CONSTRUCTION PLANNING AND PROGRESS MEETING
BROUGHT TO YOU BY INFRASTRUCTURE PLANNING AND FACILITIES
July 2018

Twitter hashtag #msuconstruction
PLEASE LET US KNOW HOW WE’RE DOING

• We want your thoughts and suggestions about the online version of Construction Junction, and what we might do to improve.

• Please leave any comments or suggestions in the feedback box on the Construction Junction webpage located at: http://ipf.msu.edu/construction/construction-junction/index.html.
MSU Board of Trustees updates

Roads and parking lots

New projects:

- Abrams Planetarium – Addition 1 – classroom and catering
- Biochemistry – replace power service – capital renewal
- Strategic academic development – STEM teaching and learning and interdisciplinary research facilities
Project updates:

- Wilson Road extension
- Interdisciplinary Science and Technology – construct original building
- Business College Complex – Addition No. 2 – Pavilion
- FRIB – High Rigidity Spectrometer (HRS) and Isotope Harvesting Experimental Vault
- FRIB – Cryogenic Assembly Building (CAB)
- Cook Hall – building renovation
- Jenison Field House – renovations
- IM Sports – West – replacement of indoor turf surface in room 161
- Demonstration Hall – alterations to multi-use court floor
- IM Sports – East – renovations and resurface indoor track
- Food Science – Fruit and Vegetable Lab renovation
- Communication Arts and Sciences – replace roofs (16-17 major maintenance)
- Hubbard Hall exterior masonry repair – phase three
- Wharton Center – Great Hall and Pasant Theater seat replacement
- Biochemistry – replace windows
- Student Services – replace windows and curtain wall
Step 2: Authorization to proceed:

- Abrams Planetarium – Addition 1 – classroom and catering
- Biochemistry – replace power service – capital renewal
- Strategic academic development – STEM teaching, learning and interdisciplinary research facilities
Step 2: Authorization to proceed:

- Veterinary Medical Center – replace HVAC-1 and HVAC-21
- T.B. Simon Power Plant – install reverse osmosis system
Roads and parking lots
Summer 2018 roadway milling and repaving (May through July)

- Northbound Abbot Road - westernmost lane
- Collingwood entrance - both north and southbound
- Red Cedar Road between Chestnut Road and Wells Hall
- Holden Hall east and west parking loops
- Westbound Shaw Lane - southernmost lane
- Eastbound Shaw Lane - southernmost lane
- Westbound Shaw Lane
Parking lot striping – May 29 through August 3 (all season)

Ramp #3 (Wharton)
Lot 91 (Service Rd.)
Lot 83 (Service Rd.)
Parking lot striping – June 25 through July 6

Lot 26 (Small Vet/Oncology)
Lot 35 (Shaw Hall east)
Lot 36 (Shaw Hall west)
Lot 100 (Clinical Center)
IM Sports – East
Life Science loop
Parking lot striping – July 9 through July 20

Lot 44 (Farrall/BPS)
Lot 53 (Food Safety)
Lot 97 (Engineering Research)
Munn Ice Arena loop
Parking lot striping – July 23 through Aug. 3

Lot 46 (Plant Biology)
Lot 204 (Vet Diagnostic Lab)
Observatory
Summer roadway and parking lot asphalt maintenance

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Project manager:
Matthew Fehrenbach
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Background:

• For over 53 years, Abrams Planetarium has been serving MSU students, faculty, and staff, as well as the general public and K-12 students.

• The Planetarium is positioned to provide nationally recognized innovative, inclusive, and interdisciplinary STEM education and research.

• The newly added full-dome digital technology that allows for immersive virtual environments through 3-D models and 360-degree photography has created new demand for use of the Planetarium for courses ranging from Astronomy to Art History and Classics to Geology.

• The Planetarium also engages the general public and K-12 students in a range of experiences and partners with the Broad Art Museum and the BRIDGE Artist in Residency Program.
Project goals:

• To construct an addition that will:
  ○ Allow for additional partnerships with MSU courses.
  ○ Increase use of the Planetarium.
  ○ Provide room for simultaneous programming (in conjunction with the dome) for a range of curricular, co-curricular and extra-curricular activities.

Project scope:

• Construction of a single-story addition to provide:
  ○ Multi-purpose learning spaces.
  ○ Offices.
  ○ Catering prep space.
• Modifications to the existing building interior/exterior to connect the addition.
• Utility and site work.
• Consideration of capital renewal items (as planning progresses).
Impacts:

- Sidewalk closures along West Shaw Lane.
- Lane closures on West Shaw Lane.
- Loading dock access restrictions.
- Reduced/limited building occupancy.

Schedule:

- Construction start: March 2019
- Ready for use: December 2019
Conceptual floor plan with new addition
Conceptual exterior views
Conceptual exterior views
Conceptual exterior views
Conceptual day time view
Conceptual night time view
Project manager:
Jason Van Zee
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Biochemistry – replace power service – capital renewal (CP17112)
Background:

- The Biochemistry Building opened in 1964.
- The primary switch and substation equipment are original to the building and have passed their life expectancy.
- The transformers contain PCBs and have a potential for site contamination if an electrical failure occurs.
- MSU EHS recommends this upgrade due to the potential hazards involved with PCB-containing transformers.

Project goals:

- Removal and proper disposal of PCB containing transformers.
Project scope:

• Removal and replacement of the entire building power entrance to include the medium voltage entrance switch, two substations and their respective four transformers.

Impacts:

• Project access will require temporary barricading adjacent to the building parking circle and loading dock. However, these facilities are intended to remain open at all times.
• Temporary power will be provided for facility occupants during the transition.

Schedule:

• Construction start: May 2019.
• Construction complete: August 2019.
Existing primary switch and substations
Impacted/fenced area south of building
Project manager:
Chris Barnes
cbarnes@ipf.msu.edu
(517) 355-1628
Strategic academic development – STEM teaching, learning and interdisciplinary research facilities (CP17133)
Background:

• Over the past ten years, enrolled credit hours in Science, Technology, Engineering and Mathematics (STEM) and related courses have increased by 38%, and this trend is anticipated to continue.
• More than a third of the university’s teaching and research labs are housed in facilities that are over 40 years old.
• Significant capital investment in facilities that support best practices in teaching and research, reflecting shifts in instructional methods, code compliance and the collaborative nature of research is needed for MSU to successfully plan for the future and solidify our place among the world’s premier research and teaching institutions.
Project goals:

• Improve and enhance the undergraduate learning experience; support experimental teaching and learning; attract and retain more students in STEM disciplines; and better prepare those students for professional careers in the fields of science, technology, engineering and mathematics.

• The new facility will support curriculum reform that includes different modes of teaching and learning across the STEM gateway courses.

Project scope:

• The full scope of this project is still evolving, and will be finalized in the coming months, while site and existing facility preparations are in progress.
Impacts:

- Increased construction traffic around the Shaw Lane/Red Cedar Road intersection (in the vicinity of the old Shaw Lane Power Plant).
- Scheduled utility shutdowns that may affect other facilities in the area.
- Temporary traffic and pedestrian detours typical of a project of this magnitude.
- New construction footprint needs, and resulting pedestrian circulation requirements, necessitate the closing of Parking Lot 79E (with a loss of 75 spaces). Alternate parking is available in adjacent Lot 79 to accommodate for this loss.

Schedule:

- Construction start: June 2018.
- Ready for occupancy: Fall 2020.
Artist aerial-view rendering of completed project (tentative, pending scope finalization)
Artist rendering of exterior – looking northeast (tentative, pending scope finalization)
Strategic academic development – STEM teaching, learning and interdisciplinary research facilities (CP17133)

Artist rendering of exterior – looking southeast (tentative, pending scope finalization)
Strategic academic development – STEM teaching, learning and interdisciplinary research facilities (CP17133)

Artist rendering of exterior – looking west (tentative, pending scope finalization)
Strategic academic development – STEM teaching, learning and interdisciplinary research facilities (CP17133)

Artist rendering of the first-floor commons/gallery (tentative, pending scope finalization)
Strategic academic development – STEM teaching, learning and interdisciplinary research facilities *(CP17133)*

Artist rendering of the fourth-floor studio space in the former power plant space (tentative, pending scope finalization)
Strategic academic development – STEM teaching, learning and interdisciplinary research facilities (CP17133)

Project manager:
Ken Gottschalk
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Wilson Road extension (CP11349)

Project location
Project milestones:

• Curbs and road base have been installed for the new Conrad Road between Wilson Road and Shaw Lane. It’s likely that the opening date for Conrad Road will be delayed a few days due to added work dealing with water main tests and poor soils.

• Traffic signal bases, light pole bases and curbs at the Shaw Lane – Conrad Road intersection have been installed.

• Cow remains, over 100-years-old, were unearthed during excavation near Conrad Hall.

Impact updates:

• Around Aug. 16, vehicular access to Fee Hall will change from being from the east to being from the west.

• Various pedestrian and vehicular detours will continue until Nov. 15.
Construction phasing (June 20 – July 10)
Construction phasing (July 11 – August 15)
Wilson Road extension (CP11349)

Conrad Road – looking south
Conrad Road – Shaw Lane intersection
Wilson Road – looking west
100-year-old cow remains unearthed at construction site

Photos courtesy of MSU Archaeology
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Project manager:
Dave Wilber
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Wilson Road extension (CP11349)

Project background:
- There is only one major campus entrance (Shaw Lane) on Hagadorn Road, north of Service Road. This creates added vehicular traffic through a busy pedestrian and bicycling area. The intersection is also very close to the intersection of Hagadorn Road and Grand River, which is one of the busiest intersections in the state.
- The current intersection is not coordinated with the CN rail line, creating further traffic complications.
- The lack of traffic signals along Shaw Lane east of Farm Lane creates accessibility concerns.
- Fee Road and Wilson Road (from Conrad Hall to Shaw Lane) along with the parking lots 30 and 32 (south of Fee Hall) are in poor condition and approaching the end of their useful life.
Interdisciplinary Science and Technology – construct original building (CP16304)
Project milestones:

- Metal siding is near completion.
- Freight elevator is installed and in operation.
- Buck hoist has been removed.
- Chillers are operational.

Impact updates:

- Construction traffic will continue to be heavy on Service Road.
- Consumers Energy continues installation of gas service from Hagadorn Road, closing one lane of traffic on Service Road.
Drywall finishing and priming continue.
Central stairway nearing completion
Completion of atrium glazing and skylights
Buck hoist removal to accommodate metal panel installation on the east end
North elevation – panel and glass installation nearing completion
Project webcam

https://app.oxblue.com/open/RockfordCon/InterdisciplinaryScience
Project manager: Carol Cool
ccool@ipf.msu.edu
(517) 353-8619
Project milestones:

- Building envelope construction has started (glass, brick and metal panels).
- All concrete floors have been poured.
- Mechanical/electrical/plumbing rough-ins have started on the first floor.

Impact updates:

- Sidewalks traveling north and south between Shaw Hall and the Business College complex remain closed.
- Sidewalk north of Shaw Lane will be closed throughout summer.
West elevation – from the Red Cedar River
West elevation – from the Red Cedar River
North elevation
South connector corridor – to existing North Business College
Site logistics plan
Project webcam

https://app.oxblue.com/open/MSU/EliBroadPavilion
Construction representative:
Tony Rhodes
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(517) 432-7104
FRIB – High Rigidity Spectrometer (HRS) (CP16108)
Project milestones:

- Building has been demolished.
- 75 percent of abandoned tunnel has been removed.
- Commencement of earth retention system installation.

Impact updates:

- N/A
Earth retention system installation
Project representative
Todd Elkin
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(517) 908-7749
Cryogenic Assembly Building
Project milestones:

- Caisson work is complete, and underground duct bank installation will commence mid-July.
- Foundation construction will begin end of July.

Impact updates:

- A crane lift will occur on Saturday, July 14 to install three helium tanks on the SRF High Bay roof.
- The crane will sit on the south side of the SRF High Bay, on the CAB site.
Caisson work nearing completion - equipment demobilizing
Caisson work complete
Project manager:
Jessica Kolp
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(517) 908-7746
Cook Hall – building renovation (CP16285)
Project milestones:

- Basement fire suppression system installation is 95 percent complete.
- Foundation walls for addition are finished and slab-on-grade in basement has been poured.
- Paint stripping on the second floor wainscot and trim is ongoing.
- New mechanical/electrical/plumbing rough-in installation is ongoing.
- Elevator shaft erection is ongoing.

Impact updates:

- Pedestrian detours as well as site inaccessibility remain in effect.
Fire suppression riser
Lower-level ceiling mechanical/electrical/plumbing rough-in installation
Lower-level column framing
Second-floor columns
Addition foundation walls and slab complete – elevator shaft construction underway
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Project manager:
Amr Abdel-Azim
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(517) 432-0323
Project milestones:

• Steel stud framing and installation of acoustical in-wall insulation is complete on the north second floor.
• Commencement of drywall installation on the north second floor.
• Mechanical/electrical in-wall rough-in installation in progress.

Impact updates:

• Access to the north half of the second and third floors is limited; alternate routes are posted.
• Men’s restroom on the south second floor will be closed; alternate restroom locations are posted.
Installation of drywall in the north main corridor.
Installation of exterior finish system in the pool area.
Installation of acoustical in-wall insulation.
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Project manager:
Matt Postma
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Jenison Field House - renovations (CP16103)
IM Sports – West – replacement of indoor turf surface in room 161 (CP17167)
Project milestones:

- The existing turf grass flooring system has been fully abated.
- New exterior egress doors have been installed.
- Installation of under-floor drainage and flooring sub-base materials is ongoing.
- New air distribution system with air handler, fire sprinkler system and LED lights have been installed.
- Ceiling has been painted.

Impact updates:

- No additional impacts are expected
Turf grass flooring condition - prior to construction
Installation of under-floor drainage, flooring sub-base material and new egress doors
IM Sports – West – replacement of indoor turf surface in room 161 (CP17167)

Installation of under-floor drainage and flooring sub-base material
Installation of new egress doors
Project manager: Scott Gardner
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(517) 432-0782
Demonstration Hall – alterations to multi-use court floor (CP17166)
Project milestones:

- Demolition of arena floor, dasher board system with netting, concrete floor, bathroom fixtures and partitions and hallway ceiling tile abatement are complete.
- Installation of new level concrete floor complete.
- Progress on installation of new lights and abatement of mechanical systems.

Impact updates:

- Approximately five to eight parking spaces south of Demolition Hall are affected.
Demonstration Hall – alterations to multi-use court floor (CP17166)

Condition prior to start of construction
New level concrete floor and lighting being installed
New level concrete floor and lighting being installed
Bathroom demolition and construction in-progress
Hallway ceiling abatement
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Demonstration Hall – alterations to multi-use court floor (CP17166)

Project manager:
Scott Gardner
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(517) 432-0782
IM Sports – East – gym and track renovations (Healthy Campus Initiative)  (CP17168)
Project milestones

- Completion of running track abatement.
- Removal of the interior block wall between the gymnasiums is complete.
- Installation of the protective flooring over the gym floor.
- Demolition of the running track interior stud wall continues.
- Installation of new LED lighting and miscellaneous architectural/electrical/mechanical (AEM) items continues.

Impact updates:

- Temporary hallway has been constructed to allow access to half of the racquetball and other courts.
- Pedestrian pathway between IM Sports – East and the Wharton Center Parking Ramp has been detoured for the duration of this project.
Existing conditions prior to start of construction
Demolition of the block wall between both gymnasiums in progress
Interior block wall removed – demolition of interior track stud wall
Interior block wall removed – demolition of interior track stud wall
Running track renovation progress
Project manager: Scott Gardner
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(517) 432-0782
Project milestones:

• All equipment from the first floor plant has been moved to the recently completed second floor storage area and is ready for fall semester.
• Demolition of the first floor plant and other areas is complete.
• Known asbestos abatement is complete.
• Room 115A (analytical lab) is 75 percent complete.
• Autoclaves have been relocated, to accommodate new mechanical shaft, and are operational.
• Long lead-time procurement has begun. Air handler and three steam kettles have been ordered, and quotes for clean steam generator are being reviewed.

Impact updates:

• Four parking spaces in Lot 43 will be blocked off until Aug. 17 to accommodate construction dumpsters.
• At times, seven parking spaces will be barricaded for crane lifts.
• Approximately three-hour shutdown of the fume hood exhaust system will be required for ductwork rerouting (date to be determined). This will affect the north side of the building.
• General construction noise from demolition will continue.
Second floor storage area with new six-foot equipment door
Room 115A stainless steel cabinets
New door opening from room 115A to the Pilot Plant
Completed demolition in the Pilot Plant

Food Science – Fruit and Vegetable Lab renovation (CP17140)
Wall removed to mechanical shaft and room. Space will now be a part of the new classroom, and serve as a work shop and electrical room.
Old analytical lab demolition completed
Food Science – Fruit and Vegetable Lab renovation (CP17140)

Demolition completed for new water softener and reverse osmosis system
Demolition completed for new air handler in the Pilot Plant
Project manager:
Bryan Anderson
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(517) 432-0583
Communication Arts and Sciences – replace roofs (16-17 major maintenance) (CP16203)
Project milestones:

• Lower roof area complete.

Impact updates:

• Prolonged periods of inclement weather could impact the construction schedule.
Equipment on northwest corner
Lower roof area; viewed from the fifth floor (stone ballast installation).
Temporary access walkway to equipment on northwest corner.
Project manager: Brandon Charland  
**bcharland@ipf.msu.edu**  
(517) 884-6099
Project milestones:

- Continued installation of new window units.

Impact updates:

- Building will remain unoccupied during construction.
New windows installed half way across the west face of North Hubbard Hall.
New window installed – before and after plaster work
Project manager:
Carol Cool
ccool@ipf.msu.edu
(517) 353-8619
Wharton Center – Renovations and Great Hall Seat Replacement (CP16318)
Project milestones:

- New seats have been installed in the Pasant Theater.
- Flooring has been re-coated, and carpet has been replaced in the Pasant Theater.

Impact updates:

- Construction will resume on July 31, after the Lion King production in the Cobb Great Hall Theater.
New seats in the Pasant Theater
Epoxy coating of Pasant Theater flooring
New carpet in Pasant Theater
Project manager: Jessica Kolp
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(517) 908-7746
Project milestones:

- First floor north windows have been replaced.
- Fifth and fourth floor south windows have been replaced.

Impact updates:

- Swing stage is being prepared for replacement of north windows on upper floors. This type of scaffolding has a narrower profile than lifts, and will permit retention of landscape plantings and reduce site disruption.
- Loading dock remains open, but parking places on the south side are now temporarily re-striped and reduced in number to create clearance for the construction lift.
- Project is progressing ahead of schedule.
- Schedule is being fully coordinated with occupants to minimize disruptions.
Barriers north of Biochemistry
Improved window glazing on the new units gives a cleaner, enhanced appearance without the need for solar screens.
Information monitors help keep Biochemistry staff well updated on construction progress and impacts

**BMB Window Replacement Schedule**

- **Monday, June 18th**: 410-B (Polly Hsu’s Office) & 410
- **Tuesday, June 19th**: 410-A (Monique Floer’s Office) & 402-C
- **Wednesday, June 20th**: 402-B & 402-D, 302-A* (Breakroom) & 322-A
- **Thursday, June 21st**: 322, 316-B
- **Friday, June 22nd**: 310-D & 310-E

- **Per EHS, no one is allowed in the lab at ANY time during window replacement**
- **Labs need to:**
  - Clear all windowsills
  - Move chairs out of the way
  - Cover all experiments
  - Close open chemicals
- **Lab personnel will be able to return after the windows are installed**
  - However - there will be patching and painting to follow window replacement
- **Contact Nichole Daly** ([dalyn@msu.edu](mailto:dalyn@msu.edu)) for a more specific schedule
Project manager:
Kristin Pennock
kpennock@msu.edu
(517) 884-7848
Student Services – replace windows and curtain wall (CP16194)
Project milestones:

- Abatement of old windows and installation of new windows have begun.
- The removal must be completed by an abatement contractor, due to asbestos being present in the window caulking.

Impact updates:

- The window replacement portion of the project is being split into two phases; north wing work will occur this summer, with south wing work next summer.
Window removal in progress
Student Services – replace windows and curtain wall (CP16194)

Window removal in progress on the north elevation
New window frame installation
Temporary protection installed to protect building interior after windows are removed.
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