



**Clarksburg Fire Station #35 Mandatory Referral No. MR2012001-DGS-1**

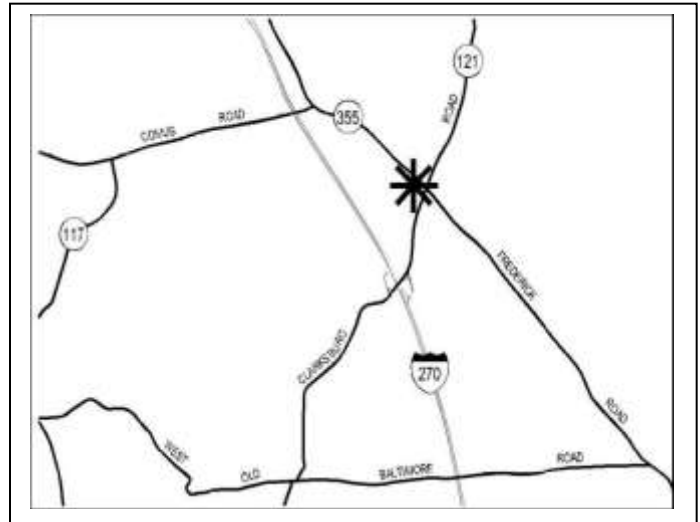
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**description**

**C. Mandatory Referral No. 2012001-DGS-1** CIP Project # 450300: Northwest of the intersection of MD Route 355 Frederick Road and MD Route 121 Clarksburg Road, southwest of the Historic District, and northeast of the Clarksburg Stage 4 boundary, R-200 zone, 1994 Clarksburg Master Plan

**Staff Recommendation:**

*Approval to transmit comments to the Department of General Services.*



**summary**

The Clarksburg Fire Station #35 as proposed:

1. Complies with the 1994 Clarksburg Master Plan including allowance for future access to the master planned, Relocated MD 355 roadway.
2. Meets the standards of the R-200 Zone.
3. Will be compatible within its site context and with the adjacent Historic District.
4. Minimizes impervious surfaces of the required program, and will include advanced Environmental Site Design (ESD) and Best Management Practices (BMPs) to the maximum extent possible.
5. Will achieve, at the minimum, under standards for Leadership in Energy and Environmental Design, as registered with the U. S. Green Building Council, a LEED Silver rating .
6. Has reached the design development phase following full County justification, County Council approval in 2005, periodic public meetings, and Planning Board approval of the Mandatory Referral for Site Selection in 2010.

## **RECOMMENDATION**

Staff recommends approval to transmit the following comments to the County Department of General Services:

1. Allow future additional access for the facility to the anticipated Relocated Frederick Rd., MD 355, master planned segment of the Corridor Cities Transitway (CCT, Observation Drive extended, A-19 to A-305), MP Pages 38, 43, 50, 52, 55, and 113 - 115.
2. Continue engineering studies for implementation of sewer service to the Historic District, facilitated by extensions required by the fire station.
3. Allocate a sum of \$23,400 to mitigate 10 percent of the estimated peak hour trips for the facility, as the PAMR requirement of the current Annual Growth Policy and Adequate Public Facilities Ordinance.
4. For any future improvements at the facility that will increase the number of staff persons or visitors on site, submit a transportation study with an amended facility plan for an added Mandatory Referral review.
5. Continue final design with the objectives of providing, to the best extent possible, exceptional environmental site design and LEED Silver or higher standards for the facility.
6. Design the two bio-swales, located adjacent to MD 355 and at the corners of the site, as visual amenities and compatible with the existing character of the adjacent Historic District.
7. Provide on the site plan and include handicapped ramps or at grade curbs at all locations requiring ADA compliance.
8. Include bike racks for a minimum of 2 bikes with space to increase bicycle storage as needed.

### **Final Forest Conservation Plan and Water Quality Plan**

This staff report reviews and makes recommendations for the Clarksburg Fire Station #35 project facility design phase only. The Planning Board must also act on the related Preliminary/ Final Forest Conservation Plan (FCP) and the Preliminary/ Final Water Quality Plan required for this public project within the Clarksburg Special Protection Area (SPA). The FCP and the Preliminary/ Final Water Quality Plan are addressed, and recommended for approval, by Environmental Planning staff in separate accompanying reports.

## **PROJECT DESCRIPTION**

### **Location**

The 3.99 acre project site is located and fronts on the southwest side of MD Route 355 Frederick Road approximately 200 feet north of the intersection of MD 355 and Clarksburg Road, MD Route 121. The site is adjacent to the boundary of the Historic District at MD 355 and adjacent to the northeastern boundary of the Clarksburg Stage 4 area. The project site is located in the Town Center District analysis subarea Master Plan (MP) page 41.

As described in the County Mandatory Referral for Site Selection the site is approximately 1/4 mile from the optimum target location as established by Fire and Rescue Service for response to Clarksburg and the surrounding area. The location provides immediate north-south access via MD Route 355 and east-west access with its close proximity to MD 121 and Stringtown Road to the south.

### **Justification**

The need for the fire station facility in the Town Center vicinity of Clarksburg was established by the Department of Fire and Rescue Services and the Department of General Services in years prior to the May 13, 2010 Planning Board approval of the Mandatory Referral for Site Selection. The fire station facility was included in the Fire and Rescue station location and resource work group report in October 14, 1999. The justification was approved by County Council in October 2005. A new fire station in the Town Center vicinity is necessary due to the existing and projected population of the Clarksburg planning area.

### **Background**

The first County appropriation for the project was made in FY 2003. The present site was acquired after years of effort by the County to locate a suitable site that would accommodate the facility program in the necessary service area. The May 13, 2010 Planning Board approval of the County's recommended site had followed extensive evaluations of more than 10 alternate locations. The Montgomery County Department of General Services (DGS) has completed the facility design development phase for the proposed Fire Station #35 and for this Mandatory Referral review. The current County CIP allocation includes funds for the design phase with the total project cost estimated at approximately \$22,000,000 excluding the planned WSSC contribution for sewer service to the historic district.

### **Site Context**

The site is in the Little Seneca Creek portion of the Clarksburg SPA. There are no existing streams, floodplains, wetlands, or environmental buffers on or affecting the site. The site is located between the Historic District to the northeast and the Stage 4 area to

the southwest, and within the general Town Center Stage 2 and 3 development areas as designated in the Master Plan, MP Pg. 215.

Small older low scaled commercial buildings all of residential character and including one residence are located north of the site across MD 355. The adjacent uses include a bank to the southeast, a garden center and a plumbing supply shop.

## **Proposed Facility**

The County Clarksburg Fire Station will be constructed at property parcels P50 and P04 located at 23420 Frederick Road. The station will be a new, one floor 23,236 sq. ft. facility with four apparatus bays, personnel living and dormitory space, and support areas including administrative offices, meeting areas, a police satellite office, and a local office space for the Upcounty Regional Services Center. The facility will be primarily owned and operated by the County Department of Fire and Rescue Services.

The building spaces are organized around a primary circulation corridor traversing the length of the building and crossed by two secondary corridors for access to the front and rear of the Apparatus Bays. The Apparatus Bays have required front and rear access. Vehicular access to and from the site are at two separate locations at the north corner of the site. The required facility program is efficiently designed and well placed on the site.

## **ANALYSIS**

### **Master Plan**

The proposed fire station is consistent with recommendations in the 1994 Clarksburg Master Plan. The Plan recommends a fire station in Clarksburg near the Town Center, MP Page, 167. The Master Plan recommends Frederick Road in the Historic District as a two lane road, with a min. 50 ft. ROW and an on street bikeway, MP Page 116, 132-133 as proposed.

Adjacent MXPDP Land in the Stage 4 Development Area - The Master Plan recommends the future alignment of the north extension of Observation Drive, and the CCT, traverse the adjacent MXPDP designated property at a location approximately 500 ft. west of the Historic District, MP Page 121, and generally parallel and near the southwestern, rear lot line of the fire station property, MP Pages 38, 50, 55, and 113-115. The proposed facility is designed for initial access with 2 entries at MD 355:

- The facility design with vehicular access on both the north and south sides of the building will also allow for future access to and from the master planned segment of the Observation Drive, CCT roadway. Staff has recommended that the fire station design be finalized in a manner that would allow ultimate access to both MD 355, as designed, and the master planned roadway. Future access to the fire station to and from the relocated MD 355 roadway will comply with the Master Plan.

## Zoning Analysis

The site is zoned R-200. The project is in compliance with the minimum requirements of the R-200 Zone. The following table includes the primary applicable provisions of the R-200 zone together with comparative information for the fire station facility as proposed (from Site Plan No. C-100, June 2011).

Zoning Section	Development Standard	Required/ permitted	Proposed
59-C-1.322 (a)	Minimum lot area	20,000 sq. ft.	173,804 sq. ft. 3.99 ac.
59-C-1.322 (b)	Minimum lot width		
	<ul style="list-style-type: none"> <li>• at Front building line</li> <li>• at Street line</li> </ul>	100 ft. 25 ft.	347 ft. 347 ft.
59-C-1.323 (a) 59-C-1.323 (b)	Min. Building Setback Front Side	40 ft. (EBL)	60 ft. (prop. min.)
	<ul style="list-style-type: none"> <li>• One side</li> <li>• Sum - both sides</li> <li>• Rear</li> </ul>	12 ft. 25 ft. 30 ft.	68 ft. (prop. min.) 140 ft. 240 ft. (bldg.) 158 ft. (ret. wall)
59-C-1.327	Max, Building Height	50 ft.	40 ft.
59-C-1.328	Max. Building Coverage	25%	13%
N/A	Parking	N/A	34 w/ HC.
N/A	Floor Area Ratio	N/A	.15 (as submitted)

## Environmental Analysis

Site Description - The 3.99 acre site is wooded with sloping topography with a general increase in elevation of approximately 16 ft. along the MD 355 frontage from the south east to the north, and with approximately the same elevation slope increase from the north site frontage to the rear property boundary.

The property is within the Clarksburg Special Protection Area (SPA) and the Little Seneca Creek watershed,. The project does not have any proposed activities within any streams, wetlands, or environmental buffers, and is in compliance with the Department's Environmental Guidelines.

Environmental Guidelines - A Natural Resources Inventory/Forest Stand Delineation (NRI/FSD#420110590) was approved by Environmental Planning staff on November 12, 2010.

Forest Conservation - Forest conservation issues are covered in a separate regulatory memo to the Planning Board. In summary, this property is subject to the Chapter 22A, Montgomery County Forest Conservation Law, and meets forest conservation requirements of the law. The majority of the site is wooded. The southwest portion of the site is within a Category I Forest Conservation Easement. The Applicant proposes to meet forest planting requirements with .13 acres of planting onsite, .33 acres of onsite reforestation, and a payment in lieu of planting for .19 acres. A Forest Conservation Law variance, required for impacts upon five existing trees, has been submitted and approved by the County Arborist.

Environmental Planning staff recommends approval of the Final Forest Conservation Plan.

Water Quality and Stormwater Management - In pre-application meetings with staff, the Applicant placed emphasis upon efforts by the project team to reduce impacts of the required program and project on the site. Water quality performance goals included:

- Minimizing storm flow run off increases
- Minimizing sediment loading
- Maximizing groundwater recharge
- Controlling toxic substances on site

Water quantity and quality will be controlled on site with five enhanced biofilters and a structural filter to treat the fueling area prior to discharging into a biofilter:

- Redundant sediment controls are used throughout the site
- Sediment traps and specialized silt fences will be used

Best Management Practices (BMP's) will meet Department of Environmental Protection (DEP) and Department of Permitting Services (DPS) requirements for the facility and its location in the Clarksburg SPA.

Imperviousness - A main goal for new development in all SPA's is to reduce the amount of impervious surfaces. The project proposes approximately 37% of the site as impervious and, while this is greater than the typical percentage for R-200 residential development, the facility program is similar to standards typically necessary for County fire stations. A public space component originally included in the space program was eliminated to reduce the overall impervious footprint for the site. The original program of 100 parking spaces has been reduced to 34. Circulation and parking requirements are at the required minimum to further reduce imperviousness.

Staff finds that the applicant has minimized imperviousness while accommodating the program requirements.

Sustainability and Green Building Design - Montgomery County has a number of goals that work toward creating a sustainable community. These goals include reducing the carbon footprint of proposed development, promoting walkability, reducing urban heat island effect, and protecting air and water quality. Public projects should lead the way in

promoting sustainability by becoming examples of the multiple benefits of sustainable development to future generations:

- This project must comply with County Council Bill 17-06, Montgomery County Green Buildings Law. The Applicant has committed that the facility will attain, at a minimum, a LEED Silver Certification and the project is registered with the U. S, Green Building Council under the LEED 2009 Rating system.

Carbon footprint - Carbon footprint analysis can be divided into three basic categories – embodied energy (energy utilized while constructing the building), transportation energy (energy associated with traffic to and from the building), and building energy emissions (energy emissions created as a result of every day building operations).

- Embodied energy - The building construction specifications will include: a construction waste management plan; use of regional materials; and use of recycled content for portions of the building materials.
- Transportation energy - Bicycle racks will be provided near the entry of the station to encourage alternative modes of transportation. Use of local bus stops will be encouraged.
- Building energy emissions – A majority of the site lighting will be “dark sky compliant” and will reduce light pollution by utilizing downlights to reduce direct glare to the adjacent Historic District.

Urban Heat Island Effect - The new roofing material will be of reflective composition with a solar reflectance index of 29 or greater to minimize heat island effect.

Noise – Maximum allowable noise levels in the County are 65dBA during the day and 55dBA at night. Emergency operations by fire and rescue services are exempt from the County noise ordinance. Construction noise levels will be required to meet County standards.

### **Sewer and Water Service**

The Fire Station site is located within area A1 of the master plan’s Recommended Sewer and Water service areas and in the Town Center Analysis area east of I-270, MP Page 202, The A1 service area is designated for properties that can logically be sewerred by a pump station that would tie into the existing sewer line, MP Page 203. Public water service is already available throughout the Historic District however sewer service is not.

The May 13, 2010 review of the Site Selection phase of the Fire Station facility included discussion of the County’s ongoing analysis of sewer service for the facility and options for sewer service to properties in the adjacent Historic District.

Sewer service for the Historic District, facilitated by service to the Fire Station, is important since most Historic District properties and some surrounding properties do not have access to public sewer service. Most improved properties within the Historic District lack septic systems that satisfy modern wastewater disposal standards; and

some have septic systems that have already failed. Compatible infill development encouraged by the master plan, generally cannot be accomplished without the provision of public sewer service, as many parcels lack space or suitable soil conditions for new septic systems. An initial proposal to serve just the planned fire station site with a grinder pump and a low-pressure sewer would not have benefited any other Historic District properties. In December 2010 WSSC completed a study of providing sewer service to both the planned fire station and the Historic District, at the request of DEP. As a result of that study, and as included in the April 7, 2011 CIP No 450300 for the facility, the fire station project will include design and construction for a sewerage system for the fire station and 38 surrounding properties.

The County is currently in the process of retaining a consultant for added studies for sewer design. As a part of these studies three options for a pump station will likely be examined. The preliminary study done by WSSC has a central wastewater pump station to serve the entire area at either of two locations:

- At the corner of Frederick Road, MD 355, and Clarksburg Rd., MD 121, and
- At the southwestern edge of the Historic District along Clarksburg Road.

Most of the pumping equipment is anticipated to be underground with any required above grade utility structure to be limited to approximately 100 sq. ft. The proposed pumping station is intended for interim use only. The Historic District sewerage system could eventually connect with a sewerage system to serve the nearby Stage 4 development area.

Staff continues to support and encourage County study of sewer service to the Historic District facilitated by extensions required by the fire station.

### **Transportation Analysis**

Transportation staff has reviewed the vehicular/pedestrian circulation system as shown on the site plan and found that the site provides adequate and efficient accessibility to the area. The site will have two driveways on existing MD 355, one for the emergency vehicles only and other for employee's ingress/egress so that no conflict can exist between emergency and non-emergency vehicles. Staff references an anticipated future connection to the master planned Observation Drive Extended (MD 355 Bypass) when the MD 355 Bypass is constructed.

The Applicant's transportation consultant submitted a Transportation statement and study in January 2011. The study referenced analysis of trips generated at the existing Germantown East Fire Station that showed no more than 30 peak our trips. The analysis indicated that the proposed Clarksburg facility, since it is similar to the Germantown station, would also generate fewer than 30 peak hour trips and that neither a Local Area Transportation Review (LATR) or Policy Area Mobility Review (PAMR) study were required.

Vehicular Access - The site plan for the fire station facility provides two separate access locations at the north corner of the property. One is for access to the 34 space parking



area and the other provides a wide apron for fire apparatus ingress and egress directly to MD 355. These locations and configurations will provide safe and convenient vehicular access for the project. Added vehicular access will be provided with the future Relocated MD 355 segment of the extension of Observation Drive, to be located southwest of the fire station site.

Walkability - The Master Plan provides for the retention of the existing two lane character of MD 355, Frederick Road in the area of the Historic District. The Plan encourages development within the Historic District in accord with historic development patterns and in a manner to preserve and enhance the existing rural character of streets, MP Page 47. The Plan also encourages historically appropriate sidewalks along both sides of Frederick Road, MP Page 48. Staff has determined that, in order to preserve the rural character of this area of Frederick Road, walkability in this specific location is a priority on the east side of MD 355, within the Historic District. To preserve the existing rural character of the street on the west side of 355, and to limit imperviousness on the fire station site, staff finds that a sidewalk is not currently needed. The Applicant will grade the site at the west roadway frontage to retain the rural character of the existing streetscape.

Staff has recommended approval of the facility design with the determination that the site is located in the Clarksburg Policy Area where the County's current Growth Policy results in a 10 percent PAMR trip mitigation requirement. Staff therefore recommends that the Applicant make a lump sum payment of \$23,400 to mitigate 10percent of the new peak-hour trips generated by the proposed fire station.

The September 9, 2011 Transportation Planning staff Memorandum for the Mandatory Referral is attached.

### **Neighborhood Compatibility**

Building Scale - The immediate surrounding neighborhood has an established rural, low scaled, open character that the Master Plan recommends and encourages to be retained, MP Page 47 and 48. Staff has determined that the subject 3.99 acre site is large enough to well accommodate the facility as designed while providing compatibility with the existing character of the immediate site vicinity.

Clarksburg Historic District - The Historic Preservation Commission does not have review authority for the subject site since the site is adjacent to and outside of the designated District boundary. Compatibility with the adjacent Historic District is, however, necessary and will be compatible with the adjacent Historic District.

- The fire station is a one floor facility with a relatively low pitched gable roof. While the facility floor plan is relatively large, the building will have significant open areas at both sides and the building mass has significant setbacks in the front facade. Discussion included the possibility of moving the facility closer to the street, however program requirements and the comparatively large building mass

resulted in a determination that the placement of the building at its current position is best and will provide compatibility within its immediate surroundings.

Staff has determined that the one facility has been designed in a manner that will provide compatibility with the low, gabled roofed structures to the north on MD 355 and will be compatible with the adjacent historic district.

#### Facility Design -

In addition to the reduced parking program, other design features of the proposed facility and site layout include:

- The facility plan to allow future access to the planned relocated MD 355, Observation Drive, CCT master planned roadway
- A one floor design with a low pitched gable roof for compatibility with the adjacent Historic District
- Significant building setbacks at the MD 355 frontage to reduce the impact of the building mass at street areas adjacent to the Historic District
- The building with gabled roofs, dormers, brick, and board siding materials and with colors as shown in the illustrative exhibits (Attached) will be compatible with the adjacent Historic District
- Integrated service areas to provide favorable and welcoming views from the MD 355 frontage.

#### Operational Considerations -

- The building layout is efficient with public and administrative spaces at the front and with support and dormitory spaces at the rear
- The Applicant has submitted a design request that has been approved by SHA for a proposed traffic signal. Signalization plans will be submitted to SHA.

### **COMMUNITY OUTREACH AND NOTIFICATION**

County Department of General Services representatives and Planning staff have had multiple briefings and discussions with residents of the Clarksburg community throughout the history of development of the Fire Station project. Community meetings included events in April 2004, April 2009, and April 2010 held prior to the May 13, 2010 Planning Board review and approval of the Mandatory Referral for Site Selection phase of the project.

Input from the Planning Board for the project at the time of the Site Selection approval included requests that the Applicant:

- Meet with both the Clarksburg Citizen Association and also staff of the Historic Preservation Commission during the early stages of the facility planning process, and
- Seek exceptional applications for sustainability: i.e., Best Management Practices (BMP's) for stormwater management; and environmental site design (ESD) considerations for the project.

On February 28, 2011 Planning staff and DGS representatives meet with the Clarksburg Citizens Association and discussed the project plans. Citizens were supportive of the facility plans and inquired about:

- Future accommodation and access to the master planned, Relocated MD 355 roadway south of the site
- The space program for the facility, and
- Compatibility with the adjacent Historic District.

For the Mandatory Referral for design development, the Forest Conservation Plan and Water Quality applications, the Planning Department staff notified adjoining and confronting property owners and notified the Clarksburg Citizens Association of the submittal and Planning Board review date.

## **CONCLUSION**

Based on information provided by the Applicant and the analysis contained in this report, staff concludes that the proposed Mandatory Referral for the Clarksburg Fire Station will be compatible within its site context and meets the applicable standards and guidelines for the environment, the Adequate Public Facilities Ordinance as well as the development standards for the R-200 Zone. Staff recommends approval of the Mandatory Referral with comments listed at the front of this report to be transmitted to the Montgomery County Department of General Services.

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### **Attachments:**

Proposed Site Plan and Floor Plan	Page 12
Proposed Building Elevations and Building Views	Pages 13 -15
Transportation Memo	Page 16





REAR ELEVATION - WEST  
(NOT TO SCALE)



SIDE ELEVATION - NORTH  
(NOT TO SCALE)



CLARKSBURG FIRE STATION #35  
ARCHITECTURE: HIGGINS

BUILDING ELEVATIONS



FRONT ELEVATION - EAST  
(NOT TO SCALE)



SIDE ELEVATION - SOUTH  
(NOT TO SCALE)



CLARKSBURG FIRE STATION #35  
ARCHITECTURE: HIGGINS

BUILDING ELEVATIONS







MAIN ENTRANCE VIEW (NOT TO SCALE)



DETAIL VIEW (NOT TO SCALE)



CLARKSBURG FIRE STATION #35  
CLARK COUNTY, TN

PERSPECTIVE VIEWS



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# MONTGOMERY COUNTY PLANNING DEPARTMENT

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

September 9, 2011

## **MEMORANDUM:**

TO: Ron Cashion  
Area 3 Division

FROM: Ki H. Kim, Transportation Planner/Coordinator   
Area 3 Division

SUBJECT: Mandatory Referral 2012001 – Clarksburg Fire Station

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Transportation Planning staff has reviewed the subject Mandatory Referral application and recommends approval of the proposed Clarksburg Fire Station Mandatory Referral with a condition that the applicant make a lump sum payment of \$23,400 to MCDOT to meet the Policy Area Mobility Review (PAMR) requirement.

The proposed Clarksburg Fire Station site is located along west side of MD 355 approximately 190 feet north of MD 121 in Clarksburg. Based on the traffic statement submitted by the applicant, the proposed fire station would generate fewer than 30 peak-hour trips, thus, not subject to the Local Area Transportation Review (LATR). The site is located in the Clarksburg Policy Area where there is a 10% PAMR trip mitigation requirement according to the County's current Growth Policy. The applicant is recommended to make a lump sum of \$23,400 to mitigate two peak-hour trips which represent 10% of the new peak-hour trips generated by the proposed fire station.

Staff has reviewed the vehicular/pedestrian circulation system as shown on the site plan and found that the site provides adequate and efficient accessibility to the area. The site will have two driveways on existing MD 355 and future connection to the master planned Observation Drive Extended (MD 355 Bypass). This section of MD 355 is classified as a B-1 (Business Street) roadway and Observation Drive Extended is classified as an A-19 (Arterial Highway) in the Clarksburg Master Plan. These two roadways should provide necessary accessibility for the Clarksburg Fire Station to respond the emergency calls in a timely manner for the area.