

BARRINGTON
BROOKFIELD
DOVER
DURHAM
FARMINGTON
LEE
MADBURY
MIDDLETON
MILTON



NEW DURHAM
NEWMARKET
NORTHWOOD
NOTTINGHAM
ROCHESTER
ROLLINSFORD
SOMERSWORTH
STRAFFORD
WAKEFIELD

December 31, 2012

Town of Barrington Planning Board
Town of Barrington
333 Calef Highway
Barrington NH 03825

Re: Regional Impact Review: Case SRPC/RIC 2012-03; Trinity Conservation, LLC – Site Plan application for a Gravel Excavation Operation (Tax Map #210, Lot 57) with access from abutting lot (Tax Map #210, Lot 44) located on Green Hill Road in the General Residential (GR) Zoning District.

Dear Planning Board Members:

Per NH RSA 36:55, a development of regional impact means any proposal before a local land use board which in the determination of such local land use board could reasonably be expected to impact on a neighboring municipality, because of factors such as, but not limited to, the following:

- I. Relative size or number of dwelling units as compared with existing stock
- II. Proximity to the borders of neighboring communities
- III. Transportation networks
- IV. Anticipated emissions such as light, noise, smoke, odors, or particles
- V. Proximity to aquifers or surface waters, which transcend municipal boundaries
- VI. Shared facilities such as schools and solid waste disposal facilities

After receipt of the Barrington Planning Board's October 12, 2012 determination to consider the Trinity Conservation, LLC Site Review application for a gravel excavation operation a potential Development of Regional Impact (DRI), the Strafford Regional Impact Committee (RIC) scheduled a meeting for December 21, 2012 at 1:00pm at our offices in Rochester, NH. Comments from the original Draft Technical Review have been modified to reflect information received from the applicant, applicant's agent, Barrington Town Planner, Barrington Conservation Commissioners and members of the public at the December 21st Regional Impact Committee meeting.

The Strafford Regional Impact Committee, under New Hampshire RSA 36: 54-58, offers the following nonbinding recommendations for the Town of Barrington Planning Board to consider for this application.

- *We concur with the New Hampshire Department of Transportation District 6 Bridge Engineers to consider performing a structural calculation on the Greenhill Road C-2 bridge to determine the anticipated impacts on the structure as a result of this project. We now know that the project calls for a combination of tri-axle dump and tractor trailer dump trucks.*
- *We recommend the applicant contact the New Hampshire Department of Transportation Division of Highway Design to seek input regarding potential safety impacts at the intersections of Route 202/Greenhill Road and Route 125/Greenhill Road as a result of the proposed heavy truck traffic associated with this project. A future signalization project is scheduled for the intersection of Route 125/Greenhill Road during the spring of 2013 which may warrant further consideration, including truck turning movements, during the planning process.*
- *We concur with New Hampshire Fish & Game Staff recommendation to preserve a large tract of the site un-reclaimed (in the order of 5-10 acres minimum) after operations in that phase have ceased to provide nesting opportunities for wood turtle and potentially Blanding's turtle. We further recommend carrying the preserved "turtle nesting area" over into the future subdivision plan and working with New Hampshire Department of Environmental Services and New Hampshire Fish & Game to generate a plan for preserving this area in the future.*

- *As recommended by New Hampshire Fish & Game Staff staff, project personnel working on the job site should be made aware of the potential to encounter protected turtles in the work area especially during turtle nesting season which extends from late May through the end of June. If Blanding's or other protected turtle species are found nesting in the work area, contact New Hampshire Fish & Game. .*
- *Consider requiring a greater vegetative buffer to the Still Water Circle Residences in excess of the proposed 200 feet. Considering the proposed time schedule (Phase 1 & 2 proposed to last at least two (2) years each – Total duration of project expected to last a minimum of 12 years), use of heavy machinery, blasting, crushing and hauling activities, and incompatibility with this existing cross-border development.*
- *Consider requiring the use of a decibel meter on site to measure the actual DBA readings at the property lines during on-site blasting and crushing activities to ensure the 75 DBA threshold is being met.*
- *Consider supplying abutting property owners with a 48 hour notice before each day scheduled for blasting activities in order to alleviate potential complaints and noise nuisance issues.*
- *Consider requiring the implementation of vibratory equipment/methods in order to measure actual ground borne vibration levels generated during blasting and crushing activities to ensure that the project will not generate or expose persons to excessive ground borne vibration or noise levels.*
- *Consider amending General Note #9 to reference the proposed 10 acre maximum area of disturbance criteria. There appears to be a discrepancy between the **Phasing Note** on Sheet 3 of the submitted plans and note #9 under **General Notes** on Sheet 10.*
- *Consider pulling the emergency overflow spillway of the sediment basin further away from the 250 foot shoreland buffer in order to alleviate potential future violations. We find it reasonable to anticipate impacts to the buffer during construction considering how close the spillway overflow is to the shoreland buffer limits.*
- *Consider any recommendation made by the Isinglass River Local Advisory Committee. We highly recommend the applicant review the Isinglass River Management Plan in order to maximize the protection of the river corridor and the natural communities which depend on it.*
- *Consider requiring the utilization of stump pulp berms, silt sock or hay bale perimeter erosion controls instead of silt fencing. We find that silt fencing is easily compromised and is often times left to deteriorate on-site after project completion.*
- *Consider requiring a water truck to be stationed on-site during dry conditions in order to alleviate potential air quality concerns associated with dust.*
- *Consider revising operating hours from October through March as daytime hours will be altered during these months. We recommend hours of operation during these months be from 8:00AM to 4:00PM.*

Thank you for your time, information and participation. If there are any questions regarding this report and associated maps, please contact Greg Jones, Regional Planner, at 994-3500 or gjones@strafford.org

Sincerely,


Edmund Jansen, Jr.
Regional Impact Committee Chair

cc: City of Rochester – City Council, Planning Board
City of Dover – City Council, Planning Board
SRPC - RIC Committee Members

Attachments:

1. SRPC Regional Impact Committee Approved Technical Review Report
2. SRPC Traffic Volume Traffic Count Data
3. Environmental Overview Map
4. Floodplain and Hazard Sites Map
5. Fluvial Erosion Hazard Analysis Map
6. Strafford County Soils & Aquifer Areas Map
7. Prime Farmland & Aquifers Map
8. Wildlife Protection Areas Map
9. Zoning Map
10. 12/21/2012 Draft Regional Impact Committee Meeting Minutes

Materials received by date:

- 10/12/2012: Town of Barrington Notice of Public Hearing – Development of Regional Impact (DRI) for the Trinity Conservation, LLC proposed Gravel Excavation Operation – Received by SRPC on 10/19/2012
- 12/11/2012: Materials submitted by TF Moran Inc., as follows: one (1) full sized Site Plan (sheets 1-12), one (1) reduced Site Plan (11x17), one (1) copy of the October 24, 2012 Dubois & King correspondence letter, one (1) copy of the December 11, 2012 TF Moran correspondence letter, one (1) copy of the Town of Barrington Application Agreement, and one (1) copy of the TF Moran Stormwater Management Report (which includes the project's State of New Hampshire Alteration of Terrain (AOT) permit application, Natural Heritage Bureau (NHB) Data Check Results correspondence letter and species reports, on-site Natural Resource Conservation (NRCS) Web Soils Survey, Groundwater Recharge Volume (GRV) Calculation report and Pre/Post Soils Color Map)

Materials presented from SRPC staff by date:

- 12/21/2012: Strafford Regional Planning Commission (SRPC) Development of Regional Impact (DRI) Draft Technical Review and associated maps (Environmental Overview, Floodplain and Hazard Sites, Fluvial Erosion Hazard Analysis, Strafford County Soils & Aquifer Areas, Prime Farmland & Aquifers, Wildlife Protection Areas, Zoning Map)
- 12/26/2012: Regional Impact Committee - Draft Meeting Minutes of 12/21/2012
- 12/31/2012: Strafford Regional Planning Commission (SRPC) Development of Regional Impact (DRI) Final Technical Review and associated maps (Environmental Overview, Floodplain and Hazard Sites, Fluvial Erosion Hazard Analysis, Strafford County Soils & Aquifer Areas, Prime Farmland & Aquifers, Wildlife Protection Areas, Zoning Map)

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SOMERSWORTH
STRAFFORD
WAKEFIELD

December 31, 2012

Dear Committee Members:

Re: Final Review - Development of Regional Impact - Trinity Conservation, LLC, Proposed Gravel Excavation Project

Per NH RSA 36:55, a Development of Regional Impact means any proposal before a local land use board which in the determination of such local land use board could reasonably be expected to impact on a neighboring municipality, because of factors such as, but not limited to, the following:

- I. Relative size or number of dwelling units as compared with existing stock.
- II. Proximity to the borders of a neighboring community.
- III. Transportation networks.
- IV. Anticipated emissions such as light, noise, smoke, odors, or particles.
- V. Proximity to aquifers or surface waters, which transcend municipal boundaries.
- VI. Shared facilities such as schools and solid waste disposal facilities.

Per the Town of Barrington, on October 2, 2012 a declaration of potential regional impact was approved by the Planning Board for the Trinity Conservation, LLC, Site Plan application for a proposed Gravel Excavation Project (Tax Map #210, Lot 57) with access from abutting lot (Tax Map #210, Lot 44) located on Green Hill Road in the General Residential (GR) Zoning District.

The Town of Barrington formally notified Strafford Regional Planning Commission (SRPC) and abutting communities of said ***Development of Regional Impact*** on October 19, 2012. On December 11, 2012, SRPC received one (1) full sized Site Plan (sheets 1-12), one (1) reduced (11x17) Site Plan (sheets 1-12), one (1) Stormwater Management Report (which includes the project's State of New Hampshire Alteration of Terrain (AOT) permit application, Natural Heritage Bureau (NHB) Data Check Results correspondence letter and species reports, on-site Natural Resource Conservation (NRCS) Web Soils Survey, Groundwater Recharge Volume (GRV) Calculation report and pre/post Soils Color Map), one (1) Pre & Post Development Drainage Plan, and correspondence letters from both the applicant's engineering consultant and the Town of Barrington's third party engineering consultant.

SRPC staff has prepared the following comments to the Regional Impact Committee to guide the regional discussion for this proposed project. Comments from the original Draft Technical Review have been modified to reflect information received from the applicant, applicant's agent, Barrington Town Planner and Conservation Commissioners at the Regional Impact Committee meeting held on December 21, 2012.

Traffic-Access-Parking:

1. Will the development cause an increase in traffic that will diminish the capacity or safety of the street system in the adjacent town/city?

According to the Trip Distribution notes on sheet 2 of the submitted plans, the assumption has been made that Normal operational activity will generate 10 loads per day (or 20 trips), with a Maximum output of 30 loads per day (or 60 trips). However, the Summary states that the Average Daily activity is 60 trips. Please clarify.

We concur with the December 11, 2012 TF Moran correspondence letter, in which the applicant cites NHDOT traffic volume data. Green Hill Road experiences approximately 2000 trips per day. The proposed project and associated truck traffic will represent a 3% increase in current traffic volumes.

According to the December 11, 2012 TF Moran correspondence letter, the applicant states that a maximum of 25 cubic yards will be leaving the site per haul using a combination of tri-axle dump and tractor trailer dump trucks. Assuming that one cubic yard is approximately equal to 1.3 tons, we can expect the regular transport of up to approximately 32.5 tons from the site per haul. According to Barrington municipal staff, Green Hill Road was constructed using six inches of base material. It is reasonable to anticipate that the proposed heavy truck traffic will negatively impact the integrity of the roadway and will likely contribute to additional maintenance costs. Attention should be given to this issue in order to protect the Town, residents and regional commuters.

The October 24, 2012 Memorandum from Dubois & King, the Town's third party engineering consultant, states that the District 6 Bridge Engineer, Stephen Liakos, informed the municipality that a structural calculation could be performed to determine the anticipated impacts on the bridge structure. As stated above, the project calls for a combination of tri-axle dump and tractor trailer dump trucks. We concur with Mr. Liakos and recommend the Town pursue this impact data now that truck size information has been submitted.

While the proposed project does not constitute a significant increase in daily traffic on Green Hill Road, and we agree that "One Lane Bridge Ahead" signs, potential speed limit reduction, stop bars and proposed boring program for the roadway will have some positive safety implications. However, this roadway is not typically used for heavy truck traffic. Large vehicles are not designed to be as maneuverable as cars; they take longer to stop and accelerate, and because of their size, they often need to swing wide to make their turns. With this in mind, we find it reasonable to anticipate negative roadway safety impacts for residential pedestrian traffic on Green Hill Road during material transport.

We recommend the applicant contact the New Hampshire Department of Transportation Division of Highway Design to seek input regarding potential safety impacts at the intersections of Route 202/Greenhill Road and Route 125/Greenhill Road as a result of the proposed heavy truck traffic associated with this project. A future signalization project is scheduled for the intersection of Route 125/Greenhill Road during the spring of 2013 which may warrant further consideration, including truck turning movements, during the planning process.

2. Will the development exceed, either individually or cumulatively, a level of service standard established by the adjacent town/city for designated roads or highways?

There is no specific information about level of service. The existing traffic volumes are discussed in the prior section.

3. Will the development substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., construction, gravel operation equipment)?

Gravel operations are a permitted use within the General Residential (GR) Zoning District. Compliance is achieved through adherence to the Performance Standards specified in Section 7.1 of the Municipal Zoning Ordinance, and the requirements specified in the Town's Site Plan Regulations. The Planning Board may require an undisturbed and/or vegetated buffer of suitable size be maintained between an excavation site and any adjoining properties if said properties would be adversely impacted by such an operation. In addition, the project proposes to upgrade the gravel drive used to access the project site by expanding its width to 18 feet in compliance with the Barrington Subdivision Regulations.

On page one (1) of the December 11, 2012 TF Moran correspondence letter, the ultimate site limit distance to Stillwater Circle residences will be *200 feet*. On page two (2) of the letter, Revised Statutes Annotated (RSA) 155-E is referenced under the heading Buffers and explains how the applicant will adhere to this statute. The letter states "RSA 155E requires the applicant provide a 50 foot buffer zone from abutting properties and the

Isinglass River. A generous 75 foot vegetative buffer will be provided along the northerly property line of parcel 210-57. Additionally, the applicant owns a strip of land, ranging up to 70+/- feet wide, between the site and the Stillwater Circle development which will be utilized to provide an additional buffer zone to the excavation site”.

The comment is referencing the *Minimum and Express Operational Standards* under RSA 155-E:4-a(II)(II-a). RSA 155-E:4-a(II) states “No excavation shall be permitted within 50 feet of the boundary of a disapproving abutter, within 150 feet of any dwelling which either existed or for which a building permit has been issued at the time excavation is commenced”.

After a review of the December 11, 2012 TF Moran correspondence letter, and sheet 8 of the submitted plans with a 1” = 100’ scale, we concur that the applicant has provided a 200’ buffer to the Still Water Circle residences as presented.

Considering the proposed blasting, crushing, hauling and heavy equipment operation on-site, we recommend an adjustment to the ultimate site limits to provide suitable vegetative buffering in excess of the proposed 200’ as allowed by the Barrington Zoning Ordinance.

4. Will the development result in inadequate emergency access?

Note #4 on sheet 10 of the submitted plans, under General Notes, states that the contractor shall maintain emergency access to all areas affected by his work at all times.

It does not appear that the submitted plans include an emergency access provision for review. An existing paved driveway will be utilized as the access point to the site and a sight line plan and profile will be prepared for the Planning Board prior to final approval. The Municipal Road Agent and Public Safety personnel will also provide input to the Planning Board regarding any potential site access issues.

5. Will the development result in inadequate parking capacity?

We do not anticipate the project to have any parking capacity implications.

6. Will the development conflict with adopted policies, plans, or programs supporting alternative transportation?

We do not anticipate the project will conflict with any adopted policies, plans or programs supporting alternative transportation. As stated under question #1, we find it reasonable to anticipate negative roadway safety impacts to alternative modes of transportation (i.e., bicycles, pedestrians etc.) on this residentially zoned roadway.

Conflicts with Policies, Plans and Programs

Noise:

7. Will the development expose persons to or generate noise levels in excess of standards established in the local general plan, noise ordinance, or applicable standards of other agencies?

Under Barrington Zoning Ordinance Article 7.1.2 Noise, all noise, except that generated by normal human or vehicular activity, shall be muffled so as not to be objectionable due to intermittence, beat frequency or shrillness. At property lines, noise levels shall not exceed 75 DBA.

It is important to note that during the winter months, noise levels from construction activities will lack the vegetative buffer present during the growing season. According to the Winter Construction Notes on sheet 10 of the submitted plans, winter excavation and earthwork will be performed as such that no more than 1 acre of the site should go without stabilization at one time. The potential for crushing and/or blasting activities occurring during the winter months should be discussed. We recommend such activities be greatly limited during times of reduced vegetative noise buffering.

The December 11, 2012 TF Moran correspondence letter states that the project will not generate noise levels exceeding 75 DBA at the abutting property lines. The same paragraph goes on to state that based on the relative distance from the ledge to the abutting residential properties the operations are not expected to generate significant noise impacts to these areas. We recommend using a decibel meter on site to measure the actual DBA readings at the property lines during on-site blasting and crushing activities to ensure the 75 DBA threshold is being met.

In order to alleviate potential complaints and noise nuisance issues, we recommend supplying abutting property owners with a 48 hour notice before each day scheduled for blasting. We further recommend that the Town require an adjustment to the ultimate site limits to provide additional suitable vegetative buffering to these residences as allowed by the Barrington Zoning Ordinance.

8. Will the development expose persons to or generate excessive ground borne vibration or ground borne noise levels?

The December 11, 2012 TF Moran correspondence letter states that “normal excavation operations are not expected to generate significant vibration. The applicant expects blasting areas to be limited to the western portions of the property in areas where there is currently ledge face. This area is approximately 1,700 feet from Green Hill Road, 1,200 feet from the Isinglass River, 2,300 feet from Jessica Drive and 650 feet from the rear of the Stillwater Circle properties. Based on the relative distance from the ledge to these properties the operations are not expected to generate significant noise impacts to these areas”.

Without a Noise and Vibration Control and Monitoring Plan (NVCMP), and associated implementation of vibratory equipment/methods, actual ground borne vibration levels generated during blasting and crushing activities will be difficult to measure. We recommend actions be taken during the planning process to ensure this project will not expose persons to or generate excessive ground borne vibration or noise levels.

9. Will the development substantially and permanently increase ambient noise levels in the project vicinity above existing levels?

See Sections above on NOISE.

10. Will the development substantially increase temporary or periodic ambient noise levels in the project vicinity above existing levels?

See Sections above on NOISE.

11. Is the development located within an airport zone or within two miles of an airport or airfield, where the project would expose residents or employees in the project area to excessive noise levels?

The project site is not within two-miles of an airport or airfield.

Hazardous Materials or Substances:

12. Will the development create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

It can be anticipated that incomplete reactions are likely to occur during blasting activities and will result in the production of hazardous substances such as carbon monoxide (CO), nitrous oxide (NO) and nitric oxide (NO₂). In addition, incomplete reactions may result in molecule fragmentation of the ingredient explosives, oxidizers, or fuels which may also be toxic.

The December 11, 2012 TF Moran correspondence letter states that the operator will be required to identify drinking water wells located within 2000 feet of the proposed blasting activities, as well as to develop a groundwater quality sampling program to monitor for nitrate and nitrite either in the drinking water supply wells or in other wells that are representative of the drinking water supply wells in the area. The plan also calls for pre/post blast water quality monitoring subject to approval by the NH Department of Environmental Services (NHDES) prior to initiating blasting activities. Additionally, the letter provides a list of Best Management Practices (BMPs) to be implemented for blasting activities. This list of BMPs includes various procedures including, but not limited to, loading practices, spillage, fuel storage, Muck Pile management, and explosives management etc.

The project proposes to disturb an area in excess of 100,000 square feet and therefore requires an Alteration of Terrain (AOT) permit from the NHDES. The AOT permit ensures that certain BMPs be adhered to and that stormwater is adequately treated prior to leaving the site. BMPs for the on-site excavator will be required.

Under Federal Law, the site operator will be required to prepare a Stormwater Pollution Prevention Plan (SWPPP) and a Spill Prevention and Countermeasures Plan (SPCC) to address potential contamination concerns. The site operator will also be required to attend regular compliance hearings with the Barrington Planning Board to ensure conformance to the approved plan and permit conditions.

There appears to be a discrepancy between the **Phasing Note** on Sheet 3 of the submitted plans and note **#9** on under **General Notes** on Sheet 10. The phasing note states that the operation will be performed in such a manner so as to disturb no more than 10 acres at a time. **General Note #9** states that the smallest practical area shall be disturbed during construction, but in no case shall it exceed 5 acres at any one time before disturbed areas are stabilized. We recommend amending General Note #9 to reference the proposed 10 acre maximum area of disturbance criteria.

The level of attention given to the prevention of significant hazards to the public or the environment through the routine transport, use, or disposal of hazardous materials associated with this project is adequate as described.

13. Will the development create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

We think that the level of attention given to the prevention of significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous material to the environment to be adequate as described.

14. Will the development produce hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

No, the development is not within one-quarter mile of an existing or proposed school.

15. Will the development be located on a site that is included on a list of hazardous materials sites compiled by the NH Department of Environmental Services and, as a result, would it create a significant hazard to the public or the environment?

No, the development is not located on a site that is included on a list of hazardous materials sites compiled by The NH Department of Environmental Services.

Ecology and Resources:

16. Will the development have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, regulations, or by the U.S. Fish and Wildlife Service?

A review of the Natural Heritage Bureau's (NHB) Data Check Tool shows that there are NHB records of rare plants and/or exemplary natural communities in the vicinity of the project site which may be adversely impacted by project implementation. Specifically, Wood turtle, a NH species of concern, was identified in the NHB database check as being in the vicinity of the project site. According to New Hampshire Fish & Game (NHFG), both the Wood turtle and the state endangered Blanding's turtle may be found in and around abandoned pit areas. As recommended by NHFG staff, project personnel working on the job site should be made aware of the potential to encounter protected turtles in the work area especially during turtle nesting season which extends from late May through the end of June. If Blanding's or other protected turtle species are found nesting in the work area, please contact NHFG.

The applicant has designated an area on-site to remain exposed gravel in order to provide nesting habitat for the above referenced turtle species. NHFG staff recommended that this preserved exposed gravel area be a minimum of 5-10 acres in size. After taking approximate measurements based on the scaled plans, we found this area to be roughly 4 acres in size.

While the applicant has provided a nesting area for the above referenced state listed turtle species as recommended by NHFG, a conceptual subdivision plan has been included with this Site Review plan that proposes to situate at least four (4) residential building lots over this preserved nesting area. We recommend carrying the preserved "turtle nesting area" over into the future subdivision plan and working with NHDES and NHFG to generate a plan for preserving this area in the future.

17. Will the development have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the NH Department of Fish and Game or US Fish and Wildlife Service?

The State Designated Isinglass River makes up the easterly boundary of the project site (2008 Isinglass River Management Plan). RSA 438, New Hampshire Rivers Management and Protection Program, establishes the program policy, intent, definitions, nomination and management criteria for State Designated Rivers. The Isinglass River in the vicinity of the project site is listed as a Rural-community river (RSA 483:7-a) and the "river corridor" (RSA 483:4) means the river and the land area located within a distance of 1,320 feet of the normal high water mark or to the landward extent of the 100 year floodplain as designated by the Federal Emergency Management Agency, whichever distance is greater. It is important to note that the majority of the project site is located within the 1,320 foot designated river buffer. As such, it can be anticipated that some protection of the benefits of this buffer will be lost as a result of this project.

The project site is located along a section of the Isinglass River which has been deemed as exhibiting Extreme to Very High fluvial erosion hazard characteristics by the New Hampshire Geologic Survey (NHGS). NHGS and SRPC have previously met with the Barrington Planning Board and Conservation Commission to discuss the potential adoption of the state's template Fluvial Erosion Hazard Ordinance. The purpose of adopting Fluvial Erosion Hazard (FEH) ordinance is to limit development in fluvial erosion hazard areas for the purpose of protecting public and private property, and public safety and welfare. Informed by geomorphic channel assessment and management practices endorsed by the New Hampshire Department of Environmental Services (DES) and New Hampshire Geological Survey, this model fluvial erosion hazard ordinance recommends implementation of development requirements and standards that recognize a stream's natural evolution and range of stable conditions.

Ultimately, the most effective way to prevent hazards associated with fluvial erosion is ***avoidance by limiting future human presence and investments in river corridors***. The objective of this type of zoning is to guide and encourage measures and improvements that provide increased property and infrastructure protection, and maintain or restore the hydrologic and geomorphic functions and economic values of river systems. The functions and values of healthy river systems include: flood mitigation, water supply, water quality, sediment storage and transport, aquatic habitat, recreation, transportation and aesthetic qualities.

The NHDES Shoreland Water Quality Protection act maintains a protected 250 foot vegetated buffer along the Isinglass River. The adherence to this protected buffer, and conformance with Article 11 of the Barrington Zoning Ordinance, Shoreland Protection District Overlay (SDO), will retain some riparian habitat.

On Sheet 3 of the submitted plans, it appears that the emergency overflow spillway associated with the temporary sedimentation basin is shown to be slightly within the 250 Shoreland buffer. It can be anticipated that construction activities will likely further impact this buffer. We recommend the emergency spillway be pulled back from this buffer in order to avoid potential impacts during construction.

- 18. Will the development have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?**

No substantial adverse impact to federally protected wetlands as defined by Section 404 of the Clean Water Act will occur as a result of this project. No impacts to wetlands of any size or under any jurisdiction will be impacted by the project.

- 19. Will the development interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?**

According to NHFG and NHB records of rare plants and/or exemplary natural communities in the vicinity of the project site, both the Wood turtle and the state endangered Blanding's turtle may be found in and around abandoned pit areas. The applicant has designated an area of approximately 4 acres on-site to remain exposed gravel in order to provide nesting habitat for the above referenced turtle species. NHFG staff recommended that this preserved exposed gravel area be a minimum of 5-10 acres in size.

As recommended by NHFG staff, project personnel working on the job site should be made aware of the potential to encounter protected turtles in the work area especially during turtle nesting season which extends from late May through the end of June. If Blanding's or other protected turtle species are found nesting in the work area, contact NHFG.

- 20. Will the development conflict with any local policies or ordinances protecting biological resources, such as a conservation easement, tree preservation policy or ordinance?**

We do not anticipate the project to conflict with any local policies or ordinances protecting biological resources.

21. Will the development conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan?

The Isinglass River Management Plan (2008) was prepared in order to advocate for a management approach which is focused on protecting and conserving the rivers many resources, protecting riparian and aquatic habitat, preserving and improving water quality and quantity, to sustain aquatic and recreational resources while balancing the development of land and water uses with other public needs within the river corridor and watershed.

The December 11, 2012 TF Moran correspondence letter states that the Isinglass River Local Advisory Committee has been provided a copy of the NHDES permit application package and will be involved in the review of this project. We support this collaboration and highly recommend the applicant review the management plan in order to maximize the protection of the river corridor and the natural communities which depend on it.

Additionally, the Barrington Natural Resource Inventory Report (2009) encourages the Town to support the implementation activities stated within the Isinglass River Management Plan.

The *New Hampshire Wildlife Action Plan* (WAP) lists the subject lot as being located within an area deemed as supporting the “Highest Ranked Habitat in the Biological Region” and “Supporting Landscapes” (see attached *Wildlife Protection Areas map*).

22. Will the development have a substantial adverse effect on Groundwater Quality?

The applicant’s submitted Alteration of Terrain Permit (AOT) Application lists under section “L” that the project is **not** within a State Groundwater Protection Area (GPA).

While we do not have any specific data to verify this GPA determination, the project site is located within the Town of Barrington’s Groundwater Protection Overlay District. However, the applicant has taken the proper steps to address potential groundwater contamination with regard to required activities to identify drinking water wells located within 2000 feet of the proposed blasting activities, as well as the development of a groundwater quality sampling program to monitor for nitrate and nitrite either in the drinking water supply wells or in other wells that are representative of the drinking water supply wells in the area.

We have reviewed the Pre/Post-Development Drainage Plans, stormwater methodology and groundwater recharge descriptions. The Town’s third-party engineering consultant will formally review the applicant’s data prior to final approval.

23. Will the development have a substantial adverse effect on Air Quality?

According to the December 11, 2012 TF Moran correspondence letter, the operation is not expected to produce or create detrimental odors or significant smoke. The plans include specifications which require the operator to control fugitive dust. We recommend stationing a water truck on-site during dry conditions in order to alleviate potential air quality concerns associated with dust.

Hazards-Public Health and Safety:

24. Will the development expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides or flooding?

The December 11, 2012 TF Moran correspondence letter states that the project work area is not proposed to be within the on-site Isinglass River floodplain limits. In addition, we have been informed that topography onsite provides a natural berm between the site and the river. Therefore, we do not anticipate the development will expose people or structures to any adverse impacts.

The project site is located along a section of the Isinglass River which has been deemed as exhibiting very high fluvial erosion hazard characteristics by the New Hampshire Geologic Survey (NHGS). See item #17 above.

25. Will the development result in substantial soil erosion or the loss of topsoil?

Yes. This project will result in substantial loss of topsoil and will likely result in some soil erosion during operations. The applicant has devised an erosion control system comprised of stone check dams, slope stabilization blankets, rip/rap, aggregate construction entrance, perimeter silt fencing and a drainage pond (forebay depth 1 foot & associated basin depth 6 feet).

Note #8 on Sheet 4 of the submitted plans states “The contractor shall be responsible for installing and maintaining all erosion and sediment control devices necessary to control erosion throughout the duration of the project in accordance with applicable NHDES/EPA standards”. While silt-fencing is an acceptable control, we recommend utilizing stump pulp berms, silt sock or hay bale perimeter controls instead of silt fencing. We find that silt fencing is easily compromised and is often times left to deteriorate on-site after project completion.

26. Will the development be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

After a review of the NRCS Strafford County Soils data layer (See attached *Soils & Aquifer Areas map*), we found the subject lot to be comprised of a mix of Hollis-Charlton, Hinckley Loamy/Gravelly and mixed alluvial soils very similar to the applicant’s Web Soils Survey report.

The potential for on/off site landslides, lateral spreading, subsidence, liquefaction and/or collapse is unlikely based on soil types, presence of NHDES Alteration of Terrain Bureau performance oversight, and variety of erosion control technology available to on-site construction and engineering staff.

27. Will the development be located on soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

No. The project does not propose the installation of utilities.

Facilities:

28. Will the development require new or expanded public facilities or services in the adjacent municipality in order to maintain acceptable service ratios, response times or other performance standards for any of the following public services?

- Fire protection?

- No new or expanded fire protection services are anticipated in the adjacent municipality as a result of this project.
- **Police protection?**
No new or expanded police protection is anticipated in the adjacent municipality as a result of this project.
- **Schools?**
No new or expanded school services are anticipated in the adjacent municipality a result of this project.
- **Parks?**
No new or expanded public park services are anticipated in the adjacent municipality as a result of this project.
- **Solid Waste?**
No new or expanded solid waste services are anticipated in the adjacent municipality as a result of this project.
- **Other public facilities?**
No new or expanded public facilities are anticipated in the adjacent municipality as a result of this project.

29. Will the development cause an increase in new or expanded utilities, treatment facilities, storm water, water supplies, etc., that would result in a negative financial or environmental impact to the adjacent municipality?

We do not anticipate this project will cause an increase in new or expanded utilities, treatment facilities, storm water, water supplies, etc., that would result in a negative financial or environmental impact to the adjacent municipality.

Scenic and Visual Character:

30. Will the development convert Prime Farmland to non-agricultural use?

No. This proposed gravel excavation project will not impact prime farmland (see attached *Soils map*).

31. Will the development conflict with existing zoning for agricultural use?

No. The project will not conflict with existing zoning for agricultural uses.

32. Will the development involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?

No. This proposed gravel excavation project will not impact prime farmland (see attached *Soils map*).

33. Will the development have a substantial adverse effect on a scenic vista?

We do not anticipate that the proposed project will have a substantial adverse visual impact from the Green Hill Road. However, it is possible that scenery from surrounding elevations will be negatively impacted.

34. Will the development substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No. The project is not located on a state scenic highway or municipal scenic roadway.

35. Will the development substantially degrade the existing visual character or quality of the site and its surroundings?

As the project site is set far back from Green Hill Road, and vegetated buffers will be present on all property boundaries, we do not anticipate degradation of the existing visual character surrounding the site within the Barrington municipal boundary.

It can be anticipated that the project site will no longer exhibit the current visual characteristics once operations commence when viewing the property from the Still Water Circle residential subdivision in Rochester (see attached pictures).

36. Will the development create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

The project will not be operating after dark during the growing season and therefore is not anticipated to create a new source of substantial light or glare which would adversely affect day or nighttime views in the area during this time. However, the project proposes to operate to some capacity during the winter months which will necessitate alternate operation hours in order to alleviate potential sources of glare created by machinery on-site. We recommend operating hours from October through March be from 8:00AM to 4:00PM.

37. Will the development conflict with any applicable land use plan, policy, or regulation including, but not limited to the master plan or zoning ordinance?

The project is located within Barrington's Groundwater Protection Overlay District. As previously stated, the applicant will be required to identify drinking water wells located within 2000 feet of the proposed blasting activities, develop a groundwater quality sampling program to monitor contaminants in the drinking water supply wells or in other wells that are representative of the drinking water supply wells in the area. The plan also calls for pre/post blast water quality monitoring subject to approval by NHDES prior to initiating blasting activities. Additionally, a list of Best Management Practices (BMPs) will be implemented for blasting activities which includes various procedures including, but not limited to, loading practices, spillage, fuel storage, Muck Pile management, and explosives management etc.

The applicant will be required to adhere to all requirements established by the municipal Planning Board and guiding documents and regulations. Gravel operations are a permitted use within the General Residential (GR) Zoning District; compliance is achieved with the Performance Standards specified in Section 7.1 of the Municipal Zoning Ordinance, and the requirements specified in the town's Site Plan Regulations are adhered to. The Planning Board may require an undisturbed and/or vegetated buffer of suitable size be maintained between an excavation site and any adjoining properties if said properties would be adversely impacted by such an operation. In addition, the project proposes to upgrade the gravel drive used to access the project site (Map 201 Lot 57) by expanding its width to 18 feet in compliance with the Barrington Subdivision Regulations.

Federal Storm Water Pollution Prevention Plan (SWPPP) and Spill Prevention Control and Countermeasures (SPCC) plan will be required for this project as well.

Housing and Population Growth:

38. Will the development induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

The proposed project does not induce substantial population growth in this area, either directly or indirectly.

39. Will the development displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

The proposed project does not displace substantial numbers of existing housing necessitating replacement housing elsewhere.

40. Will the development displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

No. We do not anticipate that this project will result in the displacement of substantial numbers of people, necessitating the construction of replacement housing elsewhere.

41. Is the development compatible with existing or planned cross border development?

The City of Rochester is the closest abutting community to the project site. The only cross-border development is a residential subdivision known as Still Water Circle located within Rochester's Agricultural Zoning District.

Considering the proposed time schedule (Phase 1 & 2 proposed to last at least two (2) years each – Total duration of project expected to last a minimum of 12 years), use of heavy machinery, blasting, crushing and hauling activities, and the proposed 200 foot vegetated buffer between the ultimate limit of the project site and Still Water Circle residences, we find that the project is not compatible with existing cross-border development.

Rochester City staff and residents will be able to discuss potential concerns at the public hearing on January 8, 2012 at 7:00pm at the Early Childhood Learning Center in Barrington.

Please contact Greg Jones, Regional Planner, should you have any questions at 994-3500 or gjones@strafford.org

Sincerely,

Strafford Regional Impact Committee Members

Edmund Jansen, Rollinsford

Sandra Keans, Rochester

Tom Clark, Dover

Brandon Anderson, Durham

cc: City of Rochester – City Council, Planning Board

City of Dover – City Council, Planning Board

Trinity Conservation, LLC

TF Moran Inc.

Strafford Regional Planning Commission

150 Wakefield St, Suite 12
Rochester, NH 03867
(603)994-3500

Page 1

Site Code: 82027066

Station ID:

Green Hill Road over Isinglass River

Latitude: 0' 0.000 Undefined

Start Time	13-Jun-11		Tue		Wed		Thu		Fri		Sat		Sun		Week Average	
	Eastbound	Westbou	Eastbou	Westbou	Eastbou	Westbou	Eastbou	Westbou	Eastbou	Westbou	Eastbou	Westbou	Eastbou	Westbou	Eastbou	Westbou
12:00 AM	*	*	*	*	8	2	13	2	15	1	20	0	21	2	15	1
01:00	*	*	*	*	7	0	12	0	8	0	13	1	10	0	10	0
02:00	*	*	*	*	1	0	4	0	7	0	10	0	4	0	5	0
03:00	*	*	*	*	3	1	3	0	2	0	1	0	4	0	3	0
04:00	*	*	*	*	12	0	18	1	18	1	5	0	11	1	13	1
05:00	*	*	*	*	46	0	41	0	41	0	17	0	14	1	32	0
06:00	*	*	*	*	111	2	112	3	97	5	39	0	22	0	76	2
07:00	*	*	*	*	145	14	128	32	153	4	58	9	35	0	104	12
08:00	*	*	*	*	126	8	139	8	112	12	80	3	66	3	105	7
09:00	*	*	*	*	78	11	78	10	94	9	106	15	63	11	84	11
10:00	*	*	*	*	82	4	83	7	89	9	113	12	112	6	96	8
11:00	*	*	63	2	82	8	83	5	94	4	119	12	115	9	93	7
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Lane	0	0	1162	39	1906	130	1914	145	2007	121	1732	155	1424	109	1781	124
Day	0		1201		2036		2059		2128		1887		1533		1905	
AM Peak			11:00	11:00	07:00	07:00	08:00	07:00	07:00	08:00	11:00	09:00	11:00	09:00	08:00	07:00
Vol.			63	2	145	14	139	32	153	12	119	15	115	11	105	12
PM Peak			17:00	15:00	17:00	12:00	16:00	14:00	16:00	16:00	15:00	12:00	12:00	12:00	17:00	12:00
Vol.			195	8	222	14	189	13	189	12	155	18	119	16	162	10

Strafford Regional Planning Commission

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Rochester, NH 03867
(603)994-3500

Site Code: 82027066

Station ID:

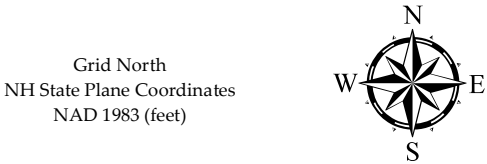
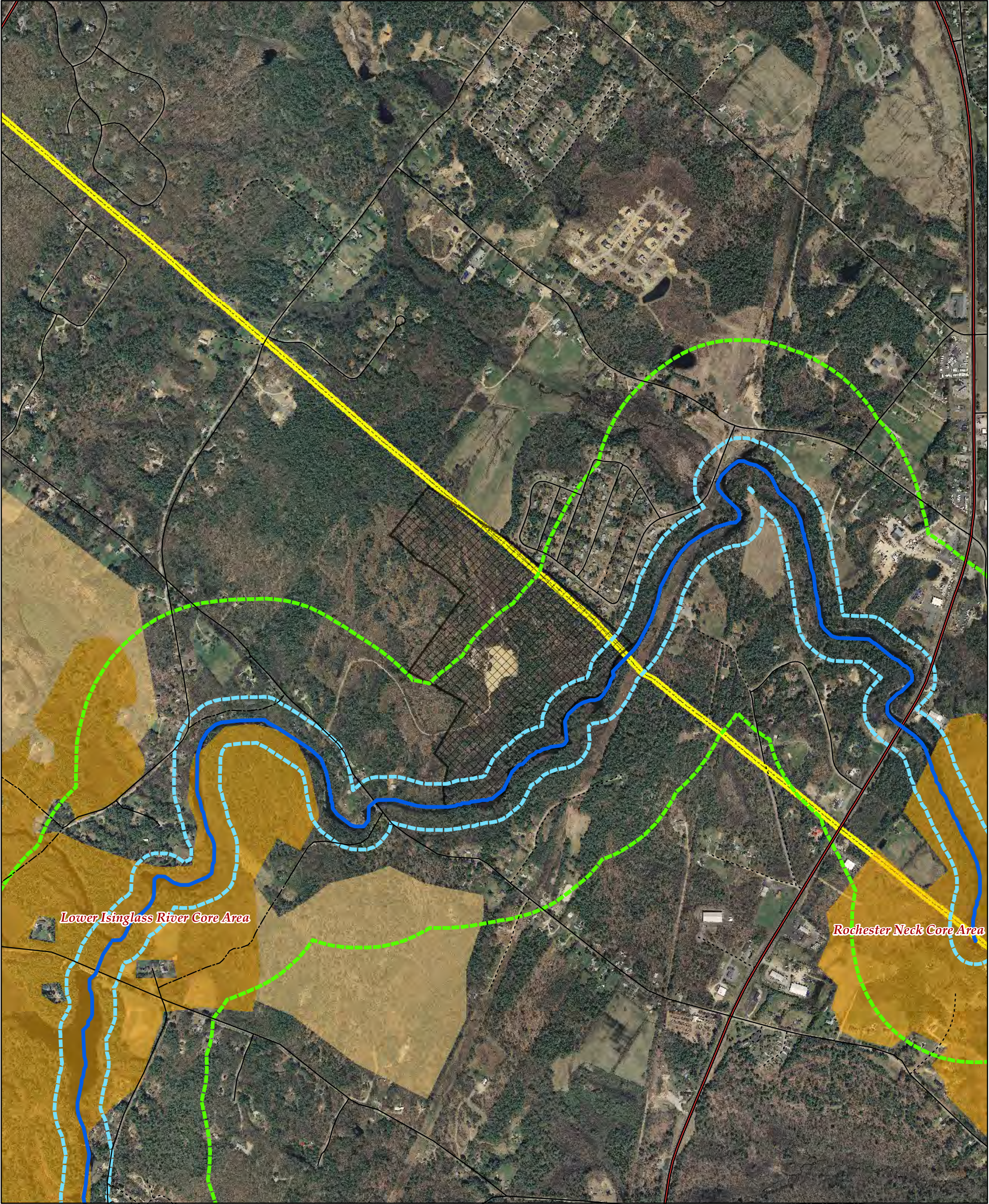
Green Hill Road over Isinglass River

Latitude: 0' 0.000 Undefined

Start Time	20-Jun-11		Tue		Wed		Thu		Fri		Sat		Sun		Week Average			
	Eastbound	Westbou	Eastbou	Westbou	Eastbou	Westbou	Eastbou	Westbou	Eastbou	Westbou	Eastbou	Westbou	Eastbou	Westbou	Eastbou	Westbou		
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03:00	3	0	*	*	*	*	*	*	*	*	*	*	*	*	3	0		
04:00	11	1	*	*	*	*	*	*	*	*	*	*	*	*	11	1		
05:00	46	0	*	*	*	*	*	*	*	*	*	*	*	*	46	0		
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07:00	157	6	*	*	*	*	*	*	*	*	*	*	*	*	157	6		
08:00	108	19	*	*	*	*	*	*	*	*	*	*	*	*	108	19		
09:00	85	7	*	*	*	*	*	*	*	*	*	*	*	*	85	7		
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10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		
Lane	543	39	0	0	0	0	0	0	0	0	0	0	0	0	543	39		
Day	582		0		0		0		0		0		0		582			
AM Peak	07:00	08:00															07:00	08:00
Vol.	157	19															157	19
PM Peak																		
Vol.																		

Comb. Total	582	1201	2036	2059	2128	1887	1533	2487
ADT	ADT 2,074		AADT 2,074					

Environmental Overview



Data Sources

Base features are from USGS 1:24,000 scale Digital Line Graphs, as archived in the GRANIT database. Digital data in NH GRANIT represent the efforts of the contributing agencies to record information from the cited source materials. Complex Systems Research Center (CSRC), under contract to the Office of Energy & Planning (OEP), and in consultation with cooperating agencies, maintains a continuing program to identify and correct errors in these data. Neither OEP nor CSRC make any claim as to the validity or reliability or to any implied uses of these data.

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2010 High Resolution Orthophotography Provided by NHDOT. Imagery was flown in the spring of 2010 by Sanborn Inc.

Additional data was derived from various sources. For more information please contact the Strafford Regional Planning Commission.

Legend

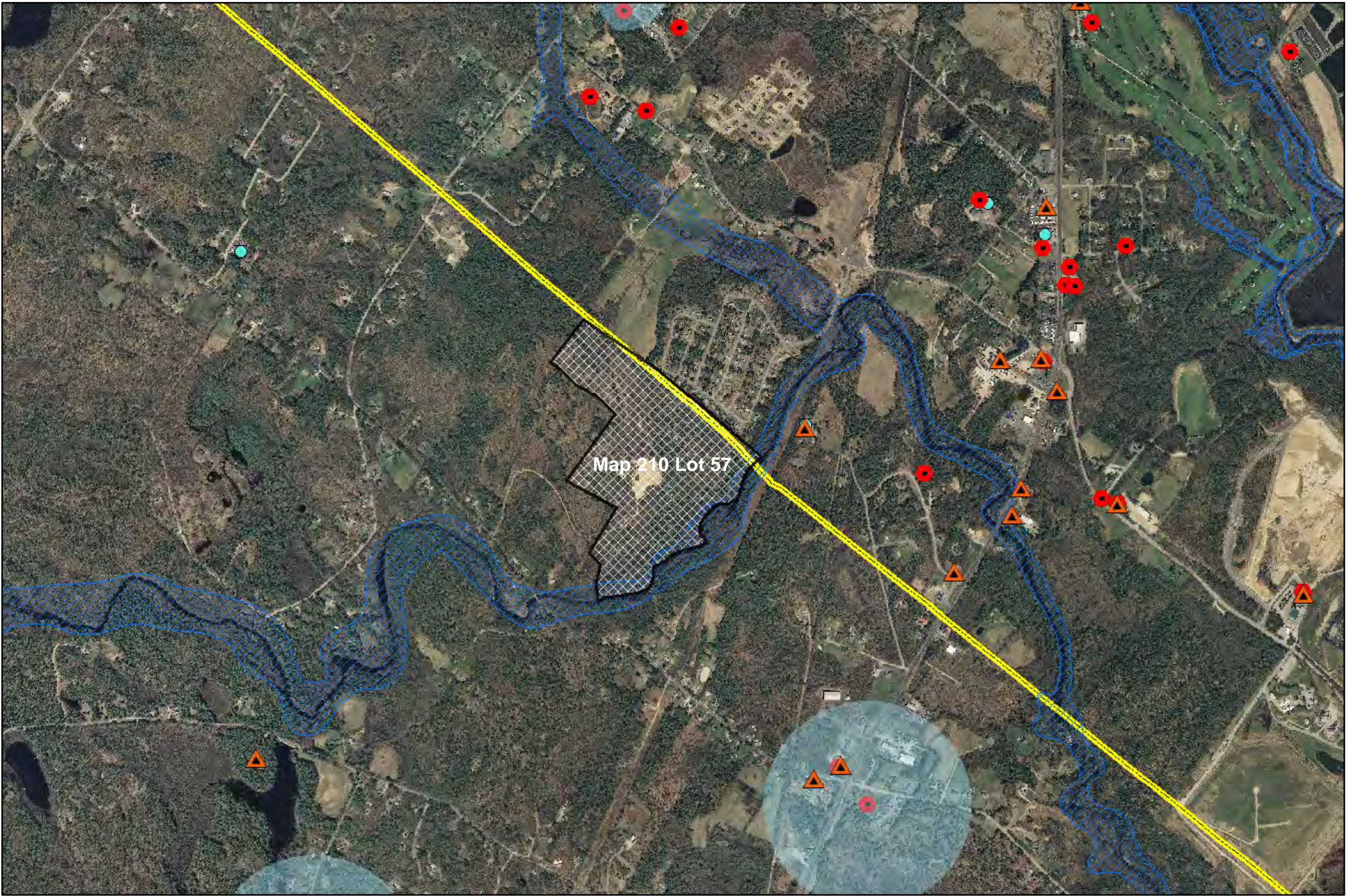
- Subject Lot
- Isinglass River
- Shoreland Protection Act Buffer
- Designated River Buffer
- LCP (2006) Core Area
- LCP (2006) Supporting Landscape
- SRPC_Boundary

Prepared by **Strafford Regional Planning Commission**
150 Wakefield Street, Suite 12, Rochester, NH 03867
T: (603) 994-3500 EM: srpc@strafford.org
Regional Impact Committee
Date//Author: December//GJ

Path: M:\Region\Regional Impact Committee\Regional_Impact\2012\
Trinity Conservation-Gravel Excavation Operation\GIS-MAPS
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Floodplain and Hazard Sites

- Legend**
- Subject Lot
 - Hazardous Waste Sites
 - Wellhead_Protection_Area
 - NHDES Water Quality Hazards
 - Underground Storage Tanks
 - Strafford County 100-Year Floodplain
 - Municipal Boundary



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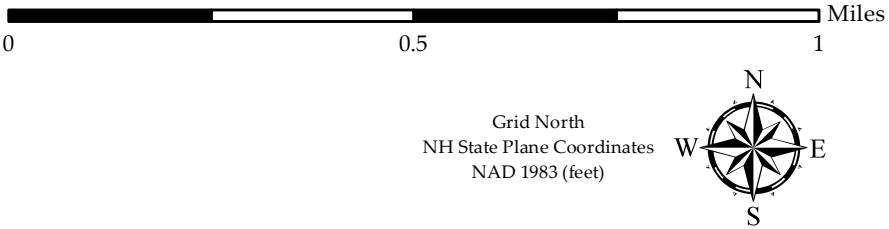
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Fluvial Erosion Hazard Analysis

Legend

Fluvial Hazard Rating

- Moderate
- High
- Very High
- Extreme
- Subject Lot
- Municipal Boundary

Hazard Level Determination



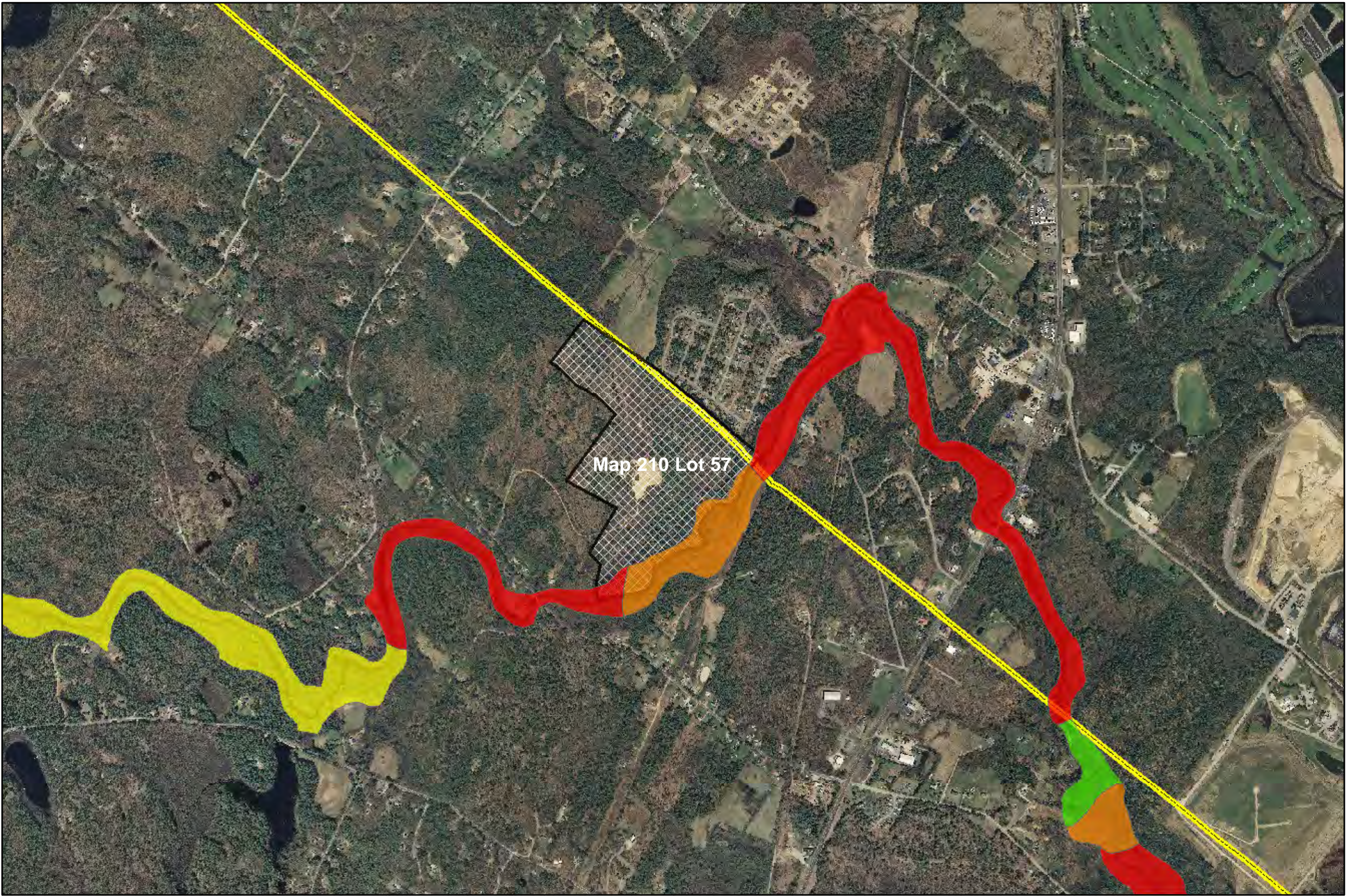
Based on past experience of how high water might rise in flood event. In a given year, there's a 1 in a 100 chance of being flooded



Based on width of the valley in which the river can move; potential for erosion due to high velocity flood events.



Erosion exists wherever the river has the potential and probability to move.



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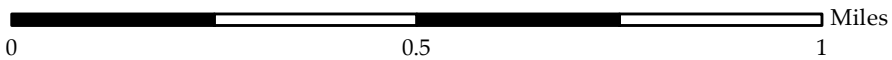
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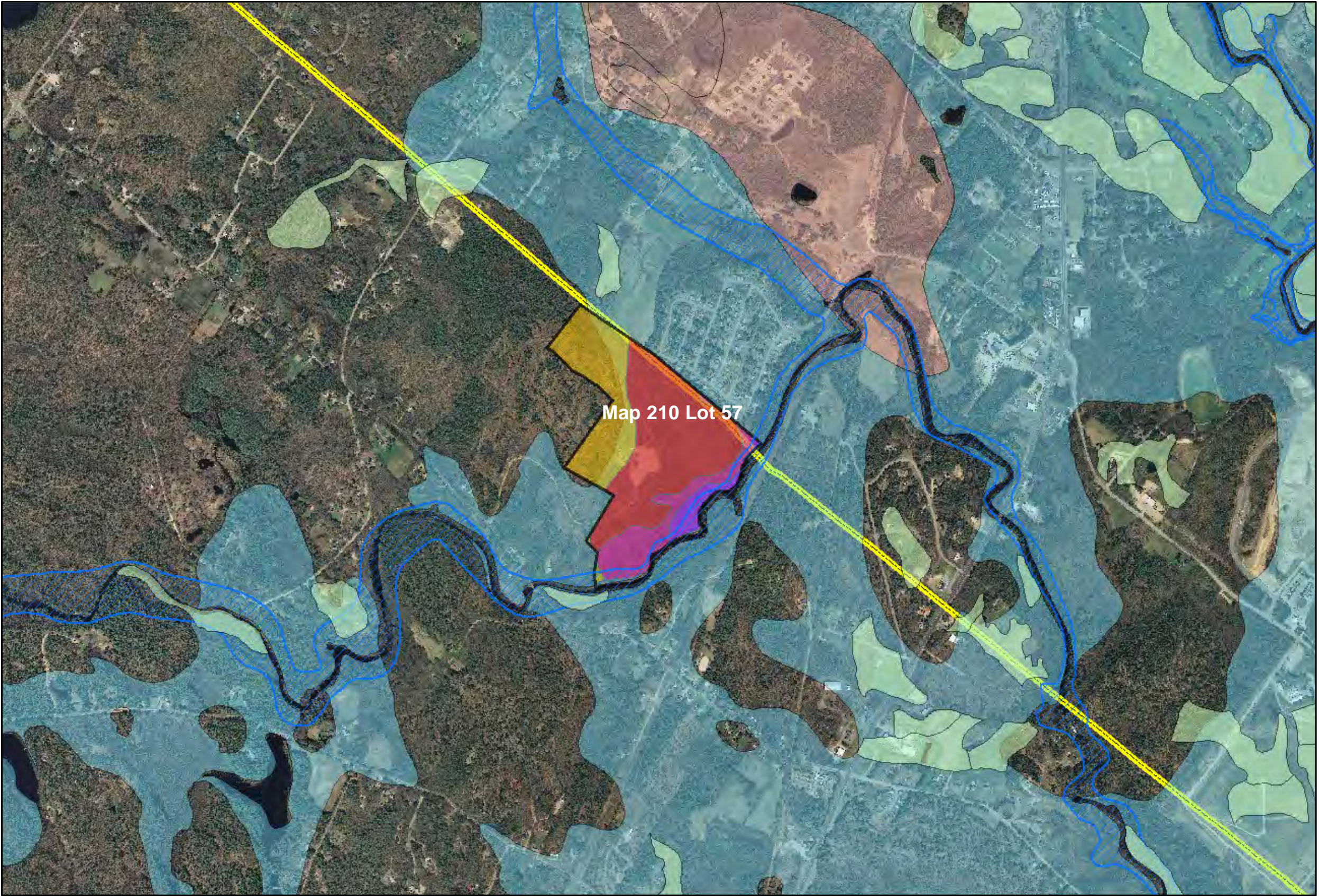
Grid North
NH State Plane Coordinates
NAD 1983 (feet)



Strafford County Soils and Aquifer Areas

Legend

- Prime Farmland
- Strafford County 100-Year Floodplain
- Subject Lot
- Hollis-Charlton Very Rocky Fine Sandy Loam
- Hinckley Loamy Sand
- Hinckley Gravelly Loam
- Mixed Alluvial Land
- Aquifer ≤ 2000 sq. ft. per day transmissivity
- Aquifer > 2000 sq. ft. per day transmissivity
- Municipal Boundary



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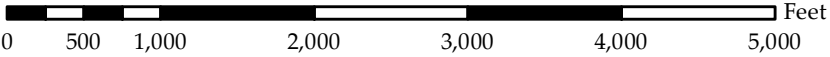
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


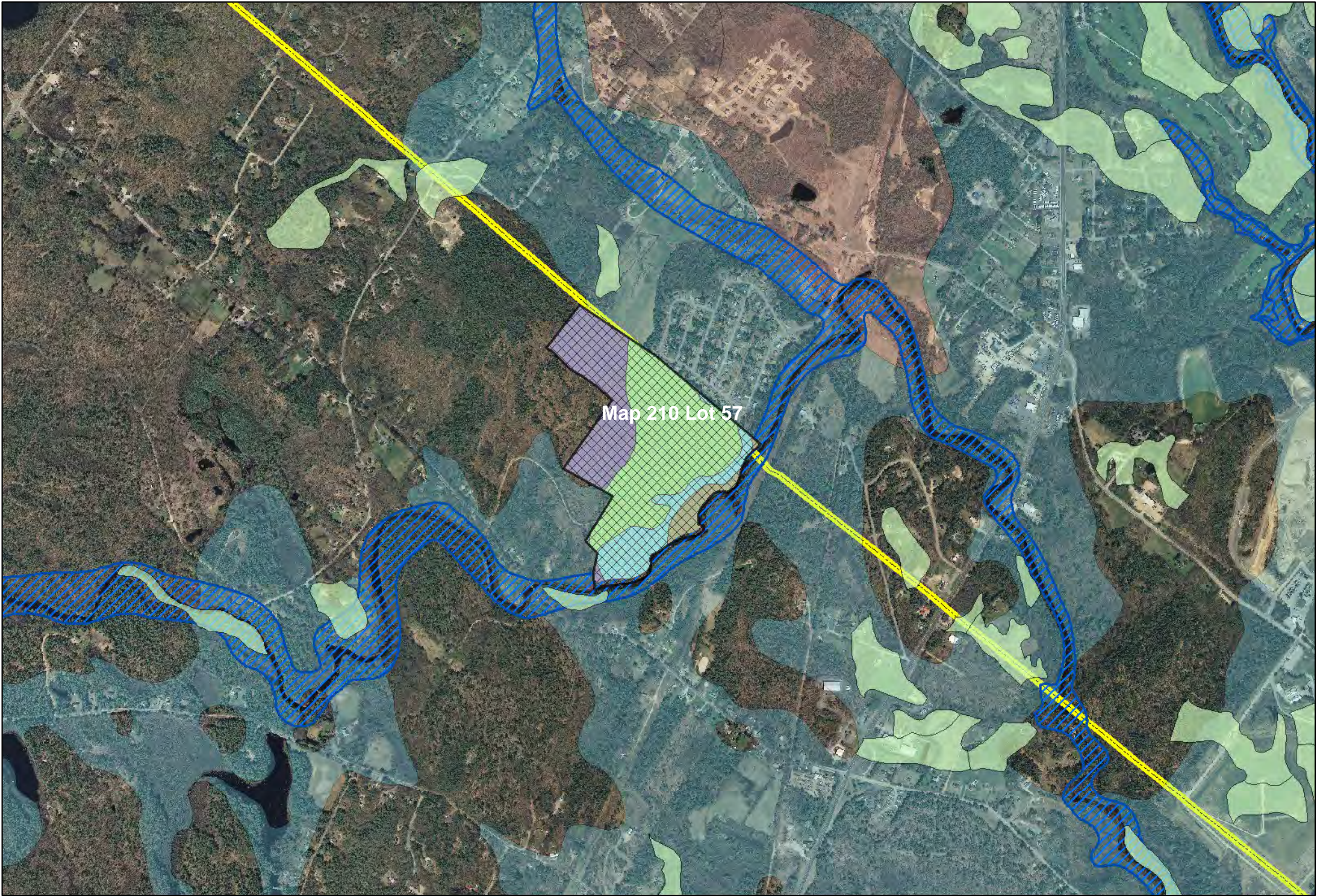
Grid North
NH State Plane Coordinates
NAD 1983 (feet)



Prime Farmland & Aquifer Areas

Legend

-  Subject Lot
-  Hollis-Charlton Very Rockey Fine Sandy Loam
-  Hinckley Loamy Sand
-  Hinckley Gravelly Loam
-  Mixed Alluvial Land
-  Prime Farmland
-  Strafford County 100-Year Floodplain
-  Aquifer <= 2000 sq. ft. per day transmissivity
-  Aquifer > 2000 sq. ft. per day transmissivity
-  SRPC_Boundary



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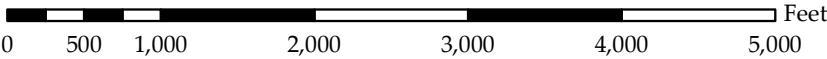
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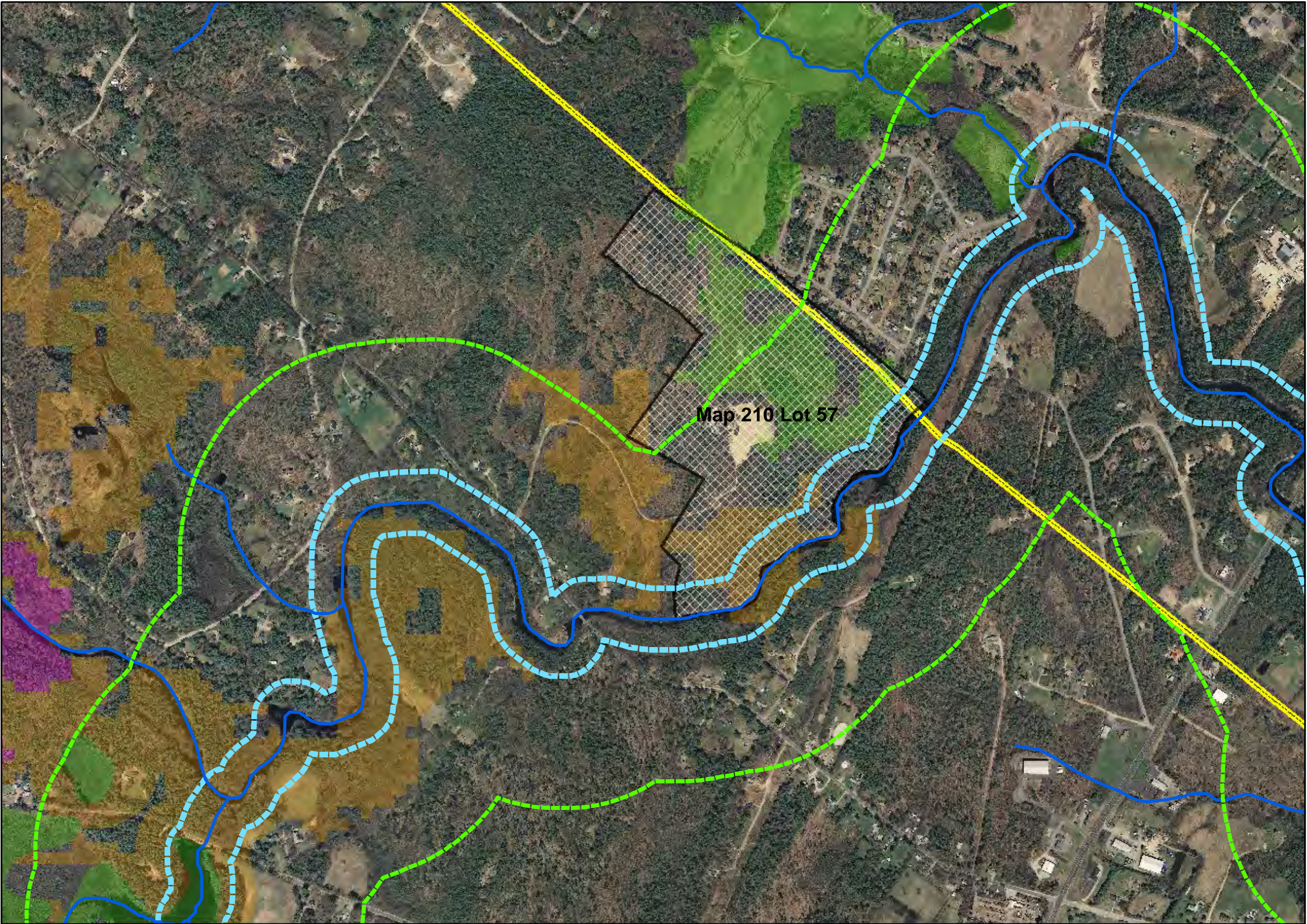
Grid North
NH State Plane Coordinates
NAD 1983 (feet)



Wildlife Protection Areas

Legend

- Designated River Buffer
- Subject Lot
- Isinglass River
- Shoreland Protection Act Buffer
- Wildlife Action Protection Areas**
 - Highest Ranked Habitat in NH
 - Highest Ranked Habitat in Biological Region
 - Supporting Landscapes
 - Municipal Boundary



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Regional Impact Committee
Date/Author: December/GJ
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Trinity Conservation-Gravel Excavation Operation\GIS-MAPS
Maps prepared by Strafford Regional Planning Commission
are for planning purposes only.

Data Sources

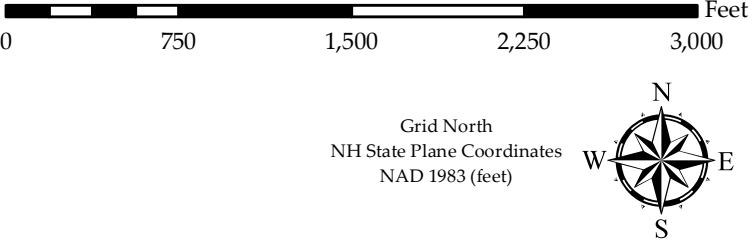
Base features are from USGS 1:24,000 scale Digital Line Graphs, as archived in the GRANIT database. Digital data in NH GRANIT represent the efforts of the contributing agencies to record information from the cited source materials. Complex Systems Research Center (CSRC), under contract to the Office of Energy & Planning (OEP), and in consultation with cooperating agencies, maintains a continuing program to identify and correct errors in these data. Neither OEP nor CSRC make any claim as to the validity or reliability or to any implied uses of these data.

Transportation Project data were digitized by SRPC GIS staff, Dec. 2010.

Digital tax parcels taken from SRPC database. **Data should be used for planning purposes only.** Data was derived from various sources and were updated at different time frames, with varying levels of accuracy.












2010 High Resolution Orthophotography Provided by NHDOT. Imagery was flown in the spring of 2010 by Senborn Inc.

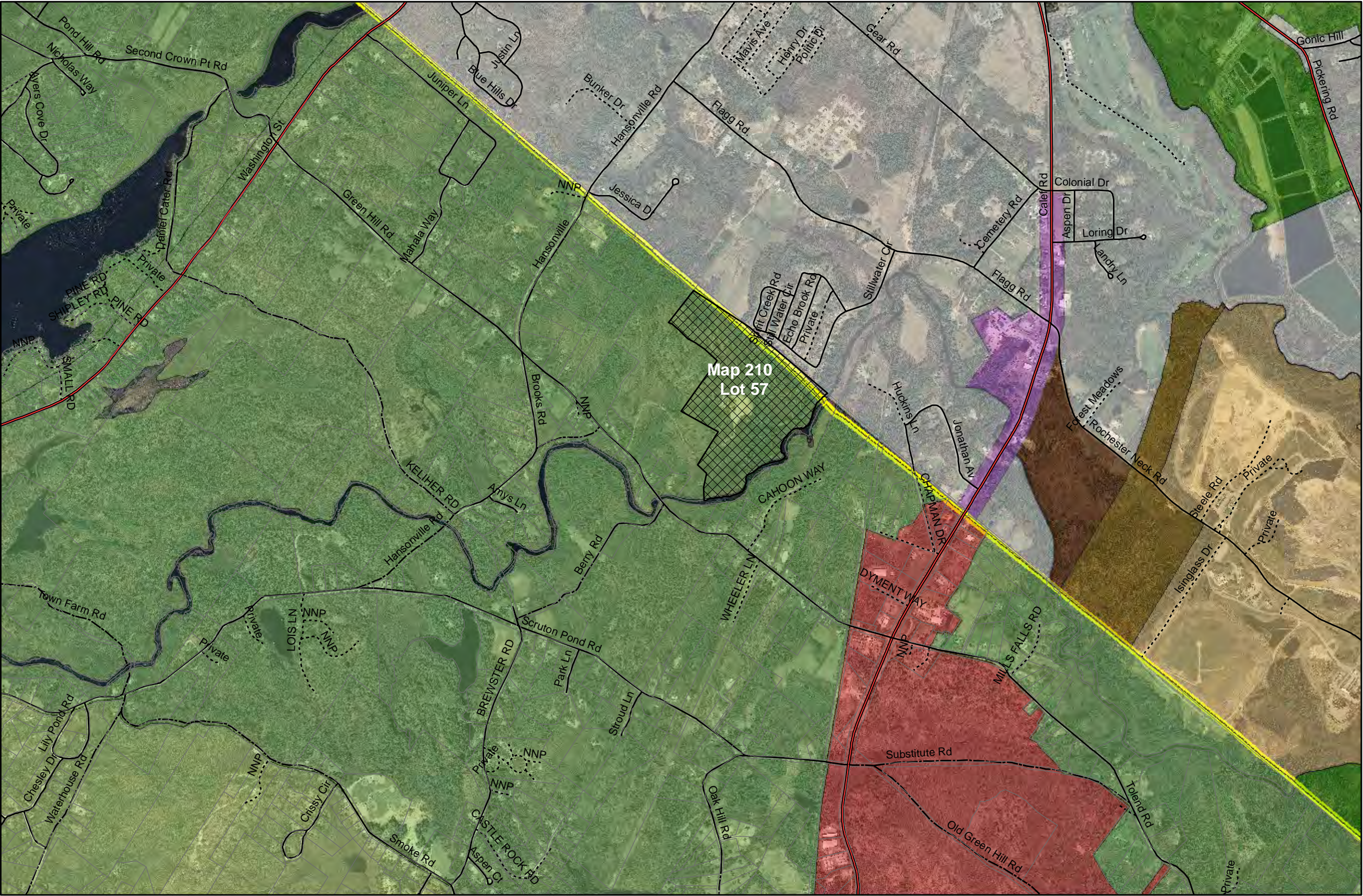
Additional data was derived from various sources. For more information please contact the Strafford Regional Planning Commission.



Zoning Map

Legend

-  Subject Lot
-  Tax Parcels
-  State Highway
-  Local Roadway
-  Local roadway - Not Maintained
-  Private Roadway
- Barrington Zoning Districts**
-  General Residential (GR)
-  Neighborhood Residential (NR)
-  Regional Commercial (RC)
-  Town Center
-  Village (VD)
- Rochester Zoning Districts**
-  Agricultural
-  Business - 2
-  Industry - 2
-  Industry - 3
-  Industry - 4
-  Industry - 4A
-  Municipal Boundary



Prepared by **Strafford Regional Planning Commission**
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T: (603) 994-3500 EM: srpc@strafford.org
Regional Impact Committee
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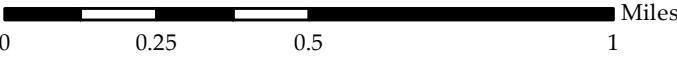
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2010 High Resolution Orthophotography Provided by NHDOT. Imagery was flown in the spring of 2010 by Somborn Inc.

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Grid North
NH State Plane Coordinates
NAD 1983 (feet)



BARRINGTON
BROOKFIELD
DOVER
DURHAM
FARMINGTON
LEE
MADBURY
MIDDLETON
MILTON



NEW DURHAM
NEWMARKET
NORTHWOOD
NOTTINGHAM
ROCHESTER
ROLLINSFORD
SOMERSWORTH
STRAFFORD
WAKEFIELD

MINUTES
Strafford Regional Planning Commission
Regional Impact Committee
150 Wakefield Street, Suite 12, Conference Room 1A
Rochester NH 03867
December 21, 2012
Draft

RIC Members Present: Chairman Edmund Jansen, Jr. (Rollinsford), Tom Clark (Dover), Sandra Keans (Rochester)

RIC Members Absent: Brandon Anderson (Alternate Member)

Staff Present: Cynthia Copeland, AICP, Executive Director, Gregory M. Jones, Regional Planner

Others Present: Daniel J. Hussey (Trinity Conservation, LLC), Jason Hill (TF Moran, Inc.), Marcia Gassas (Barrington Town Planner), James Gray (Rochester), Bernard Martin (Rochester), Ken Grossman (Barrington), Anne Melvin (Barrington), Clayton Carl (Barrington), Jeff Winders (Rochester)

Introductions

Chair E. Jansen called Regional Impact Committee (RIC) meeting of December 21, 2012 to order at 1:00 PM and noted members present and existence of quorum as listed above. Chair E. Jansen reminded the Committee that the Regional Impact review is pursuant to New Hampshire RSA 36:54. The purpose of this legislation is to:

- I. Provide timely notice to potentially affected municipalities concerning proposed developments, which are likely to have impacts beyond the boundaries of a single municipality.
- II. Provide opportunities for the Regional Planning Commission and the potentially affected municipalities to furnish timely input to the municipality having jurisdiction.
- III. Encourage the municipality having jurisdiction to consider the interests of other potentially effected municipalities.

C. Copeland informed the applicant and members of the public of the process by which the Development of Regional Impact Technical Review is processed. The Committee members concurred with Copeland's explanation of the process.

1. Regional Impact Review

Traffic-Access-Parking

1. Will the development cause an increase in traffic that will diminish the capacity or safety of the street system in the adjacent town/city?

Copeland stated:

According to the Trip Distribution notes on sheet 2 of the submitted plans, the assumption has been made that Normal operational activity will generate 10 loads per day (or 20 trips), with a Maximum output of 30 loads per day (or 60 trips). However, the Summary states that the Average Daily activity is 60 trips. Please clarify.

We concur with the December 11, 2012 TF Moran correspondence letter, in which the applicant cites NHDOT traffic volume data. Green Hill Road experiences approximately 2000 trips per day. The proposed project and associated truck traffic will represent a 3% increase in current traffic volumes.

According to the December 11, 2012 TF Moran correspondence letter, the applicant states that a maximum of 25 cubic yards will be leaving the site per haul using a combination of tri-axle dump and tractor trailer dump trucks. Assuming that one cubic yard is approximately equal to 1.3 tons, we can expect the regular transport of up to approximately 32.5 tons from the site per haul. According to Barrington municipal staff, Green Hill Road was constructed using six inches of base material. It is reasonable to anticipate that the proposed heavy truck traffic will negatively impact the integrity of the roadway and will likely contribute to additional maintenance costs. Attention should be given to this issue in order to protect the Town, residents and regional commuters.

The October 24, 2012 Memorandum from Dubois & King, the Town's third party engineering consultant, states that the District 6 Bridge Engineer, Stephen Liakos, informed the municipality that a structural calculation could be performed to determine the anticipated impacts on the bridge structure. As stated above, the project calls for a combination of tri-axle dump and tractor trailer dump trucks. We concur with Mr. Liakos and recommend the Town pursue this impact data now that truck size information has been submitted.

While the proposed project does not constitute a significant increase in daily traffic on Green Hill Road, and we agree that "One Lane Bridge Ahead" signs, potential speed limit reduction, stop bars and proposed boring program for the roadway will have some positive safety implications. However, this roadway is not typically used for heavy truck traffic. Large vehicles are not designed to be as maneuverable as cars; they take longer to stop and accelerate, and because of their size, they often need to swing wide to make their turns. With this in mind, we find it reasonable to anticipate negative roadway safety impacts for residential pedestrian traffic on Green Hill Road during material transport.

2. Will the development exceed, either individually or cumulatively, a level of service standard established by the adjacent town/city for designated roads or highways?

Copeland stated:

There is no specific information about level of service. The existing traffic volumes are discussed in the prior section.

3. Will the development substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., construction, gravel operation equipment)?

Copeland Stated:

Gravel operations are a permitted use within the General Residential (GR) Zoning District. Compliance is achieved through adherence to the Performance Standards specified in Section 7.1 of the Municipal Zoning Ordinance, and the requirements specified in the Town's Site Plan Regulations. The Planning Board may require an undisturbed and/or vegetated buffer of suitable size be maintained between an excavation site and any adjoining properties if said properties would be adversely impacted by such an operation. In addition, the project proposes to upgrade the gravel drive used to access the project site (Map 201 Lot 57) by expanding its' width to 18 feet in compliance with the Barrington Subdivision Regulations.

On page one (1) of the December 11, 2012 TF Moran correspondence letter, the ultimate site limit distance to Stillwater Circle residences will be **200 feet**. On page two (2) of the letter, Revised Statutes Annotated (RSA) 155-E is referenced under the heading Buffers and explains how the applicant will adhere to this statute. The letter states "RSA 155E requires the applicant provide a 50 foot buffer zone from abutting properties and the Isinglass River. A generous **75 foot vegetative buffer** will be provided along the northerly property line of parcel 210-57. Additionally, the applicant owns a strip of land, ranging up to 70+/- feet wide, between the site and the Stillwater Circle development which will be utilized to provide an additional buffer zone to the excavation site".

The comment is referencing the **Minimum and Express Operational Standards** under RSA 155-E:4-a(II)(II-a). RSA 155-E:4-a(II) states "*No excavation shall be permitted within 50 feet of the boundary of a disapproving abutter, within 150 feet of any dwelling which either existed or for which a building permit has been issued at the time excavation is commenced*".

After a review of the December 11, 2012 TF Moran correspondence letter, and sheet 8 of the submitted plans with a 1" = 100' scale, it appears as though the ultimate site limits and associated clearing and grading will extend well within the stated 200' vegetative buffer to Stillwater Circle. Please clarify buffer distances.

Considering the proposed blasting, crushing, hauling and heavy equipment operation on-site, we recommend an adjustment to the ultimate site limits to provide suitable vegetative buffering in excess of the proposed 200' as allowed by the Barrington Zoning Ordinance.

Jason Hill, the project engineer with TF Moran Inc., further explained the proposed buffer to RIC Committee members and audience members. Hill stated that the proposed buffer is measured from the Still Water Circle residential structures extending 200 feet into the subject lot. The buffer is not measured from the Rochester/Barrington Town Line and may warrant additional plantings to supplement existing vegetation. Hill stated that he will revise the Site Plan scale in order to better demonstrate the distance between the Still Water Circle residences and the project site. Limits of clearing flags will be installed on-site to ensure that no clearing or digging will occur within the buffer.

Rochester Conservation Commissioner Jeff Winders inquired as to why the Rochester/Barrington municipal boundary is not being used to measure the proposed buffer distance. J. Winders opined that measuring the buffer from the boundary line would be more consistent and could potentially alleviate impacts to home based businesses which exist in Still Water Circle. J. Hill responded by informing Mr. Winders that pursuant to RSA 155-E:4(a), the applicable buffer is measured from the actual dwelling structure to the subject lot of an excavation project. Hill stated that the applicant has proposed a 75' vegetative buffer from the City boundary line which is sufficient to conform to state statutes.

J. Winders inquired as to what the slope will be along the proposed buffer to Still Water Circle. J. Hill stated that the proposed slope grades will be 3:1 with proper reclamation procedures being taken to stabilize these areas (i.e. gravel pit vegetation to be established).

4. Will the development result in inadequate emergency access?

Copeland stated:

Note #4 on sheet 10 of the submitted plans, under General Notes, states that the contractor shall maintain emergency access to all areas affected by his work at all times.

It does not appear that the submitted plans include an emergency access provision for review. An existing paved driveway will be utilized as the access point to the site and a sight line plan and profile will be prepared for the Planning Board prior to final approval. The Municipal Road Agent and Public Safety personnel will also provide input to the Planning Board regarding any potential site access issues.

5. Will the development result in inadequate parking capacity?

Copeland stated:

We do not anticipate the project to have any parking capacity implications.

6. Will the development conflict with adopted policies, plans, or programs supporting alternative transportation?

Copeland stated:

We do not anticipate the project will conflict with any adopted policies, plans or programs supporting alternative transportation. As stated under question #1, we find it reasonable to anticipate negative roadway safety impacts to alternative modes of transportation (i.e., bicycles, pedestrians etc.) on this residentially zoned roadway.

Conflicts with Policies, Plans and Programs

Noise

7. Will the development expose persons to or generate noise levels in excess of standards established in the local general plan, noise ordinance, or applicable standards of other agencies?

Copeland stated:

Under Barrington Zoning Ordinance Article 7.1.2 Noise, all noise, except that generated by normal human or vehicular activity, shall be muffled so as not to be objectionable due to intermittence, beat frequency or shrillness. At property lines, noise levels shall not exceed 75 DBA.

It is important to note that during the winter months, noise levels from construction activities will lack the vegetative buffer present during the growing season. According to the Winter Construction Notes on sheet 10 of the submitted plans, winter excavation and earthwork will be performed as such that no more than 1 acre of the site should go without stabilization at one time. Will crushing and/or blasting activities occur during the winter months?

The December 11, 2012 TF Moran correspondence letter states that the project will not generate noise levels exceeding 75 DBA at the abutting property lines. The same paragraph goes on to state that based on the relative distance from the ledge to the abutting residential properties the operations are

not expected to generate significant noise impacts to these areas. Please clarify if the possibility for noise nuisance to abutting residential properties exists. Will a decibel meter be utilized on site to measure the actual DBA readings at the property lines during initial blasting activities and crushing activities to follow?

In order to alleviate potential complaints and noise nuisance issues, we recommend supplying abutting property owners with a 48 hour notice before each day scheduled for blasting. We further recommend that the Town require an adjustment to the ultimate site limits to provide additional suitable vegetative buffering to these residences as allowed by the Barrington Zoning Ordinance.

J. Hill deferred the question to the applicant; Daniel Hussey. D. Hussey informed the Committee members that blasting operations are not anticipated to occur during the winter months and that a smaller work area will be exposed during the winter per the Site Plan construction notes.

8. Will the development expose persons to or generate excessive ground borne vibration or ground borne noise levels?

Copeland stated:

The December 11, 2012 TF Moran correspondence letter states that “normal excavation operations are not expected to generate significant vibration. The applicant expects blasting areas to be limited to the western portions of the property in areas where there is currently ledge face. This area is approximately 1,700 feet from Green Hill Road, 1,200 feet from the Isinglass River, 2,300 feet from Jessica Drive and 650 feet from the rear of the Stillwater Circle properties. Based on the relative distance from the ledge to these properties the operations are not expected to generate significant noise impacts to these areas”.

Without a Noise and Vibration Control and Monitoring Plan (NVCMP), and associated implementation of vibratory equipment/methods, how will the actual ground borne vibration levels generated during blasting and crushing activities be measured to ensure the above assertion is correct?

J. Hill stated that instruments can be installed on-site to measure these levels if warranted. Hill informed the Committee that the municipal excavation permit conditions will necessitate a reoccurring renewal period to evaluate the site operator’s performance with regard to criteria set for the project by Barrington decision makers. A violation of this approval and associated performance conditions would be addressed during said renewal period. Hill stated that during the initial phase of the proposed operation, such monitoring equipment would not be in the best interest of the applicant or the Town of Barrington.

J. Winders inquired if an operations pre-check of structural foundations on abutting properties will be performed to avoid potential future issues once blasting operations commence as is required with many other excavation operations in the State.

T. Clark agreed that this is a requirement at the State level but informed Mr. Gray, Committee Members, and the applicant that a distance threshold to the project site exists for this requirement. Clark advised the applicant to show this distance threshold can be adhered to.

Barrington Town Planner, M. Gassas, stated that the Barrington Fire Department will review for compliance.

9. Will the development substantially and permanently increase ambient noise levels in the project vicinity above existing levels?

Copeland stated:

See Sections above on NOISE.

10. Will the development substantially increase temporary or periodic ambient noise levels in the project vicinity above existing levels?

Copeland stated:

See Sections above on NOISE

11. Is the development located within an airport zone or within two miles of an airport or airfield, where the project would expose residents or employees in the project area to excessive noise levels?

Copeland stated:

The project site is not within two-miles of an airport or airfield.

Hazardous Materials or Substances

12. Will the development create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Copeland stated:

It can be anticipated that incomplete reactions are likely to occur during blasting activities and will result in the production of hazardous substances such as carbon monoxide (CO), nitrous oxide (NO) and nitric oxide (NO₂). In addition, incomplete reactions may result in molecule fragmentation of the ingredient explosives, oxidizers, or fuels which may also be toxic.

The December 11, 2012 TF Moran correspondence letter states that the operator will be required to identify a drinking water wells located within 2000 feet of the proposed blasting activities, as well as to develop a groundwater quality sampling program to monitor for nitrate and nitrite either in the drinking water supply wells or in other wells that are representative of the drinking water supply wells in the area. The plan also calls for pre/post blast water quality monitoring subject to approval by The New Hampshire Department of Environmental Services (NHDES) prior to initiating blasting activities. Additionally, the letter provides a list of Best Management Practices (BMPs) to be implemented for blasting activities. This list of BMPs includes various procedures including, but not limited to, loading practices, spillage, fuel storage, Muck Pile management, and explosives management, etc.

The project proposes to disturb an area in excess of 100,000 square feet and therefore requires an Alteration of Terrain (AOT) permit from the NHDES. The AOT permit ensures that certain BMPs be adhered to and that stormwater is adequately treated prior to leaving the site. BMPs for the on-site excavator will be required as well.

Under Federal Law, the site operator will be required to prepare a Stormwater Pollution Prevention Plan (SWPPP) and a Spill Prevention and Countermeasures Plan (SPCC) to address potential contamination concerns. The site operator will also be required to attend regular compliance hearings with the Barrington Planning Board to ensure conformance to the approved plan and permit conditions.

There appears to be a discrepancy between the **Phasing Note** on Sheet 3 of the submitted plans and note #9 on under **General Notes** on Sheet 10. The phasing note states that the operation will be

performed in such a manner so as to disturb no more than 10 acres at a time. **General Note #9** states that the smallest practical area shall be disturbed during construction, but in no case shall it exceed 5 acres at any one time before disturbed areas are stabilized. Please clarify and/or amend plan notes.

We think the level of attention given to the prevention of significant hazards to the public or the environment through the routine transport, use, or disposal of hazardous materials associated with this project is adequate as described.

J. Hill informed the Committee members that the phasing note on sheet three (3) of the submitted plan is the applicants intention for this project. Hill stated that he will address the discrepancy with the General Notes.

13. Will the development create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Copeland stated:

We think that the level of attention given to the prevention of significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous material to the environment to be adequate as described.

14. Will the development produce hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Copeland stated:

No, the development is not within one-quarter mile of an existing or proposed school.

15. Will the development be located on a site that is included on a list of hazardous materials sites compiled by the NH Department of Environmental Services and, as a result, would it create a significant hazard to the public or the environment?

Copeland stated:

No, the development is not located on a site that is included on a list of hazardous materials sites compiled by the NH Department of Environmental Services.

Ecology and Resources

16. Will the development have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, regulations, or by the U.S. Fish and Wildlife Service?

Copeland stated:

A review of the Natural Heritage Bureau's (NHB) Data Check Tool shows that there are NHB records of rare plants and/or exemplary natural communities in the vicinity of the project site which may be adversely impacted by project implementation. Specifically, Wood turtle, a NH species of concern, was identified in the NHB database check as being in the vicinity of the project site. According to New Hampshire Fish & Game (NHFG), both the Wood turtle and the state endangered Blanding's turtle may be found in and around abandoned pit areas. As recommended by NHFG staff, project personnel working on the job site should be made aware of the potential to encounter protected turtles in the work area especially during turtle nesting season which extends from late May

through the end of June. If Blanding's or other protected turtle species are found nesting in the work area, please contact NHFG.

The applicant has designated an area on-site to remain exposed gravel in order to provide nesting habitat for the above referenced turtle species. NHFG staff recommended that this preserved exposed gravel area be a minimum of 5-10 acres in size. What is the acreage of the referenced area to remain undisturbed by the proposed operations? After taking approximate measurements based on the scaled plans, I found this area to be roughly 4 acres in size.

While the applicant's provision of nesting areas for the above referenced state listed turtle species was included, a subdivision plan has been included with the submitted plan set which appears to propose at least four (4) residential building lots covering this preserved nesting area. Please amend the attached subdivision plan by including this preserved nesting area and an associated note in order to note and preserve this protected area during future potential projects on this property.

K. Grossman, Barrington Conservation Commissioner, inquired if personnel who can identify turtle species of concern will be stationed on-site in order to comply with the NHFG recommendation. D. Hussey informed the Committee that only one (1) or two (2) loaders will be on-site at any one time limiting the potential for impacts to sensitive turtle species. Hussey stated that the project team will comply with whatever regulations required of them.

J. Winders inquired if orange construction fencing will be installed around the nesting area to ensure its protection during project activities. The Committee agreed that the erection of said fencing would aid to the protection of this area.

D. Hussey informed the Committee that it is difficult to anticipate how the site will be developed in the future. Hussey stated that a Conservation Subdivision could be engineered to protect the nesting area in question.

M. Gassas opined that the NHFG recommendation is contrary to the requirement of NH RSA 155-E to reclaim the site (i.e. site stabilization via vegetative cover).

17. Will the development have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the NH Department of Fish and Game or US Fish and Wildlife Service?

Copeland stated:

The State Designated Isinglass River makes up the easterly boundary of the project site (2008 Isinglass River Management Plan). RSA 438, New Hampshire Rivers Management and Protection Program, establishes the program policy, intent, definitions, nomination and management criteria for State Designated Rivers. The Isinglass River in the vicinity of the project site is listed as a Rural-community river (RSA 483:7-a) and the "river corridor" (RSA 483:4) means the river and the land area located within a distance of 1,320 feet of the normal high water mark or to the landward extent of the 100 year floodplain as designated by the Federal Emergency Management Agency, whichever distance is greater. It is important to note that the majority of the project site is located within the 1,320 foot designated river buffer. As such, it can be anticipated that some protection of the benefits of this buffer will be lost as a result of this project.

The project site is located along a section of the Isinglass River which has been deemed as exhibiting Extreme to Very High fluvial erosion hazard characteristics by the New Hampshire Geologic Survey (NHGS). NHGS and SRPC have previously met with the Barrington Planning Board and

Conservation Commission to discuss the potential adoption of the state's template Fluvial Erosion Hazard Ordinance. The purpose of adopting Fluvial Erosion Hazard (FEH) ordinance is to limit development in fluvial erosion hazard areas for the purpose of protecting public and private property, and public safety and welfare. Informed by geomorphic channel assessment and management practices endorsed by the New Hampshire Department of Environmental Services (DES) and New Hampshire Geological Survey, this model fluvial erosion hazard ordinance recommends implementation of development requirements and standards that recognize a stream's natural evolution and range of stable conditions.

Ultimately, the most effective way to prevent hazards associated with fluvial erosion is *avoidance by limiting future human presence and investments in river corridors*. The objective of this type of zoning is to guide and encourage measures and improvements that provide increased property and infrastructure protection, and maintain or restore the hydrologic and geomorphic functions and economic values of river systems. The functions and values of healthy river systems include: flood mitigation, water supply, water quality, sediment storage and transport, aquatic habitat, recreation, transportation and aesthetic qualities.

The NHDES Shoreland Water Quality Protection act maintains a protected 250 foot vegetated buffer along the Isinglass River. The adherence to this protected buffer, and conformance with Article 11 of the Barrington Zoning Ordinance, Shoreland Protection District Overlay (SDO), will retain some riparian habitat.

On Sheet 3 of the submitted plans, it appears that the rip/rap outlet structure is shown to be slightly within the 250 Shoreland buffer. It can be anticipated that construction activities will likely further impact this buffer. Recommend re-designing the outlet structure to be pulled back from this buffer in order to allow for compliant construction activities outside of the 250 foot buffer for the Isinglass River.

J. Hill informed the Committee and guests that the intent is to work entirely outside of the protected buffer area to the Isinglass River. Hill stated that the project team can review the placement of the emergency overflow spillway referenced above, and revise as necessary to ensure against potential buffer impacts. Hill continued by informing the Committee that the system is designed to hold up to a 100 year storm event and that a Shoreland permit from NHDES would be in order should impacts to this buffer be unavoidable. Hill stated that he will clarify this concern with the Barrington Planning Board.

K. Grossman inquired if the sediment basin and forebay will service the entire 60 acre site.

J. Hill stated that the sediment forebay with a depth of 1 foot and associated basin with a depth of 6 feet will be constructed during phase 1. Hill informed the Committee and guests that no more than 10 acres of land will be without vegetative cover at any one time. The remaining 50 acres of the site will be grassed and not anticipated to contribute runoff to the pond.

J. Winders expressed concern with true on-site measurement of the 250 shoreland protection buffer to the Isinglass River with regard to steep slopes which exist on this site.

J. Hill stated that no stormwater will be leaving the gravel pit as is demonstrated in the stormwater management report. Hill stated that the project team does not want to create a violation and will do what is necessary to ensure compliance with applicable permits and standards. Hill stated that if the site is found to be contributing to water quality issues, the project's Alteration of Terrain permit would be pulled, and a Cease & Desist order would be issued.

M. Gassas reminded the Committee and guests that the project must adhere to Barrington's potential future conditional approval and associated renewal agreement procedures which would be in place to monitor the site periodically for compliance.

A. Melvin, Barrington Conservation Commissioner and member of the Isinglass River Local Advisory Committee, inquired who will be responsible for the inspection work for this site. Melvin opined that an inspection schedule would be beneficial and informative to residents and other interested parties.

D. Hussey opined that the percolation rates on-site are adequate assured the Committee and guests that plan specifications and calculations are correct.

18. Will the development have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Copeland stated:

No substantial adverse impact to federally protected wetlands as defined by Section 404 of the Clean Water Act will occur as a result of this project. No impacts to wetlands of any size or under any jurisdiction will be impacted by the project.

19. Will the development interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Copeland stated:

According to NHFG and NHB records of rare plants and/or exemplary natural communities in the vicinity of the project site, both the Wood turtle and the state endangered Blanding's turtle may be found in and around abandoned pit areas. The applicant has designated an area of approximately 4 acres on-site to remain exposed gravel in order to provide nesting habitat for the above referenced turtle species. NHFG staff recommended that this preserved exposed gravel area be a minimum of 5-10 acres in size.

As recommended by NHFG staff, project personnel working on the job site should be made aware of the potential to encounter protected turtles in the work area especially during turtle nesting season which extends from late May through the end of June. If Blanding's or other protected turtle species are found nesting in the work area, contact NHFG.

20. Will the development conflict with any local policies or ordinances protecting biological resources, such as a conservation easement, tree preservation policy or ordinance?

Copeland stated:

We do not anticipate the project to conflict with any local policies or ordinances protecting biological resources.

21. Will the development have a substantial adverse effect on Groundwater Quality?

Copeland stated:

The applicant's submitted Alteration of Terrain Permit (AOT) Application lists under section "L" that the project is not within a State Groundwater Protection Area (GPA).

While we do not have any specific data to verify this GPA determination, the project site is located within the Town of Barrington's Groundwater Protection Overlay District. However, the applicant has taken the proper steps to address potential groundwater contamination with regard to required activities to identify drinking water wells located within 2000 feet of the proposed blasting activities, as well as the development of a groundwater quality sampling program to monitor for nitrate and nitrite either in the drinking water supply wells or in other wells that are representative of the drinking water supply wells in the area.

We have reviewed the Pre/Post-Development Drainage Plans, stormwater methodology and groundwater recharge descriptions. The Town's third-party engineering consultant will formally review the applicant's data prior to final approval.

22. Will the development have a substantial adverse effect on Air Quality?

Copeland stated:

According to the December 11, 2012 TF Moran correspondence letter, the operation is not expected to produce or create detrimental odors or significant smoke. The plans include specifications which require the operator to control fugitive dust. Will a water truck be stationed on-site during the growing season or during drought conditions?

J. Hill stated that a water truck may be stationed on-site if conditions warrant.

J. Winders advised against drawing water from the Isinglass River to fill the potential water trucks for this site.

Hazards-Public Health and Safety

23. Will the development expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides or flooding?

Copeland stated:

The December 11, 2012 TF Moran correspondence letter states that the project work area is not proposed to be within the on-site Isinglass River floodplain limits. In addition, we have been informed that topography onsite provides a natural berm between the site and the river. Therefore, we do not anticipate the development will expose people or structures to any adverse impacts.

The project site is located along a section of the Isinglass River which has been deemed as exhibiting very high fluvial erosion hazard characteristics by the New Hampshire Geologic Survey (NHGS). See item #17 above.

24. Will the development result in substantial soil erosion or the loss of topsoil?

Copeland stated:

Yes. This project will result in substantial loss of topsoil and will likely result in some soil erosion during operations. The applicant has devised an erosion control system comprised of stone check dams, slope stabilization blankets, rip/rap, aggregate construction entrance, perimeter silt fencing and a temporary sedimentation basin equipped with a sediment forebay with a depth of one (1) foot.

Note #8 on Sheet 4 of the submitted plans states "The contractor shall be responsible for installing and maintaining all erosion and sediment control devices necessary to control erosion throughout the

duration of the project in accordance with applicable NHDES/EPA standards". While silt-fencing is an acceptable control, we recommend utilizing stump pulp berms, silt sock or hay bale perimeter controls instead of silt fencing. We find that silt fencing is easily compromised and is often times left to deteriorate on-site after project completion.

25. Will the development be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Copeland stated:

After a review of the NRCS Strafford County Soils data layer (See attached *Soils & Aquifer Areas map*), we found the subject lot to be comprised of a mix of Hollis-Charlton, Hinckley Loamy/Gravelly and mixed alluvial soils very similar to the applicant's Web Soils Survey report.

The potential for on/off site landslides, lateral spreading, subsidence, liquefaction and/or collapse is unlikely based on soil types, presence of NHDES Alteration of Terrain Bureau performance oversight, and variety of erosion control technology available to on-site construction and engineering staff.

26. Will the development be located on soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

Copeland stated:

No. The project does not propose the installation of utilities.

Facilities

27. Will the development require new or expanded public facilities or services in the adjacent municipality in order to maintain acceptable service ratios, response times or other performance standards for any of the following public services?

- Fire protection?
- Police protection?
- Schools?
- Parks?
- Solid Waste
- Other public facilities

Copeland stated:

No new or expanded public facilities or services are anticipated in the adjacent municipality as a result of this project.

28. Will the development cause an increase in new or expanded utilities, treatment facilities, storm water, water supplies, etc., that would result in a negative financial or environmental impact to the adjacent municipality?

Copeland stated:

Not anticipating this project will cause an increase in new or expanded utilities, treatment facilities, storm water, water supplies, etc., that would result in a negative financial or environmental impact to the adjacent municipality.

Scenic and Visual Character

29. Will the development convert Prime Farmland to non-agricultural use?

Copeland stated:

No. This proposed gravel excavation project will not impact prime farmland (see attached *Soils map*).

30. Will the development conflict with existing zoning for agricultural use?

Copeland stated:

The project will not conflict with existing zoning for agricultural uses as the Town of Barrington does not zone for agricultural uses.

After some discussion it was determined that the comment above must be revised to state “The project will not conflict with existing zoning for agricultural uses in the Town of Barrington”.

31. Will the development involve other changes in the existing environment, which, due to their location or nature, could result in conversion of farmland, to non-agricultural use?

Copeland stated:

No. This proposed gravel excavation project will not impact prime farmland (see attached *Soils map*).

32. Will the development have a substantial adverse effect on a scenic vista?

Copeland stated:

We do not anticipate that the proposed project will have a substantial adverse visual impact from the Green Hill Road. However, it is possible that scenery from surrounding elevations will be negatively impacted.

33. Will the development substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Copeland stated:

No. This project is not located on a state scenic highway.

M. Gassas informed the Committee and members that Greenhill Road is not a municipal scenic road.

34. Will the development substantially degrade the existing visual character or quality of the site and its surroundings?

Copeland stated:

As the project site is set far back from Green Hill Road, and vegetated buffers will be present on all property boundaries, we do not anticipate degradation of the existing visual character surrounding the site within the Barrington municipal boundary.

It can be anticipated that the project site will no longer exhibit the current visual characteristics once operations commence when viewing the property from the Still Water Circle residential subdivision in Rochester (see attached pictures).

35. Will the development create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Copeland stated:

The project will not be operating after dark during the growing season and therefore is not anticipated to create a new source of substantial light or glare which would adversely affect day or nighttime views in the area during this time. However, the project proposes to operate to some capacity during the winter months which will necessitate alternate operation hours in order to alleviate potential sources of glare created by machinery on-site. We recommend operating hours from October through March be from 8:00AM to 4:00PM.

36. Will the development conflict with any applicable land use plan, policy, or regulation including, but not limited to the master plan or zoning ordinance?

Copeland stated:

The project is located within Barrington's Groundwater Protection Overlay District. As previously stated, the applicant will be required to identify drinking water wells located within 2000 feet of the proposed blasting activities, develop a groundwater quality sampling program to monitor contaminants in the drinking water supply wells or in other wells that are representative of the drinking water supply wells in the area. The plan also calls for pre/post blast water quality monitoring subject to approval by NHDES prior to initiating blasting activities. Additionally, a list of Best Management Practices (BMPs) will be implemented for blasting activities which includes various procedures including, but not limited to, loading practices, spillage, fuel storage, Muck Pile management, and explosives management etc.

The applicant will be required to adhere to all requirements established by the municipal Planning Board and guiding documents and regulations. Gravel operations are a permitted use within the General Residential (GR) Zoning District; compliance is achieved with the Performance Standards specified in Section 7.1 of the Municipal Zoning Ordinance, and the requirements specified in the town's Site Plan Regulations are adhered to. The Planning Board may require an undisturbed and/or vegetated buffer of suitable size be maintained between an excavation site and any adjoining properties if said properties would be adversely impacted by such an operation. In addition, the project proposes to upgrade the gravel drive used to access the project site (Map 201 Lot 57) by expanding its width to 18 feet in compliance with the Barrington Subdivision Regulations.

Federal Storm Water Pollution Prevention Plan (SWPPP) and Spill Prevention Control and Countermeasures (SPCC) plan will be required for this project as well.

37. Will the development conflict with any applicable habitat conservation plan or natural community conservation plan?

Copeland stated:

The Isinglass River Management Plan (2008) was prepared in order to advocate for a management approach which is focused on protecting and conserving the rivers many resources, protecting riparian and aquatic habitat, preserving and improving water quality and quantity, to sustain aquatic and recreational resources while balancing the development of land and water uses with other public needs within the river corridor and watershed.

The December 11, 2012 TF Moran correspondence letter states that the Isinglass River Local Advisory Committee has been provided a copy of the NHDES permit application package and will

be involved in the review of this project. We support this collaboration and highly recommend the applicant review the management plan in order to maximize the protection of the river corridor and the natural communities which depend on it.

Additionally, the Barrington Natural Resource Inventory Report (2009) encourages the Town to support the implementation activities stated within the Isinglass River Management Plan.

The *New Hampshire Wildlife Action Plan* (WAP) lists the subject lot as being located within an area deemed as supporting the “Highest Ranked Habitat in the Biological Region” and “Supporting Landscapes” (see attached *Wildlife Protection Areas map*).

Housing and Population Growth

38. Will the development induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Copeland stated:

The proposed project does not induce substantial population growth in this area, either directly or indirectly.

39. Will the development displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

Copeland stated:

The proposed project does not displace substantial numbers of existing housing necessitating replacement housing elsewhere.

40. Will the development displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

Copeland stated:

No. We do not anticipate that this project will result in the displacement of substantial numbers of people, necessitating the construction of replacement housing elsewhere.

41. Is the development compatible with existing or planned cross border development?

Copeland stated:

The City of Rochester is the closest abutting community to the project site. The only cross-border development is a residential subdivision known as Still Water Circle located within Rochester's Agricultural Zoning District.

Considering the proposed time schedule (Phase 1 & 2 proposed to last at least two (2) years each – Total duration of project expected to last a minimum of 12 years), use of heavy machinery, blasting, crushing and hauling activities, and the proposed 200 foot vegetated buffer between the ultimate limit of the project site and Still Water Circle residences, the project is not compatible with the existing cross-border development.

Rochester City staff and residents will be able to discuss potential concerns at the public hearing on January 8, 2012 at 7:00pm in the Early Childhood Learning Center.

T. Clark made a motion to approve the December 21, 2012 SRPC Technical Review Letter as amended and empowered SRPC staff to submit the Technical Review Letter to the Town of Barrington prior to the Town's January 8, 2012 Public Hearing. S. Keans seconded the motion which passed unanimously with a vote of three (3), to zero (0) in favor.

2. Other Business

S. Keans made a motion to approve both the April 16, 2012 and October 3, 2012 SRPC Regional Impact Committee Meeting Minutes as submitted. T. Clark seconded the motion which passed unanimously with a vote of three (3), to zero (0) in favor.

3. Citizen's Forum

Chair E. Jansen opened up the meeting to public comment.

Bernard Martin, a resident of Still Water Circle, approached the Committee to express several concerns he has with regard to this project. Martin stated that he is concerned with the proposed tree clearing activities as the loss of vegetation will take away from buffering that residents of Still Water Circle enjoy today. Martin stated that he is concerned for the amount of noise which will be generated from the project, now lacking buffering, odors from on-site machinery, impacts to the Isinglass River and wildlife, as well as contamination impacts which may occur after soil disturbance due to the existence of an illegal rifle range which has historically existed on the property. Martin continued by informing the Committee and guests about his concerns for blasting activities and potential impacts to underground gas line in Still Water Circle, potential impacts to property values and City tax rates, and impacts to the roadways and bridge on Greenhill Road. Lastly, Martin inquired if the site operator is going to wait for the "buffer" to Still Water Circle to establish before commencing activities as he is of the opinion that the vegetation associated with this buffer is already deficient.

M. Gassas informed Mr. Martin and the Committee that the NHDOT District 6 Bridge Engineer will be further reviewing the bridge capabilities in light of truck specifications which have been recently submitted by the applicant. Gassas ensured Martin that this issue will require further review. Gassas also informed Martin that the Town Fire Department would be investigating the possibility gas line impacts as part of the Site Review.

D. Hussey informed Mr. Martin and the Committee that trees will be planted to supplement the buffer. All regulative requirements will be accomplished first, and then whatever is required of the operator to be a "good neighbor" to surrounding properties will be implemented.

J. Hill added that orange construction fencing will be placed at the clearing limits to ensure against potential encroachment into the buffer.

Committee member S. Keans inquired if any thought has been given to potential diversion issues for trucking operations once they have left the project site.

J. Hill informed the Committee and guests that the trucks will be directly routed to Routes 125/202 unless they are on a delivery run.

J. Winders inquired if soundproof fencing could be installed along the northern property boundary to enhance protections to the Still Water Circle residences.

D. Hussey stated that the proposed ground floor of the construction area will be well below the original ground at the northern portion of the subject lot. Hussey stated that the project engineers feel this elevation difference will provide a natural sound barrier. Hussey stated proper steps will be taken to be good neighbors to abutting properties.

T. Clark inquired if the applicant has investigated the potential for decrease in property values of abutters as a result of the project.

D. Hussey stated that the project team has consulted an appraiser to look at other similar projects and impacts they may have had on surrounding property values. Hussey stated that the gravel pit of today is very different from your "grandfathers" gravel pit. They are heavily regulated and much less of an impact on surrounding properties when compared with historical operations of this type.

K. Grossman inquired how deep the water table is on the project site.

J. Hill stated that test borings were performed on-site initially, revealing a seasonal water table depth of 20'-40'. This data was used to design the Site Plan and specifications. A minimum of 4'-6' of material will be left over the water table at any time. Additional test pits will be dug to supplement the initial data once operations commence.

A. Melvin inquired as to what protections will be implemented to ensure against impacts to the water table. J. Hill informed the Committee and guests that a 2% grade will be maintained at the floor of the pit to alleviate potential ponding.

Rochester Planning Board member James Gray expressed concern for impacts to area roadways, with emphasis on those in Rochester, as a result of regular 50 ton loads being transported from the site into the surrounding road network. Gray inquired if Impact Fee discussions have taken place to address this concern.

M. Gassas informed the Committee and members of the public that the City of Rochester has the ability to post their City roadways for weight limit thresholds in order to divert heavy truck traffic from the site away from smaller roadways. Gassas stated that the Greenhill Road/125 intersection will be signalized during the spring of 2013, the Greenhill Road/202 intersection will be investigated for appropriate turning radii, and the entrance to the project site will be reviewed to ensure that sufficient width exists for trucks entering and exiting the site.

J. Gray opined that posting the roadways for weight capacity will only force the trucks onto other streets within the network. Gray advised that this issue should be discussed during the municipal planning process in order to generate an appropriate maintenance agreement that will address the issue beforehand rather than after-the-fact.

S. Keans opined that the project does not appear to have serious roadway implications for the City of Rochester.

C. Copeland stated that the Greenhill Road/Route 125 intersection is one of the most dangerous intersections in the region; which is why the signalization project has been moved to the top of the priority list for 2013. As a regional commuter, Copeland expressed concerns for impacts to safety associated with regular heavy truck traffic in this section of Route 125.

J. Winders inquired as to what the intention is for the disposal of on-site "Muck Piles" left over from blasting activities. J. Hill informed the Committee and members of the public that the on-site operator

will treat and dispose of the "Muck Piles" in the appropriate manner as listed in the operations notes associated with the Site Plan.

4. Meeting Adjournment

T. Clark made a motion to adjourn the December 21, 2012 Strafford Regional Planning Commission Regional Impact Committee meeting at 3:15 PM. S. Keans seconded the motion which passed unanimously with a vote of three (3), to zero (0) in favor.

Sincerely,



Gregory M. Jones
Strafford Regional Planning Commission
Regional Planner

DRAFT