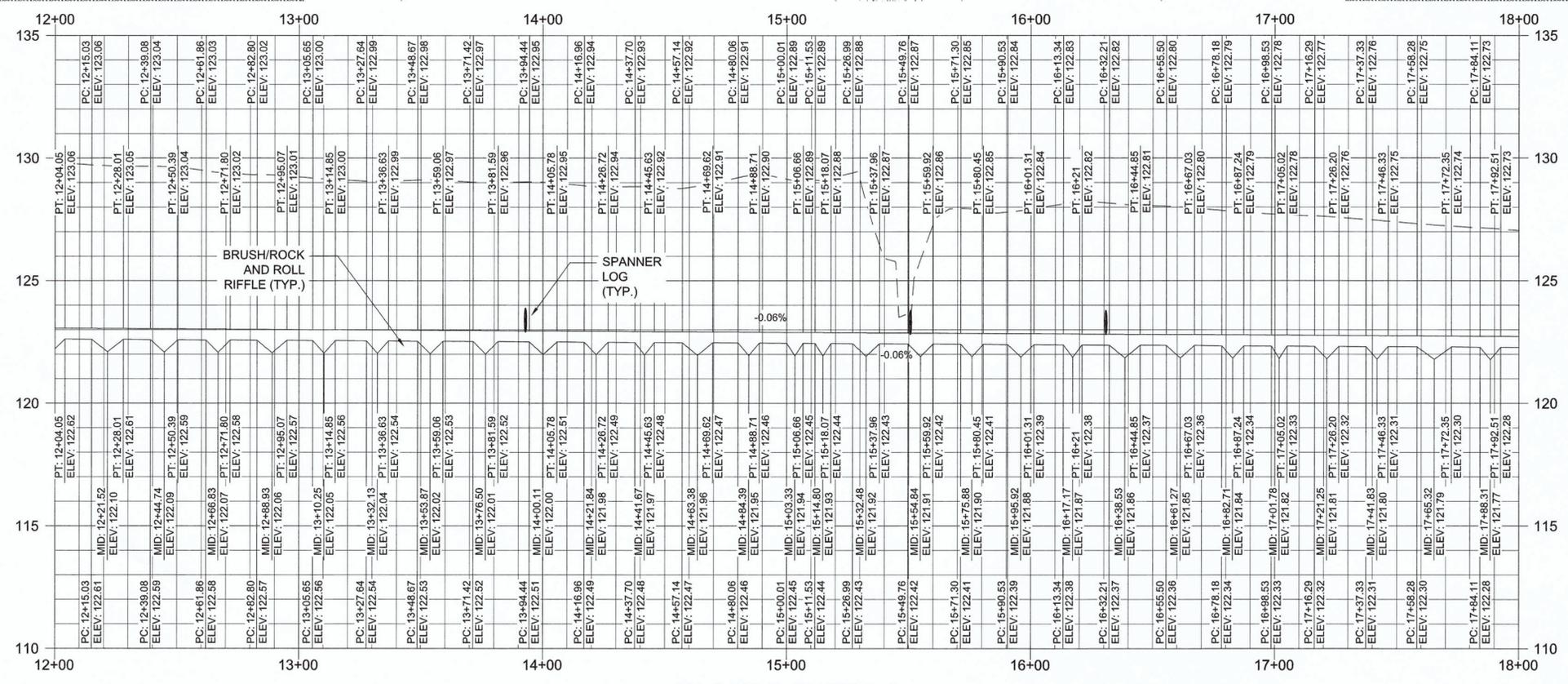
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- PROPOSED STREAM CENTER LINE
  - PROPOSED CHANNEL TOB
  - EXISTING MAJOR CONTOUR
  - EXISTING MINOR CONTOUR
  - PROPOSED MAJOR CONTOUR
  - PROPOSED MINOR CONTOUR
  - LIMIT OF DISTURBANCE
  - PROPOSED FLOOD TERRACE TOE/TOP
  - PROPOSED FLOODPLAIN TOE
  - EXISTING CONTOUR ELEVATION
  - BRUSH AND ROLL RIFFLE
  - ROCK AND ROLL RIFFLE
  - FASCINE TOE PROTECTION
  - LOG VANE
  - SPANNER LOG
  - ROUGHENED TOE LOG
  - UPLAND PERIMETER BOUNDARY
  - STORMWATER DISPERSION STRUCTURE
- ### PROFILE LEGEND
- PROPOSED STREAM THALWEG
  - PROPOSED CHANNEL TOB
  - EXISTING GROUND
  - FLOOD TERRACE TOP/FLOODPLAIN TOE

Prepared by:  
**SWCA**  
 ENVIRONMENTAL & ENGINEERING  
 Operating in North Carolina as  
 SWCA Environmental Consulting  
 and Engineering of NC, PC  
 116 Alexandria Drive  
 Mooresville, NC 28115  
 (p) 919.624.1458

Prepared for:  
**NorthPoint**  
 DEVELOPMENT

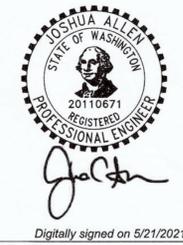


NOTE:  
 WOODY DEBRIS HABITAT SHALL BE  
 RANDOMLY PLACED THROUGHOUT  
 THE BANKFULL CHANNEL AS SHOWN IN  
 THE DETAIL ON SHEET 51.



SCALE: HOR 1" = 30"; VERT 1" = 3'

CITY OF ARLINGTON  
 CONSTRUCTION DRAWING REVIEW APPROVAL  
 THIS PLAN SHEET HAS BEEN REVIEWED AND APPROVED PER THE  
 CONDITIONS ON THE TITLE SHEET.  
 BY: *Nova Heaton*  
 Nova Heaton, PE, Development Services Manager  
 DATE: 6/22/21 THIS APPROVAL IS VALID FOR 18 MONTHS



Project Title:

EDGECOMB CREEK  
 100% DESIGN

Sheet Title:  
 PLAN AND PROFILE  
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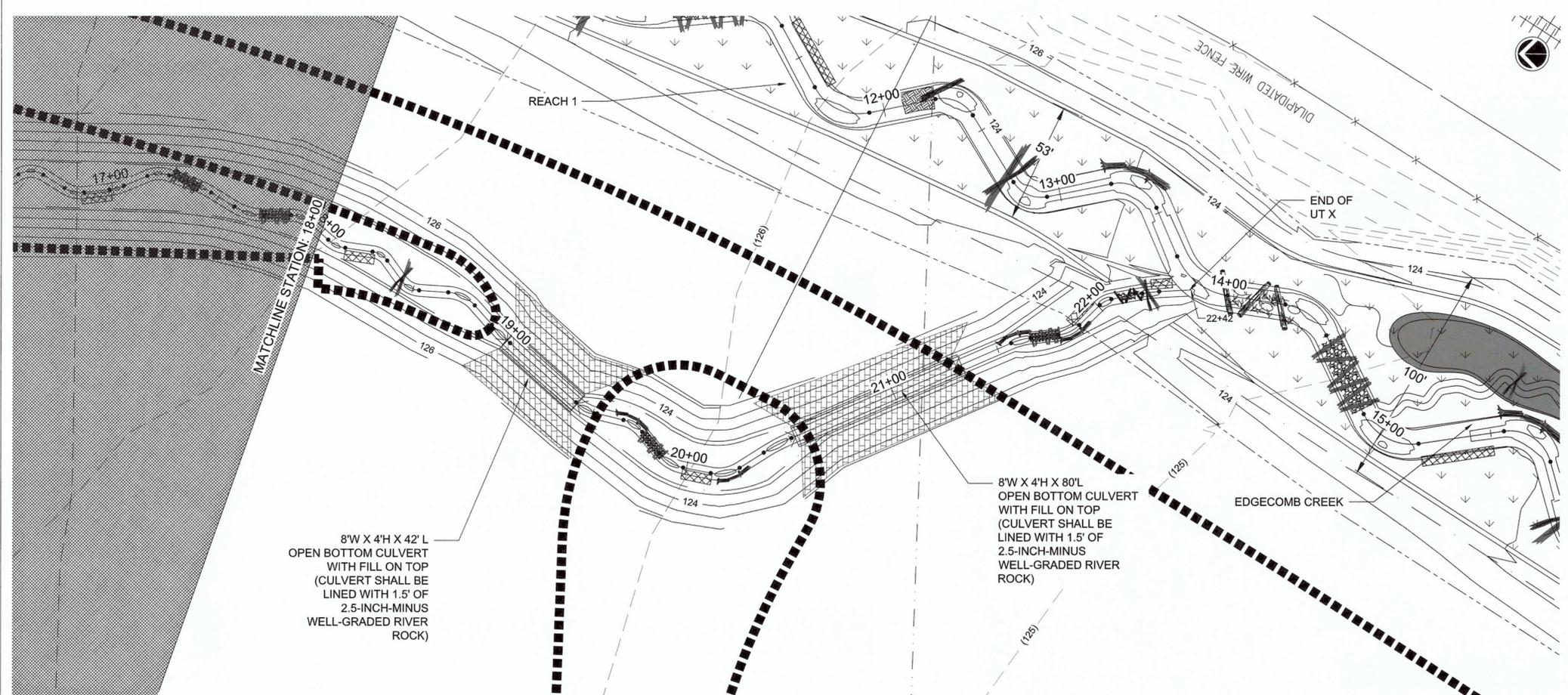
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 Checked by: JCA  
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10/21/20	JYZ	30% REVISION
12/04/20	JYZ	60% DESIGN
12/10/20	JYZ	60% REVISION
02/12/21	JYZ	90% DESIGN
03/26/21	JYZ	100% DESIGN

Sheet No:  
 27 OF 51



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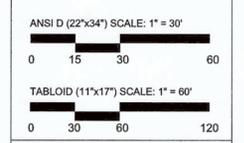
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- PROPOSED MINOR CONTOUR
- LIMIT OF DISTURBANCE
- PROPOSED FLOOD TERRACE TOE/TOB
- PROPOSED FLOODPLAIN TOE
- EXISTING CONTOUR ELEVATION
- BRUSH AND ROLL RIFFLE
- ROCK AND ROLL RIFFLE
- FASCINE TOE PROTECTION
- LOG VANE
- SPANNER LOG
- ROUGHENED TOE LOG
- UPLAND PERIMETER BOUNDARY
- STORMWATER DISPERSION STRUCTURE

### PROFILE LEGEND

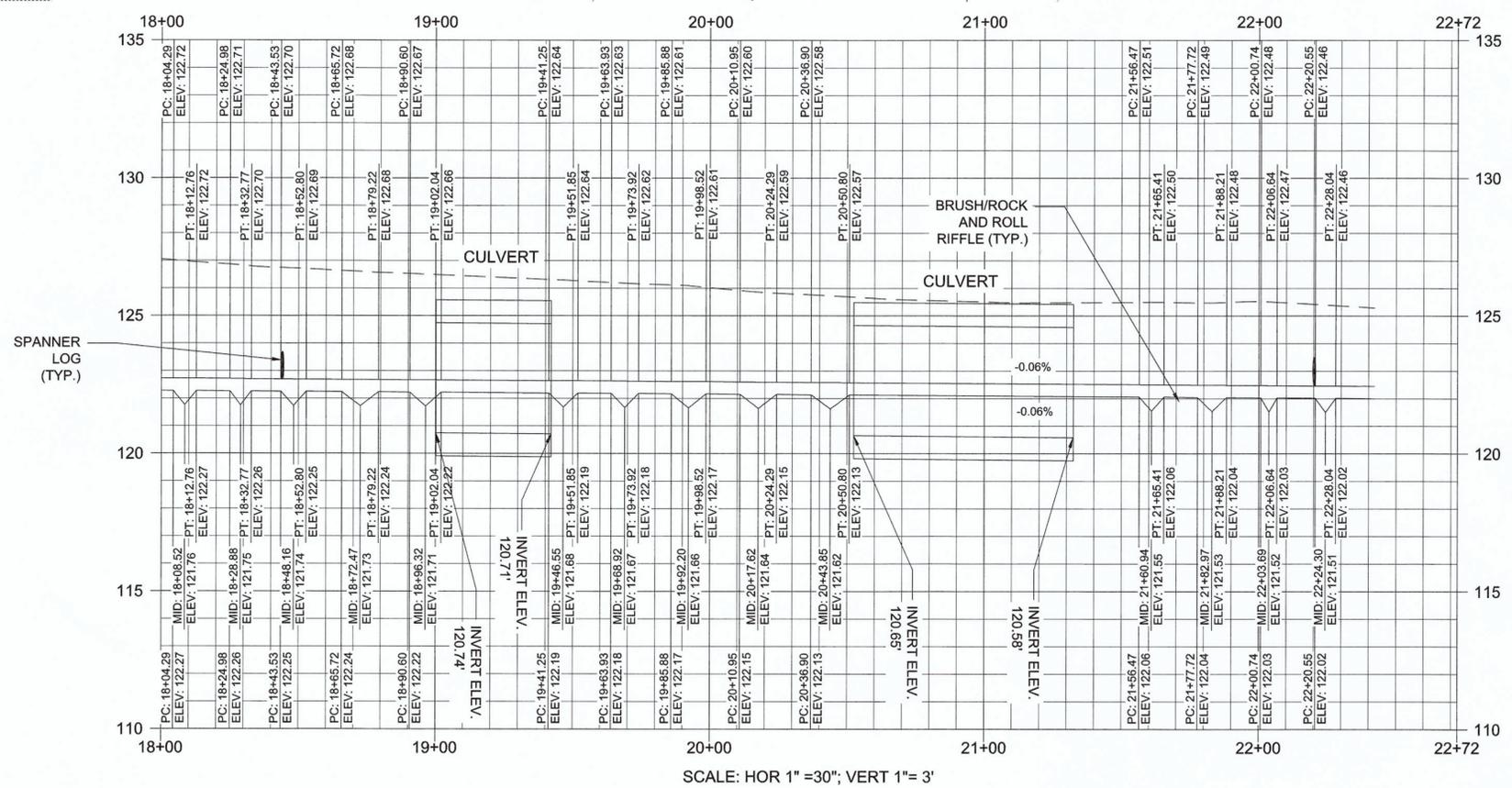
- PROPOSED STREAM THALWEG
- PROPOSED CHANNEL TOB
- EXISTING GROUND
- FLOOD TERRACE TOP/FLOODPLAIN TOE

Prepared by:  
**SWCA**  
 ENVIRONMENTAL & ENGINEERING  
 Operating in North Carolina as  
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 116 Alexandria Drive  
 Mooresville, NC 28115  
 (p) 919.624.1458

Prepared for:



NOTE:  
 WOODY DEBRIS HABITAT SHALL BE  
 RANDOMLY PLACED THROUGHOUT  
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 THE DETAIL ON SHEET 51.



CITY OF ARLINGTON  
**CONSTRUCTION DRAWING REVIEW APPROVAL**  
 THIS PLAN SHEET HAS BEEN REVIEWED AND APPROVED PER THE  
 CONDITIONS ON THE TITLE SHEET.  
 BY:   
 Nova Heaton, PE, Development Services Manager  
 DATE: 6/22/21 THIS APPROVAL IS VALID FOR 18 MONTHS

Digitally signed on 5/21/2021

Project Title:  
**EDGECOMB CREEK  
 100% DESIGN**

Sheet Title:  
**PLAN AND PROFILE  
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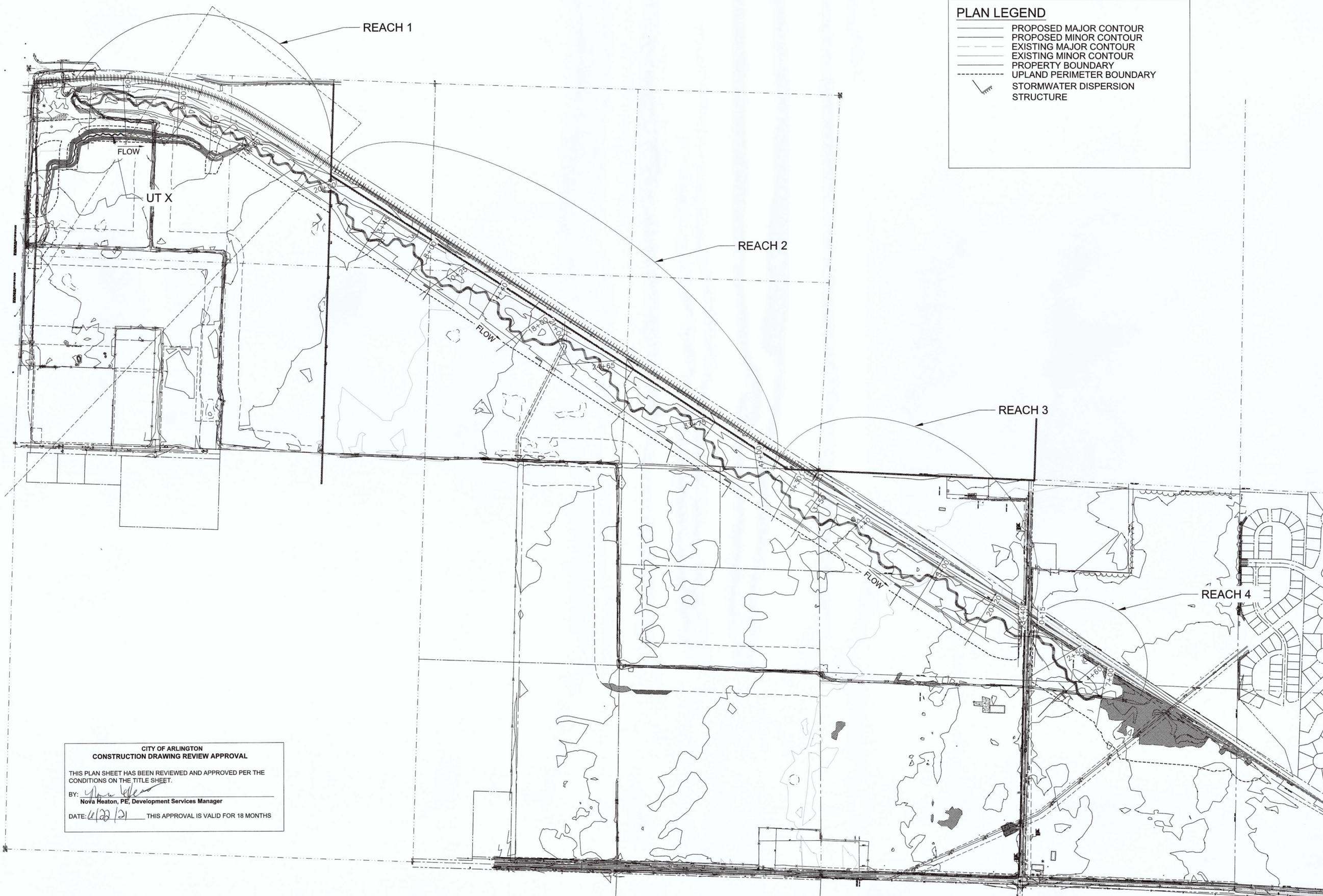
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02/12/21	JYZ	90% DESIGN
03/28/21	JYZ	100% DESIGN

Sheet No:  
**28 OF 51**



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**PLAN LEGEND**

- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- - - EXISTING MAJOR CONTOUR
- - - EXISTING MINOR CONTOUR
- PROPERTY BOUNDARY
- - - UPLAND PERIMETER BOUNDARY
- STORMWATER DISPERSION STRUCTURE

**CITY OF ARLINGTON  
CONSTRUCTION DRAWING REVIEW APPROVAL**

THIS PLAN SHEET HAS BEEN REVIEWED AND APPROVED PER THE CONDITIONS ON THE TITLE SHEET.

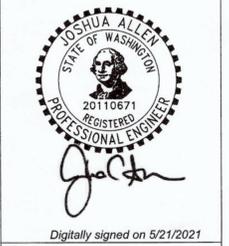
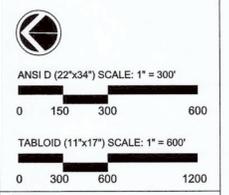
BY: *Nova Heaton*  
Nova Heaton, PE, Development Services Manager

DATE: 4/22/21 THIS APPROVAL IS VALID FOR 18 MONTHS

Prepared by:  
**SWCA**  
ENVIRONMENTAL & ENGINEERING

Operating in North Carolina as  
SWCA Environmental Consulting  
and Engineering of NC, PC

116 Alexandria Drive  
Mooresville, NC 28115  
(p) 919.624.1458



Project Title:  
**EDGECOMB CREEK  
100% DESIGN**

Sheet Title:  
**OVERVIEW  
CROSS-SECTIONS**

Date: 04/08/2021  
Scale: NTS  
Drawn by: JYZ  
Checked by: JCA  
File #

REVISIONS		
Date:	By:	Note:
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12/04/20	JYZ	60% DESIGN
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02/12/21	JYZ	90% DESIGN
03/26/21	JYZ	100% DESIGN

Sheet No:  
**29 OF 51**

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**CITY OF ARLINGTON  
CONSTRUCTION DRAWING REVIEW APPROVAL**

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By: *[Signature]*  
Nova Heaton, PE, Development Services Manager

DATE: *6/22/21* THIS APPROVAL IS VALID FOR 18 MONTHS

**SECTION LEGEND**

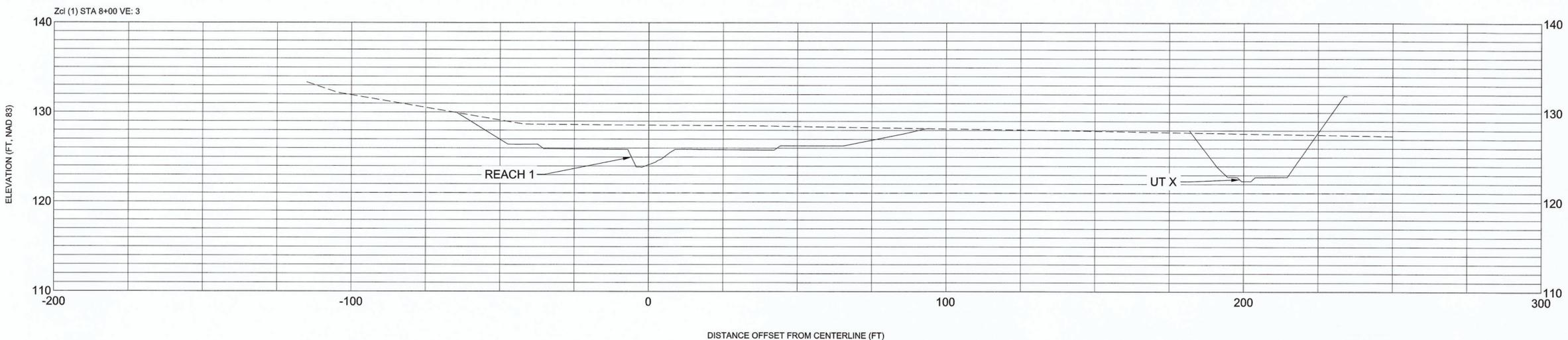
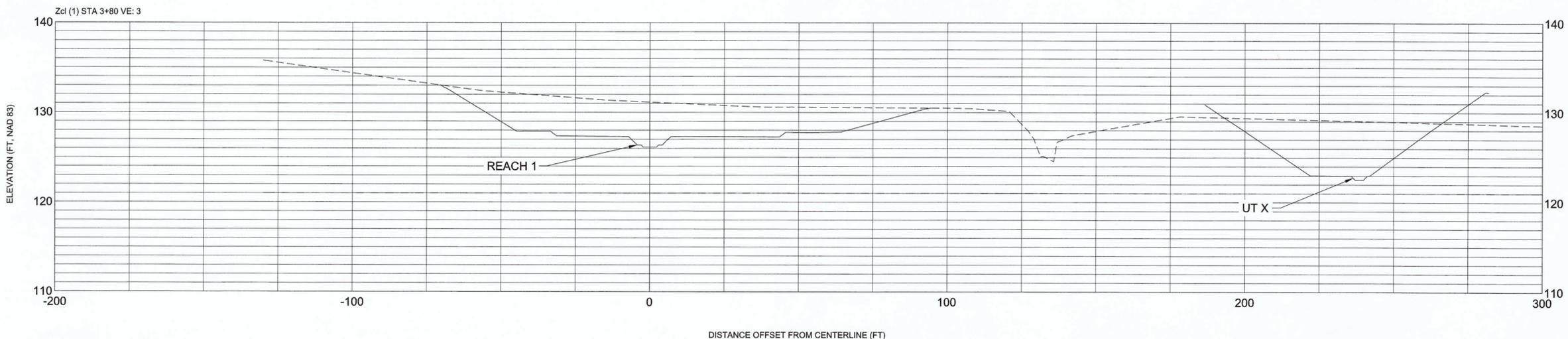
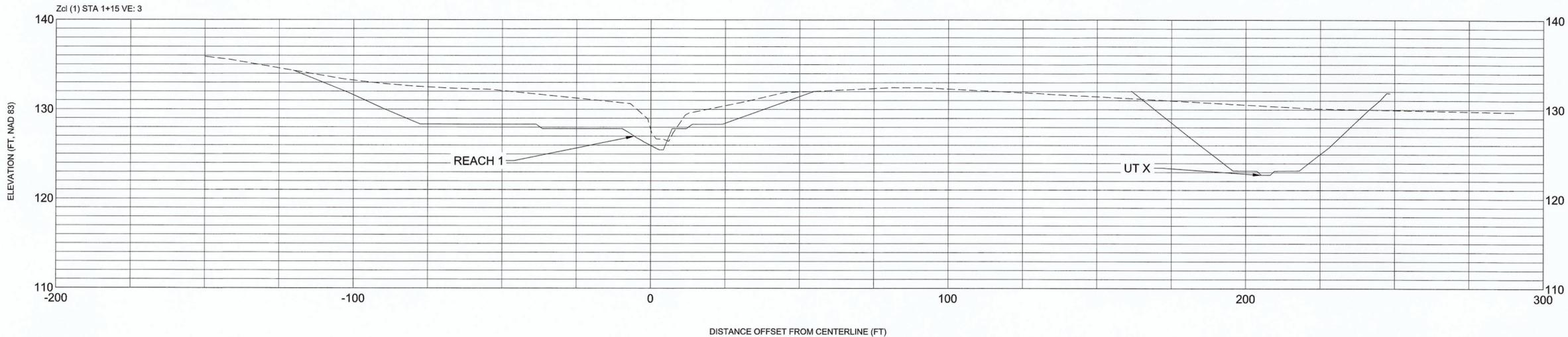
- STREAM DESIGN SURFACE
- - - EXISTING GROUND
- · · SEASONAL HIGH GROUNDWATER LEVEL ELEVATION
- · - SEASONAL LOW GROUNDWATER LEVEL ELEVATION

Prepared by:  
**SWCA**  
ENVIRONMENTAL & ENGINEERING

Operating in North Carolina as  
SWCA Environmental Consulting  
and Engineering of NC, PC

116 Alexandria Drive  
Mooresville, NC 28115  
(p) 919.624.1458

Prepared for:  
**NorthPoint**  
DEVELOPMENT



NOT TO SCALE

Stamp:

*[Signature]*  
Digitally signed on 5/21/2021

Project Title:  
**EDGECOMB CREEK  
100% DESIGN**

Sheet Title:  
**SECTIONS  
REACH 1 - (1)**

Date:	04/08/2021
Scale:	NTS
Drawn by:	JYZ
Checked by:	JCA
File #	

REVISIONS		
Date:	By:	Note:
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10/21/20	JYZ	30% REVISION
12/04/20	JYZ	60% DESIGN
12/09/20	JYZ	60% REVISION
02/12/21	JYZ	90% DESIGN
03/28/21	JYZ	100% DESIGN

Sheet No:  
**30 OF 51**

**CITY OF ARLINGTON  
CONSTRUCTION DRAWING REVIEW APPROVAL**

THIS PLAN SHEET HAS BEEN REVIEWED AND APPROVED PER THE CONDITIONS ON THE TITLE SHEET.

BY: *[Signature]*  
Nova Heaton, PE, Development Services Manager

DATE: 6/22/21 THIS APPROVAL IS VALID FOR 18 MONTHS

**SECTION LEGEND**

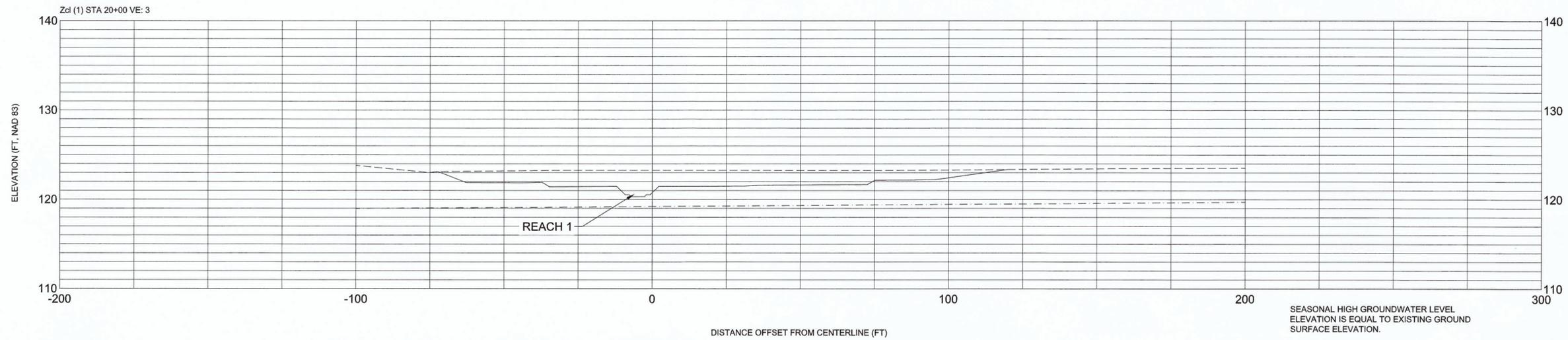
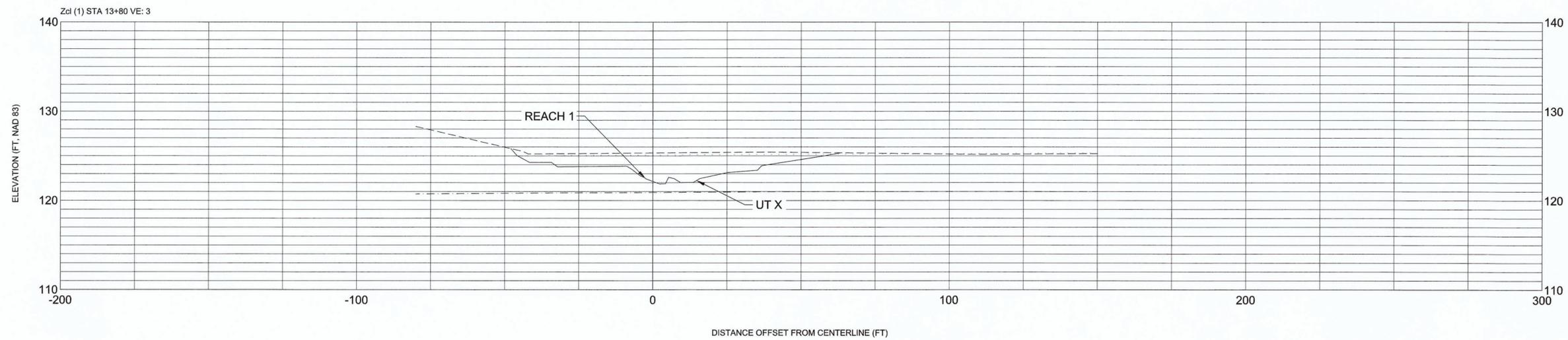
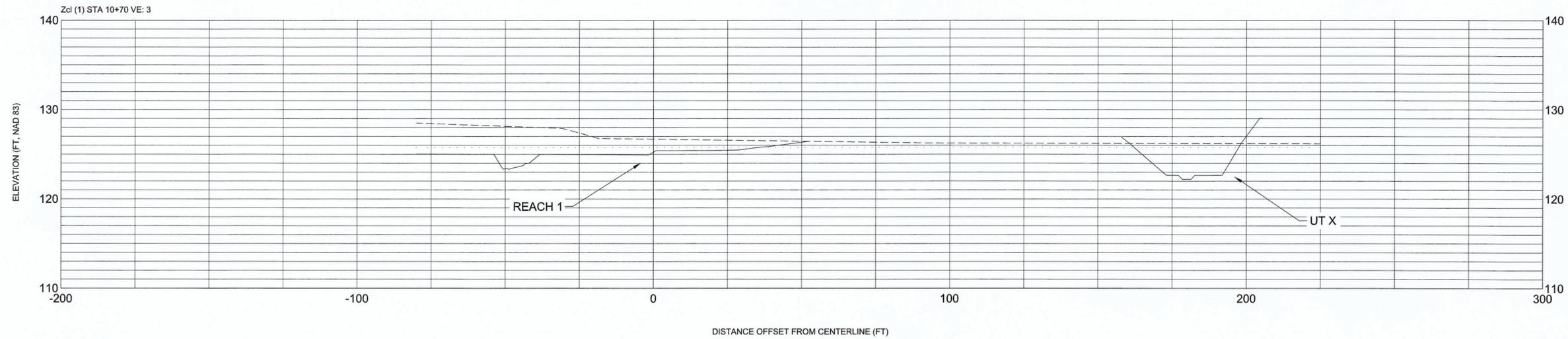
- STREAM DESIGN SURFACE
- - - EXISTING GROUND
- · · · · SEASONAL HIGH GROUNDWATER LEVEL ELEVATION
- · - · - SEASONAL LOW GROUNDWATER LEVEL ELEVATION

Prepared by:  
**SWCA**  
ENVIRONMENTAL & ENGINEERING

Operating in North Carolina as  
SWCA Environmental Consulting  
and Engineering of NC, PC

116 Alexandria Drive  
Mooresville, NC 28115  
(p) 919.624.1458

Prepared for:  
**NorthPoint**  
DEVELOPMENT



SEASONAL HIGH GROUNDWATER LEVEL  
ELEVATION IS EQUAL TO EXISTING GROUND  
SURFACE ELEVATION.

NOT TO SCALE

Stamp:

*[Signature]*  
Digitally signed on 5/21/2021

Project Title:  
**EDGECOMB CREEK  
100% DESIGN**

Sheet Title:  
**SECTIONS  
REACH 1 - (1)**

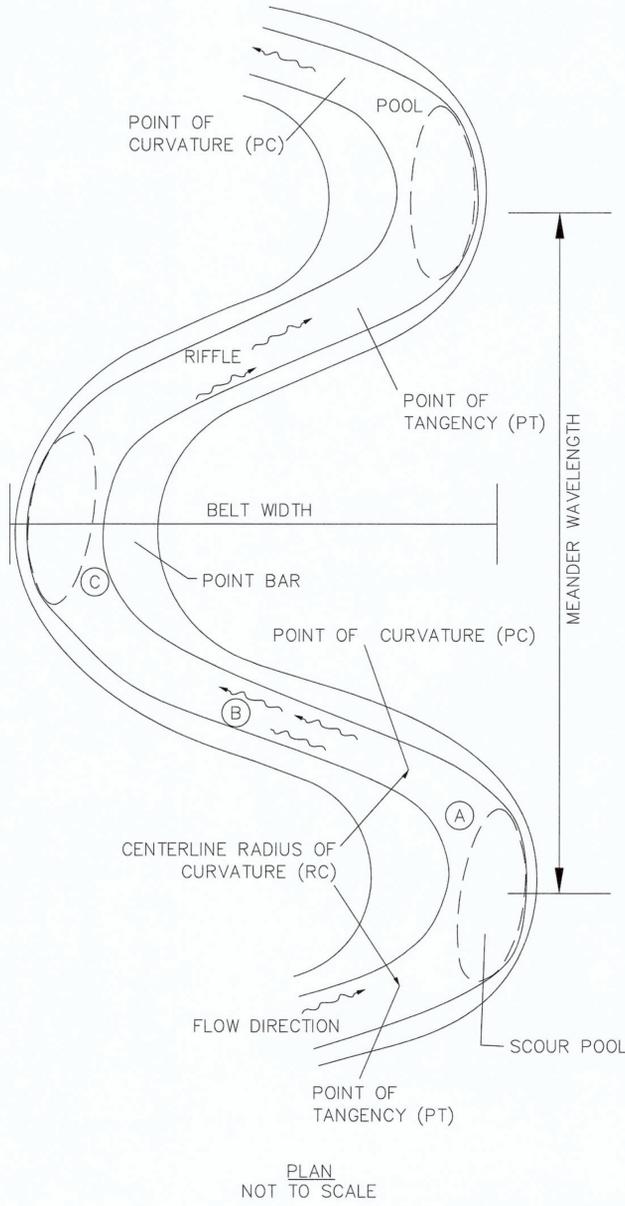
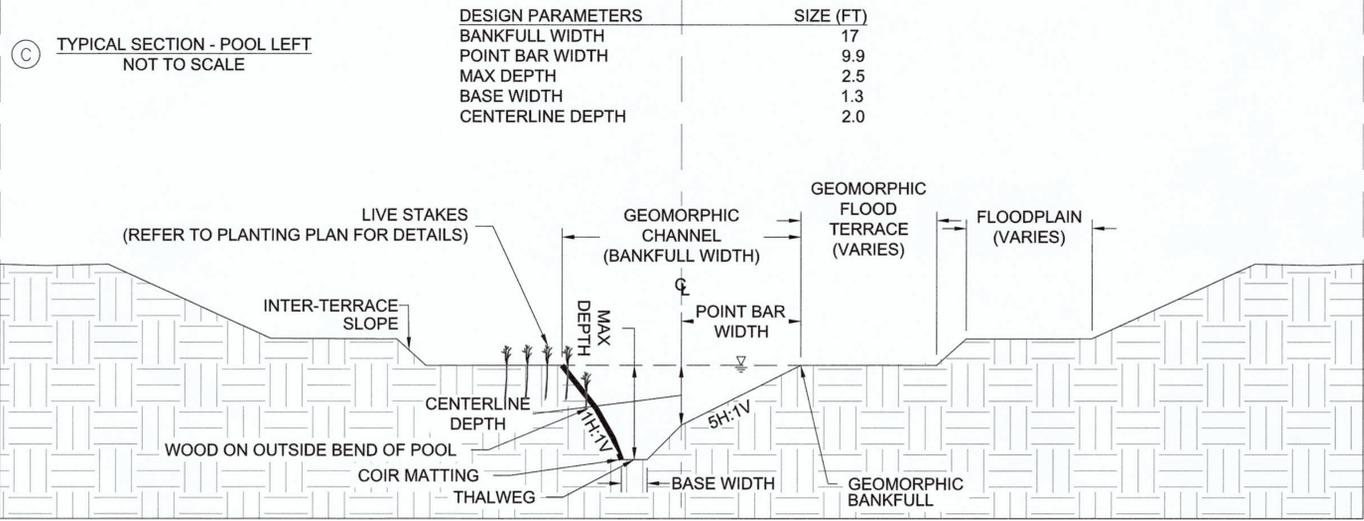
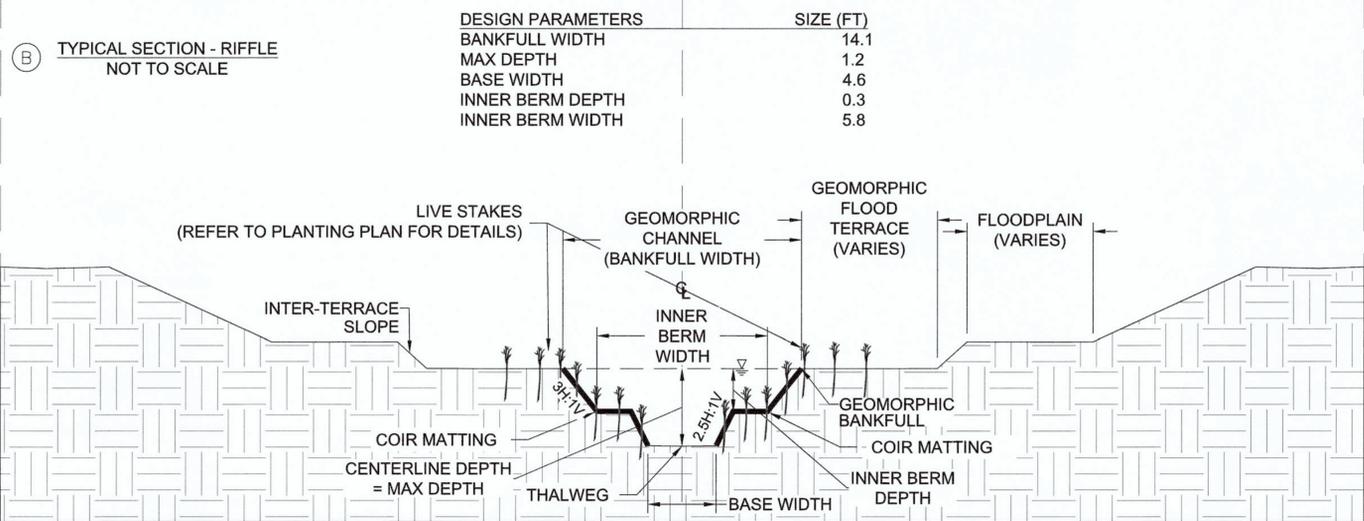
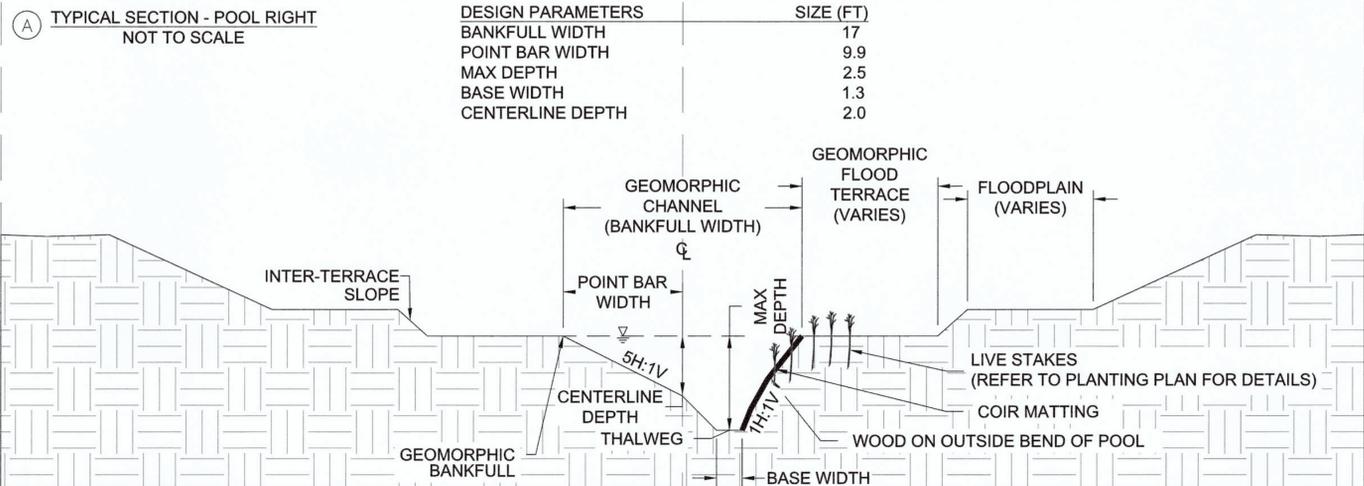
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Checked by:	JCA
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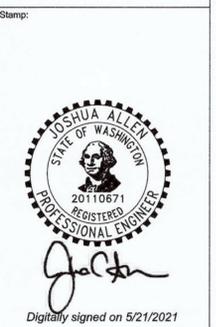
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STREAM NAME	EDGECOMB CREEK		
STREAM TYPE	E4		
DESIGN PARAMETERS	MINIMUM	MEDIAN	MAXIMUM
MEAN RIFFLE DEPTH, DBKF (FT)		0.9	
RIFFLE WIDTH, WBKF (FT)		14.1	
WIDTH-TO-DEPTH RATIO, [WBKF/DBKF]		16.8	
RIFFLE CROSS-SECTION AREA, ABKF (SQ FT)		11.9	
MAX RIFFLE DEPTH, DMBKF (FT)		1.2	
POOL WIDTH, WBKFP (FT)		17	
POOL CROSS-SECTION AREA, ABKFP (SQ FT)		25.3	
MAX POOL DEPTH, DMBKFP (FT)		2.5	
RIFFLE LENGTH, LRIF (FT)	29.9	33.8	40.9
POOL LENGTH, LP (FT)	12.7	19.7	35.3
ENTRENCHMENT RATIO, ER [WFPA/WBKF]		3.6	
BANKFULL DISCHARGE, QBKF (CFS)		41.8	
MEANDER LENGTH, LM (FT)	70.4	76.1	88.4
BELT WIDTH, WBLT (FT)	39.5	46.5	53.6
RADIUS OF CURVATURE, RC (FT)	25.4	43.7	67.7
POOL-TO-POOL SPACING, P-P (FT)	29.6	77.6	118.4
VALLEY LENGTH, VL (FT)		7,812	
STREAM LENGTH, SL (FT)		9,513	
SINUOSITY, K = SL/VL (FT/FT)		1.22	



Project Title:  
**EDGECOMB CREEK**  
**100% DESIGN**

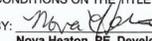
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**TYPICAL**  
**CROSS SECTION**  
**EDGECOMB CREEK**

Date:	04/08/2021
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Drawn by:	JYZ
Checked by:	JCA
File #	

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Date:	By:	Note:
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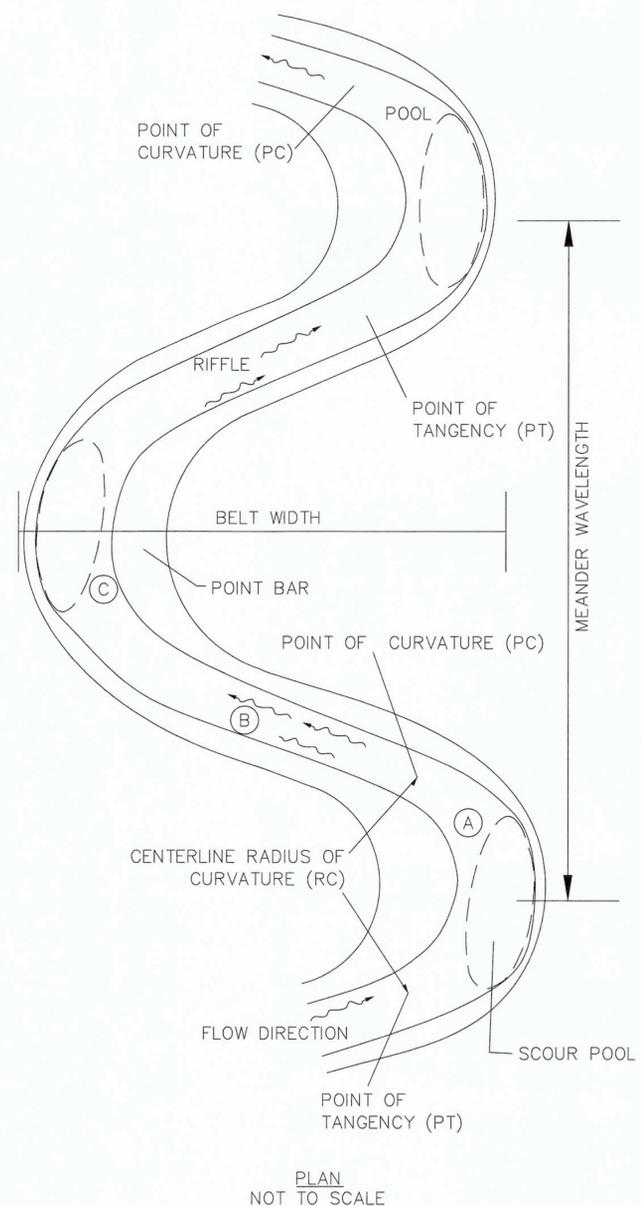
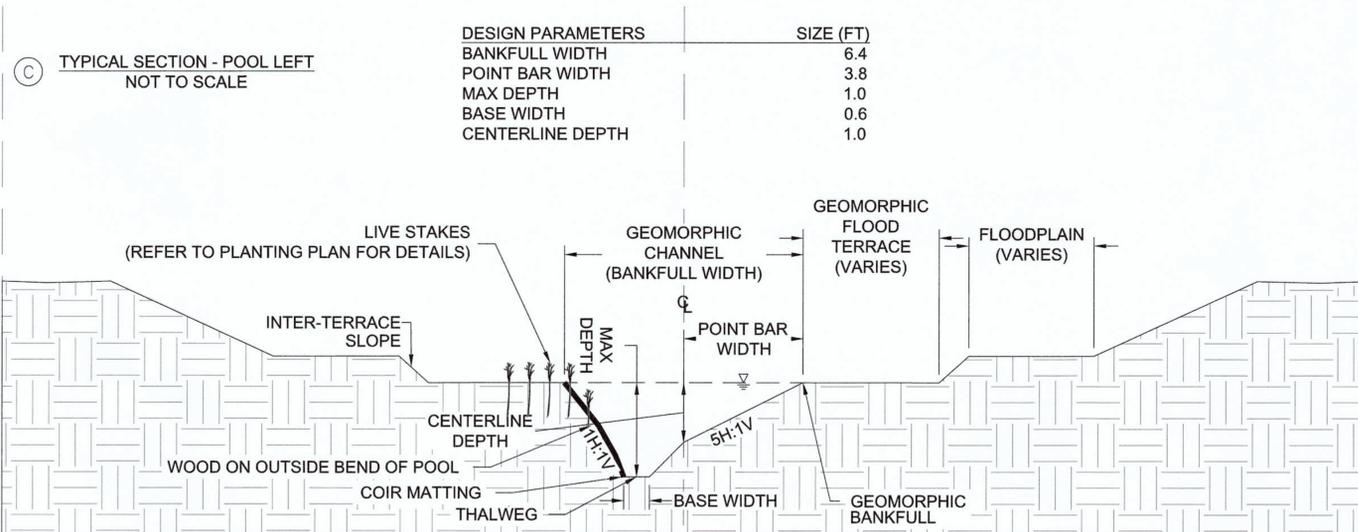
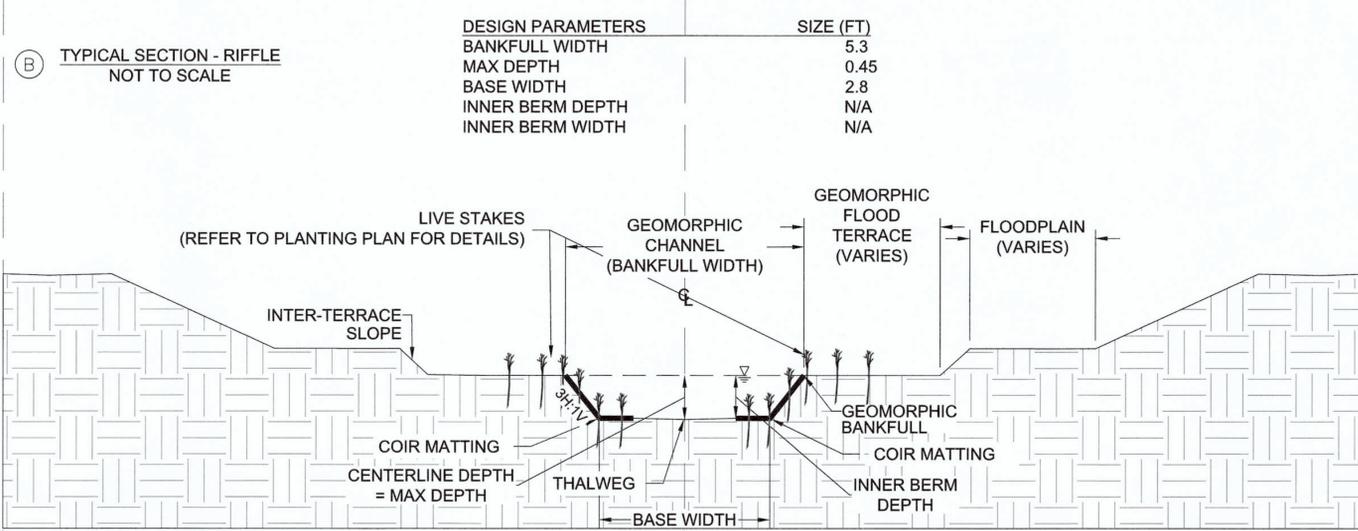
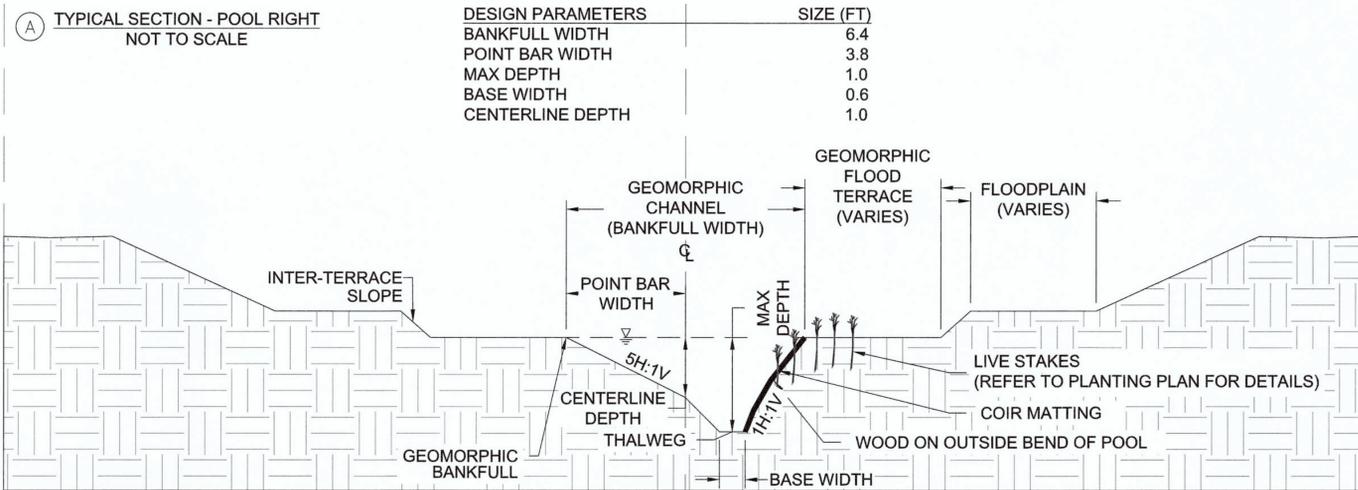
**CITY OF ARLINGTON**  
**CONSTRUCTION DRAWING REVIEW APPROVAL**

THIS PLAN SHEET HAS BEEN REVIEWED AND APPROVED PER THE CONDITIONS ON THE TITLE SHEET.

By:   
 Nova Heaton, PE, Development Services Manager

DATE: 6/22/21 THIS APPROVAL IS VALID FOR 18 MONTHS

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STREAM NAME	UNNAMED TRIB X		
STREAM TYPE	E4		
DESIGN PARAMETERS	MINIMUM	MEDIAN	MAXIMUM
MEAN RIFFLE DEPTH, DBKF (FT)		0.24	
RIFFLE WIDTH, WBKF (FT)		5.3	
WIDTH-TO-DEPTH RATIO, [WBKF/DBKF]		16.8	
RIFFLE CROSS-SECTION AREA, ABKF (SQ FT)		1.7	
MAX RIFFLE DEPTH, DMBKF (FT)		0.45	
POOL WIDTH, WBKFP (FT)		6.4	
POOL CROSS-SECTION AREA, ABKFP (SQ FT)		3.6	
MAX POOL DEPTH, DMBKFP (FT)		1.0	
RIFFLE LENGTH, LRIF (FT)	10.6	12.0	14.5
POOL LENGTH, LP (FT)	4.5	7.0	12.5
ENTRENCHMENT RATIO, ER [WFPA/WBKF]		3.2	
BANKFULL DISCHARGE, QBKF (CFS)		5.9	
MEANDER LENGTH, LM (FT)	25.0	27.0	31.4
BELT WIDTH, WBLT (FT)	14.0	16.5	19.0
RADIUS OF CURVATURE, RC (FT)	9.0	15.5	24.0
POOL-TO-POOL SPACING, P-P (FT)	10.5	27.5	42.0
VALLEY LENGTH, VL (FT)	2,090		
STREAM LENGTH, SL (FT)	2,240		
SINUOSITY, K = SL/VL (FT/FT)	1.07		

**CITY OF ARLINGTON  
CONSTRUCTION DRAWING REVIEW APPROVAL**

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BY: *Nova Heaton*  
Nova Heaton, PE, Development Services Manager

DATE: 6/22/21 THIS APPROVAL IS VALID FOR 18 MONTHS

Prepared by:  
**SWCA**  
ENVIRONMENTAL & ENGINEERING  
Operating in North Carolina as  
SWCA Environmental Consulting  
and Engineering of NC, PC  
116 Alexandria Drive  
Moorestville, NC 28115  
(p) 919.624.1458



Stamp:  
  
Digitally signed on 5/21/2021

Project Title:  
**EDGECOMB CREEK  
100% DESIGN**

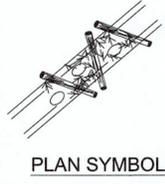
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Checked by: JCA  
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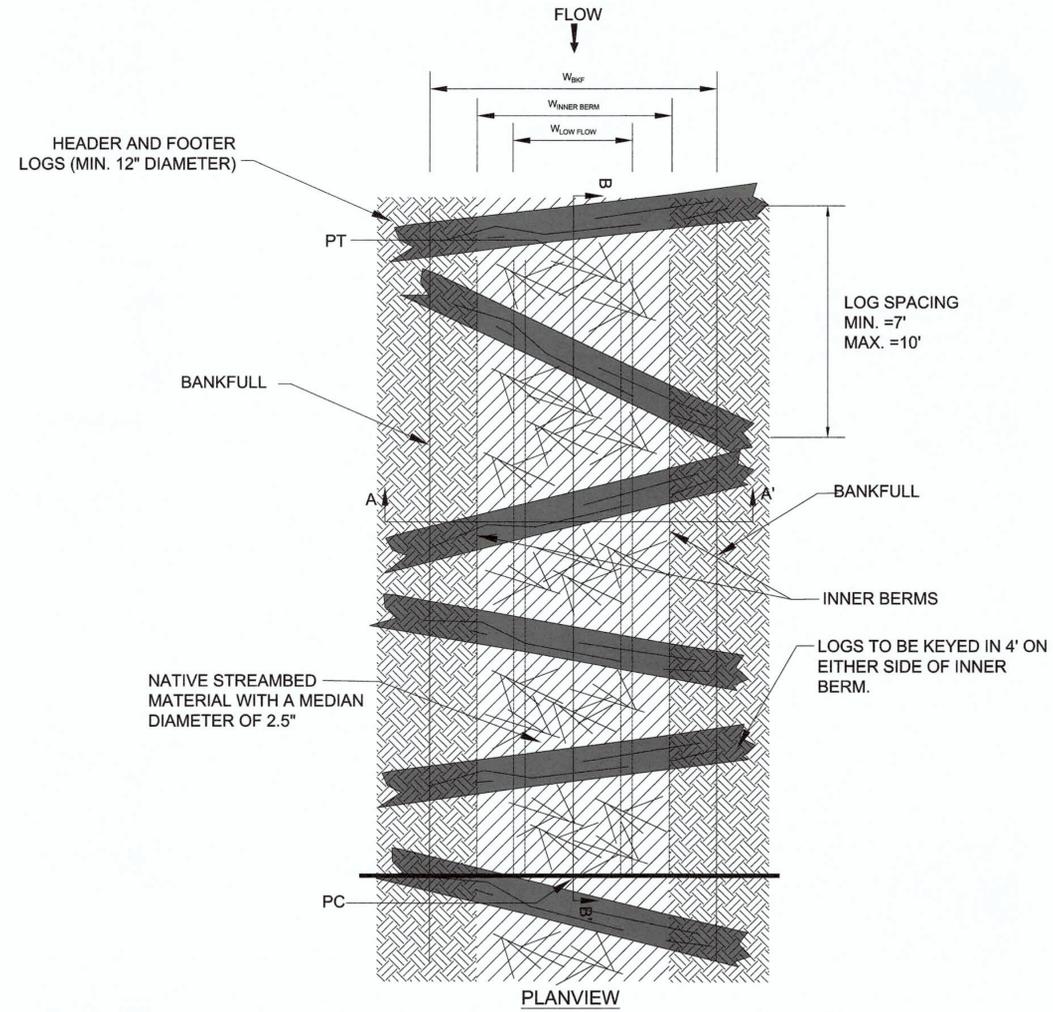
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Sheet No:  
**40 OF 51**

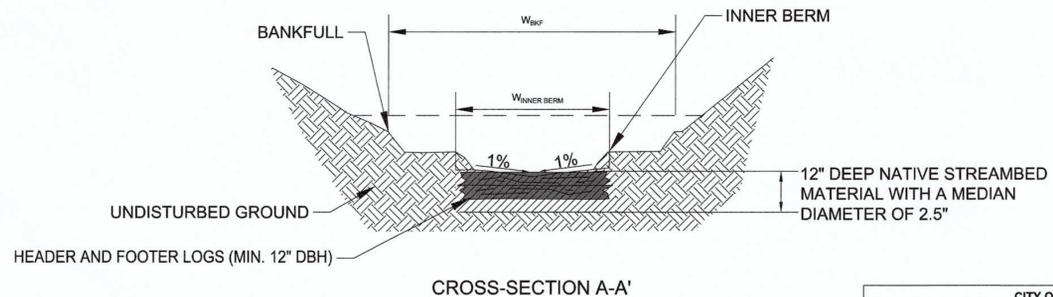
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PLAN SYMBOL



PLANVIEW



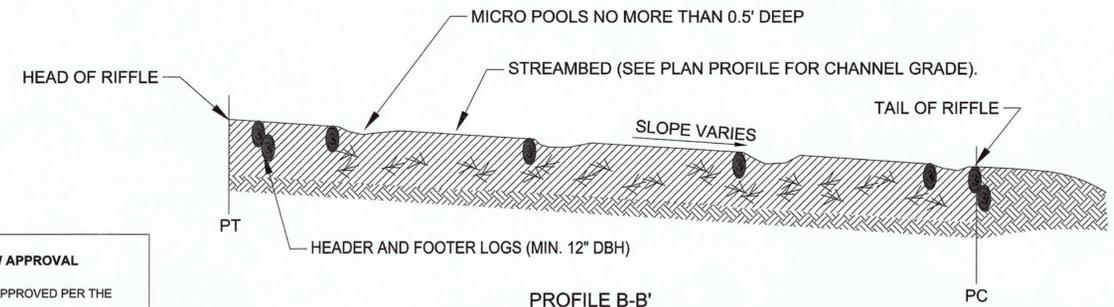
CROSS-SECTION A-A'

**DETAIL - BRUSH AND ROLL RIFFLE**  
NOT TO SCALE



**NOTES:**

- LOGS SHALL HAVE MIN. DIAMETER OF 12", AND A MINIMUM LENGTH OF 13'.
- ALL LOGS SHALL BE RELATIVELY STRAIGHT AND LIMBS SHALL BE TRIMMED FLUSH.
- THE LOGS AT THE UPSTREAM AND DOWNSTREAM END OF THE STRUCTURE WILL BE UNDERLAIN BY A FOOTER LOG (SOMETIMES CALLED A BACKER LOG) UNLESS OTHERWISE DIRECTED BY ENGINEER. THE HEADER LOG IS THE TOP LOG USED IN EACH PAIR. WHEN FINISHED, THE HEADER LOG IS VISIBLE ONLY BETWEEN THE INNER BERMS. THE HEADER LOG SHALL BE INSTALLED BEFORE THE FOOTER LOG. THE HEADER LOG DOES NOT REST ON THE TOP OF THE FOOTER LOG. THE FOOTER LOG IS INSTALLED FROM THE UPSTREAM SIDE AND INSTALLED AGAINST THE LOWER HALF OF THE HEADER LOG RESULTING IN A STAGGER WITH THE HEADER LOG BEING SLIGHTLY MORE DOWNSTREAM THAN THE FOOTER LOG.
- THE OTHER LOGS IN THE STRUCTURE ARE SINGLE LOGS WITH NO FOOTER LOG.
- SET INVERTS AT ELEVATIONS SHOWN ON THE PLAN AND PROFILE SHEETS. THE ELEVATIONS OF THE LOGS COMPRISING THE LOG CONSTRUCTED RIFFLE SHALL NOT VARY FROM THE PLAN UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
- THE MOST UPSTREAM LOG SHALL BE PLACED SUCH THAT THE BANK TIE-IN IS ON THE SAME SIDE AS THE NEXT UPSTREAM OUTSIDE BEND IN ORDER TO SERVE AS A VANE AND HELP DIRECT STREAM FLOW AWAY FROM THE PREVIOUS OUTSIDE BEND.
- THE MOST DOWNSTREAM LOG SHALL BE PLACED SUCH THAT THE HIGH POINT IS ON THE SAME SIDE AS THE NEXT DOWNSTREAM OUTSIDE BEND IN ORDER TO HELP DIRECT STREAM FLOW AWAY FROM THE NEXT OUTSIDE BEND.
- ALL GAPS/VOIDS LARGER THAN 1" BETWEEN THE HEADER AND FOOTER LOGS SHALL BE AUGMENTED WITH ADDITIONAL PLACEMENT OF SMALL WOODY DEBRIS ON THE UPSTREAM SIDE, TO INCREASE HABITAT COMPLEXITY AND STABILITY.
- BACKFILL MATERIAL SHALL BE PLACED UPSTREAM OF EACH LOG SUCH THAT FUTURE SETTLEMENT OF THE MATERIAL WILL BE MINIMAL.
- THE SURFACE OF THIS STRUCTURE SHALL BE FINISHED TO A SMOOTH AND COMPACT SURFACE IN ACCORDANCE WITH THE LINES, GRADES, AND CROSS-SECTIONS OR ELEVATIONS SHOWN ON THE DRAWINGS. THE DEGREE OF FINISH FOR INVERT ELEVATIONS SHALL BE WITHIN 0.1' OF THE GRADES AND ELEVATIONS INDICATED, PROVIDED ANY HEIGHT DOES NOT EXCEED MAX. ALLOWABLE DROP OF 0.1' OVER ANY ONE LOG.
- LOGS WILL CREATE MICRO POOLS THAT ARE NO MORE THAN 0.5' DEEP FOR ENERGY DISSIPATION.
- DRESSING OF CHANNEL AND BANKFULL BENCH/FLOODPLAIN WILL LIKELY BE REQUIRED FOLLOWING INSTALLATION OF IN-STREAM STRUCTURES.
- LOGS AND WOODY MATERIALS SHALL BE HARVESTED FROM PACIFIC NORTHWEST TREE SPECIES SUCH AS DOUGLAS FIR, WESTERN RED CEDAR, OR AN ENGINEER-APPROVED ALTERNATIVE.



PROFILE B-B'

**CITY OF ARLINGTON  
CONSTRUCTION DRAWING REVIEW APPROVAL**

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BY: *Nova Heaton*  
Nova Heaton, PE, Development Services Manager

DATE: 6/22/21 THIS APPROVAL IS VALID FOR 18 MONTHS

Prepared by:  
**SWCA**  
ENVIRONMENTAL & ENGINEERING  
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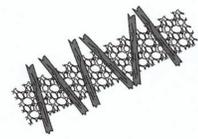
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Project Title:  
**EDGECOMB CREEK  
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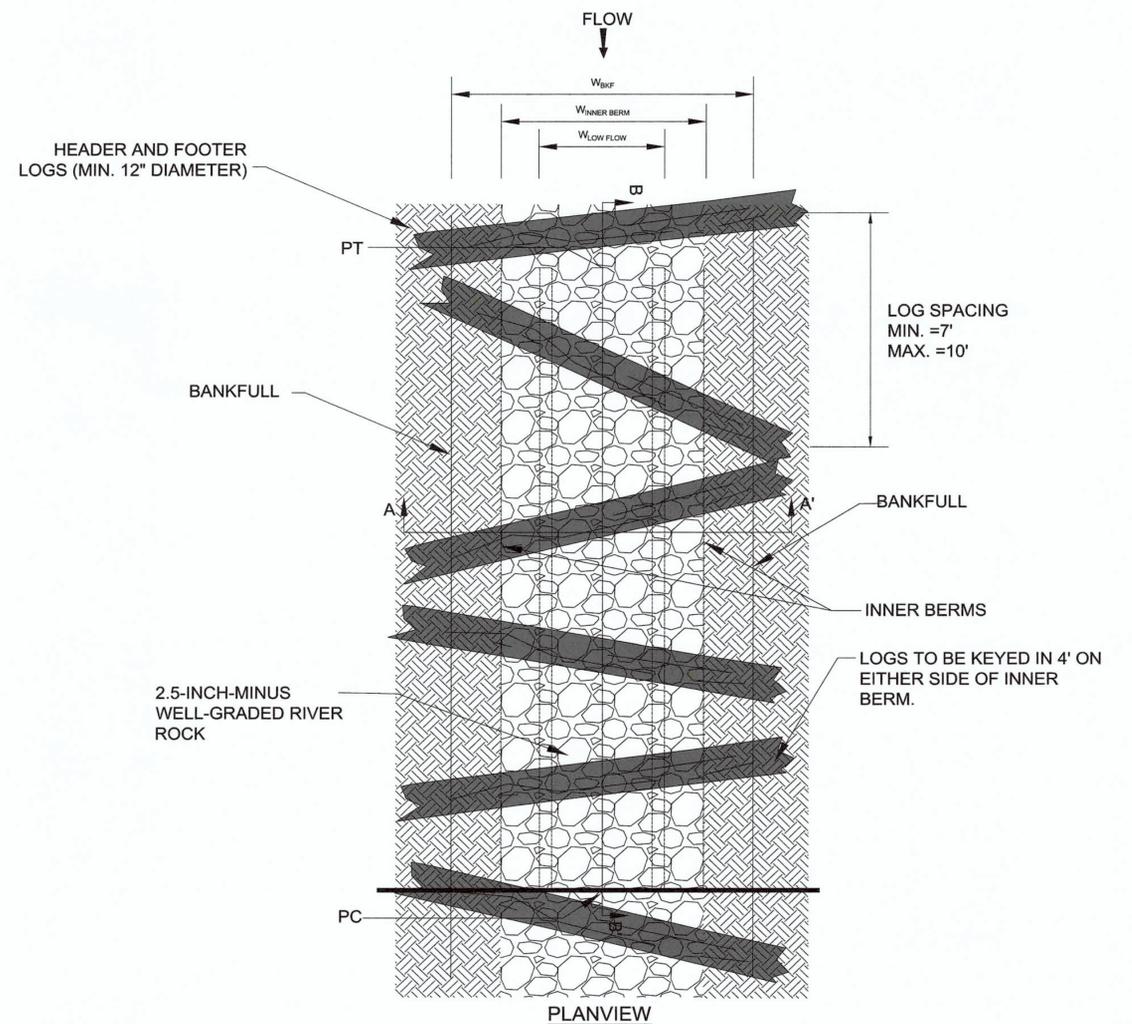
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BRUSH AND ROLL  
RIFFLE**

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Checked by:	JCA	
File #		
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Date:	By:	Note:
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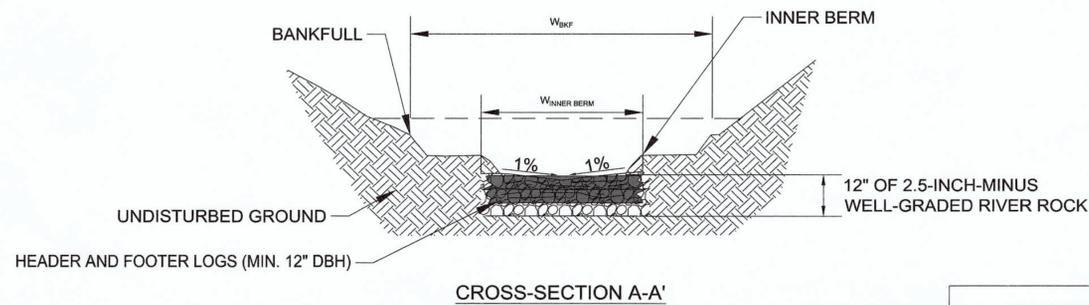
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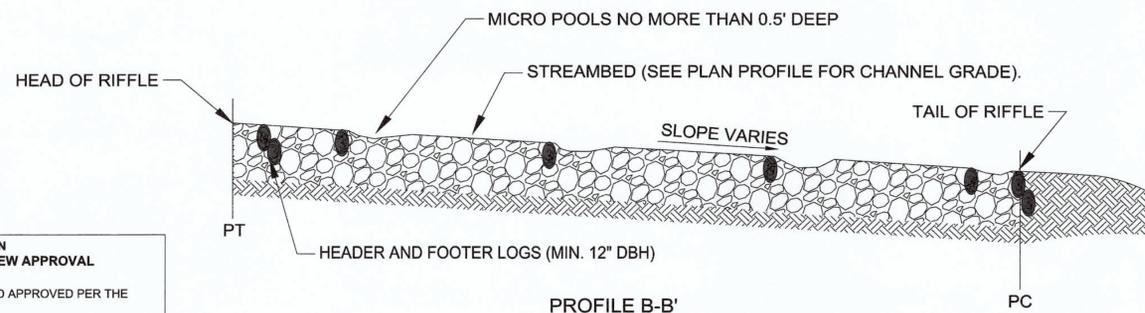
PLAN SYMBOL



PLANVIEW



CROSS-SECTION A-A'



PROFILE B-B'



**NOTES:**

1. LOGS SHALL HAVE MIN. DIAMETER OF 12", AND A MINIMUM LENGTH OF 13'.
2. ALL LOGS SHALL BE RELATIVELY STRAIGHT AND LIMBS SHALL BE TRIMMED FLUSH.
3. THE LOGS AT THE UPSTREAM AND DOWNSTREAM END OF THE STRUCTURE WILL BE UNDERLAIN BY A FOOTER LOG (SOMETIMES CALLED A BACKER LOG) UNLESS OTHERWISE DIRECTED BY ENGINEER. THE HEADER LOG IS THE TOP LOG USED IN EACH PAIR. WHEN FINISHED, THE HEADER LOG IS VISIBLE ONLY BETWEEN THE INNER BERMS. THE HEADER LOG SHALL BE INSTALLED BEFORE THE FOOTER LOG. THE HEADER LOG DOES NOT REST ON THE TOP OF THE FOOTER LOG. THE FOOTER LOG IS INSTALLED FROM THE UPSTREAM SIDE AND INSTALLED AGAINST THE LOWER HALF OF THE HEADER LOG RESULTING IN A STAGGER WITH THE HEADER LOG BEING SLIGHTLY MORE DOWNSTREAM THAN THE FOOTER LOG.
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5. SET INVERTS AT ELEVATIONS SHOWN ON THE PLAN AND PROFILE SHEETS. THE ELEVATIONS OF THE LOGS COMPRISING THE LOG CONSTRUCTED RIFFLE SHALL NOT VARY FROM THE PLAN UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
6. THE MOST UPSTREAM LOG SHALL BE PLACED SUCH THAT THE BANK TIE-IN IS ON THE SAME SIDE AS THE NEXT UPSTREAM OUTSIDE BEND IN ORDER TO SERVE AS A VANE AND HELP DIRECT STREAM FLOW AWAY FROM THE PREVIOUS OUTSIDE BEND.
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8. ALL GAPS/VOIDS LARGER THAN 1" BETWEEN THE HEADER AND FOOTER LOGS SHALL BE AUGMENTED WITH ADDITIONAL PLACEMENT OF SMALL WOODY DEBRIS ON THE UPSTREAM SIDE, TO INCREASE HABITAT COMPLEXITY AND STABILITY.
9. BACKFILL MATERIAL SHALL BE PLACED UPSTREAM OF EACH LOG SUCH THAT FUTURE SETTLEMENT OF THE MATERIAL WILL BE MINIMAL.
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**CITY OF ARLINGTON  
CONSTRUCTION DRAWING REVIEW APPROVAL**

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BY: *Nova Heaton*  
Nova Heaton, PE, Development Services Manager

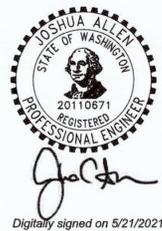
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**DETAIL - ROCK AND ROLL RIFFLE  
NOT TO SCALE**

Prepared by:  
**SWCA**  
ENVIRONMENTAL & ENGINEERING  
Operating in North Carolina as  
SWCA Environmental Consulting  
and Engineering of NC, PC  
116 Alexandria Drive  
Mooresville, NC 28115  
(p) 919.624.1458



Stamp:



Project Title:

**EDGECOMB CREEK  
100% DESIGN**

Sheet Title:

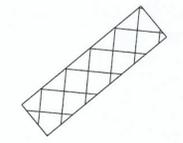
**DETAILS -  
ROCK AND ROLL  
RIFFLE**

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Drawn by:	JYZ
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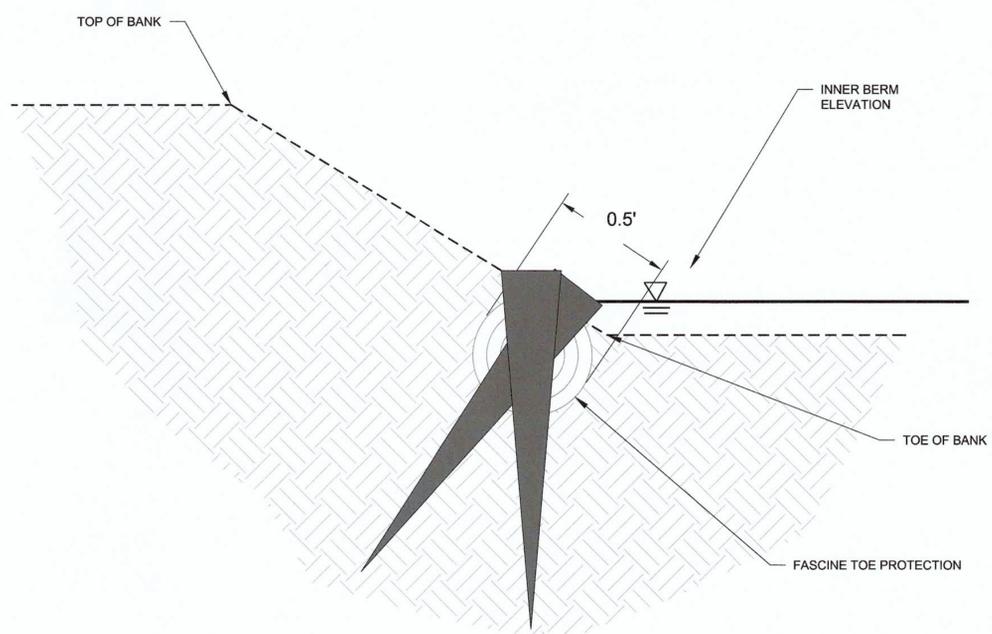
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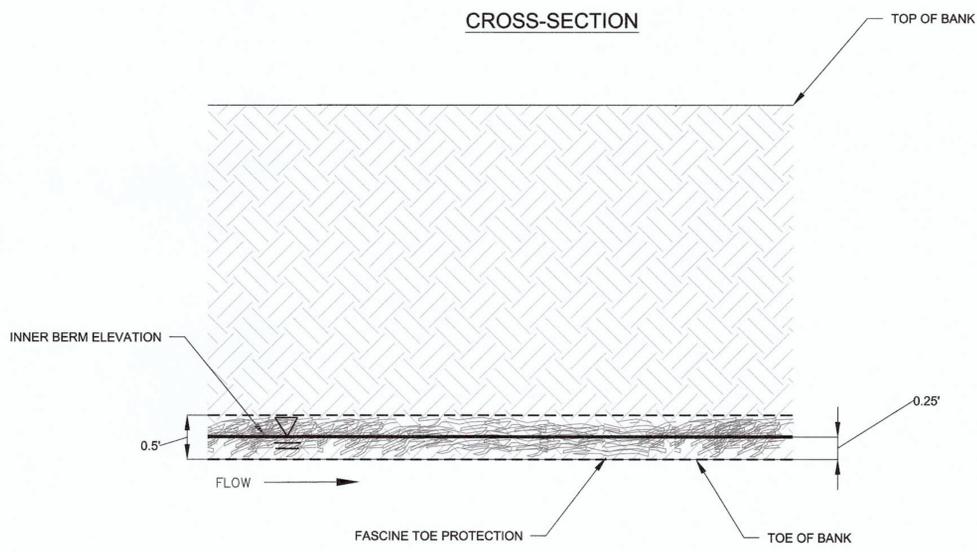
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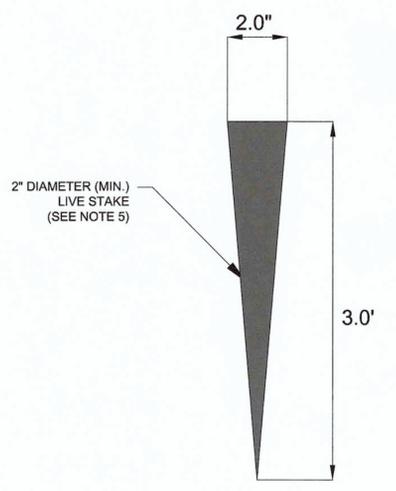
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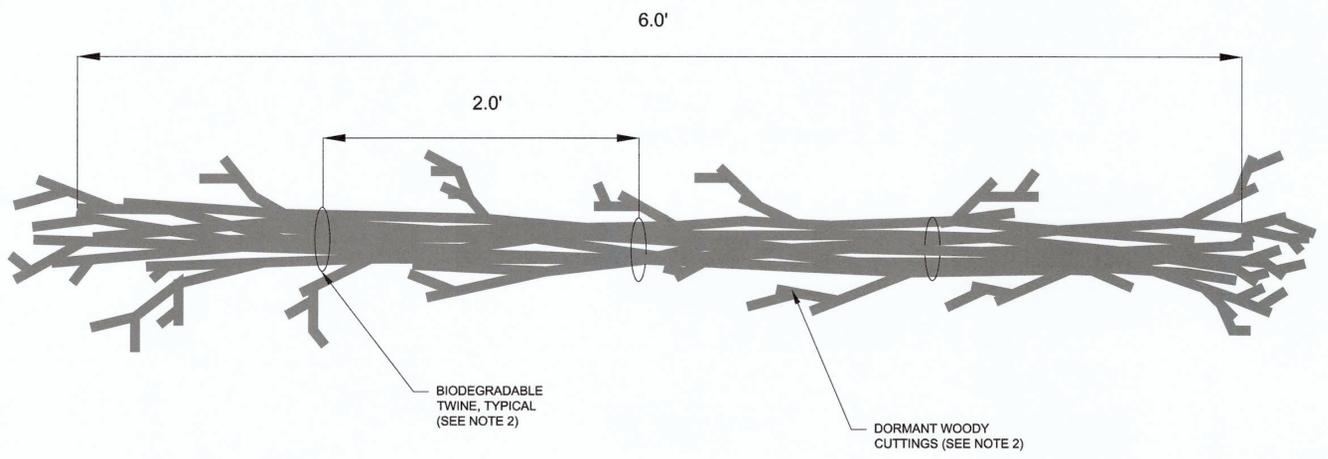
CROSS-SECTION



PLAN VIEW



STAKE DETAIL



FASCINE DETAIL

NOTES:

- FASCINE TOE PROTECTION SHALL BE INSTALLED IN LINEAR TRENCHES ON FINISHED STREAM BANKS. "FINISHED" GENERALLY REFERS TO ANY AND/OR ALL OF THE FOLLOWING AS SPECIFIED BY THE DESIGNER:
  - GRADED
  - PREPARED (ROTO-TILLED, RAKED, AND AMENDED),
  - SEEDED,
  - MULCHED, AND
  - COVERED WITH COIR FIBER MATTING.
- FASCINES SHALL BE FABRICATED FROM A COMBINATION OF LIVE DORMANT CUTTINGS OF WOODY PLANT SPECIES INCLUDING PACIFIC NINEBARK, RED-OSIER DOGWOOD, TWINBERRY AND OTHER PACIFIC NORTHWEST LOCAL WILLOW SPECIES AS APPROVED BY THE ENGINEER. THE CUTTINGS SHALL TIED TOGETHER WITH A MINIMUM 2 PLY BIODEGRADABLE BALING TWINE TO FORM A BUNDLE THE SAME LENGTH AS THE CUTTINGS.
- FASCINES SHALL BE INSTALLED PARALLEL TO THE TOE OF BANK, AND BE OVERLAPPING AT LEAST 12" ON BOTH ENDS.
- FASCINE INSTALLATION TRENCH WIDTH SHALL BE SUCH THAT FASCINE FITS SNUGLY WITHIN. FASCINE INSTALLATION TRENCH DEPTH SHALL ALLOW APPROXIMATELY ONE QUARTER OF THE FASCINE TO PROTRUDE ABOVE THE GROUND SURFACE.
- LIVE STAKES SHALL BE INSTALLED THROUGH THE LIVE FASCINES WITH ONE STAKE PERPENDICULAR TO THE SLOPE OF THE BANK AND THE OTHER PERPENDICULAR TO THE CHANNEL BED. THE TOP OF THE STAKES SHOULD BE FLUSH WITH THE INSTALLED BUNDLE.
- SOIL SHOULD BE PLACED ALONG THE SIDE OF, OVER, AND PRESSED INTO THE FASCINE IN THE TRENCH TO CREATE CONTACT BETWEEN DORMANT WOODY CUTTINGS AND SOIL TO PROMOTE GROWTH.
- LIVE STAKES MAY BE USED IN COMBINATION WITH FASCINES AS SPECIFIED BY THE DESIGNER. ADDITIONAL INFORMATION REGARDING ANY LIVE STAKING SHALL BE DETAILED SEPARATELY AND REFERENCED HEREIN.
- SPLIT OR OTHERWISE DAMAGED LIVE CUTTINGS SHALL NOT BE USED.

DETAIL - FASCINE TOE PROTECTION  
NOT TO SCALE

**CITY OF ARLINGTON  
CONSTRUCTION DRAWING REVIEW APPROVAL**

THIS PLAN SHEET HAS BEEN REVIEWED AND APPROVED PER THE CONDITIONS ON THE TITLE SHEET.

BY: *Nova Heaton*  
Nova Heaton, PE, Development Services Manager

DATE: 6/22/21 THIS APPROVAL IS VALID FOR 18 MONTHS

Prepared by:  
**SWCA**  
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Prepared for:  
**NorthPoint**  
DEVELOPMENT

Stamp:  
  
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Project Title:  
**EDGECOMB CREEK  
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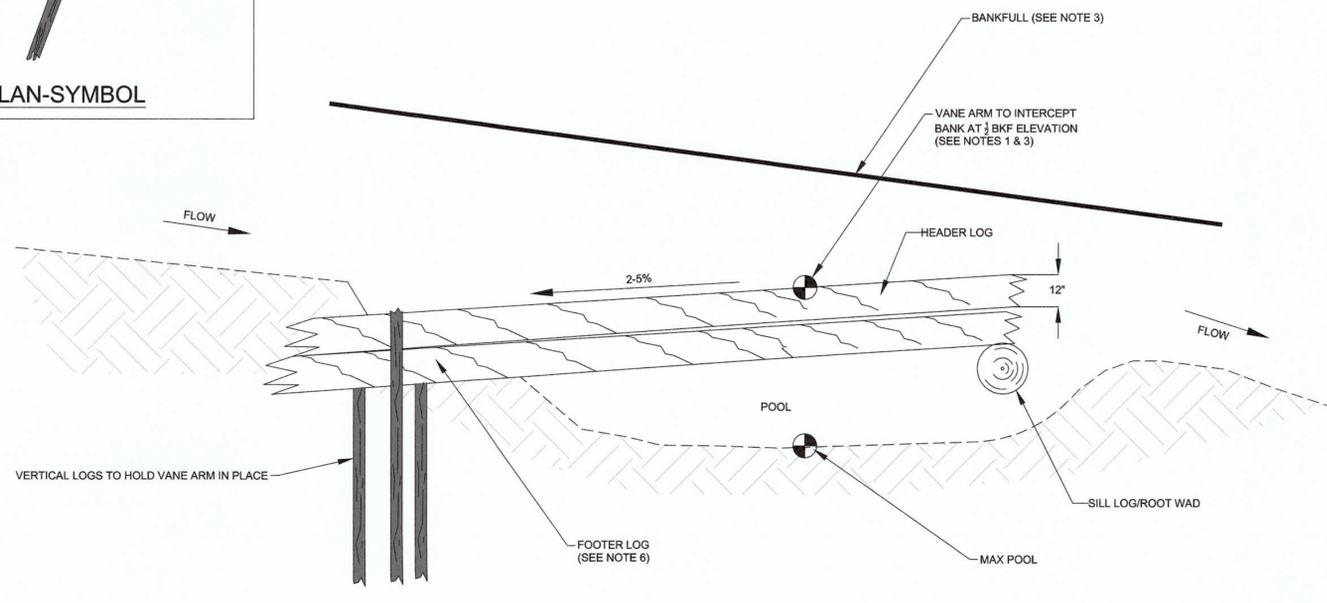
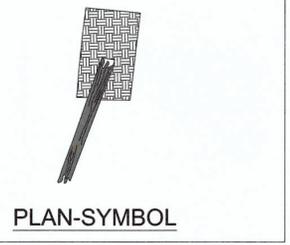
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**DETAILS -  
FASCINE TOE  
PROTECTION**

Date:	04/08/2021
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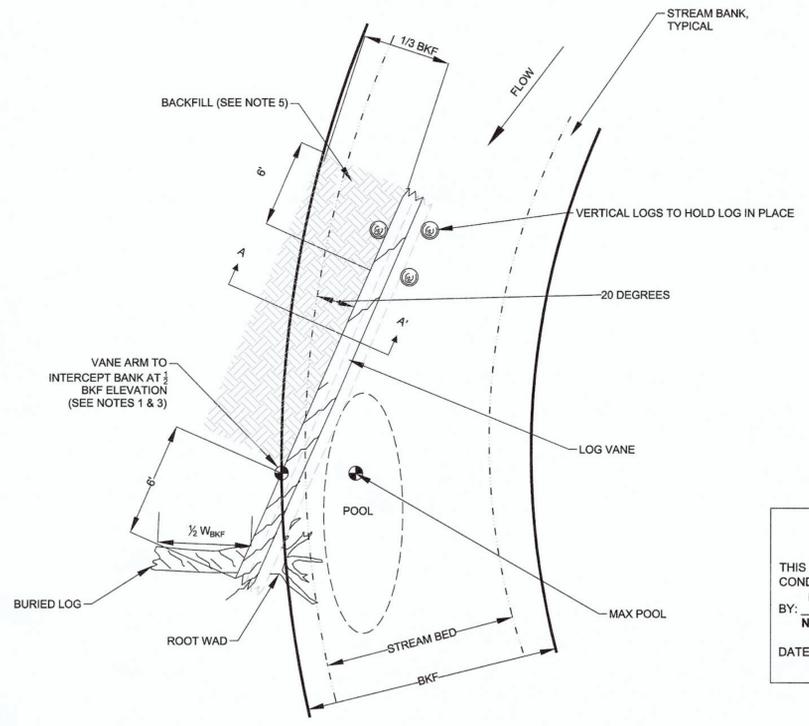
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Sheet No:  
**43 OF 51**

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PROFILE VIEW



PLAN VIEW

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CONSTRUCTION DRAWING REVIEW APPROVAL**

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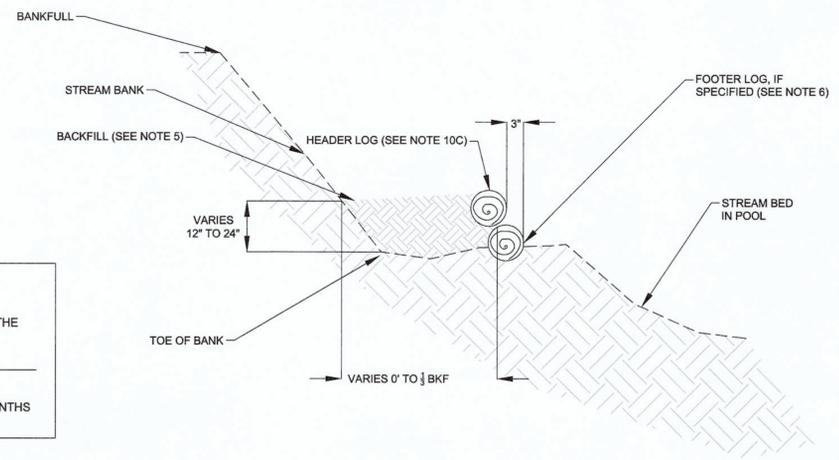
BY: *Nova Heaton*  
Nova Heaton, PE, Development Services Manager

DATE: 6/27/21 THIS APPROVAL IS VALID FOR 18 MONTHS



**NOTES:**

1. A LOG VANE IS A STREAM BANK PROTECTION, IN-STREAM STRUCTURE THAT DIRECTS STREAM FLOW AWAY FROM THE STREAM BANK AND IN TOWARD THE CENTER OF THE CHANNEL. THE DETAIL SHALL BE "FLIPPED" DEPENDING ON WHICH STREAM BANK (LEFT OR RIGHT) IS ON THE OUTSIDE OF THE MEANDER BEND.
2. THE VANE SHALL INTERCEPT THE STREAM BANK AT A HEIGHT EQUAL TO 1/3 BANKFULL STAGE THE VANE INTERCEPT LOCATION MAY BE OTHERWISE DESCRIBED BY ITS RELATIONSHIP TO BANKFULL STAGE OR BY THE LENGTH AND SLOPE OF THE VANE ARM, AS MEASURED FROM THE INVERT ELEVATION OF THE TAIL OF THE UPSTREAM RIFFLE TO BANKFULL ELEVATION. BANKFULL IS NOT NECESSARILY THE TOP OF THE STREAM BANK SLOPE.
3. LOG VANES SHALL BE CONSTRUCTED OF ONE OR MORE LOGS PINNED IN PLACE BY EMBEDDED LOGS. LOGS SHALL BE DIAMETER OF 12" MINIMUM AND BE RELATIVELY STRAIGHT WOOD, RECENTLY HARVESTED. LOGS WITH ROOT WADS ATTACHED SHALL HAVE A DIAMETER OF 8" MINIMUM SUCH THAT THE ROOT WAD DIAMETER DOES NOT EXCEED THE DEPTH OF THE POOL.
4. LOGS AND WOODY MATERIAL SHALL BE HARVESTED FROM PACIFIC NORTHWEST SPECIES SUCH AS WESTERN RED CEDAR, DOUGLAS FIR, WESTERN HEMLOCK, OR AN ENGINEER-APPROVED ALTERNATIVE. THE LENGTH SHALL BE SUCH THAT THE LOG IS BURIED INTO THE SOIL OF THE STREAM BANK (ON ONE END) AND STREAM BED (ON THE OTHER END) A MINIMUM DISTANCE AS SPECIFIED BY THE DESIGNER.
5. BACKFILL OF THE LOG VANE SHALL BE 2.5-INCH-MINUS WELL-GRADED RIVER ROCK. BACKFILL SHALL BE PLACED TO A THICKNESS EQUAL TO THE DEPTH OF THE HEADER AND FOOTER LOGS AND SHALL EXTEND OUT FROM THE VANE TO THE STREAM BANK.
6. LOG VANES SHALL BE BUILT TYPICALLY AS FOLLOWS:
  - A. OVER-EXCAVATE STREAM BED TO A DEPTH EQUAL TO THE TOTAL THICKNESS OF THE HEADER AND FOOTER LOGS.
  - B. PLACE FOOTER LOG OF THE VANE ARM BEFORE HEADER LOG. THE SLOPE OF VANE ARM IS MEASURED ALONG THE VANE ARM WHICH IS INSTALLED AT AN ANGLE TO THE STREAM BANK AND PROFILE.
  - C. INSTALL HEADER LOG OF THE VANE ARM ON TOP OF AND SLIGHTLY FORWARD OR BACK FROM THE FOOTER LOG.
  - D. SECURE VANE ARM IN PLACE USING VERTICAL LOGS.
  - E. PLACE BACKFILL BEHIND LOGS ENSURING THAT ANY VOIDS BETWEEN THE LOGS ARE FILLED.
  - F. BACKFILL REMAINDER OF VANE WITH PREVIOUSLY EXCAVATED MATERIAL.
6. IF ANY BIODEGRADABLE EROSION CONTROL MATTING (JUTE OR COIR) IS USED IN THE VICINITY OF THE STREAM BANK/VANE INTERCEPT POINT, THE MATTING EDGES SHALL BE NEATLY SECURED AROUND THE LOGS.



ARM SECTION A - A'

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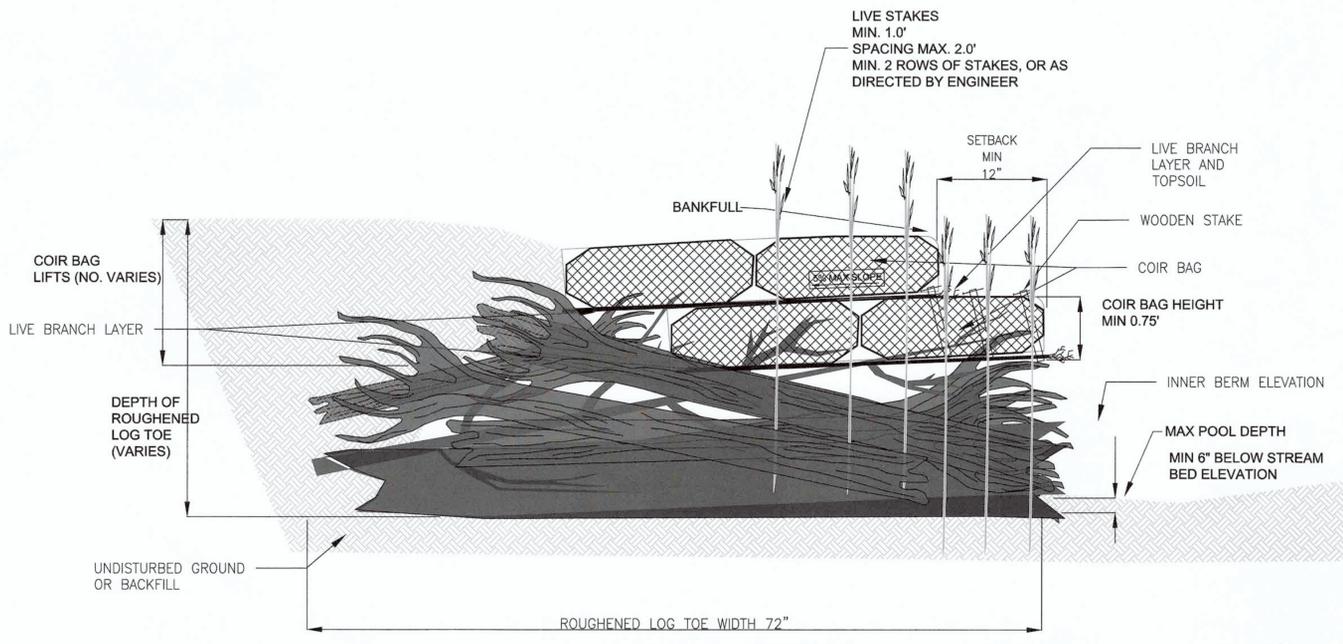
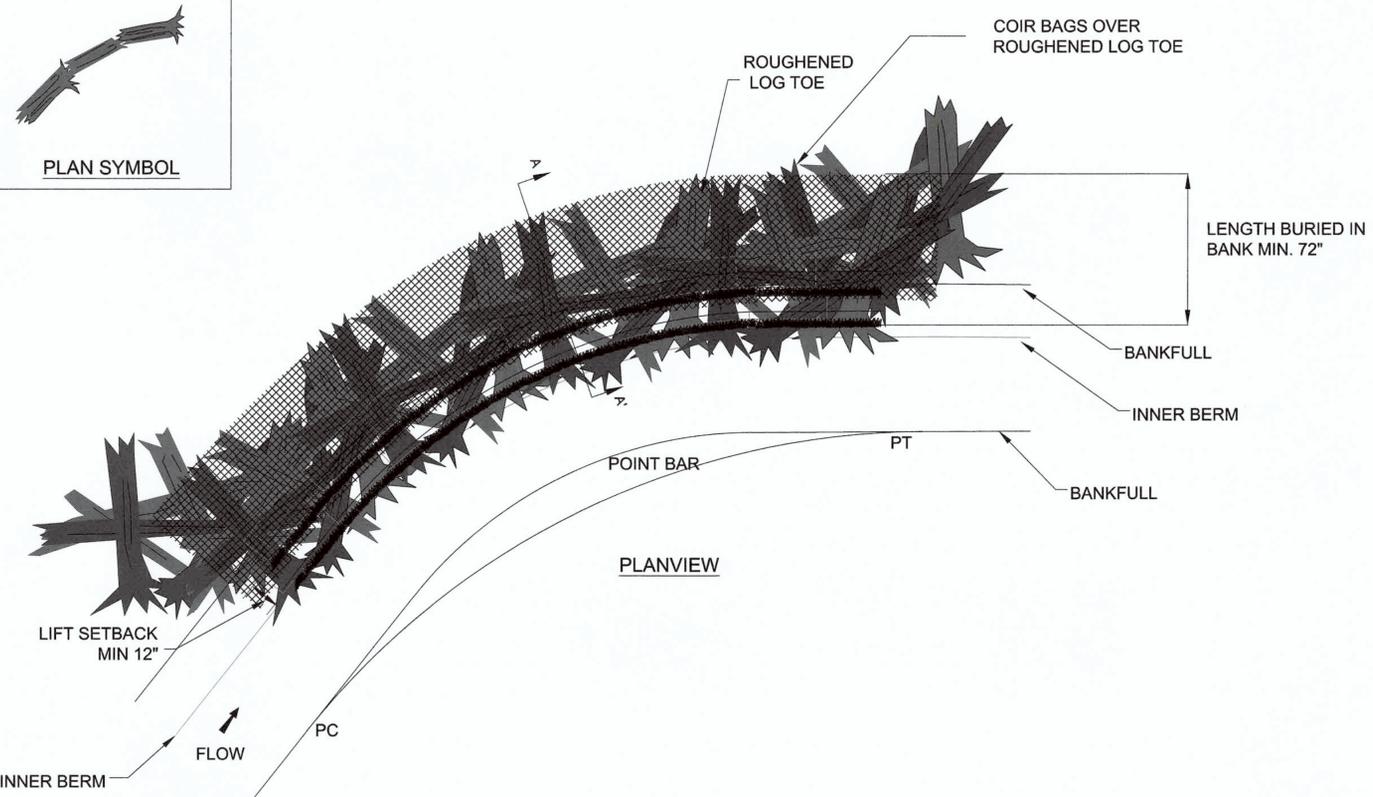
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**DETAILS -  
LOG VANE**

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DETAIL - ROUGHENED LOG TOE  
NOT TO SCALE

NOTES:

- THIS STRUCTURE PROVIDES PROTECTION TO THE BANKS OF NEWLY CONSTRUCTED STREAM CHANNELS. WOODY DEBRIS OF ALL SIZES CAN BE USED IN THE CONSTRUCTION OF THIS STRUCTURE. THE STABILITY OF THE LOWER PORTION OF THE STREAMBANK IS CRITICAL TO THE SUCCESS OF THE PROJECT.
- ALL MATERIALS INCLUDING COARSE/LARGE WOODY DEBRIS CONSISTS OF LOGS, ROOTWADS, AND LARGE BRANCHES, ARE TO BE APPROVED BY THE ENGINEER.
- A TRENCH SHALL BE EXCAVATED ALONG THE OUTER BANK OF THE POOL. THE ELEVATION OF THE TRENCH SHALL BE 6" BELOW MAX. POOL DEPTH.
- COARSE/LARGE WOODY DEBRIS SHALL BE INSTALLED IN THE TRENCH WITH THE LARGEST MATERIAL PLACED FIRST. THE LOGS OR WOOD MATERIAL SHALL BE PLACED PERPENDICULAR TO THE FLOW OF WATER. LOGS SHALL BE PLACED IN A CROSSING PATTERN OR WEAVE SUCH THAT EACH LOG/BRANCH IS ANCHORED BY ANOTHER LOG/BRANCH. THE COARSE/LARGE WOODY DEBRIS SHALL BE INSTALLED TO A HEIGHT OF 3/4 OF THE FINISHED HEIGHT OF THE WOODY DEBRIS WITH THE FINE/SMALL WOODY DEBRIS MAKING UP THE REMAINING 1/4 OF THE TOTAL HEIGHT.
- FINE/SMALL WOODY DEBRIS CONSISTS OF MEDIUM TO SMALL LIMBS, BRANCHES, BUSHES, AND/OR SMALL LOGS. INVASIVE SPECIES SHALL NOT BE USED. ALL MATERIALS ARE TO BE APPROVED BY THE ENGINEER.
- FINE/SMALL WOODY DEBRIS SHALL BE PLACED ON TOP OF THE COARSE/LARGE WOODY DEBRIS WITH THE LARGEST MATERIAL BEING PLACED FIRST AND THE SMALLEST MATERIAL PLACED LAST. THE FINE WOODY DEBRIS SHALL BE INSTALLED TO AN ELEVATION EQUAL TO THE INVERT OF THE DOWNTREAM RIFFLE.
- ALL WOODY DEBRIS SHALL BE COMPACTED WITH THE EXCAVATOR BUCKET IN ORDER TO REDUCE THE PRESENCE OF VOIDS IN THE SMALL/FINE WOODY DEBRIS LAYER.
- SELECT BACKFILL/TOPSOIL SHALL BE INSTALLED ON TOP OF WOODY DEBRIS TO CREATE A LEVEL SUBSTRATE FOR THE COIR BAGS.
- COIR BAGS SHALL BE INSTALLED IN LAYERS SO THAT THE FINISHED ELEVATION OF THE LAST LAYER MATCHES THE SPECIFIED BANKFULL ELEVATION.
- THE SURFACE OF THIS STRUCTURE SHALL BE FINISHED TO A SMOOTH AND COMPACT SURFACE IN ACCORDANCE WITH THE LINES, GRADES, AND CROSS-SECTIONS OR ELEVATIONS SHOWN ON THE DRAWINGS.
- DRESSING OF CHANNEL AND BANKFULL BENCH/FLOODPLAIN WILL LIKELY BE REQUIRED FOLLOWING INSTALLATION OF BANK STRUCTURES AND SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION.
- LIVE STAKES SHALL BE PACIFIC NORTHWEST SPECIES AND APPROVED BY THE ENGINEER. LIVE STAKES SHALL BE 2-3' LONG AND A MIN. OF 1" IN DIAMETER AND INSTALLED WITH 2/3 OF THE LENGTH BELOW GROUND WITH A MINIMUM OF 2 BUD SCARS BELOW THE GROUND AND 2 ABOVE GROUND.
- LIVE STAKES SHALL BE PLACED ON THE SLOPE FROM THE INNER BERM TO HALF BANK FULL HEIGHT.
- WOOD STAKES SHALL BE 1" X 2" AND A MINIMUM OF 18" LONG. WOODEN STAKES SHALL BE INSTALLED THROUGH BOTH LAYERS OF COIR BAGS AT A SPACING 1 PER 3'.
- COIR BAGS SHALL CONSIST OF 7 OUNCE COIR FIBER AND HAVE MINIMUM DIMENSIONS OF 26 INCHES LONG AND 14 INCHES WIDE. THE COIR BAGS SHALL BE FILLED WITH 2.5-INCH-MINUS WELL-GRADED RIVER ROCK. EACH COIR BAG SHOULD BE LIMITED TO 50 POUNDS OF MATERIAL.
- LOGS AND WOODY MATERIAL SHALL BE HARVESTED FROM PACIFIC NORTHWEST TREE SPECIES SUCH AS DOUGLAS FIR, WESTERN RED CEDAR, OR AN ENGINEER-APPROVED ALTERNATIVE.

CITY OF ARLINGTON  
CONSTRUCTION DRAWING REVIEW APPROVAL  
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BY: *Nova Heaton*  
Nova Heaton, PE, Development Services Manager  
DATE: 6/22/21 THIS APPROVAL IS VALID FOR 18 MONTHS

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*Joshua Allen*  
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Project Title:  
**EDGEComb CREEK  
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Sheet Title:  
**DETAILS -  
ROUGHENED LOG  
TOE**

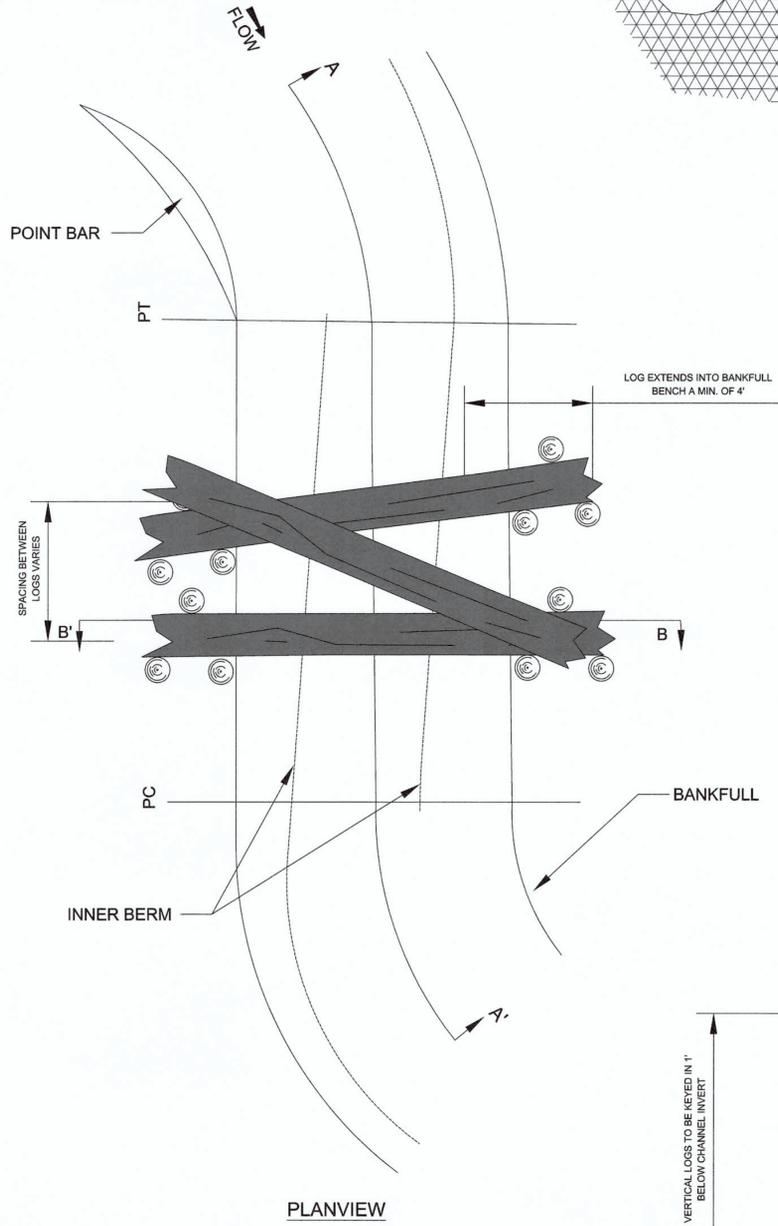
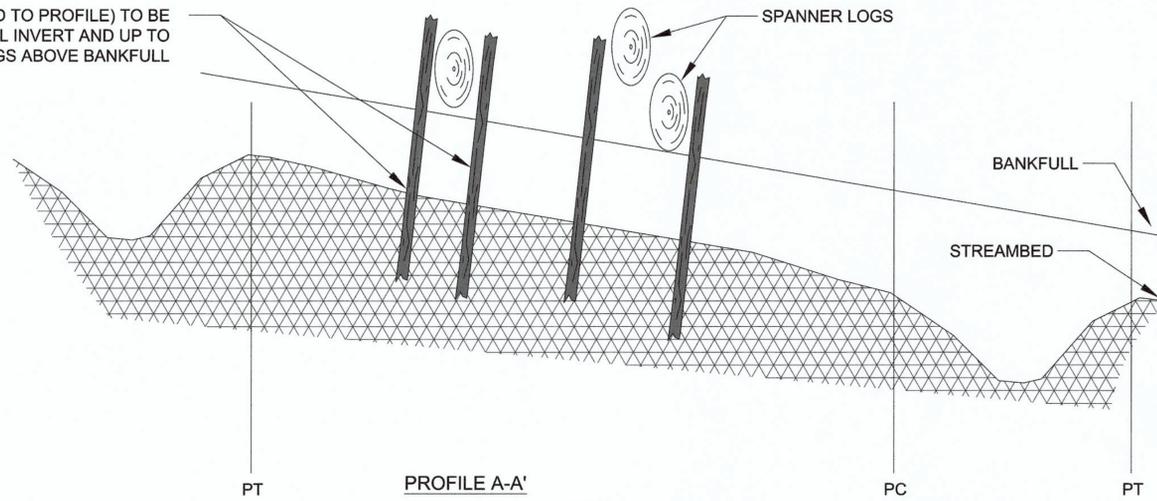
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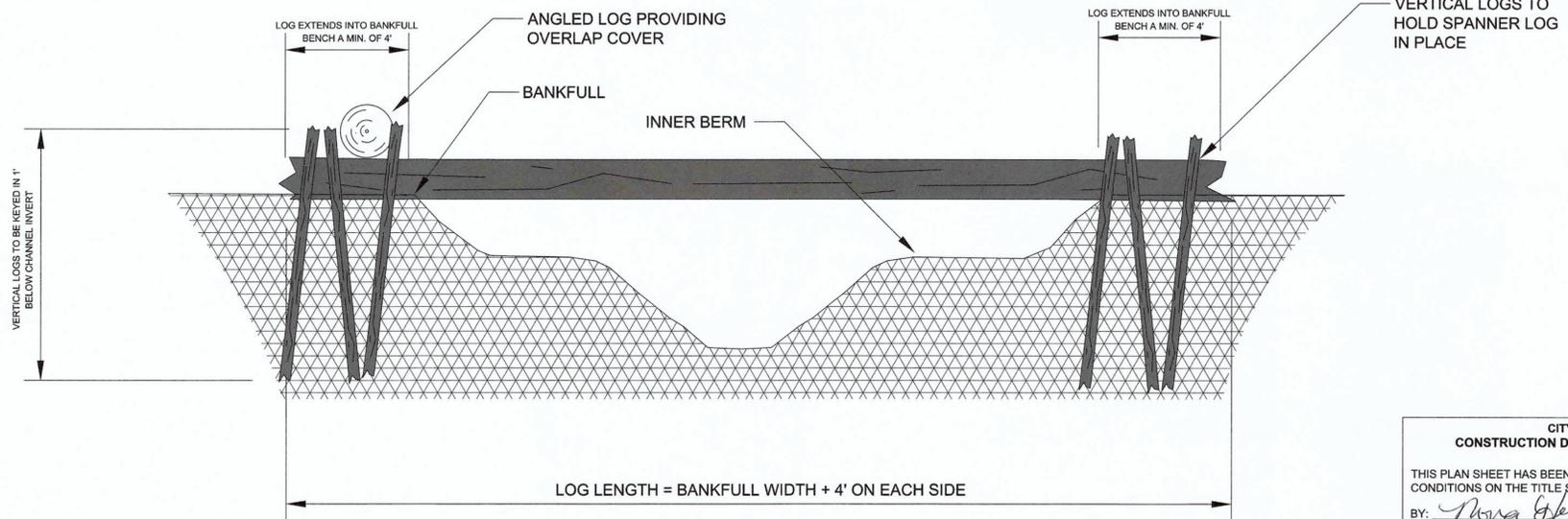


VERTICAL LOGS (PROJECTED TO PROFILE) TO BE KEYPED IN 1' BELOW CHANNEL INVERT AND UP TO LOGS ABOVE BANKFULL



NOTES:

1. SPANNER LOGS SHALL BE USED FOR ENHANCEMENT OF HABITAT WITHIN THE STREAM CORRIDOR. THE WOODY DEBRIS WILL PROVIDE SUNNING AREAS FOR REPTILES AND AMPHIBIANS, LOAFING SITES FOR WATERFOWL, AND COVER FOR AQUATIC SPECIES.
2. SPANNER LOGS SHALL CONSIST OF CLEARED OR CUT TREES. TREES USED FOR SHALL HAVE A MINIMUM TRUNK DIAMETER OF 12 INCHES AND BE FREE OF ROT OR DECAY. WOODY DEBRIS WITH ROOT WADS ATTACHED ARE DESIRABLE. HOWEVER, SAW CUT TREES ARE ALSO ACCEPTABLE.
3. SPANNER LOG PLACEMENT
  - 3.1. WHEN PLACED, THE MAIN TRUNK OF THE TREE SHOULD BE GENTLY SLOPED SO THAT WITH CHANGING WATER LEVELS, THE TREE WILL PROVIDE LOAFING AREAS FOR WILDLIFE MOST OF THE TIME.
  - 3.2. SEVERAL SMALLER TREES MAY BE USED IN LIEU OF A SINGLE LOG AS LONG AS THEY PROVIDE COVER FOR THE FULL HYDROLOGIC REGIME AS SHOWN IN THE DETAILS.
4. NO PART OF THE SPANNER LOG SHALL BE PLACED WITHIN THE BANKFULL CHANNEL.
5. THE VERTICAL LOGS SHALL HAVE A MINIMUM DIAMETER OF 6 INCHES.
6. LOGS AND WOODY MATERIAL SHALL BE HARVESTED FROM PACIFIC NORTHWEST TREE SPECIES SUCH AS DOUGLAS FIR, WESTERN RED CEDAR, OR AN ENGINEER-APPROVED ALTERNATIVE.
7. IF THE SPANNER LOG HAS A ROOT WAD AND EXTENDS ONTO THE BANKFULL BENCH BY MORE THAN 7 FEET ON EACH SIDE, THE VERTICAL LOGS ARE NOT NECESSARY.
8. LOCATION OF THE SPANNER LOGS CAN BE ADJUSTED IN THE FIELD TO MAXIMIZE THE AMOUNT OF COVER AND HABITAT PROVIDED BY THE STRUCTURE.



DETAIL - SPANNER LOG  
NOT TO SCALE

**CITY OF ARLINGTON  
CONSTRUCTION DRAWING REVIEW APPROVAL**

THIS PLAN SHEET HAS BEEN REVIEWED AND APPROVED PER THE CONDITIONS ON THE TITLE SHEET.

BY: *Nova Heaton*  
Nova Heaton, PE, Development Services Manager

DATE: 4/22/21 THIS APPROVAL IS VALID FOR 18 MONTHS

Prepared by:  
**SWCA**  
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Project Title:  
**EDGEComb CREEK  
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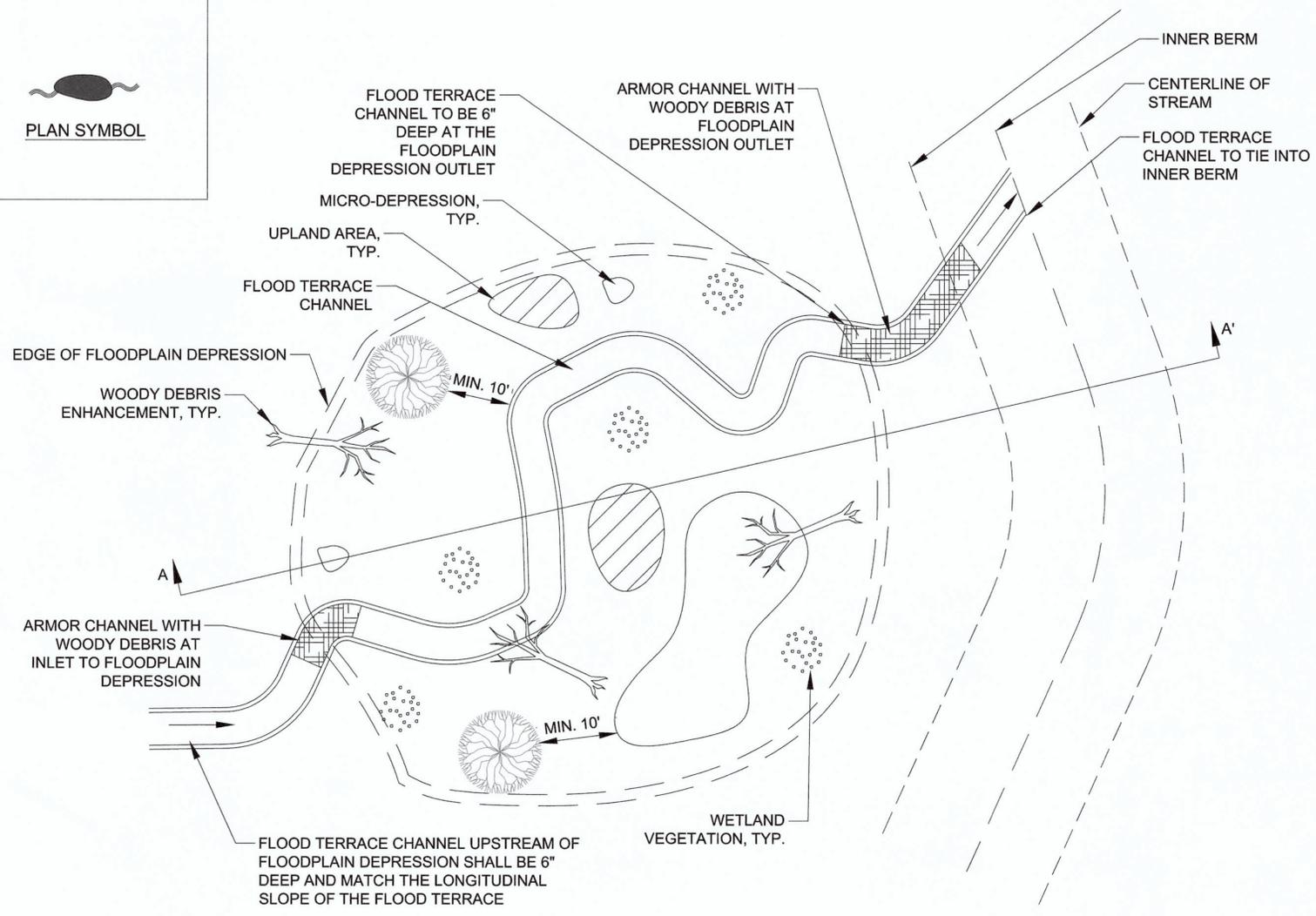
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**DETAILS -  
SPANNER LOG**

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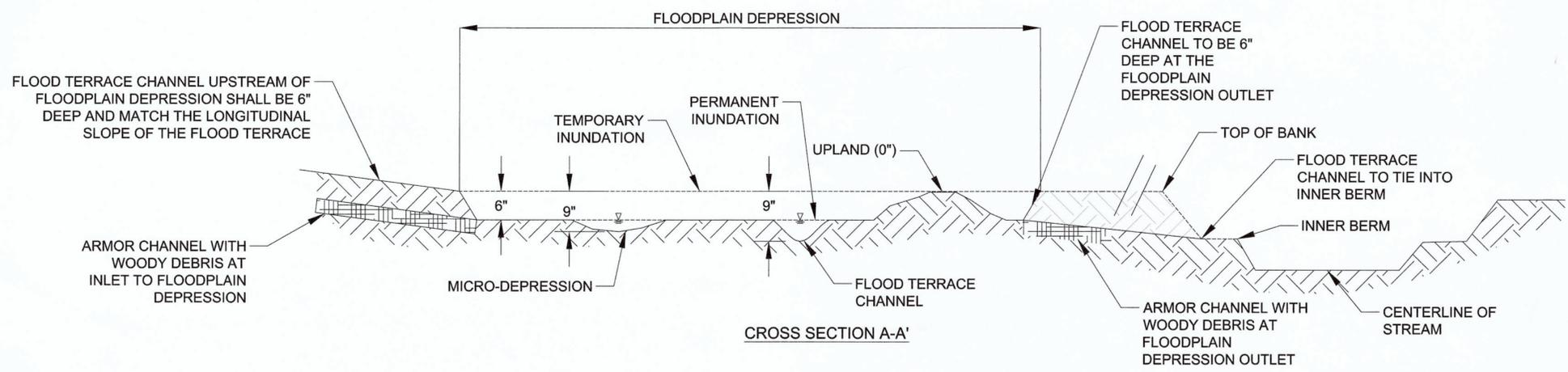
PLAN SYMBOL



PLAN VIEW

NOTES:

1. MICRO-DEPRESSIONS AND UPLAND AREAS ARE INTENDED TO INCREASE THE VARIABILITY OF WETLAND HABITAT WITHIN THE FLOODPLAIN DEPRESSION.
2. FLOODPLAIN DEPRESSIONS SHALL BE LOCATED AND SIZED PER THE PROJECT PLAN SHEETS.
3. ALL SIDE SLOPES ASSOCIATED WITH THE FLOODPLAIN DEPRESSION SHALL BE NO GREATER THAN 4:1.
4. THE FLOOD TERRACE CHANNEL SHALL BE LOCATED AND SIZED PER THE PROJECT PLAN SHEETS. THE FLOOD TERRACE CHANNEL SHALL HAVE NO SLOPE THROUGH THE FLOODPLAIN DEPRESSION.
5. THE FLOODPLAIN DEPRESSIONS ARE TO BE PLANTED PER THE PLANTING PLAN PREPARED BY SOUNDVIEW CONSULTANTS, LLC.
6. MICRO-DEPRESSIONS AND UPLAND AREAS ARE TO BE CREATED THROUGHOUT THE FLOODPLAIN DEPRESSION IN A RANDOM PATTERN. THERE SHOULD BE NO MICRO-DEPRESSIONS OR FLOOD TERRACE CHANNELS EXCAVATED WITHIN 10' OF THE DRIP LINE OF ANY PLANTED TREES.



DETAIL - FLOODPLAIN DEPRESSION

NOT TO SCALE

**CITY OF ARLINGTON  
CONSTRUCTION DRAWING REVIEW APPROVAL**

THIS PLAN SHEET HAS BEEN REVIEWED AND APPROVED PER THE CONDITIONS ON THE TITLE SHEET.

BY: *[Signature]*  
Nova Heaton, PE, Development Services Manager

DATE: 6/22/21 THIS APPROVAL IS VALID FOR 18 MONTHS

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Prepared for:  
**NorthPoint**  
DEVELOPMENT

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Project Title:  
**EDGE COMB CREEK  
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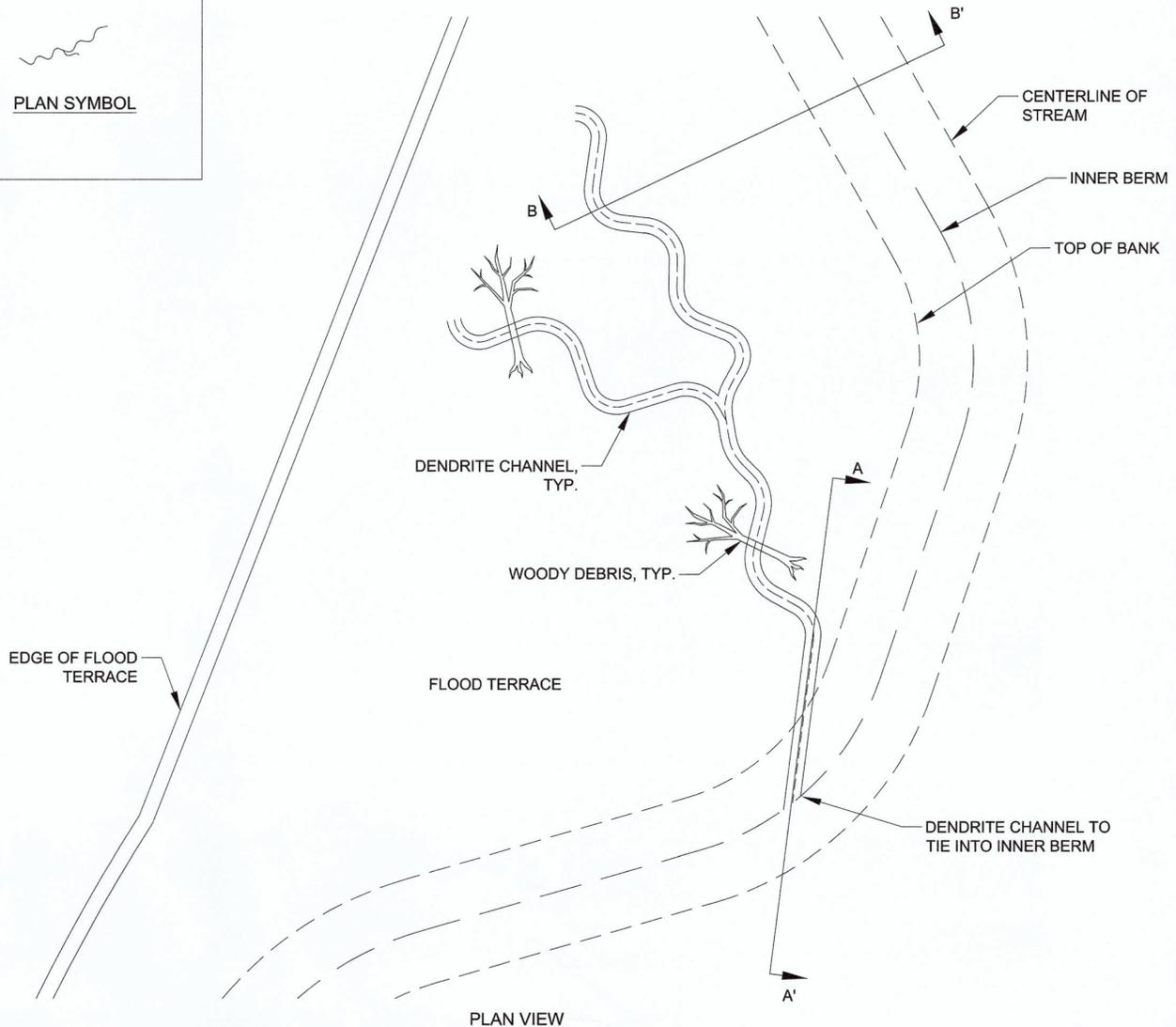
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**DETAILS -  
FLOODPLAIN  
DEPRESSION**

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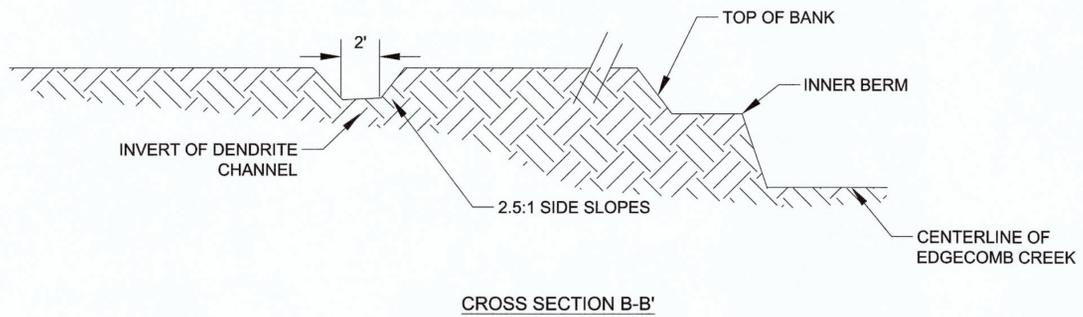
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PLAN SYMBOL

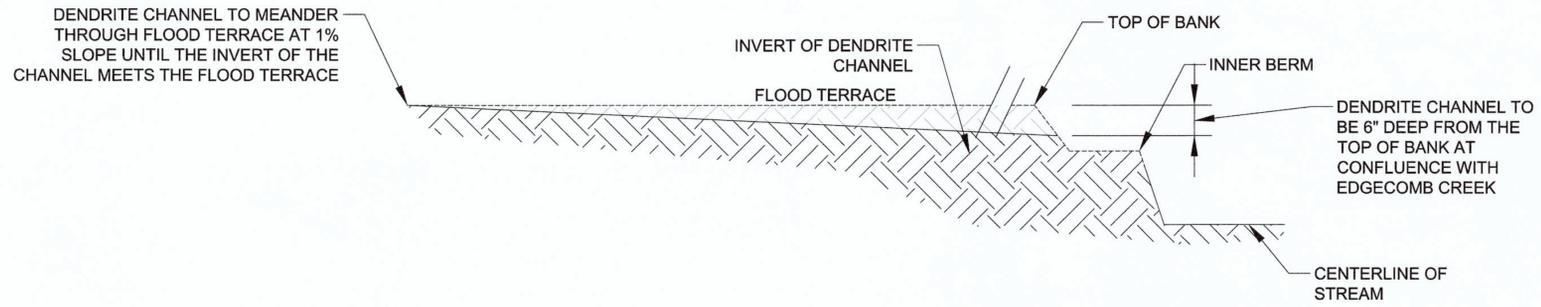


NOTES:

1. DENDRITE CHANNELS ARE INTENDED TO INCREASE THE VARIABILITY OF HABITAT WITHIN THE FLOODPLAIN TERRACE.
2. DENDRITE CHANNELS SHALL BE LOCATED AND SIZED PER THE PROJECT PLAN SHEETS.
3. DENDRITE CHANNELS SHALL HAVE A 1% LONGITUDINAL SLOPE, AND TERMINATE WHEN THE INVERT ELEVATION OF THE CHANNEL IS EQUAL WITH THE FLOOD TERRACE ELEVATION.
4. THE DENDRITE CHANNELS SHALL HAVE A BOTTOM WIDTH OF 2 FEET AND SIDE SLOPES OF 2.5:1.
5. THE DENDRITE CHANNELS ARE TO BE PLANTED IN ACCORDANCE WITH THE PLANTING PLAN.
6. SPANNER LOGS AND OTHER WOODY DEBRIS SHALL BE PLACED IN AND AROUND THE DENDRITE CHANNELS IN A RANDOM PATTERN.
7. WOODY DEBRIS SHALL BE PLACED IN ACCORDANCE WITH THE FLOOD TERRACE WOODY DEBRIS DETAIL ON SHEET 51.



CROSS SECTION B-B'



CROSS SECTION A-A'

DETAIL - DENDRITE CHANNEL

NOT TO SCALE

**CITY OF ARLINGTON  
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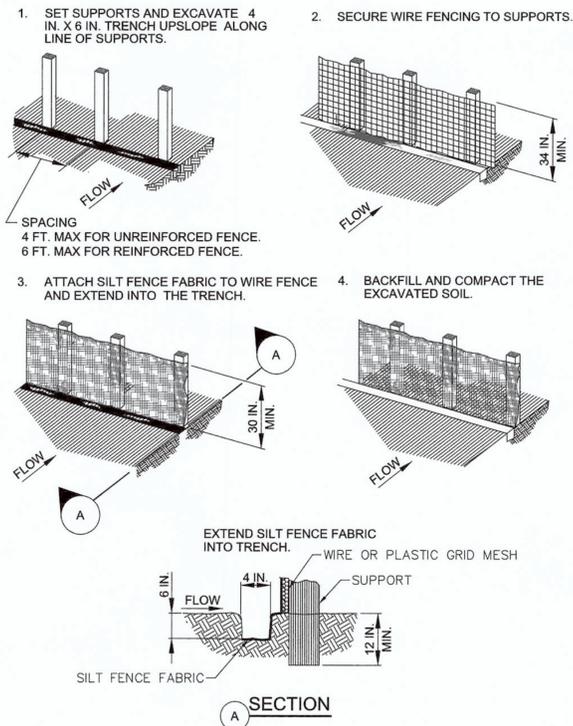
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**DETAILS -  
DENDRITE  
CHANNEL**

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Checked by:	JCA
File #	

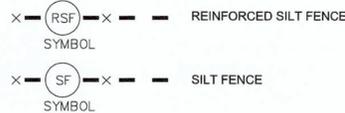
REVISIONS		
Date:	By:	Note:
09/30/20	JYZ	30% DESIGN
10/21/20	BPW	30% REVISION
12/04/20	JYZ	60% DESIGN
12/09/20	JYZ	60% REVISION
02/12/21	JYZ	90% DESIGN
03/26/21	JYZ	100% DESIGN

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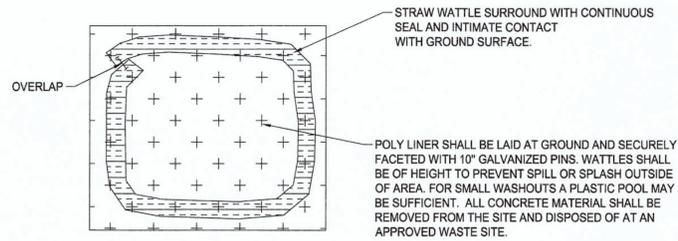


**CONSTRUCTION NOTES:**

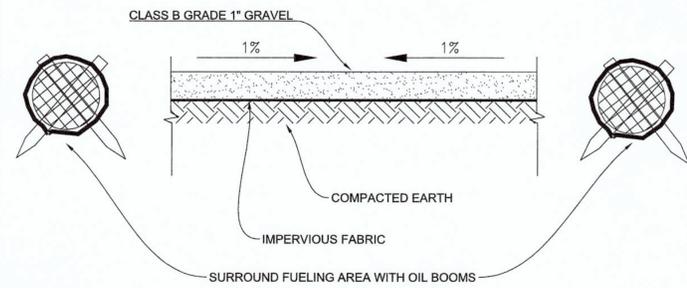
- SEE SPECIFICATION SECTION NO. 02361-SILT FENCES.



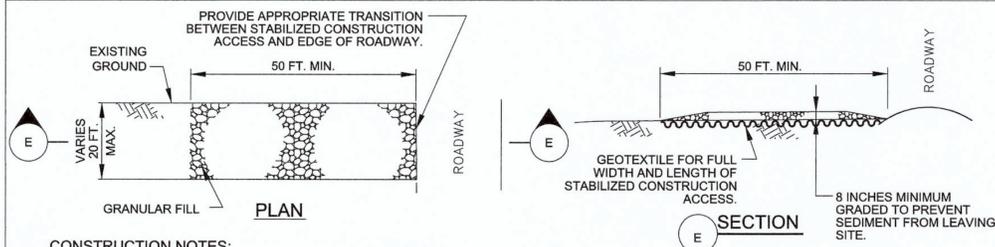
**SILT FENCE**



**CONCRETE WASH OUT**



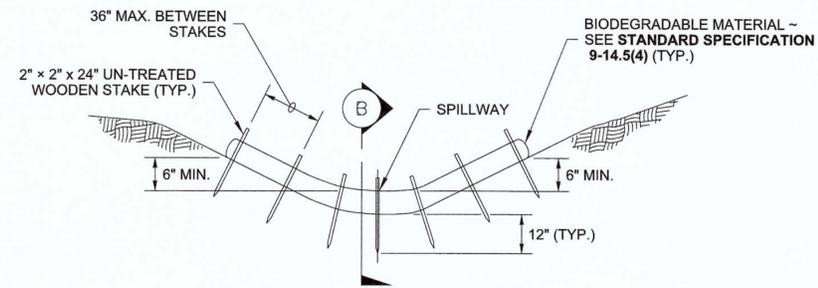
**FUELING AREA BMP**



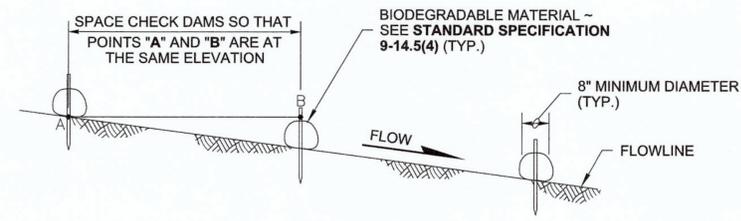
**CONSTRUCTION NOTES:**

- SEE SPECIFICATION SECTION NO. 02365-STABILIZED CONSTRUCTION ACCESS.

**STABILIZED CONSTRUCTION ACCESS**



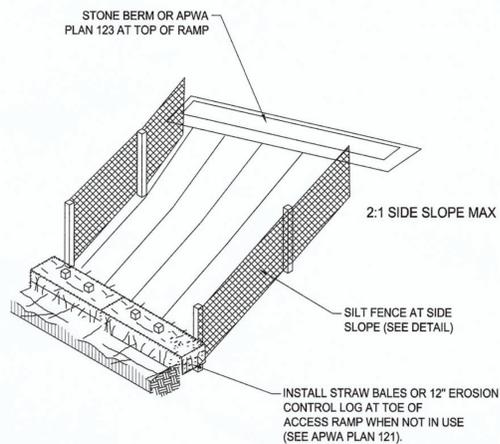
**TYPICAL CHANNEL SECTION**



**CHANNEL PROFILE ~ SECTION B**

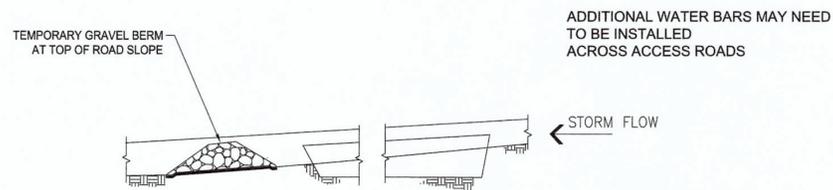
**NOTES:**

- CHECK DAMS SHALL MEET THE REQUIREMENTS OF STANDARD SPECIFICATIONS 8-01.3(6) AND 9-14.5(4).
- IN CHANNELS, INSTALL THE SLOPED ENDS OF THE CHECK DAM A MINIMUM OF 8" HIGHER THAN THE SPILLWAY TO ENSURE WATER FLOWS OVER THE DAM AND NOT AROUND IT.
- PERFORM MAINTENANCE IN ACCORDANCE WITH STANDARD SPECIFICATION 8-01.3(15).
- REMOVE CHECK DAMS IN ACCORDANCE WITH STANDARD SPECIFICATION 8-01.3(16).
- BIODEGRADABLE CHECK DAMS MAY NEED ADDITIONAL OR MODIFIED STAKING TO PREVENT UNDERCUTTING OR SCOURING.

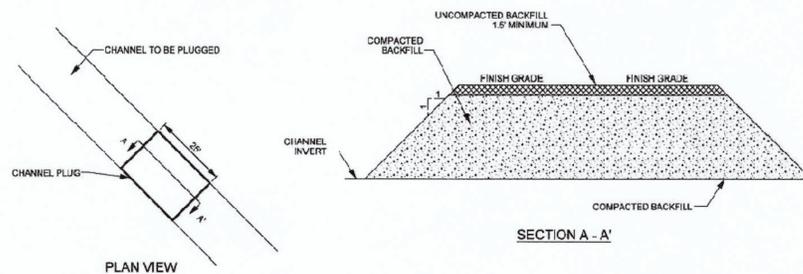


NOTE: USE ON ALL STEEP SLOPE ACCESS POINTS AND FOR CHANNEL ACCESS.

**STREAM ACCESS RAMP BMP**



**TOP OF ROAD SLOPE BMP**



**CHANNEL PLUG**

Prepared by:



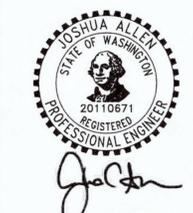
Operating in North Carolina as SWCA Environmental Consulting and Engineering of NC, PC

116 Alexandria Drive  
Mooresville, NC 28115  
(p) 919.624.1458

Prepared for:



Stamp:



Digitally signed on 5/21/2021

Project Title:

**EDGECOMB CREEK  
100% DESIGN**

Sheet Title:

**DETAILS -  
SWPPP (1)**

Date:	04/08/2021
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03/26/21	JYZ	100% DESIGN

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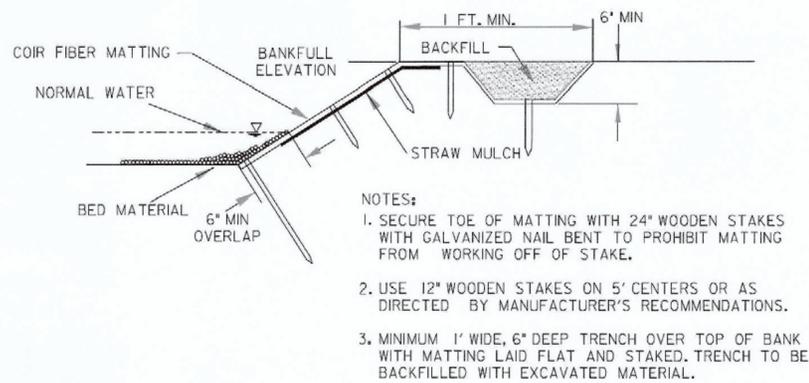
**CITY OF ARLINGTON  
CONSTRUCTION DRAWING REVIEW APPROVAL**

THIS PLAN SHEET HAS BEEN REVIEWED AND APPROVED PER THE CONDITIONS ON THE TITLE SHEET.

BY: *Nova Heaton*  
Nova Heaton, PE, Development Services Manager

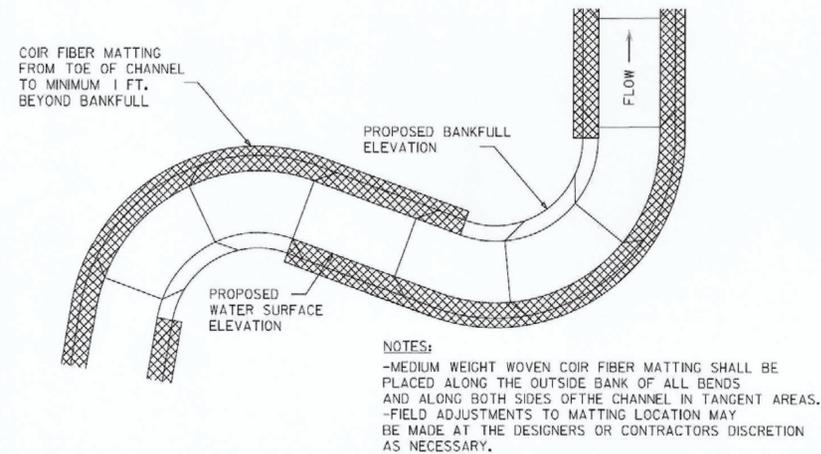
DATE: 6/22/21 THIS APPROVAL IS VALID FOR 18 MONTHS

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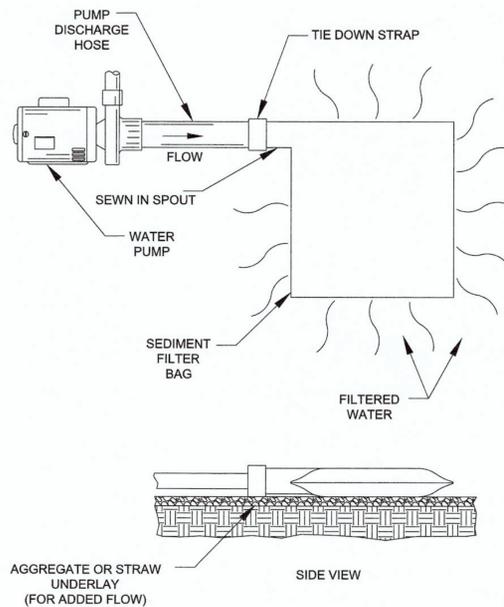
**COIR MATTING CROSS SECTION**

- NOTES:
1. SECURE TOE OF MATTING WITH 24\"/>



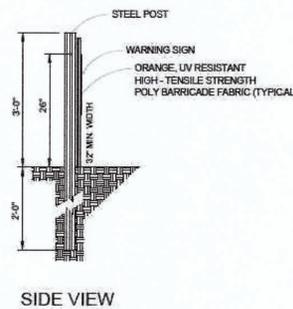
**TYPICAL MATTING LOCATION**

- NOTES:
- MEDIUM WEIGHT WOVEN COIR FIBER MATTING SHALL BE PLACED ALONG THE OUTSIDE BANK OF ALL BENDS AND ALONG BOTH SIDES OF THE CHANNEL IN TANGENT AREAS.
  - FIELD ADJUSTMENTS TO MATTING LOCATION MAY BE MADE AT THE DESIGNER'S OR CONTRACTOR'S DISCRETION AS NECESSARY.

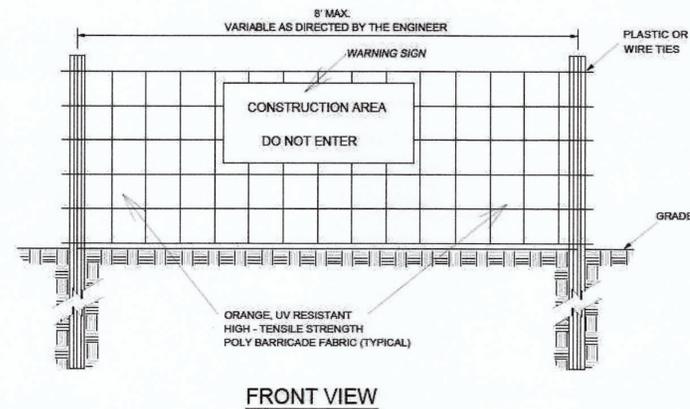


**SEDIMENT FILTER BAG**

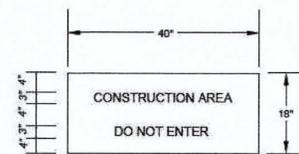
- NOTE:
1. ALL STRUCTURAL SEAMS SHALL BE SEWN WITH A DOUBLE STITCH USING A DOUBLE NEEDLE MACHINE WITH HIGH STRENGTH THREAD.
  2. DISCHARGE FROM THE SEDIMENT FILTER BAG SHALL BE DIRECTED SUCH THAT PRE-DISTURBANCE HYDROLOGY IS NOT CHANGED.
  3. TRANSPORT AND PLACE THE SEDIMENT FILTER BAG WITH CARE TO PREVENT RIPPING OR TEARING THE FABRIC.
  4. AVOID INSTALLING ON STEEP SLOPES AS THE BAG MAY ROLL, CAUSING FAILURE.
  5. INSERT THE DISCHARGE HOSE A MINIMUM OF 1-FOOT INSIDE THE SEDIMENT FILTER BAG. DO NOT INSERT MORE THAN ONE DISCHARGE HOSE INTO THE BAG.
  6. AVOID USE OF EXCESSIVE FLOW RATES OR OVERFILLING THE BAG. THIS MAY CAUSE THE BAG TO RUPTURE OR CAUSE FAILURE TO THE HOSE TO BAG CONNECTION.
  7. SEDIMENT BAG SHALL BE LOCATED AT LEAST 100 FEET FROM ANY JURISDICTIONAL OR DRAINAGE FEATURE.



**SIDE VIEW**



**FRONT VIEW**



**WARNING SIGN DETAIL**

- NOTES:
1. WARNING SIGNS TO BE MADE OF DURABLE, WEATHERPROOF MATERIAL.
  2. LETTERS TO BE 3\"/>

**CONSTRUCTION FENCE**

**CITY OF ARLINGTON  
CONSTRUCTION DRAWING REVIEW APPROVAL**

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BY: *Nova Heaton*  
Nova Heaton, PE, Development Services Manager

DATE: 4/22/21 THIS APPROVAL IS VALID FOR 18 MONTHS

Prepared by:  
**SWCA**  
ENVIRONMENTAL & ENGINEERING  
Operating in North Carolina as  
SWCA Environmental Consulting  
and Engineering of NC, PC  
116 Alexandria Drive  
Mooresville, NC 28115  
(p) 919.624.1458

Prepared for:  
**NorthPoint**  
DEVELOPMENT

Stamp:



Digitally signed on 5/21/2021

Project Title:

**EDGECOMB CREEK  
100% DESIGN**

Sheet Title:

**DETAILS -  
SWPPP (2)**

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**50 OF 51**

