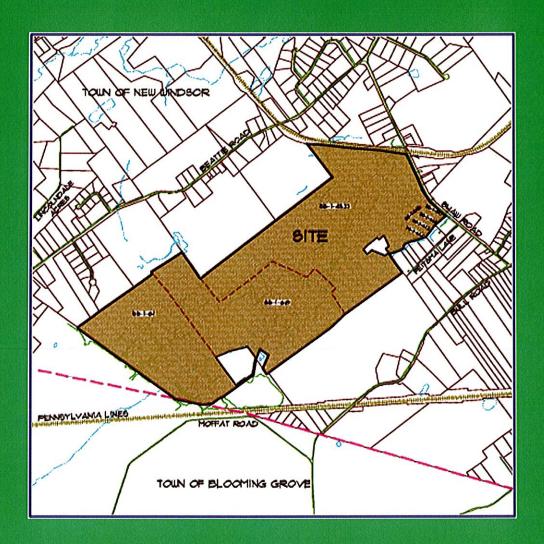
# Apple Ridge



# Final Environmental Impact Statement

Town of New Windsor Orange County, New York

October 2019

# **Apple Ridge**

#### **Final Environmental Impact Statement**

SHAW ROAD & FEITSMA LANE TOWN OF NEW WINDSOR ORANGE COUNTY, NEW YORK

Tax Map Designation: Section 55, Block 1, Lots 43.22, 44.1, 44.2, 44.3, 44.4, 44.5, 60 & 61

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Submitted: October 2019 Last Revised:

Lead Agency Acceptance Date:

A digital copy of the FEIS may be downloaded at <u>www.town.new-windsor.ny.us</u>
A printed copy of the FEIS is on file in the Town Hall Complex

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FEIS Executive Summary

Apple Ridge FEIS

#### I. FEIS EXECUTIVE SUMMARY

This Final Environmental Impact Statement ("FEIS") has been prepared to assess the potential for significant adverse environmental impacts that could occur from the development of the proposed Apple Ridge Cluster Subdivision ("Proposed Action"). The Applicant, Heritage at New Windsor Development Company, LLC, 247 Bridge Avenue Red Bank, New Jersey 07701 ("Project Sponsor") proposes to develop 172 single family residential dwellings in a cluster development on 418.4± acres located in the Town of New Windsor.

This FEIS has been prepared in accordance with the New York State Environmental Quality Review Act ("SEQRA"), pursuant to Article 8 of the Environmental Conservation Law and its implementing regulations, 6NYCRR Part 617. In accordance with 617.9(b)(8), the purpose of the FEIS is to provide official responses to comments received during the public comment period, document project changes and provide the results of studies not included in the DEIS. For ease of understanding, this document is organized under the following Chapter headings:

#### **Chapter I – FEIS Executive Summary**: (above)

**Chapter II – Project Description**: The purpose of this Chapter is to summarize relevant project history and the SEQRA process to date. The purpose of this Chapter is to provide a summary description of the project. New information contained in this Chapter supersedes the Project Description in the Draft Environmental Impact Statement ("DEIS").

Chapter III – Anticipated Impacts and Proposed Mitigation: This information is organized by topic as presented in the accepted DEIS in Chapter III. The information contained in this Chapter summarizes mitigation strategies presented and discussed in the DEIS and describes any new mitigation strategies developed during the course of the public comment period, applicable project changes and new studies presented to the Board that were not included in the DEIS.

**Chapter IV – Construction Sequencing and Phasing**: This Chapter discusses implementation of required infrastructure, anticipated buildout and construction phasing. Also identifies potential impacts that may occur during construction and proposed mitigation.

Chapter V – Alternatives: This Chapter discusses the subdivision design alternatives that have been developed and reviewed during the subdivision application process. The DEIS evaluated the No Action Alternative; the Preferred Cluster Subdivision Plan consisting of 172 single family lots serviced by central sewer and central water on a total site area of 418.4 acres; a Conventional Subdivision Plan consisting of 172 single family lots with a minimum lot size of 60,000 square feet serviced by central sewer and central water on a total site area of 418.4 acres; a Cluster Subdivision Alternative with a single wetlands crossing. Another Alternative analyzed related to the WWTP outfall location which proposed discharge of the onsite location in a northerly direction and a southerly direction.

FEIS Executive Summary Apple Ridge FEIS

**Chapter VI – Potential Growth Inducing Aspects:** This Chapter discusses potential growth as a result of the Proposed Action, additional residents and increased population.

**Chapter VII – Unavoidable Adverse Impacts:** This Chapter discusses potential short term and long term unavoidable impacts.

Chapter VIII – Project Impacts on Energy Use and Solid Waste Management: This Chapter discusses potential demand on energy supply and solid waste, potential impacts and mitigation measures.

Chapter IX – Irreversible and Irretrievable Commitments of Environmental Resources: This Chapter describes the irreversible and irretrievable commitment of environmental resources resulting from the construction and operation of the Proposed Action.

**Chapter X - Technical Comments and Responses**: These comments are those received from involved and interested agencies and are organized by subject area following the same outline as the DEIS.

**Chapter XI – Public Comments and Responses**: These comments were received during the public hearing or as written comment letters sent to the Lead Agency within the public comment period. They are organized by subject area following the same outline as the DEIS.

#### II. PROJECT DESCRIPTION

The Town of New Windsor Planning Board designated the Proposed Action a Type I Action and adopted a Positive Declaration under SEQRA. This required coordinated review and approval by a variety of agencies. The Lead Agency adopted a Scoping Outline on February 8, 2017 and directed the Project Sponsor to prepare a DEIS. A Public Hearing was noticed and published in the local paper. The Public Hearing was opened on March 27, 2019 and was closed that evening with the opportunity for written comments up to fourteen (14) days after close of Public Hearing; which period ended on April 10, 2019.

See Appendix A *Town of New Windsor Planning Board Public Hearing Minutes March* 27, 2019. See Appendix B *Written Comment Letters*.

The FEIS should be read in conjunction with the DEIS, references are contained within the FEIS for further explanation and clarification purposes. Public comments have been organized according to topics within the DEIS and each comment is immediately followed by a response. Comments regarding similar topics that can be addressed by one response are referenced to the preceding comment that contains the applicable response.

The property is designated as tax parcel Section 55, Block 1, Lots 43.22, 44.1, 44.2, 44.3, 44.4, 44.5, 60 and 61 containing approximately 418.4± acres, located within the Town of New Windsor, County of Orange and State of New York ("Project Site"). The Project Sponsor proposes to develop the Apple Ridge Subdivision consisting of 172 single family residential dwellings designed in a cluster development together with associated infrastructure including a public road system, drainage facilities, public water and public sewer on property located on the southwest side of Shaw Road in the Town of New Windsor.

The Project Site is located within Rural Residential ("R-1") Zoning District.

See DEIS Figure II-2, "Location Map".

The Project Site is serviced by the Washingtonville School District, Vails Gate Fire District and is patrolled by the Town of New Windsor Police Department with mutual aid agreements for assistance from New York State Police Department.

The Project Site is characterized with a rolling topography with four dominant high points. Portions of the uplands are currently an apple orchard, hayfields and woodland. The lowlands contain regulated wetlands under the jurisdiction of the Army Corps of Engineers ("ACOE") pursuant to Section 404 of the Clean Water Act. The New York State Department of Environmental Conservation ("NYSDEC") also has jurisdiction over many of the on-site wetlands pursuant to Article 24 of the Environmental Conservation Law. The total regulated wetlands on-site are  $68.35\pm$  acres. In addition, there is  $1.799\pm$  acres of small isolated wetlands which do not fall under the jurisdiction of either the ACOE or the NYSDEC. There are two

intermittent streams; one which discharges off-site in a northeasterly direction and one which discharges off-site in a southwesterly direction. There are also old and current farm roads and areas of open water which support the previous and current agricultural on-site operations.

Archaeological reconnaissance was performed by the Project Sponsor which was submitted to the Division for Historic Preservation of the Office of Parks, Recreation and Historic Preservation ("OPRHP") for their review.

The Proposed Action is a residential cluster subdivision consisting of a total of 172 residential lots consistent with Section 300-16 of the Town of New Windsor Zoning Code. Within the plan, 170 lots are laid out in a cluster arrangement. The remaining two lots are large Estate lots which contain the majority of the proposed open space. The Proposed Action is preserving approximately 334.4± acres, or 80% of the Project Site, as open space subject to a Conservation Easement intended to conserve regulated wetlands, streams, water courses and other natural site resources. The proposed open space also preserves open woodland, native wildlife habitats and corridors.

See DEIS Figure I-2, "172 Lot Cluster Plan".

The Proposed Action will be entirely new construction that would be designed and constructed in a manner consistent with current Energy Star Standards. The construction is intended to meet or exceed all requirements of the pertinent ICBO New York State Codes including but not limited to the Residential Building Code and the Energy Conservation Code. The Project Sponsor intends to consider "green" building standards published by the American National Standards Institute ("ANSI") and the National Association of Home Builders ("NAHB") at the time of construction.

The plan currently before the Planning Board provides vehicular access to the Project Site via an internal road network. One (1) proposed roadway connects directly onto the southwesterly side of Shaw Road. Central Hudson Gas & Electric, Frontier Communications and Time Warner Cable will be contacted to install underground utility services to the proposed residences and to the sewer and water facilities. The residences will be accessed via the proposed internal roads. Parking for the individual residents will be in the proposed garages and driveways.

The domestic water will be provided through a central water system which includes four (4) onsite bedrock wells which can produce roughly two (2) times the estimated daily demand with the best well out of service. The Proposed Action includes an on-site wastewater treatment plant ("WWTP") to treat domestic sewage. The plant will be designed in accordance with all federal, state and local regulations. The discharge from the wastewater treatment plant will be regulated though the NYSDEC under the State Pollutant Discharge Elimination System program. Stormwater runoff from the Proposed Action's roadways and driveways will be collected and directed to stormwater management facilities. Within these facilities the stormwater will be

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treated for quality and will be detained to maintain current discharge rates. Stormwater management facilities shall be designed in accordance with State and local standards and will conform to the requirements of the General Stormwater SPDES permit.

The site disturbance as a result of the Proposed Action is indicated by the limit of disturbance lines on the Preliminary Subdivision Drawings. The limit of disturbance line delineates the area of disturbance from clearing and grading for the proposed infrastructure and residential dwelling units, along with providing approximately a fifty (50') foot cleared area behind each residential dwelling unit; disturbing approximately 84± acres or 20% of the gross acreage. Most all of the homes and infrastructure have been located in the existing orchard or old farm fields that have been previously disturbed as a result of agricultural purposes. The subdivision design also avoids disturbing the steep slopes, woodlands, wetlands and their buffers to the greatest extent practical.

See DEIS Figure III-5, "Clearing Limits".

There will be limited tree clearing and clearing will be selective in an effort to preserve existing specimen trees where feasible. Existing stonewalls that are within areas to be graded will be removed and stockpiled for reuse. Stonewalls will be reused as landscape elements, retaining walls and tree wells, where feasible.

The Project Sponsor anticipates that the majority of the required infrastructure, roads, utilities and services will be completed within a five (5) year period. Phasing of the project is influenced by a number of factors including the Project Sponsor's goals and objectives, current stormwater regulations in regard to disturbance areas, regulatory agency requirements and market demand. It is anticipated that the project will be broken down into a number of construction phases. A final Phasing Plan (Section Plan) will be submitted to the Planning Board after the regulatory agencies have issued their permits and/or approvals. Although dependent upon market demand, it is anticipated that most of the houses will be constructed and sold within that time period referenced above.

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#### III. SUMMARY OF ANTICIPATED IMPACTS AND PROPOSED MITIGATION

#### III.1 Land Use and Zoning

The Project Site is currently zoned Rural Residential R-1. The primary permitted use is residential. Agricultural uses including raising of field and garden crops, vineyard and orchard farming, breeding, boarding and raising of cattle, sheep, goats, pigs and horses are also permitted uses by right. For residential purposes, the minimum gross lot area is 60,000 square feet with a minimum net lot area of 40,000 square feet, not to exceed one (1) dwelling unit on each lot regardless of availability of central water and/or central sewer. The net lot area is determined by deducting site constraints including easements, rights-of-way, regulated wetlands and areas otherwise precluded from development.

It is the Project Sponsor's opinion that the cluster plan has been designed in accordance with the 2009 Comprehensive Plan Update, Town of New Windsor Zoning Code and Orange County's updated Comprehensive Plan. The current Cluster Plan meets the goals and objectives of the previously mentioned plans by preserving 334.4 acres of land. Therefore, there have been no significant land use or zoning impacts identified requiring mitigation.

The following are unavoidable environmental impacts, minimal in scope, which cannot be avoided during construction of the Proposed Action:

➤ Conversion of 84± acres of the 418.4± acre Project Site from active orchard, vacant land to residential development.

#### III.2 Geology

Based on the existing depth to bedrock which was initially determined from data in the *Soil Survey of Orange County* prepared by the Soil Conservation Service and review of the well logs, it is not anticipated that blasting will occur during construction. Based on the depth of overburden, it is not anticipated that significant impacts will occur to the underlying geology of the Project Site. However, should blasting be required, protocols outlined in Section III.2.3 of the DEIS shall be followed.

#### III.3 Soils

The Project Site has sixteen (16) different soil types. Within the 84± acres of development area, all of the existing soil types have an erosion rating of "slight". A rating of "slight" indicates that erosion is unlikely under ordinary climatic conditions. A SWPPP and an Erosion and Sediment Control Plan have been developed in accordance with applicable NYSDEC design standards, general permit requirements and the Town of New Windsor *Zoning Code*. It is not anticipated that significant adverse impacts are likely to occur given the soil ratings; however, the following mitigation measures will be implemented:

➤ The disturbances associated with construction will only occur within the 84± acres of the development footprint. The limits of disturbance will be delineated in the field by silt fence, construction fence and/or flagging to ensure that no clearing or grading shall occur outside of the clearing limit line.

- ➤ Work associated with each construction phase will be completed within the shortest possible time frame limiting the duration of the potential impact.
- Approved erosion and sediment control devices shall be installed and maintained in and around disturbed areas to prevent the movement of sediment to undisturbed areas.
- > Stabilization on a temporary and/or permanent basis within fourteen (14) days of initially disturbing portions of the Site will be required during the construction period.
- ➤ Stockpile topsoil for re-use on-site with appropriate erosion control and revegetation measures.

#### III.4 Topography

The Project Site has varying topography. Approximately eight-seven percent (87%) of the Project Site has slopes between 0-15%. The proposed improvements have been located within these areas of the Project Site to the greatest extent practicable. The Project was designed to balance cuts and fills to minimize the need to export or import materials during construction. Areas of excessive slope have been avoided in the design of the project. By avoiding steep slopes, it is not anticipated that significant adverse impacts are likely to occur; however, the following mitigation measures will be implemented:

- ➤ The disturbances associated with construction will only occur within the 84± acres of the development footprint. The limits of disturbance will be delineated in the field by silt fence, construction fence and/or flagging to ensure that no clearing or grading shall occur outside of the clearing limit line.
- ➤ Work associated with each construction phase will be completed within the shortest possible time frame limiting the duration of the potential impact.
- Approved erosion and sediment control devices shall be installed and maintained in and around disturbed areas to prevent the movement of sediment to undisturbed areas.
- > Stabilization on a temporary and/or permanent basis within fourteen (14) days of initially disturbing portions of the Site will be required during the construction period.
- > Stockpile topsoil for re-use on-site with appropriate erosion control and revegetation measures.

#### III.5 Wetlands, Streams and Surface Water

The Project Site contains a total of approximately 68± acres of wetlands of which 60± acres are regulated by the NYSDEC designated on the State Wetlands Map as MB-36, MB-37 and MB-38. Wetland boundaries were delineated in the field by the NYSDEC. There are an additional 6.4± acres of regulated wetlands under the jurisdiction of the ACOE. These wetlands were delineated in the field utilizing the *Federal Manual for Identifying and Delineating Jurisdictional Wetlands*. The remaining 1.8± acres are isolated wetlands which are not under regulatory jurisdiction of either the NYSDEC or ACOE.

Two (2) manmade irrigation ponds bordered by wet meadow habitat are located in the northeast portion of the Site. The westerly pond is under the jurisdiction of both the NYSDEC and the ACOE. The easterly pond is only under the jurisdiction of the ACOE.

There are two (2) watercourses on-site. One exits the Project Site to the south which is tributary to the Moodna Creek. The second watercourse exits the Project Site to the north at the old rail bed at Shaw Road and is also tributary to the Moodna Creek. Both of these watercourses are intermittent streams.

The Preferred Plan includes a  $0.48\pm$  acre impact to regulated wetlands and  $1.1\pm$  acre impact to the NYSDEC 100' adjacent area. There will also be a  $0.18\pm$  acre impact to an existing non-regulated wetland. The majority of these impacts will be the result of two (2) road crossings through the wetlands.

The potential direct or indirect impacts to the surface water and wetland resources are as follows:

- ➤ Clearing, grading and filling of approximately 0.48± acres within the limits of a regulated wetland.
- ➤ Clearing, grading and filling of approximately 1.1± acres within the 100' adjacent area of State regulated wetlands.
- ➤ Interference with the hydrological connection of the existing wetlands at the proposed road crossings.
- ➤ Water level fluctuations due to modification of rate and volume of stormwater runoff currently contributing to existing wetlands.
- ➤ Increase in stormwater quantities as a result of additional impervious surfaces.
- > Sand and salt applied to roadways during winter storms.
- > Sediment and pollutants from construction activities.

The following mitigation measures will be implemented:

- ➤ The disturbance area will be limited to 84± total acres which is 20% of the total Site. Limits of disturbance will be delineated in the field by silt fence, construction fence and/or flagging to ensure that no clearing or grading shall occur outside of the clearing limit line.
- ➤ The Project Sponsor will prepare a Wetland Mitigation Plan for submission in obtaining a Freshwater Wetlands Disturbance Permit in accordance with Article 24 of the NYCRR and Nationwide Permit No. 29. This will include the design of a wetland mitigation area that will provide a 2:1 ratio of new wetlands to disturbed wetlands.
- ➤ Road crossings will be constructed with bottomless corrugated metal arch culverts or concrete bottomless box culverts to minimize disturbance and to provide connectivity of existing wetland hydrology and movement of wildlife.
- Installation of erosion control devices, based upon an Erosion and Sediment Control Plan, around the perimeter of proposed disturbances to prevent sediment from exposed topography and soils from entering wetlands and watercourses.
- ➤ Maintain an undisturbed vegetative buffer greater than the required 100' adjacent area from NYSDEC wetlands where practical.
- ➤ Green Infrastructure Practices shall be incorporated in the design to promote run-off reduction through preservation and conservation of natural features, reduction of impervious surfaces and green infrastructure techniques.

#### III.6 Stormwater Management

The Project Sponsor has submitted a Stormwater Pollution Prevention Plan (SWPPP) and Sediment and Erosion Control Plans to the Town for review and approval. In accordance with locally adopted laws and acceptable stormwater practices mandated by the NYSDEC, the SWPPP is required to demonstrate that the project would not significantly modify and/or impact the existing wetlands or surface hydrology on the Project Site. The SWPPP is required to demonstrate that the maximum amount of infiltration practical occurs within the same drainage area and the stormwater plan would have no appreciable effect on recharge of the wetlands and on-site streams.

The SWPPP and Erosion and Sediment Control Plans have been designed in accordance with NYSDEC's current *Stormwater Management Design Manual* and *Standards and Specifications for Erosion and Sediment Control*. The following erosion control measures will be incorporated to minimize erosion potential:

- ➤ Filter Fabric Silt Fence: Silt fence shall be used to control erosion from sheet flow on slopes not to exceed two horizontal to one vertical. Concentrated flows shall not be directed toward silt fence and spacing shall vary from 50' to 200' depending on slope steepness.
- ➤ Permanent and Temporary Seeding Mixtures: Permanent and temporary seeding, mulch, fertilizer, soil amendments and slope stabilization will be used on seeded areas. Land that is stripped of vegetation will be left bare for the shortest time possible. Any area that will remain cleared, but not under construction for fourteen (14) days or longer, will be seeded with a temporary mixture. Topsoil shall be stockpiled, stabilized with temporary seeding and saved for reuse on the Proposed Site.
- ➤ Slope Stabilization: All slopes shall be stabilized to minimize erosion. Slopes shall be stabilized with temporary seeding mixtures and straw mulch. Slopes in excess of four horizontal to one vertical shall be stabilized with jute netting and hydro-seed or blown dry mulch. Existing vegetation, which is not to be removed, will also act as filter strips to protect down slope areas. Run-off will be diverted from newly graded areas to prevent erosion until a permanent ground cover has been established.
- ➤ Dust Control: Measures for dust control during construction shall be implemented as needed, daily water sprays will be used during dry conditions and calcium chloride will be used only if necessary. In addition to water sprays, temporary plantings will aid in minimizing dust.
- ➤ Temporary Diversion Swales: Temporary diversion swales shall be constructed to either divert clean stormwater run-off from newly graded areas or direct sediment laden run-off to a sediment trapping device.
- ➤ Channel Stabilization: Drainage channels and temporary diversion swales shall be stabilized with seed, jute netting or riprap, as specified, to minimize deterioration of the channel bed.

- ➤ Sediment Traps: Sediment traps shall be constructed in the location and be of size and type specified to collect sediment from sediment laden storm water runoff. Sediment traps shall be constructed downstream of disturbed areas and be in place prior to disturbance within the contributory area.
- > Stabilized Construction Entrance: Existing roads will be protected by installation of crushed stone blanket for cleaning construction vehicle wheels. Blankets shall be placed at any intersection of a construction road with a paved or publicly owned road. Stabilized construction entrances shall be installed in the location and be of size and type specified.
- ➤ Tree Protection: Trees to be preserved within areas of construction shall be protected. In all other areas, construction workers will be directed to avoid the storing of equipment or soil under trees in order to prevent soil compaction.

For erosion control sequence, maintenance and responsibility requirements during construction, see Section III.6.3 of the DEIS.

#### III.7 Groundwater Resources

Wells 2, 3, 6 and 7 were selected as the proposed pumping wells for inclusion in the 72-hour pumping test program. The well logs for Wells 6 and 7 are included in the Project Hydrogeologist's 72-Hour Pumping Test Program report.

The combined 72-hour pumping test on Wells 2, 3 and 6 was conducted between January 10 and January 13, 2017 and the individual 72-hour pumping test on Well 7 was conducted between January 23 and 26, 2017. The 72-hour pumping test program was conducted in accordance with the New York State Department of Environmental Conservation (NYSDEC) February 2015 "Pumping Test Procedures for Water Withdrawal Applications" and was designed to demonstrate twice the Proposed Action's average water demand with the best well (i.e. most productive well) out of service in accordance with NYSDOH guidelines.

See DEIS Appendix F, "72 Hour Pumping Test Program".

See DEIS Figure III-8, "Production Well Location Plan".

The average water demand for the Proposed Action was calculated based on 92 4-bedroom and 78 3-bedroom residential units at a water usage rate of 110 gpd per bedroom. The average water demand for the Proposed Action is 66,220 gpd.

The NYSDOH requires that the water supply for new developments equals or exceeds the design maximum daily demand (twice the average daily demand) for the project with the best well out of service. Therefore, the water supply for the Proposed Action must have a capacity to produce a minimum of 132,440 gpd or 92 gpm with the best well (Well 7 40 gpm) out of service.

During the pumping test program, water-level measurements were collected from the four pumping Wells 2, 3, 6 and 7; eight onsite bedrock monitoring wells; and eight offsite wells. The well locations that were measured during the test period are shown in DEIS Appendix F "72-Hour Pumping Test Program".

A Mitigation and Remediation Plan will be put in place to rectify a well-related problem should one occur in an offsite well that is attributed to use of the onsite production wells. The Mitigation and Remediation Plan would be continued for three (3) years commencing when the project reaches 75% completion or at the issuance of the 129th CO.

The Project Sponsor will also conduct follow up offsite well monitoring during the project build-out in the well at 81 Shaw Road and wells near the cul-de-sac on Feitsma Lane if permission by the property owners is granted. When this monitoring is performed, information on well depth and pump depth setting will be collected for further consideration and evaluation of offsite impacts, assuming the property owner can provide this information.

Any well complaint received by the Town Building Department or water system operator from a neighboring property owner would be immediately referred to the Project Sponsor for resolution and the following procedures would be followed:

- > Prior to signing of the plat, a bond shall be filed with the Town by the Project Sponsor, in an amount to be set by the Town Board, to ensure that such homeowner complaints are properly investigated and corrected.
- ➤ The Project Sponsor would retain a hydrogeologist to investigate the complaint.
- > This investigation would include a review of available water level data from the Proposed Action's operating wells and off-site wells monitored, together with data obtained during investigation of the complainant's well.
- ➤ The Project Sponsor would submit a description of the complaint, recommendations and hydrogeologic data to the Town Board for review.
- ➤ If the individual well was not being affected by the Proposed Action's water supply wells as determined by the Town Board upon recommendation by their consulting hydrogeologist, the homeowner would be referred to a competent well or pump contractor for remediation at the homeowner's cost.
- ➤ If the individual well was being affected by the Proposed Action's water supply wells, the following possible remedies would be pursued and paid for by the Project Sponsor:
  - Lowering the homeowner's pump;
  - Deepening the well;
  - Redeveloping the well;
  - Drilling a new well; or
  - Connecting the resident to the Proposed Action's central water supply system; and, if this
    alternative is chosen by the Project Sponsor, the homeowner would be given one (1) year
    of free water service and would thereafter pay for metered water use. The connection
    would essentially eliminate the homeowner's costs related to the maintenance of the
    private wells and pumps on the property in exchange for metered service.
- The homeowner would be notified of the Town Board's findings.

#### III.8 Vegetation and Wildlife

The Project Site consists of an active apple orchard, successional field/meadow, upland hardwood forests, emergent wetlands, red maple and shrub swamp wetlands, mixed deciduous forest/shrub wetland areas and open water/farm pond. Table 7 in the DEIS illustrates the acreages and percent coverages of each of the on-site ecological communities.

Regulated wetlands, non-regulated wetlands and other surface water resources have been previously discussed. Upland hardwood forest communities occur in the central and southern portions of the Site. Much of the upland forest occurs on slopes surrounding wetlands. A narrow band of upland forest along the southwest boundary of the property forms a contiguous block with forest habitat on the adjacent parcels to the north. Dominant hardwood species identified on the Site are listed in the Appendix G1 "Habitat Assessment for New York State-Listed Fauna" of the DEIS.

The cluster plan proposes two (2) forested wetland crossings and encroachment on an isolated wetland. The wetlands crossings could impact Indiana Bat roost trees. It is unlikely that the isolated wetland provides significant amphibian breeding habitat based on the proximity to the active agricultural operations.

The Proposed Action will be implemented in accordance with Federal, State and local laws which regulate development activities with regard to environmental resources. The following mitigation measures will be implemented:

- ➤ The impacts associated with the proposed cluster plan will be limited to a disturbance area of 84± acres and the plans will clearly delineate the limits of disturbance. The limits of disturbance will be laid out in the field prior to the commencement of any construction to confine that work within these areas of the Site.
- ➤ Work associated with each phase is to be completed in the shortest possible time frame. Revegetation will be on a permanent or temporary basis for those areas disturbed longer than fourteen (14) days.
- ➤ Clearing of existing deciduous woodlands will be completed between the months of October through March to limit effects on the Indiana Bat during times of summer roost.
- > Implementation of a proposed landscape plan which will consist of indigenous tree species.
- > The design and layout of the proposed cluster plan avoids on-site natural resources to the greatest extent practical.
- Prepare and implement a wetland mitigation plan in accordance with Part 63 Wetlands Permit Requirements which will net a 2:1 ratio of additional wetlands from what is being disturbed.

#### III.9 <u>Visual Character</u>

The New York State Department of Environmental Conservation's Program Policy Assessing and Mitigating Visual Impacts has inventoried significant scenic and aesthetic resources of Statewide significance. None of the State identified resources are within close proximity to the Project Site. Similarly, there are no sensitive federally regulated historic, cultural or aesthetics resources in close proximity to the Site as well.

The Town of New Windsor 2009 Comprehensive Plan Update recommends that new subdivisions in the western portion of the Town "should be required to explore clustering as an option in order to conserve open space." The recommended development approaches were made to facilitate the preservation of natural and aesthetic resources while creating efficient infrastructure and providing diversity in housing types. The Project Site consists of an active apple orchard, wetlands, woodlands and successional meadows and fields. The Proposed Action is a cluster plan that will preserve approximately 334.4 acres of open space or 80% of the Site which includes natural resources such as woodlands, wetlands and diverse habitat. These

resources contribute to the Town's aesthetic and cultural landscape. Neither the 2009 Comprehensive Plan Update nor the Zoning Code identified cultural or aesthetic resources of Town-wide significance in close proximity to the Project Site.

The following mitigation measures will be implemented, but not limited to:

- ➤ Maintain a 150' continuous green buffer along Shaw Road which will be protected by the conservation easement in perpetuity.
- ➤ The cluster plan has been laid out so that the nearest dwelling unit is over 200' from Shaw Road.
- ➤ All utilities will be installed underground.
- ➤ The impacts associated with the cluster plan will be limited to the 84± acres of the development footprint and the limits of disturbance shown on the Preliminary Subdivision Plan will be delineated in the field prior to construction activities to minimize disturbance.
- ➤ In compliance with Section 257-20 F (1-9), "the following specific areas shall be preserved as undeveloped open space to the extent consistent with the reasonable utilization of land:
  - Unique and/or fragile areas including wetlands.
  - Significant trees or stands of trees.
  - Steep slopes in excess of 20%.
  - Habitats of endangered or threatened species.
  - Historic/cultural resources.
  - Visually prominent landscape features such as fields, pastures and/or meadows.
  - Trees and hedgerows running along existing roadways, stone walls, streams and property lines.
- ➤ Construction of each phase will be completed in the shortest possible timeframe and revegetation and tree planting will be completed with each phase to maximize the duration for regrowth prior to full build-out.
- ➤ Preserve existing vegetation and drainage patterns to the maximum extent practical by limiting site disturbance.
- > Preservation of undeveloped areas as open space that provides buffers to adjacent lands and protect existing vegetation and habitat.
- ➤ Supplement existing vegetation with deciduous, evergreen and indigenous plant materials by implementing a landscape plan in accordance with the Town Code which requires planting of a street tree every 40 feet on center on both sides of the road. Over 530 deciduous trees will be planted as part of the project.
- ➤ Utilize architectural styles, colors and construction materials that enhance and complement the overall natural setting and visual character of the Project Site

#### III.10 Traffic and Transportation

Roadway inventory and traffic counts were conducted for intersections in the Town of New Windsor in close proximity to the Project Site. The following locations were the subject of the Traffic Impact Study ("TIS"):

- ➤ NYS Route 207 and Beattie Road
- Shaw Road and Beattie Road
- Shaw Road and Bull Road

A qualitative analysis has also been conducted for the intersections listed below, including a discussion of what the existing traffic volumes are at the particular location during peak hours and identification of any sight distance or general geometric issues. The analysis also quantifies the order of magnitude of expected traffic volume increases as a result of the project and indicates the percentage of such increase. The analysis also identifies any improvements and/or recommendations to deal with any sight distance or geometric issues. This analysis was performed for the following intersections:

- ➤ Bull Road and Route 207
- ➤ Bull Road and North Street
- NYS Route 94 and 208

The following are individual descriptions of the roadways utilized in the TIS:

- NYS Route 207 is a major arterial which runs throughout much of Orange County. In the immediate vicinity of the Project Site, NYS Route 207 generally consists of one lane in each direction. It has unsignalized intersections with Beattie Road and Bull Road. The roadway has posted speed limits of 55 mph with some posted curve advisory speed signs. The roadway is 22 feet wide with 4 foot wide shoulders. Based on field observations, the pavement condition along NYS Route 207 is generally in fair to good condition.
- ➤ Beattie Road is a Town road which originates at an unsignalized "T" intersection with NYS Route 207 and ends at Twin Arch Road in the Town of Hamptonburgh. Beattie Road is generally a north/south roadway in the Town of New Windsor. In the vicinity of the Project Site, it serves mostly residential neighborhoods. The roadway consists of one lane in each direction and also has a "Stop" sign controlled intersection with both Shaw Road and NYS Route 207. It has a 30 mph posted speed limit entering from the south from the Town of Hamptonburgh and has a 40 mph limit posted southbound immediately south of Route 207. The roadway is approximately 22 feet wide with no paved shoulders and has double yellow centerline striping. Based on field observations, the pavement condition along Beattie Road is generally in fair to good condition with little pavement cracking. Shaw Road is a Town road which originates at a "Y" type unsignalized intersection with Beattie Road. The roadway runs in a generally northwest to southeast direction from Beattie Road to Bull Road where it terminates at a "Stop" signed controlled "T" type intersection. Shaw Road consists of one lane in each direction for its entire length. Washingtonville Soccer Club has fields along this roadway. The roadway has a posted speed limit of 40 mph and pavement width is mostly 21 to 22 feet wide for the majority of its length and it has a

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- double yellow centerline and no paved shoulders. Based on field observations, the pavement condition along Shaw Road is generally in good condition.
- ➤ Bull Road is a Town roadway which originates at an unsignalized "T" type intersection with NYS Route 207. The roadway continues in a southerly direction to an unsignalized, "T" type, "Stop" sign controlled intersection with Shaw Road and terminates at an unsignalized intersection with Toleman Road in the Village of Washingtonville. The roadway varies in width between 20 and 24 feet and consists of one lane in each direction plus a narrow paved shoulder. It has a double yellow centerline and a white edge line (fog line). It has a posted speed limit of 40 mph which changes to 30 mph in the Town of Blooming Grove. Based on field observations, the pavement condition along Bull Road is generally in good condition with some pavement cracking in certain areas.
- North Street is a village roadway which originates at an unsignalized "T" shaped "Stop" controlled intersection with NYS Route 94. The roadway continues in a northerly direction to an unsignalized, four-way intersection with Ahern Boulevard, where it transitions into Toleman Road. The approximately 20 foot wide roadway consists of one lane in each direction plus a narrow paved shoulder and has a posted speed limit of 30 mph. Based on field observations, the pavement condition along North Street is generally in fair to good condition.

See DEIS Figure III-14, "Site Location Map".

The DEIS Section III.10.4 Potential Impacts discusses the results of the Capacity Analysis performed at each of the studied intersections to evaluate current and future operating conditions. Based on the results of this Analysis and other considerations of existing conditions, mitigation measures were developed. In coordination with the Town of New Windsor Highway Department the Project Sponsor under the Build conditions is committed to implement/install and finance the recommendations as follows:

- ➤ Vegetation at the existing and proposed studied intersections will be trimmed to enhance sight distances. This activity will occur during the first phase of construction.
- ➤ Install appropriate warning signs in accordance with MUTCD along the curve on Bull Road located south of Shaw Road
- ➤ On Shaw Road install "Stop Ahead" sign and new pavement markings, including new double center yellow line and "stop bar" on the Bull Road approach.
- Implement the recommended modifications of the intersection of Shaw Road and Beattie Road. Shaw Road approach will be realigned to form a conventional "T" shaped intersection with a "stop sign", "stop bar" and double center yellow line. This work will occur within the public road right of ways.

#### **III.11** Infrastructure and Utilities

Currently, there are no existing municipal sewer or water services at or near the Project Site. The Site is serviced by Central Hudson Gas & Electric Corp. for electric, Frontier Communications for phone and Spectrum for cable television. These service utilities will be extended underground into the Site along the proposed roadways with locations determined by each of the utility companies.

The Proposed Action will also be serviced by a central water system which includes distribution piping, hydro pneumatic water storage tank, water supply wells, water treatment equipment, manganese removal equipment, treatment building, generator house connection and impertinences. Based on the current density, it is anticipated that the Project will have an average daily demand of 66,220 gpd or 45.99 gpm.

Water used for firefighting will be stored in below grade tanks and will not be supplied by the potable water system. Based on feedback from Town of New Windsor fire officials during a meeting held on January 23, 2018 water storage tanks with a combined capacity of 30,000 gallons of usable volume that are separate from the potable water supply are acceptable. Fire flow requirements have been determined based upon the ISO recommendations found in the *Guide for Determination of Needed Fire Flow, Edition 08-2005*.

The Proposed Action will be serviced by a central wastewater treatment plant (WWTP) and sanitary collection system. The WWTP will be designed to meet Intermittent Stream Effluent Limits (ISEL) requirements. Discharge from the WWTP will be regulated by the NYSDEC under the State Pollutant Discharge Elimination System ("SPDES"). A SPDES Permit will be issued by the Department which sets the treatment levels and any specific treatment requirements that the WWTP will be required to meet.

The sewer collection system includes a gravity collection system, manholes, if required, a sewer pump station and force main which will be designed and constructed in accordance with the NYSDEC standards and Ten State standards.

The proposed infrastructure will be designed and constructed in accordance with NYSDEC standards and will meet SPDES Permit requirements, 401Water Quality Certification and Federal Nationwide Permit requirements. Compliance with the above requirements will minimize any potential significant environmental impacts as a result of the construction of the Apple Ridge infrastructure. However, the project is incorporating the following:

- > Connections to existing utilities including electric, phone and cable will be implemented where feasible to limit impacts and maximizing economy of scale by extending existing services.
- > The proposed water, sewer and stormwater systems will be owned and operated by private utility companies. This will maximize economy of scale in long term operation and maintenance of the facilities for the future residents of Apple Ridge without presenting a financial burden to existing Town residents.
- > The WWTP facility will be enclosed in a building that will provide odor and climatic control. The structure will be architecturally consistent with the overall development and will be landscaped.

#### III.12 Community Services and Facilities

The DEIS evaluated potential impacts to schools, emergency services, park facilities and public library. It is anticipated that there will be 568 new residents of the development and of those, 119 will be school aged children. Of the three (3) emergency service branches, representatives of the Project Sponsor met with the Fire Chief to review the plan and the proposed layout. The Fire Department's concerns were with water supply for fire protection and road width for emergency access. The Chief was informed that there will be adequate fire flow supply in the proposed water storage tanks and the roads are being designed in accordance with Town road specifications.

It is the opinion of the Project Sponsor that there will be no significant environmental impacts to community and/or emergency services or facilities.

- > Municipal Services: The Project Sponsor concludes no major impacts are anticipated related to municipal and/or governmental services and any minor impacts would be mitigated through an increase in user fees and/or tax revenue. No additional mitigation is being proposed.
- ➤ Emergency Services including police, fire and ambulance: The Project Sponsor concludes no major impacts are anticipated related to emergency services and any minor impacts would be mitigated through an increase in user fees and/or tax revenue. No mitigation is being proposed.
- Recreational Facilities: As part of the cluster plan, the Project Sponsor will offer for dedication to the Town a portion of the open space that may be used by the Town for future passive recreation purposes. In addition, the Project Sponsor will pay the then current recreational fee per lot.
- > Schools: The Project will generate additional tax revenue through the broadening of the tax base. The Project will also bring new students to a District whose population has been declining over the past ten years that will help stabilize State aid and retain staff and programs.
- ➤ Solid Waste Management: Future residents will be required to participate in the Orange County Recycling Program which is part of the County's Waste Management Plan. Solid waste collection will be performed by private, licensed haulers paid for by future residents. No additional mitigation is being proposed.

#### III.13 Fiscal Impacts

The DEIS estimated a net positive fiscal impact to the Town of New Windsor and emergency services after costs of services was deducted. In addition, the DEIS and FEIS indicated a net negative impact on the Washingtonville Central School District in terms of overall costs and estimated taxes generated by the Proposed Action. The estimated shortfall is not significant when compared to the overall school budget tax levy. The \$22,513.00 shortfall represents .02% of the 2017-2018 tax levy of the Washingtonville Central School District.

No significant adverse impacts have been identified; therefore, no mitigation is required.

#### **III.14** Historical and Cultural Resources

The Project Archaeologist completed a Phase 1A Literature Search and Review and a Phase 1B Field Investigation Survey for the Project Site in accordance with NYS standards for cultural resource investigation.

In accordance with the New York State Historic Preservation Act of 1980, the original Phase 1A and additional Phase 1B Archaeological Investigations have been submitted to OPRHP for review and to be included in the State's database and archives.

OPRHP issued two (2) correspondence dated March 31, 2013 and February 13, 2017 which indicate no further survey warranted and no negative impacts upon national registered properties will occur. Therefore, no mitigation is being proposed.

#### **III.15** Noise and Construction Related Impacts

With the exception of construction activities, the DEIS notes that there will be no significant adverse impacts of noise and odors as a result of the Proposed Action. Construction noise, although exempt from local standards pursuant to §300-71H(5)(b) are also considered temporary and unavoidable.

- Construction noise above the daytime of standards of 65 dBA between the hours of 8:00 a.m. and 9:00 p.m.
- ➤ Use of natural features (i.e., topography, vegetation and distance) to abate construction noise.
- ➤ Conspicuously mark the limits of disturbance throughout the construction period to ensure buffers of existing vegetation remain along the Project Site boundary.
- Ensure that all equipment meets current noise criteria with routine monitoring.
- Equipment will be turned off and not allowed to idle if not in use.
- > Tree planting immediately following final finished grading.
- > Stockpile and re-utilized topsoil on-site with appropriate erosion control and revegetation measures to limit the amount of material potentially being removed from the Project Site.

#### III.16 Air Quality

In general, existing air quality in the Town of New Windsor is good with the average Air Quality Index (AQI) less than the national average.

During construction, site clearing and grading will produce areas of exposed soil that potentially could cause fugitive emissions. Truck traffic and other vehicular traffic during construction may also generate airborne particulate matter.

There will also be exhaust emissions from the burning of fossil fuels by construction equipment, delivery trucks and other vehicular traffic during construction. There will also be an increase in vehicular traffic as a result of the project post-construction.

The proposed residences will have heating systems consisting of a furnace that will rely on petroleum based or carbon based fuels. The proposed furnaces for each of the dwellings will meet or exceed New York State Building Code standards for energy efficiency. Therefore, it is not anticipated that any significant long-term air pollution impacts would be directly attributable to the construction of the project and/or a result of the completed residential development.

The only impacts identified as a result of the Apple Ridge subdivision are those that may arise as a result of construction activities. The following mitigation measures are proposed to be incorporated into the construction process and documented in SEQRA Findings:

- ➤ Work associated with each construction phase is to be completed in the shortest possible time frame limiting the duration of impact.
- Ensure that all construction equipment meets current emissions criteria with routine monitoring during construction.
- Equipment shall be turned off and not allowed to idle during periods of non-use.

Implementing dust control measures including temporary seeding and mulching, daily water sprays during dry conditions and calcium chloride under extreme conditions during construction activities.

#### III.17 Agricultural Resources

Tax parcels 55-1-43.22, 60 and 61 are within Orange County Agricultural District #1. The Orange County Agricultural Districts contain agricultural land that has been recognized by the County and the NYS Department of Agriculture and Markets as containing valuable farmland. The County Agricultural Districts #1 and #2 were created in 1972 to encourage agricultural activities.

Currently, there is an active apple orchard on the Project Site. Within the vicinity of the Site there is a variety of existing farm operations which include crop production, dairy production and horse farms. Other portions of the site include farm fields that were previously used for field crops such as hay or grain corn.

The majority of the soils on the Project Site are not conducive to support farming activities.

The Project Site's soils are severely limited and most are not suitable for farming activities. Table 12 of the DEIS provides a summary of the existing project soils.

The following mitigation measures will be implemented:

- ➤ The proposed Estate Lots include existing agricultural resources and moderately suitable soils that may permit the development of land into future non-irrigated agricultural practices such as orchards, vineyards, horse farms, etc.
- ➤ Preserve approximately 65.9± acres of the existing apple orchard under a conservation easement.
- ➤ Preserve approximately 76.9± acres of existing successional fields under a conservation easement.
- ➤ Preserve approximately 131.4± acres of the existing hardwood forest under a conservation easement.

#### IV. CONSTRUCTION SEQUENCING AND PHASING

The Project Sponsor anticipates that the majority of the required infrastructure, roads, utilities and services will be completed within a five (5) year period. Phasing of the project is influenced by a number of factors including the Project Sponsor's goals and objectives, current stormwater regulations in regard to disturbance areas, regulatory agency requirements and market demand. It is anticipated that the project will be broken down into a number of construction phases. A final Phasing Plan (Section Plan) will be submitted to the Planning Board after the regulatory agencies have issued their permits and/or approvals. Although dependent upon market demand, it is anticipated that most of the houses will be constructed and sold within that time period referenced above.

Based on anticipated construction phasing the project will be sectionalized. It is anticipated that four (4) sections will be individually filed with the County Clerk's Office which will allow conveyance. Each section will be independent from the subsequent sections. Prior to construction of each section, the Developer will post a Performance Bond with the Town of New Windsor Town Board to ensure the requisite improvements are completed in accordance with the Approved Plan.

Alternatives Apple Ridge FEIS

#### V. ALTERNATIVES

The alternatives section of the DEIS described and evaluated a range of reasonable alternatives to the Proposed Action that are feasible considering the objectives and capabilities of the Project Sponsor. The evaluation of each alternative was sufficient to permit a comparative assessment. Four (4) alternatives were evaluated in an effort to identify and compare the potential impacts of each alternative:

- ➤ No Action Alternative: This alternative has evaluated the adverse or beneficial site changes that are likely to occur in the reasonably foreseeable future in the absence of the Proposed Action.
- ➤ The Conventional Subdivision Alternative: This alternative has evaluated potential adverse or beneficial changes to the site that are likely to occur as a result of the As of Right Conventional Subdivision consistent with the R-1 Bulk Requirements.
- The Cluster Subdivision Alternative with a single wetlands crossing: At the request of the NYSDEC, this alternative has evaluated potential adverse or beneficial changes to the site that are likely to occur as a result of the As of Right Cluster Subdivision consistent with the R-1 Bulk Requirements and the Cluster Provision with a single road crossing of the regulated wetlands. This alternative will potentially minimize disturbance of regulated wetlands and associated 100' adjacent area to the greatest extent practicable. This alternative has assessed in sufficient detail in plan and narrative form as appropriate to allow comparison of potential benefits and impacts.
- > WWTP and Outfall Locations Alternative: This alternative has evaluated potential adverse or beneficial changes regarding the location of the proposed on-site WWTP. Two (2) alternative outfall locations have also been evaluated, each will discharge to on-site streams, one which flows in the northerly direction and another which flows in a southerly direction.

#### VI. POTENTIAL GROWTH INDUCING IMPACTS

The Proposed Action has the potential to induce minor growth as a result of the anticipated increase of local expenditures made by future residents within the existing community. The development of the Proposed Action will add approximately 568 residents to the Town of New Windsor which represents an approximate 2% increase to the population at project build-out. At a five year build-out this would be a .4% increase in population annually which is consistent with the past and projected growth rates of the Town. The future population may result in an increase in demand on local retail businesses and other services in the Town as well as surrounding municipalities.

#### VII. UNAVOIDABLE ADVERSE IMPACTS

The development of the Proposed Action will result in some unavoidable impacts. Implementation of the proposed mitigation measures which are discussed further in the DEIS will limit the extent of those unavoidable impacts. Some of these impacts will be temporary or short-term associated with the construction of the Proposed Action, while others will be long term impacts associated with occupancy and use of the Site. Although these impacts cannot be avoided, many can, to some extent, be mitigated.

# VIII. PROJECT IMPACTS ON ENERGY USE AND SOLID WASTE MANAGEMENT

The Proposed Action will not put a significant demand on energy supply or solid waste. The capacity for connection to existing services is available. Residential construction will be done in accordance with energy efficient building standards. Construction waste will be sorted, recycled, reused and the remaining waste will be properly disposed of off-site in a licensed facility. Domestic solid waste that will be generated post-construction will be collected by a private carter and disposed of in a licensed solid waste facility. Future residents will also be required to participate in the County's Waste Management Plan which requires recycling of appropriate household items.

# IX. <u>IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF ENVIRONMENTAL RESOURCES</u>

Certain resources, both natural and manmade, would be expended in the construction and operation of the project. These resources include the use of land, building materials, existing vegetation, wildlife habitat, human effort required to construct the facility, and capital used to finance the construction and operation of the Proposed Action.

# X. TECHNICAL COMMENTS AND RESPONSES

Louis Berger was retained by the Town of Blooming Grove to review the DEIS. A technical report including comments was received on April 8, 2019 and may be found in Appendix B of the FEIS.

#### **X.1** Executive Summary

# Comment No. 1: Louis Berger Comment Letter emailed April 8, 2019

"The existing environmental conditions of the site should be documented in the DEIS (i.e., Phase I Environmental Assessment should be conducted)."

**Response:** Existing Conditions are discussed throughout the document. In Chapter III existing conditions are discussed in detail for each of the 17 thresholds evaluated.

### Comment No. 2: Louis Berger Comment Letter emailed April 8, 2019

"Photographs depicting the existing conditions of the site and study area should be included in the DEIS."

**Response:** Numerous maps, photographs and aerial photographs are illustrated throughout the DEIS and Appendices illustrating existing conditions.

#### Comment No. 3: Louis Berger Comment Letter emailed April 8, 2019

"The DEIS Table of Contents shows an incorrect date for DEIS Appendix H, Water and Wastewater Treatment Plant. The NSU report included as Appendix H is dated May 2018, not October 2017."

**Response:** Typo noted and amended.

# X.2 Project Description

No verbal or written comments were received during the comment period with regard to project impacts on Project Description.

## X.3 Environmental Setting: Existing Conditions, Potential Impacts and Mitigation Measures

#### X.3.1 Land Use and Zoning

## Comment No. 4: Louis Berger Comment Letter emailed April 8, 2019

"The DEIS should include an inventory of applicable local, regional and state land use plan and policies, and provide a more elaborate assessment of the Proposed Action's consistency with applicable plans and policies. The Final Scoping Document indicates that a discussion of the Orange County Open Space Plan (2004) will be provided; however, the DEIS does not contain this."

**Response:** The Orange County Open Space Plan of 2004 provides recommendations including early action items and long term actions. These recommendations are made to preserve major resource areas for consideration including water resources, agriculture, recreation, land forms and landscapes and biodiversity. The Proposed Action is a cluster plan which preserves 334± acres which include intermittent streams, vernal pool type habitats, wetlands, woodlands and agricultural lands. It is the opinion of the Applicant that the Proposed Action is in compliance with the County's Open Space Plan.

## X.3.2 Geology

No verbal or written comments were received during the comment period regarding geology.

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### **X.3.3 Soils**

No verbal or written comments were received during the comment period regarding soils.

## X.3.4 Topography

No verbal or written comments were received during the comment period regarding topography.

## X.3.5 Wetlands, Streams and Surface Water

No verbal or written comments were received during the comment period regarding wetlands, streams and surface water.

#### X.3.6 Stormwater Management

## Comment No. 5: Louis Berger Comment Letter emailed April 8, 2019

"The plans do not show stormwater management for the access road to the WWTP or the plant itself. This WWTP is going to require daily visits by operations personnel and the sludge tanks will require frequent emptying (monthly or less). Stormwater management and pollution prevention for the WWTP and access road will need to be integrated into the stormwater management design for the proposed development."

**Response:** Final design plans will incorporate full stormwater management plans, including required attenuation and treatment in the area of the wastewater treatment plant. These plans will be reviewed and approved by NYSDEC during the joint permitting process to verify compliance with General Permit GP-0-15-002.

## X.3.7 Groundwater Resources

#### Comment No. 6: Louis Berger Comment Letter emailed April 8, 2019

"During the multi-well 72-hour pumping test water level stabilization had not been demonstrated over the last 6 hours of pumping from Well 2 (0.89 feet decline), Well 3 (0.76 feet decline), and Well 6 (1.15 feet decline). The consultant followed the NYSDEC procedure documented in Pumping Test Procedures for Water Withdrawal Permitting, and constructed a semi-logarithmic plot showing a 180-day projection of the time-drawdown curve...[the] water level in the test well must remain above the intake plus a margin of 5% but no less than 5 feet of the pre-test water column. The resultant drawdown projections will satisfy NYSDEC requirements, but the failure to achieve stabilization means the long-term effects of pumping are not known."

**Response:** Bedrock wells typically stabilize at a slight downward trend. The stabilized trends reported above meet the regulatory guidelines and support the respective pumping rates reported for the wells. In addition, considering the regulatory guidelines requiring the development of twice the average water demand of the project, with the best well out of service, the proposed water supply will meet the water-supply requirements over the long term.

#### Comment No. 7: Louis Berger Comment Letter emailed April 8, 2019

"The pumping test report states that "Although these offsite wells [81 Shaw Rd., 16 Fiestina Lane, and others along Fiestina Lane] also did not appear to be negatively affected during the pumping tests or from the longer-term use of Wells 2 and 3 as irrigation wells at the apple orchard, the effects from regular use of the Heritage wells should be assessed and a mitigation plan put in place. The plan will allow Heritage to rectify a problem should one occur in an offsite well that is attributed to use of the

Heritage wells by mitigation measures such as lowering a well pump or drilling a well deeper." A mitigation plan is well advised, and should be prepared."

**Response:** A mitigation plan was provided in Section III.7.3 in the DEIS. A copy is provided in Appendix F of the DEIS and is summarized as follows:

Any well complaint received by the Town Building Department or water system operator from a neighboring property owner would be immediately referred to the Project Sponsor for resolution and the following procedures would be followed:

- Prior to signing of the plat, a bond shall be filed with the Town by the Project Sponsor, in an amount to be set by the Town Board, to ensure that such homeowner complaints are properly investigated and corrected.
- ➤ The Project Sponsor would retain a hydrogeologist to investigate the complaint.
- > This investigation would include a review of available water level data from the Proposed Action's operating wells and off-site wells monitored, together with data obtained during investigation of the complainant's well.
- ➤ The Project Sponsor would submit a description of the complaint, recommendations and hydrogeologic data to the Town Board for review.
- ➤ If the individual well was not being affected by the Proposed Action's water supply wells as determined by the Town Board upon recommendation by their consulting hydrogeologist, the homeowner would be referred to a competent well or pump contractor for remediation at the homeowner's cost.
- ➤ If the individual well was being affected by the Proposed Action's water supply wells, the following possible remedies would be pursued and paid for by the Project Sponsor:
  - Lowering the homeowner's pump;
  - Deepening the well;
  - Redeveloping the well;
  - Drilling a new well; or
  - Connecting the resident to the Proposed Action's central water supply system; and, if this alternative is chosen by the Project Sponsor, the homeowner would be given one (1) year of free water service and would thereafter pay for metered water use. The connection would essentially eliminate the homeowner's costs related to the maintenance of the private wells and pumps on the property in exchange for metered service.
- ➤ The homeowner would be notified of the Town Board's findings.

### Comment No. 8: Louis Berger Comment Letter emailed April 8, 2019

"In Pumping Test Report Figures 4 and 5, the drawdown pattern appears to be controlled by the lineament (i.e., fracture) that traverses two surface water features at the site. However, there is no discussion regarding impacts to on-site surface water resources."

**Response:** This was discussed on pages 15 to 18 in LBGHES' report dated July 2017. Water-level measurements were collected from three piezometer locations. Two piezometers (a nested pair) were installed in the large irrigation holding pond to the east of Wells 2 and 3, two piezometers in the small irrigation pond to the west of Wells 2 and 3, and two piezometers in the elongated wetland feature that runs northeast to southeast through the study parcel. The water-level data collected from the piezometers showed no discernible water-level drawdown or direct influence between the bedrock pumping wells and the surface-water feature.

## Comment No. 9: Louis Berger Comment Letter emailed April 8, 2019

"In Appendix VIII of the Pumping Test Report, the graph of temperature vs. time for Wells 2, 3, and 6 indicated that temperature varied by approximately 7 degrees Celsius. This suggests that an inflow of cold water; and since the test was conducted during the winter, it is possible that inflow from colder surface water (ponds on the property, see Figure 1) was induced during the test or may be induced by long-term pumping."

**Response:** The manual temperature measurements collected by field staff varied by about 7°C (degrees Celsius) due to ambient air conditions; which is not uncommon. The temperature measurements collected from the pressure transducers in the wells showed limited fluctuations which supports the conclusion that the wells are not under the direct influence of surface water which was also supported by the water-level data collected from the piezometers during the test events. In addition, the results for the MPA samples from all of the wells were reported as low-risk for potential groundwater under the direct influence of surface water.

## Comment No. 10: Louis Berger Comment Letter emailed April 8, 2019

"The aforementioned possible surface water infiltration shown by the pumping test temperature plots, coupled with the designed WWTP discharge point in the northern tributary (an intermittent stream within the cone of depression), suggest that there is potential for induced infiltration of not only the ponded surface water, but of the WWTP effluent. Hydraulic testing of the northern tributary, prior to construction of the WWTP, is advised."

**Response:** See response to Comments 8 and 9. The data collected during the pumping test events support the conclusion that the wells are not under the direct influence of surface water. Further testing is not warranted. The discharge location is at the northeasterly extreme of the Project Site and the intermittent stream flows north away from the project wells.

## X.3.8 <u>Vegetation and Wildlife</u>

No verbal or written comments were received during the comment period regarding vegetation and wildlife.

### X.3.9 Visual Character

## Comment No. 11: Louis Berger Comment Letter emailed April 8, 2019

"The visual impact analysis is insufficient and lacks sufficient detail needed to determine the potential for impacts. In addition, it is missing several items identified in the Visual Character and Aesthetic Resources section of the Final Scoping Document (page 15). For example, no existing conditions photographs of the site are provided. Figure III-1 is illegible at this scale and is missing a legend. Visual impacts from Moffat Road should also be included, as existing view of the site are available along this public street."

**Response:** As noted above, numerous maps, photographs and aerial photographs are provided throughout the DEIS and Appendices which provides site context and illustrates existing conditions. Views from Moffat Road were not analyzed as the Proposed Development is over 2,800 feet away separated by significant woodland.

## X.3.10 Traffic and Transportation

### Comment No. 12: Louis Berger Comment Letter emailed April 8, 2019

"(DEIS Figure No I-4 and Page 6) The DEIS discusses a yield plan that establishes the maximum density for the proposed development. This differs from the current plan for the development. Based on the yield

plan, it is plausible that a third connection to the development from the south could be constructed. The new connection would cross into the Town of Blooming Grove by connecting to Moffat Road via the existing Railway Pass over Metro North tracks. If this connection is proposed in the future, another traffic assessment would be necessary to ascertain the impact to Moffat Road and its connection to NY 208 and Bull Road. Most vehicles destined south to Washingtonville or to the Beaverdam Lake-Salisbury Metro North station would likely use this exit. This would potentially add vehicles to a road with low density housing and could affect the intersection of Moffat Road at NY 208 and the intersection of Moffat Road at Bull Road."

**Response:** There is no direct vehicular connection proposed to Moffat Road with the preferred cluster plan.

#### Comment No. 13: Louis Berger Comment Letter emailed April 8, 2019

"(Page 9, Section C) The report assumes 40 percent of all new vehicle trips will be destined south along Bull Road toward Blooming Grove, but the study area does not include any intersections within the Town of Blooming Grove."

**Response:** Pages 5-6 of the Traffic Impact Study dated April 20, 2017 states that a qualitative analysis of Bull Road and NYS Route 207, Bull Road and North Street/Toleman Road, and NYS Route 94 and NYS Route 208 was required per the Scoping Document. This qualitative analysis was discussed further in Section III.F of the study. The increases expected at the intersection of Bull Road and Toleman Road/North Street were estimated at approximately 10% above the No-Build condition. Subsequently, we conducted a capacity analysis and the Level of Service at any intersection south of that location would experience even less traffic generated by Apple Ridge since the volumes get dispersed the further you travel away from the site.

#### Comment No. 14: Louis Berger Comment Letter emailed April 8, 2019

"(Page 11, Section F) The traffic report indicates that Synchro 8 was used to perform the operations analysis. Transportation professionals have been using Synchro 10 for well over a year going on two years. Some may still be using Synchro 9, but version 8 is outdated."

**Response:** Comment noted. At the time of the original study, Synchro 8 was used. A sensitivity analysis with Synchro 10 has been completed for the access and major intersections. Note that the capacity analysis results only changed minimally under Synchro 10 and therefore, the conclusions reached in the TIS still remain valid. See summary comparison of results below.

			2017 EXISTING		2022 NO BUILD		2022 BUIL D	
			AM	PM	AM	PM	AM	PM
BEATTI E RO AD &	UN SIGN ALIZED							
NYS RO UTE 207								
NYS ROUTE 207	WB	LT	A [7.7]	A [7.9]	A [7.8]	A [8.0]	A [7.8]	A[8.1]
BEATTIE ROAD	NB	LR	B [10.4]	B [11.1]	B [10.8]	B [11.7]	B[11.4]	B [12.5]
BEATTI E RO AD &	UN SIGN ALIZED							
SHAW ROAD								
SHAW ROAD	NWR	1	Δ [9 Δ]	Δ [9 Δ]	Δ[9.5]	Δ[9.7]	Δ [9 8]	B [10.5]
								A [8.8]
BEATTIE ROAD	SB	LT	A [7.4]	A [7.3]	A [7.4]	A [7.4]	A [7.4]	A [7.4]
SUAW DO AD A	LIMENSM	ALIZED.						
	UN SIGN	ALIZED						
BULL ROAD								
SHAW ROAD	EB	LR	A [8.8]	A [8.9]	A [9.0]	A [9.1]	A [9.5]	A [9.9]
BULLROAD	NEB	LT	A [7.4]	A [7.4]	A [7.4]	A [7.5]	A [7.5]	A [7.7]
SHAW ROAD &	UN SIGN ALIZED							
SITE ACCESS								
SHAW ROAD	WR	1		_	_	_	Δ [7 3]	A [7.5]
SITE ACCESS #2	NEB	LR	-	-	-	-		A [9.5]
	NYS ROUTE 207  NYS ROUTE 207  BEATTIE ROAD & SHAW ROAD  SHAW ROAD	NYS ROUTE 207  NYS ROUTE 207  NYS ROUTE 207  W B BEATTIE ROAD NB  BEATTIE ROAD NB  SHAW ROAD  SHAW ROAD NWB  BEATTIE ROAD SB  SHAW ROAD & UNSIGN  SHAW ROAD & UNSIGN  SHAW ROAD BBULL ROAD NEB  SHAW ROAD & UNSIGN  SHAW ROAD W BULL ROAD NEB  SHAW ROAD W B  SHAW ROAD W B	NYS ROUTE 207  NYS ROUTE 207  NYS ROUTE 207  WB LT  BEATTIE ROAD & UN SKIN ALIZED  SHAW ROAD  SHAW ROAD  SHAW ROAD SB LT  BEATTIE ROAD & UN SKIN ALIZED  SHAW ROAD B LT  SHAW ROAD B LT  SHAW ROAD B LR  SHAW ROAD B LR  SHAW ROAD B LR  SHAW ROAD WB LT  SHAW ROAD WB LT  SHAW ROAD WB L	NYS RO UTE 207	NYS RO UTE 207	NYS RO UTE 207	MAM PM   AM PM   BEATTIE RO AD &   UN SIGN ALIZED	AM

				2017 EXISTING		2022 NO-BUILD		2022 BUILD	
				AM	PM	AM	PM	AM	PM
1	BEATTIE ROAD &	UNSIGN	ALIZED						
	NYS ROUTE 207								
	NYS RO UTE 207	WB	LT	A [7.7]	A [7.9]	A [7.8]	A [8.0]	A [7.8]	A[8.1]
	BEATTIE ROAD	NB	LR	B [10.4]	B [11.1]	B [10.8]	B [11.7]	B [11.4]	B [12.5]
				- 17		-,,	_ []	- ,,	
2	BEATTIE ROAD &	UNSIGNALIZED							
	SHAW ROAD								
	SHAW ROAD	NW B	L	A [9.4]	A [9.5]	A [9.5]	A [9.7]	A [9.8]	B [10.5]
			R	A [8.7]	A [8.6]	A [8.8]	A [8.7]	A [9.0]	A [8.8]
	BEATTIE ROAD	SB	LT	A [7.4]	A [7.3]	A [7.4]	A [7.4]	A [7.4]	A [7.4]
3	SHAW ROAD &	UNSIGNALIZED							
	BULL ROAD								
	SHAW ROAD	EB	LR	A [8.8]	A [8.9]	A [9.0]	A [9.1]	A [9.5]	A [9.9]
	BULLROAD	NEB	LT	A [7.4]	A [7.4]	A [7.4]	A [7.5]	A [7.5]	A [7.7]
5	SHAW ROAD &	UNSIGNALIZED							
	SITE ACCESS								
	SHAW ROAD	WB	L	-	-	-	-	A [7.3]	A [7.5]
	SITE ACCESS #2	NEB	LR	-	-	-	-	A [9.2]	A [9.6]

## Comment No. 15: Louis Berger Comment Letter emailed April 8, 2019

"(Page 14, Section F) The traffic report states that Bull Road and North Street/Toleman Road intersection (located in Blooming Grove) had a total of 45 vehicles pass through the intersection during the AM peak hour and 540 pass thought the intersection during the PM peak hour. This difference does not make sense because drivers usually use the same route both to/from work each day, especially in a rural environment with limited roadway options. No traffic count information was provided for this intersection in the report to validate the count. The report does not evaluate this intersection's operation; thus, the intersection may experience traffic delays as a result of the proposed development."

**Response:** Agreed. There was a typo on Page 14. Instead of 45, it should have read 450 vehicles for the AM peak hour.

## Comment No. 16: Louis Berger Comment Letter emailed April 8, 2019

"(Page 15, Section G) There is no mention of potential truck traffic degradation to the pavement, given the pavement has been reported as good with pavement cracking occurring on Bull Road on page 4. Depending on the truck route, trucks may be driving through the Washingtonville town center if the source of the lumber, roofing, and foundations is located south of the planned development site. Mitigation could include repaving roadways along the truck route between NY 94 and Shaw Road."

**Response:** Since the majority of the traffic generated by the site will be passenger cars, the impact to the pavement as a result of the project are expected to be similar to what occurs over time due to normal wear and tear. In addition, the majority of the heavy traffic destined to the site, including school buses, garbage trucks, delivery vehicles, plows, etc. are already present along the area roadways since they serve existing development and therefore no significant additional wear and tear on the pavement from such vehicles is expected.

# Comment No. 17: Louis Berger Comment Letter emailed April 8, 2019

"(Appendix A, Figures 2 and 3 and Appendix F) The existing condition traffic volume numbers published in Figures 2 and 3 in Appendix A do not match the values contained in Appendix F tables, which contain the 2017 traffic counts. Either the data in the Appendix F tables was not correctly entered, or the values in the figures was not correctly entered."

**Response:** The existing traffic volume numbers published in Figures 2 and 3 in Appendix A do not exactly match the values contained in the traffic count data sheet in Appendix F, since the volumes are adjusted in the process of balancing the traffic volumes between intersections. Therefore, the traffic volumes utilized in the study are slightly higher than the values contained in Appendix F tables for the purposes of a conservative analysis.

#### Comment No. 18: Louis Berger Comment Letter emailed April 8, 2019

"(Appendix A, Arrival and Departure Distribution, Figures 8 and 9) The proposed distribution of new vehicle trips to and from the Apple Ridge Residential Development does not adequately describe how the percentages were developed other than existing and expected travel patterns. This is a critical part of the assumptions that leads to the assignment of vehicle trips. Given the location, several sources should be accessed to determine the best distribution such as the Census Journey to Work or Orange County travel demand model trip tables. The Metro North station east of Washingtonville will also be an attractor of vehicle trips for residences who work in New York City or New Jersey and chose to live in Upstate New York due to various reasons. Residents who purchase a home in Apple Ridge and travel to the Metro North train station each day will most likely use Ahern Boulevard to avoid driving through the Washingtonville town center. The intersection at North Street and Ahern Boulevard as well as the intersection at NY 94 and Ahern Boulevard may need to be assessed for potential traffic impacts."

**Response:** Based on information from the United States Census Bureau and the Orange County travel demand model trip tables, the data suggests that the vast majority of workers who live in the county, also work in the county. However, with this being said, data shows that there is a considerable number of people who work in Rockland County and New York City. Therefore, we believe that data from the United Census Bureau and the Orange County travel demand model trip tables reaffirm our initial arrival departure distributions.

### Comment No. 19: Louis Berger Comment Letter emailed April 8, 2019

"(Appendix A, Arrival and Departure Distribution, Figures 8 and 9) Based on the ITE forecast, the proposed residential development will generate approximately 100 vehicle trips leaving in the morning

and returning in the evening. Washingtonville is the closest town center to the development, providing groceries, banking, pharmacy, restaurants, schools, religious, and recreational necessities for families. While not occurring every day, it is plausible that the new residents of the Apple Ridge community could plan their trips through Washingtonville as part of their commute to either drop off/pick-up children at school, stop at a retail place, or other errand. Given that potential scenario, this study should consider evaluating traffic impacts based on 100 percent of vehicle trips destined to/from Bull Road to the south into Washingtonville town center. This would also require adding a few more intersections to the study area, including North Street at Ahern Boulevard, NY 94 at North Street, and NY 94 at Ahern Boulevard (to account for vehicles destined to the Metro North Station)."

Response: While we agree that a good portion of the site generated trips will travel through Washingtonville, we do not believe it would be feasible to consider a scenario where 100 percent of vehicle trips travel in the same direction. We believe that nearby towns and villages such as New Windsor, Newburgh, Maybrook and Goshen will all draw trips for the various uses as listed above. For that reason, at most we would expect that approximately 40% of the site generated traffic to travel through the North Street and Ahern Boulevard intersection, with approximately half of these trips turning onto Ahern Boulevard and the other half of these trips continuing straight on North Street. Therefore, we would expect traffic impacts at these intersections to be minimal without a significant impact on the roadway system.

# Comment No. 20: Louis Berger Comment Letter emailed April 8, 2019

"(Appendix E) It is important to add NY 94 to Table A-2 to determine if there is an existing safety issue through Washingtonville before adding any new vehicle trips generated by the Apple Ridge development."

**Response:** On Page 6 and 7 of the Traffic Impact Study, a description of primary accident types and contributing factors for NYS Route 94 reported accidents is listed. There were 10 accidents, which were primarily due to driver inattention and failing to yield the right of way.

# Comment No. 21: Louis Berger Comment Letter emailed April 8, 2019

"(Appendix F) The traffic count for Beattie Road at Shaw Road is missing two time periods within the peak hour, 5:30 - 5:45 pm and 5:45 - 6:00 pm."

**Response:** The PM hour traffic count at this intersection was conducted between the hours of 3:30 to 5:30 PM and supplemented with machine traffic counts covering every 15 minute period within a 24-hour time frame. The peak hour at this location was identified as 4:00-5:00 PM and it appears that traffic volumes are lower after 5:00 PM at this location.

### Comment No. 22: Louis Berger Comment Letter emailed April 8, 2019

"(Overall) The traffic study focuses on issues related to the immediate area surrounding the proposed development, a rural area with low volumes. Because the planned development could produce over 100 peak hour trips, the study area needs to be expanded to include Washingtonville to assess if the nearby town center would be affected by the addition of the new vehicle trips."

**Response:** As indicated in our responses to Comments 18 and 19, only a portion of these peak hour trips are expected to pass through the Village center in Washingtonville with approximately 30 additional vehicles during the highest hour through the 208/94 intersection of the equivalent of 1 vehicle every 2 minutes. Therefore, we would expect traffic impacts at these intersections to be minimal without a significant impact on the roadway system.

### Comment No. 23: Louis Berger Comment Letter emailed April 8, 2019

"(DEIS, page 80) Dates indicated for traffic counts are incorrectly noted in text when compared to the actual count sheets provided in Appendix. This is a good result because the date in the text indicates a Friday, which is not a valid count day."

**Response:** Noted and corrected.

## Comment No. 24: Louis Berger Comment Letter emailed April 8, 2019

"(DEIS, page 82) The text indicates 2021 for No-build and build conditions. This should be changed to 2022."

Response: Noted and corrected.

## Comment No. 25: Louis Berger Comment Letter emailed April 8, 2019

"(Traffic Impact Study, page 17) The bridge discussion described in the traffic study references Appendix B of the FEIS. That is the traffic report. The bridge inspection report is missing."

**Response:** The report can be easily accessed at dot.ny.gov/main/bridgedata. The Bull Road Bridge information (attached) is found on Page 14 of the NY State Highway Bridge Data Report. The bridge report has been updated since our traffic report was completed and now shows an inspection date of May 12, 2017 and that the bridge was <u>not</u> found to be poor in status. See Bridge Report in the attached appendices of the FEIS under NY State Highway Bridge Data.

## Comment No. 26: Louis Berger Comment Letter emailed April 8, 2019

"(Traffic Impact Study, Appendix A) References to figure numbers do not match with the figure numbers listed on the figures."

Response: Noted and corrected.

## X.3.11 Infrastructure and Utilities

### Comment No. 27: Louis Berger Comment Letter emailed April 8, 2019

"Wastewater Engineering Analysis – There are two streams that originate from the proposed Apple Ridge development site. Both streams are intermittent (i.e., are dry some of the time) and are tributaries to Moodna Creek (Figure 1). The designated discharge point of the WWTP effluent is along the northern tributary where little or no flow is available for dilution. It was reported by HydroQual that no flow was observed in this stream after 2 inches of precipitation over a 48-hour period. One NYSDEC definition of an intermittent stream is any stream that periodically goes dry at any point downstream of the proposed point of discharge. Therefore, discharge to this stream would therefore be subject to Intermittent Stream Effluent Limits (ISEL)."

Response: Project Sponsor concurs. No response necessary.

#### Comment No. 28: Louis Berger Comment Letter emailed April 8, 2019

"Documents reviewed acknowledge these (Table B-4B) as the discharge requirements for the proposed WWTP. It is important to note that these are the minimum required treatment standards and that more stringent requirements could be imposed by the State Pollutant Discharge Elimination System (SPDES) Program upon permit application."

Response: Project Sponsor Concurs. No response necessary.

# Comment No. 29: Louis Berger Comment Letter emailed April 8, 2019

"The Membrane Bioreactor (MBR) process proposed for the Apple Ridge WWTP is a well-established technology that can produce a high-quality effluent. Assuming proper design and construction, this

technology should be able to meet the aforementioned minimum standards. With proper operation and maintenance, it is not anticipated that the effluent quality associated with this technology would negatively impact downstream facilities (wetlands, wildlife, etc.)."

Response: Project Sponsor concurs. No response necessary.

## Comment No. 30: Louis Berger Comment Letter emailed April 8, 2019

"The calculated influent average daily flow is 66,220 gallons per day (GPD), or 46 gallons per minute (GPM). This was calculated for 602 bedrooms at 110 GPD/bedroom. Based on the anticipated population at full buildout, the peaking factor of 4 would apply. The peak flow would therefore be approximately 184 GPM.

It is noted that the aforementioned peak flow rate is for the wastewater only under the assumption of a new water-tight, PVC collection system. It is unlikely that the gravity collection system would be entirely water-tight, at least not indefinitely. It does not account for the inevitability of inflow and infiltration. Each of the equalization tanks proposed in the Water and Wastewater Treatment Plant Engineer's Report prepared by NSU has a capacity of 12,500 gallons, which is just over one hour's capacity at the peak flow rate. Understanding that this is not the final design, it is recommended that additional equalization capacity be incorporated into the WWTP design."

**Response:** Final design will be in full compliance with all applicable regulations and will include additional operational features based on direct experience. Based on the current design, the two equalization tanks can accommodate a total of 33,000 gallons (excluding freeboard). In additional, the effective equalization volume can be further augmented by utilizing freeboard in this tank as well as other process tanks. This affords the operator with an additional/emergency 27,400 gallons. Such additional volume is not expected to be needed, nor will its use be part of Standard Operating Protocols.

#### Comment No. 31: Louis Berger Comment Letter emailed April 8, 2019

"The NSU Engineer's Report states that there should be two treatment trains each having capacity of 50% of the average daily flow (ADF), which means that there is essentially no redundancy should one treatment train be off line for an extended period and the WWTP will unlikely be able to meet regulatory discharge limits under this scenario. It is recommended that each of the proposed two treatment trains have the capacity to treat 100% of the ADF, or that a third treatment train with a capacity of 50% ADF be added to provide redundancy."

**Response:** The system is designed to treat an average daily flow (ADF) of 66,220 GPD, a maximum daily flow (MDF) of 132,400 GPD and a peak instantaneous flow of 256 GPM. Based on similar facilities, actual flows are expected to average about 40,000 GPD or less. With one process train offline, the second train is able to process and treat the full ADF for several days. In addition, critical process equipment is redundant. If the operating units fail or are offline for maintenance, standby units are present for:

- Equalization Pumping
- Equalization Tank Aeration
- Rotary Screens: Both screens will operate simultaneously under normal conditions, to extend their useful lives. However, if one screen is offline for maintenance, the other screen can process a flow of 50 GPM (ADF is 46 GPM)
- Screen Tank Pumping (from rotary screen to aeration tanks)
- Aeration Pumping (from aeration tank to membrane tank)
- Aeration Tank Blowers
- Permeate Pumping
- Membranes (Clean In Place Tank included, will contain spare membranes)
- Membrane Aeration

- UV Disinfection Units
- Activated Sludge Aeration (for sludge holding tank)

In addition, adequate spare parts for process equipment will be stocked to minimize any down time. In the unlikely event that one train is down for a length of time so extensive that effluent is at risk of not meeting permit limits, raw wastewater may be pumped out of the equalization tank and hauled offsite for further treatment at a licensed facility.

# Comment No. 32: Louis Berger Comment Letter emailed April 8, 2019

"The MBR process does generate a large volume of sludge, and it is anticipated that the two 9,000-gallon Sludge Holding Tanks will require frequent emptying. Because of the amount of sludge generated by the MBR process is significantly higher than an extended aeration process, it is recommended that a means for sludge dewatering/solidification, such as a centrifuge or belt filter press, be incorporated into the WWTP design."

**Response:** Dewatering practices require large amounts of energy, generate high levels of noise and odors, and are generally neither neighbor-friendly nor cost effective at the expected flow rates. NSU also respectfully disagrees that the proposed MBR based system generates significantly more sludge than an extended aeration process. To the contrary all aerobic process, including these, generate about one pound of excess biosolids for every pound of Biological Oxygen Demand (BOD<sub>5</sub>) removed including that from external carbon that may be added for denitrification.

## Comment No. 33: Louis Berger Comment Letter emailed April 8, 2019

"As stated above in the wastewater engineering analysis of the proposed WWTP, the effluent is required to meet ISEL standards. ISEL standard effluent is of high quality. Assuming the plant is properly designed, built, and maintained to achieve the targeted effluent quality, impacts to the groundwater quality in water supply wells in Blooming Grove in the vicinity of northern tributary would not be expected.

The municipal water supply wells along Route 94 would not be impacted by the proposed Apple Ridge development under any scenario (assuming that the effluent from the Apple Ridge WWTP was discharged into the northern tributary, as currently proposed), as the supply wells along Route 94 are located far upstream (0.6 miles) of the inflow of the northern tributary into Moodna Creek."

**Response:** Project Sponsor concurs. No further comment necessary.

## **X.3.12** Community Services and Facilities

No verbal or written comments were received during the comment period with regard to community services and facilities.

## X.3.13 Fiscal Impacts

No verbal or written comments were received during the comment period with regard to fiscal impacts.

## X.3.14 <u>Historical and Cultural Resources</u>

No verbal or written comments were received during the comment period with regard to historical and cultural resources.

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## **X.3.15** Noise and Construction Related Impacts

## Comment No. 34: Louis Berger Comment Letter emailed April 8, 2019

"As noted in following comment (Full EAF, Parts I and II), a noise assessment may be warranted due to the removal of vegetation and alteration of topography that would result from the proposed development."

**Response:** Existing ambient noise levels were evaluated and included in Section III.15 of the DEIS.

# X.3.16 Air Quality

No verbal or written comments were received during the comment period with regard to air quality.

## X.3.17 Agricultural Resources

No verbal or written comments were received during the comment period with regard to agricultural resources.

# X.4 Construction Sequencing and Phasing

No verbal or written comments were received during the comment period with regard to construction sequencing and phasing.

### X.5 Alternatives

## Comment No. 35: Louis Berger Comment Letter emailed April 8, 2019

"In light of the numerous short- and long-term unavoidable adverse impacts, the DEIS should provide a more robust discussion of alternatives. The DEIS alternatives analysis indicates that the Cluster Subdivision with a Single Wetland Crossing Alternative would result in a substantial reduction in environmental impacts relative to the Proposed Action. A more elaborate justification for dismissing this lesser environmental impact alternative should be included. The DEIS simply dismisses the alternative in stating that the single crossing "introduces a health, safety and welfare issue with regard to emergency services access." The rationale for dismissing the Single Wetland Crossing Alternative should be more fully developed, including exploring a solution to provide adequate access for emergency vehicles via a single access road to the local street network."

**Response:** As noted in the DEIS, Section 257-21F requires that subdivisions containing 20 lots or more shall have at least two (2) street connections with existing or proposed streets. This provision ensures adequate access for emergency vehicles. As suggested in the comment, providing adequate emergency access via additional access roads to existing streets would require additional site disturbance and additional impervious surface which would reduce identified benefits of this alternative.

## Comment No. 36: Louis Berger Comment Letter emailed April 8, 2019

"The Final Scoping Document (page 21) states that a WWTP and Outfall Locations Alternative will be analyzed in the DEIS. Similarly, the DEIS Executive Summary (page 20) references this alternative: WWTP and Outfall Locations Alternative:

This alternative has evaluated potential adverse or beneficial changes regarding the location of the proposed on-site WWTP. Two (2) alternative outfall locations have also been evaluated, each will discharge to on-site streams, one which flows in the northerly direction and another which flows in a southerly direction.

However, the Alternatives section of the DEIS does not include an assessment of this alternative."

**Response:** Discussions of the Alternative Outfall locations and the two (2) existing intermittent streams was discussed in Section III.11 Infrastructure and Utilities.

# **X.6** Potential Growth Inducing Aspects

No verbal or written comments were received during the comment period with regard to potential growth inducing aspects.

#### X.7 Unavoidable Adverse Impacts

No verbal or written comments were received during the comment period with regard to unavoidable adverse impacts.

## X.8 Project Impacts on Energy Use and Solid Waste Management

No verbal or written comments were received during the comment period with regard to project impacts on energy use and solid waste management.

## X.9 Irreversible and Irretrievable Commitments of Environmental Resources

No verbal or written comments were received during the comment period with regard to irreversible and irretrievable commitments of environmental resources.

#### Volume II

### **Appendix A. SEQRA Documents**

### Full Environmental Assessment Form, Parts I & II

#### Comment No. 37: Louis Berger Comment Letter emailed April 8, 2019

"The SEQRA Full EAF is dated March 23, 2011. An updated Full EAF should have been completed in 2016 for the revised project, particularly in light of the fact that NYSDEC revised the EAF in 2012. The 2012 revisions to the Full EAF were substantive; the current version of form requires a substantial amount of additional information."

**Response:** We acknowledge the commenter's opinion that revisions to the Full EAF by the Department were substantive. The Project has been subject to an Environmental Impact Statement which provides extensive analysis of 17 environmental, social, historical and fiscal thresholds. The preparation of the Impact Statement greatly outweighs the minimal information provided in the Full EAF.

### Comment No. 38: Louis Berger Comment Letter emailed April 8, 2019

"In addition, the response to EAF Part 2, question 17 should be changed to yes to reflect that the project would entail removal of natural barriers that could act as a noise screen."

Response: Noted and corrected.

#### **Final Scoping Document**

## Comment No. 39: Louis Berger Comment Letter emailed April 8, 2019

"The Final Scoping Document for the Proposed Action, dated January 26, 2017, includes an initial identification of mitigation measures. As noted on page 2 of the Final Scoping Document (General Guidelines, #7), the DEIS should "consider at least those measures mentioned in the Scoping Document;" furthering noting that "for any mitigation measures listed in this Scope that are not

incorporated into the Proposed Action, the reason why the Applicant considers them unnecessary should be discussed in the DEIS."

Many of these mitigation measures are not mentioned the DEIS. The DEIS should be revised to provide a discussion of these initial mitigation measures, including rationale for not incorporating any such measures into the Proposed Action."

**Response:** It is the opinion of the Applicant that the mitigation measures identified in the Scoping Document were generally discussed in Section I.14 Summary of Mitigation Measures and in the DEIS Sections III.1-17 where mitigation measures were provided based on potential environmental impacts.

## XI. PUBLIC COMMENTS AND RESPONSES

#### **XI.1** Executive Summary

## Comment No. 40: Paul Sherman, 542 Beattie Road, March 27, 2019 Public Hearing

"My concern is it realistic to think that 172 units with a very complicated infrastructure is going to be done in five years?"

**Response:** The Project Sponsor anticipates that all of the infrastructure and units will be completed in five (5) years given current housing market.

### **XI.2** Project Description

No public verbal or written comments were received during the comment period regarding Project Description.

## XI.3 Environmental Setting: Existing Conditions, Potential Impacts and Mitigation Measures

#### XI.3.1 Land Use and Zoning

# Comment No. 41: John Coffey, 3 Wagner Drive, March 27, 2019 Public Hearing

"...for the purposes of the yield map was that access point shown when it's not currently shown on the cluster development that's proposed?"

**Response:** The preferred plan is a cluster plan and what the Code requires is establishing the density by first developing a as of right conventional subdivision plan, this is known as a yield plan. The yield plan has three points of access, two on Shaw Road and one on Moffat. This plan established the density, complies with the current zoning code and utilizes one hundred percent of the site, there is no proposed open space.

## Comment No. 42: Sylvia Mangold, 155 Bull Road, March 27, 2019 Public Hearing

"...my first comment is that there is not two accesses, the bridge on Moffat Road is broken that goes over the railroad tracks so that's not really an accessible route and it goes into wetlands." **Response:** The Preferred Plan proposed a boulevard entry and wide shoulders to allow for emergency access. There are also two internal loops which provide alternative access within the development. The Plan does not propose to access onto Moffat Road via the railroad bridge.

### Comment No. 43: Eric Salvucci, 7 Feitsma Lane, March 27, 2019 Public Hearing

"Now we have this cluster plan on 400 some odd acres. Why not take those 172 homes, put them around the 400 some odd acres and keep the landscape as it is? Everyone will have their own well, everyone will have their own septic, you get rid of the sewer treatment plant, water issues, I think it will be much better off to do it that way."

**Response:** The Preferred Plan is a cluster plan which will preserve 334.4 acres or 80% of the site. A conventional subdivision plan would not provide any open space.

### Comment No. 44: Chris Prater, 161 Shaw Road, March 27, 2019 Public Hearing

"Yes so my concern is has there been say a study done to determine the necessity for this amount of homes which impacts the water, drainage, the traffic?"

**Response:** The Zoning Code of the Town of New Windsor regulates potential densities in the various districts of the Town. The potential impacts of the proposed action have been evaluated in the DEIS.

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## Comment No. 45: Ray Mulligan, 173 Shaw Road, March 27, 2019 Public Hearing

"All that other space, is that still going to retain, well, all the other space, is that going to retain green space? Is it going to be in a land trust like originally agreed or is that going to have a section, lot and block like it has now so you can, that's going to be, could be redeveloped down the road?" **Response:** The proposed open space will have a conservation easement over it restricting any further development in perpetuity. These lands will either be under private ownership or owned by the utility company.

## XI.3.2 Geology

No public verbal or written comments were received during the comment period regarding geology.

## XI.3.3 Soils

No public verbal or written comments were received during the comment period regarding soils.

## XI.3.4 Topography

No public verbal or written comments were received during the comment period regarding topography.

## XI.3.5 Wetlands, Streams and Surface Water

## Comment No. 46: Surdyka Family, 8 Feitsma Lane, Comment Letter dated April 2, 2019

"Another issue that needs to be addresses is the stream that flows through the middle of our back yard as well as most of our neighbors. Anybody who has property along this intermittent stream will be able to tell you how impossible it is to keep our properties from flooding throughout the year. It is already heavily impacted by the rain fall, snow thaw causing our back yard to be wet for months. The stream is not maintained therefore it is clogged with heavy derby all along it. With the addition of 63,000 gallons of projected water a day discharging from the water treatment building the stream will not be able to accommodate that additional amount of water without affecting the properties it runs through greatly. This projects effects on the environment and wildlife in the area will be irreversible."

**Response:** The outfall from the proposed treatment plant will be north of all of the properties along Feitsma Lane. The flow of the intermittent stream flows towards the north away from the existing residence; therefore, the discharge will not add flows to the stream which runs along the properties of Feitsma Lane.

#### **XI.3.6** Stormwater Management

# Comment No. 47: Jeremy McVey, Washingtonville Soccer Club, March 27, 2019 Public Hearing

"Reading through the DEIS, it sounds as if there's going to be an increasing amount of runoff and water to be displaced somewhere. Unfortunately I think our concern is our fields are going to be negatively affected by the runoff and cause us to lose those two fields."

**Response:** All design point peak flows (study point for flows off-site) have been decreased or remain the same, as displayed in Tables 1, 5 & 8 on the Stormwater Pollution Prevention Plan (SWPPP) in the DEIS Appendix. With regard to the specific concerns of the adjacent ball fields being negatively impacted, approximately 192 acres flow to the existing culvert crossing Shaw Road toward the field location. This

is identified as Design Point 1 in the SWPPP. Utilizing two (2) F-5 bio-retention basins and one (1) Type P-3 extended detention wet pond, the flows for all storm events has been decreased at Design Point 1 as displayed in Table 1 of SWPPP.

## Comment No. 48: Ray Mulligan, 173 Shaw Road, March 27, 2019 Public Hearing

"The other problem I have is the water runout, it appears that if you don't mind they're stating that all the water's coming out here but they installed a huge pond or a pond over here and I had a concern on the first board meeting that the pipe went out to my property and the only thing that has been changed from the plan is they erased the pipe."

**Response:** The area referred to is at the northwesterly portion of the property. This area has been studied as Design Point 2. Again, flows have been decreased for all storm events utilizing one (1) type P-2 wet pond and one (1) Type 5 bio-retention basin (on Table 5 in SWPPP). It should be noted that all stormwater from the site in this location (Sub-catchment 3S) flows southwest away from Mr. Mulligan's property. Also, the proposed Type P-2 wet pond in the area of Mr. Mulligan's property will have an outlet structure and emergency overflow. Both devices will be well within the project's property limits and discharging into an ACOE wetlands before flowing off-site **away** from the Mulligan property.

### Comment No. 49: Kimberly Young, Feitsma Lane, March 27, 2019 Public Hearing

"And my property right now is very wet as it is, it's very low land, we have a stream running through it... My concern is not only wildlife but all the flooding in my yard..."

**Response:** All properties on Feitsma Lane, which back onto the existing stream, have been studied as part of Design Point 1. This consists of 192+ acres of drainage basin. As mentioned previously, utilizing two (2) F-5 bio-retention basins and one (1) Type P-3 wet extended detention pond decreases the flow for all storm events at Design Point 1 (on Table 1 in SWPPP). It is the project's obligation that there be no increase in stormwater flows from the project site to this stream than current conditions.

## Comment No. 50: Elizabeth M. Munday, 138 Shaw Road, Comment Letter dated April 5, 2019

"On most properties there is very poor drainage. Flooding is the norm, particularly in the spring but not limited to that season. The soccer field is a prime example. And with the existing soccer field we are already overextended with traffic. Adding clusters of housing will make an already existing situation even much worse. What is going to happen to our home values?"

**Response:** Approximately 192 acres flow to the existing culvert crossing Shaw Road toward the existing soccer field's location. This is identified as Design Point 1 in the SWPPP. Utilizing two (2) F-5 bioretention basins and one (1) Type P-3 extended detention wet pond, the flows for all storm events has been developed at Design Point 1 as displayed in Table 1 of SWPPP. The project will not increase stormwater flows off-site as displayed in the SWPPP, and as such, existing home values will not be affected due to stormwater concerns.

## Comment No. 51: Katrin Prater, 161 Shaw Road, Comment Letter dated April 3, 2019

"I am afraid that the actual situation wasn't addressed properly. The entire area surrounding the Apple Ridge project does have a lot of water. There is wetland here but it is important to know that is mostly wet due to poor water runoff design. As for example we have a smaller collecting pond next to Shaw Road that then runs through our property. It is nearly empty at most times but when we have a day of heavy rain it almost reaches capacity and during the summer months when we have a few weeks of drought it is bone dry. So let's not think that there is plenty of water in the area to go around for an additional 172 homes, it may seem so on a rainy day but not in the midst of summer when ponds and

creeks are dry. Then there is the risk of increased runoff water in the area that will be a problem as the infrastructure is not there to support it. Not just my property but pretty much everybody in the area including the soccer field across the street will be affected. My conclusion would be that this size of development is not appropriate for a rural area where each property owner is responsible for drainage/private well etc. These type of cluster development should be within village perimeters where proper infrastructure is in place. The amount of dwelling units is largely inappropriately for an area like this."

Response: Opinion noted.

## **XI.3.7** Groundwater Resources

# Comment No. 52: Bo Erikson, 235 Bull Road, March 27, 2019 Public Hearing

"Basically the concern that all this 174 houses will probably be around 7, 800 people continuously going to use all the water from the aquifer, I know there's been people measuring our wells and the through-put and so on and they're going to put up some bond, that's all well and good for a couple years, but 10, 15 years down the road when all of these people have sucked out the aquifer."

**Response:** See Response to Comment No. 57 below.

## Comment No. 53: Bo Erikson, 235 Bull Road, March 27, 2019 Public Hearing

"... something that I never heard about now is another plan for 66,000 gallons of underground water storage tanks for the fire brigade."

**Response:** Based on feedback from Town of New Windsor fire officials during a meeting held on January 23, 2018, water storage tanks with a combined capacity of 30,000 gallons of usable volume separate from the potable water supply are acceptable. The tanks will be buried to prevent freezing and will be filled from the domestic water supply remaining full until needed.

## Comment No. 54: Bill Byrnes, Wagner Drive, March 27, 2019 Public Hearing

"...there's nobody that has a problem with their well now but when you're taking out 66,000 gallons twice that's a lot of water. Is there going to be any kind of guarantee or rider, say I run all of a sudden because of that my well goes dry to help me rather than me pay for it?"

**Response:** See Response to Comment No. 57 below.

## Comment No. 55: Bill Byrnes, Wagner Drive, March 27, 2019 Public Hearing

"...I'm more concerned about the water problem that they're going to cause with all our wells in the area. They're going to dry up the aquifer or something, you know, possible... I would like to know how we're supposed to get our water if it dries up? Cause I thought I heard there was a rider to in case something like that happened, I don't know."

**Response:** See Response to Comment No. 57 below.

# Comment No. 56: Chris Messler, Shaw Farm, Shaw Road, March 27, 2019 Public Hearing

"I've spoken to Stephen and Roger on multiple occasions about the wells, I have, in the Environmental Impact Study, if you notice, I took the most drastic hit on the well when they did their testing for three days straight, I've spoken to them about remediation..."

Response: See Response to Comment No. 57 below.

# Comment No. 57: Mr. O'Hallerin, 53 Shaw Road, March 27, 2019 Public Hearing

"...my biggest concern is the [ground] water..."

**Response:** Response to Comments: 52, 54, 55, 56 and 57

A 72-hour pumping test program was conducted on Wells 2, 3, 6 and 7. These wells are drilled in bedrock and withdraw water from the bedrock aquifer (Martinsburg Formation) that underlies the project site. Wells 2, 3 and 6 were tested concurrently and demonstrated stabilized yields of 25 gpm, 32 gpm and 35 gpm, respectively, for a combined total yield of 92 gpm. Well 7 was

- tested individually as the best well and the stabilized pumping rate in Well 7 at the end of its 72-hour pumping test was 40 gpm.
- The regulatory agencies require that new water-supply sources demonstrate the capacity of maximum daily water demand (twice the average water demand of a project), with the best well out of service. The combined pumping rate of Wells 2, 3 and 6 was 92 gpm (with Well 7 out of service as the best well) would be able to supply twice the average day water demand of the project of 132,480 gpd or an average water demand of 66,240 gpd. Based on the NYSDEC water usage rate of 110 gpd per bedroom, the withdrawal from Wells 2, 3 and 6 could supply a total of 602 bedrooms.
- ➤ Groundwater recharge to the bedrock aquifer underlying the study property is about 625 gpd/acre. Therefore, the recharge to the 418.4± acre site is approximately 261,500 gpd. Under one-year-in-30 drought conditions the estimated average recharge rate would decrease about 31% to approximately 180,400 gpd or 125.3 gpm which is more than twice the average water demand of the proposed project.
- ➤ Impervious surfaces will be constructed as part of the proposed development plan. Under the proposed cluster development plan, 16.75 acres of impervious area will be created. For the cluster development plan, with the addition of impervious areas the average precipitation recharge would be approximately 251,000 gpd (174.3 gpm) and under drought conditions would be 173,200 gpd (120.3 gpm). These recharge values, considering the reduction of impervious surfaces, remains more than twice the average water demand of the proposed project. The recharge estimate supports the conclusion that the bedrock aquifer on the Apple Ridge study parcel can support the proposed groundwater withdrawals and not result in storage depletion of the aquifer.
- Regional precipitation conditions prior to the completion of the pumping test program were below average for approximately 17 months. The total precipitation for the 12 months prior to the test was 12.73 inches below average (27% below average) and in the 4 months prior to the test period the precipitation was a total of 7.30 inches below average (45% below average). This data indicates that the 72-hour pumping test program was conducted during drought conditions and the NYSDEC had issued a statewide drought watch that was in effect at the time the pumping tests were conducted. This further supports the conclusion that the bedrock aquifer can support the proposed groundwater withdrawals and not result in storage depletion of the aquifer.
- ➤ Water-level measurements were collected from eight offsite wells during the 72-hour pumping tests. During the pumping test on Wells 2, 3, and 6 (at a maximum peak-day water demand), water-level drawdown was observed in six of the eight offsite wells and ranged from non-discernible to 50.5 feet. The water-level drawdown was largest in the wells closest to the pumping wells and generally decreased with increasing distance.
- ➤ During the pumping test on Well 7, water-level drawdown was observed in five of the eight offsite wells ranging from non-discernible to 15 feet. These drawdown values are likely similar to what would occur as part of normal use of the pumping wells with the wells cycling on and off (12 to 18-hour pumping cycles) to provide water to meet average daily demand. Where drawdown was not discernible or small during the test on Well 7, such as in the wells at 235 and 255 Bull Road and at 112 Shaw Road (1.2 feet, 0.5 foot and 0.5 foot, respectively), the wells will not likely be affected by use of the wells once the Apple Ridge production wells are placed into service.

- Additional monitoring of the wells near 81 Shaw Road and 16 Fietsma Lane, where drawdown ranged from 11 feet to 15 feet during the test on Well 7 is warranted when the four Apple Ridge production wells are placed into service. Although these offsite wells also did not appear to be negatively affected during the pumping tests or from the longer-term use of Wells 2 and 3 as irrigation wells at the apple orchard, the longer-term effects of pumping should be assessed to address concerns of neighboring homeowners. A plan would allow Apple Ridge to rectify a problem should one occur in an offsite well that is attributed to use of the Apple Ridge wells by mitigation measures such as lowering a well pump or drilling a well deeper. A copy of the Mitigation Plan and Remediation Plan included in the DEIS is provided in Appendix I.
- ➤ To further address neighboring homeowners' concerns, the Developer will file with the Town a bond in an amount acceptable to the Planning Board Attorney. The bond may be used by the Town if the Developer does not provide prompt investigation and resolution of a legitimate complaint to offsite adjoining well impacts. Should the Town draw on the bond, the Developer shall replenish the amount prior to the issuance of the next Certificate of Occupancy. The bond will remain with the Town for a three-year period after construction has been completed. This period provides adequate time to further evaluate the long-term impacts of the proposed groundwater withdrawals on neighboring wells.

## Comment No. 58: Bo Erikson, 235 Bull Road, March 27, 2019 Public Hearing

"...at the earlier meeting the developer said that they were willing to put up a bond for people in the neighborhood to have to drill deeper wells so they're aware of the problem but they only wanted to put up the bond I think for three or four years which is quite ludicrous."

**Response:** See Chapter III.7.3 regarding Mitigation Measures in the DEIS which includes filing a bond with the Town of New Windsor to ensure timely remediation.

### Comment No. 59: Elizabeth M. Munday, 138 Shaw Road, dated April 5, 2019

"All of us have great concerns about our wells and how they will be impacted by such an ambitious project as Apple Ridge. The project seems like a good idea for another location. But not here and not using Shaw Rd. as the entrance."

Response: Opinion noted.

### Comment No. 60: Joyce V. Curran, 138 Shaw Road, Comment Letter received April 8, 2019

"The ground water is always a source of consternation. We on Shaw Rd. have wells & septic systems. Blighting the area with water & sewer tanks takes nerve! Please reconsider your approval of this project."

**Response:** Opinion noted.

## Comment No. 61: John J. Coffey, 3 Wagner Drive, Comment Letter received April 10, 2019

"Based on the presentation at the public hearing, the applicant plans to complete the 172 unit subdivision in five years. Given market conditions that will drive the sale of these units, it not unreasonable to think that the five year plan may become a ten year plan so demand for water may not peak until 10 years from the start of construction. Current residents are very concerned about the potential impact to their own wells and peak demand may be over 10 years away. What is the amount of the bond and the number of years that the town will require from the applicant in the event that a current resident does have a problem with their well. It does not seem unreasonable to require the bond for 15 years from the start of construction."

**Response:** A performance bond will be held by the Town of New Windsor for a period of three (3) years after construction has been 100% completed regardless of construction duration.

## XI.3.8 Vegetation and Wildlife

No public verbal or written comments were received during the comment period regarding vegetation and wildlife.

## XI.3.9 Visual Character

## Comment No. 62: Kimberly Young, Feistma Lane, March 27, 2019 Public Hearing

"So the back yard of my property is the water treatment facility right now where you guys have it on the plan, my deck overlooks it, it's literally in clear view to everything on my property... I don't know what kind of building it's going to be, is it underground, aboveground, what it's going to look like, how it's going to affect my property value?"

**Response:** The facility will be constructed in full compliance with all applicable regulations, including physical setbacks and sound attenuation requirements. The facility has yet to be designed but will likely incorporate a single story process control building of about 1,500 square feet, below grade tankage, and landscape screening.

#### Comment No. 63: Brian Olson, 112 Shaw Road, March 27, 2019 Public Hearing

"My major concern is the entrance to the entire project, my house is literally right at the entrance of what it's supposed to be so at 172 houses, X amount of cars right in front of my house, constant cars slowing down to turn in and my biggest other concern is obviously cars coming out of the development."

**Response:** See Response to Comment No. 64 below.

## Comment No. 64: Brian Olson, 112 Shaw Road, March 27, 2019 Public Hearing

"Another concern is the green area that's supposedly between the side of the road and the start of the development. I just don't know how that looks or how it's supposed to look. I've seen some of the plans of trees or whatever like that but my house kind of sits above I would have to say six feet off of the street road or the street level so if I'm standing in my living room obviously I can look over any type of trees. And I want to see like are the trees going to be tall, good border between Shaw Road and the actual development?"

**Response:** As part of the Final Plan set, a Landscape Plan will be provided that will include buffer plantings of mixed deciduous and evergreen trees along the easterly property line and within the proposed development.

## Comment No. 65: Joyce V. Curran, 138 Shaw Road, Comment Letter dated April 2, 2019

"Where are the aesthetics in this proposed development? You need women on this panel! Sewers & water tanks?! What are you thinking?"

Response: Opinion noted.

#### Comment No. 66: Joyce V. Curran, 138 Shaw Road, Comment Letter dated April 2, 2019

"We have lived here 40+ years & want to continue in peace quiet and my beautiful orchard."

Response: Comment noted.

# Comment No. 67: Surdyka Family, 8 Feitsma Lane, Comment Letter dated April 2, 2019

"We now had a chance to review the site plans and would request that the planning board review the placements of the waste water treatment building and come up with an alternative location for it. The

placement of this structure will greatly affect our property value as well as the quality of life at our home for us and our neighbors. This structure will be in direct view from most windows in our home as well as the primary view from our back deck and backyard. I would like to point out that the current proposed location for this structure is closer to our home and property than the new cluster homes they are building. It will be 190ft from our property and 250ft to the nearest cluster home. This structure will be not only an eye sore but will directly affect our property value and health. When we asked about the odor and noise, the answers given seemed to be evasive. We are extremely concerned for our children and neighbors with the health effects that methane gas can cause by breathing in daily. In the little time I have had to research this it is very alarming that the planning board would approve such a short distance of only 190ft this will negatively affect the air quality of the existing family's that live here. The methane gas and odors that will be overwhelming our home/property as well as the constant noise that will be coming from the structure. In addition to the daily running noise we were told there will need to be weekly testing of a backup generator increasing the noise even further."

**Response:** There will be no offensive odors from the wastewater treatment facility. This is due to a number of factors, including the significant physical setback distance. In addition there will be no open tanks. All tanks will be either below grade or completely contained within the process control building. Furthermore, the enclosed tanks will be placed under negative pressure such that air escapes only through an activated carbon based odor control system, which will be monitored regularly.

Methane gas is generated by anaerobic wastewater treatment processes. However, the process proposed for Apple Ridge is not anaerobic. Instead, it is aerobic. Aerobic processes are chemically and biologically distinct and do not generate appreciable quantities of methane. Aerobic environments are lethal to all species of methanogens, bacteria that produce methane.

To ensure that the emergency generator remains in good worker order and immediately available, when needed, a routine maintenance program will be part of the facility's standard operating procedures. As part of these efforts, the generator will be exercised for approximately five minutes once each week, normally during mid to late morning hours. Sound from the treatment facility as well as from the generator will be attenuated as needed to meet onsite and offsite requirements. This often involves sound attenuating enclosures or other acoustic buffers.

## Comment No. 68: Elizabeth M. Munday, 138 Shaw Road, Comment Letter dated April 5, 2019

"The apple trees that were uprooted and piled along Shaw Rd. for many months have not been removed. They have simply been moved into a huge pile by the entrance close to Mulligans property. Many thought it to be a 'statement' of sorts by the orchard owners. It is <u>still</u> unsightly and <u>still</u> a fire danger. And <u>still</u> an unacceptable solution. What will happen if more trees are eliminated and who will be responsible for their demise?"

**Response:** The apple trees previously cut down were part of the operation of the orchard. Trees to be removed during the construction of the subdivision will be cut, chipped and properly recycled.

#### XI.3.10Traffic and Transportation

## Comment No. 69: Jeremy McVey, Washingtonville Soccer Club, March 27, 2019 Public Hearing

"I haven't had an opportunity to review the traffic layout or the traffic plan that you presented but we have trouble getting in and out of those fields as is, especially on a Saturday morning when we're running several hundred families through our, we have tournaments at those locations where we bring several, again several hundred families in at one time."

**Response:** Comment Noted. Based on previous comments from the Washingtonville Soccer Club, the previous plan was revised which eliminated the easterly proposed entrance across from the soccer fields' driveway. The current plan has one entrance to the northwest of the soccer fields' driveway.

## Comment No. 70: Joseph Bucco, Mayor of Washingtonville, March 27, 2019 Public Hearing

"How far out did the study go? The village board along with the school board went through great strides in trying to alleviate the traffic on Route 94, okay, which the middle school and high school are on." **Response:** Our report lists and describes all the intersections analyzed, as well as a qualitative analysis of the intersection of NYS Route 94 and NYS Route 208 and North Street/Toleman Road and Bull Road as required by the Scoping Document.

# Comment No. 71: Joseph Bucco, Mayor of Washingtonville, March 27, 2019 Public Hearing

"Besides that but Saturdays and Sundays when school is not in session most of these families probably be stopping in at Stop & Shop, the Brotherhood Plaza, again causing great stress to Bull Road and the roads that are around it."

**Response:** As part of the detailed traffic study dated April 20, 2017, an evaluation of the traffic distributions of the site generated traffic for the development were compiled and are identified on the various figures contained in Appendix A of the Traffic Impact Study. The amount of site generated traffic expected to be destined to and from the south were identified and shown on the arrival and departure figures. In addition, as indicated on page 14 of the Traffic Impact Study, a discussion of the traffic volumes at the intersections of Bull Road and Toleman Road/North Street, as well as Route 94 and Route 208 were identified. Note that these are based on AM and PM peak hours. Similar percentages would be expected for Saturdays and Sundays. It is not anticipated that these additional trips generated by the Apple Ridge development would significantly change current operations. See also previous response VI.3.10 Response 19. Note that certain recommendations for improvements relative to sight distances, etc. were identified for the intersection of Bull Road and Toleman Road/North Street.

### Comment No. 72: Kimberly Young, Feitsma Lane, March 27, 2019 Public Hearing

"As far as, oh, and also the exit to our road so Feitsma Lane when you come out it's a hill, it's literally on a hill, so if you have 170 cars going on the hill, the visibility right now is blind, you're nodding your head, you can barely see as it is right now, what is it going to be with 170 cars going back and forth?"

**Response:** The intersection of Feitsma Lane connecting with Shaw Road is at a location where the vertical alignment of Shaw Road and existing vegetation currently affects sight lines. In addition, as identified on page 16 of the Traffic Impact Study, the intersection of Shaw Road and Bull Road is also affected by existing vegetation looking right and left of the intersection. As recommended in the study, some pruning and clearing of vegetation within the Right-of-Way would be required to improve each of these conditions. Also, the installation of an "Intersection Ahead" sign should be considered for installation on the westbound direction of Shaw Road approaching Feitsma Lane.

### Comment No. 73: Bill Byrnes, Wagner Drive, March 27, 2019 Public Hearing

"...And maybe something else that somebody's not talking about is the gentleman over here said he took a survey at 8:30 in the morning. Well, as that other gentleman over here said take it Saturday morning when it has 300 cars from this development and 100 and something cars from the soccer on Shaw Road, that's, God only knows what's going to happen there."

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**Response:** As indicated previously, Saturday traffic data was compiled as part of the original traffic study and copies of the data showing the variations on Saturday mornings associated with the soccer fields can be found in the attached appendices under Machine Traffic Counts.

#### Comment No. 74: Ray Mulligan, 173 Shaw Road, March 27, 2019 Public Hearing

"My other question if you can ask Bob is the 172 cars that he figured out, I live on 173, I'm backed up to the funeral home every day going to work so I go 9W to Rockland County it seems like they're going to have three to four cars per house, isn't that closer to 500 cars or maybe like 700 cars?"

**Response:** Traffic studies as required by the Town, NYSDOT, and other agencies focus on the evaluation of peak one-hour periods. Based on the published data, the peak one-hour traffic generation is estimated at 17+ vehicles per hour.

### Comment No. 75: Joyce V. Curran, 138 Shaw Road, Comment Letter dated April 2, 2019

"110 homes with 2 cars each are 220 more cars on Shaw Rd. at 1 time or another. 1 rd leading out of the proposed development is inconceivable to me & my fellow Shaw Rd. residents."

**Response:** As noted in Response 74, these volumes quoted are for the peak one-hour volumes. For residential developments like this, not all vehicles will leave a site within a one-hour time period.

## Comment No. 76: Robert Surdyka, 8 Feitsma Lane, March 27, 2019 Public Hearing

"Now, learning about there's only one entrance one exit now that's going to be a problem on Shaw Road itself, there's going to be an extra 200, 300 cars now entering the road."

**Response:** The site access will be a median boulevard type design and will be constructed according to Town highway standards. As shown in the analysis summary in Section VI.3.10 in the response to Comment No. 14, the intersection will process the Build Traffic Volumes at an acceptable Level of Service "A".

### Comment No. 77: Katrin Prater, 161 Shaw Road, Comment Letter dated April 3, 2019

"The current road design surrounding the area can not handle an increase of 300+ cars. The soccer coach for Washingtonville Soccer club at the meeting mentioned there is already an issue with traffic on busy game and practice days. I understand there is a plan in place to improve streets etc however that will not change the volume of cars. The only way to create some sort of flow of traffic would be to have multiple outlets for the Apple Ridge development. 172 homes can not have just one entrance/outlet. In comparison, a similar neighborhood would be Butter Hill in Vails Gate, they have at least 3 entrances/outlets. Once again it is the amount of dwelling units making this a not so appropriate development for this rural area. A development with maybe 30-40 homes on each 1.5-2 acres with private well/septic would be more appropriate, an example would be Wagner Drive in Rock Tavern, about 25-30 homes."

**Response:** The Applicant does not have the ability to have multiple access points on surrounding roads due to the property only bordering one roadway. Furthermore, the traffic study has shown that the proposed development can be accommodated by one access point at acceptable Levels of Service.

#### Comment No. 78: Elizabeth Munday, 138 Shaw Road, Comment Letter dated April 5, 2019

"Shaw Road is used by many as the primary short-cut to Washingtonville. The speed limit isn't enforced. The cars race by my house from Beattie Rd. at unbelievable speeds, dangerous to all residents. For some it is a speedway that surely must have been observed by a traffic study. And nothing has changed."

**Response:** Vehicle speed data was observed as part of the existing conditions machine traffic data. The existing 85<sup>th</sup> percentile speed is 42 MPH. Compliance with the posted speed is a matter of enforcement by the Town.

## Comment No. 79: Elizabeth Munday, 138 Shaw Road, Comment Letter dated April 5, 2019

"Shaw Road isn't even wide enough to accommodate the snow plows that clear the snow. This fact is clearly demonstrated by the damaged properties; felled mailboxes, broken driveway entrances and torn-up lawns."

**Response:** The width of the area roadways is atypical of the type of a local Town roadway in this area and is adequate to accommodate the additional traffic volumes generated by the site. Based on the American Association of State Highway and Transportation Officials (AASHTO), this roadway is currently designed to the appropriate standards for suburban local roadways. Any substandard feature along the roadway has been identified and improvements recommended, i.e. sight distance at intersections, intersection alignment, shoulder improvements, signing and striping, warning signs at curves, etc.

#### Comment No. 80: Elizabeth Munday, 138 Shaw Road, Comment Letter dated April 5, 2019

"Additional housing will only add to existing problems and even put more stress on Bull Rd. including the bridge over the railroad. Roads are already in bad shape. These are country roads and not major highways. The Bull Rd. bridge has been closed more than once for reconstruction. That caused major problems for commuters or for emergencies that existed."

**Response:** The width of the area roadways is atypical of the type of a local Town roadway in this area and is adequate to accommodate the additional traffic volumes generated by the site. Based on the American Association of State Highway and Transportation Officials (AASHTO), this roadway is currently designed to the appropriate standards for suburban local roadways.

### Comment No. 81: Joyce V. Curran, 138 Shaw Road, Comment Letter received April 8, 2019

"Traffic on this road between 5:30 8:30 AM & 4:00 & 8:30 pm at best is an accident waiting to happen. The Bridge on Bull Rd was closed for almost 2 yrs for reconstruction because of the traffic incurred from Shaw Rd. We were diverted to Toleman Rd. Senator Larkin helped us residents in this respect. Have you given any consideration to this?"

**Response:** Accident data for the area roadways is discussed and summarized in the Traffic Impact Study dated April 20, 2017. Information regarding the Bull Road Bridge can be found on Page 17 of that report. The Bull Road Bridge report information (attached) is found on Page 14 on the NY State Highway Bridge Data Report. The bridge has been inspected since our report was completed and now shows an inspection date of May 12, 2017 and that the bridge was <u>not</u> found to be poor in status.

#### Comment No. 82: John J. Coffey, 3 Wagner Drive, Comment Letter received April 10, 2019

1. "DEIS Figure I-4, 172 Lot Yield Plan provides a site plan and roadways for a conventional subdivision assuming that 172 units would be built. If the developer's engineering studies determined that three access points would be required, two on Shaw Road and one on Moffat Road, why aren't three access point required for the cluster subdivision proposed as shown on Figure I-2, 172 Lot Cluster Plan? The proposed cluster plan provides only one access point on Shaw Road. This seems illogical given that the same number of homes and the same number of homeowner vehicles, delivery trucks, service vehicles, school buses, visitor vehicles, etc. will require access to the site. It appears that this additional road would require crossing only one additional wetland. The conservation

acreage would only be marginally affected. There are no engineering studies provided in the DEIS to explain why three access points were required for the conventional subdivision alternative. Further, alternative analysis is required to explain why only one access point is somehow a better alternative for the proposed cluster plan."

**Response:** The traffic generation for the cluster plan or the conventional plan would be the same based on the Institute of Transportation Engineers (ITE) report entitled Trip Generation, 10<sup>th</sup> Edition, 2017.

"It is noted that this site is landlocked except for access to Shaw Road and access should have been a major consideration for any applicant seriously contemplating construction of such a large subdivision. The DEIS describes the project site as "having limited access to Moffat Road at the southerly corner of the property." Will the town request that the developer submit application to the Town of Blooming Grove for a road connection to Moffat Road and incorporate this access point as a condition of final approval of this EIS? Figure 4, Conservation Subdivision Design, on Page 17 of the New Windsor 2009 Comprehensive Plan Upgrade shows multiple access points are typically provided, even for a relatively small subdivision. Chapter V. Transportation, C. Recommendations, 1. Roads states "Require new subdivisions to connect to other local roads and adjacent subdivisions...ensure local neighborhood roadways are impacted as little as possible by through traffic." It is noted that cluster type subdivisions have been built in New Windsor along State Route 300 between State Route 207 and State Route 94 with direct access to the state highway. Subdivisions with access points on state highways appear to follow the town's Comprehensive Plan since these highways are designed with shoulders to provide extra pavement width for entering and exiting vehicles and local neighborhood roadways and current residents are not impacted. It does not seem that one access point on a rural neighborhood local road as proposed for this cluster alternative is following the intent of the town's Comprehensive Plan."

**Response:** The Cluster Plan does not propose access to Moffat Road; therefore, no application is being made to the Town of Blooming Grove.

3. "Shaw Road is a rural town road and a poor choice for the only access point for this cluster plan because of its substandard roadway geometrics for the posted speed of 40 MPH. The frontage of this proposed subdivision includes the steep upgrade to the intersection with Feitsma Lane which sits at the top of a crest curve. The crest curve is on such a steep grade with a short vertical curve that there is minimal and substandard sight distance at the posted speed limit. This is a dangerous feature that needs to be corrected before there is a terrible accident. Will the town require that this substandard feature be corrected by the applicant since the applicant is substantially increasing the amount of traffic on Shaw Road and thereby increasing the risk of accidents. Also, will the town require the applicant to widen Shaw Road in the vicinity of the new access point for safe entry/exit?"

**Response:** The intersection of Feitsma Lane connecting with Shaw Road is at a location where the vertical alignment of Shaw Road and existing vegetation currently affects sight lines. In addition, as identified on page 16 of the Traffic Impact Study, the intersection of Shaw Road and Bull Road is also affected by existing vegetation looking right and left of the intersection. As recommended in the study, some pruning and clearing of vegetation within the Right-of-Way would be required to improve each of these conditions. Also, the installation of an "Intersection Ahead" sign should be considered for installation on the westbound direction of Shaw Road approaching Feitsma Lane. Additional signing will help to mitigate any existing accident conditions at this location.

4. "The Traffic and Transportation Impact shown in Alternative Analysis Matrix A is incorrect. For the conventional subdivision plan, Figure I-4 shows two access points on Shaw Road and one access point on Moffat Road."

Response: Noted and corrected.

- 5. "The Traffic Impact Study and DEIS is flawed for a number of reasons:
  - a. The study area does not include two key intersections, North Street and Bull Road; and North Street and State Route 94. These intersections must be included in the quantitative study area and data must be presented on the various figures for these intersections.
  - b. Traffic study does not include weekend traffic counts.
    - **Response:** As indicated previously, Saturday traffic data was compiled as part of the original traffic study and copies of the data showing the variations on Saturday mornings associated with the soccer fields are attached.
  - c. Traffic study does not include counts for Washingtonville Soccer Club after school and on weekends. The club operates from April through November.
    - **Response:** See Response "b" above. It is not anticipated that the traffic from the Apple Ridge development with the current access plan will significantly affect operations at the soccer field access.
  - d. Intersection of North Street and State Route 94 should include traffic signal warrant analysis. This stop controlled intersection fails miserably in the morning and additional traffic will increase delays. If warranted, this applicant should bear the cost of designing and installing a new traffic signal.
  - e. Traffic study does not discuss the need for three access points for the conventional subdivision alternative and it does not explain how only one access point is somehow sufficient for the cluster plan alternative.
    - **Response:** The proposed site access connection to Shaw Road has been modified to include a single access and to separate the offset distance from the access to the Washingtonville Soccer Club fields. The single access connection to Shaw Road to the development is provided to limit the number of curb cuts and also provide adequate separation distance from the access to the Washingtonville Soccer Club fields. The site access will be a boulevard type design to accommodate emergency vehicle access and will be landscaped and constructed according to the Town highway standards.
  - f. The Traffic Impact Report states that there will be two roadway connections to Shaw Road and identifies their locations. Is the applicant proposing one access point or two on Shaw Road? Are the plans inconsistent with the traffic study since the plans show one access point? Is the DEIS inconsistent with the traffic study since the DEIS proposes one access point?
    - Response: See Response "e" above.
  - g. The traffic report does not explain how the peak AM and PM hours were determined. The report seems to assume peak hours based on manual counts that were taken from 7 to 9 AM and from 4 to 6 PM during the week. How can the traffic engineer be certain that peak hours actually occur during these times without 24 hour counts that would identify the peak hours? Twenty-four hour Automatic Traffic Recorder counts should have been taken during the week and on weekends to ensure that the peak hours are correctly assigned. With the peak hours known and documented, turning movement counts should then be taken during those times.

**Response:** The Traffic Impact Study focuses on peak one-hour periods in terms of maximum site generated traffic volumes. Note that these estimates are based on data published by the Institute of Transportation Engineers as contained in their report entitled Trip Generation, 10th Edition, 2017. The use of this data is consistent with the requirements of the New York State Department of Transportation, Orange County, and the Town of New Windsor. The peak one-hour periods are the standard used in evaluating potential traffic impacts, design, and Level of Service determinations. During other time periods, the traffic generation from the site would be less.

h. Page 88 of the DEIS states that "The sight distance for vehicles travelling along the length of Shaw Road currently meets the minimum criteria for a 40 MPH roadway." However, the computations are not provided for review. I would dispute that statement especially for the crest curve near Feitsma Lane. Sight distance for this crest curve is a significant substandard feature that should have been evaluated and discussed in the DEIS and traffic study. This is safety concern that should be remediated by the applicant. Pruning vegetation is suggested as a mitigation measure and clearly misses the point. What are the actual grades and length of vertical curve and why isn't this engineering discussion and documentation provided as part of the evaluation of existing conditions?"

**Response:** The intersection of Feitsma Lane connecting with Shaw Road is at a location where the vertical alignment of Shaw Road and existing vegetation currently affects sight lines. In addition, as identified on page 16 of the Traffic Impact Study, the intersection of Shaw Road and Bull Road is also affected by existing vegetation looking right and left of the intersection. As recommended in the study, some pruning and clearing of vegetation within the Right-of-Way would be required to improve each of these conditions. Also, the installation of an "Intersection Ahead" sign should be considered for installation on the westbound direction of Shaw Road approaching Feitsma Lane.

## **XI.3.11 Infrastructure and Utilities**

## Comment No. 83: Paul Cordero, 585 Beattie Road, March 27, 2019 Public Hearing

"Who's main going to be maintaining throughout all the years once this thing gets up and running?"

**Response:** The public improvements including roadways, drainage and stormwater management facilities will be dedicated to the Town. Costs associated with maintaining the facilities will be paid for by property taxes generated from the new residences. The sewer plant and domestic water system will be owned, operated and maintained by Natural Systems Utilities. Costs for operation and maintenance for these facilities will be paid for by future residents of the development at no cost to the general public.

#### Comment No. 84: Paul Cordero, 585 Beattie Road, March 27, 2019 Public Hearing

"And the other question is in terms of the cost, who, where is, who's paying for this maintenance of the, of this type of sewer system?"

**Response:** See response to Comment No. 83 above.

# Comment No. 85: Edie Johnson, Orange County Post, March 27, 2109 Public Hearing MR. ARGENIO: "Is your question where is it discharged?"

MR. MOLITO. Is your question where is it discharged.

MS. JOHNSON: "That's one question. The other is what happens to discharge if the stream is intermittently dry?"

**Response:** Discharge will be to the intermittent stream bed whether water is flowing or not. During the dry months, the treated effluent will likely infiltrate the stream bed, absorbed by vegetation or lost through evaporation prior to reaching the Moodna Creek.

#### Comment No. 86: Robert Surdyka, 8 Feitsma Lane, March 27, 2019 Public Hearing

"Also the sewage treatment plant is also right behind my house. Will that be discharging into the stream behind my house? Because how clean is that water going to be..."

**Response:** The proposed treatment facility location is over 400 feet from all existing and proposed residential dwellings. The proposed discharge location is within the Shaw Road right-of-way at a tributary to Moodna Creek. The quality of the treated water discharged will be clear, extremely clean, and fully compliant with the final National Pollutant Discharge Elimination System (NPDES) permit. Expected permit limits are below:

Parameter	Value
Biochemical Oxygen Demand (BOD₅)	5 mg/L Daily Max
Total Suspended Solids (TSS)	10 mg/L Daily Max
Settleable Solids (SS)	0.1 ml/L Daily Max
рН	6.5-8.5 SU
Summer NH <sub>3</sub> -N	1.5 mg/L
Winter NH <sub>3</sub> -N	2.2 mg/L
Total Dissolved Solids (TDS)	Monitor Only
Total Phosphorus (TP)	Monitor Only
Dissolved Oxygen (DO)	7.0 mg/L Daily Min
Temperature	Action Level of 70°F per guidance
Fecal Coliform	200 No. of colonies per 100 ml (30-day geometric mean)

## Comment No. 87: Paul Sherman, 542 Beattie Road, March 27, 2019 Public Hearing

"My other concern is I know that the waste water treatment plants let off various greenhouse gases, not the least of which is methane and I'm concerned and I don't know about smells."

**Response:** Whether wastewater is treated aerobically, anaerobically, or released directly to the environment, carbon dioxide will be released as a result of the decomposition and degradation of organic matter. Methane, one of the most potent greenhouse gases, is odorless and is generated by anaerobic wastewater treatment processes. However, the process proposed for Apple Ridge is not anaerobic. Instead, it is aerobic. Aerobic processes are chemically and biologically distinct and do not generate appreciable quantities of methane. Aerobic environments are lethal to all species of methanogens, bacteria that produce methane.

Other greenhouse gases such as nitrous oxide, CFCs, HFCs, sulfur hexafluoride and nitrogen trifluoride are not known to be produced by the processes proposed.

There will be no offensive odors from the wastewater treatment facility. This is due to a number of factors, including the significant physical setback distance. In addition there will be no open tanks. All tanks will be either below grade or completely contained within the process control building. Furthermore, the enclosed tanks will be placed under negative pressure such that air escapes only through an activated carbon based odor control system, which will be monitored regularly.

#### Comment No. 88: Surdyka Family, 8 Feitsma Lane, Comment Letter dated April 2, 2019

"We noticed that on the map that was presented at the meeting it did not show our home on our lot. When we brought that the developer's attention, we were told it would have been covered by the lettering, but all other homes were shown and labeled on the map. If our home was shown on the map than I believe it would better reflect how close our home will be located to this waste water treatment structure and stream."

**Response:** Real property information has been updated for Tax Lot 55-1-45.221 (8 Feitsma Lane) to show the current owners Edward & Robert Surdyka. Final plans will show the name change, as well as existing house location along with dimensions from the proposed wastewater treatment plant. An 11"x17" plan has been included in response showing this information.

## Comment No. 89: John J. Coffey, 3 Wagner Drive, Comment Letter received April 10, 2019

"Why did the applicant propose the wastewater treatment plant near the property line adjacent to current homeowners? No one wants this in their backyard. Isn't there a better location somewhere within the 418 acre site?"

**Response:** The wastewater treatment plant location was chosen based on topography and site features. The plant location is at an elevation of 438 which allows for the entire project's sanitary sewer to be a complete gravity system with no pump stations. This will help decrease overall O&M costs. The only other on-site area where topography would be suitable is in the proposed well fields and separation requirements could not be met. Location is also a minimum 400 feet to all existing and proposed dwellings and in close proximity to the discharge stream.

# Comment No. 90: Caffrey & Flower, Glens Falls, NY Comment Letter dated May 15, 2019 "The DEIS stated that:

Water used for firefighting will be stored in below grade tanks and will not be supplied by the potable water system. Based on feedback from Town of New Windsor fire officials during a meeting held on January 23, 2018 water storage tanks with a combined capacity of 30,000 gallons of usable volume that are separate from the potable water supple are acceptable.

DEIS, p.92.

The DEIS, including Appendix K, "Water System to Serve Apple Ridge Cluster Subdivision", does not go into further detail on this topic.

In the minutes from the meeting on March 27, 2019, a representative for the applicant, Mr. Esposito, stated that the buried reservoirs for the fire department will consist of two tanks. When asked what the capacity of the tanks were by the Board, Mr. Esposito stated that "[t]hey're 33,000 gallons usable and that was established by the fire marshal." March 27, 2019 Minutes, pp. 16-17.

In the context it was unclear whether the 33,000 gallons capacity referred to each tank individually or the combined capacity. At least one member of the public at the meeting believed this statement referred to the tanks individually and, thus, they would have total capacity of 66,000 gallons. March 27, 2019 Minutes, pp. 24-25.

In either case, the figure appears to be a departure from what was stated in the DEIS and requested by the Town of New Windsor Fire Marshal. Therefore, we respectfully request that the Planning Board clarify the individual size of each water storage tank, their combined capacity, explain where these numbers came from, and whether they can be found in the public record."

**Response:** The DEIS is accurate. Based on the direction of local fire officials in a January 23, 2018 meeting, a fire suppression system that is separate from the potable water supply is acceptable. A below grade tank for fire suppression water with a minimum useable volume of 30,000 gallons is required and will be included in the project. This tank will be entirely separate from the public community water system. The potable water system, including treatment, storage and distribution system sizing, is sized to meet domestic water demands only, this enhances water quality and system reliability. It is also noted that the requirement of a "minimum useable volume" of 30,000 gallons will likely necessitate a slightly larger tank, hence the additional 10% and reference to a 33,000 gallon tank. Such usable volume may be contained in one tank, or split among two tanks. The applicant will continue to coordinate with local fire officials to finalize specific tank orientation(s), volume, fittings, access, etc.

#### **XI.3.12** Community Services and Facilities

### Comment No. 91: Katrin Prater, 161 Shaw Road, Comment Letter dated April 3, 2019

"Just to put things in perspective; Rock Tavern, zip code 12575 has currently 764 households and 206 people per square area mile on average with a totoal of 2034 people living in Rock Tavern. If Apple Ridge were to be completed as purposed it would represent almost 20 percent of the amount of households in Rock Tavern and also alsmost 20 percent of Rock Taverns population."

Response: Opinion noted.

#### **XI.3.13 Fiscal Impacts**

No public verbal or written comments were received during the comment period regarding fiscal impacts.

### **XI.3.14 Historical and Cultural Resources**

No public verbal or written comments were received during the comment period regarding historical and cultural resources.

## **XI.3.15** Noise and Construction Related Impacts

## Comment No. 92: Paul Sherman, 542 Beattie Road, March 27, 2019 Public Hearing

"...has the town thought about as Goshen did for a performance bond?"

**Response:** Section 257-9 of the Subdivision Regulations requires the developer to provide a performance bond in sufficient amount to cover the full cost of all required improvements in the subdivision. The bond amount will be reviewed by the Planning Board engineer and approved by the Town Board. The Bond will be in a form acceptable to the Town Attorney and will be filed with the Town Board.

See response No. 58 above regarding performance bond associated with offsite well mitigation.

### Comment No. 93: Chris Messler, Shaw Farm, Shaw Road, March 27, 2019 Public Hearing

"...it was just the access in and out during the development because the road where I actually have access in is actually going to be eliminated and it's going to be changed. I have spoken to Stephen two times about that, most of our issues were addressed with them."

**Response:** The Project Sponsor will continue to coordinate and communicate with Mr. Messler with regards to continual vehicular access and utilities to his residence.

### XI.3.16 Air Quality

## Comment No. 94: Joyce V. Curran, Shaw Road, Comment Letter dated April 2, 2019

"Global warming – The apple trees did so much to absorb the carbon dioxide in the area. What are people thinking to do this?"

**Response:** The Proposed Action is a cluster plan that will preserve 334± acres of open space in perpetuity in its current condition. In addition, new trees will be planted along the proposed streets and around the proposed dwellings to supplement existing vegetation.

#### **XI.3.17 Agricultural Resources**

No public verbal or written comments were received during the comment period regarding agricultural resources.

# XI.4 Construction Sequencing and Phasing

No public verbal or written comments were received during the comment period regarding construction phasing and sequencing.

## XI.5 Alternatives

No public verbal or written comments were received during the comment period regarding alternatives.

## **XI.6** Potential Growth Inducing Aspects

No public verbal or written comments were received during the comment period regarding potential growth inducing aspects.

#### **XI.7** Unavoidable Adverse Impacts

No public verbal or written comments were received during the comment period regarding unavoidable adverse impacts.

### XI.8 Project Impacts on Energy Use and Solid Waste Management

No public verbal or written comments were received during the comment period regarding project impacts on energy use and solid waste management.

# XI.9 Irreversible and Irretrievable Commitments of Environmental Resources

No public verbal or written comments were received during the comment period regarding irreversible and irretrievable commitments of environmental resources.

APPENDICES Apple Ridge FEIS

# Appendix A

Town of New Windsor Planning Board Public Hearing Minutes March 27, 2019

# TOWN OF NEW WINDSOR

PLANNING BOARD

March 27, 2019

MEMBERS PRESENT: JERRY ARGENIO, CHAIRMAN

DANIEL GALLAGHER HARRY FERGUSON DAVID SHERMAN

ALSO PRESENT: VERONICA MC MILLAN, ESQ.

PLANNING BOARD ATTORNEY

SHAWN ARNOTT

PLANNING BOARD ENGINEER

STEPHANIE TORRES

PLANNING BOARD SECRETARY

JENNIFER GALLAGHER BUILDING INSPECTOR

ABSENT: SHAWN MC GRATH

# MEETING AGENDA:

- 1. 1st Ask Realty MHP
- 2. Windsor Commons
- 3. Windsor Hospitality
- 4. Apple Ridge

### REGULAR MEETING:

MR. ARGENIO: Welcome everybody, it's about a minute before seven, we're going to get started. Jennifer hopefully she'll be here in a few moments and Shawn as well, we have a quorum so we're going to start on time. Welcome everybody to the regular meeting of the Town of New Windsor Planning Board for March 27, 2019. Would everybody please stand for the Pledge?

(Whereupon, the Pledge of Allegiance was recited.)

### ANNUAL MOBILE HOME PARK REVIEW:

#### 1ST ASK REALTY MOBILE HOME PARK

MR. ARGENIO: Welcome everybody. First item we have on tonight's agenda is annual mobile home park review, 1st Ask Realty Mobile Home Park. Somebody here for this? Your name sir?

MR. SHAH: Sandeep Shah.

MR. ARGENIO: Mr. Shah, Stephanie, has the building department been to visit this park?

MRS. TORRES: We had a couple issues, there were a couple violations that we are dealing with, as of today, everything was okay so they're good to go.

MR. ARGENIO: Did you bring a check for the benefit of the Town of New Windsor in the amount of \$250?

MR. SHAH: Yes.

MR. ARGENIO: I'll accept a motion for one year extension.

MR. GALLAGHER: So moved.

MR. FERGUSON: Second it.

MR. ARGENIO: Motion made and seconded that the Town of New Windsor Planning Board offer 1st Ask Realty Mobile Home Park one year extension on their permit to operate. Roll call.

### ROLL CALL

MR.	FERGUSON	AYE
MR.	SHERMAN	AYE
MR.	GALLAGHER	AYE
MR.	ARGENIO	AYE

MR. ARGENIO: We're on to our regular items, thank you for coming in tonight.

### **REGULAR ITEMS:**

WINDSOR COMMONS SITE PLAN AMENDMENT AND SPECIAL USE PERMIT (19-02)

MR. ARGENIO: Windsor Commons site plan and special use permit represented by Fellenzer Engineering. Is somebody here for this?

MR. LAPUT: Yes.

MR. ARGENIO: This application proposes a freestanding drive-thru restaurant on the existing shopping center site off Route 32. The plan was previously reviewed at the 13 February 2019 planning board meeting. And I'm quite sure we saw it one other time, twice, I'm sure it's twice, whatever it is. What's your name, sir?

MR. LAPUT: Amador Laput, L-A-P-U-T.

MR. ARGENIO: Tell us where we're at with this. Do you have a copy of Mark's comments?

MR. LAPUT: Yes, I do. We addressed those comments with the plans that have been submitted, updated the bulk table to clearly show we're not seeking any variances for side yard setback, updated for building height so there are no variances requested for this proposed plan.

MR. ARGENIO: They don't need any variances, I believe that to be correct, do you confirm that?

MR. ARNOTT: I will confirm that.

MR. ARGENIO: Go ahead.

MR. LAPUT: The previous drawings showed me we're within the 30 foot side yard setback and we have reduced the building to be outside of the 30 foot side yard setback.

MS. MC MILLAN: Mr. Chairman, I think initially when they first were here for this concept we reviewed, there was some question whether or not they'd need a variance but they adjusted their plans to obviate the variance.

MR. LAPUT: Thank you.

MR. ARGENIO: Okay, go ahead.

MR. LAPUT: There will be some curbing and islands removed for the new drive-thru restaurant in this part of the plaza. So the other changes to the plan was a comment from the fire inspector to have a 30 foot drive here and I confirmed that they did not want to drive around the building.

MR. ARGENIO: Mark had commented at that on the last meeting that fighting a fire as a former fireman you'd probably fight it from the parking lot.

MR. LAPUT: And he concurred so I have a 30 foot wide here and there's already a 30 foot on this side.

MR. ARGENIO: And I see you've installed the loading zone as we talked about.

MR. LAPUT: Correct, this is a loading zone now to remove the curb back to accommodate that.

MR. ARGENIO: Shawn, that loading zone there on the right of that plan should that say like no parking or something, loading zone, shouldn't there be some verbiage in the hatching?

MR. ARNOTT: I believe so, I believe that's one of Mark's comments on it.

MR. LAPUT: So that would be striped and whatever verbiage, there's no problem. The other change here this was with a concrete sidewalk, we're going to do landscaping here along the driveway, we don't need to be, and the parking calculations do reflect for the drive-thru restaurant use so 117 are required and we're providing 117.

MR. ARGENIO: What are we doing here, you have a bumper here, you have no stops here, what are you doing about that?

MR. LAPUT: So we're showing a stop here on this ADA parking space, we'll continue that for at least two, there will be two more bumpers.

MR. ARGENIO: You'll show them on the plans?

MR. LAPUT: Correct.

MR. ARGENIO: Go ahead.

MR. LAPUT: So the landscaping also shown here on the islands use grass now but it was requested we look at planting some shrubs.

MR. ARGENIO: You're staying out of the DOT right-of-way looks like.

MR. LAPUT: Correct, we don't want to encroach onto the right-of-way and there will be low growing shrubs so we don't have to worry about sight distance for the cars pulling in and out.

MR. ARGENIO: I would just suggest to you, do you know what those plantings are going to be?

MR. LAPUT: This is the landscaped plan, so the bottom right of this C101 Little Gem Cotoneaster is the circles and Inkberry Shamrock and Old Field Juniper are those and the Red Chokeberry.

MR. LAPUT: Mr. Laput, here's what I'm getting at, I don't understand the species, I don't know what they are, Shawn, not to you guys, to the engineer, you should just look at the plantings that are near the road and make sure that they're low growing plants so we don't have a sight distance issue.

MR. ARNOTT: We can do that.

MR. ARGENIO: Go ahead, Mr. Laput.

MR. LAPUT: So parking here we did talk about the future parking if required so we're not including this in the 117 spaces needed, but in the future if it were required there's another 14 spaces here along the curb that follows down to the back side of the plaza.

MR. ARGENIO: Veronica, did we talk about or am I confusing this with another application, did we talk about some sort of bond in the event we needed those spaces or was it determined that those spaces were over and above what was required or Jennifer?

MS. MC MILLAN: They're complying with the code in terms of required parking so they don't need a bond. In this instance, they were initially considering some shadow parking on the lower part of the lot, you know, dips down behind where there's additional space but

it's not required by the code so they wouldn't need a bond.

MR. ARGENIO: We're not too particularly banged up about that?

MS. MC MILLAN: No.

MR. LAPUT: And we're showing water service on a sanitary that goes to an existing station here and pump station here and that will run behind to a manhole that's behind the plaza. There was a question about truck turning radius, so this is shown for a single truck, certainly cars are fine, this is 30 foot long kind of box truck, delivery truck, garbage truck and it can make the turns around the restaurant and through the drive-thru.

MR. ARGENIO: Don't think me rude of thumbing through my phone, I'm looking for something relative to this application.

MR. LAPUT: The rest are construction details so--

MR. ARGENIO: So members of the planning board, I did get a picture, the applicant actually sent me a photograph of his flag, we asked him for a flag and he broke the code, he's not supposed to be working on this site when he's in front of the planning board but he did put the flag up.

MR. LAPUT: Here's the flag pole, it was in between flags at the time the pole was put up. If you have any questions?

MR. ARGENIO: Members, somebody chime in if you have any questions? We have certainly drilled down on this a bit. I have to, I have approval from our interoffice agencies within the town, looks like everybody has signed off on this. What we don't have is approval from the county which will stop us quickly in our tracks but let's go through things just for a minute. Mr. Laput, you have a copy of Mark's comments? I asked you that already, you said yes.

MR. LAPUT: Yes.

MR. ARGENIO: So you can see his bullet points under number two, I'm not going to read through them, they seem to be, seem to me to be very minor themselves. Could you just elaborate a little bit or Shawn maybe you could elaborate on bullet three? I'm going to read it, additional fittings/cleanouts are needed on the proposed sewer lateral connection given the elevation difference involved. So either Shawn or Mr. Laput, can somebody weigh in on that? Now we do have a signoff, John Agido, the sewer-water guy so he must not be particularly concerned about it but Mark did mention it.

MR. LAPUT: If I could confirm, I have comments dated February 13.

MR. ARGENIO: You need the ones for tonight.

MR. LAPUT: I do not have those.

MR. ARGENIO: Shawn, do you have an extra copy?

MR. ARNOTT: I do.

MR. LAPUT: Thank you.

MR. ARGENIO: I'm sure it's something that can be resolved but Mark is mentioning it so I'm, is it this cleanout right here, this cleanout over here possibly?

MR. LAPUT: Well, we're showing one at the bend so if he's saying he wants me to look at additional cleanouts on that lateral.

MR. ARGENIO: Shawn, you're not familiar with that?

MR. ARNOTT: I'm not. But from what I can tell maybe he's suggesting additional cleanouts because of the distance, I can't tell by the inverts whether or not there's some required because of the elevation.

MR. ARGENIO: It's this distance, this is the problem here.

MR. ARGENIO: Alright, look, don't see it as a big deal so--

MR. LAPUT: Yeah, it's not.

MR. ARGENIO: If you need to add a cleanout, you need to add it, get with Mark's office and if you need to add it you need to add it.

MR. LAPUT: Not an issue.

MR. ARGENIO: Plan should clarify at the north end of the crosswalk a curb/sidewalk drop will be provided and at the south end of the new sidewalk is flush with the sidewalk. I'm sure there's going to be a drop, is that right, both sides here and here?

MR. LAPUT: There will be a drop, correct.

MR. ARGENIO: I would think that would be obvious.

MR. LAPUT: Yes.

MR. ARGENIO: I'm going to strongly suggest that you consider a traffic control sign stop and do not enter  $18 \times 18$  inches rather than  $24 \times 24$ , thought process there is that the  $24 \times 24$  signs might be a bit large for your site?

MR. LAPUT: The location.

MR. ARGENIO: I don't think he's questioning the location but the size.

MR. LAPUT: Understood.

MR. ARGENIO: To make them a little smaller would not be the worst thing. Members, do you guys have anything else? Harry, got anything else on this plan?

MR. FERGUSON: No.

MR. ARGENIO: We've gone through this a few times. David?

MR. SHERMAN: No, I do not.

MR. GALLAGHER: No, I'm fine with it.

MR. ARGENIO: Let's go through a few procedural items. Veronica, it would be appropriate at this time for us to take lead agency?

MS. MC MILLAN: That's fine.

MR. ARGENIO: I will accept that motion.

MR. GALLAGHER: So moved.

MR. FERGUSON: Second it.

MR. ARGENIO: Motion made and seconded that the Town of New Windsor Planning Board declare itself lead agency for Windsor Commons site plan on Route 32. Roll call.

#### ROLL CALL

MR.	FERGUSON	AYE
MR.	SHERMAN	AYE
MR.	GALLAGHER	AYE
MR.	ARGENIO	AYE

MR. ARGENIO: It would also be appropriate at this point in time, Veronica, for us to consider a negative dec?

MS. MC MILLAN: Yes.

MR. ARGENIO: Unless any of the members disagree?

MR. GALLAGHER: I'll make a motion.

MR. FERGUSON: Second it.

MR. ARGENIO: Motion made and seconded that the Town of New Windsor Planning Board declare a negative dec under the SEQRA process. I'll have a roll call.

# ROLL CALL

MR.	FERGUSON	AYE
MR.	SHERMAN	AYE
MR.	GALLAGHER	AYE
MR.	ARGENIO	AYE

MR. ARGENIO: So let's go to the next thing here, so let's talk about the public hearing because we just need to put it out there. So this is entirely up to us, is that right?

MS. MC MILLAN: Yes, the proposed use is permitted in this district under the code so public hearing for a site plan amendment is within your discretion.

MR. ARGENIO: So the land, the owner of this parcel he owns the building next to it, what's on the other side here?

MRS. GALLAGHER: Guardian Self Storage.

MR. ARGENIO: Apple orchard in the back.

MRS. GALLAGHER: Duffer's on the side.

MR. ARGENIO: Which is currently in limbo, I think they have an approved project there, I mean, I don't see the need here with this. Typically, we start having public hearings when we get closer to Five Corners but I'll go around the room and ask the members, Harry, do you have any thoughts?

MR. FERGUSON: I'm good either way.

MR. SHERMAN: No need for it.

MR. GALLAGHER: I'm in agreement that there's major projects on either side that wouldn't affect it to where I'm agreeing to waive it.

MR. ARGENIO: Motion.

MR. GALLAGHER: I'd like to make a motion that we waive the public hearing for the Windsor Commons site plan amendment.

MR. SHERMAN: Second it.

MR. ARGENIO: Motion made and seconded that the Town of New Windsor Planning Board under its discretionary judgment waive the public hearing for New Windsor Commons on Route 32.

ROLL CALL

MR.	FERGUSON	AYE
MR.	SHERMAN	AYE
MR.	GALLAGHER	AYE
MR.	ARGENIO	AYE

MR. ARGENIO: So Veronica, that's the necessary procedural items I believe, is that correct?

MS. MC MILLAN: That's correct.

MR. ARGENIO: But we have the hurdle of county.

MS. MC MILLAN: Yes.

MR. ARGENIO: So we cannot approve this without

approval from hearing back from county. Now they have 30 days, it's been sent to them, the corrections on the plans have been made and it's been sent to them. For the record, I'm looking at the owner of the project in the audience, it's been sent to them so as soon as we hear back from them what we have usually done on simple projects like this unless they come back with a host of commentary we typically would not require you to come back to the board, we could take action on its own. they do come back with a host of commentary, Stephanie, I would ask Stephanie to let me know and reach out to you right away so you can be notified to come in with your engineer and we can address any concerns that they'd need to be addressed. As far as I'm concerned, we've drilled down on this quite a bit, Mark and I spoke about this plan earlier today and last week, another time and your engineer has been very responsive and knows that any approval you may get in the future will be subject to the comments that you currently do have a copy of. Sir, do you not have a copy?

MR. LAPUT: I do have a copy now.

MR. ARGENIO: So any approval you get will be subject to this and again obviously plus county but we're expecting that it's going to come back as a local determination.

MR. LAPUT: Agreed, yes.

MR. ARGENIO: To be continued. Do you have any other questions for us at this point?

MR. LAPUT: In terms of the hearing, it's been waived, okay, so from here is there just waiting for county?

MR. ARGENIO: Wait for county, right.

MR. LAPUT: Okay, can't make it contingent?

MR. ARGENIO: No, we will not do that.

MS. MC MILLAN: We have to wait for the expiration of the 30 days from when it's sent so the county has an option of responding or not, they generally do so but we can't do anything until the 30 days has elapsed.

MR. ARGENIO: If we receive anything other than local determination you'll be contacted.

MR. LAPUT: Very good.

MR. ARGENIO: Paul, do you have any questions? That's it for that.

MR. LAPUT: Thank you.

# WINDSOR HOSPITALITY (15-09)

MR. ARGENIO: Next is Windsor Hospitality. Somebody here for this? Application proposes two additional hotel buildings at the site of the existing hotel. The plan was previously reviewed at the 22 July 2016, 13 April 2016, 25 May 2016, 22 June 2016, 8 March 2017 and 12 July 2017 planning board meetings. The project is before the board for a procedural step. Lot of people in the audience, one might ask why did these guys have to come so many times and the other guy only came a couple three times?

MR. MINTZ: We'd like to know the same thing.

MR. ARGENIO: I know the answer obviously this is a much more complicated project than a simple 2000 square foot box in the middle of a parking lot. So that said, what's your name, sir?

MR. MINTZ: My name is Zachary Mintz, I'm here from the law firm of Zarin & Steinmetz.

MR. ARGENIO: Spell your last name please?

MR. MINTZ: M-I-N-T-Z, here on behalf of Windsor Hospitality.

MR. ARGENIO: What do you have tonight?

MR. MINTZ: We're requesting that the board determine that the draft DEIS is complete for the purposes of public hearing. We'd ask also that this board or town staff prepare a final published notice of completion of the DEIS pursuant to the New York Codes. We'd also ask that a public hearing be set on this DEIS for April 24.

MR. ARGENIO: Veronica, can you speak to what Counselor Mintz just said?

MS. MC MILLAN: So just by way of update for the board as you will recall some months ago this applicant submitted their Draft Environmental Impact Statement that you have all had the opportunity to review. Mark and I also reviewed it and met with the applicant on two different occasions to go through the content. They submitted corrections to the Draft Environmental Impact Statement, it is his belief as mine that it is complete and ready for the public review as well as other involved and interested agencies. The way to

accomplish that is for the board to certify that it is now ready for public review, we'll circulate a notice and publish it like Attorney Mintz has indicated setting a public hearing on the DEIS for April 24 at 7:00 here as part of our regular meeting.

MR. ARGENIO: Okay, so again, at the risk of being redundant, I'm going to say it so I'd read it into the minutes, read from Mark's comments, at the time it is our recommendation that the board accept the DEIS as complete and acceptable for public review. Now our means Veronica's and Mark's opinion because they certainly do consult together on all projects. Is that fair is to say?

MS. MC MILLAN: That's fair.

MR. ARGENIO: Members, do you have any questions?

MR. FERGUSON: No.

MR. ARGENIO: I'll accept a motion to that effect.

MR. GALLAGHER: So moved.

MR. FERGUSON: Second it.

MR. ARGENIO: Motion made and seconded that the Town of New Windsor Planning Board accept the DEIS as complete and acceptable for public review for Windsor Hospitality hotel site plan. Roll call.

### ROLL CALL

MR.	FERGUSON	AYE
MR.	SHERMAN	AYE
MR.	GALLAGHER	AYE
MR.	ARGENIO	AYE

MR. ARGENIO: Counselor, thank you for coming in tonight.

MR. MINTZ: Thanks for having me.

MR. SHERMAN: That was easy.

#### PUBLIC HEARINGS:

APPLE RIDGE (08-16)

MR. ARGENIO: Okay, Apple Ridge. Tis the reason for the season. Somebody here to represent this? Mr. Esposito.

MR. ESPOSITO: Mr. Chairman.

MR. ARGENIO: This is Apple Ridge major subdivision cluster proposal. The cluster application involves a total of 418 acres with multiple tax lots. The application was previously reviewed at the 28 January 2009, 11 August 2010, 9 March 2011, 27 April 2011, 10 October 2012, 23 January 2013, 27 February 2013, 13 August 2014, 8 June 2016, 9 November 2016, 8 February 2017, 25 October 2017, and 27 June 2018 and 13 February 2019 planning board meetings. I need a nap.

MR. ESPOSITO: It's a little history.

MR. ARGENIO: So there's some folks here tonight, can everybody hear me? So how this is going to work, Steve, I don't need that in my face, Mr. Esposito is the engineer, you can see I know him, he's been here many times on this application and other applications. He is going to show the planning board, us up here where the project's at at this point. At that point, we'll open it up to the public for questions and commentary, somebody's got some comments. I will lay out kind of the methodology we'll follow at that time in a few moments and if anybody wants to speak they'll be given the opportunity to speak. What I would ask though that you please come forward, speak in an intelligible voice and sign the sign-in sheet. That said, I just want to back up on one thing, Franny, if you would, Stephanie, check your notes on the prior application because you only had them listed as being reviewed once, I know they were here at least twice so please get that cleaned up in the minutes so it's clear.

MRS. TORRES: Yes.

MR. ARGENIO: Steve, that said, show us what we're doing here tonight, what your, what you'd like to do, what you're thinking about.

MR. ESPOSITO: Well--

MR. ARGENIO: And don't start from day one but bring us forward on the changes from the last time you were here.

MR. ESPOSITO: Just if I could just talk about the process for a minute because tonight we're, it's a public hearing, we have, it's for our subdivision application and also for SEQRA, State Environmental Quality Review Act. One of the things that it's a little frustrating for the public when we present these to the public is that what we need to do is we present the EIS or the DEIS, the Draft Environmental Impact Statement, the plans and then we receive comments. We're obligated to record those comments, there's a stenographer here so speak clearly and then we need to respond back to the public comment in writing. that document when we resubmit that, it's called a Final Environment Impact Statement, so it's simple yes or no questions we can answer. If there's substantive questions, we need to address those in writing and present those back to the board at a later date. you recall, the plan hasn't really changed much from the last time we were here. The big change that has been, that's taken place has to do with the water system. In designing the water system if you recall the original plan we had a standpipe at 110 feet which is up at the high point here, again, our water consultant will talk about this a little bit later on. But we're able to, we needed to eliminate that because the fact of the matter is is to the reason why we had it because it was so tall was to provide pressure for fire protection. And what happened is that volume of water that got the water high enough for a fire protection domestic pressure, you know, sat there too long and we had to have retreated it. So we looked at alternative designs, we worked with your engineer, Mark, and also with the fire inspector to come up with an alternative plan which now we have buried reservoirs in the site that the fire can access.

MR. ARGENIO: What does that mean, a pond with like a--

MR. ESPOSITO: No, buried tanks with siphons.

MR. ARGENIO: Buried concrete?

MR. ESPOSITO: Probably fiberglass or concrete, well, the detail hasn't been worked out but there will be two

of them set up for drafting and one of the things that the--

MR. ARGENIO: What's the capacity of those tanks, just curious?

MR. ESPOSITO: They're 33,000 gallons usable and that was established by the fire marshal. One of the things that the department really liked about it is that it's a resource, we're in a somewhat rural area, they can use that for any fire anywhere in the area. So the tankers could come in, fill up, we would then fill them back up with our water system connected to the water system during low usage we fill the tanks back up again. But if I could just, I want to introduce the folks with me, Roger Mumford, he's the developer, Mumford Homes, Adam Stern with Natural Systems Utilities, he's waste water and waste water system designer, Joe Pfau, Pietrzak & Pfau site and civil design of the roads, storm water treatment, water distribution system, sewer collection system, Tom Cusak WSP, a/k/a WSB hydrogeologists who did the ground water testing for on-site wells and Phil Greeley our traffic consultant from Maser Construction, Maser Consulting, the traffic impact analysis that's part of this And if I could, each one at least Adam on sewer and water, Tom on ground water and wells and Phil on traffic will give a little bit of a summary on what they've done in their technical reports.

MR. ARGENIO: Phil, why don't we start with you, do you want to speak to the traffic a bit?

MR. GREELEY: Sure.

MR. ARGENIO: This is my second time for this public hearing and I'm assuming it's probably a similar traffic package, is that a fair statement?

MR. GREELEY: A little bit more advanced and detailed. Just a little background, Phillip Greeley, Maser Consulting, we prepared the traffic study for the site that's part of the DEIS based on the scoping document. There was an original traffic study done in 2012 documenting conditions at that time. Subsequently, we went back out and did an updated traffic study in 2017 to document traffic volumes, speeds, vehicle mix, the study is again based on the scoping document that was adopted by it planning board in terms of the area roadways, Shaw Road, Bull Road, Beattie Road, 207 were

the primary, the primary areas that we focused on as set forth in the scope. When you do a traffic study, you document existing conditions, what traffic turning movements are at intersections, where traffic is traveling to, you also look at the conditions in terms of intersection layout, sight distance issues, speed limits, et cetera, et cetera, so all those details are in the report. To kind of jump ahead in terms of this type of project and as a single family type development, you look at the traffic generation and we have to base those estimates, again we look at peak hours, the morning peak hour and the afternoon peak hour. A project of this size 172 dwelling units would generate one per about 172 trips, people say well, how can you say 172 trips. Well, it may generate that for several hours. So, for example, if the peak hour in the morning is 7:30 to 8:30, you may have that number, you may have a similar number, either the hour before or the hour after. When we analyze traffic conditions, we do it based on peak hours. When you do a traffic study, you also look out into the future. case, we look out five years, look at traffic from other projects in the town and growth so you're not only looking at the traffic from this project but what else could be generated in terms of background growth and, you know, some other specific developments. After you run through all of that, you see what impacts there might be from the project and/or what existing conditions might be that need to be addressed. study outlines a whole series of improvements, some of which are needed if this project was never here and we go through and we summarize each of those. They range from sight distance improvements to signing improvements, striping improvements and intersection improvements. So, for example, at the intersection of Shaw Road and Beattie Road, there's some sight distance issues there, there's some geometry issues because of the way that the road splits, we have identified improvements and as part of the process and moving forward this application would be part of improvements, we would have to work together with the town to get things done to improve those operations.

MR. ARGENIO: So, Phil, you're, the traffic study document it's, that information is on file in the planning board office, is that correct?

MR. GREELEY: That's correct.

MR. ARGENIO: So you did the study, the traffic was

identified as a concern, planning board identified it as a concern, compelled you to do the study, you did the study?

MR. GREELEY: Correct.

MR. ARGENIO: And those improvements are part of the plan? I'm trying to move forward, I want to open the public hearing.

MR. GREELEY: Yes, absolutely, yes.

MR. ARGENIO: Is there any other high points that you wanted to hit?

MR. GREELEY: I think that's it that we have identified those improvements and they will be part of the implementation of those.

MR. ARGENIO: I want to get to the public because there's a lot of people here and my goal is to have everybody who's got a point and wants to speak, my goal is to have everybody speak, we don't always achieve our goal, but that's certainly the goal, part of the, part of the designing team, Mr. Mumford, Joe Pfau, other high points that you want to point out at this point in time that the planning board needs to know about or should we lead right to the public portion of the meeting?

MR. ESPOSITO: Just one, I know there was a couple articles in one of the local papers about the project and I know seemed to be the waste water treatment plant that's also being proposed on the site and Adam's here for some specific stuff. But basically this plant is an engineered plant, it's going to be designed and those plans are going to be reviewed by your engineer and by the DEC, it's regulated by the DEC, it's going to be designed for intermittent stream standards or tertiary treatment, the highest level of treatment that's required or highest level of treatment required by the DEC. We have met with them, pre-application management, the plant is going to be all contained, it's either going to be in a building or going to be underground and setback meets all the required setbacks off the property lines and from existing proposed dwellings and just wanted to put that out there.

MR. ARGENIO: Can you just point, for my benefit point to the location on the site where that's going to be?

MR. ESPOSITO: Right here.

MR. ARGENIO: So Veronica, I don't have technical comments yet, that's something that we're going to broach as we go down through this process tonight, we're here to talk about what's in front of us for the public hearing.

MS. MC MILLAN: Right, exactly. There's no new submission in anticipation of the hearing, the public has had the opportunity to review everything that the planning board has seen thus far.

MR. ARGENIO: Make these comments so we can consider them, the engineer can consider them, counsel can consider all the comments.

MS. MC MILLAN: Yes.

MR. ARGENIO: On the 19th day of February, Stephanie compared 56 addressed envelopes containing the notice of public hearing for this application, she received the addresses for the mailing of the notices from our assessor, Todd Wiley, those letters were mailed out announcing the public hearing for tonight and tonight is that public hearing. So this is the public hearing, so if anybody would like to be heard, speak for or against, let me finish, for or against this application or better offer us information that maybe we don't know, that is the planning board cause we don't live in that area, that would be helpful. That's what we're looking for tonight for the public to help us to make the best decision that we can. But there's one thing that I kind of feel compelled to mention is that the planning board doesn't control the zoning, okay, so we don't get to say you can build, you can't, you can build, you can't build, you can build, you can't build, we don't get to do that. This application has been designed congruent and in line with the laws and the codes of the Town of New Windsor. Is that a fair statement, Veronica?

MS. MC MILLAN: Yes, it is.

MR. ARGENIO: It is a fair statement. So this type of thing, this type of development is allowed in this location by statute. So if anybody is under the misimpression that the planning board has the ability to say to this applicant or anybody else in this room

or any other applicant no, we don't want you to do this because we just don't like it, we don't have the ability to do that, by law we don't have the ability to do that. As my predecessor used to say it's not ours to say if you can build or if you cannot build but it's ours to say here's how you're going to build it, that is the planning board, it's ours to say that. So we're looking for commentary to help us make this thing fit as best it can in this area with the quidance from the public. I would ask that everybody be respectful because everybody wants to be respected, that includes myself and I'm sure that includes everybody in the audience tonight. I'm going to ask that we don't dwell on the same issue. If an issue was brought up once or twice to have it come up again and again and again we'll get it the first time, everybody here is taking notes, Veronica will be taking notes, Shawn will be taking notes, so we'll have a record of the issues, collective record of the issues and we'll be able to effectively address them. The other thing I'm going to ask and I do this typically when we do have a large crowd is I'm going to ask that you keep your comments limited to a couple of minutes, meaning two. Now, please don't think me rude if I ask you to wrap up after about two minutes, my goal ultimately is I'd like everybody in the room to be able to ultimately speak and get their comments heard and get their comments as part of the record. If we can do that and I will apologize in advance if I do have to cut somebody off we'll come back around and we'll give somebody an opportunity to again to continue to speak. But if you could keep your comments abbreviated, I would appreciate it cause I do, it is, everybody's point that they're going to make is important to them, I'm quite sure of that. I know I feel that when I'm trying to make a point. So I'd like to have everybody have the opportunity to speak and we'll stay here for a while so everybody has a chance to speak. So that said, the public hearing is open, if somebody would like to speak, please raise your hand. The gentleman over here, please come forward. If you'd be kind enough to sign in? You're name sir?

MR. MC VEY: My name is Jeremy McVey. I'm representing the Washingtonville Soccer Club which has property directly across from the proposed project. We have some significant concerns, we have, I represent about 500 families that annually are coming to the club and going through the, playing on our fields.

MR. ARGENIO: My kids played out there.

MR. MC VEY: Awesome, even better. We have a couple of concerns. I read through the DEIS document, we actually covered it with a lot of our members and talked about it. We have some concerns about the low lands that are affected, both our, two of our fields, we have four fields total, again, we run 500 families through that, two of the fields are located in lower lands that has some wetlands in that general area. See Comment #47 Reading through the DEIS, it sounds as if there's going to be an increasing amount of runoff and water to be displaced somewhere. Unfortunately I think our concern is our fields are going to be negatively affected by the runoff and cause us to lose those two fields.

MR. ARGENIO: You think they're going to flood?

MR. MC VEY: Absolutely.

MR. GALLAGHER: Is it the Solo Group LLC fields?

MR. MC VEY: We're right here, these Washingtonville Soccer Club fields and the low land is right at the bottom of the hill just before you start to come up, there's a lot of low lands, we have two fields located here and they're on the low lands, they're right near the wetland.

MR. ARGENIO: Do they flood now when you get a lot of rain?

MR. MC VEY: We retain a lot of water in them so those fields at times are unusable for us if we do get a lot of rain. My concern is the runoff an increased amount. See Comment #69 And the second concern I have, I haven't had an opportunity to review the traffic layout or the traffic plan that you presented but we have trouble getting in and out of those fields as is, especially on a Saturday morning when we're running several hundred families through our, we have tournaments at those locations where we bring several, again several hundred families in at one time.

MR. ARGENIO: Where do they park?

MR. MC VEY: Generally we'll park all along the main entryway and the parking lot in the back. We actually have a lot more land in the back of that property so we'll push back into the woodland, we park all around

the other side and then we have, actually when we have overflow we'll park over in the apple orchards, we'll talk to them and we'll actually park there.

MR. ARGENIO: So you park along the road. Do they get ticketed?

MR. MC VEY: No. Those are my primary concerns. I just wanted to make it known, we have discussed this as a group, we're not necessarily against the project.

MR. ARGENIO: You don't want to get flooded out though.

MR. MC VEY: I don't want to lose my fields, get flooded out and we want to be able to continue to provide a service to the families of New Windsor.

MR. ARGENIO: Sounds very reasonable. Thank you. Anybody else? Right in the front here, sir.

MR. BUCCO: I did sign in before, my name is Joseph Bucco, I'm the Mayor of the Village of Washingtonville.

MR. ARGENIO: How are you? I think I saw you in the paper the other day.

MR. BUCCO: It was positive though right?

MR. ARGENIO: It was positive.

MR. BUCCO: I think it's good. No, I know that for sure. I have a couple of questions on behalf of the village residents.

MR. ARGENIO: Please.

MR. BUCCO: Regarding traffic and the 172 homes here will be attending the Washingtonville School District, primarily the middle school and high school, I don't know what they're going to do as far as the re-districting of the village. Our concern is the traffic that will be coming into the village, okay, you mentioned Bull Road, you did some studies on that, how far did you reach out, did you reach?

MR. ARGENIO: If I may, just if I may please just for one second what I'd like to do is I'd like you to, I want to try to avoid having a debate, so if you would express your concerns and we're going to make a note here and wed like to address them. So the first

question is how far out the did that radius go?

See Comment #70 MR. BUCCO: How far out did the study go? The village board along with the school board went through great strides in trying to alleviate the traffic on Route 94, okay, which the middle school and high school are on.

MR. ARGENIO: You have a big problem, we all know that.

MR. BUCCO: We do.

MR. ARGENIO: We do know.

# See Comment #71

MR. BUCCO: We do right now, this is going to obviously add to it. Besides that but Saturdays and Sundays when school is not in session most of these families probably be stopping in at Stop & Shop, the Brotherhood Plaza, again causing great stress to Bull Road and the roads that are around it. So how far out did, keeps coming back to how far out did the study go? That's really, it looks like a great project, I apologize, it's the first time I'm seeing it.

MR. ARGENIO: I'm glad you're here.

MR. BUCCO: I am too but, you know, and thank you for having us, but I think as we move forward with it and I don't know if anyone is here from the school district, I'm sure they'll be represented, the village was not notified on this project, the Village of Washingtonville I believe by law we didn't have to be notified, the Town of Blooming Grove however did notify us because borders Blooming Grove so it's new to myself, it's new to the village board, hopefully traffic studies and right now our roads are at capacity, okay.

MR. ARGENIO: Particularly that main drag through Washingtonville I could not agree more, my kids attended the middle school out there, disaster, I get it on every level, trust me.

MR. BUCCO: The school's going to love the 172 families, okay, but we're not going to be so happy on the roads. That's it.

Thank you. Anybody else? The gentleman MR. ARGENIO: here, sir in the back, yes, one standing up.

MR. ERIKSON: Bo Erikson, I'm at 235 Bull Road. So

See Comment #53

See Comment #52 it's basically the concern that all this 174 houses will probably be around 7, 800 people continuously going to use all the water from the aquifer, I know there's been people measuring our wells and the through-put and so on and they're going to put up some bond, that's all well and good for a couple years, but 10, 15 years down the road when all of these people have sucked out the aguifer and something that I never heard about now is another plan for 66,000 gallons of underground water storage tanks for the fire brigade. Of course nobody, everybody wants to make sure that they have what they need but I never heard of 66,000 gallons of water tanks underground that they also say that anybody else can use for whatever they want. All that will also be sucked out of the aquifer. Has that been addressed anywhere? What else is going to come up? I mean, I can't remember exactly but I used to work for an architect and, you know, people use an awful lot of water. If there's like 800 people there sucking up thousands, tens of thousands of gallons of water continuously through these aquifers doesn't matter what you measure today, especially if you have another 66,000 gallon storage tanks buried. So that's a huge concern. And as you said, you cannot stop this but you can say how it's going to be done. And to take all this water from a, from this aguifer is to me quite senseless. If there's so many people, there's so much money in this, they should install real water lines so they don't have, I mean, you're going to sell these houses for \$340,000 or whatever and not be able to tell you well, there's no water in a decade, so

right there, and so we talked about this before and

MR. ARGENIO: Thank you for your time. Traffic, water, anybody else like to speak on this application? Right up front, sir? What's your name?

that's a big question. Thank you for your time.

MR. MULLIGAN: Ray Mulligan, I reside at 173 Shaw Road. My two biggest concerns are one for the board on the application, I had two neighbors that told me they had no idea what the date was, it used to be stapled now you put it on the back, the neighbors didn't even know what day it was. So if you can address that in the future. Can you just say see reverse side for details?

MR. ARGENIO: So you're concerned with the fact that we use both sides of the paper or--

MR. MULLIGAN: It doesn't say over and they said

# See Comment #48

there's no meeting because they never flipped it over to see that the meeting's on the back, if they can just comment for the town. The other problem I have is the water runout, it appears that if you don't mind they're stating that all the water's coming out here but they installed a huge pond or a pond over here and I had a concern on the first board meeting that the pipe went out to my property and the only thing that has been changed from the plan is they erased the pipe.

MR. ARGENIO: What did you just say, erased?

MR. MULLIGAN: They erased the pipe. The original plan had this retention pond on this side, all these homes they're stating all the water is coming out here but all these homes from the driveways, the water, the roofs all the infrastructures coming into a pond over here and everybody understands the west end of New Windsor's is full of clay and the water there, used to be a pipe that just went to my property, it went 10 feet from my property. I did write a letter, they told me they had addressed it in the study, I read the study, all I can see is the pipe is erased.

MR. ARGENIO: You're concerned about the water from the project flooding you out?

MR. MULLIGAN: No one's stating that the water is also going out on the north side.

MR. ARGENIO: All just sitting there.

MR. MULLIGAN: There's no place for it to go except for my property. I'm very concerned, well, there's all these homes, all this storm water is going out on the north side of the project. They're stating everything is going out on the south side, the north side there's a lot of low land here, houses three that I see three of the neighbors over here these properties are lower than this pond and these people flood out now. 20 years ago we only had a 12 inch pipe that went under Shaw Road, they changed it to two 24 inch pipe that goes through their property, their property floods out now, with all this or impact of water it's not just going to flood out my eight acre piece of property here but my 26 acre piece of property here and goes all the way down and your last board member, Hank VanLeeuwen, had a house back here also. I think that maybe I'm not saying that to divert the water someplace else but can we concentrate on where this water is going to end up?

MR. ARGENIO: I don't understand exactly where the drainage is going but it's certainly something that we're going to have to look into because this is the second time I've heard it in the past half hour.

MR. MULLIGAN: I did a small million dollar subdivision about 18 years ago.

MR. ARGENIO: On your own property?

MR. MULLIGAN: I did one when Meyers was here, I was under the impression that I had to regulate the water that was on my property, I could not, my water runoff could not affect the neighbor. Now it looks like there's going to be a lot of water that's going to affect the neighbors.

MR. ARGENIO: Okay.

MR. MULLIGAN: There's no stream, it doesn't go to a stream.

MR. ARGENIO: Phil, can you pull that easel back cause David can't see it? Anybody else? Yes, in the back, the lady with the glasses, I'm sorry, I didn't see your hand, I apologize.

MS. YOUNG: My name is Kimberly Young and I own a house on Feitsma Lane and the water treatment that, is it that they're going to be putting in is going to be literally—

MR. ARGENIO: Where is Feitsma Lane, can somebody help me with that?

MR. ESPOSITO: Right here.

MR. ARGENIO: Okay, go ahead, Miss Young.

See Comment #62 MS. YOUNG: So the back yard of my property is the water treatment facility right now where you guys have it on the plan, my deck overlooks it, it's literally in clear view to everything on my property. And my

See Comment #49 property right now is very wet as it is, it's very low land, we have a stream running through it and your facility is going to be right next to the stream. That's what it says. My concern is not only wildlife but all the flooding in my yard, as it is now this, with this I don't know what kind of building it's going

to be, is it underground, aboveground, what it's going to look like, how it's going to affect my property value?

MR. ARGENIO: Does your property flood now?

MS. YOUNG: Yes.

MR. ARGENIO: How bad?

MS. YOUNG: Bad.

MR. ARGENIO: Like disaster bad?

MS. YOUNG: Bad. So those are some of my concerns. See Comment #72 far as, oh, and also the exit to our road so Feitsma Lane when you come out it's a hill, it's literally on a hill, so if you have 170 cars going on the hill, the visibility right now is blind, you're nodding your head, you can barely see as it is right now, what is it going to be with 170 cars going back and forth?

MR. ARGENIO: Okay.

MS. YOUNG: So, you know, triple, thank you.

MR. ARGENIO: Thank you, ma'am. Sir, I apologize, I was not ignoring you, I just didn't see your hand. What's your name, sir?

MR. CORDERO: My name is Paul Cordero, I live at 585 Beattie Road.

MR. ARGENIO: Like Danny Cordero?

MR. CORDERO: I wish it was. No, my concern really is about the water plant. From what I've read it's called a membrane bioreactor type, is that correct?

MR. ESPOSITO: Yes.

MR. CORDERO: This type of reactor, this type of system requires a lot of maintenance for one thing and I'd like to know who is going to be the person who is going to do that?

MR. ARGENIO: If I can, just help me understand where you're going. Are you asking about the sanitary, the sewer treatment facility or the water treatment?

MR. CORDERO: I believe that's the water treatment.

MR. ESPOSITO: Sewer.

MR. ARGENIO: Sewer.

MR. CORDERO: Is that the sewer? It's called the, yeah, I'm sorry, it is the water and sewage system, yes, that's part of the membrane bioreactor.

MR. ARGENIO: Membrane bioreactor, go ahead, ask your question.

See Comment #83 MR. CORDERO: Who's main going to be maintaining throughout all the years once this thing gets up and running?

MR. ARGENIO: Is that your question?

MR. CORDERO: That's my first question, yes.

MR. ARGENIO: What else do you have?

See Comment #84 MR. CORDERO: And the other question is in terms of the cost, who, where is, who's paying for this maintenance of the, of this type of sewer system?

MR. ARGENIO: What else?

MR. CORDERO: That's it.

MR. ARGENIO: Okay. Yes, ma'am, you're right there.

MS. JOHNSON: Edie Johnson, Orange County Post, Blooming Grove, Round Hill Road. Mr. Mumford was nice enough to answer most of my questions, like deja vu, I haven't seen you in a long time

MR. ESPOSITO: Always a pleasure.

MS. JOHNSON: Thank you, you too. The treated sewage effluent--

MR. ARGENIO: Are you a resident in the area of this project?

MS. JOHNSON: I work in New Windsor.

MR. ARGENIO: Just curious.

MS. JOHNSON: No, I'm in Blooming Grove but I've been covering it for the newspaper to help people, educate them.

MR. ARGENIO: You can be from Massachusetts and show up and ask a question and it would be fine, truly.

MS. JOHNSON: I've been covering environmental issues for a long time. While I understand that this effluent treatment system is supposedly state of the art and the best, a lot of our intermittent streams and tributaries have no water part of the year so that would be a problem. But it sounds like there's a lot of water in the area so I'm assuming that the little intermittent stream that I saw when I visited there was probably not the one that you will be discharging into or just happened to be a very low point.

See Comment #85 MR. ARGENIO: Is your question where is it discharged?

MS. JOHNSON: That's one question. The other is what happens to discharge if the stream is intermittently dry?

MR. ARGENIO: Okay.

MS. JOHNSON: Thank you.

MR. ARGENIO: Okay, thank you. In the back, in the, the gentleman? Shawn, are you getting all this cause I'm going to.

MR. ARNOTT: I am, you can check after.

MR. ARGENIO: Cause I'm getting it too.

MR. BYRNES: How you doing, my name is Bill Byrnes, I live on Wagner Drive and I've heard a lot about the water but I remember a meeting farther back that there was a, supposedly a rider cause as far as I know, See Comment #54 there's nobody that has a problem with their well now but when you're taking out 66,000 gallons twice that's a lot of water. Is there going to be any kind of quarantee or rider, say I run all of a sudden because of that my well goes dry to help me rather than me pay for it? I mean, that's a lot of water. And maybe something else that somebody's not talking about is the gentleman over here said he took a survey at 8:30 in the morning. Well, as that other gentleman over here See Comment #73 said take it Saturday morning when it has 300 cars from

this development and 100 and something cars from the soccer on Shaw Road, that's, God only knows what's going to happen there. You know, so what I heard is each end of Shaw Road was going to be a T intersection that's not going to do anything.

MR. ARGENIO: Did you look at the traffic plan at town hall?

MR. BYRNES: No, one meeting I was here.

MR. ARGENIO: Just asked if you looked at it.

MR. BYRNES: And they said it would be on both sides, they were just going to extend the stop sign out so you could see better.

MR. ARGENIO: Sir, I don't know the content of the traffic plan, I honestly don't, I don't have it memorized, let me just finish my point. I did see it quite a few years back and they were improving quite a few intersections from that corridor, I would encourage you to go to town hall and take a look at it so you can understand what they're doing. And I would further encourage you if there's something there that you don't like to pen us a little letter so we can see if there's something specific there, you as a resident I'm speaking you're a person that we want to hear from, pen us a note, what about this, what about this Mr. Planning Board guy, what about this, did you think about that? So I apologize for interrupting.

See Comment #55

MR. BYRNES: More than the traffic I've dealt with traffic my whole life but I'm more concerned about the water problem that they're going to cause with all our wells in the area. They're going to dry up the aquifer or something, you know, possible—

MR. ARGENIO: You mentioned that.

MR. BYRNES: I would like to know how we're supposed to get our water if it dries up? Cause I thought I heard there was a rider to in case something like that happened, I don't know.

MR. ARGENIO: We're going to drill down on it. There was some discussion years back and I remember something as well but I don't, I can't tell you exactly what the nuts and bolts were but I do remember some kind of discussion along those lines. But we're not going to

get into that tonight at this moment because I'd like to give everybody a chance to speak, so everybody who wants to speak.

MR. BYRNES: Still want me to sign?

MR. ARGENIO: Yes, it's funny, Shawn as or Steve or the hydrogeologist guy, somebody, and I'm filling time in while he signs his name there, it seems like there's like a lot of water out there but it's all like in the wrong place, in people's yards. Because the comments about the wells, I mean, they're really, I mean, I know that if somebody built a whole bunch of stuff next to my house and my well went dry I would be upset. So anybody else? Over here, what's your name, sir?

MR. OLSON: Brian Olson from 112 Shaw Road.

MR. ARGENIO: What's on your mind, Mr. Olson?

See Comment #63 MR. OLSON: My major concern is the entrance to the entire project, my house is literally right at the entrance of what it's supposed to be so at 172 houses, X amount of cars, blah, blah, blah, blah right in front of my house, constant cars slowing down to turn in and my biggest other concern is obviously cars coming out of the development.

MR. ARGENIO: Is your driveway literally across the street?

MR. OLSON: Not the driveway but my house, it's going to border my house and my neighbors but more on my front yard.

MR. ARGENIO: I see the driveway as splitting the property line between you and the Gonzalez lot.

MR. OLSON: Correct. Every car at night, people have different jobs, hours or whatever, I'm going to have constant headlights shining into my front house. Also because it's a rural road I'm assuming there's going to be some type of street lamp which will probably light up my entire front yard. If anyone has driven passed my house on Halloween they know I do a huge Halloween display which will probably destroy the whole thing.

MR. ARGENIO: Can I come trick or treating out there?

MR. OLSON: Sure.

MR. ARGENIO: Bring my kids out.

See Comment #64 MR. OLSON: Another concern is the green area that's supposedly between the side of the road and the start of the development. I just don't know how that looks or how it's supposed to look. I've seen some of the plans of trees or whatever like that but my house kind of sits above I would have to say six feet off of the street road or the street level so if I'm standing in my living room obviously I can look over any type of trees. And I want to see like are the trees going to be tall, good border between Shaw Road and the actual development? Because it does look like there's only one, correct me if I'm wrong, but there's only one entrance in this development, correct?

MR. ARGENIO: That's correct.

MR. OLSON: So that's a concern to me being that all the traffic is coming literally to the front of my house.

MR. ARGENIO: Thank you.

MR. OLSON: Thank you.

MR. ARGENIO: Gentleman in the gray sweatshirt?

MR. SORDYNA: My name is Robert Sordyna, Robert Sordyna.

MR. ARGENIO: Mr. Sordyna?

MR. SORDYNA: Yes, I own a house on 8 Feitsma Lane.

MR. ARGENIO: If you come in Feitsma Lane, how far down the road are you?

MR. SORDYNA: The third lot on the right-hand side.

MR. ARGENIO: Okay, go ahead.

See Comment #76 MR. SORDYNA: Now, learning about there's only one entrance one exit now that's going to be a problem on Shaw Road itself, there's going to be an extra 200, 300 cars now entering the road.

> MR. ARGENIO: Okay.

See Comment #86 MR. SORDYNA: That's my concern. Also the sewage treatment plant is also right behind my house. Will that be discharging into the stream behind my house? Because how clean is that water going to be, I really don't want, with all due respect shit runs downhill.

MR. ARGENIO: Yes, it does and with that, okay.

MR. SORDYNA: Those are my only two concerns.

MR. ARGENIO: Thank you very much, sir. Yes, the gentleman?

MR. SHERMAN: My name is Paul Sherman, I live at 542 Beattie Road. My concern is the DEIS page 19 says that the completed project 172 units will be done in five years and well, I should of started by saying thank you for holding this meeting, I appreciate it very much, thank you.

MR. ARGENIO: That's very nice of you, appreciate that.

MR. SHERMAN: Certainly, I know that Mr. Mumford has built another Heritage complex in Goshen, a much smaller scale, about 48 homes I believe something like that?

MR. MUMFORD: Seventy-five.

MR. SHERMAN: Seventy-Five, my concern--

MR. ARGENIO: Have you been there?

MR. SHERMAN: No, I haven't gotten a chance to, I've seen some pictures.

MR. ARGENIO: Go have a look at it, as part of what I do here I took a ride out there.

MR. SHERMAN: Yeah, and thousands of homes he's built. Anyway, my concern though is that that complex was started I think in 2016.

MR. MUMFORD: First homes delivered were November 17, it's 24 months from start to finish on the delivery.

But I believe only half of it is MR. SHERMAN: finished.

MR. ARGENIO: Okay.

See Comment #40 MR. SHERMAN: My concern is is it realistic to think that 172 units with a very complicated infrastructure is going to be done in five years? My other concern is See Comment #87 I know that the waste water treatment plants let off various greenhouse gases, not the least of which is methane and I'm concerned and I don't know--

MR. ARGENIO: Smells.

MR. SHERMAN: There you are.

MR. ARGENIO: Okay.

MR. SHERMAN: And last thing I'm concerned about is not to cast a pall on Mr. Mumford's project but what happens if the market softens three years and--

MR. ARGENIO: Back to the timing thing, okay.

See Comment #92

MR. SHERMAN: Well, not necessarily, has the town thought about as Goshen did for a performance bond? And what I'd like to see is a very careful study of what would happen if Mr. Mumford had to walk away from this complex halfway or a quarter of the way or three quarters of the way through and the residents here who I've been here 25 years are faced with a semi-completed project? If you go down 207 before you go into Goshen there's a project just like that and it's a mess.

MR. ARGENIO: On the right-hand side.

MR. SHERMAN: So my concern is what happens if this thing goes south?

MR. ARGENIO: I can tell you as I said I don't want to make it a debate because there's a lot of people, everybody wants to speak, but that concern, there are smarter people than me already working on that so it will be addressed with more than just those words but smarter people than me have already thought of that concern.

MR. SHERMAN: I'm glad. And this pen has run out of ink. Wait, here we go.

MR. ARGENIO: Anybody else? The gentleman in the back, what's your name, sir?

MR. COFFEY: John Coffey, 3 Wagner Drive. Okay, I

reviewed the DEIS and I will be making some written comments to the board. But there's one item I thought I would just bring out tonight. Regarding access, there's a yield map that's included in the DEIS which shows the conventional buildout if this wasn't a cluster development and it shows that building would pretty much proceed along the entire property and there's a road system that's also included with the map with the properties laid out that shows an access point with Moffat Road. Now, there's no change in the number of units, it's 172 units being built, same number of See Comment #41 folks but why, you know, for the purposes of the yield map was that access point shown when it's not currently shown on the cluster development that's proposed? would imagine it's, if it was a concern for that under the conventional substantial development I don't understand why that current, you know, methodology wouldn't be followed through.

MR. ARGENIO: That your only point?

MR. COFFEY: That's my only point for tonight.

MR. ARGENIO: Veronica and Steve, you spoke your point extremely eloquently and I kind of lost track cause I was writing so I would like Steve to address that concern right now on the spot so I don't have to try to repeat the eloquent words that just came out of your mouth. Essentially, the yield study had two roads, this has one road.

MR. COFFEY: Same number of people, same number of units.

MR. ESPOSITO: This is a cluster plan and what we have to do to establish density is a subdivision plan, a conventional subdivision plan and that's what this plan is, actually has three points of access, two on Shaw Road, one on Moffat. And what we do, this is a plan that establishes the density, this complies with your current zoning and it utilizes basically a hundred percent of the site, there's zero open space, there's three access points on existing roads.

MR. ARGENIO: Veronica, let me apologize for the interruption, if the concept model plan shows two access points by point of law does the cluster application have to show two access points? That's as direct as I can be.

MS. MC MILLAN: No. For a cluster because it's a cluster it's viewed slightly differently because they're using the same number of units but they're condensing it down into a smaller space so doesn't necessarily have to have two access points. Whether or not the plan can be tailored to create a second access plan that's a different discussion.

MR. ARGENIO: Did you have another question, Mr. Coffey?

MR. COFFEY: Not for tonight.

MR. ARGENIO: Thank you very much for that. And I would encourage you if you had any further commentary by all means send us a note. Anybody else? Ma'am in the blue, yes?

### See Comment #42

MS. MANGOLD: So my name is Sylvia Mangold, I live at 155 Bull Road. And my first comment is that there is not two accesses, the bridge on Moffat Road is broken that goes over the railroad tracks so that's not really an accessible route and it goes into wetlands. The reason I know there's so much wetland back there is because we have 150 plus acres and our property borders all of this development, a lot of the property at the lower part when you go over the hill is wetlands. So the building part would be Apple Ridge that's the best property to develop. Our property is on Bull Road, it's all frontage, road frontage and it's on the side of the hill facing south so the water runs down from, it's farmed, the hay is cut, it used to be a working farm.

MR. ARGENIO: I don't understand what your concern is. The bridge at Moffat Road is broken, is that what you're saying?

MS. MANGOLD: You can't go into this property from that direction.

MR. ARGENIO: Okay, okay, I don't know exactly where that is but we can drill down, figure that out.

MS. MANGOLD: Well, someone should drive over there and see it's very dangerous because it goes over the railroad tracks and there's a drop so a new bridge would have to be built. Maybe they should do that but I don't know, I don't know which way it would go. We have property on one side and the Duskin Farm is on the

other side, I've never gone in that way so I don't really know what it looks like. But I know that there's a great deal of wetland in there and I know that part of the sewage plan feeds into our property feeds and you have letters from our lawyer that tell you all of our grievances about the project so I imagine you've looked that over. I hope so.

MR. ARGENIO: Thank you, ma'am.

MS. MANGOLD: Thank you.

MR. ARGENIO: In the back?

MR. HAMMEN: My name is Steve Hammen and this whole time I've been wondering why I got a letter. I live at 39 Moffat Road, like right arose from the old bridge, they don't even want people walking across it. Talking about a big project where would they build a new bridge over the railroad one lane each way there's going to be a right turn over a bridge because there's not much land between Moffat Road and the railroad, I'm a, like right across the street from the bridge.

MR. GALLAGHER: Would you be able to point out the area that they're talking about with the bridge?

MR. ESPOSITO: Right here.

MR. ARGENIO: I don't think we're going to be able to solve that tonight but something we're going to have to look at.

MR. ESPOSITO: In the southern part of the Duskin parcel.

MR. ARGENIO: Anything else, Mr. Hammen?

MR. HAMMEN: Just trying to figure out where this is all happening.

MR. ARGENIO: Anybody else? Right in the front.

MR. MESSLER: Chris Messler, M-E-S-S-L-E-R, I own the original Shaw Farm, you wonder why all the wells, ever notice where they are, close to all the wells for the project where are they close to?

MR. ARGENIO: Probably the wetlands.

MR. MESSLER: No, my house. Can I show you exactly where it is?

MR. ARGENIO: Sure.

See Comment #56 MR. MESSLER: That's my property right there, we have, it was built in 1798, Shaw Farm, I've spoken to Stephen and Roger on multiple occasions about the wells, I have, in the Environmental Impact Study, if you notice, I took the most drastic hit on the well when they did their testing for three days straight, I've spoken to them about remediation, we have come to on agreement on that, hopefully biggest thing is quality of the water after they end up either redrilling or anything else like that, that's my biggest main concern, most of my concerns I've spoken to Roger multiple times.

MR. ARGENIO: So let's be clear so I can understand, let me finish my point, so you've spoken to the owner?

MR. MESSLER: Yes, I know who he is.

MR. ARGENIO: Productive dialogue?

MR. MESSLER: Very much, yes.

MR. ARGENIO: You're here tonight to make sure your comments are on the record?

MR. MESSLER: That's more or less about it? I don't want to take too much time, I'd rather have something documented.

MR. ARGENIO: Just want to make sure I understand.

MR. MESSLER: And the second thing is-

MR. ARGENIO: You know what, if I were in your shoes I would probably be doing the same exact thing.

MR. MESSLER: I'm surrounded by 360 degrees, I'm in the middle of this development, I will be hearing it day, night and morning.

MR. ARGENIO: Anybody's well will be put in jeopardy, it will be yours just cause of the simple geography, right?

MR. MESSLER: My house falls in a couple different parts as historical items and the biggest thing is my

house which they have pictures of in the Environmental Impact Study, also the house was built in 1798, has some historical value to the Town of New Windsor, See Comment #93 pretty much about it was just the access in and out during the development because the road where I actually have access in is actually going to be eliminated and it's going to be changed. I have spoken to Stephen two times about that, most of our issues were addressed with them. Like I said, I had open dialect with Roger and Stephen, I have spoken to them multiple times and I have been here since 2008 every, on every start of this project so it's been going on for almost what, 11 years.

> MR. ARGENIO: Second public hearing long time, as long as I've been here.

MR. MESSLER: We're getting old together. I used to have hair. Thank you very much.

MR. ARGENIO: Somebody up here in the front?

MR. O'HALLERIN: O'Hallerin, 53 Shaw Road, I don't want See Comment #57 to get too redundant but my biggest concern is the water, the water and then the traffic, it's a nightmare, going to be a nightmare and that's all I gotta say.

MR. ARGENIO: Traffic and domestic water?

MR. O'HALLERIN: Yes, we've got to deal with it, not going to go away.

MR. ARGENIO: Certainly were right to the point, Mr. O'Hallerin.

MR. O'HALLERIN: That's what my wife tells me.

MR. ARGENIO: Way in the back?

## See Comment #43

MR. SALVUCCI: My name is Eric Salvucci, I live on Feitsma Lane, number seven. So my wife and I bought our house in 2014 because it's very rural, there's not many homes around us. Now we have this cluster plan on 400 some odd acres. Why not take those 172 homes, put them around the 400 some odd acres and keep the landscape as it is? Everyone will have their own well, everyone will have their own septic, you get rid of the sewer treatment plant, water issues, I think it will be much better off to do it that way.

MR. ARGENIO: Okay, round of applause, make a note of it right here. Anybody else? In the front, what's your name?

MR. PRATER: Chris Prater, P-R-A-T-E-R.

MR. ARGENIO: Please address the board.

See Comment #44 MR. PRATER: Yes so my concern is has there been say a study done to determine the necessity for this amount of homes which impacts the water, drainage, the traffic?

MR. ARGENIO: Mr. Prater, you know what, I'm going to interrupt you with apologies, in all due respect.

MR. PRATER: I don't mean to be abrupt.

MR. ARGENIO: You may not have been here at the beginning of the meeting when I said that as a matter of law, as a matter of fact law, the State of New York, County of Orange, Town of New Windsor people have the right to develop their property as long as they follow the law and follow the rules. The planning board does not have any ability to say, to apply any type of law that we have made up for any applicant that comes here, yourself included.

MR. PRATT: Is there a law that determines the number of vehicles through an intersection or the number of people to attend a school or, you know, capacity wise that those questions right there are impacted by the development with a significant amount of homes?

MR. ARGENIO: Mr. Prater, that's a very good point and I'm going to answer that because I think it, everybody is probably thinking the same thing. What guides that are the studies that we compelling this applicant to do as we would require any applicant to do who is proposing this amount of homes on a parcel in the Town of New Windsor. The studies we're talking about, please continue, I apologize for interrupting.

MR. PRATER: That's pretty much it, just my point and I am impacted because I live at the bottom, the way the contour is it's essentially on a ridge line, on the back side you have people that live on Feitsma Lane, I live on the opposite side of the entire ridge line and I am the one that he mentioned with the two 24 inch

pipes, I have a stream, the lowest stream on that side going through my yard and my neighbors. They may have seen me out there trying to do my best to clear out the vegetation that grows within it because if the vegetation grows too much it plugs up and then my yard is affected, my neighbor's yard is affected and our house is because we're already like borderline on the water line. When the water drainage is so much it's going to affect me even more and then my work is going to be all futile.

MR. ARGENIO: Anybody else? Yes? I'm going to ask you not to raise your voice, okay? By all means please don't yell at me, you're right in front of me.

MR. ERIKSON: Still the same name and I haven't moved since I was up here last. I want to address the gentleman over there cause I remember the last meeting--

MR. ARGENIO: Mr. Erikson, Mr. Erikson, if you want to address the gentleman you can go outside and address the gentleman.

MR. ERIKSON: I think it's pertinent for you and the whole board to hear this, it goes to the developer at that point said that they were willing to put up a bond.

MR. ARGENIO: Please stop interrupting me, I don't interrupt you.

MR. ERIKSON: Yes, you did.

MR. ARGENIO: If you want to address the gentleman in the back, you guys can do that outside. We're here to have a public hearing about the project, let's address the project and stay focused.

MR. ERIKSON: I'm addressing one of the issues that you didn't have an answer to so it was at the earlier See Comment #58 meeting the developer said that they were willing to put up a bond for people in the neighborhood to have to drill deeper wells so they're aware of the problem but they only wanted to put up the bond I think for three or four years which is quite ludicrous. If you're thinking about a project where people will live for decades and this goes specifically to the power that you have in this board to see if this, not if the development is going to be done but if it's done in

what way it's done and that is to me outlandish that all these people are going to suck up the water from an aquifer instead of you putting in communal water and sewage, that's what you stated that your board, what you were here for and that's why I want to address this. The developer seems to be aware of this issue but they don't want to pay for it maybe for couple of years then the bonds will disappear and everybody's left high and dry. This is why you're here and if you heard most of the people here talk about the water issue that's why this is very pertinent. Thank you for your time.

MR. ARGENIO: Thank you, that was well spoken, very well spoken, very well spoken. Anybody else?

MR. MULLIGAN: Ray Mulligan, now that I didn't know this was going on out onto Moffat, is that like another easement?

MR. ARGENIO: It's not going out onto Moffat.

See Comment #45 MR. MULLIGAN: All that other space, is that still going to retain, well, all the other space, is that going to retain green space? Is it going to be in a land trust like originally agreed or is that going to have a section, lot and block like it has now so you can, that's going to be, could be redeveloped down the road?

MR. ARGENIO: We'll address that.

See Comment #74  $\,^{\mathrm{MR}}$ . MULLIGAN: My other question if you can ask Bob is the 172 cars that he figured out, I live on 173, I'm backed up to the funeral home every day going to work so I go 9W to Rockland County it seems like they're going to have three to four cars per house, isn't that closer to 500 cars or maybe like 700 cars?

MR. ARGENIO: Have you looked at the traffic study?

MR. MULLIGAN: I tried to but it's--

MR. ARGENIO: It's at town hall.

MR. MULLIGAN: I looked at the whole map, I looked at the thing but it doesn't--

MR. ARGENIO: No, the traffic study's a separate book, it's in town hall, you can look at it any time.

MR. MULLIGAN: That's what it looks like when you were saying 172 cars and a special time it's going to be like 500 cars in between 7:00 and 9:00 or 6:00 and 9:00.

MR. ARGENIO: Okay.

MR. MULLIGAN: I'll try to read it but it's pretty detailed.

MR. ARGENIO: Anybody else?

MR. GALLAGHER: Motion we close the public hearing for Apple Ridge.

MR. SHERMAN: Second it.

MR. ARGENIO: Motion made and seconded, seeing no hands, that we close the public hearing for Apple Ridge. I'll have a roll call.

### ROLL CALL

MR.	FERGUSON	AYE
MR.	SHERMAN	AYE
MR.	GALLAGHER	AYE
MR.	ARGENTO	AYE

MR. ARGENIO: Listen, I just want to say to everybody in the room, before everybody gets up and runs, I want to thank everybody who spoke here tonight for A, being brief, concise and to the point and for two, being respectful because without respect on all sides here this type of thing doesn't work and the exchange of information is aggressive and it just doesn't work. there's a lot of good stuff here, we're going to try to address some of this tonight, we can't address everything tonight cause there's some drill down, some research, some leg work that's going to need to be done both on behalf of Veronica on behalf of MH&E and I'm quite sure on behalf of Mr. Esposito. There's a couple things I can address and there's a couple things we can give them a little bit of direction on but we're not going to be able to hit everything tonight because we don't have the information here at our fingertips. as a matter of starting that drill down process, Shawn, you have notes for everything that we spoke about?

MR. ARGENIO: A common theme here was flooding and discharge, okay, I get it, we're in the west end of town, I get it, it's all clay, somebody said that, I live in the west end too, it's all clay, I've got a 40 minute perc at my house, it's terrible. We need to look at this drainage thing, Shawn and Steve because—

MR. ARNOTT: Absolutely.

MR. ARGENIO: The flow that's coming off the site you need to manage that, you can't flood these people out, that's not the deal, that does not—

MR. ESPOSITO: We're not allowed to do that.

MR. ARGENIO: Who disallows you from doing that?

MR. ESPOSITO: Well, your town code has storm water regulations that we have to follow and New York State Department of Environmental Conservation has storm water regulations that we have to follow.

MR. ARGENIO: Do they prevent you from discharging onto somebody's property anymore water than they're getting now?

MR. ESPOSITO: They do.

MR. ARGENIO: Fact of the matter is they do, is that correct?

MRS. GALLAGHER: Yes.

MR. ESPOSITO: Both quantity and quality.

MR. ARGENIO: I want to be clear about that because I have that circled four times on my page here, okay, so we need to look at that, Shawn, we need to make sure whatever calculations they do it needs to be done correctly. I want to talk about this sewer plant just a little bit cause I don't understand it, I don't want to become a P.E. that designs sewage plants, you understand, Steve, but from a layman's perspective, can you just tell us a little bit about it so we can try to understand a little bit as planning board members?

MR. ESPOSITO: May I defer to my waste water treatment expert, Adam?

MR. ARGENIO: I don't want to become an engineer but we need to have some kind of understanding what we're doing. This also was a common theme this evening.

MR. STERN: I take no offense to your a lack of desire to become a P.E. to design these, that's fine. So first I think Rob has it right, it does flow downhill and we've got more problems if it does flow downhill.

MR. ARGENIO: Address the board, please.

MR. STERN: So the treatment facility is in the northeast part of the property. We've got a standard, pretty traditional collection system that brings raw waste water to the facility. Most facilities like this and this again part of the state in that they have to treat to standards of 30 parts per million BOD, 30 parts per million total suspended solids, that's a pretty good level of treatment here, it's not good enough because this is an intermittent stream, we've got to be about ten times better than that. Our limits are much tighter here. They're really five parts per million of biological oxygen demand which is a measure of the strength of the waste water. The way we do this coming into the facility which can describe the outward appearance if that would be helpful.

MR. ARGENIO: I would think it would be clear water.

MR. STERN: Coming into the facility, no, leaving the facility, yes.

MR. ARGENIO: That's what I was talking about.

MR. STERN: I heard a lot of concerns about odors and that's expected and it's a good question. So how do we deal with that? Well, a lot of waste first--

MR. ARGENIO: You're addressing the board, sir, this board.

MR. STERN: First, do it by setback distances that this facility cannot be in somebody's back yard.

MR. ARGENIO: But speak loud so everybody can hear you.

MR. STERN: Let me write down all these requirements, first we have distance then there could be screening landscaping, buffering, that's good but—

MR. ARGENIO: I would encourage you, again, we also had comments about what this thing is going to look like, I would encourage you to do your best to screen this thing, so please continue.

MR. STERN: Next there's no open tanks. If you were to visit this facility, you're not going to see any tanks bubbling that you might of seen on the internet or larger municipal type facilities. Every tank is either below grade or indoors, every process tank is covered that—

MR. ARGENIO: You're representing it as there's no odor, let's cut right to the chase so we're not monkeying around?

MR. STERN: I'm giving you the basis for why that's the claim, covered tanks, the air space above the liquid is put under negative pressure. We vacuum air through it, run that air through an odor control system before that air gets discharged. So the odor question is addressed, I think that was about six or seven ways of doing it but it's an active odor control system, just not simply because of the location.

MR. ARGENIO: At the end of the day, it doesn't emit any odor? Those are the reasons why it doesn't, is that a fair statement?

MR. STERN: We do everything we can.

MR. ARGENIO: Steve Esposito's behind you going like this, just want to let you know, Shawn, is that right, I mean, is that accurate?

MR. ARNOTT: I would say that's, I've never seen that before so I can't say based on experience.

MR. ARGENIO: I would request that you drill down on that.

MR. STERN: I'm happy to work with you on that, Shawn.

MR. ARNOTT: Please.

MR. ARGENIO: One of the things and unfortunately I live on Station Road and down the road from me is the sewage treatment facility from the trailer park and it used to smell terrible, terrible when we got a big rain you drive passed it the odor was terrible. They did

something, I don't know what they did, there's no more odor, so I believe it can be done, I'm quite sure it can be done. So we just gotta make sure that these people do it.

MR. ARNOTT: Absolutely.

MR. ARGENIO: Make sense to you guys? Danny, you alright?

MR. GALLAGHER: Absolutely.

MR. STERN: In terms of the treatment process itself it's a biological process where if I were using naturally occurring bacteria to eat the waste effectively we're giving it the perfect environment so in terms of pH alkaline and following the biological process as the gentleman mentioned this is a membrane bioreactor, so we're then passing that through a vinyl membrane barrier on the other side of the membrane is the clear water which gets disinfected prior to discharge.

MR. ARGENIO: So yeah, so for the, Veronica, I want to come to you and ask you a question for the benefit of everybody here, if we don't hit your question tonight as I said earlier it doesn't mean it is not going to be address, just means I don't think we have the answer tonight to be able to give you an effective answer. But it's going to be addressed. Veronica, I do want to go to you and I'd like to ask you about the point that was made and I know it's being addressed, can you say a few words to it and just going, read right from my notes, buildout, and from DEIS says five years on page 19 time of build, phasing, from the town's perspective who protects the town and residents if developer walks, that's what I wrote down, can you help with that a little bit?

MS. MC MILLAN: On prior projects of this scope and magnitude and even smaller than that the town requires performance bonds so that in the event that the developer does not fulfill what they said they're going to do on the project, particularly with regard to infrastructure obligations that the town is secured by a performance bond that it can call in and have the utilities installed for the benefit of the residents that do live there. And that has happened, you know, on at least one other project that I'm aware of where the town went in and corrected the issues by virtue of

using the performance bonds placed on the project.

MR. ARGENIO: They would have to bond a hundred percent of the value of all of the public service improvements and when I say public service, I mean improvements to benefit the residents at that facility.

MS. MC MILLAN: Performance bond covers the costs calculated at the outset of the project and an insurance company insures the value of that through a bonding process.

MR. ARGENIO: So again, just in the interest of clarity, let's say God forbid Mr. Mumford who I did visit your facility in Goshen and I do, you did a beautiful job out there but I did that as part of my planning board process, if Mr. Mumford were to put up two houses and then God forbid have a heart attack and pass on us, the project will be finished, correct, the public improvements will be finished and those houses that he put up, the two houses that he put up will have sewer and they'll have water?

MS. MC MILLAN: Right, because there's the surety in place to guarantee that.

MR. ARGENIO: Good.

MS. MC MILLAN: That's posted at the beginning before the shovels go into the ground that matter is addressed so in an unlikely situation that something happens to the developer, those bonds are already in place.

MR. ARGENIO: Okay.

MR. ESPOSITO: Also, the phasing plan is laid out in such a manner that each phase is independent from the next phase. So let's say we start phase one, poor Roger gets hit by a bus, the surety gets completed and it's there and it gets completed and that phase will stand alone so just another belt on the suspenders.

MR. ARGENIO: Anybody wants to chime in but I want to, I just, I'd like to get two more things that I think we can get a little bit of somewhat of a drill down on tonight. And the one is the well thing, kind of to you, Veronica, and to the hydrogeologist guy, how do we know, now I'm not talking about Mr. Messler, I'm not talking but Mr. Messler, not that you're unimportant but you're in a different situation because you're

right next to all those pilot wells, but as a general statement in the neighborhood folks have wells, how do we know five years from now somebody's well is not going to go dry? I mean, do we blame Mr. Mumford? He's going to say no, the residents are going to say I used to have water now I don't have water. How do we handle that? Anybody share? Anybody? Hydrogeologist, somebody who knows something?

MR. ESPOSITO: Let me tell you what, we presented the Draft Environmental Impact Statement because this was an issue in the previous application.

MR. ARGENIO: There was, it was a very big issue.

MR. ESPOSITO: This is the model that we're using at Heritage as well. What we'll do, what, first of all, Tom can talk about the testing, we did 72 hour test performed in accordance with the DEC and Health Department standards, basically what we're doing is we're testing the wells twice the average daily demand so we never, we don't normally ever even meet that And we have to meet that demand with our best demand. well out of service, that's why we have four wells. So, and while doing that we're also testing and we have done tests a couple of times on quality to make sure and we do the, so it's across the board, full part five full part five, we have monitored a number of wells around the site and have collected data prior to the test during the test and after the test. So we have data on these wells. What we have proposed is that at the 75 percent of buildout we go back out and monitor those wells, right, we monitor the wells and we monitor those wells for a three year period through completion. We would also establish the bond amount, we work with the town engineer to post as an escrow to make sure to ensure that in any of the wells that are surrounding wells that are impacted that we address it. present to you or we have presented to you a protocol in which to do that, there's going to be, you know, Mr. Erikson says my well, something's wrong with my well, go contact the building inspector, they're going to contact us, our hydrogeologist is going to go out, look back at the original data that we have, go and look at the well, make a recommendation and now we have a whole series of what, of what we said we'd do, could be deeper, the well could be lowered, the pump, there's half dozen things that we suggested.

MR. ARGENIO: So Steve, not to, so there's a plan?

MR. ESPOSITO: There's a plan and there's a plan that's in place, there's a plan that we'll finalize with your consultant, there's a procedure to follow and then the board will know about it if anything happens and there's money behind it.

MR. ARGENIO: Yeah, and at the end of the day, it's really frankly not ours, Danny's and mine and Harry and David Sherman's to say well, that's a great idea, Mr. Esposito, your client's a nice guy and we like that it's going to be yours, Veronica and Shawn, it's going to be yours and Mark Edsall's to look at that and analyze that proposal from a legal perspective and from an engineering perspective and to say that makes sense or it doesn't make sense. And then at that point you guys will tell us hey, Mr. Planning Board, here's what they're proposing, A, B, C, X, Y, Z, it's better than what we would have expected, what they're proposing or we feel it's deficient, here's what we think is what they're proposing is deficient then we'll have a discussion. The point is that we're talking about it.

MR. ESPOSITO: There's a plan presented, there's a protocol we suggested.

MR. ARGENIO: At this level, the high look at this level is that we're talking about it and that's the important part. Okay, so that has some direction. The last thing I definitely want to hit was Phil Greeley.

MR. ESPOSITO: You want to hit Phil?

MR. ARGENIO: No, I don't want to hit Phil. absolutely encourage everybody to go look at the traffic study in town hall at the planning board office because it's really not gibberish, actually pictures and plans and you can look and see where intersections are going to be improved. Years and years ago when this applicant was first here I drove all of those intersections and as I remember, they were, there was a hill that was too high, had bad sight distance that they were going to correct and there was some intersection they were going to square away because the turn radius people were driving all over the place. But it's not written in gibberish or legal mumbo-jumbo or engineer mumbo-jumbo, it's something that you can look at and read, if you have any commentary to jot it down and leave Stephanie a little note. But Phil, can you elaborate a little bit on the traffic as it relates

to our friend from Washingtonville who was here, he's here, please, please do cause--

MR. GREELEY: As part of the scope, we were given the area that we needed to address.

MR. ARGENIO: So not to interrupt you but somebody also raised the question what was that area and what, how did you select that radius?

MR. GREELEY: So in terms of intersections along Shaw Road, Bull Road, Beattie Road up to 207 and then down towards Washingtonville, we looked at Bull Road and Toleman Road and north of that intersection, and then we also were asked to just look at how much of our traffic would go through the intersection of 208 and 94 middle of the village. So in order to do that, we looked at traffic data that we collected traffic data from other studies and also where the traffic from this development would distribute to cause you need to know roughly where people are going to travel and that comes into the equation. So on page 14 of the traffic study, so if you want to go look at the information, page 14 of the traffic study is where we talk about the amount of volume and again we look at one hour what we call peak design periods in the morning and in the afternoon. We also look at other hours of the day in terms of variations of traffic and, for example, what the soccer fields when there's a game going on and there's a change of people coming in and out the traffic on Shaw Road increases tremendously, you'll see the spike.

MR. ARGENIO: You're aware of that?

MR. GREELEY: We're aware of that and took that into account and we addressed that in terms of the data, it's in the background data collection that's there you see the spike. I think in terms of the amount of traffic going through some of these other intersections it starts to dissipate, okay, because we have several roads that are serving this site.

MR. ARGENIO: As you get further out it would seemingly get less.

MR. GREELEY: Correct, correct, and in terms of when I talk about peak hour trips, there's, traffic gets generated more than just one hour but that's what we analyze and that's standards practice, standard

requirements of DOT, New York State DOT.

MR. ARGENIO: Because you have to start with something.

MR. GREELEY: That's where you focus on. So we've done that, we've looked at it, it's summarized in the report as a result of that is where we outline the various improvements in terms of intersection improvements and there's going to be fine tuning of those as we work through the final plans. But that's really what's outlined in this study.

MR. ARGENIO: Okay, thank you for that. What about the Moffat Road bridge, never heard of it?

MR. ESPOSITO: It's part, you want to--

MR. GREELEY: Well, I think it was, that was, came about what we were talking about under the conventional plan if there was going to be access out to Moffat Road which that was just to establish the unit count, there's no access proposed to Moffat Road as part of this project.

MR. ARGENIO: I didn't think so but possibly I missed something. Mr. Messler, I didn't address your wells because I think Shawn, this is my message and by the way, Mark Edsall's not here tonight, he's in the hospital, he had some procedure done or some such thing, that's why Shawn is filling in, normally he'd obviously be here, but Shawn, we need to talk, you need to talk to Mark and Veronica and you guys need to talk about Mr. Messler's property. He's got three, four significant high yield wells around his property that are proposed and I think it's great, I have to tell you, Mr. Mumford, I think it's great that you guys are talking, I think that's a good thing and you're a smart developer, you get out in front of problems, don't let them fester. But we need to make sure he's okay with his well, I mean, he's right there, right there and I'm happy, again, I'm happy to hear from your mouth to my ears that you guys are talking.

MR. MESSLER: I was in contact with Mr. Mumford and Mr. Esposito for quite a few years, like I said, I started, this started in 2008, I don't think I remember Stephen in 2008 but Mr. Mumford has always been here and—

MR. ARGENIO: I think it's great. Okay, I want to go

to the members here, see if there's anything else anybody wants to hit? Now there's other comments here that I have checkmarks on that are going to need to be addressed but I don't think we can address them tonight cause we need some additional information here on the second page. Flooding two more times, I didn't circle them, flooding, flooding. Veronica or Shawn, what else do you guys want to say about this application and this process, anything else we need to talk about with this at this point?

MS. MC MILLAN: No, I mean, we'll take back all the comments from tonight and as Mr. Esposito indicated at the beginning of his presentation all of the public comments that were made here tonight are the reason why we have a stenographer, that they all have to be addressed before we can proceed to a Final Environmental Impact Statement. So the next step for the consultants and the applicant will be to analyze and address all the issues raised here tonight, make sure everything is addressed for the project before it moves forward.

MR. ARGENIO: Shawn, do you have anything else?

MR. ARNOTT: The only thing we didn't talk about with drainage that the town is the regulated MS4 therefore they do have the authority from the New York State DEC to review and ensure that the water quality and quantity are addressed.

MR. ARGENIO: That's the runoff no matter what the source is it's coming off somebody's property.

MR. ARNOTT: Right.

MR. ARGENIO: You heard everybody in the audience.

AUDIENCE MEMBER: Who's responsible if somebody's property gets ruined?

MR. ARGENIO: The public hearing is over, we're not, legally I'm not supposed to take comments but I'm going to try to craft something here. The answer to that is these things, these items that we're talking about tonight that were addressed tonight they will be put in a summary document as counsel just described, they'll be, the owner will be required to address them. If they don't address them, they will not get final approval from this board. So that should be a fairly

simple process. So I'm going to go to the applicant, I'll go to Mr. Greeley, Steve Esposito, Joe or any of you guys, you guys have any other questions for us tonight at this point, any other comments cause the last word is going to be the board members?

MR. ESPOSITO: Only thing I would say from our end if we can get a copy of the transcript and any, if Shawn, if your firm had prepared a memo, any comments that we can get them, we'll address them, you know, for the board to review and comment.

MS. MC MILLAN: Just along the lines of any further comment, the notice of completion does provide that the board continues to accept written comments on the DEIS for another ten days from now which given the weekend runs until April 8.

MR. ARGENIO: I think I did say that, please jog a little note down and get it to us.

MR. ESPOSITO: After the public written comment period.

MR. ARGENIO: Then you can, you can get your information. David Sherman, any other comments?

MR. SHERMAN: Mr. Olson just raised one question about the light, ambient light at the intersection so maybe that needs to be addressed also.

MR. ARGENIO: Shawn, make a note of that.

MR. ARNOTT: I am.

MR. ARGENIO: We need to take the elevation into consideration as well, I think he made a comment about his house being raised. Harry Ferguson, any comments?

MR. FERGUSON: Just to piggyback off Mr. Olson the open space, the green space, what type of landscape is going to be in there, maybe some screening with some trees?

MR. ARGENIO: I think they're not going to touch that, is that right?

MR. ESPOSITO: We're not going to touch that but having heard this comment, I mean, we'll take a look at doing some additional plantings.

MR. ARGENIO: There's a field there now?

MR. ESPOSITO: Fields, apple orchard, we'll plant to mitigate headlights, that type of thing.

MR. ARGENIO: Danny, any comments?

MR. GALLAGHER: Not at this time.

MR. ARGENIO: I don't have any comments either, I think we've covered a lot of ground. I want to thank everybody again for being respectful and participating in the process. So good luck to you guys, we'll see you when you get squared away and move forward. Is that it? That's it. Jen, nothing else?

MRS. GALLAGHER: No.

MR. ARGENIO: Motion to adjourn?

MR. GALLAGHER: So moved.

MR. SHERMAN: Second it.

ROLL CALL

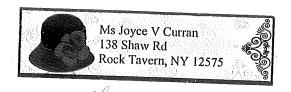
MR. FERGUSON AYE
MR. SHERMAN AYE
MR. GALLAGHER AYE
MR. ARGENIO AYE

Respectfully Submitted By:

Frances Roth Stenographer APPENDICES Apple Ridge FEIS

# Appendix B

Written Comment Letters



## 

APR 0 4 2019

Town of New Windsor Building Department ear Jins: Leasons not I have apple Lidge are abundant. Please consider



APR 0 4 2019

Town of New Windsor Building Dept,

Bright Shirth

I'm writing about our concerns with the Apple Ridge Cluster Development that is being built off Shaw Rd in Rock Tavern. My family and I have owned our home at 8 Feitsma Lane since 1992 our property is adjoining to the Apple Ridge Project and after attending the planning board meeting on March 27,2019 we have become exceedingly concerned about our property.

We have now had a chance to review the site plans and would request that the planning board review the placement of the waste water treatment building and come up with an alternative location for it. The placement of this structure will greatly affect our property value as well as the quality of life at our home for us and our neighbors. This structure will be in direct view from most windows in our home as well as the primary view from our back deck and backyard. I would like to point out that the current purposed location for this structure is closer to our home and property than the new cluster homes they are building. It will be 190ft from our property and 250ft to the nearest cluster home. This structure will be not only an eye sore but will directly affect our property value and health. When we asked about the odor and noise, the answers given seemed to be evasive. We are extremely concerned for our children and neighbors with the health effects that methane gas can cause by breathing in daily. In the little time I have had to research this it is very alarming that the planning board would approve such a short distance of only 190ft this will negatively affect the air quality of the existing family's that live here. The methane gas and odors that will be overwhelming our home/ property as well as the constant noise that will be coming from the structure. In addition to the daily running noise we were told there will need to be weekly testing of a backup generator increasing the noise even further.

Another issue that needs to be addresses is the stream that flows through the middle of our back yard as well as most of our neighbors. Anybody who has property along this intermittent stream will be able to tell you how impossible it is to keep our properties from flooding throughout the year. It is already heavily impacted by the rain fall, snow thaw causing our back yard to be wet for months. The stream is not maintained therefore it is clogged with heavy derby all along it. With the addition of 63,000 gallons of projected water a day discharging from the waste water treatment building the stream will not be able to accommodate that additional amount of water without affecting the properties it runs through greatly. This projects effects on the environment and wildlife in the area will be irreversible.

We noticed that on the map that was presented at the meeting it did not show our home on our lot. When we brought that to the developer's attention, we were told it would have been covered by the lettering, but all other homes were shown and labeled on the map. If our home was shown on the map than I believe it would better reflect how close our home will be located to this waste water treatment structure and stream.

I have attached some photos with this letter so you can have a better sense of the stream as well as the view we will have from our home. The orange cone reflects the placement of the waste water treatment building keep in mind this will be a large solid structure not a cone.

We hope the planning board can find a new location for the waste water treatment structure on the 400+ acres that will not impact any existing homes and families in the area.

Thank you in advance for your help in this matter, The Surdyka Family 845.742.3822

CC: New Windsor Town Board

## RECEIVED

APR 0 3 2019

Katrin Prater 161 Shaw Road Rock Tavern NY 12575

Town of New Windson Building Department

April 3, 2019

Planning Board 555 Union Ave New Windsor NY, 12553

Dear Chairman,

My husband and I attended the Apple Ridge Public hearing on 27 March, 2019. I want to start out by saying we are not against a development here in our neighborhood but we are against the size of this development and I will explain why below. As you know too there were mainly two concerns addressed at the hearing:

The water situation. I am afraid that the actual situation wasn't addressed properly. The entire area surrounding the Apple Ridge project does have a lot of water. There is wetland here but it is important to know that it is mostly wet due to a poor water runoff design. As for example we have a smaller collecting pond next to Shaw Rd that then runs through our property. It is nearly empty at most times but when we have a day of heavy rain it almost reaches capacity and during summer months when we have a few weeks of drought it is bone dry. So let's not think that there is plenty of water in the area to go around for an additional 172 homes, it may seem so on a rainy day but not in the midst of summer when ponds and creeks are dry. Then there is the risk of increased runoff water in the area that will be a problem as the infrastructure is not there to support it. Not just my property but pretty much everybody in the area including the soccer field across the street will be affected. My conclusion would be that this size of development is not appropriate for a rural area where each property owner is responsible for drainage/private well etc. These type of cluster development should be within village perimeters where proper infrastructure is in place. The amount of dwelling units is largely inappropriately for an area like this.

The traffic situation. The current road design surrounding the area can not handle an increase of 300+ cars. The the soccer coach for Washingtonville Soccer club at the meeting mentioned there is already an issue with traffic on busy game and practice days. I understand there is a plan in place to improve streets etc however that will not change the volume of cars. The only way to create some sort of flow of traffic would be to have multiple outlets for the Apple Ridge development. 172 homes can not have just one entrance/outlet. In comparison, a similar neighborhood would be Butter Hill in Vails Gate, they have at least 3 entrances/outlets. Once again it is the amount of dwelling units making this a not so appropriate development for this rural area. A development with maybe 30-40 homes on each 1.5-2 acres with private well/septic would be more appropriate, an example would be Wagner Drive in Rock Tavern, about 25-30 homes.

Just to put things in perspective; Rock Tavern, zip code 12575 has currently 764 households and 206 people per square area mile on average with a total of 2034 people living in Rock Tavern. If Apple Ridge were to be completed as purposed it would represent almost 20 percent of the amount of households in Rock Tavern and also almost 20 percent of Rock Taverns population.

My husband and I appreciate the opportunity to attend the public hearing and to be able to address you with our concerns. I once again must address that we are not against a development, it is the amount of dwelling units in this development that is by far inappropriate. My opinion is based on common sense and facts. We hope that you can come to an acceptable conclusion as what would be best for everyone and everything impacted by a development of this magnitude.

Sincerely,

Katrin Prater

845-614-0080

Dear Planning Board Members:

APR 0 5 2019

Show Road is used by many as the primary short-cut to Washingtonville. The speed limit isn't enforced. The cars race by my house from Beattie Rd. at unbelievable speeds; dangerous to all residents. For some it is a speedway that surely must have been observed by a traffic study. And nothing has changed.

Show Road isn't even wide enough to accommodate the snow places that clear the snow. This fact is clearly demonstrated by damaged properties; felled mailboxes, broken driveway entrances and

torn-up lawns.

Additional howing will only add to existing problems and even put more stress on Bull Rd. including the bridge over the railroad. Roads are already in bad shape. These are country roads and not major highways. The Bull Rd. lindge has been closed more than once for reconstruction. That caused major problems for commuters or for emergencies that existed.

and how they will be impacted by such an ambitious project as apple Ridge. The project seems like a good idea for another location. But not here and not using Show Rd. as the entrance.

On most properties there is very poor drainage. Hooding is the norm, particularly in the spring but not limited to that season. The soccor field is a prime example. And with the existing soccer field we are already overextended with traffic. Adding clusters of housing will make an abready existing situation even much worse. What is going to happen to our home values?

Tinally, the apple trees that were uproted and piled along Shaw Rd. for many months have not been removed. They have simply been moved into a huge pile by the entrance close to Muligans property. Many thought it to be a "statement" of sorts by the orchard owners. It is still unsightly and still a fire danger. And still an unacceptable solution. What well happen if more trees are eliminated and who well be responsible for their demise?

I want to thank Jennifer for answering some of my questions and taking time to be informative and speak to my concerns. Thank you for hearing what I think and how I feel. Sincerely.

Elizabeth M. Munday 138 SHAW RD.

The ground water is always a gourse of consternation We on I have Rd. have wello & septio 8 75 temo. B/ighting The area will water & seiber tenho takes nerve! - please recenside your apprecial of Jincerely. Joyced V. Cunay



1 /ear Jins: If any one of you level on Than completely + without neservation That apple Ridge should not become a reality. It should be a natural preseration area. I noffic on This noad leturen 5:30 8:30 AM v. 4:00 & 6:30 pm, at best is an accident waiting Thappen. The Bridge on Bull Rd was closed for almost a you for reconstruction because of the traffic incurred from 5 haw Rd. We were deverted Telman Rd. Jenator Larkin helped us residents in This respect. Have you given any considerdan

# Comments on the *Apple Ridge Draft Environmental Impact Statement (DEIS)*October 2017, Revised November 2018

### General Overview:

- The existing environmental conditions of the site should be documented in the DEIS (i.e., Phase I Environmental Site Assessment should be conducted).
- Photographs depicting the existing conditions of the site and study area should be included in the DEIS.
- The DEIS Table of Contents shows an incorrect date for DEIS Appendix H, Water and Wastewater Treatment Plant. The NSU report included as Appendix H is dated May 2018, not October 2017.

### 1. Infrastructure and Utilities

The review of the Infrastructure and Utilities section of the DEIS focuses on the proposed development's wastewater treatment plant (WTTP) and its potential impact on the water supply for the Town of Blooming Grove. Comments are primarily based on a review of the DEIS; and the following documents:

- Apple Ridge Subdivision Plan Set (Pietrzak & Pfau Engineering & Surveying, PLLC, May 16, 2018);
- DEIS Appendix D, Waste Assimilation Capacity (HydroQual Environmental Engineers & Scientists, P.C., October 8, 2010);
- DEIS Appendix H, Water and Wastewater Treatment Plant (Natural Systems Utilities (NSU), May 2018);
- DEIS Appendix J, Sewer System to Serve Apple Ridge Subdivision (Pietrzak & Pfau Engineering & Surveying, PLLC, October 2017, revised May 2018);
- Memorandum: Total Maximum Daily Loads and Water Quality-Based Effluent Limits (New York State Department of Environmental Conservation (NYSDEC), Division of Water, Bureau of Watershed Management, July 8, 1996); and
- New York State Design Standards for Intermediate Sized Wastewater Treatment Systems (NYSDEC, Division of Water, March 5, 2014).

It is noted that hydraulic calculations were not available or reviewed for the gravity sanitary sewer gravity collection.

### **Wastewater Engineering Analysis**

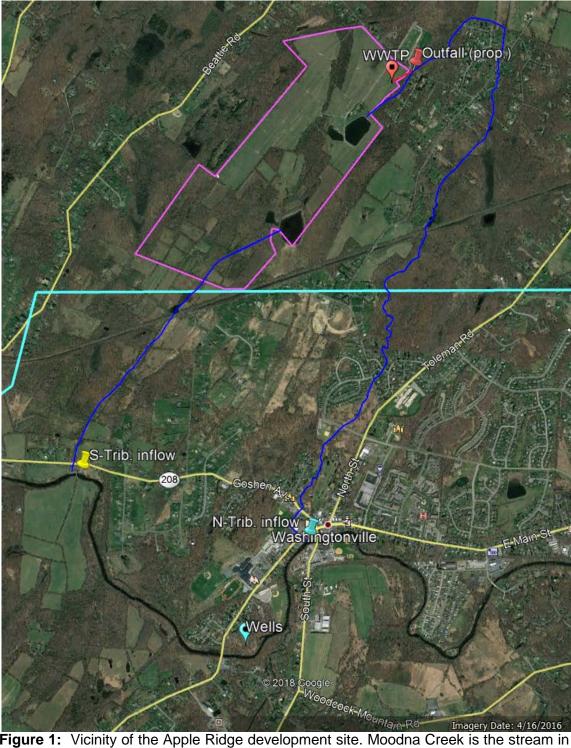
There are two streams that originate from the proposed Apple Ridge development site. Both streams are intermittent (i.e., are dry some of the time) and are tributaries to Moodna Creek (Figure 1). The designated discharge point of the WWTP effluent is along the northern tributary where little or no flow is available for dilution. It was reported by HydroQual that no flow was observed in this stream after 2 inches of precipitation over a 48-hour period. One NYSDEC definition of an intermittent stream is any stream that periodically goes dry at any point downstream of the proposed point of discharge. Therefore, discharge to this stream would therefore be subject to Intermittent Stream Effluent Limits (ISEL).

The minimum ISEL discharge limits are defined in Table B-4B of the Design Standards as follows:

Parameter	Туре	Limitation	Units	
BOD <sub>5</sub>	Daily Maximum	5	mg/L	
TSS	Daily Maximum	10	mg/L	
Settleable Solids	Daily Maximum	0.1	ml/L	
Total Residual Chlorine	Daily Maximum	0.02	mg/L	
Ammonia <sup>33</sup>	Daily Maximum or	2.2 in winter	mg/L as NH <sub>3</sub>	
	Average	1.5 in summer		
Dissolved Oxygen	Daily Minimum	≥ 7.0	mg/L	
рН	Range	6.0 - 9.0	SU	
Total Phosphorus	Site-specific	Site-specific	mg/L as P	
Coliform, fecal, when	30-day geometric	200	Number of colonies per	
disinfecting	mean	200	100 ml	
Coliform, fecal, when	7 consecutive-day	400	Number of colonies per	
disinfecting	geometric mean	100	100 ml	

Documents reviewed acknowledge these (Table B-4B) as the discharge requirements for the proposed WWTP. It is important to note that these are the minimum required treatment standards and that more stringent requirements could be imposed by the State Pollutant Discharge Elimination System (SPDES) Program upon permit application.

The Membrane Bioreactor (MBR) process proposed for the Apple Ridge WWTP is a well-established technology that can produce a high-quality effluent. Assuming proper design and construction, this technology should be able to meet the aforementioned minimum standards. With proper operation and maintenance, it is not anticipated that the effluent quality associated with this technology would negatively impact downstream facilities (wetlands, wildlife, etc.).



**Figure 1:** Vicinity of the Apple Ridge development site. Moodna Creek is the stream in the south, flowing from west to east. Marked are the Apple Ridge development (magenta), the two tributaries to Moodna Creek that originate at the site (blue), the proposed WWTP and outfall, municipal supply wells for the Village of Washingtonville, and the boundary between the Town of Blooming Grove and New Windsor and Blooming Grove (turquoise). All lines are approximate, superimposed on a Google Earth image from April 16, 2016.

The calculated influent average daily flow is 66,220 gallons per day (GPD), or 46 gallons per minute (GPM). This was calculated for 602 bedrooms at 110 GPD/bedroom. Based on the anticipated population at full buildout, the peaking factor of 4 would apply. The peak flow would therefore be approximately 184 GPM.

It is noted that the aforementioned peak flow rate is for the wastewater only under the assumption of a new water-tight, PVC collection system. It is unlikely that the gravity collection system would be entirely water-tight, at least not indefinitely. It does not account for the inevitability of inflow and infiltration. Each of the equalization tanks proposed in the Water and Wastewater Treatment Plant Engineer's Report prepared by NSU has a capacity of 12,500 gallons, which is just over one hour's capacity at the peak flow rate. Understanding that this is not the final design, it is recommended that additional equalization capacity be incorporated into the WWTP design.

The NSU Engineer's Report states that there should be two treatment trains each having capacity of 50% of the average daily flow (ADF), which means that there is essentially no redundancy should one treatment train be off line for an extended period and the WWTP will unlikely be able to meet regulatory discharge limits under this scenario. It is recommended that each of the proposed two treatment trains have the capacity to treat 100% of the ADF, or that a third treatment train with a capacity of 50% ADF be added to provide redundancy.

The MBR process does generate a large volume of sludge, and it is anticipated that the two 9,000-gallon Sludge Holding Tanks will require frequent emptying. Because of the amount of sludge generated by the MBR process is significantly higher than an extended aeration process, it is recommended that a means for sludge dewatering/solidification, such as a centrifuge or belt filter press, be incorporated into the WWTP design.

The plans do not show stormwater management for the access road to the WWTP or the plant itself. This WWTP is going to require daily visits by operations personnel and the sludge tanks will require frequent emptying (monthly or less). Stormwater management and pollution prevention for the WWTP and access road will need to be integrated into the stormwater management design for the proposed development.

### **Hydrological Considerations**

As stated, there are two intermittent streams that originate from the proposed Apple Ridge development site; both streams are tributaries to Moodna Creek.

Southern tributary: The southern tributary originates in the southern portion of the Apple Ridge development site, close to an on-site pond. The tributary flows in a southwesterly direction and enters Moodna Creek approximately 0.5 miles downstream of the intersection between Route 208 and Twin Arch Road. This inflow location is approximately 1.3 river miles upstream of the location of Washingtonville's municipal water supply wells along Route 94.

• Northern tributary: The northern tributary originates in the northern portion of the Apple Ridge development site, close to an on-site impoundment. It leaves the site at Shaw Road, flows first in a northeasterly direction and then flows to the south southwest. As stated, the WWTP is located in the watershed of the northern tributary, with the proposed WWTP outfall located near Shaw Road. From this point, the tributary flows for approximately 2.0 river miles through the Town of New Windsor before reaching the Town of Blooming Grove. It flows through Blooming Grove for approximately another 1.3 river miles before flowing into Moodna Creek. Along the way it crosses at least one wetland and several small ponds; one of these ponds may be an impoundment. The inflow of the tributary to Moodna Creek is located approximately 200 feet upstream of the Route 208 bridge and approximately 0.6 miles downstream of Washingtonville's municipal supply wells.

As stated above in the wastewater engineering analysis of the proposed WWTP, the effluent is required to meet ISEL standards. ISEL standard effluent is of high quality. Assuming the plant is properly designed, built, and maintained to achieve the targeted effluent quality, impacts to the groundwater quality in water supply wells in Blooming Grove in the vicinity of northern tributary would not be expected.

The municipal water supply wells along Route 94 would not be impacted by the proposed Apple Ridge development under any scenario (assuming that the effluent from the Apple Ridge WWTP was discharged into the northern tributary, as currently proposed), as the supply wells along Route 94 are located far upstream (0.6 miles) of the inflow of the northern tributary into Moodna Creek.

#### **Groundwater Resources**

The following comments are based on a review of the DEIS and DEIS Appendix F, 72 Hour Pumping Test Program (Leggette, Brashears & Graham, Inc., July 2017).

The first pumping test was conducted using Wells 2, 3, and 6, and the second pumping test was conducted on test Well 7 (best well). The pumping tests were in general conformance with NYSDEC guidance entitled *Pumping Test Procedures for Water Withdrawal Permitting*. The following additional comments apply:

• During the multi-well 72-hour pumping test water level stabilization had not been demonstrated over the last 6 hours of pumping from Well 2 (0.89 feet decline), Well 3 (0.76 feet decline), and Well 6 (1.15 feet decline). The consultant followed the NYSDEC procedure documented in *Pumping Test Procedures for Water Withdrawal Permitting*, and constructed a semi-logarithmic plot showing a 180-day projection of the time-drawdown curve...[the] water level in the test well must remain above the intake plus a margin of 5% but no less than 5 feet of the pre-test water column. The resultant drawdown projections will satisfy NYSDEC requirements, but the failure to achieve stabilization means the long-term effects of pumping are not known.

- The pumping test report states that "Although these offsite wells [81 Shaw Rd., 16 Fiestina Lane, and others along Fiestina Lane] also did not appear to be negatively affected during the pumping tests or from the longer-term use of Wells 2 and 3 as irrigation wells at the apple orchard, the effects from regular use of the Heritage wells should be assessed and a mitigation plan put in place. The plan will allow Heritage to rectify a problem should one occur in an offsite well that is attributed to use of the Heritage wells by mitigation measures such as lowering a well pump or drilling a well deeper." A mitigation plan is well advised, and should be prepared.
- In Pumping Test Report Figures 4 and 5, the drawdown pattern appears to be controlled by the lineament (i.e., fracture) that traverses two surface water features at the site. However, there is no discussion regarding impacts to on-site surface water resources.
- In Appendix VIII of the Pumping Test Report, the graph of temperature vs. time for Wells 2, 3, and 6 indicated that temperature varied by approximately 7 degrees Celsius. This suggests that an inflow of cold water; and since the test was conducted during the winter, it is possible that inflow from colder surface water (ponds on the property, see Figure 1) was induced during the test or may be induced by long-term pumping.
- The aforementioned possible surface water infiltration shown by the pumping test temperature plots, coupled with the designed WWTP discharge point in the northern tributary (an intermittent stream within the cone of depression), suggest that there is potential for induced infiltration of not only the ponded surface water, but of the WWTP effluent. Hydraulic testing of the northern tributary, prior to construction of the WWTP, is advised.

### 2. Traffic and Transportation

The following comments are based on a review of the DEIS and DEIS Appendix B, *Traffic Impact Study* (Maser Consulting, P.A., April 20, 2017).

### **Primary Assumptions:**

- Data collection: March 29 and March 30 (Wednesday and Thursday), 2017
- Study Area intersections: Bull Road and Shaw Road; NY 207 and Beattie Road; Beattie Road and Shaw Road
- Proposed 172 single family homes
- Base Year = 2017
- Future Year = 2022
- Background growth = 2.0 percent/year over 5 years

### **DEIS Comments Related to Blooming Grove Impacts**

(DEIS Figure No I-4 and Page 6) The DEIS discusses a yield plan that establishes the maximum density for the proposed development. This differs from the current plan for the development. Based on the yield plan, it is plausible that a third connection to the development from the south could be constructed. The new connection would cross into the Town of Blooming Grove by connecting to Moffat Road via the existing Railway Pass over Metro North tracks. If this connection is proposed in the future, another traffic assessment would be necessary to ascertain the impact to Moffat Road and its connection to NY 208 and Bull Road. Most vehicles destined south to Washingtonville or to the Beaverdam Lake-Salisbury Metro North station would likely use this exit. This would potentially add vehicles to a road with low density housing and could affect the intersection of Moffat Road at NY 208 and the intersection of Moffat Road at Bull Road.

### **Traffic Impact Study Comments Related to Blooming Grove Impacts**

- (Page 9, Section C) The report assumes 40 percent of all new vehicle trips will be
  destined south along Bull Road toward Blooming Grove, but the study area does
  not include any intersections within the Town of Blooming Grove.
- (Page 11, Section F) The traffic report indicates that Synchro 8 was used to perform the operations analysis. Transportation professionals have been using Synchro 10 for well over a year going on two years. Some may still be using Synchro 9, but version 8 is outdated.
- (Page 14, Section F) The traffic report states that Bull Road and North Street/Toleman Road intersection (located in Blooming Grove) had a total of 45 vehicles pass through the intersection during the AM peak hour and 540 pass thought the intersection during the PM peak hour. This difference does not make sense because drivers usually use the same route both to/from work each day, especially in a rural environment with limited roadway options. No traffic count information was provided for this intersection in the report to validate the count. The report does not evaluate this intersection's operation; thus, the intersection may experience traffic delays as a result of the proposed development.
- (Page 15, Section G) There is no mention of potential truck traffic degradation to the pavement, given the pavement has been reported as good with pavement cracking occurring on Bull Road on page 4. Depending on the truck route, trucks may be driving through the Washingtonville town center if the source of the lumber, roofing, and foundations is located south of the planned development site. Mitigation could include repaving roadways along the truck route between NY 94 and Shaw Road.
- (Appendix A, Figures 2 and 3 and Appendix F) The existing condition traffic volume numbers published in Figures 2 and 3 in Appendix A do not match the values contained in Appendix F tables, which contain the 2017 traffic counts. Either the

- data in the Appendix F tables was not correctly entered, or the values in the figures was not correctly entered.
- (Appendix A, Arrival and Departure Distribution, Figures 8 and 9) The proposed distribution of new vehicle trips to and from the Apple Ridge Residential Development does not adequately describe how the percentages were developed other than existing and expected travel patterns. This is a critical part of the assumptions that leads to the assignment of vehicle trips. Given the location, several sources should be accessed to determine the best distribution such as the Census Journey to Work or Orange County travel demand model trip tables. The Metro North station east of Washingtonville will also be an attractor of vehicle trips for residences who work in New York City or New Jersey and chose to live in Upstate New York due to various reasons. Residents who purchase a home in Apple Ridge and travel to the Metro North train station each day will most likely use Ahern Boulevard to avoid driving through the Washingtonville town center. The intersection at North Street and Ahern Boulevard as well as the intersection at NY 94 and Ahern Boulevard may need to be assessed for potential traffic impacts.
- (Appendix A, Arrival and Departure Distribution, Figures 8 and 9) Based on the ITE forecast, the proposed residential development will generate approximately 100 vehicle trips leaving in the morning and returning in the evening. Washingtonville is the closest town center to the development, providing groceries, banking, pharmacy, restaurants, schools, religious, and recreational necessities for families. While not occurring every day, it is plausible that the new residents of the Apple Ridge community could plan their trips through Washingtonville as part of their commute to either drop off/pick-up children at school, stop at a retail place, or other errand. Given that potential scenario, this study should consider evaluating traffic impacts based on 100 percent of vehicle trips destined to/from Bull Road to the south into Washingtonville town center. This would also require adding a few more intersections to the study area, including North Street at Ahern Boulevard, NY 94 at North Street, and NY 94 at Ahern Boulevard (to account for vehicles destined to the Metro North Station).
- (Appendix E) It is important to add NY 94 to Table A-2 to determine if there is an
  existing safety issue through Washingtonville before adding any new vehicle trips
  generated by the Apple Ridge development.
- (Appendix F) The traffic count for Beattie Road at Shaw Road is missing two time periods within the peak hour, 5:30 5:45 pm and 5:45 6:00 pm.
- (Overall) The traffic study focuses on issues related to the immediate area surrounding the proposed development, a rural area with low volumes. Because the planned development could produce over 100 peak hour trips, the study area needs to be expanded to include Washingtonville to assess if the nearby town center would be affected by the addition of the new vehicle trips.

### **General Traffic Comments not affecting results:**

- (DEIS, page 80) Dates indicated for traffic counts are incorrectly noted in text when compared to the actual count sheets provided in Appendix. This is a good result because the date in the text indicates a Friday, which is not a valid count day.
- (DEIS, page 82) The text indicates 2021 for No-build and build conditions. This should be changed to 2022.
- (Traffic Impact Study, page 17) The bridge discussion described in the traffic study references Appendix B of the FEIS. That is the traffic report. The bridge inspection report is missing.
- (Traffic Impact Study, Appendix A) References to figure numbers do not match with the figure numbers listed on the figures.

### 3. Other Environmental Topics

Comments on other environmental resources areas are based on review of the DEIS and DEIS Appendix A, SEQRA Documents (specifically, A1, Full Environmental Assessment Form (EAF), Parts 1 and 2 (March 2011); and A6 Final Scoping Document (January 2017).

### **Land Use**

The DEIS should include an inventory of applicable local, regional and state land use plan and policies, and provide a more elaborate assessment of the Proposed Action's consistency with applicable plans and policies. The *Final Scoping Document* indicates that a discussion of the Orange County Open Space Plan (2004) will be provided; however, the DEIS does not contain this.

#### Visual Character

The visual impact analysis is insufficient and lacks sufficient detail needed to determine the potential for impacts. In addition, it is missing several items identified in the Visual Character and Aesthetic Resources section of the *Final Scoping Document* (page 15). For example, no existing conditions photographs of the site are provided. Figure III-1 is illegible at this scale and is missing a legend. Visual impacts from Moffat Road should also be included, as existing view of the site are available along this public street.

### **Alternatives Analysis**

In light of the numerous short- and long-term unavoidable adverse impacts, the DEIS should provide a more robust discussion of alternatives. The DEIS alternatives analysis indicates that the Cluster Subdivision with a Single Wetland Crossing Alternative would result in a substantial reduction in environmental impacts relative to the Proposed Action. A more elaborate justification for dismissing this lesser environmental impact alternative should be included. The DEIS simply dismisses the alternative in stating that the single crossing "introduces a health, safety and welfare

issue with regard to emergency services access." The rationale for dismissing the Single Wetland Crossing Alternative should be more fully developed, including exploring a solution to provide adequate access for emergency vehicles via a single access road to the local street network.

The *Final Scoping Document* (page 21) states that a WWTP and Outfall Locations Alternative will be analyzed in the DEIS. Similarly, the DEIS Executive Summary (page 20) references this alternative:

WWTP and Outfall Locations Alternative: This alternative has evaluated potential adverse or beneficial changes regarding the location of the proposed on-site WWTP. Two (2) alternative outfall locations have also been evaluated, each will discharge to on-site streams, one which flows in the northerly direction and another which flows in a southerly direction.

However, the Alternatives section of the DEIS does not include an assessment of this alternative.

### Noise

As noted in following comment (Full EAF, Parts I and II), a noise assessment may be warranted due to the removal of vegetation and alteration of topography that would result from the proposed development.

### Full Environmental Assessment Form, Parts I and II

The SEQRA Full EAF is dated March 23, 2011. An updated Full EAF should have been completed in 2016 for the revised project, particularly in light of the fact that NYSDEC revised the EAF in 2012. The 2012 revisions to the Full EAF were substantive; the current version of form requires a substantial amount of additional information.

In addition, the response to EAF Part 2, question 17 should be changed to yes to reflect that the project would entail removal of natural barriers that could act as a noise screen. As noted in NYSDEC noise impact guidance:

Topography, vegetation, structures and the relative location of noise receptors and sources to these features are all aspects of the environmental setting that can influence noise impact potential. As such, land alteration may also indirectly create an adverse noise impact where natural land features or manmade features serve as a noise barrier or provide noise attenuation for existing sources of noise, i.e. highway, railroads, manufacturing activity. Removal of these features, i.e. hills, vegetation, large structures or walls, can expose receptors to increased sound pressure levels causing noise problems where none had previously existed. <sup>1</sup>

Because the Proposed Action would remove vegetation and alter topography, it has the potential to remove natural feature that serve as noise barrier. In accordance with NYSDEC guidance, the DEIS should include a noise impact assessment to evaluate the potential for long term impacts.

<sup>&</sup>lt;sup>1</sup> NYSDEC, Assessing and Mitigating Noise Impacts, Program Policy DEP-00-1, Revised 2/2/2001, page 11.

### **Final Scoping Document**

The Final Scoping Document for the Proposed Action, dated January 26, 2017, includes an initial identification of mitigation measures. As noted on page 2 of the *Final Scoping Document* (General Guidelines, #7), the DEIS should "consider at least those measures mentioned in the Scoping Document;" furthering noting that "for any mitigation measures listed in this Scope that are not incorporated into the Proposed Action, the reason why the Applicant considers them unnecessary should be discussed in the DEIS."

Many of these mitigation measures are not mentioned the DEIS. The DEIS should be revised to provide a discussion of these initial mitigation measures, including rationale for not incorporating any such measures into the Proposed Action.

## Caffry & Flower

ATTORNEYS AT LAW

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JOHN W. CAFFRY

AMANDA J. KUKLE

KRISTINE K. FLOWER

May 15, 2019

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Town or Devaring Pr

Planning Board Town of New Windsor 555 Union Avenue New Windsor, New York 12553

Re: Apple Ridge Subdivision, No. 08-16

Dear Board Members:

We represent Sylvia Mangold and Robert Mangold in connection with the above-referenced application (the "Project"). On their behalf, we write to seek clarification on an apparent discrepancy between figures in the draft environmental impact statement ("DEIS") for the Project and statements made by the applicant at the public hearing on March 27, 2019.

Our clients have expressed several concerns about the Project, but the longevity and quality of the water supply in the area is of the utmost priority to them. They attended the meeting and were concerned about an apparent increase in the size of the Project's proposed water storage tanks and were confused by where the new proposed figures came from. We now seek clarification on the individual size of each water storage tank, their combined capacity, and where these numbers can be found.

The DEIS stated that:

Water used for firefighting will be stored in below grade tanks and will not be supplied by the potable water system. Based on feedback from Town of New Windsor fire officials during a meeting held on January 23, 2018 water storage tanks with a combined capacity of 30,000 gallons of usable volume that are separate from the potable water supple are acceptable. DEIS, p.92.

The DEIS, including Appendix K, "Water System to Serve Apple Ridge Cluster Subdivision", does not go into further detail on this topic.

May 15, 2019

Town of New Windsor Planning Board 2
Re: Apple Ridge Subdivision

In the minutes from the meeting on Match 27, 2019, a representative for the applicant, Mr. Esposito, stated that the buried reservoirs for the fire department will consist of two tanks. When asked what the capacity of the tanks were by the Board, Mr. Esposito stated that "[t]hey're 33,000 gallons usable and that was established by the fire marshal." March 27, 2019 Minutes, pp. 16-17.

In the context it was unclear whether the 33,000 gallons capacity referred to each tank individually or the combined capacity. At least one member of the public at the meeting believed this statement referred to the tanks individually and, thus, they would have total capacity of 66,000 gallons. March 27, 2019 Minutes, pp. 24-25.

In either case, the figure appears to be a departure from what was stated in the DEIS and requested by the Town of New Windsor Fire Marshal.¹ Therefore, we respectfully request that the Planning Board clarify the individual size of each water storage tank, their combined capacity, explain where these numbers came from, and whether they can be found in the public record.

Thank you for your attention to this matter.

Sincerely,

Amanda J Kukle
Amanda J. Kukle

akukle@caffrylawoffice.com

AJK/ljs

cc: Veronica McMilian, Esq.
Michael Donnelly, Esq
Mark Edsall, P.E.
Sylvia and Robert Mangold

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<sup>&</sup>lt;sup>1</sup> As far as we are aware, notes or minutes from the January 23, 2018 meeting between the Board and the Town of New Windsor Fire Marshall were not made part of the DEIS or otherwise made available to the public.

### COMMENTS ON APPLE RIDGE FINAL REVISED DEIS DATED 7/30/18

Prepared by John J. Coffey 3 Wagner Drive Rock Tavern, NY 12575

- 1. DEIS Figure I-4, 172 Lot Yield Plan provides a site plan and roadways for a conventional subdivision assuming that 172 units would be built. If the developer's engineering studies determined that three access points would be required, two on Shaw Road and one on Moffat Road, why aren't three access point required for the cluster subdivision proposed as shown on Figure I-2, 172 Lot Cluster Plan? The proposed cluster plan provides only one access point on Shaw Road. This seems illogical given that the same number of homes and the same number of homeowner vehicles, delivery trucks, service vehicles, school buses, visitor vehicles, etc. will require access to the site. It appears that this additional road would require crossing only one additional wetland. The conservation acreage would only be marginally affected. There are no engineering studies provided in the DEIS to explain why three access points were required for the conventional subdivision alternative. Further, alternative analysis is required to explain why only one access point is somehow a better alternative for the proposed cluster plan.
- 2. It is noted that this site is landlocked except for access to Shaw Road and access should have been a major consideration for any applicant seriously contemplating construction of such a large subdivision. The DEIS describes the project site as "having limited access to Moffat Road at the southerly corner of the property." Will the town request that the developer submit application to the Town of Blooming Grove for a road connection to Moffat Road and incorporate this access point as a condition of final approval of this EIS? Figure 4, Conservation Subdivision Design, on Page 17 of the New Windsor 2009 Comprehensive Plan Upgrade shows multiple access points are typically provided, even for a relatively small subdivision. Chapter V. Transportation, C. Recommendations, 1. Roads states "Require new subdivisions to connect to other local roads and adjacent subdivisions...ensure local neighborhood roadways are impacted as little as possible by through traffic." It is noted that cluster type subdivisions have been built in New Windsor along State Route 300 between State Route 207 and State Route 94 with direct access to the state highway. Subdivisions with access points on state highways appear to follow the town's Comprehensive Plan since these highways are designed with shoulders to provide extra pavement width for entering and exiting vehicles and local neighborhood roadways and current residents are not impacted. It does not seem that one access point on a rural neighborhood local road as proposed for this cluster alternative is following the intent of the town's Comprehensive Plan.

- 3. Shaw Road is a rural town road and a poor choice for the only access point for this cluster plan because of its substandard roadway geometrics for the posted speed of 40 MPH. The frontage of this proposed subdivision includes the steep upgrade to the intersection with Feitsma Lane which sits at the top of a crest curve. The crest curve is on such a steep grade with a short vertical curve that there is minimal and substandard sight distance at the posted speed limit. This is a dangerous feature that needs to be corrected before there is a terrible accident. Will the town require that this substandard feature be corrected by the applicant since the applicant is substantially increasing the amount of traffic on Shaw Road and thereby increasing the risk of accidents. Also, will the town require the applicant to widen Shaw Road in the vicinity of the new access point for safe entry/exit?
- 4. The Traffic and Transportation Impact shown in Alternative Analysis Matrix A is incorrect. For the conventional subdivision plan, Figure I-4 shows two access points on Shaw Road and one access point on Moffat Road.
- 5. The Traffic Impact Study and DEIS is flawed for a number of reasons:
  - a. The study area does not include two key intersections, North Street and Bull Road; and North Street and State Route 94. These intersections must be included in the quantitative study area and data must be presented on the various figures for these intersections.
  - b. Traffic study does not include weekend traffic counts.
  - c. Traffic study does not include counts for Washingtonville Soccer Club after school and on weekends. The club operates from April through November.
  - d. Intersection of North Street and State Route 94 should include traffic signal warrant analysis. This stop controlled intersection fails miserably in the morning and additional traffic will increase delays. If warranted, this applicant should bear the cost of designing and installing a new traffic signal.
  - e. Traffic study does not discuss the need for three access points for the conventional subdivision alternative and it does not explain how only one access point is somehow sufficient for the cluster plan alternative.
  - f. The Traffic Impact Report states that there will be two roadway connections to Shaw Road and identifies their locations. Is the applicant proposing one access point or two on Shaw Road? Are the plans inconsistent with the traffic study since the plans show one access point? Is the DEIS inconsistent with the traffic study since the DEIS proposes one access point?
  - g. The traffic report does not explain how the peak AM and PM hours were determined. The report seems to assume peak hours based on manual counts that were taken from 7 to 9 AM and from 4 to 6 PM during the week. How can the traffic engineer be certain that peak hours actually occur during these times without 24

- hour counts that would identify the peak hours? Twenty-four hour Automatic Traffic Recorder counts should have been taken during the week and on weekends to ensure that the peak hours are correctly assigned. With the peak hours known and documented, turning movement counts should then be taken during those times.
- h. Page 88 of the DEIS states that "The sight distance for vehicles travelling along the length of Shaw Road currently meets the minimum criteria for a 40 MPH roadway." However, the computations are not provided for review. I would dispute that statement especially for the crest curve near Feitsma Lane. Sight distance for this crest curve is a significant substandard feature that should have been evaluated and discussed in the DEIS and traffic study. This is safety concern that should be remediated by the applicant. Pruning vegetation is suggested as a mitigation measure and clearly misses the point. What are the actual grades and length of vertical curve and why isn't this engineering discussion and documentation provided as part of the evaluation of existing conditions?
- 6. Based on the presentation at the public hearing, the applicant plans to complete the 172 unit subdivision in five years. Given market conditions that will drive the sale of these units, it not unreasonable to think that the five year plan may become a ten year plan so demand for water may not peak until 10 years from the start of construction. Current residents are very concerned about the potential impact to their own wells and peak demand may be over 10 years away. What is the amount of the bond and the number of years that the town will require from the applicant in the event that a current resident does have a problem with their well. It does not seem unreasonable to require the bond for 15 years from the start of construction.
- 7. Why did the applicant propose the wastewater treatment plant near the property line adjacent to current homeowners? No one wants this in their backyard. Isn't there a better location somewhere within the 418 acre site?

APPENDICES Apple Ridge FEIS

## **Appendix C**

## Maser Consulting FEIS Response to Comments

- ➤ Additional Intersections Capacity Analyses
- ➤ Machine Traffic Counts
- ➤ NY State Highway Bridge Data (Bull Road Bridge)
- ➤ Vehicle Speed Data



# APPLE RIDGE RESIDENTIAL DEVELOPMENT

## ADDITIONAL INTERSECTIONS CAPACITY ANALYSES

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Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	N/A			4	f)	
Traffic Volume (vph)	3	9	10	59	107	5
Future Volume (vph)	3	9	10	59	107	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	-6%			4%	-6%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.901				0.994	
Flt Protected	0.987			0.993		
Satd. Flow (prot)	1706	0	0	1813	1907	0
Flt Permitted	0.987			0.993		
Satd. Flow (perm)	1706	0	0	1813	1907	0
Link Speed (mph)	30			40	40	
Link Distance (ft)	1469			2498	710	
Travel Time (s)	33.4			42.6	12.1	
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81
Adj. Flow (vph)	4	11	12	73	132	6
Shared Lane Traffic (%)						
Lane Group Flow (vph)	15	0	0	85	138	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.96	0.96	1.03	1.03	0.96	0.96
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	
Intersection Summary						

Area Type: Control Type: Unsignalized Other

Intersection						
Int Delay, s/veh	1					
	EDI	EDD	NDI	NDT	CDT	CDD
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	- M	0	10	<del>{</del>	<b>þ</b>	
Traffic Vol, veh/h	3	9	10	59	107	5
Future Vol, veh/h	3	9	10	59	107	5
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	-
Grade, %	-6	-	-	4	-6	-
Peak Hour Factor	81	81	81	81	81	81
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	11	12	73	132	6
Major/Minor	Minor2	ı	Major1	٨	/lajor2	
Conflicting Flow All	232	135	138	0	- najoiz	0
Stage 1	135	-	130	-	-	-
Stage 2	97	-	-	_	-	-
Critical Hdwy	5.22	5.62	4.12	-		-
	4.22	5.02	4.12	-	-	-
Critical Hdwy Stg 1	4.22		-	-	-	-
Critical Hdwy Stg 2		2 210	2 210	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	817	935	1446	-	-	-
Stage 1	932	-	-	-	-	-
Stage 2	957	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	810	935	1446	-	-	-
Mov Cap-2 Maneuver	810	-	-	-	-	-
Stage 1	924	-	-	-	-	-
Stage 2	957	-	-	-	-	-
Approach	EB		NB		SB	
HCM Control Delay, s	9.1		1.1		0	
HCM LOS	9. I		1.1		U	
HCIVI LU3	A					
Minor Lane/Major Mvm	nt	NBL	NBT I	EBLn1	SBT	SBR
Capacity (veh/h)		1446	-	900	_	-
HCM Lane V/C Ratio		0.009	_	0.016	-	_
HCM Control Delay (s)		7.5	0	9.1	-	-
HCM Lane LOS		A	A	Α	-	-
HCM 95th %tile Q(veh	)	0	-	0.1	-	-
	,			3.1		

	W	لر	•	×	×	t
Lane Group	SBL	SBR	NEL	NET	SWT	SWR
Lane Configurations	W			4	f)	
Traffic Volume (vph)	7	109	64	164	215	5
Future Volume (vph)	7	109	64	164	215	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	2%			-1%	-6%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.873				0.997	
Flt Protected	0.997			0.986		
Satd. Flow (prot)	1605	0	0	1846	1913	0
Flt Permitted	0.997			0.986		
Satd. Flow (perm)	1605	0	0	1846	1913	0
Link Speed (mph)	40			30	30	
Link Distance (ft)	2498			2182	2000	
Travel Time (s)	42.6			49.6	45.5	
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81
Adj. Flow (vph)	9	135	79	202	265	6
Shared Lane Traffic (%)						
Lane Group Flow (vph)	144	0	0	281	271	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	0.99	0.99	0.96	0.96
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	
Intersection Summary						

**Intersection Summary** 

Area Type: Control Type: Unsignalized Other

3.2					
SBL	SBR	NEL	NET	SWT	SWR
	109	64			5
					5
					0
					Free
-		-			None
0		_			-
		-			_
		_			_
					81
					2
					6
9	133	19	202	200	O
Minor2	ľ	Major1	N	Major2	
628	268	271	0	-	0
268	-	-	-	-	-
360	-	-	-	-	-
6.82	6.42	4.12	-	-	-
5.82	-	-	-	-	-
	-	-	-	-	-
	3.318	2.218	_	-	_
			_	_	-
	-	-	_	_	_
	_	-	_	_	-
070			_	_	_
388	750	1202		_	_
		1272	_	_	_
			-	-	-
		-	-	-	-
0/8	-	-	-	-	-
SB		NE		SW	
11.3		2.2		0	
	NICI	NICT	CDL 4	CVAT	CLUD
I				SWI	SWR
		-		-	-
				-	-
	8	0	11.3	-	-
)	A 0.2	А	B 0.7	-	-
	SBL 7 7 7 0 Stop - 0 2 81 2 9 Minor2 628 268 360 6.82 5.82 5.82 5.82 3.518 417 754 678 388 388 702 678 11.3 B	SBL SBR  7 109 7 109 0 0 Stop Stop - None 0 8, # 0 2 81 81 2 2 9 135  Minor2   628 268 268 360 6.82 6.42 5.82 5.82 5.82 3.518 3.318 417 759 754 678 388 759 388 759 388 702 678  SB  11.3 B  nt NEL 1292 0.061	SBL SBR NEL  7 109 64 7 109 64 0 0 0 0 Stop Stop Free None 0 2 - None 2 81 81 81 2 2 2 2 9 135 79  Minor2 Major1 628 268 271 268 360 6.82 6.42 4.12 5.82 5.82 5.82 3.518 3.318 2.218 417 759 1292 754 678  388 759 1292 754 678  SB NE  11.3 2.2 B  ott NEL NET 1292 - 0.061	SBL         SBR         NEL         NET           7         109         64         164           7         109         64         164           0         0         0         0           Stop         Stop         Free         Free           -         None         -         None           0         -         -         -           2         -         -         -           81         81         81         81           2         2         2         2           9         135         79         202           Minor2         Major1         Major1         Major2           628         268         271         0           268         -         -         -           360         -         -         -           5.82         -         -         -           5.82         -         -         -           417         759         1292         -           754         -         -         -           470         -         -         -           388         759	SBL         SBR         NEL         NET         SWT           7         109         64         164         215           7         109         64         164         215           0         0         0         0         0           Stop         Free         Free         Free           None         -         None         -           0         -         -         -         -           2         -         -         -         -         -           81         81         81         81         81         81         81         81         2         <

	۶	•	4	<b>†</b>	<b>↓</b>	4
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	, M			4	£	
Traffic Volume (vph)	1	28	12	124	65	3
Future Volume (vph)	1	28	12	124	65	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	-6%			4%	-6%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.868				0.994	
Flt Protected	0.999			0.996		
Satd. Flow (prot)	1664	0	0	1818	1907	0
Flt Permitted	0.999			0.996		
Satd. Flow (perm)	1664	0	0	1818	1907	0
Link Speed (mph)	30			40	40	
Link Distance (ft)	1469			2498	710	
Travel Time (s)	33.4			42.6	12.1	
Peak Hour Factor	0.74	0.74	0.74	0.74	0.74	0.74
Adj. Flow (vph)	1	38	16	168	88	4
Shared Lane Traffic (%)						
Lane Group Flow (vph)	39	0	0	184	92	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	0.96	0.96	1.03	1.03	0.96	0.96
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	
Intersection Summary						

Intersection Summary

Area Type: Control Type: Unsignalized Other

Intersection						
Int Delay, s/veh	1.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	¥			4	<u>351</u>	JJIV
Traffic Vol, veh/h	1	28	12	124	65	3
Future Vol, veh/h	1	28	12	124	65	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	310p	None	-	None	-	None
		None -				
Storage Length	0		-	-	-	-
Veh in Median Storage		-	-	0	0	-
Grade, %	-6	-	-	4	-6	-
Peak Hour Factor	74	74	74	74	74	74
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	38	16	168	88	4
Major/Minor	Minor2	ľ	Major1	١	/lajor2	
Conflicting Flow All	290	90	92	0	-	0
Stage 1	90	_		_	-	_
Stage 2	200	_	_	_	_	_
Critical Hdwy	5.22	5.62	4.12	_	_	_
Critical Hdwy Stg 1	4.22	5.02	7.12	_	_	_
Critical Hdwy Stg 2	4.22	_	_	_	_	_
Follow-up Hdwy	3.518		2.218	_	_	
Pot Cap-1 Maneuver	772	982	1503	-	-	-
	962	902	1505	_	-	_
Stage 1		-	-	-	-	-
Stage 2	891	-	-	-	-	-
Platoon blocked, %	7/0	000	1500	-	-	-
Mov Cap-1 Maneuver	763	982	1503	-	-	-
Mov Cap-2 Maneuver	763	-	-	-	-	-
Stage 1	950	-	-	-	-	-
Stage 2	891	-	-	-	-	-
Approach	EB		NB		SB	
HCM Control Delay, s	8.9		0.7		0	
HCM LOS	Α		0.7		- 0	
1.5111 200	, \					
Minor Lane/Major Mvn	nt	NBL	NBT E	EBLn1	SBT	SBR
Capacity (veh/h)		1503	-	972	-	-
HCM Lane V/C Ratio		0.011	-	0.04	-	-
HCM Control Delay (s)		7.4	0	8.9	-	-
HCM Lane LOS		Α	Α	Α	-	-
HCM 95th %tile Q(veh	)	0	-	0.1	-	-
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Lane Group	SBL	SBR	NEL	NET	SWT	SWR
Lane Configurations	N/A			4	f)	
Traffic Volume (vph)	3	90	133	288	273	3
Future Volume (vph)	3	90	133	288	273	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	2%			-1%	-6%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.869				0.999	
Flt Protected	0.998			0.984		
Satd. Flow (prot)	1599	0	0	1842	1917	0
Flt Permitted	0.998			0.984		
Satd. Flow (perm)	1599	0	0	1842	1917	0
Link Speed (mph)	40			30	30	
Link Distance (ft)	2498			2182	2000	
Travel Time (s)	42.6			49.6	45.5	
Peak Hour Factor	0.74	0.74	0.74	0.74	0.74	0.74
Adj. Flow (vph)	4	122	180	389	369	4
Shared Lane Traffic (%)						
Lane Group Flow (vph)	126	0	0	569	373	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12	J		0	0	•
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.01	1.01	0.99	0.99	0.96	0.96
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	
Intersection Summary						

Intersection Summary

Area Type: Other Control Type: Unsignalized

Intersection						
Int Delay, s/veh	2.9					
Movement	SBL	SBR	NEL	NET	SWT	SWR
Lane Configurations	SDL W	JUK	IVLL	<u>NL1</u>	3W1	JWK
Traffic Vol, veh/h	3	90	133	288	273	3
Future Vol, veh/h	3	90	133	288	273	3
Conflicting Peds, #/hr	0	90	0	200	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	Siop	None	riee -	None	riee -	None
Storage Length	0	None -	-	None -	-	None -
			-	0	0	-
Veh in Median Storage Grade, %	2	-		-1	-6	
	74	- 71	71			71
Peak Hour Factor		74	74	74	74	74
Heavy Vehicles, %	2	122	100	200	240	2
Mvmt Flow	4	122	180	389	369	4
Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1120	371	373	0	-	0
Stage 1	371	-	-	-	-	-
Stage 2	749	-	-	-	-	-
Critical Hdwy	6.82	6.42	4.12	-	-	-
Critical Hdwy Stg 1	5.82			_	_	_
Critical Hdwy Stg 2	5.82			-		_
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	202	661	1185	_	_	
Stage 1	670	- 501	1100	-	-	-
Stage 2	430	-	-	-	-	-
Platoon blocked, %	430	_		_	_	_
	163	661	1185	-	-	-
Mov Cap 2 Manager	163	001	1100	-	-	-
Mov Cap-2 Maneuver		-	-	-	-	-
Stage 1	540	-	-	-	-	-
Stage 2	430	-	-	-	-	-
Approach	SB		NE		SW	
HCM Control Delay, s	12.6		2.7		0	
HCM LOS	В					
	U					
Minor Lane/Major Mvm	nt	NEL	NET:	SBLn1	SWT	SWR
Capacity (veh/h)		1185	-	002	-	-
HCM Lane V/C Ratio		0.152	-	0.209	-	-
HCM Control Delay (s)		8.6	0	12.6	-	-
HCM Lane LOS		Α	Α	В	-	-
HCM 95th %tile Q(veh	)	0.5	-	0.8	-	-



# APPLE RIDGE RESIDENTIAL DEVELOPMENT

## **MACHINE TRAFFIC COUNTS**

Default Comments PROJECT: APPLE RIDGE LOCATION: NEW WINDSOR, NY JCE JOB# 1912 11 BRADHURST AVENUE HAWTHORNE, NY 10532 (914) 347 - 7500

Site Code: 191200000111

Station ID:

BEATTIE ROAD (NORTH OF SHAW ROAD AND

SOUTH OF LIBERTY ACRES DRIVE)

Start	11-Ju	n-12	Т	ue	V	Ved		Γhu		Fri	-	Sat		Sun	Week Ave	erage
Time	NB	SB	NB	SB												
12:00 AM	*	*	3	5	4	7	5	5	6	6	8	10	9	8	6	7
01:00	*	*	1	0	3	2	2	1	1	1	6	9	5	6	3	3
02:00	*	*	1	0	1	1	2	0	2	2	7	3	7	6	3	2
03:00	*	*	2	1	1	3	0	1	0	3	2	5	7	4	2	3
04:00	*	*	2	2	3	4	4	2	5	2	3	5	2	2	3	3
05:00	*	*	3	6	9	5	6	6	4	6	2	1	3	1	4	4
06:00	*	*	34	15	21	9	21	8	23	7	8	2	9	3	19	7
07:00	*	*	52	24	48	16	42	14	39	22	28	11	9	6	36	16
08:00	*	*	46	27	46	24	35	29	37	25	47	23	11	18	37	24
09:00	*	*	43	16	31	23	25	19	32	18	42	32	25	17	33	21
10:00	*	*	29	28	26	23	31	29	20	27	48	48	22	17	29	29
11:00	*	*	25	32	25	23	21	14	36	28	54	39	35	39	33	29
12:00 PM	*	*	33	24	34	32	23	28	26	26	35	75	28	33	30	36
01:00	27	21	27	27	29	36	28	23	38	25	47	41	40	36	34	30
02:00	37	23	31	31	38	37	39	32	24	20	58	27	33	37	37	30
03:00	41	47	29	36	48	36	44	45	37	45	48	50	32	33	40	42
04:00	42	53	36	50	34	58	53	54	51	54	33	40	26	39	39	50
05:00	31	49	33	41	40	60	36	56	43	59	48	37	21	29	36	47
06:00	35	52	36	42	30	33	31	39	41	36	20	23	26	22	31	35
07:00	22	37	27	36	33	32	30	35	32	37	34	36	23	34	29	35
08:00	13	27	18	35	22	32	27	34	25	41	36	37	17	23	23	33
09:00	21	24	11	16	20	30	15	22	23	22	27	38	12	15	18	24
10:00	10	10	10	16	11	18	10	13	17	27	28	24	7	9	13	17
11:00	9	4	4	3	7	16	7	7	17	19	15	14	2	6	9	10
Lane	288	347	536	513	564	560	537	516	579	558	684	630	411	443	547	537
Day	63	5	104		11:		10		11	-	13		85		1084	
AM Peak			07:00	11:00	07:00	08:00	07:00	08:00	07:00	11:00	11:00	10:00	11:00	11:00	08:00	10:00
Vol.			52	32	48	24	42	29	39	28	54	48	35	39	37	29
PM Peak	16:00	16:00	16:00	16:00	15:00	17:00	16:00	17:00	16:00	17:00	14:00	12:00	13:00	16:00	15:00	16:00
Vol.	42	53	36	50	48	60	53	56	51	59	58	75	40	39	40	50

Default Comments PROJECT: APPLE RIDGE LOCATION: NEW WINDSOR, NY JCE JOB# 1912 11 BRADHURST AVENUE HAWTHORNE, NY 10532 (914) 347 - 7500

Site Code: 191200000111

Station ID:

BEATTIE ROAD (NORTH OF SHAW ROAD AND

SOUTH OF LIBERTY ACRES DRIVE)

Start	18-Ju	ın-12	Т	ue	We	ed	Th	u	F	ri	Sa	t	Sur	า	Week Av	erage
Time	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
12:00 AM	6	2	6	2	*	*	*	*	*	*	*	*	*	*	6	2
01:00	0	2	3	2	*	*	*	*	*	*	*	*	*	*	2	2
02:00	2	2	1	4	*	*	*	*	*	*	*	*	*	*	2	3
03:00	2	3	0	3	*	*	*	*	*	*	*	*	*	*	1	3
04:00	6	2	3	2	*	*	*	*	*	*	*	*	*	*	4	2
05:00	8	6	4	7	*	*	*	*	*	*	*	*	*	*	6	6
06:00	23	10	25	6	*	*	*	*	*	*	*	*	*	*	24	8
07:00	44	22	34	14	*	*	*	*	*	*	*	*	*	*	39	18
08:00	50	21	39	21	*	*	*	*	*	*	*	*	*	*	44	21
09:00	41	24	31	26	*	*	*	*	*	*	*	*	*	*	36	25
10:00	23	26	18	16	*	*	*	*	*	*	*	*	*	*	20	21
11:00	36	31	*	*	*	*	*	*	*	*	*	*	*	*	36	31
12:00 PM	32	31	*	*	*	*	*	*	*	*	*	*	*	*	32	31
01:00	23	31	*	*	*	*	*	*	*	*	*	*	*	*	23	31
02:00	20	25	*	*	*	*	*	*	*	*	*	*	*	*	20	25
03:00	39	41	*	*	*	*	*	*	*	*	*	*	*	*	39	41
04:00	40	45	*	*	*	*	*	*	*	*	*	*	*	*	40	45
05:00	44	57	*	*	*	*	*	*	*	*	*	*	*	*	44	57
06:00	23	43	*	*	*	*	*	*	*	*	*	*	*	*	23	43
07:00	41	34	*	*	*	*	*	*	*	*	*	*	*	*	41	34
08:00	22	36	*	*	*	*	*	*	*	*	*	*	*	*	22	36
09:00	19	18	*	*	*	*	*	*	*	*	*	*	*	*	19	18
10:00	10	14	*	*	*	*	*	*	*	*	*	*	*	*	10	14
11:00	7	13	*	*	*	*	*	*	*	*	*	*	*	*	7	13
Lane	561	539	164	103	0	0	0	0	0	0	0	0	0	0	540	530
Day	11		26		0		0		0		0		0		1070	
AM Peak	08:00	11:00	08:00	09:00											08:00	11:00
Vol.	50	31	39	26											44	31
PM Peak	17:00	17:00													17:00	17:00
Vol.	44	57													44	57
Comb. Total		1735		1316		1124		1053		1137		1314		854		2154
ADT		ADT	1,090	AA	ADT 1,090											

Default Comments PROJECT: APPLE RIDGE LOCATION: NEW WINDSOR, NY JCE JOB# 1912 11 BRADHURST AVENUE HAWTHORNE, NY 10532 (914) 347 - 7500

Site Code: 191200000222

Station ID:

BULL ROAD (ABOUT 600' SOUTH OF SHAW RD)

Start	11-Ju	n-12	Т	Гue	V	Ved	-	Γhu		Fri		Sat		Sun	Week Av	erage
Time	NB	SB	NB	SB												
12:00 AM	*	*	7	4	12	5	10	4	11	5	16	9	17	11	12	6
01:00	*	*	2	2	6	6	4	2	3	3	12	1	5	3	5	3
02:00	*	*	0	2	3	3	2	2	2	1	7	2	10	5	4	2
03:00	*	*	1	2	1	3	0	3	1	4	1	0	4	2	1	2
04:00	*	*	3	8	4	8	3	7	5	8	6	9	0	7	4	8
05:00	*	*	5	26	7	30	6	30	7	26	2	3	0	2	4	20
06:00	*	*	10	51	14	37	17	43	18	47	11	10	3	7	12	32
07:00	*	*	27	62	28	52	31	58	27	63	13	23	5	10	22	45
08:00	*	*	30	48	31	59	36	59	39	55	49	41	18	34	34	49
09:00	*	*	37	27	40	41	38	54	27	50	51	39	30	35	37	41
10:00	*	*	24	33	21	31	20	49	42	38	100	74	34	30	40	42
11:00	*	*	27	39	34	51	49	44	46	39	97	111	53	40	51	54
12:00 PM	*	*	36	28	51	41	30	30	39	36	95	94	41	47	49	46
01:00	*	*	25	23	25	28	38	38	41	36	61	88	49	40	40	42
02:00	45	37	39	34	48	46	49	30	45	43	61	72	61	51	50	45
03:00	68	50	56	51	65	51	65	55	76	58	63	59	44	46	62	53
04:00	61	45	73	50	63	51	62	53	73	56	41	47	31	37	58	48
05:00	72	55	63	65	75	57	87	54	90	84	57	55	34	42	68	59
06:00	65	49	70	42	63	40	90	51	89	63	50	46	46	44	68	48
07:00	43	41	56	30	55	38	52	69	65	52	39	28	34	37	49	42
08:00	41	27	42	22	49	32	60	43	42	45	44	50	40	32	45	36
09:00	32	13	36	14	35	29	36	23	31	22	49	36	26	26	35	23
10:00	32	12	18	15	22	13	31	12	33	32	38	23	16	9	27	17
11:00	13	12	9	8	12	8	16	11	17	8	18	13	14	15	14	11
Lane	472	341	696	686	764	760	832	824	869	874	981	933	615	612	791	774
Day	81:	3	138		15		16		17			14	12		1565	
AM Peak			09:00	07:00	09:00	08:00	11:00	08:00	11:00	07:00	10:00	11:00	11:00	11:00	11:00	11:00
Vol.			37	62	40	59	49	59	46	63	100	111	53	40	51	54
PM Peak	17:00	17:00	16:00	17:00	17:00	17:00	18:00	19:00	17:00	17:00	12:00	12:00	14:00	14:00	17:00	17:00
Vol.	72	55	73	65	75	57	90	69	90	84	95	94	61	51	68	59

Default Comments PROJECT: APPLE RIDGE LOCATION: NEW WINDSOR, NY JCE JOB# 1912 11 BRADHURST AVENUE HAWTHORNE, NY 10532 (914) 347 - 7500

Site Code: 191200000222

Station ID:

BULL ROAD (ABOUT 600' SOUTH OF SHAW RD)

Start	18-Jı	un-12	Т	ue	We	ed	Th	u	F	ri	Sa	at	Sur	<u> </u>	Week Av	erage
Time	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
12:00 AM	4	4	8	8	*	*	*	*	*	*	*	*	*	*	6	6
01:00	2	1	7	4	*	*	*	*	*	*	*	*	*	*	4	2
02:00	1	1	2	4	*	*	*	*	*	*	*	*	*	*	2	2
03:00	0	3	0	4	*	*	*	*	*	*	*	*	*	*	0	4
04:00	4	5	5	9	*	*	*	*	*	*	*	*	*	*	4	7
05:00	7	27	7	28	*	*	*	*	*	*	*	*	*	*	7	28
06:00	16	46	19	41	*	*	*	*	*	*	*	*	*	*	18	44
07:00	25	55	22	60	*	*	*	*	*	*	*	*	*	*	24	58
08:00	39	55	20	52	*	*	*	*	*	*	*	*	*	*	30	54
09:00	33	40	35	36	*	*	*	*	*	*	*	*	*	*	34	38
10:00	24	35	22	27	*	*	*	*	*	*	*	*	*	*	23	31
11:00	32	42	*	*	*	*	*	*	*	*	*	*	*	*	32	42 38
12:00 PM	35	38	*	*	*	*	*	*	*	*	*	*	*	*	35	38
01:00	40	32	*	*	*	*	*	*	*	*	*	*	*	*	40	32
02:00	42	50	*	*	*	*	*	*	*	*	*	*	*	*	42	50
03:00	53	46	*	*	*	*	*	*	*	*	*	*	*	*	53	46
04:00	77	49	*	*	*	*	*	*	*	*	*	*	*	*	77	49
05:00	65	46	*	*	*	*	*	*	*	*	*	*	*	*	65	46
06:00	77	51	*	*	*	*	*	*	*	*	*	*	*	*	77	51
07:00	55	32	*	*	*	*	*	*	*	*	*	*	*	*	55	32
08:00	47	34	*	*	*	*	*	*	*	*	*	*	*	*	47	34
09:00	44	31	*	*	*	*	*	*	*	*	*	*	*	*	44	31
10:00	19	19	*	*	*	*	*	*	*	*	*	*	*	*	19	19
11:00	7	7	*	*	*	*	*	*	*	*	*	*	*	*	7	7
Lane	748	749	147	273	0	0	0	0	0	0	0	0	0	0	745	751
Day		97	42		0		0		0		0		0		1496	07.00
AM Peak	08:00	07:00	09:00	07:00											09:00	07:00
Vol.	39	55	35	60											34	58 18:00
PM Peak	16:00	18:00													16:00	18:00
Vol.	77	51													77	51
Comb.		2310		1802		1524		1656		1743		1914		1227		3061
Total		2310		1002		1024		1000		1743		1914		1221		3001
ADT		ADT	1,563	AA	ADT 1,563											

Default Comments PROJECT: APPLE RIDGE LOCATION: NEW WINDSOR, NY JCE JOB# 1912 11 BRADHURST AVENUE HAWTHORNE, NY 10532 (914) 347 - 7500

Site Code: 19120000010

Station ID:

SHAW ROAD (EAST OF SOCCER FIELD EXIT DRIVEWAY AND WEST OF FEITSMA LANE)

Start	11-Ju	n-12	Т	ue		Ved		Thu		Fri		Sat		Sun	Week Av	erage
Time	EB	WB	EB	WВ												
12:00 AM	*	*	3	6	2	5	3	8	4	8	7	10	9	11	5	8
01:00	*	*	2	2	2	5	3	4	0	2	0	6	0	5	1	4
02:00	*	*	0	1	0	2	1	3	0	1	1	3	2	6	1	3
03:00	*	*	2	1	2	0	2	0	1	0	0	0	2	3	2	1
04:00	*	*	4	2	6	0	4	1	3	0	5	3	5	0	4	1
05:00	*	*	10	1	13	2	12	2	14	4	2	0	0	3	8	2
06:00	*	*	20	6	20	6	18	5	11	6	4	5	4	2	13	5
07:00	*	*	19	15	13	20	17	18	27	16	7	7	4	1	14	13
08:00	*	*	27	10	36	10	36	12	28	7	27	35	20	8	29	14
09:00	*	*	17	19	17	22	28	19	26	15	27	48	16	10	22	22
10:00	*	*	12	12	17	11	17	10	22	17	50	92	9	15	21	26
11:00	*	*	22	14	27	18	13	18	20	23	78	76	27	45	31	32
12:00 PM	*	*	11	17	19	26	18	23	19	25	71	79	19	31	26	34
01:00	11	26	13	21	12	12	18	15	15	19	69	39	34	19	25	22
02:00	21	26	15	17	18	17	23	31	17	23	91	24	25	30	30	24
03:00	21	31	22	24	27	47	23	27	22	32	26	26	23	19	23	29
04:00	19	29	21	36	31	36	25	28	29	40	28	35	16	21	24	32
05:00	25	32	19	33	25	36	26	55	46	50	30	31	21	17	27	36
06:00	31	37	27	40	26	35	30	63	42	71	20	17	22	23	28	41
07:00	18	20	17	25	19	43	50	35	48	37	25	19	25	24	29	29
08:00	19	27	15	22	30	18	30	33	37	19	16	26	15	18	23	23
09:00	13	21	9	19	13	26	16	24	9	19	21	23	16	17	14	21
10:00	8	17	11	11	8	8	5	13	14	22	15	23	4	11	9	15
11:00	9	11	6	5	4	5	7	9	5	5	5	13	9	9	6	8
Lane	195	277	324	359	387	410	425	456	459	461	625	640	327	348	415	445
Day	47	2	68		79		88		92		120		67		860	
AM Peak			08:00	09:00	08:00	09:00	08:00	09:00	08:00	11:00	11:00	10:00	11:00	11:00	11:00	11:00
Vol.			27	19	36	22	36	19	28	23	78	92	27	45	31	32
PM Peak	18:00	18:00	18:00	18:00	16:00	15:00	19:00	18:00	19:00	18:00	14:00	12:00	13:00	12:00	14:00	18:00
Vol.	31	37	27	40	31	47	50	63	48	71	91	79	34	31	30	41

Default Comments PROJECT: APPLE RIDGE LOCATION: NEW WINDSOR, NY JCE JOB# 1912 11 BRADHURST AVENUE HAWTHORNE, NY 10532 (914) 347 - 7500

Site Code: 19120000010

Station ID:

SHAW ROAD (EAST OF SOCCER FIELD EXIT DRIVEWAY AND WEST OF FEITSMA LANE)

Start	18-Jı	un-12	Т	ue	We	d		hu		ri	S	at	Sı	ın	Week Av	/erage
Time	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	ŴВ
12:00 AM	3	3	1	5	*	*	*	*	*	*	*	*	*	*	2	4
01:00	1	0	1	3	*	*	*	*	*	*	*	*	*	*	1	2
02:00	1	2	3	1	*	*	*	*	*	*	*	*	*	*	2	2
03:00	3	2	3	1	*	*	*	*	*	*	*	*	*	*	3	2
04:00	3	1	5	1	*	*	*	*	*	*	*	*	*	*	4	1
05:00	12	3	10	5	*	*	*	*	*	*	*	*	*	*	11	4
06:00	16	5	15	4	*	*	*	*	*	*	*	*	*	*	16	4
07:00	21	17	18	15	*	*	*	*	*	*	*	*	*	*	20	16
08:00	31	11	31	11	*	*	*	*	*	*	*	*	*	*	31	11
09:00	23	22	21	14	*	*	*	*	*	*	*	*	*	*	22	18
10:00	20	10	9	13	*	*	*	*	*	*	*	*	*	*	14	12
11:00	23	22	*	*	*	*	*	*	*	*	*	*	*	*	23	22
12:00 PM	20	19	*	*	*	*	*	*	*	*	*	*	*	*	20	19
01:00	21	23	*	*	*	*	*	*	*	*	*	*	*	*	21	23
02:00	24	19	*	*	*	*	*	*	*	*	*	*	*	*	24	19
03:00	22	33	*	*	*	*	*	*	*	*	*	*	*	*	22	33
04:00	22	29	*	*	*	*	*	*	*	*	*	*	*	*	22	29
05:00	23	34	*	*	*	*	*	*	*	*	*	*	*	*	23	34
06:00	25	41	*	*	*	*	*	*	*	*	*	*	*	*	25	41
07:00	22	37	*	*	*	*	*	*	*	*	*	*	*	*	22	37
08:00	16	26	*	*	*	*	*	*	*	*	*	*	*	*	16	26
09:00	15	24	*	*	*	*	*	*	*	*	*	*	*	*	15	24
10:00	14	13	*	*	*	*	*	*	*	*		*	*	*	14	13
11:00	6	5	*	*	*	*	*	*	*	*	*	*	*	*	6	5
Lane	387	401	117	73	0	0	0	0	0	0	0	0	0	0	379	401
Day	78		19		0		0		0		0		0		780	44.00
AM Peak Vol.	08:00 31	09:00 22	08:00 31	07:00											08:00 31	11:00
PM Peak	18:00	18:00	31	15											18:00	18:00
Vol.	25	41													25	41
V 01.	23	41													23	41
Comb. Total		1260		873		797		881		920		1265		675		1640
ADT		ΑĽ	OT 858		AADT 858											



# APPLE RIDGE RESIDENTIAL DEVELOPMENT

## NY STATE HIGHWAY BRIDGE DATA (BULL ROAD BRIDGE)

## NY State Highway Bridge Data: June 30, 2019

### Orange County

Regio	n County	Municipality	BIN	Location	Feature Carried	Feature Crossed	Owner	Year Built or Replaced	Date of Last Inspection	Poor Status
08	Orange	Newburgh (Town)	5514380	0.7 MI S JCT RTS I-87& 52	MEADOW HILL ROAD	87IX	2L - NYS Thruway Authority	1953	08/01/2018	Y
08	Orange	Newburgh (Town)	5514390	.1 MI N JCT I87 & SH 52	87IX	ORANGE LAKE TRIBUTARY	2L - NYS Thruway Authority	1953	05/02/2018	N
80	Orange	Newburgh (Town)	5514400	0.7 MI S JCT RTS 187<300	UNION AVE	87IX	2L - NYS Thruway Authority	1955	08/30/2017	N
80	Orange	Newburgh (Town)	5514419	1.7 MI N JCT RT, I-87&300	87IX	MILL STREET	2L - NYS Thruway Authority	1953	07/25/2018	N
08	Orange	Newburgh (Town)	5524790	1440' S JCT 84I & 87I	Ramp EB-NS	87IX	2L - NYS Thruway Authority	2009	05/23/2017	N
80	Orange	Wallkill (Town)	2270090	₃8 MI E I84 & Goshen Tpk.	STAGE ROAD	HARVEY ROE BROOK	40 - Town	1990	04/25/2018	N
08	Orange	Newburgh (Town)	2270240	.33mi SE Int 300 & 52 on	INNIS AVE	BUSHFIELD CR	40 - Town	1992	06/22/2017	N
08	Orange	Port Jervis (City)	2270620	Front St.Over Pike St.	FRONT STREET	Rt.209	42 - City	1930	07/18/2018	N
08	Orange	Warwick (Town)	2270810	100 FT SE JCT Rt.17A & Ir	CASCADE ROAD	LONG HOUSE CREEK	40 - Town	2012	03/19/2019	N
08	Orange	Wallkill (Town)	2270860	1_5 MI JCT Rts. 17 & 17M-	YORK ROAD	Trib.Shawangunk K	40 - Town	2012	11/28/2018	N
80	Orange	Wallkill (Town)	2270870	1 Mi SE JCT 17K &302	Gordon Road	Dwaar Kill	40 - Town	2014	10/01/2018	N
08	Orange	Warwick (Town)	2270990	0.6 mi SW Jct Old Ridge R	TAYLOR ROAD	QUAKER CREEK TRIBUTARY	40 - Town	2014	02/28/2018	N
80	Orange	New Windsor (Town)	2265580	1 MI N OF WASHINGTONVILLE	BULL ROAD	MNRR PJ LINE	30 - County	2001	05/12/2017	N
08	Orange	Deerpark (Town)	2265600	8.0 MI NW OF PORT JERVIS	RIO DAM ROAD	RIO DAM SPILLWAY	71 - Private - Utility	1935	06/19/2018	Υ
80	Orange	Wawayanda (Town)	2265610	4.5 MILES SE OF OTISVILLE	MT ORANGE ROAD	TRIB INDIGOT CREEK	40 - Town	2011	09/28/2017	N
80	Orange	Deerpark (Town)	1052411	0.3 MI E JCT 184+DELAW R	84  84 83011003	COUNTY ROAD 16	NYSDOT	1967	06/13/2018	N
08	Orange	Deerpark (Town)	1052412	0.3 MI E JCT I84+DELAW R	841 84183011003	COUNTY ROAD 16	NYSDOT	1967	06/13/2018	N
08	Orange	Greenville (Town)	1052421	3.4 MI E OF EXIT 2 - 184	841 84183011081	CR70- EATONTOWN R	NYSDOT	1967	08/01/2017	N
08	Orange	Greenville (Town)	1052422	3.4 MI E OF EXIT 2 - 184	84  84 83011081	CR70- EATONTOWN R	NYSDOT	1967	08/01/2017	N
08	Orange	Wawayanda (Town)	1052430	6.4 MI E I84 INT 2	SO CENTERVILLE RD	841 84183011101	NYSDOT	1967	11/06/2017	N



# APPLE RIDGE RESIDENTIAL DEVELOPMENT

## **VEHICLE SPEED DATA**

## Maser Consulting

400 Columbus Avenue Valhalla, NY 10595

## **Customer Loyalty through Client Satisfaction**

Site Code: 19000000111

Station ID:

BEATTIE ROAD (NORTH OF SHAW ROAD AND SOUTH OF LIBERTY ACRES DRIVE)

ΝB																	
Start	1	21	23	25	27	29	31	33	35	37	39	41	43	45		Pace	Number
Time	20	22	24	26	28	30	32	34	36	38	40	42	44	999	Total	Speed	in Pace
06/11/12	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
06:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
07:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
08:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
09:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13:00	0	1	1	1	4	2	4	1	7	1	3	1	1	0	27	28-37	16
14:00	0	1	1	1	2	4	3	6	8	4	0	5	2	0	37	29-38	23
15:00	1	1	0	0	5	2	4	2	7	6	9	1	1	2	41	32-41	23
16:00	0	0	0	1	0	3	5	7	7	4	6	2	4	3	42	31-40	29
17:00	0	1	1	1	1	3	5	6	2	4	4	2	1	0	31	31-40	19
18:00	2	0	1	1	2	2	5	3	7	6	3	1	1	1	35	31-40	19
19:00	0	0	0	1	3	3	4	0	2	4	3	1	1	0	22	31-40	13
20:00	Ō	0	0	1	1	4	1	1	2	1	0	2	0	0	13	27-36	9
21:00	0	0	1	1	1	3	5	3	3	2	1	0	0	1	21	29-38	16
22:00	0	0	0	0	0	1	2	2	4	0	0	0	0	1	10	28-37	9
23:00	0	0	0	0	0	1	1	2	2	0	0	2	1	0	9	29-38	6
Total	3	4	5	8	19	28	39	33	51	32	29	17	12	8	288		
Percent	1.0%	1.4%	1.7%	2.8%	6.6%	9.7%	13.5%	11.5%	17.7%	11.1%	10.1%	5.9%	4.2%	2.8%			
AM Peak Vol.																	
PM Peak	18:00	13:00	13:00	13:00	15:00	14:00	16:00	16:00	14:00	15:00	15:00	14:00	16:00	16:00	16:00		
Vol.	2	1	1	1	5	4	5	7	8	6	9	5	4	3	42		

# **Customer Loyalty through Client Satisfaction**

Site Code: 19000000111

Station ID:

BEATTIE ROAD (NORTH OF SHAW ROAD AND SOUTH OF LIBERTY ACRES DRIVE)

NB															Lantado.	0.0000	Oridoniilod
Start	1	21	23	25	27	29	31	33	35	37	39	41	43	45		Pace	Number
Time	20	22	24	26	28	30	32	34	36	38	40	42	44	999	Total	Speed	in Pace
06/12/12	0	0	0	0	0	0	0	2	1	0	0	0	0	0	3	27-36	3
01:00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	25-34	1
02:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	27-36	1
03:00	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2	27-36	2
04:00	0	0	0	0	0	0	0	1	0	1	0	0	0	0	2	29-38	2
05:00	0	0	0	0	1	0	0	0	1	1	0	0	0	0	3	27-36	2
06:00	3	0	0	4	1	4	2	2	5	1	2	5	1	4	34	34-43	10
07:00	0	0	1	2	5	6	6	8	6	5	4	3	4	2	52	28-37	32
08:00	4	1	0	1	2	0	5	4	7	8	5	4	1	4	46	33-42	19
09:00	0	1	2	0	0	7	3	6	10	6	5	2	0	1	43	30-39	30
10:00	1	0	0	0	3	3	5	4	3	3	3	1	0	3	29	31-40	15
11:00	1	1	0	2	1	1	3	2	2	4	2	2	2	2	25	30-39	10
12 PM	1	0	1	2	3	1	4	4	5	5	2	4	1	0	33	32-41	18
13:00	1	1	0	2	0	4	2	2	3	3	3	3	0	3	27	30-39	11
14:00	1	1	0	0	0	4	6	5	4	5	1	1	2	1	31	30-39	19
15:00	0	0	2	0	3	2	0	4	5	8	1	3	0	1	29	33-42	20
16:00	0	0	1	4	3	5	3	4	4	4	6	0	1	1	36	31-40	21
17:00	1	0	1	1	4	4	1	4	3	5	4	3	2	0	33	34-43	16
18:00	2	0	0	0	4	0	6	5	5	7	3	2	0	2	36	31-40	20
19:00	0	0	0	2	3	1	3	2	4	3	3	4	2	0	27	35-44	16
20:00	0	0	0	0	0	2	3	2	2	4	1	1	2	1	18	30-39	13
21:00	0	0	0	2	3	2	3	0	1	0	0	0	0	0	11	24-33	10
22:00	0	0	0	0	0	1	1	1	3	2	1	0	0	1	10	29-38	8
23:00	0	1	0	0	0	1	0	1	0	1	0	0	0	0	4_	12-21	2
Total	15	6	8	22	36	48	56	65	76	76	46	38	18	26	536		
Percent	2.8%	1.1%	1.5%	4.1%	6.7%	9.0%	10.4%	12.1%	14.2%	14.2%	8.6%	7.1%	3.4%	4.9%	07.00		
AM Peak	08:00	08:00	09:00	06:00	07:00	09:00	07:00	07:00	09:00	08:00	08:00	06:00	07:00	06:00	07:00		
Vol.	4	12:00	15:00	4 4	17:00		6	8	10	15:00	16:00	5	4 4.00	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	52		
PM Peak	18:00	13:00	15:00	16:00	17:00	16:00	14:00	14:00	12:00	15:00	16:00	12:00	14:00	13:00	16:00		
Vol.	2	1	2	4	4	5	6	5	5	8	6	4	2	3	36		

#### **Customer Loyalty through Client Satisfaction**

Site Code: 19000000111

Station ID:

BEATTIE ROAD (NORTH OF SHAW ROAD AND SOUTH OF LIBERTY ACRES DRIVE)

NB															Latitude.	0.0000	Ondenned
Start	1	21	23	25	27	29	31	33	35	37	39	41	43	45		Pace	Number
Time	20	22	24	26	28	30	32	34	36	38	40	42	44	999	Total	Speed	in Pace
06/13/12	0	0	0	0	0	2	2	0	0	0	0	0	0	0	4	23-32	4
01:00	0	0	0	0	1	0	0	1	0	1	0	0	0	0	3	25-34	2
02:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	27-36	1
03:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	15-24	1
04:00	0	0	0	0	0	0	0	0	2	0	0	0	0	1	3	27-36	2
05:00	0	0	0	0	0	0	1	1	3	3	0	1	0	0	9	30-39	8
06:00	0	0	0	0	1	4	1	1	1	2	3	2	1	5	21	35-44	9
07:00	0	1	0	3	2	2	7	6	3	6	7	3	7	1	48	32-41	28
08:00	1	0	0	2	3	0	4	8	9	6	3	2	5	3	46	32-41	27
09:00	0	1	0	1	4	2	4	2	3	6	1	4	2	1	31	30-39	16
10:00	0	0	0	0	0	5	3	5	2	4	3	1	2	1	26	30-39	19
11:00	2	0	1	0	1	2	6	1	4	2	0	2	3	1	25	28-37	11
12 PM	0	0	0	1	2	4	3	4	4	7	4	2	1	2	34	31-40	22
13:00	0	1	0	1	2	3	3	2	2	5	5	2	2	1	29	32-41	16
14:00	0	0	0	1	0	0	3	6	7	9	5	3	1	3	38	33-42	30
15:00	1	0	2	1	1	4	7	7	8	4	8	2	1	2	48	31-40	30
16:00	1	0	0	2	2	2	3	7	4	4	3	3	1	2	34	32-41	19
17:00	1	0	0	2	0	3	5	5	7	3	3	9	1	1	40	34-43	23
18:00	1	0	0	2	5	5	3	5	3	1	2	3	0	0	30	27-36	18
19:00	1	0	0	0	3	2	5	3	7	3	4	1	3	1	33	31-40	19
20:00	1	0	0	0	0	2	8	2	3	0	4	2	0	0	22	31-40	14
21:00	0	0	0	0	1	3	3	2	5	4	2	0	0	0	20	30-39	17
22:00	0	0	1	0	0	3	0	1	1	1	0	1	0	3	11	29-38	6
23:00	0	0	0	1	1	0	11	2	1	1	0	0	0	0	7	26-35	5
Total	9	3	5	17	29	48	72	71	80	72	57	43	30	28	564		
Percent	1.6%	0.5%	0.9%	3.0%	5.1%	8.5%	12.8%	12.6%	14.2%	12.8%	10.1%	7.6%	5.3%	5.0%			
AM Peak	11:00	07:00	03:00	07:00	09:00	10:00	07:00	08:00	08:00	07:00	07:00	09:00	07:00	06:00	07:00		
Vol.	2	11	1	3	4	5	7	8	9	6	7	4	7	5	48		
PM Peak	15:00	13:00	15:00	16:00	18:00	18:00	20:00	15:00	15:00	14:00	15:00	17:00	19:00	14:00	15:00		
Vol.	1	1	2	2	5	5	8	7	8	9	8	9	3	3	48		

# **Customer Loyalty through Client Satisfaction**

Site Code: 19000000111

Station ID:

BEATTIE ROAD (NORTH OF SHAW ROAD AND SOUTH OF LIBERTY ACRES DRIVE)

NB																	
Start	1	21	23	25	27	29	31	33	35	37	39	41	43	45		Pace	Number
Time	20	22	24	26	28	30	32	34	36	38	40	42	44	999	Total	Speed	in Pace
06/14/12	0	0	0	0	0	1	0	1	3	0	0	0	0	0	5	28-37	5
01:00	0	0	0	0	0	0	0	1	0	0	1	0	0	0	2	31-40	2
02:00	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	23-32	2
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	0	0	0	2	0	1	0	0	0	1	4	29-38	3
05:00	0	0	0	0	0	0	1	2	1	2	0	0	0	0	6	29-38	6
06:00	0	0	0	1	0	3	1	1	0	4	4	2	3	2	21	35-44	13
07:00	0	0	0	1	4	2	8	4	2	6	6	4	2	3	42	32-41	25
08:00	2	1	1	1	0	2	1	5	7	5	3	2	5	0	35	35-44	17
09:00	1	0	0	1	1	2	2	5	5	0	4	2	1	1	25	32-41	14
10:00	0	0	0	1	6	2	3	2	4	6	3	1	2	1	31	31-40	18
11:00	0	0	2	0	1	3	5	2	3	1	1	1	1	1	21	29-38	14
12 PM	0	0	0	1	1	2	5	3	4	5	2	0	0	0	23	30-39	19
13:00	0	0	1	0	2	6	1	2	2	7	0	1	3	3	28	30-39	17
14:00	0	0	1	2	2	1	6	6	7	7	5	1	1	0	39	31-40	30
15:00	2	1	2	0	1	5	6	5	8	7	4	1	1	1	44	30-39	24
16:00	2	0	1	1	2	6	8	7	6	8	7	2	2	1	53	31-40	31
17:00	0	0	0	1	0	2	7	5	6	6	2	3	2	2	36	31-40	26
18:00	0	0	1	0	1	3	3	4	7	4	3	0	3	2	31	30-39	22
19:00	0	0	1	0	1	3	6	1	5	2	3	4	2	2	30	31-40	17
20:00	0	0	0	1	4	5	5	5	3	2	0	0	1	1	27	27-36	22
21:00	1	0	0	1	0	0	4	2	3	1	1	2	0	0	15	32-41	8
22:00	0	1	2	1	0	0	1	0	1	2	1	0	0	1	10	18-27	4
23:00	0	0	0	2	0	1	0	3	0	0	0	1	0	0	7	26-35	6
Total	8	3	12	15	26	49	75	68	77	76	50	27	29	22	537		
Percent	1.5%	0.6%	2.2%	2.8%	4.8%	9.1%	14.0%	12.7%	14.3%	14.2%	9.3%	5.0%	5.4%	4.1%			
AM Peak	08:00	08:00	11:00	06:00	10:00	06:00	07:00	08:00	08:00	07:00	07:00	07:00	08:00	07:00	07:00		
Vol.	2	1	2	1	6	3	8	5	7	6	6	4	5	3	42		
PM Peak	15:00	15:00	15:00	14:00	20:00	13:00	16:00	16:00	15:00	16:00	16:00	19:00	13:00	13:00	16:00		
Vol.	2	1	2	2	4	6	8	7	8	8	7	4	3	3	53		

#### **Customer Loyalty through Client Satisfaction**

Site Code: 19000000111

Station ID:

BEATTIE ROAD (NORTH OF SHAW ROAD AND SOUTH OF LIBERTY ACRES DRIVE)

NB																	
Start	1	21	23	25	27	29	31	33	35	37	39	41	43	45		Pace	Number
Time	20	22	24	26	28	30	32	34	36	38	40	42	44	999	Total	Speed	in Pace
06/15/12	0	0	0	1	0	1	2	1	1	0	0	0	0	0	6	25-34	5
01:00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	25-34	1
02:00	0	1	0	0	0	0	0	0	1	0	0	0	0	0	2	18-27	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	0	0	0	0	3	1	0	0	0	1	5	29-38	4
05:00	0	0	0	0	0	0	1	1	0	2	0	0	0	0	4	29-38	4
06:00	1	0	0	0	1	1	2	3	1	6	2	1	1	4	23	32-41	11
07:00	1	0	0	1	0	2	4	4	7	5	4	4	5	2	39	35-44	23
08:00	0	0	1	1	2	2	2	5	9	4	2	1	6	2	37	30-39	23
09:00	0	1	0	1	0	5	2	4	4	5	4	2	0	4	32	30-39	18
10:00	0	0	0	1	1	1	2	2	5	1	4	2	0	1	20	32-41	14
11:00	0	0	0	1	3	2	4	5	5	6	7	1	1	1	36	32-41	26
12 PM	1	0	0	2	1	3	4	2	3	5	2	1	2	0	26	30-39	15
13:00	0	1	1	0	3	3	7	5	3	5	5	2	1	2	38	31-40	23
14:00	0	0	0	1	0	4	4	3	5	3	1	1	1	1	24	30-39	18
15:00	1	2	0	2	5	2	4	3	5	6	2	2	1	2	37	29-38	16
16:00	6	0	1	1	4	2	2	8	6	10	5	2	3	1	51	33-42	20
17:00	1	0	0	1	0	4	4	4	8	7	6	5	2	1	43	33-42	27
18:00	2	0	1	1	4	2	5	5	8	2	4	4	1	2	41	32-41	19
19:00	2	1	1	2	3	10	4	2	2	0	5	0	0	0	32	27-36	15
20:00	1	0	0	1	3	2	6	3	1	4	1	1	1	1	25	30-39	13
21:00	1	0	0	0	2	2	2	3	8	1	1	1	1	1	23	28-37	14
22:00	2	0	1	1	1	0	2	0	4	2	2	1	1	0	17	35-44	6
23:00	0 19	0	0	1 10	3 36	10	0 63	<u>3</u> 67	<u>3</u> 92	1 76	<u>3</u>	33	0 27	0 26	17 579	33-42	12
Total		6 1.0%	6 1.0%	19		49	10.9%	11.6%					4.7%	4.5%	5/9		
Percent  AM Peak	3.3% 06:00	02:00	08:00	3.3% 00:00	6.2% 11:00	8.5% 09:00	07:00	08:00	15.9% 08:00	13.1% 06:00	10.4% 11:00	5.7% 07:00	<u>4.7%</u> 08:00	<u>4.5%</u> 06:00	07:00		
Vol.	06.00	02.00	06.00	00.00	3	09.00 5	4	06.00 5	9	6	11.00	4	6	4	39		
PM Peak	16:00	15:00	13:00	12:00	<u>3</u> 15:00	19:00	13:00	16:00	17:00	16:00	17:00	17:00	16:00	13:00	16:00		
Vol.	6	15.00	13.00	12.00	15.00	19.00	7	8	17.00	10.00	17.00	17.00	3	13.00	51		
VOI.	Ü	2		2	ວ	10	1	0	0	10	0	3	3	2	ગ		

# **Customer Loyalty through Client Satisfaction**

Site Code: 19000000111

Station ID:

BEATTIE ROAD (NORTH OF SHAW ROAD AND SOUTH OF LIBERTY ACRES DRIVE)

NB																	
Start	1	21	23	25	27	29	31	33	35	37	39	41	43	45		Pace	Number
Time	20	22	24	26	28	30	32	34	36	38	40	42	44	999	Total	Speed	in Pace
06/16/12	1	0	0	1	0	0	0	3	0	1	1	1	0	0	8	33-42	4
01:00	0	0	0	0	0	1	1	1	1	1	0	0	1	0	6	29-38	5
02:00	0	0	0	0	0	1	1	0	4	0	0	0	1	0	7	29-38	6
03:00	0	0	0	1	0	1	0	0	0	0	0	0	0	0	2	21-30	2
04:00	0	0	0	0	1	0	0	0	1	0	0	0	0	1	3	27-36	2
05:00	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	31-40	2
06:00	0	0	0	0	0	1	2	2	0	3	0	0	0	0	8	30-39	8
07:00	1	0	0	0	1	3	4	1	4	3	2	3	5	1	28	35-44	14
08:00	0	0	0	0	3	1	5	4	6	9	8	5	4	2	47	32-41	33
09:00	6	2	2	3	2	2	3	5	7	3	3	1	2	1	42	6-15	14
10:00	5	4	4	8	4	5	6	7	4	1	0	0	0	0	48	26-35	17
11:00	1	2	4	9	8	4	6	9	3	6	0	1	1	0	54	25-34	30
12 PM	0	1	3	2	3	4	6	5	4	1	3	2	0	1	35	28-37	20
13:00	1	0	1	1	3	2	13	12	2	5	4	1	0	2	47	31-40	32
14:00	0	0	0	1	4	7	7	15	9	4	6	4	0	1	58	28-37	42
15:00	3	0	0	0	0	3	9	4	9	8	4	4	1	3	48	31-40	26
16:00	0	0	1	0	4	7	3	3	5	1	4	3	0	2	33	28-37	21
17:00	2	0	0	0	2	1	10	6	9	5	3	5	2	3	48	31-40	27
18:00	2	0	2	0	1	1	3	1	2	3	3	2	0	0	20	32-41	8
19:00	2	1	2	0	1	0	7	4	6	3	4	2	1	1	34	31-40	17
20:00	1	0	0	0	1	4	5	4	5	5	7	1	0	3	36	31-40	22
21:00	0	1	3	1	2	1	4	3	4	3	3	1	0	1	27	31-40	15
22:00	1	0	0	2	0	5	5	6	4	2	1	0	0	2	28	29-38	18
23:00	0	0	11	11	11	2	1_	2	2	3	1	1	0	0	15	29-38	10
Total	26	11	23	30	41	56	101	97	91	70	59	37	18	24	684		
Percent	3.8%	1.6%	3.4%	4.4%	6.0%	8.2%	14.8%	14.2%	13.3%	10.2%	8.6%	5.4%	2.6%	3.5%			
AM Peak	09:00	10:00	10:00	11:00	11:00	10:00	10:00	11:00	09:00	08:00	08:00	08:00	07:00	08:00	11:00		
Vol.	6	4	4	9	8_	5_	6	9	7_	9	8	5	5_	2	54		
PM Peak	15:00	12:00	12:00	12:00	14:00	14:00	13:00	14:00	14:00	15:00	20:00	17:00	17:00	15:00	14:00		
Vol.	3	1	3	2	4	7	13	15	9	8	7	5	2	3	58		

# **Customer Loyalty through Client Satisfaction**

Site Code: 19000000111

Station ID:

BEATTIE ROAD (NORTH OF SHAW ROAD AND SOUTH OF LIBERTY ACRES DRIVE)

NB																	
Start	1	21	23	25	27	29	31	33	35	37	39	41	43	45		Pace	Number
Time	20	22	24	26	28	30	32	34	36	38	40	42	44	999	Total	Speed	in Pace
06/17/12	0	0	0	0	3	0	0	2	1	0	1	0	1	1	9	27-36	6
01:00	0	0	0	0	0	0	2	1	0	1	0	1	0	0	5	29-38	4
02:00	0	0	0	0	2	1	1	0	1	1	0	0	0	1	7	27-36	5
03:00	0	0	2	1	2	0	0	0	0	2	0	0	0	0	7	20-29	5
04:00	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2	29-38	1
05:00	0	0	0	1	0	0	0	0	2	0	0	0	0	0	3	27-36	2
06:00	0	0	0	1	0	0	1	2	1	1	1	1	0	1	9	31-40	6
07:00	0	0	0	0	0	2	0	2	1	2	0	0	1	1	9	29-38	7
08:00	0	0	0	0	0	1	2	0	1	1	3	3	0	0	11	33-42	8
09:00	0	0	1	1	0	2	1	5	6	1	5	1	1	1	25	33-42	18
10:00	0	1	0	0	2	1	1	4	5	3	3	2	0	0	22	33-42	15
11:00	1	0	1	1	3	1	3	5	3	5	9	1	0	2	35	32-41	22
12 PM	0	0	0	0	3	2	2	4	3	6	3	2	1	2	28	33-42	18
13:00	0	0	0	0	1	9	4	4	8	8	2	2	0	2	40	30-39	31
14:00	0	0	0	1	1	1	4	5	9	1	4	2	3	2	33	32-41	23
15:00	1	0	0	1	2	3	4	3	2	6	4	4	1	1	32	32-41	17
16:00	3	0	1	1	1	4	2	1	5	2	3	2	0	1	26	28-37	9
17:00	1	0	0	0	0	2	3	0	4	6	3	0	0	2	21	31-40	13
18:00	0	0	0	0	2	3	2	7	6	1	3	0	1	1	26	28-37	20
19:00	0	1	1	2	2	3	3	1	3	3	2	1	1	0	23	29-38	12
20:00	1	0	0	0	2	1	4	4	2	0	0	1	0	2	17	27-36	10
21:00	0	0	1	0	0	2	1	0	2	1	2	2	0	1	12	33-42	7
22:00	0	0	0	0	0	1	2	2	0	1	0	1	0	0	7	29-38	6
23:00	0	0	0	0	0	11	0	1	0	0	0	0	0	0	2	25-34	2
Total	7	2	7	10	26	40	42	53	65	53	48	26	10	22	411		
Percent	1.7%	0.5%	1.7%	2.4%	6.3%	9.7%	10.2%	12.9%	15.8%	12.9%	11.7%	6.3%	2.4%	5.4%			
AM Peak	11:00	10:00	03:00	03:00	00:00	07:00	11:00	09:00	09:00	11:00	11:00	08:00	00:00	11:00	11:00		
Vol.	1	1	2	1	3	2	3	5	6	5_	9	3	1	2	35		
PM Peak	16:00	19:00	16:00	19:00	12:00	13:00	13:00	18:00	14:00	13:00	14:00	15:00	14:00	12:00	13:00		
Vol.	3	1	1	2	3	9	4	7	9	8	4	4	3	2	40		

### **Customer Loyalty through Client Satisfaction**

Site Code: 19000000111

Station ID:

BEATTIE ROAD (NORTH OF SHAW ROAD AND SOUTH OF LIBERTY ACRES DRIVE)

Latitude: 0' 0.0000 Undefined

NB															Lalliuue.	0.0000	Undenned
Start	1	21	23	25	27	29	31	33	35	37	39	41	43	45		Pace	Number
Time	20	22	24	26	28	30	32	34	36	38	40	42	44	999	Total	Speed	in Pace
06/18/12	0	0	0	0	0	0	1	1	1	1	1	0	1	0	6	31-40	5
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	25-34	2
03:00	0	0	0	0	0	1	0	1	0	0	0	0	0	0	2	25-34	2
04:00	0	0	0	0	0	0	0	1	1	1	1	0	1	1	6	35-44	4
05:00	0	0	0	0	0	1	2	2	0	2	0	0	1	0	8	29-38	7
06:00	0	0	0	1	1	1	2	3	1	5	1	1	0	7	23	30-39	12
07:00	1	0	1	3	2	3	3	4	7	4	2	6	3	5	44	34-43	21
08:00	2	0	1	1	4	4	7	2	8	8	7	3	1	2	50	32-41	26
09:00	0	1	0	2	2	1	8	8	5	7	3	2	1	1	41	31-40	29
10:00	2	0	0	1	0	1	1	5	4	4	0	2	1	2	23	33-42	10
11:00	0	0	1	1	3	2	3	5	7	8	3	1	2	0	36	31-40	26
12 PM	1	0	1	2	2	1	3	4	4	7	4	1	2	0	32	32-41	19
13:00	0	0	0	0	2	2	3	5	3	4	1	3	0	0	23	30-39	17
14:00	0	1	1	0	3	2	0	2	4	3	3	0	0	1	20	32-41	11
15:00	1	0	1	2	1	4	3	3	8	5	3	1	4	3	39	30-39	21
16:00	2	0	2	1	0	6	2	4	7	5	4	2	1	4	40	30-39	19
17:00	0	0	0	0	2	7	3	8	9	4	3	3	1	4	44	29-38	31
18:00	1	0	0	1	1	3	4	4	4	3	1	0	1	0	23	29-38	15
19:00	0	0	1	1	1	2	7	10	2	7	2	5	2	1	41	31-40	28
20:00	0	0	0	0	3	5	2	3	3	1	1	0	3	1	22	28-37	16
21:00	1	0	2	1	0	0	3	5	3	2	1	0	1	0	19	31-40	11
22:00	0	0	0	0	0	0	2	2	2	0	1	0	2	1	10	31-40	7
23:00	0	0	0	0	0	0	2	3	11	0	1	0	0	0	7	31-40	7
Total	11	2	11	17	28	46	61	86	84	81	43	30	28	33	561		
Percent	2.0%	0.4%	2.0%	3.0%	5.0%	8.2%	10.9%	15.3%	15.0%	14.4%	7.7%	5.3%	5.0%	5.9%			
AM Peak	08:00	09:00	07:00	07:00	08:00	08:00	09:00	09:00	08:00	08:00	08:00	07:00	07:00	06:00	08:00		
Vol.	2	1	1	3	4	4	8	8	8	8	7	6	3	7	50		
PM Peak	16:00	14:00	16:00	12:00	14:00	17:00	19:00	19:00	17:00	12:00	12:00	19:00	15:00	16:00	17:00		
Vol.	2	1	2	2	3	7	7	10	9	7	4	5	4	4	44		

#### Maser Consulting

400 Columbus Avenue Valhalla, NY 10595

#### **Customer Loyalty through Client Satisfaction**

Site Code: 190000000111

Station ID:

BEATTIE ROAD (NORTH OF SHAW ROAD AND SOUTH OF LIBERTY ACRES DRIVE)

Latitude: 0' 0.0000 Undefined

NB																	
Start	1	21	23	25	27	29	31	33	35	37	39	41	43	45		Pace	Number
Time	20	22	24	26	28	30	32	34	36	38	40	42	44	999	Total	Speed	in Pace
06/19/12	0	0	0	0	0	0	3	0	1	0	1	1	0	0	6	31-40	5
01:00	0	0	1	0	0	0	2	0	0	0	0	0	0	0	3	24-33	3
02:00	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	23-32	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	1	0	0	0	0	0	1	0	1	0	0	0	3	31-40	2
05:00	0	0	0	0	1	0	0	2	1	0	0	0	0	0	4	27-36	4
06:00	0	0	0	1	3	1	2	1	2	4	1	1	4	5	25	35-44	12
07:00	0	0	0	2	2	1	3	4	5	3	3	5	1	5	34	33-42	20
08:00	3	1	2	0	1	1	2	3	3	6	6	4	3	4	39	35-44	15
09:00	2	0	1	0	1	2	4	4	3	6	3	4	0	1	31	33-42	15
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
15:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
16:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
17:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
18:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
21:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	5	1	5	3	8	5	17	14	16	19	15	15	8	15	146		
Percent	3.4%	0.7%	3.4%	2.1%	5.5%	3.4%	11.6%	9.6%	11.0%	13.0%	10.3%	10.3%	5.5%	10.3%			
AM Peak	08:00	08:00	08:00	07:00	06:00	09:00	09:00	07:00	07:00	08:00	08:00	07:00	06:00	06:00	08:00		
Vol.	3	1	2	2	3	2	4	4	5	6	6	5	4	5	39		
PM Peak Vol.																	
Total	103	38	82	141	249	369	526	554	632	555	407	266	180	204	4306		
Percent	2.4%	0.9%	1.9%	3.3%	5.8%	8.6%	12.2%	12.9%	14.7%	12.9%	9.5%	6.2%	4.2%	4.7%			
	-		D	**	OO MIDII												

15th Percentile : 22 MPH 50th Percentile : 33 MPH

85th Percentile: 39 MPH 95th Percentile: 41 MPH

Stats 10 MPH Pace Speed: 31-40 MPH

Number in Pace : 2368 Percent in Pace : 57.7%

 Number of Vehicles > 55 MPH :
 0

 Percent of Vehicles > 55 MPH :
 0.0%

 Mean Speed(Average) :
 31 MPH

# Maser Consulting

400 Columbus Avenue Valhalla, NY 10595

# **Customer Loyalty through Client Satisfaction**

Site Code: 19000000111

Station ID:

BEATTIE ROAD (NORTH OF SHAW ROAD AND SOUTH OF LIBERTY ACRES DRIVE)

SB																	
Start	1	21	23	25	27	29	31	33	35	37	39	41	43	45		Pace	Number
Time	20	22	24	26	28	30	32	34	36	38	40	42	44	999	Total	Speed	in Pace
06/11/12	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
06:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
07:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
08:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
09:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13:00	0	0	0	1	0	2	2	4	1	3	1	3	3	1	21	34-43	12
14:00	0	0	1	0	0	0	4	4	3	3	3	3	1	1	23	32-41	17
15:00	0	0	0	0	3	4	5	6	3	8	6	5	6	1	47	32-41	29
16:00	0	1	0	1	0	3	6	7	11	8	7	4	1	4	53	32-41	37
17:00	0	1	0	0	2	0	5	5	10	11	4	5	5	1	49	35-44	34
18:00	0	0	0	1	0	6	7	2	8	10	10	6	2	0	52	32-41	37
19:00	0	0	0	0	1	1	6	5	7	5	4	5	1	2	37	32-41	27
20:00	0	0	0	0	0	0	4	1	6	2	5	4	2	3	27	35-44	19
21:00	0	0	0	0	0	1	1	2	8	1	4	3	1	3	24	33-42	18
22:00	0	0	0	0	0	1	0	2	1	1	1	1	2	1	10	35-44	6
23:00	0	0	0	0	0	0	0	1	1	1	0	0	1	0	4	35-44	3
Total	0	2	1	3	6	18	40	39	59	53	45	39	25	17	347		
Percent	0.0%	0.6%	0.3%	0.9%	1.7%	5.2%	11.5%	11.2%	17.0%	15.3%	13.0%	11.2%	7.2%	4.9%			
AM Peak																	
Vol.																	
PM Peak		16:00	14:00	13:00	15:00	18:00	18:00	16:00	16:00	17:00	18:00	18:00	15:00	16:00	16:00		
Vol.		1	1	1	3	6	7	7	11	11	10	6	6	4	53		

# **Customer Loyalty through Client Satisfaction**

Site Code: 19000000111

Station ID:

BEATTIE ROAD (NORTH OF SHAW ROAD AND SOUTH OF LIBERTY ACRES DRIVE)

SB																	
Start	1	21	23	25	27	29	31	33	35	37	39	41	43	45		Pace	Number
Time	20	22	24	26	28	30	32	34	36	38	40	42	44	999	Total	Speed	in Pace
06/12/12	0	0	2	0	1	1	0	0	0	1	0	0	0	0	5	21-30	4
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	31-40	1
04:00	0	0	0	0	0	0	1	0	1	0	0	0	0	0	2	27-36	2
05:00	0	0	0	1	0	0	0	0	0	0	0	3	1	1	6	35-44	4
06:00	1	0	0	1	1	1	0	3	1	0	1	0	3	3	15	26-35	5
07:00	0	0	1	1	1	5	1	4	2	5	1	1	1	1	24	30-39	16
08:00	0	0	0	0	3	6	0	6	4	4	3	1	0	0	27	29-38	20
09:00	0	0	0	1	1	2	2	0	1	2	1	3	1	2	16	35-44	8
10:00	1	1	0	0	1	3	3	4	5	2	5	2	0	1	28	31-40	15
11:00	0	0	1	1	0	0	5	3	6	3	5	3	3	2	32	32-41	22
12 PM	0	1	1	2	1	2	1	2	3	0	8	1	0	2	24	32-41	13
13:00	0	0	0	1	2	1	2	5	3	4	3	2	1	3	27	33-42	17
14:00	1	0	0	0	0	1	4	6	5	6	5	3	0	0	31	33-42	22
15:00	0	0	1	1	0	1	4	4	4	3	3	9	3	3	36	34-43	23
16:00	0	0	1	1	1	2	6	6	7	6	9	6	2	3	50	33-42	34
17:00	1	0	0	0	0	0	6	6	6	7	5	2	5	3	41	32-41	27
18:00	2	0	0	0	1	1	4	3	5	7	6	7	2	4	42	34-43	23
19:00	0	0	0	2	0	3	3	3	2	9	7	2	2	3	36	32-41	24
20:00	1	1	0	0	2	1	7	3	6	5	8	1	0	0	35	31-40	23
21:00	0	0	0	0	0	1	1	4	3	3	2	1	0	1	16	31-40	13
22:00	0	0	0	0	0	1	2	5	2	2	1	2	0	1	16	29-38	12
23:00	0	0	0	0	0	1	0	0	1	1	0	0	0	0	3	29-38	3
Total	7	3	7	12	15	33	52	67	67	70	74	49	24	33	513		
Percent	1.4%	0.6%	1.4%	2.3%	2.9%	6.4%	10.1%	13.1%	13.1%	13.6%	14.4%	9.6%	4.7%	6.4%			
AM Peak	06:00	10:00	00:00	05:00	08:00	08:00	11:00	08:00	11:00	07:00	10:00	05:00	06:00	06:00	11:00		
Vol.	1	1_	2	1_	3	6	5	6	6	5	5	3	3	3	32		
PM Peak	18:00	12:00	12:00	12:00	13:00	19:00	20:00	14:00	16:00	19:00	16:00	15:00	17:00	18:00	16:00		
Vol.	2	1	1	2	2	3	7	6	7	9	9	9	5	4	50		

# **Customer Loyalty through Client Satisfaction**

Site Code: 19000000111

Station ID:

BEATTIE ROAD (NORTH OF SHAW ROAD AND SOUTH OF LIBERTY ACRES DRIVE)

SB																	
Start	1	21	23	25	27	29	31	33	35	37	39	41	43	45		Pace	Number
Time	20	22	24	26	28	30	32	34	36	38	40	42	44	999	Total	Speed	in Pace
06/13/12	1	0	1	0	0	0	0	1	0	2	0	0	2	0	7	36-45	2
01:00	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2	33-42	1
02:00	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	29-38	1
03:00	0	0	0	0	0	0	0	0	0	1	0	1	1	0	3	35-44	3
04:00	0	0	0	0	0	0	3	0	0	0	0	0	0	1	4	24-33	3
05:00	0	0	1	0	0	1	0	0	0	1	1	0	0	1	5	21-30	2
06:00	0	0	0	0	0	1	1	1	0	1	2	1	0	2	9	31-40	5
07:00	0	0	1	1	0	1	2	5	0	3	1	2	0	0	16	30-39	11
08:00	0	1	0	1	4	1	4	3	3	4	2	0	0	1	24	31-40	14
09:00	2	0	1	3	0	2	2	3	1	2	3	3	0	1	23	33-42	8
10:00	0	0	2	3	0	1	1	3	4	3	2	1	2	1	23	34-43	13
11:00	0	0	0	0	0	1	1	4	2	4	4	5	1	1	23	34-43	18
12 PM	0	0	0	2	1	0	2	2	5	4	7	6	1	2	32	34-43	24
13:00	0	0	0	0	0	2	4	5	6	6	7	3	2	1	36	32-41	28
14:00	1	1	1	1	1	1	1	2	5	6	4	8	2	3	37	34-43	21
15:00	0	0	0	1	0	2	3	4	6	3	5	8	1	3	36	34-43	25
16:00	0	0	0	0	2	1	6	3	12	9	7	5	6	7	58	35-44	39
17:00	0	0	1	1	0	2	4	10	7	12	9	7	4	3	60	33-42	45
18:00	0	0	1	1	2	0	4	6	6	3	4	4	1	1	33	33-42	23
19:00	0	0	0	0	1	0	2	6	7	7	2	3	2	2	32	33-42	25
20:00	1	0	0	1	0	0	4	6	4	4	7	2	2	1	32	32-41	22
21:00	0	0	1	0	0	3	1	3	6	6	4	5	1	0	30	34-43	24
22:00	0	0	0	1	1	4	3	0	3	0	1	0	0	5	18	28-37	11
23:00	0	1	1	1	0	1	0	2	0	4	4	1	1	0	16	34-43	9
Total	5	3	11	17	12	24	48	69	77	86	76	66	29	37	560		
Percent	0.9%	0.5%	2.0%	3.0%	2.1%	4.3%	8.6%	12.3%	13.8%	15.4%	13.6%	11.8%	5.2%	6.6%			
AM Peak	09:00	08:00	10:00	09:00	08:00	09:00	08:00	07:00	10:00	08:00	11:00	11:00	00:00	06:00	08:00		
Vol.	2	14.00	2	3	40.00	2	40.00	5	40.00	4 7.00	4 7.00	5	2	2	24		
PM Peak	14:00	14:00	14:00	12:00	16:00	22:00	16:00	17:00	16:00	17:00	17:00	14:00	16:00	16:00	17:00		
Vol.	1	1	1	2	2	4	6	10	12	12	9	8	6	7	60		

# **Customer Loyalty through Client Satisfaction**

Site Code: 19000000111

Station ID:

BEATTIE ROAD (NORTH OF SHAW ROAD AND SOUTH OF LIBERTY ACRES DRIVE)

SB																	
Start	1	21	23	25	27	29	31	33	35	37	39	41	43	45		Pace	Number
Time	20	22	24	26	28	30	32	34	36	38	40	42	44	999	Total	Speed	in Pace
06/14/12	0	0	0	0	0	0	1	2	0	2	0	0	0	0	5	30-39	5
01:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	27-36	1
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	29-38	1
04:00	0	0	0	0	0	1	0	0	0	1	0	0	0	0	2	29-38	2
05:00	0	0	1	0	1	1	0	0	0	2	0	0	1	0	6	23-32	3
06:00	0	0	0	0	0	0	3	0	1	2	0	0	1	1	8	31-40	6
07:00	0	0	0	0	0	0	2	3	2	3	2	1	1	0	14	31-40	12
08:00	0	1	1	1	2	3	5	1	4	6	1	2	0	2	29	30-39	17
09:00	0	0	1	1	3	1	1	2	1	3	3	1	2	0	19	35-44	10
10:00	0	1	1	0	1	3	2	4	4	8	1	2	0	2	29	30-39	19
11:00	0	0	1	0	1	0	0	0	1	3	3	3	1	1	14	35-44	11
12 PM	0	0	1	0	2	1	1	1	5	5	6	2	3	1	28	35-44	21
13:00	0	0	1	1	0	1	1	2	1	5	4	2	3	2	23	35-44	15
14:00	1	0	0	0	0	2	4	6	5	3	2	5	2	2	32	33-42	18
15:00	1	0	2	0	0	3	4	4	9	9	6	4	1	2	45	33-42	29
16:00	0	0	0	3	3	0	9	10	12	4	5	4	1	3	54	31-40	39
17:00	0	0	1	0	1	0	4	9	6	17	10	2	2	4	56	32-41	46
18:00	1	0	0	1	0	0	4	6	10	5	3	2	1	6	39	32-41	24
19:00	0	0	0	0	1	1	5	6	3	7	7	2	1	2	35	32-41	27
20:00	0	0	1	0	1	2	5	7	4	7	1	4	1	1	34	30-39	25
21:00	1	0	0	0	2	1	6	1	1	2	3	4	1	0	22	32-41	10
22:00	0	0	0	0	0	0	2	0	4	2	2	2	0	1	13	31-40	10
23:00	0	0	0	0	0	1	0	0	2	2	1_	1	0	0	7	33-42	6
Total	4	2	11	7	18	21	59	64	76	99	60	43	22	30	516		
Percent	0.8%	0.4%	2.1%	1.4%	3.5%	4.1%	11.4%	12.4%	14.7%	19.2%	11.6%	8.3%	4.3%	5.8%			
AM Peak		08:00	05:00	08:00	09:00	08:00	08:00	10:00	08:00	10:00	09:00	11:00	09:00	08:00	08:00		
Vol.		1	1	1	3	3	5_	4	4	8	3	3	2	2	29		
PM Peak	14:00		15:00	16:00	16:00	15:00	16:00	16:00	16:00	17:00	17:00	14:00	12:00	18:00	17:00		
Vol.	1		2	3	3	3	9	10	12	17	10	5	3	6	56		

# **Customer Loyalty through Client Satisfaction**

Site Code: 19000000111

Station ID:

BEATTIE ROAD (NORTH OF SHAW ROAD AND SOUTH OF LIBERTY ACRES DRIVE)

SB																	
Start	1	21	23	25	27	29	31	33	35	37	39	41	43	45		Pace	Number
Time	20	22	24	26	28	30	32	34	36	38	40	42	44	999	Total	Speed	in Pace
06/15/12	0	0	0	0	0	1	2	1	0	1	0	0	0	1	6	29-38	5
01:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	33-42	1
02:00	0	0	0	1	0	0	0	0	1	0	0	0	0	0	2	17-26	1
03:00	0	0	0	0	0	0	1	0	0	1	1	0	0	0	3	31-40	3
04:00	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	25-34	2
05:00	0	0	0	0	2	0	0	0	0	1	0	2	1	0	6	35-44	4
06:00	0	0	0	0	0	1	1	1	0	0	0	0	0	4	7	25-34	3
07:00	1	0	1	1	0	5	2	3	0	4	1	1	1	2	22	29-38	11
08:00	1	0	1	1	0	1	5	0	4	4	3	2	1	2	25	31-40	13
09:00	0	0	0	1	1	1	3	1	1	2	2	3	2	1	18	35-44	10
10:00	1	0	1	0	2	1	5	4	0	6	2	0	2	3	27	31-40	14
11:00	0	0	0	0	1	1	1	5	5	4	5	3	2	1	28	33-42	22
12 PM	0	1	0	0	1	3	1	1	3	4	4	1	3	4	26	35-44	13
13:00	0	1	0	1	2	1	1	3	1	4	1	5	3	2	25	35-44	13
14:00	0	0	0	1	1	1	1	6	1	2	0	6	0	1	20	33-42	14
15:00	2	0	1	1	0	1	1	5	2	12	5	6	5	4	45	35-44	25
16:00	1	0	1	2	3	2	3	8	7	9	9	7	0	2	54	33-42	36
17:00	0	0	0	0	1	3	7	11	8	10	7	9	1	2	59	33-42	45
18:00	1	1	1	1	2	1	2	3	4	8	3	4	2	3	36	34-43	18
19:00	1	1	1	1	2	5	2	4	6	6	5	2	1	0	37	33-42	19
20:00	1	0	0	1	3	4	7	6	3	6	4	1	3	2	41	30-39	24
21:00	0	0	0	2	1	0	6	4	4	1	2	1	0	1	22	31-40	16
22:00	1	1	0	0	2	1	3	6	5	4	0	2	1	1	27	29-38	15
23:00	0	0	0	0	0	0	0	1_	9	2	3	1	0	3	19	33-42	16
Total	10	5	7	14	25	33	54	74	64	91	57	57	28	39	558		
Percent	1.8%	0.9%	1.3%	2.5%	4.5%	5.9%	9.7%	13.3%	11.5%	16.3%	10.2%	10.2%	5.0%	7.0%			
AM Peak	07:00		07:00	02:00	05:00	07:00	08:00	11:00	11:00	10:00	11:00	09:00	09:00	06:00	11:00		
Vol.	1_		1	1_	2	5	5_	5_	5_	6_	5_	33	2	44	28		
PM Peak	15:00	12:00	15:00	16:00	16:00	19:00	17:00	17:00	23:00	15:00	16:00	17:00	15:00	12:00	17:00		
Vol.	2	1	1	2	3	5	7	11	9	12	9	9	5	4	59		

#### **Customer Loyalty through Client Satisfaction**

Site Code: 19000000111

Station ID:

BEATTIE ROAD (NORTH OF SHAW ROAD AND SOUTH OF LIBERTY ACRES DRIVE)

SB																	
Start	1	21	23	25	27	29	31	33	35	37	39	41	43	45		Pace	Number
Time	20	22	24	26	28	30	32	34	36	38	40	42	44	999	Total	Speed	in Pace
06/16/12	1	0	0	0	0	0	0	2	2	2	0	2	1	0	10	35-44	5
01:00	1	1	1	0	0	1	2	0	0	1	1	1	0	0	9	6-15	3
02:00	0	0	0	0	0	0	0	1	0	0	2	0	0	0	3	32-41	3
03:00	0	0	1	0	0	0	0	0	1	0	1	2	0	0	5	33-42	4
04:00	0	0	0	0	2	1	0	1	0	1	0	0	0	0	5	25-34	4
05:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	33-42	1
06:00	0	0	0	0	0	0	1	0	0	0	0	0	0	1	2	23-32	1
07:00	0	0	0	0	1	1	1	0	1	2	2	0	2	1	11	35-44	7
08:00	0	0	0	0	1	1	1	3	4	5	3	3	1	1	23	33-42	18
09:00	1	0	3	3	4	2	8	4	1	4	0	1	0	1	32	25-34	18
10:00	6	3	2	7	6	6	6	8	1	2	1	0	0	0	48	26-35	18
11:00	0	1	4	6	5	5	7	7	3	1	0	0	0	0	39	26-35	27
12 PM	3	2	1	9	9	14	6	11	9	6	2	1	1	1	75	27-36	39
13:00	0	0	0	1	4	1	4	5	5	5	6	4	4	2	41	32-41	26
14:00	0	0	3	0	1	0	2	2	2	3	5	1	4	4	27	35-44	15
15:00	0	0	0	3	2	4	3	9	7	3	8	5	5	1	50	33-42	32
16:00	0	0	0	0	4	4	5	4	6	5	3	4	2	3	40	30-39	24
17:00	0	0	0	1	3	4	4	3	6	6	3	1	2	4	37	30-39	23
18:00	0	0	0	0	0	1	3	3	3	5	4	2	2	0	23	32-41	18
19:00	4	1	0	1	1	5	3	3	4	5	4	2	1	2	36	31-40	12
20:00	0	1	1	2	2	1	2	6	6	6	4	2	1	3	37	32-41	23
21:00	0	0	0	2	5	3	5	7	8	3	1	3	0	1	38	28-37	28
22:00	1	0	1	1	0	3	7	2	3	1	2	1	1	1	24	30-39	13
23:00	0	0	0	2	2	1	2	2	1	2	1	1	0	0	14	26-35	9
Total	17	9	17	38	52	58	72	83	73	68	53	37	27	26	630		
Percent	2.7%	1.4%	2.7%	6.0%	8.3%	9.2%	11.4%	13.2%	11.6%	10.8%	8.4%	5.9%	4.3%	4.1%			
AM Peak	10:00	10:00	11:00	10:00	10:00	10:00	09:00	10:00	08:00	08:00	08:00	08:00	07:00	06:00	10:00		
Vol.	6	3	4	7	6	6	8	8	4	5	3	3	2	1	48		
PM Peak	19:00	12:00	14:00	12:00	12:00	12:00	22:00	12:00	12:00	12:00	15:00	15:00	15:00	14:00	12:00		
Vol.	4	2	3	9	9	14	7	11	9	6	8	5	5	4	75		

#### **Customer Loyalty through Client Satisfaction**

Site Code: 19000000111

Station ID:

BEATTIE ROAD (NORTH OF SHAW ROAD AND SOUTH OF LIBERTY ACRES DRIVE)

SB																	
Start	1	21	23	25	27	29	31	33	35	37	39	41	43	45		Pace	Number
Time	20	22	24	26	28	30	32	34	36	38	40	42	44	999	Total	Speed	in Pace
06/17/12	0	0	0	0	0	2	1	2	1	0	2	0	0	0	8	27-36	6
01:00	0	0	0	0	0	1	0	1	0	1	0	1	2	0	6	35-44	4
02:00	0	0	0	0	0	0	0	0	2	0	0	1	1	2	6	35-44	4
03:00	1	0	0	0	0	0	0	2	0	1	0	0	0	0	4	3-12	2
04:00	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2	19-28	2
05:00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	25-34	1
06:00	0	0	0	0	0	0	0	0	0	1	0	1	1	0	3	35-44	3
07:00	0	0	0	0	1	1	1	1	1	0	0	0	1	0	6	27-36	5
08:00	0	0	0	0	1	1	1	1	4	4	3	1	0	2	18	32-41	13
09:00	0	0	1	0	3	0	3	3	2	0	1	2	0	2	17	28-37	10
10:00	0	0	1	0	0	0	1	3	3	2	5	0	0	2	17	32-41	14
11:00	3	0	0	2	1	2	4	4	5	8	1	3	5	1	39	30-39	17
12 PM	0	0	0	1	1	0	2	3	7	8	3	2	1	5	33	33-42	23
13:00	0	0	0	0	0	2	2	6	5	9	3	4	4	1	36	34-43	27
14:00	3	0	0	0	0	3	3	3	4	9	3	4	4	1	37	35-44	18
15:00	0	1	0	0	1	1	3	3	6	4	4	6	2	2	33	34-43	21
16:00	0	0	1	0	2	1	3	5	7	5	6	4	2	3	39	33-42	27
17:00	1	0	0	0	1	4	4	1	4	4	3	4	2	1	29	30-39	15
18:00	1	0	0	0	1	0	3	3	3	3	2	3	2	1	22	32-41	12
19:00	0	1	0	2	1	5	2	2	7	9	2	3	0	0	34	30-39	23
20:00	2	0	0	0	0	0	1	3	4	7	2	1	2	1	23	34-43	12
21:00	0	0	0	0	0	3	2	1	3	3	3	0	0	0	15	30-39	12
22:00	0	0	0	0	0	1	0	0	2	3	1	2	0	0	9	33-42	8
23:00	0	0	0	0	0	0	0	3	1	1	11	0	0	0	6	31-40	6
Total	11	2	3	5	15	27	36	51	71	82	45	42	29	24	443		
Percent	2.5%	0.5%	0.7%	1.1%	3.4%	6.1%	8.1%	11.5%	16.0%	18.5%	10.2%	9.5%	6.5%	5.4%			
AM Peak	11:00		09:00	11:00	09:00	00:00	11:00	11:00	11:00	11:00	10:00	11:00	11:00	02:00	11:00		
Vol.	3		1	2	3	2	4	4	5	8	5	3	5	2	39		
PM Peak	14:00	15:00	16:00	19:00	16:00	19:00	17:00	13:00	12:00	13:00	16:00	15:00	13:00	12:00	16:00		
Vol.	3	1	1	2	2	5	4	6	7	9	6	6	4	5	39		

# **Customer Loyalty through Client Satisfaction**

Site Code: 19000000111

Station ID:

BEATTIE ROAD (NORTH OF SHAW ROAD AND SOUTH OF LIBERTY ACRES DRIVE)

SB															Lamado.	0.0000	Oridomilod
Start	1	21	23	25	27	29	31	33	35	37	39	41	43	45		Pace	Number
Time	20	22	24	26	28	30	32	34	36	38	40	42	44	999	Total	Speed	in Pace
06/18/12	0	0	1	0	0	0	0	0	0	1	0	0	0	0	2	15-24	1
01:00	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2	31-40	2
02:00	0	0	1	0	0	0	0	0	1	0	0	0	0	0	2	15-24	1
03:00	0	0	0	0	1	0	0	0	0	1	1	0	0	0	3	31-40	2
04:00	0	0	0	0	0	0	1	0	1	0	0	0	0	0	2	27-36	2
05:00	0	0	0	1	0	0	1	0	1	2	0	1	0	0	6	29-38	4
06:00	0	0	0	0	2	0	2	0	0	0	0	1	3	2	10	27-36	4
07:00	1	1	1	0	1	0	1	5	4	2	3	3	0	0	22	33-42	13
08:00	3	0	0	2	2	4	0	3	5	1	0	1	0	0	21	29-38	8
09:00	0	1	0	1	1	2	0	4	3	4	2	1	4	1	24	35-44	13
10:00	0	0	1	1	2	2	2	4	4	4	2	3	0	1	26	33-42	17
11:00	0	0	0	0	1	1	3	2	5	1	7	7	3	1	31	35-44	23
12 PM	0	0	1	1	3	1	3	2	5	3	6	0	3	3	31	32-41	19
13:00	0	0	0	0	0	1	3	5	5	2	6	7	1	1	31	34-43	24
14:00	0	0	0	0	1	0	0	2	6	4	4	2	4	2	25	35-44	20
15:00	0	0	0	0	0	4	4	4	6	11	4	3	3	2	41	30-39	30
16:00	0	0	1	0	0	3	6	7	3	7	10	3	5	0	45	32-41	33
17:00	0	0	0	0	0	2	5	6	8	14	8	7	4	3	57	34-43	43
18:00	3	0	1	1	0	3	3	6	5	9	6	3	1	2	43	32-41	22
19:00	1	1	0	0	2	1	1	6	4	8	3	3	1	3	34	33-42	19
20:00	0	1	0	0	1	1	2	7	9	5	3	3	2	2	36	33-42	25
21:00	0	0	0	0	0	1	0	2	5	1	4	1	0	4	18	33-42	13
22:00	0	0	1	0	0	2	2	2	4	0	2	1	0	0	14	28-37	10
23:00	0	0	0	0	0	0	0	0	2	5	1_	5	0	0	13	34-43	13
Total	8	4	8	7	17	28	39	67	87	85	73	55	34	27	539		
Percent	1.5%	0.7%	1.5%	1.3%	3.2%	5.2%	7.2%	12.4%	16.1%	15.8%	13.5%	10.2%	6.3%	5.0%			
AM Peak	08:00	07:00	00:00	08:00	06:00	08:00	11:00	07:00	08:00	09:00	11:00	11:00	09:00	06:00	11:00		
Vol.	3	1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2	2	4	3	5	5	4 4 7 00	7	7	4 40.00	2	31		
PM Peak	18:00	19:00	12:00	12:00	12:00	15:00	16:00	16:00	20:00	17:00	16:00	13:00	16:00	21:00	17:00		
Vol.	3	1	1	1	3	4	6	7	9	14	10	7	5	4	57		

#### Maser Consulting

#### 400 Columbus Avenue Valhalla, NY 10595

#### **Customer Loyalty through Client Satisfaction**

Site Code: 190000000111

Station ID:

BEATTIE ROAD (NORTH OF SHAW ROAD AND

SOUTH OF LIBERTY ACRES DRIVE)
Latitude: 0' 0.0000 Undefined

SB																	
Start	1	21	23	25	27	29	31	33	35	37	39	41	43	45		Pace	Number
Time	20	22	24	26	28	30	32	34	36	38	40	42	44	999	Total	Speed	in Pace
06/19/12	0	0	0	0	0	0	0	0	1	0	0	0	0	1	2	27-36	1
01:00	0	0	1	0	0	0	0	0	0	0	0	0	1	0	2	23-32	1
02:00	0	0	0	0	0	0	1	0	1	1	0	1	0	0	4	29-38	3
03:00	0	0	0	0	0	0	0	0	0	1	0	1	1	0	3	35-44	3
04:00	0	0	0	1	0	0	0	0	1	0	0	0	0	0	2	17-26	1
05:00	1	0	0	1	0	0	0	0	1	1	1	0	1	1	7	36-45	2
06:00	0	0	0	0	0	1	0	1	0	0	2	0	1	1	6	35-44	3
07:00	0	0	0	0	3	0	1	4	1	3	0	1	1	0	14	33-42	9
08:00	1	1	1	0	0	2	4	2	3	4	1	1	0	1	21	30-39	11
09:00	0	1	1	1	1	2	2	3	1	2	7	0	3	2	26	32-41	14
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
15:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
16:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
17:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
18:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
21:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	2	2	3	3	4	5	8	10	9	12	11	4	8	6	87		
Percent	2.3%	2.3%	3.4%	3.4%	4.6%	5.7%	9.2%	11.5%	10.3%	13.8%	12.6%	4.6%	9.2%	6.9%			
AM Peak	05:00	08:00	01:00	04:00	07:00	08:00	08:00	07:00	08:00	08:00	09:00	02:00	09:00	09:00	09:00		
Vol.	1	1	1	1	3	2	4	4	3	4	7	1	3	2	26		
PM Peak Vol.																	
Total	64	32	68	106	164	247	408	524	583	646	494	392	226	239	4193		
Percent	1.5%	0.8%	1.6%	2.5%	3.9%	5.9%	9.7%	12.5%	13.9%	15.4%	11.8%	9.3%	5.4%	5.7%			

15th Percentile: 26 MPH 50th Percentile: 35 MPH 85th Percentile: 40 MPH 95th Percentile: 42 MPH

Stats 10 MPH Pace Speed: 32-41 MPH

 Number in Pace :
 2457

 Percent in Pace :
 62.1%

 Number of Vehicles > 55 MPH :
 0

 Percent of Vehicles > 55 MPH :
 0.0%

 Mean Speed(Average) :
 33 MPH

#### **Customer Loyalty through Client Satisfaction**

Site Code: 190000000222

Station ID:

BULL ROAD (ABOUT 600' SOUTH OF SHAW RD)

NB																	
Start	1	30	33	36	39	42	45	48	51	54	57	60	63	66		Pace	Number
Time	29	32	35	38	41	44	47	50	53	56	59	62	65	999	Total	Speed	in Pace
06/11/12	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
06:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
07:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
08:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
09:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14:00	0	0	1	7	14	6	6	5	4	1	1	0	0	0	45	37-46	29
15:00	6	0	1	3	19	16	11	9	2	0	0	1	0	0	68	39-48	35
16:00	2	1	1	7	11	19	13	2	2	1	1	1	0	0	61	38-47	38
17:00	2	1	5	5	16	19	15	7	0	1	1	0	0	0	72	39-48	45
18:00	4	1	2	6	16	16	11	4	1	3	0	0	1	0	65	38-47	34
19:00	2	0	2	5	10	10	6	3	3	2	0	0	0	0	43	37-46	23
20:00	2	3	2	3	9	6	11	2	2	1	0	0	0	0	41	38-47	19
21:00	3	3	1	8	5	7	2	2	1	0	0	0	0	0	32	36-45	12
22:00	0	1	4	7	6	8	3	2	1	0	0	0	0	0	32	36-45	20
23:00	1	0	2	1	4	2	1	1	0	1	0	0	0	0	13	33-42	6
Total	22	10	21	52	110	109	79	37	16	10	3	2	1	0	472		
Percent	4.7%	2.1%	4.4%	11.0%	23.3%	23.1%	16.7%	7.8%	3.4%	2.1%	0.6%	0.4%	0.2%	0.0%			
AM Peak																	
Vol.																	
PM Peak	15:00	20:00	17:00	21:00	15:00	16:00	17:00	15:00	14:00	18:00	14:00	15:00	18:00		17:00		
Vol.	6	3	5	8	19	19	15	9	4	3	1	1	1		72		

### **Maser Consulting** 400 Columbus Avenue

# Valhalla, NY 10595 Customer Loyalty through Client Satisfaction

Site Code: 190000000222

Station ID:

BULL ROAD (ABOUT 600' SOUTH OF SHAW RD)

NB																	
Start	1	30	33	36	39	42	45	48	51	54	57	60	63	66		Pace	Number
Time	29	32	35	38	41	44	47	50	53	56	59	62	65	999	Total	Speed	in Pace
06/12/12	0	0	0	1	3	0	1	2	0	0	0	0	0	0	7	40-49	4
01:00	0	0	0	1	0	0	1	0	0	0	0	0	0	0	2	39-48	1
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	37-46	1
04:00	0	0	0	1	1	0	0	0	1	0	0	0	0	0	3	35-44	2
05:00	2	0	0	0	0	2	0	1	0	0	0	0	0	0	5	12-21	2
06:00	0	1	0	0	1	4	1	1	1	1	0	0	0	0	10	41-50	5
07:00	0	0	1	5	8	7	5	1	0	0	0	0	0	0	27	37-46	22
08:00	4	0	2	5	6	5	5	3	0	0	0	0	0	0	30	38-47	11
09:00	1	2	3	6	5	9	6	2	3	0	0	0	0	0	37	37-46	18
10:00	1	0	2	4	5	4	5	1	1	0	0	0	1	0	24	37-46	13
11:00	0	0	2	6	4	7	6	1	1	0	0	0	0	0	27	37-46	19
12 PM	1	2	5	9	4	10	3	0	2	0	0	0	0	0	36	35-44	19
13:00	0	1	0	6	4	2	8	2	1	0	1	0	0	0	25	38-47	14
14:00	3	1	3	5	12	5	5	4	0	1	0	0	0	0	39	38-47	17
15:00	2	2	5	4	14	14	7	5	2	1	0	0	0	0	56	38-47	29
16:00	1	1	3	12	17	19	10	9	1	0	0	0	0	0	73	37-46	47
17:00	4	2	2	13	9	14	12	3	2	2	0	0	0	0	63	37-46	30
18:00	1	2	1	10	23	16	16	1	0	0	0	0	0	0	70	38-47	50
19:00	3	1	1	12	16	11	4	3	3	0	1	0	0	1	56	36-45	31
20:00	1	1	5	4	5	12	12	2	0	0	0	0	0	0	42	39-48	26
21:00	2	4	3	5	14	5	2	1	0	0	0	0	0	0	36	35-44	17
22:00	1	0	3	6	4	4	0	0	0	0	0	0	0	0	18	34-43	12
23:00	0	0	1	2	3	11	2	0	0	0	0	0	0	0	9	36-45	7
Total	27	20	42	117	158	151	112	42	18	5	2	0	1	1	696		
Percent	3.9%	2.9%	6.0%	16.8%	22.7%	21.7%	16.1%	6.0%	2.6%	0.7%	0.3%	0.0%	0.1%	0.1%			
AM Peak	08:00	09:00	09:00	09:00	07:00	09:00	09:00	08:00	09:00	06:00			10:00		09:00		
Vol.	4	2	3	6	8	9	6	3	3	1			1		37		
PM Peak	17:00	21:00	12:00	17:00	18:00	16:00	18:00	16:00	19:00	17:00	13:00			19:00	16:00		
Vol.	4	4	5	13	23	19	16	9	3	2	1			1	73		

### **Maser Consulting** 400 Columbus Avenue

# Valhalla, NY 10595 Customer Loyalty through Client Satisfaction

Site Code: 190000000222

Station ID:

BULL ROAD (ABOUT 600' SOUTH OF SHAW RD)

NB																0.0000	0
Start	1	30	33	36	39	42	45	48	51	54	57	60	63	66		Pace	Number
Time	29	32	35	38	41	44	47	50	53	56	59	62	65	999	Total	Speed	in Pace
06/13/12	1	1	1	2	1	3	2	0	1	0	0	0	0	0	12	38-47	4
01:00	0	0	1	2	0	1	0	0	2	0	0	0	0	0	6	35-44	3
02:00	0	0	0	0	0	0	1	1	1	0	0	0	0	0	3	43-52	3
03:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	7-16	1
04:00	0	0	1	0	0	1	1	0	0	0	1	0	0	0	4	41-50	2
05:00	2	0	2	0	0	1	0	1	0	0	0	0	1	0	7	8-17	3
06:00	2	0	0	0	1	5	0	4	2	0	0	0	0	0	14	41-50	6
07:00	0	0	2	1	11	6	4	3	0	0	0	0	1	0	28	39-48	21
08:00	2	1	1	4	7	9	4	2	0	1	0	0	0	0	31	36-45	16
09:00	3	0	5	6	9	9	6	0	1	1	0	0	0	0	40	36-45	20
10:00	0	1	0	1	10	5	1	1	1	0	1	0	0	0	21	36-45	15
11:00	4	1	2	5	5	7	3	5	0	1	1	0	0	0	34	37-46	11
12 PM	1	1	5	8	8	11	11	1	3	1	1	0	0	0	51	37-46	28
13:00	0	0	1	3	7	4	6	1	0	1	1	1	0	0	25	38-47	17
14:00	2	1	3	7	9	9	7	4	4	2	0	0	0	0	48	38-47	22
15:00	8	2	1	7	16	12	13	3	0	2	1	0	0	0	65	38-47	27
16:00	1	2	2	7	9	14	18	3	3	2	2	0	0	0	63	38-47	37
17:00	5	0	2	4	17	21	14	8	3	1	0	0	0	0	75	39-48	42
18:00	2	0	3	6	15	16	11	3	3	3	0	1	0	0	63	38-47	38
19:00	0	2	0	9	15	12	13	3	0	0	1	0	0	0	55	38-47	39
20:00	3	3	6	10	13	9	3	1	1	0	0	0	0	0	49	34-43	24
21:00	4	1	5	3	8	6	3	3	2	0	0	0	0	0	35	34-43	12
22:00	4	0	1	3	3	5	2	2	2	0	0	0	0	0	22	36-45	7
23:00	1	0	2	4	11	4	0	0	0	0	0	0	0	0	12	34-43	7
Total	46	16	46	92	165	170	123	49	29	15	9	2	2	0	764		
Percent	6.0%	2.1%	6.0%	12.0%	21.6%	22.3%	16.1%	6.4%	3.8%	2.0%	1.2%	0.3%	0.3%	0.0%			
AM Peak	11:00	00:00	09:00	09:00	07:00	08:00	09:00	11:00	01:00	08:00	04:00		05:00		09:00		
Vol.	4	1	5	6	11	9	6	5	2	1	1		1		40		
PM Peak	15:00	20:00	20:00	20:00	17:00	17:00	16:00	17:00	14:00	18:00	16:00	13:00			17:00		
Vol.	8	3	6	10	17	21	18	8	4	3	2	1			75		

#### **Customer Loyalty through Client Satisfaction**

Site Code: 190000000222

Station ID:

BULL ROAD (ABOUT 600' SOUTH OF SHAW RD)

NB																	
Start	1	30	33	36	39	42	45	48	51	54	57	60	63	66		Pace	Number
Time	29	32	35	38	41	44	47	50	53	56	59	62	65	999	Total	Speed	in Pace
06/14/12	0	0	0	2	3	3	1	0	0	0	0	0	0	1	10	36-45	8
01:00	0	0	0	0	1	2	1	0	0	0	0	0	0	0	4	37-46	4
02:00	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2	32-41	2
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	1	0	0	0	0	0	1	0	0	1	0	0	0	3	27-36	1
05:00	1	1	0	0	1	1	1	0	0	1	0	0	0	0	6	11-20	2
06:00	0	0	2	1	3	2	4	2	1	1	1	0	0	0	17	40-49	9
07:00	0	0	1	3	5	5	9	5	2	0	0	1	0	0	31	40-49	21
08:00	6	0	1	5	6	12	4	2	0	0	0	0	0	0	36	37-46	14
09:00	4	0	0	10	6	7	5	4	1	0	0	1	0	0	38	36-45	16
10:00	0	0	0	6	2	2	7	0	1	0	2	0	0	0	20	37-46	13
11:00	1	2	3	13	16	5	2	4	0	1	2	0	0	0	49	35-44	29
12 PM	0	0	1	3	3	8	8	2	3	1	1	0	0	0	30	39-48	20
13:00	1	2	0	5	4	9	10	4	2	0	1	0	0	0	38	39-48	20
14:00	6	0	2	3	10	13	9	3	2	1	0	0	0	0	49	39-48	21
15:00	3	1	1	1	17	18	10	10	2	1	0	1	0	0	65	39-48	38
16:00	3	0	4	8	9	14	9	10	2	2	1	0	0	0	62	40-49	30
17:00	5	3	3	9	16	25	14	8	0	2	0	1	1	0	87	38-47	44
18:00	1	0	3	7	15	34	17	8	5	0	0	0	0	0	90	39-48	65
19:00	1	1	3	5	16	10	8	3	5	0	0	0	0	0	52	38-47	31
20:00	2	0	4	11	24	6	7	4	1	1	0	0	0	0	60	36-45	37
21:00	3	3	4	4	8	4	5	2	1	0	2	0	0	0	36	37-46	12
22:00	1	1	3	4	1	11	7	0	1	1	0	1	0	0	31	38-47	16
23:00	0	1	2	1	8	2	1	0	11	0	0	0	0	0	16	35-44	10
Total	38	16	37	101	176	193	139	72	30	12	11	5	1	1	832		
Percent	4.6%	1.9%	4.4%	12.1%	21.2%	23.2%	16.7%	8.7%	3.6%	1.4%	1.3%	0.6%	0.1%	0.1%			
AM Peak	08:00	11:00	11:00	11:00	11:00	08:00	07:00	07:00	07:00	05:00	10:00	07:00		00:00	11:00		
Vol.	6	2	3	13	16	12	9	5	2	11	2	1		1	49		
PM Peak	14:00	17:00	16:00	20:00	20:00	18:00	18:00	15:00	18:00	16:00	21:00	15:00	17:00		18:00		
Vol.	6	3	4	11	24	34	17	10	5	2	2	1	1		90		

### **Maser Consulting** 400 Columbus Avenue

# Valhalla, NY 10595 Customer Loyalty through Client Satisfaction

Site Code: 190000000222

Station ID:

BULL ROAD (ABOUT 600' SOUTH OF SHAW RD)

NB															Lamado.	0.0000	Ondomioa
Start	1	30	33	36	39	42	45	48	51	54	57	60	63	66		Pace	Number
Time	29	32	35	38	41	44	47	50	53	56	59	62	65	999	Total	Speed	in Pace
06/15/12	0	1	1	4	3	0	1	0	0	1	0	0	0	0	11	32-41	7
01:00	0	0	0	1	0	0	2	0	0	0	0	0	0	0	3	39-48	2
02:00	0	0	0	1	0	1	0	0	0	0	0	0	0	0	2	34-43	2
03:00	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	37-46	1
04:00	0	0	0	2	0	2	0	0	0	1	0	0	0	0	5	35-44	4
05:00	1	1	0	1	0	2	0	1	1	0	0	0	0	0	7	9-18	2
06:00	2	2	0	1	2	1	3	2	3	2	0	0	0	0	18	44-53	5
07:00	0	1	3	1	5	6	7	2	1	1	0	0	0	0	27	39-48	17
08:00	2	0	3	3	13	8	3	2	4	1	0	0	0	0	39	36-45	21
09:00	1	0	1	4	5	5	7	4	0	0	0	0	0	0	27	38-47	16
10:00	1	0	3	0	16	8	3	5	2	1	1	1	0	1	42	38-47	25
11:00	1	1	2	3	14	10	8	4	1	2	0	0	0	0	46	38-47	29
12 PM	1	0	0	0	5	12	9	7	2	1	2	0	0	0	39	41-50	26
13:00	4	0	3	4	12	8	5	4	0	1	0	0	0	0	41	38-47	19
14:00	3	0	4	4	12	7	10	4	1	0	0	0	0	0	45	39-48	23
15:00	9	4	3	6	11	26	5	5	5	0	2	0	0	0	76	38-47	27
16:00	6	0	5	11	7	23	13	3	4	1	0	0	0	0	73	37-46	34
17:00	4	1	9	9	24	18	13	11	0	1	0	0	0	0	90	38-47	48
18:00	1	1	1	9	22	31	10	9	2	3	0	0	0	0	89	38-47	61
19:00	1	0	4	5	22	16	11	3	1	2	0	0	0	0	65	38-47	47
20:00	0	1	1	11	13	7	5	2	0	1	0	1	0	0	42	36-45	30
21:00	0	1	1	8	10	7	1	2	0	1	0	0	0	0	31	35-44	23
22:00	3	0	6	8	7	2	0	3	3	1	0	0	0	0	33	33-42	15
23:00	4	0	1	1_	1_	2	5	1	1	1_	0	0	0	0	17	9-18	6
Total	44	14	51	97	204	202	122	74	31	22	5	2	0	1_	869		
Percent	5.1%	1.6%	5.9%	11.2%	23.5%	23.2%	14.0%	8.5%	3.6%	2.5%	0.6%	0.2%	0.0%	0.1%			
AM Peak	06:00	06:00	07:00	00:00	10:00	11:00	11:00	10:00	08:00	06:00	10:00	10:00		10:00	11:00		
Vol.	2	2	3	4 40.00	16	10	8	5	4 4 5 00	2	1 1	1 00.00		11	46		
PM Peak	15:00	15:00	17:00	16:00	17:00	18:00	16:00	17:00	15:00	18:00	12:00	20:00			17:00		
Vol.	9	4	9	11	24	31	13	11	5	3	2	1			90		

#### **Customer Loyalty through Client Satisfaction**

Site Code: 190000000222

Station ID:

BULL ROAD (ABOUT 600' SOUTH OF SHAW RD)

NB																	
Start	1	30	33	36	39	42	45	48	51	54	57	60	63	66		Pace	Number
Time	29	32	35	38	41	44	47	50	53	56	59	62	65	999	Total	Speed	in Pace
06/16/12	1	0	0	4	5	1	2	2	1	0	0	0	0	0	16	36-45	8
01:00	1	0	0	2	1	3	2	0	1	2	0	0	0	0	12	36-45	5
02:00	3	2	1	0	0	0	0	1	0	0	0	0	0	0	7	9-18	3
03:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	34-43	1
04:00	0	0	1	1	1	0	0	1	1	1	0	0	0	0	6	31-40	3
05:00	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	38-47	2
06:00	1	0	0	0	3	3	1	1	2	0	0	0	0	0	11	39-48	5
07:00	2	0	2	0	3	4	2	0	0	0	0	0	0	0	13	39-48	5
08:00	2	0	2	1	11	16	6	9	2	0	0	0	0	0	49	40-49	30
09:00	1	0	2	6	13	14	4	7	2	2	0	0	0	0	51	37-46	31
10:00	2	1	4	14	18	28	25	5	2	1	0	0	0	0	100	38-47	66
11:00	6	0	2	13	18	27	16	10	4	1	0	0	0	0	97	38-47	51
12 PM	7	0	3	16	19	25	17	4	4	0	0	0	0	0	95	37-46	50
13:00	6	1	0	9	10	13	15	3	1	1	2	0	0	0	61	38-47	27
14:00	2	0	2	11	15	10	10	6	3	2	0	0	0	0	61	37-46	34
15:00	1	0	1	6	15	18	13	8	0	1	0	0	0	0	63	38-47	45
16:00	1	0	0	3	9	6	10	6	1	3	2	0	0	0	41	39-48	24
17:00	4	0	3	4	11	9	15	6	4	0	0	0	0	1	57	39-48	28
18:00	4	2	2	3	10	11	6	7	4	0	0	1	0	0	50	39-48	20
19:00	5	0	0	2	12	6	6	5	2	1	0	0	0	0	39	39-48	16
20:00	4	3	5	11	6	4	4	4	2	1	0	0	0	0	44	33-42	15
21:00	6	1	9	16	4	4	4	3	2	0	0	0	0	0	49	32-41	19
22:00	0	2	6	4	7	10	7	1	1	0	0	0	0	0	38	37-46	22
23:00	2	0	4	1	5	2	2	2	0	0	0	0	0	0	18	32-41	7
Total	61	12	49	127	196	215	169	91	39	16	4	1_	0	1	981		
Percent	6.2%	1.2%	5.0%	12.9%	20.0%	21.9%	17.2%	9.3%	4.0%	1.6%	0.4%	0.1%	0.0%	0.1%			
AM Peak	11:00	02:00	10:00	10:00	10:00	10:00	10:00	11:00	11:00	01:00					10:00		
Vol.	6	2	4	14	18	28	25	10	4	2					100		
PM Peak	12:00	20:00	21:00	12:00	12:00	12:00	12:00	15:00	12:00	16:00	13:00	18:00		17:00	12:00		
Vol.	7	3	9	16	19	25	17	8	4	3	2	1		1	95		

#### **Customer Loyalty through Client Satisfaction**

Site Code: 190000000222

Station ID:

BULL ROAD (ABOUT 600' SOUTH OF SHAW RD)

NB																	
Start	1	30	33	36	39	42	45	48	51	54	57	60	63	66		Pace	Number
Time	29	32	35	38	41	44	47	50	53	56	59	62	65	999	Total	Speed	in Pace
06/17/12	1	1	0	5	3	3	2	2	0	0	0	0	0	0	17	36-45	8
01:00	0	0	0	1	1	3	0	0	0	0	0	0	0	0	5	35-44	5
02:00	2	1	1	2	2	2	0	0	0	0	0	0	0	0	10	7-16	3
03:00	0	0	0	1	1	0	1	0	0	1	0	0	0	0	4	38-47	2
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
06:00	2	0	0	0	0	0	1	0	0	0	0	0	0	0	3	16-25	1
07:00	0	0	0	0	2	2	0	1	0	0	0	0	0	0	5	39-48	4
08:00	1	1	0	4	5	2	2	0	2	1	0	0	0	0	18	37-46	8
09:00	0	0	2	3	9	9	4	1	2	0	0	0	0	0	30	37-46	23
10:00	1	0	1	8	5	7	8	1	2	0	1	0	0	0	34	37-46	20
11:00	2	1	3	5	14	9	13	3	3	0	0	0	0	0	53	38-47	30
12 PM	0	2	6	5	7	7	10	2	2	0	0	0	0	0	41	38-47	22
13:00	3	1	3	5	8	9	11	6	3	0	0	0	0	0	49	39-48	23
14:00	0	1	1	4	11	20	12	7	3	1	0	1	0	0	61	39-48	43
15:00	0	2	0	5	7	12	10	5	1	0	2	0	0	0	44	39-48	28
16:00	2	6	1	0	3	10	3	3	1	2	0	0	0	0	31	22-31	10
17:00	0	0	4	1	6	10	8	3	1	0	0	1	0	0	34	39-48	24
18:00	1	0	1	5	12	6	15	3	2	0	1	0	0	0	46	38-47	31
19:00	0	2	1	5	2	3	11	3	7	0	0	0	0	0	34	44-53	19
20:00	1	0	3	7	8	10	6	3	0	0	2	0	0	0	40	37-46	24
21:00	0	1	4	5	5	5	3	0	1	1	0	1	0	0	26	34-43	15
22:00	0	0	2	2	6	4	2	0	0	0	0	0	0	0	16	36-45	13
23:00	2	0	2	0	5	2	1	0	0	1	11	0	0	0	14	33-42	5_
Total	18	19	35	73	122	135	123	43	30	7	7	3	0	0	615		
Percent	2.9%	3.1%	5.7%	11.9%	19.8%	22.0%	20.0%	7.0%	4.9%	1.1%	1.1%	0.5%	0.0%	0.0%			
AM Peak	02:00	00:00	11:00	10:00	11:00	09:00	11:00	11:00	11:00	03:00	10:00				11:00		
Vol.	2	1	3	8	14	9	13	3	3	1	1				53		
PM Peak	13:00	16:00	12:00	20:00	18:00	14:00	18:00	14:00	19:00	16:00	15:00	14:00			14:00		
Vol.	3	6	6	7	12	20	15	7	7	2	2	1			61		

### **Maser Consulting** 400 Columbus Avenue

# Valhalla, NY 10595 Customer Loyalty through Client Satisfaction

Site Code: 190000000222

Station ID:

BULL ROAD (ABOUT 600' SOUTH OF SHAW RD)

NB																	
Start	1	30	33	36	39	42	45	48	51	54	57	60	63	66		Pace	Number
Time	29	32	35	38	41	44	47	50	53	56	59	62	65	999	Total	Speed	in Pace
06/18/12	0	0	1	1	1	1	0	0	0	0	0	0	0	0	4	35-44	3
01:00	0	0	0	0	1	1	0	0	0	0	0	0	0	0	2	38-47	2
02:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	34-43	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	1	2	0	0	0	1	0	0	0	0	0	0	4	32-41	3
05:00	2	0	1	0	2	0	1	1	0	0	0	0	0	0	7	9-18	3
06:00	0	0	1	2	2	2	0	5	4	0	0	0	0	0	16	45-54	9
07:00	1	0	0	1	7	5	6	4	1	0	0	0	0	0	25	38-47	16
08:00	4	1	3	6	6	9	7	1	2	0	0	0	0	0	39	37-46	16
09:00	6	0	2	5	7	9	1	1	1	0	1	0	0	0	33	35-44	12
10:00	1	0	3	1	5	7	6	0	0	0	1	0	0	0	24	38-47	15
11:00	1	0	1	4	4	10	3	3	4	1	0	0	1	0	32	36-45	17
12 PM	0	1	1	8	5	5	7	2	4	1	0	0	1	0	35	37-46	19
13:00	1	2	2	4	7	11	8	2	3	0	0	0	0	0	40	38-47	22
14:00	2	1	0	3	8	11	10	4	1	1	0	1	0	0	42	39-48	24
15:00	5	1	4	5	13	11	5	4	2	1	1	1	0	0	53	38-47	21
16:00	5	0	6	9	17	21	11	4	2	1	0	0	1	0	77	37-46	41
17:00	2	1	4	5	18	14	11	6	2	0	2	0	0	0	65	38-47	38
18:00	10	0	7	12	19	12	7	8	1	0	1	0	0	0	77	36-45	29
19:00	1	0	0	10	16	12	6	7	0	2	1	0	0	0	55	36-45	36
20:00	3	0	6	8	6	11	8	2	2	1	0	0	0	0	47	36-45	22
21:00	3	2	2	6	7	7	10	3	4	0	0	0	0	0	44	38-47	18
22:00	1	0	0	3	8	3	3	1	0	0	0	0	0	0	19	38-47	12
23:00	0	0	2	0	11	2	1	0	0	11	0	0	0	0	7	34-43	4
Total	48	9	47	95	160	165	111	59	33	9	7	2	3	0	748		
Percent	6.4%	1.2%	6.3%	12.7%	21.4%	22.1%	14.8%	7.9%	4.4%	1.2%	0.9%	0.3%	0.4%	0.0%			
AM Peak	09:00	08:00	08:00	08:00	07:00	11:00	08:00	06:00	06:00	11:00	09:00		11:00		08:00		
Vol.	6	1	3	6	7	10	7	5	4	1	1		1		39		
PM Peak	18:00	13:00	18:00	18:00	18:00	16:00	16:00	18:00	12:00	19:00	17:00	14:00	12:00		16:00		
Vol.	10	2	7	12	19	21	11	8	4	2	2	1	1		77		

#### Maser Consulting

#### 400 Columbus Avenue Valhalla, NY 10595

#### **Customer Loyalty through Client Satisfaction**

Site Code: 190000000222

Station ID:

BULL ROAD (ABOUT 600' SOUTH OF SHAW RD)

Latitude: 0' 0.0000 Undefined

NB																	
Start	1	30	33	36	39	42	45	48	51	54	57	60	63	66		Pace	Number
Time	29	32	35	38	41	44	47	50	53	56	59	62	65	999	Total	Speed	in Pace
06/19/12	1	0	0	5	0	1	0	1	0	0	0	0	0	0	8	33-42	4
01:00	0	0	0	0	1	2	1	1	0	0	1	0	0	1	7	41-50	4
02:00	1	0	0	0	0	0	0	0	0	1	0	0	0	0	2	2-11	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	1	0	1	1	0	1	0	0	0	1	0	0	5	41-50	2
05:00	2	0	0	0	2	2	1	0	0	0	0	0	0	0	7	9-18	3
06:00	7	0	0	1	1	3	6	1	0	0	0	0	0	0	19	9-18	8
07:00	0	0	0	1	3	8	3	3	3	1	0	0	0	0	22	39-48	15
08:00	5	0	1	4	0	9	1	0	0	0	0	0	0	0	20	8-17	7
09:00	5	2	3	3	3	8	5	4	2	0	0	0	0	0	35	41-50	10
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
15:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
16:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
17:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
18:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
21:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22:00		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23:00	*															*	*
Total	21	2	5	14	11	34	17	11	5	2	11	1	0	11	125		
Percent	16.8%	1.6%	4.0%	11.2%	8.8%	27.2%	13.6%	8.8%	4.0%	1.6%	0.8%	0.8%	0.0%	0.8%			
AM Peak	06:00	09:00	09:00	00:00	07:00	08:00	06:00	09:00	07:00	02:00	01:00	04:00		01:00	09:00		
Vol.	7	22	3	5	3	9	6	4	3	1	1	1		1	35		
PM Peak																	
Vol.	205	440	200	700	4202	4074	005	470	004	00	40	40	0		0400		
Total	325	118 1.9%	333	768	1302	1374	995	478	231	98	49	18	8 0.1%	5	6102		
Percent	5.3%		5.5% 5th Percent	12.6%	21.3% 17 MPH	22.5%	16.3%	7.8%	3.8%	1.6%	0.8%	0.3%	0.1%	0.1%			

15th Percentile: 17 MPH 50th Percentile: 39 MPH 85th Percentile: 46 MPH 95th Percentile: 50 MPH

Stats 10 MPH Pace Speed: 38-47 MPH Number in Pace: 3055

| Number in Pace : 3055 |
| Percent in Pace : 50.1% |
Number of Vehicles > 55	MPH : 101
Percent of Vehicles > 55	MPH : 1.7%
Mean Speed(Average) : 36	MPH

# **Maser Consulting** 400 Columbus Avenue

# Valhalla, NY 10595

#### **Customer Loyalty through Client Satisfaction**

Site Code: 190000000222

Station ID:

BULL ROAD (ABOUT 600' SOUTH OF SHAW RD)

SB																	
Start	1	30	33	36	39	42	45	48	51	54	57	60	63	66		Pace	Number
Time	29	32	35	38	41	44	47	50	53	56	59	62	65	999	Total	Speed	in Pace
06/11/12	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
06:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
07:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
08:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
09:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14:00	0	1	1	3	8	5	10	2	5	1	0	1	0	0	37	38-47	22
15:00	4	0	7	7	8	10	8	3	1	1	0	0	1	0	50	37-46	21
16:00	4	3	3	3	9	6	9	4	4	0	0	0	0	0	45	39-48	16
17:00	6	2	4	8	12	9	5	3	5	1	0	0	0	0	55	36-45	20
18:00	0	2	2	7	14	4	11	4	5	0	0	0	0	0	49	38-47	28
19:00	4	2	1	4	9	6	6	2	2	4	0	1	0	0	41	38-47	14
20:00	0	0	1	7	4	10	0	1	2	1	0	0	1	0	27	36-45	21
21:00	0	1	0	0	1	6	3	1	0	1	0	0	0	0	13	39-48	9
22:00	4	0	0	2	2	1	1	0	2	0	0	0	0	0	12	8-17	5
23:00	0	2	1	1	3	1	2	1	1	0	0	0	0	0	12	40-49	4
Total	22	13	20	42	70	58	55	21	27	9	0	2	2	0	341		
Percent	6.5%	3.8%	5.9%	12.3%	20.5%	17.0%	16.1%	6.2%	7.9%	2.6%	0.0%	0.6%	0.6%	0.0%			
AM Peak			•														
Vol.																	
PM Peak	17:00	16:00	15:00	17:00	18:00	15:00	18:00	16:00	14:00	19:00		14:00	15:00		17:00		
Vol.	6	3	7	8	14	10	11	4	5	4		1	1		55		

#### **Customer Loyalty through Client Satisfaction**

Site Code: 190000000222

Station ID:

BULL ROAD (ABOUT 600' SOUTH OF SHAW RD)

SB															Latitado.	0.0000	Ondomiou
Start	1	30	33	36	39	42	45	48	51	54	57	60	63	66		Pace	Number
Time	29	32	35	38	41	44	47	50	53	56	59	62	65	999	Total	Speed	in Pace
06/12/12	0	0	0	0	3	1	0	0	0	0	0	0	0	0	4	34-43	4
01:00	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2	47-56	2
02:00	0	1	0	0	0	1	0	0	0	0	0	0	0	0	2	25-34	1
03:00	0	0	0	0	1	0	1	0	0	0	0	0	0	0	2	37-46	2
04:00	0	1	3	0	2	1	1	0	0	0	0	0	0	0	8	32-41	4
05:00	0	1	1	4	3	4	5	4	2	2	0	0	0	0	26	40-49	13
06:00	2	1	2	5	12	7	11	3	3	1	3	0	1	0	51	38-47	26
07:00	5	2	7	10	5	14	8	6	4	1	0	0	0	0	62	36-45	22
08:00	3	2	3	9	11	8	5	4	3	0	0	0	0	0	48	36-45	21
09:00	1	1	2	4	10	2	3	2	1	1	0	0	0	0	27	35-44	14
10:00	2	0	2	3	11	4	3	1	5	1	0	1	0	0	33	37-46	15
11:00	3	1	5	4	9	8	7	0	1	0	0	1	0	0	39	37-46	18
12 PM	3	1	0	4	7	3	5	4	1	0	0	0	0	0	28	38-47	11
13:00	0	2	0	5	5	5	6	0	0	0	0	0	0	0	23	38-47	14
14:00	1	0	5	6	6	10	1	3	1	1	0	0	0	0	34	35-44	20
15:00	1	1	4	11	15	8	3	5	1	2	0	0	0	0	51	35-44	31
16:00	4	3	6	4	11	13	4	1	4	0	0	0	0	0	50	36-45	20
17:00	3	3	4	9	15	14	6	6	3	1	1	0	0	0	65	36-45	30
18:00	2	2	2	5	10	7	7	4	2	1	0	0	0	0	42	38-47	19
19:00	1	1	3	3	5	9	4	4	0	0	0	0	0	0	30	38-47	16
20:00	1	0	4	5	5	4	2	1	0	0	0	0	0	0	22	33-42	13
21:00	1	0	2	2	2	2	1	2	2	0	0	0	0	0	14	35-44	5
22:00	1	3	2	2	4	1	1	0	1	0	0	0	0	0	15	22-31	5
23:00	1_	0	1	2	2	0	0	1	1	0	0	0	0	0	8	34-43	3_
Total	35	26	58	97	154	126	84	52	36	11	4	2	1	0	686		
Percent	5.1%	3.8%	8.5%	14.1%	22.4%	18.4%	12.2%	7.6%	5.2%	1.6%	0.6%	0.3%	0.1%	0.0%			
AM Peak	07:00	07:00	07:00	07:00	06:00	07:00	06:00	07:00	10:00	05:00	06:00	10:00	06:00		07:00		
Vol.	5	2	7	10	12	14	11	6_	5_	2	33	1	1		62		
PM Peak	16:00	16:00	16:00	15:00	15:00	17:00	18:00	17:00	16:00	15:00	17:00				17:00		
Vol.	4	3	6	11	15	14	7	6	4	2	1				65		

#### **Customer Loyalty through Client Satisfaction**

Site Code: 190000000222

Station ID:

BULL ROAD (ABOUT 600' SOUTH OF SHAW RD)

SB																	
Start	1	30	33	36	39	42	45	48	51	54	57	60	63	66		Pace	Number
Time	29	32	35	38	41	44	47	50	53	56	59	62	65	999	Total	Speed	in Pace
06/13/12	0	0	1	1	0	0	3	0	0	0	0	0	0	0	5	39-48	3
01:00	0	0	0	2	1	2	0	1	0	0	0	0	0	0	6	35-44	5
02:00	2	0	0	0	0	1	0	0	0	0	0	0	0	0	3	16-25	1
03:00	0	0	0	1	0	0	1	0	0	0	1	0	0	0	3	39-48	1
04:00	0	0	3	0	1	3	0	1	0	0	0	0	0	0	8	33-42	5
05:00	1	2	6	3	5	5	1	4	2	1	0	0	0	0	30	33-42	12
06:00	4	1	2	3	7	7	9	3	0	1	0	0	0	0	37	39-48	16
07:00	1	3	4	7	10	11	8	3	2	3	0	0	0	0	52	37-46	26
08:00	2	2	7	11	16	11	6	2	1	1	0	0	0	0	59	35-44	33
09:00	4	0	3	4	12	4	8	2	2	1	1	0	0	0	41	38-47	18
10:00	0	0	4	5	6	7	5	0	4	0	0	0	0	0	31	36-45	20
11:00	1	2	4	9	13	7	9	4	1	1	0	0	0	0	51	37-46	27
12 PM	4	1	2	6	7	10	7	1	2	1	0	0	0	0	41	37-46	18
13:00	1	2	1	2	9	5	4	3	0	0	1	0	0	0	28	38-47	14
14:00	2	4	3	7	6	6	10	3	2	1	1	1	0	0	46	38-47	17
15:00	8	2	3	4	7	8	5	10	2	1	0	1	0	0	51	41-50	14
16:00	0	3	0	9	9	14	7	2	3	0	2	2	0	0	51	37-46	30
17:00	3	1	6	5	8	10	12	8	1	1	1	0	1	0	57	40-49	26
18:00	3	0	0	8	4	11	6	4	2	2	0	0	0	0	40	37-46	19
19:00	2	1	2	8	8	4	4	4	2	2	1	0	0	0	38	36-45	16
20:00	3	1	6	4	8	3	4	2	0	0	0	0	1	0	32	33-42	13
21:00	3	1	4	4	4	7	2	2	0	2	0	0	0	0	29	36-45	10
22:00	2	3	4	1	2	0	0	0	1	0	0	0	0	0	13	25-34	5
23:00	2	2	0	1	0	2	0	0	1	0	0	0	0	0	8	13-22	3
Total	48	31	65	105	143	138	111	59	28	18	8	4	2	0	760		
Percent	6.3%	4.1%	8.6%	13.8%	18.8%	18.2%	14.6%	7.8%	3.7%	2.4%	1.1%	0.5%	0.3%	0.0%			
AM Peak	06:00	07:00	08:00	08:00	08:00	07:00	06:00	05:00	10:00	07:00	03:00				08:00		
Vol.	4	3	7	11	16	11	9	4	4	3	1				59		
PM Peak	15:00	14:00	17:00	16:00	13:00	16:00	17:00	15:00	16:00	18:00	16:00	16:00	17:00		17:00		
Vol.	8	4	6	9	9	14	12	10	3	2	2	2	1		57		

#### **Customer Loyalty through Client Satisfaction**

Site Code: 190000000222

Station ID:

BULL ROAD (ABOUT 600' SOUTH OF SHAW RD)

SB																	
Start	1	30	33	36	39	42	45	48	51	54	57	60	63	66		Pace	Number
Time	29	32	35	38	41	44	47	50	53	56	59	62	65	999	Total	Speed	in Pace
06/14/12	1	0	1	0	0	1	0	0	0	0	0	1	0	0	4	16-25	1
01:00	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2	29-38	2
02:00	0	0	1	0	0	1	0	0	0	0	0	0	0	0	2	36-45	1
03:00	0	0	0	1	1	1	0	0	0	0	0	0	0	0	3	34-43	3
04:00	0	0	2	0	1	1	3	0	0	0	0	0	0	0	7	38-47	5
05:00	1	1	2	9	3	4	2	5	3	0	0	0	0	0	30	35-44	14
06:00	2	0	3	3	7	13	8	4	3	0	0	0	0	0	43	39-48	24
07:00	0	0	3	7	9	10	8	13	5	3	0	0	0	0	58	41-50	33
08:00	4	1	6	6	13	8	12	5	2	0	1	1	0	0	59	38-47	26
09:00	1	2	5	10	12	10	10	1	1	1	1	0	0	0	54	37-46	30
10:00	1	2	1	9	13	14	6	1	0	1	0	1	0	0	49	37-46	31
11:00	3	3	3	1	5	10	11	1	2	2	3	0	0	0	44	39-48	18
12 PM	3	0	0	2	10	5	2	3	4	1	0	0	0	0	30	38-47	13
13:00	3	0	1	5	2	11	9	5	0	0	1	0	0	1	38	41-50	19
14:00	2	0	2	2	9	3	9	0	2	1	0	0	0	0	30	38-47	16
15:00	5	2	3	5	14	7	3	8	4	3	1	0	0	0	55	36-45	18
16:00	1	2	2	8	7	10	13	5	3	1	0	0	0	1	53	39-48	27
17:00	0	0	5	10	8	13	10	3	1	2	0	1	0	1	54	37-46	34
18:00	2	1	7	11	11	9	8	1	1	0	0	0	0	0	51	37-46	27
19:00	1	1	2	8	22	14	15	4	0	1	0	0	0	1	69	38-47	48
20:00	8	1	4	7	10	6	3	2	0	0	2	0	0	0	43	35-44	13
21:00	1	1	1	6	7	4	2	1	0	0	0	0	0	0	23	36-45	13
22:00	1	0	1	3	2	3	2	0	0	0	0	0	0	0	12	37-46	6
23:00	11	0	2	3	2	1	1	1	0	0	0	0	0	0	11	34-43	5
Total	41	17	57	118	168	159	137	63	31	16	9	4	0	4	824		
Percent	5.0%	2.1%	6.9%	14.3%	20.4%	19.3%	16.6%	7.6%	3.8%	1.9%	1.1%	0.5%	0.0%	0.5%			
AM Peak	08:00	11:00	08:00	09:00	08:00	10:00	08:00	07:00	07:00	07:00	11:00	00:00			08:00		
Vol.	4	3	6	10	13	14	12	13	5	3	3	1			59		
PM Peak	20:00	15:00	18:00	18:00	19:00	19:00	19:00	15:00	12:00	15:00	20:00	17:00		13:00	19:00		
Vol.	8	2	7	11	22	14	15	8	4	3	2	1		1	69		

#### **Customer Loyalty through Client Satisfaction**

Site Code: 190000000222

Station ID:

BULL ROAD (ABOUT 600' SOUTH OF SHAW RD)

SB																	
Start	1	30	33	36	39	42	45	48	51	54	57	60	63	66		Pace	Number
Time	29	32	35	38	41	44	47	50	53	56	59	62	65	999	Total	Speed	in Pace
06/15/12	0	0	0	2	1	0	0	1	0	0	0	1	0	0	5	35-44	3
01:00	0	0	0	0	1	0	1	0	1	0	0	0	0	0	3	37-46	2
02:00	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	49-58	1
03:00	0	0	0	2	1	0	1	0	0	0	0	0	0	0	4	37-46	3
04:00	0	0	1	4	0	2	1	0	0	0	0	0	0	0	8	36-45	6
05:00	0	4	2	1	3	7	1	1	5	2	0	0	0	0	26	39-48	8
06:00	2	1	6	6	8	11	6	5	1	0	1	0	0	0	47	37-46	22
07:00	2	1	3	4	10	13	17	7	2	1	3	0	0	0	63	39-48	36
08:00	3	4	3	10	12	5	13	1	2	2	0	0	0	0	55	37-46	23
09:00	1	0	5	6	14	10	9	0	2	0	2	1	0	0	50	38-47	31
10:00	0	1	2	4	7	9	5	7	1	2	0	0	0	0	38	39-48	22
11:00	0	1	3	2	10	9	9	3	1	1	0	0	0	0	39	39-48	27
12 PM	2	2	0	6	1	9	4	7	2	3	0	0	0	0	36	41-50	15
13:00	5	3	5	4	8	2	6	2	1	0	0	0	0	0	36	32-41	10
14:00	3	2	1	9	5	15	5	2	1	0	0	0	0	0	43	36-45	21
15:00	13	2	3	2	17	13	3	1	1	3	0	0	0	0	58	12-21	18
16:00	4	1	1	9	16	9	6	5	1	2	0	1	0	1	56	37-46	26
17:00	2	6	5	11	20	14	17	4	2	0	3	0	0	0	84	38-47	42
18:00	10	3	2	11	18	7	7	3	2	0	0	0	0	0	63	36-45	21
19:00	0	2	4	13	12	7	8	4	1	1	0	0	0	0	52	35-44	31
20:00	2	2	7	12	9	3	4	2	0	3	0	0	0	1	45	32-41	22
21:00	3	2	2	3	3	1	5	1	1	1	0	0	0	0	22	39-48	5
22:00	1	2	2	9	9	5	2	1	0	0	0	1	0	0	32	35-44	18
23:00	0	0	2	1	2	2	1	0	0	0	0	0	0	0	8	34-43	6
Total	53	39	59	131	187	153	131	57	27	21	10	4	0	2	874		
Percent	6.1%	4.5%	6.8%	15.0%	21.4%	17.5%	15.0%	6.5%	3.1%	2.4%	1.1%	0.5%	0.0%	0.2%			
AM Peak	08:00	05:00	06:00	08:00	09:00	07:00	07:00	07:00	05:00	05:00	07:00	00:00			07:00		
Vol.	3	4	6	10	14	13	17	77	5	2	3	11			63		
PM Peak	15:00	17:00	20:00	19:00	17:00	14:00	17:00	12:00	12:00	12:00	17:00	16:00		16:00	17:00		
Vol.	13	6	7	13	20	15	17	7	2	3	3	1		1	84		

### **Customer Loyalty through Client Satisfaction**

Site Code: 190000000222

Station ID:

BULL ROAD (ABOUT 600' SOUTH OF SHAW RD)

SB															Lamado.	0.0000	Ondomiou
Start	1	30	33	36	39	42	45	48	51	54	57	60	63	66		Pace	Number
Time	29	32	35	38	41	44	47	50	53	56	59	62	65	999	Total	Speed	in Pace
06/16/12	1	0	0	2	1	3	0	2	0	0	0	0	0	0	9	35-44	4
01:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	7-16	1
02:00	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2	5-14	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	2	1	3	0	1	1	0	1	0	0	0	0	9	32-41	6
05:00	0	0	0	1	0	0	1	0	1	0	0	0	0	0	3	43-52	2
06:00	3	2	1	0	1	1	1	1	0	0	0	0	0	0	10	18-27	3
07:00	0	0	1	3	4	6	4	2	2	1	0	0	0	0	23	37-46	15
08:00	1	2	2	6	12	7	5	3	3	0	0	0	0	0	41	36-45	22
09:00	2	0	2	6	6	11	5	4	3	0	0	0	0	0	39	37-46	20
10:00	4	0	10	9	12	20	12	5	1	0	1	0	0	0	74	37-46	38
11:00	14	1	12	22	22	25	5	4	2	2	2	0	0	0	111	35-44	46
12 PM	7	4	14	23	17	17	8	2	2	0	0	0	0	0	94	35-44	43
13:00	2	1	11	15	22	16	11	8	1	1	0	0	0	0	88	36-45	50
14:00	6	1	8	12	17	11	5	7	1	1	2	0	1	0	72	35-44	31
15:00	2	1	3	9	13	10	10	3	4	2	1	0	0	1	59	37-46	30
16:00	0	1	4	4	8	11	7	7	4	0	1	0	0	0	47	39-48	27
17:00	1	0	2	7	4	13	8	9	6	2	2	0	1	0	55	41-50	29
18:00	2	0	5	2	13	9	5	4	4	1	1	0	0	0	46	38-47	23
19:00	2	2	2	8	4	3	2	4	0	1	0	0	0	0	28	35-44	11
20:00	15	4	8	5	9	4	3	1	1	0	0	0	0	0	50	10-19	18
21:00	9	2	2	13	2	4	2	0	1	0	1	0	0	0	36	9-18	12
22:00	2	0	0	4	5	5	3	3	1	0	0	0	0	0	23	36-45	11
23:00	0	3	1	0	5	2	0	1	0	1	0	0	0	0	13	22-31	5_
Total	75	25	90	152	180	178	98	71	37	13	11	0	2	1	933		
Percent	8.0%	2.7%	9.6%	16.3%	19.3%	19.1%	10.5%	7.6%	4.0%	1.4%	1.2%	0.0%	0.2%	0.1%			
AM Peak	11:00	06:00	11:00	11:00	11:00	11:00	10:00	10:00	08:00	11:00	11:00				11:00		
Vol.	14	2	12	22	22	25	12	5	3	2	2		44.00	45.00	111		
PM Peak	20:00	12:00	12:00	12:00	13:00	12:00	13:00	17:00	17:00	15:00	14:00		14:00	15:00	12:00		
Vol.	15	4	14	23	22	17	11	9	6	2	2		1	1	94		

#### **Customer Loyalty through Client Satisfaction**

Site Code: 190000000222

Station ID:

BULL ROAD (ABOUT 600' SOUTH OF SHAW RD)

SB																	
Start	1	30	33	36	39	42	45	48	51	54	57	60	63	66		Pace	Number
Time	29	32	35	38	41	44	47	50	53	56	59	62	65	999	Total	Speed	in Pace
06/17/12	0	1	0	4	1	2	1	2	0	0	0	0	0	0	11	35-44	6
01:00	0	0	0	2	0	1	0	0	0	0	0	0	0	0	3	34-43	3
02:00	0	0	1	1	1	0	0	0	2	0	0	0	0	0	5	31-40	3
03:00	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	35-44	2
04:00	0	1	1	1	1	1	1	0	1	0	0	0	0	0	7	39-48	2
05:00	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2	35-44	2
06:00	1	0	0	1	1	1	3	0	0	0	0	0	0	0	7	39-48	3
07:00	0	0	2	2	2	1	2	0	1	0	0	0	0	0	10	34-43	6
08:00	2	1	2	4	9	6	8	1	1	0	0	0	0	0	34	37-46	18
09:00	3	2	2	7	6	6	3	3	3	0	0	0	0	0	35	36-45	13
10:00	1	4	3	3	2	4	9	2	2	0	0	0	0	0	30	39-48	11
11:00	1	2	1	7	10	2	5	8	3	1	0	0	0	0	40	38-47	16
12 PM	1	1	5	4	8	11	10	4	1	1	0	1	0	0	47	39-48	26
13:00	2	2	4	6	10	6	8	1	0	1	0	0	0	0	40	38-47	19
14:00	5	0	4	3	7	10	10	2	6	3	1	0	0	0	51	39-48	19
15:00	4	1	1	9	6	8	10	2	4	1	0	0	0	0	46	37-46	19
16:00	1	3	3	3	5	7	7	4	2	1	1	0	0	0	37	40-49	15
17:00	2	1	3	9	7	7	8	3	2	0	0	0	0	0	42	37-46	20
18:00	1	3	3	6	8	9	7	2	3	1	0	0	1	0	44	37-46	21
19:00	0	1	0	7	6	7	7	5	2	0	2	0	0	0	37	37-46	21
20:00	1	2	7	4	5	7	3	2	1	0	0	0	0	0	32	35-44	14
21:00	3	0	1	3	4	6	4	0	2	1	0	2	0	0	26	36-45	10
22:00	0	0	0	2	3	2	0	0	1	0	1	0	0	0	9	35-44	7
23:00	0	0	1_	4	6	0	1	1	1	0	1	0	0	0	15	33-42	11_
Total	28	25	44	93	109	106	107	42	38	10	6	3	1	0	612		
Percent	4.6%	4.1%	7.2%	15.2%	17.8%	17.3%	17.5%	6.9%	6.2%	1.6%	1.0%	0.5%	0.2%	0.0%			
AM Peak	09:00	10:00	10:00	09:00	11:00	08:00	10:00	11:00	09:00	11:00					11:00		
Vol.	3	4	3	7	10	6	9	8	3	1_					40		
PM Peak	14:00	16:00	20:00	15:00	13:00	12:00	12:00	19:00	14:00	14:00	19:00	21:00	18:00		14:00		
Vol.	5	3	7	9	10	11	10	5	6	3	2	2	1		51		

#### **Customer Loyalty through Client Satisfaction**

Site Code: 190000000222

Station ID:

BULL ROAD (ABOUT 600' SOUTH OF SHAW RD)

SB															Latitado.	0.0000	0.1.0000
Start	1	30	33	36	39	42	45	48	51	54	57	60	63	66		Pace	Number
Time	29	32	35	38	41	44	47	50	53	56	59	62	65	999	Total	Speed	in Pace
06/18/12	0	1	0	1	1	0	1	0	0	0	0	0	0	0	4	22-31	2
01:00	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	37-46	1
02:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	31-40	1
03:00	0	1	0	0	0	0	1	1	0	0	0	0	0	0	3	45-54	1
04:00	0	0	2	2	0	1	0	0	0	0	0	0	0	0	5	33-42	4
05:00	1	1	3	6	5	5	2	1	3	0	0	0	0	0	27	36-45	13
06:00	3	1	3	8	7	11	5	5	2	1	0	0	0	0	46	36-45	21
07:00	1	2	6	7	14	9	6	7	1	1	1	0	0	0	55	38-47	27
08:00	1	7	9	11	6	9	9	1	1	0	1	0	0	0	55	35-44	21
09:00	3	0	2	5	12	6	6	1	2	2	0	1	0	0	40	38-47	19
10:00	3	2	4	3	5	6	9	1	1	0	1	0	0	0	35	39-48	13
11:00	2	1	1	5	12	10	7	2	1	0	1	0	0	0	42	38-47	24
12 PM	2	1	5	5	6	10	5	2	1	0	1	0	0	0	38	36-45	18
13:00	0	0	3	3	5	7	8	3	2	1	0	0	0	0	32	39-48	21
14:00	2	2	1	5	14	8	8	10	0	0	0	0	0	0	50	39-48	26
15:00	6	2	4	3	15	3	5	6	1	1	0	0	0	0	46	38-47	15
16:00	2	1	0	7	9	13	7	2	6	2	0	0	0	0	49	37-46	26
17:00	1	3	5	5	14	5	6	2	2	3	0	0	0	0	46	38-47	21
18:00	4	0	1	7	11	5	6	7	6	1	1	2	0	0	51	37-46	19
19:00	3	1	1	2	9	4	6	3	0	0	2	0	1	0	32	39-48	13
20:00	1	2	2	4	7	5	7	1	2	0	2	1	0	0	34	38-47	16
21:00	3	1	4	4	8	5	3	2	1	0	0	0	0	0	31	36-45	12
22:00	3	2	2	3	2	3	2	1	0	1	0	0	0	0	19	9-18	5
23:00	0	0	0	11	0	2	1	0	2	11	0	0	0	0	7	43-52	4
Total	41	31	58	97	163	127	111_	58	34	14	10	4	1	0	749		
Percent	5.5%	4.1%	7.7%	13.0%	21.8%	17.0%	14.8%	7.7%	4.5%	1.9%	1.3%	0.5%	0.1%	0.0%			
AM Peak	06:00	08:00	08:00	08:00	07:00	06:00	08:00	07:00	05:00	09:00	07:00	09:00			07:00		
Vol.	3	7	9	11	14	11	9	7	3	2	1	1 1	40.00		55		
PM Peak	15:00	17:00	12:00	16:00	15:00	16:00	13:00	14:00	16:00	17:00	19:00	18:00	19:00		18:00		
Vol.	6	3	5	7	15	13	8	10	6	3	2	2	1		51		

#### **Maser Consulting**

#### 400 Columbus Avenue Valhalla, NY 10595

#### **Customer Loyalty through Client Satisfaction**

Site Code: 190000000222

Station ID:

BULL ROAD (ABOUT 600' SOUTH OF SHAW RD)

Latitude: 0' 0.0000 Undefined

SB																	
Start	1	30	33	36	39	42	45	48	51	54	57	60	63	66		Pace	Number
Time	29	32	35	38	41	44	47	50	53	56	59	62	65	999	Total	Speed	in Pace
06/19/12	0	1	0	0	1	2	1	1	2	0	0	0	0	0	8	42-51	4
01:00	0	0	0	0	1	1	2	0	0	0	0	0	0	0	4	38-47	4
02:00	0	0	0	1	1	1	0	0	1	0	0	0	0	0	4	34-43	3
03:00	0	0	2	0	0	1	1	0	0	0	0	0	0	0	4	33-42	2
04:00	0	0	3	1	4	1	0	0	0	0	0	0	0	0	9	32-41	8
05:00	1	3	2	2	3	8	3	0	4	2	0	0	0	0	28	38-47	10
06:00	3	0	0	10	7	11	3	2	5	0	0	0	0	0	41	36-45	21
07:00	2	1	3	8	7	17	9	4	3	2	3	1	0	0	60	37-46	30
08:00	7	4	8	14	6	5	4	2	1	1	0	0	0	0	52	32-41	17
09:00	1	0	3	3	10	5	7	0	4	1	2	0	0	0	36	38-47	20
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
15:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
16:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
17:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
18:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
21:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	14	9	21	39	40	52	30	9	20	6	5	1	0	0	246		
Percent	5.7%	3.7%	8.5%	15.9%	16.3%	21.1%	12.2%	3.7%	8.1%	2.4%	2.0%	0.4%	0.0%	0.0%			
AM Peak	08:00	08:00	08:00	08:00	09:00	07:00	07:00	07:00	06:00	05:00	07:00	07:00			07:00		
Vol.	7	4	8	14	10	17	9	4	5	2	3	1			60		
PM Peak																	
Vol.																	
Total	357	216	472	874	1214	1097	864	432	278	118	63	24	9	7	6025		
Percent	5.9%	3.6%	7.8%	14.5%	20.1%	18.2%	14.3%	7.2%	4.6%	2.0%	1.0%	0.4%	0.1%	0.1%			
			Eth Darson		16 MDLL												

15th Percentile: 16 MPH

50th Percentile : 38 MPH 85th Percentile : 46 MPH

95th Percentile : 50 MPH

Stats 10 MPH Pace Speed: 37-46 MPH

Number in Pace : 2608 Percent in Pace : 43.3%

Number of Vehicles > 55 MPH : 128
Percent of Vehicles > 55 MPH : 2.1%
Mean Speed(Average) : 35 MPH

# Maser Consulting

400 Columbus Avenue Valhalla, NY 10595

#### **Customer Loyalty through Client Satisfaction**

Site Code: 19120000010

Station ID:

SHAW ROAD (EAST OF SOCCER FIELD EXIT DRIVEWAY AND WEST OF FEITSMA LANE)

EB																	
Start	1	21	23	25	27	29	31	33	35	37	39	41	43	45		Pace	Number
Time	20	22	24	26	28	30	32	34	36	38	40	42	44	999	Total	Speed	in Pace
06/11/12	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
06:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
07:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
08:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
09:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13:00	0	0	0	0	0	0	0	0	1	3	2	3	1	1	11	35-44	10
14:00	0	1	0	1	0	0	2	1	0	1	3	3	3	6	21	35-44	9
15:00	0	0	0	0	0	0	1	1	1	1	3	1	4	9	21	35-44	10
16:00	0	0	0	0	0	1	1	1	0	0	0	5	3	8	19	35-44	8
17:00	0	0	0	0	0	0	0	0	3	6	0	4	1	11	25	35-44	14
18:00	0	0	0	0	0	0	1	1	1	5	8	3	6	6	31	35-44	23
19:00	0	2	0	0	0	0	1	0	0	0	4	2	2	7	18	36-45	5
20:00	0	0	0	0	0	0	2	0	1	0	2	4	4	6	19	35-44	11
21:00	1	0	0	0	0	0	0	0	1	1	2	3	2	3	13	35-44	6
22:00	0	0	0	0	0	0	0	0	0	2	2	0	1	3	8	35-44	5
23:00	0	0	0	0	0	1	0	1	1	0	1	0	2	3	9	35-44	4
Total	1	3	0	1	0	2	8	5	9	19	27	28	29	63	195		
Percent	0.5%	1.5%	0.0%	0.5%	0.0%	1.0%	4.1%	2.6%	4.6%	9.7%	13.8%	14.4%	14.9%	32.3%			
AM Peak																	
Vol.																	
PM Peak	21:00	19:00		14:00		16:00	14:00	14:00	17:00	17:00	18:00	16:00	18:00	17:00	18:00		
Vol.	1	2		1		1	2	1	3	6	8	5	6	11	31		
	-	_		•		-	_	-		•	_	•	-	• •			

# **Customer Loyalty through Client Satisfaction**

Site Code: 19120000010

Station ID:

SHAW ROAD (EAST OF SOCCER FIELD EXIT DRIVEWAY AND WEST OF FEITSMA LANE)

EB																	
Start	1	21	23	25	27	29	31	33	35	37	39	41	43	45		Pace	Number
Time	20	22	24	26	28	30	32	34	36	38	40	42	44	999	Total	Speed	in Pace
06/12/12	0	0	0	0	0	0	0	0	0	1	0	0	0	2	3	29-38	1
01:00	0	0	0	0	0	0	0	0	0	0	1	0	1	0	2	35-44	2
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2	29-38	1
04:00	0	0	0	0	0	0	0	0	0	2	0	0	1	1	4	35-44	3
05:00	0	0	0	0	0	0	0	1	0	0	1	2	1	5	10	35-44	4
06:00	0	0	0	0	0	0	0	0	0	2	0	1	4	13	20	35-44	7
07:00	1	0	0	1	2	0	0	1	0	0	2	2	4	6	19	35-44	6
08:00	0	1	0	0	0	2	1	2	5	0	4	1	5	6	27	35-44	13
09:00	0	1	0	0	0	0	0	0	0	2	1	2	5	6	17	35-44	8
10:00	0	1	0	0	0	0	0	0	1	1	1	2	1	5	12	36-45	4
11:00	0	0	0	0	0	0	0	1	2	7	3	0	3	6	22	35-44	15
12 PM	0	0	0	0	0	0	0	1	0	1	3	0	1	5	11	35-44	5
13:00	0	1	0	0	1	0	0	2	1	1	1	3	0	3	13	34-43	6
14:00	0	0	0	0	0	0	1	1	1	0	4	2	2	4	15	35-44	9
15:00	0	0	0	0	0	0	0	0	3	5	3	1	6	4	22	35-44	18
16:00	0	0	0	1	0	0	0	0	0	3	1	1	5	10	21	35-44	10
17:00	0	0	1	1	0	0	0	0	1	3	3	1	4	5	19	35-44	12
18:00	0	0	0	1	0	0	0	0	2	2	3	6	5	8	27	35-44	18
19:00	0	0	1	0	1	1	0	0	1	1	2	2	0	8	17	33-42	6
20:00	0	0	0	0	0	0	0	2	2	1	1	1	4	4	15	35-44	9
21:00	0	0	0	0	0	0	1	0	2	1	1	2	0	2	9	33-42	6
22:00	0	0	0	0	0	0	0	0	4	0	0	3	2	2	11	35-44	9
23:00	0	0	0	0	0	0	1	11	2	0	1	1_	0	0	6	31-40	5
Total	11	4	2	4	4	3	4	12	27	34	36	33	54	106	324		
Percent	0.3%	1.2%	0.6%	1.2%	1.2%	0.9%	1.2%	3.7%	8.3%	10.5%	11.1%	10.2%	16.7%	32.7%			
AM Peak	07:00	08:00		07:00	07:00	08:00	08:00	08:00	08:00	11:00	08:00	05:00	08:00	06:00	08:00		
Vol.	1	1		1	2	2	1	2	5	7	4	2	5	13	27		
PM Peak		13:00	17:00	16:00	13:00	19:00	14:00	13:00	22:00	15:00	14:00	18:00	15:00	16:00	18:00		
Vol.		1	1	1	1	1	1	2	4	5	4	6	6	10	27		

## 400 Columbus Avenue Valhalla, NY 10595

# **Customer Loyalty through Client Satisfaction**

Site Code: 19120000010

Station ID:

SHAW ROAD (EAST OF SOCCER FIELD EXIT DRIVEWAY AND WEST OF FEITSMA LANE)

EB																	
Start	1	21	23	25	27	29	31	33	35	37	39	41	43	45		Pace	Number
Time	20	22	24	26	28	30	32	34	36	38	40	42	44	999	Total	Speed	in Pace
06/13/12	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2	33-42	1
01:00	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2	23-32	1
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
03:00	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	35-44	2
04:00	0	0	0	0	0	0	1	0	0	0	2	0	1	2	6	31-40	3
05:00	0	0	0	0	0	0	0	0	2	3	0	2	0	6	13	34-43	7
06:00	0	0	0	0	0	0	0	0	0	1	5	1	1	12	20	35-44	8
07:00	0	0	0	0	0	1	0	0	0	2	3	2	3	2	13	35-44	10
08:00	0	0	0	0	0	0	4	0	1	4	6	1	4	16	36	35-44	16
09:00	0	0	0	0	0	0	0	1	0	1	1	3	2	9	17	35-44	7
10:00	0	0	1	0	1	0	0	1	1	2	4	1	1	5	17	35-44	9
11:00	0	0	0	0	0	0	3	1	1	5	2	3	2	10	27	35-44	13
12 PM	0	0	0	0	0	1	0	0	0	0	0	3	3	12	19	35-44	6
13:00	0	0	0	0	0	1	0	0	1	0	1	1	3	5	12	35-44	6
14:00	0	0	0	0	0	0	0	0	0	1	2	4	0	11	18	34-43	7
15:00	0	0	0	0	0	0	0	1	4	1	1	7	3	10	27	35-44	16
16:00	1	0	0	0	0	1	2	0	3	0	2	2	3	17	31	35-44	7
17:00	0	1	0	1	0	1	1	2	2	3	5	2	1	6	25	34-43	12
18:00	0	0	0	0	1	0	0	0	2	1	5	2	5	10	26	35-44	15
19:00	0	0	0	3	2	2	1	0	1	3	4	1	0	2	19	32-41	9
20:00	2	1	0	1	4	4	2	1	3	0	2	2	4	4	30	27-36	10
21:00	0	0	0	0	0	0	1	0	0	2	1	2	1	6	13	35-44	6
22:00	0	0	0	0	0	0	0	0	0	3	1	0	0	4	8	31-40	4
23:00	0	0	0	0	0	0	0	0	0	0	11	0	1	2	4	35-44	2
Total	3	2	1	5	8	11	16	7	21	32	48	42	39	152	387		
Percent	0.8%	0.5%	0.3%	1.3%	2.1%	2.8%	4.1%	1.8%	5.4%	8.3%	12.4%	10.9%	10.1%	39.3%			
AM Peak			10:00		10:00	07:00	08:00	09:00	05:00	11:00	08:00	09:00	08:00	08:00	08:00		
Vol.			1		11	1	4	1	2	5	6	3	4	16	36		
PM Peak	20:00	17:00		19:00	20:00	20:00	16:00	17:00	15:00	17:00	17:00	15:00	18:00	16:00	16:00		
Vol.	2	1		3	4	4	2	2	4	3	5	7	5	17	31		

#### Maser Consulting 400 Columbus Avenue

# Valhalla, NY 10595 Customer Loyalty through Client Satisfaction

Site Code: 19120000010

Station ID:

SHAW ROAD (EAST OF SOCCER FIELD EXIT DRIVEWAY AND WEST OF FEITSMA LANE)

EB																	
Start	1	21	23	25	27	29	31	33	35	37	39	41	43	45		Pace	Number
Time	20	22	24	26	28	30	32	34	36	38	40	42	44	999	Total	Speed	in Pace
06/14/12	0	0	0	0	0	1	0	0	0	1	0	0	0	1	3	29-38	2
01:00	0	0	0	0	0	1	0	0	0	1	0	1	0	0	3	29-38	2
02:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	33-42	1
03:00	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2	29-38	1
04:00	0	0	0	0	0	0	0	0	0	1	1	0	0	2	4	31-40	2
05:00	0	0	0	0	0	0	0	0	1	1	1	1	4	4	12	35-44	8
06:00	0	0	0	0	0	0	0	0	2	1	0	2	2	11	18	35-44	7
07:00	0	0	0	0	0	1	0	0	2	1	0	5	2	6	17	35-44	10
08:00	0	0	0	0	1	0	0	0	4	3	4	2	7	15	36	35-44	20
09:00	0	0	0	0	0	0	0	0	1	5	1	2	6	13	28	35-44	15
10:00	0	0	0	0	0	1	1	0	3	2	3	1	1	5	17	35-44	10
11:00	0	0	0	0	0	1	0	0	3	2	0	1	2	4	13	35-44	8
12 PM	1	0	0	0	0	0	0	0	0	0	2	2	4	9	18	36-45	5
13:00	0	0	0	1	0	1	1	1	0	0	2	1	3	8	18	35-44	6
14:00	1	0	0	0	0	1	0	1	1	1	2	2	3	11	23	36-45	6
15:00	0	0	0	0	0	1	1	4	1	3	3	2	1	7	23	33-42	13
16:00	0	0	0	0	0	1	1	0	0	1	2	1	4	15	25	35-44	8
17:00	0	0	0	1	1	1	1	0	2	3	4	2	2	9	26	35-44	13
18:00	1	0	0	1	1	2	0	0	3	2	2	3	4	11	30	35-44	11
19:00	2	1	0	5	7	6	2	2	0	2	5	1	6	11	50	25-34	17
20:00	1	0	0	4	4	3	4	1	0	0	3	4	0	6	30	25-34	13
21:00	0	0	0	0	0	0	0	1	0	4	3	2	0	6	16	33-42	10
22:00	0	0	0	0	0	0	0	0	0	0	2	1	1	1	5	35-44	4
23:00	0	0	0	0	1	0	1	0	0	0	1_	1_	2	1	7	35-44	4
Total	6	1	0	12	15	21	12	10	23	35	41	38	54	157	425		
Percent	1.4%	0.2%	0.0%	2.8%	3.5%	4.9%	2.8%	2.4%	5.4%	8.2%	9.6%	8.9%	12.7%	36.9%			
AM Peak					08:00	00:00	10:00		08:00	09:00	08:00	07:00	08:00	08:00	08:00		
Vol.	40.00	40.00		40.00	1 10 00	1 1	11	45.00	4	5	4 40.00	5	7	15	36		
PM Peak	19:00	19:00		19:00	19:00	19:00	20:00	15:00	18:00	21:00	19:00	20:00	19:00	16:00	19:00		
Vol.	2	1		5	7	6	4	4	3	4	5	4	6	15	50		

# **Customer Loyalty through Client Satisfaction**

Site Code: 19120000010

Station ID:

SHAW ROAD (EAST OF SOCCER FIELD EXIT DRIVEWAY AND WEST OF FEITSMA LANE)

Start	EB																	
OFFICE   O	Start	1	21	23	25	27	29	31	33	35	37	39	41	43	45		Pace	Number
01:00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		20	22	24	26	28	30	32	34	36	38	40	42	44	999	Total	Speed	in Pace
02:00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	06/15/12	0	0	0	0	0	0	0	0	1	0	1	1	0	1	4	33-42	3
03:00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00 0 0 0 0 0 0 1 1 0 0 0 0 0 0 0 2 0 0 0 3 33:42 2 0 05:00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		*
05:00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 1 2 2 3 4 3 14 35-44 11 06:00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 1 22 1 3 3 3 15 27 35-44 11 08:00 0 0 0 0 0 0 0 0 1 2 2 2 1 3 3 3 15 27 35-44 11 08:00 0 0 0 0 0 0 0 0 1 2 1 2 1 2 3 4 4 1 11 28 35-44 11 09:00 0 0 0 0 0 0 0 0 1 2 1 2 1 2 3 4 4 1 11 28 35-44 11 09:00 1 0 0 0 0 0 0 0 0 0 1 2 1 2 1 2 3 4 4 1 11 22 26 34-43 12 10:00 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	*	*
06:00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 2 0 0 0 0 9 11 29:38 2 0 0 0 0 0 9 11 29:38 2 0 07:00 0 0 0 0 0 0 1 0 0 0 0 2 2 2 1 1 3 3 3 15 27 35:44 11 08:00 0 0 0 0 0 0 0 0 1 1 2 1 2 1 2 3 4 4 4 11 12 26 34:43 12 10:00 1 0 0 0 0 0 0 0 0 1 2 1 2 1 2 3 4 4 1 1 12 26 34:43 12 10:00 1 0 0 0 0 0 0 0 0 1 0 0 1 3 1 0 0 10 22 34:43 7 11:00 1 0 0 0 0 0 0 0 1 0 1 0 1 3 0 4 1 1 9 20 36:45 6 12 PM 0 0 0 0 1 1 0 0 1 0 0 1 3 1 3 0 4 1 1 9 20 36:45 6 12 PM 0 0 0 0 1 1 0 0 1 0 0 1 1 0 0 1 1 5 2 2 4 1 15 36:45 5 14:00 0 1 1 0 0 0 0 0 0 0 1 1 0 0 1 1 5 2 2 4 1 15 36:45 5 14:00 0 0 0 0 0 0 1 1 1 0 0 0 1 1 0 0 1 1 5 2 2 4 1 15 36:45 5 14:00 0 0 0 0 0 0 0 1 1 1 0 0 0 1 1 2 2 2 2	04:00	0	0	0	0	1	0	0	0	0	0	0	2	0	0	3	33-42	
07:00 0 0 0 0 0 0 1 0 0 1 0 0 1 0 0 2 2 2 1 3 3 4 4 1 11 08:00 0 0 0 0 0 0 0 0 0 0 1 2 1 1 2 3 4 4 1 11 08:00 0 0 0 0 0 0 0 0 0 0 1 2 1 1 2 3 4 4 1 11 128 35-44 14 09:00 0 1 0 0 0 0 0 0 0 1 2 1 1 2 3 4 4 1 112 26 34-43 12 10:00 1 0 0 0 0 0 0 0 0 0 0 0 3 1 1 0 3 3 4 0 1 10 22 34-43 77 11:00 1 0 0 0 0 0 0 0 1 0 1 0 1 3 0 4 1 1 9 20 36-45 6 12 PM 0 0 0 0 1 1 0 1 0 1 0 0 3 1 3 1 3 9 19 35-44 7 13:00 1 1 0 0 0 0 0 0 0 1 0 1 0 1 0 1 3 0 3 1 3 9 19 35-44 7 13:00 1 1 1 0 0 0 0 0 0 0 0 1 1 0 1 1 5 2 4 15 36-45 5 14:00 0 0 0 0 0 0 1 1 1 0 0 1 3 3 5 2 35-44 13 16:00 3 0 0 0 0 0 0 0 0 0 0 0 1 1 2 2 2 6 6 2 9 22 35-44 13 16:00 3 0 0 0 0 0 0 0 0 0 0 1 1 2 2 2 4 4 1 13 29 6-15 7 17:00 0 1 1 1 1 0 0 0 0 0 0 1 2 2 2 4 4 1 13 29 6-15 7 17:00 0 1 1 1 1 0 0 0 5 6 2 2 2 0 0 0 5 6 1 1 13 42 27-36 12 19:00 1 1 1 1 0 0 0 5 6 2 1 1 2 3 3 1 1 5 5 5 48 25-34 24 20:00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 1 0 1 5 5 5 5		0	0	0	0	0	0	0	0	1	1	2	3	4	3	14	35-44	11
08:00 0 0 0 0 0 0 0 0 0 0 1 2 1 2 1 2 3 4 4 1 11 28 35-44 14 09:00 0 0 0 0 0 0 0 0 0 0 1 2 1 2 1 2 3 4 1 1 12 26 34-33 12 10:00 1 0 0 0 0 0 0 0 0 0 0 3 1 0 0 3 4 0 1 12 26 34-43 12 11:00 1 0 0 0 0 0 0 0 1 0 0 1 3 1 0 3 4 0 1 1 9 20 36-45 6 11:00 1 0 0 0 0 1 1 0 1 0 0 1 3 1 3 9 19 35-44 7 13:00 1 1 1 0 0 0 0 0 0 0 0 0 1 0 0 1 0 1	06:00	0	0	0	0	0	0	0	0	0	2	0	0	0	9	11	29-38	
09:00 0 0 0 0 0 0 0 0 0 0 0 1 2 1 2 1 2 3 4 1 1 12 26 34-43 12 10:00 1 0 0 0 0 0 0 0 0 0 0 0 0 3 1 0 0 3 4 0 10 22 34-43 7 11:00 1 0 0 0 0 0 0 0 1 0 0 1 3 0 0 4 1 1 9 20 36-45 6 12 PM 0 0 0 0 1 0 0 1 0 1 0 1 0 0 0 3 1 1 3 9 19 35-44 7 13:00 1 1 1 0 0 0 0 0 0 1 1 0 0 1 5 2 4 1 15 36-45 5 14:00 0 0 0 0 0 0 1 1 0 0 1 0 1 5 2 4 1 15 36-45 5 14:00 0 0 0 0 0 0 0 1 1 0 0 1 1 3 3 3 5 3 17 35-44 12 15:00 0 0 0 0 0 0 0 0 0 0 0 0 1 1 2 2 2 6 6 2 9 22 35-44 13 16:00 3 0 0 0 0 0 0 0 0 0 0 0 1 1 2 2 2 6 6 2 9 22 35-44 13 16:00 3 0 0 0 0 0 0 0 0 0 0 1 1 2 2 2 4 4 1 13 29 6-15 7 17:00 0 0 1 1 1 1 0 0 0 0 0 0 1 1 2 2 2 4 4 1 13 29 6-15 7 17:00 0 0 1 1 1 1 1 0 0 0 5 6 6 2 2 2 0 0 0 5 6 6 1 1 13 42 27-36 12 19:00 1 1 1 1 1 0 0 0 5 5 6 2 2 2 0 0 0 5 6 6 1 1 13 42 27-36 12 19:00 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	07:00	0	0	0	0	1	0	0	0	2	2	1	3	3	15	27	35-44	11
10:00	08:00	0	0	0	0	0	0	1	2	1		3	4	4	11	28	35-44	
11:00		0	0	0	0	0	0	1	2	1	2	3	4	1	12	26	34-43	12
12 PM 0 0 0 1 1 0 1 0 1 0 1 0 0 3 1 3 9 19 35-44 7 13:00 1 1 0 0 0 0 0 1 5 2 4 15 36-45 5 14:00 0 0 0 0 0 0 0 0 0 1 2 2 2 6 6 2 9 22 35-44 13 16:00 3 0 0 0 0 0 0 0 0 0 0 1 2 2 2 4 4 13 29 6-15 7 17:00 0 1 1 1 0 0 0 0 0 1 2 2 2 4 4 13 29 6-15 7 17:00 0 1 1 1 0 0 0 0 0 1 2 2 2 4 4 13 29 6-15 7 17:00 0 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0	10:00	1	0	0	0	0	0	0	3	1	0	3	4	0	10	22	34-43	-
13:00	11:00	1	0	0	0	0	0	1	0	1	3	0	4	1	9	20	36-45	6
14:00 0 0 0 0 0 0 1 1 1 0 0 0 0 1 1 2 2 2 6 2 9 22 35-44 13 16:00 3 0 0 0 0 0 0 0 0 0 0 0 0 1 2 2 2 4 4 4 13 29 6-15 7 17:00 0 1 1 1 0 0 2 3 2 4 1 6 4 2 19 46 33-42 16 18:00 1 1 1 0 0 0 5 6 2 2 0 0 0 5 6 1 13 42 27-36 12 19:00 1 1 1 1 6 11 4 4 4 2 1 1 1 1 5 5 5 5 5 48 25-34 24 20:00 0 0 0 2 1 1 3 6 11 4 4 4 2 1 1 1 1 5 5 5 5 5 48 25-34 24 20:00 0 0 0 0 2 1 1 3 6 2 1 1 2 3 3 1 1 5 8 37 28-37 15 21:00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	12 PM	0	0	0	1	0	1	0	1	0	0	3	1	3	9	19	35-44	7
15:00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	13:00	1	1	0	0	0	0	0	0	1	0	1	5	2	4	15	36-45	
16:00	14:00	0	0	0	0	1	1	0	0	0	1	3	3	5	3	17	35-44	12
17:00       0       1       1       1       0       2       3       2       4       1       6       4       2       19       46       33-42       16         18:00       1       1       0       0       5       6       2       2       0       0       5       6       1       13       42       27-36       12         19:00       1       1       1       6       11       4       4       2       1       1       1       5       5       5       48       25-34       24         20:00       0       0       0       2       1       3       6       2       1       2       3       3       1       5       8       37       28-37       15         21:00       0       0       0       0       0       0       0       0       0       0       2       0       1       0       2       1       3       9       33-42       5         21:00       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0	15:00	0	0	0	0	0	0	0	0	1	2	2	6	2	9	22	35-44	13
18:00 1 1 1 0 0 0 5 6 2 2 0 0 0 5 6 1 13 42 27-36 12 19:00 1 1 1 1 6 11 4 4 4 2 1 1 1 1 5 5 5 5 48 25-34 24 20:00 0 0 0 2 1 3 3 6 2 1 2 3 3 3 1 5 8 37 28-37 15 21:00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	16:00	3	0	0	0	0	0	0	0	1	2	2	4	4	13	29	6-15	7
19:00 1 1 1 1 1 6 11 4 4 4 2 1 1 1 1 5 5 5 5 48 25-34 24 20:00 0 0 0 2 1 3 3 6 2 1 2 3 3 3 1 5 5 8 37 28-37 15 21:00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	17:00	0	1	1	1	0	2	3	2	4	1	6	4	2	19	46	33-42	16
20:00         0         0         2         1         3         6         2         1         2         3         3         1         5         8         37         28-37         15           21:00         0         0         0         0         0         0         0         0         1         0         2         0         1         0         2         1         3         9         33-42         5           22:00         0         0         0         0         0         0         0         0         1         1         1         4         35-44         12           23:00         0         0         0         0         0         0         0         0         0         1         0         1         0         0         0         3         5         29-38         2           Total         8         4         4         10         22         20         14         18         20         26         41         63         48         161         459           Percent         1.7%         0.9%         0.9%         2.2%         4.8%         4.4%         3.1% <td>18:00</td> <td>1</td> <td>1</td> <td>0</td> <td>0</td> <td>5</td> <td>6</td> <td>2</td> <td>2</td> <td>0</td> <td>0</td> <td>5</td> <td>6</td> <td>1</td> <td>13</td> <td>42</td> <td>27-36</td> <td>12</td>	18:00	1	1	0	0	5	6	2	2	0	0	5	6	1	13	42	27-36	12
21:00       0       0       0       0       0       0       0       0       0       1       0       2       0       1       0       2       1       3       9       33-42       5         22:00       0       0       0       0       0       0       0       0       0       0       0       1       0       1       0       0       0       0       35-44       12         23:00       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0        0	19:00	1	1	1	6	11	4	4	2	1	1	1	5	5	5	48	25-34	24
22:00         0         0         0         1         0         0         0         0         2         2         2         1         5         1         14         35-44         12           23:00         0         0         0         0         0         0         0         1         0         1         0         0         0         3         5         29-38         2           Total         8         4         4         10         22         20         14         18         20         26         41         63         48         161         459           Percent         1.7%         0.9%         0.9%         2.2%         4.8%         4.4%         3.1%         3.9%         4.4%         5.7%         8.9%         13.7%         10.5%         35.1%           AM Peak         10:00         04:00         08:00         10:00         07:00         11:00         08:00         08:00         05:00         07:00         08:00           Vol.         1         1         1         3         2         3         3         4         4         15         28           PM Peak         16:00	20:00	0	0	2	1	3	6	2	1	2	3	3	1	5	8	37	28-37	15
23:00         3         5         29-38         2           Total         8         4         4         10         22         20         14         18         20         26         41         63         48         161         459           Percent         1.7%         0.9%         0.9%         2.2%         4.8%         4.4%         3.1%         3.9%         4.4%         5.7%         8.9%         13.7%         10.5%         35.1%           AM Peak         10:00         0.9%         0.9%         2.2%         4.8%         4.4%         3.1%         3.9%         4.4%         5.7%         8.9%         13.7%         10.5%         35.1%           AM Peak         10:00         0.9%	21:00	0	0	0	0	0	0	0	2	0	1	0	2	1	3	9	33-42	5
Total         8         4         4         10         22         20         14         18         20         26         41         63         48         161         459           Percent         1.7%         0.9%         0.9%         2.2%         4.8%         4.4%         3.1%         3.9%         4.4%         5.7%         8.9%         13.7%         10.5%         35.1%           AM Peak         10:00         04:00         08:00         10:00         07:00         11:00         08:00         08:00         05:00         07:00         08:00           Vol.         1         1         1         3         2         3         3         4         4         15         28           PM Peak         16:00         13:00         20:00         19:00         18:00         19:00         17:00         17:00         20:00         17:00         15:00         14:00         17:00         19:00	22:00	0	0	0	1	0	0	0	0	2	2	2	1	5	1	14	35-44	
Percent         1.7%         0.9%         0.9%         2.2%         4.8%         4.4%         3.1%         3.9%         4.4%         5.7%         8.9%         13.7%         10.5%         35.1%           AM Peak         10:00         04:00         08:00         10:00         07:00         11:00         08:00         08:00         05:00         07:00         08:00           Vol.         1         1         1         3         2         3         3         4         4         15         28           PM Peak         16:00         13:00         20:00         19:00         18:00         19:00         17:00         20:00         17:00         15:00         14:00         17:00         19:00			0	0					1								29-38	2
AM Peak     10:00     04:00     08:00     10:00     07:00     11:00     08:00     08:00     05:00     07:00     08:00       Vol.     1     1     1     3     2     3     3     4     4     15     28       PM Peak     16:00     13:00     20:00     19:00     18:00     19:00     17:00     17:00     20:00     17:00     15:00     14:00     17:00     19:00	Total		·	•												459		
Vol.         1         1         1         3         2         3         3         4         4         15         28           PM Peak         16:00         13:00         20:00         19:00         18:00         19:00         17:00         20:00         17:00         15:00         14:00         17:00         19:00			0.9%	0.9%	2.2%		4.4%											
PM Peak 16:00 13:00 20:00 19:00 19:00 18:00 19:00 17:00 17:00 17:00 17:00 15:00 14:00 17:00 19:00		10:00				04:00		08:00					08:00	05:00				
		1				1		1						<u>.</u>				
Vol. 3 1 2 6 11 6 4 2 4 3 6 6 5 19 48			13:00															
	Vol.	3	1	2	6	11	6	4	2	4	3	6	6	5	19	48		

#### Maser Consulting 400 Columbus Avenue

# Valhalla, NY 10595 Customer Loyalty through Client Satisfaction

Site Code: 19120000010

Station ID:

SHAW ROAD (EAST OF SOCCER FIELD EXIT DRIVEWAY AND WEST OF FEITSMA LANE)

Time   20   22   24   26   28   30   32   34   36   38   40   42   44   999   Total   Speed in O6/16/12   0 0 0 0 0 0 0 0 0 1 0 0 1 0 0 0 0 0 0	<b>S</b>																	
06/16/12	Start	1	21	23	25	27	29	31	33	35	37	39	41	43	45		Pace	Number
01:00	Time	20	22	24	26	28	30	32	34	36	38	40	42	44	999	Total	Speed	in Pace
02:00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6/16/12	0	0	0	0	0	0	0	1	0	0	1	0	2	3	7	35-44	3
03:00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	02:00	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	29-38	1
05:00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
06:00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 0 1 1 1 0 1 4 33-42 07:00 0 0 0 0 0 0 0 0 0 0 1 2 1 1 3 7 36-45 08:00 0 0 0 0 0 0 1 1 1 1 0 0 2 1 1 3 7 36-45 08:00 0 1 0 0 0 0 1 1 2 2 1 1 3 7 36-45 08:00 0 1 1 0 0 0 0 1 1 2 2 2 1 1 3 14 27 31-40 09:00 1 1 0 0 0 0 1 1 2 2 2 1 1 5 2 2 2 2 3 6 2 3 6 27 35-44 10:00 2 1 1 4 5 7 8 5 1 3 3 3 5 5 0 2 4 5 5 2 2 2 3 3 6 27 35-44 10:00 2 2 1 4 5 5 7 8 5 5 1 3 3 3 5 5 0 2 4 5 5 2 2 3 3 6 1 1:00 1 2 1 1:00 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	04:00	0	0	0	0	0	0	1	1	0	0	0	0	0	3	5	25-34	2
07:00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	05:00	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2	33-42	1
08:00 0 0 0 0 0 0 1 1 1 3 1 3 1 1 0 2 1 3 14 27 31-40 09:00 1 0 0 0 0 1 2 2 1 3 3 6 27 35-44 10:00 2 1 4 5 7 8 5 1 3 3 3 5 0 2 4 50 23-32 11:00 2 2 7 11 9 14 10 3 1 2 6 4 1 6 78 24-33 12 PM 2 1 8 8 7 11 2 5 4 5 0 2 6 0 2 8 71 24-33 13:00 1 2 5 6 14 12 5 5 5 0 2 6 0 2 9 69 24-33 14:00 1 2 8 10 12 17 14 1 5 3 0 0 5 8 5 91 24-33 15:00 0 0 0 0 0 0 0 0 1 1 1 2 2 4 4 5 35-44 16:00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	06:00	0	0	0	0	0	0	0	0	1	0	1	1	0	1	4	33-42	3
09:00	07:00	0	0	0	0	0	0	0	0	0	0	1	2	1	3	7	36-45	4
10:00	08:00	0	0	0	0	1	1	3	1	1	0	2	1	3	14	27	31-40	7
11:00	09:00	1	0	0	0	1	2	2	1	5	2	2	2	3	6	27	35-44	11
12 PM	10:00	2	1	4	5	7	8	5	1	3	3	5	0	2	4	50	23-32	23
13:00       1       2       5       6       14       12       5       5       0       2       6       0       2       9       69       24-33         14:00       1       2       8       10       12       17       14       1       5       3       0       5       8       5       91       24-33         15:00       0       0       0       0       2       0       1       1       2       4       4       2       2       8       26       35-44         16:00       0	11:00	2	2	7	11	9	14	10	3	1	2	6	4	1	6	78	24-33	42
14:00       1       2       8       10       12       17       14       1       5       3       0       5       8       5       91       24-33         15:00       0       0       0       0       2       0       1       1       2       4       4       2       2       8       26       35-44         16:00       0       0       0       0       0       0       0       0       5       8       5       8       26       35-44         17:00       1       0       0       0       0       0       0       0       5       8       5       8       28       35-44         17:00       1       0       0       0       0       0       0       0       1       1       0       0       2       4       15       30       35-44         18:00       0       0       0       0       0       0       0       1       1       1       2       2       2       3       10       20       35-44         19:00       0       0       0       0       0       0       0       1	12 PM	2	1	8	8	7	11	2	5	4	5	2	6	2	8	71	24-33	30
15:00 0 0 0 0 0 0 2 0 1 1 2 2 4 4 2 2 8 26 35-44 16:00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 5 8 5 8	13:00	1	2	5	6	14	12	5	5	0	2	6	0	2	9	69	24-33	37
16:00       0       0       0       0       0       0       0       0       5       8       5       8       28       35-44         17:00       1       0       0       0       0       1       0       0       5       1       1       2       4       15       30       35-44         18:00       0       0       0       0       0       0       0       1       2       2       2       2       3       10       20       35-44         19:00       0       0       0       0       0       1       1       2       2       2       3       10       20       35-44         20:00       0       0       0       0       0       0       0       1       1       1       1       2       2       2       3       10       20       35-44         21:00       0       0       0       0       0       0       0       0       1       1       1       5       4       1       2       16       35-44         22:00       0       0       0       0       0       0       0 </td <td>14:00</td> <td>1</td> <td>2</td> <td>8</td> <td>10</td> <td>12</td> <td>17</td> <td>14</td> <td>1</td> <td>5</td> <td>3</td> <td>0</td> <td>5</td> <td>8</td> <td>5</td> <td>91</td> <td>24-33</td> <td>54</td>	14:00	1	2	8	10	12	17	14	1	5	3	0	5	8	5	91	24-33	54
17:00       1       0       0       0       1       0       0       5       1       1       2       4       15       30       35-44         18:00       0       0       0       0       0       0       0       1       2       2       2       2       3       10       20       35-44         19:00       0       0       0       0       1       1       0       1       1       2       2       2       3       10       20       35-44         20:00       0       0       0       0       0       0       0       0       1       1       0       1       1       2       4       2       13       25       35-44         20:00       0       0       0       0       0       0       0       0       1       1       1       5       4       1       2       16       35-44         21:00       1       0       0       0       0       0       0       0       3       1       3       3       5       21       34-43         22:00       0       0       0       0 </td <td>15:00</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>2</td> <td>0</td> <td>1</td> <td>1</td> <td>2</td> <td>4</td> <td>4</td> <td>2</td> <td>2</td> <td>8</td> <td>26</td> <td>35-44</td> <td>14</td>	15:00	0	0	0	0	2	0	1	1	2	4	4	2	2	8	26	35-44	14
18:00       0       0       0       0       0       0       0       1       2       2       2       3       10       20       35-44         19:00       0       0       0       0       0       1       1       0       1       1       2       4       2       13       25       35-44         20:00       0       0       0       0       0       0       0       1       1       5       4       1       2       16       35-44         21:00       1       0       0       0       0       0       0       0       3       2       3       1       3       3       5       21       34-43         22:00       0       0       0       0       0       0       0       3       1       2       5       4       15       35-44         23:00       0       0       0       0       0       0       0       1       1       0       1       2       5       35-44         10:01       11       8       32       40       53       69       46       23       32       34       <	16:00	0	0	0	0	0	2	0	0	0	0	5	8	5	8	28	35-44	18
19:00       0       0       0       0       1       1       0       1       1       2       4       2       13       25       35-44         20:00       0       0       0       0       0       2       0       1       1       5       4       1       2       16       35-44         21:00       1       0       0       0       0       0       0       3       2       3       1       3       3       5       21       34-43         22:00       0       0       0       0       0       0       0       0       3       1       2       5       4       15       35-44         23:00       0       0       0       0       0       0       0       0       1       1       0       1       2       5       4       15       35-44         23:00       0       0       0       0       0       0       0       1       1       0       1       2       5       35-44         Total       11       8       32       40       53       69       46       23       32 <td< td=""><td>17:00</td><td>1</td><td>0</td><td>0</td><td>0</td><td>0</td><td>1</td><td>0</td><td>0</td><td>5</td><td>1</td><td>1</td><td>2</td><td>4</td><td>15</td><td>30</td><td>35-44</td><td>10</td></td<>	17:00	1	0	0	0	0	1	0	0	5	1	1	2	4	15	30	35-44	10
20:00 0 0 0 0 0 0 0 0 2 0 1 1 5 4 1 2 16 35-44 21:00 1 0 0 0 0 0 0 0 0 0 3 2 3 1 3 3 5 21 34-43 22:00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 1 1 1 0 1 2 5 4 15 35-44 23:00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 1 1 0 1 2 5 35-44  Total 11 8 32 40 53 69 46 23 32 34 48 49 50 130 625  Percent 1.8% 1.3% 5.1% 6.4% 8.5% 11.0% 7.4% 3.7% 5.1% 5.4% 7.7% 7.8% 8.0% 20.8%  AM Peak 10:00 11:00 11:00 11:00 11:00 11:00 11:00 11:00 10:00 11:00 11:00 08:00 08:00 11:00	18:00	0	0	0	0	0	0	0	0	1	2	2	2	3	10	20	35-44	10
21:00       1       0       0       0       0       0       3       2       3       1       3       3       5       21       34-43         22:00       1       1       0       1       2       5       35-44         Total       11       8       32       40       53       69       46       23       32       34       48       49       50       130       625         Percent       1.8%       1.3%       5.1%       6.4%       8.5%       11.0%       7.4%       3.7%       5.1%       5.4%       7.7%       7.8%       8.0%       20.8%         AM Peak       10:00       11:00       11:00       11:00       11:00       11:00       11:00       10:00       10:00       11:00       11:00       08:00       08:00       08:00 <td>19:00</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>1</td> <td>1</td> <td>0</td> <td>1</td> <td>1</td> <td>2</td> <td>4</td> <td>2</td> <td>13</td> <td>25</td> <td>35-44</td> <td>10</td>	19:00	0	0	0	0	0	1	1	0	1	1	2	4	2	13	25	35-44	10
22:00       1       1       0       1       2       5       35-44         Total       11       8       32       40       53       69       46       23       32       34       48       49       50       130       625         Percent       1.8%       1.3%       5.1%       6.4%       8.5%       11.0%       7.4%       3.7%       5.1%       5.4%       7.7%       7.8%       8.0%       20.8%         AM Peak       10:00       11:00       11:00       11:00       11:00       11:00       11:00       10:00       11:00       10:00       10:00       11:00       08:00       08:00       11:00	20:00	0	0	0	0	0	0	2	0	1	1	5	4	1	2	16	35-44	12
23:00         0         0         0         0         0         0         0         0         0         0         0         0         1         1         0         1         2         5         35-44           Total         11         8         32         40         53         69         46         23         32         34         48         49         50         130         625           Percent         1.8%         1.3%         5.1%         6.4%         8.5%         11.0%         7.4%         3.7%         5.1%         5.4%         7.7%         7.8%         8.0%         20.8%           AM Peak         10:00         11:00         11:00         11:00         11:00         11:00         11:00         10:00         10:00         11:00         11:00         08:00         08:00         11:00	21:00	1	0	0	0	0	0	0	3	2	3	1	3	3	5	21	34-43	10
Total         11         8         32         40         53         69         46         23         32         34         48         49         50         130         625           Percent         1.8%         1.3%         5.1%         6.4%         8.5%         11.0%         7.4%         3.7%         5.1%         5.4%         7.7%         7.8%         8.0%         20.8%           AM Peak         10:00         11:00         11:00         11:00         11:00         11:00         11:00         11:00         11:00         11:00         08:00         08:00         08:00         11:00	22:00	0	0	0	0	0	0	0	0	0	3	1	2	5	4	15	35-44	11
Percent         1.8%         1.3%         5.1%         6.4%         8.5%         11.0%         7.4%         3.7%         5.1%         5.4%         7.7%         7.8%         8.0%         20.8%           AM Peak         10:00         11:00	23:00		0		0		0	0	0		11	1		1	2	5	35-44	3
AM Peak 10:00 11:00 11:00 11:00 11:00 11:00 11:00 10:00 11:00 11:00 11:00 11:00	Total	11	8	32	40	53	69	46	23	32	34	48	49	50	130	625		
	Percent	1.8%	1.3%	5.1%	6.4%	8.5%	11.0%	7.4%	3.7%	5.1%	5.4%	7.7%	7.8%	8.0%	20.8%			
Vol. 2 2 7 11 9 14 10 3 5 3 6 4 3 14 78		10:00	11:00	11:00	11:00	11:00	11:00	11:00	11:00	09:00	10:00	11:00	11:00	08:00	08:00			
	Vol.																	
PM Peak 12:00 13:00 12:00 14:00 13:00 14:00 12:00 12:00 12:00 13:00 16:00 14:00 17:00 14:00		12:00		12:00					12:00	14:00	12:00	13:00	16:00	14:00				
Vol. 2 2 8 10 14 17 14 5 5 5 6 8 8 15 91	Vol.	2	2	8	10	14	17	14	5	5	5	6	8	8	15	91		

# **Customer Loyalty through Client Satisfaction**

Site Code: 19120000010

Station ID:

SHAW ROAD (EAST OF SOCCER FIELD EXIT DRIVEWAY AND WEST OF FEITSMA LANE)

EB																	
Start	1	21	23	25	27	29	31	33	35	37	39	41	43	45		Pace	Number
Time	20	22	24	26	28	30	32	34	36	38	40	42	44	999	Total	Speed	in Pace
06/17/12	0	0	0	0	0	0	0	0	2	1	2	2	1	1	9	35-44	8
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	0	0	0	0	0	1	0	0	0	0	1	2	27-36	1
03:00	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	33-42	2
04:00	1	0	0	0	0	0	0	0	0	2	0	0	1	1	5	2-11	2
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
06:00	0	0	0	0	0	0	0	1	0	1	0	0	1	1	4	35-44	2
07:00	0	0	0	1	0	0	1	0	0	0	1	0	1	0	4	25-34	2
08:00	0	0	0	0	0	0	0	0	2	1	1	1	3	12	20	35-44	8
09:00	0	1	0	0	0	2	0	3	0	0	2	1	1	6	16	33-42	5
10:00	0	0	0	0	0	0	0	0	0	1	1	1	1	5	9	35-44	4
11:00	5	0	0	0	2	4	0	0	2	1	1	2	3	7	27	7-16	9
12 PM	0	0	0	0	0	2	1	0	0	0	2	3	1	10	19	35-44	6
13:00	0	1	2	7	4	3	1	0	2	3	5	0	4	2	34	23-32	16
14:00	0	0	0	0	1	1	2	1	1	2	1	3	1	12	25	35-44	8
15:00	3	0	1	1	1	0	2	0	0	2	0	2	2	9	23	6-15	6
16:00	0	0	0	1	1	0	1	0	1	0	1	1	2	8	16	35-44	5
17:00	1	0	0	0	1	1	0	1	1	0	2	3	2	9	21	35-44	6
18:00	1	0	0	0	0	0	0	1	0	2	3	1	5	9	22	35-44	8
19:00	0	0	0	0	1	0	0	1	2	0	3	7	3	8	25	35-44	15
20:00	0	0	0	0	0	0	1	0	2	4	2	0	3	3	15	35-44	11
21:00	0	0	0	0	0	0	0	0	1	6	2	1	1	5	16	35-44	11
22:00	0	0	0	0	0	0	0	0	0	1	1	0	1	1	4	35-44	3
23:00	0	0	0	0	0	1	0	0	2	11	2	1	0	2	9	33-42	6
Total	11	2	3	10	11	14	9	8	19	28	32	31	37	112	327		
Percent	3.4%	0.6%	0.9%	3.1%	3.4%	4.3%	2.8%	2.4%	5.8%	8.6%	9.8%	9.5%	11.3%	34.3%			
AM Peak	11:00	09:00		07:00	11:00	11:00	07:00	09:00	00:00	04:00	00:00	00:00	08:00	08:00	11:00		
Vol.	5	1		11	2	4	11	3	2	2	2	2	3	12	27		
PM Peak	15:00	13:00	13:00	13:00	13:00	13:00	14:00	14:00	13:00	21:00	13:00	19:00	18:00	14:00	13:00		
Vol.	3	1	2	7	4	3	2	1	2	6	5	7	5	12	34		

## 400 Columbus Avenue Valhalla, NY 10595

# **Customer Loyalty through Client Satisfaction**

Site Code: 19120000010

Station ID:

SHAW ROAD (EAST OF SOCCER FIELD EXIT DRIVEWAY AND WEST OF FEITSMA LANE)

EB																	
Start	1	21	23	25	27	29	31	33	35	37	39	41	43	45		Pace	Number
Time	20	22	24	26	28	30	32	34	36	38	40	42	44	999	Total	Speed	in Pace
06/18/12	0	0	0	0	0	0	0	0	0	0	0	1	1	1	3	35-44	2
01:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	35-44	1
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	*	*
03:00	0	0	0	0	0	0	0	0	0	0	1	1	1	0	3	35-44	3
04:00	0	0	0	0	0	0	0	0	1	0	0	2	0	0	3	34-43	3
05:00	0	0	0	0	0	1	0	1	0	0	3	1	1	5	12	35-44	5
06:00	0	0	0	0	0	0	0	0	0	1	2	1	3	9	16	35-44	7
07:00	0	0	0	0	0	0	0	2	0	4	1	2	5	7	21	35-44	12
08:00	1	0	0	0	0	1	4	2	2	6	3	3	5	4	31	35-44	16
09:00	0	0	0	0	1	0	1	0	1	3	4	2	3	8	23	35-44	13
10:00	0	0	0	0	0	0	2	0	3	4	4	3	1	3	20	35-44	15
11:00	0	0	0	0	0	0	1	1	1	1	3	3	3	10	23	35-44	11
12 PM	0	0	0	0	0	0	0	1	1	2	2	5	4	5	20	35-44	14
13:00	0	0	1	0	0	0	0	1	0	0	2	1	5	11	21	35-44	8
14:00	0	0	0	0	0	0	0	0	2	2	3	4	3	10	24	35-44	14
15:00	0	0	0	0	0	0	0	1	4	0	2	2	6	7	22	35-44	14
16:00	0	0	0	0	0	1	1	4	0	0	5	3	2	6	22	33-42	12
17:00	0	0	0	0	0	0	0	0	1	5	4	1	3	9	23	35-44	14
18:00	0	0	1	0	0	0	1	0	1	3	2	2	2	13	25	35-44	10
19:00	0	0	0	0	0	0	0	2	1	1	1	5	3	9	22	35-44	11
20:00	0	0	0	0	0	0	0	0	0	4	2	2	4	4	16	35-44	12
21:00	0	0	0	0	0	0	1	1	1	3	2	0	0	7	15	31-40	8
22:00	0	0	0	0	0	1	0	0	3	1	0	3	2	4	14	35-44	9
23:00	0	0	0	0	0	0	0	11	0	0	2	0	1	2	6	35-44	3
Total	1	0	2	0	1	4	11	17	22	40	48	47	59	135	387		
Percent	0.3%	0.0%	0.5%	0.0%	0.3%	1.0%	2.8%	4.4%	5.7%	10.3%	12.4%	12.1%	15.2%	34.9%			
AM Peak	08:00				09:00	05:00	08:00	07:00	10:00	08:00	09:00	08:00	07:00	11:00	08:00		
Vol.	1				1	1	4	2	3	6	4	3	5	10	31		
PM Peak			13:00			16:00	16:00	16:00	15:00	17:00	16:00	12:00	15:00	18:00	18:00		
Vol.			1			1	1	4	4	5	5	5	6	13	25		

400 Columbus Avenue Valhalla, NY 10595

## **Customer Loyalty through Client Satisfaction**

Site Code: 19120000010

Station ID:

SHAW ROAD (EAST OF SOCCER FIELD EXIT DRIVEWAY AND WEST OF FEITSMA LANE)

Latitude: 0' 0.0000 Undefined

EB																	
Start	1	21	23	25	27	29	31	33	35	37	39	41	43	45		Pace	Number
Time	20	22	24	26	28	30	32	34	36	38	40	42	44	999	Total	Speed	in Pace
06/19/12	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	*	*
01:00	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	31-40	1
02:00	0	0	0	0	0	0	1	0	0	0	0	1	1	0	3	35-44	2
03:00	0	0	0	0	0	0	0	0	0	0	1	0	0	2	3	31-40	1
04:00	0	0	0	0	0	0	1	0	0	1	1	0	0	2	5	31-40	3
05:00	0	0	0	0	0	0	0	0	0	1	1	1	2	5	10	35-44	5
06:00	0	0	0	0	0	1	0	0	0	0	3	2	3	6	15	35-44	8
07:00	0	0	0	0	0	0	0	1	1	3	2	3	4	4	18	35-44	13
08:00	0	0	0	0	0	2	2	1	1	5	3	5	4	8	31	35-44	18
09:00	0	0	0	1	0	1	0	1	0	0	1	2	5	10	21	35-44	8
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
15:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
16:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
17:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
18:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
21:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	0	0	0	1_	0	4	4	3	2	10	13	14	19	38	108		
Percent	0.0%	0.0%	0.0%	0.9%	0.0%	3.7%	3.7%	2.8%	1.9%	9.3%	12.0%	13.0%	17.6%	35.2%			
AM Peak				09:00		08:00	08:00	07:00	07:00	08:00	06:00	08:00	09:00	09:00	08:00		
Vol.				1		2	2	1	1	5	3	5	5	10	31		
PM Peak Vol.																	
Total	42	24	44	83	114	148	124	103	175	258	334	345	389	1054	3237		
Percent	1.3%	0.7%	1.4%	2.6%	3.5%	4.6%	3.8%	3.2%	5.4%	8.0%	10.3%	10.7%	12.0%	32.6%	0207		
1 0100110	1.070			2.070	0.070	1.070	0.070	J.2 /J	0.170	0.070	10.070	10.1 /0	12.070	02.070			

15th Percentile : 24 MPH 50th Percentile : 36 MPH

85th Percentile: 42 MPH 95th Percentile: 43 MPH

Stats 10 MPH Pace Speed: 35-44 MPH

Number in Pace : 1337 Percent in Pace : 61.2%

Number of Vehicles > 55 MPH: 0.0%
Percent of Vehicles > 55 MPH: 0.0%
Mean Speed(Average): 34 MPH

## 400 Columbus Avenue Valhalla, NY 10595

# **Customer Loyalty through Client Satisfaction**

Site Code: 19120000010

Station ID:

SHAW ROAD (EAST OF SOCCER FIELD EXIT DRIVEWAY AND WEST OF FEITSMA LANE)

WB																	
Start	1	21	23	25	27	29	31	33	35	37	39	41	43	45		Pace	Number
Time	20	22	24	26	28	30	32	34	36	38	40	42	44	999	Total	Speed	in Pace
06/11/12	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
06:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
07:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
08:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
09:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13:00	0	1	0	0	1	3	1	1	1	1	5	4	2	6	26	35-44	12
14:00	0	0	1	0	0	1	0	0	1	3	8	2	0	10	26	33-42	14
15:00	0	0	0	1	2	0	0	0	0	2	6	5	4	11	31	35-44	17
16:00	0	0	0	0	0	1	0	0	2	3	3	8	5	7	29	35-44	21
17:00	1	0	0	0	0	0	2	0	2	3	8	5	5	6	32	35-44	19
18:00	0	0	0	0	0	0	1	0	0	5	4	6	9	12	37	35-44	24
19:00	0	0	0	0	0	1	0	0	3	2	4	4	3	3	20	35-44	16
20:00	0	0	0	1	2	0	0	2	2	4	5	3	4	4	27	35-44	18
21:00	0	0	0	0	0	0	0	1	3	2	4	6	0	5	21	34-43	16
22:00	0	0	0	0	0	0	0	1	0	4	3	4	0	5	17	34-43	12
23:00	1	0	0	0	0	0	1	0	0	1	2	4	0	2	11	34-43	5_
Total	2	11	1	2	5	6	5	5	14	30	52	51	32	71	277		
Percent	0.7%	0.4%	0.4%	0.7%	1.8%	2.2%	1.8%	1.8%	5.1%	10.8%	18.8%	18.4%	11.6%	25.6%			
AM Peak																	
Vol.																	
PM Peak	17:00	13:00	14:00	15:00	15:00	13:00	17:00	20:00	19:00	18:00	14:00	16:00	18:00	18:00	18:00		
Vol.	1	1	1	1	2	3	2	2	3	5	8	8	9	12	37		

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Site Code: 19120000010

Station ID:

SHAW ROAD (EAST OF SOCCER FIELD EXIT DRIVEWAY AND WEST OF FEITSMA LANE)

Start	WB																	
06/2/12 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 2 0 2 0	Start	1	21	23	25	27	29	31	33	35	37	39	41	43	45		Pace	
06/2/12 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 2 0 2 0	Time	20	22	24	26	28	30	32	34	36	38	40	42	44	999	Total	Speed	in Pace
02:00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	06/12/12	0	0	0	0	0	0	0	0	0	2	0	2	0	2	6	33-42	4
03:00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	01:00	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	31-40	2
06:00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	02:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	33-42	1
06:00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	*	*
06:00 0 0 0 0 1 0 0 1 1 0 0 0 1 0 1 1 0 1 1 6 35-44 3 0 07:00 0 0 0 1 1 0 1 1 1 1 6 35-44 3 0 07:00 0 0 0 0 1 1 0 0 0 1 3 1 2 2 15 35-44 7 08:00 0 1 1 0 0 0 0 0 0 0 0 0 1 0 3 2 2 0 3 1 0 36-45 4 0 09:00 0 0 0 0 1 1 0 0 0 0 1 2 0 0 2 1 2 0 1 2 4 12 35-44 11 10:00 0 0 0 0 1 1 0 0 0 0 0 2 1 1 2 1 2 1 2	04:00	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	31-40	2
07:00 0 0 0 0 1 1 1 2 0 2 0 1 3 1 3 1 2 2 1 15 35-44 7 08:00 0 1 0 0 0 0 0 0 0 1 0 0 3 2 0 3 10 36-45 4 09:00 0 0 0 0 0 0 0 0 1 0 0 0 0 1 1 0 3 2 0 0 3 10 36-45 4 11:00 0 0 0 1 1 1 0 0 0 1 1 0 0 0 0 2 1 1 2 4 12 35-44 15 11:00 0 0 0 0 1 1 0 0 2 1 1 0 4 0 1 1 2 1 2 1 2 1 4 35-44 8 12:PM 0 0 0 0 0 1 1 2 0 0 0 2 1 2 3 0 6 6 17 34-43 8 13:00 0 0 0 0 0 0 0 2 1 1 0 1 3 3 2 4 0 1 1 7 21 35-44 10 15:00 0 0 0 0 0 0 0 0 0 0 0 0 1 3 3 1 1 1 5 5 5 0 9 24 34-43 14 16:00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	*	*
08:00 0 1 0 0 0 0 0 0 0 0 0 0 0 0 1 0 0 3 2 0 3 10 36-45 4 0 09:00 0 0 0 0 0 0 0 1 2 0 0 0 4 3 4 5 19 35-44 11 10:00 0 0 1 1 1 0 0 0 0 2 1 1 2 1 2 1 2 14 35-44 5 11:00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 2 1 1 2 1 2	06:00	0	0	0	1	0	0	0	1	0	1	1	0	1	1	6	35-44	
09:00 0 0 0 0 0 0 0 0 0 0 0 1 1 2 0 0 0 4 3 4 5 19 35-44 11 10:00 0 0 0 1 1 1 0 0 0 1 0 0 0 2 1 2 4 1 2 4 12 35-44 5 11:00 0 0 0 0 0 1 1 2 1 2 1 2 4 12 35-44 5 12:00 0 0 0 0 0 1 2 1 1 2 1 2 1 2 1 35-44 8 12:00 0 0 0 0 0 0 0 0 1 2 1 1 2 1 2 1 2 1 35-44 8 12:00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	07:00	0	0	0	1	1	2	0	2	0	1	3	1	2	2	15	35-44	7
10:00 0 0 0 1 1 1 0 0 0 1 0 0 1 0 0 1 0 0 0 2 1 0 2 1 0 2 4 12 35-44 5 11:00 0 0 0 0 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 1 0 0 1 0 0 1 0 1 0 0 1 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 0 1 0	08:00	0	1	0	0	0	0	0	0	1	0	3	2	0	3	10	36-45	4
11:00 0 0 0 1 1 0 2 1 0 4 0 1 2 1 2 1 2 14 35-44 8 12 PM 0 0 0 0 0 0 0 1 2 1 2 3 0 0 6 17 34-43 8 13:00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	09:00	0	0	0	0	0	0	1	2	0	0	4	3	4	5	19	35-44	11
12 PM 0 0 0 0 0 1 2 1 2 0 0 0 2 1 2 3 0 6 17 34-43 8 13:00 0 0 0 0 0 0 0 0 1 3 2 1 0 0 1 7 21 35-44 10 14:00 0 0 0 0 0 0 0 0 0 0 0 0 0 1 2 4 2 1 7 7 17 35-44 10 15:00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	10:00	0	0	1	1	0	0	1	0	0	0	2	1	2	4	12	35-44	5
13:00       0       0       0       0       2       1       0       1       3       2       4       0       1       7       21       35-44       10         14:00       0       0       0       0       0       0       0       0       1       2       4       2       1       7       17       35-44       10         15:00       0       0       0       0       0       0       0       0       0       9       24       34-43       14         16:00       0       0       0       0       0       0       0       0       0       0       9       24       34-43       14         16:00       0       0       0       0       0       0       0       0       0       9       24       34-43       14         17:00       0       0       0       0       0       0       0       2       4       4       2       11       9       33       35-44       23         18:00       0       0       0       0       0       0       0       2       3       6       11 <td< td=""><td>11:00</td><td>0</td><td>0</td><td>0</td><td>1</td><td>0</td><td>2</td><td>1</td><td>0</td><td>4</td><td>0</td><td>1</td><td>2</td><td>1</td><td>2</td><td>14</td><td>35-44</td><td>8</td></td<>	11:00	0	0	0	1	0	2	1	0	4	0	1	2	1	2	14	35-44	8
14:00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	12 PM	0	0	0	0	1	2	0	0	2	1	2	3	0	6	17	34-43	8
15:00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	13:00	0	0	0	0	2	1	0	1	3	2	4	0	1	7	21	35-44	10
16:00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	14:00	0	0	0	0	0	0	0	0	1	2	4	2	1	7	17	35-44	10
17:00       0       0       0       0       1       0       0       2       4       4       2       11       9       33       35-44       23         18:00       0       0       0       0       0       0       0       0       2       3       6       11       7       4       7       40       35-44       31         19:00       0       0       1       0       0       1       1       1       1       3       2       5       3       7       25       35-44       14         20:00       0       1       0       0       0       0       0       0       2       0       2       3       3       6       5       22       35-44       14         20:00       0	15:00	0	0	0	0	0	0	0	3	1	1	5	5	0	9	24	34-43	14
18:00       0       0       0       0       0       0       2       3       6       11       7       4       7       40       35-44       31         19:00       0       0       1       0       0       1       1       1       1       3       2       5       3       7       25       35-44       14         20:00       0       1       0       0       0       0       0       2       0       2       3       3       6       5       22       35-44       12         21:00       0<	16:00	0	0	0	0	0	0	2	2	4	0	11	6	4	7	36	35-44	25
19:00 0 0 1 0 0 0 1 1 0 0 0 1 1 1 1 1 1 3 2 1 2 4 2 4 3 4 5 19  PM Peak 20:00 19:00 0 1 1 0 0 0 0 1 1 1 1 1 1 2 1 1 2 1 1 2 4 2 4 3 4 5 19  PM Peak 20:00 19:00 1 10:00 06:00 07:00 18:00 16:00 18:00 16:00 18:00 17:00 15:00 18:00	17:00	0	0	0	0	0	1	0	0	2	4	4	2	11	9	33	35-44	23
20:00 0 1 0 0 0 0 0 0 0 0 0 0 2 0 2 0 2 3 3 3 6 5 22 35-44 12 21:00 0 0 0 0 0 0 0 0 0 2 1 1 1 2 7 2 0 0 4 19 32-41 13 22:00 0 0 0 0 0 0 0 0 0 1 0 0 0 1 0 0 1 35-44 9 23:00 0 0 0 0 0 0 0 0 0 0 0 1 0 0 1 2 1 0 0 5 35-44 4 14 15 25:00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 0 0 0 1 0 0 0 1 0	18:00	0	0	0	0	0	0	0	2	3	6	11	7	4	7	40	35-44	31
20:00 0 1 0 0 0 0 0 0 0 0 0 0 2 0 2 0 2 3 3 3 6 5 22 35-44 12 21:00 0 0 0 0 0 0 0 0 0 2 1 1 1 2 7 2 0 0 4 19 32-41 13 22:00 0 0 0 0 0 0 0 0 0 1 0 0 0 1 0 0 1 35-44 9 23:00 0 0 0 0 0 0 0 0 0 0 0 1 0 0 1 2 1 0 0 5 35-44 4 14 15 25:00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 0 0 0 1 0 0 0 1 0	19:00	0	0	1	0	0	1	1	1	1	3	2	5	3	7	25	35-44	14
22:00       0       0       0       0       0       0       1       0       2       1       1       3       2       1       11       35-44       9         23:00       0       0       0       0       0       1       0       0       1       2       1       0       5       35-44       4         Total       0       2       2       4       4       9       9       18       25       29       72       52       43       90       359         Percent       0.0%       0.6%       1.1%       1.1%       2.5%       2.5%       5.0%       7.0%       8.1%       20.1%       14.5%       12.0%       25.1%         AM Peak       08:00       10:00       06:00       07:00       09:00       07:00       11:00       00:00       09:00	20:00	0	1	0	0	0	0	0	2	0	2	3	3	6	5	22	35-44	12
23:00         0         0         0         0         0         0         0         1         0         0         1         2         1         0         5         35-44         4           Total         0         2         2         4         4         9         9         18         25         29         72         52         43         90         359           Percent         0.0%         0.6%         0.6%         1.1%         1.1%         2.5%         2.5%         5.0%         7.0%         8.1%         20.1%         14.5%         12.0%         25.1%           AM Peak         08:00         10:00         06:00         07:00         09:00         07:00         11:00         00:00         09:00	21:00	0	0	0	0	0	0	2	1	1	2	7	2	0	4	19	32-41	13
Total         0         2         2         4         4         9         9         18         25         29         72         52         43         90         359           Percent         0.0%         0.6%         0.6%         1.1%         1.1%         2.5%         2.5%         5.0%         7.0%         8.1%         20.1%         14.5%         12.0%         25.1%           AM Peak         08:00         10:00         06:00         07:00         09:00         07:00         11:00         00:00         09:00	22:00	0	0	0	0	0	0	1	0	2	1	1	3	2	1	11	35-44	9
Percent         0.0%         0.6%         0.6%         1.1%         1.1%         2.5%         2.5%         5.0%         7.0%         8.1%         20.1%         14.5%         12.0%         25.1%           AM Peak         08:00         10:00         06:00         07:00         09:00         07:00         11:00         00:00         09:00 <td></td> <td>0</td> <td></td> <td></td> <td>0</td> <td>0</td> <td></td> <td></td> <td>1</td> <td></td> <td></td> <td>11</td> <td></td> <td>1</td> <td></td> <td></td> <td>35-44</td> <td>4</td>		0			0	0			1			11		1			35-44	4
AM Peak 08:00 10:00 06:00 07:00 07:00 09:00 07:00 11:00 00:00 09:0						4										359		
Vol.         1         1         1         1         2         1         2         4         2         4         3         4         5         19           PM Peak         20:00         19:00         13:00         16:00         15:00         16:00         18:00         16:00         17:00         15:00         18:00		0.0%																
PM Peak 20:00 19:00 13:00 12:00 16:00 15:00 16:00 18:00 16:00 17:00 15:00 18:00			08:00	10:00	06:00	07:00		09:00		11:00		09:00		09:00				
			11	1	1	1		11						<u>.</u>				
Vol. 1 1 2 2 2 3 4 6 11 7 11 9 40			20:00	19:00														
	Vol.		1	1		2	2	2	3	4	6	11	7	11	9	40		

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SHAW ROAD (EAST OF SOCCER FIELD EXIT DRIVEWAY AND WEST OF FEITSMA LANE)

WB																	
Start	1	21	23	25	27	29	31	33	35	37	39	41	43	45		Pace	Number
Time	20	22	24	26	28	30	32	34	36	38	40	42	44	999	Total	Speed	in Pace
06/13/12	0	0	0	0	0	0	0	0	1	1	1	0	1	1	5	35-44	4
01:00	0	0	0	0	0	0	0	1	0	0	1	0	0	3	5	31-40	2
02:00	0	0	0	0	0	0	0	1	0	0	0	0	0	1	2	25-34	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	0	0	0	0	0	1	0	0	0	0	0	0	0	1	2	21-30	1
06:00	0	0	0	0	0	0	0	1	1	0	0	0	0	4	6	27-36	2
07:00	0	0	0	1	0	0	0	1	3	2	3	2	1	7	20	35-44	11
08:00	0	1	0	0	1	0	0	0	0	1	2	2	1	2	10	36-45	4
09:00	0	0	1	0	0	1	1	2	1	1	1	5	3	6	22	35-44	11
10:00	0	0	0	1	1	0	0	0	1	2	0	3	2	1	11	35-44	8
11:00	0	0	0	0	1	0	0	0	0	2	2	2	4	7	18	35-44	10
12 PM	0	0	0	0	1	0	1	0	1	4	2	5	3	9	26	35-44	15
13:00	0	0	0	0	0	1	0	0	0	0	1	1	3	6	12	35-44	5
14:00	0	0	0	0	0	2	0	1	1	1	4	1	1	6	17	35-44	8
15:00	0	0	0	0	0	0	2	1	4	2	8	9	5	16	47	35-44	28
16:00	2	0	0	0	1	0	0	0	1	2	7	3	5	15	36	36-45	12
17:00	0	0	0	0	2	0	1	0	1	5	8	3	4	12	36	35-44	21
18:00	0	0	0	1	0	0	0	2	6	4	7	7	3	5	35	35-44	27
19:00	2	0	0	0	0	0	0	1	4	10	7	9	5	5	43	35-44	28
20:00	0	0	0	0	0	0	0	0	2	1	5	8	1	1	18	35-44	17
21:00	0	0	0	0	0	0	0	2	2	4	5	3	3	7	26	35-44	17
22:00	0	0	0	0	0	0	0	0	0	2	1	0	3	2	8	36-45	6
23:00	0	0	0	0	0	0	0	0	0	1_	0	1_	2	1	5	35-44	4
Total	4	1	1	3	7	5	5	13	29	45	65	64	50	118	410		
Percent	1.0%	0.2%	0.2%	0.7%	1.7%	1.2%	1.2%	3.2%	7.1%	11.0%	15.9%	15.6%	12.2%	28.8%			
AM Peak		08:00	09:00	07:00	08:00	05:00	09:00	09:00	07:00	07:00	07:00	09:00	11:00	07:00	09:00		
Vol.		1	1	1	1	1	1	2	3	2	3_	5_	4	7	22		
PM Peak	16:00			18:00	17:00	14:00	15:00	18:00	18:00	19:00	15:00	15:00	15:00	15:00	15:00		
Vol.	2			1	2	2	2	2	6	10	8	9	5	16	47		

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WB																	
Start	1	21	23	25	27	29	31	33	35	37	39	41	43	45		Pace	Number
Time	20	22	24	26	28	30	32	34	36	38	40	42	44	999	Total	Speed	in Pace
06/14/12	0	0	0	0	0	0	0	0	1	0	1	1	2	3	8	35-44	5
01:00	0	0	0	0	0	0	1	0	0	0	1	1	0	1	4	31-40	2
02:00	0	0	0	0	0	0	0	0	0	0	2	0	0	1	3	31-40	2
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	27-36	1
05:00	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2	31-40	1
06:00	0	0	0	0	0	1	0	0	1	1	0	2	0	0	5	33-42	4
07:00	0	0	1	1	1	0	2	2	4	1	0	1	1	4	18	31-40	9
08:00	0	0	0	1	0	0	0	0	2	0	2	3	1	3	12	35-44	8
09:00	1	0	0	0	0	0	1	1	2	3	3	2	3	3	19	35-44	10
10:00	0	0	0	0	0	1	0	1	2	2	3	0	0	1	10	31-40	8
11:00	0	0	0	0	0	3	0	0	2	2	4	4	0	3	18	34-43	12
12 PM	0	0	1	0	0	0	0	0	0	3	4	3	5	7	23	35-44	15
13:00	0	0	0	0	0	0	0	0	1	2	0	2	5	5	15	35-44	10
14:00	2	0	0	0	1	0	1	0	2	3	2	7	5	8	31	35-44	13
15:00	1	0	1	0	1	1	1	2	1	1	4	1	5	8	27	35-44	10
16:00	1	0	0	1	0	0	0	1	2	1	7	5	3	7	28	35-44	15
17:00	1	0	0	0	0	1	1	6	12	7	8	4	6	9	55	34-43	35
18:00	1	0	0	0	0	0	0	7	4	13	9	12	9	8	63	35-44	45
19:00	1	0	0	0	0	0	2	2	5	2	4	5	4	10	35	35-44	17
20:00	0	0	0	0	0	0	0	2	5	8	5	5	3	5	33	35-44	26
21:00	0	0	0	0	0	0	0	1	2	6	6	3	3	3	24	35-44	20
22:00	1	0	0	0	0	0	0	1	0	1	2	2	3	3	13	36-45	5
23:00	0	0	0	0	0	0	1	1	2	2	1	1	11	0	9	35-44	7
Total	9	0	3	3	3	7	10	27	51	58	69	64	59	93	456		
Percent	2.0%	0.0%	0.7%	0.7%	0.7%	1.5%	2.2%	5.9%	11.2%	12.7%	15.1%	14.0%	12.9%	20.4%			
AM Peak	09:00		07:00	07:00	07:00	11:00	07:00	07:00	07:00	09:00	11:00	11:00	09:00	07:00	09:00		
Vol.	1		1	11	11	3	2	2	4	3	4	4	3	4	19		
PM Peak	14:00		12:00	16:00	14:00	15:00	19:00	18:00	17:00	18:00	18:00	18:00	18:00	19:00	18:00		
Vol.	2		1	1	1	1	2	7	12	13	9	12	9	10	63		

# **Customer Loyalty through Client Satisfaction**

Site Code: 19120000010

Station ID:

SHAW ROAD (EAST OF SOCCER FIELD EXIT DRIVEWAY AND WEST OF FEITSMA LANE)

WB																	
Start	1	21	23	25	27	29	31	33	35	37	39	41	43	45		Pace	Number
Time	20	22	24	26	28	30	32	34	36	38	40	42	44	999	Total	Speed	in Pace
06/15/12	0	0	0	0	0	0	1	1	0	2	3	0	1	0	8	32-41	7
01:00	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2	31-40	1
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	*	*
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	0	0	0	0	0	0	0	0	0	1	1	1	0	1	4	33-42	3
06:00	0	0	0	0	0	1	0	1	0	1	2	1	0	0	6	33-42	5
07:00	0	0	0	0	1	0	0	1	3	1	2	1	3	4	16	35-44	10
08:00	0	0	0	1	0	0	0	0	0	1	3	1	0	1	7	33-42	5
09:00	0	0	0	1	1	0	0	0	2	1	2	3	1	4	15	35-44	9
10:00	4	0	0	0	1	1	1	0	1	1	2	1	2	3	17	4-13	7
11:00	0	0	1	0	0	0	0	0	1	3	4	5	5	4	23	35-44	18
12 PM	0	0	0	0	1	0	0	0	0	1	1	9	6	7	25	35-44	17
13:00	0	0	1	0	0	0	0	1	1	1	4	3	2	6	19	35-44	11
14:00	0	0	0	0	0	0	0	1	0	4	4	1	4	9	23	35-44	13
15:00	1	0	0	0	0	3	0	3	0	2	2	4	9	8	32	35-44	14
16:00	2	2	0	0	0	0	1	1	2	1	7	11	4	9	40	35-44	17
17:00	0	0	0	0	0	0	0	3	7	5	10	10	6	9	50	35-44	39
18:00	0	0	0	0	1	0	1	3	2	7	19	12	13	13	71	35-44	53
19:00	1	0	1	3	0	0	2	1	8	3	5	6	2	5	37	35-44	21
20:00	1	0	0	0	0	0	1	1	2	1	5	3	3	2	19	35-44	11
21:00	0	0	0	0	0	1	2	2	2	2	3	4	2	1	19	35-44	13
22:00	0	0	0	0	1	0	1	4	1	6	4	2	0	3	22	33-42	17
23:00	1	0	1	0	0	0	1	0	0	0	0	0	1_	1	5	2-11	2
Total	10	2	4	5	6	6	11	23	32	44	84	78	64	92	461		
Percent	2.2%	0.4%	0.9%	1.1%	1.3%	1.3%	2.4%	5.0%	6.9%	9.5%	18.2%	16.9%	13.9%	20.0%			
AM Peak	10:00		11:00	08:00	07:00	06:00	00:00	00:00	07:00	11:00	11:00	11:00	11:00	07:00	11:00		
Vol.	4		1	1	1	11	11	1	3	3	4	5	5	4	23		
PM Peak	16:00	16:00	13:00	19:00	12:00	15:00	19:00	22:00	19:00	18:00	18:00	18:00	18:00	18:00	18:00		
Vol.	2	2	1	3	1	3	2	4	8	7	19	12	13	13	71		

# **Customer Loyalty through Client Satisfaction**

Site Code: 19120000010

Station ID:

SHAW ROAD (EAST OF SOCCER FIELD EXIT DRIVEWAY AND WEST OF FEITSMA LANE)

WB																	
Start	1	21	23	25	27	29	31	33	35	37	39	41	43	45		Pace	Number
Time	20	22	24	26	28	30	32	34	36	38	40	42	44	999	Total	Speed	in Pace
06/16/12	0	0	0	0	0	0	1	1	0	0	2	1	1	4	10	35-44	4
01:00	0	0	0	0	0	0	0	0	1	0	0	1	2	2	6	35-44	4
02:00	0	0	0	0	0	0	0	0	0	0	0	2	0	1	3	33-42	2
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
04:00	0	0	0	0	0	0	0	1	0	0	0	1	0	1	3	33-42	2
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
06:00	0	0	0	0	0	0	0	1	0	1	0	2	0	1	5	33-42	4
07:00	0	0	0	0	0	0	0	1	1	0	1	1	1	2	7	35-44	4
08:00	0	0	0	0	1	0	5	2	2	7	9	2	2	5	35	32-41	25
09:00	1	0	0	0	0	3	4	5	8	9	4	4	2	8	48	33-42	27
10:00	0	0	0	3	1	4	7	15	22	17	8	5	3	7	92	32-41	69
11:00	1	0	0	2	1	3	5	4	14	15	15	8	4	4	76	35-44	53
12 PM	2	0	1	1	3	2	8	4	14	12	11	12	7	2	79	35-44	50
13:00	0	0	0	1	1	2	3	2	3	2	10	6	3	6	39	35-44	24
14:00	0	0	0	0	1	0	3	2	2	1	3	2	6	4	24	35-44	14
15:00	0	0	0	0	0	2	0	0	2	2	4	5	3	8	26	35-44	16
16:00	0	0	0	0	0	1	2	2	1	4	0	8	2	15	35	35-44	15
17:00	1	0	0	0	0	1	0	0	1	0	5	4	4	15	31	35-44	11
18:00	1	1	0	0	0	0	0	0	0	1	0	1	1	12	17	14-23	2
19:00	1	0	0	0	0	0	0	0	0	1	2	0	7	8	19	35-44	7
20:00	1	0	0	0	0	0	1	1	2	5	7	1	6	2	26	35-44	18
21:00	1	0	0	0	0	0	1	4	3	3	6	2	0	3	23	33-42	14
22:00	0	0	0	0	0	0	0	3	6	1	4	1	4	4	23	35-44	17
23:00	0	0	0	0	0	1	0	1	1	1_	1	3	1	4	13	35-44	7
Total	9	1	1	7	8	19	40	49	83	82	92	72	59	118	640		
Percent	1.4%	0.2%	0.2%	1.1%	1.3%	3.0%	6.3%	7.7%	13.0%	12.8%	14.4%	11.3%	9.2%	18.4%			
AM Peak	09:00			10:00	08:00	10:00	10:00	10:00	10:00	10:00	11:00	11:00	11:00	09:00	10:00		
Vol.	1			3	1	4	7	15	22	17	15	8	4	8	92		
PM Peak	12:00	18:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00	16:00	12:00		
Vol.	2	1	1	1	3	2	8	4	14	12	11	12	7	15	79		

# **Customer Loyalty through Client Satisfaction**

Site Code: 19120000010

Station ID:

SHAW ROAD (EAST OF SOCCER FIELD EXIT DRIVEWAY AND WEST OF FEITSMA LANE)

WB																	
Start	1	21	23	25	27	29	31	33	35	37	39	41	43	45		Pace	Number
Time	20	22	24	26	28	30	32	34	36	38	40	42	44	999	Total	Speed	in Pace
06/17/12	0	0	0	0	0	1	1	0	3	4	0	0	1	1	11	30-39	9
01:00	0	0	0	0	0	1	0	1	0	1	1	0	0	1	5	29-38	3
02:00	0	0	0	0	0	0	1	0	0	2	1	1	1	0	6	35-44	5
03:00	0	0	0	0	0	0	0	0	0	1	0	0	0	2	3	29-38	1
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
05:00	0	0	1	0	0	0	0	1	0	0	0	0	0	1	3	15-24	1
06:00	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	35-44	1
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	*	*
08:00	1	0	0	0	0	0	0	0	1	0	0	1	0	5	8	5-14	2
09:00	0	0	0	0	0	0	0	0	1	1	2	1	2	3	10	35-44	7
10:00	1	0	0	0	0	0	0	0	3	2	2	3	1	3	15	34-43	8
11:00	1	0	3	2	3	2	2	1	3	5	4	9	3	7	45	35-44	21
12 PM	2	0	0	0	1	0	2	3	3	3	2	1	4	10	31	35-44	9
13:00	0	0	0	0	0	0	0	0	1	2	3	5	1	7	19	35-44	12
14:00	0	0	0	1	0	0	0	2	1	1	11	5	5	4	30	35-44	23 8
15:00	1	0	0	0	0	0	1	0	0	1	3	4	3	6	19	35-44	
16:00	0	0	1	0	1	0	1	1	1	1	3	6	3	3	21	35-44	14
17:00	0	0	0	0	0	0	1	2	1	1	1	3	1	7	17	33-42	8
18:00	0	0	0	0	1	3	0	2	2	1	5	2	2	5	23	35-44	12
19:00	1	0	0	0	0	0	1	2	2	3	4	1	2	8	24	32-41	10
20:00	0	0	0	0	0	0	0	0	4	0	5	2	2	5	18	35-44	13
21:00	0	0	0	0	0	0	0	0	4	0	3	4	4	2	17	35-44	15
22:00	0	0	0	0	0	0	0	0	1	3	1	2	1	3	11	35-44	8
23:00	0	0	0	0	0	1	0	0	0	11	2	2	2	11	9	35-44	7
Total	7	0	5	3	6	8	10	15	31	33	53	52	39	86	348		
Percent	2.0%	0.0%	1.4%	0.9%	1.7%	2.3%	2.9%	4.3%	8.9%	9.5%	15.2%	14.9%	11.2%	24.7%			
AM Peak	08:00		11:00	11:00	11:00	11:00	11:00	01:00	00:00	11:00	11:00	11:00	11:00	11:00	11:00		
Vol.	1		3	2	3	2	2	1	3	5	4	9	3	7	45		
PM Peak	12:00		16:00	14:00	12:00	18:00	12:00	12:00	20:00	12:00	14:00	16:00	14:00	12:00	12:00		
Vol.	2		1	1	1	3	2	3	4	3	11	6	5	10	31		

# **Customer Loyalty through Client Satisfaction**

Site Code: 19120000010

Station ID:

SHAW ROAD (EAST OF SOCCER FIELD EXIT DRIVEWAY AND WEST OF FEITSMA LANE)

WB																	
Start	1	21	23	25	27	29	31	33	35	37	39	41	43	45		Pace	Number
Time	20	22	24	26	28	30	32	34	36	38	40	42	44	999	Total	Speed	in Pace
06/18/12	1	0	0	0	0	0	0	0	0	0	0	1	0	1	3	9-18	1
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	*	*
02:00	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	33-42	2
03:00	0	0	0	0	0	0	1	0	0	0	0	0	1	0	2	31-40	1
04:00	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	31-40	1
05:00	0	0	0	0	0	1	0	0	0	1	1	0	0	0	3	29-38	2
06:00	0	0	0	0	0	0	0	1	1	0	1	0	1	1	5	35-44	3
07:00	0	0	0	0	0	0	0	0	3	3	0	2	3	6	17	35-44	11
08:00	0	1	0	2	0	1	2	0	0	0	1	1	0	3	11	23-32	4
09:00	0	0	0	0	1	1	1	2	0	3	6	3	3	2	22	35-44	15
10:00	1	0	0	0	1	0	2	0	2	0	0	1	0	3	10	27-36	3
11:00	0	0	0	0	0	1	2	1	1	2	2	3	3	7	22	35-44	11
12 PM	2	0	0	0	0	0	0	2	2	1	1	1	5	5	19	35-44	6
13:00	0	0	0	3	0	0	0	2	0	3	3	2	2	8	23	35-44	10
14:00	0	0	0	0	0	0	0	0	1	0	2	3	2	11	19	35-44	8
15:00	1	0	0	1	0	0	0	1	2	6	4	5	5	8	33	35-44	19
16:00	1	0	0	0	0	0	1	1	3	0	4	8	1	10	29	35-44	13
17:00	0	0	0	0	0	0	0	1	3	4	3	8	9	6	34	35-44	27
18:00	0	0	0	0	0	0	0	1	1	3	9	6	6	15	41	35-44	25
19:00	0	0	0	0	0	0	0	1	1	4	9	6	4	12	37	35-44	24
20:00	0	0	0	0	0	0	0	1	2	4	6	5	2	6	26	35-44	19
21:00	0	0	0	0	0	0	0	1	2	1	6	5	1	8	24	35-44	15
22:00	0	0	0	0	0	0	0	3	1	4	1	1	1	2	13	33-42	10
23:00	0	0	0	0	0	0	1	0	0	2	0	0	1_	11	5	31-40	3_
Total	6	1	0	6	2	4	10	18	25	41	61	62	50	115	401		
Percent	1.5%	0.2%	0.0%	1.5%	0.5%	1.0%	2.5%	4.5%	6.2%	10.2%	15.2%	15.5%	12.5%	28.7%			
AM Peak	00:00	08:00		08:00	09:00	05:00	08:00	09:00	07:00	07:00	09:00	09:00	07:00	11:00	09:00		
Vol.	1	1		2	1	1	2	2	3	3	6	3	3_	7	22		
PM Peak	12:00			13:00			16:00	22:00	16:00	15:00	18:00	16:00	17:00	18:00	18:00		
Vol.	2			3			1	3	3	6	9	8	9	15	41		

#### 400 Columbus Avenue Valhalla, NY 10595

## **Customer Loyalty through Client Satisfaction**

Site Code: 19120000010

Station ID:

SHAW ROAD (EAST OF SOCCER FIELD EXIT DRIVEWAY AND WEST OF FEITSMA LANE)

Latitude: 0' 0.0000 Undefined

Start	WB																	
Time		1	21	23	25	27	29	31	33	35	37	39	41	43	45		Pace	Number
01:00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		20	22			28		32	34	36	38	40	42	44	999	Total	Speed	in Pace
03:00 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0	06/19/12	0	0	0	0	0	0	0	0	0	2	1	0	1	1	5	35-44	4
03:00 0 0 0 1 0 0 1 0 0 0 0 0 0 0 0 0 0 0	01:00	0	0	0	0	0	0	0	0	1	0	0	1	1	0	3	35-44	3
04:00 0 0 0 0 0 0 0 1 0 0 1 0 0 0 1 0 0 0 0 1 23:32 1 0 05:00 0 0 0 0 0 0 0 1 23:32 1 0 05:00 0 0 0 0 0 0 1 0 0 0 1 0 0 0 0 1 0 0 0 0 0 0 0 1 1 0	02:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	35-44	1
06:00 0 0 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 1 0 3 0 0 0 5 31-40 4 96:00 0 0 0 0 0 1 0 0 0 0 0 1 1 1 1 1 0 0 4 35-44 3 0 7:00 0 0 0 0 1 0 0 0 0 0 0 0 0 1 1 1 1 1	03:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	17-26	1
06:00 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 1 1 1 1 1 0 4 35-44 3 0 07:00 0 0 0 1 1 0 0 0 0 2 3 2 0 0 0 0 7 15 30-39 7 0 08:00 0 1 0 1 0 1 0 0 0 0 2 0 1 1 0 3 0 3 11 34-43 4 0 9:00 0 0 0 0 0 1 2 2 2 1 0 0 3 0 0 5 14 31-40 8 1 11:00 1 0 0 0 0 1 2 2 1 1 0 0 3 0 0 5 14 31-40 8 1 11:00 1 0 0 0 0 0 0 0 1 1 2 2 2 1 1 0 0 3 0 0 5 14 31-40 8 1 11:00 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	04:00	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	23-32	1
07:00 0 0 0 0 1 0 0 1 0 0 0 0 2 3 2 0 0 0 0 7 15 30-39 7 08:00 0 1 0 1 0 1 0 0 0 0 2 0 1 0 3 0 3 11 34-43 4 09:00 0 0 0 0 0 0 1 2 2 1 0 3 0 0 0 5 14 31-40 8 10:00 1:00 1:00 1:00 1:00 1:00 1:00 1:0	05:00	0	0	0	0	0	1	0	0	1	0	3	0	0	0	5	31-40	4
08:00 0 1 0 1 0 1 0 0 0 2 0 1 0 3 0 3 11 34-43 4 0 99:00 0 0 0 0 0 0 0 1 2 2 1 0 0 3 0 0 5 14 31-40 8 1 1:00 1 1:00 1 1:00 1 1:00 1 1 1:00	06:00	0	0	0	0	1	0	0	0	0	0	1	1	1	0	4	35-44	3
09:00 0 0 0 0 0 0 0 1 2 2 2 1 0 3 0 0 5 14 31-40 8 10:00	07:00	0	0	0	1	0	0	0	2	3	2	0	0	0	7	15	30-39	7
10:00 11:00 12:PM 13:00 14:00 15:00 15:00 15:00 16:00 17:00 18:00	08:00	0	1	0	1	0	0	0	2	0	1	0	3	0	3	11	34-43	4
11:00 12 PM 13:00 14:00 14:00 15:00 16:00 17:00 17:00 17:00 17:00 18:00 19:00	09:00	0	0	0	0	0	1	2	2	1	0	3	0	0	5	14	31-40	8
11.00 12.00 14:00 15:00 15:00 16:00 17:00 18:00 19:00	10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13:00	11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13:00	12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
15:00		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
16:00	14:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
17:00	15:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
17.00  18:00	16:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19:00	17:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20:00	18:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
21:00	19:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22:00	20:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23:00	21:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total   0   1   0   3   1   2   3   6   6   5   8   5   4   16   60	22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Percent         0.0%         1.7%         0.0%         5.0%         1.7%         3.3%         5.0%         10.0%         10.0%         8.3%         13.3%         8.3%         6.7%         26.7%           AM Peak         08:00         03:00         06:00         05:00         09:00         07:00         00:00         05:00         08:00         00:00         07:00         07:00           Vol.         1         1         1         1         2         2         3         2         3         3         1         7         15           PM Peak         Vol.         Vol.         36         42         66         103         174         296         367         556         500         400         799         3412		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
AM Peak 08:00 03:00 06:00 05:00 09:00 07:00 07:00 00:00 05:00 08:00 07:0																60		
Vol.         1         1         1         1         2         2         3         2         3         3         1         7         15           PM Peak           Vol.           Total         47         9         17         36         42         66         103         174         296         367         556         500         400         799         3412	Percent	0.0%	1.7%	0.0%	5.0%	1.7%	3.3%	5.0%	10.0%	10.0%	8.3%	13.3%	8.3%	6.7%	26.7%			
PM Peak           Vol.           Total         47         9         17         36         42         66         103         174         296         367         556         500         400         799         3412			08:00		03:00	06:00	05:00			07:00				00:00	07:00			
Vol. Total 47 9 17 36 42 66 103 174 296 367 556 500 400 799 3412			1		1	1	1	2	2	3	2	3	3	1	7	15		
Total 47 9 17 36 42 66 103 174 296 367 556 500 400 799 3412																		
																3412		
Percent 1.4% 0.3% 0.5% 1.1% 1.2% 1.9% 3.0% 5.1% 8.7% 10.8% 16.3% 14.7% 11.7% 23.4%	Percent	1.4%					1.9%	3.0%	5.1%	8.7%	10.8%	16.3%	14.7%	11.7%	23.4%			

15th Percentile :29 MPH50th Percentile :38 MPH85th Percentile :42 MPH95th Percentile :43 MPH

Stats 10 MPH Pace Speed: 35-44 MPH

 Number in Pace :
 1962

 Percent in Pace :
 75.1%

 Number of Vehicles > 55 MPH :
 0

 Percent of Vehicles > 55 MPH :
 0.0%

 Mean Speed(Average) :
 36 MPH