

**US Army Corps
of Engineers**®
Nashville District

ENVIRONMENTAL ASSESSMENT

Lee's Ford Marina Parking Lot Expansion Project, Pulaski County,
Wolf Creek Dam and Lake Cumberland Project, Kentucky.

October 14, 2015

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1 PURPOSE AND NEED FOR ACTION

The U.S. Army Corps of Engineers, Nashville District (Corps) is evaluating the impacts of a proposed Lee's Ford Marina Parking Lot Expansion Project, Pulaski County, Wolf Creek Dam and Lake Cumberland Project, Nancy, Kentucky through the preparation of an Environmental Assessment (EA).

1.1 Authorization

This EA is being conducted under Operation and Maintenance authority for Wolf Creek Dam and Lake Cumberland Reservoir. Wolf Creek Dam and Lake Cumberland Reservoir was authorized by the River and Harbor Act of July 24, 1946 (Public Law 396, 82nd Congress, 2nd Session). The proposed project consists of the construction of a 4.0 acre (2.2 acres is an existing parking lot) parking lot to add 381 additional parking spaces within the approved lease area of Lee's Ford Marina. This EA is being prepared pursuant to the National Environmental Policy Act (NEPA), Council for Environmental Quality (CEQ) regulations (40 CFR 1500-1508), and the USACE Regulation ER 200-2-2, titled Policies and Procedures for Implementing NEPA.

1.2 Purpose and Need

The need for the proposed project is based on the lack of parking available for individuals leasing marina slips and guests to Lee's Ford Marina. The current parking consists of 293 spaces and the marina has 800 boat slips, cabins, two boat launching ramps, and restaurant.

The proposed project consists of the construction of a 4.00 acre parking lot to add 381 additional parking spaces within the approved lease area of Lee's Ford Marina. 2.20 acres is comprised of the existing parking lot. In order to construct the additional 1.80 acre parking lot extension, a 1.60 acre borrow area adjacent to the existing parking lot would be utilized. Following completion of construction activities, 0.60 acres of the borrow area would be utilized as additional parking.

1.3 Issues and Opportunities

Current parking is limited during high event days, such as weekends and holidays. Vehicles are routinely parked along the side of the access road to Lee's Ford Marina creating major traffic congestion.

This issue was temporarily mitigated for during the lake drawdown while repairs to Wolf Creek Dam were underway. The temporary parking area was constructed in a section that under normal operations would be under water. Since repairs to Wolf Creek Dam are completed, lake levels have been restored to normal levels, thus eliminating the temporary parking area.

The proposed parking lot expansion project would add an additional 381 parking spaces bringing the total number of parking spaces to approximately 674 spaces. The 674 parking spaces would reduce parking in non-designated areas and reduce roadway traffic concerns.

Tree removal and ground disturbance adjacent to the existing parking lot totaling approximately 1.60 acres, would be required to construct the proposed parking lot expansion. A vicinity map is included for project orientation and location (Figure 1).



Figure 1. Vicinity Map of Lee's Ford Marina.

2 ALTERNATIVES CONSIDERED

2.1 Alternative 1- No Action Alternative

Alternative 1 would not allow for the additional parking lot expansion project to take place. No additional parking would be permitted and Lee's Ford Marina would operate under the current conditions (293 parking spaces) (Figure 2).



Figure 2. Existing Parking Lot and Riprap Slope.

2.2 Alternative 2 - Approval of the Proposed Parking Lot Expansion

Alternative 2 would allow for Lee's Ford Marina to create 381 parking spaces in order to accommodate the demands for additional parking (Figure 3). The proposed parking lot expansion would cover approximately 1.80 acres and would require approximately 107,950 cubic yards of material to reach the final grade of approximately 728 feet above mean sea level (msl). Of this total volume, 92,131 cubic yards would be placed in the hydropower pool between elevations 675 msl and 723 msl and 15,827 cubic yards would be placed in the flood control pool between elevations 723 msl and 735 msl. Fill operations would occur during winter lake drawdown. Excavated material would be placed on the lake bottom. In order to create the additional parking spaces, a borrow area adjacent to the proposed parking expansion project would be needed to fill in the proposed parking lot expansion.



Figure 3. Proposed Project Footprint.

The proposed 1.60 acre borrow area is a wooded hillside immediately east of the existing parking area. The borrow material is primarily comprised of limestone which also underlay's the majority of the leased area to includes the marina restaurant and lodging facilities. No other material, for fill, would come from an offsite location with the exception of final grade crushed stone and asphalt that would be the final layer and parking surface. The cut volume from the borrow area is preliminarily estimated to be approximately 87,122 cubic yards and would occur in and above the flood control pool between elevations 723 msl and 823 msl. Of this total excavation, approximately 50,240 cubic yards would come from the flood control pool between elevations 723 msl and 760 msl. The remaining 36,882 cubic yards would come from above the flood control pool between the elevations of 760 msl and 823 msl.

The existing vegetation, predominately oak/hickory species, would be removed. Following completion of borrow excavation activities, the area would be planted with native hardwood species typical of the area. Following completion of construction

activities, 0.60 acres of the borrow area would be utilized as additional parking. Proposed project plans can be found in Appendix A.

3 AFFECTED ENVIRONMENT & ENVIRONMENTAL CONSEQUENCES

3.1 Introduction

The proposed project consists of the construction of a 4.00 acre parking lot to add 381 additional parking spaces within the approved lease area of Lee's Ford Marina. 2.20 acres is comprised of the existing parking lot. In order to construct the additional 1.80 acre parking lot extension, an 1.60 acre borrow area adjacent to the existing parking lot would be utilized. Following completion of construction activities, 0.60 acres of the borrow area would be utilized as additional parking. The borrow area would require tree removal and ground disturbance.

3.2 Physiography and Topography

The proposed project site is located within the Eastern Highland Rim.

Eastern Highland Rim (71g)

The Eastern Highland Rim has level terrain, with landforms characterized as tablelands of moderate relief and irregular plains. Mississippian-age limestone, chert, shale and dolomite predominate, and karst terrain sinkholes and depressions are especially noticeable in some areas. Numerous springs and spring associated fish fauna also typify the region. Natural vegetation for the region is transitional between the oak-hickory type to the west and the mixed mesophytic forests of the Appalachian ecoregions to the east. Bottomland hardwoods forests were once abundant in some areas, although much of the original bottomland forest has been inundated by several large impoundments. Barrens and former prairie areas are now mostly oak thickets or pasture and cropland.

The proposed parking lot expansion project area is relatively steep, is directly adjacent to Lake Cumberland, and is dominated by an oak-hickory forest type. Approximately 2.90 acres in total (1.60 acre borrow area and 1.80 acre parking lot extension) would be impacted by implementation of Alternative 2. The borrow area, approximately 1.60 acres, is the only area that would require tree removal. The 1.80 acres parking lot expansion area is comprised of riprap, aquatic vegetation, and water. This area is located within Lake Cumberland pool.

Alternative 1 – No Action Alternative, would have no effect on the physiology and topography as no project would be implemented.

Alternative 2 - Approval of the Proposed Parking Lot Expansion, would have minor impacts to the physiology and topography within the proposed project area.

3.3 Aquatic Resources

The proposed project site is located within the reservoir pool for Lake Cumberland, contains one intermittent stream and one wetland area. Wetlands found within the proposed project area are discussed in Section 3.5. Figure 4 shows the location and classification of features within the proposed project area. One intermittent stream approximately 50 linear feet in length and one wetland area approximately 0.026 acres was identified within the proposed project area. Wetland areas are discussed in more detail in Section 3.5.



Figure 4. Jurisdictional features located within the Proposed Project Footprint.

Permanent impacts to the intermittent stream identified within the proposed project area would be avoided, thus, no mitigation for stream impacts is anticipated.

Approximately 107,950 cubic yards (approximately 3.0 acres) would be placed below and elevation of 723 feet msl. Fill operations would occur during winter lake drawdown. Excavated material would then be placed on the lake bottom. No compensatory mitigation has been identified as the substrate of Lake Cumberland within the proposed project footprint has been significantly modified and disturbed by Lake draw-down associated with the Wolf Creek Major Rehabilitation Project.

Alternative 1 and Alternative 2 would have no permanent impacts to the stream identified within the proposed project footprint. In addition, no adverse impacts to Lake Cumberland are anticipated due to placement of fill material required for the parking expansion project. Therefore, no impacts to Lake Cumberland area would be anticipated as a result of implementation of Alternative 2. Due to the placement of fill material into Waters of the U.S. (WOUS) a permit from the Corps of Engineers, Regulatory Branch, Nashville District and Kentucky Division of Water (KDOW) prior to construction.

3.4 Water Quality

No work would take place within the stream and wetland (seep) identified within the proposed project footprint to include the borrow area. However, fill material would be placed within Lake Cumberland in order to expand the existing parking lot. Approximately 107,950 cubic yards of fill material would be placed below elevation 723 msl. Excavated material would then be placed on the lake bottom. These areas have been previously exposed for the past seven years during the construction repairs for Wolf Creek Dam Major Rehabilitation Project.

Alternative 1 – No Action Alternative, would have no effect on water quality within the proposed project area.

Alternative 2 - Approval of the Proposed Parking Lot Expansion, would have temporary moderate adverse impacts to water quality within the proposed project area due to the placement of fill material below ordinary high water.

3.5 Wetlands

The project area was examined for wetlands through a field investigation. During this time, one wetland area (0.026 acres) was identified. The wetland identified is classified as a seep wetland. The wetland area identified within the proposed project areas would be avoided and no mitigation required for impacts. A 15 foot buffer would also be applied to the wetland area to reduce potential impacts (Figure 4).

Both Alternative 1 and 2 would have no impacts on wetland areas within the proposed project area. The wetland area would be avoided, thus no mitigation would be required.

3.6 Terrestrial Resources

3.6.1 Vegetation

Lee's Ford Marina can be characterized as having a mixed mesophytic deciduous forest vegetation type. Trees common to the area include oaks (*Quercus spp.*), hickories (*Carya spp.*), yellow poplar (*Liriodendron tulipifera*), hackberry (*Celtis occidentalis*), elms (*Ulmus spp.*), American beech (*Fagus grandifolia*), and blackgum (*Nyssa sylvatica*). Common understory species associated with this type include flowering dogwood (*Cornus florida*), black cherry (*Prunus serotina*), redbud (*Cercis canadensis*), and persimmon (*Diospyros virginiana*).

Alternative 1 – No Action Alternative, would have no impact on the existing vegetation within the proposed project area since no project would be implemented.

Alternative 2 - Approval of the Proposed Parking Lot Expansion, would have permanent adverse impacts as a result of implementation of Alternative 2. A borrow area, approximately 1.60 acres, would be cleared of vegetation in order to obtain suitable fill material. Following construction activities, 0.60 acres of the borrow area would be utilized as parking.

3.6.2 Wildlife

Areas adjacent to the project area are divided into several different habitat types from open, manicured fields, scrub/shrub, to mature forest habitat supporting a wide array of wildlife. Some common species such as opossum (*Didelphis virginiana*), raccoon (*Procyon lotor*), white-tailed deer (*Odocoileus virginiana*), eastern wild turkey (*Meleagris gallopavo*), and an array of songbirds, as well as waterfowl, can also be found within the project location.

Alternative 1 – No Action Alternative, would have no effect on wildlife within the leased area.

Alternative 2 - Approval of the Proposed Parking Lot Expansion, would have minor to no effect on wildlife species found within the proposed parking lot expansion footprint.

3.7 Archeological and Historic Resources

Existing Condition: Prehistoric and historic period archaeological sites exist along the banks and floodplains of the now inundated Fishing Creek, a tributary to the Cumberland River, and document activities by Native Americans and early European-American descendants that lived in Pulaski County, Tennessee. There are 40 historic properties and six historic districts listed on the National Register of Historic Places (NRHP) in Pulaski County, KY. The physical Area of Potential Effects (APE) would encompass the footprint of the proposed project, which includes all borrow and fill areas

and areas involving disturbances to soil subsurface. The visual APE would encompass a 800 meter line of sight buffer extending from the boundaries of the physical APE. Approximately 60% of the physical APE occurs within previously disturbed areas or within natural riverine/lucustrine environments. The remaining 40% occurs against a very steep bluff line in the western end of the proposed project area.

Identification of Cultural Resources: A search of the NRHP returned no findings of listed historic properties within the boundaries of the physical and visual APEs. A search of Corps site files and cultural resource site reports indicate no known archaeological sites exist with the physical APE. A site visit, conducted on April 29, 2014, determined that the proposed borrow areas is situated against a very steep bluff line with slopes greater than 30 degrees. No shovel test pits were excavated within the proposed borrow area due to the steep terrain and the low potential for significant cultural deposits. Three rock overhangs were identified in the project area and were tested for cultural deposits; none were identified. The footprint of the proposed parking lot expansion reflects previously disturbed conditions associated with the existing paved parking lot in addition to portions of the footprint that extend into inundated areas of Lake Cumberland. No archaeological investigations were conducted in these areas due to the very low potential for intact cultural deposits.

A records search determined that the marina's primary lodge/restaurant meet the minimum age requirement to be considered eligible for listing in the NRHP. An analysis of early photographs (circa 1950) indicates that the primary lodge and restaurant, has been significantly altered. The current owner indicated through a telephonic conversation that the major alterations included the addition of attached rooms, an exterior facade, new floors and updated electrical and plumbing systems. Based on the architectural modifications, the Corps is confident the marina lodge/restaurant lacks integrity to be considered eligible for listing in the NRHP.

Consultation: The primary requirements for the consideration of cultural resources stem from Section 106 of the National Historic Preservation Act of 1966 (NHPA) as implemented by regulations at 36 CFR 800. The Lee's Ford Marina parking lot expansion project is a Corps undertaking; therefore, the effects of its implementation on historic properties must be considered. Historic properties are properties, including archeological sites and standing structures that have been determined eligible for or are listed on the NRHP. The Corps recommended a "no historic properties affected" determination in a letterer to the Kentucky Heritage Council (KHC), dated September 15, 2015. USACE is awaiting KHC's comments on the proposed undertaking. USACE is confident KHC will concur with the Corps's determination. Per 36 CFR 800 (d)(1)(i) the KHC has 30 days to review and provide USACE with their comments.

Consultation with six Federally recognized Native American Tribes was initiated via letter dated September 9, 2015. USACE made a determination of "no effects to historic properties". USACE is confident that the Tribes will concur with this determination. The Tribes have 30 days to review and provide USACE with their comments per 36 CFR 800.4 (d)(1)(i). Please reference Appendix C for information regarding Section 106 consultation with the KHC and federally recognized Native American tribes.

Alternative 1 – No Action Alternative would have no effect on archeological and historic resources within the leased area.

Alternative 2 - Approval of the Proposed Parking Lot Expansion would have no effect on archeological and historic resources within the leased area.

3.8 Threatened and Endangered Species

Two known species, Indiana bat (*Myotis sodalis*) and Northern long-eared bat (*Myotis septentrionalis*) may occur within the proposed project footprint. After further investigation and coordination with United States Fish and Wildlife Service (Service), the Corps made the determination that the proposed project "is likely to adversely affect and Threatened and/or Endangered Species (T&E Species).

In an email dated April 24, 2014, the Service stated "The next steps would be to conduct a presence/absence survey for the Indiana bat or to assume presence and mitigate for the habitat loss."

In a letter dated October 1, 2014, Lee's Ford Marina stated "that the upland habitat present could potentially be used during spring, summer and fall months by Indiana bat and northern long-eared bat. Clearing of existing trees would be restricted to late fall and winter seasons (October to March). In addition, coordination with Indiana Bat Conservation Fund would be made to determine the amount of payment that would be appropriate. Such payment will be made if a Department of the Army permit is approved."

On September 18, 2015 the Corps received a copy of Lee's Ford Marina's and Service's signed Memorandum of Agreement (MOA) and Lee's Ford Marina's payment into the Kentucky Natural Lands Trust – Indiana Bat Conservation Fund.

Alternative 1 – No Action Alternative would have no impact on T&E species.

Alternative 2 - Approval of the Proposed Parking Lot Expansion could potentially have temporary minor impacts to both the Indiana and Northern long-eared bats. To lessen potential impacts, trees would be removed during winter months (October – March) to avoid direct impacts to T & E Species. In addition, Lee's Ford Marina has signed a MOA with the Service for loss of habitat suitable for both the Indiana and Northern long-

eared bats. The MOA resulted in Lee's Ford Marina making a payment into the Kentucky Natural Lands Trust - Indiana bat conservation fund to offset the loss of potential summer roost habitat.

3.9 Hazardous, Toxic, and Radioactive Waste

A site reconnaissance resulted in no known Hazardous, Toxic, and Radioactive Waste (HTRW) sources within the project area.

HTRW would have no effect on any alternative.

3.10 Health and Safety

The proposed project area is accessible by the public by land and boat. No health concerns exist with respect to construction activities associated with the construction of the parking lot expansion and borrow site.

Alternative 1 – No Action Alternative, current parking is limited during high event days, such as weekends and holidays. Vehicles are routinely parked along the side of the access road to Lee's Ford Marina creating a major safety issue.

Alternative 2 - Approval of the Proposed Parking Lot Expansion would have minor to no effect on health and safety. Construction of parking lot and borrow area would create temporary moderate adverse impacts to health and safety.

3.11 Recreation and Scenic Resources

Recreation has become a major factor in the regional economy. Visitors to Lee's Ford Marina have many opportunities to fish, hunt, camp, picnic, boat, canoe, hike, and enjoy the outdoors. Lee's Ford Marina consists of 800 boat slips, 16 cabins, one hotel, restaurant, and 2 boat launching ramps.

Alternative 1 – No Action Alternative, would add no additional recreational uses within the project area.

Alternative 2 - Approval of the Proposed Parking Lot Expansion, short-term and minor adverse impacts, due to vegetation removal and borrow area, are expected due to construction of the parking lot expansion project. Clearing and borrow area removal necessary for Alternative 2 would create unsightly conditions to some visitors to the area. However, this would be temporary and only during construction. Following the completion of the proposed project, potential long-term positive benefits to recreation and scenic resource opportunities would be anticipated. An additional 381 parking spaces would be available for public use allowing for more recreational opportunities at Lee's Ford Marina and Lake Cumberland.

3.12 Socioeconomics

According to U.S. Census data for 2014, Pulaski County has an estimated population of 318,857,056. Areas surrounding Wolf Creek Dam are sparsely developed with the majority of the surrounding area being forested and/or agricultural.

Alternative 1 – No Action Alternative, socioeconomic benefits would not be realized since the project would not be undertaken and the additional economic benefits would be lost.

Alternative 2 - Approval of the Proposed Parking Lot Expansion would be anticipated to provide positive socioeconomic benefits to the local economy and Lee's Ford Marina, by possibly providing additional recreational opportunities with Lee's Ford Marina.

3.13 Air Quality

Currently the proposed project area is in an attainment area with regard to the National Ambient Air Quality Standard (NAAQS).

The No Action Alternative would have no effects on air quality levels. Under Alternative 2 there would be temporary /minor air quality impacts from vehicle, equipment, and construction activities. However, this would be short-term and minimal, and would have no lasting effects on air quality levels. The proposed project does meet the Conformity Rule under the Clean Air Act and poses no risk to NAAQS.

4 CUMULATIVE IMPACTS

Cumulative impacts are defined as “the impact on the environment which results from the incremental impact of the (proposed) action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such other actions (40 CFR 1508.7).” CEQ guidance identifies an 11-step process for evaluating cumulative effects. For the purpose of cumulative effects the entire Wolf Creek Dam tailwater is considered, not just the proposed project's footprint.

Step 1: Identify the significant cumulative effects issues associated with the proposed action and define the assessment goals.

Current parking is limited during high event days, such as weekends and holidays. Vehicles are routinely parked along the side of the access road to Lee's Ford Marina creating a major safety issue. The proposed parking lot expansion project would add an additional 381 parking spaces bring the total number of parking spaces to approximately 674 spaces. By construction of the proposed project, additional parking would be available while also reducing safety concerns, and creating additional recreational opportunities.

Step 2: Establish the geographic scope for the analysis (project impact zone).

This includes areas impacted by the construction of the proposed project (approximately 1.80 acres), borrow area (approximately 1.60 acres), proposed project footprint (approximately 5.10 acres), and Lake Cumberland.

Step 3: Establish the time frame for the analysis.

Past impacts would be considered back to the construction of the Wolf Creek Dam in 1946. Present conditions are described in Section 3 of this EA. Future conditions are projected for the next 50 years. The Cumberland River system was much different prior to the construction of Wolf Creek Dam.

Prior to the construction of Wolf Creek Dam, flooding repeatedly impacted the Cumberland River Valley. Although the lake was constructed for flood damage reduction and hydropower, it triggered a number of successive events. Land around the lake became prime real estate and property and tax values increased. Lee's Ford Marina is one of ten marinas surrounding Lake Cumberland. Lee's Ford Marina has is a heavily used access point to the lake, and makes a significant contribution to both recreation and the local economy.

Step 4: Identify other actions affecting the resources, ecosystems, and human communities of concern.

No other actions are identified that could affect the resources, ecosystems, and human communities.

Step 5: Characterize the resources, ecosystems and human communities in terms of the responses to change and capacity to withstand stresses.

No mitigation would be required by implementing the proposed project. Both the wetland area and intermittent stream identified within the proposed project area would be avoided. Final construction would result in an additional 381 parking spaces, 1.60 acres of terrestrial impacts portions of which would be utilized as parking, and 3.00 acres of fill within Lake Cumberland. Impacts from the proposed action would be considered an insignificant contribution to the surrounding area and would not cause additional stress on resources and the ecosystem. The additional parking spaces would reduce stress placed upon humans by allowing for additional areas to park.

Step 6: Characterize stresses affecting these resources, ecosystems and human communities.

T&E species (Indiana bat and Northern long-eared bat) could be stressed due to construction activities. Removal of trees would take place during winter months

(October – March). In addition to offset potential impacts to Indiana and Northern long-eared bats maternity roosting season, Lee's Ford Marina's and Service's signed a MOA and Lee's Ford Marina's made a payment into the Kentucky Natural Lands Trust – Indiana Bat Conservation Fund.

Step 7: Define a baseline condition for the resources, ecosystems and communities.

Lee's Ford Marina is a privately owned marina in which the lands to included water areas are leased from the Corps. The need for the proposed project is based on the lack of parking available for individuals leasing marina slips and guests to Lee's Ford Marina. The current parking consists of 289 spaces and the marina has 800 slips available for lease. The proposed parking lot expansion project would add an additional 381 parking spaces bring the total number of parking spaces to approximately 674 spaces.

Step 8: Identify the important cause and effect relationships between human activities and resources, ecosystems, and human communities.

Recreation is effected by socioeconomic factors and the availability of recreational activities. If the proposed project is implemented, revenue and recreational opportunities could potentially increase.

Step 9: Determine the magnitude and significance of cumulative effects.

The proposed project would result in minor impacts to the physiology and topography, as well as, water quality of the proposed project area. Minor temporary impacts to vegetation, threatened & endangered species, and health and safety would be anticipated by implementation of the proposed project. Recreation would have minor impacts during construction but long-term positive benefits would be anticipated. Positive benefits to the socioeconomic of the area would also be expected by implementing the proposed project. When combined with the reasonably foreseeable future actions and past actions, impacts from the proposed action would be considered an insignificant contribution to the surrounding area. The purpose of the proposed project is to add additional parking opportunities within Lee's Ford Marina.

Step 10: Modify and add alternatives to avoid, minimize, or mitigate significant cumulative effects.

The wetland area and intermittent stream identified within the proposed project footprint would be avoided. A 15 foot buffer would be applied to the wetland area to avoid potential impacts. Thus, no mitigation for impacts the stream and wetland area would be required.

Step 11: Monitor the cumulative effects of the selected alternative and adapt management.

No monitoring would be required for the proposed project.

5 ENVIRONMENTAL COMMITMENTS, PERMITS, AND APPROVALS

The following commitments, permits, and approvals are made regarding implementation of the action alternatives:

- 1) Individual water quality certification would be required from KDOW since Lake Cumberland would be impacted due to the implementation of the proposed project.
- 2) A permit from the Corps Regulatory Office would be required for fill placed within WOUS.
- 3) It would be necessary to obtain an individual National Pollutant Discharge Elimination System (NPDES) Storm water permit prior to commencement of construction activities. Construction BMP's would be followed to minimize environmental impacts. Examples of general construction BMP's are listed below.
 - Minimize Disturbance – minimize disturbed areas within the project area to those being actively worked.
 - Sediment Control Devices – sediment control devices such as silt fences, fiber rolls, straw bale barriers, geotextile filter fabric, and rock filters would be used as temporary erosion control barriers to capture stormwater runoff from project area.
 - Inspection and Maintenance - inspect and verify activity-based BMPs are in place prior to commencement of associated activities and regular inspect erosion control devices to assure they are functioning properly.
- 4) Terrestrial resources impacted would be minimized to those areas where construction activities would be performed. Disturbance or removal of vegetation within the proposed project area would be avoided to the greatest extent possible.
- 5) Consultation under Section 106 of the NHPA has led to a finding of “no adverse effect” based on the stipulation that a qualified archaeologist would monitor the construction.

6 ENVIRONMENTAL COMPLIANCE

6.1 Executive Order 11990-Wetlands

One wetland areas has been identified within the proposed project area. To avoid potential impacts a 15 foot buffer has been applied to the wetland area.

6.2 Farmland Policy Protection Act

No private agricultural lands or prime and unique farmlands are located in the proposed project area.

6.3 Executive Order 11988-Floodplain Management

The proposed project is located within the 100-year floodplain and falls under the purview of executive Order 11988, Floodplain Management. This executive order requires federal agencies to evaluate and minimize to the extent possible, impacts and modifications to the floodplain. Riverbank stabilization would inherently occur within the floodplain; therefore, there is no alternative to working in the floodplain. None of the alternatives considered in detail would increase the risk of a "base flood".

6.4 Clean Water Act

WOUS are present within the proposed project footprint. Therefore, coordination with State and Federal Agencies regarding Clean Water Act compliance is required. Permits from both the Corps Regulatory Office (Section 404) and KDOW (Section 401) would be required for the proposed project.

Under Section 404 of the Clean Water Act, Regulatory Branch evaluates the impacts associated with the proposed discharge of fill material into the Cumberland River. Regulatory Branch is preparing a separate combined decision document that includes the 404(b)(1) Guidelines Evaluation and Public Interest Review in addition to the EA and Statement of Findings that would inform the Department of the Army (DA) permit decision for the project. The project also requires a DA permit under Section 10 of the Rivers and Harbors Act as the proposed discharge site is located within a navigable water of the United States.

6.5 National Pollutant Discharge Elimination System (NPDES) SW Permit

Construction projects disturbing over 1 acre of land require a storm water permit. An NPDES permit is required for all alternatives except No Action. Coordination with KDOW WPC would occur and the permit would be obtained prior to construction.

6.6 Endangered Species Act and Fish and Wildlife Coordination Act

The Endangered Species Act (ESA) requires the determination of possible effects on or degradation of habitat critical to Federally-listed endangered or threatened species. Because the proposed project would involve the removal of trees, a habitat assessment was conducted by Corps personnel on April 17, 2014. Based on the findings of the habitat assessment, the Corps determined that suitable habitat was present within the proposed project footprint and that coordination with the Service would be required.

In an email dated April 24, 2014, Service stated "The next steps would be to conduct a presence/absence survey for the Indiana bat or to assume presence and mitigate for the habitat loss."

In a letter dated October 1, 2014, Lee's Ford Marina stated "that the upland habitat present could potentially be used during spring, summer and fall months by Indiana bat and northern long-eared bat. Clearing of existing trees would be restricted to late fall and winter seasons (October to March). In addition, coordination with Indiana Bat Conservation Fund would be made to determine the amount of payment that would be appropriate. Such payment will be made if a Department of the Army permit is approved."

On September 18, 2015 the Corps received a copy of Lee's Ford Marina's and Service's signed Memorandum of Agreement (MOA) and Lee's Ford Marina's payment into the Kentucky Natural Lands Trust – Indiana Bat Conservation Fund. Coordination with the Service and a copy of the signed MOA can be found in Appendix B.

6.7 Fish and Wildlife Coordination Act

The Corps is required to coordinate with the Service and State Agency under the Fish and Wildlife Coordination Act (FWCA) (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.). Coordination with Service and Kentucky Department of Fish and Wildlife would be finalized with review of the draft EA and unsigned FONSI.

6.8 National Historic Preservation Act

Section 106 of the National Historic Preservation Act requires Federal agencies to take into account the effects of their actions on historic properties and afford the Advisory Council of Historic Preservation the opportunity to comment on undertakings. The Corps defined the Area of Potential Effects (APE) as the proposed project area footprint and surrounding viewshed. No historic properties are present in the APE. Appendix C summarizes the Section 106 consultation for the action alternatives. This project also complies with cultural resource laws such as Section 110 of the National Historic Preservation Act, the Archaeological Resources Protection Act, Native American

Graves and Repatriation Act, American Indian Religious Freedom Act, and Executive Orders 13006.

Section 106 consultation for the action alternatives is underway and a summary of the information is presented in Appendix C.

6.9 Executive Order 13514 – Environmental Justice

The 1994 Executive Order 12898: “Federal Actions to address Environmental Justice in Minority Populations and Low Income Populations” was signed by President Clinton on February 11, 1994, to focus Federal attention on the environmental and human health conditions of minority and low-income populations, with the goal of achieving environmental protection for all communities. As defined by the “Draft Guidance for Addressing Environmental Justice under NEPA” (CEQ, 1996), a minority population exists where the percentage of minorities in an affected area either exceeds 50% or is significantly greater than in the general population.

None of the alternatives described in this environmental assessment would disproportionately place any adverse environmental, economic, social, or health impacts on minority and low-income populations.

6.10 Clean Air Act

None of the alternatives described would impact long-term ambient air quality standards.

6.11 Comprehensive Environmental Response, Compensation, and Liability Act

No Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) sites were identified within the proposed project boundaries.

6.12 Resource Conservation and Recovery Act

All alternatives would be in compliance with the Resource Conservation and Recovery Act (RCRA).

7 PUBLIC AND AGENCUBIC YARDS COORDINATION

7.1 Public and Agency Involvement

A public notice (PN-14-29) for this project was made available by the Corps Regulatory Office on November 14, 2014 to the public and state and Federal governments with jurisdiction by law or special expertise through a combination of mailings, media outlets, local U.S. Post Office, and other public sources. Comments received are summarized

below and included in entirety in Appendices D. All issues relative to the project have been addressed within the EA.

7.1.1 Public and Agency Comments

Four comments were received during the public notice comment period. Below is a brief summary of each comment and how each was evaluated.

U.S. Fish and Wildlife Service

The Service states that based on the information provided three federally listed species have the potential to occur within the project vicinity. These species include the Indiana, northern long-eared, and gray bats.

See section 6.6 for details on ESA. ESA has been finalized.

Kentucky Division for Air Quality

Kentucky Division for Air Quality Regulation 401 KAR 63:010 Fugitive Emissions states that no person shall cause, suffer, or allow any material to be handled, processed, transported, or stored without taking reasonable precaution to prevent particulate matter from becoming airborne. Additional requirements include the covering of open bodied trucks, operating outside the work area transporting materials likely to become airborne, and that no one shall allow earth or other material being transported by truck or earth moving equipment to be deposited onto a paved street or roadway.

Kentucky Division for Air Quality Regulation 401 KAR 63:005 states that open burning is prohibited. Open burning is defined as the burning of any matter in such a manner that the products of combustion resulting from the burning are emitted directly into the outdoor atmosphere without passing through a stack or chimney.

The Division would like to offer the following suggestions on how this project can help us stay in compliance with the NAAQS. More importantly, these strategies are beneficial to the health of citizens of Kentucky.

- Utilize alternatively fueled equipment.
- Utilize other emission controls that are applicable to your equipment.
- Reduce idling time on equipment.

The Division also suggests an investigation into compliance with applicable local government regulations.

The proposed project will comply with all federal, state, and local regulations. BMPs would be utilized to reduce impacts to air quality.

Kentucky Division of Water

KDOW states that an Individual Water Quality Certification (WQC) would be required from KDOW.

No work would take place prior to obtaining the WQC from KDOW. BMPs would be utilized to reduce impacts to waters.

Kentucky Waterways Alliance (KWA)

KWA stated that they have significant concerns regarding the excavation, or borrow area, as proposed. Second, we are concerned with the project purpose to place fill into the lake, construct additional parking area within the floodzone and effectively "in" the lake, and environmental effects as a result of this project and any future projects. Finally, KWA also has concerns with lack of any mitigation proposed by the applicant.

Portions of the borrow area would be utilized as additional parking. While the remaining portions of the borrow area would be left as bedrock. A NPDES permit and a Stormwater Protection Prevention Plan would be emplaced to reduce erosion/sediment from entering waters. The proposed project has been reviewed by the Corps for impacts to the floodzone. The proposed project impacts would be considered an insignificant contribution to the surrounding area. All work would be done in accordance with all federal, state, and local laws. Any future development would be subject to NEPA.

A Notice of Availability (NOA) has been prepared and is being made available to local media outlets regarding this document. All comments received during the thirty (30) day comment period would be considered in the EA. This EA is being made available to Federal and state natural resources agencies, other interested agencies, and the general public for a thirty (30) day review period. The EA is also being posted to USACE webpage for public review at http://www.lrn.usace.army.mil/pmgmt/environmental/public_notices.htm.

8 CONCLUSION

Two alternatives were discussed throughout this EA, both of which were evaluated in detail. These were Alternative 1- No Action Alternative and Alternative 2 - Approval of the Proposed Parking Lot Expansion.

Alternative 1 would not allow for the additional parking lot expansion project to take place. No additional parking would be permitted and Lee's Ford Marina would operate under the current conditions (293 parking spaces).

Alternative 2 would allow for Lee's Ford Marina to create 381 parking spaces in order to accommodate the demands for additional parking. The Alternative 2 would cause minor

impacts during construction. Alternative 2 would have permanent adverse impacts to approximately 1.60 acres of terrestrial habitat as a result of construction of a borrow area. The borrow area would be cleared of vegetation in order to obtain suitable fill material. Following construction activities, approximately 0.60 acres of the borrow area would be utilized as parking.

Following the completion of the proposed project, potential long-term positive benefits to recreation and scenic resource opportunities would be anticipated. An additional 381 parking spaces would be available for public use allowing for more recreational opportunities at Lee's Ford Marina and Lake Cumberland. Impacts associated with Alternative 2 would be considered an insignificant contribution to the surrounding area. All work would be done in accordance with all federal, state, and local laws.

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9 REFERENCES

Council for Environmental Quality. Draft Guidance for Addressing Environmental Justice under NEPA. 1996.

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<http://quickfacts.census.gov/qfd/states/47000.html>

DRAFT

10 LIST OF PREPARERS

Matthew Granstaff, Biologist, Environmental Section, Project Planning Branch, Primary EA Preparation

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Cara Beverly, Regulatory Specialist, Regulatory Branch, EA Preparation – Permitting

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APPENDIX A
Project Plans

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LEE'S FORD MARINA PARKING LOT ADDITION NANCY, KY

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S-1	SITE MAP
C-1	DISTURBED LIMITS & DIMENSIONS
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PK-2	PARKING LOT CROSS SECTIONS
PK-3	PARKING LOT CROSS SECTIONS
PK-4	PARKING LOT CROSS SECTIONS
PK-5	PARKING LOT CROSS SECTIONS
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B-5	BORROW AREA CROSS SECTIONS
SW-1	STORM WATER POLLUTION PREVENTION PLAN
D-1	DETAIL SHEET



ELECTRIC

SOUTH KENTUCKY RECC
SOMERSET OFFICE
606-678-4121

TELEPHONE

WINDSTREAM KY EAST
SOMERSET OFFICE
606-677-1065

WATER & SEWER

CITY OF SOMERSET WATER WORKS
606-678-4466

NATURAL GAS

SOMERSET GAS SERVICE
606-678-4466

PREPARED BY:



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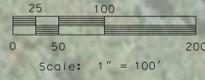
- PRELIMINARY PLAN -
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CLIENT

LEE'S FORD MARINA
451 LEE'S FORD DOCK ROAD
NANCY, KY 42544
1-606-636-6426

J.D. HAMILTON, OWNER

BOBBY MAYNARD, OPERATING MANAGER



- PRELIMINARY PLAN -
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① CONTRACTOR TO DELINEATE HAUL ROAD DAILY WITH SAFETY CONES OR BARRELS. CONTRACTOR TO PROVIDE FLAGGERS WHEN WARRANTED.

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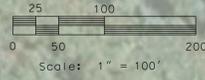
LEE'S FORD MARINA
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SITE MAP
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NOTE: COORDINATES SHOWN HEREON ARE BASED ON EARLY PHOTOSCIENCE DRAWINGS. CONTACTOR SHALL VERIFY AND ESTABLISH CONTROL WITH THE ENGINEER BEFORE ANY EARTHWORK REMOVAL CAN BE PERFORMED.

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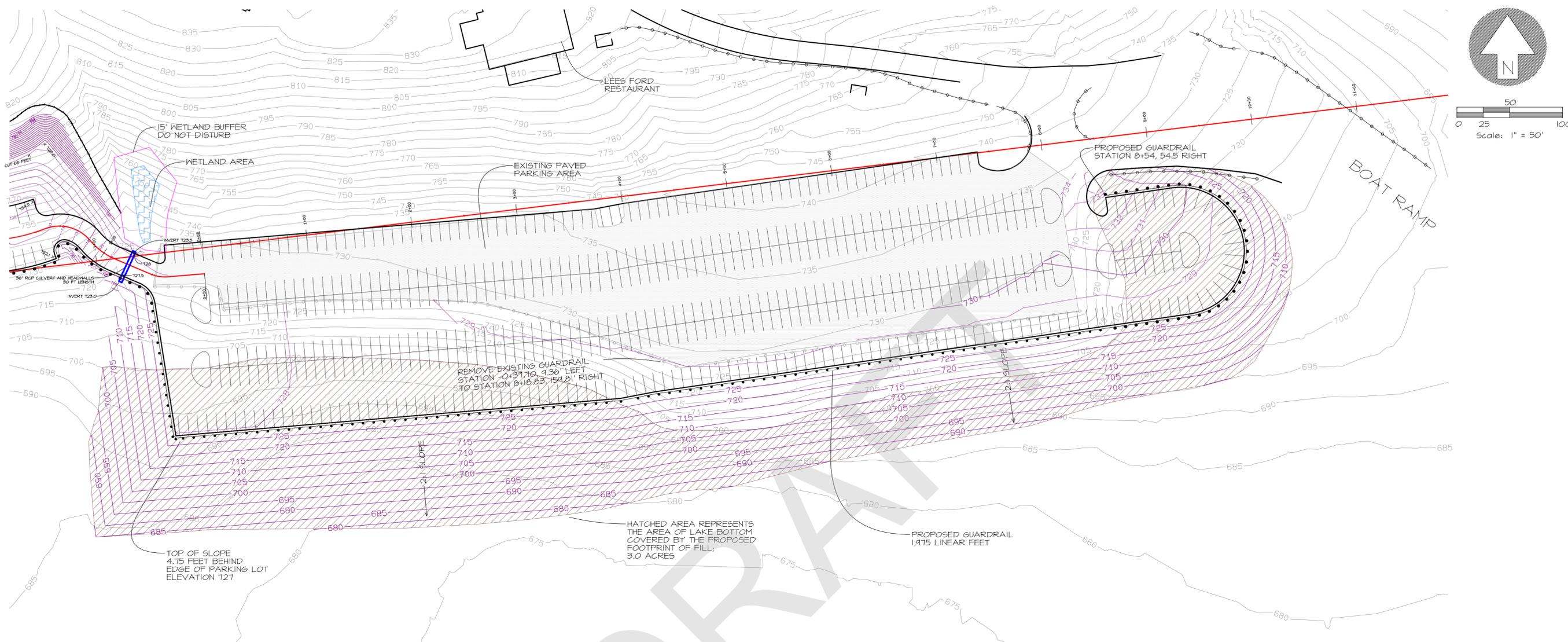
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GENERAL NOTES:

BEFORE PROCEEDING WITH THE WORK, THE CONTRACTOR SHALL CONFER WITH ALL PUBLIC OR PRIVATE COMPANIES, AGENCIES, OR DEPARTMENTS THAT OWN AND OPERATE UTILITIES IN THE VICINITY OF THE CONSTRUCTION.

EXISTING UNDERGROUND UTILITIES AND SERVICES, IF ANY, ARE SHOWN IN THEIR APPROXIMATE LOCATIONS, ACCORDING TO THE BEST INFORMATION AVAILABLE. THE LOCATIONS ARE INTENDED ONLY AS A GUIDE AND CAN NOT BE GUARANTEED ACCURATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR:

- A. CONTACTING THE INDIVIDUAL UTILITY OWNERS TEN DAYS PRIOR TO CONSTRUCTION, ADVISING THEM OF THE WORK TO TAKE PLACE.
- B. SOLICITING THEIR AID IN LOCATING AND PROTECTING ANY UTILITY WHICH MAY INTERFERE WITH CONSTRUCTION.
- C. EXCAVATING AND VERIFYING THE HORIZONTAL AND VERTICAL LOCATION OF EACH UTILITY.
- D. ANY DAMAGE TO ANY UTILITY, BOTH ABOVE AND BELOW GROUND.

PERMIT REQUIREMENTS:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A GRADING PERMIT FROM THE LOCAL GOVERNMENT PRIOR TO ANY CONSTRUCTION ACTIVITY.

PRIOR TO COMMENCING WITH CONSTRUCTION THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING ALL REQUIRED PERMITS INCLUDING SUBMISSION IN WRITING OF A NOTICE OF INTENT (NOI) TO DISTURB WITH THE KENTUCKY DIVISION OF WATER.

WHERE REFERRED TO IN THE PLANS AND SPECIFICATIONS AS CONTRACTOR/OWNER RESPONSIBILITY, IT IS THE CONTRACTOR'S OBLIGATION TO ACT ON THE OWNER'S BEHALF IN FULFILLING ALL REQUIREMENTS FOR COMPLIANCE WITH PERMIT AND EROSION CONTROL.

ALL WORK MUST BE IN ACCORDANCE WITH THE DEPARTMENT OF ARMY PERMIT CORRESPONDING TO THESE PLANS. THIS PERMIT MUST BE AVAILABLE ON-SITE.

PARKING EXPANSION	
EXISTING PARKING SPACES:	+/- 293
ADDITIONAL FILL AREA SPACES:	289
ADDITIONAL BORROW AREA SPACES:	92
TOTAL SPACES:	674
FILL VOLUME ELEV 675 TO 723:	92,131 cu. yds.
FILL VOLUME ELEV 723 TO 735:	15,827 cu. yds.
TOTAL FILL VOLUME:	107,958 cu. yds.
BORROW VOLUME ELEV 675 TO 723:	0 cu. yds.
BORROW VOLUME ELEV 723 TO 760:	50,240 cu. yds.
BORROW VOLUME ELEV 761 TO 823:	36,882 cu. yds.
TOTAL BORROW VOLUME:	87,122 cu. yds.
(USING A SWELL FACTOR OF 20%, THE BORROW SITE VOLUME WILL PROVIDE THE REQUIRED FILL MATERIAL)	

EXISTING PAVED PARKING AREA: 2.2 ACRES
 PROPOSED PAVED PARKING AREA (INCLUDING EXISTING): 4.0 ACRES
 PROPOSED PAVED BORROW AREA TO BE USED AS PARKING 0.6 ACRES

SURFACE VOLUME NOTE:

THE ORIGINAL GROUND SURFACE WAS GENERATED FROM EARLY PHOTOSCIENCE DATA. THE PARKING LOT DESIGN WAS CREATED USING THIS ORIGINAL SURFACE. THE VOLUMES SHOWN HEREON ARE BASED ON A SURFACE TO SURFACE CALCULATION. IT IS AGE ENGINEERING'S OPINION THAT SURFACE TO SURFACE VOLUMES ARE MORE ACCURATE THAN THE AVERAGE END METHOD VOLUMES AS SHOWN IN THE CROSS SECTION SHEETS. ALL VOLUMES ARE TO THE FINISH GRADE AND ACCOUNT FOR ANY PAVING MATERIALS.

NOTE:

THE EXISTING PARKING SPACES IS LISTED AT +/- 293 THIS NUMBER IS BASED ON THE EXISTING PAVED SURFACE AND SHOULD BE CONSIDERED TO BE THE MAXIMUM NUMBER OF SPACES AVAILABLE FOR THAT AREA. DUE TO THE SHAPE OF THE EXISTING PAVED SURFACE, PARKING IS INEFFICIENT AND MOST LIKELY WOULD BE MUCH LESS THAN 293 SPACES.

ALL PARKING SPACES SHOWN AT 9 ft x 18 ft

NOTE:

THE PROPOSED PARKING SURFACE HAS BEEN STIPULATED BY THE OWNER/CONTRACTOR AS 8" OF DENSE GRADED AGGREGATE AND 3" OF BITUMINOUS MATERIAL. THIS PARKING SURFACE HAS NOT BEEN CHECKED FOR ADEQUACY BY AGE ENGINEERING.

**- PRELIMINARY PLAN -
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 PROPOSED PARKING LOT AREA
 NANCY, KENTUCKY

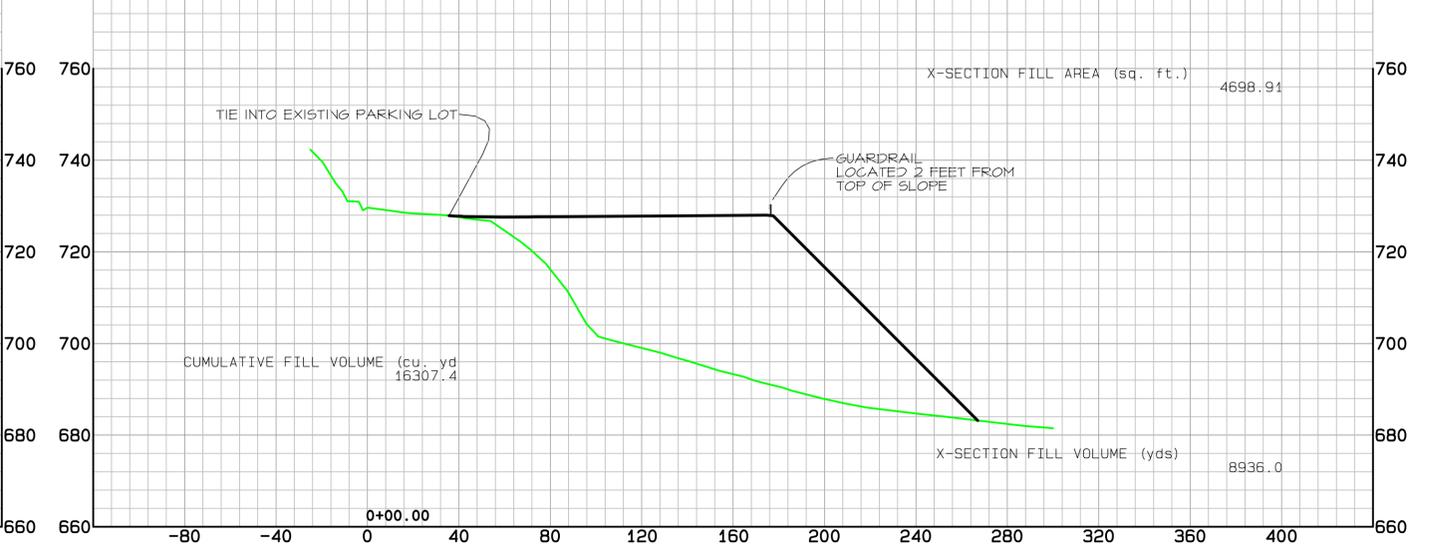
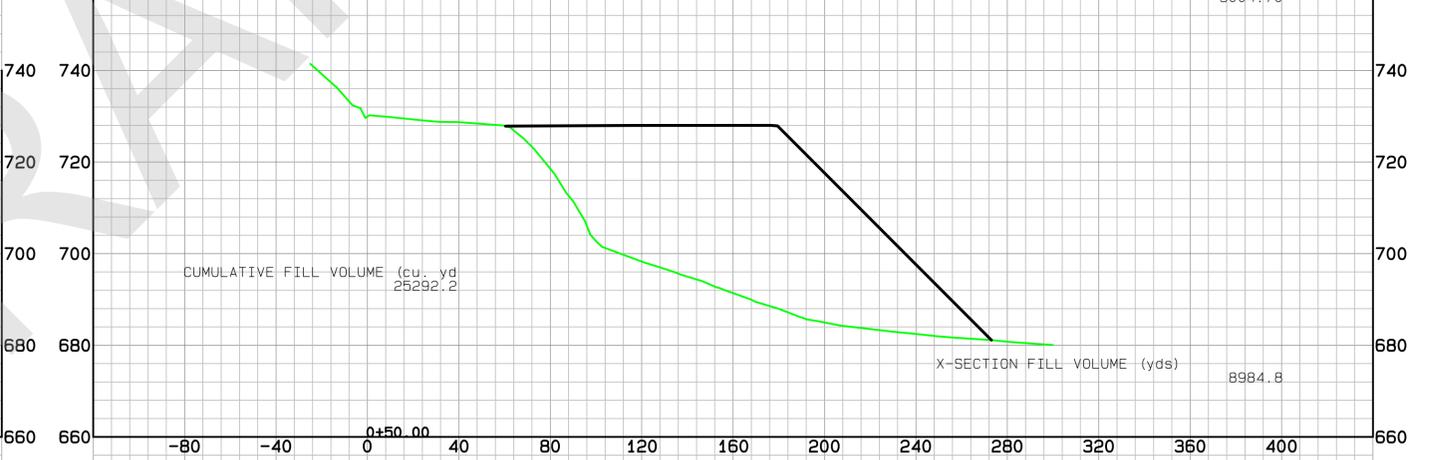
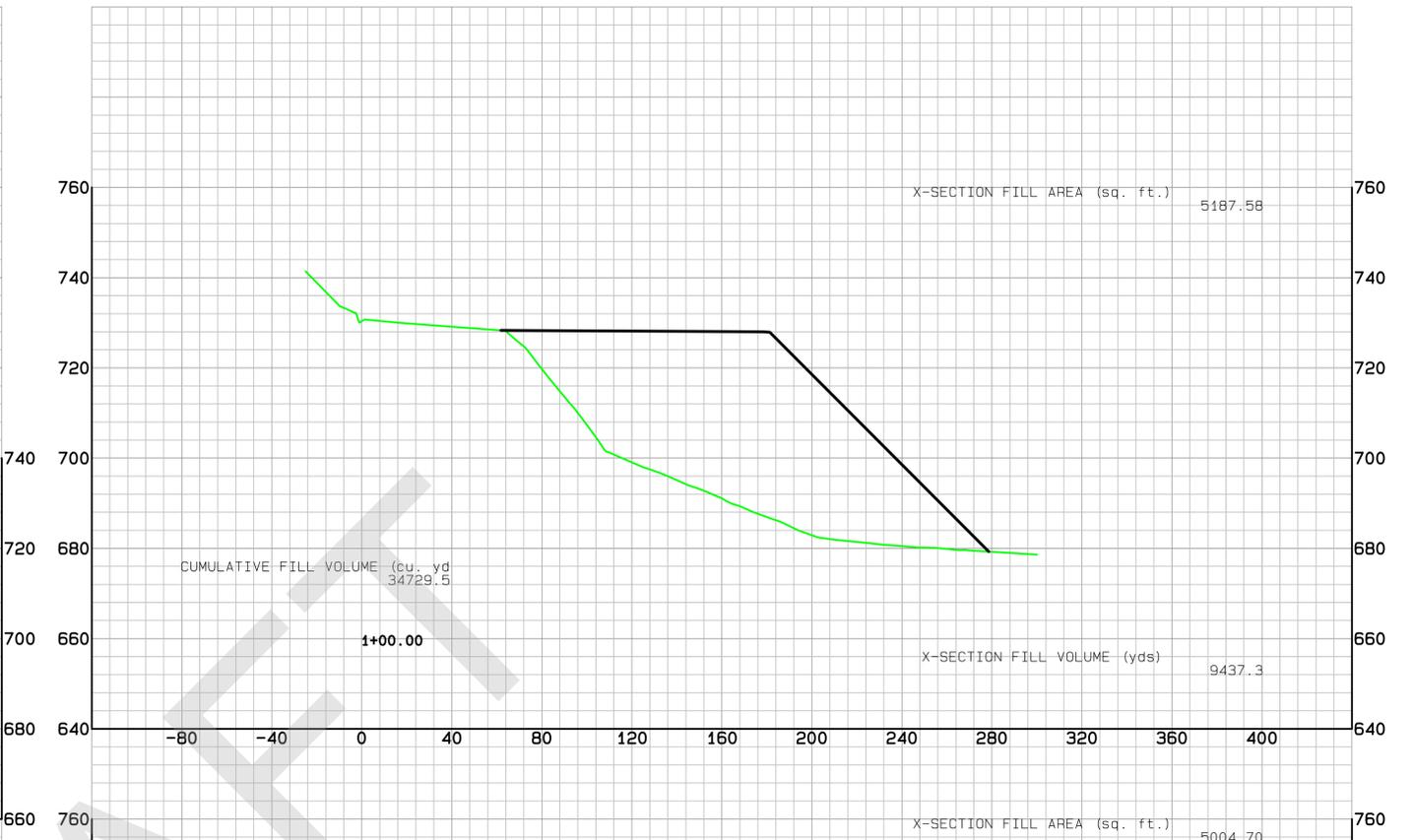
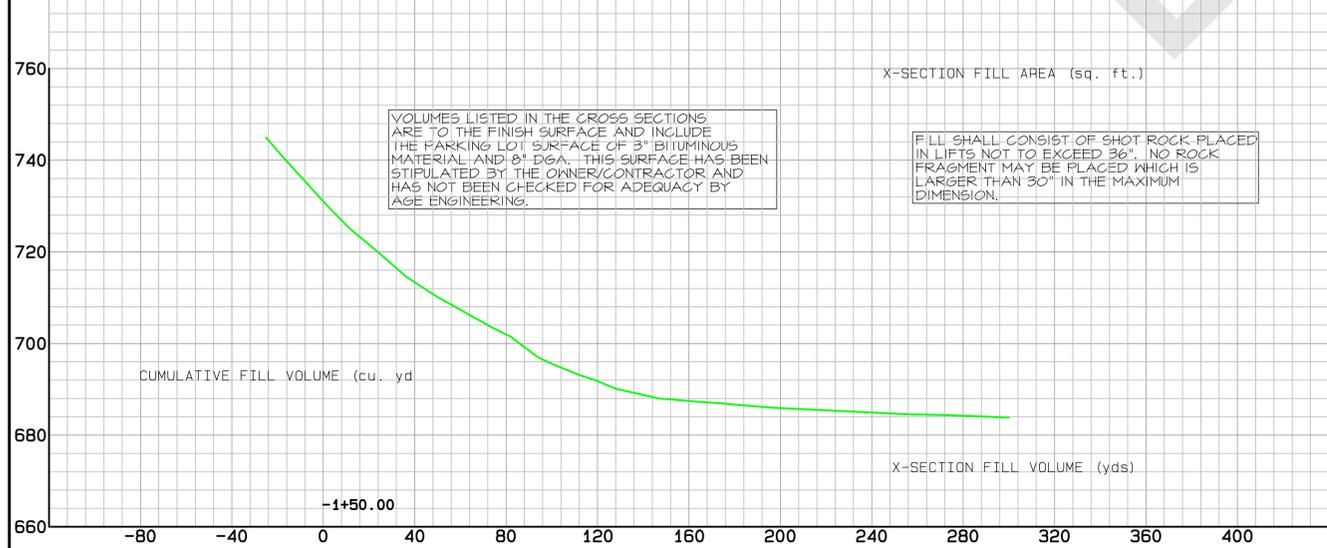
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NOTE: ALL FILL SLOPES ARE TO BE 2:1. CROSS SECTIONS SHOWN HEREON MAY OR MAY NOT REFLECT A TRUE PERPENDICULAR SECTION OF PROPOSED PARKING LOT AREA. THEREFORE ALL CROSS SECTION CALCULATIONS SHOULD BE USED AS APPROXIMATE VALUES.



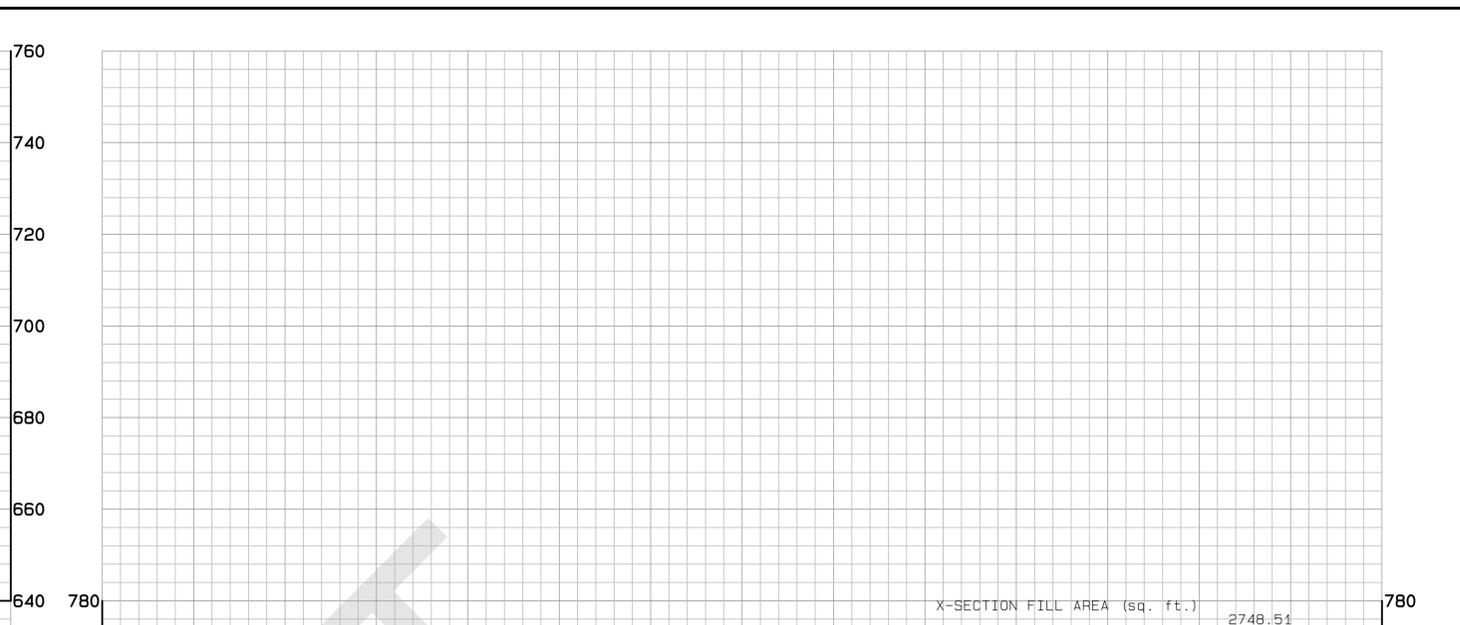
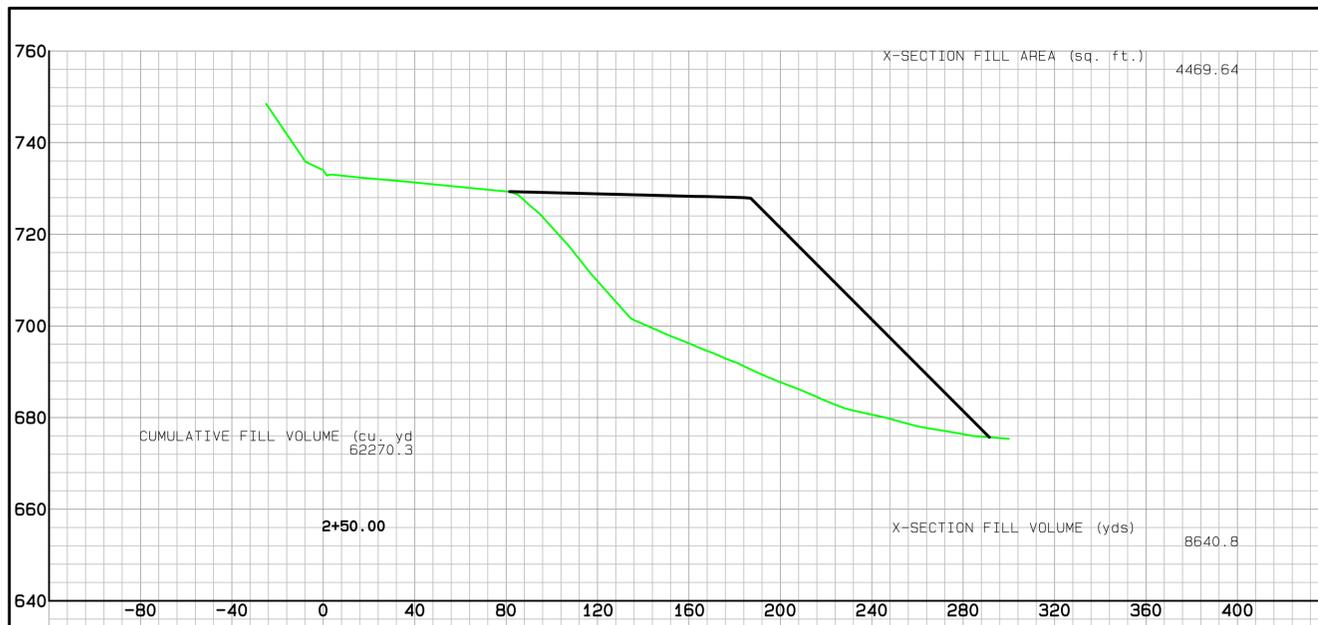
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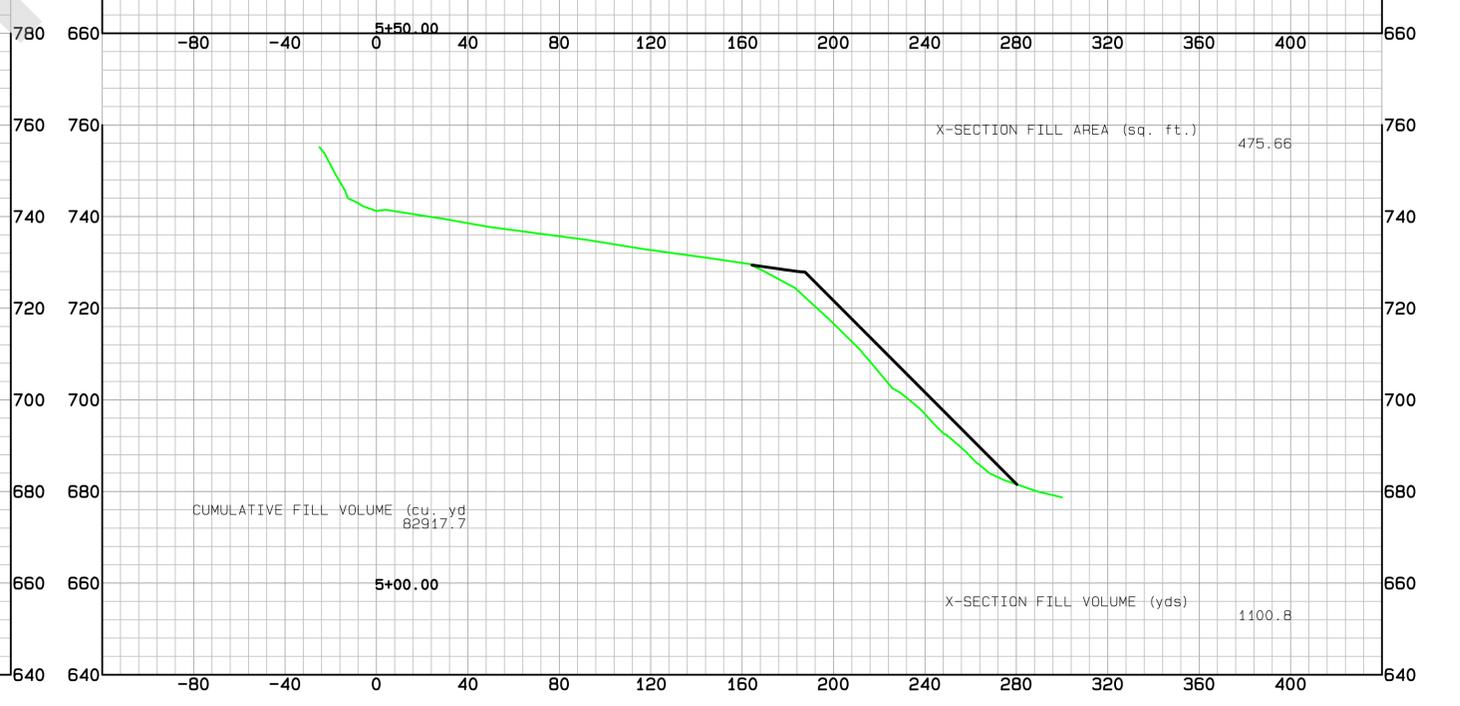
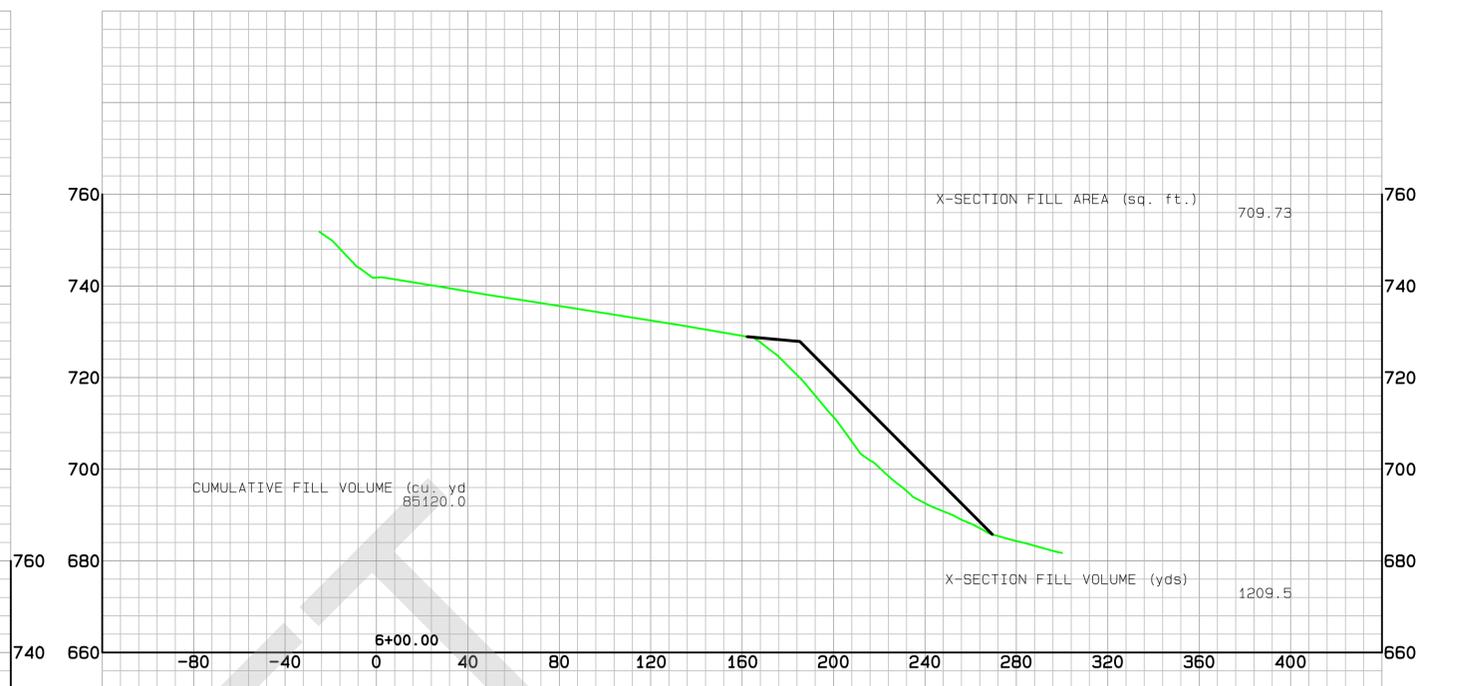
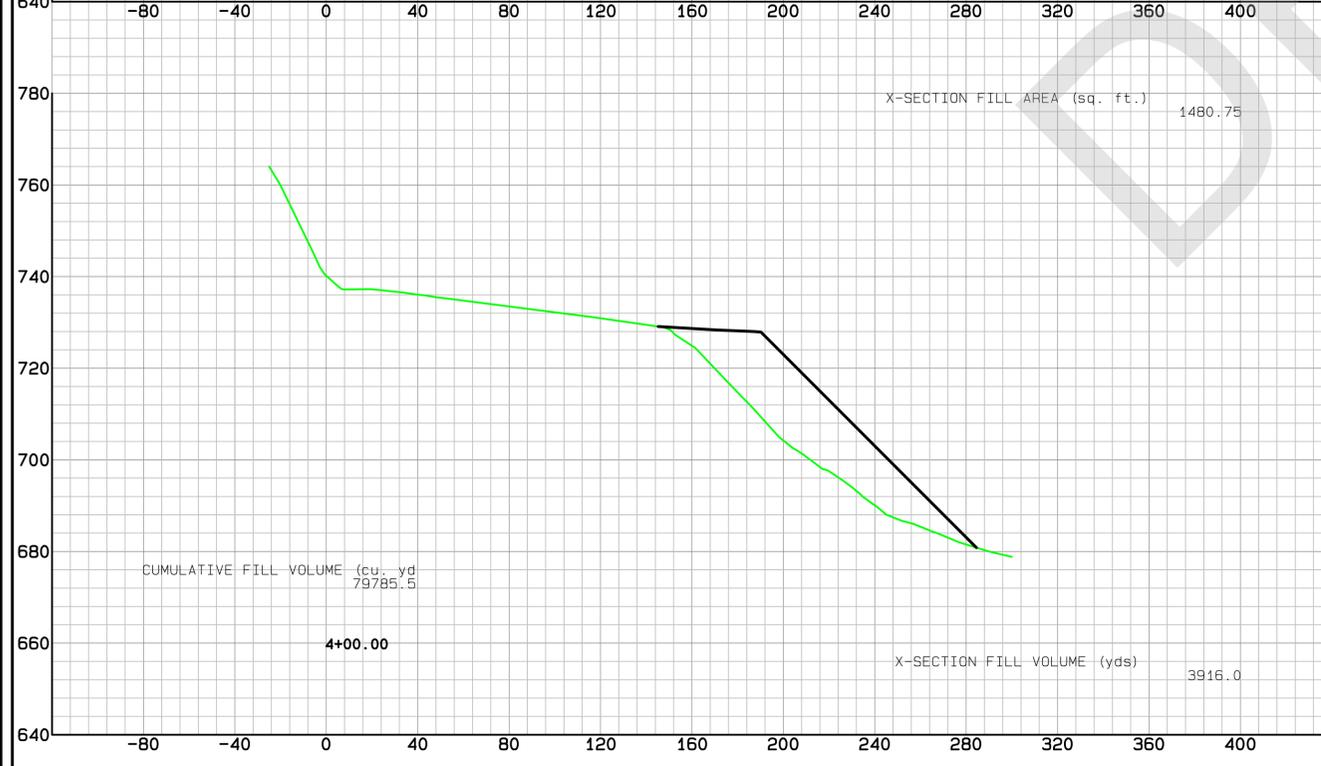
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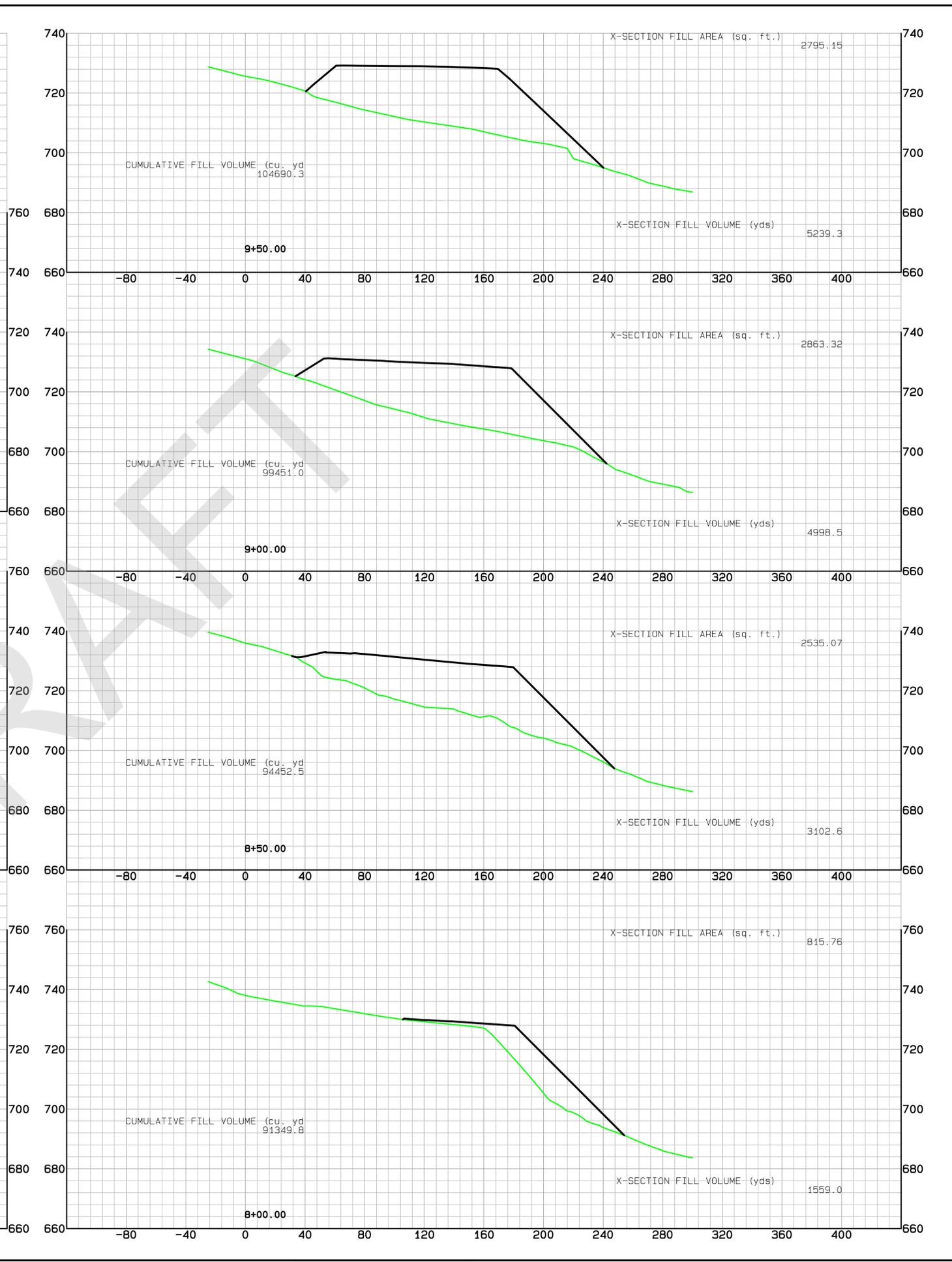
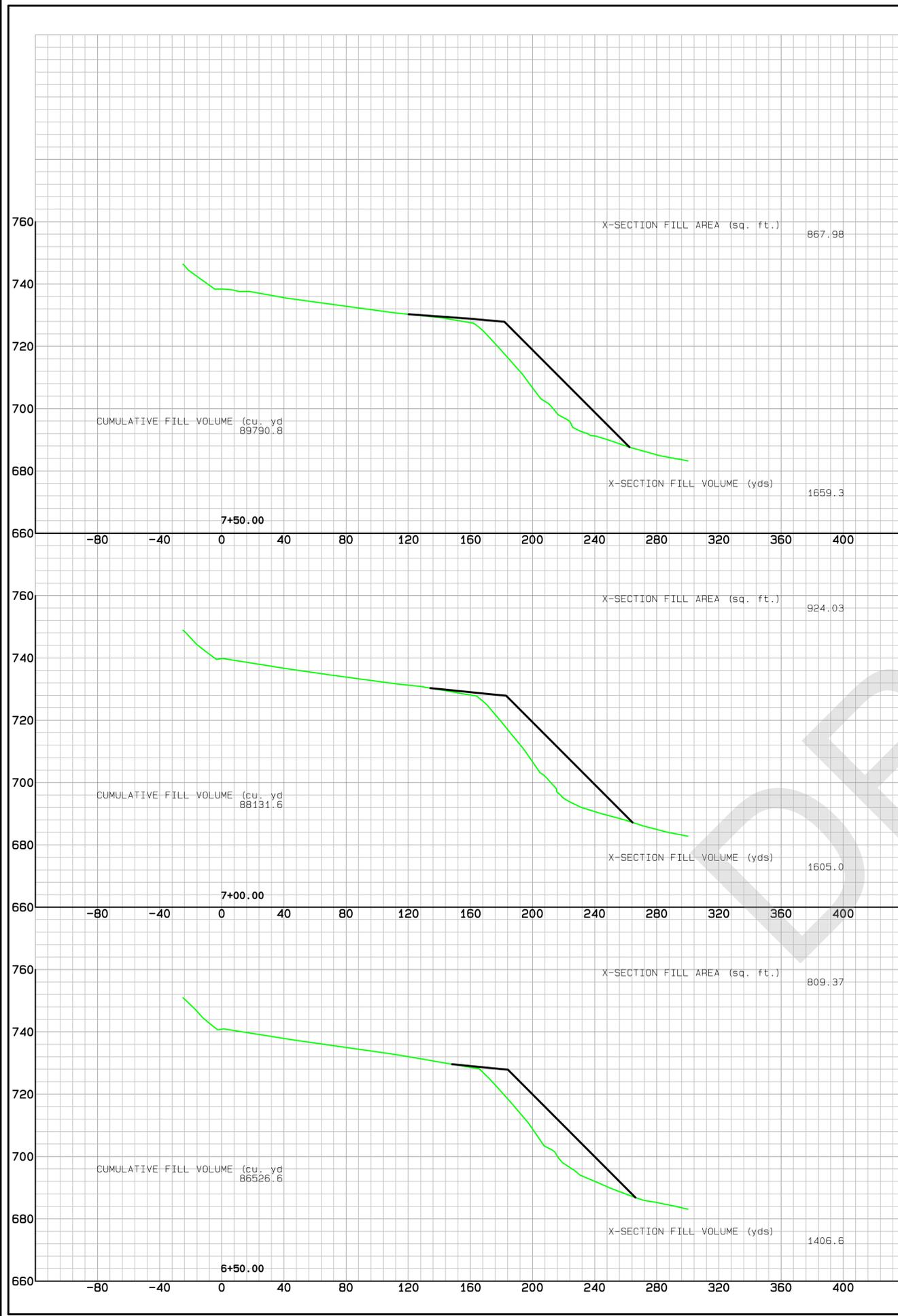
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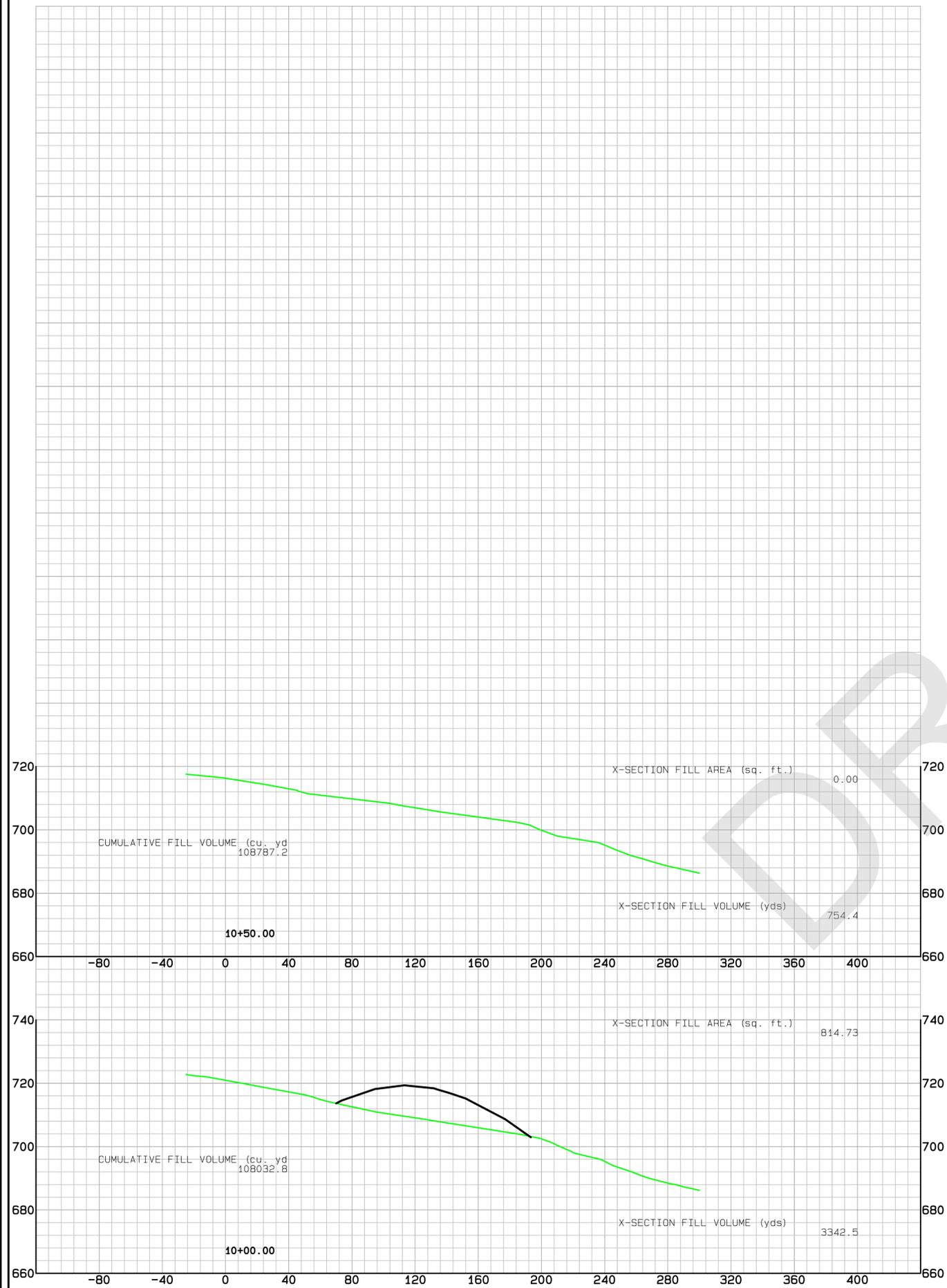
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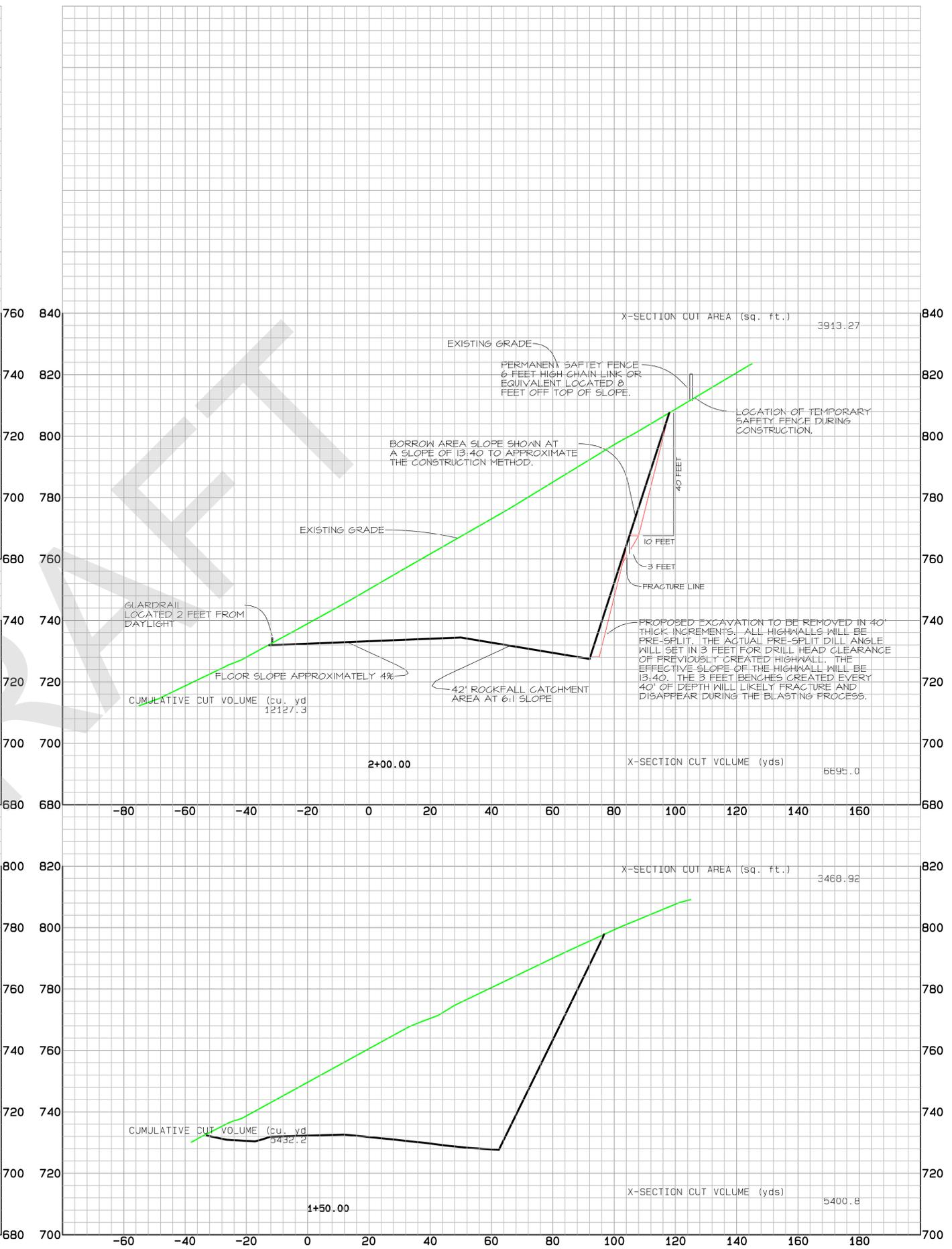
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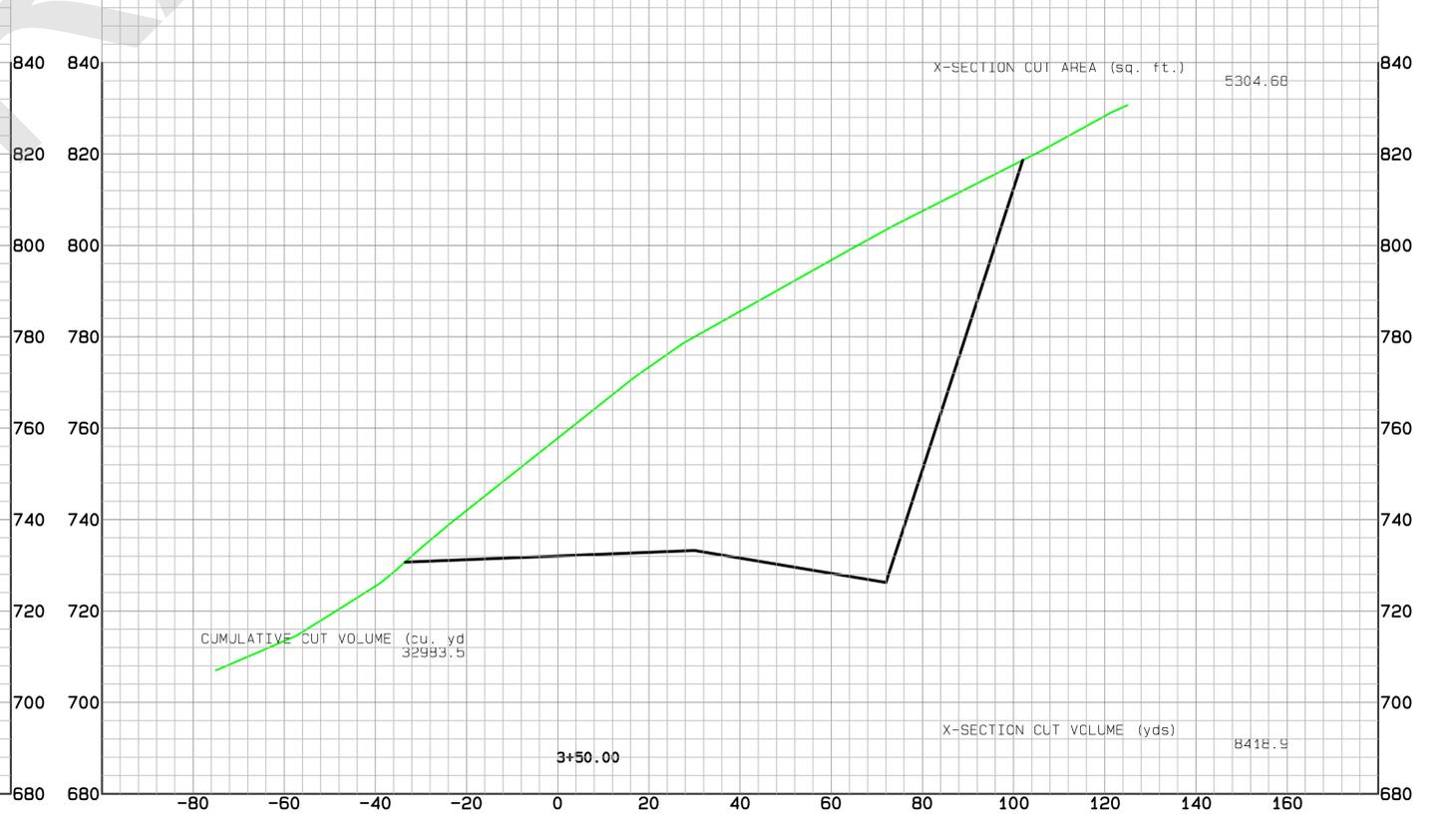
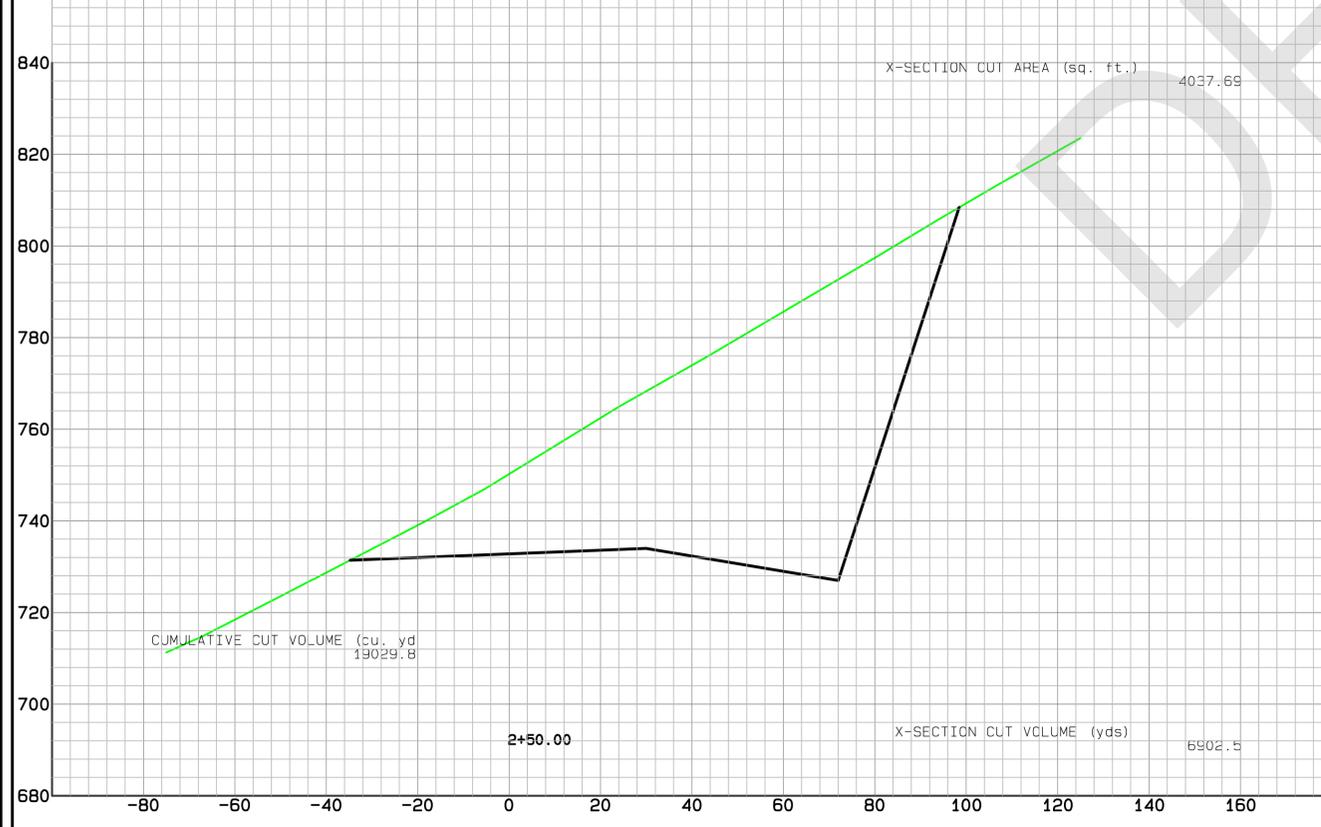
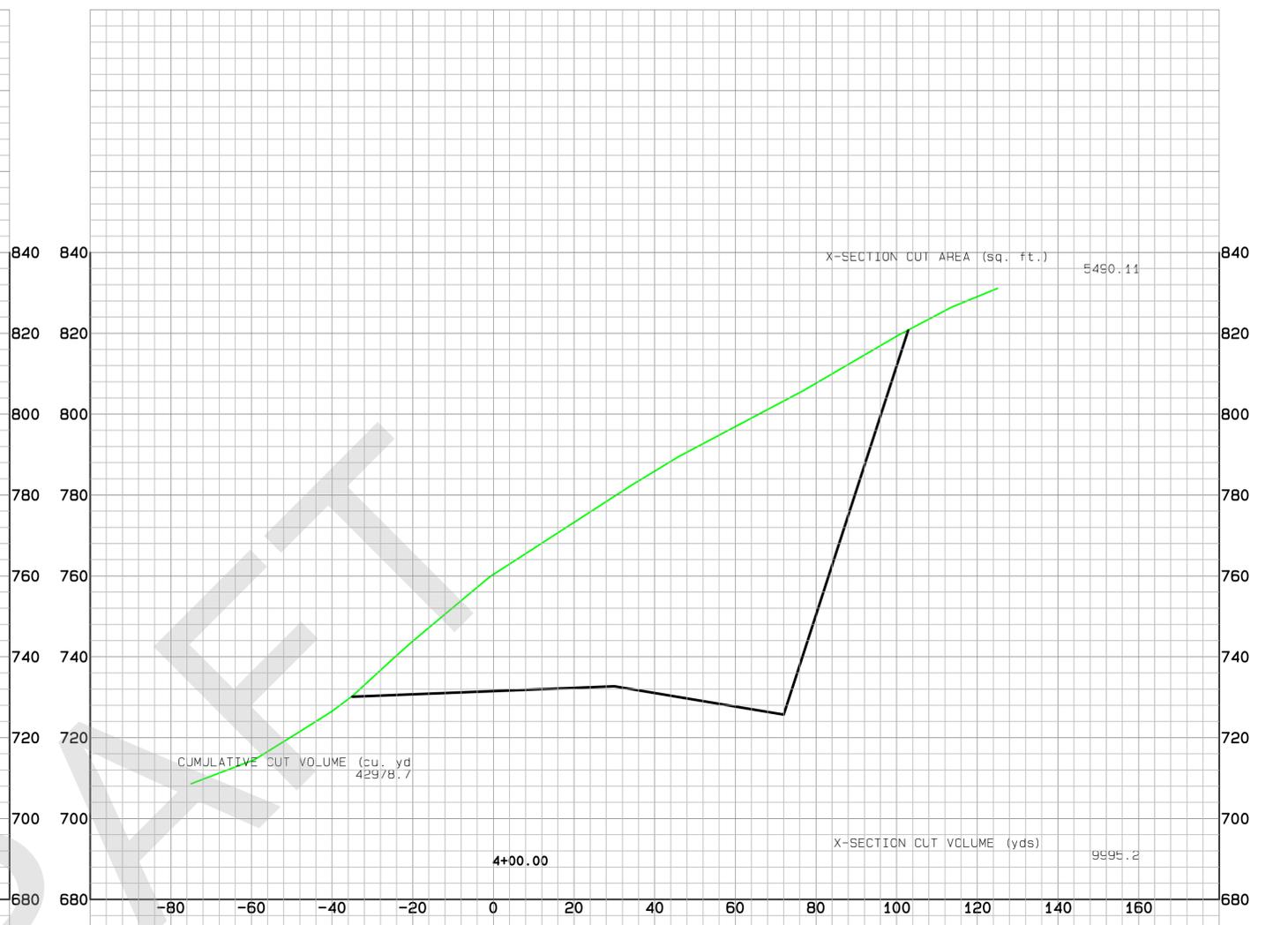
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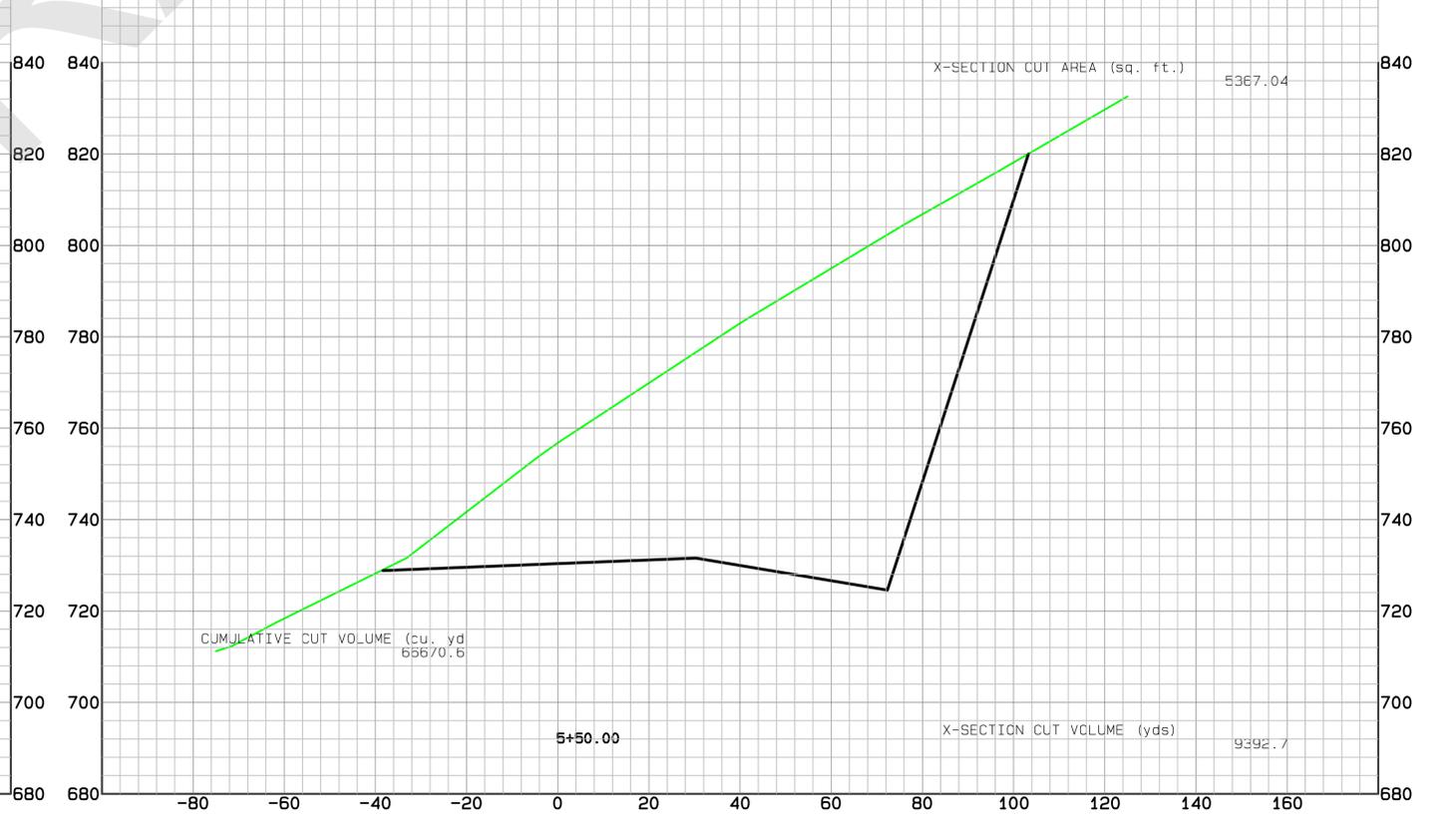
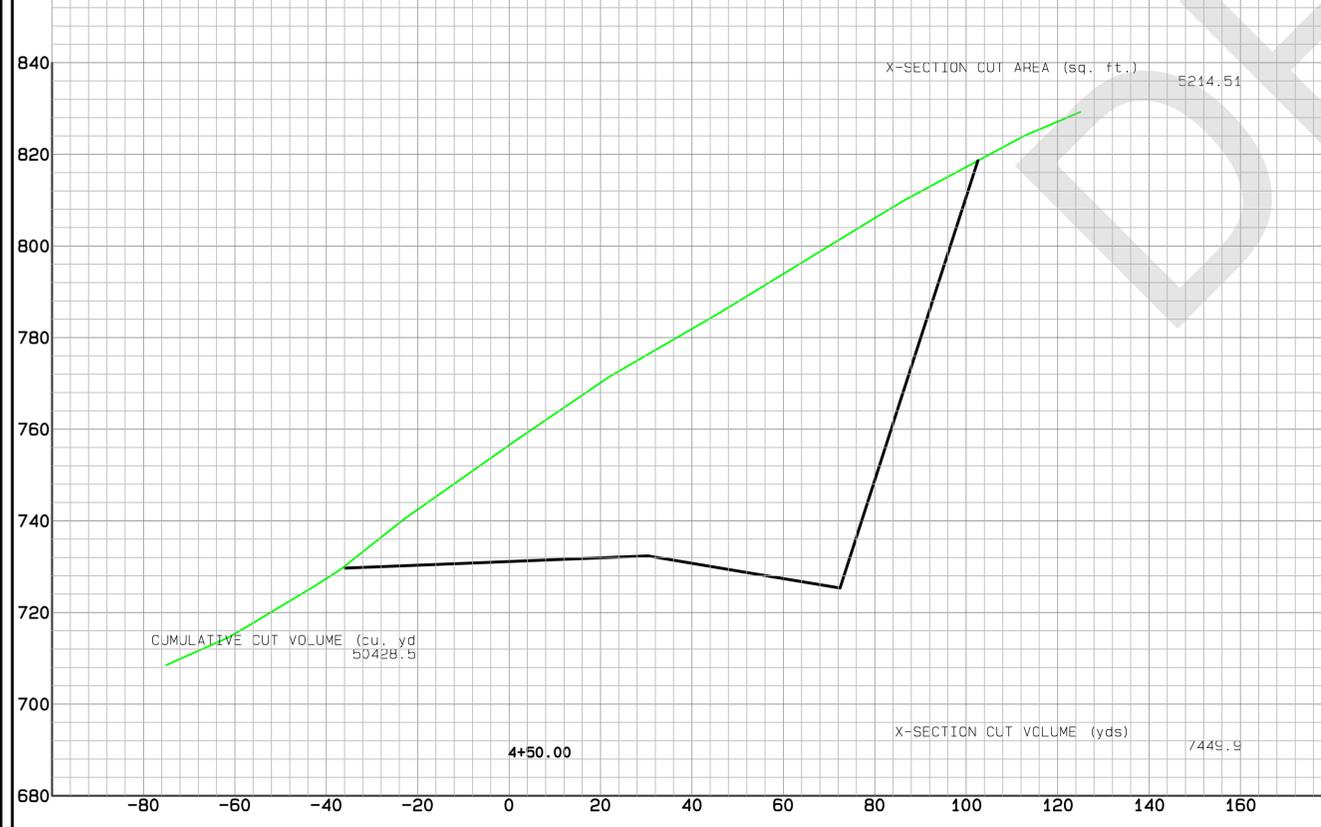
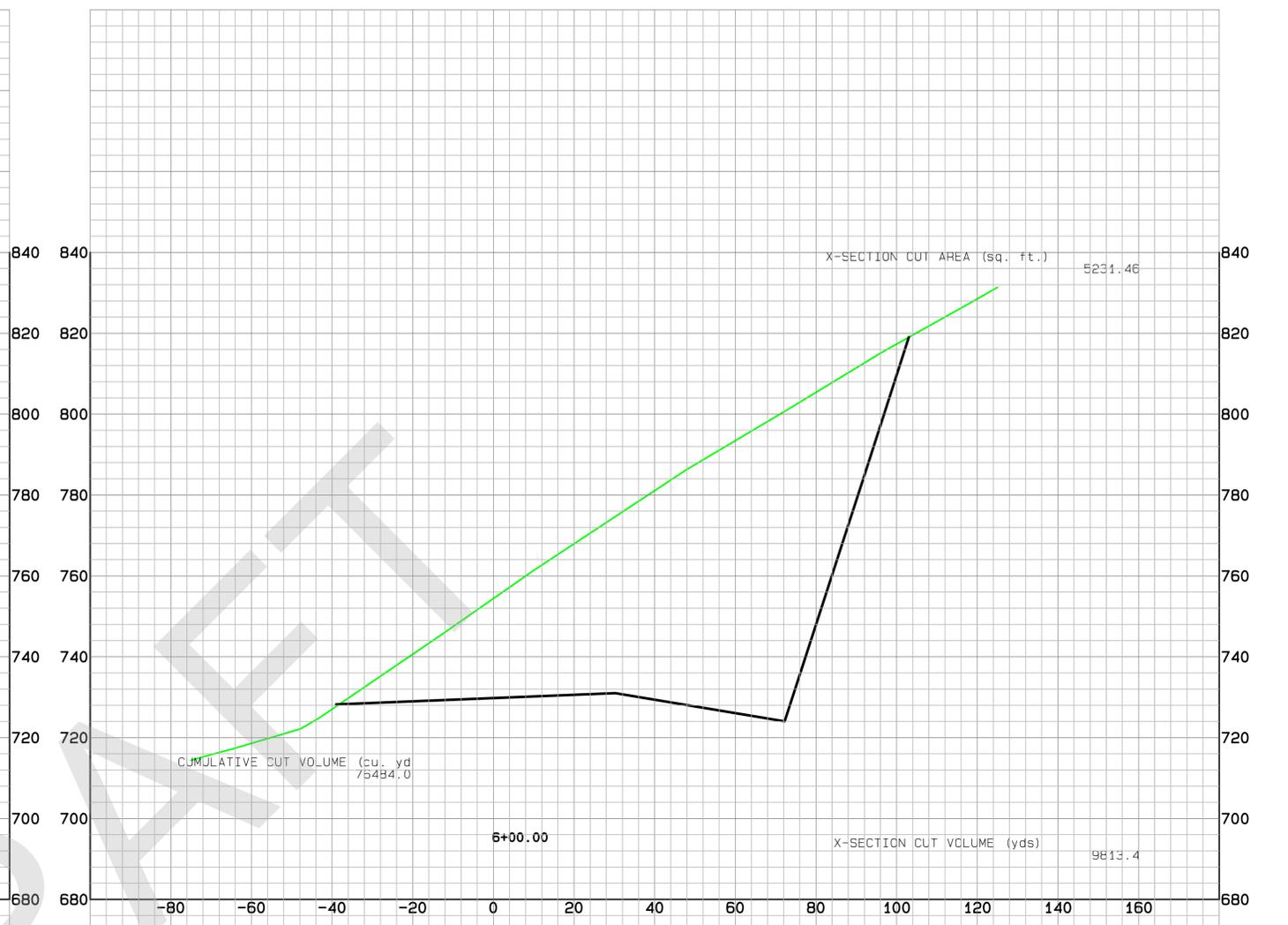
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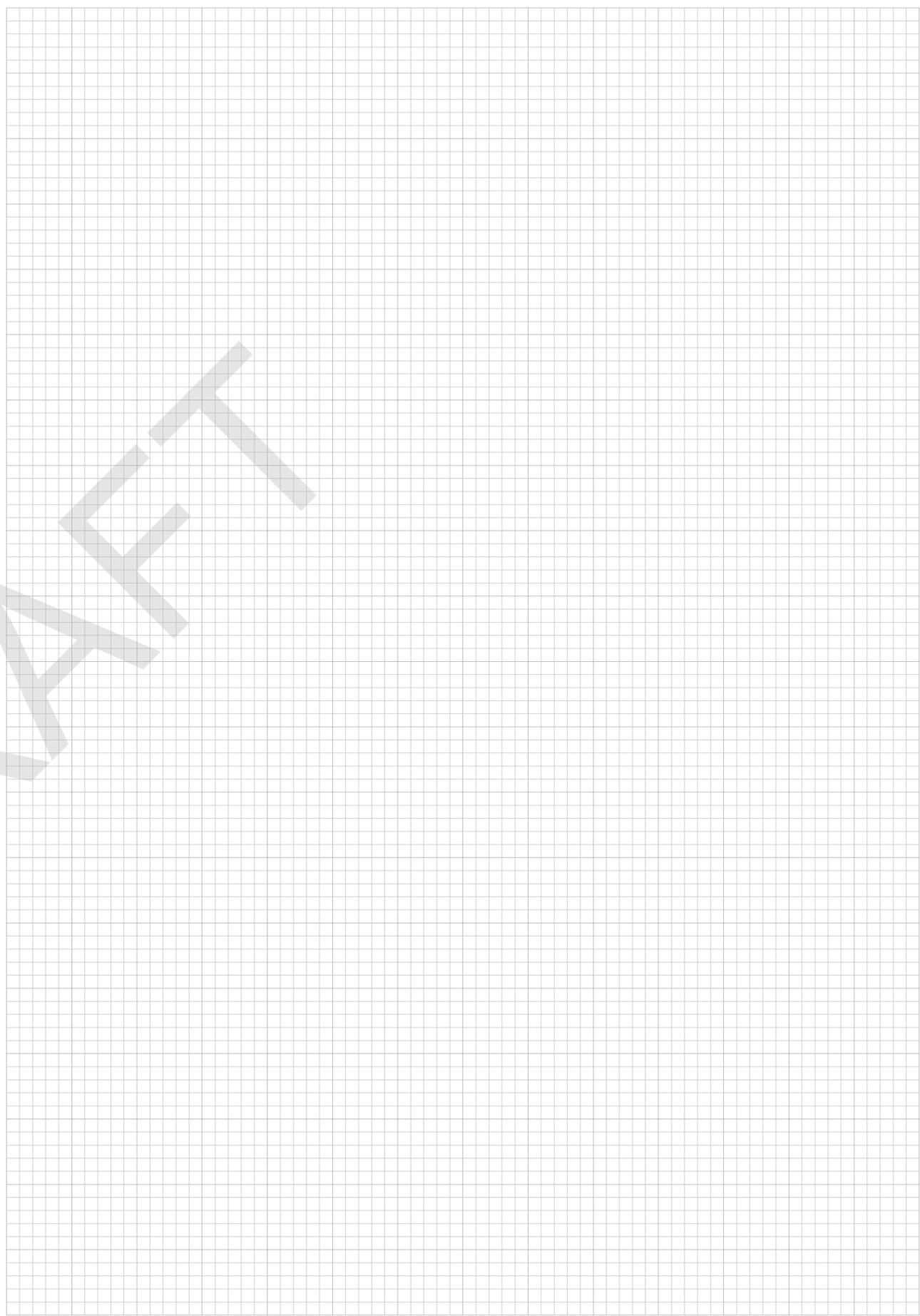
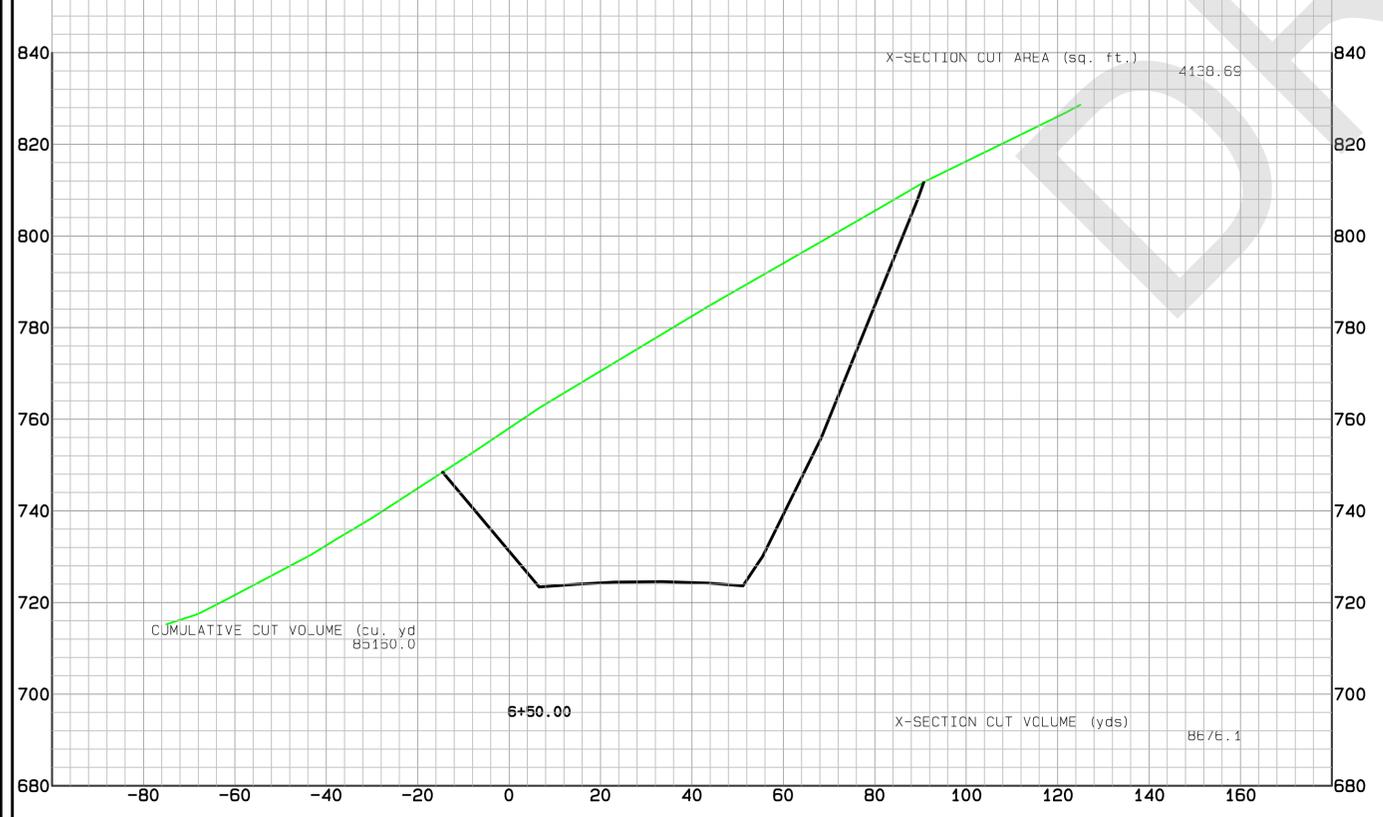
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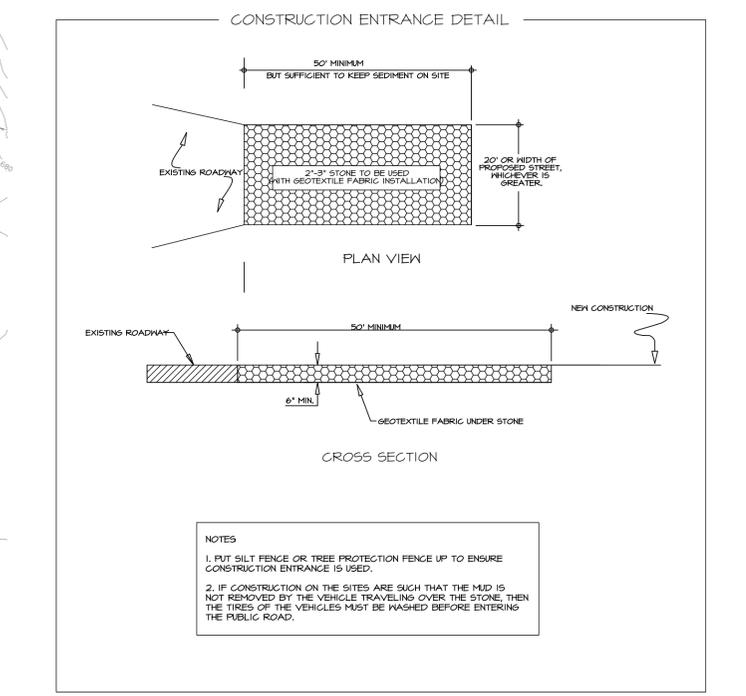
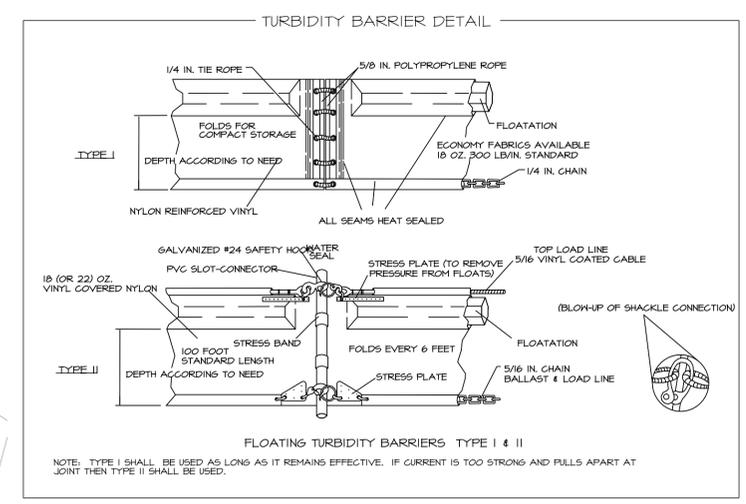
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SOIL EROSION CONTROL SEQUENCE

IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTROL EROSION FROM THIS SITE DURING ITS PHYSICAL ALTERATION. THIS PLAN SEEKS TO PROVIDE SOME DIRECTION IN THE MANNER IN WHICH THE OBJECTIVE TO CONTROL EROSION CAN BE ACCOMPLISHED. IT IS NOT THE INTENT OF AGE ENGINEERS TO LIMIT THE CONTRACTOR IN THE MANNER AND TECHNIQUES TO CONTROL EROSION. RECOMMENDED RESOURCE FOR CONTRACTORS WORK IS "STORMWATER MANAGEMENT FOR CONSTRUCTION ACTIVITIES-DEVELOPING POLLUTION PREVENTION PLANS AND BEST MANAGEMENT PRACTICES" PUBLISHED BY THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY.

THE FOLLOWING IS A LIST, IN SEQUENCE, OF CONSTRUCTION ACTIVITIES TO CONTROL SOIL EROSION FOR THE PROJECT.

- 1) 50' OF NO.2 STONE SHALL BE INSTALLED AT THE ACCESS LOCATION. THE CONTRACTOR IS RESPONSIBLE FOR KEEPING STREETS FREE FROM MUD, DIRT, DEBRIS, AND ROCK. DUST SHALL BE KEPT TO A MINIMUM BY UTILIZING SPRINKLING, CALCIUM CHLORIDE, VEGETATIVE COVER, SPRAY ON ADHESIVES OR OTHER APPROVED METHODS.
- 2) INSTALL SILT FENCE, DIVERSION DITCHES, AND ROCK CHECK DAMS AS SHOWN.
- 3) PRELIMINARY GRADINGS OF THE SITE SHALL BEGIN AS AREAS OF THE SITE ARE BROUGHT TO DESIGN GRADES. EROSION CONTROL MEASURES SUCH AS DIVERSION DITCHES, SILT TRAPS, STRAW BALES, RIPRAP CHANNEL LINING, AND SILT FENCE SHALL BE INSTALLED IN ACCORDANCE WITH "BEST MANAGEMENT PRACTICES".
- 4) CLEAR AND GRUB THE SITE AND DISPOSE OF ALL DEBRIS PROPERLY. IF AN AREA THAT HAS BEEN DISTURBED IS TO BE INACTIVE FOR MORE THAN 21 DAYS, THE CONTRACTOR SHALL STABILIZE BY MEANS OF TEMPORARY SEEDING AND MULCHING, SODDING, COVERING OR OTHER EQUIVALENT EROSION CONTROL MEASURES AS SOON AS PRACTICAL. IN NO CASE SHALL AN AREA REMAIN UNTREATED FOR MORE THAN 14 DAYS AFTER CONSTRUCTION ACTIVITY HAS TEMPORARILY OR PERMANENTLY CEASED. FOR TEMPORARY SEEDING THE CONTRACTOR SHALL UTILIZE A FAST GROWING SEED OF EITHER OATS, ANNUAL RYE GRASS OR WHEAT DEPENDING ON TIME OF YEAR.
- 5) STOCKPILED MATERIALS SHOULD BE PROPERLY STABILIZED WITH TEMPORARY SEEDING AND EROSION CONTROL FENCE.
- 6) MAINTAIN ALL FILTERS AND TRAPS DURING CONSTRUCTION TO PREVENT ANY BLOCKAGES FROM ACCUMULATED SEDIMENT. AFTER EVERY RAIN IN EXCESS OF HALF AN INCH, SILT CONTROL DEVICES ARE TO BE INSPECTED CLEANED AND REPAIRED IF NECESSARY. SILT FENCE MUST BE CLEANED IF SILT BUILDUP REACHES 1/3 OF THE SILT FENCE HEIGHT. ADDITIONAL SEEDING, SILT FENCE, AND/OR STRAW BALES MAY BE REQUIRED DURING CONSTRUCTION AS SPECIFIED BY THE SWPPP INSPECTOR.
- 8) WHEN DISTURBED AREAS ARE AT FINAL GRADE AND ALL ACTIVITY IN THESE AREAS IS COMPLETE, PERMANENT VEGETATION SHALL BE PROVIDED AS DESCRIBED IN THE PLANS AND SPECIFICATIONS. THIS VEGETATION IS TO INCLUDE PERENNIAL GRASSES APPROVED BY THE DEVELOPER. SLOPES EXCEEDING 4:1 SHALL HAVE THE ADDITIONAL PROTECTION OF MULCHING OR SODDING TO PREVENT EROSION. SEEDING OF ALL PERMANENT VEGETATION SHALL FOLLOW GUIDELINES SET FORTH IN "KENTUCKY BEST MANAGEMENT PRACTICES FOR CONSTRUCTION ACTIVITIES" PUBLISHED BY THE DIVISION OF CONSERVATION AND DIVISION OF WATER, NATURAL RESOURCES AND
- 9) UNLESS OTHERWISE NOTED, CONTRACTOR SHALL MAINTAIN ALL TEMPORARY EROSION CONTROL MEASURES THROUGHOUT THE CONSTRUCTION PHASE OF THIS PROJECT AND REMOVE ALL TEMPORARY EROSION AND SEDIMENT CONTROLS ONLY WHEN THERE IS A

THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A GRADING PERMIT FROM THE LOCAL GOVERNMENT PRIOR TO ANY CONSTRUCTION PRIOR TO COMMENCING WITH CONSTRUCTION THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING ALL REQUIRED PERMITS INCLUDING SUBMISSION IN WRITING OF A NOTICE OF INTENT (NOI) TO DISTURB WITH THE KENTUCKY DIVISION OF WATER.

WHERE REFERRED TO IN THE PLANS AND SPECIFICATIONS AS CONTRACTOR/OWNER RESPONSIBILITY, IT IS THE CONTRACTOR'S OBLIGATION TO ACT ON THE OWNER'S BEHALF IN FULFILLING ALL REQUIREMENTS FOR COMPLIANCE WITH PERMIT AND EROSION CONTROL.

**- PRELIMINARY PLAN -
- NOT FOR CONSTRUCTION -**

DATE: 5-5-15
SCALE: 1" = 100'
DRAWN BY: ES
APPROVED BY:
FILENAME: OT100 WORK CURRENT

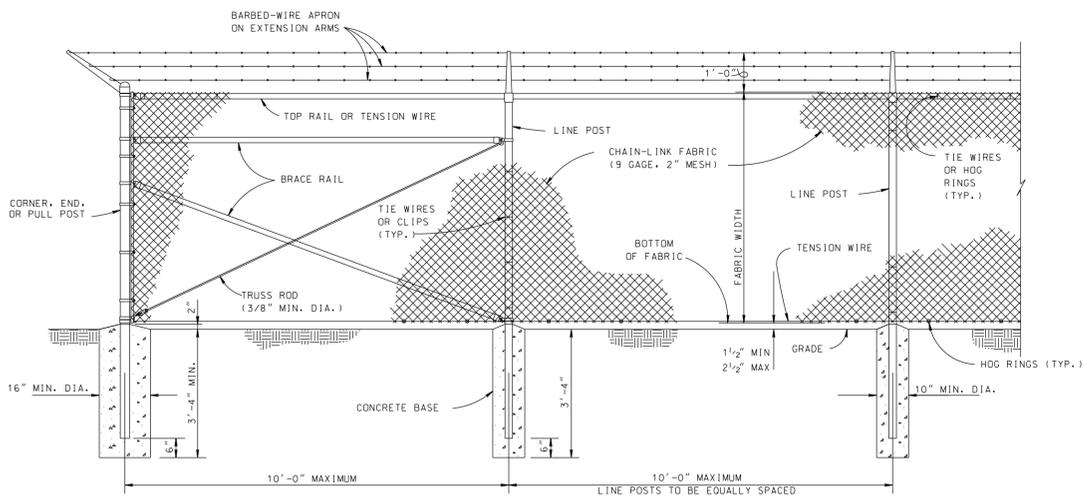
LEE'S FORD MARINA
PARKING LOT ADDITION
STORM WATER POLLUTION PREVENTION PLAN
NANCY, KENTUCKY

P.O. BOX 204
165 FOSTER LANE
STANFORD, KY 40484
PHONE (606) 365-8362
FAX (606) 365-1097



REVISION(S)

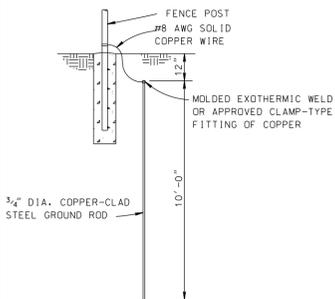
SHEET:
SW - 1



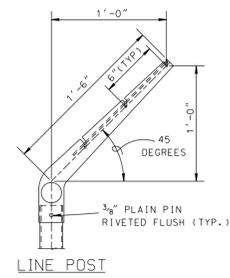
1 CHAIN-LINK SECURITY FENCE DETAIL
NO SCALE

NOTE: THE PAVEMENT SECTION SHOWN HEREON HAS BEEN STIPULATED BY THE OWNER/CONTRACTOR AND IS IN NO WAY AN AGE ENGINEERING SERVICES, INC. DESIGN.

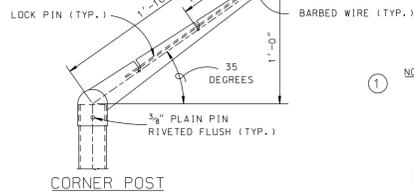
TYPICAL PAVEMENT SECTION DETAIL
NO SCALE



GROUNDING DETAIL
NO SCALE



EXTENSION ARM DETAILS
NO SCALE

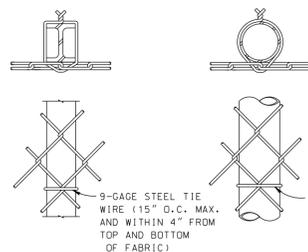


CORNER POST

- NOTES:
1. DETAILS SHOWN ARE TO CLARIFY REQUIREMENTS AND ARE NOT INTENDED TO LIMIT OTHER TYPES OF FENCE SECTIONS AND METHODS OF INSTALLATION THAT COMPLY WITH THE SPECIFICATIONS.
 2. WIRE TIES, RAILS, POSTS, AND BRACES SHALL BE CONSTRUCTED ON THE SECURE SIDE OF THE FENCE ALIGNMENT. CHAIN-LINK FABRIC SHALL BE PLACED ON THE SIDE OPPOSITE THE SECURE AREA.
 3. UNLESS SPECIFICALLY SHOWN OR SPECIFIED, ALL FENCE SHALL HAVE APRON EXTENDED OUTWARD FROM THE AREA BEING PROTECTED.
 4. C-SECTION POSTS SHALL BE INSTALLED SO THAT THE VOID INSIDE THE POST IS COMPLETELY FILLED WITH CONCRETE UP TO THE TOP OF THE FOUNDATION.

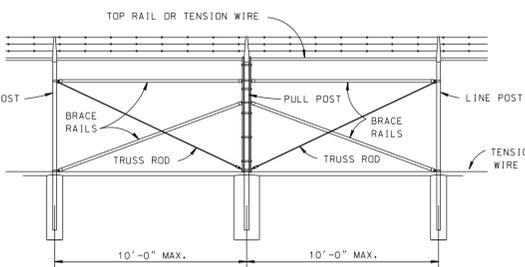
FENCE LEGEND:

- TYPE FE5 - CHAIN-LINK FENCE WITHOUT BARBED-WIRE APRON
 - TYPE FE6 - CHAIN-LINK FENCE W/BARBED-WIRE ON SINGLE OUTRIGGER
 - TYPE FE7 - CHAIN-LINK FENCE W/BARBED-WIRE ON DOUBLE OUTRIGGER
 - TYPE FE8 - CHAIN-LINK FENCE W/BARBED-WIRE AND BARBED-TAPE ON DOUBLE OUTRIGGER
 - TR - FENCE WITH TOP RAIL AND TENSION WIRE AT BOTTOM
 - TBR - FENCE WITH TOP AND BOTTOM RAILS
 - TWB - TENSION WIRE TOP AND BOTTOM
 - TMBR - FENCE WITH TOP TENSION WIRE AND BOTTOM RAIL
- FINAL NUMBER IS FABRIC WIDTH IN INCHES.

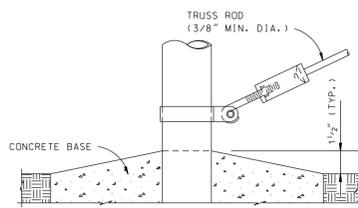


H-BEAM ROUND POST
LINE POST ATTACHMENTS
NO SCALE

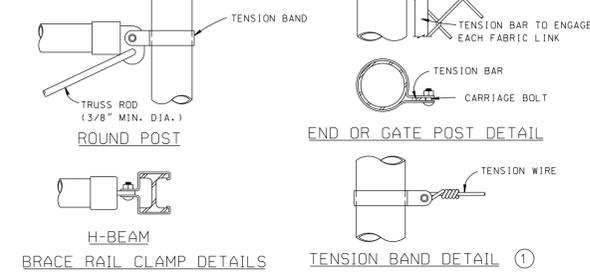
STEEL POST SCHEDULE	
USE AND SECTION	MINIMUM OUTSIDE DIMENSIONS (NOMINAL)
CORNER, END & PULL POSTS	
TUBULAR - ROUND	2.375" O.D.
TUBULAR - SQUARE	2.00" SQ.
C-SECTION (ROLL-FORMED)	3.50" x 3.50"
LINE POSTS	
TUBULAR - ROUND	1.90" O.D.
H-SECTION	2.25" x 1.70"
C-SECTION (ROLL-FORMED)	1.875" x 1.625"
TOP, BOTTOM & BRACE RAILS	
TUBULAR - ROUND	1.90" O.D.
TUBULAR - SQUARE	2.00" SQ.
H-SECTION	2.25" x 1.70"
C-SECTION (ROLL-FORMED)	1.875" x 1.625"



1 BRACE PANEL DETAIL
NO SCALE

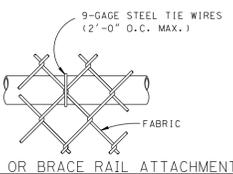


1 TRUSS ROD AND BAND
NO SCALE

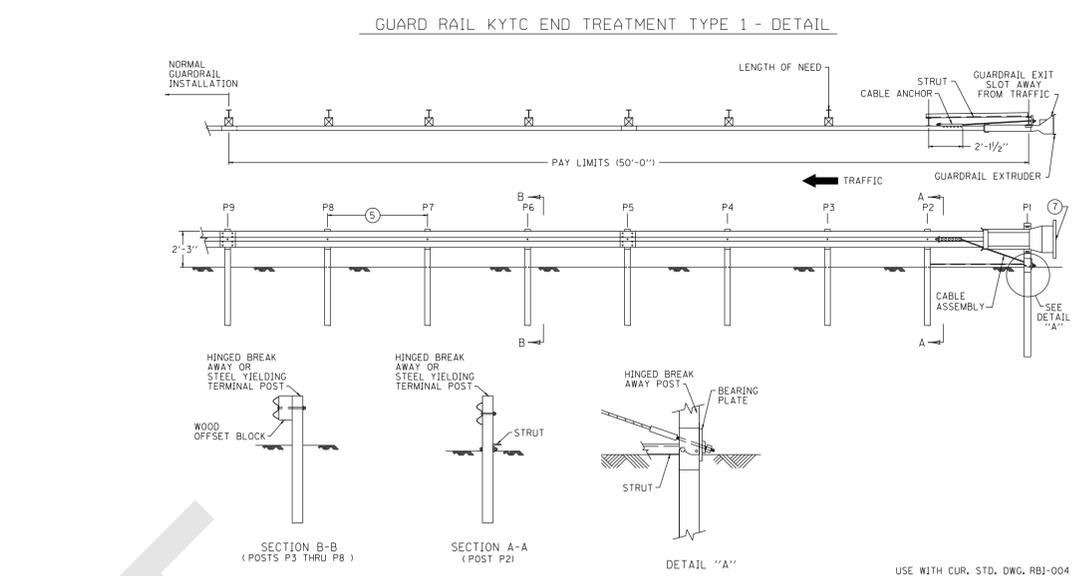


FASTENING DETAILS
NO SCALE

- PRELIMINARY PLAN -
- NOT FOR CONSTRUCTION -

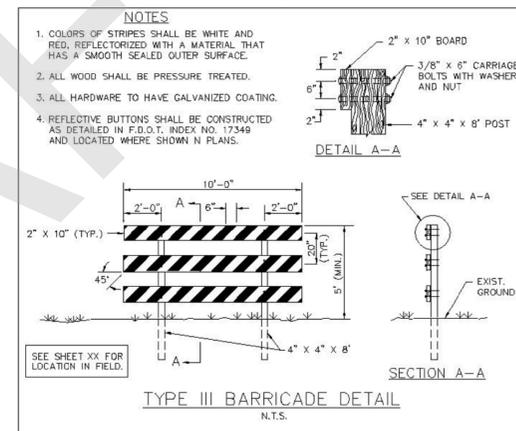


TOP OR BRACE RAIL ATTACHMENT



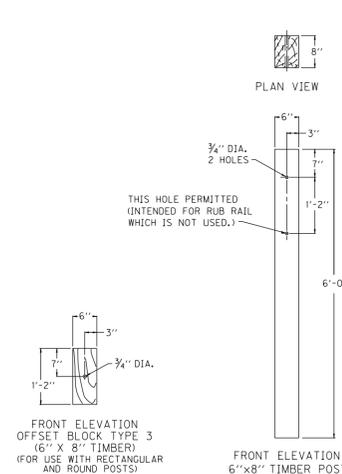
1. GUARDRAIL END TREATMENT TYPE 1 SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH, AND INCLUDES POSTS, RAIL ELEMENTS, GUARDRAIL EXTRUDER AND ALL OTHER INCIDENTALS NECESSARY TO COMPLETE THE INSTALLATION AS DETAILED.
2. PERMISSIBLE ALTERNATES FOR GUARDRAIL END TREATMENT TYPE 1 ARE PATENTED ITEMS; ET PLUS MANUFACTURED BY TRINITY INDUSTRIES OF CINCINNATI, OHIO OR SKI-350 MANUFACTURED BY ROAD SYSTEMS INC. OF BIG SPRING, TEXAS.
3. THE MANUFACTURER SHALL FURNISH TWO (2) SETS OF SHOP PLANS TO THE CONTRACTOR WITH EACH INSTALLATION.
4. THE COMPLETED INSTALLATION SHALL MEET ALL APPLICABLE REQUIREMENTS OF THE MANUFACTURER (SEE SHOP DRAWINGS).
5. POSTS P1 THROUGH P9 ARE SPACED 6'-3" ON CENTER.
6. INTENDED USE: AREAS WITH ADEQUATE VEHICLE RECOVERY ZONE BEHIND GUARDRAIL.
7. OBJECT MARKER TYPE 3 (SEE CURRENT MUTCD MANUAL FOR DETAILS).

USE WITH CUR. STD. DWG. RBJ-004



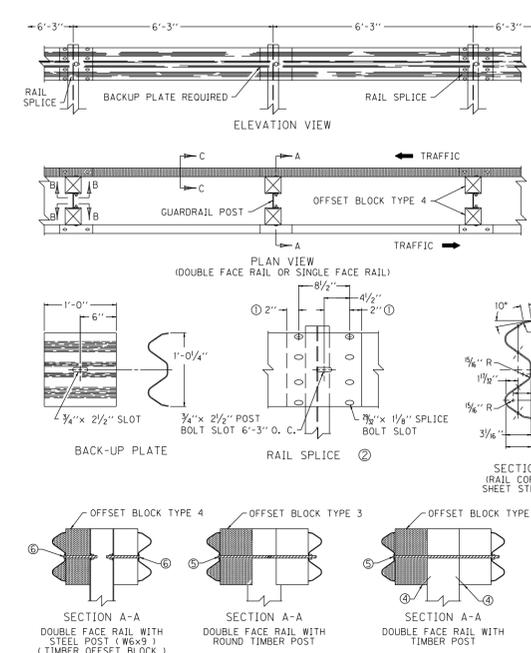
TYPE III BARRICADE DETAIL
N.T.S.

KYTC GUARD RAIL POST DETAIL



FRONT ELEVATION OFFSET BLOCK TYPE 3 (6' x 8' TIMBER) (FOR USE WITH RECTANGULAR AND ROUND POSTS)
FRONT ELEVATION 6' x 8" TIMBER POST

KYTC STEEL BEAM GUARDRAIL ("W" BEAM) DETAIL



SECTION A-A DOUBLE FACE RAIL WITH STEEL POST (W6x9) (TIMBER OFFSET BLOCK)
SECTION A-A DOUBLE FACE RAIL WITH ROUND TIMBER POST
SECTION A-A DOUBLE FACE RAIL WITH TIMBER POST

- NOTES:
- THE CONTRACT UNIT PRICE BID SHALL BE: GUARDRAIL-STEEL W BEAM-SINGLE FACE - LIN. FT. OR GUARDRAIL-STEEL W BEAM-DOUBLE FACE - LIN. FT. DIMENSIONAL TOLERANCES NOT SHOWN OR IMPLIED ARE INTENDED TO BE THOSE CONSISTENT WITH THE PROPER FUNCTIONING OF THE PART, INCLUDING ITS APPEARANCE AND ACCEPTED MANUFACTURING PRACTICES.
- THE RAIL ELEMENT SHALL COMPLY WITH AASHTO M-180 - CLASS A, TYPE II.
- ALL LAPS SHALL BE PLACED IN THE DIRECTION OF TRAFFIC FLOW.
1. TOLERANCE: +1/4", -1/4"
 2. 8-3/4" x 1/2" LONG BUTTON HEAD BOLTS AND HEX HEAD RECESS NUTS REQUIRED FOR EACH RAIL SPLICE.
 3. LENGTH EQUALS POST AND BLOCK WIDTH PLUS 2" FOR BOLT OR 3/4" FOR THREADED ROD.
 4. GALVANIZED STEEL 100 COMMON COATED NAIL (DRIVE NAIL AT THE TOP OR BOTTOM CENTER OF BLOCK AND POST AFTER BOLT IS INSTALLED).
 5. 5/8" x 3" STEEL THREADED ROD AND TWO (2) HEX HEAD NUTS OR 3/8" x 3" BUTTON OR HEX HEAD BOLT AND HEX HEAD NUT.
 6. 3/8" x 8" BUTTON HEAD BOLT, HEX HEAD RECESS NUT AND ONE 3/8" ROUND WASHER (TYP.). BOLT SHALL HAVE A MINIMUM THREAD LENGTH OF 2".
- REQUIRED FOR DOUBLE RAIL

DATE: 6-1-2015
SCALE: N/A
DRAWN BY: ES
APPROVED BY:
FILENAME: 07100 DETAIL

LEE'S FORD MARINA
PARKING LOT ADDITION
DETAIL SHEET
CITY, COUNTY, STATE

P.O. BOX 204
165 FOSTER LANE
STANFORD, KY 40484
PHONE (606) 365-8362
FAX (606) 365-1097



REVISION(S)

SHEET:
D - 1

APPENDIX B
U.S. Fish and Wildlife Service Coordination

DRAFT

From: [Miller, Jessica](#)
To: [Granstaff, Matthew LRN](#)
Subject: Re: [EXTERNAL] Re: Lee's Ford Marina Parking Lot Expansion Project (UNCLASSIFIED)
Date: Monday, April 28, 2014 1:50:40 PM

The next steps would be to conduct a presence/absence survey for the Indiana bat or to assume presence and mitigate for the habitat loss.

On Thu, Apr 24, 2014 at 3:01 PM, Granstaff, Matthew LRN <Matthew.L.Granstaff@usace.army.mil> wrote:

Classification: UNCLASSIFIED
Caveats: NONE

Jessi,

Thank you for your help. I have already conducted a habitat assessment and then are several trees that meet the criteria for potential bat habitat. Since there is the potential and habitat is present what would be the applicants next step forward.

Thanks,

Matt

From: Miller, Jessica [mailto:jessica_miller@fws.gov]
Sent: Thursday, April 24, 2014 1:57 PM
To: Granstaff, Matthew LRN
Subject: Re: [EXTERNAL] Re: Lee's Ford Marina Parking Lot Expansion Project (UNCLASSIFIED)

Matt,

There are no records of listed species nearby. There is the potential for Indiana bat, gray bat, and Northern long-eared bat.

Jessi

On Thu, Apr 24, 2014 at 2:02 PM, Granstaff, Matthew LRN <Matthew.L.Granstaff@usace.army.mil> wrote:

Classification: UNCLASSIFIED
Caveats: NONE

Jessie sorry I should have sent in previous email. Sorry.

Lee's Ford Marina, 451 Lees Ford Dock Rd, Nancy, KY, United States.

37.047841, -84.674166

<http://www.bing.com/maps/#Y3A9MzYuMzE2NTAyfi04Ni45MjI4OTembHZsPTQmc3R5SPXImc3M9eXAuWU4zNjF4ODYxMDE5Mn5wZy4xfnJhZC44MA==>

Thanks for the help,

Matt

-----Original Message-----

From: Miller, Jessica [mailto:jessica_miller@fws.gov]
Sent: Thursday, April 24, 2014 12:59 PM
To: Granstaff, Matthew LRN
Subject: [EXTERNAL] Re: Lee's Ford Marina Parking Lot Expansion Project (UNCLASSIFIED)

Do you have GPS coordinates for that site?

On Wed, Apr 23, 2014 at 5:17 PM, Granstaff, Matthew LRN <Matthew.L.Granstaff@usace.army.mil> wrote:

Classification: UNCLASSIFIED
Caveats: NONE

Good Afternoon Jessi,

I am reviewing a project located at Lee's Ford Marina, Nancy, Kentucky. I was curious if there are any T&E species within the area? I assume potential for Indiana and Gray bats. Are there any others?

Thanks for your help.

Matthew Granstaff

Classification: UNCLASSIFIED
Caveats: NONE

--

Jessica Blackwood Miller
Fish & Wildlife Biologist
Kentucky Field Office
U.S. Fish & Wildlife Service
330 W. Broadway, Suite 265
Frankfort, KY 40601
Ph: (502) 695-0468 ext. 104
Fax: (502) 695-1024

Classification: UNCLASSIFIED
Caveats: NONE

--

Jessica Blackwood Miller
Fish & Wildlife Biologist
Kentucky Field Office
U.S. Fish & Wildlife Service
330 W. Broadway, Suite 265
Frankfort, KY 40601
Ph: (502) 695-0468 ext. 104
Fax: (502) 695-1024

Classification: UNCLASSIFIED
Caveats: NONE

--

Jessica Blackwood Miller
Fish & Wildlife Biologist
Kentucky Field Office
U.S. Fish & Wildlife Service

From: [Terry Siemsen](#)
To: [Granstaff, Matthew LRN](#)
Cc: [Wanamaker, Kelly A LRN](#); [Beverly, Cara C. LRN](#); [Jd Hamilton](#)
Subject: [EXTERNAL] Re: Lee's Ford Marina (UNCLASSIFIED)
Date: Tuesday, June 23, 2015 10:11:15 AM

Matthew:

On behalf of Lee's Ford Marina and JD Hamilton, we wish to enter into a MOA with USFWS and make a donation to the Indiana Bat Conservation Fund.

I understand that some shapefiles are needed. Please advise which features are needed and I will try to expedite their development.

Thanks,

Terry

Terry S. Siemsen
GeoSpatial Analyst
Emergency Planning Specialist

terrysiemsen@yahoo.com
502.314.5834 (mobile and text)

> On Jun 23, 2015, at 10:01 AM, Granstaff, Matthew LRN <Matthew.L.Granstaff@usace.army.mil> wrote:
>
> Classification: UNCLASSIFIED
> Caveats: NONE
>
> Good Morning Terry,
>
> I would like to discuss how Lee's Ford Plans to proceed with T&E's.
>
> Two known species, Indiana bat (*Myotis sodalis*) and Northern long-eared bat (*Myotis septentrionalis*) may occur within the proposed project footprint. The Endangered Species Act (ESA) requires the determination of possible effects on or degradation of habitat critical to Federally-listed endangered or threatened species. Because the proposed project would involve the removal of trees, a habitat assessment was conducted by me on April 17, 2014. Based on the findings of the habitat assessment, the Corps determined that suitable habitat was present within the proposed project footprint and that coordination with the USFWS would be required.
>
> In an email dated April 24, 2014, USFWS stated "The next steps would be to conduct a presence/absence survey for the Indiana bat or to assume presence and mitigate for the habitat loss."
>
> In a letter dated October 1, 2014, Lee's Ford Marina stated "that the upland habitat present could potentially be used during spring, summer and fall months by Indiana bat and northern long-eared bat. Clearing of existing trees would be restricted to late fall and winter seasons (October to March). In addition, coordination with Indiana Bat Conservation Fund would be made to determine the amount of payment that would be appropriate. Such payment will be made if a Department of the Army permit is approved."
>
> My question is:
> 1.) would Lee's Ford perform a presence/absence survey or would Lee's Ford prefer to sign a MOA with USFWS which would more than likely result in a payment into the Indiana Bat Conservation Fund? It appears that the disposal site is around 1-2 acres?



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Kentucky Ecological Services Field Office
330 West Broadway, Suite 265
Frankfort, Kentucky 40601
(502) 695-0468

September 8, 2015

Mr. James D. Hamilton
Lee's Ford Resort and Marina
451 Lee's Ford Dock Road
Nancy, KY 42544

Re: FWS 2014-B-0453; Forest-Dwelling Bat CMOA for Lee's Ford Resort and Marina in association with the parking lot expansion project in Pulaski County, Kentucky

Dear Mr. Hamilton:

Please find the attached Forest-Dwelling Bat Conservation Memorandum of Agreement (MOA) between the Service and Lee's Ford Resort and Marina accounting for adverse effects to the Indiana bat and the northern long-eared bat in association with the subject project. Please review for any questions or changes. If you do not have any, please have the responsible party sign, date, and return to our office via fax, email, or mail.

Execution of the attached CMOA and the Imperiled Bat Conservation Fund (IBCF) contribution that it requires will allow Lee's Ford Resort and Marina to be in compliance with the Endangered Species Act relative to the Indiana bat and the northern long-eared bat for the proposed project. If necessary to fulfill requirements of the U.S. Army Corps of Engineers and/or other federal nexus agencies obligations per section 7 of the ESA, please provide them with a copy of this letter, fully executed CMOA, and proof of payment for their records.

In order to complete payment per the CMOA (Section 6.4 of the MOA) please:

- 1) Make check or money order payable to **Kentucky Natural Lands Trust**,
- 2) Reference **Lee's Ford; FWS 2014-B-0453 IBCF** in the memo line,
- 3) Remit payment to: **Kentucky Natural Lands Trust
c/o Hugh Archer, Executive Director
433 Chestnut Street
Berea, Kentucky 40403**
- 4) Provide proof of payment (copy of the check or receipt) to our office via fax, email, or mail.

Indiana bat (*Myotis sodalis*)

Northern long-eared bat (*Myotis septentrionalis*)

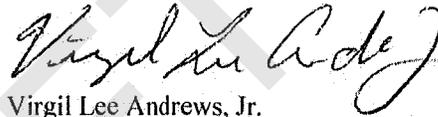
Adverse effects to the Indiana bat and/or the northern long-eared bat as a result of impacts to its summer roosting and foraging habitat are addressed in the Conservation MOA that is attached to this correspondence. The impacts covered by this Conservation MOA are included in the take authorized in the Service's 2015 *Biological Opinion: Kentucky Field Office's Participation in Conservation*

Memoranda of Agreement for the Indiana Bat and/or Northern Long-eared Bat that concludes that the habitat impacts evaluated that are likely to adversely affect the Indiana bat and the northern long-eared bat would not likely jeopardize the continued existence of the species.

In view of these findings, upon execution of the attached CMOA, we believe that your obligations under the Endangered Species Act will be fulfilled for this project. These obligations may change, however, if: (1) new information reveals that the proposed action may affect listed species in a manner or to an extent not previously considered, (2) the proposed action is subsequently modified to include activities which were not considered during this consultation, or (3) new species are listed or critical habitat designated.

If you have any questions regarding the information that we have provided, please contact Jessi Miller of my office at (502) 695-0468 extension 104.

Sincerely,



Virgil Lee Andrews, Jr.
Field Supervisor

**FOREST-DWELLING BAT CONSERVATION
MEMORANDUM OF AGREEMENT
BETWEEN THE
U.S. FISH AND WILDLIFE SERVICE
AND
LEE'S FORD RESORT AND MARINA**

This Conservation Memorandum of Agreement (CMOA) is entered into by the United States Department of the Interior, U.S. Fish and Wildlife Service (Service) and Lee's Ford Resort and Marina (Lee's Ford) to promote the survival and recovery of the Indiana bat (*Myotis sodalis*), a federally endangered species and the northern long-eared bat (*Myotis septentrionalis*), a federally threatened species. Together, the Service and Lee's Ford are referred to as "Cooperators."

Section 1: PURPOSE AND OBJECTIVES

The Indiana bat and the northern long-eared bat are federally-listed species native to a large portion of the eastern United States and the Commonwealth of Kentucky. This CMOA will implement recovery-focused conservation measures that will be undertaken by the Cooperators and afford a measurable conservation benefit for these species as set forth in the Service's Conservation Strategy for Forest-Dwelling Bats in the Commonwealth of Kentucky (Conservation Strategy) as modified April 2015 and hereby incorporated by reference. These measures will be implemented in association with the proposed project as detailed in section 4 of this CMOA. All measures will be implemented according to the terms of this CMOA. The Cooperators understand and intend that the benefits resulting from this CMOA may also provide conservation benefits for other federal protected species and native fish and wildlife.

Section 2: AUTHORITY

This CMOA is hereby entered into under the authorities of the Endangered Species Act (16 U.S.C. 1531 *et seq.*) (ESA), Fish and Wildlife Act of 1956 (16 U.S.C. 742a. *et seq.*), and the Fish and Wildlife Coordination Act (16 U.S.C. 661 *et seq.*). Section 5 of the ESA provides that, "The Secretary...shall establish and implement a program to conserve fish, wildlife, and plants, including those which are listed as endangered species or threatened species..." and "shall utilize land acquisition and other authority under the Fish and Wildlife Act, as amended, and the Migratory Bird Conservation Act, as appropriate". Section 7(a) (1) of the ESA further directs Federal agencies to "utilize their authorities in furtherance of the purposes of this Act [ESA] by carrying out programs for the conservation of endangered species and threatened species." The Fish and Wildlife Act of 1956 provides that the Secretary shall "...take such steps as may be required for the development, advancement, management, conservation, and protection of fish and wildlife resources...." Finally, the Fish and Wildlife Coordination Act states that the Secretary is authorized "to provide assistance to, and cooperate with, Federal, State, and public or private agencies and organizations in the development, protection, rearing, and stocking of all species of wildlife, resources thereof, and their habitat..."

The authorization for any incidental take of the Indiana bat and the northern long-eared bat, as defined in section 9 of the ESA, and resulting from impacts that may be associated with the qualified project(s), as defined in section 4 of this CMOA, is provided through the Service's incidental take statement and April 21, 2015 intra-Service biological opinion, which is incorporated herein by this reference. This biological opinion covers the Service's participation in conservation agreements for the Indiana bat and/or the northern long-eared bat, which includes this CMOA, that are based on implementation of the Conservation Strategy and exempts incidental take of Indiana bats and northern long-eared bats resulting from up to 2,000 acres of forested habitat for each species per year through April 30, 2020.

Section 3: STATEMENT OF MUTUAL INTEREST

The mission of the Service is to work with others to conserve, protect, and enhance fish, wildlife, and plants and their habitats for the continuing benefit of the American people. The Service's major responsibilities are for endangered species, threatened species, migratory birds, marine mammals, and freshwater and anadromous fish. The Service recognizes the ability and interest of Lee's Ford to contribute to the conservation and recovery of the Indiana bat and the northern long-eared bat, and recognizes Lee's Ford as a partner in the recovery and habitat conservation of the species. Lee's Ford recognizes the Service's mission and its interest in developing partnerships to protect, restore, and manage important habitats on private and public lands for federal listed species. The Cooperators understand the collaboration for this CMOA is voluntary.

Section 4: PROJECT DESCRIPTION

The proposed project consists of expanding the parking lot for the existing facility on Lake Cumberland in Pulaski County, Kentucky. The following information was derived and calculated from Mr. Terry Siemsen's August 25, 2015 emails and attachments.

The proposed project would result in the direct loss of 1.60 acres of forested habitat from one (1) Indiana bat habitat type and one (1) northern long-eared bat habitat type during the specified timeframes as depicted in Table 1 below.

Table 1

Species	Habitat Type	Timeframe	Acreage
Indiana bat	potential	unoccupied	1.60
Northern long-eared bat	potential	unoccupied	1.60
TOTAL ACRES:			1.60

These Indiana bat and northern long-eared bat habitat impacts are the impacts that are covered by this agreement and that were analyzed by the Service to assess the direct, indirect, and cumulative effects of the proposed project on Indiana bats and northern long-eared bats.

Section 5: EFFECTIVE DATE AND TERMS OF AGREEMENT

This MOA is valid for Lee's Ford's consideration for 90 days from the date of the Service's signature below, shall be deemed effective on the last date signed below, and shall remain

in effect until all terms of the agreement have been fulfilled, except as modified in Section 8 hereof.

Lee's Ford has determined that the removal of Indiana bat and northern long-eared bat habitat (*i.e.*, tree clearing) will occur during the unoccupied timeframe (October 15 – March 31). Clearing when the species are not anticipated to be present is a specific minimization measure that avoids direct effects on summer-roosting Indiana bats and northern long-eared bats and is intended to minimize the effect of the take on these species. The Imperiled Bat Conservation Fund contribution amount (identified in section 6.4 of the CMOA) is based on the assumption that all tree removal associated with the project will be conducted during the unoccupied timeframe. If tree clearing must occur during the occupied timeframe (April 1 – October 14), then Lee's Ford must notify the Service in advance of tree clearing, and the CMOA must be amended appropriately to account for the adverse effects to Indiana bats and northern long-eared bats that would occur as a result of tree clearing during the occupied timeframe. In addition, if additional forested areas not considered in Section 4 of this agreement are to be removed, then Lee's Ford must coordinate with the Service to determine if additional modification of this agreement is necessary, and, if found necessary, Lee's Ford will seek such modification.

Section 6: SPECIFIC OBLIGATIONS OF THE COOPERATORS

Lee's Ford and the Service agree to fulfill the following conditions to minimize the potential level of take of the Indiana bat and the northern long-eared bat, compensate for adverse effects on the Indiana bat and the northern long-eared bat that may result from construction of the project, and promote future conservation and recovery of the Indiana bat and the northern long-eared bat:

6.1 The Service will take the necessary steps to ensure that the project covered under this CMOA meets federal requirements for compliance with the National Environmental Policy Act (NEPA) and ESA. If Lee's Ford has NEPA requirements beyond the scope of this CMOA, Lee's Ford or other Federal action agency are responsible for those additional requirements.

With regard to the ESA, the Biological Opinion exempts incidental take of Indiana bats and northern long-eared bats associated with forested habitat removal. As such, paragraphs 6.3 and 6.4 are incorporated to ensure compliance with the Reasonable and Prudent Measures and Terms and Conditions of the biological opinion. Lee's Ford acknowledges that any divergence from these measures and conditions may result in a violation of Section 9 of the ESA.

6.2 Lee's Ford will take the necessary steps to ensure that the project covered under this CMOA meets federal requirements for compliance with the National Historic Preservation Act (NHPA).

6.3 The project proposed by Lee's Ford, as described in Section 4, will result in the incidental take of Indiana bats and northern long-eared bats in the form of habitat loss totaling not more than 1.60 acres of the habitat type(s) specified in Table 1. Lee's Ford may remove this habitat from October 15 to March 31 as stated in Section 5. If tree clearing is necessary outside of this timeframe, Lee's Ford must notify the Service so that the CMOA and Imperiled Bat Conservation Fund (IBCF) contribution amount can be amended

accordingly. Forested habitat associated with the proposed project, but not considered in this CMOA, shall not be removed without further coordination.

6.4 Lee's Ford shall contribute \$2,600 to the IBCF administered by the Kentucky Natural Lands Trust (KNLT). This contribution is based on the removal of 1.60 acres of habitat as specified in Table 1 using the process identified in the Conservation Strategy. Funds shall be provided to KNLT within thirty (30) days of the last signature to this CMOA. Lee's Ford shall provide the Service with a copy of the check or transaction receipt within seven (7) business days of payment that shows the date and amount of the deposit.

In summary, this CMOA provides recovery based conservation benefits for the Indiana bat and the northern long-eared bat in form of contributions to the IBCF which, in turn, will fund habitat protection, conservation, restoration and/or priority monitoring and research projects for the Indiana bat and the northern long-eared bat.

Section 7: COOPERATION

Both the Service and Lee's Ford acknowledge that it is their desire to facilitate the processes set forth in this CMOA by open communication and cooperation. Both parties agree to exercise their rights and obligations under this CMOA in good faith. If at any time Lee's Ford has questions regarding this CMOA or the Conservation Strategy, the Service agrees to make itself available for consultation in a timely fashion.

Section 8: MODIFICATION OR TERMINATION

Modifications to this CMOA may be proposed by either party in writing and will become effective upon being reduced to a written instrument and being signed by duly authorized representatives of the Cooperators.

Lee's Ford or the Service may terminate this CMOA at any time within or prior to thirty (30) days of the last signature to this CMOA upon written notification from the other signatory party. Failure to fulfill the provisions, as specified, within paragraph 6.4 will result in automatic termination of this CMOA.

Section 9: OTHER PROVISIONS

9.1 The Cooperators hereto agree that they shall be liable for the negligent or wrongful acts or omissions of their employees, agents, and assigns only to the extent liable under applicable law. Nothing in this CMOA shall be interpreted or construed as constituting a waiver by any party of sovereign immunity or statutory limitation on liability.

9.2 Each provision of this CMOA shall be interpreted in such a manner as to be effective and valid under applicable law, but if any provision of the CMOA shall be prohibited or invalid under application law, such provision shall be ineffective to the extent of such prohibition or invalidity, without invalidating the remainder of such provision or the remaining provisions of this CMOA.

9.3 No provision of this CMOA shall be interpreted as or constitute a commitment or requirement that either party take actions in contravention of applicable laws, either substantive or procedural.

9.4 Nothing in the CMOA shall be interpreted as or constitute a commitment or requirement that the Service obligate or pay funds in contravention of the Anti-Deficiency Act, 31 U.S.C. §1341, or any other law or regulation.

9.5 Third Parties Not to Benefit: This CMOA does not grant rights or benefits of any nature to any party not named or identified in this CMOA.

9.6 Merger: This CMOA contains the sole and entire CMOA of the parties. No oral representations of any nature form the basis of or may amend this CMOA. This CMOA may be extended, renewed, or amended only when agreed to in writing by the parties.

9.7 Waiver: Failure to enforce any provision of this agreement by either party shall not constitute waiver of that provision, nor a waiver of a claim for subsequent breach of the same type, nor a waiver of any other term of this agreement. The waiver of any provision must be express and evidenced in writing.

9.8 Assignment: No part of this agreement shall be assigned to any other party.

Section 10: NOTICES AND AUTHORIZED REPRESENTATIVES

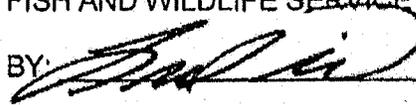
Notices shall be made in writing to the persons at the addresses listed below and may be given by personal delivery, mail or by telecopy (FAX) to the duly authorized representatives listed below. If there are changes in a party's representative, each party shall notify the other party, in writing, within thirty (30) days of the change in their representative.

U.S. Fish and Wildlife Service
Virgil Lee Andrews, Jr.
Field Office Supervisor
330 West Broadway, Room 265
Frankfort, Kentucky 40601
502/695-0468 (telephone)
502/695-1024 (fax)

Lee's Ford Resort and Marina
Attn: Mr. James D. Hamilton
451 Lee's Ford Dock Road
Nancy, KY 42544
contact: Terry Siemsen
terrysiensen@yahoo.com

Each party hereby indicates its acceptance of the terms and conditions of the CMOA as outlined herein by its signature below. The parties hereto have executed this CMOA as of the last written date below:

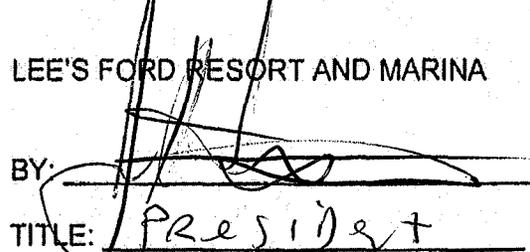
U.S. DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE

BY:  _____

TITLE: R4 Assistant Regional Director

DATE: 9/15/15

LEE'S FORD RESORT AND MARINA

BY:  _____

TITLE: President

DATE: 9/18/2015

APPENDIX C
Section 106 Compliance

DRAFT

Section 106 Compliance

Section 106 of the National Historic Preservation Act of 1966, as amended (NHPA), and its implementing regulations at 36 CFR 800 require consideration of cultural resources prior to a federal undertaking and requires consultation with the State Historic Preservation Officer (SHPO), Federally recognized tribes with a connection to the project location and other consulting parties defined at §800.3. The NHPA only affords protection to sites, buildings structures, or objects listed in or determined eligible for listing in the National Register of Historic Places (NRHP). In addition, under the Archaeological Resources Protection Act and section 110 of the NHPA, the Corps has responsibilities to protect and preserve significant archaeological sites. Archival research for this project involved consulting the National Register of Historic Places, Kentucky Historic Resources Survey, Corps site files and structure files. Table 1 summarizes the parties consulted, the mechanisms for consultation, and responses to the consultation. The Section 106 consultation has lead to a “no historic properties affected” determination for the proposed project.

Table 1. Summary of Section 106 of the National Historic Preservation Act Consultation.

Consulting Party	Initiation Date	Initiation Mechanism	No Affects to Historic Properties - Letter Sent	Concurrence to No Affects to Historic Properties Determination
Tennessee State Historic Preservation Officer	15 September 2015	1,2	15 September 2015	Awaiting Response
Tennessee State Historic Preservation Officer	15 September 2015	1,2	15 September 2015	Awaiting Response
Absentee-Shawnee Tribe of Indians of Oklahoma	15 September 2015	1,2	15 September 2015	Awaiting response
Cherokee Nation	15 September 2015	1,2	15 September 2015	Awaiting response
Eastern Band of Cherokee Indians	15 September 2015	1,2	15 September 2015	Awaiting response
Eastern Shawnee Tribe of Oklahoma	15 September 2015	1,2	15 September 2015	Awaiting response
Shawnee Tribe	15 September 2015	1,2	15 September 2015	Awaiting response
United Keetoowah Band of Cherokee	15 September 2015	1,2	15 September 2015	Awaiting response
Public	15 September 2015	1		

1-Notified of project in NEPA Public Review. 2-Section 106 initiation letter sent September 2015.

*Response date reflects the end of the 30 day comment period. No Response (NR) implies concurrence with the Corps finding of "no historic properties affected" as per 36 CFR 800.4(d).

National Historical Preservation Act: Consultation Summary

In a letter to the Kentucky Heritage Council (KHC) dated September 15, 2015, USACE made a determination of "no effects to historic properties". Per 36 CFR 800 (d)(1)(i) the KHC has 30 days to review and provide USACE with their comments regarding the proposed Federal Undertaking.

Consultation with Federally recognized American Indian Tribes was initiated September 15, 2015. Tribes include the following; United Keetoowah Band of Cherokee Indians, Oklahoma; Absentee-Shawnee Tribe of Indians of Oklahoma; Cherokee Nation; Eastern Band of Cherokee Indians; Eastern Shawnee Tribe of Oklahoma; and the Shawnee Tribe. Per 36 CFR 800 (d)(1)(i) the Tribes have 30 days to review and provide USACE with their comments regarding the proposed Federal Undertaking.

DRAFT

APPENDIX D
Public Notice/Scoping Letter
and
Comments

DRAFT



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Kentucky Ecological Services Field Office
330 West Broadway, Suite 265
Frankfort, Kentucky 40601
(502) 695-0468

RECEIVED
NOV 24 2014
BY: SMR

November 19, 2014

Ms. Cara Beverly
U.S. Army Corps of Engineers
Nashville District
Regulatory Branch
3701 Bell Road
Nashville, TN 37214

Re: FWS 2014-B-0453; LRN-2007-01037; Lee's Ford Marina; parking lot expansion; located in Pulaski County, Kentucky

Dear Ms. Beverly:

Thank you for the opportunity to provide comments on the above-referenced project. The U.S. Fish and Wildlife Service (Service) has reviewed this proposed project and offers the following comments in accordance with the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) and the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 *et seq.*). This is not a concurrence letter. Please read carefully, as further consultation with the Service may be required.

In order to assist you in determining if the proposed project has the potential to impact protected species we have searched our records for occurrences of listed species within the vicinity of the proposed project. Based upon the information provided to us and according to our databases, we believe that the following federally listed species have the potential to occur within the project vicinity:

Group	Species	Common name	Legal* Status
Mammals	<i>Myotis grisescens</i>	gray bat	E
	<i>Myotis sodalis</i>	Indiana bat	E
	<i>Myotis septentrionalis</i>	Northern long-eared bat	P

* Key to notations: E = Endangered, T = Threatened, P = Proposed, C = Candidate, CH = Critical Habitat

We must advise you that collection records available to the Service may not be all-inclusive. Our database is a compilation of collection records made available by various individuals and resource agencies. This information is seldom based on comprehensive surveys of all potential

habitats and thus does not necessarily provide conclusive evidence that protected species are present or absent at a specific locality.

Indiana bat

The proposed project is located in Indiana bat “potential habitat,” therefore we believe that: (1) caves, rockshelters, and abandoned underground mines in the vicinity of and in the project area may potentially provide suitable wintering habitat for the Indiana bat; and (2) forested areas in the vicinity of and in the project area may potentially provide suitable summer roosting and foraging habitat for the Indiana bat. In order to address the concerns and be in compliance with the ESA, we have the following recommendations relative to potential direct and/or indirect effects as a result of impacts to the habitats listed above:

- (1) During hibernation, the Indiana bat prefers limestone caves, sandstone rockshelters, and abandoned underground mines with stable temperatures of 39 to 46 degrees F and humidity above 74 percent but below saturation. Prior to hibernation, Indiana bats utilize the forest habitat up to five miles from the hibernacula to feed and roost until temperatures drop to a point that forces them into hibernation. This “swarming” period is dependent upon weather conditions and lasts from about September 15 to about November 15. This is a critical time for Indiana bats, since they are acquiring additional fat reserves and mating prior to hibernation.

Based on the presence of numerous caves, rock shelters, and underground mines in Kentucky, we believe that it is reasonable to assume that other caves, rock shelters, and/or abandoned underground mines may occur within the project area, and, if they occur, they could provide winter habitat for Indiana bats. Therefore, we recommend that the project proponent survey the project area for caves, rock shelters, and underground mines, identify any such habitats that may exist on-site, and avoid impacts to those sites pending an analysis of their suitability as Indiana bat habitat by this office.

- (2) The Indiana bat utilizes a wide array of forested habitats, including riparian forests, bottomlands, and uplands for both summer foraging and roosting habitat. Indiana bats typically roost under exfoliating bark, in cavities of dead and live trees, and in snags (*i.e.*, dead trees or dead portions of live trees). Trees in excess of 16 inches diameter at breast height (DBH) are considered optimal for maternity colony roosts, but trees in excess of 9 inches DBH appear to provide suitable maternity roosting habitat. Male Indiana bats have been observed roosting in trees as small as 5 inches DBH.

To address potential impacts to Indiana bat summer roosting and foraging habitat we recommend that the project proponent survey the project site to determine the presence or likely absence of Indiana bats within the project area in an effort to determine if potential effects are likely. A qualified biologist who holds the appropriate collection permits for the Indiana bat must undertake such surveys in accordance with our most current survey guidance. If any Indiana bats are identified, we would request written notification of such occurrence(s) and further coordination and consultation.

As an alternative to surveying, the following options are also available:

- The project proponent can modify the proposed project to eliminate or reduce impacts to suitable Indiana bat habitat, thus avoiding impacts. A habitat

assessment may be useful in determining if suitable Indiana bat summer roosting or foraging habitat is present in the action area of the proposed project.

- The project proponent can request formal section 7 consultation through the lead federal action agency associated with the proposed project. To request formal consultation, the project proponent would need to submit a Biological Assessment that describes the action and evaluates the effects of the action on the listed species in the project area. After formal consultation is initiated, the Service has 135 days to prepare a Biological Opinion that analyzes the effects of the action on the listed species and recommends strategies to minimize those effects.
- The project proponent may provide the Service with additional information through the informal consultation process, prepared by a qualified biologist, that includes site-specific habitat information and a thorough effects analysis (direct, indirect, and cumulative) to support a “not likely to adversely affect” determination. The Service will review this and decide if there is enough supporting information to concur with the determination.
- The project proponent may choose to assume presence of the species in the project area and enter into a Conservation Memorandum of Agreement (MOA) with the Service to account for the incidental take of Indiana bats. By entering into a Conservation MOA with the Service, Cooperators gain flexibility with regard to the removal of suitable Indiana bat habitat. In exchange for this flexibility, the Cooperator provides recovery-focused conservation benefits to the Indiana bat through the implementation of minimization and mitigation measures that are described in the Indiana Bat Mitigation Guidance for the Commonwealth of Kentucky. For additional information about this option, please notify our office.

Gray bat

Gray bats roost, breed, rear young, and hibernate in caves year round. They migrate between summer and winter caves and will use transient or stopover caves along the way. Gray bats eat a variety of flying aquatic and terrestrial insects present along streams, rivers, and lakes. Low-flow streams produce an abundance of insects and are especially valuable to the gray bat as foraging habitat. For hibernation, the roost site must have an average temperature of 42 to 52 degrees F. Most of the caves used by gray bats for hibernation have deep vertical passages with large rooms that function as cold air traps. Summer caves must be warm, between 57 and 77 degrees F, or have small rooms or domes that can trap the body heat of roosting bats. Summer caves are normally located close to rivers or lakes where the bats feed. Gray bats have been known to fly as far as 12 miles from their colony to feed.

Because we have concerns relating to the gray bat on this project and due to the lack of occurrence information available on this species relative to the proposed project area, we have the following recommendations relative to gray bats.

- Based on the presence of numerous caves, rock shelters, and underground mines in Kentucky, we believe that it is reasonable to assume that other caves, rock shelters, and/or abandoned underground mines may occur within the project area, and, if they

occur, they could provide winter/summer habitat for gray bats. Therefore, we would recommend that the project proponent survey the project area for caves, rock shelters, and underground mines, identify any such habitats that may exist on-site, and avoid impacts to those sites pending an analysis of their suitability as gray bat habitat by this office.

- Sediment Best Management Practices (BMPs) should be utilized and maintained to minimize siltation of the streams located within and in the vicinity of the project area, as these streams represent potential foraging habitat for the gray bat.

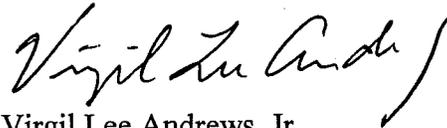
Northern long-eared bat

The northern long-eared bat was proposed for federal listing under the ESA on October 2, 2013. The Service has extended the deadline for the final determination to April 2, 2015. No designated critical habitat has been proposed at this time. The entire state of Kentucky is considered potential habitat for the northern long-eared bat. During the summer, northern long-eared bats typically roost singly or in colonies in a wide-variety of forested habitats, where they seek shelter during daylight hours underneath bark or in cavities/crevices of both live trees and snags, including relatively small trees and snags that are less than 5 inches in diameter at breast height (DBH). Northern long-eared bats have also been documented roosting in man-made structures (i.e., buildings, barns, etc.) during the summer. According to current winter occurrence data, northern long-eared bats predominately winter in hibernacula that include caves, tunnels, and underground mine passages.

Although species proposed for listing are not afforded protection under the ESA, when a species is listed, the prohibitions against jeopardizing its continued existence and unauthorized take are effective immediately, **regardless of an action's stage of completion**. Therefore, to avoid significant project delays, we recommend that you contact our office to identify and resolve potential conflicts regarding the northern long-eared bat in your project area.

Thank you again for your request. Your concern for the protection of endangered and threatened species is greatly appreciated. If you have any questions regarding the information that we have provided, please contact Jessi Miller at (502) 695-0468 extension 104.

Sincerely,



Virgil Lee Andrews, Jr.
Field Supervisor



RECEIVED
DEC 12 2014
BY: JMK

ENERGY AND ENVIRONMENT CABINET

Steven L. Beshear
Governor

DEPARTMENT FOR ENVIRONMENTAL PROTECTION
300 FAIR OAKS LANE
FRANKFORT, KENTUCKY 40601
PHONE (502) 564-2150
FAX (502) 564-4245
www.dep.ky.gov

Leonard K. Peters
Secretary

R. Bruce Scott
Commissioner

December 9, 2014

U.S. Army Corps of Engineers
Nashville District
Attn: Cara Beverly
3701 Bell Road
Nashville, TN 37214-2660

RE: Coordinated State Response
Public Notice No: 14-29
Applicant: Lee's Ford Marina/Mr. J.D. Hamilton
Proposed Activity: The proposed work would involve the permanent placement of fill material into the waters of the United States associated with bridge construction at Lake Barkley on US 68/KY 80 highway located in Trigg County, Kentucky.

Dear Cara Beverly:

The Energy and Environment Cabinet's Department for Environmental Protection has coordinated the above referenced public notice with concerned state agencies in order to prepare a statement of the Commonwealth's concerns on the proposed activity. We have the following comments concerning this project.

1. The Kentucky Division for Air Quality provided the following comments concerning Kentucky Administrative Regulations that may apply to this project. Questions should be directed to Joe Forgacs, at (502) 564-3999. The Division also suggests an investigation into compliance with applicable local government regulations.

Kentucky Division for Air Quality Regulation 401 KAR 63:010 Fugitive Emissions states that no person shall cause, suffer, or allow any material to be handled, processed, transported, or stored without taking reasonable precaution to prevent particulate matter from becoming airborne. Additional requirements include the covering of open bodied trucks, operating outside the work area transporting materials likely to become airborne, and that no one shall allow earth or other material being transported by truck or earth moving equipment to be deposited onto a paved street or roadway. Please note the Fugitive Emissions Fact Sheet located at http://www.air.ky.gov/homepage_repository/e-Clearinghouse.htm.

Kentucky Division for Air Quality Regulation 401 KAR 63:005 states that open burning is prohibited. Open burning is defined as the burning of any matter in such a manner that the products of combustion resulting from the burning are emitted directly into the outdoor atmosphere without passing through a stack or chimney. However, open burning may be utilized for the purposes listed on the Open Burning Fact Sheet located at http://www.air.ky.gov/homepage_repository/e-Clearinghouse.htm.

Letter to Cara Beverly

December 9, 2014

Page 2

The Division would like to offer the following suggestions on how this project can help us stay in compliance with the NAAQS. More importantly, these strategies are beneficial to the health of citizens of Kentucky.

- Utilize alternatively fueled equipment.
- Utilize other emission controls that are applicable to your equipment.
- Reduce idling time on equipment.

The Division also suggests an investigation into compliance with applicable local government regulations.

2. The Division of Water offered the following comments.

This project requires an Individual Water Quality Certification from the Kentucky Division of Water. The Kentucky Division of Water is currently working with the applicant. Questions should be directed to Joyce Fry at (502) 564-3410.

Best management practices shall be utilized to reduce runoff into Lake Cumberland. Questions should be directed to John Brumley at (502) 564-3410.

Pursuant to KRS 151.250, an Application to Construct Across or Along a Stream will need to be submitted to the Division of Water for further review of this project. Questions should be directed to Julia Harrod at (502) 564-3410.

Contractors performing the work may need a Groundwater Protection Plan depending on the onsite activities. Questions should be directed to Phil O'Dell at (502) 564-3410.

If you have any additional questions, please contact me at (502) 564-2150.

Sincerely,



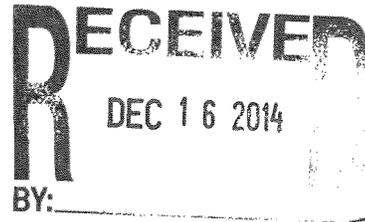
R. Bruce Scott
Commissioner

cc: Joyce Fry, Division of Water
Lee's Ford Marina/Mr. J.D. Hamilton

VIA ELECTRONIC MAIL

December 16, 2014

U.S. Army Corps of Engineers
Nashville District Regulatory Branch
ATTN: Cara Beverly
3701 Bell Road
Nashville, TN 37214



RE: LRN-2007-01037

Dear Ms. Beverly,

Please accept the following comments on behalf of the Kentucky Waterways Alliance, Inc. ("KWA", "the Alliance") regarding the proposed Department of the Army (DA) permit application LRN-2007-01037 for the proposed expansion of Lee's Ford Marina at Lake Cumberland (the "applicant").

KWA is a statewide nonprofit organization dedicated to protecting and restoring the waters of the Commonwealth. KWA represents over 900 members and affiliate organizations united to insure high quality water resources in Kentucky for diverse recreational activities such as swimming, boating, and fishing as well as reliable drinking water supplies and biological habitat.

The proposed project is located in Pulaski County, Kentucky. The project description includes the following:

"The proposed action is the placement of limestone rock fill excavated from an area identified on Exhibit B and Exhibit C, Project Plans, as "borrow area" and placed within the area designated as "fill area".....the total fill area, including fill in uplands, would be approximately 5.11 acres to be used as additional parking containing approximately 325 vehicle spaces.....The fill volume would total approximately 115,240 cubic yards of material below normal summer pool elevation of 723 feet m.s.l. Temporary impacts include placement of 30 feet of 36-inch culvert in an intermittent stream for access path from the borrow area to fill site."

KWA has several concerns with this project. First, we have significant concerns regarding the excavation, or borrow area, as proposed. Second, we are concerned with the project purpose to place fill into the lake and construct additional parking area within the floodzone and effectively "in" the lake. Doing so exposes the lake to the many pollutants from automobiles via stormwater runoff. Finally, we also have concerns with lack of any mitigation proposed by the applicant.

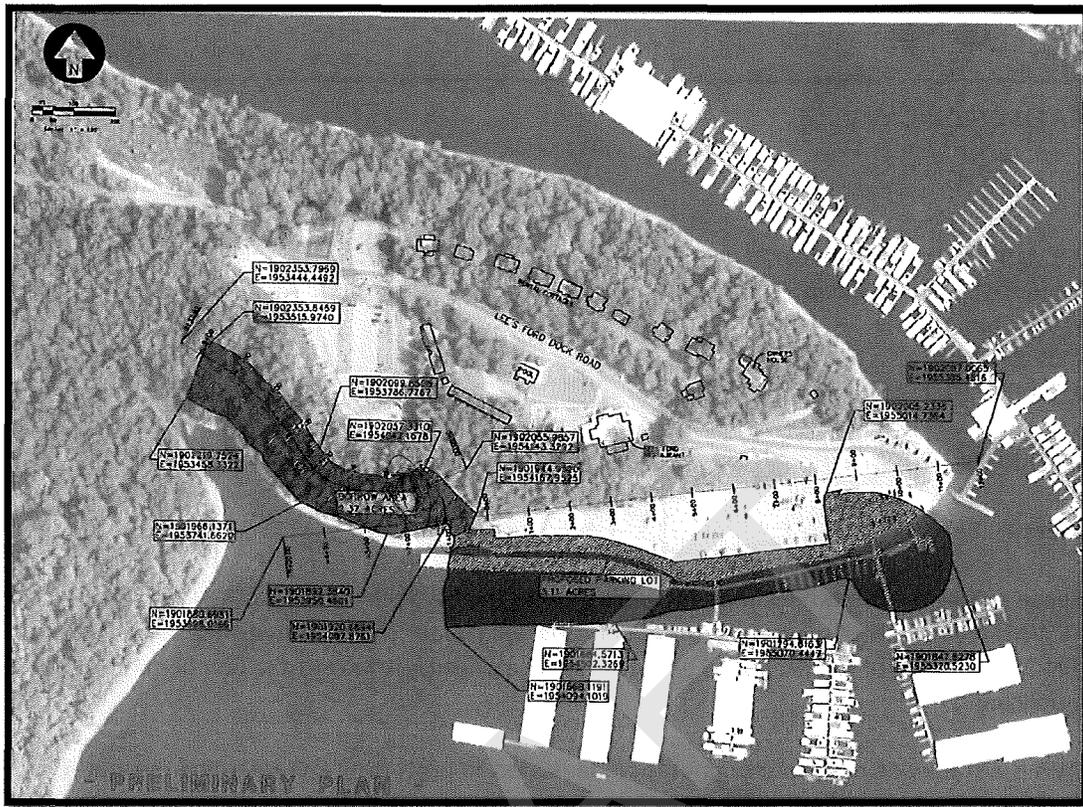


Figure 1. Preliminary plan from application.

As proposed the applicant intends to excavate an area west of the proposed parking location for the needed limestone that would be placed in the lake as the base for the parking area. This borrow area is currently a forested riparian zone.



Figure 2. Ephemeral stream adjacent to the proposed borrow area.

The applicant has proposed to excavate out bedrock for use as structural fill for the parking area. It is unclear, after excavation, what this borrow area will become. Will it be regarded with soil and planted to return it to riparian habitat? Will it be flattened and paved over for future use as parking? Will it serve some other purpose that will not lead to it becoming a water quality concern? Will the applicant protect the lake from sediment runoff as excavation occurs? These are all important questions that need to be answered in this application. Having said that, the proposed borrow area should not be allowed regardless. The value of the existing riparian habitat should not be supplanted by the need for fill material, which can be acquired elsewhere.

KWA's second concern extends to the project concept in general. We are strong proponents of projects and design concepts that attempt to protect and enhance our water resources whenever possible. In this situation, the existing parking lot has already been constructed immediately adjacent to the lake and therefore contributes stormwater runoff pollution directly into the lake. This is a significant concern for us. It is entirely negligent, knowing that stormwater runoff is the largest contributor to stream impairments both in Kentucky and nationwide, to proceed with a proposal to enlarge this existing parking area by further expanding into the lake footprint—even if, as the applicant says, it has "minimal environmental effects within the Lake Cumberland watershed." Doing so means more stormwater runoff laden with oils and other contaminants from automobiles being discharged directly into Lake Cumberland.

The applicant's opinion may be that the proposal has minimal environmental effects. However, upon further consideration, if this project is approved, then nothing is to prevent similar projects from being approved. As each new impervious surface is added to the waterfront, the collective impacts are very significant, both hydrologically and from a water pollution standpoint. Pollutants will go straight into the lake, without any filtration and treatment by soils and plants. Less vegetation around the lake means less rainfall captured, and more cumulative runoff. Thus, KWA disagrees with the applicant's assessment that this proposal has minimal environmental effects, from the perspective of 404(b)(1) guidelines and permitting process.

Finally, we have concerns with the lack of mitigation. The applicant has proposed to remove valuable riparian and flood attenuation habitat, has proposed wetland impacts, and has proposed to encroach into the lake. KWA would like to see a mitigation proposal that includes some form of green infrastructure that will capture and treat the first flush of stormwater runoff from the parking area.

Thank you for the opportunity to submit comments on behalf of Kentucky Waterways Alliance, our members, and the citizens of the Commonwealth of Kentucky. Please provide a response to comments and notice of determination to the address listed.

Respectfully Submitted,



APPENDIX E

Draft EA Public and Agency Review Comments

DRAFT