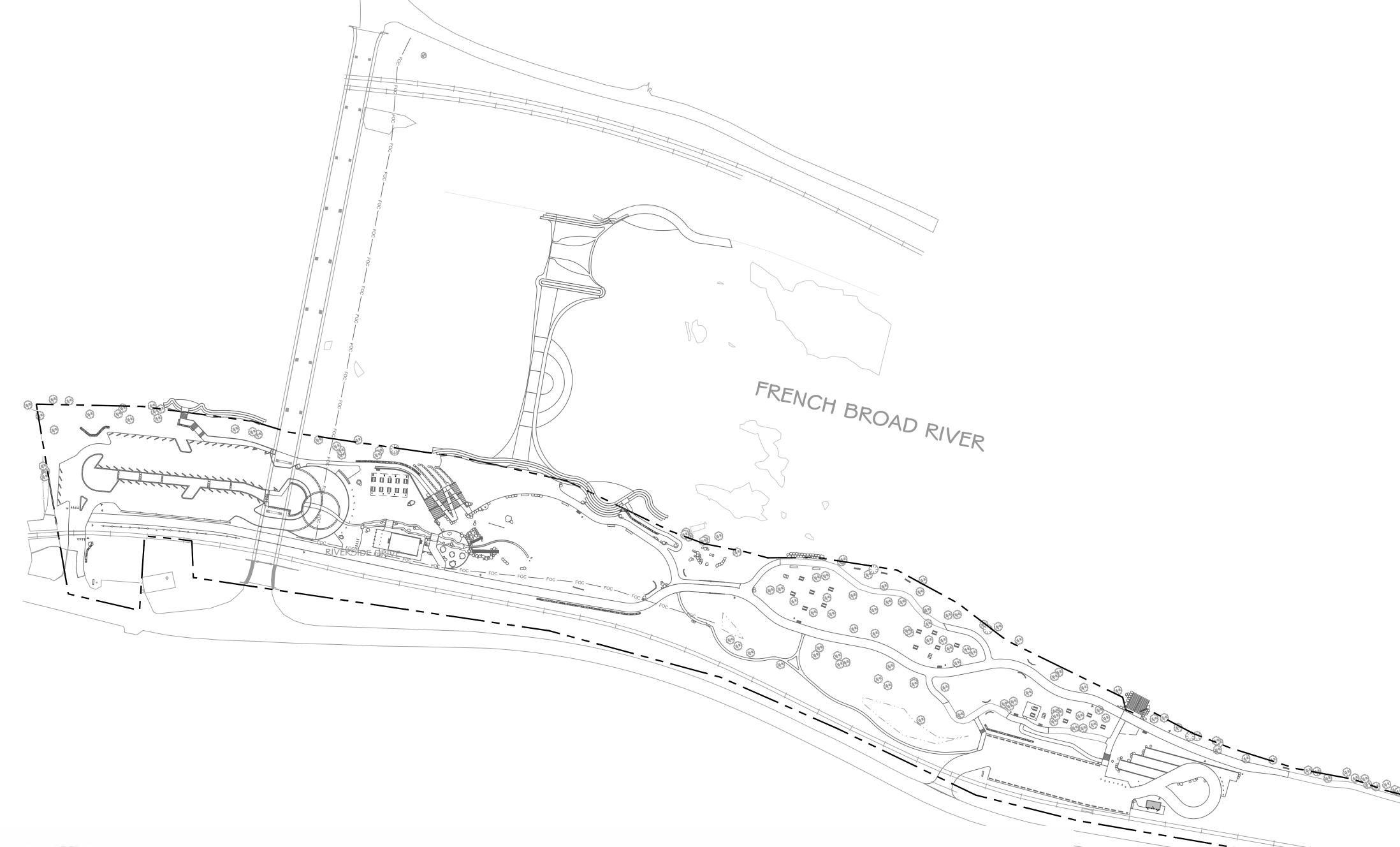


RIVERSIDE PARK

CONSTRUCTION DOCUMENTS

ISSUED FOR PERMITTING, NOT FOR CONSTRUCTION



.ac:



CLIENT/OWNER:

Town of Woodfin 90 Elk Mountain RD. Woodfin, NC 28804 (828) 253-4887



LANDSCAPE ARCHITECT: Equinox

37 Haywood Street, Suite 100 Asheville, NC 28801 (828) 253-6856 (x202) david@equinoxenvironmental.com ADDRESS: 1598 Riverside Dr. Asheville, NC 28804

Latitude: 35.627678° N Longitude: - 82.600733° W

PROJECT SIZE:
Approximately 9.15 Ac Total
Disturbance area is 8.31 Ac

All aspects of work shall be performed in accordance with all applicable local, state, and federal regulations pertaining to worker safety.

SHEETS INCLUDED IN THIS SET:

LANDSCAPE ARCHITECTURE

- LO- PROJECT INFORMATION
- L1- SITE PLAN
- L2- SITE PREPERATION
- L3- LAYOUT PLAN
- L4- MATERIAL PLAN
 - SIGNAGE & WAYFINDING
- L5- GRADING & DRAINAGE
- L6- STORMWATER PLAN
- L7- PLANTING PLAN
- L8- DETAILS
- EC- EROSION CONTROL PLAN

STRUCTURAL ENGINEERING

S-STRUCTURAL PLAN

CIVIL ENGINEERING

C- WATER & SEWER LAYOUT PLAN

ELECTRICAL ENGINEERING

E- ELECTRICAL LAYOUT PLAN

PLUMBING

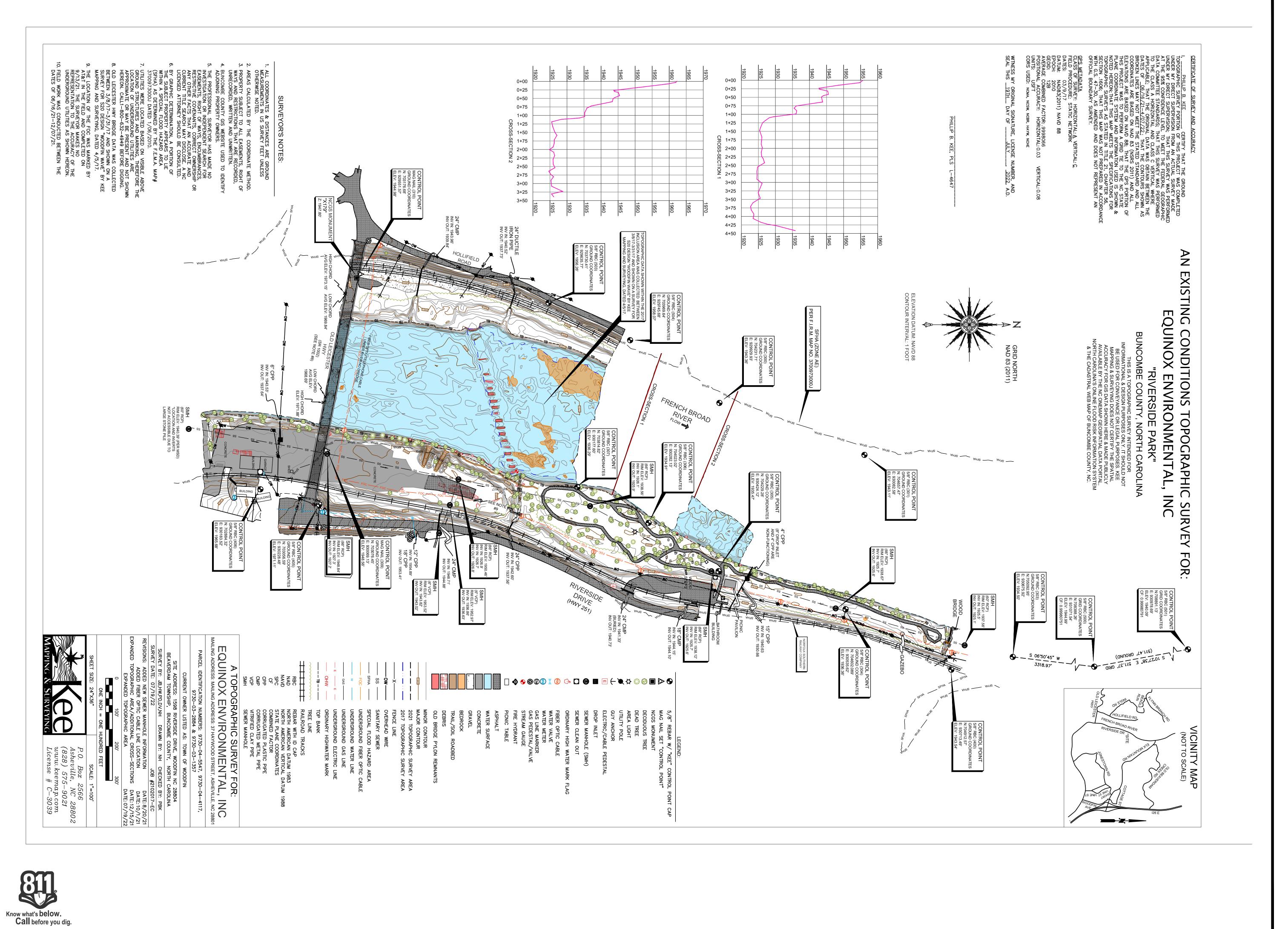
P- PLUMBING PLAN AND DETAILS

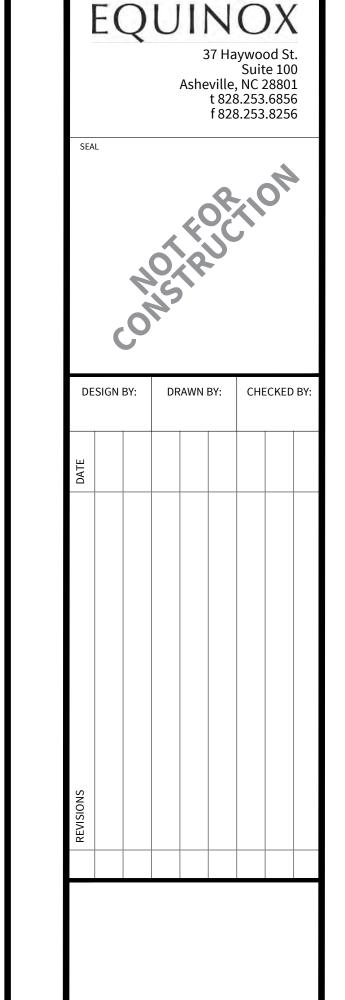
ARCHITECTURE

- A1- PLANS
- A2- ELEVATIONS
- A3- SECTIONS
- A5- DETAILS
- A6- FINISH SCHEDULE
- PE- STRUCTURE PLUMBING & ELECTRICAL





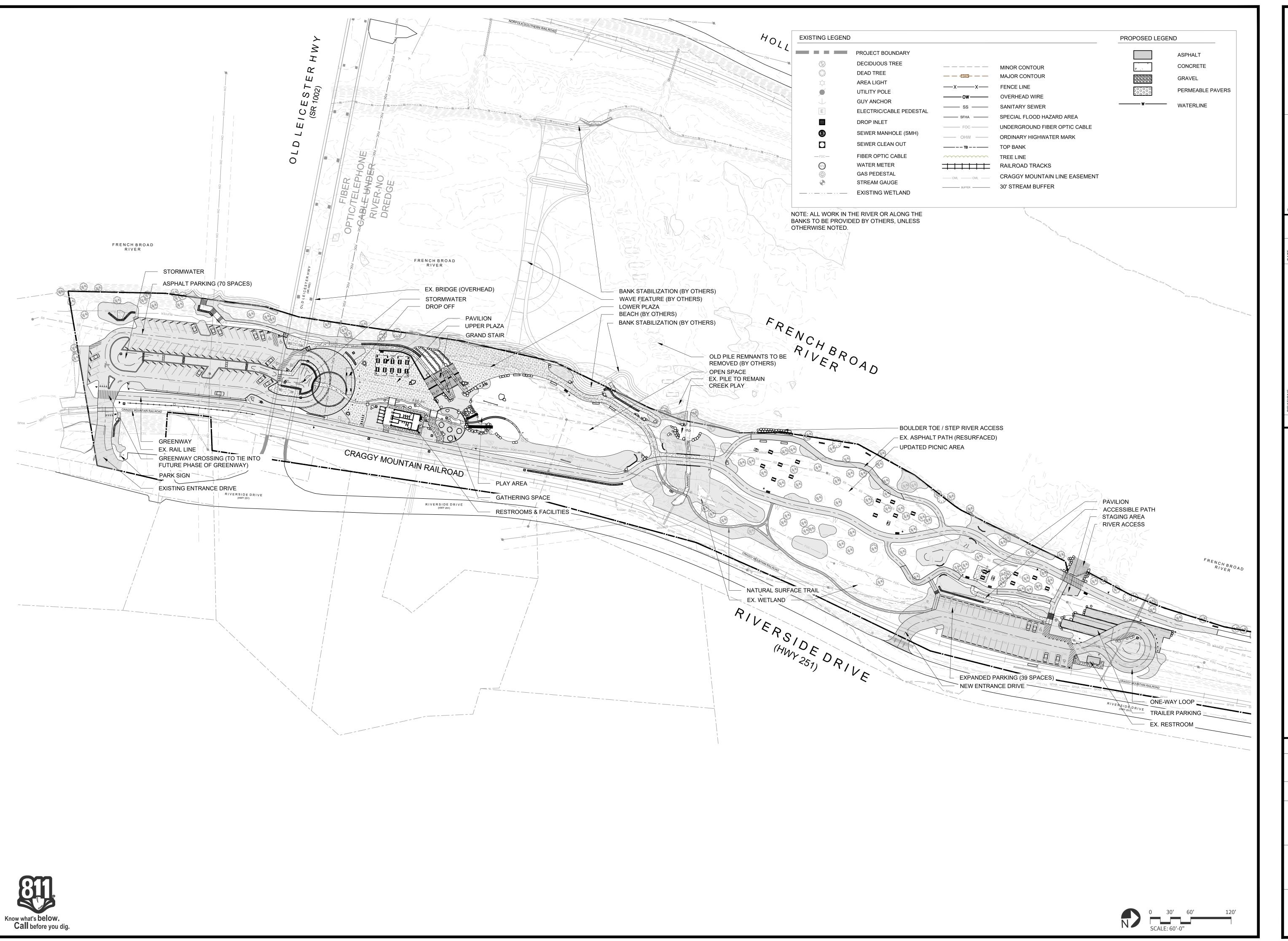


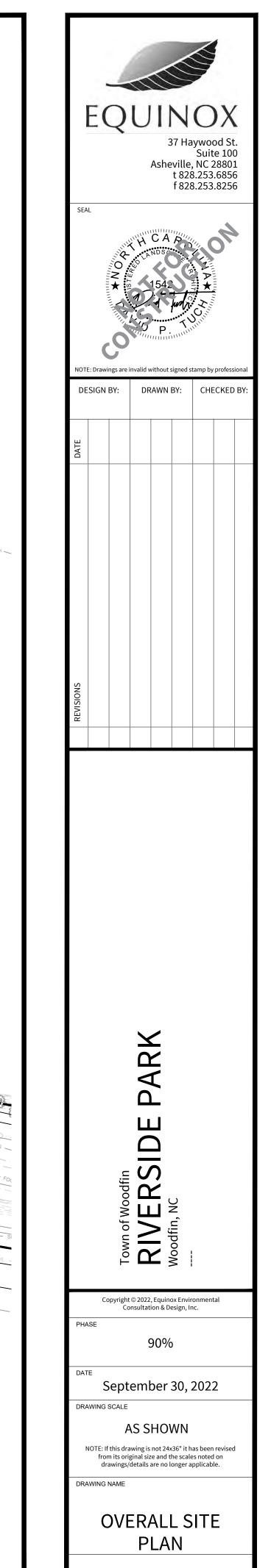


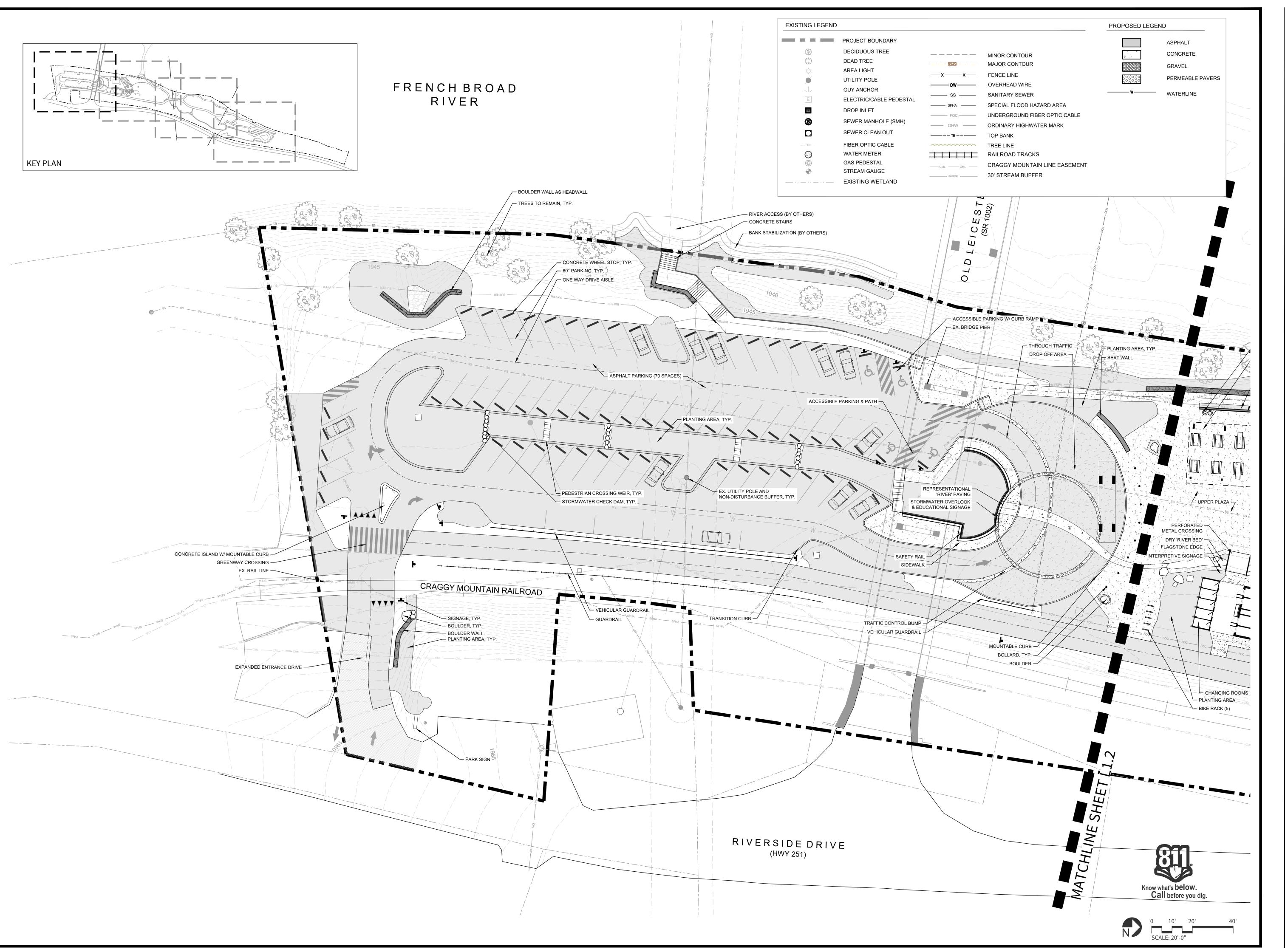
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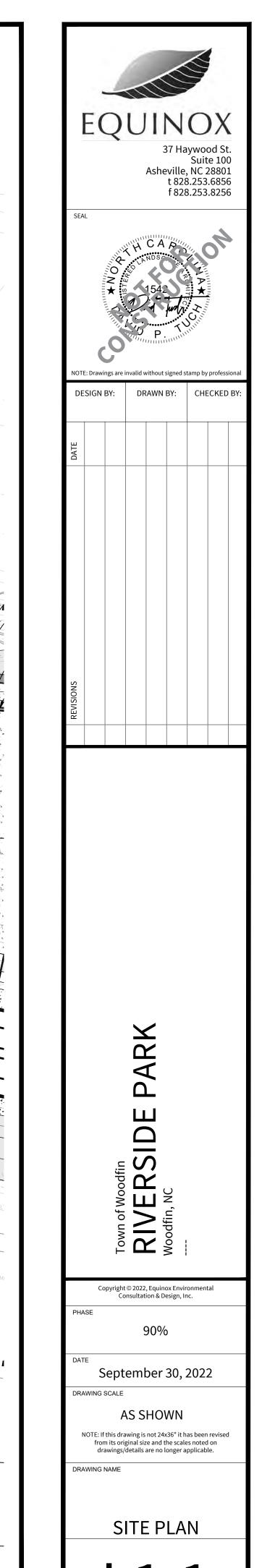
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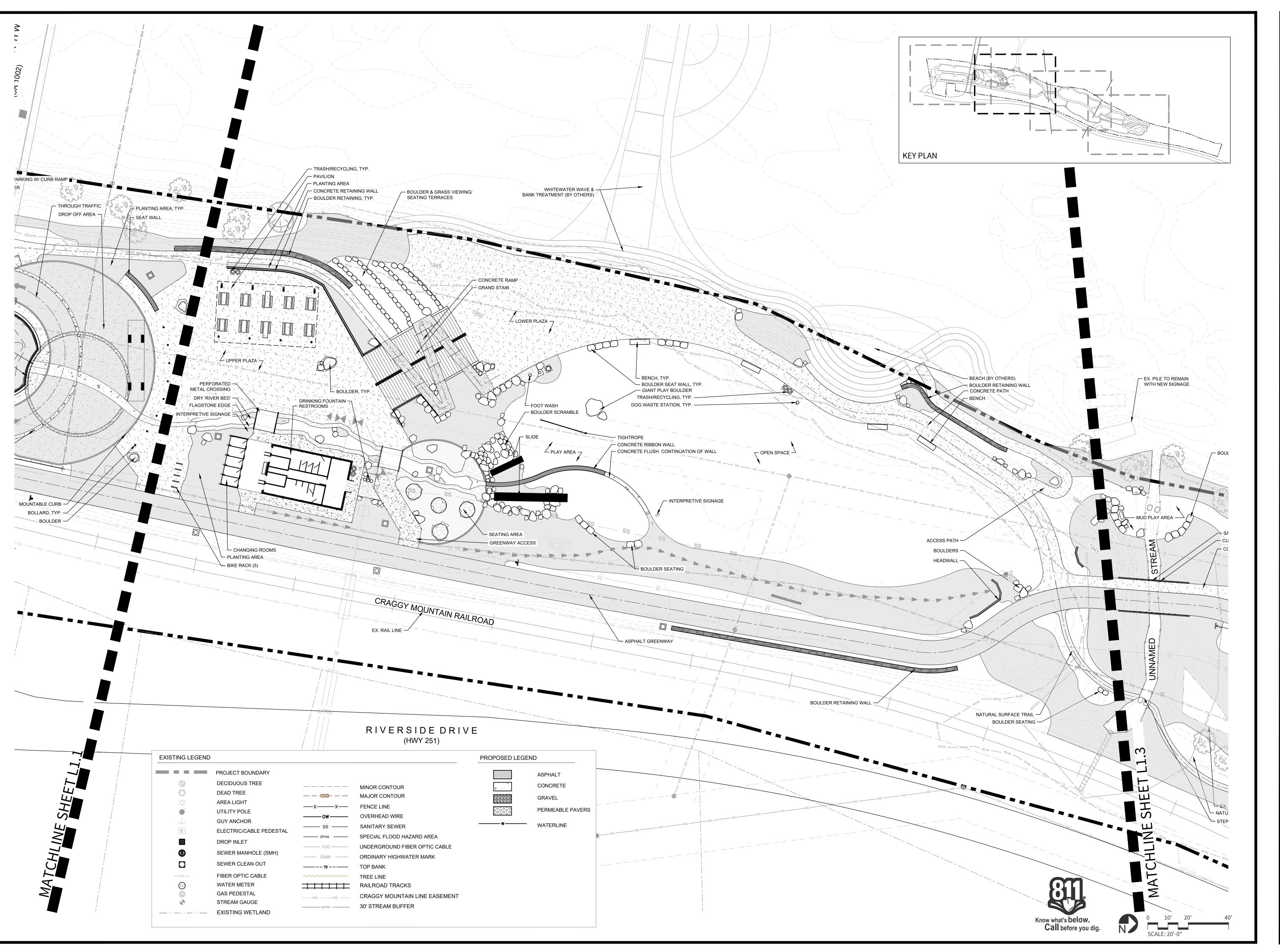
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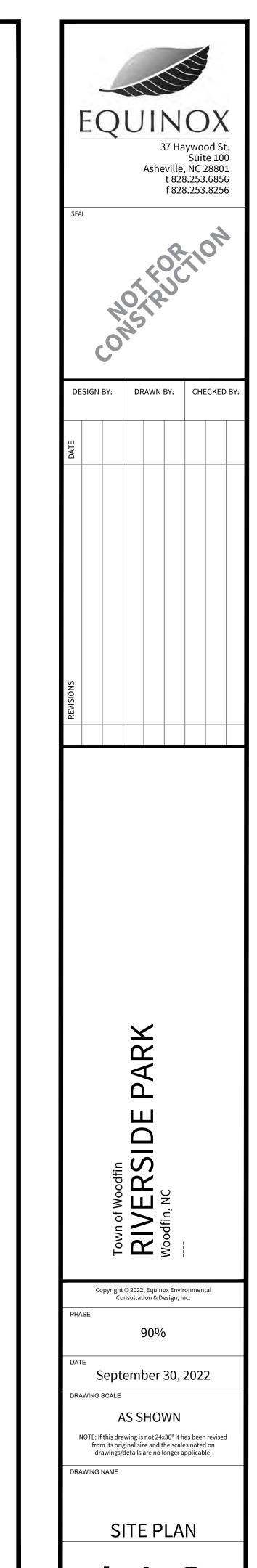


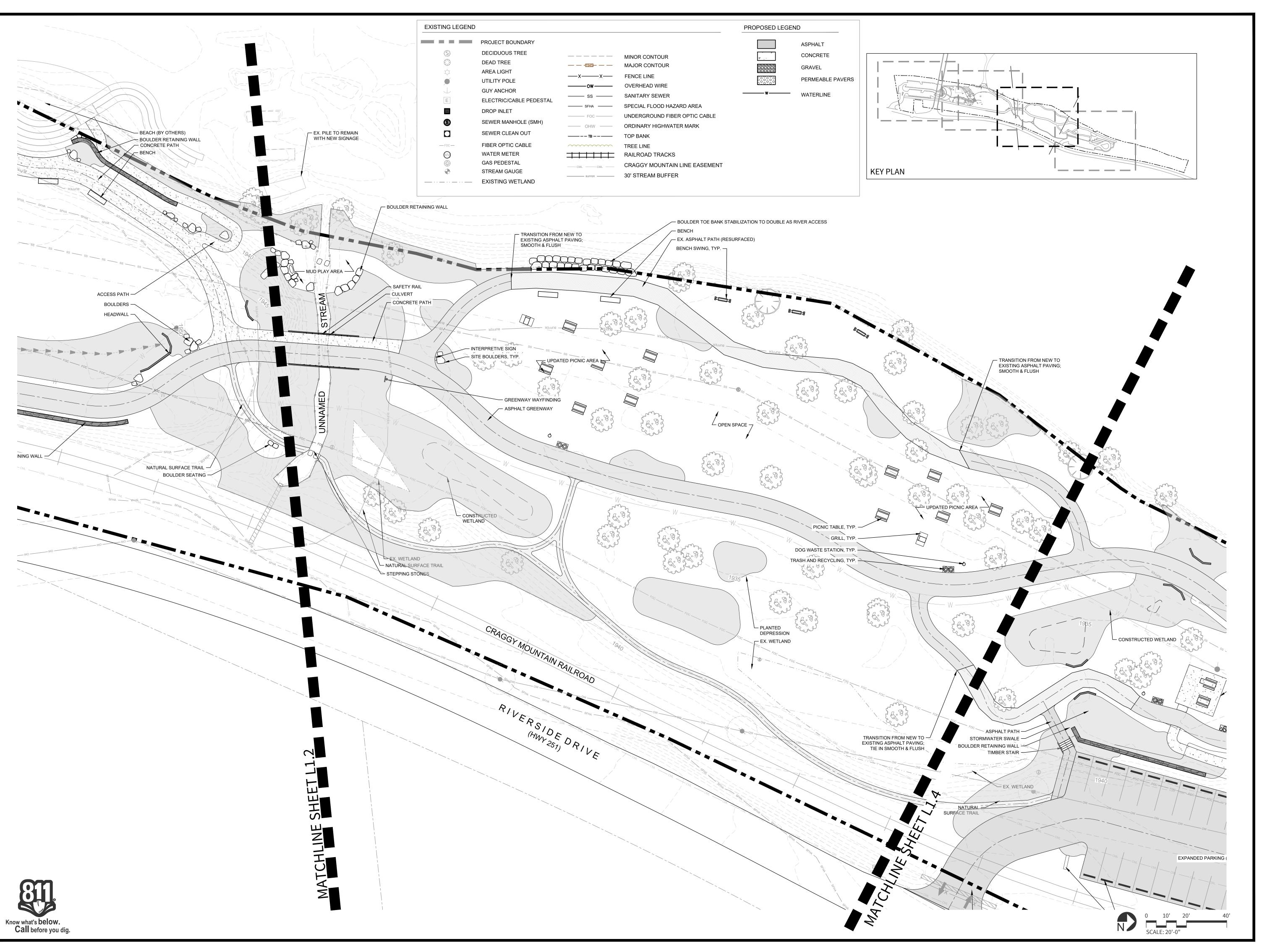


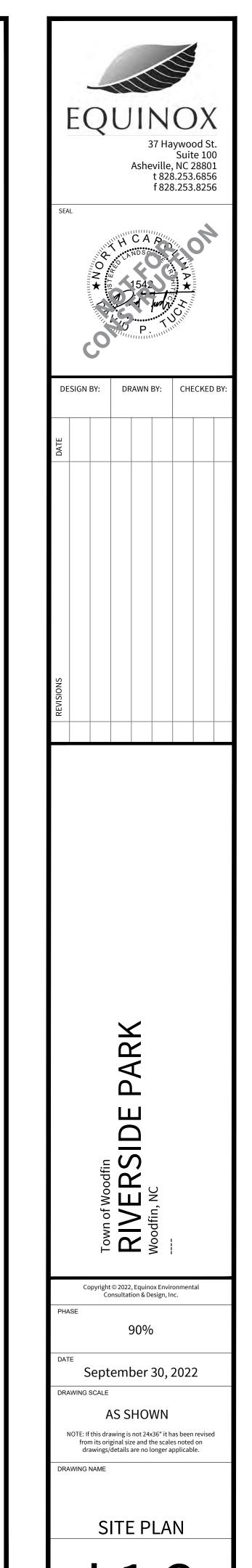


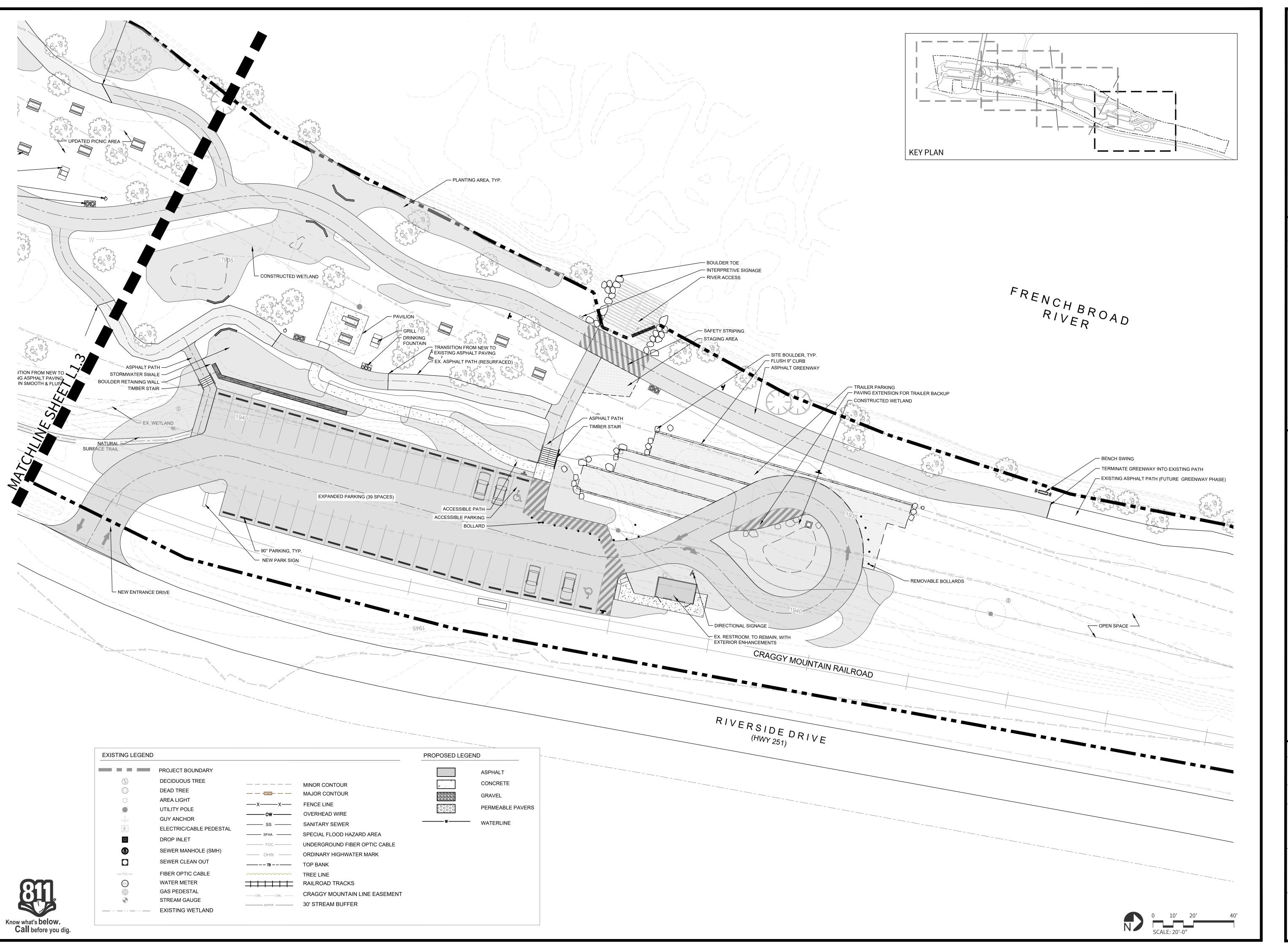


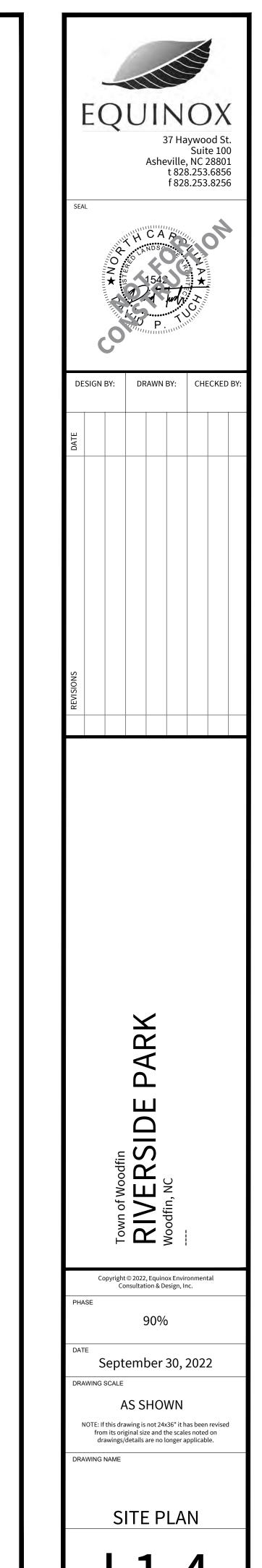


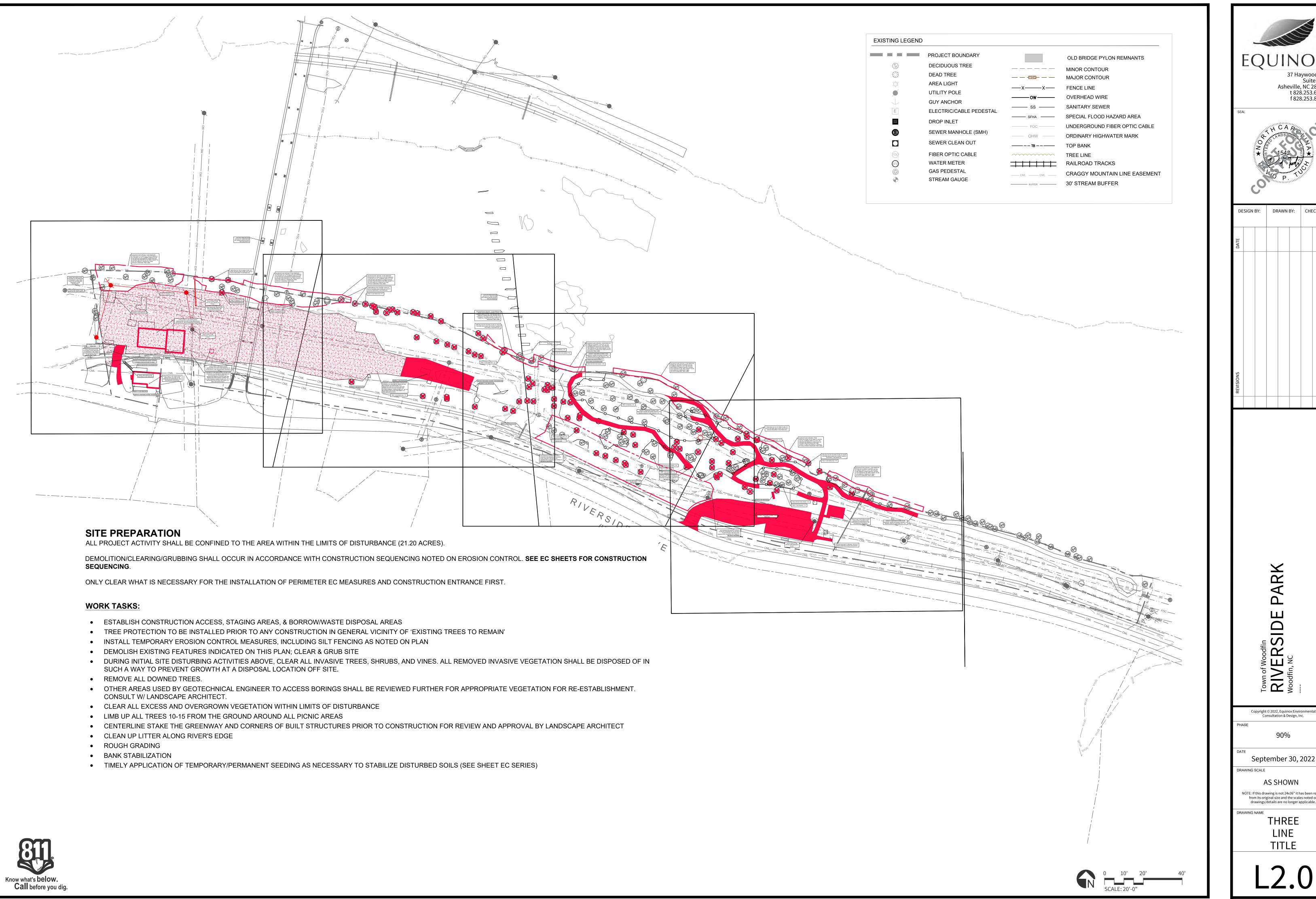


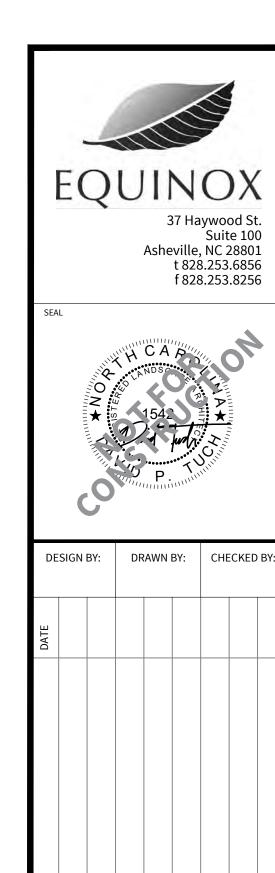










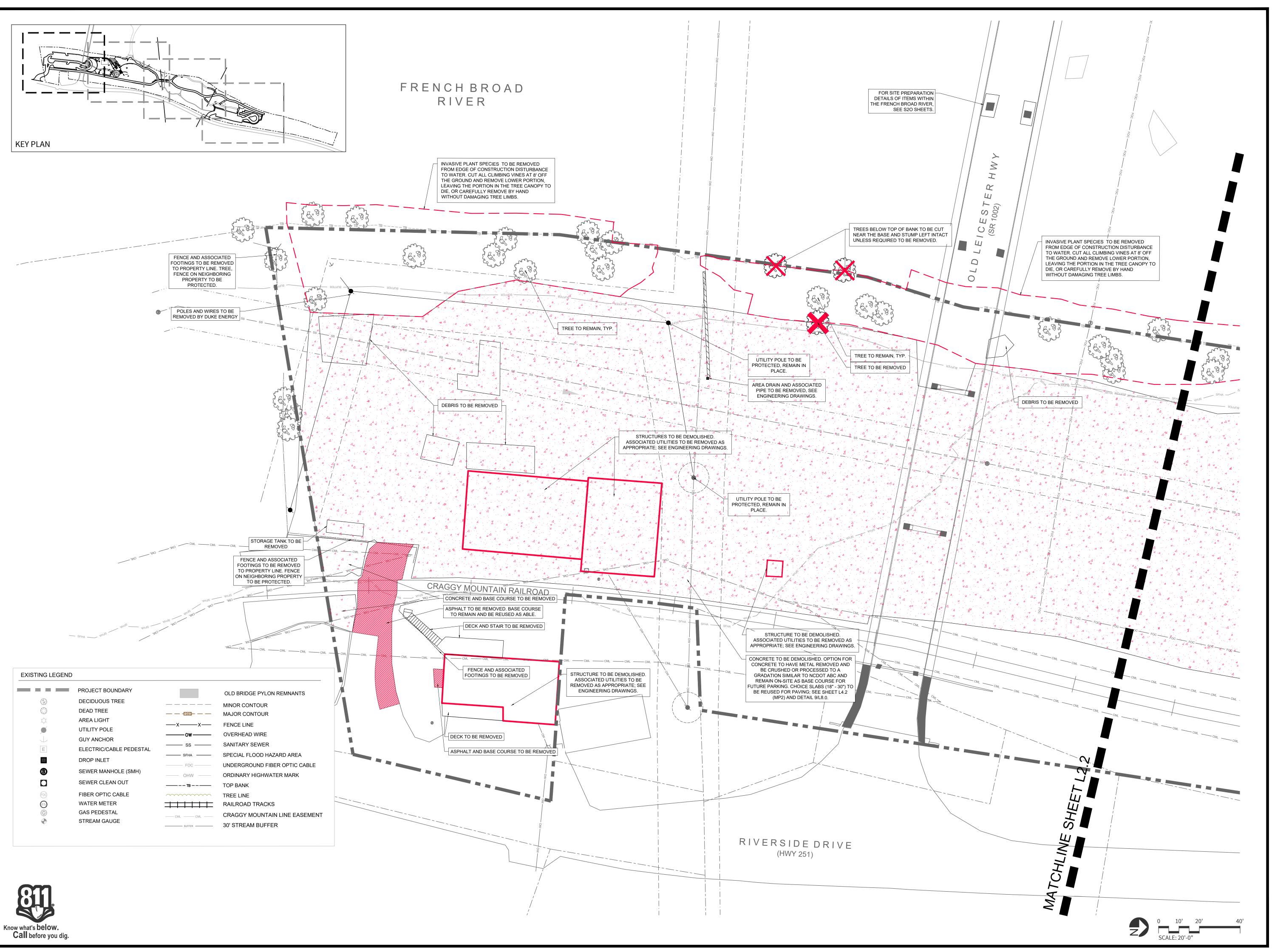


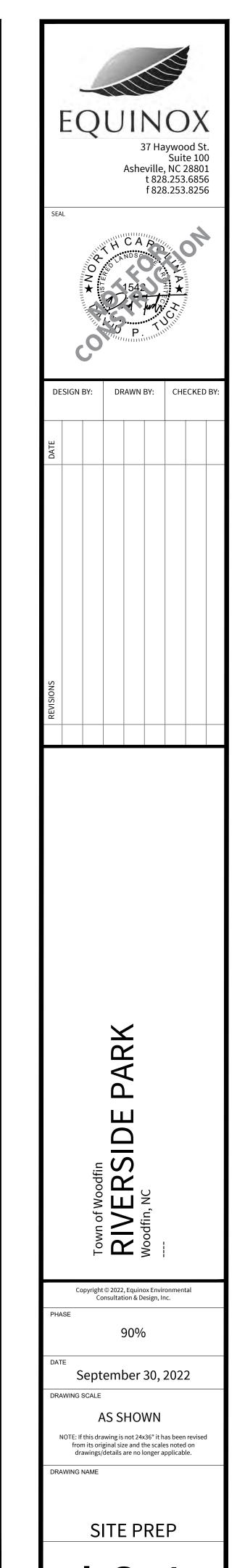
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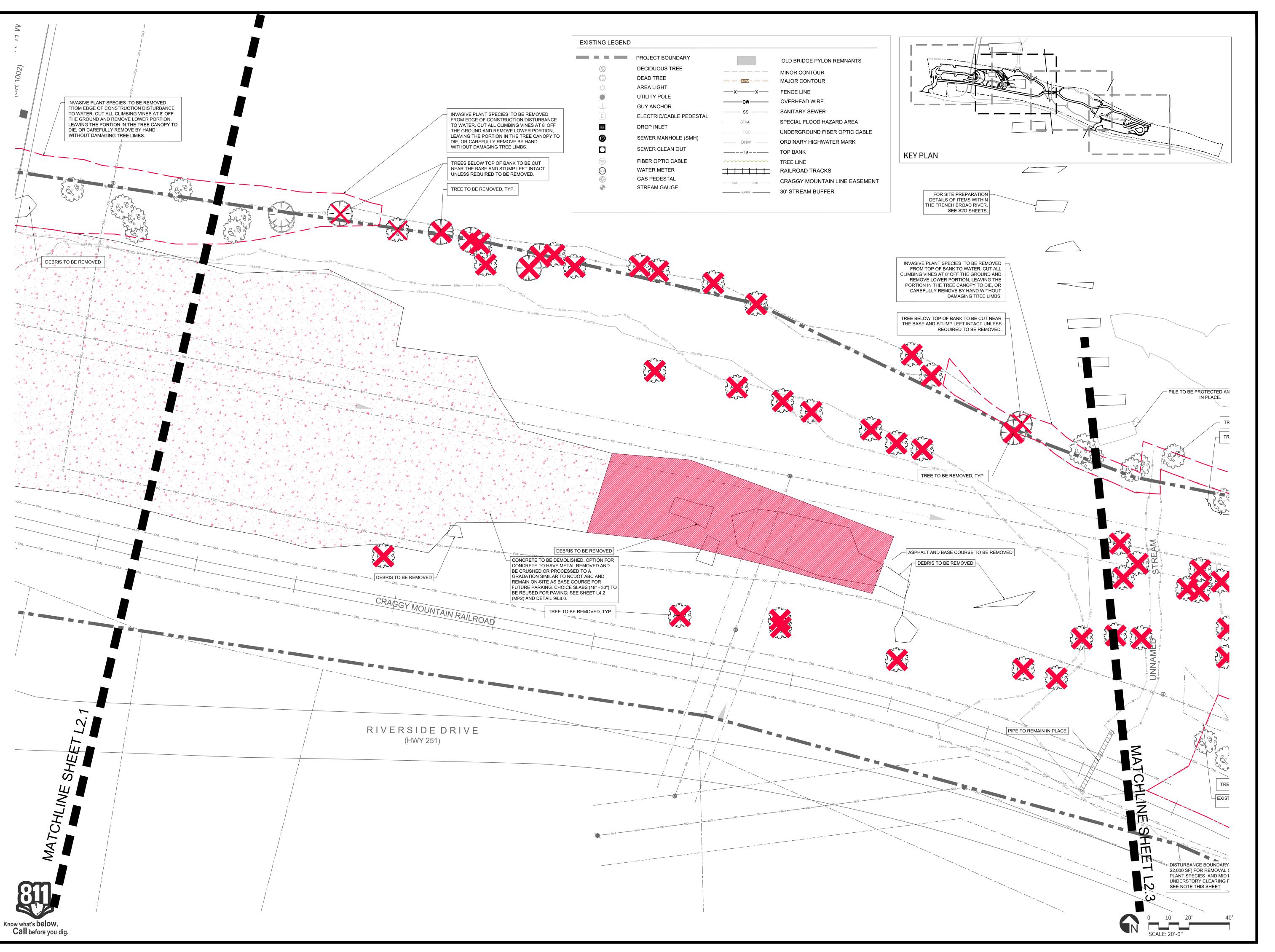
September 30, 2022

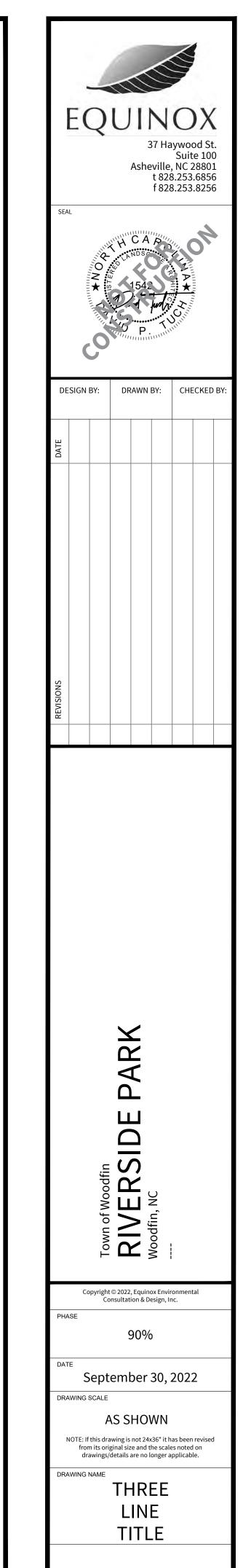
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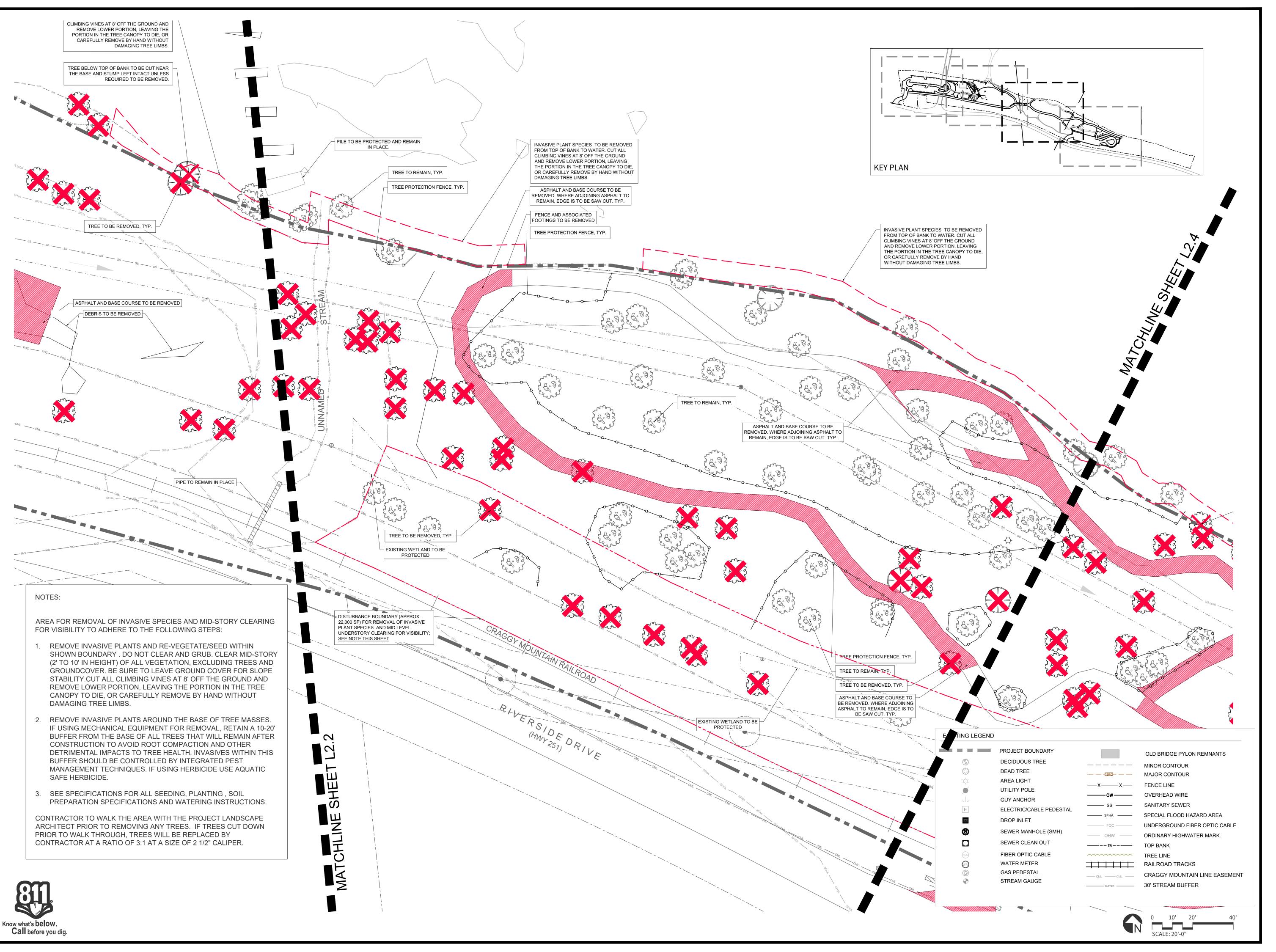
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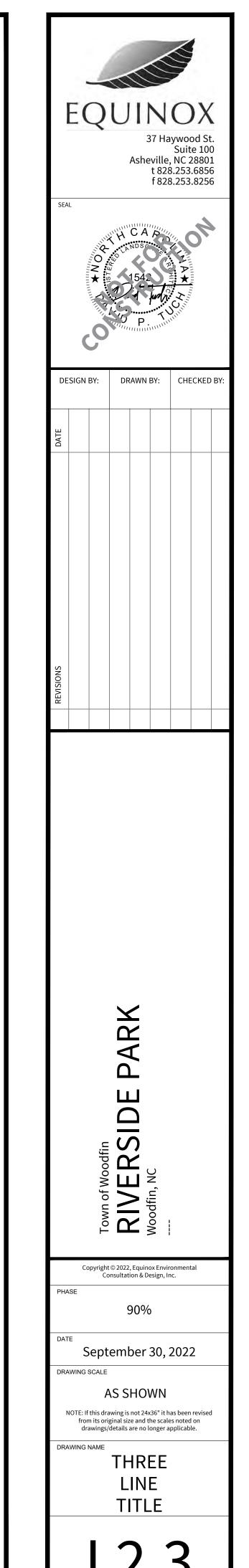


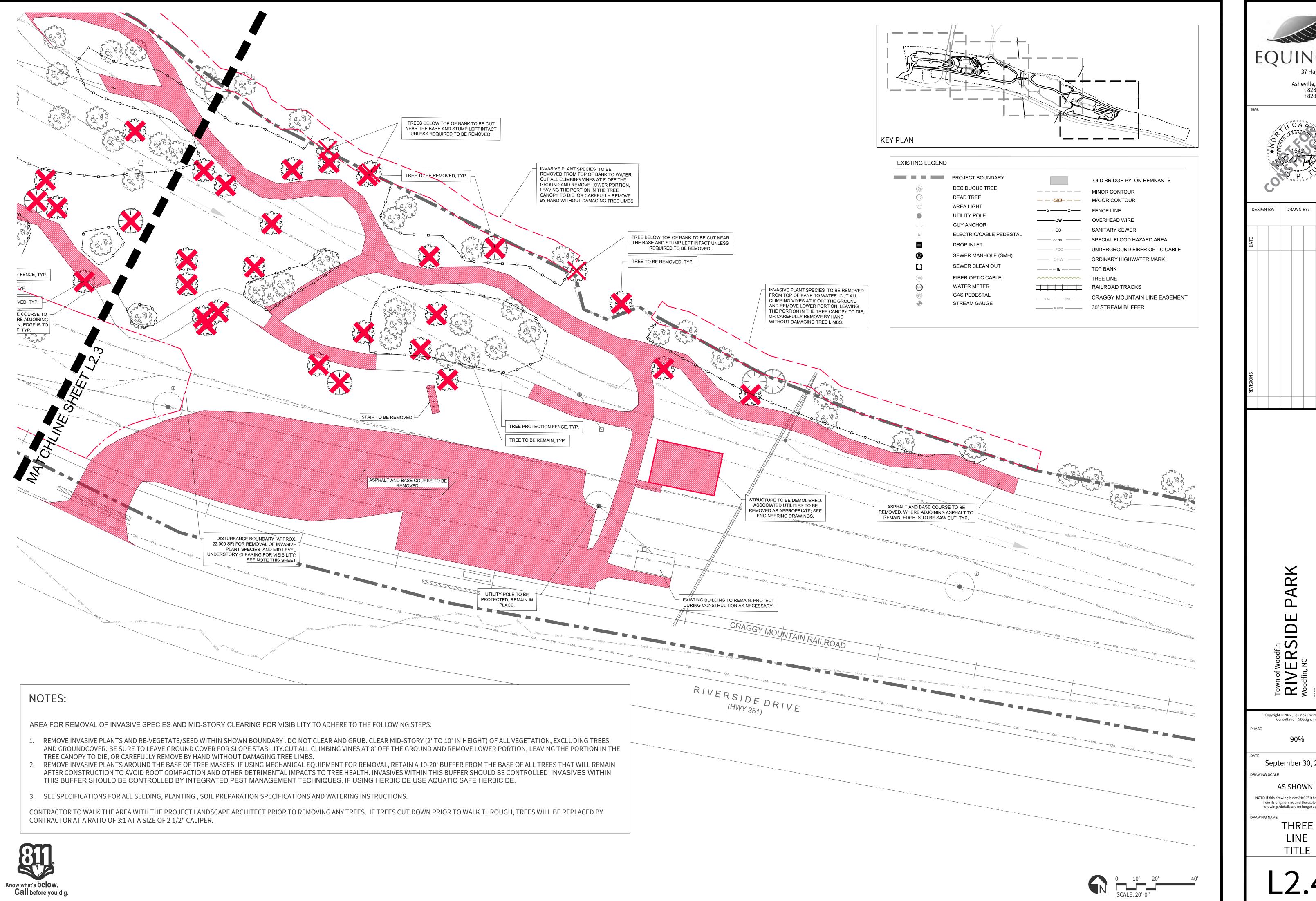












37 Haywood St. Suite 100 Asheville, NC 28801 t 828.253.6856 f 828.253.8256 DESIGN BY: DRAWN BY: CHECKED BY:

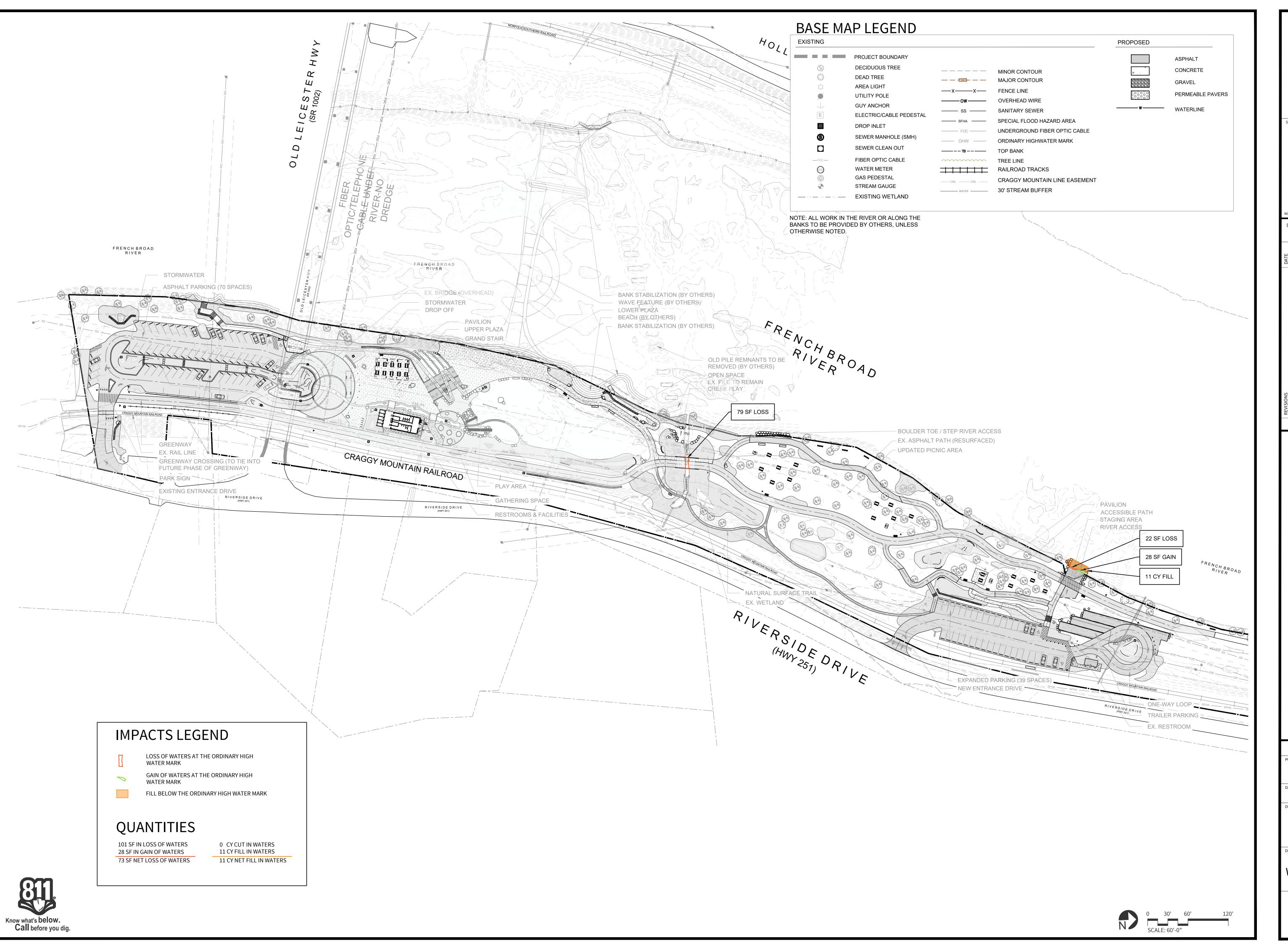
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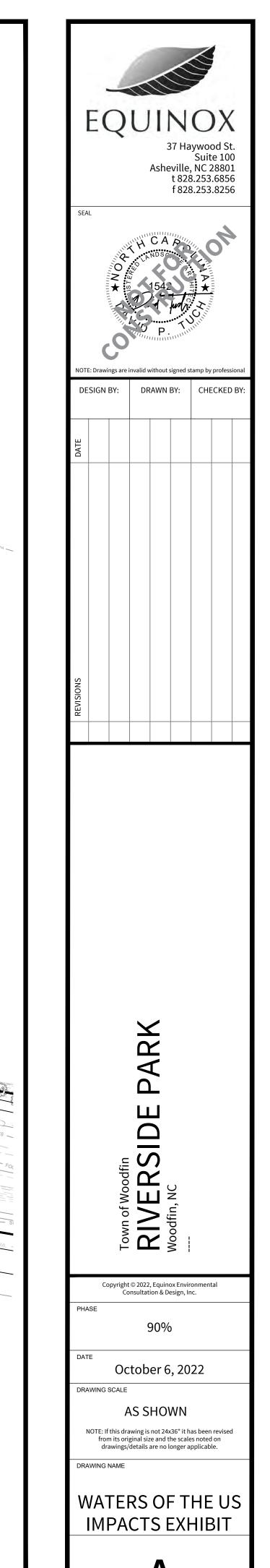
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TITLE







- THOROUGHLY REVIEW THE SEDIMENT AND EROSION CONTROL PLAN, ADDING EXTRA PROTECTION ALONG THE RIVER AND NEAR STREAMS (I.E. DOUBLE ROW SILT FENCE).
- 2. CONTRACTOR TO FINE GRADE AND ADD EROSION CONTROL MATTING AND NATURAL SITE DEBRIS AT ACCESS AREAS USED BY GEOTECHNICAL ENGINEERS FOR BORING SITES.
- 3. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN SEVEN (7) DAYS AFTER WORK HAS CEASED, EXCEPT AS STATED BELOW.
- 4. WHERE STABILIZATION BY THE 7TH DAY IS PRECLUDED BY SNOW COVER OR FROZEN GROUND CONDITIONS STABILIZATION MEASURES MUST BE INITIATED AS SOON AS PRACTICABLE.
- 5. WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, AND EARTH-DISTURBING ACTIVITIES WILL BE RESUMED WITHIN 7 DAYS, TEMPORARY STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF THE SITE.
- 6. ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE INSPECTED ONCE EVERY CALENDAR WEEK. IF PERIODIC INSPECTION OR OTHER INFORMATION INDICATES THAT A BMP HAS BEEN INAPPROPRIATELY OR INCORRECTLY INSTALLED, THE PERMITTEE MUST ADDRESS THE NECESSARY REPLACEMENT OR MODIFICATION REQUIRED TO CORRECT THE BMP WITHIN 48 HOURS OF IDENTIFICATION. IF THIS OCCURS, NOTIFY LANDSCAPE ARCHITECT.
- PROVIDE SILT FENCE AND/OR OTHER CONTROL DEVICES, AS MAY BE REQUIRED, TO CONTROL SOIL EROSION DURING UTILITY CONSTRUCTION. ALL DISTURBED AREAS SHALL BE CLEANED, GRADED, AND STABILIZED WITH GRASSING IMMEDIATELY AFTER THE UTILITY INSTALLATION. FILL, COVER, AND TEMPORARY SEEDING AT THE END OF EACH DAY ARE RECOMMENDED. IF WATER IS ENCOUNTERED WHILE TRENCHING, THE WATER SHOULD BE FILTERED TO REMOVE ANY SEDIMENTS BEFORE BEING PUMPED BACK INTO ANY WATERS OF THE STATE.
- 8. ALL EROSION CONTROL DEVICES SHALL BE PROPERLY MAINTAINED DURING ALL PHASES OF CONSTRUCTION UNTIL THE COMPLETION OF ALL CONSTRUCTION ACTIVITIES AND ALL DISTURBED AREAS HAVE BEEN STABILIZED. ADDITIONAL CONTROL DEVICES MAY BE REQUIRED DURING CONSTRUCTION IN ORDER TO CONTROL EROSION AND/OR OFFSITE SEDIMENTATION. ALL TEMPORARY CONTROL DEVICES SHALL BE REMOVED ONCE CONSTRUCTION IS COMPLETE AND THE SITE IS STABILIZED.
- 9. THE CONTRACTOR MUST TAKE NECESSARY ACTION TO MINIMIZE THE TRACKING OF MUD ONTO PAVED ROADWAY(S) FROM CONSTRUCTION AREAS AND THE GENERATION OF DUST. THE CONTRACTOR SHALL DAILY REMOVE MUD/SOIL FROM PAVEMENT, AS MAY BE REQUIRED.
- 10. TEMPORARY DIVERSION BERMS AND/OR DITCHES WILL BE PROVIDED AS NEEDED DURING CONSTRUCTION TO PROTECT WORK AREAS FROM UPSLOPE RUNOFF AND/OR TO DIVERT SEDIMENT-LADEN WATER TO APPROPRIATE TRAPS OR STABLE OUTLETS. THESE TEMPORARY BERMS AND DITCHES SHALL BE PROTECTED WITH A ROLLED EROSION AND SEDIMENT CONTROL PRODUCT UNTIL VEGETATION CAN BE ESTABLISHED.
- 11. ALL WATERS OF THE STATE (WOS), INCLUDING WETLANDS, ARE TO BE FLAGGED OR OTHERWISE CLEARLY MARKED IN THE FIELD. A DOUBLE ROW OF SILT FENCE IS TO BE INSTALLED IN ALL AREAS WHERE A 50-FOOT BUFFER CAN'T BE MAINTAINED BETWEEN THE DISTURBED AREA AND ALL WOS. A 10-FOOT BUFFER SHOULD BE MAINTAINED BETWEEN THE LAST ROW OF SILT FENCE
- 12. LITTER, CONSTRUCTION DEBRIS, OILS, FUELS, AND BUILDING PRODUCTS WITH SIGNIFICANT POTENTIAL FOR IMPACT (SUCH AS STOCKPILES OF FRESHLY TREATED LUMBER) AND CONSTRUCTION CHEMICALS THAT COULD BE EXPOSED TO STORM WATER MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE IN STORM WATER DISCHARGES.
- 13. A COPY OF THE INSPECTION RECORDS, AND RAINFALL DATA MUST BE RETAINED AT THE CONSTRUCTION SITE OR A NEARBY LOCATION EASILY ACCESSIBLE DURING NORMAL BUSINESS HOURS, FROM THE DATE OF COMMENCEMENT OF CONSTRUCTION ACTIVITIES TO THE DATE THAT FINAL STABILIZATION IS REACHED.
- 14. INITIATE STABILIZATION MEASURES ON ANY EXPOSED STEEP SLOPE (3H:1V OR GREATER) WHERE LAND-DISTURBING ACTIVITIES HAVE PERMANENTLY OR TEMPORARILY CEASED, AND WILL NOT RESUME FOR A PERIOD OF 7 CALENDAR DAYS.
- 15. MINIMIZE SOIL COMPACTION AND, UNLESS UNFEASIBLE, PRESERVE TOPSOIL.
- 16. MINIMIZE THE DISCHARGE OF POLLUTANTS FROM EQUIPMENT AND VEHICLE WASHING, WHEEL WASH WATER, AND OTHER WASH WATERS. WASH WATERS MUST BE TREATED IN A SEDIMENT BASIN OR ALTERNATIVE CONTROL THAT PROVIDES EQUIVALENT OR BETTER TREATMENT PRIOR
- 17. MINIMIZE THE DISCHARGE OF POLLUTANTS FROM DEWATERING OF TRENCHES AND EXCAVATED
- 18. MAINTAIN ALL BUFFER REQUIREMENTS AS INDICATED ON THE PLAN.
- 19. THE FOLLOWING DISCHARGES FROM SITES ARE PROHIBITED:
- 19.1. WASTEWATER FROM WASHOUT OF CONCRETE, UNLESS MANAGED BY AN APPROPRIATE
- 19.2. WASTEWATER FROM WASHOUT AND CLEANOUT OF STUCCO, PAINT, FORM RELEASE OILS,
- 19.3. FUELS, OILS, OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND
- 19.4. SOAPS OR SOLVENTS USED IN VEHICLE AND EQUIPMENT WASHING.
- 20. AFTER CONSTRUCTION ACTIVITIES BEGIN, INSPECTIONS ARE EXPECTED TO BE CONDUCTED AT A MINIMUM OF AT LEAST ONCE EVERY CALENDAR WEEK AND MUST BE CONDUCTED UNTIL FINAL STABILIZATION IS REACHED ON ALL AREAS OF THE CONSTRUCTION SITE.





D FOR

PREPARE

Town of Woodfin 90 Elk Mountain RD. Woodfin, NC 28804 (828) 253-4887

LANDSCAPE ARCHITECT: **Equinox**

37 Haywood Street, Suite 100 Asheville, NC 28801 (828) 253-6856 (x202) david@equinoxenvironmental.com

ADDRESS: 1598 Riverside Dr. Asheville, NC 28804

> Latitude: 35.627678° N Longitude: - 82.600733° W

PROJECT SIZE: Approximately 9.15 Ac Total Disturbance area is 8.31 Ac

All aspects of work shall be performed in accordance with all applicable local, state, and federal regulations pertaining to worker safety.

Skimmer Sizing

Trap	Drainage Area (AC)	Time to Drain	Required volume	Skimmer Size	Orifice Radius	Orifice Diameter
ST1	0.93	48 hrs	3348 CF	1.5 in	0.6 in	1.3 in
ST2	0.22	48 hrs	792 CF	1.5 in	0.3 in	0.6 in

Sediment Trap Schedule										
DrainageAr ea (AC)	Min. L/W Ratio	Designed L/W Ratio	Required Surface Area	Required volume	Minimum Storage Depth (with 1.5' min. excavation)	Bottom Surface Elev	Surface Area	Volume	Weir Width	weir Elevation
0.93	2 to 1	2 to 1	1352 SF	3348 CF	2.0'	1935	1745 SF	3873 CF	4'	1938.00
0.22	2 to 1	2 to 1	492 SF	792 CF	2.0'	1933	574 SF	893 CF	4'	1935.00





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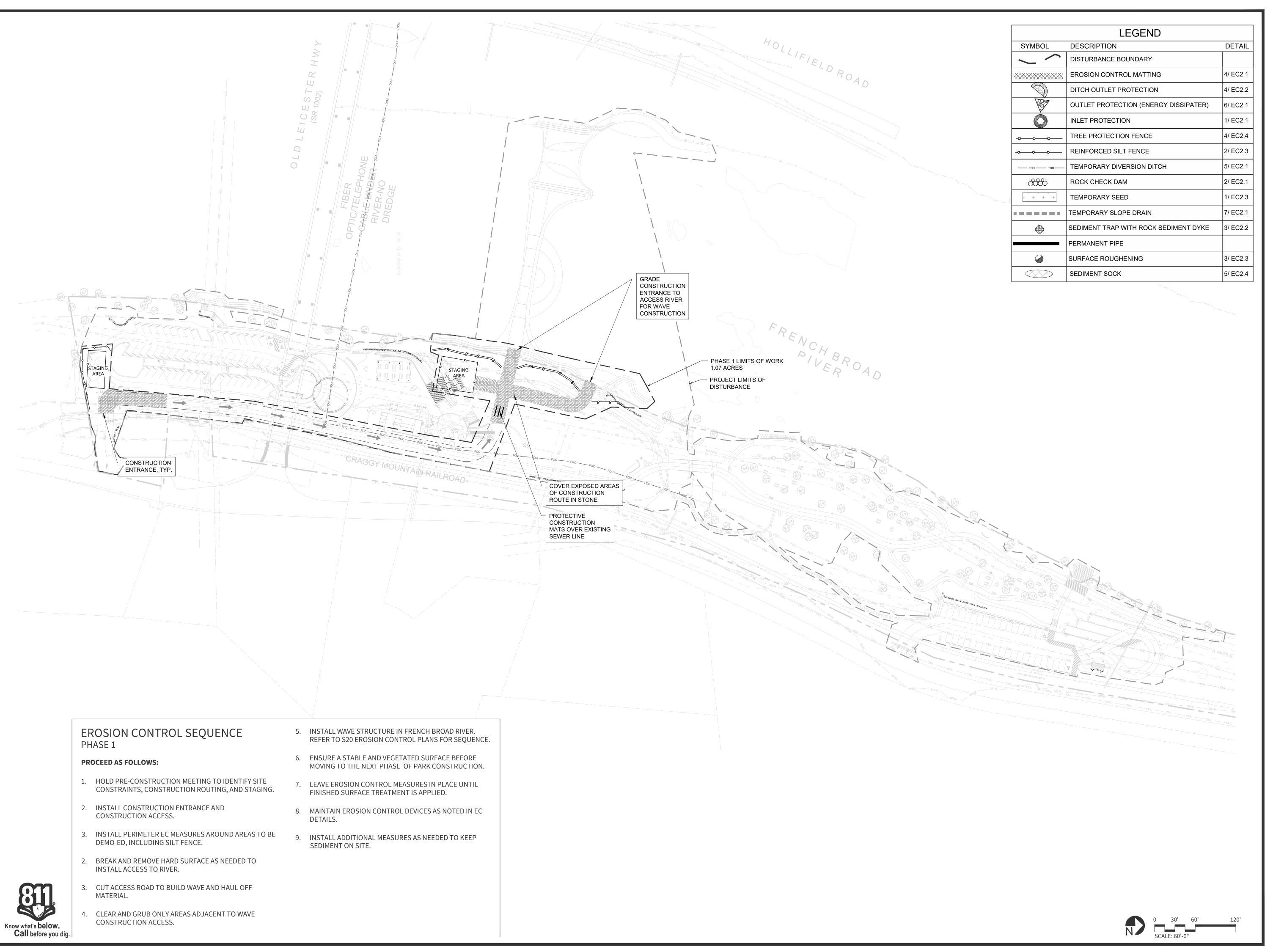
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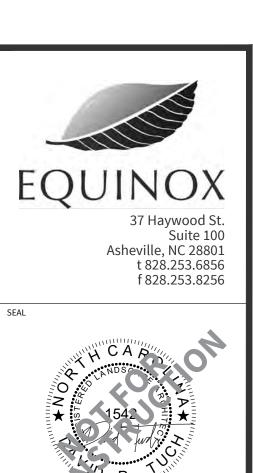
September 30, 2022

AS SHOWN

from its original size and the scales noted on

EC COVER





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Town of Woodfin RIVERSIDE PARK Woodfin, NC

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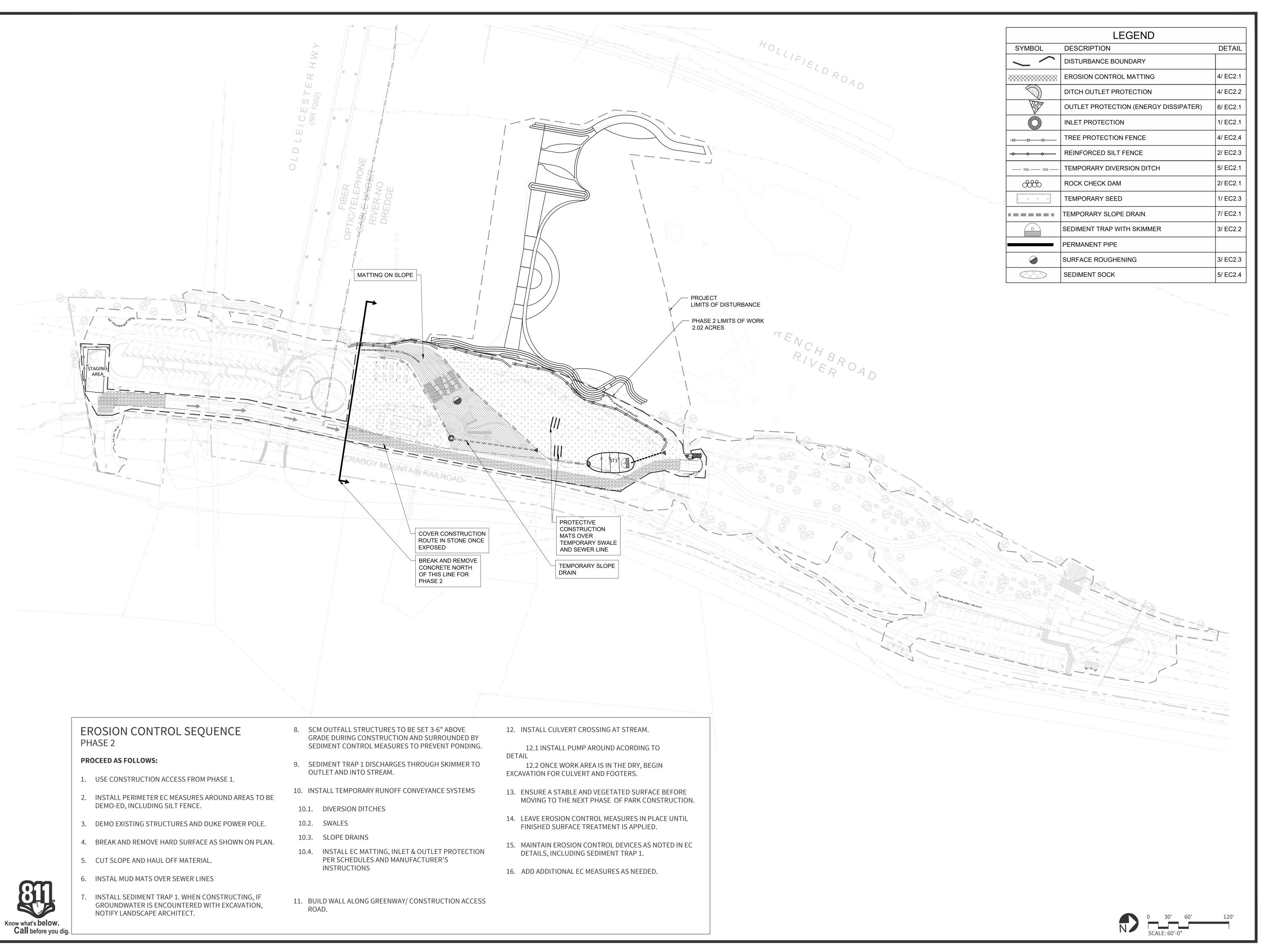
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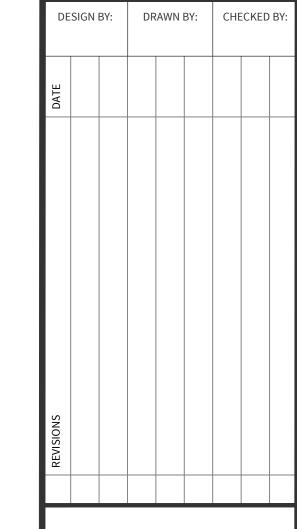
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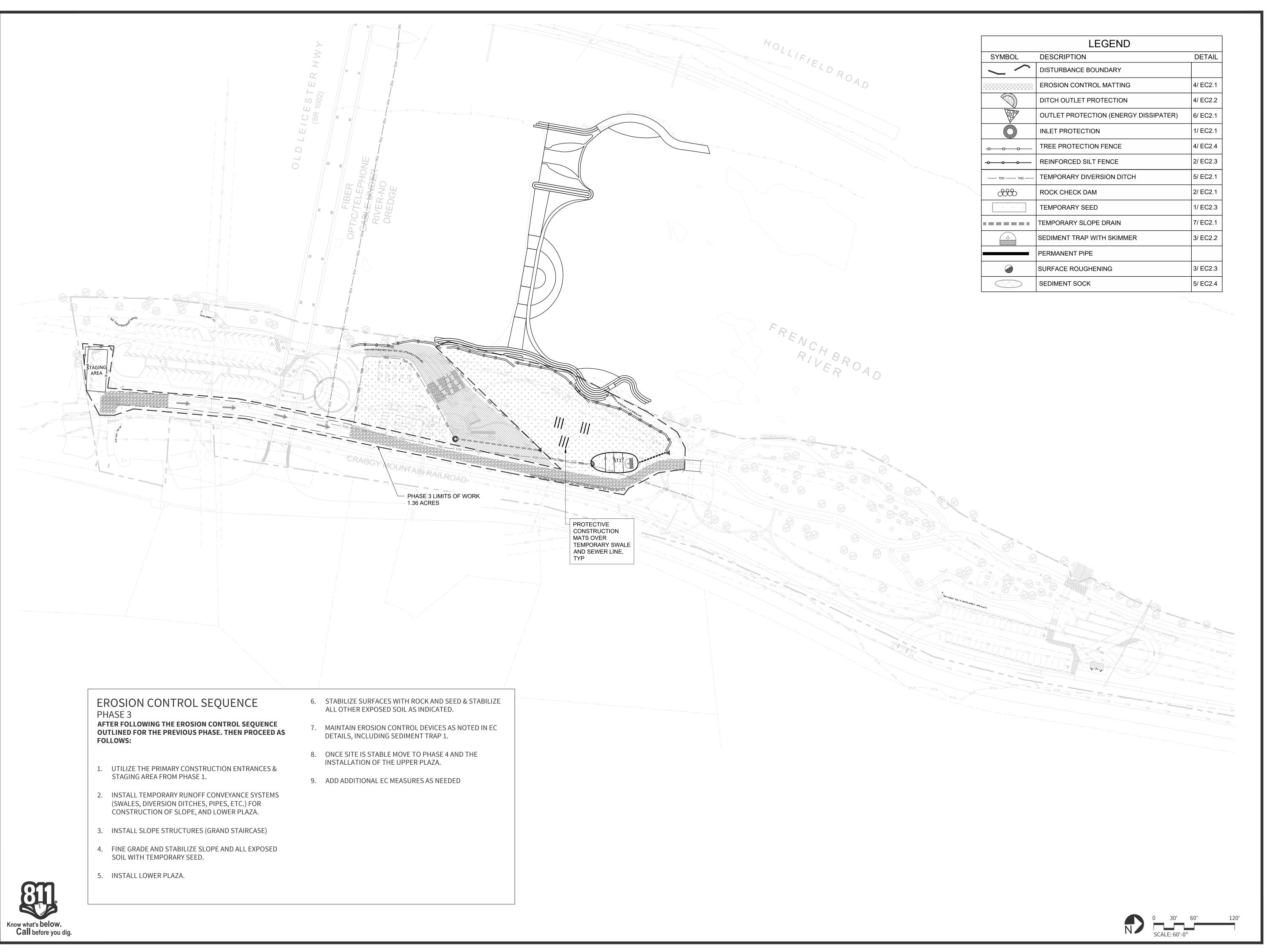


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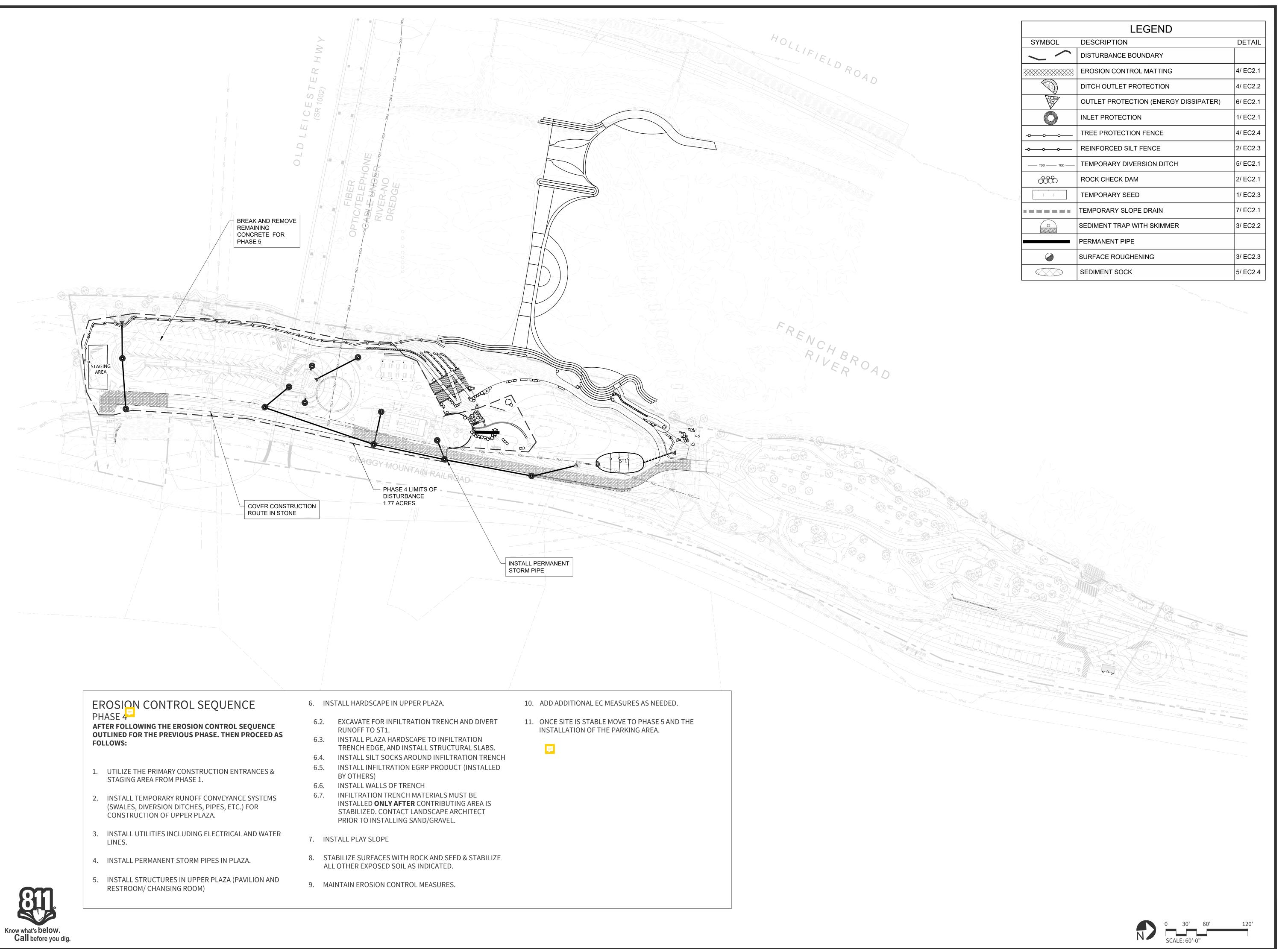


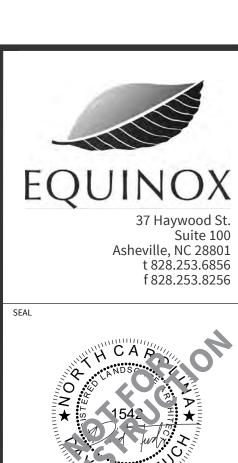
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Town of Woodfin RIVERSIDE PARK Woodfin, NC

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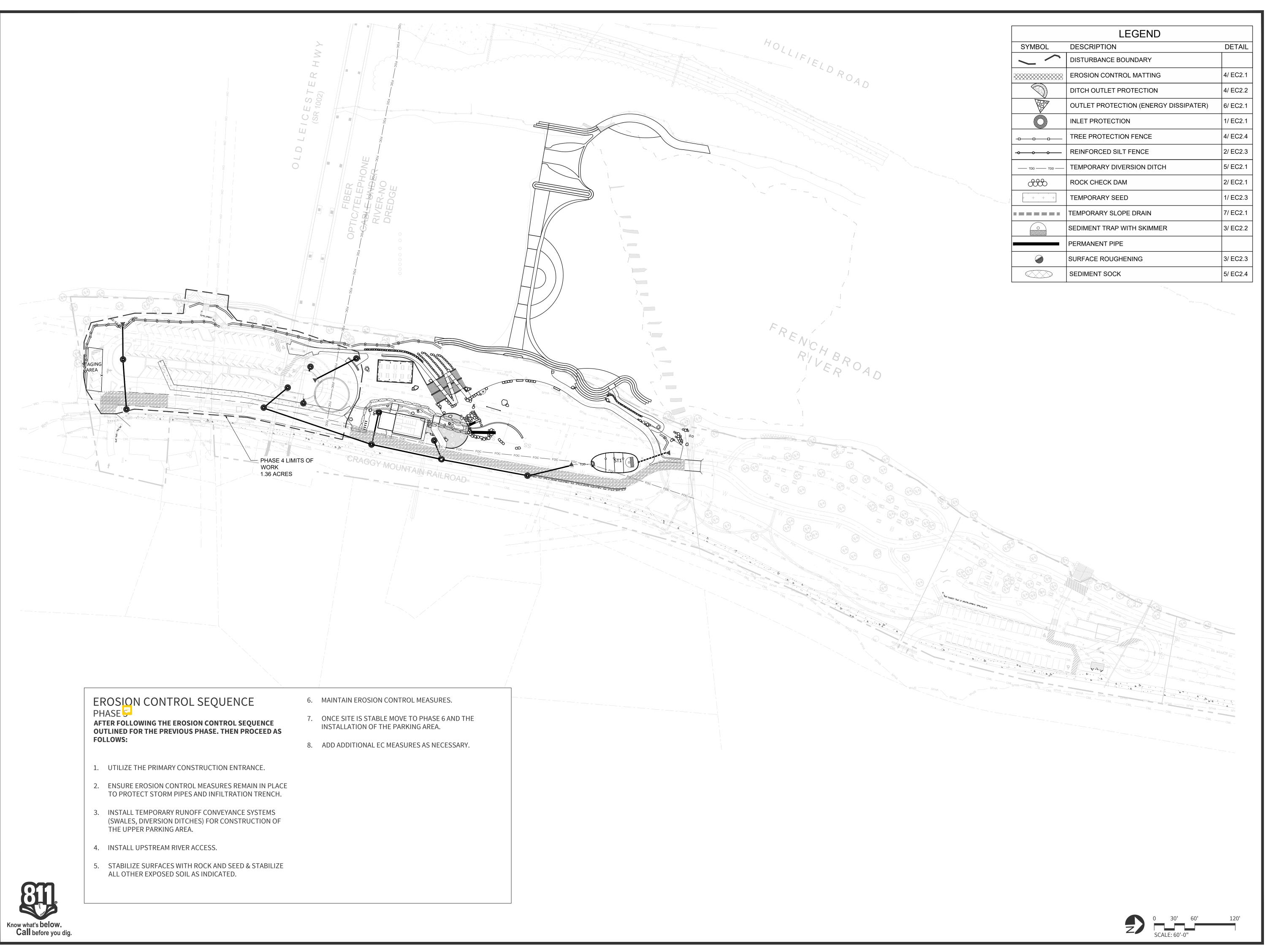
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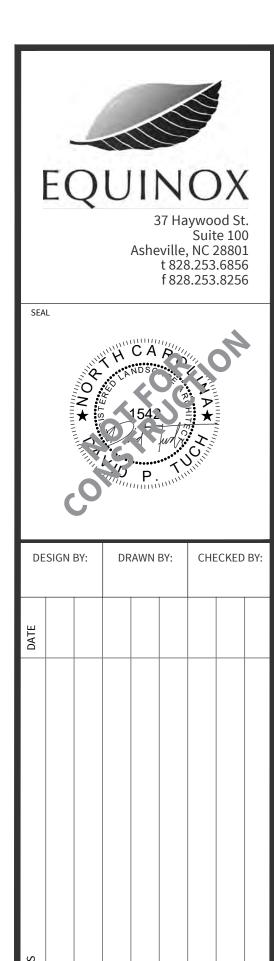
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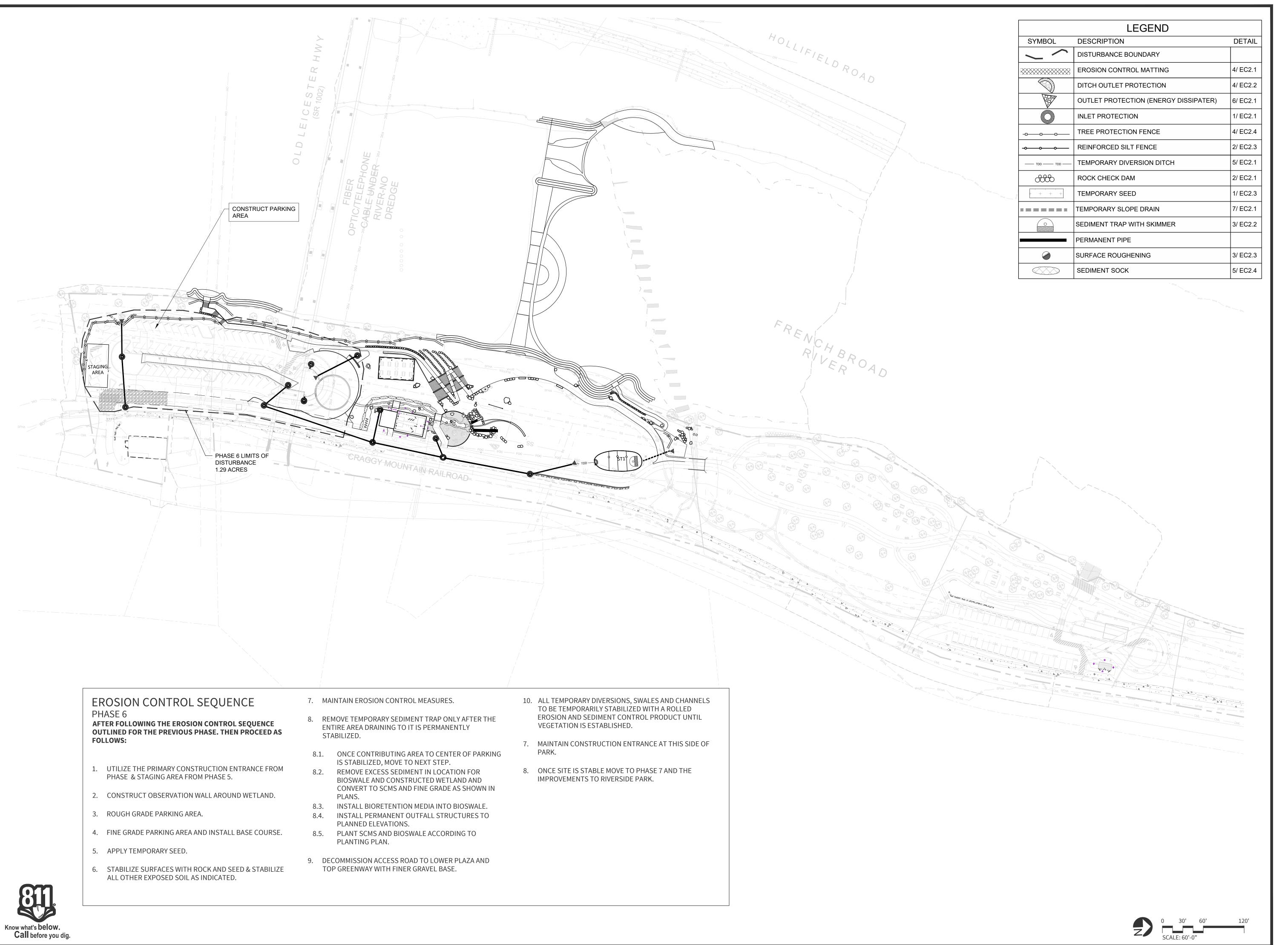


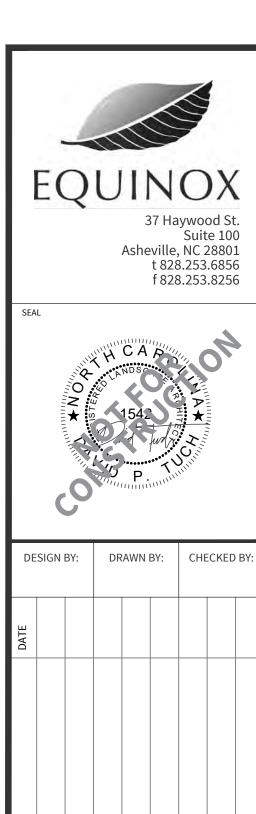


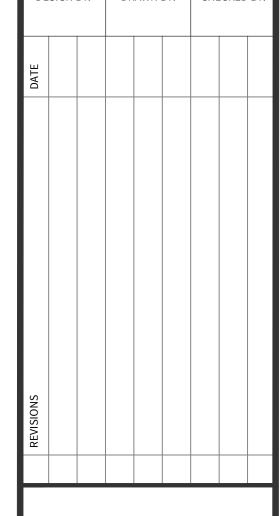
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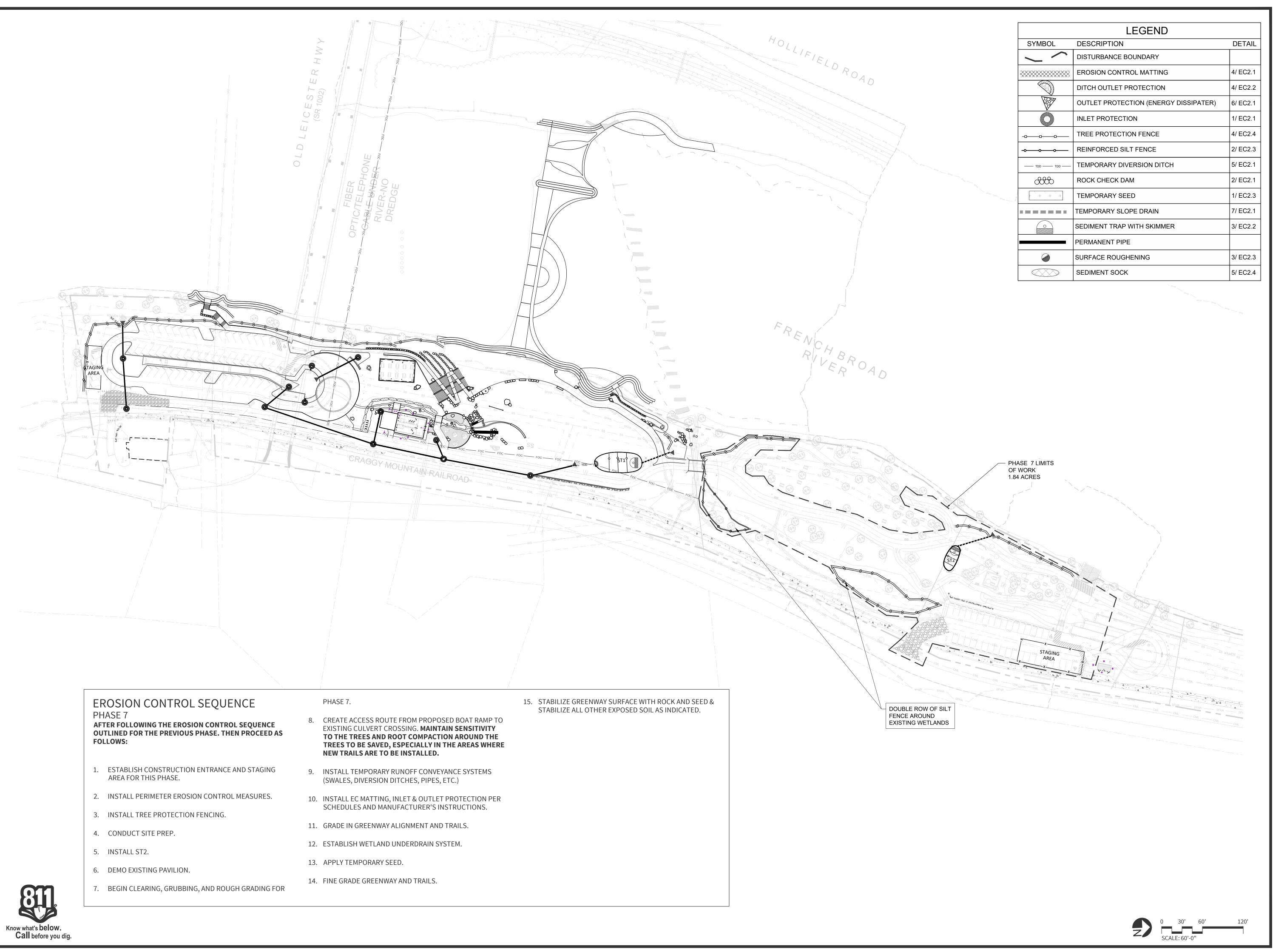


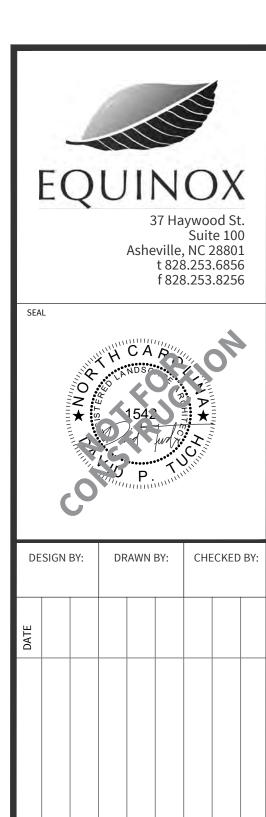


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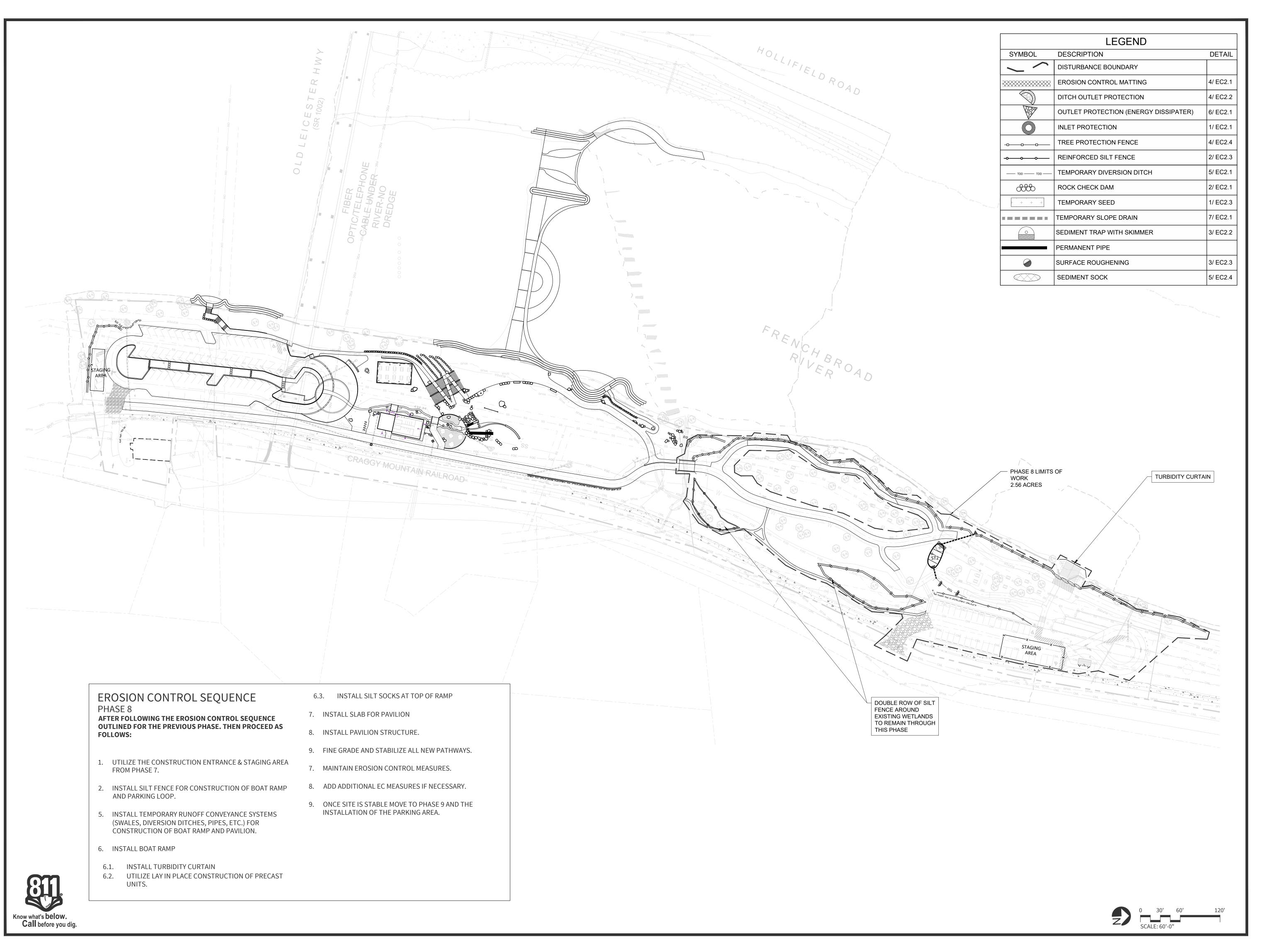


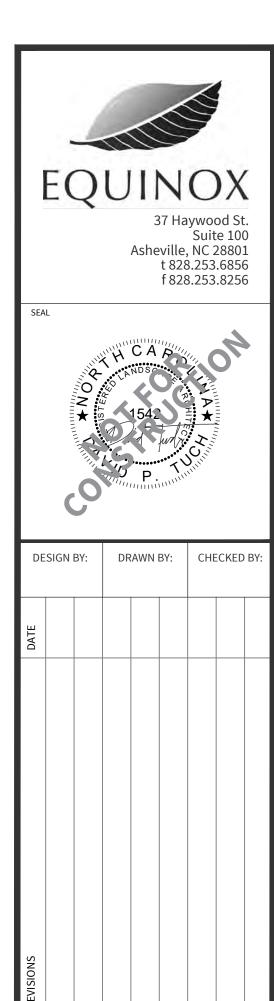
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Town of Woodfin

RIVERSIDE PARK
Woodfin, NC

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September 30, 2022

September 30, 2022

DRAWING SCALE

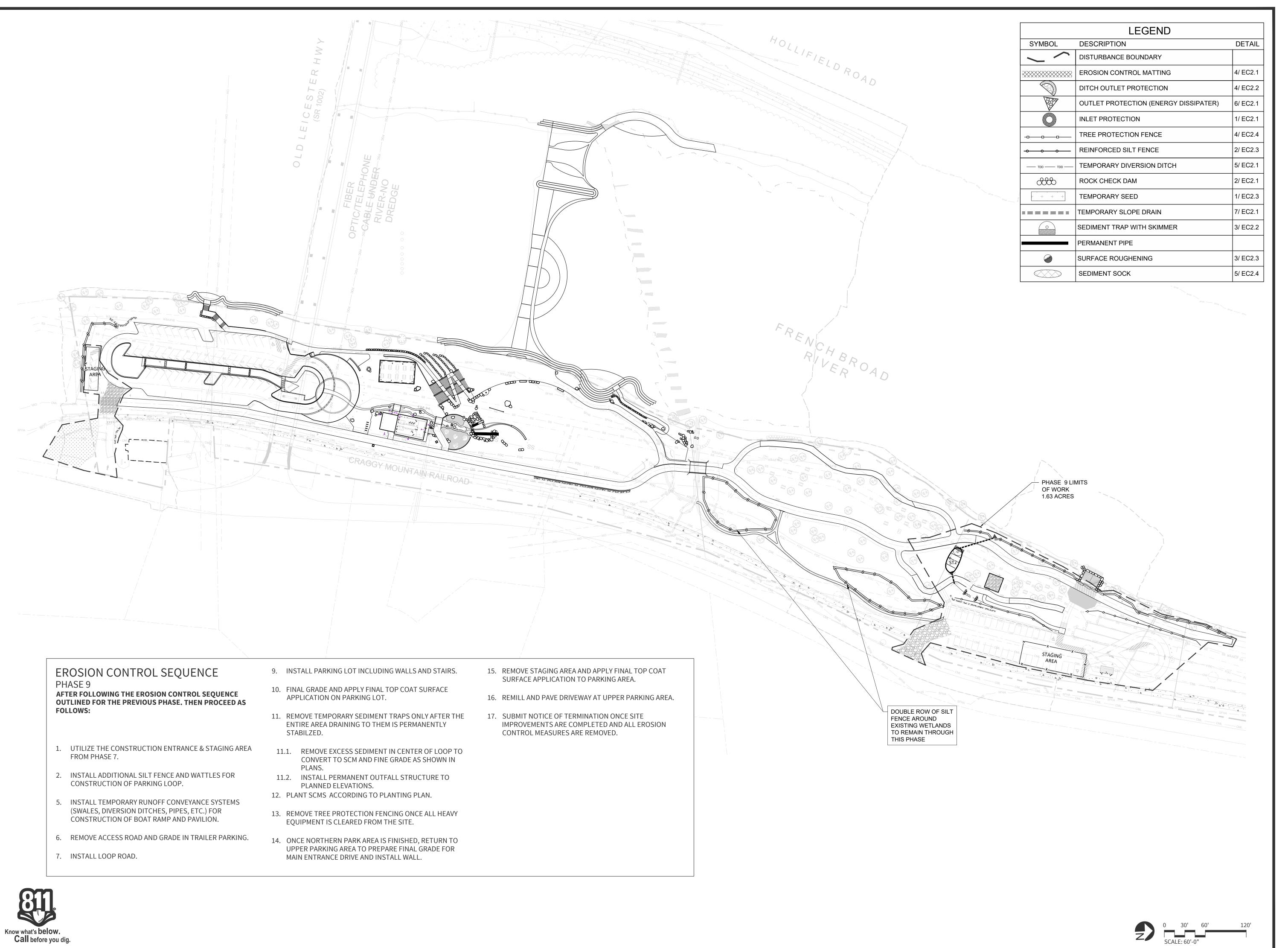
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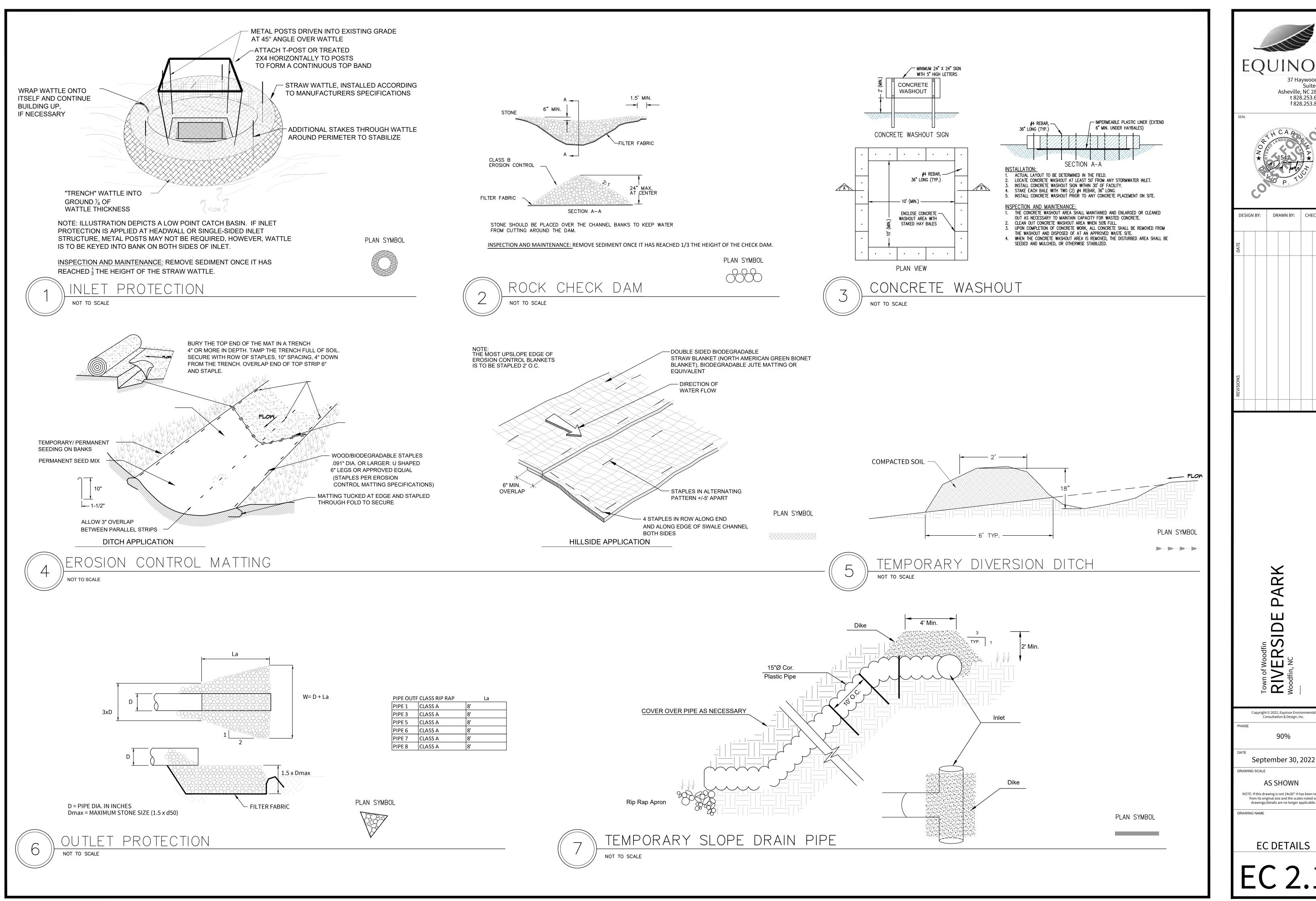
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PARK RIVERSIDE Woodfin. NC

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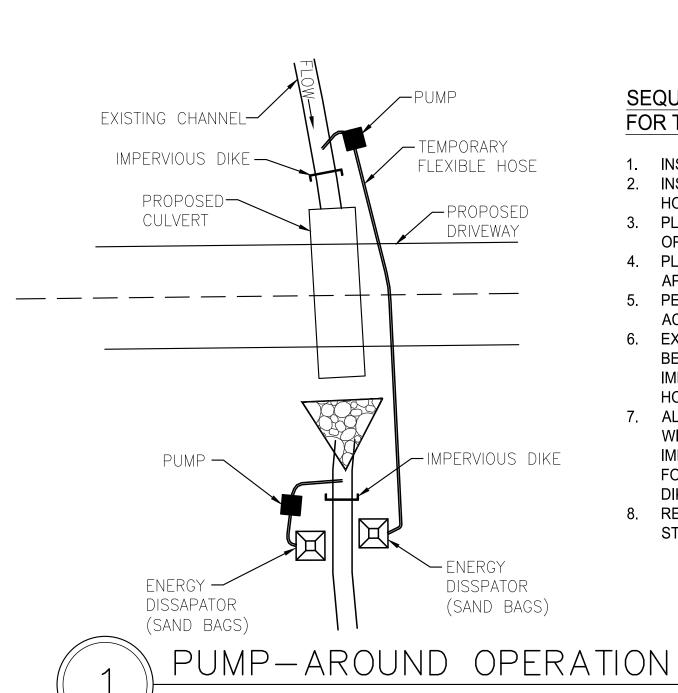
PARK Town of Woodfin RIVERSIDE

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September 30, 2022

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EC DETAILS



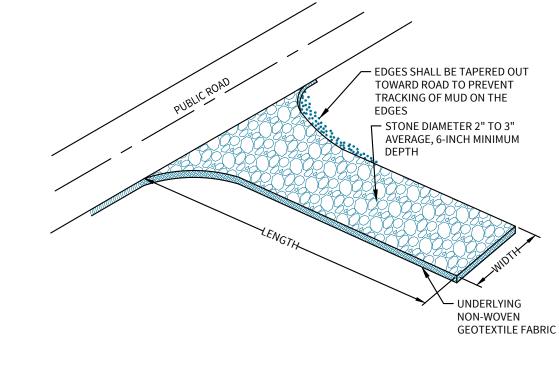
NOT TO SCALE

SEQUENCE OF CONSTRUCTION FOR TYPICAL PUMP-AROUND

- 1. INSTALL SAND BAG ENERGY DISSIPATERS.
- 2. INSTALL UPSTREAM PUMP AND TEMPORARY FLEXIBLE
- 3. PLACE UPSTREAM IMPERVIOUS DIKE AND BEGIN PUMPING
- OPERATIONS FOR STREAM DIVERSION. 4. PLACE DOWNSTREAM IMPERVIOUS DIKE AND PUMPING APPARATUS. DE-WATER ENTRAPPED AREA.
- PERFORM CULVERT INSTALLATION WORK IN ACCORDANCE WITH THE PLANS.
- EXCAVATE ANY ACCUMULATED SILT AND DEWATER BEFORE REMOVAL OF IMPERIOUS DIKES. REMOVE IMPERVIOUS DIKES, PUMPS, AND TEMPORARY FLEXIBLE HOSE. (DOWNSTREAM DIKE FIRST).
- 7. ALL GRADING AND STABILIZATION MUST BE COMPLETED WITHIN THE PUMP-AROUND AREA BETWEEN THE IMPERVIOUS DIKES. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE LOCATION OF THE IMPERVIOUS
- REMOVE ENERGY DISSIPATERS AND BACKFILL. STABILIZED DISTURBED AREA WITH SEED AND MULCH.

NOTES:

- 1. ALL EXCAVATION SHALL BE PERFORMED IN ONLY DRY OR ISOLATED SECTIONS OF THE CHANNEL.
- 2. IMPERVIOUS DIKES ARE TO BE USED TO ISOLATE WORK FROM STREAM FLOW WHEN NECESSARY.
- 3. ALL GRADED AREAS SHALL BE STABILIZED WITHIN 24 HOURS. MAINTENANCE OF STREAM FLOW OPERATION SHALL BE INCIDENTAL TO THE WORK. THIS INCLUDES SHEETING, DIVERSIONS PIPES, PUMPS AND HOSES.
- 5. PUMPS AND HOSES SHALL BE OF SUFFICIENT SIZE TO DEWATER THE WORK AREA.



	LENGTH	WIDTH
	(MIN.)	(MIN.)
PROJECT	100 FEET	24 FEET
INDIVIDUA L LOT	20 FEET	15 FEET

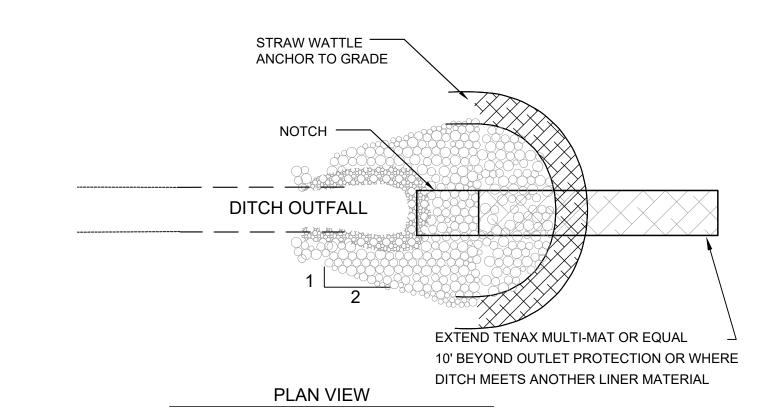
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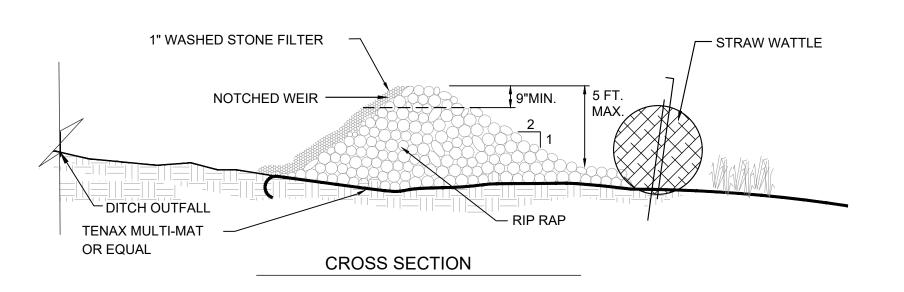
- 1. STABILIZED CONSTRUCTION ENTRANCES SHOULD BE USED AT ALL POINTS WHERE TRAFFIC WILL EGRESS/INGRESS A CONSTRUCTION SITE ONTO A PUBLIC ROAD OR ANY IMPERVIOUS SURFACE, SUCH AS
- 2. INSTALL A NON-WOVEN GEOTEXTILE FABRIC PRIOR TO PLACING ANY STONE. 3. INSTALL A CULVERT PIPE ACROSS THE ENTRANCE WHERE NEEDED TO PROVIDE POSITIVE DRAINAGE.
- 4. LIMESTONE MAY NOT BE USED FOR THE STONE PAD.

INSPECTION AND MAINTENANCE:

- 1. INSPECT THE CONSTRUCTION ENTRANCE AT LEAST ONCE PER CALENDAR WEEK, CHECK FOR MUD AND SEDIMENT BUILDUP AND PAD INTEGRITY. INSPECTIONS MAY BE NEEDED TO BE MORE FREQUENT DURING LONG PERIODS OF WET WEATHER.
- 2. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEAN OUT OF ANY MEASURES USED TO TRAP SEDIMENT.
- 4. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY, 5. IMMEDIATELY REMOVE ANY MUD OR SEDIMENT TRACKED ONTO ADJACENT IMPERVIOUS SURFACES BY BRUSHING OR SWEEPING. FLUSHING SHOULD ONLY BE USED WHEN THE WATER IS DIRECTED TO A
- SEDIMENT TRAP OR BASIN. 6. REMOVE CONSTRUCTION ENTRANCE ONLY AFTER THE SITE HAS REACHED FINAL STABILIZATION. PERMANENT VEGETATION SHOULD REPLACE AREAS WHERE THE CONSTRUCTION ENTRANCE HAS BEEN REMOVED UNLESS THE AREA WILL BE CONVERTED TO AN IMPERVIOUS SURFACE TO SERVE POST-CONSTRUCTION.

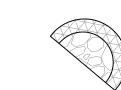


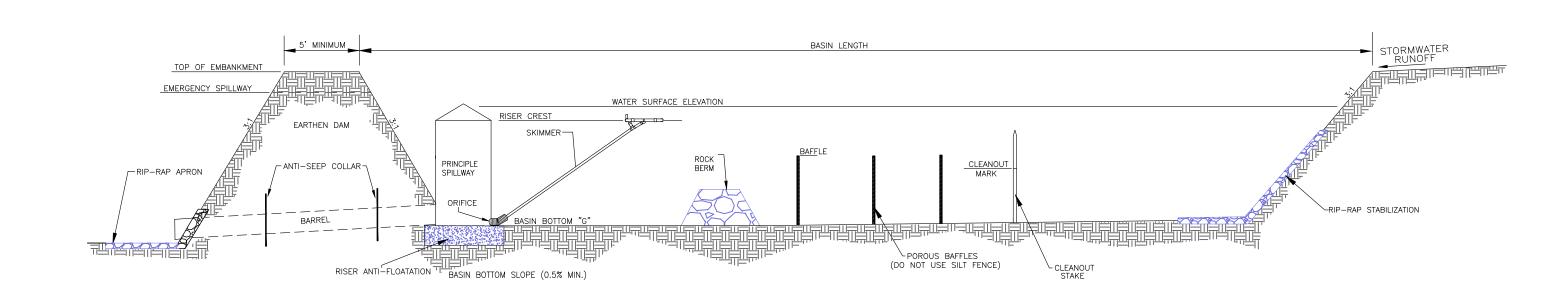




INSPECTION AND MAINTENANCE: REMOVE SEDIMENT ONCE IT HAS REACHED 1/3 THE HEIGHT OF THE NOTCHED WEIR.

PLAN SYMBOL





GENERAL NOTES

- 1. Sediment traps should not be placed in Waters of the State or USGS blue-line streams (unless approved by Federal Authorities).
- 2. Both outlet berm and the stone apron shall have an underlying layer of non-woven geotextile filter fabric.
- 3. All internal side slopes of the sediment trap should be 2.5:1 or flatter.
- 5. A sediment cleanout stake should be installed and marked to remove sediment at 50% of the sediment storage volume.
- 7. After construction of each sediment trap, the area disturbed to construct the trap should be promptly stabilized, including all side slopes.
- 8. The following sediment trap requirements shall be maintained:
 - Maximum embankment height shall be 5-feet. Maximum riprap outlet height shall be 3.5-feet. Minimum flow length at top of riprap outlet shall be 5-feet.

INSPECTION AND MAINTENANCE

- 1. The key to a functional sediment trap is weekly inspections, routine maintenance and regular
- 2. Attention to sediment accumulations within the trap is extremely important. Accumulated sediment deposition should be continually monitored in the trap and removed when
- 3. Remove accumulated sediment when it reaches 50% of the designed sediment storage volume as marked by the cleanout stake.
- 4. Removed sediment from the trap shall be placed in stockpile storage areas or spread thinly across the disturbed area. Stabilize the removed sediment after it is relocated.
- 5. Regular inspections of sediment traps should be conducted once every calendar week and, as recommended and within 24-hours after each rainfall event that produces ½-inch or more of precipitation.
- 6. Disturbed areas resulting from the removal of the sediment trap should be permanently stabilized and additional BMPs, such as silt fence, should be utilized to handle stormwater runoff from this disturbed area until final stabilization is reached.

PLAN SYMBOL \bigcirc

EDIMENT TRAP WITH SKMMER NOT TO SCALE

DITCH OUTLET PROTECTION NOT TO SCALE

D SID 2 RIVE!

ARK

Asheville, NC 28801

DESIGN BY: DRAWN BY: CHECKED BY

t 828.253.6856

f 828.253.8256

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September 30, 2022

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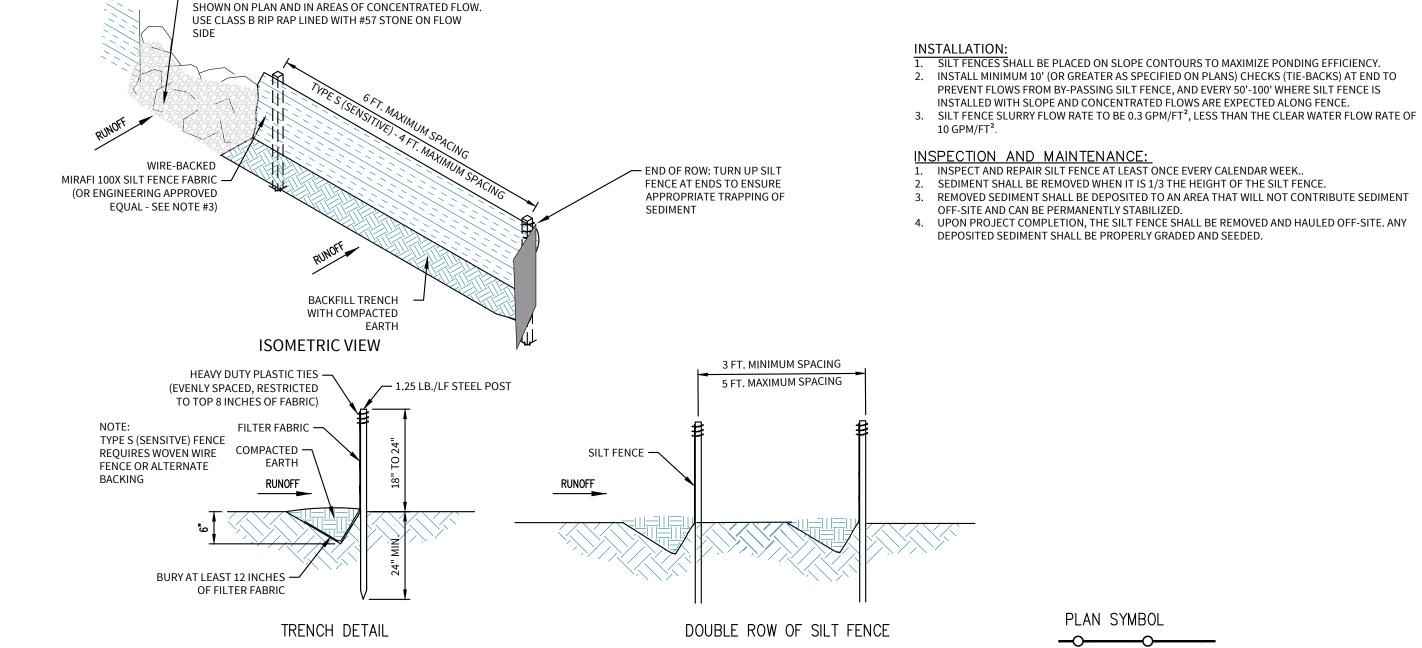
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drawings/details are no longer applicable.

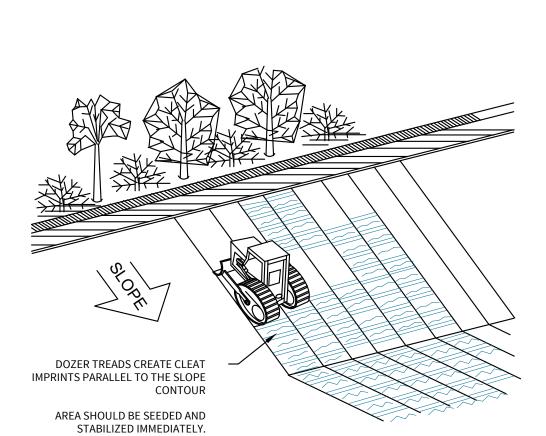
EC DETAILS

- 1. SEE PLANTING & REVEGETATION SPECIFICATIONS FOR MORE INFORMATION
- ON SEED APPLICATION AND ESTABLISHMENT. 2. CONTRACTOR TO KEEP RECORD OF SEED PURCHASE AND APPLICATION
- RATES FOR FINAL INSPECTION (BAGS & RECEIPTS).
- 3. GROUND STABILIZATION REQUIRED IN (7) SEVEN DAYS ON PERIMETER AREAS AND SLOPES GREATER THAN 3:1, AND GROUND STABILIZATION IN (14) DAYS ON OTHER AREAS

TEI	MPORARY SEEDING SCHEDULE MPORARY SEEDING MUST OCCUR WHEN DENUDED AREAS WILL NOT BE OUGHT TO FINAL GRADE WITHIN 7 CALENDAR DAYS (SEE NOTE 3 ABOVE).	PERMANENT SEEDING SCHEDULE PERMANENT SEEDING MUST OCCUR WITHIN 14 CALENDAR DAYS OF FINAL GRADING. COVER CROPS (TEMPORARY SEEDING) TO BE ADDED TO PERMANENT SEEDING MIXES IF NO TEMPORARY SEEDING HAS BEEN PLACED PREVIOUSLY.
SUMMER	SEEDING MIXTURE: SPECIES GERMAN MILLET PARTRIDGE PEA A small-stemmed sudangrass may be substituted for Partridge Pea at a rate of 50 lb/acre. SEEDING DATES: May 15-Aug 15	PERMANENT SEEDING MIXES: REFERENCE PLANTING PLAN SHEETS 7.1-7.5 FOR PERMANENT SEED MIXES The seed mixes above are listed in the specifications and available at ERNST CONSERVATION SEEDS (800.873.3321). Local sources of similar seed mix may be used
WINTER & EARLY SPRING	SEEDING MIXTURE: SPECIES ANNUAL (WINTER) RYE GRASS FARTRIDGE PEA A small-stemmed sudangrass may be substituted for Partridge Pea at a rate of 50 lb/acre. SEEDING DATES: Feb 1-May 15	(to be approved by Landscape Architect in writing).
FALL	SEEDING MIXTURE: SPECIES ANNUAL (WINTER) RYE GRASS PARTRIDGE PEA A small-stemmed sudangrass may be substituted for Partridge Pea at a rate of 50 lb/acre. SEEDING DATES: Aug 15-Dec 30	SOIL AMENDMENTS: Physically or chemically treat all exotic invasive plants before amending soil. Apply lime and fertilizer according to soil tests or apply 4,000 lb/acre ground agricultural limestone and 1,000 lb/acre 5-10-10 fertilizer. SOIL PREPARATION: Soil impacted by construction must be loosened prior to seeding by means of disking or raking. Seedbed shall be well-pulvarized, loose, and uniform. All stones larger than three (3) inches, sticks, roots, and other extraneous materials shall be removed. Apply seed uniformly with a cyclon seeder, drop-type spreader, drill or hydro-seeder. Cover broadcast seed by lightly raking, then firm surface with roller or cultipacker. Cut or disc temporary seeding cover crop prior to seeding.
GENERAL	SOIL AMENDMENTS: Follow recommendation of soil tests. Use only amendments safe for riparian areas. MULCH: Apply 4,000 lb/acre straw. Anchor straw by tacking. MAINTENANCE: Refertilize if growth is not fully adequate. Topdress with 50 lb/acre of nitrogen in March (if applicable). If it is necessary to extend temporary cover beyond June 15th overseed with mixes provided. Reseed, re-fertilize and mulch immediately following erosion or other damage.	SEED PREPARATION: If banks exceed 4:1, apply seed, lime, and apply mulch. MULCH: Apply 4,000-5,000 lb/acre grain straw or equivalent cover of another suitable, weed-free mulching material. Use a spray-on growth (mulch) matrix (Flexterra FGM or equal) for slope embankments that exceed 3:1 slopes. MAINTENANCE: Mow or cut back no more than once a year. Refertilize in the second year unless growth is fully adequate. Reseed, fertilize, and mulch damaged areas immediately. Weed during first 2 years of establishment.







- 1. TO SLOW EROSION, PERFORM SURFACE ROUGHENING (TRACKING) AS SOON AS POSSIBLE AFTER
- VEGETATION HAS BEEN REMOVED FROM SLOPE. 2. CLEAT IMPRINTS SHOULD BE PARALLEL TO THE SLOPE.
- 3. USE TRACKING WITH TEMPORARY SEEDING AND MULCHING TO STABILIZE AN AREA. 4. PERFORM TRACKING IMMEDIATELY AFTER GRADING ACTIVITIES HAVE CEASED (TEMPORARILY OR
- 5. AVOID EXCESSIVE COMPACTING OF THE SOIL SURFACE WHEN TRACKING SINCE SOIL COMPACTION INHIBITS VEGETATION GROWTH AND CAUSES HIGHER RUNOFF RATES. AS FEW PASSES AS POSSIBLE SHOULD BE MADE WITH THE MACHINERY TO MINIMIZE COMPACTION.

INSPECTION AND MAINTENANCE:

- 1. ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE INSPECTED ONCE EVERY CALENDAR
- 2. IF RILLS (SMALL WATERCOURSES THAT HAVE STEEP SIDES AND USUALLY ARE ONLY A FEW INCHES DEEP) APPEAR, RE-GRADE , RE-ROUGHEN AND RE-SEED IMMEDIATELY.

PLAN SYMBOL



Reseed, fertilize, and mulch damaged areas immediately. Weed during first 2 years of establishment.

SURFACE ROUGHENING

NOT TO SCALE

10' ROCK CHECK EVERY 50-100' ALONG SILT FENCE AS SHOWN ON PLAN AND IN AREAS OF CONCENTRATED FLOW.

REINFORCED SILT FENCE NOT TO SCALE

PLAN SYMBOL

PARK RSID

Asheville, NC 28801 t 828.253.6856 f 828.253.8256

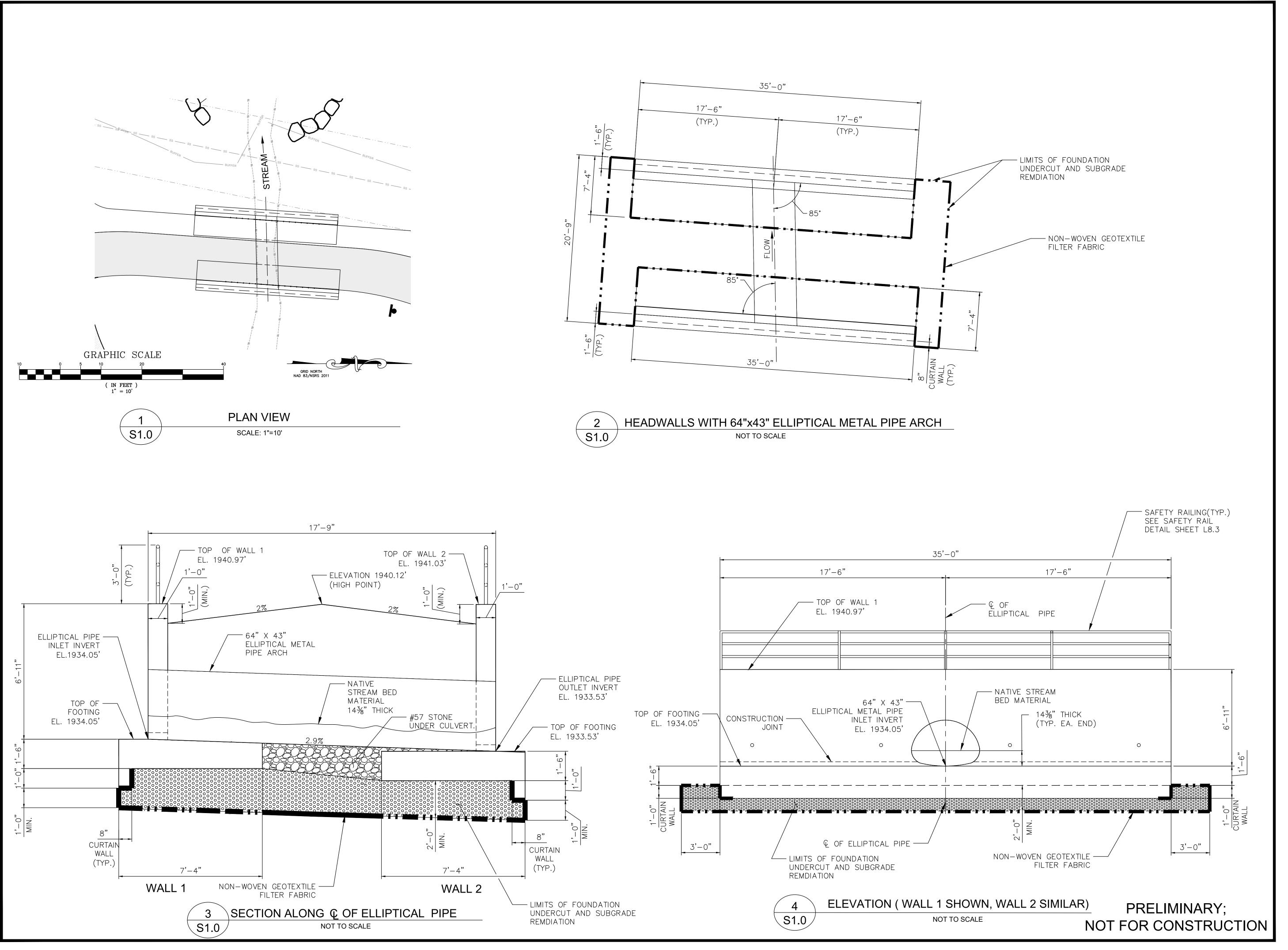
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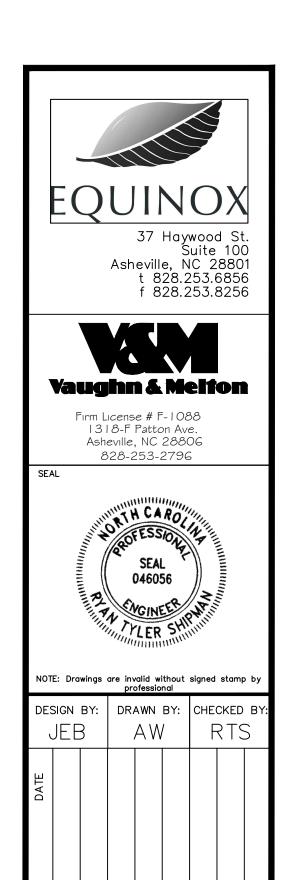
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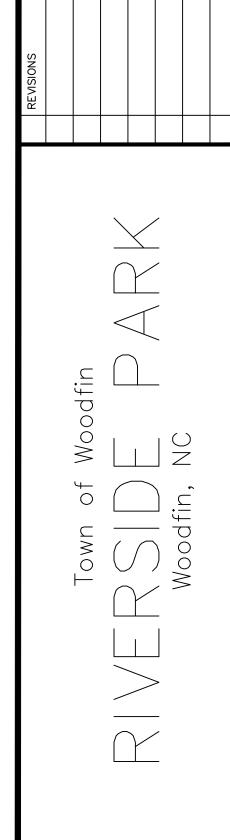
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EC DETAILS







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100%

DATE
SEPTEMBER 26, 2022

DRAWING SCALE

AS SHOWN

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STRUCTURAL PLAN

S1.0

Implementing the details and specificati activity being considered compliant with sections of the NCG01 Construction Ger permittee shall comply with the Erosion delegated authority having jurisdiction.

SECTION E: GROUND STABILIZATION

Required Groun

		Stabilize Within this	
Ś	Site Area Description	many calendar days after ceasing	Timeframe variations
		land disturbance	
(a)	Perimeter dikes,		
	swales, ditches, and	7	None
	perimeter slopes		
(q)	High Quality Water	7	and
	(HQW) Zones	•	
(2)	Slopes steeper than		If slopes are 10' or less in length and are
_		7	not steeper than 2:1, 14 days are
			allowed
			-7 days for slopes greater than 50' in
			length and with slopes steeper than 4:1
			-7 days for perimeter dikes, swales,
(9	(d) Slopes 3:1 to 4:1	14	ditches, perimeter slopes and HQW
			Zones
			-10 days for Falls Lake Watershed
			-7 days for perimeter dikes, swales,
(a	(e) Areas with slopes		ditches, perimeter slopes and HQW Zones
)	flatter than 4:1	14	-10 days for Falls Lake Watershed unless
			there is zero slope
Note	:: After the permanent	cessation of construc	Note: After the permanent cessation of construction activities, any areas with temporary

-, -	stal	Stabilize the ground sufficiently so that rain will not dislodge the soil. Use one techniques in the table below:	vill not dislodge the soil. Use one
		Temporary Stabilization	Permanent Stabilization
	•	 Temporary grass seed covered with straw or 	 Permanent grass seed covered with
		other mulches and tackifiers	other mulches and tackifiers
	•	 Hydroseeding 	 Geotextile fabrics such as permaner
	•	 Rolled erosion control products with or 	reinforcement matting
		without temporary grass seed	 Hydroseeding
	•	 Appropriately applied straw or other mulch 	 Shrubs or other permanent planting
	•	Plastic sheeting	with mulch
			 Uniform and evenly distributed gro
			sufficient to restrain erosion
			 Structural methods such as concret
-			

1. Show stockpile locations on p 50 feet away from storm drai and surface waters unless it c available.

2. Protect stockpile with silt fendive feet from the toe of stock five feet from the access p 4. Stabilize stockpile within the with the approved plan and a as vegetative, physical or che erosion on disturbed soils for

GROUND

NCG01

AD LAND CLEARING WASTE Place litter and debris in approved waste containers. er and size of waste containers (e.g dumpster, trash cain construction and domestic wastes. I least 50 feet away from storm drain inlets and surface rematives are reasonably available. In areas that do not receive substantial amounts of runoff es not drain directly to a storm drain, stream or wetland. The end of each workday and before storm events or ment. Repair or replace damaged waste containers. In waste containers during times of high winds. I needed to prevent overflow. Clean up immediately if ITTER, BUILDING MATERIAL AND 1. Never bury or burn waste. P 2. Provide a sufficient number a

- TE WASHOUTS

 In not discharge concrete or cement slurry from the site.

 Spose of, or recycle settled, hardened concrete residue in accordance with loc distate solid waste regulations and at an approved facility.

 Banage washout from mortar mixers in accordance with the above item and in dition place the mixer and associated materials on impervious barrier and with perimeter silt fence.

Do not dump paint and other liable.
 Locate paint washouts at least waters unless no other alterna
 Contain liquid wastes in a cont
 Containment must be labeled,
 Prevent the discharge of soaps construction sites.

- Install temporary concrete washouts per local requirements, where applicable. If an alternate method or product is to be used, contact your approval authority for review and approval. If local standard details are not available, use one of the two types of temporary concrete washouts provided on this detail.
 Do not use concrete washouts for dewatering or storing defective curb or sidewalk sections. Stormwater accumulated within the washout may not be pumped into or discharged to the storm drain system or receiving surface waters. Liquid waste must be pumped out and removed from project.
 Locate washouts at least 50 feet from storm drain inlets and surface waters unless it can be shown that no other alternatives are reasonably available. At a minimum, install protection of storm drain inlet(s) closest to the washout which could receive spills or overflow.
 Locate washouts in an easily accessible area, on level ground and install a stone entrance pad in front of the washout. Additional controls may be required by the approving authority.
 Install at least one sign directing concrete trucks to the washout within the project limits. Post signage on the washout when at approximately 75% capacity to limit components when no longer functional. When utilizing alternative or proprietary products, follow manufacturer's instructions.
 At the components when no longer functional. When utilizing alternative or proprietary products, follow manufacturer's instructions.
 At the completion of the concrete work, remove remaining leavings and dispose of in an approved disposal facility. Fill pit, if applicable, and stabilize any disturbance caused by removal of washout.

el ground, at least 50 feet away from storm drains, here is no alternative reasonably available. If 50 fool ide relocation of portable toilet behind silt fence or pd with sand bags.

- 2.
- 3.
- ERBICIDES, PESTICIDES AND RODENTICIDES

 1. Store and apply herbicides, pesticides and rodenticides in accordan restrictions.

 2. Store herbicides, pesticides and rodenticides in their original conta label, which lists directions for use, ingredients and first aid steps i accidental poisoning.

 3. Do not store herbicides, pesticides and rodenticides in areas where possible or where they may spill or leak into wells, stormwater dra or surface water. If a spill occurs, clean area immediately.

 4. Do not stockpile these materials onsite.
- RDOUS AND TOXIC WASTE

 Create designated hazardous waste collection areas on-site.
 Place hazardous waste containers under cover or in secondary containment.
 Do not store hazardous chemicals, drums or bagged materials directly on the groun

EFFECTIVE: 04/01/19

STABILIZATION AND MATERIALS HANDLING

NORTH CAROLINA Environmental Quality

(during normal business hours) Daily
A
At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours
At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours of a rain event ≥ 1.0 inch in 24 hours
At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours After each phase of grading
2. Documentation that the required ground stabilization measures have been provided within the required timeframe or an assurance that they will be provided as soon as possible. NOTE: The rain inspection resets the required 7 calendar day inspection requirement.

3. Documentation to be Retained All data used to complete the e of three years after project cor

SE OUT PART II, SECTION G, ITEM (4) IMENT BASINS FOR MAINTENANCE OR CLO DOWN OF

r from the surface v shall be rare (for e

-) and (d) of this permit, rom the sediment basi ction C, Ite that is rer
- e at the outlet of the dewatering ' scharge points of all dewatering d I of in a manner that does not cau

SELF-INSPECTION, RECORDKEEPING AND REPORTING NCG01

well as any approved deviation shall be kept on the site. e kept up-to-date throughout the coverage under this per ng to the E&SC plan shall be kept on site and available for gnormal business houre

(a) Each E&SC measure has be and does not significantly deviocations, dimensions and relashown on the approved E&SC

- Oil spills if:
 They are 25 gallons or more,
 They are less than 25 gallons bt
 They cause sheen on surface w
 They are within 100 feet of surf

- Releases of hazardous substances in excess of reportable quit of the Clean Water Act (Ref: 40 CFR 110.3 and 40 CFR 117.3) (Ref: 40 CFR 302.4) or G.S. 143-215.85.

Reporting Timeframes and Other Requirements

After a permittee becomes aware of an occurrence that must be reported, he shall the appropriate Division regional office within the timeframes and in accordance wither requirements listed below. Occurrences outside normal business hours may reported to the Department's Environmental Emergency Center personnel at (800) 858-0368.

Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate the completion of the corrective action.

In Site

above, the following items shall be kept on the nes during normal business hours, unless the on based on unique site conditions that make

Reporting Timeframes (After Discovery) and Other Requirements
• Within 24 hours, an oral or electronic notification.
• Within 7 calendar days, a report that contains a description of the sediment and actions taken to address the cause of the deposition. Division staff may waive the requirement for a written report on a case-by-case basis.
• If the stream is named on the NC 303(d) list as impaired for sediment-related causes, the permittee may be required to perform additional monitoring, inspections or apply more stringent practices if staff determine that additional requirements are needed to assure compliar with the federal or state impaired-waters conditions.
• Within 24 hours, an oral or electronic notification. The notification shall include information about the date, time, nature, volume and location of the spill or release.

is made during the previous twelve months. The permittee shall observations on the Inspection Record Form provided by the inspection form that includes all the required elements. Use of ole records in lieu of the required paper copies will be allowed if ual access and utility as the hard-copy records.

ained for Three Years

the e-NOI and all inspection records shall be maintained for a perio the e-NOI and made available upon request. [40 CFR 122.41]

Records of inspections mecord the required obsections or a similar inspelectronically-available shown to provide equal





DESIGN BY: DRAWN BY: CHECKED BY:

PARK

RIVERSIDE

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90%

September 30, 2022

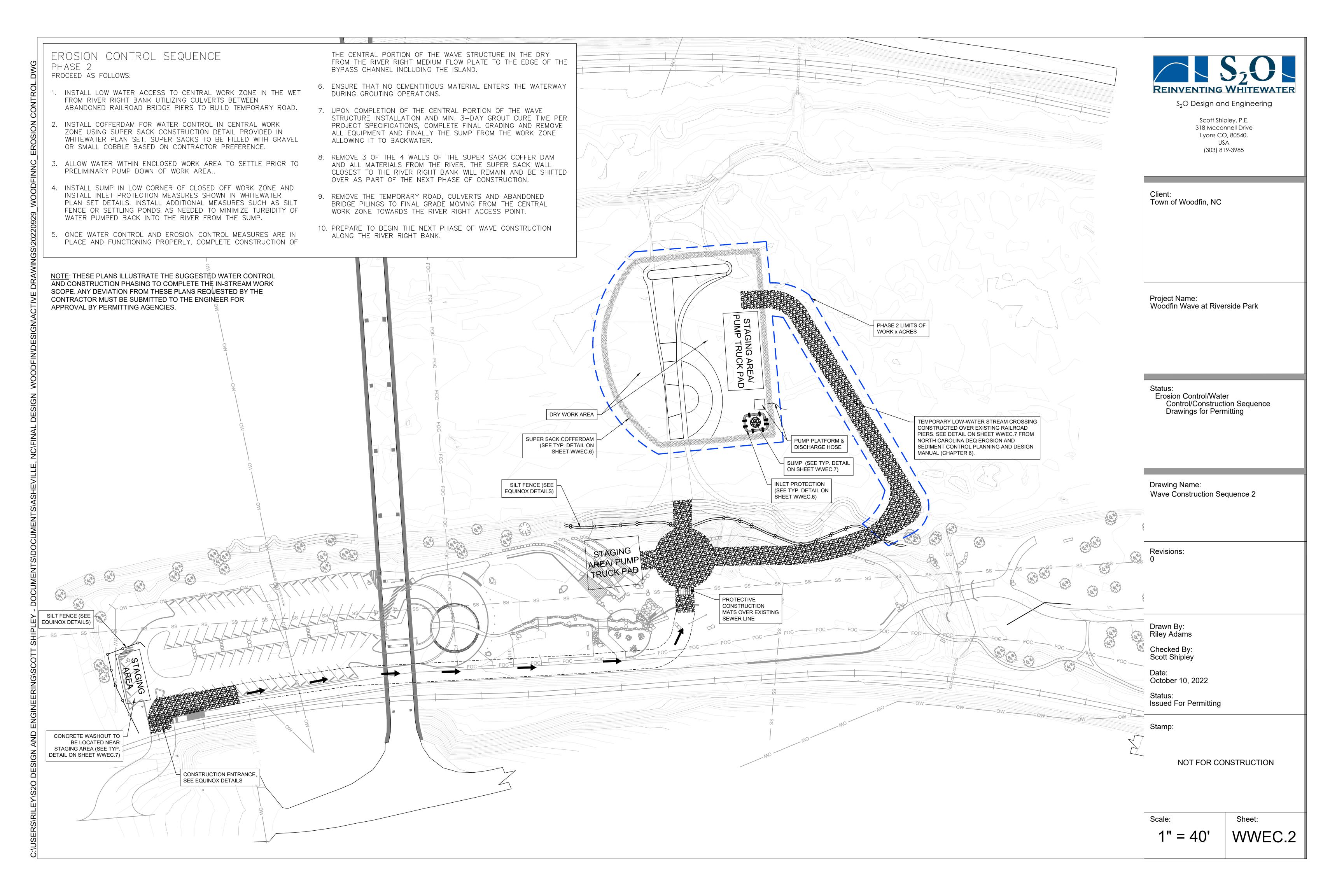
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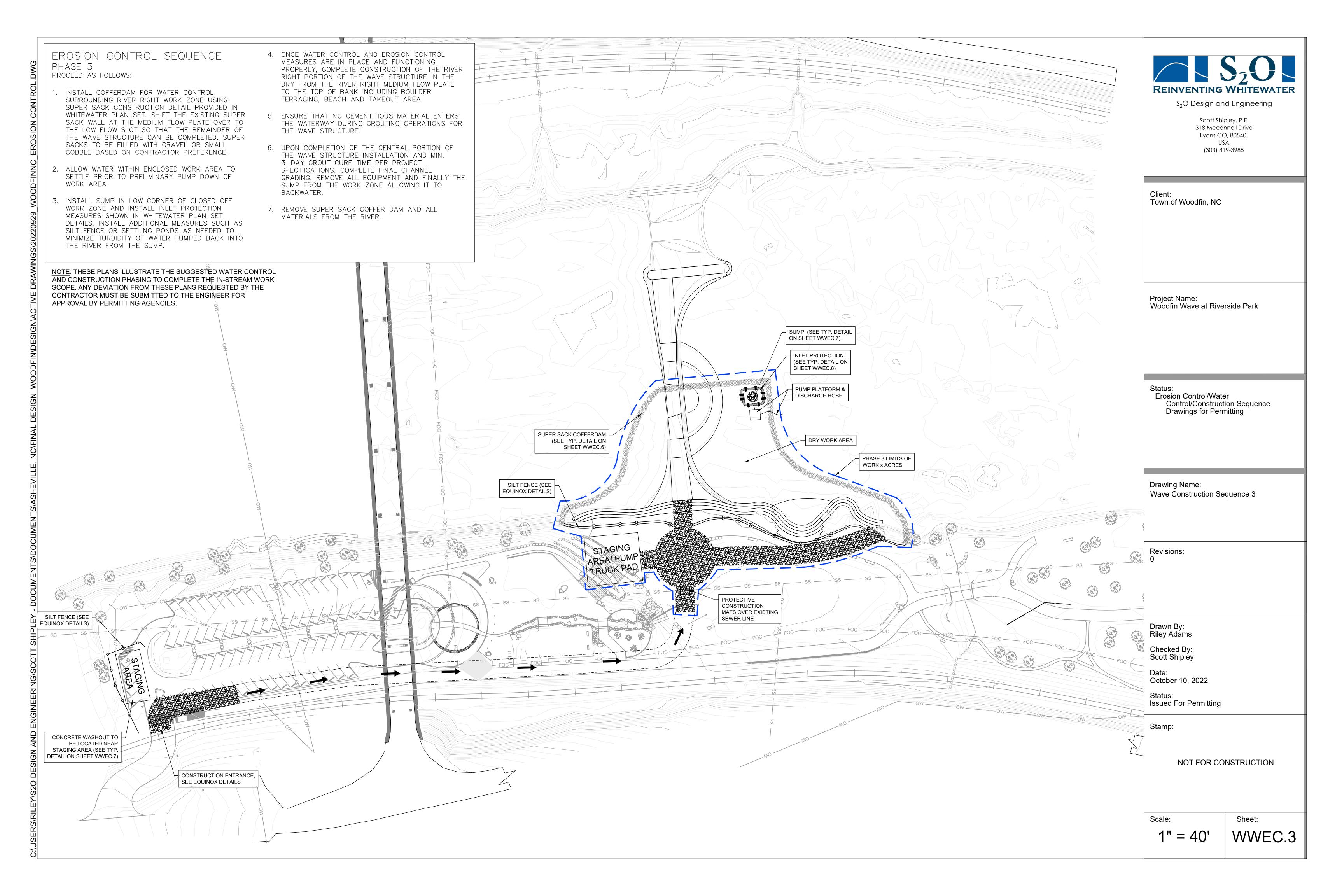
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EC DETAILS

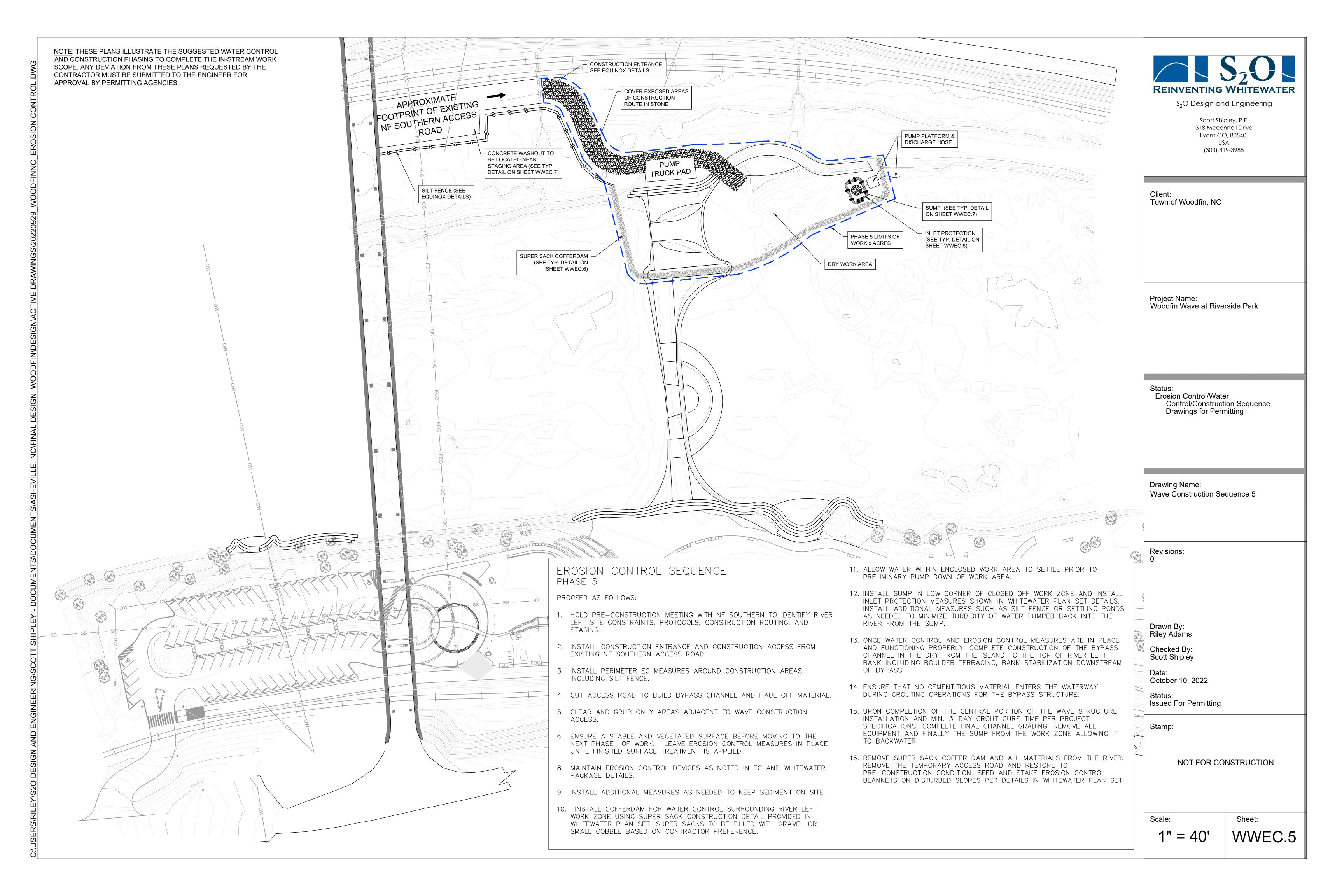
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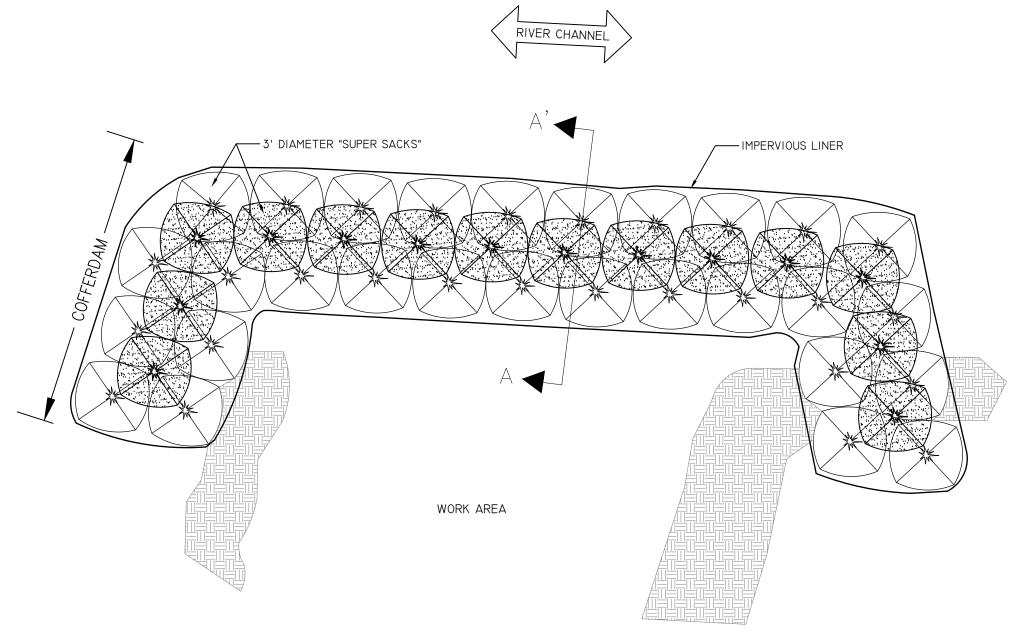
37 Haywood St. Suite 100 Asheville, NC 28801 t 828.253.6856 f 828.253.8256











COFFERDAM NOTES:

(I) WRAP "SUPER SACKS" WITH IMPERVIOUS PLASTIC LINER TO PREVENT SEEPAGE.

(2) BACKFILL THE DOWNSTREAM SIDE OF THE COFFERDAM WITH NATIVE ADJACENT ALLUVIUM.

(3) USE "SUPER SACKS" AS A BUTTRESS AS REQUIRED.

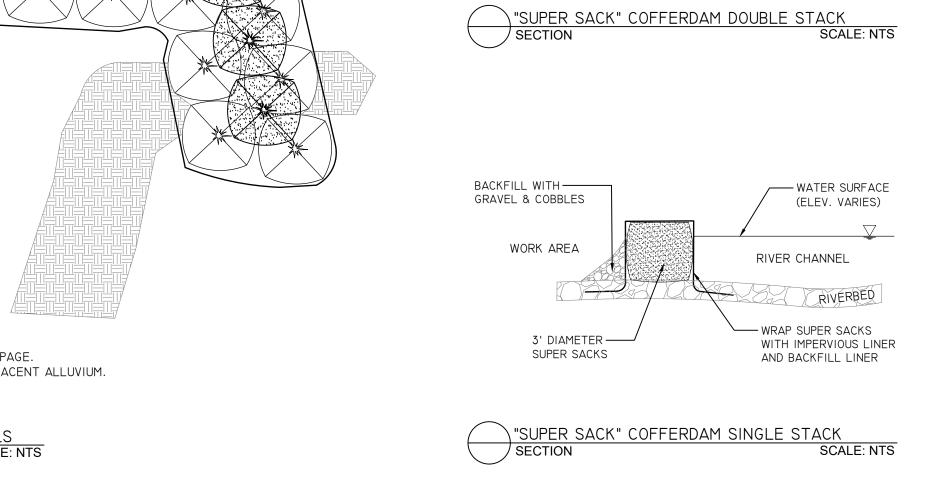
"SUPER SACK" COFFERDAM TYPICAL DETAILS
PLAN SCALE: NT



(I) THE IMPLEMENTATION OF EROSION AND SEDIMENT CONTROL MEASURES AND BEST MANAGEMENT PRACTICES INCLUDING CONSTRUCTION, MAINTENANCE, REPLACEMENT AND UPGRADING ARE THE RESPONSIBILITY OF THE CONTRACTOR UNTIL ALL CONSTRUCTION IS COMPLETED AND APPROVED.

- (2) THE DETAILS SHOWN ON THIS SHEET ARE AN EXAMPLE OF ACCEPTABLE METHODS TO USE DURING CONSTRUCTION OF THIS PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR DEVELOPING AND SUBMITTING A COFFERDAM PLAN TO INCLUDE SUFFICIENT DETAIL OF MEANS AND METHODS SATISFACTORILY MEETING THE PROJECT SPECIFICATIONS AND PERMIT REQUIREMENTS. COFFERDAMS MAY CONSIST OF OTHER METHODS INCLUDING (BUT NOT LIMITED TO) SECLUSION FENCING, SAND BAGS, BULK BAGS, SUPER SACKS, SHEET PILE AND INFLATABLE BLADDERS.

 COFFERDAMS SHALL INCLUDE PLASTING LINER OR FINE MESH SILT FENCE TO REDUCE TURBIDITY AND FINES FROM ENTERING THE FREE FLOWING PORTION OF LIVE WATER.
- (3) ALL PUMP INTAKES SHALL BE SCREENED FOR FISH PROTECTION AS REQUIRED BY REGULATORY AGENCIES.
- (4) DEWATERING PUMP DISCHARGE FROM WITHIN COFFERDAM WORK AREAS SHALL BE RELEASED ONTO FLOODPLAIN AREAS AWAY FROM WETLANDS AND CONSTRUCTION ACTIVITIES. DISCHARGE SHALL NOT CAUSE EROSION OF TOPSOIL AND SHALL SHEET FLOW OVER THE FLOODPLAIN BEFORE RETURNING TO LIVE WATER DOWNSTREAM OF THE WORK AREA. ALL RETURN FLOWS MUST MEET PERMIT REQUIREMENTS FOR TURBIDITY.
- (5) ALL EARTHWORK AND WOOD STRUCTURES CONSTRUCTION WITHIN THE ORDINARY HIGH CHANNEL SHALL CONFORM TO WATER QUALITY STANDARDS ESTABLISHED BY THE REGULATORY AGENCY PERMITS FOR THIS PROJECT.



SANDBAGS —

WATER SURFACE ——

(ELEV. VARIES)

EXTEND LINER MIN. 4'————BEYOND BARRIER & BURY

IN NATIVE ALLUVIUM

3' DIAMETER SUPER SACKS ----

WORK AREA

BACKFILL WITH ----

GRAVEL & COBBLES

WATER SURFACE

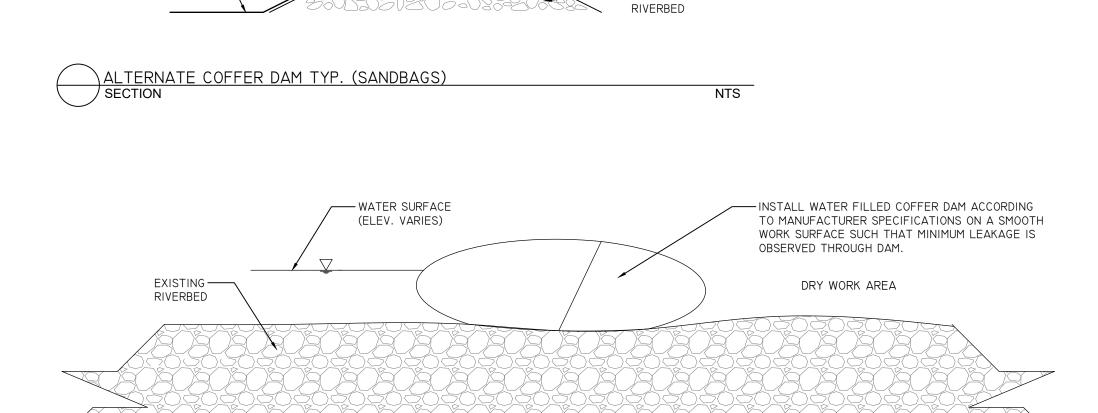
(ELEV. VARIES)

RIVER CHANNEL

- WRAP SUPER SACKS

WITH IMPERVIOUS LINER

AND BACKFILL LINER



- POLYETHYLENE LINER

MIN. THICKNESS 8 MIL.

MAX SLOPE IH:2V

DRY WORK AREA

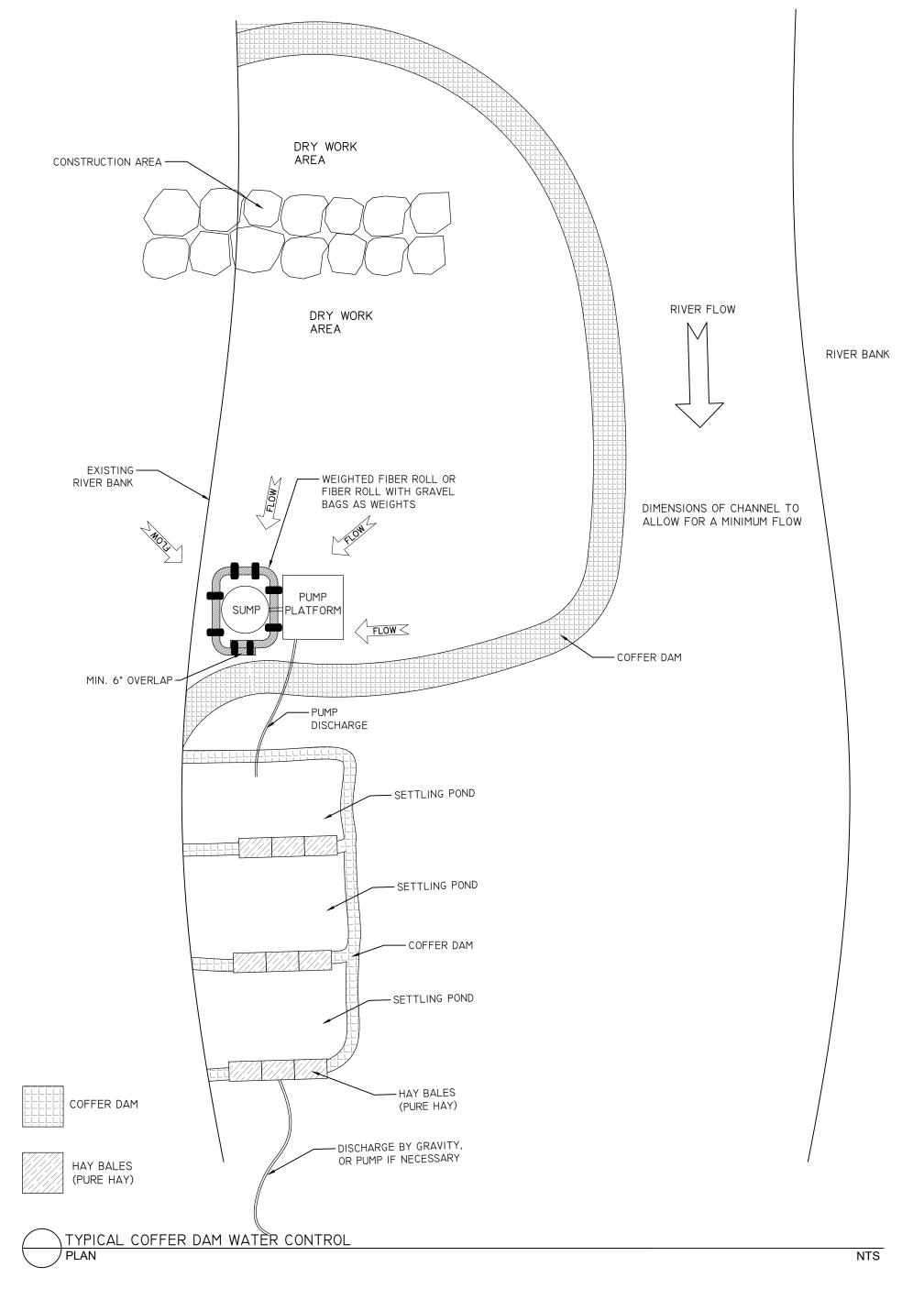
-EXISTING COMPACTED

OR FLATTER

ALTERNATE COFFER DAM TYP. WATER-FILLED BLADDER

SECTION

NT





Scott Shipley, P.E. 318 Mcconnell Drive Lyons CO, 80540, USA (303) 819-3985

Client: Town of Woodfin, NC

Project Name: Woodfin Wave at Riverside Park

Status:
Erosion Control/Water
Control/Construction Sequence
Drawings for Permitting

Drawing Name:
Erosion Control Details 1

Revisions:

Drawn By: Riley Adams

Checked By:

Scott Shipley

Date:
October 10, 2022

Status: Issued For Permitting

Stamp:

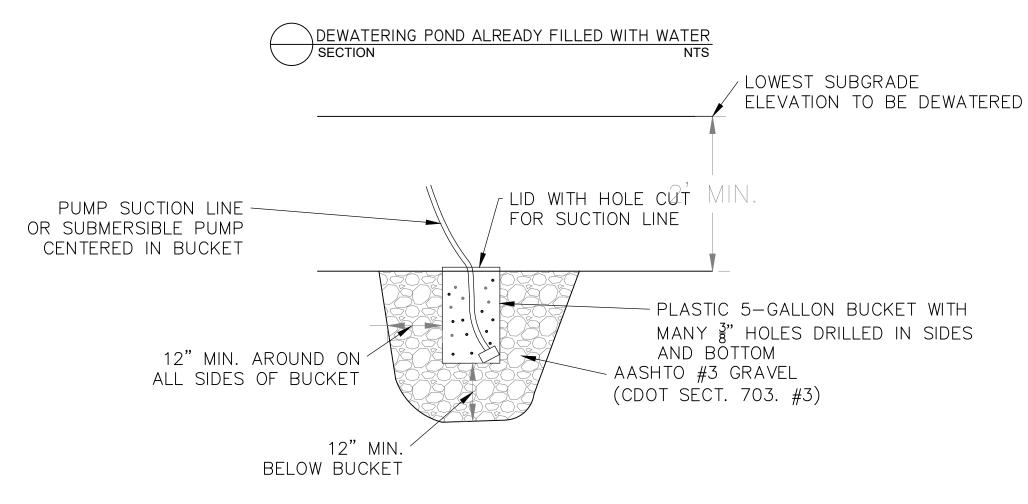
NOT FOR CONSTRUCTION

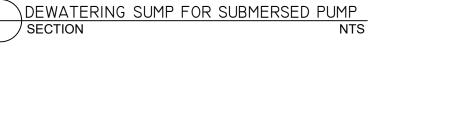
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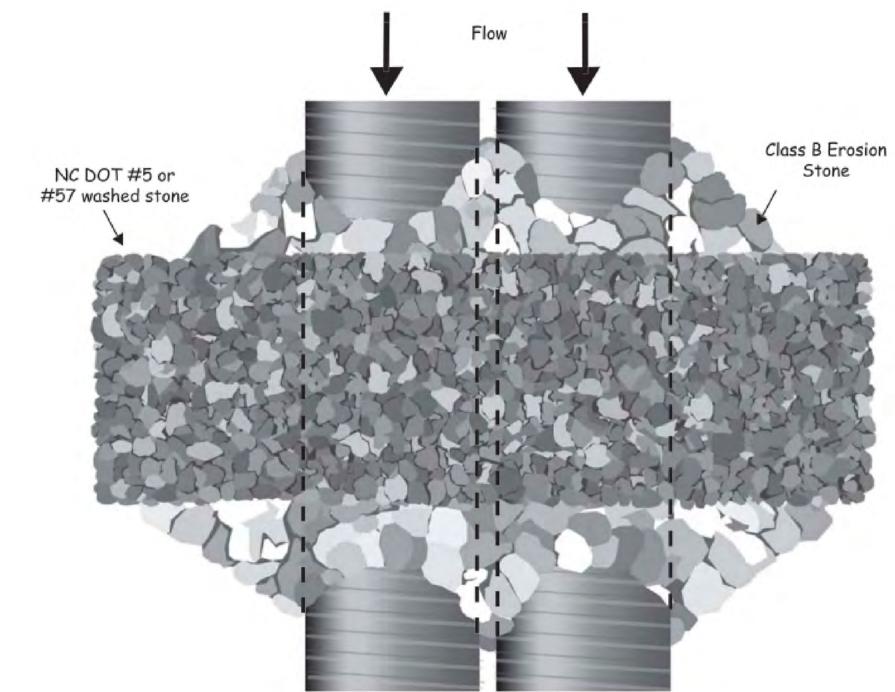
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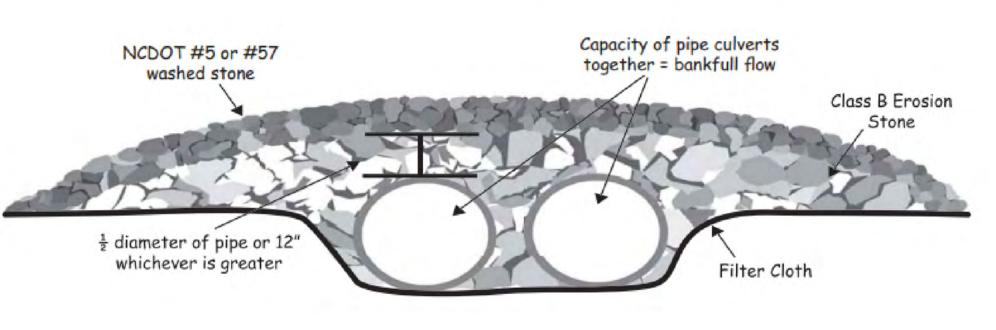
1" = 40'

WWEC.6





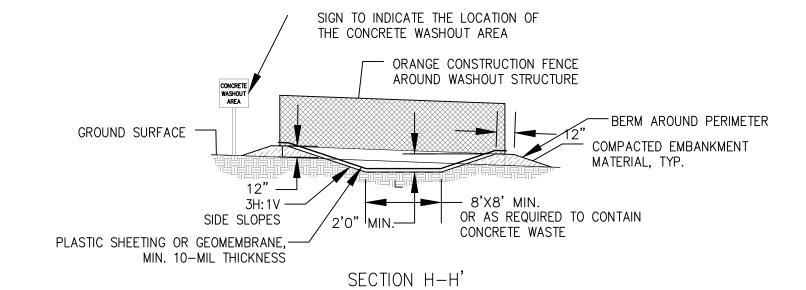


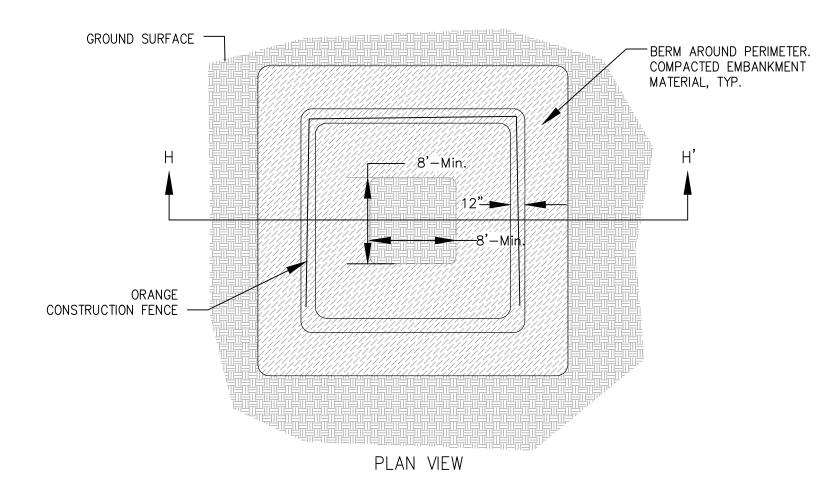


Stream

Channel

TEMPORARY STREAM CROSSING/ACCESS ROAD
DETAIL





NOTES

1. CONCRETE WASHOUT AREA SHALL BE INSTALLED PRIOR TO ANY CONCRETE PLACEMENT ON SITE; PLACED A MINIMUM 50' FROM STATE WATERS.

2. VEHICLE TRACKING CONTROL IS REQUIRED AT CONCRETE WASHOUT ENTRANCE IF ACCESS TO CONCRETE WASHOUT AREA IS OFF PAVEMENT.

3. A PLASTIC SHEETING OR GEOMEMBRANE LINER SHALL BE PLACED. MINIMUM 10-MIL THICKNESS..

4. THE CONCRETE WASHOUT AREA SHALL BE REPAIRED AND/OR ENLARGED AS NECESSARY TO MAINTAIN CAPACITY
FOR WASTE CONCRETE

5. WASTE MATERIAL FROM CONCRETE WASHOUT OPERATIONS MUST BE REMOVED AND LEGALLY DISPOSED OF WHEN IT HAS ACCUMULATED TWO—THIRDS OF THE WET STORAGE CAPACITY OF THE STRUCTURE AND AT THE END OF CONSTRUCTION

6. WHEN THE CONCRETE WASHOUT AREA IS REMOVED, THE DISTURBED AREA SHALL BE SEEDED AND MULCHED OR

OTHERWISE STABILIZED IN A MANNER ACCEPTED BY THE CLIENT.

7. NO STORMWATER RUN-OFF SHALL DRAIN INTO CONCRETE WASHOUT AREA.

CONCRETE WASHOUT AREA

DETAIL

NT



Scott Shipley, P.E. 318 Mcconnell Drive Lyons CO, 80540, USA (303) 819-3985

S₂O Design and Engineering

Client: Town of Woodfin, NC

Project Name: Woodfin Wave at Riverside Park

Status:
Erosion Control/Water
Control/Construction Sequence
Drawings for Permitting

Drawing Name: Erosion Control Details 2

Revisions:

Drawn By: Riley Adams

Checked By: Scott Shipley

Date: October 10, 2022

Status: Issued For Permitting

Stamp:

NOT FOR CONSTRUCTION

Scale:

1" = 40'

Sheet:

WWEC.7

WOTUS Impacts Narrative

The Riverside Park and Wave project is a 12.01ac park improvement project that will have impacts to waters of the United States. There will be both land based and water based impacts including tributary crossing, the addition and improvements of river access, and the implementation of an in-stream white water feature (the wave and bypass channel).

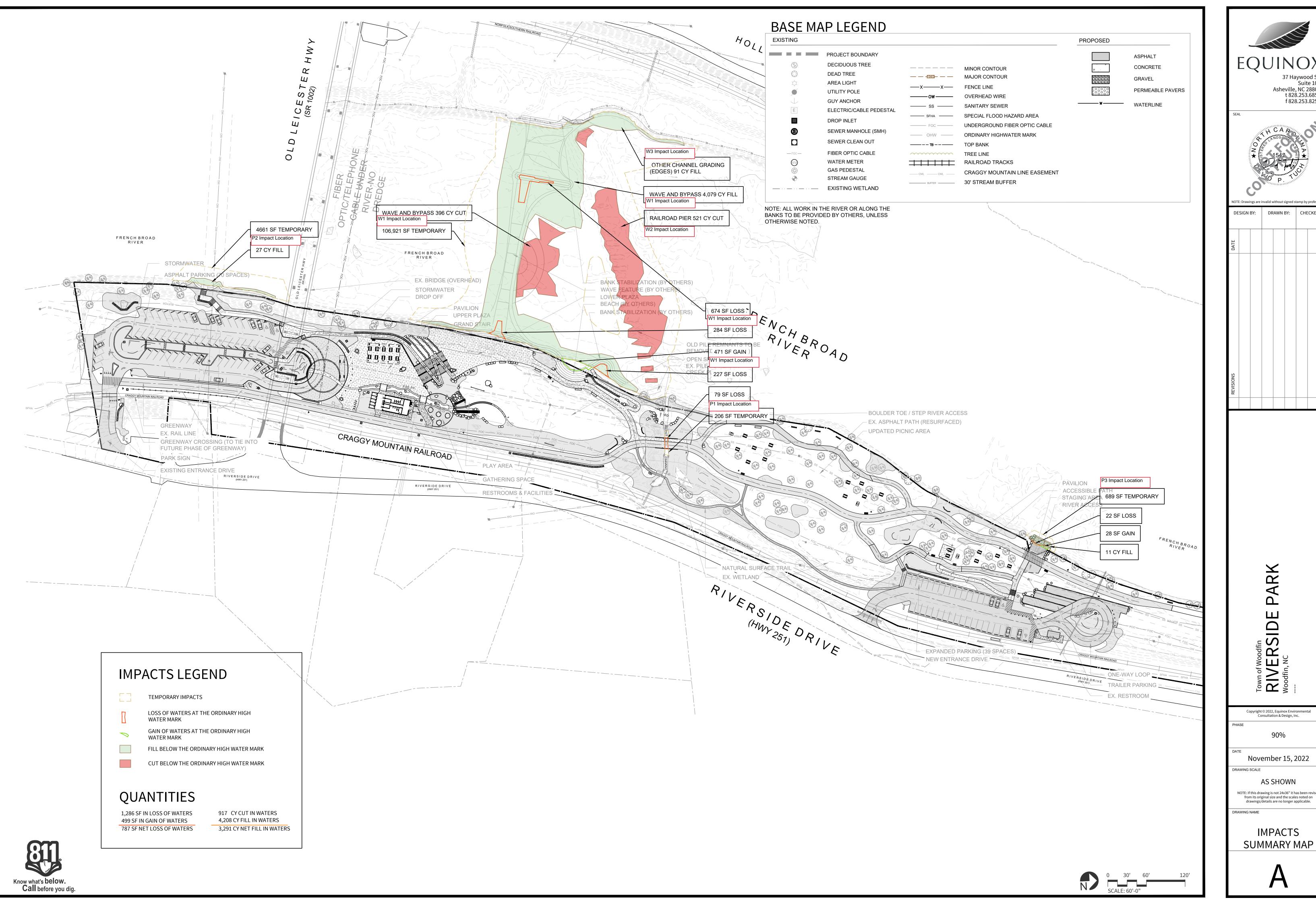
Water based impacts will be first in the construction sequencing. Impacts will be both temporary and permanent. Temporary impacts are necessary to construct the wave and bypass feature as well as bank tie-ins. These impacts will include a temporary low-flow road, coffer dams and dewatering zones to allow construction of the wave feature in the dry. The construction of the wave and bypass will be done in three sections. The project will commence with the lowering of the east bank to gain access for the wave and bypass construction. Once a temporary construction access is installed down to the east bank and where the abandoned railroad piles meet the east bank, a temporary low-flow road will be constructed along the existing remnants of the old railroad crossing. The low-flow road will be constructed by placing culverts between the abandoned railroad piles and filling over the culverts and between the piles with cobble. This road will be used to carry construction equipment and material to the first section of construction, the center of the wave, including the island separating the wave from the bypass. Once the road is complete, a coffer dam will be constructed surrounding this section on all sides and it will be dewatered. Once the construction of the first (center) section is complete, the coffer dam on the upstream side of this section will be relocated to the downstream side of the temporary low-flow road as well as portions of the upstream side of the road that may not have coffer dam. At this point, the road should have coffer dam on either side of it. The road will then be removed. While removing the road, the contractor will also pull out the abandoned bridge pilings. These pilings are to be removed for the safety of river users. Note, this area of road and piling removal will not be dewatered, however cofferdams will limit siltation and turbidity migrating downstream. The coffer dams will be removed as the road gets removed, backing back to the east bank.

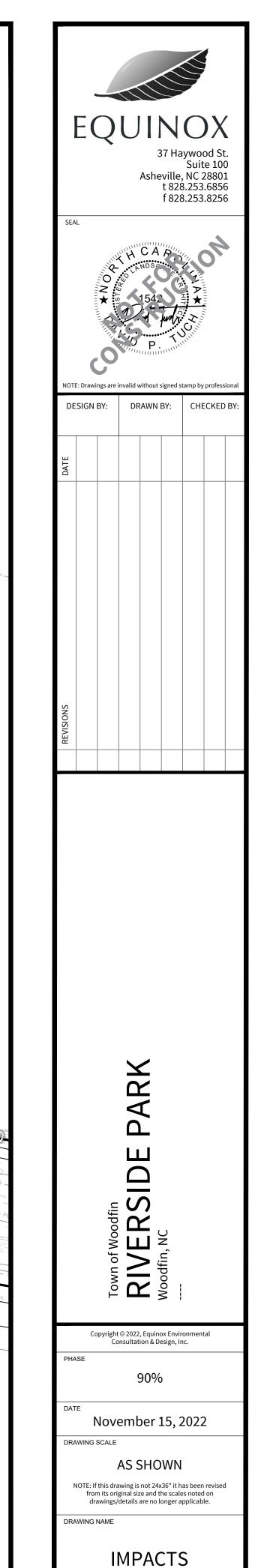
The second section of the wave to be constructed will be the east side. This includes from the center of the wave feature to the east bank tie in and the east bank boulder toe. This section will be surrounded with coffer dam and dewatered. The portion of coffer dam furthest from the bank will be shifted coffer dam from the previous section of work, while the portions of coffer dam closer to the bank will be set from the bank and a built-up peninsula in the footprint of the wave. Once this portion of the wave is complete, all construction material temporary measures will be removed wrapping up with the coffer dams.

The third section (fish bypass) will be built from the west bank. Coffer dams will be installed to surround the limits of work which will be from the island to the west bank tie-in, including boulder toe and bank stabilization. This section will be dewatered, and construction of the bypass will be done in the dry. Once construction is complete, all construction equipment and temporary measures will be removed finishing with the coffer dam.

As part of other water-based impacts, the park improvements include two river access points. The south access will be constructed first and includes boulder toe/bank stabilization. This section will be surrounded by a coffer dam and dewatered. The north access will be a precast boat ramp that will be placed. This will not be done in the dry, however a turbidity curtain will be used to protect the river from construction activities on the bank.

Land based impacts include a tributary crossing. This crossing will be complete as part of other land-based activities and will be constructed in the dry using a pump around with dykes. The crossing will be an elliptical metal culvert that will be partially buried. Once the culvert is installed, the pump around and temporary dykes will be removed.







- THOROUGHLY REVIEW THE SEDIMENT AND EROSION CONTROL PLAN, ADDING EXTRA PROTECTION ALONG THE RIVER AND NEAR STREAMS (I.E. DOUBLE ROW SILT FENCE).
- 2. CONTRACTOR TO FINE GRADE AND ADD EROSION CONTROL MATTING AND NATURAL SITE DEBRIS AT ACCESS AREAS USED BY GEOTECHNICAL ENGINEERS FOR BORING SITES.
- 3. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN
- 4. WHERE STABILIZATION BY THE 7TH DAY IS PRECLUDED BY SNOW COVER OR FROZEN GROUND CONDITIONS STABILIZATION MEASURES MUST BE INITIATED AS SOON AS PRACTICABLE.
- 5. WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, AND EARTH-DISTURBING ACTIVITIES WILL BE RESUMED WITHIN 7 DAYS, TEMPORARY STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF THE SITE.
- 6. ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE INSPECTED ONCE EVERY CALENDAR WEEK. IF PERIODIC INSPECTION OR OTHER INFORMATION INDICATES THAT A BMP HAS BEEN INAPPROPRIATELY OR INCORRECTLY INSTALLED, THE PERMITTEE MUST ADDRESS THE NECESSARY REPLACEMENT OR MODIFICATION REQUIRED TO CORRECT THE BMP WITHIN 48 HOURS OF IDENTIFICATION. IF THIS OCCURS, NOTIFY LANDSCAPE ARCHITECT.
- PROVIDE SILT FENCE AND/OR OTHER CONTROL DEVICES, AS MAY BE REQUIRED, TO CONTROL SOIL EROSION DURING UTILITY CONSTRUCTION. ALL DISTURBED AREAS SHALL BE CLEANED, GRADED, AND STABILIZED WITH GRASSING IMMEDIATELY AFTER THE UTILITY INSTALLATION. FILL, COVER, AND TEMPORARY SEEDING AT THE END OF EACH DAY ARE RECOMMENDED. IF WATER IS ENCOUNTERED WHILE TRENCHING, THE WATER SHOULD BE FILTERED TO REMOVE ANY SEDIMENTS BEFORE BEING PUMPED BACK INTO ANY WATERS OF THE STATE.
- 8. ALL EROSION CONTROL DEVICES SHALL BE PROPERLY MAINTAINED DURING ALL PHASES OF CONSTRUCTION UNTIL THE COMPLETION OF ALL CONSTRUCTION ACTIVITIES AND ALL DISTURBED AREAS HAVE BEEN STABILIZED. ADDITIONAL CONTROL DEVICES MAY BE REQUIRED DURING CONSTRUCTION IN ORDER TO CONTROL EROSION AND/OR OFFSITE SEDIMENTATION. ALL TEMPORARY CONTROL DEVICES SHALL BE REMOVED ONCE CONSTRUCTION IS COMPLETE AND THE SITE IS STABILIZED.
- 9. THE CONTRACTOR MUST TAKE NECESSARY ACTION TO MINIMIZE THE TRACKING OF MUD ONTO PAVED ROADWAY(S) FROM CONSTRUCTION AREAS AND THE GENERATION OF DUST. THE CONTRACTOR SHALL DAILY REMOVE MUD/SOIL FROM PAVEMENT, AS MAY BE REQUIRED.
- 10. TEMPORARY DIVERSION BERMS AND/OR DITCHES WILL BE PROVIDED AS NEEDED DURING CONSTRUCTION TO PROTECT WORK AREAS FROM UPSLOPE RUNOFF AND/OR TO DIVERT SEDIMENT-LADEN WATER TO APPROPRIATE TRAPS OR STABLE OUTLETS. THESE TEMPORARY BERMS AND DITCHES SHALL BE PROTECTED WITH A ROLLED EROSION AND SEDIMENT CONTROL PRODUCT UNTIL VEGETATION CAN BE ESTABLISHED.
- 11. ALL WATERS OF THE STATE (WOS), INCLUDING WETLANDS, ARE TO BE FLAGGED OR OTHERWISE CLEARLY MARKED IN THE FIELD. A DOUBLE ROW OF SILT FENCE IS TO BE INSTALLED IN ALL AREAS WHERE A 50-FOOT BUFFER CAN'T BE MAINTAINED BETWEEN THE DISTURBED AREA AND ALL WOS. A 10-FOOT BUFFER SHOULD BE MAINTAINED BETWEEN THE LAST ROW OF SILT FENCE
- 12. LITTER, CONSTRUCTION DEBRIS, OILS, FUELS, AND BUILDING PRODUCTS WITH SIGNIFICANT POTENTIAL FOR IMPACT (SUCH AS STOCKPILES OF FRESHLY TREATED LUMBER) AND CONSTRUCTION CHEMICALS THAT COULD BE EXPOSED TO STORM WATER MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE IN STORM WATER DISCHARGES.
- 13. A COPY OF THE INSPECTION RECORDS, AND RAINFALL DATA MUST BE RETAINED AT THE CONSTRUCTION SITE OR A NEARBY LOCATION EASILY ACCESSIBLE DURING NORMAL BUSINESS HOURS, FROM THE DATE OF COMMENCEMENT OF CONSTRUCTION ACTIVITIES TO THE DATE THAT FINAL STABILIZATION IS REACHED.
- 14. INITIATE STABILIZATION MEASURES ON ANY EXPOSED STEEP SLOPE (3H:1V OR GREATER) WHERE LAND-DISTURBING ACTIVITIES HAVE PERMANENTLY OR TEMPORARILY CEASED, AND WILL NOT RESUME FOR A PERIOD OF 7 CALENDAR DAYS.
- 15. MINIMIZE SOIL COMPACTION AND, UNLESS UNFEASIBLE, PRESERVE TOPSOIL.
- 16. MINIMIZE THE DISCHARGE OF POLLUTANTS FROM EQUIPMENT AND VEHICLE WASHING, WHEEL WASH WATER, AND OTHER WASH WATERS. WASH WATERS MUST BE TREATED IN A SEDIMENT BASIN OR ALTERNATIVE CONTROL THAT PROVIDES EQUIVALENT OR BETTER TREATMENT PRIOR
- 17. MINIMIZE THE DISCHARGE OF POLLUTANTS FROM DEWATERING OF TRENCHES AND EXCAVATED
- 18. MAINTAIN ALL BUFFER REQUIREMENTS AS INDICATED ON THE PLAN.
- 19. THE FOLLOWING DISCHARGES FROM SITES ARE PROHIBITED:
- 19.1. WASTEWATER FROM WASHOUT OF CONCRETE, UNLESS MANAGED BY AN APPROPRIATE
- 19.2. WASTEWATER FROM WASHOUT AND CLEANOUT OF STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS, AND OTHER CONSTRUCTION MATERIALS
- 19.3. FUELS, OILS, OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND
- 19.4. SOAPS OR SOLVENTS USED IN VEHICLE AND EQUIPMENT WASHING.
- 20. AFTER CONSTRUCTION ACTIVITIES BEGIN, INSPECTIONS ARE EXPECTED TO BE CONDUCTED AT A MINIMUM OF AT LEAST ONCE EVERY CALENDAR WEEK AND MUST BE CONDUCTED UNTIL FINAL STABILIZATION IS REACHED ON ALL AREAS OF THE CONSTRUCTION SITE.

574 SF

1933

893 CF



D FOR

PREPARE



Town of Woodfin 90 Elk Mountain RD. Woodfin, NC 28804 (828) 253-4887

LANDSCAPE ARCHITECT: **Equinox**

37 Haywood Street, Suite 100 Asheville, NC 28801 (828) 253-6856 (x202) david@equinoxenvironmental.com

ADDRESS: 1598 Riverside Dr. Asheville, NC 28804

Latitude: 35.627678° N Longitude: - 82.600733° W

PROJECT SIZE: Approximately 9.15 Ac Total Disturbance area is 8.31 Ac

All aspects of work shall be performed in accordance with all applicable local, state, and federal regulations pertaining to worker safety.

Trap	DrainageAr ea (AC)	Min. L/W Ratio	Designed L/W Ratio	Required Surface Area	Required volume	Minimum Storage Depth (with 1.5' min. excavation)	Bottom Surface Elev	Surface Area	Volume	Weir Width	weir Elevation
ST1	0.93	2 to 1	2 to 1	1352 SF	3348 CF	2.0'	1935	1745 SF	3873 CF	4'	1938.00

2.0'

792 CF

Skimmer Sizing

2 to 1

2 to 1

,	Trap	Drainage Area (AC)	Time to Drain	Required volume	Skimmer Size	Orifice Radius	Orifice Diameter
ST1	1	0.93	48 hrs	3348 CF	1.5 in	0.6 in	1.3 in
ST2	.2	0.22	48 hrs	792 CF	1.5 in	0.3 in	0.6 in

492 SF



1935.00



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PARK RIVERSIDE

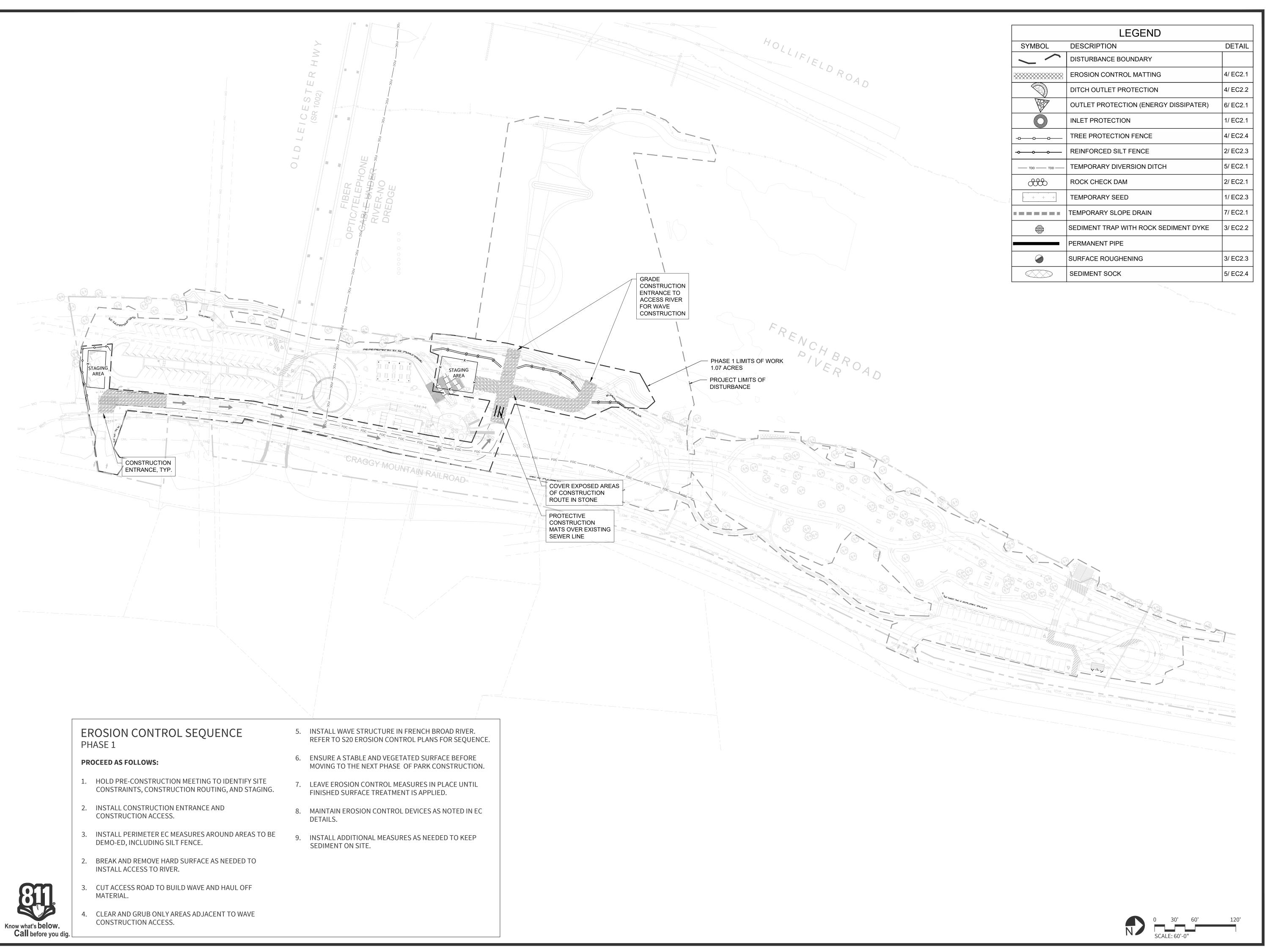
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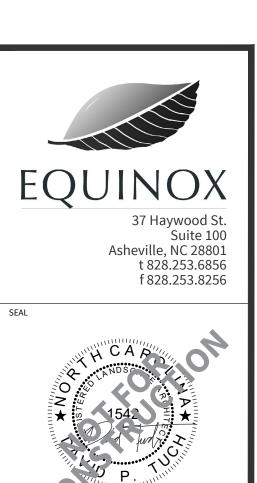
September 30, 2022

AS SHOWN

from its original size and the scales noted on

EC COVER





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Town of Woodfin RIVERSIDE PARK Woodfin, NC

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September 30, 2022

PRAWING SCALE

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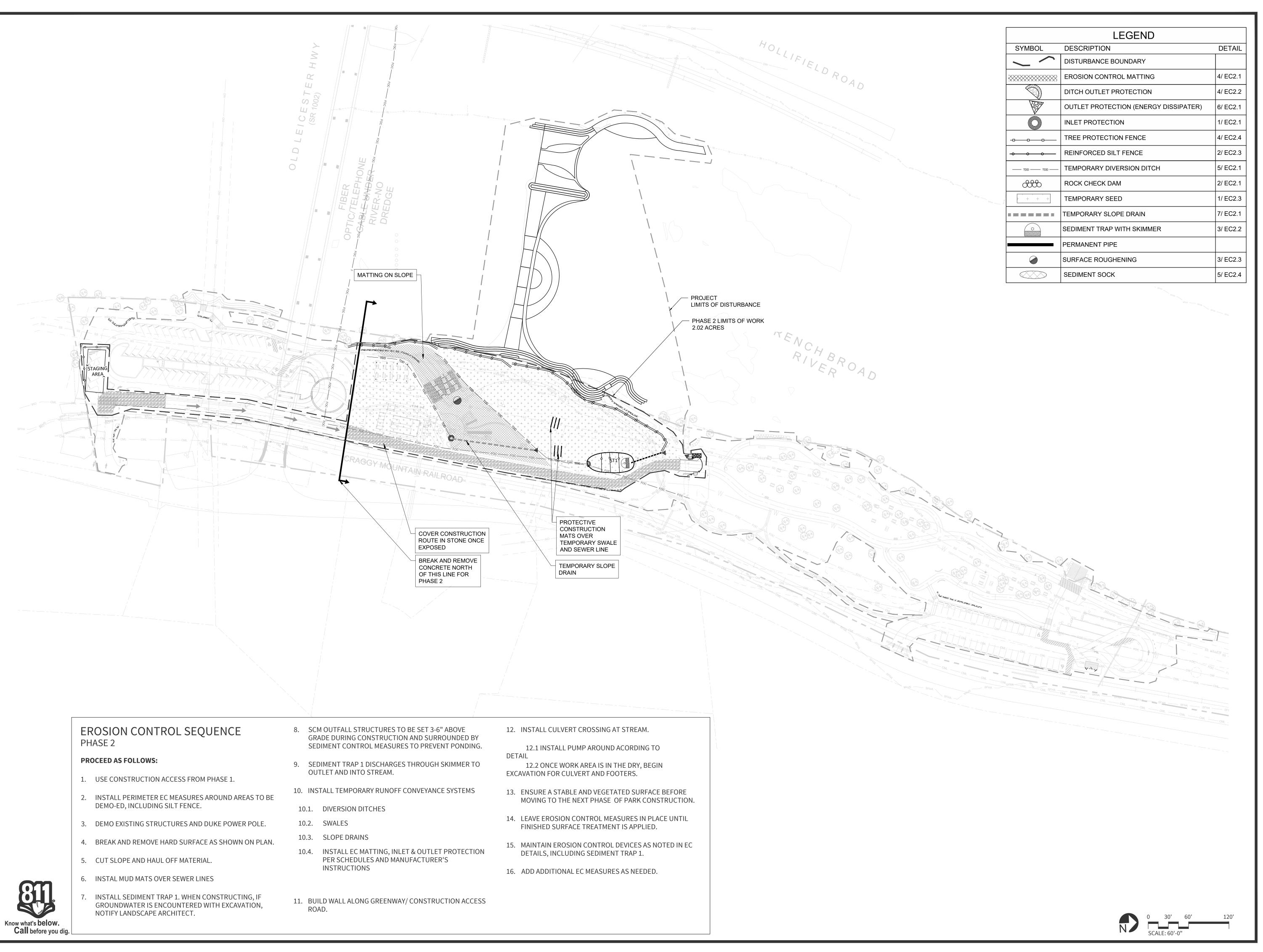
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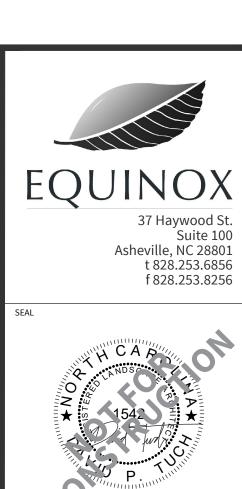
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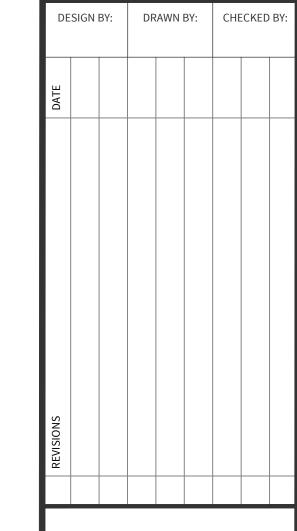
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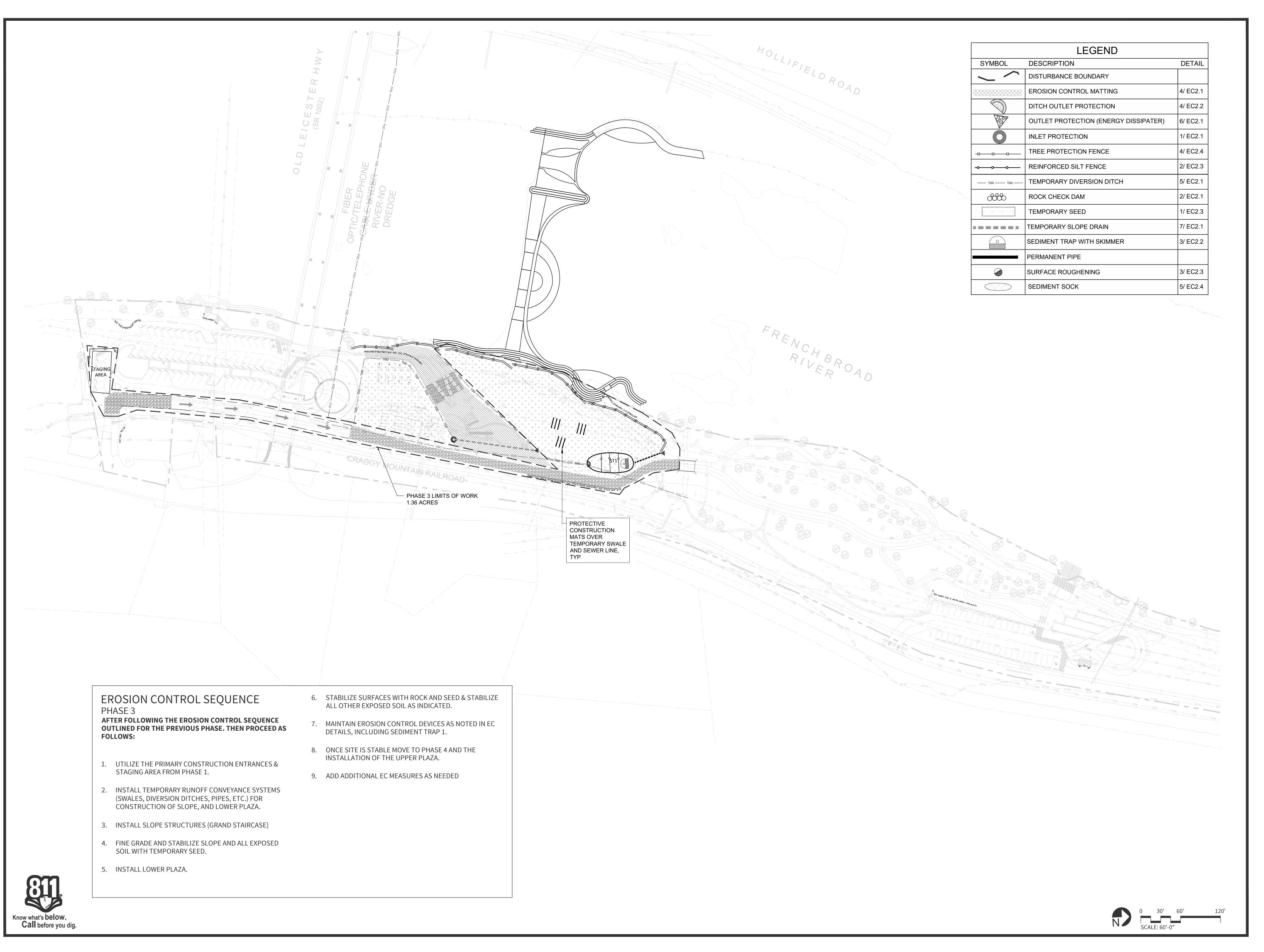


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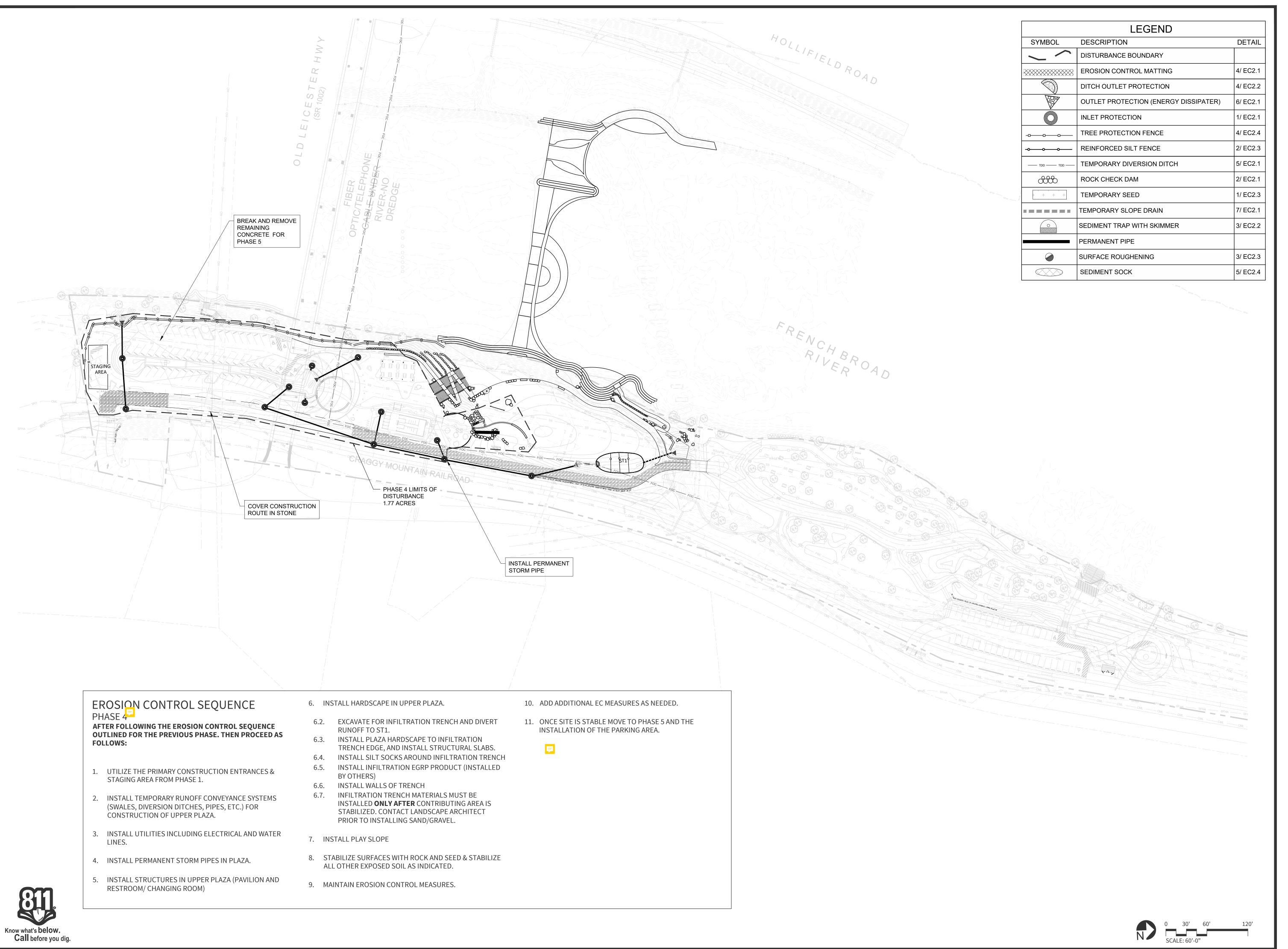
Town of Woodfin
RIVERSIDE PARK
Woodfin, NC

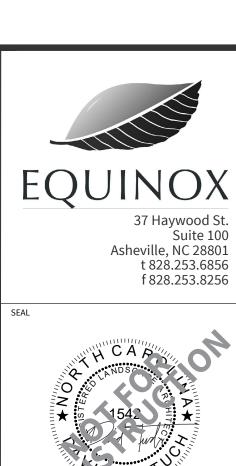
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Town of Woodfin RIVERSIDE PARK

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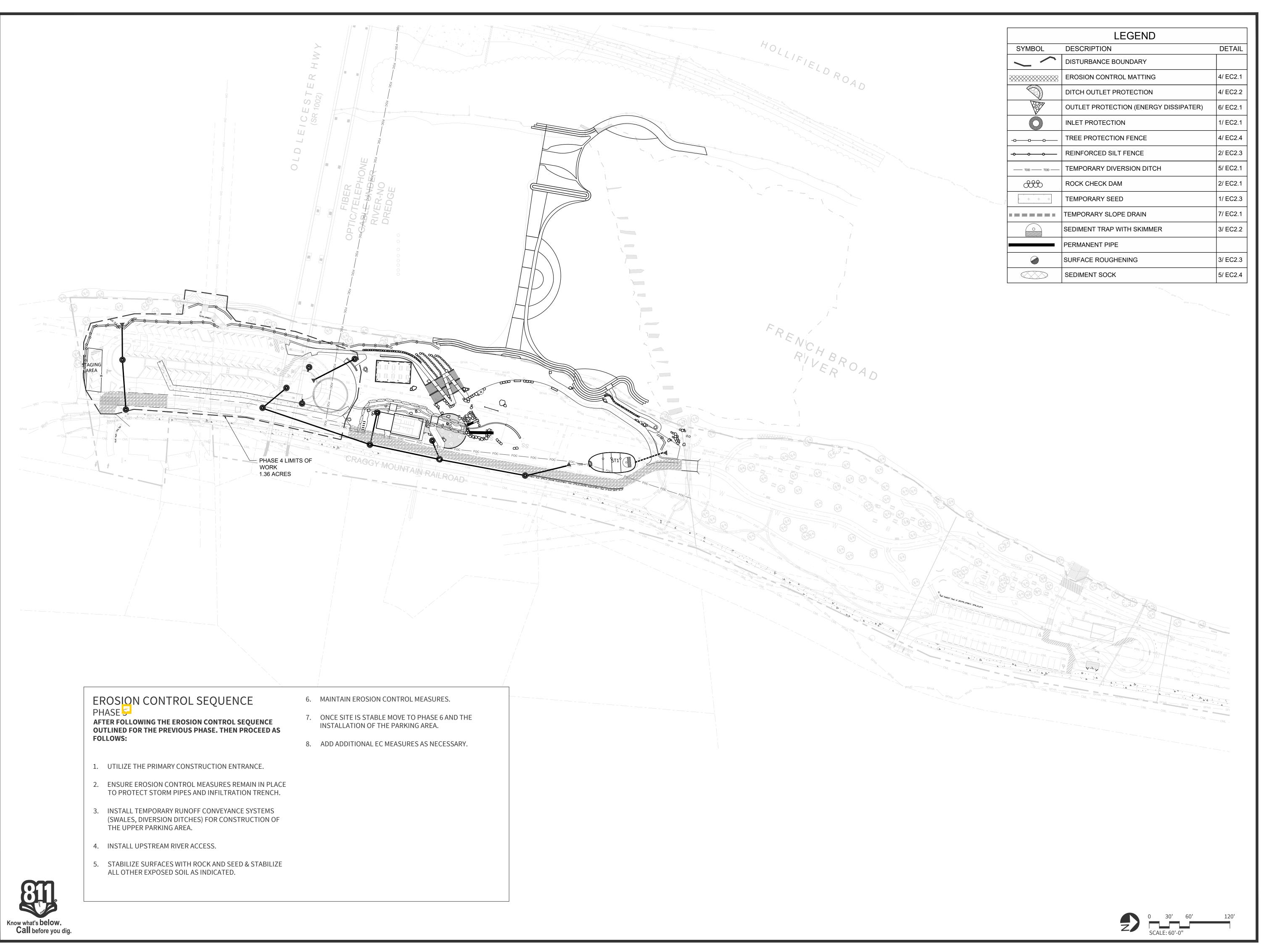
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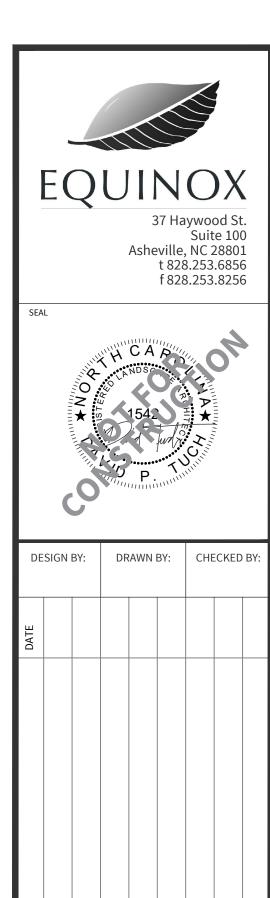
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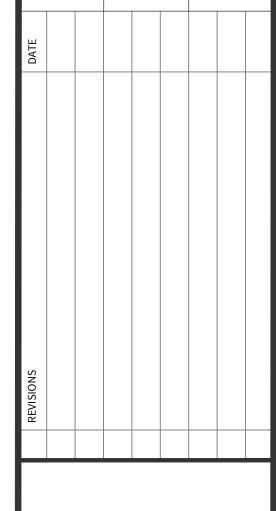
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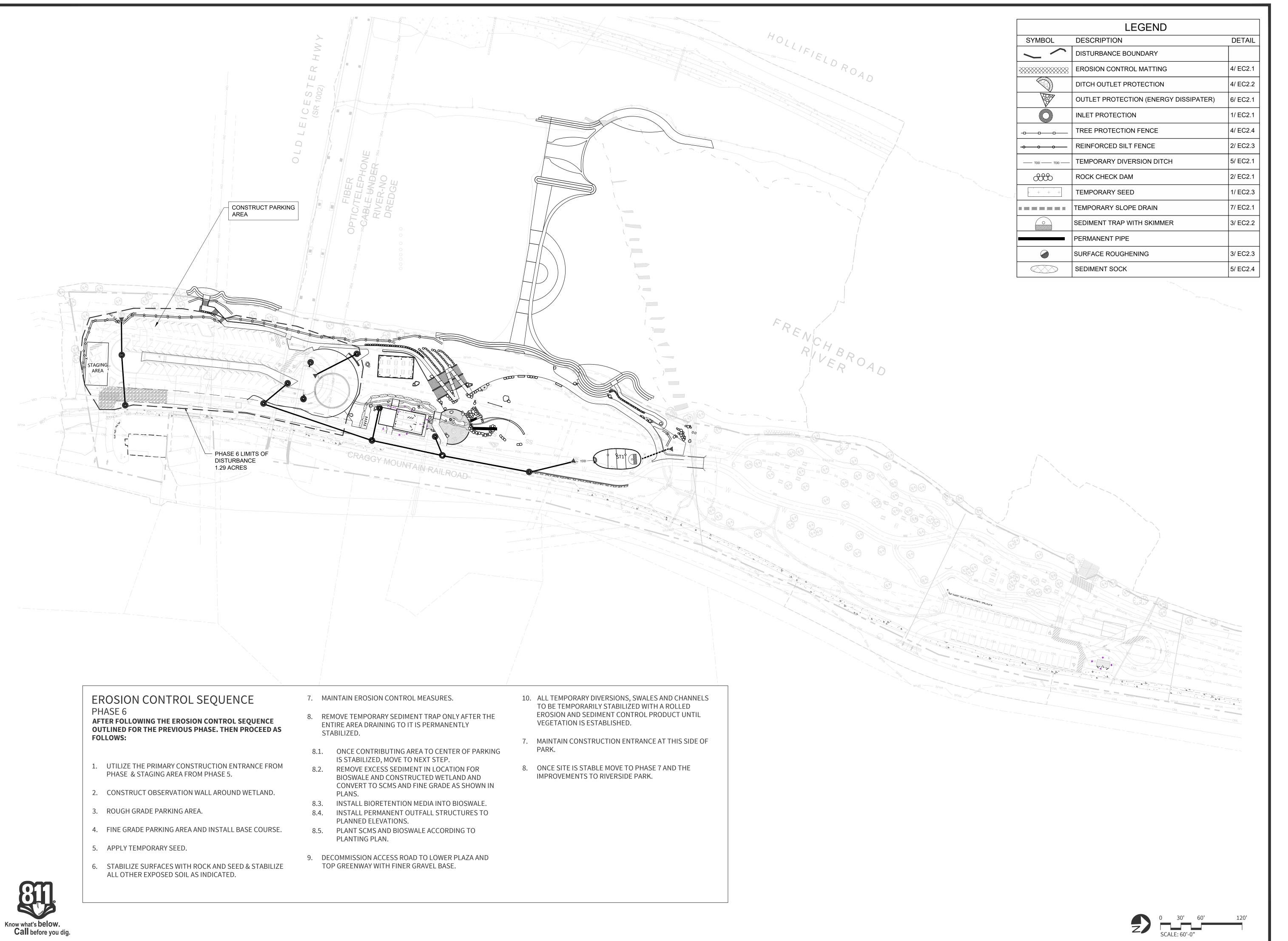




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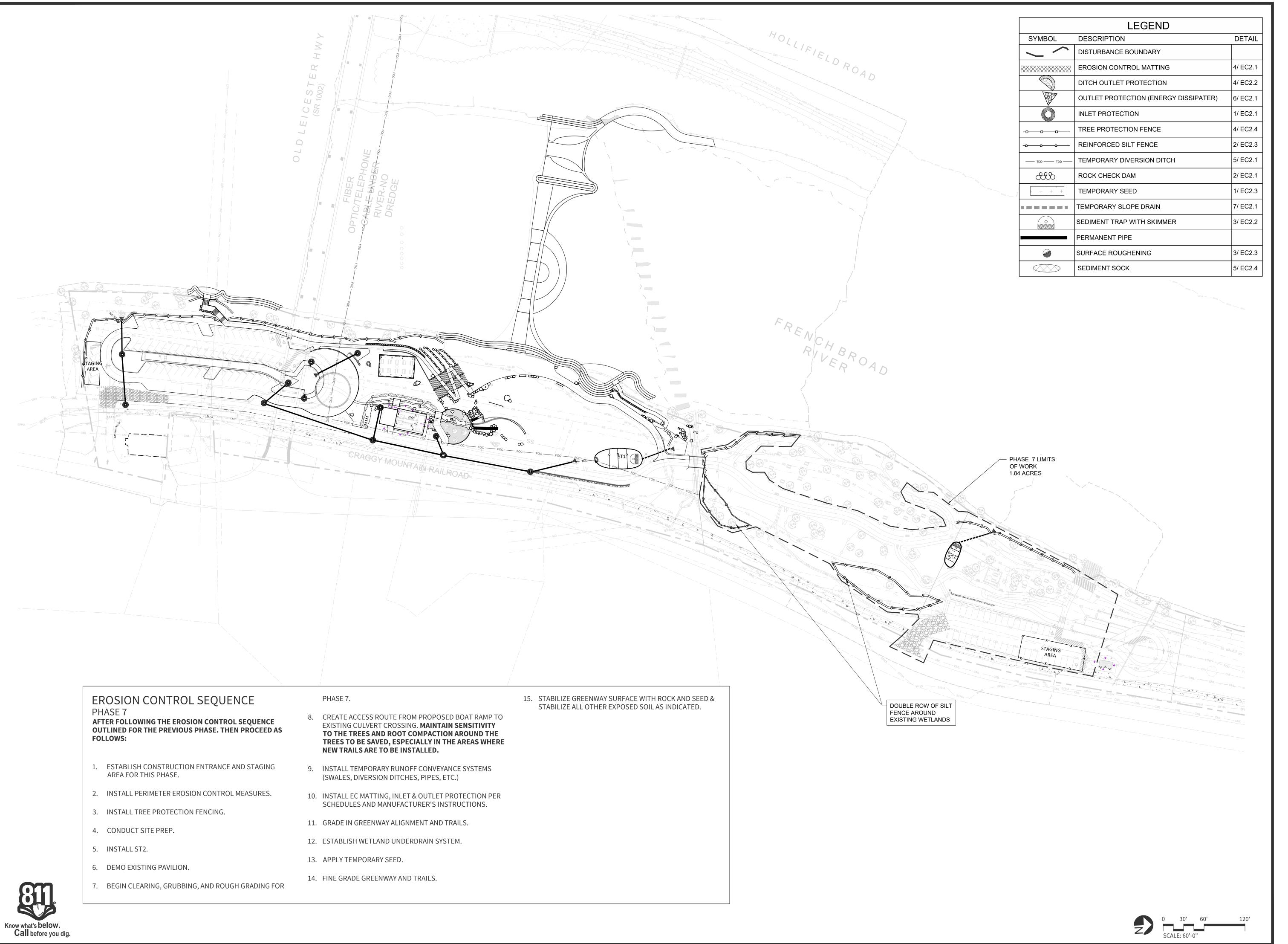


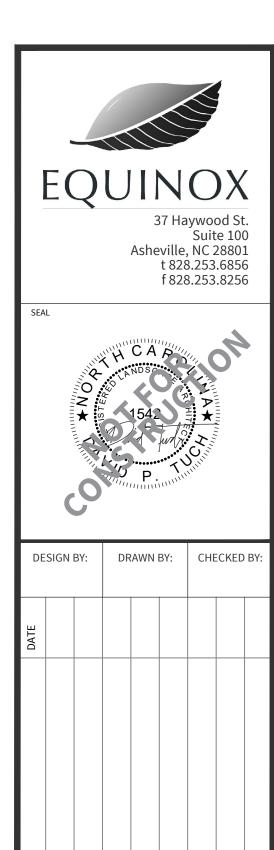
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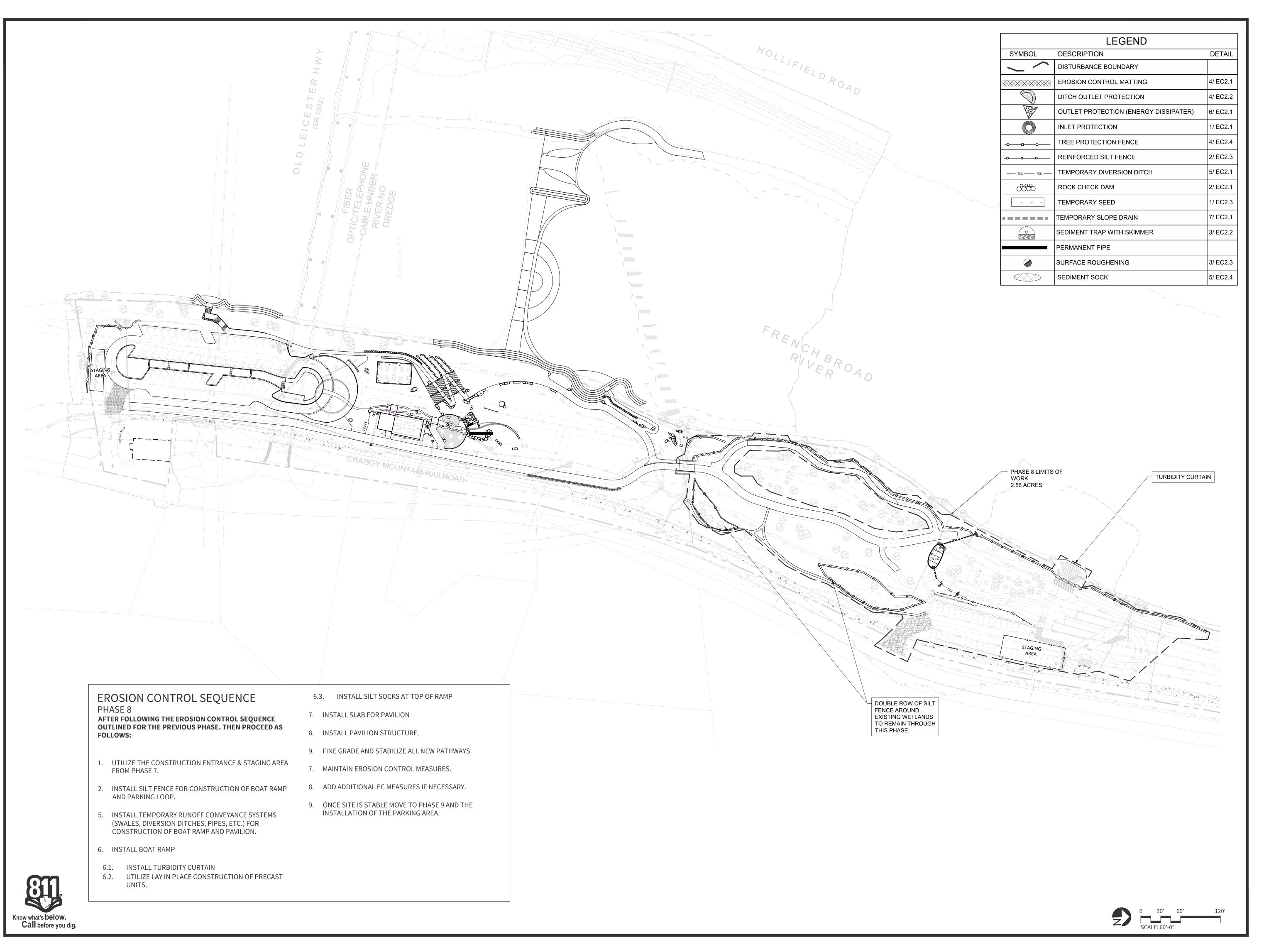
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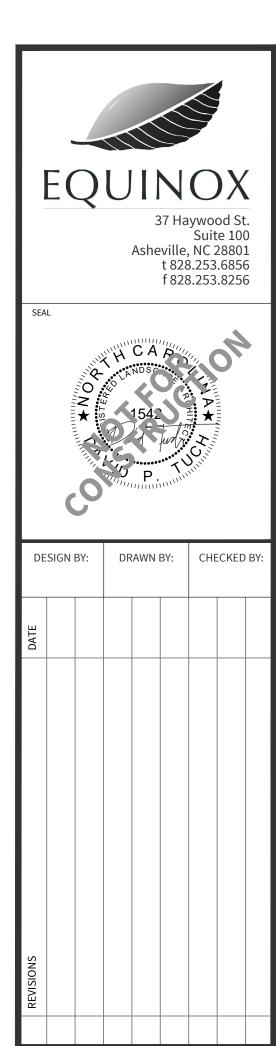
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RIVERSIDE PARK
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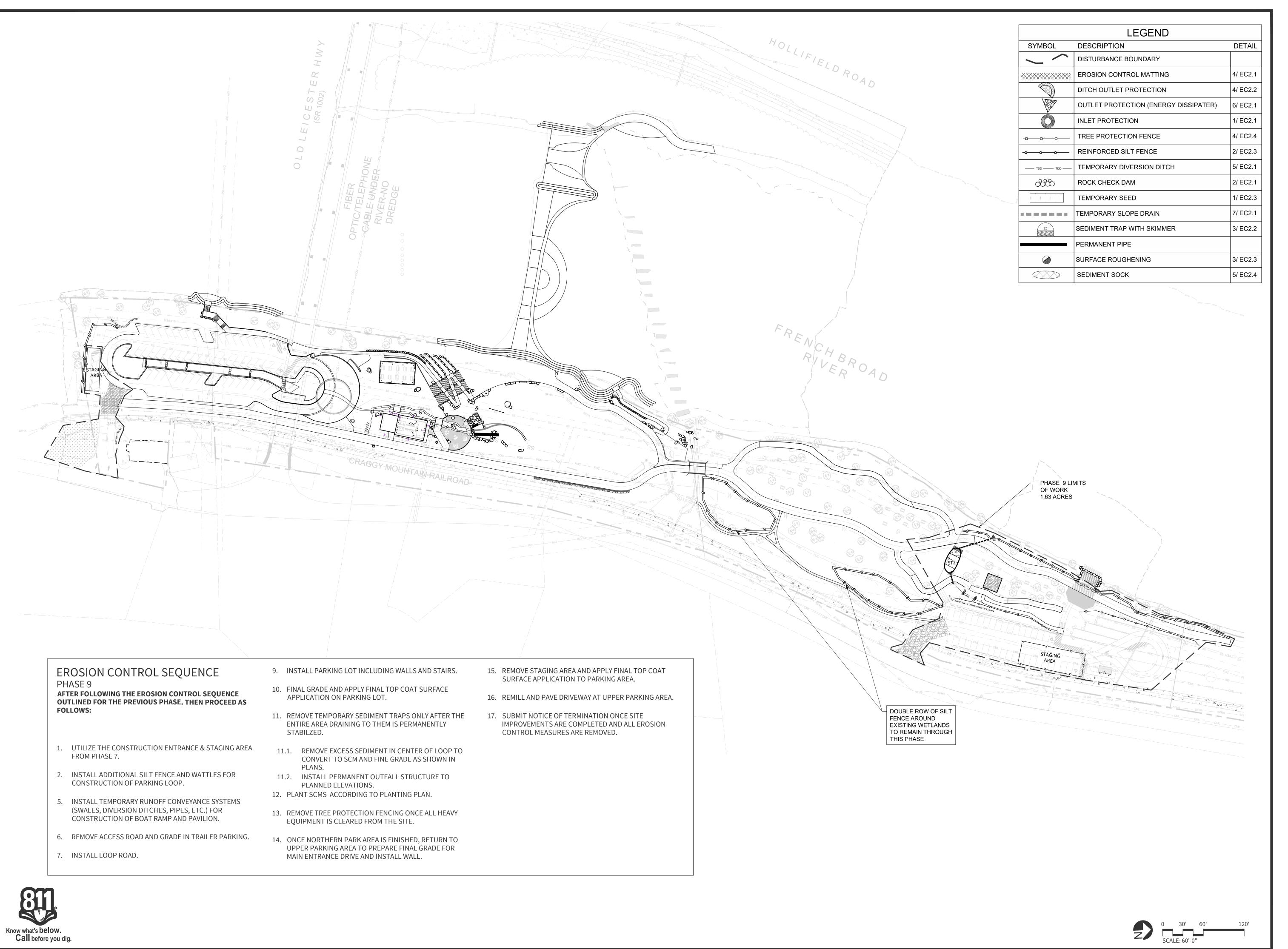
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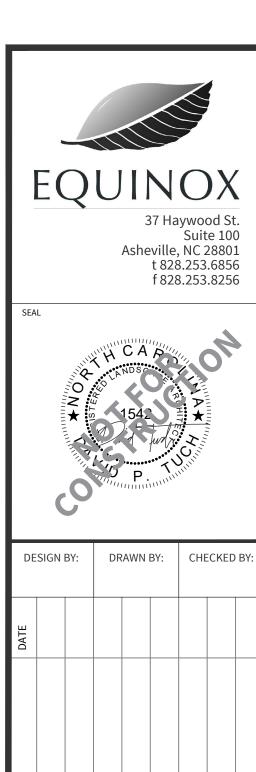
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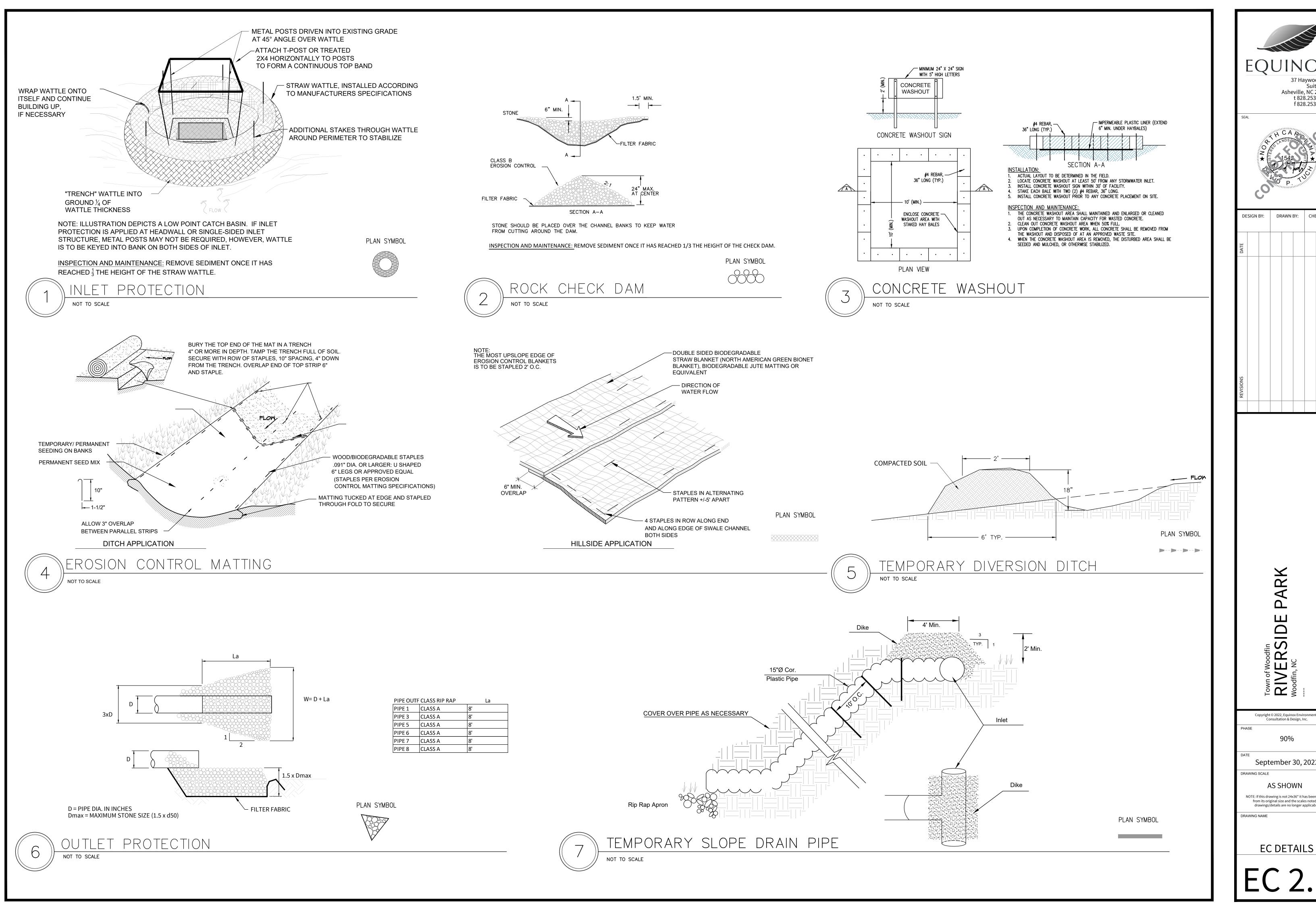


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37 Haywood St. Suite 100 Asheville, NC 28801 t 828.253.6856 f 828.253.8256

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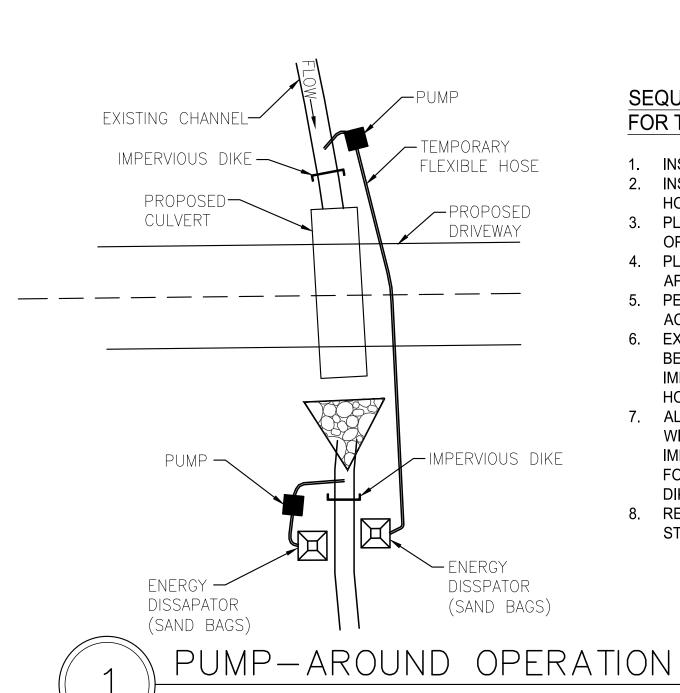
PARK Town of Woodfin RIVERSIDE

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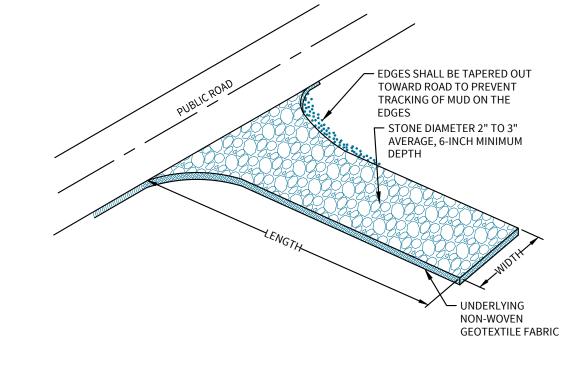
NOT TO SCALE

SEQUENCE OF CONSTRUCTION FOR TYPICAL PUMP-AROUND

- 1. INSTALL SAND BAG ENERGY DISSIPATERS.
- 2. INSTALL UPSTREAM PUMP AND TEMPORARY FLEXIBLE
- 3. PLACE UPSTREAM IMPERVIOUS DIKE AND BEGIN PUMPING OPERATIONS FOR STREAM DIVERSION.
- 4. PLACE DOWNSTREAM IMPERVIOUS DIKE AND PUMPING APPARATUS. DE-WATER ENTRAPPED AREA.
- PERFORM CULVERT INSTALLATION WORK IN
- ACCORDANCE WITH THE PLANS. EXCAVATE ANY ACCUMULATED SILT AND DEWATER BEFORE REMOVAL OF IMPERIOUS DIKES. REMOVE IMPERVIOUS DIKES, PUMPS, AND TEMPORARY FLEXIBLE HOSE. (DOWNSTREAM DIKE FIRST).
- 7. ALL GRADING AND STABILIZATION MUST BE COMPLETED WITHIN THE PUMP-AROUND AREA BETWEEN THE IMPERVIOUS DIKES. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE LOCATION OF THE IMPERVIOUS
- REMOVE ENERGY DISSIPATERS AND BACKFILL. STABILIZED DISTURBED AREA WITH SEED AND MULCH.

NOTES:

- 1. ALL EXCAVATION SHALL BE PERFORMED IN ONLY DRY OR ISOLATED SECTIONS OF THE CHANNEL.
- 2. IMPERVIOUS DIKES ARE TO BE USED TO ISOLATE WORK FROM STREAM FLOW WHEN NECESSARY.
- 3. ALL GRADED AREAS SHALL BE STABILIZED WITHIN 24 HOURS. MAINTENANCE OF STREAM FLOW OPERATION SHALL BE INCIDENTAL TO THE WORK. THIS INCLUDES SHEETING,
- DIVERSIONS PIPES, PUMPS AND HOSES. 5. PUMPS AND HOSES SHALL BE OF SUFFICIENT SIZE TO DEWATER THE WORK AREA.



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	LENGTH	WIDTH
	(MIN.)	(MIN.)
PROJECT	100 FEET	24 FEET
INDIVIDUA L LOT	20 FEET	15 FEET

INSTALLATION:

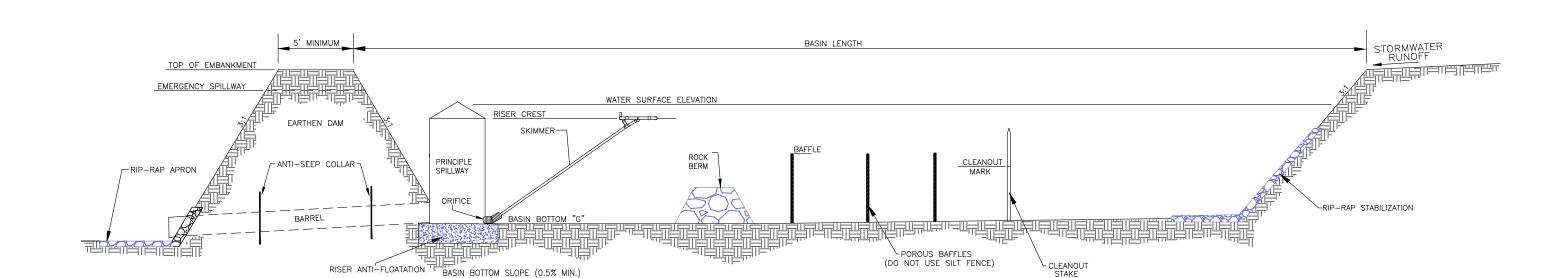
- 1. STABILIZED CONSTRUCTION ENTRANCES SHOULD BE USED AT ALL POINTS WHERE TRAFFIC WILL EGRESS/INGRESS A CONSTRUCTION SITE ONTO A PUBLIC ROAD OR ANY IMPERVIOUS SURFACE, SUCH AS
- 2. INSTALL A NON-WOVEN GEOTEXTILE FABRIC PRIOR TO PLACING ANY STONE. 3. INSTALL A CULVERT PIPE ACROSS THE ENTRANCE WHERE NEEDED TO PROVIDE POSITIVE DRAINAGE.
- 4. LIMESTONE MAY NOT BE USED FOR THE STONE PAD.

INSPECTION AND MAINTENANCE:

NOT TO SCALE

- 1. INSPECT THE CONSTRUCTION ENTRANCE AT LEAST ONCE PER CALENDAR WEEK, CHECK FOR MUD AND SEDIMENT BUILDUP AND PAD INTEGRITY. INSPECTIONS MAY BE NEEDED TO BE MORE FREQUENT DURING LONG PERIODS OF WET WEATHER.
- 2. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEAN OUT OF ANY MEASURES USED TO TRAP SEDIMENT.
- 4. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY, 5. IMMEDIATELY REMOVE ANY MUD OR SEDIMENT TRACKED ONTO ADJACENT IMPERVIOUS SURFACES BY BRUSHING OR SWEEPING. FLUSHING SHOULD ONLY BE USED WHEN THE WATER IS DIRECTED TO A
- SEDIMENT TRAP OR BASIN. 6. REMOVE CONSTRUCTION ENTRANCE ONLY AFTER THE SITE HAS REACHED FINAL STABILIZATION. PERMANENT VEGETATION SHOULD REPLACE AREAS WHERE THE CONSTRUCTION ENTRANCE HAS BEEN REMOVED UNLESS THE AREA WILL BE CONVERTED TO AN IMPERVIOUS SURFACE TO SERVE POST-CONSTRUCTION.





GENERAL NOTES

- 1. Sediment traps should not be placed in Waters of the State or USGS blue-line streams (unless approved by Federal Authorities).
- 2. Both outlet berm and the stone apron shall have an underlying layer of non-woven geotextile filter fabric.
- 3. All internal side slopes of the sediment trap should be 2.5:1 or flatter.
- 5. A sediment cleanout stake should be installed and marked to remove sediment at 50% of the sediment storage volume.
- 7. After construction of each sediment trap, the area disturbed to construct the trap should be promptly stabilized, including all side slopes.
- 8. The following sediment trap requirements shall be maintained:
 - Maximum embankment height shall be 5-feet. Maximum riprap outlet height shall be 3.5-feet.
 - Minimum flow length at top of riprap outlet shall be 5-feet.

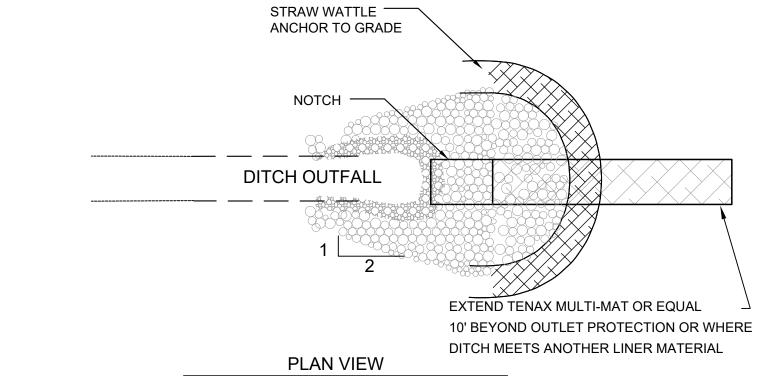
INSPECTION AND MAINTENANCE

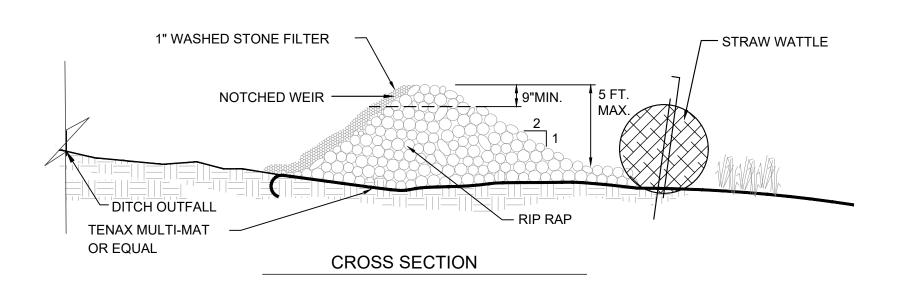
- 1. The key to a functional sediment trap is weekly inspections, routine maintenance and regular
- 2. Attention to sediment accumulations within the trap is extremely important. Accumulated sediment deposition should be continually monitored in the trap and removed when
- 3. Remove accumulated sediment when it reaches 50% of the designed sediment storage volume as marked by the cleanout stake.
- 4. Removed sediment from the trap shall be placed in stockpile storage areas or spread thinly across the disturbed area. Stabilize the removed sediment after it is relocated.
- 5. Regular inspections of sediment traps should be conducted once every calendar week and, as recommended and within 24-hours after each rainfall event that produces ½-inch or more of precipitation.

PLAN SYMBOL

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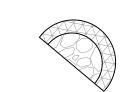
6. Disturbed areas resulting from the removal of the sediment trap should be permanently stabilized and additional BMPs, such as silt fence, should be utilized to handle stormwater runoff from this disturbed area until final stabilization is reached.





INSPECTION AND MAINTENANCE: REMOVE SEDIMENT ONCE IT HAS REACHED 1/3 THE HEIGHT OF THE NOTCHED WEIR.

PLAN SYMBOL



DITCH OUTLET PROTECTION NOT TO SCALE

EDIMENT TRAP WITH SKMMER

NOT TO SCALE

DESIGN BY: DRAWN BY: CHECKED BY

Asheville, NC 28801

t 828.253.6856

f 828.253.8256

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September 30, 2022 DRAWING SCALE

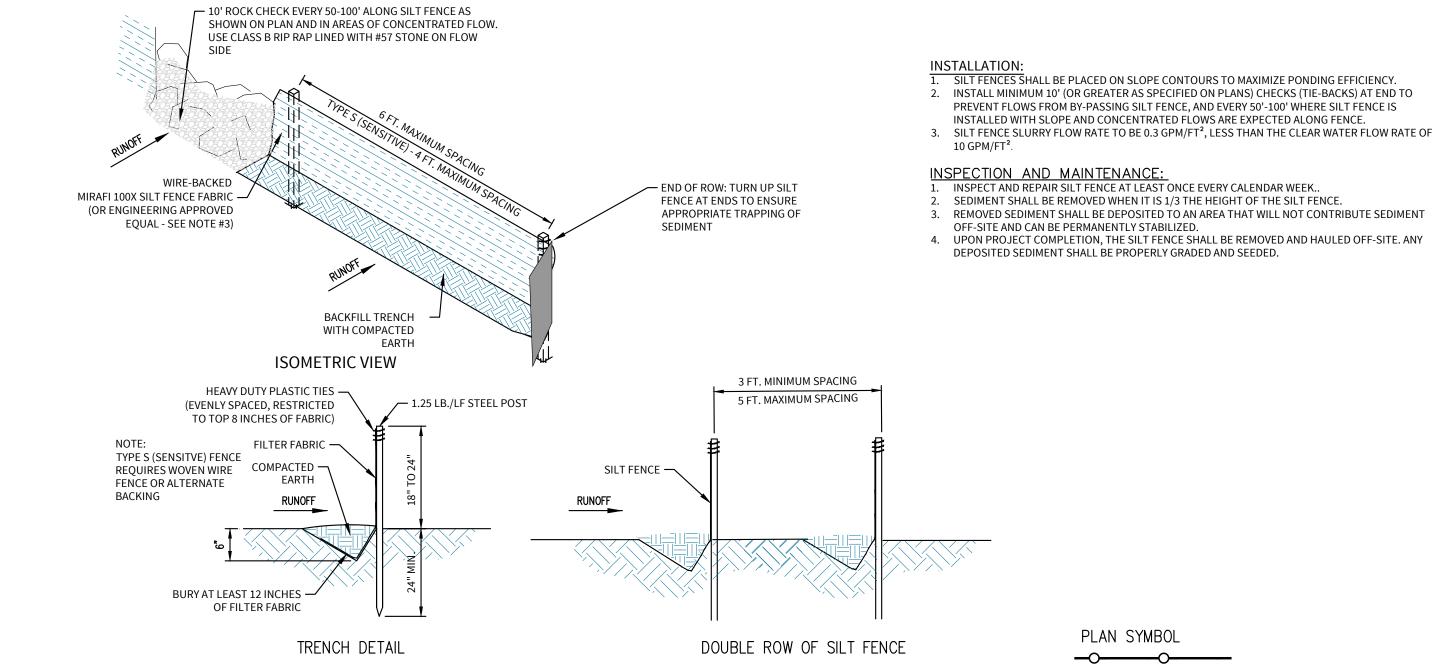
AS SHOWN NOTE: If this drawing is not 24x36" it has been revised from its original size and the scales noted on drawings/details are no longer applicable.

EC DETAILS

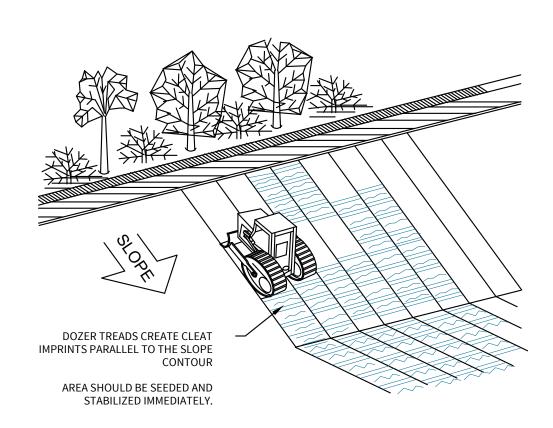
NOTES:

- 1. SEE PLANTING & REVEGETATION SPECIFICATIONS FOR MORE INFORMATION
- ON SEED APPLICATION AND ESTABLISHMENT. 2. CONTRACTOR TO KEEP RECORD OF SEED PURCHASE AND APPLICATION
- RATES FOR FINAL INSPECTION (BAGS & RECEIPTS).
- 3. GROUND STABILIZATION REQUIRED IN (7) SEVEN DAYS ON PERIMETER AREAS AND SLOPES GREATER THAN 3:1, AND GROUND STABILIZATION IN (14) DAYS ON OTHER AREAS

TEN	MPORARY SEEDING SCHEDULE MPORARY SEEDING MUST OCCUR WHEN DENUDED AREAS WILL NOT BE OUGHT TO FINAL GRADE WITHIN 7 CALENDAR DAYS (SEE NOTE 3 ABOVE).	PERMANENT SEEDING SCHEDULE PERMANENT SEEDING MUST OCCUR WITHIN 14 CALENDAR DAYS OF FINAL GRADING. COVER CROPS (TEMPORARY SEEDING) TO BE ADDED TO PERMANENT SEEDING MIXES IF NO TEMPORARY SEEDING HAS BEEN PLACED PREVIOUSLY.
SUMMER	SEEDING MIXTURE: SPECIES GERMAN MILLET PARTRIDGE PEA A small-stemmed sudangrass may be substituted for Partridge Pea at a rate of 50 lb/acre. SEEDING DATES: May 15-Aug 15	PERMANENT SEEDING MIXES: RATE (LB/ACRE) REFERENCE PLANTING PLAN SHEETS 7.1-7.5 FOR PERMANENT SEED MIXES • The seed mixes above are listed in the specifications and available at ERNST CONSERVATION SEEDS (800.873.3321). Local sources of similar seed mix may be used
WINTER & EARLY SPRING	SEEDING MIXTURE: SPECIES ANNUAL (WINTER) RYE GRASS PARTRIDGE PEA A small-stemmed sudangrass may be substituted for Partridge Pea at a rate of 50 lb/acre.	(to be approved by Landscape Architect in writing).
	SEEDING DATES: Feb 1-May 15 SEEDING MIXTURE: RATE (LB/ACRE) ANNUAL (WINTER) RYE GRASS 60	SOIL AMENDMENTS: Physically or chemically treat all exotic invasive plants before amending soil. Apply lime and fertilizer according to soil tests or apply 4,000 lb/acre ground agricultural limestone and 1,000 lb/acre 5-10-10 fertilizer.
FALL	PARTRIDGE PEA 10 A small-stemmed sudangrass may be substituted for Partridge Pea at a rate of 50 lb/acre. SEEDING DATES: Aug 15-Dec 30	SOIL PREPARATION: Soil impacted by construction must be loosened prior to seeding by means of disking or raking. Seedbed shall be well-pulvarized, loose, and uniform. All stones larger than three (3) inches, sticks, roots, and other extraneous materials shall be removed. Apply seed uniformly with a cyclon seeder, drop-type spreader, drill or hydro-seeder. Cover broadcast seed by lightly raking, then firm surface with roller or cultipacker. Cut or disc temporary seeding cover crop prior to seeding.
	SOIL AMENDMENTS: Follow recommendation of soil tests. Use only amendments safe for riparian areas.	SEED PREPARATION: If banks exceed 4:1, apply seed, lime, and apply mulch.
GENERA	MULCH: Apply 4,000 lb/acre straw. Anchor straw by tacking. MAINTENANCE: Refertilize if growth is not fully adequate. Topdress with 50 lb/acre of nitrogen in March (if applicable). If it is necessary to extend temporary cover beyond June 15th overseed with	MULCH: Apply 4,000-5,000 lb/acre grain straw or equivalent cover of another suitable, weed-free mulching material. Use a spray-on growth (mulch) matrix (Flexterra FGM or equal) for slope embankments that exceed 3:1 slopes. MAINTENANCE:
	mixes provided. Reseed, re-fertilize and mulch immediately following erosion or other	Mow or cut back no more than once a year. Refertilize in the second year unless growth is fully adequate.







- 1. TO SLOW EROSION, PERFORM SURFACE ROUGHENING (TRACKING) AS SOON AS POSSIBLE AFTER
- VEGETATION HAS BEEN REMOVED FROM SLOPE. 2. CLEAT IMPRINTS SHOULD BE PARALLEL TO THE SLOPE.
- 3. USE TRACKING WITH TEMPORARY SEEDING AND MULCHING TO STABILIZE AN AREA. 4. PERFORM TRACKING IMMEDIATELY AFTER GRADING ACTIVITIES HAVE CEASED (TEMPORARILY OR
- 5. AVOID EXCESSIVE COMPACTING OF THE SOIL SURFACE WHEN TRACKING SINCE SOIL COMPACTION INHIBITS VEGETATION GROWTH AND CAUSES HIGHER RUNOFF RATES. AS FEW PASSES AS POSSIBLE SHOULD BE MADE WITH THE MACHINERY TO MINIMIZE COMPACTION.

INSPECTION AND MAINTENANCE:

- 1. ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE INSPECTED ONCE EVERY CALENDAR
- 2. IF RILLS (SMALL WATERCOURSES THAT HAVE STEEP SIDES AND USUALLY ARE ONLY A FEW INCHES DEEP) APPEAR, RE-GRADE , RE-ROUGHEN AND RE-SEED IMMEDIATELY.

PLAN SYMBOL



Reseed, fertilize, and mulch damaged areas immediately. Weed during first 2 years of establishment.

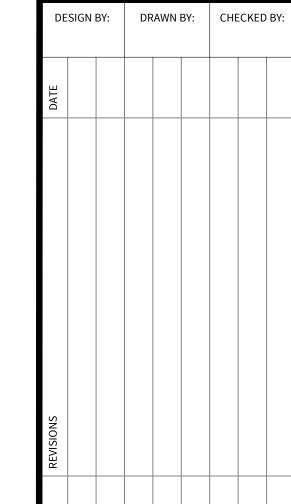
SURFACE ROUGHENING

NOT TO SCALE

PLAN SYMBOL

REINFORCED SILT FENCE NOT TO SCALE

37 Haywood St. Suite 100 Asheville, NC 28801 t 828.253.6856 f 828.253.8256



PARK RSID

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September 30, 2022

AS SHOWN

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EC DETAILS

specifications on this plan sheet will result in the construction with the Ground Stabilization and Materials Handlir uction General Permit (Sections E and F, respectively). The he Erosion and Sediment Control plan approved by the risdiction. All details and specifications shown on this shee site conditions and the delegated authority having jurisdict

	יי	required organia stabilization illimentanies	Ization innenanies
<u>s</u>	Site Area Description	Stabilize within this many calendar days after ceasing land disturbance	Timeframe variations
(a)	Perimeter dikes, swales, ditches, and perimeter slopes	7	None
(q)	High Quality Water (HQW) Zones	7	None
(c)	Slopes steeper than 3:1	7	If slopes are 10' or less in length and are not steeper than 2:1, 14 days are allowed
(p)	(d) Slopes 3:1 to 4:1	14	-7 days for slopes greater than 50' in length and with slopes steeper than 4:1 -7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones -10 days for Falls Lake Watershed
(e)	(e) Areas with slopes flatter than 4:1	14	-7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones -10 days for Falls Lake Watershed unless there is zero slope
Note grou pract activ surfa	:: After the permanent nd stabilization shall b ticable but in no case l ity. Temporary ground	cessation of construce converted to perma onger than 90 calends stabilization shall be lerated erosion until g	Note: After the permanent cessation of construction activities, any areas with temporary ground stabilization shall be converted to permanent ground stabilization as soon as practicable but in no case longer than 90 calendar days after the last land disturbing activity. Temporary ground stabilization shall be maintained in a manner to render the surface stable against accelerated erosion until permanent ground stabilization is achieved.

other mulches and ta	other mulches and tackifiers
 Permanent grass see 	Temporary grass seed covered with straw or
Permanen	Temporary Stabilization
	techniques in the table below:
will not dislodge the s	Stabilize the ground sufficiently so that rain will not dislodge the s

- Hydroseeding
 Rolled erosion without tempo
 Appropriately a
 Plastic sheeting

EARTHEN STOCKPILE MANAGEMEN

1. Show stockpile locations on pl
50 feet away from storm drair
and surface waters unless it ca
available.

2. Protect stockpile with silt fenc
five feet from the toe of stock
3. Provide stable stone access pc
4. Stabilize stockpile within the t
with the approved plan and an
as vegetative, physical or cher
erosion on disturbed soils for

NCG01 GROUND

IPMENT AND VEHICLE MAINTE

Maintain vehicles and equipm

Provide drip pans under any sildentify leaks and repair as so

- AD LAND CLEARING WASTE

 Place litter and debris in approved waste containers. er and size of waste containers (e.g dumpster, trash cain construction and domestic wastes.

 I least 50 feet away from storm drain inlets and surface rematives are reasonably available.

 In areas that do not receive substantial amounts of runoff es not drain directly to a storm drain, stream or wetland. Ithe end of each workday and before storm events or ment. Repair or replace damaged waste containers.

 In waste containers during times of high winds.

 Is needed to prevent overflow. Clean up immediately if LITTER, BUILDING MATERIAL AND

 1. Never bury or burn waste. P

 2. Provide a sufficient number a
- not discharge concrete or cement slurry from the site.
 spose of, or recycle settled, hardened concrete residue in accordance with loc a state solid waste regulations and at an approved facility.
 snage washout from mortar mixers in accordance with the above item and in dition place the mixer and associated materials on impervious barrier and with perimeter silt fence.

- 9

1. Do not dump paint and other li
2. Locate paint washouts at least waters unless no other alterna
3. Contain liquid wastes in a cont
4. Containment must be labeled,
5. Prevent the discharge of soaps construction sites.

- 7
- Install temporary concrete washouts per local requirements, where applicable. If an alternate method or product is to be used, contact your approval authority for review and approval. If local standard details are not available, use one of the two types of temporary concrete washouts provided on this detail.
 Do not use concrete washouts for dewatering or storing defective curb or sidewalk sections. Stormwater accumulated within the washout may not be pumped into or discharged to the storm drain system or receiving surface waters. Liquid waste must be pumped out and removed from project.
 Locate washouts at least 50 feet from storm drain inlets and surface waters unless it can be shown that no other alternatives are reasonably available. At a minimum, install protection of storm drain inlet(s) closest to the washout which could receive spills or overflow.
 Locate washouts in an easily accessible area, on level ground and install a stone entrance pad in front of the washout. Additional controls may be required by the approving authority.
 Install at least one sign directing concrete trucks to the washout within the project limits. Post signage on the washout when at approximately 75% capacity to limit overflow events. Replace the tarp, sand bags or other temporary structural components when no longer functional. When utilizing alternative or proprietary products, follow manufacturer's instructions.
 At the completion of the concrete work, remove remaining leavings and dispose of in an approved disposal facility. Fill pit, if applicable, and stabilize any disturbance caused by removal of washout.

el ground, at least 50 feet away from storm drains, chere is no alternative reasonably available. If 50 fool ide relocation of portable toilet behind silt fence or pd with sand bags.

PORTABLE TOILETS

1. Install portable toilets on lever streams or wetlands unless to offset is not attainable, provion a gravel pad and surround foot traffic areas.

3. Monitor portable toilets for leading or anitary wat with properly operating unit

- 2.
- 3.
- ERBICIDES, PESTICIDES AND RODENTICIDES

 1. Store and apply herbicides, pesticides and rodenticides in accordan restrictions.

 2. Store herbicides, pesticides and rodenticides in their original conta label, which lists directions for use, ingredients and first aid steps i accidental poisoning.

 3. Do not store herbicides, pesticides and rodenticides in areas where possible or where they may spill or leak into wells, stormwater dra or surface water. If a spill occurs, clean area immediately.

 4. Do not stockpile these materials onsite.
- RDOUS AND TOXIC WASTE

 Create designated hazardous waste collection areas on-site.
 Place hazardous waste containers under cover or in secondary containment.
 Do not store hazardous chemicals, drums or bagged materials directly on the grou

EFFECTIVE: 04/01/19

STABILIZATION AND MATERIALS HANDLING NORTH CAROLINA Environmental Quality

well as any approved deviation shall be kept on the site. The kept up-to-date throughout the coverage under this per ing to the E&SC plan shall be kept on site and available for Ig normal business hours

1. E&SC Plan Documentation
The approved E&SC plan as wapproved E&SC plan must be The following items pertainin inspection at all times during

SELF

- Oil spills if:
 They are 25 gallons or more,
 They are less than 25 gallons b
 They cause sheen on surface w
 They are within 100 feet of sur

en installed ite from the ive elevation olan.

(a) Each E&SC measure has be and does not significantly devir locations, dimensions and relar shown on the approved E&SC

- Releases of hazardous substances in excess of reportable qui of the Clean Water Act (Ref: 40 CFR 110.3 and 40 CFR 117.3) (Ref: 40 CFR 302.4) or G.S. 143-215.85.

Reporting Timeframes and Other Requirements After a permittee becomes aware of an occurrence that must be reported, he shall the appropriate Division regional office within the timeframes and in accordance winther requirements listed below. Occurrences outside normal business hours may reported to the Department's Environmental Emergency Center personnel at (800) 858-0368.

Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate the completion of the corrective action.

No Site

above, the following items shall be kept on the nes during normal business hours, unless the on based on unique site conditions that make

Inspection records must include:

Daily rainfall amounts.

If no daily rain gauge observations are made during weekend available, record the cumulative rain measurement for those unavailable, record the cumulative rain measurement for those unavailable, record the cumulative rain measurement for those unavailable, record the cumulative rain measurement for those unattended days (and this will determine if a site inspection needed). Days on which no rainfall occurred shall be recorded.

2. Date and time of the inspection,
3. Name of the person performing the inspection,
4. Indication of whether the measures were operating properly,
5. Description, evidence, and date of corrective actions taken.
1. Identification of the dispection,
3. Name of the person performing the inspection,
4. Evidence of indicators of stormwater pollution such as oil sheen, floating or suspended solids or discoloration,
5. Description, evidence, and date of corrective actions taken.
1. Identification of the dischere sediment leaving the site,
5. Date and time of the inspection,
6. Description, evidence, and date of corrective actions taken,
7. Indication of visible sediment leaving the site,
8. Indication of visible sediment leaving the site,
9. Indication of visible sediment leaving the site inite,
1. Actions taken to clean up or stabilize the sediment that has left finits,
1. Description, evidence, and date of corrective actions taken, and
3. An explanation as to the actions taken to control future releases.
1. The phase of grading (installation of perimeter E&SC measures, clearing and grubhing, installation of storm drainage facilities, completion or redevelopment, permanent ground cover).
2. Documentation that the required ground stabilization measures have been provided within the required around cover).
3. Documentation that the required ground stabilization measures have been provided within the required scound sone as possible.
4. Scoon as possible.

Reporting Timeframes (After Discovery) and Other Requirements
Within 24 hours, an oral or electronic notification.
Within 7 calendar days, a report that contains a description of the sediment and actions taken to address the cause of the deposition. Division staff may waive the requirement for a written report on a case-by-case basis.
If the stream is named on the NC 303(d) list as impaired for sedimen related causes, the permittee may be required to perform additional monitoring, inspections or apply more stringent practices if staff determine that additional requirements are needed to assure compli with the federal or state impaired-waters conditions.
Within 24 hours, an oral or electronic notification. The notification shall include information about the date, time, nature, volume and location of the spill or release.

(b) Records of inspections made during the previous twelve months. The permittee shall record the required observations on the Inspection Record Form provided by the Division or a similar inspection form that includes all the required elements. Use of electronically-available records in lieu of the required paper copies will be allowed if shown to provide equal access and utility as the hard-copy records.
3. Documentation to be Retained for Three Years
All data used to complete the e-NOI and all inspection records shall be maintained for a pe of three years after project completion and made available upon request. [40 CFR 122.41]

r from the surface v shall be rare (for e

SE OUT

PART II, SECTION G, ITEM (4) DRAW DOWN OF SEDIMENT BASINS FOR MAINTENANCE OR CLO

(2)(c) and (d) of this permi wed from the sediment ba

ction C, Iter r that is rem

authority has been provided vence until the E&SC plan authore withdrawal has been reporte charges are treated with contradesigned and maintained decimals.

(a) (b) (c)

e at the outlet of the dewatering 'scharge points of all dewatering d's of in a manner that does not cau



EFFECTIVE: 04/01/19

SELF-INSPECTION, RECORDKEEPING AND REPORTING NCG01

DESIGN BY: DRAWN BY: CHECKED BY:

EQUINOX

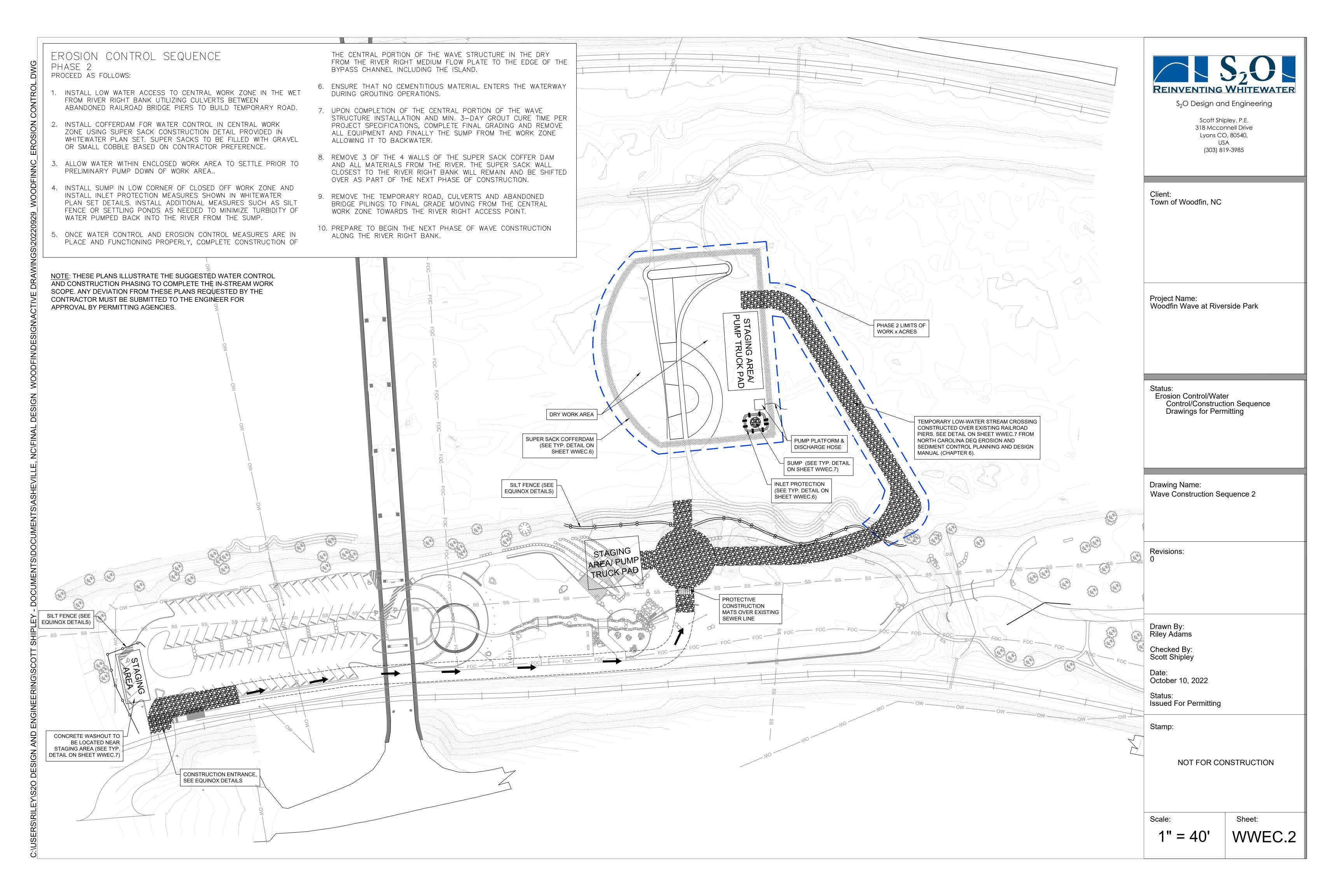
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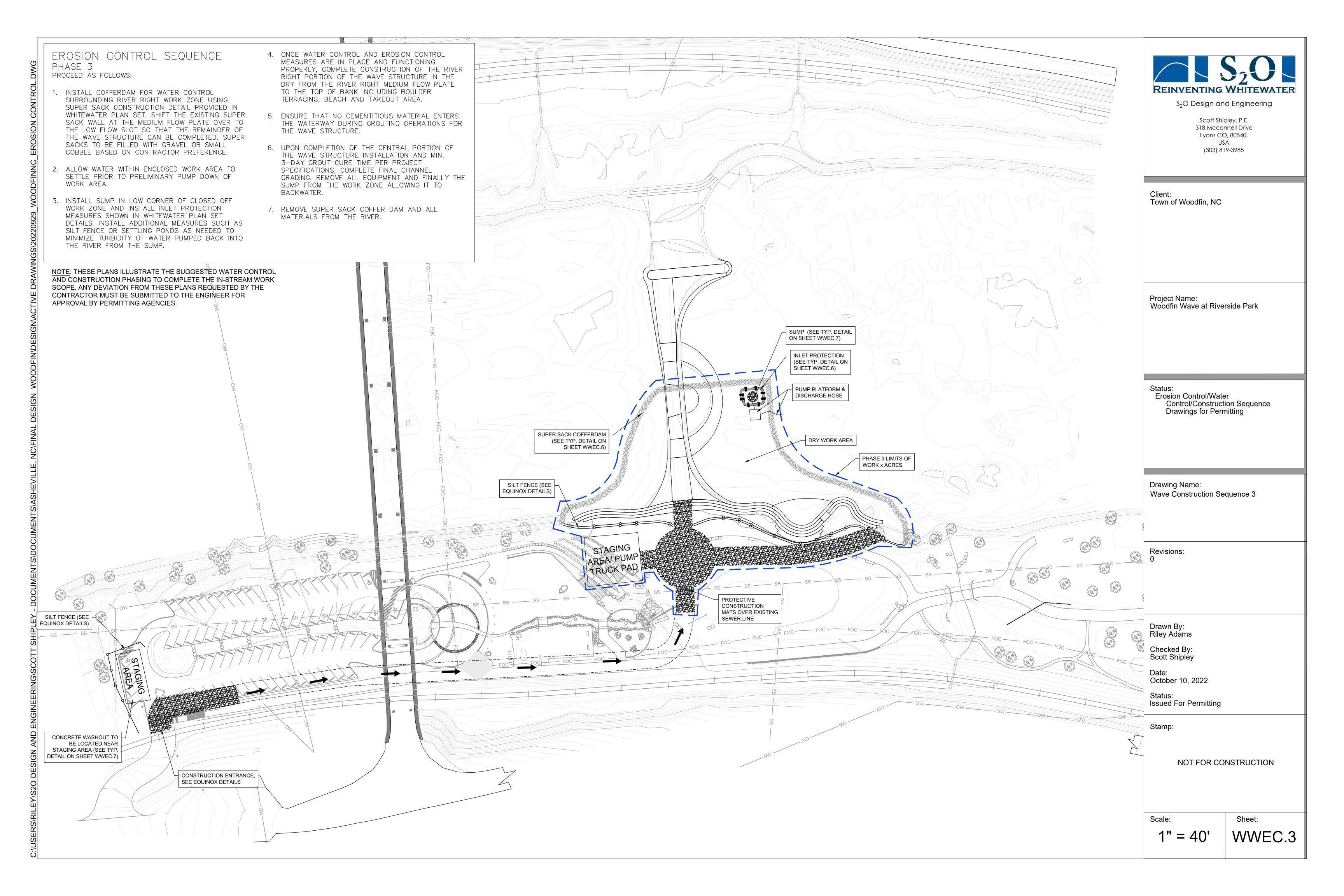
RIVERSIDE I Copyright © 2022, Equinox Environmental Consultation & Design, Inc. 90% September 30, 2022 DRAWING SCALE **AS SHOWN**

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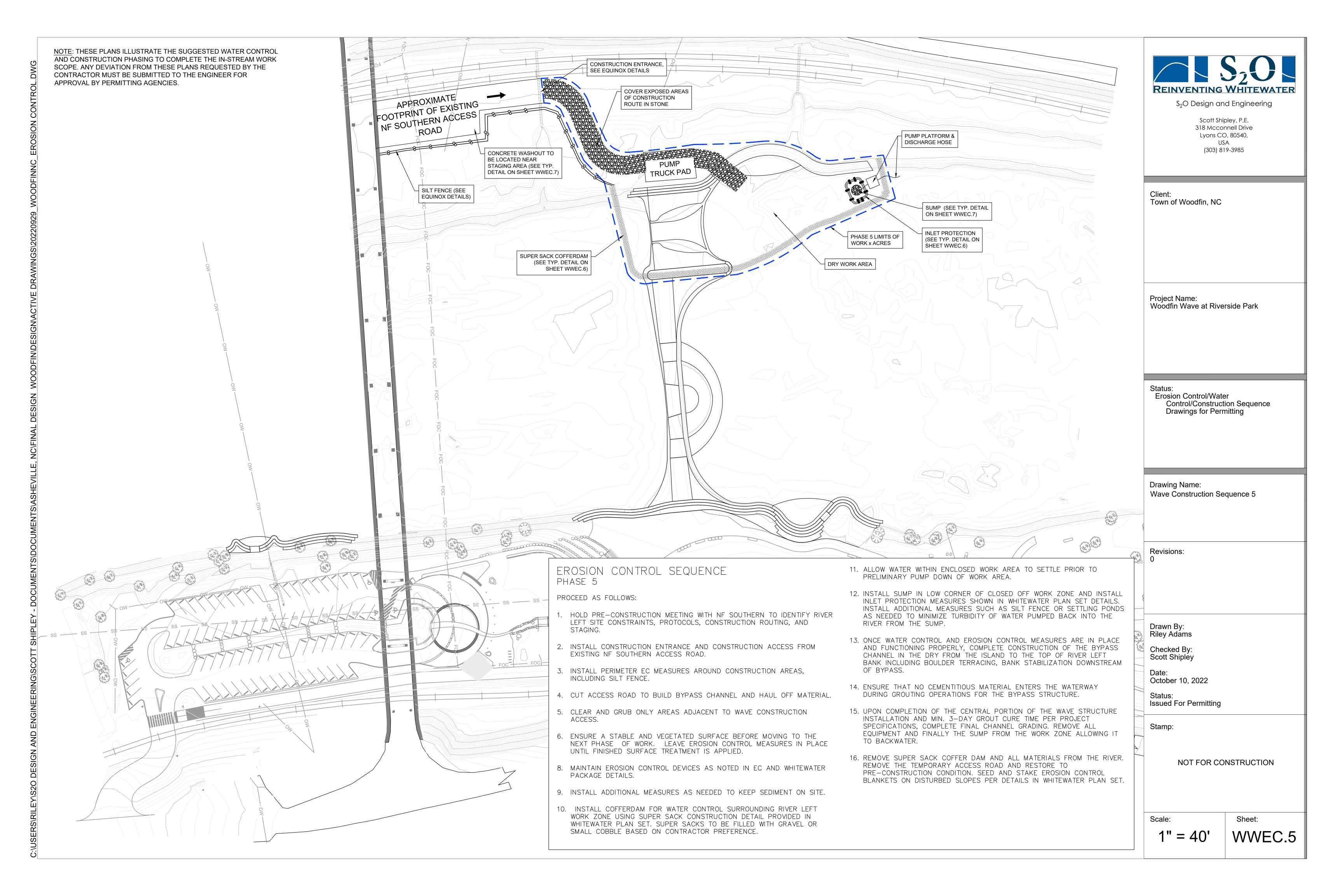
PARK

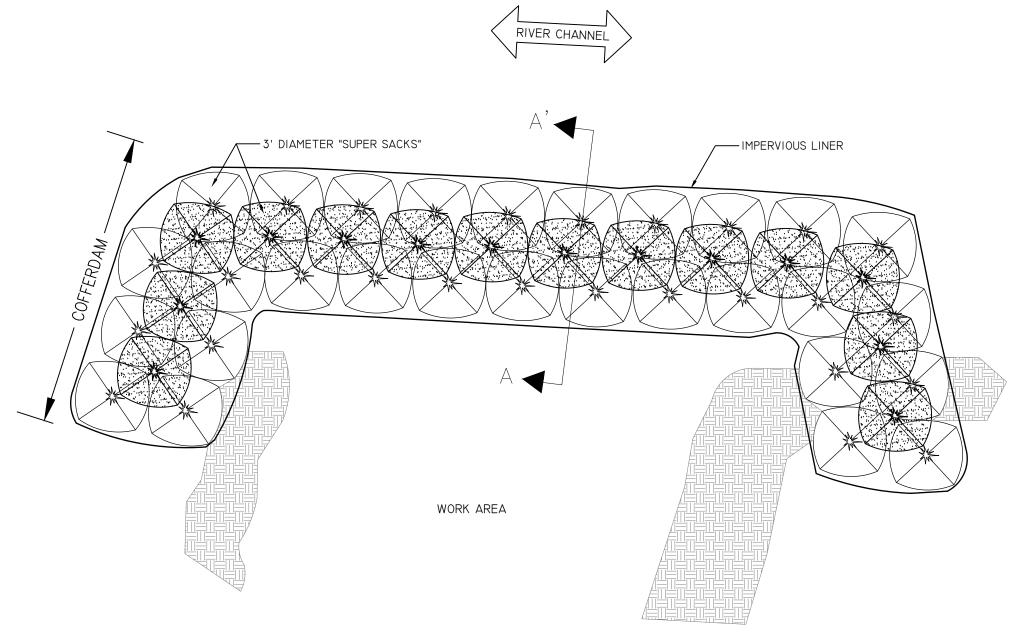
EC DETAILS











COFFERDAM NOTES:

(I) WRAP "SUPER SACKS" WITH IMPERVIOUS PLASTIC LINER TO PREVENT SEEPAGE.

(2) BACKFILL THE DOWNSTREAM SIDE OF THE COFFERDAM WITH NATIVE ADJACENT ALLUVIUM.

(3) USE "SUPER SACKS" AS A BUTTRESS AS REQUIRED.



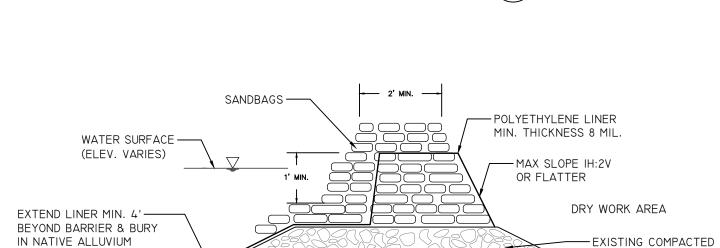
GENERAL EROSION & SEDIMENT CONTROL NOTES:

(I) THE IMPLEMENTATION OF EROSION AND SEDIMENT CONTROL MEASURES AND BEST MANAGEMENT PRACTICES INCLUDING CONSTRUCTION, MAINTENANCE, REPLACEMENT AND UPGRADING ARE THE RESPONSIBILITY OF THE CONTRACTOR UNTIL ALL CONSTRUCTION IS COMPLETED AND APPROVED.

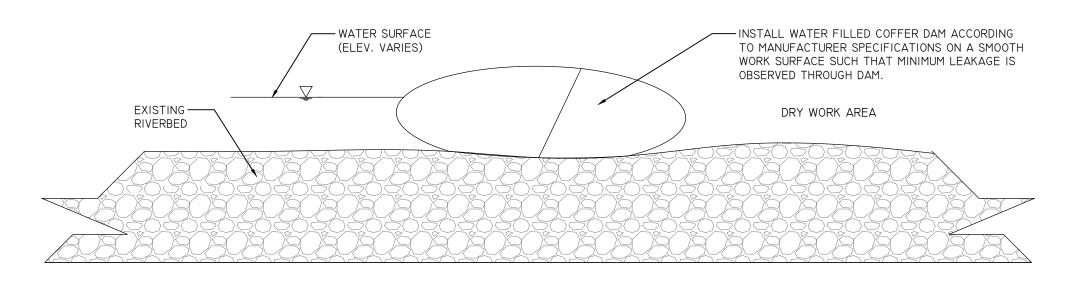
- (2) THE DETAILS SHOWN ON THIS SHEET ARE AN EXAMPLE OF ACCEPTABLE METHODS TO USE DURING CONSTRUCTION OF THIS PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR DEVELOPING AND SUBMITTING A COFFERDAM PLAN TO INCLUDE SUFFICIENT DETAIL OF MEANS AND METHODS SATISFACTORILY MEETING THE PROJECT SPECIFICATIONS AND PERMIT REQUIREMENTS. COFFERDAMS MAY CONSIST OF OTHER METHODS INCLUDING (BUT NOT LIMITED TO) SECLUSION FENCING, SAND BAGS, BULK BAGS, SUPER SACKS, SHEET PILE AND INFLATABLE BLADDERS.

 COFFERDAMS SHALL INCLUDE PLASTING LINER OR FINE MESH SILT FENCE TO REDUCE TURBIDITY AND FINES FROM ENTERING THE FREE FLOWING PORTION OF LIVE WATER.
- (3) ALL PUMP INTAKES SHALL BE SCREENED FOR FISH PROTECTION AS REQUIRED BY REGULATORY AGENCIES.
- (4) DEWATERING PUMP DISCHARGE FROM WITHIN COFFERDAM WORK AREAS SHALL BE RELEASED ONTO FLOODPLAIN AREAS AWAY FROM WETLANDS AND CONSTRUCTION ACTIVITIES. DISCHARGE SHALL NOT CAUSE EROSION OF TOPSOIL AND SHALL SHEET FLOW OVER THE FLOODPLAIN BEFORE RETURNING TO LIVE WATER DOWNSTREAM OF THE WORK AREA. ALL
- RETURN FLOWS MUST MEET PERMIT REQUIREMENTS FOR TURBIDITY.

 (5) ALL EARTHWORK AND WOOD STRUCTURES CONSTRUCTION WITHIN THE ORDINARY HIGH CHANNEL SHALL CONFORM TO WATER QUALITY STANDARDS ESTABLISHED BY THE REGULATORY AGENCY PERMITS FOR THIS PROJECT.







3' DIAMETER SUPER SACKS ----

WORK AREA

BACKFILL WITH ----

BACKFILL WITH ----

GRAVEL & COBBLES

WORK AREA

3' DIAMETER ——— SUPER SACKS

RIVERBED

GRAVEL & COBBLES

WATER SURFACE

(ELEV. VARIES)

RIVER CHANNEL

- WRAP SUPER SACKS

WITH IMPERVIOUS LINER

AND BACKFILL LINER

---- WATER SURFACE

RIVER CHANNEL

RIVERBED

- WRAP SUPER SACKS

WITH IMPERVIOUS LINER

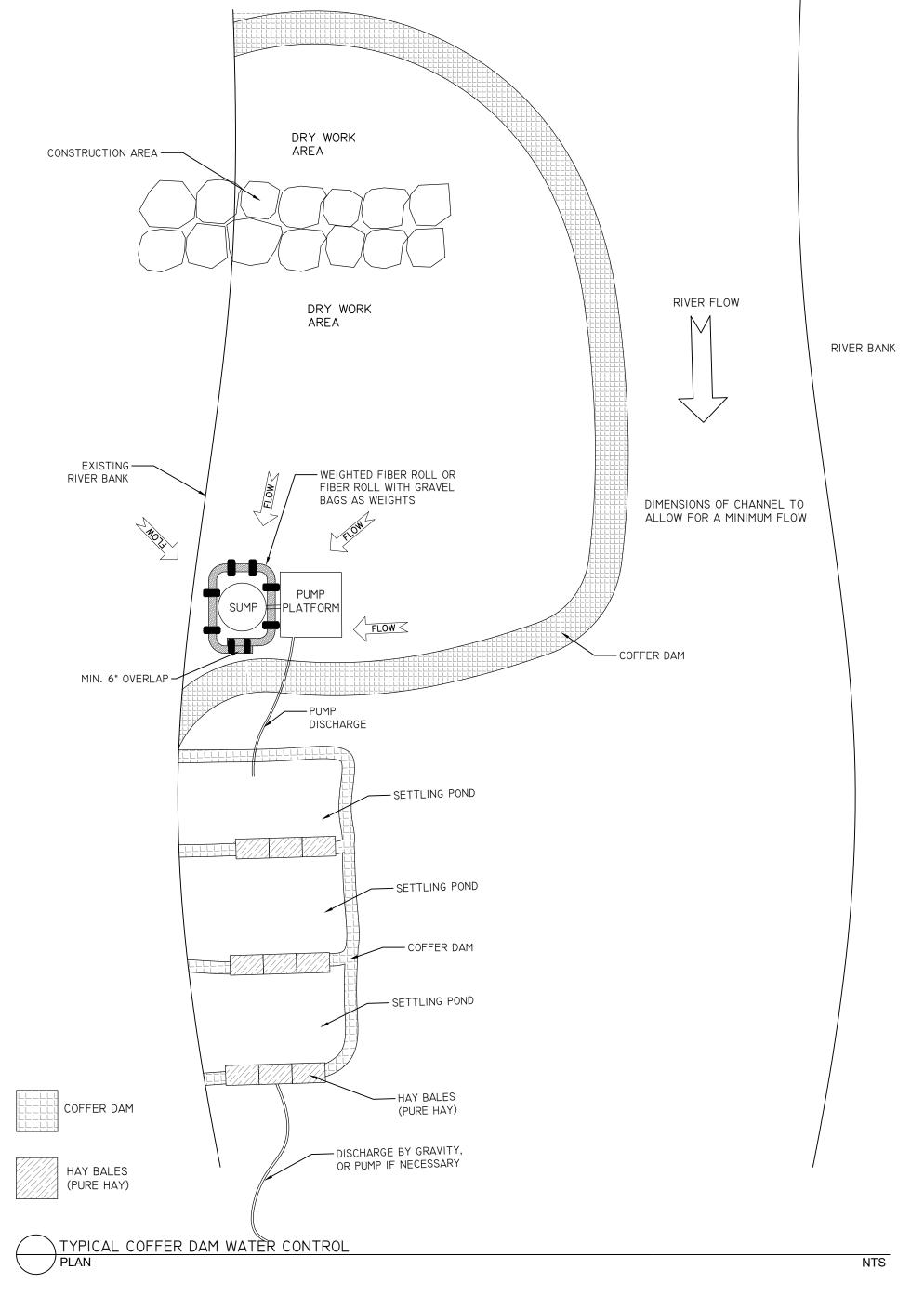
AND BACKFILL LINER

(ELEV. VARIES)

ALTERNATE COFFER DAM TYP. WATER-FILLED BLADDER

SECTION

NTS





Scott Shipley, P.E. 318 Mcconnell Drive Lyons CO, 80540, USA (303) 819-3985

Client: Town of Woodfin, NC

Project Name: Woodfin Wave at Riverside Park

Status:
Erosion Control/Water
Control/Construction Sequence
Drawings for Permitting

Drawing Name:
Erosion Control Details 1

Revisions:

Drawn By: Riley Adams Checked By:

Date: October 10, 2022

Scott Shipley

Status: Issued For Permitting

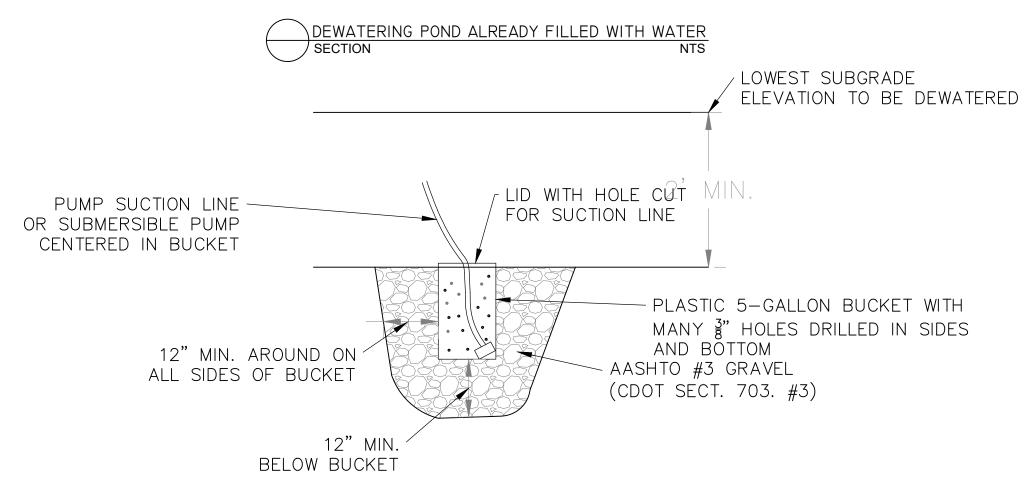
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NOT FOR CONSTRUCTION

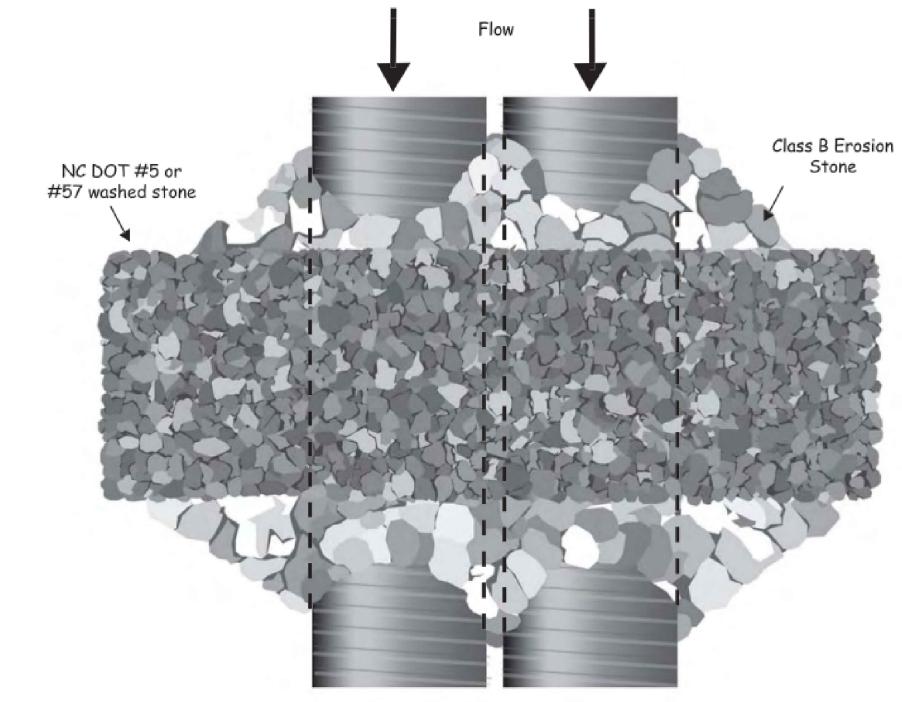
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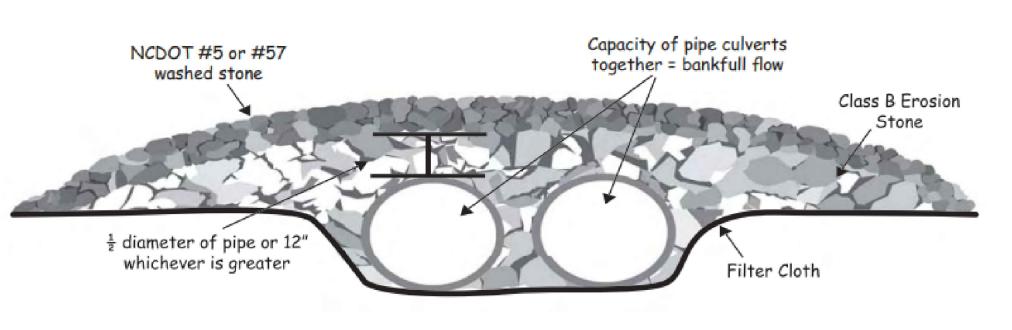
Sheet:

1" = 40' WWEC.6



DEWATERING SUMP FOR SUBMERSED PUMP SECTION NTS

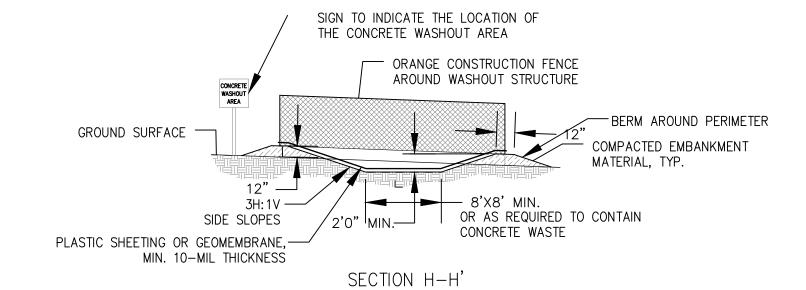


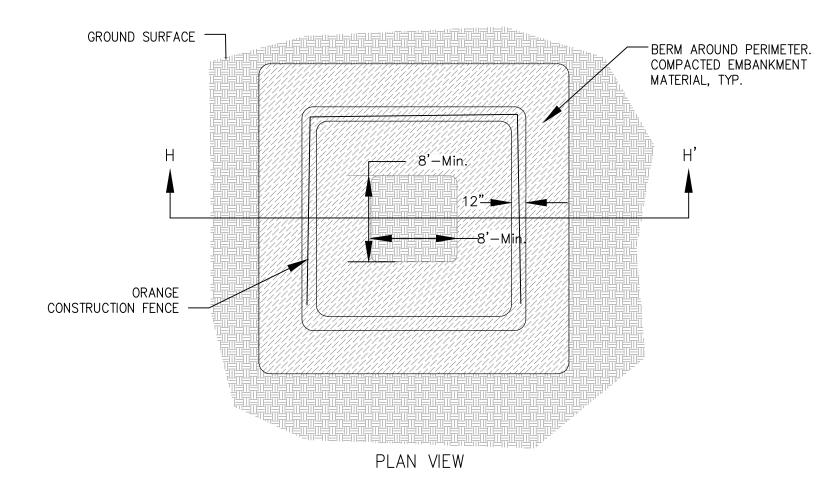


Stream

Channel

TEMPORARY STREAM CROSSING/ACCESS ROAD
DETAIL





NOTES

1. CONCRETE WASHOUT AREA SHALL BE INSTALLED PRIOR TO ANY CONCRETE PLACEMENT ON SITE; PLACED A MINIMUM 50' FROM STATE WATERS.

2. VEHICLE TRACKING CONTROL IS REQUIRED AT CONCRETE WASHOUT ENTRANCE IF ACCESS TO CONCRETE WASHOUT AREA IS OFF PAVEMENT.

AREA IS OFF PAVEMENT.

3. A PLASTIC SHEETING OR GEOMEMBRANE LINER SHALL BE PLACED. MINIMUM 10—MIL THICKNESS..

4. THE CONCRETE WASHOUT AREA SHALL BE REPAIRED AND/OR ENLARGED AS NECESSARY TO MAINTAIN CAPACITY

5. WASTE MATERIAL FROM CONCRETE WASHOUT OPERATIONS MUST BE REMOVED AND LEGALLY DISPOSED OF WHEN IT HAS ACCUMULATED TWO—THIRDS OF THE WET STORAGE CAPACITY OF THE STRUCTURE AND AT THE END OF CONSTRUCTION

6. WHEN THE CONCRETE WASHOUT AREA IS REMOVED, THE DISTURBED AREA SHALL BE SEEDED AND MULCHED OR

OTHERWISE STABILIZED IN A MANNER ACCEPTED BY THE CLIENT.

7. NO STORMWATER RUN-OFF SHALL DRAIN INTO CONCRETE WASHOUT AREA.

CONCRETE WASHOUT AREA
DETAIL



S₂O Design and Engineering

Scott Shipley, P.E. 318 Mcconnell Drive Lyons CO, 80540, USA (303) 819-3985

Client: Town of Woodfin, NC

Project Name: Woodfin Wave at Riverside Park

Status:

Erosion Control/Water
Control/Construction Sequence
Drawings for Permitting

Drawing Name:
Erosion Control Details 2

Revisions:

Drawn By: Riley Adams

Checked By: Scott Shipley

Date: October 10, 2022

Status: Issued For Permitting

Stamp:

NOT FOR CONSTRUCTION

Scale:

1" = 40'

Sheet:

WWEC.7