

Draft Generic Environmental Impact Statement

Buffalo Niagara Medical Campus

North End Projects

Lead Agency:
City of Buffalo
Planning Board
901 City Hall
Buffalo, New York, 14202
William P. Grillo, Principal Planner
City of Buffalo Office of Strategic Planning

Project Sponsors:
Buffalo Niagara Medical Campus
Kaleida Health
Ciminelli Development Company, Inc
University at Buffalo, State University of New York

Prepared by:
American Consulting Professionals of New York, PLLC
70 Niagara Street, Suite 410
Buffalo, NY 14202

C & S Companies
90 Broadway Street
Buffalo, NY 14203

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Executive Summary	E-1
1.0 Project Description.....	1-1
1.1 Introduction.....	1-1
1.2 SEQR Process and Chronology	1-1
1.3 Proposed Projects.....	1-2
1.4 Purpose and Need	1-4
1.5 Project Descriptions	1-9
1.6 Summary of Permits and Approvals	1-12
1.6.1 State.....	1-12
1.6.2 Local	1-16
1.7 Summary of Construction Timelines	1-18
2.0 Environmental Impact Assessment.....	2-1
2.1 Land Use and Zoning.....	2-1
2.2 Transportation and Parking.....	2-5
2.2.1 Transportation	2-5
2.2.2 Parking	2-12
2.3 Utilities.....	2-15
2.4 Visual and Aesthetic Resources.....	2-17
2.5 Historic, Archaeological and Cultural Resources.....	2-22
2.6 Topography, Geology and Soils	2-25
2.7 Neighborhood Character	2-27
2.8 Socioeconomics	2-30
2.9 Air Quality	2-40
2.10 Solid/Medical/Hazardous Waste.....	2-41
2.11 Hazardous and Contaminated Sites	2-43
2.12 Public Services.....	2-45
2.13 Construction.....	2-47
3.0 Alternatives	3-1
4.0 Unavoidable Adverse Environmental Impacts	4-1
5.0 Irreversible and Irrecoverable Commitment of Resources.....	5-1
6.0 Growth Inducing Aspects of the Proposed Project	6-1

Tables

2.2-1	Off-Street Parking Supply & Demand
2.2-2	Future Parking Demand
2.8 -1	Racial Composition
2.8-2	Housing Characteristics
2.8-3	Environmental Justice Statistics
2.8-4	Employment Base
3.0-1	Future Supply/Demand Comparison

Figures
(Following Text)

1.0-1	Project Location
1.5-1	Proposed Projects Locations
2.1-1	Urban Renewal Districts
2.2-1	Off-Street Parking Capacity
2.5-1	National Register Historic Sites and Districts
2.5-2	National Register of Historic Places – Eligible Sites
2.8-1	Primary and Secondary Study Areas
2.12-1	Potential Construction Routes and Staging Areas

Appendices

- Appendix A Department of Health Regarding the Closing of Deaconess
- Appendix B Existing Facility Permits
- Appendix C Transportation Impact Study
- Appendix D Utility Information
- Appendix E Visual Analysis Photographs
- Appendix F Historic Properties Information
- Appendix G Air Quality Information
- Appendix H Solid Waste Management Plan
- Appendix I Best Practices for Construction Plan

Acronyms

BGH - Buffalo General Hospital
BNMC - Buffalo Niagara Medical Campus
BPDES - Buffalo Pollution Discharge Elimination System
BSA - Buffalo Sewer Authority
CAA - Clean Air Act
CMHC - Community Mental Health Center
CON - Certificate of Need
CWA - Clean Water Act
DGEIS - Draft Generic Environmental Impact Statement
ECMC - Erie County Medical Center
GVI - Global Vascular Institute
LOS – Level of Service
MFGH - Millard Fillmore Gates Circle Hospital
MMTS - Multi-modal transportation structure
MOB - Medical Office Building
NFTA – Niagara Frontier Transportation Authority
NRHP - National Register of Historic Places
NYSDEC - New York State Department of Environmental Conservation
NYSDOH - New York State Department of Health
NYSDOT - New York State Department of Transportation
NYSOASAS - New York State Office of Alcohol and Substance Abuse Services
NYSOMH - New York State Office of Mental Health
SEQRA - New York State Environmental Quality Review Act
SHPO - New York State Office of Parks, Recreation and Historic Preservation
SPDES - New York State Pollutant Discharge Elimination System
TDM – Transportation Demand Model
TIS – Transportation Impact Study
UB - State University of New York at Buffalo
ZBA - City of Buffalo Zoning Board of Appeals

Executive Summary

On August 19, 2008, the City of Buffalo Planning Board (“Planning Board”) resolved to act as Lead Agency pursuant to the New York State Environmental Quality Review Act (“SEQRA”) Article 8 of the N.Y. Environmental Conservation Law and 6 NYCRR Part 617. The Planning Board was chosen as the Lead Agency because it was the only agency with review authority over all of the Projects and the scope of its site plan review process encompassed the broadest range of issues. The Notice of Intent to Act as Lead Agency was circulated among the many interested and involved agencies by August 23, 2008. There was no objection to the Planning Board acting as Lead Agency for the Projects and on September 23, 2008, the Planning Board issued a Positive Declaration requiring the preparation of this DGEIS.

Project Description

This Draft Generic Environmental Impact Statement (“DGEIS”) is intended to analyze the impacts from four proposed projects which are programmed for the Buffalo Niagara Medical Campus – North End (“BNMC – North End”). The four proposed projects (collectively hereinafter referred to as the “Projects”) include a Global Vascular Institute (“GVI”) and an updated Emergency Department adjacent to Buffalo General Hospital (“BGH”); a new Medical Office Building (“MOB”) across from Buffalo General; a Skilled Nursing Facility (“SNF”) along Michigan Avenue between East North Street and High Street; and a 1,200-1,600-space multi-modal transportation structure (“MMTS”) in the vicinity of GVI, BGH, MOB and SNF. The City of Buffalo Planning Board as Lead Agency has determined that there are enough overlapping concerns and cumulative impacts among the four proposed developments that the public interest would be best served by looking at the four proposals in a cumulative assessment. It is important to note that each development is a stand alone project that remain viable regardless of the fate of the other proposals. However, because of their potential overlapping impacts within the campus and adjacent neighborhoods it was most appropriate to review the proposals together in a single environmental review.

There are four proposed projects assessed in this DGEIS:

- The Global Vascular Institute and updated emergency department for Buffalo General Hospital. This building will be 500,000 to 600,000 square feet (sq. ft.).
- A new Medical Office Building, which will be a maximum of 300,000 sq. ft.
- The Skilled Nursing Facility at a maximum of 200,000 sq. ft.
- A multi-modal transportation structure that can accommodate 1,200 to 1,600 cars.

Each of these proposals will be sited on the BNMC – North End. This area is generally bounded by East North Street to the north, Main Street to the west, High Street to the south and Maple Street to the East. See Figure 1.0-1. General descriptions of the Projects are provided below.

Global Vascular Institute

The North End projects include the construction of a new Global Vascular Institute, a first-of-its-kind, multi-dimensional medical institute focused on the full spectrum of vascular health care, and will bring together physicians, researchers and educators to address heart and vascular diseases. The GVI will be operated by Kaleida Health (“Kaleida”), the operator of BGH, and the University at Buffalo (“UB”) of the State University of New York. Kaleida’s portion of the GVI will house a number of facilities including an emergency department for use by both BGH and the GVI, which will be a treatment and research that focuses on the heart, neuro and related vascular system. The UB portion of the GVI will house educational space for the University at Buffalo School of Medicine and Biomedical Sciences, as well as research and life sciences technology incubator facilities. UB will develop and use the space for the medical school and as well as a program in bioinformatics. The new center will facilitate research and clinical collaboration on the causes, treatment and prevention of heart and vascular diseases.

Medical Office Building

To attract top physicians, it is important that adequate medical office space be provided in close proximity to the other facilities. The MOB will be owned and operated by Ciminelli Development Company, Inc., which will lease medical office space to a variety of tenants. These tenants are expected to consist of both existing physician groups relocated from other facilities and from the creation of new business spurred by the expected growth of the BNMC. The building may also house a laboratory, medical incubator facilities and some retail or general commercial businesses that would be available to the entire BNMC. The MOB will be physically connected to the GVI and the existing parking structure adjacent to the building site by pedestrian bridges. Several prospective tenants have been identified and lease negotiations have begun for potential occupancy in the building.

Skilled Nursing Facility

The SNF would have 300 beds. As currently proposed, there would be 200 long term care beds, 40 memory care beds, 30 sub-acute care beds, 20 pediatric care beds and 10 ventilator care residents' beds. The facility would also house the associated support facilities for a nursing facility, including a kitchen, laundry and therapy areas.

Multi-Modal Transportation Structure

The MMTS will be owned by the BNMC. This facility will incorporate parking with other transportation services be used jointly by all of the institutions on the BNMC. The MMTS parking and related services will also be available for use by the public.

Purpose and Need

The *Commission on Health Care Facilities in the 21st Century*, was a state commission mandated to review and make recommendations regarding health care facilities. It determined that Millard Fillmore Gates Circle Hospital should close and that Kaleida Health should create a center for vascular care in Western New York. The closing of Millard Fillmore Gates Circle requires the relocation of skilled nursing beds to a new location.

The construction of a center for excellence in vascular care and the existing facilities on the campus has created the demand for adjacent medical office space. Additionally, the current BNMC has a shortage of parking spaces and the situation will only get worse with the construction of the GVI and MOB.

Topics Assessed in this Report

Based on coordination with the City of Buffalo Planning Department and an evaluation of the potential impacts related to these developments, the following potential impact topics were assessed in this report:

- Land Use and Zoning;
- Transportation and Parking;
- Utilities;
- Visual and Aesthetic Resources;
- Historical, Archaeological and Cultural Resources;
- Topography, Geology and Soils;
- Neighborhood Character;
- Socioeconomics;
- Air Quality;
- Solid, Medical and Hazardous Waste
- Hazardous and Contaminated Sites;
- Public Services; and
- Construction.

The results of the assessments indicated the following potential impacts may occur as a result of the development:

Summary of Adverse Impacts

Land Use and Zoning

The SNF may displace six residential structures and replace it with a commercial structure. The GVI would require the closure of Goodrich Street and the demolition of the Community Mental Health Facility.

Transportation and Parking

The Project will negative impact the Level of Service at various impacts at, or in the vicinity of the BNMC. The operation of the GVI and MOB will require the construction of the MMTS.

Utilities

To service the developments, National Grid will need to upgrade service to the area. The MOB will require an extension of the 12” high pressure main south along Ellicott Street. Supplemental pump for fire protection will be required to serve the highest floors of the GVI and MOB.

Visual and Aesthetic Resources

The SNF could alter the visual environment in the Fruit Belt, and in particular Maple Street.

Historical, Archaeological and Cultural Resources

The construction of the SNF may require the removal of two National Register of Historic Places - eligible properties. It would also be built in view of four other National Register of Historic Places eligible properties.

Topography, Geology and Soils

No significant adverse impacts are expected.

Neighborhood Character

No significant adverse impacts are expected. The SNF may require the removal of six residential structures.

Socioeconomics

No significant adverse impacts are expected to the Environmental Justice population in the area.

Air Quality

Heating of the GVI will increase the output of oxides of nitrogen from the existing steam plant. However, this is not a significant adverse impact.

Solid, Medical and Hazardous Waste

Solid C&D waste will be generated during construction. Solid, medical and hazardous waste streams in varying quantities will be generated by the Projects.

Hazardous and Contaminated Sites

No significant adverse impacts are anticipated.

Public Services

No significant adverse impacts are anticipated.

Construction

The labor and equipment requirements of the area may create traffic delays on local streets. Construction equipment could create traffic delays or impede flow. Dust from

demolition or excavation could migrate into residential areas. Construction may temporarily increase noise above ambient.

Criteria, Thresholds and Mitigation

In order to ensure the impacts are appropriately reduced, the following criteria, thresholds and mitigation have been established. These requirements will ensure the projects are developed in a way to most effectively and practicably reduce the impacts on the environment.

Land Use and Zoning

The Community Mental Health Facility should be relocated no more than 750 feet from its current facility to remain within its current service area.

The SNF should be no higher than four stories, if at the preferred location. The SNF should be constructed as a “transitional” building, employing building design compatible with the adjacent residential area including looking like four smaller residential structures of four stories each.

Transportation and Parking

Various geometric and timing changes should be employed at negatively impacted intersections. The MMTS should be constructed to mitigate the additional parking demand from the operation of the GVI and MOB.

Utilities

The project sponsors should work with the City of Buffalo Division of water to ensure adequate water pressure to the area. All developments must be built to applicable fire codes. The project sponsors should work with National Grid to ensure the electric service is adequately upgraded for their needs.

Visual and Aesthetic Resources

The SNF should be no higher than four stories, if at the preferred location. Lighting schemes for the buildings should follow best practices for minimizing light migration off of BNMC. Downward focused lights shall be utilized.

Historical, Archaeological and Cultural Resources

The two properties that are being removed should be documented prior to removal and historic elements of the properties should be salvaged to the extent practicable. If any unanticipated archaeological finds are encountered during construction, work at that site will be halted and the State Historic Preservation Office will be called.

Topography, Geology and Soils

Although no significant adverse impacts are expected, a soil management plan for excavation near existing structures will be required. If contaminated soils or groundwater are encountered during construction the appropriate agencies will be notified.

Neighborhood Character

The SNF should be no higher than four stories, if at the preferred location. The SNF should be constructed as a “transitional” building, employing building design compatible with the adjacent residential area including looking like four smaller residential structures of four stories each.

Socioeconomics

Since are no significant adverse impacts, no mitigation is required.

Air Quality

Emissions from the steam plant servicing the GVI should remain below state air quality limits. The SNF and MOB should be designed using the best practicable heating and insulation technology to conserve energy.

Solid, Medical and Hazardous Waste

All construction and operation waste should be disposed of in accordance with New York State Department of Health and New York State Department of Environmental Conservation regulations.

Hazardous and Contaminated Sites

If any previously unidentified contamination is encountered during development, the Project sponsors should notify Region 9 of the New York State Department of Environmental Conservation to coordinate appropriate clean up.

Public Services

Since there are no significant adverse impacts, no mitigation is required.

Construction

To mitigate the potentially negative impacts from construction, a construction vehicle access plan should be created. A Stormwater Pollution Prevention Plan will be created and followed during construction. No parking should be allowed on residential streets. Best management practices should be used to mitigate noise during construction.

SUMMARY

This EIS assessed the impacts and benefits of the proposed Projects. Where practicable, design criteria, thresholds and mitigations were established to reduce or remove the impacts identified. The remaining impacts are largely outweighed by the proposed Projects' needs and their benefits to the community.

1.0 Project Description

1.1 Introduction

This Draft Generic Environmental Impact Statement (“DGEIS”) is intended to analyze the impacts from four proposed projects which are programmed for the Buffalo Niagara Medical Campus – North End (“BNMC – North End”). The four proposed projects (collectively hereinafter referred to as the “Projects”) include a Global Vascular Institute (“GVI”) and an updated Emergency Department adjacent to Buffalo General Hospital (“BGH”); a new Medical Office Building (“MOB”) across from Buffalo General; a Skilled Nursing Facility (“SNF”) with a preferred location along Michigan Avenue between East North Street and High Street; and a 1,200-1,600-space multi-modal transportation structure (“MMTS”) in the vicinity of GVI, BGH, MOB and SNF. The City of Buffalo Planning Board as Lead Agency has determined that there are enough overlapping concerns and cumulative impacts among the four proposed developments that the public interest would be best served by looking at the four proposals in a cumulative assessment. It is important to note that each development is a stand alone project that remain viable regardless of the fate of the other proposals. However, because of their potential overlapping impacts within the campus and adjacent neighborhoods it was most appropriate to review the proposals together in a single environmental review.

1.2 SEQRA Process and Chronology

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on September 23, 2008, the Planning Board issued a Positive Declaration requiring the preparation of this DGEIS.

The Planning Board determined that the Projects required a Generic Environmental Impact Statement because the individual projects are fluid with final design and location. However, by assessing the Projects cumulatively through a generic assessment, the potential environmental impacts can be best minimized and appropriate project criteria can be established to guide development. This determination required that a Generic Environmental Impact Statement (“GEIS”) be drafted to evaluate the cumulative impacts of the proposed Projects. Where variables in individual project components exist, the GEIS will assess the maximum possible development (i.e largest possible building size) as well as various potential facility locations within the study area.

1.3 Proposed Projects

There are four proposed projects assessed in this DGEIS:

- The Global Vascular Institute and updated emergency department for Buffalo General Hospital. This building will be 500,000 to 600,000 square feet (sq. ft.).
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vascular health care, and will bring together physicians, researchers and educators to address heart and vascular diseases. The GVI will be operated by Kaleida Health (“Kaleida”), the operator of BGH, and the University at Buffalo (“UB”) of the State University of New York. Kaleida’s portion of the GVI will house a number of facilities including an emergency department for use by both BGH and the GVI, which will be a treatment and research that focuses on the heart, neuro and related vascular system. The UB portion of the GVI will house educational space for the University at Buffalo School of Medicine and Biomedical Sciences, as well as research and life sciences technology incubator facilities. UB will develop and use the space for the medical school and as well as a program in bioinformatics. The new center will facilitate research and clinical collaboration on the causes, treatment and prevention of heart and vascular diseases.

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The MOB will be owned and operated by Ciminelli Development Company, Inc. This structure will lease medical office space to a variety of tenants. These tenants are expected to consist of both existing physician groups relocated from other facilities and from the creation of new business spurred by the expected growth of the BNMC. The building may also house a laboratory, medical incubator facilities and some retail or general commercial businesses that would be available to the entire BNMC. The MOB will be physically connected to the GVI and the existing parking structure adjacent to the building site by pedestrian bridges. Several prospective tenants have been identified and lease negotiations have begun for potential occupancy in the building.

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Multi-Modal Transportation Structure

The MMTS will be owned by the BNMC. This facility will incorporate parking with other transportation services be used jointly by all of the institutions on the BNMC. The MMTS parking and related services will also be available for use by the public.

1.4 Purpose and Need

Background

In 2005 the *Commission on Health Care Facilities in the 21st Century*, commonly called the Berger Commission, was formed to review and propose changes to the health care system in New York State. In 2007, the findings of this Commission became law. Among other findings, the Berger Commission mandated that Millard Fillmore Gates Circle Hospital (“MFGH”) close. The closing was meant to reduce the number of hospital beds in New York State and increase efficiency in the delivery of health services. Another finding of the Berger Commission was that Kaleida Health and the Erie County Medical Center (“ECMC”) should operate under a unified governance structure. The Berger Commission’s mandate was to “reduce duplication of services, enhance quality of care, maintain the provision of public goods, reduce costs, preserve employment and support an academic mission.” (Commission on Health Care Facilities in the 21st Century, 2006) The Berger Commission also found Kaleida and ECMC should “develop new infrastructure to locate comprehensive heart and vascular services”.

Regarding long term care, the Berger Commission determined that the 75 skilled nursing beds at MFGH should be relocated. These beds were slated to close due to their location within MFGH. The intent of the Berger Commission was for DeGraff Memorial Hospital to close as a hospital and refocus as a Skilled Nursing Facility and absorb the 75 beds from MFGH. However, since the publication of the Berger Commission recommendations, the Commissioner of Health has determined that it was in the community’s best interest to keep DeGraff open as a Hospital. Therefore, the beds are still required to be relocated from MFGH but are not able to combine with the beds at

DeGraff. This has created a need to relocate 75 long term care beds to a new or existing facility.

In response to the changes mandated by the Berger Commissions the following issues need to be resolved:

- Need to develop heart and vascular services;
- Need for additional emergency department services in Buffalo; and
- Relocation of 75 skilled nursing beds.

Global Vascular Institute

The Berger Commission also required ECMC and Kaleida Health to create a center for vascular care. Construction of a new facility specifically designed for vascular care, including patient intake, emergency department, surgical suites and recovery rooms which will allow for the best care for patients. This would include the construction of mixed use procedure rooms which will accommodate surgeons for multiple specialties to work together during one surgery. Creating a new and specialized building for these facilities will also provide greater benefits to the community and patients than inserting this care into an existing and possibly outdated medical center.

The Project sponsors could realize significant efficiencies by collocating the center for vascular services, with a new, updated emergency department. These efficiencies and benefits are further enhanced when located within the existing BGH facility and BNMC. Although not specifically directed by the Berger Commission, consolidation of these services was part of their vision and mission. Construction of a new GVI facility with a new state of the art emergency department connected to one of the largest medical centers in the region (BGH) would be a tremendous benefit to the level of healthcare available to residents of Western New York.

Skilled Nursing Facility

The mandated closing of MFGH combined with the continued operation of DeGraff creates a situation in which 75 skilled nursing beds need to be relocated within the Kaleida system.

In Buffalo, Kaleida also operates the Deaconess Skilled Nursing Facility (“Deaconess”). Deaconess currently has 242 hospital-based skilled nursing beds. In 2003, the New York State Department of Health determined that Deaconess should close due to space limitations, inefficient floor plan configurations and obsolete building systems (See Appendix A). It was therefore determined that the interests of the patients at Deaconess and MFGH would be best served by combining both facilities in a new state-of-the-art facility with fewer beds. Combining the two facilities will allow for the consolidation of the 317 current beds at two locations to 300 beds in one location. The consolidation, while not specifically identified by the Berger Commission, is consistent with its goals and objectives established with the closing of MFGH.

Consolidation of these beds on the BNMC is an optimal solution for Kaleida and the patients for several reasons. A new facility will allow for a redesign from a hospital setting to a more residential type setting. This setting will also provide more greenspace and allow residents and their visitors the opportunity to engage in more outdoor and neighborhood activities. A new building will also be more architecturally appealing for short and long-term care patients, which is more consistent with the modern level of care for similar facilities.

Kaleida will benefit from consolidation of the skilled nursing beds by improving the staff’s working environment, reducing duplication in the management of skilled nursing beds and operational benefits including consolidated staff support and patient support services.

Other benefits that will accrue to the community based on consolidation at the BNMC include:

- Strengthening the range of services offered on the campus;
- Proximity to acute care to better serve residents of the SNF;
- Providing jobs to local residents; and
- Providing additional commerce to the local businesses.

These anticipated benefits of the SNF will reinforce the role of the BNMC as a regional economic development engine and a center for clinical care, research, education and entrepreneurship in Western New York.

Medical Office Building

Ciminelli Development proposes to build a medical office building of up to 300,000 square feet to be owned and managed by Ciminelli Development Company, Inc.

Currently on the BNMC there is very little commercial/medical office space that is available for lease. In addition, many of the biomedical and life sciences researchers located on the campus are currently using valuable lab space as office space, rather than for its intended use. Without available office and medical space, the ability of physicians and related professionals to locate on the medical campus is impaired affecting both the quality of medical care for the region as well as the innovativeness and economic development effectiveness of the BNMC.

By locating additional physician offices on the BNMC, patients would have increased access to additional diagnostic tools and support services. Additionally, physicians will be better able to coordinate care for patients requiring hospitalization due to the MOB's physical proximity to BGH and the GVI.

The BNMC as a regional economic development engine is also impaired by the shortage of medical/commercial office space. Replacing the currently undeveloped surface lots with a privately developed mid-rise structure will increase tax revenues.

Another economic development goal of the BNMC is to promote entrepreneurship by facilitating the collaboration of research and clinical care to pioneer innovations in treatment and medicine. The goal is that some of these innovations will be commercialized and allow emerging biomedical and life science companies to grow. However, the lack of available space on the BNMC for this type of collaboration limits the economic development potential of the campus.

The current proposed programming of the building would also allow for some ancillary service businesses on the ground level such as a bank branch, eating establishments, a pharmacy, a fitness center and other healthcare related retail. These spaces are likely to be filled by service type businesses that will be accessible to the entire campus. The provision of additional services on the campus will increase the marketability of both the newly constructed office space and the entire BNMC. This may in-turn create the working environment desired by companies that would consider locating in the BNMC.

Multi-Modal Transportation Structure

As the BNMC becomes more of a destination for regional health care and research, the need to provide improved parking and transportation services for employees, patients and visitors, increases. Currently there is a shortage of parking on the BNMC as evidenced by the actions of one of the BNMC institutions. One institution has leased off-site parking and is shuttling employees to and from work. Though this is a good use of excess parking in other areas, if this parking shortage continues, the ability of the campus to attract and retain employees and businesses will be impaired.

An ongoing parking study by Howard Stein-Parking Associates and Walker Parking Consultants identified 6,394 parking spaces on the campus as a whole. Of this 2,325 spaces are located in the BNMC – North End. At peak occupancy 78% of these spaces are filled. However, the occupancy of the lots is as high as 160%, which is accomplished by having a parking attendant stack cars. This may indicate that additional parking is needed in this area to service the demands of current employees, patients and visitors as well as the future demand from the construction of the GVI and MOB.

1.5 Project Descriptions

GVI

The GVI will be designed to facilitate the development of a world-class heart and vascular treatment and research center through collaborative spaces and shared medical facilities. The GVI will be operated by Kaleida Health, and partial occupied by UB. The UB portion of the GVI will house educational space for the University at Buffalo School of Medicine and Biomedical Sciences, as well as research and life sciences technology incubator facilities. The GVI will be a regional center for the heart, neuro and related vascular system. The building will be no more than 600,000 sq. ft. and will house an emergency department and treatment, research and incubator space that focuses on the heart, neuro and related vascular system.

Specific design elements of the GVI that will enhance vascular care include new mixed use procedure rooms that will allow for specialists from multiple specialties to work together during one surgery. The facility will also house:

- a chest pain center;
- non invasive diagnostics, imaging, patient services and extended recovery services;
- invasive services including catheterization and mixed use procedure rooms, critical care beds, procedure support and physician support services;
- patient and family wellness education;
- translational research facilities; and
- educational/research facilities.

The GVI must be physically linked to BGH (See Figure 1.5-1 Proposed Projects Locations) as it will house the emergency department that will serve the GVI and BGH. Therefore the GVI will be built adjacent to BGH along Ellicott and Goodrich Streets.

This location will require the abandonment of this portion of Goodrich Street (Ellicott to Michigan) by the City of Buffalo and the demolition of the building located at the northeast corner of Ellicott and Goodrich Streets. This building is owned by Kaleida Health and currently houses the Community Mental Health Center (“CMHC”). As currently proposed, the GVI will have up to a 50,000 sq. ft. footprint and up to 15 stories. The exact dimensions will not be known until the final design.

SNF

The SNF will be no more than 200,000 sq. ft. and an estimated 75 parking spaces. The preferred location for the facility is the block bound by Michigan Avenue, East North Street, Maple Street and High Street.

The facility will be designed to accommodate 300 patient beds; 200 for long term care, 40 for memory care, 30 for sub-acute care, 20 for pediatrics and 10 for ventilator residents. The facility will also have support service including kitchen and dietary areas, personal laundry and physical and occupational areas.

The building design splits the structure into what will appear to be four connected, four-story buildings. This design reduces the massing to minimize the potential negative impacts on the residential character of the community. The design will also allow for the building to house four 20-bed nursing clusters per floor, the maximum size of unit that will adhere to New York State Department of Health Guidelines. Additionally, the design creates exterior greenspace in the form of courtyards on every floor that will both serve the residents, visitors and employees as well as enhance the environmental quality of the immediate and surrounding area. The courtyards will also provide an abundance of natural light into the building.

MOB

Ciminelli Development Corporation will construct and operate the MOB on the parcel directly across from the BGH (bound by Main, Ellicott, Goodrich and High Streets). Currently, the block is predominately used as parking, though there is a one story

building at the corner of Main and High Streets, which houses the Physicians Imaging Center.

The building will be a maximum of 300,000 sq. ft. and up to two stories of below ground parking may be included. The structure will be no taller than 10 stories, excluding the parking. The first three floors of the building will be larger than the upper floors. This will create a tower on a larger pedestal. The first floors will include street-level connections to the existing City road network, retail/service amenities, medical office space, laboratory facilities and out-patient care facilities. The upper floors will provide for medical office space and outpatient care facilities.

An overhead pedestrian bridge is planned to connect the MOB to the GVI. The bridge will be up to 40 feet wide and up to two stories high. Additional pedestrian bridges may be attached to adjacent parking facilities.

MMTS

Six locations within the BNMC – North End are being considered for the MMTS. The sites being considered include:

- the southwest corner of Goodrich and Ellicott Streets;
- the southwest corner of East North Street and Michigan Avenue;
- the lot located between Carlton and High Streets adjacent to the Buffalo Medical Group Building;
- the southwest corner of East North and Ellicott Streets;
- expansion of the current City of Buffalo parking ramp located at the northwest corner of Goodrich and Ellicott Streets; and
- the northwest corner of High Street and Michigan Avenue are all under consideration.

A preferred alternative location has not been selected.

Regardless of the site selected, the MMTS will be built to accommodate 1,200 to 1,600 cars. To take best advantage of the space available, the footprint and height will be determined after the site is selected. Depending on site characteristics and related costs, below-grade parking alternatives are also being considered.

While the design of the structure is currently unknown, the BNMC will make all practicable efforts to create a visually attractive and environmentally friendly facility. One of the main design criteria of the MMTS will be to minimize the visual impact to the BNMC.

1.6 Summary of Permits and Approvals

The Projects may require several different permits or approvals from various State or Local Agencies. The Project Sponsors have reviewed their proposed operations and have identified the potential permits or approvals which may be required for the Projects. The following summary identifies those potential permits or approvals which may be necessary to facilitate the construction or operation of the facilities.

1.6.1 State

New York State Office of Alcoholism and Substance Abuse Services

- Chemical Dependence Certification Application – The CMHC services that are licensed by the New York State Office of Alcohol and Substance Abuse Services (“NYSOASAS”) require approval through Chemical Dependence Certification Application. Part 810 of the NYSOASAS regulations requires that the relocation of any existing service must be reviewed prior to approval (14 NYCRR §810.6(d)). Since the GVI Project will require the relocation of the existing authorized services at the CMHC, the NYSOASAS must approve of the move. An application has been submitted for Kaleida Health’s addiction outpatient clinic relocation.

New York State Office of Mental Health

- Prior Approval Review - The relocation of CMHC services that are licensed by the New York State Office of Mental Health (“NYSOMH”) requires approval through Prior Approval Review (PAR) application. Part 551 of the NYSOMH regulations requires that the relocation of existing services within an area requires the prior approval of the NYSOMH (14 NYCRR §551.6(d)(3)(i)). Since the GVI Project will require the relocation of the existing services at the CMHC, the NYSOMH must approve the move. An application has been submitted for each Kaleida Health program license that will be relocated: outpatient clinic, continuing day treatment and partial hospitalization.

New York State Department of Health

The Projects require multiple approvals from the New York State Department of Health (“NYSDOH”) through Certificate of Need (“CON”) Applications.

- Construction of the GVI, Conversion of Inpatient Beds - NYSDOH approval of the construction of the GVI and conversion of inpatient beds must be secured through an Administrative Review CON application. While typically, a project of this magnitude/cost would require a Full Review CON, the Commission on Health Care Facilities in the 21st Century Enabling Legislation Section 9(a)(iii) allows for the expedited administrative approval by the New York State Commissioner of Health. The construction of the GVI and associated bed conversion is consistent with the Berger Commission Recommendation to “develop new infrastructure in which to locate comprehensive heart and vascular services.”, and is therefore eligible for an administrative review CON (Commission on Health Care Facilities in the 21st Century, 2006). An Administrative Review CON has been submitted to the NYSDOH for the construction of the GVI and the conversion and addition of inpatient beds.
- Construction of the 300 Bed SNF, Conversion of Beds - NYSDOH approval of the construction of the new 300 bed SNF and conversion of beds must be secured

through a Full Review CON application. New York State Hospital Code Part 710 requires the approval of the NYSDOH when projects exceed \$10,000,000 (10 NYCRR §710.1(C)(2)(i)(c)). A Full Review CON is required for the SNF and conversion of beds since the total project costs will exceed the abovementioned threshold. A Full Review CON has been submitted to the NYSDOH for the construction of the new residential health care facility and associated conversion of beds.

- CMHC Relocation - NYSDOH approval of the relocation of CMHC services must be secured through a Limited Review CON application. New York State Hospital Code Part 710 also requires a limited architectural and engineering review by the NYSDOH prior to licensing (10 NYCRR §710.1(c)(5)). The purpose of this approval is to ensure that the architectural and engineering elements of the new facility are appropriate. A Limited Review CON is required as the new location will require the approval of the NYSDOH Bureau of Architectural and Engineering Facility Planning. A Limited Review CON has been submitted to the NYSDOH for the relocation of CMHC services.
- License for the Use of Radioactive Materials – It is anticipated that radioactive materials and equipment will be used for the diagnosis and treatment of patients, and research activities being conducted within the GVI and/or MOB. Pursuant to §225 of the Public Health Law and 10 NYCRR Part 16, the NYSDOH has established a licensing program for the use of radioactive materials in healthcare facilities. This program requires certain users of radioactive materials to obtain a license from the NYSDOH prior to using the materials in their operations. Since it is anticipated that radioactive materials will be used in the GVI and/or MOB, the users will be required to obtain radioactive material licenses from the NYSDOH.

New York State Department of Environmental Conservation

The Projects may require several approvals from the New York State Department of Environmental Conservation (“NYSDEC”). In certain circumstances, the Projects may also require modification of existing permits. The following is a brief summary of the potential permits or approvals which may be needed from the NYSDEC for the Projects:

- Stormwater Discharge Permit Associated with Construction Activities –Section 402 of the Clean Water Act (“CWA”) and, by extension, the New York State Pollutant Discharge Elimination System (“SPDES”) (N.Y. Environmental Conservation Law (“ECL”), Article 17, Title 8; 6 NYCRR Part 750) requires that construction projects which disturb more than 1 acre of land are required to obtain a discharge permit. Since the Projects will collectively exceed this 1 acre threshold, a SPDES General Construction Stormwater Permit (GP-0-08-001) will be required for the North End Development. This permit requires the implementation of certain design and construction practices which help prevent the discharge of pollutants from construction sites to waters of the United States.
- New York State Facility Air Permit – The Federal Clean Air Act (“CAA”), 42 U.S.C. §7401 et. seq. and, by extension, the New York State Air Pollution Control Act (N.Y. ECL, Article 19, Title 5; 6 NYCRR Part 201) requires that facilities which emit certain levels of pollutants obtain a permit for their discharges. The Steam Plant which services BGH will be adapted to service the GVI as well. Currently, the Steam Plant is considered a “Minor Source” under the CAA and thus operates pursuant to a New York State Facility Permit (Permit Id. #:9-1402-00089/00014). A copy of the State Facility Permit is included in Appendix B. Because of the anticipated need to increase the Steam Plant’s output to accommodate the needs of the GVI, the existing State Facility Permit will need to be modified to reflect the increase in emissions. However, it is not anticipated that the increased emission levels from the Steam Plant will exceed the “Minor Source” thresholds, requiring a Title V Facility Permit.

- Petroleum Bulk Storage Facility Registration – The New York State Oil Spill Prevention, Control and Compensation Act (N.Y. Navigation Law, Article 12, Part 2; 6 NYCRR Part 612) requires that facilities with a combined petroleum storage capacity of over 1,100 gallons must be registered with the NYSDEC. Currently, there are six petroleum storage tanks at BGH totaling 74,250 gallons, thus BGH was required to register these tanks with the NYSDEC (PBS Reg. # 9-451320). A copy of the PBS Registration is included in Appendix B. A 20,000 gallon underground storage tank serves the emergency backup generators. It may be necessary to add or modify the existing generators to provide adequate power for the GVI in the event of a power outage. This may require additional fuel storage capacity. If so, the PBS Registration will be modified to reflect any additional storage capacity added at the site.

1.6.2 Local

City of Buffalo

The City of Buffalo will have jurisdiction over many aspects of the Projects. The City of Buffalo will have authority over approvals ranging from zoning to construction. The following summarizes the potential approvals which may be required from the City of Buffalo for the various Projects:

- City of Buffalo Planning Board (“Planning Board”) - Site Plan Approval – Section 511-138 of the Charter and Code of the City of Buffalo (“Code”) requires that all new construction in excess of \$100,000 or 50,000 sq. ft. in area requires Site Plan Approval from the Planning Board. Since all of the Projects will exceed these thresholds, each Project will require Site Plan approval from the Planning Board. (*See also*, N.Y. Gen. City Law §27-a).
- City of Buffalo Zoning Board of Appeals (“ZBA”) – Area Variances – At this time, no specific variances from the Code have been identified. However, it is anticipated that the Projects may require certain variances from bulk requirements (height, setbacks and parking) of the Code. Section 511-125 of the Code vests the

- ZBA with the authority to grant area variances where appropriate. (*See also*, N.Y. Gen. City Law §81-b). If any of the Projects as designed do not comply with the bulk requirements of the Code, variances will be required from the ZBA.
- City of Buffalo Common Council (“Common Council”) - Rezoning – A portion of the Maple Street site for the SNF is currently zoned R-2 which does not permit long-term care facilities as-of-right. However, the majority of this potential site is zoned C-1 which would permit the facility as-of-right. To facilitate the SNF as proposed would therefore require a rezoning of those portions of this site which are currently zoned R-2. Pursuant to §511-126 of the Code, the City of Buffalo Common Council is vested with the authority to alter the zoning classification of parcels. If the Maple Street site is ultimately chosen for the SNF, a rezoning of the R-2 parcels to C-1 will be required. (*See also*, N.Y. Gen. City Law §83).
 - City of Buffalo Preservation Board (“Preservation Board”) – Demolition Permits – The City of Buffalo has established a policy requiring all demolition permits to be reviewed by the Preservation Board. The GVI, and some potential sites for the MMTS, will require the demolition of existing structures thereon. Pursuant to §337-16 et.seq. of the Code, the Preservation Board must evaluate the existing structures and determine what, if any, impact the demolition may have on a historic structure, landmark or historic district. Since there are several structures which may require demolition to facilitate the GVI and the MMTS, a determination of the Preservation Board must be obtained prior to demolishing those structures. As such, Preservation Board consultation and/or approval will be necessary prior to demolishing any structures.
 - City of Buffalo Department of Permits and Inspection Services (“Permits and Inspections”) – Building/Demolition Permits – Pursuant to §103 et seq. of the Code, no construction or demolition can take place without the approval of Permits and Inspections. Permits and Inspections is responsible for ensuring that the construction or demolition will be conducted according to applicable rules and regulations and is consistent with any other approvals granted by the City of

Buffalo. Permits and Inspections is also ultimately responsible for issuing Certificates of Occupancy which allow the buildings to be occupied as planned. This process also involves periodic inspections and permits during the construction process. All of the Projects will require the approval of Permits and Inspections at various stages of construction.

- City of Buffalo Department of Public Works – Water Supply Connection Permit – Pursuant to Chapter 491 of the Code, all water supply connections are subject to a permit from the Department of Public Works. Each of the facilities will be separately tied to the City-owned system and therefore will require a separate permit from the Department of Public Works.

Buffalo Sewer Authority

- Buffalo Pollution Discharge Elimination System Permit - The Buffalo Sewer Authority (“BSA”) is vested with the authority to establish, operate and maintain sewer systems within the City of Buffalo (N.Y. Pub. Auth. Law, Article 5, Title 8). The BSA requires that all industrial users obtain a Buffalo Pollution Discharge Elimination System (“BPDES”) Permit prior to discharging wastewater to the BSA system (BSA Reg. §10075.6). While at this time it is too early to determine the exact nature of the sewage discharges from the facilities, the GVI, SNF and portions of the MOB will likely contain discharges which are regulated by the BSA (BSA Reg. § 10075.1). As such, if any of the facilities will discharge an “industrial waste” as defined in BSA Reg. §10075.7, a BPDES permit will be required.

1.7 Summary of Construction Timelines

It is expected that the construction of these projects will occur simultaneously and will require coordination of efforts by all parties involved. This simultaneous construction assumption constitutes the worst case scenario for short-term environmental effects.

GVI

Site work for the GVI will begin January 2009. This will begin with the demolition and relocation of the CMHC. Partial occupancy of the building is expected in August 2011 with complete build out and occupancy expected in January 2012.

SNF

Site work for the SNF is scheduled to begin March 2009. Completion and occupancy of the building is expected in May 2010.

MOB

Site work for the MOB is scheduled to begin in March 2009. Completion and occupancy is expected in January 2011.

MMTS

Site work for the MMTS is scheduled to begin in September 2009. Completion is expected in April 2011.

2.0 Environmental Impact Assessment

2.1 Land Use and Zoning

Setting

Planning Framework

In 2005, the City of Buffalo (“City”) adopted the *Queen City in the 21st Century*, as its comprehensive plan. The plan requires that the City fix the basic components of its built and natural environments while also building on the strengths, including the health care and medical research potential of the BNMC. The BNMC is also highlighted in the *Queen City Hub: A Regional Action Plan for Downtown Buffalo* as one of the five priority investment areas for downtown Buffalo.

The BNMC – North End is also governed by two urban renewal plans. The Oak Street Urban Renewal Area and the Fruit Belt Urban Renewal Area. The Fruit Belt Urban Renewal Area covers the block bordered by High Street, Michigan Avenue, East North Street and Maple Street (see Figure 2.1-1). The goals Fruit Belt Urban Renewal Plan are to: eliminate blighting conditions, upgrade community facilities, reinforce the affordable housing and encourage sound urban design. Residential uses and neighborhood commercial uses are specifically allowed in the area.

The rest of the BNMC – North End is governed by the Oak Street Urban Renewal Plan. The stated goals of the Oak Street Urban Renewal Plan are to “foster the renewal and redevelopment of an area housing key hospital and related medical service, research and educational resources of the community.” (Oak Street Urban Renewal Plan) Hospital and medical services are specifically permitted within this area.

Existing Zoning

The BNMC – North End has a number of zoning districts. The zoning districts include:

- R-3 Dwelling District;

- R-4 Dwelling District;
- R-5 Dwelling District;
- C-1 Neighborhood Business District; and
- C-M General Commercial District.

Existing Land Use

The BNMC – North End is an approximately 31.76 acre site bound by Main, East North, Maple and High Streets. The current land use in the area is predominately health care and parking. The blocks bound by Ellicott Street, East North Street, Michigan Avenue and High Street are controlled by Kaleida Health. The facilities on these blocks are BGH, the CMHC, parking and the steam power plant for Kaleida.

On the block bound by Ellicott, High, Goodrich and Main Streets, there is one structure that is used for the Physicians Imaging Center for Western New York. The rest of the block is used as parking. The block just north of this is bound by Goodrich, Main, East North and Ellicott Streets. This block has three structures: the City of Buffalo parking ramp; a one story building that houses a pharmacy and medical supply stores; and a multi-story building that houses the University at Buffalo Research Institute on Addictions. The block bordered by High, Maple, East North and Michigan is predominately vacant. There are six houses on this block, a parking lot and an abandoned gas station.

Impacts

Planning Framework

The construction and operation of all of the facilities is in compliance with the City of Buffalo Comprehensive Plan. In particular, the enhancement of the BNMC with additional services and the strengthening of BGH helps meet the goal of the Comprehensive Plan of building on the strength of the BNMC.

The construction and operation of the GVI, MOB and MMTS are also in compliance with the Oak Street Urban Renewal Plan. The goal of the plan is to enhance the medical service industry available in the area. The GVI and MOB will directly adhere to this goal while the MMTS will serve as an ancillary development in support of the MOB and GVI.

Though not specifically allowed by the Fruit Belt Urban Renewal Plan, the SNF will strengthen the residential conditions of the area. The SNF will replace six residential units on the block bound by Maple Street and Michigan Avenue. It will also remove the abandoned gas station. The Fruit Belt will benefit by the removal of a sparsely populated block and the construction of a new high quality building that will act as a visual buffer between the larger BNMC facilities and the adjacent neighborhood to the east. The new building will also be designed to look like four smaller residential structures. The displaced residents are likely to look to the adjacent neighborhood for housing which will help to reinforce the neighborhood and housing in the adjacent area.

Zoning

The only facility that may require a zoning change is the SNF. The block slated at the preferred site is currently zoned R-2 and will need to be rezoned to C-1 to allow the SNF.

This would not be a significant adverse impact.

Land Use

The MOB will displace a surface parking lot or require the demolition of buildings less than 50 years old, and replace it with up to two floors of below-ground parking and an office building. This is a positive impact of the MOB.

The MMTS will be built on existing parking lots or require the demolition of buildings. This increase in density from surface to structured parking will make better use of the limited land available on the BNMC. This is, therefore, a beneficial impact of the MMTS.

The SNF may displace six residential structures and 22 vacant lots and replace them with a commercial structure. The SNF would not negatively impact the surrounding community since there are already a number of institutional and commercial uses within or adjacent to the area (including a school, an armory and the BNMC with ancillary parking facilities).

The construction of the GVI will have two specific land use impacts, the closure of Goodrich Street (between Ellicott and Michigan) and the demolition and relocation of the CMHC. The closure of Goodrich Street is discussed in Section 2.2 - Transportation. The closure is necessary to physically connect BGH and the GVI to allow for an emergency department to serve both facilities.

The need to connect the GVI and BGH will also require the demolition of the structure located at Ellicott and Goodrich Streets which currently houses the CMHC. This facility will therefore need to be relocated. To best serve the patients of this clinic, the facility needs to be relocated in proximity to the current location. The current proposal is to lease a soon to be renovated building on Main Street near the intersection of East North Street for this clinic. This would represent a relocation of the facility within 750 feet to the west. This will allow the CMHC to continue to serve clients in proximity to the existing location.

Mitigation

The CMHC should be located on, or adjacent to the BNMC to allow for a continuation of care for patients. The relocation of the facility should be no more than 750 feet from its current facility to maintain its current service area for its existing clients.

The SNF should be constructed as a “transitional” building, employing building design compatible with the adjacent residential area including looking like four smaller residential structures of four stories each.

As there are no other significant adverse impacts no additional mitigation is required.

2.2 Transportation and Parking

2.2.1 Transportation

Setting

Ellicott Street is the main spine of the BNMC. The BNMC is bordered by Main Street on the west; Michigan Avenue on the east; Goodell Street to the south; and East North Street to the north. Traffic primarily enters the BNMC from Route 33 via Goodell Street and I-190 via Elm Street. Niagara Frontier Transportation Authority (“NFTA”) provides public transportation into the BNMC. Multiple bus stops are located throughout the BNMC. Additionally, the NFTA provides light rail service to Allen-Hospital Station.

However, vehicular traffic is anticipated to be the most impacted mode of transportation. C&S Companies completed a Traffic Impact Study (“TIS”) that both documented existing conditions and projected impacts from the proposed Projects.

The study area for the TIS, includes all of the intersections and roadways within the BNMC as well as a number of surrounding intersections. As required by the New York State Department of Transportation (NYSDOT), the study area includes all intersections anticipated to see an increase of 100 or more peak hour entering vehicles. The study area includes 52 intersections and is generally bound by Main Street to the west, Best Street to the north, Michigan Avenue to the east and Tupper Street to the South. South of Tupper Street the study area extends along Elm and North Oak streets to Swan Street. The conditions and impacts are presented in this section.

Existing Conditions

The existing conditions analysis is based on traffic counts conducted in May, June and September of 2008. Data collection focused on the peak travel periods from 7:00 to 10:00 a.m. and 3:00 to 6:00 p.m. Individual intersection peak volumes were used in the analysis.

The Level of Service (“LOS”) for signalized intersections is defined in terms of delay. Delay is a measure of driver discomfort, frustration, fuel consumption, and lost travel time. Specifically, LOS criteria are stated in terms of the control delay per vehicle for a 15 minute analysis period and range from A to F. A LOS A is representative of a movement that is free flowing with minimal delay, while a LOS F generally represents long delays. The LOS for unsignalized intersections is also defined in terms of control delay. Unsignalized intersection at or approaching LOS F is obtained when insufficient gaps exist in the opposing traffic for turning vehicles to pass through safely. In general, a LOS D or better is considered acceptable in urban environments.

Each movement at every study intersection currently operates at an acceptable level of service (LOS D or better) except for the following:

Existing AM

- Elm Street & Swan Street: LOS C (30.0)
 - Swan WB: LOS E (58.2)
- Main Street & Goodell Street: LOS C (22.7)
 - Main NB: LOS F (83.3)

Existing PM

- Michigan Avenue & Goodell Street: LOS E (73.0)
 - Michigan SB: LOS F (145.5)
- Goodell Street & Washington Street: LOS C (33.0)
 - Washington NB: LOS F (84.0)

Impacts

The TIS was conducted to evaluate the potential transportation effects associated with the BNMC- North End Development. The TIS is included as Appendix C. The TIS analyzed the GVI and the associated closing of Goodrich Street; the MOB; the SNF; and five proposed MMTS locations. The TIS analyzed three scenarios as discussed below.

No Build Scenario

The proposed Projects are expected to be completed by 2013. The background traffic conditions were estimated by applying a background growth rate of 1% per year and incorporating changes in traffic volume associated with two city projects: the Allen

Street extension from Main Street to Ellicott Street and the conversion of Ellicott Street to a two-way roadway from Goodell Street to North Street.

Based on the 2013 no-build conditions analysis, each movement at every study intersection is expected to operate at an acceptable level of service (LOS D or better) except for the movements previously noted in the existing conditions analysis:

No-Build AM

- Elm Street & Swan Street: LOS D (44.9)
 - Swan WB: LOS E (65.5)
- Main Street & Goodell Street: LOS C (25.9)
 - Main NB: LOS F (100.9)

No-Build PM

- Michigan Avenue & Goodell Street: LOS C (30.4)
 - Michigan SB: LOS E (59.9)
- Goodell Street & Washington Street: LOS C (27.7)
 - Washington NB: LOS E (65.9)

Due to the redistribution of southbound traffic to Ellicott Street, the LOS for the southbound Michigan Avenue approach at Goodell Street during the PM peak hour improves to a LOS E with 59.9 seconds of delay (85.6 second improvement over existing conditions). For the same reason, the northbound Washington Street approach at Goodell Street during the PM peak improves to a LOS E with 65.9 seconds of delay (18.1 second improvement over existing conditions).

Build Scenarios

The number of total person trips generated by the BNMC - North End Projects was estimated using the Institute of Transportation Engineers Trip Generation Manual 7th Edition. This estimate was then adjusted for a 77% auto mode share which reflects a combination of drive alone and carpool use. This mode share is for the commute into the Buffalo Metro Area based on the 2000 Census data. The total new vehicle entering and exiting trips are shown below:

AM Peak Hour		PM Peak Hour	
Entering	Exiting	Entering	Exiting
850	275	415	1055

Since the final location of the proposed parking structure has not been determined, two different future scenario distributions are analyzed in this study:

Future Scenario #1 places the parking structure at Site B on Ellicott Street between Goodrich Street and High Street. It is assumed that both access and egress will be provided on High Street and on Ellicott Street. This is also the proposed location of the MOB. Sites I and J contain slight variations on scenario #1 since access to both of these locations is assumed to be on Ellicott Street in close proximity to the assumed access for the Site B location.

Future Scenario #2 places the parking structure at Site F (on Michigan Avenue between Goodrich Street and High Street) or Site G (on Michigan Avenue between Goodrich Street and North Street). It is assumed that access and egress for either site will be located where Goodrich Street currently intersects Michigan Avenue.

The results of the Future Scenario #1 operations indicate the following approaches and intersections operating at an unacceptable LOS:

Future Scenario #1 AM Peak Hour

- Carlton Street & Ellicott Street (unsignalized)
 - Ellicott NB: LOS f (197.5)
- Structure Access & Ellicott Street (unsignalized)
 - Access EB left/right: LOS e (42.2)
- Ellicott Street & High Street: LOS D (38.5)
 - Ellicott Street NB: LOS E (59.4)
- Main Street & Goodell Street: LOS C (26.1)*
 - Main NB: LOS F (100.9)
- Elm Street & Swan Street: LOS E (66.4)*
 - Swan WB: LOS E (65.5)
 - Elm NB thru: LOS E (75.8)

Future Scenario #1 PM Peak Hour

- Carlton Street & Ellicott Street (unsignalized)

- Ellicott NB: LOS e (44.6)
- Ellicott SB: LOS f (385.6)
- Allen Street & Ellicott Street (unsignalized)
 - Allen EB: LOS e (44.4)
- Virginia Street & Ellicott Street (unsignalized)
 - Virginia WB: LOS f (75.1)
- Structure Access & Ellicott Street (unsignalized)
 - Access EB: LOS f (126.0)
- Tupper Street & Ellicott Street: LOS F (145.5)
 - Ellicott SB: LOS F (395.9)
- Michigan Avenue & Goodell Street: LOS D (37.5)*
 - Michigan SB: LOS F (81.7)
- Washington Street & Goodell Street: LOS D (48.7)*
 - Washington NB: LOS F (127.6)
- Oak Street & Goodell Street: LOS D (46.4)
 - Oak SB: LOS F (123.3)
- Ellicott Street & High Street: LOS F (127.6)
 - Ellicott NB: LOS F (325.9)
 - Ellicott SB: LOS F (83.7)
- Ellicott Street & Goodell Street: LOS F (198.2)
 - Ellicott NB: LOS F (Err)
 - Ellicott SB: LOS F (151.3)

* indicates a movement/intersection that operates at an unacceptable LOS based on no-build conditions prior to future scenario conditions
err – accurate delay can not be calculated due to level of failure

If the parking structure is built on Site I, the operational results are the same for the peak hours as Scenario #1, except that the intersection of High Street and Ellicott Street operates at an acceptable LOS. For Site J, the unsignalized intersection at Goodrich Street and Ellicott Street is different from the rest of the scenario #1 results since the site is located just north of this intersection from Site B.

The results of the future scenario #2 operations indicate the following approaches and intersections operating at an unacceptable LOS:

Future Scenario #2 AM Peak Hour

- Virginia Street & Michigan Avenue: LOS F (125.6)
 - Michigan NB: LOS F (170.6)
- North Street & Michigan Avenue: LOS C (28.1)
 - North WB: LOS E (70.1)
- Elm Street & Swan Street: LOS E (66.4)*

- Swan WB: LOS E (65.5)
- Elm NB thru: LOS E (75.8)
- Main Street & Goodell Street: LOS C (25.9)*
 - Main NB: LOS F (100.9)

Future Scenario #2 PM Peak Hour

- Washington Street & Goodell Street: LOS D (48.6)*
 - Washington NB: LOS F (127.6)
- Oak Street & Goodell Street: LOS C (24.0)
 - Oak SB: LOS E (62.0)
- Ellicott Street & Tupper Street: LOS C (28.9)
 - Ellicott SB: LOS F (92.0)
- Michigan Avenue & Goodell Street: LOS F (173.5)*
 - Michigan SB: LOS F (347.6)
- Michigan Avenue & Carlton Street: LOS F (86.5)
 - Michigan SB: LOS F (139.2)

* indicates a movement/intersection that operates at an unacceptable LOS based on no-build conditions prior to future scenario conditions
err – accurate delay can not be calculated due to level of failure

Since most of the signals within the study area are pre-timed, the existing signal timings at the above-mentioned intersections will not be able to accommodate significant changes to the volumes in the future. This scenario results in several intersections having a poor LOS as a result of the MMTS at either Site F or G.

Mitigation

Under future scenario #1, the following mitigation measures are recommended:

- Add southbound through lane on Ellicott Street just north and south of High Street, that will require the loss of on-street parking south of High Street and a drop-off area north of High Street;
- Add southbound left-turn lane on Ellicott Street at the intersection with Oak Street, that will require the loss of on-street parking north of Oak Street;
- Provide dual left-turn lanes for southbound traffic on Ellicott Street at Tupper Street;
- Installation of a signal at Ellicott Street and Carlton Street; and

- Optimization of signal splits and/or cycle lengths at the following intersections:
 - Tupper Street & Ellicott Street;
 - High Street & Ellicott Street;
 - Ellicott Street & Goodell Street; and
 - Goodell Street & Oak Street (the recommended changes does not significantly affect signal coordination on Oak Street).

The poor LOS of the intersection of Elm Street and Swan Street cannot be mitigated. The long delays at this intersection were noted in the no-build conditions analysis for the AM peak hour without the addition of the North End Development traffic. The anticipated Project trips added to this intersection are a small share of the overall volumes, approximately 6%.

If the proposed MMTS is constructed on Site I, no additional mitigation measures are necessary and the mitigation noted at the intersection of High Street and Ellicott Street would not be necessary.

If the proposed MMTS is constructed on Site J, in addition to the mitigation measures noted for scenario #1, the stop signs should be removed for the Ellicott Street approaches to Goodrich Street.

Under future scenario #2, the following mitigation measures are recommended:

- Restripe and sign the SB Michigan approach to consist of a dedicated left-turn lane onto Cherry Street and exclusive through lane; and
- Optimization of signal splits and/or cycle lengths at the following intersections:
 - Virginia Street & Michigan Avenue;
 - North Street & Michigan Avenue;
 - Main Street & Goodell Street;
 - Washington Street & Goodell Street;
 - Goodell Street & Oak Street (the recommended changes does not significantly affect signal coordination on Oak Street);

- Tupper Street & Ellicott Street;
- Michigan Avenue & Goodell Street; and
- Michigan Avenue & Carlton Street.

With these improvements, the study area intersections will operate at acceptable LOS except at the intersection of Elm Street and Swan Street for both future scenarios, providing improved access and egress to the North End Development and the BNMC campus as a whole.

2.2.2 Parking

Setting

There are 2,325 off-street parking spaces on the BNMC – North End (See Figure 2.2-1). As shown in Table 2.2-1, the overall average utilization for these lots is 79% during the peak parking hour (1:00 p.m., weekdays.). There are 231 of on street parking spaces in the BNMC – North End. The utilization of these spaces is approximately 39% at peak parking hour. Generally, parking occupancy at 85% is considered optimal. When occupancy levels are greater than 85%, parking is perceived as a problem.

Approximately 23% of the trips to the BNMC are made by either transit, carpooling, walking or other forms of transportation than single occupancy vehicle. This indicates that 77% of visitors arrive by car and require parking.

While the on-street parking is under-utilized at 39%, the off-street utilization is high at 78% for the area. However, this off-street parking is not evenly distributed throughout the study area. Grey shading in the tables identifies locations where parking occupancy exceeds 85% and is considered to be at capacity. This data indicates that:

- Off-street parking is not the preferred option of visitors/users. This may be for many reasons including location of the parking relative to the destination and the expected duration of their stay (i.e greater than 2 hrs).
- These high-occupancy percentages may point to a need for the reallocation of parking resources or additions to the parking supply.

Table 2.2-1: Off-Street Parking Supply & Demand

LOT KEY	FACILITY OWNER	CAPACITY	MAX DEMAND	UTILIZATION RATE
COB-1	CITY OF BUFFALO	880	489	56%
KH-2	KALEIDA HEALTH	266	221	83%
KH-2A	KALEIDA HEALTH	46	18	39%
KH-5	KALEIDA HEALTH	60	71	118%
KH-6A	KALEIDA HEALTH	313	332	106%
KH-6B	KALEIDA HEALTH	161	157	98%
KH-4	KALEIDA HEALTH	176	281	160%
KH-4A	KALEIDA HEALTH	29	20	69%
BMG-2	BUFFALO MEDICAL GROUP	107	63	59%
MC-3	BUFFALO NIAGARA MEDICAL CENTER	63	25	40%
KH-1	KALEIDA HEALTH/LHI	80	55	69%
BMG-1	BNMC/BUFFALO MEDICAL GROUP	207	134	65%
	TOTALS	2325	1894	79%

Note: The 160% utilization rate indicated for lot KH-4 is due to a valet service and the double/triple stacking of vehicles in the parking lot.

Based on the available data, as presented in Table 2.2-1 above, there is an existing excess capacity of 431 spaces.

Impacts

With the construction of the GVI and MOB, there is a need to expand parking options to service their increased needs. Insufficient parking supply would inhibit the ability of the BNMC developments to function.

A proprietary parking demand model was developed for the BNMC by Walker Parking Consultants. The table 2.2-2 below provides demand ratios for the different types of proposed uses. Consistent with that model and the trip generation analysis, the estimated demand was reduced by 23% to account for trips by other modes including transit and carpooling. These demand numbers are estimated based on the likely programming for the proposed Projects.

Table 2.2-2: Future Parking Demand

PROPOSED PROJECT		LAND USE	SIZE (SF)	DEMAND RATIO (VEHICLES/1000 SF)	DEMAND (VEHICLES)
GVI	GVI	Clinical Care	300,500	3.50	1052
	UB/Incubator	Research	160,000	1.60	256
	UB Clinical Research	Outpatient	15,000	4.00	60
	UB Incubator	Office	40,000	2.00	80
	To be removed from BGH				
	ED	Clinical Care	10,400	3.50	-36
	Cardiac Angio	Clinical Care	17,000	3.50	-60
Medical Office Bldg	Outpatient		220,000	4.00	880
	Lab		40,000	0.75	30
	Retail		40,000	2.65	27
Kaleida Skilled Nursing Facility	Nursing Home	200,000	1.05	210	
CMHC *	Outpatient	16,800	4.00	67	
* Difference between existing (19,832 SF) and proposed (36,586 SF)					
PARKING DEMAND SUBTOTAL					2,566
MODE SHARE REDUCTION (23%)					590
INCREASE IN PARKING DEMAND					1,975

Mitigations

The total parking demand for the BNMC-North End will be 3,869 spaces. In order to reduce the impact from the increased parking demand, BNMC is proposing to construct the MMTS. Based on the 5 alternatives, the construction of 1,200 to 1,600 space MMTS will yield a net of 719 to 1,593 spaces. These additional spaces, in conjunction with the existing parking, will reduce the projected parking deficit for the BNMC-North End

In addition to MMTS, the BNMC will pursue balancing growth and sustainability. The BNMC may consider a Transportation Demand Management (“TDM”) Program. TDM is a collection of strategies to reduce vehicle trips and encourage alternative modes. Strategies should include:

- Financial incentives,
- Transit programs,

- Carpool programs,
- Car or bike sharing programs,
- Back-up programs (guaranteed ride home or occasional parking permits), and
- Education and promotion.

Therefore the combination of the MMTS and proposed TDM will effectively mitigate the impacts from the BNMC-North End developments

2.3 Utilities

Setting

The study area is well served with utilities. The City of Buffalo Division of Water provides water for domestic and fire-fighting needs. The smaller pipes were installed as early as 1870 through 1914, with larger pipes installed in 1973, 1979, 1994 and 2004 (see Appendix D). Available hydrant flow test data indicate an average static pressure of from 36 to 46 pounds per square inch (“psi”) at a residual flow rate of 850+- gallons per minute at 35 to 44 psi.

The gravity sanitary sewer system includes pipes that range in size from 10” to 24” in diameter. The City of Buffalo has “combined” sewers, meaning that they convey storm water and sanitary sewage in the same piping network to the City’s treatment plant. However, in this particular area of the City, there are parallel storm sewers into which roof runoff and parking area drainage will be directed.

Electric service to the area is provided by Niagara Mohawk.

Gas service is provided by National Fuel Gas Company. The present gas distribution system includes a 12” medium to high pressure gas main on East North Street.

Impacts

Each municipal or private provider was contacted to determine its respective utility capacity and ability to serve the proposed Projects. The results of these assessments are summarized below.

Water: The tallest office building will likely require a fire pump to serve the highest floors, but the available flow at ground level should be sufficient to serve the new development for domestic and fire-fighting needs.

Sanitary Sewer: Each new structure will have separate storm and sanitary sewer laterals. By separately connecting to the storm sewers, the Projects will reduce the stormwater flow burden on combined sewers. The gravity sanitary sewer system pipes are each of sufficient size to serve the MOB, SNF and GVI at the locations proposed.

Electric Service: The National Grid engineering department has determined that the service to the area has to be upgraded to meet the demands of the development.

Gas Service: This 12” medium to high pressure gas main on East North Street should be of sufficient capacity and pressure to serve the GVI and SNF. The MOB will likely require an extension of the higher pressure service from the 12” main south along Ellicott Street.

Mitigation

The Projects Sponsors should work with the City of Buffalo Division of Water to ensure the appropriate water pressure is available for each facility. Additionally, the buildings must be constructed to all applicable fire codes to ensure all floors have adequate fire protection.

Regarding electric service, the Projects Sponsors should work with National Grid to ensure the electric service is adequately upgraded for their needs.

Finally, Ciminelli Development should work with National Fuel Gas to extend the high pressure service south along Ellicott Street to service their building.

2.4 Visual and Aesthetic Resources

Setting

Existing Building Massing

Building massing generally refers to building scale, size and relationship to exterior spaces.

Building scale within the Study Area primarily consists of low-rise (1-4 stories) and mid-rise buildings (5-10 stories). Buffalo General Hospital is the exception at 17 stories. In general, building scale tends to increase as you move towards Ellicott Street, away from Main Street and Michigan Avenue. Appendix E, Exhibit 1 demonstrates varying scales within the Study Area.

Building size varies within the Study Area. The BGH has a much larger footprint and vertical scale than the other structures in the BNMC – North End. The large size can appear to dwarf surrounding structures; however, significantly varying facades on the eastern end of the hospital mitigates this effect. Appendix E, Exhibit 2 exemplifies the articulation of the larger structures within the Study Area.

Abundant vacant parcels and surface parking lots within the Study Area dominate the streetscape, particularly along Main Street and Michigan Avenue. Approximately 90% of the Study Area is either vacant or a surface parking lot. These expansive areas visually disturb the building massing of the Study Area. Vacant parcels dominate the space between Michigan Avenue and Maple Street, creating a sense of a deteriorating community. Surface parking lots located along Main Street and Michigan Avenue abut public sidewalks and disrupt the pedestrian experience. Appendix E, Exhibit 3 demonstrates the visual disruption caused by these spaces.

Building Styles and Materials

Architectural styles within the Study Area vary depending on use. In general, medical-related structures conform to various forms of Modern architecture. Building materials for these structures are generally restricted to concrete, glass and steel, brick and block and stone. Appendix E, Exhibit 4 is an example of the modern architecture found within the Study Area. In contrast, the residential structures within the Study Area are primarily of Colonial Revival, Italianate and Queen Anne styling; they are constructed with wood-frame or brick. Appendix E, Exhibit 5 demonstrates a typical residential unit within the Study Area.

Lighting

The Study Area produces a steady amount of light throughout the night. Existing lighting conditions are comprised primarily of interior and exterior building illumination, security lighting associated with open-air parking lots and pole-mounted lights along roadways. Much of the lighting is emitted from twenty-four hour medical facilities such as Buffalo General Hospital and Roswell Park Cancer Institute. Appendix E, Exhibit 6 was taken from Downtown Buffalo demonstrating typical nighttime lighting conditions at the Study Area.

When viewed from surrounding areas, existing nighttime lighting at the Study Area is generally at higher levels when compared to the surrounding areas, particularly the adjacent Fruit Belt neighborhood to the east.

Impacts

Viewpoints in the vicinity of the BMNC were chosen to analyze the visual impact of the proposed Project on aesthetic resources. These viewpoints consisted of areas available to the general public, such as public streets and sidewalks. The photographs taken in support of this assessment are included in Appendix E. The viewpoints chosen include the following:

- Allentown;

- The Fruit Belt; and
- City Honors;

The affected population, existing visual quality and impact of the proposed Project are discussed for each viewpoint. Existing visual quality is categorized as “high”, “moderate” or “low”. A “high” visual quality viewpoint would have dense urban development and high quality views with no deterioration; a “moderate” rating would have some deterioration or views of incompatible development; and a rating of “low” would demonstrate significant deterioration. The level of impact is rated as “positive”, “neutral” or “negative”. A “positive” impact would improve the visual quality of the area; a “neutral” impact would not impact the area; and a negative impact would adversely affect the visual quality of the area.

Allentown

Allentown is a neighborhood north of Goodell Street, south of East North Street, east of Orton Place and west of Main Street. Allentown was designated a Buffalo Local Preservation District in 1978 and listed on the National Register of Historic Places (“NRHP”) in 1980. The historic significance of the neighborhood is in its architecture, not in its setting or views of the surrounding locale. It is one of the oldest and largest residential historic districts in the United States and is therefore a potential aesthetic resource of statewide significance.

The viewpoints associated with the Allentown neighborhood include:

- Corner of Allen Street and North Pearl Street (Appendix E, Exhibit 7);
- Allen Street and Main Street (Appendix E, Exhibit 8);
- North Street and North Pearl Street (Appendix E, Exhibit 9);
- North Street and Main Street (Appendix E, Exhibit 10); and
- Carlton Street and Main Street (Appendix E, Exhibit 11).

All views were directed toward Buffalo General Hospital. The affected persons at these viewpoints include the residents of the Allentown neighborhood. The existing visual quality from these viewpoints is considered “moderate” for both its historic and modern urban development that has not significantly deteriorated.

In general, visibility of the proposed Projects will be limited within the Allentown neighborhood due to existing development and tree cover. However, visibility is prominent at the corner of Allen Street and Main Street, as development is sparse along Main Street between Goodrich Street and High Street. The impact of the proposed Project on Allentown is considered “neutral” as the visibility is limited.

The Fruit Belt

The Fruit Belt is a neighborhood centered by High Street and bordered by Jefferson Avenue to the east, Michigan Avenue to the west, Best Street to the north and the Kensington Expressway to the south. This neighborhood was chosen for its adjacency to the proposed Projects.

The viewpoints associated with the Fruit Belt neighborhood include:

- Corner of East North Street and Mulberry Street (Appendix E, Exhibit 12),
- Corner of High Street and Mulberry Street (Appendix E, Exhibits 13 and 14) and
- Corner of High Street and Michigan Avenue (Appendix E, Exhibit 15).

All views were directed toward the proposed Skill Nursing Facility and the BNMC. The affected population at these viewpoints includes the residents of the Fruit Belt neighborhood. The existing visual quality is considered “low” as existing development is sparse and at times deteriorating.

Visibility of the proposed Project from the Fruit Belt neighborhood will be prominent from Michigan Avenue and Maple Street. The SNF will be constructed between these streets along East North Street. The low-rise scale of the SNF will also buffer the

residents of the Fruit Belt from taller structures within the BNMC. Visibility will be limited from other areas within the neighborhood due to existing development and vegetation, as seen in Appendix E, Exhibits 12, 13 and 14.

However, from other locations within the Fruit Belt, one block past Maple, views of the BNMC are blocked by structures and trees. Views to the BNMC are available at some intersections and when travelling westward towards the campus along High or East North Streets.

The impact of the SNF is “positive”, as the structure will replace existing deteriorating structures, surface parking lots, an abandoned gas station and vacant parcels. The impact from the remaining BNMC – North End Projects are “neutral” as they will have limited visibility.

City Honors

City Honors is a NRHP listed site (Fosdick Masten High School) and therefore a potential aesthetic resource of statewide significance. The historic significance of the building is based on its Beaux Art architecture. The viewpoint associated with City Honors is located at the corner of Maple Street and East North Street. Two views were chosen, one looking toward the proposed Skilled Nursing Facility (Appendix E, Exhibit 16) and a second toward the BNMC (Appendix E, Exhibit 17). The affected persons at this viewpoint would be local residents as well as students, parents and faculty associated with the educational facility. City Honors is a test-based magnet school; students reside in various neighborhoods within the City of Buffalo. The existing visual quality from this viewpoint is considered “moderate” as it has historic features and modern urban development that has not significantly deteriorated.

Visibility of the proposed Project will be prominent at the chosen viewpoint, the SNF in particular. The impact of the proposed Project on City Honors, however, is considered “positive” as it will replace vacant and deteriorating structures with new aesthetically pleasing buildings.

Mitigation

In order to minimize the visual impact of the BNMC to the adjacent Fruit Belt neighborhood, the SNF should not be any higher than four stories. Additionally, massing of the SNF will be broken up in an effort to mitigate the visual impact of the proposed Project on the residential area to the east. The SNF will have a residential, pedestrian scale feel at street level and new greenspace to improve the aesthetic and environmental quality of the surrounding area.

Lighting schemes for the buildings should follow best practices for minimizing light migration off of the property while ensuring adequate lighting for safety. Downward-focused lights shall be utilized to reduce ambient light pollution for the GVI, MMTS, MOB and SNF.

2.5 Historic, Archaeological and Cultural Resources

Setting

Historic Buildings

There are no buildings or sites in the BNMC – North End that are historic landmarks as designated either as a City landmark or by listing on the NRHP.

There are a few sites adjacent to the North End that are listed on NRHP. In particular on the BNMC, but outside of the North End, is the Trico Building located at 817 Washington Street. Other nearby properties are Fosdick Masten Park High School (City Honors) at Masten and East North Streets; and the M. Wile and Company Factory located at 77 Goodell Street (Figure 2.5-1).

There are views of the BNMC from Fosdick Masten School. The Trico and M. Wile Buildings also have views of the BNMC as they are on or adjacent to the campus, however the views of the North End are limited.

There are two buildings in the BNMC – North End that are eligible for the NRHP. The buildings are located at 177 East North Street and 336 Maple Street. Both are located on the block bound by East North, Maple, High Streets and Michigan Avenue. Four properties on the adjacent block were identified as eligible for the NRHP (305 and 309 Maple Street and 195 and 204 High Street) (See Figure 2.5 -2).

Historic Districts

There is one historic district (Allentown Historic Preservation District) adjacent to the BNMC – North End. The district is listed both on the NRHP and local directories. The district extends from the West side of Main Street on the east to Orton Place on the west between North Street on the north and Virginia Place on the south (See Figure 2.5-1). With the exception of the Main Street corridor, this district has extremely limited views of the BNMC, due to the building massing and trees.

Archaeological

The BNMC – North End has been previously disturbed at almost all locations. In particular, at the High Street area there is approximately 10 feet of fill (See Section 2.6 Geology, Topography and Soils). While there is minimal chance that pre-historic finds will exist, there is a possibility of remnants of former urban developments that may be of historical significance.

Impacts

Indirect Impacts

Indirect impacts to the historic buildings or district could occur due to the construction of the buildings. As discussed in Section 2.4, the visual impact of the campus is mitigated by the topography of the area and the screening provided by the existing buildings and trees. Additionally, the existing buildings in the BNMC – North End are generally modern in design, as discussed in Section 2.4. Although the designs of the proposed buildings are not yet determined, they will likely be modern in design and therefore fit into the existing aesthetics of the campus.

The four potentially eligible properties (305 and 309 Maple Street and 195 and 204 High Street) will not be directly impacted by any of the construction. However, they may be indirectly impacted by the construction of the SNF. The facility would be constructed adjacent to these properties. Additionally, as the properties were determined by the New York State Office of Parks, Recreation and Historic Preservation (“SHPO”) for New York State to be eligible for listing on the NRHP based on the architectural character a change in the setting should not negatively impact the structures.

No significant adverse indirect impacts are anticipated to NRHP structures and districts.

Direct Impacts

As discussed in Section 1.4 (Purpose and Need), the design of the SNF that will best serve residents and provide for a low-rise structure more fitting with the adjacent neighborhood will require the demolition of two NRHP-eligible properties. Direct impacts to NRHP-eligible structures will occur due to the demolition of 177 East North Street and 336 Maple Street for the SNF. Demolishing these two structures has been determined by SHPO to have an “adverse effect”. (See Appendix F)

The facilities are on a block which was settled in the late 19th and early 20th centuries in a residential pattern of individual homes. The block formerly housed 48 houses generally constructed throughout the 1870s to 1890s. Due to lack of maintenance, condemnation and demolition for other purposes, only five of these houses remain on the block today. Unfortunately, the block has lost most of its historic character since approximately 88% of the turn-of-the-century structures have been demolished. The remainder of the block is now made of vacant lots, one recently-built home and a parking lot. Additionally, 336 Maple Street is deteriorated and has been significantly altered from its original condition by the addition of historically inappropriate materials, such as asbestos siding.

SHPO determined that although the area is archeologically sensitive the Archaeological Unit had no concern about developments on the area where the SNF may be situated (See Appendix F).

Mitigation

Indirect Impacts

To mitigate the indirect impacts to the other NRHP-eligible properties the SNF should be visually separated into four separate buildings to break up the massing and create a more residential feel for patients. The building, if constructed at the preferred site, should be limited to four stories to minimize the impact upon the visual character of the community.

Direct Impacts

To minimize for the direct impacts from the construction of the SNF the following mitigations will be undertaken in coordination with SHPO:

- Documentation of the two on-site NRHP-eligible structures; and
- Salvage of historic elements of the properties prior to demolition, to the extent practicable.

If any unanticipated archaeological finds are encountered during construction work will be halted and SHPO will be called. Work shall not restart at that location until cleared by SHPO.

2.6 Topography, Geology and Soils

Setting

The BNMC - North End is located on the Lower Great Lakes Physiographic province, on the lake plain of Lake Erie in Buffalo, New York. The lake plain is generally flat to slightly rolling, except where it is interrupted by the Onondaga Limestone subcrop, ancient beach ridges or end moraines associated with various glacial ice advances.

Ground elevations within the BNMC - North End range from approximately 665 feet along High Street to approximately 650 feet along East North Street, and is higher than the general area to both the north and south (USGS NED Dataset).

Overburden soils in the BNMC – North End consist primarily of fill material at the ground surface. Fill material varies in thickness from 2 – to 10 feet across the BNMC - North End and from driller's logs (Glynn Geotechnical Engineering, 1993 and McMahon and Mann, 1995), fill material is reportedly black to brown sand with varying amounts of gravel, bricks and slag.

Soil underlying the fill is comprised of interbedded sands and silts that are brown to olive - brown in color. A review of existing well logs from the BNMC - North End indicates that soil characteristics are highly variable both vertically and horizontally across the BNMC - North End. Overburden soils are underlain by the Onondaga Limestone (bedrock), which is at approximately 100 feet below ground surface, at an elevation of approximately 565 +/- feet. (Glynn Geotechnical Engineering, 1993 and McMahon and Mann, 1995).

Groundwater elevation measurements from existing wells north of High Street indicate that groundwater is approximately 20 to 30 feet below ground surface, or at an elevation of approximately 636 feet. Groundwater flow direction in this section of the BNMC – North End is reportedly to the north. (Glynn Geotechnical Engineering, 1993 and McMahon and Mann, 1995).

Impacts

Since the BNMC - North End is in an urban setting, there are no expected adverse impacts to site soils from the proposed construction. All Projects proposed for the BNMC – North End are expected to have subsurface foundations and likely occupied subsurface floors. Therefore, excavation will be required. However, overburden materials are approximately 100 feet in thickness; thus, blasting will not be required. Groundwater will not be used for drinking supply or process supply. Stormwater and waste water from the facilities will be discharged to the city's combined sewer system.

Groundwater is reportedly 20 to 30 feet below ground surface. Based on the proposed uses and developments, significant groundwater impacts are not expected.

Last, the BNMC - North End is in an urban setting; thus there is the potential to encounter pockets of contaminated fill, contaminated soils and/or contaminated groundwater as well as abandoned underground storage tanks during construction. Construction of the projects could have a positive impact with respect to delineation and remediation of historic environmental impacts to soils that are encountered in the BNMC - North End, as materials would be removed from the site and properly disposed.

Mitigation

Although no significant adverse impacts are anticipated, several best management practices should be employed during construction.

Given the nature of subsurface soils (primarily unconsolidated sands in the shallow subsurface), a soil management plan for excavation near existing structures will likely be required to assure structural integrity of existing building foundations is maintained.

If contaminated soils and/or groundwater are encountered during construction, the NYSDEC will be notified. Contaminated soils, if encountered, would require proper disposal at a NYSDEC landfill.

2.7 Neighborhood Character

Setting

Neighborhood character is a combination of the many factors that gives an area its distinctive personality. These components include land use, scale and type of development; historic features; and other physical or social characteristics that help define a community. Not all of these elements affect neighborhood character in all cases; as a neighborhood usually draws its distinctive character from a few determining elements.

The proposed Project is surrounded by three unique neighborhoods including: downtown Buffalo, the Fruit Belt and Allentown.

Downtown

The neighborhood south of the proposed Projects is downtown Buffalo. Specifically, all of the properties east of Main Street, west of Michigan Avenue, north of Genesee Street and south of Goodell Street. Development within this area is low-rise (1-4 stories) and of high-density. Land use within this portion of downtown Buffalo is primarily comprised of commercial and entertainment uses including: dining establishments, night clubs, bars, theaters and office space. Residential development, however, has seen a surge in recent years. Several hundred residential units with an average rent of over \$800 per month have been developed in this area since the year 2000; therefore, accurate population counts are not available. Architecture within this portion of downtown Buffalo is primarily comprised of a variety of styles including Beaux Arts Classical Revival, Italianate and Modern. The area between Main and Washington Streets is part of the Theatre Preservation District, which was designated a Buffalo Local Preservation District in 1983 and is eligible for inclusion in the NRHP. Further south of this neighborhood is the main business district of downtown with mid- and high rise buildings ranging from 10 to 36 stories.

Fruit Belt

The Fruit Belt is a neighborhood centered around High Street and bordered by Jefferson Avenue to the east, Michigan Avenue to the west, Best Street to the north and the Kensington Expressway to the south. Development within this area is low-rise and of medium-density. Land use within this neighborhood is primarily residential. According to the 2000 Census of Population and Housing, 94.5% of its 5,180 residents are minorities. The Fruit Belt takes its name from the large number of orchards planted by its first residents of German ethnicity. The names of the streets, including Peach, Grape, Orange and Lemon Streets, are a testament to the neighborhood's early development. The construction of the Kensington Expressway during the 1960's bisected the

neighborhood, severing its cohesion. The structures are primarily of cottage, Italianate, Colonial Revival and Queen Anne architectural styling.

Allentown

Allentown is a neighborhood north of Goodell Street, south of North Street, east of Orton Place and west of Main Street. Development is low-rise and of high-density. Land use is primarily residential, although the neighborhood does have two major commercial thoroughfares in Allen Street and Elmwood Avenue. Both Allen Street and Elmwood Avenue are known for their eateries, cafes, bars, antique stores, art galleries and curio shops. Allentown is known for its diverse population; 37.1% of Allentown's 3,745 residents are minorities according to the 2000 Census of Population and Housing. Structures within Allentown were primarily built during the late-nineteenth century and are considered to belong to picturesque eclecticism style, an amalgamation of different architectural fads and trends popular during the last half of the nineteenth century. Allentown was designated a Buffalo Local Preservation District in 1978 and listed on the NRHP in 1980. Allentown is one of the oldest and largest residential historic districts in the United States.

Impacts

No significant adverse impact on neighborhood character is anticipated from the construction and operation of the MOB, MMTS or GVI. Planned structures are consistent with use and scale of existing structures within the BNMC and as such, will not significantly alter visual characteristics within, or from downtown or Allentown (See Appendix E).

The construction of the SNF adjacent to residential structures in the Fruit Belt may have a negative impact, depending on the scale and massing of this facility. The SNF would represent a new development in a previously residential block. This development, depending on its final scale, may create a visually intrusive presence on the adjacent residential area. Additionally, the SNF development will require the removal of six houses, two of which are NRHP-eligible.

Mitigation

To reduce the adverse impact on the adjacent neighborhood, the final design of the SNF should be a low-rise (no more than 4-stories) structure. The structure should be designed with neighborhood aesthetics in mind, i.e. varying building massing, in order to provide a more residential feel on the interior and exterior. By using these design criteria, the SNF would serve as a transitional structure between the taller BNMC structures, both existing (Roswell Park, Center of Excellence and BGH) and proposed (GVI and MOB) and the Fruit Belt Neighborhood.

2.8 Socioeconomics

Changes made to the physical environment will have an effect on persons living near the proposed Projects. Because the BNMC – North End area is geographically limited and does not have many residents, it was determined that a larger study area should be analyzed. Therefore, the boundaries of the BNMC – North End is the Primary Study Area. To get a better sense of the surrounding community that would be impacted, a Secondary Study Area was determined to be the census tract in which the BNMC is situated. Physical impacts of the proposed Projects will affect the Primary Study Area, while socioeconomic concerns will impact the Secondary Study Area. Information associated with the County of Erie was provided as a baseline for the analysis.

Setting

The Primary Study Area is defined as US Census blocks 6002, 7000, 7001, 8005, 8006 and 8007, all within US Census tract 31. This area includes the properties bounded by Main, Maple, East North and High Streets.

The Secondary Study Area is defined as all of Census tract 31. Figure 2.8-1 illustrates the boundaries of both study areas.

Demographics

Total Population

The total population of the Primary Study Area is 17 (Census 2000). There are 3,274 people in the Secondary Study Area, while Erie County has 950,265 residents.

Racial Composition

The entire population residing within the Primary Study Area is ‘Black or African American alone’ (Census 2000). In comparison, 90.1% and 13.0% of the total populations of the Secondary Study Area and the County of Erie are ‘Black or African American alone’, respectively. Table 2.8-1 provides a summary of the racial composition in all study areas. Hispanic ethnicity is a separate data category from race and, therefore, should not be added to race totals.

Table 2.8-1: Racial Composition

Population Group	Primary Study Area	Percent of Total (%)	Secondary Study Area	Percent of Total (%)	Erie County	Percent of Total (%)
Total Population, All Races	17	100	3,274	100	950,265	100
White alone	0	0	195	6.0	780,942	82.2
Black or African American alone	17	100	2,976	90.9	123,529	13.0
American Indian or Alaska Native alone	0	0	12	0.4	5,755	0.6
Asian alone	0	0	1	0.0	13,835	1.5
Native Hawaiian and other Pacific Islander alone	0	0	0	0.0	223	0.0
Some Other Race alone	0	0	27	0.8	13,499	1.4
Two or More Races	0	0	63	1.9	12,482	1.3
Hispanic or Latino	3	17.6	80	2.4	31,054	3.4

Source: US Census Bureau, 2000

Households

There are six households (all family) located within the Primary Study Area; 1,361 households (762 family, 599 non-family) located within the Secondary Study Area; and 380,873 households (243,359 family, 137,514 non-family) located within the County of Erie (Census 2000). The median household income in the Secondary Study Area and the

County of Erie (in 1999 dollars) is \$13,864 and \$38,567, respectively. Household income data is not available for the Primary Study Area.

Poverty Status

Within the Secondary Study Area, 1,415 residents had incomes below the poverty level in 1999 (Census 2000). This is approximately 44.7% of the 3,165 persons for whom poverty status is determined. Data on poverty is not available for the Primary Study Area.

Housing

There are a total of eight housing units in the Primary Study Area; 1,775 housing units in the Secondary Study Area; and 415,868 housing units in the County of Erie (Census 2000). In the Primary Study Area; six or 75.0% of total housing units are either owner or renter-occupied. The remaining two or 25.0% of total housing units are classified as vacant. Table 2.8-2: Housing Characteristics provides a summary of housing characteristics in all study areas. The values calculated for “median value” are only of owner-occupied housing units.

Table 2.8-2: Housing Characteristics

Housing Characteristic	Primary Study Area	Percent of Total (%)	Secondary Study Area	Percent of Total (%)	Erie County	Percent of Total (%)
Total Housing Units	8	100	1,775	100	415,868	100
Renter Occupied Units	3	37.5	876	49.4	132,093	31.8
Owner-Occupied Units	3	37.5	485	27.3	248,780	59.8
Vacant Units	2	25.0	414	23.3	34,995	8.4
Median Value	N/A	--	\$35,900	--	\$90,800	--

Source: US Census Bureau, 2000

Environmental Justice

This section examines the socioeconomic characteristics of the Primary and Secondary Study Areas for the purpose of determining if any one population subgroup could potentially be disproportionately and adversely impacted by the proposed Projects. Specifically, minority and low-income populations were considered in this assessment.

Criteria for Environmental Justice (EJ) determination were derived from the Environmental Protection Agency standards for environmental justice areas. These criteria are:

- At least one-half of the study area is of minority status;
- At least one-half of the study area is of low-income status;
- The percentage of minority status is at least 10 percentage points higher than for the entire county in which the population is located; and
- The percentage of low-income status is at least 10 percentage points higher than for the entire county in which the population is located.

Table 2.8-3 provides a comparison of EJ statistics for the Study Areas as well as Erie County, New York. Low-income status was defined as a population having an annual income that is less than the poverty threshold. In census year 2000, the poverty threshold for a family of four, established by the U.S. Census Bureau, was \$17,609.

Table 2.8-3: Environmental Justice Statistics

Demographic Profile	Primary Study Area	Secondary Study Area	Erie County
Total Population	17	3,274	950,265
Percent Minority (%)	100	94.0	17.8
Percent White alone (%)	0.0	6.0	82.2
Individuals below Poverty Level	N/A	1,415 (44.7%)	112,358 (12.2%)

Source: US Census Bureau, 2000

Both the Primary and Secondary Study Areas qualify as EJ areas in respect to minority status. Both have a disproportionately high percentage of minority races at 100.0% and 94.0%, respectively. In comparison, these figures are significantly higher than the percentage of minority races in the County of Erie (17.8%).

The Secondary Study Area also qualifies as an EJ area because of its to low-income status, since it has a disproportionately high percentage of individuals below the poverty level as of 1999 (44.7%). This is over three times as high as the percentage of

individuals below the poverty level in the County of Erie (12.2%). Data on poverty is not available for the Primary Study Area.

Employment

The Secondary Study Area and the County of Erie have civilian employment bases totaling 822 and 431,174 persons, respectively (Census 2000). The largest industry within both study areas is educational, health and social services. This industry accounts for 40.9% of the total employed civilian population over the age of 16 within the Secondary Study Area and 25.6% in the County of Erie. Table 2.8-4 summarizes employment by industry in the Secondary Study Area. Employment data is not available for the Primary Study Area.

Table 2.8-4: Employment Base

Industry	Employed Civilian Population 16 Years and Over	Percent of Total (%)	Erie County	Percent of Total (%)
Total Employment Base	822	100	431,174	100
Agriculture, Forestry, Fishing, Hunting, and Mining	0	0.0	1,499	0.3
Construction	15	1.8	19,178	4.5
Manufacturing	118	14.4	62,253	14.4
Wholesale Trade	18	2.2	18,677	4.3
Retail Trade	57	6.9	50,932	11.8
Transportation, Warehousing, and Utilities	65	7.9	22,211	5.2
Information	0	0.0	10,234	2.4
Finance, Insurance, Real Estate, Rental & Leasing	44	5.4	28,687	6.7
Professional, Scientific, Management, Administrative, and Waste Management	41	5.0	34,656	8.0
Educational, Health, and Social Services	336	40.9	110,315	25.6
Arts, Entertainment, Recreation, Accommodation, and Food Services	25	3.0	32,343	7.5
Other Services	75	9.1	19,547	4.5
Public Administration	28	3.4	20,642	4.8

Source: US Census Bureau, 2000

Taxes

Much of the Primary Study Area is exempt from local property taxes since the properties house nonprofit organizations and are used primarily for hospital purposes. The parking lot at the southwest corner of Goodrich and Ellicott Streets is one of the few taxable parcels in the BNMC – North End.

Impact

Demographics

Some of the employees of the proposed Projects will be new to the City of Buffalo and Western New York. As a result, the potential exists for a population increase within the Primary and Secondary Study Areas and, therefore, an increased demand for housing in the neighborhoods immediately surrounding the medical campus; specifically downtown, Allentown and the Fruit Belt. This impact is considered a benefit since potential residents would add to the density and vibrancy of the surrounding neighborhoods. These neighborhoods have adequate capacity for residential growth.

The preferred site for the SNF will require the demolition of the existing residential units within the boundaries of Michigan Avenue, East North, Maple and High Streets. This will result in the displacement of six residential structures. This impact is considered minor as there is adequate capacity in the surrounding neighborhoods of downtown, Allentown and the Fruit Belt to absorb the displaced residents. In addition, housing in the Fruit Belt is comparable to those units that are expected to be demolished.

Environmental Justice

Although there is a higher concentration of minority populations within the Primary and Secondary Study Areas, the proposed Projects do not adversely impact minority or low-income populations. The construction and operation of the proposed Projects are not anticipated to adversely impact these populations within the study areas. The proposed Projects are expected to have a net benefit on the EJ population.

Environmental impacts from the Projects were assessed as either having a neutral, beneficial or negative effect on EJ populations. The level of impact is rated as “positive”, “neutral” or “negative”. A “positive” impact would benefit the EJ populations; a “neutral” impact would not impact EJ populations; and a negative impact would adversely affect EJ populations. The impacts that were assessed include:

- land use and zoning;
- transportation and parking;
- utilities;
- visual and aesthetic resources;
- historic, archaeological and cultural resources;
- topography, geology and soils;
- neighborhood character;
- socioeconomics;
- air quality;
- solid, medical and hazardous wastes;
- hazardous and contaminated sites; and
- public services.

Land Use and Zoning

As a consequence of the proposed Projects, one block of the study area may be converted from residential to commercial land use. Although this may remove six residential structures, this will not negatively impact the land use and zoning of the surrounding area. Therefore, this is a “neutral” impact.

Transportation and Parking

A portion of Goodrich Street will be permanently closed to traffic, representing a long-term operational change. This impact is considered “neutral” as Goodrich Street is not a high-traffic road and will not significantly impact the driving patterns of local residents.

Utilities

No significant adverse impact to utilities will result from short-term construction or long-term operational changes as a result of the proposed Projects; the impact is considered “neutral”.

Visual and Aesthetic Resources

No significant adverse impacts are anticipated to visual and aesthetic resources from short-term construction or long-term operational changes as a result of the proposed Projects; impact is considered “neutral”.

Historical, Archaeological and Cultural Resources

Adverse impacts to historical, archaeological and cultural resources would result from the construction of the SNF; impact is considered “negative”. Two NRHP-eligible properties would be demolished to accommodate the new SNF. However, 336 Maple Street is deteriorated and has been significantly altered from its original condition by the addition of historically inappropriate materials, such as asbestos siding.

Topography, Geology and Soils

No significant adverse impact to topography, geology and soils will result from short-term construction or long-term operational changes as a result of the proposed Projects. Blasting will not be required, as overburden materials are approximately 100 feet thick. Impacts to topography, geology and soils are considered “neutral”.

Neighborhood Character

The MOB, MMTS and GVI are consistent with use and scale of existing structures within the BNMC and as such, will not negatively alter visual characteristics within or from the surrounding neighborhoods. The construction and long-term operation of the SNF, if the design is mitigated as discussed in Section 2.7, will be beneficial to the adjacent neighborhood. Therefore the impact would be “positive”.

Socioeconomics

Some of the employees of the proposed Projects will come from staff to be relocated from other facilities in the City of Buffalo and Western New York. As a result, there may be additional demand for housing in the neighborhoods immediately surrounding BNMC, specifically Downtown Buffalo, Allentown and the Fruit Belt. This long-term operational impact is considered beneficial, as the potential new residents will add to the density and vibrancy of these neighborhoods, which have adequate capacity for residential growth.

Six residential structures may be taken for the construction of the SNF. This impact is considered to be “neutral” as the surrounding neighborhoods have comparable housing and the capacity to absorb additional residents.

The proposed Projects will have a “positive” impact on employment. The Projects will create some employment opportunities during short-term construction and long-term operation. Potential spin-off development may result in additional job growth. Employment opportunities of various skill levels will be made available to residents of local neighborhoods where available.

Operational Impacts to Air Quality

No negative impacts are anticipated from air quality. Therefore, this is considered a “neutral” impact.

Solid, Medical and Hazardous Wastes

Short-term construction impacts will result in the generation of a solid waste stream, demolition debris and wood forms for concrete construction. Solid, medical and hazardous waste streams in varying quantities will also be generated during long-term operation of the proposed Projects. A small quantity of solid waste will likely be generated with the operation of the proposed parking lot. These impacts are considered “neutral” as the waste will be properly handled and disposed of under NYSDEC and EPA regulations.

Hazardous and Contaminated Sites

The proposed Projects could have a “positive” impact with respect to delineation, characterization and remediation of unknown, historic environmental impacts to soils that may be encountered during construction. Abatement and demolition of existing buildings should also have a “positive” impact on site conditions with respect to the presence of asbestos, lead paint and PCBs.

Public Services

The construction of the GVI will improve the emergency medical care available to the region including the EJ populations of the surrounding communities. Therefore, this is a “positive” impact.

Construction

Construction impacts to the EJ populations would be limited to temporary noise and air quality impacts. The potential air impacts are associated with the release of dust and particulate matter from the movement and storage of materials and other construction activities. During construction noise levels are likely to exceed existing ambient conditions. However, these short-term construction impacts are considered “neutral” as they will be mitigated using best management practices.

Employment

The proposed Projects will not adversely affect local employment. To the contrary, the Projects will create additional employment opportunities during construction and operation. Although some employment opportunities will be filled by staff relocated from other sites within the City of Buffalo and Western New York, some new permanent jobs will be created; most likely through new tenants in the MOB and through the creation of UB's research institute in the GVI. Additionally, Kaleida will use their Kaleida Prep Program which helps teach entry level workers how to apply for jobs within the Kaleida system. In the long term, potential spin-off development may create new job opportunities requiring a variety of skill levels and open to local residents.

Taxes

The construction and operation of the proposed MOB will result in an undetermined amount of additional tax revenue for the City of Buffalo. No additional tax revenue is expected from the construction and operation of the GVI, SNF, or MMTS as they will all be operated by healthcare and educational non-profit institutions.

Mitigation

Because no significant adverse impacts are anticipated from the construction and operation of the proposed Projects, no mitigation is required.

2.9 Air Quality

Setting

Kaleida operates a boiler system to provide heat to BGH. Kaleida is permitted for two 75 million Btu per hour (MMBtu/hr) boilers and one 39.3 MMBtu/hr boiler. The boilers operate under a State Facility Air Permit with emission limits of 190,000 pounds per year for oxides of nitrogen and sulfur dioxide.

Impacts

The SNF and MOB will use gas for heat. Based on projected building sizes, neither structure would have a Btu need that exceeds the 10 MMBtu/hr threshold for a State Facility Air Permit. Additionally, the output from using natural gas would have a minimal effect on air quality due to the dense urban development in the area.

Based on the maximum 600,000 sq. ft. build out, the additional heating requirement for the GVI is approximately 38 MMBtu/hr. This additional demand will not require the installation of a new boiler. As with the current steam plant, the new heat demand will be met with natural gas. The most significant emission from the natural gas fuel will be oxides of nitrogen. The addition of 38 MMBtu/hr would result in an additional 9% of the total allowable pounds per year. (See Appendix G)

Mitigation

GVI – Additional steam supply needs combined with existing needs must stay within the 190,000 pounds per year allowable emissions of oxide of nitrogen, sulfur dioxide and other State Facility Air Permit requirements.

SNF, MOB – The heating equipment will consume less than 10 MMBtu/hr. The SNF and MOB will use best practicable heating and insulation technology thus conserving energy usage and reducing Btu needs.

2.10 Solid/Medical/Hazardous Waste

Setting

At the present time, businesses within the BNMC – North End generate solid waste, hazardous waste and medical waste, most of which is generated by BGH. BGH and the other facilities generate solid waste as part of the cafeteria operations, product packaging, administrative activities and from materials associated with general patient care. The volume of solid waste generated by BGH on an average monthly basis is 130 tons (Modern Landfill).

Medical waste is generated by BGH and the CMHC as a result of surgical procedures and general patient care. BGH is a large quantity generator of medical waste (greater than 200 pounds per month), with disposal managed by Stericycle (Stericycle, 2005).

The BGH is also a small quantity hazardous waste generator. Hazardous waste is generated as a result of routine operational and maintenance activities, unused medicine, testing procedures and as a result of general patient care. As a small quantity generator, BGH generates between 100 and 1,000 kilograms of hazardous waste on a monthly basis (Watts; August 2008). Hazardous waste is disposed of at a NYSDEC permitted hazardous waste facility.

All waste streams within the BNMC are disposed of at off-site regulated facilities under state and federal regulations.

Impact

Construction

Construction of the Projects within the BNMC – North End will generate a solid waste stream during actual construction of the individual building projects. Demolition debris will be generated from the decommissioning of existing facilities for construction of the new facilities, particularly in the case of the GVI. In addition, solid waste will be generated from wood forms for concrete construction purposes; from packaging associated with various materials; from parts and equipment used for construction; and from packaging for equipment that will be installed for operation of the constructed facilities. These wastes will be sent off-site and will be either recycled or disposed of at a licensed Construction & Demolition debris disposal facility. The generation and reuse or disposal of construction wastes will present a significant environmental impact to the area.

Operation

Solid, medical and hazardous waste streams in varying quantities will also be generated during operation of the Projects. Solid, medical and hazardous waste will be generated as

part of operations at GVI, SNF and MOB. A small quantity of solid waste will likely be generated associated with operation of the MMTS. The GVI, UB's research institute and SNF will likely be considered RCRA small quantity generators of hazardous waste (100 to 1,000 kilograms per month) as part of ongoing medical operations.

New operations generating medical or hazardous waste shall be integrated into the established and regulated waste disposal programs. Where new facilities, such as those that may locate in the MOB or UB's research institute, operate independently of the GVI program, the facilities or their tenants, must implement develop their own disposal programs and comply with the existing state and federal disposal regulations. As such, no additional environmental impact from the operation of these new facilities will occur as a result of these developments.

Mitigation

Construction and demolition debris should be handled and disposed of in accordance with NYSDOH and NYSDEC regulations, and should be disposed of at regulated and approved facilities. Where feasible, large demolition debris such as brick, concrete and stone work should be segregated for potential re-use/recycling as crushed fill material. An example Solid Waste Management Plan is included as Appendix H.

2.11 Hazardous and Contaminated Sites

Setting

The BNMC - North End has been an urban setting for over 150 years. Historical uses identified in environmental investigations that have been completed within the BNMC - North End have identified hospitals with petroleum storage, auto repair shops and filling stations. Historic petroleum contamination to the west of Buffalo General Hospital (the location of the proposed MOB) along High Street has undergone extensive soil and groundwater remediation for approximately 10 years. The remediation system was recently shut down (NYSDEC, Greg Sutton, personal comms 9/17/2008). In addition, a subsurface investigation is presently being conducted at 991 Main Street (the adjacent

property and possible MMTS location) to evaluate potential petroleum impacts to soil and groundwater from its past use as a filling station (GES; August, 2008).

There are also recognized environmental conditions from a recently completed Phase I Environmental Site Assessment at 1021 - 1027 Michigan Avenue and 1033 Michigan Avenue near the preferred location for the proposed SNF. The recognized environmental conditions include: the potential presence of asbestos in buildings, lead paint, PCBs in light ballasts and window caulk and abandoned underground storage tanks. There is also potential to encounter pockets of contaminated fill, contaminated soils and/or contaminated groundwater as well as abandoned underground storage tanks during construction (Watts; August 2008).

Buildings presently in place where the GVI will be built may contain asbestos containing materials, lead based paint and PCBs in light ballasts and window caulk.

Impact

Construction of these Projects should have a positive impact with respect to delineation, characterization and remediation of historic environmental impacts that are encountered within the BNMC - North End. Demolition of existing buildings completed in accordance with existing NYSDEC, NYSDOH, New York State Department of Labor and City regulations should have a positive impact on site conditions with respect to the presence of asbestos, lead paint and PCBs. Excavation for foundations should also have a positive impact on the BNMC - North End since contaminated soils and groundwater along with waste that is encountered, will be remediated and disposed of at a NYSDEC regulated facility.

As with any project developed in urban centers, there is a chance that previously unidentified contamination will be encountered during development. If this were to occur, the project developers will need to notify Region 9 of the NYSDEC to coordinate appropriate cleanup. However, this situation would result in a positive impact, as a previously unknown environmentally contaminated situation would be discovered and appropriately remediated under NYSDEC supervision.

Mitigation

Although no significant adverse impacts to hazardous or contaminated sites will result from the proposed Projects. If contaminated soil and/or groundwater, waste, abandoned underground storage tanks and bedding, asbestos containing materials, lead paint based materials and materials containing PCBs are encountered during demolition and construction, the appropriate work plans or mitigation plans will be submitted to manage these materials in accordance with applicable NYSDEC and NYSDOH regulations.

2.12 Public Services

Setting

Schools

Three Buffalo Public School District educational facilities are located within the Secondary Study Area (See Figure 2.8-1). These include: Futures Academy located at 295 Carlton Street (elementary), Martin Luther King Multicultural Institute located at 487 High Street (elementary) and City Honors School located at 186 E North Street (grades 5-12).

City Honors, a test-based magnet school, is currently undergoing reconstruction work that began in 2008 and is scheduled to be completed by September 2010. For the duration of the reconstruction project, students have been temporarily transferred to schools outside of the study area.

Emergency Services

Emergency services include fire and police protection, as well as emergency medical services. The Study Area is serviced by the Buffalo Fire Department and the Buffalo Police Department. There is no fire or police station located within the Study Area. The Study Area is serviced by Engine 21 of the Buffalo Fire Department, located at 1229 Jefferson Avenue. The Study Area is split between B and C District of the Buffalo Police

Department. The B-District station is located at 695 Main Street, while the C-District station is located at 696 East Ferry Street.

Emergency medical services within the Study Area are provided by Buffalo General Hospital located at 100 High Street. Buffalo General Hospital is a 511-bed acute care hospital in the center of the BNMC.

Impacts

Schools

The Project developments are anticipated to create additional strain on the public school system. In the event any additional demand is created, there is sufficient capacity in the school system to accommodate this demand. Therefore, the Projects will not have a significant adverse impact on schools.

Emergency Services

The proposed Projects are not expected to have an adverse significant impact on the demand or ability to provide emergency services.

A portion of Goodrich Street will be permanently closed to traffic for the construction and operation of the GVI. This will result in an impact to local traffic patterns, but is considered minor, as Goodrich Street is neither a high-traffic road, nor a primary traffic route (as discussed in Section 2.2).

In the long term, a beneficial impact is expected since the proposed Projects will improve emergency medical services for the residents in the immediate area and Western New York through increased and more efficient services. The GVI, to be attached to BGH, will include a state of the art Emergency Department that will replace the existing Emergency Department at BGH. The new Emergency Department combined with the attached GVI will greatly improve emergency medical services to the study area, especially in neuro and vascular care.

Mitigation

No negative impacts are anticipated therefore, no mitigation is required.

2.13 Construction

Setting

The BNMC – North End is bound by High, Main, East North and Maple Streets. The four Projects are planned for areas that have been previously developed.

The preferred SNF is planned for a block that is containing residential structures, a parking lot and an abandoned gas station. The MOB is planned for a surface parking lot that is across Ellicott Street from BGH. The GVI is planned for the current location of the CMHC and Goodrich Street connecting to BGH. There are six locations under consideration for the MMTS.

Impacts

Construction Phasing

The proposed Projects call for the build out of four individual sites over an approximately three year period. A high level of construction planning and coordination for the Projects will be required. Upon receipt of the required permits and approvals for the proposed Projects, the following construction projects are expected to proceed concurrently:

- Global Vascular Institute – ~500,000 to 600,000 sq. ft. Acute Care and Medical Research Facility
- Skilled Nursing Facility – ~200,000 sq. ft. Long Term Care Facility
- Medical Office Building – ~300,000 sq. ft. Out-Patient / Office Complex
- Multi-Modal Transportation Structure – 1,600 space multi-modal parking structure

In addition to the above projects and their related infrastructure/utility work, there will be construction activity related to the closure of Goodrich between Ellicott Street and Michigan Avenue. This work will also be coordinated with the overall Projects' schedules to ensure proper access and safety measures during construction.

Construction Vehicle Access

The amount of construction activity located in the BNMC - North End will create a large volume of construction-related traffic. This traffic will be comprised of construction workers traveling to the sites each day for work and delivery of materials and construction equipment (which will be mobilized on an as-needed basis).

Labor – The construction labor influx into the BNMC may be a considerable impact to parking in the BNMC. All construction workers will be directed to use designated routes of travel to access the sites and will be allowed to park in specifically identified parking areas for construction laborers. With the high volume of construction workers expected to be active on the BNMC – North End, a shuttle system which will utilize off site parking will be required.

Construction Equipment – Construction equipment due to its size, may create traffic delays or impede traffic flow. If not managed correctly, equipment and construction traffic may traverse local residential streets outside of the BNMC - North End.

Construction – Infrastructure & Foundation

Dust Control

Dust from demolition and excavation may migrate offsite into residential areas. However, this impact is expected to be minimal as best management practices (such as wetting demolition or dry soil areas and using standard erosion control methods) will be utilized during construction.

Sediment and Erosion Control

Sediment and erosion can pose a significant impact during construction. This is often more of a concern in rural or “greenfield” areas. However, as required by NYSDEC regulation, construction will employ erosion control methods that will greatly minimize the impacts.

Excavation and Foundation Fill

Excavation and foundation fill will have minimal impact to the surrounding area. If excavated material is found to be suitable for future use on site, it will be stored and stockpiled for reuse. If the material is not satisfactory for backfill or any type of reuse, it will be hauled off to a licensed disposal facility.

Mitigation

To effectively reduce the impacts from construction, best management practices, vehicle access plans and coordination of Project schedules should be developed.

Construction Phasing

In addition to coordination with Public Agencies and Utilities, all related City and Public Agencies will be continually informed and updated on the construction schedule and any activity which is planned to occur on a public street.

Construction Vehicle Access

A site specific access plan will be created to direct both forms of traffic to their expected destination within the BNMC – North End and will attempt to keep this traffic away from neighboring residential areas and on the BNMC. Any construction-related traffic associated with the proposed Projects will be required to report to the construction traffic manager who will be located at a central staging area for the Projects.

No parking will be allowed outside of the BNMC on residential streets.

Construction Equipment

All construction equipment traffic will be specifically coordinated by an assigned construction traffic manager who will control access and vehicular flow on the BNMC. A street-specific traffic plan will be developed and provided to the construction and delivery companies which will illustrate the allowable means of access to the respected sites. All traffic will be directed to stay on the BNMC and not use roads in the adjacent residential neighborhoods for access. It is currently expected that the majority of vehicular traffic destined for the site will be coming from Route 33. Figure 2.12-1 identifies this potential vehicular access and a staging area located on the existing surface lot on High Street.

Construction Planning

A Best Practices for Construction Plan will form the baseline of construction practices and will be followed throughout the construction phase of the Projects. A construction plan (design and site specific) will be crafted using this baseline at the time of implementation. A draft of this plan is attached as Appendix I for reference

Sediment and Erosion Control

All required elements of sediment and erosion control must be in place and inspected by the Project Manager and appropriate regulatory agency prior to further activity on site (clearing or excavation). Sediment and erosion control plan will be prepared in accordance with New York State Stormwater Management Design Manual and Phase II Stormwater SPDES requirements. A site-specific Stormwater Pollution Prevention Plan will be prepared and implemented for the Projects.

3.0 Alternatives

SEQR requires that an evaluation of alternatives be discussed. These alternatives must be a range of reasonable alternatives to the action that are feasible, considering the objectives and capabilities of the project sponsor. This GEIS will consider the following alternatives:

- No Action
- Alternate locations
- Six Multi-Modal Transportation Structure location options

No Action

The no action alternative would mean that any one of the proposed Projects or all of the Projects would not be constructed.

GVI

If the GVI were not constructed, specific negative impacts associated with the project would not occur. More particularly there would be no need to close Goodrich Street, no potential impacts from increased traffic and no impacts from the increased use of the steam plant.

However, if the GVI were not constructed, the following potential beneficial impacts would not occur:

- Consolidation of existing hospital facilities consistent with the findings of the Berger Commission;
- Establishment of a world class heart and vascular care center for the region;
- An updated emergency department; and

- Any associated economic or technological benefits from the facilities and new medical ventures.

No action is not considered the preferred alternative as the benefits of the construction and operation of the GVI outweigh the potential adverse impacts.

MOB

If the MOB is not constructed none of the negative impacts associated with the Project would occur. In particular, there would be no loss of surface parking and no increase in traffic.

However, the no action alternative would remove benefits to the local community, such as additional tax revenues from the conversion of the land from a parking lot to a building; further enhancement of the economic development goals of the BNMC by providing office and incubator space for physicians; new construction jobs; and ancillary spinoff development. Another positive impact that would not occur if the MOB is not constructed is the remediation of the former gas station.

This is not considered a preferred alternative as the benefits of the construction of the MOB outweigh the minor potential adverse impacts.

SNF

If the SNF is not constructed, the following negative impacts would not occur:

- Demolition of two NRHP-eligible properties;
- Demolition of three additional residential structures; and
- Potential visual impacts to adjacent residential properties on Maple Street.

However, by not building the SNF, the Project benefits would not be realized. These benefits include:

- Consolidation of existing long-term care facilities consistent with the findings of the Berger Commission;
- Improve the physical environment and quality of life of residents of the skilled nursing beds at Deaconess and MFGH;
- Construction jobs;
- Improvements to the aesthetic and environmental quality of the block;
- Operational benefits to the management of skilled nursing beds; and
- Continued consolidation and growth of the BNMC as the regional center for health care services.

As such, the benefits of the construction of the SNF outweigh the potential adverse impacts, and therefore the no build is not the preferred alternative.

MMTS

If the MMTS is not constructed, the negative impacts associated with the Project would not occur. Negative impacts from the construction of the MMTS include potential air quality impacts associated with the construction of the structure, and any potential negative visual impacts associated with the facility.

However, benefits of the structure include the provision of up to 1,600 additional parking spaces which would increase the viability of the BNMC for world class clinical care, research, education and entrepreneurship in downtown Buffalo and will relieve the current inadequate parking situation present on campus.

As such, the benefits of the construction of the MMTS outweigh the potential adverse impacts, and therefore the no-build is not the preferred alternative.

All BNMC – North End Projects

If none of the Projects are constructed, none of the negative environmental impacts associated with the construction of the buildings would occur, including demolition of the NRHP-eligible structures, and temporary air quality impacts.

However, none of the positive benefits of the Project would occur. Positive benefits as identified in Section 2.0 are:

- Increase in taxes from the construction of the MOB;
- Compliance with requirements of the Berger Commission;
- Improvement in the living conditions for residents of the SNF;
- Create a heart and vascular center of excellence; and
- The BNMC as an economic engine for the City and region.

The no-action alternative will deprive the region of a state-of-the-art GVI facility, would fail to capitalize on the regional benefits of the BNMC and such action would be inconsistent with regional initiatives of the BNMC and with the findings and intent of the Berger Commission. Furthermore, the City of Buffalo would be denied the benefits of increased tax revenue (MOB) and the further strengthening of one of its key growth industries, medical services, research and entrepreneurship. Therefore, the no action alternative is not a viable or preferred alternative.

Alternate Locations

GVI

Considering no other requirements other than available space, there is adequate land available in the region for the GVI. However, other locations would not meet the multiple purposes the GVI would serve. In particular, by collocating the GVI adjacent to BGH, Kaleida can create a center of excellence for neuro and vascular care without

adding hospital beds while still allowing direct and immediate interaction between doctors, researchers and patients. This is truly a unique opportunity. Also, the secondary purpose of the GVI is to facilitate the development of a world class medical research center; taking advantage of existing research facilities on the campus (Roswell, etc.). Neither option would be effectively realized if the GVI were located outside of the BNMC.

Therefore, locating the GVI off the BNMC is not a preferred alternative as it would not meet the purposes of Project.

MOB

The impetus for the construction of the MOB is to take advantage of the concentration of health services available on the campus and more importantly, the physical connection to the facilities at BGH and the GVI. A vital element to the success of this building is adjacency to the exiting BGH and GVI building, where physicians need direct and immediate access from their office space to critical/acute care facilities.

In addition to the proximity to acute care services, there is an increased demand for medical office space generated by the growth of facilities, services and business of the BNMC. Construction of the MOB would absorb some of this demand. If the MOB can not be developed on the BNMC, it is likely that this building would not be constructed elsewhere in Western New York.

Therefore, locating the MOB off of the BNMC is not a viable alternative since it does not meet the purposes of the Project to increase the quality of care for patients by concentrating medical care and providing office space for companies on the BNMC.

Locating the MOB in close proximity to the GVI is also critical to the viability of the building. This is required to allow physicians and researchers to easily access and interact with the GVI and BGH. Thus, the MOB location along Ellicott and Goodrich Streets is critical to meeting the MOB's mission.

SNF

The preferred SNF location is on the Block bounded by East North Street, Maple Street, Michigan Avenue and High Street. The advantages and impacts of this location have been assessed throughout this document. Alternate locations are assessed below.

Taking into account no needs other than available land, the SNF could be located anywhere in Western New York. The skilled nursing beds that would be relocated to the SNF are all currently located in the City, in the area of greatest need for the urban Buffalo elderly population. To ease the relocation for residents, visitors and staff, the new facility is best located in the Buffalo. Therefore, potential locations should be within the City limits. There is adequate vacant land in the City to accommodate the new SNF, however no other locations meet the purpose of the Project.

Locating the SNF on the BNMC would consolidate support services for staff and patients. The BNMC location will also allow for proximity to acute care for residents of the SNF. The BNMC is less than two miles from either of the existing skilled nursing facilities. The BNMC is therefore an ideal location to minimize the impact for the residents, visitors and employees of the facilities. Therefore, a location for the SNF outside of the BNMC is not considered preferred as it would not meet the purpose and needs of the project.

There is one alternate location, on the BNMC, under consideration for the SNF. The alternate location is the parking lot bound by East North Street, Goodrich Street and Michigan Avenue.

The advantage of this site is that demolition of the residences on the adjacent block will not be required. However, there are a number of disadvantages. In particular, the building would displace 474 parking spaces and the facility would not buffer the BNMC from the Fruit Belt neighborhood. Most significantly, the site constraints of the parcel would require the SNF to be designed as a more institutional building. This would reduce the functionality of the SNF, as current design standards for long term care

facilities aim to create a more residential living environment for the patients. As such, this location was deemed to be the least advantageous to meet the needs of the patients.

MMTS

The MMTS would serve the North End of the BNMC. The current parking demand is from the workers, patients and visitors to the campus. There is no land adjacent to the campus that would adequately serve this need. Locating the MMTS farther from the center of the campus would not best serve the needs of the GVI, MOB and SNF. Although the possibility exists to continue to use a remote lot and bus workers to the campus, this may lead to worker frustration and hamper the effectiveness of the campus as an economic development tool. If the BNMC is not seen as a convenient place to work, companies may bypass the area and locate in other areas.

Therefore, locating the MMTS somewhere not on the BNMC is not a preferred alternative as it would not meet the purposes of the structure to provide parking and related transportation services on the BNMC to make it more attractive to existing and potential companies, patients and workers.

Alternate North End Locations for the MMTS

As discussed above the, purpose and need for the MMTS is best served on the BNMC. However, there are six locations in the BNMC – North End under consideration for the MMTS. The southwest corner of Goodrich Street and Ellicott Street, the southwest corner of East North Street and Michigan Avenue and the northwest corner of High Street and Michigan Avenue are all under consideration. Each location has some advantages and disadvantages.

Table 3.0-1 provides a comparison of the increase in demand to the change in supply. A proposed parking facility on Sites B and J will meet the future demand of the North End Development. Parking facilities on Sites I and F would result in a small deficit of approximately 200 vehicles (see Figure 1.5-1). User reallocation of resources, coupled with transportation demand management measures, can mitigate this deficit. If Site G,

with an anticipated deficit of approximately 480 spaces is selected as the preferred site, there will be a need to construct additional parking capacity.

Table 3.0-1: Future Supply/Demand Comparison

	SCENARIO #1			SCENARIO #2	
	SITE B	SITE I	SITE J	SITE F	SITE G
INC. IN DEMAND	1,975	1,975	1,975	1,975	1,975
CHANGE IN SUPPLY	1,618	1,411	1,618	1,413	1,144
EXISTING SURPLUS	350	350	350	350	350
NET SUPPLY	1,968	1,761	1,968	1,763	1,494
SURPLUS/(DEFICIT)	(7)*	(214)	(7)	(212)	(481)

* - The net parking gain for this scenario will most likely be lower than shown. This scenario assumes the replacement of the MOB elsewhere which will most likely result in an additional loss of surface parking.

This parking analysis documents that the parking demand associated with the North End Development can be accommodated within the project study area. The selection of the preferred parking location will take into account the parking supply and demand relationship, traffic operations including facility access/egress, site availability and construction feasibility. When the preferred parking location is selected, there will be a detailed analysis of the proposed access/egress locations.

Alternative B – Goodrich and Ellicott

The site is currently a surface parking lot. This is also the block on which the MOB is proposed.

One advantage of this site is that is near the proposed GVI. There is limited site clearing costs associated with building on a parking lot. The site is also located within walking distance of existing facilities.

The disadvantages of this site include the proximity to the current City of Buffalo parking ramp. Proximity to an existing parking garage may over-concentrate supply in one area.

It may only serve to move parkers one block closer to their destination. This may either limit the parking spaces available in the structure or increase the height and costs of the structure. Locating the MMTS on this parcel, if the MOB is not also located here, may not be the best use of Ellicott Street streetscape. Additionally, locating the structure on this site may negatively impact the Main Street streetscape and may be inconsistent with the City's Transit Overlay District.

Alternative F – North and Michigan

The advantages of Alternative B include locating the structure within a five minute walk of the other proposed Projects; locating the building away from the main campus roadway to limit the visual impact of a parking structure; and limited site clearing costs associated with building on a parking lot.

The primary disadvantage of the site is the displacement of 474 existing parking spaces. This would limit the positive impact of the new structure to 1,413 spaces. The workers and visitors who park at this location would be displaced during construction. This site is also the farthest from the center of the BNMC, and therefore, its ability to serve multiple facilities is somewhat limited.

Alternative G – High and Michigan

Advantages of this site are the same as the other sites.

The disadvantages of the site include the displacement of 205 spaces during construction and the land at the site is limited for future development uses. This would therefore, limit the new gain to 1,144 spaces.

Alternative H – High and Ellicott

The advantages of this site include the proximity to the existing and proposed BNMC – North End facilities.

Disadvantages of the site include the limited land at the site. Another disadvantage is the Langston Hughes Institute is sited on this property. As this building is more than 50 years old and of potential historic value. Demolishing the Langston Hughes Institute building may be considered a negative impact. As there are other viable alternatives for the construction of the MMTS, this alternative will not be considered further.

Alternative I – Mid Block between Ellicott and North Oak Streets

Alternative I is located mid-block between Carlton and High Streets. The block is also home to Buffalo Medical Group and their parking lot. The advantages of this site include proximity to the BNMC – North End institutions and Projects. This site could also provide access from both Ellicott and North Oak Streets.

The disadvantages of the site include a small footprint and developments on either side. The limited footprint would either limit the size of the MMTS or require the MMTS to significantly increase the number of floors. The proximity of the other developments on either side of the site would make the construction of the MMTS more difficult. Additionally, locating the MMTS on this parcel may not be the best use of Ellicott Street streetscape.

Alternative J – Expansion on the City Parking Ramp

Alternative J would require the expansion vertically of the parking ramp owned by the City of Buffalo located at the southwest corner of Ellicott and East North Street. This type of expansion has occurred on other City of Buffalo parking ramps in downtown Buffalo.

The advantages of this site include proximity of the BNMC – North End facilities and projects. This expansion would also make more efficient use of land on the BNMC, the existing ramp is only approximately 800 spaces over a limited number of stories. Additional stories would increase parking and related services on the BNMC without the dedication of additional land. This location would also preserve existing parking lots for future development.

As the site is already dedicated to parking, there are few disadvantages to expanding it to house the MMTS. The current design of the ramp does not enhance the pedestrian environment and would need to be redesigned to enhance the area. Additionally, as Ellicott is the front door for the BNMC, perpetuating parking on this location may not reinforce the development of the street.

Currently, the preferred alternative has not been determined by the BNMC. They would select the preferred alternative based on the factors analyzed above, costs and future land control. For this GEIS, potential impacts were evaluated based on the worst case scenario from all six alternatives.

4.0 Unavoidable Adverse Environmental Impacts

Unavoidable adverse environmental impacts associated with the proposed Projects are the long-term effects that remain after mitigation efforts have occurred. These generally are impacts for which there is no additional feasible method for mitigation. Impacts can be temporary, due to construction activities, or long-term, due to physical alteration of the landscape and environmental conditions. This section summarizes those adverse impacts that cannot be avoided (6NYCRR 617.9 (b)(5)(iii)(b)).

The construction of the four buildings will have an unavoidable visual impact to the areas directly adjacent to, or within, the BNMC. The addition of new structures and the aesthetic appeal of those structures is a subjective evaluation which will vary from person to person. Although some will find the addition of new structures as a visual improvement to the area, others may find this a negative impact which can not be fully mitigated.

During the site clearing, preparation and construction of the proposed Projects, short-term impacts on air quality and noise will occur. These impacts will be primarily from the movement and operation of construction equipment. The use of best management practices will be employed to mitigate these impacts to the maximum extent practicable (See Appendix I). However, not all impacts can be fully mitigated.

Both during and after construction there will be impacts to traffic on the BNMC. During construction, road and lane closures will be required periodically to allow for the delivery of materials and construction equipment. To construct and operate the GVI, Goodrich Street will be permanently closed to through traffic between Michigan Avenue and Ellicott Street. This will not negatively impact utilities.

5.0 Irreversible and Irrecoverable Commitment of Resources

This section identifies the unavoidable environmental impacts of the proposed Projects that will irreversibly curtail the range of potential uses of the environment or result in the commitment of resources that are neither renewable nor recoverable. An irreversible commitment results in environmental changes that cannot, at a future date, be altered to restore the environment to its preconstruction state. Resources include not only the commitment of labor, fiscal resources and materials, but also natural and cultural resources committed as a result of Project construction, operation and maintenance.

Most land development projects require a commitment of natural resources for construction. Construction of the proposed Projects will result in the short- and long-term commitment of natural resources. Some of the resources include structural steel, gravel, wood and concrete to be used in the construction of the buildings. The long-term commitment of these materials will limit their availability for future projects. However, the actual amount of materials used to build any structure will comprise a very small percentage of the U.S. and world production of these materials. Some materials, at the end of the project life, such as steel and stone, will be available for reclamation and recycling. Therefore, the proposed Projects will not have a significant impact on the availability of these materials.

The Proposed Project will require the commitment of previously developed, yet currently underutilized urban land for the life span of the project. About 12 acres of land will be directly impacted by this development. This land use is considered an irreversible commitment, but only during the expected lifetime of the individual Projects. Once the land is no longer needed for these facilities, they can be removed and the land can be converted to a different purpose. Therefore, in the long-term, this is neither an irreversible, nor irretrievable commitment of resources.

Construction, operation and maintenance of the proposed Projects will require irreversible and irretrievable commitments of human and fiscal resources to design, build, operate and maintain the facilities. Human and financial resources will also be expended

by the local, state and federal governments for the planning, environmental reviews, permitting and monitoring of the proposed Projects. These commitments are justifiable in light of the medical and human benefits to be derived from the proposed Projects. No significant impacts on human and fiscal resources of local governmental services (fire, police, etc.) are expected.

Project construction and maintenance work will irretrievably commit energy resources derived from petroleum products and electricity. Fuels and electrical energy will be consumed during the manufacturing and transport of materials and workers to be used for the Projects. Additional fuel will be expended by construction equipment used to construct the facilities. Some fuels will also be used by maintenance and emergency vehicles and equipment during the lifetime of the Projects. Fuels and electrical energy will be consumed for heating and cooling of the facilities during the life of the Projects. These commitments will be minor and will not affect the local energy supply.

The construction of the SNF will require the demolition of two houses eligible for listing on the National Register of Historic Places. The demolition of these structures will permanently make them unavailable for human enjoyment or use. If the residences are removed, the facilities will be documented and the historic elements of the structures will be salvaged. This proposed mitigation will help balance the public benefit of the SNF against impact to existing historic resources.

6.0 Growth Inducing Aspects of the Proposed Project

Various types of projects can directly or indirectly foster economic or population growth, creating the need for the construction of additional housing in the surrounding environment. Certain projects can influence growth by removing impairments to growth such as establishment of essential public services or new access to an area. Projects can also change the revenue base in an area.

The direct effect of the Project will be the construction of four buildings in the BNMC – North End. This will create employment during construction and during the lifespan of the Projects. Some of the employment will be relocated from other areas of the City of Buffalo and Western New York, but the ultimate goal of the Projects is to improve medical care for the region and act as a catalyst to help draw new business and private investment from outside of Western New York. New permanent jobs will be created due to the Projects. Secondary benefits may accrue to various existing service businesses that would be patronized by employees during construction and operation. There may also be some benefit to the local community from the purchase of materials to construct and furnish these buildings.

The creation and reinforcement of the BNMC as a center for medical care, research innovation and entrepreneurship will be further enhanced with the location and creation of the GVI, MOB, SNF and MMTS. A campus environment helps to nurture the interdisciplinary research and entrepreneurship that can be the basis for job growth in the City of Buffalo and the region.

Although some of the staff will be relocated from other facilities within Western New York, some new jobs will be created. This may cause some additional demand for housing in the areas immediately surrounding the medical campus, in particular the loft housing available downtown and single-family homes in Allentown and the Fruit Belt. There is adequate capacity to absorb new employees in these residential areas without displacing current residents. This potential growth is one of the reasons that the BNMC is considered a regional economic development center.

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