PUBLIC NOTICE

US Army Corps
Of Engineers
Wilmington District

Issue Date: **March 13, 2008**
Comment Deadline: **April 11, 2008**
Corps Action ID #: **200230652/200702076**

The Wilmington District, Corps of Engineers (Corps) has received an application from Balsam Mountain Preserve, LLC, seeking Department of the Army authorization to modify the Individual Permit issued on March 25, 2003 (Action ID 200230652). Balsam Mountain Preserve is an approximately 4,400-acre low-density residential development located 6 miles east of Sylva in Jackson County, North Carolina. This after-the-fact request for permit modification has been submitted in an effort to resolve noncompliance issues with the existing Individual Permit. Balsam Mountain proposes the following: (1) authorization of unpermitted impacts; (2) authorization of the revised mitigation plan, and; (3) authorization of stream restoration required as a result of an onsite dam failure.

Specific plans and location information are described below and shown on the attached plans. This Public Notice and all attached plans are also available on the Wilmington District Web Site at www.saw.usace.army.mil/wetlands

Applicant:
Balsam Mountain Preserve, LLC
Attn: Mr. Chris Crouch
52 Sugar Loaf Road
Sylva, North Carolina 28779

Agent:
Clear Water Environmental Consultants, Inc.
Attn: Mr. Clement Riddle
718 Oakland Street
Hendersonville, North Carolina 28739

Authority

The Corps will evaluate this after-the-fact request for permit modification to the original permit and decide whether to issue, conditionally issue, or deny the proposed and completed work pursuant to applicable procedures of Section 404 of the Clean Water Act (33 U.S.C. 1344).

Location

The site is located 10 miles west of Waynesville and 6 miles east of Sylva in Jackson County, North Carolina. Coordinates for the site are 35.3770 north and 83.1184 west.

Existing Site Conditions

The property is 4,400 acres in size and is accessed off of U.S. Highway 23/74. The Balsam Mountain Preserve (BMP) development will include 354 home sites, an 18-hole golf course with associated clubhouse facilities, and approximately two miles of new roads; currently 27 homes have been built, 18 are under construction, and the golf course has been constructed.

The property contains Dark Ridge Creek, Sugarloaf Creek, South Fork Sugarloaf, Cashie Branch, Licklog Creek, and Flint Spring Creek, and unnamed tributaries to these streams. All of these streams are tributaries to the Tuckasegee River. The Tuckasegee River is a tributary to the Little Tennessee River, which is a navigable in fact water at the 441 Bridge in downtown Franklin.

Elevations range from 2,600 feet msl to 5,500 feet msl at the top of Doubletop Mountain. The property is bordered by the Nantahala National Forest to the south and most of the land on the eastern border is owned privately.

Applicant's Stated Purpose

As described by the applicant, the purpose of the project, as originally proposed, was to construct a residential community within the mountains of North Carolina with extensive natural areas, a golf course, and other amenities. The modification request has been submitted by the applicant in an effort to resolve noncompliance issues with the existing Individual Permit and 401 Certification.

Project History

A Department of the Army Individual Permit was issued to BMP on March 25, 2003 (Action ID 200230652). This permit authorized impacts to 3,337.73 linear feet (lf) of perennial/intermittent stream channel/approximately 5,200 cubic yards of fill into waters of the United States. These impacts included the placement of fill for construction of a golf course, dam fill with related flooding impacts, and road impacts.

During construction of the project under the original permit, the applicant made several modifications to the impacts; as a result several culverts were lengthened, shortened, or moved to new locations and one of the two on-line ponds was relocated. BMP did not request a modification to the original permit nor did they inform the U.S. Army Corps of Engineers that these impacts had changed.

Table 1 describes the impacts that were authorized by the 2003 permit ("Permitted") and the actual impacts ("Modification"). Those figures shown as a positive number in the "Difference" column were not authorized by the original permit (i.e., are unauthorized impacts).

Table 1: Permitted versus Modified Impacts

Type	Impact No.	Permitted	Modification	Difference
Golf Course Fill	5	306.00	81.00	-225.00
	6	628.13	283.97	-344.16
	7	0.00	334.20	334.20
	8	128.39	128.39	0
	9	0.00	139.00	139.00
	10	0.00	122.00	122.00
	11	613.45	317.10	-296.35
	14	345.27	347.10	1.83
	15	140.09	290.70	150.61
	16	216.40	267.96	51.56
SUBTOTAL		***2,377.73***	***2,311.42***	***-66.31***
Flood	1	370.00	370.00	0.00
	3	279.00	0.00	-279.00
	12	0.00	183.30	183.30
SUBTOTAL		***649.00***	***553.30***	***-95.70***
Dam	2	25.00	25.00	0.00
	4	96.00	0.00	-96.00
	13	0.00	132.70	132.70
SUBTOTAL		***121.00***	***157.70***	***36.70***
Road		100.00	35.00	-65.00
Contingency		90.00	90.00	0.00
SUBTOTAL		***190.00***	***125.00***	***-65.00***
TOTAL IMPACTS		**3,337.73**	**3,147.42**	**-190.31**

In the original permit, Pond 2 was to be an on-line irrigation pond adjacent to Fairway 17. As construction progressed, the architects revised the routing of the fairways as a result of more accurate topographic information. Given this new alignment, BMP decided not to construct Pond 2 at the location authorized by the original permit. BMP instead constructed a pond on Fairway 13 by impounding a different tributary without authorization from the USACE.

At approximately 0845 on June 7, 2007, the dam on the unauthorized pond failed and released sediment into several streams with important aquatic function. According to information submitted by BMP, approximately 999.52 cubic yards of material was lost in the breach area and the volume of the pond was calculated to be approximately 7.55 acre-feet.

The velocity and volume of water released from the dam caused downstream impacts due to scour and deposition of sediment. Property and resources both on and off site were damaged and/or threatened. BMP has proposed the following activities to address the dam failure, unauthorized impacts, and other permit non-compliance issues (numbers 1-4).

1. Remedial Actions for Damaged Areas

1.1 Off-site Sediment Removal

The off-site sediment removal activities resulting from the dam failure are complete. The applicant's consultant, Clear Water Environmental Consultants, Inc. (CEC) submitted the final compliance report to the USACE on October 24, 2007.

1.2 Off-site Stabilization

Stabilization of damaged off-site areas was authorized by Nationwide Permit (NWP) Number 13 submitted to the USACE and the NC Division of Water Quality on August 7, 2007, and modified on (1) August 28, 2007, (2) September 25, 2007 and (3) December 2007. (Action ID 2007-02076-350). BMP has completed the stabilization as permitted under modifications #2 and #3, and no further work is anticipated in those areas. BMP will complete the work authorized under modification #4 after April 15, 2008, as conditioned in the NWP verification letter due to the trout moratorium.

1.3 Restoration of Dam Scour Impact

Due to the velocity and volume of water released from the dam, the unnamed tributary of Sugarloaf Creek located directly downstream of the dam failure received more scour damage than any other stream segment. Survey data indicates that the impacted area is approximately 678 linear feet. Cross section measurements and visual assessments indicate that the reach experienced lateral erosion and down cutting. Down cutting in the channel was somewhat limited by the presence of shallow bedrock that behaved as grade control. The bedrock is currently maintaining grade for this section of stream. Assessment of this reach indicates not all stream function or ecological value has been lost (USACE Stream Quality Assessment Worksheet score = 63.5).

BMP proposes to conduct restoration/stabilization activities in this section as a partially self-mitigating action. These activities would include reconstructing some banks to reduce the width of the channel to a more natural dimension, installing in-stream structures and planting shrubs along the banks where necessary to reduce the potential for further erosion and instability. Step-pool structures would be spaced to allow for 2.0± feet of water surface fall. Channel shaping that could be performed in this area, where not limited by bedrock or existing riparian vegetation, would attempt to match the estimated original cross section in dimension. Banks would be stabilized with coir matting and planted, where possible. Only species native to Balsam Mountain Preserve would be utilized for planting. Good riparian cover exists throughout most of the reach which should help with the prevention of future instability.

Confluence Engineering has performed a preliminary evaluation of this stream reach and believes it possible to perform beneficial repairs to this upstream reach that would at-least partially restore stream functions and improve overall stream quality. The bed and bank scour would be addressed through a combination of the following three practices:

- Limited bank grading and bioengineering to reestablish stable channel dimensions and a stabilizing root mass.

- Placement of in-stream rock and wood structures to promote a step-pool profile typical of the stream's headwater position

- Planting native trees and shrubs on the banks and adjacent hill slopes to provide additional stabilizing root mass, shade, and other beneficial habitat functions.

In addition to the partial restoration work, BMP proposes to provide onsite compensatory mitigation for the 678 linear feet of impact at a ratio of 0.5:1. This mitigation is comprised of either planned or completed culvert removals and is further detailed below.

1.4 On-site Restoration/Stabilization

As part of this permit modification request, BMP is also requesting on-site restoration/stabilization along four other stream segments impacted by the pond failure. Damage to these stream segments was the result of both scouring and sediment deposition.

The streams assessed are high gradient streams dominated by naturally occurring step-pools with a gravel/cobble substrate. Specific areas to be considered include:

- Golf Hole 11 – 600± linear feet of stream channel
- Golf Hole 18 – 300± linear feet of stream channel
- Golf Hole 9 – 300± linear feet of stream channel
- Ruby Valley Camp Site - 300± linear feet of stream channel

Channel shaping would attempt to match the estimated original cross section. Step-pool structures would be spaced to allow for 2.0± feet of water surface fall. Three different bank treatments would be utilized depending on the nature of the channel. Only species native to Balsam Mountain Preserve would be planted.

1.4.1 Golf Hole 11

BMP proposes to restore and/or stabilize a total of 600± linear feet of stream channel at this location. Two cart path bridges are located in this vicinity, one parallel to the stream at the upstream end and one perpendicular to the stream just downstream from the first bridge. From the upstream start of the project reach to the second bridge crossing, the stream would undergo

bank reconstruction and stabilization only. The parallel bridge prevents any additional work in this area. The banks would be sloped as close to 3:1 as possible with the addition of coir matting and seeding. A portion of the bank would be planted with shrubs where the bank is not shaded by the bridges.

Restoration would be more extensive downstream of the perpendicular crossing. In this reach, the channel and banks would be reconstructed in the deposited alluvium. Overall slope of the reach would not be changed and would be maintained with the construction of step-pool structures. Channel shaping that in this area, where not limited by bedrock or existing riparian vegetation, would attempt to match the estimated original cross section in dimension. Following channel and bank construction, the banks would be matted, seeded, and live staked. Shrub planting (1,875 shrubs) would take place in the remaining riparian areas.

1.4.2 Golf Hole 18

BMP proposes to restore and/or stabilize a total of 300± linear feet of stream channel at this location. A golf cart bridge is located at the downstream end of this reach. The channel and banks would be reconstructed in the deposited alluvium. Overall slope of the reach would not be changed and would be maintained with the construction of step-pool structures. Channel shaping that in this area, where not limited by bedrock or existing riparian vegetation, would attempt to match the estimated original cross section in dimension. Following channel and bank construction, the banks would be matted, seeded, and live staked. Shrub planting (937 shrubs) would take place in the remaining riparian areas.

1.4.3 Golf Hole 9

BMP proposes to restore and/or stabilize a total of 300± linear feet of stream channel at this location. The channel and banks would be reconstructed in the deposited alluvium. Overall slope of the reach would not be changed and would be maintained with the construction of step-pool structures. Channel shaping in this area, where not limited by bedrock or existing riparian vegetation, would attempt to match the estimated original cross section in dimension. Following channel and bank construction, the banks would be matted, seeded, and live staked. Shrub planting (937 shrubs) would take place in the remaining riparian areas.

1.4.4 Ruby Valley Camp Site

BMP proposes to restore and/or stabilize a total of 300± linear feet of stream channel at various locations. The banks would be reconstructed to match undamaged existing conditions upstream and/or downstream of each location. Most of this reach is heavily vegetated with localized damages. Following construction, the banks would be matted, seeded, and live staked. Shrub planting (up to 937 shrubs) would take place in the remaining riparian areas where riparian cover does not exist.

1.5 Monitoring Plan and Success Criteria

Environmental components monitored in this project would be those that allow an evaluation of channel stability and riparian survivability. Specifically, the success of channel modification, erosion control, seeding, and woody vegetation plantings would be evaluated. Monitoring the success of the restoration areas would involve an as-built survey and one year of morphological and vegetative data gathering.

Permanent cross-sections would be established along each reach, with an effort made to include both riffles and pools. Each cross-section would be marked on both banks with permanent pins to establish the exact transect used. The annual cross-section survey would include points measured at all breaks in slope, including top of bank, bankfull, inner berm, edge of water, and thalweg. To determine success, there should be little or no change in as-built cross-sections. If changes do take place, they would be evaluated to determine if they represent a movement toward a more unstable condition (down-cutting, erosion) or are minor changes that represent an increase in stability (settling, vegetative changes, deposition along the banks, decrease in width/depth ratio).

A complete longitudinal profile would be completed once during the as-built survey and again during monitoring the following year. Measurements would include slope (average, pool, riffle) and pool-to-pool spacing. Survey points would include thalweg, water surface, inner berm, bankfull, and top of low bank. Each of these points would be taken at the head of each feature, e.g., riffle, run, pool, and glide, and the max pool depth. The survey would be tied to a permanent benchmark. To determined success, the as-built longitudinal profiles should show that the bedform features are remaining stable, e.g., they are not aggrading or degrading. The pools should remain deep with flat water surface slopes and the riffles/steps should remain steeper and shallower.

Photographs would be made with a digital camera used to subjectively evaluate channel aggradation or degradation, bank erosion, success of riparian vegetation and effectiveness of erosion control measures. There would be two photo reference sites per cross-section showing both banks and the stream channel. One photo station would be located at the start and end of each stream segment looking into the restoration area. Longitudinal photos should indicate the absences of developing bars within the channel or an excessive increase in channel depth. Lateral photos should not indicate excessive erosion or continuing degradation of the bank over time. Vegetative succession would include initial herbaceous growth, followed by increasing densities of woody vegetation and then ultimately a mature shrub overstory with herbaceous understory.

All rooted vegetation would be flagged and evaluated for to determine survival. At least 2 staked survival plots per reach would be evaluated. Plots would be 25 feet wide and 25 feet long and all flagged stems would be counted in those plots. Success would be defined as “75% survival of all planted shrubs or greater shrub density due to the establishment of native volunteer species”. Vegetation would be planted on 4’x 4’ if rooted vegetation does not survive, a determination would be made as to the need for replacement; in general, if greater than 25% die, replacement may be done.

2.0 As-built Impacts

BMP proposes to modify the original permit to match the existing conditions (i.e., as built) on-site. All impacts are indicated on Table 1 on page 3 of this Public Notice.

USACE stream quality worksheets were completed by the applicant's consultant in order to compare the as-built impacted areas to those areas where impacts were authorized in order to assess the overall impacts of permit non-compliance. Scores ranged from 60 to 80 with a mean of 72.6. In general, they indicate that the streams impacted are similar in size and quality to the streams authorized to be impacted in the original permit.

2.1 Pond Related (Dam Fill and Flooding)

The original permitted amount of impact authorized for pond related activities, (i.e. dam fill and flooding impacts) is a total of 770 lf (649 lf of flooding and 121 lf of dam fill). Pond 1 was constructed as permitted and includes 370 lf of flooding and 25 lf of dam fill. As discussed previously, BMP's original permit specified that Pond 2 be constructed on-line, adjacent to Fairway 17. Instead, Pond 2 was constructed on-line in another tributary adjacent to Fairway 13 without authorization from the USACE. The authorized impacts associated with Pond 2 were 279 lf of flooding and 96 lf of dam fill. The unauthorized, as-built impacts associated with Pond 2 are 183.30 lf of flooding and 132.70 lf of dam fill. Flooding impacts from Pond 2 decreased by 95.70 lf while dam fill impacts increased by 36.7 lf.

According to BMP's consultant (CEC), the unauthorized/as-built location for Pond 2 is located approximately 350 feet higher than the permitted site for Pond 2. The advantage of the as-built pond location includes the reduction of irrigation pumping uphill by 350 feet. This reduces the number of booster pumps required for the irrigation system and it lowers the pressure requirements of the irrigation system. The reduction of pumps and pressure requirements make this a more efficient system with less potential for mechanical breakdown.

CEC evaluated the stream conditions at the permitted location for Pond 2 and just upstream of its unauthorized/'as-built location. Both of these streams are narrow, unnamed tributaries of Sugarloaf Creek. The stream at the original Pond location is slightly smaller (6 ft wide) with a gentler slope and a total score of 79. Impact 12 is 8 ft wide, has a moderate slope, and scored a total of 75. It is the opinion of CEC that these tributaries are very similar in size, flow, habitat, and overall condition and that the new pond location is no more environmentally damaging that than the permitted location.

BMP proposes to rebuild the dam in the as-built location (Fairway 13).

2.2 Golf Course Fill

The original permitted amount authorized for golf course fill impact was 2,377.73 linear feet. The as-built survey of current impacts indicates a decrease in impacts of 66.31 linear feet to 2,311.42 linear feet. Please note that in the original permit, an error occurred in the calculation of golf course fill as shown on the "Wetland Master Plan 2002". The summary table on the "Wetland Master Plan 2002" indicated a total of 2,454.04 linear feet while the sum of individual

labels on the drawing totaled 2,377.73 (a decrease of 76.30 linear feet). The correct amount of impacts required for golf was the latter, 2,377.73 linear feet. The correction was never made to the 404 Permit or the 401 Water Quality Certification.

The original permit indicated a master plan layout based on aerial topographic surveys. As construction commenced on the project, it became apparent that the aerial topographic survey was inaccurate to a significant degree. Therefore, site specific surveying was completed and golf course routing adjusted so that the layout was reasonable within the contours of the site. BMP adjusted the golf course routing and some of the impacts to waters of the U.S. Several of the larger impacts were decreased significantly while three additional impacts were added. The as-built survey used for the modified impact drawings was measured in the field by Ed Holmes and Associates Surveying in the spring of 2007.

In order to gather information on the permitted verses the unpermitted impacts, CEC completed Stream Quality Assessment Forms for reaches upstream and downstream of Impact 16, which was for golf course fill. The scores are comparable above and below the culvert, 77.5 and 72.5, respectively. The stream at Impact 10 received a score of 73, which is expected based on other streams assessed. The stream at Impact 9 was scored only a 60 and seemed below expected. The size and slope contributed to the lower than average score. These scores are consistent with other assessment and are not of a significantly higher quality than other streams on the property.

2.3 Culverts

BMP's permit authorized 190 linear feet of impact associated with road construction (100 linear feet of identified road impacts plus 90 linear feet of contingency for use in future phases). BMP will not construct 65 linear feet the identified road crossing impacts to minimize impacts. One 35 lf road crossing is to be constructed. Bridges or a rerouting of roads would allow BMP to eliminate the remaining 65 lf of road culvert impacts. BMP has utilized 20 linear feet of the permitted contingency for extension of one culvert at a road crossing, and anticipates the possible need for the remaining 70 feet.

3.0 Compensatory Mitigation

Baker Engineering (formerly Buck Engineering) has been working with Balsam Mountain Preserve since 2003, designing and overseeing the stream mitigation activities on-site.

3.1 Preservation

BMP has preserved through Conservation Easement, 200,328.84 lf of stream with 368 acres of upland buffers ranging from 25 to 100 feet. This easement was recorded in 2003 and a copy was provided to the USACE. A total of 200,428.26 lf was specified in the original permit. However, preservation based on the actual survey indicated a decrease by 99.42 lf due to specific registered land survey information.

3.2 Roadbed Stream Restoration/Enhancement

BMP has completed the stream restoration/enhancement per the permit requirements. This stream, formerly in a roadbed, has been reconstructed and replanted. The permit indicated 566 lf of enhancement. However, at the completion of the enhancement activities and post construction surveying, restoration activities provided 489 lf of mitigation credit (1:1) and enhancement of 188 lf upstream of the restoration segment provided another 75 credits (2.5:1). This as-built information was submitted to the USACE by Baker Engineering (Buck Engineering) in 2006. A total of 564 mitigation credits were provided by roadbed stream restoration/enhancement activities. The original length of enhancement indicated on the permit was an estimate only based on site conditions at the time. BMP proposes additional mitigation, as discussed in Section 3.5, to offset the difference of 2 credits.

3.3 Brook Trout Enhancement

Brook trout enhancement has also taken place on 7,656.78 lf of stream through the reintroduction of native Southern Appalachian brook trout. Brook Trout were removed from Dark Ridge Creek on-site and relocated to Cashie Branch. This relocation plan has been implemented by Blue Ridge Environmental Consultants.

3.4 Culvert Removal

BMP has removed 32 culverts on-site. The removal of these culverts has resulted in the restoration of 1,501 lf. Of this total, 1,246 lf was approved in the original mitigation plan. An additional 255 lf of restoration has been performed at other sites that were not contained in the original permit but were located during construction. Removal of the remaining feasible approved (141 lf) and proposed (878 lf, if approved) culverts would result in total on-site stream restoration of 2,520 lf. A total of 519 lf at 8 crossings were included in the original permit but are not now feasible according to BMP, due to logistic considerations.

The culvert removal and restoration would follow all of the construction, planting, and monitoring methodology that was in the Buck Engineering (now Baker Engineering) approved (USACE 404 Permit, Special Condition 17) plan named “Balsam Mountain Preserve Stream Mitigation Project 2002, Jackson County, North Carolina.”

Table 2: Summary of Mitigation from Culvert Removal

Description	Permitted	Pending Approval	Total
Culvert Removal Completed	1,246	255	1,501
Approved Culverts, Not Completed	141	0	141
Proposed Substitutions, Not Completed	0	878	878
Total Feasible Culvert Removal/Enhancement Mitigation	1,387	1,133	2,520
Original Permit			2,347

3.5 Proposed Permit Modification for Mitigation

BMP proposes to modify the permit according to Tables 3 and 4 located below. Preservation has decreased by 99.42 lf for a total of 200,328.84 lf. This reduction in preservation was a mathematical error and will require no change to the recorded Conservation Easement. Brook trout reintroduction plans will not change. The enhancement of the stream in the old roadbed has been accurately measured and indicates a 2 lf decrease to 564 lf. More detail regarding the culvert removal sites, including the exclusion of some sites due to logistics, the inclusion of additional sites, and the accurate measurement of restoration lengths, shows an overall net excess of 173 lf for mitigation from culvert removal restoration for a total of 2,520 lf. According to BMP, after adjustments based on a decrease of overall impacts and the remaining mitigation from the dam scour impact, there would be an excess of 22.31 lf of mitigation credits being generated by the project.

Table 3: Original versus Modified Compensatory Mitigation

Type	Original Permit Quantity	Modified Permit Quantity
Preservation	200,428	200,328
Brook trout reintroduction	7,656.78	7,656.78
Enhancement	566	569
Culvert Removal Restoration	2,347	2,520

Table 4: Balance of Compensatory Mitigation

Source/Reason	Quantity
Culvert Removal Mitigation Excess	173
Stream Enhancement Outstanding	(2)
Difference in "As Built" Impacts	125.31
Road Impacts Eliminated in Modified Permit	65
Remaining Compensatory Mitigation for Pond Breach (678 lf at 0.5:1 ratio = 339 lf)	(339)
Total Compensatory Mitigation Excess	**22.31**

4.0 Summary

According to information submitted by BMP, they have reduced overall impacts associated with the project by 190.31 lf for a total of 3,147.42 lf. A total of 22.31 lf of excess mitigation credit remains. Based on the Stream Quality Assessment Forms, there is no additional detrimental effect to water quality as a result of impacts outside of authorized areas and therefore "the constructed alternative is no more environmentally damaging the permitted plan."

Other Required Authorizations

This notice and all applicable application materials are being forwarded to the appropriate State agencies for review. The Corps will generally not make a final permit decision until the North Carolina Division of Water Quality (NCDWQ) issues, denies, or waives State certification required by Section 401 of the Clean Water Act (PL 92-500). The receipt of the application and this public notice combined with appropriate application fee at the North Carolina Division of Water Quality central office in Raleigh will constitute initial receipt of an application for a 401 Water Quality Certification. A waiver will be deemed to occur if the NCDWQ fails to act on this request for certification within sixty days of the date of the receipt of this notice in the NCDWQ Central Office. Additional information regarding the Clean Water Act certification may be reviewed at the NCDWQ Central Office, 401 Oversight and Express Permits Unit, 2321 Crabtree Boulevard, Raleigh, North Carolina 27604-2260. All persons desiring to make comments regarding the application for certification under Section 401 of the Clean Water Act should do so in writing delivered to the North Carolina Division of Water Quality (NCDWQ), 2321 Crabtree Boulevard, Raleigh, North Carolina 27604-2260 Attention: Ms Cyndi Karoly by April 11, 2008.

In addition, this project may be located in a watershed subject to Tennessee Valley Authority (TVA) permit requirements pursuant to Section 26a of the TVA Act. This Public Notice and all application materials are being forwarded to the Little Tennessee Watershed Team, Attention: Ms. Rachel Terrell, 260 Interchange Park Dr., Lenoir City, TN 37772-5664. Questions or comments regarding Section 26a permit requirements should be directed to the above address.

Essential Fish Habitat

This notice initiates the Essential Fish Habitat (EFH) consultation requirements of the Magnuson-Stevens Fishery Conservation and Management Act. The Corps' initial determination is that the proposed project would not adversely impact EFH or associated fisheries managed by the South Atlantic or Mid Atlantic Fishery Management Councils or the National Marine Fisheries Service.

Cultural Resources

The Corps has consulted the latest published version of the National Register of Historic Places and is not aware that any registered properties, or properties listed as being eligible for inclusion therein are located within the project area or would be affected by the proposed work. Presently, unknown archeological, scientific, prehistoric, or historical data may be located within the project area and/or could be affected by the proposed work.

Endangered Species

The Corps has reviewed the project area, examined all information provided by the applicant and consulted the latest North Carolina Natural Heritage Database. Based on available information, the Corps is not aware of the presence of species listed as threatened or endangered or their critical habitat formally designated pursuant to the Endangered Species Act of 1973 (ESA)

within the project area. A final determination on the effects of the proposed project will be made upon additional review of the project and completion of any necessary biological assessment and/or consultation with the U.S. Fish and Wildlife Service and/or National Marine Fisheries Service.

Evaluation

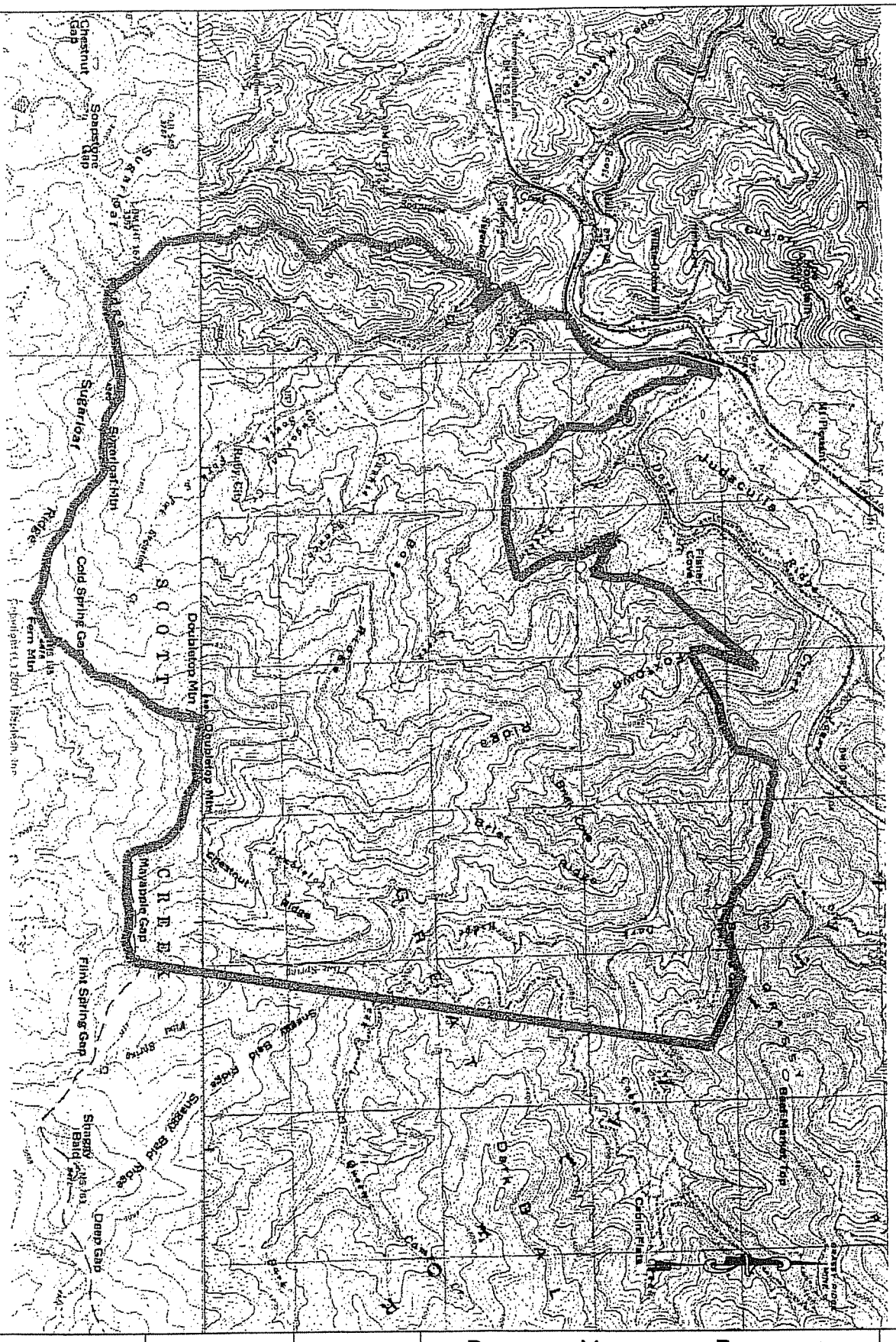
The decision whether to issue a permit modification will be based on an evaluation of the probable impacts, including cumulative impacts, of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, flood plain values (in accordance with Executive Order 11988), land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people. For activities involving the discharge of dredged or fill materials in waters of the United States, the evaluation of the impact of the activity on the public interest will include application of the Environmental Protection Agency's 404(b)(1) guidelines.

Commenting Information

The Corps of Engineers is soliciting comments from the public, Federal, State and local agencies and officials, including any consolidate State Viewpoint or written position of the Governor, Indian Tribes, and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment (EA) and/or an Environmental Impact Statement (EIS) pursuant to the National Environmental Policy Act (NEPA). Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider the application. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing. Requests for a public hearing shall be granted, unless the District Engineer determines that the issues raised are insubstantial or there is otherwise no valid interest to be served by a hearing.

Written comments pertinent to the proposed work, as outlined above, will be received by the Corps of Engineers, Wilmington District, until 5pm, April 11, 2008. Comments should be submitted to USACE, Attn: Lori Beckwith, 151 Patton Avenue Room 208, Asheville, North Carolina 28801.



SOURCE: MAPTECH TERRAIN NAVIGATOR

USGS QUADS: SYLVA NORTH, SYLVA SOUTH, HAZELWOOD, TUCKASEGEE

ClearWater Environmental Consultants, Inc.	718 Oakland St Hendersonville NC 28791 Phone: (828) 698-9800 Fax: (828) 698-9003	1 inch = 3000 feet Drawn by: CSG Date: 09JAN2008 CEC Project No: 307	**Balsam Mountain Preserve** **USGS Topographic Map** Balsam Mountain Preserve — Jackson County, NC	Sheet No. 2

Balsam Mountain Preserve
Jackson County, NC
Permit Modifications - January 22, 2008
As-Built

FIGURE 4: MAP KEY SHEET

Drawn By: TWT SCALE: 1"=1200'

WILLIAM G. LAPSLEY & ASSOCIATES, P.A.
CONSULTING ENGINEERS & LAND PLANNERS

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JANUARY 2008

PROJECT DATA

TOTAL PROJECT AREA	4,363.512 ACRES

JURISDICTIONAL WATERS OF THE US/WETLANDS

PERENNIAL & INTERMITTENT STREAMS	203,652.81 / 121.09 LF/AC

STREAM IMPACTS

ROAD IMPACTS/CULVERTS	35 LF
CONTINGENCY	90 LF
GOLF COURSE IMPACTS	
PERMANENT FILL IMPACTS	
PERENNIAL/INTERMITTENT STREAM IMPACT	2311.42 LF
IRRIGATION POND/FLOODING IMPACTS	
FLOODING	553.30 LF
FILLING-DAM FOOTPRINT	157.70 LF
TOTAL PERMANENT IMPACTS:	3147.42 LF

MITIGATION

AVOIDANCE	
TOTAL STREAMS AVOIDED	200,620.08 LF
USE OF EXISTING CULVERTS/BRIDGES	# 77
NEW BRIDGES/HALFPIPES	#9
GOLF CART BRIDGES	#22
RETAINING WALL(FOR STREAM AVOIDANCE)	12,248 LF.
RESTORATION/CREATION	
STREAM RESTORATION(INCLUDING CULVERTS)	2,520 LF
STREAM ENHANCEMENT	564 LF
LITTORIAL SHELF/WETLAND CREATION	.25 AC
PRESERVATION	
JURISDICTIONAL WATERS OF THE US/WETLANDS	200,328.284 LF
UPLAND BUFFERS	
UPLAND BUFFER ALONG STREAMS	368.85 ACRES
AQUATIC HABITAT	
BROOK TROUT REINTRODUCTION CASHIE BRANCH	7656.78 LF

Impact No.	Impact Type	Permitted	As-built	Difference
1	Flood	370	370	0
2	Dam	25	25	0
3	Flood	279	0	-279
4	Dam	96	0	-96
5	GC Fill	306	81	-225
6	GC Fill	628.13	283.97	-344.16
7	GC Fill	0	334.2	334.2
8	GC Fill	128.39	128.39	0
9	GC Fill	0	139	139
10	GC Fill	0	122	122
11	GC Fill	613.45	317.1	-296.35
12	Flood	0	183.3	183.3
13	Dam	0	132.7	132.7
14	GC Fill	345.27	347.1	1.83
15	GC Fill	140.09	290.7	150.61
16	GC Fill	216.4	267.96	51.56
	SUBTOTAL	3147.73	3022.42	-125.31
	Road	100	35	-65
	Contingency	90	90	0
TOTAL		**3337.73**	**3147.42**	**-190.3**

Balsam Mountain Preserve
Jackson County, NC
Permit Modifications - January 22, 2008
As-Built

FIGURE 4: TABLE Drawn By: TWT SCALE: NTS

WILLIAM G. LAPSLEY & ASSOCIATES, P.A.
CONSULTING ENGINEERS & LAND PLANNERS

Two Town Square Blvd.
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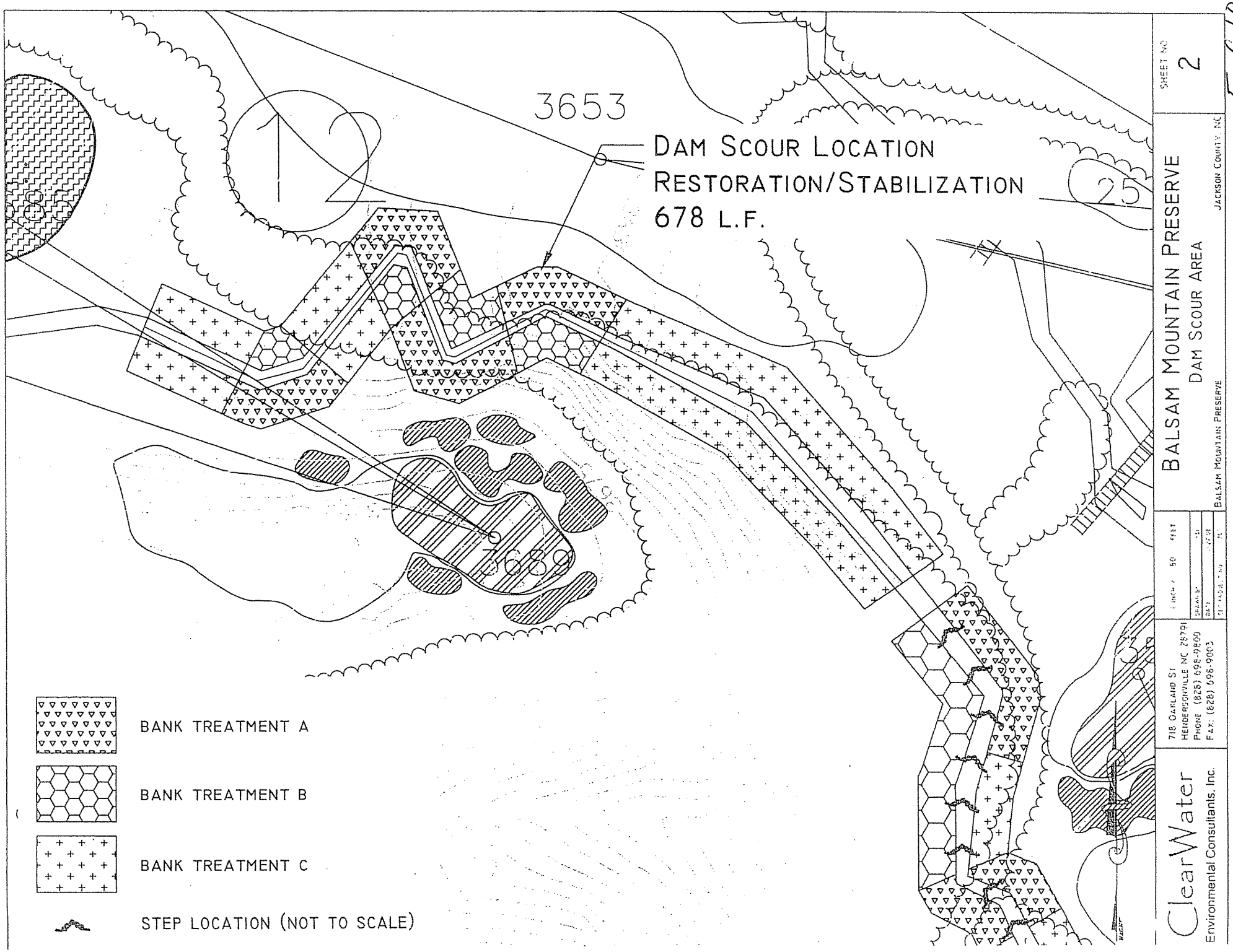
ClearWater
Environmental Consultants, Inc.
718 Oakland St
Hendersonville NC 28791
Phone (828) 698-9800
Fax (828) 698-9003

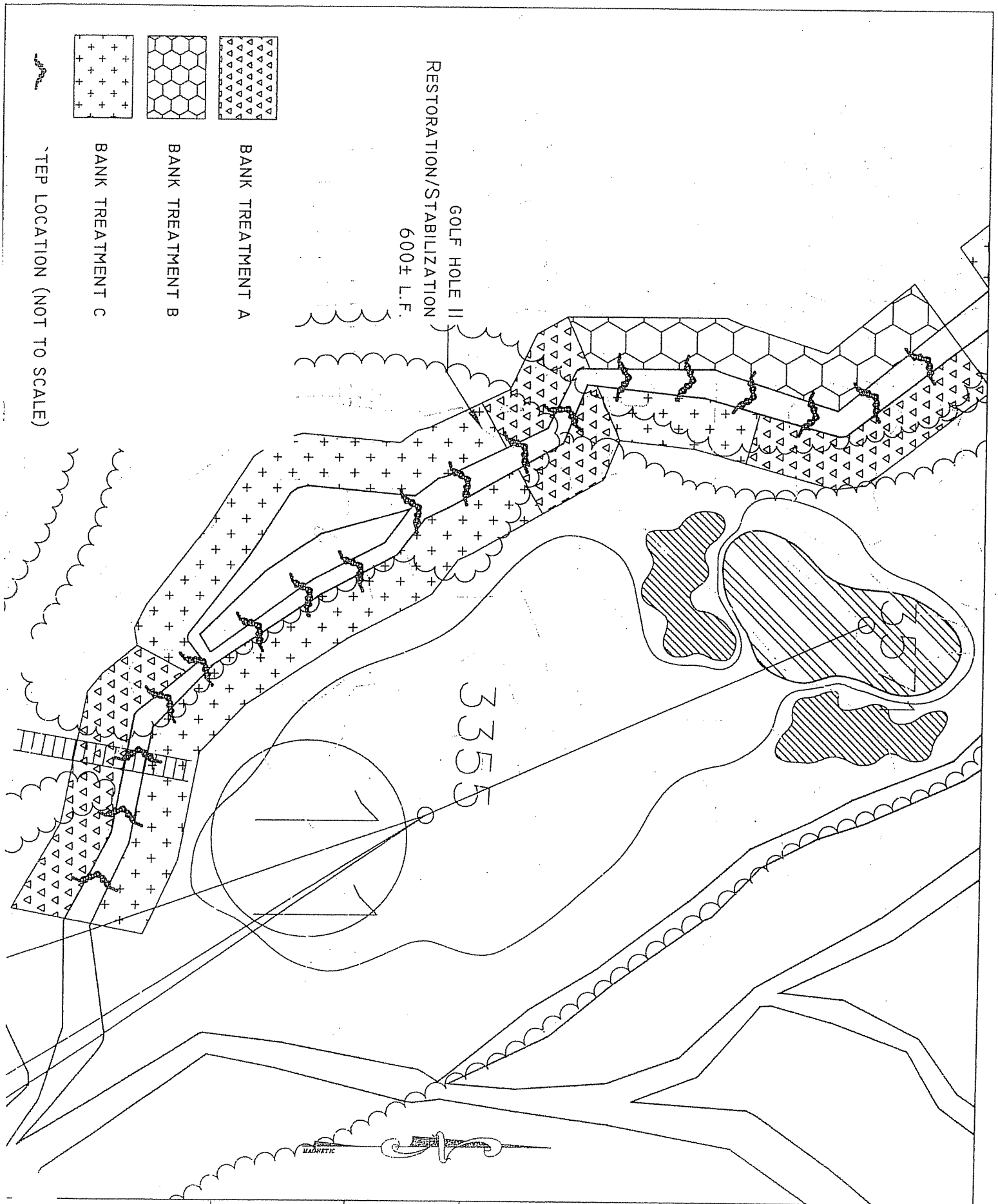
1 INCH = 400 FEET
DRAWN BY
DATE
CEC PROJECT NO

Balsam Mountain Preserve
On-Site Restoration/Stabilization

Balsam Mountain Preserve — Jackson County, NC

SHEET NO
1


3653
DAM SCOUR LOCATION
RESTORATION/STABILIZATION
678 L.F.
3680
BANK TREATMENT A
BANK TREATMENT B
BANK TREATMENT C
STEP LOCATION (NOT TO SCALE)
BALSAM MOUNTAIN PRESERVE
DAM SCOUR AREA
JACKSON COUNTY, NC
SHEET NO 2
BALSAM MOUNTAIN PRESERVE
ClearWater
Environmental Consultants, Inc.
716 OAKLAND ST
HENDERSONVILLE NC 28791
PHONE (828) 698-9800
FAX: (828) 698-9803



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Hendersonville NC 28791
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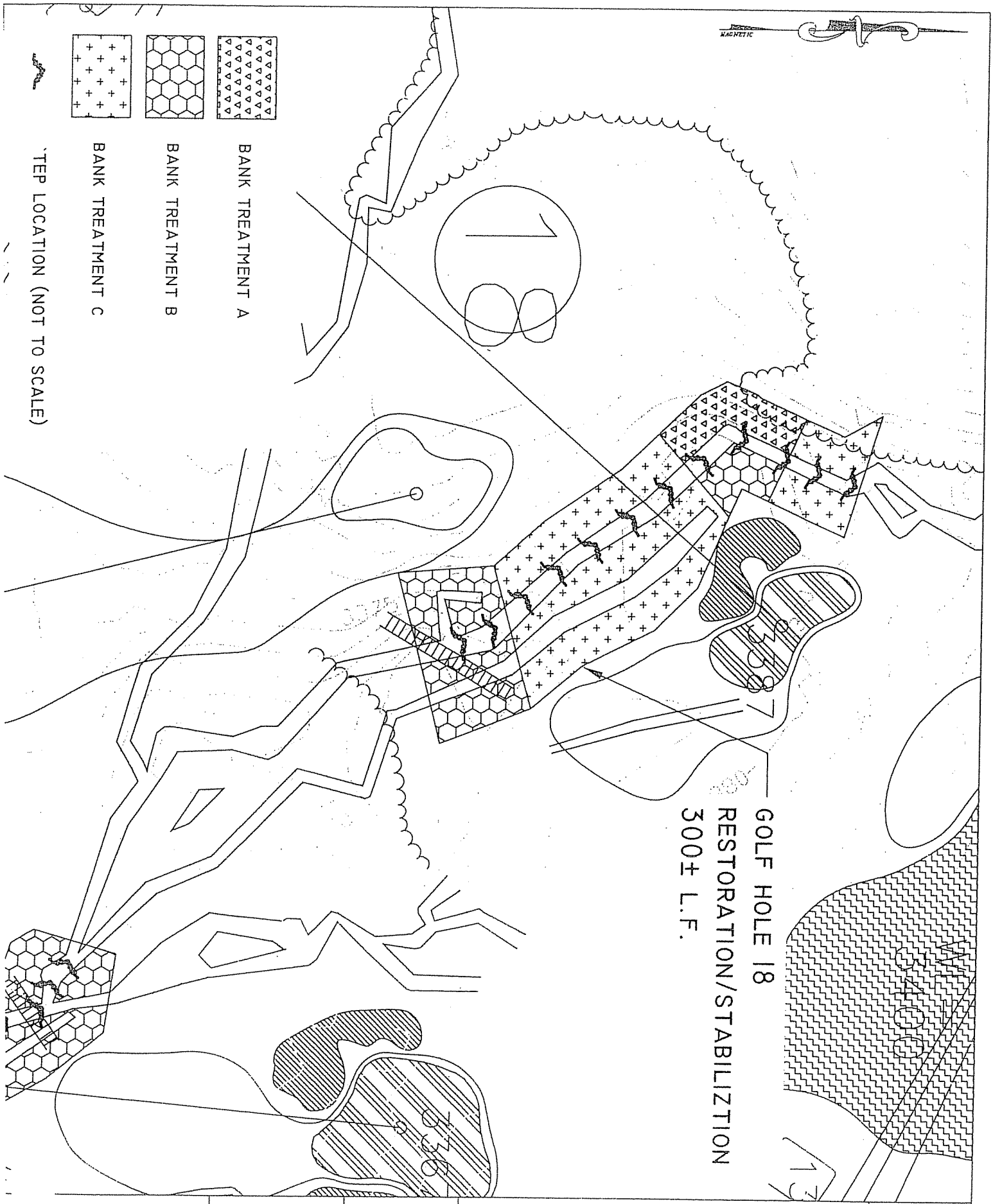
1 inch = 50 feet
Drawn by:
Date
CES Project No.

Balsam Mountain Preserve
Golf Hole II

Balsam Mountain Preserve — Jackson County, NC

Sheet No 3



ClearWater
Environmental Consultants, Inc.

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Fax: (828) 698-9003

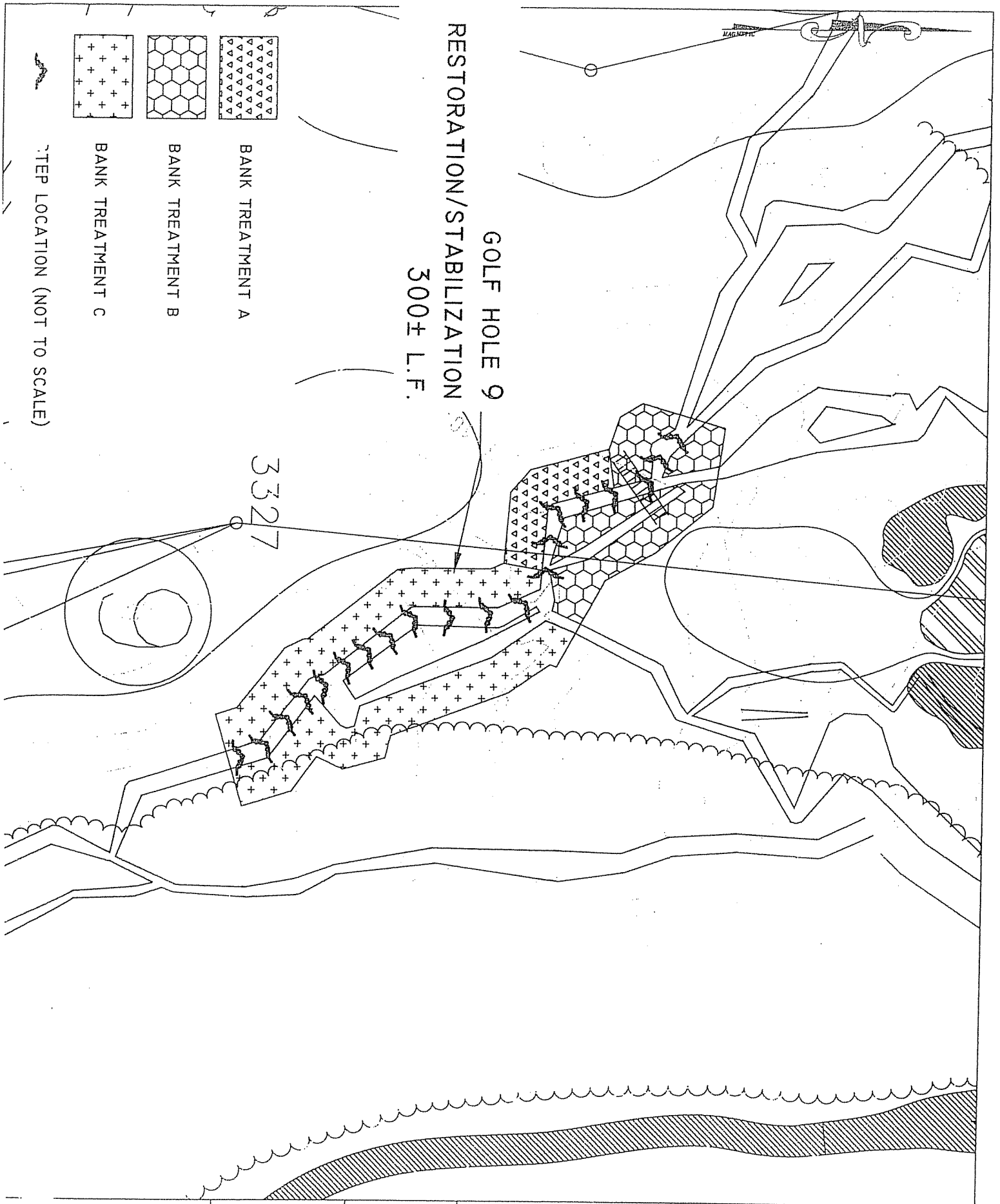
1 inch = 50 feet

Drawn by:
Date:
CEC Project No:

Balsam Mountain Preserve
Golf Hole 18

Balsam Mountain Preserve — Jackson County, NC

Sheet No 4



ClearWater
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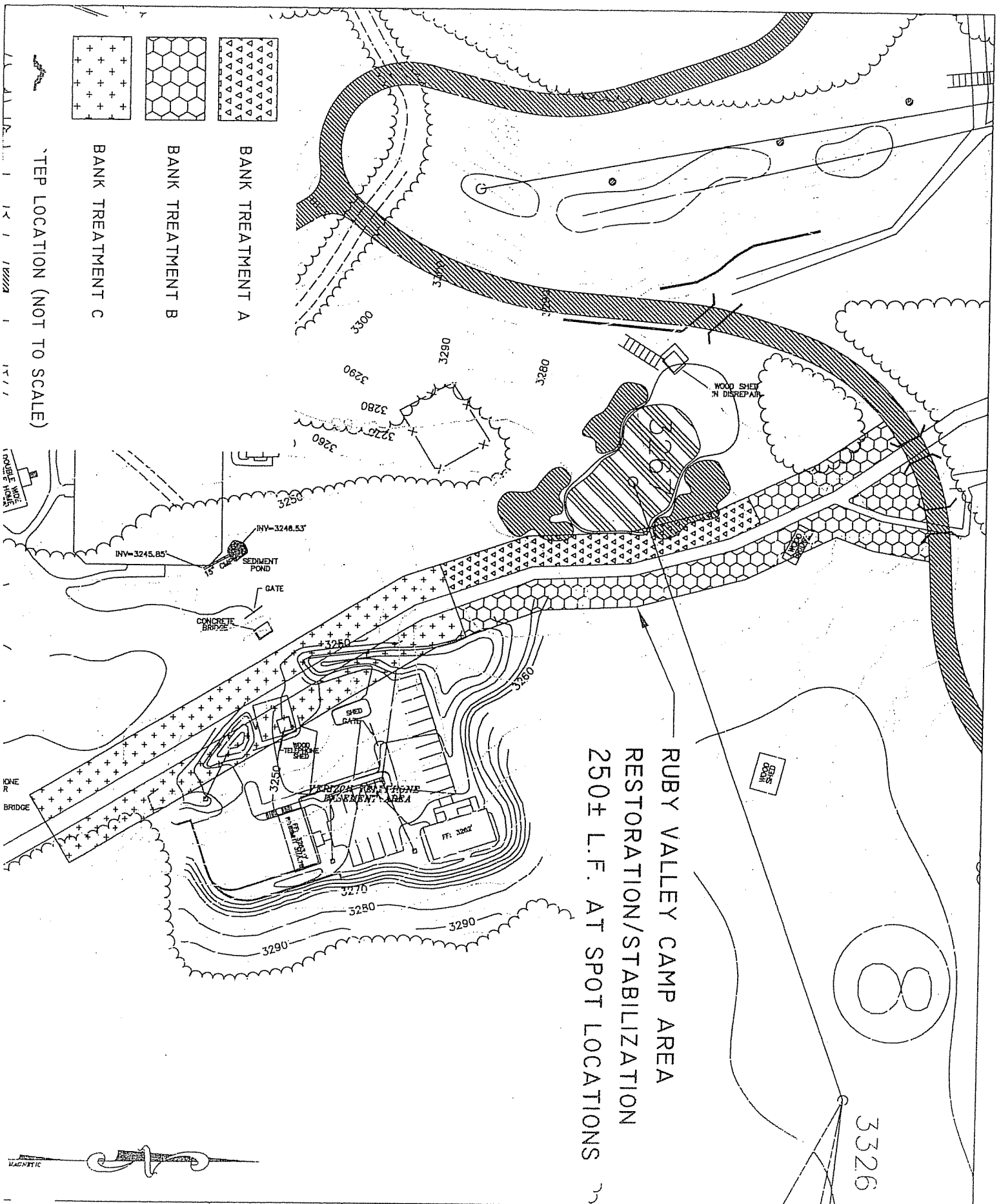
Balsam Mountain Preserve
Golf Hole 9

Balsam Mountain Preserve — Jackson County NC

Sheet No 5



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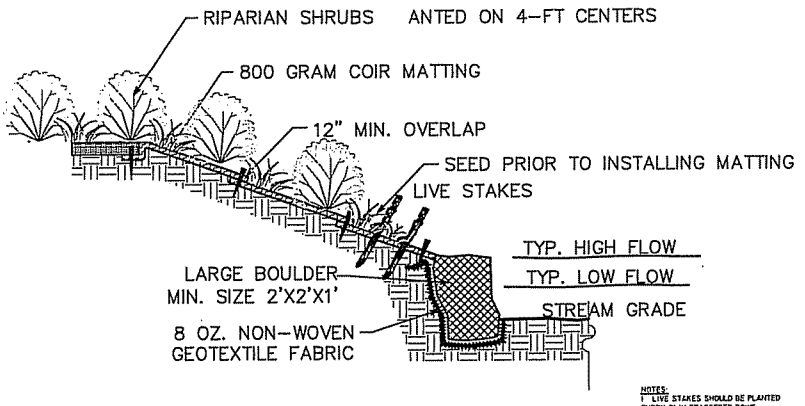
1 inch = 100 feet

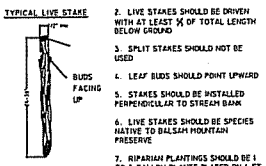
BALSAM MOUNTAIN PRESERVE
RUBY VALLEY CAMP AREA

Balsam Mountain Preserve — Jackson County, NC

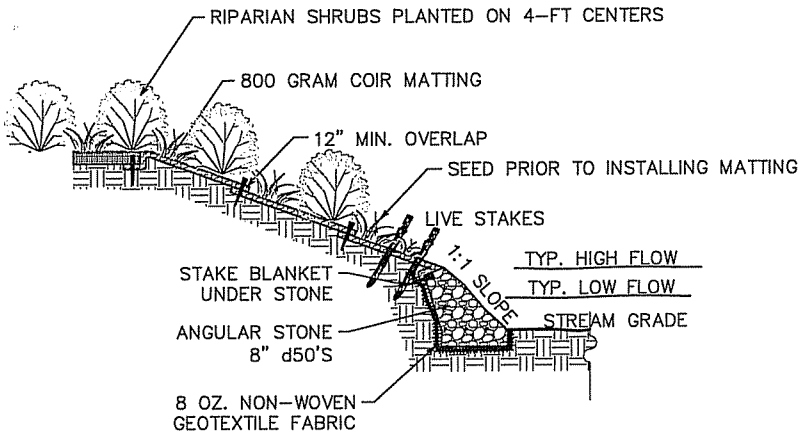
SHEET NO 6

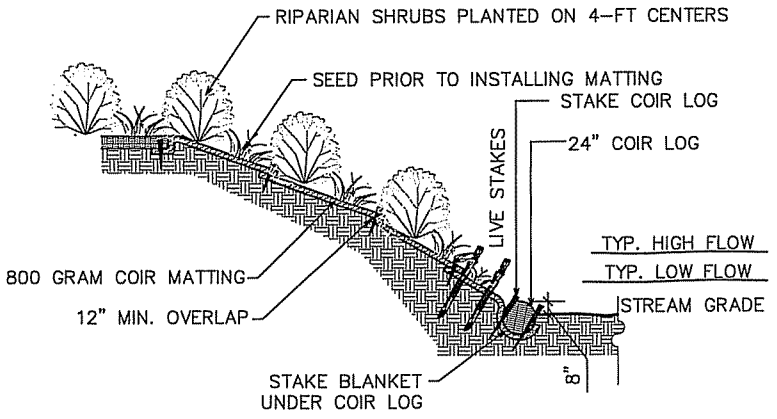


BANK TREATMENT A



NOTES:
1. LIVE STAKES SHOULD BE PLANTED EVERY 2' IN STAGGERED ROWS
2. LIVE STAKES SHOULD BE DRIVEN WITH AT LEAST ⅔ OF TOTAL LENGTH BELOW GROUND
3. SPLIT STAKES SHOULD NOT BE USED
4. LEAF BUDS SHOULD POINT UPWARD
5. STAKES SHOULD BE INSTALLED PERPENDICULAR TO STREAM BANK
6. LIVE STAKES SHOULD BE SPECIES NATIVE TO BALSAM MOUNTAIN PRESERVE
7. RIPARIAN PLANTINGS SHOULD BE 1 TO 3-GALLON PLANTS PLACED ON 4-FT CENTERS IN STAGGERED ROWS
8. SPECIES COMPOSITION FOR PLANTINGS SHOULD BE NATIVE TO BALSAM MOUNTAIN PRESERVE





BANK TREATMENT C

ClearWater Environmental Consultants, Inc.	718 Oakland St Hendersonville NC 28791 Phone: (828) 698-9800 Fax: (828) 698-9003	1 inch = NTS feet Drawn by: csg Date: 01.22.08 CEC Project No.: 507	Balsam Mountain Preserve Bank Treatment Details Balsam Mountain Preserve — Jackson County, NC	Sheet No. 9	