- APPLICANT:

OWNER(S):

SMITHBILT HOMES
Josh Sanderson Smithbilt Homes

TAX ID NUMBER:
JURISDICTION:
STREET ADDRESS:

- LOCATION:
- TRACT INFORMATION:

SECTOR PLAN:
GROWTH POLICY PLAN:
ACCESSIBILITY:

UTILITIES:

WATERSHED:

2200514
Commission District 8
6701 ROBERTS RD
West side of Roberts Rd, north of Washington Pike
74.73 acres.

Northeast County
Rural Area
Access is via Roberts Rd, a major collector street with a pavement width of 20 ft within a 50-ft right-of-way.
Water Source: Northeast Knox Utility District
Sewer Source: Knoxville Utilities Board
Flat Creek

- PRESENT PLAN DESIGNATION/ZONING:
- PROPOSED PLAN DESIGNATION/ZONING:
- EXISTING LAND USE:


## - DENSITY PROPOSED:

EXTENSION OF PLAN DESIGNATION/ZONING:
HISTORY OF ZONING REQUESTS:
SURROUNDING LAND USE, PLAN DESIGNATION, ZONING

## AG (Agricultural) / A (Agricultural)

## LDR (Low Density Residential) / PR (Planned Residential)

## Agriculture/Forestry/Vacant Land

## 3 du/ac

Yes, this is a minor extension of the PR zone from the south. However, this is not an extension of the LDR plan designation.
None noted.

North: Agriculture/forestry/vacant land - AG (Agricultural) - A (Agricultural)
South: Single family residential, agriculture/forestry/vacant land - AG
(Agricultural) - PR (Planned Residential) up to 3 du/ac, A (Agricultural)
East: Agriculture/forestry/vacant land - AG (Agricultural) - A (Agricultural)
West: Public/quasi public land (TVA power station) - AG (Agricultural) - A (Agricultural)
NEIGHBORHOOD CONTEXT: The area is primarily characterized by farmlands and rural residential uses. There is a single-family subdivision south of the property and a TVA power
station to the west. The property is approximately 0.35 miles north of a minor commercial node at the intersection of Roberts Road and Washington Pike.

## STAFF RECOMMENDATION:

## * Deny the LDR (Low Density Residential) land use classifications because it would be out of character with the surrounding agricultural and rural residential area.

- Approve the PR (Planned Residential) zone, up to 1 du/ac, because it will be consistent with the surrounding development and a minor extension of the zone.


## COMMENTS:

SECTOR PLAN AMENDMENT REQUIREMENTS FROM GENERAL PLAN (May meet one of these):
CHANGES OF CONDITIONS WARRANTING AMENDMENT OF THE LAND USE PLAN:

1. There have been no recent changes in the area that warrant an amendment to the sector plan.
2. There are no other properties in the vicinity with the LDR classification. The requested land use will be out of character with the surrounding area which has the AG (Agricultural) classification.

## INTRODUCTION OF SIGNIFICANT NEW ROADS OR UTILITIES THAT WERE NOT ANTICIPATED IN THE PLAN AND MAKE DEVELOPMENT MORE FEASIBLE: <br> 1. No new roads or additional utilities have been introduced in this area.

AN OBVIOUS OR SIGNIFICANT ERROR OR OMISSION IN THE PLAN:

1. There are no apparent errors or omissions in the sector plan with regards to the requested LDR classification here.
2. The adjacent residential development to the south, Mari-Ben Acres Subdivision, was approved for a sector plan amendment from AG/RR to LDR in 2002 (3-A-02-SP), though Planning staff had recommended denial. That property was reclassified as AG in a later sector plan update.
3. If a sector plan amendment were to be approved, staff recommends approval of the RR (Rural Residential) land use classification since this would be supported by the Growth Policy Plan. However, the Northeast County Sector Plan recommends a density of 1 du/ac for the RR classification, so an amendment to the RR classification will not grant any higher density than the present AG classification.

TRENDS IN DEVELOPMENT, POPULATION OR TRAFFIC THAT WARRANT RECONSIDERATION OF THE ORIGINAL PLAN PROPOSAL:

1. The area is mostly characterized by farmlands and rural residential uses. Over the last 20 years, several agricultural/vacant lands have been transformed into low density residential uses. However, those developments have been consistent with the current AG classification and the development pattern does not warrant reconsideration of the sector plan to the LDR land use classification.

## OTHER CONSIDERATIONS:

1. The requested LDR classification is not compatible with the property's location within the Rural Area boundary of the Growth Policy Plan.
2. An amendment to either of the LDR or RR classification could be considered a 'spot' amendment for this location. If a sector plan amendment is contemplated in this vicinity, a larger area should be considered.

State law regarding amendments of the general plan (which includes Sector Plan amendments) was changed with passage of Public Chapter 1150 by the Tennessee Legislature in 2008. The law now provides for two methods to amend the plan at TCA 13-3-304:

- The Planning Commission may initiate an amendment by adopting a resolution and certifying the amendment to the Legislative Body. Once approved by majority vote of the Legislative Body, the amendment is operative.
- The Legislative Body may also initiate an amendment and transmit the amendment to the Planning Commission. Once the Planning Commission has considered the proposed amendment and approved, not approved, or taken no action, the Legislative Body may approve the amendment by majority vote and the amendment is operative.

PURSUANT TO THE KNOX COUNTY ZONING ORDINANCE, ARTICLE 6.30.01: THE FOLLOWING CONDITIONS MUST BE MET FOR ALL REZONINGS (must meet all of these):

THE PROPOSED AMENDMENT SHALL BE NECESSARY BECAUSE OF SUBSTANTIALLY CHANGED OR CHANGING CONDITIONS IN THE AREA AND DISTRICTS AFFECTED, OR IN THE COUNTY GENERALLY: 1. The area has experienced relatively slow growth over the last 20 years, with several agricultural/vacant lands transforming into low density residential uses. Nonetheless, the proposed rezoning will be a minor extension of the zone and the recommended density will be consistent with the surrounding area.

## THE PROPOSED AMENDMENT SHALL BE CONSISTENT WITH THE INTENT AND PURPOSE OF THE APPLICABLE ZONING ORDINANCE:

1. The PR zone is intended to provide flexibility for different types of residential development.
2. Houses, duplexes, and multi-dwelling structures and developments are permitted in the PR zone along with some nonresidential uses. At the recommended density of 1 du/ac, a maximum of 74 dwelling units could be built. This is consistent with the minimum lot size requirement of the current Agricultural zone as well (1 acre for each house).
3. Rezonings should be based on the entire range of uses allowed within a zone to ensure that any development brought forth at a future time would be compatible with the surrounding land uses.

THE PROPOSED AMENDMENT SHALL NOT ADVERSELY AFFECT ANY OTHER PART OF THE COUNTY, NOR SHALL ANY DIRECT OR INDIRECT ADVERSE EFFECTS RESULT FROM SUCH AMENDMENT.

1. The proposed rezoning at the recommended density of 1 du/ac will be compatible with the surrounding rural residential and single family residential developments.
2. Any development under the PR zone would be subject to a Development Plan approval by the Planning Commission to ensure that the development does not have any significant adverse effects.
3. The existing pond on the property appears to be waters of the state which could be subject to Knox County Stormwater Ordinance regulations during the Development Plan phase.

## THE PROPOSED AMENDMENT SHALL BE CONSISTENT WITH AND NOT IN CONFLICT WITH THE GENERAL PLAN OF KNOXVILLE AND KNOX COUNTY, INCLUDING ANY OF ITS ELEMENTS, MAJOR ROAD PLAN, LAND USE PLAN, COMMUNITY FACILITIES PLAN, AND OTHERS: <br> 1. The proposed PR zone is consistent with the subject property's location in the Rural Area of The Growth Policy Plan. <br> 2. The recommended density of 1 du/ac are consistent with the AG land use classification of the sector plan. 3. The proposed rezoning is consistent with the General Plan's development policy 9.3 that encourages new development to be compatible with existing neighborhoods and communities.

ESTIMATED TRAFFIC IMPACT: 2119 (average daily vehicle trips)
Average Daily Vehicle Trips are computed using national average trip rates reported in the latest edition of "Trip Generation," published by the Institute of Transportation Engineers. Average Daily Vehicle Trips represent the total number of trips that a particular land use can be expected to generate during a 24 -hour day (Monday through Friday), with a "trip" counted each time a vehicle enters or exits a proposed development.

ESTIMATED STUDENT YIELD: 95 (public school children, grades K-12)
Schools affected by this proposal: Corryton Elementary, Gibbs Middle, and Gibbs High.

- Potential new school population is estimated using locally-derived data on public school student yield generated by new housing.
- Students are assigned to schools based on current attendance zones as determined by Knox County

Schools. Students may request transfers to different zones, and zone boundaries are subject to change.

- Estimates presume full build-out of the proposed development. Build-out is subject to market forces, and timing varies widely from proposal to proposal.
- Student yields from new development do not reflect a net addition of children in schools. Additions occur incrementally over the build-out period. New students may replace current population that ages through the system or moves from the attendance zone.

If approved, this item will be forwarded to Knox County Commission for action on $3 / 25 / 2024$. If denied, Knoxville-Knox County Planning Commission's action is final, unless the action to deny is appealed to Knox County Commission. The date of the appeal hearing will depend on when the appeal application is filed. Appellants have 30 days to appeal a Planning Commission decision in the County.



Exhibit A. Contextual Images




```
Mr. Josh Sanderson
Smithbilt Homes
4 9 0 7 \text { Ball Road}
Knoxville, Tennessee 37931
```


## RE: Traffic Impact Letter - Roberts Road Residential (Mari Ben Subdivision) <br> Parcel ID \#022 00514 <br> Knox County, Tennessee

Dear Mr. Sanderson:
Cannon \& Cannon, Inc is pleased to provide a preliminary impact assessment for the proposed rezoning of a parcel adjacent to the existing Mari Ben Subdivision located in the Corryton community of Knox County, Tennessee. Discussions with Knoxville-Knox County Planning determined a Traffic Impact Letter (TIL) is required due to rezoning within the "Rural Area" portion of Knox County according to the Growth Policy Plan. The intent of this TIL is to determine the adequacy of the adjacent roadway network and evaluate anticipated traffic conditions for this development.

Please do not hesitate to contact us with any questions you may have or if you require additional information.

Sincerely,
Cannon \& Cannon, Inc.
Wesley Stokes
Wesley Stokes, P.E.
Project Manager


\section*{(F. CANNON \& CANNON INC <br> ${ }^{\text {ra }}$ 8.85.677.8555 <br> | 10025 Investment Drive |
| :--- | :--- |
| Suite 120 |
| Knoxville, TN 37932 |}

## Project Description and Site Location

The parcel under consideration for rezoning is currently zoned as Agricultural land use and is proposed to be rezoned to Rural Residential. The parcel has a recorded deeded acreage of 74.73 acres. Under existing Agricultural zoning, 1 unit per acre is allowed to be developed. A proposed rezoning to Rural Residential would allow up to 3 dwelling units per acre.

Although a site plan is not yet available for this proposed project, developer representatives have indicated that access to the project will occur via tying into an existing stub-out within the Mari Ben Subdivision and an additional full movement access onto Roberts Road north of Mari Ben Lane. FIGURE 1 is a Site Location Map that shows the proposed project site in relation to major roadways in the area.


FIGURE 1 - SITE LOCATION MAP

## Existing Roadway Conditions

Roberts Road is a two-lane marked roadway that extends from Emory Road (TN-331) to Rutledge Pike (US-11W). Within the vicinity of the proposed development, Roberts Road is classified as a Major Collector according to the Knox County Major Road Plan. The roadway width varies between 20 and 21 feet in the study vicinity with a posted speed limit of 40 mph and no curb and gutter.

Emory Road (SR 331) and Washington Pike are two-lane marked roadways within the vicinity of the proposed development. Emory Road (SR 331) Road is classified as a Major Arterial and Washington Pike is classified as a Minor Arterial according to the Knox County Major Road Plan. The roadway widths vary between 20 and 22 feet in the study vicinity and have posted speed limits of 45 mph and no curb and gutter.

## C. CANNON \& CANNON inc <br> 

## Existing Traffic Data

Two types of existing traffic data were gathered for this study - annual average daily traffic (AADT) and turning movement counts. The Tennessee Department of Transportation (TDOT) collects annual average daily traffic (AADT) data on roadways in the study area. Three count stations were found near the project site that were felt to have relevance for this study. The most currently available data from this station is contained in Table 1.

TABLE 1: ANNUAL AVERAGE DAILY TRAFFIC COUNT SUMMARY

| COUNT YEAR | ```TDOT COUNT STATION 4 7 0 0 0 5 6 6 ROBERTS ROAD NORTH OF SITE``` | ```TDOT COUNT STATION 47000011 SR331 - EMORY ROAD NORTH OF SITE``` | ```TDOT COUNT STATION 47000018 WASHINGTON PIKE SOUTH OF SITE``` |
| :---: | :---: | :---: | :---: |
| 2018 | 2,575 | 2,773 | 3,731 |
| 2019 | 2,397 | 2,520 | 3,812 |
| 2020 | 2,129 | 2,724 | 3,637 |
| 2021 | 2,391 | 1,972 | 3,456 |
| 2022 | 2,573 | 2,239 | 3,484 |

In addition to the available AADT data, intersection turning movement traffic counts were collected at the intersections of Roberts Road at Emory Road (SR 331), Mari Ben Lane at Roberts Road, and Roberts Road at Washington Pike on November 29, 2023. The count summary sheets are contained in the attached Supplemental Information.

## Existing Average Daily Traffic Capacity Analysis

Average Daily Traffic level analysis was performed utilizing Florida Department of Transportation's (FDOT) Multimodal Quality/Level of Service Handbook. The information provided in this handbook provides a generalized level of service analysis for roadways based on AADT volumes. For the purposes of this TIL, the 2022 AADT data was utilized for the analysis. TABLE 2 provides a summary of the existing LOS for the project area roadways based on FDOT's "Table 4-1: Generalized Annual Average Daily Volumes."

TABLE 2: ANNUAL AVERAGE DAILY TRAFFIC - EXISTING ANALYSIS

| ROADWAY <br> NAME | ROADWAY <br> CLASS | AVERAGE DAILY <br> TRAFFIC | NEXT HIGHEST <br> FDOT CAPACITY | LEVEL OF <br> SERVICE |
| :--- | :---: | :---: | :---: | :---: |
| Roberts Road | Major Collector | 2,573 | 7,280 | Better than LOS C |
| Emory Road | Major Arterial | 2,239 | 3,360 | LOS B |
| Washington Pike | Minor Arterial | 3,484 | 7,280 | Better than LOS C |

## Trip Generation Summary

In order to estimate the expected traffic volumes to be generated by the proposed development, the procedures of Trip Generation, $11^{\text {th }}$ Edition (Institute of Transportation Engineers-ITE) were utilized. The generated traffic volumes were determined based on the AM and PM peak hours of adjacent street traffic. A comparison was made between the existing Agricultural land use of 1 dwelling unit / acre and the proposed Rural Residential land use of 3 dwelling units / acre. The difference between the two land uses is shown in TABLE 3.

TABLE 3: TRIP GENERATION SUMMARY

| ITE LAND USE CODE | LAND USE SCENARIO | SIZE | DAILY | AM PEAK HOUR |  |  | PM PEAK HOUR |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Enter | Exit | Total | Enter | Exit | Total |
| 210 | Proposed Zoning | 224 DU | 2,112 | 39 | 118 | 157 | 133 | 78 | 211 |
|  | Existing Zoning | 74 DU | 698 | 13 | 39 | 52 | 44 | 26 | 70 |
| DIFFERENCE |  | 150 DU | 1,414 | 26 | 79 | 105 | 89 | 52 | 141 |

## Build-out Average Daily Traffic Capacity Analysis

In order to evaluate the build-out average daily traffic capacity analysis, the trip generation scenario for the proposed zoning was added to the existing AADT volumes for the surrounding roadway network. Since the proposed development is single-family residential, the anticipated trip distribution from the proposed residential development is believed to have a directional split like that of the existing Mari Ben Subdivision. Based on a review of the turning movement counts performed at the intersection of Mari Ben Lane at Roberts Road, roughly 30\% of the proposed daily traffic will travel north to the intersection of Roberts Road at Emory Road and roughly 70\% of the proposed daily traffic will travel south to the intersection of Roberts Road at Washington Pike. TABLE 4 provides a summary of the build-out LOS for the project area roadways based on FDOT's "Table 4-1: Generalized Annual Average Daily Volumes." (Provided in the Supplemental Information) As can be seen, the increase in traffic associated with the proposed rezoning remains within the same level of service for each of the roadways in the project study area.

TABLE 4: ANNUAL AVERAGE DAILY TRAFFIC - BUILD-OUT ANALYSIS

| ROADWAY <br> NAME | ROADWAY <br> CLASS | AVERAGE DAILY <br> TRAFFIC | NEXT HIGHEST <br> FDOT CAPACITY | LEVEL OF <br> SERVICE |
| :--- | :---: | :---: | :---: | :---: |
| Roberts Road | Major Collector | $2,573+2,112=4,685$ | 7,280 | Better than LOS C |
| Emory Road | Major Arterial | $2,239+634=2,873$ | 3,360 | LOS B |
| Washington Pike | Minor Arterial | $3,484+1,478=4,962$ | 7,280 | Better than LOS C |

[^0]
## Preliminary Turn Lane Assessments

The intersections of Roberts Road at Emory Road and Roberts Road at Washington Pike were preliminarily evaluated for turn lane needs. The intersection turning movement count data was utilized for baseline traffic volumes and the existing directional distribution splits at each intersection were mimicked for proposed traffic volumes utilized in the warrant determination. The resulting turn lane warrant analysis indicates that under existing conditions, neither a left turn lane nor right turn lane are warranted at either studied intersection.

Under build-out conditions, preliminary analysis indicates that right turn lanes will not be warranted during the AM and PM peak hours at either studied intersection. Preliminary analysis indicates that a left turn lane could potentially be warranted at the intersection of Roberts Road at Washington Pike during the PM peak hour. The resulting volumes do not meet the warrant thresholds for the AM peak hour. At the intersection of Roberts Road at Emory Road, the resulting volumes do not meet the left turn lane warrant thresholds for either peak hour.

The turn lane warrant sheets are provided in the Supplemental Information for Existing and Build-out conditions.

## Sight Distance Assessment

As previously mentioned, developer representatives have indicated that an additional full movement access point will be provided onto Roberts Road north of the intersection of Mari Ben Lane at Roberts Road. The exact location of the proposed access is undetermined at the time of preparing this TIL. With a posted speed limit of 40 mph , typical Knox County sight distance requirements indicate 400 feet of sight distance (10x the posted speed limit) will be required for newly created intersections. A desktop review of the property frontage along Roberts Road reveals that 400 feet of sight distance is likely achievable with the existing horizontal and vertical geometry present along Roberts Road. When the site plan for this project is developed, it is recommended to locate the proposed site driveway where sight distance requirements will be able to be met.

## Conclusions and Recommendations

It is concluded from this traffic impact letter that the proposed residential development will not result in any significant traffic operational concerns at the study intersections if the parcel were to be rezoned to Rural Residential at 3 dwelling units / acre. The AADT level of service analysis indicates similar roadway capacity operation between existing and build-out conditions. Additionally, the preliminary turn lane warrant assessment indicates a left turn lane at the intersection of Roberts Road at Washington Pike is potentially warranted during the PM peak hour under build-out conditions.

## © CANNON\&CANNONinc <br> TLL 865.670.8555 <br> 

## SUPPLEMENTAL INFORMATION

Prepared by National Data \& Surveying Services

## Roberts Rd \& Mari Ben Ln

Peak Hour Turning Movement Count

ID: 23-190064-001
City: Corryton


Cars (NOON)


Cars (PM)




| TEV | 303 | 0 | 319 |
| :---: | :---: | :---: | :---: |
| PHF | AM | NOON | PM |
| PHF | 0.90 |  | 0.93 |



Day: Wednesday
Date: 11/29/2023


HT (NOON)


HT (PM)


|  | Roberts Rd Northbound |  |  |  |  |  | Roberts Rd Southbound |  |  |  |  |  | Mari Ben Ln Eastbound |  |  |  |  |  | Mari Ben Ln Westbound |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | Left | Thru | Rgt | Uturn | Peds | App. Total | Left | Thru | Rgt | Uturn\| | Peds | App. Total | Left | Thru | Rgt | Uturn | Peds | App. Total | Left | Thru | Rgt |  | Uturn | Peds | App. T |  | Int. Total |
| 7:00 AM | 0 | 21 | 0 | 0 | 0 | 21 | 0 | 40 | 1 | 0 | 0 | 41 | 2 | 0 | 1 | 0 | 0 | 3 | 0 | 0 |  | 0 | 0 | 0 |  |  | 65 |
| 7:15 AM | 0 | 18 | 0 | 0 | 1 | 18 | 0 | 43 | 0 | 0 | 0 | 43 | 2 | 0 | 9 | 0 | 2 | 11 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 72 |
| 7:30 AM | 2 | 26 | 0 | 0 | 0 | 28 | 0 | 51 | 0 | 0 | 0 | 51 | 1 | 0 | 4 | 0 | 0 | 5 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 84 |
| 7:45 AM | 3 | 34 | 0 | 0 | 0 | 37 | 0 | 43 | 0 | 0 | 0 | 43 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 82 |
| Total | 5 | 99 | 0 | 0 | 1 | 104 | 0 | 177 | 1 | 0 | 0 | 178 | 5 | 0 | 16 | 0 | 2 | 21 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 303 |
| 8:00 AM | 1 | 17 | 0 | 0 | 0 | 18 | 0 | 33 | 1 | 0 | 0 | 34 | 3 | 0 | 4 | 0 | 0 | 7 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 59 |
| 8:15 AM | 0 | 23 | 0 | 0 | 0 | 23 | 0 | 27 | 0 | 0 | 0 | 27 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 51 |
| 8:30 AM | 1 | 16 | 0 | 0 | 0 | 17 | 0 | 24 | 1 | 0 | 0 | 25 | 2 | 0 | 0 | 0 | 0 | 2 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 44 |
| 8:45 AM | 1 | 24 | 0 | 0 | 0 | 25 | 0 | 17 | 1 | 0 | 0 | 18 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 45 |
| Total | 3 | 80 | 0 | 0 | 0 | 83 | 0 | 101 | 3 | 0 | 0 | 104 | 5 | 0 | 7 | 0 | 0 | 12 | 0 | 0 |  | 0 | 0 | 0 |  | 0 | 199 |


| 4:00 PM | 2 | 36 | 0 | 0 | 0 | 38 | 0 | 38 | 1 | 0 | 0 | 39 | 1 | 0 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 79 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4:15 PM | 1 | 50 | 0 | 0 | 0 | 51 | 0 | 23 | 1 | 0 | 0 | 24 | 1 | 0 | 3 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 79 |
| 4:30 PM | 6 | 45 | 0 | 0 | 0 | 51 | 0 | 29 | 2 | 0 | 0 | 31 | 1 | 0 | 3 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 86 |
| 4:45 PM | 3 | 39 | 0 | 0 | 0 | 42 | 0 | 26 | 3 | 0 | 0 | 29 | 1 | 0 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 73 |
| Total | 12 | 170 | 0 | 0 | 0 | 182 | 0 | 116 | 7 | 0 | 0 | 123 | 4 | 0 | 8 | 0 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 317 |
| 5:00 PM | 3 | 48 | 0 | 0 | 0 | 51 | 0 | 24 | 3 | 0 | 0 | 27 | 2 | 0 | 1 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 81 |
| 5:15 PM | 1 | 35 | 0 | 0 | 0 | 36 | 0 | 26 | , | 0 | 0 | 27 | 1 | 0 | 2 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 66 |
| 5:30 PM | 1 | 53 | 0 | 0 | 0 | 54 | 0 | 33 | 0 | 0 | 0 | 33 | 3 | 0 | 2 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 92 |
| 5:45 PM | 3 | 48 | 0 | 0 | 0 | 51 | 0 | 18 | 1 | 0 | 0 | 19 | 2 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 72 |
| Total | 8 | 184 | 0 | 0 | 0 | 192 | 0 | 101 | 5 | 0 | 0 | 106 | 8 | 0 | 5 | 0 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 311 |
| Grand Total | 28 | 533 | 0 | 0 | 1 | 561 | 0 | 495 | 16 | 0 | 0 | 511 | 22 | 0 | 36 | 0 | 2 | 58 | 0 | 0 | 0 | 0 | 0 | 0 | 1130 |
| Apprch \% | 5.0 | 95.0 | 0.0 | 0.0 | 0.2 |  | 0.0 | 96.9 | 3.1 | 0.0 | 0.0 |  | 37.9 | 0.0 | 62.1 | 0.0 | 3.4 |  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |  |  |
| Total \% | 2.5 | 47.2 | 0.0 | 0.0 | 0.1 | 49.6 | 0.0 | 43.8 | 1.4 | 0.0 | 0.0 | 45.2 | 1.9 | 0.0 | 3.2 | 0.0 | 0.2 | 5.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |  |
| Cars, PU, Vans | 27 | 514 | 0 | 0 |  | 541 | 0 | 479 | 15 | 0 |  | 494 | 21 | 0 | 34 | 0 |  | 55 | 0 | 0 | 0 | 0 |  | 0 | 1090 |
| \% Cars, PU, Vans | 96.4 | 96.4 | 0.0 | 0.0 |  | 96.4 | 0.0 | 96.8 | 93.8 | 0.0 |  | 96.7 | 95.5 | 0.0 | 94.4 | 0.0 |  | 94.8 | 0.0 | 0.0 | 0.0 | 0.0 |  | 0.0 | 96.5 |
| Heavy trucks | 1 | 19 | 0 | 0 |  | 20 | 0 | 16 | 1 | 0 |  | 17 |  | 0 | 2 | 0 |  | 3 | 0 | 0 | 0 | 0 |  | 0 | 40 |
| \%Heavy trucks | 3.6 | 3.6 | 0.0 | 0.0 |  | 3.6 | 0.0 | 3.2 | 6.3 | 0.0 |  | 3.3 | 4.5 | 0.0 | 5.6 | 0.0 |  | 5.2 | 0.0 | 0.0 | 0.0 | 0.0 |  | 0.0 | 3.5 |

## PEAK HOURS

## Day: Wednesday

Roberts Rd
Southbound
Mari Ben Ln
Mari Ben Ln

|  | Roberts Rd Northbound |  |  |  |  | Roberts Rd Southbound |  |  |  |  | Mari Ben Ln Eastbound |  |  |  |  | Mari Ben Ln Westbound |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | Left | Thru | Rgt | Uturn | App. Total | Left | Thru | Rgt | Uturn | App. Total | Left | Thru | Rgt | Uturn | App. Total | Left | Thru | Rgt | Uturn | App. Total | Int. Total |
| Peak Hour Analysis from 07:00 AM - 09:00 AM <br> Peak Hour for Entire Intersection Begins at 07:00 AN |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7:00 AM | 0 | 21 | 0 | 0 | 21 | 0 | 40 | 1 | 0 | 41 | 2 | 0 | 1 | 0 | 31 | 0 | 0 | 0 | 0 | 0 | 65 |
| 7:15 AM | 0 | 18 | 0 | 0 | 18 | 0 | 43 | 0 | 0 | 43 | 2 | 0 | 9 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 72 |
| 7:30 AM | 2 | 26 | 0 | 0 | 28 | 0 | 51 | 0 | 0 | 51 | 1 | 0 | 4 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 84 |
| 7:45 AM | 3 | 34 | 0 | 0 | 37 | 0 | 43 | 0 | 0 | 43 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 82 |
| Total Volume | 5 | 99 | 0 | 0 | 104 | 0 | 177 | 1 | 0 | 178 | 5 | 0 | 16 | 0 | 21 | 0 | 0 | 0 | 0 | 0 | 303 |
| \% App. Total | 4.8 | 95.2 | 0.0 | 0.0 | 100 | 0.0 | 99.4 | 0.6 | 0.0 | 100 | 23.8 | 0.0 | 76.2 | 0.0 | 100 | 0.0 | 0.0 | 0.0 | 0.0 | 0 |  |
| PHF |  |  |  |  | 0.703 |  |  |  |  | 0.873 |  |  |  |  | 0.477 |  |  |  |  |  | 0.902 |
| Cars, PU, Vans | 5 | 96 | 0 | 0 | 101 | 0 | 169 | 1 | 0 | 170 | 5 | 0 | 15 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 291 |
| \% Cars, Pu, Vans | 100.0 | 97.0 | 0.0 | 0.0 | 97.1 | 0.0 | 95.5 | 100.0 | 0.0 | 95.5 | 100.0 | 0.0 | 93.8 | 0.0 | 95.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 96.0 |
| Heavy trucks | 0 | 3 | 0 | 0 |  | 0 | 8 | 0 | 0 | 8 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 12 |
| \%Heavy trucks | 0.0 | 3.0 | 0.0 | 0.0 | 2.9 | 0.0 | 4.5 | 0.0 | 0.0 | 4.5 | 0.0 | 0.0 | 6.3 | 0.0 | 4.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.0 |

 Peak Hour Analysis from 04:00 PM - 06:00 PM
Peak Hour for Entire Intersection Begins at 04:15 PN

| 4:15 PM | 1 | 50 | 0 | 0 | 51 | 0 | 23 |  | 0 | 24 | 1 | 0 | 3 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 79 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4:30 PM | 6 | 45 | 0 | 0 | 51 | 0 | 29 | 2 | 0 | 31 | 1 | 0 | 3 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 86 |
| 4:45 PM | 3 | 39 | 0 | 0 | 42 | 0 | 26 | 3 | 0 | 29 | 1 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 73 |
| 5:00 PM | 3 | 48 | 0 | 0 | 51 | 0 | 24 | 3 | 0 | 27 | 2 | 0 | 1 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 81 |
| Total Volume | 13 | 182 | 0 | 0 | 195 | 0 | 102 | 9 | 0 | 111 | 5 | 0 | 8 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 319 |
| \% App. Total | 6.7 | 93.3 | 0.0 | 0.0 | 100 | 0.0 | 91.9 | 8.1 | 0.0 | 100 | 38.5 | 0.0 | 61.5 | 0.0 | 100 | 0.0 | 0.0 | 0.0 | 0.0 | 0 |  |
| PHF |  |  |  |  | 0.956 |  |  |  |  | 0.895 |  |  |  |  | 0.813 |  |  |  |  |  | 0.927 |
| Cars, PU, Vans | 13 | 171 | 0 | 0 | 184 | 0 | 98 | 9 | 0 | 107 | 5 | 0 | 7 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 303 |
| \% Cars, PU, Vans | 100.0 | 94.0 | 0.0 | 0.0 | 94.4 | 0.0 | 96.1 | 100.0 | 0.0 | 96.4 | 100.0 | 0.0 | 87.5 | 0.0 | 92.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 95.0 |
| Heavy trucks | 0 | 11 | 0 | 0 | 11 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 16 |
| \%Heavy trucks | 0.0 | 6.0 | 0.0 | 0.0 | 5.6 | 0.0 | 3.9 | 0.0 | 0.0 | 3.6 | 0.0 | 0.0 | 12.5 | 0.0 | 7.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5.0 |

Prepared by National Data \& Surveying Services

## Roberts Rd \& Emory Rd NE

## Peak Hour Turning Movement Count

ID: 23-190064-002
City: Corryton
City: Corryton


Day: Wednesday
Date: 11/29/2023


HT (NOON)


HT (PM)


|  | Roberts Rd Northbound |  |  |  |  |  | Roberts Rd Southbound |  |  |  |  |  | Emory Rd NE Eastbound |  |  |  |  |  | Emory Rd NE Westbound |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | Left | Thru | Rgt | Uturn | Peds | App. Total | Left | Thru | Rgt | Uturn | Peds | App. Total | Left | Thru | Rgt | Uturn\| | Peds | App. Total | Left | Thru | Rgt |  | Uturn | Peds | App. Total | Int. Total |
| 7:00 AM | 15 | 0 | 7 | 0 | 0 | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 5 | 0 | 0 | 20 | 35 | 41 |  | 0 | 0 | 0 | 76 | 118 |
| 7:15 AM | 16 | 0 | 7 | 0 | 0 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 14 | 0 | 0 | 36 | 32 | 43 |  | 0 | 0 | 0 | 75 | 134 |
| 7:30 AM | 17 | 0 | 7 | 0 | 0 | 24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 28 | 20 | 0 | 0 | 48 | 31 | 43 |  | 0 | 0 | 0 | 74 | 146 |
| 7:45 AM | 27 | 0 | 12 | 0 | 0 | 39 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 27 | 11 | 0 | 0 | 38 | 28 | 45 |  | 0 | 0 | 0 | 73 | 150 |
| Total | 75 | 0 | 33 | 0 | 0 | 108 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 92 | 50 | 0 | 0 | 142 | 126 | 172 |  | 0 | 0 | 0 | 298 | 548 |
| 8:00 AM | 16 | 0 | 3 | 0 | 0 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 16 | 0 | 0 | 30 | 18 | 25 |  | 0 | 0 | 0 | 43 | 92 |
| 8:15 AM | 13 | 0 | 8 | 0 | 0 | 21 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 13 | 0 | 0 | 30 | 15 | 24 |  | 0 | 0 | 0 | 39 | 90 |
| 8:30 AM | 10 | 0 | 1 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 12 | 0 | 0 | 31 | 10 | 22 |  | 0 | 0 | 0 | 32 | 74 |
| 8:45 AM | 13 | 0 | 16 | 0 | 0 | 29 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 6 | 0 | 0 | 20 | 9 | 18 |  | 0 | 0 | 0 | 27 | 76 |
| Total | 52 | 0 | 28 | 0 | 0 | 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 64 | 47 | 0 | 0 | 111 | 52 | 89 |  | 0 | 0 | 0 | 141 | 332 |



Project ID: 23-190064-002


|  | Roberts Rd Northbound |  |  |  |  | Roberts Rd Southbound |  |  |  |  | Emory RdNE Eastbound |  |  |  |  | Emory Rd NE Westbound |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | Left | Thru | Rgt | Uturn | App. Total | Left | Thru | Rgt | Utu | App. Total | Left | Thru | Rgt | Uturn | App. Total | Left | Thru | Rgt | Utu | App. Total | Pak Hour Analysis from 04:00 PM - 06:00 PM

Peak Hour for Entire Intersection Begins at 04:15 PN

| 4:15 PM | 23 | 0 | 28 | 0 | 51 | 0 | 0 | 0 | 0 | 0 | 0 | 37 | 20 | 0 | 57 | 6 | 20 | 0 | 0 | 26 | 134 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4:30 PM | 20 | 0 | 22 | 0 | 42 | 0 | 0 | 0 | 0 | 0 | 0 | 37 | 17 | 0 | 54 | 15 | 30 | 0 | 0 | 45 | 141 |
| 4:45 PM | 19 | 0 | 22 | 0 | 41 | 0 | 0 | 0 | 0 | 0 | 0 | 40 | 21 | 0 | 61 | 6 | 22 | 0 | 0 | 28 | 130 |
| 5:00 PM | 20 | 0 | 30 | 0 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | 42 | 17 | 0 | 59 | 8 | 18 | 0 | 0 | 26 | 135 |
| Total Volume | 82 | 0 | 102 | 0 | 184 | 0 | 0 | 0 | 0 | 0 | 0 | 156 | 75 | 0 | 231 | 35 | 90 | 0 | 0 | 125 | 540 |
| \% App. Total | 44.6 | 0.0 | 55.4 | 0.0 | 100 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 67.5 | 32.5 | 0.0 | 100 | 28.0 | 72.0 | 0.0 | 0.0 | 100 |  |
| PHF |  |  |  |  | 0.902 |  |  |  |  |  |  |  |  |  | 0.947 |  |  |  |  | 0.694 | 0.957 |
| Cars, PU, Vans | 74 | 0 | 99 | 0 | 173 | 0 | 0 | 0 | 0 | 0 | 0 | 150 | 71 | 0 | 221 | 34 | 85 | 0 | 0 | 119 | 513 |
| \% Cars, PU, Vans | 90.2 | 0.0 | 97.1 | 0.0 | 94.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 96.2 | 94.7 | 0.0 | 95.7 | 97.1 | 94.4 | 0.0 | 0.0 | 95.2 | 95.0 |
| Heavy trucks | 8 | 0 | 3 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 4 | 0 | 10 | 1 | 5 | 0 | 0 | 6 | 27 |
| \%Heavy trucks | 9.8 | 0.0 | 2.9 | 0.0 | 6.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.8 | 5.3 | 0.0 | 4.3 | 2.9 | 5.6 | 0.0 | 0.0 | 4.8 | 5.0 |

## Roberts Rd E \& Washington Pike

Peak Hour Turning Movement Count

ID: 23-190064-003
City: Corryton


SOUTHBOUND



Day: Wednesday
Date: 11/29/2023


HT (NOON)


HT (PM)


|  | Roberts Rd E Northbound |  |  |  |  |  | Roberts Rd E Southbound |  |  |  |  |  | Washington Pike Eastbound |  |  |  |  |  | Washington Pike Westbound |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | Left | Thru | Rgt | Uturn | Peds | App. Total | Left | Thru | Rgt | Uturn\| | Peds | App. Total | Left | Thru | Rgt | \| Uturn| | Peds | App. Total | Left | Thru | Rgt |  | Uturn | Peds | App. Total | Int. Total |
| 7:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 40 | 0 | 0 | 40 | 21 | 14 | 0 | 0 | 0 | 35 | 0 | 28 |  | 0 | 0 | 0 | 28 | 103 |
| 7:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 50 | 0 | 0 | 52 | 19 | 22 | 0 | 0 | 0 | 41 | 0 | 43 |  | 2 | 0 | 0 | 45 | 138 |
| 7:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 50 | 0 | 0 | 52 | 26 | 22 | 0 | 0 | 0 | 48 | 0 | 45 |  | 3 | 0 | 0 | 48 | 148 |
| 7:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 45 | 0 | 0 | 47 | 30 | 12 | 0 | 0 | 0 | 42 | 0 | 28 |  | 6 | 0 | 0 | 34 | 123 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 185 | 0 | 0 | 191 | 96 | 70 | 0 | 0 | 0 | 166 | 0 | 144 |  |  | 0 | 0 | 155 | 512 |
| 8:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 34 | 0 | 0 | 36 | 17 | 5 | 0 | 0 | 0 | 22 | 0 | 26 |  | 1 | 0 | 0 | 27 | 85 |
| 8:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 27 | 0 | 0 | 28 | 22 | 11 | 0 | 0 | 0 | 33 | 0 | 22 |  | 0 | 0 | 0 | 22 | 83 |
| 8:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 22 | 0 | 0 | 23 | 17 | 9 | 0 | 0 | 0 | 26 | 0 | 11 |  | 1 | 0 | 0 | 12 | 61 |
| 8:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 0 | 0 | 20 | 22 | 4 | 0 | 0 | 0 | 26 | 0 | 13 |  | 2 | 0 | 0 | 15 | 61 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 103 | 0 | 0 | 107 | 78 | 29 | 0 | 0 | 0 | 107 | 0 | 72 |  | 4 | 0 | 0 | 76 | 290 |



Project ID: 23-190064-003

|  | Roberts Rd E Northbound |  |  |  |  | Roberts Rd E Southbound |  |  |  |  | Washington Pike Eastbound |  |  |  |  | Washington Pike Westbound |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | Left | Thru | Rgt | Uturn | App. Total | Left | Thru | Rgt | Uturn | App. Total | Left | Thru | Rgt | Uturn | App. Total | Left | Thru | Rgt | Uturn | App. Total | Int. Total |
| Peak Hour Analysis from 07:00 AM - 09:00 AM <br> Peak Hour for Entire Intersection Begins at 07:00 AN |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 40 | 0 | 40 | 21 | 14 | 0 | 0 | 35 | 0 | 28 | 0 | 0 | 28 | 103 |
| 7:15 AM | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 50 | 0 | 52 | 19 | 22 | 0 | 0 | 41 | 0 | 43 | 2 | 0 | 45 | 138 |
| 7:30 AM | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 50 | 0 | 52 | 26 | 22 | 0 | 0 | 48 | 0 | 45 | 3 | 0 | 48 | 148 |
| 7:45 AM | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 45 | 0 | 47 | 30 | 12 | 0 | 0 | 42 | 0 | 28 | 6 | 0 | 34 | 123 |
| Total Volume | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 185 | 0 | 191 | 96 | 70 | 0 | 0 | 166 | 0 | 144 | 11 | 0 | 155 | 512 |
| \% App. Total | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 3.1 | 0.0 | 96.9 | 0.0 | 100 | 57.8 | 42.2 | 0.0 | 0.0 | 100 | 0.0 | 92.9 | 7.1 | 0.0 | 100 |  |
| PHF |  |  |  |  |  |  |  |  |  | 0.918 |  |  |  |  | 0.865 |  |  |  |  | 0.807 | 0.865 |
| Cars, PU, Vans | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 178 | 0 | 183 | 93 | 68 | 0 | 0 | 161 | 0 | 142 | 11 | 0 | 153 | 497 |
| \% Cars, PU, Vans | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 83.3 | 0.0 | 96.2 | 0.0 | 95.8 | 96.9 | 97.1 | 0.0 | 0.0 | 97.0 | 0.0 | 98.6 | 100.0 | 0.0 | 98.7 | 97.1 |
| Heavy trucks | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 7 | 0 | 8 |  | 2 | 0 | 0 | 5 | 0 | 2 | 0 | 0 | 2 | 15 |
| \%Heavy trucks | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 16.7 | 0.0 | 3.8 | 0.0 | 4.2 | 3.1 | 2.9 | 0.0 | 0.0 | 3.0 | 0.0 | 1.4 | 0.0 | 0.0 | 1.3 | 2.9 |



Peak Hour Analysis from 04:00 PM - 06:00 PM
Peak Hour for Entire Intersection Begins at 04:00 PN

| 4:00 PM | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 37 | 0 | 38 | 38 | 24 | 0 | 0 | 62 | 0 | 18 | 0 | 0 | 18 | 118 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4:15 PM | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 23 | 0 | 27 | 50 | 21 | 0 | 0 | 71 | 0 | 13 | 0 | 0 | 13 | 111 |
| 4:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 32 | 0 | 32 | 50 | 37 | 0 | 0 | 87 | 0 | 16 | 2 | 0 | 18 | 137 |
| 4:45 PM | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 24 | 0 | 27 | 40 | 29 | 0 | 0 | 69 | 0 | 12 | 1 | 0 | 13 | 109 |
| Total Volume | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 116 | 0 | 124 | 178 | 111 | 0 | 0 | 289 | 0 | 59 | 3 | 0 | 62 | 475 |
| \% App. Total | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 6.5 | 0.0 | 93.5 | 0.0 | 100 | 61.6 | 38.4 | 0.0 | 0.0 | 100 | 0.0 | 95.2 | 4.8 | 0.0 | 100 |  |
| PHF |  |  |  |  |  |  |  |  |  | 0.816 |  |  |  |  | 0.830 |  |  |  |  | 0.861 | 0.867 |
| Cars, PU, Vans | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 112 | 0 | 120 | 168 | 107 | 0 | 0 | 275 | 0 | 57 | 3 | 0 | 60 | 455 |
| \% Cars, PU, Vans | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 96.6 | 0.0 | 96.8 | 94.4 | 96.4 | 0.0 | 0.0 | 95.2 | 0.0 | 96.6 | 100.0 | 0.0 | 96.8 | 95.8 |
| Heavy trucks | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 4 | 10 | 4 | 0 | 0 | 14 | 0 | 2 | 0 | 0 | 2 | 20 |
| \%Heavy trucks | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.4 | 0.0 | 3.2 | 5.6 | 3.6 | 0.0 | 0.0 | 4.8 | 0.0 | 3.4 | 0.0 | 0.0 | 3.2 | 4.2 |

## Roberts Rd W \& Washington Pike

Peak Hour Turning Movement Count

ID: 23-190064-103
City: Corryton
City: Corryton

| Roberts Rd w |
| :---: |
| SOUTHBOUND |

SOUTHBOUND


Cars (NOON)


Cars (PM)


Day: Wednesday
Date: 11/29/2023


HT (NOON)


HT (PM)


|  | Roberts Rd W Northbound |  |  |  |  |  | Roberts Rd W Southbound |  |  |  |  |  | Washington Pike Eastbound |  |  |  |  |  | Washington Pike Westbound |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | Left | Thru | Rgt | Uturn | Peds | App. Total | Left | Thru | Rgt | Uturn\| | Peds | App. Total | Left | Thru | Rgt | Uturn\| | Peds | App. Total | Left | Thru | Rgt |  | Uturn | Peds | App. Total | Int. Total |
| 7:00 AM | 4 | 0 | 20 | 0 | 0 | 24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 4 | 0 | 0 | 14 | 21 | 47 |  | 0 | 0 | 0 | 68 | 106 |
| 7:15 AM | 7 | 0 | 22 | 0 | 0 | 29 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 5 | 0 | 0 | 20 | 37 | 49 |  | 0 | 0 | 0 | 86 | 135 |
| 7:30 AM | 6 | 0 | 31 | 0 | 0 | 37 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 2 | 0 | 0 | 19 | 45 | 49 |  | 0 | 0 | 0 | 94 | 150 |
| 7:45 AM | 3 | 0 | 24 | 0 | 0 | 27 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 3 | 0 | 0 | 20 | 31 | 38 |  | 0 | 0 | 0 | 69 | 116 |
| Total | 20 | 0 | 97 | 0 | 0 | 117 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 59 | 14 | 0 | 0 | 73 | 134 | 183 |  | 0 | 0 | 0 | 317 | 507 |
| 8:00 AM | 10 | 0 | 8 | 0 | 0 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 2 | 0 | 0 | 13 | 23 | 32 |  | 0 | 0 | 0 | 55 | 86 |
| 8:15 AM | 8 | 0 | 17 | 0 | 0 | 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 3 | 0 | 0 | 18 | 18 | 30 |  | 0 | 0 | 0 | 48 | 91 |
| 8:30 AM | 8 | 0 | 11 | 0 | 0 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 7 | 0 | 0 | 20 | 16 | 16 |  | 0 | 0 | 0 | 32 | 71 |
| 8:45 AM | 4 | 0 | 15 | 0 | 0 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 7 | 0 | 0 | 16 | 9 | 22 |  | 0 | 0 | 0 | 31 | 66 |
| Total | 30 | 0 | 51 | 0 | 0 | 81 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 48 | 19 | 0 | 0 | 67 | 66 | 100 |  | 0 | 0 | 0 | 166 | 314 |


| 4:00 PM | 3 | 0 | 30 | 0 | 0 | 33 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 30 | 5 | 0 | 0 | 35 | 26 | 26 | 0 | 0 | 0 | 52 | 120 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4:15 PM | 11 | 0 | 37 | 0 | 0 | 48 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 30 | 7 | 0 | 0 | 37 | 21 | 12 | 0 | 0 | 0 | 33 | 118 |
| 4:30 PM | 9 | 0 | 35 | 0 | 0 | 44 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 47 | 7 | 0 | 0 | 54 | 22 | 21 | 0 | 0 | 0 | 43 | 141 |
| 4:45 PM | 7 | 0 | 31 | 0 | 0 | 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 36 | 11 | 0 | 0 | 47 | 23 | 13 | 0 | 0 | 0 | 36 | 121 |
| Total | 30 | 0 | 133 | 0 | 0 | 163 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 143 | 30 | 0 | 0 | 173 | 92 | 72 | 0 | 0 | 0 | 164 | 500 |
| 5:00 PM | 6 | 0 | 41 | 0 | 0 | 47 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 38 | 8 | 0 | 0 | 46 | 19 | 13 | 0 | 0 | 0 | 32 | 125 |
| 5:15 PM | 4 | 0 | 33 | 0 | 0 | 37 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 32 | 4 | 0 | 0 | 36 | 18 | 22 | 0 | 0 | 0 | 40 | 113 |
| 5:30 PM | 5 | 0 | 30 | 0 | 0 | 35 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 38 | 4 | 0 | 0 | 42 | 23 | 20 | 0 | 0 | 0 | 43 | 120 |
| 5:45 PM | 4 | 0 | 29 | 0 | 0 | 33 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 50 | 2 | 0 | 0 | 52 | 14 | 13 | 0 | 0 | 0 | 27 | 112 |
| Total | 19 | 0 | 133 | 0 | 0 | 152 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 158 | 18 | 0 | 0 | 176 | 74 | 68 | 0 | 0 | 0 | 142 | 470 |
| Grand Total | 99 | 0 | 414 | 0 | 0 | 513 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 408 | 81 | 0 | 0 | 489 | 366 | 423 | 0 | 0 | 0 | 789 | 1791 |
| Apprch \% | 19.3 | 0.0 | 80.7 | 0.0 | 0.0 |  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |  | 0.0 | 83.4 | 16.6 | 0.0 | 0.0 |  | 46.4 | 53.6 | 0.0 | 0.0 | 0.0 |  |  |
| Total \% | 5.5 | 0.0 | 23.1 | 0.0 | 0.0 | 28.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 22.8 | 4.5 | 0.0 | 0.0 | 27.3 | 20.4 | 23.6 | 0.0 | 0.0 | 0.0 | 44.1 |  |
| Cars, PU, Vans | 98 | 0 | 395 | 0 |  | 493 | 0 | 0 | 0 | 0 |  | 0 | 0 | 401 | 80 | 0 |  | 481 | 351 | 413 | 0 | 0 |  | 764 | 1738 |
| \% Cars, PU, Vans | 99.0 | 0.0 | 95.4 | 0.0 |  | 96.1 | 0.0 | 0.0 | 0.0 | 0.0 |  | 0.0 | 0.0 | 98.3 | 98.8 | 0.0 |  | 98.4 | 95.9 | 97.6 | 0.0 | 0.0 |  | 96.8 | 97.0 |
| Heavy trucks | 1 | 0 | 19 | 0 |  | 20 | 0 | 0 | 0 | 0 |  | 0 | 0 | 7 | 1 | 0 |  | 8 | 15 | 10 | 0 | 0 |  | 25 | 53 |
| \%Heavy trucks | 1.0 | 0.0 | 4.6 | 0.0 |  | 3.9 | 0.0 | 0.0 | 0.0 | 0.0 |  | 0.0 | 0.0 | 1.7 | 1.2 | 0.0 |  | 1.6 | 4.1 | 2.4 | 0.0 | 0.0 |  | 3.2 | 3.0 |

Project ID: 23-190064-103

|  | Roberts Rd W Northbound |  |  |  |  | Roberts Rd W Southbound |  |  |  |  | Washington Pike Eastbound |  |  |  |  | Washington Pike Westbound |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | Left | Thru | Rgt | Uturn | App. Total | Left | Thru | Rgt | Uturn | App. Total | Left | Thru | Rgt | Uturn | App. Total | Left | Thru | Rgt | Uturn | App. Total | Int. Total |
| Peak Hour Analysis from 07:00 AM - 09:00 AMPeak Hour for Entire Intersection Begins at 07:00 AN |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7:00 AM | 4 | 0 | 20 | 0 | 24 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 4 | 0 | 14 | 21 | 47 | 0 | 0 | 68 | 106 |
| 7:15 AM | 7 | 0 | 22 | 0 | 29 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 5 | 0 | 20 | 37 | 49 | 0 | 0 | 86 | 135 |
| 7:30 AM | 6 | 0 | 31 | 0 | 37 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 2 | 0 | 19 | 45 | 49 | 0 | 0 | 94 | 150 |
| 7:45 AM | 3 | 0 | 24 | 0 | 27 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 3 | 0 | 20 | 31 | 38 | 0 | 0 | 69 | 116 |
| Total Volume | 20 | 0 | 97 | 0 | 117 | 0 | 0 | 0 | 0 | 0 | 0 | 59 | 14 | 0 | 73 | 134 | 183 | 0 | 0 | 317 | 507 |
| \% App. Total | 17.1 | 0.0 | 82.9 | 0.0 | 100 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 80.8 | 19.2 | 0.0 | 100 | 42.3 | 57.7 | 0.0 | 0.0 | 100 |  |
| PHF |  |  |  |  | 0.797 |  |  |  |  |  |  |  |  |  | 0.864 |  |  |  |  | 0.853 | 0.875 |
| Cars, PU, Vans | 19 | 0 | 95 | 0 | 114 | 0 | 0 | 0 | 0 | 0 | 0 | 58 | 14 | 0 | 72 | 129 | 179 | 0 | 0 | 308 | 494 |
| \% Cars, PU, Vans | 95.0 | 0.0 | 97.9 | 0.0 | 97.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 98.3 | 100.0 | 0.0 | 98.6 | 96.3 | 97.8 | 0.0 | 0.0 | 97.2 | 97.4 |
| Heavy trucks | 1 | 0 | 2 | 0 |  | 0 | 0 | 0 | 0 | 0 | . | 1 | 0 | 0 | 1 | 5 | 4 | 0 | 0 | 9 | 13 |
| \%Heavy trucks | 5.0 | 0.0 | 2.1 | 0.0 | 2.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.7 | 0.0 | 0.0 | 1.4 | 3.7 | 2.2 | 0.0 | 0.0 | 2.8 | 2.6 |

 Peak Hour Analysis from 04:00 PM - 06:00 PM
Peak Hour for Entire Intersection Begins at 04:15 PN

| 4:15 PM | 11 | 0 | 37 | 0 | 48 | 0 | 0 | 0 | 0 | 0 | 0 | 30 | 7 | 0 | 37 | 21 | 12 | 0 | 0 | 33 | 118 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4:30 PM | 9 | 0 | 35 | 0 | 44 | 0 | 0 | 0 | 0 | 0 | 0 | 47 | 7 | 0 | 54 | 22 | 21 | 0 | 0 | 43 | 141 |
| 4:45 PM | 7 | 0 | 31 | 0 | 38 | 0 | 0 | 0 | 0 | 0 | 0 | 36 | 11 | 0 | 47 | 23 | 13 | 0 | 0 | 36 | 121 |
| 5:00 PM | 6 | 0 | 41 | 0 | 47 | 0 | 0 | 0 | 0 | 0 | 0 | 38 | 8 | 0 | 46 | 19 | 13 | 0 | 0 | 32 | 125 |
| Total Volume | 33 | 0 | 144 | 0 | 177 | 0 | 0 | 0 | 0 | 0 | 0 | 151 | 33 | 0 | 184 | 85 | 59 | 0 | 0 | 144 | 505 |
| \% App. Total | 18.6 | 0.0 | 81.4 | 0.0 | 100 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 82.1 | 17.9 | 0.0 | 100 | 59.0 | 41.0 | 0.0 | 0.0 | 100 |  |
| PHF |  |  |  |  | 0.922 |  |  |  |  |  |  |  |  |  | 0.829 |  |  |  |  | 0.809 | 0.868 |
| Cars, PU, Vans | 33 | 0 | 132 | 0 | 165 | 0 | 0 | 0 | 0 | 0 | 0 | 151 | 32 | 0 | 183 | 80 | 57 | 0 | 0 | 137 | 485 |
| \% Cars, PU, Vans | 100.0 | 0.0 | 91.7 | 0.0 | 93.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 97.0 | 0.0 | 99.5 | 94.1 | 96.6 | 0.0 | 0.0 | 95.1 | 96.0 |
| Heavy trucks | 0 | 0 | 12 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 5 | 2 | 0 | 0 | 7 | 20 |
| \%Heavy trucks | 0.0 | 0.0 | 8.3 | 0.0 | 6.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.0 | 0.0 | 0.5 | 5.9 | 3.4 | 0.0 | 0.0 | 4.9 | 4.0 |

TABLE 4-1
GENERAUZED ANNUAL AVERAGE DAILY VOLUMES FOR FLORIDA'S URBANIZED AREAS*


# Single-Family Detached Housing <br> (210) 

Vehicle Trip Ends vs: Dwelling Units<br>On a: Weekday

## Setting/Location: General Urban/Suburban

Number of Studies: 174
Avg. Num. of Dwelling Units: 246
Directional Distribution: 50\% entering, 50\% exiting
Vehicle Trip Generation per Dwelling Unit

| Average Rate | Range of Rates | Standard Deviation |
| :---: | :---: | :---: |
| 9.43 | $4.45-22.61$ | 2.13 |

Data Plot and Equation


## Single-Family Detached Housing <br> (210)

Vehicle Trip Ends vs: Dwelling Units
On a: Weekday,
Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.
Setting/Location: General Urban/Suburban
Number of Studies: 192
Avg. Num. of Dwelling Units: 226
Directional Distribution: 25\% entering, $75 \%$ exiting
Vehicle Trip Generation per Dwelling Unit

| Average Rate | Range of Rates | Standard Deviation |
| :---: | :---: | :---: |
| 0.70 | $0.27-2.27$ | 0.24 |

Data Plot and Equation


# Single-Family Detached Housing <br> (210) 

Vehicle Trip Ends vs: Dwelling Units
On a: Weekday,
Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
Number of Studies: 208
Avg. Num. of Dwelling Units: 248
Directional Distribution: 63\% entering, 37\% exiting
Vehicle Trip Generation per Dwelling Unit

| Average Rate | Range of Rates | Standard Deviation |
| :---: | :---: | :---: |
| 0.94 | $0.35-2.98$ | 0.31 |

Data Plot and Equation


# Single-Family Detached Housing <br> (210) 

Vehicle Trip Ends vs: Dwelling Units<br>On a: Weekday

## Setting/Location: General Urban/Suburban

Number of Studies: 174
Avg. Num. of Dwelling Units: 246
Directional Distribution: 50\% entering, 50\% exiting
Vehicle Trip Generation per Dwelling Unit

| Average Rate | Range of Rates | Standard Deviation |
| :---: | :---: | :---: |
| 9.43 | $4.45-22.61$ | 2.13 |

Data Plot and Equation


## Single-Family Detached Housing <br> (210)

Vehicle Trip Ends vs: Dwelling Units
On a: Weekday,
Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.
Setting/Location: General Urban/Suburban
Number of Studies: 192
Avg. Num. of Dwelling Units: 226
Directional Distribution: 25\% entering, $75 \%$ exiting
Vehicle Trip Generation per Dwelling Unit

| Average Rate | Range of Rates | Standard Deviation |
| :---: | :---: | :---: |
| 0.70 | $0.27-2.27$ | 0.24 |

Data Plot and Equation


# Single-Family Detached Housing <br> (210) 

Vehicle Trip Ends vs: Dwelling Units
On a: Weekday,
Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
Number of Studies: 208
Avg. Num. of Dwelling Units: 248
Directional Distribution: 63\% entering, 37\% exiting
Vehicle Trip Generation per Dwelling Unit

| Average Rate | Range of Rates | Standard Deviation |
| :---: | :---: | :---: |
| 0.94 | $0.35-2.98$ | 0.31 |

Data Plot and Equation


TABLE 5A
KNOX COUNTY LEFT-TURN LANE VOLUME THRESHOLDS FOR 2-LANE ROADWAYS WITH A PREVAILING SPEED OF 36 TO 45 MPH

Project No: 01203-0003
Project Name: Roberts Rd Residential TIL Notes: Existing Traffic
(If the left-turn volume exceeds the table value a left-turn lane is needed)

| OPPOSING | THROUGH VOLUME PLUS RIGHT-TURN VOLUME * |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Volume | 100-149 | 150-199 | 200-249 | 250-299 | 300-349 | 350-399 |
| 100-149 | 250 | 180 | 140 | 110 | 80 | 70 |
| 150-199 | 200 | 140 | 105 | 90 | 70 | 60 |
| 200-249 | 160 | 115 | 85 | 75 | 65 | 55 |
| 250-299 | 130 | 100 | 75 | 65 | 60 | 50 |
| 300-349 | 110 | 90 | 70 | 60 | 55 | 45 |
| 350-399 | 100 | 80 | 65 | 55 | 50 | 40 |
| 400-449 | 90 | 70 | 60 | 50 | 45 | 35 |
| 450-499 | 80 | 65 | 55 | 45 | 40 | 30 |
| 500-549 | 70 | 60 | 45 | 35 | 35 | 25 |
| 550-599 | 65 | 55 | 40 | 35 | 30 | 25 |
| 600-649 | 60 | 45 | 35 | 30 | 25 | 25 |
| 650-699 | 55 | 35 | 35 | 30 | 25 | 20 |
| 700-749 | 50 | 35 | 30 | 25 | 20 | 20 |
| 750 or More | 45 | 35 | 25 | 25 | 20 | 20 |


| OPPOSING <br> VOLUME | THROUGH VOLUME PLUS RIGHT-TURN VOLUME * |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 350-399 | 400-449 | 450-499 | 500-549 | 550-599 | $=/>600$ |
| 100-149 | 70 | 60 | 50 | 45 | 40 | 35 |
| 150-199 | 60 | 55 | 45 | 40 | 35 | 30 |
| 200-249 | 55 | 50 | 40 | 35 | 30 | 30 |
| 250-299 | 50 | 45 | 35 | 30 | 30 | 30 |
| 300-349 | 45 | 40 | 35 | 30 | 25 | 25 |
| 350-399 | 40 | 35 | 30 | 25 | 25 | 20 |
| 400-449 | 35 | 30 | 30 | 25 | 20 | 20 |
| 450-499 | 30 | 25 | 25 | 20 | 20 | 20 |
| 500-549 | 25 | 25 | 20 | 20 | 20 | 15 |
| 550-599 | 25 | 20 | 20 | 20 | 20 | 15 |
| 600-649 | 25 | 20 | 20 | 20 | 20 | 15 |
| 650-699 | 20 | 20 | 20 | 20 | 20 | 15 |
| 700-749 | 20 | 20 | 20 | 15 | 15 | 15 |
| 750 or More | 20 | 20 | 20 | 15 | 15 | 15 |

* Or through volume only if a right-turn lane exists

| Intersection | Time Period | Opposing <br> Volume | Through <br> Volume | Left-Turn <br> Volume | Warrant <br> Threshold | Left-Turn Lane <br> Warranted <br> (Yes / No) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rob. @ Wash | AM Peak | 155 | 70 | 96 | $\mathbf{2 0 0}$ | NO |
| Rob. @ Wash | PM Peak | 62 | 111 | 178 | $\mathbf{2 5 0}$ | NO |
| Rob. @ Emory | AM Peak | 142 | 172 | 126 | $\mathbf{1 8 0}$ | NO |
| Rob. @ Emory | PM Peak | 231 | 90 | 35 | $\mathbf{1 6 0}$ | NO |



Project No: 01203-0003
Project Name: Roberts Rd Residential TIL Notes: Existing Traffic

| RIGHT-TURN <br> VOLUME | THROUGH VOLUME PLUS LEFT-TURN VOLUME * |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | < 100 | 100-199 | 200-249 | 250-299 | 300-349 | 350-399 |
| Fewer Than 25 |  |  |  |  |  |  |
| 25-49 |  |  |  |  |  |  |
| 50-99 |  |  |  |  |  |  |
| 100-149 |  |  |  |  |  |  |
| 150-199 |  |  |  |  |  |  |
| 200-249 |  |  |  |  |  | Yes |
| 250-299 |  |  |  |  | Yes | Yes |
| 300-349 |  |  |  | Yes | Yes | Yes |
| 350-399 |  |  | Yes | Yes | Yes | Yes |
| 400-449 |  |  | Yes | Yes | Yes | Yes |
| 450-499 |  | Yes | Yes | Yes | Yes | Yes |
| 500-549 |  | Yes | Yes | Yes | Yes | Yes |
| 550-599 | Yes | Yes | Yes | Yes | Yes | Yes |
| 600 or More | Yes | Yes | Yes | Yes | Yes | Yes |


| RIGHT-TURN | THROUGH VOLUME PLUS LEFT-TURN VOLUME * |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| VOLUME | 350-399 | 400-449 | 450-499 | 500-549 | 550-599 | $=/>600$ |
| Fewer Than 25 |  |  |  |  |  |  |
| 25-49 |  |  |  |  | Yes | Yes |
| 50-99 |  |  |  | Yes | Yes | Yes |
| 100-149 |  |  | Yes | Yes | Yes | Yes |
| 150-199 |  | Yes | Yes | Yes | Yes | Yes |
| 200-249 | Yes | Yes | Yes | Yes | Yes | Yes |
| 250-299 | Yes | Yes | Yes | Yes | Yes | Yes |
| 300-349 | Yes | Yes | Yes | Yes | Yes | Yes |
| 350-399 | Yes | Yes | Yes | Yes | Yes | Yes |
| 400-449 | Yes | Yes | Yes | Yes | Yes | Yes |
| 450-499 | Yes | Yes | Yes | Yes | Yes | Yes |
| 500-549 | Yes | Yes | Yes | Yes | Yes | Yes |
| 550-599 | Yes | Yes | Yes | Yes | Yes | Yes |
| 600 or More | Yes | Yes | Yes | Yes | Yes | Yes |

* Or through volume only if a left-turn lane exists

| Intersection | Time Period | Through <br> Volume | Right-Turn <br> Volume | Right-Turn Lane <br> Warranted <br> (Yes / No) |
| :---: | :---: | :---: | :---: | :---: |
| Rob. @ Wash | AM Peak | 144 | 11 | NO |
| Rob. @ Wash | PM Peak | 59 | 3 | NO |
| Rob. @ Emory | AM Peak | 92 | 50 | NO |
| Rob. @ Emory | PM Peak | 156 | 75 | NO |

TABLE 5A
KNOX COUNTY LEFT-TURN LANE VOLUME THRESHOLDS FOR 2-LANE ROADWAYS WITH A PREVAILING SPEED OF 36 TO 45 MPH

Project No: 01203-0003
Project Name: Roberts Rd Residential TIL Notes: Build-out Traffic
(If the left-turn volume exceeds the table value a left-turn lane is needed)

| OPPOSING | THROUGH VOLUME PLUS RIGHT-TURN VOLUME * |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| VOLUME | 100-149 | 150-199 | 200-249 | 250-299 | 300-349 | 350-399 |
| 100-149 | 250 | 180 | 140 | 110 | 80 | 70 |
| 150-199 | 200 | 140 | 105 | 90 | 70 | 60 |
| 200-249 | 160 | 115 | 85 | 75 | 65 | 55 |
| 250-299 | 130 | 100 | 75 | 65 | 60 | 50 |
| 300-349 | 110 | 90 | 70 | 60 | 55 | 45 |
| 350-399 | 100 | 80 | 65 | 55 | 50 | 40 |
| 400-449 | 90 | 70 | 60 | 50 | 45 | 35 |
| 450-499 | 80 | 65 | 55 | 45 | 40 | 30 |
| 500-549 | 70 | 60 | 45 | 35 | 35 | 25 |
| 550-599 | 65 | 55 | 40 | 35 | 30 | 25 |
| 600-649 | 60 | 45 | 35 | 30 | 25 | 25 |
| 650-699 | 55 | 35 | 35 | 30 | 25 | 20 |
| 700-749 | 50 | 35 | 30 | 25 | 20 | 20 |
| 750 or More | 45 | 35 | 25 | 25 | 20 | 20 |


| OPPOSING <br> VOLUME | THROUGH VOLUME PLUS RIGHT-TURN VOLUME $*$ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $350-399$ | $400-449$ | $450-499$ | $500-549$ | $550-599$ | $=/>600$ |
| $100-149$ | 70 | 60 | 50 | 45 | 40 | 35 |
| $150-199$ | 60 | 55 | 45 | 40 | 35 | 30 |
| $200-249$ | 55 | 50 | 40 | 35 | 30 | 30 |
| $250-299$ | 50 | 45 | 35 | 30 | 30 | 30 |
| $300-349$ | 45 | 40 | 35 | 30 | 25 | 25 |
| $350-399$ | 40 | 35 | 30 | 25 | 25 | 20 |
| $400-449$ | 35 | 30 | 30 | 25 | 20 | 20 |
| $450-499$ | 30 | 25 | 25 | 20 | 20 | 20 |
| $500-549$ | 25 | 25 | 20 | 20 | 20 | 20 |
| $550-599$ | 25 | 20 | 20 | 20 | 20 | 15 |
| $600-649$ | 20 | 20 | 20 | 15 | 15 | 15 |
| $650-699$ | 20 | 20 | 15 | 15 | 15 |  |
| $700-749$ | 20 | 20 |  | 20 | 15 |  |
| 750 or More | 20 |  | 20 | 15 |  |  |

* Or through volume only if a right-turn lane exists

| Intersection | Time Period | Opposing <br> Volume | Through <br> Volume | Left-Turn <br> Volume | Warrant <br> Threshold | Left-Turn Lane <br> Warranted <br> (Yes / No) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rob. @ Wash | AM Peak | 158 | 70 | 120 | $\mathbf{1 8 0}$ | NO |
| Rob. @ Wash | PM Peak | 63 | 111 | 270 | $\mathbf{2 5 0}$ | YES |
| Rob. @ Emory | AM Peak | 145 | 172 | 135 | $\mathbf{1 8 0}$ | NO |
| Rob. @ Emory | PM Peak | 258 | 90 | 48 | $\mathbf{1 1 0}$ | NO |



Project No: 01203-0003
Project Name: Roberts Rd Residential TIL Notes: Build-out Traffic

| RIGHT-TURN <br> VOLUME | THROUGH VOLUME PLUS LEFT-TURN VOLUME * |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | < 100 | 100-199 | 200-249 | 250-299 | 300-349 | 350-399 |
| Fewer Than 25 |  |  |  |  |  |  |
| 25-49 |  |  |  |  |  |  |
| 50-99 |  |  |  |  |  |  |
| 100-149 |  |  |  |  |  |  |
| 150-199 |  |  |  |  |  |  |
| 200-249 |  |  |  |  |  | Yes |
| 250-299 |  |  |  |  | Yes | Yes |
| 300-349 |  |  |  | Yes | Yes | Yes |
| 350-399 |  |  | Yes | Yes | Yes | Yes |
| 400-449 |  |  | Yes | Yes | Yes | Yes |
| 450-499 |  | Yes | Yes | Yes | Yes | Yes |
| 500-549 |  | Yes | Yes | Yes | Yes | Yes |
| 550-599 | Yes | Yes | Yes | Yes | Yes | Yes |
| 600 or More | Yes | Yes | Yes | Yes | Yes | Yes |


| RIGHT-TURN | THROUGH VOLUME PLUS LEFT-TURN VOLUME * |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| VOLUME | 350-399 | 400-449 | 450-499 | 500-549 | 550-599 | $=/>600$ |
| Fewer Than 25 |  |  |  |  |  |  |
| 25-49 |  |  |  |  | Yes | Yes |
| 50-99 |  |  |  | Yes | Yes | Yes |
| 100-149 |  |  | Yes | Yes | Yes | Yes |
| 150-199 |  | Yes | Yes | Yes | Yes | Yes |
| 200-249 | Yes | Yes | Yes | Yes | Yes | Yes |
| 250-299 | Yes | Yes | Yes | Yes | Yes | Yes |
| 300-349 | Yes | Yes | Yes | Yes | Yes | Yes |
| 350-399 | Yes | Yes | Yes | Yes | Yes | Yes |
| 400-449 | Yes | Yes | Yes | Yes | Yes | Yes |
| 450-499 | Yes | Yes | Yes | Yes | Yes | Yes |
| 500-549 | Yes | Yes | Yes | Yes | Yes | Yes |
| 550-599 | Yes | Yes | Yes | Yes | Yes | Yes |
| 600 or More | Yes | Yes | Yes | Yes | Yes | Yes |

* Or through volume only if a left-turn lane exists

| Intersection | Time Period | Through <br> Volume | Right-Turn <br> Volume | Right-Turn Lane <br> Warranted <br> (Yes / No) |
| :---: | :---: | :---: | :---: | :---: |
| Rob. @ Wash | AM Peak | 144 | 14 | NO |
| Rob. @ Wash | PM Peak | 59 | 4 | NO |
| Rob. @ Emory | AM Peak | 92 | 53 | NO |
| Rob. @ Emory | PM Peak | 75 | 102 | NO |



## CORRESPONDENCE

All correspondence related to this application should be directed to the approved contact listed below.
Josh Sanderson Smithbilt Homes
Name / Company
4909 Ball Rd Knoxville TN 37931
Address

865-694-7756 / josh@smithbilthomes.com
Phone / Email
CURRENT PROPERTY INFO

| Josh Sanderson Smithbilt Homes | $\mathbf{4 9 0 9}$ Ball Rd Knoxville TN 37931 | 865-694-7756 / josh@smithbilt |
| :--- | :--- | :--- |
| Owner Name (if different) | Owner Address | Owner Phone / Email |

6701 ROBERTS RD
Property Address

| $\mathbf{2 2} 00514$ |  | 74.08 acres |  |
| :--- | :--- | :--- | :--- |
| Parcel ID | Part of Parcel (Y/N)? | Tract Size |  |
| Knoxville Utilities Board | Northeast Knox Utility District |  |  |
| Sewer Provider | Water Provider | Septic (Y/N) |  |

## STAFF USE ONLY

West side of Roberts Rd, north of Washington Pike

## General Location

| $\square$ City | Commission District $\mathbf{8}$ | A (Agricultural) | Agriculture/Forestry/Vacant Land |
| :--- | :--- | :--- | :--- |
|  | District | Zoning District | Existing Land Use |
| Northeast County | AG (Agricultural) | Rural Area |  |
| Planning Sector | Sector Plan Land Use Classification | Growth Policy Plan Designation |  |


| $\square$ Development Plan $\quad \square$ Planned Development | $\square$ Use on Review / Special Use | Related City Permit Number(s) |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $\square$ Hillside Protection COA | $\square$ Residential | $\square$ Non-residential |  |
| Home Occupation (specify) |  |  |  |

Other (specify)

## SUBDIVSION REQUEST

| Proposed Subdivision Name | Related Rezoning File Number |  |
| :--- | :--- | :--- |
|  |  |  |
| Unit / Phase Number | Total Number of Lots Created |  |
| Additional Information |  |  |

$\square$ Attachments / Additional Requirements

## ZONING REQUEST



## STAFF USE ONLY

| PLAT TYPE | Fee 1 | Total |
| :---: | :---: | :---: |
| $\square$ Staff Review $\quad \square$ Planning Commission | $\$ 5,204.00$ |  |
| ATTACHMENTS |  |  |
| $\square$ Property Owners / Option Holders $\square$ Variance Request | Fee 2 |  |
| ADDITIONAL REQUIREMENTS |  |  |
| $\square$ COA Checklist (Hillside Protection) |  |  |
| $\square$ Design Plan Certification (Final Plat) | Fee 3 |  |
| $\square$ Site Plan (Development Request) |  |  |
| $\square$ Traffic Impact Study |  |  |
| $\square$ Use on Review / Special Use (Concept Plan) |  |  |

## AUTHORIZATION

I declare under penalty of perjury the foregoing is true and correct: 1) He/she/it is the owner of the property, AND 2) the application and all associated materials are being submitted with his/her/its consent.

|  | Smithbilt Homes | 12/27/2023 |
| :--- | :--- | :--- |
| Applicant Signature | Please Print | Date |

## Phone / Email

|  | Josh Sanderson Smithbilt Homes | 12/27/2023 |
| :--- | :--- | :--- |
| Property Owner Signature | Please Print | Date |
| 2-E-24-SP |  | Printed 1/22/2024 3:29:42 PM |

## Development Request

DEVELOPMENT
$\square$ Development PlanPlanned DevelopmentUse on Review / Special UseHillside Protection COA
$\square$ Concept PlanFinal Plat

ZONING
Z Plan Amendment $\checkmark$ SP $\square$ OYP Rezoning

Smithbilt Homes


| General Location |  | Tract Size |  |
| :--- | :--- | :--- | :--- |
| $\square$ City $\square$ County |  |  |  |
|  | District | Zoning District | Existing Land Use |
|  |  |  |  |
| Planning Sector | Sector Plan Land Use Classification | Growth Policy Plan Designation |  |

## DEVELOPMENT REQUEST

| $\square$ Development Plan $\quad \square$ Use on Review / Special Use $\quad \square$ Hillside Protection COA | Related City Permit Number(s) |  |
| :--- | :--- | :--- |
| $\square$ Residential $\square$ Non-Residential |  |  |
| Home Occupation (specify) |  |  |
| Other (specify) |  |  |

## SUBDIVISION REQUEST

| Proposed Subdivision Name | Related Rezoning File Number |
| :--- | :--- | :--- |
| Unit / Phase Number $\quad \square$ Combine Parcels $\quad \square$ Divide Parcel $\quad$ Total Number of Lots Created |  |
| $\square$ Other (specify) $\quad \square$ Attachments / Additional Requirements |  |

## ZONING REQUEST

|  | Planne | Residential | Pending Plat File Number |
| :---: | :---: | :---: | :---: |
| Proposed Zoning |  |  |  |
| $\checkmark$ Plan Amendment Change |  | LDR (Low Density Residential) |  |
|  |  | Proposed Plan Designation(s) |  |
| 3 DU/AC |  | N/A |  |
| Proposed Density ( | (units/acre) | Previous Rezoning Requests |  |
| $\square$ Other (specify) |  |  |  |

## STAFF USE ONLY

| PLAT TYPE | Fee 1 |  | $\begin{array}{r} \text { Total } \\ \$ 5,204.00 \end{array}$ |
| :---: | :---: | :---: | :---: |
| $\square$ Staff Review $\quad \nabla$ Planning Commission | 0802 | \$4354.00 |  |
| ATTACHMENTS |  |  |  |
| $\square$ Property Owners / Option Holders $\square$ Variance Request | Fee 2 |  |  |
| ADDITIONAL REQUIREMENTS | 0604 | \$850.00 |  |
| $\square$ Design Plan Certification (Final Plat) |  |  |  |
| $\square$ Use on Review / Special Use (Concept Plan) | Fee 3 |  |  |
| $\square$ Traffic Impact Study |  |  |  |
| $\square$ COA Checklist (Hillside Protection) |  |  |  |

## AUTHORIZATION

$\square$ I declare under penalty of perjury the foregoing is true and correct:

1) He/she/it is the owner of the property AND 2) The application and all associated materials are being submitted with his/her/its consent

|  | Smithbilt Homes | 12/27/2023 |
| :---: | :---: | :---: |
| Applicant Signature | Please Print | Date |
| 865-680-2321 | josh@smithbilthomes.com |  |
| Phone Number | Email |  |
|  | Josh Sanderson | 12/28/23, SG |
| Property Owner Signature | Please Print | Date Paid |

Revised April 2021

The Administrative Rules and Procedures of the Knoxville-Knox County Planning Commission require a sign to be posted on the property for each application subject to consideration by the Planning Commission, including the following applications: rezoning, plan amendment, concept plan, use on review/special use, planned development, right-ofway closure, and name change.


The required public notice sign(s) will be provided by Planning to the applicant when an application is submitted. If an application is submitted electronically, Planning staff will post the required sign. If a replacement sign(s) is needed, the applicant is responsible for picking up the new sign(s) from Planning and will be charged $\$ 10$ for each replacement.

## LOCATION AND VISIBILITY

The sign must be posted on the nearest adjacent/frontage street and in a location clearly visible to vehicles traveling in either direction. If the property has more than one street frontage, the sign should be placed along the street that carries more traffic. Planning staff may recommend a preferred location for the sign to be posted at the time of application.

## TIMING

The sign(s) must be posted not less than 12 days prior to the scheduled Planning Commission public hearing and must remain in place until the day after the meeting. In the case of a postponement, the sign can either remain in place or be removed and reposted not less than 12 days prior to the next Planning Commission meeting. The applicant is responsible for removing the sign after the application has been acted upon by the Planning Commission.

The individual below is responsible for posting and removing the sign(s) provided consistent with the above guidelines and between the dates of:

01/26/2023
(applicant or staff to post sign)
and $\qquad$ 02/09/2024
(applicant to remove sign)

Applicant Name: Smithbilt Homes
Date: 12/28/2023
File Number: $2-J-24-R Z ~ \& ~ 2-E-24-S P$

Sign posted by Staff

Sign posted by Applicant


[^0]:    Ci, CANNON \& CANNON inc
    

