Disclaimer: Section 508 of the Rehabilitation Act of 1973 (29 U.S.C. § 794d), as amended in 1998, requires that the information in federal documents be accessible to individuals with disabilities. CHIPS for America, U.S. Department of Commerce, has made every effort to ensure that the information in the Micron Semiconductor Manufacturing Project Draft Environmental Impact Statement is accessible; however, some Appendix elements may not be fully accessible. Individuals with disabilities are encouraged to contact David Frenkel, Environmental Division Director by phone at (240) 204-1960 or by email at david.frenkel@chips.gov for access to the information contained in this document.

APPENDIX A
SCOPING SUMMARY, SCOPING COMMENTS, KEY DOCUMENTS

Appendix A-1
CPO Purpose and Need Factors

A-1 CPO Purpose and Need Factors

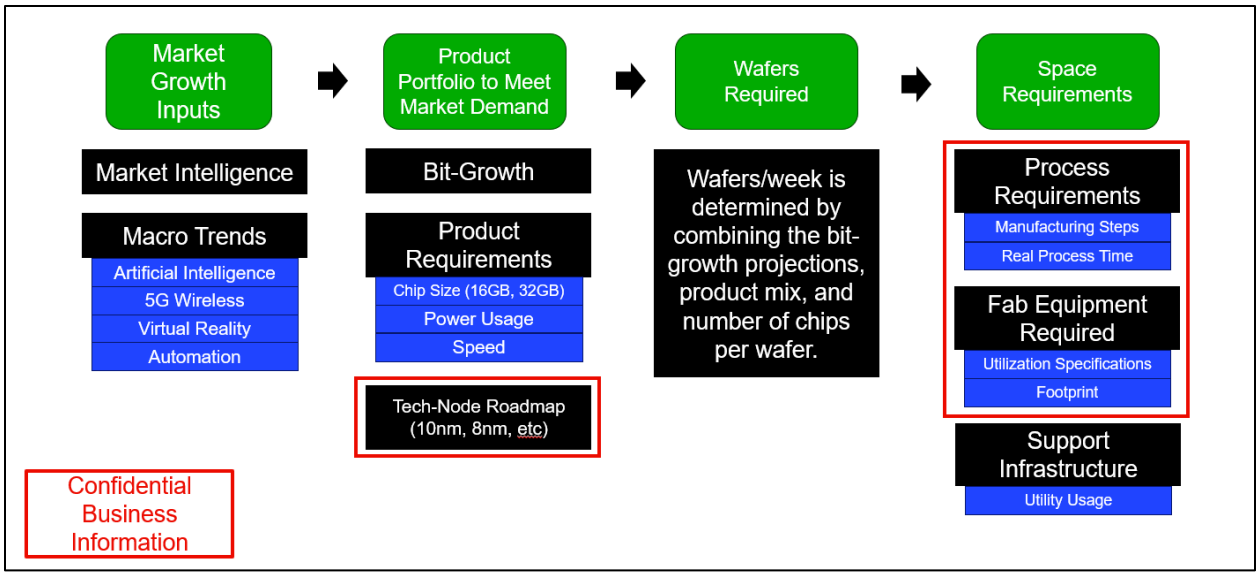
As described in Section 1.1.1, the Department of Commerce's funding award for a semiconductor memory facility is based on two factors: (1) the amount of cleanroom space that would be required to achieve an economically viable domestic memory chip output sufficient to meet U.S. economic and national security objectives, based on economic modeling; and (2) by extension, the amount of total building area and site configuration that would be required to support that cleanroom space, accounting for technological, logistical, and cost considerations.

A-1.1 Cleanroom Space

Based on the economic modeling that Micron submitted in support of its CHIPS application, the Department of Commerce determined that Micron would need to construct 2.4 million sq. ft. of cleanroom space capable of the short-term manufacture of 13,000 DRAM wafers per week starting in 2028 and increasing to 52,000 wafers per week by 2045 to achieve the level of domestic memory chip output sufficient to meet U.S. economic and national security objectives.

This output and associated cleanroom space requirement is based on Micron's sources and uses information submitted in support of its CHIPS application, including economic modeling and estimates that Micron prepares as part of its annual long-range SNOP process. Micron uses its SNOP process to forecast overall memory sector market growth based on market intelligence, macro trends from new technologies such as AI, virtual reality, 5G wireless proliferation, and many other factors. Based on its product mixes and technological capabilities, such as the number of bits it can manufacture per wafer, Micron then determines how many wafers would be required to meet DRAM market demand, which in turn determines the cleanroom space required to meet that demand. Figure A-1 illustrates the SNOP process.

Figure A-1 Micron Long Range SNOP Process



Source: Micron Technology.

The economic modeling in Micron's SNOP process analyzes key market trends. In the semiconductor industry, one key trend is the continuous effort to develop chips based on increasingly smaller (e.g., nanoscale) "technology nodes" enabled by advancements in semiconductor manufacturing technology.[1] As technology nodes become smaller typically every 18 to 24 months, more processing steps are required per wafer due to increased manufacturing complexity. This results in both longer processing times per wafer and the need for additional, highly complex, space-consuming, and expensive semiconductor manufacturing equipment or "tools," which in turn require more cleanroom space.

Therefore, as reflected in historic data and information from the research and development processes of Micron and other manufacturers, as technology advances, the number of wafers that can be produced per square foot of cleanroom space declines, necessitating more cleanroom space. Micron's modeling also considers that, as technology advances and technology nodes become smaller, the amount of data stored per wafer (measured in bits) increases, which further drives longer processing times per wafer, manufacturing complexity, the need for additional tools, and requirements for more cleanroom space.

Micron's ability to achieve a target DRAM wafer output and successfully align its investment planning and product optimization with that output thus depends on the ability to effectively model and forecast memory chip demand based on the above technical considerations. The economic and commercial viability of Micron's planned facilities depends in part on Micron's ability to analyze how trends in declining wafer production per square foot of cleanroom space and increasing data storage per wafer affect overall operational capacity and efficiency, so that Micron can align its production capacity with future market growth and competition.

Micron gathers market intelligence from a variety of sources, including industry publications and engagement with customers. The Boston Consulting Group (BCG) and the Semiconductor Industry Association (SIA) estimate that the United States accounts for 25 percent of global memory chip demand, and that 11 percent of the global memory chip output is consumed by applications that are critical to U.S. economic and national security (Varas et al., 2021), including defense, aerospace, telecommunications, energy, medical equipment, and other applications. As noted in Section 1.1.1, because Micron currently manufactures all DRAM produced in the United States, but that output is less than one percent of global DRAM production, the United States memory chip supply chain is largely dependent on production in East Asia, which leaves the United States exposed to geopolitical tensions and large-scale supply interruptions, which could impair access to suppliers or customers.

The 2.4 million sq. ft. of cleanroom space that would be needed to achieve the level of domestic memory chip output sufficient to meet U.S. economic and national security objectives described above is based on historical investment data showing that DRAM memory chip manufacturing requires, on average, approximately 2.05 times the capital intensity of logic chip manufacturing (Yoon, 2021), which drives memory cleanroom size. In general, an economically viable logic operation requires approximately 300,000 sq. ft. of cleanroom space, and the typical

[1] A technology node is the smallest manufacturable feature size on a chip, typically measured by transistor gate length, often in nanometers (nm). As the technology node size shrinks, more transistors can be packed into a given area, improving performance.

memory operation requires approximately 600,000 sq. ft. of cleanroom space. Based on these factors and technical constraints relating to bit-growth per wafer and step-growth per wafer from new technology nodes, achieving the necessary level of DRAM output requires a total of 2.4 million sq. ft. of cleanroom space.

In addition, growth trends in logic fabs also drive growth trends in memory fabs. In their 2021 report, "Strengthening the Global Semiconductor Value Chain," BCG and SIA specifically noted that "covering the expected domestic consumption of advanced logic chips for critical infrastructure applications by 2030 would require building . . . 2-3 new state-of-the-art [logic] fabs in the U.S." (Varas et al., 2021). The Department of Commerce factored in this domestic need for logic chip production in the context of a separate CPO award to TSMC Arizona Corporation to construct three leading-edge logic fabs in Arizona with 900,000 sq. ft. of cleanroom space.[2] Because on-shoring of logic chip production is anticipated to drive domestic growth of products requiring logic chips that also will require memory chips,[3] 2.4 million sq. ft. of cleanroom space is in keeping with the projected capital intensity needed to on-shore memory chip production at pace with logic chip production.

A-1.2 Co-Location at Sufficient Scale

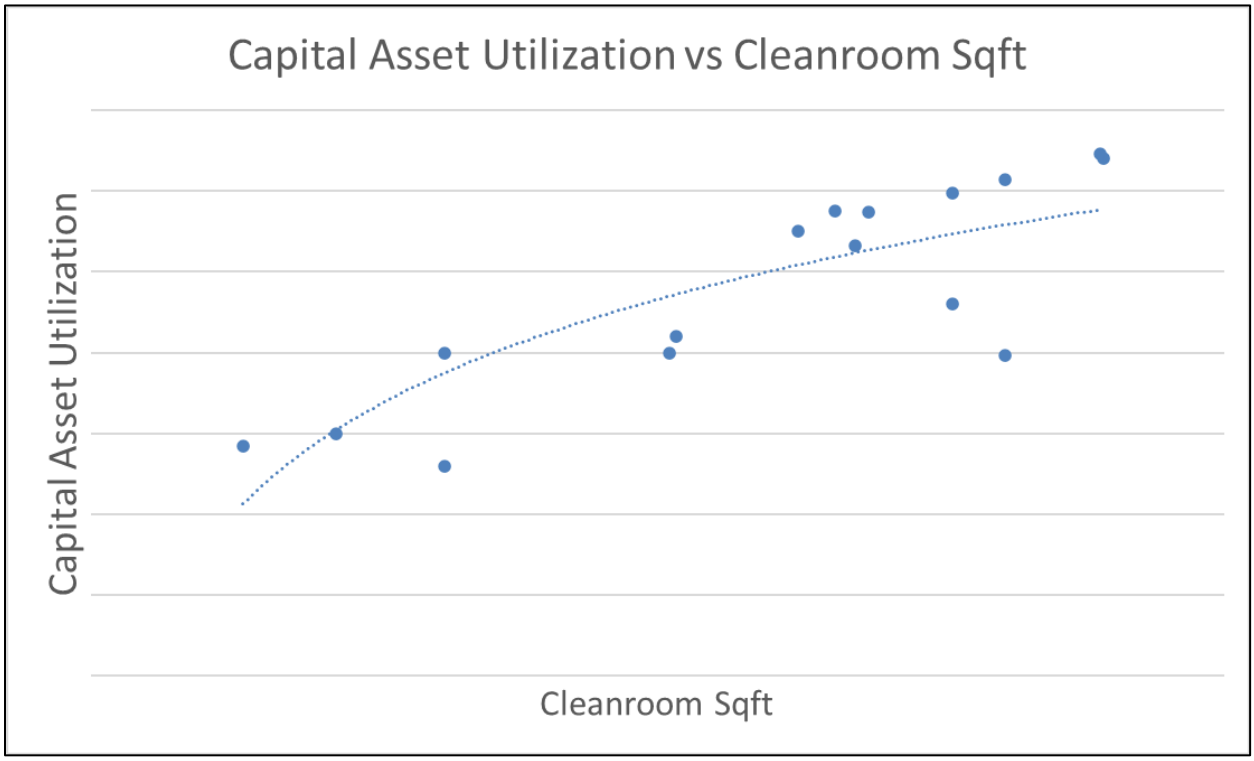
As noted above, cleanroom space is the primary driver of semiconductor facility size requirements. However, a key related requirement is the need to accommodate such large amounts of cleanroom space with sufficient supporting infrastructure and utilities, accounting for technological, logistical, and cost considerations. As noted in Section 1.1.1, to be economically viable, large-scale semiconductor facilities need to be simultaneously: (a) large enough to achieve a utilization rate of their expensive facility infrastructure capable of justifying their capital expenditures, known as the CAU rate; and (b) compact enough with buildings efficiently designed to meet precise sizing, engineering, and interoperability specifications while minimizing overall building, utility, and equipment costs.

Although it would not cost more money, narrowly construed, to build only two or three fabs as opposed to four, a campus limited to two or three fabs would have a higher *per wafer cost* due to lower scale and production efficiencies. The incremental wafer cost would be higher at a 2-fab facility than a 4-fab facility. Put differently, to avoid a higher per wafer cost, semiconductor facilities must take advantage of larger economies of scale. The CAU rate is one measurement of this requirement and reflects the utilization rate of advanced semiconductor manufacturing equipment, weighted by cost. (For example, the average privately owned car is used only at certain times, to drive to work, the store, etc., whereas a taxi, which operates more continuously, has a much higher utilization rate.) In semiconductor manufacturing, the CAU rate increases with cleanroom square footage, as larger fabs enable more efficient equipment use (see Figure A-2).

[2] *See* U.S. Department of Commerce, "Biden-Harris Administration Announces CHIPS Incentives Award with TSMC Arizona to Secure U.S. Leadership in Advanced Semiconductor Technology" (Nov. 15, 2024), https://www.commerce.gov/news/press-releases/2024/11/biden-harris-administration-announces-chips-incentives-award-tsmc.

[3] Logic chips are primarily designed to perform complex logical operations and execute instructions for programmable devices that rely on them; memory chips are primarily responsible for storing and retrieving data for such devices.

Figure A-2 Capital Asset Utilization vs. Cleanroom Square Footage



Source: Micron Technology.

Micron estimates that with only two fabs instead of four, its CAU rate would be approximately 6.7 percent lower. This lower utilization rate would reflect the less efficient use of resources from operating fewer fabs with the same expensive equipment, which would result in a higher production cost per wafer. Specifically, Micron estimates that an additional up-front investment of approximately $3.3 billion would be necessary to achieve the same output needed to meet the Department of Commerce's goals with fewer fabs, due to the less efficient economies of scale and lower CAU rate that approach would create.

Building a large campus with four fabs would require co-locating the fabs in a precise site configuration to ensure adequate cost controls for economic viability. Memory is a commodity that is built to precise standards (such as the Joint Electron Device Engineering Council (JEDEC) standards) and is designed to be pin-compatible, enabling customers to easily substitute one supplier's product for another. This high level of interchangeability creates a highly competitive market. When combined with the cyclical nature of the semiconductor industry, which includes periods of operating at a loss, this combination reinforces the principle that controlling cost is paramount. Strict cost control is therefore essential for long-term viability. Co-locating cleanroom space in multiple fabs on a single site to reduce both the fixed cost per wafer produced and the average operating cost per wafer has become a demonstrated cost control strategy in the industry. In the context of the Proposed Project, and as shown in Table A-1 below, co-locating four fabs on a single site is necessary to avoid cost impacts that could prevent the campus from achieving economic viability.

Table A-1 Cost Impacts of Building Fewer Than Four Fabs

Requirement	Description	Est. Cost Impact
Electrical Infrastructure	Each fab would use approximately 400 MW of electricity, which would require very large copper cables from the Clay Substation to the fabs. This cost is projected to remain high as the world electrifies transportation and builds out renewable energy solutions. By locating all four fabs at the WPCP across the road from the Clay Substation, Micron would be able to control these high transmission costs.	$50 million (approx. $5,000 per linear foot)
Lighting Strike Protection	One of the most damaging events to a semiconductor operation is the loss of power, even a short loss measured in seconds.[4] The Clay Substation has invested $150 million to install lightning protection over the past five years. If Micron built some of the fabs elsewhere, Micron would need to invest $150 million to ensure adequate lightning protection.	$150 million
Water	By locating all four fabs at the WPCP, and with installation of the proposed OCWA water supply system upgrades discussed in this EIS, Micron would be able to ensure an adequate water supply for Fabs 1 and 2 using as much existing infrastructure as possible.	Estimate not available
Capital Equipment	As described above, Micron estimates that achieving the required memory chip output with a lower CAU rate from operating fewer fabs with the same expensive semiconductor manufacturing equipment would require $3.3 billion in additional capital investment.	$3.3 billion
Transportation	The WPCP is conveniently located near a major highway and is a short drive (20 minutes) from Syracuse. In comparison, STAMP is two times farther from I-90 and twice as far from a major metro area (Buffalo).	Estimate not available
		Total Estimated Impact: $3.5 billion (approx.)

Source: Micron Technology

[4] In 2019, a major semiconductor manufacturer in Japan experienced a 13-minute power outage due to a lightning strike on its electrical infrastructure. The outage impacted approximately 25 percent of the company's output for the quarter, a material event financially for the company resulting in an estimated loss of $250 million.

References

Varas, A., Varadarajan, R., Goodrich, J., & Yinug, F. (2021). *Strengthening the global semiconductor value chain*. Boston Consulting Group & Semiconductor Industry Association. https://web-assets.bcg.com/9d/64/367c63094411b6e9e1407bec0dcc/bcgxsia-strengthening-the-global-semiconductor-value-chain-april-2021.pdf

Yoon, J. K. (2021). *Foundry to account for 35% of chip spending in 2021*. The Elec. https://thelec.net/news/articleView.html?idxno=3684.

Appendix A-2
Final SEQRA Scope

MICRON SEMICONDUCTOR FABRICATION
CLAY, NY

FINAL SEQRA SCOPE OF WORK

December 14, 2023

CONTENTS

TABLES

FIGURES

APPENDICES

ABBREVIATIONS

ADA ..... Americans with Disabilities Act
CEQ ..... Council on Environmental Quality
CFR ..... Code of Federal Regulations
CLCPA ..... Climate Leadership and Community Protection Act
DEIS ..... Draft Environmental Impact Statement
EIS ..... Environmental Impact Statement
FHWA ..... Federal Highway Administration
GEIS ..... Generic Environmental Impact Statement
GHG ..... Greenhouse Gas
LWRP ..... Local Waterfront Revitalization Program
MSAT ..... Mobile Source Air Toxic
NAAQS ..... National Ambient Air Quality Standards
NEPA ..... National Environmental Policy Act
NOI ..... Notice of Intent
NYSDEC ..... New York State Department of Environmental Conservation
NYSDOT ..... New York State Department of Transportation
OCDOT ..... Onondaga County Department of Transportation
OCDWEP ..... Onondaga County Department of Water Environment Protection
OCIDA ..... Onondaga County Industrial Development Agency
OCWA ..... Onondaga County Water Authority
OPRHP ..... New York State Office of Parks, Recreation and Historic Preservation
SEQRA ..... New York State Environmental Quality Review Act
SGEIS ..... Supplemental Generic Environmental Impact Statement
SHPO ..... State Historic Preservation Office
SMTC ..... Syracuse Metropolitan Transportation Council
SPDES ..... State Pollutant Discharge Elimination System
SWPPP ..... Stormwater Pollution Prevention Plan
TEM ..... NYSDOT's The Environment Manual
USACE ..... United States Army Corps of Engineers
U.S.C. ..... United States Code
USEPA ..... United States Environmental Protection Agency
USFWS ..... United States Fish and Wildlife Service
WPCP ..... White Pine Commerce Park
WWTP ..... Wastewater Treatment Plant

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1 Introduction

Micron New York Semiconductor Manufacturing LLC (Micron), a Delaware limited liability company (LLC) and wholly owned subsidiary of Micron Technology, Inc., is proposing to construct a semiconductor manufacturing campus (the "Micron Campus") in the Town of Clay, New York, at the White Pine Commerce Park (WPCP), an approximately 1,400-acre industrial park controlled by the Onondaga County Industrial Development Agency (OCIDA). The Micron Campus, together with ancillary development on nearby properties (described below), are referred to collectively as the "Proposed Project."

After receipt of an Application for Financial Assistance from Micron, OCIDA circulated a notice of intent to serve as State Environmental Quality Review Act (SEQRA) (6 NYCRR Part 617) (New York Environmental Conservation Law §§8-0101 et seq.) Lead Agency on July 28, 2023. No objections to that notice were received during the 30-day period commencing on that date. At its regular meeting of September 14, 2023, OCIDA issued a Positive Declaration, indicating the need for an Environmental Impact Statement (EIS), and scheduled a public scoping meeting held on October 11, 2023.

Micron, as the Project Sponsor, will prepare a draft Environmental Impact Statement (DEIS) pursuant to SEQRA. Since Micron is seeking federal funding under the "Creating Helpful Incentives to Produce Semiconductors and Science Act of 2022 (the "CHIPS Act") and the Proposed Project will require certain federal permits and approvals that require federal environmental review, including, but not limited to, federal wetlands permits pursuant to Section 404 of the Clean Water Act, the SEQRA DEIS will also contain information to support the National Environmental Policy Act (NEPA) of 1969 (42 United States Code (U.S.C.) § 4321 et seq.) review.

This document is the Final SEQRA Scope for the proposed DEIS. It was prepared pursuant to 6 NYCRR Part 617.8 and provides: (1) a brief description of the Proposed Project; (2) an identification of potentially significant adverse impacts from the SEQRA Environmental Assessment Form and through consultation with Federal, State, and local agencies; (3) the extent and quality of information needed to adequately address each impact; (4) an initial identification of mitigation measures; and (5) the reasonable alternatives to be considered.

1.1 PROPOSED PROJECT OVERVIEW AND DESCRIPTION

Micron is a world leader in innovative memory solutions that transform how the world uses information. For over 40 years, the company has been instrumental to the world's most significant technology advancements, delivering optimal memory and storage systems for a broad range of applications. Memory is at the leading edge of semiconductor manufacturing and fuels everything from feature-rich 5G smartphones to the AI-enabled cloud. Micron's leadership in both

DRAM and NAND technologies provides the market-based confidence to invest up to $100 billion to affirm the company's industry-leading memory innovation and deliver differentiated products to its customers.

Micron's proposed semiconductor manufacturing facility campus ("Micron Campus") in the Town of Clay, Onondaga County, New York will be built-out over an approximate 20-year period, and will consist of the construction of four (4) Memory Fabrication facilities (Fabs). Micron expects that the Fabs will be built in sequence, with construction of each Fab starting as the preceding Fab is being fit-out with manufacturing equipment and operations begun (the DEIS will analyze two interim analysis years as well as a final year of completion). This process will result in continuous construction activities on the site over the approximate 20-year period, with a significant portion of that construction occurring inside previously-constructed Fab buildings. Micron intends to start construction of the Micron Campus in 2024 with Fabs 1 and 2 operational by 2032. Fabs 3 and 4 would be operational by 2041.

1.1.1 Proposed Project Location

The proposed Micron Campus is an approximately 1,400-acre assemblage of land located at the White Pine Commerce Park (WPCP) in the Town of Clay bordered by NYS Route 31 to the south, Caughdenoy Road to the west, a series of National Grid overhead power lines to the north (although the Micron Campus extends approximately 100 feet beyond the power lines), and the Town of Clay/Town of Cicero boundary line to the east. Most of the Micron Campus is contained within the Town of Clay, Onondaga County, New York and is accessible from I-81 via an interchange with NYS Route 31. Figure 1 identifies the broader vicinity within which the Micron Campus would be located. Figure 2 identifies the Micron Campus in relation to surrounding roadways.

1.1.2 Project Background

OCIDA completed a Generic Environmental Impact Statement (GEIS) in 2013 and a Supplemental GEIS (SGEIS) in 2021 on potential development of WPCP with manufacturing use. See Section 3.2 for additional information on the project background and OCIDA's efforts to prepare a shovel-ready site for manufacturing use, with a particular focus on the semiconductor industry.

FIGURE 1 VICINITY MAP

FIGURE 2 LOCATION OF PROPOSED PROJECT

1.1.3 Project Description

1.1.3.1 Micron Campus

The Micron Campus would comprise approximately 1,400 acres, consisting of the enlarged WPCP parcel studied in the 2021 SGEIS along with additional contiguous acreage acquired or to be acquired by OCIDA or Micron. Each Fab is expected to cover approximately 1.2 million sf of land and contain approximately 600,000 sf of cleanroom space[1], 290,000 sf of cleanroom support space[2], and 250,000 sf of administrative space. Each set of two Fabs will be supported by approximately 470,000 sf of central utility buildings[3], 200,000 sf of warehouse space, and 200,000 sf of product testing space[4] housed in separate buildings. The Micron Campus will also have ancillary on-site electrical substations, as well as facilities for water and wastewater treatment and storage, along with industrial gas storage. See Figure 3 for a preliminary site plan of the proposed Micron Campus.

Two (2) additional properties will be developed with uses ancillary to the Micron Campus (see Figure 4):

- An approximately 30.2-acre parcel on the north side of Caughdenoy Road (Town of Clay tax parcel 042.-01-13.0, 9100 Caughdenoy Road) (the "Childcare Site") on which Micron will construct an employee health care center and childcare center; and
- An approximately 1-acre parcel on the northwest side of the WPCP (048.-01-02.1) ("jack and bore site") which will be used for utility line conveyance.

The Micron Campus, with four (4) Fabs and all ancillary support facilities, driveways, and parking; the jack and bore site; and the Childcare Site comprise the "Proposed Project." The DEIS will include additional description of each element of the Proposed Project as well as a high-level description of key Micron systems to provide an understanding of Micron's proposed use and management of water, chemicals, and energy serving the site (including provisions for renewable energy sources). The DEIS will also describe Micron's generation and management of various waste streams and how best management practices will be implemented to limit energy consumption, water consumption, air pollutants, and generation of waste.

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1 Cleanroom: This part of the campus is where the thousands of advanced pieces of equipment are housed that are used to take raw silicon wafers and build the chips. It is called a cleanroom because there are strict requirements on particles in the air that can impact the functionality of the chips. The chips are built up in layers of metals and insulators, similar to how a building is constructed floor-by-floor.

2 Cleanroom support: This part of the campus includes functions such as workshops to refurbish parts, labs to complete incoming chemical tests, surface analysis of what is on the wafers, and analysis of cross-sections of the wafer to validate the structure of the chips meets requirements.

3 Central utility building: These buildings house the systems required for delivering the utilities necessary to produce the chips. These utilities include systems such as HVAC, electrical transmission equipment, water purification and recycling, and chemical/specialty gas delivery systems.

4 Product testing space: This space is used to house advanced equipment that takes finished wafers and performs electrical testing that validates the chips function to required specifications before the wafers are shipped out for assembly into products and further testing.

FIGURE 3 PROPOSED SITE PLAN FOR MICRON CAMPUS

1.1.3.2 Off-Site Improvements

Off-site energy (natural gas and electricity), telecommunications, water, wastewater utility, and rail spur improvements also will be required and will be identified as "off-site improvements" necessary for the Proposed Project (see Figure 4). The DEIS will assess impacts of the Proposed Project and off-site improvements. National Grid will complete a separate Article 7 regulatory process before the New York Public Service Commission with regard to the electric transmission lines needed for the Proposed Project. The following off-site improvements have been identified:

Energy

- Extension of a 16-inch diameter natural gas line from National Grid's Gas Regulator Station (GRS) 147 at 4459 NYS Route 31 to the Micron Campus (approximately 3.15 miles) and construction of GRS 147A at the same address as the existing GRS;
- Construction of eight (two per Fab) underground electrical transmission duct bank connections from the existing National Grid sub-station west of Caughdenoy Road.

Telecommunications

- Extension of existing fiber-optic lines located along NYS Route 31 to the Micron Campus and from the existing fiber-optic lines located along Caughdenoy Road.

Water Supply

Onondaga County Water Authority (OCWA) has capacity within its water supply system to service Micron's initial water demand for construction and operations of Fab 1 (approximately 11.5 million gallons per day (MGD)). A new Clear Water Pumping Station at OCWA's Lake Ontario Water Treatment Plant (LOWTP) would be required. This new Clear Water Pumping Station will be designed to accommodate anticipated water demand for Micron's Fab 2, Fab 3, and Fab 4. Potable water for initial construction would be provided to the Micron Campus through existing buried water mains located within the Caughdenoy Road and Burnet Road rights-of-way. Potable water for Fab 1 operations would be provided to the Micron Campus through construction of a new connection from OCWA's existing Eastern Branch Transmission Main south of NYS Route 31 via a new service connection within a 99-foot-wide easement within the Micron Campus along Caughdenoy Road.

To serve the anticipated future demand of approximately 48 MGD, OCWA would have to make the following water supply infrastructure improvements:

- Construction of a new Raw Water Tunnel and Raw Water Pumping Station at OCWA's existing Burt Point property on Lake Ontario (City of Oswego);
- Construction of a new Raw Water Transmission Main from Burt Point to OCWA's Lake Ontario Water Treatment Plant (LOWTP) using an easement that OCWA obtained for such purposes in the 1990s;

- Modification to the LOWTP with addition of two (2) new filters, one (1) contact basin, and one (1) new clearwell as well as additional chemical storage space and residual handling facilities;
- Expansion of OCWA's Clear Water Transmission Main from LOWTP to OCWA's Terminal Campus with one (1) additional 54-inch diameter line parallel to the existing 54-inch diameter line;
- Construction of one (1) 15 million gallon water storage tank at OCWA's Terminal Campus;
- Upgrading of existing pumps at OCWA's Farrell Pumping Station at Terminal Campus and construction of a parallel pumping station;
- Expansion of OCWA's Eastern Branch Transmission Main south of NYS Route 31 from one (1) 54-inch diameter water main with up to three (3) additional 54-inch diameter water mains depending on evaluations of Micron's initial water re-use and reclamation performance; and
- Relocation of a portion of the existing OCWA Eastern Branch Transmission Line crossing the Micron Campus to allow for Micron Fab 3 and Fab 4 construction.

Wastewater

Onondaga County Department of Water Environment Protection (OCDWEP) will be able to convey sanitary wastewater from the Micron Campus during initial construction through a previously planned and separately studied extension of municipal sanitary wastewater force mains to a portion of the Oak Orchard Wastewater Treatment Plant (WWTP) service area that has not previously been served by municipal infrastructure. Operation of Micron's Fabs 1-4 will require additional industrial wastewater infrastructure and improvements to the Oak Orchard WWTP in addition to planned industrial wastewater pre-treatment facilities that Micron will construct on the Micron Campus. The following OCDWEP infrastructure improvements are required prior to operation of Micron's Fab 1:

- Construction of OCDWEP industrial wastewater service conveyance to the Oak Orchard wastewater treatment plant (WWTP) from a new industrial wastewater pumping station to be constructed on the Micron Campus. Conveyance infrastructure would comprise four (4) 30-inch force mains for industrial wastewater; and one (1) 36-inch force main for reclaimed water supply; and
- Expansion of the Oak Orchard WWTP to treat industrial wastewater (with pre-treatment required by Micron at the Micron Campus).

Rail Spur Site

Micron has proposed to construct a rail spur on an approximately 37-acre area on the west side of Caughdenoy Road (including Town of Clay tax parcel 046.-02-03.2) (the "rail spur site"). The rail spur will be used to deliver construction aggregate to the Micron Campus to reduce construction vehicle impacts on the local community from construction of the Proposed Project, which will

facilitate the avoidance, minimization and mitigation of traffic, air, climate change and community character impacts. The rail spur is a separate but related action that would require advanced construction to achieve the intended benefit of reduced construction vehicle impacts from the Proposed Project. Although it will be addressed separately under SEQRA so that it is in place at the commencement of groundbreaking in order to maximize mitigation measures for the Proposed Project, it will also be analyzed in the SEQRA DEIS.

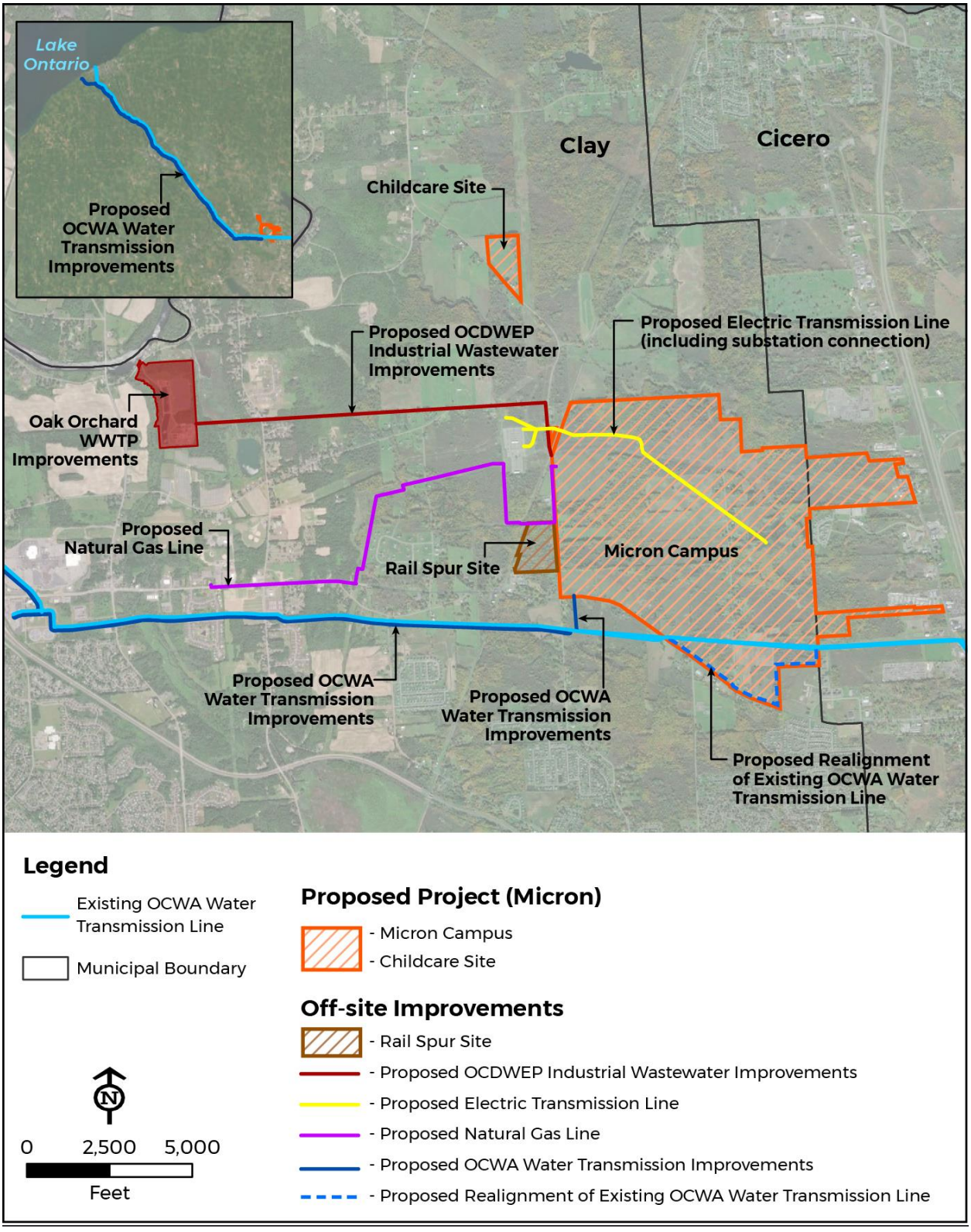
1.1.3.3 Proposed Project Employment

Micron will create approximately 9,000 high-paying jobs by 2045 to support the Micron Campus when operating at full capacity and about 40,000 community jobs over a 20-plus year period to include suppliers, contractors, and other supporting roles. Micron has begun efforts to attract a diverse and multi-talented workforce to Central New York. Using its existing labor models for high-volume fabs around the globe, Micron has estimated that 90% of its workers will be dedicated to manufacturing, and the remaining 10% will provide support services, including IT, security, quality, procurement, supply chain, smart manufacturing technology, finance, people, and legal services.

The bulk of manufacturing headcount will comprise three major job categories, each with a mix of specific jobs and skillsets. In the category of leadership (~10%), there are directors, managers, and supervisors. Typical qualifications for managers are a B.A. or B.S. degree or equivalent training and experience and five years of leadership experience. For supervisors, these are an A.A. or A.S. degree or Production Operations Management Certificate or equivalent training and experience. For directors, a B.A. or B.S. degree or equivalent training and experience, and eight years of leadership experience is required. In the category of Engineering & Professional (~44%), the bulk of needed roles are equipment engineers and process engineers. Engineering roles require a B.S. in Engineering or a B.S. in a relevant discipline, and Micron provides specific on-the-job training for the role's function. In the category of Technicians (~36%), the bulk of needed roles are equipment technicians and process technicians. Technician roles require the same minimum qualifications, and Micron provides specific on-the-job training for the role's function. The qualifications are an A.A or A.S. degree or completion of a Micron Apprenticeship Program or, other approved certification, or a combination of certifications under development with Micron community college partners or equivalent training and experience.

Micron will operate three (3) shifts over a 24-hour day. Day and night shifts will be utilized to sustain 24-hour manufacturing activities as well as a maintenance shift.

FIGURE 4 PROPOSED PROJECT AND OFF-SITE IMPROVEMENTS



2 The Scoping Process and Agency Coordination

Scoping provides an opportunity for the public to learn more about the Proposed Project and to provide valuable input as Micron and OCIDA prepare the SEQRA Draft EIS (DEIS). A SEQRA Positive Declaration and notice of public scoping meeting was published in the *Environmental Notice Bulletin* on September 20, 2023. Notice of the public scoping meeting was placed in The Post Standard (Syracuse.com) – a newspaper of general circulation serving the broader Clay, New York area on September 19, 2023.

Project information and this final SEQRA Scope was also posted on OCIDA's website (www.ongoved.com).

OCIDA, as SEQRA Lead Agency, invited the public and agencies to be involved in the environmental review process. During the SEQRA scoping process, comments were encouraged on the draft purpose and need, potential alternatives, and environmental issues of concern. A list of the Federal, State, and local agencies with which OCIDA is coordinating is provided in Section 6.

Public Comment Period and Community Meetings

- The comment period for the scoping process was extended beyond the minimum required 30 days from September 20, 2023, to October 31, 2023. During this period, OCIDA held a public scoping meeting on October 11, 2023, at 6:30 PM to obtain input from the public. Everyone who registered or asked to speak was given the opportunity to submit a verbal comment.

The scoping meeting provided simultaneous Spanish and American Sign Language interpretation. No additional language translation services or special needs assistance were requested.

How Comments Were Received

Comments were accepted during the scoping period via:

- Public comment at the public scoping meeting on October 11, 2023;
- E-mails to micron@ongov.net; and
- Mail to Attn: Micron Project, Office of Economic Development, Onondaga County, 335 Montgomery Street, 2nd Floor, Syracuse, NY 13202

All comments received, no matter their format, were considered equally. In total, 39 individuals, organizations, or agencies provided comments during the public comment period including written comment letters from the United States Fish & Wildlife Service and the New York State Department of Environmental Conservation.

How Comments Were Used

After the end of the comment period on October 31, 2023, OCIDA, with assistance as needed from Micron, collected, reviewed, and summarized the comments received and prepared this final SEQRA Scope with attached Response to Comments found in Appendix B. The comments received during the scoping period were considered by OCIDA to define this final scope of the DEIS and to inform the related technical analyses and environmental resources to be evaluated.

OCIDA has made the final SEQRA Scope available to all interested and involved agencies as well as on its website (*www.ongoved.com/ocida*) and to everyone that commented during the public comment period. This final SEQRA Scope will be used to prepare the DEIS.

3 Purpose and Need

3.1 PURPOSE AND NEED

The purpose of the Proposed Project is to further the United States goal to expand domestic memory chip manufacturing capacity and restore U.S. leadership in semiconductor manufacturing as embodied in the "Creating Helpful Incentives to Produce Semiconductors and Science Act of 2022" (the "CHIPS Act"). For Micron, the purpose is to advance its leading-edge position in the development and manufacturing of DRAM memory chips.

The purpose of the CHIPS Act and the need for the Proposed Project is to reduce U.S. reliance on foreign production of both leading edge and older generation microelectronics. Semiconductors were invented in America, and the U.S. semiconductor industry has historically dominated many parts of the international semiconductor supply chain, such as R&D, chip design and manufacturing. Yet the U.S. position within the semiconductor industry has been declining. According to the Semiconductor Industry Association, U.S. production of the world's microchips has fallen from 37% in 1990 to 12% in 2020. The need for the Proposed Project is to reduce economic and national security risks by building domestic capacity, to establish a dynamic and collaborative network for semiconductor research and innovation centers, and to improve competitiveness and strengthen regional supply chain industries. Micron provides a unique and essential role in domestic production of leading-edge memory chips that are essential and high-volume components of the semiconductor industry.

Micron's investment in the Proposed Project will also advance the goals of the State of New York and OCIDA to enhance job growth in Central New York by promoting advanced manufacturing in the region. The Proposed Project is anticipated to generate nearly 50,000 jobs in Central New York over more than a 20-year period, including 9,000 good-paying Micron jobs directly generated by the Proposed Project and over 40,000 additional jobs with suppliers, contractors and other businesses supporting the proposed chip manufacturing facility. To this end, Micron and the State of New York have announced a historic $500 million investment in community and workforce development over a more than 20-year period. Micron will further invest $250 million in line with its commitment to the Green CHIPS Community Investment Fund. An additional $250 million is expected to be invested, with $100 million from New York, and $150 million from local, other state and national partners. This fund is intended to expand and train the workforce in the region, including providing support for disadvantaged populations.

3.2 PROJECT BACKGROUND

Central New York as well as other regions of New York State have experienced a reduction in manufacturing jobs over several decades. In 1991, OCIDA and the City of Syracuse Chamber of

Commerce commissioned an Industrial Park Feasibility Study to identify potential candidate sites for locating industrial businesses in Onondaga County (the "County"). The study identified two sites for large scale industrial uses, with the White Pine Commerce Park (WPCP) ultimately selected as the preferred site for purchase due to its proximity to National Grid's Clay electric substation, highway access, and Industrial zoning designation. Between 1991 and 1999, the County purchased seven properties to form the original approximately 340-acre WPCP (previously referred to as Clay Business Park).

OCIDA's intent in acquiring the lands, was further justified in 1998 with the advent of the SEMI-NY program (as discussed below), resulted in the accumulation of the original 340-acre footprint of the WPCP. The SEMI-NY program was a New York State initiative initiated in 1998 to attract the semiconductor industry to the state by identifying and advancing "qualified" sites that were consistent with conceptual semiconductor industry profiles. OCIDA's objective was to further the County's economic development agenda by providing a site that met the SEMI-NY criteria and could be presented as a qualified site for a semiconductor manufacturing facility under the SEMI-NY program. To support OCIDA's efforts to obtain the SEMI-NY "qualified" site designation for its site, OCIDA prepared a SEQRA Generic Environmental Impact Statement (GEIS) to assess potential environmental and socio-economic impacts associated with full build-out of the 300-acres by a yet to be determined semiconductor company.

From 2017 to the present, OCIDA has made significant investments to advance and market the WPCP, with the semiconductor industry targeted as the site's highest and best use. In the ensuing years following the initial creation and focused marketing of the WPCP, the semiconductor industry, for several commercial reasons, has transitioned toward the construction and use of a Fab complex, which typically consists of two to four fabrication facilities operating at a single site; a trend introduced in Asia and Europe and now replicated in the United States. The semiconductor industry of today focuses on economies of scale; the need to build fewer, larger Fabs; and the managerial and economic benefits regarding workforce and reducing operational downtimes during expansions. This has resulted in the need for 1000-acre sites.

As a result, over the past six years, OCIDA decided to purchase adjacent land to enlarge the WPCP to accommodate this new industry model. The WPCP is now over 1,400 contiguous acres. This size makes it considerably larger than most available sites in New York. Considering other critical additional project needs beyond sheer size (e.g., proximity to a sufficient supply of electricity and water, wastewater treatment, and natural gas) further diminishes the number of available sites that can accommodate modern semiconductor manufacturing. Overlaying the acreage and infrastructure needs with access to multi-modal transportation and labor needs is often a point of failure for most other sites, which might otherwise meet the acreage need. Accordingly, sites that substantially meet Micron's site selection criteria are not commonly available, which further supports Micron's selection of the WPCP for the proposed Micron Campus.

OCIDA utilized the development of a GEIS (2013) and the follow-up Supplemental Generic Environmental Impact Statement (SGEIS), completed in 2021, to evaluate potential locations throughout Onondaga County for development of a site suitable to attract semiconductor manufacturing. OCIDA, in 2013, and again in 2021, selected the WPCP as its preferred site to attract private industrial and commercial development because of its size, potential for industrial zoning, access to transportation, proximity of utilities, as well as a history of Town of Clay efforts to facilitate industrial development at the property.

The 2013 GEIS considered several other potential sites in addition to WPCP:

- Radisson Corporate Park – 950 acres in the Town of Lysander;
- Hancock Air Park – 200 acres adjacent to the Syracuse Hancock Airport;
- Collamer Crossings Business Park – 200 acres in the Town of Dewitt located near NYS Route 298, I-90, I-481; and
- Syracuse Research Park – 99-acre site adjacent to Syracuse University.

OCIDA deemed the Radisson Corporate Park as an unviable choice because it lacked sufficient room and it did not offer the location specific advantages such as the proximity to I-81 and I-481/NY 481 that the WPCP did. Neither the Hancock Air Park nor the Collamer Crossing Business Park were deemed viable options because the available lots were small and could not accommodate large industrial uses. The Syracuse Research Park was available for light industrial use, but OCIDA concluded that it could not easily accommodate large-scale industrial uses.

The 2013 GEIS evaluated three (3) different site layouts for the WPCP: 1) a layout that provided 1 million sf of development while avoiding all State-mapped wetlands; 2) a layout that provided 1.5 million sf of development that balanced approximately 4.2 acres of wetland impacts against the additional benefits from the larger size of development; and 3) a layout that provided over 2 million sf balanced against additional impacts to wetlands. OCIDA identified the third alternative as the "preferred alternative" in the 2013 GEIS based on the overall economic returns versus the degree of environmental impacts. The 2013 GEIS also included a 2012 engineering report evaluating three (3) options for extending sanitary sewer service to the WPCP: 1) use of Verplank Road north of NYS Route 31; 2) use of the NYS Route 31 right-of-way; and 3) use of the Metropolitan Water Board (now OCWA) right-of-way south of NYS Route 31. The 2012 engineering report built from a 2003 feasibility study, the *Semi-NY Sewer Route Feasibility Study*, which evaluated five (5) sanitary sewer line routing options. OCIDA selected the third option for extension of sanitary sewer service to the WPCP as the preferred alternative.

The 2021 SGEIS revisited the question of whether the WPCP was the preferred alternative to attract industrial and commercial development to Onondaga County. The SGEIS compared WPCP to the

same alternative candidate sites that the 20132 GEIS assessed, again concluding that "[n]one of the previously considered alternative locations would be able to accommodate the large-scale industrial use that the [White Pine Commerce] Park is promoting due to size limitations and proximity to services and necessary infrastructure."

The 2021 SGEIS concluded that significant expansion of the WPCP was feasible and more likely to attract leading edge manufacturing, such as semiconductor manufacturing. The alternative locations considered in the 2021 SGEIS were rejected as much too small to accommodate semiconductor manufacturing. The 2021 SGEIS assessed the additional potential significant adverse impacts from a larger facility and the creation of a shovel-ready WPCP by increasing the size of the development parcel to approximately 1,250 acres (later expanded to the current approximately 1,400 acres). OCIDA indicated in the SEQRA Findings Statement that "consistent with social, economic and other essential considerations from among the reasonable alternatives available, the action is the one that avoids or minimizes adverse impacts to the maximum extent practicable, and that adverse impacts will be avoided or minimized to the maximum extent practicable by incorporating as conditions to the decision those mitigation measures that were identified as practicable."

On August 9, 2022, President Biden signed into law the CHIPS Act making over $50 billion available "to strengthen American manufacturing, supply chains, and national security, and invest in research and development, science and technology, and the workforce of the future to keep the United States the leader in the industries of tomorrow, including nanotechnology, clean energy, quantum computing, and artificial intelligence."[5]

On August 11, 2022, New York State Governor Kathy Hochul signed into law the Green CHIPS Act, which provides up to $10 billion in economic incentives for environmentally friendly semiconductor manufacturing and supply chain projects (Ch. 494, L. 2022). The Green CHIPS legislation was passed to align with the provisions of the Federal CHIPS Act for the purpose of attracting domestic semiconductor manufacturing and related activities to New York State.

On October 4, 2022, Micron announced plans to invest up to $100 billion over the next 20-plus years to develop a new leading edge semiconductor manufacturing facility at what is now known as the WPCP in Clay, New York, with a first-tier investment of $20 billion planned by the end of this decade. Micron intends to apply for funding from both the CHIPS Act and the Green CHIPS Act to assist in the financing of the Proposed Project. Micron and Empire State Development (ESD), the umbrella organization of New York State's two principal economic development public-benefit corporations, established a framework, known as the Community Investment Framework, outlining the shared investments to be made by Micron and the State of New York. This framework

[5] FACT SHEET: CHIPS and Science Act will Lower Costs, Create Jobs, Strengthen Supply Chains, and Counter China, August 9, 2022, The White House. https://www.whitehouse.gov/briefing-room/statements-releases/2022/08/09/fact-sheet-chips-and-science-act-will-lower-costs-create-jobs-strengthen-supply-chains-and-counter-china/

will allow for the strengthening of the existing regional workforce and to create new growth and expansion of the workforce overall.

Micron's Proposed Project is the long-anticipated fulfillment of OCIDA's original goal to attract a state-of-the-art manufacturing facility to generate high-paying employment opportunities in Onondaga County. Micron's investment also furthers recent United States and New York State policies and programs to incentivize domestic semiconductor manufacturing.

4 Project Alternatives

4.1 INTRODUCTION

SEQRA requires the evaluation of alternatives to the Proposed Project, including either alternative sites or alternative designs, as well as a No Action Alternative. The evaluation of alternative site locations to be presented in the DEIS for the Proposed Project will be based upon the prior evaluation of alternative sites reflected in the earlier SEQRA analyses prepared by OCIDA as well as work completed by the New York State Economic Development Council (Project Rhino). See Table 1 for a summary of the various alternatives considered previously in the establishment of WPCP and those that will be carried into the DEIS for consideration.

4.2 DISCUSSION OF ALTERNATIVE PROJECT LOCATIONS

4.2.1 Alternative Sites in New York State

The DEIS will include a discussion of project location needs for semiconductor manufacturing in general and Micron in particular. The DEIS will also discuss the process previously undertaken by New York State to identify candidate sites for semiconductor manufacturing over recent years. That process identified four (4) sites throughout New York State as "shovel ready" sites for semiconductor manufacturing: STAMP in Genesee County, WPCP in Onondaga County, Marcy Nanocenter in Oneida County, and Luther Forest Technology Campus in Saratoga County. The DEIS will discuss the three alternative shovel ready sites and detail why they are not suitable alternative locations for the Proposed Project. For example, since 2012, GlobalFoundries U.S., Inc. has operated a semiconductor manufacturing facility at the Luther Forest Technology Campus in Saratoga County. Marcy Nanocenter Parcel #1 was previously developed into a manufacturing facility for Wolfspeed. The remaining parcel at Marcy Nanocenter is only 438 acres, too small for the proposed project. Some development has already occurred at STAMP and the remaining available acreage at that site also is too small to accommodate the Proposed Project.

In 2018 the New York State Economic Development Council (NYSEDC) prepared a "Competitive Site Location Benchmarking for Semiconductor Manufacturing" study (also known as "Project Rhino"). The purpose of the benchmarking study was to assess and compare four (4) sites in New York State, including WPCP, for their readiness to support semiconductor manufacturing; benchmark those four (4) sites against six (6) other sites located throughout the United States; and identify other industrial sectors that might be attracted to New York State to support semiconductor manufacturing. The study was based upon a hypothetical semiconductor manufacturing facility and evaluated each of the sites against a number of quality, cost, and economic incentive factors.

The qualitative assessment evaluated the sites against five categories, each of which had several factors included: site quality and suitability; workforce and community alignment; utilities capacity, quality, and reliability; economic development and regulatory context; and incentive capacity and capability. WPCP ranked second nationally for access to utilities and readiness of those utilities to serve the site. It was noted that all four New York State sites ranked first through fourth for the degree to which tax and non-tax incentives have been made available from the State and local governments. Lastly, three of the New York sites, including WPCP, ranked in the top five for economic development and regulatory support.

While all four New York State sites were among the most expensive in terms of construction costs, personnel, water and wastewater, and real estate and personal income taxes, the New York State sites had a competitive advantage on electricity and natural gas costs. On balance, the study concluded that New York State led all competitors in terms of the capacity, capability, and probability of delivering a meaningful incentives package.

The DEIS will include a summary of the prior New York State site selection process and detail why alternative semiconductor locations in New York State cannot accommodate the Proposed Project.

4.2.2 Alternative Sites and Design Options in Onondaga County

As previously noted, as part of its effort to develop a "shovel-ready" industrial park in Onondaga County, OCIDA evaluated a number of potential locations throughout the county. OCIDA ultimately selected WPCP as its preferred site to attract private industrial and commercial development because of its size, potential for industrial zoning, access to transportation, proximity of utilities, as well as a history of Town of Clay efforts to facilitate industrial development at the property.

The 2012 DGEIS prepared by OCIDA evaluated three (3) different site layouts for WPCP: 1) a layout that provided 1 million sf of development while avoiding all State-mapped wetlands; 2) a layout that provided 1.5 million sf of development that balanced approximately 4.2 acres of wetland impacts against the additional benefits from the larger size of development; and 3) a layout that provided over 2 million sf balanced against additional impacts to wetlands. OCIDA identified the third alternative as the "preferred alternative" in the 2012 DGEIS based on the overall economic returns versus the degree of environmental impacts. The DGEIS also included a 2012 engineering report evaluating three (3) options for extending sanitary sewer service to WPCP: 1) use of Verplank Road north of NYS Route 31; 2) use of the NYS Route 31 right-of-way; and 3) use of the Metropolitan Water Board (now OCWA) right-of-way south of NYS Route 31. The 2012 engineering report built from a 2003 feasibility study, the *Semi-NY Sewer Route Feasibility Study*, that evaluated five (5) sanitary sewer line routing options. OCIDA selected the third option for extension of sanitary sewer service to WPCP as the preferred alternative.

The 2021 Final SGEIS prepared by OCIDA revisited the question of whether WPCP was the preferred alternative to attract industrial and commercial development to Onondaga County, and compared it to the same alternative candidate sites that were assessed in the 2012 DGEIS, concluding that "[n]one of the previously considered alternative locations would be able to accommodate the large-scale industrial use that the [White Pine Commerce] Park is promoting due to size limitations and proximity to services and necessary infrastructure." The 2021 Final SGEIS further concluded that significant expansion of WPCP was feasible and more likely to attract leading edge manufacturing, such as semiconductor manufacturing. The 2021 SGEIS assessed the additional potential significant adverse impacts from a larger facility (up to 4 million sf of manufacturing space) and increase in size of the development parcel to approximately 1,250 acres. OCIDA indicated in the SEQRA Findings Statement that "consistent with social, economic and other essential considerations from among the reasonable alternatives available, the action is the one that avoids or minimizes adverse impacts to the maximum extent practicable, and that adverse impacts will be avoided or minimized to the maximum extent practicable by incorporating as conditions to the decision those mitigation measures that were identified as practicable."

The DEIS will include a summary of the prior Onondaga County site selection process, but will not include detailed impact assessment of any of the candidate sites included in that prior process.

4.2.3 Other Alternatives Considered but Determined Not Feasible

The DEIS will include a summary of other alternatives previously considered but determined not to be feasible, including an alternative that relies exclusively on alternative sources of energy (beyond use of renewable energy for purchased electricity).

The DEIS will also summarize previous Onondaga County Water Authority studies evaluating potential alternative sources of water.

4.3 ALTERNATIVES TO BE CONSIDERED IN THE DEIS

4.3.1 No Action Alternative

Under the No Action Alternative, WPCP would delay OCIDA's long-standing efforts to develop the WPCP, with a particular focus on development that will bring high-tech facilities and high paying jobs to Onondaga County. OCIDA's 2021 Final SGEIS concluded that development of up to 4 million sf of manufacturing space would avoid, minimize, or mitigate adverse environmental impacts to the maximum extent practicable. The WPCP would therefore remain vacant land until such time as OCIDA identified another development proposal for the WPCP.

4.3.2 The Proposed Project

Micron intends to build a semiconductor manufacturing facility campus (the "Micron Campus") at the expanded WPCP, which will be built-out over an approximately 20-year period with four

Fabs. It is expected that Fabs will be continuously fit-out and construction on the next Fab will be in sequence as the prior Fab finishes fit-out. The DEIS will analyze an interim analysis year of 2031 with Fab 1 in operation and Fab 2 under construction and anticipated completion of major off-site transportation improvements,[6] 2037 with Fab 1 and Fab 2 operating and construction of Fab 3 underway, as well as a final analysis year of 2041 with all four Fabs in operation with on-going fit-out of Fab 4).

4.3.3 The Proposed Project with No Access from US Route 11

Micron intends to build a site access road from US Route 11 in the Town of Cicero to facilitate construction and operation access to the Proposed Project once construction of Fab 3 commences. The DEIS will analyze an alternative access scenario that eliminates this site access road from the Micron Campus to US Route 11. In this alternative, all access to the Micron Campus would be from NYS Route 31 and Caughdenoy Road.

4.3.4 Alternative Internal Configurations of the Proposed Project

Consistent with the requirements of the Clean Water Act (Section 404(b)(1)), which governs the filling of wetlands, Micron must demonstrate that the Proposed Project is the least environmentally damaging practicable alternative ("LEDPA"). In accordance with USEPA "Guidelines for Specification of Disposal Sites for Dredged or Fill Material (40 CFR Part 230), Micron has developed an alternative analysis to evaluate the reasonableness and practicableness of several on-site layout alternatives. The DEIS will consider these on-site layout alternatives.

4.3.5 Reduced Scale Proposed Project

The DEIS will consider an alternative development site plan reflecting a reduced scale of the Proposed Project, which would comprise only the first two Fabs, as described above. All of the same off-site improvements would be considered as part of the Reduced Scale Proposed Project and while the improvements would be scaled to the requirements of the smaller project, the areal extent of disturbance to construct those conveyances would be substantially similar to that required for the Proposed Project while only realizing half of the economic and social benefits from the Proposed Project.

The purpose of this alternative is to assess significant adverse effects from a reduced scale project and compare such effects to the Proposed Project.

[6] The 2031 interim year analysis will evaluate any traffic, air quality, noise, and construction impacts for what is projected to be a peak of operations and construction employment. For other areas of impact analysis, the 2037 analysis year representing completion of Fab 1 and Fab 2 will be used to reflect the larger amount of project completion at that time.

TABLE 1 SUMMARY OF ALTERNATIVES CONSIDERED OR TO BE CONSIDERED

Alternatives Considered	Status of Alternative
Alternative Sites Considered in New York State	
STAMP in Genesee County	Withdrawn from further consideration because some development has already occurred, and the remaining parcel is too small for the proposed project.
Marcy Nanocenter in Oneida County	Withdrawn from further consideration because the site was previously developed into a manufacturing facility for Wolfspeed.
Luther Forest Technology Campus in Saratoga County	Withdrawn from further consideration because, since 2012, GlobalFoundries has operated a semiconductor manufacturing facility on this site.
Previous Alternatives Considered in OCIDA 2013 Generic EIS (GEIS) for White Pine Commerce Park	
Radisson Corporate Park	Withdrawn from further consideration because it lacked room and did not offer the location specific advantages such as proximity to Interstate 81.
Hancock Air Park	Withdrawn from further consideration because available lots were too small and could not accommodate large industrial uses.
Collamer Crossings Business Park	
Syracuse Research Park	Withdrawn from consideration because it could not easily accommodate large-scale industrial uses.
Concept 1: 1 million square foot development – no wetland impacts	
Concept 2: 1.5 million square foot development – 4.2 acres of wetland impacts	
Concept 3: 2 million square foot development – additional wetlands impacts	
Previous Alternatives Considered in OCIDA 2021 Supplemental GEIS for White Pine Commerce Park	
Alternative 1: Retain site as open space	Withdrawn from consideration because it could not easily accommodate large-scale industrial uses.
Alternative 2: Same as Concept 3 in OCIDA's 2013 GEIS	Withdrawn from consideration because it could not easily accommodate large-scale industrial uses.
Alternative 3: Comparable to Alternative 2 but at smaller scale	
Preferred Alternative: 4 million square feet development – additional wetlands impacts	OCIDA identified this alternative as the preferred alternative in the Supplemental GEIS based on the overall economic returns versus the degree of environmental impacts.
Other Alternatives Considered but Determined to be Not Feasible	
Alternative Energy Sources	The DEIS will describe how Micron's Proposed Project could not rely exclusively on alternative energy sources (beyond use of renewable energy for purchased electricity) before reliable energy sources are identified and developed.
Alternatives to be Considered in the Draft EIS for the Micron Semiconductor Fabrication Project	
No Action	These alternatives will be considered in the DEIS for the Micron Semiconductor Fabrication Project in Clay, NY.
Proposed Project (4 fabs)	
Proposed Project No Access from US Route 11	
Proposed Project Alternative Internal Configurations* – Options 2, 3, 4, 5, 6 and 7	
Reduced Scale Proposed Project (2 fabs)**	

* Note: Proposed Project– Alternative Internal Configuration Option 1 is the Proposed Project (4 fabs).

** This alternative is similar to the Preferred Alternative: 4 million square feet development identified in the OCIDA 2021 SGEIS.

5 Analysis Framework

This section outlines the analytical framework that will be used to complete the DEIS. It describes the reasoning behind the chosen analysis year(s) and study area(s) and outlines the methodology used to establish baseline conditions from which the environmental effects will be analyzed.

5.1 ORGANIZATION OF THE ENVIRONMENTAL IMPACT STATEMENT

Preparation of the DEIS will conform to 6 NYCRR Part 617.9(b). The Proposed Project will be evaluated for potential significant adverse effects to the Project Site[7] and applicable study areas for all relevant environmental technical categories in accordance with applicable SEQRA requirements. The DEIS will consider short-term (construction) and long-term (operational) effects (including direct and indirect effects) of the Proposed Project. Cumulative impacts will also be addressed, as applicable. The DEIS will identify proposed mitigation for any significant adverse environmental impacts. The DEIS shall include a list of all Involved and Interested Agencies to which copies of the DEIS and supporting material will be distributed. See Table 2, "Preliminary List of SEQRA Lead, Involved, and Interested Agencies," and Table 3, "Preliminary List of Federal Agencies," in Section 6.

Consistent with those regulations, the DEIS technical chapters are proposed as shown below. Appendices of the DEIS will contain any detailed technical studies used to complete the DEIS.

- Cover Sheet (see below)
- Table of Contents
- Executive Summary
- Chapter 1 – Purpose and Need
- Chapter 2 – Project Alternatives and Description of the Proposed Project
- Chapter 3 – Land Use, Zoning, and Public Policy
- Chapter 4 – Community Facilities, Open Space and Recreation
- Chapter 5 – Socioeconomic Conditions
- Chapter 6 – Environmental Justice
- Chapter 7 – Historic and Cultural Resources
- Chapter 8 – Visual Impacts and Community Character
- Chapter 9 – Geology, Soils, and Topography
- Chapter 10 – Water Resources
- Chapter 11 – Ecological Communities and Wildlife
- Chapter 12 – Solid Waste
- Chapter 13 – Hazardous Materials

[7] References to the "Project Site" refer to any location where elements of the Proposed Project or off-site improvements will be constructed.

- Chapter 14 – Transportation
- Chapter 15 – Air Quality
- Chapter 16 – Greenhouse Gas Emissions and Climate Change
- Chapter 17 – Noise and Vibration
- Chapter 18 – Utilities and Infrastructure
- Chapter 19 – Use and Conservation of Energy
- Chapter 20 – Construction
- Chapter 21 – Permits
- Chapter 22 –Cumulative Impacts
- Chapter 23 – Unavoidable Adverse Impacts
- Chapter 24 – Growth Inducing Aspects
- Chapter 25 – Irreversible and Irretrievable Commitment of Resources
- Chapter 26 – Mitigation
- Appendices

Consistent with 6 NYCRR Part 617.9(b)(3), the DEIS Cover Sheet shall:

(i) identify the document as a DEIS;
(ii) identify the name of the Proposed Project;
(iii) identify the location of the Proposed Project;
(iv) identify the name and address of the Lead Agency and the contact information of a person at the agency who can provide further information;
(v) identify the names of individuals and organizations that prepared any portion of the DEIS;
(vi) identify the date the DEIS was accepted as complete with respect to the Final Scope by the Lead Agency; and
(vii) identify the date of the DEIS Public Hearing and the closing of the Public Comment Period.

5.2 ANALYSIS YEARS

The following analysis years (build years) will be included in the DEIS for the Proposed Project. Selection of analysis years is based on Micron's projected operations and construction employment and peak levels of activities:

- 2031 — Interim analysis year with Fab 1 in operation and Fab 2 under construction and anticipated completion of major off-site transportation improvements[8];

[8] The 2031 interim year analysis will evaluate any traffic, air quality, noise, and construction impacts for what is projected to be a peak of operations and construction employment. For other areas of impact analysis, the 2037 analysis year representing completion of Fab 1 and Fab 2 will be used to reflect the larger amount of project completion at that time.

- 2037 — Interim analysis year with Fab 1 and Fab 2 operating and construction of Fab 3 underway; and
- 2041 — All four Fabs in operation with on-going fit out of Fab 4.

Specific study areas for technical evaluations will be established and described in each chapter as appropriate (i.e., traffic intersections for analysis).

5.3 METHODOLOGIES FOR TECHNICAL ANALYSES

5.3.1 Technical Studies

The environmental review will include site-specific evaluations and studies of the full range of technical areas needed to comply with SEQRA. The following bullets identify the key environmental topics that could result in potential adverse impacts that will be studied. If environmental analysis reveals any significant adverse impacts, the document will identify any reasonable measures to minimize or mitigate those impacts. To the extent applicable, prior studies completed by OCIDA as part of its generic environmental impact statements will be referenced in the site-specific assessments completed as part of the current environmental impact statement.

- LAND USE, ZONING, AND PUBLIC POLICY: This analysis will assess land use, zoning, and public policy, including relevant New York State policy related to Green CHIPS. Zoning compliance of the Proposed Project will be assessed where project elements are proposed. The study area for the land use assessment will be one mile from the Micron Campus as well as, where relevant, any other areas where off-site development is proposed to occur. Public policy assessments will cover the Town of Clay, Town of Cicero, and Onondaga County, as appropriate. This analysis will also identify reasonably foreseeable development projects (projects known or likely to be built within the time horizon of the Proposed Project in the study area) based on information obtained from the Town of Clay, Town of Cicero, and Onondaga County. Changes in land use and/or zoning that may result from the Proposed Project, either directly or indirectly, will be described and evaluated. Consistency with any applicable local or regional policies, including the SMTC 2050 Long Range Transportation Plan, Onondaga County Comprehensive Plan, Onondaga County Climate Action Plan, Town of Clay Comprehensive Plan (if available; draft anticipated in March 2024), Town of Clay Northern Land Use Study, Town of Clay Local Waterfront Revitalization Program (LWRP) (for proposed modifications to the Oak Orchard WWTP), Town of Cicero Comprehensive Plan (if available; draft anticipated in April 2024), and City of Oswego LWRP (for proposed improvements to water supply infrastructure) will be evaluated.
- COMMUNITY FACILITIES/OPEN SPACE AND RECREATION: The police, fire, emergency, and community service providers within the Town of Clay and the Town of Cicero, and school district(s) that serve the Proposed Project will be identified and the impacts to each service will be analyzed with potential mitigation identified where significant adverse impacts are identified. The relevant Town of Clay and Town of Cicero departments will be consulted regarding the

existing staffing of emergency services; planned changes to staffing levels, service levels, equipment and/or facilities; and how those departments would respond to emergency situations at the site. The DEIS will assess potential impacts of the Proposed Project on staffing levels, service levels, equipment and/or facilities on- and off-site. The chapter will discuss separation distance between buildings, proposed fire access, and construction in accordance with applicable building and fire codes. The chapter will also describe and map existing parks and recreational resources on-site and within one mile of the Micron Campus, including walking paths and trails. Using information made available by the State/County/Town parks agencies, the assessment will include a discussion of planned changes to existing parks and recreational resources, and/or development of new parks and recreational resources anticipated to occur in the future without the Proposed Project. Potential direct and indirect impacts of the Proposed Project on parks and recreational facilities will be assessed. Operations of the Proposed Project may result in new residential populations that may generate additional school children. The DEIS will identify enrollment trends for the following school districts and will identify whether any of these school districts may require capacity enhancements: North Syracuse Central School District (CSD), Baldwinsville CSD, Liverpool CSD, Central Square CSD, and Phoenix CSD.

- SOCIOECONOMIC CONDITIONS: This analysis will examine the potential direct and indirect effects of the Proposed Project on population, housing, and economic activities within local and regional study areas. The local study area will be the Town of Clay, and the regional study area will include Onondaga County and surrounding counties in the Central New York region (the area from which most Micron employees would reside). The analysis will use a variety of data sources including the U.S. Census Bureau, New York State Department of Labor, Syracuse Metropolitan Transportation Council (SMTC), OCIDA, Empire State Development (ESD), and study area municipalities to present: existing demographic and workforce characteristics; changes that are expected to occur in the future independent of the Proposed Project; and the potential impacts of the Proposed Project. The impact assessment will consider changes in demographics and housing costs, property taxes, changes in labor supply and effects on existing businesses, and municipal costs generated by the Proposed Project. In addition to considering potential adverse effects, the analysis will describe anticipated social and economic benefits such as jobs, economic and workforce development opportunities, and municipal and state tax revenues. The DEIS will also describe Micron's efforts to work with community leaders through the Community Engagement Committee (CEC) (an entity convened by the Governor's Office, Micron, and local elected officials) to consider how project benefits can be distributed throughout the affected communities, including to communities of color or low-income communities. This is necessary to issue findings where agencies must balance social and economic considerations against environmental impacts that cannot be avoided or mitigated.
- ENVIRONMENTAL JUSTICE: The environmental justice study area will include all census block groups that are within or intersect a 10-mile radius of the Proposed Project as well as the area that

could be affected by changes in traffic patterns resulting from the Proposed Project. The environmental justice study area also encompasses the areas that would be affected by the off-site improvements. Pursuant to the Laws of New York (2022) ECL § 8-0113(2)(b), this analysis will consider the direct or indirect impacts of the Proposed Project on any identified low-income, minority, or "disadvantaged communities" (as defined in ECL § 75-0101(5)), including whether the Proposed Project may cause or increase a disproportionate pollution burden on those communities. This analysis will also follow Executive Order 12898 on Environmental Justice, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," Executive Order 14008, "Tackling the Climate Crisis at Home and Abroad," and Executive Order 14096, "Revitalizing our Nation's Commitment to Environmental Justice for All," to determine whether the Proposed Project will result in any disproportionate and adverse impacts on minority or low-income populations (in anticipation of consistency with federal guidelines as part of federal NEPA review or permitting for the Proposed Project). This analysis will also describe the public outreach undertaken to inform and involve minority and low-income populations who may be affected by the Proposed Project.

- HISTORIC AND CULTURAL RESOURCES: This analysis will document the Proposed Project's impact on historic and cultural resources consistent with Section 14.09 of the New York State Historic Preservation Act, and NYSDEC Commissioner Policy 42, "Contact, Cooperation, and Consultation with Indian Nations." An Area of Potential Effects (APE) (study area) will be defined for potential direct effects covering any location where construction would occur as well as a ¼-mile study area for potential indirect effects where construction activities would result in permanent above-ground features that could have the potential to indirectly affect historic architectural resources. The New York State Office of Parks, Recreation, and Historic Preservation (OPRHP) Cultural Resources Information System (CRIS) will be consulted to identify if there are any known listed or eligible structures within the APE. Additionally, any previously unidentified historic resources in the APE will be identified and evaluated. The evaluation will assess the potential of the Proposed Project to affect historic and cultural resources in the APE including buried archaeological resources through consultation with the New York State Historic Preservation Office (SHPO). It is anticipated that Section 106 of the National Historic Preservation Act compliance would be completed by a Federal agency as part of federal permitting for the Proposed Project.
- VISUAL IMPACTS AND COMMUNITY CHARACTER: This analysis will evaluate the Proposed Project for potential visual and community character impacts within a five-mile radius of the Micron Campus and ¼-mile from the Childcare Site and rail spur site (which are included within the five-mile radius of the Micron Campus) and ¼-mile from above-ground structures associated with the off-site improvements. This section of the DEIS will detail the existing aesthetic characteristics of the WPCP and surrounding area through descriptive text and representative photographs including a description of prevalent landforms and vegetative cover. Potential changes in views of the Proposed Project and its surroundings will be evaluated through comparisons of post-development conditions to the existing conditions and to the established

aesthetic character of the surrounding area. The analysis will identify and describe significant views into the existing WPCP from a range of representative publicly accessible vantage points and aesthetic resources and the preservation of existing vegetative buffers. The visual and architectural character of the Proposed Project, with special attention to the site lighting and off-site visibility of buildings and structures will be assessed. Assessment of impacts shall be based on the NYSDEC Program Policy document "Assessing and Mitigating Visual and Aesthetic Impacts" last revised December 13, 2019.

- GEOLOGY, SOILS, AND TOPOGRAPHY: This analysis will identify the major geologic and soil conditions within areas where construction of the Proposed Project and off-site improvements would occur, focusing on suitability of the property for development and stormwater management purposes, as applicable. The analysis will use information readily available from the United States Department of Agriculture's Natural Resources Conservation Service (e.g., soil survey) as well as the geotechnical investigation of the Micron Campus to complete this chapter. Any soils classified as prime agricultural soils will be identified. The assessment will also include a slope map and discussion of proposed modifications to site topography including categories of 0-10%, 10-15%, 15-25% and 25% or greater. A summary of the geotechnical investigation and cut and fill analysis for the Micron Campus will also be included.
- WATER RESOURCES: This analysis will address the potential impacts to water resources present on the Project Site or in any area impacted by off-site improvements, including groundwater, streams and wetlands. Groundwater levels will be described from geotechnical investigations. Wetlands will be delineated using the three-part standard outlined in the 1987 U.S. Army Corps of Engineers delineation manual, with the boundaries verified through the Jurisdictional Determination process. New York State regulated wetlands will also be delineated pursuant to the standards set forth at Article 24 of the Environmental Conversation Law and NYSDEC's freshwater wetlands regulations set forth at 6 NYCRR Part 663. Any water resources will be characterized and any potential adverse impacts to them will be assessed and potential mitigation identified. The DEIS will include an assessment of wetland functions and services. A physical and chemical characterization of Youngs Creek will be presented in the DEIS based on site reconnaissance. The Proposed Project's location with respect to any floodplain would also be documented. A Stormwater Pollution Prevention Plan (SWPPP) prepared pursuant to the NYSDEC *Stormwater Management Design Manual* will be prepared for the Proposed Project and included as an appendix to the DEIS. Potential impacts of stormwater generated by the Proposed Project on streams and wetlands will be described in the DEIS. While specific impacts and mitigation measures are not known at this time, impacts to streams and wetlands from the Proposed Project are likely. Stream and wetland mitigation could include on-site or off-site stream or wetland creation, restoration, or enhancements approved by USACE and NYSDEC. The wetland delineation report and draft conceptual compensatory mitigation plan will be included as an appendix to the DEIS.
- ECOLOGICAL COMMUNITIES AND WILDLIFE: This analysis will address the potential impacts to ecological communities (terrestrial and aquatic) and wildlife. The U.S. Fish & Wildlife Service

(USFWS) Information, Planning, and Consultation System (IPaC) and New York State Natural Heritage Program database will be queried for any known or potential threatened or endangered species within the study area, which includes the Project Site as well as any areas where off-site improvements would be constructed. This will include an assessment for the presence of, and potential impacts to, threatened and endangered species for all linear utility construction projects, new infrastructure, and the expansion of existing infrastructure (e.g., Oak Orchard Wastewater Treatment Plant and the Lake Ontario water filtration plant). Consultation with NYSDEC and USFWS to develop protocol for assessing presence of habitat for any identified species and protocol for assessing potential impacts to any identified species will be undertaken. Summaries of field studies will be included as an appendix to the DEIS. The DEIS will include characterization of wildlife within the Project Site based on literature review and field observations collected seasonally, including winter and migration seasons. Field studies will identify existing plant species that are invasive, non-native, or both invasive and non-native. Field studies will also include characterization of aquatic wildlife (biology) within Youngs Creek. Potential impacts to wildlife that will be considered in the DEIS include, but are not limited to, habitat fragmentation, noise, lighting, pollution, human activity and traffic. The DEIS will include a commitment to prepare and implement an invasive species management plan as a condition of site plan approval.

- SOLID WASTE: This analysis will describe the proposed generation of solid waste by the Proposed Project and how that material will be handled, stored, and transported. This analysis will describe Micron's proposed measures to reduce generation of solid waste through reuse or recycling. This analysis will describe Onondaga County's Solid Waste Management Plan and how the Proposed Project would comply. The analysis will consider the capacity of the existing waste management network and the ability to accept increased volumes generated by the Proposed Project as well as the anticipated population growth in the study area. Approximate timing of expansion of waste or recycling facilities, if needed, will be discussed.
- HAZARDOUS MATERIALS: The assessment of hazardous materials will include Phase I environmental site assessments compatible with American Society for Testing and Materials (ASTM) standards (E1527-21) to identify potential areas of concern within areas where construction of the Proposed Project would occur. All pertinent environmental databases will be reviewed for each off-site improvement area and site inspections will be conducted where feasible. Phase II environmental sampling would be conducted as needed and to the extent practicable. Any warranted remedial approaches for addressing identified or potential contaminated materials would be described. The chapter will identify any hazardous materials (including any chemical or petroleum bulk or other storage) that would be used, stored, transported, or generated by the Proposed Project and measures to protect against releases to the environment and impacts to human health, including worker safety. Hazardous wastes as identified in 6 NYCRR Part 371.4 that the Proposed Project may generate will be described, including the type of hazardous waste anticipated to be generated, estimated volumes, storage methods, disposal options, and how the facility will comply with hazardous waste

regulations at 6 NYCRR Part 370-373. Potential mitigation measures to be considered include an evaluation of methods to reduce generation of hazardous waste.

- TRANSPORTATION: Construction and operation of the Proposed Project can be expected to generate a substantial number of new vehicular trips on the local and regional highway network including local roads and I-81 and NYS Route 481. The DEIS will describe the existing transportation network, project conditions in the future with and without the Proposed Project and will assess potential impacts associated with the Proposed Project, such as changes to intersection and roadway capacity and Levels of Service as well as access to existing and anticipated uses along key highway corridors serving the Project Site. In consultation with NYSDOT, New York State Thruway Authority, and Onondaga County Department of Transportation, automatic traffic recorder (ATR), turning movement counts (TMC), and vehicle classification counts (VCC) will be conducted. See Appendix A for additional information on the locations of proposed traffic data collection. Analysis will consider the effects of Proposed Project operations and construction, including during times when both operations and construction overlap. The DEIS will also describe the site driveways, internal circulation roadways, and parking facilities that will be part of the Proposed Project and designed to accommodate peak employee demand and on-going construction activity. The regional travel demand model developed by the Syracuse Metropolitan Transportation Council (SMTC), the designated Metropolitan Planning Organization (MPO) for the area serving the Project Site, will be used to identify existing and projected travel patterns on area roadways throughout the region. A sub-area section of SMTC's model will be used to provide the analysis foundation for a Visum transportation planning model to assign routing through the regional study area. Micro-simulation modeling of roadways and intersections within the study area will be conducted with either Vissim or Synchro traffic analysis modeling tools to analyze potential impacts of the Proposed Project in coordination with NYSDOT. Additional evaluations of existing crash patterns related to addressing safety, signal functionality, signing and striping, roadway lighting, and ITS systems will be completed to propose future improvements designed to increase safety and service in the area. While specific impacts and mitigation measures are not known at this time, impacts to area roadways due to additional traffic (during construction and during operations) from the Proposed Project are likely. Traffic mitigation may include improvements to area roadways or construction of new roadways. The DEIS will identify any proposed traffic improvements and a timetable for their implementation.

  The Transportation assessment will also include an identification of, and assessment of potential impacts from the Proposed Project and off-site improvements to, transit systems operating within Onondaga County as well as the CSX freight rail operations using the railroad line adjacent to the Micron Campus.

- AIR QUALITY: This analysis will assess mobile source and stationary source air emissions from the Proposed Project, including air emissions from operation of the fabs as well as the increased vehicular traffic on the local and regional roads and highways. The mobile source air quality analyses will be performed in accordance with the procedures found in the NYSDOT *The*

Environmental Manual (TEM), the USEPA guidance on project-level analyses, and the FHWA's current guidance on Mobile Source Air Toxic (MSAT) analysis. Potential air quality effects associated with construction activities will also be assessed. Overall, transportation conformity is not applicable to projects in Onondaga County. Consistent with the Clean Air Act and the Final Transportation Conformity Rule, the assessment will determine whether any regional or localized impacts to air quality (beneficial or detrimental) will result from the Proposed Project, including whether the Proposed Project would cause or contribute to any new violation of any National Ambient Air Quality Standards (NAAQS) in any area or increase the frequency or severity of any existing violation of any NAAQS in any area, or delay timely attainment of any NAAQS or any required interim emission reductions or other milestones in any area.

The Proposed Project will require a stationary source air pollution control permit for the new manufacturing facilities. The air pollution control permit application will include evaluation of pollutants subject to NAAQS, New York air toxic control and ambient air requirements, and a Climate Leadership and Community Protection Act (CLCPA) greenhouse gas evaluation. The DEIS will summarize these detailed air quality modeling and impact assessment analyses that will be prepared to support the air pollution control permitting process and address potential impacts to human health from project related air emissions.

- GREENHOUSE GAS AND CLIMATE CHANGE: This analysis will estimate greenhouse gas (GHG) emissions from embodied carbon (carbon embodied in building materials) and construction activities and will describe anticipated facility design features that will minimize energy consumption and GHG emissions. This analysis will use the Motor Vehicle Emission Simulator (MOVES). Following the rule of reason (*Final Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in National Environmental Policy Act Reviews*), MOVES can be used for calculation of mobile source GHG emissions as inputs are available from use in the NAAQS related analysis. The GHG assessment will also follow applicable standards or guidance from the New York State CLCPA.
- NOISE AND VIBRATION: The Proposed Project will have the potential to increase noise levels based on construction activities and operation of the proposed facility. The increase in vehicular traffic is also likely to result increase in noise levels both on- and off-site. Noise standards as available from applicable local, state, and federal will be reviewed and used to establish impact thresholds and criteria. Traffic noise measurement and modeling methodology will use the NYSDOT TEM, Section 4.4.18, "Noise Analysis Policy and Procedures" (or "NYSDOT Noise Policy") and will use FHWA Traffic Noise Model (TNM) 2.5 to perform the traffic noise analyses. The assessment of potential noise impacts will also be conducted following the NYSDEC guidance document, "Assessing and Mitigating Noise Impacts" (DEP-00-1, Revised February 2, 2001).
- UTILITIES AND INFRASTRUCTURE: As noted in the Proposed Project description, there are substantial off-site infrastructure improvements that will be required to support the Proposed Project. The DEIS will identify and describe these required improvements and assess if the Proposed Project, with improvements (and acknowledging any measures that Micron can take to reduce

consumption of energy or water or generation of wastewater), has the potential to adversely affect the larger community in terms of potential impacts to water from operational usage, as well as sanitary sewer and industrial wastewater discharges. The analysis will also note connections to energy (electrical and natural gas) and telecommunications infrastructure, and capacity of those systems, as applicable.

- USE AND CONSERVATION OF ENERGY: This analysis will describe the Proposed Project's use and conservation of energy and measures that Micron intends to pursue to reduce energy consumption and use of renewable sources.
- CONSTRUCTION IMPACTS: This analysis will address impacts arising from the primary construction activities for the Proposed Project and off-site improvements, such as construction traffic on surrounding streets, noise and vibration, air quality (e.g., emissions from construction equipment), effects on adjacent historic structures, dewatering activities, and any hazardous materials that may be disturbed by construction activities. This assessment will also qualitatively discuss potential impacts associated with noise, air quality, water quality, and traffic impacts from construction of the Proposed Project.
- CUMULATIVE IMPACTS: The DEIS will consider any significant adverse impacts resulting from the incremental impact of the Proposed Project when added to other past, present, and reasonably foreseeable future actions. This chapter will identify the other projects or actions included in the assessment and summarize the cumulative impacts of the Proposed Project contained in each of the technical areas of evaluation.
- UNAVOIDABLE ADVERSE IMPACTS: This chapter will identify any impacts that are unavoidable and that cannot be reasonably mitigated.
- GROWTH INDUCING ASPECTS OF THE PROPOSED PROJECT: This chapter will focus on whether the Proposed Project will have the potential to induce new development within the surrounding area, including, but not limited to, White Pine South, an approximately 105-acre parcel south of the Micron Campus and NYS Route 31. As noted, one of the purposes of the Proposed Project will be to create both direct and indirect employment opportunities in Central New York. The DEIS will evaluate the environmental impacts that arise from such economic enhancements and new development.
- IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES: This chapter will include a discussion of any irreversible or irretrievable commitments of resources.
- MITIGATION: This chapter will summarize any mitigation measures required to avoid, minimize or mitigate identified significant adverse effects. Mitigation measures will be described in detail in the technical analyses. While specific impacts and mitigation measures are not known at this time, impacts to wetlands and area roadways due to additional traffic (during construction and during operations) from the Proposed Project are likely. Wetland mitigation could include on-site or off-site wetland enhancements approved by USACE and NYSDEC. Traffic mitigation could include physical enhancements to area roadways, railways, and/or

signal timing changes approved by the Federal Highway Administration (FHWA), NYSDOT or Onondaga County.

6 Agency and Public Coordination

Agency and public coordination are an integral component at all stages of planning and project development, including in this SEQRA scoping process.

6.1 AGENCY COORDINATION ACTIVITIES

The agency coordination process will include coordination with various Federal, State, and local agencies (see Table 2, "Preliminary List of SEQRA Lead, Involved, and Interested Agencies" and Table 3, "Preliminary List of Federal Agencies").

OCIDA, as the lead agency for the Proposed Project, has coordinated with Micron to identify Involved and Interested Agencies to be informed and involved throughout the environmental review.

An "Involved Agency" means "an agency that has jurisdiction by law to fund, approve or directly undertake an action. If an agency will ultimately make a discretionary decision to fund, approve or undertake an action, then it is an 'involved agency' notwithstanding that it has not received an application for funding or approval at the time the SEQR process is commenced. The lead agency is also an 'involved agency'" (6 NYCRR 617.2(t)).

An "Interested Agency" means "an agency that lacks the jurisdiction to fund, approve or directly undertake an action but wishes to participate in the review process because of its specific expertise or concern about the proposed action. An 'interested agency' has the same ability to participate in the review process as a member of the public" (6 NYCRR 617.2(u)).

TABLE 2 PRELIMINARY LIST OF SEQRA LEAD, INVOLVED, AND INTERESTED AGENCIES

Agency	Potential Role	Responsibilities
Lead Agency		
Onondaga County Industrial Development Agency (State environmental review lead)	Lead Agency	SEQRA leadership and coordination, establishing final entitlement of White Pine Industrial Park and coordination of land development agreements. Sale of OCIDA property to Micron. Potential property condemnation pursuant to New York Eminent Domain Procedure Law.
Involved and Interested Agencies		
New York State Department of Environmental Conservation	Involved Agency	Title V air quality permitting, wetlands jurisdictional determination and permitting, consultation related to threatened & endangered species, SWPPP permits for on-site and off-site land disturbance, modification to existing SPDES discharge for Oak Orchard WWTP, Section 401 water quality certification, hazardous petroleum and chemical bulk storage, and SPDES Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity.
New York State Empire State Development	Involved Agency	Approval of Excelsior Jobs Program Green Chips Project Application.
New York State Office of Parks, Recreation and Historic Preservation (OPRHP)	Involved Agency	Consultation related to potential impact to historic and cultural resources. OPRHP serves as the New York SHPO.
New York State Department of Transportation	Involved Agency	Consultation in traffic impact evaluation and mitigation measures to address adverse transportation impacts on state routes and interstate highways. Potential property condemnation pursuant to New York Eminent Domain Procedure Law.
Syracuse Metropolitan Transportation Council (SMTC)	Interested Agency	General consultation and approval actions to add to official regional transportation plans.
Onondaga County Department of Planning	Interested Agency	General consultation.
Onondaga County Dept. of Transportation (OCDOT)	Involved Agency	Consultation in traffic impact evaluation and mitigation on county routes. Potential property condemnation pursuant to New York Eminent Domain Procedure Law.
Town of Clay Planning Board	Involved Agency	Site Plan/Subdivision (re-subdivision of multiple parcels) approvals including MS4/SWPPP approval.
Town of Cicero Town Board	Interested Agency	Referral per General Municipal Law.
Town of Cicero Planning Board	Involved Agency	Subdivision Approval.
City of Syracuse	Interested Agency	General consultation.
New York Power Authority	Involved Agency	Proving high-load factor energy allocation and ReCharge expansion energy allocation.
New York State Energy Research Development Authority	Interested Agency	Collaborating on Excelsior Jobs Program Green Chips Project Application..
Onondaga County Department of Water Environment Protection	Involved Agency	Enlarging wastewater treatment capacity and extending sewer lines to the Micron Campus; Modification of OCDWEP's SPDES Permit by NYSDEC; issuance of an Industrial Wastewater Discharge Permit from OCDWEP to Micron Campus.
Onondaga County Water Authority	Involved Agency	Extending potable water lines to the Micron Campus.

TABLE 3 PRELIMINARY LIST OF FEDERAL AGENCIES

Federal Agencies	
US Dept. of Commerce	Approval of CHIPS Act funding application.
US Army Corps of Engineers (USACE)	Issue 404 Wetlands permit.
Federal Highway Administration	Consultation on the need and design of alterations to the national highway system and the interstate highway system to mitigate identified adverse traffic impacts.
U.S. Environmental Protection Agency	NEPA advisory role (i.e., Environmental Justice) and consultation related to the issuance of federally-delegated Clean Air Act and Clean Water Act permits to be issued by New York State Department of Environmental Conservation.
U.S. Department of Interior, Office of Environmental Policy and Compliance	Consultation related to Section 4(f) of the U.S. Dept. of Transportation Act.
U.S. Fish & Wildlife Service	Consultation on federal Endangered Species Act compliance.

Appendix A

TRAFFIC STUDY AREA

It is expected that traffic due to the Proposed Project, which includes construction workers, Micron employees, and community jobs induced by the Proposed Project, will be distributed throughout Onondaga County and beyond. The DEIS will focus on the immediate area around the Proposed Project and will examine potentially impacted traffic areas through regional, highway, and local analyses. The regional analysis will focus on the broader transportation network links within a roughly 30-minute driving commute of the proposed Micron Campus because this is the area that is expected to experience the largest increases in traffic volume. Within this area, all major highways in the greater Syracuse area are represented, and it is expected that trips coming from a greater distance to the Micron Campus, including from the City of Syracuse would be captured along these major access roadways. Additionally, the area allows other major projects in the area, such as the modifications to Interstate 81 (I-81) to be considered in the analysis.

The highway and local analyses will focus on the major highways, interstates, and intersections within a five-mile radius of the proposed Micron Campus. A 5-mile radius was chosen as this captures the locations most likely to be impacted by the Proposed Project.

The analyzed highway area includes sections of New York State Route 481/Interstate 481 (NY 481/I-481) and I-81. The analyzed local area will include 42 intersections along NY 31, United States Route 11 (US 11), Caughdenoy Road, Verplank Road, and other local streets.

The study area extents of the regional, highway and local study areas described above are shown in Figure A-1.

FIGURE A-1 TRAFFIC STUDY AREA

AUTOMATIC TRAFFIC RECORDER (ATR) COUNTS

Continuous 24-hour, two-way Automatic Traffic Recorder (ATR) counts will be collected at 190 locations within the New York State Department of Transportation (NYSDOT) jurisdiction, collected at 65 locations within the Onondaga County Department of Transportation (OCDOT), and collected at 36 locations within the New York State Thruway Authority (NYSTA) jurisdiction, each for a total of 7 days. The ATR counts will be collected by a third-party vendor using traffic data collection cameras or pneumatic tubes. ATR volume data summaries will be summarized in 15-minute intervals by location. The proposed ATR count locations, for each jurisdiction, are shown in Figure A-2.

TURNING MOVEMENT COUNTS (TMC)

Turning Movement Counts (TMCs) will be collected at 25 signalized and 7 unsignalized intersections within the NYSDOT jurisdiction and at 3 signalized and 6 unsignalized intersections within the OCDOT jurisdiction. A high-resolution video technology will be used to record vehicle classification TMC counts and crosswalk pedestrian volumes for two 5-hour time periods. The classified TMC counts will be compiled on two representative mid-weekdays (Tuesday, Wednesday, or Thursday) during the ATR count period nearest their location. The time periods chosen for reduction will be subject to the ATR results but is currently anticipated to be 5AM to 10AM and 3PM to 8PM. The number of conflicting pedestrians and bicyclists will be counted simultaneously with vehicle turning movement counts. Traffic recorded in the TMCs will be sorted into four classifications: Autos, Buses (including non-articulated buses, articulated buses and jitneys), Medium Trucks, and Heavy Trucks. The proposed TMC count locations are provided in Figure A-3.

VEHICLE CLASSIFICATION COUNTS (VCC)

29 ATR locations have been identified within the NYSDOT jurisdiction and 4 ATR locations have been identified within the NYSTA jurisdiction for Vehicle Classification Counts (VCCs). VCC shall be collected to provide detailed vehicle classification data over a 24-hour period during one of the three representative mid- weekdays (Tuesday, Wednesday, or Thursday). The VCC volume data summary will be summarized by location in 15-minute intervals. Traffic recorded for the VCCs will be sorted into four vehicle classifications: Autos, Buses (which would include non-articulated buses, articulated buses and jitneys), Medium Trucks, and Heavy Trucks. The proposed VCC ATR count locations are provided in Figure A-4.

FIGURE A-2 AUTOMATIC TRAFFIC RECORDER LOCATIONS

FIGURE A-3 TURNING MOVEMENT COUNT LOCATIONS

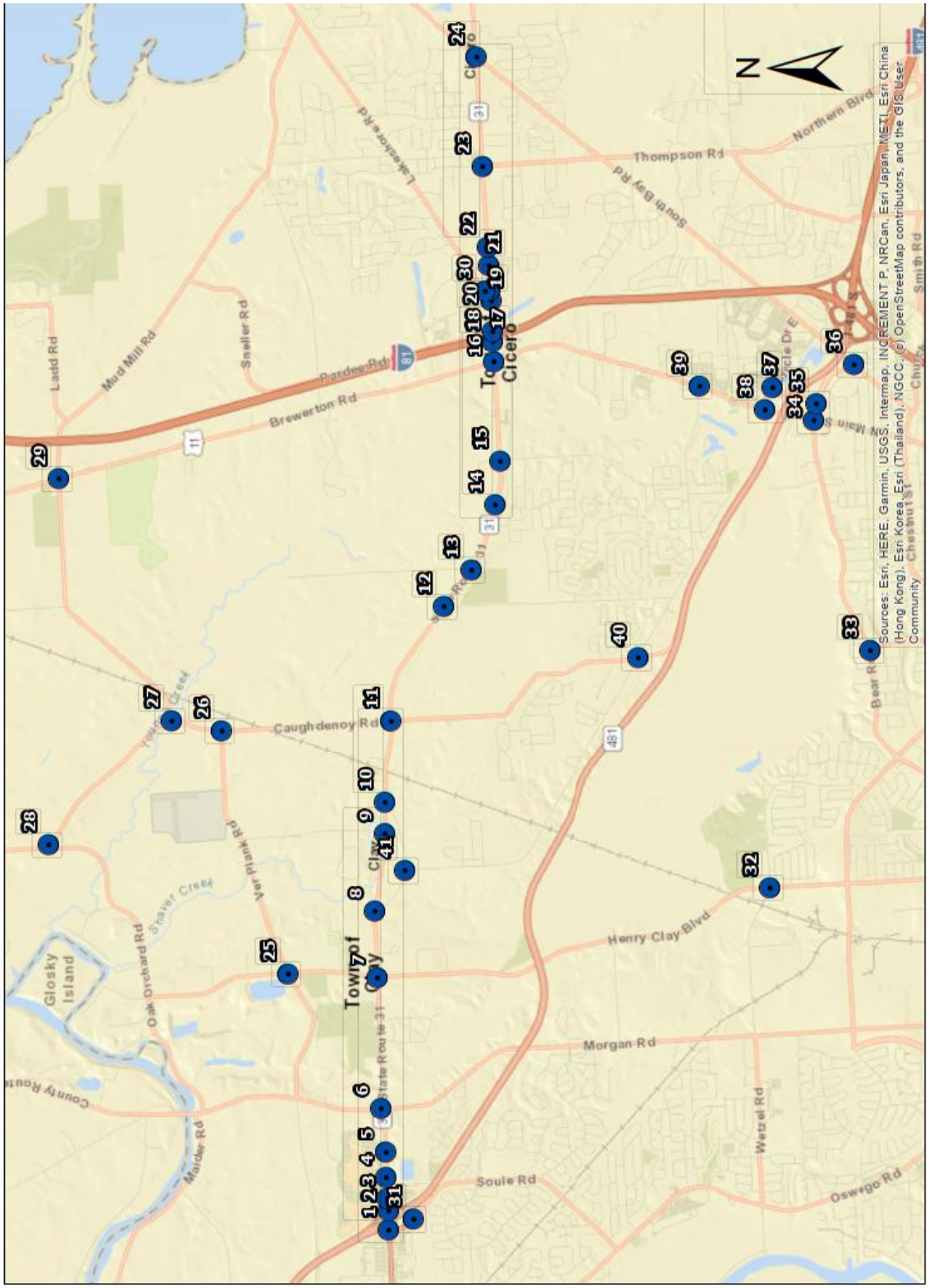
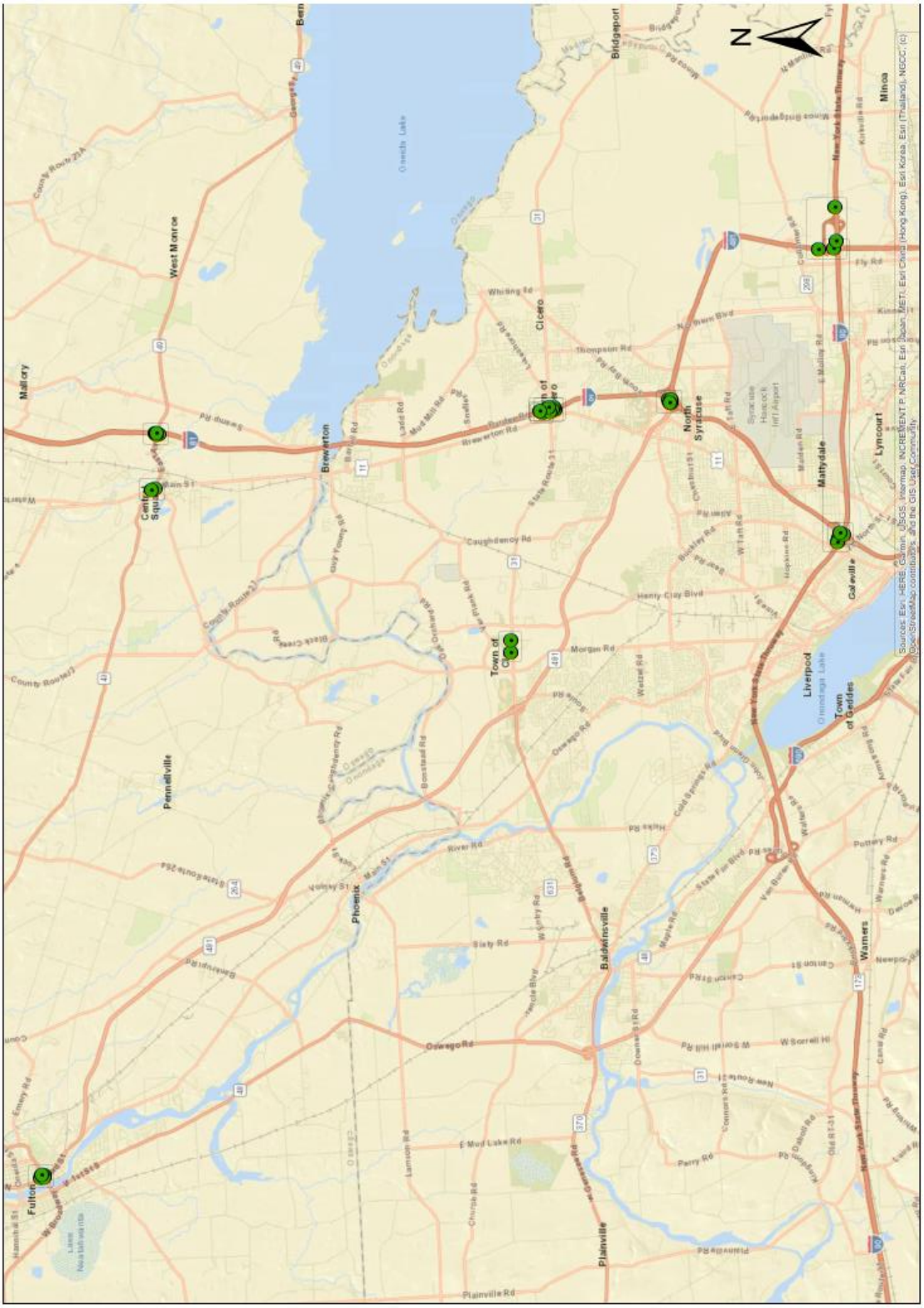


FIGURE A-4 VEHICLE CLASSIFICATION COUNT LOCATIONS



MICRON SEMICONDUCTOR FABRICATION
CLAY, NY

FINAL SEQRA SCOPE OF WORK

APPENDIX B:
RESPONSE TO COMMENTS

December 14, 2023

Contents

A. Introduction

Micron New York Semiconductor Manufacturing LLC (Micron), a Delaware limited liability company (LLC) and wholly owned subsidiary of Micron Technology, Inc., is proposing to construct a semiconductor manufacturing campus (the "Micron Campus") in the Town of Clay, New York, at the White Pine Commerce Park (WPCP), an approximately 1,400-acre industrial park controlled by the Onondaga County Industrial Development Agency (OCIDA). The Micron Campus, together with ancillary development on nearby properties, are referred to collectively as the "Proposed Project." Off-site energy (natural gas and electricity), telecommunications, water, and wastewater utility improvements also will be required and are referred to as "off-site improvements" necessary for the Proposed Project. Rail spur improvements adjacent to the site are also considered off-site improvements.

After receipt of an Application for Financial Assistance from Micron, OCIDA circulated a notice of intent to serve as State Environmental Quality Review Act (SEQRA) (6 NYCRR Part 617) (New York Environmental Conservation Law §§8-0101 et seq.) Lead Agency on July 28, 2023. No objections to that notice were received during the 30-day period commencing on that date. At its regular meeting of September 14, 2023, OCIDA issued a Positive Declaration, indicating the need for an Environmental Impact Statement (EIS), and scheduled a public scoping meeting held on October 11, 2023. The Positive Declaration and notice of public scoping meeting was published in the Environmental Notice Bulletin on September 20, 2023. Notice of the public scoping meeting was placed in The Post Standard (Syracuse.com) – a newspaper of general circulation serving the broader Clay, New York area. Project information and a Draft SEQRA Scope were posted on OCIDA's website (www.ongoved.com).

This document is an addendum to the Final SEQRA Scope. It identifies comments received through a public scoping process that ran from September 20, 2023, through October 31, 2023, including an in-person scoping meeting on October 11, 2023, at North Syracuse Junior High School.

Additional information on the Proposed Project and off-site improvements is contained in the Final SEQRA Scope.

B. Commenters on SEQRA Scope of Work

Individuals, elected officials, agencies, and organizations ("commenters") were able to submit comments during the SEQRA scoping process in a variety of ways:

- Oral testimony was received during a public scoping meeting on October 11, 2023; and
- Written comments were received via mail and e-mail through October 31, 2023.

The list below identifies all commenters who submitted comments during the comment period. In some instances, commenters used more than one method for submitting comments.

All comment submittals (written and oral) were reviewed and substantive comments were allocated to comment categories. This document provides responses by comment category. When multiple commenters submitted similar comments, the similar comments were paraphrased and summarized in the respective comment categories, with effort taken to retain the substance and tone of the comments received. Each comment response includes a numbered cross-reference to the corresponding comment submittal(s). Attachment 1 is the full transcript of the public scoping meeting. Attachment 2 contains all written comments received during the public comment period.

AGENCY COMMENTS

A. New York State Department of Environmental Conservation (NYSDEC) Region 7
B. United States Fish & Wildlife (USFWS)
C. Onondaga County Legislator Charles Garland
D. Town of Clay Supervisor Damien Ulatowski

ORAL TESTIMONY AT PUBLIC SCOPING MEETING

1. Frank Sciortino
2. Jay Riordan | Cicero Democratic Committee and candidate for Town Council
3. Donald Hughes | Sierra Club
4. John Przepiora | Greening USA, Inc.
5. Mary Scanlon
6. Diana Elliott
7. Jim Nistico
8. Denise Androvette | Sierra Club member
9. Debra DeSocio | Sierra Club member
10. Peter Wirth | Climate Change Awareness and Action
11. Brian Heffron

WRITTEN PUBLIC COMMENTS

12. Frank Sciortino

13. Debra DeSocio | Central and Northern NY Sierra Club
14. Steve Erwin | Trucking Association of New York
15. Nathan Gunn
16. Minchin G Lewis
17. Audrey Fletcher
18. Paul Goldsman
19. Onondaga Audubon
20. Peter Wirth
21. Jill Shultz
22. Mary Lou Bender
23. Craig Polhamus
24. Richard Ellenbogen | Allied Converters, Inc.
25. Roger Caiazza
26. Michelle Fanelli
27. Brian Cocca
28. Center for Public Environmental Oversight
29. Sara Pieklik
30. CNY Sustainability Coalition
31. Sierra Club
32. Michael Wolfson
33. Frank Fowler
34. Jim Baker
35. Steve Strauss | Empire State Passengers Association[1]

[1] Although this comment was received late, it was still considered by OCIDA and addressed in this Response to Comments.

C. Response to Agency Comments

New York State Department of Environmental Conservation (NYSDEC)

NYSDEC Comment 1: The DEIS should include a separate chapter addressing stormwater management which should include an evaluation of stormwater runoff (industrial and construction) and water quality. This section should identify the current requirements of NYSDEC' s State Pollutant Discharge Elimination System (SPDES) Permits, including the Construction General Permit (GP-0-20-001) and Multi-Sector General Permit (GP-0-23-001), and also evaluate how these requirements will be met. Sufficient information should be developed to identify the approximate size and location of necessary stormwater management measures and outfalls during and after construction.

Response: Although stormwater impacts and management will be evaluated in the DEIS, it will not be in a separate chapter but will be included in the water resources chapter as part of the assessment of the Proposed Project's impact on surface waters. The Scope indicates that a Stormwater Pollution Prevention Plan (SWPPP) will be prepared for the Proposed Project and described in the DEIS (it will also be included as an appendix).

NYSDEC Comment 2: Due to the scale of the project and the anticipated need to have large areas of soil exposed at any given time, the DEIS should evaluate the soil characteristics that may cause or contribute to erosion on site. A reference should be developed to identify any supporting information or reports that will be included as an appendix. The Stormwater Pollution Prevention Plan (SWPPP) needs to address hydraulic changes pre- and post-construction, and all changes to hydrology from filling in any wetlands, streams, and drainage ways on site. It is important to note that while NYSDEC's Region 7 Division of Water and the Town of Clay will jointly evaluate the required SWPPP prepared by the Applicant, responsibility for the approval of the SWPPP lies with the Town of Clay as per the municipal separate stormwater sewer systems (MS4) General Permit (currently GP 0-15-003).

Response: The SWPPP will be prepared pursuant to the New York State Stormwater Management Design Manual (SMDM) and included in Micron's site plan application to the Town of Clay. Any soil characteristics that may cause or contribute to erosion will be identified in the SWPPP. Measures to protect against erosion during construction will also be identified in the SWPPP.

NYSDEC Comment 3: Stormwater management should pay particular attention to Chapter 3 of the New York State Stormwater Management Design Manual (SMDM) and its focus on Stormwater Management Planning. The SMDM requires a specific planning process when addressing stormwater management on a project site and guides the planner through steps to maintain pre-development natural hydrologic conditions of the site by application of environmentally sound development principles, such as green infrastructure, as well as treatment and control of runoff discharges from the site.

Response: Comment noted.

NYSDEC Comment 4: Identify additional potential development alternatives considering design and configuration changes to avoid or minimize potential impacts to wetlands, streams, and other sensitive natural resources. The area east of Burnett [sic] Road contains a large, forested wetland complex and portions of Youngs Creek; additional consideration should be given to avoiding development in this area.

Response: The Scope has been revised to indicate that the DEIS will consider two additional alternatives: 1) an alternative that evaluates the Proposed Project without access to and from US Route 11; and 2) an alternative that evaluates different internal configurations of Micron's proposed Fabs to determine to what extent impacts to wetlands, streams, and other natural resources on the Micron Campus can be avoided or minimized.

NYSDEC Comment 5: The DEIS should include a discussion of potential alternatives and mitigation that could reduce energy and fuel demands during construction and the long-term operation of the facility, including renewable energy sources.

Response: The Scope has been revised to indicate that the DEIS will include a summary of other alternatives previously considered but determined not to be feasible, including an alternative that relies exclusively on alternative sources of energy (beyond use of renewable energy for purchased electricity). The DEIS will also assess the proposed use and conservation of energy (including provisions for renewable energy sources). The DEIS will include an evaluation of energy impacts from construction and long-term operation of the facility, along with potential mitigation of those impacts.

NYSDEC Comment 6: Natural resource impacts associated with off-site infrastructure improvements (linear utility construction projects, pump stations, water intake and associated improvements, wastewater plant) should be evaluated and described in the DEIS, including the presence of, and impacts to, wetlands, waterbodies, and threatened and endangered species for. Horizontal drilling should be discussed and considered.

Response: The Scope has been revised to clarify that the DEIS will include an assessment of off-site improvements in each of the relevant subject areas, including natural resources. Proposed mitigation methods will be discussed.

NYSDEC Comment 7: The DEIS should include a table summarizing the amounts and types of wetlands, streams, and other waterbodies on the Proposed Project site, and those associated with the previous comment. The table should also quantify the impacts on these resources for phases 1 and 2, and the cumulative of both phases.

Response: Comment noted.

NYSDEC Comment 8: The DEIS should include a complete discussion on the avoidance and minimization of wetlands impacts, which are the first two analyses required prior to considering

wetland mitigation under implementing regulatory programs for Section 404 of the Clean Water Act and Article 24 of the New York State Environmental Conservation Law.

Response: The Scope has been revised to indicate that the DEIS will consider an alternative that evaluates different internal configurations of Micron's proposed Fabs to determine to what extent impacts to wetlands, streams, and other natural resources on the Micron Campus can be avoided or minimized.

NYSDEC Comment 9: The DEIS should include and discuss wetland creation and restoration prior to consideration of enhancement. Please see attachment B, which discusses DEC wetland mitigation requirements. This information should be discussed in the DEIS.

Response: The Scope has been revised to note that creation and restoration of wetlands would be considered prior to consideration of enhancement.

NYSDEC Comment 10: The DEIS should include the Proposed Project's onsite wetland delineation and compensatory mitigation package being developed by Micron and its consultants.

Response: The Scope has been revised to indicate that the wetland delineation report and draft conceptual compensatory mitigation plan will be included as an appendix to the DEIS.

NYSDEC Comment 11: The DEIS should address and discuss stream mitigation that will be completed to offset impacts to waterbodies on the Proposed Project site.

Response: The Scope has been revised to clarify that potential impacts (and any required mitigation) to streams will be assessed as part of the water resources assessment.

NYSDEC Comment 12: The DEIS should include an assessment of the functions and benefits of all the streams and wetlands on the Proposed Project site.

Response: The Scope has been revised to indicate that the DEIS will include an assessment of wetland functions and services.

NYSDEC Comment 13: The Acoustic Bat Survey Report and the Grassland Breeding Bird Survey Report, prepared for Micron New York by AKRF Inc. should be discussed and appended to the DEIS. The DEIS should reference Grass Land Bird Mitigation Requirements (attachment to comment letter)

Response: The Scope has been revised to indicate that the field reports for work conducted in Spring 2023 on bat habitat and grassland birds will be included as appendices to the DEIS.

NYSDEC Comment 14: The natural resource analysis of the Proposed Project should also include details on wildlife that likely use the site based on habitat types and any ancillary observations made by on-site natural resource consultants. The DEIS should discuss the impacts on the species associated with converting these habitats to an industrial site.

Response: The Scope indicates that the DEIS will include discussion of natural resources, including wildlife habitats, potential impacts and proposed mitigation.

NYSDEC Comment 15: The C-Class Youngs Creek (Water Index Number ONT-66-11-14), located east of Burnett [sic] Road, is continuously connected to the Oneida River (Water Index Number ONT-66-11) with no known impassable barrier. The site plan OCIDA included with the draft scope shows portions of the Proposed Project filling Youngs Creek. The DEIS should include information on any portions of Youngs Creek being filled or "culverted" and discuss how water in the stream will be managed.

Response: The Scope has been revised to note that field studies describing physical, biological, and chemical characteristics of Youngs Creek will be conducted as part of the DEIS.

NYSDEC Comment 16: A biological survey of Youngs Creek on the Proposed Project site should be completed to assess fish species composition in this stream and detail the effects on these species associated with any impact on the stream. The analysis should consider upstream and downstream impacts, and evaluate upstream and downstream instream habitat enhancement projects to mitigate potential onsite impacts.

Response: The Scope has been revised to include a requirement for field studies to characterize aquatic wildlife within Youngs Creek.

NYSDEC Comment 17: The DEIS should include further details to identify how surface and subsurface water resources will be evaluated. It should address potential on-site and off-site flooding and impacts to surface and groundwater, and an evaluation of impacts on surface water volume, including streams, wetlands, and drainage ways, and groundwater elevations during and after construction. Impacts to groundwater levels, quantity, and quality from filling wetlands should be assessed, including a groundwater hydrologic and hydraulic analysis of the impacts of placing fill in watersheds contributing to the project area. Special consideration should be given to filling wetlands, drainage areas, Youngs Creek, and its tributaries, including unmapped streams, and evaluate how fill may affect the surface and subsurface water flow and drainage patterns in the area and surrounding properties. Consider factors such as increased surface runoff, potential water flow redirection, and impacts on nearby waterbodies or stormwater management systems. Portions of this information are also needed as part of the SWPPP review. Points for consideration in the hydrologic/hydraulic analysis were identified.

Response: The Scope has been revised to clarify that the DEIS will identify both surface and subsurface water resources and impacts to those resources, including from construction, and potential mitigation of those impacts. See also Responses to NYSDEC Comments 1, 15, 16.

NYSDEC Comment 18: The DEIS should discuss how drainage will be maintained and how potential flooding would be mitigated.

Response: The DEIS will include the requested discussion.

NYSDEC Comment 19: NYSDEC supports documenting floodplains and recommends re-evaluating and updating floodplain mapping for any significant grade changes.

Response: Comment noted.

NYSDEC Comment 20: Dewatering of groundwater during construction should be discussed including best management practices that may be employed to avoid and mitigate impacts to the resource.

Response: The DEIS will include the requested discussion.

NYSDEC Comment 21: Evaluate the impact potential population growth associated with this development will have on the management of solid waste and recyclables, as well as the anticipated amount of waste and recyclable material generated by Micron. Onondaga County law requires that waste generated within the County be disposed of at the Onondaga County Resource Recovery Waste to Energy Facility. Consider the existing waste management network's capacity, and ability to accept increased volumes associated with the Proposed Project, and the potential for population growth. If the evaluation includes an expansion of any waste or recycling facilities or the use of the Onondaga County landfill, approximate dates of the expansion(s) should be included that correspond with Micron's expected buildout.

Response: The Scope has been revised to indicate that the DEIS will address issues of solid waste generation from the Proposed Project, as well as plans by Onondaga County to manage solid waste and recyclables as a result of economic development related to the Proposed Project. The Scope has been revised to provide additional detail on how the capacity of the existing waste management network would be affected by the Proposed Project.

NYSDEC Comment 22: The DEIS should include a discussion of hazardous waste, listed in 6 NYCRR Part 371.4, that the Proposed Project may generate, including type of hazardous waste anticipated to be generated, approximate volumes, storage methods, disposal options, and how the facility will operate following hazardous waste regulations found at 6 NYCRR Part 370-373.

Response: The Scope has been revised to clarify that the DEIS will include a description of the generation, storage, and disposal of hazardous wastes identified in 6 NYCRR Part 371.4.

NYSDEC Comment 23: Mitigation considerations for solid waste should include an evaluation of processing methods and chemicals used in the manufacturing process to determine if alternative methods could reduce the generation of hazardous waste.

Response: See Responses to NYSDEC Comments 21 and 22.

NYSDEC Comment 24: The air quality modeling included in the DEIS should include an air quality impact evaluation or dispersion modeling analysis for a variety of emission sources including major sources, air toxic sources, and any sources that appear likely to contravene an applicable ambient air quality standard. NYSDEC developed the DAR-10 guidance document, NYSDEC Guidelines on Dispersion Modeling Procedures for Air Quality Impact Analysis. The applicant should submit a modeling protocol to DEC for approval prior to performing any dispersion modeling analyses.

Response: The Scope notes that a stationary source air pollution control permit for the new manufacturing facilities will be required. The air pollution control permit application will include evaluation of pollutants subject to the National Ambient Air Quality Standards (NAAQS), New York air toxic control and ambient air requirements, and a Climate Leadership and Community Protection Act (CLCPA) greenhouse gas evaluation. The Scope indicates that the DEIS will summarize these detailed air quality modeling and impact assessment analyses that will be prepared to support the air pollution control permitting process.

NYSDEC Comment 25: If the impact assessment includes a private, pre-construction, on-site air quality monitoring network, the plan will need prior NYSDEC approval. Guidance for the establishment, maintenance, and reporting requirements of private air monitoring networks can be found in DAR-2, 6 NYCRR Part 231-12.3 and Appendix B to 40 CFR Part 58.

Response: Comment noted.

NYSDEC Comment 26: If one or more applicable requirements or proposed compliance certification sections require the use of a continuous emissions monitoring (CEM) system, the analysis should develop and include a continuous emissions monitoring plan. The analysis should include applicable RACT/BACT/LAER demonstrations, as well as appropriate Emission Reduction Credit (ERCs) demonstrations and analysis.

Response: See Response to NYSDEC Comment 24.

NYSDEC Comment 27: The analysis should include, as applicable, a Toxic Impact Assessment and Environmental Rating Demonstration pursuant to the requirements of 6 NYCRR Part 212. DEC developed DAR-1: Guidelines for the Evaluation and Control of Ambient Air Contaminants Under Part 212.

Response: See Response to NYSDEC Comment 24.

NYSDEC Comment 28: NYSDEC recommends that a copy of the Air Title V permit application and supporting information be appended to the DEIS to the extent it is available.

Response: Information supporting the Air Title V permit application will be provided as an appendix to the DEIS.

NYSDEC Comment 29: The Proposed Project is subject to the mandates of the Climate Leadership and Community Protection Act (CLCPA) and therefore requires an analysis pursuant to Section 7(2) of CLCPA. Please see DEC Program Policy DAR-21 for guidance on preparing the CLCPA analysis.

Response: The DEIS will include an assessment of GHG emissions associated with the Proposed Project and will assess compliance with Section 7(2) of the CLCPA.

NYSDEC Comment 30: NYSDEC recommends evaluating and quantifying GHG and co-pollutants of mobile emissions sources during construction and when the plant is in operation. Additionally, alternatives and mitigation that reduce GHG and co-pollutants from mobile emission sources must be considered.

Response: The Scope indicates that the DEIS will assess the Proposed Project's potential emission of GHGs and the measures proposed to avoid, minimize, and mitigate any impacts.

NYSDEC Comment 31: Among other CLCPA requirements, the Proposed Project will result in an actual increase in greenhouse gas (GHG) emissions, including both direct and indirect GHG emissions. Therefore, the DEIS should include a discussion of the justification for the Proposed Project, along with the technical and economic feasibility of any alternatives or GHG mitigation measures to address the increase. Any such mitigation should take place at the New York facility or in the immediate area, rather than in other cities or out of state. NYSDEC offered examples of potential alternatives and mitigation measures.

Response: The Scope indicates that the DEIS will include an assessment of GHG emissions associated with the Proposed Project and will assess compliance with Section 7(2) of the CLCPA.

NYSDEC Comment 32: The discussion of natural resource impacts for constructing utility connections, such as clean water, wastewater, electric, gas, telecommunications, and roadway expansions should be referenced in the Utilities and Infrastructure section of the DEIS.

Response: The Scope has been revised to clarify that the DEIS will include assessment of all off-site improvements (water, wastewater, electricity, natural gas, telecommunications) in each of the relevant subject areas, including natural resources.

NYSDEC Comment 33: NYSDEC recommends developing a phasing plan, which coincides with Micron's incremental expansion, for the buildout and expansion of all utility upgrades required to meet the Proposed Project's anticipated demands. The phasing plan should include sewer extensions, pumping systems, new clean water source(s) and distribution systems, wastewater plant upgrades, and gas and electricity distribution infrastructure.

Response: The Scope indicates that the DEIS will describe the proposed phasing plan of off-site improvements required to meet the Proposed Project's anticipated demand.

NYSDEC Comment 34: The DEIS should also provide adequate information to demonstrate that all utility upgrades will be constructed, operational, and sufficient to accept waste from or provide service to the Proposed Project. Please see Attachment D, which lists the typical details DEC reviews for a sewer extension and force main approvals.

Response: See Response to NYSDEC Comment 33.

NYSDEC Comment 35: Provide adequate details on the Proposed Project's wastewater loading, flow, and discuss the on-site wastewater pretreatments.

Response: The Scope has been revised to indicate that the Project Description chapter of the DEIS will include additional description of Micron's proposed use and management of water and chemicals (including on-site pretreatment) and Micron's proposed generation and management of various waste streams and how best management practices will be implemented.

NYSDEC Comment 36: The DEIS should provide details on the design specification of the new lake water intake structure and intake screening and assess potential fish impingement mortality and entrainment, and additional measures, including specific equipment, to avoid and minimize fish impingement and entrainment.

Response: The DEIS will identify and describe required infrastructure improvements, including, to the extent known, information on the design, and potential impacts to environmental resources from construction of those improvements.

NYSDEC Comment 37: The DEIS should consider and include details and a summary of water conservation and reuse practices to mitigate water demands.

Response: The Scope has been revised to indicate that the Project Description chapter of the DEIS will include additional description of Micron's proposed use and management of water (including on-site pretreatment) and how best management practices will be implemented to conserve water usage.

NYSDEC Comment 38: The DEIS should include a summary of any investigated and considered alternative water sources.

Response: The Scope has been revised to indicate that the DEIS will describe any previous studies conducted by Onondaga County Water Authority on alternative sources of water.

NYSDEC Comment 39: Water withdrawals within the Great Lakes Basin are subject to the requirement and provisions of the Great Lakes-St. Lawrence River Basin Water Resource Compact. The DEIS should discuss and address how the proposed water withdrawal and use is consistent with the Compact and all state, local, and federal laws.

Response: In accordance with NYSDEC rules and guidance there is an exception for public water supply systems from the Great Lakes-St. Lawrence River Basin Water Resources Compact as enacted in ECL Article 21 Title 10. The DEIS will include discussion regarding water withdrawal, including applicable permits and regulations.

NYSDEC Comment 40: NYSDEC recommends renaming the DEIS chapter as "Use and Conservation of Energy."

Response: The Scope has been revised to indicate that the chapter will be named "Use and Conservation of Energy."

NYSDEC Comment 41: The DEIS should contain a description of energy sources to be used during both construction and operational phases of a project, including accurate estimates of demand or consumption. Discuss alternatives and mitigation that could reduce energy and fuel demands during construction and long-term operation.

Response: The DEIS will assess the Proposed Project's energy requirements and will include a discussion of the use of alternative energy sources and energy conservation. If significant adverse impacts with regard to energy resources are identified, mitigation of such impacts will be identified.

NYSDEC Comment 42: The 2018 amendments to SEQR regulations require all New York State agencies to evaluate such GHG impacts in a new section specifically dedicated to climate change and its impacts. Proposed energy conservation measures that go beyond the minimum requirements of the State Energy Conservation Construction Code (9 NYCRR Parts 7810 through 7816) should be specifically identified, such as LEED or Energy Star. Please refer to Chapter 5, Section C, Item 44 on page 123 in the SEQR Handbook. The information and energy conservation measures discussed in this section may be applicable and cross-referenced to the Greenhouse Gas Emissions and Climate Change chapter.

Response: Comment noted.

United States Fish & Wildlife Services (USFWS)

USFWS Comment 1: Section five of the Scope provides general topics and specific technical studies proposed to inform the DEIS. We note that while the list of resources includes wetlands, floodplains, and vegetated habitat, there is no mention of an analysis of the project's effects on wildlife. The Scope should be amended to include literature review and field observations of wildlife using the site at all times of the year, including winter and migration seasons. Potential impacts to wildlife that should be considered in the DEIS include, but are not limited to, noise, lighting, pollution, human activity and traffic. Potential loss of habitat and fragmentation appear to be substantial and will negatively affect many species. This information should be included in the Scope and documented in the DEIS.

Response: The Scope has been revised to divide the "Natural Resources" chapter into separate "Water Resources" and "Ecological Communities & Wildlife" chapters to

provide clarity regarding how water resources (groundwater, streams, and wetlands) and habitat for wildlife will be assessed in the DEIS. The DEIS will assess potential impacts on wildlife, including where appropriate, literature review and field observations collected seasonally, including winter and migration seasons. This assessment will evaluate potential impacts associated with noise, lighting, pollution, human activity and traffic as well as from the potential loss of habitat and fragmentation.

USFWS Comment 2: Regarding site vegetation, the Scope should include mapping of vegetation communities, surveys to document endemic plants and identification of rare species and communities as well as invasive plant species. Information should also be provided on the present and future threats of spreading invasive plants to and from the site. An invasive species management plan should be developed for the site in consultation with NYSDEC.

Response: The Scope has been revised to enhance the description of how the DEIS will address ecological communities and potential impacts of the Proposed Project. The DEIS will include mapping of vegetation communities, surveys to document endemic plants and identification of rare species and communities as well as invasive plant species. The DEIS will also assess present and future threats of spreading invasive plants to and from the site.

USFWS Comment 3: The information gathered using the Service's Information, Planning and Consultation (IPaC) system should be included in the DEIS along with a description of studies completed thus far. For example, the Service and the Micron team, along with staff from the NYSDEC, have discussed studies of two endangered bat species believed to be using the site.

Based on information in IPaC, the project is within the range of the federally listed endangered Indiana bat (Myotis sodalis) and the federally listed endangered northern long-eared bat (Myotis septentrionalis). Accordingly, Micron initiated acoustic surveys of these species at sample locations on the site. A summary of the survey results should be included in the DEIS. The documented call locations should be analyzed in regard to tree removal and habitat modification. This information should inform what the potential effects to these listed species may be and what, if any, measures could be implemented to mitigate adverse effects. The Service will continue to work with Micron and other partners in evaluating the project's effects on federally listed species. Since federal agencies will be funding, permitting and/or approving aspects of the project, section 7 consultation under the ESA will be required.

Response: The Scope has been revised to indicate that summaries of field studies will be included as an appendix to the DEIS. The Scope indicates that the USFWS IPaC system will be queried.

USFWS Comment 4: The Scope indicates that wetlands will be identified and delineated in consultation with the US Army Corps of Engineers. We understand that most of that field work has been completed. However, the Scope does not indicate if or how wetland functions and services will be evaluated and reported. This information is important in understanding the habitat and social values (flood flow attenuation, sediment and nutrient retention, pollution abatement, etc.) these

areas provide. Documentation in the DEIS is also important to understand what is being potentially lost from the project and what mitigation is required of Micron to replace these functions and services. In line with section 404 of the Clean Water Act, the project design must avoid, minimize, and mitigate potential impacts to aquatic resources to the greatest extent practicable. This review approach should be added to the Scope.

Response: The discussion of wetlands has been revised in the Scope to make clear that a discussion of wetland function and services will be included in the DEIS along with a discussion of Section 404 permitting factors.

USFWS Comment 5: Wetland mitigation is mentioned in the Scope as potentially occurring on and off site. While the extent of potential wetland impacts is not yet known, it appears to be a substantial amount based upon the extent of wetlands found on the 1400-acre site. Mitigation for unavoidable impacts should occur within the same watershed (as defined by the 8-digit hydrologic code) and be as close to the impacted wetlands as practicable. Micron has inquired about mitigation options including the purchase of credits at third party wetland mitigation banks or in-lieu fee sites. The Service does not support the complete purchase of available credits for the Micron project as that reduces the effectiveness of the mitigation program.

Response: Comment noted.

Onondaga County Legislator Garland

Comment 1: "I want to be sure that our collective efforts ensure a pathway out of poverty for all of the residents I represent."

Response: Comment noted.

Comment 2: Raised concerns about the potential for increased traffic on highways and roads in and around the project due to population growth and workforce commutes.

Response: In coordination with the New York State Department of Transportation (NYSDOT), Onondaga County, the Town of Clay, and the Town of Cicero, and as indicated in the Scope, the DEIS will include an assessment of traffic conditions at the regional and local levels. Input from the Syracuse Metropolitan Transportation Council (SMTC) is also being provided. The Scope has been revised to include additional detail on how the traffic and transportation study area has been defined through consultation with NYSDOT and SMTC and in recognition of modifications to I-81.

Comment 3: Raised safety concerns relative to increased traffic and questioned what improvements would be made.

Response: See Response to Legislator Garland Comment 2.

Comment 4: Questioned the study area for traffic and whether additional areas to the south should be included.

Response: See Response to Transportation Comments 1-2.

Comment 5: "How is traffic going to be addressed as the scoping of the project goes further and further and brings not only Micron employees to our -- to our boundaries, but also those support industries that are so vital to that operation and will be instrumental in the growth of our community."

Response: See Response to Growth Inducing Impacts 2.

Town of Clay

Comment 1: The DEIS should include the reason or purpose for the chimneys or stacks (163 ± ft), and the emissions associates with those stacks.

Response: The Scope indicates that the DEIS will include analysis of impacts associated with construction and operation of the facility, including visual impacts and air emissions impacts.

Comment 2: Safeguards should be established for the discharges into the rivers, including testing, to confirm the discharges are safe and not contaminating the receiving waters.

Response: Comment noted.

Comment 3: Assurances should be made regarding the safe conveyance of wastewater from the facility to the Oak Orchard treatment plant.

Response: Comment noted.

Comment 4: The DEIS should address not only the traffic impacts to the Town from Micron employees but also those from the support industries.

Response: The DEIS will include a full analysis of traffic impacts, including growth-inducing impacts.

D. Response to Public Comments

Purpose and Need

Comment 1: Many commenters expressed overall support of the Proposed Project and noted the many positive impacts, including economic impacts, it will have in the Town, County, region and State. (1, 14, 15 16, 17, 33, 34, 35)

Response: Comment noted.

Project Alternatives and Description of the Proposed Project

Comment 1: One commenter stated that "Micron, DEIS needs to greatly expand its range of alternatives." (30)

Response: See Responses to NYSDEC Comments 4-5.

Comment 2: Comments asked why Micron needs to site the Proposed Project in Clay. (26)

Response: See Response to NYSDEC Comment 4. The Scope indicates that the DEIS section on alternatives will detail the analyses previously performed for the proposed location of the Proposed Project and other locations in New York State and Onondaga County.

Comment 3: Commenters suggest that the Draft Environmental Impact Statement should include an alternative to add a Combined Cycle generating plant on the Micron Property. (24, 25)

Response: See Response to NYSDEC Comment 5.

Comment 4: Comments requested a consideration of alternative energy sources, including the use of renewable energy. (3, 10, 13, 20, 21, 26, 29, 30, 31,)

Response: See Response to NYSDEC Comment 5.

Comment 5: "Careful attention must be paid to ensuring the energy at the plant will be fossil free." (10)

Response: As outlined in the Scope, the DEIS will assess the Proposed Project's energy needs, including its potential use of fossil free energy.

Land Use, Zoning, & Public Policy

Comment 1: The Sierra Club and CNY Sustainability Coalition commented "Why isn't the city of Syracuse explicitly included here? Seems to be a major omission." (30, 31)

Response: While changes to land use, zoning, and public policy within the City of Syracuse will be unlikely given the distance between the City of Syracuse and WPCP, the Scope indicates that the DEIS will address regional issues of economic activity and how that might affect land use within the surrounding area, including the City of Syracuse. See also response to *Other* Comment 11.

Community Facilities, Open Space & Recreation

Comment 1: A number of comments note that open space and the enjoyment of outdoor activities (e.g., birding) was important and should be preserved. Numerous studies have demonstrated the benefit to humans of having green spaces nearby. (19, 26, 29)

Response: The Scope indicates that the DEIS will consider potential direct and indirect impacts of the Proposed Project on parks and recreational resources as well as open space.

Comment 2: The Sierra Club and CNY Sustainability Coalition commented that "This section is poorly organized and deserves to be rewritten to define more clearly what are the parameters to be studied and analyzed relevant to police, fire and other emergency services; schools; parks and rec facilities. Absent from the community facilities most notably is the health care and hospital system." (30, 31)

Response: The Scope has been revised to provide greater clarity on the study areas that will be used for each of the technical areas of analysis, including for community facilities and services and parks and recreational resources. Because the technical areas are related to variable conditions, there will necessarily be a variety of study areas defined for each area. Note, however, that an assessment of impact on health care and the hospital system is not contemplated as it is beyond the scope of the environmental review of the Proposed Project.

Comment 3: "Onondaga County health care facilities, in particular our hospitals, were short-staffed even before the Coronavirus pandemic. Waiting times and bed shortages were unfortunately highlighted by Covid-19 cases and have continued. What improvements in the healthcare system are proposed to remedy these shortcomings in view of the expectation of potentially thousands of new residents to work at and/or serve the Micron plant." (32)

Response: See Response to Community Facilities, Open Space & Recreation Comment 2.

Socioeconomic Conditions

Comment 1: The public comments raised questions about the future workforce. (16, 26)

Response: Micron has been engaged in an extensive discussion with the Community Engagement Committee (CEC) (an entity convened by the Governor's Office, Micron, and local elected officials) on how the economic benefits of Micron's Proposed Project will be experienced within the broader community, including, but not limited to, the City of Syracuse. Micron has been working with regional stakeholders to identify and enhance workforce development programs in anticipation of the thousands of jobs that the Proposed Project will generate. The draft Scope included estimates of projected Micron employment and the general qualifications required for different categories of jobs. The Scope has been revised to include a new sub-heading for this text: "Proposed Project Employment."

Comment 2: Some comments requested a discussion of the anticipated impacts on property taxes. (1, 3, 5, 26,)

Response: SEQRA does not require consideration of purely economic impacts. Notwithstanding, the Scope indicates that the DEIS will consider changes in demographics and housing costs, changes in labor supply and effects on existing businesses, and municipal costs generated by the Proposed Project. As part of

this, anticipated impacts to municipal tax levies (the amount of the municipal budget derived from property taxes) will be qualitatively discussed.

Comment 3: How will the increase in this infrastructure expansion be covered financially? Will the local community be impacted financially due to the building of the pipeline to carry the water? How is the expense being covered? How much money will it take to pay for the whole building?" (26)

Response: This comment is outside the scope of SEQRA. Notwithstanding, the Scope indicates that the DEIS will consider changes in demographics and housing costs, changes in labor supply and effects on existing businesses, and municipal costs generated by the Proposed Project.

Comment 4: "What are the projected benefits for the local community? What does Micron have to offer the local community as they plan their environmental impact? How will the negative effects of this infrastructure affect me economically in the beginning and through to the future?" (26)

Response: The Scope indicates that the DEIS will describe Micron's projected benefits to the community as well as its efforts to work with community leaders through the CEC to consider how project benefits can be distributed throughout the affected communities, including to communities of color or low-income communities.

Comment 5: The benefits and adverse impacts of socioeconomics need to be considered together and the DEIS should specify the analytical standards, tools and techniques employed. (32, 35)

Response: The Scope indicates that potential adverse socioeconomic impacts will be assessed in the DEIS.

Environmental Justice

Comment 1: Comments raised concern that project-related traffic could potentially affect environmental justice areas and suggested that traffic data be collected from an expansive geographic, especially since the southwest side of the city which has been a concentration of historically disadvantaged populations. (16)

Response: The Scope indicates that the DEIS will include analysis of potential impacts on environmental justice communities and disadvantaged communities. See Response to Transportation Comment 1.

Comment 2: "There is a draft permitting requirement that should be considered in the Technical Studies section of the DEIS. The New York State Department of Environmental Conservation (DEC) recently proposed a new policy that will require an analysis of impacts on disadvantaged communities (DACs) as part of most environmental permitting actions." (25)

Response: Comment noted. Micron will consider applicable guidance in the DEIS.

Historic and Cultural Resources

Comment 1: One commenter noted the existence of properties located on Burnet Road and other parts of the White Pine site, some of which are eligible or potentially eligible for listing on the NY State Register of Historic Places and commented that these properties were supposed to be surveyed/assessed in conjunction with the NY State Historic Preservation Office. (18) One commenter suggested preservation of a house on the corner of Burnet and Route 31, and also preservation of a barn on the south side of Route 31. (34)

Response: The properties located on Burnet Road were studied as part of the SGEIS for the WPCP prepared in 2021 to establish a shovel ready commerce park. Any demolition of those properties is not part of the Proposed Project and was completed earlier this year for public safety purposes. The Scope indicates that coordination with the New York State Historic Preservation Office (SHPO) would be required for any additional properties not previously evaluated. In coordination with SHPO, and as indicated in the Scope, the DEIS will identify potential eligible or listed historic resources at WPCP or the surrounding area.

Visual Impacts & Community Character

Comment 1: Commenters raised concerns about visual impacts, including impacts associated with lighting. (19, 22)

Response: The Scope indicates that a visual impact assessment will be conducted consistent with NYSDEC Program Policy "Assessing and Mitigating Visual Impacts."

Comment 2: Concerns were raised about the Proposed Project's impact on community character and quality of life. (4, 24)

Response: The Scope indicates that potential impacts to community character will be addressed in the DEIS.

Comment 3: The Sierra Club and CNY Sustainability Coalition commented that "This project has the potential to significantly alter the character of the community—not only the locale surrounding the immediate project location, but the wider Syracuse and Onondaga County as well as portions of Oswego County as population growth and housing development is induced." (30, 31)

Response: See Response to Visual Impacts & Community Character Comment 2.

Geology, Soils, & Topography

Comment 1: "Reference is made to 'property survey' as a data source but later the 'geotechnical investigation' is mentioned but not included in the sentence describing the analysis. Is this an oversight that should be corrected? Certainly the geotechnical survey will provide valuable information to confirm or modify the USGS soil survey data." (30, 31)

Response: The Scope has been revised to clarify the information to be used in the geology, soils, and topography DEIS chapter.

Water Resources

Comment1: Public comments related to consumption of water, water infrastructure, wastewater, and water quality. (2, 3, 5, 17, 26, 27, 28, 30, 32)

Response: The Scope has been revised to indicate that the DEIS will include additional description of Micron's proposed consumption of water and generation of wastewater and how those volumes will be minimized as well as managed and coordinated with County infrastructure.

Comment 2: The DEIS must describe the types and amounts of pollutants that will be discharged into the water. (27)

Response: See Response to Water Resources Comment 1.

Comment 3: The DEIS should evaluate ways in which water consumption can be minimized including options for recycling. (3, 32)

Response: See Response to Water Resources Comment 1.

Comment 4: The volume of water and the contents of wastewater including, but not limited to known hazardous waste products/chemicals must be identified, including, the various expected contents of the water must be specified, including hazardous materials, even if the weights and the volumes are not known. (27, 28, 32)

Response: See Response to Water Resources Comment 1.

Comment 5: Questions were raised about the industrial wastewater, including how it will be treated and monitored. (5, 28, 30, 31)

Response: See Response to Water Resources Comment 1.

Comment 6: Concerns were raised about the massive use of water and potential impacts to water resources. (2, 3, 26, 30, 31, 32)

Response: The Scope indicates that the DEIS will evaluate potential impacts to water resources.

Comment 7: The public must be assured that the public water drinking supply will never be compromised to accommodate water use by the Micron plant. (32)

Response: Comment noted.

Comment 8: Questions were posed regarding safeguards and monitoring for wastewater leaving the Micron facility. (5, 27, 28, 30, 31)

Response: The Scope indicates that the DEIS will discuss applicable permitting, monitoring, and reporting obligations associated with wastewater.

Ecological Communities and Wildlife

Comment 1: Public comments raised concerns of the potentials impacts to wildlife and habitat on and around the site, specifically to birds, butterflies and other animals native to the site. (19, 21, 22, 23, 26, 28, 29, 30, 31)

Response: The Scope indicates that potential adverse impacts to these natural resources will be addressed in the DEIS.

Comment 2: Native plants should be considered as part of mitigation plans instead of typical ornamentals. (19)

Response: The Scope indicates that the DEIS will consider use of native plants as mitigation where necessary and if appropriate.

Solid Waste

Comment 1: Public comments submitted raised questions about solid waste and the amount of materials that would be used at the site, and what the process would be to dispose of the waste. (3, 26, 28, 32,)

Response: The Scope indicates that the DEIS will evaluate solid waste generation from the Proposed Project, including proposed management, impacts to resources, as well as proposed mitigation strategies, including recycling to reduce waste stream volumes.

Hazardous Materials & Hazardous Waste

Comment 1: Public comments raised concerns about hazardous materials being transported to and from the site, along with how Micron plans to dispose of such materials. Comments mentioned the use of PFAS as it relates to the semiconductor industry more broadly. Comments requested more information about the use of PFAS and the potential effect on communities and the environment. Comments also expressed interest in further analysis as it relates to the materials that will be used at the site and how risks will be avoided or mitigated with respect to those materials. (3, 4, 9, 23, 26, 28, 32)

Response: See Response to NYSDEC Comment 22.

Comment 2: Comments requested that the DEIS identify any hazardous materials, including chemical or petroleum bulk storage that would be used towards transport or generated by the proposed project and measures to protect against releases to the environment. (4, 30, 31)

Response: See Response to NYSDEC Comment 22. The Scope has been revised to indicate that the Project Description in the DEIS must further illustrate Micron's intended use, management, and conservation of water, chemicals, and energy.

Transportation

Comment 1: A commenter provided that "The importance of I-81 is recognized for its impact in the draft scoping document. The majority of the Micron Campus is contained within the Town of Clay, Onondaga County, New York and is accessible from I-81 from an interchange with NYS Route 31 (see Figure 1). OCIDA deemed the Radisson Corporate Park as an unviable choice because it lacked . . . specific advantages such as the proximity to Interstates 81 and 481. The draft scoping document notes that the lack of "access to multi-modal transportation" is often a point of failure for most other sites. Changes to I-81 should be evaluated for potential adverse impacts on the Micron Development." (16)

Response: The Scope indicates that the DEIS, in coordination with the New York State Department of Transportation (NYSDOT), will evaluate regional and local traffic conditions. The assessment of potential future traffic conditions will include potential I-81 modifications. The Scope has been revised to include additional detail on how the traffic and transportation study area has been defined through consultation with NYSDOT and SMTC and in recognition of modifications to I-81.

Comment 2: Several additional public comments raised concerns about the potential for increased traffic on highways and roads in and around the project due to population growth and workforce commutes. Many commenters are concerned about impact to residents and listed areas directly around the Project Site, while others raised concerns about the regional traffic impact. (1, 2, 5, 7, 14, 15, 16, 17, 22, 26, 32)

Response: In coordination with NYSDOT, Onondaga County, the Town of Clay, and the Town of Cicero, and as indicated in the Scope, the DEIS will include an assessment of traffic conditions at the regional and local levels. Input from the Syracuse Metropolitan Transportation Council (SMTC) is also being provided. The Scope has been revised to include additional detail on how the traffic and transportation study area has been defined through consultation with NYSDOT and SMTC and in recognition of modifications to I-81. See also response to Legislator Garland Comment 2.

Comment 3: Many commenters requested that the DEIS analyze and provide details for the proposed traffic improvements. As part of this, certain potential traffic improvements were proposed to help alleviate the traffic of the current roads that exist now. (2, 8)

Response: The Scope indicates that the DEIS will identify proposed transportation improvements and provide a schedule for when the improvements would be required.

Comment 4: Comments raised safety concerns and questions about what improvements would be made. Many commenters are concerned about impact to residents and listed areas directly around

the Project Site, while others raised concerns about the regional traffic impact. (3, 5, 13, 15, 16, 17, 20, 28, 29, 30)

Response: See Response to Transportation Comments 1-3.

Comment 5: Traffic must be evaluated in the context of existing and proposed infrastructure. (16)

Response: See Response to Transportation Comments 1-3.

Comment 6: "Significant adverse impacts could result in the assessment of environmental impacts from traffic if Automatic Traffic Recorder (ATR) counts and Vehicle Classification Counts (VCC) data sites are not added to collect data from sites in the City of Syracuse." (16)

Response: See Response to Transportation Comments 1-2.

Comment 7: A question was raised regarding the proposed number of entrances to the campus as well as the traffic flow and routes for delivery trucks. (2, 5)

Response: Details of proposed access points and circulation routes for employee vehicles and delivery vehicles will be described in the DEIS.

Comment 8: Certain comments questioned the study area for traffic and whether additional areas to the south should be included. "There [are] no traffic counters utilized on I-481 at the NY Route 92/5 exchange nor in the City of Syracuse." (15, 16)

Response: See Response to Transportation Comments 1-2. The Scope has been revised to include additional detail on how the traffic and transportation study area has been defined through consultation with NYSDOT and SMTC and in recognition of modifications to I-81. The interchange of I-481 and NY Route 92/5 is included in the regional study area.

Comment 9: The Trucking Association of New York commented that "[w]hile the Micron project itself may not have a negative impact on our industry, the additional vehicle traffic will. Put that increased vehicular traffic on a poorly designed interstate, and the results will be disastrous for our industry." As additional context, the Trucking Association of New York attached its October 2021 comments on the I-81 Viaduct Project DEIS. (14)

Response: See Response to Transportation Comment 1.

Air Quality

Comment 1: Public comments mentioned air quality as it relates to operations at the Proposed Project Site along with the air quality implications due to increased traffic and potential hazardous material. These comments requested additional detail on proposed air emissions, including mobile source emissions, and requested that air quality impacts be evaluated in the context of the existing

and proposed infrastructure" and, "Air quality should be monitored at all the traffic locations." (16, 17, 32, 36)

Response: See Response to NYSDEC Comment 24. The Scope indicates that the DEIS will include assessment of mobile source and stationary source emissions from the Proposed Project. Mobile source emissions are primarily generated from additional vehicular traffic during both construction and operations. Stationary source emissions are generated from operation of the proposed Fabs. The Scope notes that a stationary source air pollution control permit for the new manufacturing facilities will be required. The air pollution control permit application will include evaluation of pollutants subject to the National Ambient Air Quality Standards (NAAQS), New York air toxic control and ambient air requirements, and a Climate Leadership and Community Protection Act (CLCPA) greenhouse gas evaluation. The Scope indicates that the DEIS will summarize these detailed air quality modeling and impact assessment analyses that will be prepared to support the air pollution control permitting process.

Comment 2: The public must be informed now regarding the amounts and types of air pollutants released by current Micron industrial facilities and expected to be released/emitted by the proposed Clay plant. (32)

Response: See Response to NYSDEC Comment 24.

Comment 3: Micron should identify plans to notify first responders and public of any toxic air releases, and first responders should be provided in advance with training and equipment to respond safely to such releases. (28)

Response: Comment Noted.

Comment 4: Employees should be warned about the toxicity of gases used by the industry and trained to protect themselves from potential releases, both at low levels associated with chronic toxicity as well as higher levels with acute toxicity." (28)

Response: Comment noted.

Greenhouse Gas Emissions and Climate Change

Comment 1: Public comments noted that the use of natural gas seems inconsistent with New York State's Climate Leadership and Community Protection Act (CLPCA) greenhouse gas (GHG) reduction goals. (10, 20, 23)

Response: See Responses to NYSDEC Comments 29-31.

Comment 2: Members of the public provided comments about GHGs. (10, 20, 35)

Response: The Scope indicates that the DEIS will assess the Proposed Project's potential emission of GHGs and the measures proposed to avoid, minimize and mitigate any impacts.

Comment 3: "Semiconductors have a carbon problem. The public should be informed about the plan to prevent fluorocarbons from being introduced to our local air." (9)

Response: See Response to Greenhouse Gas and Climate Change Comments 1 and 2.

Comment 4: "Interested to learn about the impact of embodied carbon as well as operational carbon in both the Micron plant and the associated growth." (6)

Response: See Response to Greenhouse Gas and Climate Change Comments 1 and 2.

Comment 5: Methane is a much more potent greenhouse gas than CO2. (10)

Response: Comment noted.

Comment 6: "The current plans for powering the Micron facility in Clay, NY, while looking good on paper, will in fact increase emissions on energy used to supply the Micron facility… The reality is that Micron is going to be powered by Fossil Fuel Generation that is transmitted over long distances, very likely from out of state in Pennsylvania or Ohio that have generation carbon footprints far higher than those in NY State. As GHG emissions are not cognizant of political boundaries on a map, those emissions will end up affecting NY State residents." (14)

Response: Comment noted.

Comment 7: "There are also possibilities for using the CO2 emissions of the generating facility for agricultural purposes, further reducing the carbon footprint of the plant." (14)

Response: Comment noted.

Noise & Vibration

Comment 1: Several public comments referred to concerns about noise & vibration from construction and operation, including noise from increased traffic. (8, 19, 29)

Response: The Scope indicates that the DEIS will include assessment of noise and vibration generated by construction and operations of the Proposed Project, including from increased vehicular traffic.

Utilities and Infrastructure

Comment 1: One comment requests that the process for wastewater be described.

Response: The Scope indicates that the DEIS will describe the manner in which wastewater will be treated.

Comment 2: There needs to be better definition of the assessment of potential impacts on infrastructure (water, stormwater, sanitary sewer, electrical and telecommunications) will be assessed.

Response: The Scope indicates that the DEIS will include an assessment of potential adverse impacts on utilities and infrastructure due to demand associated with the Proposed Project.

Comment 3: The release of toxic contaminants through water pathways is one of the most serious threats of semiconductor productions. Releases of certain contaminants in wastewater could compromise the operations of the Oak Orchard Wastewater Treatment Plant, even undermining compliance with its discharge permit.

Response: The Scope indicates that the DEIS will include an assessment of impacts from wastewater discharges from the Proposed Project.

Comment 4: Industrial pre-treatment must be described in the DEIS and should include identification of identify ways to pre-treat hazardous chemicals, perhaps even reusing some, before comingling with other wastes. This is particularly important for PFAS, because in the future more PFAS compounds are likely to be subjected to enforceable environmental standards, many at very low concentrations." (18)

Response: The Scope indicates that the DEIS will include an assessment of impacts from wastewater discharges from the Proposed Project, and will include a description of industrial pretreatment at the Proposed Project.

Comment 5: The DEIS needs to address parameters such as system capacity, level of service changes, fiscal implications for the community and impacts on water bodies. (16)

Response: The Scope has been revised to indicate that the DEIS will include additional description of Micron's proposed consumption of water and generation of wastewater and how those volumes will be managed and coordinated with County infrastructure.

Comment 6: Impacts associated with the "natural gas main" that will be extended to the plant must be included in the DEIS. (30, 31)

Response: The Scope has been revised to clarify that the DEIS will include assessment of all off-site improvements (water, wastewater, electricity, natural gas, telecommunications) in each of the relevant subject areas.

Anticipated Use & Conservation of Energy

Comment 1: "It is imperative to reduce emissions through clean energy usage initiatives and energy conservation projects." (2,36)

Response: Comment noted.

Comment 2: One comment questioned the impact of the Proposed Project on their energy bill and whether the Proposed Project will strain the grid and cause blackouts. (16)

Response: The Scope has been revised to indicate that the DEIS will include additional description on Micron's proposed use and conservation of energy (including provisions for renewable energy sources).

Comment 3: Additional detail was requested on the anticipated energy needs of this project which were noted to be enormous. (20,23)

Response: The DEIS will describe the Proposed Project's energy needs.

Comment 4: "Electrical consumption is anticipated to be 16 billion kilowatt-hours of electricity per year, when fully built. (Phase 2, Envir. Assessment Form, Part 1, Section K) To put this in perspective, this is equivalent to all of the electricity consumed by the states of New Hampshire and Vermont, combined. The entire state of New York used 143 billion kWh of energy in 2022. Micron will increase demand in NY by 11%." (20,23)

Response: Comment noted.

Comment 5: Questions were raised regarding the type and source of energy to be used by the Proposed Project. (10, 11, 16, 22)

Response: See Response to Anticipated Use and Conservation of Energy Comment 2.

Comment 6: Commenters requested consideration of various sources of electricity, including those that are currently available, and whose which may become available as the plant is constructed.

Response: See Response to NYSDEC Comment 5; Response to Anticipated Use and Conservation of Energy Comment 2.

Comment 7: The DEIS must evaluate the ability of current power lines owned and operated by National Grid to deliver the required power. (30)

Response: See Response to Anticipated Use and Conservation of Energy Comment 2.

Comment 8: One commenter questioned whether Micron stated its goal "to achieve 100% renewable energy for existing U.S. operations by the end of 2025" applies to the proposed facility. (10)

Response: See Response to Anticipated Use and Conservation of Energy Comment 2.

Construction

Comment 1: Several public comments referred to concerns about construction, specifically the use of heavy duty equipment and expected constructed related vehicular trips. (1, 13, 24)

Response: The Scope indicates that the DEIS will include evaluation of traffic conditions and potential adverse impacts during the construction of the Proposed Project. Specific analysis of traffic and traffic-related air quality and noise during construction will be identified and assessed in the DEIS, including potential mitigation options to address any adverse impacts.

Permits

Comment 1: "The SEQRA review should list all anticipated permitting processes, with the anticipated schedule of public comment periods, and it should require public notification to interested parties of each permit application as it is submitted." (18)

Response: Section 6 of the Scope lists the Federal, State, and local agencies with which Micron would coordinate on the Proposed Project and a preliminary list of anticipated permits that would be required to construct and operate the Proposed Project. The status, and contents, of draft permit applications would be made available, as applicable, as appendices to the DEIS. When OCIDA releases the DEIS for public review, it will announce the schedule for public comment and notifications will be distributed in accordance with applicable rules and regulations.

A forecasted date for the commencement of construction will be included in the DEIS.

Cumulative Impacts

Comment 1: "The use of the word 'summarize' to describe the scope of this Chapter is insufficient. This Chapter must assess indirect and cumulative impacts of the proposed project for each of the technical areas included in the DEIS. If these effects are included elsewhere it may be appropriate to summarize them here. Let's be clear about exactly what is required to be included in the DEIS." (20, 23)

Response: The Scope has been revised to indicate that the "Cumulative Impacts" chapter will consider any significant adverse impacts resulting from the incremental impact of the Proposed Project when added to other past, present, and reasonably foreseeable future actions. Each of the technical areas of the DEIS will address direct and indirect effects of the Proposed Project and off-site improvements.

Growth Inducing Aspects

Comment 1: Onondaga Audubon commented on Housing & Development that "the region outside of the project's direct footprint will be modified in order to support influx of as many as 100,000 new residents. Zoning maps have already been changed to increase the amount of land available to be developed for housing." (21)

Response: Comment noted.

Comment 2: The DEIS should include an analysis of the potential for growth-induced changes in the community that this project will induce." (32, 35)

Response: The Scope indicates that the DEIS will include an assessment of potential growth-inducing effects of the Proposed Project. This assessment will evaluate projected growth in traffic as a result of new residential development and any noise or air quality impacts associated with that increase in traffic.

Comment 3: Commenters note that the Proposed Project will cause an increase in demand for new housing and questioned the necessary capacity as well as the potential environmental impacts. (19)

Response: The location of any development of new housing within the Central New York region in response to any demand generated by Micron employment is unknown at this time and outside of Micron's control. It is therefore beyond the scope of this environmental review. Notwithstanding, any such new development would be subject to local comprehensive planning policies and zoning laws and regulations and require separate approvals pursuant to those local laws, regulations, and policies. The Scope indicates that the DEIS will evaluate projected growth in traffic as a result of new residential development and any noise or air quality impacts associated with that increase in traffic. The Scope also indicates that the DEIS will evaluate potential indirect impacts to community facilities and services as a result of projected residential population growth (see above).

Comment 4: "This is going to affect the housing market, are there any plans in order to ease this transition or combat this? (28)

Response: See Response to Growth Inducing Comment 3.

Comment 5: "With new jobs and housing comes increased traffic and therefore noise and air pollution. What impact will this have on residents' health and how will it be mitigated?" (19, 27)

Response: See Response to Growth Inducing Comment 2.

Other

Comment 1: Many commenters asserted that the NYSDOT's environmental review of the I-81 project was inadequate and that similar mistakes should not be made for the Proposed Project. (14, 15, 16, 33)

Response: Comment noted. The I-81 project is a separate and distinct project.

Comment 2: "Onondaga County health care facilities, in particular our hospitals, were short-staffed even before the Coronavirus pandemic. Waiting times and bed shortages were unfortunately highlighted by Covid-19 cases and have continued. What improvements in the healthcare system are proposed to remedy these shortcomings in view of the expectation of potentially thousands of new residents to work at and/or serve the Micron plant." (36)

Response: An assessment of impact on health care and the hospital system is beyond the scope of the environmental review of the Proposed Project.

Comment 3: “Demand new housing have walkable community parks that exceed the WHO recommendation of green space per person, and demand current brownfield sites be the priority sites of new development.” (29, 31)

Response: The specific development of new housing within the Central New York region in response to any demand generated by Micron employment is unknown at this time and outside of Micron’s control. The Scope indicates that impacts from induced demand will be considered in the DEIS. .

Comment 4: “It just brought, and I sort of a thought to myself to make sure that the scope does consider and focus and put ample attention towards the rail line. I'm not sure if the current CSX line that is moving across 31 is a part of what would be an increase in that rail traffic because of -- if that movement happened with that grant and that played out in (unintelligible). But I just want to, you know, make sure that the scope looks at the rail lines and the impact of the rail service and of an increase in that surface as we move forward here in the future generation. Thank you.” (12)

Response: The Scope has been revised to indicate that the DEIS will address the existing CSX rail line adjacent to WPCP and its potential use to support construction of the Proposed Project and reduce construction truck traffic. Potential air quality and noise impacts of additional rail traffic along the CSX rail line would also be considered in the DEIS.

Comment 5: The use of rail was encouraged to mitigate transportation impacts. (35)

Response: Comment noted.

Comment 6: Several comments raised concerns about transit options in the area and how those options would be addressed for workers and commuters who will be working at the site. Commenters also encouraged prioritizing bike, and pedestrian access to the site. (29, 31, 32)

Response: The Scope has been revised to indicate that the DEIS, in coordination with the Central New York Regional Transportation Authority (Centro), will identify potential adverse impacts to transit service caused by the Proposed Project and modifications and expansion to transit service that may be required to address those impact and address the need for such services caused by the Proposed Project.

Comment 7: “The only mitigation measures mentioned in this section are improvements to roadways. It is imperative that the utilization of public transportation, including mass transit by bus and light rail, be considered.” (32)

Response: See Response to Other Comment 6.

Comment 8: It should be noted that the Community Grid Plan is subject to a court order requiring the need for additional diligence related to the Micron development among other factors.” (17)

Response: See Response to Other Comment 1.

Comment 9: Some comments questioned the use of the terminology “100 percent renewable energy.” (10, 11, 22)

Response: Comment noted.

Comment 10: News reports have indicated that Micron has not committed to the huge expense of building a second water supply system from Lake Ontario in order to serve its industrial needs. The taxpayers of Onondaga County should not pay for this water supply system. This new system amounts to a dedicated supply for the Clay Micron plant.” (36)

Response: Comment noted.

Comment 11: The City of Syracuse should be considered an interested agency. (31, 32)

Response: The Scope has been revised to include the City of Syracuse as an interested agency.

Comment 12: The DEIS should include a chapter for Wastewater and Stormwater.

Response: See Response to NYSDEC Comment 1.

Comment 13: A detailed assessment of the expected numbers of cancers and other pollutant-related illnesses based on air emissions, water discharge, and hazardous solid waste from the plant must be identified as part of the DEIS. (24)

Response: The Scope has been revised to indicate that the DEIS will include an assessment of potential adverse health impacts associated with air emissions and the use and disposal of hazardous waste from the facility.

Comment 14: “Micron is to be commended for committing itself to a large degree of sustainability, but what is actually achievable?” (3)

Response: The Scope indicates that the DEIS will discuss sustainability measures that Micron intends to implement at its facility.

Appendix A-3
Summary of NEPA Scoping Comments

A-3 Summary of NEPA Scoping Comments

As noted in Section 1.3.2, a NEPA scoping period was held from March 5 to April 5, 2024, and a public scoping meeting was held on March 19, 2024. Commenters at the scoping meeting included Federal, State, and local agencies, non-government organizations, and members of the public. Overall, 113 commenters, including 102 individuals, provided input during the scoping period. As shown in Table A-2, a total of 438 individual comments were received across various categories. This section summarizes the comments received by category.

Table A-2 Summary of Scoping Comments by Category

Category	Comments
NEPA Process Generally	73
Land Use, Zoning, and Public Policy	9
Geology, Soils, and Topography	13
Water Resources	99
Biological Resources	43
Historic and Cultural Resources	7
Air Quality	21
Greenhouse Gases and Climate Change	12
Solid Waste, Hazardous Waste, and Hazardous Materials	21
Human Health and Safety	14
Utilities and Supporting Infrastructure	22
Transportation and Traffic	36
Noise and Vibration	8
Socioeconomic Conditions	32
Environmental Justice	2
Miscellaneous	26
Total	**438**

NEPA Process Generally

Seventy-three commenters provided comments on the NEPA process. USEPA suggested the use of the NEPAssist tool to facilitate the environmental review process. Most commenters in this category requested that the EIS analyze all potential environmental effects. Some commenters requested additional consultation with local indigenous communities and nearby municipalities. Some commenters expressed concern about the lack of transparency in the semiconductor industry in general. One commenter stated that the current environmental process is sufficient. One commenter highlighted the importance of fully applying the guidance in CPO's Programmatic Environmental Assessment for Modernization and Internal Expansion of Existing Semiconductor Fabrication Facilities under the CHIPS Incentives Program.

Three commenters provided comments on indirect and cumulative effects. USEPA recommended consideration of direct, indirect, and cumulative effects, analysis of effects of both the Proposed Project and other announced or planned projects in the area, analysis of effects on communities that may be experiencing existing pollution or health burdens.

Other commenters noted the existence of other projects within the vicinity of the Proposed Project, such as the Interstate 81 urban corridor redevelopment project, which required lengthy analysis of traffic modeling. These commenters suggested that the EIS include updated regional traffic and air pollution models, with detailed analysis of the Proposed Project's effects on traffic in Syracuse. Commenters also recommended the consideration of cumulative effects on sewers, water usage, power, emergency services, schools, roads, air quality, and water quality.

Seven commenters provided comments relating to alternatives to the Proposed Project. Some commenters suggested siting the proposed Micron Campus elsewhere to decrease potential environmental, community, and traffic impacts; one commenter recommended siting the Micron Campus in downtown Syracuse or at one of several unused remediated industrial sites with existing utilities and infrastructure. Some commenters suggested that the Micron Campus and alternatives include features such as permeable parking lots and ecological landscaping techniques to reduce potential effects on wildlife. One commenter suggested that alternatives only be partially implemented to reduce potential effects.

Twenty-seven commenters provided comments on mitigation measures and monitoring. These commenters highlighted the need for a comprehensive and transparent discussion on mitigation and monitoring measures in the EIS, particularly regarding potential effects relating to wetlands and traffic. Many commenters expressed concern that wetland mitigation measures may not be sufficient or could lead to adverse effects. Commenters stated that the scope of current plans for wetland mitigation should be expanded to include wetlands outside the immediate project area and that there is a potential for the wetland mitigation measures to adversely affect nearby landowners due to displaced water.

Many commenters requested that the government agencies reviewing the Proposed Project ensure that stated mitigation measures are fully planned and implemented prior to the commencement of construction. Some commenters stated there should be permitting and monitoring efforts to reduce the potential effects of environmental releases.

Three commenters requested accessible public meetings that members of the public could reasonably attend after normal working hours, accommodations for non-English speakers, and virtual attendance methods. Commenters requested assurances that Micron would fulfill commitments to provide financial assistance to the City of Syracuse to address poverty. Commenters also stated that agencies should recognize the public's right to know about Proposed Project effects, the permits it would require, and how and when comments could be made on the EIS. The commenters recommended that agencies publish a schedule of opportunities for public participation for permit processes associated with the Proposed Project.

Land Use, Zoning, and Public Policy

Nine commenters provided comments on land use. Some commenters expressed concerns that the Proposed Project area contains prime agricultural land and historic properties that would

be permanently impacted if the Proposed Project is implemented. Others indicated concern over the planned development of the land based on the potential environmental effects of filling wetlands and streams. Some commenters suggested increasing the amount of green space on the proposed Micron campus, while others suggested that Micron purchase land elsewhere that could be converted to green space as a land exchange. Some commenters also expressed concerns about potential effects on residentially zoned areas adjacent to the project area.

Geology, Soils, and Topography

Seven commenters provided comments on geology, topography, and soils. Commenters were generally concerned over potential pollution of the soil as a result of facility construction and operation, particularly related to heavy metals, PFAS, and other chemical contamination. One commenter expressed concerns about potential soil impacts due to excavation.

Six commenters provided comments on construction methods and impacts. Commenters recommended utilizing green construction practices whenever possible, including recycling of construction materials for both use and disposal, environmentally friendly landscaping, green infrastructure, and incorporation of energy-efficient technologies. Commenters requested that green construction include permeable pavement on all hardened surfaces because the facility would be built in a wetland area. Commenters further inquired if Micron would seek a SITES certification for sustainable landscapes, which would entail the creation of landscapes to help reduce water demand, conserve or restore natural resources, provide wildlife habitat, reduce energy consumption, and promote human health and wellbeing.

Commenters also expressed concern relating to the effects of construction processes and equipment on the site. Commenters stated that significant volumes of concrete may affect the water table, and that the drainage of the site should be considered. Commenters stated that there should be a construction plan to mitigate the potential effects of construction fill on the site's water table and drainage, and of construction vehicle traffic on surrounding residential areas.

Water Resources

Fifty-seven commenters provided comments on water resources, water quality, and flooding in and near the Proposed Project area. Commenters were broadly concerned with the potential for negative effects from facility wastewater, stormwater runoff, and potential leaks or spills on the water quality of water resources, including Oneida Lake, nearby streams, and other water bodies. Commenters expressed concerns about potential flooding due to water displaced by the facility from the filling of water bodies and runoff from impervious surfaces, such as parking lots. Commenters also expressed concerns about short- and long-term adverse effects on nearby residences, businesses, and agriculture from potential Proposed Project-induced flooding, including sedimentation, increased turbidity, and introduction of pollutants via runoff. Some commenters expressed concerns that filling of water bodies would potentially cause floodwater to enter their properties and damage their lands or structures, and some of those commenters provided personal or historical anecdotes of flooding on their properties.

Forty-two commenters submitted comments relating to wetlands in or near the Proposed Project area. Most of these commenters expressed general concern about and opposition to the filling of wetlands, particularly related to potential flooding of nearby properties, and the loss of

wildlife habitat, including for threatened and endangered species and migratory birds. Many commenters stated that wetlands are essentially irreplaceable and expressed concerns that compensatory mitigation for filled wetlands would not sufficiently replace them or the habitat and ecosystem services they provide. Many commenters also expressed concerns about the potential for pollutants to leach into wetlands outside of the Proposed Project area. Some commenters requested that the EIS analyze wetlands outside of the immediate vicinity of the Proposed Project area. One commenter indicated that USACE should not permit Micron to fill the proposed acreage of wetlands and should instead consider permitting fill of a substantially smaller acreage of wetlands.

Biological Resources

Forty-three commenters provided comments relating to biological resources, including threatened and endangered species, other terrestrial wildlife, migratory birds, and vegetation and habitat in and near the Proposed Project area. Many commenters expressed concerns about potential adverse effects on wildlife from noise and light pollution from construction and operation of the proposed Micron Campus. Several commenters expressed opposition to the amount of vegetation and wildlife habitat that would be cleared for construction.

A majority of these 43 commenters expressed concerns about potential effects on Indiana and northern long-eared bats from habitat loss that would be expected to occur within the Proposed Project area and vicinity. Some commenters expressed concerns about proposals to relocate bat populations. Additional commenters raised concerns about potential effects on protected bird species in the area. Other commenters expressed concerns that planned habitat mitigation measures would not be sufficient to protect threatened and endangered species or concerns with an overall lack of mitigation planning in general.

Commenters in this category generally also commented on potential effects on wildlife from the loss of wetland and grassland habitat. Commenters expressed concern that Micron's plan to minimize the effects on habitat would be inadequate and suggested that there should be a mitigation program to analyze the effects of construction in wetlands, including on adjacent uplands. Commenters also stated that Micron should engage in wildlife relocation efforts. Commenters stated that the loss of grassland habitat would affect the 11 species of grassland birds in New York State that require grasslands for breeding and wintering. One commenter noted that historic habitat degradation has had little impact on New York State's wildlife and expects the Proposed Project to have no significant effects on wildlife.

Additional comments related to other potential Proposed Project effects on wildlife from construction activities, noise and light pollution, wastewater, and water use. One commenter requested the preparation of studies of these effects, and effects from loss of open space and increased human activity within the proposed Micron Campus, on wildlife. Commenters also requested disclosure of effects of wastewater discharges and water intakes on shoreline vegetation, aquatic organisms, fish, and other lake-dependent wildlife.

Five comments expressed concerns about potential effects of wetlands and grasslands habitat removal on migratory birds. The commenters stated that wetlands and grasslands play a vital role in supporting birds during migration and expressed concerns about potential effects on migratory birds from facility light pollution and the risk of bird strikes once the buildings are

completed.

Historic and Cultural Resources

Seven commenters expressed concerns relating to potential effects on properties considered to have historic importance at or near the Proposed Project site, including a cemetery, older residences, and potential indigenous burial sites. Other commenters expressed concerns about potential effects on local indigenous communities, particularly the Onondaga Nation and the Oneida Indian Nation, from potential pollution of Onondaga Lake and other culturally significant water bodies in and near the Proposed Project area. Some commenters also expressed concern that the Onondaga Nation and the Oneida Indian Nation did not attend the public scoping meeting and requested that Micron invite their views and input on the Proposed Project.

Air Quality

Twenty-one commenters expressed concerns about potential air pollution from facility chemical use (including PFAS) and incineration, and from increased traffic. Commenters stated that there should be careful monitoring and regulation of air emissions associated with the Proposed Project. Commenters requested the use of modeling to estimate potential air emissions from the proposed Micron Campus and from Proposed Project-related traffic, and that these estimates be made publicly available. One commenter requested that USACE develop a more comprehensive action plan to mitigate air pollution.

Greenhouse Gases and Climate Change

Twelve commenters provided comments on GHGs and climate change. Some commenters expressed general concerns about potential individual and cumulative effects from the Proposed Project on climate change. Commenters expressed concerns about potential effects on climate change from chemical and gas releases and a large projected water consumption rate. Some commenters stated that there should be more discussion of the GHG emissions mitigation technology that Micron plans to use, including for fluorinated gases. Several commenters requested that Micron implement green energy solutions to mitigate the Proposed Project's potential contributions to climate change, such as on-site renewable energy generation by solar or geothermal power.

Solid Waste, Hazardous Waste, and Hazardous Materials

Twenty-one commenters provided comments on chemicals, contaminants, toxics, and hazardous materials, including comments relating to PFAS. Commenters expressed concerns about potential environmental pollution from facility releases of chemicals from normal operation, hazardous waste, and waste disposal by incineration and wastewater. Commenters expressed concerns about regulatory oversight of the semiconductor industry given the range of toxic chemicals it uses. Some commenters stated that there should be a comprehensive waste management plan addressing potential worker or public chemical exposure. One commenter requested assurances that herbicides or insecticides would not be used on the proposed Micron Campus. One commenter suggested that municipalities included in the traffic study should be notified of vehicles that would transport hazardous chemicals or waste within their boundaries.

Some commenters expressed concerns about the potential use of PFAS on the proposed Micron Campus, including concerns that potential release routes for PFAS could include accidental spills during transport or handling of PFAS-containing products, incomplete combustion of PFAS during process controls on gaseous emissions, or inadequate wastewater treatment. Commenters expressed concerns that current wastewater treatment technologies would not adequately remove all PFAS, particularly short-chain compounds used in semiconductor production. The commenters requested that the EIS identify potential mitigation measures or research objectives relating to industrial wastewater. These commenters also expressed concern that current State and Federal regulations only cover two types of PFAS that have been phased out by the semiconductor industry. Other comments expressed general concerns about the longevity of PFAS once they are released to the environment and their potential adverse effects on the human and natural environment.

Human Health and Safety

Fourteen commenters provided comments on public and worker health and safety. Commenters expressed concerns about the potential for public and worker exposure to toxic chemicals, including PFAS, via air, water, and soil pollution and short- and long-term health effects from potential chemical exposure, including at a nearby school. Some commenters also expressed concerns about fair labor practices in the context of potential worker exposure to hazardous chemicals. Some commenters expressed concerns about potential terrorist acts on the Micron Campus based on its national value and proximity to New York City and stated that these factors could pose risks to public safety. Commenters suggested that employees should be trained in the potential toxicity of gases and management of potential releases. Commenters stated that additional risk management should include the planned use and storage of hazardous substances based on proximity and wind direction. One commenter recommended that Micron create Risk Management Plans for the notification of the public and first responders.

Utilities

Twenty-two commenters provided comments on utilities. Many commenters expressed concerns about the funding sources or use of tax dollars for new utility connections for the proposed Micron Campus. Commenters also expressed concerns about the size of the proposed Micron Campus and its projected electricity and water demands, and the ability of the existing utility system to prevent potential blackouts and water shortages. One commenter inquired about the potential incorporation of combined heat and power into Micron Campus building designs.

Transportation and Traffic

Thirty-six commenters provided comments on transportation and traffic in and surrounding the Proposed Project area. Commenters generally expressed concerns about the potential for increased traffic congestion as a result of the Proposed Project and additional residential and commercial development. Some commenters stated that increased traffic could result in potential air quality and noise effects. Some commenters requested the completion of additional traffic studies, particularly relating to air quality or the delivery of construction material to the Proposed Project site. One commenter expressed concern about the ability of emergency vehicles (e.g., fire engines) to travel efficiently along Caughdenoy Road in the event of potential traffic congestion from the Proposed Project. Another commenter suggested that the EIS should thoroughly discuss

specific traffic mitigation measures. One commenter submitted an illustration proposing new road construction.

Noise and Vibration

Eight commenters provided comments on noise (as well as other potential nuisances such as olfactory irritation and light pollution). Commenters expressed concerns about potential quality of life effects (e.g., sleep, traffic flow) and effects on wildlife (e.g., birds) from noise pollution from operation of the proposed Micron Campus. One commenter expressed concerns about potential noise pollution from lawncare equipment and recommended the implementation of ecological landscape techniques to reduce the amount of necessary lawncare. One commenter requested construction of a traffic noise barrier. One commenter stated that the current wastewater treatment plant has an extremely unpleasant odor. Another commenter expressed concerns about potential unpleasant odors from the completed Micron facility due to chemical releases. Two commenters expressed concerns that the Micron Campus would generate light pollution during operation and from associated traffic and stated that light pollution could also have adverse effects on the quality of human life.

Socioeconomic Conditions

Thirty-two commenters provided comments relating to socioeconomic conditions. Several commenters expressed support for the Proposed Project due to the projected boost to the local economy. Many commenters expressed concerns regarding housing affordability and availability in the areas surrounding the Proposed Project due to the projected influx of Micron employees and supporting staff. Some commenters expressed concerns about effects on quality of life in the areas surrounding the proposed Micron Campus relating to potential chemical, noise, and light pollution from the construction and operation of the facility. Some commenters expressed concerns about potential effects on the local economy from the construction of supporting facilities and residences. One commenter expressed concern that products manufactured at the Micron Campus would not be used in the United States, but would be shipped overseas, and that the Proposed Project would not result in the creation of jobs for existing local residents. One commenter suggested that Micron seek employees for the new facility from within the local area, particularly the City of Syracuse, based on the city's high rate of poverty and unemployment, particularly among minority groups. One commenter suggested that the EIS discuss potential effects on property taxes.

Two commenters expressed opposition to removal of residences and potential effects on properties considered to have historic importance. One commenter expressed concerns about where homeowners who would be asked to relocate would go and who would be responsible for providing new housing. One commenter described a personal experience with losing a historical property to eminent domain.

Environmental Justice

USEPA stated that communities with environmental justice concerns should be afforded the opportunity to provide input on the NEPA process, including proposed mitigation, and encouraged the use of the EJScreen tool to identify such communities. One commenter stated that the EIS must provide an unbiased and rigorous analysis of environmental effects, including effects relating to environmental justice, and encouraged the agencies to evaluate potential air quality,

climate change, water quality, and socioeconomic effects on communities with environmental justice concerns.

Miscellaneous

Twenty-six commenters raised other miscellaneous concerns:

- **Aesthetics and visual resources.** Commenters expressed concerns relating to potential effects on area aesthetics from facility construction and perceived undesirable visual elements, such as large sizes of buildings and supporting infrastructure on the proposed Micron Campus.

- **Recreation.** Three commenters stated that the EIS should consider potential effects on recreational resources in Upstate New York and the outdoor opportunities they provide. One commenter mentioned the value of Oneida Lake to fishermen and enthusiasts of boating, kayaking, sailing, swimming, and sightseeing, noting that these activities generate more than $140 million in spending and additional tax revenue.

- **Comment deadline extension requests.** Four commenters requested an extension of the public scoping comment deadline to give the public more time to provide input.

- **Support for public scoping meeting.** One commenter expressed appreciation for USACE and Micron staff based on the public scoping meeting.

- **Education and community benefits.** One commenter expressed support for the Proposed Project based on projected education and community benefits, particularly as would be provided by the proposed Childcare Center.

- **Employment interest.** One commenter expressed support for the Proposed Project and interest in future employment at the Micron Campus.

- **Information requests.** Two commenters requested copies of public scoping meeting materials.

- **Mailing list requests.** Five commenters requested to be added to the EIS mailing list to receive updates on the NEPA process.

- **Media interview requests.** One commenter requested an interview with Micron regarding the Proposed Project.

- **Project longevity.** Several commenters expressed concerns about the longevity of the Micron fabs, and associated facilities based on potential further technology advancement during the Proposed Project's 16-year construction period.

- **Independent review.** Several commenters requested that government agencies conduct independent and thorough reviews of documents associated with the Proposed Project, including the EIS, traffic and air studies, and Proposed Project facility emergency and disaster management plans.

- **Sovereign Nations.** One commenter requested that the EIS describe the process and outcomes of consultation with sovereign nations and recommended that the EIS evaluate potential downstream effects on sovereign nations, sacred sites, and areas of religious or cultural significance. The commenter stated that CPO should ensure that the Proposed Project avoids or includes plans to mitigate effects on such sacred sites.

- **Compliance with Executive Order 14008.** One commenter inquired about compliance with Section 216 of E.O. 14008, Tackling the Climate Crisis at Home and Abroad, which requires Federal agencies to recommend steps to achieve the goal of conserving at least 30 percent of U.S. lands and waters by 2030.

APPENDIX B
MICRON CAMPUS SITE SELECTION BACKGROUND, CONSTRUCTION PHASES, AND SITE LAYOUT ALTERNATIVES

Appendix B-1
Micron Campus Site Selection Background

B-1 Micron Campus Site Selection Background

This section describes: (1) the process that the State of New York conducted to identify semiconductor technology parks sufficient in scale to advance the State's semiconductor manufacturing sector; (2) the process that OCIDA conducted to identify sites in Onondaga County sufficient in scale to host a large-scale semiconductor manufacturing facility; (3) the process and criteria that Micron used to identify a sufficient location for a large-scale memory chip manufacturing facility; and (4) the additional property search Micron conducted to identify potential alternative locations for its facility.

B-1.1 New York State Selection of WPCP

In 1997, New York State initiated the CHIP FAB 98 / SEMI-NY Program to promote the growth of the State's semiconductor manufacturing industry. Led by the Governor's Office for Regulatory Reform and the Empire State Economic Development Council (NYSEDC), this initiative began by identifying suitable sites. A list of 55 candidate sites throughout the State was narrowed to 13 sufficient to meet then-current industry standards. (Apte, 1998; Gargano, 2006).

By the year 2000, three sites—Luther Forest (in Malta, NY, Saratoga County), Marcy Nanocenter (in Marcy, NY, Oneida County), and the WPCP—were identified as "shovel ready," i.e., they had completed certain pre-permitting requirements applicable at that time. In 2017, NYSEDC updated its site suitability criteria and arrived at four potentially suitable sites: the Marcy Nanocenter; the Western NY Science, Technology, and Advanced Manufacturing Park (STAMP) near Batavia in Genesee County; Luther Forest; and the WPCP. NYSEDC's evaluation included 5 primary criteria with 108 geographical viability factors, including site quality, and reliability. The evaluation benchmarked the four sites against six other competing locations nationwide. Of the evaluated sites, only the WPCP and Marcy Nanocenter ranked the highest nationally for utility access and development readiness (Newmark Knight Frank, 2018).

The Marcy Nanocenter is a 434-acre greenfield campus. A substantial portion of that campus was developed in 2022 by Mohawk Valley EDGE for semiconductor manufacturing, and only approximately 130 acres remain for stormwater management infrastructure, compensatory wetland mitigation, and development buffers. Therefore, this location is no longer available and would be too small for the Proposed Project (see Section 1.1).

The STAMP site, covering 1,250 acres, has seen significant development by other companies, reducing its available space to five non-contiguous parcels totaling 540 acres, the largest of which is 310 acres. This location would be too small for the Proposed Project.

The Luther Forest site was developed for semiconductor manufacturing and is currently occupied by GlobalFoundries, which has purchased the only remaining 800 undeveloped acres at the site. This location is no longer available and would be too small for the Proposed Project.

B-1.2 Onondaga County Selection of WPCP

Onondaga County presented the WPCP to the State as a suitable site for semiconductor manufacturing as part of a longstanding process to identify and develop a suitable site in the County for industrial manufacturing. In 1991, OCIDA and the City of Syracuse Chamber of

Commerce initiated an Industrial Park Feasibility Study to identify potential locations for industrial businesses in Onondaga County. Of the two sites the study identified—a site in the Town of Lysander and the WPCP—the WPCP emerged as the preferred choice due to its proximity to National Grid's electric substation in Clay, excellent highway access, and ability to be rezoned for industrial use. From 1991 to 1999, the County acquired seven properties, forming the original 340-acre WPCP.

Onondaga County received feedback from prospective site selectors and companies that the 340-acre site would be insufficient for the economic needs of contemporary large-scale semiconductor manufacturing. The County expanded the WPCP on multiple occasions until it ultimately reached its current 1,339-acre area. In addition to expanding the size of the WPCP, the County began addressing other essential project requirements, including access to adequate, reliable electricity, natural gas, and water supply, and wastewater treatment capacity.

OCIDA completed a GEIS, which was supplemented in 2021, that identified and screened various alternatives to the WPCP within Onondaga County. The analysis concluded that the WPCP was the only viable option to meet the semiconductor industry's needs, as it meets specific project pre-requisites, including a large, contiguous parcel of land controlled by a single owner, and access to significant, redundant, and resilient transportation and utility infrastructure (OCIDA, 2013).

B-1.3 Micron Site Search

In 2021, Micron initiated a search for potentially suitable sites to construct a large-scale memory chip manufacturing facility that would also be able to achieve U.S. national and economic security goals, based on then-emerging consideration in Congress of new legislation to incentivize re-shoring of chip manufacturing, including large-scale, commercially viable fab clusters capable of enduring foreign competition—goals that ultimately became the basis for the CHIPS Act and the Department of Commerce's priorities in the NOFO for commercial semiconductor fabrication facilities (see Section 1.1).

Consistent with the above goals, which form the basis of CPO's purpose and need described in Section 1.1, and Micron's analysis of memory chip fab cluster trends described in Appendix A-1, the combination of then-developing Federal priorities for large fab clusters and Micron's annual long-range SNOP process coincided to shape Micron's site search. Specifically, to attract Federal and other sources of investment and achieve global competitiveness, Micron determined that it would need to identify a site capable of hosting a commercially viable, four-fab memory chip manufacturing facility with a cleanroom size of at least 600,000 sq. ft. and a fab size of at least 1.2 million sq. ft. (for a total 2.4 million sq. ft. of cleanroom space and 4.8 million sq. ft. of fab space). This four-fab configuration also would be necessary to achieve a memory chip production output of 52,000 wafers per week on average over the life of the facility capable of meeting Micron's market-based forecast for the output required to be commercially viable given memory chip industry competition in East Asia.

Micron also determined that construction of 2.4 million sq. ft. of cleanroom space would necessitate the construction of ancillary buildings, such as central utility buildings, hazardous process materials buildings, bulk and specialty gas storage, and other on-site infrastructure, as described in Section 2.1.1.5 and Table 2.1-3. Given the competitiveness and cost sensitivity of the DRAM market, Micron determined that it would require a single site of sufficient size to co-locate

and accommodate all of the fab space and infrastructure described above, and that developing disparate parcels with duplicative infrastructure and supply chain needs would preclude Micron from achieving a cost-efficient memory chip operation capable of global competitiveness and attracting Federal and other sources of investment. For the above reasons, Micron determined that it would require a minimum single site footprint of 1,000 acres or more.

This approach is consistent with semiconductor industry competitiveness trends that drive companies in this space to co-locate multiple fabs on a single site to achieve economies of scale and efficient supply chain and feedstock management, while minimizing costs, as well as minimizing total project footprints and ground disturbance (see Section 1.1).

In the context of these goals, Micron began exploring potential sites for a four-fab memory chip manufacturing facility in New York State in late 2021. To facilitate its search, Micron developed a set of site selection criteria, detailed in Table B-1 below, including the minimum 1,000-acre site size, utility and energy availability, transportation accessibility, workforce development capacity, time-to-market (permitting and approvability), climate-related risks, place enhancement (livability) considerations, advanced manufacturing ecosystem (including supply chain) considerations, and the availability of Federal and State financial incentives, among various other technical and socioeconomic factors.

Table B-1 Micron Site Selection Criteria

Criteria	Description
Site availability	Potential sites would need to be available for acquisition.
Minimum site size of 1,000 contiguous acres	See explanation of 1,000-acre size requirement in text above. Sufficient parcel size would be essential to accommodate the necessary size of the manufacturing buildings to economically meet production goals while maintaining adequate spacing between the fab buildings and providing the space needed for ancillary structures, utilities, and other infrastructure. The parcel also would need to be fully contiguous and could not be irregularly shaped or preclude a uniform manufacturing facility layout capable of maximizing fab interoperability, efficiencies, and economies of scale, driven by minimizing automated device travel times across fabs (see Appendix B-3). The contiguous land criterion also would be necessary to ensure that all facility components could be efficiently integrated and operated on a single campus, reducing the need for multiple utility or other site connections that would make the facility uncompetitive with its peers and global competitors.
Zoning	Potential sites would need to be zoned or readily able to be zoned to accommodate the proposed manufacturing use.
Geological conditions	Potential sites would need to have a relatively flat topography with geological conditions capable of supporting an efficient four-fab layout and adequate foundations to support such a design. A site with a geotechnical makeup and topography that would require substantial excavation and import of fill material also would need to have proximity to rail transport or other cost-effective transportation methods capable of bringing

	substantial volumes of fill and other construction materials on-site, while avoiding prohibitive increased costs and environmental and community effects from transporting large volumes by truck.
Electricity supply	Potential sites would need to have proximity to robust electric transmission infrastructure capable of providing electricity at 345 kV or higher to the entire site, with sufficient available on-site or adjacent land for dedicated substations and transformers, or to a technically and economically feasible and practicable plan to expand such capacity and capability to connect to such supplies. A multi-fab facility requires a stable and continuous 24/7 electricity supply from highly resilient, non-intermittent sources, including dual feed electrical service with high resistance to voltage fluctuations. Any disruption in power can dramatically impact the semiconductor manufacturing process and lead to substantial operational inefficiencies and production and financial losses.
Natural gas supply	Potential sites would need to have ready access to substantial natural gas supplies and distribution capacity, or to a technically and economically feasible and practicable plan to expand such capacity and a route to connect to such supplies. Natural gas is required for its thermal value in semiconductor manufacturing, which depends on several heating processes that together could overwhelm otherwise reasonable electricity supplies and infrastructure.
Water supply	Potential sites would need to have ready access to substantial water supplies and transmission capacity, or to a technically and economically feasible and practicable plan to expand such capacity and a route to connect to such supplies.
Wastewater treatment capacity	Potential sites would need to have ready access to substantial wastewater treatment infrastructure with adequate capacity to accommodate a large-scale semiconductor facility, or to a technically and economically feasible and practicable plan to expand such capacity and a route to connect to such service.
Highway access	Potential sites would need to be located within 20 miles of an interstate highway. Proximity to highway access would be required to facilitate efficient transportation of materials, products, and personnel for a four-fab facility.
Airport access	Potential sites would need to be located within 30 miles of a domestic commercial airport and 50 miles of an international commercial airport. Proximity to air transport is needed to support efficient movement of personnel and critical components to a large-scale semiconductor manufacturing facility.
Specialized workforce	Potential sites would need to be in an area with a sufficiently large, specialized labor force capable of supporting highly advanced manufacturing processes and specialized equipment operation and maintenance needs. In addition, potential sites would need to be in proximity to institutions of higher learning and institutions for research and development, training, and innovation, such as military bases, technical colleges, universities, and other sources of technical direct labor, which are essential to providing skilled labor, continuing education, and training programs to keep a specialized workforce familiar with relevant technological advancements and industry practices.

Source: Micron Technology.

At the time that Micron began exploring sites in New York State in late 2021, three of the four viable State-identified technology sites (Marcy Nanocenter, STAMP, Luther Forest, and the WPCP) were unavailable or too small for the four fabs needed to satisfy Micron's search criteria. Marcy Nanocenter only had 130 acres available, GlobalFoundries held an option contract on Luther Forest, and STAMP offered only 540 non-contiguous acres. Only the WPCP remained, which satisfied all of Micron's site selection criteria in Table B-1.

B-1.4 Micron Updated Site Search

In 2024, Micron conducted an updated property search to identify other potentially reasonable alternative sites for the Proposed Project. Using an available parcel listing survey, Micron identified three sites, including the WPCP, that were available for purchase and that were 1,000 acres or greater in size. See Figure B-1, Figure B-2, and Figure B-3 for site locations. Micron evaluated each site against its site selection criteria. The results are summarized in Table B-2 below. Of the three sites, only the WPCP was located in a NYISO Load Zone with the potential to provide a sufficiently reliable and stable electricity supply to the Proposed Project. In addition, the WPCP satisfied all of Micron's other site selection criteria, whereas the other two sites failed several criteria.

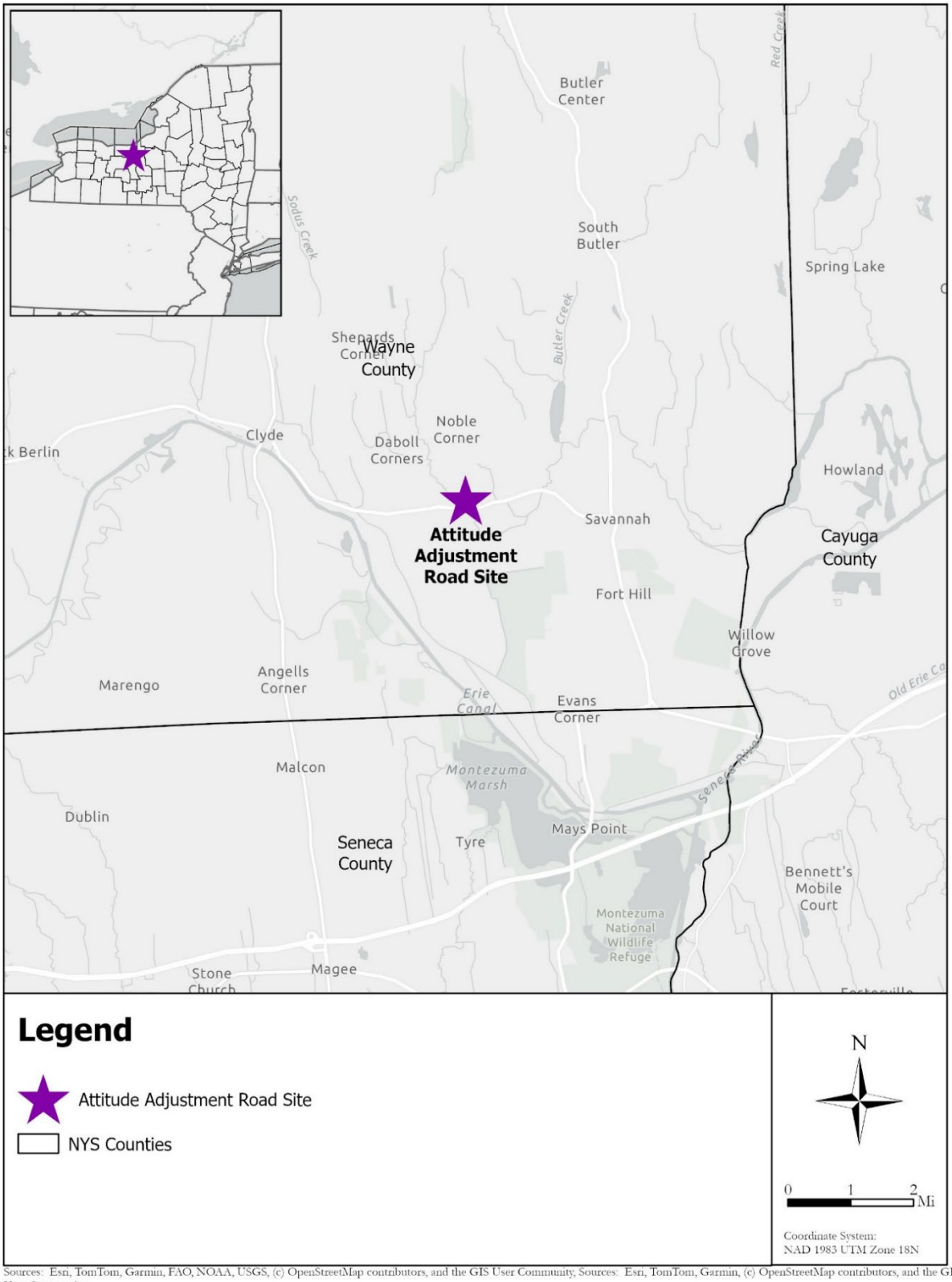
Table B-2 Updated Site Search Results

Site	1	2	3
Site Name	Attitude Adjustment Rd	Creek Road	White Pine Commerce Park (WPCP)
County	Wayne	Cattaraugus	Onondaga
Parcel ID	76111-00-115772	4.003-1-22	Multiple
Available for Purchase	Yes	Yes	Yes
Parcel Acreage	3,929	1,217	1,376
Industrial zoning	No	No	Yes
Adequate geology and topography	No	No	Yes
Floodplains present	Yes	No	No
Adequate power / NYISO Load Zone / adequate transmission capacity	No / B / Yes	No / A / Yes	Yes / C / Yes
Adequate natural gas supplies	Yes	No	Yes
Adequate water supplies	No	No	Yes
Adequate wastewater capacity	Yes	No	Yes

Proximity to highways	Yes	Yes	Yes
Proximity to airports	Yes	Yes	Yes
Specialized workforce available	No	No	Yes

Source: Micron Technology.

Figure B-1 Attitude Adjustment Road Site Location



Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community, Sources: Esri, TomTom, Garmin, (c) OpenStreetMap contributors, and the GIS User Community

Figure B-2 Creek Road Site Location

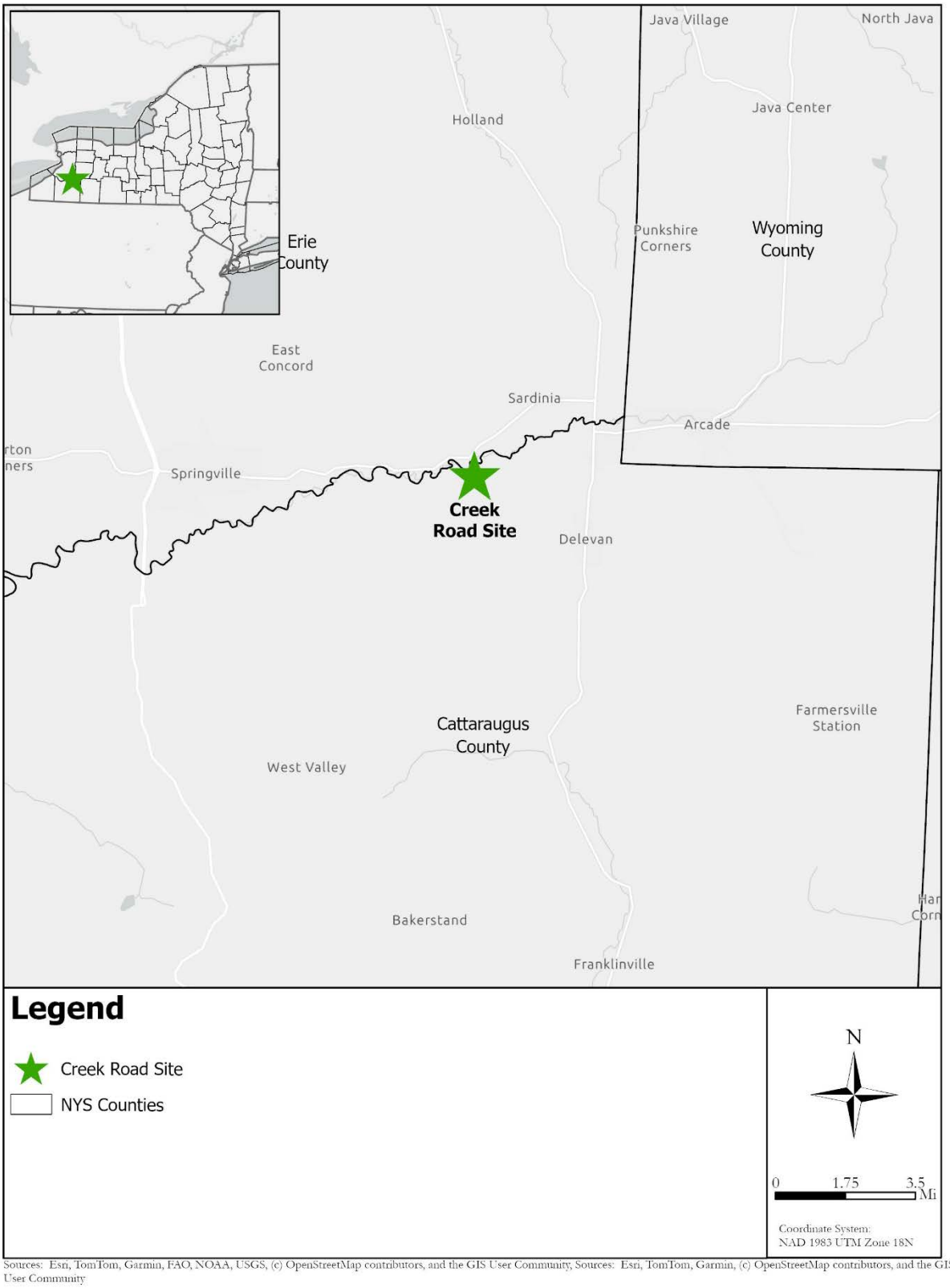
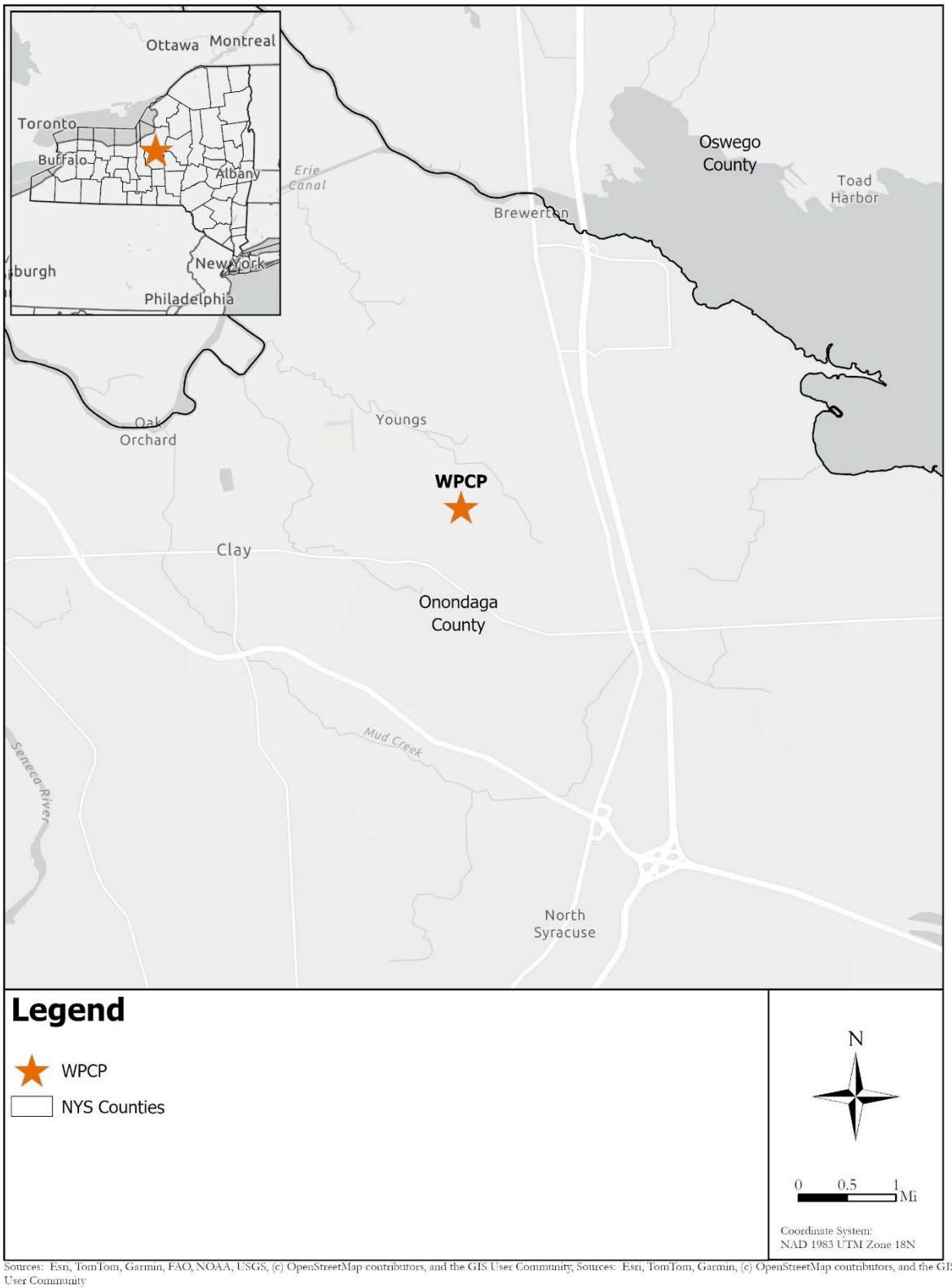


Figure B-3 WPCP Site Location



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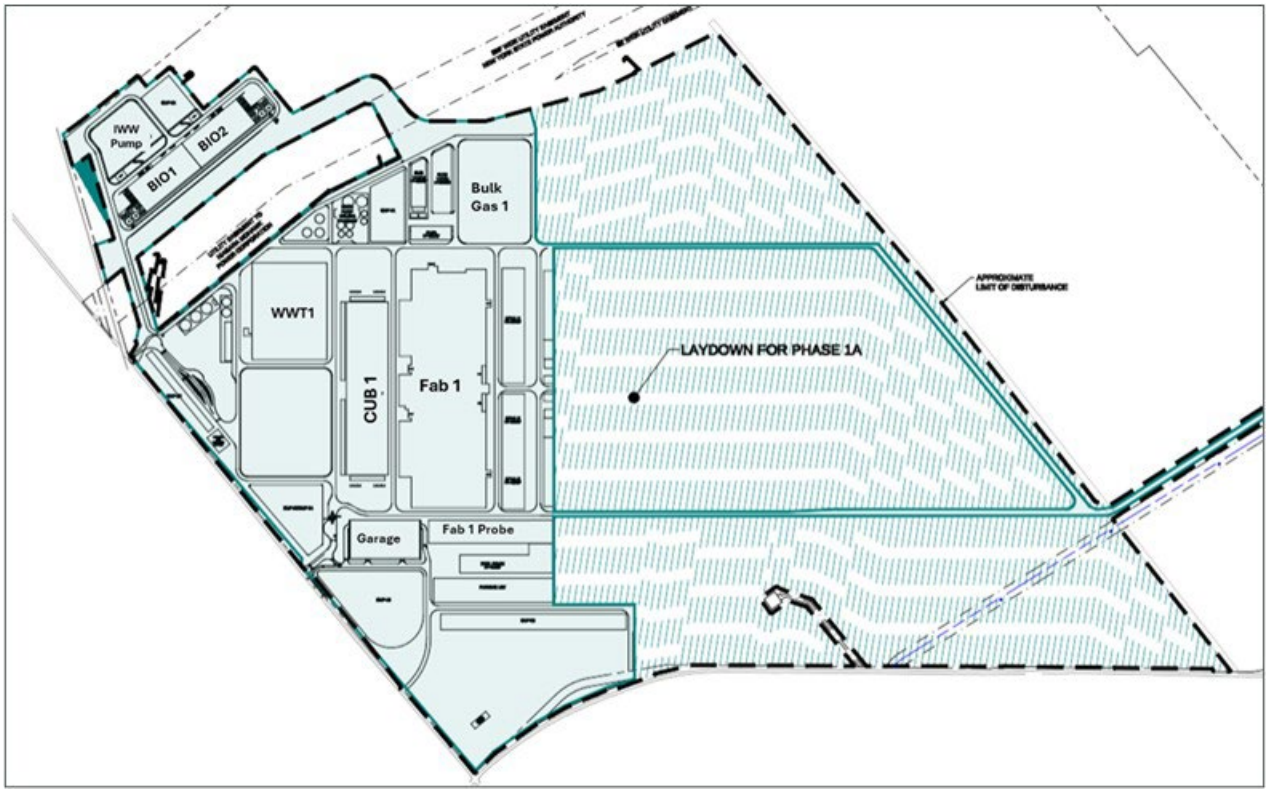
Appendix B-2
Micron Campus Construction Phases

B-2 Micron Campus Construction Phases

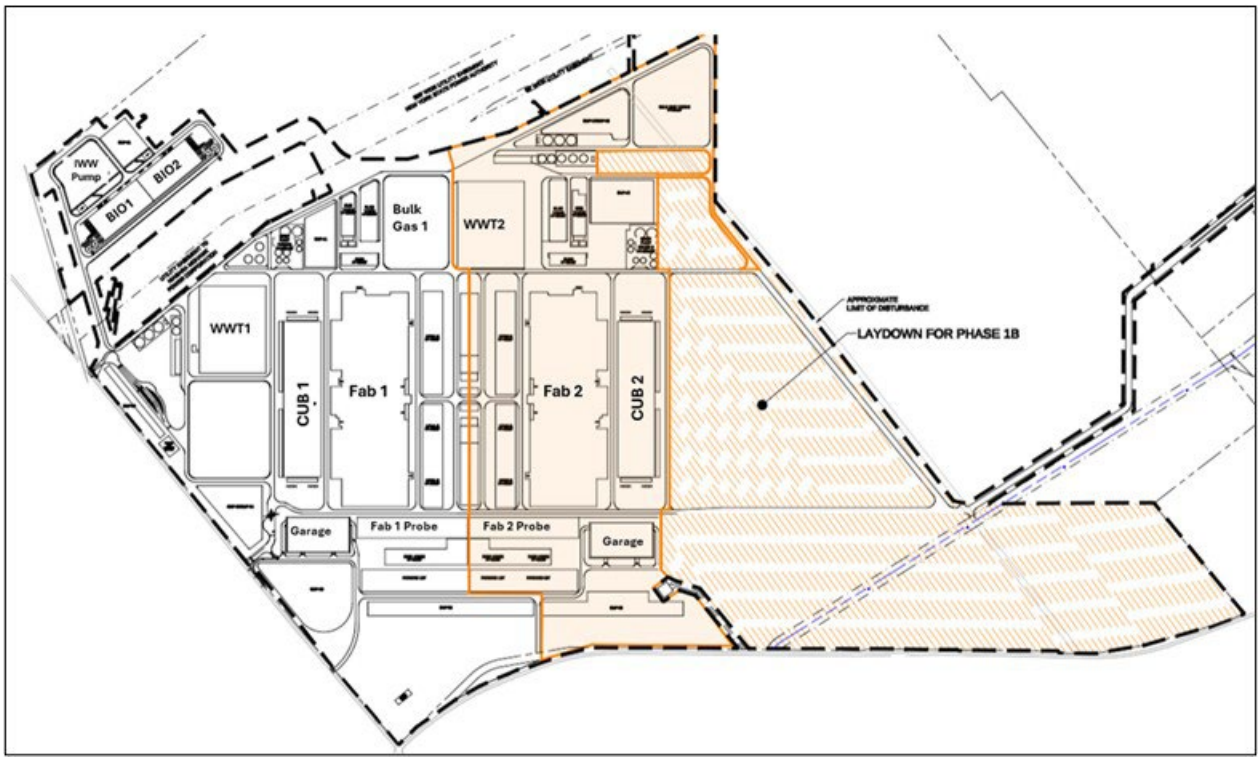
As noted in Section 2.1.1.1, the four fabs at the proposed Micron Campus would be built sequentially from west to east. The four figures below show schematics of the build-out.

Figure B-4 Micron Campus Construction – Phase 1A[5]



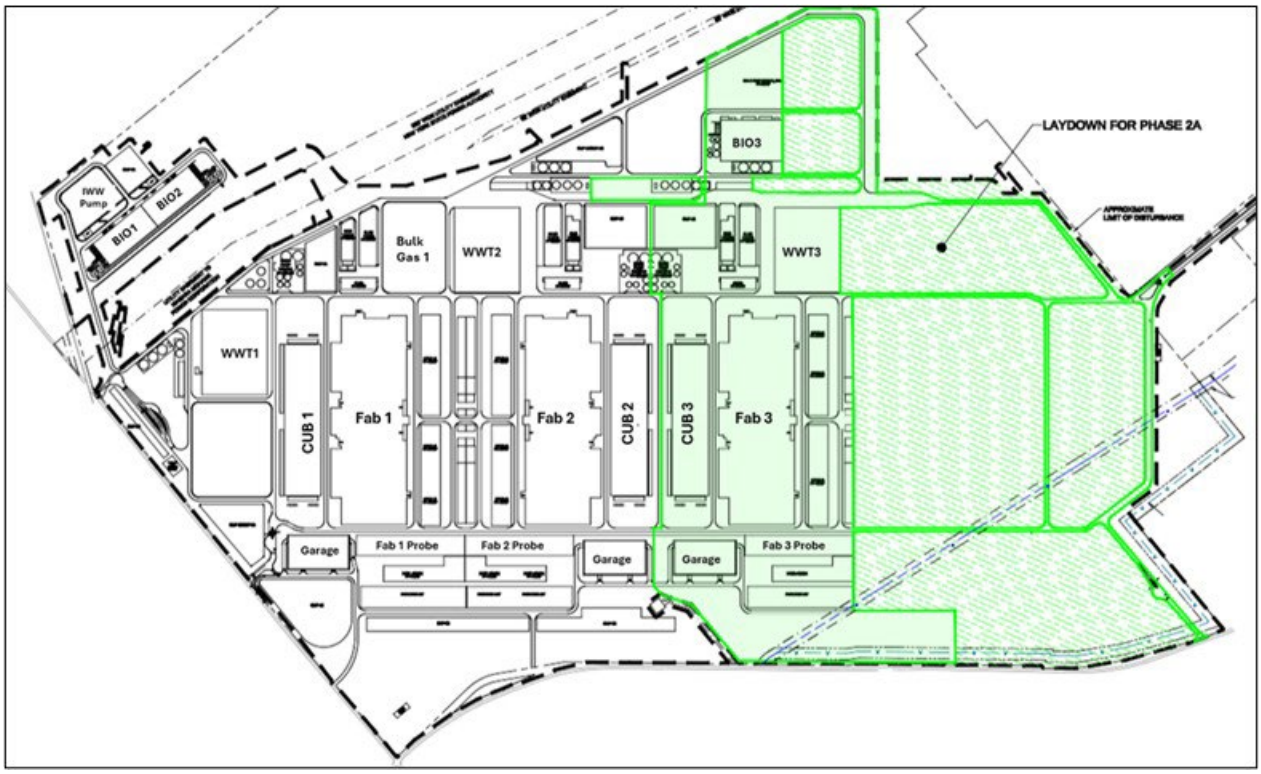
[5] Ground clearing of the entire Phase 1A area would occur in Q4 2025, during the bat hibernation period.

Figure B-5 Micron Campus Construction – Phase 1B[6]



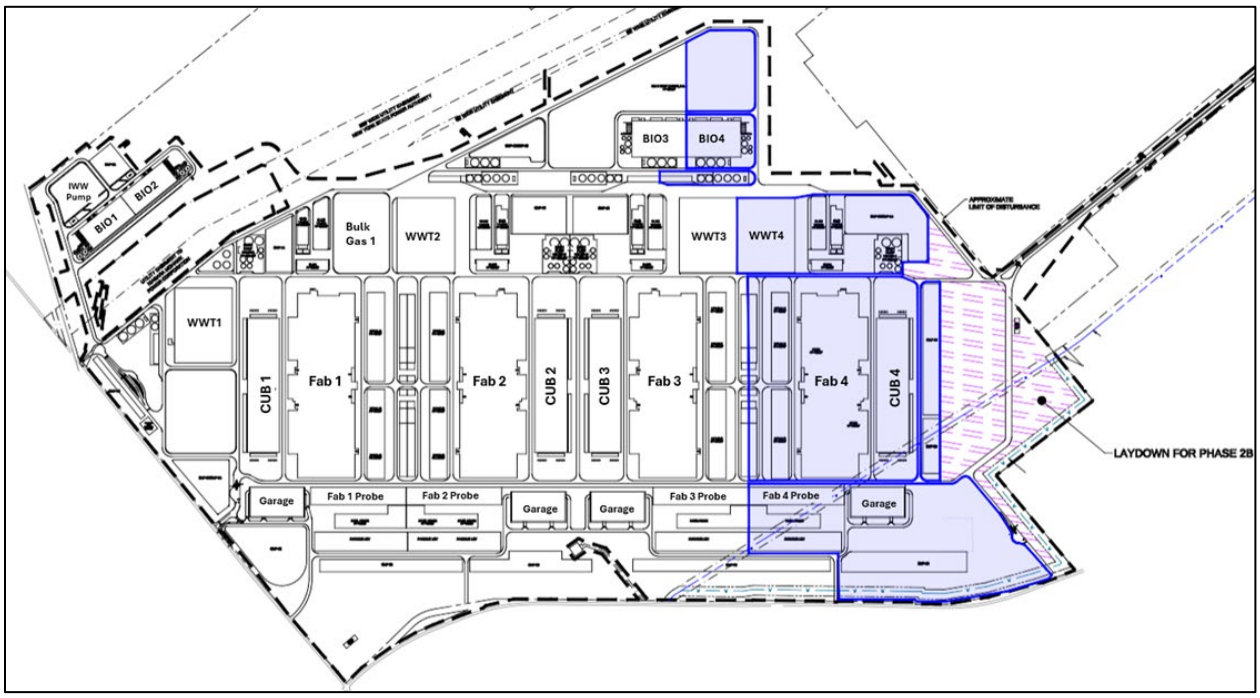
[6] Although construction would be scheduled for Q3 2028, additional ground clearing in the Phase 1B area would occur in Q4 2028, during the bat hibernation period.

Figure B-6 Micron Campus Construction – Phase 2A[7]



[7] Although construction would be scheduled for Q3 2033, additional ground clearing in the Phase 2A area would occur in Q4 2033, during the bat hibernation period.

Figure B-7 Micron Campus Construction – Phase 2B[8]



[8] Although construction would be scheduled for Q2 2039, additional ground clearing in the Phase 2B area would occur in Q4 2039 or Q1 2039, during the bat hibernation period.

Appendix B-3
Micron Campus Site Layout Alternatives

B-3 Micron Campus Site Layout Alternatives

In coordination with Micron, CPO and OCIDA considered a series of potential site layout alternatives for the proposed Micron Campus to determine whether a different layout of the fabs and supporting buildings from the Preferred Action Alternative site layout would result in fewer impacts to waterbodies on the WPCP. Specifically, six site layout alternatives were considered in addition to the Preferred Action Alternative. For the reasons explained below, CPO and OCIDA determined that none of the site layout alternatives besides the Preferred Action Alternative would be practicable because each would create inefficiencies that would prevent the Micron Campus from achieving the semiconductor wafer output necessary to achieve commercial viability.

In addition, CPO and OCIDA found that the Preferred Action Alternative would impact fewer Federal jurisdictional wetlands (190 acres) compared to other site layout alternatives, all of which would impact 200 acres or more of Federal jurisdictional wetlands.

Therefore, CPO and OCIDA determined that the Preferred Action Alternative site layout makes it the only alternative that meets CPO's purpose and need under NEPA and Micron's purpose and need under SEQRA (see Section 1.1) and did not carry the six other site layout alternatives forward for further analysis in the EIS.

Maximally efficient site layouts are critical to the successful operation of large-scale, multi-fab semiconductor manufacturing facilities such as the proposed Micron Campus manufacturing facility. These advanced facilities depend on the ability to minimize transport time for material traveling from one fab to another to maximize the utilization of extremely high-cost fab equipment. An AMHS (Figure B-8) is an integrated system of robots that travel along the ceilings of the fabs and across links between the fabs to transport wafers from one step of the manufacturing process to the next. Since there are limitations on the number of robot paths between fabs that can be built, site layout alternatives must carefully consider variations to entry and exit points from each fab to avoid unacceptable levels of robot congestion that could hamper facility productivity.

Figure B-8 AMHS Example

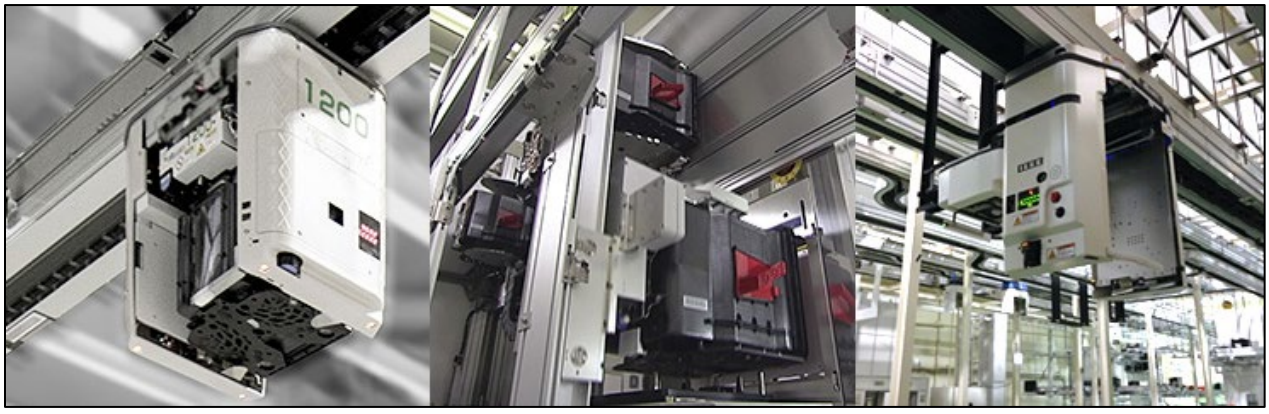


Image Source: www.muratec.net/cfa/

Table B-3 on the next page further details key site layout criteria relevant to ensuring efficient semiconductor manufacturing facility operations.

Table B-3 Site Layout Criteria

Criteria	Description
AMHS Cross-Fab Travel Time	This is the measure of time to transport material from one fab to another. Travel time would need to be minimized to maximize the utilization of the more than $60 billion that Micron would need to spend on semiconductor manufacturing equipment, to ensure that wafer output is optimized as more materials are processed in less time.
AMHS Risk of Overhead Transport (OHT) Congestion	Similar to roadways, the paths that AMHS robots take can become congested and there are limited paths that can be built. For the Micron Campus, any inefficient design of the entry and exit points from each fab would negatively affect cross-fab travel time and diminish Micron's utilization of the more than $60 billion estimated cost of fab equipment needed for the campus.
Utilities Layout and Routing	Semiconductor manufacturing uses a large variety and volume of chemicals, gases, and water. For the Micron Campus, air in the fabs would need to be conditioned to precise temperature and humidity ranges. Delivery of the chemicals, gases, water, and air needed for fab operations would require special support buildings (the central utilities buildings and hazardous process materials buildings located between the fabs). To minimize energy usage, the distances between these support buildings and the fabs would need to be minimized.
Construction Laydown Space	The Micron Campus would require a large area for contractor parking and storage of construction materials. Once the fabs would be built, the construction laydown area would still be needed due to continuous construction activities inside the fabs as they are retrofitted for new memory chip production technology nodes. The need for a large laydown area therefore operates as a constraint on efficient layouts.
Constructability	Design of the fab buildings would only be feasible based on currently available construction means and methods, which also can operate as constraints on alternative layouts.
Other	Other requirements that can operate as constraints on alternative layouts include stormwater management, vibration specifications, and access points.

Source: Micron Technology.

Table B-4 below shows CPO's and OCIDA's application of the alternative evaluation criteria described in Section 2.2 and the site layout criteria in Table B-3 above to the Preferred Action Alternative and the six other site layout alternatives. Based on the below comparison, CPO and OCIDA found that none of the site layout alternatives besides the Preferred Action Alternative would meet purposes and needs or be technically or economically feasible or practicable, and all of them would result in either the same amount of permanent losses of Federal jurisdictional wetlands or the permanent loss of approximately 16-20 additional acres of Federal jurisdictional wetlands. Following Table B-4, Figure B-9 to Figure B-15 display each site layout alternative.

Table B-4 Site Layout Alternative Analysis

Layout	Meets Alternative Evaluation Criteria?	Wetland / Surface Water Losses[9]
Site Layout Alternative 1 (Preferred Action Alternative)	Yes. Would meet purposes and needs; would be technically and economically feasible and practicable; would result in fewer permanent losses of wetlands compared to other site layout alternatives.	184.47 acres / 6,283 LF
Site Layout Alternative 2 (similar to 1 but requires underground parking garages)	No. Would not meet purposes and needs because: • Layout would reduce wafer output per week (WOPW)[10] due to bottlenecks and inefficiencies from underground parking (limited underground access and garage congestion, longer employee garage to workstation travel times, and longer fab material, equipment, and maintenance delivery times would all affect production process efficiency). Would not be technically or economically feasible or practicable because: • Parking garages could not be constructed underground due to high water table and prohibitive amount of near-grade bedrock. Would not result in permanent losses of wetland or surface water features compared to the Preferred Action Alternative.	184.47 acres / 6,283 LF
Site Layout Alternative 3 (Fabs 2-4 shifted to southeast; requires underground parking garages)	No. Would not meet purposes and needs because: • Layout would reduce WOPW by approximately 2 to 3 percent primarily due to longer delivery travel times between fabs. o Distance between fabs and non-linear connections between fabs would require AMHS robot turning and bending, causing bottlenecks, congestion, and increased robot travel times from Fabs 1-2 to Fabs 3-4. o AMHS inefficiencies would reduce the amount of process tool sharing across fabs.	204 acres / 5,701 LF

[9] Figures represent losses of acres of Federal jurisdictional wetlands and linear feet (LF) of Federal jurisdictional surface water features. For additional information, see Section 3.3 (Water Resources).

[10] Unaddressed or unmanageable inefficiencies in memory chip production processes result in reductions in WOPW; even marginal reductions in WOPW result in significantly increased costs (see Appendix A-1).

	○ Design would break up and thereby diminish efficiency of unified probe building operations. ○ Layout would cause bottlenecks and inefficiencies from underground parking garages. Would not be technically or economically feasible or practicable because: • Parking garages could not be constructed underground due to high water table and prohibitive amount of near-grade bedrock. • Layout would have insufficient construction laydown area for Fabs 3-4. • Fab 2 would be too far removed from industrial wastewater treatment. • Layout would result in insufficient stormwater management areas on the southwest side of the campus. Would result in permanent loss of approximately 20 additional acres of Federal jurisdictional wetlands compared to the Preferred Action Alternative.	
Site Layout Alternative 4 (Fabs 1-4 shifted to southeast; requires underground parking garages)	No. Would not meet purposes and needs because: • Layout would reduce WOPW due to bottlenecks and inefficiencies from underground parking. Would not be technically or economically feasible or practicable because: • Parking garages could not be constructed underground due to high water table and prohibitive amount of near-grade bedrock. • Layout would have insufficient construction laydown area for Fabs 3-4. • Layout would have insufficient space for projected utility needs. • Layout would result in insufficient stormwater management area allocations across the campus, necessitating construction of underground stormwater holding tanks with mechanical pumps, which would result in decreased energy efficiency, increased risks of mechanical failure, and increased costs. Would result in permanent loss of approximately 16 additional acres of Federal jurisdictional wetlands compared to the Preferred Action Alternative.	200 acres / 5,902 LF
Site Layout Alternative 5 (Fabs 3-4 shifted to southeast; requires underground parking garages)	No. Would not meet purposes and needs because: • Layout would reduce WOPW primarily due to longer delivery travel times between fabs. ○ Distance between fabs and non-linear connections between fabs would require AMHS robot turning and bending, causing	204 acres / 5,701 LF

	bottlenecks, congestion, and increased robot travel times. o AMHS inefficiencies would reduce the amount of process tool sharing across fabs. o Design would break up and thereby diminish efficiency of unified probe building operations. o Layout would cause bottlenecks and inefficiencies from underground parking garages. Would not be technically or economically feasible or practicable because: • Parking garages could not be constructed underground due to high water table and prohibitive amount of near-grade bedrock. • Layout would have insufficient construction laydown area for Fabs 3-4. • Layout would result in insufficient stormwater management areas on the southwest side of the campus. Would results in permanent loss of approximately 20 additional acres of Federal jurisdictional wetlands compared to the Preferred Action Alternative.	
Site Layout Alternative 6 (Fabs 3-4 rotated horizontally; requires underground parking garages)	No. Would not meet purposes and needs because: • Layout would reduce WOPW primarily due to longer delivery travel times between fabs. o Orientation of fabs and distance and non-linear connections between fabs would require AMHS robot turning and bending, causing bottlenecks, congestion, and increased robot travel times; layout would necessitate additional AMHS construction for approximately $150 million in additional capital expenditure. o Non-linear fab alignment would essentially eliminate useful cross-fab transportation connections (which also would increase capital and operating expenditures). o Tool sharing across fabs would be eliminated. o Design would break up and thereby diminish efficiency of unified probe building operations. o Layout would cause bottlenecks and inefficiencies from underground parking garages. Would not be technically or economically feasible or practicable because: • Parking garages could not be constructed underground due to high water	204 acres / 5,701 LF

	table and prohibitive amount of near-grade bedrock. • Layout would have insufficient construction laydown area for Fabs 3-4. • Layout would result in insufficient stormwater management areas on the southwest side of the campus. Would results in permanent loss of approximately 20 additional acres of Federal jurisdictional wetlands compared to the Preferred Action Alternative.	
Site Layout Alternative 7 (Fabs 2-3 rotated horizontally; requires underground parking garages)	No. Would not meet purposes and needs because: • Layout would reduce WOPW primarily due to longer delivery travel times between fabs. o Orientation of fabs and distance and non-linear connections between fabs would require AMHS robot turning and bending, causing bottlenecks, congestion, and increased robot travel times. o Non-linear fab alignment would essentially eliminate useful cross-fab transportation connections (which also would increase capital and operating expenditures). o Tool sharing across fabs would be eliminated. o Design would break up and thereby diminish efficiency of unified probe building operations. o Layout would cause bottlenecks and inefficiencies from underground parking garages. Would not be technically or economically feasible or practicable because: • Parking garages could not be constructed underground due to high water table and prohibitive amount of near-grade bedrock. Would result in permanent loss of approximately 20 additional acres of Federal jurisdictional wetlands compared to the Preferred Action Alternative.	204 acres / 5,701 LF

Source: Micron Technology.

Figure B-9 Site Layout Alternative 1
(Preferred Action Alternative)

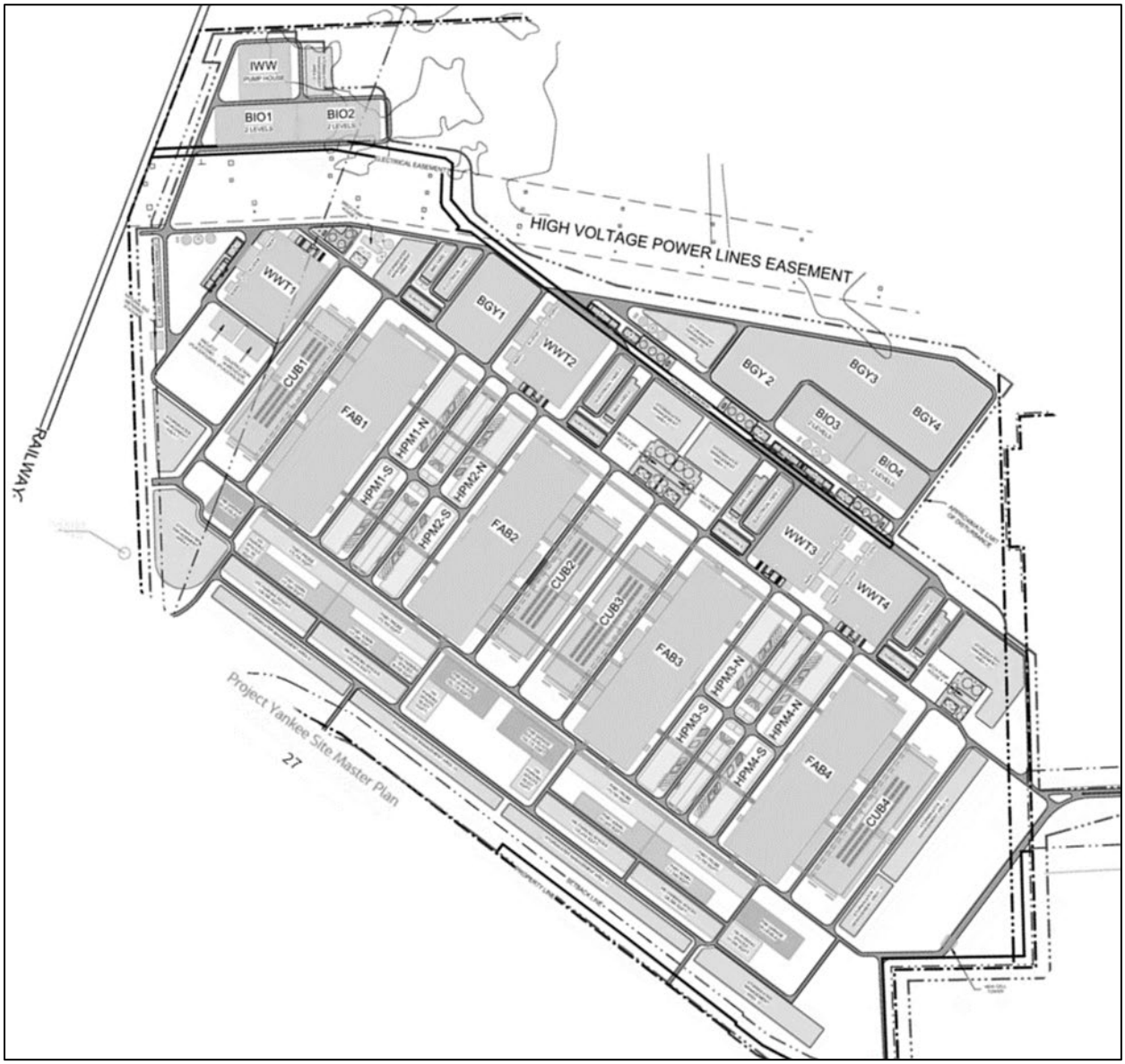


Figure B-10 Site Layout Alternative 2
(similar to 1 but requires underground parking garages)

Figure B-11 Site Layout Alternative 3
(Fabs 2-4 shifted to southeast; requires underground parking garages)

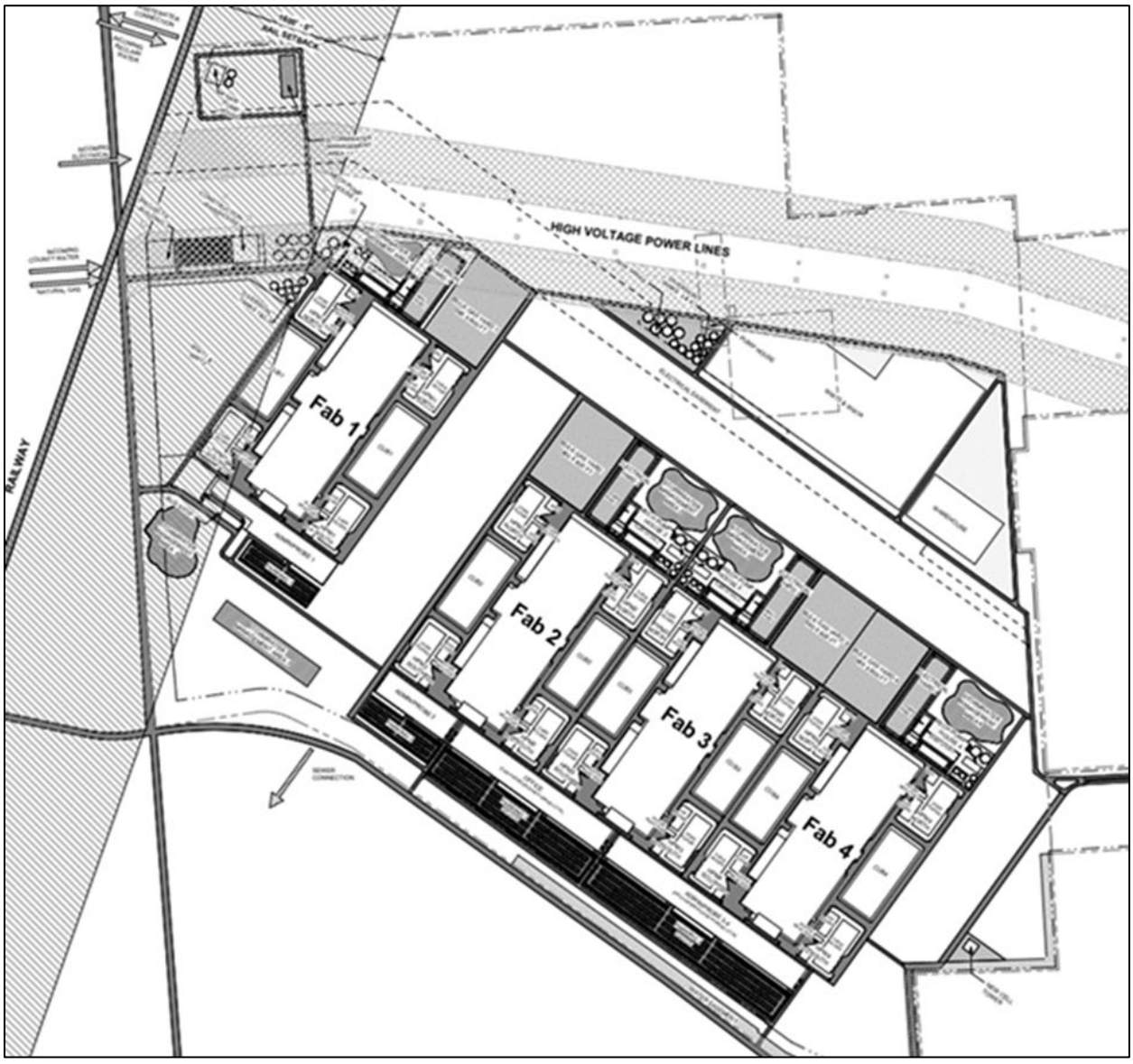


Figure B-12 Site Layout Alternative 4
(Fabs 1-4 shifted to southeast; requires underground parking garages)

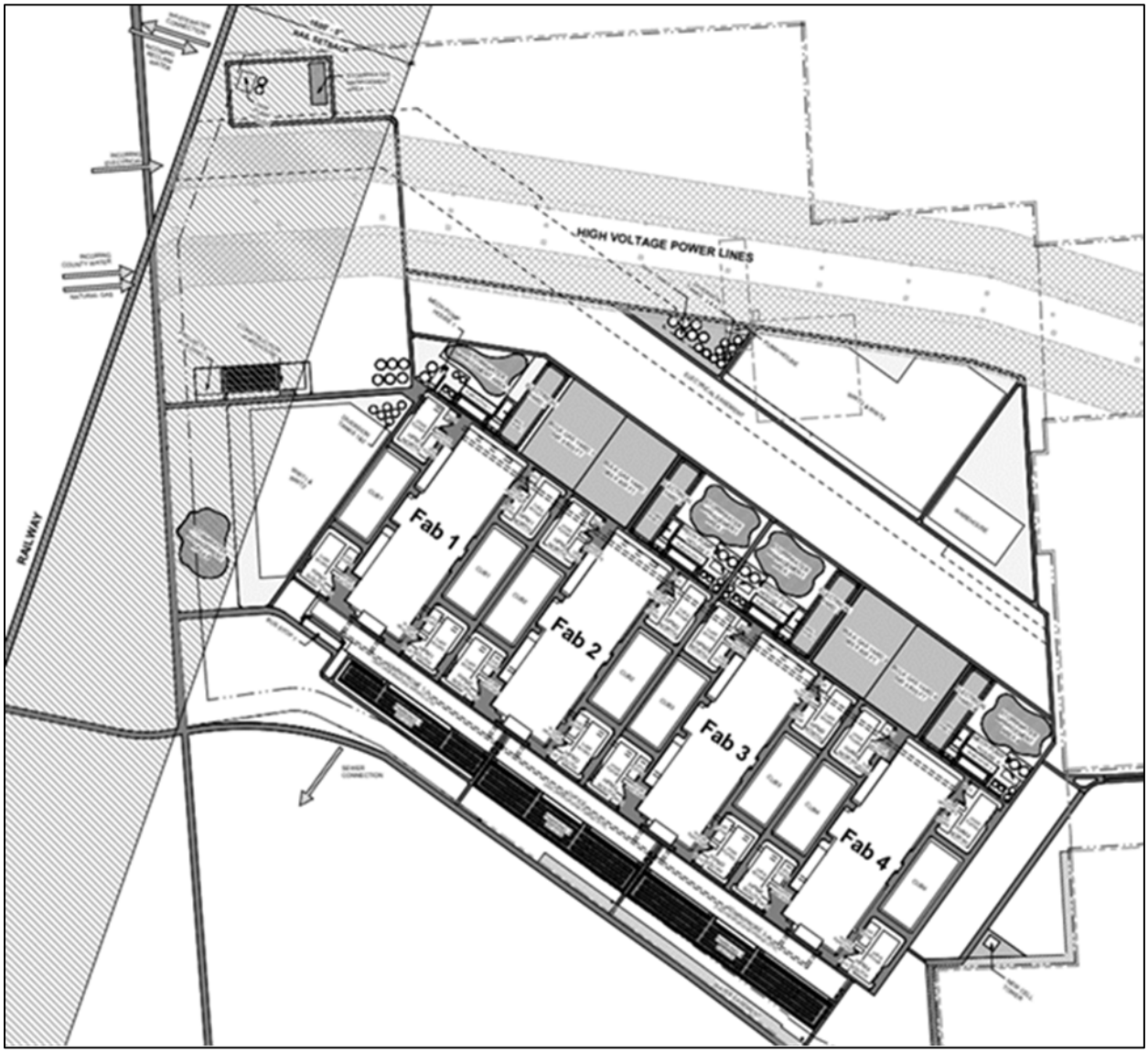


Figure B-13 Site Layout Alternative 5
(Fabs 3-4 shifted to southeast; requires underground parking garages)

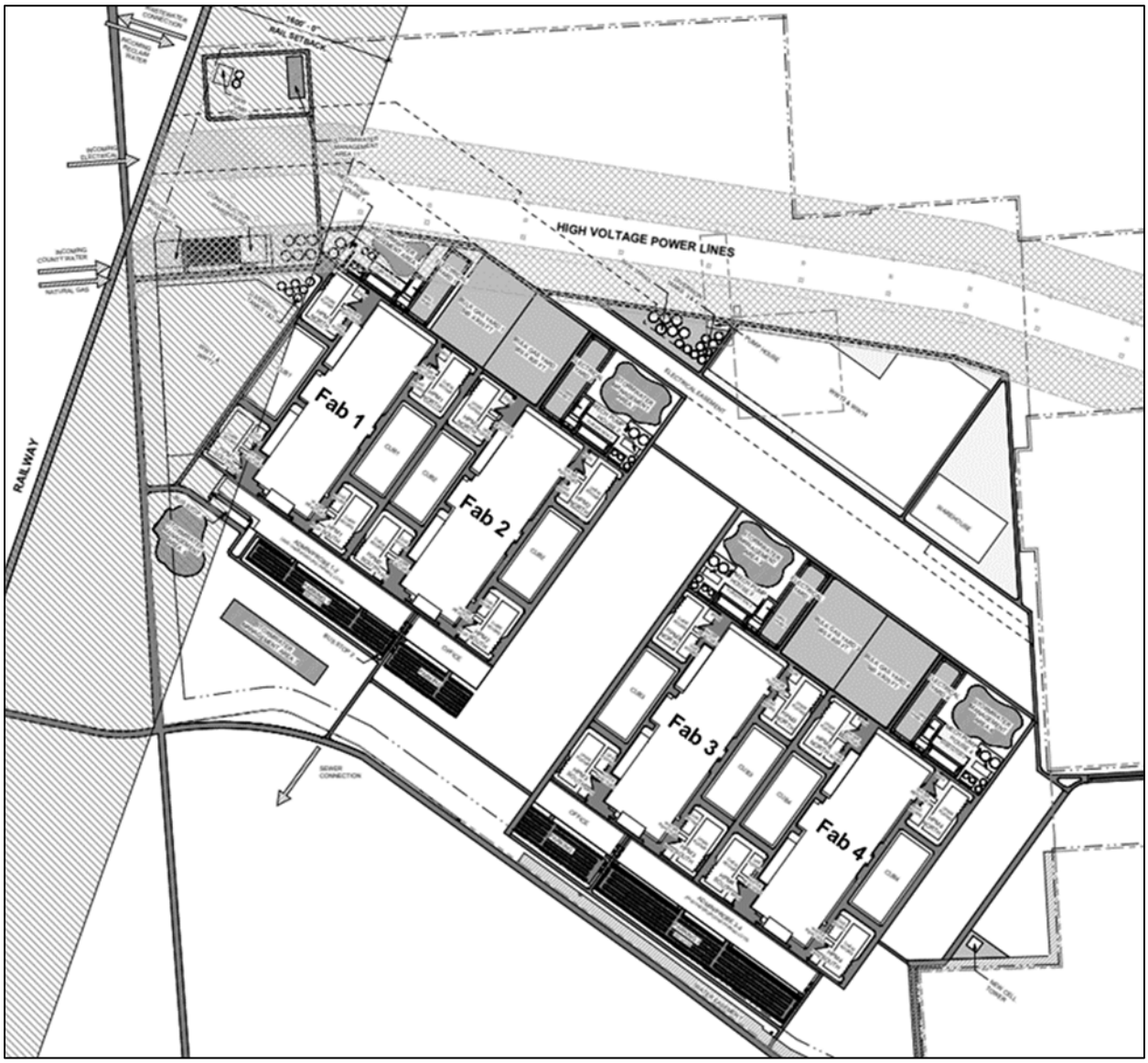


Figure B-14 Site Layout Alternative 6
(Fabs 3-4 rotated horizontally; requires underground parking garages)

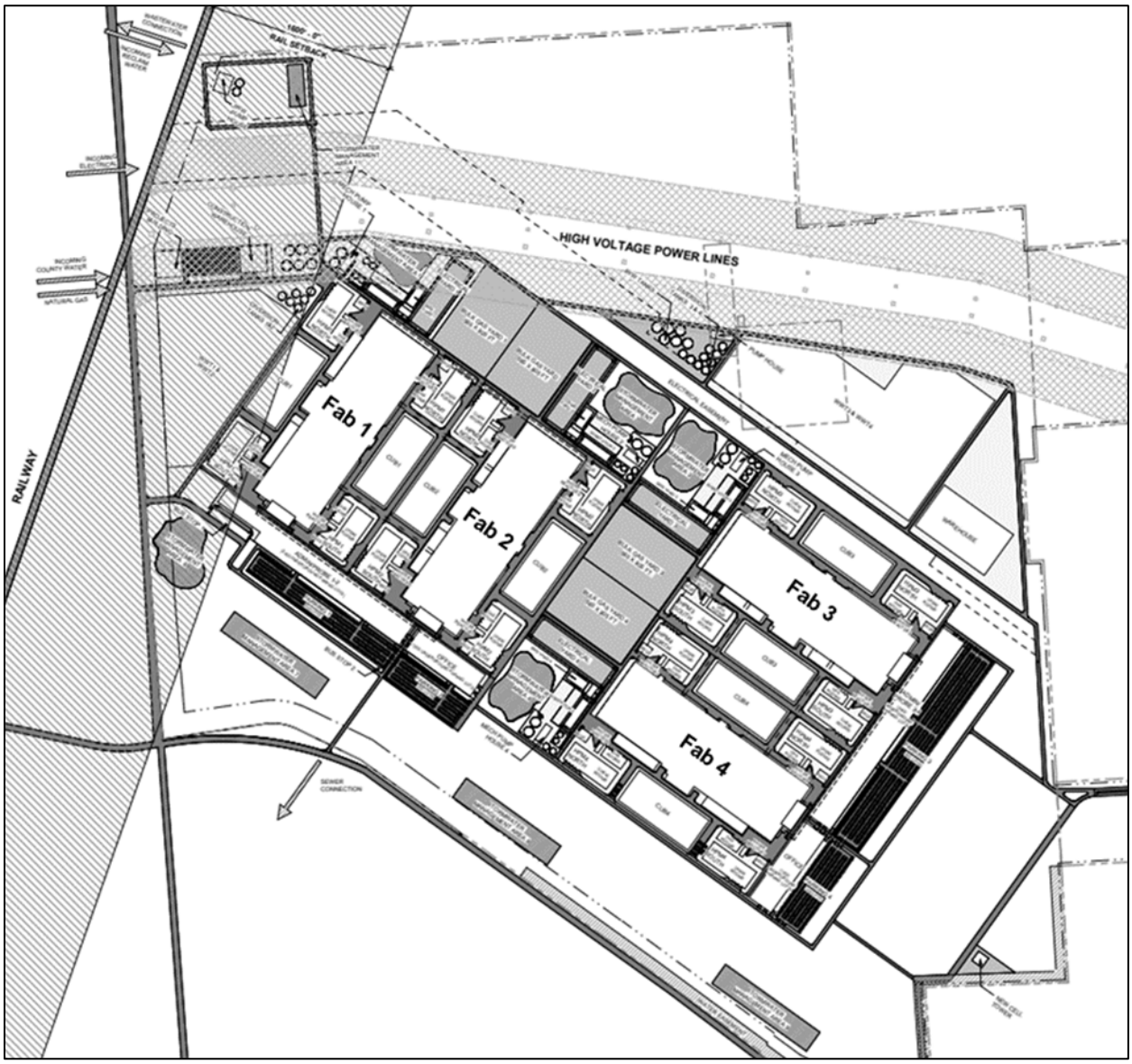
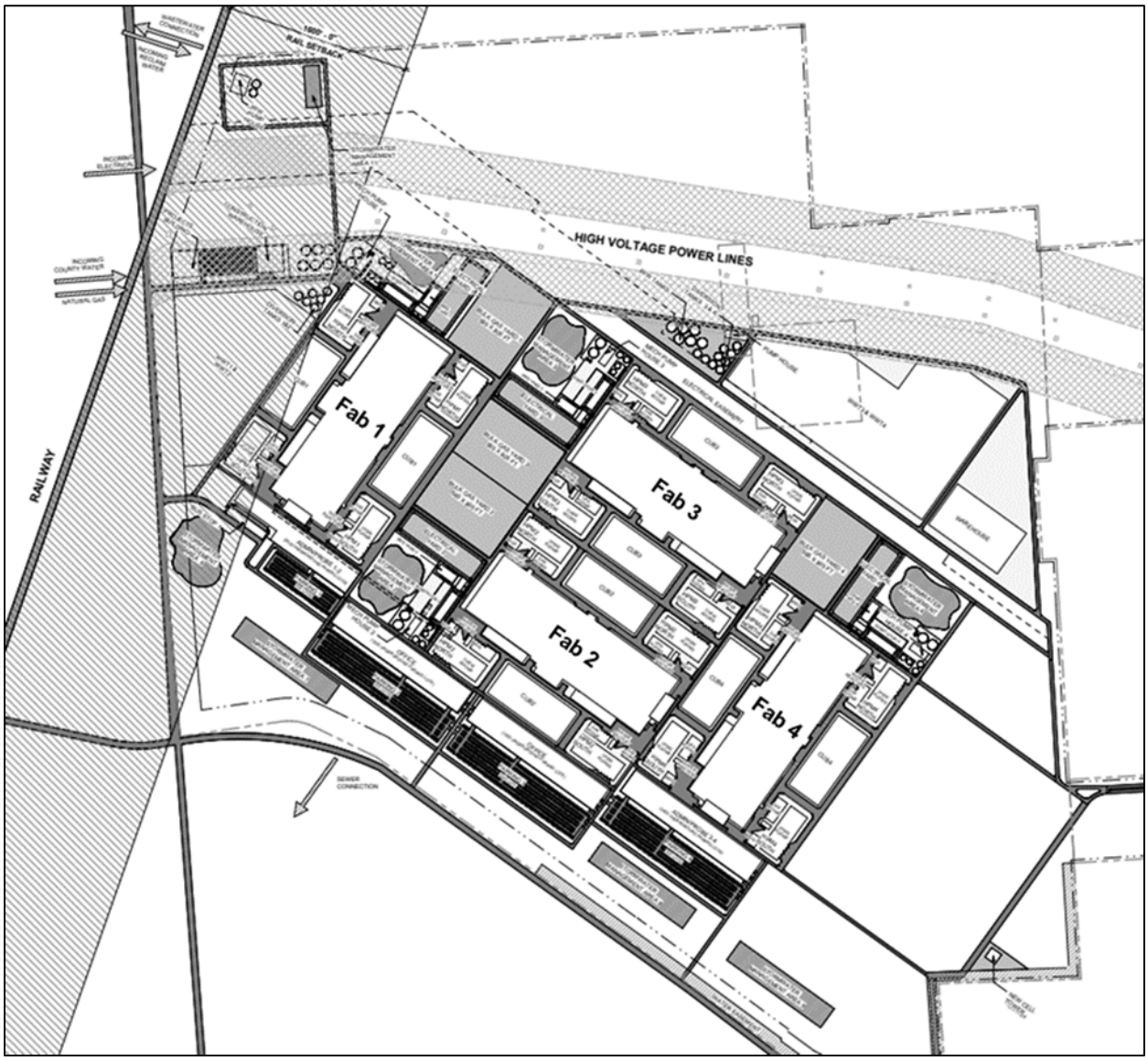


Figure B-15 Site Layout Alternative 7
(Fabs 2-3 rotated horizontally; requires underground parking garages)



Appendix B-4
Micron Campus Parking Space Needs

B-4 Micron Campus Parking Space Needs

The proposed Micron Campus would include a total of 11,600 above-ground parking spaces, divided between four 500-space surface parking lots located south of the administration and probe buildings, and four 2,400-space structured parking areas (see Figure 2.1-5). As outlined below, the design of the campus includes this number of parking spaces to accommodate the anticipated peak headcount for full-time employees, construction workers, general visitors, and visitors to large on-site events, while also factoring in considerations for snow storage.

Workforce Parking

As discussed in Section 2.1.1.6, at full production in 2045, the Micron Campus would support a full-time employee peak headcount of 9,005 workers, along with 300 construction workers who will remain on-site for ongoing refinements. Parking spaces would be allocated to ensure that every full-time employee and construction worker has access to on-site parking and to accommodate shift overlap. This overlap would be necessary to allow for a pass-down period between shifts, during which both incoming and outgoing shift vehicles would be parked simultaneously. Overall, this parking allocation would be necessary to maintain a smooth flow of traffic within the property.

General Visitor Parking

In addition to parking for employees and construction workers, Micron anticipates a regular flow of visitors. Approximately 400 parking spaces would be allocated to visitors to ensure safe visitor access to the campus. This allocation would minimize disruptions to employee parking areas and day-to-day operations.

Large Event Parking

Micron anticipates the need to occasionally host large events that would require additional visitor parking. Approximately 800 parking spaces would be allocated to accommodate peak anticipated attendance during these events. These spaces would be necessary to ensure that large groups can park on-site and safely access the campus. Micron would plan for these events in advance to avoid potential congestion or parking shortages.

Snow Storage

Given the climate in New York State, snow storage is an essential element of parking lot design. Approximately 1,100 spaces, representing 25 percent of the surface parking lots and the top level of the structured parking areas, would be allocated to snow storage during the winter months. Adequate snow storage space would be necessary to manage snow accumulation without interfering with the availability of parking spaces, and would ensure that snow removal would not impede traffic flow or create hazards for employees or visitors.

APPENDIX C
GROWTH INDUCING EFFECTS

Appendix C-1
Growth Inducing Effects Methodology and Study Area

C-1 Growth Inducing Effects

C-1.1 Overview and Study Area

SEQRA and its implementing regulations (6 NYCRR § 617.9) specify that an EIS should identify and discuss any growth inducing aspects of a proposed action, where such effects are relevant to the analysis. As described in the SEQR Handbook published by NYSDEC, the analysis in an EIS of the reasonably foreseeable indirect effects of a proposed action should include growth inducing effects, such as "effects related to changes in the pattern of land use, population density or growth rate, and air, water, and other natural systems, including ecosystems" (NYSDEC, 2020, p. 79).

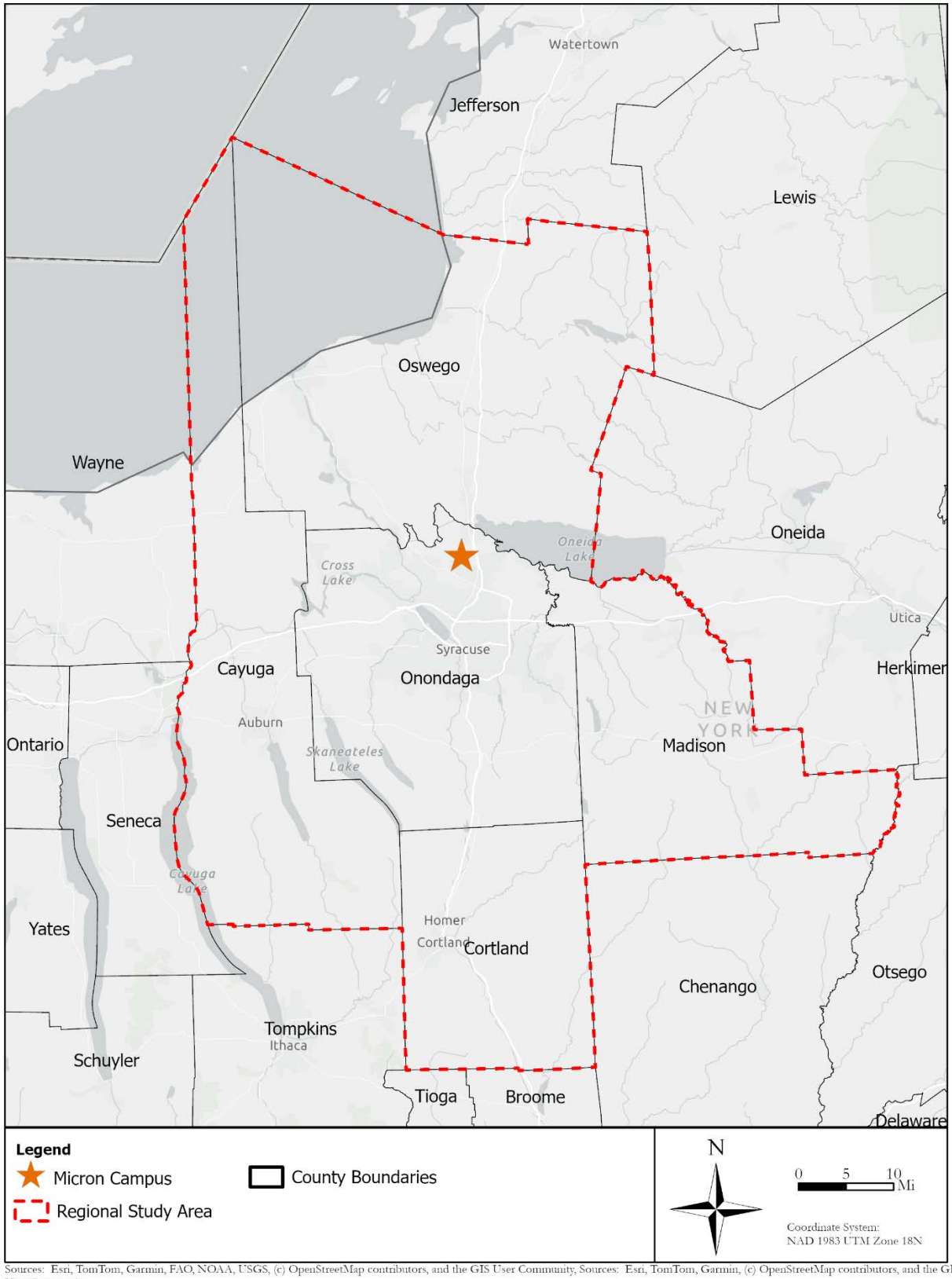
According to a 2022 study prepared by Regional Economic Models, Inc. (REMI) and sponsored by ESD (the "REMI Study"), 85 percent of induced job growth and 90 percent of induced residential growth from Micron establishing a four-fab semiconductor manufacturing facility in Onondaga County would occur within the five-county region (REMI, 2022). A copy of the REMI Study is included in Appendix C-2.

Therefore, this five-county region, shown in Figure C-1 on the next page, has been selected as the study area for analyzing growth inducing effects in this EIS. This study area represents the outer extent of the reasonably foreseeable growth inducing effects of the Preferred Action Alternative on the resource areas analyzed in the EIS, which describes such effects under Growth Inducing Effects in each section of Chapter 3. In general, although locations beyond the five-county region could experience some induced growth, such growth would likely be more limited in nature than that in the five-county region and would not occur at a scale that would be anticipated to result in significant adverse environmental effects.

Under the Preferred Action Alternative, the construction and operation of the Micron Campus in particular would be anticipated to induce job growth within the semiconductor supply chain, draw additional supply chain businesses to the area, and catalyze further development and growth in the regional economy. This economic revitalization could lead to increases in population, worker and household spending, and commercial and retail activity. At the same time, this induced growth could lead to changes in population density and land use patterns, and increased residential, commercial, and industrial activity that could produce additional effects on the surrounding human and natural environment.

The following sections provide additional information on the methodology and evaluation methods used to assess growth inducing effects in the EIS.

Figure C-1 Growth Inducing Effects Study Area



Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community, Sources: Esri, TomTom, Garmin, (c) OpenStreetMap contributors, and the GIS User Community

C-1.2 Methodology and Modeling

The methodology for the growth inducing effects analysis in the EIS was developed based on a combination of the REMI Study, local planning sources, and data analytics. An analysis of growth inducing effects requires information on the types of growth anticipated, the scale and extent of growth, and where that growth is likely to occur. Therefore, the growth inducing effects analysis first considered the following broad categories of growth:

- **Increases in population:** the Preferred Action Alternative would lead to in-migration of Micron workers, supply chain workers, and other individuals attracted to the area by increased social and economic opportunities, the in-migration of the families of those groups, and the increased retention of existing residents and workers and their families who would support and benefit from increased local economic activity and household spending from additional population and labor income such groups would bring.

- **Increases in jobs and economic activity:** the Preferred Action Alternative would lead to increased economic activity, business revenues, and jobs within the semiconductor manufacturing supply chain in the region and would further stimulate other business growth, residential growth, and household consumer spending.

- **Increases in residential, commercial, and industrial development:** in-migrating workers and families would need housing, which would spur additional residential development; Micron's construction and operational activities would lead to growth in supply chain businesses supporting Micron's activities; and increases in population and labor income would spur further commercial development to support the anticipated growth in household consumer spending.

The REMI Study estimated induced job[11] growth and induced residential growth from the construction of a four-fab facility at the proposed Micron Campus site that would be likely to occur between 2025 and 2055.[12] These induced growth estimates indicate the overall extent and scale of anticipated induced growth in the five-county region as a whole, but the study was not intended to provide induced growth projections at a smaller scale.

To develop a more granular analysis of growth inducing effects at the community level, the EIS used information and data from local planning sources compiled by the Syracuse Metropolitan Transportation Authority (SMTA) to develop a model of induced household growth at the town, city, and county levels. The model distributed the REMI Study's induced population growth projections by municipality as follows:

[11] Although the REMI Study defined "induced jobs" as those jobs that would be generated by worker spending and "indirect jobs" as those jobs that would be generated within the semiconductor supply chain, the EIS considers both of those types of jobs as components of induced growth.

[12] The REMI Study found that induced population growth in the five-county region would be primarily driven by economic in-migration to the region due to the expanded availability of high-paying jobs. Economic in-migration is net population movement into (or out of) a region driven by changes in economic conditions such as job availability, compensation, cost of living, or taxes.

- The REMI Study's induced population growth projections were converted to estimated numbers of induced households, based on a 2.31 persons-per-household assumption derived from 2016-2021 U.S. Census Bureau American Community Survey (ACS) data for the five-county region.

- The total induced households were apportioned into the following household types:

  - Micron construction workers and their families who would in-migrate to the region based on construction jobs at the Micron Campus. The estimated number of in-migrating construction workers is based on Micron's estimated construction labor demand relative to the construction labor force supply within an approximately 90-mile radius of the Micron Campus, and assumes one Micron construction worker per in-migrating household.

  - Micron operational workers and their families who would in-migrate to the region for an operational job at the Micron Campus. The estimated number of in-migrating Micron operational workers is based on Micron's estimated operational labor demand relative to an average 28 percent worker in-migration rate that has occurred at Micron's existing facilities in Boise, ID and Manassas, VA, and assumes one Micron operational worker per in-migrating household.

  - Other workers and their families (also assuming one induced worker per household) who would in-migrate to the area to meet the growth in labor demand within Micron's supply chain and the consumer needs from the induced population growth, as well as individuals and families attracted to the area by increased social and economic opportunities.

- The total induced households were then distributed to municipalities within the five-county region based on the known characteristics of these household types:

  - In-migrating Micron construction worker households were distributed based in part on ACS data on commuting distances within Onondaga County and for construction workers nationally. The modeling also accounted for existing population densities, short-term housing supply constraints that could push worker housing farther out than shorter commuting distances, and Micron's intention to reimburse certain work-related travel expenses for construction workers traveling from as far away as 90 miles from the Micron Campus.

  - In-migrating Micron operational worker households also were distributed based on existing population densities and ACS data on commuting distances, including U.S. Census Bureau OnTheMap data on residence-to-workplace distances in the census tract where the Micron Campus would be located and the census tracts for Micron's existing facilities in Boise, ID and Manassas, VA and the GlobalFoundries semiconductor facilities in Malta, NY, taking into account changing patterns in commuting distances from before and after those facilities began operations.

  - Other workers and their families who would be employed at supply chain businesses and other commercial businesses serving anticipated household consumer spending

growth were distributed not based on potential proximity to the Micron Campus but on existing municipal population densities within the five-county region; in-migrating residents who would be attracted to the region due to increased social and economic opportunities and who would not necessarily be tied to induced jobs also were distributed based on existing municipal population densities.

Because a vast majority of the projected in-migrating residents would not be employed with Micron, the modeled distribution of the REMI Study induced population projections as described above was not heavily concentrated around the Micron Campus location.

Separate from the modeling described above, SMTC generated future household and job growth projections for the Syracuse Metropolitan Planning Area (MPA) (all of Onondaga County, plus the Towns of Hastings, Schroeppel, and West Monroe in Oswego County), including anticipated growth associated with the Proposed Project. To generate these projections, SMTC staff met with local planning agencies, including representatives from the City of Syracuse, Onondaga County, and CenterState CEO, who identified general and site-specific locations of planned and anticipated household and employment growth or decline in their geographic areas of expertise. SMTC developed MPA projections for 2040 and 2050 based on this information, the REMI Study projections, and its local knowledge of other anticipated growth.

SMTC's MPA projections indicated a larger degree of induced growth than the modeling described above, whereas assuming the REMI Study's regional projections as an upper limit on the SMTC projections results in a reduced degree of induced growth occurring outside of the MPA but within the five-county region. Therefore, the EIS developed low- and high-range estimates of induced household growth at the town, city, and county levels to conservatively demonstrate the range of possible induced growth based on these varying information sources.

Induced commercial and industrial business growth within the semiconductor supply chain, and increased consumer demand generated by population increases, also would be anticipated to occur in the five-county region in addition to the induced household growth described above. The REMI Study did not provide estimates for induced commercial or industrial business growth, and it would be difficult to determine how much of that growth would occur largely within or through expansions of existing facilities versus through establishment of new facilities. Given the scale of anticipated supply chain growth and new worker and household spending, it is reasonable to assume that substantial new commercial and industrial development would occur over time. However, it would be premature to estimate ranges for such incremental commercial and industrial development at the municipal or regional level at this time.

C-1.3 Induced Growth Estimates

As described above, the EIS developed a model of future induced household growth at the town, city, and county levels. Although it is not possible to predict all of the specific locations and sites where induced development would occur over time (including because such development would be subject to applicable laws and regulations, including local zoning requirements, site plan approvals, and other discretionary actions requiring separate site-specific reviews), the municipal and county level estimates indicate the potential scale of such induced growth, and inform the discussion of potential Growth Inducing Effects in the EIS.

The following tables show the induced growth projections developed based on the methodology and modeling described in the previous section. The projections are shown as low- and high-range estimated percentage changes compared to 2023 estimated household numbers at the municipal and county levels the five-county region for the years 2035 and 2041. Table C-1 and C-2 show the total induced growth projections at the county level in 2035 and 2041. The remaining tables show the municipal projections within each county for those years.[13]

Table C-1 Induced Growth Projections by County (2035)

Geographic Area	Estimated Households in 2023	Micron Induced Households		Percent Increase in Households over 2023	
		Low	High	Low	High
Onondaga County	194,963	12,727	18,223	6.5%	9.3%
Oswego County	47,132	1,438	3,721	3.1%	7.9%
Madison County	25,563	751	1,943	2.9%	7.6%
Cayuga County	31,334	808	2,090	2.6%	6.7%
Cortland County	18,768	464	1,201	2.5%	6.4%

Table C-2 Induced Growth Projections by County (2041)

Geographic Area	Estimated Households in 2023	Micron Induced Households		Percent Increase in Households over 2023	
		Low	High	Low	High
Onondaga County	194,963	16,568	23,518	8.5%	12.1%
Oswego County	47,132	1,674	4,561	3.6%	9.7%
Madison County	25,563	874	2,382	3.4%	9.3%
Cayuga County	31,334	940	2,562	3.0%	8.2%
Cortland County	18,768	540	1,473	2.9%	7.8%

[13] All tables in this Appendix are projections developed by AKRF, Inc. based on data from the REMI Study, existing household data contained in U.S. Census Bureau ACS 2019-2023 5-year estimates, and SMTC growth projections. The induced household growth estimates presented in the tables include all Proposed Project-induced new populations, including: in-migrating Micron workers and families; retained and in-migrating supply chain workers and families; retained and in-migrating workers and families supporting increased household and consumer spending; and other retained and in-migrating residents attracted to the region by increased social and economic opportunities. Totals may not sum due to rounding.

Table C-3 Induced Growth in Onondaga County (2035)

Geographic Area	Estimated Households in 2022	Micron Induced Households		Percent Increase in Households over 2022	
		Low	High	Low	High
Onondaga County (Total)	**194,963**	**12,727**	**18,223**	**6.5%**	**9.3%**
Camillus	10,785	539	772	5.0%	7.2%
Cicero	12,635	1,270	1,819	10.1%	14.4%
Clay	25,143	2,092	2,996	8.3%	11.9%
Dewitt	10,332	796	1,140	7.7%	11.0%
Elbridge	2,339	101	144	4.3%	6.2%
Fabius	825	16	22	1.9%	2.7%
Geddes	7,187	195	280	2.7%	3.9%
LaFayette	1,942	71	101	3.7%	5.2%
Lysander	9,002	754	1,080	8.4%	12.0%
Manilius	13,830	789	1,130	5.7%	8.2%
Marcellus	2,629	129	185	4.9%	7.0%
Onondaga (town)	8,640	610	873	7.1%	10.1%
Onondaga Nation	192	-	-	-	-
Otisco	934	30	43	3.2%	4.6%
Pompey	2,812	97	139	3.4%	4.9%
Salina	15,205	544	779	3.6%	5.1%
Skaneateles	3,037	104	148	3.4%	4.9%
Spafford	730	19	27	2.6%	3.7%
Syracuse	59,286	4,097	5,866	6.9%	9.9%
Tully	1,016	41	59	4.0%	5.8%
Van Buren	6,462	433	620	6.7%	9.6%

Table C-4 Induced Growth in Onondaga County (2041)

Geographic Area	Estimated Households in 2023	Micron Induced Households		Percent Increase in Households over 2023	
		Low	High	Low	High
Onondaga County (Total)	**194,963**	**16,568**	**23,518**	**8.5%**	**12.1%**
Camillus	10,785	702	996	6.5%	9.2%
Cicero	12,635	1,654	2,348	13.1%	18.6%
Clay	25,143	2,724	3,866	10.8%	15.4%
Dewitt	10,332	1,036	1,471	10.0%	14.2%
Elbridge	2,339	131	186	5.6%	8.0%
Fabius	825	20	29	2.4%	3.5%
Geddes	7,187	254	361	3.5%	5.0%
LaFayette	1,942	92	131	4.7%	6.7%
Lysander	9,002	982	1,394	10.9%	15.5%
Manlius	13,830	1,028	1,459	7.4%	10.5%
Marcellus	2,629	168	238	6.4%	9.1%
Onondaga (town)	8,640	794	1,126	9.2%	13.0%
Onondaga Nation	192	-	-	-	-
Otisco	934	39	56	4.2%	6.0%
Pompey	2,812	126	179	4.5%	6.4%
Salina	15,205	708	1,005	4.7%	6.6%
Skaneateles	3,037	135	192	4.4%	6.3%
Spafford	730	25	35	3.4%	4.8%
Syracuse	59,286	5,333	7,570	9.0%	12.8%
Tully	1,016	54	76	5.3%	7.5%
Van Buren	6,462	564	800	8.7%	12.4%

Table C-5 Induced Growth in Oswego County (2035)

Geographic Area	Estimated Households in 2023	Micron Induced Households		Percent Increase in Households over 2023	
		Low	High	Low	High
Oswego County (Total)	**47,132**	**1,438**	**3,721**	**3.1%**	**7.9%**
Albion	709	20	54	2.9%	7.6%
Amboy	487	14	37	2.9%	7.6%
Boylston	256	7	19	2.9%	7.6%
Constantia	1,879	64	161	3.4%	8.6%
Fulton	4,782	138	364	2.9%	7.6%
Granby	2,657	77	202	2.9%	7.6%
Hannibal	1,781	51	135	2.9%	7.6%
Hastings	3,851	132	329	3.4%	8.6%
Mexico	2,269	66	173	2.9%	7.6%
Minetto	691	20	53	2.9%	7.6%
New Haven	1,107	32	84	2.9%	7.6%
Orwell	370	11	28	2.9%	7.6%
Oswego city	7,256	210	552	2.9%	7.6%
Oswego town	1,874	54	143	2.9%	7.6%
Palermo	1,220	42	104	3.4%	8.6%
Parish	1,042	30	79	2.9%	7.6%
Redfield	168	5	13	2.9%	7.6%
Richland	2,337	68	178	2.9%	7.6%
Sandy Creek	1,610	47	122	2.9%	7.6%
Schroeppel	3,385	116	290	3.4%	8.6%
Scriba	2,809	81	214	2.9%	7.6%
Volney	2,346	80	201	3.4%	8.6%
West Monroe	1,707	58	146	3.4%	8.6%
Williamstown	539	16	41	2.9%	7.6%

Table C-6 Induced Growth in Oswego County (2041)

Geographic Area	Estimated Households in 2023	Micron Induced Households		Percent Increase in Households over 2023	
		Low	High	Low	High
Oswego County (Total)	**47,132**	**1,674**	**4,561**	**3.6%**	**9.7%**
Albion	709	24	66	3.4%	9.4%
Amboy	487	16	46	3.4%	9.4%
Boylston	256	9	24	3.4%	9.4%
Constantia	1,879	74	195	3.9%	10.4%
Fulton	4,782	162	448	3.4%	9.4%
Granby	2,657	90	249	3.4%	9.4%
Hannibal	1,781	60	167	3.4%	9.4%
Hastings	3,851	152	400	3.9%	10.4%
Mexico	2,269	77	212	3.4%	9.4%
Minetto	691	23	65	3.4%	9.4%
New Haven	1,107	37	104	3.4%	9.4%
Orwell	370	13	35	3.4%	9.4%
Oswego city	7,256	245	679	3.4%	9.4%
Oswego town	1,874	63	175	3.4%	9.4%
Palermo	1,220	48	127	3.9%	10.4%
Parish	1,042	35	98	3.4%	9.4%
Redfield	168	6	16	3.4%	9.4%
Richland	2,337	79	219	3.4%	9.4%
Sandy Creek	1,610	54	151	3.4%	9.4%
Schroeppel	3,385	133	352	3.9%	10.4%
Scriba	2,809	95	263	3.4%	9.4%
Volney	2,346	92	244	3.9%	10.4%
West Monroe	1,707	67	177	3.9%	10.4%
Williamstown	539	18	50	3.4%	9.4%

Table C-7 Induced Growth in Madison County (2035)

Geographic Area	Estimated Households in 2023	Micron Induced Households		Percent Increase in Households over 2023	
		Low	High	Low	High
Madison County (Total)	**25,563**	**751**	**1,943**	**2.9%**	**7.6%**
Brookfield	839	24	62	2.8%	7.4%
Cazenovia	2,479	74	190	3.0%	7.7%
DeRuyter	518	15	38	2.8%	7.4%
Eaton	1,180	33	87	2.8%	7.4%
Fenner	682	20	52	3.0%	7.7%
Georgetown	223	6	17	2.8%	7.4%
Hamilton	1,522	43	113	2.8%	7.4%
Lebanon	521	15	39	2.8%	7.4%
Lenox	3,681	109	282	3.0%	7.7%
Lincoln	701	21	54	3.0%	7.7%
Madison	1,167	33	87	2.8%	7.4%
Nelson	778	23	60	3.0%	7.7%
Oneida	4,519	134	346	3.0%	7.7%
Smithfield	447	13	34	3.0%	7.7%
Stockbridge	729	22	56	3.0%	7.7%
Sullivan	5,577	166	427	3.0%	7.7%

Table C-8 Induced Growth in Madison County (2041)

Geographic Area	Estimated Households in 2023	Micron Induced Households		Percent Increase in Households over 2023	
		Low	High	Low	High
Madison County (Total)	**25,563**	**874**	**2,382**	**3.4%**	**9.3%**
Brookfield	839	28	76	3.3%	9.1%
Cazenovia	2,479	86	233	3.5%	9.4%
DeRuyter	518	17	47	3.3%	9.1%
Eaton	1,180	39	108	3.3%	9.1%
Fenner	682	24	64	3.5%	9.4%
Georgetown	223	7	20	3.3%	9.1%
Hamilton	1,522	50	139	3.3%	9.1%
Lebanon	521	17	47	3.3%	9.1%
Lenox	3,681	127	345	3.5%	9.4%
Lincoln	701	24	66	3.5%	9.4%
Madison	1,167	39	106	3.3%	9.1%
Nelson	778	27	73	3.5%	9.4%
Oneida	4,519	156	424	3.5%	9.4%
Smithfield	447	15	42	3.5%	9.4%
Stockbridge	729	25	68	3.5%	9.4%
Sullivan	5,577	193	523	3.5%	9.4%

Table C-9 Induced Growth in Cayuga County (2035)

Geographic Area	Estimated Households in 2023	Micron Induced Households		Percent Increase in Households over 2023	
		Low	High	Low	High
Cayuga County (Total)	**31,334**	**808**	**2,090**	**2.6%**	**6.7%**
Auburn	11,758	310	796	2.6%	6.8%
Aurelius	1,097	27	70	2.4%	6.4%
Brutus	1,873	49	127	2.6%	6.8%
Cato	1,100	29	74	2.6%	6.8%
Conquest	683	18	46	2.6%	6.8%
Fleming	991	24	63	2.4%	6.4%
Genoa	652	16	42	2.4%	6.4%
Ira	786	21	53	2.6%	6.8%
Ledyard	602	15	38	2.4%	6.4%
Locke	741	18	47	2.4%	6.4%
Mentz	828	22	56	2.6%	6.8%
Montezuma	496	13	34	2.6%	6.8%
Moravia	1,020	25	65	2.4%	6.4%
Niles	498	12	32	2.4%	6.4%
Owasco	1,655	44	112	2.6%	6.8%
Scipio	578	14	37	2.4%	6.4%
Sempronius	304	7	19	2.4%	6.4%
Sennett	1,256	33	85	2.6%	6.8%
Springport	914	22	58	2.4%	6.4%
Sterling	1,410	37	95	2.6%	6.8%
Summerhill	379	9	24	2.4%	6.4%
Throop	698	18	47	2.6%	6.8%
Venice	457	11	29	2.4%	6.4%
Victory	558	15	38	2.6%	6.8%

Table C-10 Induced Growth in Cayuga County (2041)

Geographic Area	Estimated Households in 2023	Micron Induced Households		Percent Increase in Households over 2023	
		Low	High	Low	High
Cayuga County (Total)	**31,334**	**940**	**2,562**	**3.0%**	**8.2%**
Auburn	11,758	360	974	3.1%	8.3%
Aurelius	1,097	31	86	2.8%	7.9%
Brutus	1,873	57	155	3.1%	8.3%
Cato	1,100	34	91	3.1%	8.3%
Conquest	683	21	57	3.1%	8.3%
Fleming	991	28	78	2.8%	7.9%
Genoa	652	18	51	2.8%	7.9%
Ira	786	24	65	3.1%	8.3%
Ledyard	602	17	47	2.8%	7.9%
Locke	741	21	58	2.8%	7.9%
Mentz	828	25	69	3.1%	8.3%
Montezuma	496	15	41	3.1%	8.3%
Moravia	1,020	29	80	2.8%	7.9%
Niles	498	14	39	2.8%	7.9%
Owasco	1,655	51	137	3.1%	8.3%
Scipio	578	16	46	2.8%	7.9%
Sempronius	304	9	24	2.8%	7.9%
Sennett	1,256	38	104	3.1%	8.3%
Springport	914	26	72	2.8%	7.9%
Sterling	1,410	43	117	3.1%	8.3%
Summerhill	379	11	30	2.8%	7.9%
Throop	698	21	58	3.1%	8.3%
Venice	457	13	36	2.8%	7.9%
Victory	558	17	46	3.1%	8.3%

Table C-11 Induced Growth in Cortland County (2035)

Geographic Area	Estimated Households in 2023	Micron Induced Households		Percent Increase in Households over 2023	
		Low	High	Low	High
Cortland County (Total)	**18,768**	**464**	**1,201**	**2.5%**	**6.4%**
Cincinnatus	429	9	25	2.2%	5.9%
Cortland City	6,992	153	411	2.2%	5.9%
Cortlandville	3,209	70	189	2.2%	5.9%
Cuyler	288	10	24	3.5%	8.3%
Freetown	326	7	19	2.2%	5.9%
Harford	413	9	24	2.2%	5.9%
Homer	2,786	98	231	3.5%	8.3%
Lapeer	293	6	17	2.2%	5.9%
Marathon	749	16	44	2.2%	5.9%
Preble	560	20	46	3.5%	8.3%
Scott	377	8	22	2.2%	5.9%
Solon	379	8	22	2.2%	5.9%
Taylor	159	3	9	2.2%	5.9%
Truxton	457	16	38	3.5%	8.3%
Virgil	1,028	22	60	2.2%	5.9%
Willet	323	7	19	2.2%	5.9%

Table C-12 Induced Growth in Cortland County (2041)

Geographic Area	Estimated Households in 2023	Micron Induced Households		Percent Increase in Households over 2023	
		Low	High	Low	High
Cortland County (Total)	**18,768**	**540**	**1,473**	**2.9%**	**7.8%**
Cincinnatus	429	11	31	2.6%	7.3%
Cortland City	6,992	179	509	2.6%	7.3%
Cortlandville	3,209	82	234	2.6%	7.3%
Cuyler	288	12	28	4.0%	9.9%
Freetown	326	8	24	2.6%	7.3%
Harford	413	11	30	2.6%	7.3%
Homer	2,786	111	275	4.0%	9.9%
Lapeer	293	8	21	2.6%	7.3%
Marathon	749	19	55	2.6%	7.3%
Preble	560	22	55	4.0%	9.9%
Scott	377	10	27	2.6%	7.3%
Solon	379	10	28	2.6%	7.3%
Taylor	159	4	12	2.6%	7.3%
Truxton	457	18	45	4.0%	9.9%
Virgil	1,028	26	75	2.6%	7.3%
Willet	323	8	24	2.6%	7.3%

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Appendix C-2
REMI Study

REMI

Regional Economic Models, Inc.

Economic and Fiscal Impact of Establishing a Semiconductor Manufacturing Facility in Onondaga County, New York

September 29, 2022

Sponsor
Empire State Development

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Principal Investigator
Peter Evangelakis, Ph.D.

Project Manager
Chris Judson

Economic Analysts
Haozheyi Guan
Zhuyin (May) Lin

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Executive Summary

Micron Technology, Inc., a manufacturing company is considering a project to construct, fit-out, and equip several large facilities in Onondaga County, New York. Regional Economic Models, Inc. (REMI) was retained by Empire State Development to perform an economic and fiscal impact analysis of the facility at the state and local levels. REMI analyzed the facility's economic and fiscal impacts over the period 2025-2055 using a New York-specific multi-regional Tax-PI model.

The company would ramp up operations over two phases (Phase 1: 2025-2034, Phase 2: 2035-2044) while investing $99.6 billion capital investment (construction and machinery and equipment). In addition, there would be infrastructure (utility construction) and other investments of $1.5 billion. Ongoing direct employment in the facility would be 9,005 jobs as of 2045. Additionally, there would be Research and Development (R&D) spending of $3.3 billion over the period 2026-2045. Given the propensity of chip fabs to remain in operation for decades, the economic impact analysis conservatively assumed an additional 11 years of operations on top of the 20-year period in which Phases 1 and 2 capital expenditures would be completed. R&D spending would continue over the period 2046-2055. This direct activity and spending would be accompanied by ongoing employment of 5,772 in-state resident and 1,924 out-of-state visiting contractors as of 2036.

REMI analyzed the facility's economic and fiscal impacts over the period 2025-2055 using a New York-specific multi-regional Tax-PI model, and found the following key results:[1]

- The facility would create an average annual employment impact of 45,418 at the state level over the time period 2025-2055, with 39,975 of those jobs coming from the Central New York region.

- For every direct company hire[2], there would be about 5.5 other jobs created in the state economy.[3]

- By 2055, the facility would create 50,911 jobs at the state level (44,943 of which would be based in Central New York), including 9,005 of the facility's direct hires and 9,431 indirect and 32,474 induced jobs (indirect and induced 41,905).

- The average annual total investment employment impact associated with the capital and other infrastructure spending (2025-2044) would be 11,871 (6,647 direct; 1,146 indirect; 4,079 induced). In terms of the direct investment employment, construction related jobs would be over 84 percent (5,595) on average during the 2025-2044 timeframe.

[1] Unless stated otherwise, annual averages are over the entire 31-year period (2025-2055). Figures and numbers may not add-up exactly due to rounding.

[2] These refer to the facility's direct hires as well as jobs directly associated with the capital investments.

[3] Direct company hires are also referred to as Direct Operations Employment.

- The facility would grow the state economy significantly, adding an annual average of $16.7 billion in real economic output and $9.6 billion in real Gross Domestic Product (GDP) over the time period 2025-2055.[4]

- The facility would add an annual average of 59,575 in state population over the time period 2025-2055.

- The facility would add an annual average of $5.4 billion in real disposable personal income for New York residents over the time period 2025-2055.

- The facility would generate an average annual increase of $378.5 million in real state government revenue, for a present value (PV) of $7.1 billion over 2025-2055 using a three percent discount rate, and a fiscal benefit-cost ratio of 2.0 relative to the PV of proposed real New York State incentives at a three percent discount rate.[5]

- The facility would generate an average annual increase of $565.5 million in real revenue to local governments in New York State, for a PV of $10.7 billion over 2025-2055 using a three percent discount rate. Most of these revenue gains would occur in Central New York region.

- The ROI real Gross Domestic Product ratio would be 51.5 using a three percent discount rate. The ROI (return on investment) real GDP ratio is defined as the PV of real GDP impact over the period 2025-2055 to the PV of real New York State Incentives over the period 2025-2055.

- *Economic Benefit* measure is defined by ESD as the sum of the real disposable personal income, real state government revenue, and real local government revenue impacts. The Economic Benefit ratio, which is calculated as the ratio of the PV of the real Economic Benefit to the PV of the real New York State Incentives, comes out to 33.6 (using a three percent discount rate over the period 2025-2055).

The Executive Summary Table below displays the 2055, average, and PV with three percent discount rate values of employment (direct, direct operations, indirect, induced), real GDP, real economic output, real disposable personal income, real state government revenue, real local government revenue, real Economic Benefit, and real New York State Incentives. During 2025-2055, real state government revenue increases by $378.5 million on average. Approximately 66 percent of the real revenue is from the personal income tax. The table below also isolates the direct company hires (Direct Operations) for reference.

[4] For purposes of this report, real dollar figures are in fixed 2025 dollars.
[5] New York State incentives total $5.8 billion current dollars, and are converted into 2025 dollars using a price deflator.

Executive Summary Table

	2055	Annual Average (2025-2055)	PV (3%)
Employment	50,911	45,418	
Direct	9,005	11,182	
Direct Operations	9,005	6,894	
Indirect	9,431	8,294	
Induced	32,474	25,943	
GDP (Millions of 2025 Dollars)	13,183	9,601	182,496
Output (Millions of 2025 Dollars)	22,835	16,652	317,419
Disposable Personal Income (Millions of 2025 Dollars)	8,330	5,429	101,393
State Revenue (Millions of 2025 Dollars)	545	379	7,114
Local Government Revenue (Millions of 2025 Dollars)	800	566	10,727
Economic Benefit (Millions of 2025 Dollars)	9,674	6,373	119,235
NYS Incentives $5.8 Billion Current Dollar Offer (Millions of 2025 Dollars)		151	3,544

		PV (3%)
Fiscal Benefit-Cost Ratio		2.0
Economic Benefit Ratio		33.6
ROI Real GDP Ratio		51.5

Note: Present value calculations are over the 2025-2055 timeframe.

REMI Background & Experience

Regional Economic Models, Inc. (REMI) is an independent company with offices in Amherst, MA and Washington, D.C. that provides non-partisan economic analysis and modeling software to its clients, who include federal, state, and local government agencies, non-profit organizations, universities, and private companies. With approximately 40 years of experience, REMI is a worldwide leader in providing dynamic regional U.S. macroeconomic and demographic models used to evaluate economic development as well as many other policy issues such as taxes, health care, transportation, energy and the environment, and trade. REMI consultative services and modeling software have been utilized on several economic development studies in New York, in addition to other semiconductor manufacturing facilities.

REMI Glossary

Disposable Personal Income: Total after-tax income received by persons; it is the income available to persons for spending or saving.

Economic Output: The amount of production, including all intermediate goods purchased as well as value added (compensation and profit). This can also be thought of as sales or supply.

Employment: Employment comprises estimates of the number of jobs, full-time plus part-time, by place of work for all industries.

GDP: Gross Domestic Product. The market value of goods and services produced by labor and property. It is also the sum of value-added across all industries.

Personal Income: Income received by persons from all sources. It is the sum of wages and salaries, supplements to wages and salaries, proprietors' income, rental income, asset income, and personal current transfer receipts, net of contributions for government social insurance.

Introduction

Micron Technology, Inc., is considering a project to construct, fit-out, and equip several large facilities, in Onondaga County, New York. The company would ramp up operations over two phases from 2025-2044 while investing approximately $99.6 billion for capital expenditures (construction and machinery and equipment). In addition, there would be infrastructure (utility construction) and other investments of $1.5 billion.

Ongoing direct employment in the facility would be 9,005 jobs as of 2045, and it would be accompanied by ongoing employment of about 5,772 in-state resident and 1,924 out-of-state visiting contractors as of 2036.

On behalf of Empire State Development (ESD), Regional Economic Models, Inc. (REMI) performed an economic and fiscal impact analysis of the facility at the state and local levels over the period 2025-2055 using a New York-specific Tax-PI model. Specifically, REMI considered how the capital expenditures, facility operations, and contractors would affect employment, economic output, Gross Domestic Product (GDP), disposable personal income, state government revenue, and local government revenue for New York and the Central New York model region in which Onondaga County is located.

REMI found strong positive economic and fiscal impacts, driven largely by the highly productive and well-compensated facility employees who create significant supply chain demand and spend robustly in the local economy. These include an average annual employment increase of 45,418 jobs, with almost 40,000 in Central New York and an associated state-level multiplier over four, an average annual increase in real economic output and real state GDP of over $16 billion and $9 billion respectively, an average annual increase of almost 60,000 in population, an average annual increase of more than $5 billion in real disposable personal income, a present value (PV) of $7.1 billion in additional real state government revenue generated given a three percent discount rate, which is greater than the present value (PV) of the proposed New York State Incentives, and a PV of $10.7 billion in additional real local government revenue generated, of which about 85 percent accrues in Central New York.

Methodology

In order to assess the economic and fiscal impacts of locating a semiconductor manufacturing facility in Onondaga County, New York, REMI uses ESD's currently licensed multi-region, 70-industry Tax-PI v2.5 model of New York. Onondaga County is in the Central New York model region. Tax-PI is a sophisticated dynamic regional macroeconomic, demographic, and fiscal policy model that simulates the year-by-year effects of public policy initiatives, and is widely used by state and local agencies, legislatures, universities, and other organizations and experts, both in New York and across the U.S. More detailed information is available about the model and the fiscal calibration in Appendix II.

The economic and fiscal impact of the Micron facilities on state and local economies comes from two sources. The first source is the development and construction of its facility, which is expected to last 20 years from 2025-2044. The second source of economic impact is the ongoing operations of the manufacturing facility, which includes the direct employment and compensation, ongoing R&D spending, and both in-state resident and out-of-state visiting contractors, and which is expected to commence in 2026 and ramp up until stabilizing in 2045. The capital investment and operations will both occur in two phases, with Phase 1 starting in 2025 and Phase 2 starting in 2035. The direct, indirect, and induced impacts in spending and job creation are estimated through the REMI Tax-PI model. In addition, state and local tax revenue is estimated, where totals for both New York and Central New York are reported for the latter. The analysis covers the 31-year period from 2025-2055.[6] Unless otherwise noted, averages are calculated over the 2025-2055 period. In Appendix I, a table of nominal values (current dollars) is available.

Capital Expenditures, Infrastructure, and Others

Phase 1. Capital Expenditures are categorized as (1) Construction and (2) Machinery and Equipment. Infrastructure Expenditures are categorized as (3) Utility Construction (i.e., Water and sewer system upgrades, Infrastructure Grant, Site Development, and Façade Grant). Table 1.1a displays the spending for each category from 2025-2034 and in 2055, entered as demand for (i.e., a state GDP contribution from) the corresponding industry. For categories (1) and (3), the corresponding industry is Construction, and for category (2), it is Machinery Manufacturing. Additionally, there are Workforce Training expenditures of $10 million per year during 2026-2034, which are counted as demand for the Educational Services industry.

[6] Given the propensity of chip fabs to remain in operation for decades, the economic impact analysis conservatively assumes an additional 11-year operating on top of the 20-year period in which Phases 1 and 2 capital expenditures are complete. Please see section on Capital Expenditures.

Table 1.1a: Capital Expenditures, Phase 1

Spending Type	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2055	Average	2025-2034 Average
Land & Building	2.1	3.1	2.8	0.8	2.0	1.2	0.3	1.6	2.5	4.5	-	0.7	2.1
Machinery & Equipment	0.1	0.8	1.0	3.6	3.0	4.6	5.0	3.4	3.3	1.9	-	0.9	2.7
Utility Construction	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-	0.0	0.1
Total	2.3	4.0	3.9	4.5	5.1	5.9	5.4	5.1	5.9	6.5	-	1.6	4.9

Note: Units in Billions of Nominal Dollars. Components may not sum to totals due to rounding.

Phase 2. Capital Expenditures are categorized as (1) Construction and (2) Machinery and Equipment. Infrastructure Expenditures are categorized as (3) Utility Construction (i.e., Water and sewer system upgrades, Infrastructure Grant, Site Development, and Façade Grant). Table 1.1b displays the spending for each category from 2035-2044, and in 2055, entered as demand for the corresponding industry, which is the same as in Phase 1. Additionally, there are Workforce Training expenditures of $10 million in 2035, which are counted as demand for the Educational Services industry.

Table 1.1b: Capital Expenditures, Phase 2

Spending Type	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2055	Average	2035-2044 Average
Land & Building	2.1	2.9	3.4	1.7	-	-	-	-	-	-	-	0.3	1.0
Machinery & Equipment	5.0	4.5	4.2	4.9	5.7	5.0	4.6	2.7	2.7	2.7	-	1.4	4.2
Utility Construction	0.1	0.1	0.1	0.1	-	-	-	-	-	-	-	0.0	0.0
Total	7.0	7.5	7.5	6.6	5.7	5.0	4.6	2.7	2.7	2.7	-	1.7	5.2

Note: Units in Billions of Nominal Dollars. Components may not sum to totals due to rounding.

Operations

Direct employment for Engineers, Quality Engineers, and Technicians, classified in the Semiconductor and related device manufacturing industry, would ramp up over 20 years starting in 2026, after which it would remain constant at 8,211. Table 1.2 displays this direct employment from 2026-2030 and 2036-2040, and in 2055, the final analysis year.

Table 1.2: Direct Employment – Semiconductor and related device manufacturing

Variable	2026	2027	2028	2029	2030	2036	2037	2038	2039	2040	2055	Average
Employment	1,570	2,381	2,979	3,685	4,223	6,488	7,021	7,426	7,558	7,825	8,211	6,271

Note: Units in Jobs. Components may not sum to totals due to rounding.

The R&D spending would ramp up to an annual value of $301.3 million by 2045, growing by the projected inflation rate thereafter. Table 1.3 displays the spending in R&D from 2026-2030 and 2035-2039, and in 2055, the final analysis year.

Table 1.3: Direct Employment and Spending, Professional, scientific, and technical services

Variable	2026	2027	2028	2029	2030	2035	2036	2037	2038	2039	2055	Average
Spending	2.6	4.9	7.3	16.3	31.3	161.5	185.7	216.8	234.9	241.0	367.6	213.5

Note: Units for Spending in Millions of Nominal Dollars. Components may not sum to totals due to rounding.

Direct employment for Management, classified in the Management of companies and enterprises industry, would ramp up over 20 years starting in 2026, after which it would remain constant at 610. Table 1.4a displays this direct employment from 2026-2030 and 2036-2040, and in 2055, the final analysis year.

Table 1.4: Direct Employment – Management of companies and enterprises

Variable	2026	2027	2028	2029	2030	2036	2037	2038	2039	2040	2055	Average
Employment	208	326	320	273	314	482	521	552	562	581	610	477

Note: Units in Jobs. Components may not sum to totals due to rounding.

Direct employment in Administrative / Other Management, classified in the Administrative and support services industry, would ramp up over 20 years starting in 2026, after which it would remain constant at 184. Table 1.5 displays this direct employment from 2026-2030 and 2036-2040, and in 2055, the final analysis year.

Table 1.5: Direct Employment – Administrative and support services

Variable	2026	2027	2028	2029	2030	2036	2037	2038	2039	2040	2055	Average
Employment	94	125	122	82	95	146	156	166	169	174	184	146

Note: Units in Jobs. Components may not sum to totals due to rounding.

Contractors

The number of contractors would remain constant at 4,000 from 2026-2035, grow to 7,697 in 2036, and remain constant afterwards. Table 1.6 displays the numbers of contractors by location and industry in 2026, 2036, and 2055, the final analysis year.

Table 1.6: Contractor Employment

Industry	2026	2036	2055	Average
In-State Contractors				
Semiconductor machinery manufacturing	2,000	4,079	4,079	3,277
Services to buildings and dwellings	1,000	1,693	1,693	1,415
Out-of-State Contractors				
Semiconductor machinery manufacturing	1,000	1,924	1,924	1,564

Note: Units in Jobs. Components may not sum to totals due to rounding.

Aggregate out-of-state visiting contractor consumer spending during on-site would be $97.5 million in 2026, growing by the projected inflation rate from 2026-2035. The number would rise to $229.5 million in 2036, and would grow by the projected inflation rate thereafter. Table 1.7 displays the contractor consumer spending by category in 2026, 2036, and 2055, the final analysis year.

Table 1.7: Out-of-State Visiting Contractor Consumer Spending

Commodity	2026	2036	2055	Average
Accommodations	65.0	153.0	223.3	143.1
Purchased meals and beverages	19.5	45.9	67.0	42.9
Ground transportation	13.0	30.6	44.7	28.6

Note: Units in Millions of Nominal Dollars. Components may not sum to totals due to rounding.

Results

This section reports the economic and fiscal impacts of the Micron facilities on New York and Central New York over the period 2025-2055, specifically on employment, economic output, GDP, personal income, disposable personal income, and state and local government revenue.

Employment

Table 2.1 displays the employment impacts for New York and Central New York, including both the totals and breakdowns into direct, indirect, and induced impacts, from 2025-2029, from 2035-2039, and in 2055. During 2025-2055, the average total employment impact in New York is an increase of 45,418 jobs, with 39,975 occurring in Central New York. The average number of new direct jobs in the state is 11,182, implying an employment multiplier of approximately 4.1.

Table 2.1: Employment Impacts (New York & Central New York)

Category	2025	2026	2027	2028	2029	2035	2036	2037	2038	2039	2055	Average
New York												
Employment	15,468	40,272	40,268	30,724	38,260	38,829	58,961	61,989	55,611	48,511	50,911	45,418
Direct	8,992	15,229	14,680	8,217	13,018	13,033	17,696	19,297	14,640	9,763	9,005	11,182
Direct Operation	-	1,872	2,832	3,421	4,040	4,680	7,116	7,698	8,144	8,289	9,005	6,894
Indirect	1,436	6,534	6,428	5,589	6,225	6,336	10,701	10,888	10,349	9,774	9,431	8,294
Induced	5,040	18,510	19,160	16,918	19,016	19,460	30,564	31,804	30,622	28,975	32,474	25,943
Central New York												
Employment	14,367	36,293	36,236	26,069	33,406	33,821	52,007	55,071	48,782	41,798	44,943	39,975
Direct	8,964	15,085	14,505	7,650	12,557	12,455	17,187	18,849	14,132	9,196	9,005	10,922
Direct Operation	-	1,872	2,832	3,421	4,040	4,680	7,116	7,698	8,144	8,289	9,005	6,894
Indirect	1,281	6,251	6,152	5,380	5,951	6,037	10,327	10,496	10,017	9,507	9,231	8,047
Induced	4,121	14,957	15,579	13,040	14,898	15,329	24,493	25,727	24,633	23,095	26,707	21,006

Note: Units in Jobs. Components may not sum to totals due to rounding.

Economic Output & Gross Domestic Product

Table 2.2 displays the real economic output and real GDP impacts for New York and Central New York from 2025-2039, from 2035-2039, and in 2055. During 2025-2055, the average economic output and GDP impacts in New York are increases of $16.7 billion and $9.6 billion respectively. For Central New York, the corresponding impacts are $14.9 billion and $8.6 billion. Central New York accounts for about 90 percent of the economic output impact and 90 percent of the GDP impact. This is driven by the afore-mentioned high productivity of the semiconductor manufacturing facility employees, generating a sizable economic footprint in the state relative to their employment presence.

Table 2.2: Economic Output & Gross Domestic Product Impacts (New York & Central New York)

Variable	2025	2026	2027	2028	2029	2035	2036	2037	2038	2039	2055	Average
New York												
Output	2.8	10.2	10.5	9.4	11.0	12.0	19.4	20.3	19.4	18.4	22.8	16.7
GDP	1.6	5.6	5.9	5.2	6.2	6.9	11.0	11.6	11.2	10.5	13.2	9.6
Central New York												
Output	2.6	9.1	9.5	8.1	9.6	10.4	17.3	18.2	17.3	16.2	20.7	14.9
GDP	1.5	5.0	5.3	4.5	5.4	6.1	9.9	10.5	10.0	9.4	11.9	8.6

Note: Units in Billions of 2025 Dollars. Components may not sum to totals due to rounding.

Population

Table 2.3 displays the population impacts for New York and Central New York from 2025-2029, from 2035-2039, and in 2055. During 2025-2055, the average population impact in New York is 59,575, with 53,388 accruing in Central New York. This is primarily driven by the economic migrants[7] flowing into the region, largely due to the expanded availability of high compensation jobs.

Table 2.3: Population Impacts (New York & Central New York)

Variable	2025	2026	2027	2028	2029	2035	2036	2037	2038	2039	2055	Average
New York												
Population	4,285	14,112	21,178	24,212	29,216	48,429	56,050	62,791	66,605	68,072	84,530	59,575
Central New York												
Population	4,056	12,992	19,368	21,607	26,038	43,203	50,094	56,278	59,595	60,642	76,264	53,388

Note: Units in Individuals. Components may not sum to totals due to rounding.

[7] Economic migration is net population movement into (or out of) a region driven by a change in economic conditions such as job availability, compensation, cost of living, or taxes.

Personal Income & Disposable Personal Income

Table 2.4 displays the real personal income and real disposable personal income impacts for New York and Central New York from 2025-2029, from 2035-2039, and in 2055. During 2025-2055, the average personal income impact in New York is $6.8 billion, with $5.8 billion accruing in Central New York; the average disposable personal income impact in New York is $5.4 billion, with $4.7 billion accruing in Central New York. This is primarily driven by the high compensation of the direct employees, as well as the additional labor income earned in the many spillover jobs generated in other industries.

Table 2.4: Personal Income & Disposable Personal Income Impacts (New York & Central New York)

Variable	2025	2026	2027	2028	2029	2035	2036	2037	2038	2039	2055	Average
New York												
Personal Income	1.1	3.5	3.8	3.3	3.9	4.9	7.1	7.7	7.4	7.1	10.3	6.8
Disposable Personal Income	0.9	2.7	2.9	2.6	3.1	3.9	5.6	6.1	5.9	5.7	8.3	5.4
Central New York												
Personal Income	1.0	3.0	3.2	2.7	3.3	4.1	6.1	6.6	6.3	6.0	8.9	5.8
Disposable Personal Income	0.8	2.3	2.5	2.1	2.6	3.3	4.8	5.2	5.1	4.8	7.3	4.7

Note: Units in Billions of 2025 Dollars. Components may not sum to totals due to rounding.

State Government Revenue[8]

Table 2.5a displays the real state government revenue impacts for New York during 2025-2029 and 2035-2039, and in 2055. During 2025-2055, real state government revenue increases by $378.5 million on average. Approximately 66 percent of the real revenue is from the personal income tax.

Table 2.5a: State Government Revenue

Variable	2025	2026	2027	2028	2029	2035	2036	2037	2038	2039	2055	Average
Total Revenue	17.4	110.9	230.3	237.6	219.3	329.3	329.4	443.0	463.3	443.5	544.7	378.5
Personal Income	12.7	76.9	158.3	160.4	149.5	218.6	220.9	298.9	310.3	294.3	359.1	251.5
Corporation and Business	1.8	10.9	22.4	22.7	21.1	30.9	31.3	42.3	43.9	41.6	50.8	35.6
Sales, Excise and User	2.2	19.1	41.3	46.1	40.8	68.2	65.5	86.0	92.7	92.1	115.8	78.2
Property Transfers	0.6	3.8	7.8	7.9	7.4	10.8	10.9	14.7	15.3	14.5	17.7	12.4
Other Taxes and Fees	0.0	0.3	0.6	0.6	0.5	0.8	0.8	1.0	1.1	1.0	1.2	0.9

Note: Units in Millions of 2025 Dollars. Components may not sum to totals due to rounding.

[8] Both New York State and Onondaga County have a sales tax rate of 4.0%. Sales of equipment for manufacturing businesses are exempt from sales tax. The sales tax on purchases of construction materials and other supplies is also waived.

Table 2.5b displays the current dollar state government revenue impacts for New York during 2025-2029 and 2035-2039, and in 2055. During 2025-2055, current dollar state government revenue increases by $17.2 billion.

Table 2.5b: State Government Revenue (Current Dollars)

Variable	2025	2026	2027	2028	2029	2035	2036	2037	2038	2039	2055	Average	Total
Total Revenue	17.6	114.5	242.9	255.9	241.1	408.3	416.6	571.5	609.7	595.2	1,002.6	555.5	17,221.5
Personal Income	12.9	79.4	166.9	172.7	164.3	271.1	279.4	385.7	408.3	394.9	661.1	368.6	11,425.3
Corporation and Business	1.8	11.2	23.6	24.4	23.2	38.4	39.5	54.6	57.8	55.9	93.5	52.1	1,616.5
Sales, Excise and User	2.2	19.7	43.5	49.6	44.9	84.6	82.9	110.9	122.0	123.6	213.1	115.4	3,576.9
Property Transfers	0.6	3.9	8.2	8.5	8.1	13.4	13.8	19.0	20.1	19.5	32.6	18.2	563.0
Other Taxes and Fees	0.0	0.3	0.6	0.6	0.6	0.9	1.0	1.3	1.4	1.4	2.3	1.3	39.7

Note: Units in Millions of Current Dollars. Components may not sum to totals due to rounding.

Local Government Revenue[9]

Table 2.6a displays the real local government revenue impacts for *All of New York* and Central New York during 2025-2029 and 2035-2039, and in 2055. During 2025-2055, local government revenue for *All of New York* increases by $565.5 million on average. For Central New York, the corresponding impact is $490.4 million. Approximately, 85 percent of the real local government revenue is generated from Central New York. It is important to note that the local government revenue impact reported for Central New York is the region's contribution to the *All of New York* local government revenue based on Central New York local government tax rates.

Table 2.6a: Local Government Revenue - All of New York & Central New York

Variable	2025	2026	2027	2028	2029	2035	2036	2037	2038	2039	2055	Average
All New York Local Government Revenue												
Total Revenue	96.4	322.9	348.7	303.9	359.1	416.7	629.3	672.5	647.2	608.6	800.2	565.5
Central New York Local Government Revenue												
Total Revenue	84.9	280.1	302.2	251.7	303.4	354.7	542.8	583.0	557.7	520.1	700.1	490.4

Note: Units in Millions of 2025 Dollars. Components may not sum to totals due to rounding.

[9] For the Micron facilities, instead of collecting real estate tax, Onondaga County will utilize a Payment in Lieu of Taxes (PILOT) agreement. From 2025 to 2055, the total PILOT payment will be $43.7 million, or the total PILOT savings will be $146.8 million. New York State and Onondaga County have a sales tax rate of 4.0 percent. Sales of equipment for manufacturing businesses are exempt from sales tax. The sales tax on purchases of construction materials and other supplies is also waived.

Table 2.6b displays the current dollar local government revenue impacts for *All of New York* and Central New York during 2025-2029 and 2035-2039, and in 2055. During 2025-2055, local government revenue for *All of New York* increases by $826.1 million on average ($25.6 billion in total). For Central New York, the corresponding impact is $694.5 million on average ($21.5 billion in total). Approximately, 85 percent of the current dollar local government revenue is generated from Central New York. It is important to note that the local government revenue impact reported for Central New York is the region's contribution to the *All of New York* local government revenue based on Central New York local government tax rates. Approximately 57 percent of the Central New York local government revenue is generated in Onondaga County.

Table 2.6b: Local Government Revenue (Current Dollars) - All of New York & Central New York

Variable	2025	2026	2027	2028	2029	2035	2036	2037	2038	2039	2055	Average	Total
All New York Local Government Revenue													
Total Revenue	97.5	333.5	367.7	327.2	394.8	516.6	795.9	867.6	851.6	816.8	1,472.9	826.1	25,608.9
Central New York Local Government Revenue													
Total Revenue	83.2	280.2	308.5	262.3	322.6	425.1	663.6	727.1	709.5	675.0	1,248.9	694.5	21,529.1

Note: Units in Millions of Current Dollars. Components may not sum to totals due to rounding.

Incentives Offer Analysis: Current Dollar $5.8 Billion, 3 Percent Discount Rate

Table 2.7 displays the real GDP, real disposable personal income, real state government revenue, and real local government revenue impacts, the real Economic Benefit, and the real New York State Incentives during 2025-2029 and 2035-2039, and in 2055. The table also displays the PV of each under a three percent discount rate. The Economic Benefit measure is defined by ESD as being the sum of the real disposable personal income, real state government revenue, and real local government revenue impacts.

During 2025-2055, the PV of the real GDP, real disposable personal income, real state government revenue, and real local government revenue impacts are $182.5, $101.4 billion, $7.1 billion, and $10.7 billion respectively, yielding a real Economic Benefit PV of $119.2 billion. The PV of the real New York State Incentives for 2025-2055 is $3.5 billion.

The fiscal benefit-cost ratio, which is calculated as the ratio of the PV of the real state government revenue impact to the PV of the real New York State Incentives, comes out to 2.0. The Economic Benefit ratio, which is calculated as the ratio of the PV of the real Economic Benefit to the PV of the real New York State Incentives, comes out to 33.6. The ROI real GDP ratio, which is calculated as the ratio of the PV of the real GDP impact to the PV of the real New York State incentives, comes out to 51.5.

Table 2.7: Disposable Personal Income, State Government Revenue, Local Government Revenue, Economic Benefit, New York State Incentives, Combined Phases, 3 Percent Discount Rate

Variable	2025	2026	2027	2028	2029	2035	2036	2037	2038	2039	2055	Average	PV (3%)
NYS Gross Domestic Product													
Total	1,616	5,579	5,854	5,178	6,184	6,890	11,042	11,645	11,184	10,548	13,183	9,601.2	182,495.9
NYS Disposable Personal Income													
Total	878.6	2,700.8	2,903.6	2,560.8	3,076.5	3,891.9	5,630.9	6,069.0	5,919.1	5,660.7	8,329.6	5,428.9	101,392.7
NYS Government Revenue													
Total	17.4	110.9	230.3	237.6	219.3	329.3	329.4	443.0	463.3	443.5	544.7	378.5	7,114.4
Local Government Revenue													
Total	96.4	322.9	348.7	303.9	359.1	647.2	608.6	618.1	625.8	626.3	800.2	565.5	10,727.5
Economic Benefits													
Total	992.3	3,134.5	3,482.6	3,102.3	3,655.0	4,868.4	6,568.8	7,130.0	7,008.3	6,730.5	9,674.4	6,373.0	119,234.6
New York State Incentives													
Total	-	147.5	231.0	225.3	250.4	321.7	272.6	286.7	287.6	252.1	-	150.9	3,544.3

	PV (3%)
Fiscal Benefit-Cost Ratio	2.0
Economic Benefit Ratio	33.6
ROI Real GDP Ratio	51.5

Note: Units in Millions of 2025 Dollars. Components may not sum to totals due to rounding.

Conclusion

REMI conducted an analysis of the Micron facilities on behalf of ESD to evaluate how the semiconductor manufacturing facilities would impact the New York and Central New York economies. The findings show that from 2025-2055, the average total employment impact in a given year is an increase of 45,418 jobs, with close to 90 percent occurring in Central New York. The average impact on the size of the state economy is $16.7 billion in real economic output and $9.6 billion in real GDP, the average impact on state population is 59,575, and the average impact on state real disposable personal income is $5.4 billion. Importantly, the facility also generates $378.5 million in additional real state government revenue on average, 2.5 times the value of the proposed real New York State Incentives on average ($150.9 million), and more than $565.5 million in additional real local government revenue statewide on average during the analysis period. Ultimately, these results point to substantial positive impacts on New York's economy and budget, supported by productive and high-paying jobs and a fostering of further growth in the semiconductor manufacturing ecosystem in the state.

Appendix I: Supplemental Tables

Incentives Offer Analysis: Current Dollar $5.8 Billion, 6 Percent Discount Rate

Table 3.1 displays the real GDP, real disposable personal income, real state government revenue, and real local government revenue impacts, the real Economic Benefit, and the real New York State Incentives during 2025-2029 and 2035-2039, and in 2055. The table also displays the PV of each under a six percent discount rate. The Economic Benefit measure is defined by ESD as being the sum of the real disposable personal income, real state government revenue, and real local government revenue impacts.

During 2025-2055, the PV of the real GDP, real disposable personal income, real state government revenue, and real local government revenue impacts are $120.3, $65.7 billion, $4.6 billion, and $7.1 billion respectively, yielding a real Economic Benefit PV of $77.4 billion. The PV of the real New York State Incentives for 2025-2055 is $2.8 billion.

The fiscal benefit-cost ratio, which is calculated as the ratio of the PV of the real state government revenue impact to the PV of the real New York State Incentives, comes out to 1.7. The Economic Benefit ratio, which is calculated as the ratio of the PV of the real Economic Benefit to the PV of the real New York State Incentives, comes out to 28.0. The ROI real GDP ratio, which is calculated as the ratio of the PV of the real GDP impact to the PV of the real New York State incentives, comes out to 43.5.

Table 3.1: Disposable Personal Income, State Government Revenue, Local Government Revenue, Economic Benefit, New York State Incentives, Combined Phases, 6 Percent Discount Rate

Variable	2025	2026	2027	2028	2029	2035	2036	2037	2038	2039	2055	Average	PV (6%)
NYS Gross Domestic Product													
Total	1,616	5,579	5,854	5,178	6,184	6,890	11,042	11,645	11,184	10,548	13,183	9,601.2	120,311.6
NYS Disposable Personal Income													
Total	878.6	2,700.8	2,903.6	2,560.8	3,076.5	3,891.9	5,630.9	6,069.0	5,919.1	5,660.7	8,329.6	5,428.9	65,722.1
NYS Government Revenue													
Total	17.4	110.9	230.3	237.6	219.3	329.3	329.4	443.0	463.3	443.5	544.7	378.5	4,689.9
Local Government Revenue													
Total	96.4	322.9	348.7	303.9	359.1	647.2	608.6	618.1	625.8	626.3	800.2	565.5	7,061.9
Economic Benefits													
Total	992.3	3,134.5	3,482.6	3,102.3	3,655.0	4,868.4	6,568.8	7,130.0	7,008.3	6,730.5	9,674.4	6,373.0	77,473.9
New York State Incentives													
Total	119.3	120.8	138.8	175.8	111.4	165.2	169.9	58.7	58.5	57.6	-	75.6	2,764.1

	PV (6%)
Fiscal Benefit-Cost Ratio	1.7
Economic Benefit Ratio	28.0
ROI Real GDP Ratio	43.5

Note: Units in Millions of 2025 Dollars. Components may not sum to totals due to rounding.

Current Dollar Tables

Table 3.2a: Gross Domestic Product, Economic Output, Disposable Personal Income, State Government Revenue, Local Government Revenue, Economic Benefit, New York State Incentives, Capital Expenditures

Variable	Average	Total
Gross Domestic Product	13,941.9	430,607.1
Output	24,348.5	751,975.9
Disposable Personal Income	7,774.8	240,156.0
State Revenue	555.5	17,221.5
Local Government Revenue	826.1	25,608.9
NYS Incentives	187.1	5,800.0
Capital Expenditures	3,213.0	99,603.0

Note: Units in Millions of Current Dollars. Components may not sum to totals due to rounding.

Table 3.2b: Central New York (CNY) Gross Domestic Product, Economic Output, Disposable Personal Income, Local Government Revenue, Economic Benefit

Variable	Average	Total
CNY Gross Domestic Product	12,610.4	390,923.4
CNY Output	21,867.0	677,875.9
CNY Disposable Personal Income	6,694.2	207,520.8
CNY Local Government Revenue	694.5	21,529.1

Note: Units in Millions of Current Dollars. Components may not sum to totals due to rounding.

Appendix II: REMI Model Framework & Fiscal Calibration

REMI Model Framework

Tax-PI is a structural economic, demographic, and fiscal forecasting and policy analysis model. The following core framework applies to all REMI model builds. The model integrates input-output, computable general equilibrium, econometric and economic geography methodologies. The model is dynamic, with forecasts and simulations generated on an annual basis and behavioral responses to compensation, price, and other economic factors.

The model consists of thousands of simultaneous equations with a structure that is relatively straightforward. The exact number of equations used varies depending on the extent of industry, demographic, demand, and other detail in the specific model being used. The overall structure of the model can be summarized in five major blocks: (1) Output and Demand, (2) Labor and Capital Demand, (3) Population and Labor Supply, (4) Compensation, Prices, and Costs, and (5) Market Shares. The blocks and their key interactions are shown in Figures 1 and 2.

Figure A1.1: REMI Model Linkages

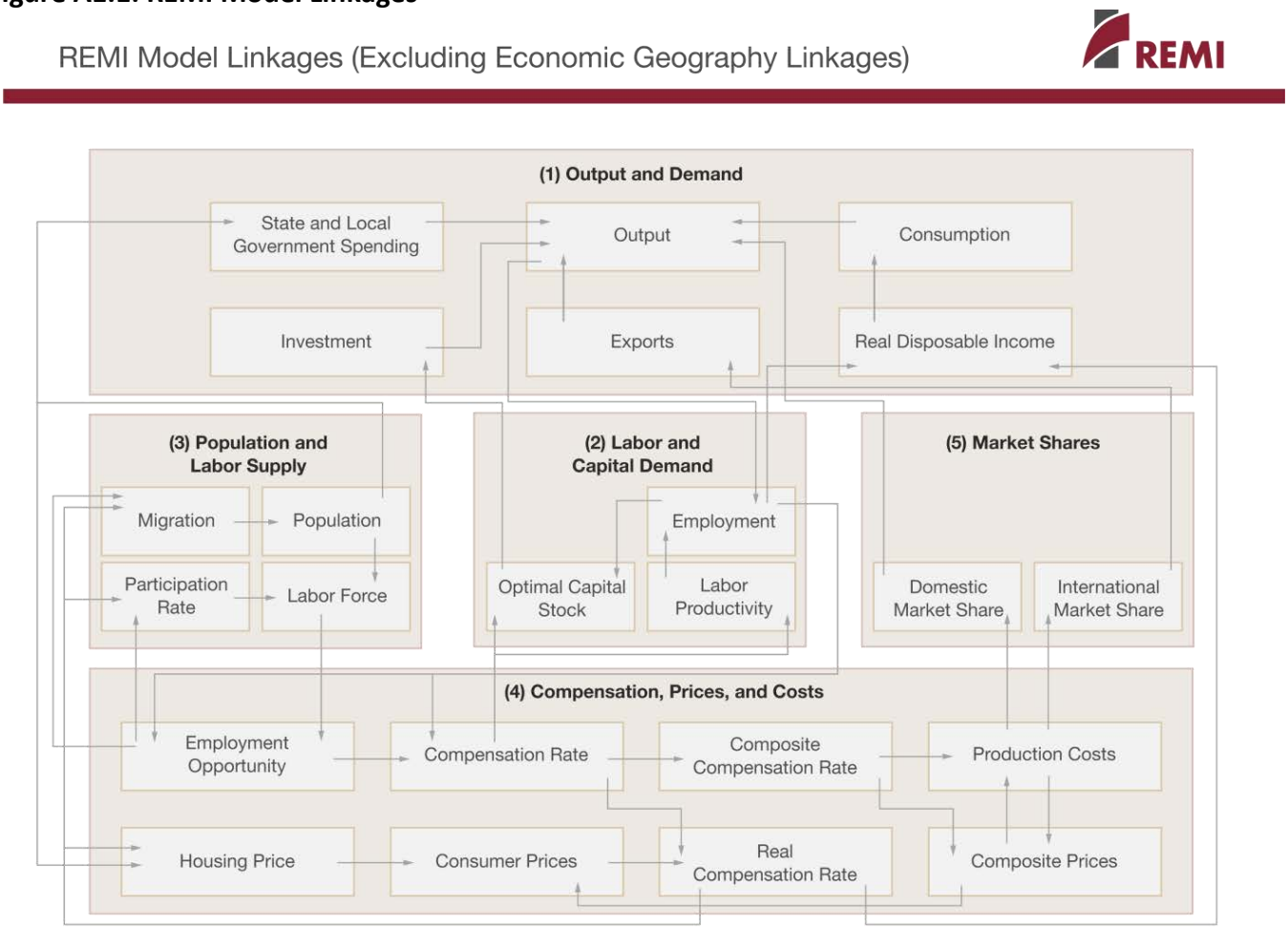
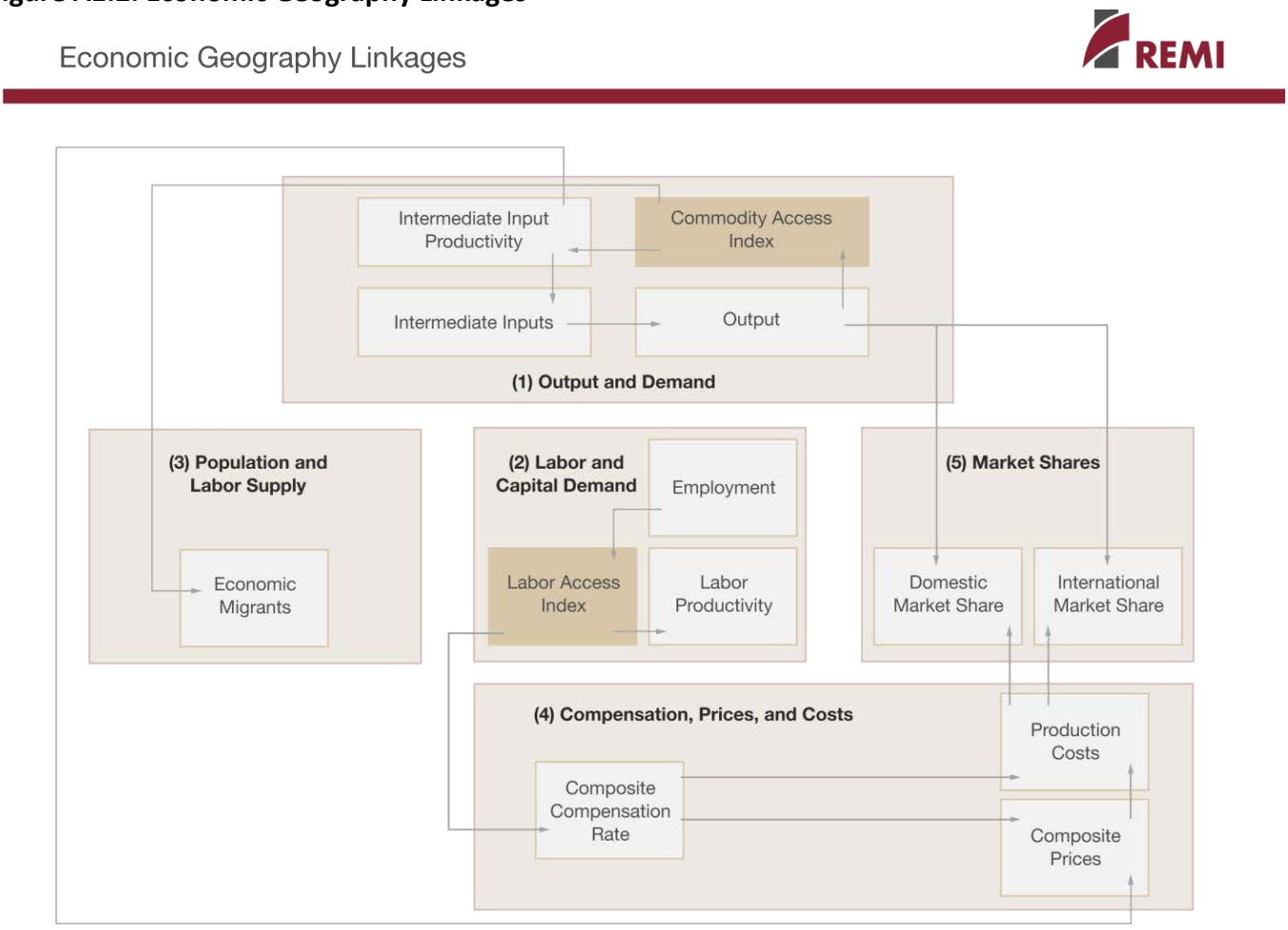


Figure A1.2: Economic Geography Linkages

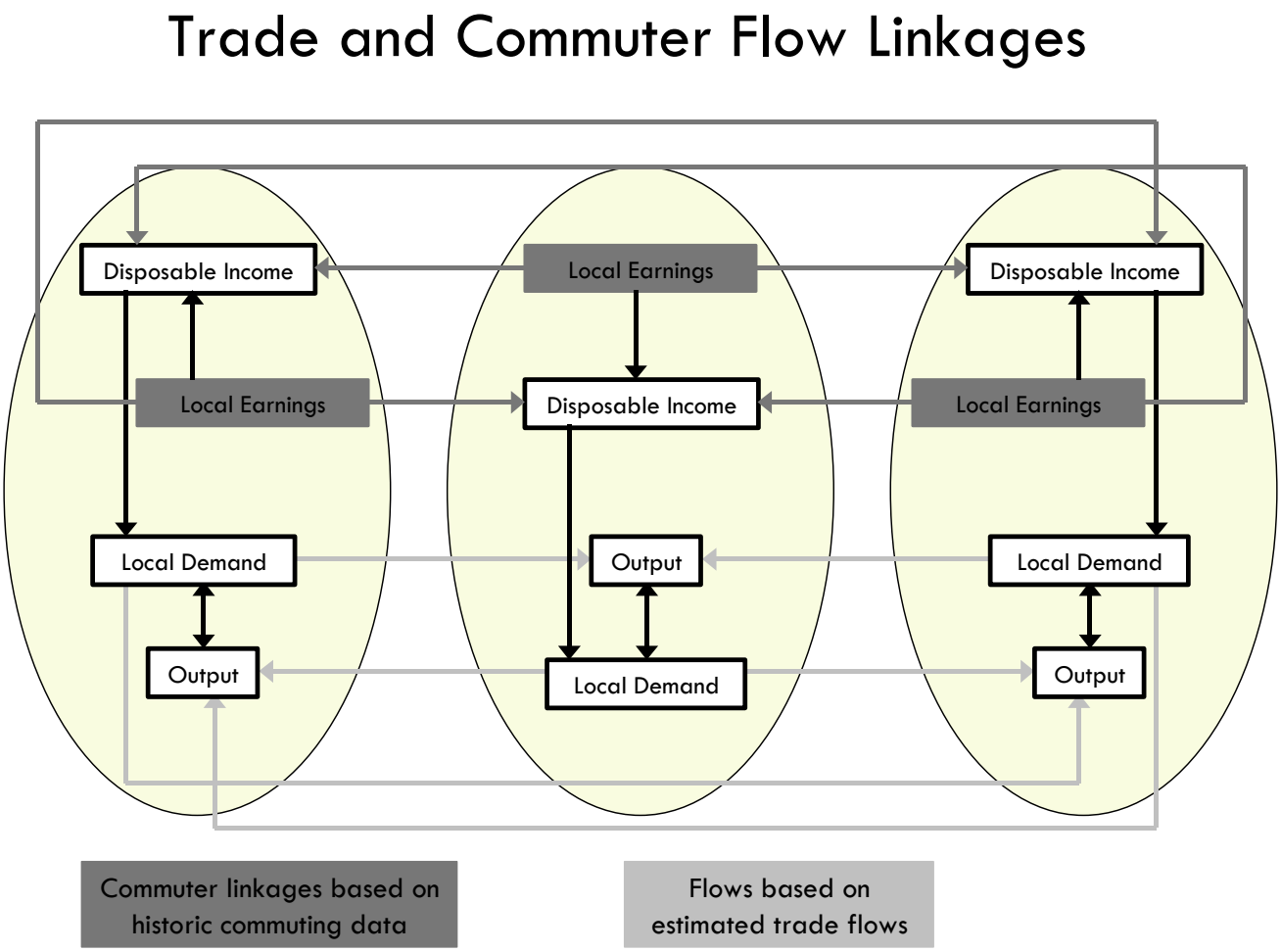


The Output and Demand block consists of output, demand, consumption, investment, government spending, exports, and imports, as well as feedback from output change due to the change in the productivity of intermediate inputs. The Labor and Capital Demand block includes labor intensity and productivity as well as demand for labor and capital. Labor force participation rate and migration equations are in the Population and Labor Supply block. The Compensation, Prices, and Costs block includes composite prices, determinants of production costs, the consumption price deflator, housing prices, and the compensation equations. The proportion of local, inter-regional, and export markets captured by each region is included in the Market Shares block.

Models can be built as single region, multi-region, or multi-region national models. A region is defined broadly as a sub-national area, and could consist of a state, province, county, or city, or any combination of sub-national areas.

Single-region models consist of an individual region, called the home region. The rest of the nation is also represented in the model. However, since the home region is only a small part of the total nation, the changes in the region do not have an endogenous effect on the variables in the rest of the nation. Multi-regional models have interactions among regions, such as trade and commuting flows. These interactions include trade flows from each region to each of the other regions. These flows are illustrated for a three-region model in Figure 3.

Figure A1.3: Trade and Commuter Flow Linkages



Multiregional national models also include a central bank monetary response that constrains labor markets. Models that only encompass a relatively small portion of a nation are not endogenously constrained by changes in exchange rates or monetary responses.

Block 1. Output and Demand

This block includes output, demand, consumption, investment, government spending, import, commodity access, and export concepts. Output for each industry in the home region is determined by industry demand in all regions in the nation, the home region's share of each market, and international exports from the region.

For each industry, demand is determined by the amount of output, consumption, investment, and capital demand on that industry. Consumption depends on real disposable income per capita, relative prices, differential income elasticities, and population. Input productivity depends on access to inputs because a larger choice set of inputs means it is more likely that the input with the specific characteristics required for the job will be found. In the capital stock adjustment process, investment occurs to fill the difference between optimal and actual capital stock for residential, non-residential, and equipment investment. Government spending changes are determined by changes in the population.

Block 2. Labor and Capital Demand

The Labor and Capital Demand block includes the determination of labor productivity, labor intensity, and the optimal capital stocks. Industry-specific labor productivity depends on the availability of workers with differentiated skills for the occupations used in each industry. The occupational labor supply and commuting costs determine firms' access to a specialized labor force.

Labor intensity is determined by the cost of labor relative to the other factor inputs, capital and fuel. Demand for capital is driven by the optimal capital stock equation for both non-residential capital and equipment. Optimal capital stock for each industry depends on the relative cost of labor and capital, and the employment weighted by capital use for each industry. Employment in private industries is determined by the value added and employment per unit of value added in each industry.

Block 3. Population and Labor Supply

The Population and Labor Supply block includes detailed demographic information about the region. Population data is given for age, gender, and race, with birth and survival rates for each group. The size and labor force participation rate of each group determines the labor supply. These participation rates respond to changes in employment relative to the potential labor force and to changes in the real after-tax compensation rate. Migration includes retirement, military, international, and economic migration. Economic migration is determined by the relative real after-tax compensation rate, relative employment opportunity, and consumer access to variety.

Block 4. Compensation, Prices and Costs

This block includes delivered prices, production costs, equipment cost, the consumption deflator, consumer prices, the price of housing, and the compensation equation. Economic geography concepts account for the productivity and price effects of access to specialized labor, goods, and services.

These prices measure the price of the industry output, taking into account the access to production locations. This access is important due to the specialization of production that takes place within each industry, and because transportation and transaction costs of distance are significant. Composite prices for each industry are then calculated based on the production costs of supplying regions, the effective distance to these regions, and the index of access to the variety of outputs in the industry relative to the access by other uses of the product.

The cost of production for each industry is determined by the cost of labor, capital, fuel, and intermediate inputs. Labor costs reflect a productivity adjustment to account for access to specialized labor, as well as underlying compensation rates. Capital costs include costs of non-residential structures and equipment, while fuel costs incorporate electricity, natural gas, and residual fuels.

The consumption deflator converts industry prices to prices for consumption commodities. For potential migrants, the consumer price is additionally calculated to include housing prices. Housing prices change from their initial level depending on changes in income and population density.

Compensation changes are due to changes in labor demand and supply conditions and changes in the national compensation rate. Changes in employment opportunities relative to the labor force and occupational demand change determine compensation rates by industry.

Block 5. Market Shares

The market shares equations measure the proportion of local and export markets that are captured by each industry. These depend on relative production costs, the estimated price elasticity of demand, and the effective distance between the home region and each of the other regions. The change in share of a specific area in any region depends on changes in its delivered price and the quantity it produces compared with the same factors for competitors in that market. The share of local and external markets then drives the exports from and imports to the home economy.

Fiscal Calibration

Each Tax-PI budget category is assigned an "Economic Indicator" that allows it to respond to changes in a specific economic variable (e.g., Personal Income for Personal Income Tax Revenue). Because the Tax-PI model integrates the economic outlook into fiscal projections, this analysis captures the interaction between economic activity and the level of tax revenue.

APPENDIX D
LAND USE, ZONING, AND PUBLIC POLICY

Appendix D-1
Land Use, Zoning, and Public Policy Methodology

D-1 Land Use, Zoning, and Public Policy Methodology

This section defines the study area for land use, zoning, and public policy and explains the methodology, data, and sources of information used to describe the affected environment. This section also explains the evaluation methods used to determine the direct and indirect effects of the alternatives on land use, zoning, and public policy. The analysis considers the Preferred Action Alternative's direct effects on uses and development trends within the study area and its compatibility with the surrounding built and natural environment. The analysis also considers the Preferred Action Alternative's relationship to applicable zoning regulations and public policies. Finally, the analysis considers potential indirect growth inducing effects on land use, zoning, and public policy in the region. Potential cumulative effects on land use, zoning, and public policy are evaluated in Chapter 4.

The land use study area encompasses the full scope of the Proposed Project and the proposed Connected Actions. The study area for the Proposed Project includes the Micron Campus, the Rail Spur Site, and the Childcare Site, as well as the area within a 1-mile radius surrounding the Micron Campus and the Rail Spur Site and a ¼-mile radius surrounding the Childcare Site, as shown in Figure 3.1-1. These study area limits represent a conservative estimate of the broader area potentially susceptible to land use changes from the Proposed Project. The build-out of the Micron Campus and the Rail Spur Site would create industrial uses in an area generally surrounded by vacant land, residential uses, and agricultural land. Therefore, the 1-mile radius around the Micron Campus and the Rail Spur Site represents the area that would be most likely to experience potential adverse effects from the manufacturing and industrial activities on those sites, such as noise and vibration effects from construction activities and the effects of increased traffic. The Childcare Site would include childcare, medical, and recreational uses more common in residential and commercial areas with more limited potential to disturb adjacent properties. Therefore, the ¼-mile radius was selected based on the lower likelihood of potential adverse effects from that site to extend beyond that distance.

The land use study area also encompasses the Connected Actions (electricity, natural gas, telecommunications, water, wastewater, and utility improvements; see Table 3.1-3). The Connected Actions would include upgrades to existing utility properties and certain linear infrastructure located primarily in existing rights-of-way and easements that would be unlikely to generate noticeable post-construction effects beyond the utility boundaries. Therefore, the study area for the Connected Actions is limited to the extent of the new utilities and improvements upon build-out but considers any potential effects on surrounding properties, including privately owned parcels along utility easement areas. The analysis also considers relevant effects on surrounding land uses and relevant zoning and public policy considerations.

Various sources were used to comprehensively analyze the land use, zoning, and public policy characteristics of the study area, including land use data supplied by Onondaga County; zoning maps from both the Town of Clay and the Town of Cicero as well as those towns' respective zoning codes; and comprehensive plans and other planning documents published by Onondaga County, the Town of Clay, and Town of Cicero. The methodology accounts for all existing land uses in the study area, including existing residences, businesses, and community facilities in the vicinity of the Proposed Project, as well as the other planned projects identified in Table 3.1-2.

The analysis also summarizes the existing zoning regulations applicable to the area of the Preferred Action Alternative and the land use study area and describes any changes to zoning regulations that are anticipated by the Preferred Action Alternative.

As explained in Section 3.1.3.2, the analysis of growth inducing effects due to reasonably foreseeable increases in population, jobs and economic activity, and residential, commercial, and industrial development under the Preferred Action Alternative relies on a study area that includes the five-county region. Because this study area supports the analysis of the alternatives' potential growth inducing effects on multiple resource areas, the detailed methodology for this study area is provided in Appendix B-3.

Finally, the methodology also considers the Preferred Action Alternative's relationship to applicable local or regional planning and economic development policies, including the Onondaga County Comprehensive Plan, the SMTC 2050 Long Range Transportation Plan 2020 Update, the Town of Clay Northern Land Use Study, the Town of Cicero Comprehensive Plan, and the New York Green CHIPS Program.

Appendix D-2
Zoning Regulations

D-2 Zoning Regulations

This section summarizes the zoning regulations that would be applicable to the Proposed Project, including design standards, site plan conditions, and mitigation requirements potentially applicable to new development.

D-2.1 Industrial-2 District (Town of Clay)

The majority of the Micron Campus and the entire Rail Spur Site would be located within the Town of Clay Industrial-2 (I-2) zoning district.

As shown in Table D-1 below, development in the I-2 district must comply with the dimensional/bulk (i.e., building size and shape), density, and design requirements in the Town of Clay Zoning Code. The I-2 district does not have minimum lot area, width, or depth requirements, and does not restrict maximum building height, number of floors, or gross floor area, but does include a maximum building coverage of 60 percent and a total maximum lot coverage of 80 percent. The district also requires minimum frontage and perimeter landscape areas and additional side and rear yards when a lot abuts a non-industrial district. In addition, the district imposes performance standards on activities that emit noise exceeding certain maximum levels, vibration, dust and dirt, smoke, noxious gases, and odors, as well as standards relating to lighting and glare, radioactive materials, fire, and safety hazards.

Table D-1 Town of Clay I-2 District Requirements

Requirement	Principal Structure	Accessory Structure
Minimum Required Dimensions/Bulk		
Lot Area / Width / Depth	-	-
Maximum Permitted Dimensions/Bulk		
Building Height / Floors	-	-
Gross Floor Area (GFA)	-	-
Building Coverage	60%	60%
Total Lot Coverage	80%	80%
Front Perimeter Landscape Strip	50% of front yard area required (25% of front yard required when a lot is surrounded on all sides by other industrial zones).	
Structure Design, Scale, and Materials	Approval required for new or modified land uses and/or structures proposed on a property that is entirely or partially within 500 feet of a Residential Zone District in consideration of compatibility of site and building design, scale of development, and any impacts related to development with the existing or planned character of those residential zones. Seven-foot-high fence, hedge, or similar opaque barrier required around open storage of materials or waste to screen them from view from all property lines.	

Requirement	Principal Structure	Accessory Structure
Minimum Required Frontage and Design Requirements		
Front Yard (ft)	200 (NYS or County HWY) 50 (Town or Private HWY)	Existing principal structure rear line
Side Yard (ft)	25 (100 if abutting non-industrial district)	25 (100 if abutting non-industrial district)
Rear Yard (ft)	25 (100 if abutting non-industrial district)	25 (100 if abutting non-industrial district)
Performance Standards		
Noise and Vibration	Noise from activities generally limited to a maximum of 70 decibels between 6:00 a.m. and 10:00 p.m., or 60 decibels between 10:00 p.m. and 6:00 a.m., with provisions for limited intermittent exceedances. Activities that result in vibration that creates an unreasonable displacement are prohibited.	
Dust and Dirt	Activities required to meet USEPA or NYSDEC standards for limiting emissions of soot, cinders or fly ash, other kinds of dust, dirt and other particulate matter. Emissions of dust and/or dirt crossing the property lines of the subject property are prohibited.	
Smoke, Noxious Gases, and Odors	Activities required to meet USEPA or NYSDEC standards for limiting emissions of smoke. Emissions of noxious acids, fumes, or gases at levels with the potential endanger public health or safety are prohibited. Emissions of odors that are unreasonably offensive are prohibited.	
Lighting and Glare	Activities that illuminate a property or emit direct or reflected glare that is determined to be unreasonably intense or offensive is prohibited. Lighting of signs, buildings or yards is prohibited, unless it is of intensity, location, direction and shielding that does not impair the vision of any motor vehicle driver. Any activity, structure, or site improvement on property that is entirely or partially within 500 feet of a residential zone district may be subject to more restrictive lighting standards.	
Radiation, Fire, and Safety	Activities that emit any form or quantities of radioactive materials that are considered unsafe under standards established by NIST or the NYS Department of Labor are prohibited. All buildings, operations, storage, waste disposal, etc. are required to be in conformance with applicable provisions of the NYS Uniform Fire Prevention and Building Code relating to fire protection and safety.	

Source: Town of Clay Zoning Code.

D-2.2 Highway Overlay District (Town of Clay)

The Micron Campus also would be located in the Town of Clay Highway Overlay district, which applies to properties that abut major roadways. The Highway Overlay district was created to protect the function, safety, and efficiency of primary roadways by allowing additional space for roadway expansion while providing for additional setbacks. The district classifies NYS Route 31 as a Type A road, which means it has the potential to become a five-lane roadway. Developments in the Highway Overlay district that would abut Type A roads may include increased lot sizes but would be subject to increased frontage requirements (double the base district minimum), as well as a 165-foot setback for primary structures, a 115-foot setback for accessory structures, and a 90-foot setback for parking areas.

D-2.3 Residential/Agricultural District (Town of Clay)

Three parcels in the WPCP are currently zoned as Residential/Agricultural (RA-100). The Childcare Site also would be located in an RA-100 district. RA-100 districts are intended for agricultural activities, low-density family dwellings, and supportive non-residential development. Other uses not specifically permitted in an RA-100 district may need to obtain special use permits from the Town of Clay Planning Board.[14]

D-2.4 General Commercial District (Town of Cicero)

Two portions of the Micron Campus would be located in the Town of Cicero General Commercial (GC) district, which permits a mix of commercial uses such as shopping centers, hotels and motels, gas stations, and restaurants. Table D-2 shows the GC bulk regulations.

Table D-2 Town of Clay GC District Bulk Regulations

Dimension	Bulk Limit
Minimum Building Line	100 ft.
Minimum Lot Depth	200 ft.
Minimum Front Yard	50 ft.
Minimum Rear Yard	25 ft.
Minimum Side Yard	15 ft.
Maximum Coverage	40%
Maximum Building Size	100,000 sq. ft.
Maximum Height	60 ft.

Source: Town of Cicero Zoning Code

[14] Section 230-13 A (2) (c) [7] of the Town of Clay Zoning Code permits "Special Uses" defined as "An accessory use to a principal use which, because of its unique characteristics, requires special consideration in each case by the Planning Board before a building permit can be issued."

References

Town of Cicero (NY) Department of Zoning and Planning. (n.d.). Town of Cicero Zoning Code. https://ciceronewyork.net/zoning-planning/. Accessed November 2023

Town of Clay (NY) Department of Planning and Development. (n.d.). Town of Clay Zoning Code. https://townofclay.org/forms-permits-info/zoning-codes-map. Accessed November 2023 .

Appendix D-3
Public Policies

D-3 Public Policies

This section summarizes the public policies that would be applicable to the Preferred Action Alternative, including policies related to land use and planning in the local region (e.g., local comprehensive, land use, and transportation plans) and the New York Green CHIPS economic development program. The section includes analyses of the relationship between the Preferred Action Alternative and each of these public policies.

D-3.1 2050 Long Range Transportation Plan 2020 Update

SMTC adopted its 2050 Long Range Transportation Plan 2020 Update (LRTP) in September 2020 to provide goals, objectives, targets, and performance measures, utilize transportation planning, and lay out capital investments. SMTC amended the LRTP in 2022 to reflect progress on the Interstate 81 Viaduct Project, including by incorporating a new financial analysis and adding anticipated future short-term highway projects to the LRTP.

In developing the LRTP, SMTC reviewed local and regional planning documents and compiled public input to create goals for the future. The LRTP analyzes past and current regional population growth, the region's economic growth, potential future growth patterns, travel, and tourism, and proposed future employment centers. The LRTP specifically identifies the WPCP as a proposed future employment center that would bolster the region's economic growth.

The LRTP comprehensively documents the existing transportation system, examining factors such as freight volumes, challenges and opportunities in freight movement, and issues related to injuries, fatalities, accessibility, mobility, environmental impacts, reliability, preservation, and equity. The LRTP also incorporates predictive modeling for future conditions and evaluates emerging transportation trends, including the potential integration of autonomous vehicles. The LRTP designates I-81 as a key freight corridor and an integral part of the Congestion Management Process (CMP) Freight Network and identifies both I-81 and NYS Route 31 as primary commuter corridors. The LRTP also outlines two designated on-street bike routes: one aligning with NYS Route 31 and the other following U.S. Route 11.

The LRTP identifies future short-term projects, including: capacity improvements on NYS Route 31 at Caughdenoy Road; maintenance on I-81 between NYS Route 31 and Route 49; and railroad grade crossing improvements planned at the intersection of the CSX Railroad with Old Liverpool Road. The LRTP also identifies mid-term projects (2025-2034) including interchange improvements at I-81 and NYS Route 31, and NYS Route 31 intersection turn lanes from Morgan Road to U.S. Route 11 (SMTC, 2020).

D-3.1.1 Analysis

As the Preferred Action Alternative is not a transportation system improvement project, it would not directly advance the SMTC LRTP's goals relating to the region's transportation system. However, the Preferred Action Alternative would be consistent with SMTC's LRTP goals relating to community planning, which seek to support the planning goals of the region and local communities. This includes supporting smart growth development patterns and commercial and industrial development.

The LRTP specifically identifies the WPCP, where the Micron Campus would be located, as a future employment center to help support the region's economic growth. The Proposed Project would be adjacent to major roadways evaluated in the LRTP, including I-81, NYS Route 31, and U.S. Route 11. The LRTP includes capacity improvements and upgrades on each of these roads in the short-term, with interchange and intersection improvements identified as mid-term projects.

Section 3.11 (Transportation and Traffic) identifies potential transportation improvement projects that could address anticipated traffic effects from the Proposed Project. The transportation improvements also would address capacity on the roads evaluated in the LRTP and their interchanges, which would support the LRTP's goal of improving road access to intermodal freight facilities and major freight generators. Any proposed transportation improvements would be subject to review by NYSDOT and the FHWA.

D-3.2 Onondaga County Comprehensive Plan

Onondaga County adopted the Onondaga County Comprehensive Plan (the Comprehensive Plan) in 2023 to envision the future of the County. Through public input, the County developed the Comprehensive Plan around five themes—Strong Centers, Housing and Neighborhoods, Community Mobility, Greenways and Blueways, and Agriculture—and included goals and recommendations for all five themes.

The Comprehensive Plan evaluates the County's current conditions and trends, which include a decline in job growth, and establishes a global economic competitiveness framework for the County. The Comprehensive Plan recognizes the County's competitiveness in three defined areas that contribute to regional economic competitiveness—Human Capital, Strong Centers, and Economic Collaboration—but notes the need for continued improvement in Economic Collaboration.[15] Under the Strong Centers theme, the Comprehensive Plan calls for infrastructure investments and economic development to encourage private sector investment and improve the quality of life through the creation of higher paying jobs. It also identifies employment centers, such as industrial parks, as a type of development that should be prioritized for continued investment. The Comprehensive Plan specifically identifies the Proposed Project as a major economic development initiative that would positively influence growth in the region.[16]

[15] Human Capital, also referred to in the Comprehensive Plan as "Investments in People," concerns social elements that support growth in the knowledge-based economy, such as support for entrepreneurship, improving quality of life to attract talent, and education. Economic Collaboration concerns coordinated efforts to guide economic development, such as support for institutions that encourage economic growth and developing strong relationships between jurisdictions and with the private sector.

[16] See Comprehensive Plan at 11 (Countywide Profile): "In October 2022 Micron Technology Inc. announced that it would be locating its largest semiconductor manufacturing facility in the Town of Clay, in the northern portion of Onondaga County. This facility is the largest economic development project to date in the history of the nation and will provide 9,000 jobs at the facility and an estimated 40,000 induced jobs in the region, especially in Onondaga County. The location of the plant in the Town of Clay will create a dramatic shift in employment centers. The project will also introduce jobs and an industry that will support our existing and planned mixed-use centers. From the initiation of Plan Onondaga, the planning team has been aware that this type of opportunity was inevitable, and the themes and approaches put forward in this plan are consistent with both a fast-growth and slow-growth reality."

The Comprehensive Plan includes a land use plan for the County that reflects the County's vision for its future growth, calls for new development and future investment to be concentrated in areas that are served by existing infrastructure, and specifically identifies "centers" throughout the County that have the ability to support additional growth: Traditional Centers (existing walkable, mixed-use, and amenity-rich neighborhoods); Emerging and Town Growth Centers (existing commercial corridors and downtown areas with potential for growth); the City Center (downtown Syracuse); and Employment Centers (locations with potential for increased economic activity, such as manufacturing). The Comprehensive Plan identifies the proposed Micron Campus as a potential Employment Center and nearby locations along the NYS Route 31 and I-81 corridors as Emerging Centers.

The Comprehensive Plan calls for a focus on transit-oriented development near the identified centers and transit corridors and enhancement of the BRT system to support the land use vision for the County. It identifies the portion of I-81 near the proposed Micron Campus as a corridor to target for enhanced BRT services and recommends that the County take a broader approach to the BRT system as it works to advance the WPCP redevelopment that accounts for potential increases in people travelling to and from the site.

D-3.2.1 Analysis

The Preferred Action Alternative would advance key goals in the Comprehensive Plan to expand economic development in Onondaga County. The Comprehensive Plan cites the proposed Micron Campus as an opportunity to bolster the County's competitiveness in Human Capital, Strong Centers, and Economic Collaboration. The Proposed Project also would support the Comprehensive Plan's recommendations relating to continued investment in industrial parks and other businesses that would bring high paying jobs to the County and promote development near existing utilities and transit corridors. The Proposed Project would become an Employment Center under the Comprehensive Plan capable of driving the County's economic development goals.

The Proposed Project would not directly advance some of the Comprehensive Plan's goals relating to development of key Employment Centers; in particular, the Proposed Project would not include improvements to public transit such as expansion of BRT services, which were actions intended to be taken by the County.

D-3.3 Town of Clay Northern Land Use Study

The Town of Clay adopted its Northern Land Use Study (NLUS) in 2013 to guide Town officials and planners with regard to future land use development in the northern portion of the Town. It evaluates existing land uses in the area north of NYS Route 31 as well as development-constraining features, such as sewage and water access, wetlands, soils, and floodplains. The NLUS aims to preserve open space and project future patterns of growth, and includes a plan for appropriate land uses adjacent to the Town of Cicero.

The NLUS encompasses three main themes: environmental, economic, and public infrastructure. The study's environmental objectives focus on safeguarding environmentally sensitive areas, preserving open space, and mitigating the development impacts on water quality. The NLUS also recognizes the Town of Clay Local Waterfront Revitalization Program as part of

an overarching goal to protect riverfront areas in the Town. The NLUS includes recommendations to maintain the rural character of the area by focusing growth in suitable locations. These recommendations include permitting higher-density, large-lot residential uses with a minimum lot size of 100,000 sq. ft and encouraging cluster developments with minimum lot sizes of 40,000 sq. ft. where suitable.

The NLUS' economic goals include promoting the development of the WPCP and leveraging its proximity to I-81 and essential public infrastructure. The NLUS also includes a public infrastructure goal that calls for restricting sewer and water extensions north of NYS Route 31 except as needed to support the WPCP redevelopment.

The NLUS also finds that the OWWTP would have the capacity to support a large manufacturing use with substantial water requirements located on the WPCP property.

Finally, the NLUS notes that NYS Route 31 is currently operating at full capacity and recommends that any proposed future development that would increase the intensity of uses in Northern Clay provide adequate traffic impact. The NLUS states that such future development should also consider access points and development of alternative transportation routes to NYS Route 31 (Town of Clay Department of Planning and Development, 2013).

D-3.3.1 Analysis

The Preferred Action Alternative would be generally consistent with the economic growth and development goals in the NLUS. In particular, construction of the Micron Campus would fulfill the study's goal to establish an industrial development at the WPCP. The Proposed Project also would fulfill goals in the NLUS to expand water supply infrastructure and sewer systems near the WPCP and increase the OWWTP's capacity to serve a large industrial development. Although construction of the manufacturing facility on the Micron Campus would not support the NLUS' goal to preserve the rural character of the area, it would be consistent with the study's goal to concentrate larger-scale development around the WPCP while the Town undertakes efforts to relieve development pressure in other rural areas further away from the I-81 corridor and public infrastructure.

D-3.4 Town of Cicero Comprehensive Plan

The Town of Cicero initiated a process to establish its first comprehensive plan in late 2022, which would supersede a draft plan from 2006 that was not adopted. In November 2024, the Town released a draft of the new Comprehensive Plan, titled Vision Cicero, which is currently undergoing public review and is expected to be adopted in 2025. Although Vision Cicero has not been formally adopted, the draft Comprehensive Plan is considered here.

Vision Cicero is intended as a guide for decision-making relating to growth, with a focus on promoting balanced growth, sustainability, and preservation of the town's community character and quality of life. The plan specifically identifies the Proposed Project as a major potential factor

for economic growth that would likely bring jobs and infrastructure development to the area.[17] At the same time, Vision Cicero acknowledges that potential effects of the Proposed Project on growth would present challenges, particularly the need for an expanded transportation network, diverse housing options, and expanded public services. As a whole, Vision Cicero cites the Proposed Project as "a once in a generation opportunity to improve our already high quality of life."

Vision Cicero includes goals relating to housing and residential growth, transportation, public services to enhance quality of life, economic development and business growth, preservation of natural areas, and sustainability. Vision Cicero's economic development goal focuses on attracting and supporting the economic growth that the Proposed Project would likely generate by calling for marketing efforts to attract businesses, particularly in the semiconductor industry, upgrades to Town infrastructure to support businesses, and identifying opportunities for additional industrial development along the Town's major freight corridors.

Vision Cicero includes a land use plan intended as a guide for future land use decisions, including a comprehensive update to the Town zoning code that is anticipated to follow the adoption of the Comprehensive Plan. The land use plan identifies the area along the U.S. Route 11 corridor as an area of commercial and light industrial development with potential to attract new businesses, including high-tech manufacturing facilities. The land use plan also identifies higher density residential and other development areas near the U.S. Route 11 corridor (referred to as Regional Mixed Use, Mixed Residential, and Town Center areas) with potential to facilitate a variety of housing types and increase the housing supply to meet the increased demand and growth the Proposed Project would likely generate in the area (Town of Cicero, 2024).

D-3.4.1 Analysis

Although the proposed Micron Campus manufacturing facility would be located in the Town of Clay and only two portions of the campus with access roads, driveways, and utility lines would be located in the Town of Cicero, the Preferred Action Alternative would be generally consistent with Vision Cicero and would directly support the plan's primary economic development goal. In addition, the Proposed Project would be consistent with the Vision Cicero land use plan, which is intended to attract high-tech businesses, including those that would serve Micron's supply chain, to the U.S. Route 11 corridor.

[17] See Vision Cicero at 10 (Micron Technology Invests in CNY): "The Micron semiconductor manufacturing facility is expected to generate a significant number of jobs and have a substantial economic impact on the central New York region. The plant will create approximately 9,000 direct high-tech jobs over the next 20 years, with positions ranging from engineering and manufacturing to maintenance and administrative roles. In addition to these direct jobs, the construction phase alone is projected to support around 5,000 temporary jobs. Beyond direct employment, the Micron facility will also create tens of thousands of indirect jobs across various sectors, including suppliers, logistics, construction, and service industries that will support both the plant and the growing workforce. The influx of workers will likely boost local demand for housing, retail, and services, leading to further job creation in these sectors. The broader economic impact is expected to be transformative for the region … The Micron plant will act as a catalyst for broader economic growth in Cicero. Increased demand for housing, retail, and services will likely spur new residential and commercial development, particularly along major corridors like I-81, Route 11, and Route 31."

The Proposed Project would not directly support some of the plan's goals; in particular, it would not directly provide any housing or enhanced public services to support the anticipated residential growth and would not provide for enhanced mixed-modal transportation options. However, the Proposed Project would include infrastructure improvements to support the manufacturing use (generally located in the Town of Clay and outlying areas, and not in the Town of Cicero) and traffic mitigation to address capacity on major roadways (discussed in Section 3.11, Transportation and Traffic), consistent with the plan's recommendations to support growth. The Proposed Project is also consistent with Vision Cicero's land use plan, which identifies the area that contains the Micron Campus as an area for commercial and light industrial development. Therefore, the Preferred Action Alternative is generally consistent with Vision Cicero.

D-3.5 New York Green CHIPS Program

In 2022, the New York State Legislature enacted the Green CHIPS Program, which includes approximately $10 billion in economic incentives for environmentally friendly semiconductor manufacturing projects with the potential to create thousands of jobs in the State and address issues relating to semiconductor supply chain shortages, inflation, and national security. The Green CHIPS Program includes several provisions to help reduce the cost of constructing and operating semiconductor manufacturing facilities.

To receive benefits under the Green CHIPS Program, a project must be qualified through an application to the State Urban Development Corporation (also known as ESD). There are several requirements to qualify as a Green CHIPS facility, including creating a minimum of 500 new jobs and providing $3 billion in investment over a 10-year period. Projects also must adopt sustainability measures to mitigate greenhouse gas emissions, pay construction workers a federal prevailing wage, and commit to worker and community investment, including training and educational programs to expand employment opportunities for economically disadvantaged individuals. Projects may apply for an additional 10 years of benefits, subject to new job requirements, capital expenditures, and ESD approval, which may allow some Green CHIPS projects to be eligible for 20 years of incentives.

Incentives available to Green CHIPS projects include a tax credit for research and development expenditures and an investment tax credit for capital expenditures. The Program also offers a tax credit on salaries and wages, and a real property tax credit. The Program also includes reductions in private utility services through discounted delivery rates. Green CHIPS projects that achieve their job and investment commitments and meet eligibility requirements are eligible for refundable tax credits under ESD's Excelsior Jobs Program, a pay-for-performance program that allows companies to receive tax credits as they meet investment and job targets.

D-3.5.1 Analysis

The Proposed Project would use incentives from the New York Green CHIPS Program, enacted in August 2022 to provide financial support for on-shoring semiconductor manufacturing to spur economic growth in New York State. To be eligible to receive Green CHIPS Program incentives, Micron must meet the statutory requirements of creating at least 500 new jobs, adopting sustainability measures to reduce GHG emissions (see Section 3.7, Greenhouse Gas Emissions, Climate Change, and Climate Resiliency), paying construction workers the Federal prevailing

wage, and committing to worker and community investments. In furtherance of the Green CHIPS Program and New York's policy of incentivizing semiconductor manufacturing in New York, in September 2022, Micron, ESD, Onondaga County and OCIDA entered into a "Key Terms and Conditions for Development of the Micron Green Manufacturing Memory Chip Fab Campus in Clay, New York" ("Term Sheet") to incentivize Micron to locate a semiconductor facility at the WPCP.

The Term Sheet outlines Micron's commitments to creating more than 9,000 new jobs and paying the Federal prevailing wage to construction workers, and further outlines preliminary sustainability commitments designed to reduce GHG emissions. The Term Sheet further illustrates Micron's commitments to worker and community investments, including a Community Investment Fund (CIF) of $500 million for CNY communities, which will be used to develop the local workforce, invest in education throughout CNY, promote affordable housing, and provide additional benefits to CNY communities. Micron also committed to installing on-site renewable energy systems and implementing water conservation and efficiency measures.

References

Empire State Development (ESD). (n.d.). *New York State's Green CHIPS Program*. https://esd.ny.gov/green-chips. Accessed December 2023.

Onondaga County. (2023). *Plan Onondaga County Comprehensive Plan. https://plan.ongov.net/the-plan/*

SMTC. (2020). *2050 Long Range Transportation Plan 2020 Update*. https://smtcmpo.org/wp-content/uploads/lrtp/2050-LRTP-Update-Full-Doc-2020.10.08.pdf

Town of Cicero. (2024). *Vision Cicero: Town of Cicero Comprehensive Plan (Draft)*. https://www.visioncicero.com/. Accessed November 2024.

Town of Clay Department of Planning and Development. (2013). Town of Clay Northern Land Use Study.

Appendix D-4
NRCS FPPA Review Documents

U.S. Department of Agriculture

FARMLAND CONVERSION IMPACT RATING

PART I *(To be completed by Federal Agency)*	Date Of Land Evaluation Request November 27, 2024
Name of Project Micron Clay Fab Facility	Federal Agency Involved CHIPS Program Office
Proposed Land Use Industrial and Commercial	County and State Onondaga, New York
PART II *(To be completed by NRCS)*	Date Request Received By NRCS 11/27/2024 / Person Completing Form: Daniel Ufnar

Does the site contain Prime, Unique, Statewide or Local Important Farmland? *(If no, the FPPA does not apply - do not complete additional parts of this form)*	YES ☑ NO ☐	Acres Irrigated 1330	Average Farm Size 258
Major Crop(s) Hay, corn	Farmable Land In Govt. Jurisdiction Acres: 292912% 58.65	Amount of Farmland As Defined in FPPA Acres: 29291% 58.65	
Name of Land Evaluation System Used Onondaga County LESA	Name of State or Local Site Assessment System NA	Date Land Evaluation Returned by NRCS 12/05/2024	

PART III *(To be completed by Federal Agency)*	Alternative Site Rating Site A	Site B	Site C	Site D
A. Total Acres To Be Converted Directly	1081			
B. Total Acres To Be Converted Indirectly	56			
C. Total Acres In Site	1685			
PART IV *(To be completed by NRCS)* Land Evaluation Information				
A. Total Acres Prime And Unique Farmland	1073.1			
B. Total Acres Statewide Important or Local Important Farmland	63.8			
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted	0.39			
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value	36.4			
PART V (To be completed by NRCS) Land Evaluation Criterion Relative Value of Farmland To Be Converted (Scale of 0 to 100 Points)	70.4			

PART VI *(To be completed by Federal Agency)* Site Assessment Criteria *(Criteria are explained in 7 CFR 658.5 b. For Corridor project use form NRCS-CPA-106)*	**Maximum Points**	Site A	Site B	Site C	Site D
1. Area In Non-urban Use	(15)	8			
2. Perimeter In Non-urban Use	(10)	5			
3. Percent Of Site Being Farmed	(20)	0			
4. Protection Provided By State and Local Government	(20)	0			
5. Distance From Urban Built-up Area	(15)	0			
6. Distance To Urban Support Services	(15)	10			
7. Size Of Present Farm Unit Compared To Average	(10)	0			
8. Creation Of Non-farmable Farmland	(10)	1			
9. Availability Of Farm Support Services	(5)	5			
10. On-Farm Investments	(20)	3			
11. Effects Of Conversion On Farm Support Services	(10)	0			
12. Compatibility With Existing Agricultural Use	(10)	5			
TOTAL SITE ASSESSMENT POINTS	160	37	0	0	0
PART VII ***(To be completed by Federal Agency)***					
Relative Value Of Farmland *(From Part V)*	100	70.4	0	0	0
Total Site Assessment *(From Part VI above or local site assessment)*	160	37	0	0	0
TOTAL POINTS ***(Total of above 2 lines)***	260	107.4	0	0	0

Site Selected: A	Date Of Selection 12/16/24	Was A Local Site Assessment Used? YES ☑ NO ☐

Reason For Selection:

Overall score for Site A is 107.4, indicating it did not approach the score that would require consideration of alternative sites.

Name of Federal agency representative completing this form: David Frenkel	Date: 1/08/2025

(See Instructions on reverse side)

Form AD-1006 (03-02)

STEPS IN THE PROCESSING THE FARMLAND AND CONVERSION IMPACT RATING FORM

Step 1 - Federal agencies (or Federally funded projects) involved in proposed projects that may convert farmland, as defined in the Farmland Protection Policy Act (FPPA) to nonagricultural uses, will initially complete Parts I and III of the form. For Corridor type projects, the Federal agency shall use form NRCS-CPA-106 in place of form AD-1006. The Land Evaluation and Site Assessment (LESA) process may also be accessed by visiting the FPPA website, http://fppa.nrcs.usda.gov/lesa/.

Step 2 - Originator (Federal Agency) will send one original copy of the form together with appropriate scaled maps indicating location(s)of project site(s), to the Natural Resources Conservation Service (NRCS) local Field Office or USDA Service Center and retain a copy for their files. (NRCS has offices in most counties in the U.S. The USDA Office Information Locator may be found at http://offices.usda.gov/scripts/ndISAPI.dll/oip_public/USA_map**,** or the offices can usually be found in the Phone Book under U.S. Government, Department of Agriculture. A list of field offices is available from the NRCS State Conservationist and State Office in each State.)

Step 3 - NRCS will, within 10 working days after receipt of the completed form, make a determination as to whether the site(s) of the proposed project contains prime, unique, statewide or local important farmland. (When a site visit or land evaluation system design is needed, NRCS will respond within 30 working days.

Step 4 - For sites where farmland covered by the FPPA will be converted by the proposed project, NRCS will complete Parts II, IV and V of the form.

Step 5 - NRCS will return the original copy of the form to the Federal agency involved in the project, and retain a file copy for NRCS records.

Step 6 - The Federal agency involved in the proposed project will complete Parts VI and VII of the form and return the form with the final selected site to the servicing NRCS office.

Step 7 - The Federal agency providing financial or technical assistance to the proposed project will make a determination as to whether the proposed conversion is consistent with the FPPA.

INSTRUCTIONS FOR COMPLETING THE FARMLAND CONVERSION IMPACT RATING FORM

(For Federal Agency)

Part I: When completing the "County and State" questions, list all the local governments that are responsible for local land use controls where site(s) are to be evaluated.

Part III: When completing item B (Total Acres To Be Converted Indirectly), include the following:

1. Acres not being directly converted but that would no longer be capable of being farmed after the conversion, because the conversion would restrict access to them or other major change in the ability to use the land for agriculture.
2. Acres planned to receive services from an infrastructure project as indicated in the project justification (e.g. highways, utilities planned build out capacity) that will cause a direct conversion.

Part VI: Do not complete Part VI using the standard format if a State or Local site assessment is used. With local and NRCS assistance, use the local Land Evaluation and Site Assessment (LESA).

1. Assign the maximum points for each site assessment criterion as shown in § 658.5(b) of CFR. In cases of corridor-type project such as transportation, power line and flood control, criteria #5 and #6 will not apply and will, be weighted zero, however, criterion #8 will be weighed a maximum of 25 points and criterion #11 a maximum of 25 points.

2. Federal agencies may assign relative weights among the 12 site assessment criteria other than those shown on the FPPA rule after submitting individual agency FPPA policy for review and comment to NRCS. In all cases where other weights are assigned, relative adjustments must be made to maintain the maximum total points at 160. For project sites where the total points equal or exceed 160, consider alternative actions, as appropriate, that could reduce adverse impacts (e.g. Alternative Sites, Modifications or Mitigation).

Part VII: In computing the "Total Site Assessment Points" where a State or local site assessment is used and the total maximum number of points is other than 160, convert the site assessment points to a base of 160.
Example: if the Site Assessment maximum is 200 points, and the alternative Site "A" is rated 180 points:

$$\frac{\text{Total points assigned Site A}}{\text{Maximum points possible}} = \frac{180}{200} \text{ X } 160 = 144 \text{ points for Site A}$$

For assistance in completing this form or FPPA process, contact the local NRCS Field Office or USDA Service Center.

NRCS employees, consult the FPPA Manual and/or policy for additional instructions to complete the AD-1006 form.

U.S. DEPARTMENT OF AGRICULTURE
Natural Resources Conservation Service

NRCS-CPA-106
(Rev. 1-91)

FARMLAND CONVERSION IMPACT RATING FOR CORRIDOR TYPE PROJECTS

PART I *(To be completed by Federal Agency)*	3. Date of Land Evaluation Request **11/27/24**	4. Sheet 1 of _____
1. Name of Project **Micron Clay Fab Facility**	5. Federal Agency Involved **CHIPS Program Office**	
2. Type of Project **Industrial and Commercial**	6. County and State **Onondaga, New York**	

PART II *(To be completed by NRCS)*	1. Date Request Received by NRCS **11/27/24**	2. Person Completing Form **Daniel Ufnar**
3. Does the corridor contain prime, unique statewide or local important farmland? (If no, the FPPA does not apply - Do not complete additional parts of this form). YES ☑ NO ☐		4. Acres Irrigated **1330** Average Farm Size **258**
5. Major Crop(s) **Hay, corn**	6. Farmable Land in Government Jurisdiction Acres: **292912** % **58.65**	7. Amount of Farmland As Defined in FPPA Acres: **292912** % **58.6**
8. Name Of Land Evaluation System Used **Onondaga County LESA**	9. Name of Local Site Assessment System **NA**	10. Date Land Evaluation Returned by NRCS **12/5/24**

PART III *(To be completed by Federal Agency)*	Maximum Points	Alternative Corridor For Segment _____ Corridor A	Corridor B	Corridor C	Corridor D
A. Total Acres To Be Converted Directly		**0**			
B. Total Acres To Be Converted Indirectly, Or To Receive Services		**288**			
C. Total Acres In Corridor		**426**			
PART IV *(To be completed by NRCS) Land Evaluation Information*					
A. Total Acres Prime And Unique Farmland		**99.7**			
B. Total Acres Statewide And Local Important Farmland		**8.4**			
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted		**0.037**			
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value		**36.4**			
PART V *(To be completed by NRCS) Land Evaluation Information Criterion Relative value of Farmland to Be Serviced or Converted (Scale of 0 - 100 Points)*		72.2			
PART VI *(To be completed by Federal Agency) Corridor Assessment Criteria (These criteria are explained in 7 CFR 658.5(c))*	**Maximum Points**				
1. Area in Nonurban Use	**15**	**6**			
2. Perimeter in Nonurban Use	**10**	**8**			
3. Percent Of Corridor Being Farmed	**20**	**8**			
4. Protection Provided By State And Local Government	**20**	**0**			
5. Size of Present Farm Unit Compared To Average	**10**	**0**			
6. Creation Of Nonfarmable Farmland	**25**	**0**			
7. Availablility Of Farm Support Services	**5**	**5**			
8. On-Farm Investments	**20**	**12**			
9. Effects Of Conversion On Farm Support Services	**25**	**0**			
10. Compatibility With Existing Agricultural Use	**10**	**5**			
TOTAL CORRIDOR ASSESSMENT POINTS	**160**	**44**	**0**	**0**	**0**
PART VII *(To be completed by Federal Agency)*					
Relative Value Of Farmland (From Part V)	**100**	**72.2**	**0**	**0**	**0**
Total Corridor Assessment (From Part VI above or a local site assessment)	**160**	**44**	**0**	**0**	**0**
TOTAL POINTS *(Total of above 2 lines)*	**260**	**116.2**	**0**	**0**	**0**

1. Corridor Selected:	2. Total Acres of Farmlands to be Converted by Project:	3. Date Of Selection:	4. Was A Local Site Assessment Used?
A	**288**	**12/16/24**	YES ☑ NO ☐

5. Reason For Selection:

Overall score for Corridor A within Onondaga County is 116.2, indicating it did not approach the score that would require consideration of alternative corridors.

Signature of Person Completing this Part: David Frenkel

DATE **1/8/25**

NOTE: Complete a form for each segment with more than one Alternate Corridor

CORRIDOR - TYPE SITE ASSESSMENT CRITERIA

The following criteria are to be used for projects that have a linear or corridor - type site configuration connecting two distant points, and crossing several different tracts of land. These include utility lines, highways, railroads, stream improvements, and flood control systems. Federal agencies are to assess the suitability of each corridor - type site or design alternative for protection as farmland along with the land evaluation information.

(1) How much land is in nonurban use within a radius of 1.0 mile from where the project is intended?
More than 90 percent - 15 points
90 to 20 percent - 14 to 1 point(s)
Less than 20 percent - 0 points

(2) How much of the perimeter of the site borders on land in nonurban use?
More than 90 percent - 10 points
90 to 20 percent - 9 to 1 point(s)
Less than 20 percent - 0 points

(3) How much of the site has been farmed (managed for a scheduled harvest or timber activity) more than five of the last 10 years?
More than 90 percent - 20 points
90 to 20 percent - 19 to 1 point(s)
Less than 20 percent - 0 points

(4) Is the site subject to state or unit of local government policies or programs to protect farmland or covered by private programs to protect farmland?
Site is protected - 20 points
Site is not protected - 0 points

(5) Is the farm unit(s) containing the site (before the project) as large as the average - size farming unit in the County ? (Average farm sizes in each county are available from the NRCS field offices in each state. Data are from the latest available Census of Agriculture, Acreage or Farm Units in Operation with $1,000 or more in sales.)
As large or larger - 10 points
Below average - deduct 1 point for each 5 percent below the average, down to 0 points if 50 percent or more below average - 9 to 0 points

(6) If the site is chosen for the project, how much of the remaining land on the farm will become non-farmable because of interference with land patterns?
Acreage equal to more than 25 percent of acres directly converted by the project - 25 points
Acreage equal to between 25 and 5 percent of the acres directly converted by the project - 1 to 24 point(s)
Acreage equal to less than 5 percent of the acres directly converted by the project - 0 points

(7) Does the site have available adequate supply of farm support services and markets, i.e., farm suppliers, equipment dealers, processing and storage facilities and farmer's markets?
All required services are available - 5 points
Some required services are available - 4 to 1 point(s)
No required services are available - 0 points

(8) Does the site have substantial and well-maintained on-farm investments such as barns, other storage building, fruit trees and vines, field terraces, drainage, irrigation, waterways, or other soil and water conservation measures?
High amount of on-farm investment - 20 points
Moderate amount of on-farm investment - 19 to 1 point(s)
No on-farm investment - 0 points

(9) Would the project at this site, by converting farmland to nonagricultural use, reduce the demand for farm support services so as to jeopardize the continued existence of these support services and thus, the viability of the farms remaining in the area?
Substantial reduction in demand for support services if the site is converted - 25 points
Some reduction in demand for support services if the site is converted - 1 to 24 point(s)
No significant reduction in demand for support services if the site is converted - 0 points

(10) Is the kind and intensity of the proposed use of the site sufficiently incompatible with agriculture that it is likely to contribute to the eventual conversion of surrounding farmland to nonagricultural use?
Proposed project is incompatible to existing agricultural use of surrounding farmland - 10 points
Proposed project is tolerable to existing agricultural use of surrounding farmland - 9 to 1 point(s)
Proposed project is fully compatible with existing agricultural use of surrounding farmland - 0 points

U.S. DEPARTMENT OF AGRICULTURE
Natural Resources Conservation Service

NRCS-CPA-106
(Rev. 1-91)

FARMLAND CONVERSION IMPACT RATING FOR CORRIDOR TYPE PROJECTS

PART I *(To be completed by Federal Agency)*	3. Date of Land Evaluation Request **11/27/24**	4. Sheet 1 of _____
1. Name of Project **Micron Clay Fab Facility**	5. Federal Agency Involved **CHIPS Program Office**	
2. Type of Project **Industrial and Commercial**	6. County and State **Oswego, New York**	

PART II *(To be completed by NRCS)*	1. Date Request Received by NRCS **11/27/24**	2. Person Completing Form **Daniel Ufnar**
3. Does the corridor contain prime, unique statewide or local important farmland? (If no, the FPPA does not apply - Do not complete additional parts of this form). YES ☑ NO ☐		4. Acres Irrigated **752** / Average Farm Size **141**
5. Major Crop(s) **Hay**	6. Farmable Land in Government Jurisdiction Acres: **241049** % **39.51**	7. Amount of Farmland As Defined in FPPA Acres: **241049** % **39.5**
8. Name Of Land Evaluation System Used **Oswego County LESA**	9. Name of Local Site Assessment System **NA**	10. Date Land Evaluation Returned by NRCS **12/5/24**

PART III *(To be completed by Federal Agency)*	Maximum Points	Alternative Corridor For Segment _____ Corridor A	Corridor B	Corridor C	Corridor D
A. Total Acres To Be Converted Directly		**0**			
B. Total Acres To Be Converted Indirectly, Or To Receive Services		**288**			
C. Total Acres In Corridor		**426**			
PART IV *(To be completed by NRCS) Land Evaluation Information*					
A. Total Acres Prime And Unique Farmland		**102**			
B. Total Acres Statewide And Local Important Farmland		**78.1**			
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted		**0.075**			
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value		**9.3**			
PART V *(To be completed by NRCS) Land Evaluation Information Criterion Relative value of Farmland to Be Serviced or Converted (Scale of 0 - 100 Points)*		49			
PART VI *(To be completed by Federal Agency) Corridor Assessment Criteria (These criteria are explained in 7 CFR 658.5(c))*	**Maximum Points**				
1. Area in Nonurban Use	**15**	**2**			
2. Perimeter in Nonurban Use	**10**	**5**			
3. Percent Of Corridor Being Farmed	**20**	**0**			
4. Protection Provided By State And Local Government	**20**	**20**			
5. Size of Present Farm Unit Compared To Average	**10**	**1**			
6. Creation Of Nonfarmable Farmland	**25**	**1**			
7. Availablility Of Farm Support Services	**5**	**5**			
8. On-Farm Investments	**20**	**1**			
9. Effects Of Conversion On Farm Support Services	**25**	**0**			
10. Compatibility With Existing Agricultural Use	**10**	**5**			
TOTAL CORRIDOR ASSESSMENT POINTS	**160**	**40**	**0**	**0**	**0**
PART VII *(To be completed by Federal Agency)*					
Relative Value Of Farmland (From Part V)	**100**	**49**	**0**	**0**	**0**
Total Corridor Assessment (From Part VI above or a local site assessment)	**160**	**40**	**0**	**0**	**0**
TOTAL POINTS *(Total of above 2 lines)*	**260**	**89**	**0**	**0**	**0**

1. Corridor Selected:	2. Total Acres of Farmlands to be Converted by Project:	3. Date Of Selection:	4. Was A Local Site Assessment Used?
A	**288**	**12/16/24**	YES ☑ NO ☐

5. Reason For Selection:

Overall score for Corridor A within Oswego County is 89, indicating it did not approach the score that would require consideration of alternative corridors.

Signature of Person Completing this Part: *David Frenkel* DATE **1/8/25**

NOTE: Complete a form for each segment with more than one Alternate Corridor

CORRIDOR - TYPE SITE ASSESSMENT CRITERIA

The following criteria are to be used for projects that have a linear or corridor - type site configuration connecting two distant points, and crossing several different tracts of land. These include utility lines, highways, railroads, stream improvements, and flood control systems. Federal agencies are to assess the suitability of each corridor - type site or design alternative for protection as farmland along with the land evaluation information.

(1) How much land is in nonurban use within a radius of 1.0 mile from where the project is intended?
More than 90 percent - 15 points
90 to 20 percent - 14 to 1 point(s)
Less than 20 percent - 0 points

(2) How much of the perimeter of the site borders on land in nonurban use?
More than 90 percent - 10 points
90 to 20 percent - 9 to 1 point(s)
Less than 20 percent - 0 points

(3) How much of the site has been farmed (managed for a scheduled harvest or timber activity) more than five of the last 10 years?
More than 90 percent - 20 points
90 to 20 percent - 19 to 1 point(s)
Less than 20 percent - 0 points

(4) Is the site subject to state or unit of local government policies or programs to protect farmland or covered by private programs to protect farmland?
Site is protected - 20 points
Site is not protected - 0 points

(5) Is the farm unit(s) containing the site (before the project) as large as the average - size farming unit in the County ? (Average farm sizes in each county are available from the NRCS field offices in each state. Data are from the latest available Census of Agriculture, Acreage or Farm Units in Operation with $1,000 or more in sales.)
As large or larger - 10 points
Below average - deduct 1 point for each 5 percent below the average, down to 0 points if 50 percent or more below average - 9 to 0 points

(6) If the site is chosen for the project, how much of the remaining land on the farm will become non-farmable because of interference with land patterns?
Acreage equal to more than 25 percent of acres directly converted by the project - 25 points
Acreage equal to between 25 and 5 percent of the acres directly converted by the project - 1 to 24 point(s)
Acreage equal to less than 5 percent of the acres directly converted by the project - 0 points

(7) Does the site have available adequate supply of farm support services and markets, i.e., farm suppliers, equipment dealers, processing and storage facilities and farmer's markets?
All required services are available - 5 points
Some required services are available - 4 to 1 point(s)
No required services are available - 0 points

(8) Does the site have substantial and well-maintained on-farm investments such as barns, other storage building, fruit trees and vines, field terraces, drainage, irrigation, waterways, or other soil and water conservation measures?
High amount of on-farm investment - 20 points
Moderate amount of on-farm investment - 19 to 1 point(s)
No on-farm investment - 0 points

(9) Would the project at this site, by converting farmland to nonagricultural use, reduce the demand for farm support services so as to jeopardize the continued existence of these support services and thus, the viability of the farms remaining in the area?
Substantial reduction in demand for support services if the site is converted - 25 points
Some reduction in demand for support services if the site is converted - 1 to 24 point(s)
No significant reduction in demand for support services if the site is converted - 0 points

(10) Is the kind and intensity of the proposed use of the site sufficiently incompatible with agriculture that it is likely to contribute to the eventual conversion of surrounding farmland to nonagricultural use?
Proposed project is incompatible to existing agricultural use of surrounding farmland - 10 points
Proposed project is tolerable to existing agricultural use of surrounding farmland - 9 to 1 point(s)
Proposed project is fully compatible with existing agricultural use of surrounding farmland - 0 points

December 5, 2024

Gwen Sivirichi, Senior Technical Director
AKRF
7250 Parkway Drive
Suite 210
Hanover, MD 21076

RE: NRCS FPPA Review – Micron Clay Fab Facility, Onondaga and Oswego Counties, NY

Ms. Sivirichi,

The Natural Resources Conservation Service (NRCS) under Part 523 of the Farmland Protection Policy Act (FPPA) has reviewed the proposed project described above. This review was conducted with respect to the effect(s) that the proposal may have on prime, statewide, and/or unique farmland. The project has several components within the overall design, some of which are limited to linear utility corridors. As such, the project is being reviewed with two separate forms. The following listed components have been submitted as part of the project with specific descriptions, extent, and areas of impact provided:

1. Micron Campus
2. Childcare Site
3. Rail Spur
4. Clay Substation Expansion
5. Oak Orchard WWTP
6. Existing Raw Water Pump Station
7. OCWA Terminal Campus
8. OCWA Burt Point Property
9. OCWA Lake Ontario Water Treatment Plant
10. Gas Regulator Station
11. Natural Gas Line
12. Fiberoptic Line
13. OCWA Line
14. Industrial Wastewater Conveyance

Project components 11 through 14 (as listed above) are associated with linear utility installations and were evaluated with the Farmland Conversion Impact Rating For Corridor Type Projects (NRCS-CPA-106). As the proposed OCWA line (component 13) crosses from Onondaga into Oswego counties, two separate NRCS-CPA-106 forms were used to capture county level land evaluation information. The remaining project areas (1 through 10 in the list above) were evaluated using a single Farmland Conversion Impact Rating form (AD-1006) as most proposed actions will take place within Onondaga County. Those non-corridor related activities occurring within Oswego County as currently proposed fall under existing exemptions and are not subject to FPPA provisions.

Several listed project components as proposed in part or as a whole would be exempt from FPPA provisions for several reasons. Subpart B of Part 523 of the Farmland Protection Policy Act states that ‘Lands identified as “urbanized area” (UA) on the Census Bureau maps’ are not covered by the act. The OCWA Terminal Campus, and OCWA Burt Point Property (components 7 and 8 on the above list)

extents as currently proposed and presented are entirely within UA on the 2020 Census Bureau Reference Maps and would therefore be exempt from FPPA provisions. In addition, portions of components 1 and 13 are also located within UA areas as proposed, and those acreages were not included within the AD-1006 or NRCS-CPA-106 evaluations. Other areas of components 3, 5, 9, and 10 that are part of the project were described as either already converted (i.e., currently paved, standing buildings, etc.) or fall outside the area of proposed disturbance. Additionally, project area 9, the OCWA Lake Ontario Water Treatment Plant improvements proposed are located within an area not mapped as prime, unique, or farmland of statewide importance, and/or are already converted, therefore would not fall under the FPPA provisions. If the scope of the project changes, then further review for FPPA might be needed.

FPPA provisions outlined in 440-V-CPM Amendment 12 Part 523.11 C, describes if construction is within an existing right-of-way (ROW), the activity is not subject to provisions of FPPA. As currently proposed and provided, portions of components 11, 14, and all of 12 (Fiberoptic line) occur within existing road ROW's, and therefore those acreages would be exempt. Please note that Part 523.11 E, lists another exemption that might be applicable for corridor portions of the project. FPPA provisions lists corridor subsurface project (such as buried water, sewage, and/or electrical lines) exempt if the proposal includes development of a soil disturbance/removal and reconstruction plan (as defined in 30 CFR823.12 and 30 CFR823.14) for all agricultural land uses. If a project area is currently in cropland, as defined by USDA-NRCS, 30 CFR823.15 applies, and a soil disturbance/removal and reconstruction plan will be developed for the exemption to apply.

For areas of the project proposal that do not fall under an existing exemption, and will impact prime farmland soils, or farmland soils of statewide importance, the enclosed AD-1006 and NRCS-CPA-106 forms need to be completed to rate the land being converted. If the Total Points in part VII (Relative Value from Part V plus the Total Site Assessment from Part VI) is greater than or equal to 160 (on either form AD-1006 or NRCS-CPA-106), an alternative site or adjustment to project extent should be considered that will limit impacts to prime farmland soils and soils of statewide importance. If no alternative for the project is practical, the Reason for Selection block at the bottom of the form should state the reasoning. Upon completion of Parts VI and VII of the forms provided, a copy is requested to be sent to the address below or e-mail to daniel.ufnar@usda.gov.

USDA/NRCS
Daniel Ufnar
441 S. Salina St
Suite 354
Syracuse, NY 13202

Thank you for this opportunity to review and comment on this proposal.

Respectfully,

Daniel Ufnar
State Soil Scientist

Enc.