Luther Forest Technology Campus GEIS

Statement of Findings

Towns of Malta & Stillwater, Saratoga County, New York

Draft
June 14, 2004

Adopted By:
Stillwater Town Board
P.O. Box 700
Stillwater, New York 12170
(518) 664-6148
Fax: (518) 664-6140
Contact: Greg Connors, Supervisor

TABLE OF CONTENTS

Appendices

I. GENERAL

A. The project site contains approximately 1,350 acres located one-half mile southeast of the intersection of Dunning Street and Route 9 in the Town of Malta and west of Cold Springs Road in the Town of Stillwater. The application seeks the creation of the Luther Forest Technology Campus (LFTC) PDD that would allow a mixture of industrial, commercial and residential uses, including up to four silicon "wafer" manufacturing facilities, up to 2-million sq. ft. of ancillary uses, a hotel/conference center, and up to 50 residential homes.

B. Pursuant to the State Environmental Quality Review Act (SEQR), the Town of Malta Town Board (Lead Agency) prepared a Generic Environmental Impact Statement (GEIS) to evaluate the potential impacts of the proposed long-range development of the LFTC and to identify appropriate mitigation. A GEIS is a tool provided by the State Environmental Quality Review Act (SEQR) to evaluate development issues within a defined geographic area that may impact land use and the environment. The level of detail that is analyzed under a GEIS is limited to the planning or concept level since specific site details have not been advanced. The GEIS is a document which focuses on broader environmental issues. The Town of Stillwater participated in the SEQRA process as an involved agency.

C. The primary purpose of preparing the GEIS was to identify early on in the process the potential impacts the project may have on the community's resources and the appropriate mitigation measures which may be necessary to minimize those impacts to the greatest extent practicable. The GEIS and this Statement of Findings apply to all development within the project site as well as all the infrastructure necessary to support the proposed project.

D. Pursuant to the requirements of SEQR, the Malta Town Board, as Lead Agency, deemed the DGEIS complete on January 16, 2003. Public hearings were scheduled and conducted on February 20, 2003 and February 26, 2003. Due to the complexity and size of the proposed project, the public comment period was extended to March 24, 2003 to allow the public adequate time to review the DGEIS. A FGEIS was prepared and deemed complete on October 16, 2003.

E. For purposes of these Findings the following terms shall have the following meanings:

1. The term "Applicant" shall mean the SEDC or its assigns or succesors.

2. The term "Owner" shall mean a company who is a tenant of the project or who desires to be a tenant of the project.

3. The term "Property Owner" shall mean the current owner of the subject property.

II. CERTIFICATION

A. The Town of Stillwater Town Board, as an Involved Agency, is issuing this Statement of Findings pursuant to 6NYCRR Part 617.11 of SEQR. Specifically, the Stillwater Town Board hereby finds:

1. *The requirements of 6 NYCRR 617 have been met.*
2. *Consistent with social, economic and other essential considerations from among the reasonable alternatives available, the action is one that avoids or minimizes adverse environmental impacts to the maximum extent practicable,*
3. *Adverse environmental 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.*
4. *The GEIS is comprehensive and contains the facts and conclusions relied upon to support the Town Board's Statement of Findings and indicates the social, economic and other factors, which formed the basis of its findings.*

B. Pursuant to the regulatory requirements of SEQR for Generic Environmental Impact Statements (6 NYCRR Part 617.10), the Luther Forest Technology Campus GEIS assessed the environmental impacts that may occur as a result of future development in the Project Area. This Statement of Findings lists the specific conditions or criteria under which future projects may be undertaken or approved, including requirements for any subsequent SEQR compliance. To the extent that certain impacts may require further analysis, it is recognized that the FGEIS may be supplemented pursuant to 6 NYCRR Part 617.10(d). No further SEQR compliance is required if a subsequent proposed action will be carried out in conformance with the conditions and thresholds established for such actions in the GEIS and its Findings Statement, provided all other (assumptions) used in the GEIS analysis remain the same.

III. PROPOSED ACTION

A. The proposed action is the approval of a long range conceptual master plan for the 1,350 acre project site, construction and operation of the LFTC through a zoning change creating Planned Development Districts (PDDs) under the Zoning Laws of the Towns of Malta and Stillwater. The PDD will allow the creation of a technology campus and manufacturing center with a specific focus on nanotechnology manufacturing uses, nanotechnology support uses, general office, a hotel/conference center, limited retail and commercial uses and approximately 50 residential homes. The project site is located approximately 77% in the Town of Malta and 23% in the Town of Stillwater, Saratoga County, New York. Approval of the proposed LFTC by the Town Boards will authorize both anchor and support nanotechnology manufacturing facilities (herein called a "Fab") and ancillary uses (i.e., support businesses and offices), including some commercial uses and a limited amount of single-family housing, subject to future local site plan approval procedures as set forth in New York State Town Law Section 274-a, the Town (of Stillwater) Code and the proposed LFTC PDD regulations.

B. Long-range development of the LFTC will occur in five (5) phases of development over an anticipated 15- to 25-year build-out period, correlating to the initial development of up to 300,000 sq. ft. of building construction and up to 50 residential home sites. The remaining four (4) phases of development correlate to the construction of the four (4) anchor nanotechnology manufacturing facilities, as prescribed by the proposed Planned Development District (PDD) Regulations and Master Plan. The proposed action also includes off-site infrastructure

improvements, inclusive of roads, water, sewer, electric power, telecommunications, and natural gas.

C. There are 19 development areas proposed within the LFTC. All anchor Fab tenants will be located in Development Area 1 which can accommodate up to four (4) manufacturing facilities. Development Areas 1, 2, and 3 are the only development areas located in the Town of Stillwater. Development Areas 6, 7 and 8 comprise the Campus Center which will contain office and commercial uses which will primarily provide goods and services to support the tenants and employees of the LFTC. Development Areas 2, 3, 4, 5, and 9 will contain the ancillary uses, which are limited to minor manufacturing, offices, R&D, and wholesale and other uses which will support the anchor Fabs. Development Area 10 will contain up to 50 single family residential lots and will be subject to the Town of Malta's Open Space Subdivision ordinance, with the entitlement calculation based on one half acre (21,780 sq.ft.) zoning. Green space within Development Area 10 may count toward the overall green space calculations for the project site. It should be noted that Development Area 10 will be physically separated from the interior of the project site by a ravine and will have no direct access to the other Development Areas within the LFTC. Development Area 11 is proposed to be a hotel/conference center with up to 40 suites and conference facilities for up to 200 people. The remainder of the Development Areas will comprise the open space and residential buffer areas for the site.

D. Saratoga Economic Development Corporation (SEDC), and/or its assigns, acting as the authorized agent for the property owners, is the Applicant for the proposed LFTC. The Applicant's stated purpose is to develop the LFTC as a world-class nanotechnology campus and manufacturing center. The LFTC is consistent with regional and state economic development plans and would create thousands of middle and upper income jobs in the Towns of Malta and Stillwater, and the Capital Region.

E. The 1,350-acre project site is privately owned by the Wright Malta Corporation and the Luther Forest Corporation. A majority of the project site is a managed second-growth forest with planted rows of trees having a network of interconnected logging roads. At the end of World War II, the site was used by the U.S. Army as a "top-secret" testing facility. The testing facility was located on the Wright Malta portion of the project site and was developed to duplicate the technological advances of German scientists in rocket technology and deny such military technology to the Soviet Union. During this time, a one-mile "safety easement" was established over portions of the Luther Forest Corporation's property to provide a safety buffer for experimental rocket testing and ordnance firing. This safety easement covers approximately 1,730 acres of a circular area and prohibits human habitation. This safety easement will be discontinued when the Wright Malta and surrounding Luther Forest "safety easement" parcels are merged into the LFTC parcel prior to construction and operation of the LFTC. The SEDC currently has options of both properties as well as the safety easement.

F. The PDD Master Plan for the LFTC is attached as Appendix "A" and provides a development scheme for a "campus-like," high-technology manufacturing complex, with a minimum 60% plus green space, at full build out and buffers from surrounding land uses. A well defined list of allowable land uses concentrated in semiconductor manufacturing and nanotechnology (i.e., nanoelectronics) are described in the PDD Regulations. This "industry cluster" focus within the LFTC seeks to maximize the highest and best use of the LFTC project site for economic development and job creation. Also included in the PDD Regulations are uniform Architectural, Landscaping and Lighting Standards. Among other criteria, there will be a minimum of 200 feet of separation setback from the Luther Forest residential neighborhoods (actual building setbacks range from ~100 to 700 feet), and more than 50% green space on the project site.

G. There will be a maximum of four (4) site access driveways into the project site from existing public roads—two (2) from State roads (one from US Route 9 and one from NYS Route 67) and two (2) from Cold Springs Road. There will be a total of four (4) phases of transportation improvements to be implemented as build out of the LFTC occurs. Major off-site improvements include an bypass road around the Village of Round Lake to be constructed and in operation prior to the issuance of the a Certificate of Occupancy for any development within the LFTC, in excess of the initial 300,000 sq.ft. of building construction and a new Exit 11A from I-87 to be completed before the issuance of the Certificate of Occupancy of the third (3rd) Fab.

H. The Hudson River will be the primary source of water supply to the LFTC, however the Saratoga Water Services, Inc. will supply water for the initial phase of development which includes up to 300,000 sq.ft. of building construction and up to 50 residential home lots. Sanitary sewer service will be provided by the Saratoga County Sewer District No. 1 (SCSD#1). Niagara Mohawk, A National Grid Company (Niagara Mohawk) and New York State Electric & Gas (NYSEG) will provide electrical power service via four (4) circuits on two (2) new 115 kV transmission line rights-of-way and a new substation on the project site. Natural gas will be provided by Niagara Mohawk from its existing distribution system. Telecommunication facilities will be provided by Verizon New York Inc. (Verizon). As part of the initial phase of Fab development, it will be necessary to extend these utilities to the project site.

IV. FACTS & CONCLUSIONS

A. Transportation

1. The potential traffic impacts of the LFTC project were analyzed based on four (4) phases of build out over a 25-year period. Each phase will include one (1) anchor manufacturing facility (Fab) and 500,000 sq. ft. of ancillary development.
2. The Fabs will operate on two12-hour shifts beginning at 6:00 a.m. and 6:00 p.m.. Therefore, peak-trip generation for the anchor Fabs will occur from 5:30 to 6:30 a.m. and 5:30 to 6:30 p.m. As build-out occurs within the campus and additional/current traffic information is provided, the times of shift change will be re-evaluated and adjusted as necessary.
3. Ancillary development within the LFTC will generally operate on a more common work schedule between 8:00 a.m. and 5:00 p.m. Therefore, trip generation from the approximately two- (2) million sq.ft. of ancillary development will coincide with the current AM and PM peak hour of adjacent street traffic (7:00 a.m. - 8:00 a.m.; 4:30 p.m. - 5:30 p.m.).
4. Background growth rates of 3.5% compounded per year for four (4) years was applied to the 2001 base traffic volumes followed by 1.25% per year compounded growth from 2005 to 2025.
5. Trip generation for both the Fabs and ancillary development at each phase of development were estimated as follows:

Peak Hour Trip Generation Summary for Anchor Fab Facilities

# of Facilities	Year	AM Peak Hour of Generator 5:30 a.m. to 6:30 a.m.			PM Peak Hour of Generator 5:30 p.m. to 6:30 p.m.		
		Enter*	Exit*	Total*	Enter*	Exit*	Total*
1	2005	500	500	1000	500	500	1000
2	2011	1000	1000	2000	1000	1000	2000
3	2018	1500	1500	3000	1500	1500	3000
4	2025	2000	2000	4000	2000	2000	4000

* Indicates the cumulative trip generation of the nanotechnology land uses.

Peak Hour of Adjacent Street Traffic
Trip Generation Summary For Ancillary Development

Phase	Year	AM Peak Hour of Adj. St. Traffic 7:00 a.m. to 8:00 a.m.			PM Peak Hour of Adj. St. Traffic 4:30 p.m. to 5:30 p.m.		
		Enter*	Exit*	Total*	Enter*	Exit*	Total*
1	2005	500	100	600	125	500	625
2	2011	1000	200	1200	250	1000	1250
3	2018	1500	300	1800	375	1500	1875
4	2025	2000	400	2400	500	2000	2500

* Indicates the cumulative trip generation of the ancillary land uses.

6. Trip distribution for the project was estimated using the Capital District Transportation Committee (CDTC) Systematic Traffic Evaluation and Planning Model. In general, the model indicated that approximately 35% of the site generated traffic will travel to and from the northwest, 14% from the northeast, 8% from the east, 24% from the south and 19% from points west.

7. Access to the site will be provided by up to four (4) locations for Phases 1 and 2 of Fab development, US Route 9 at Stonebreak Road; and from NYS Route 67; and two (2) locations on Cold Springs Road. During Phase 1 of Fab development, there may be only one access point on Cold Springs Road, subject to Town of Stillwater approval. Phases 3 and 4 will add another Route 9 access near the Route 9/67 intersection in conjunction with the new Exit 11A.

8. The traffic analysis was conducted assuming NYSDOT will complete reconstruction of the I-87 Exit 12 Interchange and the NYS Route 67 / Dunning Street Corridor round-about alternative prior to issuing any Certificates of Occupancy for an anchor Fab within the LFTC.

9. Transportation improvements will be required during each phase of development to mitigate the increase in traffic generated by the LFTC. Appendix B summarizes the specific improvements required during each phase of development. In general, the improvements listed will be completed and operational prior to issuing Certificates of Occupancy for buildings within that phase.

10. A maximum of 300,000 square feet of new building construction within Development Area 5, as well as single-family residential construction in Development Area 10, will be permitted the LFTC site prior to the construction of the Village of Round Lake bypass road, as described in Section 6.6 of the DGEIS. The improvements required to accommodate this initial development include the construction of a southbound left-turn lane from Route 9 onto the site access road (Stonebreak Road) and construction of two lanes exiting Stonebreak Road onto US Route 9 to allow for separate left- and right-turn movements. A traffic signal will also be installed when required NYSDOT warrants are satisfied.

11. Access to the adjacent NYSERDA property will be provided through the LFTC site, prior to the Certificate of Occupancy for Development Area 1.

12. Multi-use paths will be constructed along the primary arterial boulevards within the LFTC for pedestrian and bicycle circulation. The extent and details of multi-use paths will be reviewed as part of the site plan review process.

13. Construction of a new I-87 Exit 11A interchange will be completed and operational prior to issuing a Certificate of Occupancy for the third (3rd) Fab or ancillary buildings which results in a total LFTC trip generation of 1,800 cars in the AM or 1,875 in the PM peak hours.

14. The conceptual alignment of the bypass road and the future I-87 Exit 11A interchange are shown in Appendix C. These alignments are preliminary and final alignment will be subject to the review and approval of NYSDOT and the Town of Malta. Exit 11A, if warranted based on future development in LFTC, will undergo a separate environmental review by the Federal Highway Administration (FHWA) in accordance with the National Environmental Policy Act (NEPA). The exact location and alignment of the Exist 11A will be determined in conjunction with this NEPA review.

15. During Phases 1 and 2 trucks making chemical/fuel deliveries to the LFTC as well as hazardous waste removal will be limited to using the Route 9 / Stonebreak Road entrance or the NYS Route 67 entrance to the LFTC. Construction related traffic will be restricted from accessing the site through the Village of Round Lake and Town-owned roadways in the Town of Stillwater, except by special permit issued by the Stillwater Town Board. Construction traffic from I-87 will be directed to use Route 9 from Exit 12 or Exit 10 of the Northway. General conditions of the actual construction contracts which include plans for maintenance and protection of traffic will be submitted to the NYS DOT, Town and Village for review and comment.

16. Provisions for commuting by airplane or helicopter are not included in the LFTC Master Plan and have not been evaluated within the FGEIS.

17. Once alternative access is provided into the project site, use of Dunning Street will be limited to emergency or public transportation vehicles only, at the discretion of the Town.

18. There will be no road connection to Fox Wander Road along the Stonebreak Road access road.

19. As build out of the LFTC progresses, additional traffic studies will be required to monitor trip generation and the timing of the proposed transportation improvements, and to ensure that mitigation measures identified remain valid over time. At a minimum, updated traffic analyses will be completed during the site plan review process for each individual application for the LFTC that generates more than a de minimus number of operational trips.

20. Both project-related and cumulative trip count data will be required for all proposed development projects within the project site, except for Development Area 10.

21. The Applicant or Owner will be required to improve the unimproved sections of Cold Springs Road and Elmore Robinson Road to Town specifications prior to the issuance of a Certificate of Occupancy for Fab 1.

22. The Town of Stillwater may require the Applicant or Owner to construct a temporary surface on Cold Springs Road during the construction period for the first anchor Fab in Development Area 1.

23. The Applicant or Owner shall construct traffic calming measures at the Cold Springs Road accesses. Such measures shall be subject to site plan review by the Town of Stillwater Planning Board.

24. Water, sewer and electrical transmission lines placed in Town rights-of-way will require the Applicant or Owner to reconstruct, resurface or restore Town roadways to the specifications of the Town.

B. Infrastructure

1. Water

a. The estimated water supply need for development of the first Fab is estimated to be between 1.5 and 2.0 million gallons per day (MGD). Ultimate build-out water supply is estimated at 10 to15 MGD.

b. As part of the water supply system, there is planned to be a 5-million gallon water storage tank installed on the southern portion of the LFTC project site. The tank will be located on a natural knoll and is anticipated to be approximately 70-feet tall.

c. Additional on-site storage of water may be required by the companies that seek to locate on the project site. All on-site storage tanks will be low profile tanks or standpipes with a maximum height of 75 feet. The exact location, height and visual impacts will be further analyzed during the site plan review process.

d. Water supply for the initial development of up to 300,000 sq. ft. of building construction in Development Area 5 and the residential development within Development Area 10 will be provided by the Saratoga Water Services, Inc., a private water supply company in the area. As part of the site plan review process, documentation shall be submitted indicating that Saratoga Water Service Company has permitted capacity to serve the initial 300,000 sq.ft. of building development and the residential homes within Development Area 10.

e. The remainder of the development within the LFTC will be provided from the Hudson River by either the upper or lower Hudson River source.

f. The upper Hudson River source is the proposed regional water source presently being advocated by Saratoga County and historically recommended by the original 1990 Intermunicipal Water Supply Study, as well as the 1995 Update. Under this proposed regional plan for Saratoga County, "raw" surface water will be withdrawn and treated in the Upper Hudson within the Town of Moreau. Water distribution will be delivered down the spine of the County, principally along Route 9, south to the City of Saratoga Springs. The LFTC would then be connected to this system via the extension of a water main in the vicinity of Saratoga Springs. If this regional water source, or alternative regional Hudson River water source is available within the time limitations of the LFTC, then it will be utilized as the primary water source.

g. The impacts of the proposed alternative, lower Hudson River water source have been evaluated within the DGEIS and FGEIS. The lower Hudson water source will require the installation of a new intake structure in Stillwater, a new transmission main along existing rights of way to the proposed water treatment plant to be located on the proposed right-of-way. The conceptual water line distribution route to the LFTC will initiate from the Hudson River and extend behind Brickyard Road to the north along an old railroad grade, west to County Road 75, north to McDermott road, west along Elmore Robinson Road to Cold Springs Road into the project site. A conceptual alignment has been provided in Appendix C – Infrastructure Improvements. Final details of the routing plan will be reviewed as part of the site plan review process.

h. The proposed water supply system will require specific permits from the following permitting agencies:

1. NYSDOH: source, treatment plan design.
2. NYSDEC: Hudson River intake, service area, crossing disturbance of streams and wetlands.
3. US Army Corps of Engineers: Hudson River intake (construction in navigable waters), wetlands disturbance of streams (joint permit with NYSDEC).
4. NYSDOT, Saratoga County DPW, Town Highway Dept. Construction within highway R.O.W.
5. NYS Historic Preservation Office: cultural resources.
6. Town of Stillwater Planning Board: water treatment plant site plan.
7. NYS Electrical & Gas: Crossing R.O.W. and Construction in the forebay of existing hydro plant.
8. Railroad Work Permits: construction in R.O.W.

i. Easements will be required from private property owners.

j. Specific permit applications and approvals will be obtained during the site plan approval process.

k. Construction-related impacts (i.e., erosion control, wetland disturbance, stream crossings, maintenance and protection of traffic) will be reviewed during the

development of the detailed construction documents which will be reviewed and approved by the Towns of Malta and Stillwater.

2. Sewer

a. The estimated wastewater discharge rate for full build out of the LFTC is between 4 and 10 million gallons per day (MGD). The sewer requirement for the first Fab is estimated at 0.8-1.1 MGD, with a peak discharge at start up of 2.5 MGD. Wastewater generated by the initial development of 300,000 sq. ft. and up to 50 residential homes is estimated at 30,000 gallons per day.

b. Wastewater from the LFTC will be treated by the Saratoga County Sewer District No. 1 (SCSD) at its Mechanicville Wastewater Treatment Plant (WWTP) which currently has a capacity of 21.3 MGD. The WWTP currently has available capacity of approximately 8.3 MGD. Upgrades to the Mechanicville treatment plant to increase its capacity to 32 MGD can be accommodated to service the needs of the LFTC. As the plant nears capacity, SCSD #1 will plan, as necessary, the expansion of its treatment plant to meet anticipated future demand of the LFTC, as well as other projects in the service area.

c. Sewer collection and transmission will be accomplished in up to two (2) phases. The initial phase (which will serve the first Fab and up to 500,000 sq. ft. of ancillary development) will include the installation of a new collection pipe from the site out to Dunning Street. Improvements will be made to the Dunning Street system to provide adequate reserve capacity to accommodate future non LFTC development. The second phase will include the construction of a 10 MGD sewer connection along Cold Springs Road to SCSD's main sewer trunk line in the area of NYS Route 67 to provide adequate capacity to service the remainder of the development within the LFTC. Details of the sewer collection design and construction related impacts will be reviewed and approved by the Town of Stillwater Planning Board during the site plan review process. Alternatively, the 10 MGD sewer option could be constructed during the initial phase of Fab development which would obviate the need for the improvements along Dunning Street.

d. The "generic" characteristics and concentrations of wastewater for a typical nanotechnology manufacturing facility are provided in Appendix D have been reviewed by the SCSD #1. Based on a preliminary review, pretreatment requirements will be applicable to the Fabs at the LFTC. In addition to pretreatment of the wastewater, there will also be active monitoring of the companies discharge into the SCSD #1 system to ensure that designated standards are being attained.

e. These pretreatment and monitoring requirements will be established on a case-by-case basis upon review of the specific processes proposed and their wastewater characteristics. Design review and approval process with the SCSD #1 will be completed as part of each site plan review.

3. Electric Power

a. The anticipated electric power needs for full build out of the LFTC is estimated to be approximately 140 megawatts (MW) with an initial power requirement for the first phase of development estimated at 40 MW. Initially, there is a need to provide approximately 7 MW of electric power to support construction of the first anchor Fab.

b. The nanotechnology manufacturing industry requires reliable power sources without interruptions, provided by a minimum of two (2) separate electric transmission lines (ETL), each having independent electrical sources from the grid with redundant transformers. This redundancy minimizes the potential for interruption of electrical service which is a critical factor in the proposed manufacturing processes.

c. The main components of the electric service plan include the following:

1. Supplying a temporary electric service for the first phase of Fab construction (up to 7 MW), from the Malta Substation via a 2.5 mile 13.2 kV express distribution circuit along highway rights-of-way and existing poles.

2. A new 115/13.8 kV substation for supplying the LFTC and connecting it to the local transmission system. This includes capacitor banks, which is required to provide adequate voltage performance to the LFTC extensions of 115 kV transmission lines (i.e., interconnection facilities) for connecting the new substation above to Niagara Mohawk's: existing transmission system. The two extensions into the LFTC include: 1.) a 2.5 mile #2 loop from the Malta Substation, across Route 9 routed from the west and 2.) a 5.9 mile #3 loop from the Mulberry Substation routed west-northwest.

d. Installation of the 115 kV transmission lines from the existing Malta substation underground within the Town of Malta was evaluated investigated and discounted for the following:

1. Longer timeframe and cost for repairs to underground lines.
2. Faults on overhead lines are easily located and repairs can usually be made within 24 to 48 hours. Many faults in overhead lines are temporary in a nature. Often it is possible to "reclose" (re-energize) an overhead line after a temporary fault and return the line to service with only a brief interruption. Faults in underground transmission cables are rarely temporary.
3. The cost of the 115 kV transmission lines underground is approximately 6 to 10 times that of overhead lines.

e. Single pole, double davit structures shall be used for the primary support structures of the ETL within visually sensitive areas.

f. A 500-foot wide corridor was identified to be the current best routing path for the 115 kV transmission lines from the Malta and Mulberry substations to the site and has been included within Appendix E – Electrical Transmission Line Routing. Actual width of the electric corridor necessary to accommodate the lines is as follows:

1. Single-pole, double-davit - 100' permanent R.O.W.
2. Double H-Frame poles—150' permanent R.O.W.
3. Pole heights shall be approximately 75 feet to 95 feet tall

g. Exceptions to these permanent R.O.W. widths will be those locations where additional area is needed for guying of structures or at difficult angle turns in the transmission line routing.

h. The final routing plan and design details for power lines will be subject to review and approval from the Towns of Malta and Stillwater and the New York State Department of Public Service pursuant to 16 NYCRR Part 102. The Town's review will include viewshed analysis, structure type and height, and screening alternatives.

i. Power distribution to individual buildings from the substation within the LFTC will be underground.

4. Natural Gas

a. Niagara Mohawk presently provides natural gas service to the project area via a network of existing distribution pipelines within its E-13 gas transmission system. This existing transmission system currently services the Luther Forest residential community and the Route 9 corridor, amongst other Niagara Mohawk customers in the project area. Niagara Mohawk's existing E-36/E-18 pipeline corridor is located seven *(7)* miles to the west of E-13.

b. It is estimated that full build-out of the proposed LFTC will require from 200,000 to 360,000 cubic feet per hour (cfh) of natural gas at a delivery pressure of up to 60 psi. The actual amount will depend upon the type of fuel chosen for back-up power generation. Use of natural gas for back-up power generation for the full build-out of four (4) Fabs will require up to 360,000 cfh, whereas the use of an alternative back-up fuel (e.g., fuel oil) would result in a significant reduction in the overall gas load for full build out of the LFTC to within the range of 200,000 cfh.

c. The E-13 gas transmission system with certain improvements is able to transport a significant quantity of natural gas to the proposed LFTC. Niagara Mohawk estimates that minor improvements to the E-13 gas transmission system, they can provide up to approximately 270,000 cfh at 20 psi to the project site. The first phase of proposed E-13 improvement involves installing approximately 4,000 to 5,000 feet of 8-inch plastic pipe on Plains Road between Route 9 and Fox Wander Road, as well as approximately 4,000 feet of 12-inch steel main from the existing gas distribution main along Dunning Street into the project site. This improvement has the capability to supply up to 200,000 cfh of natural gas to the project site at 20 psi.

d. The second phase will require additional E-13 system improvements to achieve a maximum of 270,000 cfh at 20 psi. Incremental, additional system improvements, are associated with upgrading the existing E-13 system to 60 psi, and include increasing the capacity of two existing gas substations, GRS #738 Malta and GRS # 733 Rowley Road.

e. To accommodate 360,000 at 20 psi , at full build out, a third and more costly phase of natural gas system improvements would be required. This potential third phase of natural gas system improvements involves an additional transmission main from the E-36/E-18 pipeline' corridor and a new gas regulating station. If required in the future, this third phase will require a supplemental environmental assessment for purposes of complying with SEQR.

5. Telecommunications

a. Verizon's Round Lake central office is located approximately three (3) miles from the center of the LFTC site. All forms of switched and non-switched service are available out of this central office.

b. As the system is designed and the actual infrastructure routing is more defined, it will be submitted for review by the Towns, as may be applicable to the proposed telecommunications project.

c. Distribution of telecommunications on the LFTC will be underground.

C. Water Resources

1. General

a. The Knapp Road Well Field owned by Saratoga Water Services, Inc. is located to the south of the project site. The well field contains approximately five (5) shallow wells (approximately 28- to 33-feet deep) which provide potable water to the Luther Forest residential community and to other areas in the Towns of Malta and Stillwater.

b. Saratoga Water Services, Inc. also has a deep well (+/- 300 feet) along Cold Springs Road which also provides potable water to the distribution system in Malta and Stillwater.

c. Saratoga Glen Hollow Water Supply Corporation owns two (2) deep wells (+/- 300 feet) on the east side of Cold Springs Road. These wells provide water to residential communities in the Town of Stillwater.

d. The City of Mechanicville surface water reservoir is located approximately one mile southeast of the project site, however, the portion of the LFTC site proposed for development is not located within the reservoir's watershed. The Applicant or Owner shall develop and submit to the Stillwater Planning Board a water quality monitoring program for the reservoir prior to any development activity in the Mechanicville watershed..

e. Private wells are also located around the project site predominantly for residential use. Although no NYSDOH records exist, based on local geology, it is likely that most wells are located within the shallow permeable deposits. The Applicant or Owner shall be responsible for remedying any impacts to private water sources that occur as a result of construction or operation activities associated with the project, if any.

f. Approximately 15 streams will be traversed and/or temporarily impacted during construction of the off-site utilities and transportation improvements, five (5) of which are considered NYSDEC protected streams (i.e., C (T) or higher classification).

g. Approximately 12 % of the project site comprises a hazardous waste site. The former Malta Rocket Fuel Area (MRFA) is a former U.S. Army Munitions R & D / test site and is now listed as an inactive hazardous waste disposal site. The MRFA site has impacted groundwater within the shallow sandy overburden unit on portions of the +/- 1,350-acre site. A USEPA approved groundwater monitoring operation is ongoing to assure that the contaminants in groundwater are not migrating and/or increasing in concentration. This monitoring program will continue during the development of the proposed LFTC.

h. Development of the site will include the removal of vegetative cover and creation of significant areas of impervious surfaces resulting in changes to surface water runoff from the project site and related off-site infrastructure improvements.

i. The shallow Knapp Road Aquifer is susceptible to contamination from a variety of sources including general construction impacts, unauthorized discharges, chemical

spills, alternation of surface water flows and infiltration capacity within the aquifer recharge area.

j. In order to mitigate the potential impacts to water resources, the following mitigation measures will be incorporated into each site development plan and reviewed by the Towns during the site plan review process:

1. A stormwater management analysis/report and design of stormwater management facilities for each site plan will be in general conformance with the New York Guidelines for Urban Erosion and Sediment Control and the New York State Stormwater Management Design Manual. In addition to requirements set forth in these manuals, as discussed in the Draft and Final GEIS's, predevelopment infiltration rates into the lacustrine sands will be maintained for each site over and proximal to the existing groundwater plume associated with the MRFA site. Adherence to these requirements will be required for site plan approval from the Town.
2. A Stormwater Pollution Prevention Plan (SWPPP) will be developed for each project as required by the State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activity and will include a construction phasing sequence, prescribed water quality and quantity protection measures and the supporting analysis. Review of the SWPPP will occur during the site plan approval process.
3. Inspection and monitoring of the site during construction to ensure conformance with the approved SWPPP will be conducted by a qualified professional at least once every seven (7) days and within 24 hours at the end of a storm event of 0.5 inches or greater. The inspection reports will be maintained on site and a copy will be sent to the Towns. These inspections shall be conducted at the expense of the Owner(s).
4. A minimum 100 feet "no disturb" buffer will be maintained along all stream corridors except where a crossing is required for utilities, stormwater management, trails and proposed roads. Stream buffers will be shown on the site plan drawings to be reviewed during each project's site plan approval process.
5. Any modification to the existing Malta Rocket Fuel Area (MRFA) groundwater monitoring program will require USEPA approval and will be obtained during the site plan approval process.
6. No access or construction activity will be allowed within 200 feet of the Knapp Road Well Field property line.
7. Upon completion of the Hudson River or other County water source and distribution to the LFTC an emergency connection shall be offered to the existing Saratoga Water Services, Inc.

2. Wetlands

a. Federal and NYSDEC wetlands will be impacted as a result of the proposed project. These impacts are predominantly along proposed utility corridors and off site transportation improvements. It is estimated that approximately one acre of wetlands will be permanently impacted as a result of the project's transportation improvements. Temporary impacts to wetlands resulting from the construction of off-site utilities are estimated at approximately 5.5 acres.

b. During the site plan review process, wetlands will be formally delineated on site and along proposed off site utilities and transportation corridors. A wetland mitigation plan will be developed for the proposed impacts and a joint permit application package will be submitted to the U.S. Army Corps of Engineers and the New York State Department of Environmental Conservation for approval. There will be no net loss of wetlands as a result of the proposed development.

D. Semi-Conductor Industry

1. Health and Safety

a. The semiconductor industry makes use of a broad spectrum of chemical and physical products in the fabrication of semi-conductor devices. To facilitate the safe, healthful and environmentally sound use of these hazardous products, the semi-conductor industry has adopted a number of building and fire code requirements in the following areas:

1. Fire Protection
2. Fire Alarms and Toxic Gas Detection and Control
3. Exiting
4. Hazardous Production Material Usage
5. Chemical Storage Rooms
6. Gas Piping and Locally Exhausted Gas Dispensing Cabinets
7. Continuous Gas Monitoring
8. Local Evacuation Capability
9. Emergency Response Team (ERT) Protocols
10. Exhaust Ventilation Recommendations
11. Emergency Electrical Power,
12. Specifications, Policies, Procedures and Protocols

b. The industry has developed and implemented broad-based Facility and Safety Guidelines in the Semi-conductor Equipment and Materials International (SEMI) "F" and "S" documents. The USEPA and New York State environmental regulatory agencies have adopted requirements to manage air emissions, wastewater effluents and hazardous wastes in an effective fashion. Adherence to these guidelines and regulations will be required by each tenant in the LFTC.

c. Emergency response plans for each nanotechnology manufacturing facility will be required to be developed which detail the procedures for responding to a wide variety of possible incidents, such as fire, hazardous material spills, personnel injury, etc. Fabs locating in LFTC will be required to have certified on-site Haz-Mat and Emergency Response Brigades who work with off-site agencies and contractors as

well as the local fire department for any unusual incidents. A written emergency response plan will be required for each manufacturing facility. This document describes the site's plan for preparing for and responding to a wide range of potential events, including chemical spills, fires, smoke, and other incidents with potential environmental impacts. The plan will be subject to review and approval of the appropriate State and Federal agencies as well as the Town(s) during the site plan review process. Any subsequent changes and or revisions to the emergency response plans will be subject to review and approval

d. The on-site Emergency Response Brigades will receive specialized emergency training, conduct response drills, coordinate any environmental clean-up or mitigation, coordinate their activities with site environmental staffs, and function as liaisons with outside emergency response authorities during an incident.

e. Environmental staff and other employees will attend internal and external training seminars to maintain proficiency and to maintain knowledge of changes in hazardous materials, chemical and/or safety issues.

f. Stack testing for process equipment emission points, upon achieving commercial production, but also after three (3) years of operation. After the first three (3) years of Fab operation, additional stack testing will be performed, as necessary, based on performance criteria and as required by regulatory agencies.

g. Best Available Control Technology (BACT) minimum mandatory for process equipment emissions of criteria pollutants and hazardous air pollutants (HAPs). When tool replacement takes place, there will be a re-assessment of air emission controls with a demonstration requirement for BACT at the time of reporting or if the permit regulations require more stringent control technology.

h. The Clean Air Act (CAA) reporting frequency should be increased from annual to every six (6) months and be provided to the Towns.

i. Requiring 24-hour access for NYSDEC, USEPA and Town inspections.

j. An Environmental Management System (EMS) be in place at the time of issuance of a certificate of occupancy for each nanotechnology manufacturing facility. The intent of the EMS is to provide a comprehensive assessment of environmental impacts that are routinely assessed and managed in order to minimize or eliminate such impacts to the maximum extent practicable. Four (4) general EMS objectives are:

1. To adopt production practices which protect the public health and the environment, and ensure the sustainable and efficient use of resources.
2. To achieve state of the art best management practices (BMPs) for chemicals including their proper use, storage and disposal, including appropriate pollution prevention measures.
3. To foster meaningful public participation with stakeholders by raising the level of communication and public education on environmental matters so as to ensure that industry, governmental agencies, community groups and conservation organizations are adequately informed of environmental policies and facility operations.
4. The EMS shall be evaluated by a qualified independent third party with a report to the Town. The cost of the evaluation shall be the responsibility of the owner or operator of the nanotechnology manufacturing facility.

2. Petroleum and Chemical Bulk Storage

a. A characteristic list of chemicals and petroleum products that are used at a typical Fab has been provided in Appendix F. This list is based on current processes used at Fabs. It is recognized that chemical and petroleum usage at Fabs is subject to constant change as Fab companies seek to use alternative chemicals and processes.

b. The chemicals used within each nanotechnology manufacturing facility will be based on the size of the facility and the specific process chemistry utilized. Appendix F provides typical chemicals and quantities which could be used within a state of the art manufacturing facility with a 150,000 - 200,000 sq. ft. clean room. As part of the site plan review process, each facility will be required to submit a listing of chemicals and quantities used in the proposal process. The Towns will review the information to determine if the proposed chemicals or quantities are significantly different than those presented in Appendix F, and assess the need for supplemental environmental analysis.

c. Preparation of emergency response, spill response and contingency plans for anchor Fabs will be required by a number of state and federal regulatory programs and the Town's of Malta and Stillwater. Since these response plans are intended to focus resources on the specific potential hazards, their development is dependent on site and industry specifics which will not be available until a specific facility and site layout are proposed.

d. Once an anchor Fab is proposed, an Integrated Contingency Plan (ICP) will be prepared incorporating all applicable regulatory requirements including:

- NYSDEC Chemical Bulk Storage Spill Prevention Report;
- USEPA Petroleum Bulk Storage Spill Prevention, Control and Countermeasures (SPCC) Plan;
- USEPA Risk Management Plan (RMP);
- OSHA Process Safety Management (PSM) Plan;
- NYSDEC Hazardous Waste Contingency Plan;
- NYSDEC Storm Water Pollution Prevention Plan; and
- NYSDEC Best Management Practices Plan.

e. The Integrated Contingency Plan (ICP) will be subject to review by the Town of Malta and Stillwater. Various components of the ICP are subject to approval by NYSDEC and USEPA.

f. Bulk tanker trucks which deliver products to the site will be subject to NYSDOT regulations and NYSDEC chemical bulk storage requirements during the loading/unloading process. Tanker truck deliveries will access the site only from the Stonebreak Road or Route 67 entrances.

3. Storage and Delivery of Gases:

a. Special gas systems will be used to deliver gases to process tools and operations. Gas cylinders will be used to store the gases and provide regulated dispensing of small amounts of gases. The cylinders will be stored in designated areas within a

gas storage facility, with hazardous gases stored in designated cabinets. The storage facility will be designed to accommodate the types of gases being stored and to provide for fire protection.

b. Hazardous gases will be dispensed to each tool via single- or double-contained, welded pipes through a valve manifold system located in a gas cabinet. These gas cabinets provide local exhaust ventilation, fire suppression, leak detection, containment, and an alarm system. Gas detection monitors will be installed at points in these feed systems to provide warnings when limits are exceeded, with appropriate source shut down, when necessary.

c. Corrosive, flammables, toxic, and pyrophoric-gas cabinets, valve-manifold boxes, and the interstitial space of containment piping will be vented to the facility's process exhaust system. The process exhaust system will be connected to a scrubber and/or other air abatement system such as an oxidizer in order to reduce or eliminate the amount of these materials emitted to the atmosphere.

d. Specific details of the gas storage and dispensing systems will be provided for the Town's review and approval during the site plan review process.

4. Waste Management

a. The LFTC at full build out will generate approximately 16,000 tons of solid waste and 8,000 tons of hazardous waste per year.

b. Typical hazardous/regulated wastes generated by a Fab site include:

Bulk Systems	*Containerized Waste*
Ethylene Glycol Mixed Solvent N-Methyl-2-Pyrrolidone Phosphoric Acid Sulfuric Acid Concentrated Lead Waste Concentrated Copper Waste Slurry Copper Waste Hydrofluoric Waste	Calcium Fluoride in Cake Form Arsenic Contaminated Debris Corrosive Debris Flammable Debris Lead Acid Batteries Mercury Vapor Lamps Ion Exchange Resins

c. The proposed Fabs and potentially some ancillary development within the LFTC will be subject to the NYSDEC Hazardous Waste Regulations (6 NYCRR Parts 370-375). These regulations govern the generation, storage, transport and disposal of hazardous waste. These regulations also require development of a hazardous waste contingency plan as well as annual reporting of all hazardous waste activity.

d. Solid and hazardous waste will be managed (treated and/or disposed of) off site at permitted/approved facilities. Hazardous waste will be removed from the LFTC site by a permitted waste hauler.

e. All waste haulers will access the LFTC site from Route 9 or Exit 11A.

f. Specific details of each facility's solid and hazardous waste handling procedures will be submitted for review by the appropriate Towns during the site plan approval process.

E. Geology

1. The 1,350 +/- acre site consists of an area of relatively flat topography with an undulating surface containing occasional rises and several ravines. The southern portion has several ravines with moderately steep channels which are gradually being eroded by flowing spring fed streams.

2. The soils on the site are typically described as loamy sands and silt loams. The following Table provides a description of the soils that are located on the site.

Soil Series	Map Identifier	Drainage Classification
Claverack loamy fine sand, 3 to 8% slope	ClB	Moderately well-drained
Oakville loamy fine sand, undulating	OaB	Well drained to moderately well-drained
Oakville loamy fine sand, rolling	OaC	Well-drained to moderately well-drained
Oakville loamy fine sand, hilly	OaD	Well drained to moderately well-drained
Oakville and Windsor soils, 25 to 35% slope	OaE	Well-drained to excessively drained
Rhinebeck silt loam, 0 to 3% slope	RhA	Somewhat poorly drained
Scarboro mucky loamy sand	Sa	Very poorly drained
Wareham loamy sand	Wa	Somewhat poorly drained

3. The project site and surrounding area is underlain by Canajoharie Shale which is characterized by blue black to gray shale containing layers of sandstone. The surface of the bedrock beneath the project site and surrounding areas is irregular resulting in variable thickness of overlaying materials that is greater than 100 feet on site.

4. Bedrock excavation may be necessary for the off-site transportation improvements in the vicinity of the Ballston Creek and the Northway. During the design of these improvements, a geotechnical investigation will be performed to determine the extent of such excavation and the need for blasting. Should blasting be required, a blasting plan will be provided to permitting agencies including NYSDOT and the Town of Malta for review and approval.

5. Temporary erosion and sediment control plans (stormwater pollution prevention plans) will be prepared for each future project within the campus and for all off-site infrastructure projects. These plans will be in accordance with New York Guidelines for Urban Erosion and Sediment Control and will be submitted for review and approval by the respective towns where construction is taking place.

F. Fish and Wildlife

1. Ecological Communities

a. The following ecological communities exist within the undeveloped portion of the project site:

1. Hemlock-northern hardwood forest,
2. Pine-northern hardwood forest, and
3. Pine plantation and terrestrial cultural.

4. Typical species associated with these communities are as follows:

Wood warblers,
Black capped chickadees (*Parus atricapillus*),
Pileated woodpeckers (*Dryocopus pileatus*),
Red-tail hawks (*Buteo jamaicensis*),
Wild turkey (*Meleagris gallopavo*),
American robin (*Turdus migratorius*),
Killdeer (*Charadrius vociferus*),
Rouse Sparrow (*Passer domesticus*),
Rock Dove (*Columba livia).*

White-Tailed Deer (*Odocoileus virginianus*),
Raccoon (*Procyon lotor*),
Skunks (*Mephitis mephetis*),
Red Fox (*Vulpes vulpes*) and

5. Smaller mammals including:

Eastern Chipmunks (*Tamias striatus*),
Voles,
Moles,
Shrew, and
Gray squirrels (*Sciurus carolinensis*).

b. The wetlands, streams and other waters of the U.S. on the project site can be described as riverine and palustrine aquatic ecosystems. Palustrine wetlands typically support amphibians such as red-spotted newts (*Notophthalmus viridescens*), northern redback salamanders (*Plethodon cinereus*), various frogs, turtles and birds. The cold headwater riverine system that flow through the ravines on the site are likely home to trout species, blacknose dace (*Rhinichthys atrarulus*), creek chubs (*Semolitus atromaculatus*) and numerous invertebrates.

c. The proposed action will result in some temporary and permanent impacts to fish and wildlife resources. Minor temporary impacts will occur during construction activities on the project site and within proposed utility corridors. Wildlife may be temporarily displaced during construction and will most likely move into adjacent habitats for refuge during work activities. Since a majority of the project site and the project area are surrounded primarily by undeveloped lands, there is

compatible habitat available for wildlife species to move to immediately adjacent to the project site.

d. Fish species may also be temporarily impacted during construction activities. During stream crossing work, fish may be temporarily displaced to areas upstream or downstream from the work area. Flume pipes shall be installed where possible to maintain the stream flow so the normal migration of fish, amphibians and invertebrates through the stream are not impeded.

e. Best Management Practices shall be developed and integrated into plans used by contractors working adjacent to streams to reduce the potential for increases in the sediment load of the water channels, which may temporarily disturb some of the existing faunal elements.

f. Work within designated trout streams shall take place outside of fish spawning periods, as permitted by NYS DEC.

g. The proposed action will create some permanent impacts to wildlife, including incidental loss of fish and wildlife due to the movement of construction equipment, clearing and grading activities.

h. Impacts to fish and wildlife and ecological communities are considered to be minor.

2. Threatened and Endangered Species

a. New York State DEC, NYSDEC's Natural Heritage Program and the United States Fish and Wildlife Services (USFWS) were contacted to determine if any threatened or endangered species were known to exist within the project site. A response from the USFWS, dated September 19, 2001, indicated that no federally listed or proposed endangered or threatened species are known to exist within the project site. A response from the NYSDEC, dated September 21, 2001, indicated that no known occurrences of rare or State-listed animals or plants, natural communities, or other habitats are located within the project site.

b. An additional information request to NYSDEC's Natural Heritage Program for threatened and endangered species in the project area (i.e., the area for off-site improvements) was made on September 5, 2002. A response from the NYSDEC, dated September 23, 2002, indicated that no known occurrences of rare or State-listed animals or plants, natural communities, or other habitats are located within the project area.

c. Additionally, the applicant conducted field reviews for blue lupine within the project site during the period from August 28 through September 27, 2001 with special focus on cleared, open areas. No blue lupine or Karner blue butterflies were observed during field reviews.

3. Critical Environmental Areas

a. There are no listed Critical Environmental Areas, as defined within 6 NYCRR 617.14 and maintained by the NYS DEC that would be effected as result of the proposed project.

G. Vegetative Impacts

1. General

a. The 1350 acre project site is generally undeveloped, with the exception of the Malta Test Station and Wright Malta Corporation's access road (currently known as Hermes Road) and consists of a mixed hardwood forest, mixed hardwood-softwood forest and pine plantation. The forested areas comprise approximately 1,172± acres with the remaining 172± acres of land comprising the Malta Test Station Site and Hermes Road. The forested area can be characterized in the following categories, with dominant species:

1. Mixed Hardwood Forest (190± acres)- Red Oak, White Oak, Beech, and Maple
2. Mixed Softwood Forest (32± acres)- White Pine, Red Pine, Hemlock, Larch
3. Mixed Hardwood-Softwood Forest (576± acres) – White Pine, Red Pine, White Oak , Red Oak, Birch and Maple
4. Pine Plantation (374 ± acres) – White Pine, Red Pine

b. The proposed Transportation improvements are located within the following land use cover types:

1. Forested lands
2. Agricultural Lands
3. Roadway Edge

c. The proposed offsite utilities will be located within the following land use cover types:

1. Forested lands
2. Agricultural Lands
3. Rural Residential
4. Industrial
5. Urban

d. Development of the proposed project site and transportation improvements will result in the following impacts to on-site vegetation and off site land use cover types:

1. On -Site Vegetative Impacts (641± acres impacted):
   --Mixed Hardwood Forest - 5+ acres impacted (185+ acres remaining)
   --Mixed Softwood Forest - 14+ acres impacted (18+ acres remaining)
   --Mixed Hardwood-Softwood Forest - 344+ acres impacted (232+ acres remaining)
   --Pine Plantation - 278 ± acres impacted (96± acres remaining)
2. Off-Site Transportation Improvement Impacts (10.34± acres impacted):

Bypass road (9.16 ± acres impacted):

--Forested- 8.18 ± acres
--Agricultural-0.32 ± acres
--Roadway Edge – 0.66 ± acres

Exit 11A (1.18 ± acres impacted):

--Forested- 0.35 ± acres
--Agricultural-0.79 ± acres
--Roadway Edge-0.03 ± acres

H. Historic and Archeological Resources

1. General

a. All areas identified as having a high or moderate level of sensitivity to historic and prehistoric resources shall receive a letter of approval from the New York State Office of Parks Recreation and Historic Preservation's Field Services Bureau, prior to any site plan approval being granted for the PDD.

b. Initial project site development could occur independent of any formal eligibility determination by OPRHP on the Malta Rocket Test Station, provided that such development takes place outside of the immediate areas surrounded by the fence located on-site.

c. The final alignment of all utilities shall be subject to and require that a letter of approval be obtained from NYS OPRHP Field Service Bureau.

2. Malta Rocket Fuel Area

a. Approximately 12 percent of the project site comprises a hazardous waste site. The Malta Rocket Fuel Area (MRFA) is a former U.S. Army munitions R&D and test site which is now listed as an inactive hazardous waste disposal site that is defined by USEPA as 445 acres, including the 165 acres of the Malta Test Station (currently owned by Wright Malta Corporation and part of the project site) and 280 acres of the STEP owned by NYSERDA (adjacent to the project site). The U.S. Army established the Malta Test Station in 1945 for rocket testing, and it historically has been and continues to be used for a wide range of weapons testing programs, by a private contractor, Wright Malta Corporation. This inactive hazardous waste disposal site has been remediated to the satisfaction of USEPA, and the presence of hazardous waste on the project site is very minimal, limited to dilute concentrations of several hazardous chemicals in groundwater.

b. In 1999, the USEPA completed a five-year review for the MRFA site. The five-year review concluded that soil remediation was satisfied for the MRFA site. The drinking water remediation, groundwater remediation and institutional controls are on-going. Groundwater samples are collected from seven (7) existing monitoring wells and three (3) surface water sampling points as required by the early warning monitoring system. This monitoring is on-going and is and will remain the responsibility of the General Electric Co., regardless of future ownership. Any modification to the MRFA's monitoring plan triggered by the proposed action will require USEPA approval.

c. Work inside the MRFA will require the preparation of Health and Safety Work Plans subject to NYSDEC and/or USEPA approval.

d. Any and all development inside the fence, at the Malta Rocket Test Station, will be subject to OPRHP's concurrence and receipt of a letter of approval. It is possible that portions of the Malta Rocket Test Station may need to be totally avoided by site development. The proposed master development plans provide flexibility for such future determinations. It is important to note that all structures presently located at the Malta Rocket Test Station are designated as either green space or as a "future Development Area" on the Master Plan, Appendix A.

I. Land Use and Zoning

1. The predominant land uses on and around the project site are undeveloped land, agricultural land, commercial, industrial, and residential. Within the project site the dominant land use is forested land, with the exception of industrial use of the Wright Malta Corporation property. Development of the property, as proposed will effect the character of the existing site.
2. The existing zoning for the project site is comprised of the following zoning districts Planned Development District #9 (PDD #9) and C-3 Commercial District in the Town of Malta, and Business Park (BP) in the Town of Stillwater (refer to existing zoning maps in Appendix N of the DGEIS).
3. PDD #9 is the original, 1977 Luther Forest Planned Development District. A substantial part of the residential subdivision component of PDD #9, not within the project area, has already been developed. Remaining, undeveloped components within PDD#9 include the project site and other peripheral areas west of Cold Springs Road. Approved uses within PDD #9 include residential development, industrial development, commercial and community uses, manufacturing offices, sanitary landfill, cemetery, stables/paddocks, neighborhood center, and business park.
4. The C-3 Commercial District in the Town of Malta was established in 1999. The following uses are permitted within the C-3 Commercial District:
    a. light industrial,
    b. office (professional and business),
    c. adult entertainment, and
    d. research and development.
5. No structure over 30 feet in height is authorized in the C-3 Commercial District, and no structures are permitted within 200 feet of a residential property line.
6. The Business Park (BP) District in the Town of Stillwater allows the following uses:
    a. office
    b. accessory industrial uses
    c. bulk storage
    d. business incubation
    e. light industrial manufacturing or processing
    f. research and development
    g. warehousing, public and semi-public uses
    h. timber harvesting
    i. uses customarily accessory to a principal use
7. Minimum lot size in the BP District is one acre, with a maximum building height of 50 feet, and maximum lot coverage of 60 percent.
8. Implementation of the proposed action will alter the pattern of existing land uses, transforming primarily undeveloped land into a modern Campus manufacturing center. Current zoning and permitted uses on the project site will be modified by creating a PDD within the Towns of Malta and Stillwater.

9. While the uses proposed in the LFTC are generally consistent with the existing and permitted uses of the project site, the intensity of the uses, as proposed, was not envisioned within the original Luther Forest Master Plan.

J. Noise Impacts

1. Development of the LFTC, as proposed, will change the character of the project area from undeveloped woodland to a modern campus manufacturing center, resulting in more non-residential development adjacent to existing residential neighborhoods. A baseline noise level study was conducted in accordance with the NYS DEC policy, Assessing and Mitigating Noise Impacts, to determine what the existing (ambient) baseline noise levels were to provide the basis for the evaluation of potential impacts.
2. Projections of potential vehicular noise at specific receptors adjacent to the proposed extension of Stonebreak Road and along the Bypass road were conducted to determine if the existing levels would be exceeded by 6 decibels (dBA), the threshold that NYS DEC recommends as the level that difference in noise levels become discernible. The specific noise receptor locations have been included within Appendix G.
3. Even though the noise analysis indicated that traffic related noise along Stone Break Road and the Bypass road would not exceed the 6 dBA threshold, noise mitigation measures will be incorporated into the design to ensure impacts are reduced to the greatest extent practicable. Such features could include: earth berms, 'depressed' roadway construction, vegetative barriers, or a combination of the above. Potential mitigation for the proposed improvements shall be evaluated by the Town during the site plan review process.
4. Manufacturing facility noise impacts within the LFTC will be evaluated during each specific site plan review process. Given the baseline noise study completed as part of the GEIS process, the following noise thresholds will be established.
    a. Project noise levels at the PDD property line will not exceed 6 dBA above the baseline, ambient noise levels and/or,
    b. Project noise levels at the PDD property line will not exceed 55 dBA during the day and 45 dBA at night.
    c. Impulse and discrete noise sources shall be identified, evaluated and mitigated during the site plan review process.
5. To ensure that these limits are appropriate and will be maintained, supplemental noise analysis will be required as individual manufacturing facility applicants come before the Towns for review. The criteria and guidance documents upon which the future studies will be based shall be the most recent version of the NYSDEC policy, Assessing and Mitigating Noise Impacts.
6. Some level of construction noise will be unavoidable. During the site plan review phase the Town Planning Boards will work with Owners for each phase of project development to establish a construction noise reduction program. At a minimum the following noise mitigation measures will be incorporated into each phase of on-site development:
    a. All construction equipment will have operational noise reducing mufflers that reduce sound on machinery.
    b. Banging of tail gates by heavy equipment will be prohibited.

c. Community information programs, including complaint/response mechanisms, shall be implemented and monitored during all phases of on-site construction.

d. Building construction near residential areas (i.e., closer than 1,000 feet) will be phased, to the extent practicable, such that site grading and exterior walls are erected first in the direction of the residential area, and subsequently away from the residential area.

e. Normal construction will occur during daylight hours.

f. During night-time construction backup audible alarms (i.e., beepers) for heavy equipment will be replaced with strobe lights or other OSHA- and MSHA-approved device.

g. Construction haul roads will be limited to primary and arterial roadways and development areas. Construction truck traffic may not use Town roads in the Town of Stillwater, except by issuance of a special permit by the Stillwater Town Board.

7. Periodic noise monitoring surveys will be required at the discretion of the Town once the first anchor Fab is fully operational, and in response to valid noise complaints by neighbors outside of the PDD. The results of these measurements shall be submitted to the Town for discussion and potential action. The noise studies will be funded by the LFTC or specific tenants.

K. Air Resources

1. An air quality analysis was conducted for the project to determine potential impacts to regional air quality from automobiles in accordance with the NYSDOT Environmental Procedures Manual (Chapter 1.1). The screening analysis indicated that a detailed air quality analysis was not necessary and that the project generated traffic would not jeopardize attainment of the New York State and National Ambient Air Quality Standards.

2. Prior to receiving a building permit, each facility will be required to assess whether its activities will necessitate receipt of an air emission source permit from the NYSDEC and USEPA. In order to obtain a permit, each facility will be required to present calculations for facility-wide emissions of contaminants, and to demonstrate that they are able to satisfy all applicable State and Federal Clean Air Act regulations, including the installation and use of air pollution control devices.

3. Post abatement air emissions associated with the operation of a typical nanoelectronics manufacturing facility with a 175,000 sq. ft. clean room (silicon wafer processing facility) are estimated on the following table.

Post Abatement Annual Air Emissions

Pollutant	Annual Emissions (TPY – tons per year) – single Fab operating 24 hours per day, 7 days a week.
Ozone (O_3)	Negligible
Lead (Pb)	Negligible
Particulate Matter (PM10)	Less than 5 TPY
Sulfur Dioxide (SO_2)	Normally <2 TPY
Oxides of Nitrogen (NOx)	8 TPY
Carbon Monoxide (CO)	7 TPY
Volatile Organic Compounds (VOC)	10 to 13 TPY
Hazardous Air pollutants (HAP)	3 to 5 TPY

4. Minor variations in the process chemistry utilized by different manufacturers will result in varying emissions.
5. Based on the emissions data presented, a nanoelectronics manufacturing facility with a 175,000 sq. ft. clean room will be regulated under NYSDEC State Facility Permitting System.
6. In addition to the general USEPA & NYSDEC permitting requirements described above, all facilities locating in the LFTC must satisfy the requirements of the NYSDEC Guidelines for the Control of Toxic Ambient Air Contaminants (aka, Air Guide-1, dated July 2000). Air Guide-1 was developed in order to evaluate the short-term and annual impacts from sources of air emissions in New York State. NYSDEC has established short-term and annual air concentrations (SGC are hourly average concentrations) that may be associated with acute exposures to either human health or the environment. The allowable annual guideline concentrations (AGCs) are designed to be protective of the environment and public health from effects which may be associated with long-term exposure to the air contaminant.
7. Once specific emission sources and concentrations are known, air dispersion modeling will be completed to approximate the concentration of air contaminants at various receptor locations to ensure compliance with NYSDEC Air Guide-1.
8. Air Emission Control Technologies in each facility will be required by a number of NYSDEC and USEPA regulations. The applicable control technology required will be dependant upon the specifics of the process and the facility's permit, and the level of control required for each facility will be subject to final determination by NYSDEC during the air permit application process. Generally, however, processes or facilitates subject to USEPA New Source Performance Standards (NSPS) will incorporate technologies considered as Best Available Control Technologies (BACT), while other permitted activities not subject to an NSPS would be reviewed by NYSDEC for conformance with 6 NYCRR Part 212 and Air Guide-1, which, depending upon the contaminant and emission rate, are considered Reasonably Available Control Technology (RACT) or BACT. Additionally, backup control systems and fail safe measures to ensure that manufacturing systems do not operate unless the associated control systems are functioning shall be incorporated.
9. To check compliance with established air regulations, State and Federal air monitoring reports will be copied to the Towns.
10. The Risk Management Plan (RMP) in compliance with Section 112(r) of the Clean Air Act (CAA) will be developed in conjunction with local emergency services providers for all facilities with more than a threshold quantity of a listed "regulated substance" in storage. At a minimum the program will include:
    1. Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases.
    2. Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and
    3. Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g., the fire department) should an accident occur.

L. Quality of Life

1. General

a. The Capital Region and Upstate New York are experiencing a decline in manufacturing jobs mainly from changes in the global economy and the obsolescence of existing infrastructure. With this decline it is imperative that high-quality sources of employment be attracted to the area to replace those jobs that have already been lost and those that will likely continue to be lost.

b. Industries like nanotechnology manufacturing, which are dependent upon a highly skilled workforce, must locate in areas capable of attracting and retaining an educated workforce. The Albany/Saratoga Region with its current employment diversity, universities and training resources maintains a significant skilled workforce pool that would be available to future employers

c. Potential impacts to "quality of life" resulting from the LFTC Project will be mitigated to the greatest extent practical through the following measures:

1. Development of a campus style setting with sufficient green space and substantial buffers to residential areas.
2. Significant off-site transportation improvements to improve current level of service at critical intersections. Improvements include the bypass road to ensure the "quality of life" in the historic Village is not negatively impacted by the LFTC traffic.
3. Monitoring traffic in and out of the project site throughout the development of the project to ensure proposed mitigation measures remain sufficient over time.
4. Contributions to the Town of Malta Recreation and Open Space Preservation Program as presented in Section L.4 of these Findings.
5. Funding of Master Plan and Zoning updates to provide the Towns with the tools necessary to maintain their vision of quality of life as build out of the LFTC and Town occurs, as presented in Section M.8 of these Findings.
6. In addition, the Applicant shall assist the Town of Stillwater, the Village of Stillwater and the Stillwater School District with obtaining grants and loans to address quality of life issues in the Town, Village and School District.

2. Socio-Economic Impacts

a. Approximately 35% of the new jobs for each Fab (estimated at 630 to 875 per Fab) will be professionals or members of related occupations who will earn between $65,000 and $130,000 annually. Approximately 55% of the new jobs (estimated at 990 to 1,375 per Fab) will be technical or production jobs with compensation ranging between $40,000 and $90,000 annually.

b. Companies locating within the LFTC will only be permitted to use the NYS Empire Zone program, or equivalent state program for tax incentives. Additionally the only permitted IDA approved program for which an applicant could seek tax relief would be for exemption from the mortgage recording tax and/or the local share of sales tax for construction cost.

c. The estimated assessed value of the project property with only the anchor Fabs in Development Area 1 is a significant increase from its current valuation, as shown in the following table:

Town of Malta Estimated Assessed Value of Project Property During Project Phases	
Project Phases	*Estimated Assessed Value*
Current Assessed Valuation:	
Town of Malta Current Total Assessed Valuation	$732,912,139
Project Property Current Assessed Valuation**	$1,276,388
Project Phases/Scenarios	
1st Fab 100% in Malta*	$506,362,305
4 Fabs of which 80% in Malta*	$1,606,362,306

*Applicant assumes that the assessed valuation would be equal to the purchase price of the parcel + $500 million per each Fab. These values may differ from the values eventually assigned by the Town Assessor.
**When the Fisher Act partial exemption is taken into account, the total current assessed valuation used to calculate the general town, county, and school tax levy is $1,186,665.
(Source: Based on data provided by Saratoga County Treasurer 2002 Town Tax Roll and AGI)

Town of Stillwater Estimated Assessed Value of Project Property During Project Phases	
Project Phases	*Estimated Assessed Value*
Current Assessed Valuation:	
Town of Stillwater Current Total Assessed Valuation	$338,674,439
Project Property Current Assessed Valuation**	$608,708
Project Phases/Scenarios	
4 Fabs of which 20% in Stillwater*	$401,050,231

*Applicant assumes that the assessed valuation would be equal to the purchase price of the parcel + $500 million per each Fab. These values may differ from the values eventually assigned by the Town Assessor.
**When the Fisher Act partial exemption is taken into account, the total current assessed valuation used to calculate the general town, county, and school tax levy is $1,186,665.
(Source: Based on data provided by Saratoga County Treasurer 2002 Town Tax Roll and AGI)

d. The additional estimated real property tax revenues from the LFTC Project for the Towns of Malta and Stillwater are shown on the following tables. Because the Town of Malta's current general town tax is allocated specifically for emergency services, the estimated increase impacts only those line items. The Town of Stillwater uses a more traditional tax structure that includes a general town tax from which the revenues are allocated across all categories of town expenditure. As such, the additional estimated tax revenues derived from the LFTC are more pronounced in Stillwater.

Town of Malta Breakdown of Revenues and Additional Estimated Revenues Derived from Project Based on Fiscal Year 2001			
Function	2001 Revenue ($)	Percent of total Revenue	Add'l Est. Revenue[1]
Real Property Taxes (includes special assessments)[2]	$679,900	16%	$424,274 to $1,348,274
Non-Property Taxes (includes sales tax)	$2,482,700 (of which $2,402,100 was sales tax)	58% (sales tax equaled 56% of total revenue)	Unknown[3]
Inter-government Revenue	$532,100	12%	Unknown[4]
Interest on Investments	$149,300	3%	$0
All Other	$452,600	11%	Unknown [5]
Total	$4,296,600	100%	$424,274 to $1,348,274

[1]Ranges depict estimated revenues based on 1 Fab, 100% in Malta to 4 Fabs, 80% in Malta. [2]These figures do not include school taxes which are paid directly to the School District rather than the Town. In addition, existing real property tax revenues derived from the Project property in its existing condition were deducted from the figures so as to reflect only additional tax revenues generated by the Project. In keeping with existing taxing procedure, the full market value of the parcels was used to calculate the existing fire district tax levy while a partial assessed value was used to calculate the general town tax levy of those parcels subject to partial exemption under the Fisher Act [3]As discussed in the text at greater length, due to the difficulty of determining what percentage of Fab expenditures will be on end user consumable goods that are subject to local sales tax and the proprietary nature of such information, it is not possible to estimate additional sales tax revenues that will be generated directly by the Project. However, the Project is expected to have a positive impact on Town sales tax revenues given that (1) the increased property value assessment of Town property resulting from the Project will likely increase the Town's share of sales tax revenues split among the various municipalities of Saratoga County, and (2) the Project's overall impact on sales tax receipts County-wide is likely to be much higher through the increased economic activity stemming from ancillary industry throughout the municipalities in Saratoga County generated by the Project, the commute of workers from around the region to the Project site, and the increased economic activity likely to result from the high salaries earned by residents employed by the Project. [4]It is expected that the Project will receive New York State and Federal funding for off-site improvements, such as road improvements, necessitated by the Project. Depending on how these grants are structured, the Town may experience an increase in the Intergovernmental Revenue category. [5]The All Other category of revenue includes revenues collected from licenses and permits. The Project is likely to generate an unknown amount of additional revenue in this category. (Source: Based on data provided by Comptroller's Special Report on Local Government Finances for New York State, Town Data for Local Fiscal Years Ended in 2001, Released April 2003; Saratoga County Treasurer, 2002 Town Tax Roll; and industry data provided by Abbie Gregg, Inc.)

Town of Stillwater Breakdown of Revenues and Additional Estimated Revenues Derived from Project Based on Fiscal Year 2001			
Function	2001 Revenue ($)	Percent of total Revenue	Add'l Est. Revenue[1]
Real Property Taxes (includes special assessments)[2]	$1,092,500	29%	$1,762,506 to $2,203,036
Non-Property Taxes (includes sales tax)	$1,101,200 (of which $1,072,000 was sales tax)	30% (sales tax equaled 29% of total revenue)	Unknown[3]
Intergovernmental Revenue	$1,168,200	32%	Unknown[4]
Interest on Investments	$19,600	<1%	$0
All Other	$325,300	9%	Unknown [5]
Total	$3,706,800	100%	$1,762,506 to $2,203,036

1 Ranges depict estimated revenues based on 4 Fabs, 20% in Stillwater to 1 Fab, 100% in Stillwater. 2 These figures do not include school taxes which are paid directly to the School District rather than the Town. In

addition, existing real property tax revenues derived from the Project property in its existing condition were deducted from the figures so as to reflect only additional tax revenues generated by the Project. 3 As discussed in the text at greater length, due to the difficulty of determining what percentage of Fab expenditures will be on end user consumable goods that are subject to local sales tax and the proprietary nature of such information, it is not possible to estimate additional sales tax revenues that will be generated directly by the Project. However, the Project is expected to have a positive impact on Town sales tax revenues given that (1) the increased property value assessment of Town property resulting from the Project will likely increase the Town's share of sales tax revenues split among the various municipalities of Saratoga County, and (2) the Project's overall impact on sales tax receipts County-wide is likely to be much higher through the increased economic activity stemming from ancillary industry throughout the municipalities in Saratoga County generated by the Project, the commute of workers from around the region to the Project site, and the increased economic activity likely to result from the high salaries earned by residents employed by the Project. 4 It is expected that the Project will receive New York State and Federal funding for off-site improvements, such as road improvements, necessitated by the Project. Depending on how these grants are structured, the Town may experience an increase in the Intergovernmental Revenue category. 5 The All Other category of revenue includes revenues collected from licenses and permits. The Project is likely to generate an unknown amount of additional revenue in this category.
(Source: Based on data provided by Comptroller's Special Report on Local Government Finances for New York State, Town Data for Local Fiscal Years Ended in 2001, Released April 2003; Saratoga County Treasurer, 2002 Town Tax Roll; and industry data provided by Abbie Gregg, Inc.)

e. The increase in assessed value for the project property would result in the following estimated school tax liability based on 2002 tax rates.

Project Related Tax Liability Ballston Spa School District	
	Estimated School Tax
1st Fab 100% in Malta	$11,434,667
4 Fabs 80% in Malta	$36,274,867

Project Related Tax Liability Stillwater School District	
	Estimated School Tax
4 Fabs 20% in Stillwater	$7,295,099

f. The estimated increase in assessment and the taxes derived therefore will exceed the increased costs and demands associated to the LFTC on the Town's of Malta and Stillwater fire protection, ambulance and school services.

g. The LFTC Project will have a positive impact on Saratoga County sales tax revenues. The majority of the purchases made by the project anchor tenants will be subject to sales tax including general office materials and supplies, such as paper goods and office equipment. Given the highly variable nature of such purchases, it is not possible to calculate the estimated sales tax revenues that will be generated by the LFTC Project. In addition to the direct taxable expenditures made by Anchor Fab tenants, tax receipts will also be positively affected by workers commuting to the project site, higher salaries earned by residents employed by the LFTC that will increase spending power and increased economic activity stemming from ancillary industry attracted by the project to municipalities throughout Saratoga County.

h. The Empire State Development's (ESD) Upstate New York Economic model as well as the RIMS model were used to estimate the indirect impacts of the LFTC. The ESD model, which was developed specifically for upstate New York, estimated the following economic benefits:

ESD Proprietary Upstate New York Economic Model Indirect Impact Results

	Ancillary Permanent New Jobs	Temporary Construction Jobs generated by Ancillary Development*	Fiscal Benefits resulting from Ancillary Development**
1st Fab	1,456 to 1,724	3,581	$111,691,000 to $127,681,000
Full Build-out (4 Fabs)	5,824 to 6,936	12,967	$436,248,000 to $513,292,000

*Construction jobs mean the estimated average annual number of full-time, contractual and part-time jobs.
**Fiscal benefits means the estimated tax revenues flowing to New York State and local governments generated by ancillary development activity, including estimated personal incomes, corporate and business incomes, excise and user taxes, negative transfers and other taxes. The benefits reported are the sum of total annual indirect fiscal benefits to state and local government over the 10-year period of analysis.
(Source: ESD based on data provided by SEDC and industry consultants, AGI).

i. The ESD model also provides a fiscal, internal rate of return for all state and local governments, which equates to the project's stream of net benefits over the ten (10) year period of analysis to the fiscal cost on the initial project year. The ESD model indicates that for every dollar invested by state and local governments in connection with the first Fab, they will reap a return of 406% to 407% over a 10-year period. The rate of return will then rise with the introduction of each successive Fab until the rate of return reaches 499% to 500% with the fourth Fab at full build-out.

3. Recreation

a. The existing project site is comprised of privately held lands with access limited to those individuals or groups with permission from the current landowner. While general public access is not currently available to the project site, the project sponsors are willing to allow general public access to the site, specifically the multi-use trails along the proposed roadways and the trails within the 100 acre park preserve area. Access to these areas of the proposed project site would increase the running, walking, jogging and other similar recreational activities to residents within the Towns of Malta and Stillwater.

b. The LFTC has set aside approximately 28 acres of public use lands that could be used by the Town of Malta for recreational and other uses.

c. The proposed access improvements for the proposed LFTC could potentially fragment access to the existing trolley line trail on the north side of the Ballston Creek Valley. To prevent this potential fragmentation and allow future development of this trail, a box culvert, or similar measures approved by the Town, shall be provided.

d. The Zim Smith Trail, and the vistas available from it, will be impacted as a result of the proposed project. To reduce the potential impacts to the greatest extent practicable the following mitigation measures will be employed:

1. During initial Fab development of the LFTC, the proposed bypass road around the Village of Round Lake will need to be constructed over the Zim Smith Trail. The design and construction of the improvements will be such that the existing grade of the multi-use trail is unchanged. To accomplish this design element a wide tunnel (i.e., arch culvert) or highway overpass, similar in nature to the existing I-87 overpass, will be incorporated into the final design of the bypass road.

2. The design objectives for the bypass road related to the Zim Smith Trail will be:

   a. to provide for public safety during construction and operation,
   b. to preserve and enhance the existing visual character of the trail, to the extent practicable.
   c. to complete construction as quickly as practicable, such that public use of the trail can be resumed after construction, and
   d. to require that all construction be done in a continuous sequence.

3. It is probable, as a safety precaution, that there will be a temporary, short-term period when the trail is closed during construction. The duration of this temporary closure could range from one to three weeks. To further minimize impacts during this time frame, the construction shall provide continuous use of the multi-use trail during weekends, or other periods of non-work, or to provide a detour around the construction work area such that end-to-end use of the trail is possible.

4. The trail shall not be used for normal construction access.

5. Signage will be posted at all trail entrances, during construction of both the Step 1 and Step 2 transportation improvements, to alert users of the proposed construction schedule. Such postings shall occur a minimum of two weeks before construction in proximity to the Zim Smith Trail, and will be updated as construction schedules are modified.

6. During the construction of the new I-87 exit (planned to be implemented before Phase 3 Campus development), there may be a need to traverse the Zim Smith Trail by the northbound on-ramp and southbound off-ramp. Similar construction design and work practices as described above shall be implemented during this second traversing of the multi-use trail.

7. Additional berming, landscape screening and buffering of the Zim Smith trail will be necessary to reduce noise associated with the transportation improvements. The final design of the buffering for each phase of the transportation improvements will be submitted to the Town of Malta for review and approval.

e. As outlined in the Town of Malta's Comprehensive Master Plan, the Town Board in December, 2003 commissioned the LA Group to perform a Recreation and Open Space Study. Public meetings, open houses and professional public surveys

have been conducted in an effort to determine the Town's existing and future recreational needs. Based upon this information, an estimated capital costs plan has been identified for these open space and recreational opportunities and needs.

Recreational opportunities are used not only by the residents of the community, but by its commercial employers, their employees and customers as well. According to the Generic Environmental Impact Statement prepared for Luther Forest Technology Campus (LFTC), the Town may have a labor force of approximately 7,800 employees, of which approximately 800 of which are employed in Malta (Table 2.E.3) and the remainder have an average commute time of 28 minutes (Figure 2.E.4). Furthermore, approximately 10,000 technology related jobs may also be created.

It is anticipated that a significant number of non-residents will use the Town's recreational and open space facilities during or after their workday. Therefore the Luther Forest Technology Campus shall be subject to the Town of Malta's Recreation and Open Space Fee, as established by the Town of Malta.

f. It is the Town of Stillwater's intent to prepare a recreation and open space plan as well as other plans that the Town of Stillwater, in its sole discretion, may deem appropriate. One component of such a plan or plans will be the establishment of additional recreation and open space fees in the Town. After adopting recreation and open space fees, development in Area 1 within the Town of Stillwater will be subject to such fees, if adopted.

4. Open Space

a. The LFTC will reserve a minimum 60% of the proposed 1350± acre project site as open/green space. This is consistent with the specific overall goals of the Town of Malta.

b. The only allowable development within the open space will be forest management, utility corridors, trails, stormwater management facilities, and wetlands mitigation. Due to the potential disruption to the open space by these utilities, all utility corridors shall be consolidated to the maximum extent practicable.

c. Portions of the open space may be managed as forest with selective timber harvesting practices. The project sponsor, successors, heirs or assigns shall submit a forestry management plan for review and comment by the NYS DEC and review and approval by the Town of Malta prior to receiving a clearing and grading permit. Updates to this plan shall be submitted for re-approval every five years to ensure the LFTC harvesting practices are the most current and environmentally compatible.

d. The Town of Stillwater believes that the induced growth, as a result of the proposed action, has the potential to increase the loss of open space/recreational opportunities within the Town of Stillwater and require the development of new recreation facilities in the Town. Therefore, the project sponsors, successors, heirs or assigns shall be required to contribute to the Town of Malta Recreation and Open Space Fund and the Town of Stillwater for purchase of development rights or outright acquisition of property and for the development of recreational facilities

that are considered critical to the overall open space preservation and recreational goals of the Towns.

e. It is the Town of Stillwater's intent to prepare a recreation and open space plan. One component of such a plan will be the establishment of additional recreation and open space fees in the Town. After adopting recreation and open space fees, development in Area 1 within the Town of Stillwater will be subject to such fees, if adopted.

5. Educational Facilities

a. Primary and Secondary Educational Facilities:

1. The LFTC is served by two public school systems, the Ballston Spa Central and Stillwater Central School Districts, which offer K-12 education at a number of central school building locations. There are no private schools or institutions of higher education in the Towns of Malta or Stillwater.
2. As presented the LFTC FGEIS, at full build-out of the LFTC with 80% of the Fabs in the Town of Malta and 20% of the Fabs in the Town of Stillwater, the estimated annual increase in school tax revenues will be approximately $36.3-million per year in the Town of Malta and $7.3-million per year in the Town of Stillwater.
3. The proposed action, by itself will not result in a significant increase in the population of public schools; however the induced growth will likely increase the enrollment of school age children and may require the construction of new schools or additional transportation. Should the school district(s) experience growth that requires the construction of additional school facilities, the estimated increase in school tax revenues associated with the proposed action, as presented in the LFTC FGEIS, would offset at least in part, the financial obligation associated with the additional school facilities.

b. Collegiate Level Educational Facilities:

1. While there are no collegiate level educational facilities within either the Town of Malta or Stillwater, the project site is located in a region of upstate New York that has an abundance of educational institutions providing undergraduate, graduate, professional and other educational and job training programs. The following institutions of higher learning are located within a 40 minute commute of the project site:

Adirondack Community College (Queensbury)
College of Saint Rose (Albany)
Excelsior College (Albany)
Empire State College
Fulton Montgomery Community College
Hudson Valley Community College (Troy)
Maria College (Albany)
Rensselaer Polytechnic Institute (Troy)
The Sage Colleges (Troy)

Schenectady County Community College (Schenectady)
Siena College (Loudonville)
Skidmore College (Saratoga Springs)
Union College (Schenectady)
University at Albany (Albany)

2. In addition, the Capital Region is home to a number of high-technology teaching and research centers, such as SUNY Albany College of Nanotechnology, Albany Medical Center, GE Global Research and Development, Wadsworth Center, and Knolls Atomic Power Lab.

3. It is anticipated that the project will not have an adverse effect on the enrollment within the above mentioned institutions, however additional programs may be added at the discretion of the institution to provide training and education with respect to the field of nanotechnology thereby increasing the educational opportunities within the greater Capital District.

6. Visual Impact Assessment

a. A Visual Impact Assessment was completed in accordance with the provisions and guidance contained within the NYS DEC policy DEP 00-2, Assessing and Mitigating Visual Impacts for the project site, the major transportation improvements and overhead electric lines. The following illustrates a summary of the potential impacts:

1. Project Site

   The site contains deciduous and evergreen vegetation approximately 80 feet in height. This vegetation limits views to and from the site. Potential views from the site may be visible from the northern portion of Saratoga Lake and limited areas within the eastern and western bluffs surrounding the Lake in the Towns of Malta and Stillwater.

2. Transportation Improvements

   The Ballston Creek Valley was indicated by the Town of Malta as a scenic area as viewed from I-87 (the Northway), to the east and west of the existing crossing of Interstate I-87. The FGEIS Figures 2.12.2A, 2.12.2B and 2.12.2C illustrate potential impacts to this area and include clearing, grading and construction of the proposed Exit 11 A. Impacts to these views, based on the conceptual plan, would be most significant on the eastern side of the crossing and within the valley area. Western views may not be impacted as significantly due to the level of improvements on the western side of the Northway. Views of the improvements are not anticipated from the Village of Round Lake proper.

3. Electric Transmission Lines

   The DGEIS and FGEIS evaluated the potential impacts associated with the construction of the Electrical Transmission Lines (ETL) and found there to be low to moderate visual impacts through a majority of its proposed alignment. Currently there is an identified corridor that the ETL will be located within. Portions of the ETL are anticipated to be visible along the Route 9 corridor, within the residential neighborhoods of the Luther Forest PDD and the

Woodfield PDD, and at road crossings. The impacts of the proposed ETL will only be partially mitigated by existing vegetation. Due to the fact that there is no final alignment at this time, the final future alignment shall be subject to the following siting criteria to reduce the potential visual impacts:

a. The ETL right of way shall be combined with the Stonebreak Road right of way to reduce overall clearing associated with the installation of the future infrastructure.

b. The nearest proposed ETL right of way from any adjacent residential home shall be no less than 400 feet.

c. Single pole, double davit structures shall be used for the primary support structures of the ETL along critical viewshed areas, with Double H-Frame poles used for all other portions of the ETL.

d. Pole heights shall be approximately 75 feet to 95 feet tall.

To further minimize the impacts of the proposed ETL at the Route 9 crossing, the existing overhead transmission line will be buried underground. Even with the proposed siting criteria and the undergrounding of the existing overhead lines, the impacts of the proposed transmission line will be only partially mitigated and the Lead Agency has determined that an offset fee will be necessary and shall be used within visual proximity to the proposed area of impacts to underground other existing overhead lines.

b. Preservation of vegetation on- site, as well as adjacent to off-site transportation and utility improvements is critical in minimizing visual impacts. To protect adjacent uses, detailed clearing plans shall be submitted for review and approval by the Town of Stillwater to those sections of the project which come before the Town of Stillwater. To ensure that the approved limits of clearing and grading are adhered to, stakeout of the limits of clearing shall be set and approved by the Town of Stillwater, for those sections of the project within the Town of Stillwater. The stake out interval shall be not more than 200 feet and may be less than that, as specified by the Town of Stillwater, during the site plan review phase.

c. To minimize visual impacts to the maximum extent practicable the following shall be incorporated:

1. The maximum building height will be 110 feet for buildings in Development Area 1 and 75 feet for all other development areas.
2. There will be no clear cutting for the purpose of creating views. Selective removal of individual small trees (Less than 12" in diameter) or pruning of lower branches, no higher than 15 feet above grade on existing trees will be permitted to increase visibility of signage, intersections, or common space.
3. Proposed building exteriors will be constructed of architectural-grade metal, masonry stone and other durable man-made and natural materials and finishes. Earth tones will be used where exterior finishes (paint, stain) are used. All development within the Campus shall adhere to the Architectural Guidelines set forth in the PDD Master Development Plan and be approved the Town.
4. Lighting Standards for the campus shall be developed to maintain a homogeneous lighting plan throughout the Campus that is aesthetically

pleasing from internal Campus locations without comprising views from outside the project site.

5. Cooling tower/scrubber units for the anchor Fabs shall be ground mounted water cooling units.
6. The electric transmission line within the Town of Malta shall have a single pole double davit structure at all roadway crossings to reduce the cleared right of way width and consolidate the structure's visibility.
7. All proposed improvements shall have a landscaping component. On-site landscaping shall be developed in accordance with the Landscaping guidelines provided within the PDD Development Master Plan.
8. The proposed campus shall be developed aesthetically, in general accordance with the Concept Sketches provided within Appendix G - Campus Drawings.

7. Emergency Services

a. Police protection is provided to the Town of Malta by the Saratoga County Sheriff's department and the New York State Police Department. Police protection is provided to the Town of Stillwater by the Town of Stillwater Police, the Saratoga County Sheriff's department and the New York State Police Department.

b. Neither the Troop "G" Commander for the New York State Police nor the County Sheriff believes that the additional projected development will have any significant impact on staff and capital expenditures.

c. There are three fire departments that service the Study Area on a full time basis. They are: The Arvin Hart Fire Company, of the Stillwater fire District (four stations within Stillwater), The Malta Ridge Volunteer Fire Company (two stations within Malta), and the Round Lake Hose Company #1(two stations within Malta).

d. Fire districts were contacted to determine the potential effects on the company's ability to serve the project. The fire companies expressed concern that additional equipment (aerial truck with a span of 100 feet or higher and a hazmat vehicle) might be needed to adequately respond to major Fab incident(s) on the project site. It was noted that the potential calls to the site was within the projected background growth of the area and could be served effectively by the fire companies.

e. Required responses may also involve hazardous material incidents. The local fire protection agencies currently have extensive training in regards to hazardous materials and typically respond to two (2) to three (3) such incidents per year, primarily due to the high volume of hazardous materials transported through the Interstate Route 87 corridor. The Saratoga County Office of Emergency Services will be responsible for coordinating responses involving the regional hazardous materials response teams. During the periods of initial training, the local fire protection agencies may elect to have a county hazardous materials response team dispatched for all hazardous material incidents. Effective responses to the LFTC will necessitate that the Fabs in Development Area 1 provide training to the local responders so that site specific and chemical specific knowledge is conveyed to the responders. Such coordination and training shall be provided by the tenants of the LFTC, and as required by federal statutes.

f. Emergency vehicle access to the facility via Dunning Street, in conjunction with the public access roads, will provide sufficient access points for emergency vehicles. Access to the LFTC via Dunning Street may be restricted to emergency vehicles through the use of a locking gate. Coordinating access to the gate; and whether it is a keyed, combination, or electronic system; will be made in consultation with the local agencies.

g. The Malta Ambulance Corps, located on Route 9, in Malta and the Stillwater Rescue Squad, located on North Hudson Avenue, in the Town of Stillwater, provides emergency medical services (EMS) in the Study Area.

h. Contact with the Malta Ambulance Corps revealed the increase in the volume of calls is expected to be within the projected background rate of growth expected for the area, and they believe that they will be able to adequately serve the project site.

i. The anticipated emergency services tax liability of the 4 Fabs is summarized in the following tables:

Anticipated Town of Malta Annual Fire District Taxes
During Project Phases

	Est. Fire Dist. Tax Liability
1st Fab 100% in Malta	$404,068
4 Fabs of which 80% in Malta	$1,284,068

(Source: Based on data provided by Saratoga County Treasurer, 2002 Town Tax Roll; Ballston Spa Central School District Transaction History dated 11/15/01, the Town of Malta Comptroller's Office, and the New York State Office of Real Property Services)

Anticipated Town of Malta Annual Ambulance Service Taxes
During Project Phases

	Est. Town Tax Liability (Vol Amb. Corps Tax)
1st Fab 100% in Malta	$20,254
4 Fabs of which 80% in Malta	$64,254

(Source: Based on data provided by Saratoga County Treasurer, 2002 Town Tax Roll; Ballston Spa Central School District Transaction History dated 11/15/01, the Town of Malta Comptroller's Office, and the New York State Office of Real Property Services)

j. Based on the estimated revenue generated by the initial Fab project, it appears adequate funding will be available to provide the equipment and training necessary to serve the LFTC.

8. Construction Impacts

a. Construction of the LFTC Project and associated infrastructure is anticipated to take place over a 15-25 year timeframe depending on the actual demand during the course of development.

b. The four (4) main phases of construction each include one (1) nanotechnology manufacturing facility (Fab) and approximately 500000 sq. ft. of ancillary development. The first phase will also include the single-family residential portion of the project identified as Development Area 10, as well as initial development in Development Area 5.

c. Construction staging areas for on-site building construction will be located within the Development Areas. Staging areas for off-site improvements and infrastructure construction will be required and will vary in size up to approximately 10 acres. In general, these construction staging areas will be located close to the actual construction zone within a rural or industrial area and not directly adjacent to any residential areas. Staging areas for road, railroad, and stream crossing will be required on either side of

the crossing. Construction staging areas are temporary in nature and the areas will be cleaned up and restored at the end of their use. Details of the restoration shall be submitted and approved by the Towns during the Site Plan Review Process.

d. Some outdoor, night-time construction is anticipated during the build out of the LFTC Project. Construction lighting for outside construction is intended to illuminate a work area and as such lights will not face down. Temporary light towers will be set up directing inward from the work limits. There will be the potential for reflective glare within the construction area; however, the existing vegetative buffer will provide mitigation for off-site light reflection.

e. As applicable, a staging plan, night construction plan, schedule and lighting plan will be prepared for each project which will be subject to review and approval by the Town(s).

f. Temporary air quality impacts are likely to occur during the construction phases of the LFTC and associated infrastructure improvements. These impacts will consist mainly of dust being generated during clearing and earthwork operations. These impacts are temporary and will be minimized to off-site receptors by the existing vegetative buffers to remain. The following additional measures will be used to mitigate on-site dust.

1. Minimize, to the extent practicable, the amount of clearing on the site at any one time.
2. Provide water truck to periodically wet unimproved areas.
3. Utilize stabilized construction entrances to help prevent the tracking of soil from the site.
4. Apply temporary seed to soil stockpiles and cleared areas not being worked.

g. The specifics of these mitigation measures will be provided in the Erosion & Sediment Control Plan which will be submitted as part of the Site Plan Review Process.

M. Growth Inducing Impacts

The growth-inducing aspects of the proposed LFTC that can be reasonably expected from the project are described below:

1. Construction Workers

a. The four (4) primary construction phases of the proposed LFTC will result in a significant number of temporary construction workers with seasonal employment in the project area. The construction phase of the LFTC is planned to extend over four (4) main phases of development during an estimated 15- to 25-year build-out period. Construction will be intermittent through this period. It is anticipated that there is a current excess of available construction workers in the Saratoga-Albany-Glens Falls region, and that many of these workers will be drawn from the existing labor pool and residents of this region. During construction of the nanotechnology manufacturing facilities, workers from outside the local region with specific nanotechnology manufacturing construction experience will likely be drawn to the project site during construction. Similarly, other nanotechnology manufacturing support businesses could create a demand for out-of-region construction workers. This will induce new construction workers to the project area.

b. The existing construction trades will most likely patronize restaurants, hotels/motels, entertainment facilities and other service providers in the vicinity of the LFTC providing a positive impact to the local economy. This increase is planned to extend over the 15- to 25-year build-out period of the proposed LFTC. By itself, the entry of new construction workers into the project area is not expected to result in the opening of any specific new businesses that cater to the needs of these workers. Some expansions to existing service providers could occur, depending upon the specific location and success of these establishments. The construction work force is not expected to create significant demand for additional housing or other community services. Therefore, the construction aspect of the proposed action is not anticipated to result in any significant growth inducing effects.

2. Population Growth

a. The proposed LFTC will provide significant new and expanded employment opportunities in the region. This new nanotech-cluster will likely contribute to population growth in the Capital Region and as far north as Warren and Washington Counties. As many as 10,000 new jobs will be created at full build-out of the Campus over a 15- to 25-year period. Some of these new jobs are expected to be filled by the existing population residing in an approximate 30 to 40 mile radius around the project site. Others, particularly those associated with management level and higher professionals of the nanotechnology manufacturing and support businesses, will be filled by new professionals moving into the region. Recent local graduates choosing to live in the Saratoga-Albany-Glens Falls region will likely be part of the employment pool employed at the Campus.

3. New Housing

a. The new jobs created by the proposed action will create an increased demand for existing and new housing. In turn, the sale of such housing will likely create a gradual, increased school enrollment in their respective communities over the planned development period. The increased demand for housing could induce the sale of some existing housing units, and the private sector would likely respond to an increased housing demand by constructing more housing, as authorized by local planning units. All such new housing developments would need to be in compliance with local zoning plans and be subject to their own environmental reviews on a case by case basis. Mitigation measures, as necessary, for this new housing will be implemented as a condition of local project approval.

4. Expanded Educational Opportunities

a. The proposed creation of the LFTC and its associated nanotechnology manufacturing facilities will serve to augment UAlbany's, RPI's, Union College's and other colleges and universities existing educational programs and advance evolution of programs and services on their respective campuses. This mutually beneficial relationship between institutes of higher education and the LFTC may induce some increment of additional facility or student body growth, particularly for part-time students. It is expected that such growth resulting from the proposed

action would be limited. No adverse impact in growth at institutes of higher education will occur from the proposed action.

5. Ancillary/Secondary Growth

a. The LFTC will likely induce some level of complementary secondary growth, especially in the area of research & development and ancillary businesses to nanotechnology manufacturing (i.e., the semiconductor industry), including supply and support enterprises, as well as other high-technology entities. This inferred secondary growth is dependent upon an 'anchor' nanotechnology manufacturing company locating within the LFTC. This impact is considered beneficial to the region and the State. The resultant secondary businesses would be complementary to the 'anchor' nanotechnology manufacturing company, and they are not anticipated to result in any significant adverse impact, be concentrated in any one portion of the implementation schedule, or cause any significant growth inducing effects by themselves. Each secondary business located outside of the LFTC would need to be consistent with local zoning or otherwise be approved on a local level, and each would be subject to its own site plan approval and SEQR review process.

b. The planned development of the LFTC anticipates the induced need for these secondary businesses. Specific development pods are provided for such ancillary development within the LFTC with the objective of minimizing traffic outside the Campus. Additional potential locations for such secondary ancillary development include the Harriman Campus in Albany, the RPI Tech Park in Troy, and other appropriately zoned properties throughout the region. Existing urban areas throughout this widespread Capital Region could significantly benefit from the secondary growth resultant from the proposed LFTC. Existing buildings with available infrastructure in urban areas could be reused for industrial development, or retrofit for office space or R&D, all within the constraints of existing allowable land uses.

6. Utility Infrastructure Induced Growth

a. Providing water service to the project site has the potential to cause some additional growth in the surrounding area.

b. The proposed alignment of the lower Hudson water line has the potential to spur development in the Town of Stillwater, east of the project site. Lands in this area of Stillwater are currently zoned Low Density Residential (LDR) and Rural Residential. The availability of public water to this area could result in pressure to allow a higher density build out of adjacent lands. This would require the Town of Stillwater to modify its current zoning law or entertain development under the planned development provisions of the law. In either case, future development would be subject to a similar SEQR process in which potential impacts and mitigation measures will be evaluated.

7. Transportation Improvement Induced Growth

a. The proposed project has the ability to alter traffic patterns and generally increase traffic within the Town of Malta by making LFTC a destination oriented

workplace within the Capitol Region. Additionally, construction of a new exit on the Northway (Interstate Route 87) connecting to Routes 9 and 67 may expand and alter traffic movements in the vicinity of the project site. Such new and/or expanded traffic movements have the potential to induce growth. New commercial development may occur up and down the Route 9 corridor within the constraints of existing zoning and available infrastructure, extending north to the Dunning Street intersection near Exit 12, and south into Clifton Park in the vicinity of Exit 10.

b. Additionally, the new exit and alternative access will significantly improve the Route 67, east-west corridor into Stillwater and the City of Mechanicville, providing better, more direct access to I-87. New commercial and residential development may occur along this improved east-west corridor within the constraints of existing zoning and available infrastructure.

8. Summary of Growth Inducement

a. The proposed action has the potential to induce regional growth in both population and business activity within a large geographic area. Some level of such induced growth has been anticipated by the overall design of the PDD and will be accommodated within the Campus. Other growth resulting from the proposed action will occur in the project area and Saratoga County, as well as in appropriately zoned areas in Albany, Rensselaer, Schenectady, Warren, and Washington Counties, within the constraints of existing infrastructure. Such growth will occur on a voluntary basis, subject to local environmental review and approval. Localities that do not desire such growth related to the proposed action will have the ability to limit future growth consistent with their comprehensive master planning efforts, whereas those localities that desire such growth can take appropriate steps to authorize site plan applications allowing construction to proceed. All such induced growth related to the proposed action is anticipated to be consistent with applicable local zoning and community's comprehensive master planning efforts. Independent environmental reviews in accordance with SEQR will be done for each individual project outside the purview of the proposed action.

b. Implementation of the following measures (funded by the Fab tenant) will provide a comprehensive means to avoid or mitigate the potential adverse impacts of increased growth associated with the proposed LFTC project to the greatest extent practicable.

1. Regional Planning Studies – Prior to operation of the first anchor Fab, the Lead Agency and/or Applicant will seek the services of a regional planning entity, for example the Capital District Transportation Committee (CDTC) or other equivalent regional planning entity, to develop a more detailed growth model for the proposed LFTC. Such a growth model could be refined and modified as specific projects are brought forward. This growth model would be expected to provide municipalities with useful information for local and regional planning decision making, evaluation of potential land use impacts, and master planning/zoning amendments. It is recommended that the growth model include reasonable geographic boundaries (e.g., 30 mile radius or 30 to 35 minute driving distance), projected rates of growth, as well as model growth management

tools to assist with the control of growth. Recommendations and model growth management tools can then be provided to address the important issues of each community such as farmland protection, rural character, and community identity, to name a few.

2. Town Master Plan – A majority of the potential impacts relating to growth inducement by the anchor Fabs are anticipated to occur within the Towns of Malta and Stillwater initially, due to their location and availability of suitable lands for development, therefore a series of Master Plan updates are proposed. The first master plan update in the Town of Stillwater will be funded by the Applicant and will be commenced within one year from the date of adoption of these Findings. Subsequent updates will be commenced with the filing of the second, third and fourth anchor Fabs in either the Town of Stillwater of the Town of Malta. This planning revision process would more precisely identify and inventory those important open space, visual and aesthetic resources of which the public spoke about preserving the rural/suburban surroundings, and to ensure the vision of the Towns can remain or change as the demographics of the area change.

3. Zoning Update/Revisions – It is the implementation phase of the comprehensive plans, typically through zoning updates/revisions that will allow the Towns of Malta and Stillwater to effectively control the induced growth that is likely to occur as a result of the LFTC. The Applicant is proposing to finance the potential zoning updates that are an outgrowth of each Master Plan update for each of the two (2) Towns. As one outcome of the Master Plan update process, it is anticipated that the zoning updates would occur within the two (2) year time frame of completion of the initial master plan update and within a two (2) year time frame of filing of an application for construction of each anchor Fab. Just as with the Master Plan updates, these zoning updates would initiate prior to each anchor tenant of the LFTC receiving a Certificate of Occupancy.

4. Open Space Preservation – Refer to Section L.4d (pg.34) of these Findings.

5. Recreational- Refer to Section L.3e (pg.33) of these Findings.

N. Alternatives

1. No Action Alternative

a. This alternative assumes that the LFTC concept is not pursued. Under this scenario, based on the existing knowledge that the current owner desires to sell the property and one mile safety easement, it is likely that a private developer would purchase the property and develop it in some fashion.

b. The current zoning of the project site is a business park in the Town of Stillwater and PDD #9 and C-3 (commercial) in Malta. Under existing zoning, a significant amount of development could occur on site include office development, residential

development, research & development, light industrial, manufacturing, cemetery, and stables/paddocks.

c. Under this scenario, it is unlikely that the significant traffic mitigation (Bypass road; direct access to Northway) would be proposed or constructed. In addition, the socioeconomic benefits to the Town(s) and region would be significantly reduced.

2. Alternative Access

a. A number of access alternatives were evaluated for the project including allowing access from Dunning Street and full build out of LFTC without the new Exit 11A interchange. In addition, a number of alternative alignments of the Bypass road and Exit 11A interchange were evaluated.

b. The alternative access scenarios resulted in impacts not realized by implementation of the preferred traffic mitigation plan. Whether impacts to the residential corridor of Dunning Street or degradation of level of services in downtown Malta or increased visual impacts from the interchange alternatives, it has been concluded that the phased traffic approach outlined for this project provides mitigation to the greatest extent practicable.

3. Alternative PDD Configurations

a. Alternative PDD configurations while feasible would detract from the ability to create a campus setting which lends itself to creation of a mix of manufacturing facilities, light industrial and other supporting business. Placing these businesses nearby will support the LFTC's core business and will likely increase productivity and efficiency. Given the existing residential neighborhood to the north and west and other site development constraints, the master plan presented minimizes environmental impacts to the greatest extent practical.

4. Alternative High Technology Facilities

a. Alternative high-technology facilities would include manufacturers making other 'high-technology' products, or using other leading edge technologies in their facilities, other than the clean rooms, tool sets and techniques common to nanotechnology facilities. These alternative manufacturing facilities, for instance, might include companies which are developing bio-engineered products, or products using new composite or synthetic materials, or biomedical devices, or alternative energy technologies, aerospace, or similar high-tech endeavors.

b. This alternative of allowing a broader range of high-tech manufacturing activities at the LFTC rather than restricting the focus to nanotech manufacturing would,

however, not result in as great a potential economic benefit as the preferred alternative of focusing on nanotechnology manufacturing for several reasons.

1. Because the nanotech development as proposed requires a very large site over 600 to 800 acres, as noted within Appendix D- Industry Requirements Report, like the LFTC where large, bulky buildings can be sited without significantly impacting existing communities, and their related substantial infrastructure requirements for water and power, potential sites for nanotech manufacturing are much more scarce than the relatively plentiful light industrial or heavy industrial sites which could potentially be used for general high-tech enterprises.
2. The worldwide scarcity of suitable nanotech sites, and the comparative high levels of investment and salaries those facilities produce, suggests that the highest and best use for this site would is served by restricting development to nanotech, as opposed to allowing a high-technology alternatives or other uses either in whole or part. Additionally, the need to preserve a nanotech focus by not encouraging such alternative high-tech development at the LFTC is important because it is known that nanotech facilities prefer locating in an area with other similar facilities.
3. It is reasonable to expect that alternative high-technology facilities, if located at the LFTC, would have similar types and levels of potential adverse impacts from their manufacturing processes. However, traffic from alternative high technology facilities might have greater adverse peak hour impacts because, unlike most large wafer Fabs such as those planned to anchor the LFTC, such facilities would tend to use a standard, 9:00 a.m. to 5:00 p.m. workday, rather than the rotating 12-hour, off-peak shifts used in the nanotech industry.

c. The foregoing analysis of this potential high-tech manufacturing alternative therefore reasonably supports a conclusion that the preferred development approach of targeting nanotech manufacturing will produce a superior project while at the same time causing the same or lower levels of potential significant adverse impacts.

5. Alternative Sites

a. No alternative sites have been identified in New York State or the Northeast that have the capability of hosting an anchor tenant which desires to build four (4) Fab manufacturing facilities. This conclusion has been reached based on discussions with representatives with Albany NanoTech, Center for Economic Growth, Empire State Development Corporation, NYS Governor's Office of Regulatory Reform, and several industry representatives. No other sites within this geographic area are large enough, with a minimum of 600 developable acres, that meet the requisite siting requirements for a 'world-class' semiconductor manufacturing facility. Although it is conceivable that sufficient adjoining land parcels could be identified and merged to create a potential site meeting the criteria of the semi conductor industry somewhere in the Northeast, no such site has been identified to date.

6. Alternative Land Uses

a. An assessment of alternative land uses was completed for the 1,350 acre site including retail, residential and office development.

b. Retail development in this area would not be consistent with the two Town's Master Plans. The Town of Stillwater identifies this project site for a business park. The Town of Malta's Master Plan establishes downtown Malta for retail development which does not include the LFTC property.

1. Retail development on 1,350 acres would likely result in adverse traffic impacts during the PM weekday peak hour and afternoon peak on the weekends. This scenario would require the expansion of existing infrastructure into the site, however, not to the extent required for the proposed project. While additional jobs would be created by a retail development alternative, they would not be considered high quality jobs when compared to the jobs created by the LFTC due to the relatively low salaries when compared to those of the LFTC.

c. The socioeconomic benefits resulting from a retail development would be reduced from that of the proposed LFTC.

d. Residential development within the 1350 acre site would also require infrastructure expansion to the property (water, sewer, electric, gas) although not to the level required by the proposed nanotechnology proposal. Residential development would likely result in greater impacts to community services such as education facilities, public recreation facilities, and emergency services. Under this scenario, significant road and drainage infrastructure would be dedicated to the Towns of Malta & Stillwater, creating increased maintenance responsibilities. Additionally it is unlikely that the traffic mitigation required for a large residential development would be as extensive as what is proposed for the LFTC and is likely that increased traffic will be more likely during the am and pm peak hours along already congested traffic corridors.

e. Office development is an important component of the proposed campus in association with the primary nanotechnology manufacturing business. Office development by itself, however, does not appear to be a practical alternative given the availability of vacant and approved un-built general office space in the Town of Malta and throughout the region.

O. Unavoidable Adverse Impacts

1. The following items have been identified by the Lead Agency as unavoidable adverse impacts associate with construction and operation of the LFTC as proposed:

a. Approximately 675± acres of forested lands will be cleared at full build-out of the proposed LFTC.

b. Loss of habitat for indigenous and transient wildlife species.

c. The transportation improvements within the Ballston Creek Valley will detract from its existing visual character as viewed from I-87.

d. Increase in traffic on local roads.

e. Creation of additional noise sources both on-site and off the project site associated with the infrastructure improvements.

f. Construction of electrical transmission lines to service the Campus.

g. Discharge of pollutants into the air via permitted emission sources.

h. Water usage at full build-out will require that 8-15 million gallons of water be withdrawn from the Hudson River.

i. Potential increase in development pressure within both Towns.

j. The project will result in some temporary impacts with respect to construction noise, dust, traffic and visual impacts related to on-site and off-site building and infrastructure improvements.

k. Storage of hazardous chemicals and associated risk of chemical spills

l. Potential loss or continued redefinition of small town and rural character of Malta and Stillwater.

m. Potential increase in housing costs for people seeking to live in Malta and Stillwater

P. Project Benefits

1. The semi-conductor industry is expected to make substantial investments at LFTC which will have a significant positive impact on the economies of the Towns of Stillwater and Malta. Some of the projected economic outcomes of the LFTC development will be:

   a. Creation of up to 10,000 good paying semi-conductor jobs at full build out, with a requirement to advertise locally for new jobs.

   b. Increase in jobs for construction workers within the region. As the LFTC construction is spread over an estimated 15 to 20 year period, these construction jobs will persist over more than a temporary period.

   c. Increase in general downtown business activity, as well as general business activity in the region.

   d. Substantive tax benefits to localities, emergency service providers, and school districts.

   e. The semi-conductor industry has a high ratio of job creation to environmental media impacts in comparison to other industries.

   f. Increase in property values for both residential and commercial properties.

2. Considerable planning and effort has been performed to minimize impacts on the quality of life (QOL) for the citizens of the Towns of Stillwater and Malta. Some of the proposed improvements or enhancements in the QOL for Malta residents resulting from LFTC development will be:

   a. Provision for funding of independent third party audits to ensure best practices to protect the environment and worker safety.

b. Donation of 28 acres to the Towns of Malta and Stillwater for community uses, public park, and public pathways.

c. Financial contributions to future Town master planning and zoning updates.

d. Financial contributions to Town open space preservation and recreational planning initiatives.

e. Provision for alternative sewer disposal in the vicinity of the proposed 10 MGD trunk line and expansion of public sewer service in presently non-sewered areas of the Town of Stillwater.

f. Potential provision for public water supply in the Town of Stillwater in areas presently not serviced by public water.

g. Enhanced public perception of Malta and Stillwater.

h. Offset mitigation fee for electric power line visual impact throughout the Town of Malta.

i. Creation of an expanded buffer area around the Knapp Road well field.

j. Public use recreation trails, including paved multi-use trails along Campus roads and trails in a 100 acre preserve will be constructed, providing connectivity to existing public trail systems in both Malta and Stillwater.

k. 60% green space estimated at full build out resulting in preservation of natural habitat.

l. Incorporation of significant buffers to minimize impacts on existing residential areas.

m. Buildings and structures inside the LFTC will be essentially invisible to off-site areas, except in a few locations.

n. Noise monitoring will be performed to ensure property line noise level thresholds are being attained. Selective nighttime construction will allow construction impacts to be shorter in duration.

o. Proactive cooperative approach to emergency services training and preparation both in-house and with local providers.

p. Creation of new wetlands in excess of impacted wetlands.

q. The productive reuse of a remediated inactive hazardous waste site.

r. Expansion of educational opportunities.

s. Air permit modeling will be cumulative and encompass the entire site.

t. New vista locations will be created by the proposed transportation improvements over the Ballston Creek Valley.

u. Protection of the Mechanicville Reservoir's watershed.

v. Pollution controls of LFTC facilities will utilize the best available control technologies to ensure ongoing protection of human health and the environment.

w. Providing increased "walkable" job opportunities for residents within the Town of Malta.

x. Provide increased connectivity with other areas within the Towns of Stillwater and Malta.

y. Development agreements will be executed with LFTC developers to provide further substantial and tangible benefits to the Town of Stillwater which could include any of the following:

ii. Demolition and remediation of the Boiler House property;

iii. Preparation and implementation of stormwater improvements;

iv. Mitigation of pump station limitations at the Riverside Pumping Station;

v. Acquisition of a privately owned sewer transportation company and associated infrastructure at the Hillside Mobile Home Colony;

vi. Preparation of a Town-wide sewer master plan;

vii. Construction of a water tank to serve the needs of water Districts #3 and #4 and future water District #6;

viii. Construction of sidewalks within the Village of Stillwater;

ix. Recreational development;

x. Redevelopment of the Village of Stillwater Central Business District;

xi. Preservation of open space through purchase of development rights or fee acquisitions on a one-for-one basis to that space being developed;

xii. Contributions towards the creation of streetscapes or community focal points (e.g., statues, fountains, museums, civic art);

xiii. Beautification projects; and

xiv. Historic preservation.

3. Development of LFTC will create more traffic. However, significant efforts will be made to minimize the impacts of this traffic on the residents of the Towns of Stillwater and Malta. Some of the proposed traffic improvements that Stillwater and Malta residents will see as the LFTC development progresses will be:

a. Provision for construction of a new interchange, 11A, on Interstate 87 to consolidate transportation into and out of the LFTC project site.

b. Upgrade of 19 intersections, relieving congestion and increasing traffic safety, including six (6) substandard intersections under the no build scenario.

c. Connection road between Cold Springs Road and Routes 9 and I87 to mitigate local traffic on Cold Springs Road and provide traffic flow through the LFTC project site.

d. Diversion of traffic from Dunning Street away from residential areas, and provision of alternative access to and connectivity with "STEP".

e. Threshold-based planning triggers for upgrade of traffic mitigation and evaluation on a regular basis, providing assurance that future traffic issues will be addressed.

f. Paving of Cold Springs Road and Elmore Robinson Road, which will enhance public safety and reduce dust.

g. Impetus for expansion of mass transport systems in the area for increased connectivity.

h. Provision for constructing a bypass road around the Village of Round Lake, thus assisting in the preservation of a Historic District, and improvement of the Village's quality of life.

V. REFERENCES

Abbie Gregg, Inc., Industry Requirements Document, October 2, 2002: Typical wastewater characteristics table and typical annual Fab chemical use and storage table.

C.T. Male Associates, P.C.; Luther Forest Technology Campus; Off-Site Improvements, November 5, 2002.

LA Group, P.C., PDD Development Master Plan, undated

Niagara Mohawk, A National Grid Company: Potential Electrical Transmission Line Routing, July 2002.

Saratoga Economic Development Corp.: Luther Forest Technology Campus Draft Generic Environmental Impact Statement, January 16, 2003.

Malta Town Board: Luther Forest Technology Campus Final Generic Environmental Impact Statement, October 16, 2003.

APPENDIX A

Luther Forest Technology
Planned Development District Map

APPENDIX B

Transportation Improvements

Transportation Improvement Phasing Summary

Four (4) phases of development correspond to trip thresholds which trigger the need for transportation improvements. The trip thresholds and improvements are summarized below:

Phase 1A- development includes up to 300,000 sq. ft. of building construction within Development Area 5 that will generate up to 450 AM peak hour trips and 415 PM peak hour trips during the peak hour of the adjacent street traffic, and up to 50 residential homes within Development Area 10 that will generate up to 40 AM peak hour trips and 50 PM peak hour trips during the peak hour of adjacent street traffic. The following improvements are required to accommodate Phase 1A development:

A. Construction of a southbound left-turn lane from Route 9 onto the site access road (Stonebreak Road) and construction of two lanes exiting Stonebreak Road onto to US Route 9 to allow for separate left- and right-turn movements. A traffic signal will also be installed when required NYSDOT warrants are satisfied.

Phase 1B- development includes one anchor Fab and ancillary development that generates up to 600 AM peak hour trips or 625 PM peak hour trips during the peak hour of adjacent street traffic. It should be noted that the total trips are cumulative with Phase 1A and not in addition to. In addition to the construction of a bypass road around the Village and Gateway improvements on both ends of George Avenue, the following improvements are required to accommodate Phase 1b development:

A. George Avenue (Curry Road) / Round Lake Bypass road – Modify this proposed intersection to make the bypass road the main line and have George Avenue tee into the new bypass road. This modified intersection should provide all single lane approaches. A traffic signal should be installed when warranted.

B. Route 67 / East Line Road – Construct eastbound and westbound exclusive left-turn lanes on Route 67.

C. Dunning Street / Fox Wander West – Install an actuated traffic signal.

D. Route 9 / Route 67 / Round Lake Bypass road – Construct two lanes on the eastbound approach of the bypass road for separate left lane and a shared through/right-turn lane. Construct a separate left lane and a shared through / right-turn lane on Route 67. Construct a separate left-turn lane on Route 9 northbound. Install a traffic signal.

E. Route 67 / Site driveway 2 – Construct an eastbound left-turn lane on Route 67. Construct the site driveway to provide separate left and right turn lanes exiting the site onto Route 67. Install a stop sign to control traffic exiting the site and monitor for possible traffic signal.

F. Cold Springs Road / Site driveway 3 – Realign Cold Springs Road north as the main approach into the site and construct a “T” type intersection with Cold Springs Road south.

G. Cold Springs Road – Pave the unpaved portions of Cold Springs Road. Improve Cold Springs Road, Farley Road, and Fitch Road to minimum Town Standards within the existing R.O.W.

Phase 2 development includes the second anchor Fab and ancillary development that generates a total of 1200 AM peak hour trips or 1250 PM peak hour trips during the peak hour of adjacent street traffic. In addition to the construction of the Phase 1 improvements, the following improvements are required to accommodate Phase 2 development:

A. Route 67 / East Line Road – Construct northbound and southbound exclusive left turn lanes on East Line Road.

B. Route 9 / Route 67 / Round Lake Bypass road – Construct a third lane on the westbound approach of Route 67 to provide separate left-, through- and right-turn lanes.

C. Round Lake Road / Exit 11 Southbound Ramps – Install a traffic signal.

D. Round Lake Road / Exit 11 Northbound Ramps – Construct a northbound right-turn lane on the off-ramp approach.

E. Cold Spring Road / Site driveway 4 – Construct a second site driveway to Cold Springs Road north to provide separate left and right turn lanes exiting the project site.

Phase 3 development includes the third anchor Fab and ancillary development that generates a total of 1800 AM peak hour trips or 1875 PM peak hour trips during the peak hour of adjacent street traffic. The Phase 3 development will require construction of a new interchange on I-87 between Exits 11 and 12, with access from the interchange to Route 9 at the site driveway. The following additional improvements are required to accommodate Phase 3 development:

A. Route 9P / Lake Road – Install a traffic signal.

B. Route 67 / East Line Road - Construct a second through lane in each direction on Route 67.

C. Route 9 / Route 67 / Dunning Street – Modify the entrance approaches to the roundabout.

D. The Round Lake bypass road shall remain open and shall connect to the Exit 11a Connector (Eastbound direction) via a right on-right off only configuration.

E. Route 9 / Exit 11a connector (Step 2 bypass road) westbound ramps – Install a traffic signal. Construct a separate northbound left-turn lane on Route 9. Construct a shared left / through lane and a separate right-turn lane on the westbound off-ramp.

F. Route 9 / Exit 11a connector (Step 2 bypass road) eastbound ramps – Modify traffic signal. Modify right-turn lane on the westbound approach of Route 67 to be a thru-right.

G. Route 67 / Site driveway 2 – Under the interchange configuration contemplated in the DGEIS, the site driveway leg of this intersection will be converted into a one-way eastbound on-ramp entering the site.

Phase 4 development includes the fourth anchor Fab and ancillary development that generates a total of 2400 AM peak hour trips or 2500 PM peak hour trips during the peak hour of adjacent street traffic. The following additional improvements are required to accommodate Phase 4 development:

A. Lake Road/Cold Springs Road – Install a traffic signal.

B. Route 9/Route 67/Dunning Street – Modify the entrances approaches to the roundabout.

APPENDIX C

Infrastructure Improvements

APPENDIX D

Typical Anchor Fab
Wastewater Characteristics

APPENDIX E

Electrical Transmission Routing

APPENDIX F

Typical Fab Annual Chemical Usage and Storage