

September 8, 2023

Carrier Clinic, Inc.  
252 County Route 601  
Belle Mead, NJ 08502

RE: Traffic Impact Study  
Hackensack Meridian Health Carrier Clinic  
Child and Adolescent Expansion Project  
Block 2001, Lot 2 & Block 1001, Lot 14.02  
252 County Road 601  
Belle Mead, Township of Montgomery, Somerset County, New Jersey

Dewberry has prepared the following study to assess the potential traffic impacts of the proposed Hackensack Meridian Health Carrier Clinic – Child and Adolescent Building Addition. The study contains an overview of the proposed improvements and an evaluation of potential traffic impacts that may result from the building addition and on-site circulation modifications. The findings indicate the proposed improvements would generate a nominal increase in new vehicular trips and it is unlikely that on-site circulation improvements would result in any significant changes to existing driveway utilization. Therefore, the improvements are unlikely to result in a significant traffic impact to the site driveways or surrounding roadway network.

### **Existing Conditions**

Hackensack Meridian Health Carrier Clinic is located on 87 acres in Belle Mead and specializes in inpatient and outpatient psychiatric and substance abuse treatment services for adolescents, adults, and older adults. For children and teenagers, the Carrier Clinic currently offers behavioral health programs and support services, including an adolescent unit amongst other treatment program facilities. Overall, the Carrier Clinic currently has a license to operate 297 beds. It should be noted that there are some licensed beds at the facility that are not currently in use.

Primary access to the Clinic is provided via one (1) driveway along Belle Mead-Blawenburg Road (CR 601) and one (1) driveway along E Mountain Road. There are also two (2) minor driveways along E Mountain Road. An internal roadway network connects the Clinic's various buildings and parking fields. The primary roadway runs along the perimeter of the site and connects both primary site driveways.

### **Proposed Improvements**

#### *Project Overview*

The Carrier Clinic currently has 297 licensed beds. The primary goal of the proposed project will be to separate adolescent patients from adult patients and to relocate administrative services. Some of the key elements of the proposed project that are planned to facilitate these goals are as follows:

- *The relocation of adolescent services into a newly constructed building addition*
- *The existing Executive Office Building will be demolished, and administrative services relocated into the existing building space vacated by the current Adolescent Services*
- *Elimination of trailers located at the southeast portion of the site*
- *A small addition (795 SF) to the Family Resource Training Center*

### *Operational Improvements*

Hackensack Meridian Health proposes to construct a new building addition to accommodate the relocation of the current Child and Adolescent unit. The new addition will include 52 beds for the adolescents and will improve and modernize services the adolescent patients. The addition is required to accommodate the changing needs of inpatient care for the younger Behavioral Health population. These improvements will also provide the facility with the means and versatility improve the treatment approaches. Additionally, the ages served will be expanded from 12-18 to accept patients as young as 7-8 years of age.

While up to 16 beds may be activated as part of the proposed project, no increase in licensed beds are currently proposed with this project.

In addition to the improved inpatient treatment options that would result from the building addition, the addition will also enable a modest expansion of administrative office space that will be relocated from the existing Executive Office building (which is to be demolished) and the removal of the existing trailers located at in the southeastern corner of the site. It is anticipated that with the construction of the adolescent addition, eight (8) new employees will be required during max shift, which can be considered de minimis.

### *Internal Circulation Improvements*

Internal roadway improvements are also proposed to allow for safer and more efficient on-site circulation. Internal roadway striping would be enhanced along the drive-aisle accessed via Belle Mead-Blawenburg Road (CR 601), stop bars would be added to multiple internal intersections to improve traffic control, and a new connection would be established between two existing parking fields near the Family Resource and Training Center. On-site circulation would generally remain unchanged in the vicinity of the proposed adolescent unit addition near the E Mountain Road driveway. No new site driveways are proposed, nor are any changes proposed to existing roadway striping on either frontage road. In summary, the relatively minor modifications to on-site circulation are not anticipated to change the utilization of the existing site driveways.

The new parking in the area of the proposed addition will be for parents/guardians of the patients staying in the proposed adolescent addition. It is anticipated that the employees will continue to access the site as they do today and park in the large parking lot located to the east of the site in the proposed condition.

### **Trip Generation Impacts**

As previously mentioned, the improvements would not increase the Carrier Clinic's number of licensed beds as currently proposed. It is anticipated that the addition of eight (8) employees during the max shift to support the adolescent addition will have a de minimis impact on the expected trips generated from the site. It can be reasonably assumed that some or most of these employees would enter and exit the site during the typical morning and afternoon peak hours. It is unlikely that patient arrivals and departures would all occur during typical morning and afternoon peak hours, and the inpatient nature of this treatment indicates that the newly accommodated patients would not all arrive and depart on a daily basis. Thus, there is not a one-to-one correlation between new adolescent addition and peak hours trips. In summary, the anticipated increase in trip generation would be limited to the arrival and departure of some or all of the eight (8) new employees and the occasional arrival or departure of newly accommodated patients that happen to coincide with peak commuting hours.

Any increase in trip generation falls significantly below the industry standard threshold of trips that can appreciably increase the volume-to-capacity ratio of an intersection approach (50 trips) and it is therefore reasonable to characterize the anticipated Carrier Clinic trip increase as de minimis. This information is contained within the ITE recommended practice entitled Multimodal Transportation Impact Analysis for Site Development, published in January 2023, which states that where local trip generation thresholds are not established, "it is suggested that a multimodal transportation impact study be conducted whenever a

proposed development will generate 50 or more added vehicle trips during the adjacent roadway's peak hour or the development's peak hour." Furthermore, the New Jersey Department of Transportation (NJDOT) utilizes a less conservative threshold of 100 trips in any peak hour to define a "significant increase in traffic". In summary, ITE guidance and NJDOT standards support the conclusion that the proposed expansion would result in a negligible traffic impact and will not adversely impact the adjacent road network.

### **Conclusion**

This study was prepared to assess the potential traffic impacts of the proposed Child and Adolescent Building Addition. The study contained an overview of the proposed improvements and an evaluation of potential traffic impacts that may result from this addition and on-site circulation modifications. The findings indicate that the proposed improvements will not have an adverse impact traffic impact to the site driveways or surrounding roadway network.

Should you have any questions or require any additional information, please do not hesitate to contact our office.

Sincerely,



Andrew Vischio, PE, PTOE  
Project Manager, Traffic Department