Davidson County, SR-112 from SR-12 (Ashland City Highway) to
SR-155 (Briley Parkway)
Davidson County, Tennessee
PIN No. 103764
P.E. No. 19046-1214-14

ECOLOGY REPORT

Prepared By:

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April 26, 2007

Introduction

TDOT proposes to upgrade the existing two-lane State Route (SR)-112 to a five lane highway. Studies to determine the impacts of the proposed upgrade on the local ecology were conducted by biologists from AMEC Earth & Environmental, Inc. (AMEC) on March 22, 2007. Studies included literature and database surveys as well as on-foot reconnaissance. Particular attention was given to locating streams, wetlands, and specialized habitats such as glades, caves, springs, and sinkholes which could harbor protected species or influence water quality. No previous studies had been conducted in this area.

Project Type

At the time of these studies, the project is proposed to extend from SR-12 (Ashland City Highway) to SR-155 (Briley Parkway). One alternative was studied. The upgraded highway will consist of four 12-foot traffic lanes, a 12-foot continuous center turn lane, 4-foot shoulders/bikeways with gutters, curbs, grass utility strips, and 8-foot sidewalks within a 102-foot right-of-way. Most of the route will be widened symmetrically along the present roadway centerline.

Project Setting

The proposed project is located in the northern portion of Davidson County, Tennessee. It is shown on Figure 1, USGS 7.5 minute topographic quadrangle Nashville West, Tennessee (3656 NE). This portion of the county is within the Central Basin physiographic region. The project area is underlain by limestone of the Richmond Group, Leipers and Catheys Formations, and Bigby Cannon Limestone (Wilson, 1966). Soils in the area are primarily Mimosa-Urban Land-Rock Outcrop, described on the USDA General Soil Map for Davidson County (1981) as undulating to hilly, well drained soils, Urban land, and outcrops of phosphatic limestone. Soils adjacent to Whites Creek are identified as Arrington-Lindell-Armour, which are described as nearly level to gently sloping, well drained and moderately well drained soils on floodplains and terraces. The project is located within the Whites Creek watershed (within the Lower Cumberland-Sycamore Watershed/ USGS Cataloging Unit: 05130202). The project area crosses Whites Creek.

Terrestrial Ecology

Most of the land in the project corridor has been disturbed at one time or another. The majority of the project area is industrial, commercial, residential lands, or areas in earlier stages of succession, which have limited habitat values. A few areas are forested or in shrub/scrub thickets. A small amount of higher quality

habitat such as riparian forest and floodplain forest occurs just along Whites Creek.

Specifically land use around Whites Creek is old field, with a small riparian contingent adjacent to the stream (NE quadrant); old field, with a small riparian contingent adjacent to the stream (SE quadrant); forested (SW quadrant); and forested (NW quadrant).

Plant communities found in the area are characteristic of communities formed over limestone. Different communities may develop on different (limestone, sandstone, etc.) strata; elevation differences also have an influence. Land use along SR-112 includes industrial, commercial, and residential development; both upland and floodplain forests; and disturbed scrub-shrub and old field habitats.

The upland forested communities are dominated by hackberry and redcedar with an understory of shrub honeysuckle. Boxelder is common along the floodplain of Whites Creek. Occasional American sycamore is also present and shrub honeysuckle is widespread in the floodplain habitats. Disturbed scrub-shrub and old field habitats contain a variety of old field species (i.e., broomsedge and various grasses) as well as shrub honeysuckle, sumac, and occasional redcedar trees. Invasive species such as shrub honeysuckle are abundant in all areas along the project corridor.

Both upland and floodplain forested habitats provide food, cover, and nesting opportunities for numerous small mammals. These animals include rabbits, squirrels, other rodents, as well as numerous reptiles, native birds, spiders and other arachnids, and numerous insects.

Old-field habitats in various stages of succession are also useful to many types of wildlife. These areas are most often dominated by grasses and legumes, blackberries, and young redcedars. The industrial, commercial, and residential lands generally have limited wildlife value, as they are usually paved or mowed, except for undisturbed vegetation along fencerows or boundaries.

Terrestrial Impacts:

Direct impacts: Approximately 2.25 acres of forested and shrub habitat and 0.9 acre of old field habitat will be directly impacted as a result of the project. This loss is one of the larger impacts of the project. There will be direct long-term adverse impacts when forests and old-field areas are converted to roadway.

Mortality of individual wildlife may occur both during construction and highway operation. Although roadway mortality is generally not believed to significantly affect animal populations under normal conditions, if the population is experiencing other sources of stress (e.g., disease, habitat degradation or

elimination), then traffic-related mortality can contribute to the demise of the population. Highway noise can affect the utilization of habitats by wildlife. Since this is an urban project and is an expansion of an existing road, noise is already a factor within existing habitats. After project construction, areas that remain undisturbed within highway rights of way, will, over time, provide some degree of refuge for local wildlife as the surrounding areas continue to urbanize and habitats are destroyed.

Indirect impacts: The plant communities found along the project serve as shelter, nesting, and foraging habitat for numerous species of wildlife. Loss of habitat initially displaces animals from the area, forcing them to concentrate into a smaller area, which causes over-utilization of the habitat. This ultimately lowers the carrying capacity of the remaining habitat and is manifested in some species as becoming more susceptible to disease, predation, and starvation.

Cumulative Impacts: In a developing area such as this portion of Davidson County, the amount of forested habitat is currently relatively abundant, but is expected to decrease as the area continues to develop. Most of the area around the project corridor has already been developed for residential commercial, and industrial uses (refer to Figure 1 and Table 1). After project construction undisturbed areas within the rights of way, over time, will provide refuge for local wildlife as the surrounding area continues to urbanize and habitats continue to dwindle.

Table 1. Total terrestrial habitat acreages potentially affected.

Alternative	Forested, scrub/shrub, forested floodplain	Pasture, agricultural, or early stages of old-field succession	Commercial/ Industrial/ Residential	**Total acres**
State Route 112 Alternative	2.25 acres	0.9 acre	15.03 acres	**18.18**

Note: These acreage amounts were calculated based on typical sections shown on aerial photographs, and are given for impact estimation/comparison purposes. They include all areas within existing rights-of-way in the project areas that are already owned by the state, portions of which are likely to be utilized for project construction. For instance, existing rights-of-way along (road, near where) are included in the habitat calculations, but are not included in the right-of-way acquisition amounts shown elsewhere in the environmental document. Not all of the habitat amounts shown will actually be disturbed, since lands outside those needed for actual construction or work zones or for other reasons will not be cleared.

Aquatic Ecology

The project has been located, and will be designed, to avoid major impacts to waters of the state to the extent practicable. Efforts to further minimize impacts will continue throughout the design, permitting, and construction processes. Unavoidable impacts will be mitigated as required by applicable laws and regulations. Mitigation is discussed further in the sections applying to streams and wetlands. In an effort to minimize sedimentation impacts, erosion and sediment control plans will be included in the project construction plans. TDOT will also implement its Standard Specifications for Road and Bridge Construction, which includes erosion and sediment control standards for use during construction. The State of Tennessee sets water quality criteria for waters of the state; these standards must be met during the construction of the highway (bridge) improvement.

Streams, Springs, and Seeps and other Waterbodies: Streams, springs, seeps, impoundments and other watercourses and waterbodies, which are known at this time to be potentially affected by the project alternatives, are listed in Table 2 of this report, along with the potential direct impacts. The location of streams and wet weather conveyances are shown on Figure 1. The determinations as to which are waters of the State and/or of the U.S. have not been confirmed by TDEC and the Corps. All aquatic impacts identified as project development continues will be avoided, minimized, or mitigated to the extent possible, and incorporated into the permitting.

Direct Impacts: The proposed Alternative will cross one stream (bridge across Whites Creek). Additionally, two small streams originate in areas potentially affected by construction and could also be impacted during construction. It is difficult to determine the exact impact type at these sites with present information; therefore the information in Table 2 represents the anticipated worst-case impact, with the assumption that these impacts will be reduced, where possible, during further project design.

Indirect Impacts: The implementation of the proposed Alternative could add some sedimentation impacts to Whites Creek as well as other small streams in the area; these impacts could probably be minimized by good sediment control planning and implementation.

Cumulative Impacts: Culverting, sediment impacts, and the addition of impervious surfaces in a geographic area all tend to degrade overall quality of aquatic habitats and water quality. The placement of lengths of streams in culverts is considered by TDEC to be a permanent impact. While the water quality impacts of culverts over 200 feet in length are mitigated by off-site programs, increases in numbers of culverts associated with highways, private

driveways, and industrial and commercial development may cumulatively reduce available habitats over time.

Mitigation: It is unlikely that mitigation will be required. However, if required, stream or water body impacts that cannot be mitigated on site, or impacts to springs or seeps, which require rock fill to allow for movement of water underneath the roadway, will either be mitigated off-site by improving a degraded system or by making a comparable payment to an in-lieu-fee program which will perform such off-site mitigation under the direction of state and Federal regulatory and resource agencies.

Table 2. Streams, watercourses, and waterbodies affected by proposed alternative alignments of SR-112 from SR-12 (Ashland City Highway) to SR-155 (Briley Parkway), Davidson County, State of Tennessee (see Figure 1).*

Stream watercourse waterbody	Location	Potential Impacts	Legal Designation (confirmed/ unconfirmed)	Stream/Watercourse/Waterbody Description
STR-1 Whites Creek	300 feet south of intersection with E. Hamilton Road	Potential sediment impacts during construction	Stream (confirmed)	The channel is 50-65 feet across and 5-6 feet deep. Water surface width is 35-45 feet, and water depth 0.5-2 feet. The substrate is gravelly and rocky. Aquatic macroinvertebrates and fish are likely abundant. Forested riparian areas include box elder and American sycamore. See photographs 2-4.
STR-2	Directly south of the Marathon Station at the Kings Lane intersection.	Potential sediment impacts during construction	Stream (unconfirmed)	Small stream originating from seep within ROW. Area immediately surrounding seep contain hydrophytic vegetation (willow and cottonwood trees), but not hydric soils. Stream approximately 1 foot wide; aquatic vegetation present, but no aquatic invertebrates observed. See photographs 9-10.
STR-3	Directly north of Fairmeade Drive	Potential sediment impacts during construction	WWC/ Stream (unconfirmed)	WWC-5 turns into STR-3. WWC within ROW, stream portion is not. Stream portion 1-2 feet wide, water depth 0.5 inch, leeches and isopods present in stream portion. See photographs 11-14.
WWC-1	Approx. 500 feet north of south end of project, west side of SR-112.	Potential sediment impacts during construction	WWC/ (unconfirmed)	Small drainage originating in ROW and continues to the southwest off ROW. See photograph 5.

Stream watercourse waterbody	Location	Potential Impacts	Legal Designation (confirmed/ unconfirmed)	Stream/Watercourse/Waterbody Description
WWC-2	Adj. to Whites Creek, southeast quadrant	No impact	WWC (unconfirmed)	Small drainage entering Whites Creek, southeast quadrant. See photograph 6**.**
WWC-3	Adj. to Whites Creek, northeast quadrant	Filled/ relocated.	WWC (unconfirmed)	Small drainage entering Whites Creek, northeast quadrant. See photograph 7**.**
WWC-4	Between Hamilton Rd and Whites Creek, west side of SR-112	Filled/ relocated.	WWC (unconfirmed)	Large ditch adjacent to SR-112. See photograph 8.
WWC-5	Approx. 150 feet north of Fairmeade Rd, east side of SR-112.	Potential sediment impacts during construction	WWC (unconfirmed)	Originates as small roadside ditch and conveys water downhill towards Stream 3. See photographs 15 and 16.

*These watercourses and waterbodies, and any others subsequently located, may require determination, or confirmation of, their status as stream or wet-weather conveyances or other waters of the state by the Tennessee Department of Environment and Conservation Division of Water Pollution Control, and as perennial, intermittent or ephemeral streams or other waters of the U.S. by the U.S. Army Corp of Engineers

Wetlands. No wetlands have been identified within or near the anticipated project limits. No wetlands were reported by the U.S. Fish and Wildlife Service based on National Wetland Inventory Maps (letter dated March 15, 2007).

Beneficial Ecological Floodplain Values. Ecological values associated with the floodplain of Whites Creek include: providing habitat and refuge for a variety of species, reducing runoff and sediment that enter Whites Creek from adjacent areas; and providing shade and bank stabilization for Whites Creek. Impacts to these values have been avoided or minimized by crossing the floodplain at a near-perpendicular angle, with appropriately sized bridge.

Endangered and Threatened Species. Information from several sources, as well as prior experience with habitats in the area, was used to prepare for field surveys to locate protected species or habitats. These sources included database information provided by the Tennessee Department of Environment and Conservation and books or databases of cave records.

Direct and Indirect Impacts. No protected species records were shown within the likely direct impact zone of the project or within a one mile radius. Species records listed within a four mile radius are Cumberlandian combshell (*Epioblasma brevidens*), prairie parsley (*Polytaenia nutallii*), willow aster (*Aster praealtus*), Tennessee milk vetch (*Astragalus tennesseenisis*), Bewick's wren (*Thryomanes bewickii*), Eastern woodrat

(*Neotoma magister*), and Peregrine falcon (*Falco peregrinus*). A letter from the U.S. Fish and Wildlife Service (dated March 15, 2007) listed no species for consideration.

Epioblasma brevidens - Cumberlandian combshell - This species inhabits medium-sized streams to large rivers on shoals and riffles in coarse sand, gravel, cobble, and boulders. It is not associated with small stream habitats. There are no records of this species occurring in Whites Creek (Bulter and Biggins, 2003). It is highly unlikely that this species occurs within the project area or would be impacted by the project. The project is not likely to adversely affect this species.

Polytaenia nutallii - Prairie parsley - Appropriate habitat for this species includes dry to mesic prairies, but may be found in other disturbed dry areas such as glades, rocky savannahs, clearings, open woodlands, fields, and roadsides. Only marginal habitat occurs within the project area; therefore this species is not likely to occur within the project area. It is unlikely that this species would be impacted by the proposed project.

Aster praealtus - Willow aster - Appropriate habitat for this species includes moist prairies, moist meadows along lakes or rivers, thickets, roadside ditches, abandoned fields, and poorly drained areas. This habitat does not occur within the project area; therefore, this species is not likely to occur within the project area. It is unlikely that this species would be impacted by the proposed project.

Astragalus tennesseenisis - Tennessee milk vetch - Appropriate habitat for this species includes glade habitats and, therefore, is not likely to occur within the project area. No glade habitats occur within the project area. It is unlikely that this species would be impacted by the proposed project.

Thryomanes bewickii - Bewick's wren - Appropriate habitat includes brushy areas, thick undergrowth, clearings, gardens, orchards, fencerows, stream edges, open scrubby woods. Due to appropriate habitat within the project area, it is reasonable to believe that this species likely enters the project area on occasion. It is unlikely that this species would be impacted by the proposed project.

Neotoma magister - Eastern woodrat - This species uses a variety of forested habitats, including floodplain and deciduous forests. Although possible, it is unlikely that this species occurs within the project area due to its rarity. No woodrat nests were observed during initial field reviews. It is unlikely that this species would be impacted by the proposed project.

Falco peregrinus - Peregrine falcon - This species utilizes a variety of open and forested areas. It is reasonable to believe that this species may enter the project area on occasion as a transient. It is unlikely that this species would be impacted by the proposed project.

Cumulative impacts. No impacts to threatened and endangered species are anticipated.

Conclusions. At this time, no state or Federally listed protected species are known to be affected by the proposed project.

Information received from the Tennessee Department of Environment and Conservation is periodically reviewed and updated. If any protected species or their habitats are identified as project development continues, they will be addressed in accordance with applicable laws and regulations.

Required Permits

Stream and miscellaneous water quality permits. Alterations to streams or other aquatic sites designated as waters of the State or waters of the United States require either individual or general Aquatic Resource Alteration Permits (ARAP) from the State of Tennessee, individual or Nationwide 404 U. S. Army Corps of Engineers permits and, where applicable, a TVA 26a permit or letter of no objection. Construction projects disturbing one or more acres of land require storm water control permits issued by the State of Tennessee pursuant to the National Pollutant Discharge Elimination System. For any project that affects water flowing into an open sinkhole or cave, or for any impact that may affect the ground water via a sinkhole, a Class V Injection Well permit may be required. This process involves obtaining a permit before the project is let if open sinkholes are known to exist. If other sinkholes are encountered after construction has begun, the appropriate TDOT offices will be notified and the appropriate steps taken to comply with laws, regulations, and permits. These or any other permit requirements identified in the project development process will be complied with (TVA permit, coast guard permit).

Wetland Permits (not required for this project). All wetland impacts require confirmation by, and coordination with, permitting agencies. All require either general or individual Aquatic Resources Alteration (ARAP) permits from the State of Tennessee. Almost all require either Nationwide or Individual permits from the U. S. Army Corps of Engineers pursuant to Section 404 of the Clean Water Act. Other agencies such as the U. S. Fish and Wildlife Service and the Environmental Protection Agency may be involved in the permitting process.

Wetland impacts, which are subject to either State or Federal jurisdiction and do not meet criteria for either general or Nationwide permits, require individual permits; these typically require compensatory mitigation for impacts. In general, **isolated** wetlands with less than 0.25 acre impacts may come under the guidelines of a general permit issued by the State of Tennessee; no mitigation is required. This permit cannot be used, however, for a cumulative series of small impacts. Some wetland impacts of less than 0.5 acres qualify for Corps of Engineers nationwide permits.

TDOT will carry out further coordination with the regulatory agencies before preparing mitigation plans and submitting permit applications. Permit requirements and mitigation plans will be based on these discussions.

Summary of Findings

The majority of the project area is industrial, commercial, residential lands, or areas in earlier stages of succession; which have limited habitat values. A few areas are forested or in shrub/scrub thickets, and a small amount of higher quality habitat such as riparian forest and floodplain forest occurs just along Whites Creek. Invasive species such as shrub honeysuckle are abundant in all areas along the project corridor. Only approximately 2.25 acres of forested and shrub habitat and 0.9 acre of old field habitat will be directly impacted as a result of the project.

The proposed Alternative will cross one stream (Whites Creek). Additionally, two small streams and several wet weather conveyances originate in areas potentially affected by construction and could also be impacted during construction. The implementation of the proposed Alternative could add some sedimentation impacts to Whites Creek as well as the other small streams in the area. These impacts could probably be minimized by good sediment control planning and implementation.

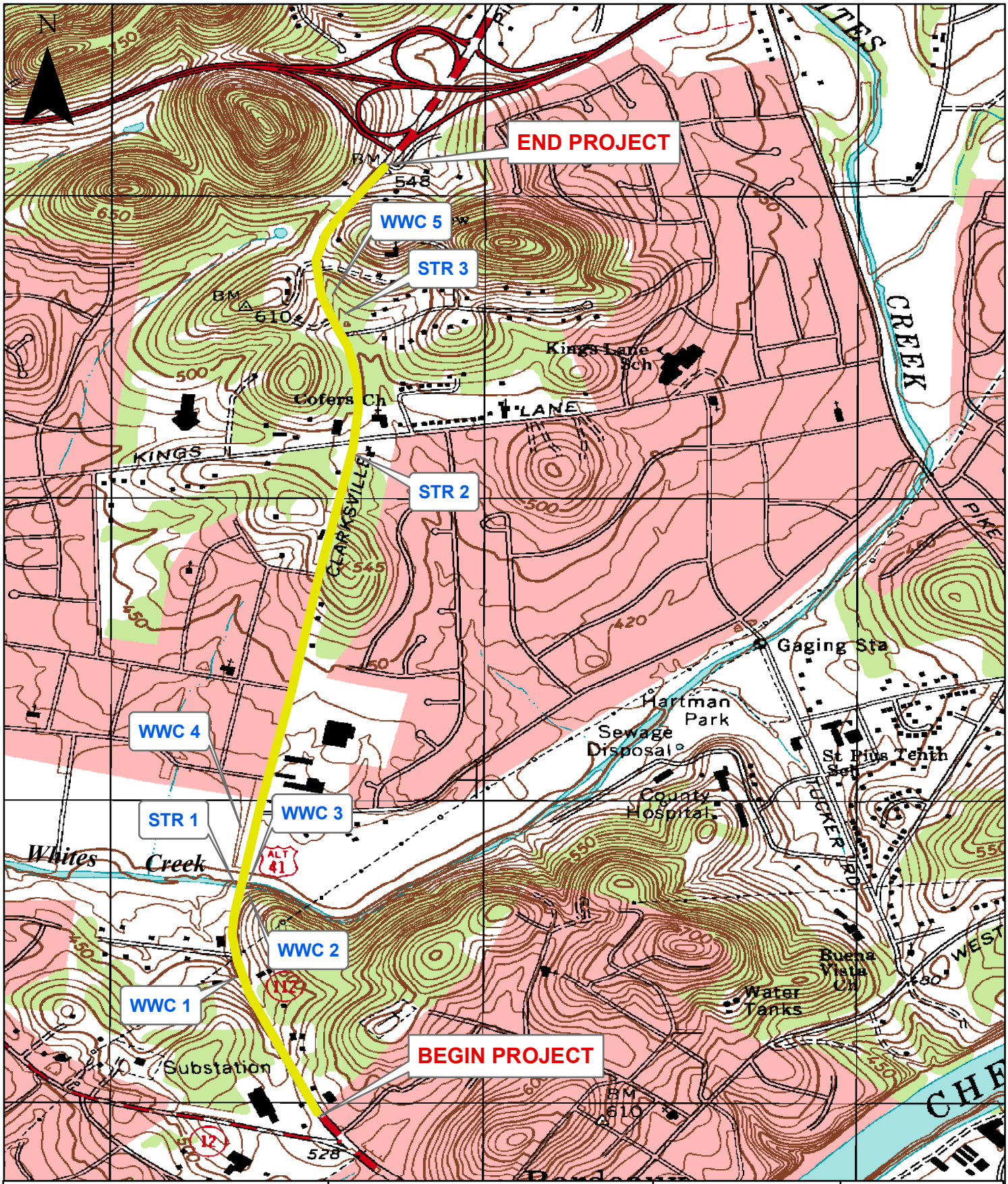
No wetlands occur within the project area or would be impacted by the project.

No threatened and endangered species are known to occur within the project area or would likely be affected by the project.

References:

Wilson, Charles W. Jr., 1966, Geologic Map and Mineral Resources Summary of the Nashville West Quadrangle, Tennessee.

Butler, Robert S. and Richard Biggins. 2003. Cumberland Elktoe (*Alasmidonta atropurpurea*), Oyster Mussel (*Epioblasma capsaeformis*), Cumberlandian Combshell (*Epioblasma brevidens*), Purple Bean (*Villosa perpurpurea*), and Rough Rabbitsfoot (*Quadrula cylindrica strigillata*). Asheville Field Office U.S. Fish and Wildlife Service, Asheville, North Carolina.



TDOT Go.

REGION 3
NASHVILLE, TENNESSEE

0 310 620 1,240 1,860 2,480 Feet

ECOLOGY REPORT
STUDY BOUNDARIES MAP

US-41A (SR 112) CLARKSVILLE HWY
FROM STATE ROUTE 12 (ASHLAND CITY HWY)
TO STATE ROUTE 155 (BRILEY PARKWAY)

DAVIDSON COUNTY, TENNESSEE

DRAWN BY:	CHECKED BY:
BLW	MMF

PROJECT NO. 19046-1214-14
PIN NO. 103764.00
AMEC PROJECT NO. 549610002

FIGURE:	DATE:
1	04/12/2007

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
ENVIRONMENTAL DIVISION
SUITE 900 - JAMES K. POLK BUILDING
505 DEADERICK STREET
NASHVILLE, TENNESSEE 37243-0334

February 9, 2007

Dr. Lee A. Barclay
U.S. Department of Interior
Fish and Wildlife Service
446 Neal Street
Cookeville, TN 38501

SUBJECT: SR-112 from SR-12 to SR-155
PE #: 19046-1214-14 PIN: 103764.00
Davidson County, Tennessee

Dear Dr. Barclay:

The Tennessee Department of Transportation proposes to begin construction at the location listed above. Project location maps are attached. In compliance with the Fish and Wildlife Act of 1958, and the Endangered Species Act of 1973 (as amended), we are requesting a list of threatened or endangered species that may be present in the vicinity of the proposed construction.

Please include in your reply the entire project description as listed in the subject line of this request. Your assistance in the preparation of this project is greatly appreciated. If you need additional information, please contact me at 615-532-3878.

Sincerely,

Jennifer Thompson

Jennifer Thompson
Ecology Section

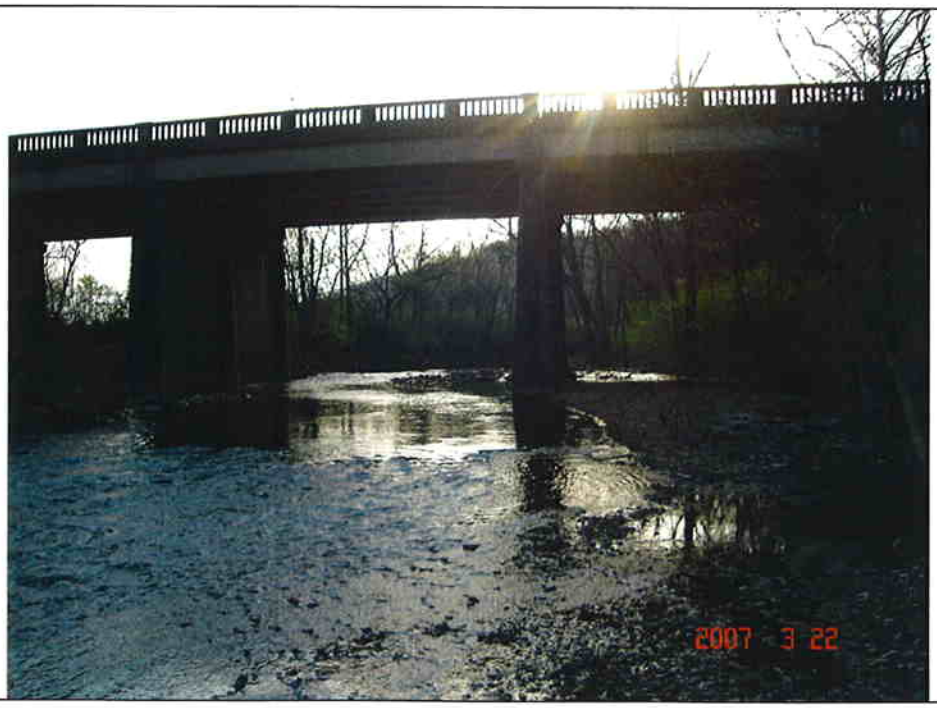
copy: Project File

No significant adverse impacts to wetlands or federally listed endangered or threatened species are anticipated from this proposal.

Lee A Barclay 3/15/07
Field Supervisor Date
U.S. Fish & Wildlife Service
Cookeville, TN

Davidson County, State Route 112
Project No. 19046-1214-14
PIN No. 103764.00

Photograph 1: North end of project, facing north towards Briley Parkway.



Photograph 2: Whites Creek (STR-1), looking upstream (east).

Photograph 3: Whites Creek (STR-1), looking downstream (west) from west side of bridge.

Photograph 4: Whites Creek (STR-1), looking upstream (east) from bridge.

Photograph 5: Wet weather conveyance (WWC-1) that starts as roadside ditch and continues off right-of-way adjacent to the Auto Repair Facility. Looking north along west side of roadway.

Photograph 6: Short wet weather conveyance (WWC-2) on south side of Whites Creek and east side of road, extends from roadside ditch approximately 150 feet to Whites Creek.

Photograph 7: Short wet weather conveyance (WWC-3) on north side of Whites Creek and east side of road, extends from roadside approximately 150 feet to Whites Creek.

Photograph 8: Wet weather conveyance/roadside ditch (WWC-4), extends approximately 300 feet along roadway from the intersection of E. Hamilton Road south to Whites Creek. Facing south along west side of road.

Photograph 9: Small spring/stream (STR-2) that originates at edge of right-of-way on the east side of the road, directly south of the Marathon along Kings Lane.

Photograph 10: Small stream (STR-2) that originates at edge of right-of-way, facing southeast. Aquatic vegetation and algae in one-foot wide channel.

Photograph 11: Small stream (STR-3), looking upstream from Fairmeade Road.

Photograph 12: Culvert that conveys STR-3, extends beneath Fairmeade Road.

Photograph 13: STR-3, just off ROW, east side of SR-112, north of Fairmeade Road.

Photograph 14: STR-3, just off ROW, east side of SR-112, north of Fairmeade Road.

Photograph 15: Wet weather conveyance (WWC-5), east side of SR-112.

Photograph 16: WWC-5, east side or SR-112, looking north.

Species Review Form

Project: Davidson County, SR-112 from SR-12 (Ashland City Highway) to SR-155 (Briley Parkway)

Date of Field Study: 3-22-2007 **Date TDEC Database Checked:** 2-8-07 **Biologists:** Mary Motte Fikri (AMEC)

Species reported within 1 mile radius of project:

1.	2.		3.	4.	5.	6	7.
Species Scientific and common names, followed by (A) for animal or (P) for plant	Status		Species is potentially present in R-O-W because: **(A)** it is listed by TDEC within ROW **(B)** habitat is present **(C)** Observed during site visit **(D)** critical habitat present	Species is considered likely NOT present in R-O-W because: **(A)** Present habitat unsuitable **(B)** Not observed during site visit **(C)** Original record questionable **(D)** Considered extinct/extirpated	(**A**) BMPs are sufficient to protect species (**B**) Special Notes are included on project plans to protect species **(C)** Individuals may be affected	Habitat (include blooming, breeding or other information; where found according to TDEC database; year last observed)	Notes
	Fed	TN					
None reported							

Species reported within 1-mile to 4-mile radius of project:

1.	2.		3.	4.	5.	6	7.
Species Scientific and common names, followed by (A) for animal or (P) for plant	Status		Species is potentially present in R-O-W because: **(A)** it is listed by TDEC within ROW **(B)** habitat is present **(C)** Observed during site visit **(D)** critical habitat present	Species is considered likely NOT present in R-O-W because: **(A)** Present habitat unsuitable **(B)** Not observed during site visit **(C)** Original record questionable **(D)** Considered extinct/extirpated	(**A**) BMPs are sufficient to protect species (**B**) Special Notes are included on project plans to protect species **(C)** Individuals may be affected	Habitat (include blooming, breeding or other information; where found according to TDEC database; year last observed; reference)	Notes
	Fed	TN					
Epioblasma brevidens Cumberlandian combshell	E	E	---	D	A	Habitat: Main stem of Cumberland River in Nashville, medium to large rivers; sand & gravel bottoms in rivers or clear streams with rocky bottoms. Breeding: These mussels are bradytictic, retaining glochidia in gills over winter. Gravid females have been reported in May and June. Last observed: 1925-PRE, Cumberland River @ Jefferson St. bridge, RM 190.0.	BMPs would be sufficient to minimize impacts.

Project: Davidson County, SR-112 from SR-12 (Ashland City Highway) to SR-155 (Briley Parkway)

Date of Field Study: 3-22-2007 **Date TDEC Database Checked:** 2-8-07 **Biologists:** Mary Motte Fikri (AMEC)

1.	2.		3.	4.	5.	6	7.
Species Scientific and common names, followed by (A) for animal or (P) for plant	Status		Species is potentially present in R-O-W because: **(A)** it is listed by TDEC within ROW **(B)** habitat is present **(C)** Observed during site visit **(D)** critical habitat present	Species is considered likely NOT present in R-O-W because: **(A)** Present habitat unsuitable **(B)** Not observed during site visit **(C)** Original record questionable **(D)** Considered extinct/extirpated	(**A**) BMPs are sufficient to protect species (**B**) Special Notes are included on project plans to protect species **(C)** Individuals may be affected	Habitat (include blooming, breeding or other information; where found according to TDEC database; year last observed; reference)	Notes
Polytaenia nutallii Prairie parsley (P)	N	T	---	A	A	Habitat: Chiefly dry to mesic prairies, but may be found in other disturbed dry areas such as glades, rocky savannas, clearings, open woodlands, fields & roadsides. FL: Apr-Jun; FR: June-Aug Last observed: 1937, 12.3 miles from Nashville along Little Marrowbone Cr. on Eaton Rd.	Ideal habitat not present.
Aster praealtus Willow aster (P)	N	E	---	A	A	Habitat: Moist prairies, moist meadows along lakes or rivers, thickets, roadside ditches, abandoned fields, poorly drained areas. FL: Sep-Oct; FR: Oct-Nov Last observed: 1943, Road to Clees Ferry, Nashville.	Habitat not present.
Astragalus tennesseenisis Tennessee milk vetch (P)	N	S	---	A	A	Habitat: Cedar glades and barrens FL: Apr-May; FR: May-Jul Last observed: 1917, Vanderbilt-Peabody campus.	Habitat not present.
Thryomanes bewickii Bewick's wren (A)	N	E	B	---	A	Habitat: Brushy areas, thick undergrowth, clearings, gardens, orchards, fencerows, stream edges, open scrubby woods. Breeding: Spring, usually two broods are raised in one season, Last Observed: 1967, Centennial Park in Nashville.	BMPs would be sufficient to minimize impacts.
Neotoma magister Eastern woodrat	N	D	B	---	A	Habitat: Variety of habitats including rocky cliffs, and floodplain and deciduous forests. Cup-shaped nests of twigs, bark bits, & grass in rocks and buildings. Breeding: March-Sept., producing 4 litters per year in ideal conditions, usually 2 offspring per litter. Last observed: 1949, Bell's Bend cliff in Nashville.	BMPs would be sufficient to minimize impacts.
Falco peregrinus Peregrine falcon	N	E	B	---	A	Habitat: Open grasslands & meadows. Nesting occurs on cliff faces or crevices. Urban areas are often used because of tall buildings and abundance of pigeons. Breeding: Monogamous through many breeding seasons; breed between March & May. Eggs are laid in mid May and hatch in mid June. Last observed: 1993, Third National Bank on 4th & Church, downtown Nashville	BMPs would be sufficient to minimize impacts.

Species Review Form

Project: Davidson County, SR-112 from SR-12 (Ashland City Highway) to SR-155 (Briley Parkway)

Date of Field Study: 3-22-2007 **Date TDEC Database Checked:** 2-8-07 **Biologists:** Mary Motte Fikri (AMEC)

USFWS letter: Yes ___X__ (attached) No _____ (explain)

Biological Assessment: Yes _____ (response letter attached; see below) No ___X__

Species (scientific and common names)	USFWS conclusion[1]
Epioblasma brevidens (Cumberlandian combshell)	not likely to adversely affect

[1] Choose from “no effect"; "not likely to adversely affect;" "likely to adversely affect;" "not likely to jeopardize" based on FWS concurrence letter

List Natural Areas, management areas, refuges, or similar sites within or adjacent to project (attach 7.5 minute topographic map with pertinent boundaries of area marked)

Area Name	Type of Area	Pertinent Notes

From: Rob Todd
To: Jennifer.Thompson@state.tn.us
Date: 2/28/2007 4:04:14 PM
Subject: Re: Davidson Co., SR-112 from SR-12 to SR-155

Jennifer:

Based upon the information that you have provided me, BMP's would be sufficient to minimize impacts to rare species for this project.

Thank you for the opportunity to review and comment.

Robert M. Todd
Tennessee Wildlife Resources Agency
Environmental Services Division
Ellington Agricultural Center
P.O. Box 40747
Nashville, TN 37204
Phone: 615-781-6572
Fax: 615-781-6667
E-mail address: Rob.Todd@state.tn.us
>>> Jennifer Thompson 02/09/07 3:22 PM >>>
Robb,

I have attached project location maps (there are no ROW plans yet), a project description and species map. There were no species within one mile. Please review and respond with your comments. Thank you for your assistance.

Jennifer

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
Environmental Division
SUITE 900, JAMES K. POLK BUILDING
505 DEADERICK STREET
NASHVILLE, TENNESSEE 37243-0334

MEMORANDUM

To: John Moore
Design Division

From: Dennis Crumby
Environmental Division

Date: February 19, 2009

Subject: **ENVIRONMENTAL BOUNDARIES AND MITIGATION DESIGN FOR:**
Davidson County: SR-112, from SR-12 to SR-155
PIN 103764.00 P.E. # 19046-1214-14

An ecological evaluation of the subject project has been conducted with the following results:

_X_ No wetlands identified

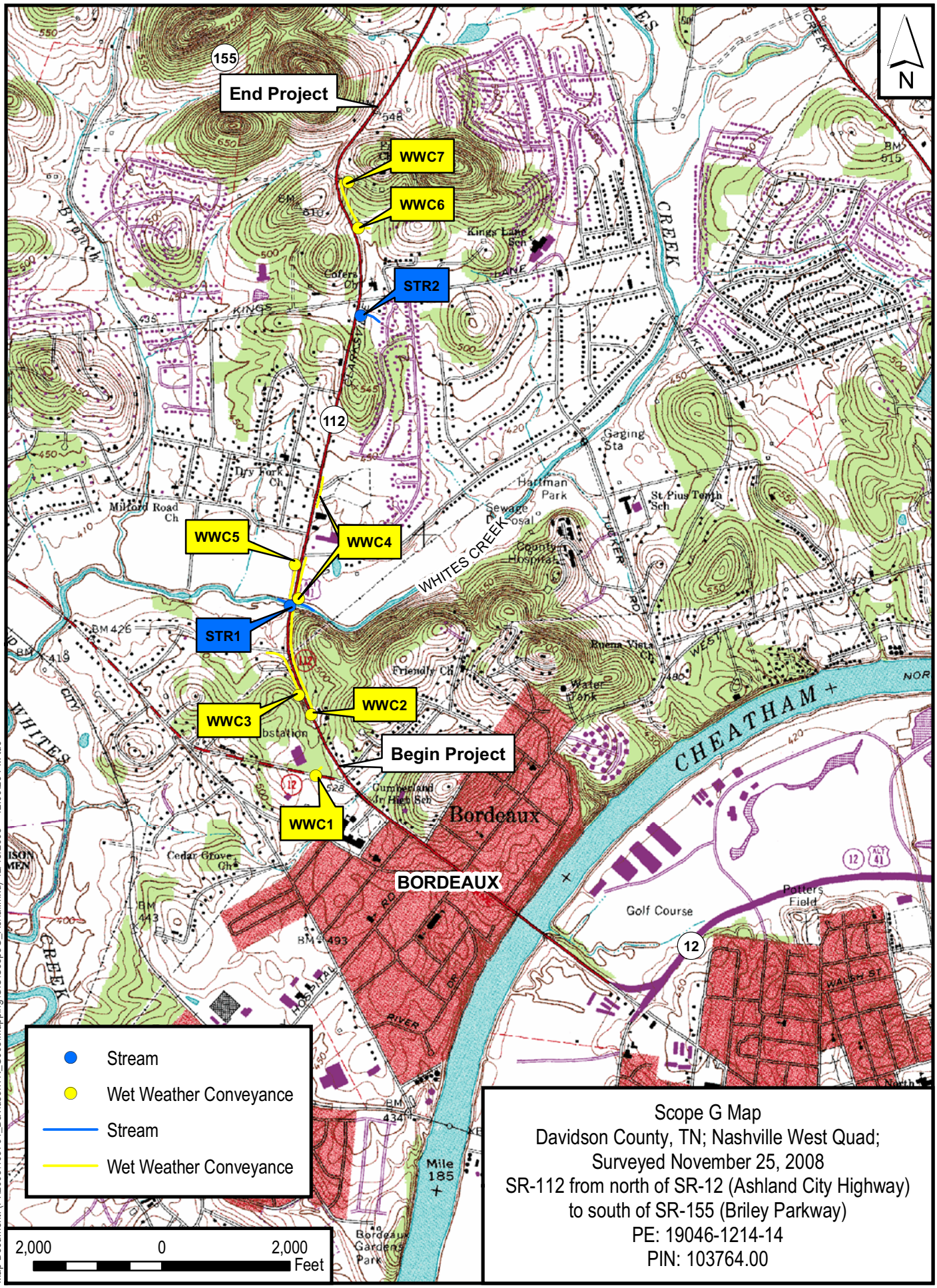
_X_ Streams are present: STR-1 (Whites Creek)
STR-2 (Unnamed stream off R.O.W.)

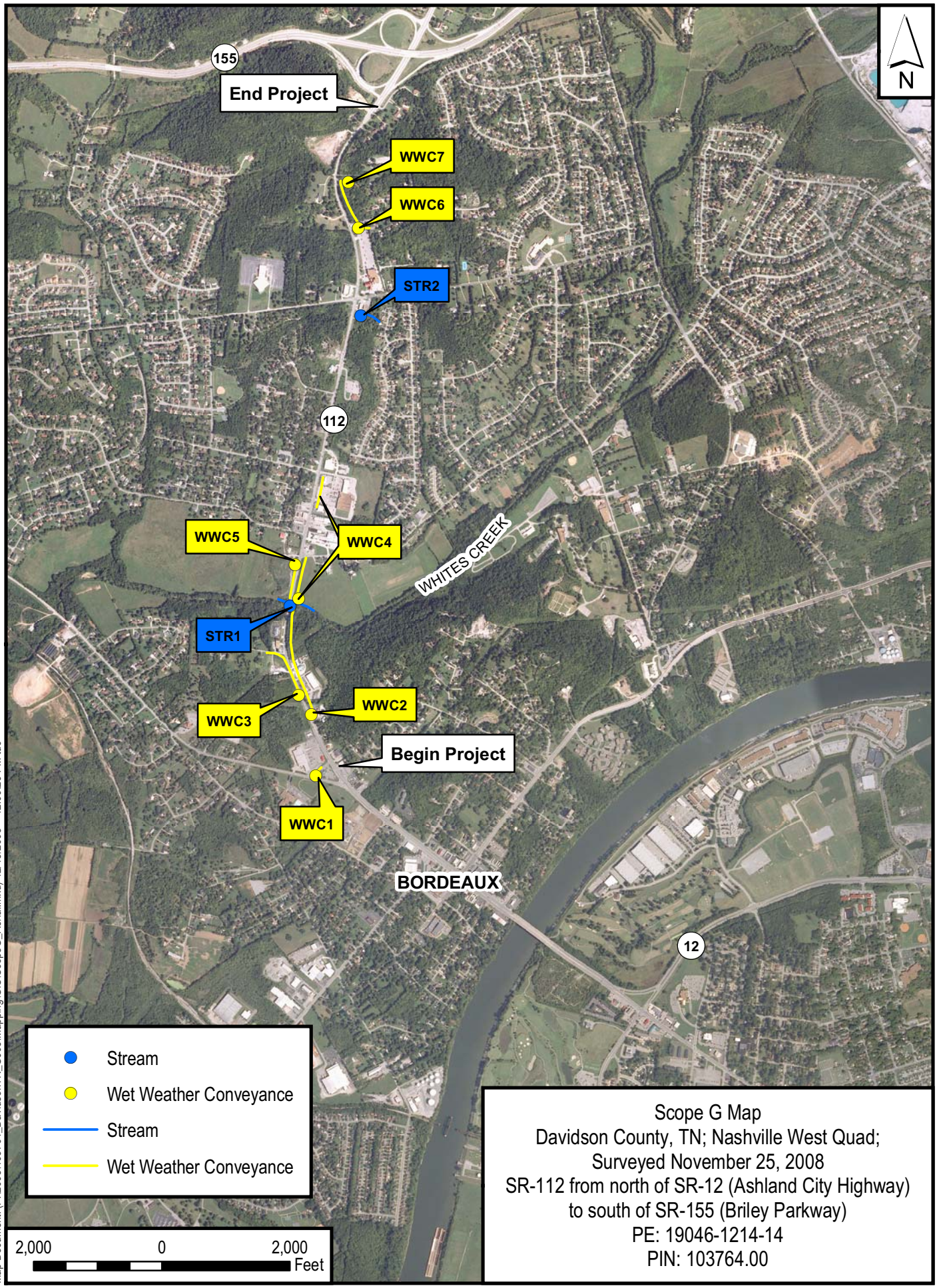
_X_ No protected species identified in project impact area

No mitigation will be required for this project.

Your assistance is appreciated. If you have any questions or comments please contact me at 615-253-2465 or dennis.crumby@state.tn.us.

copy: Carolyn Stonecipher
John Hewitt
Jon Zirkle
Dave Marshall
Environmental Division Project File/Reading File


155
End Project
WWC7
WWC6
STR2
112
WWC5
WWC4
STR1
WWC3
WWC2
Begin Project
WWC1
BORDEAUX
WHITES CREEK
CHEATHAM
Bordeaux
Golf Course
12
N
Stream
Wet Weather Conveyance
Stream
Wet Weather Conveyance
2,000
0
2,000
Feet
Scope G Map
Davidson County, TN; Nashville West Quad;
Surveyed November 25, 2008
SR-112 from north of SR-12 (Ashland City Highway)
to south of SR-155 (Briley Parkway)
PE: 19046-1214-14
PIN: 103764.00
Map Document: (P:\2008\103764_DavidsonTN_GJ08\Mapping\GIS\ScopeG_Aerial.mxd) 12/18/2008 -- 12:09:26 PM tdc



Map Document: (P:\2008\103764_DavidsonTN_GJ08\Mapping\GIS\ScopeG_Aerial.mxd) 12/18/2008 -- 12:09:26 PM tdc

Ecology Field Data Sheet: **Water Resources** Form G

County: Davidson **Route** SR-112 **LM** **P.E. No.** 19046-1214-14 **PIN No.** 103764.00
Project Description SR-112 from north of SR-12 (Ashland City Highway) to south of SR-155 (Briley Parkway)
Date of survey: 11/24/08 **Biologist:** Bert Remley/Chelsey Olson **Affiliation:** Third Rock Consultants

1-Station: from plans	132+50
2-Map label and name	STR-1, Whites Creek
3-Latitude/Longitude	36.20527552 –86.84037647
4-Potential impact	Crossing Bridge
5-Feature description:	
what is it	Perennial Stream
blue-line on topo? (y/n)	Yes
defined channel (y/n)	Yes
straight or meandering	Meandering
channel bottom width	50 to 60 feet
top of bank width	70 feet
bank height and slope ratio	6 feet, 1:1
avg. gradient of stream (%)	<5%
substratum	Cobble/boulder/gravel
riffle/run/pool	Good 25/25/50
width of buffer zone	LB: 100 feet RB: 20 feet
water flow	Fast
water depth	6 inches to 3 feet
water width	50 feet
general water quality	Clear
OHWM indicators	Presence of litter and debris, bent vegetation
groundwater connection	Yes
bank stability: LB, RB	LB: stable, RB: eroding
dominant species: LB, RB	LB: Sycamore, Silver Maple RB: Sycamore, Silver Maple
overhead canopy (%)	75
benthos	Cheumatopsyche, Heptageniidae, Isonychia, Asellidae, Elmidae, Elimia, Hydropsychidae
fish	Cyprinidae, other species likely
algae or other aquatic life	Diatoms, green filamentous
habitat assessment score	161
photo number (s)	4, 5
rainfall information	11/24/08 0.44 inches, 11/23/08 0.01 inches
6- HUC code & name (12-digit)	051302020105
7-**Confirmed by:**	Unconfirmed
8-**Mitigation**: yes/no (If yes, include on Form J)	No
9-Notes Indicate if stream is ETW or ONRW or on 303(d) list Estimate size (acres) of lake or pond if applicable	2008 303(d) list for E. coli and nutrients due to collection system failure, Category 5 stream water contact advisory (one or more uses impaired).

Ecology Field Data Sheet: **Water Resources** Form G

County: Davidson **Route** SR-112 **LM** **P.E. No.** 19046-1214-14 **PIN No.** 103764.00
Project Description SR-112 from north of SR-12 (Ashland City Highway) to south of SR-155 (Briley Parkway)
Date of survey: 11/24/08 **Biologist:** Bert Remley/Chelsey Olson **Affiliation:** Third Rock Consultants

1-Station: from plans	179+50 R
2-Map label and name	STR-2
3-Latitude/Longitude	36.21778510 –86.83675717
4-Potential impact	Runoff
5-Feature description:	
what is it	Intermittent Stream
blue-line on topo? (y/n)	No
defined channel (y/n)	Yes
straight or meandering	Meandering
channel bottom width	1 foot
top of bank width	2 feet
bank height and slope ratio	6 inches, 3:1
avg. gradient of stream (%)	<5%
substratum	Soil
riffle/run/pool	Not developed
width of buffer zone	LB: 20 feet RB: 30 feet
water flow	Yes
water depth	1 inch
water width	6 to 12 inches
general water quality	Clear
OHWM indicators	No
groundwater connection	Yes - seep potential source of water
bank stability: LB, RB	Both banks stable
dominant species: LB, RB	LB: blackberry, black willow. RB: blackberry, black willow
overhead canopy (%)	50 %
benthos	Isopods and crayfish
fish	None
algae or other aquatic life	Hydrophytic vegetation-black willow
habitat assessment score	N/A
photo number (s)	9
rainfall information	11/24/08 0.44 inches, 11/23/08 0.01 inches
6- HUC code & name (12-digit)	051302020105
7-**Confirmed by:**	Unconfirmed
8-**Mitigation**: yes/no (If yes, include on Form J)	No
9-Notes Indicate if stream is ETW or ONRW or on 303(d) list Estimate size (acres) of lake or pond if applicable	Small intermittent stream that emerges from a small seep located adjacent to Marathon gas station. Stream flows east from proposed project. Therefore, it is not crossed by SR-112.

Ecology Field Data Sheet: **Water Resources** Form G

County: Davidson **Route** SR-112 **LM** **P.E. No.** 19046-1214-14 **PIN No.** 103764.00
Project Description SR-112 from north of SR-12 (Ashland City Highway) to south of SR-155 (Briley Parkway)
Date of survey: 11/24/08 **Biologist:** Bert Remley/Chelsey Olson **Affiliation:** Third Rock Consultants

1-Station: from plans	21+50R
2-Map label and name	WWC-1
3-Latitude/Longitude	36.19800000 –86.83900000
4-Potential impact	Crossing/encapsulation expansion
5-Feature description:	
what is it	Parking lot/roadside ditch
blue-line on topo? (y/n)	No
defined channel (y/n)	Yes
straight or meandering	Straight
channel bottom width	1 foot
top of bank width	2 feet
bank height and slope ratio	< 1 foot, >4:1
avg. gradient of stream (%)	<5 %
substratum	Rip Rap
riffle/run/pool	No
width of buffer zone	LB: 0 RB: 0
water flow	None
water depth	None
water width	None
general water quality	N/A
OHWM indicators	None
groundwater connection	No
bank stability: LB, RB	Both banks stable
dominant species: LB, RB	Fescue both banks, maintained by mowing
overhead canopy (%)	0
benthos	None
fish	
algae or other aquatic life	None
habitat assessment score	N/A
photo number (s)	1
rainfall information	11/24/08 0.44 inches, 11/23/08 0.01 inches
6- HUC code & name (12-digit)	051302020105
7-**Confirmed by:**	Unconfirmed
8-**Mitigation**: yes/no (If yes, include on Form J)	No
9-Notes Indicate if stream is ETW or ONRW or on 303(d) list Estimate size (acres) of lake or pond if applicable	Small wet weather conveyance that drains small grassed area located in between parking lot and road, connected to storm sewer system

Ecology Field Data Sheet: **Water Resources** Form G

County: Davidson **Route** SR-112 **LM** **P.E. No.** 19046-1214-14 **PIN No.** 103764.00
Project Description SR-112 from north of SR-12 (Ashland City Highway) to south of SR-155 (Briley Parkway)
Date of survey: 11/24/08 **Biologist:** Bert Remley/Chelsey Olson **Affiliation:** Third Rock Consultants

1-Station: from plans	112+00R to 117+00R, 125+00R to132+00R
2-Map label and name	WWC-2
3-Latitude/Longitude	36.20061351 –86.83919890
4-Potential impact	Eliminate/Relocation
5-Feature description:	
what is it	Roadside Ditch
blue-line on topo? (y/n)	No
defined channel (y/n)	Yes
straight or meandering	Straight
channel bottom width	2 foot
top of bank width	3 feet
bank height and slope ratio	1 foot, 2:1
avg. gradient of stream (%)	6-10%
substratum	Concrete/Rip Rap
riffle/run/pool	No
width of buffer zone	LB: 0 RB: 0
water flow	None
water depth	< 1 inch
water width	1 foot
general water quality	N/A
OHWM indicators	None
groundwater connection	None
bank stability: LB, RB	Both banks stable
dominant species: LB, RB	Fescue dominates both banks, maintained by mowing
overhead canopy (%)	0
benthos	None
fish	None
algae or other aquatic life	None
habitat assessment score	N/A
photo number (s)	2
rainfall information	11/24/08 0.44 inches, 11/23/08 0.01 inches
6- HUC code & name (12-digit)	051302020105
7-**Confirmed by:**	Unconfirmed
8-**Mitigation**: yes/no (If yes, include on Form J)	No
9-Notes Indicate if stream is ETW or ONRW or on 303(d) list Estimate size (acres) of lake or pond if applicable	Roadside ditch that begins as a concrete lined ditch (Station 112+00 to 117+00), disappears for a section, then reappears as a rip-rap lined ditch (Station 125+00 to132+00) before confluence with White Creek

Ecology Field Data Sheet: **Water Resources** Form G

County: Davidson **Route** SR-112 **LM** **P.E. No.** 19046-1214-14 **PIN No.** 103764.00
Project Description SR-112 from north of SR-12 (Ashland City Highway) to south of SR-155 (Briley Parkway)
Date of survey: 11/24/08 **Biologist:** Bert Remley/Chelsey Olson **Affiliation:** Third Rock Consultants

1-Station: from plans	112+50L to 125+00L
2-Map label and name	WWC-3
3-Latitude/Longitude	36.20143821 –86.83987230
4-Potential impact	Eliminate/Relocation
5-Feature description:	
what is it	Roadside Ditch
blue-line on topo? (y/n)	No
defined channel (y/n)	Yes
straight or meandering	Straight
channel bottom width	2 feet
top of bank width	3 feet
bank height and slope ratio	1 to 2 feet, 1:1
avg. gradient of stream (%)	6-10%
substratum	Concrete/Rip Rap
riffle/run/pool	No
width of buffer zone	LB: 20 feet RB: 0
water flow	None
water depth	1-2 inches
water width	1 foot
general water quality	Runoff
OHWM indicators	None
groundwater connection	None
bank stability: LB, RB	Both banks stable
dominant species: LB, RB	LB: Fescue, teasel, bush honeysuckle, small maple saplings (Un-maintained) RB: Fescue maintained by mowing
overhead canopy (%)	0
benthos	None
fish	None
algae or other aquatic life	None
habitat assessment score	N/A
photo number (s)	3
rainfall information	11/24/08 0.44 inches, 11/23/08 0.01 inches
6- HUC code & name (12-digit)	051302020105
7-**Confirmed by:**	Unconfirmed
8-**Mitigation**: yes/no (If yes, include on Form J)	No
9-Notes Indicate if stream is ETW or ONRW or on 303(d) list Estimate size (acres) of lake or pond if applicable	Roadside ditch that is concrete lined from Station 112+50 to 117+00, then rip-rap lined from Station 117+00 to 125+00.

Ecology Field Data Sheet: **Water Resources** Form G

County: Davidson **Route** SR-112 **LM** **P.E. No.** 19046-1214-14 **PIN No.** 103764.00
Project Description SR-112 from north of SR-12 (Ashland City Highway) to south of SR-155 (Briley Parkway)
Date of survey: 11/24/08 **Biologist:** Bert Remley/Chelsey Olson **Affiliation:** Third Rock Consultants

1-Station: from plans	133+00R to 140+00R, 150+00R to 157+50R
2-Map label and name	WWC-4
3-Latitude/Longitude	36.20600000 –86.84000000
4-Potential impact	Eliminate/Relocation
5-Feature description:	
what is it	Roadside Ditch
blue-line on topo? (y/n)	No
defined channel (y/n)	Yes
straight or meandering	Straight
channel bottom width	2 feet
top of bank width	3 feet
bank height and slope ratio	3 to 4 feet
avg. gradient of stream (%)	<5 %
substratum	Rip-Rap, grass
riffle/run/pool	No
width of buffer zone	LB: 0 to 10 feet RB: 0 to 10 feet
water flow	Flow in the lower section but not in the upper section
water depth	0 to 2 inches
water width	0 to 1 foot
general water quality	Clear runoff
OHWM indicators	No
groundwater connection	No
bank stability: LB, RB	Both banks stable
dominant species: LB, RB	Lower section (133+00 to 140+00) both banks dominated by small box elder saplings and bush honeysuckle. Upper section (Station 150+00 to 157+50) dominated by mowed fescue
overhead canopy (%)	Lower section 75 %, upper section 0%
benthos	None
fish	None
algae or other aquatic life	None
habitat assessment score	N/A
photo number (s)	6, 7
rainfall information	11/24/08 0.44 inches, 11/23/08 0.01 inches
6- HUC code & name (12-digit)	051302020105
7-**Confirmed by:**	Unconfirmed
8-**Mitigation**: yes/no (If yes, include on Form J)	No
9-Notes Indicate if stream is ETW or ONRW or on 303(d) list Estimate size (acres) of lake or pond if applicable	Roadside ditch whose upper section (Station 150+00 to 157+50) is a grassy swale. The lower section of the ditch (Station 133+00 to 140+00) has a thin strip of brushy vegetation on either side and a rip-rap bottom.

Ecology Field Data Sheet: **Water Resources** Form G

County: Davidson **Route** SR-112 **LM** **P.E. No.** 19046-1214-14 **PIN No.** 103764.00
Project Description SR-112 from north of SR-12 (Ashland City Highway) to south of SR-155 (Briley Parkway)
Date of survey: 11/24/08 **Biologist:** Bert Remley/Chelsey Olson **Affiliation:** Third Rock Consultants

1-Station: from plans	133+00L to 140+00L
2-Map label and name	WWC-5
3-Latitude/Longitude	36.20700000 –86.84000000
4-Potential impact	Eliminate/Relocation
5-Feature description:	
what is it	Roadside Ditch
blue-line on topo? (y/n)	No
defined channel (y/n)	Yes-weak
straight or meandering	Straight
channel bottom width	2 feet
top of bank width	6 feet
bank height and slope ratio	7 feet, .05:1
avg. gradient of stream (%)	<5%
substratum	Soil with terrestrial plants
riffle/run/pool	No
width of buffer zone	LB: 10 RB: 10
water flow	No
water depth	0
water width	0
general water quality	None
OHWM indicators	None
groundwater connection	No
bank stability: LB, RB	Both banks stable
dominant species: LB, RB	Both banks dominated by smooth sumac ad bush honeysuckle
overhead canopy (%)	25 %
benthos	None
fish	None
algae or other aquatic life	None
habitat assessment score	N/A
photo number (s)	8
rainfall information	11/24/08 0.44 inches, 11/23/08 0.01 inches
6- HUC code & name (12-digit)	051302020105
7-**Confirmed by:**	Unconfirmed
8-**Mitigation**: yes/no (If yes, include on Form J)	No
9-Notes Indicate if stream is ETW or ONRW or on 303(d) list Estimate size (acres) of lake or pond if applicable	Roadside ditch probably created by earth moving activites west of SR112. The ditch is deep but the channel is weakly defined, with terrestrial plants growing throughout the channel.

Ecology Field Data Sheet: **Water Resources** Form G

County: Davidson **Route** SR-112 **LM** **P.E. No.** 19046-1214-14 **PIN No.** 103764.00
Project Description SR-112 from north of SR-12 (Ashland City Highway) to south of SR-155 (Briley Parkway)
Date of survey: 11/24/08 **Biologist:** Bert Remley/Chelsey Olson **Affiliation:** Third Rock Consultants

1-Station: from plans	193+00
2-Map label and name	WWC-6
3-Latitude/Longitude	36.22200000 –86.83700000
4-Potential impact	Crossing/Encapsulation Expansion
5-Feature description:	
what is it	Roadside Ditch
blue-line on topo? (y/n)	No
defined channel (y/n)	Yes
straight or meandering	Straight
channel bottom width	1 foot
top of bank width	2 feet
bank height and slope ratio	2 feet
avg. gradient of stream (%)	<5%
substratum	Soil
riffle/run/pool	No
width of buffer zone	LB: 10 feet RB: 6 feet
water flow	None
water depth	0
water width	0
general water quality	N/A
OHWM indicators	None
groundwater connection	No
bank stability: LB, RB	Both banks stable
dominant species: LB, RB	LB: Blackberry, bush honeysuckle, fescue. RB: Bush honeysuckle
overhead canopy (%)	75%
benthos	None
fish	None
algae or other aquatic life	None
habitat assessment score	N/A
photo number (s)	10,11
rainfall information	11/24/08 0.44 inches, 11/23/08 0.01 inches
6- HUC code & name (12-digit)	051302020105
7-**Confirmed by:**	Unconfirmed
8-**Mitigation**: yes/no (If yes, include on Form J)	No
9-Notes Indicate if stream is ETW or ONRW or on 303(d) list Estimate size (acres) of lake or pond if applicable	Small roadside ditch that emerges from existing culvert under SR-112 and joins with WWC-7 approximately 100 feet downstream from SR-112. The ditch does not exist on the west side of SR-112.

Ecology Field Data Sheet: **Water Resources** Form G

County: Davidson **Route** SR-112 **LM** **P.E. No.** 19046-1214-14 **PIN No.** 103764.00
Project Description SR-112 from north of SR-12 (Ashland City Highway) to south of SR-155 (Briley Parkway)
Date of survey: 11/24/08 **Biologist:** Bert Remley/Chelsey Olson **Affiliation:** Third Rock Consultants

1-Station: from plans	193+00R to 201+00R
2-Map label and name	WWC-7
3-Latitude/Longitude	36.22350826 –86.83747298
4-Potential impact	Eliminate/Relocation and Crossing/Encapsulation Expansion
5-Feature description:	
what is it	Roadside Ditch/Wet Weather Conveyance
blue-line on topo? (y/n)	No
defined channel (y/n)	Yes
straight or meandering	Straight-along roadside, meandering once it leaves roadside
channel bottom width	1 foot
top of bank width	3 feet
bank height and slope ratio	3 inches (WWC section) to 1.5 feet (Ditch section), 2:1
avg. gradient of stream (%)	<5%
substratum	Rip-rap (ditch), soil (WWC)
riffle/run/pool	No
width of buffer zone	LB: > 100 feet RB: 0 to > 100 feet
water flow	None
water depth	None
water width	None
general water quality	N/A
OHWM indicators	No
groundwater connection	No
bank stability: LB, RB	Both banks stable
dominant species: LB, RB	Both banks dominated by bush honeysuckle, hackberry from approximately Station 193+00 to 196+00, from Station 196+00 to 201+00 RB dominated by mowed fescue, LB dominated by bush honeysuckle, goldenrod, redbud, and hackberry
overhead canopy (%)	25 to 50% (Station 196+00 to 201+00), and 100% (Station 193+00 to 196+00).
benthos	None
fish	None
algae or other aquatic life	None
habitat assessment score	N/A
photo number (s)	12,13,14
rainfall information	11/24/08 0.44 inches, 11/23/08 0.01 inches
6- HUC code & name (12-digit)	051302020105
7-**Confirmed by:**	Unconfirmed
8-**Mitigation**: yes/no (If yes, include on Form J)	No
9-Notes Indicate if stream is ETW or ONRW or on 303(d) list Estimate size (acres) of lake or pond if applicable	WWC-7 begins as a roadside ditch (196+00 to 201+00) that leaves the roadside and becomes a wet weather conveyance (Station 193+00 to 196+00) through a wooded lot before passing through an existing culvert under Fairmeade Drive. The roadside ditch section will be eliminated/relocated, and the wet weather conveyance section will be crossed/encapsulation expansion at Fairmeade Drive.

HABITAT ASSESSMENT FIELD DATA SHEET — HIGH GRADIENT STREAMS (FRONT)

STREAM NAME: Whites Creek	LOCATION: at SR 112
STREAM WDTH (FT): 50 DEPTH (FT): 3	PERENNIAL ☒ INTERMITTENT ☐ EPHEMERAL ☐
STATION #: STR 1 RIVERMILE:	COUNTY: Davidson STATE: KY
LAT: LONG:	RIVER BASIN: Cumberland River
CLIENT: TDOT	PROJECT NO. PE #19046-1214-14 / PIN #103764.00
INVESTIGATORS/CREW: B. Remley, C. Olson	
FORM COMPLETED BY: B. Remley	DATE: November 24, 2008 TIME: 2:40 p.m.
	REASON FOR SURVEY: TDOT

Parameters to be evaluated in sampling reach

Habitat Parameter	Condition Category				
	Optimal	Suboptimal	Marginal	Poor	
1. Epifaunal Substrate/ Available Cover	Greater than 70% of substrate favorable for epifaunal colonization and fish cover; mix of snags, submerged logs, undercut banks, cobble or other stable habitat and at stage to allow full colonization potential (i.e., logs/snags that are not new fall and not transient.	40-70% mix of stable habitat; well suited for full colonization potential; adequate habitat for maintenance of populations; presence of additional substrate in the form of newfall, but not yet prepared for colonization (may rate at high end of scale).	20-40% mix of stable habitat; habitat availability less than desirable; substrate frequently disturbed or removed.	Less than 20% stable habitat; lack of habitat is obvious; substrate unstable or lacking.	
SCORE: 17	20 19 18 **17** 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0	
2. Embeddedness	Gravel, cobble, and boulder particles are 0-25% surrounded by fine sediment. Layering of cobble provides diversity of niche space.	Gravel, cobble, and boulder particles are 25-50% surrounded by fine sediment.	Gravel, cobble, and boulder particles are 50-75% surrounded by fine sediment.	Gravel, cobble, and boulder particles are more than 75% surrounded by fine sediment.	
SCORE: 16	20 19 18 17 **16**	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0	
3. Velocity/Depth Regime	All four velocity/depth regimes present (slow-deep, slow-shallow, fast-deep, fast-shallow). (Slow is < 0.3 m/s, deep is > 0.5 m.)	Only 3 of the 4 regimes present (if fast-shallow is missing, score lower than if missing other regimes).	Only 2 of the 4 habitat regimes present (if fast-shallow or slow-shallow are missing, score low).	Dominated by 1 velocity/depth regime (usually slow-deep).	
SCORE: 15	20 19 18 17 16	**15** 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0	
4. Sediment Deposition	Little or no enlargement of islands or point bars and less than 5% of the bottom affected by sediment deposition.	Some new increase in bar formation, mostly from gravel, sand or fine sediment; 5-30% of the bottom affected; slight deposition in pools.	Moderate deposition of new gravel, sand or fine sediment on old and new bars; 30-50% of the bottom affected; sediment deposits at obstructions, constrictions, and bends; moderate deposition of pools prevalent.	Heavy deposits of fine material, increased bar development; more than 50% of the bottom changing frequently; pools almost absent due to substantial sediment deposition.	
SCORE: 15	20 19 18 17 16	**15** 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0	
5. Channel Flow Status	Water reaches base of both lower banks, and minimal amount of channel substrate is exposed.	Water fills > 75% of the available channel; or <25% of channel substrate is exposed.	Water fills 25-75% of the available channel, and/or riffle substrates are mostly exposed.	Very little water in channel and mostly present as standing pools.	
SCORE: 18	20 19 **18** 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0	

HABITAT ASSESSMENT FIELD DATA SHEET — HIGH GRADIENT STREAMS (BACK)

Parameters to be evaluated in sampling reach

Habitat Parameter	Condition Category			
	Optimal	Suboptimal	Marginal	Poor
6. Channel Alteration	Channelization or dredging absent or minimal; stream with normal pattern.	Some channelization present, usually in areas of bridge abutments; evidence of past channelization, i.e., dredging, (greater than past 20 yr) may be present, but recent channelization is not present.	Channelization may be extensive; embankments or shoring structures present on both banks; and 40 to 80% of stream reach channelized and disrupted.	Banks shored with gabion or cement; over 80% of the stream reach channelized and disrupted. Instream habitat greatly altered or removed entirely.
SCORE: 18	20 19 **18** 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
7. Frequency of Riffles (or bends)	Occurrence of riffles relatively frequent; ratio of distance between riffles divided by width of the stream < 7:1 (generally 5 to 7); variety of habitat is key. In streams where riffles are continuous, placement of boulders or other large, natural obstruction is important.	Occurrence of riffles infrequent; distance between riffles divided by the width of the stream is between 7 to 15.	Occasional riffle or bend; bottom contours provide some habitat; distance between riffles divided by the width of the stream is between 15 to 25.	Generally all flat water or shallow riffles; poor habitat; distance between riffles divided by the width of the stream is a ration of > 25.
SCORE: 17	20 19 18 **17** 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
8. Bank Stability (score each bank) Note: determine left or right side by facing downstream.	Banks stable; evidence of erosion or bank failure absent or minimal; little potential for future problems. < 5% of bank affected.	Moderately stable; infrequent, small areas of erosion mostly healed over. 5-30% of bank in reach has areas of erosion.	Moderately unstable; 30-60% of bank in reach has areas of erosion; high erosion potential during floods.	Unstable; many eroded areas; "raw" areas frequent along straight sections and bends; obvious bank sloughing; 60-100% of bank has erosional scars.
SCORE: 8 (LB)	Left Bank 10 9	**8** 7 6	5 4 3	2 1 0
SCORE: 8 (RB)	Right Bank 10 9	**8** 7 6	5 4 3	2 1 0
9. Vegetative Protection (score each bank)	More than 90% of the streambank surfaces and immediate riparian zone covered by native vegetation, including trees, understory shrubs, or non-woody macrophytes; vegetative disruption through grazing or mowing minimal or not evident; almost all plants allowed to grow naturally.	70-90% of the streambank surfaces covered by native vegetation, but one class of plants is not well-represented; disruption evident but not affecting full plant growth potential to any great extent; more than one-half of the potential plant stubble height remaining.	50-70% of the streambank surfaces covered by vegetation; disruption obvious; patches of bare soil or closely cropped vegetation common; less than one-half of the potential plant stubble height remaining.	Less than 50% of the streambank surfaces covered by vegetation; disruption of streambank vegetation is very high; vegetation has been removed to 5 centimeters or less in average stubble height.
SCORE: 9 (LB)	Left Bank 10 **9**	8 7 6	5 4 3	2 1 0
SCORE: 8 (RB)	Right Bank 10 9	**8** 7 6	5 4 3	2 1 0
10. Riparian Vegetative Zone Width (score each bank riparian zone)	Width of riparian zone >18 meters; human activities (i.e., parking lots, roadbeds, clear-cuts, lawns, or crops) have not impacted zone.	Width of riparian zone 12-18 meters; human activities have impacted zone only minimally.	Width of riparian zone 6-12 meters; human activities have impacted zone a great deal.	Width of riparian zone <6 meters: little or no riparian vegetation due to human activities.
SCORE: 8 (LB)	Left Bank 10 9	**8** 7 6	5 4 3	2 1 0
SCORE: 4 (RB)	Right Bank 10 9	8 7 6	5 **4** 3	2 1 0

TOTAL SCORE: 161

Photo 1

Davidson County
November 24, 2008

WWC1, Station 22+50, Looking East

Photo 2

Davidson County
November 24, 2008

WWC2, Station 112+00R, Looking North

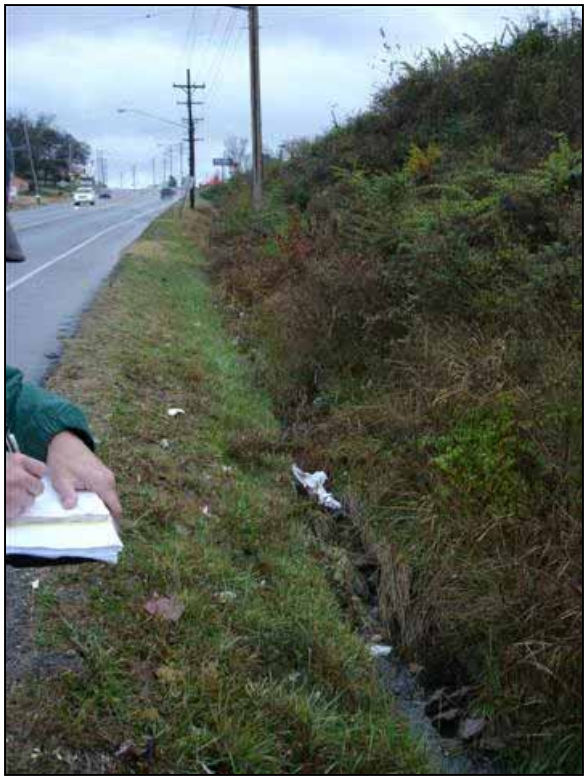


Photo 3

Davidson County
November 24, 2008

WWC3, Station 115+00L, Looking South

Photo 4

Davidson County
November 24, 2008

Standing on SR 112 Bridge, Looking Downstream (West) at Whites Creek (STR-1)

Photo 5

Davidson County
November 24, 2008

Standing on SR 112 Bridge, Looking Upstream (East) at Whites Creek (STR-1)

Photo 6

Davidson County
November 24, 2008

WWC4, Looking North at WWC4 from Confluence with STR-1

Photo 7

Davidson County
November 24, 2008

WWC4, Looking North from Station 150+00R

Photo 8

Davidson County
November 24, 2008

WWC5, Looking North from Confluence from STR-1

Photo 9

Davidson County
November 24, 2008

STR-2, Looking West from Station 179+50 at STR-2 at Seep Origin

Photo 10

Davidson County
November 24, 2008

WWC6, Looking West at WWC6 from Station 193+00R

Photo 11

Davidson County
November 24, 2008

Looking West at Existing Culvert under SR112 for WWC6

Photo 12

Davidson County
November 24, 2008

Looking South at Existing Culvert under Fairmeade Drive for WWC7

Photo 13

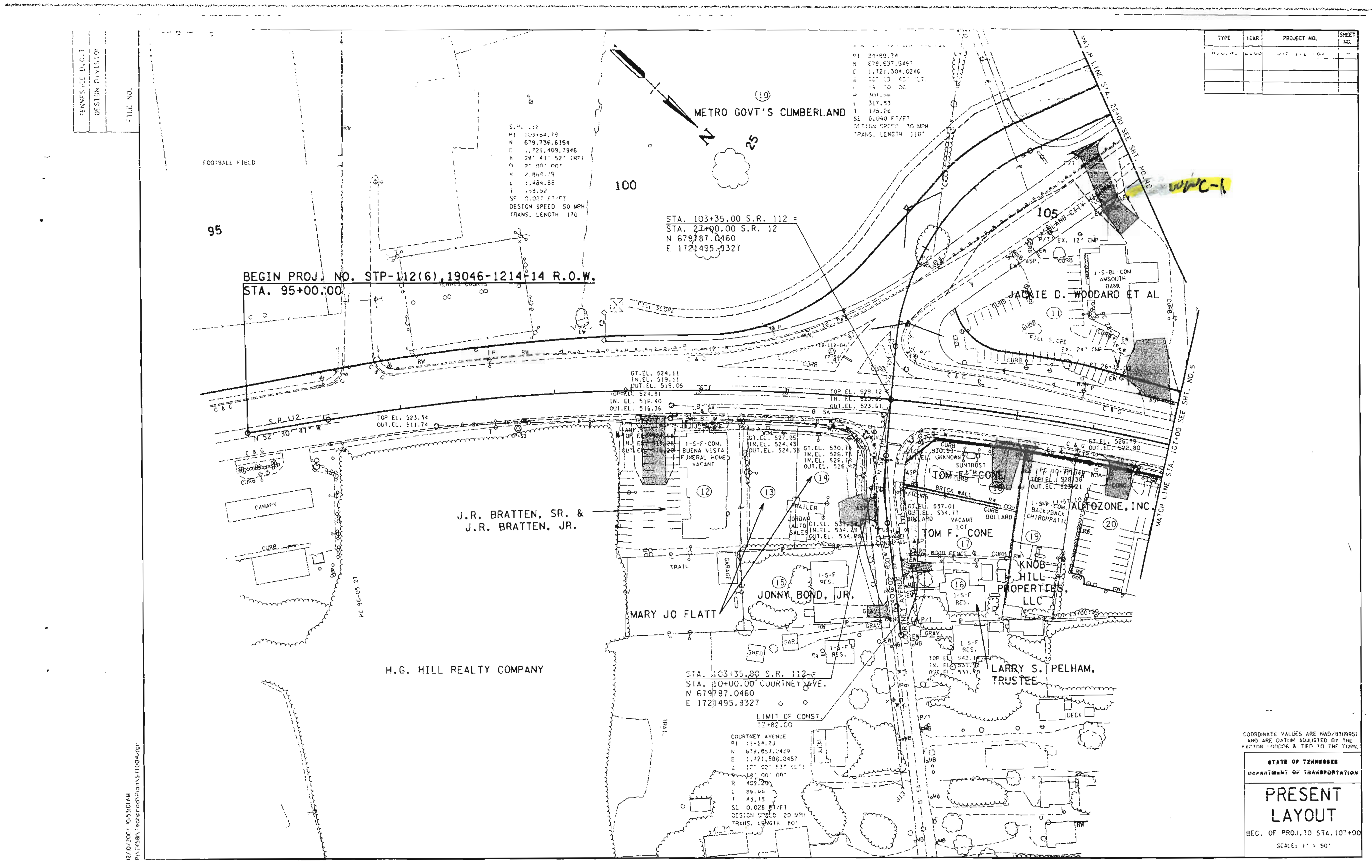
Davidson County
November 24, 2008

WWC7, Looking North at WWC7 North of Fairmeade Road

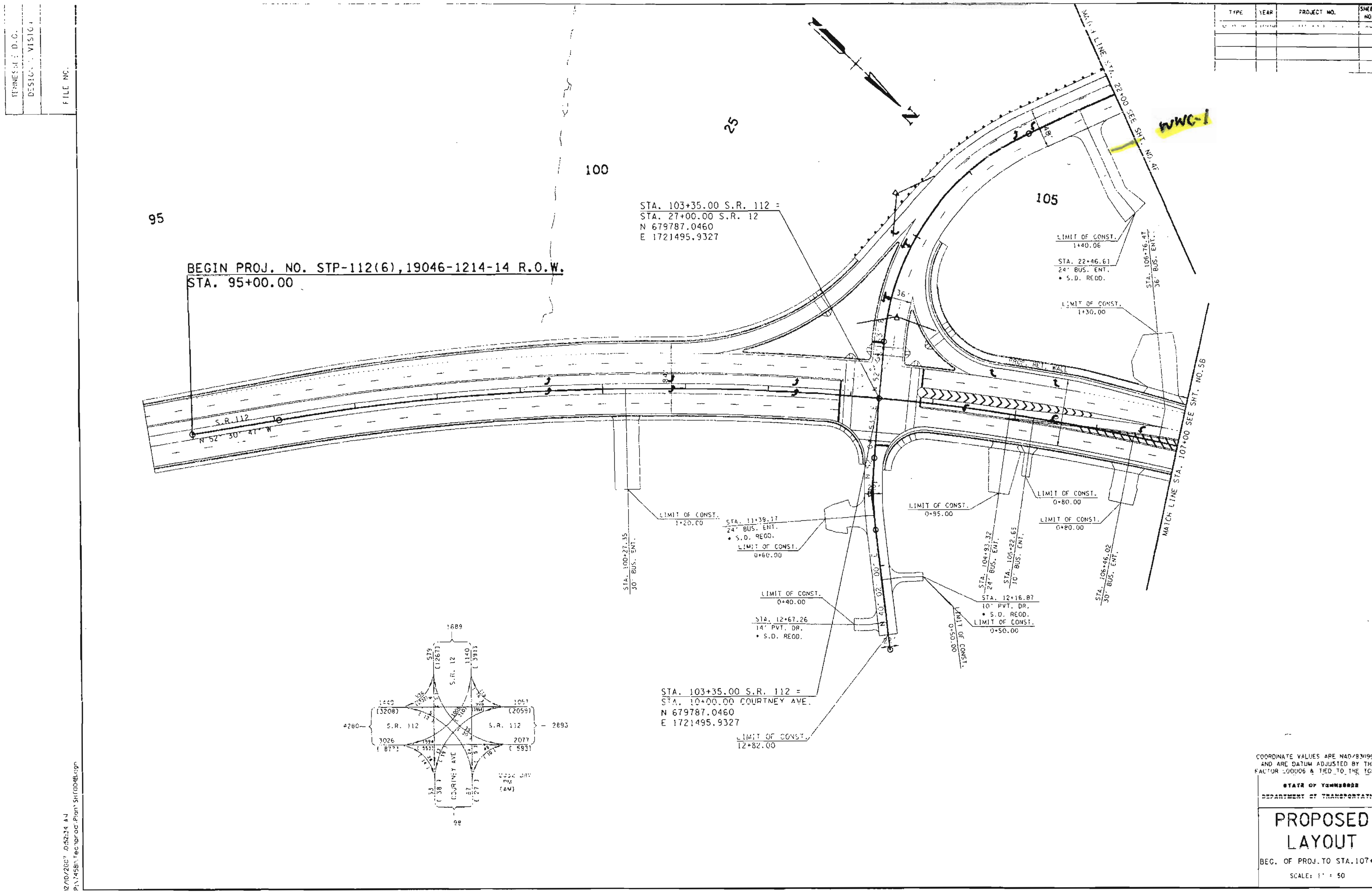
Photo 14

Davidson County
November 24, 2008

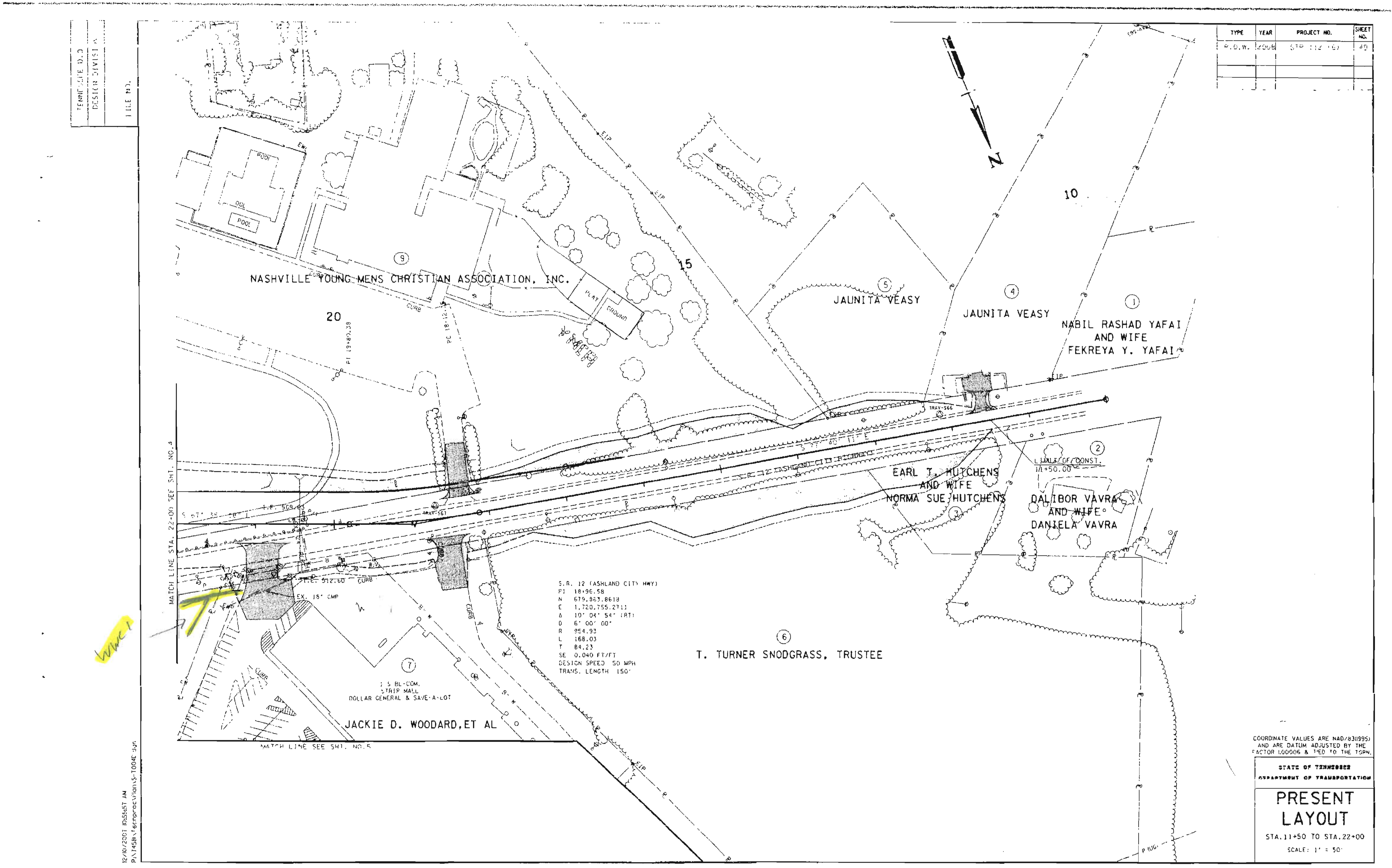
WWC7, Looking South at WWC7 from Station 198+00



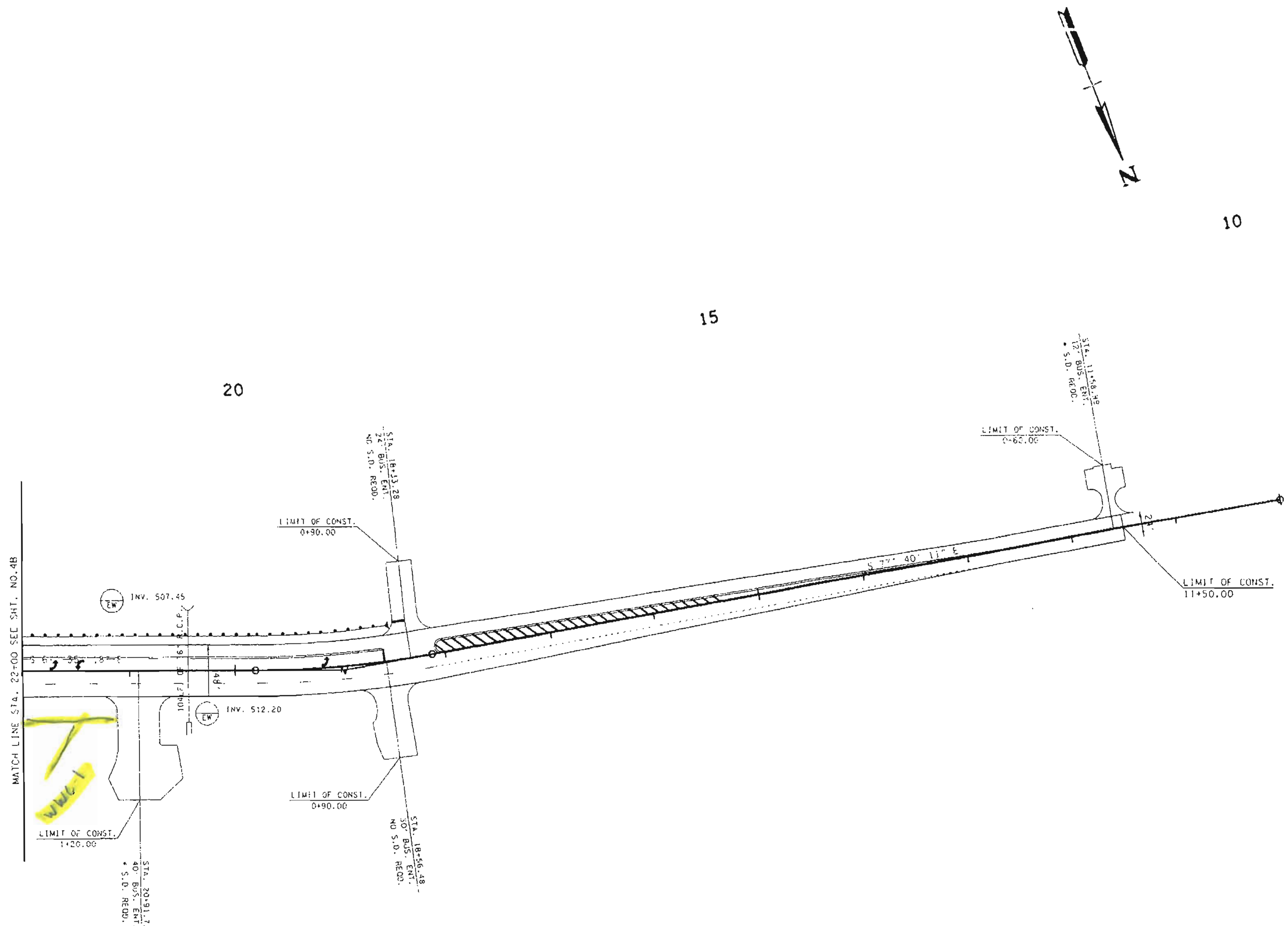
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.
TYPE
YEAR
PROJECT NO.
SHEET NO.
METRO GOVT'S CUMBERLAND
N
FOOTBALL FIELD
95
100
105
STA. 103+35.00 S.R. 112 =
STA. 27+00.00 S.R. 12
N 679787.0460
E 1721495.9327
BEGIN PROJ. NO. STP-112(6),19046-1214-14 R.O.W.
STA. 95+00.00
JACKIE D. WOODARD ET AL
1-S-BL-COM AMSOUTH BANK
S.R. 112
N 52° 30' 47" W
1-S-F-COM. BUENA VISTA FUNERAL HOME VACANT
J.R. BRATTEN, SR. &
J.R. BRATTEN, JR.
MARY JO FLATT
JONNY BOND, JR.
TOM F. CONE
TOM F. CONE
AUTOZONE, INC.
KNOB HILL PROPERTIES, LLC
LARRY S. PELHAM, TRUSTEE
H.G. HILL REALTY COMPANY
STA. 103+35.80 S.R. 112 =
STA. 10+00.00 COURTNEY AVE.
N 679787.0460
E 1721495.9327
LIMIT OF CONST.
12+82.00
COURTNEY AVENUE
MATCH LINE STA. 107+00 SEE SHT. NO. 5
WWC-1
COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR LOGO & TIED TO THE TGRN.
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
PRESENT LAYOUT
BEG. OF PROJ. TO STA. 107+00
SCALE: 1" = 50'



WWC-1
95
100
105
25
N
BEGIN PROJ. NO. STP-112(6),19046-1214-14 R.O.W.
STA. 95+00.00
S.R. 112
N 52° 30' 47" W
STA. 103+35.00 S.R. 112 =
STA. 27+00.00 S.R. 12
N 679787.0460
E 1721495.9327
MATCH LINE STA. 22+00 SEE SHT. NO. 47
MATCH LINE STA. 107+00 SEE SHT. NO. 58
LIMIT OF CONST. 1+40.06
STA. 22+46.61 24' BUS. ENT. • S.D. REQD.
STA. 106+76.47 36' BUS. ENT.
LIMIT OF CONST. 1+30.00
LIMIT OF CONST. 1+20.00
STA. 11+39.17 24' BUS. ENT. • S.D. REQD.
LIMIT OF CONST. 0+60.00
STA. 100+27.35 30' BUS. ENT.
LIMIT OF CONST. 0+95.00
LIMIT OF CONST. 0+80.00
LIMIT OF CONST. 0+80.00
STA. 104+93.32 24' BUS. ENT.
STA. 105+22.63 10' BUS. ENT.
STA. 106+46.02 30' BUS. ENT.
LIMIT OF CONST. 0+40.00
STA. 12+67.26 14' PVT. DR. • S.D. REQD.
STA. 12+16.87 10' PVT. DR. • S.D. REQD.
LIMIT OF CONST. 0+50.00
LIMIT OF CONST. 0+50.00
STA. 103+35.00 S.R. 112 =
STA. 10+00.00 COURTNEY AVE.
N 679787.0460
E 1721495.9327
LIMIT OF CONST. 12+82.00
S.R. 12
S.R. 112
COURTNEY AVE
4280
2893
1689
98
COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.00006 & TIED TO THE TGRN.
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
PROPOSED LAYOUT
BEG. OF PROJ. TO STA. 107+00
SCALE: 1" = 50'
TYPE
YEAR
PROJECT NO.
SHEET NO.
FILE NO.


TYPE
YEAR
PROJECT NO.
SHEET NO.
R.O.W.
2008
49
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.
N
10
15
20
NASHVILLE YOUNG MENS CHRISTIAN ASSOCIATION, INC.
9
POOL
PLAY GROUND
CURB
PI 19+80.38
PC 18+12.5
5
JAUNITA VEASY
4
JAUNITA VEASY
1
NABIL RASHAD YAFAI
AND WIFE
FEKREYA Y. YAFAI
EIP
TRAV-S66
TRAV-S67
S.R. 12 (ASHLAND CITY HIGHWAY)
2
LIMIT OF CONST.
11+50.00
EARL T. HUTCHENS
AND WIFE
NORMA SUE HUTCHENS
3
DALIBOR VAVRA
AND WIFE
DANIELA VAVRA
MATCH LINE STA. 22+00 SEE SHT. NO.4
T.E. 509.63
T.E. 512.60
CURB
EX. 18" CMP
WWC 1
S.R. 12 (ASHLAND CITY HWY)
PI 18+96.58
N 679,863.8618
E 1,720,755.2711
Δ 10° 04' 54" (RT)
D 6° 00' 00"
R 954.93
L 168.03
T 84.23
SE 0.040 FT/FT
DESIGN SPEED 50 MPH
TRANS. LENGTH 150'
6
T. TURNER SNODGRASS, TRUSTEE
7
1 S BL-COM.
STRIP MALL
DOLLAR GENERAL & SAVE-A-LOT
JACKIE D. WOODARD, ET AL
MATCH LINE SEE SHT. NO.5
12/10/2007 10:55:57 AM
P(UG)
COORDINATE VALUES ARE NAD/83(1995)
AND ARE DATUM ADJUSTED BY THE
FACTOR 1.00006 & TIED TO THE TGRN.
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
PRESENT
LAYOUT
STA.11+50 TO STA.22+00
SCALE: 1" = 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2008	STP-112 (6)	49



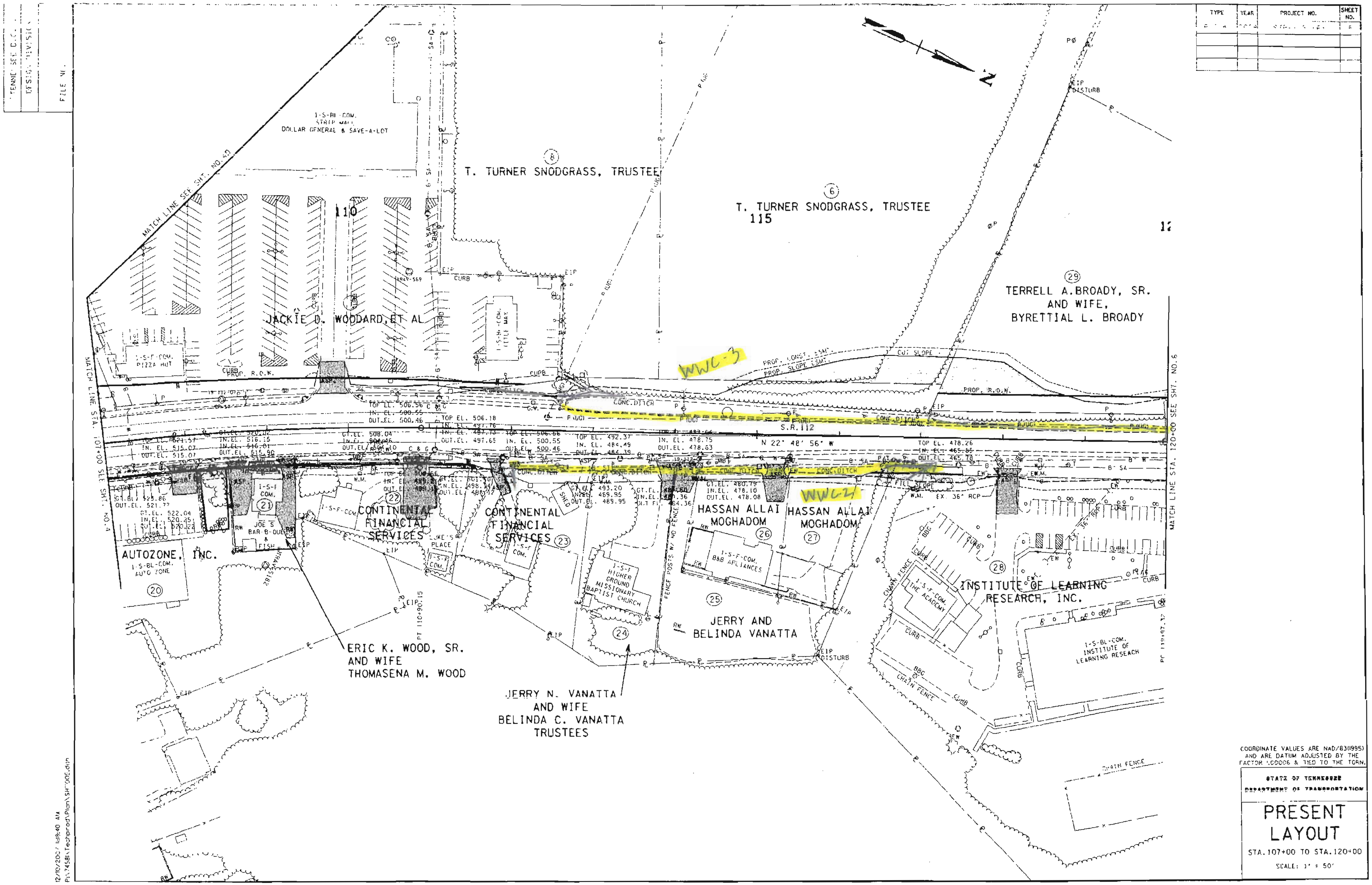
COORDINATE VALUES ARE NAD/83(1995)
AND ARE DATUM ADJUSTED BY THE
FACTOR 1.00006 & TIED TO THE TCRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED LAYOUT

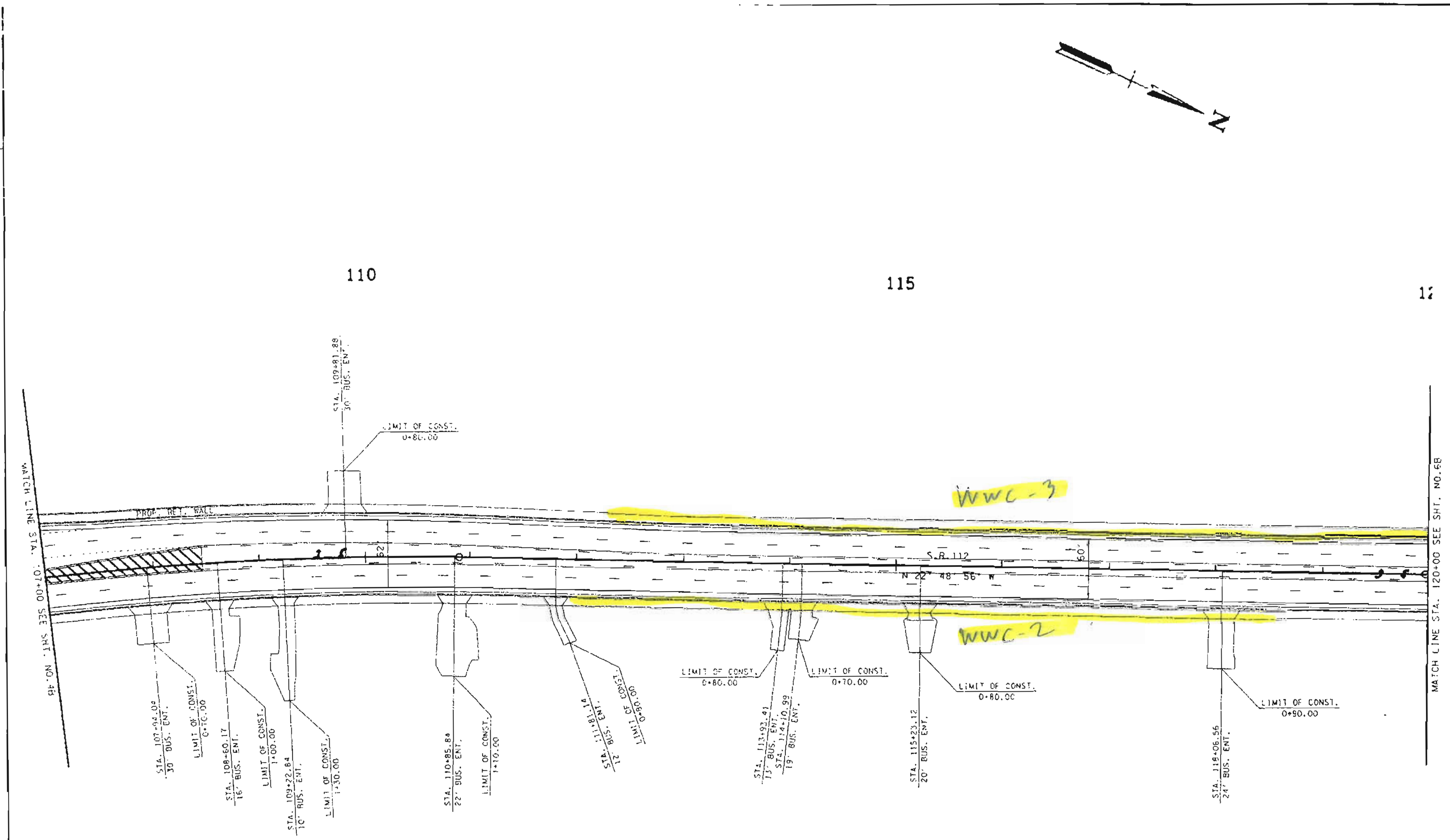
STA.11+50 TO STA.22+00

SCALE: 1" = 50'



T. TURNER SNODGRASS, TRUSTEE
T. TURNER SNODGRASS, TRUSTEE
115
110
1-S-BL-COM.
STRIP MALL
DOLLAR GENERAL & SAVE-A-LOT
JACKIE D. WOODARD, ET AL
1-S-F-COM.
PIZZA HUT
MATCH LINE SEE SHT. NO. 4
MATCH LINE STA. 107+00 SEE SHT. NO. 4
MATCH LINE STA. 120+00 SEE SHT. NO. 6
TERRELL A. BROADY, SR.
AND WIFE,
BYRETTIAL L. BROADY
WWC-3
WWC-4
PROP. R.O.W.
CONC. DITCH
CUT SLOPE
S.R. 112
N 22° 48' 56" W
AUTOZONE, INC.
1-S-BL-COM.
AUTO ZONE
JOE'S BAR-B-QUE & FISH
CONTINENTAL FINANCIAL SERVICES
CONTINENTAL FINANCIAL SERVICES
HASSAN ALLAI MOGHADOM
HASSAN ALLAI MOGHADOM
1-S-F-COM.
B&B APLIANCES
1-S-F
HIGHER GROUND
MISSIONARY
BAPTIST CHURCH
JERRY AND
BELINDA VANATTA
INSTITUTE OF LEARNING
RESEARCH, INC.
1-S-BL-COM.
INSTITUTE OF
LEARNING RESEACH
1-S-F-COM.
THE ACADEMY
ERIC K. WOOD, SR.
AND WIFE
THOMASENA M. WOOD
JERRY N. VANATTA
AND WIFE
BELINDA C. VANATTA
TRUSTEES
CHAIN FENCE
COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.00006 & TIED TO THE TGRN.
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
PRESENT
LAYOUT
STA. 107+00 TO STA. 120+00
SCALE: 1" = 50'
TYPE
YEAR
PROJECT NO.
SHEET NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
[illegible]	[illegible]	[illegible]	[illegible]



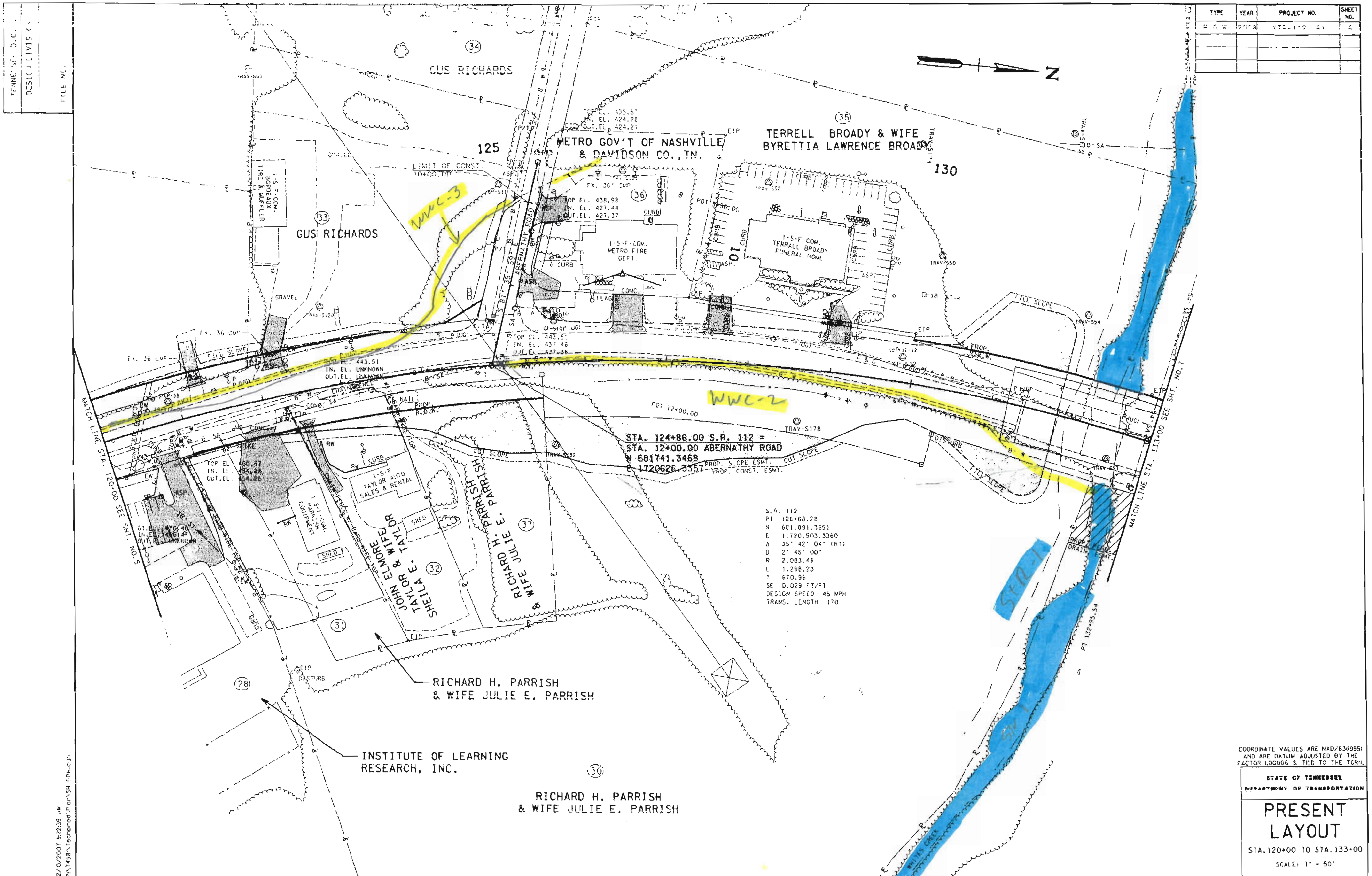
COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.0000E & TIED TO THE TGRN

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

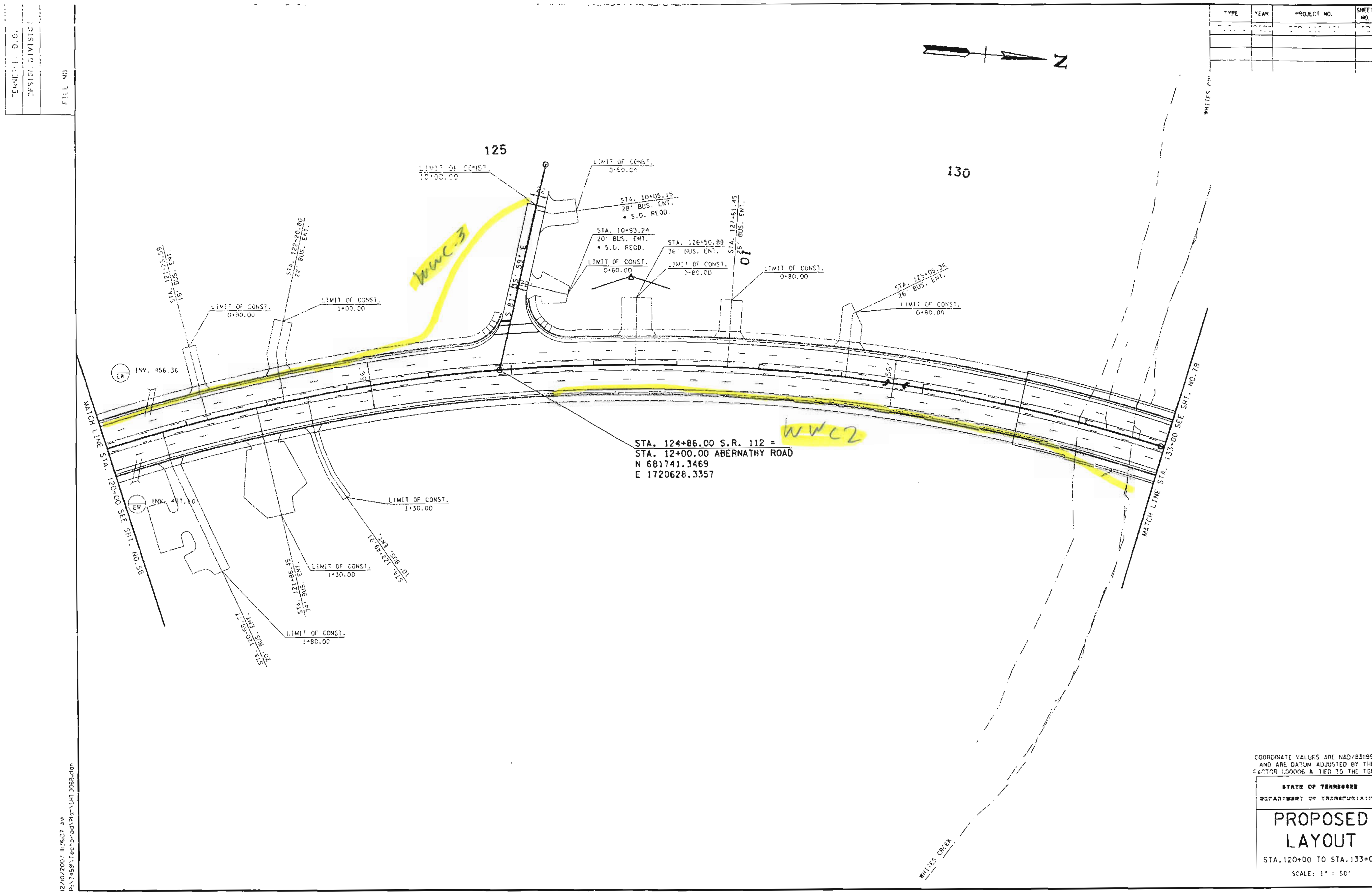
PROPOSED LAYOUT

STA.107+00 TO STA.120+00

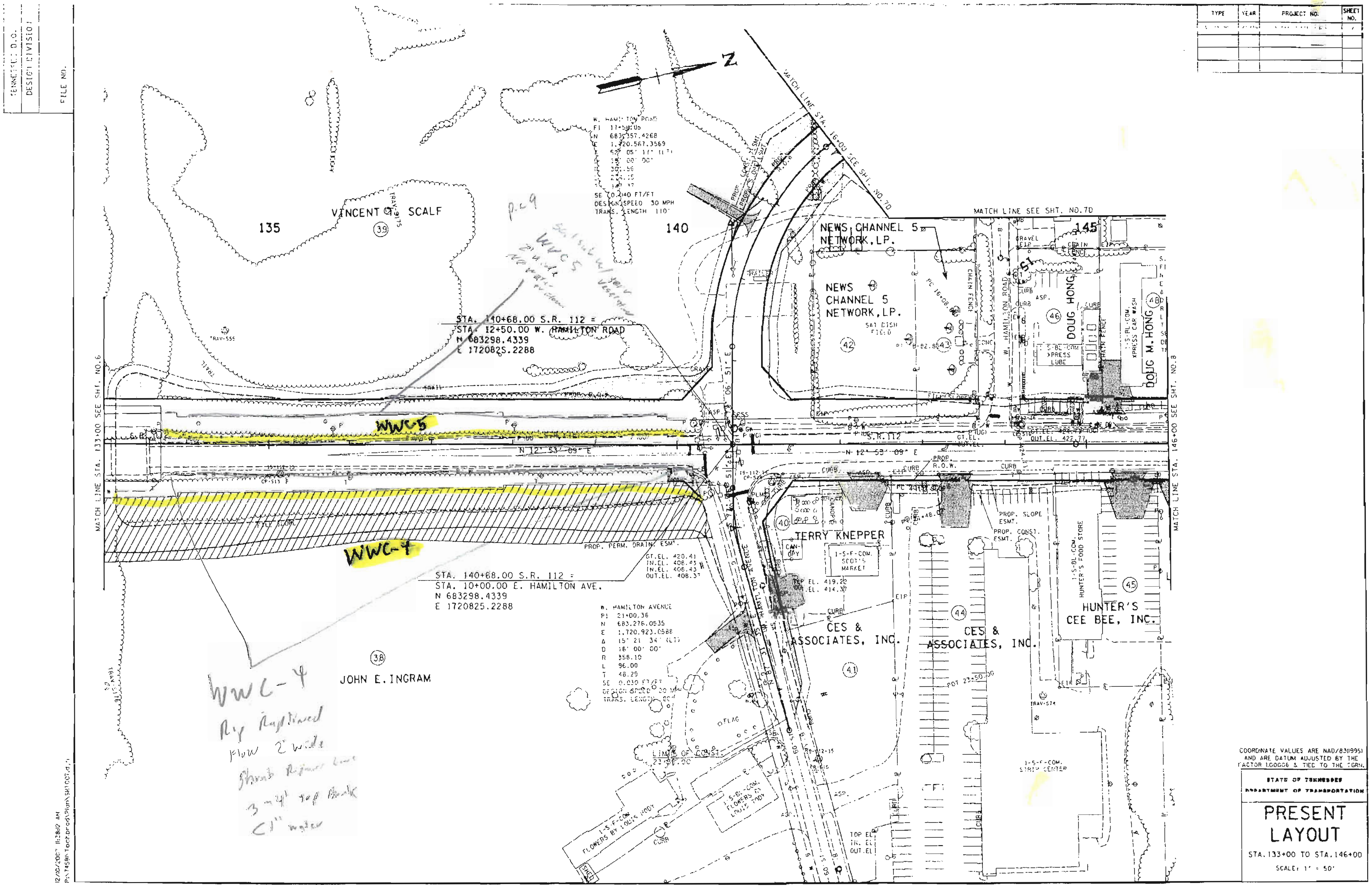
SCALE: 1" = 50'



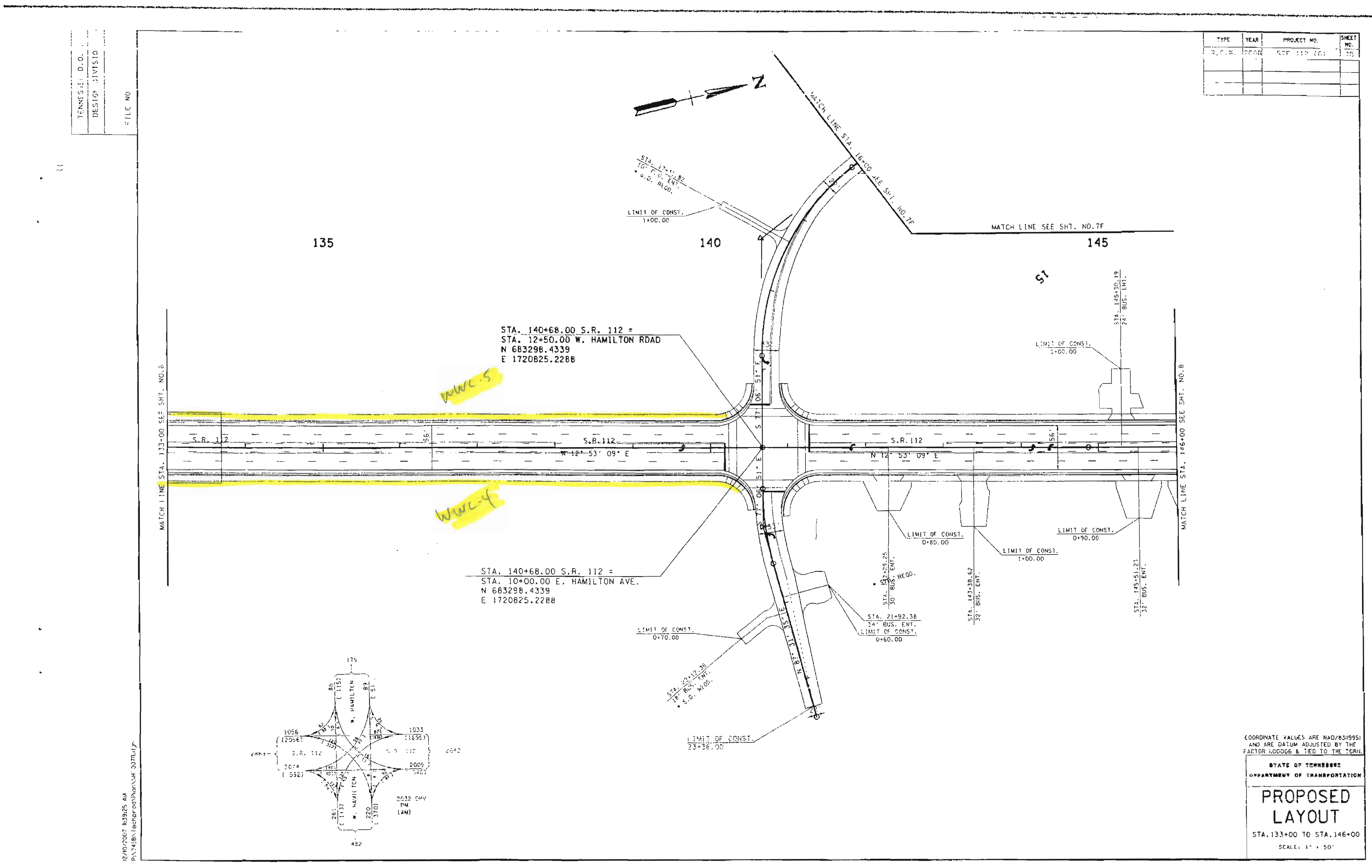
GUS RICHARDS
GUS RICHARDS
METRO GOV'T OF NASHVILLE & DAVIDSON CO., TN.
TERRELL BROADY & WIFE BYRETTIA LAWRENCE BROADY
125
130
WWC-3
WWC-2
STR-1
1-S-F-COM. METRO FIRE DEPT.
1-S-F-COM. TERRALL BROADY FUNERAL HOME
ABERNATHY ROAD
STA. 124+86.00 S.R. 112 = STA. 12+00.00 ABERNATHY ROAD
N 681741.3469
E 1720628.3557
S.R. 112
PI 126+68.28
N 681,891.3651
E 1,720,503.3360
Δ 35° 42' 04" (RT)
D 2° 45' 00"
R 2,083.48
L 1,298.23
T 670.96
SE 0.029 FT/FT
DESIGN SPEED 45 MPH
TRANS. LENGTH 170
JOHN ELMORE TAYLOR & WIFE SHEILA E. TAYLOR
RICHARD H. PARRISH & WIFE JULIE E. PARRISH
RICHARD H. PARRISH & WIFE JULIE E. PARRISH
INSTITUTE OF LEARNING RESEARCH, INC.
RICHARD H. PARRISH & WIFE JULIE E. PARRISH
1-S-F TAYLOR AUTO SALES & RENTAL
MATCH LINE STA. 120+00 SEE SHT. NO. 5
MATCH LINE STA. 133+00 SEE SHT. NO. 7
PT 132+93.54
COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.00006 & TIED TO THE TCRN.
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
PRESENT LAYOUT
STA. 120+00 TO STA. 133+00
SCALE: 1" = 50'
TYPE
YEAR
PROJECT NO.
SHEET NO.



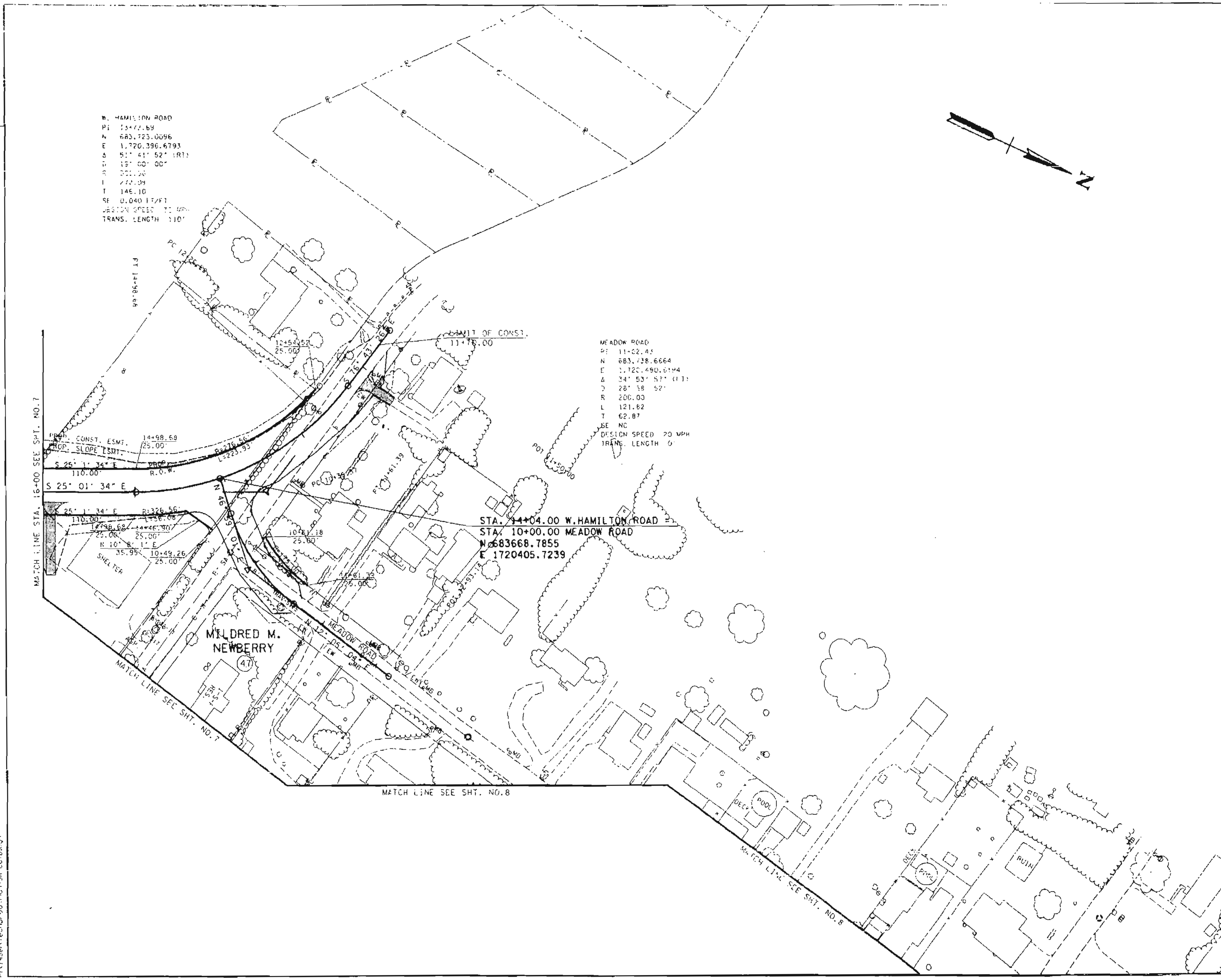
N
125
130
LIMIT OF CONST.
10+00.00
LIMIT OF CONST.
0+50.00
STA. 10+05.15
28' BUS. ENT.
• S.D. REQD.
STA. 10+93.24
20' BUS. ENT.
• S.D. REQD.
LIMIT OF CONST.
0+60.00
STA. 126+50.89
36' BUS. ENT.
LIMIT OF CONST.
STA. 127+61.45
26' BUS. ENT.
LIMIT OF CONST.
0+80.00
STA. 129+05.36
26' BUS. ENT.
LIMIT OF CONST.
0+80.00
STA. 122+20.80
22' BUS. ENT.
LIMIT OF CONST.
1+00.00
STA. 121+25.59
16' BUS. ENT.
LIMIT OF CONST.
0+90.00
INV. 456.36
INV. 457.10
WWC 3
WWC2
STA. 124+86.00 S.R. 112 =
STA. 12+00.00 ABERNATHY ROAD
N 681741.3469
E 1720628.3357
LIMIT OF CONST.
1+30.00
LIMIT OF CONST.
1+30.00
STA. 121+86.45
34' BUS. ENT.
LIMIT OF CONST.
1+80.00
MATCH LINE STA. 120+00 SEE SHT. NO. 5B
MATCH LINE STA. 133+00 SEE SHT. NO. 7B
WHITES CREEK
COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.00006 & TIED TO THE TGRN.
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
PROPOSED LAYOUT
STA. 120+00 TO STA. 133+00
SCALE: 1" = 50'
TYPE
YEAR
PROJECT NO.
SHEET NO.



TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.
TYPE
YEAR
PROJECT NO.
SHEET NO.
VINCENT G. SCALF
135
140
145
39
NEWS CHANNEL 5 NETWORK, LP.
NEWS CHANNEL 5 NETWORK, LP.
42
43
DOUG HONG
DOUG M. HONG
46
48
MATCH LINE SEE SHT. NO.7D
MATCH LINE STA. 16+00 SEE SHT. NO.7D
MATCH LINE STA. 133+00 SEE SHT. NO.6
MATCH LINE STA. 146+00 SEE SHT. NO.8
STA. 140+68.00 S.R. 112 =
STA. 12+50.00 W. HAMILTON ROAD
N 683298.4339
E 1720825.2288
STA. 140+68.00 S.R. 112 =
STA. 10+00.00 E. HAMILTON AVE.
N 683298.4339
E 1720825.2288
W. HAMILTON ROAD
W. HAMILTON AVENUE
SE 0.040 FT/FT
DESIGN SPEED 30 MPH
TRANS. LENGTH 110'
S.R. 112
N 12° 53' 09" E
PROP. PERM. DRAIN. ESMT.
PROP. SLOPE ESMT.
PROP. CONST. ESMT.
WWC-5
WWC-4
TERRY KNEPPER
40
1-S-F-COM. SCOTT'S MARKET
CES & ASSOCIATES, INC.
CES & ASSOCIATES, INC.
41
44
45
HUNTER'S CEE BEE, INC.
JOHN E. INGRAM
38
LIMITS OF CONST.
1-S-F-COM. FLOWERS BY LOUIS RODY
1-S-F-COM. STRIP CENTER
WWC-4
Rip Rap lined
Flow 2' wide
Steep Riparian bank
3-4' top Bank
<1" water
WWC-5
COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.00008 & TIED TO THE TGRN.
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
PRESENT LAYOUT
STA. 133+00 TO STA. 146+00
SCALE: 1" = 50'


TENNESSEE D.O.
DESIGN DIVISION
FILE NO.
TYPE
YEAR
PROJECT NO.
SHEET NO.
N
MATCH LINE STA. 16+00 SEE SHT. NO.7F
MATCH LINE SEE SHT. NO.7F
LIMIT OF CONST.
1+00.00
135
140
145
STA. 140+68.00 S.R. 112 =
STA. 12+50.00 W. HAMILTON ROAD
N 683298.4339
E 1720825.2288
WWC-5
WWC-4
S.R. 112
N 12° 53' 09" E
MATCH LINE STA. 133+00 SEE SHT. NO.6
MATCH LINE STA. 146+00 SEE SHT. NO.8
STA. 145+30.19
24' BUS. ENT.
STA. 140+68.00 S.R. 112 =
STA. 10+00.00 E. HAMILTON AVE.
N 683298.4339
E 1720825.2288
LIMIT OF CONST.
0+80.00
LIMIT OF CONST.
1+00.00
LIMIT OF CONST.
0+90.00
STA. 143+38.62
32' BUS. ENT.
STA. 145+51.23
32' BUS. ENT.
LIMIT OF CONST.
0+70.00
STA. 21+92.38
34' BUS. ENT.
LIMIT OF CONST.
0+60.00
LIMIT OF CONST.
23+38.00
W. HAMILTON
S.R. 112
2032 DHV
PM
(AM)
COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.00006 & TIED TO THE TGRN.
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
PROPOSED
LAYOUT
STA. 133+00 TO STA. 146+00
SCALE: 1" = 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2008	STP-112 (6)	7D



COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.00006 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRESENT LAYOUT

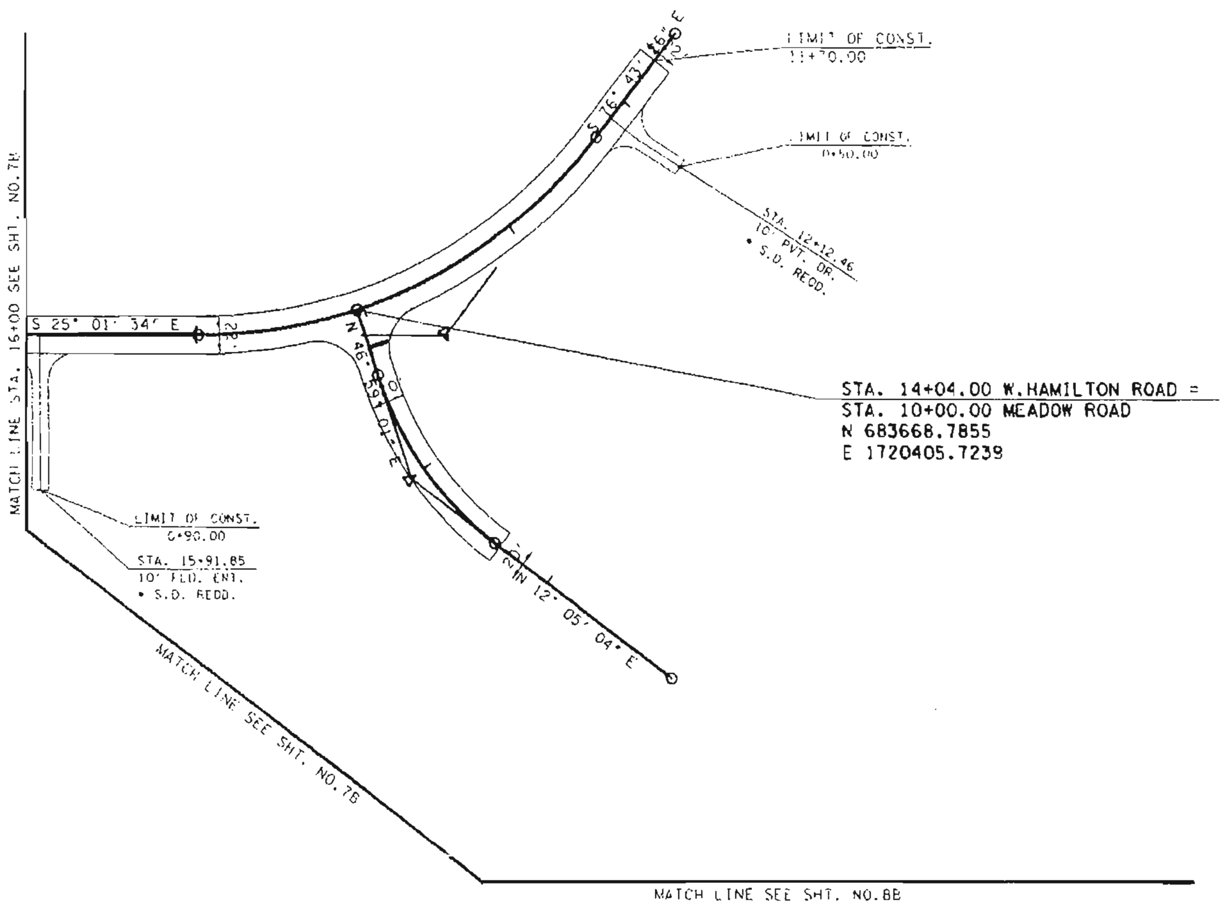
STA. 11+50 TO STA. 16+00

SCALE: 1" = 50'

TENNESSEE D.O.T.
DESIGN DIVISION

FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.



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P:\T458\Teamprod\Plan\SH 20TF.dgn

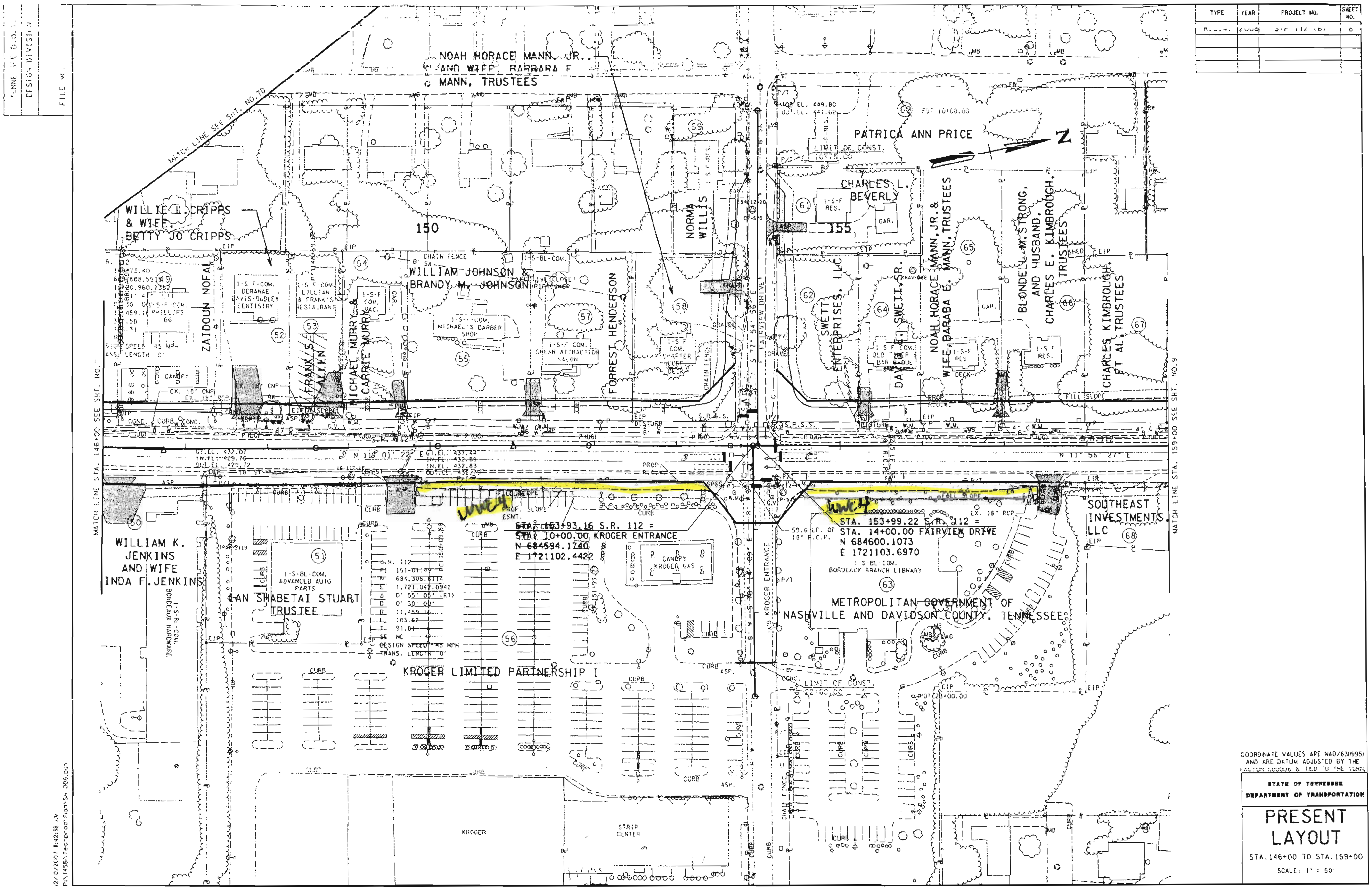
COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR .00006 & TIED TO THE TGRN.

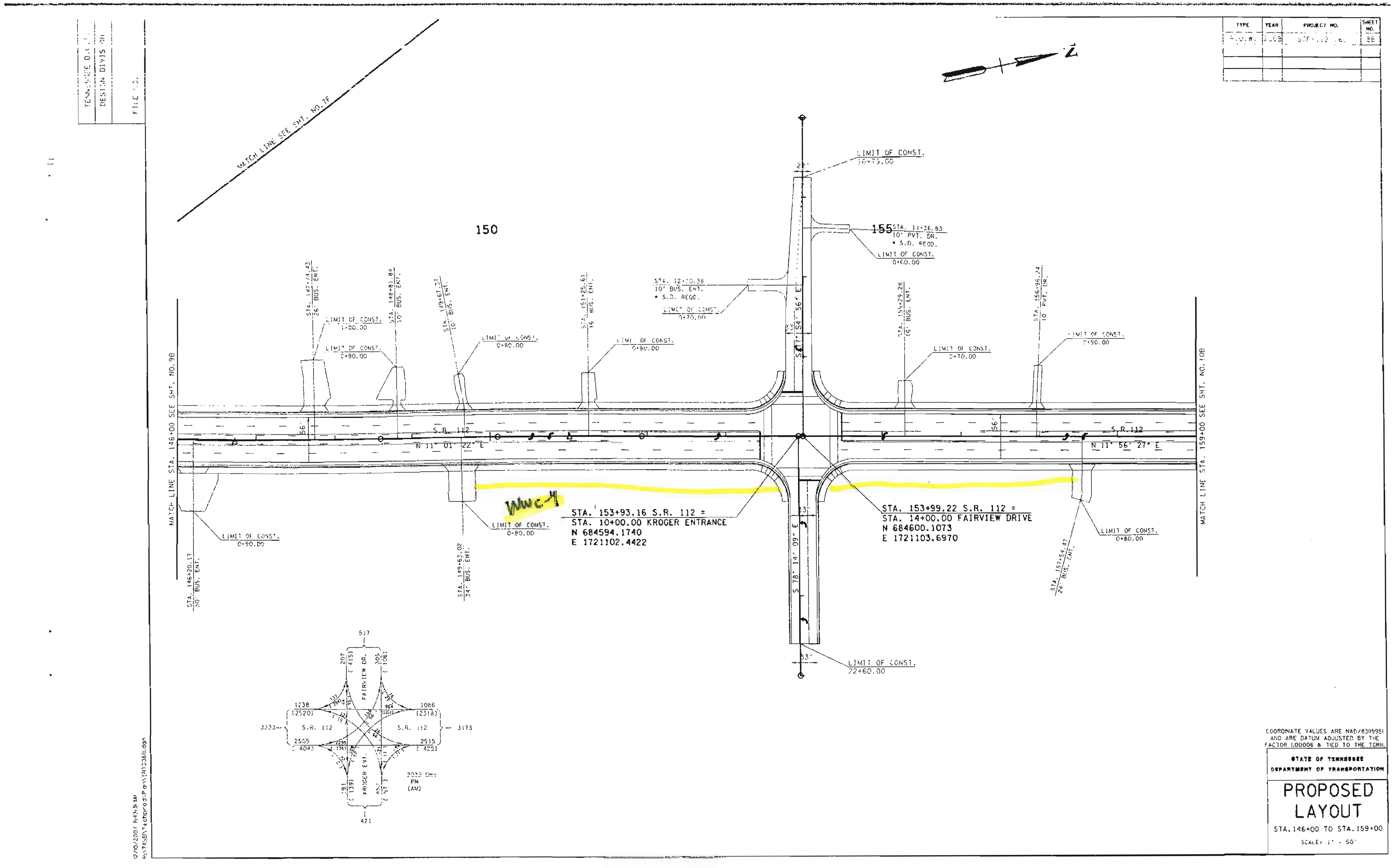
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

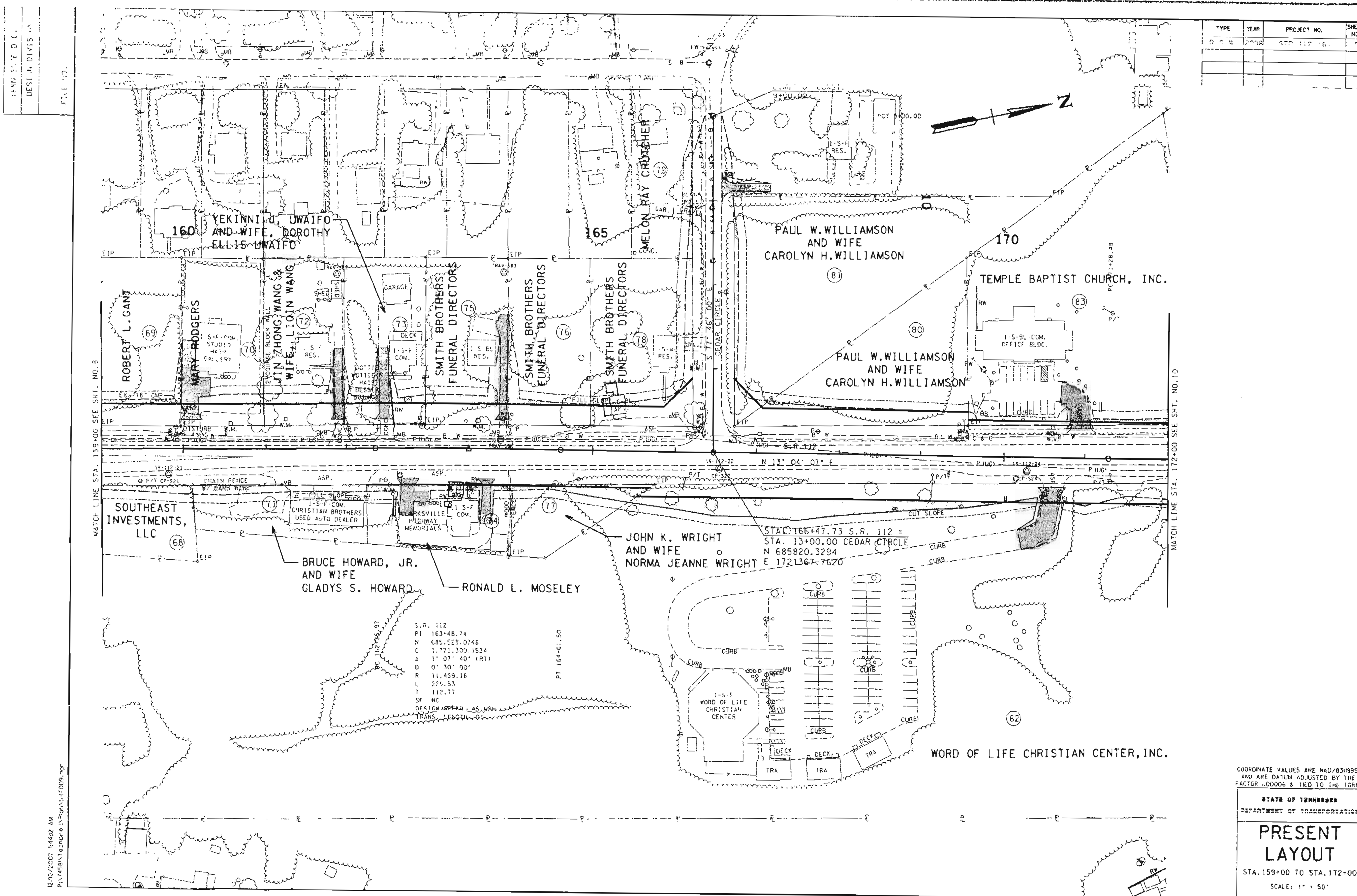
PROPOSED LAYOUT

STA. 11+50 TO STA. 16+00

SCALE: 1" = 50'

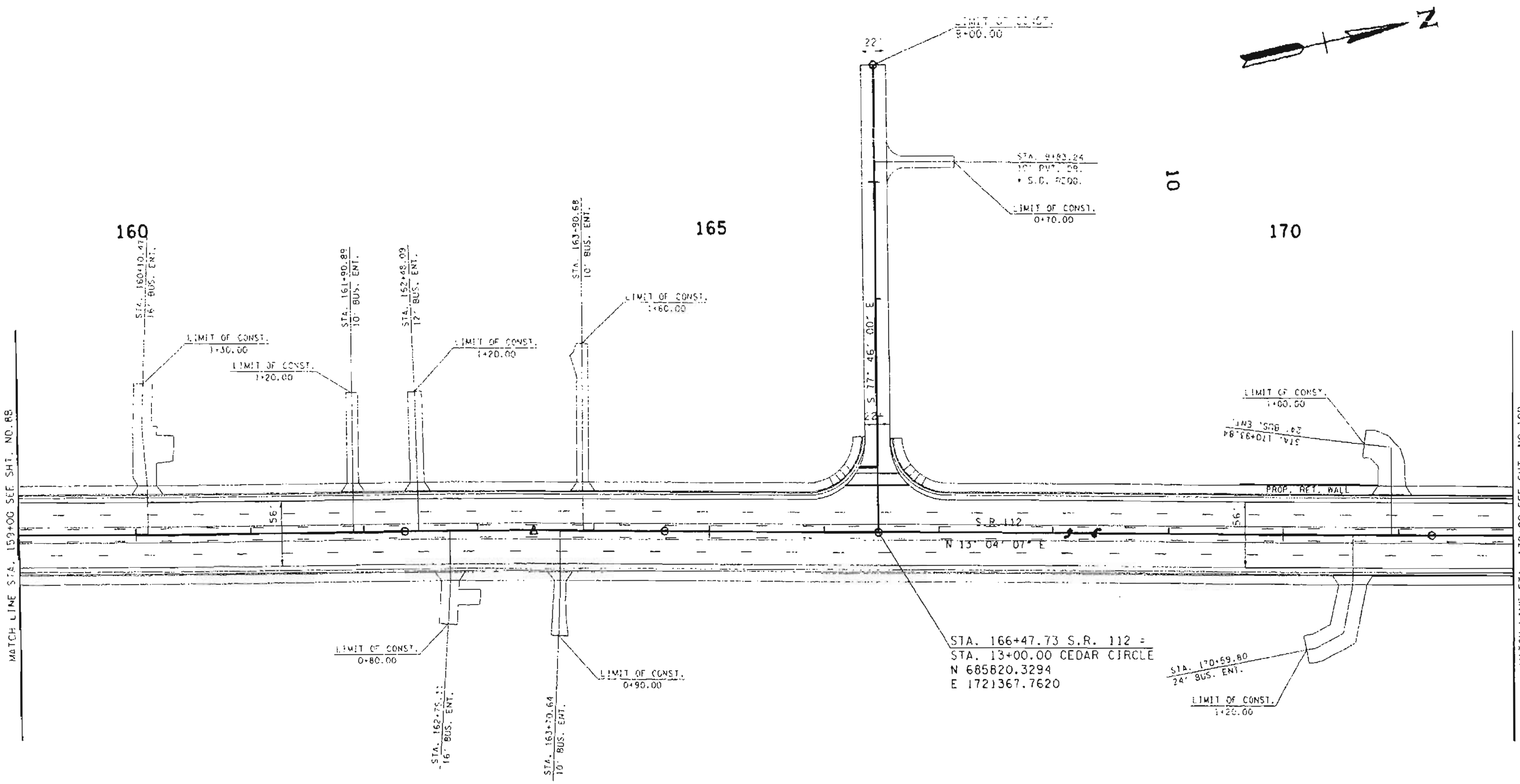

NOAH HORACE MANN, JR.
AND WIFE, BARBARA E.
MANN, TRUSTEES
PATRICA ANN PRICE
CHARLES L. BEVERLY
WILLIE L. CRIPPS
& WIFE
BETTY JO CRIPPS
150
155
NORMA WILLIS
WILLIAM JOHNSON &
BRANDY M. JOHNSON
ZAIDOUN NOFAL
FRANK S. ALLEN
MICHAEL MURRY &
CARRIE MURRY
FORREST HENDERSON
SWETT ENTERPRISES, LLC
DAVID E. SWETT, SR.
NOAH HORACE MANN, JR. &
WIFE, BARABA E. MANN, TRUSTEES
BLONDELL M. STRONG,
AND HUSBAND,
CHARLES E. KIMBROUGH,
TRUSTEES
CHARLES KIMBROUGH,
ET AL, TRUSTEES
MATCH LINE SEE SHT. NO. 7
MATCH LINE STA. 146+00 SEE SHT. NO.
MATCH LINE STA. 159+00 SEE SHT. NO. 9
N 11° 56' 27" E
WILLIAM K. JENKINS
AND WIFE
INDA F. JENKINS
IAN SHABETAI STUART
TRUSTEE
1-S-BL-COM.
ADVANCED AUTO
PARTS
STA. 153+93.16 S.R. 112 =
STA. 10+00.00 KROGER ENTRANCE
N 684594.1740
E 1721102.4422
STA. 153+99.22 S.R. 112 =
STA. 14+00.00 FAIRVIEW DRIVE
N 684600.1073
E 1721103.6970
1-S-BL-COM.
BORDEAUX BRANCH LIBRARY
METROPOLITAN GOVERNMENT OF
NASHVILLE AND DAVIDSON COUNTY, TENNESSEE
SOUTHEAST
INVESTMENTS,
LLC
KROGER LIMITED PARTNERSHIP I
KROGER
STRIP
CENTER
CANOPY
KROGER GAS
KROGER ENTRANCE
FAIRVIEW DRIVE
LIMIT OF CONST.
DESIGN SPEED 45 MPH
Z
UWC4
UWC4
TYPE
YEAR
PROJECT NO.
SHEET NO.
COORDINATE VALUES ARE NAD/83(1995)
AND ARE DATUM ADJUSTED BY THE
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
PRESENT
LAYOUT
STA. 146+00 TO STA. 159+00
SCALE: 1" = 50'
DESIGN DIVISION
FILE NO.


MATCH LINE SEE SHT. NO. 7F
150
155
LIMIT OF CONST.
STA. 153+93.16 S.R. 112 =
STA. 10+00.00 KROGER ENTRANCE
N 684594.1740
E 1721102.4422
STA. 153+99.22 S.R. 112 =
STA. 14+00.00 FAIRVIEW DRIVE
N 684600.1073
E 1721103.6970
S.R. 112
N 11° 01' 22" E
N 11° 56' 27" E
MATCH LINE STA. 146+00 SEE SHT. NO. 9B
MATCH LINE STA. 159+00 SEE SHT. NO. 10B
STA. 146+20.17 30' BUS. ENT.
STA. 149+63.02 34' BUS. ENT.
STA. 147+14.43 26' BUS. ENT.
STA. 148+81.84 10' BUS. ENT.
STA. 151+25.61 16' BUS. ENT.
STA. 155+29.28 16' BUS. ENT.
STA. 156+96.24 10' PVT. DR.
STA. 12+10.38 10' BUS. ENT. • S.D. REQD.
STA. 13+36.63 10' PVT. DR. • S.D. REQD.
LIMIT OF CONST. 10+75.00
LIMIT OF CONST. 22+60.00
S 78° 14' 09" E
WWC-4
FAIRVIEW DR.
KROGER ENT.
S.R. 112
2032 DHV PM (AM)
COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.00006 & TIED TO THE TDRN.
STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION
PROPOSED LAYOUT
STA. 146+00 TO STA. 159+00
TYPE
YEAR
PROJECT NO.
SHEET NO.



ROBERT L. GANT
MARY RODGERS
JIN ZHONG WANG & WIFE LIQIN WANG
YEKINNI U. UWAIFO AND WIFE, DOROTHY ELLIS UWAIFO
SMITH BROTHERS FUNERAL DIRECTORS
MELON RAY CRUTCHER
PAUL W. WILLIAMSON AND WIFE CAROLYN H. WILLIAMSON
TEMPLE BAPTIST CHURCH, INC.
1-S-BL-COM. OFFICE BLDG.
CEDAR CIRCLE
S.R. 112
N 13° 04' 07" E
SOUTHEAST INVESTMENTS, LLC
1-S-F-COM. CHRISTIAN BROTHERS USED AUTO DEALER
BRUCE HOWARD, JR. AND WIFE GLADYS S. HOWARD
RONALD L. MOSELEY
JOHN K. WRIGHT AND WIFE NORMA JEANNE WRIGHT
STA. 166+47.73 S.R. 112 = STA. 13+00.00 CEDAR CIRCLE
N 685820.3294
E 1721367.7620
1-S-F WORD OF LIFE CHRISTIAN CENTER
WORD OF LIFE CHRISTIAN CENTER, INC.
MATCH LINE STA. 159+00 SEE SHT. NO. 8
MATCH LINE STA. 172+00 SEE SHT. NO. 10
160
165
170
N
COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.00006 & TIED TO THE TGRN.
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
PRESENT LAYOUT
STA. 159+00 TO STA. 172+00
SCALE: 1" = 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2008	STP-112 [illegible]	9B



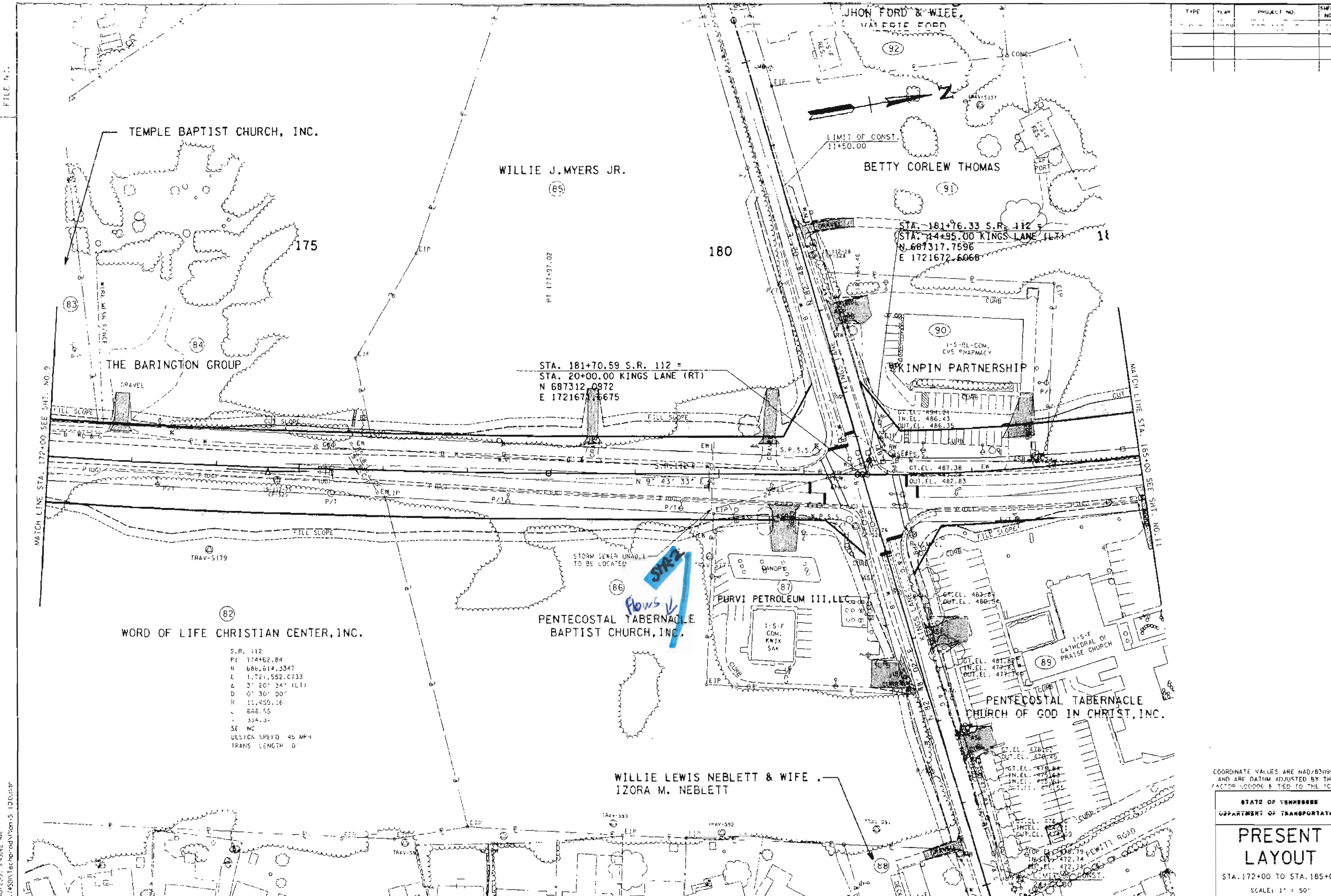
COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.00006 & TIED TO THE TGRN.

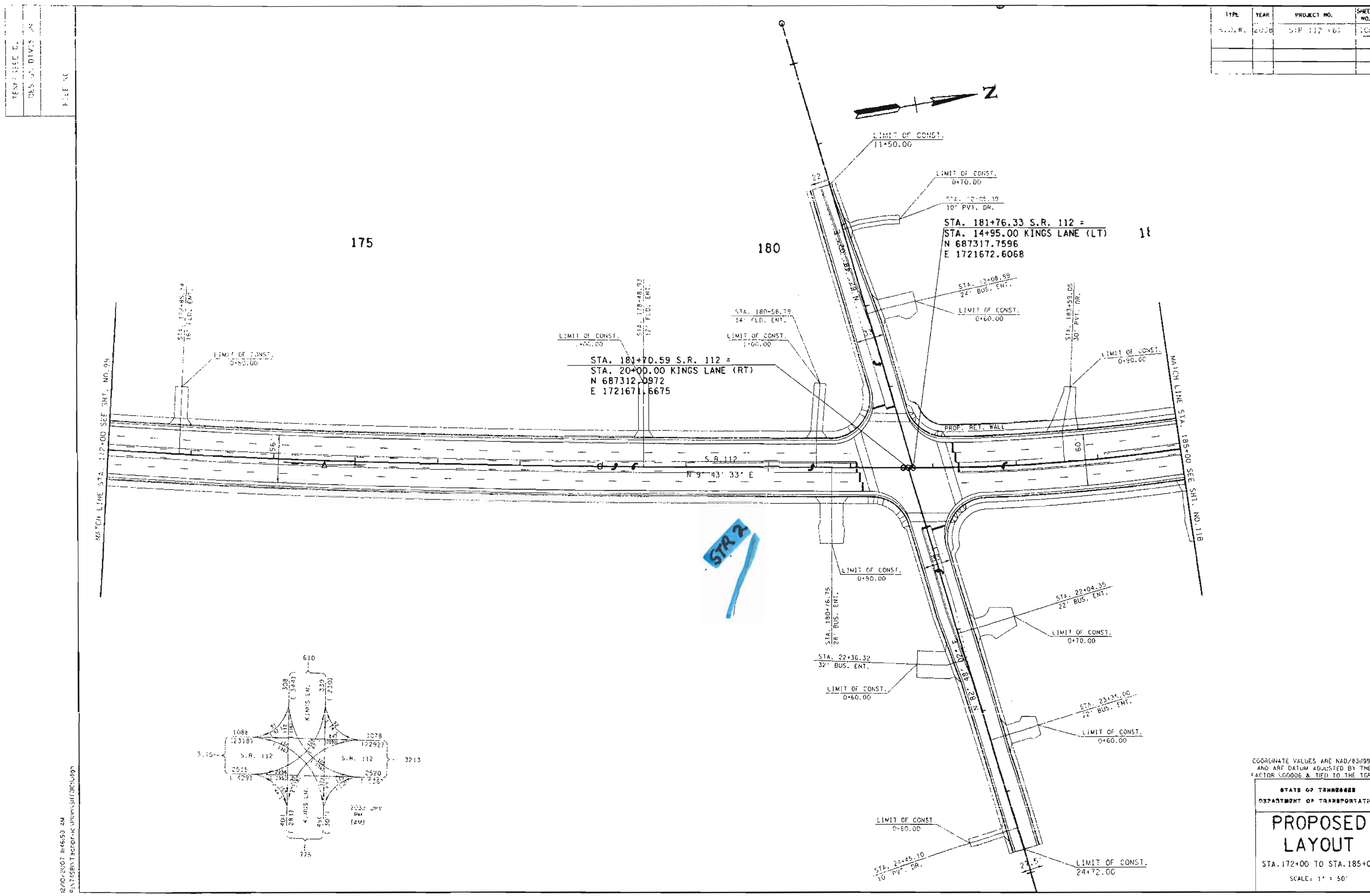
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED LAYOUT

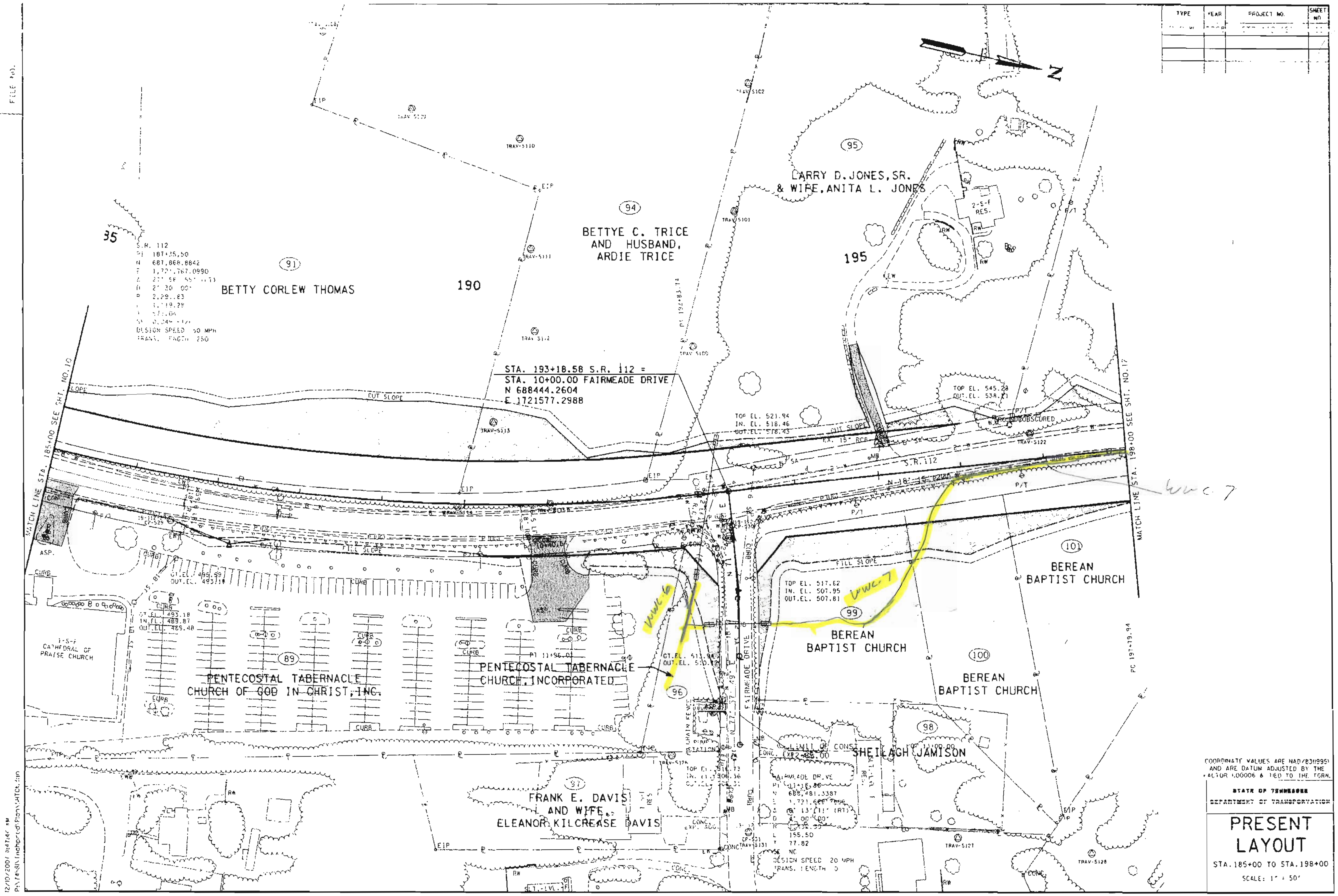
STA. 159+00 TO STA. 172+00

SCALE: 1" = 50'

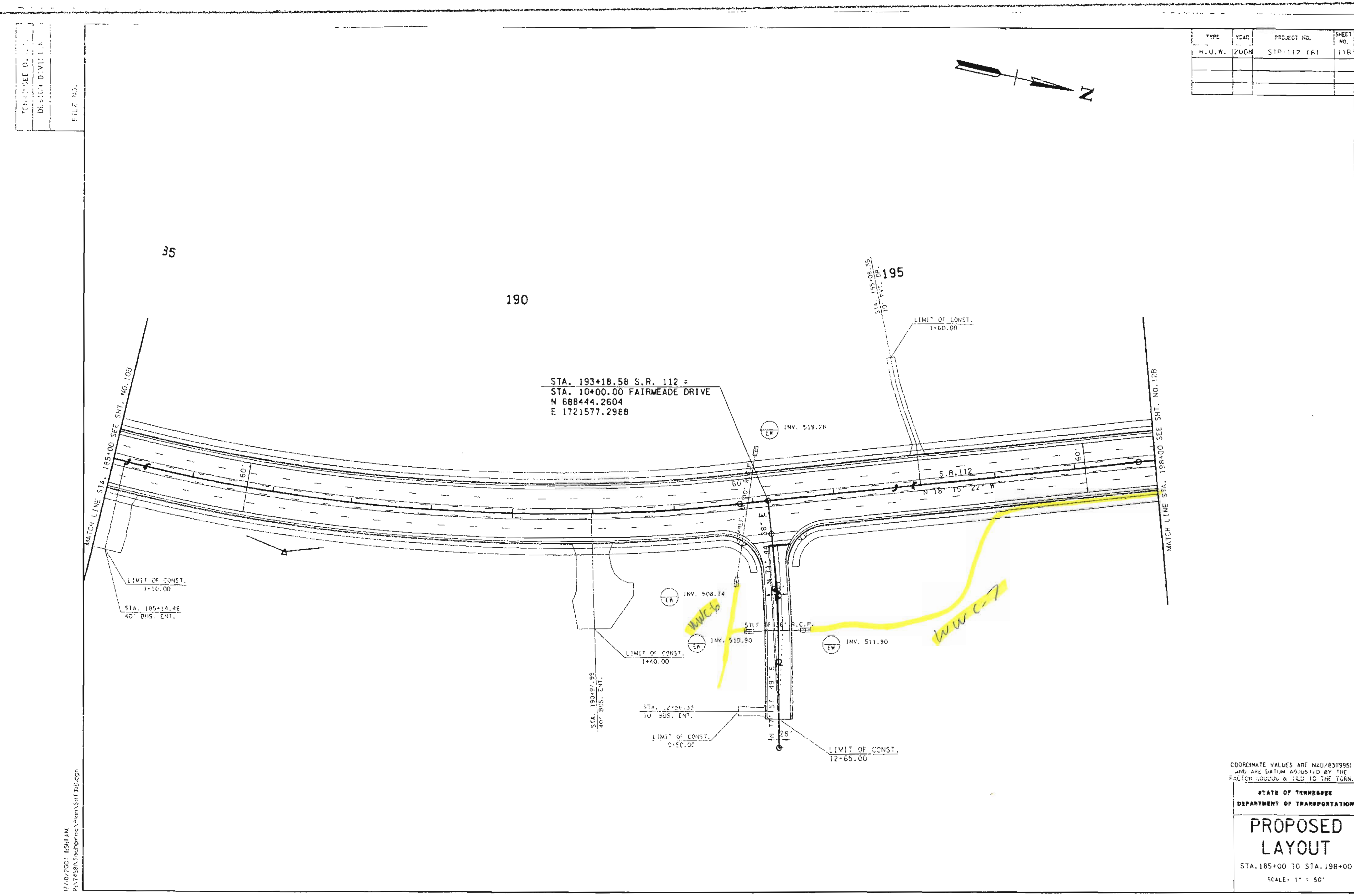

TEMPLE BAPTIST CHURCH, INC.
WILLIE J.MYERS JR.
85
JHON FORD & WIFE,
VALERIE FORD
92
BETTY CORLEW THOMAS
91
LIMIT OF CONST.
11+50.00
175
180
83
84
THE BARINGTON GROUP
STA. 181+76.33 S.R. 112 =
STA. 14+95.00 KINGS LANE (LT)
N 687317.7596
E 1721672.6068
STA. 181+70.59 S.R. 112 =
STA. 20+00.00 KINGS LANE (RT)
N 687312.0972
E 1721671.6675
90
CVS PHARMACY
SKINPIN PARTNERSHIP
FILL SLOPE
CUT SLOPE
S.R. 112
TRAV-5179
STORM SEWER UNABLE TO BE LOCATED
86
87
CANOPY
PURVI PETROLEUM III,LLC
82
WORD OF LIFE CHRISTIAN CENTER,INC.
PENTECOSTAL TABERNACLE
BAPTIST CHURCH,INC.
STR 2
Flows
KINGS LANE
89
CATHEDRAL OF PRAISE CHURCH
PENTECOSTAL TABERNACLE
CHURCH OF GOD IN CHRIST,INC.
WILLIE LEWIS NEBLETT & WIFE ,
IZORA M. NEBLETT
88
PEWITT ROAD
MATCH LINE STA. 172+00 SEE SHT. NO.9
MATCH LINE STA. 185+00 SEE SHT. NO.11
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
PRESENT
LAYOUT
STA.172+00 TO STA.185+00
SCALE: 1" = 50'

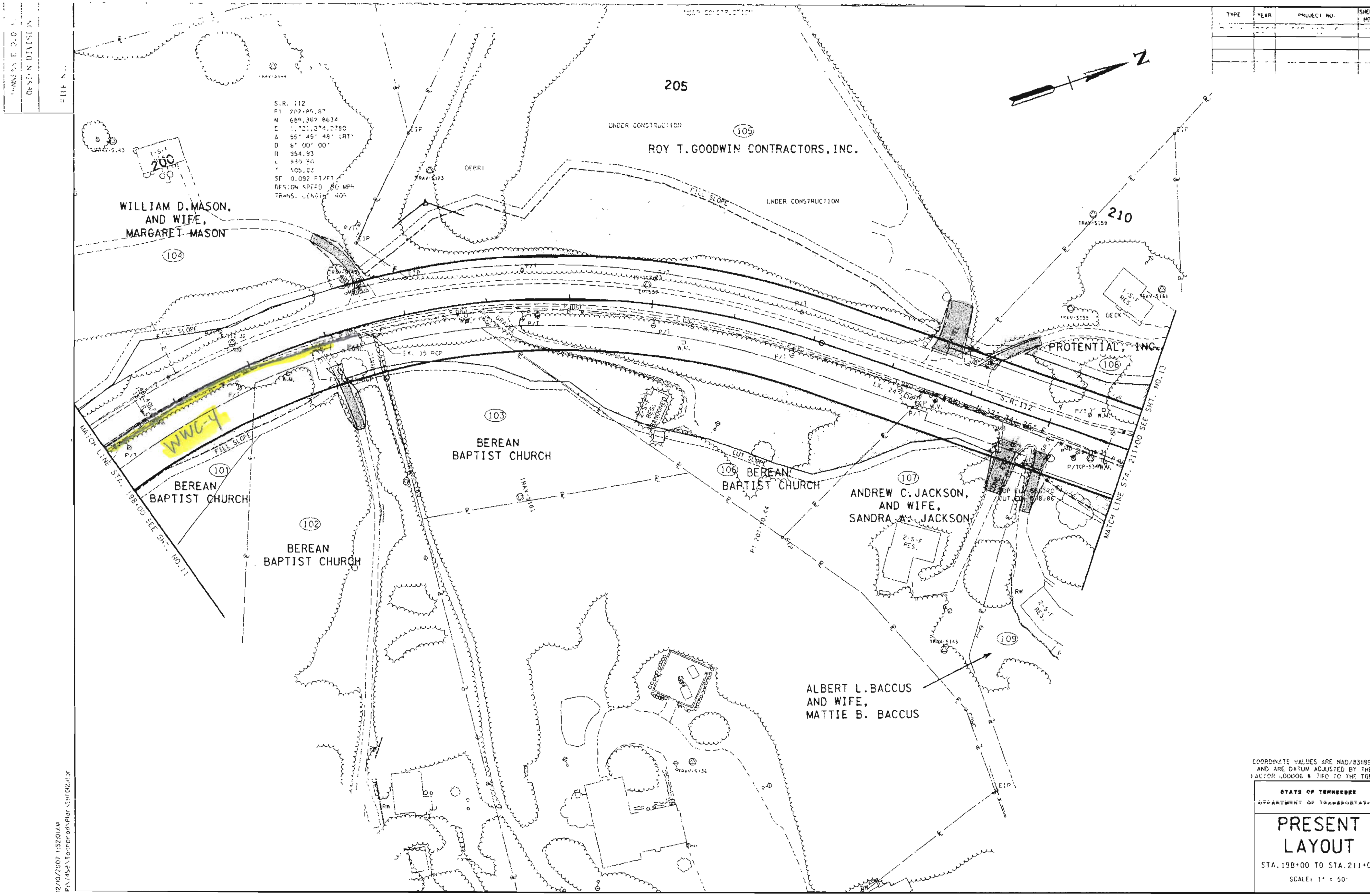


TYPE | YEAR | PROJECT NO. | SHEET NO.
N
LIMIT OF CONST. 11+50.00
LIMIT OF CONST. 0+70.00
10' PVT. DR.
STA. 181+76.33 S.R. 112 =
STA. 14+95.00 KINGS LANE (LT)
N 687317.7596
E 1721672.6068
175
180
22' BUS. ENT.
LIMIT OF CONST. 0+60.00
STA. 183+53.05 30' PVT. DR.
LIMIT OF CONST. 0+90.00
STA. 180+56.79 14' FLD. ENT.
LIMIT OF CONST. 1+00.00
LIMIT OF CONST.
STA. 181+70.59 S.R. 112 =
STA. 20+00.00 KINGS LANE (RT)
N 687312.0972
E 1721671.6675
LIMIT OF CONST. 0+60.00
MATCH LINE STA. 172+00 SEE SHT. NO. 9A
MATCH LINE STA. 185+00 SEE SHT. NO. 11B
PROP. RET. WALL
S.R. 112
N 9° 43' 33" E
56
60
STR 2
LIMIT OF CONST. 0+90.00
STA. 180+76.75 28' BUS. ENT.
STA. 22+04.35 22' BUS. ENT.
LIMIT OF CONST. 0+70.00
STA. 22+36.32 32' BUS. ENT.
LIMIT OF CONST. 0+60.00
STA. 23+35.00 22' BUS. ENT.
LIMIT OF CONST. 0+60.00
LIMIT OF CONST 0+60.00
STA. 24+45.10 10' PVT. DR.
LIMIT OF CONST. 24+72.00
610
KINGS LN.
S.R. 112
S.R. 112
KINGS LN.
3213
725
COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.00006 & TIED TO THE TGRN.
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
PROPOSED LAYOUT
STA. 172+00 TO STA. 185+00
SCALE: 1" = 50'

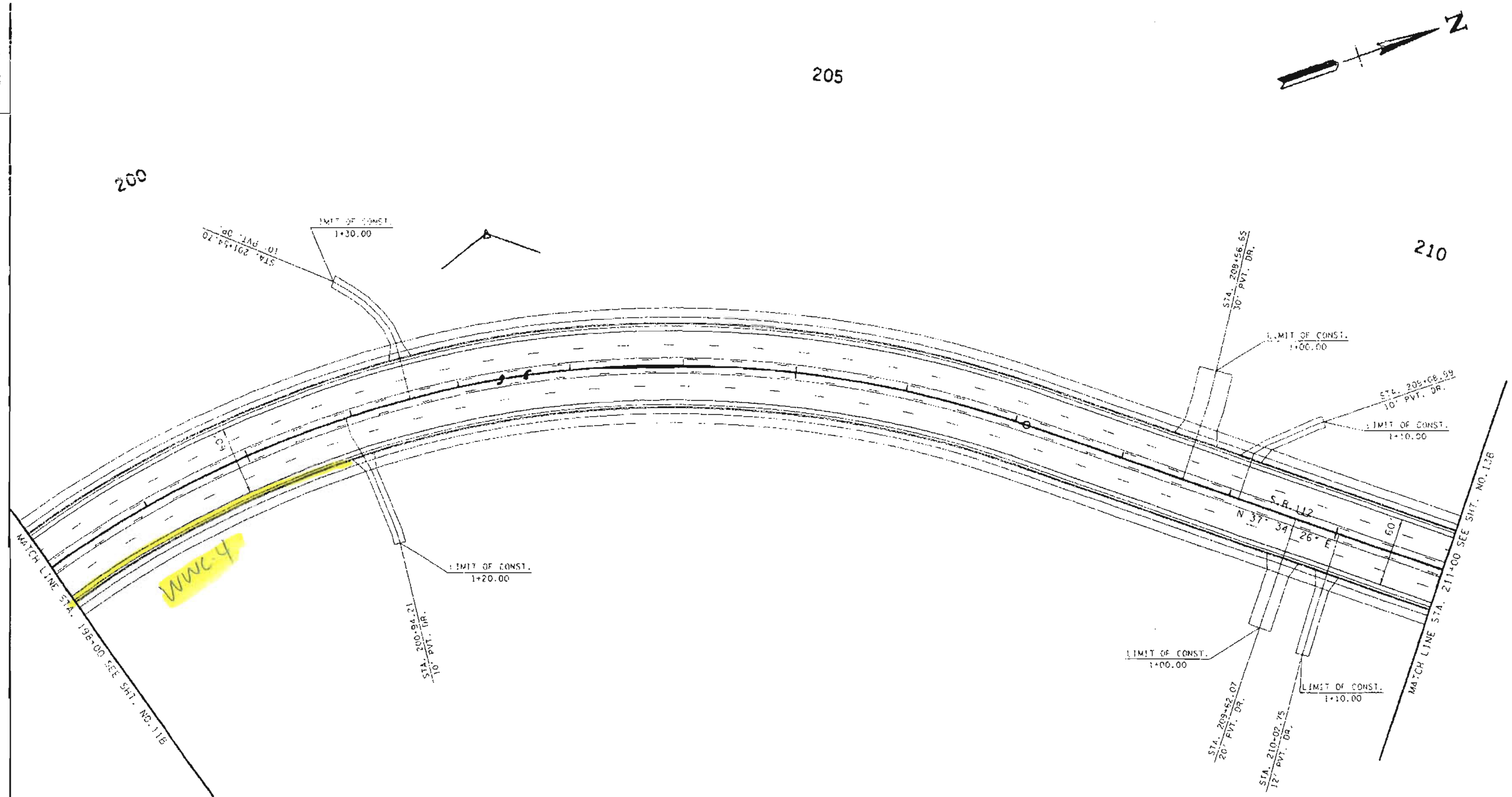


LARRY D. JONES, SR. & WIFE, ANITA L. JONES
BETTYE C. TRICE AND HUSBAND, ARDIE TRICE
BETTY CORLEW THOMAS
190
195
STA. 193+18.58 S.R. 112 =
STA. 10+00.00 FAIRMEADE DRIVE
N 688444.2604
E 1721577.2988
CUT SLOPE
FILL SLOPE
S.R. 112
MATCH LINE STA. 185+00 SEE SHT. NO. 10
MATCH LINE STA. 198+00 SEE SHT. NO. 12
BEREAN BAPTIST CHURCH
PENTECOSTAL TABERNACLE CHURCH OF GOD IN CHRIST, INC.
PENTECOSTAL TABERNACLE CHURCH, INCORPORATED
FAIRMEADE DRIVE
SHEILAGH JAMISON
FRANK E. DAVIS AND WIFE, ELEANOR KILCREASE DAVIS
WWC 6
WWC 7
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
PRESENT LAYOUT
STA. 185+00 TO STA. 198+00


TYPE
YEAR
PROJECT NO.
SHEET NO.
R.O.W.
2008
STP-112 (6)
11B
N
190
195
STA. 193+18.58 S.R. 112 =
STA. 10+00.00 FAIRMEADE DRIVE
N 688444.2604
E 1721577.2988
INV. 519.28
INV. 508.74
INV. 510.90
INV. 511.90
S.R. 112
LIMIT OF CONST.
1+60.00
LIMIT OF CONST.
1+10.00
STA. 185+14.48
40' BUS. ENT.
LIMIT OF CONST.
1+40.00
LIMIT OF CONST.
12+65.00
MATCH LINE STA. 185+00 SEE SHT. NO. 10B
MATCH LINE STA. 198+00 SEE SHT. NO. 12B
WWC6
WWC-7
COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
PROPOSED LAYOUT
STA. 185+00 TO STA. 198+00
SCALE: 1" = 50'


205
UNDER CONSTRUCTION
105
ROY T. GOODWIN CONTRACTORS, INC.
UNDER CONSTRUCTION
FILL SLOPE
210
200
WILLIAM D. MASON, AND WIFE, MARGARET MASON
104
CUT SLOPE
FILL SLOPE
WWC-4
MATCH LINE STA. 198+00 SEE SHT. NO. 11
101
BEREAN BAPTIST CHURCH
102
BEREAN BAPTIST CHURCH
103
BEREAN BAPTIST CHURCH
106
BEREAN BAPTIST CHURCH
CUT SLOPE
S.R. 112
PROTENTIAL, INC.
106
107
ANDREW C. JACKSON, AND WIFE, SANDRA A. JACKSON
MATCH LINE STA. 211+00 SEE SHT. NO. 13
109
ALBERT L. BACCUS AND WIFE, MATTIE B. BACCUS
COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.00006 & TIED TO THE TGRN.
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
PRESENT LAYOUT
STA. 198+00 TO STA. 211+00
SCALE: 1" = 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2008	STP-112 (6)	12B



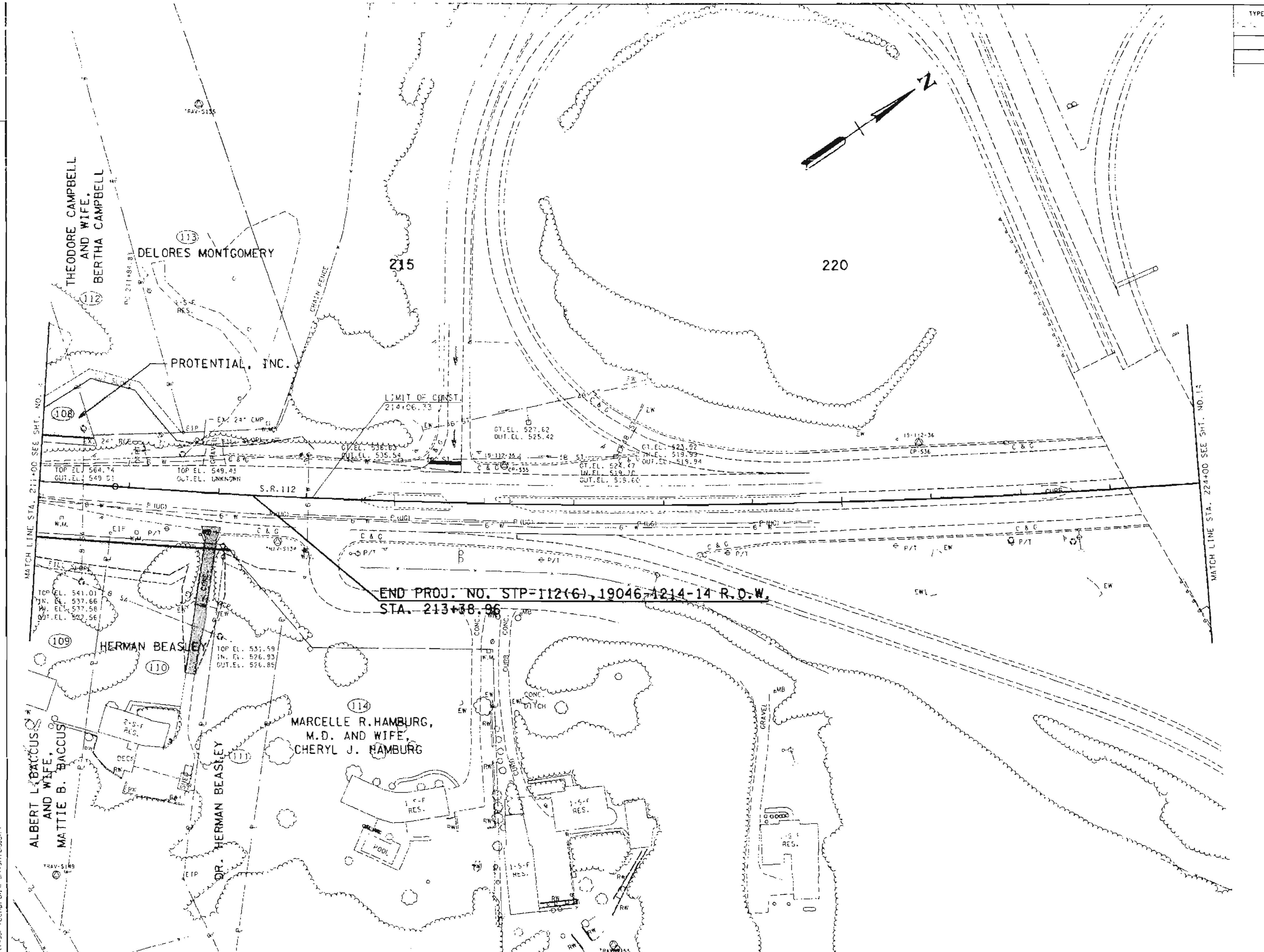
COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.00006 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED LAYOUT

STA. 198+00 TO STA. 211+00

SCALE: 1" = 50'



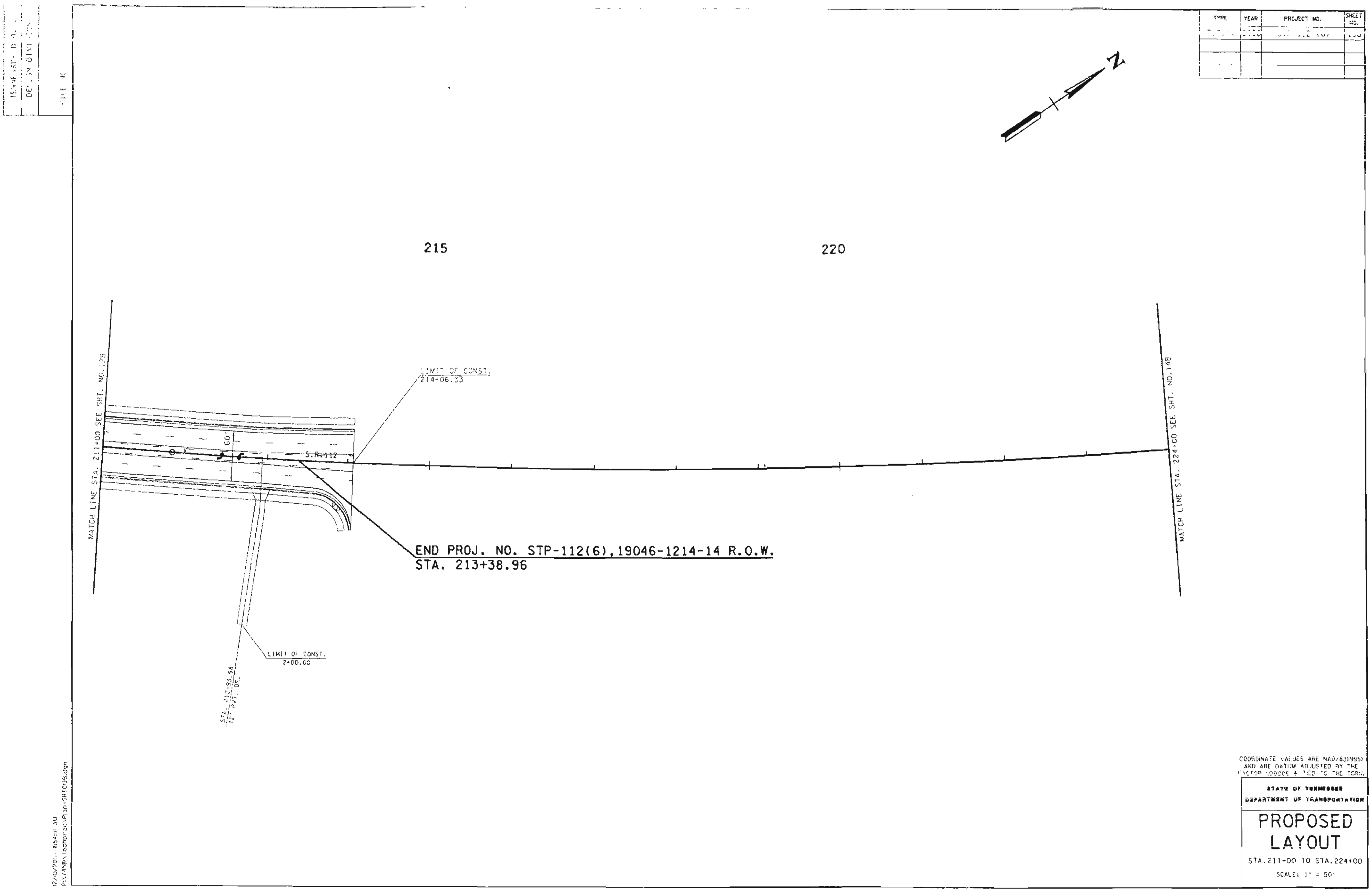
COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.00006 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRESENT LAYOUT

STA. 211+00 TO STA. 224+00

SCALE: 1" = 50'


N
215
220
MATCH LINE STA. 211+00 SEE SHT. NO.129
MATCH LINE STA. 224+00 SEE SHT. NO.148
LIMIT OF CONST.
214+06.33
60'
S.R.112
END PROJ. NO. STP-112(6),19046-1214-14 R.O.W.
STA. 213+38.96
LIMIT OF CONST.
2+00.00
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
PROPOSED
LAYOUT
STA.211+00 TO STA.224+00
SCALE: 1" = 50'

Species Review Form

Project: Davidson County, SR-112 from SR-12 (Ashland City Highway) to SR-155 (Briley Parkway)

Date of Field Study: 3-22-2007 **Date TDEC Database Checked:** 2-8-07 **Biologists:** Mary Motte Fikri (AMEC)

Species reported within 1 mile radius of project:

1.	2.		3.	4.	5.	6	7.
Species Scientific and common names, followed by (A) for animal or (P) for plant	Status		Species is potentially present in R-O-W because: **(A)** it is listed by TDEC within ROW **(B)** habitat is present **(C)** Observed during site visit **(D)** critical habitat present	Species is considered likely NOT present in R-O-W because: **(A)** Present habitat unsuitable **(B)** Not observed during site visit **(C)** Original record questionable **(D)** Considered extinct/extirpated	(**A**) BMPs are sufficient to protect species (**B**) Special Notes are included on project plans to protect species **(C)** Individuals may be affected	Habitat (include blooming, breeding or other information; where found according to TDEC database; year last observed)	Notes
	Fed	TN					
None reported							

Species reported within 1-mile to 4-mile radius of project:

1.	2.		3.	4.	5.	6	7.
Species Scientific and common names, followed by (A) for animal or (P) for plant	Status		Species is potentially present in R-O-W because: **(A)** it is listed by TDEC within ROW **(B)** habitat is present **(C)** Observed during site visit **(D)** critical habitat present	Species is considered likely NOT present in R-O-W because: **(A)** Present habitat unsuitable **(B)** Not observed during site visit **(C)** Original record questionable **(D)** Considered extinct/extirpated	(**A**) BMPs are sufficient to protect species (**B**) Special Notes are included on project plans to protect species **(C)** Individuals may be affected	Habitat (include blooming, breeding or other information; where found according to TDEC database; year last observed; reference)	Notes
	Fed	TN					
Epioblasma brevidens Cumberlandian combshell	E	E	---	D	A	Habitat: Main stem of Cumberland River in Nashville, medium to large rivers; sand & gravel bottoms in rivers or clear streams with rocky bottoms. Breeding: These mussels are bradytictic, retaining glochidia in gills over winter. Gravid females have been reported in May and June. Last observed: 1925-PRE, Cumberland River @ Jefferson St. bridge, RM 190.0.	BMPs would be sufficient to minimize impacts.

Project: Davidson County, SR-112 from SR-12 (Ashland City Highway) to SR-155 (Briley Parkway)

Date of Field Study: 3-22-2007 **Date TDEC Database Checked:** 2-8-07 **Biologists:** Mary Motte Fikri (AMEC)

1.	2.		3.	4.	5.	6	7.
Species Scientific and common names, followed by (A) for animal or (P) for plant	Status		Species is potentially present in R-O-W because: **(A)** it is listed by TDEC within ROW **(B)** habitat is present **(C)** Observed during site visit **(D)** critical habitat present	Species is considered likely NOT present in R-O-W because: **(A)** Present habitat unsuitable **(B)** Not observed during site visit **(C)** Original record questionable **(D)** Considered extinct/extirpated	(**A**) BMPs are sufficient to protect species (**B**) Special Notes are included on project plans to protect species **(C)** Individuals may be affected	Habitat (include blooming, breeding or other information; where found according to TDEC database; year last observed; reference)	Notes
Polytaenia nutallii Prairie parsley (P)	N	T	---	A	A	Habitat: Chiefly dry to mesic prairies, but may be found in other disturbed dry areas such as glades, rocky savannas, clearings, open woodlands, fields & roadsides. FL: Apr-Jun; FR: June-Aug Last observed: 1937, 12.3 miles from Nashville along Little Marrowbone Cr. on Eaton Rd.	Ideal habitat not present.
Aster praealtus Willow aster (P)	N	E	---	A	A	Habitat: Moist prairies, moist meadows along lakes or rivers, thickets, roadside ditches, abandoned fields, poorly drained areas. FL: Sep-Oct; FR: Oct-Nov Last observed: 1943, Road to Clees Ferry, Nashville.	Habitat not present.
Astragalus tennesseenisis Tennessee milk vetch (P)	N	S	---	A	A	Habitat: Cedar glades and barrens FL: Apr-May; FR: May-Jul Last observed: 1917, Vanderbilt-Peabody campus.	Habitat not present.
Thryomanes bewickii Bewick's wren (A)	N	E	B	---	A	Habitat: Brushy areas, thick undergrowth, clearings, gardens, orchards, fencerows, stream edges, open scrubby woods. Breeding: Spring, usually two broods are raised in one season, Last Observed: 1967, Centennial Park in Nashville.	BMPs would be sufficient to minimize impacts.
Neotoma magister Eastern woodrat	N	D	B	---	A	Habitat: Variety of habitats including rocky cliffs, and floodplain and deciduous forests. Cup-shaped nests of twigs, bark bits, & grass in rocks and buildings. Breeding: March-Sept., producing 4 litters per year in ideal conditions, usually 2 offspring per litter. Last observed: 1949, Bell's Bend cliff in Nashville.	BMPs would be sufficient to minimize impacts.
Falco peregrinus Peregrine falcon	N	E	B	---	A	Habitat: Open grasslands & meadows. Nesting occurs on cliff faces or crevices. Urban areas are often used because of tall buildings and abundance of pigeons. Breeding: Monogamous through many breeding seasons; breed between March & May. Eggs are laid in mid May and hatch in mid June. Last observed: 1993, Third National Bank on 4th & Church, downtown Nashville	BMPs would be sufficient to minimize impacts.

Species Review Form

Project: Davidson County, SR-112 from SR-12 (Ashland City Highway) to SR-155 (Briley Parkway)

Date of Field Study: 3-22-2007 **Date TDEC Database Checked:** 2-8-07 **Biologists:** Mary Motte Fikri (AMEC)

USFWS letter: Yes ___X__ (attached) No _____ (explain)

Biological Assessment: Yes _____ (response letter attached; see below) No ___X__

Species (scientific and common names)	USFWS conclusion[1]
Epioblasma brevidens (Cumberlandian combshell)	not likely to adversely affect

[1] Choose from “no effect"; "not likely to adversely affect;" "likely to adversely affect;" "not likely to jeopardize" based on FWS concurrence letter

List Natural Areas, management areas, refuges, or similar sites within or adjacent to project (attach 7.5 minute topographic map with pertinent boundaries of area marked)

Area Name	Type of Area	Pertinent Notes

From: Rob Todd
To: Jennifer.Thompson@state.tn.us
Date: 2/28/2007 4:04:14 PM
Subject: Re: Davidson Co., SR-112 from SR-12 to SR-155

Jennifer:

Based upon the information that you have provided me, BMP's would be sufficient to minimize impacts to rare species for this project.

Thank you for the opportunity to review and comment.

Robert M. Todd
Tennessee Wildlife Resources Agency
Environmental Services Division
Ellington Agricultural Center
P.O. Box 40747
Nashville, TN 37204
Phone: 615-781-6572
Fax: 615-781-6667
E-mail address: Rob.Todd@state.tn.us
>>> Jennifer Thompson 02/09/07 3:22 PM >>>
Robb,

I have attached project location maps (there are no ROW plans yet), a project description and species map. There were no species within one mile. Please review and respond with your comments. Thank you for your assistance.

Jennifer

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
ENVIRONMENTAL DIVISION
SUITE 900 - JAMES K. POLK BUILDING
505 DEADERICK STREET
NASHVILLE, TENNESSEE 37243-0334

February 9, 2007

Dr. Lee A. Barclay
U.S. Department of Interior
Fish and Wildlife Service
446 Neal Street
Cookeville, TN 38501

SUBJECT: SR-112 from SR-12 to SR-155
PE #: 19046-1214-14 PIN: 103764.00
Davidson County, Tennessee

Dear Dr. Barclay:

The Tennessee Department of Transportation proposes to begin construction at the location listed above. Project location maps are attached. In compliance with the Fish and Wildlife Act of 1958, and the Endangered Species Act of 1973 (as amended), we are requesting a list of threatened or endangered species that may be present in the vicinity of the proposed construction.

Please include in your reply the entire project description as listed in the subject line of this request. Your assistance in the preparation of this project is greatly appreciated. If you need additional information, please contact me at 615-532-3878.

Sincerely,

Jennifer Thompson

Jennifer Thompson
Ecology Section

copy: Project File

No significant adverse impacts to wetlands or federally listed endangered or threatened species are anticipated from this proposal.

Lee A Barclay 3/15/07
Field Supervisor Date
U.S. Fish & Wildlife Service
Cookeville, TN