

APPENDIX C

Farmland Protection Act

FARMLAND CONVERSION IMPACT RATING

PART I <i>(To be completed by Federal Agency)</i>	Date Of Land Evaluation Request
Name Of Project	Federal Agency Involved
Proposed Land Use	County And State

PART II <i>(To be completed by NRCS)</i>		Date Request Received By NRCS	
Does the site contain prime, unique, statewide or local important farmland? <i>(If no, the FPPA does not apply -- do not complete additional parts of this form).</i>	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Average Farm Size
Major Crop(s)	Farmable Land In Govt. Jurisdiction Acres: %	Amount Of Farmland As Defined in FPPA Acres: %	
Name Of Land Evaluation System Used	Name Of Local Site Assessment System	Date Land Evaluation Returned By NRCS	

PART III <i>(To be completed by Federal Agency)</i>	Alternative Site Rating			
	Site A	Site B	Site C	Site D
A. Total Acres To Be Converted Directly				
B. Total Acres To Be Converted Indirectly				
C. Total Acres In Site				

PART IV <i>(To be completed by NRCS)</i> Land Evaluation Information				
A. Total Acres Prime And Unique Farmland				
B. Total Acres Statewide And Local Important Farmland				
C. Percentage Of Farmland In County Or Local Govt. Unit To Be Converted				
D. Percentage Of Farmland In Govt. Jurisdiction With Same Or Higher Relative Value				

PART V <i>(To be completed by NRCS)</i> Land Evaluation Criterion Relative Value Of Farmland To Be Converted <i>(Scale of 0 to 100 Points)</i>				
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PART VI <i>(To be completed by Federal Agency)</i> Site Assessment Criteria <i>(These criteria are explained in 7 CFR 658.5(b))</i>	Maximum Points				
1. Area In Nonurban Use					
2. Perimeter In Nonurban Use					
3. Percent Of Site Being Farmed					
4. Protection Provided By State And Local Government					
5. Distance From Urban Builtup Area					
6. Distance To Urban Support Services					
7. Size Of Present Farm Unit Compared To Average					
8. Creation Of Nonfarmable Farmland					
9. Availability Of Farm Support Services					
10. On-Farm Investments					
11. Effects Of Conversion On Farm Support Services					
12. Compatibility With Existing Agricultural Use					
TOTAL SITE ASSESSMENT POINTS	160				

PART VII <i>(To be completed by Federal Agency)</i>					
Relative Value Of Farmland <i>(From Part V)</i>	100				
Total Site Assessment <i>(From Part VI above or a local site assessment)</i>	160				
TOTAL POINTS <i>(Total of above 2 lines)</i>	260				

Site Selected:	Date Of Selection	Was A Local Site Assessment Used? Yes <input type="checkbox"/> No <input type="checkbox"/>
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Reason For Selection:

STEPS IN THE PROCESSING THE FARMLAND AND CONVERSION IMPACT RATING FORM

Step 1 – Federal agencies involved in proposed projects that may convert farmland, as defined in the Farmland Protection Policy Act (FPPA) to nonagricultural uses, will initially complete Parts I and III of the form.

Step 2 – Originator will send copies A, B and C together with maps indicating locations of site(s), to the Natural Resources Conservation Service (NRCS) local field office and retain copy D for their files. (Note: NRCS has a field office in most counties in the U.S. The field office is usually located in the county seat. A list of field office locations are available from the NRCS State Conservationist in each state).

Step 3 – NRCS will, within 45 calendar days after receipt of form, make a determination as to whether the site(s) of the proposed project contains prime, unique, statewide or local important farmland.

Step 4 – In cases where farmland covered by the FPPA will be converted by the proposed project, NRCS field offices will complete Parts II, IV and V of the form.

Step 5 – NRCS will return copy A and B of the form to the Federal agency involved in the project. (Copy C will be retained for NRCS records).

Step 6 – The Federal agency involved in the proposed project will complete Parts VI and VII of the form.

Step 7 – The Federal agency involved in the proposed project will make a determination as to whether the proposed conversion is consistent with the FPPA and the agency's internal policies.

INSTRUCTIONS FOR COMPLETING THE FARMLAND CONVERSION IMPACT RATING FORM

Part I: In completing the "County And State" questions list all the local governments that are responsible for local land controls where site(s) are to be evaluated.

Part III: In completing item B (Total Acres To Be Converted Indirectly), include the following:

1. Acres not being directly converted but that would no longer be capable of being farmed after the conversion, because the conversion would restrict access to them.
2. Acres planned to receive services from an infrastructure project as indicated in the project justification (e.g. highways, utilities) that will cause a direct conversion.

Part VI: Do not complete Part VI if a local site assessment is used.

Assign the maximum points for each site assessment criterion as shown in § 658.5 (b) of CFR. In cases of corridor-type projects such as transportation, powerline and flood control, criteria #5 and #6 will not apply and will, be weighed zero, however, criterion #8 will be weighed a maximum of 25 points, and criterion #11 a maximum of 25 points.

Individual Federal agencies at the national level, may assign relative weights among the 12 site assessment criteria other than those shown in the FPPA rule. In all cases where other weights are assigned relative adjustments must be made to maintain the maximum total weight points at 160.

In rating alternative sites, Federal agencies shall consider each of the criteria and assign points within the limits established in the FPPA rule. Sites most suitable for protection under these criteria will receive the highest total scores, and sites least suitable, the lowest scores.

Part VII: In computing the "Total Site Assessment Points" where a State or local site assessment is used and the total maximum number of points is other than 160, adjust the site assessment points to a base of 160. Example: if the Site Assessment maximum is 200 points, and alternative Site "A" is rated 180 points:

Total points assigned Site A = $\frac{180}{200} \times 160 = 144$ points for Site "A."

Maximum points possible 200

Site Assessment Scoring for the Twelve Factors Used in FPPA

The Site Assessment criteria used in the Farmland Protection Policy Act (FPPA) rule are designed to assess important factors other than the agricultural value of the land when determining which alternative sites should receive the highest level of protection from conversion to non agricultural uses.

Twelve factors are used for Site Assessment and ten factors for corridor-type sites. Each factor is listed in an outline form, without detailed definitions or guidelines to follow in the rating process. The purpose of this document is to expand the definitions of use of each of the twelve Site Assessment factors so that all persons can have a clear understanding as to what each factor is intended to evaluate and how points are assigned for given conditions.

In each of the 12 factors a number rating system is used to determine which sites deserve the most protection from conversion to non-farm uses. The higher the number value given to a proposed site, the more protection it will receive. The maximum scores are 10, 15 and 20 points, depending upon the relative importance of each particular question. If a question significantly relates to why a parcel of land should not be converted, the question has a maximum possible protection value of 20, whereas a question which does not have such a significant impact upon whether a site would be converted, would have fewer maximum points possible, for example 10.

The following guidelines should be used in rating the twelve Site Assessment criteria:

1. How much land is in non-urban use within a radius of 1.0 mile from where the project is intended?

More than 90 percent:	15 points
90-20 percent:	14 to 1 points
Less than 20 percent:	0 points

This factor is designed to evaluate the extent to which the area within one mile of the proposed site is non-urban area. For purposes of this rule, "non-urban" should include:

- Agricultural land (crop-fruit trees, nuts, oilseed)
- Range land
- Forest land
- Golf Courses
- Non paved parks and recreational areas
- Mining sites
- Farm Storage
- Lakes, ponds and other water bodies
- Rural roads, and through roads without houses or buildings
- Open space
- Wetlands
- Fish production
- Pasture or hayland

Urban uses include:

- Houses (other than farm houses)
- Apartment buildings
- Commercial buildings
- Industrial buildings
- Paved recreational areas (i.e. tennis courts)
- Streets in areas with 30 structures per 40 acres
- Gas stations

- Equipment, supply stores
- Off-farm storage
- Processing plants
- Shopping malls
- Utilities/Services
- Medical buildings

In rating this factor, an area one-mile from the outer edge of the proposed site should be outlined on a current photo; the areas that are urban should be outlined. For rural houses and other buildings with unknown sizes, use 1 and 1/3 acres per structure. For roads with houses on only one side, use one half of road for urban and one half for non-urban.

The purpose of this rating process is to insure that the most valuable and viable farmlands are protected from development projects sponsored by the Federal Government. With this goal in mind, factor S1 suggests that the more agricultural lands surrounding the parcel boundary in question, the more protection from development this site should receive. Accordingly, a site with a large quantity of non-urban land surrounding it will receive a greater number of points for protection from development. Thus, where more than 90 percent of the area around the proposed site (do not include the proposed site in this assessment) is non-urban, assign 15 points. Where 20 percent or less is non-urban, assign 0 points. Where the area lies between 20 and 90 percent non-urban, assign appropriate points from 14 to 1, as noted below.

Percent Non-Urban Land within 1 mile	Points
90 percent or greater	15
85 to 89 percent	14
80 to 84 percent	13
75 to 79 percent	12
70 to 74 percent	11
65 to 69 percent	10
60 to 64 percent	9
55 to 59 percent	8
50 to 54 percent	7
45 to 49 percent	6
40 to 44 percent	5
35 to 39 percent	4
30 to 24 percent	3
25 to 29 percent	2
21 to 24 percent	1
20 percent or less	0

2. How much of the perimeter of the site borders on land in non-urban use?

More than 90 percent:	10 points
90 to 20 percent:	9 to 1 point(s)
Less than 20 percent:	0 points

This factor is designed to evaluate the extent to which the land adjacent to the proposed site is non-urban use. Where factor #1 evaluates the general location of the proposed site, this factor evaluates the immediate perimeter of the site. The definition of urban and non-urban uses in factor #1 should be used for this factor.

In rating the second factor, measure the perimeter of the site that is in non-urban and urban use. Where more than 90 percent of the perimeter is in non-urban use, score this factor 10 points. Where less than 20 percent, assign 0 points. If a road is next to the perimeter, class the area according to the

use on the other side of the road for that area. Use 1 and 1/3 acre per structure if not otherwise known. Where 20 to 90 percent of the perimeter is non-urban, assign points as noted below:

Percentage of Perimeter Bordering Land	Points
90 percent or greater	10
82 to 89 percent	9
74 to 81 percent	8
65 to 73 percent	7
58 to 65 percent	6
50 to 57 percent	5
42 to 49 percent	4
34 to 41 percent	3
27 to 33 percent	2
21 to 26 percent	1
20 percent or Less	0

3. How much of the site has been farmed (managed for a scheduled harvest or timber activity) more than five of the last ten years?

More than 90 percent:	20 points
90 to 20 percent:	19 to 1 point(s)
Less than 20 percent:	0 points

This factor is designed to evaluate the extent to which the proposed conversion site has been used or managed for agricultural purposes in the past 10 years.

Land is being farmed when it is used or managed for food or fiber, to include timber products, fruit, nuts, grapes, grain, forage, oil seed, fish and meat, poultry and dairy products.

Land that has been left to grow up to native vegetation without management or harvest will be considered as abandoned and therefore not farmed. The proposed conversion site should be evaluated and rated according to the percent, of the site farmed.

If more than 90 percent of the site has been farmed 5 of the last 10 years score the site as follows:

Percentage of Site Farmed	Points
90 percent or greater	20
86 to 89 percent	19
82 to 85 percent	18
78 to 81 percent	17
74 to 77 percent	16
70 to 73 percent	15
66 to 69 percent	14
62 to 65 percent	13
58 to 61 percent	12
54 to 57 percent	11
50 to 53 percent	10
46 to 49 percent	9
42 to 45 percent	8
38 to 41 percent	7
35 to 37 percent	6
32 to 34 percent	5
29 to 31 percent	4
26 to 28 percent	3

23 to 25 percent	2
20 to 22 percent percent or Less	1
Less than 20 percent	0

4. Is the site subject to state or unit of local government policies or programs to protect farmland or covered by private programs to protect farmland?

Site is protected:	20 points
Site is not protected:	0 points

This factor is designed to evaluate the extent to which state and local government and private programs have made efforts to protect this site from conversion.

State and local policies and programs to protect farmland include:

State Policies and Programs to Protect Farmland

1. Tax Relief:

A. Differential Assessment: Agricultural lands are taxed on their agricultural use value, rather than at market value. As a result, farmers pay fewer taxes on their land, which helps keep them in business, and therefore helps to insure that the farmland will not be converted to nonagricultural uses.

1. Preferential Assessment for Property Tax: Landowners with parcels of land used for agriculture are given the privilege of differential assessment.
2. Deferred Taxation for Property Tax: Landowners are deterred from converting their land to nonfarm uses, because if they do so, they must pay back taxes at market value.
3. Restrictive Agreement for Property Tax: Landowners who want to receive Differential Assessment must agree to keep their land in - eligible use.

B. Income Tax Credits

Circuit Breaker Tax Credits: Authorize an eligible owner of farmland to apply some or all of the property taxes on his or her farmland and farm structures as a tax credit against the owner's state income tax.

C. Estate and Inheritance Tax Benefits

Farm Use Valuation for Death Tax: Exemption of state tax liability to eligible farm estates.

2. "Right to farm" laws:

Prohibits local governments from enacting laws which will place restrictions upon normally accepted farming practices, for example, the generation of noise, odor or dust.

3. Agricultural Districting:

Wherein farmers voluntarily organize districts of agricultural land to be legally recognized geographic areas. These farmers receive benefits, such as protection from annexation, in exchange for keeping land within the district for a given number of years.

4. Land Use Controls: Agricultural Zoning.

Types of Agricultural Zoning Ordinances include:

- A. Exclusive: In which the agricultural zone is restricted to only farm-related dwellings, with, for example, a minimum of 40 acres per dwelling unit.
- B. Non-Exclusive: In which non-farm dwellings are allowed, but the density remains low, such as 20 acres per dwelling unit.

Additional Zoning techniques include:

- A. Sliding Scale: This method looks at zoning according to the total size of the parcel owned. For example, the number of dwelling units per a given number of acres may change from county to county according to the existing land acreage to dwelling unit ratio of surrounding parcels of land within the specific area.
- B. Point System or Numerical Approach: Approaches land use permits on a case by case basis.

LESA: The LESA system (Land Evaluation-Site Assessment) is used as a tool to help assess options for land use on an evaluation of productivity weighed against commitment to urban development.
- C. Conditional Use: Based upon the evaluation on a case by case basis by the Board of Zoning Adjustment. Also may include the method of using special land use permits.

5. Development Rights:

- A. Purchase of Development Rights (PDR): Where development rights are purchased by Government action.

Buffer Zoning Districts: Buffer Zoning Districts are an example of land purchased by Government action. This land is included in zoning ordinances in order to preserve and protect agricultural lands from non-farm land uses encroaching upon them.

- B. Transfer of Development Rights (TDR): Development rights are transferable for use in other locations designated as receiving areas. TDR is considered a locally based action (not state), because it requires a voluntary decision on the part of the individual landowners.

6. Governor's Executive Order: Policy made by the Governor, stating the importance of agriculture, and the preservation of agricultural lands. The Governor orders the state agencies to avoid the unnecessary conversion of important farmland to nonagricultural uses.

7. Voluntary State Programs:

- A. California's Program of Restrictive Agreements and Differential Assessments: The California Land Conservation Act of 1965, commonly known as the Williamson Act, allows cities, counties and individual landowners to form agricultural preserves and enter into contracts for 10 or more years to insure that these parcels of land remain strictly for agricultural use. Since 1972 the Act has extended eligibility to recreational and open space lands such as scenic highway corridors, salt ponds and wildlife preserves. These contractually restricted lands may be taxed differentially for their real value. One hundred-acre districts constitute the minimum land size eligible.

Suggestion: An improved version of the Act would state that if the land is converted after the contract expires, the landowner must pay the difference in the taxes between market value for the land and the agricultural tax value which he or she had been

paying under the Act. This measure would help to insure that farmland would not be converted after the 10 year period ends.

- B. Maryland Agricultural Land Preservation Program: Agricultural landowners within agricultural districts have the opportunity to sell their development rights to the Maryland Land Preservation Foundation under the agreement that these landowners will not subdivide or develop their land for an initial period of five years. After five years the landowner may terminate the agreement with one year notice.

As is stated above under the California Williamson Act, the landowner should pay the back taxes on the property if he or she decides to convert the land after the contract expires, in order to discourage such conversions.

- C. Wisconsin Income Tax Incentive Program: The Wisconsin Farmland Preservation Program of December 1977 encourages local jurisdictions in Wisconsin to adopt agricultural preservation plans or exclusive agricultural district zoning ordinances in exchange for credit against state income tax and exemption from special utility assessment. Eligible candidates include local governments and landowners with at least 35 acres of land per dwelling unit in agricultural use and gross farm profits of at least \$6,000 per year, or \$18,000 over three years.

8. Mandatory State Programs:

- A. The Environmental Control Act in the state of Vermont was adopted in 1970 by the Vermont State Legislature. The Act established an environmental board with 9 members (appointed by the Governor) to implement a planning process and a permit system to screen most subdivisions and development proposals according to specific criteria stated in the law. The planning process consists of an interim and a final Land Capability and Development Plan, the latter of which acts as a policy plan to control development. The policies are written in order to:
- prevent air and water pollution;
 - protect scenic or natural beauty, historic sites and rare and irreplaceable natural areas; and
 - consider the impacts of growth and reduction of development on areas of primary agricultural soils.
- B. The California State Coastal Commission: In 1976 the Coastal Act was passed to establish a permanent Coastal Commission with permit and planning authority. The purpose of the Coastal Commission was and is to protect the sensitive coastal zone environment and its resources, while accommodating the social and economic needs of the state. The Commission has the power to regulate development in the coastal zones by issuing permits on a case by case basis until local agencies can develop their own coastal plans, which must be certified by the Coastal Commission.
- C. Hawaii's Program of State Zoning: In 1961, the Hawaii State Legislature established Act 187, the Land Use Law, to protect the farmland and the welfare of the local people of Hawaii by planning to avoid "unnecessary urbanization". The Law made all state lands into four districts: agricultural, conservation, rural and urban. The Governor appointed members to a State Land Use Commission, whose duties were to uphold the Law and form the boundaries of the four districts. In addition to state zoning, the Land Use Law introduced a program of Differential Assessment, wherein agricultural landowners paid taxes on their land for its agricultural use value, rather than its market value.
- D. The Oregon Land Use Act of 1973: This act established the Land Conservation and Development Commission (LCDC) to provide statewide planning goals and guidelines.

Under this Act, Oregon cities and counties are each required to draw up a comprehensive plan, consistent with statewide planning goals. Agricultural land preservation is high on the list of state goals to be followed locally.

If the proposed site is subject to or has used one or more of the above farmland protection programs or policies, score the site 20 points. If none of the above policies or programs apply to this site, score 0 points.

5. How close is the site to an urban built-up area?

The site is 2 miles or more from an urban built-up area	15 points
The site is more than 1 mile but less than 2 miles from an urban built-up area	10 points
The site is less than 1 mile from, but is not adjacent to an urban built-up area	5 points
The site is adjacent to an urban built-up area	0 points

This factor is designed to evaluate the extent to which the proposed site is located next to an existing urban area. The urban built-up area must be 2500 population. The measurement from the built-up area should be made from the point at which the density is 30 structures per 40 acres and with no open or non-urban land existing between the major built-up areas and this point. Suburbs adjacent to cities or urban built-up areas should be considered as part of that urban area.

For greater accuracy, use the following chart to determine how much protection the site should receive according to its distance from an urban area. See chart below:

Distance From Perimeter of Site to Urban Area	Points
More than 10,560 feet	15
9,860 to 10,559 feet	14
9,160 to 9,859 feet	13
8,460 to 9,159 feet	12
7,760 to 8,459 feet	11
7,060 to 7,759 feet	10
6,360 to 7,059 feet	9
5,660 to 6,359 feet	8
4,960 to 5,659 feet	7
4,260 to 4,959 feet	6
3,560 to 4,259 feet	5
2,860 to 3,559 feet	4
2,160 to 2,859 feet	3
1,460 to 2,159 feet	2
760 to 1,459 feet	1
Less than 760 feet (adjacent)	0

6. How close is the site to water lines, sewer lines and/or other local facilities and services whose capacities and design would promote nonagricultural use?

None of the services exist nearer than 3 miles from the site	15 points
Some of the services exist more than one but less than 3 miles from the site	10 points
All of the services exist within 1/2 mile of the site	0 points

This question determines how much infrastructure (water, sewer, etc.) is in place which could facilitate nonagricultural development. The fewer facilities in place, the more difficult it is to develop an area. Thus, if a proposed site is further away from these services (more than 3 miles distance away), the site should be awarded the highest number of points (15). As the distance of the parcel of land to services decreases, the number of points awarded declines as well. So, when the site is equal to or further than 1 mile but less than 3 miles away from services, it should be given 10 points. Accordingly, if this distance is 1/2 mile to less than 1 mile, award 5 points; and if the distance from land to services is less than 1/2 mile, award 0 points.

Distance to public facilities should be measured from the perimeter of the parcel in question to the nearest site(s) where necessary facilities are located. If there is more than one distance (i.e. from site to water and from site to sewer), use the average distance (add all distances and then divide by the number of different distances to get the average).

Facilities which could promote nonagricultural use include:

- Water lines
- Sewer lines
- Power lines
- Gas lines
- Circulation (roads)
- Fire and police protection
- Schools

7. Is the farm unit(s) containing the site (before the project) as large as the average-size farming unit in the county? (Average farm sizes in each county are available from the NRCS field offices in each state. Data are from the latest available Census of Agriculture, Acreage of Farm Units in Operation with \$1,000 or more in sales.)

As large or larger:	10 points
Below average: Deduct 1 point for each 5 percent below the average, down to 0 points if 50 percent or more is below average	9 to 0 points

This factor is designed to determine how much protection the site should receive, according to its size in relation to the average size of farming units within the county. The larger the parcel of land, the more agricultural use value the land possesses, and vice versa. Thus, if the farm unit is as large or larger than the county average, it receives the maximum number of points (10). The smaller the parcel of land compared to the county average, the fewer number of points given. Please see below:

Parcel Size in Relation to Average County Size	Points
Same size or larger than average (100 percent)	10
95 percent of average	9
90 percent of average	8
85 percent of average	7
80 percent of average	6
75 percent of average	5
70 percent of average	4
65 percent of average	3
60 percent of average	2
55 percent of average	1
50 percent or below county average	0

State and local Natural Resources Conservation Service offices will have the average farm size information, provided by the latest available Census of Agriculture data

8. If this site is chosen for the project, how much of the remaining land on the farm will become non-farmable because of interference with land patterns?

Acreage equal to more than 25 percent of acres directly converted by the project	10 points
Acreage equal to between 25 and 5 percent of the acres directly converted by the project	9 to 1 point(s)
Acreage equal to less than 5 percent of the acres directly converted by the project	0 points

This factor tackles the question of how the proposed development will affect the rest of the land on the farm. The site which deserves the most protection from conversion will receive the greatest number of points, and vice versa. For example, if the project is small, such as an extension on a house, the rest of the agricultural land would remain farmable, and thus a lower number of points is given to the site. Whereas if a large-scale highway is planned, a greater portion of the land (not including the site) will become non-farmable, since access to the farmland will be blocked; and thus, the site should receive the highest number of points (10) as protection from conversion.

Conversion uses of the Site Which Would Make the Rest of the Land Non-Farmable by Interfering with Land Patterns

Conversions which make the rest of the property nonfarmable include any development which blocks accessibility to the rest of the site. Examples are highways, railroads, dams or development along the front of a site restricting access to the rest of the property.

The point scoring is as follows:

Amount of Land Not Including the Site Which Will Become Non-Farmable	Points
25 percent or greater	10
23 - 24 percent	9
21 - 22 percent	8
19 - 20 percent	7
17 - 18 percent	6
15 - 16 percent	5
13 - 14 percent	4
11 - 12 percent	3
9 - 11 percent	2
6 - 8 percent	1
5 percent or less	0

9. Does the site have available adequate supply of farm support services and markets, i.e., farm suppliers, equipment dealers, processing and storage facilities and farmer's markets?

All required services are available	5 points
Some required services are available	4 to 1 point(s)
No required services are available	0 points

This factor is used to assess whether there are adequate support facilities, activities and industry to keep the farming business in business. The more support facilities available to the agricultural

landowner, the more feasible it is for him or her to stay in production. In addition, agricultural support facilities are compatible with farmland. This fact is important, because some land uses are not compatible; for example, development next to farmland can be dangerous to the welfare of the agricultural land, as a result of pressure from the neighbors who often do not appreciate the noise, smells and dust intrinsic to farmland. Thus, when all required agricultural support services are available, the maximum number of points (5) are awarded. When some services are available, 4 to 1 point(s) are awarded; and consequently, when no services are available, no points are given. See below:

Percent of Services Available	Points
100 percent	5
75 to 99 percent	4
50 to 74 percent	3
25 to 49 percent	2
1 to 24 percent	1
No services	0

10. Does the site have substantial and well-maintained on farm investments such as barns, other storage buildings, fruit trees and vines, field terraces, drainage, irrigation, waterways, or other soil and water conservation measures?

High amount of on-farm investment	20 points
Moderate amount of non-farm investment	19 to 1 point(s)
No on-farm investments	0 points

This factor assesses the quantity of agricultural facilities in place on the proposed site. If a significant agricultural infrastructure exists, the site should continue to be used for farming, and thus the parcel will receive the highest amount of points towards protection from conversion or development. If there is little on farm investment, the site will receive comparatively less protection. See-below:

Amount of On-farm Investment	Points
As much or more than necessary to maintain production (100 percent)	20
95 to 99 percent	19
90 to 94 percent	18
85 to 89 percent	17
80 to 84 percent	16
75 to 79 percent	15
70 to 74 percent	14
65 to 69 percent	13
60 to 64 percent	12
55 to 59 percent	11
50 to 54 percent	10
45 to 49 percent	9
40 to 44 percent	8
35 to 39 percent	7
30 to 34 percent	6
25 to 29 percent	5
20 to 24 percent	4
15 to 19 percent	3
10 to 14 percent	2
5 to 9 percent	1
0 to 4 percent	0

11. Would the project at this site, by converting farmland to nonagricultural use, reduce the support for farm support services so as to jeopardize the continued existence of these support services and thus, the viability of the farms remaining in the area?

Substantial reduction in demand for support services if the site is converted	10 points
Some reduction in demand for support services if the site is converted	9 to 1 point(s)
No significant reduction in demand for support services if the site is converted	0 points

This factor determines whether there are other agriculturally related activities, businesses or jobs dependent upon the working of the pre-converted site in order for the others to remain in production. The more people and farming activities relying upon this land, the more protection it should receive from conversion. Thus, if a substantial reduction in demand for support services were to occur as a result of conversions, the proposed site would receive a high score of 10; some reduction in demand would receive 9 to 1 point(s), and no significant reduction in demand would receive no points.

Specific points are outlined as follows:

Amount of Reduction in Support Services if Site is Converted to Nonagricultural Use	Points
Substantial reduction (100 percent)	10
90 to 99 percent	9
80 to 89 percent	8
70 to 79 percent	7
60 to 69 percent	6
50 to 59 percent	5
40 to 49 percent	4
30 to 39 percent	3
20 to 29 percent	2
10 to 19 percent	1
No significant reduction (0 to 9 percent)	0

12. Is the kind and intensity of the proposed use of the site sufficiently incompatible with agriculture that it is likely to contribute to the eventual conversion of the surrounding farmland to nonagricultural use?

Proposed project is incompatible with existing agricultural use of surrounding farmland	10 points
Proposed project is tolerable of existing agricultural use of surrounding farmland	9 to 1 point(s)
Proposed project is fully compatible with existing agricultural use of surrounding farmland	0 points

Factor 12 determines whether conversion of the proposed agricultural site will eventually cause the conversion of neighboring farmland as a result of incompatibility of use of the first with the latter. The more incompatible the proposed conversion is with agriculture, the more protection this site receives from conversion. Therefore, if the proposed conversion is incompatible with agriculture, the site receives 10 points. If the project is tolerable with agriculture, it receives 9 to 1 points; and if the proposed conversion is compatible with agriculture, it receives 0 points.

CORRIDOR - TYPE SITE ASSESSMENT CRITERIA

The following criteria are to be used for projects that have a linear or corridor - type site configuration connecting two distant points, and crossing several different tracts of land. These include utility lines, highways, railroads, stream improvements, and flood control systems. Federal agencies are to assess the suitability of each corridor-type site or design alternative for protection as farmland along with the land evaluation information.

For Water and Waste Programs, corridor analyses are not applicable for distribution or collection networks. Analyses are applicable for transmission or trunk lines where placement of the lines are flexible.

(1) How much land is in nonurban use within a radius of 1.0 mile form where the project is intended?

- | | |
|--------------------------|-----------------------|
| (2) More than 90 percent | (3) 15 points |
| (4) 90 to 20 percent | (5) 14 to 1 point(s). |
| (6) Less than 20 percent | (7) 0 points |

(2) How much of the perimeter of the site borders on land in nonurban use?

- | | |
|--------------------------|-------------------|
| (3) More than 90 percent | (4) 10 point(s) |
| (5) 90 to 20 percent | (6) 9 to 1 points |
| (7) less than 20 percent | (8) 0 points |

(3) How much of the site has been farmed (managed for a scheduled harvest or timber activity) more than five of the last 10 years?

- | | |
|--------------------------|----------------------|
| (4) More than 90 percent | (5) 20 points |
| (6) 90 to 20 percent | (7) 19 to 1 point(s) |
| (8) Less than 20 percent | (9) 0 points |

(4) Is the site subject to state or unit of local government policies or programs to protect farmland or covered by private programs to protect farmland?

- | | |
|-----------------------|-----------|
| Site is protected | 20 points |
| Site is not protected | 0 points |

(5) Is the farm unit(s) containing the site (before the project) as large as the average - size farming unit in the County? (Average farm sizes in each county are available from the NRCS field offices in each state. Data are from the latest available Census of Agriculture, Acreage of Farm Units in Operation with \$1,000 or more in sales.)

- | | |
|---|---------------|
| As large or larger | 10 points |
| Below average deduct 1 point for each 5 percent below the average, down to 0 points if 50 percent or more below average | 9 to 0 points |

(6) If the site is chosen for the project, how much of the remaining land on the farm will become non-farmable because of interference with land patterns?

- | | |
|--|------------------|
| Acreage equal to more than 25 percent of acres directly converted by the project | 25 points |
| Acreage equal to between 25 and 5 percent of the acres directly converted by the project | 1 to 24 point(s) |
| Acreage equal to less than 5 percent of the acres directly converted by the project | 0 points |

(7) Does the site have available adequate supply of farm support services and markets, i.e., farm suppliers, equipment dealers, processing and storage facilities and farmer's markets?

All required services are available	5 points
Some required services are available	4 to 1 point(s)
No required services are available	0 points

(8) Does the site have substantial and well-maintained on-farm investments such as barns, other storage building, fruit trees and vines, field terraces, drainage, irrigation, waterways, or other soil and water conservation measures?

High amount of on-farm investment	20 points
Moderate amount of on-farm investment	19 to 1 point(s)
No on-farm investment	0 points

(9) Would the project at this site, by converting farmland to nonagricultural use, reduce the demand for farm support services so as to jeopardize the continued existence of these support services and thus, the viability of the farms remaining in the area?

Substantial reduction in demand for support services if the site is converted	25 points
Some reduction in demand for support services if the site is converted	1 to 24 point(s)
No significant reduction in demand for support services if the site is converted	0 points

(10) Is the kind and intensity of the proposed use of the site sufficiently incompatible with agriculture that it is likely to contribute to the eventual conversion of surrounding farmland to nonagricultural use?

Proposed project is incompatible to existing agricultural use of surrounding farmland	10 points
Proposed project is tolerable to existing agricultural use of surrounding farmland	9 to 1 point(s)
Proposed project is fully compatible with existing agricultural use of surrounding farmland	0 points



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Units

Soil Ratings

-  Not prime farmland
-  All areas are prime farmland
-  Prime farmland if drained
-  Prime farmland if protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated
-  Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated and drained
-  Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season

-  Prime farmland if subsoiled, completely removing the root inhibiting soil layer
-  Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
-  Prime farmland if irrigated and reclaimed of excess salts and sodium
-  Farmland of statewide importance
-  Farmland of local importance
-  Farmland of unique importance
-  Not rated or not available

Political Features

 Cities

Water Features

 Streams and Canals

Transportation

 Rails

 Interstate Highways

 US Routes

 Major Roads

 Local Roads

MAP INFORMATION

Map Scale: 1:2,990 if printed on A size (8.5" × 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
Coordinate System: UTM Zone 17N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Cattaraugus County, New York
Survey Area Data: Version 12, Dec 19, 2011

Date(s) aerial images were photographed: 6/17/2006

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Farmland Classification

Farmland Classification— Summary by Map Unit — Cattaraugus County, New York (NY009)				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
78B	Hornell silt loam, 3 to 8 percent slopes	Farmland of statewide importance	14.4	32.5%
78C	Hornell silt loam, 8 to 15 percent slopes	Farmland of statewide importance	4.9	11.1%
80A	Fremont silt loam, 0 to 3 percent slopes	Prime farmland if drained	18.8	42.4%
80B	Fremont silt loam, 3 to 8 percent slopes	Farmland of statewide importance	6.3	14.1%
Totals for Area of Interest			44.3	100.0%

Description

Farmland classification identifies map units as prime farmland, farmland of statewide importance, farmland of local importance, or unique farmland. It identifies the location and extent of the soils that are best suited to food, feed, fiber, forage, and oilseed crops. NRCS policy and procedures on prime and unique farmlands are published in the "Federal Register," Vol. 43, No. 21, January 31, 1978.

Rating Options

Aggregation Method: No Aggregation Necessary

Aggregation is the process by which a set of component attribute values is reduced to a single value that represents the map unit as a whole.

A map unit is typically composed of one or more "components". A component is either some type of soil or some nonsoil entity, e.g., rock outcrop. For the attribute being aggregated, the first step of the aggregation process is to derive one attribute value for each of a map unit's components. From this set of component attributes, the next step of the aggregation process derives a single value that represents the map unit as a whole. Once a single value for each map unit is derived, a thematic map for soil map units can be rendered. Aggregation must be done because, on any soil map, map units are delineated but components are not.

For each of a map unit's components, a corresponding percent composition is recorded. A percent composition of 60 indicates that the corresponding component typically makes up approximately 60% of the map unit. Percent composition is a critical factor in some, but not all, aggregation methods.

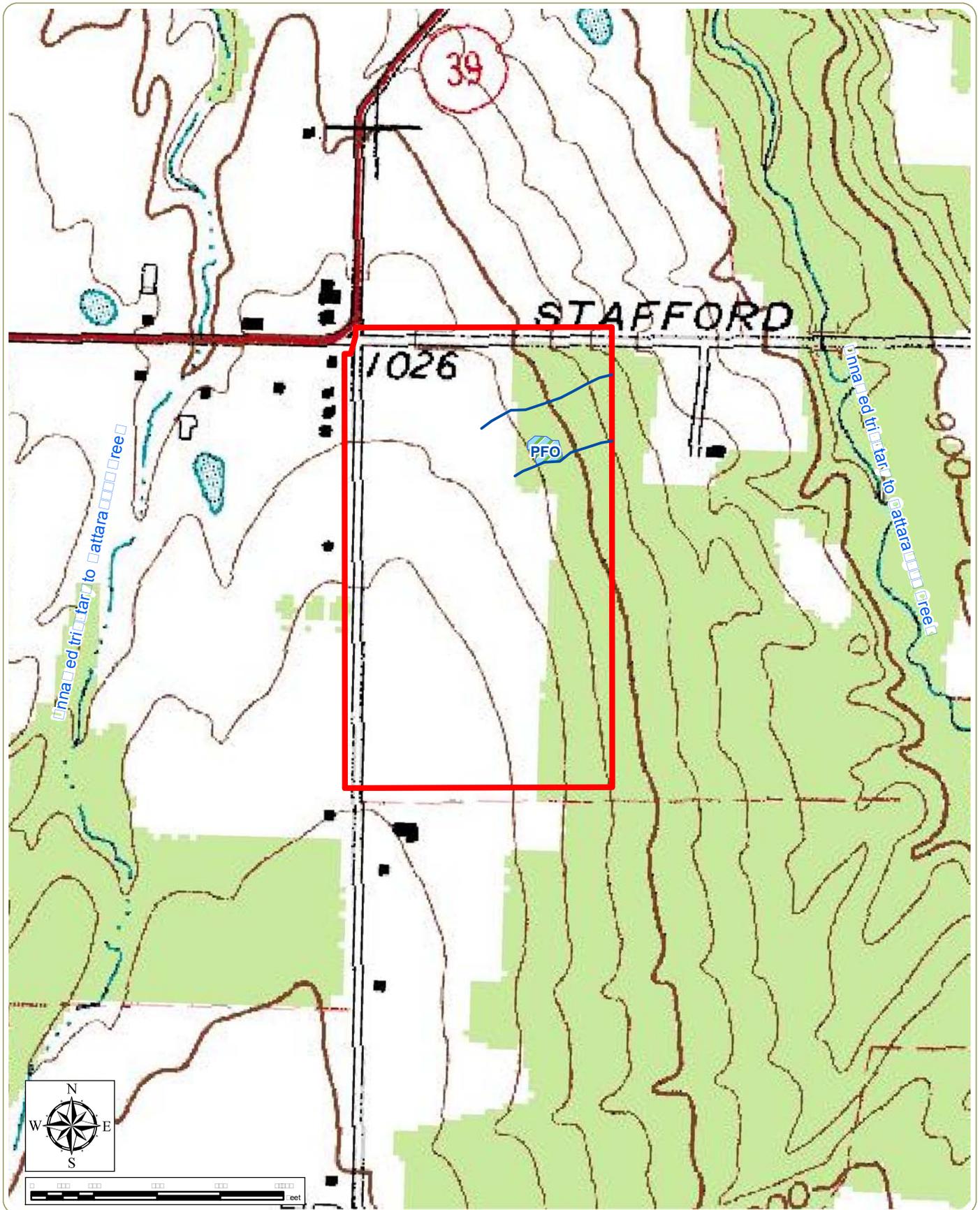
The majority of soil attributes are associated with a component of a map unit, and such an attribute has to be aggregated to the map unit level before a thematic map can be rendered. Map units, however, also have their own attributes. An attribute of a map unit does not have to be aggregated in order to render a corresponding thematic map. Therefore, the "aggregation method" for any attribute of a map unit is referred to as "No Aggregation Necessary".

Tie-break Rule: Lower

The tie-break rule indicates which value should be selected from a set of multiple candidate values, or which value should be selected in the event of a percent composition tie.

APPENDIX D

Water Resources Mapping



Tri-County Memorial Hospital

Town of Perrysburg, Cattaraugus County

Environmental Assessment

Appendix D: Water Resources

March 2012

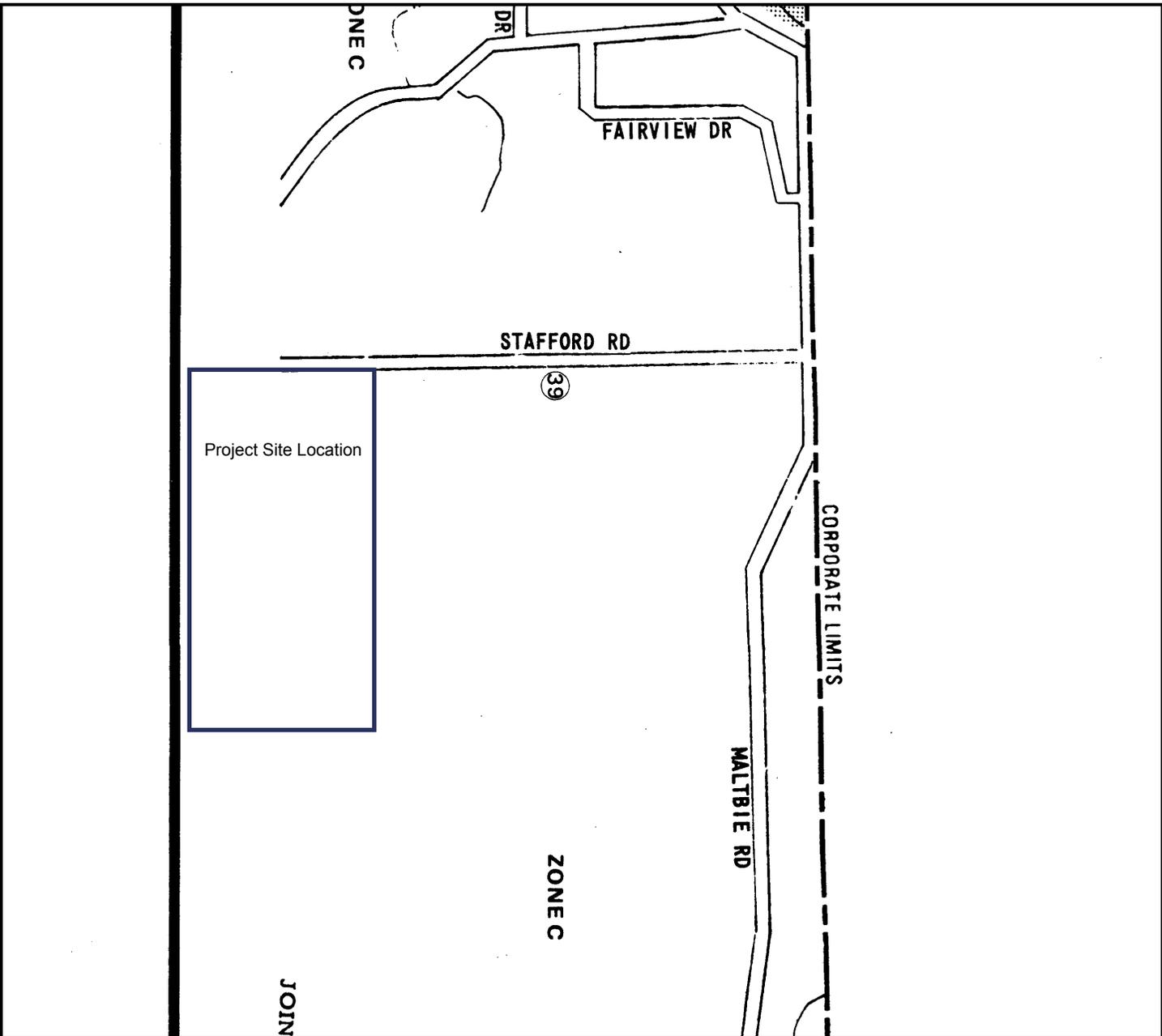
Notes: USGS 1:24,000 Gowanda Quadrangle

-  Delineated Ephemeral Streams
-  Approximate Wetland Boundary
-  Site Boundary



APPENDIX E

Flood Insurance Rate Map



federal emergency management agency

**TOWN OF PERRYSBURG, NY
CATTARAUGUS COUNTY**



**EFFECTIVE DATE
APRIL 20, 1984**

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

APPENDIX F

Fish and Wildlife Consultation

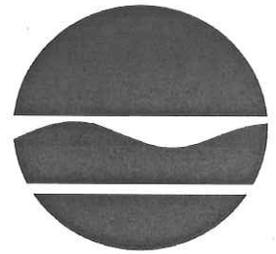
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Fish, Wildlife & Marine Resources

625 Broadway, 5th Floor, Albany, New York 12233-4757

Phone: (518) 402-8935 • **Fax:** (518) 402-8925

Website: www.dec.ny.gov



EDR

September 19, 2011

SEP 21 2011

RECEIVED

Joe Martens
Commissioner

Lisa Young
E D R Companies
217 Montgomery Street, Suite 1000
Syracuse, NY 13202

Dear Ms. Young:

In response to your recent request, we have reviewed the New York Natural Heritage Program database, with respect to an Environmental Assessment for the proposed Tri-County Memorial Hospital, Project 11038, site as indicated on the map you provided, located in the Town of Perrysburg, Cattaraugus County.

We have no records of rare or state listed animals or plants, significant natural communities or other significant habitats, on or in the immediate vicinity of your site.

The absence of data does not necessarily mean that rare or state-listed species, natural communities or other significant habitats do not exist on or adjacent to the proposed site. Rather, our files currently do not contain information which indicates their presence. For most sites, comprehensive field surveys have not been conducted. We cannot provide a definitive statement on the presence or absence of all rare or state-listed species or significant natural communities. This information should not be substituted for on-site surveys that may be required for environmental assessment.

Our databases are continually growing as records are added and updated. If this proposed project is still under development one year from now, we recommend that you contact us again so that we may update this response with the most current information.

This response applies only to known occurrences of rare or state-listed animals and plants, significant natural communities and other significant habitats maintained in the Natural Heritage Data bases. Your project may require additional review or permits; for information regarding other permits that may be required under state law for regulated areas or activities (e.g., regulated wetlands), please contact the appropriate NYS DEC Regional Office, Division of Environmental Permits, as listed at www.dec.ny.gov/about/39381.html.

Sincerely,

Jean Pietrusiak, Information Services
NYS Department Environmental Conservation

Enc.
cc: Region 9

915



Cattaraugus County

Federally Listed Endangered and Threatened Species and Candidate Species

This list represents the best available information regarding known or likely County occurrences of Federally-listed and candidate species and is subject to change as new information becomes available.

<u>Common Name</u>	<u>Scientific Name</u>	<u>Status</u>
Bald eagle ¹	<i>Haliaeetus leucocephalus</i>	D
Clubshell	<i>Pleurobema clava</i>	E
Rayed bean	<i>Villosa fabalis</i>	E

Status Codes: E=Endangered T=Threatened P=Proposed C=Candidate D=Delisted

¹ The bald eagle was delisted on August 8, 2007. While there are no ESA requirements for bald eagles after this date, the eagles continue to receive protection under the Bald and Golden Eagle Protection Act (BGEPA). Please follow the Service's May 2007 Bald Eagle Management Guidelines to determine whether you can avoid impacts under the BGEPA for your projects. If you have any questions, please contact the endangered species branch in our office.

Information current as of: 2/21/112

APPENDIX G

Cultural Resources



New York State Office of Parks, Recreation and Historic Preservation

Andrew M. Cuomo
Governor

Rose Harvey
Acting Commissioner

Historic Preservation Field Services Bureau
P.O. Box 189, Waterford, New York 12188-0189
518-237-8643

February 16, 2011

Mr. Robert J. Peltier
Commonwealth Cultural Resources Group, Inc.
2495 Main Street 448
Buffalo, New York 14214

Re: Federal Emergency Management Agency/ NYS Department of Health
Tri-County Hospital
Stafford and Jolls Roads/PERRYSBURG, Cattaraugus County
11PR00856

Dear Mr. Peltier:

Thank you for requesting the comments of the State Historic Preservation Office (SHPO). We have reviewed the submitted report *Phase I Resource Investigation for the Tri-County Hospital, Town of Perrysburg, Cattaraugus, New York* completed by Commonwealth Cultural Resources Group, Inc. and received by our office February 3, 2011. We have reviewed the project in accordance with Section 106 of the National Historic Preservation Act of 1966, *as amended*; and its implementing regulations 36 CFR Part 800: Protection of Historic Properties.

Results of the submitted survey indicate that a total of 10 structures were identified immediately adjacent to the project parcel. These were comprised of two commercial and one residential property located along Route 39 and seven residential structures located along Jolls Road. Only four of the structures were determined to be 50 years of age or older and none were determined to be listed, or eligible for listing, in the State or National Register of Historic Places. This was determined due to significant alteration and lacking in historical or architectural significance.

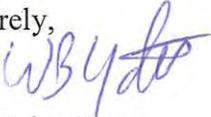
Archaeological assessment of the subject parcel included an attempt to pedestrian survey, but zero ground surface visibility precluded these efforts. Subsequently, systematic shovel testing was conducted at 50 ft. intervals across the entire 14+/- acre site. A total of 240 shovel tests were excavated within the subject parcel. As a result of the archaeological testing, no artifacts were recovered and no subsurface features were identified.

Mr. Robert J. Peltier/ 11PR00856
February 16, 2011
Page 2

It is the determination of Commonwealth Cultural Resources Group, Inc. that there are no properties listed, or eligible for listing, in the State or National Register of Historic Places within the APE of the proposed project. As such, there will be *no historic properties affected* [as per 36 CFR Part 800, § 800.4(d)(1)] as a result of the proposed project. Our office concurs with this finding.

Should you have any questions, please feel free to contact me directly at (518) 237-8643, Extension 3288 or via electronic mail at Brian.Yates@oprhp.state.ny.us. If further correspondence is required regarding this project, please be sure to refer to the OPRHP Project Review (PR) number noted above.

Sincerely,



Wm. Brian Yates
Historic Preservation Specialist

PHASE I CULTURAL RESOURCE INVESTIGATION

FOR THE

TRI-COUNTY HOSPITAL

TOWN OF PERRSBURG,

CATTARAUGUS COUNTY, NEW YORK

January 10, 2010

Prepared For:

TLC Health Care Network
845 Main Road
Irving, New York 14081



N522

PHASE I CULTURAL RESOURCE INVESTIGATION
FOR THE
TRI-COUNTY HOSPITAL
TOWN OF PERRYSBURG,
CATTARAUGUS COUNTY, NEW YORK

By

Robert J. Peltier, M.A.
Principal Investigator

and

Dana D'Orazio, B.A.,
Field Director

January 10, 2011

Prepared For:

TLC Health Care Network
845 Main Road
Irving, New York 14081

N-522

MANAGEMENT SUMMARY

SHPO Project Review Number: _____

Involved Agencies: The project is a candidate for Federal Emergency Management Agency (FEMA) funding, and is a possible candidate for a Certificate of Need (CON) from the NYS Department of Health's Office of Health System's Management. Project sponsors are requesting that the NY State Historic Preservation Office's (SHPO's) comments of project effect under Section 106 of the National Historic Preservation Act of 1966 and the relevant implementing regulations so we will be eligible to pursue federal grants, loans, and guarantees.

Phase of Survey: Phase I

Location: Southeast corner of Jolls and Stafford Roads
Town of Perrysburg
Cattaraugus County, New York 14070

Surveyed Area: Overall Project – 0.14± Acres; Area Tested – 0.14± Acres
Length: N/A
Width: N/A
Depth: N/A
Acres Surveyed: 0.14± Acres

Archaeological Survey Overview:

No. and Interval of Shovel Tests:	240 (15 m / 50 ft)
No. and Size of Test Units:	N/A
Width of Plowed Strips:	N/A
No. of Acres Surface Surveyed	N/A

Results of Archeological Survey:

No. and Name of Prehistoric Sites Identified:	none
No. and Name of Historic Sites Identified:	none
No. and Name of Sites Recommended for Phase II:	none

Results of Architectural Survey:

No. of Structures in Project Area:	none
No. of Known NR Listed/Eligible Structures/Districts:	none
No. of Recommended Eligible Structures/Districts:	none
No. of Listed/Eligible Structures/Districts That May Be Impacted:	none

Report Author(s): Robert J. Peltier, M.A. and Dana D'Orazio, B.A.

Date of Report: January 10, 2011

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- PHOTO 2.** View of Adjacent Residence (No. 10431 Jolls Road), Facing Northwest.
- PHOTO 3.** View of Adjacent Residence (No. 10439 Jolls Road), Facing Northwest.
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PHOTO 8. View of Adjacent Residence (No. 10473 Jolls Road), Facing Northwest.

PHOTO 9. View of Adjacent Residence (No. 11253 Route 39), Facing South.

PHOTO 10. View of Adjacent Commercial Property (No. 11254 Route 39), Facing North.

PHOTO 11. View of Adjacent Commercial Property (No. 11236 Route 39), Facing Northwest.

PHOTO 12. View Along Jolls Road From Intersection at Stafford Road, Facing Southwest.

PHOTO 13. View Along Stafford Road From Intersection at Jolls Road, Facing East.

PHOTO 14. View of Adjacent Residences Along Jolls Road, Facing Northwest.

PHOTO 15. View of Project Area From Western Boundary (Jolls Road), Facing East.

PHOTO 16. View of Project From Northeast Corner (Near Stafford Road), West.

ARCHAEOLOGICAL SITE FILE/LITERATURE SEARCH REPORT

PREPARED BY: Robert J. Peltier, M.A. and Dana D’Orazio

AFFILIATION: Commonwealth Cultural Resources Group, Inc.
2495 Main Street, Suite 448
Buffalo, New York 14214
716/831-9003

DATE: January 10, 2011

1.0 PROJECT INFORMATION

Location of Proposed Action: The project area is located within the southeast corner of the intersection of Jolls and Stafford Roads, Town of Perrysburg, Cattaraugus County, New York (Figures 1 and 2).

Description of Undertaking: The proposed project involves the construction of an approximate 40,000 square foot (SF) medical facility – the Tri-County Hospital. The new facility will replace the Tri-County Hospital (Gowanda), which was damaged in the August 8-20, 2009 flooding that hit Cattaraugus County.

The project is a candidate for Federal Emergency Management Agency (FEMA) funding, and is a possible candidate for a Certificate of Need (CON) from the NYS Department of Health’s Office of Health System’s Management. Project sponsors are requesting that the NY State Historic Preservation Office’s (SHPO’s) comments of project effect under Section 106 of the National Historic Preservation Act of 1966 and the relevant implementing regulations so we will be eligible to pursue federal grants, loans, and guarantees.

Project Area and Area of Potential Effect: The Area of Potential Effect (APE) for the project is rectangular in shape and consists of approximately 14± acres. Measuring approximately 600 by 1000 feet (ft) (183 x 305 meters [m]), the APE is located within a fallow agricultural field. It is bounded on the north by Stafford Road; on the east by a privately owned wooded lot; on the south by additional agricultural fields; and on the west by Jolls Road (Figures 1 and 2).

Given the nature of the current undertaking, the APE also contains an above ground component as well. Since the proposed hospital may have an adverse effect on adjacent structures located along Jolls and Stafford Roads, these properties were included in this study as part of an above ground APE.

Description of Impact: Although specific plans for the 14± acre APE are not yet in place, project sponsors, TLC Health Network, proposes to construct a hospital facility which will feature an array of services including emergency, primary and long term care, home health, dental, mental health, and chemical dependency services. Impacts typically associated with such undertakings include, but may not be limited to: possible grading, cutting, and filling; driveway, parking lot and sidewalk construction; installation of subsurface utilities (e.g. natural gas, sewer, electric, water, cable, telephone etc.), installation of drainage ditches and/or storm water detention ponds; and landscaping subsequent to such developments.

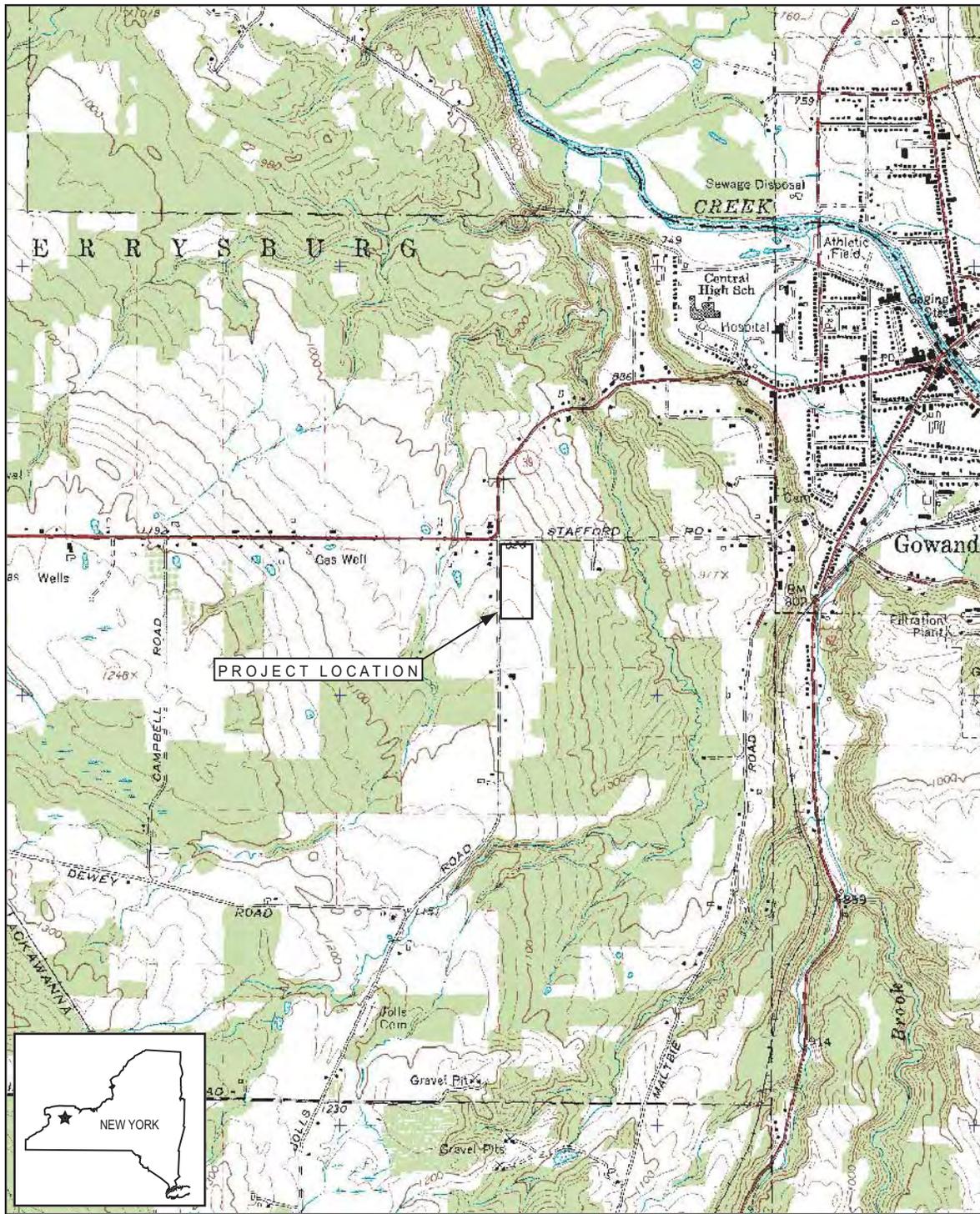


FIGURE 1. Project Location on Gowanda, NY 7.5 Minute Series Quadrangle



(Source: Google Earth 2011)

FIGURE 2. Aerial View of Project Area

2.0 ENVIRONMENTAL INFORMATION

Topography: The project area is located on the eastern edge of the Erie Lake Plain, at the dissected northern edge of the Allegheny Plateau, which is a glaciated region of rounded steep hills and broad, flat-bottomed stream valleys. The region was covered with ice during the Wisconsin Glaciation and glacial effects form important elements of the landscape (Tesmer 1975). Holocene alluvial sands, silts and gravels form the bottom of convergent stream channels in this area. Broad level terraces are significant features of these valleys (i.e., along Cattaraugus Creek), while steep ravines are present in the location of hill drainages. The project area itself is situated on terrain that rises slightly to the south. The project's northern boundary (near Stafford Road) contains an elevation of about 1,022 ft (312 m) above mean sea level (amsl), which rises to an elevation of about 1,060 ft (323 m) amsl along the project's southern boundary (Figure 1).

Geology: Bedrock geology in the vicinity of the project is partially obscured by deep unconsolidated alluvial and glacial deposits. These deposits cover interbedded gray shales and gray siltstones from the upper portion of the undivided Canadaway Formation (Tesmer 1975; Cattaraugus Planning Board 1968). These Upper Devonian shales and siltstones are exposed along the sometimes steep walls of creek valleys and, occasionally, closer to the surface on adjacent slopes. Exposed bedrock was not observed anywhere within the project area.

Soils: Three specific soil types occur within the APE, one of which accounts for nearly 80% of the total area. The most prevalent is Fremont Silt Loam (0-3% slope) [80A], which, with the exception of the eastern edge, covers the main portion project area. The next most prevalent type is Hornell Silt Loam (3-8% slope) [78B], which is located throughout the project's eastern edge. Fremont Silt Loam (3-8%) [80B] is located within the project's southeastern corner (Figure 3; Table 1).

FIGURE 3. Mapped Soils Within the Project Area (USDA, NRCS 2011)



TABLE 1. Soil Descriptions for the Project Area (USDA, NRCS 2011)

Soil Type	Depth (in/cm)	Texture	Slope	Drainage	Landform
Hornell Silt Loam (78B)	0-8/0-20	Silt Loam	3-8%	SP-D	Benches, Ridges, Till Plains
	8-28/20-71	Silty Clay			
	28-34/71-86	Channery Silty Clay Loam			
	34-44/86-118	Unweathered Bedrock			
Fremont Silt Loam (80A)	0-9/0-23	Silt Loam	0-3%	SP-D	Drumlinoid Ridges, Hills, Till Plains
	9-39/23-99	Silty Clay Loam			
	39-72/99-183	Channery Silty Loam			
Fremont Silt Loam (80B)	0-9/0-23	Silt Loam	3-8%	SP-D	Drumlinoid Ridges, Hills, Till Plains
	9-39/23-99	Silty Clay Loam			
	39-72/99-183	Channery Silty Loam			

Key: SP-D – somewhat poorly drained

Drainage: The project area is located within the Cattaraugus Creek watershed. The primary drainage within the vicinity of the project area is an unnamed tributary of Cattaraugus Creek. The project area is situated between two branches of the Cattaraugus Creek tributary, with one branch located about 700 ft (213 m) to the west and the other located about 1,500 ft (457 m) to the east (Figure 1). Soils within the project area were found to be seasonally moist and somewhat poorly-drained.

Vegetation: Precontact vegetation within the region was dominated by deciduous forests in which beech, red and sugar maples, red and white oak, and white ash were the most prevalent species. Remnants of these forests are still evident today across the region, usually on areas consisting of steep slopes. Today the project area is located within a fallow agricultural field, consisting of short wild grasses and weeds (Attachment A, Photos 15 and 16).

Manmade Features and Alterations: Initial impacts to the project area were most likely those related to mid-nineteenth century Euroamerican land clearing and agricultural activities (e.g., plowing, discing, planting). In fact, the parcel is still being used agriculturally. Additional impacts to the project include those associated with the construction and maintenance of Jolls and Stafford Roads and adjacent drainage ditches (Attachment A, Photos 12 through 16).

3.0 DOCUMENTARY RESEARCH

Site Files: Site file and map research for the project area was conducted at the Archaeological Survey, State University of New York at Buffalo (SUNYAB) (Amherst), the Office of Parks, Recreation, and Historic Preservation (OPRHP) (Waterford), and the New York State Museum (NYSM) (Albany). Research included a review of the New York State Inventory and Register, the National Register of Historic Places (NRHP), and the NRHP-eligible and State/NRHP-proposed lists.

National Register of Historic Places: No cultural resources listed on or eligible for the State or NRHP or the State/NRHP-proposed lists were recorded within, or immediately adjacent to, the project area. However, background research conducted for the project indicated seven National Register Listed (NRL) properties and up to 14 National Register Eligible (NRE) properties within 1.5 miles (2.4 km) of the project area. The NRL properties include a collection of commercial buildings located along West Main Street in the central business district of the Village of Gowanda. Twelve of the NRE properties include either residential or commercial structures located along West Main Street (Cattaraugus County) or Buffalo Street

(Erie County), in the Village of Gowanda. The remaining two NRE properties include one residential structure located along NYS Route 39 and one cemetery located along the west side of Center Road. No NRL or NRE properties are within view of the proposed Tri-County Hospital project area (Table 2).

Table 2. NRL and NRE Properties within 1.5 Mile (2.4 km) of the Project Area

OPRHP No.	Designation	Location/Description	Distance From P/A
00942.000012	NRL	37 West Main Street (NY 39)/Key Bank	5,900 ft (1798 m) NE
00942.000011	NRL	39 West Main Street (NY 39)/Hollywood Theatre	6,000 ft (1829 m) NE
00942.000013	NRL	47-49 West Main Street (NY 39)	5,800 ft (1768 m) NE
00942.000014	NRL	53 West Main Street (NY 39)	5,700 ft (1737 m) NE
00942.000015	NRL	63 West Main Street (NY 39)/U.S. Post Office	5,600 ft (1707 m) NE
00942.000017	NRL	Gowanda Village Historic District, West Main Street	5,200 ft (1585 m) NE
00942.000064	NRL	West Main Street/Marine Midland Bank – south side	5,400 ft (1646 m) NE
00942.000055	NRE	West Main Street/Persia Town Hall	5,400 ft (1646 m) NE
00942.000087	NRE	19 West Main Street (NY 39)	6,100 ft (1859 m) NE
00942.000062	NRE	56 West Main Street (NY 39)/Gowanda Free Library	5,800 ft (1768 m) NE
02942.000021	NRE	105 Buffalo Street	7,100 ft (2164 m) NE
02942.000001	NRE	140 Buffalo Street	7,200 ft (2195 m) NE
02942.000002	NRE	160 Buffalo Street	7,200 ft (2195 m) NE
00942.000065	NRE	84 West Main Street (NY 39)	5,400 ft (1646 m) NE
00942.000066	NRE	92 West Main Street (NY 39)	5,400 ft (1646 m) NE
00942.000018	NRE	216 West Main Street (NY 39)	4,300 ft (1311 m) NE
00942.000077	NRE	167 West Main Street (NY 39)	4,700 ft (1433 m) NE
00942.000068	NRE	114 West Main Street (NY 39)	5,100 ft (1554 m) NE
00942.000080	NRE	113 West Main Street (NY 39)	5,100 ft (1554 m) NE
00926.000041	NRE	12316 NYS Route 39 (circa 1860s residential structure)	2,600 ft (792 m) NE
00926.000044	NRE	Weaver Cemetery, west side of Center Road	5,400 ft (1646 m) NE

Prehistoric Archaeological Sites: Background research conducted for the project indicated, at least, six previously recorded prehistoric archaeological sites located within 1.5 miles (2.4 km) of the project area. Unfortunately, none of the six previously recorded sites have been placed within a temporal context. The sites are all located within a half a mile (0.8 km) of Cattaraugus Creek (Table 3).

Historic Archaeological Sites: No historic archaeological sites were located within 1.5 miles (2.4 km) of the project area.

Table 3. Prehistoric Archaeological Sites within 1.5 Mile (2.4 km) of the Project Area

Site Name	Site Number(s)	Site Type	Time Period	Distance From P/A
Joll's Mound	NYSM 857; UB 160	Mound	Indeterminate	6,300 ft (1920 m) S
ACP-CATT-11A	NYSM 7872	Mound	Indeterminate	7,200 ft (2195 m) NW
CT-64	UB 71	Lithic scatter	Indeterminate	4,000 ft (1219 m) NE
Indian Hill Scatter	A00926.0034	Lithic scatter	Indeterminate	6,500 ft (1981 m) NW
Geick	A00926.0001; UB 2243	camp, workshop	Indeterminate	4,000 ft (1219 m) NW
No name	NYSM 8109	no information	no information	5,300 ft (1615 m) NW

Historic Map Overview/Brief Local History: After the American Revolution, the Seneca, who had sided with the British, were forced to relinquish their claims to much of their lands in southwestern New York. They were subsequently restricted to reservations. Shortly thereafter (1796), the Holland Land Company purchased 3.3 million acres in western New York State which it planned to subdivide and sell to prospective settlers (Chazanof 1970). Both counties were part of this purchase. Joseph Ellicott, who was sales agent for the Holland Land Company from 1801 until 1821, controlled the company's holdings in western New York State. Ellicott surveyed the lands, laid out towns of six miles square, established land values and reserved the choice areas to be held for later sales. This was in the hope that the company would make a large profit. By the 1820s, a number of roads had been opened and settlements were

scattered throughout the area. Cattaraugus County was set off from Genesee County in 1808 and officially established in 1817 when there were 500 taxable inhabitants (Ellis 1879).

Southwestern New York grew in population throughout the nineteenth century. The proximity of the Erie Canal and the Allegheny River made the county part of an important transportation corridor and an area that was accessible for settlement near the end of the first quarter of the century. The first task of the settlers was to clear land for farming. Much of the timber was simply burned for potash production (Ellis 1879; McElroy 1977). However, with the expansion of transport systems, timber was shipped out of the area and logging became more important. Throughout the nineteenth century, water power was harnessed to run saw and grist mills. Cottage industries began in tanning and furniture manufacture, as spinoffs of the timber industries (Ellis 1879). Settlers came to farm and cheese production was an important industry. The general region remains rural today.

Turner Aldrich, a member of the Society of Friends, was the first to settle in Gowanda, arriving from Connecticut with his family in 1810. Aldrich purchased 707 acres of land on both sides of Cattaraugus Creek, comprising most of the present Village of Gowanda. Although his attempt to build a dam for hydropower was unsuccessful, he did erect a saw mill along Grannis Brook (about 6,500 ft [1981 m] northeast of the project). The settlement around this mill became known as Aldrich Mills.

In 1812, Ahaz Allen built grist and saw mills in the area and, at his suggestion in 1823, the post office at Aldrich Mills became known as Lodi. As there were two Lodis in New York State, the name was changed (in 1848) to Gowanda (an Indian term meaning "a valley among the hills"). The village was incorporated at this time and later, in 1878, was re-incorporated and included Hidi, a hamlet about a mile to the north, within its limits (Ellis 1879). The residential part of Gowanda extended across Cattaraugus Creek into Erie County at this time.

Historic maps and atlases reviewed for the study indicated that there were no structures adjacent to the project parcel until sometime after 1923 (Figures 4 through 7). The Geil (1856) atlas, the D.G. Beers (1869) atlas, and the 1923 *Cattaraugus, NY* USGS quadrangle indicate no structures along Jolls or Stafford Roads, adjacent to the project area (Figures 4 through 6). However, the 1938 *Cattaraugus, NY* USGS quadrangle shows two structures present along the west side of Jolls Road, both of which are still standing today – No. 10439 and No. 10473 Jolls Road (Figure 7; Attachment A, Photo 8 and 3).

As indicated on historic maps and atlases, denser settlement in the vicinity of the project area took place within the Village of Gowanda, located about 5,000 ft (1524 m) to the northeast or within the Village of Perrysburg, located about 8,700 ft (2652 m) to the west. For the most part, the general vicinity of the project area has remained part of a small, rural farming community throughout most of the nineteenth and twentieth centuries.

Previous Surveys: The project area is within a region studied by early archaeologists (Beauchamp 1900; Squire 1849; Benedict 1901; Houghton 1909; Cheney 1860; and Parker 1922), as well as later researchers (Ritchie 1980; Ritchie and Funk 1973; McElroy 1977; Schock 1964; and White 1961). Within the past 18+ years many cultural resource surveys have been conducted within the general vicinity of the project area. Those closest to the project area include cultural resource investigations carried out in conjunction with such undertakings as a multitude of infrastructure projects (McKenna and Nelson 1985; Nelson 1983; Skinner, Pierce, and Rosenzweig 1983; Rosenzweig 1984, 1992; Slawson and Herold 1992; Dean 2001, 2000a, 2000b, 1992; Cinquino et al. 1999; Hartner and Herold 1991; Barbour, Saladino, and Hutinett 1994; Pierce and Collura 2002), a gravel mine (Pierce 1985), and a park improvement project (Dean 2005).

Cultural resource investigations carried out for the Strickland Gravel Deposit project revealed the presence a lithic scatter site (A02909.0030; UB 2245) dating to the Early Woodland/Meadowood Phase (Pierce 1985). The prehistoric Indian Hill Scatter Site (A00926.0034) was identified during the cultural resources study carried in conjunction with the Cattaraugus Waterline project (Dean 1992). In addition, historic and prehistoric archaeological components were discovered during the study conducted in anticipation of the

reconstruction of Routes 62 and 39, but are located well outside the 1.5 mile (2.4 km) radius of the project area (Slawson and Herold 1992, 1991) (Table 3).

Sensitivity Assessment/Prediction:

Prehistoric: Based on background literature and site file research, the project area is considered to have a moderate to high sensitivity for the location of previously unrecorded prehistoric archaeological sites. The sensitivity assessment is based on the project's proximity to known sites and its environmental setting which would have made it attractive to prehistoric populations (i.e., proximity to Cattaraugus Creek).

Historic: A review of available historic maps, atlases, and site file literature (Geil 1856; D. G. Beers 1869; *Cattaraugus, NY*, Quadrangle 1921; *Cattaraugus, NY* Quadrangle 1938; and Chazanof 1970; and Ellis 1879) indicated that the project area never contained a structure, historic or otherwise. Therefore, the project area contains a low sensitivity for locating historic resources such as foundation remains, but a moderate sensitivity for finding peripheral activity areas such as historic middens.

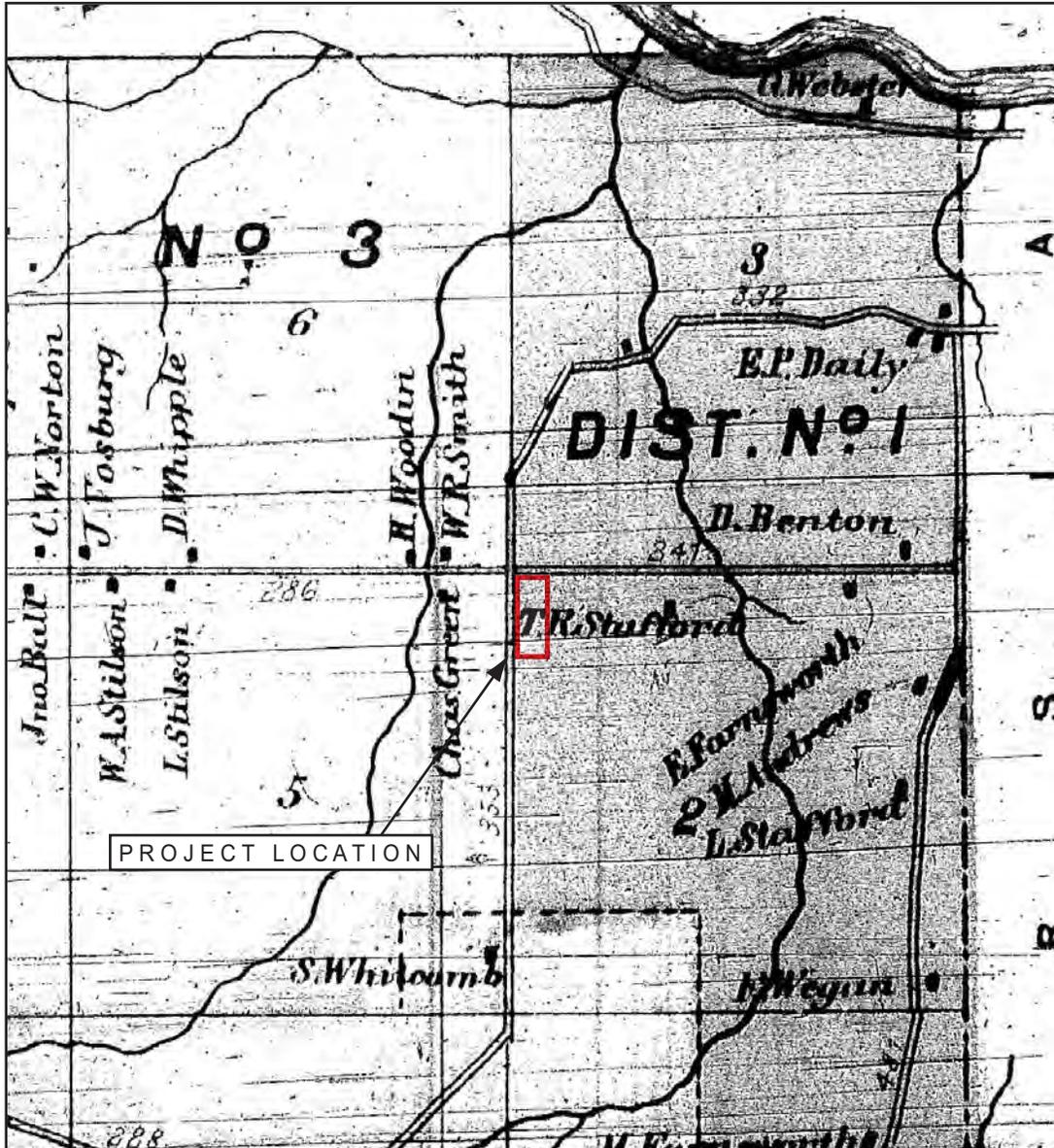
4.0 RECOMMENDATIONS

A Phase I cultural resource investigation was recommended for the project area because of its proximity to previously recorded archaeological site(s).



(Source: Geil 1856)

FIGURE 4. Project Location in 1856



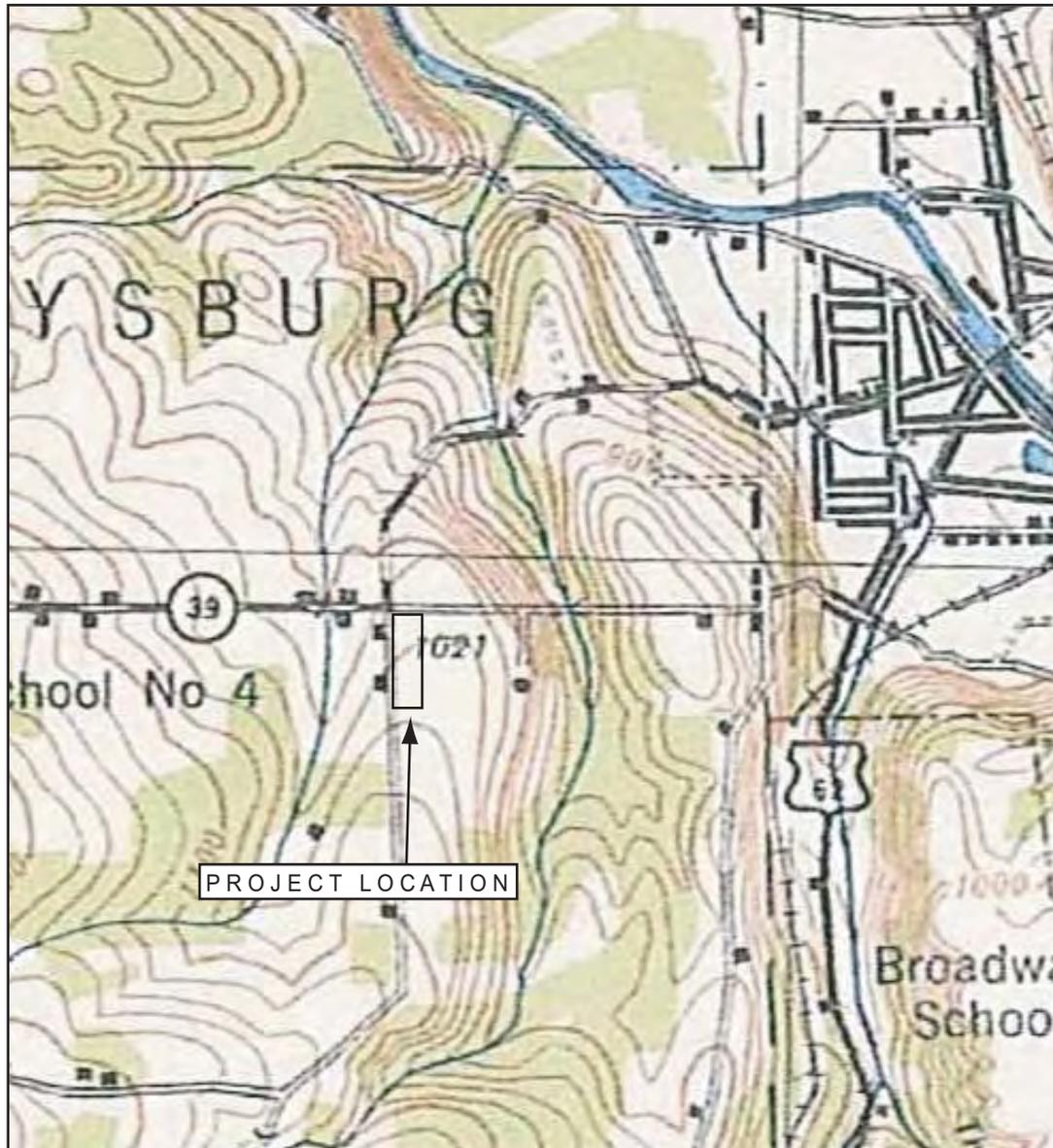
(Source: D.G. Beers 1869)

FIGURE 5. Project Location in 1869



(Source: 1923 Cattaraugus, NY USGS Quadrangle)

FIGURE 6. Project Location in 1923



(Source: 1921 [photo revised 1938] Cattaraugus, NY USGS Quadrangle)

FIGURE 7. Project Location in 1938

REPORT OF FIELD RECONNAISSANCE

PERMIT APPLICATION:

TLC Health Network
845 Main Road
Irving, New York 14081

LOCATION:

34 Commercial Street
Village of Gowanda
Town of Persia
Cattaraugus County, New York

REPORT PREPARED BY: Robert J. Peltier, M.A. and Dana D’Orazio, B.S.

AFFILIATION: Commonwealth Cultural Resources Group, Inc.
2495 Main Street, Suite 448
Buffalo, New York 14214
716/831-9003

DATE: January 10, 2011

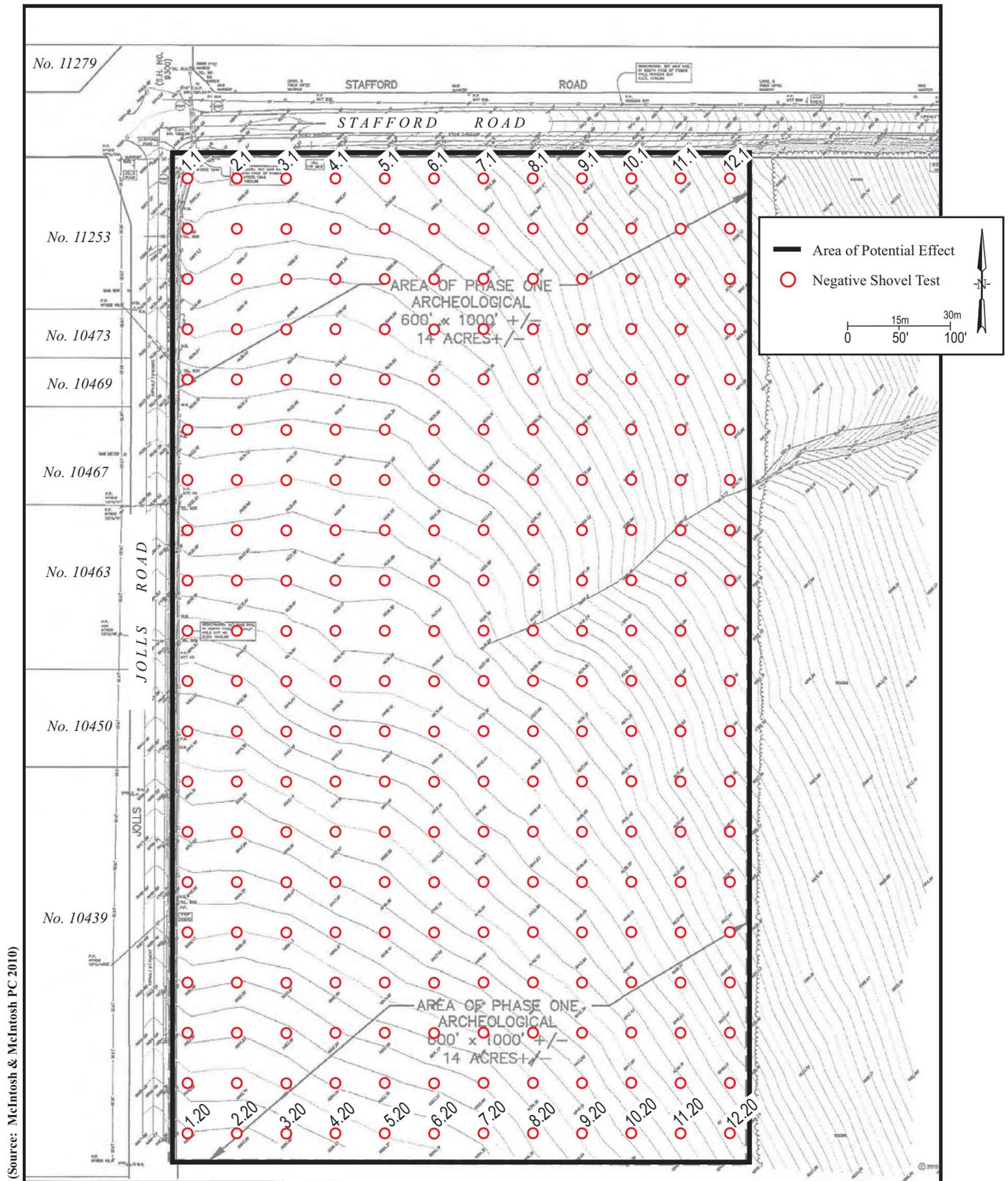
5.0 FIELD INVESTIGATIONS/METHODOLOGY

Description of Structure of Survey Team: The survey team for the Phase IB cultural resource investigation for the Tri-County Hospital project area was composed of Principal Investigator Robert J. Peltier, Field Director Dana D’Orazio, and two archaeological field technicians (Martin Boratin and Kyle Brock).

Date of Survey and Description of General Surface and Subsurface Conditions: Pre-field reconnaissance was conducted prior to Phase IB field investigations by Principal Investigator Robert Peltier and Field Director Dana D’Orazio. The purpose of the walk-over inspection, in addition to determining whether favorable field conditions existed, was to look for surface indications of archaeological sites and standing structures within or directly adjacent to the project parcel. At this time, the project was visually inspected in order to identify areas of at least 75% ground surface visibility that would warrant a surface inspection (in addition to shovel testing) and areas of ground disturbance that would not be conducive to shovel testing. No surficial evidence of archaeological sites (prehistoric or historic) was identified. Phase IB field investigations for the project were conducted between the dates of November 8 and 10, 2010. Weather conditions were favorable and consisted of clear skies with temperatures reaching 55 degrees by afternoon. Soils were found to be seasonally moist and somewhat moderately-drained to poorly-drained.

Description of Intensity of Coverage and Rationale for Excluding Areas From Survey: Limited ground surface visibility across the APE precluded the possibility of conducting a surface inspection. Shovel testing was the only field methodology employed. Phase IB shovel testing was conducted at 50 ft (15 m) intervals across the entire 14± acre APE, wherever possible.

Outline of Field Testing Strategy (Sampling Techniques, Surface Inspection Techniques, Subsurface Techniques, Remote Sensing Techniques): As described above, zero ground surface visibility across the APE precluded the possibility of conducting a surface inspection. Shovel testing was the only field methodology employed. A total of 240 shovel tests was proposed for excavation across the APE. All tests were excavated. Tests were placed at 50 ft (15 m) intervals along 12 transects that ran south from, and perpendicular to the APE’s northern boundary (Stafford Road), which served as a baseline (Figure 8; Attachment A, Photos 12 through 16).



(Source: McIntosh & McIntosh PC 2010)

FIGURE 8. Map Showing Results of Phase IB Shovel Tests

Shovel tests were excavated with shovels and hand trowels. Soils in all shovel tests were screened through ¼-inch mesh hardware cloth and examined for the presence or absence of cultural material. Pertinent information for each shovel test (i.e., depth, soil type, color [Munsell] and texture) was recorded in field notebooks. All shovel tests were back-filled upon completion. Figure 8 indicates the location of each test, while Attachment B summarizes the results of shovel testing across the APE.

Description of General Soil Characteristics (Including Texture and Depth to Sterile Soil): Soils from testing across the project area were consistent with those expected for the vicinity (USDA, NRCS 2011). In general, they ranged from dark grayish brown (10YR 4/2) to brown (10YR 4/3) silt loam, to an average depth of 30 cm (11.8 in) below the surface. These overlaid subsoils consisting of light brownish gray (10YR 6/2) mottled with brownish yellow (10YR 6/8) silty clay, excavated to an average depth of 41 cm (16.1 in) below the surface. Attachment B summarizes the results of the Phase IB testing.

Description of Problems Encountered During Survey Which May Have Influenced Results: No problems were encountered during field investigations which would have influenced the results of the study.

6.0 RESULTS OF FIELD INVESTIGATION

No historic or prehistoric artifacts were recovered during the Phase IB field investigations carried out at the Tri-County Hospital project area.

In addition, Phase IB field investigations for the project documented 10 structures located immediately adjacent to the project parcel. The structures are comprised of two commercial and one residential property located along Route 39 (Attachment A, Photos 9 through 11) and seven residential structures located along Jolls Road (Attachment A, Photos 1 through 8). Although four of the identified structures were constructed prior to 1961 (No. 11253 Route 39; No. 10473, No. 10469, 10439 Jolls Road), they are not, however, not eligible for listing on the NRHP. All four structures have been highly altered and modified and are not considered to be historically or architecturally significant (Attachment A, Photos 3, 7, 8, and 9). Any visual impacts caused by the construction of the Tri-County Hospital should not be an issue, considering there are no properties listed on or eligible for the NRHP adjacent to or located within the immediate vicinity of the project parcel.

7.0 RECOMMENDATIONS AND RATIONALE

Phase IB field investigations at the project area failed to identify evidence of archaeological sites or any other cultural resources. The proposed project will have no effect on cultural resources listed, or eligible for listing, in the State or National Registers of Historic Places. No further cultural resource investigations are recommended for the Tri-County Hospital project area.

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1921 *Cattaraugus, New York 15 Minute Series Quadrangle (Photo Revised 1938)*
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SUPPORTING DATA

- ATTACHMENT A.** Photographs Showing Project Area (w/ Photo Angle Map)
- ATTACHMENT B.** Phase IB Shovel Test Summary

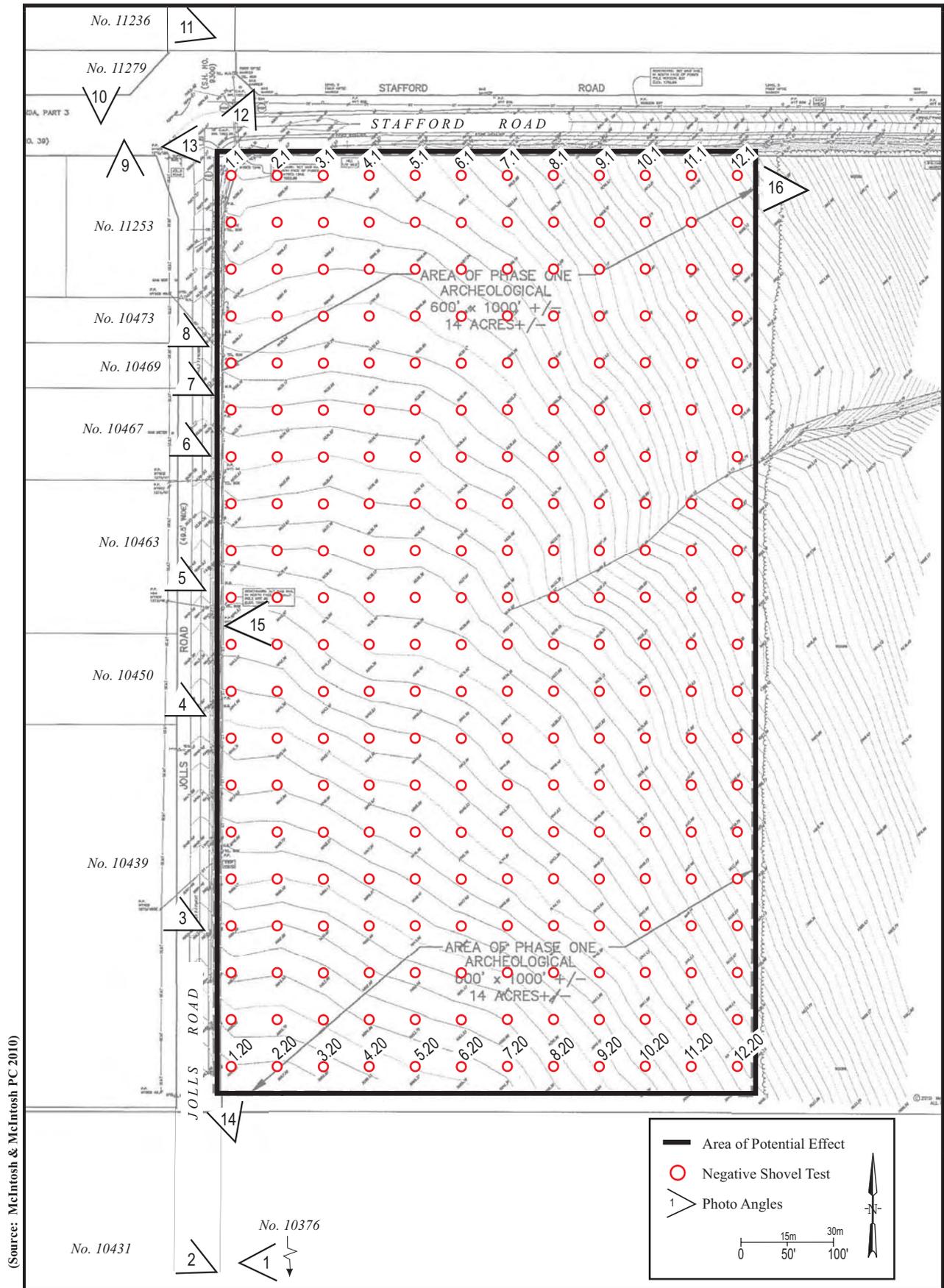
Certification: I certify that I directed the cultural resource investigation reported here, that my observations and methods are fully reported and that this report is complete and accurate to the best of my knowledge.

Date

Signature of Preparer

ATTACHMENT A

Photographs Showing Project Area (w/ Photo Angle Map)



ATTACHMENT A. Map Showing Photo Angles



PHOTO 1. View of Adjacent Residence (No. 10376 Jolls Road), Facing Southeast.



PHOTO 2. View of Adjacent Residence (No. 10431 Jolls Road), Facing Northwest.



PHOTO 3. View of Adjacent Residence (No. 10439 Jolls Road), Facing Northwest.



PHOTO 4. View of Adjacent Residence (No. 10450 Jolls Road), Facing Northwest.



PHOTO 5. View of Adjacent Residence (No. 10463 Jolls Road), Facing Northwest.



PHOTO 6. View of Adjacent Residence (No. 10467 Jolls Road), Facing Northwest.



PHOTO 7. View of Adjacent Residence (No. 10469 Jolls Road), Facing Northwest.



PHOTO 8. View of Adjacent Residence (No. 10473 Jolls Road), Facing Northwest.



PHOTO 9. View of Adjacent Residence (No. 11253 Route 39), Facing South.



PHOTO 10. View of Adjacent Commercial Property (No. 11254 Route 39), Facing North.



PHOTO 11. View of Adjacent Commercial Property (No. 11236 Route 39), Facing Northwest.



PHOTO 12. View Along Jolls Road From Intersection at Stafford Road, Facing Southwest.



PHOTO 13. View Along Stafford Road From Intersection at Jolls Road, Facing East.



PHOTO 14. View of Adjacent Residences Along Jolls Road, Facing Northwest.



PHOTO 15. View of Project From Western Boundary (Jolls Road), Facing East.



PHOTO 16. View of Project From Northeast Corner (Near Stafford Road), Facing West.

ATTACHMENT B

Phase IB Shovel Test Summary

Shovel Test No.	Depth (cm)	Soil Description	Artifact Summary
1.1	0-37	Dark Grayish Brown Silt Loam	---
	37-47	Light Brownish Gray/Brownish Yellow Silty Clay	---
1.2	0-31	Dark Grayish Brown Silt Loam	---
	31-41	Light Brownish Gray/Brownish Yellow Silty Clay	---
1.3	0-30	Dark Grayish Brown Silt Loam	---
	30-40	Light Brownish Gray/Brownish Yellow Silty Clay	---
1.4	0-29	Dark Grayish Brown Silt Loam	---
	29-39	Light Brownish Gray/Brownish Yellow Silty Clay	---
1.5	0-31	Dark Grayish Brown Silt Loam	---
	31-41	Light Brownish Gray/Brownish Yellow Silty Clay	---
1.6	0-33	Dark Grayish Brown Silt Loam	---
	33-43	Light Brownish Gray/Brownish Yellow Silty Clay	---
1.7	0-29	Dark Grayish Brown Silt Loam	---
	29-39	Light Brownish Gray/Brownish Yellow Silty Clay	---
1.8	0-35	Dark Grayish Brown Silt Loam	---
	35-45	Light Brownish Gray/Brownish Yellow Silty Clay	---
1.9	0-33	Dark Grayish Brown Silt Loam	---
	33-43	Light Brownish Gray/Brownish Yellow Silty Clay	---
1.10	0-33	Dark Grayish Brown Silt Loam	---
	33-43	Light Brownish Gray/Brownish Yellow Silty Clay	---
1.11	0-26	Dark Grayish Brown Silt Loam	---
	26-36	Light Brownish Gray/Brownish Yellow Silty Clay	---
1.12	0-29	Dark Grayish Brown Silt Loam	---
	29-39	Light Brownish Gray/Brownish Yellow Silty Clay	---
1.13	0-31	Dark Grayish Brown Silt Loam	---
	31-41	Light Brownish Gray/Brownish Yellow Silty Clay	---
1.14	0-29	Dark Grayish Brown Silt Loam	---
	29-39	Light Brownish Gray/Brownish Yellow Silty Clay	---
1.15	0-28	Dark Grayish Brown Silt Loam	---
	28-38	Light Brownish Gray/Brownish Yellow Silty Clay	---

Shovel Test No.	Depth (cm)	Soil Description	Artifact Summary
1.16	0-27	Dark Grayish Brown Silt Loam	---
	27-37	Light Brownish Gray/Brownish Yellow Silty Clay	---
1.17	0-34	Dark Grayish Brown Silt Loam	---
	34-44	Light Brownish Gray/Brownish Yellow Silty Clay	---
1.18	0-32	Dark Grayish Brown Silt Loam	---
	32-42	Light Brownish Gray/Brownish Yellow Silty Clay	---
1.19	0-29	Dark Grayish Brown Silt Loam	---
	29-39	Light Brownish Gray/Brownish Yellow Silty Clay	---
1.20	0-27	Dark Grayish Brown Silt Loam	---
	27-37	Light Brownish Gray/Brownish Yellow Silty Clay	---
2.1	0-31	Dark Grayish Brown Silt Loam	---
	31-41	Light Yellowish Brown Silty Clay	---
2.2	0-28	Grayish Brown Silt Loam	---
	28-38	Light Brownish Gray/Brownish Yellow Sandy Clay	---
2.3	0-34	Grayish Brown Silt Loam	---
	34-44	Light Brownish Gray/Brownish Yellow Sandy Clay	---
2.4	0-32	Grayish Brown Silt Loam	---
	32-42	Light Brownish Gray/Brownish Yellow Sandy Clay	---
2.5	0-39	Dark Grayish Brown Silt Loam	---
	39-50	Light Brownish Gray/Brownish Yellow Silty Clay	---
2.6	0-28	Dark Grayish Brown Silt Loam	---
	28-50	Light Brownish Gray/Brownish Yellow Silty Clay	---
2.7	0-20	Dark Grayish Brown Silt Loam	---
	20-32	Light Brownish Gray/Brownish Yellow Silty Clay	---
2.8	0-20	Dark Grayish Brown Silt Loam	---
	20-30	Light Brownish Gray/Brownish Yellow Silty Clay	---
2.9	0-33	Dark Grayish Brown Silt Loam	---
	33-43	Light Brownish Gray/Brownish Yellow Silty Clay	---
2.10	0-27	Dark Grayish Brown Silt Loam	---
	27-37	Light Brownish Gray/Brownish Yellow Silty Clay	---

Shovel Test No.	Depth (cm)	Soil Description	Artifact Summary
2.11	0-30	Dark Grayish Brown Silt Loam	---
	30-40	Light Brownish Gray/Brownish Yellow Silty Clay	---
2.12	0-29	Dark Grayish Brown Silt Loam	---
	29-40	Light Brownish Gray/Brownish Yellow Silty Clay	---
2.13	0-25	Dark Grayish Brown Silt Loam	---
	25-35	Light Brownish Gray/Brownish Yellow Silty Clay	---
2.14	0-32	Dark Grayish Brown Silt Loam	---
	32-42	Light Brownish Gray/Brownish Yellow Silty Clay	---
2.15	0-27	Dark Grayish Brown Silt Loam	---
	27-37	Light Brownish Gray/Brownish Yellow Silty Clay	---
2.16	0-34	Dark Grayish Brown Silt Loam	---
	34-44	Light Brownish Gray/Brownish Yellow Silty Clay	---
2.17	0-30	Dark Grayish Brown Silt Loam	---
	30-41	Light Brownish Gray/Brownish Yellow Silty Clay	---
2.18	0-35	Dark Grayish Brown Silt Loam	---
	35-45	Light Brownish Gray/Brownish Yellow Silty Clay	---
2.19	0-28	Dark Grayish Brown Silt Loam	---
	28-38	Light Brownish Gray/Brownish Yellow Silty Clay	---
2.20	0-30	Dark Grayish Brown Silt Loam	---
	30-40	Light Brownish Gray/Brownish Yellow Silty Clay	---
3.1	0-32	Dark Grayish Brown Silt Loam	---
	32-42	Light Brownish Gray/Brownish Yellow Sand Loam	---
3.2	0-28	Brown Silt Loam	---
	28-38	Light Brownish Gray/Brownish Yellow Sandy Clay	---
3.3	0-27	Brown Silt Loam	---
	27-37	Light Brownish Gray/Brownish Yellow Sandy Clay	---
3.4	0-27	Brown Silt Loam	---
	27-37	Light Brownish Gray/Brownish Yellow Sandy Clay	---
3.5	0-27	Brown Silt Loam	---
	27-37	Light Brownish Gray/Brownish Yellow Sandy Clay	---

Shovel Test No.	Depth (cm)	Soil Description	Artifact Summary
3.6	0-29	Brown Silt Loam	---
	29-39	Light Brownish Gray/Brownish Yellow Sandy Clay	---
3.7	0-26	Brown Silt Loam	---
	26-36	Light Brownish Gray/Brownish Yellow Sandy Clay	---
3.8	0-27	Brown Silt Loam	---
	27-37	Light Brownish Gray/Brownish Yellow Sandy Clay	---
3.9	0-27	Brown Silt Loam	---
	27-37	Light Brownish Gray/Brownish Yellow Sandy Clay	---
3.10	0-28	Grayish Brown Silt Loam	---
	28-38	Light Brownish Gray/Brownish Yellow Sandy Clay	---
3.11	0-27	Grayish Brown Silt Loam	---
	27-37	Light Brownish Gray/Brownish Yellow Sandy Clay	---
3.12	0-25	Grayish Brown Silt Loam	---
	25-35	Light Brownish Gray/Brownish Yellow Sand Loam	---
3.13	0-28	Grayish Brown Silt Loam	---
	28-38	Light Brownish Gray/Brownish Yellow Sandy Clay	---
3.14	0-27	Grayish Brown Silt Loam	---
	27-37	Light Brownish Gray/Brownish Yellow Sandy Clay	---
3.15	0-28	Brown Silt Loam	---
	28-38	Light Brownish Gray/Brownish Yellow Sandy Clay	---
3.16	0-27	Brown Silt Loam	---
	27-37	Light Brownish Gray/Brownish Yellow Sandy Clay	---
3.17	0-29	Brown Silt Loam	---
	29-39	Light Brownish Gray/Brownish Yellow Sandy Clay	---
3.18	0-28	Brown Silt Loam	---
	28-38	Light Brownish Gray/Brownish Yellow Sandy Clay	---
3.19	0-27	Brown Silt Loam	---
	27-37	Light Brownish Gray/Brownish Yellow Sandy Clay	---
3.20	0-28	Brown Silt Loam	---
	28-38	Light Brownish Gray/Brownish Yellow Sandy Clay	---

Shovel Test No.	Depth (cm)	Soil Description	Artifact Summary
4.1	0-31	Dark Grayish Brown Silt Loam	---
	31-41	Light Brownish Gray/Brownish Yellow Silty Clay	---
4.2	0-32	Dark Grayish Brown Silt Loam	---
	32-42	Light Brownish Gray/Brownish Yellow Silty Clay	---
4.3	0-29	Dark Grayish Brown Silt Loam	---
	29-39	Light Brownish Gray/Brownish Yellow Silty Clay	---
4.4	0-28	Dark Grayish Brown Silt Loam	---
	28-38	Light Brownish Gray/Brownish Yellow Silty Clay	---
4.5	0-28	Dark Grayish Brown Silt Loam	---
	28-38	Light Brownish Gray/Brownish Yellow Silty Clay	---
4.6	0-26	Dark Grayish Brown Silt Loam	---
	26-36	Light Brownish Gray/Brownish Yellow Silty Clay	---
4.7	0-31	Dark Grayish Brown Silt Loam	---
	31-41	Light Brownish Gray/Brownish Yellow Silty Clay	---
4.8	0-28	Dark Grayish Brown Silt Loam	---
	28-38	Light Brownish Gray/Brownish Yellow Silty Clay	---
4.9	0-28	Dark Grayish Brown Silt Loam	---
	28-38	Light Brownish Gray/Brownish Yellow Silty Clay	---
4.10	0-31	Dark Grayish Brown Silt Loam	---
	31-41	Light Brownish Gray/Brownish Yellow Silty Clay	---
4.11	0-27	Dark Grayish Brown Silt Loam	---
	27-37	Light Brownish Gray/Brownish Yellow Silty Clay	---
4.12	0-29	Dark Grayish Brown Silt Loam	---
	29-39	Light Brownish Gray/Brownish Yellow Silty Clay	---
4.13	0-30	Dark Grayish Brown Silt Loam	---
	30-40	Light Brownish Gray/Brownish Yellow Silty Clay	---
4.14	0-27	Dark Grayish Brown Silt Loam	---
	27-37	Light Brownish Gray/Brownish Yellow Silty Clay	---
4.15	0-25	Dark Grayish Brown Silt Loam	---
	25-35	Light Brownish Gray/Brownish Yellow Silty Clay	---

Shovel Test No.	Depth (cm)	Soil Description	Artifact Summary
4.16	0-30	Dark Grayish Brown Silt Loam	---
	30-40	Light Brownish Gray/Brownish Yellow Silty Clay	---
4.17	0-30	Dark Grayish Brown Silt Loam	---
	30-40	Light Brownish Gray/Brownish Yellow Silty Clay	---
4.18	0-27	Dark Grayish Brown Silt Loam	---
	27-37	Light Brownish Gray/Brownish Yellow Silty Clay	---
4.19	0-28	Dark Grayish Brown Silt Loam	---
	28-38	Light Brownish Gray/Brownish Yellow Silty Clay	---
4.20	0-29	Dark Grayish Brown Silt Loam	---
	29-39	Light Brownish Gray/Brownish Yellow Silty Clay	---
5.1	0-32	Dark Grayish Brown Silt Loam	---
	32-42	Light Brownish Gray/Brownish Yellow Silty Clay	---
5.2	0-34	Brown Silt Loam	---
	34-44	Light Brownish Gray/Brownish Yellow Silty Clay	---
5.3	0-30	Brown Silt Loam	---
	30-40	Light Brownish Gray/Brownish Yellow Silty Clay	---
5.4	0-33	Brown Silt Loam	---
	33-43	Light Brownish Gray/Brownish Yellow Silty Clay	---
5.5	0-31	Brown Silt Loam	---
	31-41	Light Brownish Gray/Brownish Yellow Silty Clay	---
5.6	0-32	Brown Silt Loam	---
	32-42	Light Brownish Gray/Brownish Yellow Silty Clay	---
5.7	0-28	Dark Grayish Brown Silt Loam	---
	28-38	Light Brownish Gray/Brownish Yellow Silty Clay	---
5.8	0-34	Dark Grayish Brown Silt Loam	---
	34-44	Light Brownish Gray/Brownish Yellow Silty Clay	---
5.9	0-32	Dark Grayish Brown Silt Loam	---
	32-42	Light Brownish Gray/Brownish Yellow Silty Clay	---
5.10	0-22	Dark Grayish Brown Silt Loam	---
	22-32	Light Brownish Gray/Brownish Yellow Silty Clay	---

Shovel Test No.	Depth (cm)	Soil Description	Artifact Summary
5.11	0-34	Dark Grayish Brown Silt Loam	---
	34-44	Light Brownish Gray/Brownish Yellow Silty Clay	---
5.12	0-33	Dark Grayish Brown Silt Loam	---
	33-43	Light Brownish Gray/Brownish Yellow Silty Clay	---
5.13	0-25	Dark Grayish Brown Silt Loam	---
	25-35	Light Brownish Gray/Brownish Yellow Silty Clay	---
5.14	0-32	Dark Grayish Brown Silt Loam	---
	32-42	Light Brownish Gray/Brownish Yellow Silty Clay	---
5.15	0-25	Dark Grayish Brown Silt Loam	---
	25-35	Light Brownish Gray/Brownish Yellow Silty Clay	---
5.16	0-30	Dark Grayish Brown Silt Loam	---
	30-40	Light Brownish Gray/Brownish Yellow Silty Clay	---
5.17	0-30	Dark Grayish Brown Silt Loam	---
	30-40	Light Brownish Gray/Brownish Yellow Silty Clay	---
5.18	0-27	Dark Grayish Brown Silt Loam	---
	27-37	Light Brownish Gray/Brownish Yellow Silty Clay	---
5.19	0-30	Dark Grayish Brown Silt Loam	---
	30-40	Light Brownish Gray/Brownish Yellow Silty Clay	---
5.20	0-31	Dark Grayish Brown Silt Loam	---
	31-41	Light Brownish Gray/Brownish Yellow Silty Clay	---
6.1	0-26	Brown Silt Loam	---
	26-36	Light Brownish Gray/Brownish Yellow Silty Clay	---
6.2	0-24	Brown Silt Loam	---
	24-34	Light Brownish Gray/Brownish Yellow Silty Clay	---
6.3	0-27	Brown Silt Loam	---
	27-37	Light Brownish Gray/Brownish Yellow Silty Clay	---
6.4	0-28	Brown Silt Loam	---
	28-38	Light Brownish Gray/Brownish Yellow Silty Clay	---
6.5	0-27	Brown Silt Loam	---
	27-37	Light Brownish Gray/Brownish Yellow Silty Clay	---

Shovel Test No.	Depth (cm)	Soil Description	Artifact Summary
6.6	0-27	Brown Silt Loam	---
	27-37	Light Brownish Gray/Brownish Yellow Silty Clay	---
6.7	0-28	Grayish Brown Silt Loam	---
	28-38	Light Brownish Gray/Brownish Yellow Silty Clay	---
6.8	0-26	Grayish Brown Silt Loam	---
	26-36	Light Brownish Gray/Brownish Yellow Silty Clay	---
6.9	0-26	Grayish Brown Silt Loam	---
	26-36	Light Brownish Gray/Brownish Yellow Silty Clay	---
6.10	0-29	Grayish Brown Silt Loam	---
	29-39	Light Brownish Gray/Brownish Yellow Silty Clay	---
6.11	0-28	Grayish Brown Silt Loam	---
	28-38	Light Brownish Gray/Brownish Yellow Silty Clay	---
6.12	0-28	Grayish Brown Silt Loam	---
	28-38	Light Brownish Gray/Brownish Yellow Silty Clay	---
6.13	0-30	Grayish Brown Silt Loam	---
	30-40	Light Brownish Gray/Brownish Yellow Silty Clay	---
6.14	0-27	Grayish Brown Silt Loam	---
	27-37	Light Brownish Gray/Brownish Yellow Silty Clay	---
6.15	0-27	Grayish Brown Silt Loam	---
	27-37	Light Brownish Gray/Brownish Yellow Silty Clay	---
6.16	0-28	Grayish Brown Silt Loam	---
	28-38	Light Brownish Gray/Brownish Yellow Silty Clay	---
6.17	0-26	Grayish Brown Silt Loam	---
	26-36	Light Brownish Gray/Brownish Yellow Silty Clay	---
6.18	0-28	Grayish Brown Silt Loam	---
	28-38	Light Brownish Gray/Brownish Yellow Silty Clay	---
6.19	0-26	Grayish Brown Silt Loam	---
	26-36	Light Brownish Gray/Brownish Yellow Silty Clay	---
6.20	0-26	Grayish Brown Silt Loam	---
	26-36	Light Brownish Gray/Brownish Yellow Silty Clay	---

Shovel Test No.	Depth (cm)	Soil Description	Artifact Summary
7.1	0-26	Dark Grayish Brown Silt Loam	---
	26-36	Light Brownish Gray/Brownish Yellow Silty Clay	---
7.2	0-27	Dark Grayish Brown Silt Loam	---
	27-37	Light Brownish Gray/Brownish Yellow Silty Clay	---
7.3	0-32	Dark Grayish Brown Silt Loam	---
	32-42	Light Brownish Gray/Brownish Yellow Silty Clay	---
7.4	0-28	Dark Grayish Brown Silt Loam	---
	28-38	Light Brownish Gray/Brownish Yellow Silty Clay	---
7.5	0-30	Dark Grayish Brown Silt Loam	---
	30-40	Light Brownish Gray/Brownish Yellow Silty Clay	---
7.6	0-31	Dark Grayish Brown Silt Loam	---
	31-41	Light Brownish Gray/Brownish Yellow Silty Clay	---
7.7	0-30	Dark Grayish Brown Silt Loam	---
	30-40	Light Brownish Gray/Brownish Yellow Silty Clay	---
7.8	0-32	Dark Grayish Brown Silt Loam	---
	32-42	Light Brownish Gray/Brownish Yellow Silty Clay	---
7.9	0-34	Dark Grayish Brown Silt Loam	---
	34-44	Light Brownish Gray/Brownish Yellow Silty Clay	---
7.10	0-33	Dark Grayish Brown Silt Loam	---
	33-43	Light Brownish Gray/Brownish Yellow Silty Clay	---
7.11	0-33	Dark Grayish Brown Silt Loam	---
	33-43	Light Brownish Gray/Brownish Yellow Silty Clay	---
7.12	0-29	Dark Grayish Brown Silt Loam	---
	29-39	Light Brownish Gray/Brownish Yellow Silty Clay	---
7.13	0-30	Dark Grayish Brown Silt Loam	---
	30-40	Light Brownish Gray/Brownish Yellow Silty Clay	---
7.14	0-27	Dark Grayish Brown Silt Loam	---
	27-37	Light Brownish Gray/Brownish Yellow Silty Clay	---
7.15	0-30	Dark Grayish Brown Silt Loam	---
	30-40	Light Brownish Gray/Brownish Yellow Silty Clay	---

Shovel Test No.	Depth (cm)	Soil Description	Artifact Summary
7.16	0-32	Dark Grayish Brown Silt Loam	---
	32-42	Light Brownish Gray/Brownish Yellow Silty Clay	---
7.17	0-34	Dark Grayish Brown Silt Loam	---
	34-44	Light Brownish Gray/Brownish Yellow Silty Clay	---
7.18	0-30	Dark Grayish Brown Silt Loam	---
	30-40	Light Brownish Gray/Brownish Yellow Silty Clay	---
7.19	0-29	Dark Grayish Brown Silt Loam	---
	29-39	Light Brownish Gray/Brownish Yellow Silty Clay	---
7.20	0-33	Dark Grayish Brown Silt Loam	---
	33-43	Light Brownish Gray/Brownish Yellow Silty Clay	---
8.1	0-28	Dark Grayish Brown Silt Loam	---
	28-38	Light Brownish Gray/Brownish Yellow Silty Clay	---
8.2	0-37	Dark Grayish Brown Silt Loam	---
	37-47	Light Brownish Gray/Brownish Yellow Silty Clay	---
8.3	0-29	Dark Grayish Brown Silt Loam	---
	29-39	Light Brownish Gray/Brownish Yellow Silty Clay	---
8.4	0-30	Dark Grayish Brown Silt Loam	---
	30-40	Light Brownish Gray/Brownish Yellow Silty Clay	---
8.5	0-20	Grayish Brown Silt Loam	---
	20-30	Light Brownish Gray/Brownish Yellow Silty Clay	---
8.6	0-28	Grayish Brown Silt Loam	---
	28-38	Light Brownish Gray/Brownish Yellow Silty Clay	---
8.7	0-33	Grayish Brown Silt Loam	---
	33-43	Light Brownish Gray/Brownish Yellow Silty Clay	---
8.8	0-29	Grayish Brown Silt Loam	---
	29-39	Light Brownish Gray/Brownish Yellow Silty Clay	---
8.9	0-24	Grayish Brown Silt Loam	---
	24-34	Light Brownish Gray/Brownish Yellow Silty Clay	---
8.10	0-27	Grayish Brown Silt Loam	---
	27-37	Light Brownish Gray/Brownish Yellow Silty Clay	---

Shovel Test No.	Depth (cm)	Soil Description	Artifact Summary
8.11	0-28	Grayish Brown Silt Loam	---
	28-38	Light Brownish Gray/Brownish Yellow Silty Clay	---
8.12	0-32	Grayish Brown Silt Loam	---
	32-42	Light Brownish Gray/Brownish Yellow Silty Clay	---
8.13	0-32	Grayish Brown Silt Loam	---
	32-42	Light Brownish Gray/Brownish Yellow Silty Clay	---
8.14	0-33	Grayish Brown Silt Loam	---
	33-43	Light Brownish Gray/Brownish Yellow Silty Clay	---
8.15	0-30	Grayish Brown Silt Loam	---
	30-40	Light Brownish Gray/Brownish Yellow Silty Clay	---
8.16	0-31	Grayish Brown Silt Loam	---
	31-41	Light Brownish Gray/Brownish Yellow Silty Clay	---
8.17	0-35	Grayish Brown Silt Loam	---
	35-45	Light Brownish Gray/Brownish Yellow Silty Clay	---
8.18	0-28	Grayish Brown Silt Loam	---
	28-38	Light Brownish Gray/Brownish Yellow Silty Clay	---
8.19	0-28	Grayish Brown Silt Loam	---
	28-38	Light Brownish Gray/Brownish Yellow Silty Clay	---
8.20	0-30	Grayish Brown Silt Loam	---
	30-40	Light Brownish Gray/Brownish Yellow Silty Clay	---
9.1	0-31	Dark Grayish Brown Silt Loam	---
	31-41	Light Brownish Gray/Brownish Yellow Silty Clay	---
9.2	0-27	Dark Grayish Brown Silt Loam	---
	27-37	Light Brownish Gray/Brownish Yellow Silty Clay	---
9.3	0-28	Grayish Brown Silt Loam	---
	28-38	Light Brownish Gray/Brownish Yellow Silty Clay	---
9.4	0-28	Grayish Brown Silt Loam	---
	28-38	Light Brownish Gray/Brownish Yellow Silty Clay	---
9.5	0-27	Grayish Brown Silt Loam	---
	27-37	Light Brownish Gray/Brownish Yellow Silty Clay	---

Shovel Test No.	Depth (cm)	Soil Description	Artifact Summary
9.6	0-26	Grayish Brown Silt Loam	---
	26-36	Light Brownish Gray/Brownish Yellow Silty Clay	---
9.7	0-27	Grayish Brown Silt Loam	---
	27-37	Light Brownish Gray/Brownish Yellow Silty Clay	---
9.8	0-25	Grayish Brown Silt Loam	---
	25-35	Light Brownish Gray/Brownish Yellow Silty Clay	---
9.9	0-25	Grayish Brown Silt Loam	---
	25-35	Light Brownish Gray/Brownish Yellow Silty Clay	---
9.10	0-30	Grayish Brown Silt Loam	---
	30-40	Light Brownish Gray/Brownish Yellow Silty Clay	---
9.11	0-28	Grayish Brown Silt Loam	---
	28-38	Light Brownish Gray/Brownish Yellow Silty Clay	---
9.12	0-27	Grayish Brown Silt Loam	---
	27-37	Light Brownish Gray/Brownish Yellow Silty Clay	---
9.13	0-26	Grayish Brown Silt Loam	---
	26-36	Light Brownish Gray/Brownish Yellow Silty Clay	---
9.14	0-24	Grayish Brown Silt Loam	---
	24-34	Light Brownish Gray/Brownish Yellow Silty Clay	---
9.15	0-27	Grayish Brown Silt Loam	---
	27-37	Light Brownish Gray/Brownish Yellow Silty Clay	---
9.16	0-26	Grayish Brown Silt Loam	---
	26-36	Light Brownish Gray/Brownish Yellow Silty Clay	---
9.17	0-27	Grayish Brown Silt Loam	---
	27-37	Light Brownish Gray/Brownish Yellow Silty Clay	---
9.18	0-26	Grayish Brown Silt Loam	---
	26-36	Light Brownish Gray/Brownish Yellow Silty Clay	---
9.19	0-25	Grayish Brown Silt Loam	---
	25-35	Light Brownish Gray/Brownish Yellow Silty Clay	---
9.20	0-27	Grayish Brown Silt Loam	---
	27-37	Light Brownish Gray/Brownish Yellow Silty Clay	---

Shovel Test No.	Depth (cm)	Soil Description	Artifact Summary
10.1	0-32	Dark Grayish Brown Silt Loam	---
	32-42	Light Brownish Gray/Brownish Yellow Silty Clay	---
10.2	0-34	Grayish Brown Silt Loam	---
	34-44	Light Brownish Gray/Brownish Yellow Silty Clay	---
10.3	0-29	Grayish Brown Silt Loam	---
	29-39	Light Brownish Gray/Brownish Yellow Silty Clay	---
10.4	0-31	Grayish Brown Silt Loam	---
	31-41	Light Brownish Gray/Brownish Yellow Silty Clay	---
10.5	0-28	Grayish Brown Silt Loam	---
	28-38	Light Brownish Gray/Brownish Yellow Silty Clay	---
10.6	0-31	Grayish Brown Silt Loam	---
	31-41	Light Brownish Gray/Brownish Yellow Silty Clay	---
10.7	0-29	Grayish Brown Silt Loam	---
	29-39	Light Brownish Gray/Brownish Yellow Silty Clay	---
10.8	0-30	Grayish Brown Silt Loam	---
	30-40	Light Brownish Gray/Brownish Yellow Silty Clay	---
10.9	0-27	Grayish Brown Silt Loam	---
	27-37	Light Brownish Gray/Brownish Yellow Silty Clay	---
10.10	0-28	Grayish Brown Silt Loam	---
	28-38	Light Brownish Gray/Brownish Yellow Silty Clay	---
10.11	0-31	Grayish Brown Silt Loam	---
	31-41	Light Brownish Gray/Brownish Yellow Silty Clay	---
10.12	0-34	Grayish Brown Silt Loam	---
	34-44	Light Brownish Gray/Brownish Yellow Silty Clay	---
10.13	0-33	Grayish Brown Silt Loam	---
	33-43	Light Brownish Gray/Brownish Yellow Silty Clay	---
10.14	0-32	Grayish Brown Silt Loam	---
	32-42	Light Brownish Gray/Brownish Yellow Silty Clay	---
10.15	0-28	Grayish Brown Silt Loam	---
	28-38	Light Brownish Gray/Brownish Yellow Silty Clay	---

Shovel Test No.	Depth (cm)	Soil Description	Artifact Summary
10.16	0-29	Grayish Brown Silt Loam	---
	29-39	Light Brownish Gray/Brownish Yellow Silty Clay	---
10.17	0-33	Grayish Brown Silt Loam	---
	33-43	Light Brownish Gray/Brownish Yellow Silty Clay	---
10.18	0-31	Grayish Brown Silt Loam	---
	31-41	Light Brownish Gray/Brownish Yellow Silty Clay	---
10.19	0-27	Grayish Brown Silt Loam	---
	27-37	Light Brownish Gray/Brownish Yellow Silty Clay	---
10.20	0-29	Grayish Brown Silt Loam	---
	29-39	Light Brownish Gray/Brownish Yellow Silty Clay	---
11.1	0-27	Grayish Brown Silt Loam	---
	27-37	Light Brownish Gray/Brownish Yellow Silty Clay	---
11.2	0-40	Grayish Brown Silt Loam	---
	40-50	Light Brownish Gray/Brownish Yellow Silty Clay	---
11.3	0-34	Grayish Brown Silt Loam	---
	34-44	Light Brownish Gray/Brownish Yellow Silty Clay	---
11.4	0-32	Grayish Brown Silt Loam	---
	32-42	Light Brownish Gray/Brownish Yellow Silty Clay	---
11.5	0-36	Grayish Brown Silt Loam	---
	36-46	Light Brownish Gray/Brownish Yellow Silty Clay	---
11.6	0-37	Grayish Brown Silt Loam	---
	37-47	Light Brownish Gray/Brownish Yellow Silty Clay	---
11.7	0-33	Grayish Brown Silt Loam	---
	33-43	Light Brownish Gray/Brownish Yellow Silty Clay	---
11.8	0-26	Grayish Brown Silt Loam	---
	26-36	Light Brownish Gray/Brownish Yellow Silty Clay	---
11.9	0-31	Grayish Brown Silt Loam	---
	31-41	Light Brownish Gray/Brownish Yellow Silty Clay	---
11.10	0-32	Grayish Brown Silt Loam	---
	32-42	Light Brownish Gray/Brownish Yellow Silty Clay	---

Shovel Test No.	Depth (cm)	Soil Description	Artifact Summary
11.11	0-28	Grayish Brown Silt Loam	---
	28-38	Light Brownish Gray/Brownish Yellow Silty Clay	---
11.12	0-23	Grayish Brown Silt Loam	---
	23-33	Light Brownish Gray/Brownish Yellow Silty Clay	---
11.13	0-18	Grayish Brown Silt Loam	---
	18+	Water Table	
11.14	0-28	Grayish Brown Silt Loam	---
	28-38	Light Brownish Gray/Brownish Yellow Silty Clay	---
11.15	0-30	Grayish Brown Silt Loam	---
	30-40	Light Brownish Gray/Brownish Yellow Silty Clay	---
11.16	0-27	Dark Grayish Brown Silt Loam	---
	27-37	Light Brownish Gray/Brownish Yellow Silty Clay	---
11.17	0-27	Grayish Brown Silt Loam	---
	27+	Water Table	
11.18	0-28	Grayish Brown Silt Loam	---
	28+	Water Table	
11.19	0-28	Grayish Brown Silt Loam	---
	28+	Water Table	
11.20	0-11	Grayish Brown Silt Loam	---
	11+	Water Table	
12.1	0-29	Grayish Brown Silt Loam	---
	29-39	Light Brownish Gray/Brownish Yellow Silty Clay	---
12.2	0-29	Grayish Brown Silt Loam	---
	29-39	Light Brownish Gray/Brownish Yellow Silty Clay	---
12.3	0-28	Grayish Brown Silt Loam	---
	28-38	Light Brownish Gray/Brownish Yellow Silty Clay	---
12.4	0-30	Grayish Brown Silt Loam	---
	30-40	Light Brownish Gray/Brownish Yellow Silty Clay	---
12.5	0-29	Grayish Brown Silt Loam	---
	29-39	Light Brownish Gray/Brownish Yellow Silty Clay	---
12.6	0-29	Grayish Brown Silt Loam	---
	29-39	Light Brownish Gray/Brownish Yellow Silty Clay	---

Shovel Test No.	Depth (cm)	Soil Description	Artifact Summary
12.7	0-26	Grayish Brown Silt Loam	---
	26-36	Light Brownish Gray/Brownish Yellow Silty Clay	---
12.8	0-26	Grayish Brown Silt Loam	---
	26-36	Light Brownish Gray/Brownish Yellow Silty Clay	---
12.9	0-27	Grayish Brown Silt Loam	---
	27-37	Light Brownish Gray/Brownish Yellow Silty Clay	---
12.10	0-28	Grayish Brown Silt Loam	---
	28-38	Light Brownish Gray/Brownish Yellow Silty Clay	---
12.11	0-31	Grayish Brown Silt Loam	---
	31-41	Light Brownish Gray/Brownish Yellow Silty Clay	---
12.12	0-30	Grayish Brown Silt Loam	---
	30-40	Light Brownish Gray/Brownish Yellow Silty Clay	---
12.13	0-30	Grayish Brown Silt Loam	---
	30-40	Light Brownish Gray/Brownish Yellow Silty Clay	---
12.14	0-28	Grayish Brown Silt Loam	---
	28-38	Light Brownish Gray/Brownish Yellow Silty Clay	---
12.15	0-27	Grayish Brown Silt Loam	---
	27-37	Light Brownish Gray/Brownish Yellow Silty Clay	---
12.16	0-26	Grayish Brown Silt Loam	---
	26-36	Light Brownish Gray/Brownish Yellow Silty Clay	---
12.17	0-23	Grayish Brown Silt Loam	---
	23-33	Light Brownish Gray/Brownish Yellow Silty Clay	---
12.18	0-27	Grayish Brown Silt Loam	---
	27-37	Light Brownish Gray/Brownish Yellow Silty Clay	---
12.19	0-26	Grayish Brown Silt Loam	---
	26-36	Light Brownish Gray/Brownish Yellow Silty Clay	---
12.20	0-26	Grayish Brown Silt Loam	---
	26-36	Light Brownish Gray/Brownish Yellow Silty Clay	---