# Swarthmore College Campus Master Plan





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# Introduction:

were represented.

# Swarthmore College's *Strategic Directions* articulates many initiatives related to academics, admissions and access, community-building, and alumni engagement.

As the College begins to implement these initiatives, it is important to assess the physical campus and the ways in which these new priorities can best be supported through physical structures and campus layout. To inform structural and building needs for coming decades, College representatives and the planning and architecture firm Ayers Saint Gross actively consulted with the campus community to create the Campus Master Plan.

The planning effort began with the formation of a Campus Master Plan Steering Committee that included representatives of the senior College administration, who were charged with setting broad policy objectives for the Campus Master Plan. In addition, a 12-member Campus Master Plan Advisory Committee, co-chaired by C. Stuart Hain, vice president for facilities and services, and Thomas Stephenson, College provost, was tasked with providing programmatic information and soliciting insight from across campus. Academic divisions (humanities, social sciences, and natural sciences and engineering), the Dean of Students Office, the Scott Arboretum, the Communications Office, the Finance and Investment Office, and the Facilities Planning and Construction Department



way that will:

*Innovate* — Create flexible places to support our community now and in the future—spaces offering a variety of scales and functions that holistically support academic endeavors as well as student and community life.

Cultivate — Enhance the simplicity and beauty of the campus to support individual growth and creativity, the intellectual and cultural life of the community, and our engagement with the world.

Early in the process, principles were developed to inform the campus master-planning effort in order to guide the physical development of the campus in a

*Connect* — Create a dynamic campus with well-defined pathways providing a natural flow between buildings and grounds. Swarthmore seeks to create an inclusive, engaged community through a collection of distinct spaces that relate well to one another, the larger campus, and the surrounding community.

Sustain — Promote sustainable practices through the arboretum's natural resources as well as energy-efficient buildings that provide spaces to connect people with one another and with their environment.







2013

Since its founding in 1864, Swarthmore College has grown with deliberate care. Although there were no formal development plans during the College's early history, new buildings were added prudently; the Quaker tradition of decision-byconsensus was influential.

two decades.

thoughtful growth: and sense of place.



EXISTING BUILDINGS

NEW BUILDINGS

## A Note on Planning History and the College's Growth Over Time:

In 1984, the College adopted its first campus plan. Ten years later, a plan for north campus was developed and enacted. That plan called for the removal of vehicular roads from the academic area, resulting in a more pedestrian-friendly environment on campus. In 2002, the College prepared a land-use-analysis document, followed by preliminary planning activities in 2008. In 2011, the College re-engaged in a planning process, resulting in this 2013 report, which establishes the responsible capacity of the land and sets the course for the coming

- Swarthmore College has a history of
- Since its founding in 1864 as a coeducational institution, the Swarthmore campus has grown incrementally, with each new building carefully planned. As a result, the campus today enjoys a strong identity
- Swarthmore was founded by the Religious Society of Friends, and the physical campus embodies specific traits of this heritage. Buildings are of the highest quality but modest and simple in stature and detail. Campus grounds facilitate contemplation and introspection, evocative of the Quaker value of continuing revelation. Campus needs are provided for but with restraint; most spaces meet current needs, but even modest growth in campus population would stretch campus facilities beyond capacity.
- The College's reputation as a small community supportive of intellectual and personal growth is essential to its identity and mission. As the community plans for modest growth, maintaining the essential characteristics that define a Swarthmore College educational experience is crucial.
- Although the physical campus meets most current needs of the community, it will be difficult to meet future academic, student life, and administrative needs with existing facilities.



Space and Building Use A space-use determination relied on building data and interviews with representatives of an array of campus departments to calculate the quantitative and qualitative aspects of how space has been allocated and shared. The space study yielded details of current campus need and possibilities for future space use. This analysis contributed to decisions about building renovation and footprint expansion or contraction.

Planners visited campus in December 2011 and January 2012 to collect information about buildings, grounds, campus use, and perceptions of place. The findings were used to generate a series of analytical diagrams and were summarized into themes about space and building use, landscape and grounds, and connectivity and access. The exercise identified, within the physical environment, areas of strength to be preserved and areas of weakness to be improved.

- Based on fall 2011 course data, the College offers a large number of courses each semester. Many of these courses have small enrollments, which fits a culture of intimate seminars based on thoughtful dialogue and the sharing of ideas.
- Swarthmore currently has an appropriate number of teaching labs and studios based on use and utilization.



BUILDING USE

- Each department has a seminar room, with the exception of the psychology and philosophy departments.
   Departmental seminar rooms are used for class instruction, as well as for meetings, tutoring sessions, and other purposes throughout the day.
- The College experiences peak scheduling times on Tuesday and Thursday afternoons when many of the available classrooms are in use. Fewer courses are scheduled during morning hours (before 10 a.m.) and on Friday afternoons.
- The College is functioning at capacity. Even modest growth would prompt a need for academic, student, and support spaces. If the course load decreases for faculty, additional

instructional space and faculty offices will be required.

• One additional 40- to 50-seat classroom is currently needed.

### **Building Use**

- Parrish Hall is the oldest structure built specifically for College use. Its siting has an axial relationship with the train station, indicating the historic arrival experience of visitors to the campus. Originally, the building housed students and faculty and met campus needs for classrooms, laboratories, offices, and dining services.
- Today, Parrish Hall still represents the hub of the student experience at Swarthmore. Generally students take classes to the north of Parrish Hall

and they live and play to the south. This orientation shapes the student experience at Swarthmore. There is a strong, shared experience around Parrish Hall and the lawn in front of it, known as Parrish Beach. In warmer months, Parrish Beach provides a central location for events and activities that, on another campus,

ACADEMIC LIBRARY RESIDENTIAL

ATHLETICS/ RECREATION ARBORETUM OFFICES

ADMINISTRATION AND RESIDENTIAL

STUDENT SUPPORT FACILITIES MANAGEMENT

Although the campus lacks a traditional student union or multipurpose library space, Swarthmore students are empowered to use campus spaces and appropriate them for their needs. Students use classrooms in Kohlberg to watch movies with friends late at night, and they host galas in Sharples Dining Hall. Paces, a student-run café

might take place in a student union.



CAMPUS OPEN SPACE

in Clothier Hall, is used on weekends for student parties. Students frequently use outdoor spaces for concerts, games, and other campus traditions.

### Importance of Landscape and Grounds

- The Scott Arboretum shapes the physical campus and contributes significantly to the sense of campus identity. Members of the campus community often cited the arboretum's collections and gardens as some of the most memorable spaces on campus.
- Campus grounds inspire, stimulate, and provide walking trails for students, faculty, and staff, as well as for residents of nearby communities.
- The Crum Woods plays an important role in the Swarthmore campus as

THE CRUM WOODS STUDY highlighted the existing conditions and uses of the Crum Woods.

GARDENS/PLANT COLLECTIONS
QUADS/LAWNS
MATURE TREE CANOPY
ATHLETICS/RECREATION



COMPOSTING FACILITY CRUM WOODS VEHICULAR TRAILS HEAVILY-USED TRAILS OTHER TRAILS ABANDONED TRAILS TRAILHEADS



CAMPUS CIRCULATION

both classroom and natural recreation area. It serves a crucial role in the surrounding ecosystem as a biocorridor and watershed within an area pressured by suburban growth.

- The College has made recent investments in green roofs, stormwater infiltration beds, and organic lawns. The Glade Garden in the Science Center courtyard and the bioswale south of McCabe Library are two examples of best management practices that can be implemented elsewhere on campus.
- Although the landscape and grounds have a positive impact in shaping the core of campus, their presence is not as strong elsewhere, particularly to the south. Many community members

described the athletics and facilities area as feeling like a completely different place, due to the age of the buildings and the prevalence of asphalt.

### **Connectivity and Access**

- Swarthmore College is located 11 miles southwest of Philadelphia, in the borough of Swarthmore. Its surroundings are suburban and residential to the north, east, and south, with the Crum Woods and Interstate 476 (I-476) to the west and the main commercial district of the borough to the southeast. The College is dedicated to its role as a good neighbor.
- It is important that the campus remain accessible and inviting to diverse visitors. Improvements to paths have

5-MINUTE WALKING RADIUS
 10-MINUTE WALKING RADIUS

been made, and more are planned for the near future.

- Connectivity within the academic core is strong among buildings, as are connections from the academic core to Parrish Hall, Clothier Hall, McCabe Library, and many of the student residence halls.
- Parrish Hall is the symbolic heart of campus. The demand for office space in Parrish Hall, while a testament to the importance of Parrish in the life of the College, also poses a challenge due to space constraints.
- The number of parking spaces that exist today adequately meets the demand of everyday use; however, during special events, there is often a shortage.
  - The campus is highly walkable, although topography was cited by some community members as a deterrent to walking. The College's leadership made a decision in the 1990s to remove vehicles from the heart of campus. While service roads exist today in the center of the campus, most parking



TOPOGRAPHY

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areas are on the perimeter. Community members and visitors are encouraged to walk or bike once on campus. Physical elements such as the Southeastern Pennsylvania Transportation Authority (SEPTA) railroad tracks and steep topography challenge north-south connectivity on campus. As a result, the athletic facilities and student residence halls south of the rail line can feel removed from the academic core on the north side of campus.

Visitors may be confused upon arrival in Swarthmore. The route through borough and campus streets is not intuitive for a first-time visitor. Signage is understated, and the north campus entrance at Whittier Place is residential in scale.

REGIONAL CONNECTIONS





SEPTA RAIL LINE
ADJACENT ROADWAYS



Following the observation phase, Swarthmore College's planning efforts progressed through a highly consultative process of proposal development. At each stage, community input was sought and consensus was achieved before moving forward.

Representatives of Ayers Saint Gross presented observations of existing conditions to the campus community. These observations provided an overview of the current state of the campus, particularly calling attention to issues that may go unnoticed by those who live and work on campus. The planning team also solicited community feedback to ensure that essential areas had not been overlooked.

A Conceptual Plan, a physical representation of the principles and specific physical goals, was created and shared with the Swarthmore community. The Conceptual Plan diagrammatically represented the main planning themes and ideas that would be ultimately incorporated into the Campus Master Plan. The Conceptual Plan illustrated the framework structure, layout, and relationships of the planned open space, circulation systems, buildings, and development opportunities on campus.

The Conceptual Plan also identified potential for campus development that has the opportunity to achieve:

- Facilities that support academic initiatives;
- Expansion of the distinct sense of • place, so vivid in the central campus, to campus edges;
- Clear entry and arrival sequence for • first-time visitors;
- Thoughtful campus infrastructure, streets, and pathways; and
- Integration with the Crum Woods. •



The planning team from Ayers Saint Gross held workshops organized around thematic areas: academics and libraries, student life and athletics, and entry and arrival.



THE CAMPUS COMMUNITY engaged in area studies, including walks to specific areas of interest.



### CONCEPTUAL PLAN

- FACILITIES THAT SUPPORT THE ACADEMIC INITIATIVES
- EXPANSION OF THE DISTINCT SENSE OF PLACE
- CLEAR ENTRY AND ARRIVAL
- THOUGHTFUL CAMPUS CONNECTIONS
- INTEGRATION WITH THE CRUM WOODS



**OPEN FORUMS** gave the campus community chances to review and contribute to the Master Plan as it progressed.



**STUDENTS** discussed the campus map at a presentation.

Groups representing thematic areas explored solutions to specific issues. By examining the campus in small thematic areas, called area studies, the planning team and the campus community evaluated site capacity, grounds improvement, pedestrian and vehicular movement, and the overall experience in greater depth. Collaborative, hands-on design workshops engaged the campus community in dialogue, and the preferred concepts were assembled to create the draft Campus Master Plan.



The draft Campus Master Plan was developed in close coordination with the steering and advisory committees. Projects proposed in the plan, organized into themes of academic life, student life, sustainability, and campus systems, were previewed during three open forums with the campus community. In addition, the provost met with each academic department and many programs to preview opportunities for departmental and program migrations. A summary was shared with the Board of Managers and the Swarthmore borough community.

Following a two-month comment period, the Swarthmore College Campus Master of work. The plan provides conceptual solutions to challenges, while respecting the physical capacity of the Swarthmore College campus.

Sustainability concerns guided decision making. While the plan includes some new buildings, the Swarthmore community carefully considered the existing architectural resources on campus. As a result, the plan also includes repurposing and enlarging existing buildings, demonstrating respect for the history of the College and the quality of the buildings on campus. Solutions also seek to minimize impact to surrounding neighbors by focusing development away from the campus' edges where possible.



EXISTING CONDITIONS



PROPOSED MASTER PLAN

### Academic Life and Libraries

Programmatic needs of the academic departments require additional space. While the College has constructed three new academic buildings in the last 25 years -Lang Performing Arts Center (1991), Kohlberg Hall (1996), and the Science Center (2004)—some academic department spaces remain undersized. This is the result of modest enrollment growth as well as more complicated factors. In some instances, the College has added new departments; for example, film and media studies was approved as a department during this planning process and, as a result, will have new program space needs. In other cases, the way that a major is taught has changed. For example, the theater department now places greater emphasis on teaching students to direct plays; therefore, students need more space to conduct production rehearsals. For some departments, including engineering, accreditation requirements drive the need for space.

Adding to the complexity, the College's strategic plan recommends an adjustment in faculty members' teaching load. Faculty members will teach one course fewer per year, allowing faculty members more time to mentor students and pursue research. To maintain course offerings, more faculty lines will be necessary across the College. Adding a faculty position to any department requires additional office space; when the position is added to a science department, research space is also necessary.

To address these interrelated factors, the College completed an academic space needs assessment as part of this Campus Master Plan. The assessment looked at the current space assigned to each department,



ACADEMIC EXPANSION DETAIL

determined the "right-sized" amount of space each department should have based on planning standards and interviews with department chairs, and then projected future needs.

According to the assessment, the departments of Biology, Psychology, and Engineering have the greatest needs in terms of total quantity of space. Martin Biological Laboratory, Papazian Hall, and Hicks Hall, where these departments are housed, are older buildings with narrow footprints. Even with renovation, it would be difficult to retrofit these buildings to meet the specifications of modern research labs.

The biology department has the greatest space needs, so a new biology building,

tied closely to the Science Center, is recommended. Once biology vacates Martin Biological Laboratory, that building can be renovated for use by another academic department.

A significant addition to Hicks Hall is proposed to accommodate the engineering department's programmatic needs. The proximity of biology's new location to Hicks Hall and Beardsley Hall has the potential to allow for physical connections as well as improve opportunities for collaboration between engineers, biologists, and artists. If the buildings are connected, spaces such as offices, seminar rooms, or lounges could make these connections feel like active extensions of the adjacent buildings rather than pass-through zones.



OPPORTUNITIES FOR ADDITIONAL ACADEMIC **EXPANSION** 

An addition to the north façade of Pearson Hall would improve connections between Pearson and Papazian halls and allow for the creation of a collaborative space focused on the social sciences within Pearson. Papazian Hall could accommodate the growing needs of the psychology department, with renovation, expansion, and the relocation of other building functions. Alternately, the psychology department could move into a renovated Martin Hall, a location that benefits from existing connections to the Science Center.

A proposed addition connecting Lang Performing Arts Center (Lang PAC) with Lang Music Building will create needed rehearsal spaces for music, dance, and theater. The addition, proposed for the

west facade of both buildings, will provide powerful views into the Crum Woods, similar to the views from the Lang Music Building concert hall. The addition also expands the lobby space of Lang PAC, which is undersized for the events typically held there. Stricter enforcement of parking regulations in the drop-off area in front of the Lang Music Building will enable the space to be redesigned as a true courtyard.

EXISTING BUILDINGS AND NTERNAL CIRCULATION PROPOSED BUILDINGS AND INTERNAL CIRCULATION RENOVATED BUILDINGS AND NTERNAL CIRCULATION



LANG PAC/LANG MUSIC DETAIL

Within the academic core of campus, additions to the Science Center and Martin Biological Laboratory can accommodate future growth of the College's academic programs beyond what is currently planned. The treehouse-like additions proposed for these two buildings extend toward the west, providing visual connections to the Crum

Woods. These upper-level additions are open at ground level to accommodate service vehicle access to the Science Center, Martin Biological Laboratory, Lang PAC, and Lang Music Building.

A new building, north of the Science Center on the existing parking lot next to the water tower, presents another option for future growth. This site was tested as a possible location for the expansion of biology, engineering, and psychology but could not easily accommodate the total space currently required for those programs. Because many community members viewed this site's connections to the Crum Woods favorably, it has been reserved as a possible future building location.



### **Department Migration Options**

Departments in the social sciences and humanities have less urgent needs in terms of total quantity of space, but improvements to quality and adjacencies among their spaces are needed. In particular, social sciences and humanities faculty members expressed a desire for greater cohesion, stronger identity, and additional collaborative spaces. Interdisciplinary program faculty echoed these needs.

While the planning process was underway, the College received a generous gift from Eugene Lang '38 to support facilities for engineering and science. This gift will have an impact on much more than those two areas. Once biology relocates to a new building, Martin Biological Laboratoryapproximately 25,000 net assignable square feet—will be available for a new use. This well-located building has potential to fulfill a number of academic program needs, and warrants careful study to determine the best use of this important building asset.

Using conceptual diagrams showing how buildings might be renovated for new use and options for different combinations of departments to fill those buildings, the provost met with each academic department and shared three different migration scenarios. In each scenario, humanities departments stand to gain use of either a renovated Martin or Papazian Hall. The scenarios then tested how the moves of different departments might trigger subsequent changes and space improvements. The exercise was intended to be flexible, and the departments provided feedback. Opinions from the departments will inform a migration plan, to be finalized after determining the possible relocation of the psychology department.



McCABE LIBRARY DETAIL

### McCabe Library

Discussion during several work sessions with the staff at McCabe Library focused on the needs of the library today and the role of the library in the 21st century. Although the use of digitized books and journals is growing, all agreed that the library's shortage of collection space will continue into the future. The library will always be a treasured place on campus for research and study, despite changes in technology and how people access knowledge.

Many students and other members of the College community voiced a desire for McCabe to feel more open and accessible. Because of its fortress-like appearance, with narrow slit windows and a small entrance vestibule, the building does not appear welcoming to students and visitors. Inside the library, natural light is at a premium; the most coveted seats are adjacent to the few narrow windows, which have beautiful views in all directions. Adding more functions to the library, such as centers or interdisciplinary programs, might further enliven the space. The College's other primary library locations, Cornell Science Library and Underhill Music and Dance Library, have sufficient space.

Two expansions of McCabe Library are proposed to meet the storage and programmatic needs of the library and create a more inviting environment for library users. A proposed north addition will create a reading room that captures ample light. A larger addition to the south will provide space for stacks and collections on lower levels and areas to meet programmatic needs on upper floors. As envisioned, the upper levels of the addition will recede from the lower level footprint, allowing for an outdoor patio or terrace space with southern exposure and views of Parrish Lawn. The Advisory Committee discussed several different programs and centers that might be located in the library. While no final decisions were made, the dialogue underscored the desire within the Swarthmore community for a more multipurpose library, with diverse activities that will draw users. It is anticipated that when the College undertakes design of these two additions, it will also consider a more comprehensive renovation of the libraryincluding replacement/improvement of the heating, ventilation, and air conditioning system, reconfiguration of interior spaces, a new entrance, and larger windows.

PROPOSED BUILDINGS AND

NTERNAL CIRCULATION

NTERNAL CIRCULATION



**RESIDENTIAL COMMUNITIES** on campus vary greatly in size and allocation of upper and lower classmen.

### **Student Life and Athletics**

Current enrollment at Swarthmore is approximately 1,550 students, a figure reached through gradual growth over the last 150 years. The College has expanded by approximately 500 students since 1970, demonstrating a modest annual growth rate.

FIRST-YEAR STUDENT BEDS

Today, Swarthmore College is considered a small institution when compared to its peer group, and future plans call for maintaining that small size, even while planning for continued modest growth. Many of the College's student-centered spaces were built

for and sized to a smaller student body and need attention to accommodate current need and to prepare for modest growth.



WILLETS HALL DETAIL

DANA/HALLOWELL HALLS DETAIL



### PALMER, PITTENGER, AND ROBERTS HALLS DETAIL

### Residential Life

More than 90 percent of students choose to live on campus all four years, resulting in a high demand for residence hall space. Until the completion of Alice Kemp and David Paul residence halls in 2006 and 2008, respectively, the College had a shortage of student beds on campus. Today, the College has the required number of beds for the current student body; however, diversity of unit types (e.g., singles, doubles, or suites) could be improved, as well as opportunities to mix different class years within residence hall clusters. Anticipated growth over the next 10 to 15 years will require additional capacity.

A number of locations for additional residential facilities were studied. The campus community developed consensus

around four locations that could provide space for additional student housing. In all instances, the proposed locations build on existing communities and provide opportunities to diversify the types of housing options available in each community. It is not suggested that the College immediately build at each of the proposed locations. As with academic facilities, the plan illustrates options for future capacity.

Dana/Hallowell halls addition: Today, a temporary trailer connects Dana and Hallowell residence halls. Originally intended as a short-term solution, the trailer has been in use for more than 15 years. Preliminary plans call for replacing the trailer with a permanent five-story addition.

The proposed addition will create rooms to house approximately 74 students and new lounge spaces with views of the Crum Woods. The addition of an elevator will improve Americans with Disability Act (ADA) accessibility throughout these residence halls.

EXISTING BUILDINGS AND INTERNAL CIRCULATION

PROPOSED BUILDINGS AND

TERNAL CIRCULATION

RENOVATED BUILDINGS AND NTERNAL CIRCULATION

Willets Hall addition: Wings to the north and south of Willets Hall have the potential to provide approximately 75 additional student beds. The College discussed opportunities to create residential options in this location that might appeal to juniors and seniors, thereby diversifying the community that presently consists primarily of first- and second-year students. The new Willets wings would include lounge space, providing an opportunity to replace the existing Mephistos Lounge with a Willets Hall courtyard.

A new residence hall with space for 55 beds is proposed adjacent to Pittenger, Palmer, and Roberts (PPR) residence halls. The Town Center West's inn and campus store, planned just north of these residence halls will enliven this part of campus.

An additional student residence hall with suite-style rooms adjacent to the existing Mary Lyon residence hall on Harvard Avenue has the potential to appeal to juniors and seniors. Like students living at PPR, students at Mary Lyons often feel that they are living off-campus. Although the location is on the periphery of campus, it will be enlivened by the addition of approximately 65 more student residents. Suite-style rooms will provide kitchen facilities to appeal to students recently returned from

independent living arrangement, while reducing pressure on Sharples Dining Hall.

### Student Activities and Clothier Hall

Spaces for student activities are not sufficient to meet current need. Until 1983, the College used the Tarble Activities Center (attached to existing Old Tarble) as a student union. However, a fire destroyed the building in 1983, and while replacement space was created in the All-Campus Space in Clothier Hall (originally built in 1928), this solution was undersized from the start and has not kept up with enrollment growth. When the College completed a major renovation of Parrish Hall in 2006, additional student activity and lounge spaces were created in Parrish to help address the need for student-centered spaces. However, the combined studentcentered spaces on campus are still not large enough to meet the needs of the current campus population.





MARY LYONS SITE DETAIL



SHARPLES HALL DETAIL

The Town Center West project will relocate the College's campus store from the basement of Clothier Hall, presenting an additional opportunity to rethink and renovate that building. A highly flexible and multipurpose space in Clothier Hall will better serve the needs of student activities with the capacity to accommodate casual meetings, formal dinners, lectures, and outside events. Renovations to the entire building are recommended, including an expansion of Essie Mae's snack bar. Terraced steps to the south of the building will reinforce connections to Sharples Dining Hall and create a south-facing outdoor gathering space for students. The Clothier Hall renovation needs to be carefully timed so that other facilities are able to accommodate the activities that will be temporarily displaced by construction.

### Sharples Dining Hall

Sharples Dining Hall, built in 1963, met the needs of the student population in 1970, but it does not have sufficient capacity to serve and seat all students today. Sharples is overcrowded during peak meal times. The plan recommends an expansion to meet current needs. The south addition will expand the dining hall's seating area and provide an outdoor eating venue during warmer months. The addition to the west will address the constraints felt in the serving area and kitchen. A student garden could supply produce for student meals; further study is needed to identify a specific location.



PROPOSED MATCHBOX

### Wellness and Fitness

Matchbox, a wellness and fitness center proposed to replace the existing squash court building, will provide additional space for near-term needs including student activities, athletics, dance, and theater rehearsals. A large, multipurpose room within the building will accommodate student dance groups, yoga, and other activities. A fitness center with views of the woods to the south and west will mitigate the limitations of the heavily-used and often crowded fitness room in the Mullan Tennis Center.

### Athletics

The quality and configuration of the physical education and athletics department facilities limit overall utilization. The Lamb-Miller Field House, built in 1935, presents a

number of concerns. The indoor track does not meet NCAA competition standards. The playing surface has irregularities. Locker rooms are undersized and have ongoing maintenance issues. Coaches' offices are cramped. Although the Mullan Fitness Center is relatively new (built in 1999), the fitness center portion is heavily used and is undersized for the current student population. Tarble Pavilion (built in 1978) is in good condition but would benefit from separate entrances for spectators and players. The practice and intramural playing fields at Cunningham Fields are cramped, and the tennis courts at both Faulkner Courts and Cunningham Fields lack sufficient space between courts and for officiating.

The most significant athletics facilities proposal in the Campus Master Plan is the renovation of Lamb-Miller Field House. Although the structural supports of the building make it difficult for inner walls to be reconfigured, upgrades to the practice courts and the indoor track are feasible. The track, in particular, should be brought into compliance with competition standards.

The plan proposes removing the one-story entrance on the east façade of the field house and replacing it with a three-story structure. The new building addition would separate foot traffic into the Tarble Pavilion during events by bringing most spectators in at the second level, while keeping the players' entrance at ground level. An accessible



CUNNINGHAM FIELDS

ATHLETICS DETAIL

entrance to the arena will accommodate spectators and athletes with disabilities. The expansion allows for the relocation of coaches' offices onto the second and third levels. The three-story structure will be visible north of the railroad tracks, creating a stronger visual connection between the athletics complex and the rest of campus.

Physical connectivity between the field house, Mullan Center, Ware Pool, and the new Wellness/Fitness Center is recommended. Because of changes in topography, it may not be realistic for the connections to be enclosed. However, a canopied connection between the separate facilities will enhance unity and create more comfortable passage during inclement weather.



Recommended improvements to the athletic facilities along Field House Lane include enhancements to the landscape in this area of campus. Today, paved service yards and parking for employees and service vehicles are the predominant use of this space. The plan recommends replacing paving with green space where possible. Because the facilities management department and the service yard occupy this area, the potential for improvement may be limited. For instance, access to the oil storage tanks and emergency electrical generator must be maintained. Still, sensitive landscape design will improve the visual experience for pedestrians, while maintaining service access to these critical elements of the physical plant.

The tennis courts at Cunningham Fields will be reconfigured to meet competition standards. One playing field will be developed into an all-weather (artificial turf) field, allowing for extended playing hours and seasons. Other natural turf fields at Cunningham will be expanded and reoriented. A formal property survey and investigation of storm-water issues will be undertaken before site development.



**\*** ADMISSIONS VIEWSHED

- CAR ARRIVAL SEQUENCE PARKING
- --- WALKING ARRIVAL SEQUENCE - ACCESSIBLE CAR ARRIVAL SEQUENCE
- --- ACCESSIBLE FOOTPATH SEQUENCE



EXISTING ENTRY AND ARRIVAL

### **Entry and Arrival**

The current arrival experience for first-time visitors arriving by car is circuitous. Driving south on Chester Road (from I-476), visitors are directed to turn right onto College Avenue. Visitors are then directed to make another right-hand turn onto Cedar Lane, away from the historic Swarthmore College entry sign and campus, into a residential neighborhood. This route becomes more challenging to follow when visitors are directed to turn left onto Elm Avenue and left again onto Whittier Place. The north gate at Whittier successfully indicates arrival to campus. However, the faculty houses that line Whittier Place may seem out of place to visitors, as there is no signage indicating that these buildings are part of campus.

Whittier Place was never intended to serve as the main campus entrance. However, when roads were removed from the north campus and a major surface-parking lot



PROPOSED ENTRY AND ARRIVAL

was developed east of the Science Center, the entrance along Whittier Place became an important arrival route. Despite its daily use by visitors and campus community members, the scale and landscaping of Whittier Place are inconsistent with the importance of this entrance to campus.

### Entry/Arrival, Circulation, Service, and Parking

To address the confusion created by the current entry and arrival route, a dedicated parking area for admissions visitors will be created at the Benjamin West House. Signage will direct admissions visitors to this redesigned lot, where an appropriate number of visitor spaces will be reserved. Once parked, visitors can walk to an informational kiosk outside the Benjamin West House that will direct them to follow a clear and well-landscaped path to Parrish Lawn. The path will take visitors past McCabe Library's

southern addition, providing a powerful axial view of Clothier Hall and a panoramic view of Parrish Hall, echoing the historic arrival experience to the College. Visitors will then have an option to walk to Parrish Hall via Magill Walk or an accessible route.

Visitors to Lang PAC will continue to be directed to the north campus entrance. Minor improvements are recommended to help visitors navigate this route. Thinning the landscaping at the southwest corner of College Avenue and Chester Road will create clear, unobstructed views of the architecturally beautiful Worth Residence Hall and the Lodges. By softening the T-intersection at College Avenue and Cedar Lane into a curve, visitors will intuit that they are on the correct path. Pending discussion with the borough, opportunities exist to add banners, lighting, plantings, and other identifying materials on Cedar Lane

- STREET NETWORK --- SERVICE ACCESS ONLY



EXISTING VEHICULAR CIRCULATION

to reinforce a sense of arrival to campus. Although thoughtfully designed, the College's current signage is subtle and firsttime visitors may need additional directional signs at strategic locations.

Minor changes to the College's interior roads and network of paths will expand the campus pedestrian zone. The greatest changes to the roads will occur on the north campus, with the construction of a new building, largely focused on the needs of the biology department, and the expansion of Hicks Hall, which will require some road reconfiguration. The changes to the north campus will expand the pedestrian zone of campus by converting some existing roads to service-access-only zones. These roads will be similar in appearance to the fire lane that extends from the Science Center to the Rose Garden Circle. The road behind the Science Center leading to the Lang Music Building,

the driveway leading from the Benjamin West parking lot to McCabe Library, and the paved loop between Papazian Hall, Pearson Hall, and the Friends Meeting House would all be similarly detailed and limited to service vehicles.



PROPOSED VEHICULAR CIRCULATION

The topic of parking often arose during the planning process, and it quickly became apparent that comprehensive management of parking and related functions will be essential to minimize the replacement of green space with parking spaces and to maximize the use of existing resources and all travel modes. A separate transportation study was initiated to address this issue. Chance Management Advisors Inc., with participation from a diverse advisory committee comprising faculty, staff, and students, presented a draft Parking and Transportation Master Plan (PTMP) to the College community in fall 2013.

Working in concert with the College's strategic plan and Campus Master Plan, and informed by observation and surveys of faculty, staff, and student parking and transportation behavior, the proposed PTMP described the role of transportation and parking on campus. It laid a foundation for establishing the number of parking spaces needed and the best locations for those spaces, based on anticipated population changes, building development and renovation, and the displacement and replacement of parking over the next five years. Issues such as visitor and guest parking, access and loading, alternative transportation for trips to campus, limitations on student parking, support for special events, and the efficient use of financial and other resources were addressed in the proposed policies, along with supporting procedures for implementation.





Sustainability can be incorporated into the campus through planning and development as well as operations. Master planning provides a foundation to ensure that the most sustainable development decisions are made over time.

Minimizing energy use, storm-water runoff, and independent vehicle trips on campus are just a few of the ways that planning can bring about environmentally sensitive solutions that contribute significantly to resource conservation.

Swarthmore College has a number of ongoing sustainability initiatives that demonstrate the environmental responsibility of the campus community, including organic lawns, campus-wide composting, sustainability education through landscapes, and the campus Good Food Project. Building upon these efforts, new opportunities have been identified to expand sustainable features and practices in future campus development and operations.





SOLAR ORIENTATION



BUILDING REUSE

Siting buildings to provide optimal solar orientation. Buildings with their longest façade facing solar south allow for the best use of the sun's energy for heat gain and interior day lighting. Parrish Hall, which demonstrates this ideal orientation, establishes a framework that encourages optimal siting for future buildings.

The Swarthmore College

multiple opportunities

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to prioritize sustainability:

- Targeting semi-developed areas, commonly referred to as gray-fields, for new building development. For example, building on existing impervious-surface-parking lots limits
- the incremental additional impervious surface created by construction. A number of the proposed building footprints are located in current surface-parking lots.
- *Encouraging the reuse of existing* buildings, where possible. Efficient use and adaptive reuse of existing facilities can accommodate many campus needs within current building footprints. Where opportunities exist, the renovation and reuse of existing facilities is prioritized in lieu of new construction.

- EXPANDING GREENSPACE
- Expanding green space on campus. Enhancing and expanding the Crum Woods canopy at strategic locations on campus expands wildlife corridors and establishes more diverse ecology closer to campus.
- Treating storm water with best management practices (BMPs). BMPs encourage treatment and recharge of storm water as close to the source as possible. Suggested treatments include rain gardens, porous pavement, and bioswales. Swarthmore has already incorporated many of these



STORMWATER MANAGEMENT



GREEN ROOFS

The Campus Master Plan offers opportunities to expand these efforts. sites for birds and butterflies, and evaporative cooling of the roof. By limiting heat gain for the building, energy demands are in turn reduced. *Investigating geothermal as an energy* source. Geothermal energy has great potential as a sustainable source of energy. Understanding that geothermal well sites should be separate from building sites, the best places for these wells are open spaces and parking lots that are planned to remain undeveloped over the long term. There

initiatives into the campus landscape. •

Incorporating green roofs. By capturing rain and snow fall in the roof medium, green roofs limit the amount of storm water that is immediately discharged into the watershed, allowing it to recharge into the groundwater system over time. Storm water retained on the roof nourishes low-maintenance plants, providing aesthetic enhancement for roof-level views, nesting and feeding



POSSIBLE GEOTHERMAL SITES

are significant areas that meet this condition within the Campus Master Plan. However, certain subterranean conditions are more efficient for geothermal energy than others. These conditions were not studied as part of the Campus Master Plan. Additional study to identify the most appropriate locations for geothermal wells is encouraged.



Strategic Directions.

# The Swarthmore College Campus Master Plan provides recommendations for the long-term development of the College's campus.

The plan describes the capacity of the campus to absorb future growth and provides guidance for additions to academic and student life facilities and to campus systems. The plan preserves cherished campus locations, while also establishing new spaces to meet needs identified through careful study and consultation. The campus community will continue to be engaged as work shifts to the detailed planning and design of the concepts presented in the plan. The highly consultative planning process that underlies the Campus Master Plan reflects the thoughtful dialogue of the campus community as we envision the future of the College and embrace the goals set forth in the College's









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