Infrastructure Planning and Facilities
MICHIGAN STATE UNIVERSITY

Facilities and Infrastructure Report

FISCAL YEAR 2015-16

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Photos courtesy of MSU Communications and Brand Strategy

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MSUFacilities

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A MESSAGE FROM THE ASSOCIATE VICE PRESIDENT

Dear MSU Community:

Infrastructure Planning and Facilities (IPF) has taken care of Michigan State University's physical assets for the past 150 years. With rapid changes in higher education, the question becomes: How does IPF care for the campus now, and into the future, in a way that delivers the best value and advances the university's mission?

MSU must fulfill its land-grant mission amidst many changing factors. Reduction in state funding support, fewer Michigan students in the K-12 pipeline and increased competition for research funds are trends that will impact the strategies MSU pursues to remain competitive.

With these challenges in mind, IPF has focused its efforts in four areas: stewardship, university customers and partners, employee development and innovation. The Facilities and Infrastructure Report demonstrates how IPF is supporting the university mission and leveraging its resources in these areas, resulting in lower costs, better service and innovative solutions to facilities-related issues.

IPF is proud to be part of the MSU community and is committed to helping lay the foundation for another successful 150 years.

Sincerely,

Dan Bollman

Associate Vice President for Strategic
Infrastructure Planning and Facilities

STEWARDSHIP

As a result of the state's reduction in higher education funding, MSU's reliance on student tuition as a funding source has grown. Infrastructure Planning and Facilities manages a large portion of university funds and considers enhancing stewardship to return value to MSU one of its main priorities.

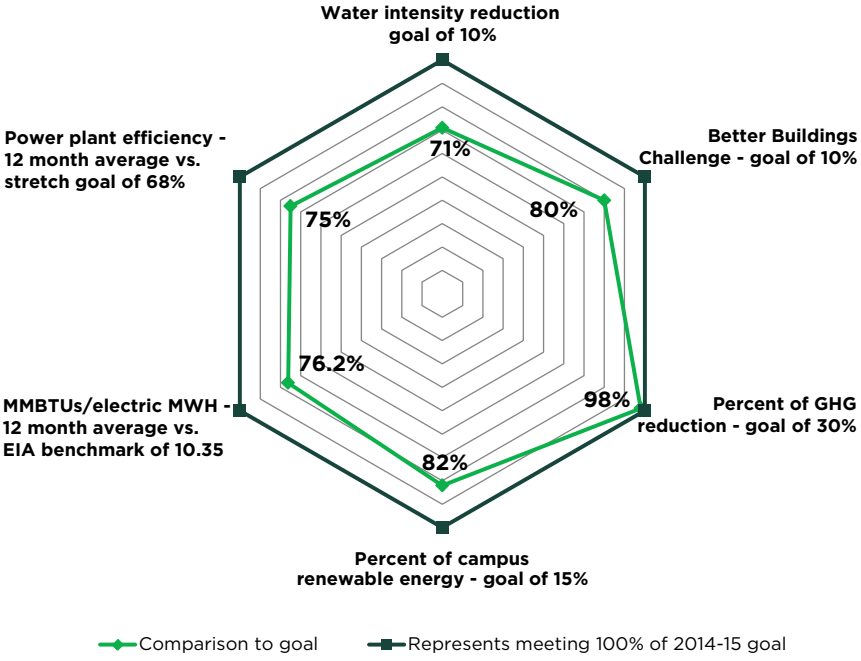
ENERGY PLANNING

In April 2016, MSU ended coal burning in the T.B. Simon Power Plant, significantly reducing emissions from the plant. This change avoided a $4.5 million investment for the installation of a sorbent injection system, which also avoids future costly Environmental Protection Agency mandates. Additionally, in September 2015, the Board of Trustees approved the planning to create five solar carport locations on campus. The solar carports will increase the amount of renewable energy available to campus and reduce emissions, and have an estimated lifetime savings of $3.5 million.

To accommodate growing energy needs as the university expands its research capacity, the installation of an electrical substation will be complete by spring 2017. The substation creates a connection between the power plant and the regional electric grid, providing firming capacity for the power plant, allowing for revised plant operations that result in $6,000 per day savings.

A Natural Gas Operations team continues to develop long-term strategies for acquiring natural gas and other commodities supplies while also providing near-term oversight for immediate recommendations in the natural gas market. Purchasing strategy methods prevent future market increases and provide certainty in purchase decisions. These efforts aid the university by managing costs, ensuring reliability and moderating risk exposure and tolerance to commodities markets.

Figure 1: Energy and the environment indicators

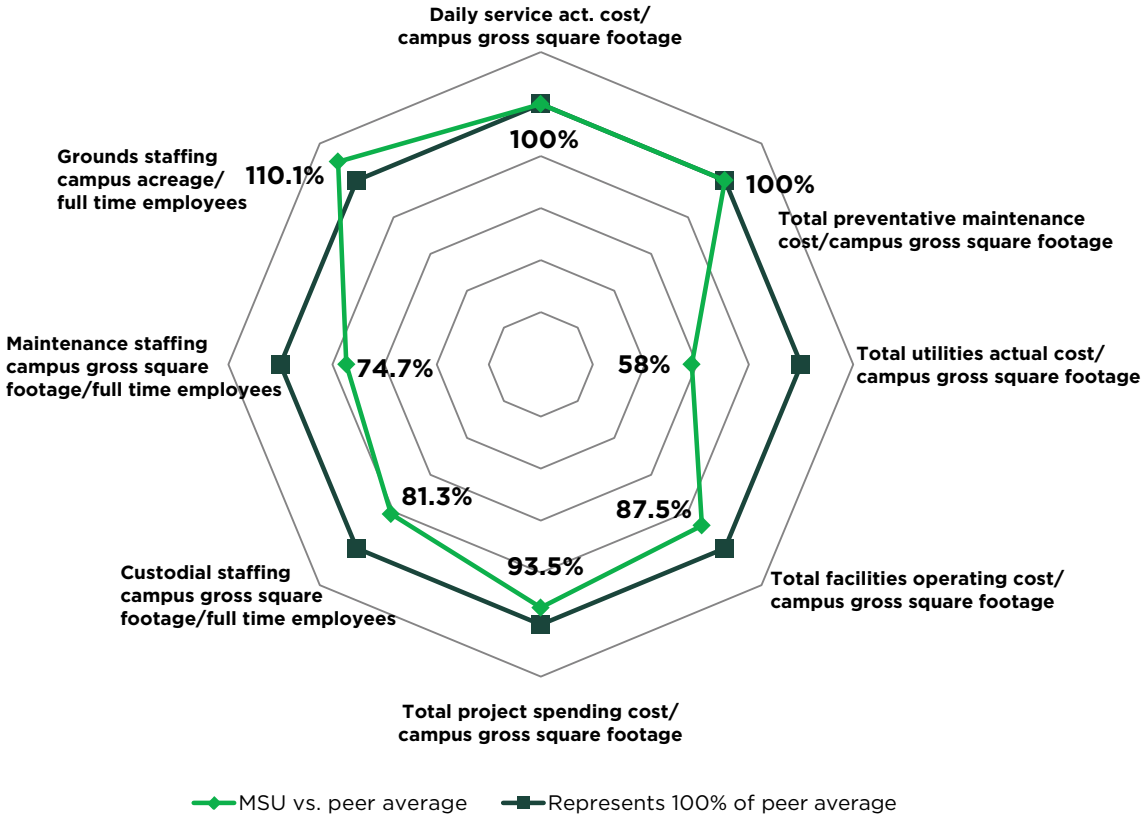


This graph illustrates the progress made by MSU in relation to the energy planning and cogeneration facility performance stretch goals. The bright green line represents MSU's actual progress as a campus in relation to the stated goal or benchmark.

IMPROVING EFFICIENCY, REDUCING COSTS

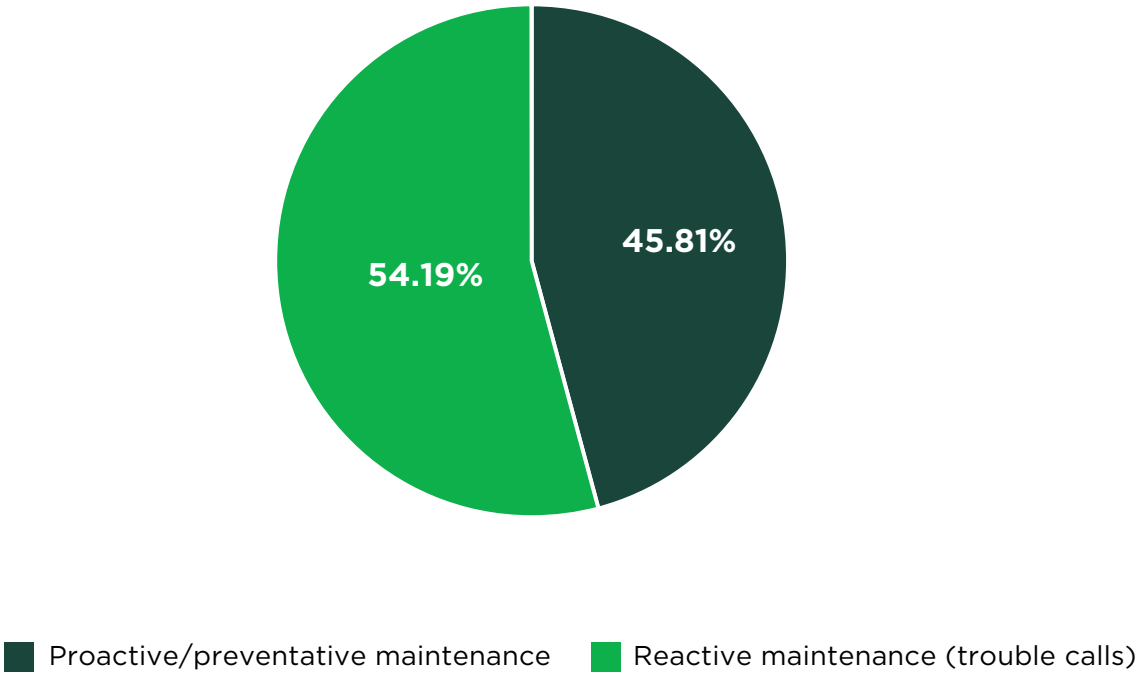
IPF professionals manage resources and operations to implement efficient practices that guarantee the best care and stewardship of MSU's campus.

Figure 2: Cost and staffing vs. peer group average



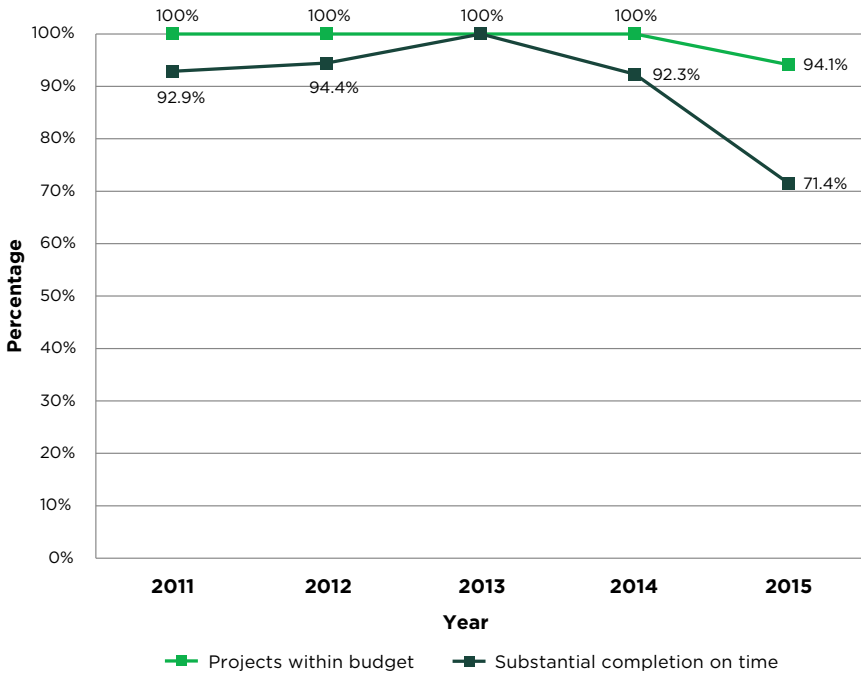
This graph illustrates IPF's current costs and staffing levels as a campus facilities group in relation to a peer group of similar research universities in similar climates. The dark green line indicates the peer group average for any one metric, and the bright green line indicates MSU's costs or staffing levels for the 2015-16 calendar year.

Figure 3: Preventative vs. reactive maintenance



This graph compares IPF's preventative maintenance efforts to the time spent on trouble calls or reactive maintenance. It is more efficient for the unit to dedicate resources to preventative maintenance. Future efforts will focus on completing preventative maintenance efforts in order to prevent trouble calls.

Figure 4: Project performance for Capital Projects



This graph illustrates Capital Project performance in relation to budgets and completion schedules. In 2015, a higher percentage of projects did not meet schedule. The average number of days late for the six projects in 2015 was 12 days. Academic programs were not impacted by the missed substantial completion date of these six projects. The performance management team in Planning, Design and Construction is looking at ways to improve meeting the planned substantial completion dates.

IMPROVING PROJECT DELIVERY

Nearly $140 million was budgeted for 21 major projects. The final cost of these projects was just over $129 million, resulting in a total of $9.9 million being returned to the university. The return represents nearly eight percent of the original project budgets.

Change orders on major construction projects dropped from 7.15 percent to 4.81 percent from fiscal year 2014-15 to fiscal year 2015-16, resulting in $9.9 million of returned funds at project closeout. The data set includes 21 major projects with a combined planned project cost of $139,845,359.

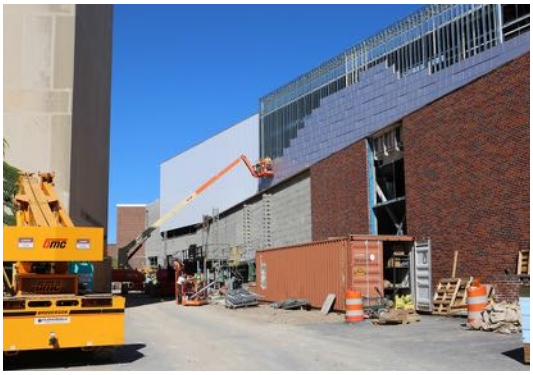
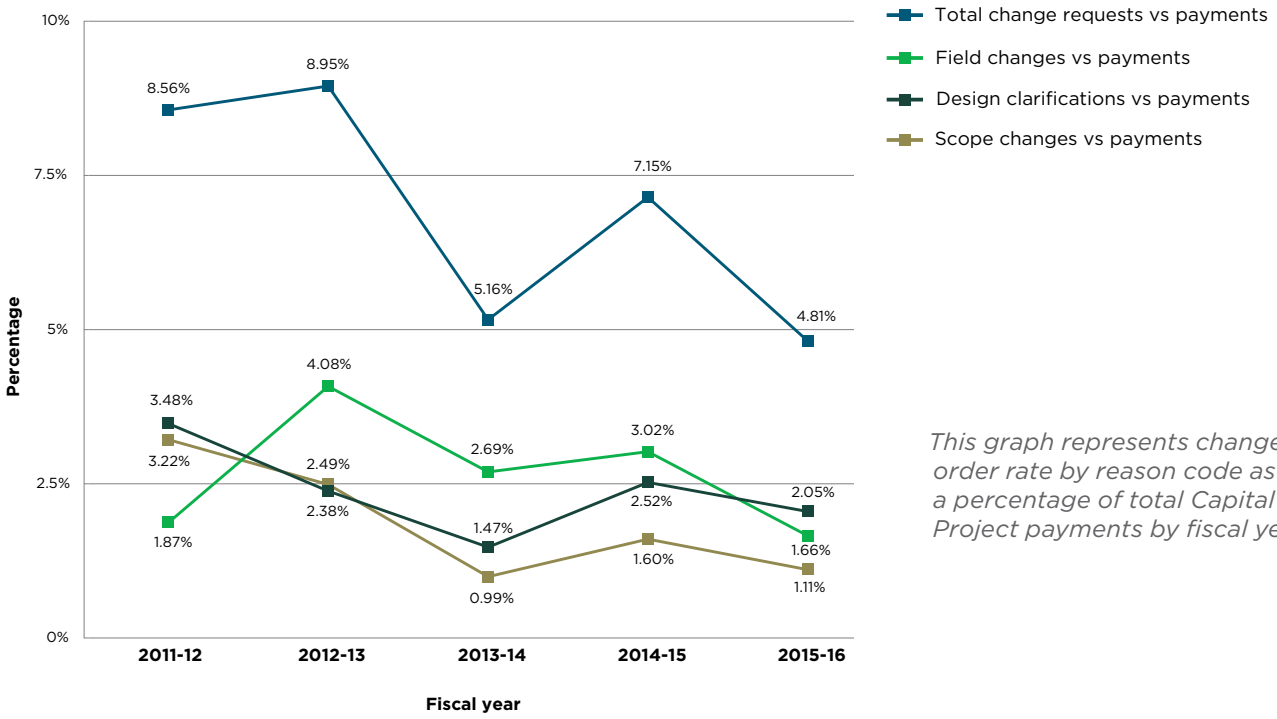
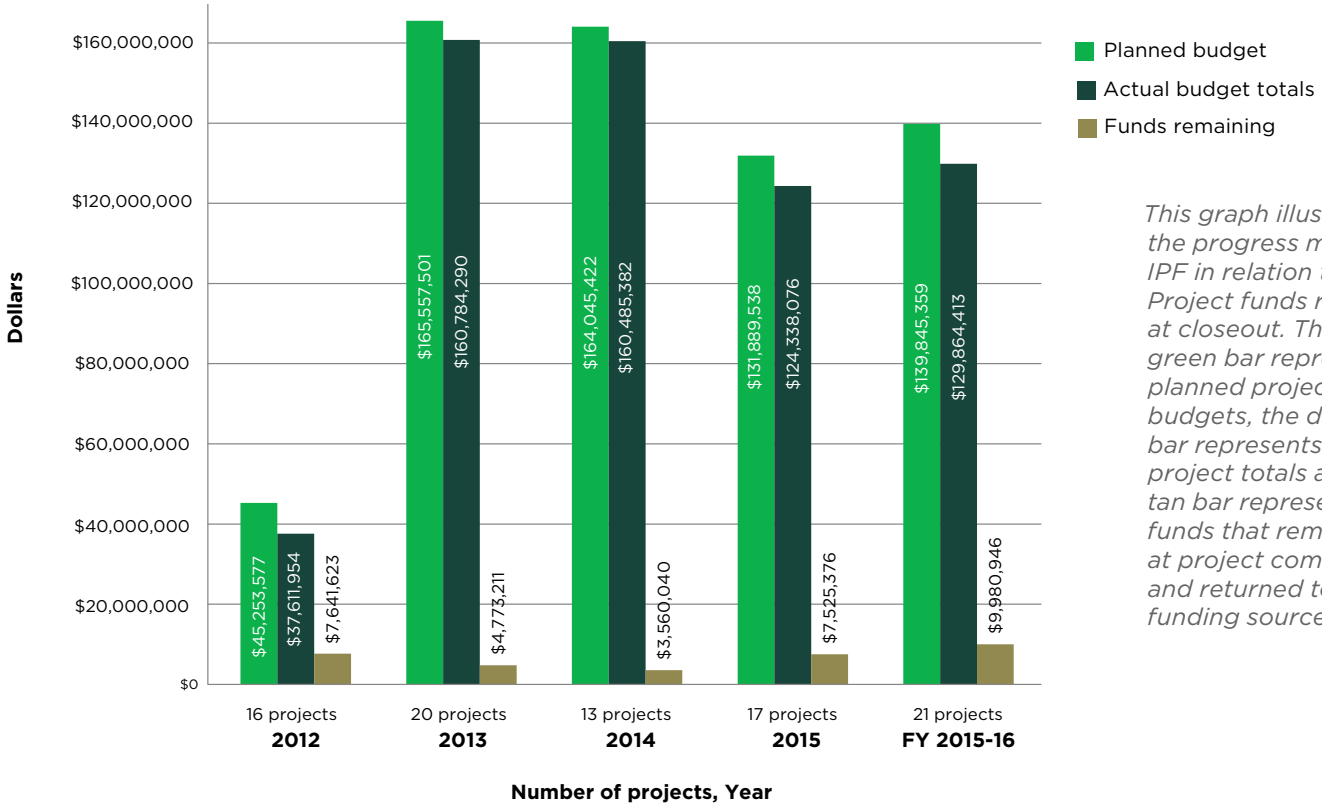


Figure 5: Change order rate vs construction payments for Capital Projects



This graph represents change order rate by reason code as a percentage of total Capital Project payments by fiscal year.

Figure 6: Budgeted Major Capital Project funds remaining at closeout



This graph illustrates the progress made by IPF in relation to Capital Project funds remaining at closeout. The bright green bar represents planned project budgets, the dark green bar represents actual project totals and the tan bar represents funds that remained at project completion and returned to original funding source.

SMART PURCHASING

Through competitive bidding and strategic purchasing, IPF has continued to enhance its financial stewardship to the university.

IPF's materials and logistics cost avoidance in fiscal year 2016 was $495,451, contributing to the total maintenance and construction materials cost avoidance of $2.275.

More than $1.4 million has been saved through the addition of an embedded purchasing agent within Project Services, including savings for: Project Services, Maintenance Services, T.B. Simon Power Plant, Commissioning, Transportation Services and Maintenance Stock Warehouse.

Additional IPF competitive bidding and strategic purchasing highlights include:

• $237,352 was saved by Landscape Services purchasing bulk construction supplies and recycling landscape materials

• Over $106,940 was saved in flooring and furniture purchases

• Over $66,000 was saved by Landscape Services competitive bidding

• Over $59,598 was saved in labor as a result of implementing off-set shifts in overtime avoidance

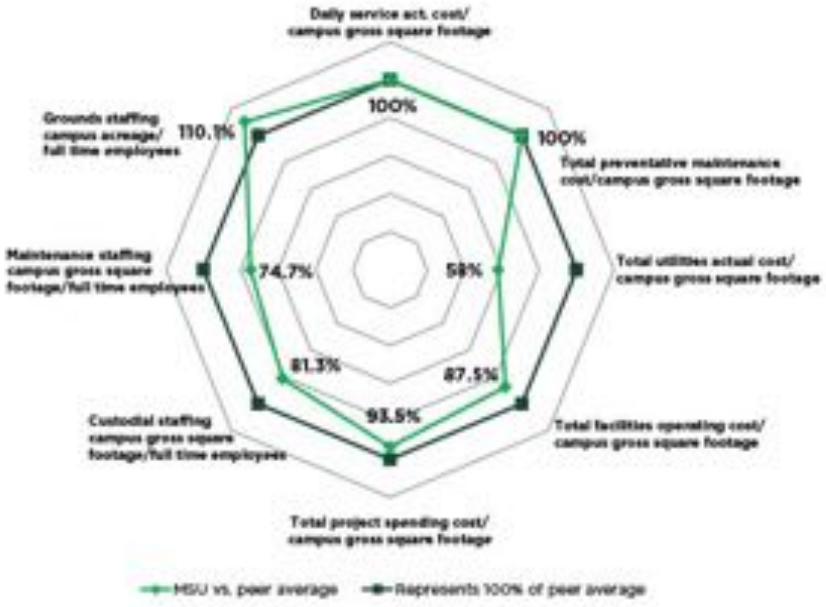
MSU DATA CENTER UNDER CONSTRUCTION

Based on an average cost comparison with similar size (2.5 MW) data centers, more than $10 million in construction costs are being saved for the MSU Data Center. When consolidated into the new energy efficient data center, the annual utilities cost avoidance for the 15 largest data centers on campus will be $600,000 annually.

CONSTRUCTION RECYCLING AND REUSE

Through a construction recycling and reuse pilot of the 1855 Place project, the Surplus Store and Recycling Center diverted 60 percent of the volume of construction waste, saving $46,000 in landfill costs and diverting 216 tons of waste from the landfill.

Cost and staffing vs. peer group average



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EMPLOYEE EFFICIENCY

IPF employees continuously endeavor new, innovative practices to be enhanced stewards of their time, resulting in saved university dollars. Specific examples include:

- 7,500 hours of overtime and $360,000 of labor expenses were saved through operating efficiencies at the T. B. Simon Power Plant.
- Over 3,140 hours have been allocated as a result of Landscape Services employees reducing sick time, which equates to gaining 1.5 full-time employees.

PARTNERING WITH CENTRAL IT FOR CENTRAL SOLUTIONS

In partnership with MSU IT, IPF is transforming how it manages technology across the unit. Through increased alignment and collaboration, IPF is able to increase IT efficiencies and decrease costs. This allows IPF IT staff to support the business technology needs of the unit rather than commodity services. Key initiatives include:

- Network support with MSU IT
- Collaborative governance and advisory groups
- Consolidated Service Desk software and change management processes

FUTURE DIRECTIONS

FRIB IMPACT

Planning, Design and Construction is partnering with the Facility for Rare Isotope Beams (FRIB) staff as well as other national construction experts to identify best practices in construction procurement and scheduling.

Construction underway at FRIB, October 2016.

CAPITAL PROJECT REPORTING FOR TRANSPARENCY

To increase transparency, IPF is working to continually improve methods for Capital Project reporting. In the last year, a quarterly Capital Projects Report was developed to keep Board of Trustee members well-informed of project budgets, schedules and status updates. Additional processes and tools also being developed to support this effort include:

- Owner and contractor meetings
- Monthly client representative meetings with key stakeholders
- Construction manager monthly reports
- Customer construction status reports

INFORMATION AND COMMUNICATIONS TECHNOLOGY STRATEGY

Throughout the next year, IPF will pursue implementation of its Information Communication Technology (ICT) strategy. This strategy was developed by a collaborative team of internal and external professionals to identify opportunities for consolidation and restructuring of IPF's ICT teams. Restructuring IPF's ICT resources will facilitate strategic goals, mitigate risks, leverage central IT resources and reduce costs through efficiencies gained by consolidation.

INNOVATION

Creating a focus on innovation allows Infrastructure Planning and Facilities departments to collaborate and implement breakthrough change to meet stewardship and customer goals.

USING TECHNOLOGY TO INCREASE THE SPEED OF CHANGE

Technology is used in the field on mobile platforms to allow the workforce immediate access to information and enhanced communication for greater productivity. These technologies are designed to streamline work processes, track data, and build metrics and key performance indicators. The Surplus Store and Recycling Center uses a customized data-tracking system to manage material routing and record quantities. Additionally, Landscape Services has implemented nine new applications that are used on a daily or monthly basis by crew members.

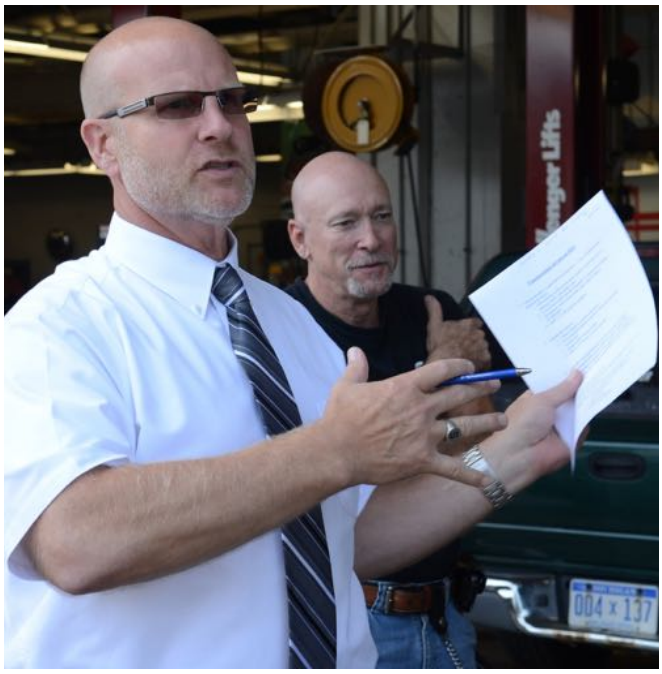
RESEARCH COLLABORATIONS: SOLVING PROBLEMS TOGETHER

IPF is leveraging MSU's world-class faculty and research programs to collaborate on projects that utilize the campus infrastructure to operationalize solutions at MSU. By partnering with faculty, IPF is launching demonstration projects that show leadership, educate students and accelerate innovation. Ongoing projects include:

- Solar water heater research to test the effectiveness of solar water heaters in Michigan's climate, specifically on MSU's campus
- A smaRt Institute (Sustainable Manufacturing and Recycle/Reuse/Remanufacture Technology) proposal, in partnership with the College of Engineering, to develop modular metal reclamation technologies and systems
- A Landscape Services collaboration with the Civil Engineering Department to assess campus pavements and determine future maintenance activities that will prolong pavement lifespan
- Partnership with the MSU Department of Biosystems and Agricultural Engineering (BAE) and an organization known as PHYCO2 to research a technology that recycles carbon dioxide emissions to accelerate the growth of algae
- Building Performance Services collaboration with the Applied Engineering Department to create an analysis tool for air filtration system optimization

AUTOMATED FAULT DETECTION DIAGNOSTICS

Building Performance Services is piloting software to complement the existing HVAC building control system that allows for real time identification, tracking and monetization of operational faults. The automated fault detection and diagnostics (AFDD) platform is web-enabled and allows for the custom development of building-specific energy and operational performance dashboards. This predictive vs. reactive approach to reaching a higher level of building operational performance is currently deployed in six campus buildings. Using a conservative estimate of 1 percent utility avoidance for the initial five building pilot results in approximately $50,000 and an accommodating payback of less than four years.



DEMONSTRATING LEADERSHIP AND EXPERTISE

IPF employees are demonstrating leadership and innovation on campus and around the globe by presenting their expertise at conferences and workshops. Presentation highlights in 2015-16 include:

- *An Evidence-Based Landscape Management Plan That Aligns With the Master Plan*, Society for College and University Planning Conference, Landscape Services Interim Manager Adam Lawver and Campus Planner Steve Troost
- *Campus Energy Systems: An International Perspective,* Tertiary Education Management Conference, Associate Vice President Dan Bollman
- *Workload For High Performance, APPA Annual Conference*, Facilities Services Manager Sean Fox-Elster and Custodial Services Manager Brandon Baswell

The unit has also received recognition in the form of several awards over the last year, including:

- Distinguished Service Award from Mid-Michigan Environmental Action Council
- APPA Innovation Award (Infrastructure Planning and Facilities Emergency Response and Business Continuity Program)
- Integrated Design Solutions was named a 2016 Honor Award winner by the American Institute of Architects Detroit chapter for its work on MSU's Bio Engineering Facility

FUTURE DIRECTIONS

Future trends in nearly all industries point to one similar theme: the speed of change is only getting faster.

An organization's ability to anticipate change and rapidly respond with smart and innovative strategies will improve its chance for success and sustainability.

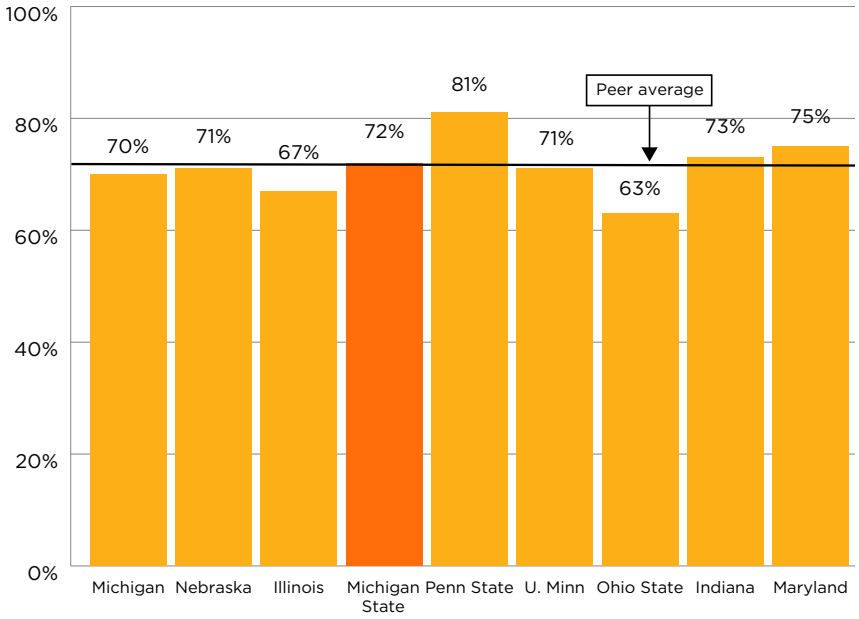
As a key support unit to Michigan State University, IPF is not only working to foster innovation, but to improve its ability to assess, implement and evaluate solutions for improvement. As a result, IPF has identified implementation of analytics and technology, along with agile project management solutions, as a key priority for upcoming years. Those tools, along with an engaged staff, will help IPF and MSU continue to be successful now and into the future.

CUSTOMERS

IPF is a partner to the academic and research enterprises at MSU. This partnership allows the unit to have an impact on groundbreaking teaching, research and outreach.

CUSTOMER STAKEHOLDER GROUP
In 2015, IPF organized a Customer Stakeholder Group representing key customer groups across the university to better understand stakeholder needs through a two-way communication process. In evaluating the effectiveness of this group, participants reported their feedback was heard and they believe the exercise will contribute to a better experience.

Figure 1: Customer Service Index



The results from five questions asked on a 2015 customer survey (2016 data available in January 2017) were combined to determine an overall customer satisfaction score. This satisfaction index compared MSU to peer Big 10 universities. MSU's customer satisfaction score of 72.5 was closely in line with most of the other universities.

CUSTODIAL SERVICES FIRST SHIFT INITIATIVE
In continuous pursuit of service excellence and stewardship, Custodial Services has taken the innovative approach to restructure its cleaning for a 5 a.m. to 1:30 p.m. schedule. This new approach offers many benefits, including:

- Better relationships with customers who get to see and know the people entering their space
- Greater accountability for customers and workers when anonymity is removed
- Cleaner buildings, as you can see more in the daylight
- A healthier schedule for Custodial Services employees

IMPROVING CAMPUS WAYFINDING
In partnership with IT Services, IPF has updated MSU's interactive campus map to enable users to receive directions on how to get from place to place. Users can now pinpoint their location anywhere on campus and, after selecting a destination, the map will provide a graphic of the quickest route available on foot. The wayfinding map includes construction detours and is compatible with any size screen.

BILLING ENHANCEMENTS
In partnership with the Controller's Office, IPF has built a new document that will route all IPF billing charges to fiscal officers prior to posting the ledger. This will allow fiscal officers to add accounting string data immediately, as opposed to after the fact through time-consuming journal entries. The document will also provide a direct web link to IPF's supporting documentation for the services billed. This new initiative allows for more efficient use of support staff time.

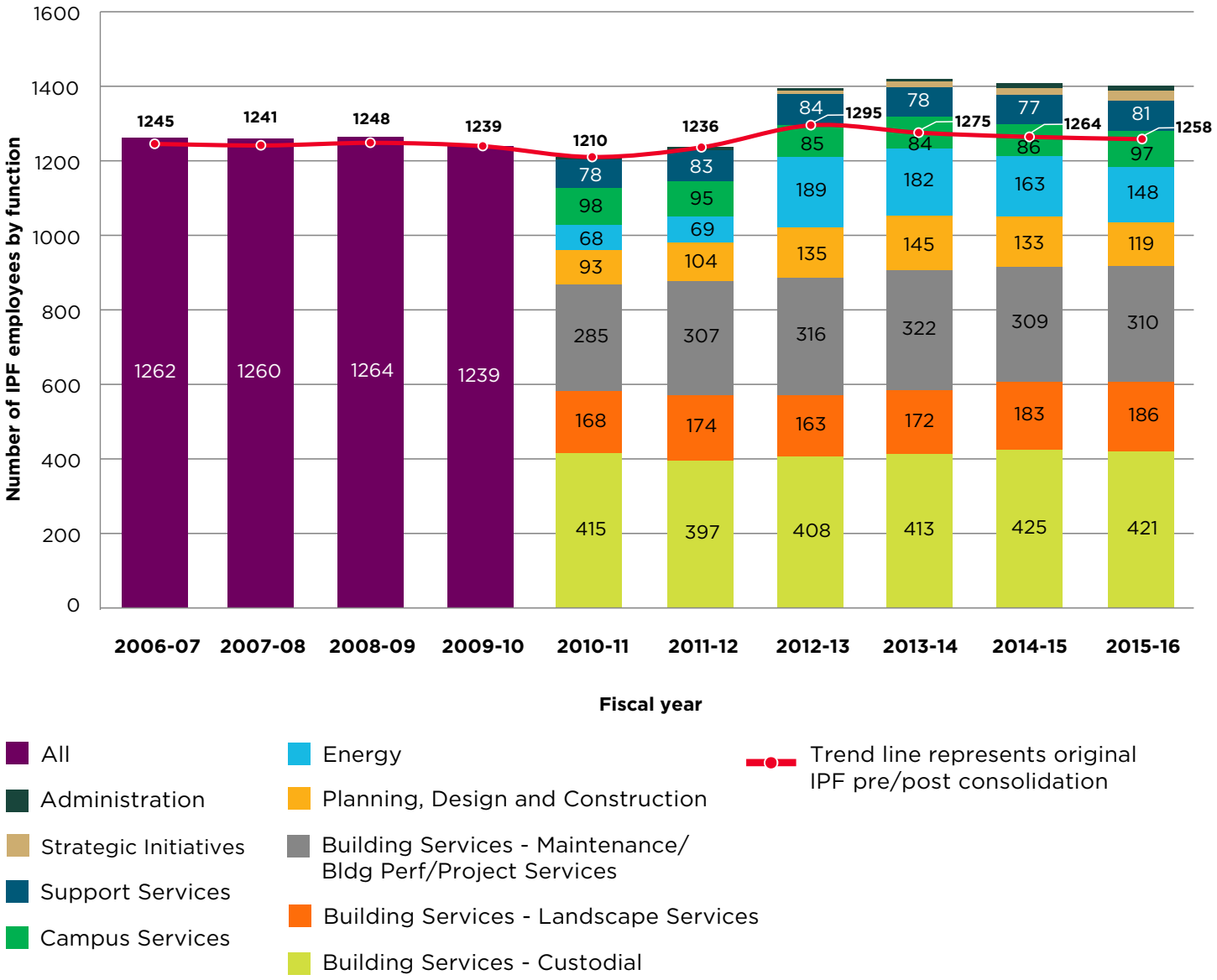
FUTURE DIRECTIONS

CUSTOMER REQUIREMENTS AND SERVICE LEVEL EXPECTATIONS
IPF is actively working toward more systematic approaches to identify, communicate and assess customer feedback and data to provide clear expectations on service levels. This work will lead to service level agreements for IPF's core products and services. As a result, academic partners will have a clear sense of the level of service provided from the initiation of the service request, scope of work and customer communication. Defining levels of service also helps IPF evaluate its process and standards for continuous improvement.

EMPLOYEES

In order to create value and best serve customers, IPF employees need to be engaged and have skills to lead IPF to be the most high-performing, leading-edge facilities organization in the nation. IPF is committed to engaging employees in innovation and problem solving, and will continue to develop new skill sets among employees for engagement and leadership.

Figure 1: IPF Total Personnel Strength



This chart shows the total number of IPF employees by function. There are significant changes shown in 2012 and 2013, due to organizational restructuring.

MAKING IPF A BEST PLACE TO WORK ENVIRONMENT

IPF strives to be a best-place-to-work environment. That's why the unit asked full-time staff members to complete a survey in August 2016. Nearly 500 IPF employees—67 percent—answered questions about the way they feel about their work environment, support from supervisors, communication and organizational culture, and the treatment of staff.

Business leaders will create tangible action plans to address at least one area of improvement that the teams have identified. This process will be repeated annually with the goal of continuing to build a positive, engaged work environment.

DIVERSITY AND INCLUSION REVIEW

Infrastructure Planning and Facilities and Residential and Hospitality Services are embarking on an internal Diversity and Inclusion Review, demonstrating a dedication to examining the impact on diversity and inclusion practices within the units. An external review process will also take place in which outside experts will share their perspectives about the successes and gaps that exist related to diversity and inclusion. The areas of measures that are being reviewed include:

- Staff engagement opportunities
- Supplier and partner diversity
- Recruiting, hiring, retaining and promoting staff
- Communication and branding
- Campus work environments

With the need to diversify core areas within IPF, there is a strong focus in providing greater diversity throughout the organization. Efforts in place include:

- Improved processes and peer review
- Planning, Design and Construction participated in the Michigan Minority Supplier Development Council – Minority Business Women's conference
- Recruiting IPF employees to participate in the Women's Advisory Committee for Support Staff

SUCCESSION PLANNING

With approximately 40 percent of IPF employees retirement eligible, strategies are being implemented to plan for the future workforce and ensure the success of new employees. Departments are reviewing succession planning data against future organizational needs and workforce trends to consider ways to efficiently meet human resource needs. Succession planning strategies include:

- Cross-training programs, including job shadowing and mentorship
- Leadership development
- Temporary employee hiring support
- Program improvements for key touchpoints in the employee lifecycle – orientation, onboarding, mentoring and career developing

FUTURE DIRECTIONS

A CHANGING EMPLOYEE PIPELINE

MSU is constantly responding to rapid changes in the higher education environment due to shifts in technology, demographics and economics. To adjust to a changing workforce, IPF employees must continue to be nimble and willing to adapt their skills to help lead through these shifts.

At the same time, many industry leaders are citing fewer people pursuing careers in skilled trades, creating a more competitive environment for recruiting several IPF roles. Diversity in IPF's workforce is also limited in several employee categories and business units, which may have further implications on the organization's ability to service customers and recruit, hire and retain employees.

Over the next year, IPF will identify opportunities to further support succession planning and diversity and inclusion in its workforce.

MICHIGAN STATE
UNIVERSITY

Infrastructure Planning and Facilities

Real Property Holdings

MICHIGAN STATE UNIVERSITY

As of July 1, 2016

Mason - Abbott Residence Hall

Prepared by:

Land Management Office

Real Property Holdings - Table of Contents

MICHIGAN STATE UNIVERSITY

As of July 1, 2016

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Real Property Holdings - Real Estate Facts

MICHIGAN STATE UNIVERSITY

As of July 1, 2016

Summary of Acres

- Michigan State University (MSU) lands comprise 25,733.498 acres.
- Main campus lands (North of Mt. Hope) comprise 2,047.943 acres.
- Research, education, and outreach lands (South of Mt. Hope) comprise 2,743.667 acres.
- The golf course is 325 acres.
- Campus lands leased to others include 81.875 acres.
- Off-campus properties include 20,425.483 acres.
- Property for sale comprise 2.14 acres (included in off-campus total).

Acreage Changes

- MSU acquired, through purchase, one property that included 148.26 acres.

Long-Term Leases

- Leases of a term of ten years or greater require Board of Trustee approval. There were two long term leases signed this year.

State Building Authority Projects

- MSU has four State Building Authority bond-financed projects. The project site is deeded to the State Building Authority and leased back to MSU. Current projects are: Anthony Hall Dairy Plant and Meat Lab (to be repaid 2032); Biomedical and Physical Sciences Building (to be repaid 2037); Diagnostic Center for Population and Animal Health (to be repaid 2040); and the Chemistry Building renovation project (to be repaid 2043). State Building Authority bonds are typically issued for 35 years.

Notice of Federal Intent

- The National Institutes of Health awarded MSU a grant for the Life Sciences Complex: Nursing Research Addition. The award terms and conditions include restrictions on property usage for 10 years (anticipated to be December 2022). The property may not be (1) used for any purposes inconsistent with the authorized grant program, (2) mortgaged, or (3) sold or transferred to another party. The entire Notice of Federal Intent is on file in the Land Management Office.

Real Property Holdings - Summary

MICHIGAN STATE UNIVERSITY

As of July 1, 2016

PROPERTY		ACRES
East Lansing Campus		
	North of Mt. Hope	2,047.943
	Golf Course	325.000
	Research, Education, and Outreach south of Mt. Hope	2,743.667
	Campus Property Leased to Others	81.875
	Total Campus Acres	**5,198.485**
Off-Campus		20,425.483
	Total Deeded Acres	**25,733.498**
Property Leased to MSU Long-Term		219.000
	Total Leased and Deeded Acres	**25,952.498**

Real Property Holdings - Acquisitions and Properties Sold

MICHIGAN STATE UNIVERSITY

July 1, 2015 - June 30, 2016

ACQUISITIONS		**ACRES**
Property:	Gruber Franenmuth, MI Tuscola County	148.260
Acquisition Date:	4/15/2016	
Purchase Price:	$1,400,000.00	
How Acquired:	Purchase	

PROPERTY SOLD		**ACRES**
Property:	Basolo Ellsworth, MI Antrim County	38.730

PROPERTY FOR SALE		**ACRES**
Property:	Gantos Kentwood, MI Kent County	2.140

Real Property Holdings - Active Mineral Leases

MICHIGAN STATE UNIVERSITY

As of July 1, 2016

MSU owns the Management Education Center.
The Mancelona Property, Homer Nowlin Property, and Merillat Property were sold; MSU retained the mineral rights on those properties.

PROPERTY	ACRES
Mancelona Property (MSU owns mineral rights) Section 16, Mancelona Township, Antrim County Leased to Mercury Exploration Co. Lease is continued with producing well	31.400
Homer Nowlin Property (MSU owns mineral rights) Sections 28 and 23, Rich Township, Lapeer County Leased to Total Petroleum, Inc. Lease is continued with producing well	313.000
Management Education Center (MSU owns surface and mineral rights) Section 9, Troy Township, Oakland County Leased to West Bay Exploration Company Lease is continued with producing well	24.320
Total Acres Under Mineral Leases	**368.720**

Real Property Holdings - Mineral Rights Reserved on Sold Properties

MICHIGAN STATE UNIVERSITY

As of July 1, 2016

PROPERTY	ACRES
Allegan County	
Section 21, Saugatuck Township	53.275
Antrim County	
Section 16, Mancelona Township	29.900
Section 8, Banks Township	38.730
Clinton County	
Section 22, Eagle Township	24.000
Sections 22 & 27, Eagle Township	61.300
Section 26, Eagle Township	1.290
Section 34, Eagle Township	2.700
Delta County	4.040
Section 17, Wells Township	
Ingham County	20.369
Section 1, Delhi Township	
Lapeer County	
Section 28, Rich Township	10.000
Section 33, Rich Township	303.000
Lenawee County	
Section 29, Adrian Township	80.000
Monroe County	
Section 21, Milan Township	80.000
Oakland County	
Sections 2, 11, 12, Avon Township	234.434
Section 32, Bloomfield Township	5.000
Ontonagon County	
Section 6, Bohemia Township; Section 12, Greenland Township	78.000
Section 23, Bohemia Township	40.000

Real Property Holdings - Mineral Rights Reserved on Sold Properties - continued

MICHIGAN STATE UNIVERSITY

As of July 1, 2014

VanBuren County	
Section 6, Geneva Township	29.000
Section 23, South Haven Township	53.230
Total Mineral Acres Reserved:	**1,148.268**

Real Property Holdings - Gas and Oil Royalty Income

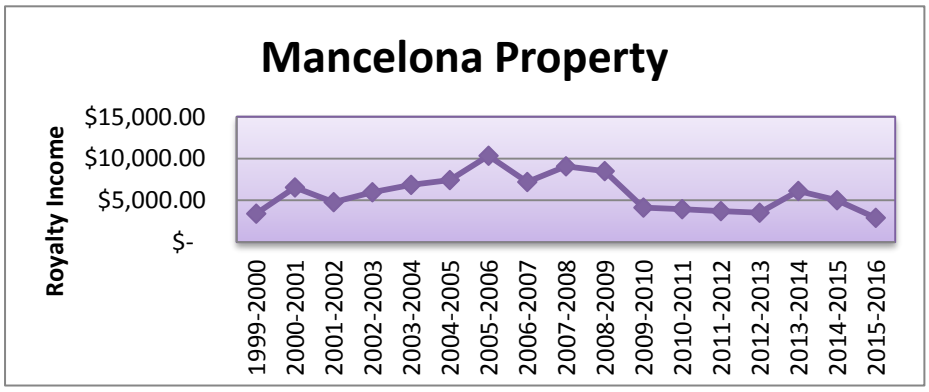
MICHIGAN STATE UNIVERSITY

As of July 1, 2016

Mancelona Property

(Income funds the Land Fund Account)

1998-1999	$ 5,068.62
1999-2000	$ 3,390.42
2000-2001	$ 6,547.95
2001-2002	$ 4,789.45
2002-2003	$ 5,958.69
2003-2004	$ 6,833.60
2004-2005	$ 7,415.27
2005-2006	$ 10,337.62
2006-2007	$ 7,192.83
2007-2008	$ 9,082.79
2008-2009	$ 8,484.09
2009-2010	$ 4,114.23
2010-2011	$ 3,941.64
2011-2012	$ 3,691.88
2012-2013	$ 3,512.94
2013-2014	$ 6,132.89
2014-2015	$ 5,013.03
2015-2016	$ 2,892.24



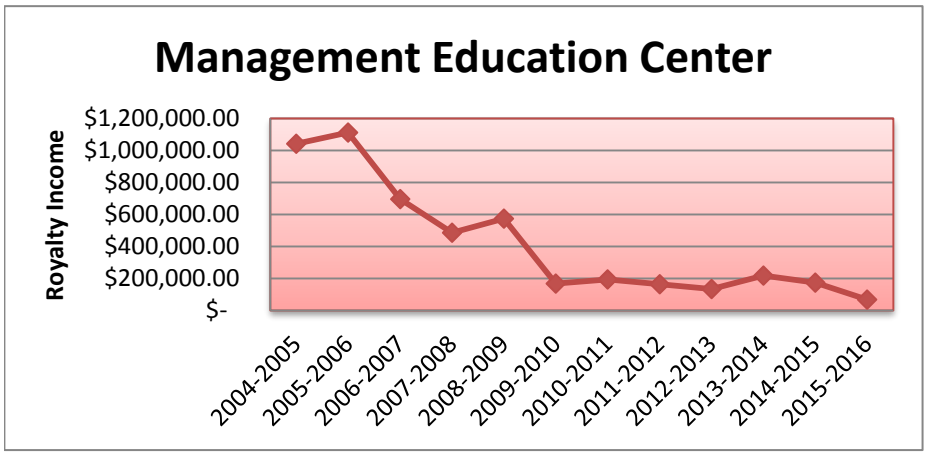
Real Property Holdings - Gas and Oil Royalty Income

MICHIGAN STATE UNIVERSITY

As of July 1, 2016

Management Education Center
(Income funds Eli Broad College
of Business Programs)

2002-2003	$	248,679.62
2003-2004	$	949,191.09
2004-2005	$	1,041,242.41
2005-2006	$	1,111,581.83
2006-2007	$	695,627.95
2007-2008	$	486,734.28
2008-2009	$	573,939.94
2009-2010	$	169,303.36
2010-2011	$	195,046.47
2011-2012	$	164,242.13
2012-2013	$	134,223.59
2013-2014	$	217,275.90
2014-2015	$	174,207.72
2015-2016	$	67,445.03



Real Property Holdings - Gas and Oil Royalty Income

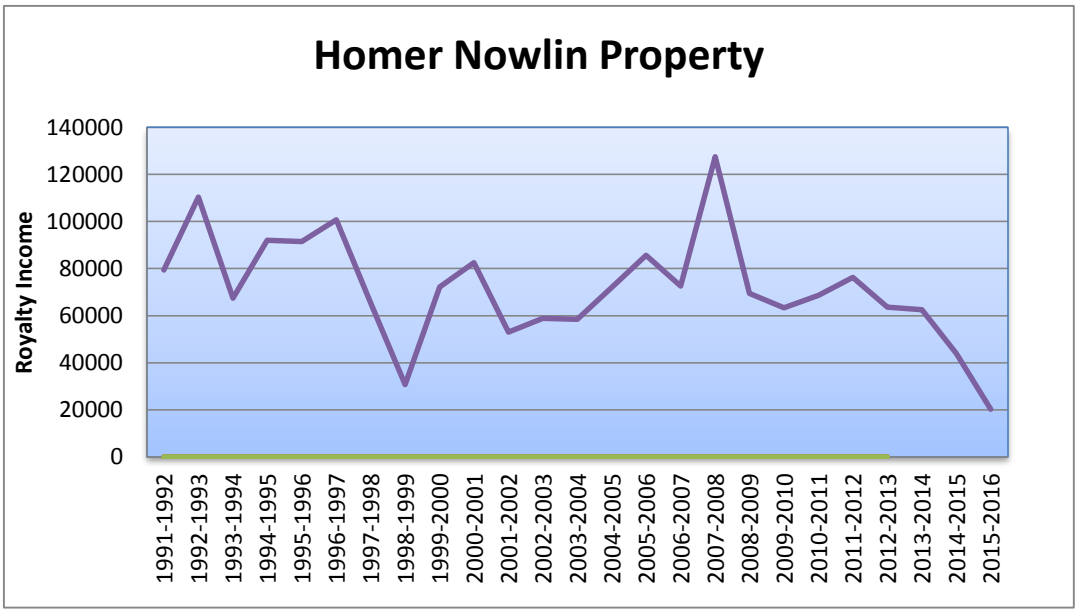
MICHIGAN STATE UNIVERSITY

As of July 1, 2016

Homer Nowlin Property

(Income funds endowed chair in the College of Agriculture and Natural Resources)

1989-1990	$	98,404.78
1990-1991	$	153,008.72
1991-1992	$	79,323.99
1992-1993	$	110,311.26
1993-1994	$	67,355.68
1994-1995	$	91,965.81
1995-1996	$	91,421.59
1996-1997	$	100,641.83
1997-1998	$	65,468.04
1998-1999	$	30,788.53
1999-2000	$	72,118.88
2000-2001	$	82,535.99
2001-2002	$	53,000.00
2002-2003	$	58,819.50
2003-2004	$	58,386.86
2004-2005	$	71,997.24
2005-2006	$	85,676.23
2006-2007	$	72,534.18
2007-2008	$	127,494.63
2008-2009	$	69,521.30
2009-2010	$	63,304.32
2010-2011	$	68,704.58
2011-2012	$	76,248.53
2012-2013	$	63,548.88
2013-2014	$	62,473.39
2014-2015	$	44,100.87
2015-2016	$	20,251.31



Real Property Holdings - Leased/Licensed Properties

MICHIGAN STATE UNIVERSITY

As of July 1, 2016

Leases of 10 years or longer require MSU Board of Trustee approval. The following leases meet that criteria. Only real property leases are included in the Real Property Holdings annual report.

MSU as TENANT	**ACRES**
Northwest Michigan Horticultural Research Center Administrative Unit: College of Agriculture and Natural Resources Department of Horticulture MSU Extension	100.000
Tollgate Education Center Administrative Unit: College of Agriculture and Natural Resources Land Management Office MSU Extension	100.000
MSU Forest Biomass Innovation Center Administrative Unit: College of Agriculture and Natural Resources Department of Forestry	9.000
MSU Forest Biomass Innovation Center Administrative Unit: College of Agriculture and Natural Resources Department of Forestry	10.000
Total Leased Acres:	**219.000**

Real Property Holdings - Leased/Licensed Properties

MICHIGAN STATE UNIVERSITY

As of July 1, 2016

Leases of 10 years or longer require MSU Board of Trustee approval. The following leases meet that criteria. Only real property leases are included in the Real Property Holdings annual report.

TENANT	MSU PROPERTY	ACRES
Prairieville Township	Lux Arbor Reserve	0.800
Berrien County Extension Service	Southwest Michigan Research & Extension Center	1.380
Cass County Historical Commission	Russ Forest	1.800
Cass County Park & Recreation Commission	Russ Forest	14.000
Marcellus Community School	Russ Forest	21.450
Department of Natural Resources	Dunbar Forest	9.400
Capital Area Transportation Authority	Campus	7.759
MSU Federal Credit Union	Campus	4.711
MSU Federal Credit Union	Campus	3.960
East Lansing Sewage and Treatment Plant	Campus	16.500
Consumers Energy	Campus	0.100
Northstar Cooperative, Inc.	Campus	9.710
University Rehabilitation Alliance	Campus	35.000
Candlewood/Vista I, LLC	Campus	3.235
LBWL/METC	Campus	0.900
Gull Lake Bible Conference	Kellogg Biological Station	10.000
Sherman Lake YMCA (License)	Brook Lodge	415.000
Sherman Lake YMCA (Lease)	Brook Lodge	40.000
Leland Township	Leland Property	0.700
Avon Players	VanHoosen Jones	1.793
Pete Clark	Morris Property	1,385.000
	Total Acres Leased/Licensed to Others:	**1,983.198**

Real Property Holdings - Inventory

MICHIGAN STATE UNIVERSITY

As of July 1, 2016

BioEconomy Research and Development Center
Holland, Ottawa County

Purpose	Status	Acres
Research	Active	6.300
	Land use or resource use restrictions	

Administrator	Comment
Vice President for Research and Graduate Studies	None

Brook Lodge
Augusta, Kalamazoo County

Purpose	Status	Acres
Conference center, teaching, research, and outreach	Inactive	633.240

Administrator	Comment
Kellogg Center Land Management Office	Long term lease on 40 acres to Sherman Lake YMCA

Clarksville Research Center
Clarksville, Ionia County

Purpose	Status	Acres
Horticulture research on small fruit and tree fruit	Active	440.000

Administrator	Comment
Department of Horticulture Land Management Office	AgBioResearch Field Research Center Coordinator: Dr. Matt Grieshop Farm Manager: Gerald Skeltis

Real Property Holdings - Inventory

MICHIGAN STATE UNIVERSITY

As of July 1, 2015

Dobie Road
Okemos, Ingham County

Purpose	Status	Acres
WKAR Broadcasting Site	Active	114.431

Administrator	Comment
Land Management Office	Location of WKAR tower T-Mobile tower

Dunbar Forest
Sault Ste. Marie, Chippewa County

Purpose	Status	Acres
Forest research and demonstration	Active Title restricted on 4,668.84 acres Land reverts to State if not used solely for forestry purposes	5,759.815

Administrator	Comment
Department of Forestry Land Management Office	AgBioResearch Field Research Center

Forest Biomass Innovation Center
Escanaba, Delta County

Purpose	Status	Acres
Research and demonstration in forestry and crops	Active	1,745.400

Administrator	Comment
	AgBioResearch Field Research Center
Department of Forestry	Coordinator: Dr. David McFarlane
Land Management Office	Resident Forester: Dr. Ray Miller

Gantos Property
City of Kentwood, Kent County

Purpose	Status	Acres
Donation for resale	Property is for sale	2.140

Administrator	Comment
Land Management Office	None

Real Property Holdings - Inventory

MICHIGAN STATE UNIVERSITY

As of July 1, 2015

Hidden Lake Gardens
Tipton, Lenawee County

Purpose	Status	Acres
Arboretum and plant conservatory	Active	756.618

Administrator	Comment
Land Management Office	Manager: Paul Pfeifer

Hulett Road Engineering
Okemos, Ingham County

Purpose	Status	Acres
Former facilities and site for College of Engineering research	Active	5.691

Administrator	Comment
Land Management Office	None

Human Medicine, College of
Grand Rapids, Kent County

Purpose	Status	Acres
Medical School	Active	9.503

Administrator	Comment
College of Human Medicine	Includes Condominium #5
Land Management Office	Includes Condominium #29 (Parking Spots)
	.005 acres sold to MDOT

Jolly Road Engineering
Okemos, Ingham County

Purpose	Status	Acres
Facilities and site for College of Engineering research	Active	3.260

Administrator	Comment
College of Engineering	None
Land Management Office	

Real Property Holdings - Inventory

MICHIGAN STATE UNIVERSITY

As of July 1, 2015

Kellogg, W.K. Biological Station
(Including Farm and Bird Sanctuary)
Hickory Corners, Kalamazoo County

Purpose	Status	Acres
Teaching, research, and extension activities in the environmental sciences focusing on the interdependence of natural and managed landscapes. The programs treat integrated study of biology, wildlife, and production agriculture, including animal input.	Active Title on original gift restricted. Property needs to be maintained and operated for educational purposes.	1,690.850

Administrator	Comment
Director, Biological Station College of Agriculture & Natural Resources College of Natural Science Land Management Office	AgBioResearch Field Research Center Director: Dr. Katherine Gross Farm Manager: Brook Wilke Bird Sanctuary Coordinator: Tracey Kast Farm Acreage: 944.674 Bird Sanctuary Acreage: 746.176 4.92 acres acquired in 2009

Kellogg, W.K. Biological Station
Lux Arbor Reserve
Delton, Barry County

Purpose	Status	Acres
Research and education in the agricultural, biological, botanical, and horticulture sciences	Active	1,323.000

Administrator	Comment
Same as Kellogg Biological Station	Included with Kellogg Biological Station as an Agricultural Research Station Farm Manager:

Real Property Holdings - Inventory

MICHIGAN STATE UNIVERSITY

As of July 1, 2015

Kellogg, W.K. Experimental Forest
Augusta, Kalamazoo County

Purpose	Status	Acres
Forestry research, teaching, demonstration, and public use	Active Title restricted on 280 acres. To be used for reforestation, education, and experimental purposes	715.995

Administrator	Comment
Department of Forestry Land Management Office	AgBioResearch Field Research Center Coordinator: Dr. David McFarlane Resident Forester: Greg Kowalewski

Lake City Research Center
Lake City, Missaukee County

Purpose	Status	Acres
Research in beef cattle, forages, and potatoes	Active	810.010

Administrator	Comment
Department of Animal Science Land Management Office	AgBioResearch Field Research Center Coordinator: Dr. Jason Rowntree Farm Manager: Doug Carmichael

Leland Property
Leland, Leelanau County

Purpose	Status	Acres
Long-term lease to Leland Township	Active	0.700

Administrator	Comment
Land Management Office	None

Lukens Property
Onekama, Manistee County

Purpose	Status	Acres
Forestry Research & Education	Active	68.01

Administrator	Comment
Department of Forestry Land Management Office	None

Real Property Holdings - Inventory

MICHIGAN STATE UNIVERSITY

As of July 1, 2015

MacCready Forest and Wildlife Reserve
Clark Lake, Jackson County

Purpose	Status	Acres
Wildlife and forestry demonstration	Active	408.000

Administrator	Comment
Department of Forestry Department of Fisheries & Wildlife Land Management Office	None

Management Education Center
Troy, Oakland County

Purpose	Status	Acres
Advanced management training center	Active	24.327

Administrator	Comment
College of Business	Manager: Tom Freed

Marshall Property
Hickory Corners, Barry County

Purpose	Status	Acres
Research support	Active	2.250

Administrator	Comment
Land Management Office	

Martin Property (Rose-Dell Seed Orchard)
Calhoun County

Purpose	Status	Acres
Tree seed orchard and demonstration site	Active Proceeds from leases and timber sales to be used for farm maintenance and scholarships	160.000

Administrator	Comment
Department of Forestry Land Management Office	None

Real Property Holdings - Inventory

MICHIGAN STATE UNIVERSITY

As of July 1, 2015

Mason Research Farm
Mason, Ingham County

Purpose	Status	Acres
Cereal grains and soybean research	Active	117.000

Administrator	Comment
Plant, Soil and Microbial Sciences Land Management Office	None

Michigan Biotechnology Institute
Lansing, Ingham County

Purpose	Status	Acres
Research	Active	15.000

Administrator	Comment
	Leased to non-MSU tenants
Land Management Office	

Michigan State University Campus
East Lansing, Ingham County

Purpose	Status	Acres
Research, education, and outreach	Active	5,198.485

Montcalm Research Center
Lakeview, Montcalm County

Purpose	Status	Acres
Potato production research and cash crops	Active	57.250

Administrator	Comment
Plant, Soil and Microbial Sciences	AgBioResearch Field Research Center
Land Management Office	Coordinator: Dr. Dave Douches
	Farm Manager: Bruce Sackett

Real Property Holdings - Inventory

MICHIGAN STATE UNIVERSITY

As of July 1, 2015

Morris Property
Grand Ledge, Clinton and Eaton Counties

Purpose	Status	Acres
Income generating property to fund endowments established by David and Betty Morris	Active	1,527.010

Administrator	Comment
Land Management Office	Long-term crop lease restricts near-term sale of property; includes six residential leased properties, cell tower lease, research crop lease, billboard lease, and option to the Grand Ledge School District

MSU Sailing Club
Haslett, Ingham County

Purpose	Status	Acres
Sailing and wind surfing lessons	Active	0.760

Administrator	Comment
Intramural Sports and Recreative Services	None

Muck Soils Research Center
Laingsburg, Clinton County

Purpose	Status	Acres
Organic soil vegetable and crops research	Inactive	447.048

Administrator	Comment
Land Management Office	AgBioResearch Field Research Center

Rau Property
Thompsonville, Benzie County

Purpose	Status	Acres
Chestnut research	Active	5.000

Administrator	Comment
Land Management Office	None

Real Property Holdings - Inventory

MICHIGAN STATE UNIVERSITY

As of July 1, 2015

River Terrace Property
East Lansing, Ingham County

Purpose	Status	Acres
Investment	Active	1.210

Administrator	Comment
Land Management Office	None

Rogers Reserve
Jackson, Jackson County

Purpose	Status	Acres
Botanical and horticultural sciences research and teaching	Active	115.850

Administrator	Comment
Plant, Soil, and Microbial Sciences Land Management Office	Coordinator: Dr. Dennis Fulbright

Russ (Fred) Forest
Decatur, Cass County

Purpose	Status	Acres
Forestry plantings and genetics research Demonstration and public use	Active Title restricted on 269 acres Land to be used for educational purposes	938.750

Administrator	Comment
Department of Forestry Land Management Office	AgBioResearch Field Research Center Coordinator: Dr. David MacFarlane Non-Resident Forester: Greg Kowalewski

Real Property Holdings - Inventory

MICHIGAN STATE UNIVERSITY

As of July 1, 2015

Saginaw Valley Research and Extension Center
Frankenmuth, Saginaw and Tuscola Counties

Purpose	Status		Acres
Dry bean, sugar beet, and crop research	Active		310.040
Research, outreach, and teaching		Guber Property Purchace 2016	148.260
			458.300

Administrator	Comment
Plant, Soil and Microbial Sciences	AgBioResearch Field Research Center
Land Management Office	Coordinator: Dr. James Kelly
	Farm Manager: Paul Horny

Southwest Michigan Research and Extension Center
Benton Harbor, Berrien County

Purpose	Status	Acres
Horticultural research and extension center	Active	350.000

Administrator	Comment
Department of Horticulture	AgBioResearch Field Research Center
Cooperative Extension Service	Coordinator: Dr. Thomas Zabadal
Land Management Office	Farm Manager: Dave Francis

Stranahan-Bell (WaWaSum)
Grayling, Crawford County

Purpose	Status	Acres
Inland stream and reforestation research	Active	251.000
Small conference center		

Administrator	Comment
Land Management Office	None

Stuckman Property
St. Johns, Clinton County

Purpose	Status	Acres
Educational and/or research	Active	40.000
Land Management Office	MOU on file in Land Management Office	

Real Property Holdings - Inventory

MICHIGAN STATE UNIVERSITY

As of July 1, 2015

Sycamore Creek
Holt, Ingham County

Purpose	Status	Acres
Support campus water management plan; controlled access to Sycamore Creek flood plain	Active Title restricted on 52 acres Deed covenants restrict use	54.500

Administrator	Comment
Land Management Office	None

Tollgate Education Center
Novi, Oakland County

Purpose	Status	Acres
Agricultural and environmental education and leadership training	Active	56.675

Administrator	Comment
Cooperative Extension Service Land Management Office	Farm Manager: Roy Prentice

Trevor Nichols Research Center
Fennville, Allegan County

Purpose	Status	Acres
Fruit pest research	Active	156.100

Administrator	Comment
Department of Entomology Land Management Office	AgBioResearch Field Research Center Coordinator: Dr. John Wise Farm Manager: Jason Seward

Upper Peninsula Research Center
Chatham, Alger County

Purpose	Status	Acres
Dairy, forestry, and crops, local food systems research	Active	1,262.227

Administrator	Comment
AgBioResearch Land Management Office	AgBioResearch Field Research Center Coordinator: Dr. Ashley McFarland Farm Manager: Paul Naasz

Real Property Holdings - Inventory

MICHIGAN STATE UNIVERSITY

As of July 1, 2015

VanHoosen Property
Rochester, Oakland County

Purpose	Status	Acres
Long-term lease to Avon Players	Active	1.793

Administrator	Comment
Executive Vice President for Administrative Services	Remaining land of Sarah
Land Management Office	Van Hoosen gift acquired in 1956

Total Acres: 14,084.963

Real Property Holdings - AgBioResearch Centers

MICHIGAN STATE UNIVERSITY

As of July 1, 2016

AgBioResearch Centers owned by MSU

Clarksville Research Center
9302 Portland Road
Clarksville, MI 48815

MSU Forest Bomass Innovation Center
6005 J. Road
Escanaba, MI 49829

Kellogg, W.K. Experimental Forest
7060 N. 42nd Street
Augusta, MI 49012

Montcalm Research Center
4747 McBride Road
Lakeview, MI 48850

Fred Russ Forest
20673 Marcellus Highway
Decatur, MI 49045

Southwest Michigan Research and
Extension Center
1781 Hillandale Road
Benton Harbor, MI 49022

Upper Peninsula Research Center
E3774 University Drive
P.O. Box 168
Chatham, MI 49816

Dunbar Forest
12839 S. Scenic Drive
Sault Ste. Marie, MI 49783

Kellogg, W.K. Biological Station
3700 E. Gull Lake Drive
Hickory Corners, MI 49060

Lake City Research Center
5401 W. Jennings Road
Lake City, MI 49651

Saginaw Valley Research and
Extension Center
9923 Krueger Road
Frankenmuth, MI 48734

Trevor Nichols Research Center
6237 124th Avenue
Fennville, MI 49408

AgBioResearch Centers leased by MSU

Northwest Michigan Horticultural
Research Center
6686 S. Center Highway
Traverse City, MI 49684

Real Property Holdings - Land Acquisition by Decade

MICHIGAN STATE UNIVERSITY

As of July 1, 2016

	Acres	
	Campus	**Off-Campus**
Prior to 1920	1,026.380	1,060.327
1920's	564.350	2,007.112
1930's	284.614	795.026
1940's	1,605.236	6,281.322
1950's	1,266.862	862.190
1960's	767.850	2,417.390
1970's	188.747	861.049
1980's	13.943	3,265.245
1990's	66.338	1,775.765
2000's	1.069	1,566.310
2010's	3.260	1,745.348

Real Property Holdings - Land Available for Agricultural and Natural Resources Research

MICHIGAN STATE UNIVERSITY

As of July 1, 2015

Off-Campus	**Acres**
12 Outlying Stations (owned)	15,559.437
1 Outlying Station (leased)	100.000
Dobie Road Property, Okemos	114.431
Off-Campus owned land used for agricultural research (Not designated as a research station)	1,153.600
Off-Campus leased land used for agricultural research	219.000
Campus	
Land used for agricultural research - south of Mt. Hope	2,737.492
Total Acres:	**19,883.960**

Real Property Holdings - Warranty Deeds to State Building Authority

MICHIGAN STATE UNIVERSITY

As of July 1, 2016

The following parcels have been or will be deeded to and leased back from the State Building Authority, for financing pursuant to earlier Board of Trustees approval.

- Anthony Hall Dairy Plant and Meats Lab
- Biomedical and Physical Sciences Building
- Diagnostic Center for Population and Animal Health
- Chemistry Building Renovation Project

Location Maps
of
Michigan State University Properties
Alphabetical by County

BioEconomy Research and Development Center

Holland Township, Section 19

MSU Real Property

Brook Lodge

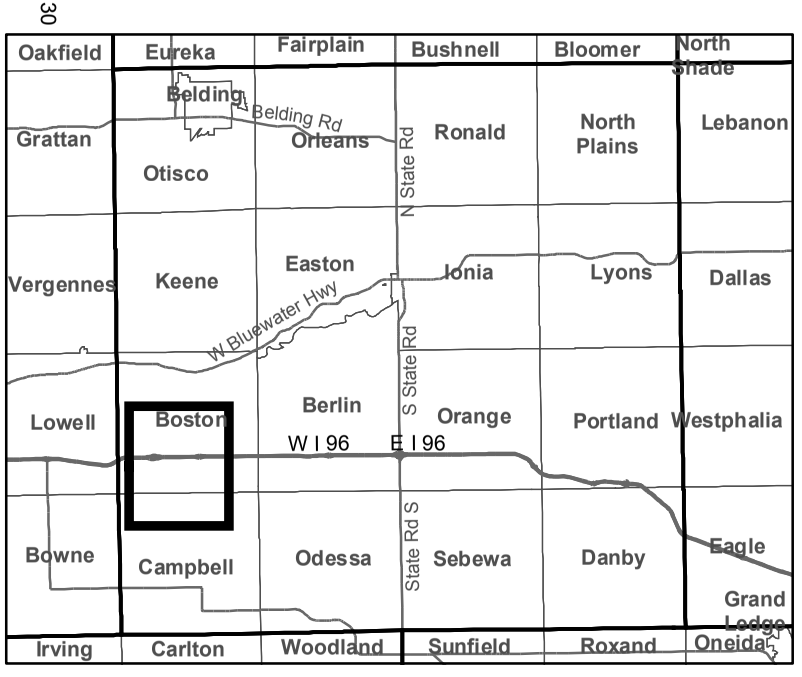
Ross Township, Section 21, 27, 28, and 29

MSU Real Property

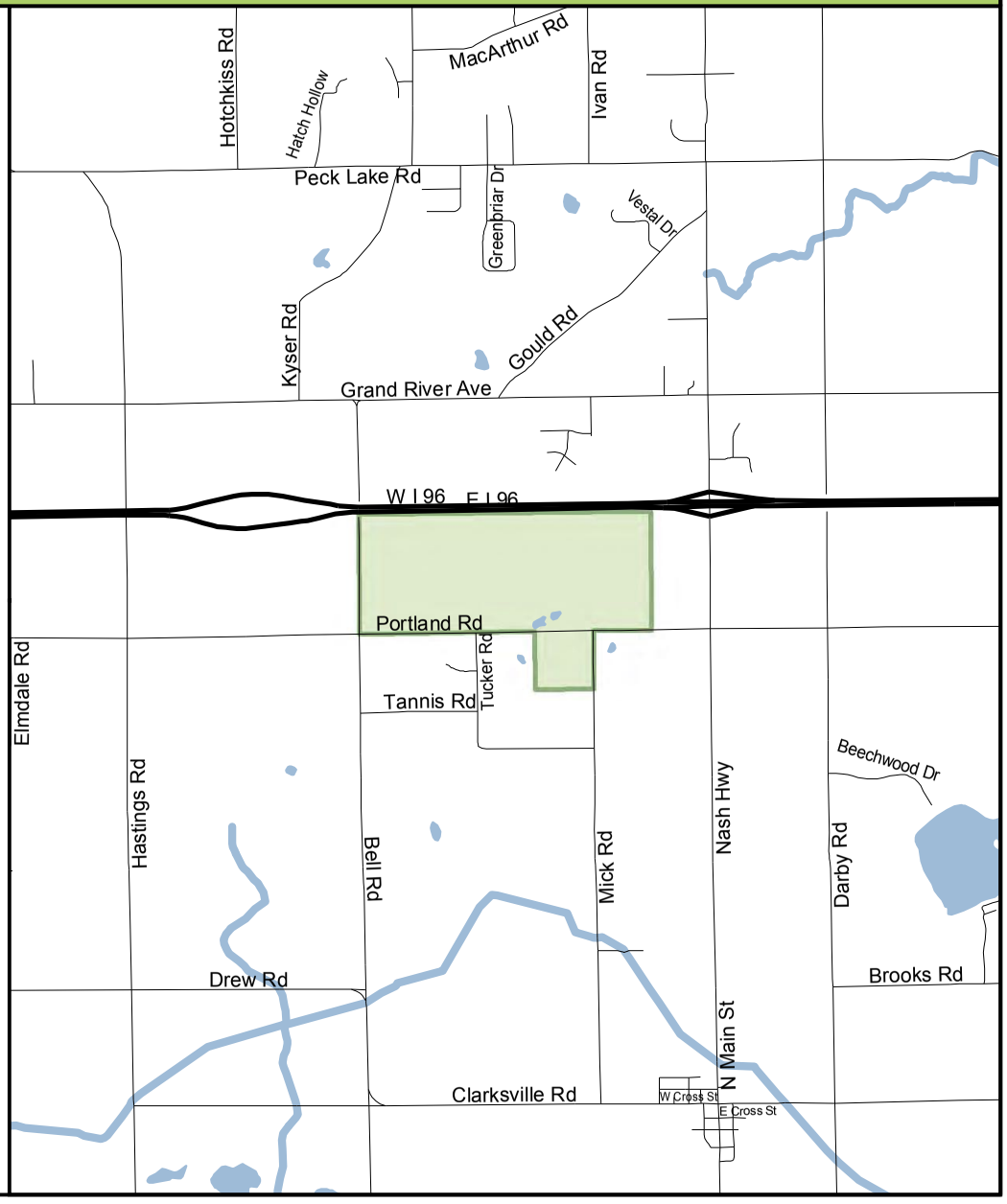
Clarksville Research Center

Boston Township, Sections 27, 28, and 33

Ionia County



MSU Real Property



Dobie Road Property

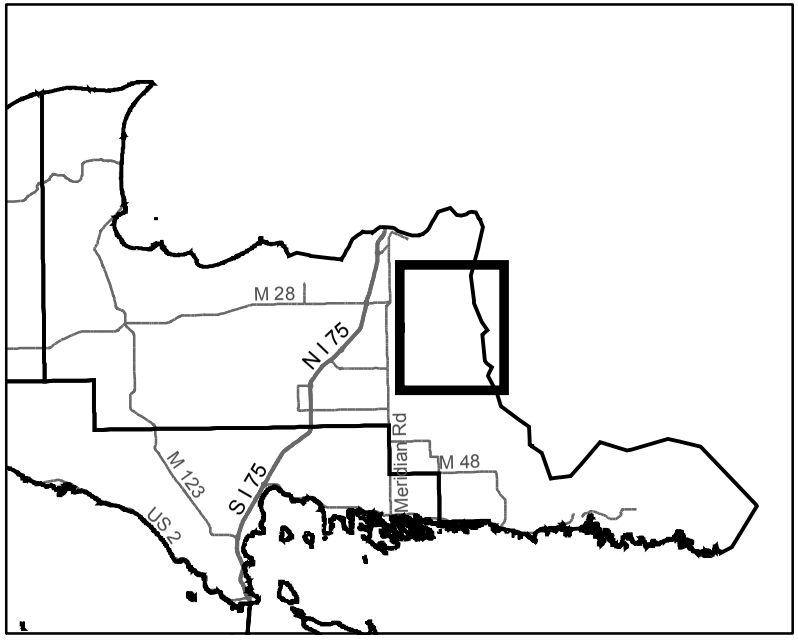
Meridian Township, Section 27

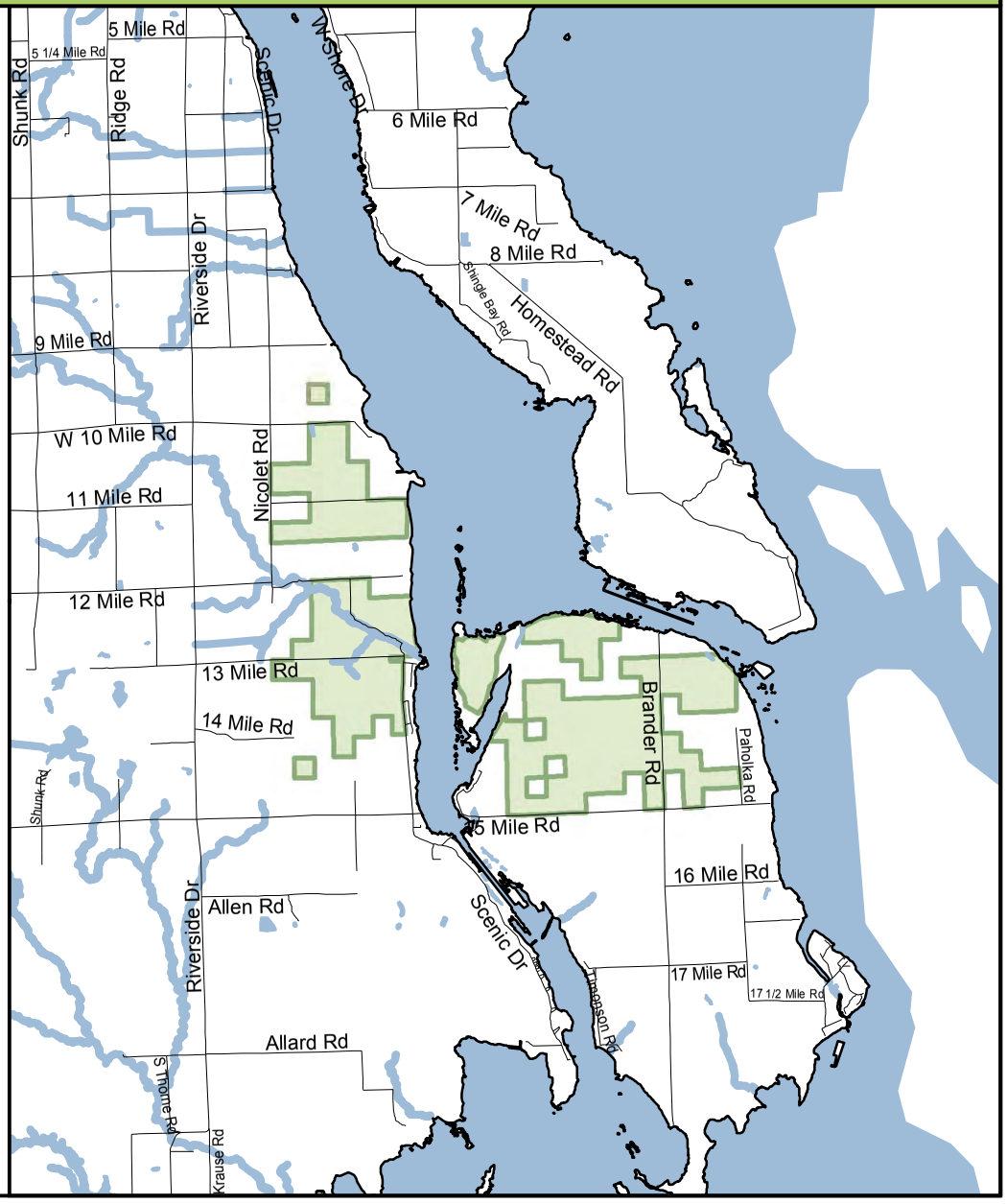
MSU Real Property

Dunbar Forest

Soo Township, Sections 3, 4, 5, 8, 9, 10, 11, 14, 15, and 16; Bruce Township, Sections 1, 6, 7, 12, 13, 24, 25, 30, 31, and 36

Chippewa County

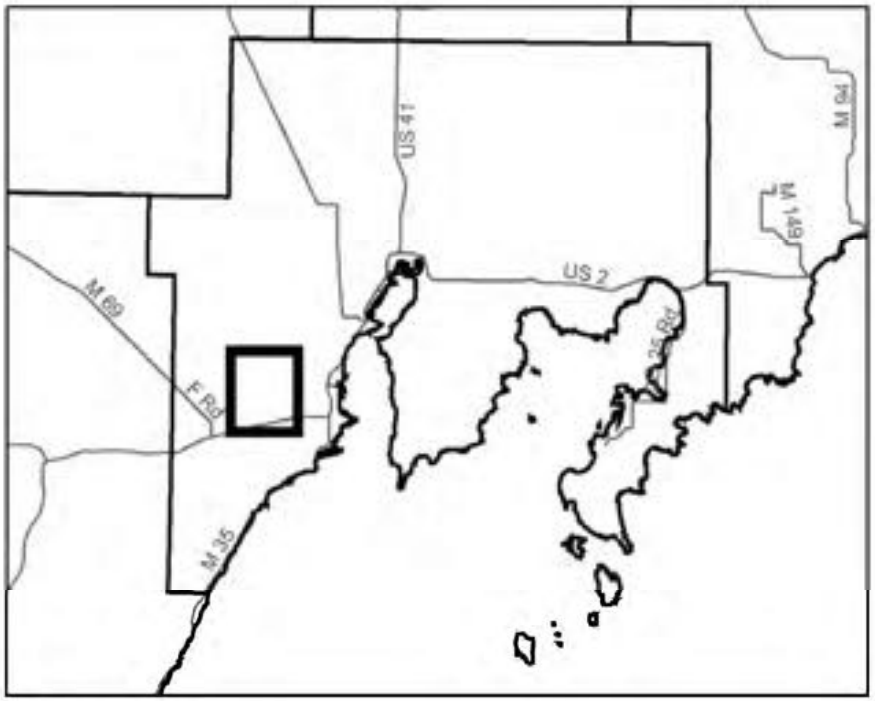


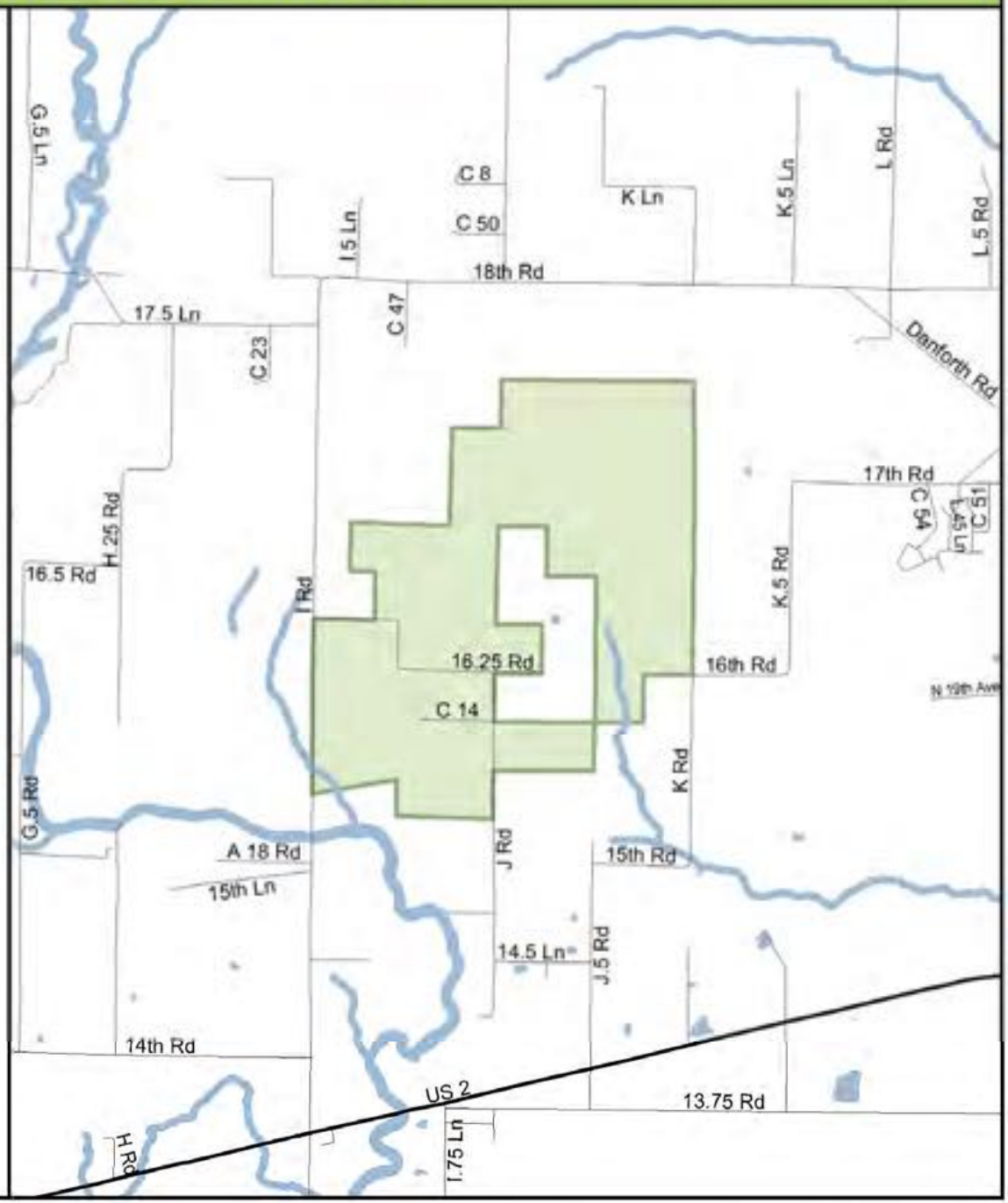


MSU Real Property

Forest Biomass Innovation Center

Wells Township, Sections 8, 17, 18, 19, and 20





MSU Real Property

Gantos Property

Kentwood Township, Section 23

MSU Real Property

Hidden Lake Gardens

Franklin Township, Sections 17, 18, 19, and 20

MSU Real Property

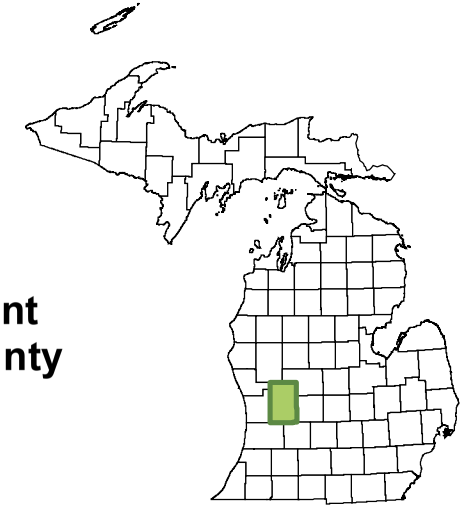
Hulett Road Engineering

Alaiedon Township, Section 5

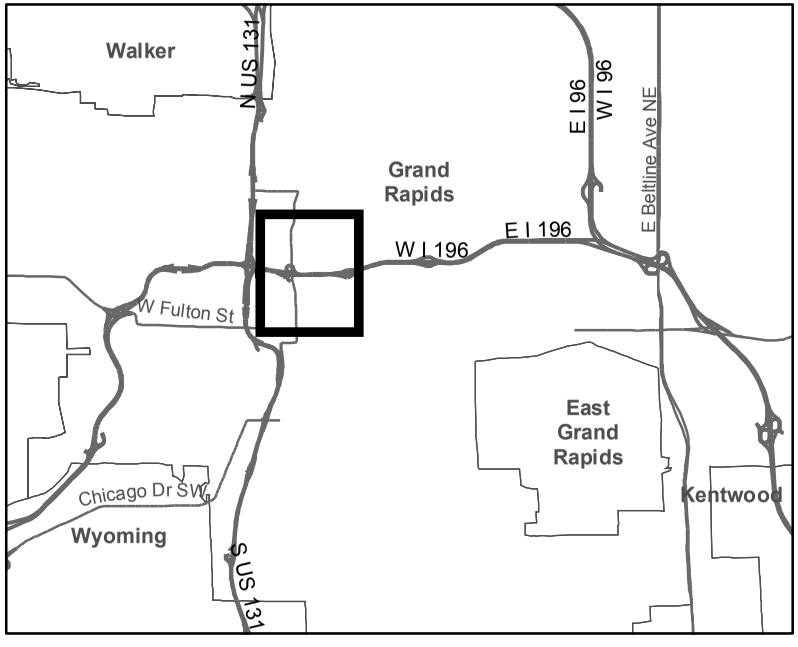
MSU Real Property

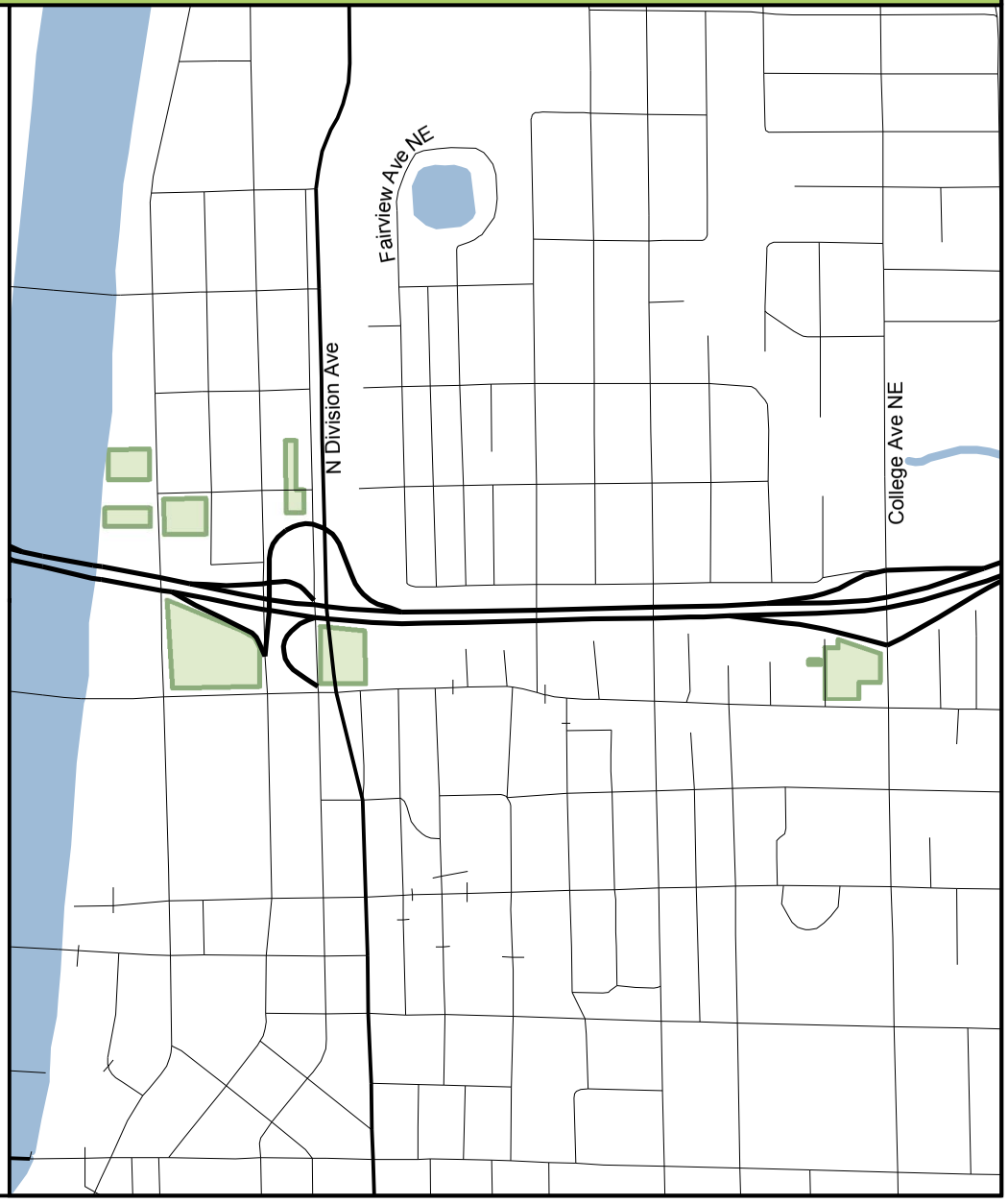
College of Human Medicine - Grand Rapids

Grand Rapids Township, Section 19



Kent County





MSU Real Property

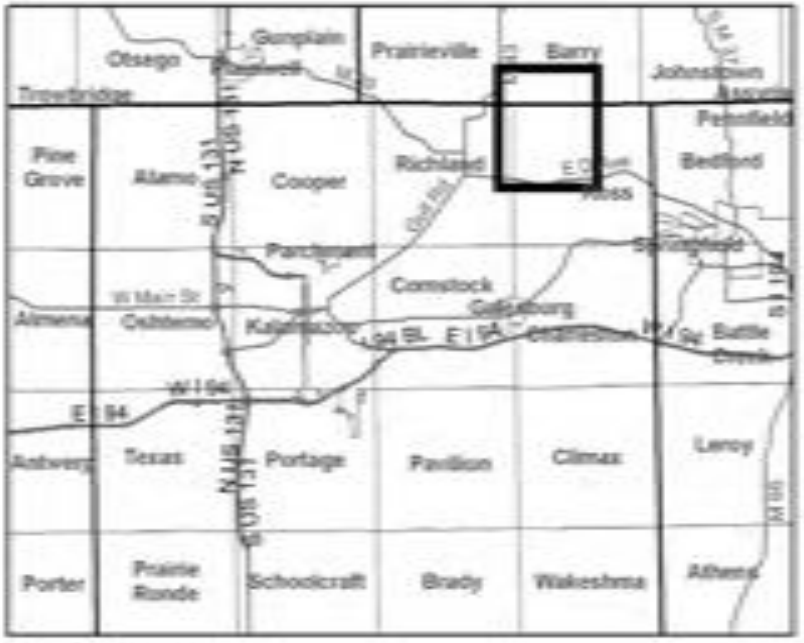
Jolly Road Engineering and Civil Infrastructure Lab

Alaiedon Township, Section 5

MSU Real Property

W.K. Kellogg Biological Station, Bird Sanctuary, and Farm

City of South Gull Lake and Ross Township, Sections 4, 5, 6, 8, and 9

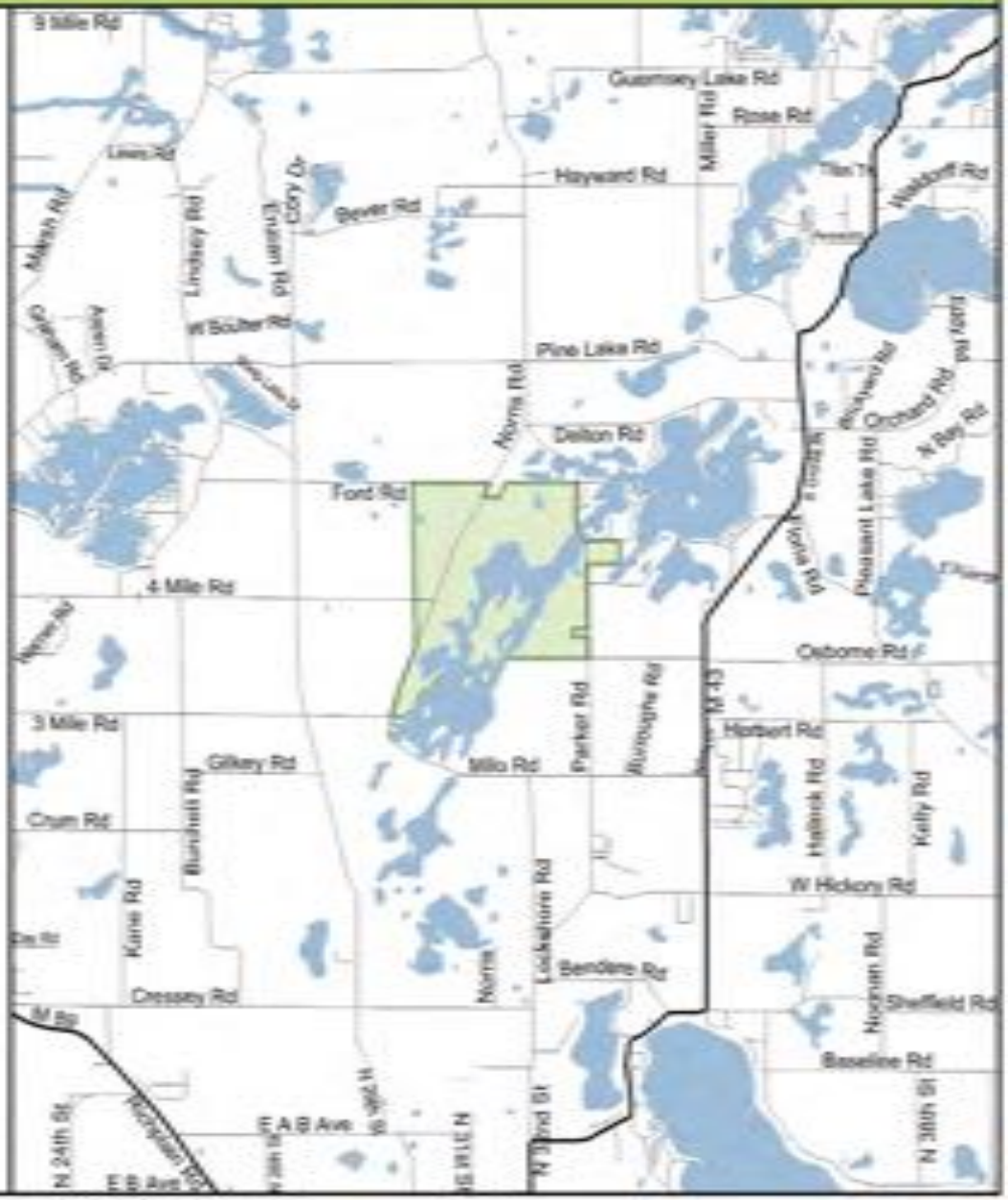


MSU Real Property

W.K. Kellogg Biological Station (Lux Arbor Reserve)

Prairieville Township, Sections 10, 11, 14, and 15

MSU Real Property



W.K. Kellogg Experimental Forest

Ross Township, Sections 21, 22, 27, and 28

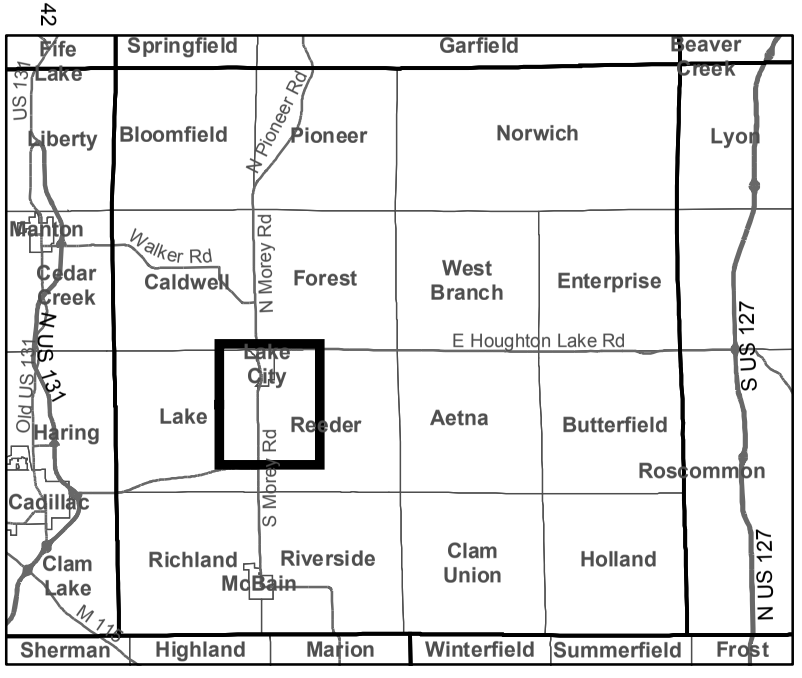
Kalamazoo County

MSU Real Property

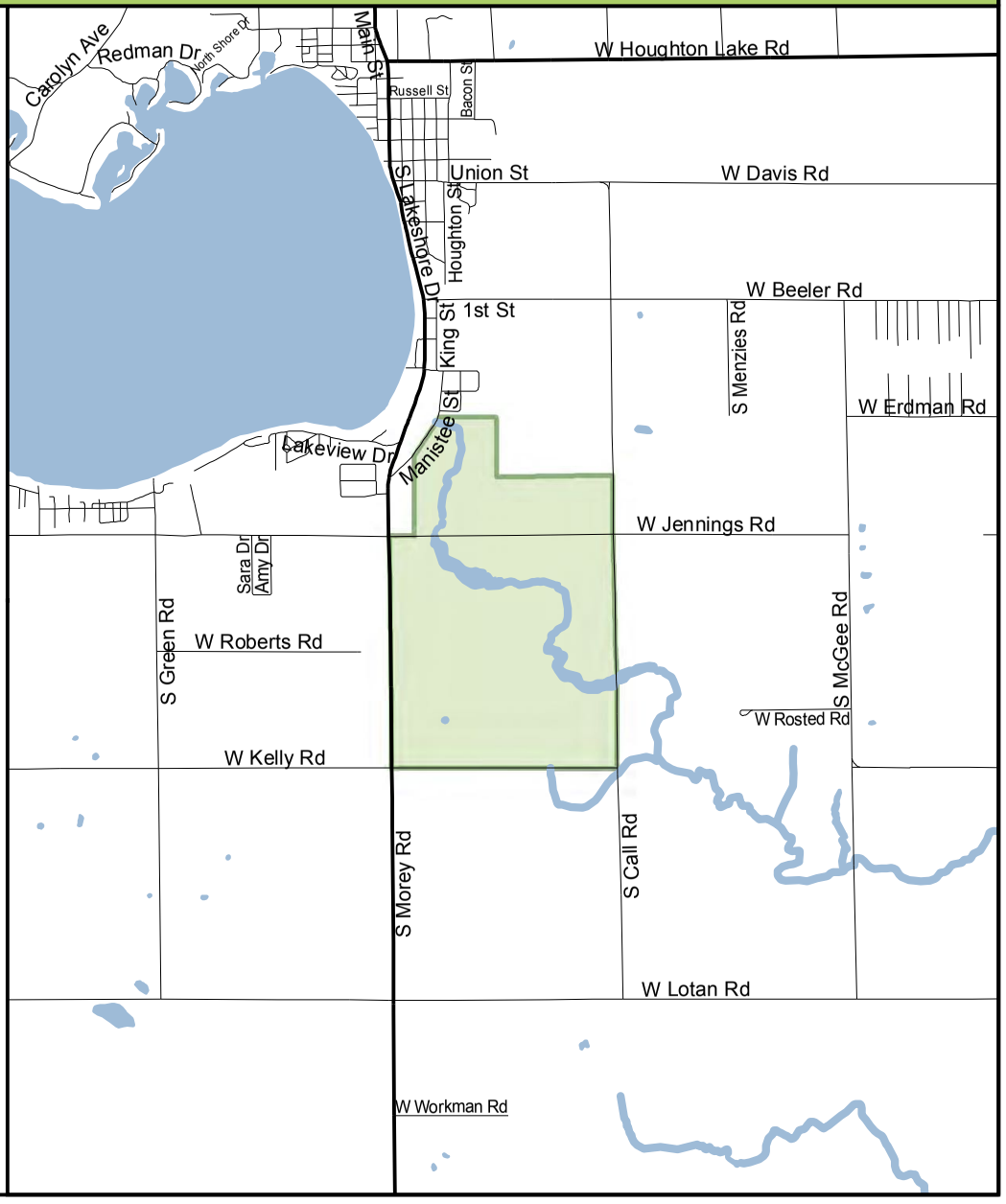
Lake City Research Center

Reeder Township, Sections 7 and 18

Missaukee County

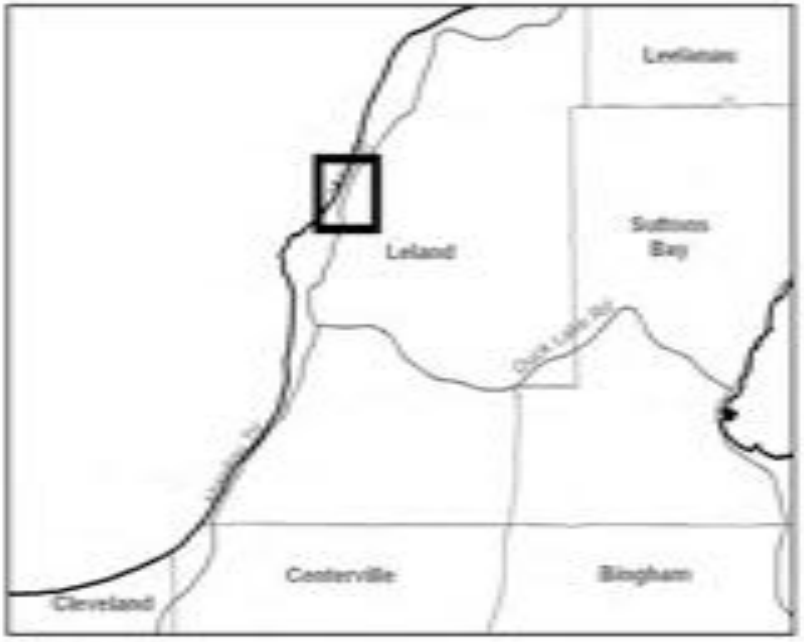


MSU Real Property



Leland Property

Leland Township, Section 9

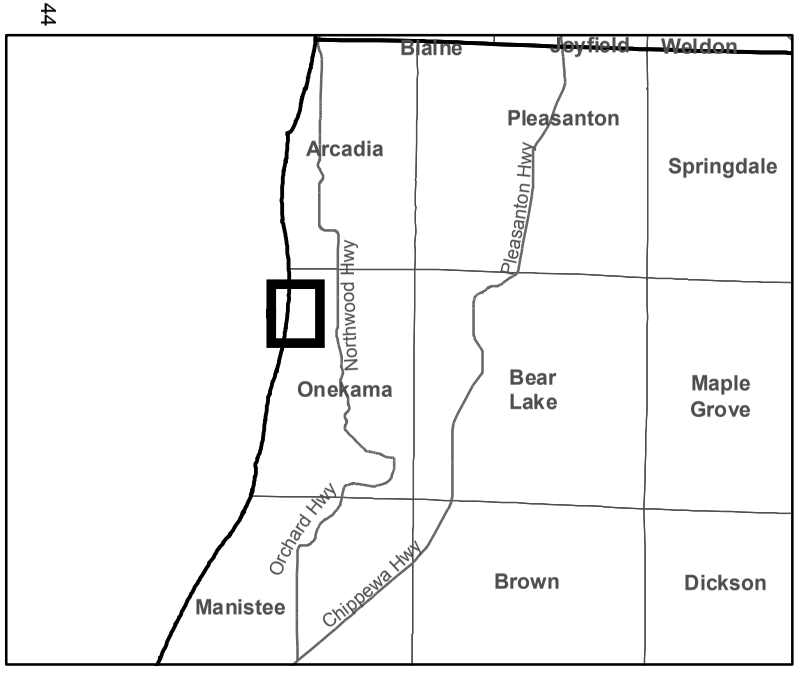


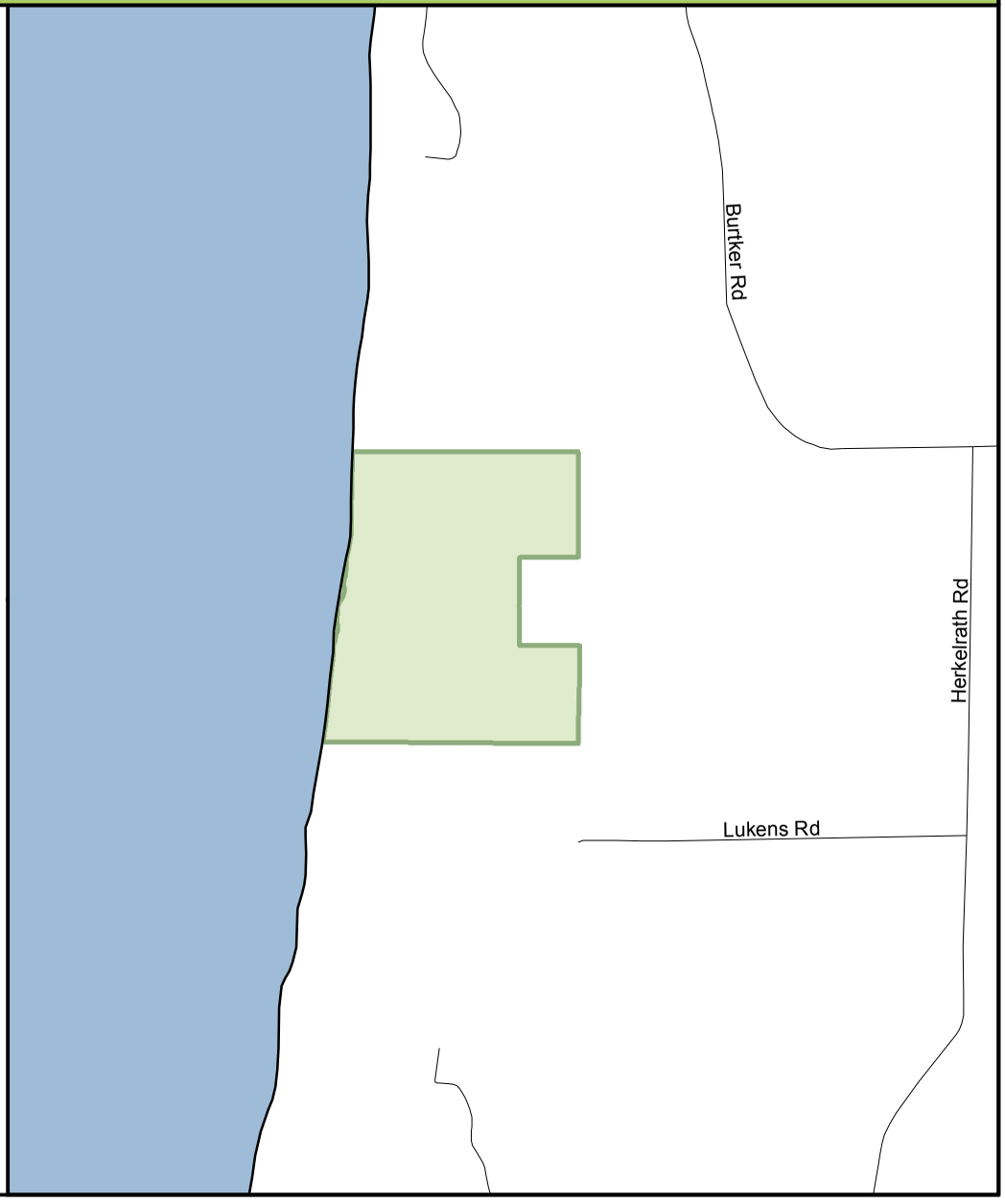
MSU Real Property

Lukens Property

Onekama Township, Section 9

Manistee County





MSU Real Property

MacCready Forest and Wildlife Reserve

Liberty Township, Sections 11 and 14

MSU Real Property

Management Education Center, Troy

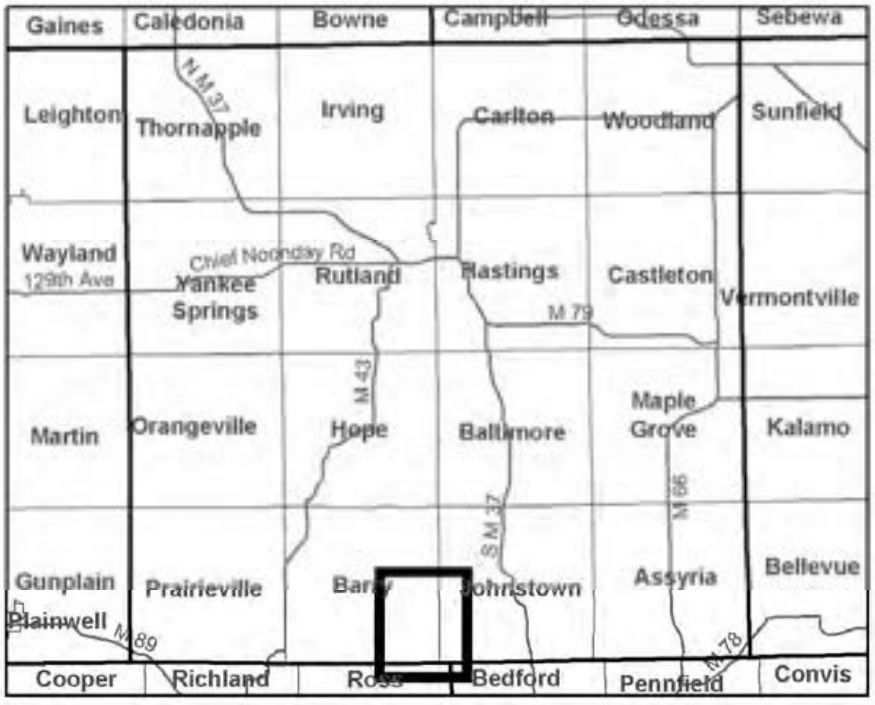
City of Troy, Section 9

MSU Real Property

Marshall Property

Barry Township, Section 25 and 26

Barry County



MSU Foundation

Martin Property (Rose-Dell Seed Orchard)

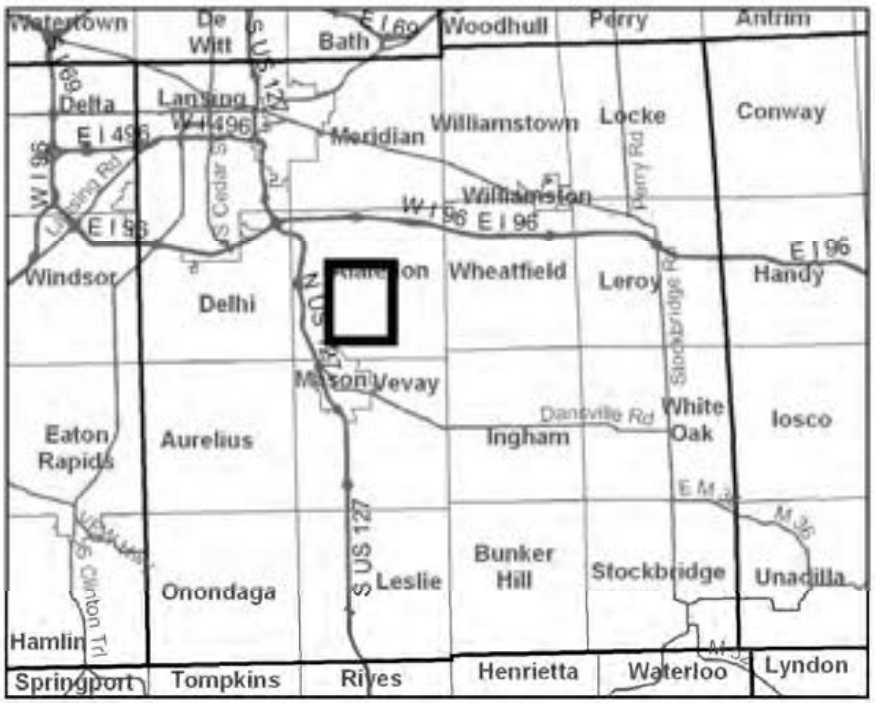
Albion Township, Sections 23 and 24

MSU Real Property

Mason Research Farm

Alaiedon Township, Section 21

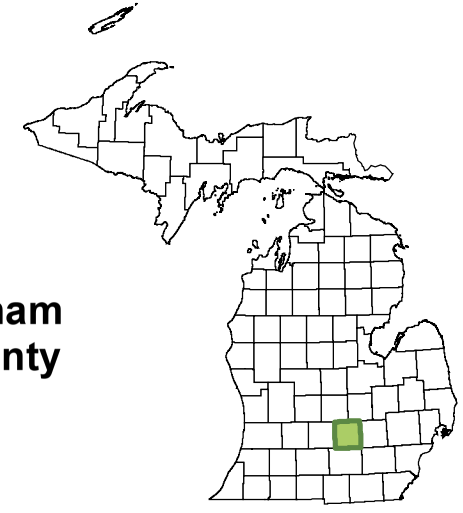
Ingham County

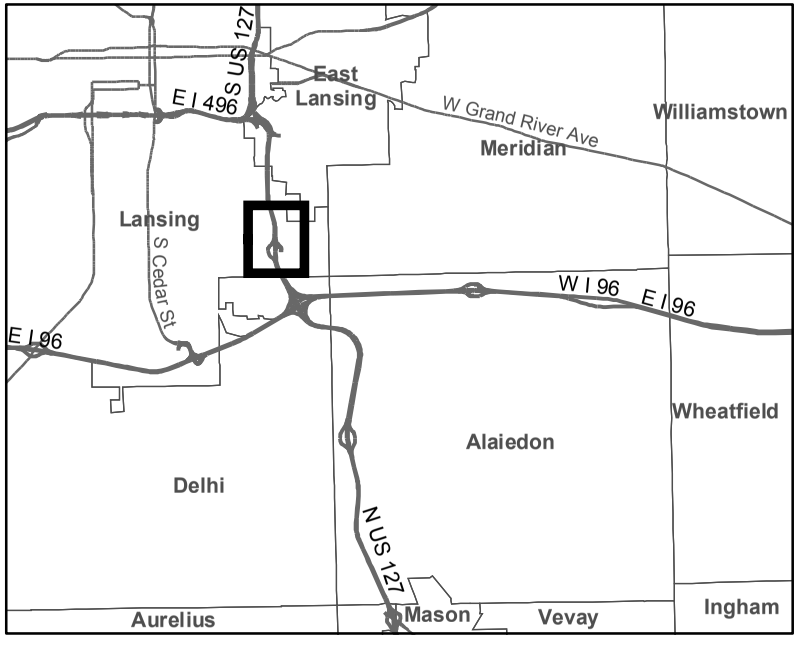


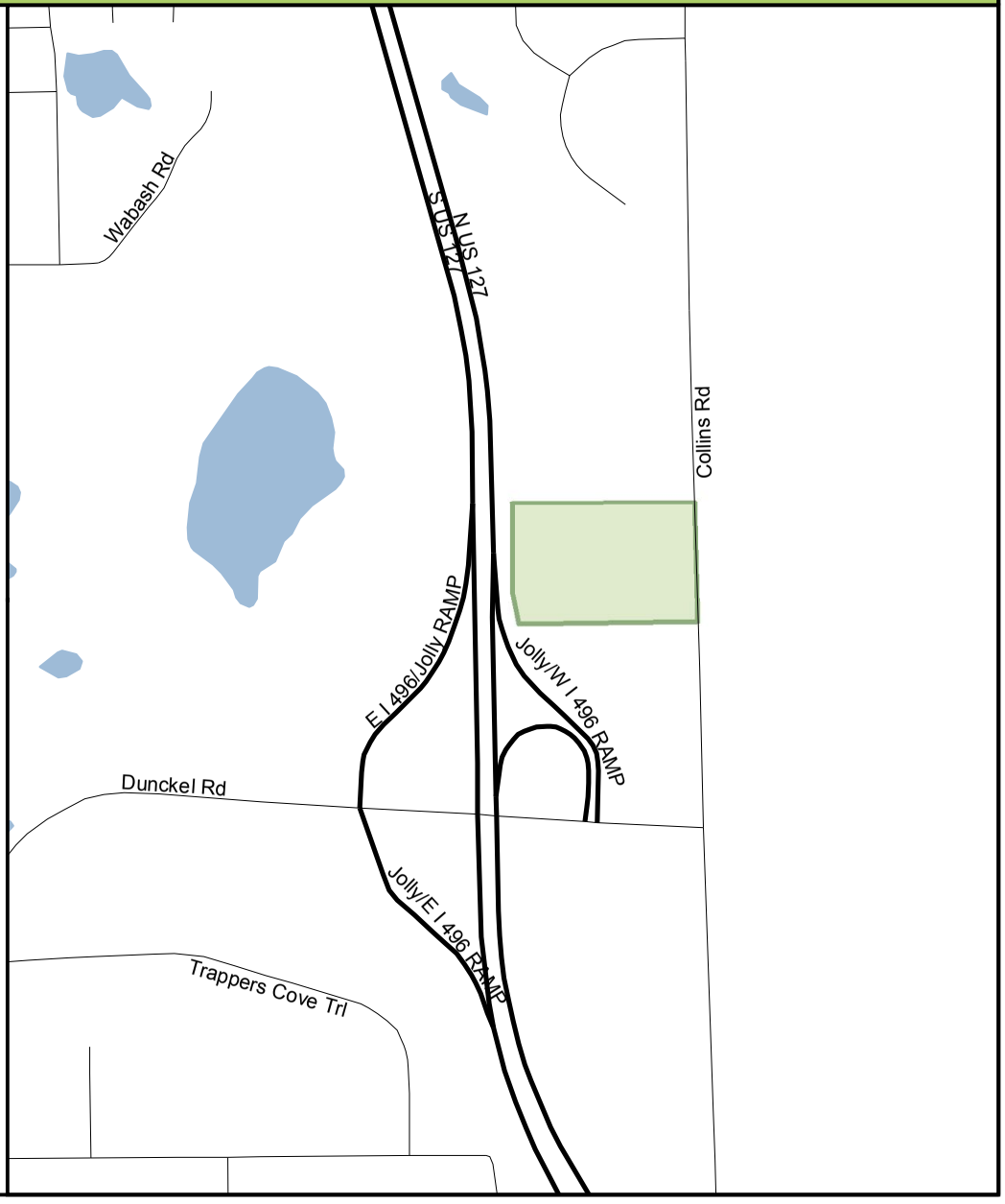
MSU Real Property

Michigan Biotechnology Institute (MBI)

Ingham County, Lansing Township, Section 36



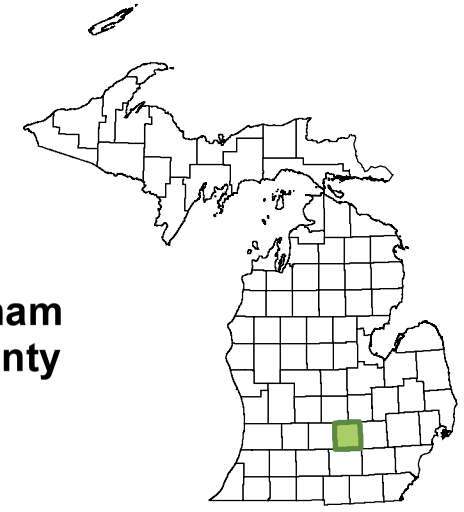




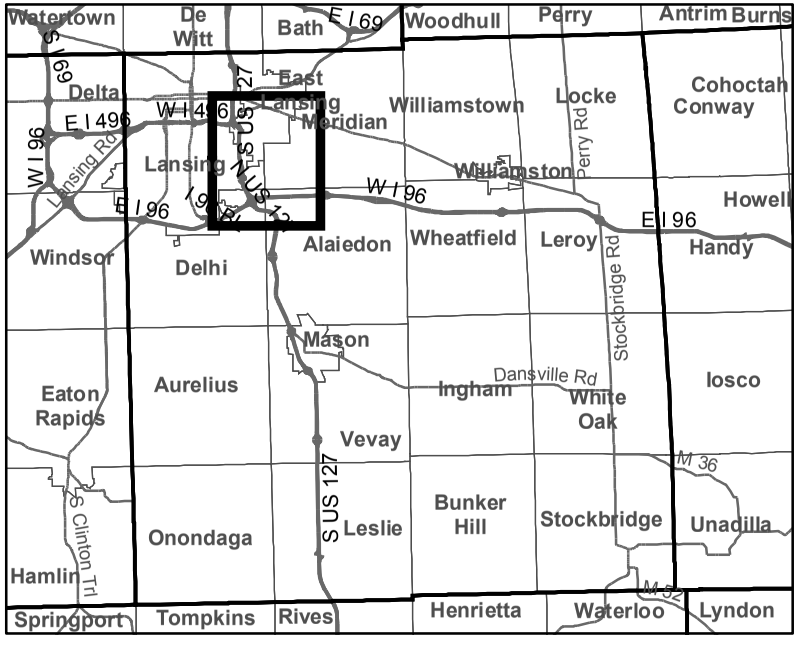
MSU Real Property

Michigan State University Campus, East Lansing

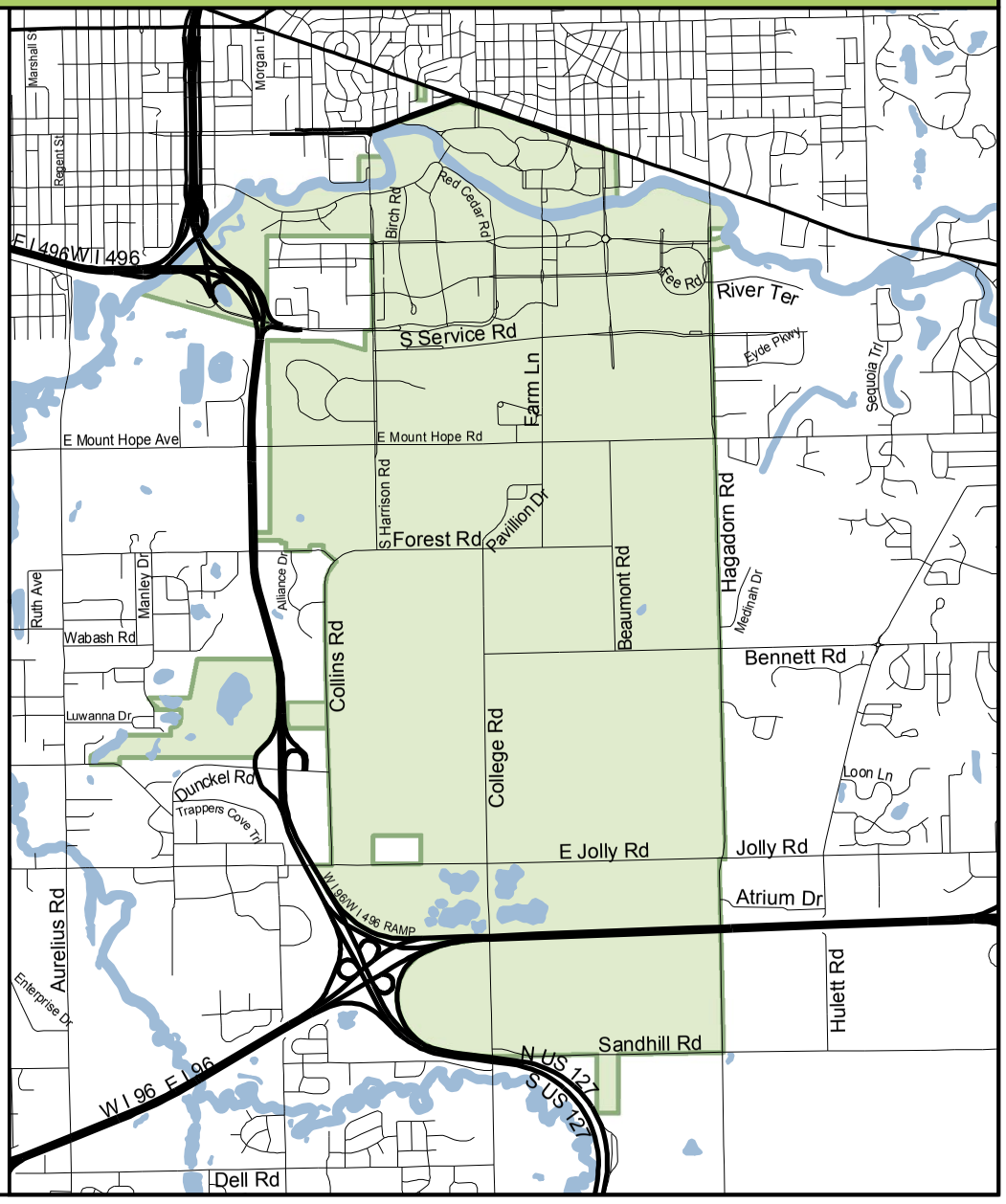
Alaiedon, Delhi, Lansing, and Meridian Townships



Ingham County



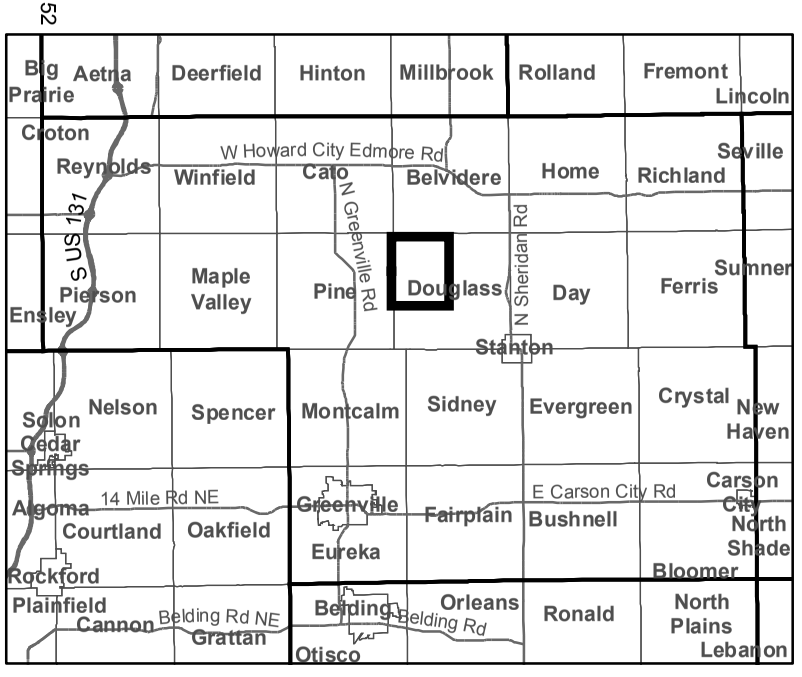
MSU Real Property



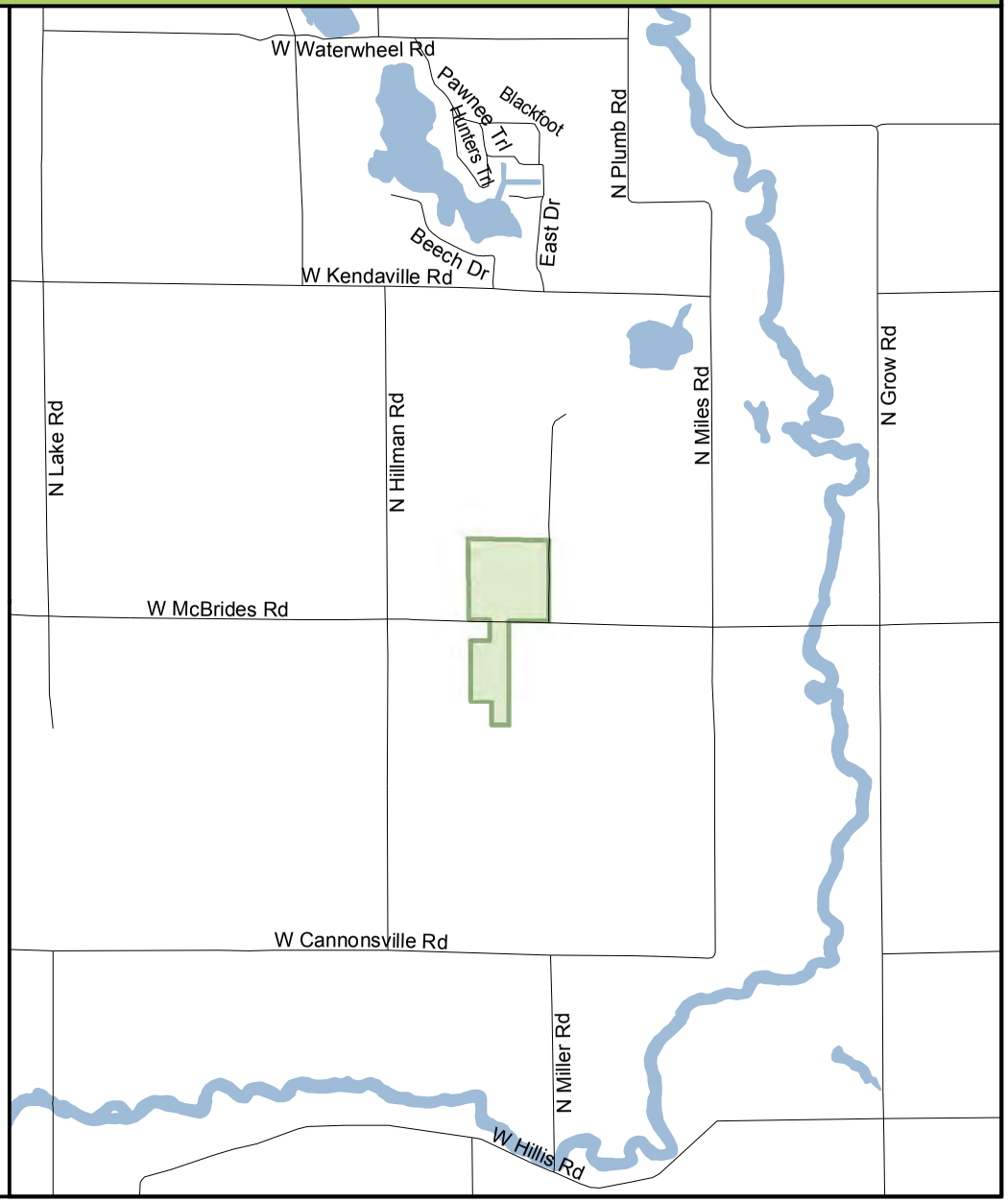
Montcalm Research Center

Douglass Township, Sections 8 and 17

Montcalm County



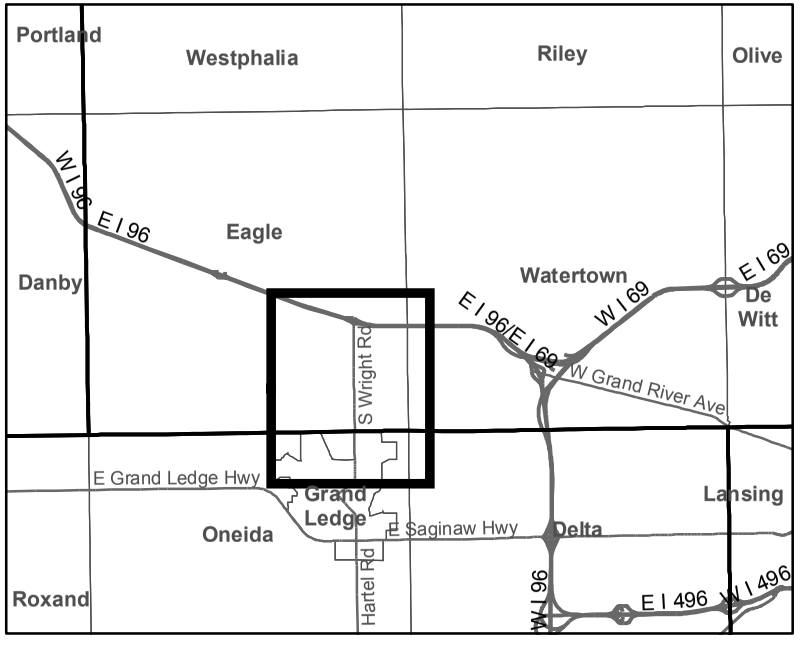
MSU Real Property

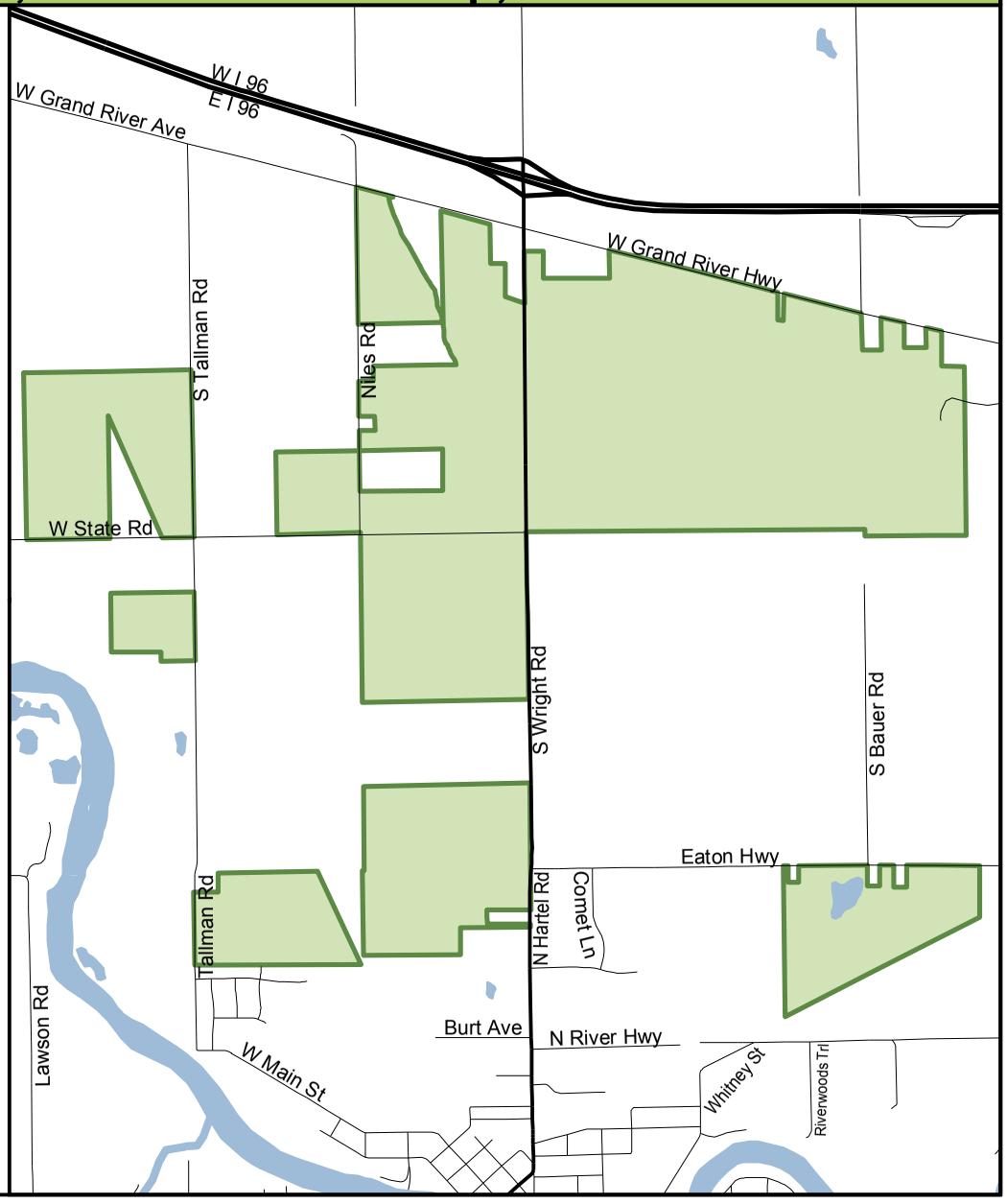


Morris Property

Oneida Twp, Sections 1 and 2; Delta Twp, Section 6; Eagle Twp, Sections 23, 25, 26, 27, 34, 35; and Watertown Twp, Section 30

Clinton County
&
Eaton County





MSU Real Property

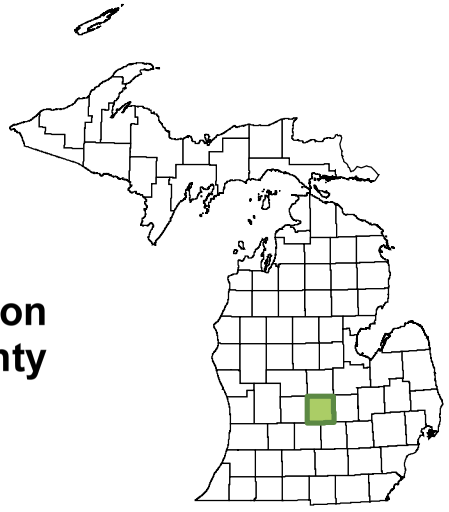
MSU Sailing Club

Meridian Township, Section 11

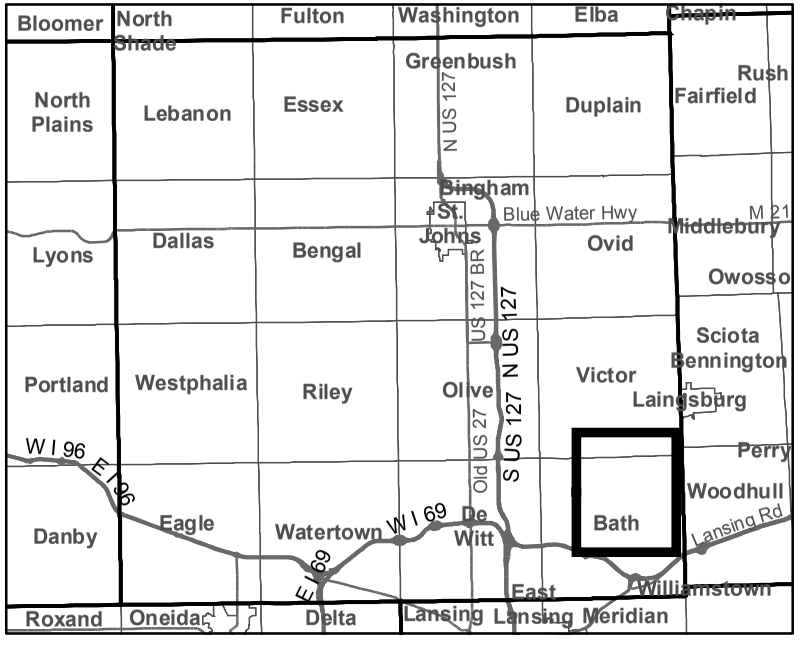
MSU Real Property

Muck Soils Research Center

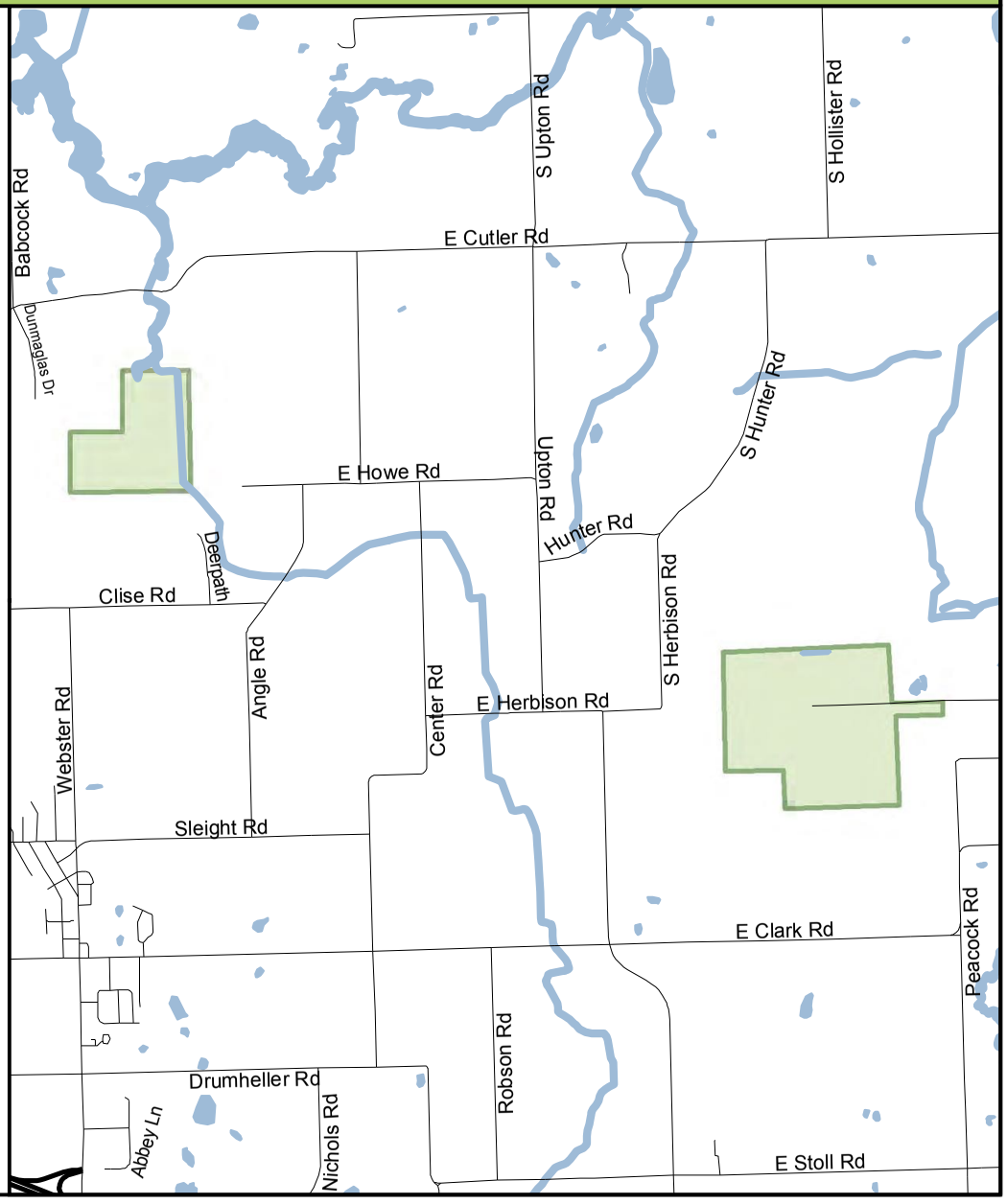
Bath Township, Sections 4, 5, 11, 12, 13, and 14



Clinton County



MSU Real Property



Rau Property

Springdale Township, Section 6

Manistee County

MSU Real Property

River Terrace Property

Meridian Township, Section 20

MSU Real Property

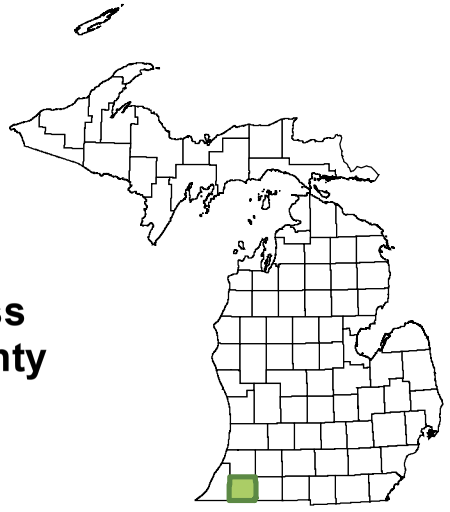
Rogers Reserve

Liberty Township, Section 4

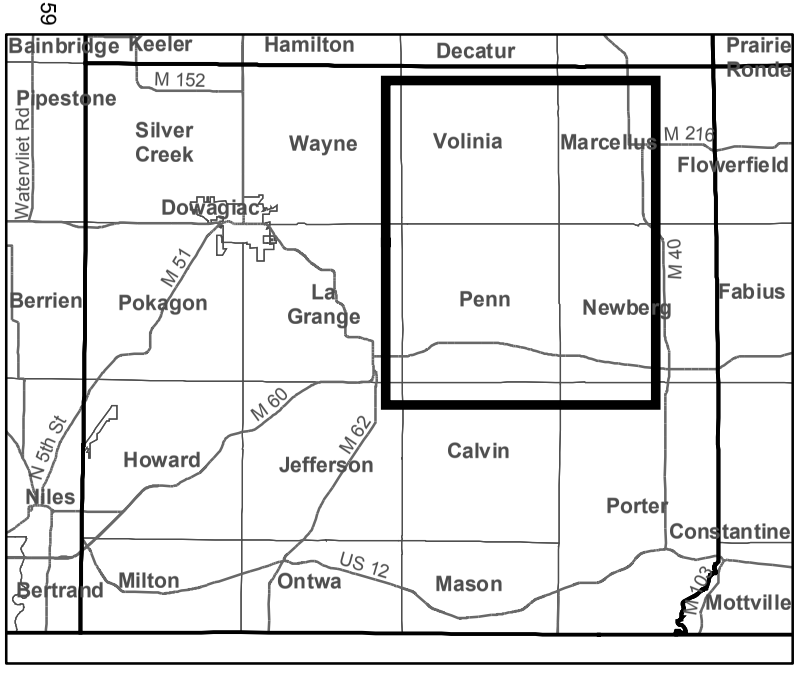
MSU Real Property

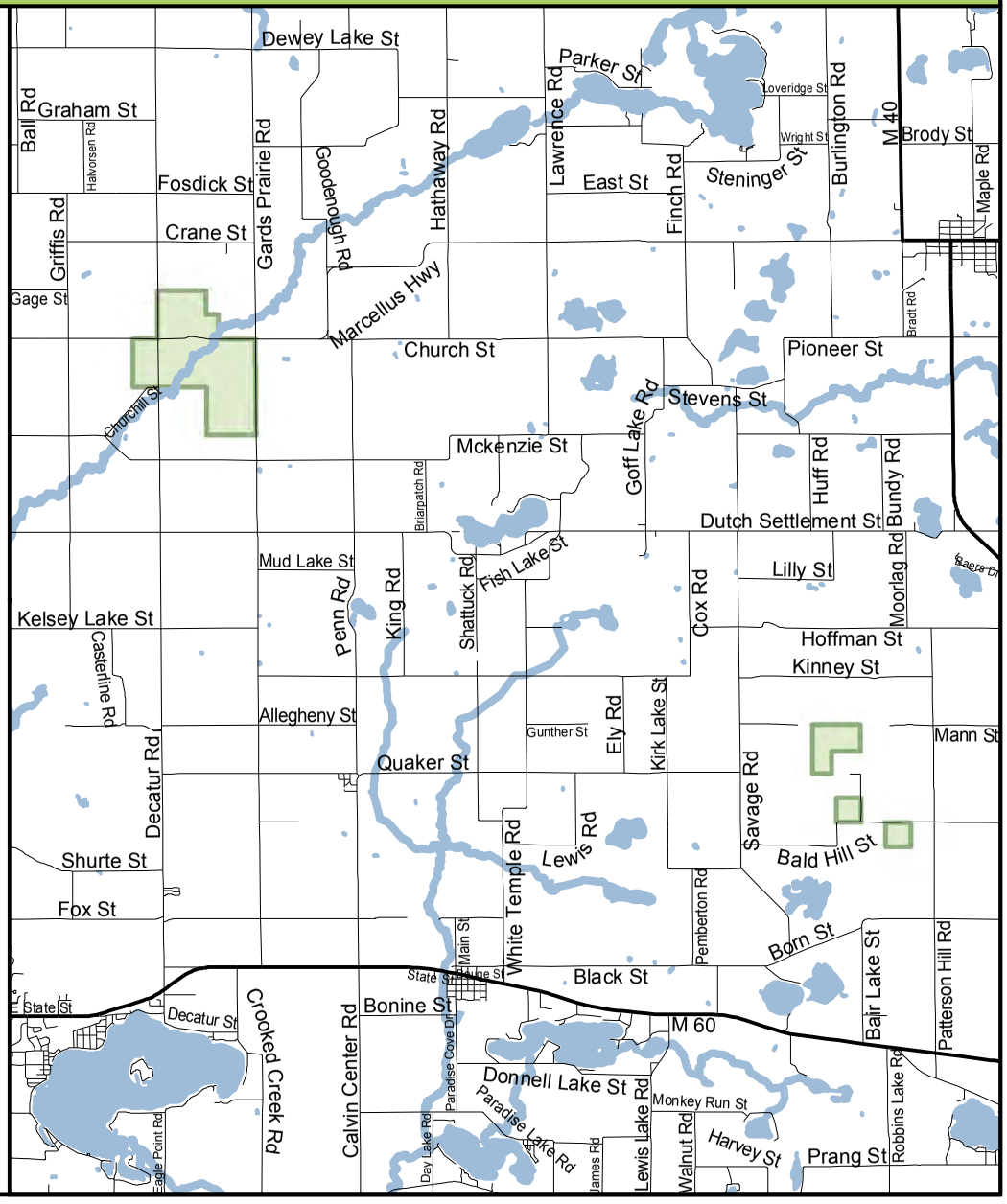
Russ Forest

Cass County, Volinia Township, Sections 20, 29 and 30; Newberg Township, Sections 16, 17, and 21



Cass County

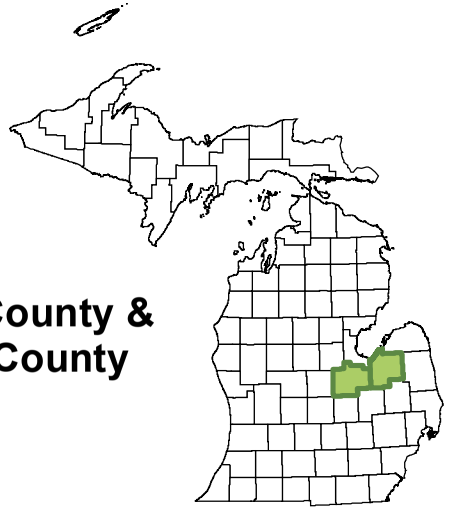




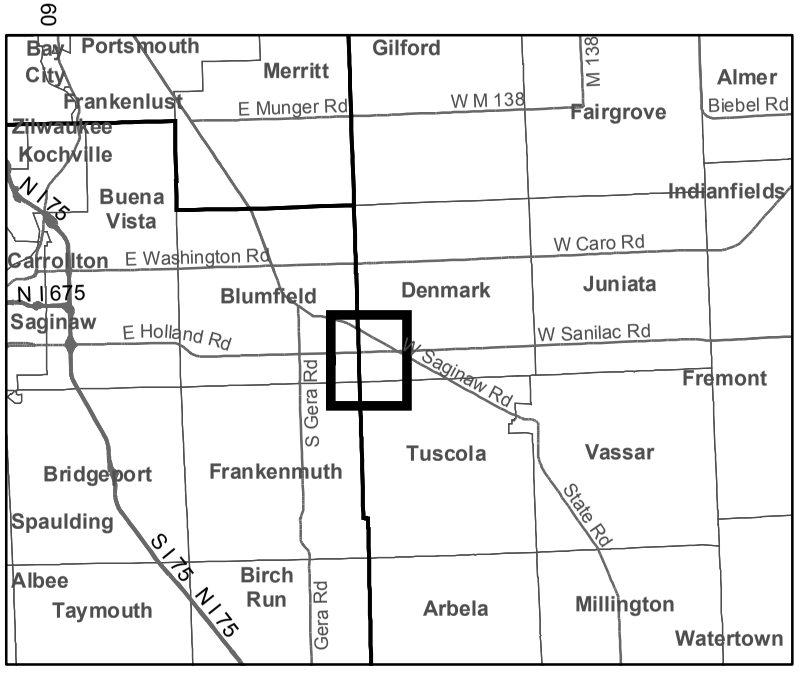
MSU Real Property

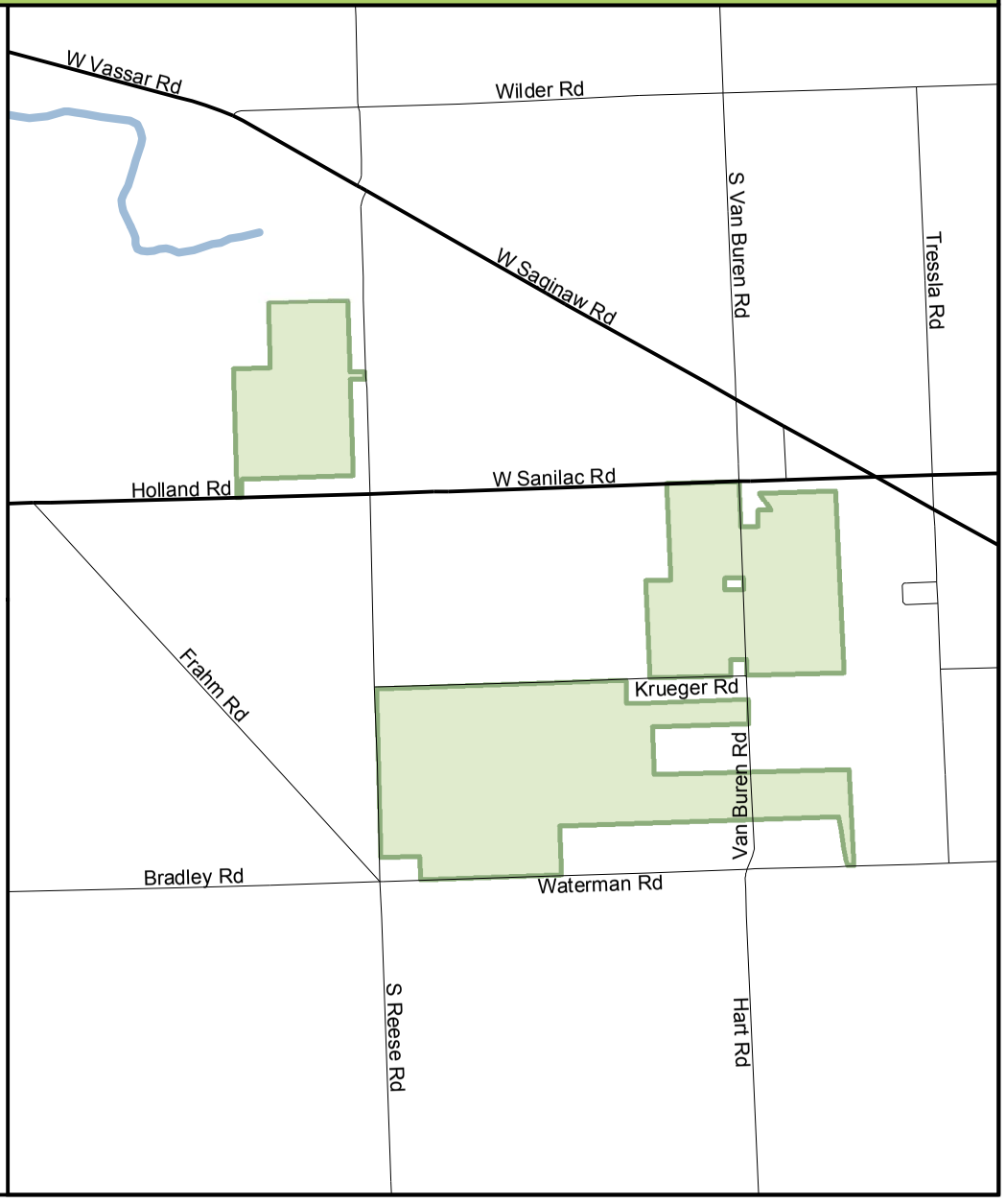
Saginaw Valley Research and Extension Center

Blumfield Township, Section 25; Denmark Township, Sections 31 and 32



Saginaw County & Tuscola County

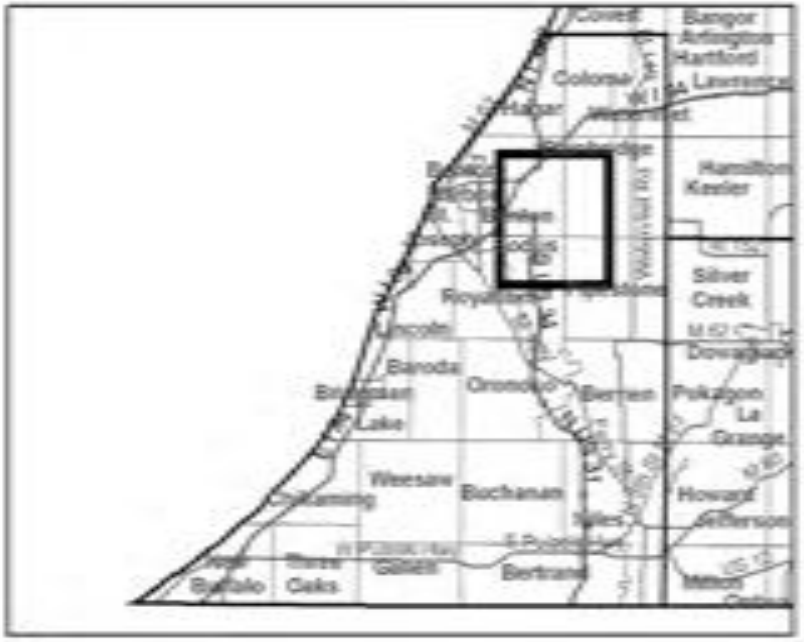


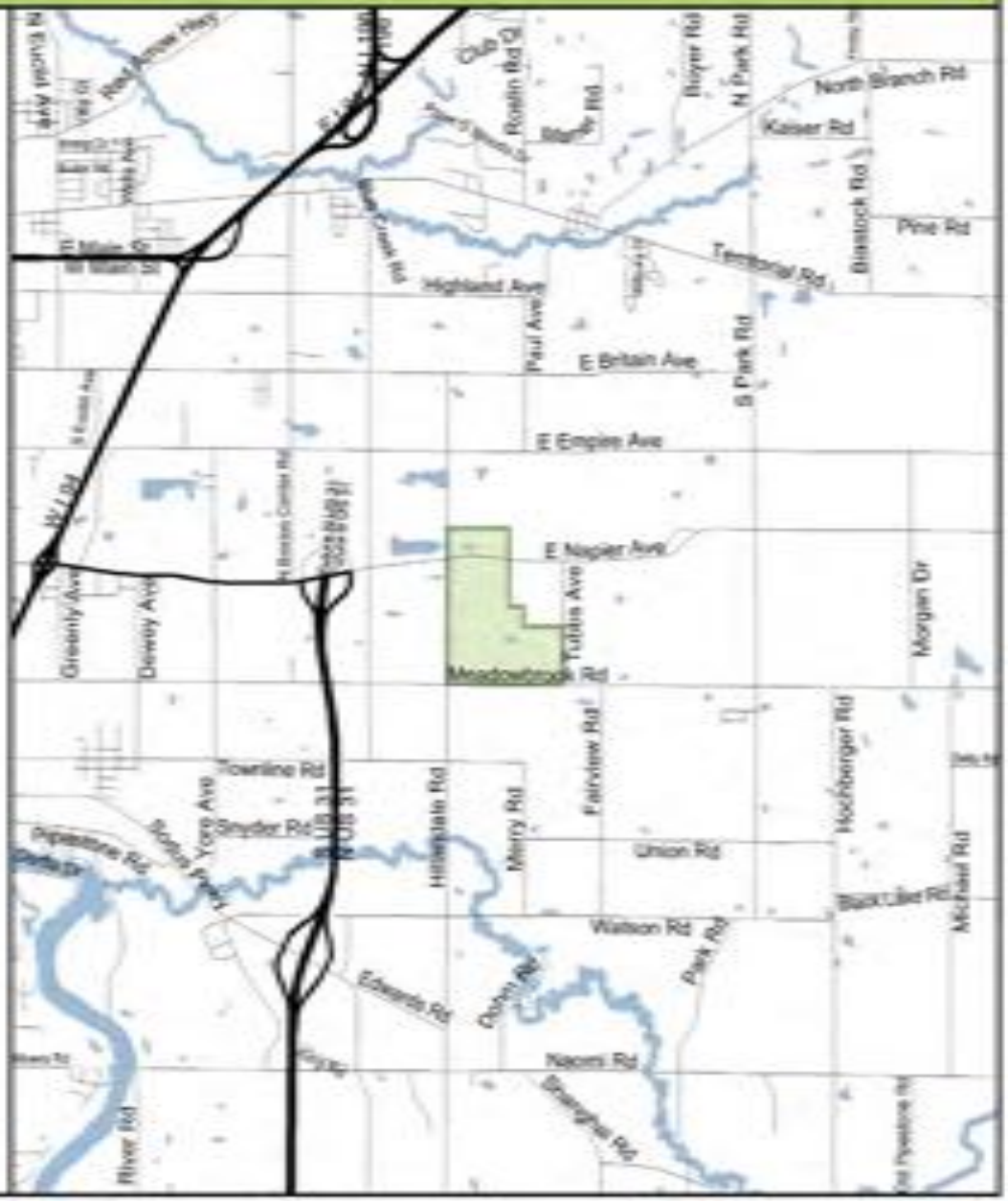


MSU Real Property

Southwest Michigan Research and Extension Center

Benton Township, Sections 25 and 36





MSU Real Property

Stranahan-Bell Property (Wa Wa Sum)

Grayling Township, Sections 1, 6, and 12

MSU Real Property

Stuckman Property

Bingham Township, Section 10

MSU Real Property

Sycamore Creek Property

Alaiedon Township, Section 18

MSU Real Property

Tollgate Education Center and Americana Foundation Property

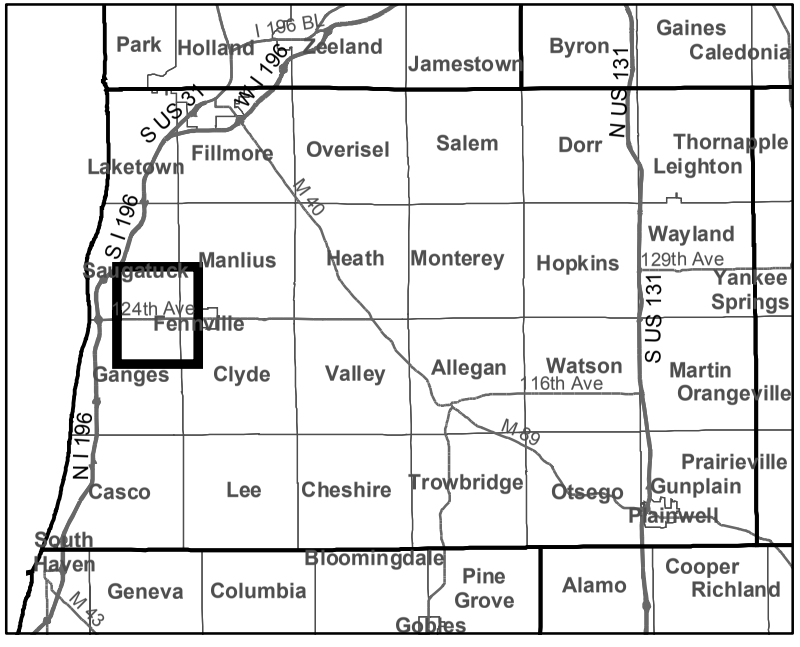
City of Novi, Section 11

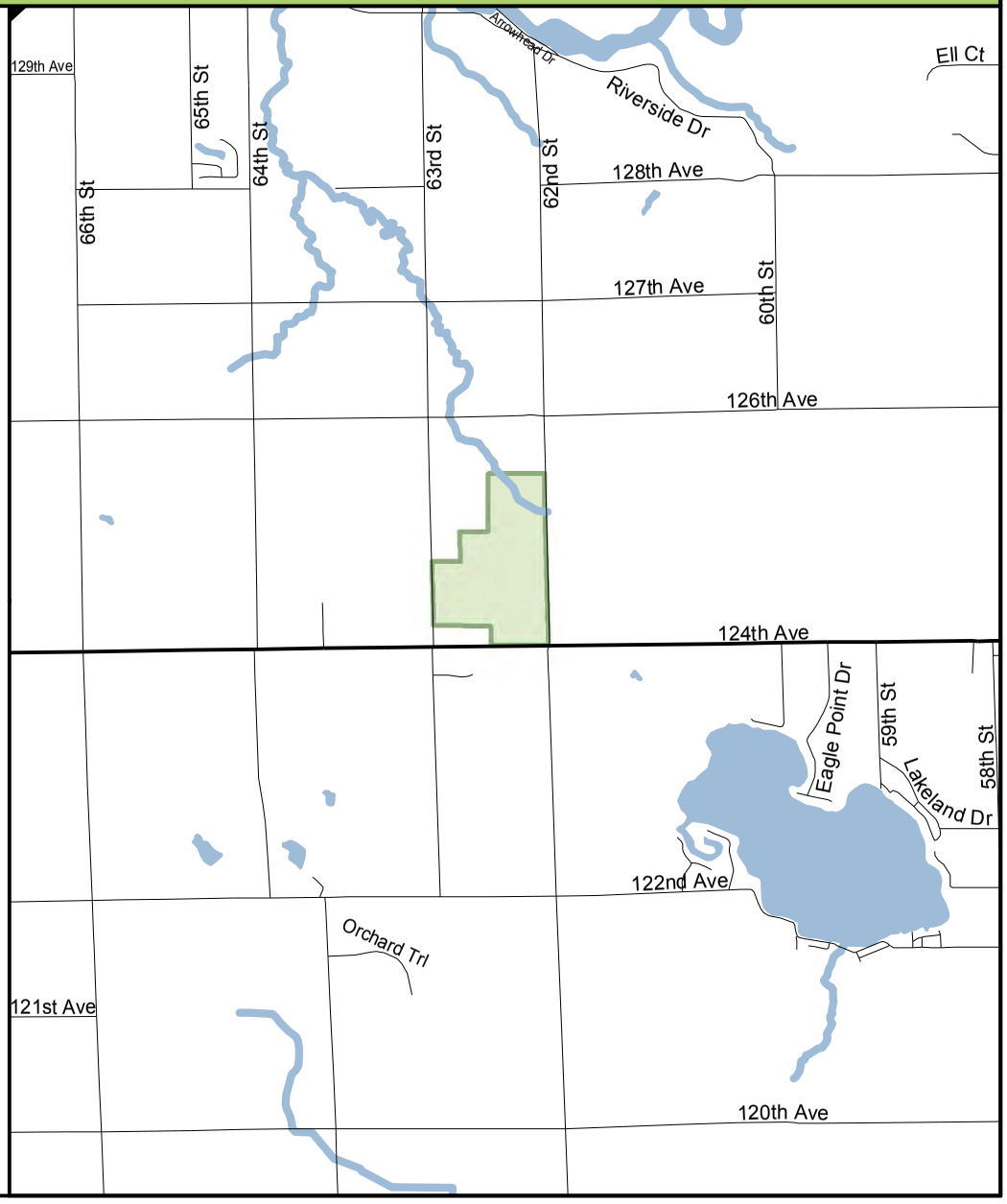
MSU Real Property

Trevor Nichols Research Center

Saugatuck Township, Section 35

Allegan County

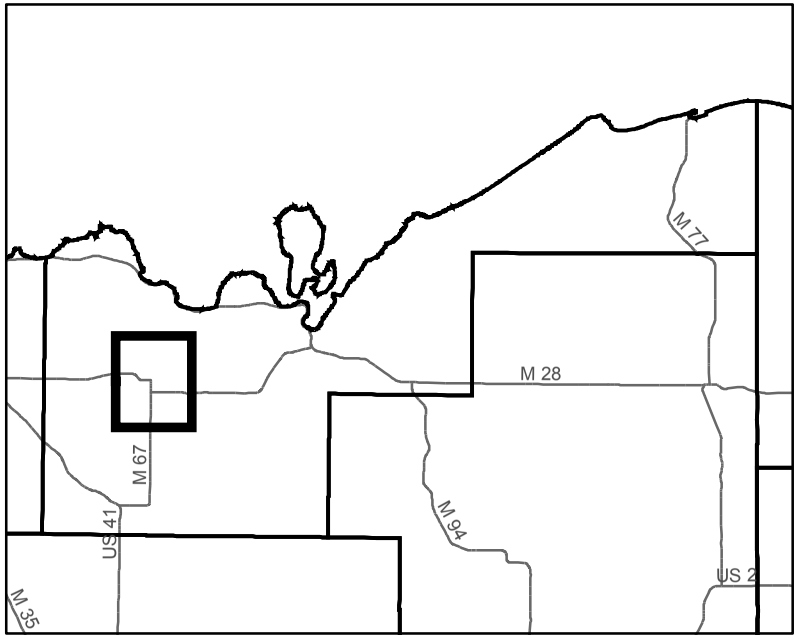


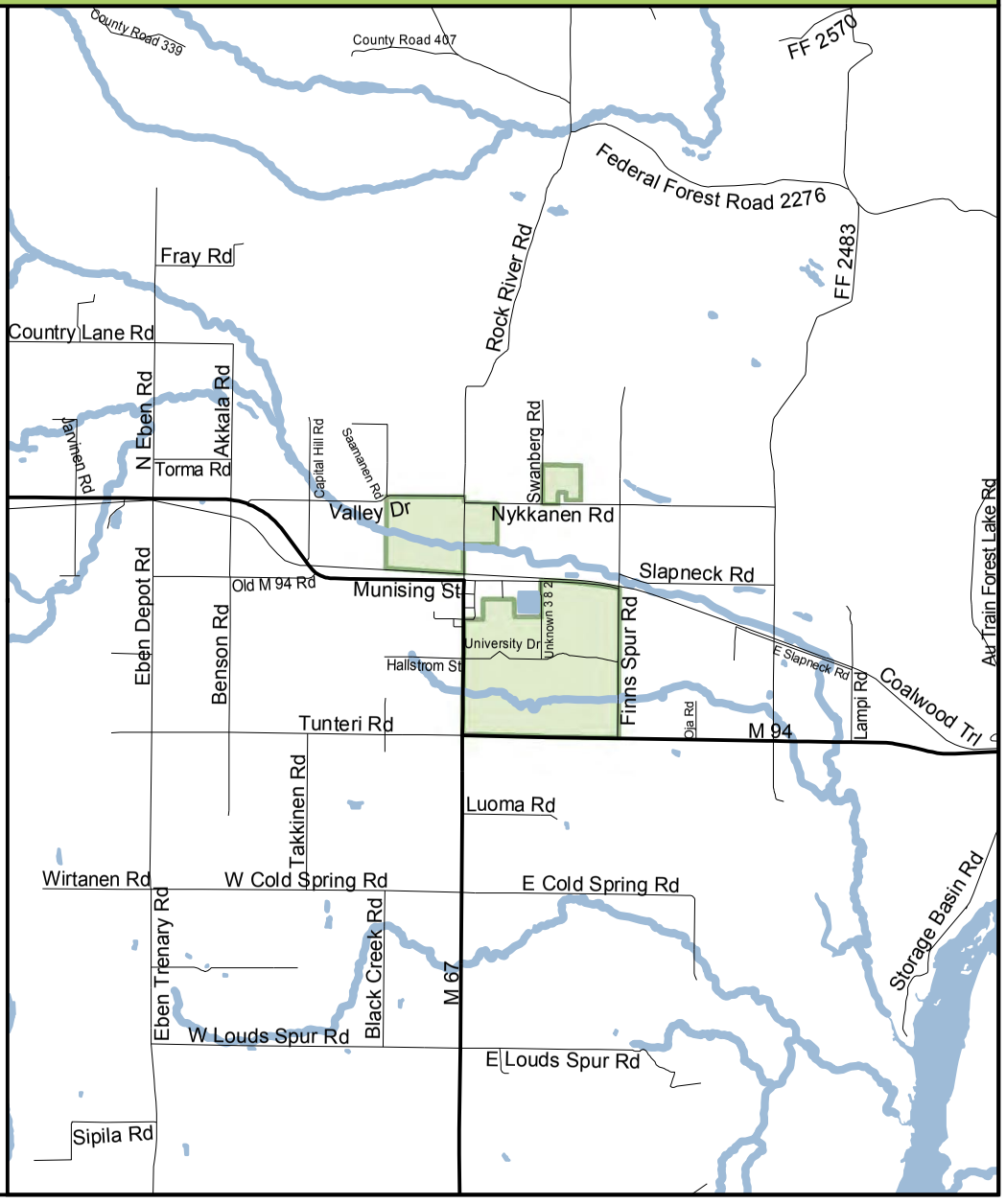


MSU Real Property

Upper Peninsula Research Center

City of Chatham and Rock River Township, Sections 24, 25, 27, 28, and 34



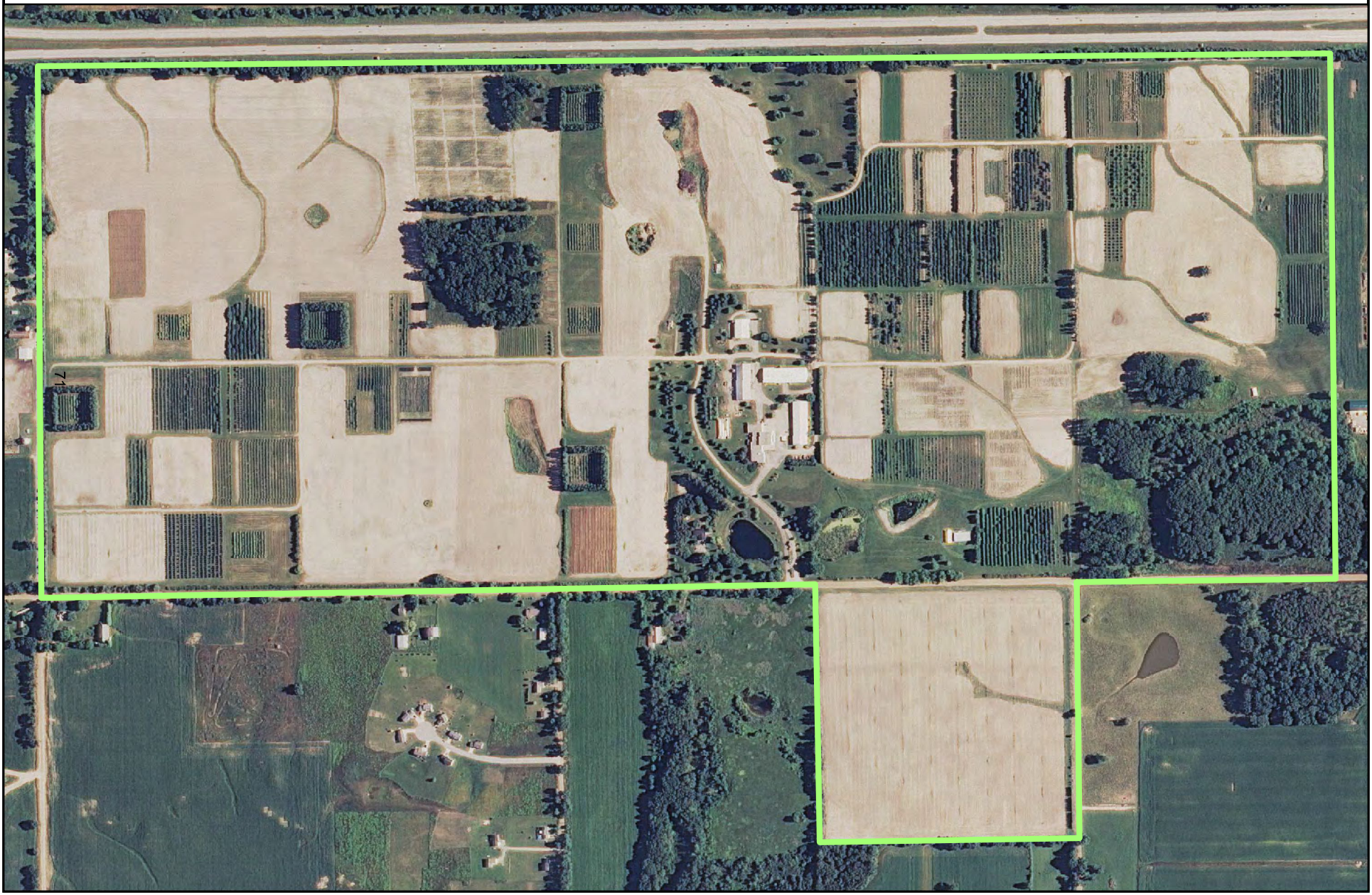


MSU Real Property

Clarksville Research Center

Ionia County, Boston Township, Sections 27, 28, and 33

Image Year: 2010



Dobie Road Property

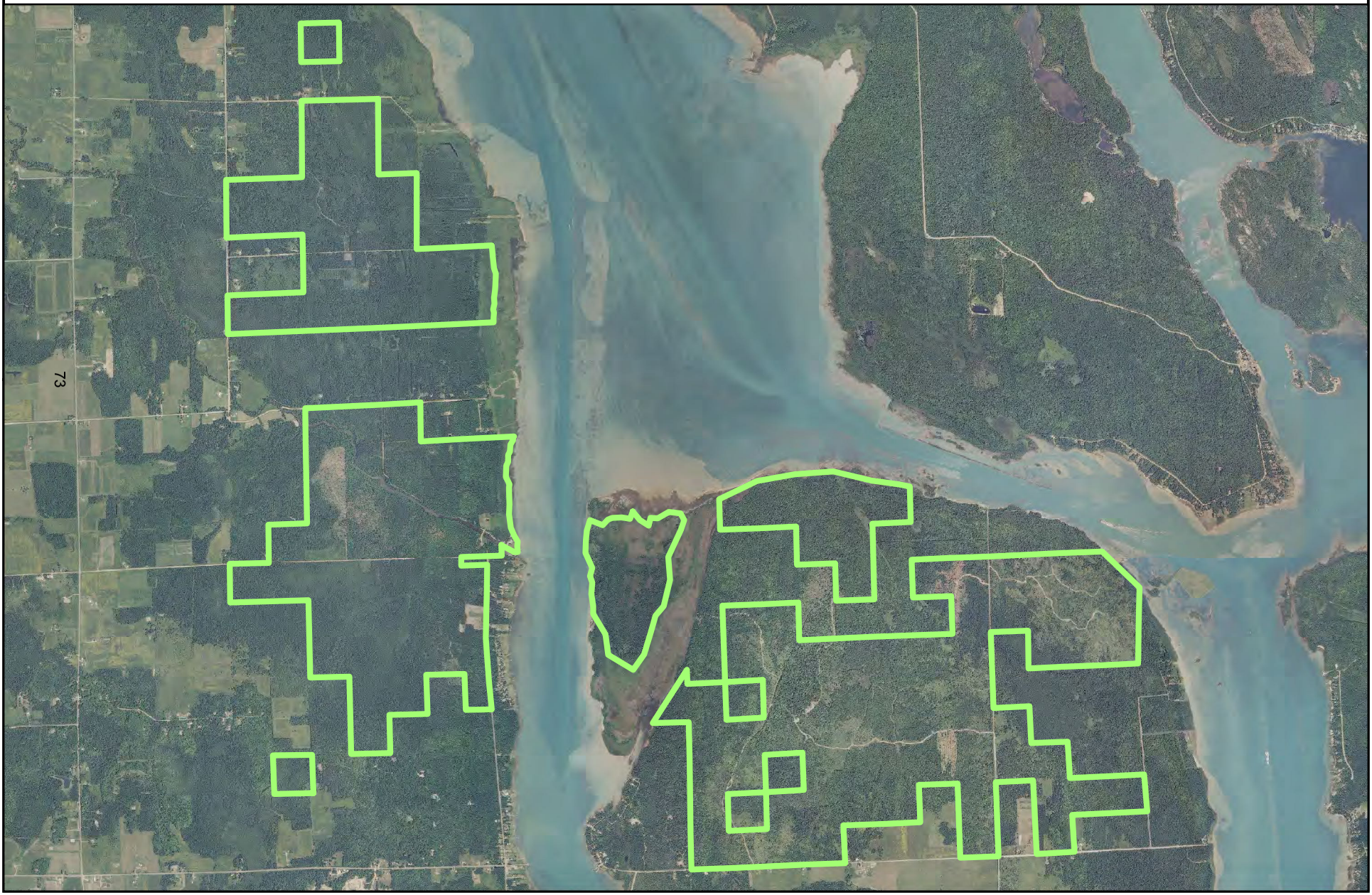
Ingham County, Meridian Township, Section 27

Image Year: 2009

Dunbar Forest

Chippewa County, Soo Township, Sections 3, 4, 5, 8, 9, 10, 11, 14, 15, and 16;
Bruce Township, Sections 1, 6, 7, 12, 13, 24, 25, 30, 31, and 36

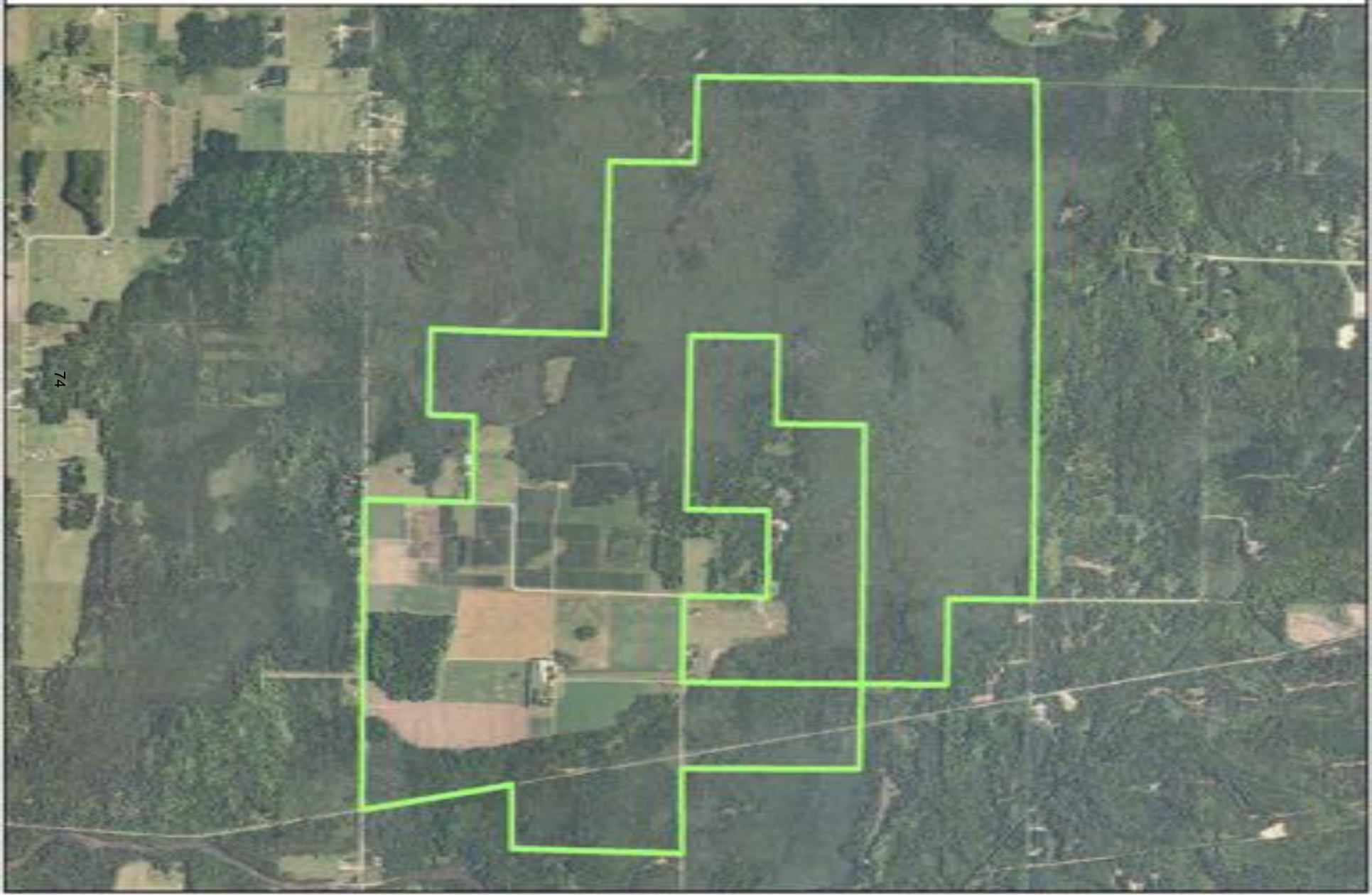
Image Year: 2010



Forest Biomass Innovation Center

Delta County, Wells Township, Sections 8, 17, 18, 19, and 20

Image Year: 2009



Gantos Property

Kent County, Kentwood Township, Section 23

Image Year: 2009

Hidden Lake Gardens

Lenawee County, Franklin Township, Sections 17, 18, 19, and 20

Image Year: 2009

Hulett Road Engineering

Ingham County, Alaiedon Township, Section 5

Image Year: 2009

College of Human Medicine

Kent County, Grand Rapids Township, Section 19

Image Year: 2009

Jolly Road Engineering and Civil Infrastructure Lab

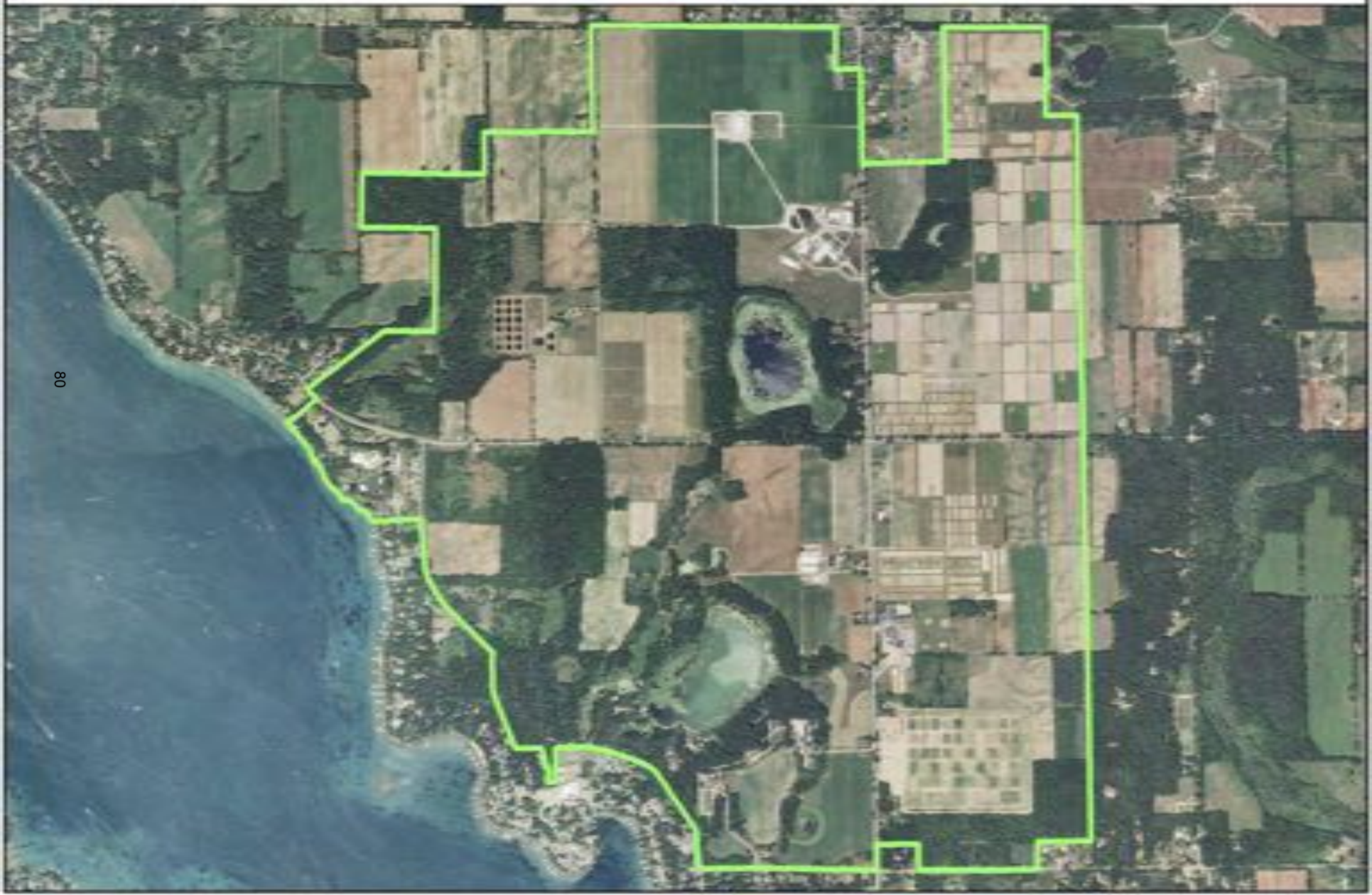
Ingham County, Alaiedon Township, Section 5

Image Year: 2009

W.K. Kellogg Biological Station, Bird Sanctuary, and Farm

Kalamazoo County, City of South Gull Lake and Ross Township,
Sections 4, 5, 6, 8, and 9

Image Year: 2009



W.K. Kellogg Biological Station (Lux Arbor Reserve)

Barry County, Prairieville Township, Sections 10, 11, 14, and 15

Image Year: 2009

W.K. Kellogg Experimental Forest

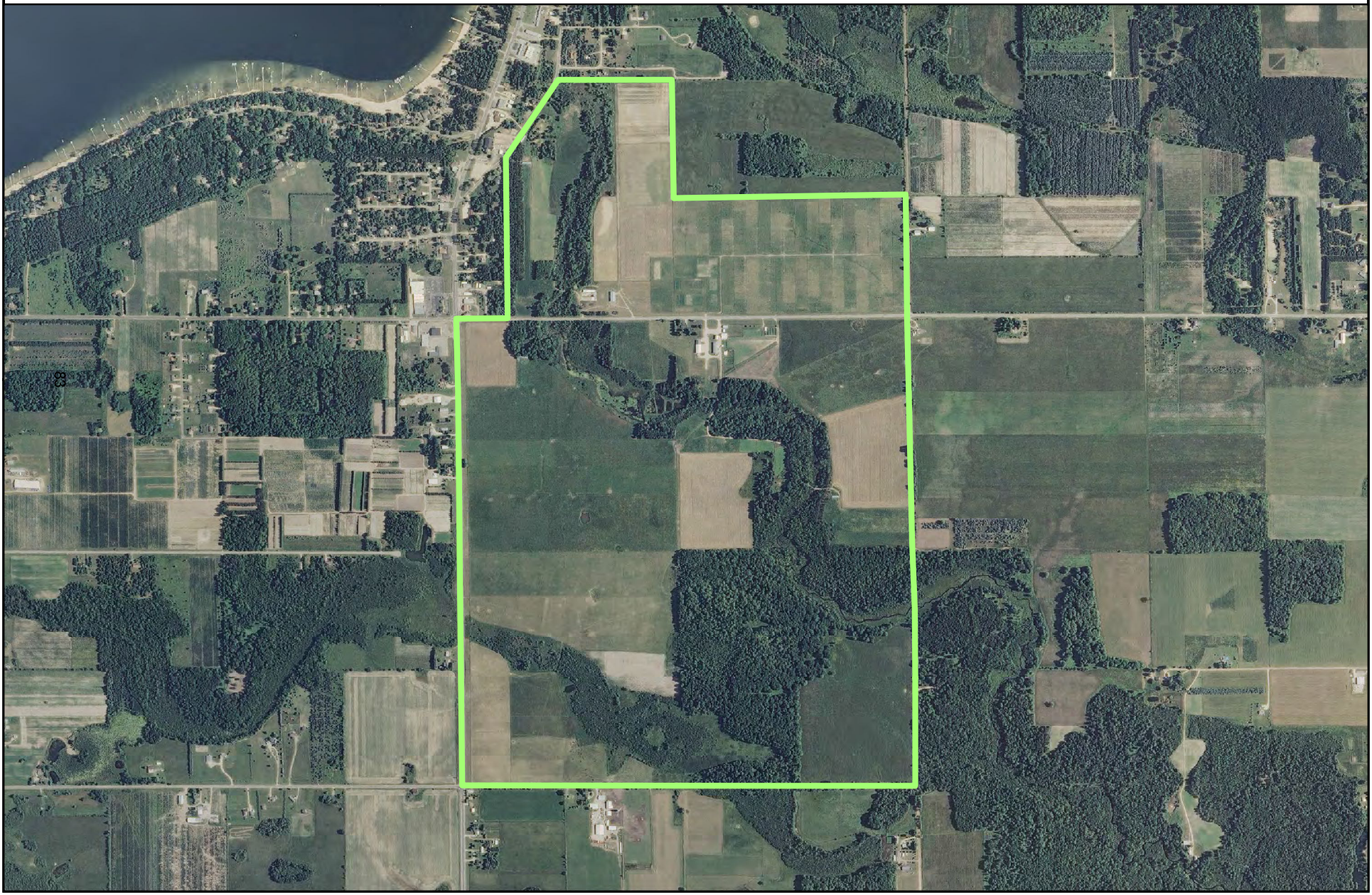
Kalamazoo County, Ross Township, Sections 21, 22, 27, and 28

Image Year: 2009

Lake City Research Center

Missaukee County, Reeder Township, Sections 7 and 18

Image Year: 2010



Leland Property

Leelanau County, Leland Township, Section 9

Image Year: 2009

Lukens Property

Manistee County, Onekama Township, Section 9

Image Year: 2012

MacCready Forest and Wildlife Reserve

Jackson County, Liberty Township, Sections 11 and 14

Image Year: 2009

Management Education Center, Troy

Oakland County, City of Troy, Section 9

Image Year: 2009

Marshall Property

Barry County, Barry Township, Section 25

MSU Property

Image Year: 2010

Martin Property (Rose-Dell Seed Orchard)

Calhoun County, Albion Township, Sections 23 and 24

Image Year: 2009

Mason Research Farm

Ingham County, Alaiedon Township, Section 21

Image Year: 2009

Michigan Biotechnology Institute (MBI)

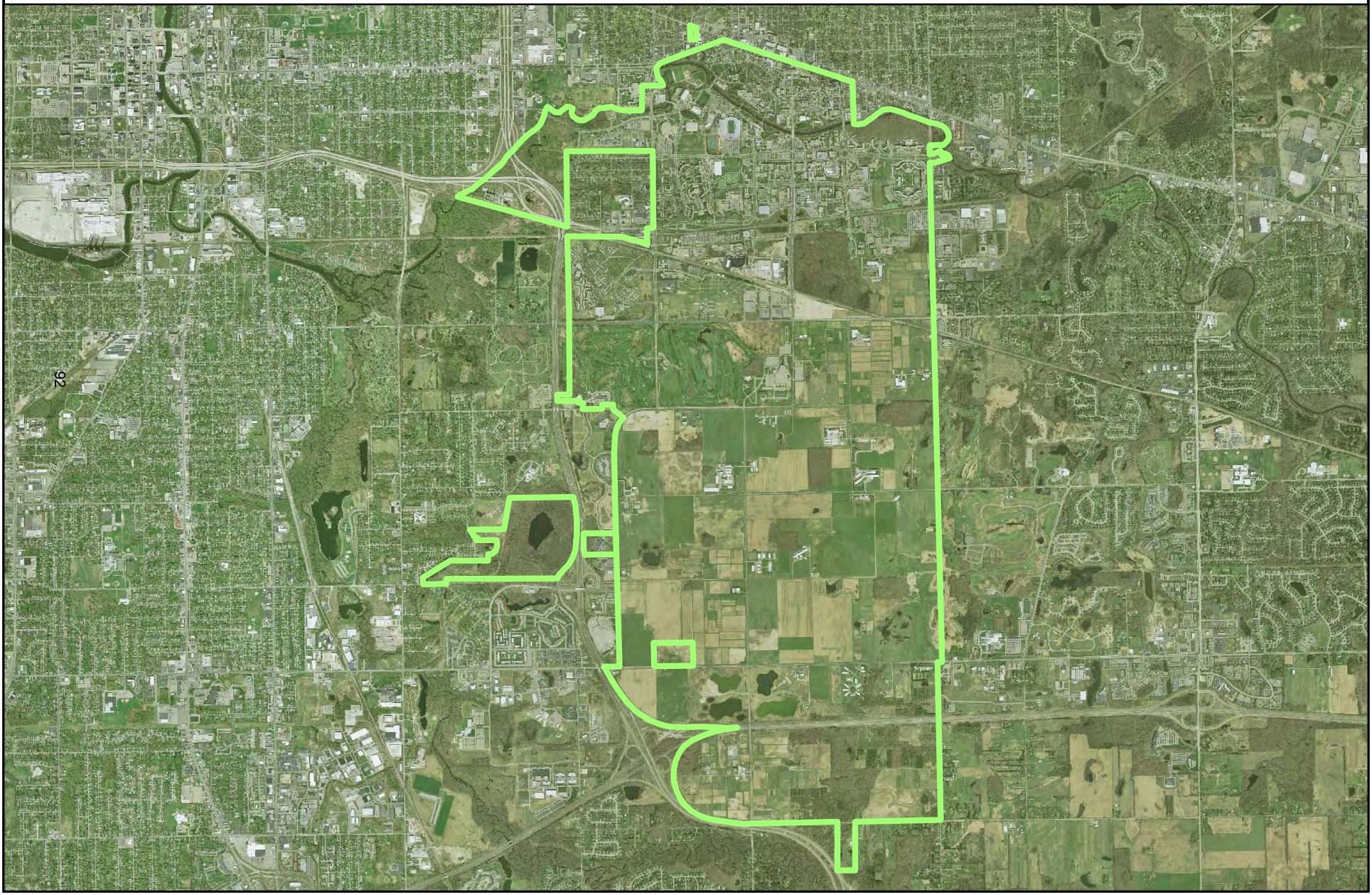
Ingham County, Lansing Township, Section 36

Image Year: 2010

Michigan State University Campus, East Lansing

Ingham County, Alaiedon, Delhi, Lansing, and Meridian Townships

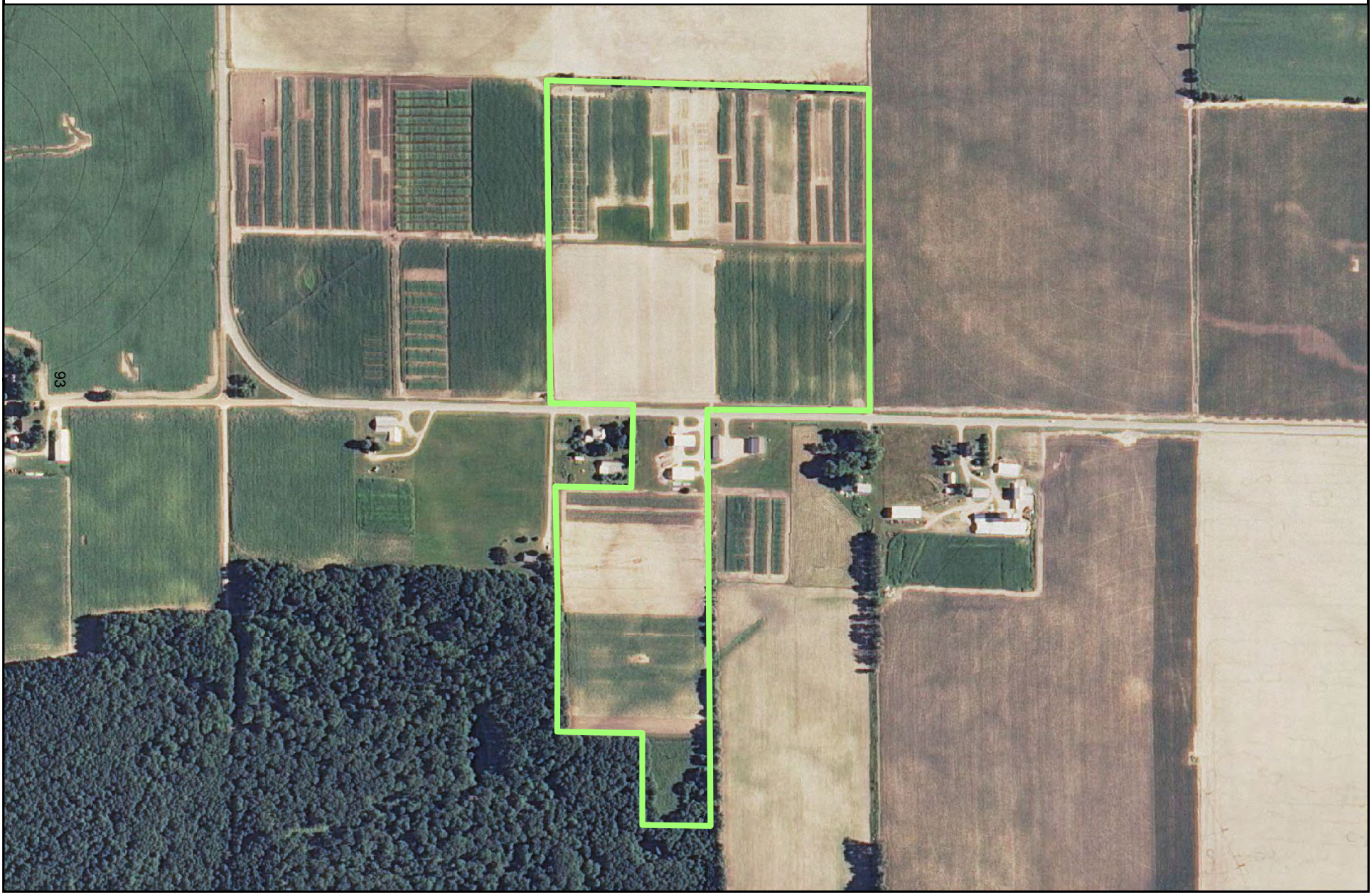
Image Year: 2010



Montcalm Research Center

Montcalm County, Douglass Township, Sections 8 and 17

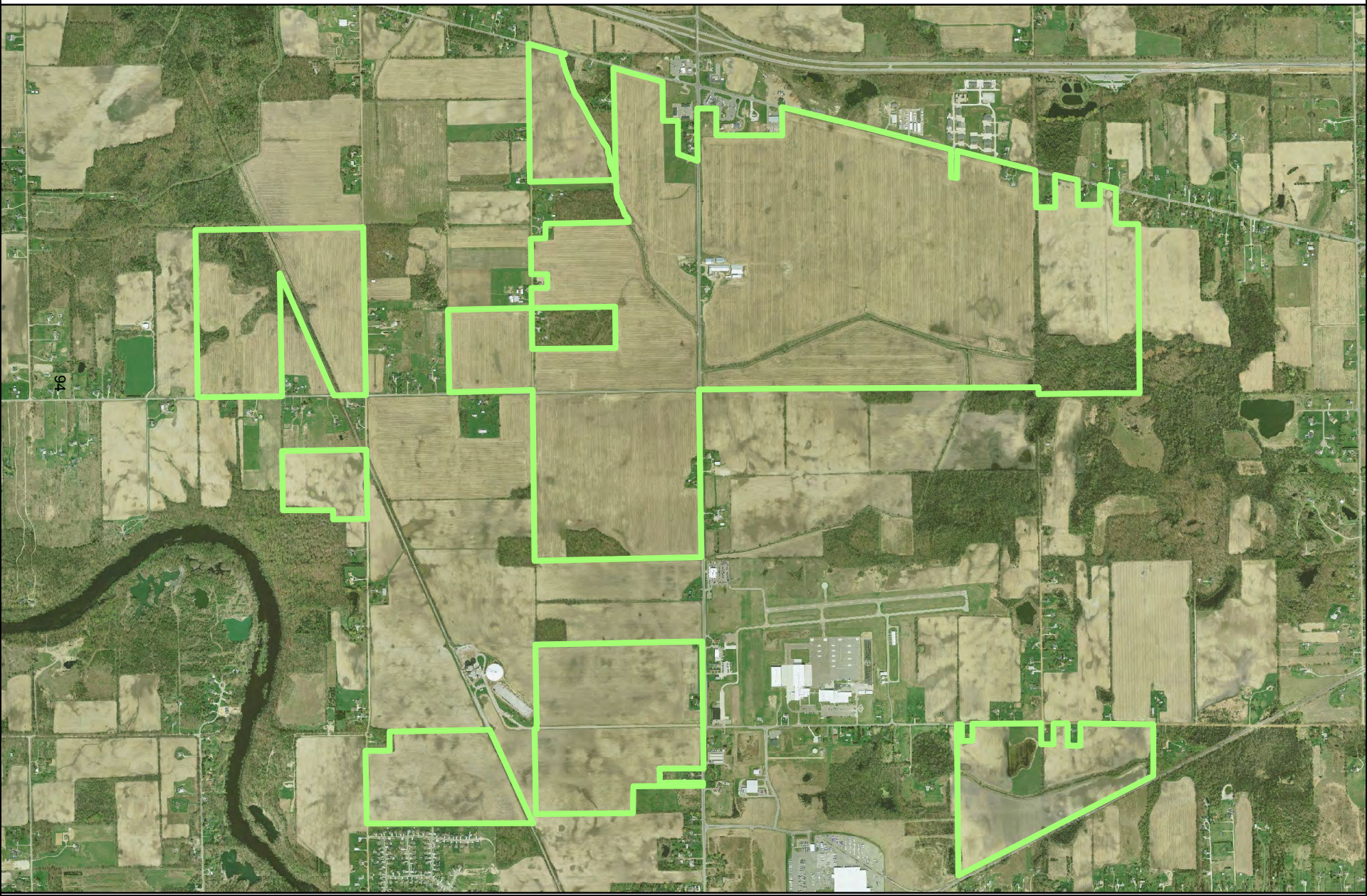
Image Year: 2010



Morris Property

Clinton & Eaton Counties, Oneida Twp, Sections 1 and 2; Delta Twp, Section 6; Eagle Twp, Sections 23, 25, 26, 27, 34, 35; and Watertown Twp, Section 30

Image Year: 2010



MSU Sailing Club

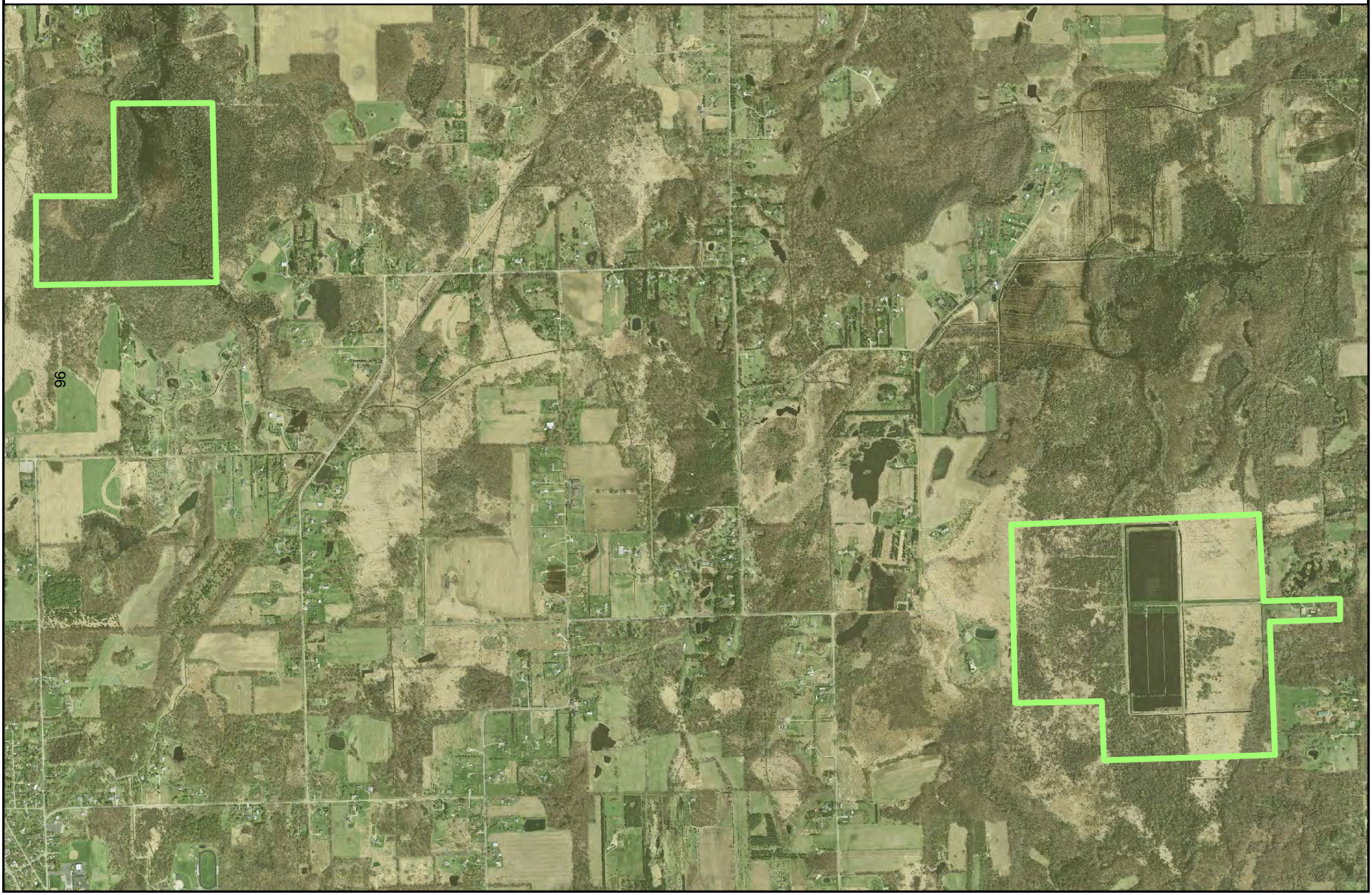
Ingham County, Meridian Township, Section 11

Image Year: 2009

Muck Soils Research Center

Clinton County, Bath Township, Sections 4, 5, 11, 12, 13, and 14

Image Year: 2010



Rau Property

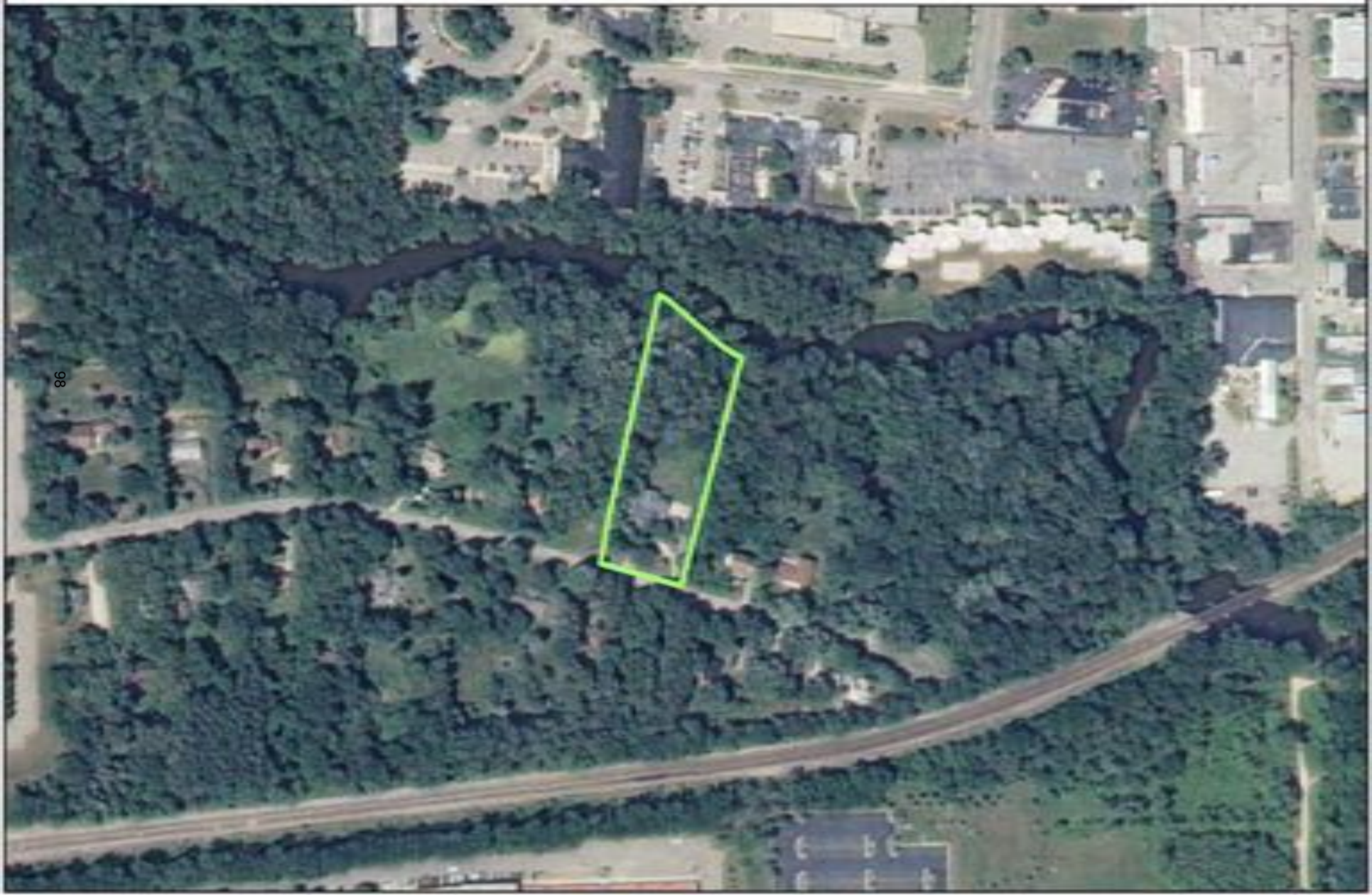
Manistee County, Springdale Township, Section 6

Image Year: 2009

River Terrace Property

Ingham County, Meridian Township, Section 20

Image Year: 2009



Rogers Reserve

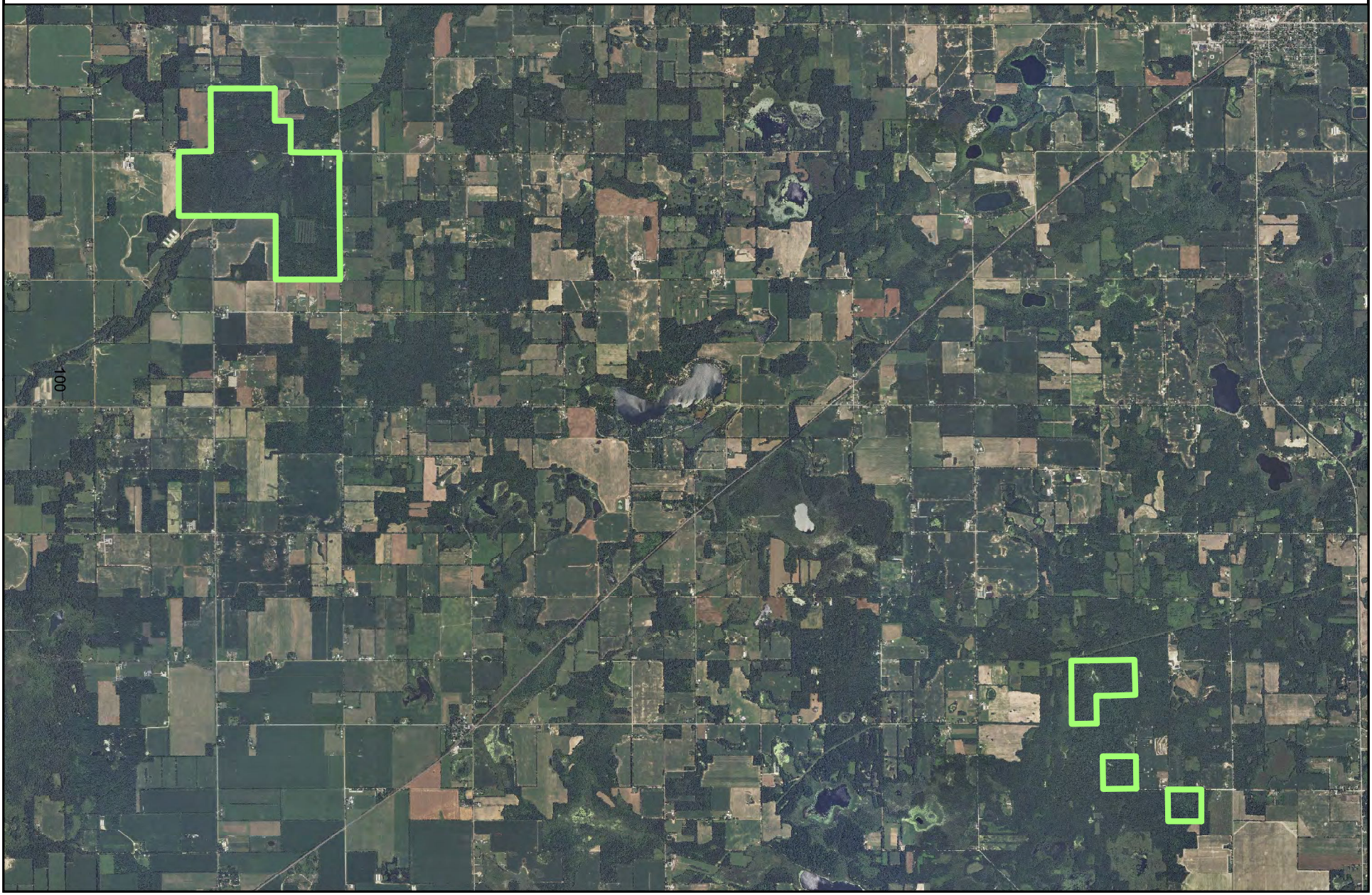
Jackson County, Liberty Township, Section 4

Image Year: 2009

Russ Forest

Cass County, Volinia Township, Sections 20, 29 and 30; Newberg Township, Sections 16, 17, and 21

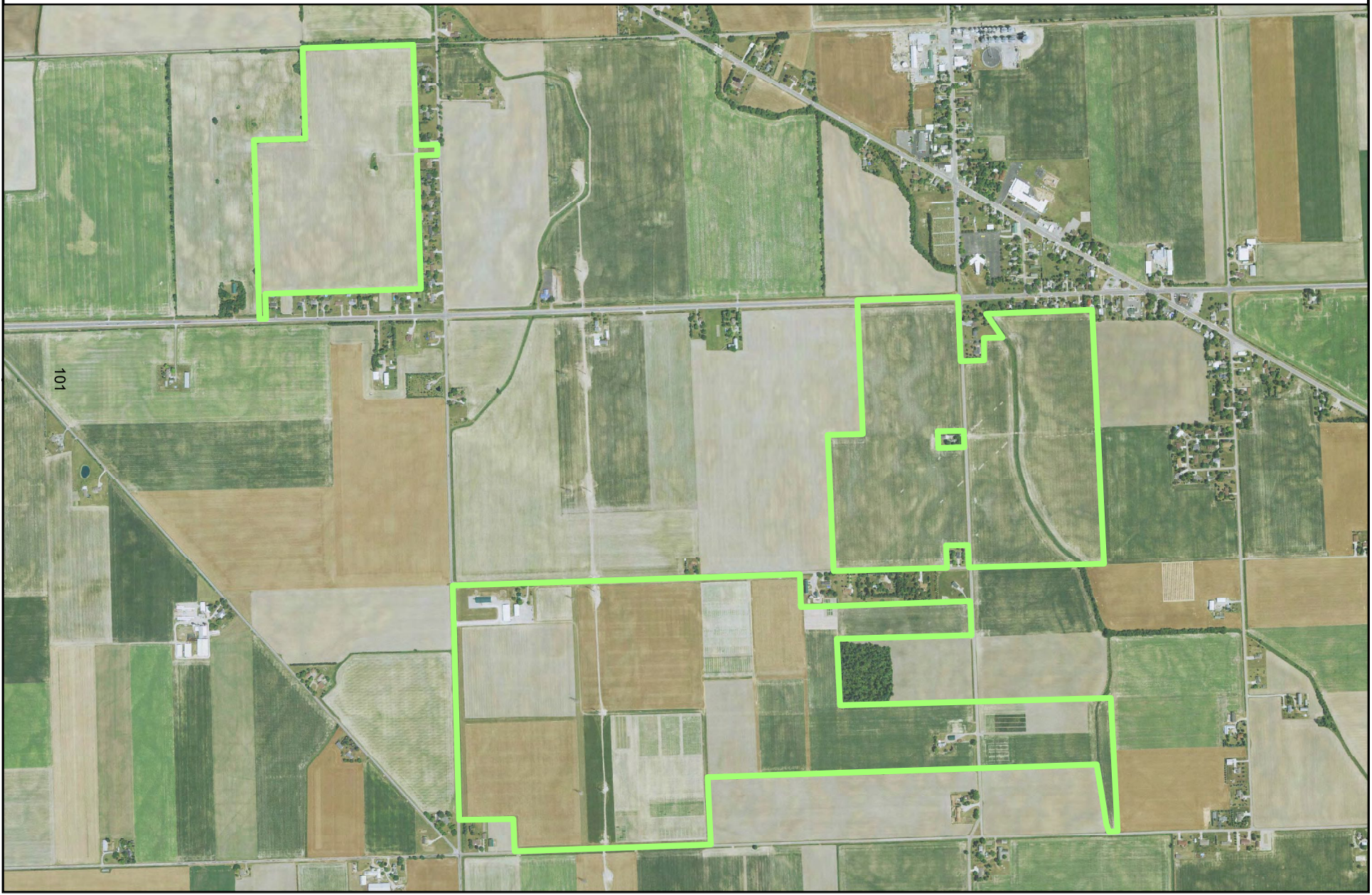
Image Year: 2010



Saginaw Valley Research and Extension Center

Saginaw County, Blumfield Township, Section 25; Tuscola County, Denmark Township, Sections 31 and 32

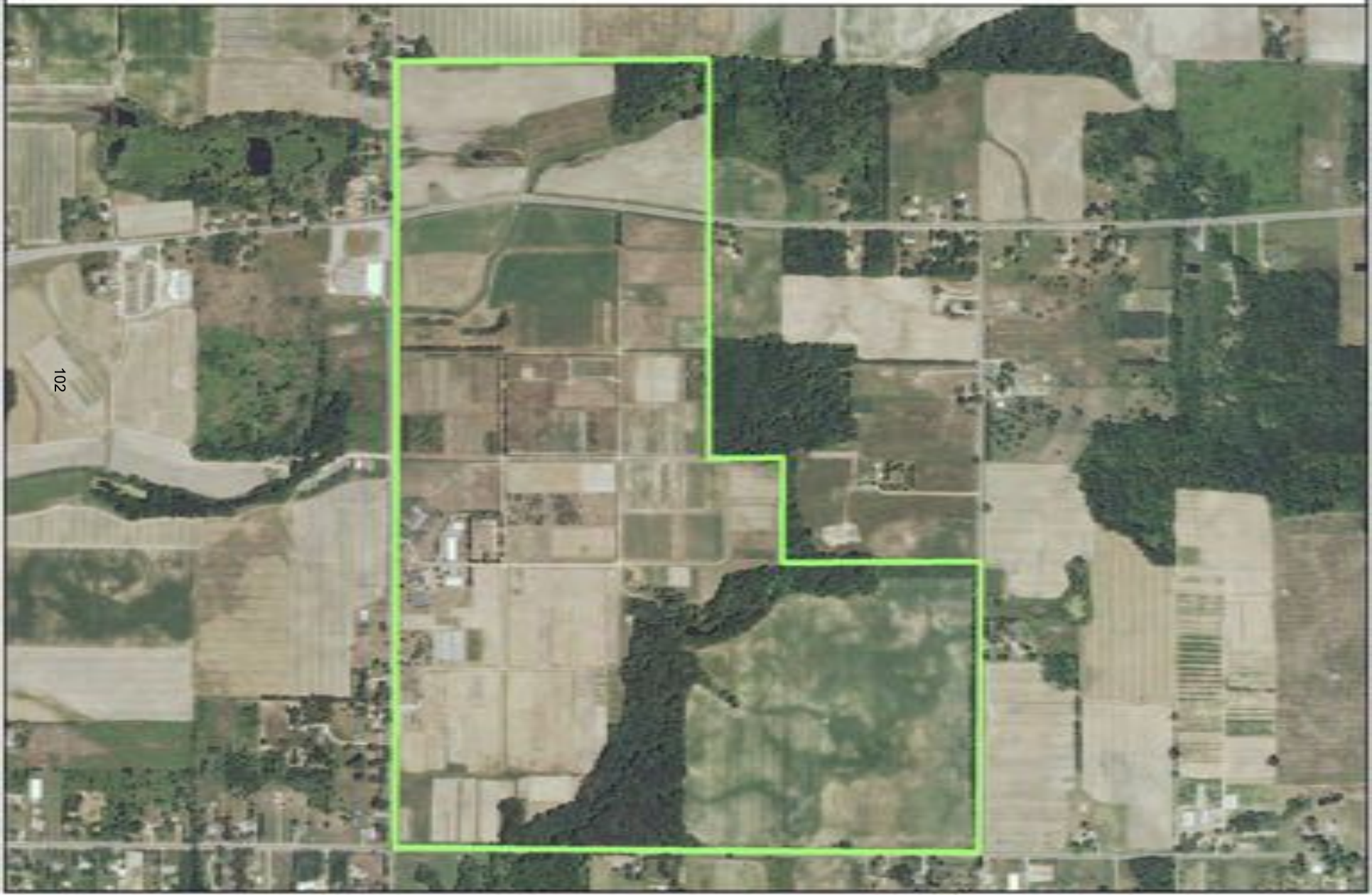
Image Year: 2012



Southwest Michigan Research and Extension Center

Berrien County, Benton Township, Sections 25 and 36

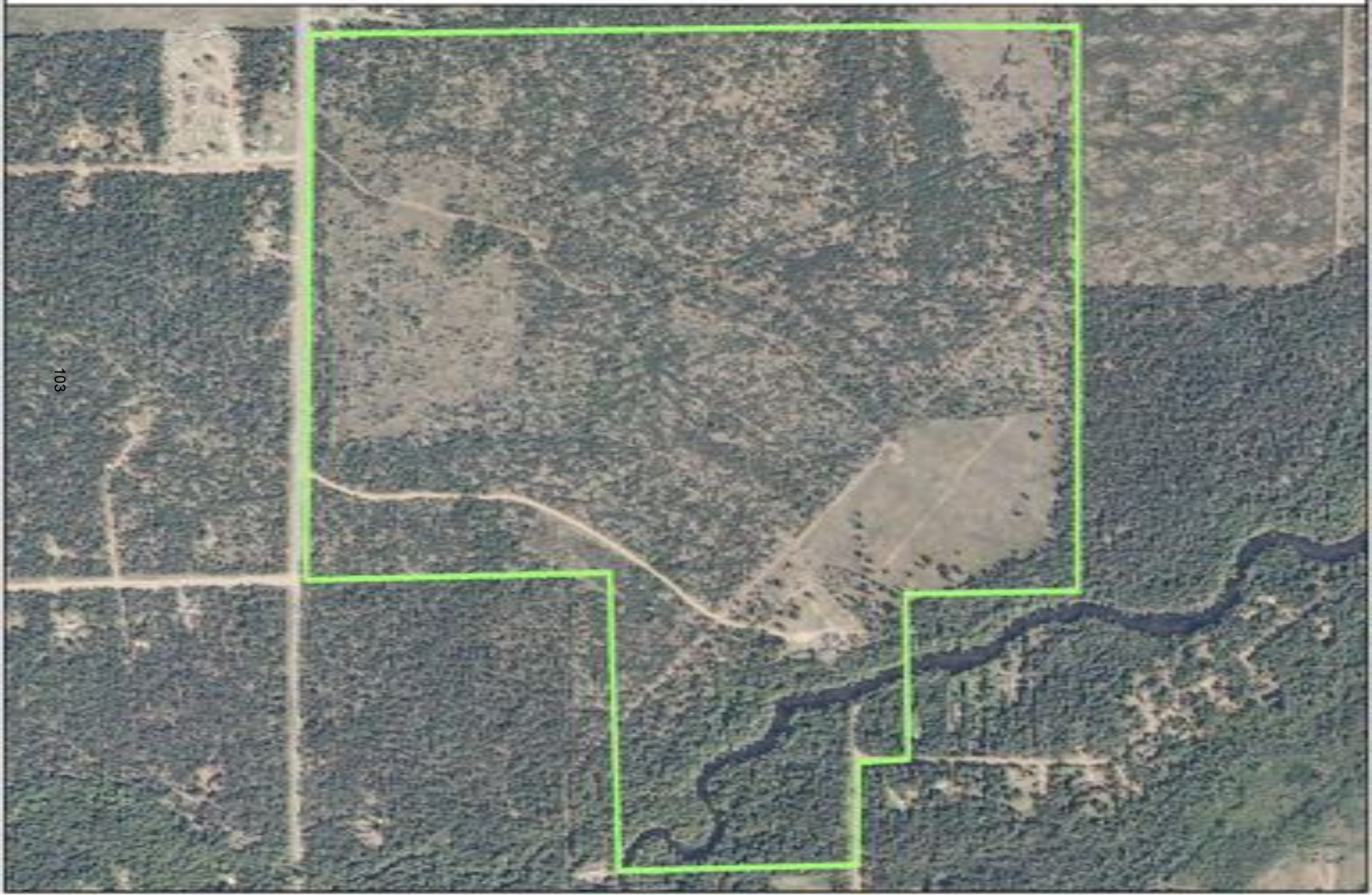
Image Year: 2009



Stranahan-Bell Property (Wa Wa Sum)

Crawford County, Grayling Township, Sections 1, 6, and 12

Image Year: 2009



Stuckman Property

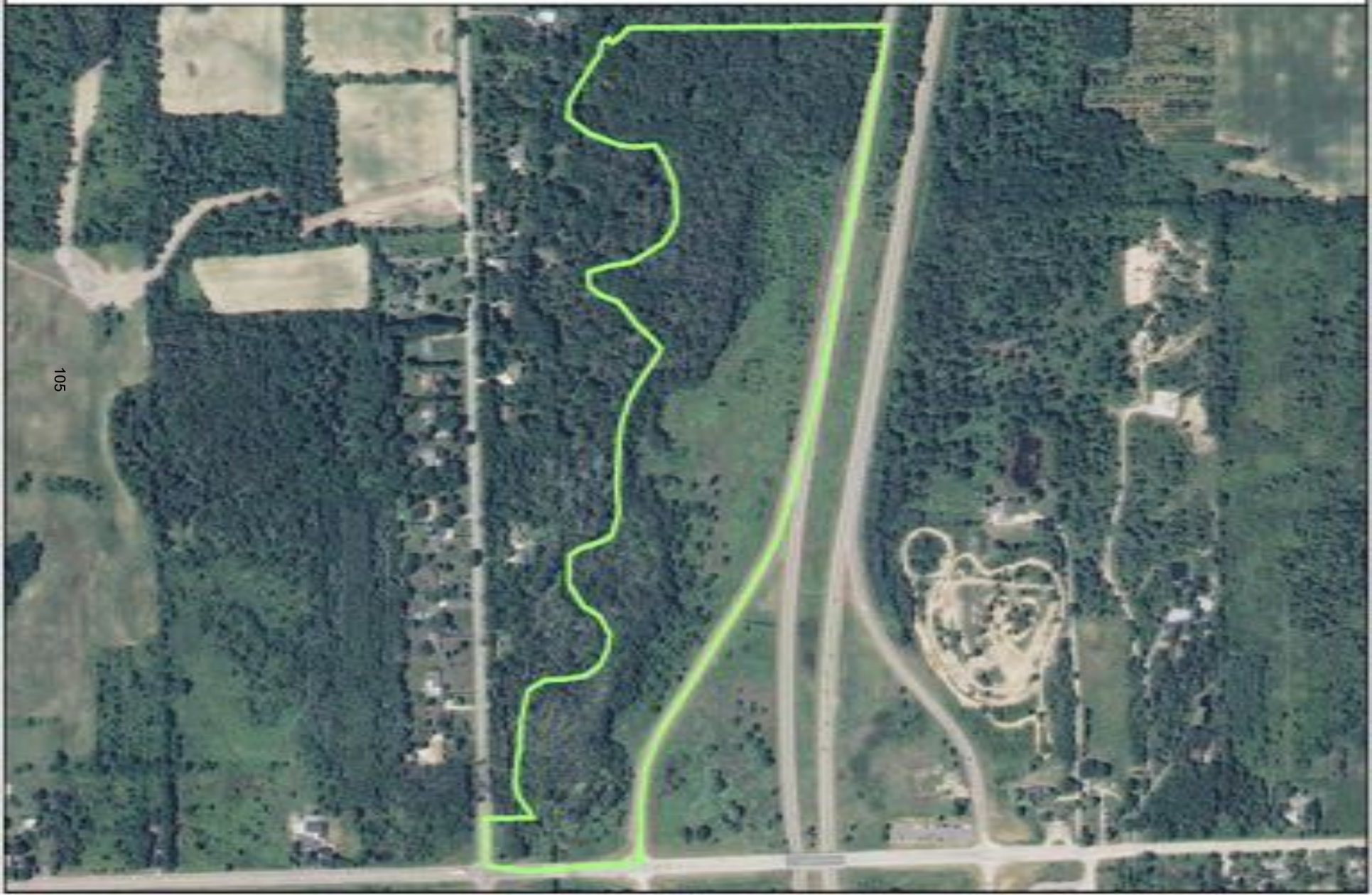
Clinton County, Bingham Township, Section 10

Image Year: 2009

Sycamore Creek Property

Ingham County, Alaiedon Township, Section 18

Image Year: 2009



Tollgate Education Center and Americana Foundation Property

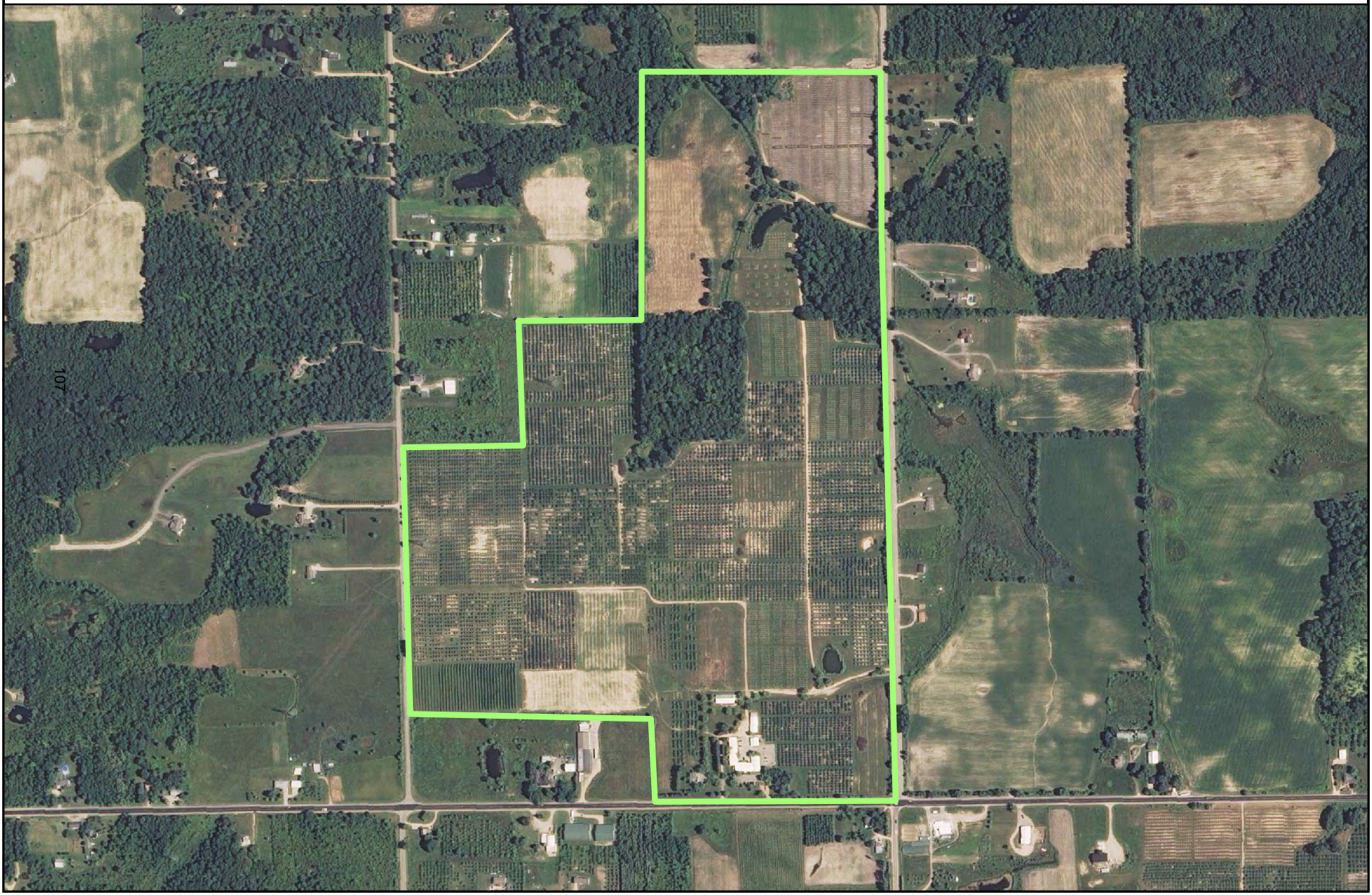
Oakland County, City of Novi, Section 11

Image Year: 2009

Trevor Nichols Research Center

Allegan County, Saugatuck Township, Section 35

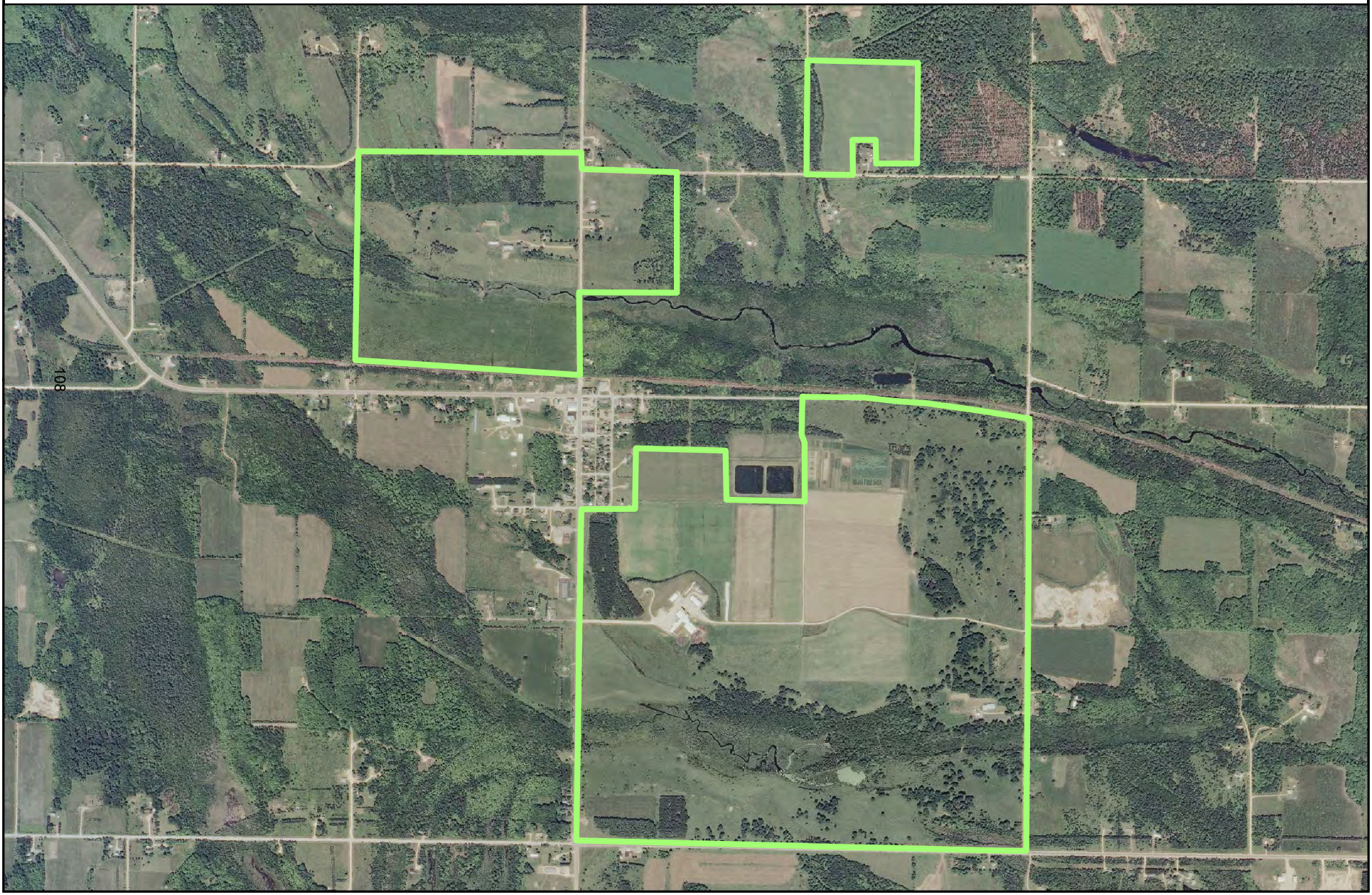
Image Year: 2010



Upper Peninsula Research Center

Alger County, City of Chatham and Rock River Township, Sections 24, 25, 27, 28, and 34

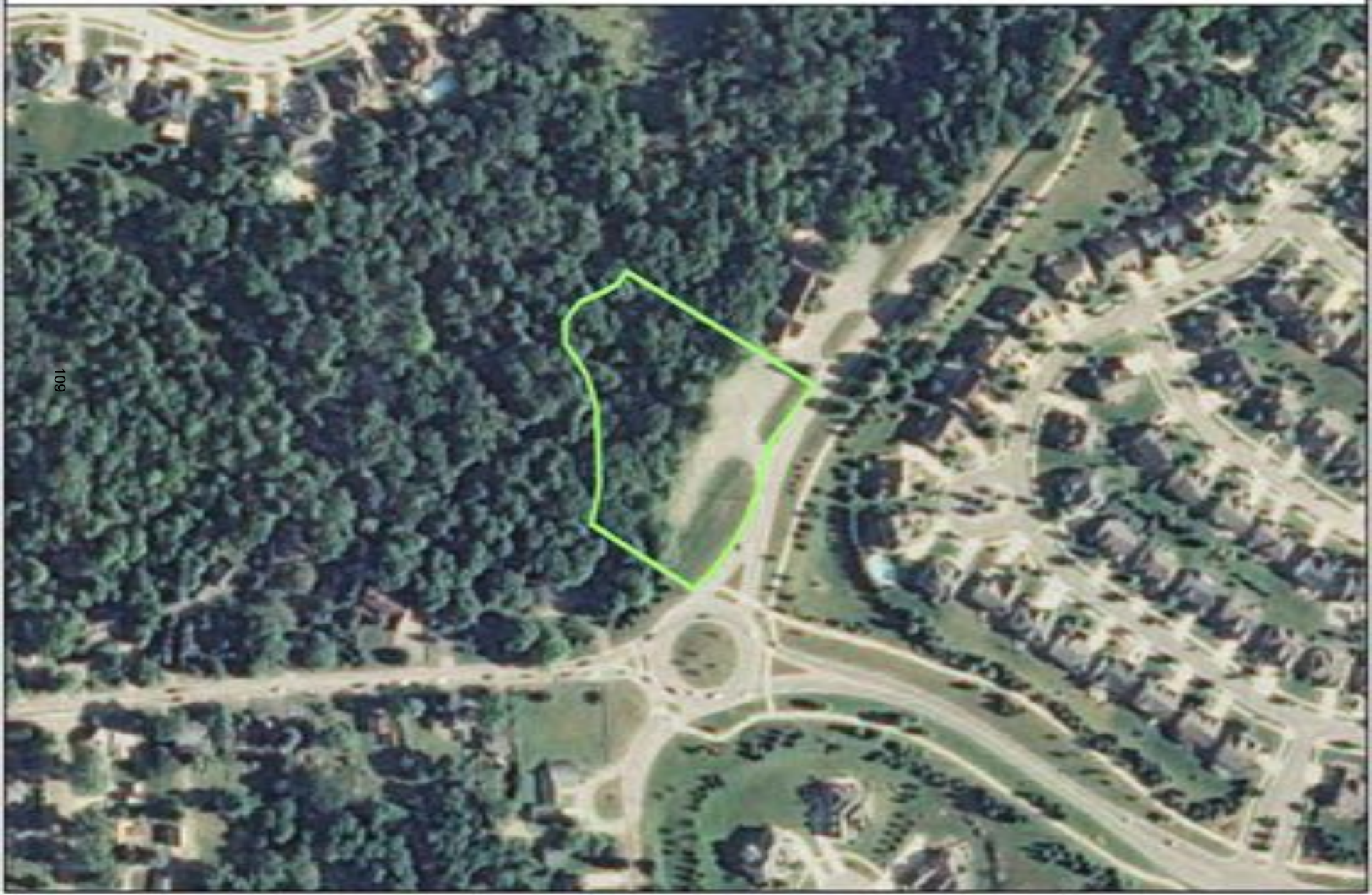
Image Year: 2010



Van Hoosen Property

Oakland County, Avon Township, Section 1

Image Year: 2009



ANNUAL CONSTRUCTION REPORT

FISCAL YEAR 2015-16

Major capital projects are those that are $1 million or greater and require Board approval. Minor capital projects are those that are greater than $250,000 and less than $1 million.

The Board requests a listing of these projects on an annual basis. In addition to the annual report, the Board receives quarterly construction reports reflecting current construction projects.

The report highlights two key areas for the 21 major capital projects that were closed during fiscal year 2015-16. These areas include planned budget and actual cost of the project.

The following table also includes data for the 25 minor capital projects that were closed during the fiscal year.

The approved budgets for the projects totaled nearly $155 million. The final cost of these projects was above $143 million, a difference of approximately $10.9 million, or 7.6 percent, which was returned to propriate units.

Project Number	Project Name	Project Type	Close Date	Consultant	Contractor	Delivery Method	Authorized Budget	Actual Costs
CP07079	MUSIC BUILDING - REPLACE ELECTRICAL SUBSTATION	Major	10/12/2015	FTC&H	Granger Construction	CM	$ 2,500,000	$ 1,683,095
CP09328	LANDON HALL - DINING RENOVATION - BUILDING LIFE SAFETY AND ACCESSIBILITY	Major	9/1/2015	Smithgroup	Christman Company	CM	$ 19,120,059	$ 19,119,892
CP09330	AKERS HALL - DINING AND LIFE SAFETY RENOVATION	Major	6/17/2016	SHW Group LLC	Christman Company	CM	$ 19,225,000	$ 19,025,332
CP09335	BUTTERFIELD HALL - MAJOR RENOVATION	Major	1/6/2016	Progressive AE	DeMaria Building Company	GC	$ 15,880,000	$ 15,858,609
CP11167	LIFE SCIENCES - RENOVATIONS - A WING	Major	5/23/2016	TMP Associates Inc	Granger Construction	CM	$ 2,400,000	$ 2,182,208
CP11258	STEAM DISTRIBUTION AND ROAD RECONSTRUCTION - WEST CIRCLE	Major	5/13/2016	FTC&H	Granger Construction	CM	$ 17,325,000	$ 15,454,415
CP11259	STEAM AND ROAD RECONSTRUCTION - BOGUE AND SHAW INTERSECTION	Major	8/3/2015	FTC&H	Triangle Associates Inc	GC	$ 5,200,000	$ 4,799,146
CP11325	KRESGE ART CENTER - COURTYARD RENOVATION	Major	4/13/2016	Virdis Design Group	IPF	CM	$ 1,515,300	$ 993,564
CP11900	SOUTH CAMPUS ANAEROBIC DIGESTER	Major	1/21/2016	Orion Engineering Co., Inc	UTS Residual Processing, LLC	CM	$ 5,100,000	$ 5,083,100
CP12036	PARKING LOT 67 (JENISON) - RECONSTRUCTION	Major	9/2/2015	Hamilton Anderson Associates	Hoffman Brothers, Inc	GC	$ 1,860,000	$ 1,641,990
CP12141	ANTHONY HALL - ENERGY CONSERVATION MEASURES	Major	2/17/2016	Peter Basso Associates	IPF	CM	$ 7,055,000	$ 4,768,696
CP12149	OLIN HEALTH CENTER - MAJOR MECHANICAL J.I.T UPGRADES	Major	7/23/2015	Diclemente Siegel Design	IPF	CM	$ 2,100,000	$ 1,558,107
CP12224	SPARTAN STADIUM - ADDITION 5 - NORTH END ZONE	Major	4/8/2016	Integrated Design Solutions	Barton Malow Company	CM	$ 24,500,000	$ 24,408,524
CP12252	VETERINARY MEDICAL CENTER - CREATE NEW CRITICAL CARE UNIT IN ROOMS D100-D103	Major	6/15/2016	A3C Company	Granger Construction	CM	$ 2,100,000	$ 1,880,299
CP12327	ATHLETIC FIELDS - MUNN FIELD - ARTIFICIAL TURF	Major	11/6/2015	IPF	Laux Construction	GC	$ 1,150,000	$ 1,132,919
CP12377	WEST CIRCLE HOUSING COMPLEX - INFRASTRUCTURE IMPROVEMENTS - (PHASE 2 OF 2)	Major	3/24/2016	Orion Engineering Co., Inc	IPF	CM	$ 6,500,000	$ 4,620,519
CP12402	PARKING - LOT 97 - ENGINEERING RESEARCH - ADDITIONAL SPACES	Major	3/9/2016	IPF	Carol's Excavating LLC	GC	$ 1,470,000	$ 1,387,144
CP13199	BESSEY HALL - RENOVATE 3RD FLOOR	Major	11/24/2015	IPF	Laux Construction	GC	$ 1,570,000	$ 1,362,468
CP13217	WILSON HALL - CREATIVE COMMONS RENOVATION	Major	8/24/2015	TMP Associates Inc	IPF	CM	$ 2,160,000	$ 1,878,389
CP14043	PARKING - RECONSTRUCT PARKING LOT AT MSU COMMUNITY MUSIC SCHOOL	Major	4/13/2016	IPF	Laux Construction	GC	$ 750,000	$ 683,582
CP14130	CHILDREN'S GARDEN - RESTROOM - CONSTRUCT ORIGINAL BUILDING	Major	5/27/2016	IPF	Laux Construction	GC	$ 365,000	$ 342,415
21 Projects							**$ 139,845,359**	**$ 129,864,413**
CP10181	LANDSCAPE SERVICES - ALTERATIONS TO ROOM 113	Minor	9/2/2015	Bernath Coakley	IPF	CM	$ 550,000	$ 521,924
CP11068	PATHWAYS - RED CEDAR GREENWAY - SPARTY TO FARM LANE	Minor	8/3/2015	Landscape Architects & Planners, Inc	Carol's Excavating LLC	GC	$ 670,000	$ 658,461

CP12031	VETERINARY MEDICAL CENTER - RENOVATIONS TO ROOMS G118-G119, G338, G355, G358 AND G359	Minor	9/2/2015	Bernath Coakley	Nielsen Commercial Construction	CM	$ 385,000	$ 384,003
CP12080	VETERINARY MEDICAL CENTER - ALTERATIONS TO ROOMS A127, A129 AND A130	Minor	9/2/2015	Peter Basso Associates	Granger Construction	CM	$ 270,000	$ 239,037
CP12109	CONRAD HALL – INSTALL ARCHIVES AIR HANDLER	Minor	9/2/2015	Harley Ellis Devereaux	Shaw-Winkler Inc	GC	$ 545,000	$ 543,403
CP12247	AGRICULTURE HALL - SUITE 219, 221 HVAC REPLACEMENT	Minor	7/7/2015	Harley Ellis Devereaux	Tech Mechanical Inc	GC	$ 310,000	$ 320,140
CP12379	STEAM DISTRIBUTION - REPLACE DIRECT BURIED STEAM SERVICE TO KRESGE ART CENTER - 2014	Minor	5/12/2016	FTC&H	IPF	CM	$ 975,358	$ 956,393
CP13128	EXECUTIVE DEVELOPMENT - WEEKEND MBA ALTERATIONS TO LEVEL A	Minor	6/15/2016	Mayotte Group Architects	Nielsen Commercial Construction	CM	$ 368,000	$ 362,837
CP13153	COMPUTER CENTER - HVAC EXPANSION IN DATA CENTER	Minor	6/20/2016	Clark Trombley	Laux Construction	GC	$ 950,000	$ 935,045
CP13244	LIFE SCIENCE - REPLACE ROOFS 6, 10, 11 AND 14-16	Minor	1/26/2016	Roofing Technology Associates	Bornor Restoration	GC	$ 300,000	$ 191,980
CP13281	LIFE SCIENCE - RENOVATION TO ROOMS B420, B420A AND B420B	Minor	9/11/2015	Bernath Coakley	Nielsen Commercial Construction	GC	$ 400,000	$ 359,425
CP13325	HOLDEN, HUBBARD AND OWEN HALLS - MASONRY REPAIR 2014	Minor	7/7/2015	IPF	Bornor Restoration	GC	$ 725,000	$ 724,997
CP13336	OLIN HEALTH CENTER - ALTERATIONS TO ROOMS 216 AND 217 AND RESTROOMS B1 AND B54	Minor	12/11/2015	Engineering Applications Inc	Nielsen Commercial Construction	GC	$ 482,447	$ 472,738
CP13341	OWEN GRADUATE HALL - ELEVATOR REPLACEMENT	Minor	3/9/2016	Bernath Coakley	Laux Construction	GC	$ 790,000	$ 783,822
CP13358	BUSINESS COLLEGE - RENOVATE ROOMS 7, 15, 17, GHW5, 424 AND 424A	Minor	4/18/2016	Bernath Coakley	Nielsen Commercial Construction	GC	$ 305,000	$ 301,687
CP13367	LIFE SCIENCE - CONVERT ROOMS A128, 131A & A131A TO A REAL CLASSROOM	Minor	6/20/2016	IPF	J Perez Construction Inc	GC	$ 765,000	$ 631,383
CP14031	CLINICAL CENTER - CLINIC WING - SUITE A112 RENOVATIONS	Minor	12/10/2015	TMP Associates Inc	Micco Construction LLC	GC	$ 900,000	$ 845,476
CP14051	SPARTAN STADIUM - NORTH CONCOURSE SLAB REPLACEMENT	Minor	3/1/2016	Integrated Design Solutions	Barton Malow Company	GC	$ 700,000	$ 699,812
CP14259	STEAM DISTRIBUTION - PROVIDE ABATEMENT-CLEAN STEAM TUNNEL AND VAULTS BETWEEN VAULTS 180 AND 206	Minor	5/20/2016	FTC&H	Granger Construction	GC	$ 985,000	$ 975,609
CP14307	ANTHONY HALL - REPLACE ROOFS 7-9, 11, 13, 15, 18-23 AND 25	Minor	5/24/2016	Roofing Technology Associates	Bornor Restoration	GC	$ 750,000	$ 677,029
CP14309	MORRILL HALL OF AGRICULTURE - REPLACE ELEVATOR	Minor	3/24/2016	Engineering Applications Inc	Nielsen Commercial Construction	GC	$ 400,000	$ 376,811
CP14310	OLDS HALL - REPLACE ELEVATOR	Minor	3/24/2016	Bernath Coakley	Laux Construction	GC	$ 380,000	$ 351,185
CP14315	ROADS - RECONSTRUCT CHESTNUT ROAD FROM TROWBRIDGE TO WILSON ROAD	Minor	3/23/2016	Fleis & Vandenbrink Engineering	E.T. Mackenzie Company	GC	$ 550,000	$ 312,808
CP14316	STEAM DISTRIBUTION - REPLACE MID-ANCHOR AND STANCHIONS AT THE VET CLINIC	Minor	5/16/2016	FTC&H	Granger Construction	GC	$ 725,000	$ 600,326
CP14332	BUSINESS COLLEGE COMPLEX - AHU & LIGHTING ECM UPGRADES	Minor	2/17/2016	Matrix Consulting Engineers Inc	Shaw-Winkler Inc	GC	$ 249,000	$ 248,999
25 projects							$ 14,429,805	$ 13,475,330
46 total projects							$ 154,275,164	$ 143,339,743

By Fiscal Year - Total Costs for Major and Minor Projects

Budget for Closed Projects	FY 10-11	FY 11-12	FY 12-13	FY 13-14	FY 14-15	FY 15-16
Authorized Budget:	$ 84,843,838.00	$ 52,410,475.00	$ 236,944,478.00	$ 244,564,890.00	$ 149,759,600.00	$154,275,164.00
Final Cost:	$ 80,362,824.00	$ 48,451,752.00	$ 226,396,069.00	$ 237,428,564.00	$ 139,028,879.00	$143,339,743.00
Total Returned:	$ 4,481,014.00	$ 3,958,723.00	$ 10,548,409.00	$ 7,136,326.00	$ 10,730,721.00	$10,935,421.00
Total % Returned:	5.3%	7.6%	4.5%	3.0%	3.0%	7.6%
Contract:	$ 59,054,199.00	$ 33,789,257.00	$ 155,668,557.00	$ 164,735,416.00	$ 102,757,439.00	$95,518,261.00
Number of Projects Closed	41	41	44	47	47	46
Contract:	$ 59,054,199.00	$ 33,789,257.00	$ 155,668,557.00	$ 164,735,416.00	$ 102,757,439.00	$95,518,261.00
Number of Projects Closed	41	41	44	47	47	46