The IMP shall include a description of land, buildings, and other structures owned or occupied by the institution as of the date of submission of the IMP. The following information shall be required: (1) illustrative site plans showing the footprints of each building and structure, together with roads, sidewalks, parking, landscape features and other significant site improvements; (2) Land and building uses; (3) Gross floor area in square feet; (4) Building height in stories and feet; and (5) A description of off-street parking and loading areas and facilities, including a statement of the approximate number of parking spaces in each area or facility.

ZONING CODE REFERENCE
905.03.D.4 (c) Existing Property and Uses

Existing Property and Uses

Zoning Legend:
- Downtown Riverfront
- Planned Unit Development
- Educational/Medical Institution
- Neighborhood Office
- Parks
- Hillside
- Neighborhood Industrial
- Urban Industrial
- Local Neighborhood Commercial
- Urban Neighborhood Commercial
- Single-Unit Attached Residential
- Single-Unit Detached Residential
- Multi-Unit Residential
- AGH Buildings
- EMI boundary

Source: Pittsburgh Zoning GIS
[2.2] Existing Property and Uses

[2.2.2] Site Plan

The existing EMI district is bounded by E North Ave to the south, Sandusky Street to the west, an irregular alignment of Hemlock Street from Sandusky to Porterfield Street to Fountain Street to James Street to the north, and James Street to the east. The planning area for the Institutional Master Plan includes the EMI district described and the properties owned by AGH within one thousand (1,000) feet of the EMI District.

The area within the red dashed profile is the area being considered for this Institutional Master Plan. AGH is not seeking to modify the EMI district boundary as part of this IMP effort.

Legend:
- EMI Boundary
- 1000’ of EMI Boundary
- AGH Property within 1000’ of EMI District
- AHN Property Outside IMP Study Area

<table>
<thead>
<tr>
<th>Property/Parcel Name within 1000’ of EMI</th>
<th>Property/Parcel Name within 1000’ of EMI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allegheny General Hospital</td>
<td>Allegheny General Hospital</td>
</tr>
<tr>
<td>1  South Tower</td>
<td>1 Allegheny General Hospital</td>
</tr>
<tr>
<td>2  Northwest Wing</td>
<td>2 North Tower</td>
</tr>
<tr>
<td>3  Snyder Pavilion</td>
<td>3 Hemlock Building</td>
</tr>
<tr>
<td>4  Academic Cancer Center</td>
<td>4 Power House</td>
</tr>
<tr>
<td>5  Hemlock Building</td>
<td>5 Hemlock St. Garage</td>
</tr>
<tr>
<td>6  Power House</td>
<td>6 Sandusky Garage</td>
</tr>
<tr>
<td>7  Hemlock St. Garage</td>
<td>7 James St. Garage</td>
</tr>
<tr>
<td>8  James St. Garage</td>
<td>8 Allegheny Professional Building</td>
</tr>
<tr>
<td>9  East Wing Office Building</td>
<td>9 Allegheny Professional Building</td>
</tr>
<tr>
<td>10 1403 James St</td>
<td>10 East Wing Office Building</td>
</tr>
<tr>
<td>11 200 Hemlock St</td>
<td>11 1403 James St</td>
</tr>
<tr>
<td>12 200 Hemlock St</td>
<td>12 200 Hemlock St</td>
</tr>
<tr>
<td>13  AGH Child Care Center</td>
<td>13 AGH Child Care Center</td>
</tr>
<tr>
<td>14  Aeberli Building</td>
<td>14 Aeberli Building</td>
</tr>
<tr>
<td>15 1219 Sandusky St</td>
<td>15 1219 Sandusky St</td>
</tr>
<tr>
<td>16 1217 Sandusky St</td>
<td>16 1217 Sandusky St</td>
</tr>
<tr>
<td>17 1205 Sandusky St</td>
<td>17 1205 Sandusky St</td>
</tr>
<tr>
<td>18  Federal North Building</td>
<td>18 Federal North Building</td>
</tr>
<tr>
<td>19  Federal North Building</td>
<td>19 Federal North Building</td>
</tr>
</tbody>
</table>
[2.2] Existing Property and Uses: Site Plan and Building Uses

[2.2.2] EMI Existing Building Images

This page identifies buildings located within The EMI District, providing images of the existing buildings that make up the Allegheny General Hospital.

1. South Tower Hospital Building
2. Hemlock Street Garage Parking Garage
3. Snyder Pavilion Hospital Building
4. Academic Cancer Center Hospital Building
5. Hemlock Building Hospital Building
6. Hemlock Building Medical Offices Fitness Center
7. James Street Garage Parking Garage
8. Sandusky Garage Parking Garage
9. East Wing Medical Offices
10. Existing Property and Uses: Site Plan and Building Uses
11. Hemlock Street Garage Parking Garage
1. E North Ave looking east towards AGH campus
2. E North Ave looking north up Sandusky St
3. Sandusky St looking south towards E North Ave
4. James St looking south towards E North Ave
5. Intersection of James St and E North Ave, looking north
Existing Campus Access

Legend:
- EMI Footprint
- Pedestrian Circulation & Crosswalks
- Accessible Public Pedestrian Entrance
- Employee Pedestrian Entrance
- Emergency Vehicle Entrance
- Service Vehicle Entrance
- Employee Vehicle Entrance
- Patient/Visitor Vehicle Entrance

B Pittsburgh Regional Transit Bus Stop
B AHN Employee Shuttle Bus Stop
• Transition to a fully private patient room facility.

• Optimize service line locations across campus to improve patient experience, wayfinding, and team-based care.

• Modernize procedural and clinical spaces consistent with new standards.

• Continue to engage and partner with the community.
[3.1] Expectations for Growth or Change

[3.1.1] Existing AGH Institution

AGH has 524 licensed beds and employs approximately:
- 800 physicians
- 100 medical students
- 4,000 staff members

Each year, AGH accommodates approximately:
- Admits 24,000 patients
- Records 300,000 outpatient visits
- Handles more than 55,000 emergency department registrations
- Performs more than 23,000 surgical procedures

[3.2.1] AGH Future Volumes and Needs

AGH will replace antiquated buildings that no longer meet the needs of the institution. New and renovated buildings will be designed to accommodate the space challenges associated with increased space needs for patient care, equipment, and teams:

- In the next 10 years, AGH anticipates growth in the cardiac, neuro, surgery, and medicine service lines.
- Service lines currently spread across campus will be consolidated.
- Two-patient rooms will be replaced with single-patient rooms.
- Lower acuity outpatient visits to the AGH campus are expected to decrease. Acuity will increase for those patients that remain on campus. As a result, visitor traffic is projected to decrease, but visitors will stay on campus longer.
- In the next 3 years, AGH projects a personnel increase of about 55 employees. This includes but is not limited to, doubling its infusion staff and coaches. By the 10 year mark, there is only a slight growth projection of 2%.
[8.1] Community Engagement Strategy

ZONING CODE REFERENCE
905.03.d.4 (k) Neighborhood Protection Strategy

The Institutional Master Plan shall identify standards and programs that will be put in place to ensure that the quality of the surrounding neighborhoods is maintained or enhanced.

[8.1.1] Ongoing Community Program Partnerships

- North Side Partnership Agreement
- North Side Community Newspaper Printing
- Highmark Health Summer

Workforce Development Programs and Initiatives

Allegheny General Hospital, either as a campus or with AHN, directly sponsors a variety of workforce development initiatives that benefit North Side residents and emphasize diversity.

- White Coats for Diverse Allied Health Professionals
- Nazareth Prep Student Internship Program
- Triumphs Minority Residency Mentoring Program
- Pittsburgh Public Schools - SOS Program for Students with Exceptionalities
- Pittsburgh Public Schools - Clinical Engineering Shadow Program
- Summer Learn and Earn
- NorthsideWorks!

[8.1.2] Annual Special Community Events

- Career Exploration and Work Experience Program
- North Side Children’s Christmas Party
- AGH Employee Christmas Party for MLK School
- Women’s Center and Shelter

[8.1.3] Community Sponsorships

- North Side Chamber of Commerce
- Light of Life Ministries Programs and Events
- Fineview Citizens Corporation

[8.1.4] Community Health Needs Assessment

The Patient Protection and Affordable Care Act (PPACA), which went into effect on March 23, 2010, requires tax-exempt hospitals to conduct community health needs assessments (CHNA) every three years, and to adopt an implementation strategy plan to improve the health and wellbeing of residents within the communities served by the hospitals. These strategies created by hospitals and institutions consist of programs, activities, and plans specifically targeted toward community populations. The most recent CHNA was conducted in 2021 by Tripp Umbach for each AHN hospital facility.

[8.1.5] Neighborhood Health Programs

Overview

AGH runs multiple programs with the goal of improving neighborhood health and wellness. These programs are ongoing.

Mobile Health Clinics

AGH runs mobile vaccine and/or screening clinics in the following neighborhoods and locations:

- North View Heights
- Allegheny Dwellings
- Allegheny Commons
- Manchester
- Children’s Museum
- Barber Shop Clinic’s – Dave’s Barber Shop
- Allen Place – Senior clinic
- Brighton Heights – 2 clinics at senior high rises and 1 at the Healthy Living Center
- North Side Farmer’s Market - Partnership with North Side Christian Health Center and Highmark Whole Care to provide vaccines, HIV and Hepatitis C testing, nutrition counseling.
### [8.2] Public Engagement Summary

#### [8.2.1] Public Engagement and IMP Submissions Timeline
- December 14, 2021: Pre-Application Meeting
- January 12, 2022: TIS Scoping Meeting
- January 25, 2022: Fineview and Perry Hilltop Community Meeting
- February 2, 2022: Northside Leadership Conference Community Meeting
- March 8, 2022: East Allegheny Community Meeting
- March 14, 2022: Allegheny Central Community Meeting
- April 6, 2022: Northside Leadership Conference Community Meeting
- April 7, 2022: Performance Target Review Meeting #1
- June 14, 2022: Fineview and Perry Hilltop Board Meeting
- June 15, 2022: Performance Target Review Meeting #2
- June 20, 2022: Fineview and Perry Hilltop Community Meeting
- July 6, 2022: Community Open House
- August 3, 2022: Northside Leadership Conference Board Meeting
- September 13, 2022: Performance Target Review Meeting #3
- October 18, 2022: IMP Submitted to Department of City Planning (DCP)
- December 9, 2022: DCP Provided Comments on IMP
- February 23, 2023: AHN Provided Responses to DCP
- March 21, 2023: DCP Provided Additional Comments to AHN
- March 23, 2023: AHN Resubmitted IMP to DCP
- May 30, 2023: City Planning Commission Briefing
- June 13, 2023: City Planning Commission Hearing

#### Groups Engaged:
- North Side Leadership Conference
- Allegheny Central City Association
- East Allegheny Citizens Council
- Fineview Citizens Council
- Perry Hilltop Citizens Council

#### TIS DOMI Timeline
- June 30, 2022: TIS Report Submitted to DOMI
- October 28, 2022: First Round Comments Received from DOMI
- November 10, 2022: First Round Responses submitted to DOMI
- November 17, 2022: Second Round Comments received
- November 23, 2022: Second Round Responses submitted
- January 10, 2023: DOMI issued approval
<table>
<thead>
<tr>
<th>Community Comment</th>
<th>AGH Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concerns regarding expansion of the AGH footprint into the Northside community</td>
<td>AGH is not seeking to change the boundaries or expand the existing EMI zoning district.</td>
</tr>
<tr>
<td>Concerns related to the current helipad location and noise</td>
<td>The flight path of helicopters will not change. If the helipad is relocated in connection construction of Sandusky Tower, the temporary relocation site will be more central to campus, away from residential areas. The helipad would later return to the top of the new, taller Sandusky Tower.</td>
</tr>
<tr>
<td>Concerns regarding the height of potential new construction projects</td>
<td>The proposed development will not exceed the height of the existing South Tower and will comply with the City requirements across from residential zones. AGH is not seeking variances from this requirement.</td>
</tr>
<tr>
<td>Complaints regarding employees and visitors parking in the residential area</td>
<td>AGH provides employees on-campus parking and shuttles to off-campus parking. AGH will continue to advises employees not to park in residential areas.</td>
</tr>
<tr>
<td>Complaint regarding litter near the AGH campus edge</td>
<td>AGH will do its part to keep the campus clean.</td>
</tr>
</tbody>
</table>
[1.3] Planning Context

[1.3.2] Previous IMPs
2017 Institutional Master Plan
The 2017 IMP included the new Cancer Institute on E North Avenue, a docking station at Hemlock Street for medical mobile equipment, and a 1,500 sf storage structure between the Hemlock Building and Snyder Pavilion.

[1.3.3] Other Planning Efforts
Planning initiatives adjacent to, and in the vicinity of the AGH campus include:

- Allegheny Commons Master Plan
- One Northside Community Plan
- Manchester-Chateau Neighborhood Plan

Improvements since 2017 IMP

10 Year Plan Sites
25 Year Plan Sites
[1.3] Planning Context

[1.3.2] Previous IMPs

2017 Institutional Master Plan
The Academic Cancer Center, MRI/CT Dock, and storage structure were all completed prior to the submission of this current Institutional Master Plan.
AGH is committed to two initiatives: remaining within its currently defined EMI district, and limiting building heights to be no higher than Snyder Pavilion. The opportunities for expansion beyond the existing campus building envelope that maintain this commitment are limited. The need for further expansion beyond the 10-year development proposals could be driven by an increase in patient volume, added service lines, new code requirements increasing the space required for certain program elements, among other things.

The 10-year development sites represent AGH’s intention to consolidate service lines and provide upgraded facilities that implement modern healthcare technologies and care delivery models.

The Porterfield and Hemlock site has been identified as a potential development site within the next 25 years. Current City of Pittsburgh zoning code restricts the height and size of this structure based on the adjacent residential zone.

The Snyder Pavilion has been identified as a potential expansion site within the next 25 years. Potential expansion may include increased floor area and vertical expansion, increased height is not proposed.

The 25-year development envelope is roughly 24,000 square feet and represents the maximum allowable building envelopes.

ZONING CODE REFERENCE
905.03.D.4 (f) Twenty-five Year Development Sites

The IMP shall include written and graphic materials identifying future development sites in addition to those noted in the Ten-Year Development Envelope. This information shall include, at a minimum, the size and location of each parcel which may be developed within a twenty-five year period.
The ten-year development envelopes as shown by the colored masses in the images below designate the maximum allowable envelope permissible by the Pittsburgh Zoning Code. The envelope identifies areas for potential growth. Actual layout within the envelope will be defined as the specific projects are advanced. The heights of these envelopes demonstrate AGH's commitment to building no higher than Snyder Pavilion. The Hemlock Tower, James E North Tower, and Sandusky Tower developments will all be medical in nature. Should AHN decide to pursue a building project within any one of these envelopes, that building will be subject to further review by the City of Pittsburgh and the North Side community. Structures included in the ten-year development envelope will be subject to applicable City of Pittsburgh Residential Compatibility Standards.
[5.1] Proposed Development

[5.1.2] Sandusky Tower

<table>
<thead>
<tr>
<th>Site Location</th>
<th>Corner of Sandusky St and E North Ave</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use</td>
<td>Hospital</td>
</tr>
<tr>
<td>Maximum GSF</td>
<td>290,000 gross square feet</td>
</tr>
<tr>
<td># of Stories</td>
<td>12 total stories above grade, existing building is 2 stories above and 2 stories below grade</td>
</tr>
</tbody>
</table>
| Setbacks              | Sandusky St: 15 feet from property line  
|                       | E North Ave: Existing setback to be maintained. Approximately 25 feet |
| Maximum Height        | 200 feet as measured from the average finished grade along the primary façade on E North Ave. |
| Stepback              | Sandusky St: 0 feet  
|                       | E North Ave: 0 feet required per adjacent Parks District (P)  
|                       | Stepbacks will be considered prior to building design to control overall site density and scale. |

10 Year Development
[5.3] Urban Design Guidelines

[5.3.8] Building Design Guidelines: Sandusky Street Massing

Existing E North Ave looking east

Potential North Ave looking east

Existing Sandusky St looking south towards E North Ave

Potential Sandusky St looking south towards E North Ave
[5.1] Proposed Development

[5.1.1] Temporary Helipad Relocation

<table>
<thead>
<tr>
<th>Site Location</th>
<th>Snyder Pavilion roof</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use</td>
<td>Hospital</td>
</tr>
<tr>
<td>Maximum GSF</td>
<td>1,400 gross square feet</td>
</tr>
<tr>
<td># of Stories</td>
<td>1 additional story above existing Snyder Pavilion</td>
</tr>
<tr>
<td>Setbacks</td>
<td>N/A</td>
</tr>
<tr>
<td>Maximum Height</td>
<td>35 feet above existing Penthouse Roof</td>
</tr>
<tr>
<td>Stepback</td>
<td>N/A</td>
</tr>
</tbody>
</table>
### [5.1.3] Proposed Development

#### James E North Ave Tower

<table>
<thead>
<tr>
<th>Site Location</th>
<th>Corner of E North Ave and James St</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use</td>
<td>Hospital</td>
</tr>
<tr>
<td>Maximum GSF</td>
<td>288,000 gross square feet</td>
</tr>
<tr>
<td># of Stories</td>
<td>9 stories above grade, 2 stories Below grade</td>
</tr>
<tr>
<td>Setbacks</td>
<td>E North Ave: 0 feet</td>
</tr>
<tr>
<td></td>
<td>James St: Existing setback to be maintained. Approximately 18 feet.</td>
</tr>
<tr>
<td>Maximum Height</td>
<td>130 feet as measured from average finished grade along the primary façade on E North Ave.</td>
</tr>
<tr>
<td>Stepback</td>
<td>E North Ave: 10 foot stepback above 3 stories</td>
</tr>
<tr>
<td></td>
<td>James St: 25 foot stepback above 3 stories</td>
</tr>
</tbody>
</table>

![Diagram of James E North Ave Tower](image)
[5.3] Urban Design Guidelines

[5.3.9] Building Design Guidelines: James Street Massing

Existing Intersection of James St and E North Ave looking north

Potential Intersection of James St and E North Ave looking north

Existing Cedar Ave looking north to E North Ave

Potential Cedar Ave looking north to E North Ave

10 Year Development
### Proposed Development

#### Hemlock Tower

<table>
<thead>
<tr>
<th>Site Location</th>
<th>Corner of Hemlock St and James St</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use</td>
<td>Hospital</td>
</tr>
<tr>
<td>Maximum GSF</td>
<td>256,000 gross square feet</td>
</tr>
<tr>
<td># of Stories</td>
<td>8 stories above grade, 1 story partially below grade</td>
</tr>
<tr>
<td>Setbacks</td>
<td>15 feet from property line at James St. 0 feet from Hemlock St.</td>
</tr>
<tr>
<td>Maximum Height</td>
<td>135 feet as measured from average finished grade along the primary façade on Hemlock St.</td>
</tr>
<tr>
<td>Stepback</td>
<td>James St: 25 foot stepback above 4 stories.  Hemlock St: Step back as shown above 4 stories (excluding sky bridge).</td>
</tr>
</tbody>
</table>
[5.3] Urban Design Guidelines

[5.3.10] Building Design Guidelines: Hemlock Street Massing

Existing Hemlock St looking west towards Sandusky St

Existing James St looking south towards E North Ave

Potential Hemlock St looking west towards Sandusky St

Potential James St looking south towards E North Ave
[5.3] Urban Design Guidelines

[5.3.2] Campus Materials, Colors & Design Elements

Neighborhood Landmarks

Allegheny Commons Park

Allegheny Center Alliance Church

[5.3.3] Neighborhood Materials, Colors & Design Elements

A variety of materials can be found in the North Side neighborhood, from stone and brick to glass and metal panel. The neighborhood buildings are products of their time and function: richly detailed stone and masonry facades in the historic Deutschtown, metal panel and glass at Allegheny Center / Nova Place.

Similarly, a variety of building scales are present in the North Side. The majority of buildings are four stories or less, with some taller office and residential buildings interspersed. The tallest buildings are concentrated in and around Allegheny Center, in and around the Commons ring road.
## Environmental and Sustainability Goals

### Environmental Initiatives

<table>
<thead>
<tr>
<th>Category</th>
<th>City of Pittsburgh Goal</th>
<th>Allegheny General Hospital Goal</th>
<th>Goal Status</th>
<th>Goal Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emissions</td>
<td>100% reduction below baseline levels by 2040</td>
<td>100% reduction below baseline levels in new buildings by 2040</td>
<td>Currently performing 26% better than baseline</td>
<td>2030 District Goals</td>
</tr>
<tr>
<td>Energy</td>
<td>50% EUI reduction below benchmark by 2030</td>
<td>50% EUI reduction below custom baseline by 2030</td>
<td>Currently performing 5% better than custom baseline</td>
<td>2030 District Goals</td>
</tr>
<tr>
<td>Renewable Energy</td>
<td>100% energy use met by off-site RECs or renewable energy purchase by 2030</td>
<td>0% energy use met by off-site RECs of renewable energy purchase by 2030</td>
<td>Investigating off-site REC options</td>
<td>City of Pittsburgh</td>
</tr>
<tr>
<td>Water Consumption</td>
<td>50% reduction below baseline by 2030</td>
<td>50% reduction below baseline by 2030</td>
<td>Currently performing 52% better than baseline</td>
<td>2030 District Goals</td>
</tr>
<tr>
<td>Stormwater Management</td>
<td>Manage 50% of stormwater runoff through Green Infrastructure</td>
<td>All new landscaping to be native species requiring no irrigation.</td>
<td>21% pervious site coverage</td>
<td>PWSA Green First Plan</td>
</tr>
<tr>
<td>Waste Management</td>
<td>Zero Waste</td>
<td>20% reduction</td>
<td>Tracking 7 waste streams</td>
<td>PCAP v3</td>
</tr>
</tbody>
</table>

For a health care system to practice resiliency in the future, the first step is to fully understand the stresses and shocks that can happen to the system, the community and surrounding region. The OnePGH Resilience plan identifies a series of chronic stresses and acute shocks that require planning in order to mitigate their effects on the community.
**7.2 Environmental Protection**

**Total Canopy Area in 10 Years:** 2.76 Acres

**Proposed Additional Canopy Area:** 0.35 Acres

**Total IMP Environmental Study Area:** 15.93 Acres

**Tree Canopy Coverage in 10 Years:** 17.32%

**Proposed Canopy Coverage:** 19.52%

It is recommended that invasive species should be removed from the IMP and should be replaced with native species.

---

**EXISTING TREE CANOPY - POTENTIAL TREE CANOPY**

- IMP Environmental Study Area
- Adjusted Tree Canopy
- Projected 10-Year Canopy
- Conceptual Tree Placement
- Pervious Surfaces
- Impervious Surfaces
- 10-Year Development Sites
- 10-Year Landscape Development Areas

**Trees of Significance**

A tree of significance as defined by the City of Pittsburgh is a tree that exceeds or is equal to 12 inches Diameter at Breast Height (DBH). DBH is measured to be approximately 4 feet above ground elevation. City of Pittsburgh Zoning requires that all trees 12 inches and above that are removed from a property are replaced inch-for-inch on site. There is one significant tree within the 10-Year Development Sites that would need to be replaced.

**DEVELOPMENT SITES OVERLAY - TREES OF SIGNIFICANCE**

- IMP Environmental Study Area
- Tree with DBH ≥ 12 Inches
- 10-Year Development Sites
- 10-Year Landscape Development Areas

---

Allegheny General Hospital
Institutional Master Plan
project no. 20-016
June 13, 2023
[7.2] Environmental Protection

Place-Making
It is important to create a sense of intimacy, healing, safety, and wellbeing throughout AGH’s campus. Encouraging the use of greenspaces, gathering areas, and pedestrian connection creates a positive healing environment for patients, staff, and visitors. Landmarks and streetscape improvements causes people to observe and interact with spaces passively and actively which enables stimulation and wellbeing. Each of these improvements are potential place-making ideas and can be created by incorporating art, comfortable and diverse furnishings, plant material, or shaded refuge.

POTENTIAL PUBLIC AREA IMPROVEMENT SITES
- IMP Environmental Study Area
- Existing Tree Canopy
- Projected 10-Year Canopy
- Pervious Surfaces
- Impervious Surfaces
- Greenway/
  Green space
- Outdoor Seating/
  Gathering
- Placemaking/
  Landmark
- Streetscape
  Improvements
- Pedestrian
  Connection
[7.2] Environmental Protection

Pervious and Impervious Impacts

Although the ten-year development sites will increase in impervious coverage by +/- 9,700 s.f. on the hospital’s campus, each one of these sites presents opportunities to create healthy and sustainable places. Future development should be balanced with adequate greenspace.

Most ten-year development sites are proposed on impervious areas. Future projects within these development sites should explore methods to reduce impervious surfaces while providing a high-quality user experience. Stormwater management must be incorporated into Best Management Practicities (BMPs) and be a guiding force in the design process.

DEVELOPMENT SITES OVERLAY - PERVIOUS & IMPERVIOUS

- IMP Environmental Study Area
- Pervious Surfaces
- Impervious Surfaces
- 10-Year Development Sites
- 10-Year Landscape Development Areas
Potential Streetscape Improvements
E North Ave is an important corridor for the Northside community and acts as the southern edge of the AGH campus. Streetscape improvements along E North Ave will be evaluated in conjunction with development projects, on a project-by-project basis.

Future improvements should enhance the safety and enjoyable experiences for pedestrians. Improvements along E North Ave may include: real-time transit information, pedestrian safety improvements, transit shelters, and lighting. AGH will work with the community to evaluate future improvements, incorporate best practices, and prioritize sidewalk and crosswalk safety.

Real time Transit Info
With audible led signage displays information for routes can be accurately conveyed, integrate real time arrival and departure information, disclose important transit and hospital related information and feature route maps. Signage to comply with accessibility requirements. AGH is currently engaged in an effort to install real-time transit screens inside the Hospital lobby.

Transit Shelters
The addition of open air shuttle shelters or covered seating along the East North Ave corridor will be evaluated to accommodate stops with high ridership. Potential shelters should be placed and designed with lighting and visibility to prioritize safety of riders waiting for transit. Shelters may integrate wayfinding information. Transit stops and shelters are subject to DOMI and PRT review and approval.

Pedestrian Safety
GH will evaluate options to eliminate confusions between different users of the streetscape, to allow for better transitions between shuttles or buses and the sidewalk and decreased backup behind shuttles. A potential option is use of curb cuts to better define the threshold between the sidewalk, street, and shuttle stop areas. Another option is to more clearly identify bike lanes, shuttle lanes, and crosswalks with paint or signage.

Lighting Experience
Street and pedestrian path lighting along the North Ave Corridor should be evaluated. Changes to lighting should promote safety at night, wayfinding, and interactive design elements.

Crosswalk Safety
Opportunities for increased safety at pedestrian crossings should be evaluated. Crosswalk locations and enhancements should increase visibility as a tactic to create safer paths for pedestrians and increase driver awareness. Additions of color or graphic art may be considered.

Sidewalk Strategy
Future sidewalk improvements should consider the integration of stormwater collection, additional plantings between the sidewalk and street, and the integration of shuttle stops at key locations along the North Ave. Corridor.
[7.3] Campus Energy Planning

[7.3.1] Energy Initiatives

AHN’s Energy Management program seeks to improve energy utilization by targeting the systems that use the most energy (HVAC, Chiller) and the computers that monitor and control them (Automation).

Several industry best practices are being considered in the areas of energy conservation, energy efficiency, and alternative/renewable energy for our existing buildings, major renovations and new construction projects. In 2018, AHN identified six areas to concentrate on improving performance across its facilities. These initiatives are aimed at reducing operations expenses (Opex).

AHN’s goal is to reduce existing carbon emissions by 50% by 2030 in existing buildings and for new building and major renovations to be net zero carbon by 2040.

AGH aims to implement a continuous commissioning program to provide seamless monitoring of building systems to ensure optimal operations and performance.

<table>
<thead>
<tr>
<th>Opex Initiative</th>
<th>Status</th>
<th>Dependencies / Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.14 Energy Supply Procurement</td>
<td>On Track: 1800 accounts, Multiple contracts</td>
<td>Service, Contract spend / Energy saved</td>
</tr>
<tr>
<td>1.15 Demand Response</td>
<td>On Track: Implemented at AGH</td>
<td>Service, Revenue, Energy Saved</td>
</tr>
<tr>
<td>1.16 HVAC Retro-Commissioning</td>
<td>On Track: Implemented at AGH</td>
<td># faults remedied, Energy Saved</td>
</tr>
<tr>
<td>1.17 Energy Use Optimization (Automation Modernization)</td>
<td>On Track: AHN IT reviewing hardware addition for CoX Proof of Concept</td>
<td>AHN IT approval, Energy Saved</td>
</tr>
<tr>
<td>1.18 Energy Savings Measures (Infrastructure as a Service)</td>
<td>On Track: Hexamodal LED Emergency Lighting Proof of Concept complete. Purchase and install LED lighting for all AHN-owned facilities.</td>
<td>Energy Saved</td>
</tr>
<tr>
<td>1.19 Waste Stream Efficiency</td>
<td>On Track: RR in place</td>
<td>Waste Reduced</td>
</tr>
</tbody>
</table>

AGH Energy Report

<table>
<thead>
<tr>
<th>EUI (kBtu/SF)</th>
<th>2016</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2040</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline</td>
<td>346</td>
<td>+9%</td>
<td>+24%</td>
<td>+06%</td>
<td>-5%</td>
</tr>
<tr>
<td>AGH Goal (50%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

GHG Emissions (Scope 1 & 2)

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline</td>
<td>24.2</td>
<td></td>
<td></td>
<td>-15%</td>
<td>-24%</td>
<td>-26%</td>
<td>-50%</td>
</tr>
<tr>
<td>AGH Goal (50%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
[7.5] Green Buildings

Driven by its mission to create a remarkable health experience for all people, AHN is committed to advancing sustainable design by improving the performance and indoor environmental quality of its existing buildings.

[7.5.1] Green Building Practices

Standards/ Certification

All proposed new buildings should be designed with consideration for LEEDv4.1 for Healthcare or New Construction, and other best practices for sustainable design for a tailored sustainable approach to the site and occupant needs.

Clean Construction

A construction activity pollution prevention plan that focuses on reducing pollution by controlling soil erosion, waterway sedimentation, airborne dust generation, hazardous material (asbestos, mercury, lead, PCBs, and mold) removal or encapsulation in existing buildings undergoing renovation should be implemented alongside enforcement of a construction indoor air quality management plan. All new construction and renovation projects should utilize construction waste management plans.

Building Envelope

New buildings should be designed to exceed the International Building Code (IBC) and International Energy Conservation Code (IECC) standards for building envelope systems, while still providing a pleasing aesthetic that compliments the campus as a whole.

Electricity and Lighting

New buildings should be designed to tie into the campus Building Automation System (BAS) to ensure efficient operation. All lighting will be LED lighting, and daylight automation will be used to the greatest extent practicable. Occupancy and timing controls will be considered where allowed by code.

Water Consumption and Quality

The AGH campus, due to its density, includes a significant amount of impervious surface. AGH aims to reduce its burden on the City water system by implementing measures to reduce and responsibly manage its consumption of potable and non-potable water resources.

Materials and Finishes

To minimize the impact of rapidly emitting VOCs on indoor air quality, where possible, newly applied adhesives, sealants, paints and coatings applied inside the building should meet all VOC emission thresholds recommended in the WELL Building standard v2 X06 VOC Restrictions and X05 Enhanced Materials Restrictions.

HVAC

Mechanical system design should reference ASHRAE Standard 90.1-2019 Appendix G Building Performance Rating Method. Energy modeling will be performed and used to help inform decision-making in conjunction with prescriptive solutions. New buildings should also set an EUI goal once the design team has been established.

Waste Management and Tracking

AGH is responsible for its waste from cradle to grave. In accordance with OSHA, EPA, Department of Health and Joint Commission guidelines, policies and procedures have been implemented to assure the health and safety of employees, staff, community, and the environment.

Infrastructure Plan

Driven by its mission to create a remarkable health experience for all people, AHN is committed to advancing sustainable design by improving the performance and indoor environmental quality of its existing buildings.

[Image of Water Use Intensity (WUI) chart]

Infrastructure Plan

Driven by its mission to create a remarkable health experience for all people, AHN is committed to advancing sustainable design by improving the performance and indoor environmental quality of its existing buildings.

[Image of Water Use Intensity (WUI) chart]

Infrastructure Plan

Driven by its mission to create a remarkable health experience for all people, AHN is committed to advancing sustainable design by improving the performance and indoor environmental quality of its existing buildings.

[Image of Water Use Intensity (WUI) chart]
[7.7] Open Space & Pedestrian Circulation

Existing Transportation and Circulation

Legend:
- EMI Footprint
- Pedestrian Circulation & Crosswalks
- Accessible Public Pedestrian Entrance
- Employee Pedestrian Entrance
- Bicycle Parking Location and Quantity
- Emergency Vehicle Entrance
- Service Vehicle Entrance
- Employee Vehicle Entrance
- Patient/Visitor Vehicle Entrance
- Employee Parking
- Visitor Parking
- Helipad
- Pittsburgh Regional Transit Bus Stop
- AHN Employee Shuttle Bus Stop
Place Making / Landmark

Purpose
The purpose of placemaking is to increase community engagement by improving the public experience on the campus, enhance pedestrian corridors, and educate the public about hospital activities. Being the most public and iconic face of the EMI district. Future development projects should consider placemaking strategies along East North Avenue. Placemaking strategies and potential streetscape improvements should prioritize increased safety, visibility, and refuge for those using the Hospital and those enjoying the neighborhood. Placemaking options include: shared history, urban furniture, and public art.

Shared History
Potential placemaking improvements should share the narrative for how AGH has played an important part in the neighborhood and city for over 100 years. Consider signage that illustrates historical significance and connection to neighborhood.

Urban furniture
New seating should be visible and integrated with the streetscape and should be designed for the benefit of employees, hospital users, and riders waiting for buses. Lighting and visual connection to the street should reinforce safety.

Public Art
Possible public art should connect this zone with the existing murals and public art present in the adjacent Deutschtown and Central North Side neighborhoods and parks. Art also should engage hospital users by adding desirable exterior spaces and amenities.

Design precedent images for example only
TABLE 1
CURRENT AND FUTURE PARKING CAPACITY
Allegheny General Hospital IMP
Pittsburgh, Pennsylvania

<table>
<thead>
<tr>
<th>Existing Parking Located Off-Site</th>
<th>Total Parking Spaces</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Gold Garage (Outside 1000’ of EMI District)</td>
<td>750</td>
</tr>
<tr>
<td>B 1201 Sherman St (Outside 1000’ of EMI District)</td>
<td>60</td>
</tr>
<tr>
<td>C Federal North MOB (Inside 1000’ of EMI District)</td>
<td>350</td>
</tr>
<tr>
<td>TOTAL OFF-SITE PARKING</td>
<td>1,160</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Parking Location</th>
<th>Number of Parking Spaces</th>
</tr>
</thead>
<tbody>
<tr>
<td>On-Site</td>
<td>2,170</td>
</tr>
<tr>
<td>Off-Site</td>
<td>1,160</td>
</tr>
<tr>
<td>Total</td>
<td>3,330</td>
</tr>
</tbody>
</table>

Mobility Plan
(See Trans Associates AGH IMP report for full Transportation and Parking Management Plan)
Mobility Plan

(See Trans Associates AGH IMP report for full Transportation and Parking Management Plan)
Mobility Plan

(See Trans Associates AGH IMP report for full Transportation and Parking Management Plan)
Mobility Plan

(See Trans Associates AGH IMP report for full Transportation and Parking Management Plan)
### Table 2
**EXISTING TRANSPORTATION MODE SPLIT FOR AGH EMPLOYEES - SURVEY RESULTS**
Allegheny General Hospital IMP
City of Pittsburgh, Allegheny County, Pennsylvania

<table>
<thead>
<tr>
<th>Transportation Mode</th>
<th>Mode Split</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drive Themselves</td>
<td>90.4%</td>
</tr>
<tr>
<td>Driven by Others</td>
<td>2.4%</td>
</tr>
<tr>
<td>Bus or Light Rail</td>
<td>2.9%</td>
</tr>
<tr>
<td>Walk</td>
<td>1.4%</td>
</tr>
<tr>
<td>Bike</td>
<td>0.3%</td>
</tr>
<tr>
<td>Other</td>
<td>2.4%</td>
</tr>
</tbody>
</table>

(1) Data collected from electronic survey during April and May 2022

Source: Analysis by Trans Associates.
Potential TDM Initiatives for AGH

Potential general initiatives include:

- Develop a Mobility Vision Statement or set of mobility goals that are supportive of the organization’s mission.
- Evaluate providing or increasing the number of electric vehicle (EV) charging stations (cost and feasibility) to encourage the use of lower energy options for commuting.
- Explore marketing and other opportunities with Pittsburgh Regional Transit.
Potential Employee TDM Initiatives

- Place TDM information on the AGH website.
- Request installation of an additional POGOH bike station nearby.
- Reassess the cost of parking passes/leases to discourage automobile usage.
- Continue to provide remote parking with shuttle service.
- Provide an informational kiosk in the building lobby, which would provide real time information on public transit and locations of available POGOH Bikes.
- Offer free bus passes.
- Identify opportunities to sell Pittsburgh Regional Transit ConnectCards on campus.
- Learn about Pittsburgh Regional Transit products and offerings related to employee programs.
- Explore potential first mile/last mile strategies for those using public transportation.
- Offer a Guaranteed Ride Home program for transit users.
- Provide easily accessible Uber/Lyft pick-up/drop-off locations.
- Provide priority parking for carpools and vanpools.
- Provide website option, bulletin board, and/or marketing for employees to connect with each other for ride sharing opportunities. Cross promote with physical literature distributed in key areas and during appropriate events.
- Establish wayfinding strategies to direct pedestrians to bus stops, bike racks, and bike repair stations.
- Hold annual transportation fairs to encourage alternative modes of commuting.
- At new employee orientation, the TDM Coordinator will present TDM options and information.
Potential Patient/Visitor TDM Initiatives

- Provide a link on the AGH website to Pittsburgh Regional Transit to promote the use of public transit for patients/visitors.
- Install outdoor public bike racks.
- Install outdoor public bicycle repair station(s).
- Place TDM information on the institution’s website.
- Request installation of an additional POGOH bike station nearby.
- Continue the use of valet parking.
- Reassess parking cost to discourage automobile usage.
- Provide an informational kiosk in the building lobby, which would provide real time information on public transit and locations of available POGOH Bikes.
- Explore potential first mile/last mile strategies for those using public transportation.
- Provide easily accessible Uber/Lyft pick-up/drop-off locations.
- Offer coordinated Uber service to bring local patients from home to the hospital (direct door-to-door contract).
- Establish wayfinding strategies to direct pedestrians to bus stops, bike racks, and bike repair stations.
Additional Campus-Area Improvements

AGH plans to make improvements to East North Avenue which will create a safer and more aesthetically pleasing passageway to encourage employees and visitors to use public transit, walk, and/or ride bicycles to the campus.

- Lighting
- Crosswalk Safety Features
- Sidewalk Enhancement
- Addition of Bus Shelters
- Real Time Arrival/Departure Information for Shuttles
- Accessibility
- The Promotion of Streetscape Safety
Thank you
### 9.1 Supplemental Information: Zoning Code Reference

<table>
<thead>
<tr>
<th>1.1</th>
<th>905.03.D.4 (b) Mission and Objectives:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The Institutional Master Plan shall include a statement that defines the organizational mission and objectives of the institution and description of how all development contemplated or defined by the Institutional Master Plan advances the goals and objectives of the institution.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2.1</th>
<th>905.03.D.3 Institutional Master Planning Area</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The Institutional Master Plan shall illustrate and identify the current land use of all the area within the EMI District, contiguous properties, and properties within one thousand (1,000) feet of the EMI District which are under the control of the institution.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3.1</th>
<th>905.03.D.4 (c) Existing Property and Uses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The Institutional Master Plan shall include a summary and projection of the institution’s current and future needs for the following facilities: Academic; Service; Research; Office; Housing; Patient care; Public; assembly; Parking; and Other facilities related to the institutional use.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4.1</th>
<th>905.03.D.4 (f) Twenty-five Year Development Sites</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The Institutional Master Plan shall include a description of the envelope within which development will occur in a ten-year time frame. The development envelope is the maximum amount of development proposed by an institution, which can be supported through impact studies. The intent of this provision is to provide the institution with flexibility regarding the future development potential of its campus, while addressing the potential impacts of that development on the surrounding neighborhoods.</td>
</tr>
</tbody>
</table>

The development envelope shall include the following:

1. Location of each potential development site;
2. Maximum Floor Area of structures for each potential development site;
3. Total Maximum Floor Area for Institutional Master Plan structures;
4. Height of possible structures;
5. Required setbacks on each parcel;
6. Other factors which may affect the size and form of buildings; and
7. Total number and location of parking spaces which will occur within a ten-year period.

<table>
<thead>
<tr>
<th>5.1</th>
<th>905.03.D.4 (e) Ten-Year Development Envelope</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The Institutional Master Plan shall include design guidelines and objectives for new and renovated buildings and structures to assure their compatibility with supporting neighborhoods and districts and to minimize potential adverse impacts on historic structures and historic districts. Urban design guidelines shall include listings of appropriate materials, height, bulk, massing, and colors that will be used to guide the course of proposed and future development.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5.3</th>
<th>905.03.D.4 (j) Urban Design Guidelines</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The Institutional Master Plan shall include a transportation and parking management plan, based on the results of the transportation study that identifies any traffic mitigation measures to be employed.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>7.2</th>
<th>905.03.D.4 (h) Environmental Protection Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The Institutional Master Plan shall identify all sensitive environmental resources within the Institutional Master Plan area, as well as any view corridors that traverse the Institutional Master Plan area. The Institutional Master Plan shall identify Environmental Overlay Districts that affect the Institutional Master Plan area and shall include reports on those conditions as required in Chapter 906. The Institutional Master Plan shall identify areas of the Institutional Master Plan area which may be subject to the Environmental Performance Standards of Chapter 915. The plan shall identify the measures that will be used to mitigate impacts for each of these conditions.</td>
</tr>
</tbody>
</table>

Proposed stormwater management strategy including the type and location of stormwater best management practices and stormwater volume control offsets planned in relation to future development.

<table>
<thead>
<tr>
<th>7.4</th>
<th>905.03.d.4 (e)(8) Proposed Stormwater Management Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The Institutional Master Plan shall identify standards and programs that will be put in place to ensure that the quality of the surrounding neighborhoods is maintained or enhanced.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>8.1</th>
<th>905.03.d.4 (k) Neighborhood Protection Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The Institutional Master Plan shall identify all sensitive environmental resources within the Institutional Master Plan area, as well as any view corridors that traverse the Institutional Master Plan area. The Institutional Master Plan shall identify Environmental Overlay Districts that affect the Institutional Master Plan area and shall include reports on those conditions as required in Chapter 906. The Institutional Master Plan shall identify areas of the Institutional Master Plan area which may be subject to the Environmental Performance Standards of Chapter 915. The plan shall identify the measures that will be used to mitigate impacts for each of these conditions.</td>
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Proposed stormwater management strategy including the type and location of stormwater best management practices and stormwater volume control offsets planned in relation to future development.