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.

• Thank you in advance!
MSU Board of Trustees updates

Summer construction projects

• Roads and parking lots
• Classrooms
• Scheduled projects
  ▪ Parking – Lot 63 - Breslin
  ▪ Spartan Stadium – install permanent field lighting
  ▪ Ralph Young Track – replace field hockey playing surface
  ▪ Engineering Research Complex – addition and renovations
  ▪ Veterinary Medical Center – alterations to room E100 and corridor
  ▪ Bessey Hall – alterations to first and second floors
  ▪ Wells Hall – replace induction units in building sections C and D
  ▪ Wharton Center – replace existing roof sections one, two, three and four
  ▪ Roads – Trowbridge Road – repaving Harrison Road to Oyer
  ▪ Parking Lot 92 – reconstruction and expansion
Project updates

- Electrical distribution – renewable energy
- 1855 Place
- Breslin Student Events Center – facility upgrades
- Spartan Stadium – South End Zone addition

Completed projects

- T.B. Simon Power Plant – upgrade utility substation

New projects

- Interdisciplinary Science and Technology – construct original building
- Wilson Road extension
- Wharton Center – Cobb Great Hall and Pasant Theater seat replacement
Step 2: Authorization to proceed

- Engineering Research Complex - Addition and Renovations (Fraunhofer Center Expansion)
- Wells Hall – replace induction units in building sections C and D

Step 3: Bid and contract award

- Parking Lot 92 – reconstruction and expansion
- Wharton Center – replace roofs (16-17 major maintenance)
- Roads – Trowbridge Road – repaving Harrison Road to Oyer
Step 2: Authorization to proceed

• Wilson Road extension
Roads and parking lots
Milling and repaving
Why?

• The asphalt conditions are to a point where safety is becoming a concern, and the pavement conditions will not last through another snow season with snow plowing.

Timeline

• Work will begin sometime in mid-May, and last through early June
Impacts

• There will be delays, but the goal is to maintain traffic flows.
• Access into parking lots adjacent to roadway resurfacing will be temporarily closed during paving operations only. Once the asphalt cools to vehicle traffic temperatures, we will reopen.
• IPF will do its best to coordinate contractor schedules to line up the equipment needed for the weekend work to minimize the inconvenience to the campus community.
• If inclement weather delays work, the areas that aren’t able to get paved will be reopened to traffic on the following Monday, allowing cars to drive on the milled asphalt. Crews will then return after 5 p.m. during the week (weather depending) to pave the remaining areas to limit the impact to the community.
Summer 2017 roadway milling and repaving (mid-May through early June)

- Red Cedar Rd. (between Chestnut Rd. and Wells Hall)
- Kalamazoo St. (between Harrison Rd. and Demonstration Hall)
- Westbound Shaw Lane
- Eastbound Shaw Lane (south lane only)
- Westbound Shaw Lane (south lane only)
- Shaw Lane and Akers Road (both lanes)
- Crescent Road
- Bus stop
Parking lot restriping
Why?

• The majority of parking areas on campus are striped on a three-year rotation.

Timeline

• Painting is scheduled in two-week time periods to allow for striping to take place in smaller sections and to also allow for weather delays.
• Parking areas that are being painted are generally shut down for two to three hours, but may take longer due to adverse weather conditions which can cause the paint to dry slower.
Summer roadway and parking lot asphalt maintenance

Impacts

- Painting crews begin work at 5 a.m., and spaces are left available whenever possible.
- Campus visitors and employees are asked to refrain from moving cones or parking in spaces that are being painted or that have been recently painted, so as not to inhibit the painting crew.
Parking lot striping – May 30 through June 9

Lot 1 (Snyder-Phillips)
Central School
Lot 11 (Library)
Lot 10 (Bessey)
Lot 64 (Wells)
University Village
Parking lot striping – May 30 through July 21

Summer roadway and parking lot asphalt maintenance

Ramp 2 (Bessey)
Ramp 6 (Gd. River Ave.)
Spartan Village

STREET PARKING:
• Alumni Chapel
• Snyder-Phillips
• Giltner
• Wells
• Abbot entrance
• Student Svcs. (Farm Ln.)
• Berkey (East Circle)
Parking lot striping – June 12 through June 23

Lot 18 (Mason-Abbot)
Lot 2 (Mason-Abbot)
Mason-Abbot (loop and service area)
Lot 7 (Morrill Hall)
Lot 94 (Spartan Daycare)
Hannah Admin. (loop)
Union (service area)
Lot 88 (Laundry Svcs.)
Parking lot striping – June 26 through July 7

Lot 3 (Berkey)
Lot 8 (Student Scvs.)
Lot 65 (Brody/Svc. area)
Olin Health Center (service area)
Kedzie (service area)
Parking lot striping – July 10 through July 21

Lot 4 (Human Ecology)
Lot 9 (Giltner)
Lot 5 (West Circle housing)
Transportation Svcs. (east)
Baker (loop)
Mary Mayo
Project manager:
Matthew Fehrenbach
mfehrenbach@ipf.msu.edu
(517) 355-7750

Summer roadway and parking lot asphalt maintenance
Classroom Renovations
Classroom renovations/remodels

Summer 2017 classroom renovations/remodels

Technology-related modifications
- Berkey Hall – 12C, 100, 103, 108, 122 and 314
- Wells Hall – A108, A122, A130, A222, A 228, A230, A232, A234, A308 and B122

HVAC upgrades
- Farrall Hall - 116
- Giltner Hall – 146
- McDonel Hall – C107

Complete renovations
- Bessey Hall – 105, 106, 107, 108, 111, 112, 113, 218, 220, 222 and 224 (includes new single person restroom, personal health room, two student testing rooms, new student seating in corridor areas, and provision for new code compliance barrier free seating)
- Bessey Hall – 114 (new REAL classroom)
- Case Hall – 331
- Music – 141 and 245
- Vet Med - E100 (includes new single person restroom, student testing room, and new student seating in lobby area)
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Project representative:
Dan Klann
klann@ipf.msu.edu
(517) 353-3113
Scheduled summer construction projects
Project scope

• Full-depth replacement of Parking Lots 63E/63W
• Expand parking count by 80 spaces
• Convert both lots to pay by plate kiosks

Impacts

• Lots will be closed during construction
• Temporary lane closures on westbound Shaw Lane and northbound Harrison Road

Schedule

• Construction start: June 2017
• Ready for use: August 2017

Construction representative:
Jason Van Zee
ivanzee@ipf.msu.edu
(517) 432-2675
Spartan Stadium – install permanent field lighting (CP15015)
Project scope
• Installation of permanent LED field lighting in Spartan Stadium.
• Field lighting will meet NCAA National Championship broadcast lighting levels of 125 vertical foot candles and will be fully controllable.

Impacts
• Minimal pedestrian detouring around facility
• Potential single-lane closure of the east service drive to the Service Garage, however it will be accessible at all times

Timeline
• Construction start: February 2017
• Ready for use: July 2017

Construction representative:
Jason Van Zee
ivanzee@ipf.msu.edu
(517) 432-2675
Ralph Young Track – replace field hockey playing surface (CP16083)
Project scope
• Replacement of artificial turf (carpet), underlayment and irrigation system
• Replacement or restoration of portions of track impacted by construction

Impacts
• Minor pedestrian detour along sidewalk north of track

Timeline
• Construction start: May 15
• Ready for use: July 27

Project representative:
Tressa Wahl
twahl@ipf.msu.edu
(517) 884-2185
Engineering Research Complex – addition and renovations (CP16042)
Project scope
• Conversion of space in the Engineering Research Complex to laboratories and building of an office addition
• Upgrading of existing electrical service
• Consolidation of chillers

Impacts
• Increased traffic in and around the Engineering Research Complex, Parking Lot 97 and Woodlot Drive

Schedule
• Construction start: April 2017
• Ready for occupancy: December 2017

Construction Representative:
Ken Gottschalk
kjottsc@ipf.msu.edu
(517) 353–7234
Veterinary Medical Center – alterations to room E100 and corridor (CP16171)
Project scope

- Comprehensive renovation of lecture hall E100 to include: fixtures, technology and furniture
- Renovation of adjacent corridor.
- Addition of a single-use, gender-neutral restroom; and quiet study/testing space

Impacts

- Increased construction traffic in and out of the west side of the building
- Noise and dust typical with a demolition project

Schedule

- Construction start: May 8
- Ready for occupancy: Aug. 16

Construction Representative:
Ken Gottschalk
kjgottsc@ipf.msu.edu
(517) 353–7234
Bessey Hall – alterations to first and second floors (CP16172)
Project scope
• Comprehensive renovation of the first and second-floor instructional space (including 11 classrooms and one lecture hall)
• Renovation of adjacent corridors
• Addition of a single use restroom, quiet study and testing spaces

Impacts
• Limited impact to adjacent academic and academic support functions
• Project team will coordinate with building occupants

Schedule
• Construction start: May 8
• Ready for occupancy: Aug. 16

Construction Representative:
Matt Postma
mpostma@ipf.msu.edu
(517) 353–9223
Wells Hall – replace induction units in building sections C and D (CP16195)
Project scope
• Replacement of aging induction heating/cooling units throughout Wells Hall.

Impacts
• Each faculty office within “C” wing will need to be occupied for construction for a period of two to five days (actual time TBD), emphasizing the importance of coordination with the departments and schedule compliance by the contractor.

Schedule
• Construction start: May 8
• Project completion: December

Construction representative:
Todd Wilson
tdwilson@ipf.msu.edu
(517) 432-4355
Wharton Center – replace existing roof sections one, two, three and four (CP16193)
**Project Scope**

- Remove existing conventional roofs and replace with new.
- Inverted Roof Membrane Assembly (IRMA) style roof to be installed over Great Hall stage.

**Impacts**

- Smells inside building; will be alleviated by installing temporary charcoal filters.
- Loading dock will be used as a site setup space, causing one month of temporary relocated parking.
- Sidewalk closure between FRIB and Wharton for one month.
- Building will remain open during work. Construction will avoid major performances

**Schedule**

- Construction start: June 26
- Construction complete: Sept. 22

Construction representative:
Jessica Kolp
[kolp@frib.msu.edu](mailto:kolp@frib.msu.edu)
(517) 908–7746
Roads – Trowbridge Road – repaving Harrison Road to Oyer (CP16204)
Project scope
• Mill and resurface both eastbound and westbound roadways (four lanes and two bike lanes) from Harrison Road to Oyer Speech and Hearing parking lot.

Impacts
• Pedestrian and vehicular circulation
• Our goal is to maintain a minimum of one lane open in both directions, so detours will not be necessary.

Schedule
• Construction start: June 5
• Construction complete: July 21

Project representative:
Tressa Wahl
twahl@ipf.msu.edu
(517) 884-2185
Parking Lot 92 – reconstruction and expansion (CP15193)
Project scope
• Full reconstruction of the lot
• Provide additional parking capacity
• Update to current ADA and MSU construction standards
• Reduce maintenance costs

Impacts
• The parking lot will be offline for the duration of the construction

Schedule
• Construction start: May 8
• Ready for occupancy: July 28

Construction representative:
Chris Barnes
cbarnes@ipf.msu.edu
(517) 355-1628
Project updates
Project locations
Why?

• Solutions are needed to address the increased demands created by campus growth, the addition of the Facility for Rare Isotope Beams and other research and academic endeavors, and to maintain the reliability and cost-effectiveness of MSU's power supply.

• This project will provide financial benefits to MSU by allowing MSU to purchase power at a fixed price over the next 25 years.

• The project will also significantly advance the Energy Transition Plan's goals of improving the environment, investing in sustainable energy research and development, and positioning MSU as a leader in the realm of sustainable energy.
Project scope

• The university has entered into a long-term Power Purchase Agreement (PPA) with Inovateus Solar for renewable energy that would be generated from the construction of large scale solar array carports over five parking lots:
  o Lot 83 (Service Road east of University Services)
  o Lot 89 (Commuter Lot at Farm Lane and Mt. Hope Road)
  o Lot 91 (Service and Hagadorn Roads)
  o Lot 92 (Service Road north of the Clinical Center)
  o Lot 100 (Service Road east of Radiology)
• MSU will connect the electrical output of the solar arrays to the MSU electrical grid.
Impacts

• Designated parking lots will experience reduced availability as a result of temporary pre-notified vehicle relocation.
• No parking places will be eliminated.
• The construction schedule is being coordinated to minimize interference during the 2017-18 football season and home tailgates.
• Once complete, carports will provide vehicles with partial protection from weather.

Schedule

• Construction start: March
• Construction complete: December
Rendering of completed solar carports (Lot 89)
Rendering of completed solar carports
Foundations – micro pile drill equipment
Foundations - installed micro piles
Electrical distribution – renewable energy (CP15105)

Construction representative:
Chris Barnes
cbarnes@ipf.msu.edu
(517) 355-1628

Electrical distribution - renewable energy

Project phase: Construction

Solutions are needed to address the increased demands created by campus growth, the addition of the Facility for Rare Isotope Beams and other research and academic endeavors, and to maintain the reliability and cost-effectiveness of MSU's power supply. These tasks also must be accomplished in a manner that achieves the goals of the Energy Transition Plan. Thus far, the planning has resulted in projects to upgrade the electric substation and transmission lines on campus and to install an additional pipeline to deliver gas to the T.B. Simon Power Plant, and the announcement in April 2015 that MSU would cease to burn coal in the Power Plant by the end of 2016. Much progress has been made, but the grand goals set by the university and the Energy Transition Plan require diligence and creativity.
Project location
Project milestones *(accomplishments/project phases completed during the past month)*

• Single student townhome units are substantially complete (excluding exterior work)

Impact updates *(pedestrian, traffic, building occupant, facility impacts expected in the coming month)*

• No new impacts are expected
Exterior work on the mixed-use structure continues
Exterior masonry work on the office tower portion nears completion
Decorative masonry work on the office tower portion
Another example of decorative elements in the structure
Interior framing work continues
Interior drywall installation in progress
Roofing work on the student apartment unit end caps in progress
Project webcam

http://oxblue.com/open/Walbridge/SpartanVillage
Construction representative:
Andy Linebaugh
alinebau@ipf.msu.edu
(517) 432-7103
Project milestones (accomplishments/project phases completed during the past month)

• Demolition of Quads 2 and 3 on the southwest and southeast corners of Breslin has begun
• Electric chillers and associated piping ready for start up and commissioning

Impact updates (pedestrian, traffic, building occupant, facility impacts expected in the coming month)

• No access to Breslin at the southeast and southwest gates during the month of April
• Concourse on the south side of Breslin is reduced
Breslin Student Events Center – facility upgrades (CP14110)

Project phasing plan – March 26 through May 1
Interior work on the Hall of History continues
Interior work on the Hall of History continues
Interior work on the Hall of History continues
HVAC installation in the Hall of History addition
Progress continues on the new restroom facilities
Exterior of the Hall of History addition
Exterior of the Hall of History addition
Project webcam

http://oxblue.com/open/MSU/Breslin
Construction representative: Jason Van Zee
jvanzee@ipf.msu.edu
(517) 432-2675
Spartan Stadium – South End Zone addition (CP16298)
Project milestones (accomplishments/project phases completed during the past month)

- Exterior masonry walls are complete
- Underground plumbing and electrical within the building are complete
- Concrete slabs in building are complete
- Prefabricated plumbing carriers and piping installations are underway

Impact updates (pedestrian, traffic, building occupant, facility impacts expected in the coming month)

- Access to the south of the Stadium is restricted
- Pedestrian detour around South End Zone to Shaw Lane is in place
- Parking in Lot 79 is temporarily reduced by one-third capacity
Exterior wall erection in progress
Exterior walls taking shape
Another view of progress on the exterior walls
Concrete slab pouring and rough-in work in progress
Completed portions of concrete slab
Plumbing and utility work installation begins in the new addition.
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Construction representative:
Jason Van Zee
jvanzee@ipf.msu.edu
(517) 432-2675
Completed projects
Why?

• To provide increased electrical power capacity and delivery reliability to FRIB, the T.B. Simon Power Plant and the MSU campus.

Project accomplishments

• The project consisted of three elements:
  o An underground 138 kV transmission line from the existing Michigan Electric Transmission Company transmission line to the T.B. Simon Power Plant.
  o Installation of a larger capacity substation, consisting of two 50 MVA transformers, at the T.B. Simon Power Plant with space for a future third transformer and connection to the new switch house installed to supply FRIB.
  o Installation of a substation along the Michigan Electric Transmission line.

Schedule

• Construction start: January 2016
• Power available: March 2017
New Green Switch Station
Restoration along the underground route
Spartan Substation equipment
Fully energized Spartan Substation
Construction representative:
Chris Barnes
cbarnes@ipf.msu.edu
(517) 355-1628
Upcoming projects
Project location
Why?

• This facility is part of the Strategic Academic Development Initiative and will:
  o Provide modern teaching and interdisciplinary research space necessary to support significant growth in STEM-related fields
  o Focus on research, which is necessary to support the university’s investment in the Global Impact Initiative (GII) to recruit more than 100 new faculty investigators

• Placement of the ISTB facility adjacent to other core research facilities will continue the strategic development of a neighborhood of scientific research in the biomedical and biological sciences.
Project scope

• Construction of a six-story structure of approximately 160,000 gross square feet which will include:
  o Wet bench laboratories
  o Computational research space
  o Offices
  o Collaborative space (including areas for shared equipment)
  o Vivarium

Schedule

• Site preparation: May 1, 2017
• Construction start: June 2017
• Construction complete: August 2019
Impacts

- Impacts to the campus community will be typical of a project of this nature and may include lane/road closures, pedestrian detours, parking impacts and increased construction traffic in the area and noise/dust.
- Replacement parking is planned to the north and east of Clinical Center A to accommodate customers and staff affected by the displacement of parking currently available at the project site.
- Interior spaces made available as a result of consolidating teaching labs will be renovated and repurposed to accommodate additional research space needs in currently active research buildings.
Aerial view rendering of the completed facility from the north
Rendering of the northwest corner of the facility
Rendering of the northeast corner of the facility
Rendering of the north side of the facility shown at night
Design representative:
Dick Temple
dick.temple@hc.msu.edu
(616) 234-2603
Why?

- There is only one intersection (Shaw Lane) connecting campus with 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 Avenue, 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 Road creates accessibility concerns.
- Fee Road and Wilson Road (from Conrad Hall to Shaw Lane) along with Parking Lots 30 and 32 (south of Fee Hall) are in poor condition and approaching the end of their useful life.
Project scope

- Reconfiguration and reconstruction of Wilson Road, Fee Road and Parking Lots 30 and 32
- New traffic light intersection at Hagadorn Road that will be integrated with railroad signals
- New traffic light at the intersection of Shaw Lane and current Wilson Road (new road name TBD)
- Improve water distribution in the region
- Vehicular, pedestrian, and bicyclist safety improvements
- Improved ADA crossings and compliance
Impacts

- Because of the roadway changes multiple campus addresses will be affected including buildings, parking lots, tennis courts and a bus stop.
- Parking capacity will be maintained in the new design, but it will be temporarily reduced during construction
- Construction closures will be phased
- During construction, employee parking will be made available in Lot 100 (south of railroad tracks)

Schedule

- Construction start: March 2018
- Road opened: October 2018
Wilson Road extension

Site plan (existing)
Existing conditions (on-street parking will be eliminated to improve safety)
Existing conditions (steps will be eliminated to improve accessibility)
Wilson Road extension

Site plan (proposed)

PARKING STALL COUNTS

ESTIMATED EXISTING: 570
WADE TRIM PROPOSED: 592
(12 A.D.A. INCLUDED)

ADDITIONAL 23 BIKE RACKS

PROPOSED WATERMAIN
Site plan (proposed)
Preliminary roadway sections

Wilson Road extension
Design representative:
Dave Wilber
dwilber@ipf.msu.edu
(517) 884-2186

Wilson Road extension
Project phase: Planning/Design

Project background
- There is only one intersection (Shaw Lane) connecting campus with 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.

Project scope
- Reconfiguration and reconstruction of Wilson Road, Fee Road and Parking Lots 30 and 32
- New traffic light intersection at Hagadorn Road that will be integrated with railroad signals
- New traffic light at the intersection of Shaw Lane and current Wilson Road (new road name TBD)
- Improve water distribution in the region
- Vehicular, pedestrian, and bicyclist safety improvements
Why?

- There is extensive failure of the current seating in the theater spaces
- Audiences have commented on the poor condition of seats in online surveys

Project scope

- Replacement of 2,401 seats in the Great Hall
- Replacement of 585 seats in the Pasant Theater
Impacts

• The project will be coordinated around performance schedules to minimize disruption to facility operations.

Schedule

• Construction start: Oct. 1, 2017 (seats will be ordered)
• Seat replacement starts in May 2018 in the Pasant Theatre
• Cobb Great Hall seat replacement cannot start before July 30, 2018 due to performance schedules, and finish no later than Sept. 7, 2018
Wharton Center for Performing Arts
Interior of Pasant Theater
Construction representative:
Jessica Kolp
kolp@frib.msu.edu
(517) 908–7746
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Construction Junctions continue monthly

Presentations will be available on the Construction Junction website by the seventh of each month.

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