

# Technician and Laboratory Facilities Requests Procedure

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CIVIL AND ENVIRONMENTAL ENGINEERING

UNIVERSITY of MICHIGAN ■ COLLEGE of ENGINEERING

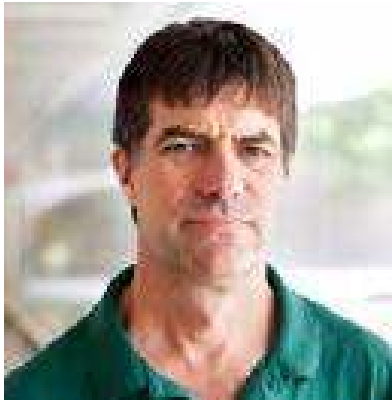
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# Procedure Objectives

- Take full advantage of the excellent technical staff, fabrication facilities and testing laboratories in CEE
- Better integrate the technical staff into projects during planning stages
- Coordinate laboratory and fabrication resources equitably across the department
- Provide a formal means of assessing the quality, timeliness and professionalism of the technical staff



# Technical Staff



Jan Pantolin  
Technical Services Supervisor



Tom Yavaraksi  
Laboratory Services Supervisor



Justin Roelofs  
Engineering Technician



Steve Donajkowski  
Mechanical Technician



Ethan Kennedy  
Electronics Technician



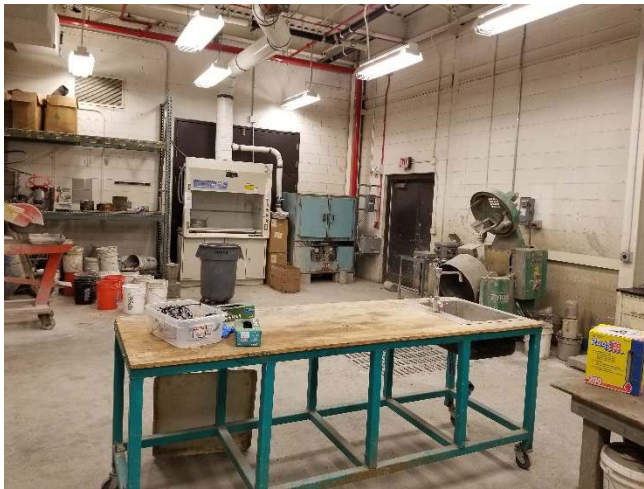
# Laboratory Facilities



Structural Engineering Laboratory



Mechanical Testing Laboratory



Concrete Mixing Laboratory



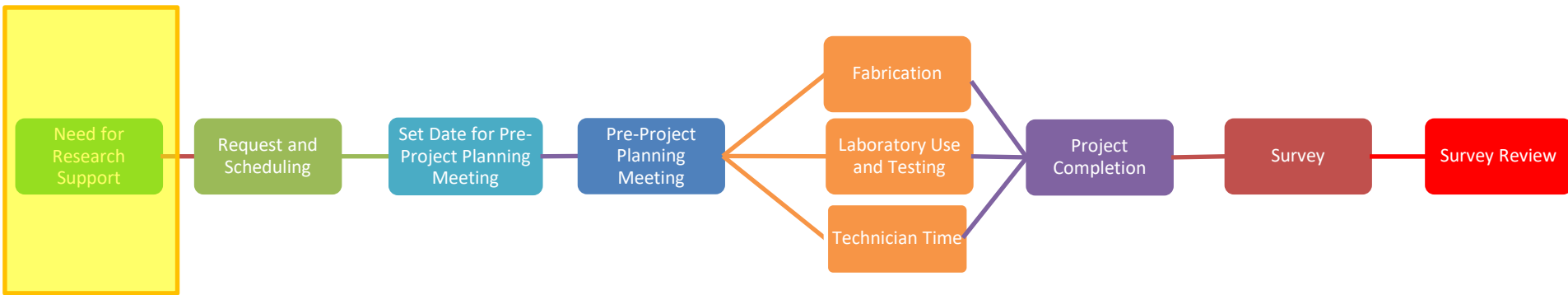
Fabrication Facilities



# Procedure Overview



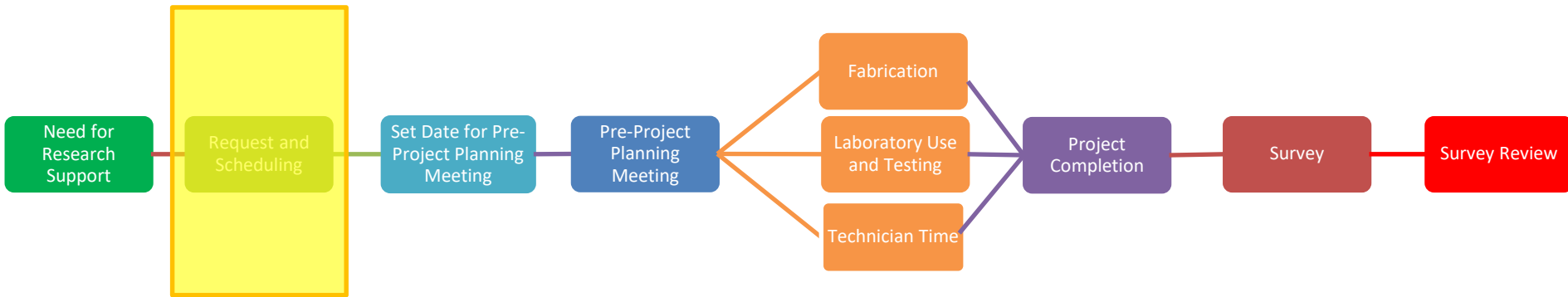
# Procedure Overview



## Need for Research Support:

- Have fabrication needs; require use of the structural engineering laboratory, mechanical testing laboratory or concrete mixing laboratory; or need technical staff support on a project or potential project
- Involve the technical staff early on in the process
- Resist the urge to purchase parts or full pieces of equipment

# Procedure Overview



## Request and Scheduling:

- Fill out *Work, Test and Lab Time Request Form*
- Initiate collaborative relationship between the project team and technical staff
- Provide as much information about the need and project as possible



# Work, Test and Lab Time Request Form

## CEE Technical Work, Test, Lab and Time Request

Please fill out the required information. Pre-planning meeting is required when starting a new project or test. Additional meetings may be required depending on work.

The name, username and photo associated with your Google account will be recorded when you upload files and submit this form. Not [jpmccorm@umich.edu](mailto:jpmccorm@umich.edu)? [Switch account](#)

\* Required

Your Name \*

Your answer

Your e-mail address \*

Your answer

Your Faculty Adviser \*

Your answer

Your Faculty Adviser's e-mail \*

Your answer

Project Name \*

Your answer

Describe the project \*

Your answer

Project Location- building and room number \*

Your answer

Pre-planning meeting suggested date (Monday-Friday) \*

MM DD YYYY

/ / 2018

Pre-planning meeting time suggested time (8am-12pm, 1pm - 4 pm) \*

Time

: AM ▾

Project type(s) \*

- Material fabrication
- Electrical/electrical control/data collection
- Material Purchase
- Repair/modification
- Material Testing- Reserve Test Equipment - Reserve Lab Space - list date(s) and times(s) below
- Mixing Lab Reservation - list date(s) and time(s) below
- Technician Time - Designate technician, location, date(s), time(s) and location - list below
- Other:

For Material Testing, Reserve Test Equipment and Lab Space - List equipment, date(s) and time(s) requested. Link to check availability on calendar: <https://calendar.google.com/calendar?cid=dW1pY2guZWRR1X3ExcGo1aTdoNTJpZGRnNDQyMHVnYzJwY28wQGdyb3VwLmNhbGVuZGFyLmdvb2dsZS5jb2Q>

Your answer

Mixing Lab Reservation -List date(s) and time(s) requested. Link to check availability on calendar:

<https://calendar.google.com/calendar?cid=dW1pY2guZWRR1X3ExcGo1aTdoNTJpZGRnNDQyMHVnYzJwY28wQGdyb3VwLmNhbGVuZGFyLmdvb2dsZS5jb2Q>

Your answer

Technician Time - Designate technician, location, date(s) and time(s) requested

Your answer

Priority \*

	1	2	3	4	5	
Very high	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very low

Desired completion date \*

MM DD YYYY

/ / 2018

More details

Your answer

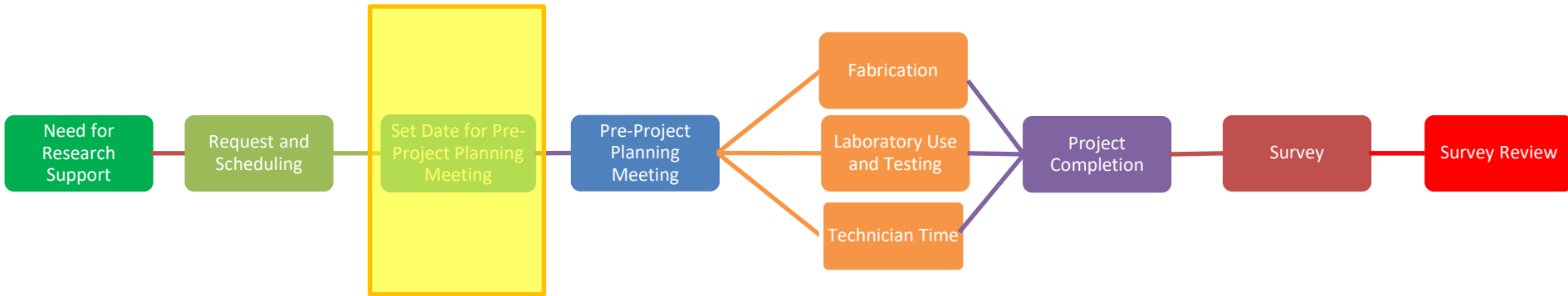
Sketches or other information

[ADD FILE](#)





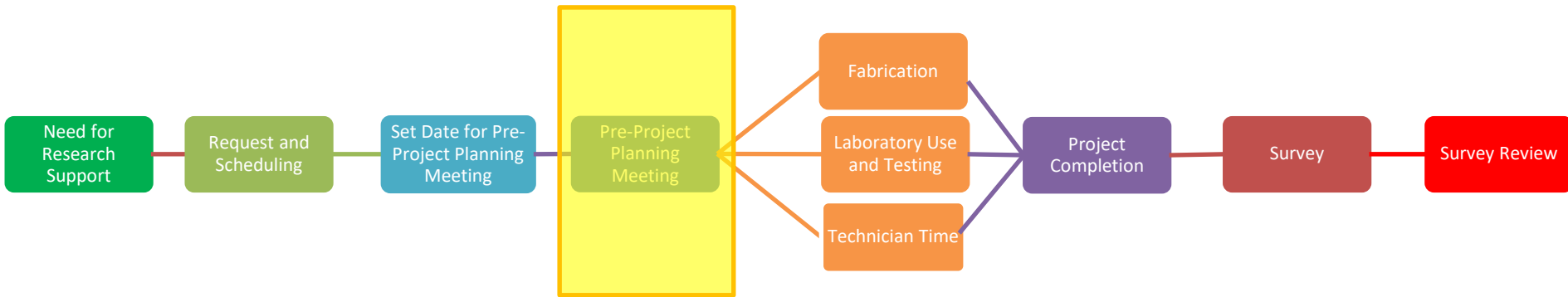
# Procedure Overview



## Set Date for Pre-Project Planning Meeting:

- Technical Services Supervisor will use the *Work, Test and Lab Time Request Form* to setup a pre-planning meeting with the researchers and appropriate technical staff
- Response to the submitter will be within 2 business days

# Procedure Overview



## Pre-Project Planning Meeting(s):

- Required for every project that needs fabrication, use of laboratory space/equipment and use of technician time
- Used to identify important elements of the request
- Links appropriate technical staff with the project team
- Establishes an agreed upon timeline for the project
- Large/complex projects may require multiple meetings
- Upon completion project is added to the *work requests spreadsheet* and *lab usage and planning google calendar*

# Work Request Spreadsheet

- Contains work order number, technician assigned, status, project team contact information, project information, and project location
- Shows ongoing and completed projects
- Use to track the status of your project

WR Number	Assigned	Status	Timestamp	Email Address	Your Name	Your e-mail	Your Faculty Adviser	Project Name
2018-98	ALL	Completed 4 hrs 8/8/18	6/12/2018 12:27:40	steendam@umich.edu	Caroline	steendam@umich.edu	Lutgarde Raskin	Move to temp control room
2018-10	Bob	Completed 2/15/18 3/4 hrs. RMS	2/8/2018 9:08:18	steendam@umich.edu	Caroline Van Steer	steendam@umich.edu	Lutgarde Raskin, Steven Skerlos	Fabrication of three small watertraps
2018-17	Bob	2/28/19 Completed 1 hr.	2/27/2018 3:05:19	florcam@umich.edu	Christian Flores	florcam@umich.edu	Jason McCormick	Filled Beam Test
2018-19	Bob	Completed 3/2/2018 2 hrs.	3/1/2018 13:00:13	amhilmas@umich.edu	Ashley Hilmas	amhilmas@umich.edu	Kathleen Sevener	Eng 100 Class
2018-20	Bob	completed 3/18/18 1/2hr.	3/5/2018 11:31:29	steendam@umich.edu	Caroline Van Steer	steendam@umich.edu	Lutgarde Raskin	Fitting in bottom of bucket
2018-28	Bob	Completed 4/3/18 8 hrs.	3/21/18	yhfeng@umich.edu	Yiheng Feng	Yiheng Feng	Henry Liu	Mount TV on the wall
2018-34	Bob	Completed 3/30/18 1hr.		florcam@umich.edu	Christian Flores	florcam@umich.edu	Jason McCormick	Lab. Meeting
2018-40	Bob	Completed 4/6/18 5hrs.	3/29/2018 10:01:47	jsemrau@umich.edu	Jeremy D. Semrau	jsemrau@umich.edu	Me	Ice Machine Installation
2018-54	Bob	Completed 4/18/18 1hr.	4/17/2018 13:06:05	nivea@umich.edu	Nivea	nivea@umich.edu	Krista and Lut	N/A
2018-61	Bob	Completed 4/24/18 2hr.	4/23/2018 11:46:50	njlowe@umich.edu	Nick Lowe	njlowe@umich.edu	Nancy Love	Flint Water Filter Outreach Training
2018-73	Bob	Completed 5/31/18 2hrs	5/7/2018 14:52:22	nivea@umich.edu	Nivea Vydiswaran	nivea@umich.edu	n/a	n/a
2018-78	Bob	Completed 5/30/18 3.5 hr.	5/15/2018 12:42:11	filpov@umich.edu	Evgueni Filipov	filpov@umich.edu	N/A	Whiteboard installation in 2144 GGB
2018-79	Bob	Completed 5/18/18 1hr.	5/15/2018 17:57:22	jpmccorm@umich.edu	Jason McCormick	jpmccorm@umich.edu	Me	Caster Testing
2018-87	Bob	Completed 6/22/18 9 hrs	5/22/2018 23:26:38	yibao@umich.edu	Yi Bao	yibao@umich.edu	Prof. Victor Li	ECC Lego
2018-90	Bob	Completed .5 hr 6/5/18	6/1/2018 13:01:57	asinanaj@umich.edu	Alexi Sinanaj	asinanaj@umich.edu	Dr. Nancy Love	INFEWS
2018-108	Bob	Completed 6/01/18 16 hrs.	8/28/2018 8:48:33	njlowe@umich.edu	Nicholas Lowe	njlowe@umich.edu	Nancy Love	Flint PoU Filter Trainings
2018-111	Bob		7/2/2018 1:51:06	jpmccorm@umich.edu	Jason McCormick	jpmccorm@umich.edu	Jason McCormick	Caster Project
2018-113	Bob	Completed 7-5-18 1.5 hr.s	7/3/2018 15:15:00	ammonsm@umich.edu	Malcolm Ammons	ammonsm@umich.edu	Jason McCormick	Aluminum Coupons
2018-123	Bob		7/31/2018 14:25:25	kafflanig@umich.edu	Katherine Flanigan	kafflanig@umich.edu	Jerry Lynch	Sensing Bench
2018-125	Bob	Completed 8/3/18 1/2 hr.	8/3/2018 11:47:37	maximm@umich.edu	Maxim Muermans	maximm@umich.edu	Lutgarde Raskin	Cutting metal tube
2018-141	Bob	Completed 3hrs Bob , 45mins Steve	8/23/2018 10:29:02	kidusaam@umich.edu	Kidus Admassu	kidusaam@umich.edu	Professor Jerome P. Lynch	Asset Management of Retaining Walls

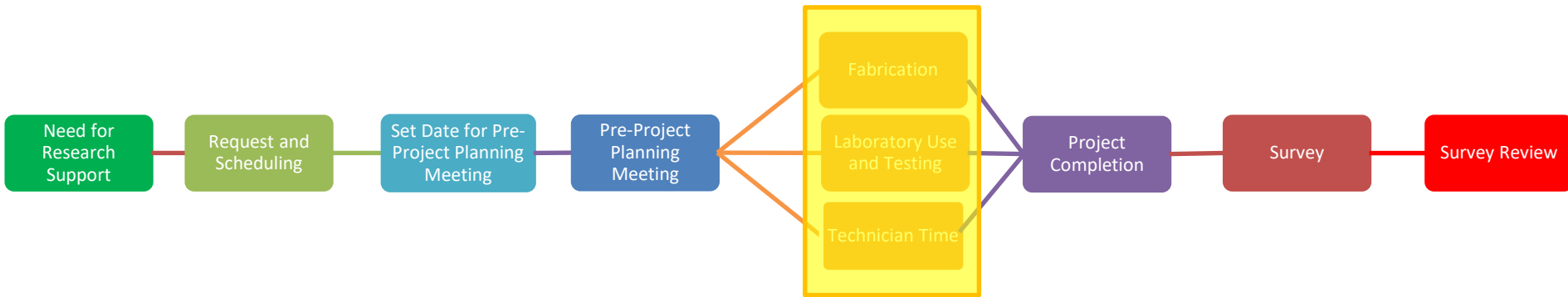


# Planning Google Calendar

- Used for laboratory use and equipment requests
- Shows when technical staff are unavailable
  - Staff meetings
  - Vacations

	Sun 7	Mon 8	Tue 9	Wed 10	Thu 11	Fri 12	Sat 13
8am							
9am		Prof. McCormick Test 500kip Instron 8am - 12pm			Staff meeting 9 - 10:30am		
10am			Alex Neves Junior Mixing Lab 10am - 12:30pm	Bo Meng mix 9:30am - 12:30pm	Carolyn McCann test 22kip MTS#1 10am - 2pm		
11am						OSEH Lab in 11:30am - 1pm	
12pm							
1pm							
2pm			CEE 351 test Xin Jing Forneymix 2 - 5pm	CEE 351 test Forney 2 - 5pm	MCCTT test 2:30 - 4pm		
3pm		Xin Jing test 3 - 4pm					
4pm							
5pm							

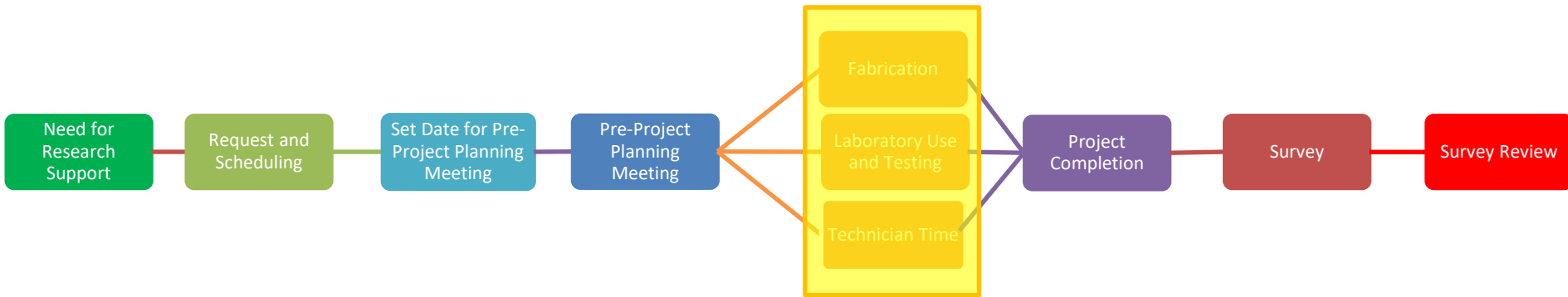
# Procedure Overview



## Fabrication for Projects:

- During Pre-Project Planning meeting(s) (typically 1 week):
  - Requirements of the element to be fabricated are established
  - Refine the design and suggest purchase needs
- Multiple Pre-Project Planning meetings may be required
- Technical Services Supervisor will assign appropriate technical staff member to the fabrication project
- Technical staff member will work with the project team to order necessary material and equipment
- Fabrication will take at least 2 weeks for most situations
- Basic fabrication can be done by students/post-docs with proper training

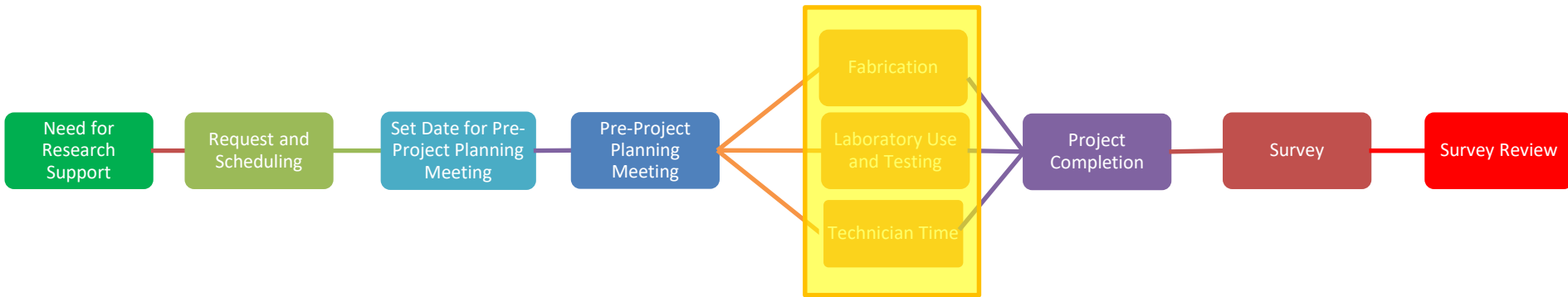
# Procedure Overview



## Laboratory Use and Testing:

- During Pre-Project Planning meeting(s) (as long as needed):
  - Establish facilities requirements and timeline
  - Ensure participants have met laboratory safety and equipment training requirements
  - Meeting may be short or replaced with an email exchange for use of small load frames
- Simple mechanical behavior testing when fixtures are available and testing has been conducted previously (SOPs available) require 24 hour notice
- Complicated and larger tests require 5 business days' notice
- After hours use of the structural engineering laboratory, concrete mixing laboratory and mechanical testing laboratory is discouraged
  - Arrange with Technical Services Supervisor and Laboratory Director
  - Use the “buddy” system

# Procedure Overview

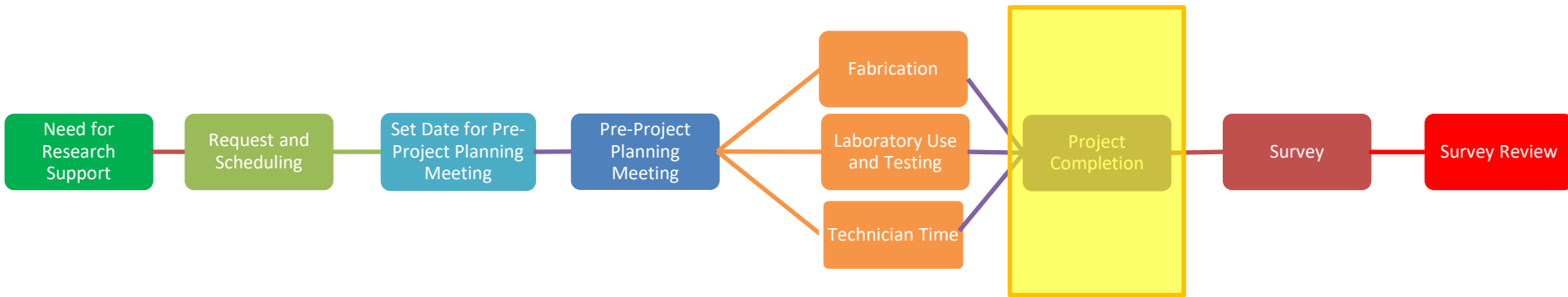


## Technician Time:

- During Pre-Project Planning meeting(s):
  - Establish what is involved, when and how long
  - Determine if technical staff has qualifications to perform request
- Requires 5 business days notice
- Off campus work
  - Must be within regular business hours
  - Technical staff are not expected to use their own vehicles
  - Must be approved by the Department Chair with request submitted to the Chair by the Technical Services Supervisor



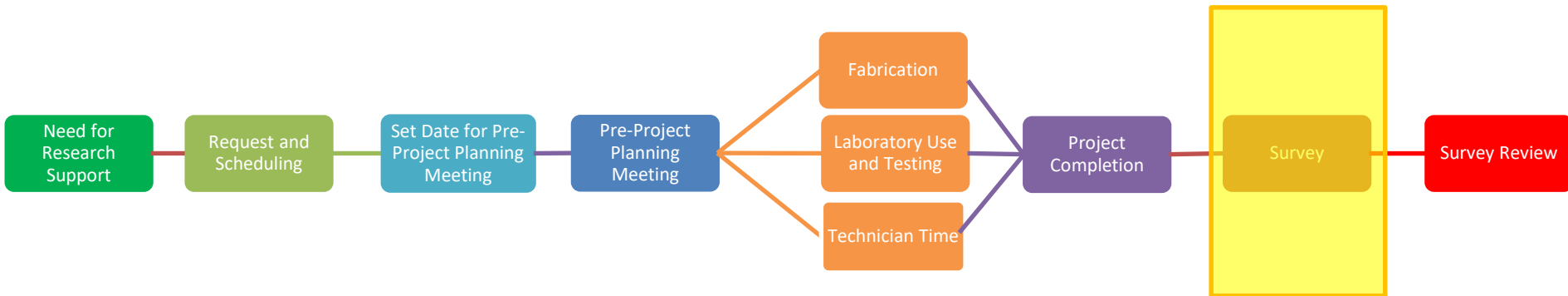
# Procedure Overview



## Project Completion:

- What constitutes completion of the work is determined during the Pre-Project Planning Meeting
- Projects completion is agreed upon by the project team and assigned technical staff

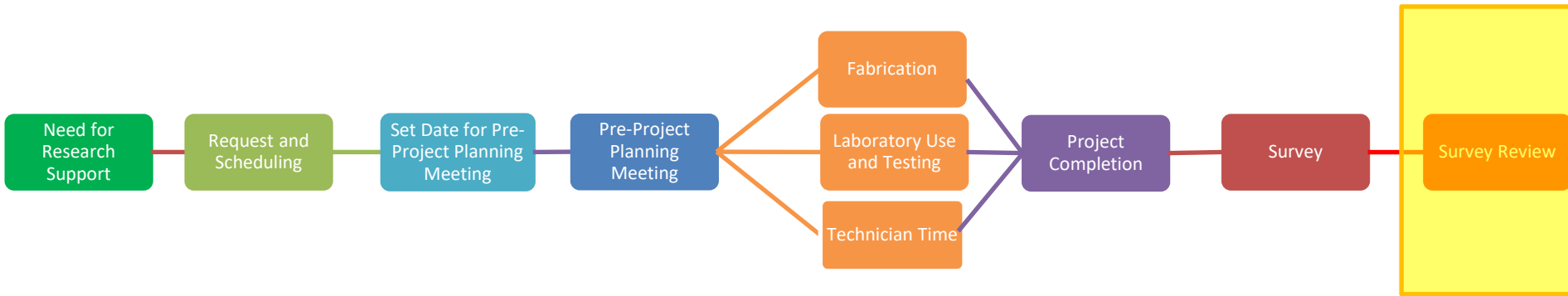
# Procedure Overview



## Survey:

- Used to assess the quality, timeliness and professionalism of the technical staff involved with the project
- Sent to the lead contact of the project team 5 business days after the completion of the project
- Fill out survey candidly

# Procedure Overview



## Survey Review:

- All surveys will be reviewed by:
  - Technical Services Supervisor
  - Structural Engineering Laboratory Director
  - Chair of the Facilities and Research Committee
  - Department Administrator
  - Department Chair
- Reviews will occur on a monthly basis
- Ensure faculty, post-doc and student's needs are met

# Last Minute Requests

- Fill out *Work, Test and Lab Time Request Form* immediately
- Clearly state what needs to be completed and the required timeline
- Provide reason for last minute request
- Pre-Project Planning meeting will be setup as soon as possible
- Faculty member may be asked to contact any other faculty member that this last minute request affects

Technical Service Supervisor will make every effort to accommodate the request



# Questions

