Montgomery Planning

STONEGATE ELEMENTARY SCHOOL

MANDATORY REFFERAL NO. MR2021035

Description

Proposed new elementary school, approximately 84,130 SF building, play areas and associated infrastructure to replace existing school on a 10.26-acre property; located at 14811 Notley Road, approximately 15 feet east of Fieldstone Road in Silver Spring, MD

NO. MR2021035

COMPLETED: 12-03-2021

MCPB
Item No. 8
December 16, 2021

2425 Reedie Drive
Floor 14
Wheaton, MD 20902

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LOCATION:

14811 Notley Rd

Silver Spring, MD 20905

MASTER PLAN & ZONE

1997 Cloverly Master Plan

R-200 Zone

PROPERTY SIZE

10.26 Acres

APPLICATION

Stonegate Elementary School Mandatory Referral

ACCEPTANCE DATE:

July 7, 2021

REVIEW BASIS:

20-301 et seq. of the Land Use Article

Summary

- This is a continuation of MCPB #5 MR2021035 Stonegate Elementary School that was deferred on September 15, 2021.
- Staff recommends Approval of the Mandatory Referral with recommendations.
- There are two items for Planning Board review for this project: The Final Forest Conservation Plan and the Mandatory Referral.
- This memorandum covers Staff review and recommendations for the Mandatory Referral. The review and recommendations for the Final Forest Conservation Plan are covered in a separate memorandum.

RECOMMENDATIONS

1. Construct a 10-foot-wide sidepath along the property frontage of Notley Road per the 2018 Bicycle Master Plan.

2. Construct 8-foot-wide internal sidewalks that loops around the bus and passenger vehicle drop off loops.

3. Provide ADA complaint ramps and 5-foot-wide sidewalks to allow access to the internal school amenities, play areas and fields.

4. Plant additional trees above what is shown on the plans to provide additional shade along all edges of the drop-off loops and walks leading to the school.

SECTION I

INTRODUCTION

Site Description

The Stonegate Elementary School site consists of 10.26 acres, Parcels C and D (identified in Deeds recorded at B. 3612 P. 689 and B. 4022 P. 421) respectively, located at 14811 Notley Road, Silver Spring ("Site") and zoned R-200. The Site is bounded to the north and south by residential development, to the west by Notley Road, and to the east by Montgomery Park property. A stream valley buffer for Rolling Stone Tributary (a tributary of Northwest Branch) exists on the south and east sides of the site. There is 0.92 acres of forest onsite along the east and southeast portions of the Site. Additionally, individual trees ring the existing school use. The Site is within the boundaries of the 1997 *Cloverly Master Plan*.

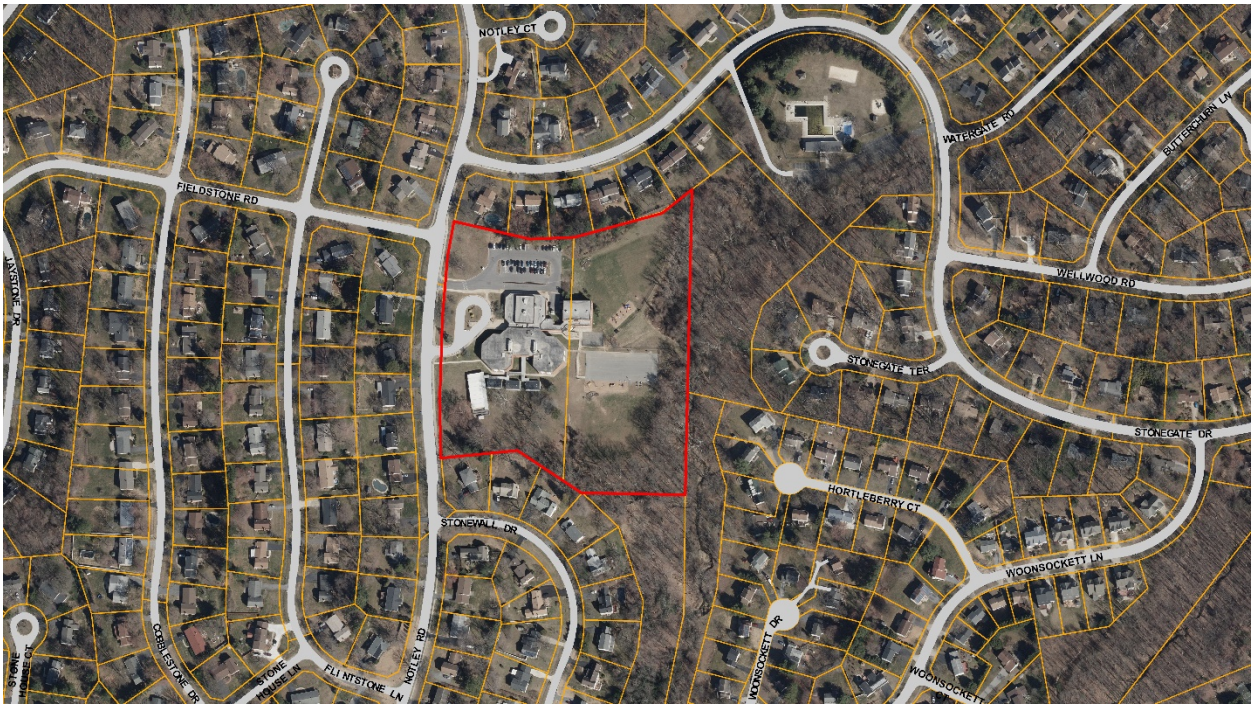


Figure 1: Aerial Photograph of the Vicinity

Figure 2: Aerial Photograph of the Site

Project Description

Montgomery County Public Schools ("Applicant") is proposing to raze the existing school and replace it with a newly constructed Stonegate Elementary School. The project is proposed to be completed in July of 2023. The school will provide program spaces for Pre-Kindergarten, Kindergarten, and Grades 1 through 5 when completed.

The proposed site plan situates the new building near the northern center of the Site. The parking, bus loop and student drop-off loop are located on the western side of the Site along Notley Road, and the ballfields and play areas are located on the southeastern portion of the site.

The existing school, temporary classrooms, play areas and associated infrastructure are planned to be removed and replaced by a new building, play areas and associated infrastructure. The foundation of the existing gymnasium wing will remain and continue to be used for the new building. The new 3-story building includes approximately 84,130 square feet of gross floor area. The existing parking lot situated to the side of the property is proposed to be relocated along the frontage of Notley Road.

The new school will increase the program capacity of the school and will provide an enhanced learning environment for the students. The existing school has an enrollment of 501 students with the proposed expansion to 740 students, an increase of 239 students.

The plans include two drop off and parking loops that connect to Notley Road. The north loop will be used for school bus drop off and faculty parking and the south loop will be used for student drop off and additional faculty and visitor parking. ADA compliant paths will be provided to the building and the various play areas from

the drop off loops and parking areas. In addition, concrete sidewalk connections will be installed to provide access to the sidewalks next to Notley Road.

Stormwater management requirements for the project will be met with the installation of micro-bioretention facilities and bio swales that were chosen due to their ability to conform to existing Site features. These practices will be concentrated around vehicular impervious areas whenever possible but will also be used to manage runoff from the building rooftop and play areas.

SECTION II

DESIGN

Site Design

The Planning Board considered the application on September 15, 2021, and the project was deferred to allow for additional collaboration between MCPS and Staff on site design and the Forest Conservation Variance request. MCPS acknowledges the Planning Department's position on site design; however, due to time and budget constraints on this particular project, MCPS is not able to make significant changes to the site design. In an effort to acknowledge the Planning Department's concerns, MCPS has worked with Staff to make changes that enhance this project but still allow it to be completed on time.

While still not an ideal layout with parking, bus loops and vehicular circulation between the school and street, the updated proposal slightly improves pedestrian access and connectivity. The primary pedestrian walk from the sidewalk on Notley Road to the main school entrance, which runs between the bus and parent drop-offs, has been widened. Planting strips with additional street trees along both sides of the walk provide shade and serve as a protected buffer between pedestrians and motorists in the drop-off area.

There are two additional walks leading to the new school on the northwest and southwest corners of the site. The walk and staircase on the northwest corner of the school site has been moved slightly so that it leads directly to the plaza in front of the school rather than along the perimeter of the bus loop. The plaza has also been widened slightly to provide additional gathering space near the school entrance. The walk on the southwest portion of the site, along the edge of the parent drop-off, was not a concern in either submission and has not been modified.

Staff recommends that additional trees be planted to provide additional shade along all edges of the drop-off loops and walks leading to the school.

Figure 3: Original Proposed Site Layout

Figure 4: Revised Proposed Site Layout

Building Design

The building design, sustainability, landscape and lighting are generally sufficient.

Sections and Elevations

The proposed building exterior features a contrasting stone veneer pattern that articulates and reduces the apparent massing and identifies the functional spaces of the interior. Well-placed window openings establish the façade rhythm and bringing natural lighting into the internal circulation areas.

Figure 5: Front Elevation (west)

Figure 6: Side Elevation (south)

Sustainability

The project will be designed and constructed with an emphasis on the environmental sustainability. The architecture and engineering systems will align with Montgomery County Public Schools facility management sustainability principles to ensure long term operational effectiveness. The project will comply with the Montgomery County Amendments to the International Green Construction Code (IgCC). The school will be designed and constructed to meet requirements of the Maryland High Performance Building Program by conforming with Green Globes certification.

Key features related to the sustainability include the following:

- Encouraging alternative transportation to the new facility by providing bike racks.
- Managing stormwater to reduce surface runoff quantity and improve quality.

- Using highly reflective roof surfaces to reduce heat gain in the building.
- Installing water conserving and low flow plumbing fixtures in the new addition.
- Optimizing the energy performance of the building by providing a highly energy efficient building envelope, lighting system, and heating, ventilation, and air conditioning systems (HVAC).
- Optimizing equipment selection, installation, and operation of new HVAC equipment through commissioning of the energy systems.
- Adhering to construction indoor air quality management plans and using low emitting building materials to safeguard occupant health.
- Providing a high level of occupant control over individual lighting and thermal comfort to promote an enhanced indoor environment in the new building.
- Using construction materials that are recycled and regionally manufactured for the new addition.
- Maximizing daylight in classrooms.
- Minimizing background noise level from HVAC systems in classrooms and control reverberation time with sufficient sound absorption materials.

Landscape and Lighting

The submitted Landscape Plan (Attachment D) proposes tree and ornamental shrub plantings throughout the Site, ornamental trees bounding the stormwater filtration areas, and foundation planting along the building facade. Shade trees and ornamental trees are proposed for the surface parking areas. The lighting plan proposes a mixture of lighting types including fixtures on poles and various wall mounted lighting. The lighting plan shows no light spill at the Site boundaries; however, it is recommended that any lighting fixtures near the right-of-way at the entrance be equipped with cut-off shields to limit spill beyond the Site boundaries.

Operating Hours

The school's hours of operation vary and comply with the standard MCPS school schedule. The school also has a year-round program and is operated throughout the summer as well as the general school year. On typical school days, the hours of operation are 8:50 am to 3:05pm.

Parking

Staff and visitor parking along with a student drop-off loop will be accessed from Notley Road along the west side of the Site and will provide access to the main entrance of the building. The proposed site design provides on-site staging areas for buses, 91 parking spaces, and on-site student drop-off queuing. There are no standard parking rates for elementary schools and final determination of parking adequacy is at the discretion of MCPS. The proposed parking, while adequate for faculty and staff, may cause limited visitor parking.

SECTION III

ANALYSIS

Neighborhood Compatibility

The Site is currently occupied and being used as the existing Stonegate Elementary School. While the placement of the building is not desirable, with the parking, bus loops and vehicular circulation located between the building and the street, the character of the proposed building will create an attractive school building for the community and the building is architecturally compatible with the surrounding neighborhood.

Master Plan Conformance

The subject Property is located within the Suburban Communities region of the 1997 *Cloverly Master Plan* ("Master Plan") area. The Suburban Communities region is located west of New Hampshire and south of Norwood Road.

"Provide for attractive land uses that encourage opportunity for social interaction and promote community identity" (p. 8 of Master Plan).

> The land use is not changing, it is remaining an Elementary School and the updated Site Layout provided by MCPS has improved connectivity and pedestrian safety. These changes help promote social interaction and community identity.

"Protect headwater streams in the Northwest Branch by assuring that ultimate subwatershed imperviousness remains within the 10 to 15 percent range that the generally acceptable limit for protection of coldwater stream systems in Maryland and by discouraging individual developments with high site-imperviousness" (p.84 of Master Plan).

> The proposed project is currently at 27% imperviousness and while it is over the 10-15% recommendation for the Site, the region itself is still within that range. Additionally, this is an existing school site which is being demolished and being replaced with a comparable use and imperviousness so the net effect on the watershed is below the recommendations of the Master Plan.

Transportation Analysis

Master-Planned Roadway and Bikeways

According to the 1997 Cloverly Master Plan and the 2018 Master Plan of Highways and Transitways, Notley Road is designated as a two-lane Primary Residential street with a 70-foot-wide right-of-way (ROW). Per Plat No. 8045, recorded in 1965, the right-of-way along Notley Road is 80-feet, so the Applicant is not proposing any additional dedication of right-of-way.

MCPS has committed to constructing the required 10-foot-wide sidepath along the property frontage of Notley Road per the 2018 Bicycle Master Plan.

Access, Circulation and Parking

Vehicular access to the site is proposed via two one-way loop driveways off of Notley Road. The bus loop will be located separately on the northwest side of the building, adjacent to the main entrance to the school. The northwestern loop will accommodate busses for pickup and drop off operations and faculty parking. The southwestern loop will accommodate passenger vehicles for additional staff and visitor parking as well as parent pick-up and drop-off operations. The proposed circulation and parking do not support the public realm and the proposed bicycle infrastructure it has to offer. The proposed configuration of the school site also does not define the streets as well as provide a sense of safety and urban design appeal to the public. See Figure 7, Access Circulation.

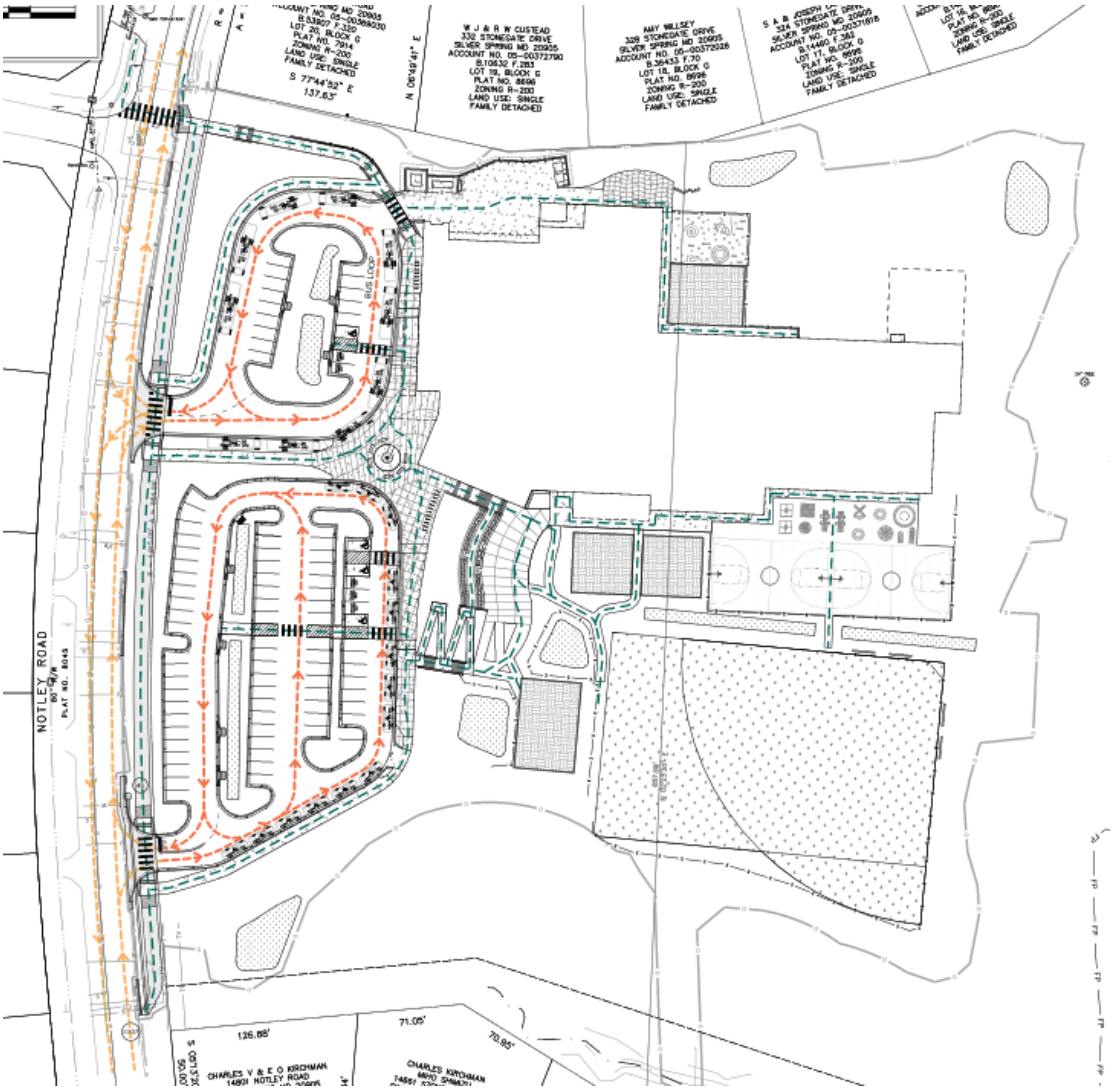


Figure 7: Access Circulation

Pedestrian and Bicycle Facilities

The school site will provide a 10-foot-wide sidepath along the property frontage of Notley Road that will connect to the proposed 8-foot-wide internal sidewalks that loops around the bus and passenger vehicle drop off loops. The school is proposing to provide 12 short-term bicycle racks in the front of the building.

Internal to the proposed site, pedestrian circulation is adequate and efficient. ADA complaint ramps and 5-foot-wide sidewalks will be provided to allow access to the internal school amenities, play areas and fields. The prominent location of the parking lots and bus loop provides an auto-centric layout causing an unsafe environment for pedestrians and rollers upon entering the proposed school site. For future applications, MCPS is expected to provide a layout that places schools closer to the street front to maximize bicycle and pedestrian connections and safety as well as better integrate the school as part of the neighborhood, rather than setback behind pavement, parking lots and bus loops. See Figure 7, Access Circulation.

Local Area Transportation Review

The existing school has an enrollment of 501 students with the proposed expansion to 740 students, an increase of 239 students. The increase of 239 students is predicted to generate 211 AM peak hour person trips and 54 PM peak hour person trips. As the Application generates more than 50 peak-hour person trips, a full traffic study was required to satisfy the LATR Mandatory Referral guidelines. The study followed the 2016-2020 Subdivision Staging Policy (SSP) and related Local Area Transportation Review Guidelines. Since the existing Stonegate Elementary School was closed due to COVID-19 restrictions, driveway counts and site-specific trip generation rates were not possible. Therefore, the trip generation rates found in the Institute of Transportation Engineer's (ITE) 10th edition were used to generate trips for the full 740 student core capacity for the proposed expansion as shown in Table 1, Trip Generation.

Use	**No. of Students**	**AM Peak Hour**			**PM Peak Hour**		
		In	**Out**	**Total**	**In**	**Out**	**Total**
Existing Elementary School (ITE 520)	501 students	181	155	**336**	39	46	**85**
Proposed Elementary School (ITE 520)	239 students	86	74	**160**	20	21	**41**
Total Students	740 students	267	229	**496**	59	67	**126**
Net New Vehicle Trips				**(176)**			**(44)**
Total Net New Peak Hour Person Trips				211			54

Table 1: Trip Generation Table

The Traffic Study was submitted on January 29, 2021 and revised on April 8, 2021. The traffic study analyzed the following intersections to determine if they met LATR congestion standards:

5. Bonifant Road at Pebblestone Drive
6. Bonifant Road at Notley Road West
7. Bonifant Road at Notley Road East
8. MD 650 at Stonegate Drive
9. MD 650 at Bonifant Road

The LATR test for the Cloverly Policy Area uses the Critical Lane Volume (CLV) congestion standard of 1450. All intersections are located in the Cloverly Policy Area. All operate below congestion standards and no improvements are necessary at this time as shown in Table 2, Critical Intersection Capacity Analysis.

Intersection	Traffic Conditions			
	Existing		Total Future	
	AM	PM	AM	PM
Cloverly Policy Area (CLV 1,450)				
Bonifant Road at Pebblestone Drive	432	559	501	577
Bonifant Road at Notley Road West	390	593	594	648
Bonifant Road at Notley Road East	401	576	458	593
MD 650 at Stonegate Drive	464	651	473	621
MD 650 at Bonifant Road	684	854	708	860

Table 2: Critical Intersection Capacity Analysis

There are no planned developments identified in the general vicinity of the site.

A Signal warrant analysis was performed at two intersections: the intersection of Bonifant Road and Notley Road West and the intersection of New Hampshire Ave (MD 650) and Stonegate Drive/Windridge Acres Court. Staff recommends that these locations be re-evaluated at a later date when schools reopen to full capacity and traffic volumes return to pre-pandemic levels.

ENVIRONMENT

Environmental Guidelines

A Natural Resources Inventory and Forest Stand Delineation (NRI/FSD) #420211510 was approved by Staff on March 12, 2021. The Site is within the Northwest Branch watershed, a Use IV designation. The Site contains 0.92

acres of forest, Stream Valley Buffer (SVB), and 100-year Floodplain. See the Forest Conservation staff report (Part A) for a complete analysis.

Forest Conservation

The Application meets the requirements of Chapter 22A of the Montgomery County Forest Conservation Law. See the Forest Conservation staff report (Part A) for a complete analysis.

Community Outreach and Notification

Representatives from Montgomery County Public Schools held public meetings virtually via videoconference to discuss the impact of the project with the surrounding community.

Conclusion

Based on information provided by the Applicant and the analysis contained in this report, Staff concludes that although the parking between the school and the street is not ideal, the updated proposal for Stonegate Elementary School improves site design and connectivity compared to the original proposal.

Staff recommends approval with recommendations of the Mandatory Referral and recommends this be transmitted to the Montgomery County Public Schools.

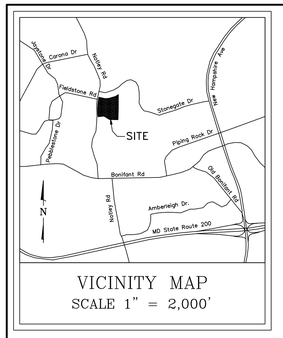
Attachments:

1. Proposed Site Plans

2. Traffic Study

3. Elevations

4. Landscape and Lighting plans



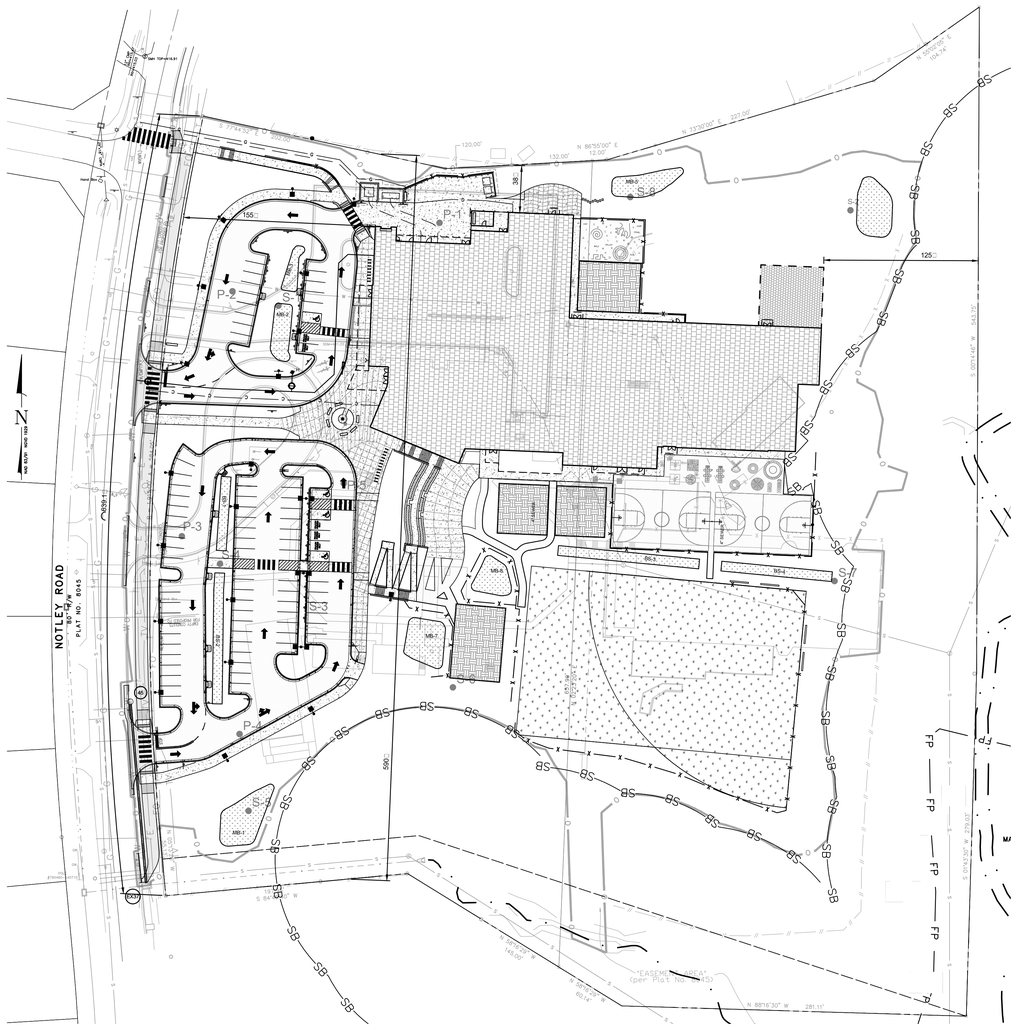
VICINITY MAP
SCALE 1" = 2,000'

SHEET INDEX

C0.01 COVER SHEET
C0.03 □IRE APPARATUS ACCESS PLAN
C0.11 CIRCULATION PLAN
C1.01 BOUNDARY & TOPOGRAPHIC SURVEY
C1.11 SITE DEMOLITION PLAN
C2.01 SITE PLAN
C2.02 GRADING PLAN
C2.03 DIMENSIONAL PLAN
C2.04 SIGNAGE AND STRIPING PLAN
C2.11 DETAILS
C2.12 DETAILS
C2.13 DETAILS
C2.14 SIGNAGE AND STRIPING DETAILS
C2.15 SITE ENLARGEMENTS
C2.21 - NOTLEY ROAD STAIR STADIUM SEATS AND WALL STRUCTURAL DETAILS
C2.22 - MAIN ENTRANCE TO PLAY AREAS STAIR STRUCTURAL DETAILS
C2.23 - PARKING TO PLAY AREAS STAIR STRUCTURAL DETAILS
C3.01 SESC DEMO PLAN COVER SHEET
C3.02 SESC DEMO PLAN
C3.03 SESC DEMO PLAN TRAP COMPS AND PRO□ILES
C3.04 SESC DEMO PLAN SESC DETAILS
C3.11 □INAL SESC AND SWM PLAN SESC COVER SHEET
C3.12 □INAL SESC AND SWM PLAN - SESC PLAN SHEET
C3.13 □INAL SESC AND SWM PLAN - TRAP COMPS & PRO□ILES
C3.14 □INAL SESC AND SWM PLAN - SESC DETAILS
C4.01 □INAL SESC AND SWM PLAN - DAM & IMPERVIOUS EXHIBIT
C4.02 □INAL SESC AND SWM PLAN - DETAILED PLAN VIEW
C4.03 □INAL SESC AND SWM PLAN - DETAILED PLAN VIEW
C4.04 □INAL SESC AND SWM PLAN - DETAILED PLAN VIEW
C4.05 □INAL SESC AND SWM PLAN - MB STANDARDS AND NOTES
C4.06 - □INAL SESC AND SWM PLAN - SD & PRO□ILES
C4.07 - □INAL SESC AND SWM PLAN - SD SCHEDULES & PRO□ILES
C4.08 - SWM PLANTING PLAN - DETAILED PLAN VIEW
C4.09 - SWM PLANTING - DETAILED PLAN VIEW
C4.10 - SWM PLANTING DETAILS AND NOTES
C5.01 SITE UTILITY PLAN
C5.02 SITE UTILITY PRO□ILES
C5.03 SITE UTILITY SEDIMENT CONTROL DETAILS
C6.01 PUBLIC ROW STORM DRAIN AND PAVING
C6.02 PUBLIC ROW STORM DRAIN AND PAVING
C6.03 PUBLIC ROW STORM DRAIN AND PAVING
C6.04 PUBLIC ROW STORM DRAIN AND PAVING
C7.01 TEMPORARY TRA□□IC CONTROL PLAN
C7.02 TEMPORARY TRA□□IC CONTROL PLAN
C7.03 TEMPORARY TRA□□IC CONTROL PLAN
C7.04 TEMPORARY TRA□□IC CONTROL PLAN
L2.01 LANDSCAPE PLAN
L2.02 LANDSCAPE ART PATIO ENLARGEMENT
L2.03 LANDSCAPE STADIUM SEATING ENLARGEMENT
L2.04 LANDSCAPE MAIN ENTRANCE ENLARGEMENT
L2.05 LANDSCAPE NOTES
L2.06 LANDSCAPE DETAILS

CONSTRUCTION NOTES

1. CALL "MISS UTILITY" ("ONE CALL" AT 811 OR 1-800-257-7777) TWO FULL BUSINESS DAYS PRIOR TO BEGINNING ANY CONSTRUCTION. HOMEOWNERS & REGISTERED EXCAVATORS MAY FILE REQUESTS ONLINE AT http://www.missutility.net
2. SHOULD THE CONTRACTOR DISCOVER DISCREPANCIES BETWEEN THE PLANS AND FIELD CONDITIONS, THIS OFFICE IS TO BE NOTIFIED IMMEDIATELY TO RESOLVE THE SITUATION. SHOULD THE CONTRACTOR MAKE FIELD CORRECTIONS OR ADJUSTMENTS WITHOUT NOTIFYING THE ENGINEER, THEN THE CONTRACTOR ASSUMES ALL RESPONSIBILITY FOR THOSE CHANGES.
3. ASPHALT PAVING AND CONCRETE FOR CURB, WALKS AND RAMPS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MARYLAND STATE HIGHWAY ADMINISTRATION (MSHA) SPECIFICATIONS.
4. CURB & GUTTER SHALL BE MONTGOMERY COUNTY DEPARTMENT OF PUBLIC WORKS & TRANSPORTATION (MCDPW&T), STANDARD 100.01 UNLESS OTHERWISE INDICATED ON THE PLANS.
5. WHEN TYING INTO EXISTING PAVING, SAW CUT PAVING EDGE TO PROVIDE A CLEAN, STRAIGHT AND VERTICAL JOINT. WHEN REMOVING EXISTING CURB OR SIDEWALK, REMOVE TO THE NEAREST JOINT.
6. STORM DRAIN SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST EDITION OF THE MONTGOMERY COUNTY ROAD CODE AND THE MARYLAND STATE HIGHWAY ADMINISTRATION (SHA) SPECIFICATIONS.
7. ALL EXPOSED METAL SURFACES ASSOCIATED WITH STORM, SEWER, WATER OR OTHER UTILITY APPURTENANCES (I.E. INLETS, GRATES, MANHOLE COVERS, ETC.) SHALL BE HOT DIPPED GALVANIZED.
8. ALL PIPES ARE TO HAVE MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION CLASS "C" BEDDING, UNLESS OTHERWISE NOTED.
9. WHERE ANY PART OF THE STORM DRAIN SYSTEM IS LOCATED IN A FILL SECTION, PROVIDE SELECT FILL MATERIAL COMPACTED TO 95% AASHTO T-99 DENSITY FROM APPROVED SUB-GRADE TO THE STRUCTURE BOTTOM SLAB AND/OR PIPE BEDDING.
10. FINISHED GRADES REFER TO THE TOP OF SOD, TOPSOIL, PAVEMENT OR WALKS. ALLOW FOR THICKNESS AS APPLICABLE WHEN GRADING.
11. SLOPE SMOOTHLY BETWEEN INDICATED ELEVATIONS TO PROVIDE POSITIVE DRAINAGE OF ALL AREAS GRADED OR DISTURBED BY THIS CONSTRUCTION. MAXIMUM SLOPE ON EARTH BANKS SHALL BE NO GREATER THAN 3:1.
12. ACCESSIBLE PARKING, HANDRAILS AND RAILINGS FOR DISABLED SHALL CONFORM TO THE "AMERICAN'S WITH DISABILITIES ACT", (ADA) REQUIREMENTS.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ARRANGING AND DOCUMENTING ALL REQUIRED INSPECTIONS AND CONSTRUCTION APPROVALS.
14. REFER TO SPECIFICATION SECTION 023200 FOR GRADING UNDERCUT AND SETTLEMENT PLATE REQUIREMENTS.
15. ANY SIDEWALK, RAMP OR PARKING AREA NOT CONSTRUCTED IN ACCORDANCE WITH THE CURRENT ADA REGULATIONS AND REQUIREMENTS OF THESE PLANS SHALL BE REMOVED AND RECONSTRUCTED AT THE CONTRACTOR'S EXPENSE.
16. ALL CURB RADII ARE DIMENSIONED AT FACE OF CURB UNLESS OTHERWISE NOTED.
17. ALL ON-SITE CURB & GUTTER SHALL 6" STANDARD EXCEPT WHERE OTHERWISE NOTED.
18. PROPOSED SITE LIGHTING, ELECTRIC, COMMUNICATION, & GAS WORK IS SHOWN FOR INFORMATIONAL PURPOSES ONLY. REFER TO MECHANICAL, ELECTRICAL & PLUMBING PLANS. CONTRACTOR RESPONSIBLE FOR COORDINATING NEW WORK WITH UTILITY COMPANIES TO AVOID EXISTING AND PROPOSED UTILITIES AT POINT(S) OF CROSSING.
19. REFER TO ARCHITECTURAL DRAWINGS FOR ALL BUILDING DIMENSIONS.



GRAPHIC SCALE
(IN FEET)
1 inch = 30 ft.
30 0 15 30 60

N

MD-NAD83 NSRS 1983

COLE LIVING TRUST
14825 NOTLEY ROAD
SILVER SPRING MD 20905
ACCOUNT NO. 05-00369030
B.53907 F.320
LOT 20, BLOCK G
PLAT NO. 7914
ZONING R-200
LAND USE: SINGLE FAMILY DETACHED

W J & R W CUSTEAD
332 STONEGATE DRIVE
SILVER SPRING MD 20905
ACCOUNT NO. 05-00372790
B.10632 F.283
LOT 19, BLOCK G
PLAT NO. 8696
ZONING R-200
LAND USE: SINGLE FAMILY DETACHED

AMY WILLSEY
328 STONEGATE DRIVE
SILVER SPRING MD 20905
ACCOUNT NO. 05-00372026
B.36433 F.70
LOT 18, BLOCK G
PLAT NO. 8696
ZONING R-200
LAND USE: SINGLE FAMILY DETACHED

S A & JOSEPH LANCON JR.
324 STONEGATE DRIVE
SILVER SPRING MD 20905
ACCOUNT NO. 05-00371818
B.14460 F.382
LOT 17, BLOCK G
PLAT NO. 8696
ZONING R-200
LAND USE: SINGLE FAMILY DETACHED

MICHAEL D & D G FITZGERALD
320 STONEGATE DRIVE
SILVER SPRING MD 20905
ACCOUNT NO. 05-00368434
B.14322 F.181
LOT 16, BLOCK G
PLAT NO. 8696
ZONING R-200
LAND USE: SINGLE FAMILY DETACHED

NOTLEY ROAD
80' R/W
PLAT NO. 8045

CHARLES V & E O KIRCHMAN
14801 NOTLEY ROAD
SILVER SPRING MD 20905
ACCOUNT NO. 05-00368228
B.4612 F.602
LOT 21, BLOCK G
PLAT NO. 7913
ZONING R-200
LAND USE: SINGLE FAMILY DETACHED

CHARLES KIRCHMAN
MIHO SHIMIZU
14661 STONEWALL DRIVE
SILVER SPRING MD 20905
ACCOUNT NO. 05-00369063
B.56413 F.498
LOT 22, BLOCK G
PLAT NO. 7913
ZONING R-200
LAND USE: SINGLE FAMILY DETACHED

CHRISTOPHER J & LINDA M MORRIS
14657 STONEWALL DRIVE
SILVER SPRING MD 20905
ACCOUNT NO. 05-00371432
B.38030 F.136
LOT 23, BLOCK G
PLAT NO.
ZONING R-200
LAND USE:

MARYLAND NATIONAL PARK & PLANNING COMMISSION
8787 GEORGIA AVENUE
SILVER SPRING MD 20910
ACCOUNT NO. 05-00369861
B.4611 F.186
PARCEL F, BLOCK F
PLAT NO. 9149
ZONING R-200
LAND USE: VACANT

MARYLAND NATIONAL PARK & PLANNING COMMISSION
8787 GEORGIA AVENUE
SILVER SPRING MD 20910
05-01896015
B.5536 F.723
PARCEL B, BLOCK A
PLAT NO. 12428
ZONING R-200
LAND USE: VACANT

"EASEMENT AREA" (per Plat No. 8045)

CROSS WALK AND RAMPS. SEE ROW PLANS
CONCRETE SIDEWALK PER 3/C2.11
GENERATOR SEE MEP
TRANSFORMER SEE MEP
CITYSCAPES' CORVIT SCREENING FENCE SEE 4/C2.15
CONCRETE PAVING PER 6/C2.11, 8/C2.11
UTILITY BOLLARDS (47) SEE 4/C2.13
WALL SEE 4/C2.15
DUMPSTER ENCLOSURE
ENCLOSURES SEE ARCH
ART PLAZA (~22 X 46) PER 6/C2.11
8' WIDE CONCRETE STAIRS AND RAMP SEE 3/C2.15
MICRO-BIORETENTION FACILITY (TYP). SEE SWM PLANS
6" CURB & GUTTER PER 1/C2.11 (TYP)
10 FT BIKE PATH. SEE ROW PLANS
ASPHALT PER 4/C2.11 (TYP)
ADA RAMPS AND CROSSWALK SEE 2/C.15
LOADING AREA
TRASH ROOM-SEE ARCH
ASPHALT ENCLOSED PLAY AREA (35 X 50) PER 5/C2.11
4' CHAIN LINK FENCE PER 4/C2.12
6' ORNAMENTAL SAFETY FENCE PER 6/C2.12
6' CONCRETE SIDEWALK PER 3/C2.11 (TYP)
ENCLOSED SOFT PLAY AREA (40 X 50)
CONCRETE WALL SEE ARCH
FUTURE ADDITION OPTION
MICRO-BIORETENTION FACILITY (TYP)
STREAM VALLEY BUFFER
24" TREE
STONEGATE ELEMENTARY SCHOOL NEW BUILDING
CANOPY (TYP)- SEE ARCH
FLAG POLE SEE 1/C2.13
9.5' WIDE CONCRETE STAIRS. SEE 1/C2.15
EXTERIOR LEARNING PLAZA
6' CONCRETE SIDEWALK PER 3/C2.11 (TYP)
ASPHALT PAVED PLAY AREA (97X28') PER 5/C2.11
ASPHALT PAVED BASKETBALL COURTS PER 5/C2.11
SOFT PLAY AREA (40 X60)
SOFT PLAY AREA (40 X60)
ADA RESTING AREA (TYP) SEE 1/C2.15
STADIUM SEATING ADD ALTERNATE 1. BASS BID SLOPED LAWN. SEE 1/C2.15
5' ADA PATH
DROP OFF ZONE BOLLARDS (13) SEE 5/C2.13
5' WIDE ADA ACCESS RAMP AND RAILINGS. SEE 1/C2.15
7' WIDE CONCRETE STAIRS. SEE 1/C2.15
ASPHALT PATH PER 5/C2.11
PLAY EQUIPMENT (40 X 60)
4' CHAIN LINK FENCE PER 4/C2.12
6' WIDE ASPHALT ADA ACCESSIBLE FIELD ACCESS PATH. PER 5/C2.11
MULTI PURPOSE GRASS TURF FIELD
10' CHAIN LINK FENCE PER 5/C2.12
BIO-SWALE (TYP)
LIMIT OF DISTURBANCE (TYP)
STUDENT DROP OFF AND PARKING LOOP
CROSS WALK AND RAMPS. SEE ROW PLANS
ASPHALT PER 4/C2.11 (TYP)
8' CONCRETE SIDEWALK PER 3/C2.11 (TYP)
BUS AND FACULTY PARKING LOOP
6' CHAIN LINK FENCE
STREAM VALLEY BUFFER

ARCHITECT

SMOLEN • EMR • ILKOVITCH ARCHITECTS

9211 CORPORATE BLVD, SUITE 340
ROCKVILLE, MD 20850
301-770-0177(P) 301-330-3224(F)

CIVIL
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LEED
DOO CONSULTING
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(443) 653-3792

CONSTRUCTION MANAGER
KELLER CONSTRUCTION CO.
1012 RISING RIDGE ROAD, MT. AIRY, MD 21771
(301) 607-9300

Professional Certification.

i hereby certify that these documents were prepared or approved by me, and that I am a duly licensed Professional Engineer under the laws of the State of Maryland, License No.: 16905, Expiration Date: 4.21.2022.

PROFESSIONAL SEAL:

PRINTS ISSUED

NO:	DESCRIPTION:	DATE:
	BID SET	09/08/2021
1	ADDENDUM #1	09/16/2021
2	ADDENDUM #2	09/22/2021
4	ADDENDUM #4	09/29/2021
5	ADDENDUM #5	10/04/2021

TAX MAP JS341 WSSC 220NW01

PLAT 8045

5TH ELECTION DISTRICT
MONTGOMERY COUNTY MARYLAND

PARCELS C & D
BLOCK G
PLAT 4 - STONEGATE

STONEGATE ELEMENTARY SCHOOL

MONTGOMERY COUNTY PUBLIC SCHOOLS

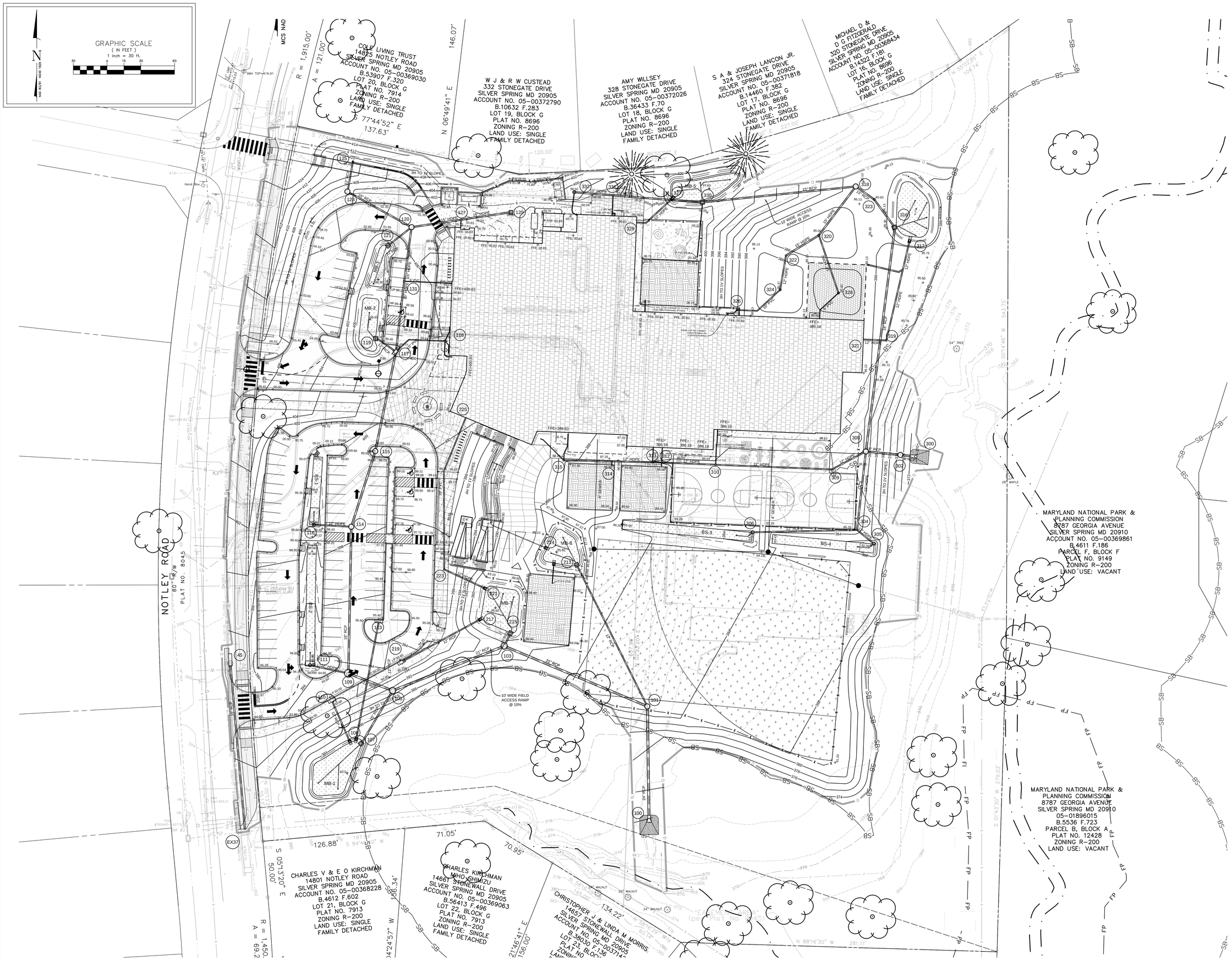
SHEET TITLE:
SITE PLAN

PROJECT NO: 20008
DATE: 09/15/2021
SCALE: 1" = 30'
WORKING NORTH

SHEET NO:
C2.01

7/28/2021 9:37:29 AM

I:\2020\20xxx\Dwg\P_21_01-Reg C2.01 - Site Plan 10/05/2021 11:48:11 AM | Hughes. Copyright © 2021 Macris, Hendricks & Glascock, P.A. Copyright © 2021 Macris, Hendricks & Glascock, P.A.


GRAPHIC SCALE
(IN FEET)
1 inch = 30 ft.
30 0 15 30 60
N
MD 83/91 NAD 1983
MCS NAD
NOTLEY ROAD
80' R/W
PLAT NO. 8045
COLE LIVING TRUST
14825 NOTLEY ROAD
SILVER SPRING MD 20905
ACCOUNT NO. 05-00369030
B.53907 F.320
LOT 20, BLOCK G
PLAT NO. 7914
ZONING R-200
LAND USE: SINGLE
FAMILY DETACHED
R = 1,915.00'
A = 121.00'
S 77°44'52" E
137.63'
N 06°49'41" E
146.07'
W J & R W CUSTEAD
332 STONEGATE DRIVE
SILVER SPRING MD 20905
ACCOUNT NO. 05-00372790
B.10632 F.283
LOT 19, BLOCK G
PLAT NO. 8696
ZONING R-200
LAND USE: SINGLE
FAMILY DETACHED
AMY WILLSEY
328 STONEGATE DRIVE
SILVER SPRING MD 20905
ACCOUNT NO. 05-00372026
B.36433 F.70
LOT 18, BLOCK G
PLAT NO. 8696
ZONING R-200
LAND USE: SINGLE
FAMILY DETACHED
S A & JOSEPH LANCON JR.
324 STONEGATE DRIVE
SILVER SPRING MD 20905
ACCOUNT NO. 05-00371818
B.14460 F.382
LOT 17, BLOCK G
PLAT NO. 8696
ZONING R-200
LAND USE: SINGLE
FAMILY DETACHED
MICHAEL D &
D G FITZGERALD
320 STONEGATE DRIVE
SILVER SPRING MD 20905
ACCOUNT NO. 05-00368434
B.14322 F.181
LOT 16, BLOCK G
PLAT NO. 8696
ZONING R-200
LAND USE: SINGLE
FAMILY DETACHED
CHARLES V & E.O KIRCHMAN
14801 NOTLEY ROAD
SILVER SPRING MD 20905
ACCOUNT NO. 05-00368228
B.4612 F.602
LOT 21, BLOCK G
PLAT NO. 7913
ZONING R-200
LAND USE: SINGLE
FAMILY DETACHED
CHARLES KIRCHMAN
MIHO SHIMIZU
14661 STONEWALL DRIVE
SILVER SPRING MD 20905
ACCOUNT NO. 05-00369063
B.56413 F.496
LOT 22, BLOCK G
PLAT NO. 7913
ZONING R-200
LAND USE: SINGLE
FAMILY DETACHED
CHRISTOPHER J & LINDA M MORRIS
14657 STONEWALL DRIVE
SILVER SPRING MD 20905
ACCOUNT NO. 05-00371
B.38030 F.136
LOT 23, BLOCK G
PLAT NO
ZONING
LAND
MARYLAND NATIONAL PARK &
PLANNING COMMISSION
8787 GEORGIA AVENUE
SILVER SPRING MD 20910
ACCOUNT NO. 05-00369861
B.4611 F.186
PARCEL F, BLOCK F
PLAT NO. 9149
ZONING R-200
LAND USE: VACANT
MARYLAND NATIONAL PARK &
PLANNING COMMISSION
8787 GEORGIA AVENUE
SILVER SPRING MD 20910
05-01896015
B.5536 F.723
PARCEL B, BLOCK A
PLAT NO. 12428
ZONING R-200
LAND USE: VACANT
MB-1
MB-2
MB-3
MB-4
MB-5
MB-6
MB-7
MB-8
BS-1
BS-2
BS-3
BS-4
10' WIDE FIELD ACCESS RAMP @ 10%
3H TO 1V SLOPES
4H TO 1V SLOPES
12" HDPE
15" HDPE
18" RCP
21" RCP
24" RCP
30" RCP
4" SEWER
6" SEWER
8" SEWER
SWM TOP=416.91
SWM TOP=394.82
SWM TOP=393.01
SWM TOP=381.36
SWM TOP=372.73
SWM TOP=365.36
SWM TOP=363.13
SWM TOP=360.19
SWM TOP=359.17
SWM TOP=358.03
SWM TOP=357.71
SWM TOP=357.00
SWM TOP=356.96
SWM TOP=356.38
SWM TOP=355.93
SWM TOP=355.68
SWM TOP=355.63
SWM TOP=355.61
SWM TOP=355.59
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SWM TOP=355.47
SWM TOP=355.46
SWM TOP=355.45
SWM TOP=355.44
SWM TOP=355.43
SWM TOP=355.42
SWM TOP=355.41
SWM TOP=355.40
SWM

GRAPHIC SCALE
(IN FEET)
1 inch = 30 ft.
30 0 15 30 60

N

MD-NAD83 - NGVD 1929

COLE LIVING TRUST
14825 NOTLEY ROAD
SILVER SPRING MD 20905
ACCOUNT NO. 05-00369030
B.53907 F.320
LOT 20, BLOCK G
PLAT NO. 7914
ZONING R-200
LAND USE: SINGLE
FAMILY DETACHED

W J & R W CUSTEAD
332 STONEGATE DRIVE
SILVER SPRING MD 20905
ACCOUNT NO. 05-00372790
B.10632 F.283
LOT 19, BLOCK G
PLAT NO. 8696
ZONING R-200
LAND USE: SINGLE
FAMILY DETACHED

AMY WILLSEY
328 STONEGATE DRIVE
SILVER SPRING MD 20905
ACCOUNT NO. 05-00372026
B.36433 F.70
LOT 18, BLOCK G
PLAT NO. 8696
ZONING R-200
LAND USE: SINGLE
FAMILY DETACHED

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SILVER SPRING MD 20905
ACCOUNT NO. 05-00371818
B.14460 F.382
LOT 17, BLOCK G
PLAT NO. 8696
ZONING R-200
LAND USE: SINGLE
FAMILY DETACHED

MICHAEL D & D G FITZGERALD
320 STONEGATE DRIVE
SILVER SPRING MD 20905
ACCOUNT NO. 05-00368434
B.14322 F.191
LOT 16, BLOCK G
PLAT NO. 8696
ZONING R-200
LAND USE: SINGLE
FAMILY DETACHED

NOTLEY ROAD
80' R/W
PLAT NO. 8045

MARYLAND NATIONAL PARK & PLANNING COMMISSION
8787 GEORGIA AVENUE
SILVER SPRING MD 20910
ACCOUNT NO. 05-00369861
B.4611 F.186
PARCEL F, BLOCK F
PLAT NO. 9149
ZONING R-200
LAND USE: VACANT

MARYLAND NATIONAL PARK & PLANNING COMMISSION
8787 GEORGIA AVENUE
SILVER SPRING MD 20910
05-01896015
B.5536 F.723
PARCEL B, BLOCK A
PLAT NO. 12428
ZONING R-200
LAND USE: VACANT

CHARLES V & E O KIRCHMAN
14801 NOTLEY ROAD
SILVER SPRING MD 20905
ACCOUNT NO. 05-00368228
B.4612 F.602
LOT 21, BLOCK G
PLAT NO. 7913
ZONING R-200
LAND USE: SINGLE
FAMILY DETACHED

CHARLES KIRCHMAN
MIHO SHIMIZU
14661 STONEWALL DRIVE
SILVER SPRING MD 20905
ACCOUNT NO. 05-00369063
B.56413 F.496
LOT 22, BLOCK G
PLAT NO. 7913
ZONING R-200
LAND USE: SINGLE
FAMILY DETACHED

CHRISTOPHER I & LINDA M MORRIS
14653 STONEWALL DRIVE
SILVER SPRING MD 20905
ACCOUNT NO. 05-00371427
B.39030 F.136
LOT 23, BLOCK G
PLAT NO.
ZONING
LAND USE:

"EASEMENT AREA"
(per Plat No. 8045)

P-1 P-2 P-3 P-4 P-5
S-1 S-2 S-3 S-4 S-5 S-6
MB-1 MB-2 MB-3 MB-4 MB-5 MB-6 MB-7 MB-8
BS-1 BS-2 BS-3 BS-4

ARCHITECT

SMOLEN • EMR • ILKOVITCH ARCHITECTS

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KELLER CONSTRUCTION CO.
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(301) 607-9300

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2	ADDENDUM #2	09/22/2021
4	ADDENDUM #4	09/29/2021
5	ADDENDUM #5	10/04/2021

TAX MAP JS341 WSSC 220NW01

PLAT 8045

5TH ELECTION DISTRICT
MONTGOMERY COUNTY MARYLAND

PARCELS C & D
BLOCK G
PLAT 4 - STONEGATE

STONEGATE ELEMENTARY SCHOOL

MONTGOMERY COUNTY PUBLIC SCHOOLS

SHEET TITLE:

DIMENSIONAL PLAN

PROJECT NO: 20008
DATE: 09/15/2021
SCALE: 1" = 30'

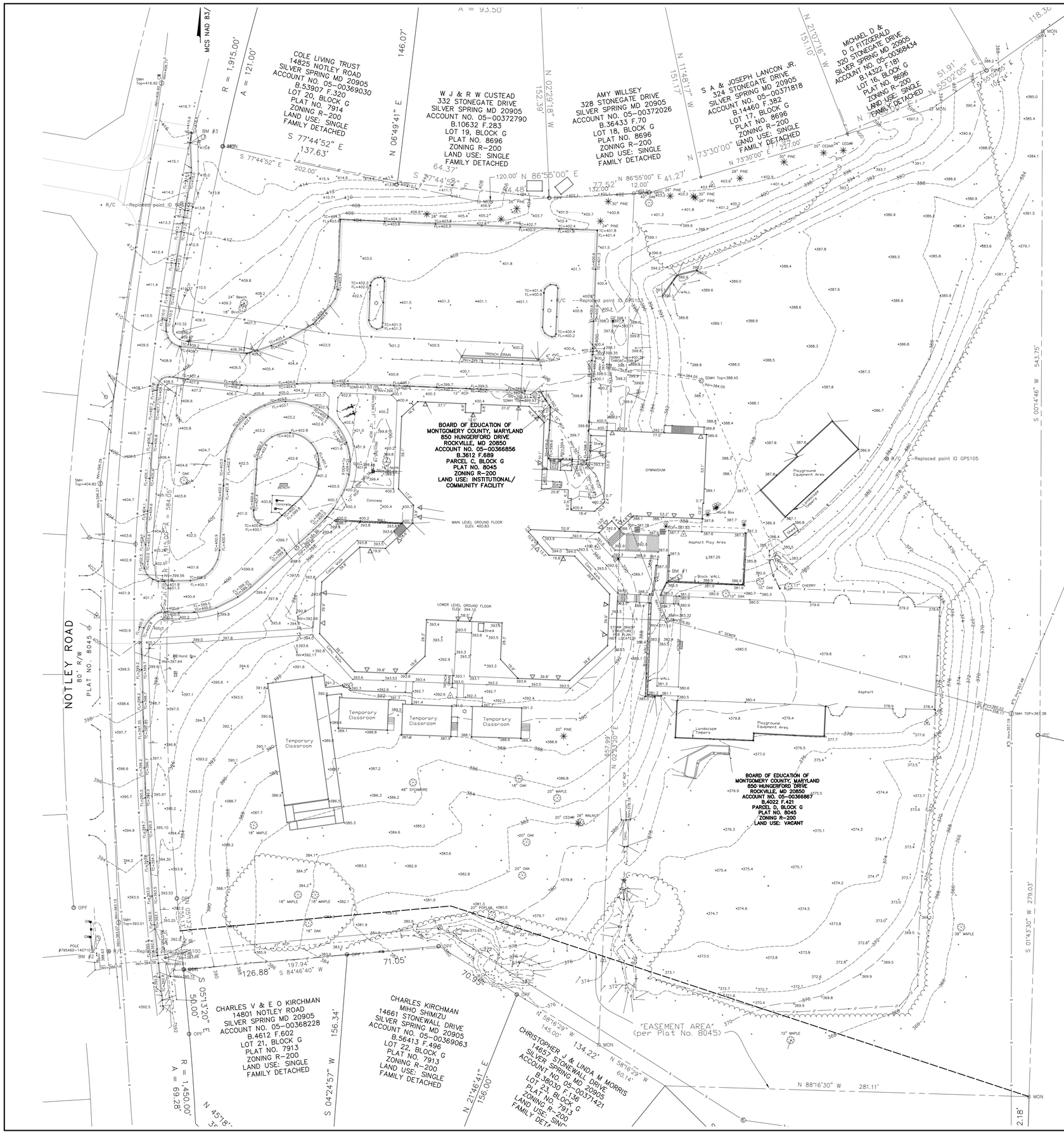
WORKING NORTH

SHEET NO:

C2.03

7/28/2021 9:37:29 AM

V:\2020\Chap20\P_31_01.dwg, C2.03 - Dimensional Plan, 10/5/2021 4:25:33 PM, RogPet, Copyright © 2021 Macris, Hendricks & Glascock, P.A.


MCS NAD 83
COLE LIVING TRUST
14825 NOTLEY ROAD
SILVER SPRING MD 20905
ACCOUNT NO. 05-00369030
B.53907 F.320
LOT 20, BLOCK G
PLAT NO. 7914
ZONING R-200
LAND USE: SINGLE FAMILY DETACHED
W J & R W CUSTEAD
332 STONEGATE DRIVE
SILVER SPRING MD 20905
ACCOUNT NO. 05-00372790
B.10632 F.283
LOT 19, BLOCK G
PLAT NO. 8696
ZONING R-200
LAND USE: SINGLE FAMILY DETACHED
AMY WILLSEY
328 STONEGATE DRIVE
SILVER SPRING MD 20905
ACCOUNT NO. 05-00372026
B.36433 F.70
LOT 18, BLOCK G
PLAT NO. 8696
ZONING R-200
LAND USE: SINGLE FAMILY DETACHED
S A & JOSEPH LANCON JR.
324 STONEGATE DRIVE
SILVER SPRING MD 20905
ACCOUNT NO. 05-00371818
B.14460 F.382
LOT 17, BLOCK G
PLAT NO. 8696
ZONING R-200
LAND USE: SINGLE FAMILY DETACHED
MICHAEL D & D G FITZGERALD
320 STONEGATE DRIVE
SILVER SPRING MD 20905
ACCOUNT NO. 05-00368434
B.14322 F.181
LOT 16, BLOCK G
PLAT NO. 8696
ZONING R-200
LAND USE: SINGLE FAMILY DETACHED
BOARD OF EDUCATION OF MONTGOMERY COUNTY, MARYLAND
850 HUNGERFORD DRIVE
ROCKVILLE, MD 20850
ACCOUNT NO. 05-00366856
B.3612 F.689
PARCEL C, BLOCK G
PLAT NO. 8045
ZONING R-200
LAND USE: INSTITUTIONAL/ COMMUNITY FACILITY
BOARD OF EDUCATION OF MONTGOMERY COUNTY, MARYLAND
850/HUNGERFORD DRIVE
ROCKVILLE, MD 20850
ACCOUNT NO. 05-00366867
B.4022 F.421
PARCEL D, BLOCK G
PLAT NO. 8045
ZONING R-200
LAND USE: VACANT
MARYLAND NATIONAL PARK & PLANNING COMMISSION
8787 GEORGIA AVENUE
SILVER SPRING MD 20910
ACCOUNT NO. 05-00369861
B.4611 F.186
PARCEL F, BLOCK F
PLAT NO. 9149
ZONING R-200
LAND USE: VACANT
MARYLAND NATIONAL PARK & PLANNING COMMISSION
8787 GEORGIA AVENUE
SILVER SPRING MD 20910
05-01896015
B.5536 F.723
PARCEL B, BLOCK A
PLAT NO. 12428
ZONING R-200
LAND USE: VACANT
CHARLES V & E O KIRCHMAN
14801 NOTLEY ROAD
SILVER SPRING MD 20905
ACCOUNT NO. 05-00368228
B.4612 F.602
LOT 21, BLOCK G
PLAT NO. 7913
ZONING R-200
LAND USE: SINGLE FAMILY DETACHED
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MIHO SHIMIZU
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B.56413 F.496
LOT 22, BLOCK G
PLAT NO. 7913
ZONING R-200
LAND USE: SINGLE FAMILY DETACHED
CHRISTOPHER J & LINDA M MORRIS
14657 STONEWALL DRIVE
SILVER SPRING MD 20905
ACCOUNT NO. 05-00371421
B.38030 F.136
LOT 23, BLOCK G
PLAT NO. 7913
ZONING R-200
LAND USE: SINGLE FAMILY DETA
NOTLEY ROAD
80' R/W
PLAT NO. 8045
"EASEMENT AREA" (per Plat No. 8045)
GYMNASIUM
Playground Equipment Area
Asphalt Play Area
Temporary Classroom
Temporary Classroom
Temporary Classroom
Landscape Timbers
Playground Equipment Area
Asphalt
Concrete
Block WALL
TRENCH DRAIN
MAIN LEVEL GROUND FLOOR ELEV. 400.83
LOWER LEVEL GROUND FLOOR ELEV. 394.10
Replaced point ID GPS102
Replaced point ID GPS103
Replaced point ID GPS104
Replaced point ID GPS105
Replaced point ID GPS100
BM #1
BM #2
BM #3
R = 1,915.00'
A = 121.00'
A = 93.50'
R = 1,450.00'
A = 69.28'
S 77°44'52" E 137.63'
S 77°44'52" E 202.00'
S 77°44'52" E 64.37'
N 06°49'41" E 146.07'
N 02°29'18" W 152.39'
N 11°48'17" W 151.17'
N 21°07'16" W 151.10'
N 73°30'00" E 227.00'
N 73°30'00" E 77.52'
N 86°55'00" E 120.00'
N 86°55'00" E 41.27'
N 86°55'00" E 84.45'
S 55°02'05" E 51.91'
S 55°02'05" E 102.74'
S 00°14'46" W 543.75'
S 01°43'30" W 279.03'
S 77°38'23" E 230.00'
N 88°16'30" W 281.11'
N 58°16'29" W 134.22'
N 58°16'29" W 60.14'
N 21°46'41" E 156.00'
S 04°24'57" W 156.34'
S 05°13'20" E 50.00'
S 84°46'40" W 126.88'
S 84°46'40" W 197.94'
N 02°29'20" E 657.99'
71.05'
70.99'
118.36'
2.18'
20" CEDAR
24" CEDAR
28" PINE
30" PINE
36" PINE
26" PINE
24" PINE
24" Beech
18" Birch
17" CHERRY
10" OAK
72" MAPLE
48" SYCAMORE
20" PINE
20" MAPLE
20" CEDAR
28" WALNUT
18" OAK
18" MAPLE
36" MAPLE
6" PVC
12" RCP
15" RCP
6" SEWER
SMH Top=416.92
SMH Top=404.82
SMH Top=393.01
SMH Top=388.45
SMH Top=367.38
SDMH Top=388.45
SDMH Top=393.53
SDMH Top=400.39
SDMH Top=400.53
SDMH Top=401.53
SDMH Top=401.66
SDMH Top=401.83
SDMH Top=402.21
SDMH Top=402.24
SDMH Top=402.25
SDMH Top=402.26
SDMH Top=402.27
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SDMH Top=402.37
SDMH Top=402.38
SDMH Top=402.39
SDMH Top=402.40
SDMH Top=402.41
SDMH Top=402.42
SDMH Top=402.43
SDMH

KL	KEEP LEFT	R4-7b	12" x 18"
NPIAI	NO PARKING IN ACCESS ISLE	R8-3(2)	12" x 18"
HC	HANDICAP PARKING	R7-8(3)	12" x 24"
VA	VAN ACCESSIBLE	R7-8a	12" x 6"
NMV	NO MOTOR VEHICLES	R5-3	24" x 24"
DNBD	DO NOT BLOCK DRIVEWAY	R10-7(1)	24" x 30"
DNE	DO NOT ENTER	R5-1	30" x 30"
ST	STOP	R1-1	30" x 30"
SD	STUDENT DROP OFF	SEE DETAIL 12/C2.14	SEE DETAIL 12/C2.15
SDU	STUDENT DROP OFF - UP	SEE DETAIL 12U/C2.14	SEE DETAIL 12U/C2.15
BO	BUS ONLY	SEE DETAIL 14/C2.14	SEE DETAIL 14/C2.15
RF	RESERVED FOR XXXX	SEE DETAIL 15/C2.14	SEE DETAIL 15/C2.15
FLA	NO PARKING FIRE LANE TYPE A	SEE DETAIL 7/C2.14	SEE DETAIL 7/C2.15
FLB	NO PARKING FIRE LANE TYPE B	SEE DETAIL 7/C2.14	SEE DETAIL 7/C2.15
FLC	NO PARKING FIRE LANE TYPE C	SEE DETAIL 7/C2.14	SEE DETAIL 7/C2.15
NOS	NO SMOKING	SEE DETAIL 13/2.14	SEE DETAIL 13/2.14
AVO	AUTHORIZED VEHICLES ONLY	R5-3(1)	24" x 18"
FEVPO	FUEL EFFICIENT VEHICLE PARKING ONLY	SEE DETAIL 9/C2.14	SEE DETAIL 9/C2.14

** See MDSHA Standard Sign Book for Referenced Signs
http://apps.roads.maryland.gov/businesswithsha/bizStdsSpecs/desManualStdPub/publicationsonline/oots/internet_signbook.asp

ARCHITECT

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PROFESSIONAL SEAL:

PRINTS ISSUED

NO:	DESCRIPTION:	DATE:
	BID SET	09/08/2021
1	ADDENDUM #1	09/16/2021
2	ADDENDUM #2	09/22/2021
4	ADDENDUM #4	09/29/2021
5	ADDENDUM #5	10/04/2021

TAX MAP JS341 WSSC 220NW01
PLAT 8045
5TH ELECTION DISTRICT
MONTGOMERY COUNTY MARYLAND
PARCELS C & D
BLOCK G
PLAT 4 - STONEGATE

STONEGATE ELEMENTARY SCHOOL

MONTGOMERY COUNTY PUBLIC SCHOOLS

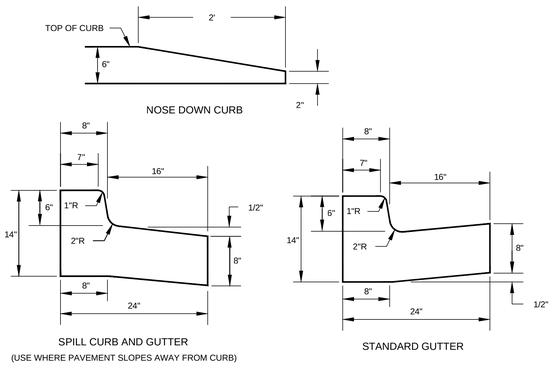
SHEET TITLE:
SIGNAGE & STRIPING PLAN

PROJECT NO: 20008
DATE: 09/15/2021
SCALE: 1" = 30'
WORKING NORTH

SHEET NO:
C2.04

7/28/2021 9:37:29 AM

I:\2020\Docs\20_21_01.dwg, C2.04 - Signage and Striping Plan, 10/5/2021 11:46:13 AM, kfagles, Copyright © 2021 Macris, Hendricks & Glascock, P.A.

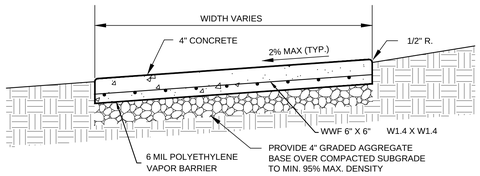


1 C2.11 6" CONCRETE CURB AND GUTTER DETAILS

NTS

GENERAL NOTES

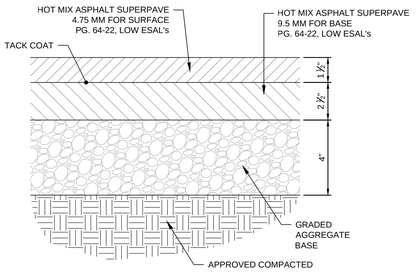
1. USE SHA CONCRETE MIX #3 (4500 PSI).
2. IN AREAS WHERE GUTTER ADJOINS CONCRETE PAVEMENT, PROVIDE ¾"x15" DOWEL RODS AT 12" O.C.
3. WHERE CURB IS PLACED IN AREAS OF FILL, PROVIDE COMPACTED AGGREGATE FILL IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.
4. REFER TO MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION SPECIFICATIONS FOR MATERIALS AND METHODS OF CONSTRUCTION.
5. PROVIDE SMOOTH TRANSITION FROM STANDARD GUTTER TO SPILL GUTTER IN LOCATIONS SHOWN ON DRAWINGS AND IN ANY LOCATIONS WHERE PAVEMENT GRADING SLOPES AWAY FROM THE CURB. PROVIDE SMOOTH TRANSITION TO DEPRESSED CURB AS NEEDED.
6. AT LOCATIONS OF TIE-IN TO EXISTING CURB, REPLACE CURB TO THE NEAREST JOINT.
7. THE STANDARD DISTANCE BETWEEN JOINTS SHALL BE TEN FEET (MAXIMUM & MINIMUM DISTANCES SHALL BE 13 FEET AND 5 FEET RESPECTIVELY). IN AREAS WHERE GUTTER ADJOINS CONCRETE PAVEMENT, JOINTS SHALL BE FORMED IN LINE WITH THE TRANSVERSE JOINTS IN PAVEMENT.
8. EXPANSION JOINT MATERIAL SHALL BE ½ INCH PREFORMED CORK, TRIMMED AND SEALED WITH NON-STAINING TWO COMPONENT POLYSULFIDE OR POLYURETHANE ELASTOMETRIC TYPE SEALANT, COMPLYING WITH ASTM-C920. ALL OTHER JOINTS SHALL BE SEALED ACROSS THE ENTIRE GUTTER PORTION AND UP THE FACE OF CURB.



3 C2.11 SITE CONCRETE SIDEWALK

NTS

1. ALL CONCRETE SHALL BE SHA MIX #3 (4500 PSI), DEPTH OF 4".
2. SIDEWALK WIDTH VARIES, SEE SITE PLAN FOR DIMENSIONS.
3. FOR SCORING PATTERNS, REFER TO ARCH. SITE PAVING PLAN.
4. FINISH SURFACES PER SPECIFICATIONS.
5. PROVIDE CONTROL JOINTS EVERY 5'-0" MINIMUM. CONTROL JOINTS SHALL BE FORMED W/ 1" DEPTH ZIP-STRIP TOOL.
6. PROVIDE ½" WIDE SMOOTH EDGE AT EACH SQUARE EDGE.
7. PROVIDE ½" EXPANSION JOINTS EVERY 24 FEET MAX. IF SIDEWALK WIDTH IS GREATER THAN 8'-0", ADD LONGITUDINAL CONTRACTION JOINT AT CENTERLINE OF SIDEWALK. EXPANSION JOINT MATERIAL SHALL BE ½" PREFORMED CORK, TRIMMED AND SEALED WITH NON-STAINING, TWO-COMPONENT POLYURETHANE ELASTOMETRIC TYPE SEALANT COMPLYING WITH ASTM-C920.
8. PROVIDE ½" EXPANSION JOINT FILLER & SEALANT WHERE SIDEWALK ABUTS CURB, BUILDING OR OTHER RIGID STRUCTURE(S).
9. ADJUST SIDEWALK AT DOORS AS FOLLOWS (SEE DETAIL, THIS SHEET):
   A. MODIFY STANDARD JOINT AND PANEL PATTERN TO PROVIDE SINGLE PANEL WITH A WIDTH EQUAL TO THE DOOR (OR BOTH DOORS) AND LENGTH OF 5' FROM THE BUILDING.
   B. PROVIDE EXPANSION JOINT AROUND MODIFIED PANEL.
   C. PROVIDE 24" #57 STONE UNDER MODIFIED PANEL.



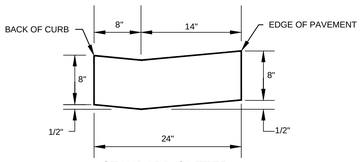
5 C2.11 KINDERGARTEN PLAY AREA & ASPHALT PATH SECTION

NTS

THE ASPHALT PAVING SECTION SHOWN IS THE MONTGOMERY COUNTY PUBLIC SCHOOLS - DIVISION OF CONSTRUCTION STANDARD & IS NOT BASED ON A GEOTECHNICAL REPORT. THE CONTRACTOR MUST HAVE THE SOIL TESTED AT THE TIME OF CONSTRUCTION BY A PROFESSIONAL GEOTECHNICAL ENGINEER. THE GEOTECHNICAL ENGINEER IS TO VERIFY THE ADEQUACY OF THE SECTION BASED ON THE SOIL TEST RESULTS AND THE PROPOSED USES.

MACRIS, HENDRICKS, & GLASCOCK, P.A. MAKES NO GUARANTEE OR WARRANTY EITHER ASSUMED OR IMPLIED AS TO THE SUITABILITY OF THESE PAVING SECTIONS AND ASSUMES NO LIABILITY IN PROVIDING THE PAVING SECTIONS SHOWN ABOVE ON OUR DRAWINGS. THESE/THIS PAVING SECTION/S ARE PLACED HERE SOLELY FOR THE CONVENIENCE OF THE OWNER AND THE CONTRACTOR.

*THE SUBBASE IS TO BE PREPARED IN STRICT ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND RECOMMENDATIONS BY A PROFESSIONAL GEOTECHNICAL ENGINEER. THE SUBBASE IS TO BE TESTED BY A PROFESSIONAL GEOTECHNICAL ENGINEER, AFTER THE GRADING OPERATIONS ARE COMPLETE AND PRIOR TO PAVEMENT CONSTRUCTION. THE GEOTECHNICAL ENGINEER IS TO PROVIDE WRITTEN CONFIRMATION TO THE OWNER AND CONTRACTOR THAT THE SUBBASE HAS BEEN PREPARED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND GEOTECHNICAL ENGINEER'S RECOMMENDATIONS AND THAT THE PAVEMENT SECTION SHOWN HEREON IS SUITABLE FOR THE PROPOSED USE(S).

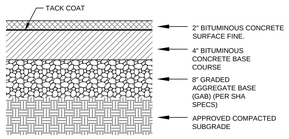


2 C2.11 DEPRESSED CONCRETE CURB AND GUTTER DETAIL

NTS

GENERAL NOTES

1. USE SHA CONCRETE MIX #3 (4500 PSI).
2. IN AREAS WHERE GUTTER ADJOINS CONCRETE PAVEMENT, PROVIDE ¾"x15" DOWEL RODS AT 12" O.C.
3. REFER TO MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION SPECIFICATIONS FOR MATERIALS AND METHODS OF CONSTRUCTION.
4. PROVIDE SMOOTH TRANSITION FROM STANDARD GUTTER TO SPILL GUTTER IN LOCATIONS SHOWN ON DRAWINGS AND IN ANY LOCATIONS WHERE PAVEMENT GRADING SLOPES AWAY FROM THE CURB. PROVIDE SMOOTH TRANSITION TO FULL HEIGHT CURB AS NEEDED.
5. THE STANDARD DISTANCE BETWEEN JOINTS SHALL BE TEN FEET (MAXIMUM & MINIMUM DISTANCES SHALL BE 13 FEET AND 5 FEET RESPECTIVELY). IN AREAS WHERE GUTTER ADJOINS CONCRETE PAVEMENT, JOINTS SHALL BE FORMED IN LINE WITH THE TRANSVERSE JOINTS IN PAVEMENT.
6. EXPANSION JOINT MATERIAL SHALL BE ½ INCH PREFORMED CORK, TRIMMED AND SEALED WITH NON-STAINING TWO COMPONENT POLYSULFIDE OR POLYURETHANE ELASTOMETRIC TYPE SEALANT, COMPLYING WITH ASTM-C920. ALL OTHER JOINTS SHALL BE SEALED ACROSS THE ENTIRE GUTTER PORTION AND ALONG THE FACE OF DEPRESSED CURB.



1. 2" HOT MIX ASPHALT SUPER PAVE 9.5 MM (PER SHA SPECS) FOR SURFACE
2. TWO LAYERS OF HOT MIX ASPHALT SUPER PAVE 19.0 MM (PER SHA SPECS) FOR BASE

THE ASPHALT PAVING SECTION SHOWN IS THE MONTGOMERY COUNTY PUBLIC SCHOOLS - DIVISION OF CONSTRUCTION STANDARD & IS NOT BASED ON A GEOTECHNICAL REPORT. THE CONTRACTOR MUST HAVE THE SOIL TESTED AT THE TIME OF CONSTRUCTION BY A PROFESSIONAL GEOTECHNICAL ENGINEER. THE GEOTECHNICAL ENGINEER IS TO VERIFY THE ADEQUACY OF THE SECTION BASED ON THE SOIL TEST RESULTS AND THE PROPOSED USES.

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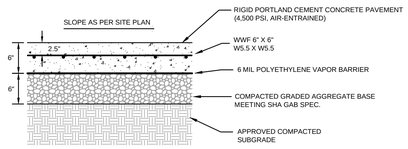
4 C2.11 MCPS STANDARD ASPHALT PAVING SECTION

NTS



CONTROL JOINTS (12-15') O.C.:
-½" x 1½" SAW CUT OR TOOLED WITH SEALANT

EXPANSION/CONSTRUCTION JOINTS (36-45' O.C.):
-⅝" x 15" DOWELS 12" O.C. W/ ¾" I.D. x 8" PLASTIC PIPE SLEEVE
-½" PREFORMED EXPANSION JOINT FILLER WITH ½" x 1" SEALANT

ISOLATION JOINTS:
-½" PREFORMED EXPANSION JOINT FILLER WITH ½" x 1" SEALANT
-REFER TO CURB & GUTTER DETAILS FOR TREATMENT ALONG GUTTER

1. WWF SHALL CONFORM TO ASTM A185.
2. DISCONTINUE WWF AT EXPANSION JOINTS.
3. WWF SHALL BE PLACED ON BAR SUPPORTS

THE CONCRETE PAVING SECTION SHOWN IS NOT BASED ON A GEOTECHNICAL REPORT. THE CONTRACTOR MUST HAVE THE SOIL TESTED AT THE TIME OF CONSTRUCTION BY A PROFESSIONAL GEOTECHNICAL ENGINEER. THE GEOTECHNICAL ENGINEER IS TO VERIFY THE ADEQUACY OF THE SECTION BASED ON THE SOIL TEST RESULTS AND THE PROPOSED USES.

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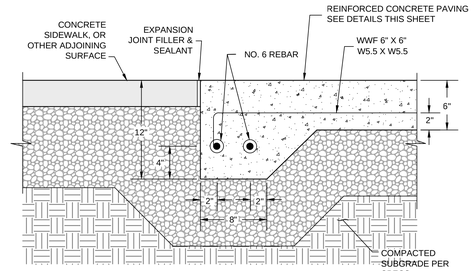
6 C2.11 MCPS STD. CONCRETE PAVING SECTION

NTS

1. ADA PARKING AREAS
2. REFER TO SHEET 3/C2.11 FOR SIDEWALK PAVING SECTION & NOTES.
3. REFER TO SHEET 7/C2.11 FOR CONCRETE PAVING JOINT DETAILS.



8 C2.11 CONCRETE PAVING - EDGE OF SLAB

NTS

CONCRETE PAVING SPECIFICATIONS:

ALL CONCRETE PAVING WORK NOT SHOWN OR SPECIFIED SHALL COMPLY WITH THE LATEST EDITION OF SHA STANDARD SPECIFICATIONS, SECTION 520.

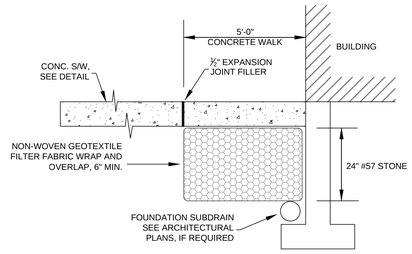
RIGID PORTLAND CEMENT CONCRETE, f'c=4,500 PSI, AIR ENTRAINED

FINAL SURFACE FINISH

AFTER THE CONCRETE HAS BEEN FLOATED AND THE SURFACE CORRECTED, IT SHALL BE FINISHED BY DRAGGING THE SURFACE IN A LONGITUDINAL DIRECTION WITH BURLAP. THIS DRAG SHALL BE WORKED WITH A LONGITUDINAL MOTION, CARE BEING USED NOT TO PERMIT THE EDGES TO DIG INTO THE SURFACE OF THE CONCRETE OR TO WORK THE CROWN OUT OF THE PAVEMENT.

AFTER THE WATER SHEEN HAS PRACTICALLY DISAPPEARED, BUT PRIOR TO ANY INITIAL SET, THE SURFACE SHALL BE GIVEN THE FINAL FINISH BY BROOMING. THE BROOM SHALL BE MOVED FROM ONE SIDE OF THE PAVEMENT TO THE OTHER WITHOUT INTERRUPTION. THE TRAVEL OF THE BROOM SHALL OVERLAP A SMALL AMOUNT. THE BROOMING SHALL BE PERPENDICULAR TO THE CENTER LINE OF THE PAVEMENT AND SO EXECUTED THAT THE CORRUGATIONS THUS PRODUCED WILL BE OF UNIFORM CHARACTER AND WIDTH AND NOT MORE THAN 1/8 INCH IN DEPTH, WITH THE RESULTING SURFACE FREE FROM OBJECTIONABLE DEPRESSIONS OR PROJECTIONS THAT MIGHT BE FORMED BY IMPROPER HANDLING. THE BROOMING MUST BE COMPLETED BEFORE THE EDGES OF THE PAVEMENT AND JOINTS ARE ROUNDED.

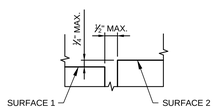
THE SURFACE OF THE PAVEMENT ADJACENT TO ALL CURBS, I.E., IN THE FLOW LINE OF THE GUTTER, SHALL BE TROWELED AND FINISHED WITH HAIR BROOMS.



NOTES: 1. DETAIL IS FOR THE FULL WIDTH CONCRETE STOOP
2. STOOP SHALL BE SEPARATE POUR FROM ADJOINING SIDEWALK

9 C2.11 CONCRETE SIDEWALK STOOP DETAIL

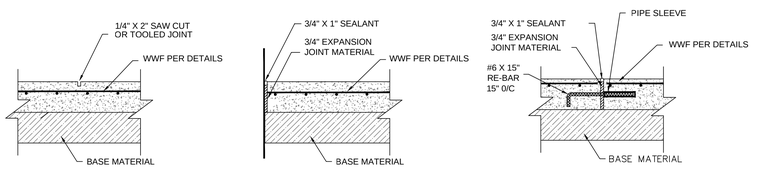
NTS TYPICAL FOR NEW BUILDING ENTRANCES
USE MSHA CONCRETE MIX #3 = 3500 psi



NOTES:
1. ACCESSIBLE WALKS, SIDEWALKS, AND PEDESTRIAN WAYS SHALL HAVE A CONTINUOUS SURFACE, NOT INTERRUPTED BY ABRUPT CHANGES IN VERTICAL ELEVATION EXCEEDING ½".
2. TRANSITION WITH THE ACCESSIBLE ROUTE FOR RAMPS TO WALKS, GUTTERS, OR VEHICULAR PATHS SHALL BE FLUSH AND FREE OF ABRUPT CHANGES IN VERTICAL ELEVATION EXCEEDING ½".
3. THE MAXIMUM OF ANY JOINT, OPENING, OR GAP BETWEEN ANY TWO ADJACENT SURFACES ALONG AN ACCESSIBLE ROUTE SHALL BE ½".

10 C2.11 CHANGES IN VERTICAL ELEVATION DETAIL

NTS



12 C2.11 CONCRETE PAVING - JOINT DETAILS

NTS

ARCHITECT

SEI SMOLEN • EMR • ILKOVITCH ARCHITECTS

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(301) 670-0840

KITCHEN
NYIKOS-GARCIA FOODSERVICE DESIGN INC.
7146 STARMOUNT WAY NEW MARKET, MD 21774
(240) 683-9530

STRUCTURAL
COMPREHENSIVE STRUCTURAL SOLUTIONS, LLC
9220 WIGHTMAN ROAD, SUITE 120,
MONTGOERY VILLAGE, MD 20886
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JAMES POSEY ASSOCIATES INC.
11155 RED RUN BLVD, OWINGS MILLS, MD 21117
(410) 265-6100

LEED
DOO CONSULTING
531 PICCADILLY RD, TOWSON, MD 21204
(443) 653-3792

CONSTRUCTION MANAGER
KELLER CONSTRUCTION CO.
1012 RISING RIDGE ROAD, MT. AIRY, MD 21771
(301) 607-9300

Professional Certification.

i hereby certify that these documents were prepared or approved by me, and that I am a duly licensed Professional Engineer under the laws of the State of Maryland, License No.: 16905, Expiration Date: 4.21.2022.

PROFESSIONAL SEAL:

PRINTS ISSUED

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TAX MAP JS341 WSSC 220NW01

PLAT 8045

5TH ELECTION DISTRICT
MONTGOMERY COUNTY MARYLAND

PARCELS C & D
BLOCK G
PLAT 4 - STONEGATE

STONEGATE ELEMENTARY SCHOOL

MONTGOMERY COUNTY PUBLIC SCHOOLS

SHEET TITLE:

DETAILS

PROJECT NO: 20008
DATE: 09/15/2021
SCALE: AS NOTED

WORKING NORTH

SHEET NO:

C2.11

7/28/2021 9:37:29 AM

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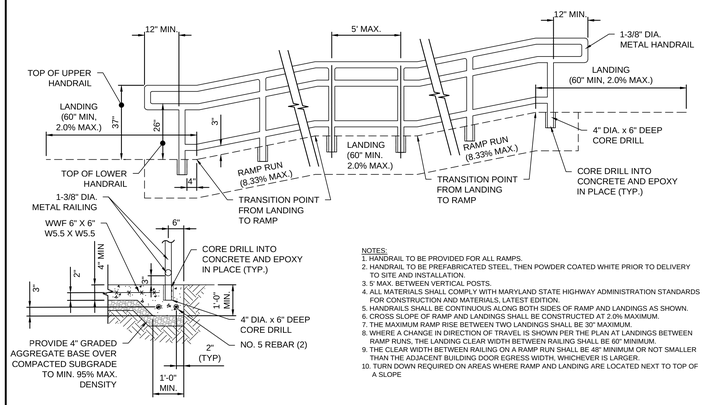
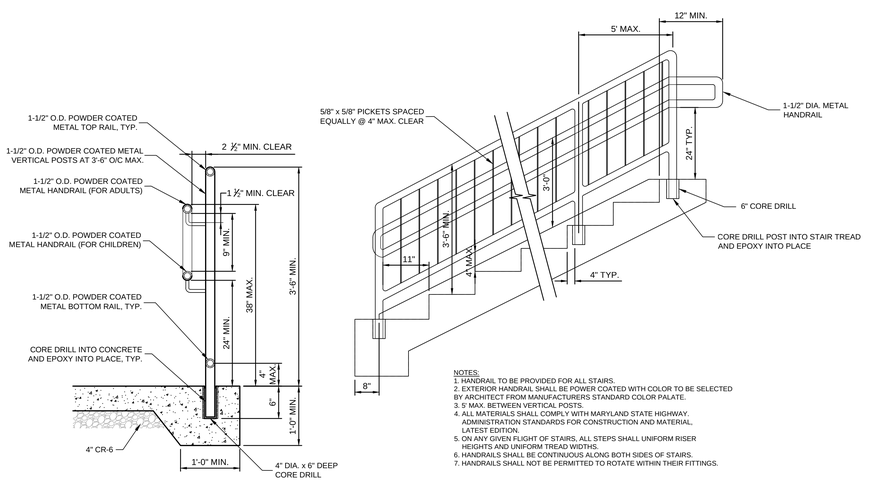


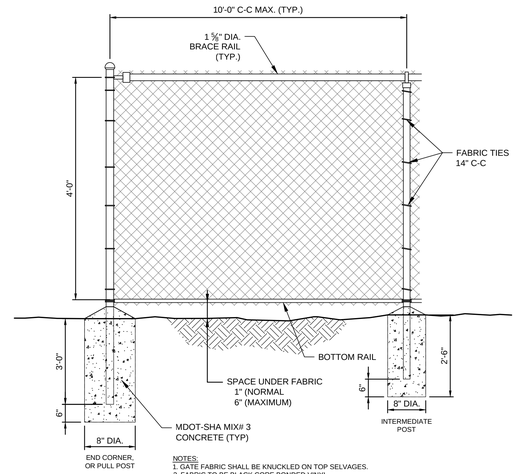
NOTES:
1. HANDRAIL TO BE PROVIDED FOR ALL RAMPS.
2. HANDRAIL TO BE PREFABRICATED STEEL, THEN POWDER COATED WHITE PRIOR TO DELIVERY TO SITE AND INSTALLATION.
3. 5' MAX. BETWEEN VERTICAL POSTS.
4. ALL MATERIALS SHALL COMPLY WITH MARYLAND STATE HIGHWAY ADMINISTRATION STANDARDS FOR CONSTRUCTION AND MATERIALS, LATEST EDITION.
5. HANDRAILS SHALL BE CONTINUOUS ALONG BOTH SIDES OF RAMP AND LANDINGS AS SHOWN.
6. CROSS SLOPE OF RAMP AND LANDINGS SHALL BE CONSTRUCTED AT 2.0% MAXIMUM.
7. THE MAXIMUM RAMP RISE BETWEEN TWO LANDINGS SHALL BE 30" MAXIMUM.
8. WHERE A CHANGE IN DIRECTION OF TRAVEL IS SHOWN PER THE PLAN AT LANDINGS BETWEEN RAMP RUNS, THE LANDING CLEAR WIDTH BETWEEN RAILING SHALL BE 60" MINIMUM.
9. THE CLEAR WIDTH BETWEEN RAILING ON A RAMP RUN SHALL BE 48" MINIMUM OR NOT SMALLER THAN THE ADJACENT BUILDING DOOR EGRESS WIDTH, WHICHEVER IS LARGER.
10. TURN DOWN REQUIRED ON AREAS WHERE RAMP AND LANDING ARE LOCATED NEXT TO TOP OF A SLOPE

1 RAMP AND HANDRAIL DETAIL
02.12 NTS



NOTES:
1. HANDRAIL TO BE PROVIDED FOR ALL STAIRS.
2. EXTERIOR HANDRAIL SHALL BE POWER COATED WITH COLOR TO BE SELECTED BY ARCHITECT FROM MANUFACTURERS STANDARD COLOR PALATE.
3. 5' MAX. BETWEEN VERTICAL POSTS.
4. ALL MATERIALS SHALL COMPLY WITH MARYLAND STATE HIGHWAY. ADMINISTRATION STANDARDS FOR CONSTRUCTION AND MATERIAL, LATEST EDITION.
5. ON ANY GIVEN FLIGHT OF STAIRS, ALL STEPS SHALL UNIFORM RISER HEIGHTS AND UNIFORM TREAD WIDTHS.
6. HANDRAILS SHALL BE CONTINUOUS ALONG BOTH SIDES OF STAIRS.
7. HANDRAILS SHALL NOT BE PERMITTED TO ROTATE WITHIN THEIR FITTINGS.

2 STAIR HANDRAIL DETAIL
C2.12 NTS



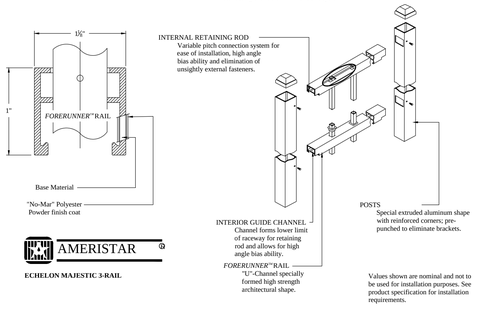
NOTES:
1. GATE FABRIC SHALL BE KNUCKLED ON TOP SELVAGES.
2. FABRIC TO BE BLACK CORE BONDED VINYL.
3. ALL FENCE, GATE POSTS AND FRAMES TO BE GROUNDED.
4. ATTACH FENCE FABRIC TO LINE POSTS, TOP AND BOTTOM TENSION WIRES WITH TIE WIRES.
5. ALL TYPE V-1 AND V-2 GATES SHALL ALLOW 180° OPENING SWING.
6. POSTS, RAILS AND RODS TO BE INSTALLED INSIDE OF FENCE FABRIC.
7. MATERIALS TO MEET REQUIREMENTS OF AASHTO M181.

4 4' HIGH CHAIN-LINK FENCE DETAIL
C2.12 NTS

NOTES:
1. GATE FABRIC SHALL BE KNUCKLED ON TOP SELVAGES.
2. CONCRETE FOUNDATIONS AT GATES SIZE RECOMMENDED BY GATE MANUFACTURER.
3. ALL FENCE, GATE POSTS AND FRAMES TO BE GROUNDED.
4. ATTACH FENCE FABRIC TO LINE POSTS, TOP AND BOTTOM TENSION WIRES WITH TIE WIRES.
5. ALL TYPE V-1 AND V-2 GATES SHALL ALLOW 180° OPENING SWING.
6. POSTS, RAILS AND RODS TO BE INSTALLED INSIDE OF FENCE FABRIC.
7. MATERIALS TO MEET REQUIREMENTS OF AASHTO M181.

5 10' HIGH CHAIN-LINK FENCE DETAIL
C2.12 NTS

NOTES:
1. Post footing available in 21" or 33" depths.



6 ORNAMENTAL SAFETY FENCE
C2.12 NTS

7 6' CITYSCAPES CORVIT SCREEN FENCES
C2.12 NTS

NOTES:
1. ARCHITECT TO SELECT SCREENING MATERIALS AND COLORS
2. ALL FENCE, POSTS AND FRAMES TO BE GROUNDED IF METAL IS USED AS A MATERIAL.
3. POST TO BE SPACED EVERY 6'

ARCHITECT
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(301) 670-0840

KITCHEN
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CONSTRUCTION MANAGER
KELLER CONSTRUCTION CO.
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(301) 607-9300

Professional Certification.

i hereby certify that these documents were prepared or approved by me, and that I am a duly licensed Professional Engineer under the laws of the State of Maryland, License No.: 16905, Expiration Date: 4.21.2022.

PROFESSIONAL SEAL:

PRINTS ISSUED

NO:	DESCRIPTION:	DATE:
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2	ADDENDUM #2	09/22/2021
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TAX MAP JS341 WSSC 220NW01

PLAT 8045

5TH ELECTION DISTRICT
MONTGOMERY COUNTY MARYLAND

PARCELS C & D
BLOCK G
PLAT 4 - STONEGATE

STONEGATE ELEMENTARY SCHOOL

MONTGOMERY COUNTY PUBLIC SCHOOLS

SHEET TITLE:
DETAILS

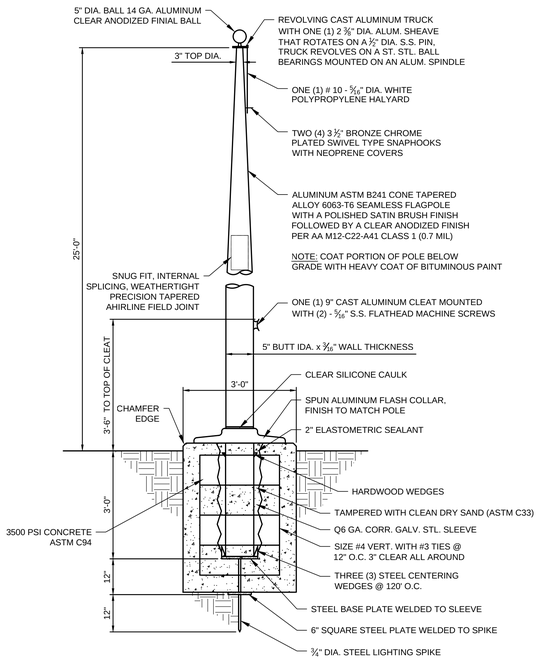
PROJECT NO: 20008
DATE: 09/15/2021
SCALE: AS NOTED

WORKING NORTH

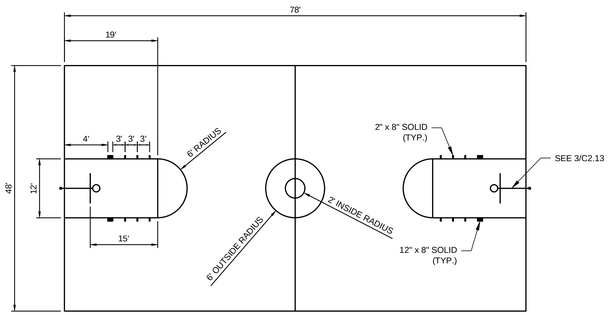
SHEET NO:
C2.12

7/28/2021 9:37:29 AM

\\2010\Dwg\P_11_0-Reg C2.12 - Details - 10/4/2021 4:55:18 PM AlisaRini. Copyright © 2021 Macris, Hendricks & Glascock, P.A. Copyright © 2021 Macris, Hendricks & Glascock, P.A.

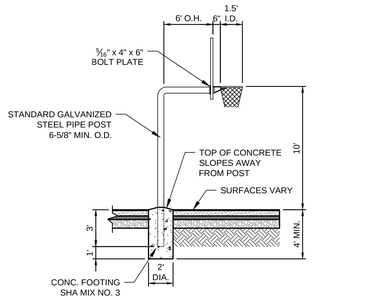


1 C2.13 FLAGPOLE DETAIL
NTS



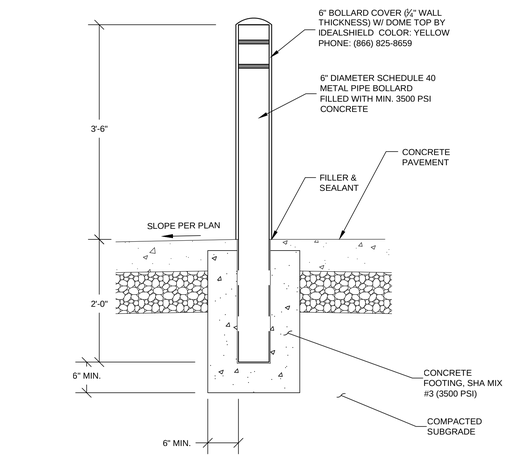
NOTE:
ALL DIMENSIONS SHOWN ARE TO THE INSIDE EDGE OF LINES.
ALL LINES ARE TO BE WHITE AND 2 IN. WIDE.

2 C2.13 BASKETBALL COURT
NTS



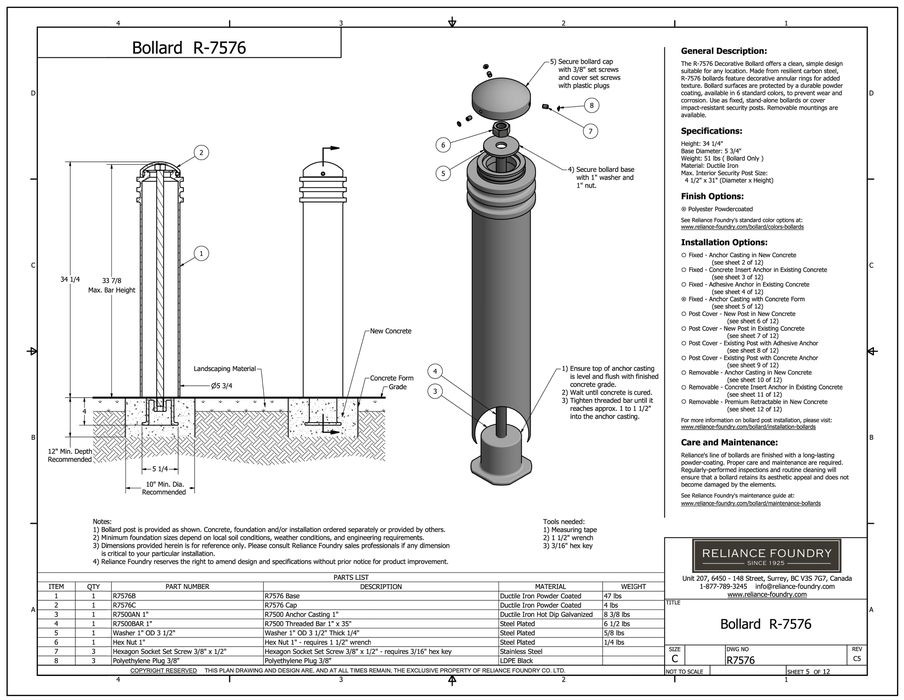
NOTE:
BASKETBALL BACKSTOPS SHALL BE MANUFACTURED BY AALCO, MODEL G66-601. ALL BACKSTOPS SHALL HAVE SAFETY PIN IN POST TO PREVENT BACKSTOP SLIPPAGE.

3 C2.13 BASKETBALL GOAL DETAIL
NTS



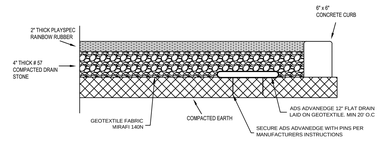
4 C2.13 UTILITY BOLLARD
NTS

NOTES:
1. BOLLARDS TO BE PAINTED TRAFFIC YELLOW PER MDOT-SHA STANDARDS

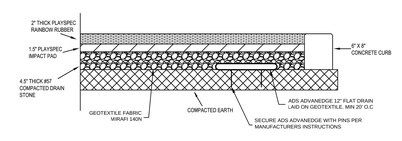


5 C2.13 DROP OFF ZONE BOLLARD
NTS

NOTES:
1. BOLLARDS PER RELIANCE FOUNDRY CO. LTD. FIXED TYPE R-7576 OR APPROVED EQUAL.
2. COLOR TO BE ANODIZED SILVER.
3. INSTALLATION PER MANUFACTURERS RECOMMENDATIONS



STANDARD PLAYSPEC RAINBOW RUBBER OVER STONE FOR 4' FALL



STANDARD PLAYSPEC RAINBOW RUBBER OVER STONE FOR 8' FALL

GENERAL NOTES:

1) #57 DRAIN STONE TO BE INSTALLED FLAT AND SMOOTH AND MECHANICALLY COMPACTED PRIOR TO INSTALLATION OF SAFETY SURFACE.

2) PLAYSPEC IMPACT PADS OVER STONE SURFACE FOR 8' MAX FALL HEIGHT.

3) 2" THICK MINIMUM DEPTH OF BONDED RAINBOW RUBBER TO BE SEAMLESSLY POURED ON TOP OF IMPACT PAD.

SCALE: 1" = 1'-0"

6 C2.13 PLAYGROUND SURFACE
NTS

NOTES:
1. WEBSITE: WWW.PLAYSPEC.COM
2. MANUFACTURER: PLAYGROUND SPECIALISTS, INC.
3. PRODUCT: PLAYSPEC RAINBOW
4. MATERIAL: POURED IN PLACE RUBBER, STANDARD COLOR MIX
5. NOTE: INSTALL PER MANUFACTURERS INSTRUCTIONS.THIS CONTRACT IS FOR SUBBASE AND DRAINAGE ONLY. PLAY EQUIPMENT, SURFACING AND IMPACT PAD BY OTHERS. SUBBASE INSTALLATION SHOULD INCLUDE SETTING SUBGRADE MINIMUM 7.5 INCHES BELOW FINISHED GRADE AND COORDINATION WITH EQUIPMENT INSTALLER FOR FOOTING INSTALLATION PRIOR TO INSTALLATION OF SUBBASE STONE.

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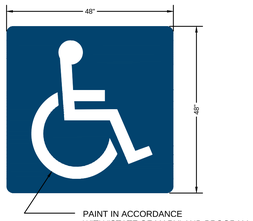
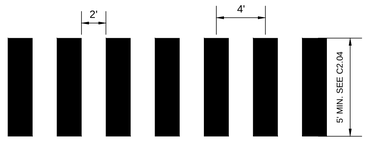
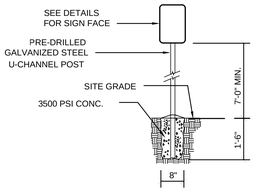


1 / C2.14 ACCESSIBILITY SYMBOL
NTS

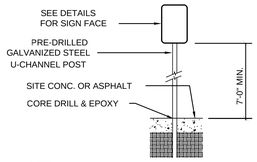


2 / C2.14 ON-SITE CROSSWALK STRIPING DETAIL
NTS



NOTE:
1. WHERE SIGN POSTS ARE LOCATED ADJACENT TO CONCRETE SWM PLANTERS, FASTEN U-CHANNEL POST TO CONCRETE PLANTER USING STAINLESS STEEL HARDWARE. MAINTAIN MINIMUM HEIGHT SHOWN HEREIN.
3. WHERE SIGN POSTS ARE LOCATED ADJACENT TO LIGHT POLES, POST SIGNS ON LIGHT POLES USING STAINLESS STEEL HARDWARE. MAINTAIN MINIMUM HEIGHT SHOWN HEREIN
4. SIGNS PROVIDED BY AND INSTALLED BY CONTRACTOR

5 / C2.14 SIGN POSTS NON-PAVED AREAS
NTS



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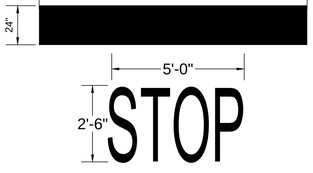
3. WHERE SIGN POSTS ARE LOCATED ADJACENT TO LIGHT POLES, POST SIGNS LIGHT POLES USING STAINLESS STEEL HARDWARE. MAINTAIN MINIMUM HEIGHT SHOWN HEREIN
4. SIGNS PROVIDED BY AND INSTALLED BY CONTRACTOR

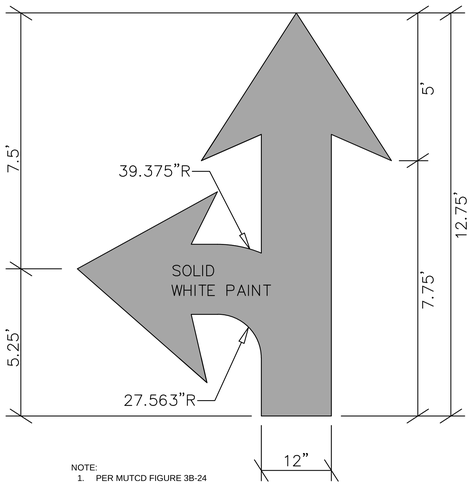
6 / C2.14 SIGN POST PAVED AREAS
NTS

7 / C2.14 FIRE LANE SIGNS
NTS



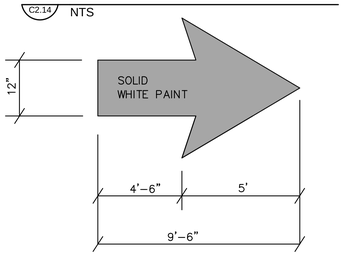
4 / C2.14 STOP BAR DETAIL
NTS

8 / C2.14 DOUBLE YELLOW LINE
NTS



NOTE:
1. PER MUTCD FIGURE 3B-24

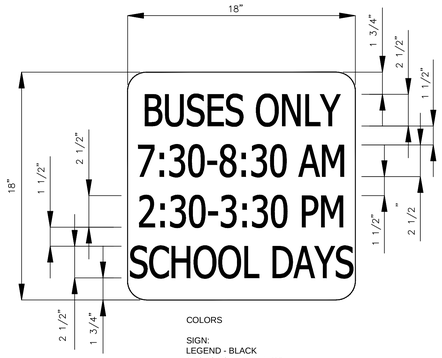
10 / C2.14 TRAFFIC STRAIGHT OR TURN ARROW
NTS



NOTE:
1. PER MUTCD FIGURE 3B-24

11 / C2.14 TRAFFIC ARROW
NTS

9 / C2.14 NTS

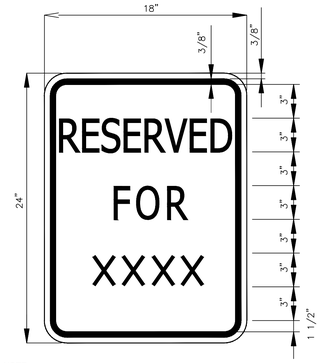


COLORS

SIGN:
LEGEND - BLACK
BACKGROUND - WHITE

NOTE:
1. CONTRACTOR TO CONFIRM TIMES BEFORE PURCHASE
2. SIGN SHALL BE CONSTRUCTED OF ALUMINUM AND HAVE REFLECTIVE SHEETING THAT CONFORMS TO SECTION 950.03.02 OF THE 2001 EDITION OF THE MARYLAND DEPARTMENT OF TRANSPORTATION, STATE HIGHWAY ADMINISTRATION'S (MDOT-SHA) STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS
3. TEXT SHALL CONFORM TO FEDERAL HIGHWAY ADMINSTRATION (FHWA) SERIES D2000/2002..

14 / C2.14 NTS



NOTE:
1. CONTRACTOR TO PROVIDE 8 SIGNS PER MCPS CHOICE FOR PRINCIPAL, ASSISTANT PRINCIPAL, SECRETARY, AND OTHER STAFF. CONTRACTOR TO PROVIDE 5 SIGNS PER CITY OF GAITHERSBURG'S CHOICE FOR RESERVED PARKING FOR PARK.
2. SIGN SHALL BE CONSTRUCTED OF ALUMINUM AND HAVE REFLECTIVE SHEETING THAT CONFORMS TO SECTION 950.03.02 OF THE 2001 EDITION OF THE MARYLAND DEPARTMENT OF TRANSPORTATION, STATE HIGHWAY ADMINISTRATION'S (MDOT-SHA) STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS
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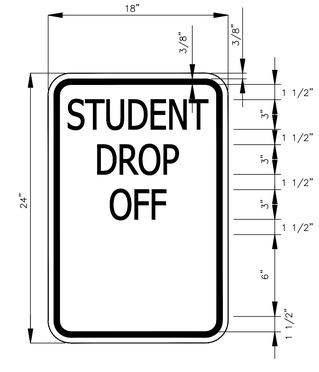
15 / C2.14 NTS



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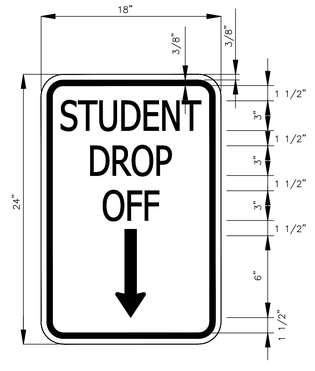
12 / C2.14 NTS



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12U / C2.14 NTS

NOTE:
1. MUTCO STANDARD REFLECTIVE FILM ON 0.125" ALUMINUM FACE PANELS FASTENED TO POSTS

13 / C2.14 NTS

PAVEMENT MARKING AND SIGNAGE NOTES

1. ALL ON-SITE PAVEMENT MARKINGS AND STRIPING SHALL BE AASHTO M 248, TYPE I, NON-REFLECTIVE PAINT. ON-SITE COLORS SHALL BE AS FOLLOWS:
   A. STANDARD PARKING SPACES: 4" WIDE WHITE
   B. ACCESSIBLE PARKING SPACES: 4" WIDE WHITE
   C. CROSS-WALKS & LOADING AREAS: WHITE (WIDTH AS SPECIFIED)
   D. CHANNELIZATION SYMBOLS: WHITE
   E. STOP BARS: WHITE (24" WIDE)
2. CURB MARKING SHALL BE AASHTO M 248, TYPE 1 REFLECTIVE YELLOW PAINT.
3. STRIPING SHALL BE INSTALLED PER C2.04. ALL EXISTING STRIPING WITHIN LIMITS OF NEW STRIPING SHALL BE REMOVED.
4. ALL SIGNAGE SHALL BE INSTALLED OR RELOCATED PER C2.04.
5. ALL REGULATORY AND TRAFFIC CONTROL SIGNAGE SHALL COMPLY WITH THE LATEST EDITION OF THE MARYLAND MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND THE MARYLAND ACCESSIBILITY CODE.
6. ALL SIGNAGE NOT REFERENCED IN THE MARYLAND MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES SHALL HAVE A WHITE BACKGROUND WITH BLACK BORDERS, SYMBOLS & TEXT.
7. ALL SIGNAGE WITHOUT SPECIFIED SIZE SHALL COMPLY WITH THE MARYLAND MUTCD AND MARYLAND ACCESSIBILITY CODE. IF SIZE NOT REFERENCED IN THESE DOCUMENTS, THEN SIZE SHALL BE SELECTED BY MCPS AT NO ADDITIONAL COST.
8. ALL SIGNAGE TO BE PROVIDED BY CONTRACTOR AND INSTALLED BY CONTRACTOR.

ADA MARKING AND SIGNAGE NOTES

1. EACH ACCESSIBLE PARKING SPACE SHALL BE IDENTIFIED BY A "RESERVED PARKING, MAXIMUM FINE $250" SIGN THAT IS IN CONFORMANCE WITH THE MARYLAND ACCESSIBILITY CODE.
2. IF THE SIGN IS PLACED FLUSH AGAINST A BUILDING, STRUCTURE OR OTHER LOCATION THAT DOES NOT OBSTRUCT VEHICLE OR PEDESTRIAN TRAFFIC, IT SHALL BE AT LEAST 6 FEET, BUT NOT MORE THAN 10 FEET ABOVE THE GROUND. ALL OTHER LOCATIONS REQUIRE A MOUNTING HEIGHT OF AT LEAST 7 FEET ABOVE THE GROUND. A 48" WIDE UNOBSTRUCTED PATH SHALL BE MAINTAINED BETWEEN ALL SIGNS.
3. THE VAN ACCESSIBLE SPACES SHALL HAVE AN ADDITIONAL "VAN ACCESSIBLE" SIGN MOUNTED BELOW THE "RESERVED PARKING" SIGN.
4. EACH VAN ACCESSIBLE AISLE SHALL HAVE A "NO PARKING IN ACCESS AISLE" SIGN.
5. THE PAVEMENT SHALL BE MARKED WITH INTERNATIONAL SYMBOL OF ACCESSIBILITY IN EACH ACCESSIBLE SPACE.

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BLOCK G
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STONEGATE ELEMENTARY SCHOOL

MONTGOMERY COUNTY PUBLIC SCHOOLS

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Signage and Striping Details

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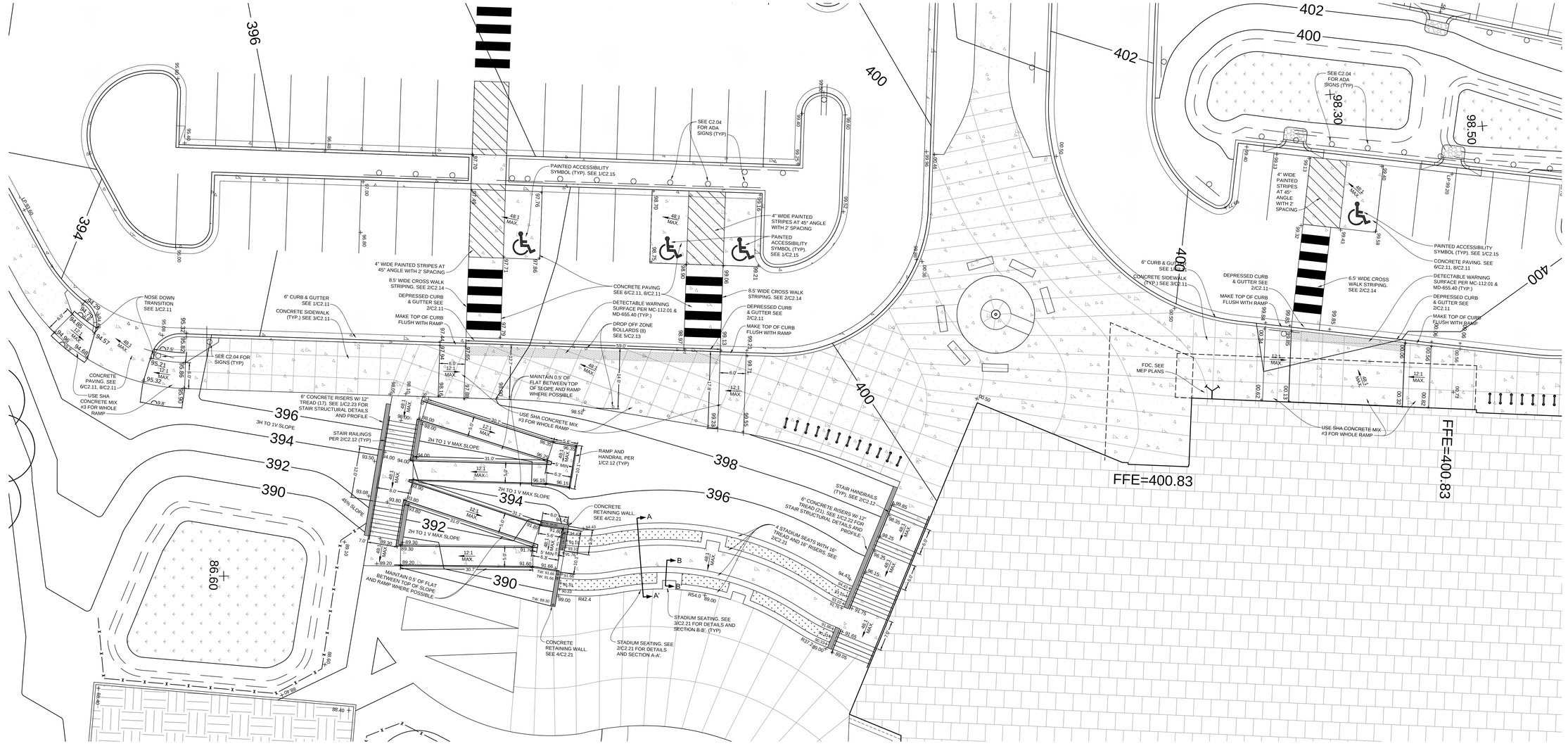
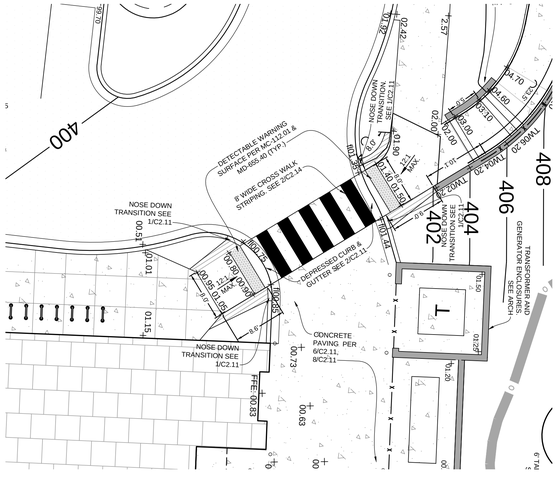


1 C2.15 ADA ACCESSIBILITY SITE ENLARGEMENT

1"=10'

1. STRIPING SHOULD END AT EDGE OF GUTTER UNLESS OTHERWISE NOTED



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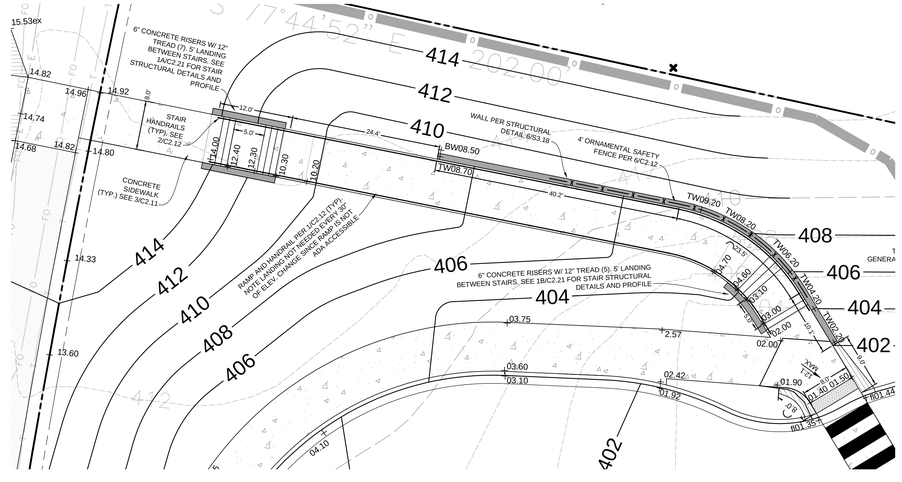
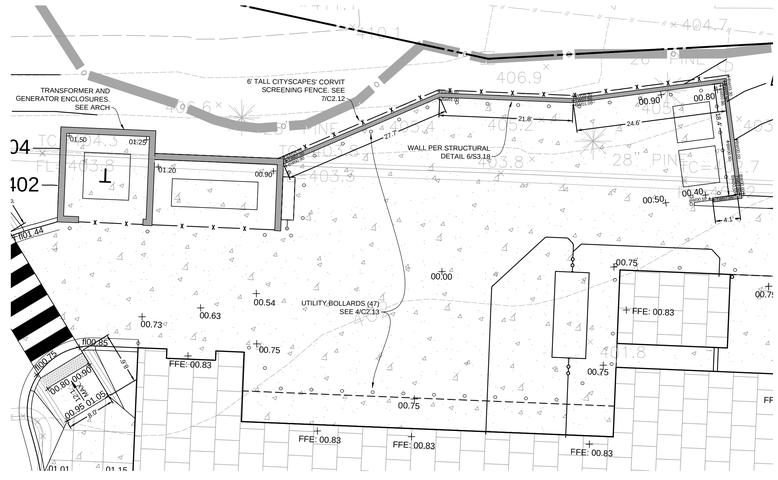


3 C2.15 NOTLEY ROAD CONNECTOR STAIRS AND RAMP

1"=10'



4 C2.15 NORTH RETAINING WALL

1"=10'

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TAX MAP JS341 WSSC 220NW01

PLAT 8045

5TH ELECTION DISTRICT
MONTGOMERY COUNTY MARYLAND

PARCELS C & D
BLOCK G
PLAT 4 - STONEGATE

STONEGATE ELEMENTARY SCHOOL

MONTGOMERY COUNTY PUBLIC SCHOOLS

SHEET TITLE:

ADA ACCESSIBILITY SITE ENLARGEMENT

PROJECT NO: 20008
DATE: 09/15/2021
SCALE: AS NOTED

NORTH WORKING

SHEET NO:

C2.15

7/28/2021 9:37:29 AM

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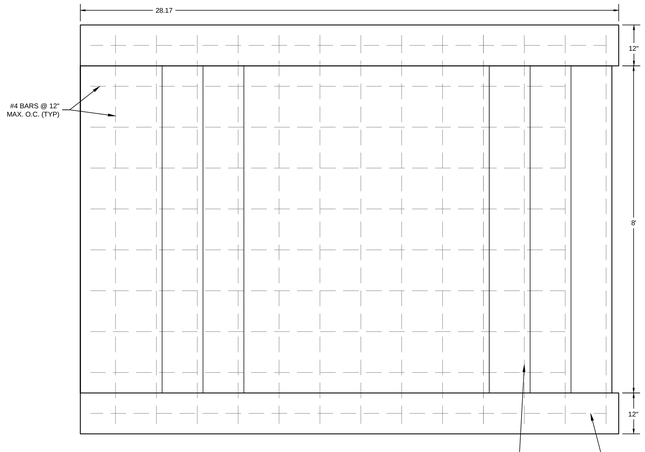

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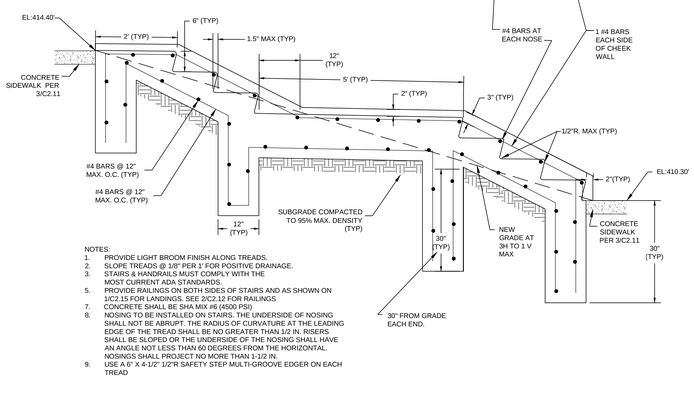
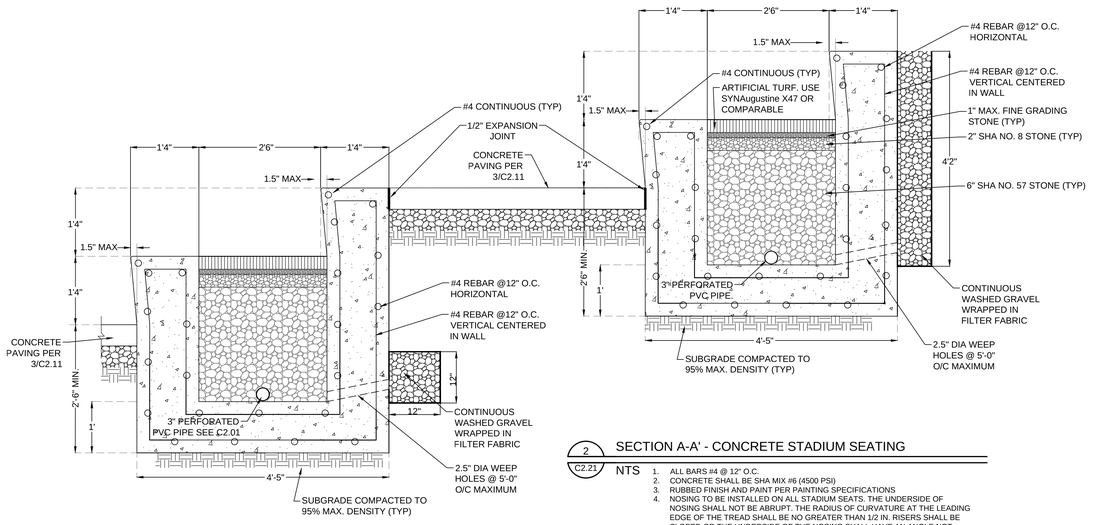


NOTES:
1. PROVIDE LIGHT BROOM FINISH ALONG TREADS.
2. SLOPE TREADS @ 1/8" PER 1' FOR POSITIVE DRAINAGE.
3. STAIRS & HANDRAILS MUST COMPLY WITH THE MOST CURRENT ADA STANDARDS.
5. PROVIDE RAILINGS ON BOTH SIDES OF STAIRS AND AS SHOWN ON 1/C2.15 FOR LANDINGS. SEE 2/C2.12 FOR RAILINGS
7. CONCRETE SHALL BE SHA MIX #6 (4500 PSI)
8. NOSING TO BE INSTALLED ON STAIRS. THE UNDERSIDE OF NOSING SHALL NOT BE ABRUPT. THE RADIUS OF CURVATURE AT THE LEADING EDGE OF THE TREAD SHALL BE NO GREATER THAN 1/2 IN. RISERS SHALL BE SLOPED OR THE UNDERSIDE OF THE NOSING SHALL HAVE AN ANGLE NOT LESS THAN 60 DEGREES FROM THE HORIZONTAL. NOSINGS SHALL PROJECT NO MORE THAN 1-1/2 IN.
9. USE A 6" X 4-1/2" 1/2"R SAFETY STEP MULTI-GROOVE EDGER ON EACH TREAD

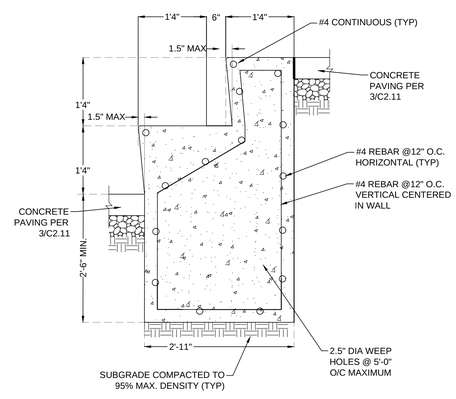
1A NOTLEY ROAD CONNECTOR STAIRS
C2.21 NTS

1B DETAILS PENDING
C2.21 NTS



2 SECTION A-A' - CONCRETE STADIUM SEATING
C2.21 NTS

1. ALL BARS #4 @ 12" O.C.
2. CONCRETE SHALL BE SHA MIX #6 (4500 PSI)
3. RUBBED FINISH AND PAINT PER PAINTING SPECIFICATIONS
4. NOSING TO BE INSTALLED ON ALL STADIUM SEATS. THE UNDERSIDE OF NOSING SHALL NOT BE ABRUPT. THE RADIUS OF CURVATURE AT THE LEADING EDGE OF THE TREAD SHALL BE NO GREATER THAN 1/2 IN. RISERS SHALL BE SLOPED OR THE UNDERSIDE OF THE NOSING SHALL HAVE AN ANGLE NOT LESS THAN 60 DEGREES FROM THE HORIZONTAL. NOSINGS SHALL PROJECT NO MORE THAN 1-1/2 IN.
5. SLOPE TREADS @ 1/4" PER 1' FOR POSITIVE DRAINAGE
6. MINIMUM SOIL BEARING CAPACITY = 3000PSI



3 SECTION B-B' - CONCRETE STADIUM SEATING ADA RESTING AREA
C2.21 NTS

1. ALL BARS #4 @ 12" O.C.
2. CONCRETE SHALL BE SHA MIX #6 (4500 PSI)
3. RUBBED FINISH AND PAINT PER PAINTING SPECIFICATIONS
4. NOSING TO BE INSTALLED ON ALL STADIUM SEATS. THE UNDERSIDE OF NOSING SHALL NOT BE ABRUPT. THE RADIUS OF CURVATURE AT THE LEADING EDGE OF THE TREAD SHALL BE NO GREATER THAN 1/2 IN. RISERS SHALL BE SLOPED OR THE UNDERSIDE OF THE NOSING SHALL HAVE AN ANGLE NOT LESS THAN 60 DEGREES FROM THE HORIZONTAL. NOSINGS SHALL PROJECT NO MORE THAN 1-1/2 IN.
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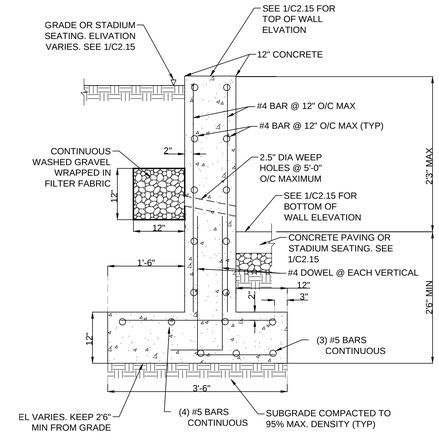

4 CONCRETE RETAINING WALL DETAIL
C2.21 NTS

1. CONCRETE SHALL BE SHA MIX #6 (4500 PSI)
2. RUBBED FINISH AND PAINT PER PAINTING SPECIFICATIONS
3. MINIMUM SOIL BEARING CAPACITY = 3000PSI

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TAX MAP JS341 WSSC 220NW01

PLAT 8045

5TH ELECTION DISTRICT
MONTGOMERY COUNTY MARYLAND

PARCELS C & D
BLOCK G
PLAT 4 - STONEGATE

STONEGATE ELEMENTARY SCHOOL

MONTGOMERY COUNTY PUBLIC SCHOOLS

SHEET TITLE:

NOTLEY ROAD STAIR, STADIUM SEATS AND WALL STRUCTURAL DETAIL

PROJECT NO: 20008
DATE: 09/15/2021
SCALE: AS NOTED

WORKING NORTH

SHEET NO:

C2.21

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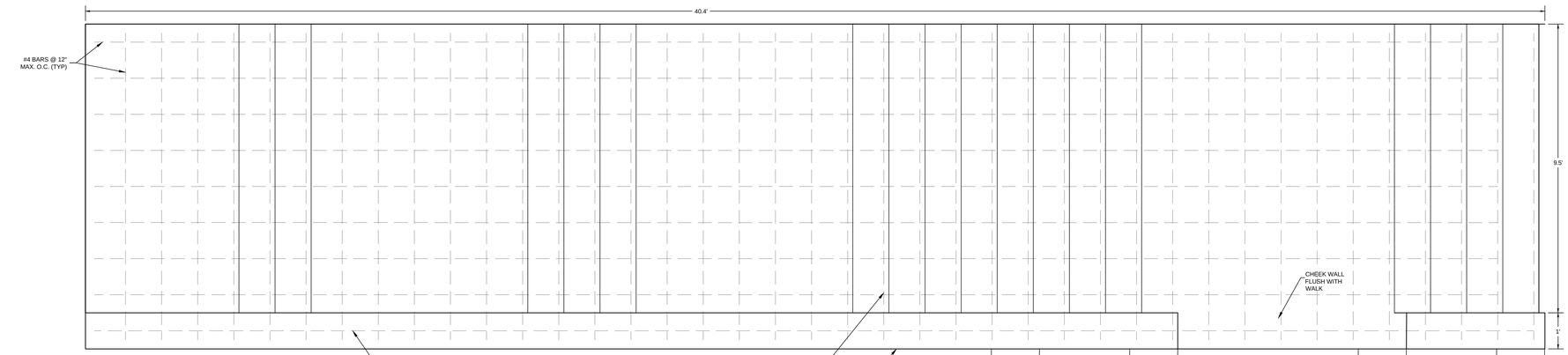

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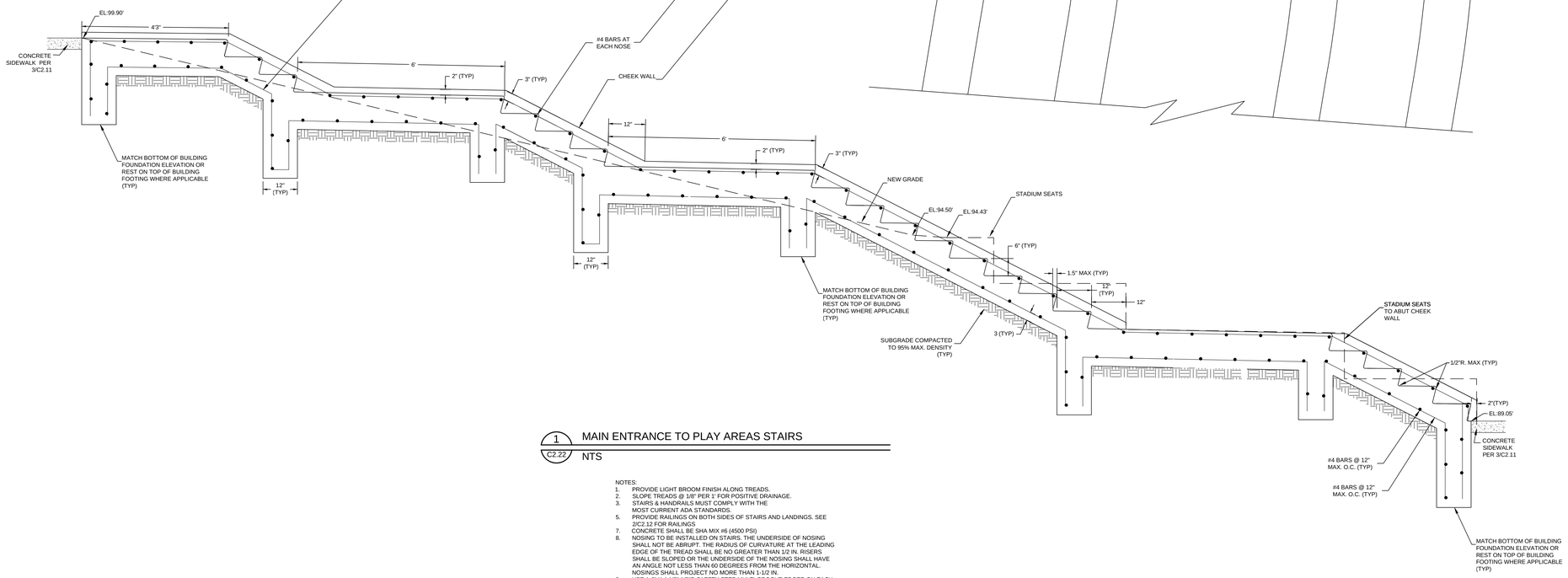

1 / C2.22 MAIN ENTRANCE TO PLAY AREAS STAIRS
NTS

NOTES:
1. PROVIDE LIGHT BROOM FINISH ALONG TREADS.
2. SLOPE TREADS @ 1/8" PER 1' FOR POSITIVE DRAINAGE.
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TAX MAP JS341 WSSC 220NW01

PLAT 8045

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MONTGOMERY COUNTY MARYLAND

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BLOCK G
PLAT 4 - STONEGATE

STONEGATE ELEMENTARY SCHOOL

MONTGOMERY COUNTY PUBLIC SCHOOLS

SHEET TITLE:

MAIN ENTRANCE TO PLAY AREAS STAIR STRUCTURAL DETAILS

PROJECT NO: 20008
DATE: 09/15/2021
SCALE: AS NOTED

WORKING NORTH

SHEET NO:

C2.22

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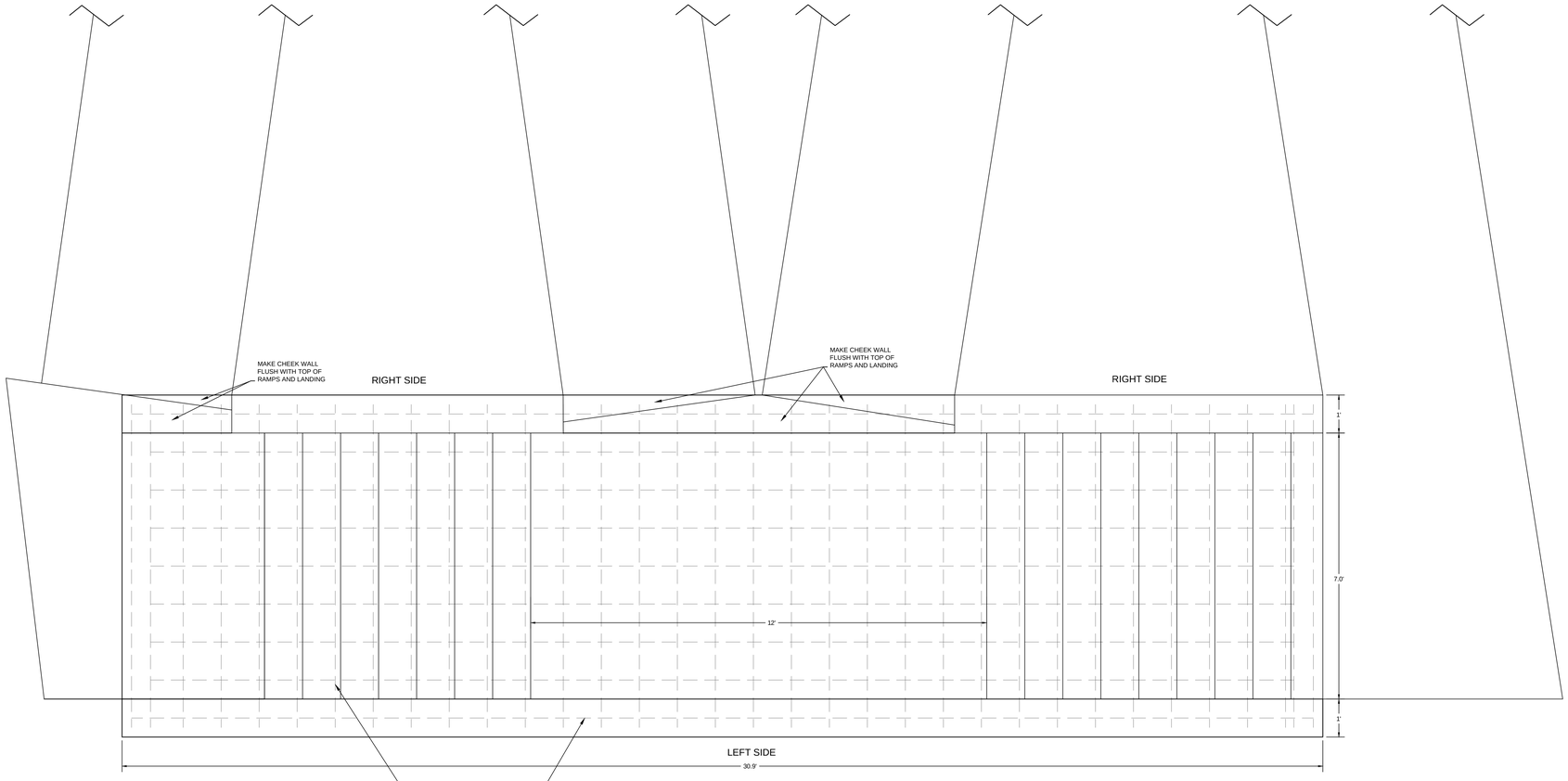

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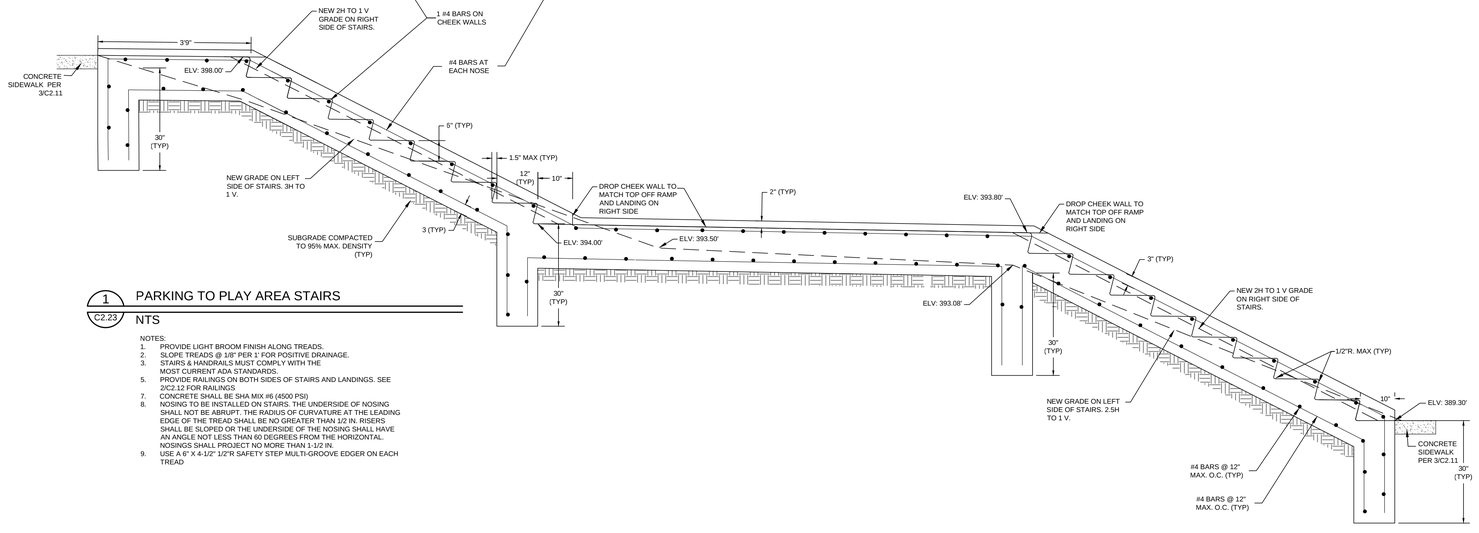

1 C2.23 PARKING TO PLAY AREA STAIRS

NTS

NOTES:
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TAX MAP JS341 WSSC 220NW01

PLAT 8045

5TH ELECTION DISTRICT
MONTGOMERY COUNTY MARYLAND

PARCELS C & D
BLOCK G
PLAT 4 - STONEGATE

STONEGATE ELEMENTARY SCHOOL

MONTGOMERY COUNTY PUBLIC SCHOOLS

SHEET TITLE:

PARKING TO PLAY AREAS STAIR STRUCTURAL DETAILS

PROJECT NO: 20008

DATE: 09/15/2021

SCALE: AS NOTED

WORKING NORTH

SHEET NO:

C2.23

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LOCAL AREA TRANSPORTATION REVIEW
STONEGATE ELEMENTARY SCHOOL
MONTGOMERY COUNTY, MARYLAND

Prepared For:
Montgomery County Public Schools

January 29, 2021
Revised: April 8, 2021

Project Manager: **David A. Nelson, P.E., P.T.O.E.**
Mike Nalepa - Street Traffic Studies, Ltd.

STS Job No.: 6794

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A TRAFFIC STUDY SCOPE OF WORK AGREEMENT

B VEHICLE TURNING MOVEMENT COUNTS

C CAPACITY CALCULATIONS - EXISTING CONDITIONS

D CAPACITY CALCULATIONS - TOTAL CONDITIONS

E SIGNAL WARRANTS STUDIES

INTRODUCTION

Montgomery County Public Schools (MCPS) is proposing to expand the existing Stonegate Elementary School located at 14811 Notley Road. The existing school has an enrollment of 501, for the current 2019-20 academic year, and the proposed expansion will result in a school with a core capacity of 740 students at completion. This represents 239 student increase.. The site is located along the east side of Notley Road as shown on Exhibit 1.

Street Traffic Studies, Ltd. has been retained to undertake the required traffic study under the provisions of the *Local Area Transportation Review and Transportation Policy Area Review Guidelines* for a site generating more than 50 peak hour person trips.

The purpose of the traffic study is to evaluate the adequacy of the transportation facilities that are available to serve the site in accordance with the procedures outlined in the *Local Area Transportation Review and Transportation Policy Area Review Guidelines* as adopted by the Planning Board. Current traffic data was acquired at five (5) ntersections in the vicinity of the site. The school is located within the Cloverly policy area which falls within the Yellow category. For intersections within the Yellow category a Critical Lane Volume (CLV) analysis is performed and any intersection with a CLV of 1350 or higher is analyzed further using the Highway Capacity Manual (HCM) procedures. The Traffic Study Scope of Work Agreement is contained in Appendix A.

Since this project is being built solely as a public facility by the Montgomery County government it is not required to pay a transportation impact tax.

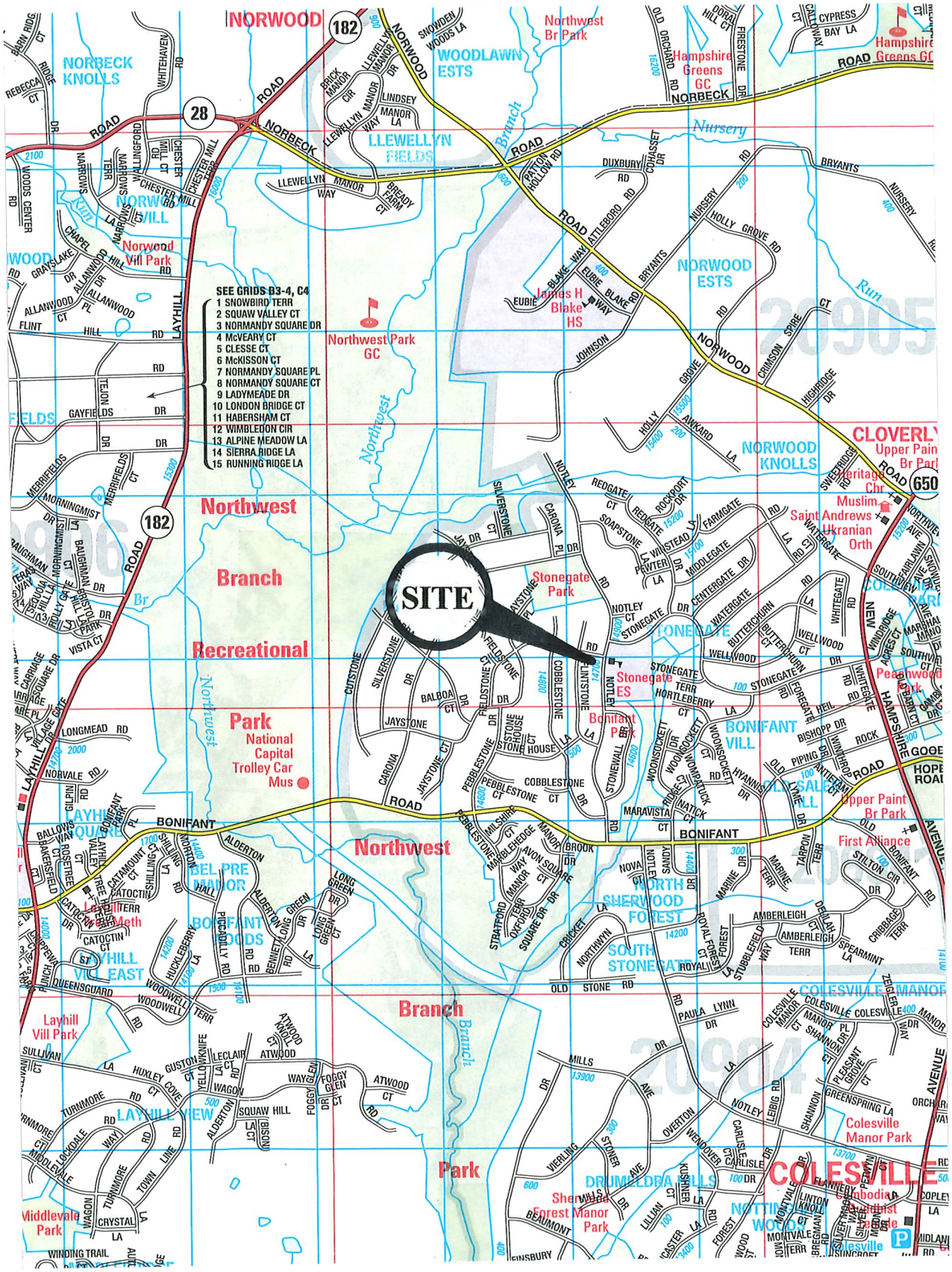


EXHIBIT 1
SITE LOCATION

SCALE: 1" = 2000'

EXISTING CONDITIONS

Roadway System Elements

The existing Stonegate Elementary School is located along the east side of Notley Road just south of Stonegate Drive. The site is currently served by two (2) full movement access points. The proposed expansion will not increase the number of access points; however their locations will change slightly to improve on-site circulation.

The approach lanes and traffic controls at the intersections analyzed as the basis for this study are shown in Exhibit 2.

Existing Traffic Volumes

Manual turning movement traffic counts were conducted in October/November 2020 at the intersections that were agreed upon with staff. The counts at the signalized intersections were conducted between 6:30 AM and 9:30 AM in the morning and between 3:00 PM and 6:00 PM in the evening. At the two (2) unsignalized intersections, 12 hour turning movement counts were conducted between the hours of 7:00 AM to 7:00 PM and used for signal warrants studies at each intersection. The summarized data for these intersections are included in Appendix B.

The morning and evening peak hour volumes recorded at each intersection are shown in Exhibit 3. The existing peak hour pedestrian and bicycle volumes are shown in Exhibits 4 and 5 respectively.

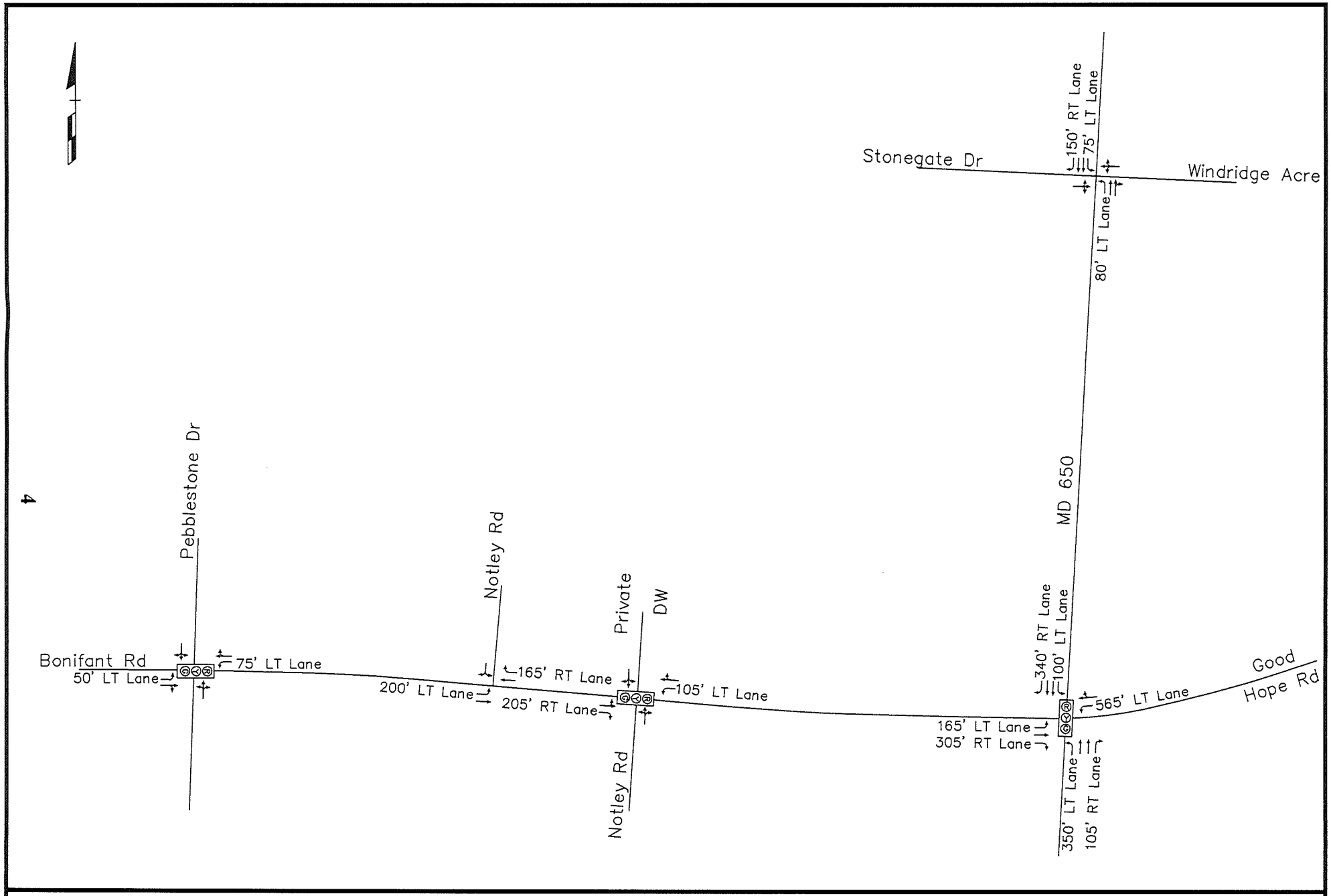
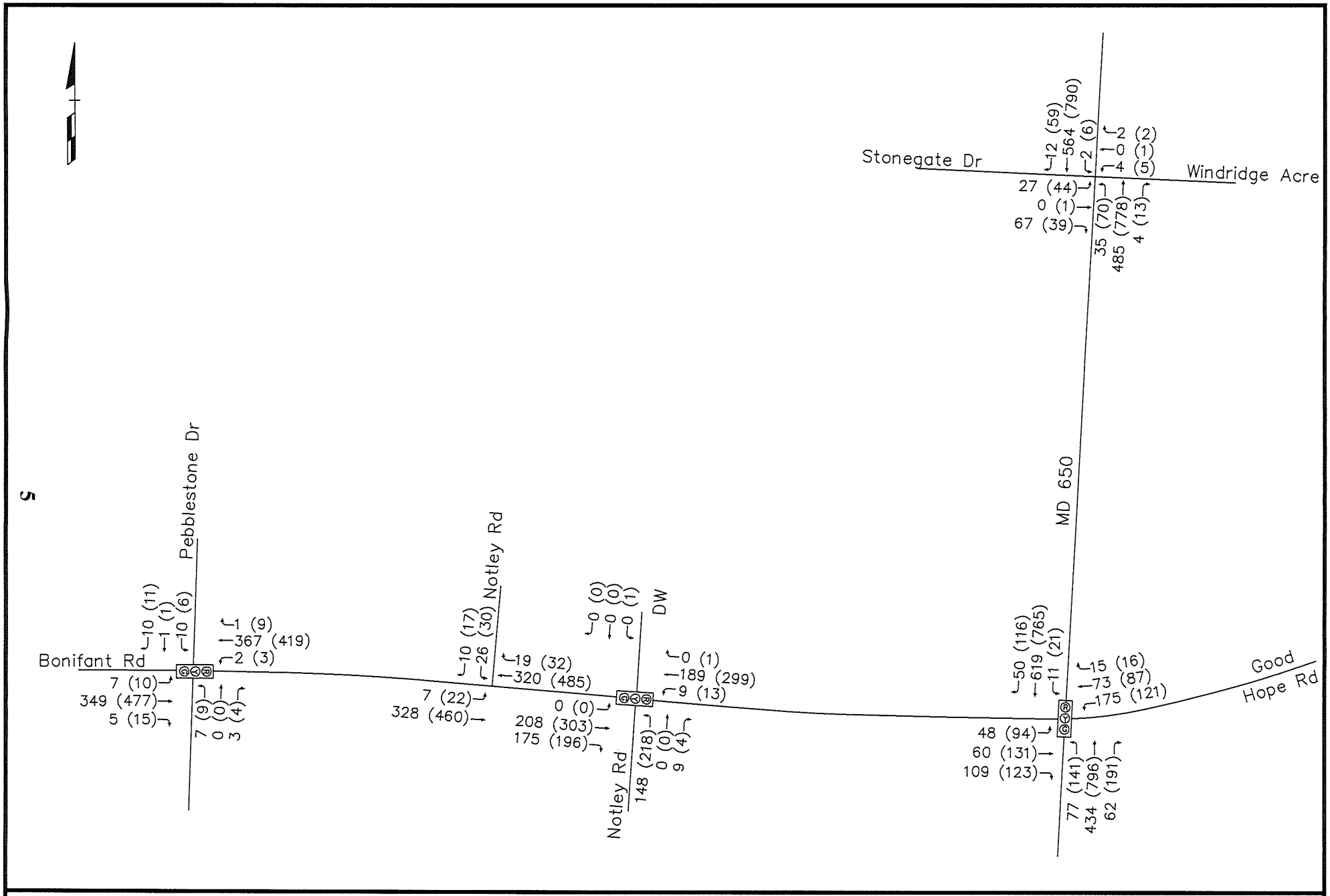


EXHIBIT 2
EXISTING LANE USE

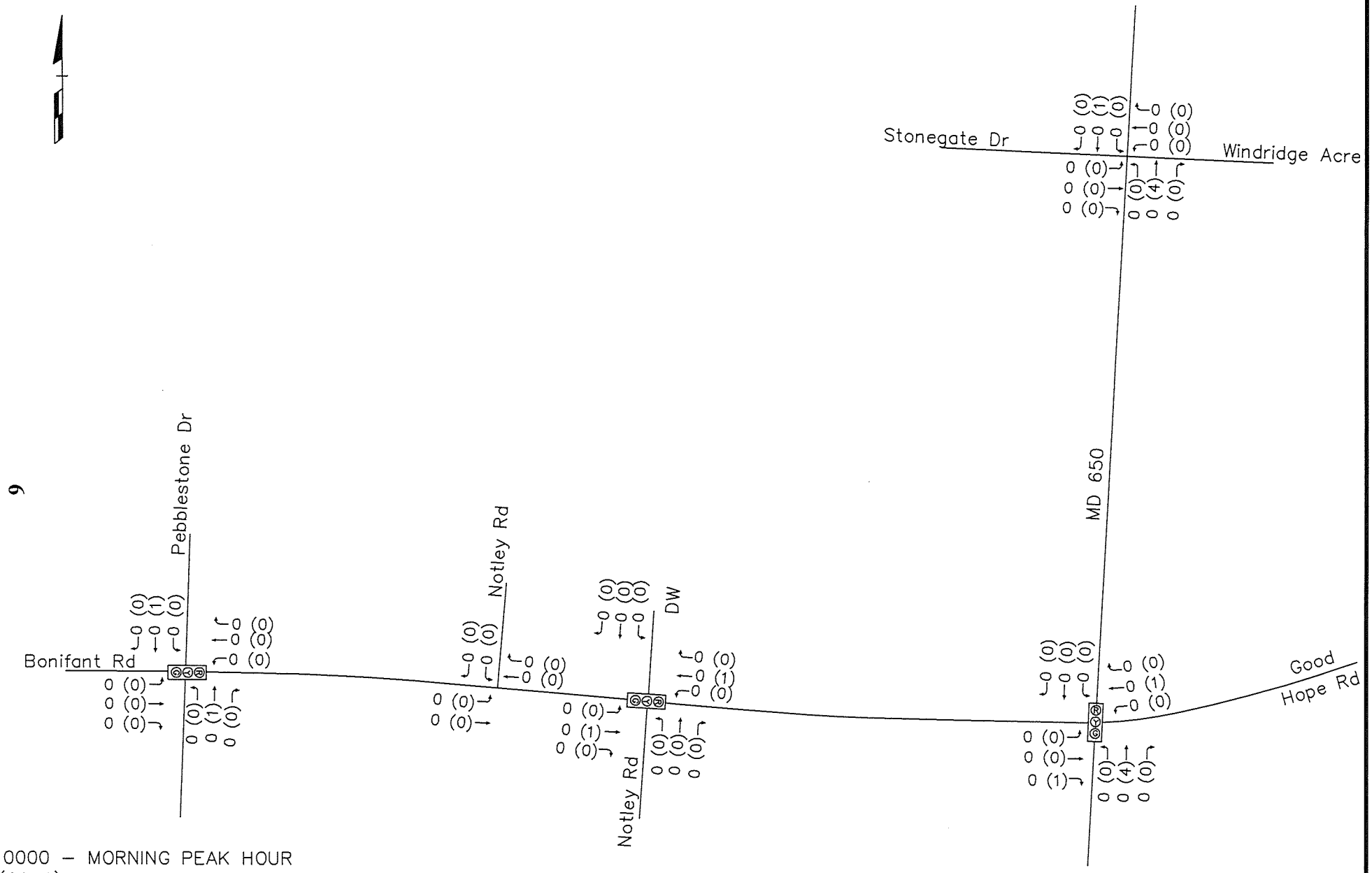
NO SCALE



0000 – MORNING PEAK HOUR
(0000) – EVENING PEAK HOUR

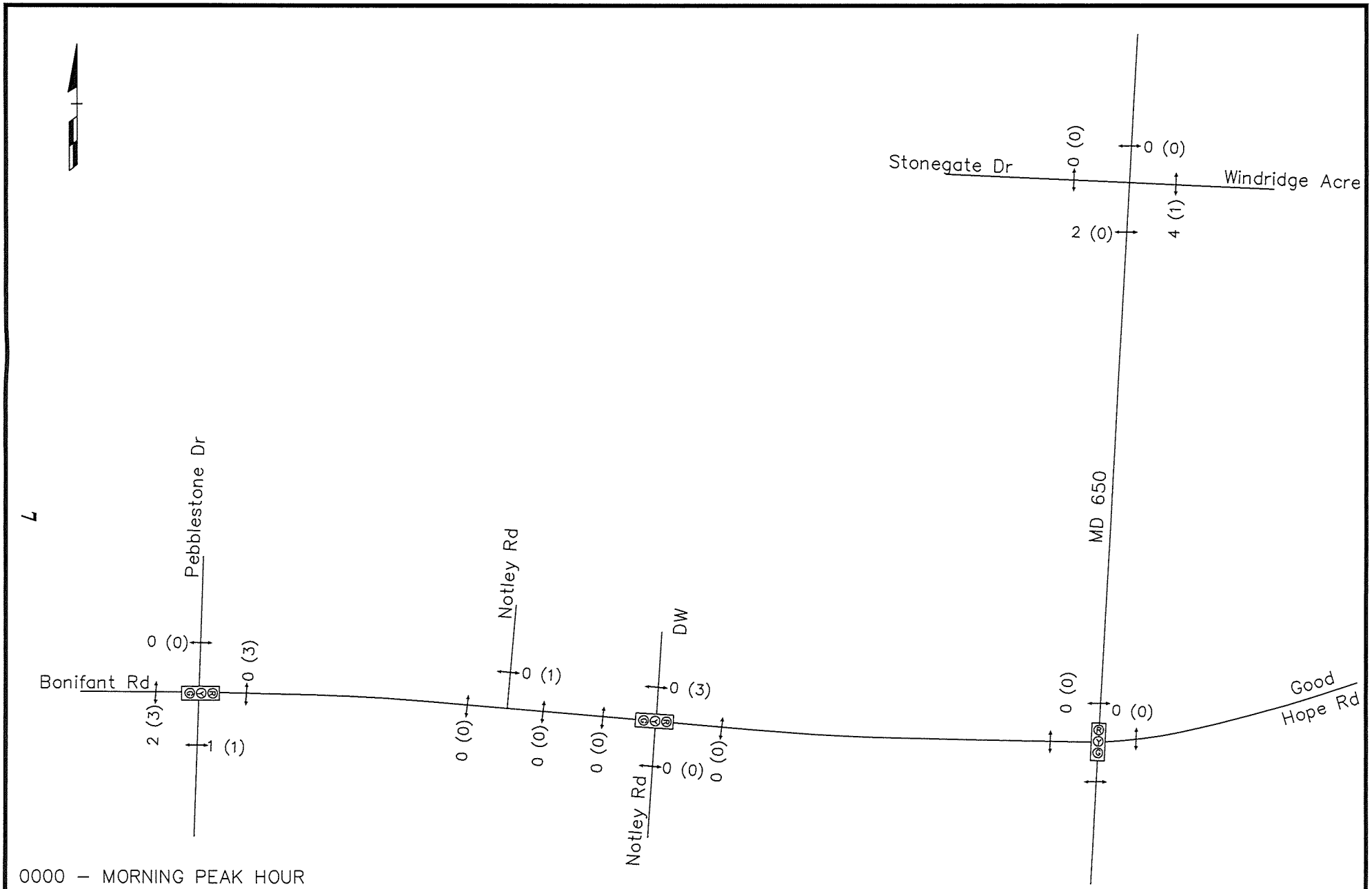
NO SCALE

EXHIBIT 3
EXISTING TRAFFIC VOLUMES



NO SCALE

EXHIBIT 4
EXISTING BIKE VOLUMES



0000 – MORNING PEAK HOUR
(0000) – EVENING PEAK HOUR

NO SCALE

EXHIBIT 5
EXISTING PEDESTRIAN VOLUMES

Based on the direction of the M-NCPPC, traffic counts conducted during the COVID-19 pandemic need to be adjusted by a factor of 1.07% to reflect the fact that schools are not currently in session. Accordingly, the volumes shown in Exhibit 3 were adjusted by 1.07% and are shown in Exhibit 6.

The adjusted peak hour traffic volumes shown in Exhibit 6 were subjected to a capacity analysis procedure using the Critical Lane Volume technique as described in M-NCPPC's *LATR/TPAR Guidelines*. The results of the analysis are set forth in Table I and the worksheets are contained in Appendix C.

TABLE 1
CLV CAPACITY ANALYSES RESULTS
(ADJUSTED EXISTING PEAK HOUR VOLUMES)

INTERSECTION	MORNING PEAK HOUR	AFTERNOON PEAK HOUR	CONGESTION STANDARD
Bonifant Rd @ Pebblestone Dr	(432)	(559)	1450
Bonifant Rd @ Notley Rd West	(390)	(593)	1450
Bonifant Rd @ Notley Rd East	(401)	(576)	1450
MD 650 @ Stonegate Dr	(464)	(651)	1450
MD 650 @ Bonifant Rd	(684)	(854)	1450

(0000) - (Critical Lane Volume)

As shown in Table 1, all of the critical intersections currently operate within acceptable levels during both the morning and evening peak hours. Furthermore, the Critical Lane Volumes are less than 1,350 and a Highway Capacity Manual analysis is not required.

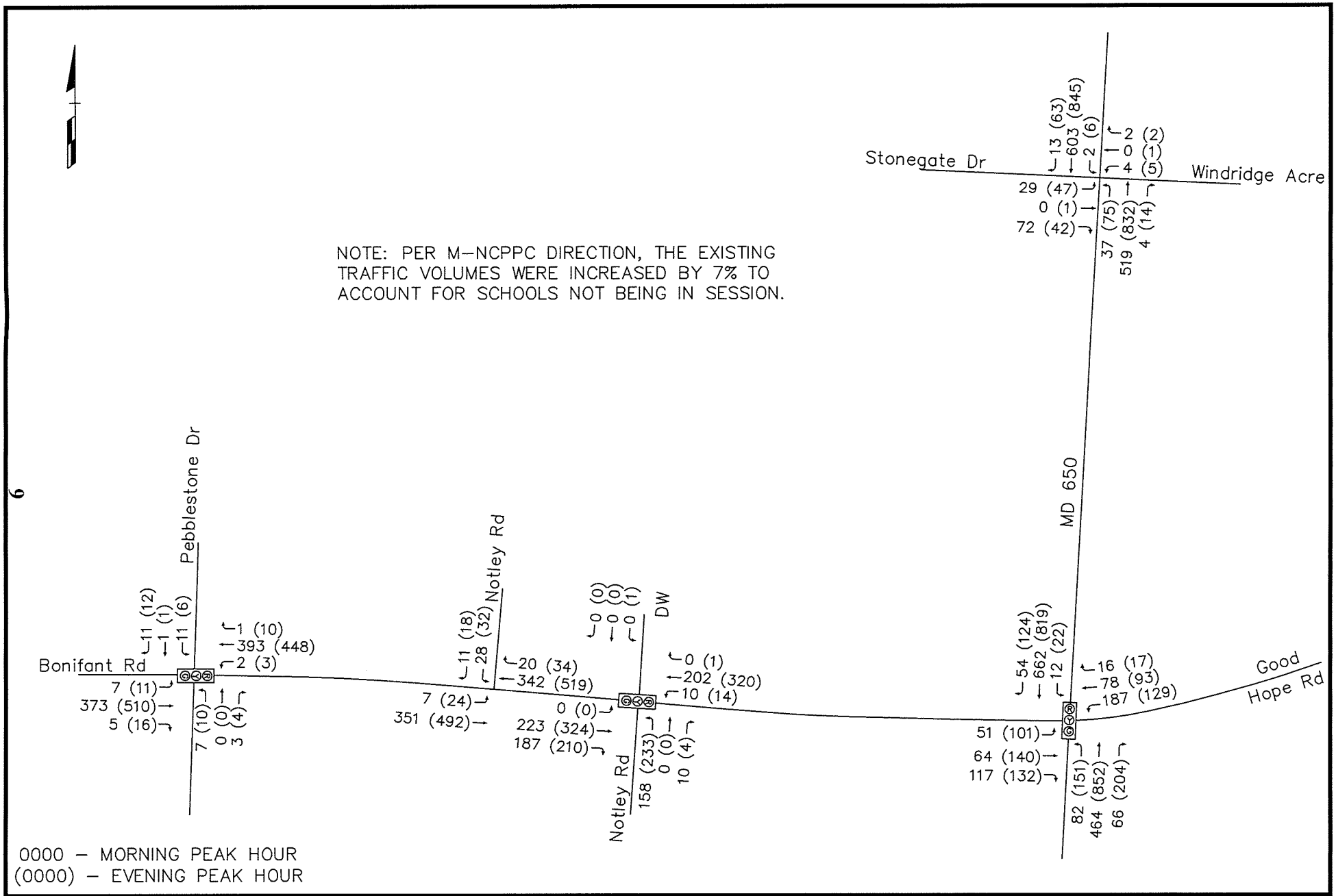


EXHIBIT 6

ADJUSTED EXISTING TRAFFIC VOLUMES

NO SCALE

BACKGROUND TRAFFIC ANALYSIS

There were no planned developments identified in the general vicinity of the site that needed to be analyzed as a part of this study.

SITE TRAFFIC ANALYSIS

Montgomery County Public Schools (MCPS) is proposing to expand the existing Stonegate Elementary School located at 14811 Notley Road. The existing school has an enrollment of 501, for the current 2019-20 academic year, and the proposed expansion will result in a school with a core capacity of 740 students at completion. This represents 239 student increase.

The site is currently served by two (2) full movement access points on Notley Road and this will not change as a result of the proposed expansion.

A concept plan showing the proposed improvements is shown on Exhibit 7.

Trip Generation Analysis

Since the existing Stonegate Elementary School was closed due to COVID-19 restrictions, driveway counts and site specific trip generation rates were not possible. Therefore, the trip generation rates found in the Institute of Transportation Engineer's publication, Trip Generation, Tenth Edition were used to generate trips for the proposed expansion.

The trip generation rates and trips generated by the proposed expansion are shown in Table 2.

NO SCALE

EXHIBIT 7
CONCEPT PLAN

TABLE 2
TRIP GENERATION
STONEGATE ELEMENTARY SCHOOL

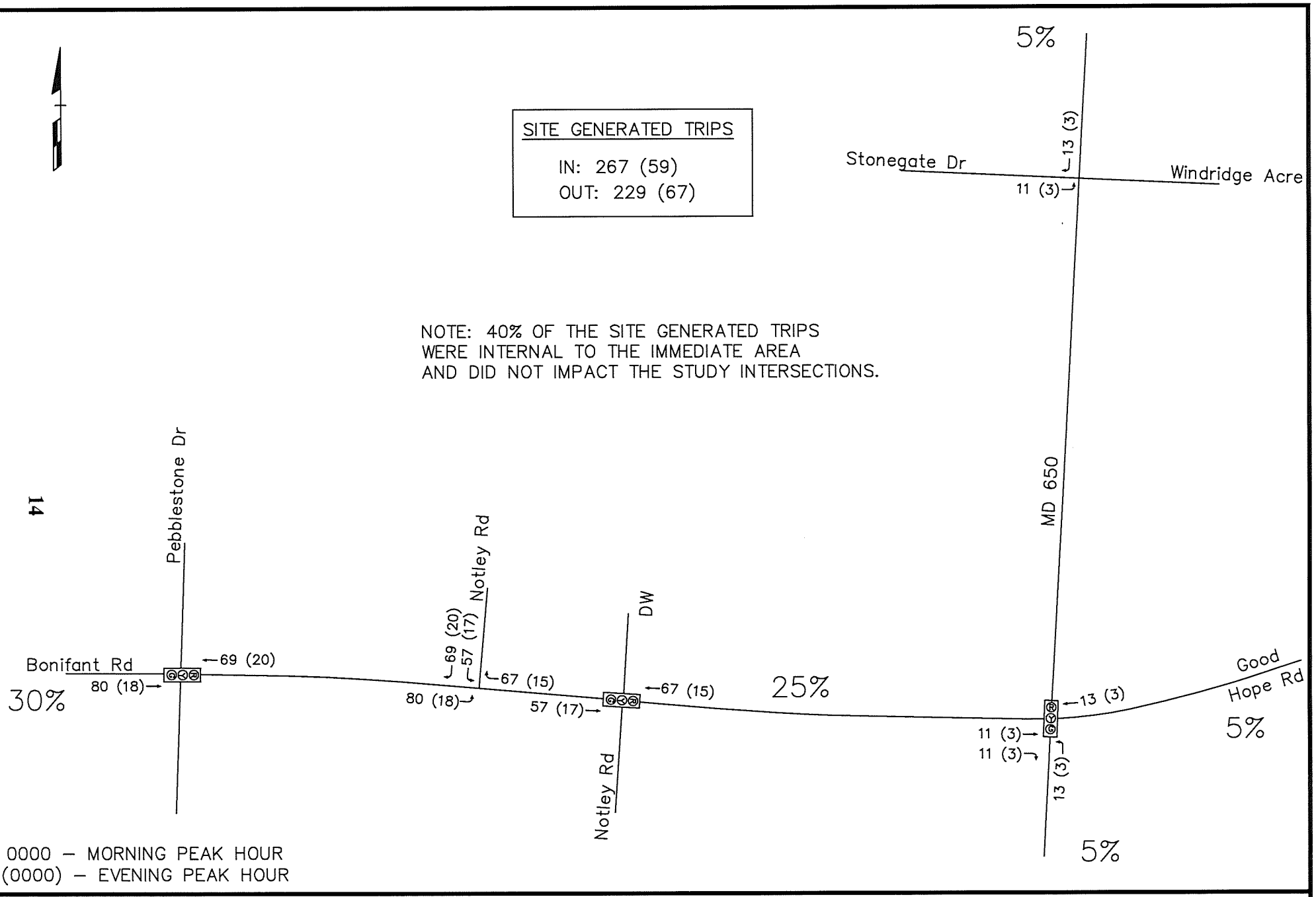
LAND USE	AM PEAK HOUR			PM PEAK HOUR		
	IN	OUT	TOTAL	IN	OUT	TOTAL
Elementary School (520)						
Trips/Student	0.36	0.31	0.67	0.08	0.09	0.17
Trips/740 Students	267	229	496	59	67	126

Trips were assigned to the road network based on the existing school boundary and the trips are shown in Exhibit 8. Note, since the school was closed when the counts were conducted, trips were generated for the full 740 student core capacity and assigned to the road network. These trips were then combined with the Adjusted Existing Traffic Volumes (Exhibit 6) resulting in the Total Traffic Volumes as shown in Exhibit 9. The total traffic volumes were then evaluated using the same methodology as for the previous step. The results of the analyses are shown in Table 3.

TABLE 3
CLV CAPACITY ANALYSES RESULTS
(TOTAL PEAK HOUR VOLUMES)

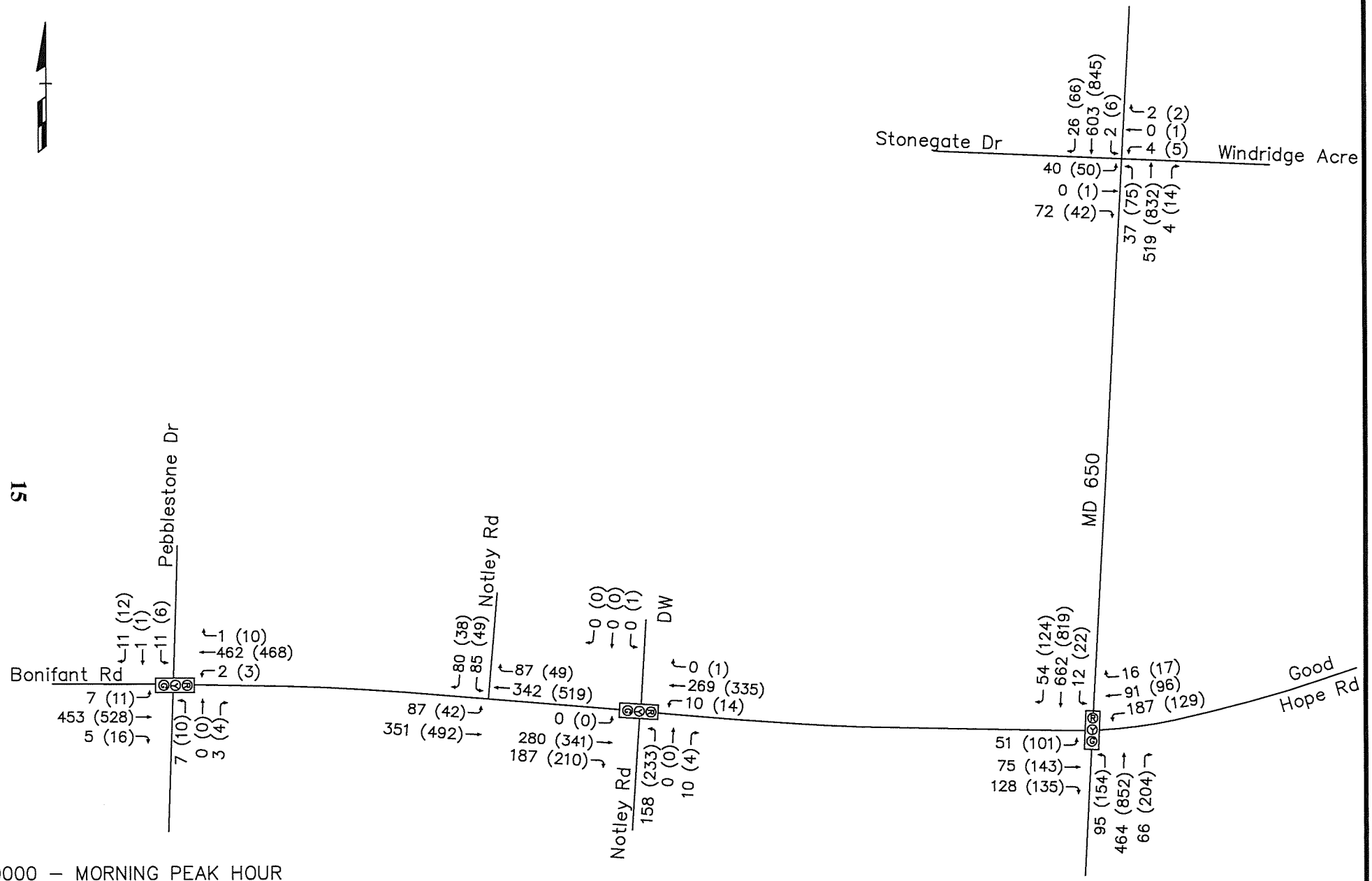
INTERSECTION	MORNING PEAK HOUR	AFTERNOON PEAK HOUR	CONGESTION STANDARD
Bonifant Rd @ Pebblestone Dr	(501)	(577)	1450
Bonifant Rd @ Notley Rd West	(594)	(648)	1450
Bonifant Rd @ Notley Rd East	(458)	(593)	1450
MD 650 @ Stonegate Dr	(473)	(621)	1450
MD 650 @ Bonifant Rd	(708)	(860)	1450

(0000) - (Critical Lane Volume)



NO SCALE

EXHIBIT 8
SITE GENERATED TRIPS



0000 – MORNING PEAK HOUR
(0000) – EVENING PEAK HOUR

NO SCALE

EXHIBIT 9
TOTAL TRAFFIC VOLUMES

As shown in Table 3, all of the critical intersections are projected to operate within acceptable levels during both the morning and evening peak hours. Furthermore, the Critical Lane Volumes are less than 1,350 and a Highway Capacity Manual analysis is not required.

The capacity worksheets are contained in Appendix D.

PEDESTRIAN/BICYCLE/TRANSIT SYSTEM ADEQUACY

The peak number of new trips generated by this proposal is 160 trips during the morning peak hour. The school is in Policy Area 8 and the results of the mode splits are shown below in Table 4.

TABLE 4
MODE SPLIT ADJUSTMENTS FOR POLICY AREA 8

Total Person Trips	Auto Driver	Auto Passenger	Transit	Pedestrian (Transit + Non-Motorized)	Bicycle (Non-motorized)
101%	76.5%	19.2%	0.8%	0.8%+3.4%	3.4%
160	122	31	1	7	5

Pedestrian System Adequacy

The number of non-motorized trips is less than the threshold of 50 so a quantitative pedestrian/bicycle analyses is not required. However the pedestrian features at each study intersection are discussed below.

MD 650 @ Good Hope Road-Bonifant Road - crosswalks are provided across the north leg of MD 650 and Good Hope Road and Bonfiant Road at this signalized intersection. The crosswalks are supplemented with APS pedestrian signals with count down displays and the ramps are ADA compatible. Continuous concrete sidewalks are provided along both sides of MD 650 and the north side of Bonifant Road. Metro Bus route Z2 runs along MD 650 and Ride-On bus route 39 runs along Good Hope Road-Bonifant Road. Street lights are provided at this intersection.

Bonifant Road @ Notley Road East - no crosswalks or pedestrian signals are provided at this signalized intersection. A concrete sidewalk is provided along the west side of Notley Road and along the north side of Bonifant Road from the intersection to the Ride On bus stop. Street lights are provided at this intersection.

Bonifant Road @ Notley Road West - no crosswalks are provided at this unsignalized intersection. A concrete sidewalk is provided along the east side of Notley Road. Street lights are provided at this intersection.

Bonifant Road @ Pebblestone Drive - crosswalks are provided across all legs of this signalized intersection. The crosswalks are supplemented with pedestrian signals and the ramps are ADA compatible. Concrete sidewalks are provided along both of the south leg of Pebblestone Drive and wrap around the radius of the intersection to the Ride On bus stops on Bonifant Road. Street lights are provided at this intersection.

MD 650 @ Stonegate Drive-Windridge Acre - no crosswalks are provided at this unsignalized intersection. Concrete sidewalks are provided along both sides of MD 650 south of the intersection and along the east side of MD 650 north of the intersection. Concrete sidewalk is also provided along the south side of Stonegate Drive. Street lights are provided at this intersection.

In the vicinity of the school, concrete sidewalk is provided along the east side of Notley Road from Stonegate Drive to Bonifant Road and along the west side from Fieldstone Road to Carona Drive. Exhibit 10 was prepared to show the pedestrian features in the vicinity of the school.

Bicycle System Adequacy

Since this proposed expansion will not generate more than 50 bicycle peak hour trips a bicycle system adequacy analysis is not required.

Transit System Adequacy

Since this proposed expansion will not generate more than 50 transit peak hour trips a transit system adequacy analysis is not required.

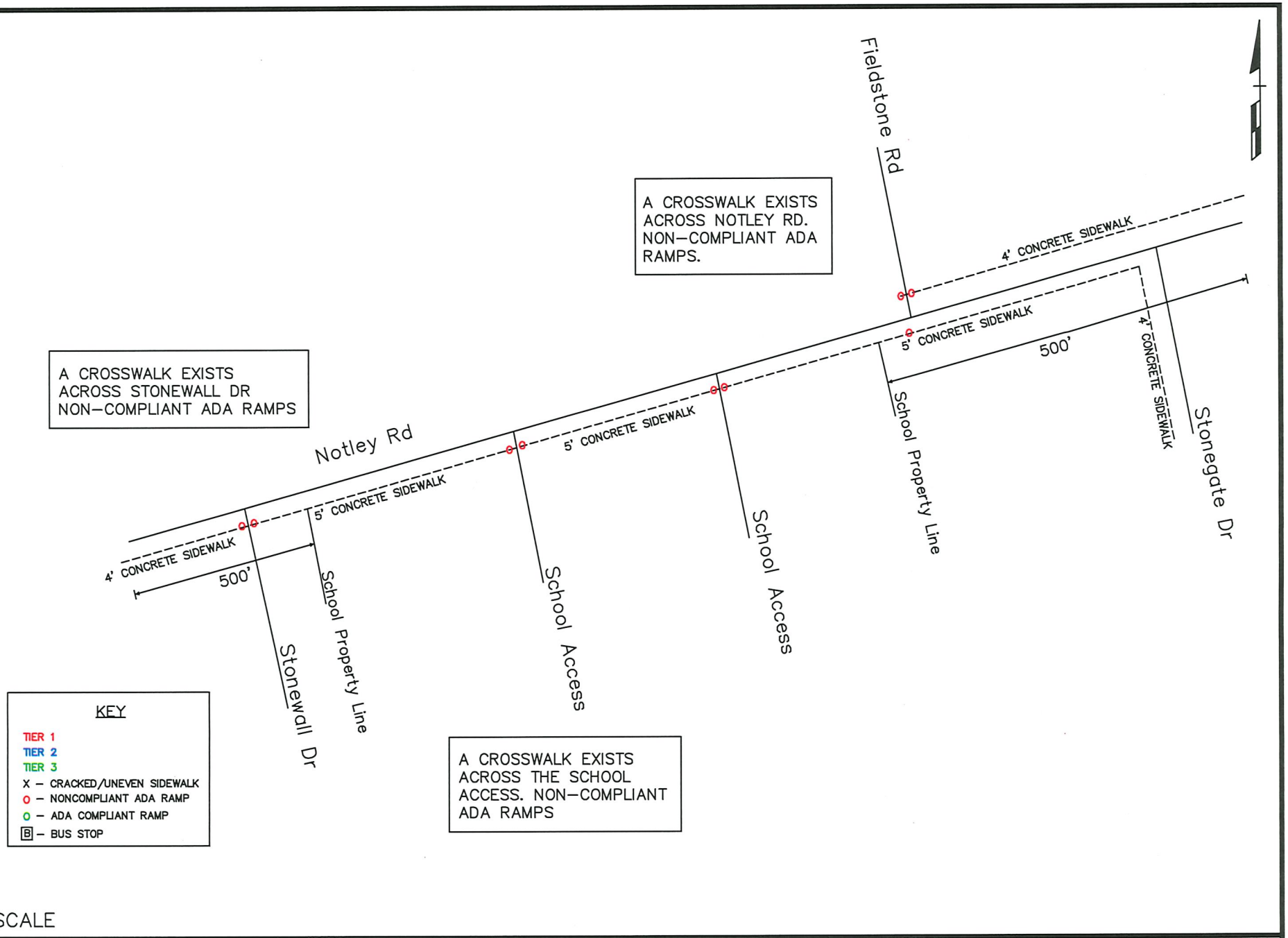


EXHIBIT 10
PEDESTRIAN FEATURES

Signal Warrants Studies

At the request of the M-NCPPC signal warrants studies were performed at the Bonifant Road/Notley Road West and MD 650/Stonegate Drive-Windridge Acre intersections. 12 hour turning movement counts were performed at each intersection from 7:00 AM to 7:00 PM. Full signal warrants studies were performed and it was determined that signalization is not justified at either intersection under existing or total traffic volumes. The signal warrants studies are enclosed in Appendix E.

CONCLUSIONS

A traffic impact study was prepared in accordance with the guidelines published by M-NCPPC for Mandatory Referrals, for projects undertaken by public agencies. The proposed expansion of the Stonegate Elementary School falls within the parameters of these guidelines.

After collecting current traffic count data at five (5) intersections, it was determined that under existing traffic volumes all of the intersections that were analyzed as part of the LATR study operate within the Congestion Standard for the Cloverly Policy Area of 1450 critical lane volume or less during the peak hours of school traffic.

The analysis then proceeded to generate trips for the additional 239 students. The results of the analyses demonstrate, as shown in Table 3, that all of the critical intersections are projected to operate within acceptable limits.

As required by the *LATR/TPAR Guidelines*, pedestrian facilities in the area were also inventoried. The area in which the school is located is a mature neighborhood with continuous sidewalks along the primary residential roadways in the neighborhood to encourage pedestrian traffic to the school.

APPENDIX A

TRAFFIC STUDY SCOPE OF WORK AGREEMENT

MONTGOMERY COUNTY PLANNING DEPARTMENT
THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

Local Area Transportation Review

TRANSPORTATION IMPACT STUDY SCOPE OF WORK AGREEMENT

Updated July 2020

Scoping Approval - Prior to initiating a Local Area Transportation Review study or supplemental traffic study, scoping *must be approved* by relevant agencies, including the Planning Department, the Montgomery County Department of Transportation, and the State Highway Administration (where relevant). It is the responsibility of the Applicant to obtain approval, which is demonstrated below via signature or electronic signature of the relevant agency representatives. Generally, the Applicant should anticipate a turnaround time of ten (10) business days for form review. Substantially large projects may require additional time and/or may warrant a scoping meeting.

Montgomery County Planning Department
Name (print): Lauren Campbell Signature: Lauren Campbell Date: 10/13/2020

Montgomery County Department of Transportation
Name (print): William Whelan Signature: William Whelan Date: 10/28/20

State Highway Administration (where relevant)
Name (print): Kwesi Woodroffe Signature: [signature] Date: 10/13/2020

Applicant Contact Information	
Transportation Consultant (company, contact name, email, and phone number)	Street Traffic Studies, Mike Nalepa, mnalepa@streettrafficstudies.com 410 590 5500
Name of Applicant / Developer	MCPS

Project Information	***Include Tables/Graphics, As Needed***			
Project Name (include plan no. if known)	Stonegate Elementary School			
Project Location (include address if known)	14811 Notley Rd, Silver Spring, MD 20905			
Policy Area(s) (subdivision staging policy map)	Cloverly	Master Plan(s) / Sector Plan Area(s)	1997 Cloverly Master Plan	
Application Type(s)	☐ Preliminary Plan	☐ Site Plan	☐ Sketch/Concept/Pre-Preliminary (Optional)	☐ Amendment
	☐ Conditional Use (formerly special exception)	☐ Local Map Amendment	☐ APF at Building Permit	☑ Other: MR

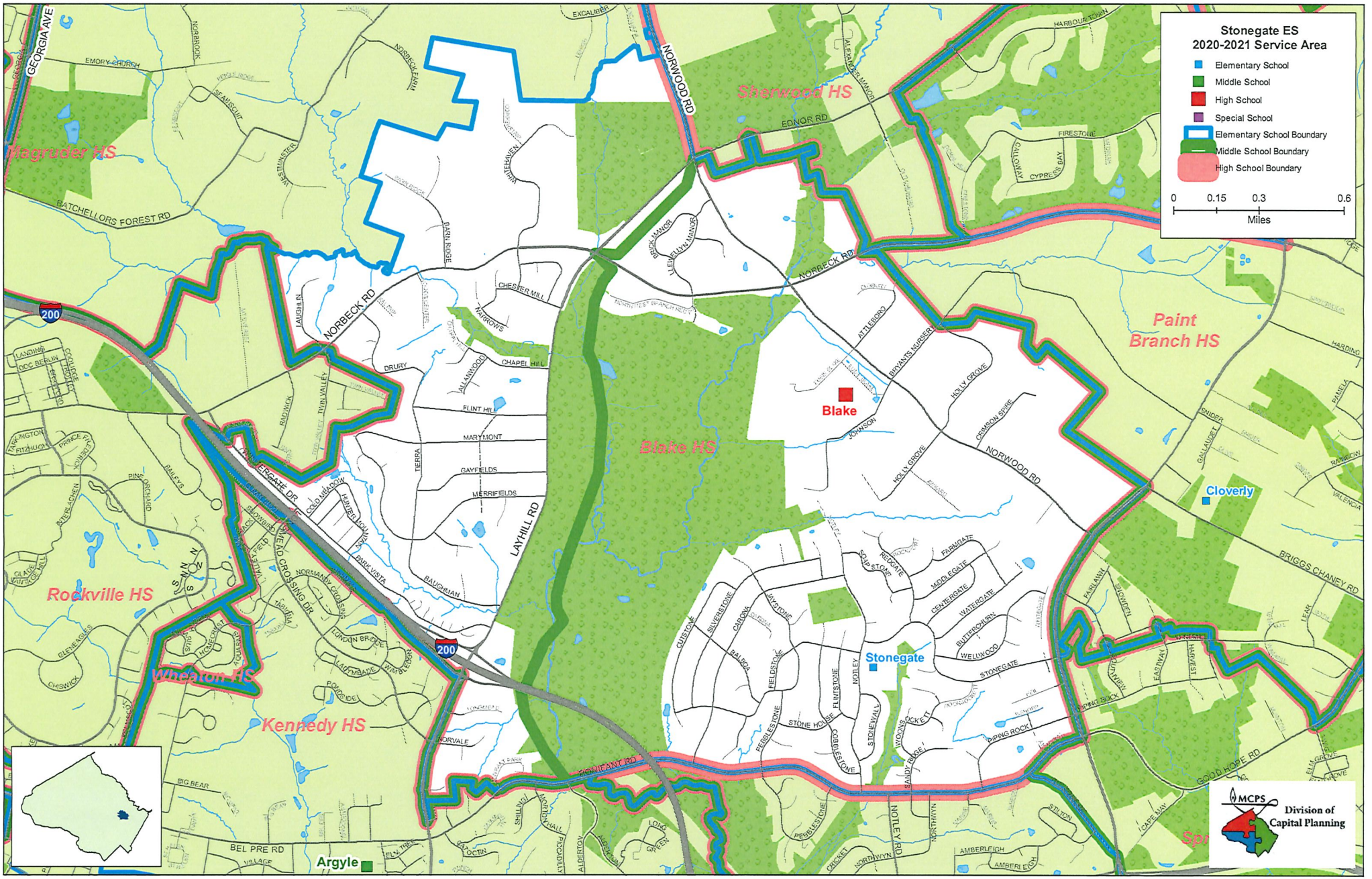
Project Description & Previous Approvals (proposed land uses, zoning, no. of units, square footage, construction phasing, prior approvals and proposals, existing uses, site operations, year built, status of Adequate Public Facilities [APF], other relevant info)	The existing Stonegate Elementary School currently occupies the site. Additions will be made to the existing facility to increase the design capacity to 594 students with a core capacity of 740 students. Currently the school is served by two access points on Notley Road. This proposal is not anticipated to change the access points.		
1.Site Access (proposed access location(s), existing/adjacent/opposite curb cuts, interparcel connections, access configurations and restrictions, internal circulation, private roads, parking/loading areas, other relevant info)	No change to the existing access is anticipated.		
2.Transportation Analysis Requirement	☑ Transportation Impact Study Generates 50 or more total weekday peak hour person trips (vehicular, transit, bicycle, and/or pedestrian) with no reductions other than a credit for existing developments over 12 years old, *AND* is outside of the White Flint and White Oak Policy Areas. Fill out remainder of this form and include in transportation impact study appendix.	☐ Transportation Study Exemption Statement Generates 49 or fewer total weekday peak hour person trips (vehicular, transit, bicycle, and/or pedestrian) with no reductions other than a credit for existing developments over 12 years old, *OR* within White Flint and White Oak Policy Areas.	
3.Project-based Transportation Demand Management Plan Required (see Chapter 42, Articles I and II)	☑ No	☐ Yes (In Transportation Management District [TMD])	☐ Amend Existing TMAg
4.Established Transportation Management District (TMD)?	☑ No	☐ Yes TMD Name: _____	

Transportation Impact Study Assumptions	***Include Tables/Graphics, As Needed***	
5.Study Years / Phases	Existing Year: 2020	Phases / Build-out Year(s): 2023
6.Study Periods	☑ AM ☑ PM ☐ Mid-day ☐ Saturday ☐ Sunday ☑ Other: PM School Peak 3 - 6pm	

<table>
<tr><td rowspan="7">7.Study Intersections
(For projects generating 50 or more person trips, list all signalized & significant unsignalized intersections, and site driveways traffic counts must be collected within 12-months of completed and accepted application)</td><td colspan="5"># of tiers of intersections to study (refer current LATR Guidelines): _____
For the purpose of determining the number of tiers of study intersections, trip calculation for the subject site should also include nearby unbuilt properties in common ownership. No trip reductions should be taken in this calculation other than a credit for existing developments over 12 years old.</td></tr>
<tr><td colspan="3">1) Bonifant Rd @ Notley Rd East</td><td colspan="2">7)</td></tr>
<tr><td colspan="3">2) Bonifant Rd @ Notley Rd West</td><td colspan="2">8)</td></tr>
<tr><td colspan="3">3) Bonifant Rd @ Pebblestone Dr</td><td colspan="2">9)</td></tr>
<tr><td colspan="3">4) MD 650 @ Stonegate Dr</td><td colspan="2">10)</td></tr>
<tr><td colspan="3">5) MD 650 @ Bonifant Rd</td><td colspan="2">11)</td></tr>
<tr><td colspan="3">6)</td><td colspan="2">attach more rows if necessary</td></tr>
<tr><td rowspan="2">8.Trip Generation
(clearly cite sources and methodology including use of average rates vs. equation; include trip generation for existing site, current approvals, proposed uses, and net changes)</td><td>Total Person Trips
158</td><td>Vehicle Trips*
(Auto Driver)
121</td><td>Transit Trips*
1</td><td>Walking Trips*
(non-motorized + transit)
7</td><td>Bicycling Trips*
(non-motorized)
5</td></tr>
<tr><td colspan="5">* Only required if total peak hour person trips are 50 or more in either the AM or PM peak hour. Sum of all vehicle, transit, and non-motorized trips shall be the equivalent of total person trips. Use table at the end of the form to show all calculations and assumptions for mode breakout.</td></tr>
<tr><td>9.Trip Reductions
(include justification and supporting documentation for internal capture, pass-by, diverted, Transportation Demand Management)</td><td colspan="5">None</td></tr>
<tr><td>10.Trip Distribution %
(include a map of the proposed project in addition to a list or table)</td><td colspan="5">Based on the service area, 40% of the site trips would be generated within the immediate area and would not use Bonifant Road. The remaining 60% were distributed as follows: 30% West on Bonifant Road, 25% East on Bonifant Road and 5% East on Stongate Drive.</td></tr>
<tr><td>11.Pipeline Developments to be considered as background traffic
(include name, plan #, land uses, and sizes for approved but unbuilt developments or concurrently pending applications; info can be obtained from the M-NCPPC Pipeline website: - website is updated quarterly)</td><td colspan="5">None</td></tr>
<tr><td>12.Pipeline Transportation Projects to be considered as background condition
(fully funded for construction in County Capital Improvement Program, State Consolidated Transportation Program, developer projects, etc. within the next 6 years)</td><td colspan="5">None</td></tr>
</table>

Preliminary Mitigation Analysis		**Refer to the LATR Guidelines for details on how to mitigate*
14.Vehicular Analysis	☑ Vehicular Analysis Anticipated (Vehicular mitigation to be determined after study)	• TEST: HCM Analysis is required to be provided for all intersections analyzed in studies for: 1) "Red & Orange" policy areas, and 2) intersections with a CLV of more than 1,350 in "Yellow & Green" policy areas. 3) **CLV analysis required for all intersections regardless of policy area. CLV assessment and signal timing worksheets are to be included in the study appendix.** • MITIGATION: Required if HCM delay analyses exceed policy area standard
15.Pedestrian Analysis	☑ Pedestrian Mitigation Anticipated See notes below	• TEST: If the plan generates 50 or more pedestrian peak hour trips, mitigation of surrounding pedestrian conditions is required • MITIGATION: Required if ADA non-compliance issues within 500 foot radius of site boundary and if pedestrian crosswalk delay at LATR intersections within 500 feet of site boundary is lower than Level of Service (LOS) D
16.Bicycle Analysis	☐ Bicycle Mitigation Anticipated	• TEST: If the plan generates 50 or more bicycle peak hour trips and is within 0.25 miles of an existing educational institution or existing/planned bikeshare station, mitigation of surrounding bicycle conditions is required • MITIGATION: Required to make improvements to provide a low Level of Traffic Stress to any existing similar facility within 750 feet of the site boundary; Alternatively, project may provide a master planned improvement that provides an equivalent improvement in the level of traffic stress for cyclists
17.Transit Analysis	☐ Transit Mitigation Anticipated	• TEST: If the plan generates 50 or more transit peak hour trips and the peak load of bus routes at bus stops within 1,000 feet of site boundary exceeds (or is worse than) peak load of LOS D (1.25 transit riders per seat during the peak period in the peak direction), mitigation of transit conditions is required • MITIGATION: Required to provide or fund improvements that would mitigate the trips exceeding the standard that are attributable to the development
Additional Analysis or Software Required	☐ Queuing Analysis ☒ Signal Warrant Analysis ☐ Weaving/Merge Analysis	☐ Accident Analysis ☐ Synchro ☐ SIDRA ☐ VISSIM ☐ CORSIM ☐ Other _____

M-NCPPC Clarifications	**Additional Assumptions & Special Circumstances for Discussion**
• **Transportation impact study will comply** with all other requirements of the LATR Guidelines not listed on this form. • **If physical improvements are proposed as mitigation**, the transportation impact study will demonstrate feasibility with regards to right-of-way and utility relocation (at a minimum). • **If the development proposal significantly changes after this transportation impact study** scope has been agreed to, the Applicant will work with M-NCPPC staff to amend the scope to accurately reflect the new proposal. • **A receipt from MCDOT** showing that the transportation impact study review fee has been paid will be provided to M-NCPPC DARC at the time the development application is submitted. • **Minimum of seven paper copies** (more if near the County line or an incorporated City) and two PDF copies of the transportation impact study and appendices will be provided.	Pedestrian Mitigation Anticipated: No full pedestrian analysis study required. Study ADA non-compliance issues within 500 foot radius of site boundary only. Traffic Counts to add 1.07 adjustment factor due to MCPS schools being closed due to Covid-19


Stonegate ES
2020-2021 Service Area
Elementary School
Middle School
High School
Special School
Elementary School Boundary
Middle School Boundary
High School Boundary
0 0.15 0.3 0.6
Miles
Magruder HS
Sherwood HS
Paint Branch HS
Blake HS
Rockville HS
Wheaton HS
Kennedy HS
Blake
Cloverly
Stonegate
Argyle
NORBECK RD
NORWOOD RD
LAYHILL RD
GEORGIA AVE
200
MCPS
Division of Capital Planning

Stonegate Elementary School - #316

Cluster Name: Northeast Consortium
School Hours: 9:00 - 3:25
Feeder Schools:

14811 Notley Road Silver Spring, MD 20905
www.montgomeryschoolsmd.org/schools/stonegatees/

Office Phone: (301) 989-5668
Fax Number: (301) 989-5671
Receiving Schools: Farquhar, White Oak

2019 – 2020 Official Enrollment as of September 30, 2019 =501

	% Total	% Gender		% Racial/Ethnic Composition[1] [2]						
		Female	Male	AM	AS	BL	HI	PI	WH	MU
All Students		**47.5**	**52.5**	**≤5.0**	**14.6**	**32.3**	**23.4**	**≤5.0**	**19.8**	**9.6**
ESOL	**13.0**	5.4	7.6	≤5.0	≤5.0	≤5.0	7.4	≤5.0	≤5.0	≤5.0
FARMS	**25.7**	11.4	14.4	≤5.0	≤5.0	9.4	10.2	≤5.0	≤5.0	≤5.0
Spec. Ed.	**15.0**	5.4	9.6	≤5.0	≤5.0	5.8	≤5.0	≤5.0	≤5.0	≤5.0

[1] Racial/ethnic composition figures reflect MSDE abbreviations: American Indian or Alaskan Native (AM); Asian (AS); Black or African American (BL); Hispanic/Latino (HI); Native Hawaiian or Other Pacific Islander (PI); White (WH); Two or More (Multiple) Races (MU).

Enrollment by Grade		
	Number	Percent
Pre-K	0	0.0
Full-Day K	75	15.0
Grade 1	72	14.4
Grade 2	72	14.4
Grade 3	96	19.2
Grade 4	86	17.2
Grade 5	100	20.0
Total	501	

Students with Disabilities Least Restrictive Environment (LRE)

Percent of Instructional Time Inside a General Education Class

	80% or More	Between 40% and 79%	Less than 40%
All Special Education Students	48.1	≤5.0	50.6

Other Participation

Students now or have in the past received FARMS[2] = 30.1%
Attendance Rate[2] [3] = ≥95.0%
Mobility Rate (Entrants + Withdrawals)[2] [3] = 8.7%
Suspension Rate[2] [3] [4] = --

School Programs

Be Well 365
Center for Enriched Studies (CES) (local)
Home School Model - Elementary
Learning for Independence (LFI)
Positive Behavioral Interventions and Supports (PBIS)
Speech Resource K-12
Visitor Management System

Staff Diversity

	% Racial/Ethnic Composition[1]					% Gender	
	AS	BL	HI	WH	MU	Female	Male
Professional	9.1	15.9	4.5	68.2	2.3	88.6	11.4
Supporting Services	10.5	21.1	26.3	36.8	5.3	84.2	15.8

Student/Instructional Staff Ratio	Average Class Size		
11.2	Kindergarten = 24.0	Grades 1 to 3 = 22.8	Grades 4 to 5 = 24.0

Years Experience of Professional Personnel

% Less Than 5 Years	% 5–15 Years	% More Than 15 Years
27.3	45.5	27.3

[2] To comply with federal requirements, any percentage rates greater than or equal to 95.0% or less than or equal to 5.0% (3% for suspensions) will be noted as ≥95.0 or ≤5.0 (≤3.0 for suspensions), respectively.

[3] Outcome data reflect 2018–2019 school year.

[4] Results are not reported (--) for groups with fewer than ten students enrolled.

Stonegate Elementary School - #316

Staff Positions

Professional

Administrative	
Principal	1.000
Assistant Principal	1.000
Asst School Administrator	
Administrative Total	2.000
Teachers	
Classroom	20.000
Staff Development	1.000
Academic Intervention	0.400
ESOL	1.500
Focus	0.600
Reading/Literacy	1.600
Physical Education	1.000
Art	1.000
Music	1.000
Instrumental Music	0.300
Preschool	
Special Education:	
Classroom	4.500
Resource Program	2.000
Other	
Teachers Total	34.900
Other Professional	
Counselor	1.000
Media Specialist	1.000
Spec Ed Related Services	1.300
Other Professional Total	3.300
Total Professional	40.200

Supporting Services

Instructional Support	
Paraeducators	
Regular	1.625
ESOL	
Special Education	4.250
Media Assistant	0.500
Instructional Support Total	6.375
Other Support	
Administrative Secretary	1.000
Secretary	1.000
Parent/Community Coord	
Lunch Hour Aide	1.625
Other Support Total	3.625
Building Services	
Manager	1.000
Assistant Manager	1.000
Worker	1.500
Plant Equipment Operator	
Building Services Total	3.500
Food Services	1.000
Total Supporting Services	14.500

Facilities Data

Original Construction Date	Year Renovated/ Modernized	Site Size in Acres	Gym	Joint Occupancy	Relocatable Classrooms
1971	--	10.3	Y	Y	7

Core Facility Teaching Stations

Total	Grades 1–6	Support A/M/R	Pre K	ESOL	Kindergarten	Special Education
23	12	4	0	0	3	4

Capacity/Enrollment Projections

Current Capacity	Future Capacity	2020 –2021	2021 –2022	2022 –2023	2023 –2024	2024 –2025	2025 –2026
385	385	486	484	471	479	479	479

School Personnel Costs

Professional Salaries	$3,223,111
Supporting Services Salaries	$655,566
Employee Benefits	$1,010,535
Total Allocated Cost	**$4,889,212**

APPENDIX B

VEHICLE TURNING MOVEMENT COUNTS

STONEGATE ELEMENTARY SCHOOL STUDY

Intersection Turning Movment Count Data Summary

Location: Bonifant Road @ Pebblestone Drive (Location #1)
Day/Date Surveyed: Tuesday (October 27, 2020)

Weather: Mild, Cloudy, Dry
ORGA Techs:

15-Minute Interval (Ending)	Total Vehicles																				Interval Total
	Pebblestone Drive From North					Pebblestone Drive From South					Bonifant Road From East					Bonifant Road From West					
	Left	Thru	Right	U-Turn	Total	Left	Thru	Right	U-Turn	Total	Left	Thru	Right	U-Turn	Total	Left	Thru	Right	U-Turn	Total	
6:45	1	0	5	0	6	1	0	1	0	2	0	46	0	0	46	0	66	0	0	66	120
7:00	2	0	3	0	5	0	0	0	0	0	0	46	0	0	46	3	80	0	0	83	134
7:15	0	0	3	0	3	0	0	0	0	0	0	49	1	0	50	2	56	0	0	58	111
7:30	5	0	3	0	8	1	0	0	0	1	0	62	1	0	63	1	72	3	0	76	148
7:45	**5**	**0**	**1**	**0**	**6**	**0**	**0**	**1**	**0**	**1**	**0**	**104**	**0**	**0**	**104**	**2**	**88**	**1**	**0**	**91**	**202**
8:00	**1**	**0**	**5**	**0**	**6**	**0**	**0**	**1**	**0**	**1**	**1**	**90**	**0**	**0**	**91**	**2**	**94**	**1**	**0**	**97**	**195**
8:15	**4**	**0**	**2**	**0**	**6**	**5**	**0**	**1**	**0**	**6**	**1**	**85**	**0**	**0**	**86**	**1**	**76**	**3**	**0**	**80**	**178**
8:30	**0**	**1**	**2**	**0**	**3**	**2**	**0**	**0**	**0**	**2**	**0**	**88**	**1**	**0**	**89**	**2**	**91**	**0**	**0**	**93**	**187**
8:45	1	0	1	0	2	3	0	2	0	5	1	69	2	0	72	3	67	4	0	74	153
9:00	0	0	3	0	3	1	0	3	0	4	2	78	4	0	84	0	43	3	0	46	137
9:15	1	0	4	1	6	1	0	2	0	3	1	76	0	0	77	2	72	1	0	75	161
9:30	1	0	2	0	3	2	0	2	0	4	0	81	0	0	81	2	71	2	0	75	163
AM Peak Hour Total	**10**	**1**	**10**	**0**	**21**	**7**	**0**	**3**	**0**	**10**	**2**	**367**	**1**	**0**	**370**	**7**	**349**	**5**	**0**	**361**	**762**
AM Peak PHF	**0.50**	**0.25**	**0.50**	**0.00**	**0.88**	**0.35**	**0.00**	**0.75**	**0.00**	**0.42**	**0.50**	**0.88**	**0.25**	**0.00**	**0.89**	**0.88**	**0.93**	**0.42**	**0.00**	**0.93**	**0.94**
15:15	2	0	10	0	12	2	0	0	0	2	0	92	4	0	96	5	106	2	0	113	223
15:30	1	0	2	0	3	0	0	1	0	1	0	113	3	0	116	7	119	3	0	129	249
15:45	4	0	2	0	6	4	0	0	0	4	0	99	2	0	101	5	105	2	0	112	223
16:00	2	0	3	0	5	0	1	1	0	2	3	106	3	0	112	3	108	3	0	114	233
16:15	**1**	**0**	**4**	**0**	**5**	**3**	**0**	**1**	**0**	**4**	**3**	**92**	**2**	**0**	**97**	**1**	**126**	**4**	**0**	**131**	**237**
16:30	**0**	**1**	**0**	**0**	**1**	**4**	**0**	**0**	**0**	**4**	**0**	**96**	**2**	**0**	**98**	**4**	**129**	**3**	**0**	**136**	**239**
16:45	**3**	**0**	**3**	**0**	**6**	**1**	**0**	**2**	**0**	**3**	**0**	**100**	**1**	**0**	**101**	**1**	**119**	**5**	**0**	**125**	**235**
17:00	**2**	**0**	**4**	**0**	**6**	**1**	**0**	**1**	**0**	**2**	**0**	**131**	**4**	**0**	**135**	**4**	**103**	**3**	**0**	**110**	**253**
17:15	4	0	2	0	6	3	0	1	0	4	2	100	0	0	102	2	91	7	0	100	212
17:30	0	0	2	0	2	2	2	0	0	4	1	131	1	0	133	5	106	2	0	113	252
17:45	3	0	1	0	4	3	0	0	0	3	1	107	5	0	113	2	102	2	0	106	226
18:00	0	0	0	0	0	2	0	3	0	5	2	129	4	0	135	6	112	3	0	121	261
PM Peak Hour Total	**6**	**1**	**11**	**0**	**18**	**9**	**0**	**4**	**0**	**13**	**3**	**419**	**9**	**0**	**431**	**10**	**477**	**15**	**0**	**502**	**964**
PM Peak PHF	**0.50**	**0.25**	**0.69**	**0.00**	**0.75**	**0.56**	**0.00**	**0.50**	**0.00**	**0.81**	**0.25**	**0.80**	**0.56**	**0.00**	**0.80**	**0.63**	**0.92**	**0.75**	**0.00**	**0.92**	**0.95**

Data Collection by: O. R. George & Associates, Inc.

STONEGATE ELEMENTARY SCHOOL STUDY

Intersection Turning Movment Count Data Summary

Location: Bonifant Road @ Pebblestone Drive (Location #1)
Day/Date Surveyed: Tuesday (October 27, 2020)

Weather: Mild, Cloudy, Dry
ORGA Techs:

15-Minute Interval (Ending)	Bicycle Volumes																				Interval Total
	Pebblestone Drive					Pebblestone Drive					Bonifant Road					Bonifant Road					
	From North					From South					From East					From West					
	Left	Thru	Right	U-Turn	Total	Left	Thru	Right	U-Turn	Total	Left	Thru	Right	U-Turn	Total	Left	Thru	Right	U-Turn	Total	
6:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:00	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:15	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:30	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AM Peak Hour Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
16:30	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
16:45	**0**	**1**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**
17:00	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
17:15	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM Peak Hour Total	**0**	**1**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**

Data Collection by: O. R. George & Associates, Inc.

STONEGATE ELEMENTARY SCHOOL STUDY

Intersection Turning Movment Count Data Summary

Location: Bonifant Road @ Pebblestone Drive (Location #1) **Weather:** Mild, Cloudy, Dry
Day/Date Surveyed: Tuesday (October 27, 2020) **ORGA Techs:**

15-Minute Interval (Ending)	Pedestrian Volumes				Interval Total
	Pebblestone Drive	Pebblestone Drive	Bonifant Road	Bonifant Road	
	Across North	Across South	Across East	Across West	
6:45	0	0	0	0	**0**
7:00	0	0	0	0	**0**
7:15	0	0	0	0	**0**
7:30	0	0	0	1	**1**
7:45	**0**	**1**	**0**	**0**	**1**
8:00	**0**	**0**	**0**	**0**	**0**
8:15	**0**	**0**	**0**	**1**	**1**
8:30	**0**	**0**	**0**	**1**	**1**
8:45	0	0	0	0	**0**
9:00	0	0	0	0	**0**
9:15	0	0	0	0	**0**
9:30	0	0	0	0	**0**
AM Peak Hour Total	**0**	**1**	**0**	**2**	**3**
15:15	1	0	3	0	**4**
15:30	0	0	0	0	**0**
15:45	1	0	0	1	**2**
16:00	0	0	0	0	**0**
16:15	**0**	**0**	**1**	**2**	**3**
16:30	**0**	**1**	**0**	**0**	**1**
16:45	**0**	**0**	**1**	**1**	**2**
17:00	**0**	**0**	**1**	**0**	**1**
17:15	0	0	0	0	**0**
17:30	0	0	0	0	**0**
17:45	0	1	1	0	**2**
18:00	1	0	1	0	**2**
PM Peak Hour Total	**0**	**1**	**3**	**3**	**7**

Data Collection by: O. R. George & Associates, Inc.

STONEGATE ELEMENTARY SCHOOL STUDY

Intersection Turning Movement Count Data Summary

Location: Bonifant Road @ Notley Road - West (Location #2)
Day/Date Surveyed: Tuesday (October 27, 2020)

Weather: Mild, Cloudy, Dry
ORGA Techs:

15-Minute Interval (Ending)	Total Vehicles																				Interval Total
	Notley Road (West)					From South					Bonifant Road					Bonifant Road					
	From North										From East					From West					
	Left	Thru	Right	U-Turn	Total	Left	Thru	Right	U-Turn	Total	Left	Thru	Right	U-Turn	Total	Left	Thru	Right	U-Turn	Total	
7:15	**4**	**0**	**3**	**0**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**83**	**6**	**0**	**89**	**0**	**61**	**0**	**0**	**61**	**157**
7:30	**10**	**0**	**3**	**0**	**13**	**0**	**0**	**0**	**0**	**0**	**0**	**84**	**4**	**0**	**88**	**3**	**79**	**0**	**0**	**82**	**183**
7:45	**8**	**0**	**3**	**0**	**11**	**0**	**0**	**0**	**0**	**0**	**0**	**69**	**3**	**0**	**72**	**3**	**87**	**0**	**0**	**90**	**173**
8:00	**4**	**0**	**1**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**84**	**6**	**0**	**90**	**1**	**101**	**0**	**0**	**102**	**197**
8:15	5	0	6	0	11	0	0	0	0	0	0	70	5	0	75	9	78	0	0	87	**173**
8:30	2	0	8	0	10	0	0	0	0	0	0	74	4	0	78	3	90	0	0	93	**181**
8:45	4	0	5	0	9	0	0	0	0	0	0	63	3	0	66	4	93	0	0	97	**172**
9:00	3	0	7	0	10	0	0	0	0	0	0	71	6	0	77	2	48	0	0	50	**137**
9:15	1	0	12	0	13	0	0	0	0	0	0	49	3	0	52	10	62	0	0	72	**137**
9:30	4	0	2	0	6	0	0	0	0	0	0	57	2	0	59	3	72	0	0	75	**140**
9:45	6	0	10	0	16	0	0	0	0	0	0	58	6	0	64	4	74	0	0	78	**158**
10:00	5	0	6	0	11	0	0	0	0	0	0	66	9	0	75	3	73	0	0	76	**162**
10:15	4	0	3	0	7	0	0	0	0	0	0	59	7	0	66	8	75	0	0	83	**156**
10:30	3	0	2	1	6	0	0	0	0	0	0	79	4	0	83	3	65	0	0	68	**157**
10:45	4	0	7	0	11	0	0	0	0	0	0	52	7	0	59	5	72	0	0	77	**147**
11:00	10	0	5	0	15	0	0	0	0	0	0	61	1	0	62	7	79	0	0	86	**163**
11:15	9	0	6	0	15	0	0	0	0	0	0	72	10	0	82	7	82	0	0	89	**186**
11:30	5	0	7	0	12	0	0	0	0	0	0	75	7	1	83	4	78	0	0	82	**177**
11:45	11	0	14	0	25	0	0	0	0	0	0	68	6	0	74	15	68	0	0	83	**182**
12:00	6	0	5	0	11	0	0	0	0	0	0	58	5	0	63	0	81	0	0	81	**155**
AM Peak Hour Total	**26**	**0**	**10**	**0**	**36**	**0**	**0**	**0**	**0**	**0**	**0**	**320**	**19**	**0**	**339**	**7**	**328**	**0**	**0**	**335**	**710**
AM Peak PHF	**0.59**	**0.00**	**0.18**	**0.00**	**0.36**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**1.07**	**0.48**	**0.00**	**1.02**	**0.12**	**1.00**	**0.00**	**0.00**	**0.94**	**0.95**
12:15	8	0	7	0	15	0	0	0	0	0	0	56	3	0	59	4	75	0	0	79	**153**
12:30	6	0	2	0	8	0	0	0	0	0	0	69	5	0	74	4	85	0	0	89	**171**
12:45	5	0	8	0	13	0	0	0	0	0	0	64	3	0	67	5	73	0	0	78	**158**
13:00	5	0	2	0	7	0	0	0	0	0	0	68	3	0	71	4	99	0	0	103	**181**
13:15	8	0	3	0	11	0	0	0	0	0	0	78	7	0	85	3	98	0	0	101	**197**
13:30	5	0	8	0	13	0	0	0	0	0	0	76	5	0	81	8	88	0	0	96	**190**
13:45	5	0	8	0	13	0	0	0	0	0	0	78	3	0	81	4	82	0	0	86	**180**
14:00	8	0	1	1	10	0	0	0	0	0	0	83	7	0	90	0	89	0	0	89	**189**
14:15	9	0	3	0	12	0	0	0	0	0	0	95	5	0	100	7	89	0	0	96	**208**
14:30	10	0	5	0	15	0	0	0	0	0	0	108	7	0	115	9	93	0	0	102	**232**
14:45	5	0	10	0	15	0	0	0	0	0	0	92	3	0	95	5	111	0	0	116	**226**
15:00	9	0	7	0	16	0	0	0	0	0	0	109	11	0	120	5	115	0	0	120	**256**
15:15	8	0	8	0	16	0	0	0	0	0	0	90	5	0	95	3	100	0	0	103	**214**
15:30	11	0	9	0	20	0	0	0	0	0	0	98	7	0	105	4	109	0	0	113	**238**
15:45	6	0	7	0	13	0	0	0	0	0	0	94	7	0	101	6	119	0	0	125	**239**
16:00	**11**	**0**	**9**	**0**	**20**	**0**	**0**	**0**	**0**	**0**	**0**	**130**	**11**	**0**	**141**	**5**	**97**	**0**	**0**	**102**	**263**
16:15	**7**	**0**	**3**	**0**	**10**	**0**	**0**	**0**	**0**	**0**	**0**	**98**	**8**	**0**	**106**	**10**	**127**	**0**	**0**	**137**	**253**
16:30	**6**	**0**	**3**	**0**	**9**	**0**	**0**	**0**	**0**	**0**	**0**	**137**	**4**	**0**	**141**	**3**	**122**	**0**	**0**	**125**	**275**
16:45	**6**	**0**	**2**	**0**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**120**	**9**	**0**	**129**	**4**	**114**	**0**	**0**	**118**	**255**
17:00	4	0	2	0	6	0	0	0	0	0	0	132	8	0	140	5	104	0	0	109	**255**
17:15	1	0	8	0	9	0	0	0	0	0	0	121	4	0	125	3	96	0	0	99	**233**
17:30	8	0	4	0	12	0	0	0	0	0	0	104	3	0	107	5	97	0	0	102	**221**
17:45	2	0	2	0	4	0	0	0	0	0	0	122	2	0	124	5	109	0	0	114	**242**
18:00	3	0	4	1	8	0	0	0	0	0	0	118	6	0	124	10	102	0	0	112	**244**
18:15	2	0	3	0	5	0	0	0	0	0	0	87	6	0	93	8	104	0	0	112	**210**
18:30	2	0	1	0	3	0	0	0	0	0	0	83	4	0	87	7	71	0	0	78	**168**
18:45	4	0	1	0	5	0	0	0	0	0	0	79	6	0	85	1	66	0	0	67	**157**
19:00	4	0	0	0	4	0	0	0	0	0	0	54	2	0	56	1	72	0	0	73	**133**
PM Peak Hour Total	**30**	**0**	**17**	**0**	**47**	**0**	**0**	**0**	**0**	**0**	**0**	**485**	**32**	**0**	**517**	**22**	**460**	**0**	**0**	**482**	**1046**
PM Peak PHF	**0.68**	**0.00**	**0.47**	**0.00**	**0.59**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.89**	**0.73**	**0.00**	**0.92**	**0.55**	**0.91**	**0.00**	**0.00**	**0.88**	**0.95**

Data Collection by: O. R. George & Associates, Inc.

STONEGATE ELEMENTARY SCHOOL STUDY

Intersection Turning Movement Count Data Summary

Location: Bonifant Road @ Notley Road - West (Location #2)
Day/Date Surveyed: Tuesday (October 27, 2020)

Weather: Mild, Cloudy, Dry
ORGA Techs:

15-Minute Interval (Ending)	Bicycle Volumes																				Interval Total
	Notley Road (West)										Bonifant Road					Bonifant Road					
	From North					From South					From East					From West					
	Left	Thru	Right	U-Turn	Total	Left	Thru	Right	U-Turn	Total	Left	Thru	Right	U-Turn	Total	Left	Thru	Right	U-Turn	Total	
7:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
10:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AM Peak Hour Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:45	0	0	0	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	0	0	0	0	0	0	0	0	0	0	0	0	0
14:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:45	0	0	0	0	0	0	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	0	0	0	0	0	0	0	0	0	0	0	0	0
15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM Peak Hour Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Data Collection by: O. R. George & Associates, Inc.

STONEGATE ELEMENTARY SCHOOL STUDY

Intersection Turning Movement Count Data Summary

Location: Bonifant Road @ Notley Road - West (Location #2) **Weather:** Mild, Cloudy, Dry
Day/Date Surveyed: Tuesday (October 27, 2020) **ORGA Techs:**

15-Minute Interval (Ending)	Pedestrian Volumes				Interval Total
	Notley Road (West)		Bonifant Road	Bonifant Road	
	Across North	Across South	Across East	Across West	
7:15	**0**	**0**	**0**	**0**	**0**
7:30	**0**	**0**	**0**	**0**	**0**
7:45	**0**	**0**	**0**	**0**	**0**
8:00	**0**	**0**	**0**	**0**	**0**
8:15	0	0	0	0	**0**
8:30	0	0	0	0	**0**
8:45	1	0	0	0	**1**
9:00	0	0	1	0	**1**
9:15	0	0	0	0	**0**
9:30	0	0	0	0	**0**
9:45	0	0	0	0	**0**
10:00	0	0	0	0	**0**
10:15	0	0	0	0	**0**
10:30	0	0	0	0	**0**
10:45	0	0	0	0	**0**
11:00	0	0	0	0	**0**
11:15	0	0	0	0	**0**
11:30	0	0	0	0	**0**
11:45	0	0	1	0	**1**
12:00	0	0	0	0	**0**
AM Peak Hour Total	**0**	**0**	**0**	**0**	**0**
12:15	0	0	0	0	**0**
12:30	0	0	0	0	**0**
12:45	0	0	0	0	**0**
13:00	0	0	0	0	**0**
13:15	0	0	0	0	**0**
13:30	0	0	0	0	**0**
13:45	0	0	0	0	**0**
14:00	1	0	0	0	**1**
14:15	0	0	0	0	**0**
14:30	0	0	0	0	**0**
14:45	0	0	0	0	**0**
15:00	0	0	0	0	**0**
15:15	0	0	0	0	**0**
15:30	0	0	0	0	**0**
15:45	0	0	0	0	**0**
16:00	**0**	**0**	**0**	**0**	**0**
16:15	**1**	**0**	**0**	**0**	**1**
16:30	**0**	**0**	**0**	**0**	**0**
16:45	**0**	**0**	**0**	**0**	**0**
17:00	0	0	0	1	**1**
17:15	1	0	0	0	**1**
17:30	0	0	0	0	**0**
17:45	0	0	0	0	**0**
18:00	0	0	0	0	**0**
18:15	1	0	0	0	**1**
18:30	0	0	0	0	**0**
18:45	0	0	0	0	**0**
19:00	0	0	0	0	**0**
PM Peak Hour Total	**1**	**0**	**0**	**0**	**1**

Data Collection by: O. R. George & Associates, Inc.

STONEGATE ELEMENTARY SCHOOL STUDY

Intersection Turning Movement Count Data Summary

Location: Bonifant Road @ Notley Road - East (Location #3)
Day/Date Surveyed: Tuesday (October 27, 2020)

Weather: Mild, Cloudy, Dry
ORGA Techs:

15-Minute Interval (Ending)	Total Vehicles																				Interval Total
	Private Driveway					Notley Road (East)					Bonifant Road					Bonifant Road					
	From North					From South					From East					From West					
	Left	Thru	Right	U-Turn	Total	Left	Thru	Right	U-Turn	Total	Left	Thru	Right	U-Turn	Total	Left	Thru	Right	U-Turn	Total	
6:45	0	0	0	0	0	26	0	3	0	29	2	67	0	0	69	0	41	39	0	80	178
7:00	0	0	1	0	1	29	0	0	0	29	3	61	0	0	64	0	47	44	0	91	185
7:15	**0**	**0**	**0**	**0**	**0**	**25**	**0**	**5**	**0**	**30**	**3**	**63**	**0**	**0**	**66**	**0**	**55**	**40**	**0**	**95**	**191**
7:30	**0**	**0**	**0**	**0**	**0**	**45**	**0**	**3**	**0**	**48**	**1**	**40**	**0**	**0**	**41**	**0**	**45**	**44**	**0**	**89**	**178**
7:45	**0**	**0**	**0**	**0**	**0**	**28**	**0**	**0**	**0**	**28**	**1**	**45**	**0**	**0**	**46**	**0**	**56**	**41**	**0**	**97**	**171**
8:00	**0**	**0**	**0**	**0**	**0**	**50**	**0**	**1**	**0**	**51**	**4**	**41**	**0**	**0**	**45**	**0**	**52**	**50**	**0**	**102**	**198**
8:15	0	0	0	0	0	36	0	1	0	37	1	36	0	0	37	0	45	35	0	80	154
8:30	0	0	0	0	0	36	0	4	0	40	3	47	0	0	50	0	47	46	0	93	183
8:45	0	0	0	0	0	24	0	2	0	26	1	41	1	0	43	0	34	35	0	69	138
9:00	0	0	0	0	0	28	0	2	0	30	2	44	0	0	46	0	23	27	1	51	127
9:15	0	0	0	0	0	25	0	5	0	30	3	30	0	0	33	0	36	27	0	63	126
9:30	0	0	0	0	0	30	0	2	0	32	0	31	0	0	31	0	38	38	0	76	139
AM Peak Hour Total	**0**	**0**	**0**	**0**	**0**	**148**	**0**	**9**	**0**	**157**	**9**	**189**	**0**	**0**	**198**	**0**	**208**	**175**	**0**	**383**	**738**
AM Peak PHF	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.82**	**0.00**	**0.45**	**0.00**	**0.82**	**0.75**	**0.71**	**0.00**	**0.00**	**0.72**	**0.00**	**0.95**	**0.99**	**0.00**	**1.01**	**0.97**
15:15	0	0	0	0	0	42	0	4	0	46	1	56	0	0	57	0	73	40	0	113	216
15:30	0	0	0	0	0	44	0	5	0	49	2	55	0	0	57	0	80	50	0	130	236
15:45	0	0	0	0	0	56	0	2	0	58	1	61	0	0	62	0	64	43	0	107	227
16:00	**0**	**0**	**0**	**0**	**0**	**49**	**0**	**1**	**0**	**50**	**4**	**77**	**1**	**0**	**82**	**0**	**68**	**48**	**0**	**116**	**248**
16:15	**1**	**0**	**0**	**0**	**1**	**51**	**0**	**0**	**0**	**51**	**4**	**61**	**0**	**0**	**65**	**0**	**80**	**50**	**0**	**130**	**247**
16:30	**0**	**0**	**0**	**0**	**0**	**55**	**0**	**1**	**0**	**56**	**2**	**81**	**0**	**0**	**83**	**0**	**82**	**47**	**0**	**129**	**268**
16:45	**0**	**0**	**0**	**0**	**0**	**63**	**0**	**2**	**0**	**65**	**3**	**80**	**0**	**0**	**83**	**0**	**73**	**51**	**0**	**124**	**272**
17:00	0	0	0	0	0	50	0	1	0	51	3	73	0	0	76	0	70	36	0	106	233
17:15	0	0	0	0	0	60	0	5	0	65	4	74	0	0	78	0	52	44	0	96	239
17:30	0	0	0	0	0	50	0	4	0	54	3	48	0	0	51	0	66	42	0	108	213
17:45	0	0	0	0	0	64	0	2	0	66	1	73	0	0	74	0	67	42	0	109	249
18:00	0	0	0	0	0	49	0	3	0	52	2	64	0	0	66	0	61	43	0	104	222
PM Peak Hour Total	**1**	**0**	**0**	**0**	**1**	**218**	**0**	**4**	**0**	**222**	**13**	**299**	**1**	**0**	**313**	**0**	**303**	**196**	**0**	**499**	**1035**
PM Peak PHF	**0.25**	**0.00**	**0.00**	**0.00**	**0.25**	**0.87**	**0.00**	**0.50**	**0.00**	**0.85**	**0.81**	**0.92**	**0.25**	**0.00**	**0.94**	**0.00**	**0.92**	**0.96**	**0.00**	**0.96**	**0.95**

Data Collection by: O. R. George & Associates, Inc.

STONEGATE ELEMENTARY SCHOOL STUDY

Intersection Turning Movement Count Data Summary

Location: Bonifant Road @ Notley Road - East (Location #3)
Day/Date Surveyed: Tuesday (October 27, 2020)

Weather: Mild, Cloudy, Dry
ORGA Techs:

15-Minute Interval (Ending)	Bicycle Volumes																				Interval Total
	Private Driveway					Notley Road (East)					Bonifant Road					Bonifant Road					
	From North					From South					From East					From West					
	Left	Thru	Right	U-Turn	Total	Left	Thru	Right	U-Turn	Total	Left	Thru	Right	U-Turn	Total	Left	Thru	Right	U-Turn	Total	
6:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
7:30	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
7:45	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:00	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
9:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AM Peak Hour Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
16:15	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
16:30	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
16:45	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**1**	**2**
17:00	0	0	0	0	0	2	0	0	0	2	0	1	0	0	1	0	0	0	0	0	3
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM Peak Hour Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**1**	**2**

Data Collection by: O. R. George & Associates, Inc.

STONEGATE ELEMENTARY SCHOOL STUDY

Intersection Turning Movement Count Data Summary

Location: Bonifant Road @ Notley Road - East (Location #3) **Weather:** Mild, Cloudy, Dry
Day/Date Surveyed: Tuesday (October 27, 2020) **ORGA Techs:**

15-Minute Interval (Ending)	Pedestrian Volumes				Interval Total
	Private Driveway	Notley Road (East)	Bonifant Road	Bonifant Road	
	Across North	Across South	Across East	Across West	
6:45	0	0	0	0	**0**
7:00	0	0	0	0	**0**
7:15	**0**	**0**	**0**	**0**	**0**
7:30	**0**	**0**	**0**	**0**	**0**
7:45	**0**	**0**	**0**	**0**	**0**
8:00	**0**	**0**	**0**	**0**	**0**
8:15	0	0	0	0	**0**
8:30	0	0	0	0	**0**
8:45	1	0	0	0	**1**
9:00	0	0	0	0	**0**
9:15	0	0	0	0	**0**
9:30	0	0	0	0	**0**
AM Peak Hour Total	**0**	**0**	**0**	**0**	**0**
15:15	0	1	0	0	**1**
15:30	0	0	0	0	**0**
15:45	0	0	0	0	**0**
16:00	**0**	**0**	**0**	**0**	**0**
16:15	**0**	**0**	**0**	**0**	**0**
16:30	**3**	**0**	**0**	**0**	**3**
16:45	**0**	**0**	**0**	**0**	**0**
17:00	0	0	0	0	**0**
17:15	0	0	0	0	**0**
17:30	0	0	0	0	**0**
17:45	0	0	0	0	**0**
18:00	0	0	0	0	**0**
PM Peak Hour Total	**3**	**0**	**0**	**0**	**3**

Data Collection by: O. R. George & Associates, Inc.

STONEGATE ELEMENTARY SCHOOL STUDY

Intersection Turning Movement Count Data Summary

Location: MD 650 @ Stonegate Drive (Location #4)
Day/Date Surveyed: Tuesday (October 27, 2020)

Weather: Mild, Cloudy, Dry
ORGA Techs:

15-Minute Interval (Ending)	Total Vehicles																				Interval Total
	MD 650 From North					MD 650 From South					Windridge Acres Court From East					Stonegate Drive From West					
	Left	Thru	Right	U-Turn	Total	Left	Thru	Right	U-Turn	Total	Left	Thru	Right	U-Turn	Total	Left	Thru	Right	U-Turn	Total	
7:15	**0**	**132**	**5**	**0**	**137**	**8**	**148**	**1**	**1**	**158**	**0**	**0**	**2**	**0**	**2**	**8**	**0**	**18**	**0**	**26**	**323**
7:30	**0**	**168**	**2**	**0**	**170**	**3**	**116**	**0**	**0**	**119**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**14**	**0**	**17**	**306**
7:45	**2**	**141**	**2**	**0**	**145**	**12**	**107**	**1**	**1**	**121**	**1**	**0**	**0**	**0**	**1**	**7**	**0**	**19**	**0**	**26**	**293**
8:00	**0**	**123**	**3**	**0**	**126**	**10**	**114**	**2**	**0**	**126**	**3**	**0**	**0**	**0**	**3**	**9**	**0**	**16**	**0**	**25**	**280**
8:15	0	117	3	0	120	13	98	0	0	111	1	0	0	0	1	8	0	5	0	13	**245**
8:30	0	120	3	0	123	11	107	2	0	120	0	0	1	0	1	8	0	8	1	17	**261**
8:45	1	136	3	0	140	9	97	0	2	108	0	0	0	0	0	9	0	14	0	23	**271**
9:00	0	112	6	0	118	6	94	2	3	105	2	0	0	0	2	9	0	9	0	18	**243**
9:15	0	97	6	1	104	7	83	1	0	91	2	1	0	0	3	12	0	4	0	16	**214**
9:30	0	98	11	0	109	8	78	0	0	86	0	0	1	0	1	10	0	10	0	20	**216**
9:45	1	87	12	0	100	7	104	2	1	114	0	0	0	0	0	4	0	10	0	14	**228**
10:00	0	115	6	0	121	10	122	1	2	135	0	0	2	0	2	13	0	8	0	21	**279**
10:15	0	97	10	0	107	2	121	1	0	124	0	0	0	0	0	10	0	6	0	16	**247**
10:30	0	109	9	0	118	9	101	0	2	112	1	0	0	0	1	9	0	8	0	17	**248**
10:45	0	103	11	0	114	3	122	1	3	129	0	0	0	0	0	12	0	5	0	17	**260**
11:00	0	113	11	0	124	11	118	0	1	130	1	0	1	0	2	12	0	13	0	25	**281**
11:15	0	113	15	0	128	8	118	1	3	130	1	0	0	0	1	9	0	14	0	23	**282**
11:30	0	121	11	0	132	8	115	1	0	124	1	0	0	0	1	4	0	8	0	12	**269**
11:45	0	124	8	1	133	13	104	0	1	118	1	0	0	0	1	11	0	12	0	23	**275**
12:00	0	109	7	0	116	9	107	3	2	121	1	0	1	0	2	7	0	11	0	18	**257**
AM Peak Hour Total	**2**	**564**	**12**	**0**	**578**	**33**	**485**	**4**	**2**	**524**	**4**	**0**	**2**	**0**	**6**	**27**	**0**	**67**	**0**	**94**	**1202**
AM Peak PHF	**0.25**	**0.84**	**0.60**	**0.00**	**0.85**	**0.69**	**0.82**	**0.50**	**0.50**	**0.83**	**0.33**	**0.00**	**0.25**	**0.00**	**0.50**	**0.75**	**0.00**	**0.88**	**0.00**	**0.90**	**0.93**
12:15	0	136	9	0	145	10	131	2	1	144	0	0	0	0	0	11	0	12	0	23	**312**
12:30	0	111	13	0	124	8	132	0	0	140	0	0	1	0	1	7	0	9	0	16	**281**
12:45	0	109	9	1	119	14	124	0	2	140	2	0	0	0	2	10	0	7	0	17	**278**
13:00	1	131	1	0	133	9	123	0	1	133	1	0	0	0	1	9	0	6	0	15	**282**
13:15	0	115	16	0	131	12	149	0	1	162	0	0	0	0	0	5	0	10	0	15	**308**
13:30	0	132	6	0	138	13	141	0	2	156	0	0	1	0	1	8	0	11	0	19	**314**
13:45	0	139	14	1	154	12	141	1	2	156	2	0	0	0	2	13	0	16	0	29	**341**
14:00	0	114	9	0	123	6	164	2	4	176	0	0	0	0	0	11	0	15	0	26	**325**
14:15	0	169	6	1	176	16	154	1	2	173	0	0	1	0	1	13	0	7	0	20	**370**
14:30	0	167	16	0	183	8	177	0	4	189	1	0	1	0	2	9	0	7	0	16	**390**
14:45	1	160	12	0	173	11	176	1	1	189	0	0	0	0	0	9	0	5	0	14	**376**
15:00	1	162	11	2	176	12	161	2	0	175	2	0	1	0	3	11	0	7	0	18	**372**
15:15	0	140	21	0	161	11	202	1	2	216	2	0	3	0	5	7	1	15	0	23	**405**
15:30	0	214	17	0	231	14	216	0	2	232	3	0	1	0	4	4	0	19	0	23	**490**
15:45	0	158	14	1	173	11	189	6	2	208	2	0	2	0	4	11	0	13	0	24	**409**
16:00	0	171	11	0	182	13	195	1	3	212	2	0	1	0	3	3	0	9	0	12	**409**
16:15	**0**	**198**	**16**	**2**	**216**	**11**	**212**	**2**	**4**	**229**	**1**	**0**	**0**	**0**	**1**	**10**	**0**	**7**	**0**	**17**	**463**
16:30	**0**	**198**	**17**	**2**	**217**	**15**	**226**	**2**	**3**	**246**	**0**	**0**	**0**	**0**	**0**	**13**	**0**	**14**	**0**	**27**	**490**
16:45	**0**	**221**	**9**	**1**	**231**	**17**	**164**	**3**	**3**	**187**	**1**	**1**	**1**	**0**	**3**	**9**	**0**	**9**	**0**	**18**	**439**
17:00	**0**	**173**	**17**	**1**	**191**	**14**	**176**	**6**	**5**	**201**	**3**	**0**	**1**	**0**	**4**	**12**	**1**	**9**	**0**	**22**	**418**
17:15	2	163	11	1	177	27	154	1	3	185	3	0	0	0	3	9	0	6	0	15	**380**
17:30	1	168	20	0	189	13	165	0	2	180	0	0	3	0	3	2	0	11	0	13	**385**
17:45	2	143	7	0	152	12	174	1	4	191	1	0	1	0	2	2	0	7	0	9	**354**
18:00	0	162	15	0	177	11	154	1	1	167	0	0	1	0	1	6	0	4	0	10	**355**
18:15	4	154	7	0	165	11	101	1	1	114	0	0	0	0	0	7	0	6	0	13	**292**
18:30	0	120	2	1	123	8	117	1	0	126	1	0	0	0	1	4	0	10	0	14	**264**
18:45	0	84	7	0	91	14	86	0	0	100	0	0	0	0	0	3	0	4	0	7	**198**
19:00	0	85	13	1	99	8	79	1	4	92	1	0	3	0	4	9	0	10	0	19	**214**
PM Peak Hour Total	**0**	**790**	**59**	**6**	**855**	**57**	**778**	**13**	**15**	**863**	**5**	**1**	**2**	**0**	**8**	**44**	**1**	**39**	**0**	**84**	**1810**
PM Peak PHF	**0.00**	**0.89**	**0.87**	**0.75**	**0.93**	**0.84**	**0.86**	**0.54**	**0.75**	**0.88**	**0.42**	**0.25**	**0.50**	**0.00**	**0.50**	**0.85**	**0.25**	**0.70**	**0.00**	**0.78**	**0.92**

Data Collection by: O. R. George & Associates, Inc.

STONEGATE ELEMENTARY SCHOOL STUDY

Intersection Turning Movement Count Data Summary

Location: MD 650 @ Stonegate Drive (Location #4)
Day/Date Surveyed: Tuesday (October 27, 2020)

Weather: Mild, Cloudy, Dry
ORGA Techs:

15-Minute Interval (Ending)	Bicycle Volumes																				Interval Total
	MD 650					MD 650					Windridge Acres Court					Stonegate Drive					
	From North					From South					From East					From West					
	Left	Thru	Right	U-Turn	Total	Left	Thru	Right	U-Turn	Total	Left	Thru	Right	U-Turn	Total	Left	Thru	Right	U-Turn	Total	
7:15	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
7:30	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
7:45	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:00	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
9:30	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
9:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
10:15	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11:00	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AM Peak Hour Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
12:15	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:00	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
13:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:45	0	1	0	0	1	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	3
14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:15	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	3
14:30	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
14:45	0	0	0	0	0	0	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	0	0	0	0	0	0	0	0	0	0	0	0	0
15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
16:15	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
16:30	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**
16:45	**0**	**1**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**
17:00	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
17:15	0	3	0	0	3	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	5
17:30	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM Peak Hour Total	**0**	**1**	**0**	**0**	**1**	**0**	**4**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**

Data Collection by: O. R. George & Associates, Inc.

STONEGATE ELEMENTARY SCHOOL STUDY

Intersection Turning Movement Count Data Summary

Location: MD 650 @ Stonegate Drive (Location #4) **Weather:** Mild, Cloudy, Dry
Day/Date Surveyed: Tuesday (October 27, 2020) **ORGA Techs:**

15-Minute Interval (Ending)	Pedestrian Volumes				Interval Total
	MD 650	MD 650	Windridge Acres Court	Stonegate Drive	
	Across North	Across South	Across East	Across West	
7:15	**0**	**1**	**1**	**0**	**2**
7:30	**0**	**0**	**1**	**0**	**1**
7:45	**0**	**1**	**1**	**0**	**2**
8:00	**0**	**0**	**1**	**0**	**1**
8:15	0	0	0	0	**0**
8:30	0	0	1	0	**1**
8:45	0	0	2	0	**2**
9:00	0	0	2	0	**2**
9:15	0	0	0	0	**0**
9:30	0	0	0	0	**0**
9:45	0	0	1	0	**1**
10:00	0	0	0	0	**0**
10:15	0	0	0	0	**0**
10:30	0	0	0	0	**0**
10:45	1	0	0	0	**1**
11:00	0	0	0	0	**0**
11:15	0	0	0	0	**0**
11:30	0	0	0	0	**0**
11:45	0	0	1	0	**1**
12:00	0	0	0	0	**0**
AM Peak Hour Total	**0**	**2**	**4**	**0**	**6**
12:15	1	0	1	0	**2**
12:30	0	0	0	0	**0**
12:45	0	0	0	0	**0**
13:00	0	0	0	0	**0**
13:15	0	0	0	0	**0**
13:30	1	0	0	0	**1**
13:45	0	0	1	0	**1**
14:00	0	1	1	0	**2**
14:15	0	0	0	0	**0**
14:30	0	0	0	0	**0**
14:45	0	0	0	0	**0**
15:00	0	0	0	0	**0**
15:15	0	0	0	0	**0**
15:30	0	0	0	0	**0**
15:45	0	0	0	0	**0**
16:00	0	0	1	0	**1**
16:15	**0**	**0**	**1**	**0**	**1**
16:30	**0**	**0**	**0**	**0**	**0**
16:45	**0**	**0**	**0**	**0**	**0**
17:00	**0**	**0**	**0**	**0**	**0**
17:15	0	0	0	0	**0**
17:30	0	0	0	0	**0**
17:45	0	0	3	0	**3**
18:00	0	0	0	0	**0**
18:15	0	0	0	0	**0**
18:30	0	0	0	0	**0**
18:45	0	0	1	0	**1**
19:00	0	1	1	0	**2**
PM Peak Hour Total	**0**	**0**	**1**	**0**	**1**

Data Collection by: O. R. George & Associates, Inc.

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VEHICLE TURNING MOVEMENT COUNT - SUMMARY

Intersection of: MD 650
and: Bonifant Rd-Good Hope Rd
Counted by: MN

Location : Montgomery County
Date : 11/4/20
Weather : Clear
Entered by MN

Day: Wednesday

STREET TRAFFIC STUDIES LTD

TIME	TRAFFIC FROM NORTH on: MD 650				TRAFFIC FROM SOUTH on: MD 650				TRAFFIC FROM WEST on: Bonifant Rd				TRAFFIC FROM EAST on: Good Hope Rd				TOTAL N + S + E + W
	RIGHT	THRU	LEFT	TOTAL	LEFT	THRU	RIGHT	TOTAL	RIGHT	THRU	LEFT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
AM																	
06:30-45	3	95	1	99	10	166	6	182	18	9	11	38	37	12	1	50	369
45-00	9	103	2	114	12	123	10	145	19	15	15	49	32	11	2	45	353
07:00-15	5	114	0	119	16	97	8	121	21	15	17	53	38	15	1	54	347
15-30	8	168	4	180	11	100	9	120	27	20	11	58	41	16	6	63	421
30-45	17	152	1	170	27	87	18	132	33	11	10	54	42	25	3	70	426
45-00	8	147	2	157	23	134	12	169	24	16	13	53	33	20	1	54	433
08:00-15	17	152	4	173	16	113	23	152	25	13	14	52	59	12	5	76	453
15-30	8	142	1	151	12	101	15	128	23	14	14	51	41	20	3	64	394
30-45	12	127	3	142	21	106	17	144	27	22	15	64	45	26	4	75	425
45-00	13	146	2	161	14	119	17	150	30	16	11	57	29	24	0	53	421
09:00-15	10	135	0	145	19	92	13	124	25	12	12	49	34	13	5	52	370
15-30	7	120	1	128	22	92	16	130	29	18	12	59	24	13	4	41	358
AM 3 HOUR TOTALS	117	1601	21	1739	203	1330	164	1697	301	181	155	637	455	207	35	697	4770
1 HOUR TOTALS																	
630-730	25	480	7	512	49	486	33	568	85	59	54	198	148	54	10	212	1490
645-745	39	537	7	583	66	407	45	518	100	61	53	214	153	67	12	232	1547
07-08	38	581	7	626	77	418	47	542	105	62	51	218	154	76	11	241	1627
715-815	50	619	11	680	77	434	62	573	109	60	48	217	175	73	15	263	1733
730-830	50	593	8	651	78	435	68	581	105	54	51	210	175	77	12	264	1706
745-845	45	568	10	623	72	454	67	593	99	65	56	220	178	78	13	269	1705
08-09	50	567	10	627	63	439	72	574	105	65	54	224	174	82	12	268	1693
815-915	43	550	6	599	66	418	62	546	105	64	52	221	149	83	12	244	1610
830-930	42	528	6	576	76	409	63	548	111	68	50	229	132	76	13	221	1574
PEAK HOUR																	
715-815	50	619	11	680	77	434	62	573	109	60	48	217	175	73	15	263	1733
PM																	
03:00-15	16	142	7	165	26	135	37	198	16	34	22	72	33	17	11	61	496
15-30	19	168	3	190	17	145	43	205	25	16	24	65	43	13	7	63	523
30-45	27	163	4	194	24	152	41	217	33	28	22	83	31	12	6	49	543
45-00	23	156	1	180	30	177	44	251	26	24	29	79	17	19	1	37	547
04:00-15	24	156	6	186	21	153	42	216	28	26	25	79	26	19	2	47	528
15-30	25	177	5	207	27	167	38	232	29	12	25	66	27	18	3	48	553
30-45	24	177	6	207	29	171	42	242	27	28	16	71	24	23	5	52	572
45-00	23	191	4	218	33	210	48	291	19	31	28	78	36	28	3	67	654
05:00-15	39	183	5	227	34	172	45	251	38	22	24	84	36	14	3	53	615
15-30	27	196	3	226	36	225	51	312	34	43	23	100	32	29	5	66	704
30-45	27	195	9	231	38	189	47	274	32	35	19	86	17	16	5	38	629
45-00	32	199	5	236	29	150	49	228	22	23	25	70	22	17	5	44	578
PM 3 HOUR TOTALS	306	2103	58	2467	344	2046	527	2917	329	322	282	933	344	225	56	625	6942
1 HOUR TOTALS																	
03-04	85	629	15	729	97	609	165	871	100	102	97	299	124	61	25	210	2109
315-415	93	643	14	750	92	627	170	889	112	94	100	306	117	63	16	196	2141
330-430	99	652	16	767	102	649	165	916	116	90	101	307	101	68	12	181	2171
345-445	96	666	18	780	107	668	166	941	110	90	95	295	94	79	11	184	2200
04-05	96	701	21	818	110	701	170	981	103	97	94	294	113	88	13	214	2307
415-515	111	728	20	859	123	720	173	1016	113	93	93	299	123	83	14	220	2394
430-530	113	747	18	878	132	778	186	1096	118	124	91	333	128	94	16	238	2545
445-545	116	765	21	902	141	796	191	1128	123	131	94	348	121	87	16	224	2602
05-06	125	773	22	920	137	736	192	1065	126	123	91	340	107	76	18	201	2526
PEAK HOUR																	
445-545	116	765	21	902	141	796	191	1128	123	131	94	348	121	87	16	224	2602

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VEHICLE TURNING MOVEMENT COUNT - SUMMARY

Intersection of: MD 650
and: Bonifant Rd-Good Hope Rd
Counted by: MN

Bikes Only

Location : Montgomery County
Date : 11/4/20
Weather : Clear
Entered by MN

Day: Wednesday

STREET TRAFFIC STUDIES LTD

TIME	TRAFFIC FROM NORTH on: MD 650				TRAFFIC FROM SOUTH on: MD 650				TRAFFIC FROM WEST on: Bonifant Rd				TRAFFIC FROM EAST on: Good Hope Rd				TOTAL N + S + E + W
	RIGHT	THRU	LEFT	TOTAL	LEFT	THRU	RIGHT	TOTAL	RIGHT	THRU	LEFT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
AM																	
06:30-45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45-00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00-15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15-30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45-00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00-15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15-30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45-00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00-15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15-30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AM 3 HOUR TOTALS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AM 1 HOUR TOTALS																	
630-730	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
645-745	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07-08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
715-815	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
730-830	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
745-845	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08-09	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
815-915	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
830-930	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AM PEAK HOUR 07-08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM																	
03:00-15	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
15-30	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
30-45	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
45-00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
04:00-15	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1
15-30	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
30-45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45-00	0	1	0	1	0	0	0	0	1	0	0	1	0	0	0	0	2
05:00-15	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
15-30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30-45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45-00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM 3 HOUR TOTALS	1	2	0	3	0	5	0	5	2	0	0	2	0	1	0	1	11
PM 1 HOUR TOTALS																	
03-04	1	0	0	1	0	3	0	3	0	0	0	0	0	1	0	1	5
315-415	0	0	0	0	0	3	0	3	1	0	0	1	0	1	0	1	5
330-430	0	0	0	0	0	4	0	4	1	0	0	1	0	1	0	1	6
345-445	0	0	0	0	0	2	0	2	1	0	0	1	0	1	0	1	4
04-05	0	1	0	1	0	2	0	2	2	0	0	2	0	0	0	0	5
415-515	0	2	0	2	0	2	0	2	1	0	0	1	0	0	0	0	5
430-530	0	2	0	2	0	0	0	0	1	0	0	1	0	0	0	0	3
445-545	0	2	0	2	0	0	0	0	1	0	0	1	0	0	0	0	3
05-06	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
PM PEAK HOUR 330-430	0	0	0	0	0	4	0	4	1	0	0	1	0	1	0	1	6

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PEDESTRIAN COUNT - SUMMARY

Location: Montgomery County

Intersection of: MD 650

Date: 11/4/20 Day: Wednesday

and: Bonifant Rd-Good Hope Rd

Weather: Clear

Counted by: MN

Entered By: MN

	NORTH LEG		EAST LEG		SOUTH LEG		WEST LEG		
TIME	EB	WB	NB	SB	EB	WB	NB	SB	TOTAL
AM									
06:30-45	0	0	0	0	0	0	0	0	0
45-00	0	0	1	0	0	0	0	0	1
07:00-15	1	0	1	0	0	0	0	0	2
15-30	0	0	0	1	0	0	0	0	1
30-45	0	0	0	0	0	0	0	0	0
45-00	0	1	1	0	0	0	0	0	2
08:00-15	0	0	0	0	0	0	0	0	0
15-30	0	0	0	0	0	0	0	0	0
30-45	0	0	0	0	0	0	0	0	0
45-00	0	0	0	0	0	0	0	0	0
09:00-15	0	0	0	0	0	0	0	0	0
15-30	0	0	0	0	0	0	0	0	0
AM 3 HOUR TOTALS	1	1	3	1	0	0	0	0	6
1 HOUR TOTALS									
630-730	1	0	2	1	0	0	0	0	4
645-745	1	0	2	1	0	0	0	0	4
07-08	1	1	2	1	0	0	0	0	5
715-815	0	1	1	1	0	0	0	0	3
730-830	0	1	1	0	0	0	0	0	2
745-845	0	1	1	0	0	0	0	0	2
08-09	0	0	0	0	0	0	0	0	0
815-915	0	0	0	0	0	0	0	0	0
830-930	0	0	0	0	0	0	0	0	0
PEAK HOUR 630-730	0	0	2	1	0	0	0	0	3
PM									
03:00-15	0	0	0	0	0	0	0	0	0
15-30	0	0	0	0	0	0	0	0	0
30-45	0	0	0	0	0	0	0	0	0
45-00	0	1	2	0	0	0	1	0	4
04:00-15	0	0	0	1	0	0	0	0	1
15-30	0	0	0	0	0	0	2	2	4
30-45	0	0	0	0	0	0	0	0	0
45-00	0	0	0	0	0	0	0	1	1
05:00-15	0	0	1	0	0	0	0	0	1
15-30	0	3	3	0	0	0	0	0	6
30-45	0	0	0	0	0	0	0	0	0
45-00	0	0	0	1	0	0	0	0	1
PM 3 HOUR TOTALS	0	4	6	2	0	0	3	3	18
1 HOUR TOTALS									
02-03	0	1	2	0	0	0	1	0	4
215-315	0	1	2	1	0	0	1	0	5
230-330	0	1	2	1	0	0	3	2	9
245-345	0	1	2	1	0	0	3	2	9
03-04	0	0	0	1	0	0	2	3	6
315-415	0	0	1	0	0	0	2	3	6
330-430	0	3	4	0	0	0	0	1	8
345-445	0	3	4	0	0	0	0	1	8
04-05	0	3	4	1	0	0	0	0	8
PEAK HOUR 03-04	0	0	4	3	0	0	0	0	7

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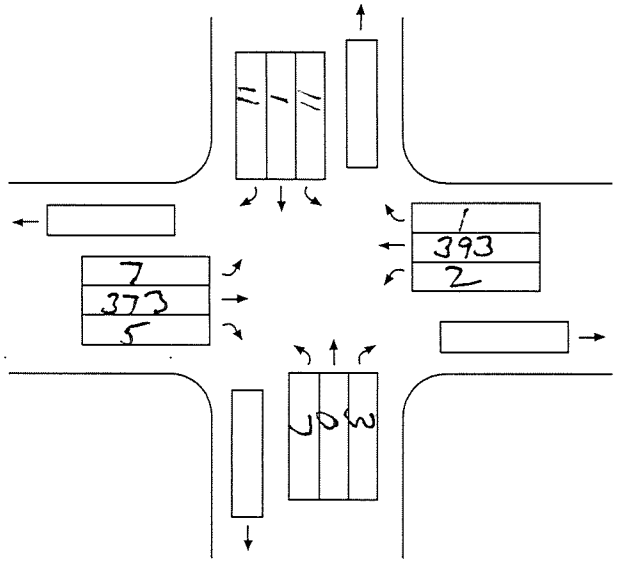
APPENDIX C

CAPACITY WORKSHEETS - EXISTING CONDITIONS

TURNING MOVEMENT SUMMARY AND LEVEL OF SERVICE

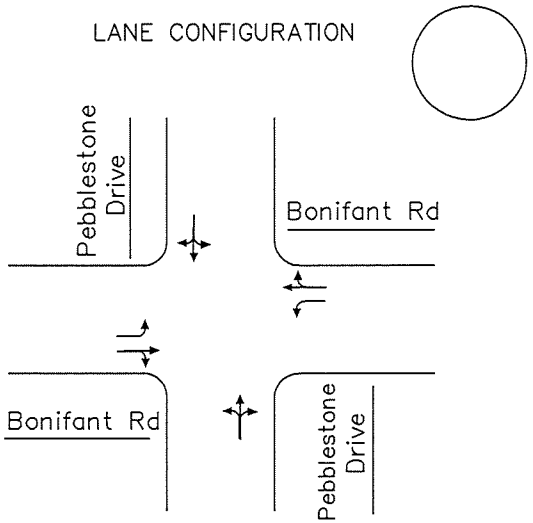
Count Date: Tu 10/27/20
Conditions/ Design Year: Existing Traffic Volumes
Computed By: MN Date:
Location: Bonifant Rd @ Pebblestone Dr

Morning Peak Hour 7:45/8:45 AM

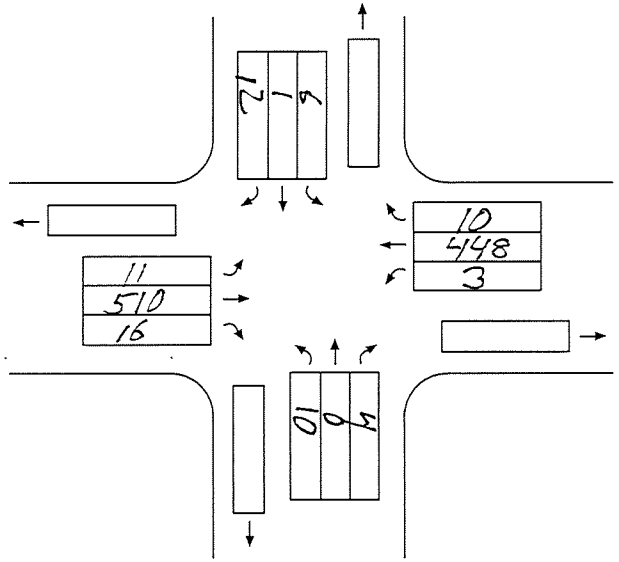


Indicate North by Arrow

LANE CONFIGURATION



Evening Peak Hour 4:15/5:15 PM



Left Turn Adjustments

Phasing ☑

Key	Opposing Through and Right-Turn Volume	Passenger Car Equivalent
1	0 to 199	1.1
2	200 to 599	2.0
3	600 to 799	3.0
4	800 to 999	4.0
5	1000+	5.0

No. of Lanes	Lane Use Factor
1	1.00
2	.53
3	.37
4	.30
5	.25

Service Level	Critical Lane Vol. Tot.
A	1000 or Less
B	1000 to 1150
C	1150 to 1300
D	1300 to 1450
E	1450 to 1600
F	Greater than 1600

ø	Movement	Volume(1)	Lane Use Factor(2)	Lane Volume (1)x(2)	Opposing Lefts	Critical Lane Volume	*
	NB	8*+3	1.0	11	11	22	
	SB	12*+1+11	1.0	24	7	31	✓
	EB	373+5	1.0	378	2	380	
	WB	393+1	1.0	394	7	401	✓

Remarks:

* critical volume TOTAL 432 V/C

LEVEL OF SERVICE

ø	Movement	Volume(1)	Lane Use Factor(2)	Lane Volume (1)x(2)	Opposing Lefts	Critical Lane Volume	*
	NB	11*+4	1.0	15	6	21	
	SB	7*+1+12	1.0	20	10	30	✓
	EB	510+16	1.0	526	3	529	✓
	WB	448+10	1.0	458	11	469	

Remarks:

* critical volume TOTAL 559 V/C

LEVEL OF SERVICE

TURNING MOVEMENT SUMMARY AND LEVEL OF SERVICE

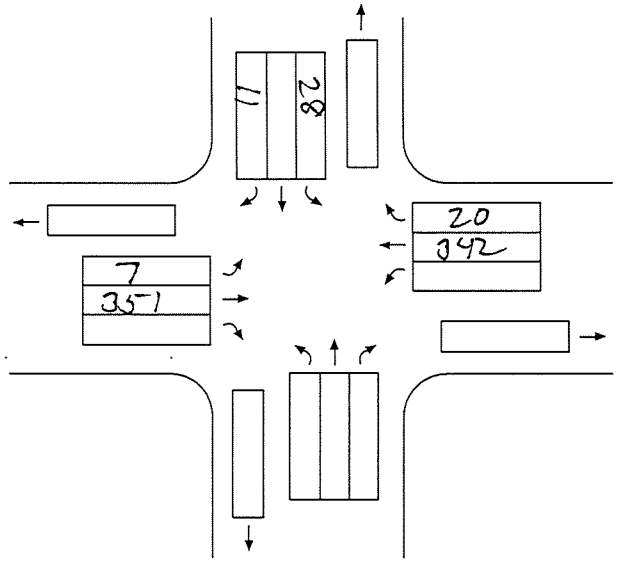
Count Date: Tu 10/27/20

Conditions/ Design Year: Existing Traffic Volumes

Computed By: MN Date:

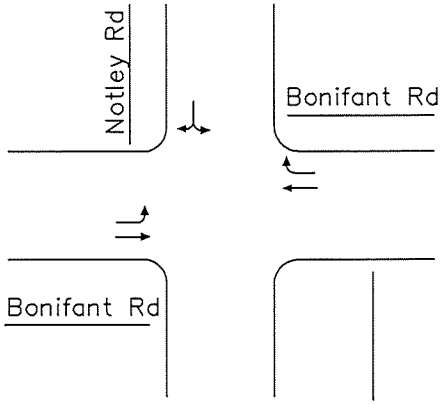
Location: Bonifant Rd @ Notley Rd

Morning Peak Hour 7:15/8:15 AM

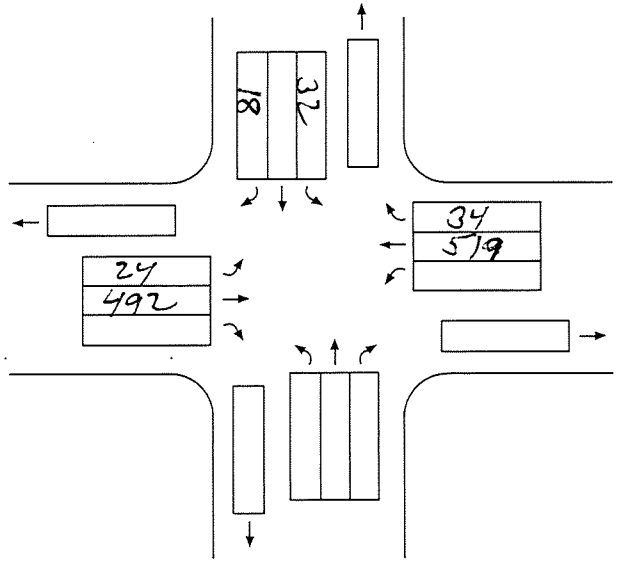


Indicate North by Arrow

LANE CONFIGURATION



Evening Peak Hour 4:00 /5:00 PM



Left Turn Adjustments

Phasing ☑

Key	Opposing Through and Right-Turn Volume	Passenger Car Equivalent
1	0 to 199	1.1
2	200 to 599	2.0
3	600 to 799	3.0
4	800 to 999	4.0
5	1000+	5.0

No. of Lanes	Lane Use Factor
1	1.00
2	.53
3	.37
4	.30
5	.25

Service Level	Critical Lane Vol. Tot.
A	1000 or Less
B	1000 to 1150
C	1150 to 1300
D	1300 to 1450
E	1450 to 1600
F	Greater than 1600

ø	Movement	Volume(1)	Lane Use Factor(2)	Lane Volume (1)x(2)	Opposing Lefts	Critical Lane Volume	*
	SB	11+28	1.0	39	-	39	✓
	EB	351	1.0	351	-	351	✓
	WB	342	1.0	342	7	349	

Remarks:

* critical volume TOTAL 390 V/C

LEVEL OF SERVICE

ø	Movement	Volume(1)	Lane Use Factor(2)	Lane Volume (1)x(2)	Opposing Lefts	Critical Lane Volume	*
	SB	18+32	1.0	50	-	50	✓
	EB	492	1.0	492	-	492	
	WB	519	1.0	519	24	543	✓

Remarks:

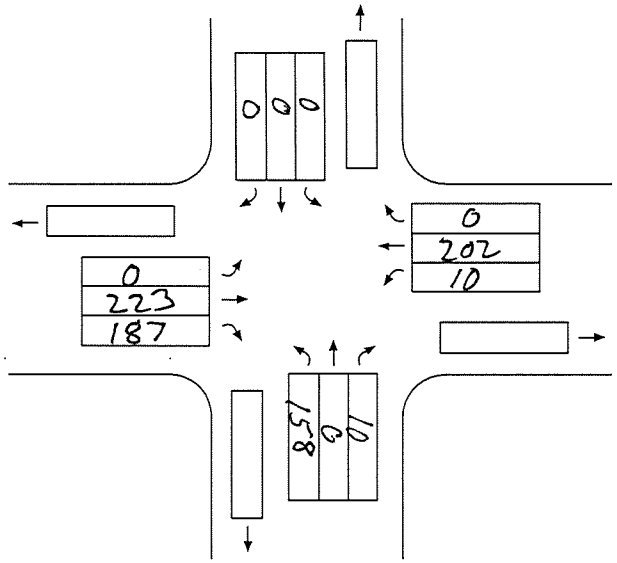
* critical volume TOTAL 593 V/C

LEVEL OF SERVICE

TURNING MOVEMENT SUMMARY AND LEVEL OF SERVICE

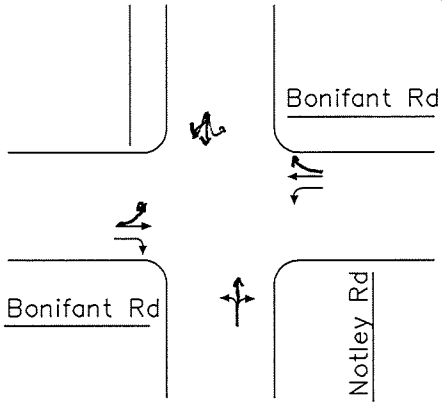
Count Date: Tu 10/27/20
Conditions/ Design Year: Existing Traffic Volumes
Computed By: MN Date:
Location: Bonifant Rd @ Notley Rd

Morning Peak Hour 7:15/8:15 AM

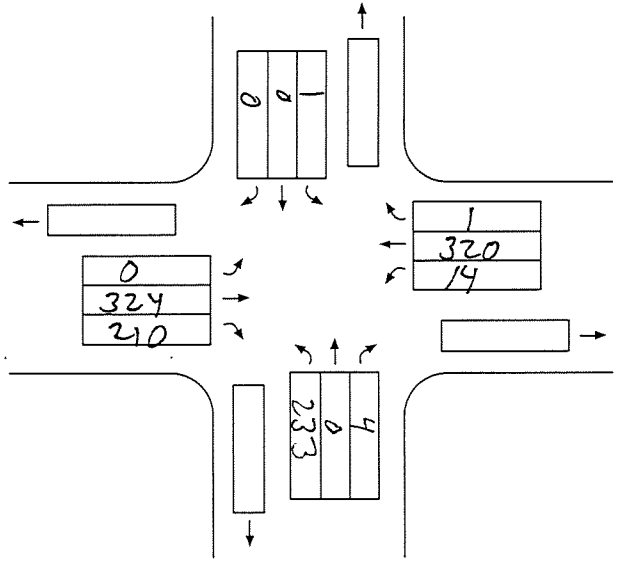


Indicate North by Arrow

LANE CONFIGURATION



Evening Peak Hour 4:00/5:00 PM



Left Turn Adjustments

Phasing ☑

Key	Opposing Through and Right-Turn Volume	Passenger Car Equivalent
1	0 to 199	1.1
2	200 to 599	2.0
3	600 to 799	3.0
4	800 to 999	4.0
5	1000+	5.0

No. of Lanes	Lane Use Factor
1	1.00
2	.53
3	.37
4	.30
5	.25

Service Level	Critical Lane Vol. Tot.
A	1000 or Less
B	1000 to 1150
C	1150 to 1300
D	1300 to 1450
E	1450 to 1600
F	Greater than 1600

ø	Movement	Volume(1)	Lane Use Factor(2)	Lane Volume (1)x(2)	Opposing Lefts	Critical Lane Volume	*
	SB	0	1.0	0	158	158	
	NB	158+10	1.0	168	0	168	✓
	EB	223	1.0	223	10	233	✓
	WB	202	1.0	202	0	202	

Remarks:

* critical volume TOTAL 401 V/C

LEVEL OF SERVICE

ø	Movement	Volume(1)	Lane Use Factor(2)	Lane Volume (1)x(2)	Opposing Lefts	Critical Lane Volume	*
	SB	1	1.0	1	233	234	
	NB	233+4	1.0	237	1	238	✓
	EB	324	1.0	324	14	338	✓
	WB	320+1	1.0	321	0	321	

Remarks:

* critical volume TOTAL 576 V/C

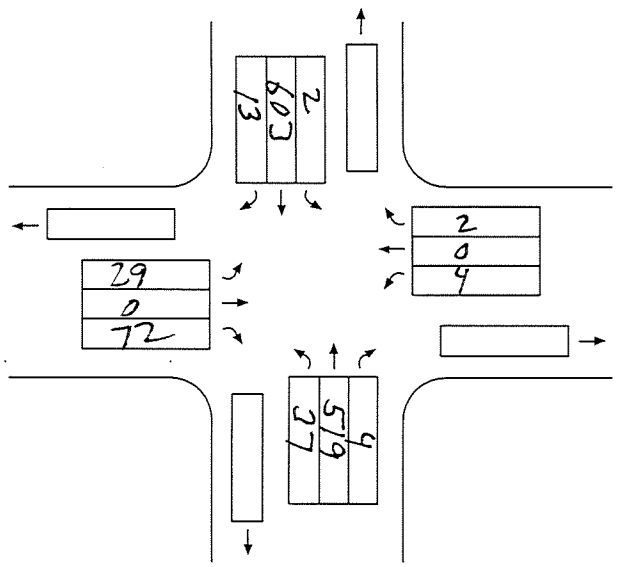
LEVEL OF SERVICE

TURNING MOVEMENT SUMMARY AND LEVEL OF SERVICE

Count Date: Tu 10/27/20
Conditions/ Design Year: Existing Traffic Volumes
Computed By: MN Date:

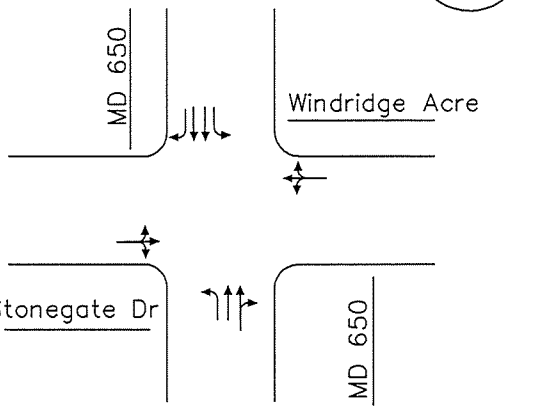
Location: MD 650 @ Stonegate Dr–Windridge Acre

Morning Peak Hour 7:15/8:15 AM

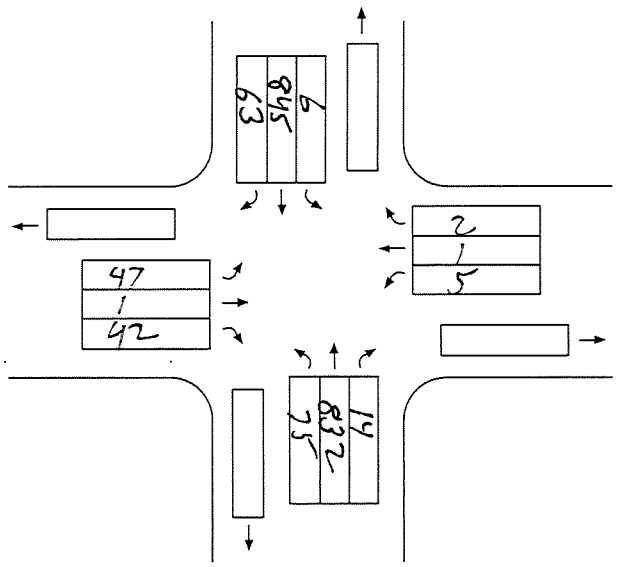


Indicate North by Arrow

LANE CONFIGURATION

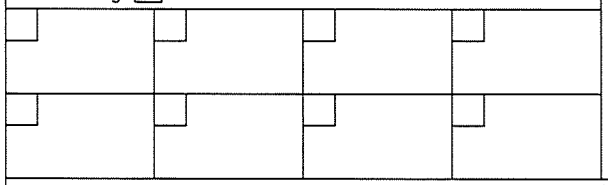


Evening Peak Hour 4:15/5:15 PM



Left Turn Adjustments

Phasing ☑



Key	Opposing Through and Right–Turn Volume	Passenger Car Equivalent
1	0 to 199	1.1
2	200 to 599	2.0
3	600 to 799	3.0
4	800 to 999	4.0
5	1000+	5.0

No. of Lanes	Lane Use Factor
1	1.00
2	.53
3	.37
4	.30
5	.25

Service Level	Critical Lane Vol. Tot.
A	1000 or Less
B	1000 to 1150
C	1150 to 1300
D	1300 to 1450
E	1450 to 1600
F	Greater than 1600

ø	Movement	Volume(1)	Lane Use Factor(2)	Lane Volume (1)x(2)	Opposing Lefts	Critical Lane Volume	*
	NB	519+4	0.53	277	2	279	
	SB	603+13	0.53	326	37	363	✓
	EB	29+72	1.0	101	4	105	✓
	WB	4+2	1.0	6	29	35	

Remarks:

* critical volume TOTAL 454 V/C

LEVEL OF SERVICE

ø	Movement	Volume(1)	Lane Use Factor(2)	Lane Volume (1)x(2)	Opposing Lefts	Critical Lane Volume	*
	NB	832+14	0.53	448	6	454	
	SB	845+63	0.53	481	75	556	✓
	EB	47+1+42	1.0	90	5	95	✓
	WB	5+1+2	1.0	8	47	55	

Remarks:

* critical volume TOTAL 651 V/C

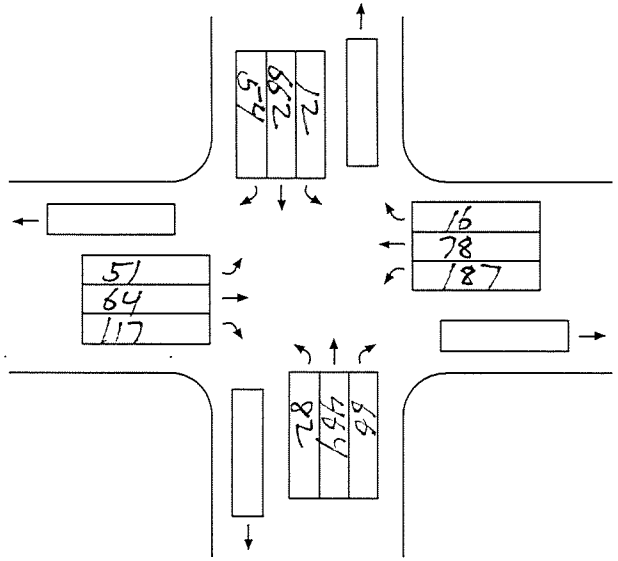
LEVEL OF SERVICE

TURNING MOVEMENT SUMMARY
AND
LEVEL OF SERVICE

Count Date: We 11/4/20
Conditions/ Design Year: Existing Traffic Volumes
Computed By: MN Date:

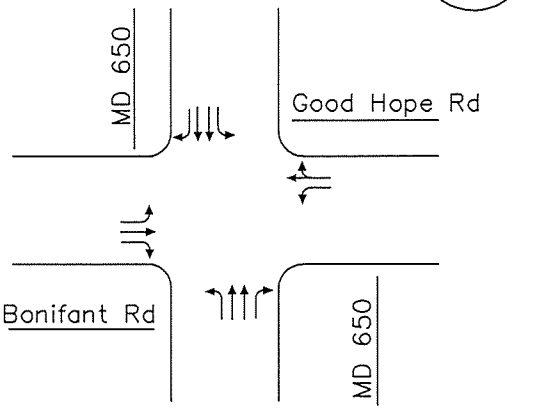
Location: MD 650 @
Bonifant Rd–Good Hope Rd

Morning Peak Hour 7:15/8:15 AM

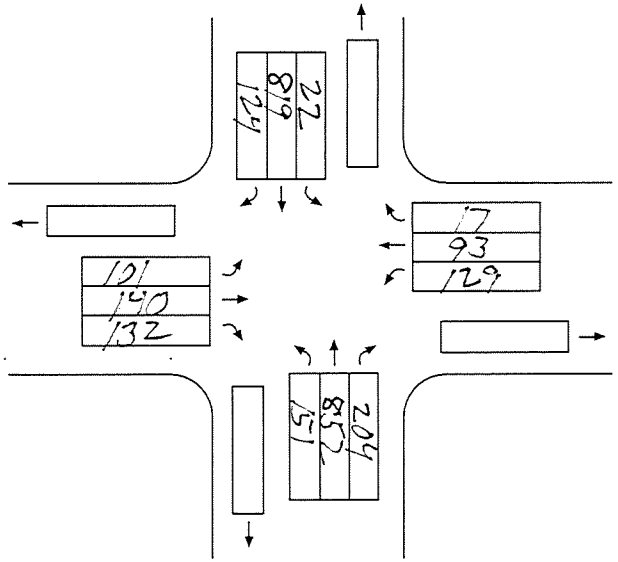


Indicate North by Arrow

LANE CONFIGURATION



Evening Peak Hour 9:45/5:45 PM



Left Turn Adjustments

Phasing ☒

Key	Opposing Through and Right–Turn Volume	Passenger Car Equivalent
1	0 to 199	1.1
2	200 to 599	2.0
3	600 to 799	3.0
4	800 to 999	4.0
5	1000+	5.0

No. of Lanes	Lane Use Factor
1	1.00
2	.53
3	.37
4	.30
5	.25

Service Level	Critical Lane Vol. Tot.
A	1000 or Less
B	1000 to 1150
C	1150 to 1300
D	1300 to 1450
E	1450 to 1600
F	Greater than 1600

ø	Movement	Volume(1)	Lane Use Factor(2)	Lane Volume (1)x(2)	Opposing Lefts	Critical Lane Volume	*
	NB	464	0.53	246	12	258	
	SB	662	0.53	351	82	433	✓
	EB	64	1.0	64	187	251	✓
	WB	78+16	1.0	94	51	145	

Remarks:

* critical volume TOTAL 684 V/C
LEVEL OF SERVICE

ø	Movement	Volume(1)	Lane Use Factor(2)	Lane Volume (1)x(2)	Opposing Lefts	Critical Lane Volume	*
	NB	852	0.53	452	22	474	
	SB	819	0.53	434	151	585	✓
	EB	140	1.0	140	129	289	✓
	WB	93+17	1.0	110	101	211	

Remarks:

* critical volume TOTAL 854 V/C
LEVEL OF SERVICE

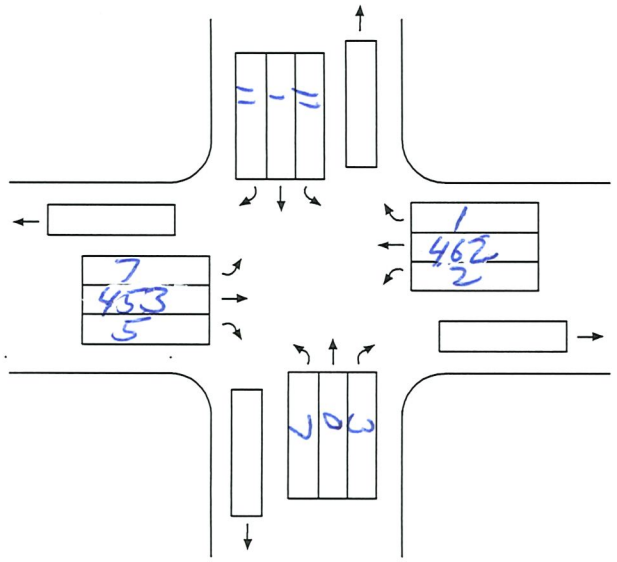
APPENDIX D

CAPACITY CALCULATIONS - TOTAL CONDITIONS

TURNING MOVEMENT SUMMARY AND LEVEL OF SERVICE

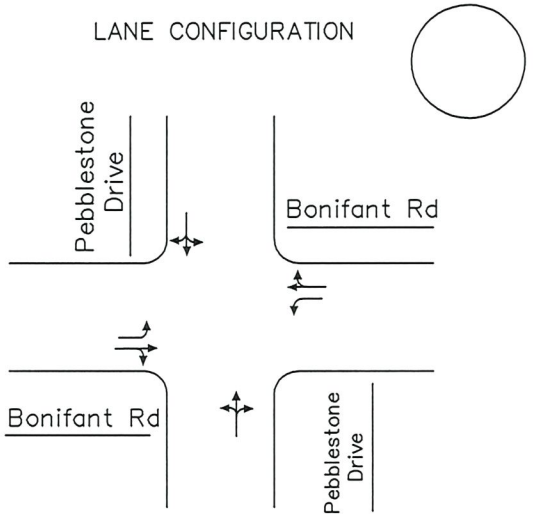
Count Date: NA
Conditions/ Design Year: Total Traffic Volumes
Computed By: MN Date:
Location: Bonifant Rd @ Pebblestone Dr

Morning Peak Hour

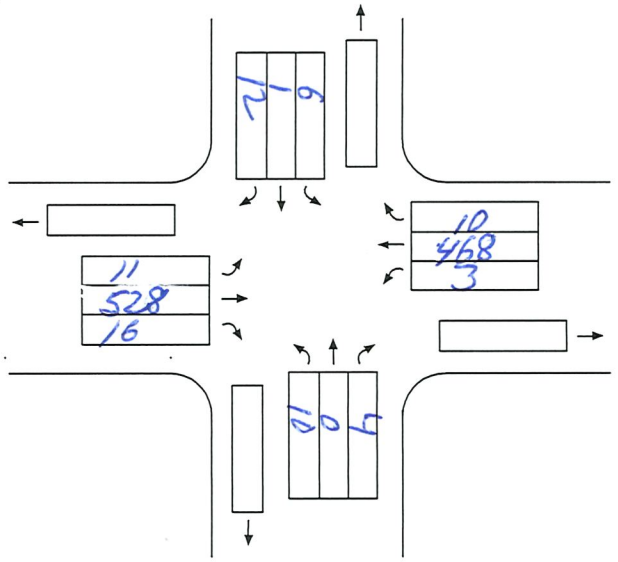


Indicate North by Arrow

LANE CONFIGURATION



Evening Peak Hour



Left Turn Adjustments

Phasing ☒

Key	Opposing Through and Right-Turn Volume	Passenger Car Equivalent
1	0 to 199	1.1
2	200 to 599	2.0
3	600 to 799	3.0
4	800 to 999	4.0
5	1000+	5.0

No. of Lanes	Lane Use Factor
1	1.00
2	.53
3	.37
4	.30
5	.25

Service Level	Critical Lane Vol. Tot.
A	1000 or Less
B	1000 to 1150
C	1150 to 1300
D	1300 to 1450
E	1450 to 1600
F	Greater than 1600

☒	Movement	Volume(1)	Lane Use Factor(2)	Lane Volume (1)x(2)	Opposing Lefts	Critical Lane Volume	*
	NB	8*+3	1.0	11	11	22	
	SB	12*+1+11	1.0	24	7	31	✓
	EB	453+5	1.0	458	2	460	
	WB	462+1	1.0	463	7	470	✓

Remarks:

* critical volume TOTAL 501 V/C

LEVEL OF SERVICE

☒	Movement	Volume(1)	Lane Use Factor(2)	Lane Volume (1)x(2)	Opposing Lefts	Critical Lane Volume	*
	NB	11*+4	1.0	15	6	21	
	SB	7*+1+12	1.0	20	10	30	✓
	EB	528+16	1.0	544	3	547	✓
	WB	468+10	1.0	478	11	489	

Remarks:

* critical volume TOTAL 577 V/C

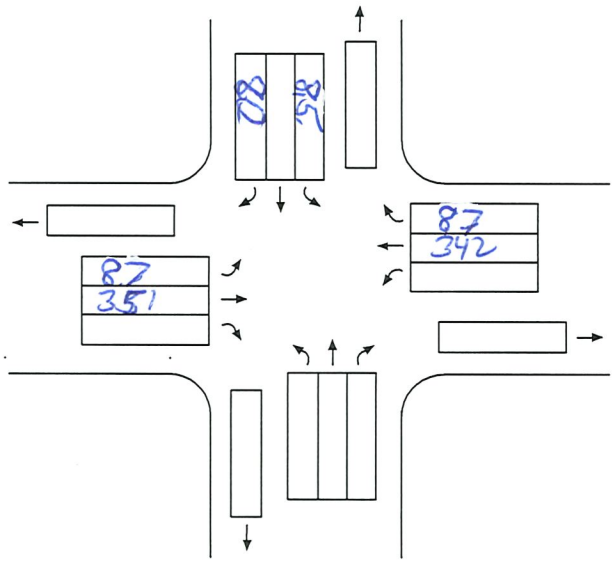
LEVEL OF SERVICE

TURNING MOVEMENT SUMMARY
AND
LEVEL OF SERVICE

Count Date: NA
Conditions/ Design Year: Total Traffic Volumes
Computed By: MN Date:

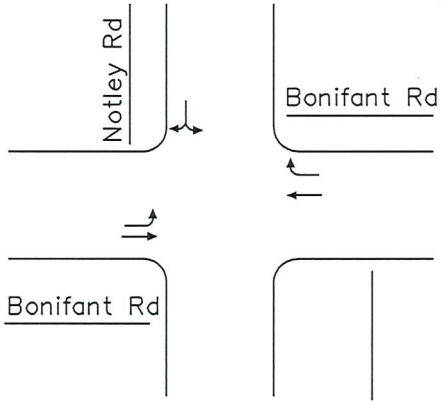
Location: Bonifant Rd @ Notley Rd

Morning Peak Hour

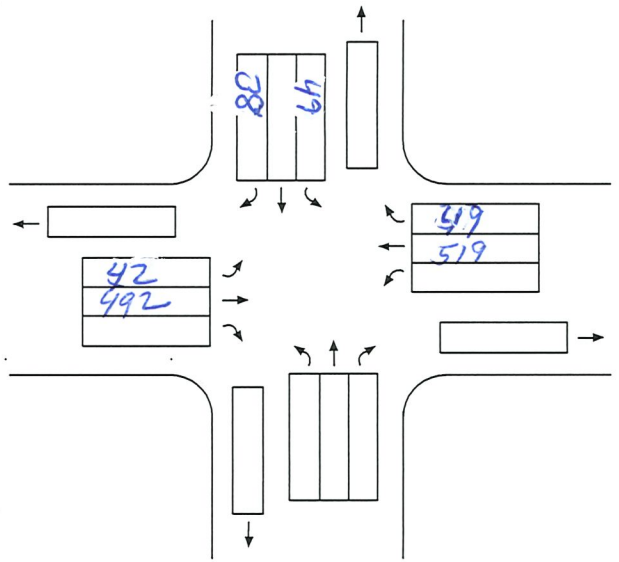


Indicate North by Arrow

LANE CONFIGURATION



Evening Peak Hour



Left Turn Adjustments

Phasing ☒

Key	Opposing Through and Right-Turn Volume	Passenger Car Equivalent
1	0 to 199	1.1
2	200 to 599	2.0
3	600 to 799	3.0
4	800 to 999	4.0
5	1000+	5.0

No. of Lanes	Lane Use Factor
1	1.00
2	.53
3	.37
4	.30
5	.25

Service Level	Critical Lane Vol. Tot.
A	1000 or Less
B	1000 to 1150
C	1150 to 1300
D	1300 to 1450
E	1450 to 1600
F	Greater than 1600

ø	Movement	Volume(1)	Lane Use Factor(2)	Lane Volume (1)x(2)	Opposing Lefts	Critical Lane Volume	*
	SB	80+85	1.0	165	–	165	✓
	EB	351	1.0	351	–	351	
	WB	342	1.0	342	87	429	✓

Remarks:

* critical volume TOTAL 594 V/C
LEVEL OF SERVICE

ø	Movement	Volume(1)	Lane Use Factor(2)	Lane Volume (1)x(2)	Opposing Lefts	Critical Lane Volume	*
	SB	38+49	1.0	87	–	87	✓
	EB	492	1.0	492	–	492	
	WB	519	1.0	519	42	561	✓

Remarks:

* critical volume TOTAL 648 V/C
LEVEL OF SERVICE

TURNING MOVEMENT SUMMARY AND LEVEL OF SERVICE

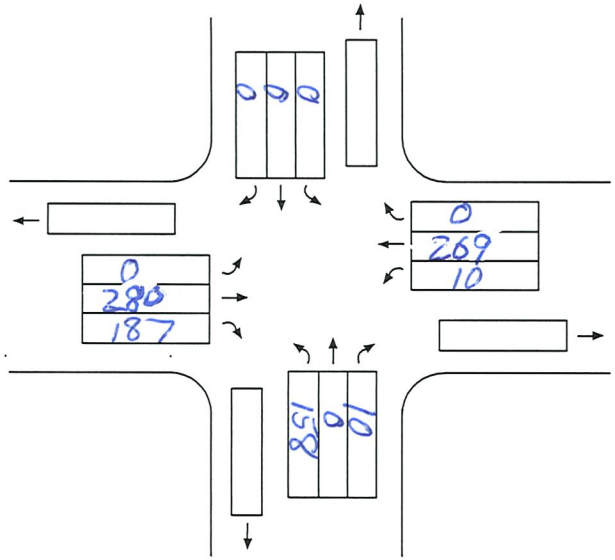
Count Date: NA

Conditions/ Design Year: Total Traffic Volumes

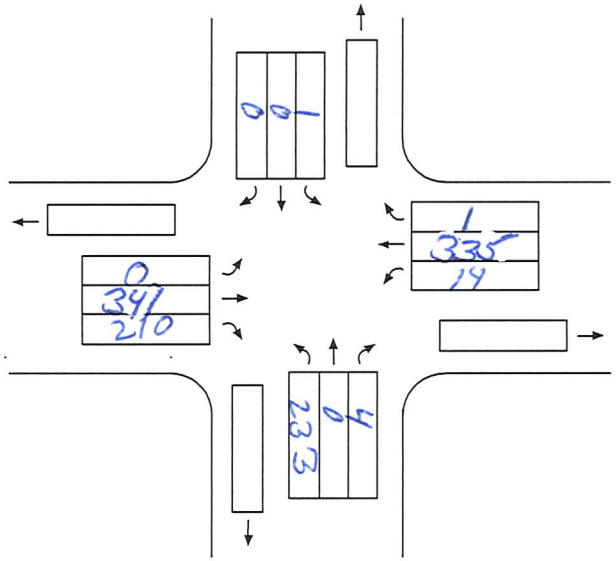
Computed By: MN Date:

Location: Bonifant Rd @ Notley Rd

Morning Peak Hour

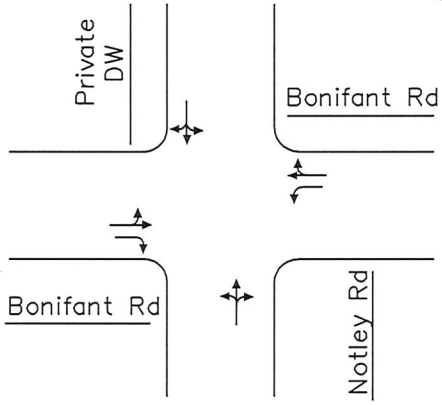


Evening Peak Hour



Indicate North by Arrow

LANE CONFIGURATION



Left Turn Adjustments

Phasing ☒

Key	Opposing Through and Right–Turn Volume	Passenger Car Equivalent
1	0 to 199	1.1
2	200 to 599	2.0
3	600 to 799	3.0
4	800 to 999	4.0
5	1000+	5.0

No. of Lanes	Lane Use Factor
1 =	1.00
2 =	.53
3 =	.37
4 =	.30
5 =	.25

Service Level	Critical Lane Vol. Tot.
A =	1000 or Less
B =	1000 to 1150
C =	1150 to 1300
D =	1300 to 1450
E =	1450 to 1600
F =	Greater than 1600

Ø	Movement	Volume(1)	Lane Use Factor(2)	Lane Volume (1)x(2)	Opposing Lefts	Critical Lane Volume	*
	NB	158+10	1.0	168	0	168	✓
	SB	0	1.0	0	158	158	
	EB	280	1.0	280	10	290	✓
	WB	269	1.0	269	0	269	

Remarks:

* critical volume TOTAL 458 V/C

LEVEL OF SERVICE

Ø	Movement	Volume(1)	Lane Use Factor(2)	Lane Volume (1)x(2)	Opposing Lefts	Critical Lane Volume	*
	NB	233+4	1.0	237	1	238	✓
	SB	1	1.0	1	233	234	
	EB	341	1.0	341	14	355	✓
	WB	335+1	1.0	336	0	336	

Remarks:

* critical volume TOTAL 593 V/C

LEVEL OF SERVICE

TURNING MOVEMENT SUMMARY AND LEVEL OF SERVICE

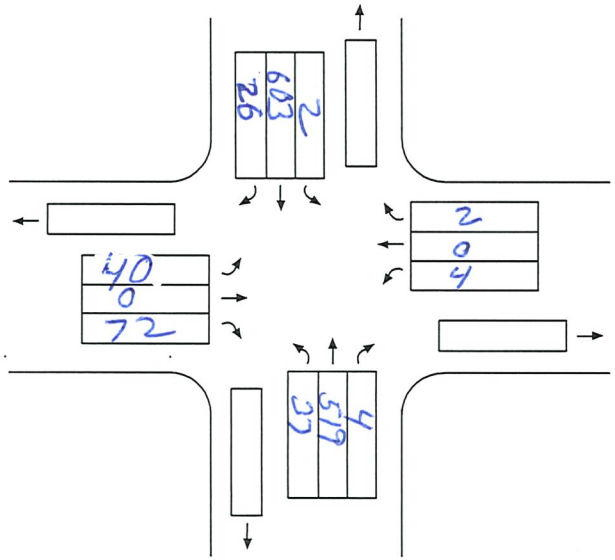
Count Date: NA

Conditions/ Design Year: Total Traffic Volumes

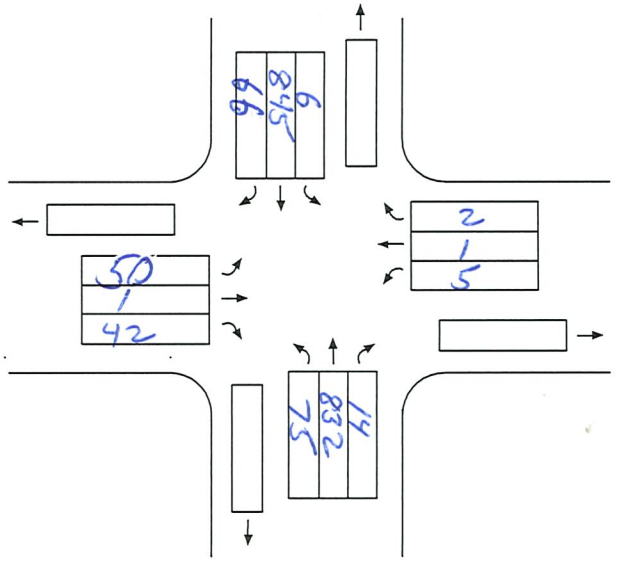
Computed By: MN Date:

Location: MD 650 @ Stonegate Dr–Windridge Acre

Morning Peak Hour

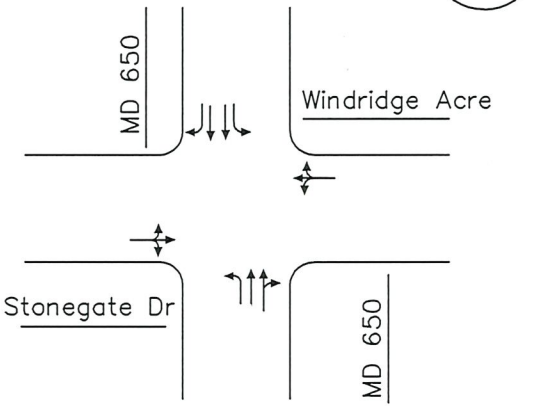


Evening Peak Hour



Indicate North by Arrow

LANE CONFIGURATION



Left Turn Adjustments

Phasing ☑

Key	Opposing Through and Right–Turn Volume	Passenger Car Equivalent
1	0 to 199	1.1
2	200 to 599	2.0
3	600 to 799	3.0
4	800 to 999	4.0
5	1000+	5.0

No. of Lanes — Lane Use Factor

1 = 1.00
2 = .53
3 = .37
4 = .30
5 = .25

Service Level — Critical Lane Vol. Tot.

A = 1000 or Less
B = 1000 to 1150
C = 1150 to 1300
D = 1300 to 1450
E = 1450 to 1600
F = Greater than 1600

ø	Movement	Volume(1)	Lane Use Factor(2)	Lane Volume (1)x(2)	Opposing Lefts	Critical Lane Volume	*
	NB	519+4	0.53	277	2	279	
	SB	603	0.53	320	37	357	✓
	EB	40+72	1.0	112	4	116	✓
	WB	4+2	1.0	6	40	46	

Remarks:

* critical volume TOTAL 473 V/C

LEVEL OF SERVICE

ø	Movement	Volume(1)	Lane Use Factor(2)	Lane Volume (1)x(2)	Opposing Lefts	Critical Lane Volume	*
	NB	832+14	0.53	448	6	454	
	SB	845	0.53	448	75	523	✓
	EB	50+1+42	1.0	93	5	98	✓
	WB	5+1+2	1.0	8	50	58	

Remarks:

* critical volume TOTAL 621 V/C

LEVEL OF SERVICE

TURNING MOVEMENT SUMMARY AND LEVEL OF SERVICE

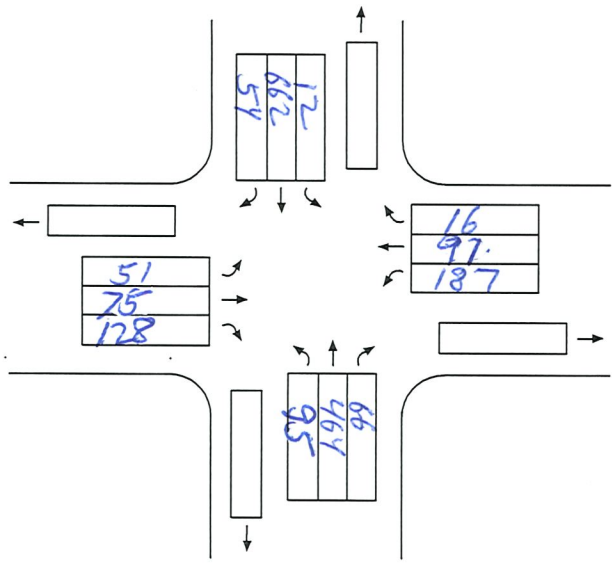
Count Date: NA

Conditions/ Design Year: Total Traffic Volumes

Computed By: MN Date:

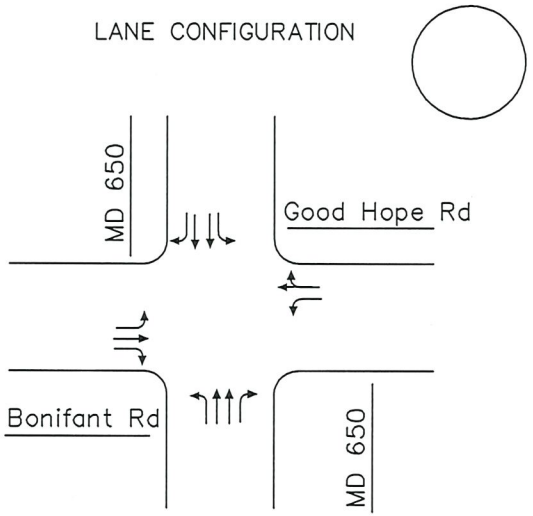
Location: MD 650 @ Bonifant Rd–Good Hope Rd

Morning Peak Hour

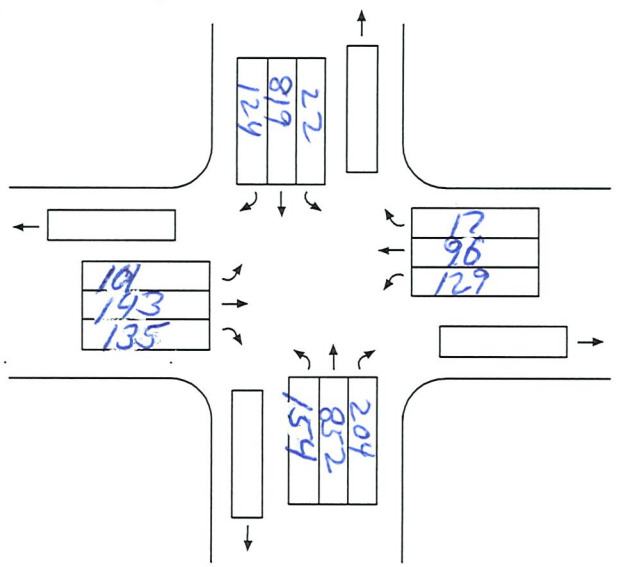


Indicate North by Arrow

LANE CONFIGURATION



Evening Peak Hour



Left Turn Adjustments

Phasing ☑

Key	Opposing Through and Right–Turn Volume	Passenger Car Equivalent
1	0 to 199	1.1
2	200 to 599	2.0
3	600 to 799	3.0
4	800 to 999	4.0
5	1000+	5.0

No. of Lanes	Lane Use Factor
1	1.00
2	.53
3	.37
4	.30
5	.25

Service Level	Critical Lane Vol. Tot.
A	1000 or Less
B	1000 to 1150
C	1150 to 1300
D	1300 to 1450
E	1450 to 1600
F	Greater than 1600

☑	Movement	Volume(1)	Lane Use Factor(2)	Lane Volume (1)x(2)	Opposing Lefts	Critical Lane Volume	*
	NB	464	0.53	246	12	258	
	SB	662	0.53	351	95	446	✓
	EB	75	1.0	75	187	262	✓
	WB	97+16	1.0	113	51	164	

Remarks:

* critical volume TOTAL 708 V/C

LEVEL OF SERVICE

☑	Movement	Volume(1)	Lane Use Factor(2)	Lane Volume (1)x(2)	Opposing Lefts	Critical Lane Volume	*
	NB	852	0.53	452	22	474	
	SB	819	0.53	434	154	588	✓
	EB	143	1.0	143	129	272	✓
	WB	96+17	1.0	113	101	214	

Remarks:

* critical volume TOTAL 860 V/C

LEVEL OF SERVICE

APPENDIX E

SIGNAL WARRANTS STUDIES

I. INTRODUCTION

This study examines traffic operations, overall geometric and safety considerations, as well as the need for a traffic signal at the intersection of Bonifant Road and Notley Road West in Montgomery County, Maryland. Bonifant Road runs in an east/west direction in the vicinity of Notley Road west and is classified as an Arterial. Notley Road forms the north leg of the intersection and is a local residential road.

This report includes a description of existing geometric conditions and traffic control devices, turning movement volumes and intersection capacity calculations. Based upon these analyses as well as field observations made by Street Traffic Studies, Ltd. personnel during November 2020, this report was prepared.

II. SITE DESCRIPTION

A. Geometric Configuration and Traffic Controls

Bonifant Road @ Notley Road west is a T type intersection controlled with a STOP sign on the Notley Road approach. Bonifant Road is a two (2) lane undivided arterial roadway in the vicinity of the intersection with exclusive turn lanes on each approach to Notley Road. Bonifant Road has a posted speed limit of 35 MPH. Notley Road at the intersection with Bonifant Road is a divided roadway with a median which extends approximately 450 feet north of the intersection. At this point Notley Road is an unmarked residential road with a posted speed limit of 25 MPH.

B. Sight Distance

A review of actual and required sight distances was performed at the intersection. Table 1 below shows available sight distances as field measured by our staff on Monday, November 23, 2020. As indicated in Table 1 below sight lines at the intersection are adequate for the travel speeds on Bonifant Road based on AASHTO guidelines.

TABLE 1 - Sight Distance Summary

Standard	Approach	Criteria	Available
AASHTO Corner Sight Distance	SB Notley Rd	500'	+1000' (Looking East) +545' (Looking West)
AASHTO Stopping Sight Distance	Eastbound Bonifant Rd	360'	+500'
	Westbound Bonifant Rd	360'	+1000'

A design speed of 45 MPH was used based on the posted 35 MPH speed limit plus 10 MPH.

III. TRAFFIC VOLUMES

> Volumes: Vehicle counts were conducted at the intersection on Tuesday, October 27, 2020. The count was conducted between the hours of 7:00 AM to 7:00 PM. The 12 hour count data as well as the morning and evening peak hour summaries are enclosed.

> Speed: The posted speed limit for each direction along Bonifant Road is 35 MPH. Vehicle speeds along Bonifant Road were not observed to be an issue.

> Delays: A delay study was not conducted at this location as volumes from Notley Road were very low and the intersection operated smoothly and efficiently.

> Anticipated Growth: The Stonegate Elementary School is proposing to expand and increase enrollment by 239 students. Based on the scoping agreement this expansion will increase the volumes at the intersection by 89 vehicles during the morning peak hour and by 22 vehicles during the evening peak hour.

IV. OPERATIONS

> Field Observations:

Observations at this location were initially made in November/December 2020 and are recorded below:

- Sight lines along Bonifant Road at the intersection exceed AASHTO standards for both intersection and stopping sight distance based on the assumed 45 MPH design speed on Bonifant Road.
- The nearest signalized intersections are located approximately 440 feet to the east at Notley Road East and 0.37 miles to the west at Pebblestone Drive.
- Delays to vehicles on Notley Road were not observed to be significant during our observations.
- Notley Road right turn motorists were able to bypass left turn motorists at the intersection.
- This intersection was observed to operate safely and efficiently during both peak and non-peak periods without any serious conflicts.

V. SAFETY

> Accident Data: Accident data was not reviewed at this intersection.

> Capacity Analyses:

Capacity analyses were performed at this intersection using the October 2020 count. The intersection was analyzed using the Critical Lane Volume technique and the results revealed that the intersection operates at a very good level of service "A" during both peak hours.

VI. TRAFFIC SIGNAL WARRANT ANALYSES

An analysis of warrants for traffic signalization was conducted in accordance with the Manual on Uniform Traffic Control Devices (MUTCD). The posted speed limit on Bonifant 35 MPH and speeds were not observed to be excessive. Therefore the volume requirements contained in the MUTCD were not reduced to reflect approach speeds in excess of 40 MPH. Further the approach to Bonifant Road is approximately 24 feet wide however it is marked as a single lane of approach. With signalization this approach would be marked with two (2) approach lanes and consequently this intersection was analyzed as having two (2) approach lanes and right turns were excluded from the analyses.

> Warrant 1 - Eight-Hour Vehicular Volume

An examination of the enclosed Traffic Signal Warrant Work Sheets reveal that under existing traffic volumes, the volume requirements for either Condition A or Condition B are not satisfied for any hour. Therefore, under existing traffic volumes, this Warrant is not satisfied.

> Warrant 2 - Four Hour Volumes

An examination of the enclosed Four Hour Volume worksheets reveals that, under existing traffic volumes, no hours is satisfied. Therefore under existing conditions, this warrant is not satisfied.

> Warrant 3 - Peak Hour Delay

For this warrant to be considered the stopped time delay for the minor road approach must exceed 4 vehicle hours of delay over a 1 hour period. A delay study was not conducted at this intersection as delays were not observed to be significant. It is unlikely that this warrant would be satisfied if a delay study were conducted.

> Warrant 4 - Minimum Pedestrian Volume

There were only a total of eight (8) pedestrians observed at the intersection during the 12 hour count period. This warrant is not satisfied under either existing or total traffic volumes.

> Warrant 5 - School Crossing

This intersection is not designated as a school crossing; therefore this warrant is not applicable.

> Warrant 6 - Coordinated Signal System

This intersection does not satisfy the requirements of this warrant. Therefore this warrant is not satisfied under either existing or total traffic volumes..

> Warrant 7 - Crash Experience

Accident data was not reviewed at this location, consequently the volume reductions for this warrant were not considered.

> Warrant 8 - Roadway Network

The conditions for this warrant are not satisfied at this intersection.

The signal warrants worksheets are enclosed.

Right turns from Notley Road are excluded from the analyses since they would be able to turn right during the red phase under signal control. Therefore the critical movement in determining if signalization would be justified at this intersection would be the southbound left turn movement. The proposed expansion of the Stonegate Elementary School is projected to increase southbound left turns by 19 during the morning peak hour and by 5 during the evening peak hour. Even if these volumes remained consistent over the entire 12 hour count period, they would not change the recommendations of this study.

V. FINDINGS AND CONCLUSIONS

The following is a summary of findings based on field observations and traffic analyses:

- Under existing traffic conditions, no volume warrant is satisfied;
- The southbound left turn movement is the critical movement in terms of warranting signalization at this intersection. Even if the peak hour projections for this movement were added to the 12 hour volumes recorded, no signal warrant would be satisfied. Therefore, it is highly unlikely that signalization would be justified at this location once the Stonegate Elementary School has been expanded.
- Roundabout control at this location would not be recommended as the volumes along Bonifant Road are significantly higher than those on the minor road approaches and this would result in little more than a speed control device on a principal arterial roadway.
- Similarly an ALL WAY STOP control at this location would not be recommended.
- Based on our review of both existing and future conditions at this location it is our opinion that the existing STOP control on the Notley Road approach is the appropriate method of traffic control at this intersection.
- All of the appropriate traffic control devices are in place and in good condition; therefore no changes/improvements are recommended at this time.

In view of the above it is recommended that signalization not be installed at this intersection.

STONEGATE ELEMENTARY SCHOOL STUDY

Intersection Turning Movement Count Data Summary

Location: Bonifant Road @ Notley Road - West (Location #2)
Day/Date Surveyed: Tuesday (October 27, 2020)

Weather: Mild, Cloudy, Dry
ORGA Techs:

15-Minute Interval (Ending)	Total Vehicles																				Interval Total
	Notley Road (West)										Bonifant Road					Bonifant Road					
	From North					From South					From East					From West					
	Left	Thru	Right	U-Turn	Total	Left	Thru	Right	U-Turn	Total	Left	Thru	Right	U-Turn	Total	Left	Thru	Right	U-Turn	Total	
7:15	**4**	**0**	**3**	**0**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**83**	**6**	**0**	**89**	**0**	**61**	**0**	**0**	**61**	**157**
7:30	**10**	**0**	**3**	**0**	**13**	**0**	**0**	**0**	**0**	**0**	**0**	**84**	**4**	**0**	**88**	**3**	**79**	**0**	**0**	**82**	**183**
7:45	**8**	**0**	**3**	**0**	**11**	**0**	**0**	**0**	**0**	**0**	**0**	**69**	**3**	**0**	**72**	**3**	**87**	**0**	**0**	**90**	**173**
8:00	**4**	**0**	**1**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**84**	**6**	**0**	**90**	**1**	**101**	**0**	**0**	**102**	**197**
8:15	5	0	6	0	11	0	0	0	0	0	0	70	5	0	75	9	78	0	0	87	173
8:30	2	0	8	0	10	0	0	0	0	0	0	74	4	0	78	3	90	0	0	93	181
8:45	4	0	5	0	9	0	0	0	0	0	0	63	3	0	66	4	93	0	0	97	172
9:00	3	0	7	0	10	0	0	0	0	0	0	71	6	0	77	2	48	0	0	50	137
9:15	1	0	12	0	13	0	0	0	0	0	0	49	3	0	52	10	62	0	0	72	137
9:30	4	0	2	0	6	0	0	0	0	0	0	57	2	0	59	3	72	0	0	75	140
9:45	6	0	10	0	16	0	0	0	0	0	0	58	6	0	64	4	74	0	0	78	158
10:00	5	0	6	0	11	0	0	0	0	0	0	66	9	0	75	3	73	0	0	76	162
10:15	4	0	3	0	7	0	0	0	0	0	0	59	7	0	66	8	75	0	0	83	156
10:30	3	0	2	1	6	0	0	0	0	0	0	79	4	0	83	3	65	0	0	68	157
10:45	4	0	7	0	11	0	0	0	0	0	0	52	7	0	59	5	72	0	0	77	147
11:00	10	0	5	0	15	0	0	0	0	0	0	61	1	0	62	7	79	0	0	86	163
11:15	9	0	6	0	15	0	0	0	0	0	0	72	10	0	82	7	82	0	0	89	186
11:30	5	0	7	0	12	0	0	0	0	0	0	75	7	1	83	4	78	0	0	82	177
11:45	11	0	14	0	25	0	0	0	0	0	0	68	6	0	74	15	68	0	0	83	182
12:00	6	0	5	0	11	0	0	0	0	0	0	58	5	0	63	0	81	0	0	81	155
AM Peak Hour Total	**26**	**0**	**10**	**0**	**36**	**0**	**0**	**0**	**0**	**0**	**0**	**320**	**19**	**0**	**339**	**7**	**328**	**0**	**0**	**335**	**710**
AM Peak PHF	**0.59**	**0.00**	**0.18**	**0.00**	**0.36**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**1.07**	**0.48**	**0.00**	**1.02**	**0.12**	**1.00**	**0.00**	**0.00**	**0.94**	**0.95**
12:15	8	0	7	0	15	0	0	0	0	0	0	56	3	0	59	4	75	0	0	79	153
12:30	6	0	2	0	8	0	0	0	0	0	0	69	5	0	74	4	85	0	0	89	171
12:45	5	0	8	0	13	0	0	0	0	0	0	64	3	0	67	5	73	0	0	78	158
13:00	5	0	2	0	7	0	0	0	0	0	0	68	3	0	71	4	99	0	0	103	181
13:15	8	0	3	0	11	0	0	0	0	0	0	78	7	0	85	3	98	0	0	101	197
13:30	5	0	8	0	13	0	0	0	0	0	0	76	5	0	81	8	88	0	0	96	190
13:45	5	0	8	0	13	0	0	0	0	0	0	78	3	0	81	4	82	0	0	86	180
14:00	8	0	1	1	10	0	0	0	0	0	0	83	7	0	90	0	89	0	0	89	189
14:15	9	0	3	0	12	0	0	0	0	0	0	95	5	0	100	7	89	0	0	96	208
14:30	10	0	5	0	15	0	0	0	0	0	0	108	7	0	115	9	93	0	0	102	232
14:45	5	0	10	0	15	0	0	0	0	0	0	92	3	0	95	5	111	0	0	116	226
15:00	9	0	7	0	16	0	0	0	0	0	0	109	11	0	120	5	115	0	0	120	256
15:15	8	0	8	0	16	0	0	0	0	0	0	90	5	0	95	3	100	0	0	103	214
15:30	11	0	9	0	20	0	0	0	0	0	0	98	7	0	105	4	109	0	0	113	238
15:45	6	0	7	0	13	0	0	0	0	0	0	94	7	0	101	6	119	0	0	125	239
16:00	**11**	**0**	**9**	**0**	**20**	**0**	**0**	**0**	**0**	**0**	**0**	**130**	**11**	**0**	**141**	**5**	**97**	**0**	**0**	**102**	**263**
16:15	**7**	**0**	**3**	**0**	**10**	**0**	**0**	**0**	**0**	**0**	**0**	**98**	**8**	**0**	**106**	**10**	**127**	**0**	**0**	**137**	**253**
16:30	**6**	**0**	**3**	**0**	**9**	**0**	**0**	**0**	**0**	**0**	**0**	**137**	**4**	**0**	**141**	**3**	**122**	**0**	**0**	**125**	**275**
16:45	**6**	**0**	**2**	**0**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**120**	**9**	**0**	**129**	**4**	**114**	**0**	**0**	**118**	**255**
17:00	4	0	2	0	6	0	0	0	0	0	0	132	8	0	140	5	104	0	0	109	255
17:15	1	0	8	0	9	0	0	0	0	0	0	121	4	0	125	3	96	0	0	99	233
17:30	8	0	4	0	12	0	0	0	0	0	0	104	3	0	107	5	97	0	0	102	221
17:45	2	0	2	0	4	0	0	0	0	0	0	122	2	0	124	5	109	0	0	114	242
18:00	3	0	4	1	8	0	0	0	0	0	0	118	6	0	124	10	102	0	0	112	244
18:15	2	0	3	0	5	0	0	0	0	0	0	87	6	0	93	8	104	0	0	112	210
18:30	2	0	1	0	3	0	0	0	0	0	0	83	4	0	87	7	71	0	0	78	168
18:45	4	0	1	0	5	0	0	0	0	0	0	79	6	0	85	1	66	0	0	67	157
19:00	4	0	0	0	4	0	0	0	0	0	0	54	2	0	56	1	72	0	0	73	133
PM Peak Hour Total	**30**	**0**	**17**	**0**	**47**	**0**	**0**	**0**	**0**	**0**	**0**	**485**	**32**	**0**	**517**	**22**	**460**	**0**	**0**	**482**	**1046**
PM Peak PHF	**0.68**	**0.00**	**0.47**	**0.00**	**0.59**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.89**	**0.73**	**0.00**	**0.92**	**0.55**	**0.91**	**0.00**	**0.00**	**0.88**	**0.95**

Data Collection by: O. R. George & Associates, Inc.

STONEGATE ELEMENTARY SCHOOL STUDY

Intersection Turning Movement Count Data Summary

Location: Bonifant Road @ Notley Road - West (Location #2)
Day/Date Surveyed: Tuesday (October 27, 2020)

Weather: Mild, Cloudy, Dry
ORGA Techs:

15-Minute Interval (Ending)	Bicycle Volumes																				Interval Total
	Notley Road (West)										Bonifant Road					Bonifant Road					
	From North					From South					From East					From West					
	Left	Thru	Right	U-Turn	Total	Left	Thru	Right	U-Turn	Total	Left	Thru	Right	U-Turn	Total	Left	Thru	Right	U-Turn	Total	
7:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
10:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AM Peak Hour Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
12:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:45	0	0	0	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	0	0	0	0	0	0	0	0	0	0	0	0	0
14:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:45	0	0	0	0	0	0	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	0	0	0	0	0	0	0	0	0	0	0	0	0
15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM Peak Hour Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Data Collection by: O. R. George & Associates, Inc.

STONEGATE ELEMENTARY SCHOOL STUDY

Intersection Turning Movement Count Data Summary

Location: Bonifant Road @ Notley Road - West (Location #2) **Weather:** Mild, Cloudy, Dry
Day/Date Surveyed: Tuesday (October 27, 2020) **ORGA Techs:**

15-Minute Interval (Ending)	Pedestrian Volumes				Interval Total
	Notley Road (West)		Bonifant Road	Bonifant Road	
	Across North	Across South	Across East	Across West	
7:15	**0**	**0**	**0**	**0**	**0**
7:30	**0**	**0**	**0**	**0**	**0**
7:45	**0**	**0**	**0**	**0**	**0**
8:00	**0**	**0**	**0**	**0**	**0**
8:15	0	0	0	0	0
8:30	0	0	0	0	0
8:45	1	0	0	0	1
9:00	0	0	1	0	1
9:15	0	0	0	0	0
9:30	0	0	0	0	0
9:45	0	0	0	0	0
10:00	0	0	0	0	0
10:15	0	0	0	0	0
10:30	0	0	0	0	0
10:45	0	0	0	0	0
11:00	0	0	0	0	0
11:15	0	0	0	0	0
11:30	0	0	0	0	0
11:45	0	0	1	0	1
12:00	0	0	0	0	0
AM Peak Hour Total	**0**	**0**	**0**	**0**	**0**
12:15	0	0	0	0	0
12:30	0	0	0	0	0
12:45	0	0	0	0	0
13:00	0	0	0	0	0
13:15	0	0	0	0	0
13:30	0	0	0	0	0
13:45	0	0	0	0	0
14:00	1	0	0	0	1
14:15	0	0	0	0	0
14:30	0	0	0	0	0
14:45	0	0	0	0	0
15:00	0	0	0	0	0
15:15	0	0	0	0	0
15:30	0	0	0	0	0
15:45	0	0	0	0	0
16:00	**0**	**0**	**0**	**0**	**0**
16:15	**1**	**0**	**0**	**0**	**1**
16:30	**0**	**0**	**0**	**0**	**0**
16:45	**0**	**0**	**0**	**0**	**0**
17:00	0	0	0	1	1
17:15	1	0	0	0	1
17:30	0	0	0	0	0
17:45	0	0	0	0	0
18:00	0	0	0	0	0
18:15	1	0	0	0	1
18:30	0	0	0	0	0
18:45	0	0	0	0	0
19:00	0	0	0	0	0
PM Peak Hour Total	**1**	**0**	**0**	**0**	**1**

Data Collection by: O. R. George & Associates, Inc.

*** TRAFFIC SIGNAL WARRANT WORK SHEET ***

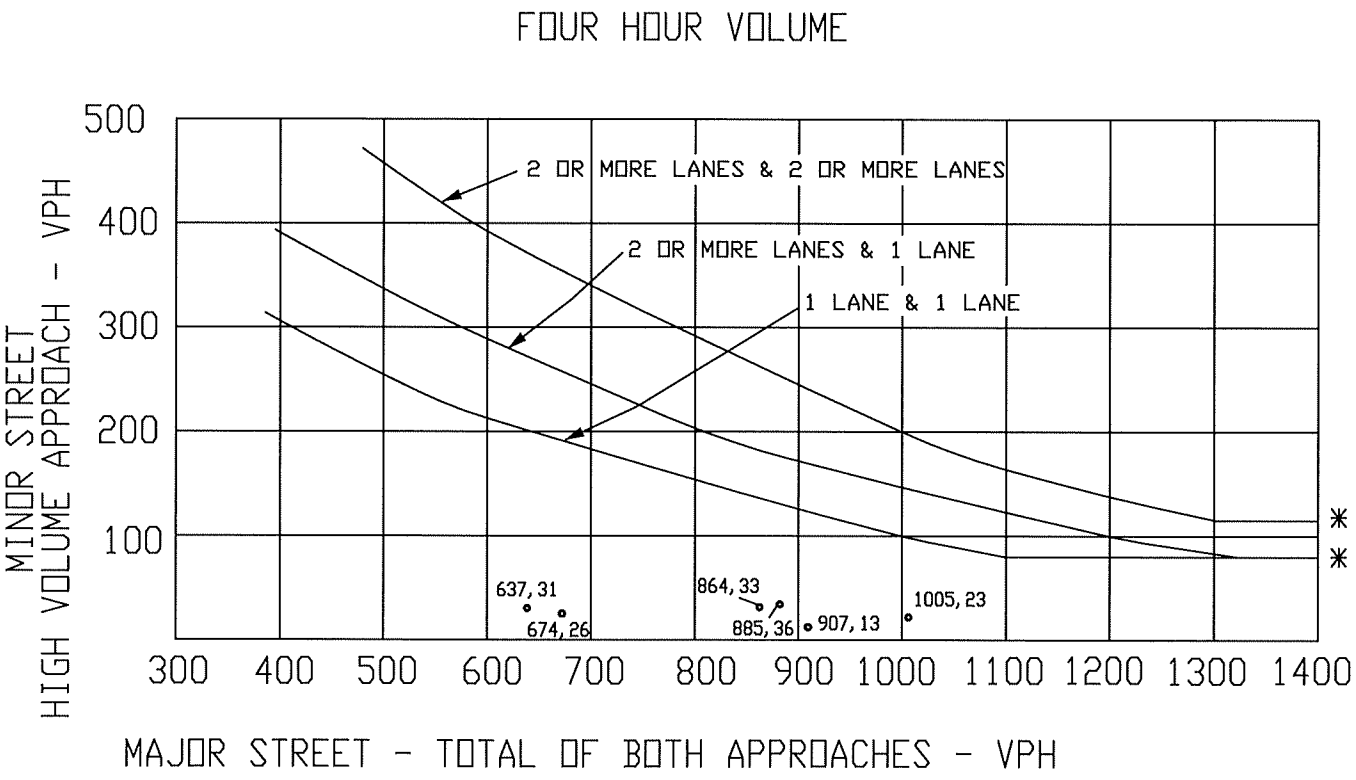
MAJOR ROAD: Bonifant Rd — CONDITION: Existing Traffic Volumes

MINOR CROSS ROAD: Notley Rd — DAY Tuesday — DATE October 27, 2020

One lane/ two+ lanes	---VOLUMES COUNTED--- (per hour) MAJOR ROAD (TOTAL BOTH APPROACHES) 2 Lanes	MINOR ROAD (MAXIMUM VOLUME APPROACH) 1 Lanes	CROSSWALK (MAXIMUM PEDESTRIAN VOLUME)	WARRANT #1 CONDITION A maj. 500/600	WARRANT #1 CONDITION A min. 150/200	WARRANT #1 CONDITION B maj. 750/900	WARRANT #1 CONDITION B min. 75/100	REDUCED WARRANTS 70% Speeds > 40 mph CONDITION A maj. 420	CONDITION A min. 105	CONDITION B maj. 630	CONDITION B min. 53	REDUCED WARRANTS 80% Combination CONDITION A maj. 336	CONDITION A min. 84	CONDITION B maj. 504	CONDITION B min. 42
TIME															
6–7															
7–8	674	26		✓				✓		✓		✓		✓	
8–9	623	14		✓				✓				✓		✓	
9–10	551	16						✓				✓		✓	
10–11	584	21						✓				✓		✓	
11–12	637	31		✓				✓		✓		✓		✓	
12–1	620	24		✓				✓				✓		✓	
1–2	709	26		✓				✓		✓		✓		✓	
2–3	864	33		✓				✓		✓		✓		✓	
3–4	885	36		✓				✓		✓		✓		✓	
4–5	1005	23		✓		✓		✓		✓		✓		✓	
5–6	907	13		✓		✓		✓		✓		✓		✓	
6–7	651	12		✓				✓		✓		✓		✓	
7–8															
NUMBER OF HOURS EXCEEDED:				0		0		0		0		0		0	
SIGNAL WARRANTED? (8 hours or more exceeded)				No		No		No		No		No			

Bonifant Rd @ Notley Rd

EXISTING TRAFFIC VOLUMES



* NOTE: 115 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 80 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH ONE LANE.

I. INTRODUCTION

This study examines traffic operations, overall geometric and safety considerations, as well as the need for a traffic signal at the intersection of MD 650/Stonegate Drive-Windridge Acres Court intersection in Montgomery County, Maryland. MD 650 runs in a north/south direction in the vicinity of Stonegate Drive and is classified as a Principal Arterial. Stonegate Drive forms the west leg of the intersection and is a local residential road. Windridge Acres Court forms the east leg of the 4 leg intersection.

This report includes a description of existing geometric conditions and traffic control devices, turning movement volumes and intersection capacity calculations. Based upon these analyses as well as field observations made by Street Traffic Studies, Ltd. personnel during November/December 2020, this report was prepared.

II. SITE DESCRIPTION

A. Geometric Configuration and Traffic Controls

MD 650 @ Stonegate Drive-Windridge Acres Court is a 4 leg intersection controlled with STOP signs on the Stonegate Drive-Windridge Acres Court approaches. MD 650 is a four (4) lane divided arterial roadway in the vicinity of the intersection with exclusive left turn lanes on each approach to the intersection along with an exclusive southbound right turn lane approaching Stonegate Drive. MD 650 has a posted speed limit of 45 MPH. Stonegate Drive at the intersection with MD 650 is a divided roadway which extends west to Whitegate Road (approximately 175 feet). Beyond Whitegate Road, Stonegate Drive is an unmarked residential road with a posted speed limit of 25 MPH, while Windridge Acres Court is a cul-de-sac with no posted speed limit.

B. Sight Distance

A review of actual and required sight distances was performed at the intersection. Table 1 below shows available sight distances as field measured by our staff on Monday, November 23, 2020. As indicated in Table 1 the sight line to the north from Windridge Acres Court is limited by vegetation/fencing in the northeast corner of the intersection and the curvature of MD 650. Motorists are able to enter the median area of MD 650 prior to crossing/entering the southbound MD 650 travel lanes and at that point the sight lines are more than adequate based on AASHTO guidelines.

TABLE 1 - Sight Distance Summary

Standard	Approach	Criteria	Available
AASHTO Corner Sight Distance	EB Stonegate Dr	610'	+700' (Looking North) +1000' (Looking South)
	WB Windridge Acres Ct	610'	+350' (Looking North) +1000' (Looking South)
AASHTO Stopping Sight Distance	Northbound MD 650	495'	+1000'
	Southbound MD 650	495'	+600'

A design speed of 55 MPH was used based on the posted 45 MPH speed limit plus 10 MPH.

III. TRAFFIC VOLUMES

> Volumes: Vehicle counts were conducted at the intersection on Tuesday, October 27, 2020. The count was conducted between the hours of 7:00 AM to 7:00 PM. The 12 hour count data as well as the morning and evening peak hour summaries are enclosed.

> Speed: The posted speed limit for each direction along MD 650 is 45 MPH. Vehicle speeds along MD 650 were not observed to be an issue.

> Delays: A delay study was not conducted at this location as volumes from Stonegate Drive and Windridge Acres Court were very low and observed delays were minimal.

> Anticipated Growth: The Stonegate Elementary School is proposing to expand and increase enrollment by 239 students. Based on the scoping agreement this expansion will increase the volumes at the intersection by eight (8) vehicles during the morning peak hour and by two (2) vehicles during the evening peak hour. This increase will be insignificant at this location and will not change the existing conditions at this location.

IV. OPERATIONS

> Field Observations:

Observations at this location were initially made in November 2020 and are recorded below:

- Sight lines along MD 650 at the intersection exceed AASHTO standards for both intersection and stopping sight distance based on the assumed 55 MPH design speed on MD 650.
- The nearest signalized intersections are located 0.29 miles to the north at Norwood Road and 0.47 miles to the south at Bonifant Road-Good Hope Road. In view of the distance between these signals this intersection is not part of a Coordinated Signal System (Warrant 6) or part of a Roadway Network (Warrant 8).
- Delays to vehicles on Stonegate Drive and Windridge Acres Court were not observed to be significant during our observations.
- This intersection was observed to operate safely and efficiently during both peak and non-peak periods without any serious conflicts.
- On the Stonegate Drive approach to the intersection motorists attempting a right turn were able to bypass a queued left turn motorist.

V. SAFETY

> Accident Data: Accident data was not reviewed at this intersection.

> Capacity Analyses:

Capacity analyses were performed at this intersection using the October 2020 count. The intersection was analyzed using the Critical Lane Volume technique and the results revealed that the intersection operates at a very good level of service "A" during both peak hours.

VI. TRAFFIC SIGNAL WARRANT ANALYSES

An analysis of warrants for traffic signalization was conducted in accordance with the Manual on Uniform Traffic Control Devices (MUTCD). The posted speed limit on MD 650 is 45 MPH and while speeds were not observed to be excessive they were above 40 MPH. Therefore the volume requirements contained in the MUTCD were reduced to reflect approach speeds in excess of 40 MPH. Further, the Stonegate Drive approach to MD 650 is approximately 24 feet wide however it is marked as a single lane of approach. With signalization this approach would be marked with two (2) approach lanes and consequently this intersection was analyzed as having two (2) approach lanes on Stonegate Drive and right turns were excluded from the analyses.

> Warrant 1 - Eight-Hour Vehicular Volume

An examination of the enclosed Traffic Signal Warrant Work Sheets reveal that under existing traffic volumes, the volume requirements for either Condition A or Condition B are not satisfied for any hour. Therefore, under existing traffic volumes, this Warrant is not satisfied.

> Warrant 2 - Four Hour Volumes

An examination of the enclosed Four Hour Volume worksheets reveals that, under existing traffic volumes, no hours is satisfied. Therefore under existing conditions, this warrant is not satisfied.

> Warrant 3 - Peak Hour Delay

For this warrant to be considered the stopped time delay for the minor road approach must exceed 4 vehicle hours of delay over a 1 hour period. A delay study was not conducted at this intersection as delays were not observed to be significant. It is unlikely that this warrant would be satisfied if a delay study were conducted.

> Warrant 4 - Minimum Pedestrian Volume

There were only a total of 28 pedestrians observed at the intersection during the 12 hour count period. This warrant is not satisfied.

> Warrant 5 - School Crossing

This intersection is not designated as a school crossing; therefore this warrant is not applicable.

> Warrant 6 - Coordinated Signal System

This intersection does not satisfy the requirements of this warrant. Therefore this warrant is not satisfied..

> Warrant 7 - Crash Experience

Accident data was not reviewed at this location, consequently the volume reductions for this warrant were not considered.

> Warrant 8 - Roadway Network

The conditions for this warrant are not satisfied at this intersection.

The signal warrants worksheets are enclosed.

V. FINDINGS AND CONCLUSIONS

The following is a summary of findings based on field observations and traffic analyses:

- Under existing traffic conditions, no volume warrant is satisfied;
- The additional trips projected as a result of the expansion of the Stonegate Elementary School will have a minimal impact on this intersection and they will not change the operation at the intersection
-
- Roundabout control at this location would not be recommended as the volumes along MD 650 are significantly higher than those on the minor road approaches and this would result in little more than a speed control device on a principal arterial roadway.
- Similarly an ALL WAY STOP control at this location would not be recommended.
- Based on our review of both existing and future conditions at this location it is our opinion that the existing STOP controls on the Stonegate Road and Windridge Acres Court approaches are the appropriate method of traffic control at this intersection.
- All of the appropriate traffic control devices are in place and in good condition; therefore no changes/improvements are recommended at this time.

In view of the above it is recommended that signalization not be installed at this intersection.

STONEGATE ELEMENTARY SCHOOL STUDY

Intersection Turning Movement Count Data Summary

Location: MD 650 @ Stonegate Drive (Location #4)
Day/Date Surveyed: Tuesday (October 27, 2020)

Weather: Mild, Cloudy, Dry
ORGA Techs:

15-Minute Interval (Ending)	Total Vehicles																				Interval Total
	MD 650 From North					MD 650 From South					Windridge Acres Court From East					Stonegate Drive From West					
	Left	Thru	Right	U-Turn	Total	Left	Thru	Right	U-Turn	Total	Left	Thru	Right	U-Turn	Total	Left	Thru	Right	U-Turn	Total	
7:15	**0**	**132**	**5**	**0**	**137**	**8**	**148**	**1**	**1**	**158**	**0**	**0**	**2**	**0**	**2**	**8**	**0**	**18**	**0**	**26**	**323**
7:30	**0**	**168**	**2**	**0**	**170**	**3**	**116**	**0**	**0**	**119**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**14**	**0**	**17**	**306**
7:45	**2**	**141**	**2**	**0**	**145**	**12**	**107**	**1**	**1**	**121**	**1**	**0**	**0**	**0**	**1**	**7**	**0**	**19**	**0**	**26**	**293**
8:00	**0**	**123**	**3**	**0**	**126**	**10**	**114**	**2**	**0**	**126**	**3**	**0**	**0**	**0**	**3**	**9**	**0**	**16**	**0**	**25**	**280**
8:15	0	117	3	0	120	13	98	0	0	111	1	0	0	0	1	8	0	5	0	13	245
8:30	0	120	3	0	123	11	107	2	0	120	0	0	1	0	1	8	0	8	1	17	261
8:45	1	136	3	0	140	9	97	0	2	108	0	0	0	0	0	9	0	14	0	23	271
9:00	0	112	6	0	118	6	94	2	3	105	2	0	0	0	2	9	0	9	0	18	243
9:15	0	97	6	1	104	7	83	1	0	91	2	1	0	0	3	12	0	4	0	16	214
9:30	0	98	11	0	109	8	78	0	0	86	0	0	1	0	1	10	0	10	0	20	216
9:45	1	87	12	0	100	7	104	2	1	114	0	0	0	0	0	4	0	10	0	14	228
10:00	0	115	6	0	121	10	122	1	2	135	0	0	2	0	2	13	0	8	0	21	279
10:15	0	97	10	0	107	2	121	1	0	124	0	0	0	0	0	10	0	6	0	16	247
10:30	0	109	9	0	118	9	101	0	2	112	1	0	0	0	1	9	0	8	0	17	248
10:45	0	103	11	0	114	3	122	1	3	129	0	0	0	0	0	12	0	5	0	17	260
11:00	0	113	11	0	124	11	118	0	1	130	1	0	1	0	2	12	0	13	0	25	281
11:15	0	113	15	0	128	8	118	1	3	130	1	0	0	0	1	9	0	14	0	23	282
11:30	0	121	11	0	132	8	115	1	0	124	1	0	0	0	1	4	0	8	0	12	269
11:45	0	124	8	1	133	13	104	0	1	118	1	0	0	0	1	11	0	12	0	23	275
12:00	0	109	7	0	116	9	107	3	2	121	1	0	1	0	2	7	0	11	0	18	257
AM Peak Hour Total	**2**	**564**	**12**	**0**	**578**	**33**	**485**	**4**	**2**	**524**	**4**	**0**	**2**	**0**	**6**	**27**	**0**	**67**	**0**	**94**	**1202**
AM Peak PHF	**0.25**	**0.84**	**0.60**	**0.00**	**0.85**	**0.69**	**0.82**	**0.50**	**0.50**	**0.83**	**0.33**	**0.00**	**0.25**	**0.00**	**0.50**	**0.75**	**0.00**	**0.88**	**0.00**	**0.90**	**0.93**
12:15	0	136	9	0	145	10	131	2	1	144	0	0	0	0	0	11	0	12	0	23	312
12:30	0	111	13	0	124	8	132	0	0	140	0	0	1	0	1	7	0	9	0	16	281
12:45	0	109	9	1	119	14	124	0	2	140	2	0	0	0	2	10	0	7	0	17	278
13:00	1	131	1	0	133	9	123	0	1	133	1	0	0	0	1	9	0	6	0	15	282
13:15	0	115	16	0	131	12	149	0	1	162	0	0	0	0	0	5	0	10	0	15	308
13:30	0	132	6	0	138	13	141	0	2	156	0	0	1	0	1	8	0	11	0	19	314
13:45	0	139	14	1	154	12	141	1	2	156	2	0	0	0	2	13	0	16	0	29	341
14:00	0	114	9	0	123	6	164	2	4	176	0	0	0	0	0	11	0	15	0	26	325
14:15	0	169	6	1	176	16	154	1	2	173	0	0	1	0	1	13	0	7	0	20	370
14:30	0	167	16	0	183	8	177	0	4	189	1	0	1	0	2	9	0	7	0	16	390
14:45	1	160	12	0	173	11	176	1	1	189	0	0	0	0	0	9	0	5	0	14	376
15:00	1	162	11	2	176	12	161	2	0	175	2	0	1	0	3	11	0	7	0	18	372
15:15	0	140	21	0	161	11	202	1	2	216	2	0	3	0	5	7	1	15	0	23	405
15:30	0	214	17	0	231	14	216	0	2	232	3	0	1	0	4	4	0	19	0	23	490
15:45	0	158	14	1	173	11	189	6	2	208	2	0	2	0	4	11	0	13	0	24	409
16:00	0	171	11	0	182	13	195	1	3	212	2	0	1	0	3	3	0	9	0	12	409
16:15	**0**	**198**	**16**	**2**	**216**	**11**	**212**	**2**	**4**	**229**	**1**	**0**	**0**	**0**	**1**	**10**	**0**	**7**	**0**	**17**	**463**
16:30	**0**	**198**	**17**	**2**	**217**	**15**	**226**	**2**	**3**	**246**	**0**	**0**	**0**	**0**	**0**	**13**	**0**	**14**	**0**	**27**	**490**
16:45	**0**	**221**	**9**	**1**	**231**	**17**	**164**	**3**	**3**	**187**	**1**	**1**	**1**	**0**	**3**	**9**	**0**	**9**	**0**	**18**	**439**
17:00	**0**	**173**	**17**	**1**	**191**	**14**	**176**	**6**	**5**	**201**	**3**	**0**	**1**	**0**	**4**	**12**	**1**	**9**	**0**	**22**	**418**
17:15	2	163	11	1	177	27	154	1	3	185	3	0	0	0	3	9	0	6	0	15	380
17:30	1	168	20	0	189	13	165	0	2	180	0	0	3	0	3	2	0	11	0	13	385
17:45	2	143	7	0	152	12	174	1	4	191	1	0	1	0	2	2	0	7	0	9	354
18:00	0	162	15	0	177	11	154	1	1	167	0	0	1	0	1	6	0	4	0	10	355
18:15	4	154	7	0	165	11	101	1	1	114	0	0	0	0	0	7	0	6	0	13	292
18:30	0	120	2	1	123	8	117	1	0	126	1	0	0	0	1	4	0	10	0	14	264
18:45	0	84	7	0	91	14	86	0	0	100	0	0	0	0	0	3	0	4	0	7	198
19:00	0	85	13	1	99	8	79	1	4	92	1	0	3	0	4	9	0	10	0	19	214
PM Peak Hour Total	**0**	**790**	**59**	**6**	**855**	**57**	**778**	**13**	**15**	**863**	**5**	**1**	**2**	**0**	**8**	**44**	**1**	**39**	**0**	**84**	**1810**
PM Peak PHF	**0.00**	**0.89**	**0.87**	**0.75**	**0.93**	**0.84**	**0.86**	**0.54**	**0.75**	**0.88**	**0.42**	**0.25**	**0.50**	**0.00**	**0.50**	**0.85**	**0.25**	**0.70**	**0.00**	**0.78**	**0.92**

Data Collection by: O. R. George & Associates, Inc.

STONEGATE ELEMENTARY SCHOOL STUDY
Intersection Turning Movement Count Data Summary

Location: MD 650 @ Stonegate Drive (Location #4)
Day/Date Surveyed: Tuesday (October 27, 2020)

Weather: Mild, Cloudy, Dry
ORGA Techs:

15-Minute Interval (Ending)	Bicycle Volumes																				Interval Total
	MD 650 From North					MD 650 From South					Windridge Acres Court From East					Stonegate Drive From West					
	Left	Thru	Right	U-Turn	Total	Left	Thru	Right	U-Turn	Total	Left	Thru	Right	U-Turn	Total	Left	Thru	Right	U-Turn	Total	
7:15	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
7:30	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
7:45	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:00	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
9:30	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
9:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
10:15	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11:00	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AM Peak Hour Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
12:15	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:00	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
13:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:45	0	1	0	0	1	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	3
14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:15	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	3
14:30	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
14:45	0	0	0	0	0	0	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	0	0	0	0	0	0	0	0	0	0	0	0	0
15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
16:15	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
16:30	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**
16:45	**0**	**1**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**
17:00	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
17:15	0	3	0	0	3	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	5
17:30	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM Peak Hour Total	**0**	**1**	**0**	**0**	**1**	**0**	**4**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**

Data Collection by: O. R. George & Associates, Inc.

STONEGATE ELEMENTARY SCHOOL STUDY

Intersection Turning Movement Count Data Summary

Location: MD 650 @ Stonegate Drive (Location #4)
Day/Date Surveyed: Tuesday (October 27, 2020)

Weather: Mild, Cloudy, Dry
ORGA Techs:

15-Minute Interval (Ending)	Pedestrian Volumes				Interval Total
	MD 650	MD 650	Windridge Acres Court	Stonegate Drive	
	Across North	Across South	Across East	Across West	
7:15	**0**	**1**	**1**	**0**	**2**
7:30	**0**	**0**	**1**	**0**	**1**
7:45	**0**	**1**	**1**	**0**	**2**
8:00	**0**	**0**	**1**	**0**	**1**
8:15	0	0	0	0	**0**
8:30	0	0	1	0	**1**
8:45	0	0	2	0	**2**
9:00	0	0	2	0	**2**
9:15	0	0	0	0	**0**
9:30	0	0	0	0	**0**
9:45	0	0	1	0	**1**
10:00	0	0	0	0	**0**
10:15	0	0	0	0	**0**
10:30	0	0	0	0	**0**
10:45	1	0	0	0	**1**
11:00	0	0	0	0	**0**
11:15	0	0	0	0	**0**
11:30	0	0	0	0	**0**
11:45	0	0	1	0	**1**
12:00	0	0	0	0	**0**
AM Peak Hour Total	**0**	**2**	**4**	**0**	**6**
12:15	1	0	1	0	**2**
12:30	0	0	0	0	**0**
12:45	0	0	0	0	**0**
13:00	0	0	0	0	**0**
13:15	0	0	0	0	**0**
13:30	1	0	0	0	**1**
13:45	0	0	1	0	**1**
14:00	0	1	1	0	**2**
14:15	0	0	0	0	**0**
14:30	0	0	0	0	**0**
14:45	0	0	0	0	**0**
15:00	0	0	0	0	**0**
15:15	0	0	0	0	**0**
15:30	0	0	0	0	**0**
15:45	0	0	0	0	**0**
16:00	0	0	1	0	**1**
16:15	**0**	**0**	**1**	**0**	**1**
16:30	**0**	**0**	**0**	**0**	**0**
16:45	**0**	**0**	**0**	**0**	**0**
17:00	**0**	**0**	**0**	**0**	**0**
17:15	0	0	0	0	**0**
17:30	0	0	0	0	**0**
17:45	0	0	3	0	**3**
18:00	0	0	0	0	**0**
18:15	0	0	0	0	**0**
18:30	0	0	0	0	**0**
18:45	0	0	1	0	**1**
19:00	0	1	1	0	**2**
PM Peak Hour Total	**0**	**0**	**1**	**0**	**1**

Data Collection by: O. R. George & Associates, Inc.

*** TRAFFIC SIGNAL WARRANT WORK SHEET ***

MAJOR ROAD: MD 650 CONDITION: Existing Traffic Volumes

MINOR CROSS ROAD: Stonegate Dr–Windridge Acres Ct DAY Tuesday DATE October 27, 2020

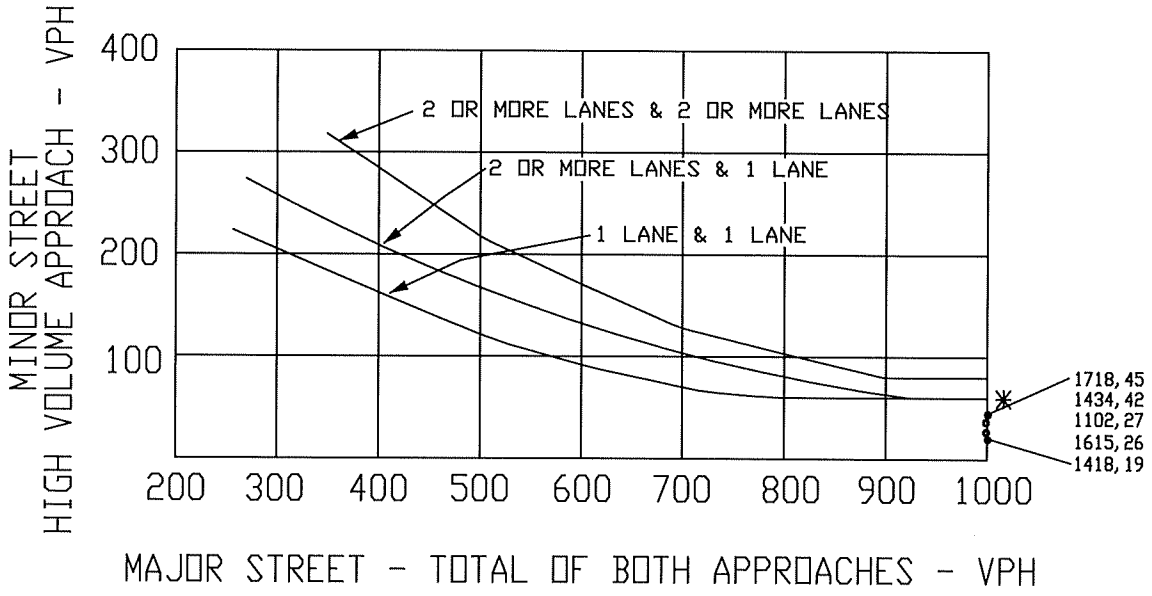
One lane/ two+ lanes	---VOLUMES COUNTED--- (per hour) MAJOR ROAD (TOTAL BOTH APPROACHES) 2 Lanes	MINOR ROAD (MAXIMUM VOLUME APPROACH) 1 Lanes	CROSSWALK (MAXIMUM PEDESTRIAN VOLUME)	WARRANT #1 CONDITION A maj. 500/600	WARRANT #1 CONDITION A min. 150/200	WARRANT #1 CONDITION B maj. 750/900	WARRANT #1 CONDITION B min. 75/100	REDUCED WARRANTS 70% Speeds > 40 mph CONDITION A maj. 420	REDUCED WARRANTS 70% Speeds > 40 mph CONDITION A min. 105	REDUCED WARRANTS 70% Speeds > 40 mph CONDITION B maj. 630	REDUCED WARRANTS 70% Speeds > 40 mph CONDITION B min. 53	REDUCED WARRANTS 80% Combination CONDITION A maj. 336	REDUCED WARRANTS 80% Combination CONDITION A min. 84	REDUCED WARRANTS 80% Combination CONDITION B maj. 504	REDUCED WARRANTS 80% Combination CONDITION B min. 42
TIME															
6–7															
7–8	1102	27		✓		✓		✓		✓		✓		✓	
8–9	945	34		✓		✓		✓		✓		✓		✓	
9–10	860	39		✓				✓		✓		✓		✓	
10–11	958	43		✓		✓		✓		✓		✓		✓	✓
11–12	1002	31		✓		✓		✓		✓		✓		✓	
12–1	1078	37		✓		✓		✓		✓		✓		✓	
1–2	1196	37		✓		✓		✓		✓		✓		✓	
2–3	1434	42		✓		✓		✓		✓		✓		✓	✓
3–4	1615	26		✓		✓		✓		✓		✓		✓	
4–5	1718	45		✓		✓		✓		✓		✓		✓	✓
5–6	1418	19		✓		✓		✓		✓		✓		✓	
6–7	910	23		✓		✓		✓		✓		✓		✓	
7–8															
NUMBER OF HOURS EXCEEDED:				0		0		0		0		0		3	
SIGNAL WARRANTED? (8 hours or more exceeded)				No		No		No		No		No			

MD 650 @ Stonegate Dr

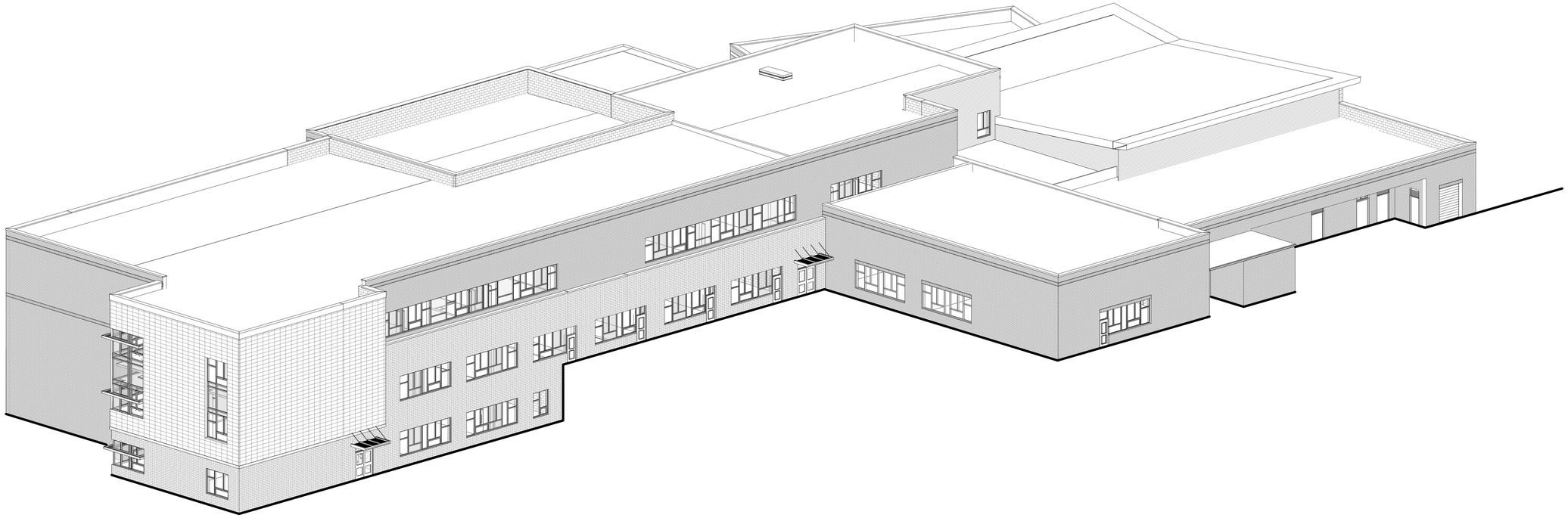
EXISTING TRAFFIC VOLUMES

FOUR HOUR VOLUME

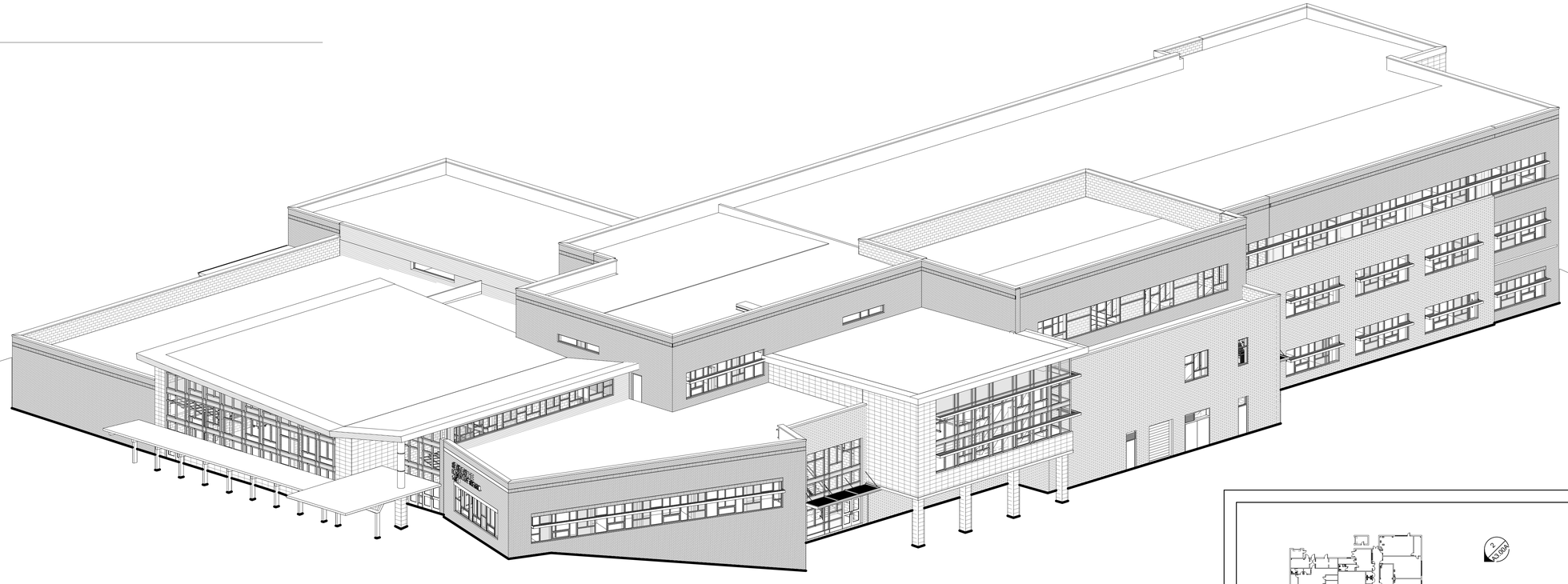
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



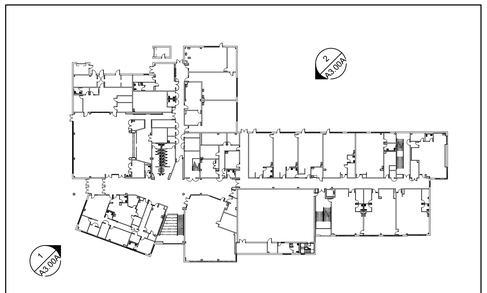
* NOTE: 80 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 60 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.



2 A3.00A NORTH-EAST AXON VIEW
SCALE:



1 A3.00A SOUTH-WEST AXON VIEW
SCALE:



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PRINTS ISSUED

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1	DD PRICING SET	04/02/2021
2	DD IAC SUBMISSION	04/30/2021

NOT FOR CONSTRUCTION

STONEGATE ELEMENTARY SCHOOL

MONTGOMERY COUNTY PUBLIC SCHOOLS

SHEET TITLE:
AXON VIEWS

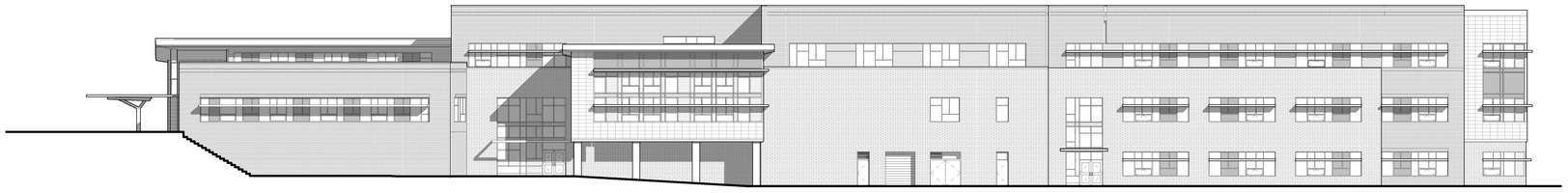
PROJECT NO: 20008
DATE:
SCALE: 1" = 60'-0"
WORKING NORTH

SHEET NO:
A3.00A

4/30/2021 6:17:23 PM

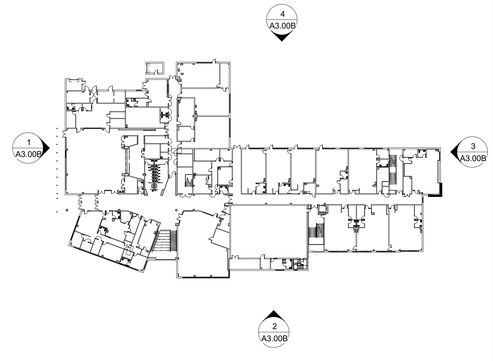
4 A3.00B OVERALL NORTH ELEVATION
SCALE: 1/16" = 1'-0"

3 A3.00B OVERALL EAST ELEVATION
SCALE: 1/16" = 1'-0"



2 A3.00B OVERALL SOUTH ELEVATION
SCALE: 1/16" = 1'-0"

1 A3.00B OVERALL WEST ELEVATION
SCALE: 1/16" = 1'-0"



KEY A3.00B - OVERALL ELEVATION KEY PLAN
SCALE: 1" = 60'-0"

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STONEGATE ELEMENTARY SCHOOL

MONTGOMERY COUNTY PUBLIC SCHOOLS

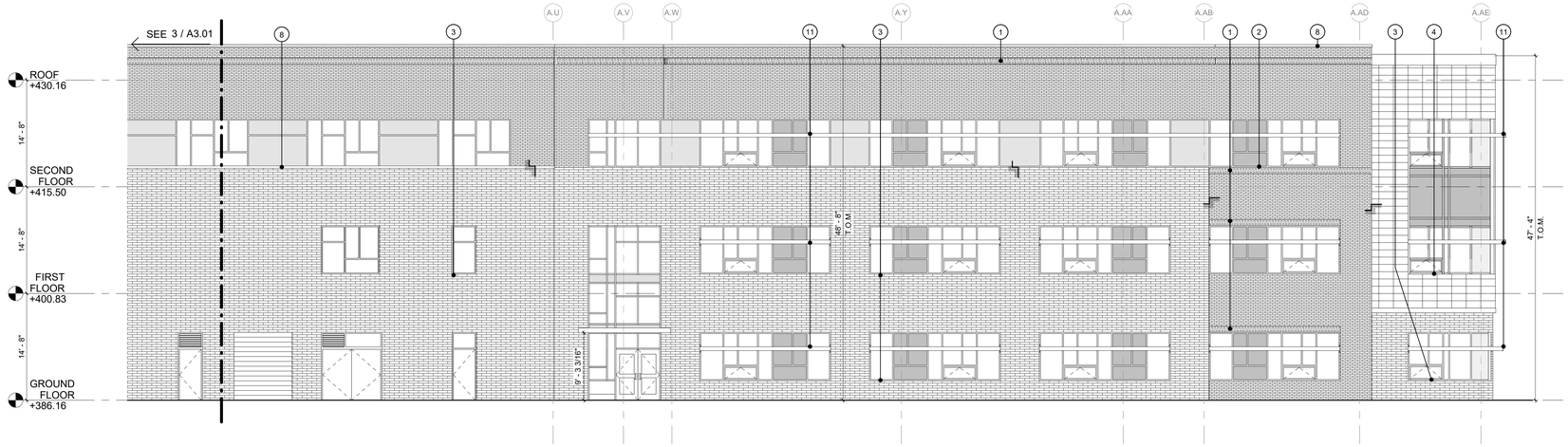
SHEET TITLE:
OVERALL ELEVATIONS

PROJECT NO: 20008
DATE:
SCALE: As indicated

WORKING NORTH

SHEET NO:
A3.00B

4/30/2021 5:17:48 PM



6 A3.01 PROPOSED SOUTH ELEVATION PART B
SCALE: 1/8" = 1'-0"

ELEVATION LEGEND:

1. SOLDIER COURSE
2. MASONRY SILL - TYPE 1A
3. MASONRY SILL - TYPE 1B
4. MASONRY SILL - TYPE 1C
5. ROOF ACCESS LADDER
6. ALUMINUM GUTTER W/ CONDUCTOR HEAD AND DOWNSPOUT
7. CAST ALUMINUM DIMENSIONAL LETTER SIGNAGE (FINAL VERBIAGE TO BE DETERMINED)
8. PRE-FINISHED METAL COPING
- (#) STOREFRONT/WINDOW/CURTAIN WALL, SEE SCHEDULE FOR TYPES AND ELEVATIONS
9. FLUSH SEAM METAL PANEL
10. MAIN ENTRY / BUS LOOP CANOPIES
11. WINDOW SUN SHADE
12. PRE-FABRICATED ALUMINUM CANOPY
13. ALUMINUM COLUMN COVER
14. COMPOSITE ALUMINUM PANEL SYSTEM
15. GRAVEL STOP
- EJ EXPANSION JOINT
- CJ CONTROL JOINT

GENERAL NOTES:

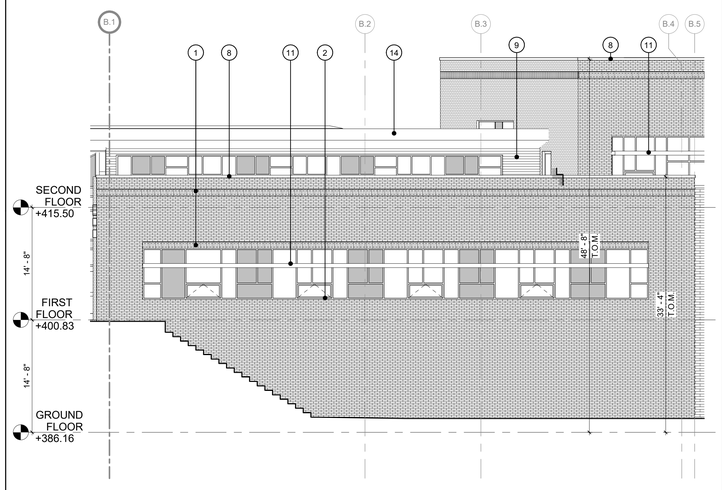
1. SEE ENLARGED COURSING DETAILS FOR TYPICAL MASONRY COURSING PATTERNS.

ABBREVIATIONS:

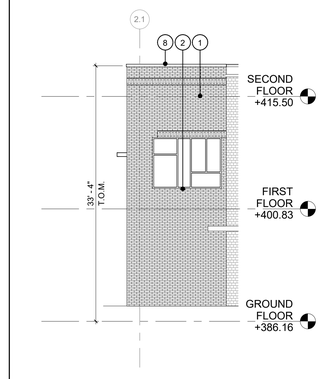
MASONRY VENEER 1A - MODULAR RED BRICK

MASONRY VENEER 1C - 12" x 24" - STACK BOND B.O.D. RENAISSANCE BY ARRISCRAFT

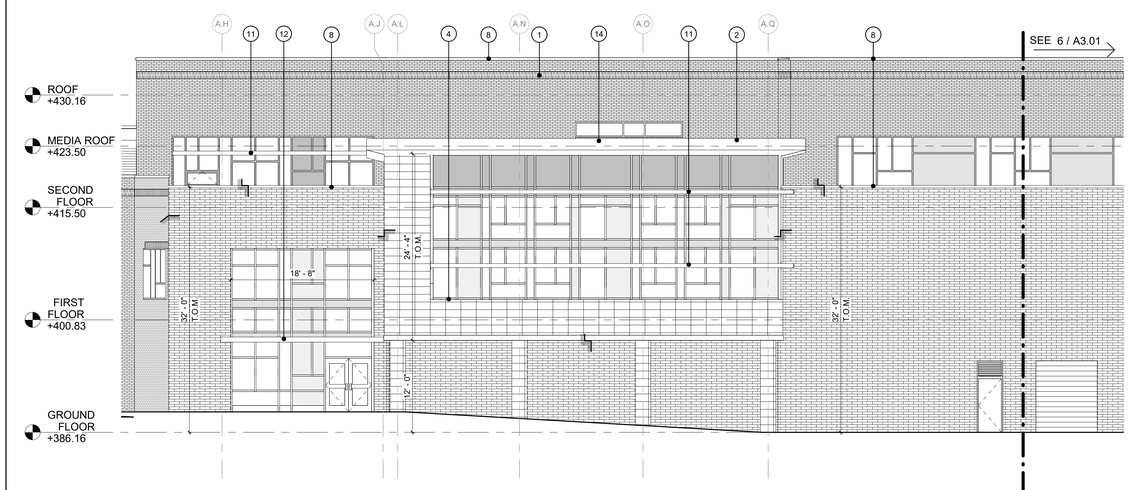
MASONRY VENEER 1B - 4" x 16" B.O.D. SHOULDICE ARCHITECTURAL STONE, TAPESTRY PROFILE



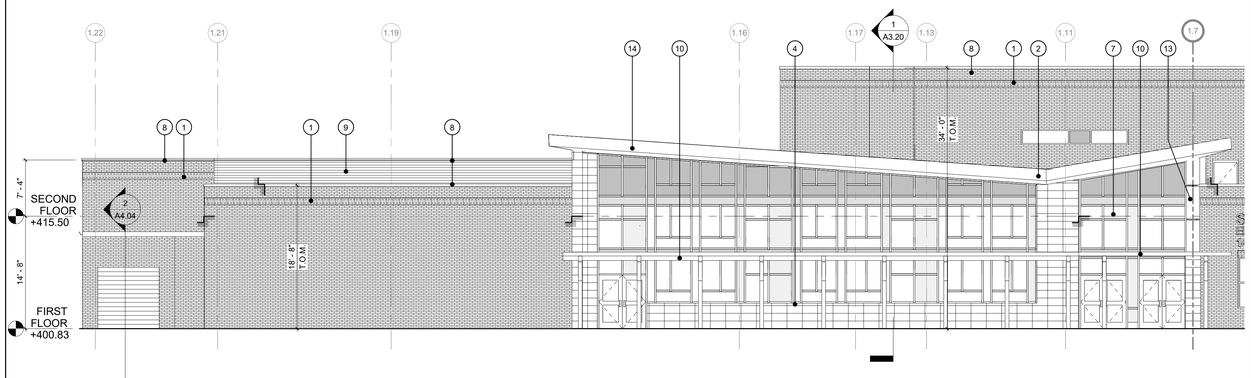
5 A3.01 PROPOSED SOUTH-WEST ELEVATION
SCALE: 1/8" = 1'-0"



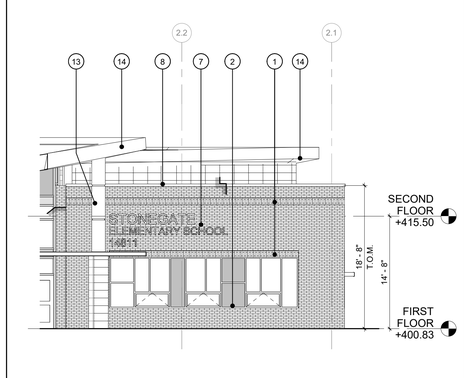
4 A3.01 PROPOSED SOUTH-EAST WALL OF ADMIN AREA
SCALE: 1/8" = 1'-0"



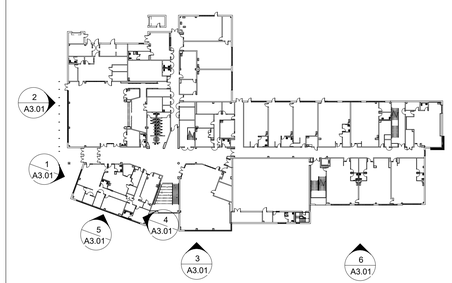
3 A3.01 PROPOSED SOUTH ELEVATION PART A
SCALE: 1/8" = 1'-0"



2 A3.01 PROPOSED WEST ELEVATION
SCALE: 1/8" = 1'-0"



1 A3.01 PROPOSED SOUTH-EAST ELEVATION
SCALE: 1/8" = 1'-0"



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STONEGATE ELEMENTARY SCHOOL

MONTGOMERY COUNTY PUBLIC SCHOOLS

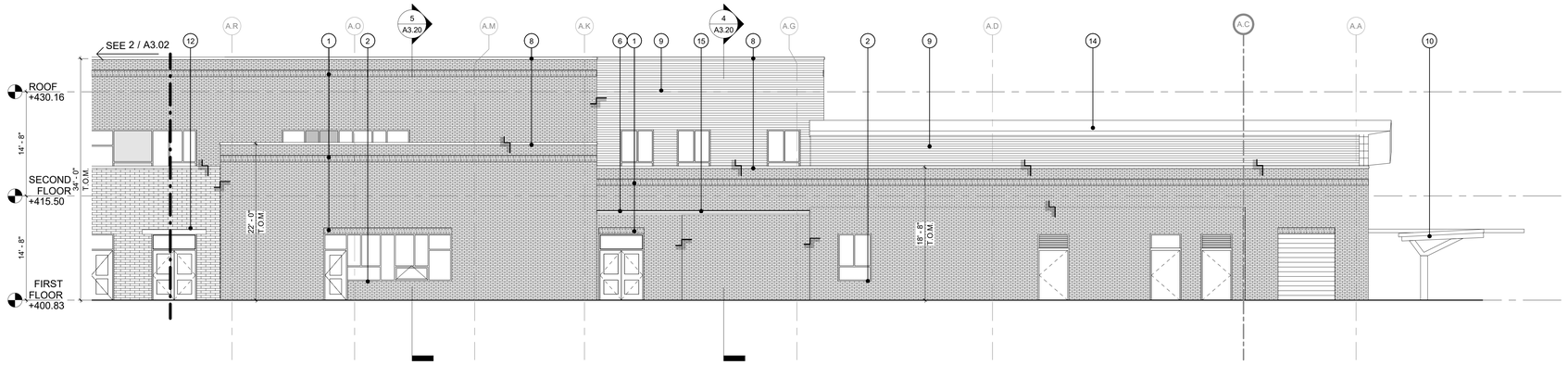
SHEET TITLE:
BUILDING ELEVATIONS

PROJECT NO: 20008
DATE:
SCALE: As indicated

WORKING NORTH

SHEET NO:
A3.01

4/30/2021 6:18:03 PM



3 A3.02 PROPOSED NORTH ELEVATION PART A
SCALE: 1/8" = 1'-0"

ELEVATION LEGEND:

1	SOLDIER COURSE	9	FLUSH SEAM METAL PANEL
2	MASONRY SILL - TYPE 1A	10	MAIN ENTRY / BUS LOOP CANOPIES
3	MASONRY SILL - TYPE 1B	11	WINDOW SUN SHADE
4	MASONRY SILL - TYPE 1C	12	PRE-FABRICATED ALUMINUM CANOPY
5	ROOF ACCESS LADDER	13	ALUMINUM COLUMN COVER
6	ALUMINUM GUTTER W/ CONDUCTOR HEAD AND DOWNSPOUT	14	COMPOSITE ALUMINUM PANEL SYSTEM
7	CAST ALUMINUM DIMENSIONAL LETTER SIGNAGE (FINAL VERBIAGE TO BE DETERMINED)	15	GRAVEL STOP
8	PRE-FINISHED METAL COPING	EJ	EXPANSION JOINT
#	STOREFRONT/WINDOW/CURTAIN WALL, SEE SCHEDULE FOR TYPES AND ELEVATIONS	CJ	CONTROL JOINT

GENERAL NOTES:

1. SEE ENLARGED COURSING DETAILS FOR TYPICAL MASONRY COURSING PATTERNS.

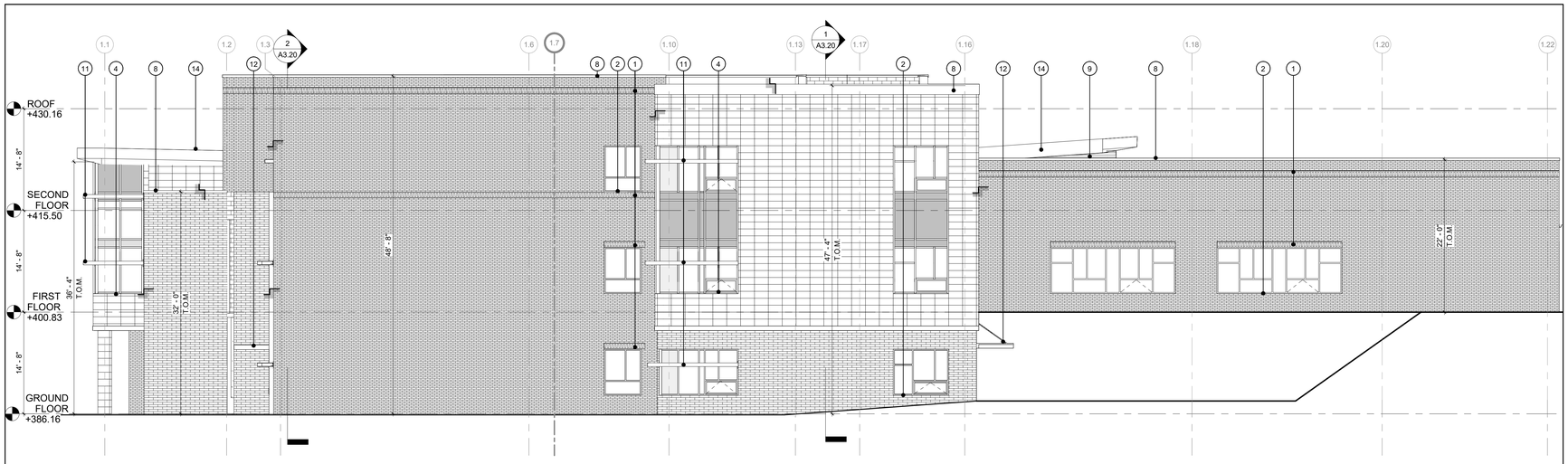
ABBREVIATIONS:

MASONRY VENEER 1A - MODULAR RED BRICK

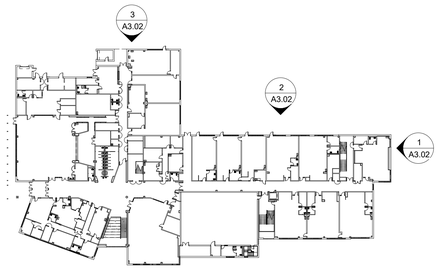
MASONRY VENEER 1C - 12" x 24" - STACK BOND B.O.D. RENAISSANCE BY ARRISCRAFT

MASONRY VENEER 1B - 4" x 16" B.O.D. SHOULDICE ARCHITECTURAL STONE, TAPESTRY PROFILE

2 A3.02 PROPOSED NORTH ELEVATION PART B
SCALE: 1/8" = 1'-0"



1 A3.02 PROPOSED EAST ELEVATION
SCALE: 1/8" = 1'-0"



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STONEGATE ELEMENTARY SCHOOL

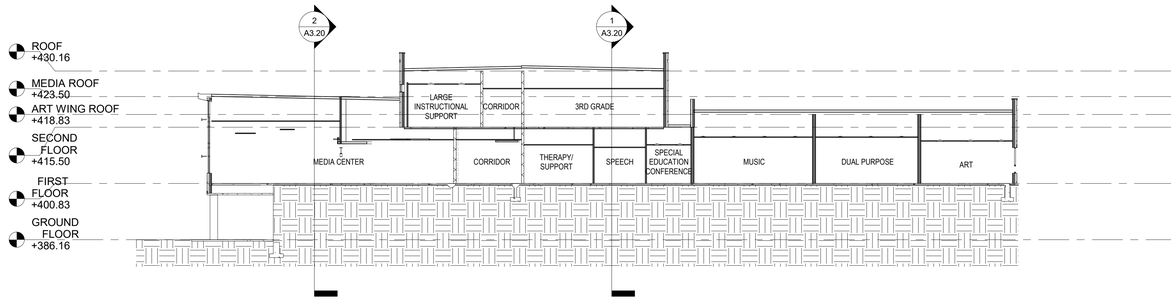
MONTGOMERY COUNTY PUBLIC SCHOOLS

SHEET TITLE:
BUILDING ELEVATIONS

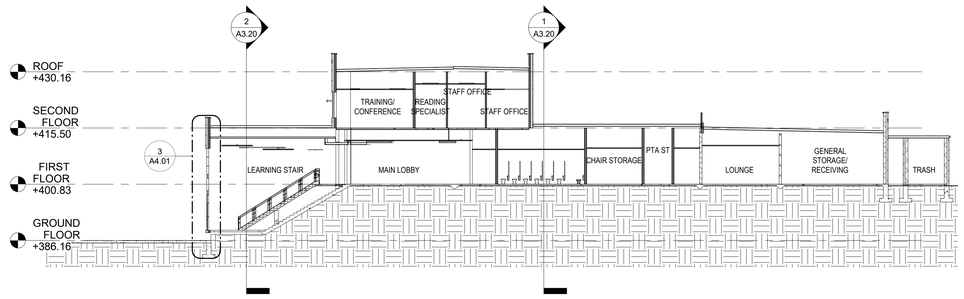
PROJECT NO: 20008
DATE:
SCALE: As indicated
WORKING NORTH

SHEET NO:
A3.02

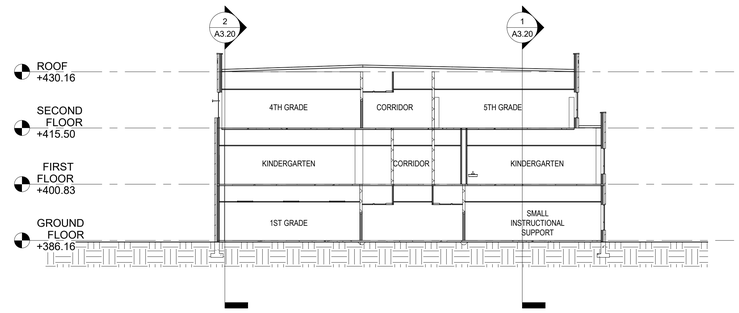
4/30/2021 6:18:41 PM



5 A3.20 PROPOSED NORTH-SOUTH SECTION THROUGH MEDIA CENTER
SCALE: 1/16" = 1'-0"



4 A3.20 PROPOSED NORTH-SOUTH TRANSVERSE SECTION A
SCALE: 1/16" = 1'-0"



3 A3.20 PROPOSED NORTH-SECTION TRANSVERSE SECTION B
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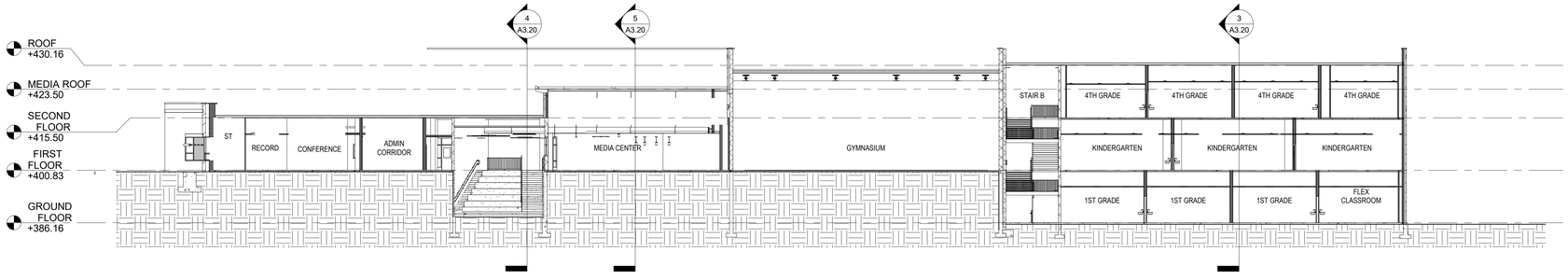
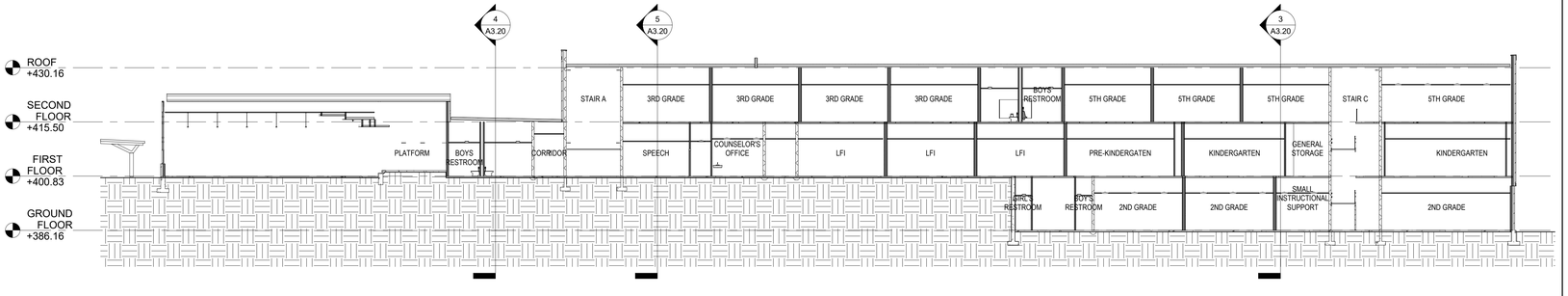
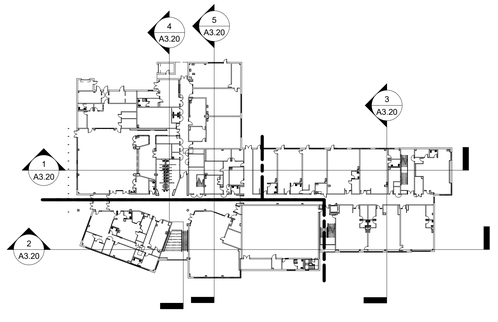


2 A3.20 PORPOSED EAST-WEST LONGITUDINAL SECTION B
SCALE: 1/16" = 1'-0"



1 A3.20 PORPOSED EAST-WEST LONGITUDINAL SECTION A
SCALE: 1/16" = 1'-0"



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1	DD PRICING SET	04/02/2021
2	DD IAC SUBMISSION	04/30/2021

NOT FOR CONSTRUCTION

STONEGATE ELEMENTARY SCHOOL

MONTGOMERY COUNTY PUBLIC SCHOOLS

SHEET TITLE:
BUILDING SECTIONS

PROJECT NO: 20008
DATE:
SCALE: As indicated

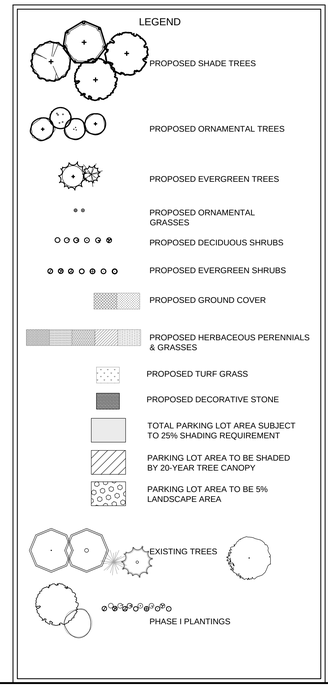
WORKING NORTH

SHEET NO:
A3.20

4/30/2021 5:19:23 PM

LANDSCAPE PLANT LIST							
KEY	QTY	BOTANICAL NAME	COMMON NAME	CAL	HGT	ROOT	SPACING
SHADE TREES							
AGR	1	Acer griseum	Paperbark Maple	2 ½ - 3"		B&B	
ARA	10	Acer rubrum 'Armstrong'	Armstrong Maple	2 ½ - 3"		B&B	
ARO	3	Acer rubrum	Red Maple	3"		B&B	
BNH	7	Betula nigra 'Heritage'	Heritage River Birch		7-8'	B&B	
CCA	10	Carpinus caroliniana	American Hornbeam	3"		B&B	
FGR	8	Fagus grandifolia	American Beech	2 ½ - 3"		B&B	
NSY	12	Nyssa sylvatica	Black Gum	3"		B&B	
PAA	5	Platanus x acerfolia	London Planetree	2 ½ - 3"		B&B	
QCO	7	Quercus coccinea	Scarlet Oak	3"		B&B	
QPH	5	Quercus phellos	Willow Oak	2 ½ - 3"		B&B	
QRU	15	Quercus rubra	Red Oak	3"		B&B	
ORNAMENTAL TREES							
AAR	9	Amelanchier arborea	Downy Serviceberry		8-10'	B&B	
CCN	5	Cercis canadensis	Eastern Redbud		8-10'	B&B	
CVI	10	Chionanthus virginicus	White Fringetree		8-10'	B&B	
IOP	3	Ilex opaca	American Holly		7-8'	B&B	
JVI	5	Juniperus virginiana	Red Cedar		5-7'	B&B	
PYE	3	Prunus x yedoensis	Yoshino Cherry		8-10'	B&B	
TGG	5	Thuja x 'Green Giant'	Green Giant Arborvitae		8-10'	B&B	
DECIDUOUS AND EVERGREEN SHRUBS							
CAH	10	Clethra alnifolia 'Hummingbird'	Hummingbird Summersweet		24-30"	cont.	
DPB	47	Distylium 'PIIDIST-II'	Blue Cascade Evergreen Distylium			#5 cont.	
HPJ	3	Hydrangea paniculata 'Jane'	Little Lime Hardy Hydrangea		18-24"	cont.	30" o.c.
IMP	23	Ilex verticillata 'Mr. Poppins'	Mr. Poppins Dwarf Winterberry		18-24"	cont.	36"-48"
IBP	9	Ilex verticillata 'Berry Poppins'	Berry Poppins Dwarf Winterberry		18-24"	cont.	36"-48"
IVH	14	Itea virginica 'Henry's Garnet	Henry's Garnet Sweetspire		24-30"	#3 cont.	36" o.c.
KLN	28	Kalmia latifolia 'Nipmuck'	Nipmuck Mountain Laurel		30-36"	cont.	60" o.c.
PLS	27	Prunus laurocerasus 'Schipkaensis'	Schipka Cherry Laurel		30-36"	cont.	48" o.c.
VCA	42	Viburnum carlesii	Koreanspice Viburnum		30-36"	cont.	
VDB	72	Viburnum dentatum 'Blue Muffin'	Blue Muffin Viburnum		30-36"	cont.	
VLE	3	Viburnum lentago	Nannyberry Viburnum		7-8'	B&B	
HERBACEOUS PERENNIALS							
CTI	158	Carex stricta	Tussock Sedge			2" plug	24" o.c.
CVR	370	Chrysogonum virginianum	Green & Gold			#1 cont.	18" o.c.
LNA	100	Lysimachia nummularia 'Aurea'	Gold Creeping Jenny			#1 cont.	12" o.c.
VNA	30	Vaccinium angustifolium	Lowbush Blueberry		6-24"	#1 cont.	24" o.c.
PHS	70	Phlox stolonifera	Creeping Phlox			#1 cont.	18" o.c.

Note: Plant counts are provided for the convenience of the contractor. The plan dominates on any discrepancies between the table and the plan. Contractor is responsible for verifying the counts and bringing any discrepancies to the attention of the landscape architect and client before proceeding.



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Exp. Date. 09.10.2023

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1	DD PRICING SET	04/02/2021
2	DD IAC SUBMISSION	04/30/2021
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4	CD IAC SUBMISSION	09/02/2021
5	PERMIT SET	09/15/2021
6	PERMIT SET - REVISION 1	11/12/2021

TAX MAP JS341 WSSC 220NW01

PLAT 8045

5TH ELECTION DISTRICT
MONTGOMERY COUNTY MARYLAND

PARCELS C & D
BLOCK G
PLAT 4 - STONEGATE

STONEGATE ELEMENTARY SCHOOL

MONTGOMERY COUNTY PUBLIC SCHOOLS

SHEET TITLE:

LANDSCAPE PLAN

PROJECT NO: 20008
DATE: 09/15/2021
SCALE: 1" = 30'

WORKING NORTH

SHEET NO:

L2.01

7/28/2021 9:37:29 AM

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9 OF IVH
9 OF IBP
6 OF CAH
30 OF VNA
1 OF AGR
3 OF VLE
STEPPING STONES
HOP
JUMP
CRAWL
WALK
GALLOP
RUN
LEAP

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NO:	DESCRIPTION:	DATE:
	BID SET	09/08/2021
1	ADDENDUM #1	09/16/2021
2	ADDENDUM #2	09/22/2021
4	ADDENDUM #4	09/29/2021
5	ADDENDUM #5	10/04/2021

TAX MAP JS341 WSSC 220NW01

PLAT 8045

5TH ELECTION DISTRICT
MONTGOMERY COUNTY MARYLAND

PARCELS C & D
BLOCK G
PLAT 4 - STONEGATE

STONEGATE ELEMENTARY SCHOOL

MONTGOMERY COUNTY PUBLIC SCHOOLS

SHEET TITLE:

LANDSCAPE ART PATIO ENLARGEMENT

PROJECT NO: 20008
DATE: 09/15/2021
SCALE: 1" = 5'

WORKING NORTH

SHEET NO:

L2.02

7/28/2021 9:37:29 AM

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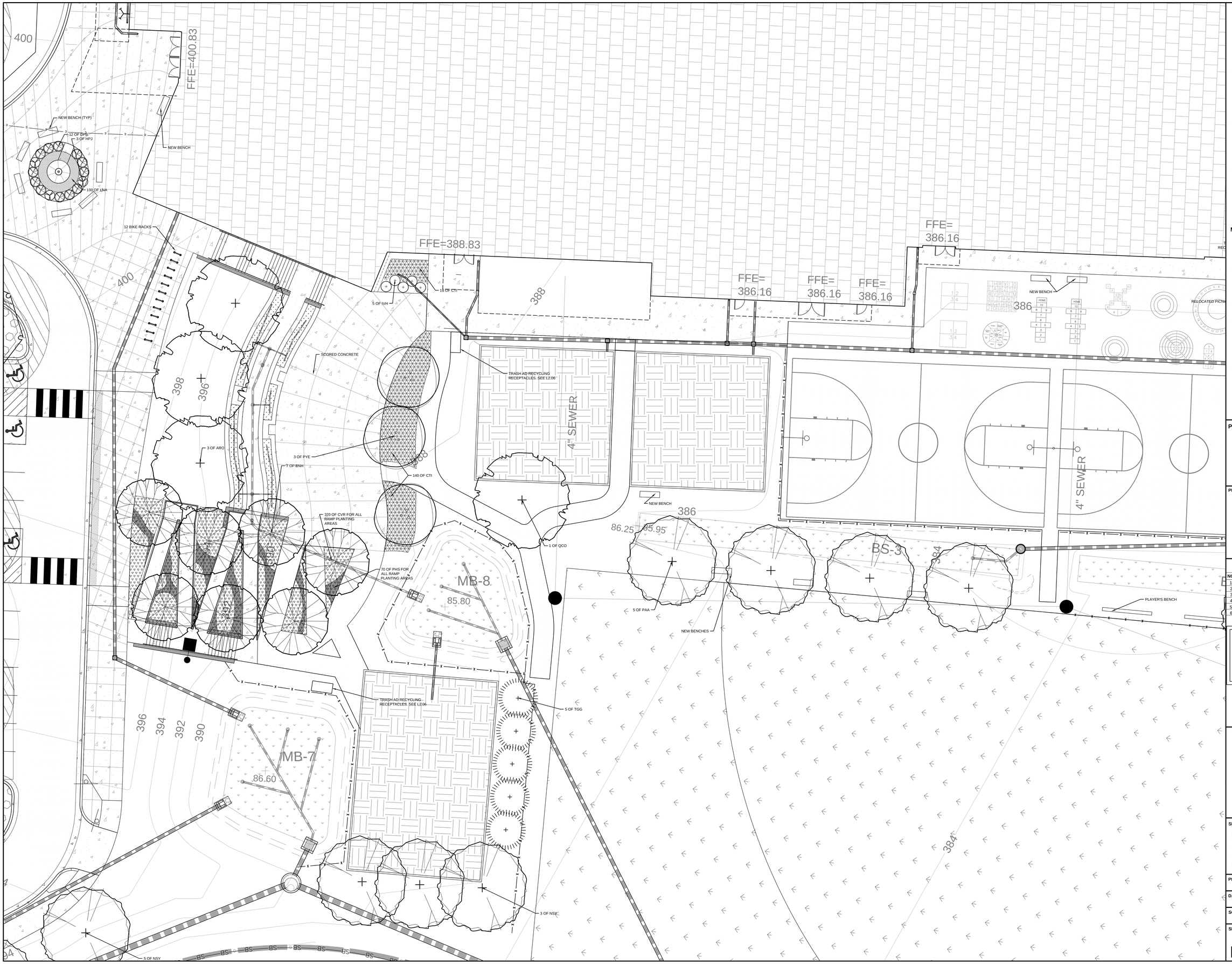

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4	CD IAC SUBMISSION	09/02/2021
5	PERMIT SET	09/15/2021
6	PERMIT SET - REVISION 1	11/12/2021

TAX MAP JS341 WSSC 220NW01

PLAT 8045

5TH ELECTION DISTRICT
MONTGOMERY COUNTY MARYLAND

PARCELS C & D
BLOCK G
PLAT 4 - STONEGATE

STONEGATE ELEMENTARY SCHOOL

MONTGOMERY COUNTY PUBLIC SCHOOLS

SHEET TITLE:

LANDSCAPE STADIUM SEATING ENLARGEMENT

PROJECT NO: 20008

DATE: 09/15/2021

SCALE: 1" = 10'

WORKING NORTH

SHEET NO:

L2.03

7/28/2021 9:37:29 AM

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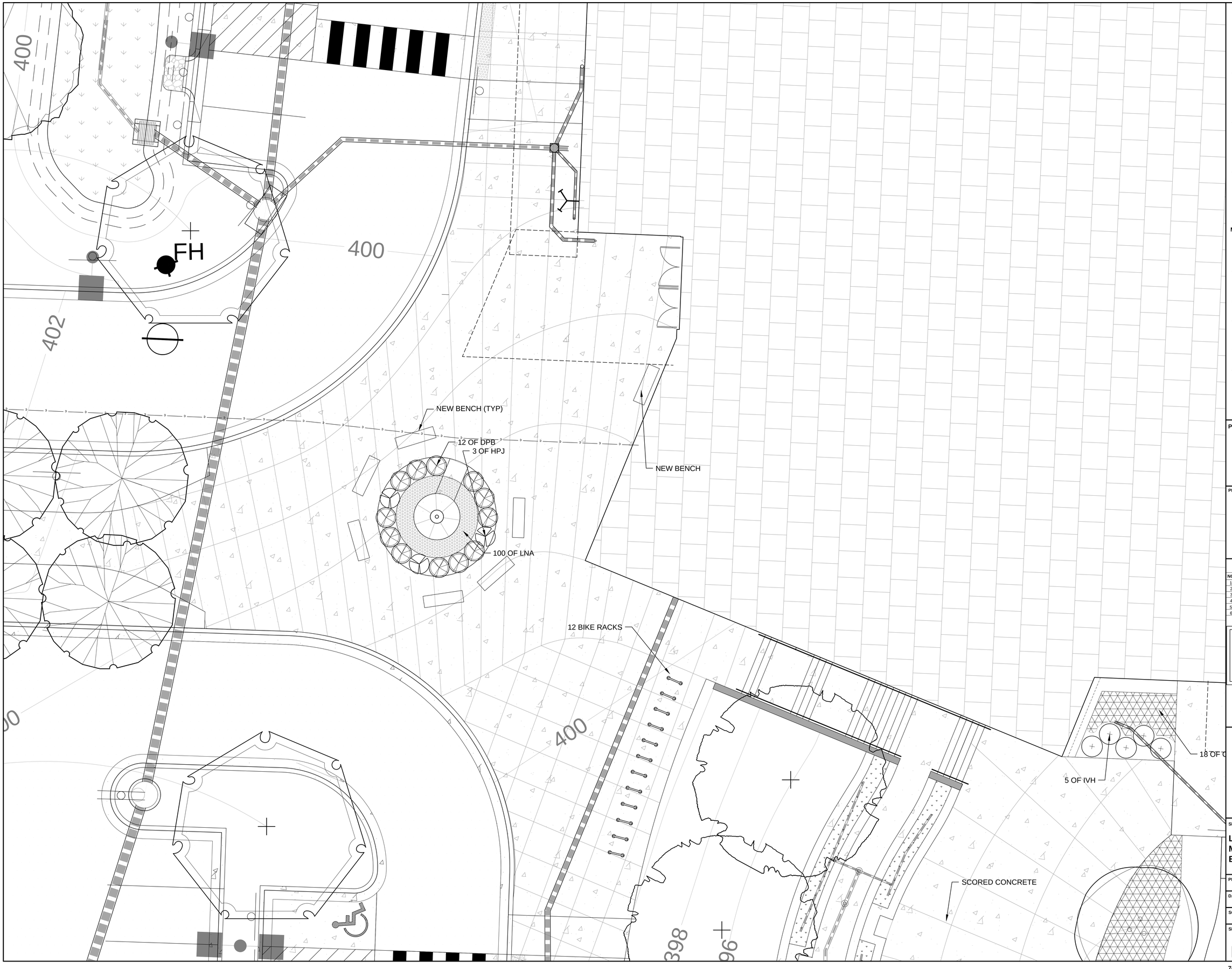

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4	CD IAC SUBMISSION	09/02/2021
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6	PERMIT SET - REVISION 1	11/12/2021

TAX MAP JS341 WSSC 220NW01

PLAT 8045

5TH ELECTION DISTRICT
MONTGOMERY COUNTY MARYLAND

PARCELS C & D
BLOCK G
PLAT 4 - STONEGATE

STONEGATE ELEMENTARY SCHOOL

MONTGOMERY COUNTY PUBLIC SCHOOLS

SHEET TITLE:

LANDSCAPE MAIN ENTRANCE ENLARGEMENT

PROJECT NO: 20008

DATE: 09/15/2021

SCALE: 1" = 5'

WORKING NORTH

SHEET NO:

L2.04

7/28/2021 9:37:29 AM

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PLANTING NOTES

1. THIS PLAN IS FOR PLANTING PURPOSES ONLY.

2. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL PLANT MAINTENANCE, INCLUDING SHRUBS AND GROUNDCOVER, AND SHALL MAINTAIN AREA IN A WEED AND DEBRIS FREE CONDITION, THROUGHOUT THE ONE YEAR GUARANTEE PERIOD.

3. CONTRACTOR SHALL LAY OUT AND CLEARLY STAKE ALL PROPOSED IMPROVEMENTS INCLUDED ON THIS PLAN.

4. CONTRACTOR IS RESPONSIBLE FOR CONTACTING MISS UTILITY PRIOR TO BEGINNING CONSTRUCTION FOR LOCATION OF ALL UTILITY LINES. TREES SHALL BE LOCATED A MINIMUM OF 5 FEET FROM SEWER/WATER CONNECTIONS. CONTRACTOR SHALL BE LIABLE FOR DAMAGE TO ANY AND ALL PUBLIC OR PRIVATE UTILITIES.

5. QUANTITIES AS SHOWN ON THE PLAN SHALL GOVERN OVER PLANT LIST QUANTITIES. CONTRACTOR TO VERIFY PLANT LIST TOTALS WITH QUANTITIES SHOWN ON PLAN. LANDSCAPE ARCHITECT SHALL BE ALERTED BY CONTRACTOR OF ANY DISCREPANCIES PRIOR TO FINAL BID NEGOTIATION. UNIT PRICES FOR ALL MATERIAL SHALL BE SUPPLIED TO THE OWNER AT BIDDING TIME.

6. ALL MATERIALS SHALL BE SUBJECT TO APPROVAL BY THE LANDSCAPE ARCHITECT. OWNER SHALL RECEIVE TAG FROM EACH PLANT SPECIES AND A LIST OF PLANT SUPPLIERS. WHERE ANY REQUIREMENTS ARE OMITTED FROM THE PLANT LIST, THE PLANTS FURNISHED SHALL MEET THE NORMAL REQUIREMENTS FOR THE VARIETY PER THE AMERICAN STANDARD FOR NURSERY STOCK, LATEST EDITION, PUBLISHED BY AMERICANHORT. PLANTS SHALL BE PRUNED PRIOR TO DELIVERY ONLY UPON THE APPROVAL OF THE LANDSCAPE ARCHITECT.

7. CONTRACTOR IS RESPONSIBLE FOR SOIL TESTING AND PREPARATION AS OUTLINED IN THE CURRENT EDITION OF THE LANDSCAPE SPECIFICATION GUIDELINES OF THE LANDSCAPE CONTRACTORS ASSOCIATION OF MD-DC-VA (LCA). PREPARATION SHALL INCLUDE, BUT NOT NECESSARILY BE LIMITED TO, THE ADDITION OF SOIL AMENDMENTS, FERTILIZERS AND SUPPLEMENTAL TOPSOIL AS INDICATED BY TESTING; AND SUBGRADE, FINAL GRADE AND FINISH GRADE SOIL PREPARATION.

8. WHERE TREES ARE PLANTED IN ROWS, THEY SHALL BE UNIFORM IN SIZE AND SHAPE.

9. SIZES SPECIFIED IN THE PLANT LIST ARE MINIMUM SIZES TO WHICH THE PLANTS ARE TO BE JUDGED. FAILURE TO MEET MINIMUM SIZE ON ANY PLANT WILL RESULT IN REJECTION OF THAT PLANT.

10. ALL PLANTS SHALL BE FRESHLY DUG, SOUND, HEALTHY, VIGOROUS, WELL BRANCHED, FREE OF DISEASE, INSECT EGGS, AND LARVAE, AND SHALL HAVE ADEQUATE ROOT SYSTEMS.

11. ALL CONTAINER GROWN MATERIAL SHALL BE HEALTHY, VIGOROUS, WELL-ROOTED PLANTS AND ESTABLISHED IN THE CONTAINER IN WHICH THEY ARE SOLD. THE PLANTS SHALL HAVE TOPS WHICH ARE GOOD QUALITY AND ARE IN A HEALTHY GROWING CONDITION.

12. GROUPS OF SHRUBS SHALL BE PLACED IN A CONTINUOUS MULCH BED WITH SMOOTH CONTINUOUS LINES. ALL MULCHED BED EDGES SHALL BE CURVILINEAR IN SHAPE FOLLOWING THE CONTOUR OF THE PLANT MASS UNLESS OTHERWISE NOTED. TREES LOCATED WITHIN FOUR FEET OF SHRUB BEDS SHALL SHARE SAME MULCH BED.

13. NO EXISTING TREES SHALL BE REMOVED WITHOUT WRITTEN AUTHORIZATION FROM THE OWNER EXCEPT WHERE NOTED ON PLANS. NO GRUBBING SHALL OCCUR WITHIN EXISTING TREE AREAS.

14. TREES SHALL BE LOCATED A MINIMUM OF 3 FEET FROM WALLS AND WALKS WITHIN THE PROJECT. IF CONFLICTS ARISE BETWEEN ACTUAL SIZE OF AREA AND PLANS, CONTRACTOR SHALL CONTACT LANDSCAPE ARCHITECT FOR RESOLUTION. FAILURE TO MAKE SUCH CONFLICTS KNOWN TO THE OWNER OR LANDSCAPE ARCHITECT WILL RESULT IN CONTRACTOR'S LIABILITY TO RELOCATE MATERIALS.

15. LARGE GROWING PLANTS ARE NOT TO BE PLANTED IN FRONT OF WINDOWS, UNDER BUILDING OVERHANGS, OR IN DRAINAGE SWALES. SHRUBS PLANTED NEAR HVAC UNITS TO BE LOCATED SO THAT SHRUBS AT MATURITY WILL MAINTAIN 1-FOOT AIRSPACE BETWEEN UNIT AND PLANT.

16. CONTRACTOR TO SLIGHTLY ADJUST PLANT LOCATIONS IN THE FIELD AS NECESSARY TO BE CLEAR OF DRAINAGE SWALES AND UTILITIES. FINISHED PLANTING BEDS SHALL BE GRADED SO AS NOT TO IMPEDE DRAINAGE AWAY FROM BUILDINGS.

17. TREE STAKING AND GUYING SHALL BE DONE PER DETAILS. CONTRACTOR SHALL ENSURE THAT TREES REMAIN VERTICAL AND UPRIGHT FOR THE DURATION OF THE GUARANTEE PERIOD.

18. ALL TREE PITS, SHRUB BEDS AND PREPARED PLANTING BEDS ARE TO BE COMPLETELY EXCAVATED IN ACCORDANCE WITH THE PLANTING DETAILS.

19. MULCH IS TO BE DOUBLE SHREDDED HARDWOOD BARK FOR TREES AND SHRUBS.

20. CROWN OF ROOT FLARE SHALL BE 1/2" - 3" HIGHER (AFTER SETTLING) THAN ADJACENT SOIL.

21. TAGS AND TWINE ARE TO BE REMOVED AND BURLAP IS TO BE ROLLED BACK ONE-HALF ON ALL B&B PLANT MATERIAL.

22. SHRUBS SHALL BE TRIANGULARLY SPACED AT SPACING SHOWN ON PLANTING PLANS WHERE MASSING IS INDICATED.

23. SHADE TREES: HEIGHT SHALL BE MEASURED FROM THE CROWN OF THE ROOT FLARE TO THE TOP OF MATURE GROWTH. SPREAD SHALL BE MEASURED TO THE END OF BRANCHING EQUALLY AROUND THE CROWN FROM THE CENTER OF THE TRUNK. MEASUREMENTS ARE NOT TO INCLUDE ANY TERMINAL GROWTH. SINGLE TRUNK TREES SHALL BE FREE OF "V" CROTCHES THAT COULD BE POINTS OF WEAK LIMB STRUCTURE OR DISEASE INFESTATION.

SHRUBS: HEIGHT SHALL BE MEASURED FROM THE GROUND TO THE AVERAGE HEIGHT OF THE TOP OF THE PLANT. SPREAD SHALL BE MEASURED TO THE END OF BRANCHING EQUALLY AROUND THE SHRUB MASS. MEASUREMENTS ARE NOT TO INCLUDE ANY TERMINAL GROWTH.

24. ALL SUBSTITUTIONS OF PLANT MATERIAL ARE TO BE REQUESTED IN WRITING TO THE LANDSCAPE ARCHITECT AND APPROVED IN WRITING BY THE OWNER AND MONTGOMERY COUNTY. FAILURE TO OBTAIN SUBSTITUTION APPROVAL IN WRITING MAY RESULT IN LIABILITY TO THE CONTRACTOR.

25. ALL CONTRACTORS SHALL BE REQUIRED TO COMPLETELY REMOVE ALL TRASH, DEBRIS AND EXCESS MATERIALS FROM THE WORK AREA AND THE PROPERTY (ESPECIALLY AT ALL CURB, GUTTERS AND SIDEWALKS) DAILY DURING INSTALLATION.

26. DEAD PLANTS ARE TO BE REMOVED FROM THE JOB BY THE CONTRACTOR ON A MONTHLY BASIS. CONTRACTOR SHALL MAINTAIN AN UPDATED, COMPREHENSIVE LIST OF ALL DEAD MATERIALS REMOVED AND PRESENT A COPY OF THE LIST TO THE OWNER AT THE END OF EVERY MONTH DURING THE CONTRACT PERIOD.

27. CONTRACTOR SHALL BE RESPONSIBLE TO REGRADE, HYDRO-SEED, STRAW MULCH, AND TACK ALL LAWN AREAS DISTURBED AS THE RESULT OF HIS WORK.

28. CONTRACTOR SHALL GUARANTEE ALL LANDSCAPE IMPROVEMENTS, INCLUDING SEEDING, FOR ONE FULL YEAR AS REQUIRED BY THE SPECIFICATIONS. CONTRACTOR MUST CONTACT THE OWNER AT LEAST 10 WORKING DAYS IN ADVANCE TO SCHEDULE ACCEPTANCE INSPECTION(S). CONTRACTOR MUST REPLACE ALL DEAD OR UNACCEPTABLE PLANTS DURING THE FOLLOWING RECOMMENDED PLANTING SEASON.

29. THE SPECIFICATIONS FOR ALL WORK INCLUDED IN THIS CONTRACT SHALL BE FROM THE LANDSCAPE SPECIFICATION GUIDELINES BY THE LANDSCAPE CONTRACTORS ASSOCIATION MD-DC-VA (LCA), CURRENT EDITION, UNLESS OTHERWISE NOTED ON THESE PLANS.

30. ANY PLANTING WHICH IS SHOWN ADJACENT TO CONDENSER UNITS SHALL BE PLANTED AS REQUIRED TO SCREEN THE UNITS. SHOULD THE CONDENSER UNITS BE INSTALLED IN LOCATIONS DIFFERENT FROM THOSE SHOWN ON THE PLAN IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO INSTALL THE MATERIALS AROUND THE CONDENSERS AND TO ADJUST OTHER ADJACENT PLANTING ACCORDINGLY.

31. FOR INFORMATION REGARDING APPROPRIATE PLANTING PERIODS FOR DIFFERENT SPECIES, SEE THE LATEST EDITION OF THE LANDSCAPE SPECIFICATION GUIDELINES FROM THE LANDSCAPE CONTRACTORS ASSOCIATION OF MD-DC-VA PART 1-EXTERIOR LANDSCAPE INSTALLATION, SECTION 1.12 (A-G) AT WWW.LCAMDDCVA.ORG.

32. ALL DISTURBED AREAS THAT'S SURFACES ARE UNSPECIFIED (ARE NOT PAVED SURFACES, SOFT PLAY ARES, WALLS CURBS AND GUTTERS, ETC) AND ARE NOT PROPOSED TO HAVE LANDSCAPING MATERIAL (GROUND-COVERS, SHRUBS, MULCH, TREES), SHALL BE SODDED PER SPECIFICATION 329223. SEE C2.01 FOR LIMITS OF DISTURBANCE AND AREAS TO BE VEGETATED. ALSO SEE L2.01-04 FOR LANDSCAPING AREAS.

SCREENING REQUIREMENTS
2014 MONTGOMERY COUNTY ZONING ORDINANCE
CHAPTER 59 SECTION 6.5.2.C

	REQUIRED/ PERMITTED	PROVIDED
7. General Building with a Non-Industrial Use	**SCREENING A (185' SEGMENT) - OPTION B**	
Minimum Landscape Dimensions (depth)	12'	12'
Canopy Trees	2 per 100' = 4 trees	4 trees
Understory or Evergreen Trees	4 per 100' = 8 trees	8 trees
Large Shrubs	8 per 100' = 15 shrubs	15 shrubs
Medium Shrubs	12 per 100' = 23 shrubs	23 shrubs
Small Shrubs	N/A	N/A
7. General Building with a Non-Industrial Use	**SCREENING B (164' SEGMENT) - OPTION A**	
Minimum Landscape Dimensions (depth)	8'	7.6'
Canopy Trees	2 per 100' = 4 trees	4 trees
Understory or Evergreen Trees	2 per 100' = 4 trees	4 trees
Large Shrubs	6 per 100' = 10 shrubs	10 shrubs
Medium Shrubs	8 per 100' = 14 shrubs	17 shrubs
Small Shrubs	8 per 100' = 14 shrubs	14 shrubs
7. General Building with a Non-Industrial Use	**SCREENING C (344' SEGMENT) - OPTION B**	
Minimum Landscape Dimensions (depth)	12'	12'
Canopy Trees	2 per 100' = 7 trees	7
Understory or Evergreen Trees	4 per 100' = 14 trees	14
Large Shrubs	8 per 100' = 28 shrubs	28 shrubs
Medium Shrubs	12 per 100' = 42 shrubs	42 shrubs

PARKING LOT SHADE TREE LIST

BOTANICAL NAME	COMMON NAME	CANOPY SIZE (SF)*
Acer rubrum 'October Glory'	Red Maple 'October Glory'	1800
Fagus grandifolia	American Beech	1650
Carpinus caroliniana	American Hornbeam	1100
Quercus rubra	Red Oak	1000
Cercis canadensis	Eastern Redbud	300
Amelanchier arborea	Downy Serviceberry	300

*Tree canopy sizes are from the Montgomery County Tree Manual.

PARKING LOT I

PARKING LOT REQUIREMENTS FOR 10 OR MORE SPACES
2014 MONTGOMERY COUNTY ZONING ORDINANCE

Chapter 59 Section 6.2.9.C.1. Landscaped Area

Parking Lot Area I
Minimum Landscaped Island Area Required =100 s.f.
Minimum Landscaped Island Area Provided = 4,975 s.f.
Parking Lot Area = 19,500 s.f.
Landscape Area required (5% of Total Pavement Area) = 975 s.f.
Total Landscape Area provided = 4,975 s.f. or 25.5%

SHADING FOR PARKING LOT PAVEMENT
Chapter 59 Section 6.2.9.C.2. Tree Canopy

PARKING LOT SHADE TREE LIST

BOTANICAL NAME	COMMON NAME	20 YEAR CANOPY (DIA. IN FEET)*
Carpinus caroliniana	American Hornbeam	39
Cercis canadensis	Eastern Redbud	20
Fagus grandifolia	American Beech	46
Quercus rubra	Red Oak	35

*20-year canopy diameters are calculated as shown in the Montgomery County Trees Technical Manual (September 1992), Appendix C, 'Plant Species Information: Montgomery County Maryland Landscape Tree Evaluation Criteria'.

Parking Lot Area I
Parking Lot Pavement Area =15,425 s.f.
Shaded Area required (25% of Total Pavement Area) = 3,856 s.f.
Total Shaded Area provided = 4,875 s.f.

PARKING LOT PERIMETER LANDSCAPING REQUIREMENTS
CHAPTER 59 SECTION 6.2.9.C.3.

	REQUIRED/ PERMITTED	PROVIDED
1. Perimeter planting area for a property that abuts a public right-of-way	**PERIMETER SCREEN A - 117 L.F.**	
i. Minimum width	6'	6'
ii. Minimum hedge height	3'	3'
iii. Canopy trees	30' o.c. 87 linear feet = 3 trees	3 trees

PARKING LOT II

PARKING LOT REQUIREMENTS FOR 10 OR MORE SPACES
2014 MONTGOMERY COUNTY ZONING ORDINANCE

Chapter 59 Section 6.2.9.C.1. Landscaped Area

Parking Lot Area II
Minimum Landscaped Island Area Required =100 s.f.
Minimum Landscaped Island Area Provided = 1,40 s.f.
Parking Lot Pavement Area = 36,465 s.f.
Landscape Area required (5% of Total Pavement Area) = 1,824 s.f.
Total Landscape Area provided = 6,575 s.f. or 18%

SHADING FOR PARKING LOT PAVEMENT
Chapter 59 Section 6.2.9.C.2. Tree Canopy

PARKING LOT SHADE TREE LIST

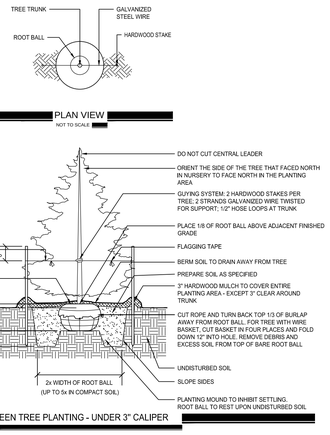
BOTANICAL NAME	COMMON NAME	20 YEAR CANOPY (DIA. IN FEET)*
Acer rubrum	Red Maple	48
Amelanchier canadensis	Serviceberry	20
Carpinus caroliniana	American Hornbeam	39
Cercis canadensis	Eastern Redbud	20
Fagus grandifolia	American Beech	46
Quercus rubra	Red Oak	35

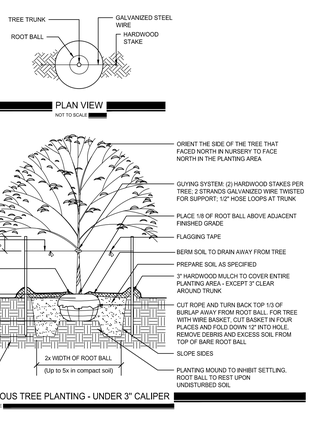
*20-year canopy diameters are calculated as shown in the Montgomery County Trees Technical Manual (September 1992), Appendix C, 'Plant Species Information: Montgomery County Maryland Landscape Tree Evaluation Criteria'.

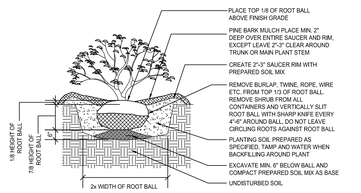
Parking Lot Area II
Parking Lot Pavement Area = 29,620 s.f.
Shaded Area required (25% of Total Pavement Area) = 7,405 s.f.
Total Shaded Area provided = 9,970 s.f.

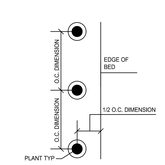
PARKING LOT PERIMETER LANDSCAPING REQUIREMENTS
CHAPTER 59 SECTION 6.2.9.C.3.

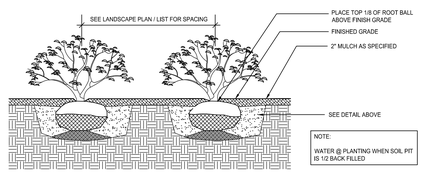
	REQUIRED/ PERMITTED	PROVIDED
1. Perimeter planting area for a property that abuts a public right-of-way	**PERIMETER SCREEN A - 117 L.F.**	
i. Minimum width	6'	6'
ii. Minimum hedge height	3'	3'
iii. Canopy trees	30' o.c. 214 linear feet = 4 trees	8 trees

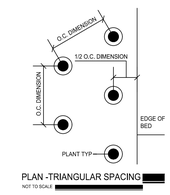




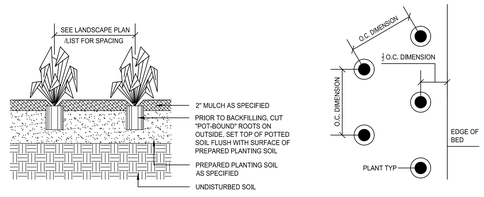








SHRUB & MASS SHRUB PLANTING
NOT TO SCALE



HERBACEOUS PLANTING & TRIANGULAR PLAN SPACING
NOT TO SCALE

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Professional Certification.

Professional Certification
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed Professional Landscape Architect under the Laws of the State of Maryland. Lic. No. 615
Exp. Date. 09.10.2023

PROFESSIONAL SEAL:

PRINTS ISSUED

NO:	DESCRIPTION:	DATE:
	BID SET	09/08/2021
1	ADDENDUM #1	09/16/2021
2	ADDENDUM #2	09/22/2021
4	ADDENDUM #4	09/29/2021
5	ADDENDUM #5	10/04/2021

TAX MAP: JS341 WSSC 220NW01
PLAT 8045
5TH ELECTION DISTRICT
MONTGOMERY COUNTY MARYLAND
PARCELS C & D
BLOCK G
PLAT 4 - STONEGATE

STONEGATE ELEMENTARY SCHOOL

MONTGOMERY COUNTY PUBLIC SCHOOLS

SHEET TITLE:
LANDSCAPE NOTES

PROJECT NO: 20008
DATE: 09/15/2021
SCALE: NONE
WORKING NORTH

SHEET NO:
L2.05

7/28/2021 9:37:29 AM

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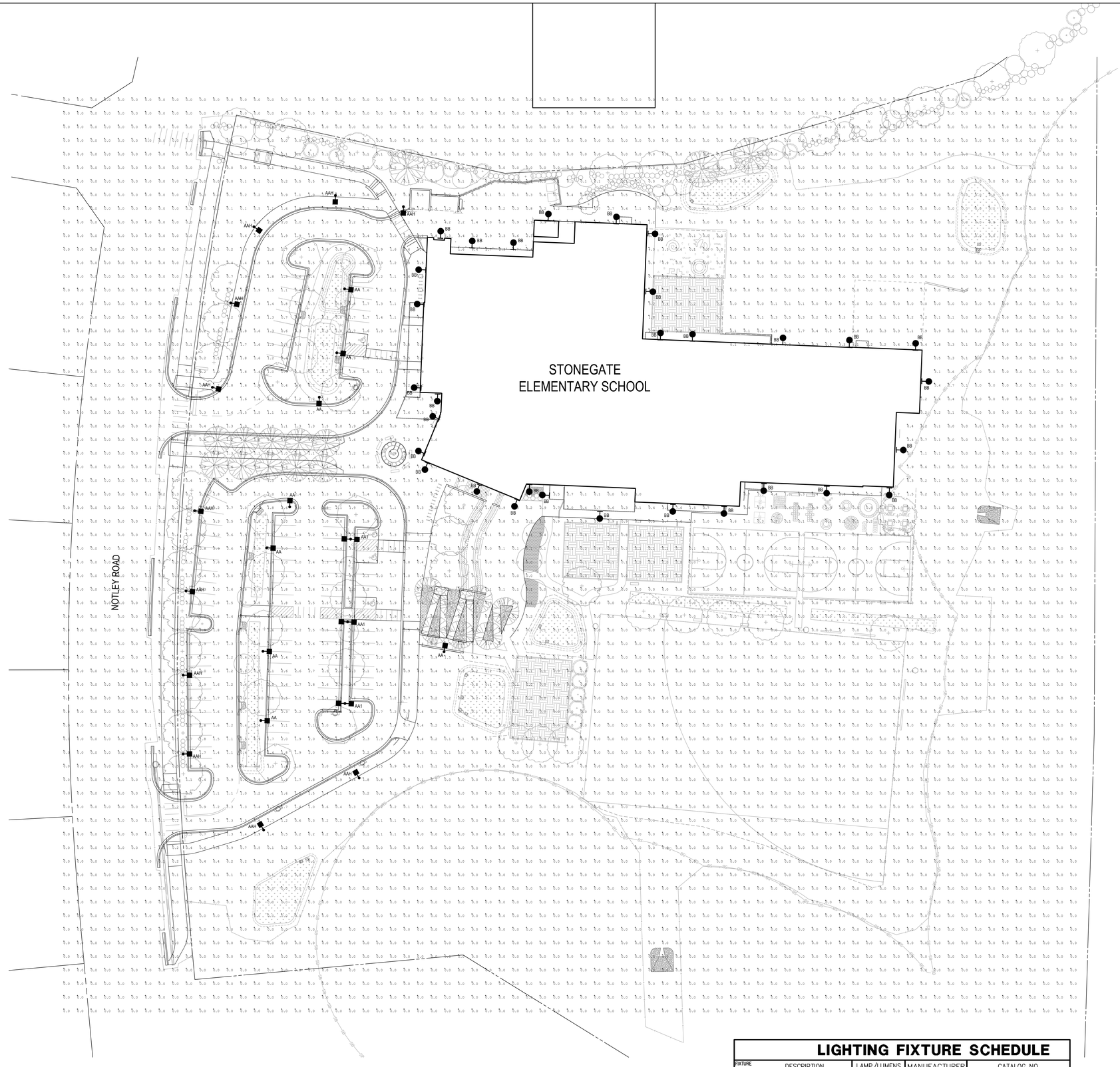

LIGHTING FIXTURE SCHEDULE

FIXTURE TYPE	DESCRIPTION	LAMP/LUMENS	MANUFACTURER	CATALOG NO.
AA	SINGLE UNIT, TYPE III DISTRIBUTION, POLE MOUNTED	LED / 4300	LITHONIA	DSXO-LED-P1-30K-T3M-MVOLT-RPA
AAH	SINGLE UNIT, TYPE III DISTRIBUTION, HOUSE SIDE SHIELD, POLE MOUNTED	LED / 5500	LITHONIA	DSXO-LED-P2-30K-T3M-MVOLT-RPA, DSXOHS-20C-U
AA1	DOUBLE UNIT, TYPE III DISTRIBUTION, POLE MOUNTED	LED / 5500	LITHONIA	DSXO-LED-P2-30K-T3M-MVOLT-RPA
BB	FULL CUTOFF, WALL MOUNTED, TYPE IV DISTRIBUTION	LED / 3000	MCGRAW-EDISON	IST-AF-450-LED-E1-T4W-7030

1 LC-1 SITE PLAN
SCALE: 1" = 30'-0"

NORTH

30 15 0 30 60
SCALE: 1" = 30'-0"

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PROFESSIONAL SEAL:

JPA Project No.: 6480-15

PRINTS ISSUED

NO:	DESCRIPTION:	DATE:

STONEGATE ELEMENTARY SCHOOL

MONTGOMERY COUNTY PUBLIC SCHOOLS

SHEET TITLE:
SITE PLAN PHOTOMETRICS

PROJECT NO: 20008
DATE: 10/14/21
SCALE: As indicated

WORKING NORTH

SHEET NO:
LC-1

A BENCH
NOT TO SCALE

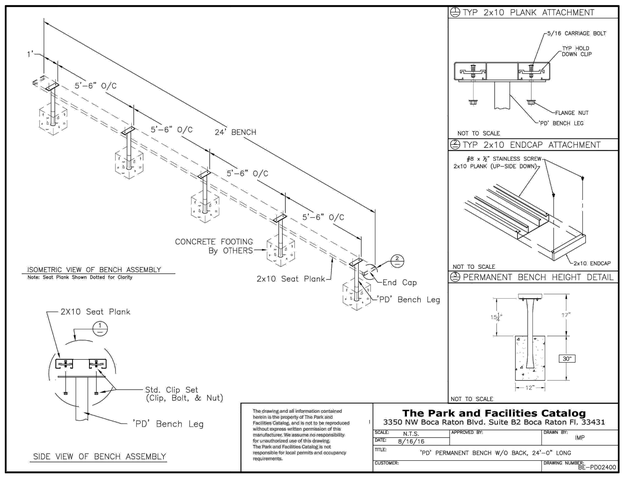
MANUFACTURER: VICTOR STANLEY
WEBSITE: WWW.VICTORSTANLEY.COM
PRODUCT NAME: MODEL 32 HOMESTEAD BENCH
MATERIAL/FINISH: RECYCLED PLASTIC, WOOD, IN-GROUND MOUNT
QUANTITY: 7

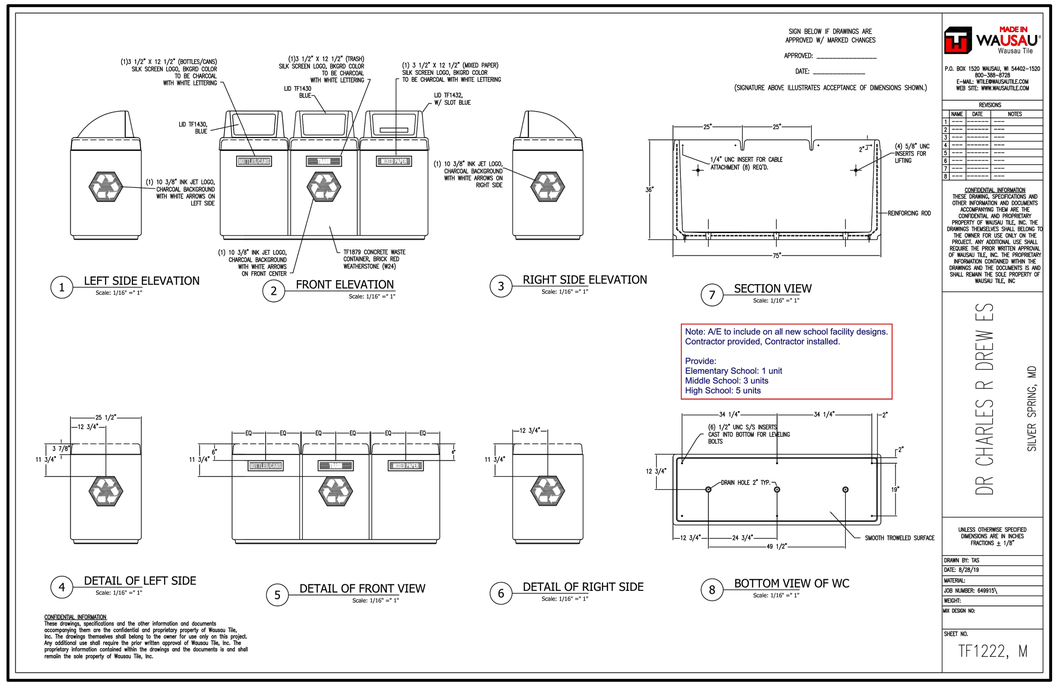
C BIKE RACK
NOT TO SCALE

MANUFACTURER: VICTOR STANLEY
WEBSITE: WWW.VICTORSTANLEY.COM
PRODUCT NAME: BRHS-101 CYCLE SENTRY
MATERIAL/FINISH: TUBULAR STEEL
QUANTITY: 20

D PLAYER'S BENCH
NOT TO SCALE

MANUFACTURER: PARK AND FACILITIES
WEBSITE: WWW.THEPARKCATALOG.COM
PRODUCT NAME: 569-1140 ALUMINUM PLAYER'S BENCH
MATERIAL/FINISH: ALUMINUM, IN-GROUND MOUNT
QUANTITY: 4





E TRASH AD RECYCLING RECEPTACLES
NOT TO SCALE

MANUFACTURER: WASAU TILE
WEBSITE: WWW.WASAUTILE.COM
PRODUCT NAME: 649915
MATERIAL/FINISH:
QUANTITY:

I:\2020\Dwgs\5_L1_01.dwg, L2.06 - Landscape Details, 10/14/2021 4:28:47 PM, RogPet, Copyright © 2021 Mavris, Hendricks & Glascock, P.A., Copyright © 2021 Mavris, Hendricks & Glascock, P.A.

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STONEGATE ELEMENTARY SCHOOL

MONTGOMERY COUNTY PUBLIC SCHOOLS

SHEET TITLE:

LANDSCAPE DETAILS

PROJECT NO: 20008
DATE: 09/15/2021
SCALE: NONE
WORKING NORTH

SHEET NO:

L2.06

7/28/2021 9:37:29 AM