

# NIMMER SPECIAL DISTRICT



PREPARED FOR:  
3N FARM NIMMER FAM PROPS LLC  
P.O Box 1599  
RIDGELAND, SC 29936-2627

SUBMITTED TO:  
THE TOWN OF RIDGELAND, SOUTH CAROLINA  
PLANNING AND ZONING BOARD  
AND  
TOWN COUNCIL  
**MAY 2024**  
J - 30596.0000

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# ORDINANCE COMPLIANCE

## Special District

This text and the attached exhibits, plans, and associated documents are included to meet the filing requirements of a Special District Consideration within the Town of Ridgeland Zoning/Smart Code.

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## **SECTION 1**

### **INTRODUCTION AND DESCRIPTION**

The Nimmer SPECIAL DISTRICT is located west of downtown Ridge off of Tarboro Road and Nimmer Turf Road approximately 2.5 miles west of Interstate 95 (I-95). The site is known as Jasper County Parcel Map numbers 046-00-07-001, 046-00-07-002 (only the portion east of Nimmer Turf Road), 046-00-07-018, 046-00-06-120 (only the portion south of Nimmer Turf Road), 063-00-01-006, and 063-00-01-007. The main vehicular access points to the property will be via Tarboro Road with a secondary access further north on Tarboro Road and west at Nimmer Turf Road. Boundary for the subject property provided in Exhibit "A."

The total property is approximately four hundred and five acres (408 AC) consisting of approximately thirty-five acres (35 AC) of freshwater wetlands as indicated on the exhibit titled Aquatic Resources Delineation Exhibit as **Exhibit "C"** to the SPECIAL DISTRICT. The freshwater wetland and other aquatic resources boundaries are approximate. A US Army Corps of Engineers Jurisdictional Determination establishing the boundaries of wetlands will be in place prior to the submittal of any final development permit applications to the Town of Ridgeland. Any area that is determined to be either non-jurisdictional or is permitted for impacts shall be allowed to be developed based on the associated allowed land uses within that Planning Area. Freshwater wetlands on the property are typical of coastal South Carolina. These acreages are based on a preliminary wetlands assessment performed by Sligh Environmental Services in January 2023, then surveyed by Coastal and are suitable for master plan level planning. These acreages are likely to differ from the final surveyed wetland jurisdictional determination as verified by the USACE and the state of South Carolina. Therefore, final design plans will incorporate the verified wetlands information and not those included herein.

#### **1.1 PROPERTY OWNERSHIP, LEGAL DESCRIPTION, AND CURRENT USE**

The Nimmer SPECIAL DISTRICT is comprised of five tracts (046-00-07-001, 046-00-07-014, 046-00-07-018, 063-00-01-006, and 063-00-01-007) and any portion or two additional tracts (046-00-07-002 & 046-00-06-120).

The five tracts contain 405.195 acres and are currently owned by 3N FARM NIMMER FAMILY. The property is currently mostly fields used for sod production as well as partly wooded on portions.

**Exhibit "A"** contains the property description surveys and deeds.

#### **1.2 INTENT OF THE NIMMER SPECIAL DISTRICT**

This SPECIAL DISTRICT will be developed with a variety of residential housing types with associated amenities as well as a dedicated site for municipal needs. The variation planned for the residential development will offer residential options with easy access to US Highway 17 and Interstate 95 via Tillman Road (Hwy. 336), the property will have convenient access to the two major north/south transportation corridors in the region.

Please refer to **Exhibit "B"** – "Conceptual Land Use Master Plan" for location of the various land use areas within property.

Zoning to SPECIAL DISTRICT, as allowed under the Special District, Section 4.5 of the Ridgeland Zoning Ordinance, which states:

*“Areas that, by their intrinsic size, function, or configuration, cannot conform to the requirements of any Transect Zone or combination of zones shall be designated as special districts by the Planning Office in the process of preparing an infill plan. Conditions of development for special districts shall be determined in public hearing of the Planning Commission and Town Council and recorded on Table 11.”*

### 1.3 PLANNED DEVELOPMENT DISTRICT PROCESS

The following process will be established for submittal and approval of Nimmer SPECIAL DISTRICT.

- (1) The review and approval of the “Conceptual Land Use Master Plan” (rezoning) by the Ridgeland Planning Commission, and subsequently the Ridgeland Town Council. The “Conceptual Land Use Master Plan” establishes the framework for development of the property over an extended time frame. Land uses, density, environmental quality, and utility services are described in this document.
- (2) Final Development Plans consist of: Preliminary and Final Plats for major subdivisions and Preliminary and Final Site Plans for Multifamily, Amenity Recreation areas, Industrial and / or Commercial uses.
- (3) The Final Development Plans will be submitted for approval to the Town for each portion/phase of the tract to be developed. The Final Development Plans will describe specific developments in detail as studies and designs are prepared. Specific development standards for individual lot setbacks, buffers, minimum lot area, lot coverage, road design standards, building heights and other development standards shall be in accordance with those established in this document or as amended by the Owner and accepted by The Town of Ridgeland. Specific subdivisions (final plats), Multi-family, Amenity Recreation areas, Industrial and Commercial site plans will be submitted to the Town for development approval. Supporting documentation of the appropriate detail is required at each level of approval.

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## **SECTION 2**

### **LAND USE MASTER PLAN**

#### **2.1 "CONCEPTUAL LAND USE MASTER PLAN" AND DEVELOPMENT SCHEDULE**

The Nimmer SPECIAL DISTRICT is anticipated to be constructed in several phases over a period of approximately 5 to 10 years. Development will occur in accordance with the "Conceptual Land Use Master Plan" (**Exhibit B**) as set forth in this document or as amended in the future. The "Conceptual Land Use Master Plan" and this text, outline the general scope of the development including number of units, development standards, open space, and other issues.

The "Conceptual Land Use Master Plan" is nonspecific regarding the final location of specific land uses, lots, buildings, and other elements to allow flexibility in the future. Actual development may yield significantly less density. The goal of the development is to produce a high quality environmentally sensitive, community. The SPECIAL DISTRICT designation is necessary to accommodate the anticipated mixture of land uses planned for the property while providing an enhanced mechanism to promote responsible planning and development of the property over an extended time frame.

The land use areas indicated on the Conceptual Land Use Master Plan are not intended to be rigid exact boundary lines for future land use and improvements. The boundaries of the SPECIAL DISTRICT may be modified to include adjacent acreage subject to the approval of the Town of Ridgeland by appropriate petition/application to the Town to amend the SPECIAL DISTRICT.

Any applicable conservation or agricultural tax benefits shall remain in place until such a time as a particular tract of land is approved for development permits and/or platted for subdivision.

The "Conceptual Land Use Master Plan" (refer to **Exhibit B**) shows a maximum of 1,400 residential dwelling units within the Residential planning areas. Units which will likely be built in phases over an extended period. Allowed uses within each land use area of the SPECIAL DISTRICT are detailed under Section 2.b – Allowed Land Use and Development Standards.

The "Conceptual Land Use Master Plan" and the elements of this text seek to maintain significant areas of open space. The open space and amenities will be owned and maintained by the developer, homeowner's association, or other legally designated entity. Property deeded to a governmental entity becomes the maintenance responsibility of that entity.

The "Conceptual Land Use Master Plan" and associated SPECIAL DISTRICT text includes amendments and/or exceptions to the current Town of Ridgeland Ordinances, as well as introduces land uses that may not exist or have different requirements than those found in the current Town of Ridgeland zoning ordinances. The provisions of the "Conceptual Land Use Master Plan," Exhibits, and Appendices shall apply to development of the Nimmer SPECIAL DISTRICT.

## **SECTION 3**

### **DEDICATIONS TO THE TOWN OF RIDGELAND**

#### **3.1 DEDICATION OF ROADS AND DRAINAGE SYSTEMS**

Except for infrastructure and systems that are specifically agreed to be private and privately maintained, the Owner will construct all roads and drainage systems in accordance with Town of Ridgeland and/or other applicable standards. Roads and drainage systems which are accessible by the public may either be dedicated to The Town of Ridgeland or owned and maintained by the community's Property Owners Association (POA) and / or other legally established entity. Should any of the residential communities be planned as gated, the Developer will establish a Homeowners Association (HOA) to own and maintain the roads and drainage systems within the gated community.

#### **3.2 DEDICATION OF WATER & SANITARY SEWER SYSTEMS**

The proposed water and wastewater system will be designed and constructed to meet or exceed The Town of Ridgeland Specifications. A future water and sewer agreement between the Owner and/or developer and the Town of Ridgeland will dictate the granting of utility easements, construction and ownership of water supply and wastewater conveyance and other terms related to water and sewer utilities.

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## **SECTION 4**

### **SITE CONDITIONS AND DESIGN CONSIDERATIONS**

#### **4.1 STORM WATER MANAGEMENT**

Impacts due to stormwater runoff are expected to be minimal. State and local stormwater ordinances shall be complied with for the design and installation of the drainage system for each phase of development. Best Management Practices will be used as appropriate and required to control the impact of stormwater runoff. No significant groundwater recharge areas, water supply watersheds, or protected river corridors exist within the development.

Stormwater collection for the site will consist primarily of pipes, swales, and ditches; which will outfall to a series of interconnected onsite detention ponds. Both water quality and water quantity will be addressed in the site development design for each phase. Water quality will be controlled by allowing solids to settle in the onsite detention ponds before being released from the site. Water quantity will be maintained by sizing the outlets from onsite detention ponds in a manner such that post-development runoff rates do not exceed the pre-development runoff rates for applicable design storms. The interconnected ponds will discharge treated stormwater runoff into adjacent freshwater wetlands and ditches which will convey the runoff to tributaries of the Great Swamp east and west of the site. Town of Ridgeland, State, and Federal stormwater ordinances will be followed in the design of the stormwater system. Also, as the area is developed, a master plan will be developed to accommodate the specific development plans for individual phases / tracts.

As part of the development process, the Owner or its assignees will implement Best Management Practices (BMPs) for Storm Water Management as required. The regulatory requirements dictate BMPs be implemented to protect our water bodies to minimize impacts from development. Use of detention lagoons, where possible, is a practice of treating storm water prior to release to the receiving stream to meet water quality standards defined by local and state regulations.

#### **4.2 WETLANDS**

Freshwater wetlands on the property are typical of coastal South Carolina. Based on an estimate performed by Sligh Environmental Consultants, Inc., approximately 9 percent of the property consists of jurisdictional and isolated freshwater wetlands. These wetlands are subject to field verification by SCDHC-OCRM and the U.S. Corps of Engineers (USCOE). At this time no wetland impacts are proposed). Upon verification, a survey of the jurisdictional wetlands will be performed and a request for a Jurisdictional Determination letter from the USCOE will be submitted.

See Aquatic Resources Delineation **Exhibit "C"**

#### **4.3 UTILITIES**

The Nimmer SPECIAL DISTRICT will be served by extensions of the adjacent Town of Ridgeland water distribution system and wastewater collection system. A separate water and sewer agreement will govern the timing and amount of water and sewer capacity town allocated to the SPECIAL DISTRICT from the town of Ridgeland.



Palmetto Electric will provide Electrical Power.

Other utility services will be provided by legally established entities at the discretion of the Owner provided such are in accordance with the franchising ordinances/licenses of the Town of Ridgeland.

#### **4.4 SITE ACCESS AND TRAFFIC**

The Nimmer SPECIAL DISTRICT will have two direct accesses to State Rd S-27-22/Tarboro Road as well as potential additional access point to Nimmer Turf Road. The general planned location of access points is shown on the Conceptual Land Use Master. The final route of and access points for all new roads will be determined at the time of final site plan approval.

An initial traffic impact analysis was conducted as part of the SPECIAL DISTRICT. The analysis calculated average daily traffic and peak hour traffic that would be generated by the development of the SPECIAL DISTRICT based on the maximum allowable density detailed in Section 2(d) of the SPECIAL DISTRICT. The analysis also approximated the distribution of traffic to existing public roads.

See attached **Exhibit "D"** for Initial Traffic Analysis for Nimmer SPECIAL DISTRICT.

#### **4.5 RESTRICTIVE COVENANTS**

Restrictive Covenants will be applied to the property. The Developer will create and record the Restrictive Covenants prior to the sale of subdivided property.

##### **(a) Development Standards**

Site development within Nimmer SPECIAL DISTRICT will be controlled by the development standards that are established in Section 5 and Section 6 of this document.

## **SECTION 5**

### **BUILDING SCALE PLANS**

#### **5.1 – INSTRUCTIONS.**

- 5.1.1 Lots and buildings located within Nimmer SPECIAL DISTRICT are governed by this Code and previously approved by the Planning Commission shall be subject to the requirements of this article.
- 5.1.2 Design plans required under this article require administrative approval by the CRC.
- 5.1.3 Building and site plans submitted under this article shall show the following, in compliance with the standards described in this article:
- A. For preliminary site and building approval:
- Building disposition.
  - Building configuration.
  - Building function.
  - Parking Location standards.
  - Plans and drawings required by this Code shall be stamped by a South Carolina licensed engineer or architect.
- B. For final approval, in addition to the above:
- Landscape standards.
  - Signage standards.
  - Special requirements, if any.

#### **5.2 PRE-EXISTING CONDITIONS.**

- 5.2.1 Existing buildings and appurtenances that do not conform to the provisions of this Code may continue in use as they are until a substantial modification is requested, at which time the CRC shall determine the provisions of this section that shall apply.
- 5.2.2 The modification of existing buildings is permitted by right if such changes result in greater conformance with the specifications of this Code.
- 5.2.3 Where buildings exist on adjacent lots, the CRC may require that a proposed building match one or the other of the adjacent setbacks and heights rather than the provisions of this Code.
- 5.2.4 Any addition to or modification of a building of value that has been designated as such by the Town of Ridgeland Municipal Code, or to a building actually or potentially eligible for inclusion on a State, Local or National Historic Register, shall be subject to approval by the Town of Ridgeland Town Administrator.
- 5.2.5 The restoration or rehabilitation of an existing building shall not require the provision of (a) parking in addition to that existing nor (b) on-site stormwater retention/detention in addition to that existing. Existing parking requirements that exceed those for this Code may be reduced as provided by Table 6 and Table 7.

### 5.3 SPECIAL REQUIREMENTS

5.3.1 To the extent that a regulating plan for either a new community plan or an Infill Community Plan designates any of the following special requirements, standards shall be applied as follows:

5.3.2 Source water protection standards:

- A. Building scale plans must adhere to the distance (no closer than 100 feet) and contaminants of concerns in relation to existing production wells in the Town of Ridgeland. Source water protection standards are as set forth in Ridgeland Code Chapter 51.

### 5.4 – CIVIC ZONES

5.4.1 General.

- A. Civic Zones are designated on community plans as Civic Space (CS) or Civic Building (CB).
- B. Parking provisions for Civic Zones shall be determined by warrant.

5.4.2 Civic Spaces (CS).

- A. Civic Spaces shall be generally designed as described in Table 9.

5.4.3 Civic Buildings (CB).

- A. Civic Buildings shall not be subject to the requirements of this article. The particulars of their design shall be determined by warrant.

### 5.5 – BUILDING DISPOSITION.

- A. Newly platted lots shall be dimensioned according to Table 10 f. and Table 11.
- B. Building disposition types shall be as shown in Table 5 and Table 10 i.
- C. Buildings shall be disposed of in relation to the boundaries of their lots according to Table 10 g., Table 10 h., and Table 11.
- D. One principal building at the frontage, and one outbuilding to the rear of the principal building, may be built on each lot as shown in Table 17C.
- E. Lot coverage by building shall not exceed that recorded in Table 10 f. and Table 11.
- F. Facades shall be built parallel to a rectilinear principal frontage line or to the tangent of a curved principal frontage line, and along a minimum percentage of the frontage width at the setback, as specified as frontage buildout on Table 10 g. and Table 11.
- G. Setbacks for principal buildings shall be as shown in Table 10 g. and Table 11. In the case of an infill lot, setbacks shall match one of the existing adjacent setbacks. Setbacks may otherwise be adjusted by warrant.
- H. Rear setbacks for outbuildings shall be a minimum of 12 feet measured from the centerline of the rear alley or rear lane easement. In the absence of rear alley or rear lane, the rear setback shall be as shown in Table 10 h. and Table 11.
- I. To accommodate slopes over ten percent, relief from front setback requirements is available by warrant.

## 5.6 – BUILDING CONFIGURATION.

- A. The private frontage of buildings shall conform to and be allocated in accordance with Table 4 and Table 10 j.
- C. All facades shall be glazed with clear glass no less than 15% of the first story.
- D. Building heights, setbacks, and extension lines shall conform to Table 5 and Table 10 j.
- E. Stories may not exceed 14 feet in height from finished floor to finished ceiling, except for a first floor commercial function, which shall be a minimum of 11 feet with a maximum of 25 feet. A single floor level exceeding 14 feet, or 25 feet at ground level, shall be counted as two (2) stories. Mezzanines extending beyond 33% of the floor area shall be counted as an additional story.
- F. In a parking structure or garage, each above-ground level counts as a single story regardless of its relationship to habitable stories.
- G. Height limits do not apply to attics or raised basements, masts, belfries, clock towers, chimney flues, water tanks, or elevator bulkheads. Attics shall not exceed 14 feet in height.
- H. The habitable area of an accessory unit within a principal building or an outbuilding shall not exceed 440 square feet, excluding the parking area.
- I. No portion of the private frontage may encroach the sidewalk.

## 5.7 – BUILDING FUNCTION.

- 5.7.1 Buildings in each transect zone shall conform to the functions on Table 6, Table 8 and Table 10 I. Functions that do not conform shall require approval by warrant or variance as specified on Table 8.
- 5.7.2 Accessory functions of restricted lodging or restricted office shall be permitted within an accessory building. See Table 6.
- 5.7.3 Accessory functions of limited lodging or limited office shall be permitted within an accessory building. See Table 6.
- 5.7.4 Structures for overnight habitation prohibited. No structure shall be allowed or permitted (either new construction or rehabilitated) for the purpose of overnight habitation (either on a short term or long-term basis) in the Town of Ridgeland other than unattached (non-conjoined) single family residential units on a separately platted lot. Any other type of construction, modifications to existing structure or change in use to provide housing (overnight habitation) is strictly prohibited without special exception being granted by Council; prohibited type of housing includes but are not limited to hotels, boarding houses, half-way houses, nightly or weekly rentals, apartments, duplexes, or multi-family of any kind.

## 5.8 – PARKING AND DENSITY CALCULATIONS.

- 5.8.1 General
  - A. Buildable density on a lot shall be determined by the actual parking provided within the lot as table 10.

## 5.9 – PARKING LOCATION STANDARDS.

- 5.9.1 General

- A. Parking shall be accessed by rear alleys or rear lanes, when such are available.
- B. Open parking areas may be located anywhere within the lot.
- C. Garage doors may not be located closer than 20 feet from the right-of-way to accommodate driveway parking without protruding into public space
- D. Driveways at frontages shall be no wider than 16 feet in the first layer.

## 5.10 – LANDSCAPE STANDARDS.

### 5.10.1 General

- A. Landscaping for the creation of streetscapes in the public realm, with street trees, on-lot trees and preserved clusters of trees acting as the form of mitigation for the removal of grand tree resources. Grand trees are defined as any tree 24" dbh or greater or any live oak or palmetto tree 12" dbh or greater. The mitigation requirement is 1.5" to 1".
- B. Street trees and spacing shall be coordinated and approved by the Planning Director in consultation with the CRC. Whenever possible the following should be used: Locally made soil amendments and compost for plant nourishment, improved water absorption, and holding capacity; drought tolerant and/or slow growing hardy grasses, native and indigenous plants, shrubs, ground covers, and trees appropriate for local conditions; and mulches to minimize evaporation, reduce weed growth, and retard erosion.
- C. Non-grand tree resources are permitted to be removed with CRC approval.
- D. Grand tree are subject to removal only by warrant.
- E. Impermeable surface shall be limited to the ratio of lot coverage specified in Table 10 f.
- F. Landscape strips of at least 6 feet in width shall be provided between parking isles of either head-in or diagonal parking. Each landscape median shall have at least one tree for every 20 linear feet, or portion thereof, and be covered with grass, shrubs, or living ground cover. To minimize water consumption, the use of low-water vegetative ground cover other than turf is encouraged.
- G. In lieu of landscape strips, landscape islands can be provided. No more than 6 consecutive parking stalls are permitted without a landscape island of at least 6 feet in width and extending the entire length of the parking stall. A minimum of one tree shall be planted in each landscape island.
- H. The first layer may not be paved, with the exception of driveways as specified in Section 5.10.2 and Section 5.10.3. (Table 12 d.)
- I. A minimum of two trees shall be planted within the first layer for each 30 feet of frontage line or portion thereof. (Table 12 d.)
- J. Trees may be of single or multiple species as shown on Table 3B.
- K. Trees shall be naturalistically clustered.

- L. Lawn shall be permitted by warrant.

## 5.11 – SIGNAGE STANDARDS.

### 5.11.1 General

- A. There shall be no signage permitted additional to that specified in this section.
- B. The address number, no more than 6 inches measured vertically, shall be attached to the building in proximity to the principal entrance or at a mailbox.
- C. Architecturally compatible ground level signs shall not exceed 6' in height, 16' in length and 2' in width, and they shall be authorized by CRC.
- D. Signage shall be externally illuminated.
- E. All proposed signage shall be reviewed and approved by the CRC.

## 5.12 – ARCHITECTURAL STANDARDS.

The following architectural standards shall apply to all structures

### 5.12.1 Walls – Materials.

- A. Walls shall be finished in wood clapboard (sealed with paint or stain), board and batten, cedar shingles, "hardie plank," stucco, or brick. Walls may be finished in bricks as approved by the CRC. Walls for single family residential units may be finished in vinyl siding provided the material thickness is not less than 0.42 millimeters.
- B. Foundation walls, and piers shall be parged block, smooth finished poured concrete, tabby, stucco, or brick.
- C. Crawl space may be skirted with horizontal wood boards, or framed wood with not more than 1.5" spaces between boards or wood louvers. Lattice shall be installed between supports as approved by the CRC. Galvanized hardware cloth may be placed behind the lattice.
- D. Garden walls shall be stucco or brick. Gates in garden walls shall be wood or iron. Garden walls shall not be perforated with precast elements, but may accommodate pierced brick.
- E. Fences at frontages and in front yards shall be made of smooth cedar, or p.f. wood pickets; spacing between pickets shall not exceed 1.5". All other fences shall be governed by community covenants and restrictions, if applicable.
- F. Retaining walls shall be built of stucco, brick, fractured face concrete or tabby.

### 5.12.2 Walls – Configurations and techniques.

- A. Walls may be built of no more than two materials and shall only change material along a horizontal line, i.e. cedar shingles may be combined with wood siding when the material change occurs horizontally, (typical at floor line or a gable end), with the heavier material below the lighter. All the walls of a single building must be built of the same materials in the same configuration. Wood clapboard and shingles shall be horizontal.

- B. Siding shall be horizontal, maximum 6" to the weather.
- C. Boards with more than 6" to the weather shall show a 1" variation from one board to the next. Shingles shall be maximum 8" to the weather. Decorative shingles shall not be permitted.
- D. Stucco shall be smooth sand- or tabby-finished.
- E. Trim shall be minimum grade "B" trim lumber; or vinyl and shall be 3.5" to 6" in width at corners and around opening, except at the front door, which may be any size (3.5" minimum) or configuration.
- F. Garden walls shall be minimum 8" thick and have a horizontal cap. Brick mortar joints shall be struck and no more than 3/8" wide.
- H. Walls shall be one color.
- I. Colors: Colors for all materials shall be selected from a master list approved by the CRC. Rough siding shall be a dark color. Masonry, smooth siding and trim shall be a light color, which may or may not be the same as the wall color.
- J. Paints and stains: All exterior smooth wood shall be painted. Wood shingles may be left to age naturally, or shall be stained.

**5.12.3 Elements – Materials.**

- A. Chimneys shall be finished with stucco or brick. Flues for pot belly stoves shall be metal with an appropriate lintel or jack arch.
- B. Piers and arches shall be made of stucco, brick, or tabby.
- C. Porches, columns, posts, railings and balusters shall be made of wood. Porches may be enclosed with glass or screens for a maximum of 30% of their length; however glass enclosures are not permitted at frontages. Porch ceilings may be enclosed with painted wood; exposed joists shall be painted.
- D. Arcades are not permitted.
- E. Stoops shall be made of wood, brick, or concrete or concrete, a stoop shall have brick or stucco cheek walls.
- F. Decks shall be located in rear yards only.
- G. Awnings shall have a metal structure covered with canvas or synthetic canvas and shall be located in rear yards only.
- H. Metal elements shall be unpainted galvanized steel, anodized or ESP aluminum, or marine grade aluminum.
- I. Patios and stoops may have horizontal surfaces made of brick, or tabby.
- J. The following shall not be permitted: Panelized materials, keystones, quoins, window air conditioning units, above-ground pools (except those of the inflatable variety), antennas, free standing solar panels, signs (on private property), direct vent fireplaces.

**5.12.4 Elements – Configurations and techniques.**

- A. Chimneys shall be a minimum 2:1 proportion in plan and capped to conceal spark arresters. Fireplace enclosures and chimneys shall extend to the ground.
- B. Porch piers of masonry construction shall be no less than 12' × 12".
- C. Arches of masonry construction shall be no less than 12" in depth.
- D. Breezeways shall have vertically proportioned openings.
- E. Screen porches shall have screens framed in wood installed behind framed railings.
- F. Columns (the classical orders), if provided, shall be of the tuscan or doric orders with correct proportions or profiles according to the American Vignola.
- G. Posts shall be no less than 6" × 6", except at outbuildings. Railings shall have horizontal top and bottom rails. Wood top rails shall be eased and bottom rails shall have a vertical section. Top and bottom rails shall be centered on the pickets. The opening between spindles and balusters shall not exceed 4".
- H. Balconies which cantilever shall be structurally supported by brackets.
- I. Signs attached to buildings shall be integral to the building, no larger than 18" in height and externally lit.
- J. Awnings shall be rectangular in shape with straight edges.
- K. Awnings may have side panels but shall not have a bottom soffit panel. Awnings shall not be backlit.
- L. Spotlights attached to building walls or roof eaves are only permitted in rear yards and illuminating cone shall not permit excess or direct light beyond property line.
- M. Wood elements must be painted or stained with an opaque or semi-solid stain, except walking surfaces which may be left natural.

**5.12.5 Roofs—Materials.**

- A. Roofs shall be clad in wood shingles, (corrugated, 5 V crimp or standing seam) galvanized steel, galvalume or copper. Asphaltic or fiberglass shingles shall be architectural grade and shall be submitted for approval.
- B. Gutters and downspouts, when used, shall be made of galvanized steel, copper (not copper-coated), anodized or ESP aluminum.
- C. Flashing shall be copper, lead or anodized aluminum.
- D. Copper roofs, flashing, gutters, and downspouts shall be allowed to age naturally (not painted or sealed).

**5.12.6 Roofs—Configurations and techniques.**

- A. Principal roofs shall be a symmetrical gable or hip with a slope of 6:12 to 10:12.
- B. Ancillary roofs (attached to walls at the highest portion of the principal building) may be shed sloped no less than 2:12. Roofs on towers shall be flat or have a slope of 4:12 to 8:12.



- C. Flat roofs, including flat roofs on towers, shall be permitted only when occupiable and accessible from an interior room. Flat roofs shall have a railing or parapet wall no less than 36" high.
- D. Parapets are not permitted
- E. Eaves shall be continuous. Eaves which overhang less than 8" shall have a closed soffit. Eaves which overhang more than 16" shall have exposed rafters. Eaves which overhang between 8" and 16" shall have either a closed soffit or exposed rafters. Rafter tails may not exceed 8" in depth.
- F. Dormers shall be accessible, placed a minimum of 3' from side building walls and have gable or shed roofs with a slope to match the principal structure or shed roofs with a slope 3:12. Dormers shall not be excessively larger than windows, i.e. no siding at either side of windows. Dormer eaves and rake trim should be scaled down from primary eaves and rake trim proportions (66%).
- G. Sights shall be flat and mounted so as not to be visible from any fronting street.

**5.12.7 Openings—Materials.**

- A. Windows shall be made of wood (painted), vinyl or aluminum clad and shall be glazed with clear glass. All trim shall be no less than 3.5". Bay windows shall be made of wood. Corner trim shall be no less than 4".
- B. Doors (including garage doors) shall be wood or metal. Doors shall be painted or stained.
- C. Storefront shall be made of wood, or metal.
- D. Shutters shall be wood, PVC, painted and meet the width of the window when closed.
- E. Security doors and window grilles must be approved.

**5.12.8 Openings—Configurations and techniques.**

- A. Windows rectangular single-, double-, or triple-hung, awning, fixed (under 2 sf), or operable casement types, with a square to vertical proportion. Transoms may be oriented horizontally with square to vertical proportions. Multiple windows in the same rough opening shall be separated by a 4" minimum post. In masonry walls the centerline of the window sash shall align with the centerline of the wall.
- B. Window muntins shall be true divided light or simulated divided light windows or fixed on the interior and exterior surface and create panels of square or vertical proportion.
- C. Bay windows shall have a minimum of 3 sides and shall extend to the floor inside and to the ground outside, if located on the ground floor or, if not, be structurally supported by brackets.
- D. Storm windows and screens shall be integral with the window. Screens shall be made of brass, bronze, or black vinyl.
- E. Front doors, including the entry door to the porch on side yard houses, shall be located on the frontage line. (Paired doors are not permitted at frontages. Windows in doors must be rectangular and vertically-oriented.)

- F. Doors shall be hinged. Doors, except garage doors, shall be constructed of planks or raised panels not flush with applied trim which express the construction technique.
- G. Garage doors facing a street frontage shall be a maximum of 16' in width. Garage doors facing an alley shall have a light fixture with an incandescent bulb activated by a photocell. Garage doors shall be painted or stained. Storefronts shall be painted a dark gloss color.
- H. Shutters shall be sized and shaped to match the openings.
- I. Stucco trim articulations shall be subject to approval by the CRC.
- J. An accent color, for items such as the front door and shutters, may be used subject to approval from the CRC.

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## ARTICLE 6. – STANDARDS AND TABLES

TABLE 2. – TRANSECT ZONE DESCRIPTIONS

<b>NIMMER</b>	<b>SPECIAL DISTRICT: NIMMER SPECIAL DISTRICT</b>
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Nimmer SPECIAL DISTRICT consists of a medium density residential area. Home occupations and accessory buildings are permitted. Medium to large-sized blocks define neighborhood general and are typically not serviced by rear lanes/alleys.

### Permitted uses:

**By right:** Live/work unit, bed & breakfast (up to 5 rooms), inn (up to 12 rooms), hotel (no room limit), SRO hostel, school dormitory, office building, retail building, open-market building, retail building, restaurant, liquor selling establishment, bus shelter, convention center, conference center, exhibition center, fountain, public art, playground, library, live theater, movie theater, museum, outdoor auditorium, parking structure, passenger terminal, sports stadium, surface parking lot, religious assembly, gasoline, automobile service, truck maintenance, drive-through facility, rest stop, roadside stand, shopping center, shopping mall, childcare center, fire station, elementary school, police station, funeral home, hospital, medical clinic, cemetery, college, high school, trade school, light industrial facility, truck depot, laboratory facility, electric substation, warehouse, produce storage, mini-storage.

**By warrant:** Kiosk, push cart, water supply facility.

**Civic spaces:** Parks, green, playgrounds, and squares.

**Base residential density:** 6 dwelling units per acre maximum.

**Block size/perimeter:** 3,000 feet.

**Permitted thoroughfares:** See thoroughfare standards for T4 and T5.

### Building configuration:

**Principal building:** 2 stories max.

**Outbuilding:** 1 story max.

### Setbacks:

#### Principal building:

(G.1) Front setback (principal): 15 ft. min. Garage setback: 20 ft. min.

(G.2) Front setback (secondary): 210 ft. min. Garage setback: 20 ft. min.

(G.3) Side setback: 6 ft. min.

(G.4) Rear setback: 15 ft. min.

Frontage buildout: 0% minimum.

#### Outbuilding:

(H.1) Front setback: 40 ft. from rear property line.

(H.2) Side setback: 6 ft. min.

(H.3) Rear setback: 5 ft. min.

**Building disposition:**

- Edgeyard: Permitted.
- Sideyard: Permitted.
- Rearyard: Permitted.
- Courtyard: Permitted.
- specialized: Permitted.

**Lot width:** 20 ft. min. and 80 ft. max.


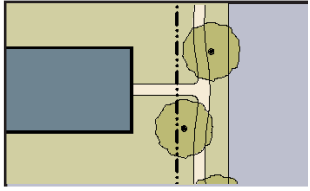
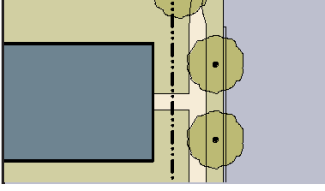
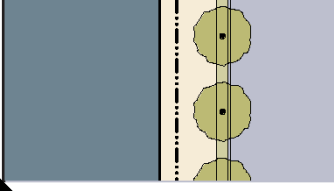
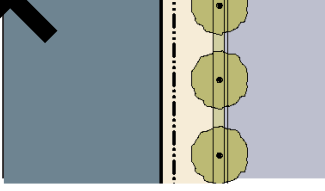
**Lot coverage:** 70%.

<p><b>BUILDING CONFIGURATION</b></p> <ol style="list-style-type: none"> <li>1. Building height shall be measured in number of Stories, excluding Attics, and raised basements.</li> <li>2. Stories may not exceed 14 feet in height from finished floor to finished ceiling</li> <li>3. Height shall be measured to the eave or roof deck as specified on Table 9.</li> </ol>	
<p><b>SETBACKS – PRINCIPAL BLDG.</b></p> <ol style="list-style-type: none"> <li>1. The Facades and Elevations of Principal Buildings shall be distanced from the Lot lines as shown.</li> <li>2. Facades shall be built along the Principal Frontage to the minimum specified width in the table.</li> </ol>	
<p><b>SETBACKS – OUTBUILDING</b></p> <ol style="list-style-type: none"> <li>1. The Elevations of the Outbuilding shall be distanced from the Lot lines as shown.</li> </ol>	
<p><b>PARKING PLACEMENT</b></p> <ol style="list-style-type: none"> <li>1. Uncovered parking spaces may be provided within the first, second, or third Layer as shown in the diagram (see Table 17d).</li> <li>2. Covered parking shall be provided within the second and third Layer as shown in the diagram (see Table 17d).</li> <li>3. Trash containers shall be stored within the third Layer.</li> </ol>	

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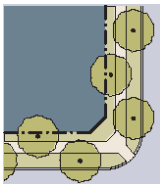
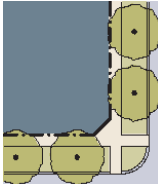
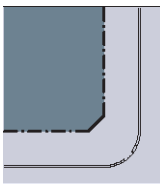
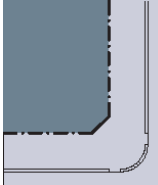
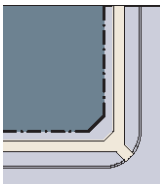
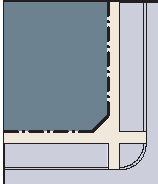
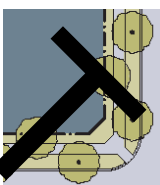
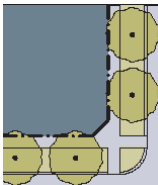
**TABLE 3A. – PUBLIC FRONTAGES – GENERAL**

The Public Frontage is the area between the private Lot line and the edge of the vehicular lanes. Dimensions are given in Table 3B.

	<p style="text-align: center;"><b>PLAN</b></p> 
<p><b>a. (RD) For Road:</b> This Frontage has open Swales drained by percolation and a walking Path or Bicycle Trail along one or both sides and Yield parking. The landscaping consists of multiple species arrayed in naturalistic clusters.</p>	
<p><b>b. (ST) For Street:</b> This Frontage has raised Curbs drained by inlets and Sidewalks separated from the vehicular lanes by individual or continuous Planters, with parking on one or both sides. The landscaping consists of street trees of a single or alternating species aligned in a regularly spaced Allee, with the exception that streets with a right-of-way (R.O.W.) width of 40 feet or less are exempt from tree requirements.</p>	
<p><b>c. (DR) For Drive:</b> This Frontage has raised Curbs drained by inlets and a wide Sidewalk or paved Path along one side related to a Greenway or waterfront. It is separated from the vehicular lanes by individual or continuous Planters. The landscaping consists of street trees of a single or alternating species aligned in a regularly spaced Allee.</p>	
<p><b>d. (AV) For Avenue:</b> This Frontage has raised Curbs drained by inlets and wide Sidewalks separated from the vehicular lanes by a narrow continuous Planter with parking on both sides. The landscaping consists of a single tree species aligned in a regularly spaced Allee.</p>	
<p><b>e. (BV) For Boulevard:</b> This Frontage has Slip Roads on both sides. It consists of raised Curbs drained by inlets and Sidewalks along both sides, separated from the vehicular lanes by Planters. The landscaping consists of double rows of a single tree species aligned in a regularly spaced Allee.</p>	

**TABLE 3B. – PUBLIC FRONTAGES – SPECIFIC**

This table assembles prescriptions and dimensions for the Public Frontage elements – Curbs, walkways, and Planters – relative to specific Thoroughfare types within Transect Zones. Table 3B–a assembles all of the elements for the various street types. Locally appropriate planting species should be filled in to the calibrated Code.

	Nimmer SPECIAL DISTRICT	
	ST-DR-AV	ST-DR-AV-BV
<b>Frontage Type</b>		
<b>a. Assembly:</b> The principal variables are the type and dimension of Curbs, walkways, Planters and landscape.	12–18 feet	12–18 feet
<b>Total Width</b>		
<b>b. Curb:</b> The detailing of the edge of the vehicular pavement, incorporating drainage.	Raised Curb 5–20 feet	Raised Curb 5–20
<b>Type Radius</b>		
<b>c. Walkway:</b> The pavement dedicated exclusively to pedestrian activity.	Sidewalk 4–8 feet	Sidewalk 4–8 feet
<b>Type Width</b>		
<b>d. Planter:</b> The layer which accommodates street trees and other landscape.	Regular Alternating Continuous Planter 8 feet–12 feet	Regular Single Continuous Planter 8 feet–12 feet
<b>Arrangement Species Planter Type Planter Width</b>		

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**TABLE 3C. – THOROUGHFARE ASSEMBLIES**

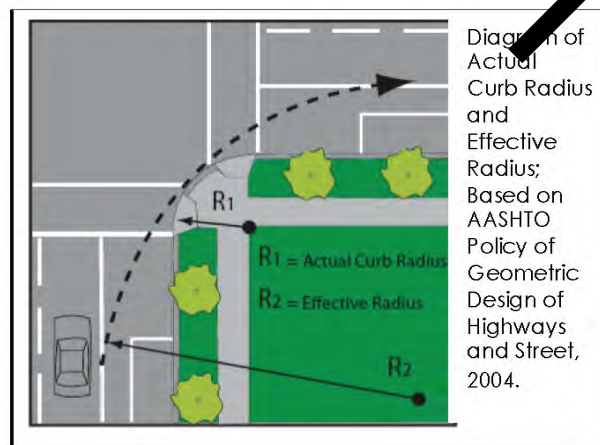
**THOROUGHFARE DESIGN STANDARDS**

- A. General requirements: Thoroughfares shall be designed to balance safety, mobility, community goals and the environment. Thoroughfares shall provide appropriate pedestrian and vehicle mobility options, shall provide appropriate locations for utilities and shall be designed to support adjacent future development. Thoroughfares addressed in this section are to have low to moderate vehicular speed (25 mph or less), varying traffic volumes and shall serve a range of land uses. The layout of thoroughfares as to arrangement, character, width, grade, and location may be required to conform to the general plan of the entire tract where completed, to adjoining thoroughfare systems of adjoining properties, to the major thoroughfare plans of the city, and to the topography, natural features, and drainage systems to be provided.
- B. Contextual design & transect zones: Thoroughfares shall be designed in context with the urban form, intended users (motorists, pedestrians, bicyclists, transit users) and desired design speed of the transect zone through which the thoroughfares pass. The transect zones shall be utilized when determining the appropriate context sensitive thoroughfare design for thoroughfare assemblies and corresponding land use areas). Several thoroughfare types may be allowed in each transect zone.
- C. Emergency/service vehicle access and Building Code and Fire Code compliance: Emergency and service vehicle access shall be considered in the design of thoroughfares and thoroughfare systems and minimum requirements shall be met for the proposed subdivision to be approved. Failure to satisfy all emergency vehicle access requirements of ratified building codes and fire codes in the design of thoroughfares and thoroughfare systems will result in additional requirements when constructing buildings to include, but not be limited to, a requirement for installation of a building fire sprinkler system.
- D. Public transit: Thoroughfares shall be designed to accommodate existing, planned and future public transit. Design accommodations may include provisions for transit pull off areas and modified curb radii. Curb radii may be tested with turn simulation software for feasibility.
- E. Bicycle provisions: Thoroughfares and community design should provide an opportunity for bicycle travel via a network of bicycle routes, lanes and trails. Bicycle travel networks shall be connected to existing or proposed regional networks wherever possible. A bicycle route shall be provided within the vehicular thoroughfare where suitable for shared use of bicycles and vehicles traveling at low speeds and may be indicated with the use of "sharrows" (see Figure 821.1). A dedicated and marked bicycle lane shall be provided within a moderate-speed vehicular thoroughfare. A bicycle trail may be provided separately from the vehicular thoroughfare.



- F. Accessibility: Thoroughfares shall be designed to accommodate ADA requirements.

- G. Utilities: Thoroughfares shall be designed to accommodate utilities within the right-of-way including, but not limited to, stormwater drainage, lighting, water, sewer, electric, gas, telephone, cable, etc.
- H. Gates and thoroughfare access restrictions: Reserve strips or parcels controlling access to thoroughfares shall be prohibited. Gates shall not be permitted to block thoroughfares.
- I. Thoroughfare narrowing devices: Thoroughfare narrowing devices including, but not limited to, curb extensions, bulbouts, neckdowns and corner bulges shall not be permitted unless approved by the SCDOT.
- J. Thoroughfare construction requirements: All thoroughfares shall be paved in accordance with minimum requirements on file in the office of the SCDOT engineer.
- K. Existing thoroughfares: Thoroughfares of an existing subdivision shall not be used as the sole means of ingress and egress in developing a new subdivision or extending an existing one, when other access can be made available and when in the opinion of the town engineer such use would create a safety hazard.
- L. Jurisdictional wetlands and critical area: No thoroughfare shall be located within a critical area or freshwater or saltwater wetland unless the applicant shall supply to the SCDOT written approval of CARM or the U.S. Army Corps of Engineers, or both, as appropriate.
- M. Connectivity: Thoroughfares shall be designed as an interconnected thoroughfare system. An interconnected thoroughfare system is necessary in order to provide for access between developments without returning to major roadways, in order to provide access for emergency and service vehicles, in order to enhance and encourage non-vehicular travel, in order to plan for future development and transportation needs and in order to create neighborhoods. The following thoroughfare connectivity requirements shall apply:
- N. Curb radius modifications & intersection safety triangles:
  - 1. The dimensions for curb radii standards are provided to accommodate pedestrians as well as emergency and service vehicles. Smaller curb radii provide for a narrower street crossing, reduces vehicle travel speed. Larger curb radii allow higher turning speeds which compromise community walkability. The following graphic illustrates the difference between the curb radius and effective turning radius.



In the event that a curb radius needs to be modified to accommodate emergency and service vehicles, turn simulation software should be used and the radius should



be increased incrementally until it is just large enough to allow safe, slow passage of the design emergency or service vehicle.

2. Standard minimum sight triangle for stop conditions at street intersections shall be accommodated for on all thoroughfares and shall be reviewed by the SCDOT engineer at the time of thoroughfare construction plan submittal.
- O. Garbage service: For properties platted after the effective date of this ordinance, garbage service shall only be provided to the nearest thoroughfare.
- P. Pavement and parking markings and signage: The SCDOT engineer shall determine when and where pavement markings and on-street parking related signs will be installed on all thoroughfares. Pavement markings include but are not limited to parking delineation lines, lane delineation lines and arrows. Final determination of pavement markings and parking signs, including location and type, will be made during thoroughfare construction plan review.
- Q. Lots abutting major thoroughfares: Subdivisions which abut or have included within the proposed area to be subdivided any limited access, or major thoroughfare shall provide:
1. A marginal access thoroughfare, or
  2. Reverse frontage with green planting contained in a non-access reservation along the rear property line, or
  3. Lots with rear service drives, or
  4. Other treatment as may be necessary for adequate protection of residential properties and to afford separation of through and local traffic.
- The SCDOT shall specify which of the above requirements apply to each individual case based upon adequate service to the public interest.
- R. Thoroughfare types: Thoroughfares types shall be defined as follows:
- Avenue (AV): A thoroughfare of high vehicular capacity and low to moderate speed, acting as a short distance connector between urban centers and usually equipped with a landscaped median.
- Bicycle lane (BL): A dedicated lane for cycling within a moderate speed vehicular thoroughfare, demarcated by striping.
- Bicycle route (BR): A thoroughfare suitable for the shared use of bicycles and automobiles moving at slow speeds.
- Bicycle trail (BT): A bicycle way running independently of a vehicular thoroughfare.
- Boulevard (BV): A thoroughfare designed for high vehicular capacity and moderate speed, traversing an urbanized area. Boulevards are usually equipped with slip roads buffering sidewalks and buildings.
- Drive (DR): A thoroughfare along the boundary between an urbanized and a natural condition, usually along a waterfront, park or promontory. One side has the urban character of a thoroughfare, with sidewalk and building, while the other side has the qualities of a road or parkway, with naturalistic planting and rural details.
- Park street (PS): A sub-urban, urban general or urban center thoroughfare with a wide center median (width may vary) that may serve as an open space feature.

Path (PT): A pedestrian way traversing a park or rural area, with landscape matching the contiguous open space, ideally connecting directly with the urban sidewalk network.

Rear alley (RA): A vehicular way located to the rear of lots providing access to service areas, parking, and outbuildings and containing utility easements. Rear alleys should be paved from building face to building faces or lot lines.

Rear lane (RL): A vehicular way located to the rear of lots providing access to service areas, parking, and outbuildings and containing utility easements. Rear lanes may be paved lightly to driveway standards. The streetscape consists of gravel or landscaped edges.

Road (RD): A local, rural and sub-urban thoroughfare of low-to-moderate vehicular speed and capacity. This type is allocated to more rural areas.

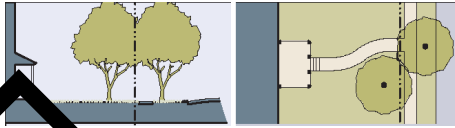

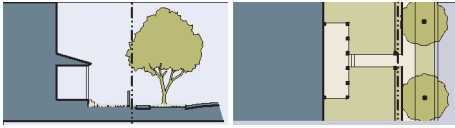
Slip road (SR): An outer vehicular lane or lanes of a thoroughfare designed for slow speeds while inner lanes carry higher speed traffic and separated from them by a planted median. (Syn: Access lane, service lane)

Street (ST): Suburban and urban thoroughfare of low speed and capacity.

Yield (Y): Characterizing a thoroughfare that has two-way traffic but only one effective travel lane because of parked cars, necessitating slow movement and driver negotiation.

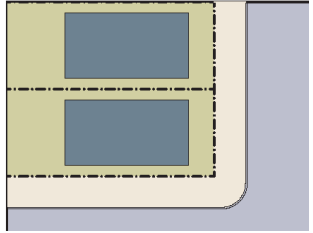
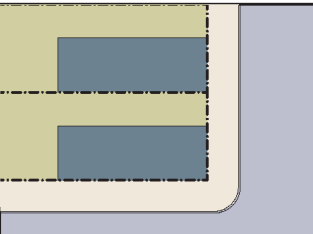
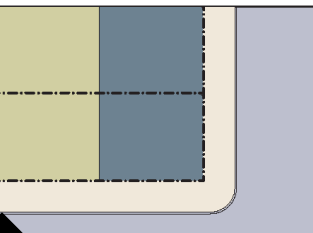
**TABLE 4. – PRIVATE FRONTAGES**

The Private Frontage is the area between the building Facades and the Lot lines.

	
<p><b>a. Common Yard:</b> A planted Frontage wherein the Facade is set back substantially from the Frontage Line. The front yard created remains unfenced and is visually continuous with adjacent yards, supporting a common landscape. The deep Setback provides a buffer from the higher speed Thoroughfares.</p>	
<p><b>b. Porch &amp; Fence:</b> A planted Frontage wherein the Facade is set back from the Frontage Line with an attached porch permitted to Encroach. A fence at the Frontage Line maintains street spatial definition.</p>	

**TABLE 5. – BUILDING DISPOSITION**

This table approximates the location of the structure relative to the boundaries of each individual Lot, establishing suitable basic building types.

<p><b>a. Edgeyard:</b> Specific Types – single family House, cottage, villa, estate house, urban villa. A building that occupies the center of its Lot with Setbacks on all sides. This is the least urban of types as the front yard sets it back from the Frontage, while the side yards weaken the spatial definition of the public Thoroughfare space. The front yard is intended to be visually continuous with the yards of adjacent buildings. The rear yard can be secured for privacy by fences and a well-placed Backbuilding and/or Outbuilding.</p>	
<p><b>b. Sideyard:</b> Specific Types – Charleston single house, double house, zero lot line house, twin building that occupies one side of the Lot with the Setback to the other side. A shallow Frontage Setback defines a more urban condition. If the adjacent building is similar with a blank side wall, the yard can be quite private. This type permits systematic climatic orientation in response to the sun or the breeze. If a Sideyard House abuts a neighboring Sideyard House, the type is known as a town or double House. Energy costs, and sometimes noise, are reduced by sharing a party wall in this Disposition.</p>	
<p><b>c. Rearyard:</b> Specific Types – Townhouse, Rowhouse, Live-Work unit, loft building, Apartment House, Mixed Use Block, Flex Building, perimeter Block. A building that occupies the full Frontage, leaving the rear of the Lot as the sole yard. This is a very urban type as the continuous Facade steadily defines the public Thoroughfare. The rear Elevations may be articulated for functional purposes. In its Residential form, this type is the Rowhouse. For its Commercial form, the rear yard can accommodate substantial parking.</p>	

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**TABLE 6. – BUILDING FUNCTION**

This table categorizes Building Functions within Transect Zones. Parking requirements are correlated to functional intensity. For Specific Function and Use permitted By Right or by Warrant, see Table 8.

NIMMER SPECIAL DISTRICT	
<b>a. RESIDENTIAL</b>	<b>Restricted Residential:</b> The number of dwellings on each Lot is restricted to one within a Principal Building and one within an Accessory Building, with 2.0 parking places for each. Both dwellings shall be under single ownership. The habitable area of the Accessory Unit shall not exceed 440 sf, excluding the parking area.
<b>b. LODGING</b>	<b>NOT PERMITTED</b>
<b>c. OFFICE</b>	<b>Restricted Office:</b> The building area available for office use on each Lot is restricted to the first Story of the Principal or the Accessory Building and by the requirement of 3.0 planned parking places per 1,000 square feet of net office space in addition to the parking requirement for each dwelling.
<b>d. RETAIL</b>	NOT PERMITTED
<b>e. CIVIC</b>	See Table 8
<b>f. OTHER</b>	See Table 8

**TABLE 7. – PARKING CALCULATIONS**

Each use shall meet parking requirements independently.

	REQUIRED PARKING (See Table 6)	SHARED PARKING FACTOR
	NIMMER SPECIAL DISTRICT	
<b>RESIDENTIAL</b>	2.0/dwelling	No shared parking is permitted. Each use shall meet parking requirements independently.
<b>CIVIC</b>	To be determined by Warrant	
<b>OFFICE</b>	3.0/1,000 sq. ft.	
<b>OTHER</b>	To be determined by Warrant	

**TABLE 8. – SPECIFIC FUNCTION & USE**

**Specific Function & Use.** This table expands the categories of Table 6 to delegate specific Functions and uses within Nimmer SPECIAL DISTRICT.

Nimmer SPECIAL DISTRICT	USE
<b>a. RESIDENTIAL</b>	

	Mixed Use Block	
	Flex Building	
	Apartment Building	
	Live/Work Unit	■
	Row House	■
	Duplex House	■
	Courtyard House	
	Sidyard House	■
	Cottage	■
	House	■
	Bungalow	■
	Accessory Unit	■
<b>b. LODGING</b>		
	Hotel (no room limit)	
	Hotel (up to 12 rooms)	
	Bed & Breakfast (up to 5 rooms)	
	Short Term Rental	
	Student Hostel	
	School Dormitory	
<b>c. OFFICE</b>		
	Office Building	
	Live-Work Unit	□
<b>d. RETAIL</b>		
	Open-Market Building	
	Retail Building	
	Display Gallery	
	Restaurant	
	Kiosk	
	Push Cart	
	Liquor Selling Establishment	
<b>e. CIVIC</b>		
	Bus Shelter	■
	Convention Center	
	Conference Center	
	Exhibition Center	

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Fountain or Public Art	<input checked="" type="checkbox"/>
Library	<input checked="" type="checkbox"/>
Live Theater	
Movie Theater	
Museum	
Outdoor Auditorium	<input checked="" type="checkbox"/>
Parking Structure	
Passenger Terminal	
Playground	<input checked="" type="checkbox"/>
Sports Stadium	
Surface Parking Lot	
Religious Assembly	<input checked="" type="checkbox"/>
<b>f. OTHER: AGRICULTURE</b>	
Grain Storage	
Livestock Pen	
Greenhouse	<input type="checkbox"/>
Stable	<input type="checkbox"/>
Peniel	
<b>f. OTHER: AUTOMOTIVE</b>	
Gasoline	
Automobile Service	
Truck Maintenance	
Drive-Through Facility	
Rest Stop	
Roadside Stand	<input type="checkbox"/>
Billboard	
Shopping Center	
Shopping Mall	
<b>f. OTHER: CIVIL SUPPORT</b>	
Fire Station	<input checked="" type="checkbox"/>
Police Station	<input checked="" type="checkbox"/>
Cemetery	
Funeral Home	
Hospital	
Medical Clinic	



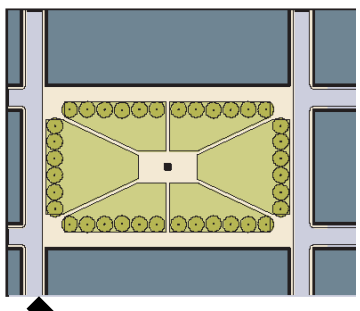
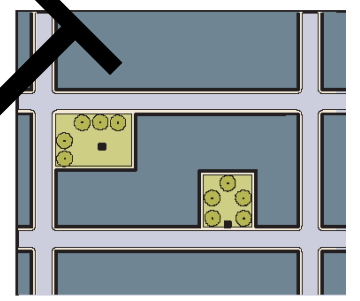
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<b>f. OTHER: EDUCATION</b>	
College	
High School	
Trade School	
Elementary School	
Other-Childcare Center	<input type="checkbox"/>
<b>g. OTHER: INDUSTRIAL</b>	
Heavy Industrial Facility	
Light Industrial Facility	
Truck Depot	
Laboratory Facility	
Water Supply Facility	
Sewer and Waste Facility	
Utility Substation	<input type="checkbox"/>
Wireless Transmitter	<input type="checkbox"/>
Communication Facility	
Warehouse	
Product Storage	
Mini-Storage	

- BY RIGHT
- BY WARRANT

DRAFT

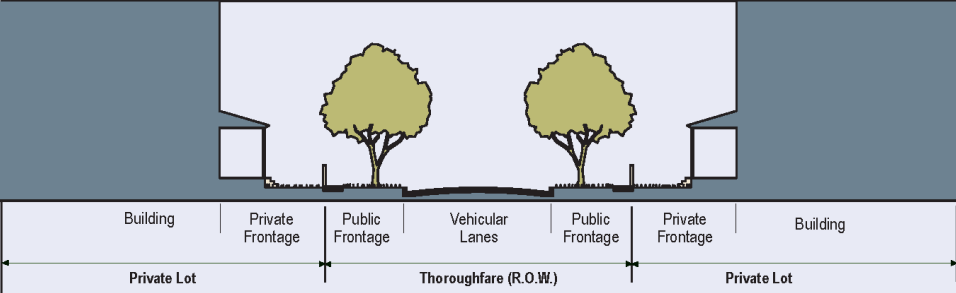
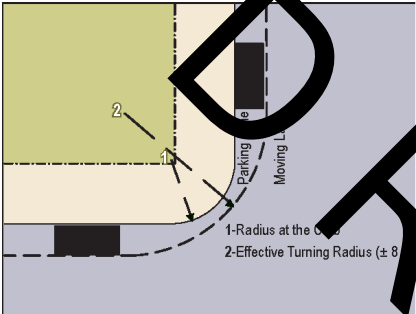
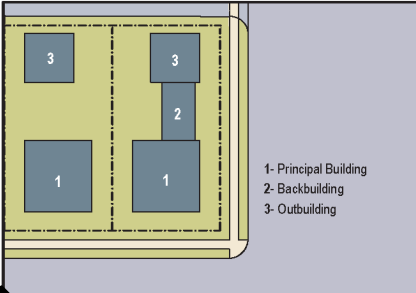
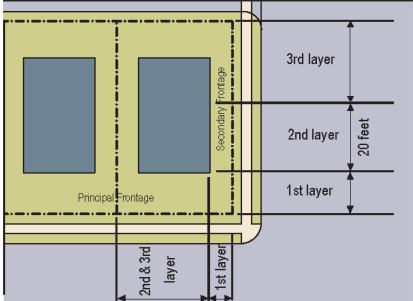
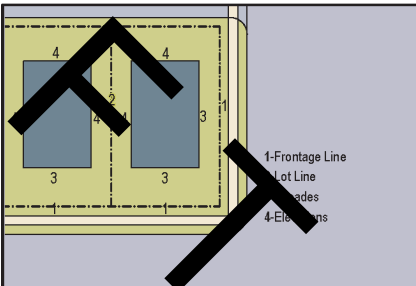
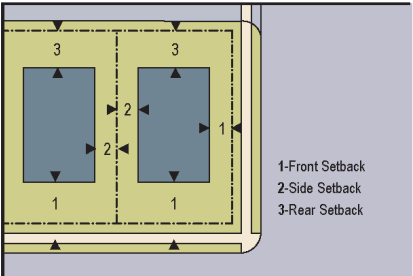

**TABLE 9. – CIVIC SPACE**

<p><b>a. Park:</b> A natural preserve available for unstructured recreation. A park may be independent of surrounding building Frontages. Its landscape shall consist of Paths and trails, meadows, waterbodies, woodland and open shelters, all naturalistically disposed. Parks may be lineal, following the trajectories of natural corridors.</p>	
<p><b>b. Green:</b> An Open Space, available for unstructured recreation. A Green may be spatially defined by landscaping rather than building Frontages. Its landscape shall consist of lawn and trees, naturalistically disposed. The minimum size shall be ½ acre and the maximum shall be 6 acres.</p>	
<p><b>c. Square:</b> An Open Space available for unstructured recreation and Civic purposes. A Square is spatially defined by building Frontages. Its landscape shall consist of paths, lawns and trees, formally disposed. Squares shall be located at the intersection of important Thoroughfares. The minimum size shall be 2 acres and the maximum shall be 5 acres.</p>	
<p><b>e. Playground:</b> An Open Space designed and equipped for the recreation of children. A playground shall be fenced and shall include an open picnic shelter. Playgrounds shall be interspersed within Residential areas and may be placed within a Block. Playgrounds may be included within parks and greens. There shall be no minimum or maximum size.</p>	

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**TABLE 12. – DEFINITIONS ILLUSTRATED**

<p align="center"><b>a. THOROUGHFARE &amp; FRONTAGES</b></p>	
 <p>The diagram shows a cross-section of a thoroughfare. From left to right, it consists of a Private Lot with a Building, a Private Frontage, a Public Frontage with a tree, Vehicular Lanes, another Public Frontage with a tree, another Private Frontage, and another Building on a Private Lot. The central section is labeled 'Thoroughfare (R.O.W.)'.</p>	
<p><b>b. TURNING RADIUS</b></p>	<p><b>c. BUILDING DISPOSITION</b></p>
 <p>The diagram shows a street corner with a dashed line indicating the turning path. Labels include '1-Radius at the Corner' and '2-Effective Turning Radius (± 8)'. A 'Parking Moving Lane' is also shown.</p>	 <p>The diagram shows a lot with three building footprints labeled 1, 2, and 3. A legend indicates: 1-Principal Building, 2-Backbuilding, 3-Outbuilding.</p>
<p><b>d. LOT LAYERS</b></p>	<p><b>e. FRONTAGE &amp; LOT LINES</b></p>
 <p>The diagram shows a lot divided into layers. The '1st layer' is the frontage. The '2nd layer' is 20 feet deep. The '3rd layer' is the rear portion. Labels include 'Principal Frontage' and 'Secondary Frontage'.</p>	 <p>The diagram shows a lot with frontage and lot lines. Labels include '1-Frontage Line', '2-Lot Line', '3-Setbacks', and '4-Elevations'.</p>
<p><b>f. SETBACK DESIGNATIONS</b></p>	<p><b>g. NETWORK-BASED PEDESTRIAN SHED</b></p>
 <p>The diagram shows a lot with setback designations. Labels include '1-Front Setback', '2-Side Setback', and '3-Rear Setback'.</p>	 <p>The diagram shows a network-based pedestrian shed. Labels include 'Theoretical 5 min. Walk' and 'Network-based 5 min. shed'.</p>

**TABLE 13. – SUSTAINABILITY**

Developers are encouraged to include alternative energy production systems if their plans permit.

**D  
R  
A  
F  
T**

# NIMMER SPECIAL DISTRICT

## EXHIBITS

D  
R  
A  
F  
T

J – 30596.0000

May 2024

# NIMMER SPECIAL DISTRICT

## EXHIBIT A

LEGAL DESCRIPTION

DEEDS

BOUNDARY SURVEYS

D  
R  
A  
F  
T

J – 30596.0000

May 2024

## PROPERTY DESCRIPTION OF NIMMER TRACT

405.195 Acres

All that Certain Piece, Parcel or Tract of Land, Situate, lying and being in Robert Township, Jasper County, South Carolina and being more particularly described as follows: Beginning at the northeast corner of the lands of Terry D. Murphy et al, as recorded in Plat Book 11, Page 311, of the Jasper County, South Carolina Recorder's Office, said northeast corner being in the west right of way of Tarboro Road, also known as County Road S-27-22, being a 66 foot right of way and having the South Carolina State Plane Coordinates, East Zone, of N233,618.70, E1,997,222.23; Thence with the north line of said Terry D. Murphy et al., South 68°25'32" West, a distance of 426.91 feet to a concrete monument found; Thence South 20°39'12" East, a distance of 33.99 feet to an iron pin found and being in the north line of the lands of Jeffrey P. Richardson, as recorded in Plat Book 35, Page 249 of the Jasper County, South Carolina Recorder's Office; Thence with said north line, North 80°00'52" West, a distance of 669.04 feet to a concrete monument found and South 61°25'05" West, a distance of 713.55 feet to a point, said point is witnessed by a broken iron pin found at North 09°West, a distance of 3.0 feet; Thence along the west line of the lands of David G. Mills, as recorded in Plat Book 22, Page 81 of the Jasper County, South Carolina recorder's office, South 12°39'36" West, a distance of 731.72 feet to a point, said point is witnessed by a disturbed concrete monument found at South 60°East, a distance of 0.8 feet; Thence with the north line of "Subdivision of the Eastern Portion of Tract 'B', as prepared for Jasper County Land Development Company, Inc., as recorded at Plat Book 16, Page 388 of the Jasper County, South Carolina Recorder's Office, South 60°03' 43" West, a distance of 3023.18 feet to a point in the west right of way of Nimmer Turf Road, a 24' right of way, said point is witnessed by a disturbed iron pin found at South 43°West, a distance of 2.5 feet; Thence with said west right of way, North 4°19'51" west, a distance of 219.20 feet to a point; Thence along a curve, deflecting to the right, a distance of 392.34 feet, having a radius of 524.98 feet, a chord bearing of North 22°55'19" West and a chord of 383.28 feet to a point; Thence North 01°30'46" West, a distance of 609.41 feet to a point; Thence North 01°54'37" West, a distance of 589.44 feet to a point; Thence North 02°18'28" West, a distance of 95.59 feet to a point, said point is witnessed by an iron pin found at North 39°East, a distance of 5.0 feet; Thence along the lands of 3N Farm Nimmer Family, as recorded in Plat Book 29, Page 359, of the Jasper County, South Carolina Recorder's Office, South 88°40'05" East, a distance of 265.88 feet to a point, said point is witnessed by an iron pin found at North 75°East, a distance of 3.5 feet; Thence North 00°04'36" West, a distance of 369.82 feet to a point; Thence North 89°58'37" East, a distance of 50.00 feet to a point; Thence North 03°43'06" East, a distance of 400.00 feet to a point; Thence North 89°50'36" West, a distance of 280.80 feet to a point in the aforesaid west right of way of Nimmer Turf Road; Thence North 11°17'10" East, a distance of 329.38 feet to a point; Thence South 84°32'56" East, a distance of 4.80 feet to a point; Thence North 11°36'54" East, a distance of 1681.44 feet to a point; Thence North 10°55'18" East, a distance of 1214.37 feet to a point; Thence along a curve, deflection to the right, a distance of 83.16 feet, having a radius of 57.51 feet, a chord bearing of North 53°13'53" East and a chord of 76.10 feet to a point in the south right of way of Nimmer Turf road, a 66 feet right of way; Thence with said south right of way, South 85°55'17" East, a distance of 1056.09 feet to a point in the west line of the lands of Helen R. Raye,

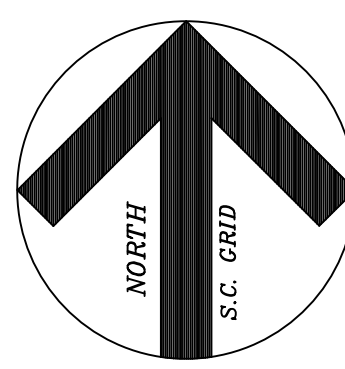
as recorded in Deed Book 333, Page 34, of the Jasper County, South Carolina Recorder's Office; Thence with said west line, South 01°56'09" West, a distance of 842.67 feet to a point; Thence along the south line of said Helen R. Raye, South 87°57'14" East, a distance of 514.08 feet to a point; Thence along the east line of said Helen R. Raye, North 02°58'01" East, a distance of 827.90 feet to a point in said south right of way of Nimmer Turf Road; Thence along said south right of way of Nimmer Turf Road, South 85°54'35" East, a distance of 1392.12 feet to a point; Thence along a curve, deflecting to the left, a distance of 311.07 feet, having a radius of 15771.47 feet, a chord bearing of South 86°53'11" East and a chord of 311.07 feet to a point; Thence along a curve, deflecting to the left, a distance of 78.69 feet, having a radius of 469.31 feet, a chord bearing of North 87°44'43" East and a chord of 78.60 feet to a point in the west right of way of Tarboro Road, also known as County Road S-27-22 and being a 66 feet right of way; Thence with said west right of way, South 15°29'36" East, a distance of 982.09 feet to a point; Thence South 15°38'50" East, a distance of 142.45 feet to a concrete monument found; Thence leaving said west right of way and along the north line of the lands of Brian L. & Shannon S. Ratkovich, as recorded in Plat Book 25, Page 241 of the Jasper County, South Carolina Recorder's Office, South 77°02'49" West, a distance of 749.39 feet to a point; Thence with the west line of the lands of Brian L. & Shannon S. Ratkovich, South 15°35'18" East, a distance of 284.79 feet to a point; Thence with the south line of the lands of Brian L. & Shannon S. Ratkovich, North 77°04'27" East, a distance of 749.03 feet to a point in aforesaid west right of way line of Tarboro Road; Thence along said west right of way, South 15°43'48" East, a distance of 615.92 feet to a point; Thence South 12°55'32" East, a distance of 141.86 feet to a point; Thence along a curve, deflecting to the right, a distance of 625.52 feet, having a radius of 5022.64 feet, a chord bearing of South 09°31'57" East and a chord of 625.11 feet to a point; Thence South 06°34'33" East, a distance of 192.98 feet to the Point of Beginning. Containing 405.195 acres. Subject to all easements, rights of way and restrictions of record.

DRAFT

MATCH LINE  
MATCH LINE

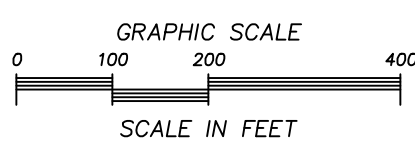
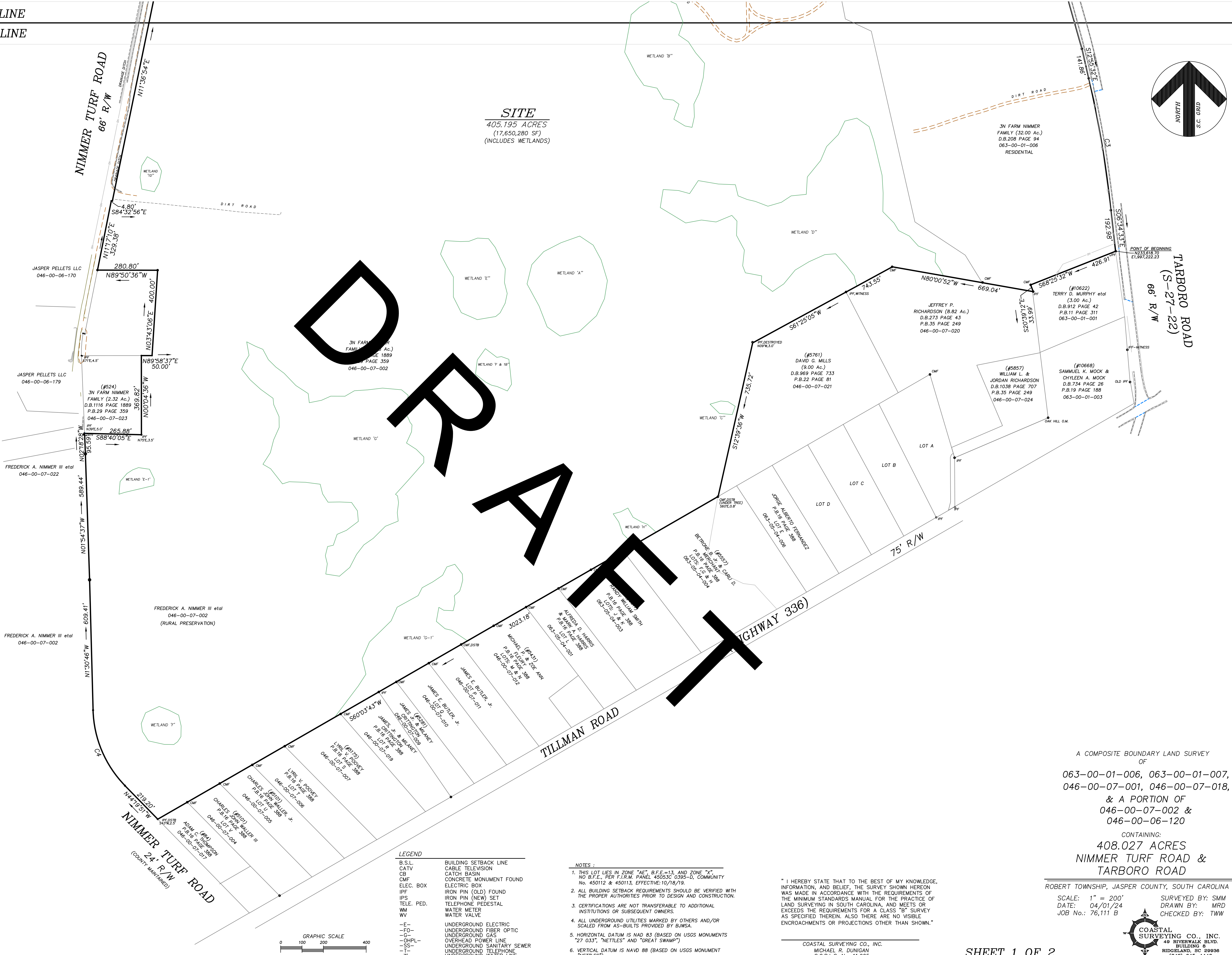
- REFERENCE PLATS:
- BOUNDARY SURVEY OF PARCEL 37A, 38.84 ACRES U.S. HIGHWAY 278-INDEPENDENCE BLVD. A PORTION OF THE COLEMAN ESTATE DATED: 02/08/2018 JOB: SC170226 RECORDED AT: D.B.1107 PAGE 1713
  - AN EASEMENT SURVEY OF NIMMER TURF ROAD, RIDGELAND, JASPER COUNTY, SOUTH CAROLINA BY: TGS LAND SURVEYING DATED: 04/22/13 JOB: 041111 EASEMENT-13 RECORDED AT: P.B.33 PAGES 84-86
  - AN ASBUILT SURVEY OF A PORTION OF #063-00-01-004, NEAR RIDGELAND, JASPER COUNTY, SOUTH CAROLINA BY: TGS LAND SURVEYING DATED: 02/24/06 JOB: 01181A1 RECORDED AT: P.B.25 PAGE 242
  - A BOUNDARY SURVEY OF A PORTION OF #046-00-07-002, NEAR RIDGELAND, JASPER COUNTY, SOUTH CAROLINA BY: TGS LAND SURVEYING DATED: 02/24/06 JOB: 04111B-06 RECORDED AT: P.B.29 PAGE 359

**SITE**  
405.195 ACRES  
(17,650,280 SF)  
(INCLUDES WETLANDS)



C#	ARC	RADIUS	DELTA	DIRECTION	CHORD
C3	625.52'	5022.64'	07°08'08"	S09°31'57"W	625.11'
C4	392.34'	524.98'	42°49'12"	N22°55'19"W	383.28'
C5	104.36'	475.00'	12°35'18"	N04°18'30"E	104.15'
C6	83.16'	57.51'	82°50'52"	N53°13'53"E	76.10'
C7	311.07'	15771.47'	01°07'48"	S86°53'11"E	311.07'
C8	78.69'	469.31'	09°36'24"	N87°44'43"E	78.60'

WETLANDS	AREAS (ACRES)
A	2.808
B	3.003
C	0.115
D	9.565
1 D	0.271
E	1.979
1 E-1	0.820
1 E-2	0.388
E-1	0.308
F	0.595
F & 1 B	0.497
G	8.917
G-1	3.392
1 G	0.239
H	0.362
1 H	2.010
<b>SUB-TOTAL:</b>	<b>35.269 ACRES</b>
<b>UPLANDS:</b>	<b>369.926 ACRES</b>
<b>TOTAL:</b>	<b>405.195 ACRES</b>



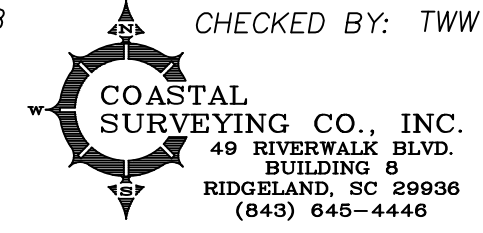
- LEGEND**
- B.S.L. BUILDING SETBACK LINE
  - CATV CABLE TELEVISION
  - CB CATCH BASIN
  - CMF CONCRETE MONUMENT FOUND
  - ELEC. BOX ELECTRIC BOX
  - IPF IRON PIN (OLD) FOUND
  - IPS IRON PIN (NEW) SET
  - TELE. PED. TELEPHONE PEDESTAL
  - WM WATER METER
  - WV WATER VALVE
  - E- UNDERGROUND ELECTRIC
  - FO- UNDERGROUND FIBER OPTIC
  - G- UNDERGROUND GAS
  - OHP- OVERHEAD POWER LINE
  - SS- UNDERGROUND SANITARY SEWER
  - T- UNDERGROUND TELEPHONE
  - W- UNDERGROUND WATER LINE

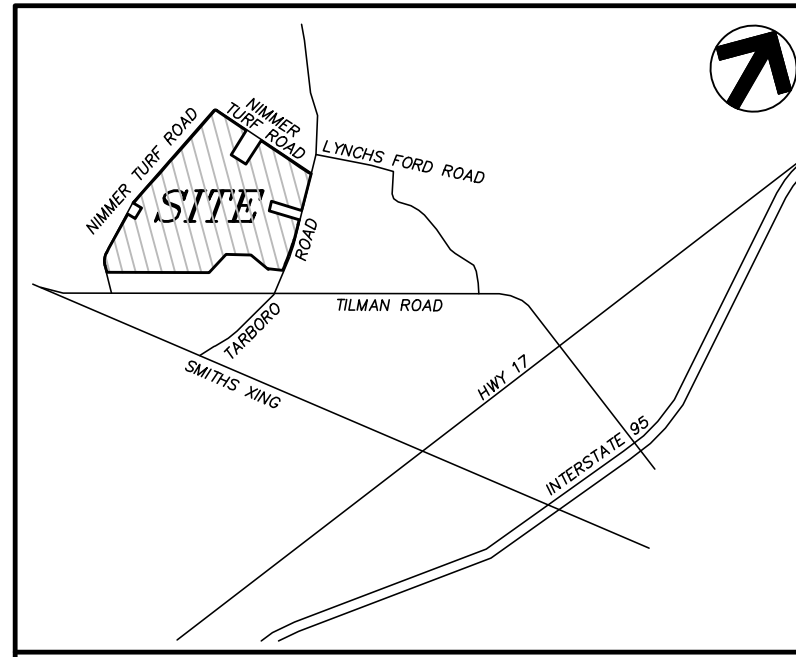
- NOTES:**
- THIS LOT LIES IN ZONE "AE", B.F.E.=13, AND ZONE "X", NO B.F.E., PER F.I.R.M. PANEL 4503C-0395-D, COMMUNITY No. 450112 & 450113, EFFECTIVE:10/18/19.
  - ALL BUILDING SETBACK REQUIREMENTS SHOULD BE VERIFIED WITH THE PROPER AUTHORITIES PRIOR TO DESIGN AND CONSTRUCTION.
  - CERTIFICATIONS ARE NOT TRANSFERABLE TO ADDITIONAL INSTITUTIONS OR SUBSEQUENT OWNERS.
  - ALL UNDERGROUND UTILITIES MARKED BY OTHERS AND/OR SCALED FROM AS-BUILTS PROVIDED BY BUNGA.
  - HORIZONTAL DATUM IS NAD 83 (BASED ON USGS MONUMENTS "27 033", "NETTLES" AND "GREAT SWAMP")
  - VERTICAL DATUM IS NAVD 88 (BASED ON USGS MONUMENT "NETTLES")

"I HEREBY STATE THAT TO THE BEST OF MY KNOWLEDGE, INFORMATION, AND BELIEF, THE SURVEY SHOWN HEREON WAS MADE IN ACCORDANCE WITH THE REQUIREMENTS OF THE MINIMUM STANDARDS MANUAL FOR THE PRACTICE OF LAND SURVEYING IN SOUTH CAROLINA, AND MEETS OR EXCEEDS THE REQUIREMENTS FOR A CLASS "B" SURVEY AS SPECIFIED THEREIN. ALSO THERE ARE NO VISIBLE ENCROACHMENTS OR PROJECTIONS OTHER THAN SHOWN."

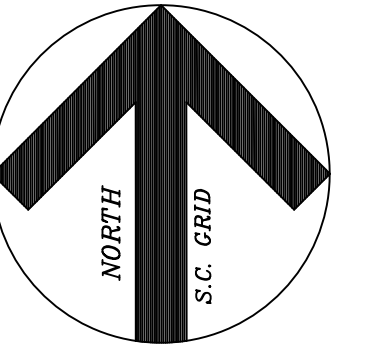
COASTAL SURVEYING CO., INC.  
MICHAEL R. DUNIGAN  
S.C.R.L.S. No. 11,905

A COMPOSITE BOUNDARY LAND SURVEY OF  
063-00-01-006, 063-00-01-007,  
046-00-07-001, 046-00-07-018,  
& A PORTION OF  
046-00-07-002 &  
046-00-06-120  
CONTAINING:  
408.027 ACRES  
NIMMER TURF ROAD &  
TARBORO ROAD  
ROBERT TOWNSHIP, JASPER COUNTY, SOUTH CAROLINA  
SCALE: 1" = 200'  
DATE: 04/01/24  
JOB No.: 76,111 B  
SURVEYED BY: SMM  
DRAWN BY: MRD  
CHECKED BY: TWW





VICINITY MAP - N.T.S.



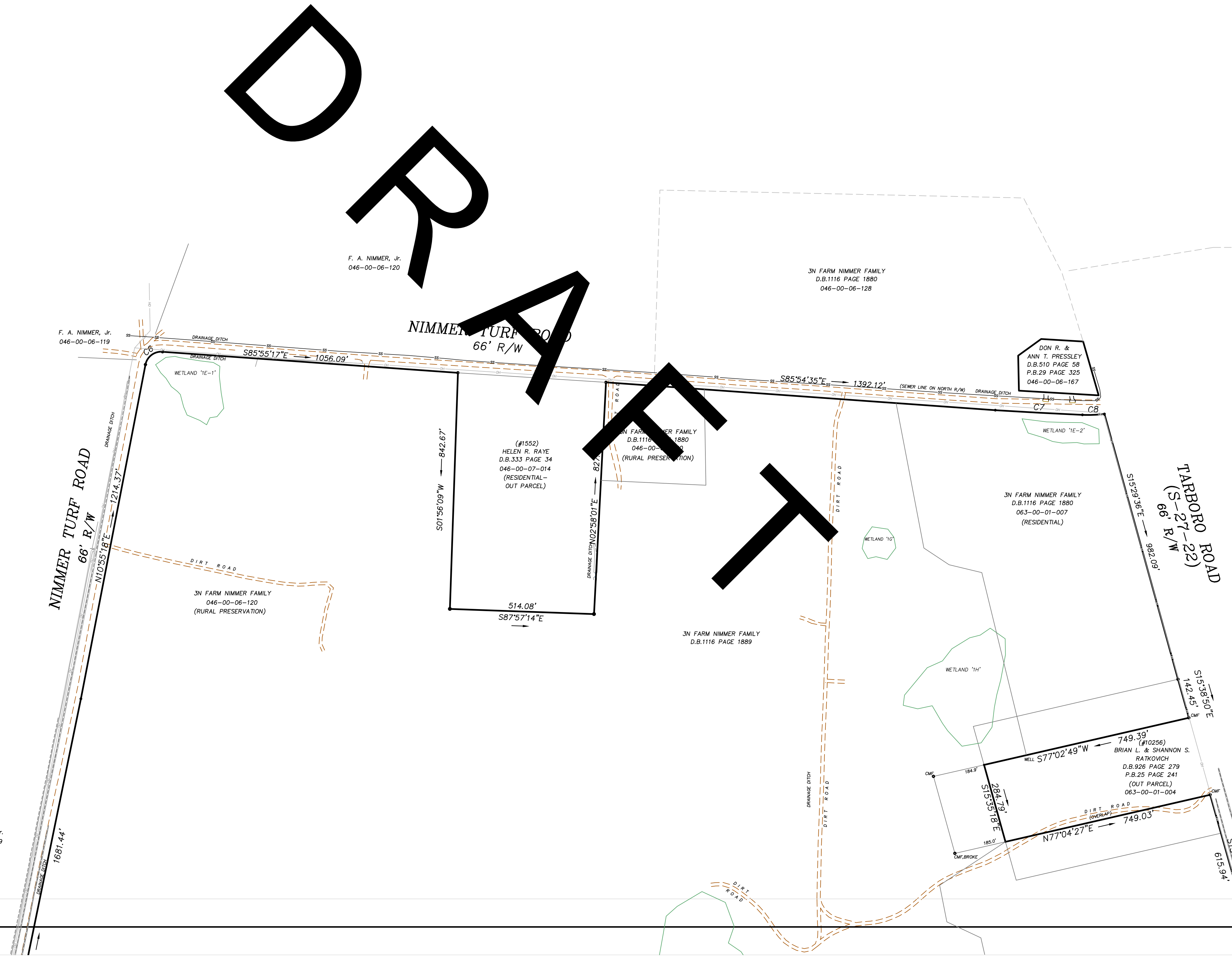
**405.195 Acres**

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Containing 405.195 acres.  
Subject to all easements, rights of way and restrictions of record.



MATCH LINE  
MATCH LINE



# NIMMER SPECIAL DISTRICT

## EXHIBIT B CONCEPTUAL LAND USE MASTER PLAN


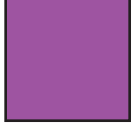

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May 2024

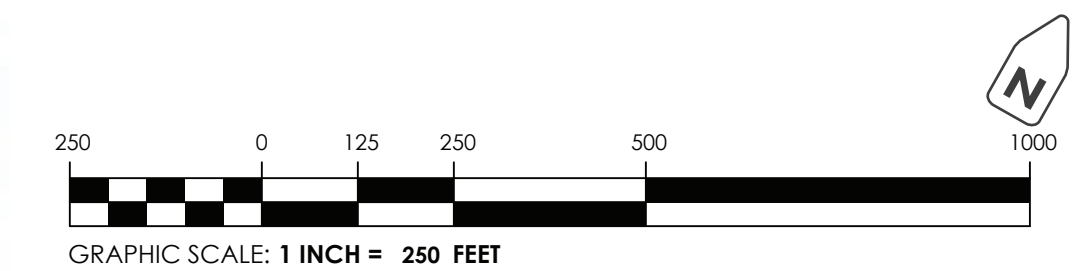
# CONCEPT LAND USE MASTER PLAN NIMMER

RIDGELAND, SOUTH CAROLINA  
JANUARY 2024

	<b>RESIDENTIAL</b>	±382.0 AC
	<b>AMENITY</b>	±22.0 AC
	<b>MUNICIPAL SITE</b>	±1.2 AC

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PREPARED BY:

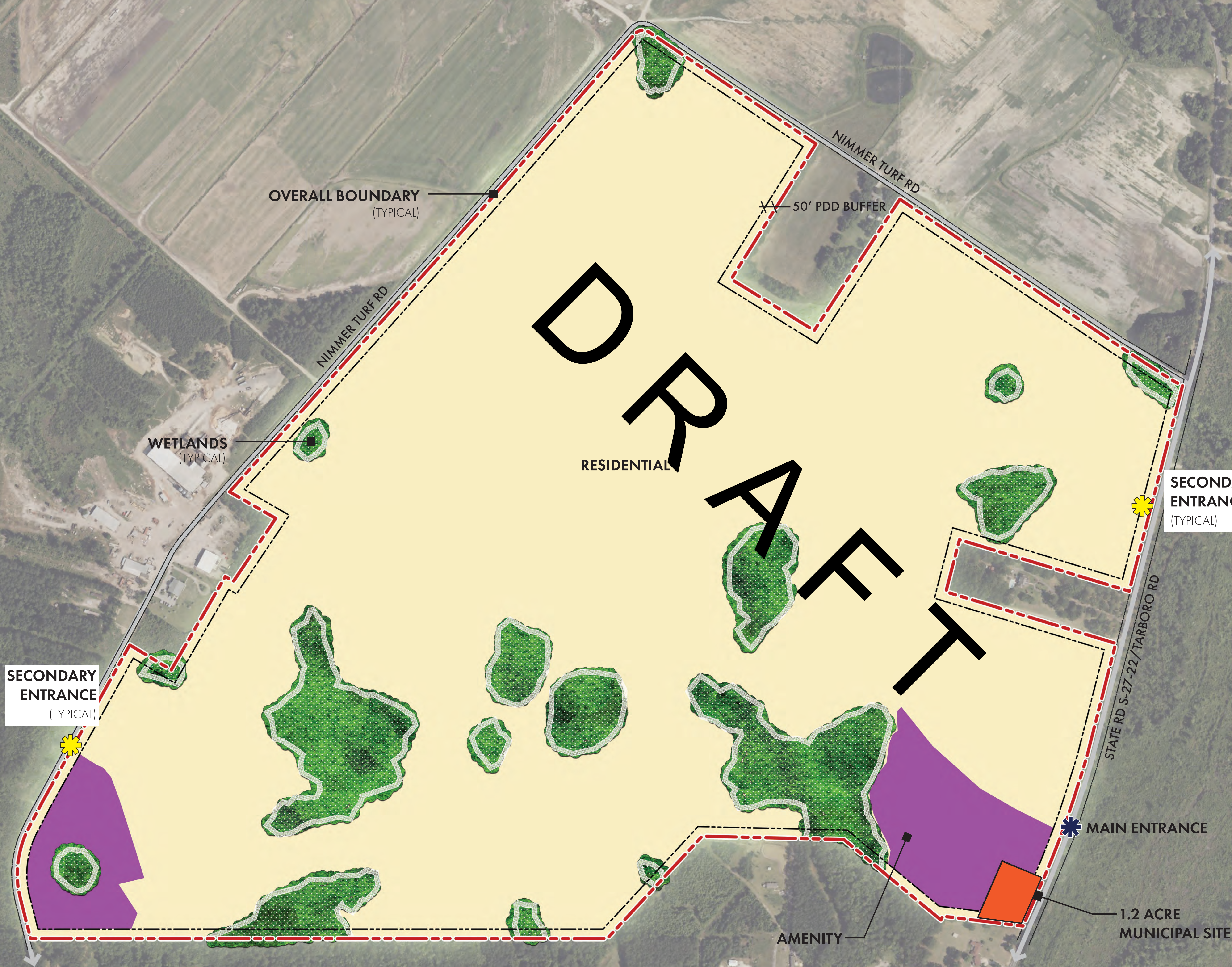


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This map illustrates a general plan of the development which is for discussion purposes only, does not limit or bind the owner/developer, and is subject to change and revision without prior written notice to the holder. Dimensions, boundaries and position locations are for illustrative purposes only and are subject to an accurate survey and property description.

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Z:\30596\30596.0000\Engineering\Drawings\Exhibits\Initial Master Plan\20



# NIMMER SPECIAL DISTRICT

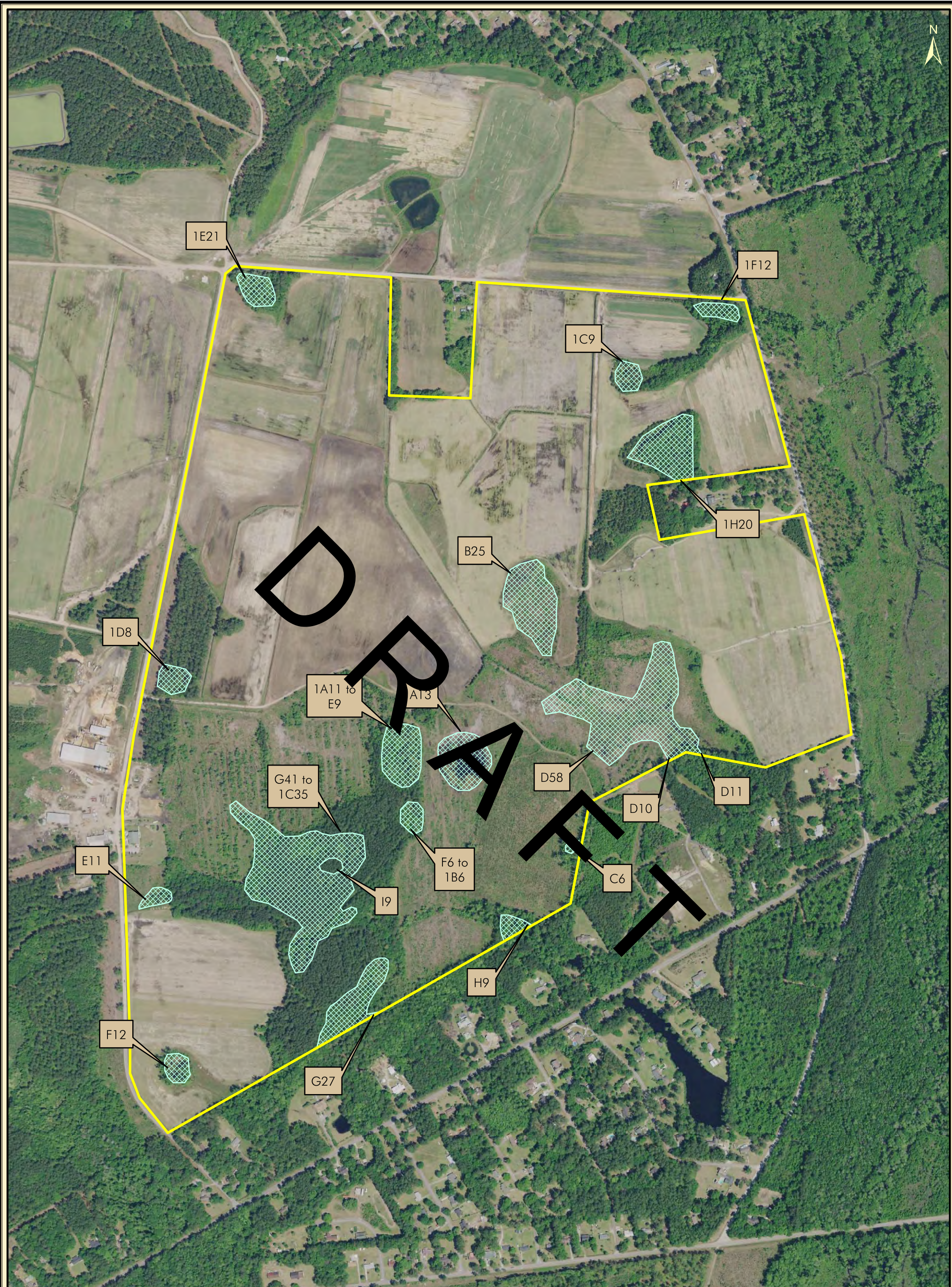
## EXHIBIT C

### AQUATIC RESOURCES DELINEATION EXHIBIT

D  
R  
A  
F  
T

J – 30596.0000

May 2024



Preliminary wetland lines are not final and are subject to change following surveying and U.S. Army Corps of Engineers (USACE) verification. SECI recommends that no land disturbance activities take place until final USACE verification is received.

 Wetland  Project Boundary

Prepared By:  
**sligh** environmental consultants, inc.  
31 Park of Commerce Way, Suite 200B  
Savannah, Georgia 31405  
phone (912) 232-0451  
fax (912) 232-0453

### Wetland Field Sketch Nimmer Sod Farm Jasper County, South Carolina

0 300 600 Feet  
Scale: 1 inch = 600 Feet  
Exhibit Date: July 11, 2022  
Drawn By: DJP  
Reviewed By: BWV  
Job Number : 01-12-077

# NIMMER SPECIAL DISTRICT

## EXHIBIT D INITIAL TRAFFIC ANALYSIS

D  
R  
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T

J – 30596.0000

May 2024



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&  
HUTTON

D  
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T

**TRAFFIC IMPACT ANALYSIS**

NIMMER TRACT  
RINGELAND, SOUTH CAROLINA

Prepared for:  
D.R. HORTON

J – 30596.0000

JANUARY 2024

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**1. INTRODUCTION**

The Nimmer Tract site proposes a residential development and a fire station. The site is located between Tarboro Road (SC 27-22), Tillman Road (SC 336), and Nimmer Turf Road, the site is west of Interstate 95 in Ridgeland, South Carolina (**Figure 1**). The proposed development currently includes 1,150 single-family detached houses, 150 townhomes, and a 10,000 SF fire station. The residential site proposes 3 access points, two are located on Tarboro Road (SC 27-22) and one is located on Nimmer Turf Road, the access to the fire station is located on Tarboro Road (SC 27-22). A Conceptual site plan is shown in **Figure 2**.

**2. EXISTING CONDITIONS**

Roadway Conditions

Tarboro Road (SC 27-22) is a north-south 2-lane roadway with no posted speed limit; however a 55-mph speed limit is assumed for the roadway as it is a state road.

Tillman Road (SC 336) is a generally east-west, two-lane roadway with a 55-mph posted speed limit.

Nimmer Turf Road is two-lane roadway that is an east-west roadway that is located north of the site and has a 90-degree turn that transforms the road to a north-south roadway located to the east of the site. Nimmer Turf has no posted speed limit.

The study intersections for the traffic impact analysis are the following:

- Tarboro Road (SC 27-22) & Tillman Road (SC 336)
- Tarboro Road (SC 27-22) & Nimmer Turf Road
- Tillman Road (SC 336) & Nimmer Turf Road
- Proposed access points:
  - Tarboro Road (SC 27-22) & Access 1
  - Tarboro Road (SC 27-22) & Access 2
  - Nimmer Turf Road & Access 3
  - Tarboro Road (SC 27-22) & Fire Station Access

Traffic Conditions

Traffic operations at intersections are typically evaluated in terms of "Level of Service" or LOS. The LOS is defined by the Transportation Research Board's Highway Capacity Manual (HCM) from which LOS A represents free flow conditions with minimal delays; LOS F represents congested conditions. Generally, an LOS D or better is considered acceptable.

Table 1 shows the HCM criteria for both signalized and unsignalized intersections.

Table 1. Level of Service definitions

LEVEL OF SERVICE	Control Delay per Vehicle (seconds)	
	Unsignalized & Roundabouts	Signalized
A	≤ 10	≤ 10
B	>10 and ≤ 15	>10 and ≤ 20
C	>15 and ≤ 25	>20 and ≤ 35
D	>25 and ≤ 35	>35 and ≤ 55
E	>35 and ≤ 50	>55 and ≤ 80
F	>50	>80



Morning and afternoon peak hour turning movement counts were collected at the following intersections in November 2023:

- Tarboro Road (SC 27-22) & Tillman Road (SC 336)
- Tarboro Road (SC 27-22) & Nimmer Turf Road
- Tillman Road (SC 336) & Nimmer Turf Road

A 24 hour count was collected near the site access point on the roadway of Tarboro Road (SC 27-22), and an additional count was collected east of the site on Tillman Road (SC 336).

AM and PM peak hour volumes are shown in **Figure 3**. Traffic count data is included in Appendix A.

Capacity analyses were completed based on the counts using Trafficware's Synchro software. Results are shown in Table 2 and included in Appendix B.

Table 2. Current Levels of Service (2023)

Intersection	Control	2023 AM Peak Hour		2023 PM Peak Hour	
		LOS	DELAY (sec)	LOS	DELAY (sec)
Tarboro Road (SC 27-22) & Tillman Road (SC 336)	Minor Stop				
EB approach lefts (Tillman Road)		A	7.4	A	7.6
WB approach lefts (Tillman Road)		A	0	A	7.4
NB approach (Tarboro Road)		B	11.5	B	10.8
SB approach (Tarboro Road)		B	11.8	B	10.5
Tillman Road (SC 336) & Nimmer Turf Road	Minor Stop				
EB approach lefts (Tillman Road)			7.4	A	0
SB approach (Nimmer Turf Road)			10.2	A	9.6
Tarboro Road (SC 27-22) & Nimmer Turf Road	Minor Stop				
EB approach (Nimmer Turf Road)		A	9.8	A	9.2
NB approach lefts (Tarboro Road)		A	7.8	A	0

The study intersections operate at acceptable levels of service during the AM and PM peak hours.

**3. HISTORICAL VOLUMES**

South Carolina Department of Transportation (SCDOT) count stations are located on Tillman Road (SC 336) to the west of the project location and Smiths Crossing (SC 27-29) to the southwest. The SCDOT Annual Average Daily Traffic (AADT) data from the count stations is shown in Table 3; the data is included in Appendix C.

Table 3. GDOT Count Station Data

Count Station	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
#027-0191 Tillman Road (SC 336)	1,800	1,900	1,950	2,000	2,000	2,000	2,200	2,000	2,000	2,100
#027-0242 Smiths Crossing (SC 27-29)	1,100	1,050	1,150	1,150	1,150	1,150	1,900	1,750	1,250	1,300

South Carolina Department of Transportation has count stations located near the project site. The calculated growth rate based on an average of the last 10 years of daily traffic data is 1.3%, and twelve years of growth at 1.3% per year is added to the existing traffic volumes to calculate 2035 No-Build volumes.

#### 4. TRIP GENERATION

Trips generated are estimated using the standard rates and equations from the Institute of Transportation Engineers, *Trip Generation, 11<sup>th</sup> Edition*, 2021. Trip generation is shown in Table 4, and the calculations and truck trip percentages are included in Appendix D.

Table 4. Trip Generation

ITE Category	Land Use	Daily	AM Peak		PM Peak	
			Enter	Exit	Enter	Exit
210	Single-Family Detached Housing 1,150 Dwelling Units	9,544	172	516	622	365
215	Single-Family Attached Housing 150 Dwelling Units	1,093	18	54	51	35
575	Fire and rescue Station 10,000 SF Gross Floor Area	48	4	1	1	4
<b>Totals</b>		<b>10,685</b>	<b>194</b>	<b>571</b>	<b>674</b>	<b>404</b>

#### 5. TRIP DISTRIBUTION

The primary site trip distribution patterns are assumed to split in accordance with the directional patterns observed in the recent counts and the site layout and surrounding road network. The trip distribution and assignment is shown in **Figure 5**. For this study, the general distribution assumptions are as follows:

- 25% to/from the West on Tillman Road (SC 336)
- 5% to/from the North on Tarboro Road (SC 27-22)
- 45% to/from the South on Tarboro Road (SC 27-22)
- 25% to/from the East on Tillman Road (SC 336)

**6. FUTURE (NO-BUILD/BUILD OUT) CONDITIONS**

The site generated volumes (**Figure 6**) are added to the No-Build volumes to determine the 2035 morning and afternoon Build out peak hour volumes (**Figure 7**). Table 5 shows the intersection levels of service with and without the proposed development. Synchro reports are included in Appendix E for the 2035 no-build condition and Appendix F for the 2035 build out condition.

Table 5. Future Levels of Service (2035)

Intersection	Control	2035 AM Peak Hour		2035 PM Peak Hour	
		No-Build (LOS/DELAY)	Build Out (LOS/DELAY)	No-Build (LOS/DELAY)	Build Out (LOS/DELAY)
Tarboro Road (SC 27-22) & Tillman Road (SC 336)	Minor Stop				
EB approach lefts (Tillman Road)		A / 7.4	A / 7.6	A / 7.7	A / 8.4
WB approach lefts (Tillman Road)		A / 0	A / 0	A / 7.4	A / 7.5
NB approach (Tarboro Road)		B / 12.1	D / 27	B / 11.3	F / 144.3
SB approach (Tarboro Road)		B / 12.8	F / 279.1	B / 10.9	F / >300
Tillman Road (SC 336) & Nimmer Turf Road	Minor Stop				
EB approach lefts (Tillman Road)		A / 7.4	A / 7.6	A / 0	A / 8.1
SB approach (Nimmer Turf Road)		B / 10.5	B / 11.9	A / 9.9	B / 14.1
Tarboro Road (SC 27-22) & Nimmer Turf Road	Minor Stop				
EB approach (Nimmer Turf Road)		B / 10.1	B / 10.8	A / 9.3	B / 10.0
NB approach lefts (Tarboro Road)		A / 7.6	A / 7.6	A / 0	A / 0
Tarboro Road (SC 27-22) & Access 1	Minor Stop				
EB approach (Access 1)		-	B / 13.2	-	B / 12.2
NB approach lefts (Tarboro Road)		-	A / 8.1	-	A / 8.5
Tarboro Road (SC 27-22) & Access 2	Minor Stop				
EB approach (Access 1)		-	B / 10.0	-	A / 9.9
NB approach lefts (Tarboro Road)		-	A / 7.6	-	A / 7.8
Nimmer Turf Road & Access 3	Minor Stop				
WB approach (Access 3)		-	A / 9.5	-	A / 9.9
SB approach lefts (Nimmer Turf Road)		-	A / 7.3	-	A / 7.6
Tarboro Road (SC 27-22) & Fire Station Access	Minor Stop				
EB approach (Fire Station Access)		-	B / 11.9	-	B / 10.6
NB approach lefts (Tarboro Road)		-	A / 8.6	-	A / 8.1

The study intersections are projected to operate at acceptable levels of service during the 2035 no-build. During the 2035 build out conditions, at the intersection of Tarboro Road (SC 27-22) & Tillman Road (SC 336), the southbound approach will experience LOS F in the AM and PM peak hour and the northbound approach will experience LOS F in the PM peak hour.

Auxiliary Turn Lane Analysis

The Warrants for Left and Right Turn Lanes were consulted using the SCDOT Roadway Design Manual. The following study intersections were analyzed:

- Tarboro Road (SC 27-22) & Nimmer Turf Road
- Tarboro Road (SC 27-22) & Tillman Road (SC 336)
- Tillman Road (SC 336) & Nimmer Turf Road
- Tarboro Road (SC 27-22) & Access 1
- Tarboro Road (SC 27-22) & Access 2
- Nimmer Turf Road & Access 3
- Tarboro Road (SC 27-22) & Fire Station Access

Tarboro Road (SC 27-22) & Nimmer Turf Road does not meet the minimum thresholds for a southbound right turn lane or for a northbound left turn lane.

Tarboro Road (SC 27-22) & Tillman Road (SC 336) meets for a right turn lane at the westbound approach and a left turn lane at the eastbound approach.

Tillman Road (SC 336) & Nimmer Turf Road meets for a left turn lane at the eastbound approach, the minimum thresholds are not met for westbound right.

Tarboro Road (SC 27-22) & Access 1 meets for a left turn lane on the northbound approach, the minimum threshold is not met for the southbound right turn lane.

Tarboro Road (SC 27-22) & Access 2 meets for a left turn lane on the northbound approach, the minimum threshold is not met for the southbound right turn lane.

Nimmer Turf Road & Access 3 meets for a right turn lane on the northbound approach, the minimum threshold is not met for the southbound left turn lane. Traffic along Nimmer turf is not significant enough to require a turn lane, the intersection will operate at an acceptable LOS.

Tarboro Road (SC 27-22) & Fire Station Access does not meet the minimum thresholds for a left turn lane on the northbound approach or for the southbound right turn lane.

The auxiliary turn lane analysis is shown in Appendix G.

Signal Warrant Analyses

Signal Warrants have been reviewed for Tarboro Road (SC 27-22) & Tillman Road (SC 336) in the 2035 build out condition. The results are summarized in the table below:

Table 6: Signal Warrant Results

	Warrant	*8-hr Warrant		4-hr Warrant	
		100 % Vols	70 % Vols	100 % Vols	70 % Vols
<b>Intersection</b>					
Tarboro Road (SC 27-22) & Tillman Road (SC 336)		N	Y	N	Y

\*Counts were collected from 6-9AM & 2-6PM.

The 70% volume warrant is applicable due to the speed limit on Tarboro Road (SC 27-22).

Signal Warrants have been reviewed for Tarboro Road (SC 27-22) & Tillman Road (SC 336) and are met in the 2035 build out condition. Additional data will need to be collected once the buildings are occupied to confirm the 8-hour warrant is met. At Tarboro Road (SC 27-22) & Tillman Road (SC 336), the northbound and southbound approaches are used for the major street approach due to higher ADT generated from the site traffic. The signal warrant analysis is included in Appendix H.

The signal warrant is met when using a one-lane major approach and one-lane minor approach, this is the only scenario where warrants are met. If signals are used the auxiliary turn lanes should not be included unless queuing and blocking is an issue.

**7. FUTURE (NO-BUILD/BUILD OUT) CONDITIONS WITH IMPROVEMENTS**

Various roadway and traffic control modifications are modelled to mitigate unacceptable levels of service in the 2035 build out condition. Table 7 presents a summary of the study intersections with improved levels of service. Table 7 presents a summary of alternate XXXX for the intersection of Tarboro Road (SC 27-22) & Tillman Road (SC 336). Synchro reports are included in Appendix G for the 2035 build out with improvements condition.

Table 7. Future Levels of Service with Improvements (2035)

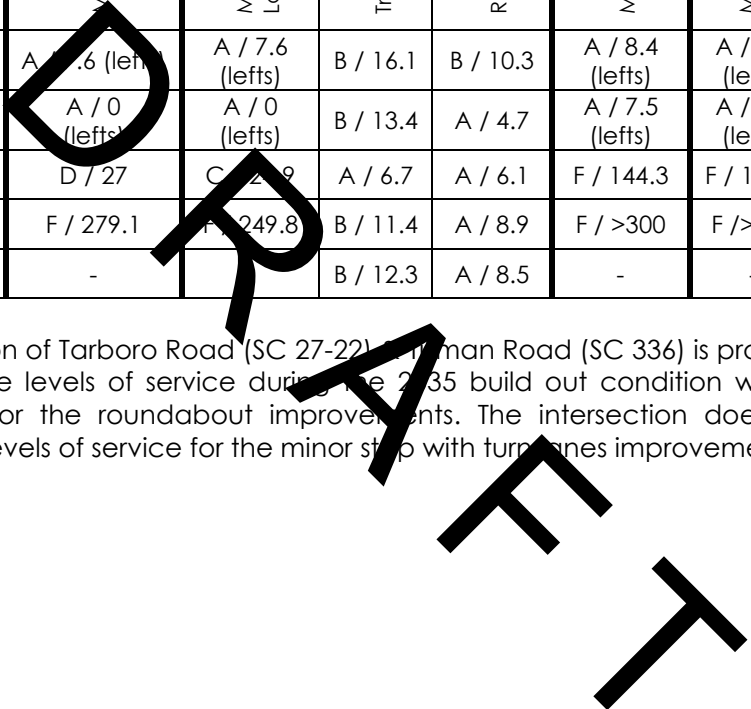
Intersection	Control	2035 AM Peak Hour		2035 PM Peak Hour	
		Build Out (LOS/DELAY)	Build Out w/ Improvements (LOS/DELAY)	Build Out (LOS/DELAY)	Build Out w/ Improvements (LOS/DELAY)
Tillman Road (SC 336) & Nimmer Turf Road	Minor Stop				
EB approach lefts (Tillman Road)		A / 7.6	A / 7.6	A / 8.1	A / 8.1
SB approach (Nimmer Turf Road)		B / 11.9	B / 11.9	B / 14.1	B / 14.0
Tarboro Road (SC 27-22) & Access 1	Minor Stop				
EB approach (Access 1)		B / 13.2	B / 13.2	B / 12.2	B / 12.1
NB approach lefts (Tarboro Road)		A / 8.1	A / 8.1	A / 8.5	A / 8.5
Tarboro Road (SC 27-22) & Access 2	Minor Stop				
EB approach (Access 1)		B / 10.0	B / 10.0	A / 9.9	A / 9.9
NB approach lefts (Tarboro Road)		A / 7.6	A / 7.6	A / 7.8	A / 7.8

The study intersections are projected to operate at acceptable levels of service during the 2035 build out condition with the recommended improvements installed.

Table 8. Tarboro Road (SC 27-22) & Tillman Road (SC 336) Future Improvements (2035)

Intersection	AM Peak Hour				PM Peak Hour			
	Future Build Out LOS/Delay	Future Build Out w/ Improvements LOS/Delay			Future Build Out LOS/Delay	Future Build Out w/ Improvements LOS/Delay		
	Minor Stop	Minor Stop w/ Turn Lanes	Traffic Signal	Roundabout	Minor Stop	Minor Stop w/ Turn Lanes	Traffic Signal	Roundabout
Tarboro Road (SC 27-22) & Tillman Road (SC 336)								
EB approach (Tillman Road)	A / 7.6 (left)	A / 7.6 (lefts)	B / 16.1	B / 10.3	A / 8.4 (lefts)	A / 8.4 (lefts)	A / 8.8	A / 6.3
WB approach (Tillman Road)	A / 0 (lefts)	A / 0 (lefts)	B / 13.4	A / 4.7	A / 7.5 (lefts)	A / 7.5 (lefts)	B / 10.1	A / 9.7
NB approach (Tarboro Road)	D / 27	C / 29	A / 6.7	A / 6.1	F / 144.3	F / 134.5	A / 9.8	A / 8.0
SB approach (Tarboro Road)	F / 279.1	F / 249.8	B / 11.4	A / 8.9	F / >300	F / >300	A / 9.8	A / 7.0
Overall Intersection	-	-	B / 12.3	A / 8.5	-	-	A / 9.7	A / 7.8

The intersection of Tarboro Road (SC 27-22) & Tillman Road (SC 336) is projected to operate at acceptable levels of service during the 2035 build out condition with the use of the traffic signal or the roundabout improvements. The intersection does not operate at acceptable levels of service for the minor stop with turn lanes improvement.



8. **SUMMARY / CONCLUSIONS**

The Nimmer Tract site proposes a residential development and a fire station. The site is located between Tarboro Road (SC 27-22), Tillman Road (SC 336), and Nimmer Turf Road, the site is west of Interstate 95 in Ridgeland, South Carolina. The proposed development currently includes 1,150 single-family detached houses, 150 townhomes, and a 10,000 SF fire station. The residential site proposes 3 access points, two are located on Tarboro Road (SC 27-22) and one is located on Nimmer Turf Road, the access to the fire station is located on Tarboro Road (SC 27-22).

As a result of the highway capacity and auxiliary turn lane warrants studied in this report, no mitigation is required at the intersections of Tarboro Road (SC 27-22) & Nimmer Turf Road and Nimmer Turf Road & Access 3.

Based upon auxiliary turn lane requirements, mitigation is recommended as discussed below:

Install 150 ft left turn lanes on Tarboro Road (SC 27-22), northbound, at the approaches to Access 1 and Access 2.

Install a 150 ft left turn lane on Tillman Road (SC 336), eastbound, at the approach to Nimmer Turf Road.

At the Intersection of Tillman Road (SC 336) & Tarboro Road (SC 27-22), traffic signal warrants are met in the build out scenario. A roundabout is an alternate recommendation to mediate the site generated traffic; however, right of way constraints and the inability of the developer to acquire additional right of way make this alternative unfeasible.

The study intersections are projected to operate at adequate levels of service during the 2035 Build Out condition with the recommended improvements installed.

DRAFT



**FIGURE 1 - PROJECT SITE MAP  
 TRAFFIC IMPACT ANALYSIS:  
 NIMMER TRACT  
 RIDGELAND, SC**

**J - 30596.0000**





**LAND USE KEY**

**USE**

- 42' WIDE LOTS
- 52' WIDE LOTS
- 42' WIDE LOTS (COTTAGES)
- TOWN HOMES
- MAIN ENTRANCE
- SECONDARY ENTRANCE
- PROPERTY/PROJECT BOUNDARY

**SITE DATA TABLE**

PROJECT AREA	±407 AC.
--------------	----------

**PARKING SUMMARY**

RESIDENTIAL	1100*
-------------	-------

\*TOTAL LOT COUNT BASED ON AN ESTIMATED YIELD EXTRACTED FROM 62-FT LOT PLAN.



PDD MASTER PLAN  
**NIMMER**  
 RIDGELAND, SOUTH CAROLINA  
 DECEMBER 2023

**FIGURE 2 - SITE PLAN**

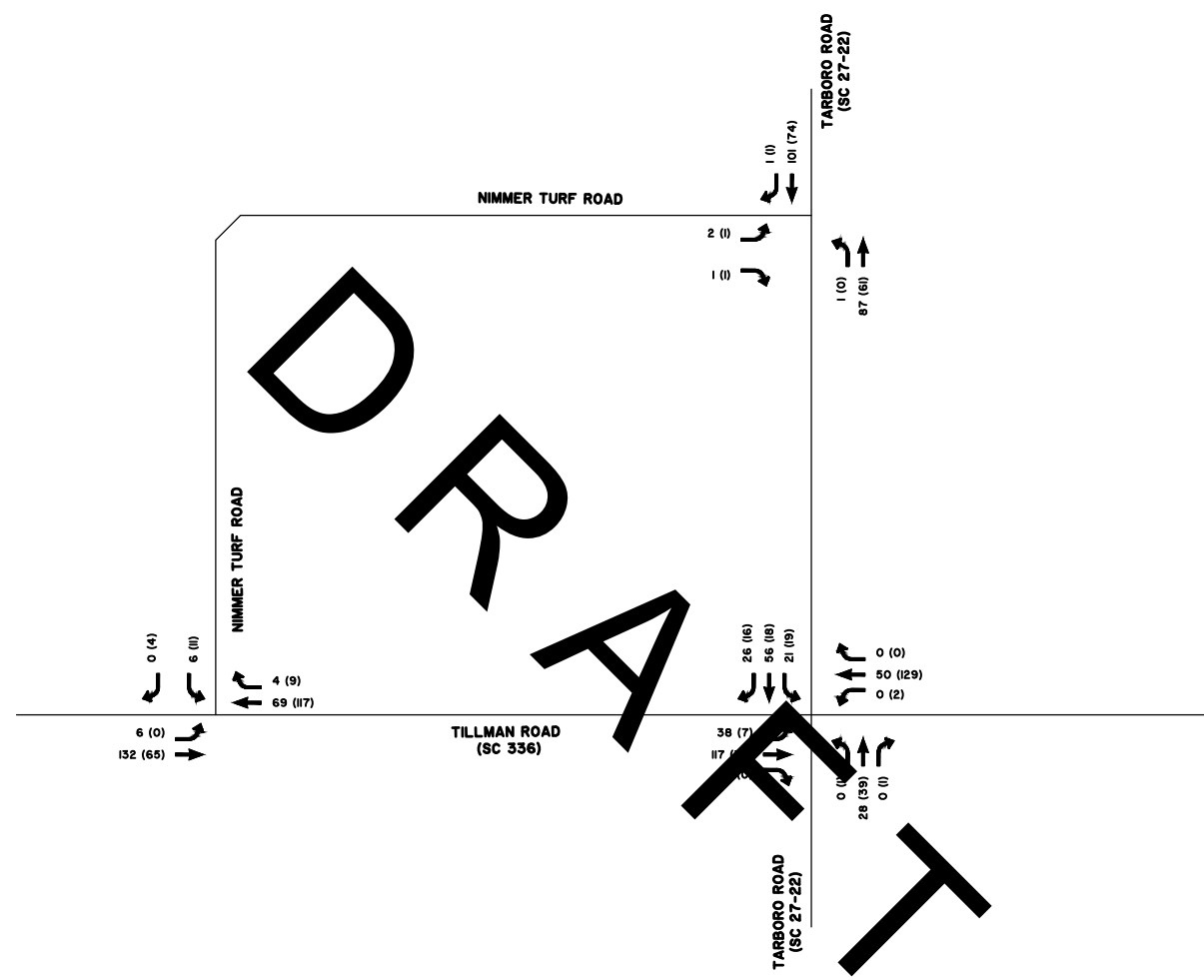
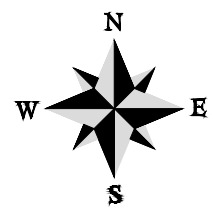
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DRAFT

**FIGURE  
3**

AM PEAK HR (PM PEAK HR) →

**NIMMER TRACT TIA**

2023 EXISTING PEAK HOUR TRAFFIC VOLUMES

CLIENT:  
D.R. HORTON

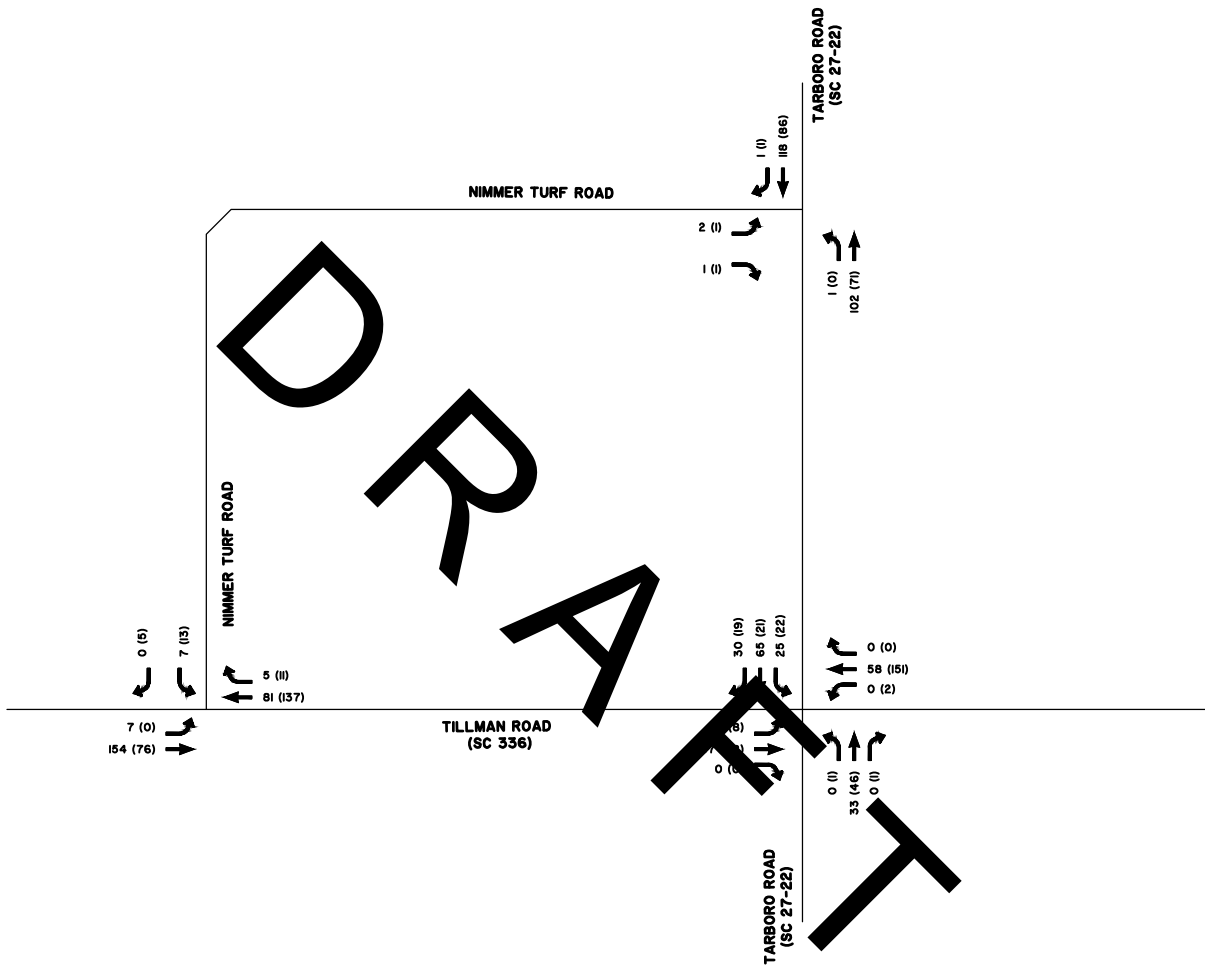
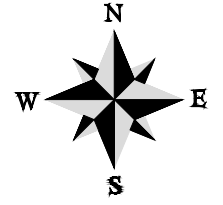
LOCATION: RIDGELAND, SC  
DATE: JANUARY 2024  
JOB NUMBER: J-30596.0000

DRAWN BY: MHH  
REVIEWED BY: TAO

SHEET: FIGURE 3  
SCALE: NTS

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Savannah, GA 31405 • 912.234.5300

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**FIGURE**  
**4**

12 Years of projected growth, at 1.3% per year added to Existing Volumes.  
Total Factor = 1.168

AM PEAK HR (PM PEAK HR) →

**NIMMER TRACT TIA**

**2035 NO-BUILD PEAK HOUR TRAFFIC VOLUMES**

CLIENT:  
**D.R. HORTON**

LOCATION: RIDGELAND, SC  
DATE: JANUARY 2024  
JOB NUMBER: J-30596.0000

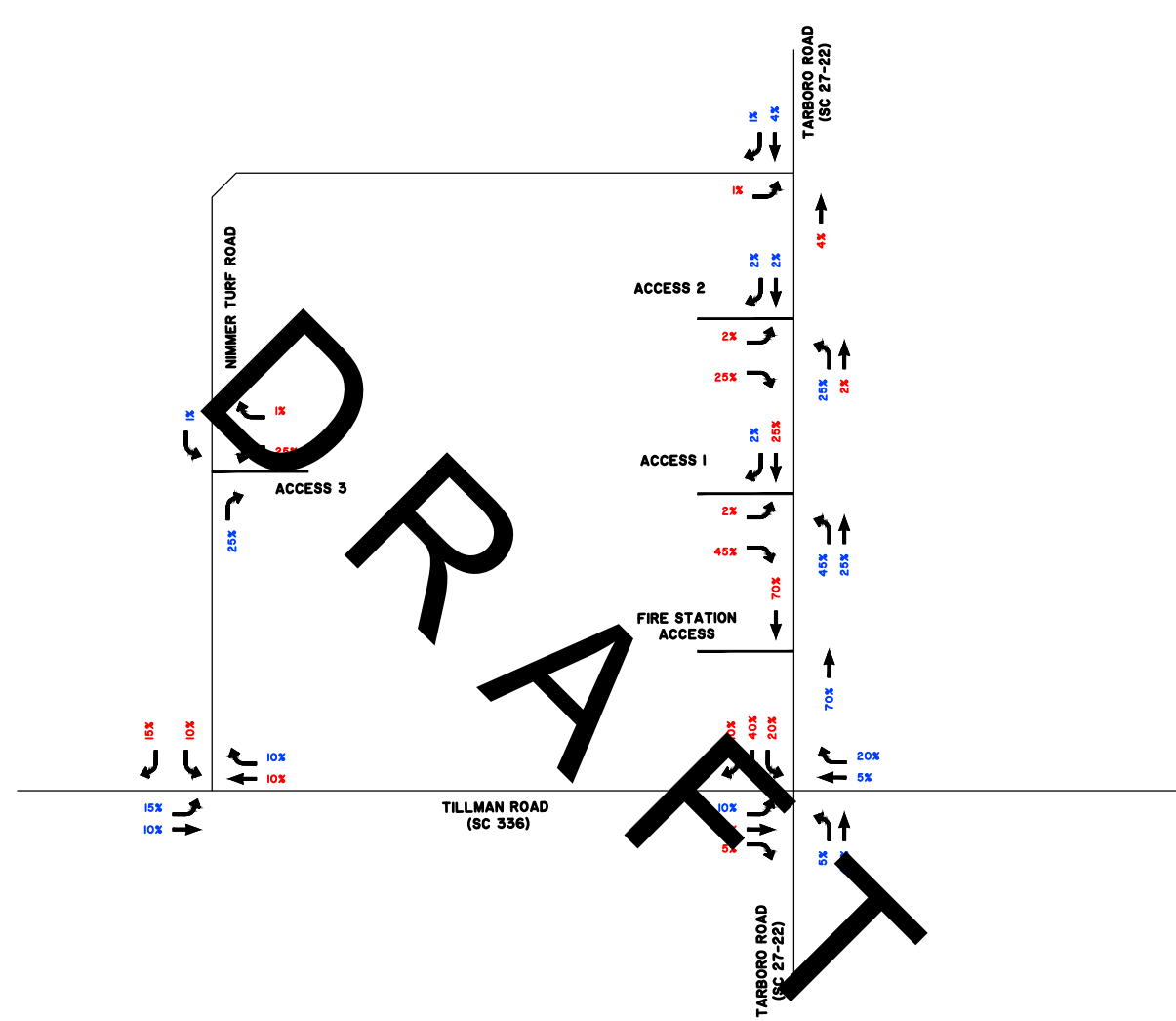
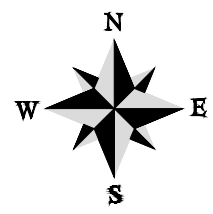
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SHEET: FIGURE 4  
SCALE: NTS

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**FIGURE**  
**5**

**NIMMER TRACT TIA**

**SITE TRIP DISTRIBUTION**

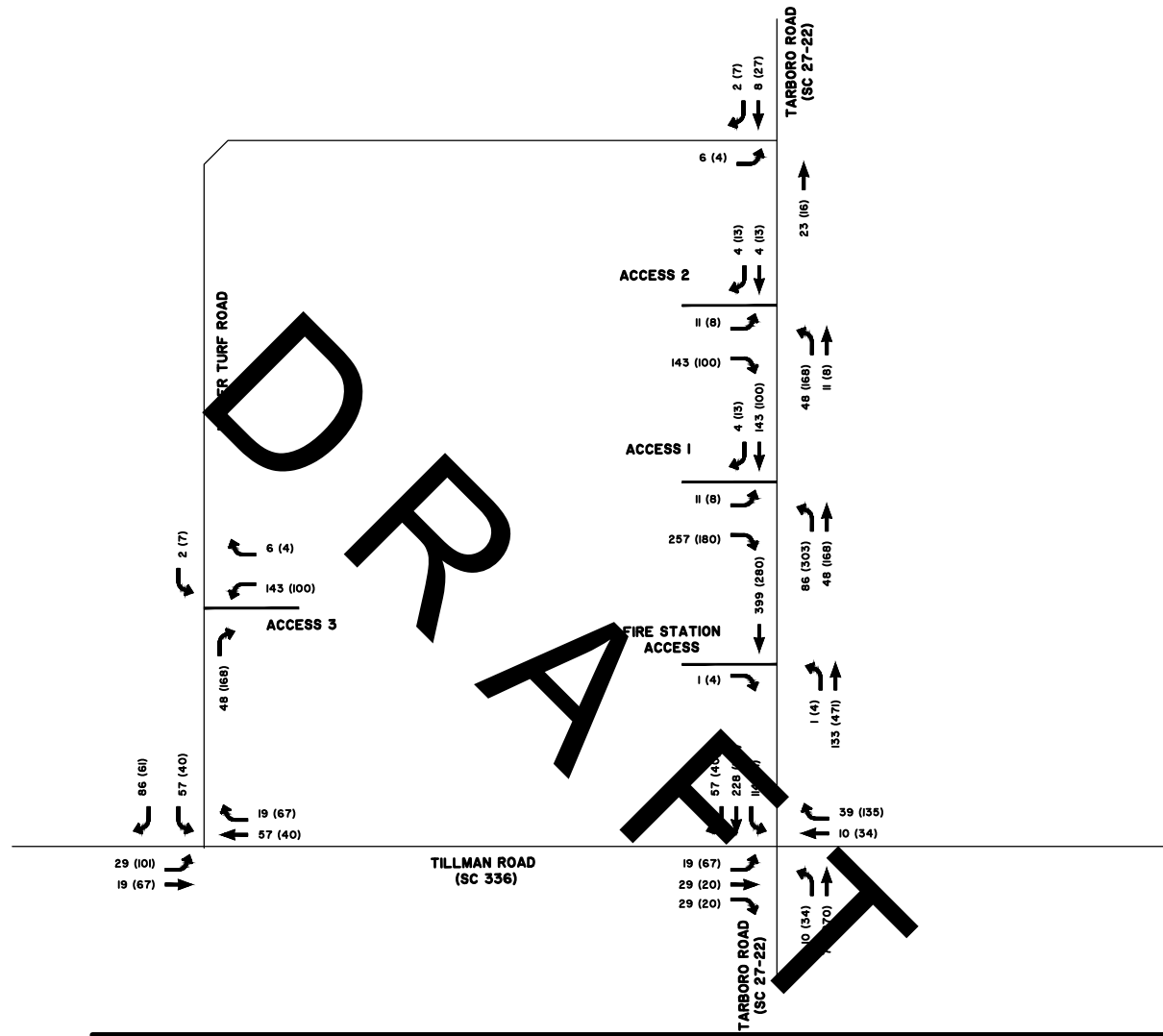
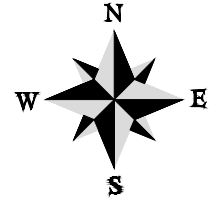
CLIENT:  
**D.R. HORTON**

LOCATION: RIDGELAND, SC  
DATE: JANUARY 2024  
JOB NUMBER: J-30596.0000

DRAWN BY: MHH  
REVIEWED BY: TAO

SHEET: FIGURE 5  
SCALE: NTS

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**FIGURE**  
**6**

**RESIDENTIAL SITE TRIPS**

**AM:**  
ENTER= 190  
EXIT= 570

**PM:**  
ENTER= 673  
EXIT= 400

AM PEAK HR (PM PEAK HR) →

**FIRE STATION**

**AM:**  
ENTER= 4  
EXIT= 1

**PM:**  
ENTER= 1  
EXIT= 4

**NIMMER TRACT TIA**

**SITE GENERATED TRIPS**

CLIENT:  
**D.R. HORTON**

LOCATION: RIDGELAND, SC  
DATE: JANUARY 2024  
JOB NUMBER: J-30596.0000

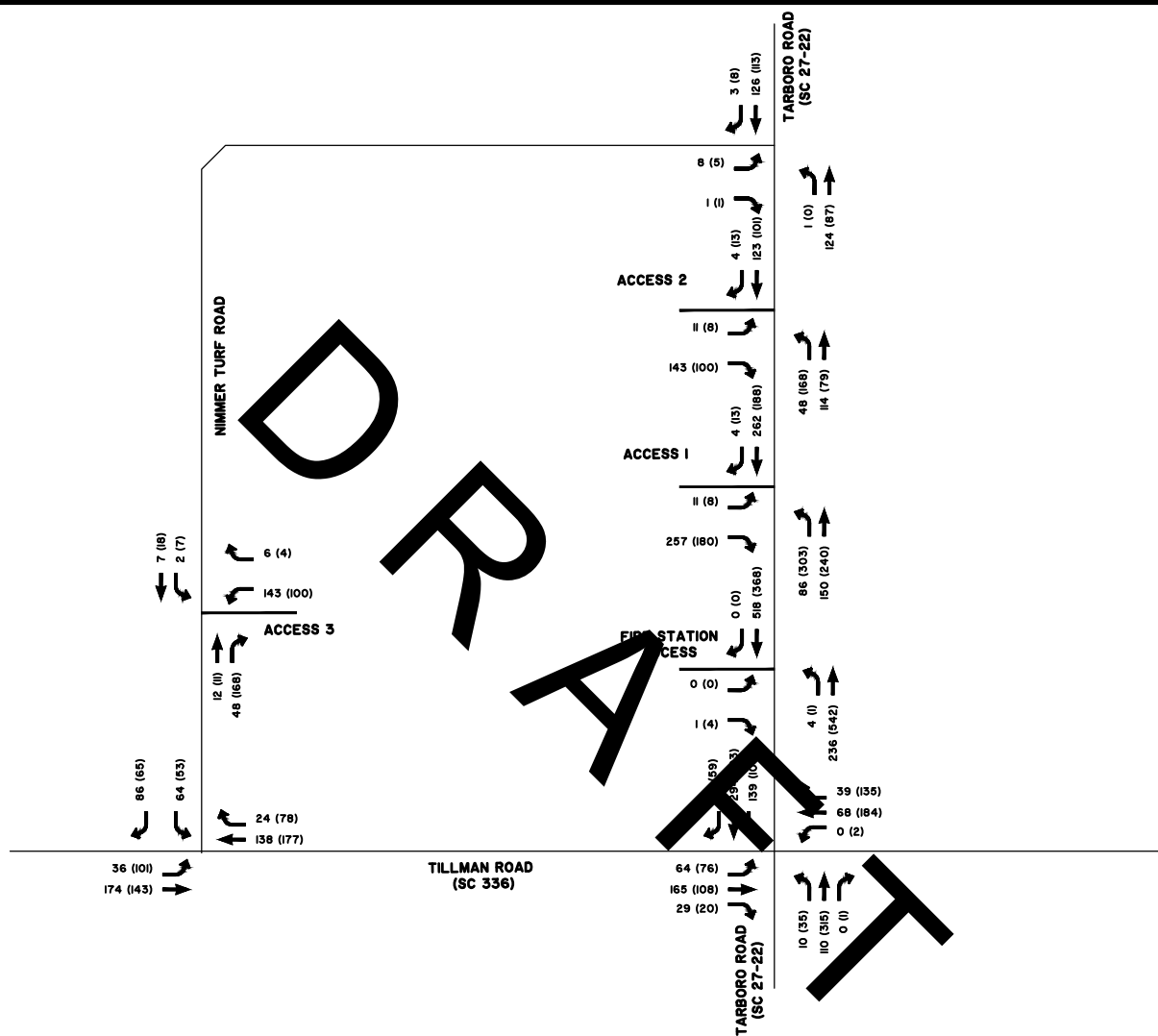
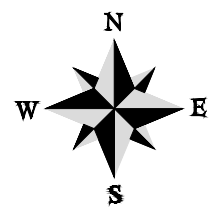
DRAWN BY: MHH  
REVIEWED BY: TAO

SHEET: FIGURE 6  
SCALE: NTS

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**FIGURE**  
**7**

AM PEAK HR (PM PEAK HR) →

**NIMMER TRACT TIA**

2035 BUILD OUT PEAK HOUR TRAFFIC VOLUMES

CLIENT:  
**D.R. HORTON**

LOCATION: RIDGELAND, SC  
DATE: JANUARY 2024  
JOB NUMBER: J-30596.0000

DRAWN BY: MHH  
REVIEWED BY: TAO

SHEET: FIGURE 7  
SCALE: NTS

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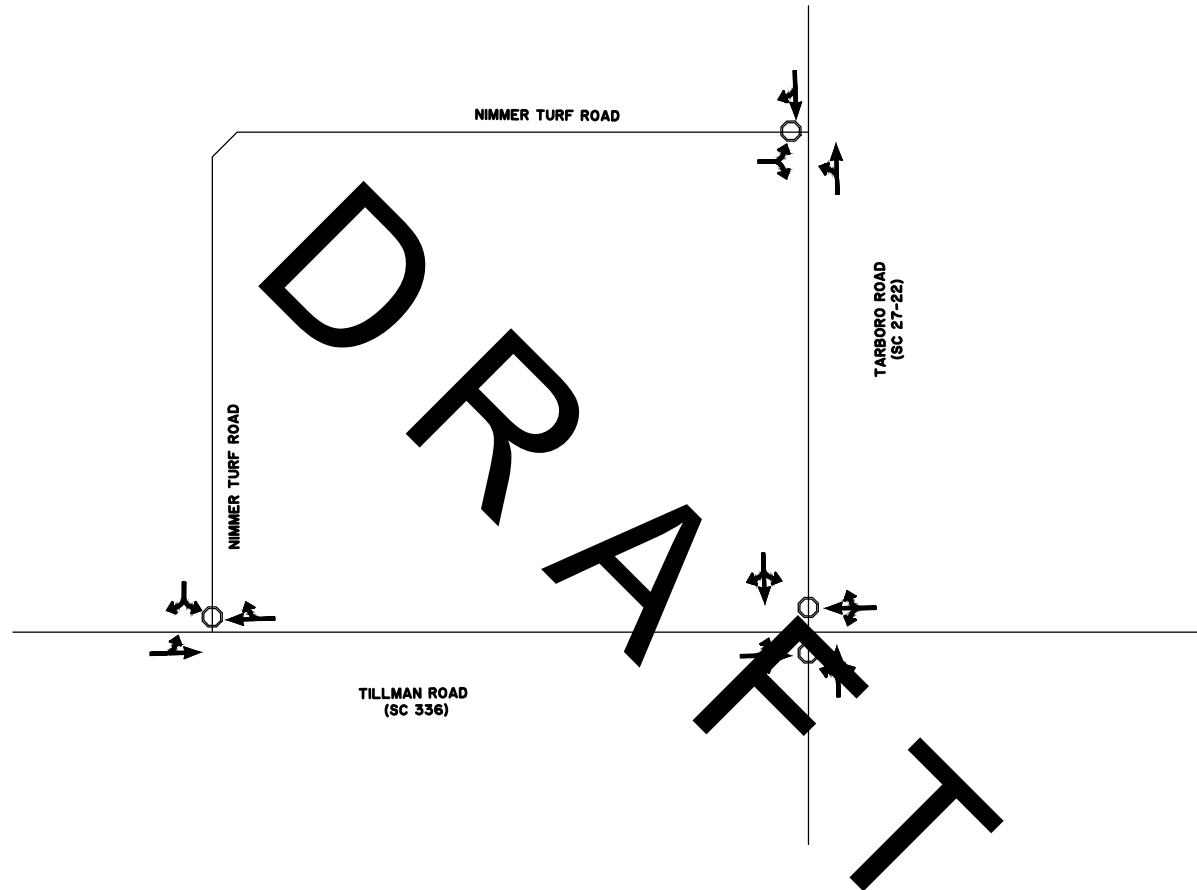
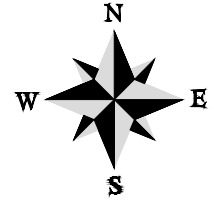


FIGURE  
8A

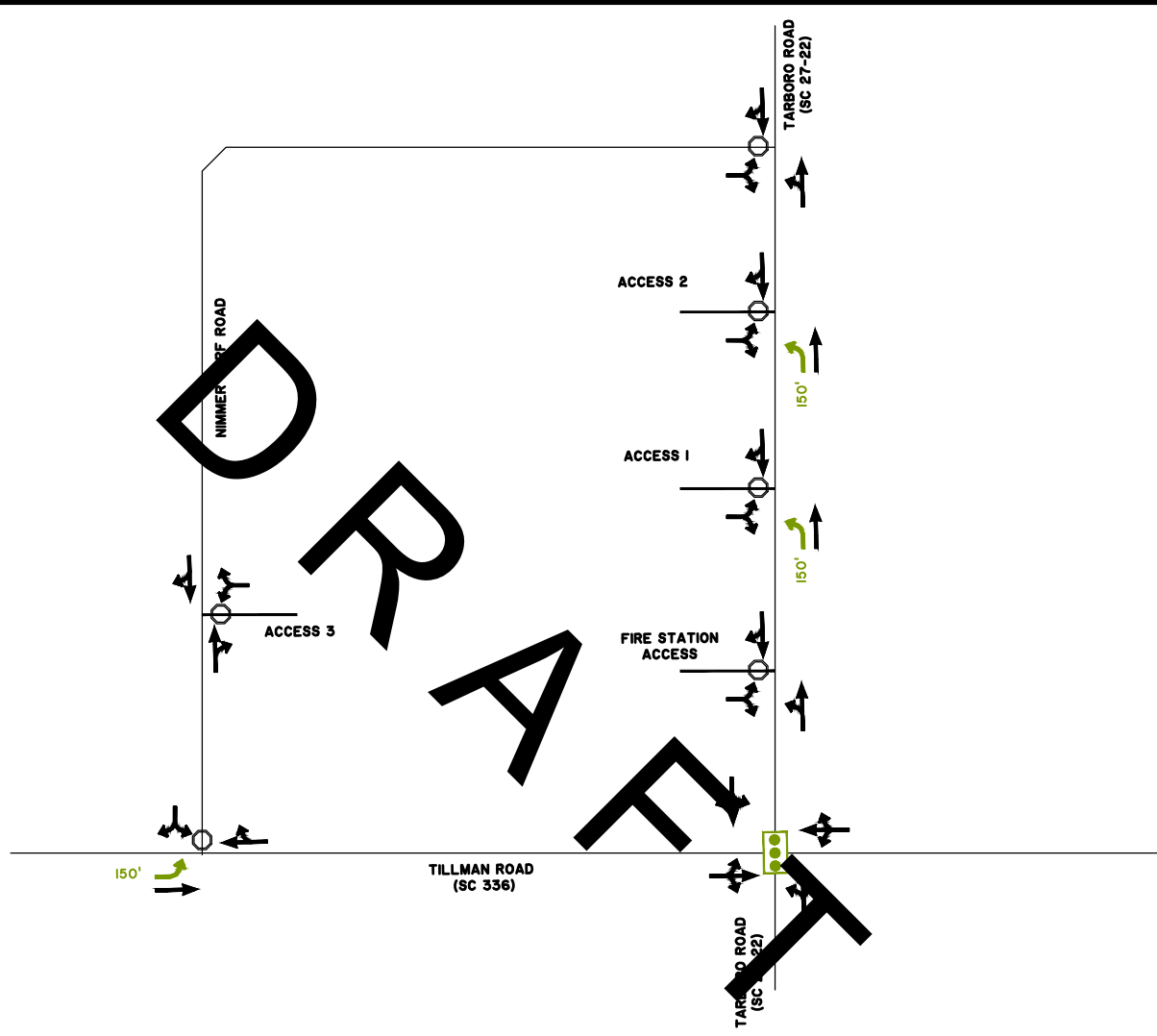
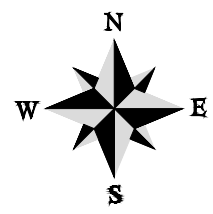
- MINOR STOP CONTROL
- ROADWAY
- ➔ EXISTING TRAFFIC MOVEMENT

NIMMER TRACT TIA  
2023 EXISTING ROADWAY GEOMETRY  
CLIENT:  
D.R. HORTON  
LOCATION: RIDGELAND, SC  
DATE: JANUARY 2024  
JOB NUMBER: J-30596.0000






DRAWN BY: MHH  
REVIEWED BY: TAO

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SHEET: FIGURE 8A  
SCALE: NTS



**FIGURE  
8B**

-  EXISTING MINOR STOP CONTROL
-  ROADWAY
-  EXISTING TRAFFIC MOVEMENT
-  RECOMMENDED TRAFFIC MOVEMENT
-  RECOMMENDED TRAFFIC SIGNAL

**NIMMER TRACT TIA**

2035 BUILD OUT ROADWAY GEOMETRY

CLIENT:  
D.R. HORTON

LOCATION: RIDGELAND, SC  
DATE: JANUARY 2024  
JOB NUMBER: J-30596.0000

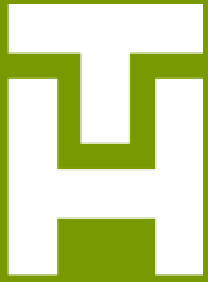
DRAWN BY: MHH  
REVIEWED BY: TAO

SHEET: FIGURE 8B  
SCALE: NTS



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D  
R  
A  
F  
T

**TRAFFIC IMPACT ANALYSIS**

NIMMER TRACT

**APPENDIX A**

EXISTING TRAFFIC COUNTS

J – 30596.0000

January 2024



# SHORT COUNTS

Traffic Data Specialists

735 Maryland St  
Columbia, SC 29201

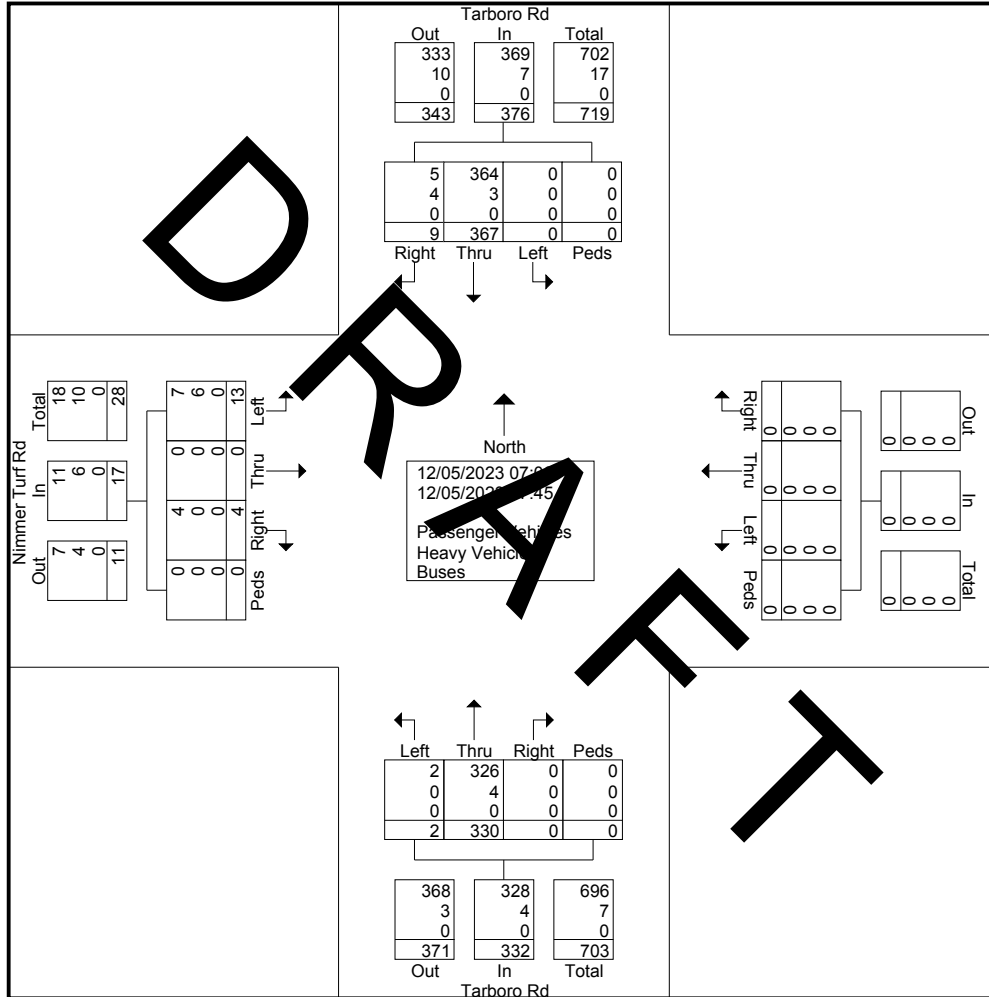
We Can't say we're the Best, but you Can!

File Name : Tarboro Rd @ Nimmer Turf Rd

Site Code :

Start Date : 12/05/2023

Page No : 2



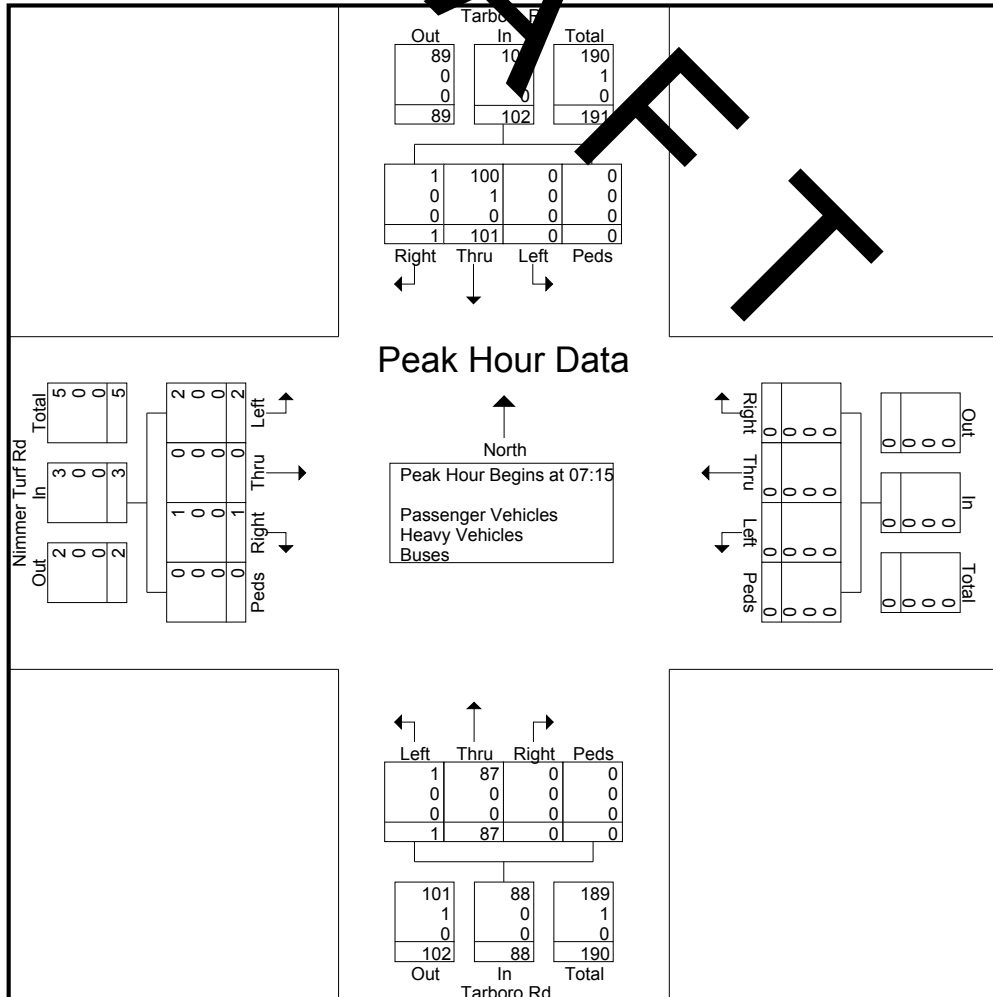
# SHORT COUNTS

## Traffic Data Specialists

735 Maryland St  
Columbia, SC 29201  
We Can't say we're the Best, but you Can!

File Name : Tarboro Rd @ Nimmer Turf Rd  
Site Code :  
Start Date : 12/05/2023  
Page No : 3

Start Time	Tarboro Rd Southbound					Westbound					Tarboro Rd Northbound					Nimmer Turf Rd Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1 Peak Hour for Entire Intersection Begins at 07:15																					
07:15	0	19	1	0	20	0	0	0	0	0	1	7	0	0	8	0	0	1	0	1	29
07:30	0	15	0	0	15	0	0	0	0	0	0	26	0	0	26	0	0	0	0	0	41
07:45	0	33	0	0	33	0	0	0	0	0	0	39	0	0	39	1	0	0	0	1	73
08:00	0	34	0	0	34	0	0	0	0	0	0	15	0	0	15	1	0	0	0	1	50
Total Volume	0	101	1	0	102	0	0	0	0	0	1	87	0	0	88	2	0	1	0	3	193
% App. Total	0	99	1	0	100	0	0	0	0	0	1.1	98.9	0	0	100	66.7	0	33.3	0	100	
PHF	.000	.743	.250	.000	.750	.000	.000	.000	.000	.000	.250	.558	.000	.000	.564	.500	.000	.250	.000	.750	.661
Passenger Vehicles	0	100	1	0	101	0	0	0	0	0	1	87	0	0	88	2	0	1	0	3	192
% Passenger Vehicles																					
Heavy Vehicles	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
% Heavy Vehicles	0	1.0	0	0	1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



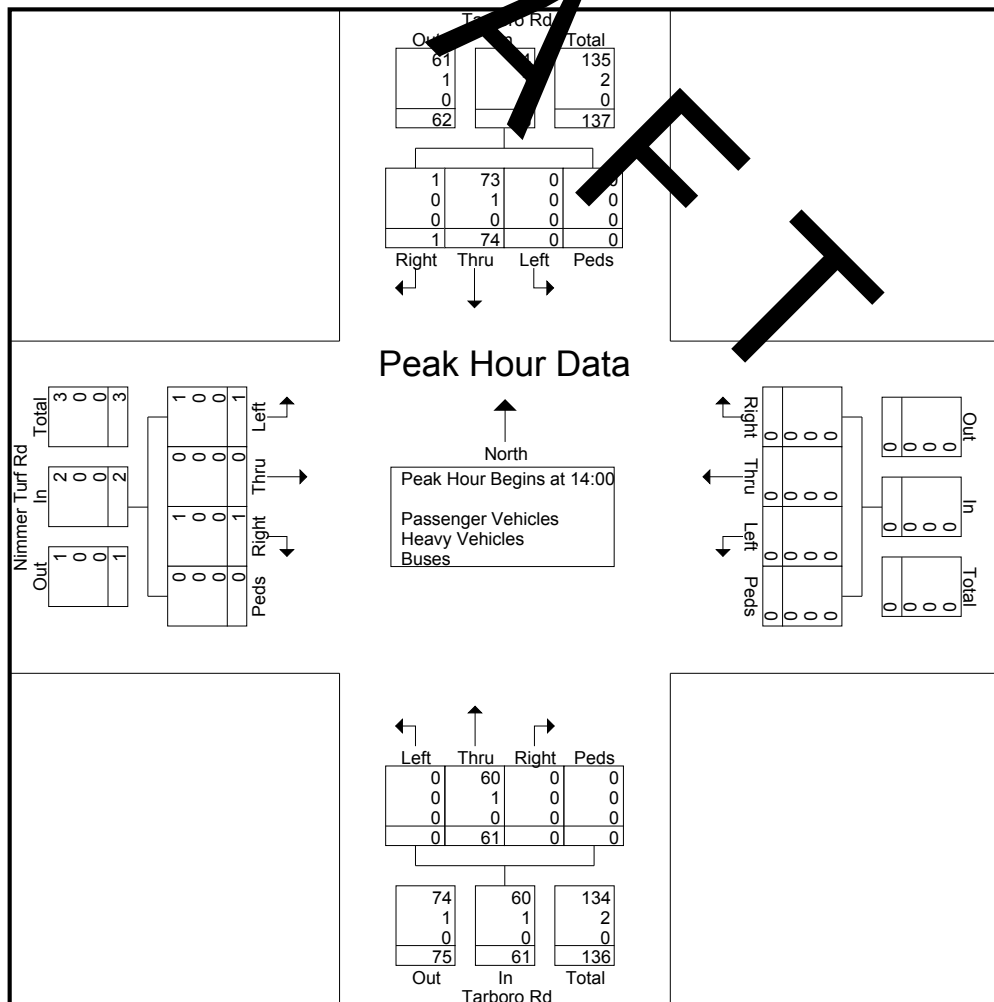
# SHORT COUNTS

## Traffic Data Specialists

735 Maryland St  
Columbia, SC 29201  
We Can't say we're the Best, but you Can!

File Name : Tarboro Rd @ Nimmer Turf Rd  
Site Code :  
Start Date : 12/05/2023  
Page No : 4

Start Time	Tarboro Rd Southbound					Westbound					Tarboro Rd Northbound					Nimmer Turf Rd Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 14:00 to 15:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 14:00																					
14:00	0	7	0	0	7	0	0	0	0	0	0	17	0	0	17	0	0	0	0	0	24
14:15	0	19	0	0	19	0	0	0	0	0	0	22	0	0	22	1	0	1	0	2	43
14:30	0	38	0	0	38	0	0	0	0	0	0	12	0	0	12	0	0	0	0	0	50
14:45	0	10	1	0	11	0	0	0	0	0	0	10	0	0	10	0	0	0	0	0	21
Total Volume	0	74	1	0	75	0	0	0	0	0	0	61	0	0	61	1	0	1	0	2	138
% App. Total	0	98.7	1.3	0	100	0	0	0	0	0	0	100	0	0	100	50	0	50	0	0	138
PHF	.000	.487	.250	.000	.493	.000	.000	.000	.000	.000	.000	.693	.000	.000	.693	.250	.000	.250	.000	.250	.690
Passenger Vehicles	0	73	1	0	74	0	0	0	0	0	0	60	0	0	60	1	0	1	0	2	136
% Passenger Vehicles																					
Heavy Vehicles	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
% Heavy Vehicles	0	1.4	0	0	1.3	0	0	0	0	0	0	1.6	0	0	1.6	0	0	0	0	0	1.4
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



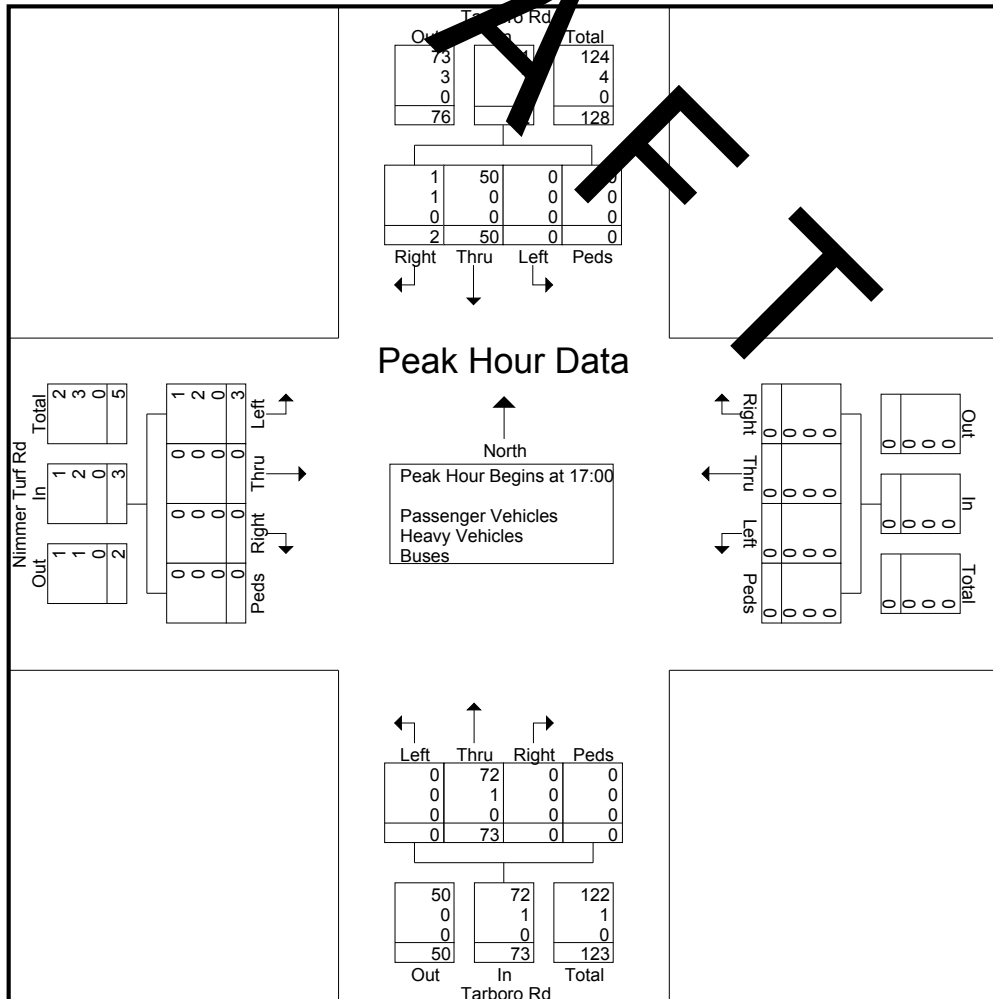
# SHORT COUNTS

## Traffic Data Specialists

735 Maryland St  
 Columbia, SC 29201  
 We Can't say we're the Best, but you Can!

File Name : Tarboro Rd @ Nimmer Turf Rd  
 Site Code :  
 Start Date : 12/05/2023  
 Page No : 5

Start Time	Tarboro Rd Southbound					Westbound					Tarboro Rd Northbound					Nimmer Turf Rd Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 17:00																					
17:00	0	14	1	0	15	0	0	0	0	0	0	18	0	0	18	2	0	0	0	2	35
17:15	0	12	0	0	12	0	0	0	0	0	0	18	0	0	18	1	0	0	0	1	31
17:30	0	15	1	0	16	0	0	0	0	0	0	17	0	0	17	0	0	0	0	0	33
17:45	0	9	0	0	9	0	0	0	0	0	0	20	0	0	20	0	0	0	0	0	29
Total Volume	0	50	2	0	52	0	0	0	0	0	0	73	0	0	73	3	0	0	0	3	128
% App. Total	0	96.2	3.8	0	100	0	0	0	0	0	0	100	0	0	100	100	0	0	0	100	
PHF	.000	.833	.500	.000	.813	.000	.000	.000	.000	.000	.000	.913	.000	.000	.913	.375	.000	.000	.000	.375	.914
Passenger Vehicles	0	50	1	0	51	0	0	0	0	0	0	72	0	0	72	1	0	0	0	1	124
% Passenger Vehicles																					
Heavy Vehicles	0	0	1	0	1	0	0	0	0	0	0	1	0	0	1	2	0	0	0	2	4
% Heavy Vehicles	0	0	50.0	0	1.9	0	0	0	0	0	0	1.4	0	0	1.4	66.7	0	0	0	66.7	3.1
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



# SHORT COUNTS



## Traffic Data Specialists

735 Maryland St  
Columbia, SC 29201  
We Can't say we're the Best, but you Can!

File Name : Tillman Rd @ Nimmer Turf Rd  
Site Code :  
Start Date : 12/05/2023  
Page No : 1

Groups Printed- Passenger Vehicles - Heavy Vehicles - Buses

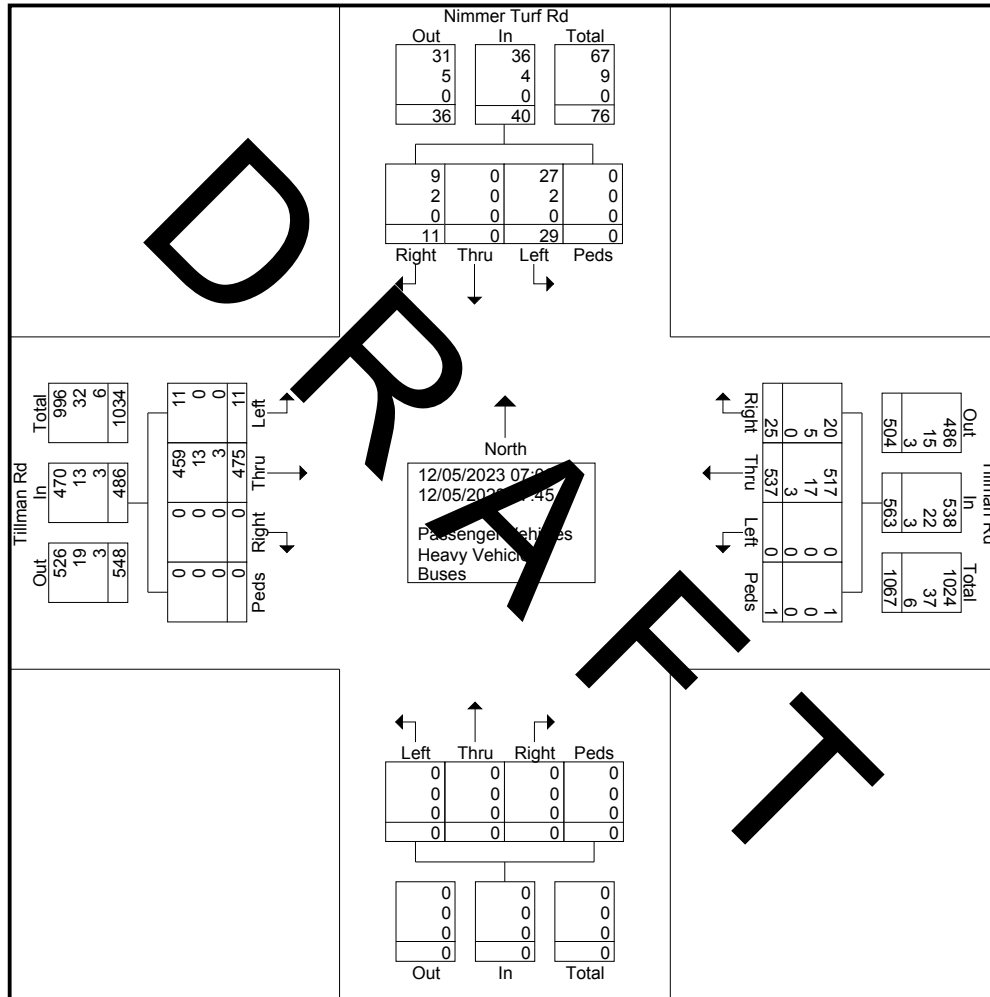
Start Time	Nimmer Turf Rd Southbound				Tillman Rd Westbound				Northbound				Tillman Rd Eastbound				Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	
07:00	0	0	1	0	0	9	3	0	0	0	0	0	1	27	0	0	41
07:15	2	0	0	0	0	13	0	0	0	0	0	0	2	33	0	0	50
07:30	2	0	0	0	0	13	3	0	0	0	0	0	3	33	0	0	54
07:45	1	0	0	0	0	16	1	0	0	0	0	0	0	40	0	0	58
Total	5	0	1	0	0	51	7	0	0	0	0	0	6	133	0	0	203
08:00	1	0	0	0	0	27	0	0	0	0	0	0	1	26	0	0	55
08:15	0	0	0	0	0	11	0	0	0	0	0	0	0	18	0	0	30
08:30	0	0	1	0	0	12	0	0	0	0	0	0	1	19	0	0	33
08:45	1	0	0	0	0	15	0	0	0	0	0	0	0	14	0	0	30
Total	2	0	1	0	0	65	1	0	0	0	0	0	2	77	0	0	148
14:00	0	0	0	0	0	17	1	0	0	0	0	0	1	14	0	0	33
14:15	0	0	1	0	0	22	0	0	0	0	0	0	1	22	0	0	47
14:30	4	0	1	0	0	33	1	0	0	0	0	0	0	21	0	0	60
14:45	1	0	0	0	0	22	0	0	0	0	0	0	1	14	0	0	38
Total	5	0	2	0	0	94	2	1	0	0	0	0	3	71	0	0	178
15:00	0	0	0	0	0	27	0	0	0	0	0	0	0	10	0	0	37
15:15	0	0	0	0	0	27	0	0	0	0	0	0	0	15	0	0	42
15:30	1	0	0	0	0	25	1	0	0	0	0	0	0	16	0	0	43
15:45	0	0	1	0	0	17	1	0	0	0	0	0	0	12	0	0	31
Total	1	0	1	0	0	96	2	0	0	0	0	0	0	53	0	0	153
16:00	1	0	1	0	0	28	1	0	0	0	0	0	0	20	0	0	51
16:15	0	0	0	0	0	31	0	0	0	0	0	0	0	18	0	0	49
16:30	4	0	1	0	0	32	3	0	0	0	0	0	0	22	0	0	62
16:45	0	0	0	0	0	23	0	0	0	0	0	0	0	16	0	0	39
Total	5	0	2	0	0	114	4	0	0	0	0	0	0	76	0	0	201
17:00	2	0	3	0	0	24	3	0	0	0	0	0	0	8	0	0	40
17:15	3	0	0	0	0	29	2	0	0	0	0	0	0	21	0	0	55
17:30	2	0	1	0	0	32	1	0	0	0	0	0	0	16	0	0	52
17:45	4	0	0	0	0	32	3	0	0	0	0	0	0	20	0	0	59
Total	11	0	4	0	0	117	9	0	0	0	0	0	0	65	0	0	206
Grand Total	29	0	11	0	0	537	25	1	0	0	0	0	11	475	0	0	1089
Apprch %	72.5	0	27.5	0	0	95.4	4.4	0.2	0	0	0	0	2.3	97.7	0	0	
Total %	2.7	0	1	0	0	49.3	2.3	0.1	0	0	0	0	1	43.6	0	0	
Passenger Vehicles	27	0	9	0	0	517	20	1	0	0	0	0	11	459	0	0	1044
% Passenger Vehicles	93.1	0	81.8	0	0	96.3	80	100	0	0	0	0	100	96.6	0	0	95.9
Heavy Vehicles	2	0	2	0	0	17	5	0	0	0	0	0	0	13	0	0	39
% Heavy Vehicles	6.9	0	18.2	0	0	3.2	20	0	0	0	0	0	0	2.7	0	0	3.6
Buses	0	0	0	0	0	3	0	0	0	0	0	0	0	3	0	0	6
% Buses	0	0	0	0	0	0.6	0	0	0	0	0	0	0	0.6	0	0	0.6

# SHORT COUNTS

Traffic Data Specialists

735 Maryland St  
 Columbia, SC 29201  
 We Can't say we're the Best, but you Can!

File Name : Tillman Rd @ Nimmer Turf Rd  
 Site Code :  
 Start Date : 12/05/2023  
 Page No : 2





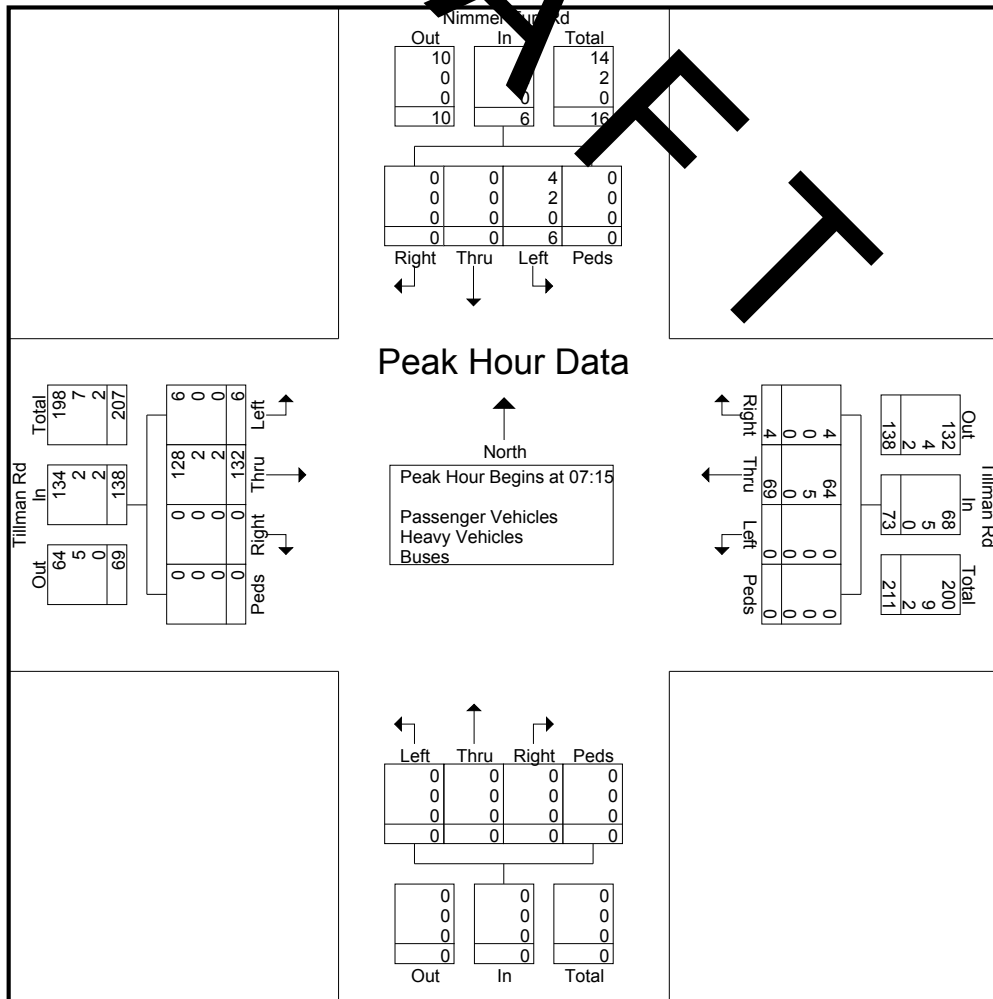
# SHORT COUNTS

## Traffic Data Specialists

735 Maryland St  
Columbia, SC 29201  
We Can't say we're the Best, but you Can!

File Name : Tillman Rd @ Nimmer Turf Rd  
Site Code :  
Start Date : 12/05/2023  
Page No : 3

Start Time	Nimmer Turf Rd Southbound					Tillman Rd Westbound					Northbound					Tillman Rd Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1 Peak Hour for Entire Intersection Begins at 07:15																					
07:15	2	0	0	0	2	0	3	0	0	13	0	0	0	0	0	2	33	0	0	35	50
07:30	2	0	0	0	2	0	3	1	0	16	0	0	0	0	0	3	33	0	0	36	54
07:45	1	0	0	0	1	0	5	1	0	17	0	0	0	0	0	0	40	0	0	40	58
08:00	1	0	0	0	1	0	27	0	0	27	0	0	0	0	0	1	26	0	0	27	55
Total Volume	6	0	0	0	6	0	69	4	0	73	0	0	0	0	0	6	132	0	0	138	217
% App. Total	100	0	0	0	100	0	94.5	5.5	0	100	0	0	0	0	0	4.3	95.7	0	0	100	
PHF	.750	.000	.000	.000	.750	.000	.639	.077	.000	.676	.000	.000	.000	.000	.000	.500	.825	.000	.000	.863	.935
Passenger Vehicles	4	0	0	0	4	0	64	0	0	68	0	0	0	0	0	6	128	0	0	134	206
% Passenger Vehicles																					
Heavy Vehicles	2	0	0	0	2	0	5	0	0	5	0	0	0	0	0	0	2	0	0	2	9
% Heavy Vehicles	33.3	0	0	0	33.3	0	7.2	0	0	6.8	0	0	0	0	0	0	1.5	0	0	1.4	4.1
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
% Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.5	0	0	1.4	0.9



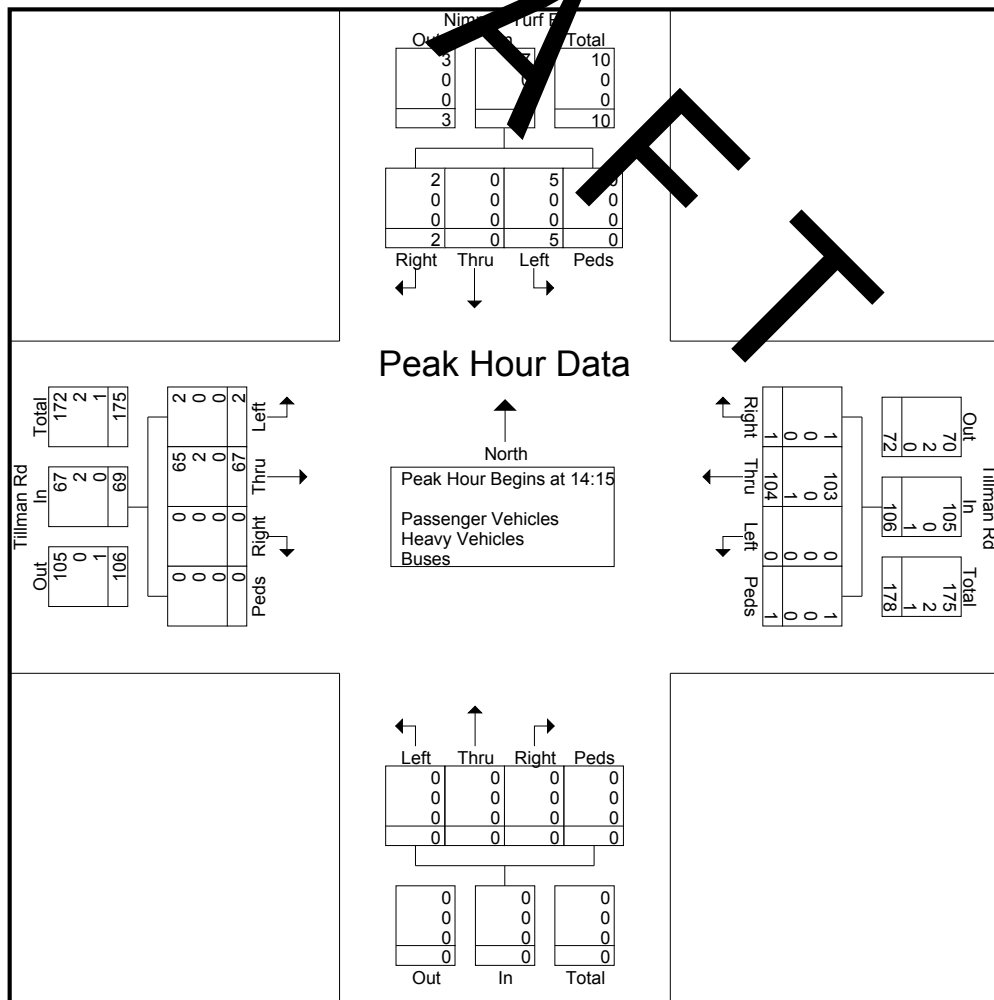
# SHORT COUNTS

## Traffic Data Specialists

735 Maryland St  
Columbia, SC 29201  
We Can't say we're the Best, but you Can!

File Name : Tillman Rd @ Nimmer Turf Rd  
Site Code :  
Start Date : 12/05/2023  
Page No : 4

Start Time	Nimmer Turf Rd Southbound					Tillman Rd Westbound					Northbound					Tillman Rd Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 14:00 to 15:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 14:15																					
14:15	0	0	1	0	1	22	0	1	23	0	0	0	0	0	1	22	0	0	23	47	
14:30	4	0	1	0	5	33	1	0	34	0	0	0	0	0	0	21	0	0	21	60	
14:45	1	0	0	0	1	22	0	0	22	0	0	0	0	0	1	14	0	0	15	38	
15:00	0	0	0	0	0	27	0	0	27	0	0	0	0	0	0	10	0	0	10	37	
Total Volume	5	0	2	0	7	106	1	1	106	0	0	0	0	0	2	67	0	0	69	182	
% App. Total	71.4	0	28.6	0		0.9	0.9	0.9		0	0	0	0	0	2.9	97.1	0	0			
PHF	.313	.000	.500	.000	.350	.788	.250	.779	.000	.000	.000	.000	.000	.500	.761	.000	.000	.750	.758		
Passenger Vehicles	5	0	2	0	7	103	1	1	105	0	0	0	0	0	2	65	0	0	67	179	
% Passenger Vehicles																					
Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2	
% Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3.0	0	0	2.9	1.1	
Buses	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	
% Buses	0	0	0	0	0	1.0	0	0	0.9	0	0	0	0	0	0	0	0	0	0	0.5	



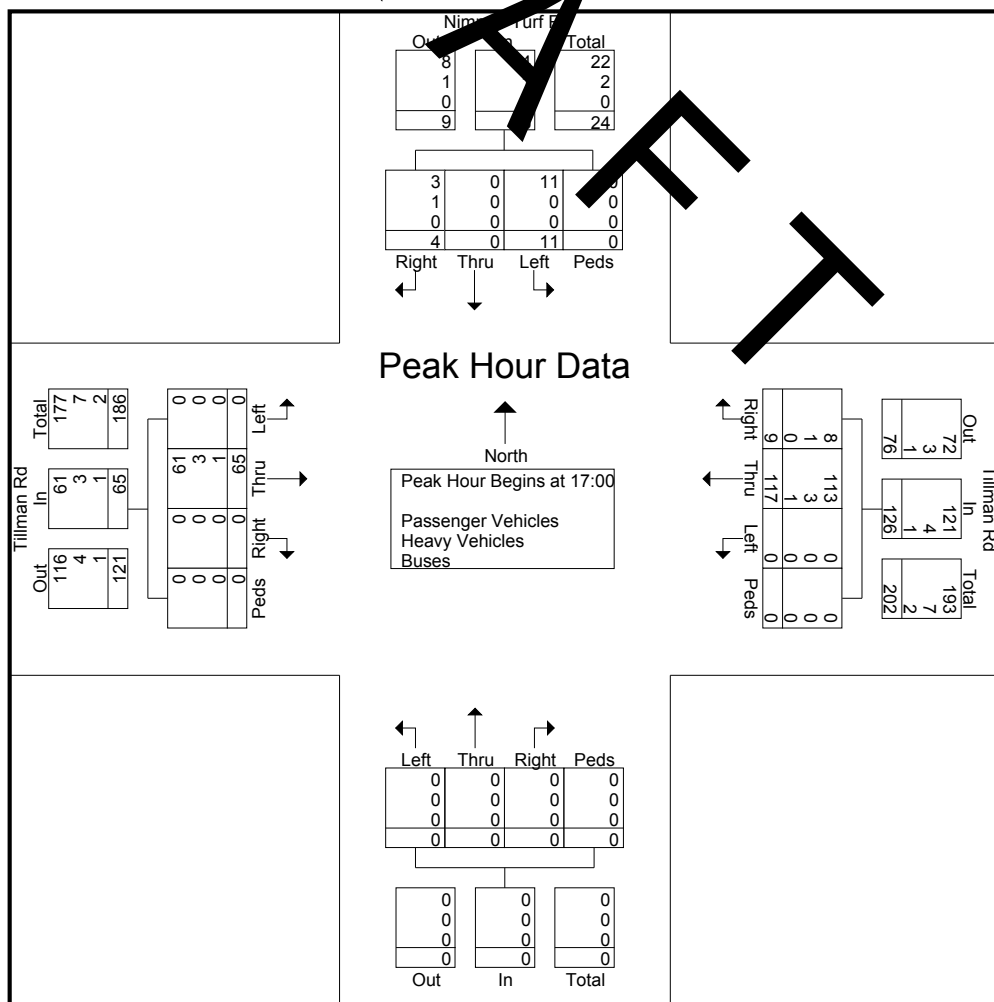
# SHORT COUNTS

## Traffic Data Specialists

735 Maryland St  
Columbia, SC 29201  
We Can't say we're the Best, but you Can!

File Name : Tillman Rd @ Nimmer Turf Rd  
Site Code :  
Start Date : 12/05/2023  
Page No : 5

Start Time	Nimmer Turf Rd Southbound					Tillman Rd Westbound					Northbound					Tillman Rd Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 17:00																					
17:00	2	0	3	0	5	0	24	3	0	27	0	0	0	0	0	0	8	0	0	8	40
17:15	3	0	0	0	3	0	29	2	0	31	0	0	0	0	0	0	21	0	0	21	55
17:30	2	0	1	0	3	0	29	1	0	33	0	0	0	0	0	0	16	0	0	16	52
17:45	4	0	0	0	4	0	3	0	3	35	0	0	0	0	0	0	20	0	0	20	59
Total Volume	11	0	4	0	15	0	77	9	0	126	0	0	0	0	0	0	65	0	0	65	206
% App. Total	73.3	0	26.7	0	100	0	32.9	7.1	0	100	0	0	0	0	0	0	100	0	0	100	
PHF	.688	.000	.333	.000	.750	.000	.914	.750	.000	.900	.000	.000	.000	.000	.000	.000	.774	.000	.000	.774	.873
Passenger Vehicles	11	0	3	0	14	0	113	0	0	121	0	0	0	0	0	0	61	0	0	61	196
% Passenger Vehicles																					
Heavy Vehicles	0	0	1	0	1	0	3	0	0	4	0	0	0	0	0	0	3	0	0	3	8
% Heavy Vehicles	0	0	25.0	0	6.7	0	2.9	11.1	0	3.2	0	0	0	0	0	0	4.6	0	0	4.6	3.9
Buses	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	2
% Buses	0	0	0	0	0	0	0.9	0	0	0.8	0	0	0	0	0	0	1.5	0	0	1.5	1.0



# SHORT COUNTS

## Traffic Data Specialists

735 Maryland St  
Columbia, SC 29201

We Can't say we're the Best, but you Can!

File Name : Tillman Rd @ Tarboro Rd  
Site Code :  
Start Date : 12/05/2023  
Page No : 1

Groups Printed- Passenger Vehicles - Heavy Vehicles - Buses

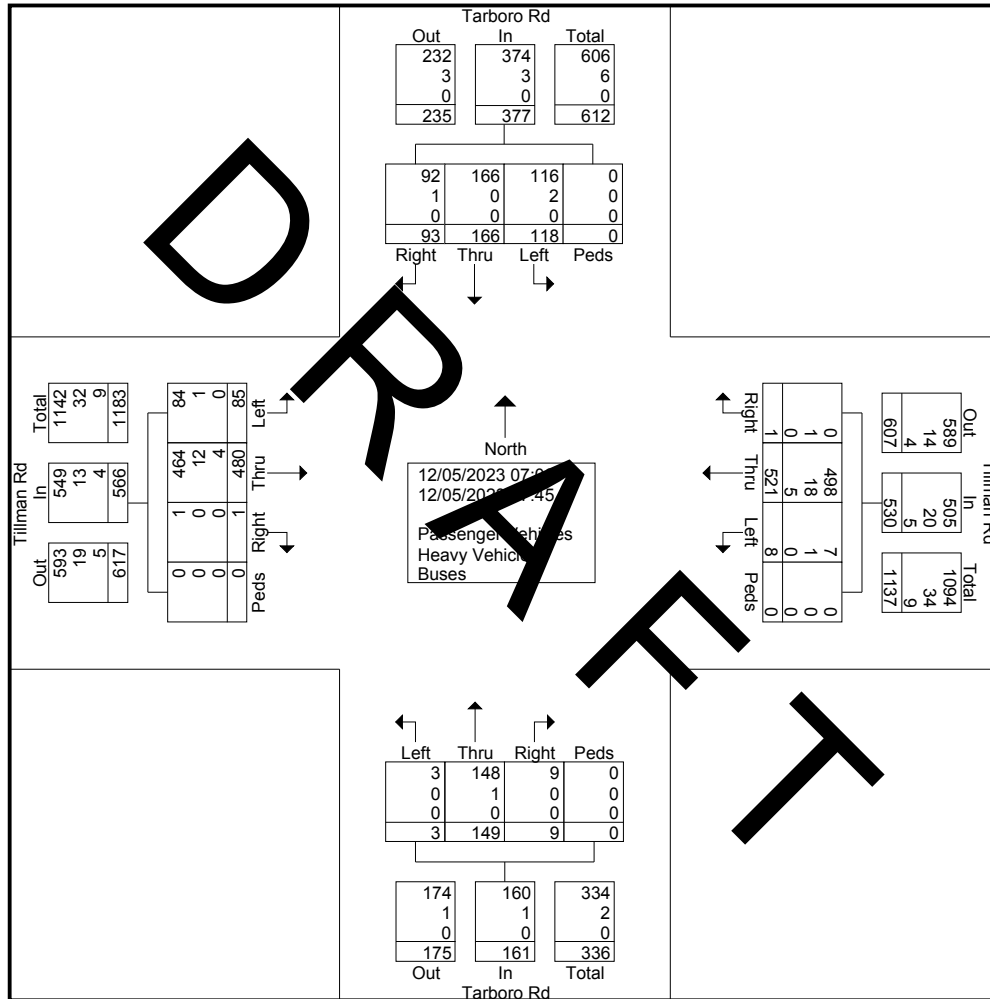
Start Time	Tarboro Rd Southbound				Tillman Rd Westbound				Tarboro Rd Northbound				Tillman Rd Eastbound				Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	
07:00	2	15	0	0	0	12	0	0	0	5	0	0	3	29	0	0	66
07:15	4	13	2	0	0	14	0	0	0	2	0	0	2	37	0	0	74
07:30	1	14	1	0	0	10	0	0	0	10	0	0	14	26	0	0	76
07:45	8	15	12	0	0	8	0	0	0	15	0	0	16	32	0	0	106
Total	15	57	15	0	0	44	0	0	0	32	0	0	35	124	0	0	322
08:00	8	14	11	0	0	18	0	0	0	1	0	0	6	22	0	0	80
08:15	2	3	1	0	0	15	0	0	0	3	1	0	0	20	0	0	45
08:30	2	5	0	0	0	12	1	0	0	3	0	0	1	21	0	0	45
08:45	3	2	2	0	0	11	0	0	0	3	1	0	0	17	0	0	39
Total	15	24	14	0	0	56	1	0	0	10	2	0	7	80	0	0	209
14:00	1	4	3	0	0	18	0	0	0	9	0	0	4	14	0	0	53
14:15	10	7	2	0	0	22	0	0	0	7	0	0	6	18	0	0	77
14:30	19	8	11	0	0	25	0	0	0	3	0	0	3	24	0	0	93
14:45	2	4	4	0	0	17	0	0	0	6	0	0	2	14	0	0	49
Total	32	23	20	0	0	82	0	0	0	25	0	0	15	70	0	0	272
15:00	4	4	3	0	0	27	0	0	1	2	1	0	2	9	1	0	54
15:15	4	5	6	0	0	27	0	0	0	3	2	0	4	13	0	0	64
15:30	4	7	1	0	1	28	0	0	0	8	1	0	1	17	0	0	68
15:45	5	1	6	0	0	18	0	0	0	6	0	0	3	13	0	0	52
Total	17	17	16	0	1	100	0	0	1	19	2	0	10	52	1	0	238
16:00	5	5	2	0	1	25	0	0	1	5	0	0	4	21	0	0	69
16:15	7	6	3	0	1	31	0	0	0	2	1	0	2	17	0	0	70
16:30	2	8	7	0	2	32	0	0	0	6	1	0	4	25	0	0	87
16:45	6	8	0	0	1	22	0	0	0	6	0	0	1	16	0	0	60
Total	20	27	12	0	5	110	0	0	1	19	2	0	11	79	0	0	286
17:00	5	4	6	0	0	31	0	0	1	10	0	0	0	11	0	0	68
17:15	7	3	2	0	0	34	0	0	0	12	0	0	2	24	0	0	84
17:30	4	6	5	0	1	31	0	0	0	8	1	0	1	16	0	0	73
17:45	3	5	3	0	1	33	0	0	0	9	0	0	4	24	0	0	82
Total	19	18	16	0	2	129	0	0	1	39	1	0	7	75	0	0	307
Grand Total	118	166	93	0	8	521	1	0	3	149	9	0	85	480	1	0	1634
Apprch %	31.3	44	24.7	0	1.5	98.3	0.2	0	1.9	92.5	5.6	0	15	84.8	0.2	0	
Total %	7.2	10.2	5.7	0	0.5	31.9	0.1	0	0.2	9.1	0.6	0	5.2	29.4	0.1	0	
Passenger Vehicles	116	166	92	0	7	498	0	0	3	148	9	0	84	464	1	0	1588
% Passenger Vehicles	98.3	100	98.9	0	87.5	95.6	0	0	100	99.3	100	0	98.8	96.7	100	0	97.2
Heavy Vehicles	2	0	1	0	1	18	1	0	0	1	0	0	1	12	0	0	37
% Heavy Vehicles	1.7	0	1.1	0	12.5	3.5	100	0	0	0.7	0	0	1.2	2.5	0	0	2.3
Buses	0	0	0	0	0	5	0	0	0	0	0	0	0	4	0	0	9
% Buses	0	0	0	0	0	1	0	0	0	0	0	0	0	0.8	0	0	0.6

# SHORT COUNTS

Traffic Data Specialists

735 Maryland St  
Columbia, SC 29201  
We Can't say we're the Best, but you Can!

File Name : Tillman Rd @ Tarboro Rd  
Site Code :  
Start Date : 12/05/2023  
Page No : 2



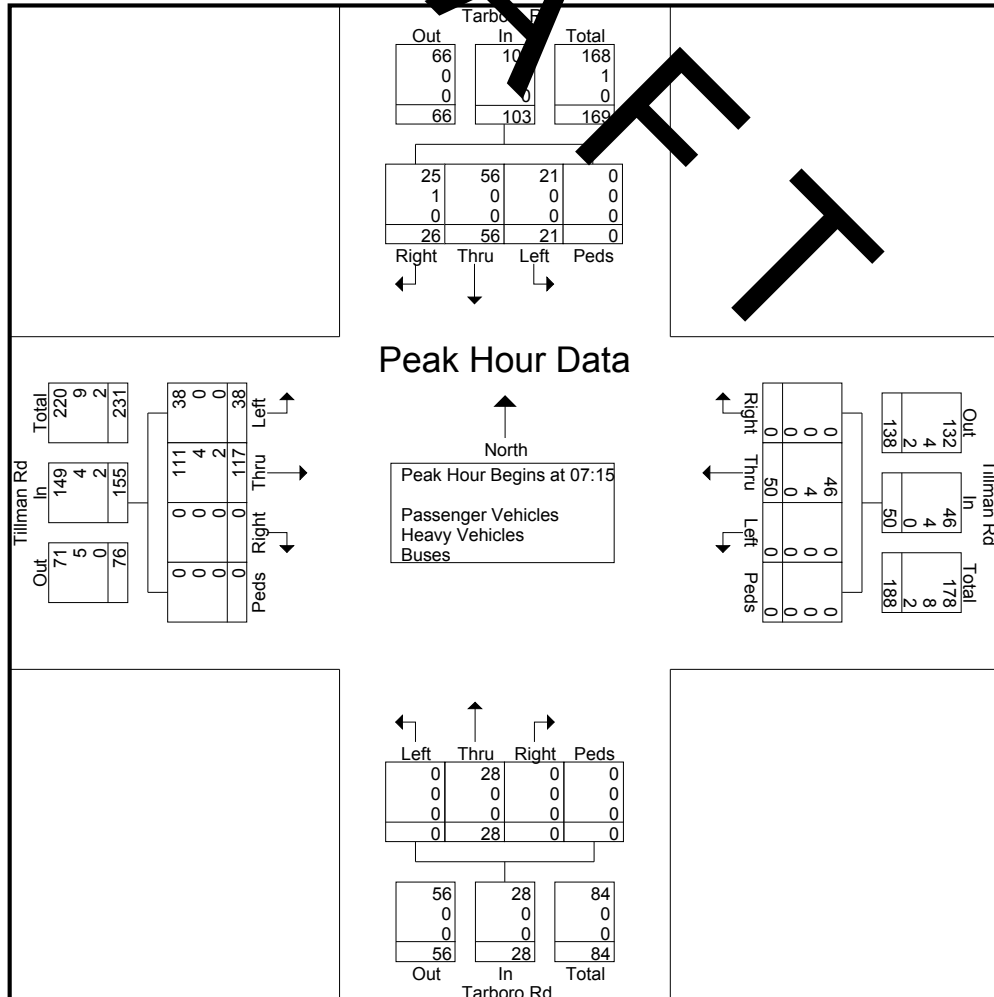
# SHORT COUNTS

## Traffic Data Specialists

735 Maryland St  
Columbia, SC 29201  
We Can't say we're the Best, but you Can!

File Name : Tillman Rd @ Tarboro Rd  
Site Code :  
Start Date : 12/05/2023  
Page No : 3

Start Time	Tarboro Rd Southbound					Tillman Rd Westbound					Tarboro Rd Northbound					Tillman Rd Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15																					
07:15	4	13	2	0	19	0	4	0	0	14	0	2	0	0	2	2	37	0	0	39	74
07:30	1	14	1	0	16	0	0	0	0	10	0	10	0	0	10	14	26	0	0	40	76
07:45	8	15	12	0	35	0	8	0	0	8	0	15	0	0	15	16	32	0	0	48	106
08:00	8	14	11	0	33	0	18	0	0	18	0	1	0	0	1	6	22	0	0	28	80
Total Volume	21	56	26	0	103	0	50	0	0	50	0	28	0	0	28	38	117	0	0	155	336
% App. Total	20.4	54.4	25.2	0	100	0	100	0	0	100	0	100	0	0	100	24.5	75.5	0	0	100	
PHF	.656	.933	.542	.000	.736	.000	.694	0	.000	.694	.000	.467	.000	.000	.467	.594	.791	.000	.000	.807	.792
Passenger Vehicles	21	56	25	0	102	0	46	0	0	46	0	28	0	0	28	38	111	0	0	149	325
% Passenger Vehicles																					
Heavy Vehicles	0	0	1	0	1	0	4	0	0	4	0	0	0	0	0	0	4	0	0	4	9
% Heavy Vehicles	0	0	3.8	0	1.0	0	8.0	0	0	8.0	0	0	0	0	0	0	3.4	0	0	2.6	2.7
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
% Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.7	0	0	1.3	0.6



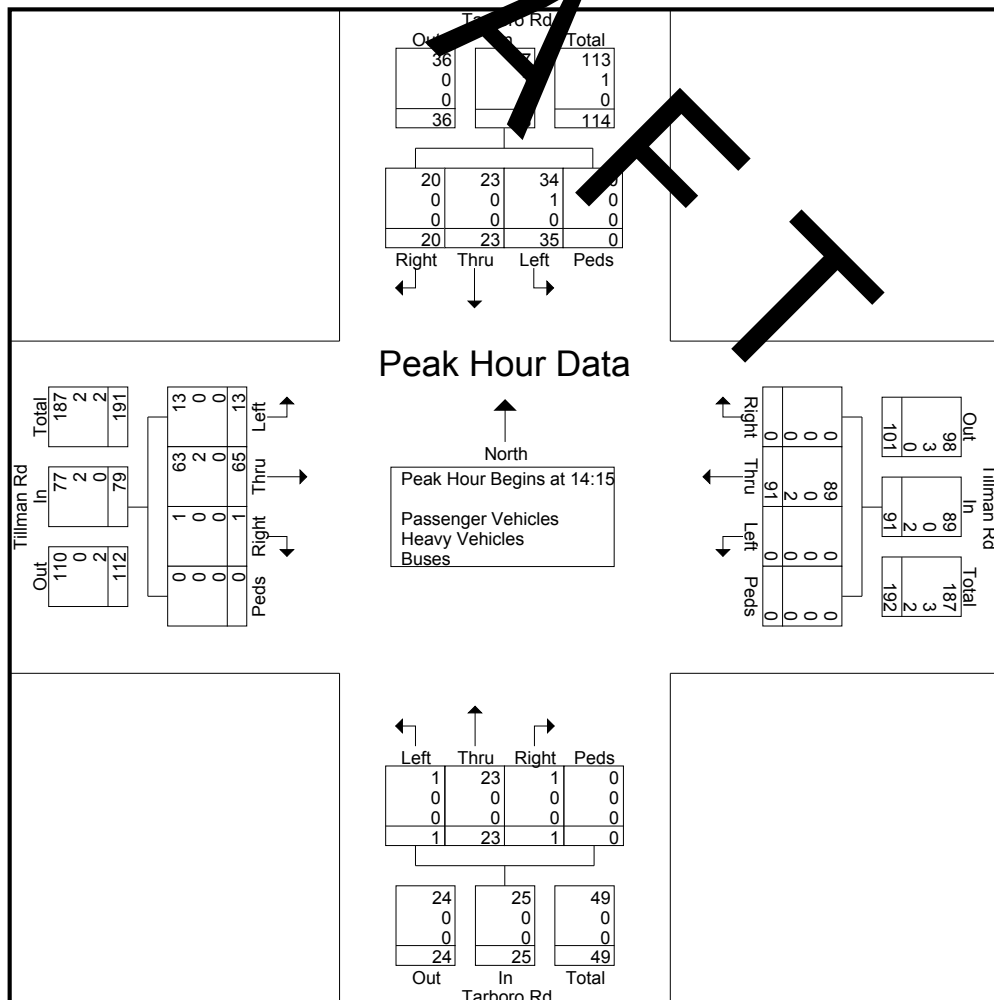
# SHORT COUNTS

## Traffic Data Specialists

735 Maryland St  
Columbia, SC 29201  
We Can't say we're the Best, but you Can!

File Name : Tillman Rd @ Tarboro Rd  
Site Code :  
Start Date : 12/05/2023  
Page No : 4

Start Time	Tarboro Rd Southbound					Tillman Rd Westbound					Tarboro Rd Northbound					Tillman Rd Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 14:00 to 15:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 14:15																					
14:15	10	7	2	0	19	22	0	0	0	22	0	12	0	0	12	6	18	0	0	24	77
14:30	19	8	11	0	38	25	0	0	0	25	0	3	0	0	3	3	24	0	0	27	93
14:45	2	4	4	0	10	7	0	0	0	17	0	6	0	0	6	2	14	0	0	16	49
15:00	4	4	3	0	11	0	0	0	0	27	1	2	1	0	4	2	9	1	0	12	54
Total Volume	35	23	20	0	78	54	0	0	0	91	1	23	1	0	25	13	65	1	0	79	273
% App. Total	44.9	29.5	25.6	0	100	100	0	0	0	100	4	92	4	0	100	16.5	82.3	1.3	0	100	
PHF	.461	.719	.455	.000	.513	.800	.843	.000	.000	.843	.250	.479	.250	.000	.521	.542	.677	.250	.000	.731	.734
Passenger Vehicles	34	23	20	0	77	0	89	0	0	89	1	23	1	0	25	13	63	1	0	77	268
% Passenger Vehicles																					
Heavy Vehicles	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	3
% Heavy Vehicles	2.9	0	0	0	1.3	0	0	0	0	0	0	0	0	0	0	3.1	0	0	0	2.5	1.1
Buses	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	2
% Buses	0	0	0	0	0	0	2.2	0	0	2.2	0	0	0	0	0	0	0	0	0	0	0.7



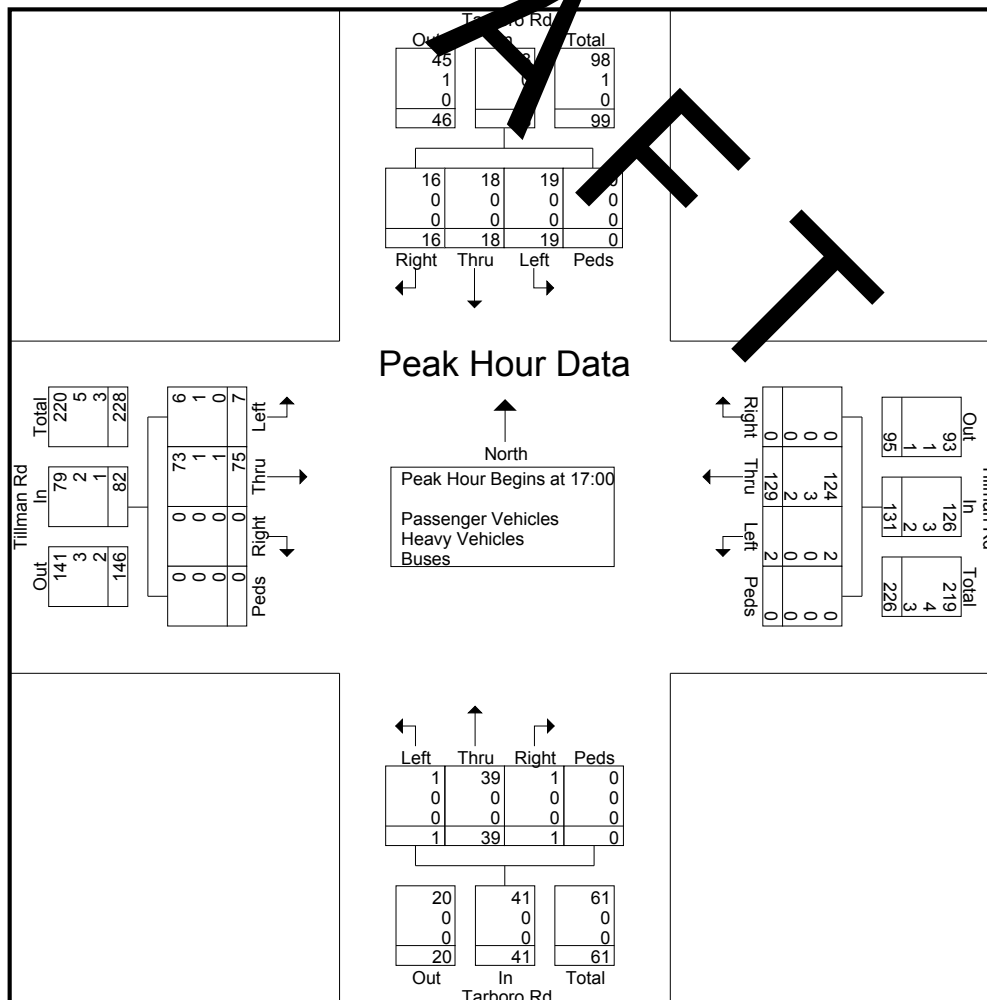
# SHORT COUNTS

## Traffic Data Specialists

735 Maryland St  
Columbia, SC 29201  
We Can't say we're the Best, but you Can!

File Name : Tillman Rd @ Tarboro Rd  
Site Code :  
Start Date : 12/05/2023  
Page No : 5

Start Time	Tarboro Rd Southbound					Tillman Rd Westbound					Tarboro Rd Northbound					Tillman Rd Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 17:00																					
17:00	5	4	6	0	15	31	0	0	0	31	1	10	0	0	11	0	11	0	0	11	68
17:15	7	3	2	0	12	34	0	0	0	34	0	12	0	0	12	2	24	0	0	26	84
17:30	4	6	5	0	15	1	0	0	0	32	0	8	1	0	9	1	16	0	0	17	73
17:45	3	5	3	0	11	1	0	0	0	34	0	9	0	0	9	4	24	0	0	28	82
Total Volume	19	18	16	0	53	100	2	39	0	131	1	39	1	0	41	7	75	0	0	82	307
% App. Total	35.8	34	30.2	0	88.3	15.5	38.5	0	0	96.3	2.4	95.1	2.4	0	85.4	8.5	91.5	0	0	91.4	
PHF	.679	.750	.667	.000	.883	.949	.000	.000	.963	.250	.813	.250	.000	.854	.438	.781	.000	.000	.732	.914	
Passenger Vehicles	19	18	16	0	53	2	124	0	0	126	1	39	1	0	41	6	73	0	0	79	299
% Passenger Vehicles																					
Heavy Vehicles	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	1	1	0	0	2	5
% Heavy Vehicles	0	0	0	0	0	0	2.3	0	0	2.3	0	0	0	0	0	14.3	1.3	0	0	2.4	1.6
Buses	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	3
% Buses	0	0	0	0	0	0	1.6	0	0	1.5	0	0	0	0	0	0	1.3	0	0	1.2	1.0





# Short Counts, LLC

735 Maryland St  
Columbia, SC 29201

Site Code: Tillman Rd  
Station ID: EB & WB Traffic  
Just East of Tarboro Rd  
Ridgeland, SC  
Latitude: 0' 0.0000 Undefined

Start Time	05-Dec-23 Tue	Eastbound		Hour Totals		Westbound		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		0	20			2	13				
12:15		0	16			2	13				
12:30		0	9			3	14				
12:45		2	13	2	58	0	27	7	67	9	125
01:00		0	20			0	23				
01:15		1	18			1	18				
01:30		0	19			1	26				
01:45		0	17	1	74	0	21	2	88	3	162
02:00		0	16			1	24				
02:15		0	26			0	28				
02:30		0				0	28				
02:45		0	18	0	103	0	20	1	100	1	203
03:00		0	15			0	29				
03:15		0	18			0	27				
03:30		0	23			1	30				
03:45		0		0	74	0	23	1	109	1	183
04:00		0	21			0	33				
04:15		2	28			0	33				
04:30		4	29			0	43				
04:45		4	23	10	101	1	28	1	137	11	238
05:00		4	15			0	37				
05:15		7	31			5	36				
05:30		9	19			4	40				
05:45		12	26	32	91	7	40	16	153	48	244
06:00		16	15			7	41				
06:15		12	26			9	31				
06:30		18	12			7	26				
06:45		26	21	72	74	8	27	31	125	103	199
07:00		32	12			12	23				
07:15		41	14			17					
07:30		26	9			11	18				
07:45		39	7	138	42	16	19	61	78	199	120
08:00		31	8			21	13				
08:15		24	6			18	11				
08:30		23	5			16	14				
08:45		20	6	98	25	12	10	67	48	165	73
09:00		18	9			14	9				
09:15		16	3			10	12				
09:30		11	2			10	6				
09:45		14	3	59	17	9	7	43	34	102	51
10:00		9	6			14	5				
10:15		14	6			6	4				
10:30		18	2			11	5				
10:45		11	6	52	20	16	5	47	19	99	39
11:00		19	2			16	7				
11:15		12	1			15	3				
11:30		21	1			19	2				
11:45		20	0	72	4	14	2	64	14	136	18
Total		536	683			341	972			877	1655
Percent		44.0%	56.0%			26.0%	74.0%			34.6%	65.4%
Grand Total		536	683			341	972			877	1655
Percent		44.0%	56.0%			26.0%	74.0%			34.6%	65.4%

ADT ADT 2,532 AADT 2,532

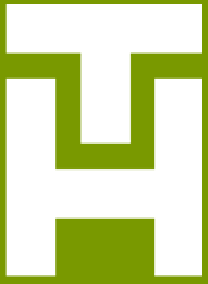
# Short Counts, LLC

735 Maryland St  
Columbia, SC 29201

Site Code: Tarboro Rd  
Station ID: NB & SB Traffic  
Just North of Tillman Rd  
Ridgeland, SC  
Latitude: 0' 0.0000 Undefined

Start Time	05-Dec-23 Tue	Southbound		Hour Totals		Northbound		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		0	6			0	3				
12:15		0	11			0	2				
12:30		0	6			0	6				
12:45		1	5	1	28	0	8	0	19	1	47
01:00		1	6			1	4				
01:15		0	5			0	8				
01:30		0	12			1	8				
01:45		0	6	1	29	0	12	2	32	3	61
02:00		0	8			0	17				
02:15		0	18			0	25				
02:30		0				0	8				
02:45		0	10	0	75	0	11	0	61	0	136
03:00		0	11			0	8				
03:15		0	14			0	6				
03:30		1	12			0	9				
03:45		1		2	48	0	15	0	38	2	86
04:00		0	12			0	13				
04:15		1	16			0	8				
04:30		4	17			0	17				
04:45		2	14		59	0	12	0	50	7	109
05:00		1	15			0	15				
05:15		3	11			1	17				
05:30		1	15			1	18				
05:45		7	10	12	51	7	20	9	70	21	121
06:00		17	14			4	14				
06:15		15	7			2	16				
06:30		16	6			5	15				
06:45		12	7	60	34	3	14	14	59	74	93
07:00		18	11			6	12				
07:15		19	4			11					
07:30		15	4			2	8				
07:45		38	6	90	25	38	5	81	30	171	55
08:00		29	0			15	2				
08:15		5	0			5	3				
08:30		8	0			9	2				
08:45		7	2	49	2	3	5	32	12	81	14
09:00		5	3			3	2				
09:15		8	0			3	6				
09:30		5	0			3	2				
09:45		4	0	22	3	2	3	11	13	33	16
10:00		1	1			4	1				
10:15		6	2			4	1				
10:30		3	0			5	1				
10:45		15	0	25	3	3	1	16	4	41	7
11:00		5	1			9	0				
11:15		6	2			2	0				
11:30		4	0			8	0				
11:45		3	0	18	3	6	1	25	1	43	4
Total		287	360			190	389			477	749
Percent		44.4%	55.6%			32.8%	67.2%			38.9%	61.1%
Grand Total		287	360			190	389			477	749
Percent		44.4%	55.6%			32.8%	67.2%			38.9%	61.1%

ADT ADT 1,226 AADT 1,226



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**TRAFFIC IMPACT ANALYSIS**

NIMMER TRACT

**APPENDIX B**

SYNCHRO HCM 6 ANALYSIS  
2023 EXISTING PEAK HOUR VOLUMES

J – 30596.0000

January 2024

HCM 6th TWSC

1: Tarboro Road (SC 27-22) & Tillman Road (SC 336)

12/11/2023

Intersection												
Int Delay, s/veh	5.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	38	117	0	0	50	0	0	28	0	21	56	26
Future Vol, veh/h	38	117	0	0	50	0	0	28	0	21	56	26
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	79	79	79	79	79	79	79	79	79
Heavy Vehicles, %	0	5	0	0	8	0	0	0	0	0	0	4
Mvmt Flow	48	148	0	0	63	0	0	35	0	27	71	33
Major/Minor	Major1	Major2	Minor1	Minor2								
Conflicting Flow All	63	0	0	148	0	359	307	148	325	307	63	
Stage 1	-	-	-	-	-	244	244	-	63	63	-	
Stage 2	-	-	-	-	-	115	63	-	262	244	-	
Critical Hdwy	4.1	-	-	4.1	-	7.1	6.5	6.2	7.1	6.5	6.24	
Critical Hdwy Stg 1	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-	
Critical Hdwy Stg 2	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-	
Follow-up Hdwy	2.2	-	-	2.2	-	3.5	4	3.3	3.5	4	3.336	
Pot Cap-1 Maneuver	1553	-	-	1446	-	500	610	904	632	610	996	
Stage 1	-	-	-	-	-	76	708	-	953	846	-	
Stage 2	-	-	-	-	-	86	846	-	747	708	-	
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	
Mov Cap-1 Maneuver	1553	-	-	1446	-	513	589	904	587	589	996	
Mov Cap-2 Maneuver	-	-	-	-	-	513	589	-	587	589	-	
Stage 1	-	-	-	-	-	738	684	-	921	846	-	
Stage 2	-	-	-	-	-	793	846	-	684	684	-	
Approach	EB	WB	NB	SB								
HCM Control Delay, s	1.8	0	11.5	11.8								
HCM LOS			B	B								
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	589	1553	-	-	1446	-	-	656				
HCM Lane V/C Ratio	0.06	0.031	-	-	-	-	-	0.199				
HCM Control Delay (s)	11.5	7.4	0	-	0	-	-	11.8				
HCM Lane LOS	B	A	A	-	A	-	-	B				
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0	-	-	0.7				

HCM 6th TWSC  
 1: Tarboro Road (SC 27-22) & Tillman Road (SC 336)

12/11/2023

Intersection												
Int Delay, s/veh	3.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	7	75	0	2	129	0	1	39	1	19	18	16
Future Vol, veh/h	7	75	0	2	129	0	1	39	1	19	18	16
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	14	3	0	0	4	0	0	0	0	0	0	0
Mvmt Flow	8	82	0	2	142	0	1	43	1	21	20	18
Major/Minor	Major1	Major2	Major2	Minor1	Minor2	Minor2	Minor2	Minor2	Minor2	Minor2	Minor2	Minor2
Conflicting Flow All	142	0	0	82	0	263	244	82	266	244	142	
Stage 1	-	-	-	-	-	98	98	-	146	146	-	
Stage 2	-	-	-	-	-	165	146	-	120	98	-	
Critical Hdwy	4.24	-	-	4.1	-	7.1	6.5	6.2	7.1	6.5	6.2	
Critical Hdwy Stg 1	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-	
Critical Hdwy Stg 2	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-	
Follow-up Hdwy	2.326	-	-	2.2	-	3.5	4	3.3	3.5	4	3.3	
Pot Cap-1 Maneuver	1370	-	-	1528	-	661	656	983	652	656	911	
Stage 1	-	-	-	-	-	97	818	-	861	780	-	
Stage 2	-	-	-	-	-	82	780	-	889	818	-	
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	
Mov Cap-1 Maneuver	1370	-	-	1528	-	661	656	983	652	656	911	
Mov Cap-2 Maneuver	-	-	-	-	-	661	656	-	652	656	-	
Stage 1	-	-	-	-	-	908	813	-	856	779	-	
Stage 2	-	-	-	-	-	804	779	-	836	818	-	
Approach	EB	WB	NB	SB	SB	SB	SB	SB	SB	SB	SB	SB
HCM Control Delay, s	0.7	0.1	10.8	10.5								
HCM LOS			B	B								
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn1	SBLn1	SBLn1	SBLn1
Capacity (veh/h)	661	1370	-	-	1528	-	-	715				
HCM Lane V/C Ratio	0.068	0.006	-	-	0.001	-	-	0.081				
HCM Control Delay (s)	10.8	7.6	0	-	7.4	0	-	10.5				
HCM Lane LOS	B	A	A	-	A	A	-	B				
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0.3				

HCM 6th TWSC  
 2: Tillman Road (SC 336) & Nimmer Turf Road

12/11/2023

Intersection						
Int Delay, s/veh	0.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Traffic Vol, veh/h	6	132	69	4	6	0
Future Vol, veh/h	6	132	69	4	6	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	3	0	0	33	0
Mvmt Flow	6	140	73	4	6	0
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	77	0	-	0	75	-
Stage 1	-	-	-	-	75	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.1	-	-	-	6.2	-
Critical Hdwy Stg 1	-	-	-	-	5.3	-
Critical Hdwy Stg 2	-	-	-	-	5.3	-
Follow-up Hdwy	2.2	-	-	-	3.797	3.3
Pot Cap-1 Maneuver	1535	-	-	-	697	992
Stage 1	-	-	-	-	875	-
Stage 2	-	-	-	-	806	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	1535	-	-	-	694	992
Mov Cap-2 Maneuver	-	-	-	-	694	-
Stage 1	-	-	-	-	872	-
Stage 2	-	-	-	-	806	-
Approach	EB	WB	SB			
HCM Control Delay, s	0.3	0	10.2			
HCM LOS			B			
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBRn1
Capacity (veh/h)	1535	-	-	-	-	694
HCM Lane V/C Ratio	0.004	-	-	-	-	0.009
HCM Control Delay (s)	7.4	0	-	-	-	10.2
HCM Lane LOS	A	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	-	0

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HCM 6th TWSC  
 2: Tillman Road (SC 336) & Nimmer Turf Road

12/11/2023

Intersection						
Int Delay, s/veh	0.7					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Traffic Vol, veh/h	0	65	117	9	11	4
Future Vol, veh/h	0	65	117	9	11	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	0	6	11	0	0	25
Mvmt Flow	0	75	134	10	13	5
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	144	0	0	139		
Stage 1	-	-	-	139		
Stage 2	-	-	-	0		
Critical Hdwy	4.1	-	-	6.4	0.45	
Critical Hdwy Stg 1	-	-	-	4		
Critical Hdwy Stg 2	-	-	-	4		
Follow-up Hdwy	2.2	-	-	3.5	3.525	
Pot Cap-1 Maneuver	1451	-	-	779	852	
Stage 1	-	-	-	893		
Stage 2	-	-	-	953		
Platoon blocked, %	-	-	-	-		
Mov Cap-1 Maneuver	1451	-	-	779	852	
Mov Cap-2 Maneuver	-	-	-	779		
Stage 1	-	-	-	893		
Stage 2	-	-	-	953		
Approach	EB	WB	SB			
HCM Control Delay, s	0	0	9.6			
HCM LOS			A			
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1451	-	-	-	797	
HCM Lane V/C Ratio	-	-	-	-	0.022	
HCM Control Delay (s)	0	-	-	-	9.6	
HCM Lane LOS	A	-	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0.1	

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HCM 6th TWSC  
 3: Tarboro Road (SC 27-22) & Nimmer Turf Road

12/11/2023

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	1	1	87	101	1
Future Vol, veh/h	2	1	1	87	101	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	66	66	66	66	66	66
Heavy Vehicles, %	0	0	0	0	1	0
Mvmt Flow	3	2	2	132	153	2
Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	290	154	155	0	0	
Stage 1	154	-	-	-	-	
Stage 2	136	-	-	-	-	
Critical Hdwy	6.4	6.2	4.1	-	-	
Critical Hdwy Stg 1	5.4	-	-	-	-	
Critical Hdwy Stg 2	5.4	-	-	-	-	
Follow-up Hdwy	3.5	3.3	2.2	-	-	
Pot Cap-1 Maneuver	705	897	1438	-	-	
Stage 1	879	-	-	-	-	
Stage 2	895	-	-	-	-	
Platoon blocked, %	-	-	-	-	-	
Mov Cap-1 Maneuver	704	897	1438	-	-	
Mov Cap-2 Maneuver	704	-	-	-	-	
Stage 1	877	-	-	-	-	
Stage 2	895	-	-	-	-	
Approach	EB		NB		SB	
HCM Control Delay, s	9.8		0.1		0	
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1438	-	758	-	-	
HCM Lane V/C Ratio	0.001	-	0.006	-	-	
HCM Control Delay (s)	7.5	0	9.8	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0	-	0	-	-	

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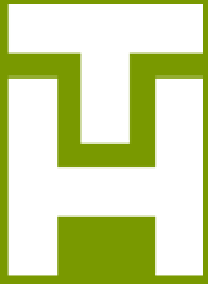


HCM 6th TWSC  
 3: Tarboro Road (SC 27-22) & Nimmer Turf Road

12/11/2023

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		T
Traffic Vol, veh/h	1	1	0	61	74	1
Future Vol, veh/h	1	1	0	61	74	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	69	69	69	69	69	69
Heavy Vehicles, %	0	0	0	2	1	0
Mvmt Flow	1	1	0	88	107	1
Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	196	108	108	0	0	0
Stage 1	108	-	-	-	-	-
Stage 2	88	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	797	951	1495	-	-	-
Stage 1	921	-	-	-	-	-
Stage 2	940	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	797	951	1495	-	-	-
Mov Cap-2 Maneuver	797	-	-	-	-	-
Stage 1	921	-	-	-	-	-
Stage 2	940	-	-	-	-	-
Approach	EB		NB		SB	
HCM Control Delay, s	9.2		0		0	
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1495	-	867	-	-	
HCM Lane V/C Ratio	-	-	0.003	-	-	
HCM Control Delay (s)	0	-	9.2	-	-	
HCM Lane LOS	A	-	A	-	-	
HCM 95th %tile Q(veh)	0	-	0	-	-	

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**TRAFFIC IMPACT ANALYSIS**

NIMMER TRACT

**APPENDIX C**

SCDOT COUNT STATION DATA VOLUMES

J – 30596.0000

January 2024

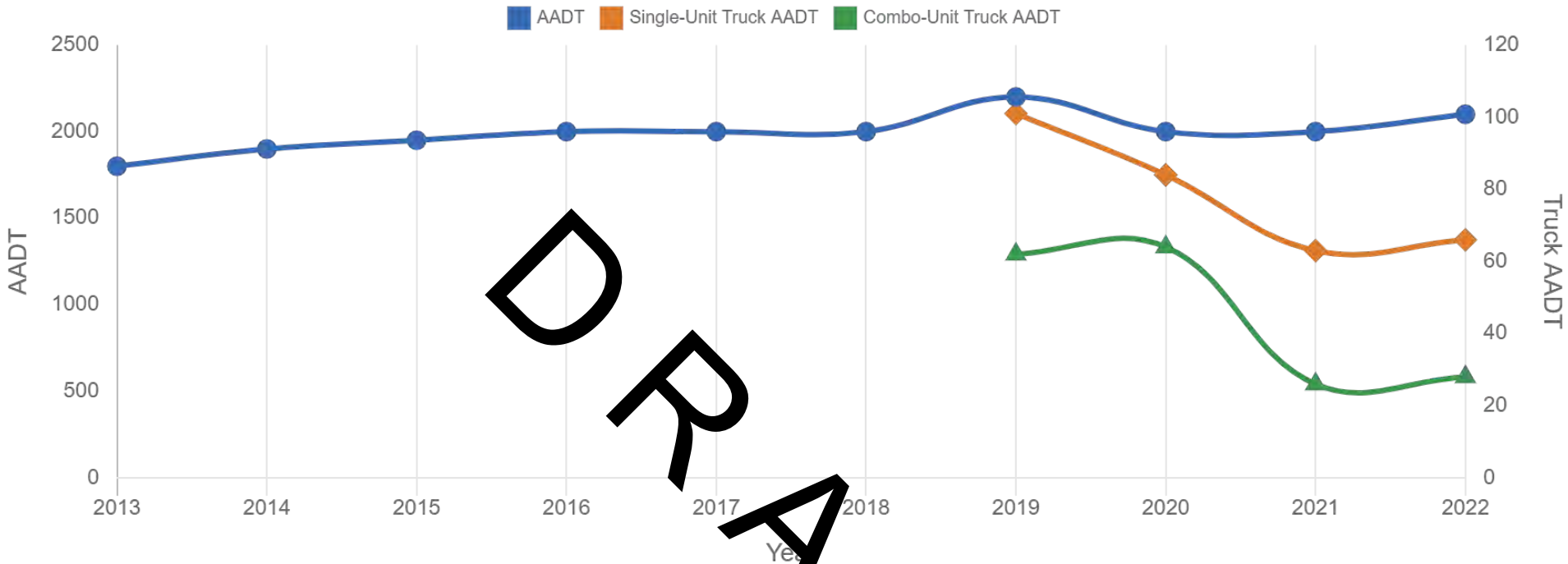
# Single Station Annualized Statistics - SCDOT\_PORTABLES 00000270191

Site Name 27-0191 Site ID 00000270191 Description SC336 : S- 29 (SMITHS XING) TO S- 116 (GREAT SWAMP ST)

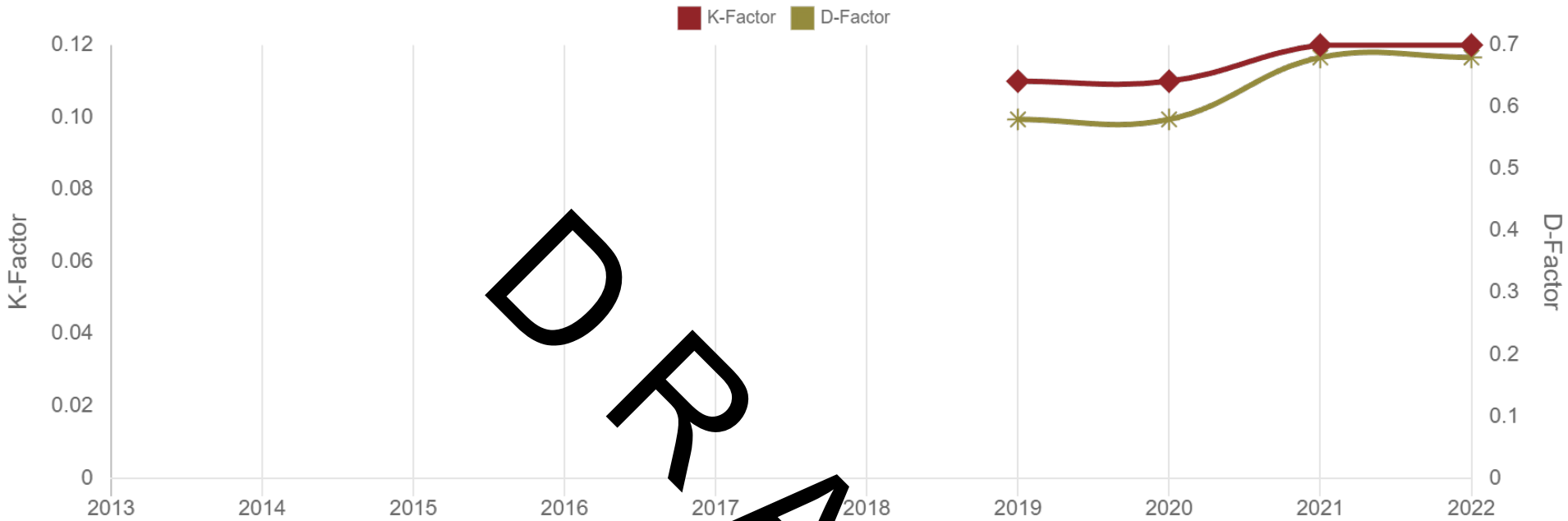
Data Item	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Statistics Type	-	-	-	-	-	-	-	-	-	-
AADT	1800	1900	1950	2000	2000	2000	2200	2000	2000	2100
Single-Unit Truck AADT	-	-	-	-	-	-	101	84	63	66
Combo-Unit Truck AADT	-	-	-	-	-	-	62	64	26	28
% DHV SU Trucks	-	-	-	-	-	-	-	-	-	-
% DHV CU Trucks	-	-	-	-	-	-	-	-	-	-
% Peak SU Trucks	-	-	-	-	-	-	-	-	-	-
% Peak CU Trucks	-	-	-	-	-	-	-	-	-	-
K-Factor	-	-	-	-	-	-	0.11	0.11	0.12	0.12
D-Factor	-	-	-	-	-	-	0.58	0.58	0.68	0.68

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Single Station Annualized Statistics - SCDOT\_PORTABLES 00000270191



Single Station Annualized Statistics - SCDOT\_PORTABLES 00000270191



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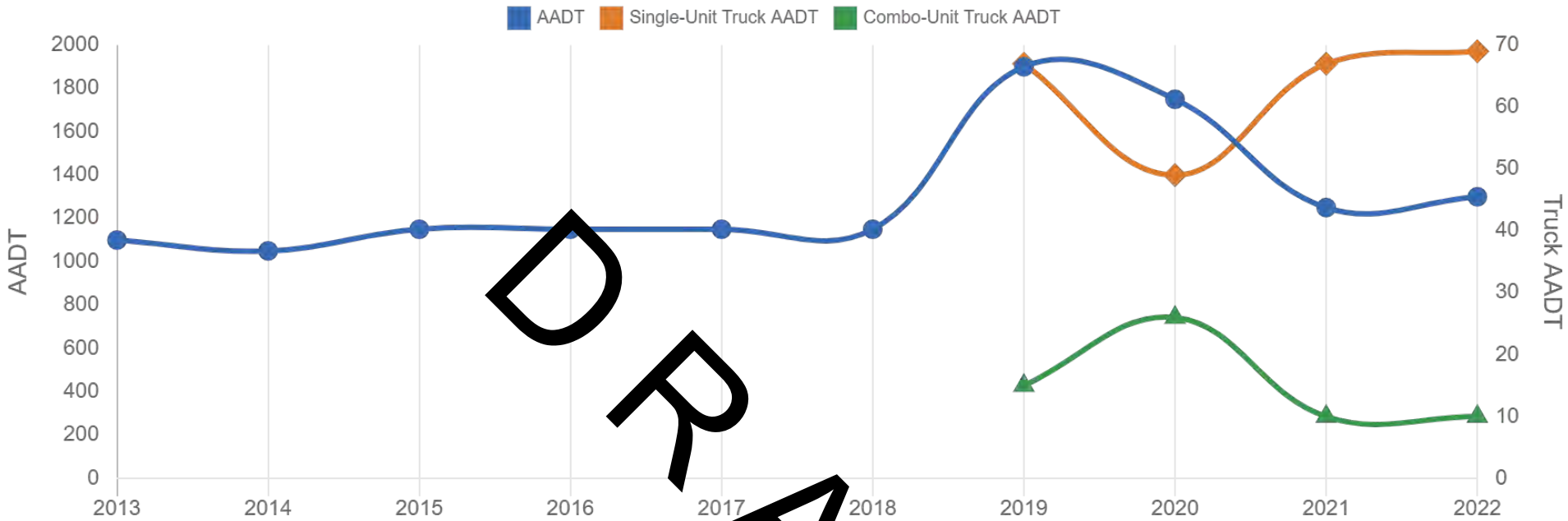
# Single Station Annualized Statistics - SCDOT\_PORTABLES 00000270242

Site Name 27-0242 Site ID 00000270242 Description S-29 : SC 336 (TILLMAN RD) TO S- 48 (CARTERS MILL RD), L- 48

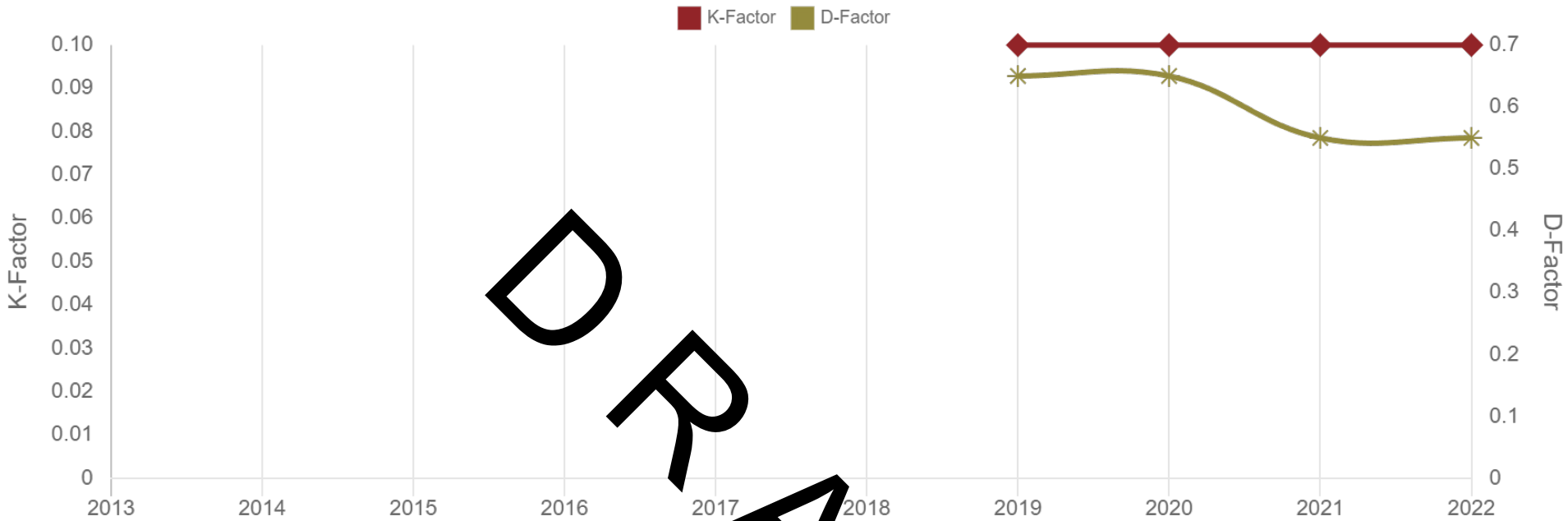
Data Item	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Statistics Type	-	-	-	-	-	-	-	-	-	-
AADT	1100	1050	1150	1150	1150	1150	1900	1750	1250	1300
Single-Unit Truck AADT	-	-	-	-	-	-	67	49	67	69
Combo-Unit Truck AADT	-	-	-	-	-	-	15	26	10	10
% DHV SU Trucks	-	-	-	-	-	-	-	-	-	-
% DHV CU Trucks	-	-	-	-	-	-	-	-	-	-
% Peak SU Trucks	-	-	-	-	-	-	-	-	-	-
% Peak CU Trucks	-	-	-	-	-	-	-	-	-	-
K-Factor	-	-	-	-	-	-	0.1	0.1	0.1	0.1
D-Factor	-	-	-	-	-	-	0.65	0.65	0.55	0.55

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Single Station Annualized Statistics - SCDOT\_PORTABLES 000000270242

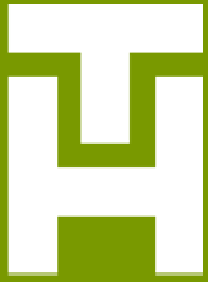


Single Station Annualized Statistics - SCDOT\_PORTABLES 000000270242



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**TRAFFIC IMPACT ANALYSIS**

NIMMER TRACT

**APPENDIX D**

TRIP GENERATION CALCULATIONS

J – 30596.0000

January 2024

## Nimmer Tract TIA

From ITE Trip Generation Manual, 11th Edition

### Vehicle Trips

#### Land Use: 210 - Single-Family Detached Housing

1,150 Dwelling Units

Weekday - Vehicle Trip Ends vs Dwelling Units

Fitted Curve Equation:  $\ln(T) = 0.92 \ln(X) + 2.68$

Directional Distribution: 50% entering, 50% exiting

Weekday	Total Trips	Entering Trips	Exiting Trips
	9,544	4,772	4,772

Weekday, Peak Hour of Adjacent Street Traffic,  
One Hour Between 7 and 9am

Fitted Curve Equation:  $\ln(T) = 0.91 \ln(X) + 0.12$

Directional Distribution: 25% entering, 75% exiting

AM Peak Hour	Total Trips	Entering Trips	Exiting Trips
	688	172	516

Weekday, Peak Hour of Adjacent Street Traffic,  
One Hour Between 4 and 6pm

Fitted Curve Equation:  $\ln(T) = 0.94 \ln(X) + 0.27$

Directional Distribution: 63% entering, 37% exiting

PM Peak Hour	Total Trips	Entering Trips	Exiting Trips
	987	622	365

## Nimmer Tract TIA

From ITE Trip Generation Manual, 11th Edition

### Vehicle Trips

#### Land Use: 215 - Single-Family Attached Housing

150 Dwelling Units

Weekly - Vehicle Trip Ends vs Dwelling Units

Fitted Curve Equation:  $T = 7.62 (X) - 50.48$

Directional Distribution: 50% entering, 50% exiting

Weekday

Total Trips	Entering Trips	Exiting Trips
1,033	547	547

Weekday, Peak Hour of Adjacent Street Traffic,  
One Hour Between 7 and 9am

Fitted Curve Equation:  $T = 0.52 (X) - 5.70$

Directional Distribution: 25% entering, 5% exiting

AM Peak Hour

Total Trips	Entering Trips	Exiting Trips
72	18	54

Weekday, Peak Hour of Adjacent Street Traffic,  
One Hour Between 4 and 6pm

Fitted Curve Equation:  $\ln(T) = 0.60 X - 3.93$

Directional Distribution: 59% entering, 41% exiting

PM Peak Hour

Total Trips	Entering Trips	Exiting Trips
86	51	35

Nimmer Tract TIA

From ITE Trip Generation Manual, 11th Edition

**Vehicle Trips**

**Land Use: 575 - Fire and Rescue Station**

10.00 KSF

Weekday - Vehicle Trip Ends vs K

Average Rate: T = 4.8 (X)

Directional Distribution: 50% entering, 50% exiting

Daily rate was calculated by assuming 10x of the AM and PM peak hour rates provided in the ITE 11th Edition.

Weekday

Total Trips	Entering Trips	Exiting Trips
48	24	24

Weekday, Peak Hour of Adjacent Street Traffic,  
One Hour Between 7 and 9am

Average Rate: T = 0.48 (X)

Directional Distribution: 71% entering, 29% exiting

AM Peak Hour

Total Trips	Entering Trips	Exiting Trips
5	4	1

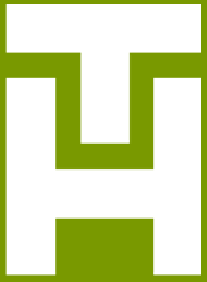
Weekday, Peak Hour of Adjacent Street Traffic,  
One Hour Between 4 and 6pm

Average Rate: T = 0.48 (X)

Directional Distribution: 29% entering, 71% exiting

PM Peak Hour

Total Trips	Entering Trips	Exiting Trips
5	1	4



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**TRAFFIC IMPACT ANALYSIS**

NIMMER TRACT

**APPENDIX E**

SYNCHRO HCM 6 ANALYSIS  
2035 NO-BUILD PEAK HOUR VOLUMES

J – 30596.0000

January 2024

Intersection												
Int Delay, s/veh	5.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	44	137	0	0	58	0	0	33	0	25	65	30
Future Vol, veh/h	44	137	0	0	58	0	0	33	0	25	65	30
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	79	79	79	79	79	79	79	79	79
Heavy Vehicles, %	0	5	0	0	8	0	0	0	0	0	0	4
Mvmt Flow	56	173	0	0	73	0	0	42	0	32	82	38
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	73	0	0	173	0	0	418	358	173	379	358	73
Stage 1	-	-	-	-	-	-	285	285	-	73	73	-
Stage 2	-	-	-	-	-	-	133	73	-	306	285	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.24
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.336
Pot Cap-1 Maneuver	1540	-	-	1416	-	-	49	572	876	582	572	983
Stage 1	-	-	-	-	-	-	7	679	-	942	838	-
Stage 2	-	-	-	-	-	-	86	838	-	708	679	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1540	-	-	1416	-	-	453	549	876	531	549	983
Mov Cap-2 Maneuver	-	-	-	-	-	-	453	549	-	531	549	-
Stage 1	-	-	-	-	-	-	698	652	-	904	838	-
Stage 2	-	-	-	-	-	-	759	838	-	636	679	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	1.8			0			12.1			12.8		
HCM LOS							B			B		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	549	1540	-	-	1416	-	-	612				
HCM Lane V/C Ratio	0.076	0.036	-	-	-	-	-	0.248				
HCM Control Delay (s)	12.1	7.4	0	-	0	-	-	12.8				
HCM Lane LOS	B	A	A	-	A	-	-	B				
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0	-	-	1				

HCM 6th TWSC

1: Tarboro Road (SC 27-22) & Tillman Road (SC 336)

12/12/2023

Intersection												
Int Delay, s/veh	3.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	8	88	0	2	151	0	1	46	1	22	21	19
Future Vol, veh/h	8	88	0	2	151	0	1	46	1	22	21	19
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	14	3	0	0	4	0	0	0	0	0	0	0
Mvmt Flow	9	97	0	2	166	0	1	51	1	24	23	21
Major/Minor	Major1	Major2	Major2	Minor1	Minor2	Minor2	Minor2	Minor2	Minor2	Minor2	Minor2	Minor2
Conflicting Flow All	166	0	0	97	0	307	285	97	311	285	166	
Stage 1	-	-	-	-	-	115	115	-	170	170	-	
Stage 2	-	-	-	-	-	192	170	-	141	115	-	
Critical Hdwy	4.24	-	-	4.1	-	7.1	6.5	6.2	7.1	6.5	6.2	
Critical Hdwy Stg 1	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-	
Critical Hdwy Stg 2	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-	
Follow-up Hdwy	2.326	-	-	2.2	-	3.5	4	3.3	3.5	4	3.3	
Pot Cap-1 Maneuver	1342	-	-	1509	-	612	623	905	600	623	884	
Stage 1	-	-	-	-	-	889	798	-	831	761	-	
Stage 2	-	-	-	-	-	770	761	-	805	798	-	
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	
Mov Cap-1 Maneuver	1342	-	-	1509	-	612	623	905	600	623	884	
Mov Cap-2 Maneuver	-	-	-	-	-	612	623	-	600	623	-	
Stage 1	-	-	-	-	-	889	798	-	831	761	-	
Stage 2	-	-	-	-	-	770	761	-	805	798	-	
Approach	EB	WB	NB	SB	SB	SB	SB	SB	SB	SB	SB	SB
HCM Control Delay, s	0.6	0.1	11.3	10.9								
HCM LOS			B	B								
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn1	SBLn1	SBLn1	SBLn1
Capacity (veh/h)	627	1342	-	-	1509	-	-	675				
HCM Lane V/C Ratio	0.084	0.007	-	-	0.001	-	-	0.101				
HCM Control Delay (s)	11.3	7.7	0	-	7.4	0	-	10.9				
HCM Lane LOS	B	A	A	-	A	A	-	B				
HCM 95th %tile Q(veh)	0.3	0	-	-	0	-	-	0.3				

HCM 6th TWSC  
 2: Tillman Road (SC 336) & Nimmer Turf Road

12/12/2023

Intersection						
Int Delay, s/veh	0.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕		↕	
Traffic Vol, veh/h	7	154	81	5	7	0
Future Vol, veh/h	7	154	81	5	7	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	3	0	0	33	0
Mvmt Flow	7	164	86	5	7	0
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	91	0	-	0	89	-
Stage 1	-	-	-	-	89	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.1	-	-	-	6.2	6.2
Critical Hdwy Stg 1	-	-	-	-	5.3	-
Critical Hdwy Stg 2	-	-	-	-	5.3	-
Follow-up Hdwy	2.2	-	-	-	3.797	3.3
Pot Cap-1 Maneuver	1517	-	-	-	660	975
Stage 1	-	-	-	-	862	-
Stage 2	-	-	-	-	783	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	1517	-	-	-	657	975
Mov Cap-2 Maneuver	-	-	-	-	657	-
Stage 1	-	-	-	-	858	-
Stage 2	-	-	-	-	783	-
Approach	EB	WB	SB			
HCM Control Delay, s	0.3	0	10.5			
HCM LOS			B			
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBRn1
Capacity (veh/h)	1517	-	-	-	657	-
HCM Lane V/C Ratio	0.005	-	-	-	0.011	-
HCM Control Delay (s)	7.4	0	-	-	10.5	-
HCM Lane LOS	A	A	-	-	B	-
HCM 95th %tile Q(veh)	0	-	-	-	0	-

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HCM 6th TWSC  
 2: Tillman Road (SC 336) & Nimmer Turf Road

12/12/2023

Intersection						
Int Delay, s/veh	0.7					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↔		↔	
Traffic Vol, veh/h	0	76	137	11	13	5
Future Vol, veh/h	0	76	137	11	13	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	0	6		11	0	25
Mvmt Flow	0	87	157	13	15	6
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	170	0	-	0	164	
Stage 1	-	-	-	-	164	-
Stage 2	-	-	-	-	164	-
Critical Hdwy	4.1	-	-	-	6.4	6.45
Critical Hdwy Stg 1	-	-	-	-	4	-
Critical Hdwy Stg 2	-	-	-	-	4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.525
Pot Cap-1 Maneuver	1420	-	-	-	742	824
Stage 1	-	-	-	-	870	-
Stage 2	-	-	-	-	941	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1420	-	-	-	742	824
Mov Cap-2 Maneuver	-	-	-	-	742	-
Stage 1	-	-	-	-	870	-
Stage 2	-	-	-	-	941	-
Approach	EB	WB	SB			
HCM Control Delay, s	0	0	9.9			
HCM LOS			A			
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1420	-	-	-	763	
HCM Lane V/C Ratio	-	-	-	-	0.027	
HCM Control Delay (s)	0	-	-	-	9.9	
HCM Lane LOS	A	-	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0.1	

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Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	1	1	102	118	1
Future Vol, veh/h	2	1	1	102	118	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	66	66	66	66	66	66
Heavy Vehicles, %	0	0	0	0	1	0
Mvmt Flow	3	2	2	155	179	2
Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	339	180	181	0	0	0
Stage 1	180	-	-	-	-	-
Stage 2	159	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	661	868	1407	-	-	-
Stage 1	856	-	-	-	-	-
Stage 2	875	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	660	868	1407	-	-	-
Mov Cap-2 Maneuver	660	-	-	-	-	-
Stage 1	854	-	-	-	-	-
Stage 2	875	-	-	-	-	-
Approach	EB	NB	SB			
HCM Control Delay, s	10.1	0.1	0			
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1407	-	717	-	-	
HCM Lane V/C Ratio	0.001	-	0.006	-	-	
HCM Control Delay (s)	7.6	0	10.1	-	-	
HCM Lane LOS	A	A	B	-	-	
HCM 95th %tile Q(veh)	0	-	0	-	-	

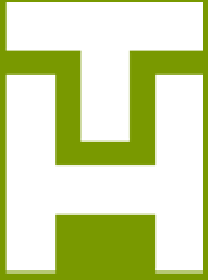
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HCM 6th TWSC  
 3: Tarboro Road (SC 27-22) & Nimmer Turf Road

12/12/2023

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	1	0	71	86	1
Future Vol, veh/h	1	1	0	71	86	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	69	69	69	69	69	69
Heavy Vehicles, %	0	0	0	2	1	0
Mvmt Flow	1	1	0	103	125	1
Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	229	126	126	0	0	0
Stage 1	126	-	-	-	-	-
Stage 2	103	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	764	930	1473	-	-	-
Stage 1	905	-	-	-	-	-
Stage 2	926	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	764	930	1473	-	-	-
Mov Cap-2 Maneuver	764	-	-	-	-	-
Stage 1	905	-	-	-	-	-
Stage 2	926	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	9.3	0		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1473	-	839	-	-	
HCM Lane V/C Ratio	-	-	0.003	-	-	
HCM Control Delay (s)	0	-	9.3	-	-	
HCM Lane LOS	A	-	A	-	-	
HCM 95th %tile Q(veh)	0	-	0	-	-	

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**TRAFFIC IMPACT ANALYSIS**

NIMMER TRACT

**APPENDIX F**

SYNCHRO HCM 6 ANALYSIS  
2035 BUILD OUT PEAK HOUR VOLUMES

J – 30596.0000

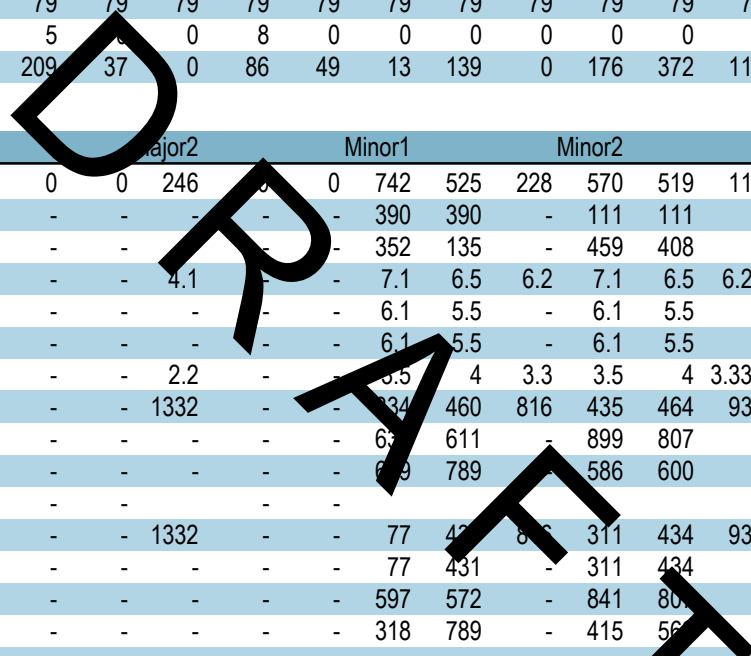
January 2024

HCM 6th TWSC

1: Tarboro Road (SC 27-22) & Tillman Road (SC 336)

01/04/2024

Intersection												
Int Delay, s/veh	148.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	64	165	29	0	68	39	10	110	0	139	294	87
Future Vol, veh/h	64	165	29	0	68	39	10	110	0	139	294	87
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	79	79	79	79	79	79	79	79	79
Heavy Vehicles, %	0	5	0	0	8	0	0	0	0	0	0	4
Mvmt Flow	81	209	37	0	86	49	13	139	0	176	372	110
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	135	0	0	246	0	0	742	525	228	570	519	111
Stage 1	-	-	-	-	-	-	390	390	-	111	111	-
Stage 2	-	-	-	-	-	-	352	135	-	459	408	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.24
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.336
Pot Cap-1 Maneuver	1462	-	-	1332	-	-	334	460	816	435	464	937
Stage 1	-	-	-	-	-	-	63	611	-	899	807	-
Stage 2	-	-	-	-	-	-	69	789	-	586	600	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1462	-	-	1332	-	-	77	42	805	311	434	937
Mov Cap-2 Maneuver	-	-	-	-	-	-	77	431	-	311	434	-
Stage 1	-	-	-	-	-	-	597	572	-	841	807	-
Stage 2	-	-	-	-	-	-	318	789	-	415	567	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	1.9			0			27			279.1		
HCM LOS	D			D			D			F		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	312	1462	-	-	1332	-	-	427				
HCM Lane V/C Ratio	0.487	0.055	-	-	-	-	-	1.542				
HCM Control Delay (s)	27	7.6	0	-	0	-	-	279.1				
HCM Lane LOS	D	A	A	-	A	-	-	F				
HCM 95th %tile Q(veh)	2.5	0.2	-	-	0	-	-	35.8				



HCM 6th TWSC

1: Tarboro Road (SC 27-22) & Tillman Road (SC 336)

01/04/2024

Intersection												
Int Delay, s/veh	393.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	76	108	20	2	184	135	35	315	1	103	183	59
Future Vol, veh/h	76	108	20	2	184	135	35	315	1	103	183	59
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	14	3	0	0	4	0	0	0	0	0	0	0
Mvmt Flow	84	119	22	2	202	148	38	346	1	113	201	65
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	350	0	0	141	0	0	711	652	130	752	589	276
Stage 1	-	-	-	-	-	-	298	298	-	280	280	-
Stage 2	-	-	-	-	-	-	413	354	-	472	309	-
Critical Hdwy	4.24	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.326	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1145	-	-	1455	-	-	351	390	925	329	423	768
Stage 1	-	-	-	-	-	-	71	671	-	731	683	-
Stage 2	-	-	-	-	-	-	60	634	-	576	663	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1145	-	-	1455	-	-	179	358	925	~ 38	388	768
Mov Cap-2 Maneuver	-	-	-	-	-	-	179	358	-	~ 38	388	-
Stage 1	-	-	-	-	-	-	658	617	-	673	683	-
Stage 2	-	-	-	-	-	-	399	633	-	232	617	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	3.1			0			144.3			\$ 1243.8		
HCM LOS							F			F		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	326	1145	-	-	1455	-	-	106				
HCM Lane V/C Ratio	1.183	0.073	-	-	0.002	-	-	3.577				
HCM Control Delay (s)	144.3	8.4	0	-	7.5	0	-	\$ 1243.8				
HCM Lane LOS	F	A	A	-	A	A	-	F				
HCM 95th %tile Q(veh)	16.3	0.2	-	-	0	-	-	37.9				
Notes												
~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    *: All major volume in platoon												

HCM 6th TWSC  
 2: Tillman Road (SC 336) & Nimmer Turf Road

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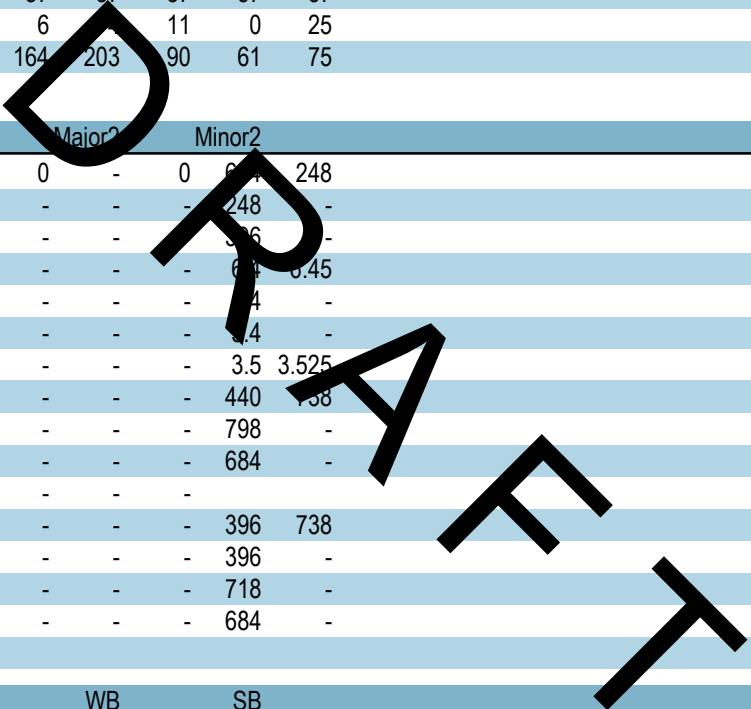
Intersection						
Int Delay, s/veh	3.9					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↷		↶	
Traffic Vol, veh/h	36	174	138	24	64	86
Future Vol, veh/h	36	174	138	24	64	86
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	3		0	33	0
Mvmt Flow	38	185	147	26	68	91
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	173	0	-	0	160	
Stage 1	-	-	-	-	160	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.1	-	-	-	6.2	6.2
Critical Hdwy Stg 1	-	-	-	-	5.3	-
Critical Hdwy Stg 2	-	-	-	-	5.3	-
Follow-up Hdwy	2.2	-	-	-	3.797	3.3
Pot Cap-1 Maneuver	1416	-	-	-	534	890
Stage 1	-	-	-	-	799	-
Stage 2	-	-	-	-	716	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1416	-	-	-	518	890
Mov Cap-2 Maneuver	-	-	-	-	518	-
Stage 1	-	-	-	-	775	-
Stage 2	-	-	-	-	716	-
Approach	EB	WB	SB			
HCM Control Delay, s	1.3	0	11.9			
HCM LOS			B			
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1416	-	-	-	681	
HCM Lane V/C Ratio	0.027	-	-	-	0.234	
HCM Control Delay (s)	7.6	0	-	-	11.9	
HCM Lane LOS	A	A	-	-	B	
HCM 95th %tile Q(veh)	0.1	-	-	-	0.9	

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HCM 6th TWSC  
 2: Tillman Road (SC 336) & Nimmer Turf Road

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Intersection						
Int Delay, s/veh	4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↔		↕	
Traffic Vol, veh/h	101	143	177	78	53	65
Future Vol, veh/h	101	143	177	78	53	65
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	0	6		11	0	25
Mvmt Flow	116	164	203	90	61	75
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	293	0	-	0	248	
Stage 1	-	-	-	-	248	-
Stage 2	-	-	-	-	306	-
Critical Hdwy	4.1	-	-	-	6.4	6.45
Critical Hdwy Stg 1	-	-	-	-	4	-
Critical Hdwy Stg 2	-	-	-	-	4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.525
Pot Cap-1 Maneuver	1280	-	-	-	440	738
Stage 1	-	-	-	-	798	-
Stage 2	-	-	-	-	684	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1280	-	-	-	396	738
Mov Cap-2 Maneuver	-	-	-	-	396	-
Stage 1	-	-	-	-	718	-
Stage 2	-	-	-	-	684	-
Approach	EB	WB	SB			
HCM Control Delay, s	3.3	0	14.1			
HCM LOS			B			
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1280	-	-	-	532	
HCM Lane V/C Ratio	0.091	-	-	-	0.255	
HCM Control Delay (s)	8.1	0	-	-	14.1	
HCM Lane LOS	A	A	-	-	B	
HCM 95th %tile Q(veh)	0.3	-	-	-	1	





HCM 6th TWSC  
 3: Tarboro Road (SC 27-22) & Nimmer Turf Road

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Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	8	1	1	124	126	3
Future Vol, veh/h	8	1	1	124	126	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	66	66	66	66	66	66
Heavy Vehicles, %	0	0	0	0	1	0
Mvmt Flow	12	2	2	188	191	5
Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	386	194	196	0	0	
Stage 1	194	-	-	-	-	
Stage 2	192	-	-	-	-	
Critical Hdwy	6.4	6.2	4.1	-	-	
Critical Hdwy Stg 1	5.4	-	-	-	-	
Critical Hdwy Stg 2	5.4	-	-	-	-	
Follow-up Hdwy	3.5	3.3	2.2	-	-	
Pot Cap-1 Maneuver	621	853	1389	-	-	
Stage 1	844	-	-	-	-	
Stage 2	845	-	-	-	-	
Platoon blocked, %	-	-	-	-	-	
Mov Cap-1 Maneuver	620	853	1389	-	-	
Mov Cap-2 Maneuver	620	-	-	-	-	
Stage 1	842	-	-	-	-	
Stage 2	845	-	-	-	-	
Approach	EB	NB	SB			
HCM Control Delay, s	10.8	0.1	0			
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1389	-	639	-	-	
HCM Lane V/C Ratio	0.001	-	0.021	-	-	
HCM Control Delay (s)	7.6	0	10.8	-	-	
HCM Lane LOS	A	A	B	-	-	
HCM 95th %tile Q(veh)	0	-	0.1	-	-	

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HCM 6th TWSC  
 3: Tarboro Road (SC 27-22) & Nimmer Turf Road

01/04/2024

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	5	1	0	87	113	8
Future Vol, veh/h	5	1	0	87	113	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	69	69	69	69	69	69
Heavy Vehicles, %	0	0	0	2	1	0
Mvmt Flow	7	1	0	126	164	12
Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	296	170	176	0	0	
Stage 1	170	-	-	-	-	
Stage 2	126	-	-	-	-	
Critical Hdwy	6.4	6.2	4.1	-	-	
Critical Hdwy Stg 1	5.4	-	-	-	-	
Critical Hdwy Stg 2	5.4	-	-	-	-	
Follow-up Hdwy	3.5	3.3	2.2	-	-	
Pot Cap-1 Maneuver	699	879	1412	-	-	
Stage 1	865	-	-	-	-	
Stage 2	905	-	-	-	-	
Platoon blocked, %	-	-	-	-	-	
Mov Cap-1 Maneuver	699	879	1412	-	-	
Mov Cap-2 Maneuver	699	-	-	-	-	
Stage 1	865	-	-	-	-	
Stage 2	905	-	-	-	-	
Approach	EB	NB	SB			
HCM Control Delay, s	10	0	0			
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1412	-	724	-	-	
HCM Lane V/C Ratio	-	-	0.012	-	-	
HCM Control Delay (s)	0	-	10	-	-	
HCM Lane LOS	A	-	B	-	-	
HCM 95th %tile Q(veh)	0	-	0	-	-	

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Intersection						
Int Delay, s/veh	5.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			W	W	
Traffic Vol, veh/h	11	257	86	150	262	4
Future Vol, veh/h	11	257	86	150	262	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	12	279	93	163	285	4
Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	636	287	289	0	0	
Stage 1	287	-	-	-	-	
Stage 2	349	-	-	-	-	
Critical Hdwy	6.42	6.22	4.12	-	-	
Critical Hdwy Stg 1	5.42	-	-	-	-	
Critical Hdwy Stg 2	5.42	-	-	-	-	
Follow-up Hdwy	3.518	3.318	2.218	-	-	
Pot Cap-1 Maneuver	442	752	1273	-	-	
Stage 1	762	-	-	-	-	
Stage 2	714	-	-	-	-	
Platoon blocked, %	-	-	-	-	-	
Mov Cap-1 Maneuver	407	752	1273	-	-	
Mov Cap-2 Maneuver	407	-	-	-	-	
Stage 1	701	-	-	-	-	
Stage 2	714	-	-	-	-	
Approach	EB	NB	SB			
HCM Control Delay, s	13.2	2.9	0			
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1273	-	727	-	-	
HCM Lane V/C Ratio	0.073	-	0.401	-	-	
HCM Control Delay (s)	8.1	0	13.2	-	-	
HCM Lane LOS	A	A	B	-	-	
HCM 95th %tile Q(veh)	0.2	-	1.9	-	-	

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HCM 6th TWSC  
 4: Tarboro Road (SC 27-22) & Access 1

01/04/2024

Intersection						
Int Delay, s/veh	5.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	8	180	303	240	188	13
Future Vol, veh/h	8	180	303	240	188	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	196	329	261	204	14
Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1130	211	0	0		
Stage 1	211	-	-	-		
Stage 2	919	-	-	-		
Critical Hdwy	6.42	6.22	4.12	-		
Critical Hdwy Stg 1	5.42	-	-	-		
Critical Hdwy Stg 2	5.42	-	-	-		
Follow-up Hdwy	3.518	3.318	2.218	-		
Pot Cap-1 Maneuver	225	829	1352	-		
Stage 1	824	-	-	-		
Stage 2	389	-	-	-		
Platoon blocked, %	-	-	-	-		
Mov Cap-1 Maneuver	161	829	1352	-		
Mov Cap-2 Maneuver	161	-	-	-		
Stage 1	589	-	-	-		
Stage 2	389	-	-	-		
Approach	EB	NB	SB			
HCM Control Delay, s	12.2	4.8	0			
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1352	-	705	-	-	
HCM Lane V/C Ratio	0.244	-	0.29	-	-	
HCM Control Delay (s)	8.5	0	12.2	-	-	
HCM Lane LOS	A	A	B	-	-	
HCM 95th %tile Q(veh)	1	-	1.2	-	-	

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HCM 6th TWSC  
 5: Tarboro Road (SC 27-22) & Access 2

01/04/2024

Intersection						
Int Delay, s/veh	4.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			W	W	
Traffic Vol, veh/h	11	143	48	114	123	4
Future Vol, veh/h	11	143	48	114	123	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	12	155	52	124	134	4
Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	364	136	138	0	0	
Stage 1	136	-	-	-	-	
Stage 2	228	-	-	-	-	
Critical Hdwy	6.42	6.22	4.12	-	-	
Critical Hdwy Stg 1	5.42	-	-	-	-	
Critical Hdwy Stg 2	5.42	-	-	-	-	
Follow-up Hdwy	3.518	3.318	2.218	-	-	
Pot Cap-1 Maneuver	635	913	1446	-	-	
Stage 1	890	-	-	-	-	
Stage 2	810	-	-	-	-	
Platoon blocked, %	-	-	-	-	-	
Mov Cap-1 Maneuver	610	913	1446	-	-	
Mov Cap-2 Maneuver	610	-	-	-	-	
Stage 1	855	-	-	-	-	
Stage 2	810	-	-	-	-	
Approach	EB	NB	SB			
HCM Control Delay, s	10	2.2	0			
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1446	-	882	-	-	
HCM Lane V/C Ratio	0.036	-	0.19	-	-	
HCM Control Delay (s)	7.6	0	10	-	-	
HCM Lane LOS	A	A	B	-	-	
HCM 95th %tile Q(veh)	0.1	-	0.7	-	-	

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HCM 6th TWSC  
 5: Tarboro Road (SC 27-22) & Access 2

01/04/2024

Intersection						
Int Delay, s/veh	5.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	8	100	168	79	101	13
Future Vol, veh/h	8	100	168	79	101	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	109	183	86	110	14
Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	569	117	124	0	0	0
Stage 1	117	-	-	-	-	-
Stage 2	452	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	484	935	1463	-	-	-
Stage 1	908	-	-	-	-	-
Stage 2	641	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	421	935	1463	-	-	-
Mov Cap-2 Maneuver	421	-	-	-	-	-
Stage 1	789	-	-	-	-	-
Stage 2	641	-	-	-	-	-
Approach	EB		NB		SB	
HCM Control Delay, s	9.9		5.3		0	
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1463	-	857	-	-	
HCM Lane V/C Ratio	0.125	-	0.137	-	-	
HCM Control Delay (s)	7.8	0	9.9	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0.4	-	0.5	-	-	

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Intersection						
Int Delay, s/veh	6.6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	143	6	12	48	2	7
Future Vol, veh/h	143	6	12	48	2	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	155	7	13	52	2	8
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	51	39	0	0	0	0
Stage 1	39	-	-	-	-	-
Stage 2	12	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	958	1033	-	-	1537	-
Stage 1	983	-	-	-	-	-
Stage 2	1011	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	957	1033	-	-	1537	-
Mov Cap-2 Maneuver	957	-	-	-	-	-
Stage 1	983	-	-	-	-	-
Stage 2	1010	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	9.5	0	1.6			
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	960	1537		
HCM Lane V/C Ratio	-	-	0.169	0.001		
HCM Control Delay (s)	-	-	9.5	7.3		
HCM Lane LOS	-	-	A	A		
HCM 95th %tile Q(veh)	-	-	0.6	0		

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Intersection						
Int Delay, s/veh	3.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T			T
Traffic Vol, veh/h	100	4	11	168	7	18
Future Vol, veh/h	100	4	11	168	7	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	109	4	12	183	8	20
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	140	104	0	0	1378	0
Stage 1	104	-	-	-	-	-
Stage 2	36	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	853	951	-	-	1378	-
Stage 1	920	-	-	-	-	-
Stage 2	986	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	848	951	-	-	1378	-
Mov Cap-2 Maneuver	848	-	-	-	-	-
Stage 1	920	-	-	-	-	-
Stage 2	980	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	9.9	0	2.1			
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	852	1378		
HCM Lane V/C Ratio	-	-	0.133	0.006		
HCM Control Delay (s)	-	-	9.9	7.6		
HCM Lane LOS	-	-	A	A		
HCM 95th %tile Q(veh)	-	-	0.5	0		

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HCM 6th TWSC  
 7: Tarboro Road (SC 27-22) & Fire Station Access

01/04/2024

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	1	4	236	518	0
Future Vol, veh/h	0	1	4	236	518	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1	4	257	563	0
Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	828	563	563	0	0	
Stage 1	563	-	-	-	-	
Stage 2	265	-	-	-	-	
Critical Hdwy	6.42	6.22	4.12	-	-	
Critical Hdwy Stg 1	5.42	-	-	-	-	
Critical Hdwy Stg 2	5.42	-	-	-	-	
Follow-up Hdwy	3.518	3.318	2.218	-	-	
Pot Cap-1 Maneuver	341	526	1008	-	-	
Stage 1	570	-	-	-	-	
Stage 2	779	-	-	-	-	
Platoon blocked, %	-	-	-	-	-	
Mov Cap-1 Maneuver	339	526	1008	-	-	
Mov Cap-2 Maneuver	339	-	-	-	-	
Stage 1	567	-	-	-	-	
Stage 2	779	-	-	-	-	
Approach	EB	NB	SB			
HCM Control Delay, s	11.9	0.1	0			
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1008	-	526	-	-	
HCM Lane V/C Ratio	0.004	-	0.002	-	-	
HCM Control Delay (s)	8.6	0	11.9	-	-	
HCM Lane LOS	A	A	B	-	-	
HCM 95th %tile Q(veh)	0	-	0	-	-	

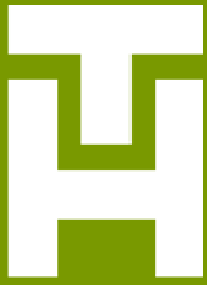
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HCM 6th TWSC  
 7: Tarboro Road (SC 27-22) & Fire Station Access

01/04/2024

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	4	1	542	368	0
Future Vol, veh/h	0	4	1	542	368	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	4	1	589	400	0
Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	991	400	400	0	0	0
Stage 1	400	-	-	-	-	-
Stage 2	591	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	273	650	1159	-	-	-
Stage 1	677	-	-	-	-	-
Stage 2	553	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	273	650	1159	-	-	-
Mov Cap-2 Maneuver	273	-	-	-	-	-
Stage 1	676	-	-	-	-	-
Stage 2	553	-	-	-	-	-
Approach	EB	NB	SB			
HCM Control Delay, s	10.6	0	0			
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1159	-	650	-	-	
HCM Lane V/C Ratio	0.001	-	0.007	-	-	
HCM Control Delay (s)	8.1	0	10.6	-	-	
HCM Lane LOS	A	A	B	-	-	
HCM 95th %tile Q(veh)	0	-	0	-	-	

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THOMAS  
&  
HUTTON

D  
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T

**TRAFFIC IMPACT ANALYSIS**

NIMMER TRACT

**APPENDIX G**

SYNCHRO HCM 6 ANALYSIS  
2035 BUILD OUT PEAK HOUR VOLUMES  
WITH IMPROVEMENTS

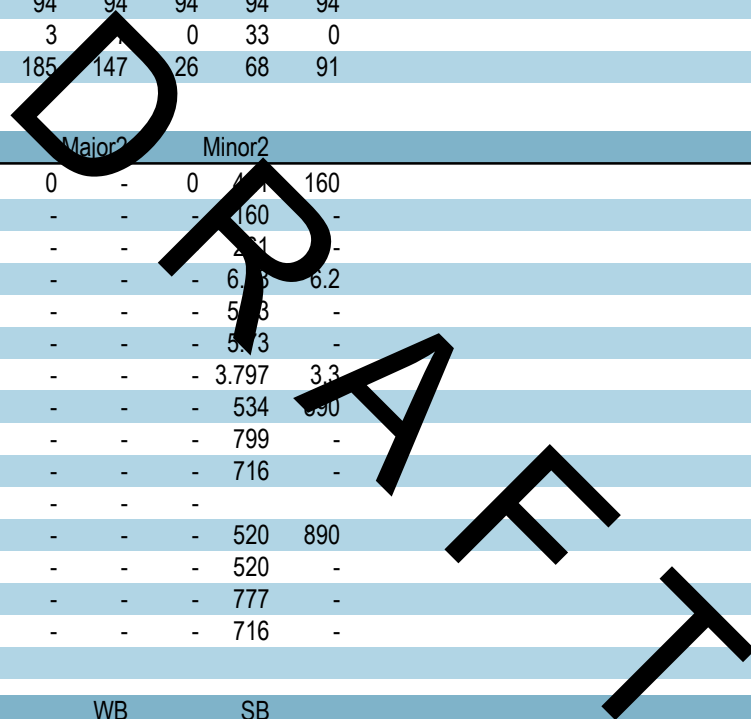
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January 2024

HCM 6th TWSC  
 2: Tillman Road (SC 336) & Nimmer Turf Road

01/04/2024

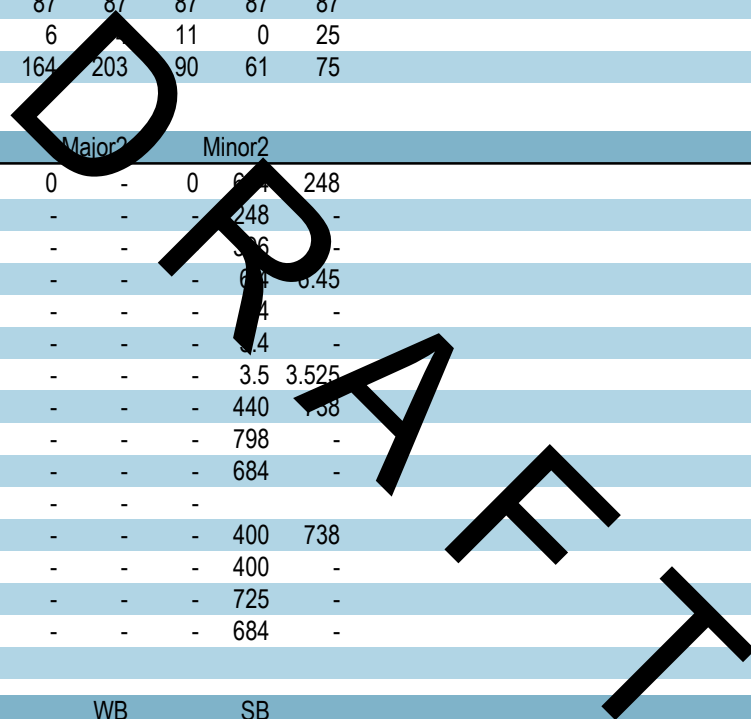
Intersection						
Int Delay, s/veh	3.9					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	36	174	138	24	64	86
Future Vol, veh/h	36	174	138	24	64	86
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	3		0	33	0
Mvmt Flow	38	185	147	26	68	91
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	173	0	-	0	160	-
Stage 1	-	-	-	-	160	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.1	-	-	-	6.2	6.2
Critical Hdwy Stg 1	-	-	-	-	5.3	-
Critical Hdwy Stg 2	-	-	-	-	5.3	-
Follow-up Hdwy	2.2	-	-	-	3.797	3.3
Pot Cap-1 Maneuver	1416	-	-	-	534	890
Stage 1	-	-	-	-	799	-
Stage 2	-	-	-	-	716	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1416	-	-	-	520	890
Mov Cap-2 Maneuver	-	-	-	-	520	-
Stage 1	-	-	-	-	777	-
Stage 2	-	-	-	-	716	-
Approach	EB	WB	SB			
HCM Control Delay, s	1.3	0	11.9			
HCM LOS			B			
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1416	-	-	-	683	
HCM Lane V/C Ratio	0.027	-	-	-	0.234	
HCM Control Delay (s)	7.6	-	-	-	11.9	
HCM Lane LOS	A	-	-	-	B	
HCM 95th %tile Q(veh)	0.1	-	-	-	0.9	



HCM 6th TWSC  
 2: Tillman Road (SC 336) & Nimmer Turf Road

01/04/2024

Intersection						
Int Delay, s/veh	4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	101	143	177	78	53	65
Future Vol, veh/h	101	143	177	78	53	65
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	0	6		11	0	25
Mvmt Flow	116	164	203	90	61	75
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	293	0	-	0	248	
Stage 1	-	-	-	-	248	-
Stage 2	-	-	-	-	306	-
Critical Hdwy	4.1	-	-	-	6.4	0.45
Critical Hdwy Stg 1	-	-	-	-	4	-
Critical Hdwy Stg 2	-	-	-	-	4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.525
Pot Cap-1 Maneuver	1280	-	-	-	440	738
Stage 1	-	-	-	-	798	-
Stage 2	-	-	-	-	684	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1280	-	-	-	400	738
Mov Cap-2 Maneuver	-	-	-	-	400	-
Stage 1	-	-	-	-	725	-
Stage 2	-	-	-	-	684	-
Approach	EB	WB	SB			
HCM Control Delay, s	3.3	0	14			
HCM LOS			B			
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1280	-	-	-	535	
HCM Lane V/C Ratio	0.091	-	-	-	0.254	
HCM Control Delay (s)	8.1	-	-	-	14	
HCM Lane LOS	A	-	-	-	B	
HCM 95th %tile Q(veh)	0.3	-	-	-	1	



HCM 6th TWSC  
 4: Tarboro Road (SC 27-22) & Access 1

01/04/2024

Intersection						
Int Delay, s/veh	5.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔		↔	↑	↑	
Traffic Vol, veh/h	11	257	86	150	262	4
Future Vol, veh/h	11	257	86	150	262	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	150	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	12	279	93	163	285	4
Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	636	287	289	0	0	
Stage 1	287	-	-	-	-	
Stage 2	349	-	-	-	-	
Critical Hdwy	6.42	6.22	4.12	-	-	
Critical Hdwy Stg 1	5.42	-	-	-	-	
Critical Hdwy Stg 2	5.42	-	-	-	-	
Follow-up Hdwy	3.518	3.318	2.218	-	-	
Pot Cap-1 Maneuver	442	752	1273	-	-	
Stage 1	762	-	-	-	-	
Stage 2	714	-	-	-	-	
Platoon blocked, %	-	-	-	-	-	
Mov Cap-1 Maneuver	410	752	1273	-	-	
Mov Cap-2 Maneuver	410	-	-	-	-	
Stage 1	706	-	-	-	-	
Stage 2	714	-	-	-	-	
Approach	EB	NB	SB			
HCM Control Delay, s	13.2	2.9	0			
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1273	-	727	-	-	
HCM Lane V/C Ratio	0.073	-	0.401	-	-	
HCM Control Delay (s)	8.1	-	13.2	-	-	
HCM Lane LOS	A	-	B	-	-	
HCM 95th %tile Q(veh)	0.2	-	1.9	-	-	

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HCM 6th TWSC  
 4: Tarboro Road (SC 27-22) & Access 1

01/04/2024

Intersection						
Int Delay, s/veh	5.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	8	180	303	240	188	13
Future Vol, veh/h	8	180	303	240	188	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	150	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	196	329	261	204	14
Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1130	211	218	0	0	
Stage 1	211	-	-	-	-	
Stage 2	919	-	-	-	-	
Critical Hdwy	6.42	6.22	4.12	-	-	
Critical Hdwy Stg 1	5.42	-	-	-	-	
Critical Hdwy Stg 2	5.42	-	-	-	-	
Follow-up Hdwy	3.518	3.318	2.218	-	-	
Pot Cap-1 Maneuver	225	829	1352	-	-	
Stage 1	824	-	-	-	-	
Stage 2	389	-	-	-	-	
Platoon blocked, %	-	-	-	-	-	
Mov Cap-1 Maneuver	170	829	1352	-	-	
Mov Cap-2 Maneuver	170	-	-	-	-	
Stage 1	624	-	-	-	-	
Stage 2	389	-	-	-	-	
Approach	EB	NB	SB			
HCM Control Delay, s	12.1	4.8	0			
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1352	-	712	-	-	
HCM Lane V/C Ratio	0.244	-	0.287	-	-	
HCM Control Delay (s)	8.5	-	12.1	-	-	
HCM Lane LOS	A	-	B	-	-	
HCM 95th %tile Q(veh)	1	-	1.2	-	-	

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HCM 6th TWSC  
5: Tarboro Road (SC 27-22) & Access 2

01/04/2024

Intersection						
Int Delay, s/veh	4.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	11	143	48	114	123	4
Future Vol, veh/h	11	143	48	114	123	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	150	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	12	155	52	124	134	4
Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	364	136	138	0	0	
Stage 1	136	-	-	-	-	
Stage 2	228	-	-	-	-	
Critical Hdwy	6.42	6.22	4.12	-	-	
Critical Hdwy Stg 1	5.42	-	-	-	-	
Critical Hdwy Stg 2	5.42	-	-	-	-	
Follow-up Hdwy	3.518	3.318	2.218	-	-	
Pot Cap-1 Maneuver	635	913	1446	-	-	
Stage 1	890	-	-	-	-	
Stage 2	810	-	-	-	-	
Platoon blocked, %	-	-	-	-	-	
Mov Cap-1 Maneuver	612	913	1446	-	-	
Mov Cap-2 Maneuver	612	-	-	-	-	
Stage 1	858	-	-	-	-	
Stage 2	810	-	-	-	-	
Approach	EB	NB	SB			
HCM Control Delay, s	10	2.2	0			
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1446	-	882	-	-	
HCM Lane V/C Ratio	0.036	-	0.19	-	-	
HCM Control Delay (s)	7.6	-	10	-	-	
HCM Lane LOS	A	-	B	-	-	
HCM 95th %tile Q(veh)	0.1	-	0.7	-	-	

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HCM 6th TWSC  
 5: Tarboro Road (SC 27-22) & Access 2

01/04/2024

Intersection						
Int Delay, s/veh	5.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔		↔	↑	↑	
Traffic Vol, veh/h	8	100	168	79	101	13
Future Vol, veh/h	8	100	168	79	101	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	150	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	109	183	86	110	14
Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	569	117	124	0	0	
Stage 1	117	-	-	-	-	
Stage 2	452	-	-	-	-	
Critical Hdwy	6.42	6.22	4.12	-	-	
Critical Hdwy Stg 1	5.42	-	-	-	-	
Critical Hdwy Stg 2	5.42	-	-	-	-	
Follow-up Hdwy	3.518	3.318	2.218	-	-	
Pot Cap-1 Maneuver	484	935	1463	-	-	
Stage 1	908	-	-	-	-	
Stage 2	641	-	-	-	-	
Platoon blocked, %	-	-	-	-	-	
Mov Cap-1 Maneuver	424	935	1463	-	-	
Mov Cap-2 Maneuver	424	-	-	-	-	
Stage 1	795	-	-	-	-	
Stage 2	641	-	-	-	-	
Approach	EB	NB	SB			
HCM Control Delay, s	9.9	5.3	0			
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1463	-	858	-	-	
HCM Lane V/C Ratio	0.125	-	0.137	-	-	
HCM Control Delay (s)	7.8	-	9.9	-	-	
HCM Lane LOS	A	-	A	-	-	
HCM 95th %tile Q(veh)	0.4	-	0.5	-	-	

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Tillman Road (SC 336) &  
Tarboro Road (SC 27-22)

Turn Lane Improvement

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HCM 6th TWSC  
 1: Tarboro Road (SC 27-22) & Tillman Road (SC 336)

01/04/2024

Intersection												
Int Delay, s/veh	132.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	64	165	29	0	68	39	10	110	0	139	294	87
Future Vol, veh/h	64	165	29	0	68	39	10	110	0	139	294	87
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	-	-	100	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	79	79	79	79	79	79	79	79	79
Heavy Vehicles, %	0	5	0	0	8	0	0	0	0	0	0	4
Mvmt Flow	81	209	37	0	86	49	13	139	0	176	372	110
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	135	0	0	246	0	0	742	525	228	545	494	86
Stage 1	-	-	-	-	-	-	390	390	-	86	86	-
Stage 2	-	-	-	-	-	-	352	135	-	459	408	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.24
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.336
Pot Cap-1 Maneuver	1462	-	-	1332	-	-	334	460	816	452	479	967
Stage 1	-	-	-	-	-	-	63	611	-	927	827	-
Stage 2	-	-	-	-	-	-	69	789	-	586	600	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1462	-	-	1332	-	-	90	42	805	326	453	967
Mov Cap-2 Maneuver	-	-	-	-	-	-	90	435	-	326	453	-
Stage 1	-	-	-	-	-	-	603	577	-	876	827	-
Stage 2	-	-	-	-	-	-	326	789	-	420	567	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	1.9			0			24.9			249.8		
HCM LOS	C			A			C			F		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	330	1462	-	-	1332	-	-	446				
HCM Lane V/C Ratio	0.46	0.055	-	-	-	-	-	1.476				
HCM Control Delay (s)	24.9	7.6	-	-	0	-	-	249.8				
HCM Lane LOS	C	A	-	-	A	-	-	F				
HCM 95th %tile Q(veh)	2.3	0.2	-	-	0	-	-	33.8				

HCM 6th TWSC  
 1: Tarboro Road (SC 27-22) & Tillman Road (SC 336)

01/04/2024

Intersection												
Int Delay, s/veh	300.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	76	108	20	2	184	135	35	315	1	103	183	59
Future Vol, veh/h	76	108	20	2	184	135	35	315	1	103	183	59
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	-	-	100	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	14	3	0	0	4	0	0	0	0	0	0	0
Mvmt Flow	84	119	22	2	202	148	38	346	1	113	201	65
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	350	0	0	141	0	0	711	652	130	678	515	202
Stage 1	-	-	-	-	-	-	298	298	-	206	206	-
Stage 2	-	-	-	-	-	-	413	354	-	472	309	-
Critical Hdwy	4.24	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.326	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1145	-	-	1455	-	-	351	390	925	369	466	844
Stage 1	-	-	-	-	-	-	71	671	-	801	735	-
Stage 2	-	-	-	-	-	-	60	634	-	576	663	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1145	-	-	1455	-	-	195	361	925	~48	431	844
Mov Cap-2 Maneuver	-	-	-	-	-	-	195	361	-	~48	431	-
Stage 1	-	-	-	-	-	-	663	622	-	743	735	-
Stage 2	-	-	-	-	-	-	415	633	-	236	611	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	3.1			0			134.5			\$ 924.9		
HCM LOS							F			F		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	333	1145	-	-	1455	-	-	131				
HCM Lane V/C Ratio	1.158	0.073	-	-	0.002	-	-	2.894				
HCM Control Delay (s)	134.5	8.4	-	-	7.5	0	-	\$ 924.9				
HCM Lane LOS	F	A	-	-	A	A	-	F				
HCM 95th %tile Q(veh)	15.8	0.2	-	-	0	-	-	35.1				
Notes												
~: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    *: All major volume in platoon												

Tillman Road (SC 336) &  
Tarboro Road (SC 27-22)  
Traffic Signal Improvement

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HCM 6th Signalized Intersection Summary  
 1: Tarboro Road (SC 27-22) & Tillman Road (SC 336)

12/29/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (veh/h)	64	165	29	0	68	39	10	110	0	139	294	87
Future Volume (veh/h)	64	165	29	0	68	39	10	110	0	139	294	87
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1826	1900	1900	1781	1900	1900	1900	1900	1900	1900	1841
Adj Flow Rate, veh/h	81	209	37	0	86	49	13	139	0	176	372	110
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Percent Heavy Veh, %	0	5	0	0	8	0	0	0	0	0	0	4
Cap, veh/h	179	294	47	0	271	155	117	841	0	279	475	130
Arrive On Green	0.25	0.25	0.25	0.00	0.25	0.25	0.47	0.47	0.00	0.47	0.47	0.47
Sat Flow, veh/h	294	115	185	0	1065	607	56	1802	0	370	1018	279
Grp Volume(v), veh/h	32	0	0	0	0	135	152	0	0	658	0	0
Grp Sat Flow(s),veh/h/ln	32	0	0	0	0	1672	1858	0	0	1666	0	0
Q Serve(g_s), s	5.2	0.0	0.0	0.0	0.0	2.8	0.0	0.0	0.0	11.7	0.0	0.0
Cycle Q Clear(g_c), s	8.0	0.0	0.0	0.0	0.0	2.8	2.0	0.0	0.0	14.8	0.0	0.0
Prop In Lane	0.25	0.0	0.0	0.0	0.0	0.36	0.09	0.00	0.00	0.27	0.00	0.17
Lane Grp Cap(c), veh/h	520	0	0	0	0	426	958	0	0	884	0	0
V/C Ratio(X)	0.63	0.00	0.00	0.00	0.00	0.32	0.16	0.00	0.00	0.74	0.00	0.00
Avail Cap(c_a), veh/h	780	0	0	0	0	698	1357	0	0	1258	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	14.9	0.0	0.0	0.0	0.0	13.0	6.7	0.0	0.0	9.9	0.0	0.0
Incr Delay (d2), s/veh	1.3	0.0	0.0	0.0	0.0	0.4	0.1	0.0	0.0	1.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.1	0.0	0.0	0.0	0.0	13.4	6.7	0.0	0.0	11.4	0.0	0.0
LnGrp LOS	B	A	A	A	A	B	A	A	A	B	A	A
Approach Vol, veh/h		327			135			152				658
Approach Delay, s/veh		16.1			13.4			6.7				11.4
Approach LOS		B			B			A				B
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		26.1		17.0		26.1		17.0				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		30.0		18.0		30.0		18.0				
Max Q Clear Time (g_c+I1), s		4.0		10.0		16.8		4.8				
Green Ext Time (p_c), s		0.7		1.0		3.3		0.4				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				12.3								
HCM 6th LOS				B								

HCM 6th Signalized Intersection Summary  
 1: Tarboro Road (SC 27-22) & Tillman Road (SC 336)

12/29/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (veh/h)	76	108	20	2	184	135	35	315	1	103	183	59
Future Volume (veh/h)	76	108	20	2	184	135	35	315	1	103	183	59
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1693	1856	1900	1900	1841	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	84	119	22	2	202	148	38	346	1	113	201	65
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	14	3	0	0	4	0	0	0	0	0	0	0
Cap, veh/h	293	314	48	122	291	212	163	529	1	275	311	89
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.30	0.30	0.30	0.30	0.30	0.30
Sat Flow, veh/h	433	1066	163	3	988	719	100	1744	5	390	1026	293
Grp Volume(v), veh/h	225	0	0	352	0	0	385	0	0	379	0	0
Grp Sat Flow(s),veh/h/ln	1693	0	0	1710	0	0	1849	0	0	1709	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	3.0	0.0	0.0	5.4	0.0	0.0	5.3	0.0	0.0	5.3	0.0	0.0
Prop In Lane	0.37	0.0	0.0	0.01	0.0	0.42	0.10	0.0	0.00	0.30	0.0	0.17
Lane Grp Cap(c), veh/h	656	0	0	67	0	0	693	0	0	675	0	0
V/C Ratio(X)	0.34	0.00	0.00	0.56	0.00	0.00	0.56	0.00	0.00	0.56	0.00	0.00
Avail Cap(c_a), veh/h	1090	0	0	1152	0	0	1347	0	0	1223	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	8.5	0.0	0.0	5.3	0.0	0.0	9.1	0.0	0.0	9.1	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.0	0.0	0.8	0.0	0.0	0.7	0.0	0.0	0.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	8.8	0.0	0.0	10.1	0.0	0.0	9.8	0.0	0.0	9.8	0.0	0.0
LnGrp LOS	A	A	A	B	A	A	A	A	A	A	A	A
Approach Vol, veh/h		225			352			385				379
Approach Delay, s/veh		8.8			10.1			9.8				9.8
Approach LOS		A			B			A				A
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		15.0		14.8		15.0		14.8				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		20.0		18.0		20.0		18.0				
Max Q Clear Time (g_c+I1), s		7.3		5.0		7.3		7.4				
Green Ext Time (p_c), s		1.6		0.9		1.7		1.3				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				9.7								
HCM 6th LOS				A								

Tillman Road (SC 336) &  
Tarboro Road (SC 27-22)  
Roundabout Improvement

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HCM 6th Roundabout  
 1: Tarboro Road (SC 27-22) & Tillman Road (SC 336)

12/29/2023

Intersection				
Intersection Delay, s/veh	8.5			
Intersection LOS	A			
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	327	135	152	658
Demand Flow Rate, veh/h	337	142	152	662
Vehicles Circulating, veh/h	548	233	476	106
Vehicles Exiting, veh/h	220	395	409	269
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	10.3	4.7	6.1	8.9
Approach LOS	B	A	A	A
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	337	142	152	662
Cap Entry Lane, veh/h	789	1088	849	1238
Entry HV Adj Factor	0.969	0.951	1.000	0.994
Flow Entry, veh/h	327	135	152	658
Cap Entry, veh/h	765	1035	849	1231
V/C Ratio	0.427	0.131	0.179	0.535
Control Delay, s/veh	10.3	4.7	6.1	8.9
LOS	B	A	A	A
95th %tile Queue, veh	2	0	1	3

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HCM 6th Roundabout  
 1: Tarboro Road (SC 27-22) & Tillman Road (SC 336)

12/29/2023

Intersection				
Intersection Delay, s/veh	7.8			
Intersection LOS	A			
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	225	352	385	379
Demand Flow Rate, veh/h	241	360	385	379
Vehicles Circulating, veh/h	316	480	332	250
Vehicles Exiting, veh/h	313	237	225	590
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	6.3	9.7	8.0	7.0
Approach LOS	A	A	A	A
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	241	360	385	379
Cap Entry Lane, veh/h	1000	846	984	1069
Entry HV Adj Factor	0.935	0.978	1.000	1.000
Flow Entry, veh/h	225	352	385	379
Cap Entry, veh/h	935	827	984	1069
V/C Ratio	0.241	0.426	0.891	0.354
Control Delay, s/veh	6.3	9.7	8.0	7.0
LOS	A	A	A	A
95th %tile Queue, veh	1	2	2	2

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&  
HUTTON

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**TRAFFIC IMPACT ANALYSIS**

NIMMER TRACT

**APPENDIX H**

AUXILIARY TURN LANE ANALYSIS

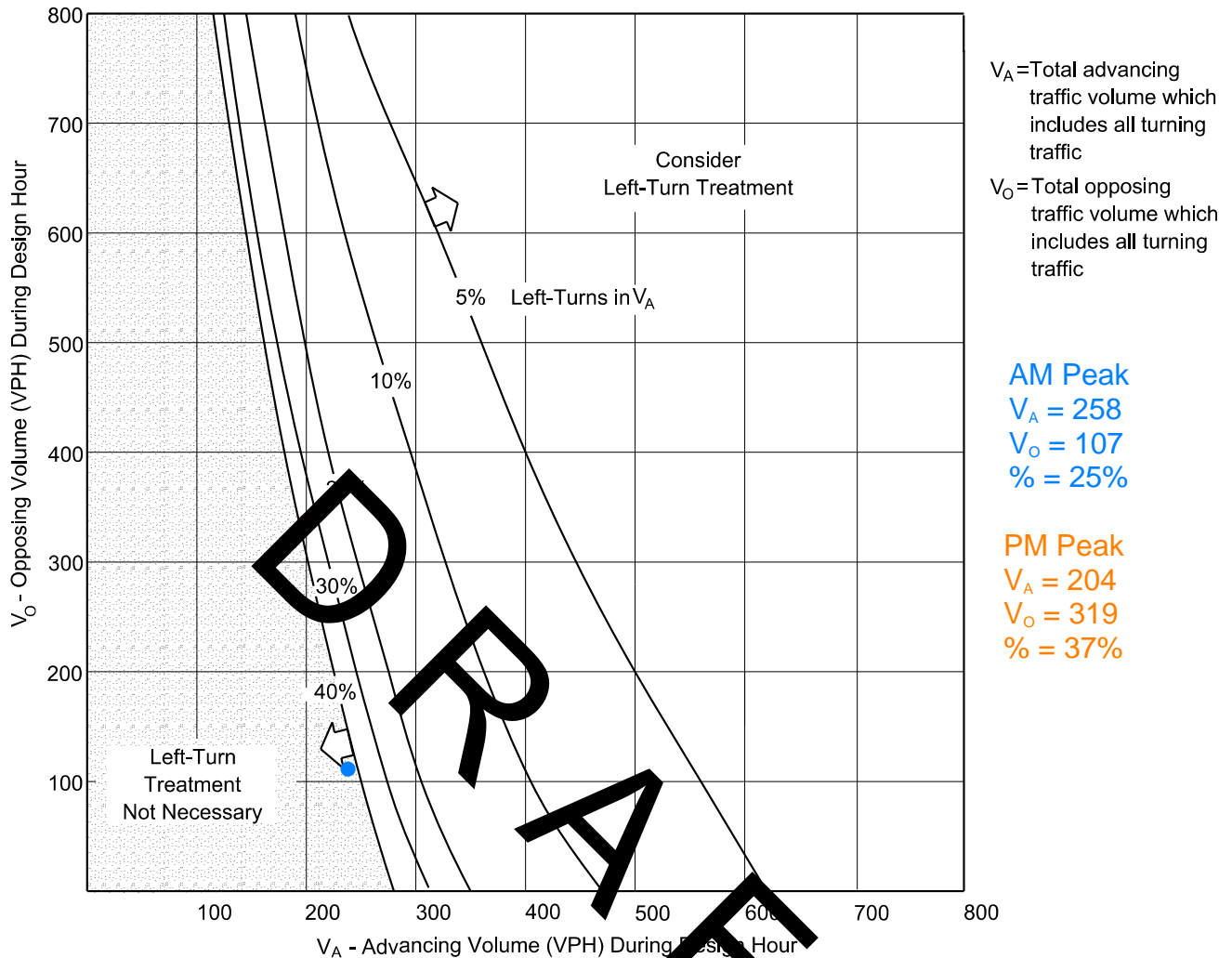
J – 30596.0000

January 2024

Tillman Road (SC 336) &  
Tarboro Road (SC 27-22)

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**Tillman Road (SC 336) & Tarboro Road (SC 27-22) eastbound**



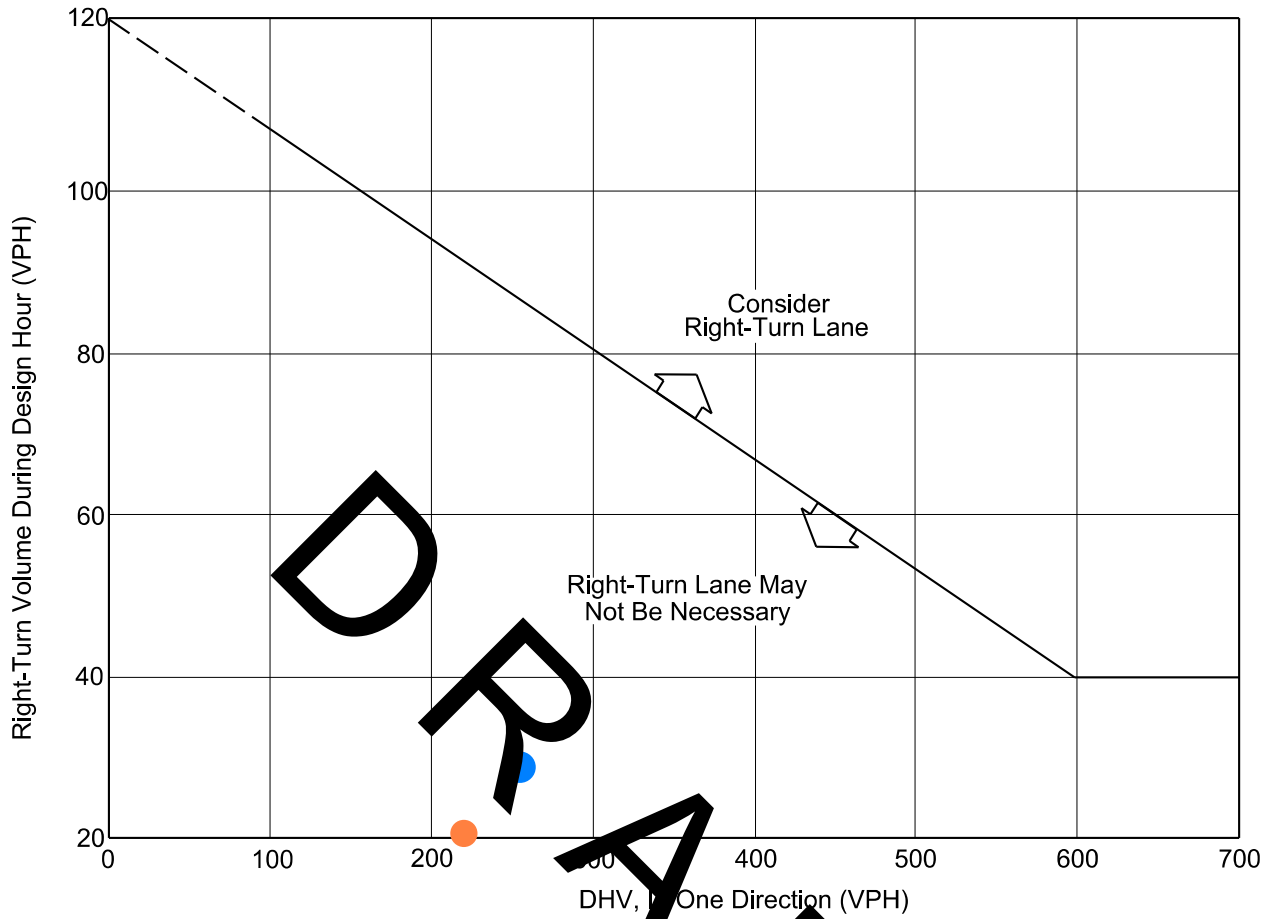
*Instructions:*

1. The family of curves represents the percent of left turns in the advancing volume ( $V_A$ ). The designer should locate the curve for the actual percentage of left turns. When this is not an even increment of 5, the designer should estimate where the curve lies.
2. Read  $V_A$  and  $V_O$  into the chart and locate the intersection of the two volumes.
3. Note the location of the point in #2 relative to the line in #1. If the point is to the right of the line, then a left-turn lane is warranted. If the point is to the left of the line, then a left-turn lane is not warranted based on traffic volumes.

**VOLUME GUIDELINES FOR LEFT-TURN LANES AT UNSIGNALIZED INTERSECTIONS ON TWO-LANE HIGHWAYS (55 mph)**

**Figure 9.5-D**

**Tillman Road (SC 336) & Tarboro Road (SC 27-22) eastbound**



Note: For highways with a design speed below 50 miles per hour with a DHV < 300 and where right turns > 40, an adjustment should be used. To read the vertical axis of the chart, subtract 20 from the actual number of right turns.

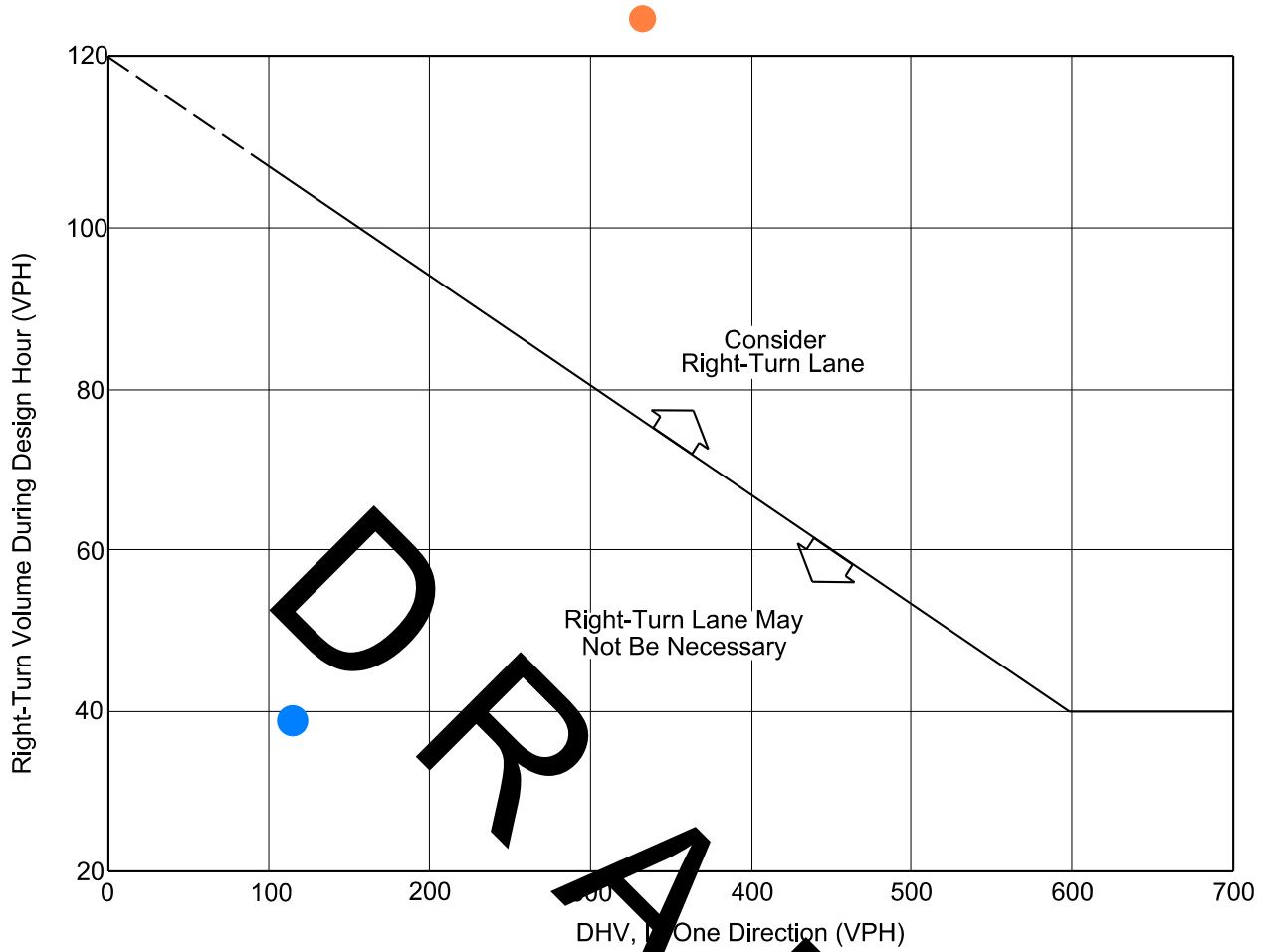
AM:  
 Speed = 55  
 DHV = 258  
 $V_R = 29$

PM:  
 Speed = 55  
 DHV = 204  
 $V_R = 20$

**GUIDELINES FOR RIGHT-TURN LANES AT UNSIGNALIZED INTERSECTIONS  
 ON TWO-LANE HIGHWAYS**

Figure 9.5-A

Tillman Road (SC 336) & Tarboro Road (SC 27-22) westbound



Note: For highways with a design speed below 50 miles per hour with a DHV < 300 and where right turns > 40, an adjustment should be used. To read the vertical axis of the chart, subtract 20 from the actual number of right turns.

AM:  
 Speed = 55  
 DHV = 107  
 $V_R = 39$

PM:  
 Speed = 55  
 DHV = 319  
 $V_R = 135$

**GUIDELINES FOR RIGHT-TURN LANES AT UNSIGNALIZED INTERSECTIONS  
 ON TWO-LANE HIGHWAYS**

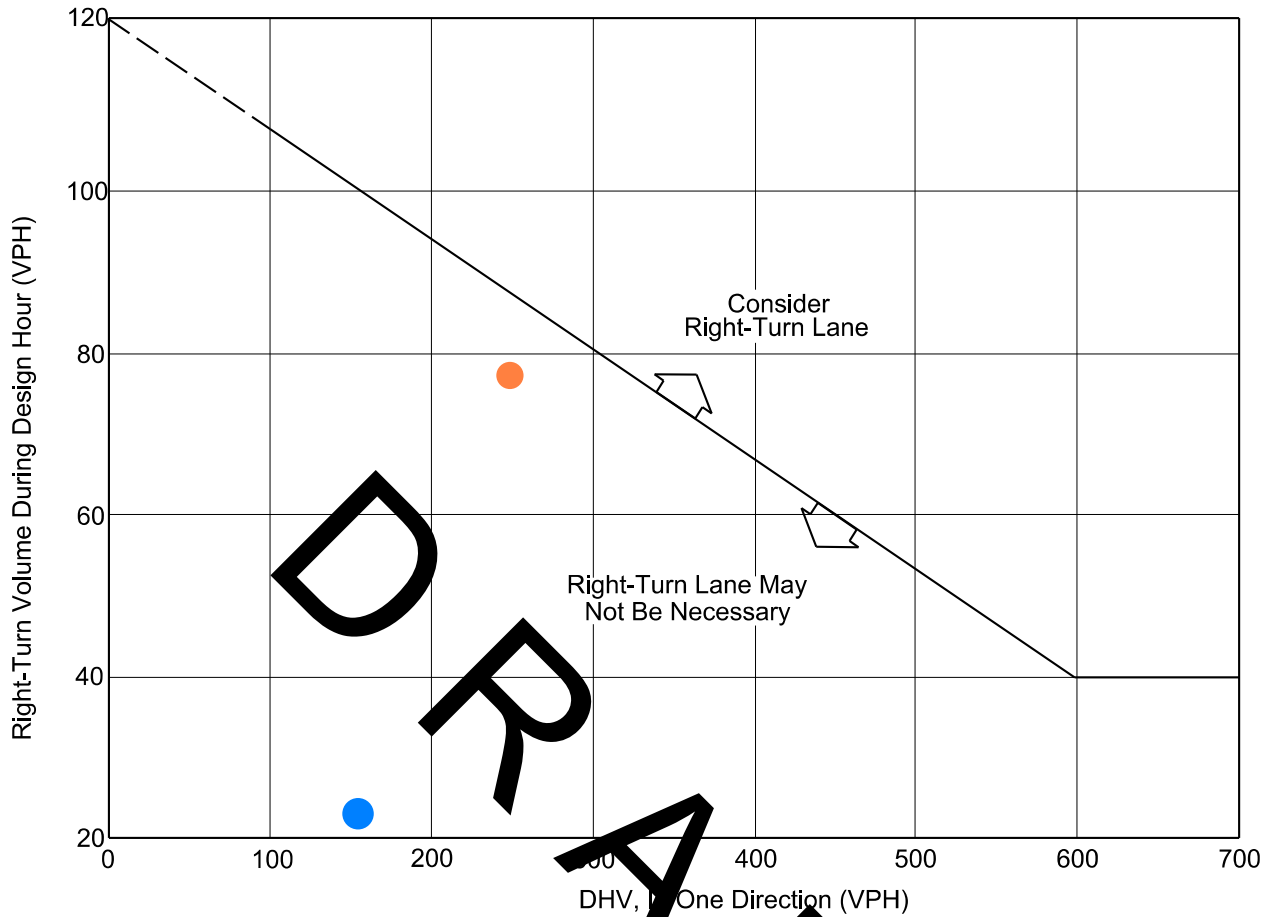
Figure 9.5-A

Tillman Road (SC 336) &  
Nimmer Turf Road

DRAFT



**Tillman Road (SC 336) & Nimmer Turf Road westbound**



Note: For highways with a design speed below 50 miles per hour with a DHV < 300 and where right turns > 40, an adjustment should be used. To read the vertical axis of the chart, subtract 20 from the actual number of right turns.

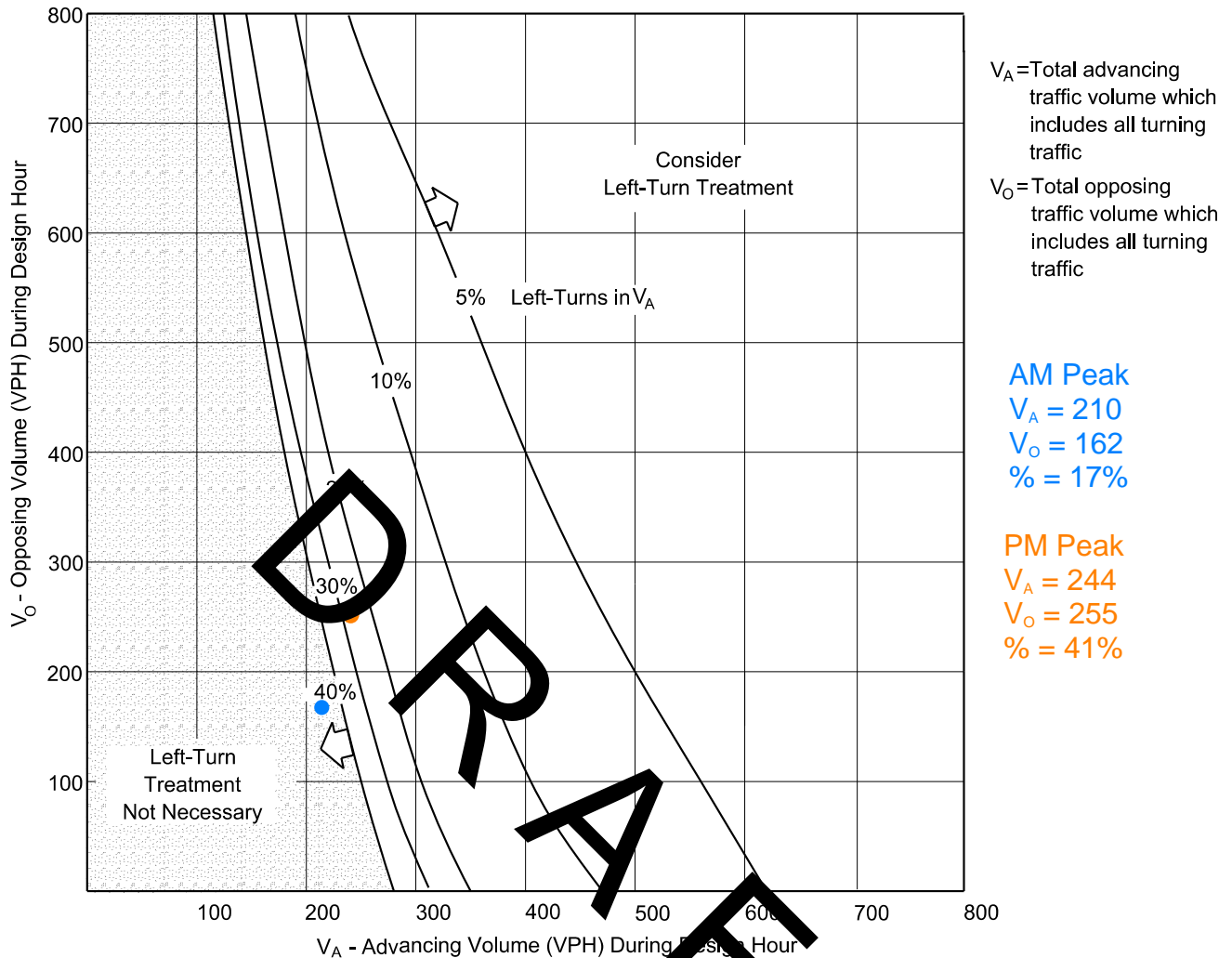
AM:  
 Speed = 55  
 DHV = 162  
 $V_R = 24$

PM:  
 Speed = 55  
 DHV = 255  
 $V_R = 78$

**GUIDELINES FOR RIGHT-TURN LANES AT UNSIGNALIZED INTERSECTIONS  
 ON TWO-LANE HIGHWAYS**

Figure 9.5-A

**Tillman Road (SC 336) & Nimmer Turf Road eastbound**



*Instructions:*

1. *The family of curves represents the percent of left turns in the advancing volume ( $V_A$ ). The designer should locate the curve for the actual percentage of left turns. When this is not an even increment of 5, the designer should estimate where the curve lies.*
2. *Read  $V_A$  and  $V_O$  into the chart and locate the intersection of the two volumes.*
3. *Note the location of the point in #2 relative to the line in #1. If the point is to the right of the line, then a left-turn lane is warranted. If the point is to the left of the line, then a left-turn lane is not warranted based on traffic volumes.*

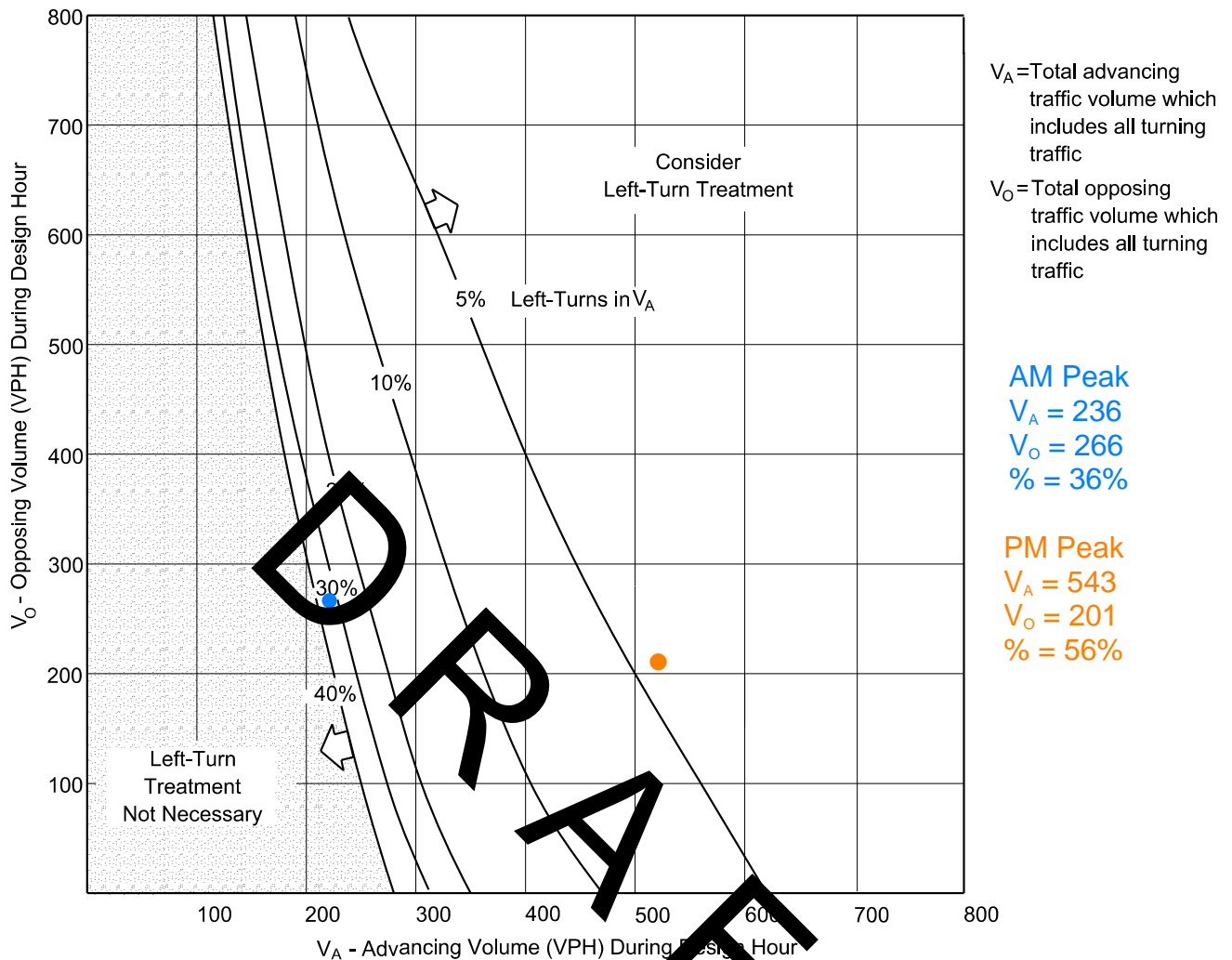
**VOLUME GUIDELINES FOR LEFT-TURN LANES AT UNSIGNALIZED INTERSECTIONS ON TWO-LANE HIGHWAYS (55 mph)**

**Figure 9.5-D**

Tarboro Road (SC 27-22) &  
Access 1

D  
R  
A  
F  
T

**Tarboro Road (SC 27-22) & Access 1 northbound**



*Instructions:*

1. The family of curves represents the percent of left turns in the advancing volume ( $V_A$ ). The designer should locate the curve for the actual percentage of left turns. When this is not an even increment of 5, the designer should estimate where the curve lies.
2. Read  $V_A$  and  $V_O$  into the chart and locate the intersection of the two volumes.
3. Note the location of the point in #2 relative to the line in #1. If the point is to the right of the line, then a left-turn lane is warranted. If the point is to the left of the line, then a left-turn lane is not warranted based on traffic volumes.

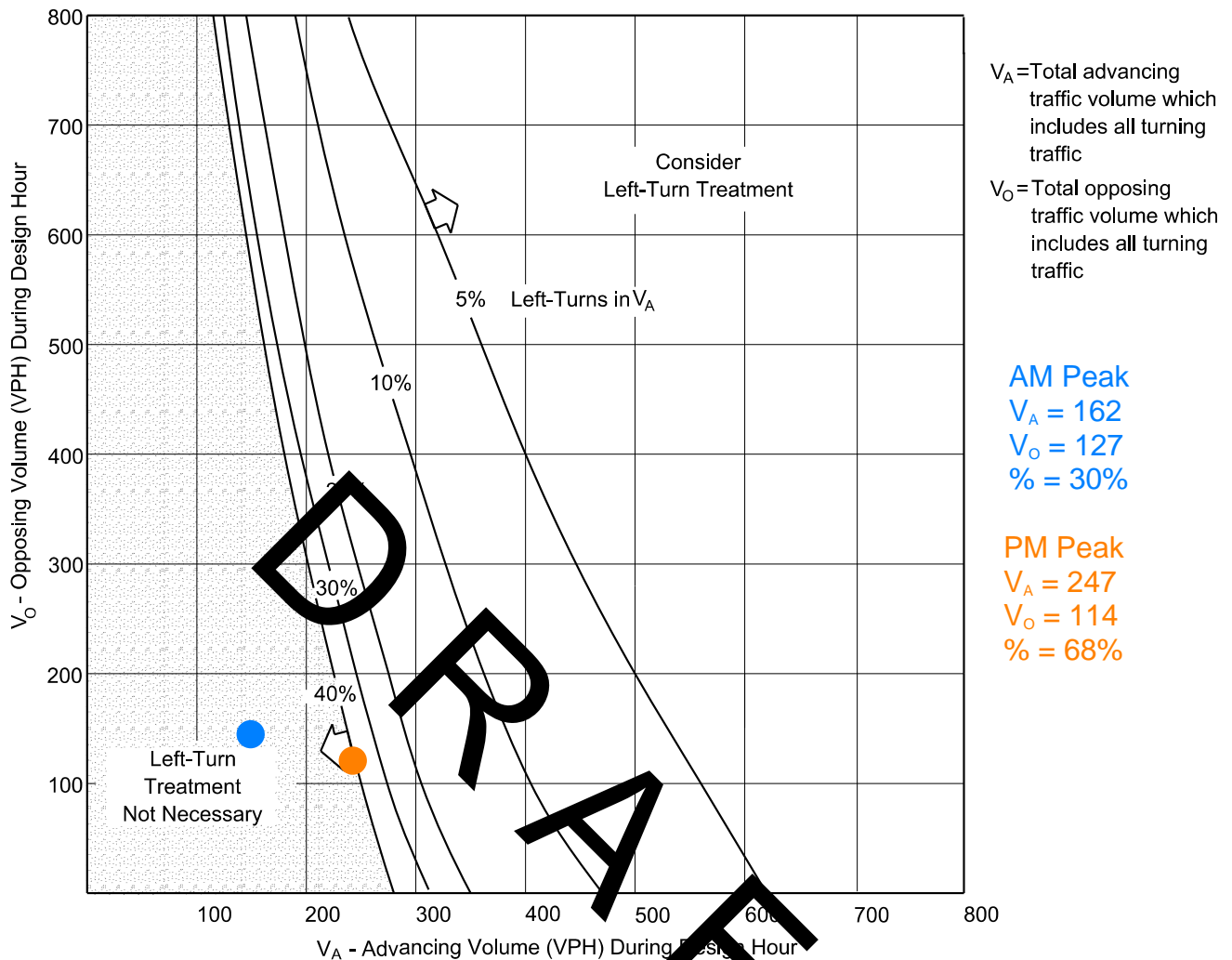
**VOLUME GUIDELINES FOR LEFT-TURN LANES AT UNSIGNALIZED INTERSECTIONS ON TWO-LANE HIGHWAYS (55 mph)**

**Figure 9.5-D**

Tarboro Road (SC 27-22) &  
Access 2

D  
R  
A  
F  
T

**Tarboro Road (SC 27-22) & Access 2 northbound**



*Instructions:*

1. The family of curves represents the percent of left turns in the advancing volume ( $V_A$ ). The designer should locate the curve for the actual percentage of left turns. When this is not an even increment of 5, the designer should estimate where the curve lies.
2. Read  $V_A$  and  $V_O$  into the chart and locate the intersection of the two volumes.
3. Note the location of the point in #2 relative to the line in #1. If the point is to the right of the line, then a left-turn lane is warranted. If the point is to the left of the line, then a left-turn lane is not warranted based on traffic volumes.

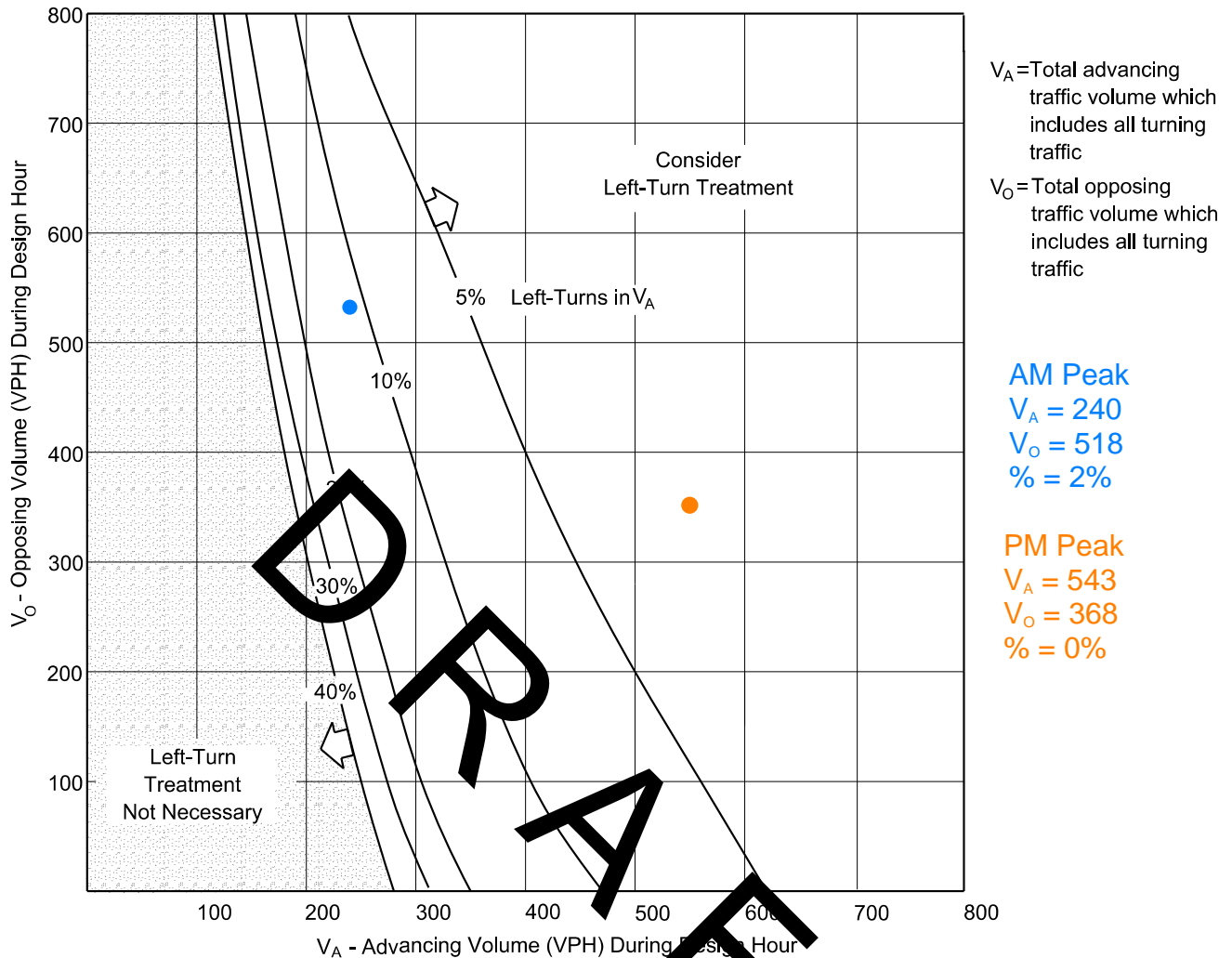
**VOLUME GUIDELINES FOR LEFT-TURN LANES AT UNSIGNALIZED INTERSECTIONS ON TWO-LANE HIGHWAYS (55 mph)**

**Figure 9.5-D**

Tarboro Road (SC 27-22) &  
Fire Station Access

DRAFT

**Tarboro Road (SC 27-22) & Fire Station Access northbound**



*Instructions:*

1. The family of curves represents the percent of left turns in the advancing volume ( $V_A$ ). The designer should locate the curve for the actual percentage of left turns. When this is not an even increment of 5, the designer should estimate where the curve lies.
2. Read  $V_A$  and  $V_O$  into the chart and locate the intersection of the two volumes.
3. Note the location of the point in #2 relative to the line in #1. If the point is to the right of the line, then a left-turn lane is warranted. If the point is to the left of the line, then a left-turn lane is not warranted based on traffic volumes.

**VOLUME GUIDELINES FOR LEFT-TURN LANES AT UNSIGNALIZED INTERSECTIONS ON TWO-LANE HIGHWAYS (55 mph)**

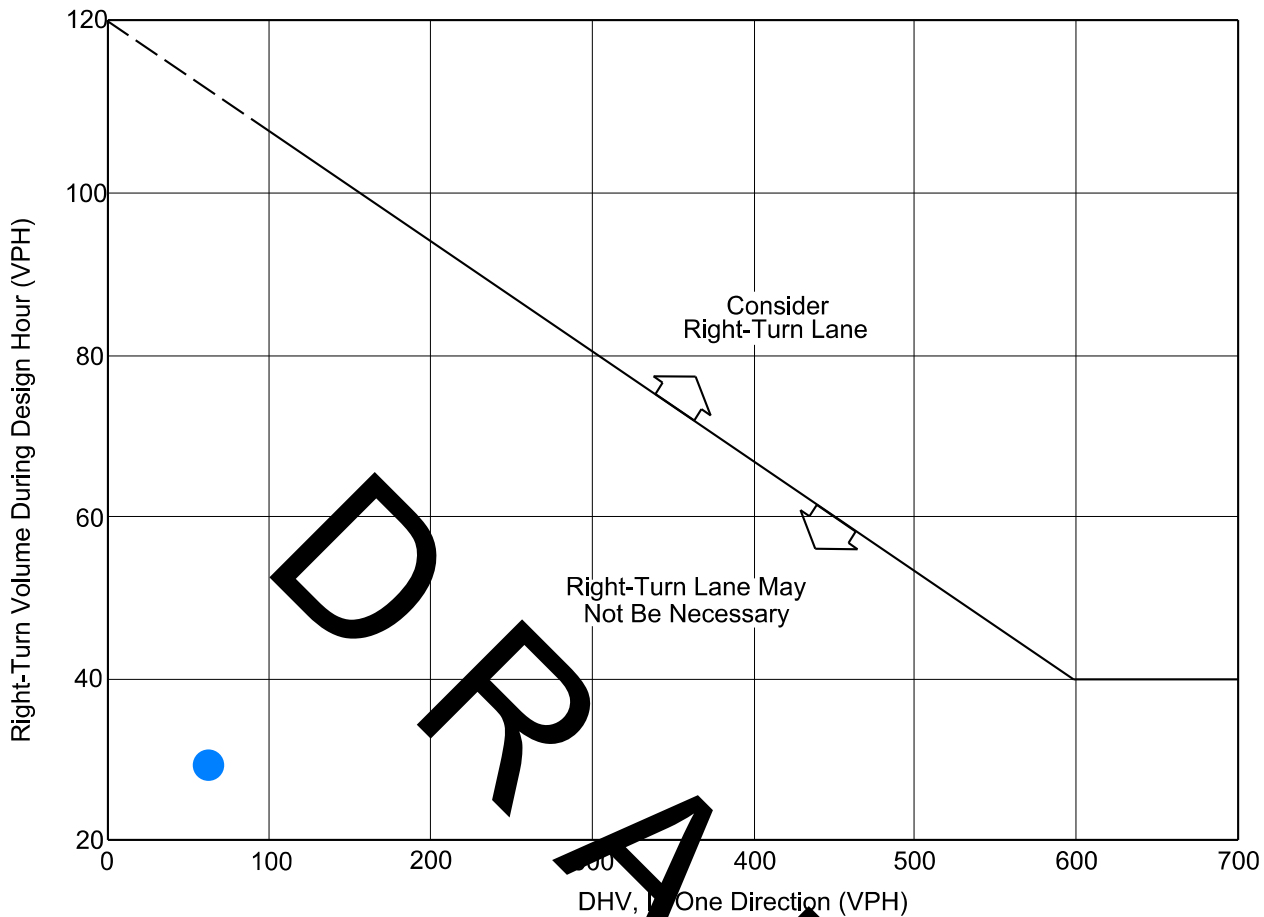
**Figure 9.5-D**



Nimmer Turf Road &  
Access 3

D  
R  
A  
F  
T

**Nimmer Turf Road & Access 3 northbound**



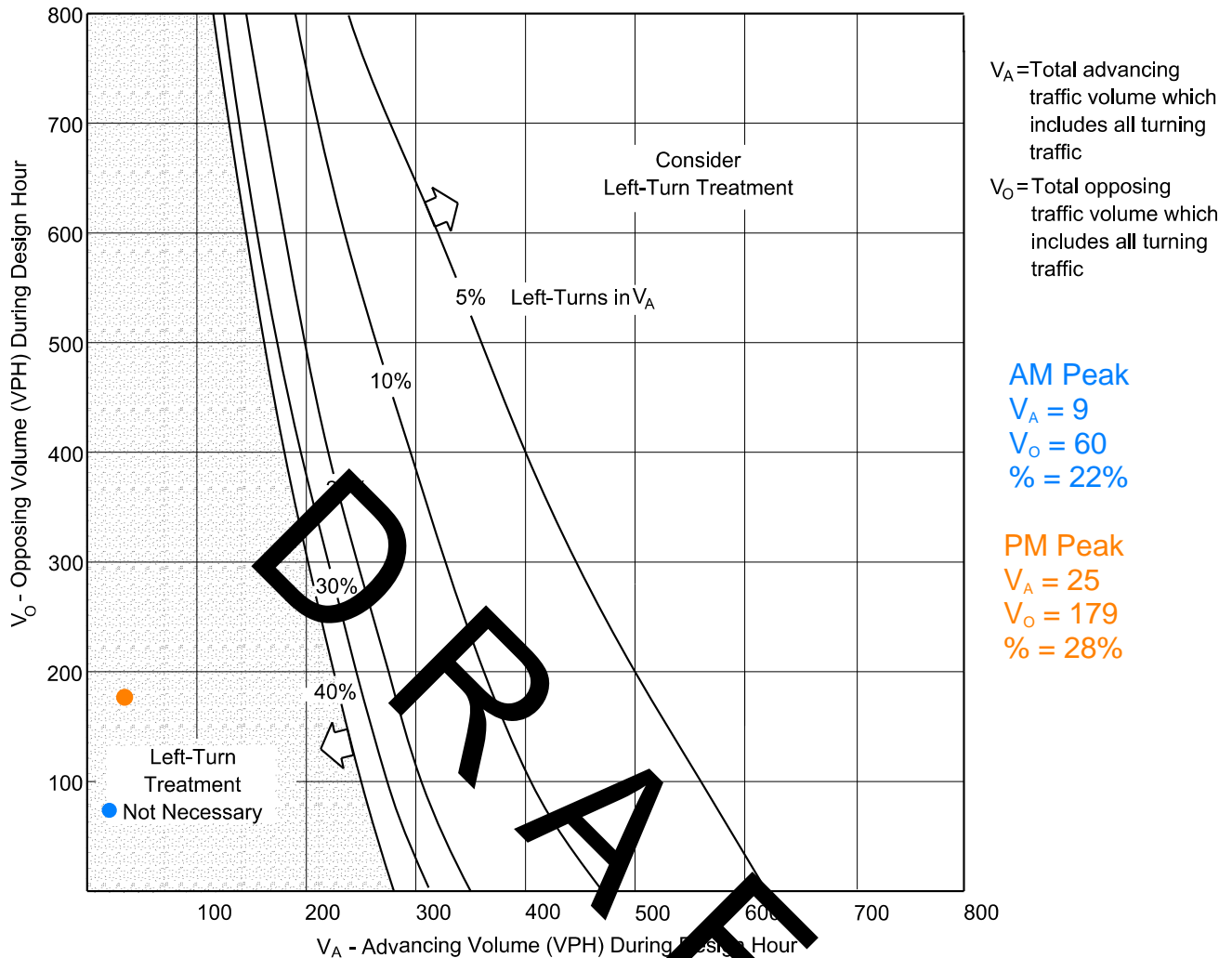
Note: For highways with a design speed below 50 miles per hour with a DHV < 300 and where right turns > 40, an adjustment should be used. To read the vertical axis of the chart, subtract 20 from the actual number of right turns.

AM:  
 Speed = 25  
 DHV = 60  
 $V_R = 48 - 20 = 29$

PM:  
 Speed = 25  
 DHV = 179  
 $V_R = 168 - 20 = 149$

**GUIDELINES FOR RIGHT-TURN LANES AT UNSIGNALIZED INTERSECTIONS ON TWO-LANE HIGHWAYS**  
 Figure 9.5-A

**Nimmer Turf Road & Access 3 southbound**

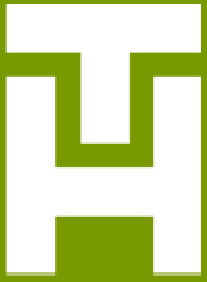


*Instructions:*

1. The family of curves represents the percent of left turns in the advancing volume ( $V_A$ ). The designer should locate the curve for the actual percentage of left turns. When this is not an even increment of 5, the designer should estimate where the curve lies.
2. Read  $V_A$  and  $V_O$  into the chart and locate the intersection of the two volumes.
3. Note the location of the point in #2 relative to the line in #1. If the point is to the right of the line, then a left-turn lane is warranted. If the point is to the left of the line, then a left-turn lane is not warranted based on traffic volumes.

**VOLUME GUIDELINES FOR LEFT-TURN LANES AT UNSIGNALIZED INTERSECTIONS ON TWO-LANE HIGHWAYS (55 mph)**

**Figure 9.5-D**



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**TRAFFIC IMPACT ANALYSIS**  
NIMMER TRACT

**APPENDIX I**  
SIGNAL WARRANT ANALYSIS

J – 30596.0000

January 2024

# Signal Warrant Analysis

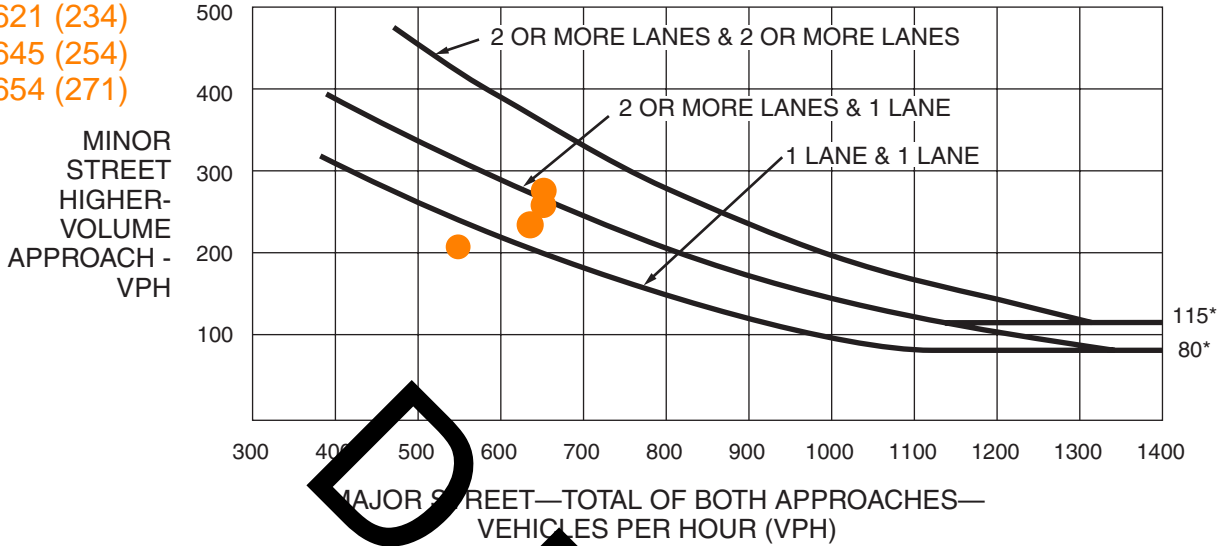
## Tarboro Road (SC 27-22) Tillman Road (SC 336)

Time	NB Volumes Tarboro Road (SC 27-22)	SB Volumes Tarboro Road (SC 27-22)	Major Street Volume Tarboro Road (SC 27-22)	Minor Street Volume Tillman Road (SC 336)	Warrant 1 (8-hour volumes) Condition A or B 70% Volume Thresholds		Warrant 1 (8-hour volumes) Condition A or B 100% Volume Thresholds	
					Condition A	Condition B	Condition A	Condition B
					major>350 and minor>105	major>525 and minor>53	major>500 and minor>150	major>750 and minor>75
6-7 AM	103	147	250	93	NO	NO	NO	NO
7-8 AM	207	366	573	146	YES	YES	NO	NO
8-9 AM	140	258	398	137	YES	NO	NO	NO
9-10AM	119	169	288	107	NO	NO	NO	NO
10-11AM	146	209	355	132	YES	NO	NO	NO
11AM-12PM	170	242	412	153	YES	NO	NO	NO
12-1 PM	222	318	540	201	YES	YES	YES	NO
1-2 PM	191	273	464	171	YES	NO	NO	NO
2-3 PM	196	339	535	185	YES	YES	YES	NO
3-4 PM	237	384	621	234	YES	YES	YES	NO
4-5 PM	241	404	645	254	YES	YES	YES	NO
5-6 PM	261	393	654	271	YES	YES	YES	NO
6-7 PM	204	292	496	184	YES	NO	NO	NO
Number of Hours meeting warrants					11		5	0
Hours needed to meet warrant					8	8	8	8
Warrant Met?					YES	NO	NO	NO

\*Build Out  
One Lane Major Street, One Lane Minor Street

PM:  
 12-1 = 540 (201)  
 3-4 = 621 (234)  
 4-5 = 645 (254)  
 5-6 = 654 (271)

Figure 4C-1. Warrant 2, Four-Hour Vehicular Volume

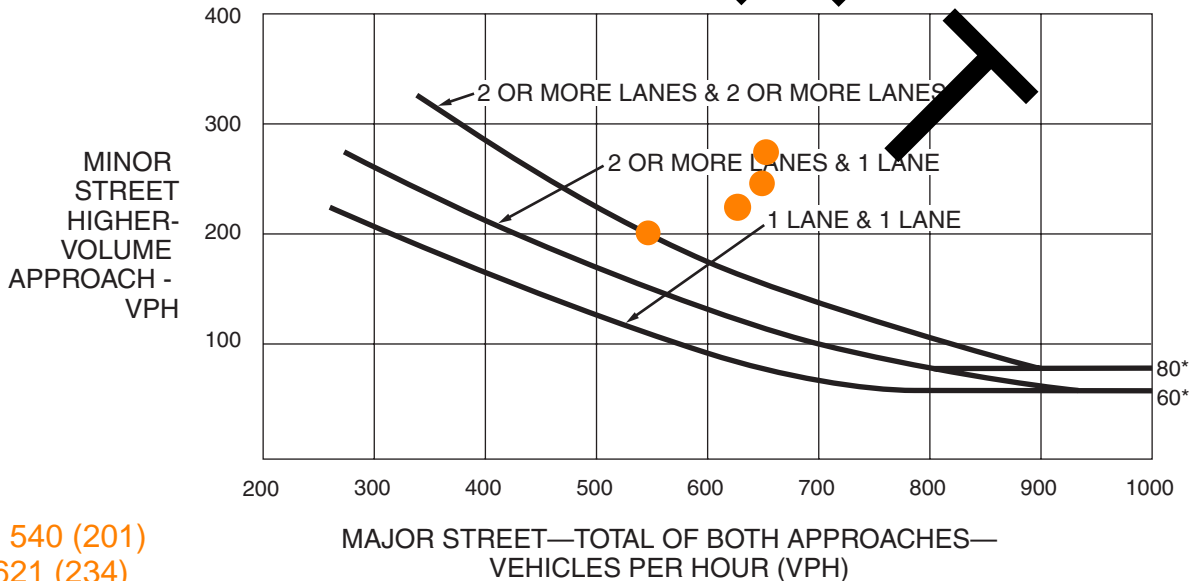


\*Note: 115 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 80 vph applies as the lower threshold volume for a minor-street approach with one lane.

100% Warrant **DOES NOT** meet

Figure 4C-2. Warrant 2, Four-Hour Vehicular Volume (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



\*Note: 80 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 60 vph applies as the lower threshold volume for a minor-street approach with one lane.

70% Warrant is **MET**

PM:  
 12-1 = 540 (201)  
 3-4 = 621 (234)  
 4-5 = 645 (254)  
 5-6 = 654 (271)

# NIMMER SPECIAL DISTRICT

## EXHIBIT E PRELIMINARY PLAT

D  
R  
A  
F  
T

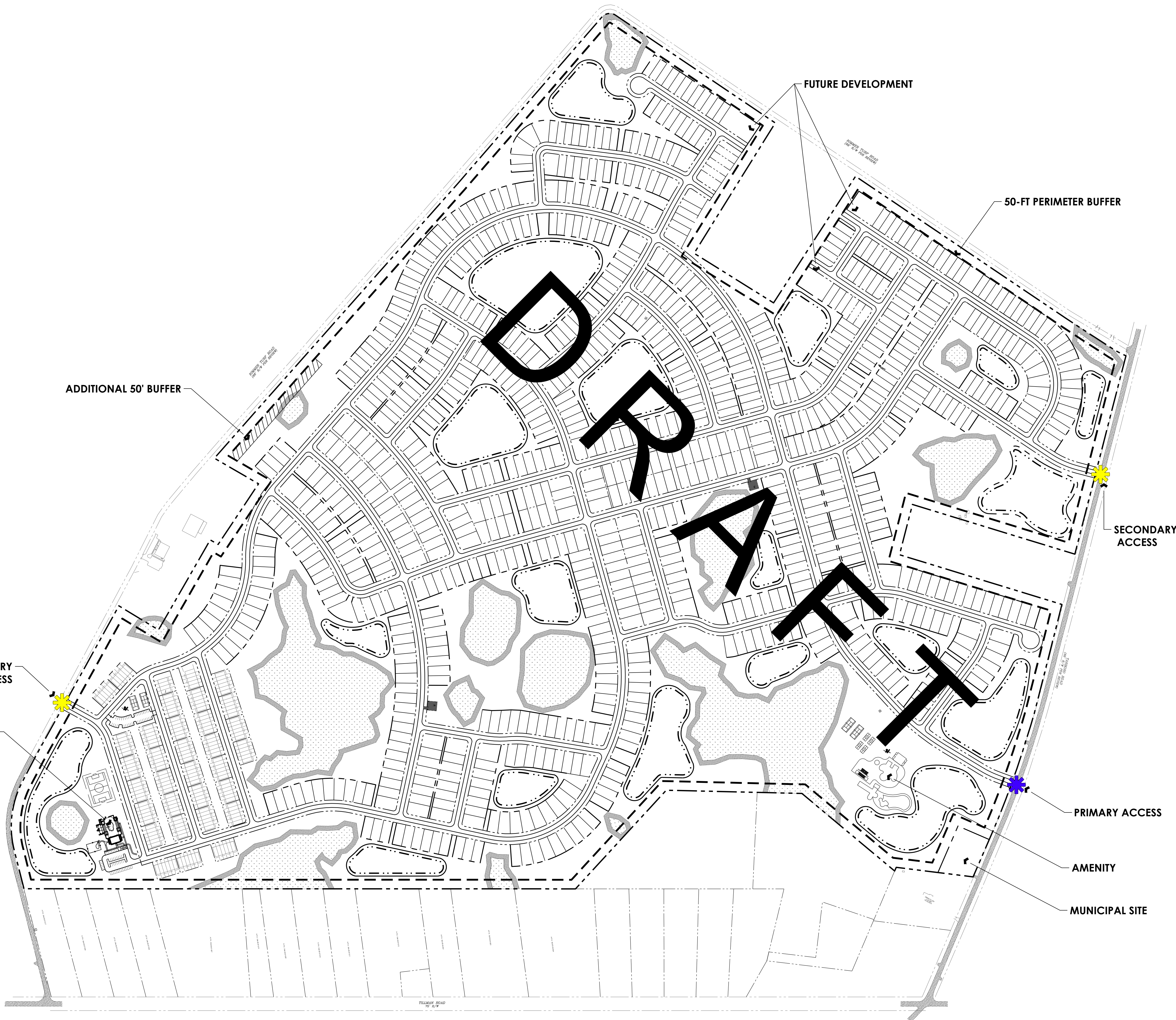
J – 30596.0000

May 2024

# NIMMER TRACT "PRELIMINARY PLAT"

RIDGELAND | JASPER COUNTY | SOUTH CAROLINA

JANUARY 2024



### LEGEND

- PDD BUFFER
- PROPERTY LINE
- COMMUNITY ACCESS POINT

### SITE DATA

TOTAL ACEAGE	±403 ACRES
WETLAND	±35 ACRES
WETLAND BUFFER	±11 ACRES
LAGOONS	±37 ACRES
UPLAND	±321 ACRES

### LOT COUNT

42' WIDE LOTS	301
42' WIDE LOTS (COTTAGES)	171
52' WIDE LOTS	501
TOWN HOMES	195
<b>TOTAL LOTS</b>	<b>1,168</b>

SECONDARY ACCESS

AMENITY

ADDITIONAL 50' BUFFER

FUTURE DEVELOPMENT

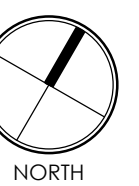
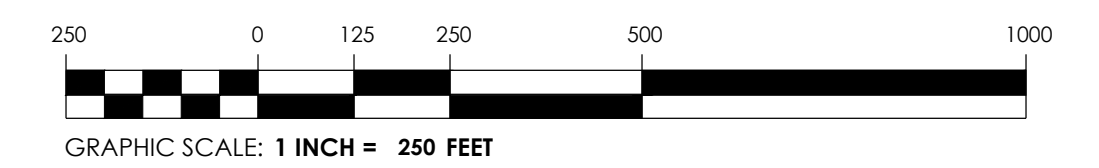
50-FT PERIMETER BUFFER

SECONDARY ACCESS

PRIMARY ACCESS

AMENITY

MUNICIPAL SITE



50 Park of Commerce Way  
Savannah, GA 31405 • 912.234.5300

[www.thomasandhutton.com](http://www.thomasandhutton.com)

This map illustrates a general plan of the development which is for discussion purposes only, does not limit or bind the owner/developer, and is subject to change and revision without prior written notice to the holder. Dimensions, boundaries and position locations are for illustrative purposes only and are subject to an accurate survey and property description.

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