



ARCHITECTURE  
ENGINEERING  
LAND SURVEYING

**Edward G. Olley, Jr., AIA**  
**William P. Plante, PLS**  
**Patrick J. Scordo, PE**  
**Thomas S.M. Compo, PE**  
**Ryan G. Churchill, PE**

11 March 2013

Mr. Kurt Hauk, P.E.  
City Engineer  
Room 305 – City Hall  
245 Washington St  
Watertown, NY 13601

Gregory F. Ashley, PLS  
Stephen J. Gracey, PLS

In Consultation  
Leo F. Gozalkowski, PLS  
Stephen W. Yausi, AIA

Re: Site Plan Submission  
Proposed Sonic Restaurant

File: 2014-023E

Dear Mr. Hauk:

On behalf of CDE Partners, LLC we are submitting the following materials for Site Plan review at the 1 April 2014 City Planning Board meeting and the 25 March 2014 Jefferson County Planning meeting:

- 4 full size sets of Site Plans for Departmental Review, including a wet stamped original (Cover, C001, C101, C102, and C501-C504);
- 4 full size Topographic Surveys (by Lafave, White & McGivern PC) and 12 – 11"x17" copies;
- 16 - 11" x 17" Preliminary Architectural Plans (A2.04, A3.0, and FP1.0);
- 12 -11"x17" sets of Site Plans;
- 16 Signed and Sealed Engineering Reports;
- City of Watertown Site Plan Application, including Short EAF, and
- \$50 Application Fee.

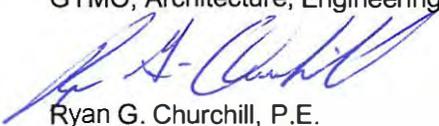
The project is located on three different tax parcel's; 8-53-103.100, 8-53-102.001, and 8-53-114 in the City of Watertown.

The proposed development consists of a Sonic Restaurant facility (2,580 SF) and related utilities and appurtenances required for site plan approval. The proposed facility will include 15 covered drive-in eating stalls. Signage is not being included for review in the submission.

The developer plans on beginning construction in the Summer of 2014.

If there are any questions or you require additional information, please feel free to contact our office.

Sincerely,  
GYMO, Architecture, Engineering & Land Surveying, PC

  
Ryan G. Churchill, P.E.  
Partner, Managing Engineer

Attachments

pc: Thomas Ross - GYMO, PC  
Fran Desimone - CDE Partners, LLC

220 Sterling Street Watertown, New York 13601  
Tel: (315) 788-3900 Fax: (315) 788-0668  
E-mail: gymopc@gymopc.com



1869

## CITY OF WATERTOWN SITE PLAN APPLICATION PROCESS

The applicant is responsible for completeness of application and inclusion of all required information.

**\*\*INCOMPLETE APPLICATIONS WILL NOT BE PROCESSED\*\***

In order to expedite the Site Plan review process, all applicants are encouraged to have a pre-application meeting with Planning & Engineering staff. Staff can be reached at (315) 785-7740.

In the interest of expediting site plan approvals, the City of Watertown wishes to advise you of the procedures in applying for these referrals:

### A. Fill out the Site Plan / Site Plan Waiver - Determination Flow Chart below:

1. Is the use a one, two, or three family dwelling?  
 YES (Site Plan Review is **not** required. You may apply directly for Building Permit.)  
 NO (Go to question 2)
2. Is your building or parking lot construction or expansion less than or equal to 400 sq. ft.?  
 YES (Site Plan Review is not required. You may apply directly for Building Permit.)  
 NO (Go to question 3)
3. Does your building or parking lot construction or expansion exceed 2500 sq. ft.?  
 YES (Site Plan Review required. Submit the Site Plan Application Form.)  
 NO (Go to question 4)
4. Is your proposed building the first on the lot?  
 YES (Site Plan Review required. Submit the Site Plan Application Form.)  
 NO (Go to question 5)
5. Does your project involve a change in the property boundaries?  
 YES (Site Plan Review required. Submit the Site Plan Application Form.)  
 NO (Go to question 6)
6. Does your building or parking lot construction or expansion change or impair the overall grading, circulation, drainage, utility services, and appearance and visual effect of the property?  
 YES (Site Plan Review required. Submit the Site Plan Application Form.)  
 NO (\*Site Plan Waiver allowed. Submit the Site Plan Waiver Form.)

\* The City of Watertown Planning Board reserves the right to require Site Plan Review.

B. When Jefferson County Planning Board review is necessary, one additional set is required. **SUBMISSION MUST CONTAIN COMPLETE COLLATED SETS OF ALL DATA.**  
 A complete submittal set at a minimum contains the following:

1. For Site Plan Approval \*
  - 15 sets** - At least 3 full size, including one original full size.
    - Remaining sets can be 11x17 if legible.
    - Completed Site Plan Application (see attached application form).
  - \* City Council Approval is required for Site Plans.
  
2. For Site Plan Waiver Approval \*\*
  - 10 sets** - At least 3 full size, including one original full size.
    - Remaining sets can be 11x17 if legible
    - Completed Site Plan Waiver Application (see attached application form).
  - \*\* Site Plan approval of City Council would be waived by the City of Watertown Planning Board.

C. Address submittals to:  
 Kurt W. Hauk, P.E.  
 City Engineer  
 Room 305, City Hall  
 245 Washington Street  
 Watertown, NY 13601

D. A **\$50.00** application fee must accompany the submittal.  
 A **\$50.00** application fee must accompany each resubmittal. You will be notified by the Engineering Department if an application requires a resubmittal.  
 Make checks payable to the City of Watertown.

E. All Site Plan submittals must be received by the City Engineer at least 14 calendar days prior to the next Planning Board Meeting; 21 calendar days if Jefferson County Planning Board action is necessary. Failure to meet the submittal deadline will result in **not** making the agenda for the upcoming Planning Board Meeting. **THERE ARE NO EXCEPTIONS.** The City Planning Board meets on the first Tuesday of each month at 1:30 P.M. in the City Council Chambers on the 3<sup>rd</sup> Floor of City Hall.

CITY OF WATERTOWN PLANNING BOARD 2010 (1 <sup>ST</sup> TUES. MONTH @ 1:30 PM)		CITY OF WATERTOWN CITY COUNCIL 2010 (1 <sup>ST</sup> & 3 <sup>RD</sup> MONDAY @ 7 PM)		JEFFERSON COUNTY PLANNING BOARD 2010 (LAST TUES. MONTH)	
MEETING DATE	DEADLINE	MEETING DATE		MEETING DATE	DEADLINE
Jan. 5	Dec. 22	Jan. 4, 19		Jan. 26	Jan. 12
Feb. 2	Jan. 19	Feb. 1, 16		Feb. 23	Feb. 9
March 2	Feb. 16	March 1, 15		March 30	March 16
April 6	March 23	Apr. 5, 19		April 27	April 13
May 4	April 20	May 3, 17		May 25	May 11
June 1	May 18	Jun. 7, 21		June 29	June 15
July 6	June 22	July 5, 19		July 27	July 13
Aug. 3	July 20	Aug. 2, 16		Aug. 24	Aug. 10
Sept. 7	Aug. 24	Sept. 7, 20		Sept. 28	Sept. 14
Oct. 5	Sept. 21	Oct. 4, 18		Oct. 26	Oct. 12
Nov. 2	Oct. 19	Nov. 1, 15		Nov. 23	Nov. 9
Dec. 7	Nov. 23	Dec. 6, 20		Dec. 28	Dec. 14



**CITY OF WATERTOWN  
SITE PLAN APPLICATION  
AND  
SHORT ENVIRONMENTAL  
ASSESSMENT FORM, PART 1**

**\*\* Provide responses for all sections. INCOMPLETE APPLICATIONS WILL NOT BE PROCESSED. Failure to submit required information by the submittal deadline will result in not making the agenda for the upcoming Planning Board meeting.**

**PROPERTY LOCATION**

Proposed Project Name: Proposed Sonic Restaurant

Tax Parcel Number: 8-53-103.100, 8-53-102.001, and 8-53-114

Property Address: Western Boulevard, City Center Plaza

Existing Zoning Classification: Planned Development District

**OWNER OF PROPERTY**

Name: Vision Development

Address: 23590 Iroquois Island Shore Road

Alexandria Bay, NY 13607

Telephone Number: (315) 482-1008

Fax Number: (315) 482-1025

**APPLICANT**

Name: CDE Partners, LLC

Address: 330 Monroe Avenue, Suite 301

Rochester, NY 14618

Telephone Number: (585) 233-0454

Fax Number: \_\_\_\_\_

Email Address: desimone.fran@gmail.com

**ENGINEER/ARCHITECT/SURVEYOR**

Name: Ryan G. Churchill, P.E. - GYMO P.C.

Address: 220 Sterling Street, Watertown, NY 13601

Watertown, NY 13601

Telephone Number: (315) 788-3900

Fax Number: (315) 788-0668

Email Address: pat@gymopc.com

**PROJECT DESCRIPTION**

Describe project and proposed use briefly:

Construction of a 2,580 SF Sonic Restaurant and the following site amenities,  
Water and sanitary sewer service, storm sewer facilities, lighting, landscaping, vehicular  
and pedestrian paths, etc.

Is proposed Action:

- New       Expansion       Modification/Alteration

Amount of Land Affected:

Initially: 1.17 Acres      Ultimately: 1.17 Acres

Will proposed action comply with existing zoning or other existing land use restrictions?

- Yes       No      If no, describe briefly

What is present land use in vicinity of project?

- Residential       Industrial       Commercial       Agriculture
- Park/Forest/Open Space       Other

Describe: Restaurants, hotels, small retail

Does project involve a permit approval, or funding, now or ultimately from any other Governmental Agency (Federal, State or Local)?

- Yes       No      If yes, list agency(s) and permit/approval(s)

Does any aspect of the project have a currently valid permit or approval?

- Yes       No      If yes, list agency(s) and permit/approval(s)

Overall WCC Plaza approved previously. Approvals needed:  
- NYSDEC Sewer and SWPPP  
-NYSDOH (Water)  
-Background Studies (Archeological, Endangered Species, Wildlife, Traffic)

As a result of proposed project, will existing permit/approval require modification?

Yes       No

Proposed number of housing units (if applicable): \_\_\_\_\_

Proposed building area: 1<sup>st</sup> Floor 2,580 Sq. Ft.  
1st Floor (                    ) Sq. Ft.  
3<sup>rd</sup> Floor \_\_\_\_\_ Sq. Ft.  
Total 2,580 Sq. Ft.

Area of building to be used for the boiler room, heat facilities, utility facilities and storage: 280 Sq. Ft.

Number of parking spaces proposed: 53 Spaces, including 15 drive-in stalls

Construction Schedule: Spring 2014

Hours of Operation: 6 AM to 10 PM

Volume of traffic to be generated: 127 AM Peak HR, 86 PM Peak HR ADT

## REQUIRED DRAWINGS:

\*\* The following drawings with the listed information **ARE REQUIRED, NOT OPTIONAL**. If the required information is not included and/or addressed, the Site Plan Application will **not** be processed.

### **BOUNDARY & TOPOGRAPHIC SURVEY**

(Depict existing features as of the date of the Site Plan Application. This Survey and Map must be performed and created by a Professional Land Surveyor licensed and currently registered to practice in the State of New York. This Survey and Map must be stamped and signed with an original seal and signature on at least one copy, the rest may be copies thereof.

- All elevations are National Geodetic Vertical Datum of 1929 (NGVD29).
- 1' contours are shown & labeled with appropriate spot elevations.
- All existing features on and within 50 feet of the subject property are shown and labeled. Unless restricted
- All existing utilities on and within 50 feet of the subject property are shown and labeled.
- All existing easements and/or right-of-ways are shown and labeled.
- Existing property lines (bearings & distances), margins, acreage, zoning, existing land use, reputed owner, adjacent reputed owners & tax parcel numbers are shown and labeled.
- The north arrow & graphic scale are shown.

### **DEMOLITION PLAN (If Applicable)**

- All existing features on and within 50 feet of the subject property are shown and labeled.
- All items to be removed are labeled in darker text.

### **SITE PLAN**

- All proposed above ground features are depicted and clearly labeled.
- All proposed features are clearly labeled "proposed".
- All proposed easements & right-of-ways are shown and labeled.
- Land use, zoning, & tax parcel number are shown.

- The Plan is adequately dimensioned including radii.
- The line work & text for all proposed features is shown darker than existing features.
- All vehicular & pedestrian traffic circulation is shown including a delivery or refuse vehicle entering and exiting the property.
- Proposed parking & loading spaces including ADA accessible spaces are shown and labeled.
- Refuse Enclosure Area (Dumpster), if applicable, is shown. Section 161-19.1 of the Zoning Ordinance states, "No refuse vehicle or refuse container shall be parked or placed within 15 feet of a party line without the written consent of the adjoining owner, if the owner occupies any part of the adjoining property".
- The north arrow & graphic scale are shown.

**GRADING PLAN**

- All proposed below ground features including elevations & inverts are shown and labeled.
- All proposed above ground features are shown and labeled.
- The line work & text for all proposed features is shown darker than existing features.
- All proposed easements & right-of-ways are shown and labeled.
- 1' existing contours are shown dashed & labeled with appropriate spot elevations.
- 1' proposed contours are shown & labeled with appropriate spot elevations.
- All elevations are National Geodetic Vertical Datum of 1929 (NGVD29).
- Sediment & Erosion control are shown & labeled on the grading plan unless separate drawings have been provided as part of a Stormwater Pollution Prevention Plan (SWPPP).

**UTILITY PLAN**

- All proposed above & below ground features are shown and labeled.
- All existing above & below ground utilities including sanitary, storm water, water, electric, gas, telephone, cable, fiber optic, etc. are shown and labeled.

- All proposed easements & right-of-ways are shown and labeled.
- The Plan is adequately dimensioned including radii.
- The line work & text for all proposed features is shown darker than existing features.
- The following note has been added to the drawings stating, "All water main and service work must be coordinated with the City of Watertown Water Department. The Water Department requirements supercede all other plans and specifications provided."

**LANDSCAPING PLAN**

- All proposed above ground features are shown and labeled.
- All proposed trees, shrubs, and other plantings are shown and labeled.
- All proposed landscaping & text are shown darker than existing features.
- All proposed landscaping is clearly depicted, labeled and keyed to a plant schedule that includes the scientific name, common name, size, quantity, etc.
- For additional landscaping requirements where nonresidential districts and land uses abut land in any residential district, please refer to Section 310-59, Landscaping of the City's Zoning Ordinance.
- Site Plan complies with and meets acceptable guidelines set forth in Appendix A - Landscaping and Buffer Zone Guidelines (August 7, 2007).**

**PHOTOMETRIC PLAN (If Applicable)**

- All proposed above ground features are shown.
- Photometric spot elevations or labeled photometric contours of the property are clearly depicted. Light spillage across all property lines shall not exceed 0.5 foot-candles.

**CONSTRUCTION DETAILS & NOTES**

- All details and notes necessary to adequately complete the project including, but not limited to, landscaping, curbing, catch basins, manholes, water line, pavement, sidewalks, trench, lighting, trash enclosure, etc. are provided.
- Maintenance & protection and traffic plans & notes for all required work within City streets including driveways, water laterals, sanitary laterals, storm connections, etc. are provided.

Water and sanitary sewer service, storm sewer facilities, lighting, landscaping, vehicular

- The following note must be added to the drawings stating:  
“All work to be performed within the City of Watertown margin will require sign-off from a Professional Engineer, licensed and currently registered to practice in the State of New York, that the work was built according to the approved site plan and applicable City of Watertown standards. Compaction testing will be required for all work to be performed within the City of Watertown margin and must be submitted to the City of Watertown Codes Department.”

**PRELIMINARY ARCHITECTURAL PLANS (If Applicable)**

- Floor plan drawings, including finished floor elevations, for all buildings to be constructed are provided.
- Exterior elevations including exterior materials and colors for all buildings to be constructed are provided.
- Roof outline depicting shape, slope and direction is provided.

**ENGINEERING REPORT**

**\*\* The engineering report at a minimum includes the following:**

- Project location
- Project description
- Existing & proposed sanitary sewer flows & summary
- Water flows & pressure
- Storm Water Pre & Post Construction calculations & summary
- Traffic impacts
- Lighting summary
- Landscaping summary

**GENERAL INFORMATION**

- ALL ITEMS ARE STAMPED & SIGNED WITH AN ORIGINAL SIGNATURE BY A PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR SURVEYOR LICENSED AND CURRENTLY REGISTERED TO PRACTICE IN THE STATE OF NEW YORK.
- If required, a copy of the Stormwater Pollution Prevention Plan (SWPPP) submitted to the NYSDEC will also be sent to the City of Watertown Engineering Department.
- If required, a copy of all submittals sent to the New York State Department of Environmental Conservation (NYSDEC) for the sanitary sewer extension permit will also be sent to the City of Watertown Engineering Department
- If required, a copy of all submittals sent to the New York State Department of Health (NYSDOH) will also be sent to the City of Watertown Engineering Department.
- Signage will not be approved as part of this submission. It requires a sign permit from the Codes Department. See Section 310-52.2 of the Zoning Ordinance.
- Plans have been collated and properly folded.
- Explanation for any item not checked in the Site Plan Checklist.  
Photometric Plan not provided, as existing poles on pad site have been  
repositioned. No new lights are proposed, with the exception of building  
lights.  

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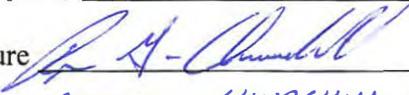
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- Completed SEQR – Short Environmental Assessment Form – Part I.  
\*A copy of the SEQR Form can be obtained from the City of Watertown website.

**SIGNATURE**

I certify that the information provided above is true to the best of my knowledge.

Applicant (please print) Fran Desimone

Applicant Signature  Date: 3/11/14  
RYAN S. CHURCHILL, P.E. - SYRACUSE, P.C.  
FOR FRAN D.

**617.20**  
**Appendix B**  
**Short Environmental Assessment Form**

**Instructions for Completing**

**Part 1 - Project Information.** The applicant or project sponsor is responsible for the completion of Part 1. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification. Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information.

Complete all items in Part 1. You may also provide any additional information which you believe will be needed by or useful to the lead agency; attach additional pages as necessary to supplement any item.

<b>Part 1 - Project and Sponsor Information</b>			
Name of Action or Project: Proposed Sonic Restaurant			
Project Location (describe, and attach a location map): City Center Plaza, Western Boulevard			
Brief Description of Proposed Action: The project consists of the construction of a 2,580 SF Sonic Restaurant and site amenities, including sanitary sewer and water services, storm sewer facilities, landscaping, lighting, and vehicular and pedestrian path.			
Name of Applicant or Sponsor: CDE Partners, LLC		Telephone: 585-233-0454	
		E-Mail:	
Address: 3300 Monroe Avenue, Suite 301			
City/PO: Rochester		State: NY	Zip Code: 14618
1. Does the proposed action only involve the legislative adoption of a plan, local law, ordinance, administrative rule, or regulation? If Yes, attach a narrative description of the intent of the proposed action and the environmental resources that may be affected in the municipality and proceed to Part 2. If no, continue to question 2.			NO <input type="checkbox"/>
			YES <input type="checkbox"/>
2. Does the proposed action require a permit, approval or funding from any other governmental Agency? If Yes, list agency(s) name and permit or approval: Jefferson County Planning Board			NO <input type="checkbox"/>
			YES <input checked="" type="checkbox"/>
3.a. Total acreage of the site of the proposed action?		_____ 1.17 acres	
b. Total acreage to be physically disturbed?		_____ 1.17 acres	
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor?		_____ 1.17 acres	
4. Check all land uses that occur on, adjoining and near the proposed action.			
<input type="checkbox"/> Urban <input type="checkbox"/> Rural (non-agriculture) <input type="checkbox"/> Industrial <input checked="" type="checkbox"/> Commercial <input type="checkbox"/> Residential (suburban)			
<input type="checkbox"/> Forest <input type="checkbox"/> Agriculture <input type="checkbox"/> Aquatic <input type="checkbox"/> Other (specify): _____			
<input type="checkbox"/> Parkland			

5. Is the proposed action, a. A permitted use under the zoning regulations?	NO	YES	N/A
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Consistent with the adopted comprehensive plan?	NO	YES	N/A
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. Is the proposed action consistent with the predominant character of the existing built or natural landscape?	NO	YES	
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
7. Is the site of the proposed action located in, or does it adjoin, a state listed Critical Environmental Area? If Yes, identify: _____	NO	YES	
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
8. a. Will the proposed action result in a substantial increase in traffic above present levels?	NO	YES	
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Are public transportation service(s) available at or near the site of the proposed action?	NO	YES	
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
c. Are any pedestrian accommodations or bicycle routes available on or near site of the proposed action?	NO	YES	
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
9. Does the proposed action meet or exceed the state energy code requirements? If the proposed action will exceed requirements, describe design features and technologies: _____	NO	YES	
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
10. Will the proposed action connect to an existing public/private water supply? If No, describe method for providing potable water: _____	NO	YES	
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
11. Will the proposed action connect to existing wastewater utilities? If No, describe method for providing wastewater treatment: _____	NO	YES	
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
12. a. Does the site contain a structure that is listed on either the State or National Register of Historic Places?	NO	YES	
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Is the proposed action located in an archeological sensitive area?	NO	YES	
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
13. a. Does any portion of the site of the proposed action, or lands adjoining the proposed action, contain wetlands or other waterbodies regulated by a federal, state or local agency?	NO	YES	
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Would the proposed action physically alter, or encroach into, any existing wetland or waterbody? If Yes, identify the wetland or waterbody and extent of alterations in square feet or acres: _____	NO	YES	
	<input type="checkbox"/>	<input type="checkbox"/>	
14. Identify the typical habitat types that occur on, or are likely to be found on the project site. Check all that apply: <input type="checkbox"/> Shoreline <input type="checkbox"/> Forest <input type="checkbox"/> Agricultural/grasslands <input type="checkbox"/> Early mid-successional <input type="checkbox"/> Wetland <input type="checkbox"/> Urban <input checked="" type="checkbox"/> Suburban			
15. Does the site of the proposed action contain any species of animal, or associated habitats, listed by the State or Federal government as threatened or endangered?	NO	YES	
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
16. Is the project site located in the 100 year flood plain?	NO	YES	
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
17. Will the proposed action create storm water discharge, either from point or non-point sources? If Yes, a. Will storm water discharges flow to adjacent properties? <input type="checkbox"/> NO <input type="checkbox"/> YES	NO	YES	
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)? If Yes, briefly describe: _____	NO	YES	
	<input type="checkbox"/>	<input type="checkbox"/>	

18. Does the proposed action include construction or other activities that result in the impoundment of water or other liquids (e.g. retention pond, waste lagoon, dam)? If Yes, explain purpose and size: _____ _____	NO	YES
	<input checked="" type="checkbox"/>	<input type="checkbox"/>
19. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility? If Yes, describe: _____ _____	NO	YES
	<input checked="" type="checkbox"/>	<input type="checkbox"/>
20. Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste? If Yes, describe: _____ _____	NO	YES
	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>I AFFIRM THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE</b>		
Applicant/sponsor name: <u>Fran Desimone</u> Date: <u>3/11/14</u>		
Signature: <u>[Signature]</u> <u>RYAN G. CHURCHILL - SPNO</u>		

**Part 2 - Impact Assessment. The Lead Agency is responsible for the completion of Part 2.** Answer all of the following questions in Part 2 using the information contained in Part 1 and other materials submitted by the project sponsor or otherwise available to the reviewer. When answering the questions the reviewer should be guided by the concept "Have my responses been reasonable considering the scale and context of the proposed action?"

	No, or small impact may occur	Moderate to large impact may occur
1. Will the proposed action create a material conflict with an adopted land use plan or zoning regulations?	<input type="checkbox"/>	<input type="checkbox"/>
2. Will the proposed action result in a change in the use or intensity of use of land?	<input type="checkbox"/>	<input type="checkbox"/>
3. Will the proposed action impair the character or quality of the existing community?	<input type="checkbox"/>	<input type="checkbox"/>
4. Will the proposed action have an impact on the environmental characteristics that caused the establishment of a Critical Environmental Area (CEA)?	<input type="checkbox"/>	<input type="checkbox"/>
5. Will the proposed action result in an adverse change in the existing level of traffic or affect existing infrastructure for mass transit, biking or walkway?	<input type="checkbox"/>	<input type="checkbox"/>
6. Will the proposed action cause an increase in the use of energy and it fails to incorporate reasonably available energy conservation or renewable energy opportunities?	<input type="checkbox"/>	<input type="checkbox"/>
7. Will the proposed action impact existing:	<input type="checkbox"/>	<input type="checkbox"/>
a. public / private water supplies?	<input type="checkbox"/>	<input type="checkbox"/>
b. public / private wastewater treatment utilities?	<input type="checkbox"/>	<input type="checkbox"/>
8. Will the proposed action impair the character or quality of important historic, archaeological, architectural or aesthetic resources?	<input type="checkbox"/>	<input type="checkbox"/>
9. Will the proposed action result in an adverse change to natural resources (e.g., wetlands, waterbodies, groundwater, air quality, flora and fauna)?	<input type="checkbox"/>	<input type="checkbox"/>

	No, or small impact may occur	Moderate to large impact may occur
10. Will the proposed action result in an increase in the potential for erosion, flooding or drainage problems?	<input type="checkbox"/>	<input type="checkbox"/>
11. Will the proposed action create a hazard to environmental resources or human health?	<input type="checkbox"/>	<input type="checkbox"/>

**Part 3 - Determination of significance. The Lead Agency is responsible for the completion of Part 3.** For every question in Part 2 that was answered “moderate to large impact may occur”, or if there is a need to explain why a particular element of the proposed action may or will not result in a significant adverse environmental impact, please complete Part 3. Part 3 should, in sufficient detail, identify the impact, including any measures or design elements that have been included by the project sponsor to avoid or reduce impacts. Part 3 should also explain how the lead agency determined that the impact may or will not be significant. Each potential impact should be assessed considering its setting, probability of occurring, duration, irreversibility, geographic scope and magnitude. Also consider the potential for short-term, long-term and cumulative impacts.

<input type="checkbox"/>	Check this box if you have determined, based on the information and analysis above, and any supporting documentation, that the proposed action may result in one or more potentially large or significant adverse impacts and an environmental impact statement is required.
<input type="checkbox"/>	Check this box if you have determined, based on the information and analysis above, and any supporting documentation, that the proposed action will not result in any significant adverse environmental impacts.
_____	_____
Name of Lead Agency	Date
_____	_____
Print or Type Name of Responsible Officer in Lead Agency	Title of Responsible Officer
_____	_____
Signature of Responsible Officer in Lead Agency	Signature of Preparer (if different from Responsible Officer)

**PRINT**



# PROPOSED SONIC RESTAURANT

CITY CENTER PLAZA, CITY OF WATERTOWN  
JEFFERSON COUNTY, NEW YORK

## SITE DEVELOPMENT PLANS

11 MARCH 2013

INDEX OF DRAWINGS:

- C001 - GENERAL NOTES AND INFORMATION
- C101 - SITE AND LANDSCAPING PLAN
- C102 - UTILITY AND GRADING PLAN
- C501 - SITE DETAILS
- C502 - SITE DETAILS
- C503 - SITE DETAILS
- C504 - SITE DETAILS

PREPARED BY:



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FOR APPROVALS ONLY  
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2014-023E - SITE PLAN SUBMISSION - 11 MARCH 2014  
PROPOSED SONIC RESTAURANT - SITE DEVELOPMENT PLANS  
CITY CENTER PLAZA - CITY OF WATERTOWN, NEW YORK



**MASTER LEGEND**

LEGEND:	EXISTING	PROPOSED
5' CONTOUR	--- 410 ---	--- 410 ---
1' CONTOUR	--- 409 ---	--- 409 ---
BOLLARD	•	•
BUILDING	—	—
BUSH	⊗	⊗
CATCH BASIN	□	□
CENTERLINE	---	---
CHECK DAM	—	—
CITY MONUMENT	⊗	⊗
CLEANOUT	○	○
CONCRETE SIDEWALK	—	—
CONIFEROUS TREE	⊗	⊗
CURB STOP	—	—
CURB WITH GUTTER	—	—
CURBED ROAD	—	—
DECIDUOUS TREE	⊗	⊗
DOUBLE YELLOW LANE LINE	—	—
EASEMENT	---	---
EDGE OF PAVEMENT	---	---
ELECTRICAL BOX	⊗	⊗
ELECTRIC MANHOLE	⊗	⊗
FENCE	—	—
FIRE HYDRANT	⊗	⊗
PLANTINGS	○	○
FORCEMAIN	—	—
GAS LINE	—	—
GAS, ELECTRIC, TELEPHONE AND CABLE	—	—
1/2" IRON PIPE WITH CAP SET	○	○
IRON PIPE FOUND (AS NOTED)	•	•
LIGHT POLE	⊗	⊗
OVERHEAD UTILITY	—	—
PROPERTY LINE	---	---
PROPERTY LINE (ADJACENT)	---	---
SEWER LINE	—	—
SEWER MANHOLE	⊗	⊗
SIGNS	—	—
SILT FENCE	—	—
SOLID WHITE LANE LINE	---	---
SPOT ELEVATION	x428.01	x428.01
SPOT ELEVATION (BOTTOM CURB/TOP CURB)	x428.01/.03	x428.01/.03
STORM LINE	---	---
STORM MANHOLE	⊗	⊗
TREELINE	—	—
UNDERGROUND CABLE	---	---
UNDERGROUND ELECTRIC	---	---
UNDERGROUND TELEPHONE	---	---
UTILITY POLE & GUY WIRE	⊗	⊗
WATER LINE	---	---
WATER OUTLINE	---	---
WATER VALVE	⊗	⊗
WATERLINE CROSSING	—	—

**ABBREVIATIONS**

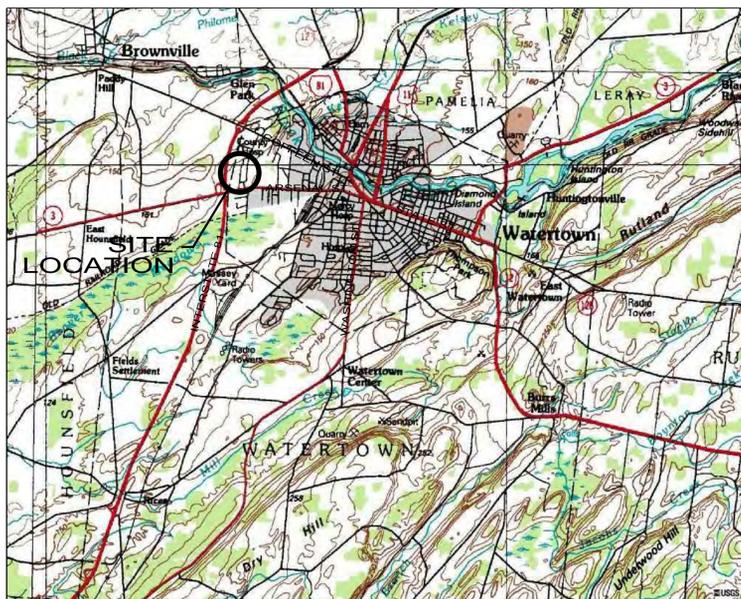
- AC - ACRES
- BLDG - BUILDING
- BOT - BOTTOM
- BW - BOTTOM OF WALL
- C - CURVE
- CB - CATCH BASIN
- CF - CUBIC FEET
- CI - CAST IRON
- CL - CENTERLINE
- CO - COUNTY
- CONC - CONCRETE
- CMP - CORRUGATED METAL PIPE
- CPP - CORRUGATED PLASTIC PIPE
- DA - DELTA ANGLE
- DA# - DRAINAGE AREA #
- DI - DUCTILE IRON
- DIA - DIAMETER
- DWG - DRAWING
- DYLL - DOUBLE YELLOW LANE LINE
- E - EAST
- EG - EXISTING GRADE
- EL - ELEVATION
- ESC - EROSION & SEDIMENT CONTROL
- FF - FINISHED FLOOR
- FG - FINISH GRADE
- GV - GATE VALVE
- HDPE - HIGH DENSITY POLYETHYLENE PIPE
- HYD - HYDRANT
- IPF - IRON PIPE FOUND
- IPS - IRON PIPE SET
- INT - INTERSECTION
- INV - INVERT
- L - LENGTH
- LF - LINEAR FEET
- MAX - MAXIMUM
- MIN - MINIMUM
- N - NORTH
- NO./# - NUMBER
- NTS - NOT TO SCALE
- NYSDEC - NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
- NYSDOT - NEW YORK STATE DEPARTMENT OF TRANSPORTATION
- NYSDOH - NEW YORK STATE DEPARTMENT OF HEALTH
- OHW - OVERHEAD WIRE
- PC - POINT OF CURVATURE
- PCC - POINT OF COMPOUND CURVE
- PT - POINT OF TANGENCY
- PVC - POLYVINYL CHLORIDE PIPE
- R - RADIUS
- RCP - REINFORCED CONCRETE PIPE
- ROC - RUN OF CRUSHER
- ROW - RIGHT-OF-WAY
- S - SOUTH
- SAN - SANITARY
- SB - SETBACK
- SDR - STANDARD DIMENSION RATIO
- SMH - SANITARY MANHOLE
- STMH - STORM MANHOLE
- SWPPP - STORM WATER POLLUTION PREVENTION PLAN
- SWLL - SINGLE WHITE LANE LINE
- TC - TIME OF CONCENTRATION
- TL - TANGENT LENGTH
- TYP - TYPICAL
- TW - TOP OF WALL
- TS & V - TAPPING SLEEVE & VALVE
- UNO - UNLESS NOTED OTHERWISE
- W - WEST

**PLANNING DATA**

CURRENT ZONING CLASSIFICATION - PLANNED DEVELOPMENT DISTRICT USE: RESTAURANT		
AREA AND BULK CALCULATIONS		
ITEM	REQUIRED/ALLOWED	PROPOSED
LOT SIZE	40,000 SF (0.92 ACRES)	807,602 SQUARE FEET (18.154 ACRES)
FRONT YARD SETBACK	50'	56'
SIDE YARD SETBACK	50'	60', 649'
REAR YARD SETBACK	50'	388'
MAX % BUILDING	40%	2 %
PARKING SPACES	5 SPACES / 1000 SF BUILDING + 2.575 SF x 5 SPACES / 1000SF + 13 SPACES	53 (INCLUDES 15 DRIVE IN SPACES)

**PLANT MATERIAL SCHEDULE**

QTY	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE
<b>TREES</b>				
AM		ACER X FREEMANII 'AUTUMN BLAZE'	'AUTUMN BLAZE' MAPLE	2 CAL
SL		GLEDITSIA TRIACANTHOS LINERMIS 'SKYLINE'	'SKYLINE' LOCUST	2 CAL
IL		SYRINGA RETICULATA 'IVORY SILK'	'IVORY SILK' TREE LILAC	2 CAL
<b>EVERGREENS</b>				
WS		PICEA GLAUCA	WHITE SPRUCE	5' B.B.
CH		TSUGA CANADENSIS 'PYRAMIDAL'	CANADIAN HEMLOCK	5' B.B.
WA		THUJA OCCIDENTALIS 'WOODWARDII'	'WOODWARDII' ARBORVITAE	24" B.B
AJ		JUNIPERUS HORIZONTALIS 'PLUMOSA COMPACTA'	ANDORRA JUNIPER	2 GAL.
<b>SHRUBS</b>				
PC		PRUNUS CISTENA	PURPLE LEAF SAND CHERRY	3 GAL.
AS		SPIREA BULMALDA 'ANTHONY WATERER'	'ANTHONY WATERER' SPIREA	3 GAL.
LS		SPIREA JAPONICA 'LITTLE PRINCESS'	'LITTLE PRINCESS' SPIREA	3 GAL.
<b>GROUND COVER</b>				
SO		STELLA DE ORO	DAY LILIES	1 GAL.



**LOCATION MAP**  
APPROXIMATE SCALE 1" = 2000'

**GENERAL NOTES**

- UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS, AND THEREFORE THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. THERE MAY BE OTHERS, THE EXISTENCE OF WHICH IS PRESENTLY NOT KNOWN. PRIOR TO CONSTRUCTION CONTACT UNDERGROUND UTILITIES CALL CENTER AT NEW YORK FOR EXACT LOCATION OF ALL UNDERGROUND UTILITIES, (1-800-962-7962). CONTRACTOR IS RESPONSIBLE FOR LOCATING AND WORKING WITH THE APPROPRIATE UTILITY COMPANIES PRIOR TO CONSTRUCTION.
- THE TOPOGRAPHIC, PLANIMETRIC, AND BOUNDARY SURVEY WAS PERFORMED BY LAFAYE, WHITE, AND MCGIVERN PC BETWEEN MARCH AND MAY 2011.
- ALL OUT-OF-SCOPE AREAS DISTURBED BY THE CONTRACTOR'S OPERATIONS WILL BE RESTORED TO CONDITIONS EQUAL TO OR BETTER THAN THAT PRIOR TO CONSTRUCTION. OUTSIDE OF PROPERTY BOUNDARIES AND EASEMENT AREAS THE CONTRACTOR IS REMINDED TO OBTAIN WRITTEN AUTHORIZATION TO USE PRIVATE PROPERTY AND ASSUMES ALL LIABILITY WHEN ACCESSING THOSE PROPERTIES.
- THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE CHARACTERISTICS AND EXTENT OF SUBSURFACE SOILS, ROCK, WATER TABLE LEVELS, ETC., PRIOR TO BIDDING.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS, SECURITY, BONDS, FEES, AND PAYMENTS TO OBTAIN SAID PERMITS WHERE APPLICABLE.
- WHEN THE PERFORMANCE OF THE CONTRACTOR'S WORK REQUIRES THE INTERRUPTION OF UTILITY SERVICES, HE/SHE SHALL ISSUE A 48 HOUR PRIOR NOTICE TO THE GOVERNING MUNICIPALITY.
- SITE CONTRACTOR TO PROVIDE EROSION AND SEDIMENT CONTROL AND DUST CONTROL.
- A LICENSED LAND SURVEYOR SHALL BE RETAINED FOR ALL UTILITY AND FIELD STAKEOUT AND AS-BUILTS AT THE CONTRACTORS EXPENSE.
- CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL MEASURES THROUGHOUT CONSTRUCTION UNTIL ESTABLISHMENT OF VEGETATIVE COVER. RUN-OFF CONTAINING SEDIMENTS FROM DISTURBED AREAS OF THE SITE SHALL NOT BE ALLOWED DIRECTLY OFF SITE OR INTO NATURAL STREAM CHANNELS.
- ALL EXISTING TREES TO REMAIN SHALL BE PROTECTED BY THE CONTRACTOR. CONSTRUCTION ACTIVITIES ADJACENT TO TREES SHALL BE CONDUCTED TO REDUCE THE IMPACT TO TREES TO THE MAXIMUM EXTENT PRACTICAL. ANY DAMAGE TO EXISTING TREES SHALL BE REPAIRED OR THE TREE REPLACED, AS DIRECTED BY THE OWNER AT THE CONTRACTORS EXPENSE.
- CONTRACTOR SHALL PERFORM ALL R.O.W. CONNECTION AND/OR ADJACENT WORK IN ACCORDANCE WITH NYS DOT SPECIFICATIONS. ALL R.O.W. WORK SHALL BE IN ACCORDANCE WITH NYS DOT MAINTENANCE AND PROTECTION OF TRAFFIC REGULATIONS, INCLUDING FLAGMEN, BARRICADES, WARNING SIGNS/LIGHTS, ETC., WHERE WARRANTED.
- CONTRACTOR SHALL BE RESPONSIBLE FOR CLEARING, GRUBBING, CUTTING AND DISPOSING OF VEGETATION, TREES AND DEBRIS IN A NYSDEC ACCEPTABLE LOCATION.
- CONTRACTOR SHALL PERFORM ALL NECESSARY EARTHWORK, INCLUDING THE STRIPPING, STOCKPILING AND REPLACING OF TOPSOIL IN ACCORDANCE WITH THE PLANS. EXCESS MATERIAL SHALL BE REMOVED FROM THE SITE.
- EXCAVATIONS SHALL BE TO DEPTHS SHOWN ON DRAWINGS. ALL UNSTABLE OR UNSUITABLE MATERIAL SHALL BE EXCAVATED AND REMOVED TO SUCH DEPTH AS REQUIRED TO PROVIDE SUFFICIENT BEARING CAPACITY. OVER-EXCAVATED AREAS SHALL BE BACKFILLED WITH SUITABLE MATERIAL.
- COMPACTION OF PIPE BEDDING AND BACKFILL MATERIAL SHALL BE BY MEANS OF HAND-GUIDED POWER DRIVEN, DRUM-TYPE, OR PLATE TAMPERS. BACKFILLING SHOULD PROCEED IN ACCORDANCE WITH LIFT THICKNESSES AND COMPACTION REQUIREMENTS AS SHOWN ON THE DRAWINGS. UNLESS OTHERWISE NOTED ON THE DRAWINGS, COMPACTION REQUIREMENTS REFER TO PERCENT OF MAXIMUM DRY DENSITY AS DETERMINED IN ACCORDANCE WITH ASTM-698B, STANDARD PROCTOR. CARE SHALL BE TAKEN TO SHAPE PIPE BEDDING TO FIT THE LOWER PART OF THE PIPE. BACKFILLING AND COMPACTION SHOULD PROGRESS EVENLY ALONG THE PIPE SIDEWALLS AND TO THE TOP OF THE PIPE BEDDING.
- COMPACTION SHALL BE 90% MAXIMUM DRY DENSITY IN GRASS AREAS, 95% MAXIMUM DRY DENSITY IN GRAVEL/PAVED AREAS AND 98% MAXIMUM DRY DENSITY UNDER AND AROUND STRUCTURES. MAXIMUM DRY DENSITY SHALL BE AS DETERMINED BY ASTM-698B, STANDARD PROCTOR. THE CONTRACTOR SHALL HIRE AN INDEPENDENT TESTING AGENCY TO PERFORM PAVEMENT TESTING PER TECHNICAL SPECIFICATIONS AND PROVIDE THE RESULTS TO THE OWNER FOR REVIEW PRIOR TO FINAL PAYMENT.
- THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES OF DIMENSIONS, ELEVATIONS AND LOCATIONS DURING PRECONSTRUCTION FIELD VERIFICATION, SUCH INFORMATION SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR VERIFICATION OR MODIFICATION OF THE PLANS.
- THE CONTRACTOR SHALL DELIVER TO THE OWNER, AN AS-BUILT SURVEY, SIGNED AND SEALED BY A LAND SURVEYOR OR ENGINEER LICENSED IN THE STATE OF NEW YORK. AS-BUILT RECORD DRAWINGS SHALL INCLUDE, AS A MINIMUM, THE FOLLOWING INFORMATION AS WELL AS ALL REQUIREMENTS OF THE SPECIFICATION:
  - RECORD OF ALL UTILITIES ENCOUNTERED IN TRENCH EXCAVATION. INFORMATION SHALL INCLUDE DIAMETER OF UTILITY, DEPTH OF BURIAL AND LOCATION WITH REFERENCE TO NEAREST STRUCTURE SHOWN ON DRAWINGS. THIS INFORMATION SHALL BE KEPT CURRENT ON A WEEKLY BASIS. FAILURE TO DO SO MAY RESULT IN WITHHOLDING OF PAYMENTS.
  - DISTANCE TIES TO ALL MANHOLES, CLEAN OUTS, CATCH BASINS, ETC.
  - UTILITY REPAIRS, SIDEWALK, AND DRIVEWAY REPLACEMENTS CENTERLINE.
  - RIM AND INVERT ELEVATIONS AND HORIZONTAL LOCATION OF MANHOLES, CATCH BASINS, AND CLEANOUTS.
  - STATIONS OF BENDS AND VALVES.
  - FINAL GRADE ELEVATIONS TO NEAREST 0.1-FOOT AND FINISHED FLOOR ELEVATIONS.
  - DENOTED BENCH MARK REFERENCES USED.
  - PERIODIC OFFSETS.
  - NOTATION FROM THE ENGINEER OR SURVEYOR THAT THE GRADES ARE IN CONFORMANCE WITH THE SITE PLANS.
  - RECORD DETAILS NOT SHOWN ON THE ORIGINAL CONTRACT DOCUMENTS, ANY FIELD CHANGES OF DIMENSIONS AND DETAILS AND ANY CHANGES MADE BY CHANGE ORDER OR FIELD ORDER.
  - CERTIFICATE OF SUBSTANTIAL COMPLETION SHALL NOT BE ISSUED UNTIL AS-BUILT INFORMATION IS ACCEPTABLE.
  - TWO (2) SETS OF FINAL COMPLETE RECORD DRAWINGS. CONTRACTOR SHALL FURNISH AS-BUILT DATA ON PLAN SHEETS.
- UPON COMPLETION OF STORM SEWER FACILITIES AND ESTABLISHMENT OF VEGETATION, THE NEW AND EXISTING STORM SYSTEMS RECEIVING RUNOFF FROM THIS SITE SHALL BE CLEANED OF DEBRIS. ONLY AT THIS TIME SHALL THE EROSION AND SEDIMENTATION CONTROL MEASURES BE REMOVED.
- CONTRACTOR SHALL PROVIDE SATISFACTORY DEWATERING AND DRAINAGE OF EXCAVATIONS.
- THE CONTRACTOR IS RESPONSIBLE FOR MAKING SURE THAT AREA ROADS AND PARKING FACILITIES ARE CLEAR OF DEBRIS AND MUD ON A DAILY BASIS DURING THE ENTIRE CONSTRUCTION PROCESS.
- EXCAVATIONS AND TRENCHING SHALL BE PERFORMED IN ACCORDANCE WITH STATE OF NEW YORK INDUSTRIAL CODE, RULE 23, O.S.H.A. TITLE 29, PART 1926, NEW YORK STATE DEPARTMENT OF LABOR, TITLE 12, PART 23, AND ALL OTHER APPLICABLE SAFETY STANDARDS AND CODES.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO BE AWARE OF AND TO CONFORM WITH ALL RULES AND RESPONSIBILITIES ASSOCIATED WITH PROVIDING A SAFE WORK PLACE. THE CONTRACTOR MUST COMPLY WITH OSHA 29 CFR PART 1926, SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION.
- A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) HAS BEEN PREPARED FOR THIS OVERALL PROJECT (VISION DEVELOPMENT), AND THE PROPOSED SONIC BUILDING FALLS WITHIN THE STIPULATIONS OF THIS PREVIOUSLY PREPARED SWPPP.
- ALL WORK TO BE PERFORMED WITHIN THE CITY OF WATERTOWN MARGIN WILL REQUIRE SIGN-OFF FROM A PROFESSIONAL ENGINEER, LICENSED AND CURRENTLY REGISTERED TO PRACTICE IN THE STATE OF NEW YORK. THAT THE WORK WAS BUILT ACCORDING TO THE APPROVED SITE PLAN AND APPLICABLE CITY OF WATERTOWN STANDARDS. COMPACTION TESTING WILL BE REQUIRED FOR ALL WORK TO BE PERFORMED WITHIN THE CITY OF WATERTOWN MARGIN AND MUST BE SUBMITTED TO THE CITY OF WATERTOWN CODES DEPARTMENT.
- PLEASE NOTE THAT ANY CONTRACTOR WORKING WITHIN THE CITY OF WATERTOWN MUST PROVIDE A CURRENT CERTIFICATE OF LIABILITY INSURANCE (ACORD 25). IN ADDITION, NYS ALSO MANDATES PROOF OF WORKER'S COMPENSATION BE SHOWN PRIOR TO THE ENGINEERING DEPARTMENT ISSUING ANY PERMITS.
- UNDERGROUND PRIMARY ELECTRIC SERVICE BY OTHERS. CONTRACTOR TO COORDINATE WITH UTILITY COMPANY FOR DESIGN.

**DEMOLITION NOTES:**

- PRIOR TO ANY CONSTRUCTION CONTACT DIG SAFELY NEW YORK AT 1-800-962-7962 (OR 811) FOR LOCATION OF ALL UNDERGROUND UTILITIES.
- VERIFY THAT ALL WATER, GAS, ELECTRIC, AND TELEPHONE SERVICES HAVE BEEN PROPERLY TERMINATED PRIOR TO DEMOLITION.
- THE CONTRACTOR IS TO ACQUIRE ANY REQUIRED DEMOLITION PERMITTING FROM INDIVIDUAL REGULATING AGENCIES, LOCAL AUTHORITIES, OR GOVERNMENTAL BODIES. THE CONTRACTOR WILL SUPPLY AND PAY FOR EFFORT AND/OR EXPENSE ASSOCIATED WITH ACQUIRING SAID DEMOLITION PERMITS UNDER THIS CONTRACT.
- DISPOSAL OF ALL CONSTRUCTION AND DEMOLITION DEBRIS SHALL BE IN ACCORDANCE WITH LOCAL AND 6 NYS CRR PART 360, PLUS OTHER APPLICABLE CODES. DISPOSAL SHALL BE AT THE CONTRACTOR'S EXPENSE.
- THE USE OF A FIRE HYDRANT FOR DUST CONTROL MUST BE REVIEWED AND APPROVED BY THE LOCAL WATER DEPARTMENT. A HYDRANT METER, GATE VALVE, AND BACKFLOW PREVENTION DEVICE MAY BE REQUIRED. ANY ASSOCIATED FEES WILL BE THE CONTRACTOR'S RESPONSIBILITY.
- REMOVAL AREAS SHALL BE RESTORED IN ACCORDANCE WITH THE SITE, UTILITY AND GRADING PLANS.
- CONTRACTOR WILL FOLLOW ALL RULES AND REGULATIONS FOR THE HANDLING AND DISPOSAL OF UNIVERSAL WASTE.

**ELECTRICAL NOTES:**

- PROVIDE GROUNDING AS REQUIRED BY N.M.P.C. AND NEC ARTICLE 250.
- CONTRACTOR SHALL ADHERE TO NMPC ELECTRIC SERVICE BULLETIN NO. 750 AND 754-A FOR SERVICE INSTALLATION.
- INFORMATION SHOWN IS IN PART DIAGRAMMATIC. CONTRACTOR MUST VERIFY EXISTING CONDITIONS AFFECTING THE WORK OF THIS PROJECT AND CONSIDER THESE PRIOR TO PREPARING A BID.
- ALL ELECTRICAL WORK SHALL CONFORM TO ALL STATE, LOCAL AND NATIONAL ELECTRICAL CODES (NEC).

**SIGN SCHEDULE**

LABEL	SIGNS	LABEL	SIGNS
A		C	
B		D	

**SIGNAGE NOTES**

- ALL OUTSIDE SIGNS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH ALL DETAILS WITHIN THE STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION - METRIC STANDARD SHEETS M645-20 THROUGH M645-80. THIS INCLUDES BUT IS NOT LIMITED TO: STANDARD SIGN BLANK DETAILS (M645-50 THROUGH M645-52); STANDARD HEIGHT AND LATERAL LOCATION FOR TRAFFIC SIGNS, TYPICAL REGULATION & WARNING SIGNS ASSEMBLED (M645-55); SIGN PANEL DETAILS FOR GUIDE, INFORMATION AND OTHER SIGNS (M645-70); BI-DIRECTIONAL BREAKAWAY BASE AND HINGE ASSEMBLY (M645-72).
- ALL SIGNS AND PAINT MARKINGS ARE TO BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS AS OUTLINED IN THE LATEST VERSION OF THE FEDERAL MUTCD AND THE NYS SUPPLEMENT.

ARCHITECTURE  
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**GENERAL NOTES AND INFORMATION**

**SONIC RESTAURANT**  
CITY CENTER PLAZA, CITY OF WATERTOWN  
JEFFERSON COUNTY, NEW YORK

Project No: 2014-023E  
Scale: As Noted  
Date: 3/5/2014  
Drawn By: THR  
Designed By: RGC  
Checked By:  
Date Issued: 3/11/2014  
Drwg. No.

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**C001**



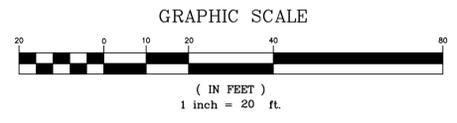
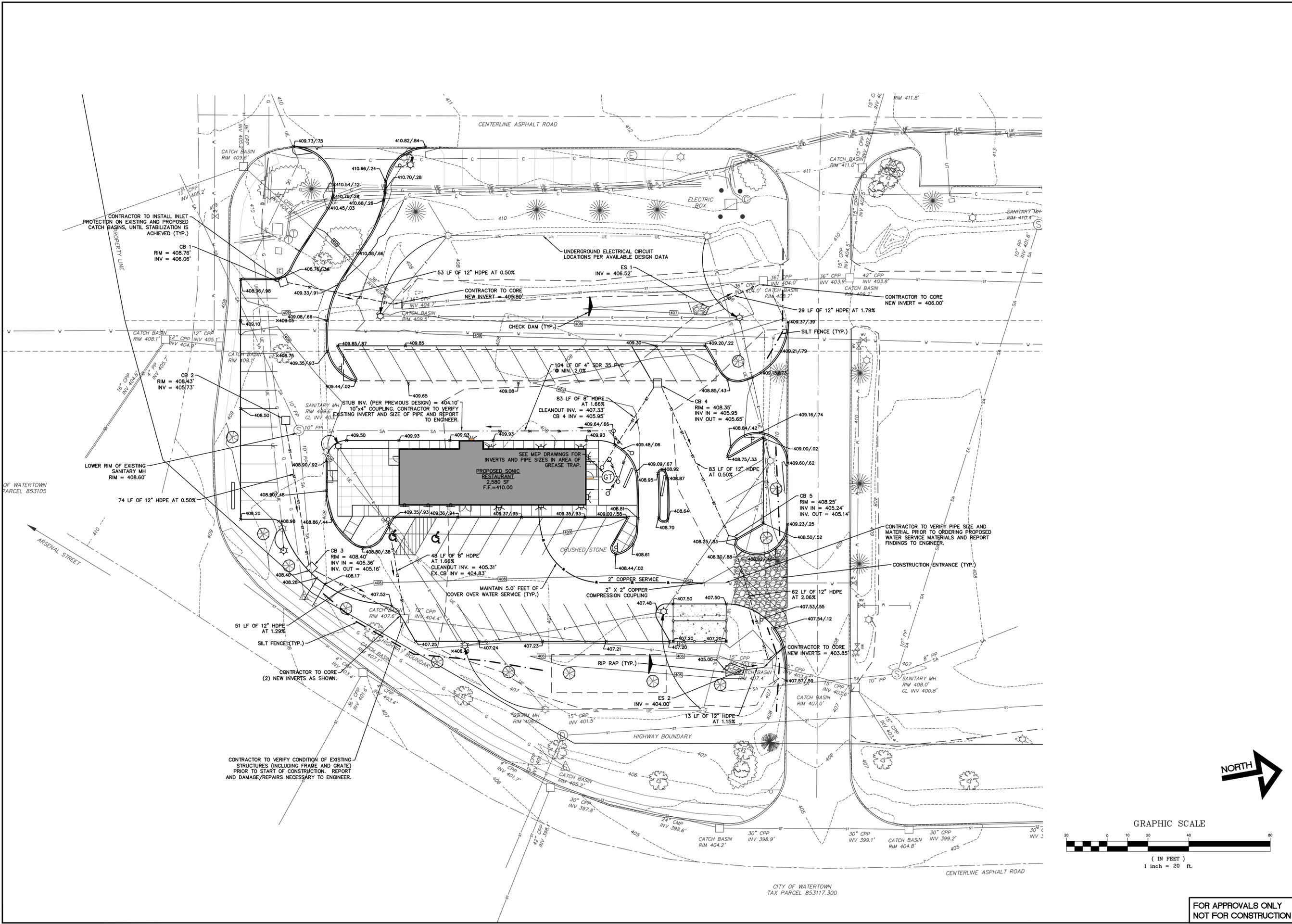
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DATE AND A SPECIFIC DESCRIPTION OF  
ALTERATION.

UTILITY AND GRADING PLAN  
**SONIC RESTAURANT**  
CITY CENTER PLAZA, CITY OF WATERTOWN  
JEFFERSON COUNTY, NEW YORK

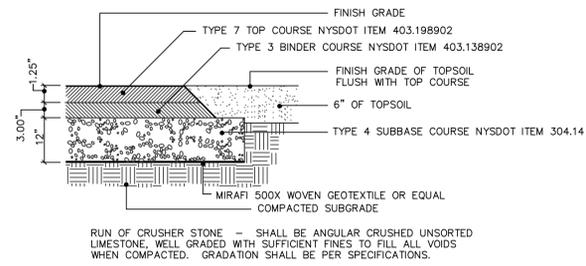
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Date: 2/14/2014  
Drawn By: THR/RGC  
Designed By: THR/RGC  
Checked By:  
Date Issued: 3/11/2014  
Drwg. No.

**C102**

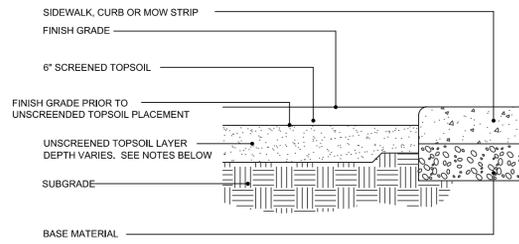
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CITY OF WATERTOWN  
TAX PARCEL 853117.300

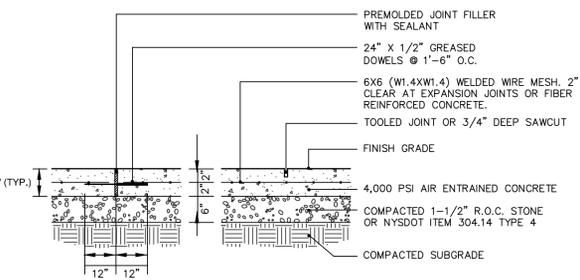


1 TYPICAL PAVEMENT DETAIL  
C501 NOT TO SCALE D153-01



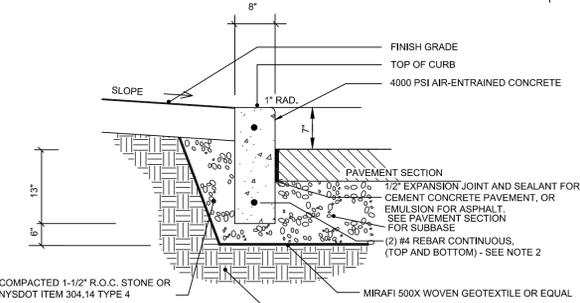
NOTES:  
GRASSSED AREAS - UNSCREENED TOPSOIL SHALL BE 4\"/>

2 SOIL PROFILE - VARIOUS AREAS  
C501 NOT TO SCALE D132-02



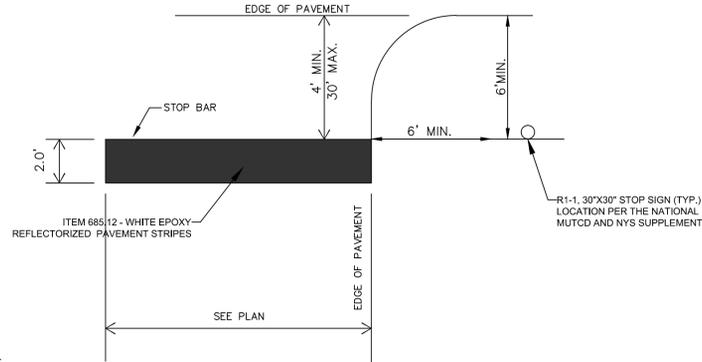
NOTES:  
1. CONTRACTION/CONTROL JOINTS TO BE SPACED 5' O.C. MAX., EXPANSION JOINTS TO BE SPACED 20' O.C. MAX.  
2. CROSS SLOPE IN SIDEWALK TO BE MIN. 1/4\"/>

3 TYPICAL CONCRETE WALK SECTION  
C501 NOT TO SCALE D154-01



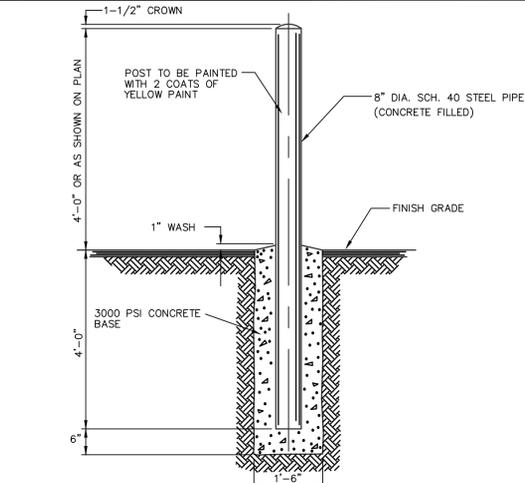
NOTES:  
1. CONTROL JOINTS TO BE SPACED 10' O.C. MAX., EXPANSION JOINTS TO BE SPACED 20' O.C. MAX. EXPANSION JOINT TO BE COVERED WITH SEALANT.

4 TYPICAL CAST-IN-PLACE CONCRETE CURB SECTION  
C501 NOT TO SCALE D151-01

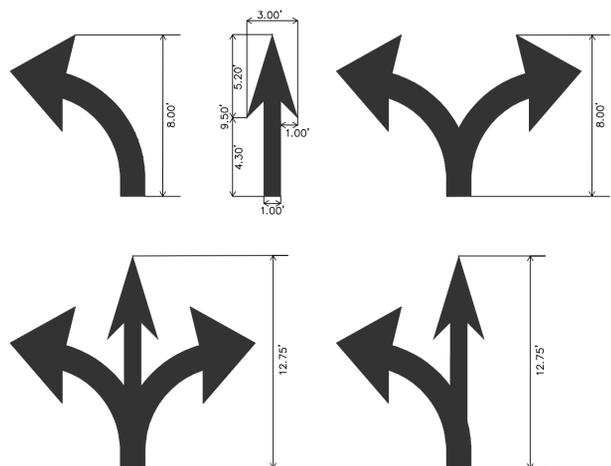


NOTES:  
1. WORDS AND ARROWS FOR DRIVEWAYS SHALL BE APPLIED ACCORDING TO REQUIREMENTS AS OUTLINED IN THE 2003 MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS.  
2. THESE MARKINGS ARE TO BE PAINTED REFLECTIVE WHITE.  
3. THE STOP LINE OR YIELD LINE SHOULD BE PLACED AT THE DESIRED STOPPING OR YIELDING POINT, BUT SHOULD NOT BE PLACED MORE THAN 30 FEET OR LESS THAN 4 FEET FROM THE NEAREST EDGE OF THE INTERSECTING TRAVEL WAY.

5 TYPICAL STOP BAR DETAIL  
C501 NOT TO SCALE

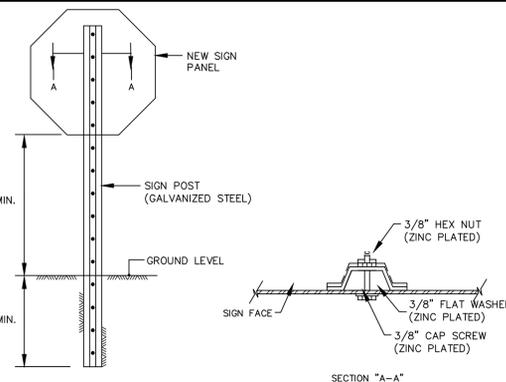


6 CONCRETE BOLLARD DETAIL  
C501 NOT TO SCALE

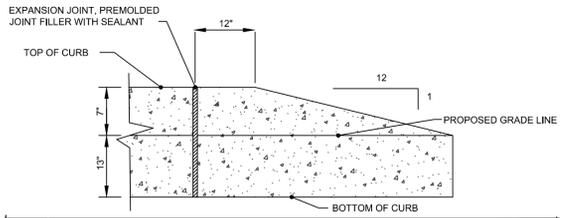


NOTES:  
1. WORDS AND ARROWS FOR DRIVEWAYS SHALL BE APPLIED ACCORDING TO REQUIREMENTS AS OUTLINED IN THE 2003 MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS.  
2. THESE MARKINGS ARE TO BE PAINTED REFLECTIVE WHITE.

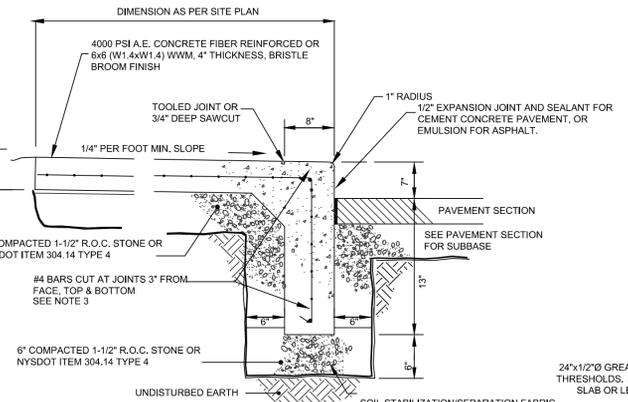
7 TYPICAL TRAFFIC FLOW ARROWS  
C501 NOT TO SCALE



8 TYPICAL SIGN-IN GROUND INSTALLATION DETAIL  
C501 NOT TO SCALE SW135-01

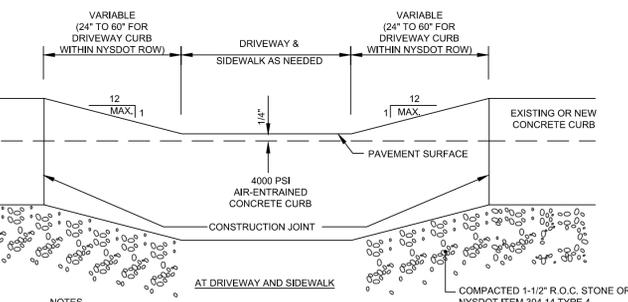


9 TYPICAL CURB TERMINAL  
C501 NOT TO SCALE D171-01



NOTES:  
1. CONCRETE WALK AND CURB EXPANSION JOINTS TO COINCIDE AT 20' O.C. MAX., CONTRACTION JOINTS TO BE SPACED EVENLY AT 9' O.C. MAX. BOTH DIRECTIONS.  
2. EXPANSION JOINTS TO BE 1/2\"/>

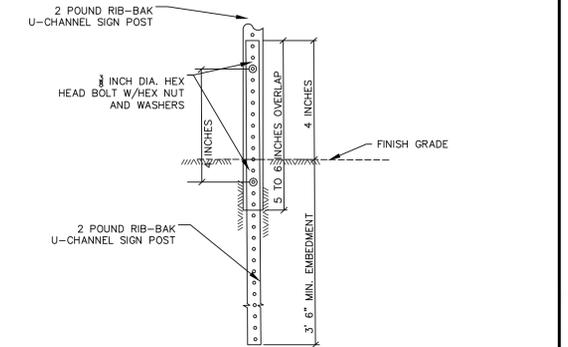
10 TYPICAL INTEGRAL CONCRETE CURB/WALK DETAIL  
C501 NOT TO SCALE SW101-01



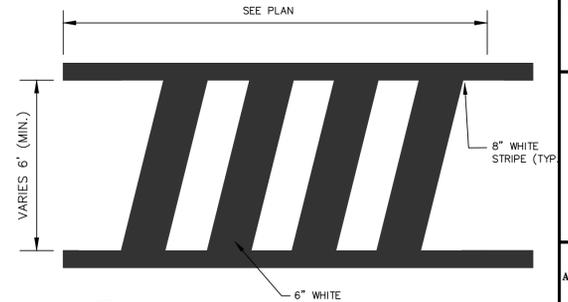
NOTES:  
1. CONTRACTION JOINTS TO BE SPACED 10' O.C. MAX., EXPANSION JOINTS TO BE SPACED 20' O.C. MAX. EXPANSION JOINT TO BE COVERED WITH SEALANT.  
2. SEE PAVEMENT SECTION FOR SUBBASE UNDER ASPHALT.  
3. REFER TO NYS DOT METRIC STANDARD SHEETS: "SIDEWALK CURB RAMP DETAILS" (M608-3R3), "DETAILS ACCESSIBLE PARKING FOR PERSONS WITH DISABILITIES" (M608-4R1) AND "DETECTABLE WARNING DETAILS" (M608-5R1) FOR ADDITIONAL INFORMATION REGARDING SIDEWALK CONSTRUCTION AND HANDICAP ACCESSIBILITY.

11 DEPRESSED CURB  
C501 NOT TO SCALE D145-02

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NOT FOR CONSTRUCTION

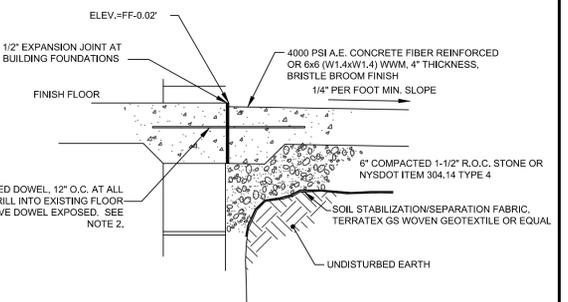


12 BREAK-AWAY SIGN POST DETAIL  
C501 NOT TO SCALE D135-01



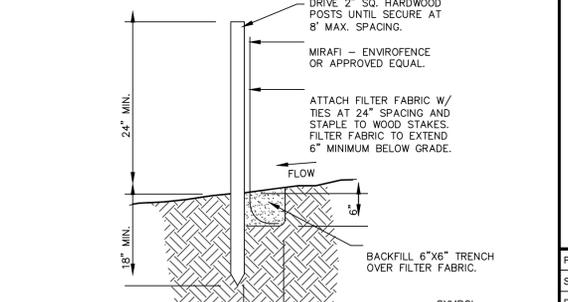
NOTES:  
1. WORDS AND ARROWS FOR DRIVEWAYS SHALL BE APPLIED ACCORDING TO REQUIREMENTS AS OUTLINED IN THE 2003 MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS.  
2. THESE MARKINGS ARE TO BE PAINTED REFLECTIVE WHITE.

13 TYPICAL CROSSWALK DETAIL  
C501 NOT TO SCALE



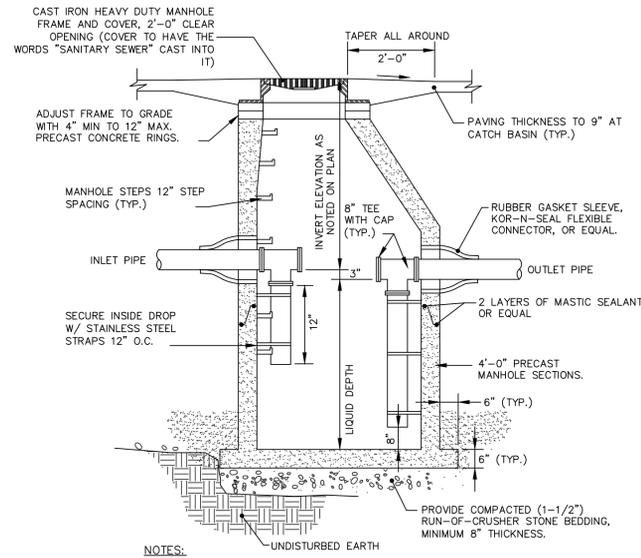
NOTES:  
1. DOWELS TO BE PROVIDED AT BUILDING THRESHOLDS AS DETAILED ABOVE. WALK SURFACE TO BE 1/4\"/>

14 TYPICAL CONCRETE WALK AT THRESHOLD DETAIL  
C501 NOT TO SCALE D114-01

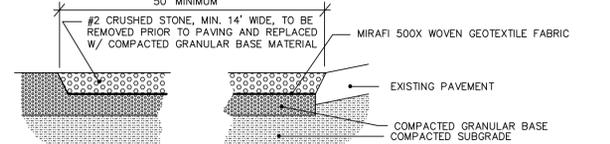


NOTES:  
1. SILTATION FENCE TO REMAIN IN PLACE UNTIL LAWNS HAVE BEEN ESTABLISHED AND/OR FINISH SURFACES HAVE BEEN INSTALLED.  
2. SILTATION FENCE TO BE CHECKED AND MAINTAINED THROUGHOUT CONSTRUCTION. SILT ACCUMULATIONS SHALL BE REMOVED PERIODICALLY AS REQUIRED.  
3. SECTIONS OF FILTER FABRIC TO HAVE 12\"/>

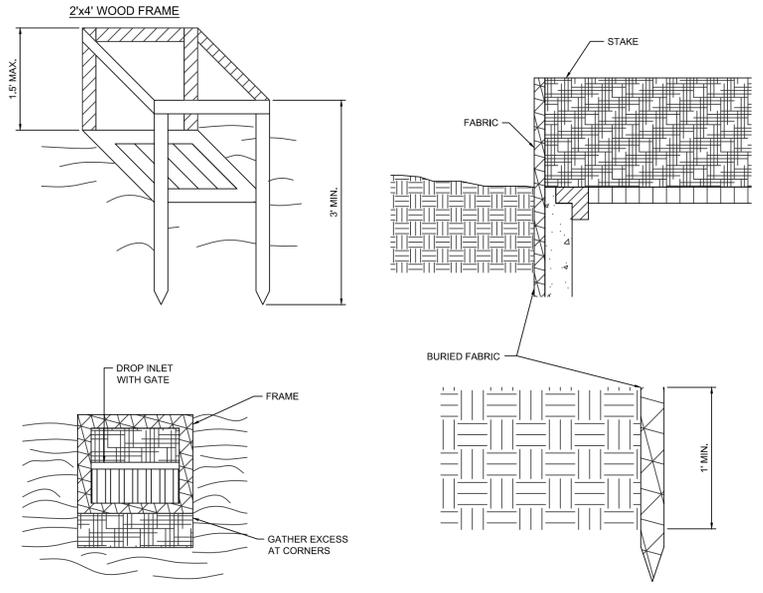
15 TYPICAL SILTATION FENCE DETAIL  
C501 NOT TO SCALE D120-01



1 GREASE TRAP DETAIL  
C502 NOT TO SCALE



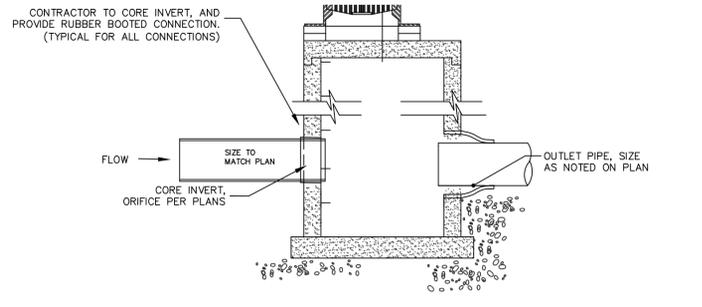
2 TYPICAL OFFSITE SEDIMENT TRACKING CONTROL (CONST. ENTRANCE)  
C502 NOT TO SCALE D163-01



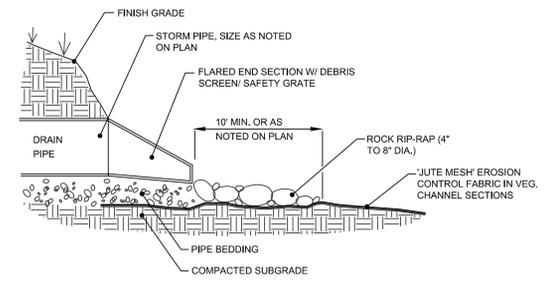
CONSTRUCTION SPECIFICATIONS

1. FILTER FABRIC SHALL HAVE AN EOS OF 40-85. BURLAP MAY BE USED FOR SHORT TERM APPLICATIONS.
2. CUT FABRIC FROM A CONTINUOUS ROLL TO ELIMINATE JOINTS. IF JOINTS ARE NEEDED THEY WILL BE OVERLAPPED TO THE NEXT STAKE.
3. STAKE MATERIALS WILL BE STANDARD 2"x4" WOOD OR EQUIVALENT, METAL WITH A MINIMUM LENGTH OF 3 FEET.
4. SPACE STAKES EVENLY AROUND INLET 3 FEET APART AND DRIVE A MINIMUM 18 INCHES DEEP. SPANS GREATER THAN 3 FEET MAY BE BRIDGED WITH THE USE OF WIRE MESH BEHIND THE FILTER FABRIC FOR SUPPORT.
5. FABRIC SHALL BE EMBEDDED 1 FOOT MINIMUM BELOW GROUND AND BACKFILLED, IT SHALL BE SECURELY FASTENED TO THE STAKES AND FRAME.
6. A 2"x4" WOOD FRAME SHALL BE COMPLETED AROUND THE CREST OF THE FABRIC FOR OVER FLOW STABILITY.

3 FILTER FABRIC DROP INLET PROTECTION DETAIL  
C502 NOT TO SCALE



4 TYPICAL EXISTING STORM STRUCTURE CONNECTION DETAIL  
C502 NOT TO SCALE

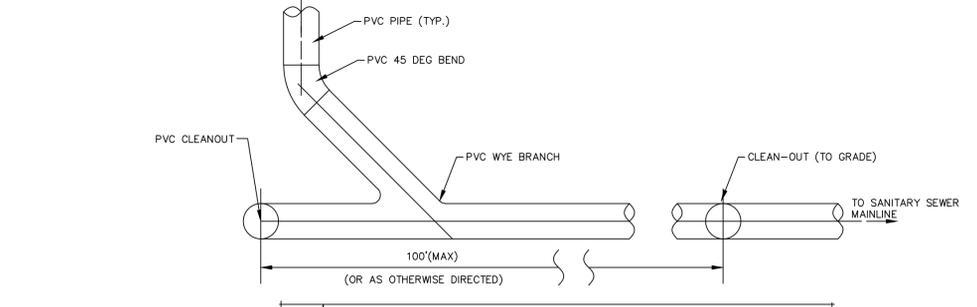


5 DRAINAGE PIPE END SECTION DETAIL (ES)  
C502 NOT TO SCALE

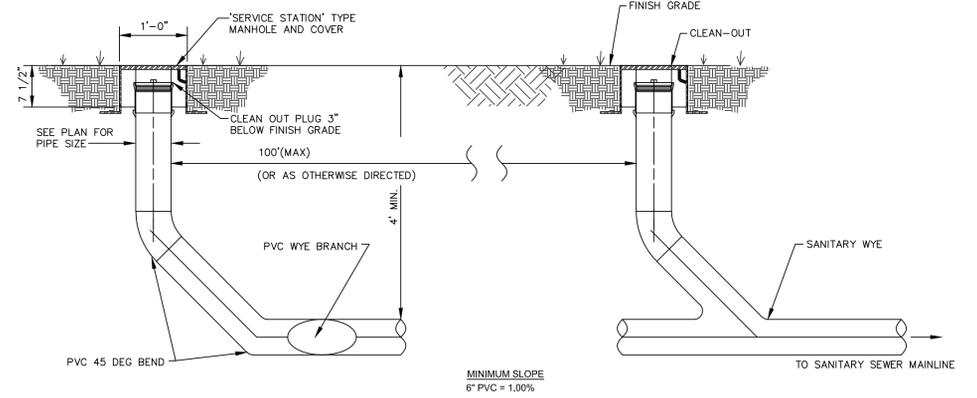
\*IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CHECK AND COMPLY WITH ALL APPLICABLE SAFETY STANDARDS.

- NOTES
1. DIMENSIONS "X" AND "Y" SHOWN ABOVE SHALL BE DETERMINED BY CONTRACTOR TO COMPLY WITH O.S.H.A., NEW YORK STATE DEPARTMENT OF LABOR, NEW YORK STATE INDUSTRIAL CODE AND ALL OTHER APPLICABLE SAFETY STANDARDS.
  2. SAFETY SHEETING OR TRENCH BOX MAY BE USED IN PLACE OF SLOPED TRENCH WALLS.
  3. SHEETING, WHEN REQUIRED, TO BE CUT OFF AT LEAST 5 FEET BELOW STREET AND A MINIMUM OF 1 FOOT ABOVE TOP OF PIPE. WOOD SHEETING DRIVEN BELOW MID-DIAMETER OF THE PIPE SHALL BE LEFT IN PLACE. STEEL SHEETING DRIVEN BELOW MID-DIAMETER MAY BE WITHDRAWN IF APPROVED IN WRITING BY THE ENGINEER. FOR PVC PIPE ALL SHEETING DRIVEN BELOW MID-DIAMETER SHALL BE LEFT IN PLACE.
  4. TRENCHES LOCATED ON ROAD SHOULDERS SHALL BE TREATED THE SAME AS UNDER PAWT.
  5. CONTRACTOR MAY USE NATIVE MATERIAL AS BACKFILL IF APPROVED BY ENGINEER.

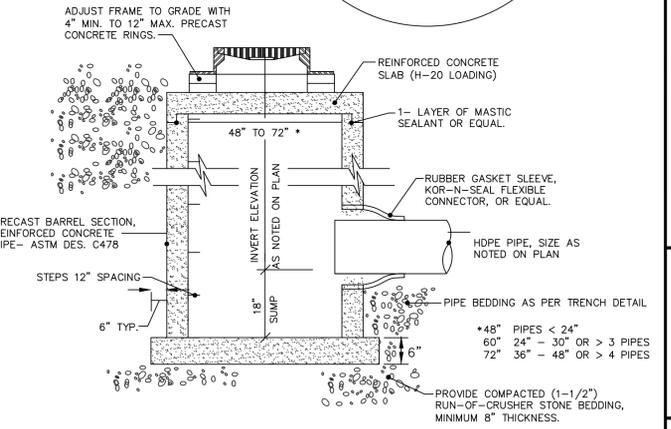
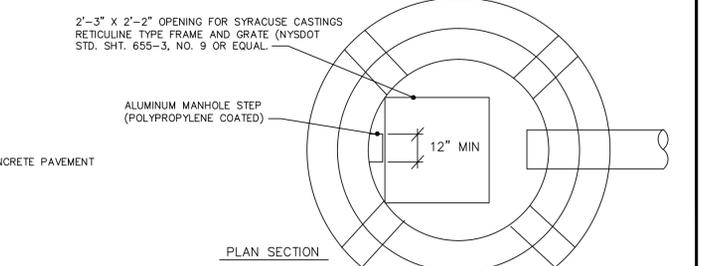
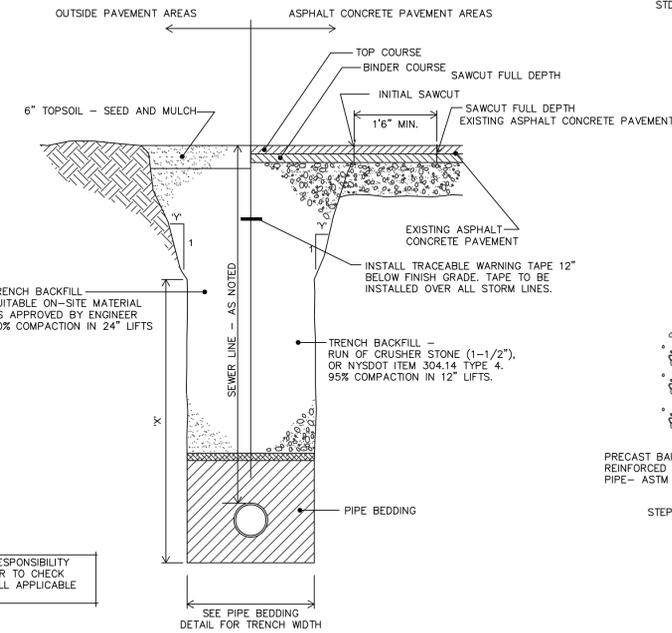
8 TYPICAL UTILITY LINE TRENCH DETAIL AND PAYMENT LIMITS  
C502 NOT TO SCALE D101-02



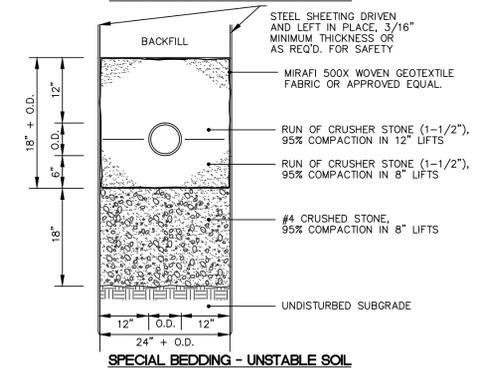
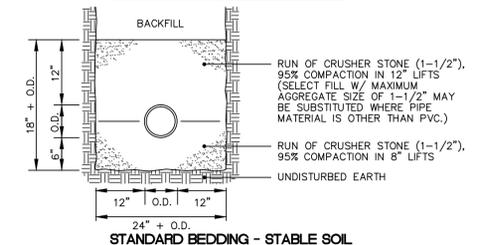
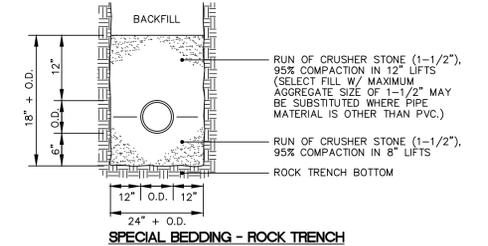
6 PLAN - TYPICAL SEWER LATERAL DETAIL  
C502 NOT TO SCALE D163-01



7 TYPICAL SEWER LATERAL DETAIL  
C502 NOT TO SCALE D163-01



9 TYPICAL CATCH BASIN DETAIL (CB)  
C502 NOT TO SCALE D102-01



10 TYPICAL PIPE BEDDING DETAILS AND PAYMENT LIMITS  
C502 NOT TO SCALE U102-01

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ARCHITECTURE  
ENGINEERING  
LAND SURVEYING

**GYMOPC**

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SITE DETAILS

SONIC RESTAURANT  
CITY CENTER PLAZA, CITY OF WATERTOWN  
JEFFERSON COUNTY, NEW YORK

Project No: 2014-023E  
Scale: As Noted  
Date: 3/5/2014  
Drawn By: THR  
Designed By: RGC  
Checked By:  
Date Issued: 3/11/2014  
Drwg. No.

FOR APPROVALS ONLY  
NOT FOR CONSTRUCTION

C502

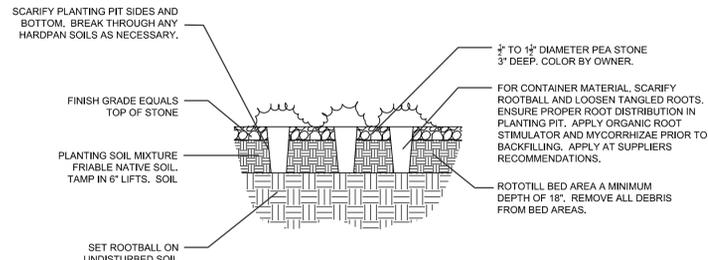
## TREE PLANTING NOTES:

THESE NOTES ARE PRESENTED AS A SUMMARY OF THE WRITTEN SPECIFICATIONS ISSUED FOR THE PROJECT. REFER TO THE WRITTEN SPECIFICATIONS FOR ADDITIONAL DETAIL AND FULL PROJECT REQUIREMENTS.

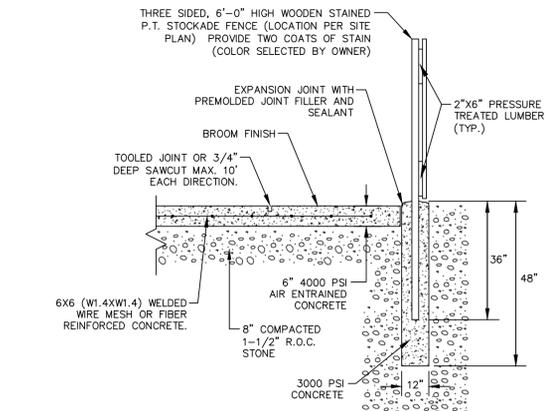
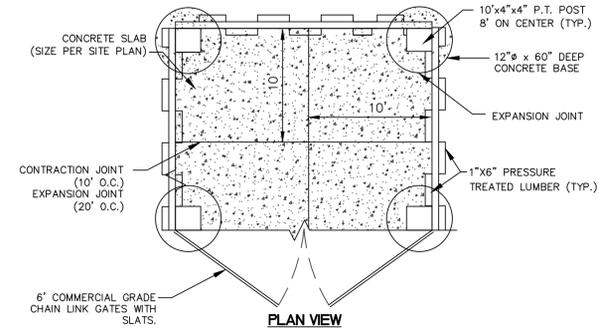
- ANY QUANTITIES INDICATED ON THE DRAWINGS OR ON THE TREE MATERIAL SCHEDULE ARE PROVIDED FOR THE BENEFIT OF THE LANDSCAPE SUBCONTRACTOR BUT SHOULD NOT BE ASSUMED TO BE CORRECT. THE LANDSCAPE SUBCONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE QUANTITIES INDICATED. ANY DISCREPANCIES NOTED SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO INSTALLATION. IN THE EVENT OF A DISCREPANCY, THE GRAPHIC REPRESENTATIONS SHOWN ON THE DRAWINGS SHALL GOVERN.
- NO SUBSTITUTIONS AS TO SIZE, TYPE, SPACING, QUANTITY OR QUALITY OF TREE MATERIAL SHALL BE MADE WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER. CHANGES IN TREE MATERIAL MAY CONSTITUTE PLAN RE-APPROVAL.
- TREES SHALL BE SUPPLIED AT THE SIZES SPECIFIED ON THE DRAWINGS. THE SIZES SHOWN ARE THE MINIMUMS FOR EACH CATEGORY (HEIGHT, SPREAD, CALIPER, CONTAINER SIZE, ETC.) WHEN A RANGE OF SIZE IS GIVEN, 75% OF THE PLANTS SUPPLIED MUST MEET THE MAXIMUM RANGE SIZE, AND 25% OF THE PLANTS SUPPLIED SHALL BE THE MINIMUM RANGE SIZE SPECIFIED. THE PLANTS SUPPLIED MUST CONFORM TO ALL OF THE MINIMUM DIMENSIONS INDICATED. PLANTS OF LARGER SIZE MAY BE USED IF ACCEPTABLE TO THE ENGINEER AT NO ADDITIONAL COST AND IF SIZES OF CONTAINER OR ROOT BALLS, HEIGHT, AND SPREAD ARE INCREASED PROPORTIONATELY IN ACCORDANCE WITH ANSI Z60.1. ALL OTHER QUALITY REQUIREMENTS OF THE TREE MATERIAL MUST ALSO BE ADHERED.
- ALL TREES MUST BE NURSERY GROWN, BALL AND BURLAP (B&B) OR CONTAINER GROWN AS SPECIFIED IN THE MATERIALS SCHEDULE. CONTAINER GROWN MATERIAL CAN BE SUBSTITUTED FOR B&B MATERIAL WITH WRITTEN APPROVAL BY THE D/B CONTRACTOR PRIOR TO INSTALLATION. ALL TREE MATERIALS SHALL CONFORM TO THE AMERICAN STANDARD FOR NURSERY STOCK ANSI Z-60.1, LATEST EDITION. ALL TREES SHALL COMPLY WITH ANSI Z-60.1 AND THE URBAN TREE FOUNDATION GUIDELINE FOR NURSERY TREE QUALITY, 2009 EDITION. ALL TREES SHALL BE HIGHEST QUALITY, FIRST CLASS REPRESENTATIVES OF THEIR SPECIES. SECONDS, CULLS, OR PARK GRADE MATERIAL WILL BE REJECTED.
- CALIPER SIZE IS NOT TO BE REDUCED. CALIPER MEASUREMENTS SHALL BE TAKEN IN ACCORDANCE WITH ANSI STANDARDS.
- ALL TREES MUST BE STRAIGHT TRUNK, HAVE A STRONG CENTRAL LEADER, FULL HEADED, AND MEET THE MINIMUM REQUIREMENTS. TREES WITH A 'Y'-SHAPE ARE NOT ACCEPTABLE. TREES THAT HAVE BEEN FRESHLY PRUNED TO MEET THESE SPECIFICATIONS SHALL BE REJECTED.
- THE TREES VEGETATIVE CANOPY SHOULD BE MOSTLY SYMMETRICAL AND FREE OF LARGE VOIDS OR FLAT SURFACE AREAS ON ONE SIDE.
- ALL STREET AND SHADE TREES SHALL HAVE A MINIMUM SIX FEET (6') CLEAR TRUNK UNLESS OTHERWISE NOTED ON PLANS OR PLANT LISTS.
- TREES MOVED DURING PERIODS OF HIGH TRANSPIRATION SHALL BE SPRAYED WITH AN ANTI-DESSICANT PRIOR TO MOVING. APPLY AND REMOVE ANTI-DESSICANTS AT THE MANUFACTURER'S RECOMMENDATIONS.
- TREES SHALL BE STAKED AND GUYED AS DETAILED AND SPECIFIED ONLY IF THE TREE CANNOT STAND ON ITS OWN AS DETERMINED BY THE PROJECT LANDSCAPE ARCHITECT. STAKE AND GUYED MATERIALS SHALL BE REMOVED BY THE LANDSCAPE SUBCONTRACTOR SIX (6) MONTHS AFTER FINAL ACCEPTANCE.
- ALL TREES ARE SUBJECT TO REVIEW AND APPROVAL BY THE ENGINEER AT ANY TIME PRIOR TO FINAL ACCEPTANCE. REJECTED PLANTS SHALL BE REPLACED IMMEDIATELY AT NO ADDITIONAL COST.
- THE LANDSCAPE SUBCONTRACTOR SHALL FIELD STAKE ALL TREES PRIOR TO INSTALLATION. THE OWNER'S REPRESENTATIVE SHALL APPROVE ALL STAKED LOCATIONS PRIOR TO INSTALLATION. PLANTS INSTALLED PRIOR TO APPROVAL BY THE OWNER'S REPRESENTATIVE ARE SUBJECT TO REJECTION AND REPLACEMENT AT NO ADDITIONAL COST TO THE OWNER.
- PRIOR TO COMMENCEMENT OF INSTALLATION, THE LANDSCAPE SUBCONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL EXISTING UTILITIES AND SHALL AVOID DAMAGING UTILITIES DURING INSTALLATION. ANY UTILITIES DAMAGED DURING INSTALLATION SHALL BE REPAIRED BY THE LANDSCAPE SUBCONTRACTOR TO THE SATISFACTION OF THE APPROPRIATE UTILITY COMPANY AND THE ENGINEER. ALL REPAIRS SHALL BE AT NO COST TO THE OWNER.
- NO TREES SHALL BE PLANTED WITHIN 10' OF SITE UTILITY LINES. TREE LOCATIONS PROPOSED WITHIN 10' SHALL BE BROUGHT TO THE ATTENTION OF THE PROJECT LANDSCAPE ARCHITECT PRIOR TO EXCAVATING. FIELD ADJUSTMENT OF TREE LOCATIONS SHALL BE DETERMINED BY THE PROJECT LANDSCAPE ARCHITECT. PLANTS RELOCATED AND INSTALLED WITHOUT APPROVAL OF THE PROJECT LANDSCAPE ARCHITECT WILL BE REMOVED, REPLACED, AND RELOCATED AT NO ADDITIONAL COST.
- THE LANDSCAPE CONTRACTOR SHALL UTILIZE ON-SITE TOPSOIL AS AVAILABLE FROM THE EARTHWORK SUBCONTRACTOR. ALL TOPSOIL SHALL BE APPROVED BY THE ENGINEER.
- NO TREES SHALL BE INSTALLED IN POOR DRAINAGE CONDITIONS. LANDSCAPE SUBCONTRACTOR IS RESPONSIBLE FOR TESTING SUSPECT TREE PITS PRIOR TO TREE INSTALLATION. REFER TO THE LANDSCAPE SPECIFICATIONS FOR TREE PIT TESTING PROCEDURES.
- ALL TREES SHALL BE PLACED WITH THE BEST FACE FORWARD, TOWARDS THE STREET WHENEVER POSSIBLE.
- ALL TREES SHOULD BE PRUNED AS NECESSARY PRIOR TO INSTALLATION.
- PRE-EMERGENT HERBICIDES, TREFLAN, PREEN, OR APPROVED EQUAL, SHALL BE APPLIED TO ALL TREE PLANTING BEDS PRIOR TO MULCHING. APPLY AT MANUFACTURER'S RECOMMENDATIONS. HERBICIDES SHALL BE INCORPORATED INTO THE SOIL AT THE RECOMMENDATION OF THE MANUFACTURER.
- APPLY ORGANIC ROOT STIMULATOR, CONTINUING MYCORRHIZAE, TO ALL TREES PRIOR TO BACKFILLING. APPLY AT MANUFACTURER'S RECOMMENDATIONS. CONTRACTOR TO SUBMIT SAMPLES OF ROOT STIMULATOR TO THE ENGINEER FOR APPROVAL PRIOR TO USE.
- THE LANDSCAPE SUBCONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE PLANT INSTALLATIONS UNTIL ACCEPTED BY THE OWNER. MAINTENANCE SHALL INCLUDE RE-MULCHING, WATERING, APPLICATIONS OF HERBICIDES, FUNGICIDES, INSECTICIDES AND PESTICIDES AS NECESSARY. MAINTENANCE SHALL INCLUDE ALL TREES, SEEDING AREAS AND SOD.
- THE LANDSCAPE CONTRACTOR SHALL GUARANTEE THAT ALL TREES SHALL BE IN A HEALTHY AND THRIVING CONDITION ACCORDING TO THE NATURAL GROWTH HABITS OF THE INDIVIDUAL SPECIES AT THE TIME OF THE PROJECT COMPLETION.

## LANDSCAPE SEED NOTES:

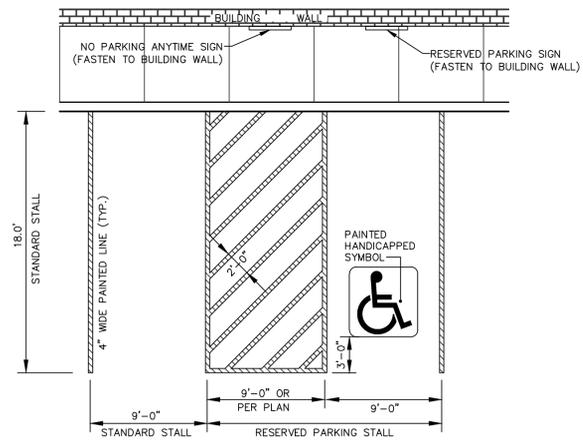
- SCARIFY, LOOSEN, FLOAT AND DRAG THE UPPER FOUR INCHES (4") OF SOIL TO BRING IT TO PROPER CONDITION AND GRADE PRIOR TO SEEDING / SODDING. REMOVE STONES LARGER THAN ONE INCH (1"), STICKS, ROOTS, RUBBISH, ETC. FINISHED GRADE SHALL BE LOOSE AND FREE DRAINING PRIOR TO SEEDING / SODDING.
- STRIP EXISTING GRASS AND WEEDS, INCLUDING ROOTS, PRIOR TO SEEDING. APPLY HERBICIDES AS NECESSARY TO SPOT TREAT UNWANTED SPECIES.
- INSTALL SEED PER THE WRITTEN SPECIFICATIONS. LANDSCAPE SUBCONTRACTOR MUST ADJUST APPLICATION RATES TO PURE LIVE SEED RATES AS INDICATED.
- ALL SEEDING AREAS MUST BE MAINTAINED BY THE LANDSCAPE SUBCONTRACTOR UNTIL ACCEPTANCE BY THE DESIGN BUILD CONTRACTOR.



4 PLANTING BED DETAIL  
C503 NOT TO SCALE

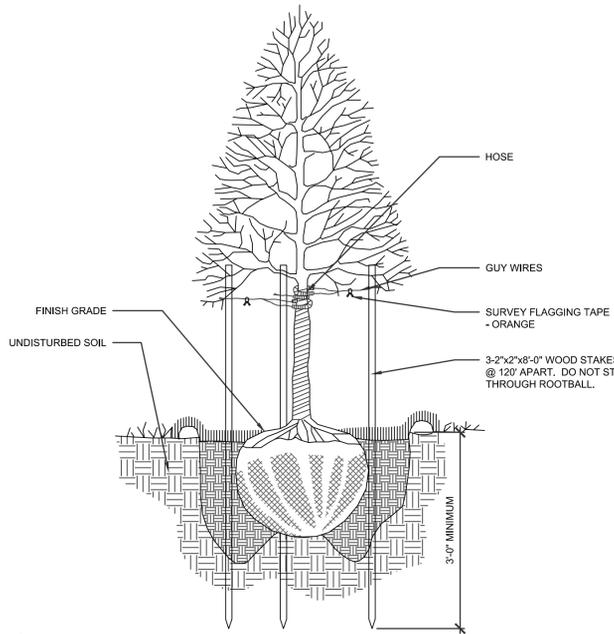


5 CONCRETE DUMPSTER AND UTILITY PAD DETAIL  
C503 NOT TO SCALE D173-01

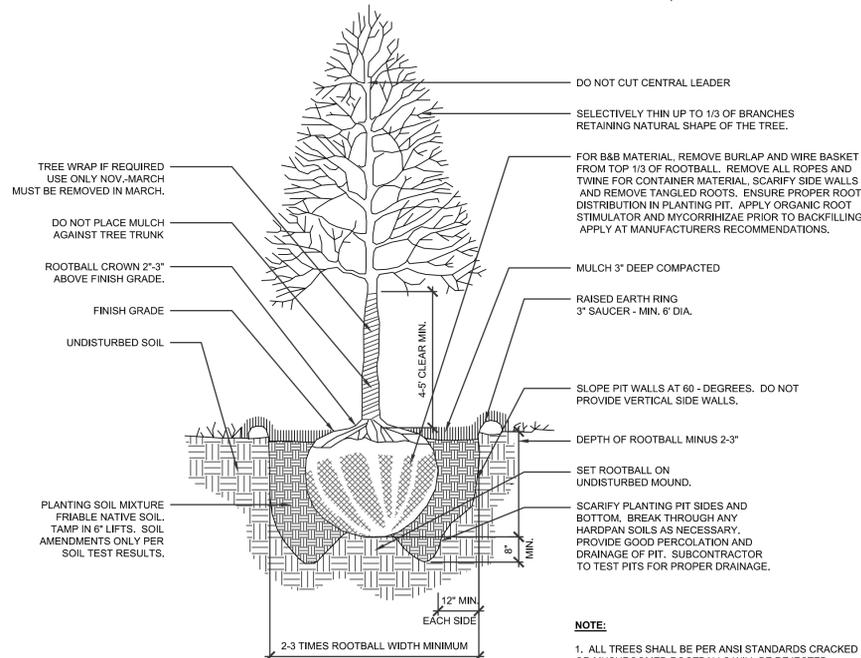


- NOTES
- MAX. PAVEMENT SLOPE TO BE 2% (1:50) IN ANY DIRECTION, FOR HANDICAP AREAS.

6 TYPICAL PARKING STALL MARKINGS  
C503 NOT TO SCALE SW136-01



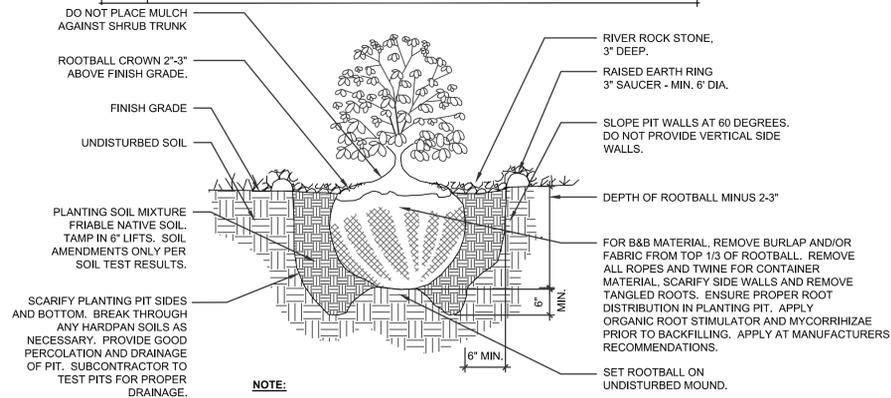
1 TREE STAKING DETAIL  
C503 NOT TO SCALE



### NOTE:

- ALL TREES SHALL BE PER ANSI STANDARDS CRACKED OR MUSHROOMED ROOTBALLS WILL BE REJECTED.
- EARTH RINGS NOT REQUIRED WHEN LOCATED IN A PLANTING BED.

2 TREE PLANTING DETAIL  
C503 NOT TO SCALE



### NOTE:

- EARTH RINGS NOT REQUIRED WHEN LOCATED IN A PLANTING BED.

3 SHRUB PLANTING DETAIL  
C503 NOT TO SCALE





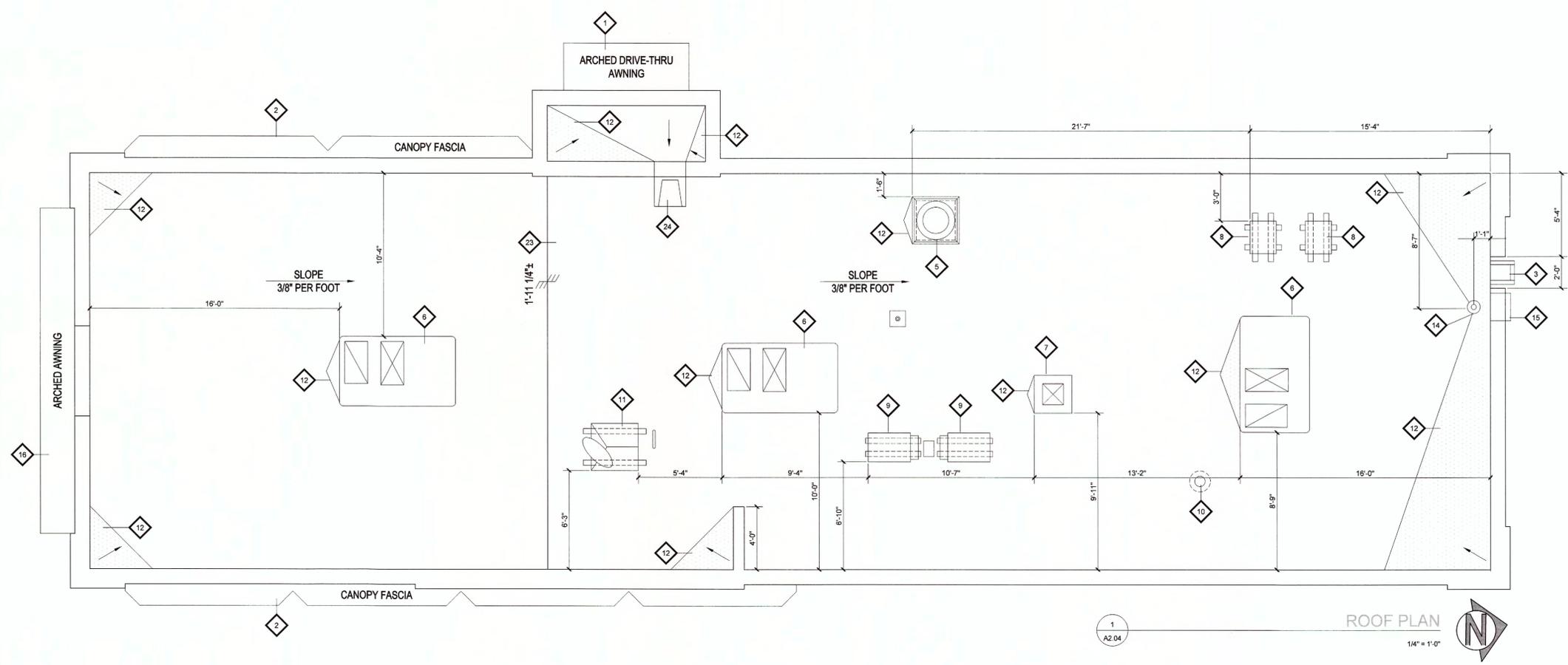
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Engineers & Architectural, Inc.

505 Tennis Club Circle, Lakeville, PA 18438, Tel: 570-839-1770, Fax: 610-820-3706

1176 N. Irving Street, Allentown, PA 18109, Tel: 610-820-8200, Fax: 610-820-3706

213 West Main Street, Landale, PA 19446, Tel: 215-362-2600, Fax: 215-362-8400

CCCEA # 14-0124



### ROOF PLAN KEY NOTES

1. PREMANUFACTURED METAL DRIVE-THRU AWNING PAINTED YELLOW WITH GREEN L.E.D. STRIP LIGHTS SUPPLIED BY CANOPY VENDOR	13. NOT USED
2. PREMANUFACTURED SILVER ALUMINUM CANOPY FASCIA WITH YELLOW AND RED L.E.D. STALL STAIRS SUPPLIED AND INSTALLED BY CANOPY VENDOR	14. INTERIOR ROOF DRAIN - REFER TO 5/A5.02
3. ROOF LADDER - REFER TO 2/A5.03	15. OVERFLOW SCUPPER - REFER TO 5/A5.02
4. NOT USED	16. PRE-MANUFACTURED PATIO CANOPY SUPPLIED & INSTALLED BY CANOPY VENDOR - REFER TO 4/A2.02
5. EXHAUST FAN - REFER TO MECHANICAL DRAWINGS & 4/A5.02 FOR ADDITIONAL INFORMATION	17. NOT USED
6. ROOF TOP UNIT - REFER TO MECHANICAL DRAWINGS & 11/A5.02 FOR ADDITIONAL INFORMATION	18. NOT USED
7. MAKE-UP AIR UNIT - REFER TO MECHANICAL DRAWINGS & 3/A5.02 FOR ADDITIONAL INFORMATION	19. NOT USED
8. COOLER/FREEZER CONDENSER - REFER TO MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION	20. NOT USED
9. ICE MACHINE CONDENSER - REFER TO MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION	21. NOT USED
10. RESTROOM EXHAUST FAN VENT - REFER TO MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION	22. NOT USED
11. OWNER SUPPLIED MUSIC SYSTEM	23. ROOF HEIGHT CHANGE - REFER TO STRUCTURAL FOR ADDITIONAL INFORMATION
12. PROVIDE CRICKET OF BUILT-UP RIGID INSULATION AT ALL ROOF-TOP MOUNTED EQUIPMENT LOCATIONS AND ALL INSIDE ROOF CORNERS- SLOPE 1/2" PER 12" TO ENSURE POSITIVE DRAINAGE	24. SPLASH GUARD UNDER SCUPPER

### GENERAL NOTES

DO NOT SCALE THIS DRAWING - IF THERE ARE ANY DISCREPANCIES PLEASE CONTACT THE ARCHITECT - PRIOR TO COMMENCING WORK

REFER TO MECHANICAL DRAWINGS FOR ADDITIONAL CEILING MOUNTED EQUIPMENT

VERIFY ALL ROOF-TOP UNIT SIZES AND LOCATIONS WITH MECHANICAL AND STRUCTURAL DRAWINGS

ROOF PIPE PENETRATION DETAIL - REFER TO 8/A5.02

ROOF CAP FLASHING DETAIL - REFER TO 7/A5.02

REV	DATE	REVISIONS	BY



PROJECT: 14-024  
**SONIC DRIVE-IN**  
 STORE # 6459  
 City Center Plaza  
 Western Blvd. and Arsenal St.  
 City of WaterTown  
 Jefferson County - New York

SHEET NUMBER:  
**A2.04**  
 ROOF PLAN





2014-023E

**ENGINEERING REPORT**

**PROPOSED SONIC RESTAURANT**

**CITY OF WATERTOWN  
JEFFERSON COUNTY, NEW YORK**



ENGINEERING REPORT

**PROPOSED SONIC RESTAURANT**

CITY CENTER PLAZA  
CITY OF WATERTOWN  
JEFFERSON COUNTY  
STATE OF NEW YORK

**CDE PARTNERS, LLC**

3300 MONROE AVENUE  
ROCHESTER, NY 14618  
PH: (585)233-0454  
CONTACT: MR. FRAN DESIMONE

PROJECT # 2014-023E

**11 MARCH 2014**



---

RYAN G. CHURCHILL, P.E.  
PARTNER, MANAGING ENGINEER

The above Engineer states that to the best of his knowledge, information and belief, the plans and specifications are in accordance with the applicable requirements of New York State. It is a violation of New York State Law for any person, unless acting under the direction of a licensed professional engineer to alter this document in any way. If altered, such licensee shall affix his or her seal and the notation "altered by" followed by his or her signature, date, and a specific description of alteration.

**GYMO ARCHITECTURE, ENGINEERING  
& LAND SURVEYING, P.C.**

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## **1.0 SITE AND PROJECT DESCRIPTIONS**

### **1.1 Location**

The project is located in the Watertown City Center Plaza in the City of Watertown, Jefferson County, New York. The project area is located along Western Boulevard. The site/building pad currently is undeveloped, but is served with utilities. Ground cover is primarily crushed stone.

The project is located on City of Watertown Tax parcels 8-53-103.100, 8-53-102.001, and 8-53-114. The approximate project site limits can be seen on the civil plans in Appendix A.

### **1.2 Project Description**

The project involves construction of a new  $\pm$  2,580 sf Sonic Restaurant. A canopy (approx. 183'x15') is also proposed to cover 15 drive-in spaces. A special use permit is not anticipated as the land use will be consistent with the area's zoning.

The site will be served with several amenities, including water and sanitary/storm sewer service, lighting, landscaping, and parking facilities. These features are depicted on the Site Development Drawings (see Appendix A). The utilities are discussed in greater detail in latter sections of the report.

### **1.3 Zoning/Parking/Approvals**

The project site is located in an area zoned as a Planned Development District (PDD). There is no proposed zone change.

Parking requirements per City of Watertown zoning is five space / 1,000 square foot of building footprint. This equates to a required 13 spaces and currently 53 spaces are proposed, including 15 Drive-In eating spaces.

It is important to note that the overall Watertown City Center Plaza project was previously approved by the City of Watertown and this particular pad site was included in that original plan. It is understood that valid permits are in place to connect utilities and also that required studies were already performed. The current plans will serve to provide detail on this pad to be developed and confirm utility demands, where applicable.

### **1.4 Site Topography**

The site has been prepped for development with rough grading completed, making for gentle slopes. The site elevation drops approximately 4 feet as you travel from the westerly side of the site towards Western Boulevard. The majority of the site generally drains via overland sheet flow in an easterly direction to existing catch basins located throughout the pad site. For existing cover, see attached orthoimagery in Appendix B. For existing topography, see attached Utility and Grading Plan in Appendix A.

### **1.5 Soil Classification**

According to the United States Department of Agriculture, Natural Resources Conservation Service (USDA NRCS), on the site you will find Canandaigua Silt Loam (Ca) and Niagara Silt Loam (NoA).

Ca (42%) is classified as Hydrologic Soil Group class C/D soil and NoA (58%) is also classified as a Hydrologic Soil Group class C/D soil.

See the attached USDA/NRCS Soil Survey descriptions for more information on the specific soil type properties in Appendix B.

## **2.0 WATER FACILITIES**

### **2.1 Water Distribution**

An existing 8-inch water main is located along the north side of the project site. A 2-inch copper water service was stubbed onto the project site during the original Watertown City Center Plaza construction and will be utilized to serve the proposed Sonic. An existing hydrant (to the north of the site) will be utilized for fire protection to the site.

The projected flows for each lot were calculated based on the anticipated uses and the recommended rates used by the NYS DEC. As shown in the table below, the average daily water demand is 2,205 gallons/day (assuming the space is food service at a rate of 35 gallons/day/seat). Drive-in stalls were considered a seat for this calculation (48 seats in restaurant and 15 drive-in stalls). Using a peaking factor of four, the maximum demand anticipated is 6.13 gallons/minute (gpm).

<b>Anticipated Use</b>	<b>Anticipated Water Usage (GPD)</b>
2,580 SF Restaurant	2,205 GPD

The water service will be installed to the east and connect to the existing stub for this parcel, as shown on the Civil Plans.

## **3.0 SANITARY SEWER FACILITIES**

### **3.1 Existing Sanitary Sewer Facilities**

A municipal, gravity sanitary sewer system exists in the project area. A sanitary stub was extended onto the project site in preparation for future development. Sanitary Sewer is collected and reaches a pump station located on the easterly side of Western Boulevard. Sanitary sewer waste is ultimately treated at the City of Watertown Wastewater Treatment Facility.

### **3.2 Proposed Sanitary Sewer Facilities**

To dispose of sewage generated on site, it is proposed that a gravity service will convey waste to an existing pumping station located on the easterly side of Western Boulevard. An exterior grease trap is proposed to treat grease laden waste and is located within the lawn on the northern side of the building. The estimated sewer flows for this project are listed in the Water Distribution section of this report. The sanitary lateral and pump station will remain privately owned. Refer to the Utility Sheets attached in Appendix A for the location of the sanitary sewer facilities.

Additionally, refer to Pumping Station Calculations in Appendix C for verification of pumping rates, cycle times and cycles per hour with the proposed additional flows from the proposed Sonic. The calculations show a slight increase in flows from previous assumptions, however the existing pump is shown to be able to handle the increase in flows.

## **4.0     HYDROLOGIC AND HYDRAULIC ANALYSES**

### **4.1     Existing and Proposed Drainage**

As previously discussed, the majority of the site generally drains via overland sheet flow in an easterly direction toward Western Boulevard, eventually leading to existing catch basins. This infrastructure will direct runoff to an existing storm water management area. For existing cover and grade conditions, see attached orthoimagery in Appendix B. For existing topography, see attached Utility and Grading Plan in Appendix A.

### **4.2     Proposed Storm Sewer Piping**

The storm water piping will be High Density Polyethylene (HDPE). Storm water piping will be owned and maintained by the owner. The site's runoff will be collected and distributed to an existing storm water management area to the north of the site.

The surrounding environment will also be protected from contamination and erosion through the implementation of Best Management Practices (BMP) during construction as required by the NYS DEC.

The storm drainage piping will be designed to carry, at a minimum, the peak runoff of the 10 year - 24 hour storm event. In addition, a 100-year overland flood route will be designed to avoid flooding of any structures.

### **4.3     Proposed Storm Water Management**

A Storm Water Pollution Prevention Plan (SWPPP) was previously developed for the parcel and will remain in place during the construction of the project.

The existing storm water pond, constructed as part of the SWPPP, was originally sized for a large retail area to be developed on the site. The impervious conditions proposed for the Sonic Restaurant fall below the previously assumed impervious area.

See the attached Civil Drawings for locations of the storm water collection and treatment locations in Appendix A.

## **5.0     LIGHTING**

### **5.1     Site Lighting**

The site parking and access drives will be illuminated by existing pole mounted luminaires (LED's) mounted at a height of 40 feet. These previously installed light poles and fixtures, will need to be relocated, as shown on the Civil Plans. Attached to the building will be wallpacks with a mounting height of approximately 14 feet. Care was given to not spill light over the property line to adjacent property owners and the lights chosen are dark sky compliant. Cut Sheets can be seen in Appendix C

## **6.0     LANDSCAPING**

### **6.1     Existing Landscaping**

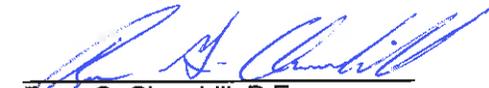
There are some trees (mainly spruce) located around the perimeter of the site that will be protected and relocated when possible.

## **6.2 Proposed Landscaping**

Landscaping will be provided to comply with City of Watertown requirements. Landscaping will be chosen that is native to the area, grows well in the soil conditions of the project, and fits in with the overall theme of the area. Refer to the civil drawings in Appendix A for detailed information on the proposed landscaping.

## **7.0 SUMMARY**

The proposed Sonic Restaurant will be a welcome addition to the City Center Plaza. The project shall not cause the City of Watertown's infrastructure to be exceeded, provided the improvements discussed in this report are performed.



Ryan G. Churchill, P.E.  
Managing Engineer, Partner

**APPENDIX A**

**SITE DEVELOPMENT PLANS**

**APPENDIX B**

**MAPPING**



SITE  
LOCATION



United States  
Department of  
Agriculture



NRCS

Natural  
Resources  
Conservation  
Service

A product of the National  
Cooperative Soil Survey,  
a joint effort of the United  
States Department of  
Agriculture and other  
Federal agencies, State  
agencies including the  
Agricultural Experiment  
Stations, and local  
participants

# Custom Soil Resource Report for Jefferson County, New York



March 6, 2014

# Preface

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Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<http://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist ([http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2\\_053951](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951)).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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# How Soil Surveys Are Made

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Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil scientists classified and named the soils in the survey area, they compared the

## Custom Soil Resource Report

individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

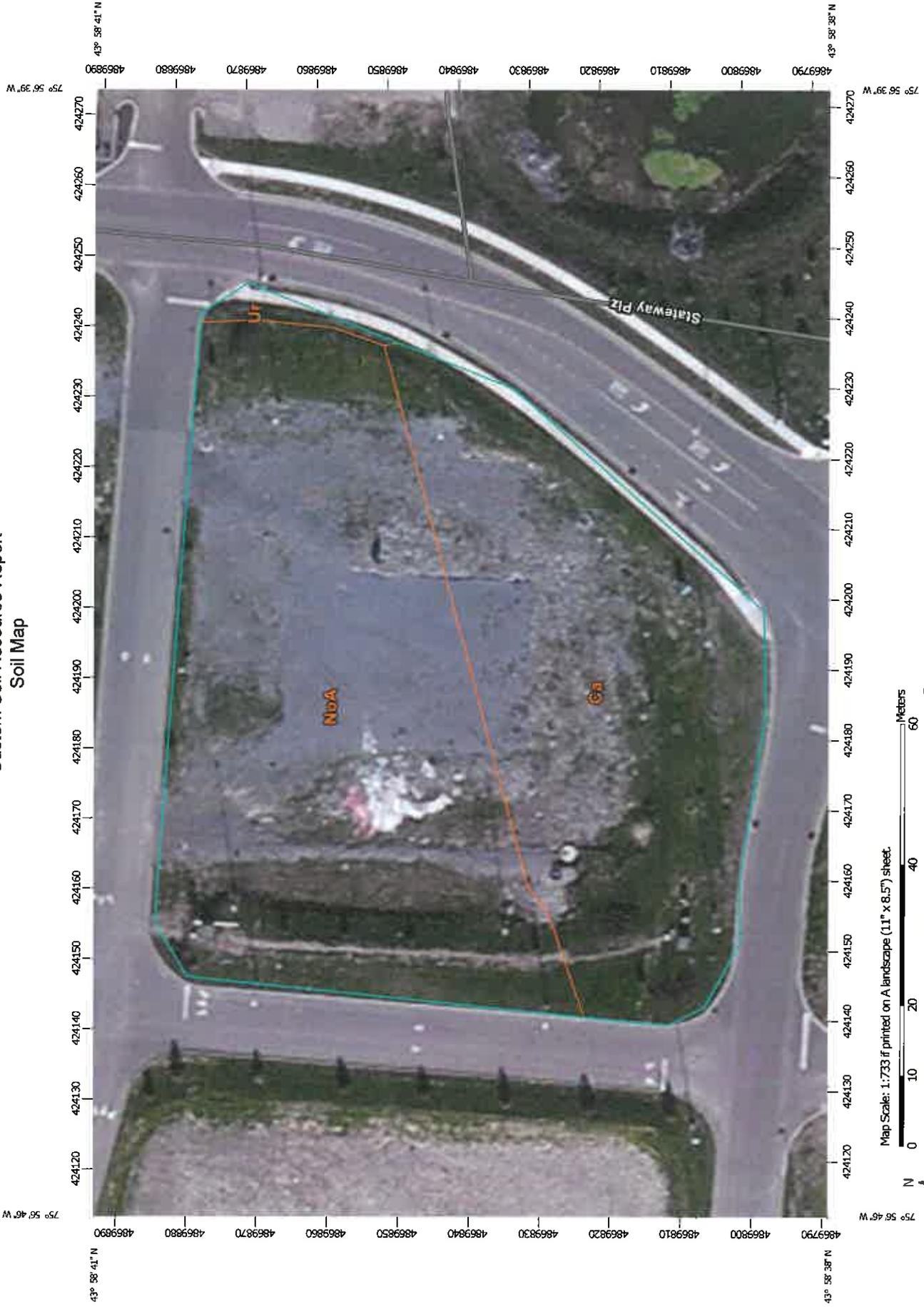
After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

# Soil Map

---

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

# Custom Soil Resource Report Soil Map



Map Scale: 1:733 if printed on A landscape (11" x 8.5") sheet.



## MAP LEGEND

 Area of Interest (AOI)	 Spoil Area
 Soils	 Stony Spot
 Soil Map Unit Polygons	 Very Stony Spot
 Soil Map Unit Lines	 Wet Spot
 Soil Map Unit Points	 Other
 Special Point Features	 Special Line Features
 Blowout	<b>Water Features</b>
 Borrow Pit	 Streams and Canals
 Clay Spot	<b>Transportation</b>
 Closed Depression	 Rails
 Gravel Pit	 Interstate Highways
 Gravelly Spot	 US Routes
 Landfill	 Major Roads
 Lava Flow	 Local Roads
 Marsh or swamp	<b>Background</b>
 Mine or Quarry	 Aerial Photography
 Miscellaneous Water	
 Perennial Water	
 Rock Outcrop	
 Saline Spot	
 Sandy Spot	
 Severely Eroded Spot	
 Sinkhole	
 Slide or Slip	
 Sodic Spot	

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

**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 map measurements.

Source of Map: Natural Resources Conservation Service  
 Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>  
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

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

Soil Survey Area: Jefferson County, New York  
 Survey Area Data: Version 10, Dec 15, 2013

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 2, 2010—Jul 2, 2011

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.

## Map Unit Legend

Jefferson County, New York (NY045)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Ca	Canandaigua silt loam	0.7	42.1%
NoA	Niagara silt loam, 0 to 3 percent slopes	1.0	56.8%
Ur	Urban land	0.0	1.0%
<b>Totals for Area of Interest</b>		<b>1.7</b>	<b>100.0%</b>

## Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If

## Custom Soil Resource Report

intensive use of small areas is planned, however, onsite investigation **is** needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

## Jefferson County, New York

### Ca—Canandaigua silt loam

#### Map Unit Setting

*Elevation:* 100 to 1,000 feet

*Mean annual precipitation:* 33 to 50 inches

*Mean annual air temperature:* 45 to 46 degrees F

*Frost-free period:* 110 to 170 days

#### Map Unit Composition

*Canandaigua and similar soils:* 75 percent

*Minor components:* 25 percent

#### Description of Canandaigua

##### Setting

*Landform:* Depressions

*Landform position (two-dimensional):* Toeslope

*Landform position (three-dimensional):* Tread

*Down-slope shape:* Concave

*Across-slope shape:* Concave

*Parent material:* Silty and clayey glaciolacustrine deposits

##### Properties and qualities

*Slope:* 0 to 3 percent

*Depth to restrictive feature:* More than 80 inches

*Drainage class:* Poorly drained

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high (0.20 to 0.57 in/hr)

*Depth to water table:* About 0 to 6 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Available water capacity:* High (about 12.0 inches)

##### Interpretive groups

*Farmland classification:* Farmland of statewide importance

*Land capability (nonirrigated):* 4w

*Hydrologic Soil Group:* C/D

##### Typical profile

*0 to 10 inches:* Silt loam

*10 to 58 inches:* Silt loam

*58 to 72 inches:* Silty clay loam

#### Minor Components

##### Niagara

*Percent of map unit:* 9 percent

##### Minoa

*Percent of map unit:* 6 percent

##### Collamer

*Percent of map unit:* 5 percent

## Custom Soil Resource Report

### Lamson

*Percent of map unit: 5 percent*

*Landform: Depressions*

## NoA—Niagara silt loam, 0 to 3 percent slopes

### Map Unit Setting

*Mean annual precipitation: 33 to 50 inches*

*Mean annual air temperature: 45 to 46 degrees F*

*Frost-free period: 110 to 170 days*

### Map Unit Composition

*Niagara and similar soils: 85 percent*

*Minor components: 15 percent*

### Description of Niagara

#### Setting

*Landform: Lake plains*

*Landform position (two-dimensional): Footslope*

*Landform position (three-dimensional): Tread*

*Down-slope shape: Concave*

*Across-slope shape: Linear*

*Parent material: Silty and clayey glaciolacustrine deposits*

#### Properties and qualities

*Slope: 0 to 3 percent*

*Depth to restrictive feature: More than 80 inches*

*Drainage class: Somewhat poorly drained*

*Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)*

*Depth to water table: About 6 to 18 inches*

*Frequency of flooding: None*

*Frequency of ponding: None*

*Calcium carbonate, maximum content: 15 percent*

*Available water capacity: High (about 10.5 inches)*

#### Interpretive groups

*Farmland classification: Prime farmland if drained*

*Land capability (nonirrigated): 3w*

*Hydrologic Soil Group: C/D*

#### Typical profile

*0 to 13 inches: Silt loam*

*13 to 35 inches: Silt loam*

*35 to 75 inches: Silt loam*

### Minor Components

#### Collamer

*Percent of map unit: 5 percent*

## Custom Soil Resource Report

### **Guffin**

*Percent of map unit: 5 percent*

*Landform: Depressions*

### **Canandaigua**

*Percent of map unit: 5 percent*

*Landform: Depressions*

## **Ur—Urban land**

### **Map Unit Setting**

*Mean annual precipitation: 33 to 50 inches*

*Mean annual air temperature: 45 to 46 degrees F*

*Frost-free period: 110 to 170 days*

### **Map Unit Composition**

*Urban land: 90 percent*

*Minor components: 10 percent*

### **Minor Components**

#### **Udorthents, smoothed**

*Percent of map unit: 10 percent*

*Landform: Depressions*

# **Soil Information for All Uses**

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## **Soil Properties and Qualities**

The Soil Properties and Qualities section includes various soil properties and qualities displayed as thematic maps with a summary table for the soil map units in the selected area of interest. A single value or rating for each map unit is generated by aggregating the interpretive ratings of individual map unit components. This aggregation process is defined for each property or quality.

## **Soil Qualities and Features**

Soil qualities are behavior and performance attributes that are not directly measured, but are inferred from observations of dynamic conditions and from soil properties. Example soil qualities include natural drainage, and frost action. Soil features are attributes that are not directly part of the soil. Example soil features include slope and depth to restrictive layer. These features can greatly impact the use and management of the soil.

## **Hydrologic Soil Group**

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

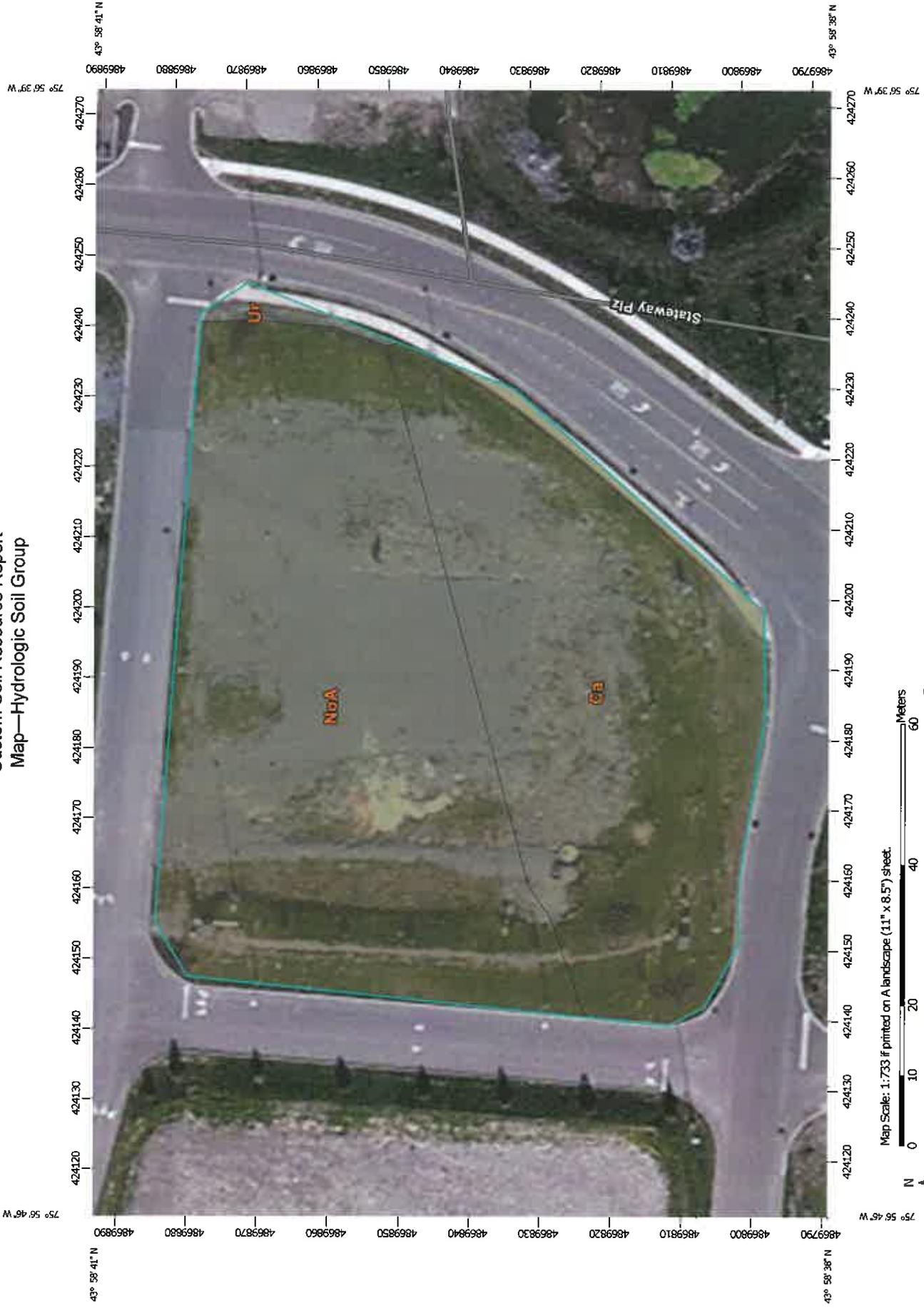
## Custom Soil Resource Report

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

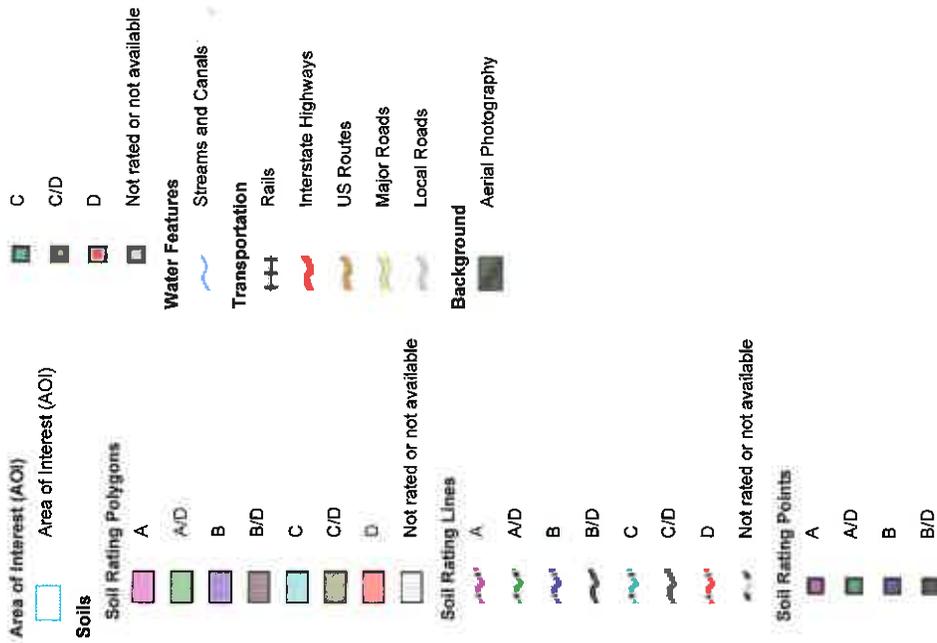
Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Custom Soil Resource Report  
Map—Hydrologic Soil Group



## MAP LEGEND



## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

**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 map measurements.

Source of Map: Natural Resources Conservation Service  
 Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>  
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

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

Soil Survey Area: Jefferson County, New York  
 Survey Area Data: Version 10, Dec 15, 2013

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 2, 2010—Jul 2, 2011

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.

Custom Soil Resource Report

**Table—Hydrologic Soil Group**

<b>Hydrologic Soil Group— Summary by Map Unit — Jefferson County, New York (NY045)</b>				
<b>Map unit symbol</b>	<b>Map unit name</b>	<b>Rating</b>	<b>Acres in AOI</b>	<b>Percent of AOI</b>
Ca	Canandaigua silt loam	C/D	0.7	42.1%
NoA	Niagara silt loam, 0 to 3 percent slopes	C/D	1.0	56.8%
Ur	Urban land		0.0	1.0%
<b>Totals for Area of Interest</b>			<b>1.7</b>	<b>100.0%</b>

**Rating Options—Hydrologic Soil Group**

*Aggregation Method:* Dominant Condition

*Component Percent Cutoff:* None Specified

*Tie-break Rule:* Higher

# References

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United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. <http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084>

## Custom Soil Resource Report

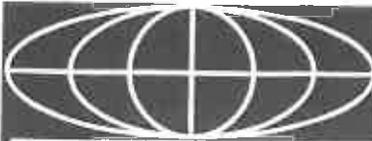
United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2\\_054242](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242)

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**APPENDIX C**

**PUMPING STATION CALCULATIONS**



PROJECT WATERTOWN CITY CENTER - SONIC	SHEET 1.	BY THR	DATE 3/10/14	FILE NO. 2014-023E
------------------------------------------	-------------	-----------	-----------------	-----------------------

→ PHASE I EXISTING FLOWS (BASED ON 2010 WATER READINGS) = 25,294 GPD

→ PROPOSED SONIC = 2,205 GPD

→ PROPOSED RESTAURANT = 5,205 GPD

TOTAL = 32,704 GPD (PHASE I)

→ PHASE II FLOWS

→ HBI - 27,260 GPD → Rest. 3 - 7,000 gpd → Retail 2 - 693 gpd

→ 5 BUYS / CHIPOTLE (ASSUME 100 SEATS) (35 gpd/seat) = 3,500 gpd

→ Rest 5 - 7,700 gpd Rest 4 - 7,140 gpd

→ ESTIMATED PHASE II FLOWS = 53,293 gpd

→ FULL BUILD OUT - PHASE I + II = 85,997 GPD

Avg Flow = 59.7 gpm; PEAK (AVG x 4) = 238.88 gpm

→ FULL BUILD OUT CONDITIONS  
Avg Flow Calc's

$$Q_{in} = 59.7 \text{ gpm} \quad Q_{out} = 225 \text{ gpm}$$

$$Q_{net} = 165.3 \text{ gpm} \quad V = 757$$

Time To Fill:

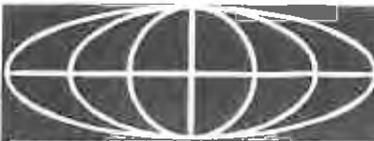
$$\frac{757}{59.7} = 12.7 \text{ mins}$$

Time to Empty:

$$\frac{757}{165.3} = 4.6 \text{ mins}$$

$$\text{Cycle} = 17.3 \text{ mins}$$

$$\pm 3.5 \text{ cycles / HR} \checkmark$$



PROJECT

SHEET

BY

DATE

FILE NO.

2.

→ EX Phase I + SONIC + HGI + (Chipotle/S Buys)  
(PROPOSED) (EXISTING) (EXISTING)

→ TOTAL PROJECTED FLOWS = 58,260 GPD

Avg FLOW = 40.46 gpm x 4 (PEAK) = 161.84 gpm

FROM PREVIOUS SYSTEM CALCULATIONS → OPERATING POINT IS 180 gpm / 41.5' HEAD [EBARA MODEL # 100 DLMFU]

NET WELL AREA

9' x 9' x 1.25' (Pump 1 on - Dump off) = 757 GALLONS

→ EXISTING CONDITIONS w/ PROPOSED SONIC CONDITIONS

Avg FLOW CALC'S

Q<sub>in</sub> = 40.46 gpm Q<sub>out</sub> = 180 gpm

Q<sub>NET</sub> = 139.54 gpm

FILL:

$$\frac{757}{40.46} = 18.7 \text{ mins}$$

Empty:  $\frac{757}{139.54} = 5.42 \text{ mins}$

Cycle = 24.12 mins

± 2.5 cycles/hr

PEAK FLOW CONDITIONS:

Q<sub>OUT</sub> = 180 gpm

Q<sub>in</sub> = 161.84 gpm

Q<sub>NET</sub> = 18.16 gpm

FILL =  $\frac{757}{161.84} = 4.7 \text{ mins}$

Empty =  $\frac{757}{18.16} = \underline{41.7 \text{ mins}}$

Cycle = 46.4 mins

± 1.3 cycles/hr

**APPENDIX C**

**LIGHTING CUT SHEETS**



Catalog Number	
Project	Type

## Features & Specifications

### Construction

Constructed with a full cutoff die cast aluminum housing. A tempered clear glass lens protects the optical system. Gasketed side hinge door for a weatherproof seal. Stainless steel hardware.

### Optical System

Made for medium mounting heights ranging from 12' to 18'. Two piece pinged aluminum reflector. Meets Dark Sky requirements for full cutoff fixtures.

### Electrical System

Provided with a medium base 4KV pulse rated socket. Fixtures are available with up to 175W Metal Halide or 150W High Pressure Sodium, and 32W-42W Fluorescent light sources. Wall Packs come with an option of Multi-Tap (120V, 208V, 240V, 277V), 480V high power factor ballasts, 120V NPF ballasts, or 120V Fluorescent ballasts depending on the light source and wattage chosen.

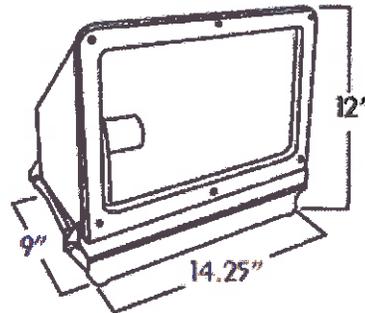
### Mounting

Built in template for mounting to electrical boxes. Threaded 1/2" and 3/4" NPT knockouts provided on side and rear of fixture.

### Finish

A Super Durable Polyester powder coat finish is electrostatically applied. Standard colors available: Black, Bronze, White, OD Green, US Green. Custom colors available upon request.

## MWP SERIES MEDIUM CUTOFF WALL PACK



Est Shipping Weight:  
18 lbs

Please contact your Techlight Sales Representative for more information.

### Ordering Nomenclature

Ex: (Medium Cutoff Wall Pack 150W Pulse Start Metal Halide, Multi-Tap, Bronze = MWPB9A-CO-BZ)

<b>MWPB</b>					
-------------	--	--	--	--	--

SERIES MWPB	LIGHT SOURCE	VOLTAGE A = Multi-Tap <sup>1</sup> B = 480V	CUTOFF CO = CUTOFF	EMERGENCY BALLAST B = 90 Minute Emergency Backup Ballast (Only available with 42W Fluores- cent Model)	FINISH BK = BLACK BZ = BRONZE GR = OD GREEN WH = WHITE SP = SPECIAL
	1 = 70W PSMH 2 = 100W PSMH 3 = 175W MH 4 = 70W HPS 5 = 100W HPS 6 = 150W HPS 8 = 50W HPS NPF 9 = 150W PSMH 10 = 50W PSMH 12 = 42W FLUOR 13 = DUAL 32W FLUOR 14 = DUAL 42W FLUOR	<small><sup>1</sup> 50W HPS is only offered with a 120V NPF Ballast, 42W &amp; 32W Fluorescent is provided with a 120V Ballast. Use Multi-Tap designation when ordering.</small>			

Submitted by Omni-Lite



**Job Name:**  
Munro DI Program-Edge  
Architect: Design Build

**Catalog Number:**  
ARE-EDG-5M-DA-14-D-UL-BZ-525-40K-R  
**Notes:**

**Type:**  
233W SHOEBOX  
OMNI12-21647

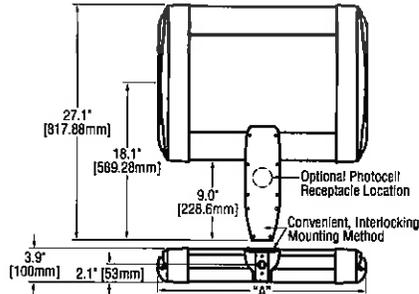
**ARE-EDG-5M-DA THE EDGE® LED Area Light – Type V Medium**

Rev. Date: 8/24/11

BetaLED Catalog #: ARE - EDG - 5M - DA - - D -



Notes:



# of LEDs	Dim. "A"
20	12.06" [306mm]
40	12.06" [306mm]
60	14.06" [357mm]
80	16.06" [408mm]
100	18.06" [459mm]
120	20.06" [510mm]
140	22.06" [560mm]
160	24.06" [611mm]
200	28.06" [713mm]
240	32.06" [814mm]

Product	Family	Optic	Mounting	# of LEDs (x 10)	LED Series	Voltage	Color Options	Drive Current	Factory-Installed Options
ARE	EDG	5M <sup>1</sup>	DA <sup>2</sup>	<input type="checkbox"/> 02 <input type="checkbox"/> 04 <input type="checkbox"/> 06 <input type="checkbox"/> 08 <input type="checkbox"/> 10 <input type="checkbox"/> 12 <input checked="" type="checkbox"/> 14 <input type="checkbox"/> 16 <input type="checkbox"/> 20 <input type="checkbox"/> 24	<input checked="" type="checkbox"/> UL Universal 120-277V <input type="checkbox"/> UH Universal 347-480V <input type="checkbox"/> 34 347V	<input type="checkbox"/> SV Silver <input type="checkbox"/> BK Black <input checked="" type="checkbox"/> BZ Bronze <input type="checkbox"/> PB Platinum Bronze <input type="checkbox"/> WH White	<input type="checkbox"/> 350 350mA <input checked="" type="checkbox"/> 525 <sup>9</sup> 525mA <input type="checkbox"/> 700 <sup>4</sup> 700mA	<input type="checkbox"/> 43K 4300K Color Temperature <sup>5</sup> <input type="checkbox"/> DIM 0-10V Dimming <sup>6,7,8</sup> <input type="checkbox"/> F Fuse <sup>9,10,11</sup> <input type="checkbox"/> HL Hi/Low (175/350/525, dual circuit input) <sup>12</sup> <input type="checkbox"/> P Photocell <sup>11,13</sup> <input checked="" type="checkbox"/> R NEMA Photocell/ Receptacle <sup>11,13</sup> <input type="checkbox"/> ML Multi-Level (75/525) <sup>12</sup> <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-top: 5px;">40K</div>	

**Footnotes**

- IESNA Type V Medium distribution
- Direct mounting arm for use with 3-6" (76-152mm) square or round pole
- Available on fixtures with 20-160 LEDs
- Available on fixtures with 20-60 LEDs
- Color temperature per fixture; 6000K standard; minimum 70 CRI
- Control by others
- Refer to dimming spec sheet for availability and additional information
- Can't exceed specified drive current. Consult factory if exceeding drive current is necessary
- Not available when UH voltage is selected
- When code dictates fusing use time delay fuse
- Not available with all multi-level options. Refer to the multi-level spec sheet for availability and additional information
- Refer to multi-level spec sheet for availability and additional information
- Must specify voltage other than UH
- Intended for horizontal mounting

LED PERFORMANCE SPECS															
# of LEDs	Initial Delivered Lumens - Type V Medium @ 6000K	BUG Rating			Initial Delivered Lumens - Type V Medium @ 4300K	BUG Rating			System Watts 120-480V	Total Current @ 120V	Total Current @ 277V	Total Current @ 347V	Total Current @ 480V	L <sub>70</sub> Hours @ 25° C (77° F)	50K Hours Lumen Maintenance Factor @ 15° C (59° F)
		Rating	U	G		Rating	U	G							
350mA Fixture Operation at 25° C (77° F)															
20	4,025 (04)	2	1	1	3,710 (04)	2	1	1	26	0.20	0.11	0.10	0.09	0.07	>150,000
40	8,049 (08)	3	2	1	7,419 (08)	3	2	1	47	0.40	0.21	0.19	0.15	0.12	>150,000
60	12,074 (12)	4	3	2	11,128 (12)	4	3	2	68	0.58	0.30	0.26	0.20	0.16	>150,000
80	16,100 (16)	4	3	2	14,837 (16)	4	3	2	90	0.77	0.38	0.34	0.26	0.20	>150,000
100	20,125 (20)	4	3	2	18,545 (20)	4	3	2	111	0.95	0.47	0.42	0.32	0.24	>150,000
120	24,150 (24)	4	3	2	22,253 (24)	4	3	2	132	1.15	0.56	0.50	0.38	0.28	>150,000
140	28,175 (28)	4	3	2	25,961 (28)	4	3	2	157	1.34	0.67	0.61	0.47	0.35	149,000
160	32,200 (32)	4	3	2	29,669 (32)	4	3	2	179	1.54	0.76	0.68	0.53	0.39	149,000
200	40,250 (40)	4	3	2	37,661 (40)	4	3	2	221	1.92	0.95	0.84	0.65	0.48	149,000
240	48,300 (48)	4	3	2	45,653 (48)	4	3	2	264	2.30	1.12	1.00	0.77	0.55	149,000
525mA Fixture Operation at 25° C (77° F)															
20	6,038 (06)	3	2	1	5,497 (06)	3	2	1	37	0.31	0.17	0.16	0.12	0.10	136,000
40	12,076 (12)	3	2	1	10,994 (12)	3	2	1	70	0.57	0.29	0.26	0.21	0.16	136,000
60	18,114 (18)	3	2	2	16,491 (18)	3	2	2	102	0.87	0.44	0.39	0.30	0.22	129,000
80	24,152 (24)	4	3	2	22,653 (24)	4	3	2	133	1.14	0.56	0.49	0.39	0.29	129,000
100	30,190 (30)	4	3	2	28,814 (30)	4	3	2	172	1.47	0.75	0.67	0.51	0.38	128,000
120	36,228 (36)	4	3	2	34,975 (36)	4	3	2	204	1.76	0.88	0.78	0.60	0.44	128,000
140	42,266 (42)	4	3	2	41,136 (42)	4	3	2	233	2.07	0.99	0.87	0.69	0.51	123,000
160	48,304 (48)	4	3	2	47,297 (48)	4	3	2	265	2.29	1.17	1.03	0.78	0.57	123,000
700mA Fixture Operation at 25° C (77° F)															
20	8,049 (08)	3	2	1	7,419 (08)	3	2	1	50	0.42	0.22	0.20	0.15	0.12	111,000
40	16,098 (16)	3	2	1	14,837 (16)	3	2	1	93	0.79	0.40	0.35	0.27	0.20	111,000
60	24,147 (24)	4	3	2	22,253 (24)	4	3	2	137	1.18	0.59	0.51	0.39	0.29	111,000

\* For recommended lumen maintenance factor data see TD-13

\*\* For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit [www.iesna.org/PDF/Erratas/TM-15-07BugRatingsAddendum.pdf](http://www.iesna.org/PDF/Erratas/TM-15-07BugRatingsAddendum.pdf)

NOTE: All data subject to change without notice.

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Made in the U.S.A. of U.S. and imported parts.  
Meets Buy American requirements within the ARBA.



Submitted by Omni-Lite



**Job Name:**  
Munro DI Program-Edge  
Architect: Design Build

**Catalog Number:**  
ARE-EDG-5M-DA-14-D-UL-BZ-525-40K-R  
Notes:

**Type:**  
233W SHOEBOX  
OMN12-21847

**ARE-EDG-5M-DA**

**THE EDGE® LED Area Light – Type V Medium**

Rev. Date: 8/24/11

**General Description**

Slim, low profile design minimizes wind load requirements. Fixture sides are rugged cast aluminum with integral, weather-tight LED driver compartments and high performance aluminum heatsinks. Convenient, interlocking mounting method. Mounting housing is rugged die cast aluminum and mounts to 3-6" (76-152mm) square or round pole. Fixture is secured by two (2) 5/16-18 UNC bolts spaced on 2" (51mm) centers. Includes leaf/debris guard. Five year limited warranty on fixture.

**Electrical**

Modular design accommodates varied lighting output from high power, white, 6000K (+/- 500K per full fixture), minimum 70 CRI, long life LED sources. Optional 4300K (+/- 300K per full fixture) also available. 120-277V 50/60 Hz, Class 1 LED drivers are standard. 347-480V 50/60 Hz driver is optional. LED drivers have power factor >90% and THD <20% at full load. Units provided with integral 10kV surge suppression protection standard. Integral weather-tight electrical box with terminal strips (12Ga - 20Ga) for easy power hook-up. Surge protection tested in accordance with IEEE/ANSI C62.41.2.

**Testing & Compliance**

UL listed in the U.S. and Canada for wet locations and enclosure rated IP66 per IEC 60529 when ordered without P or R options. Consult factory for CE Certified products. Certified to ANSI C136.31-2001, 3G bridge and overpass vibration standards. Dark Sky Friendly. IDA Approved. RoHS Compliant.



Product qualified on the Design Lights Consortium ("DLC") Qualified Products List ("QPL") when ordered without backlight control shield.

**Finish**

Exclusive Colorfast DeltaGuard® finish features an E-Coat epoxy primer with an ultra-durable silver powder topcoat, providing excellent resistance to corrosion, ultraviolet degradation and abrasion. Bronze, black, white and platinum bronze powder topcoats are also available. The finish is covered by our 10 year limited warranty.

Fixture and finish are endurance tested to withstand 5,000 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117.

**Patents**

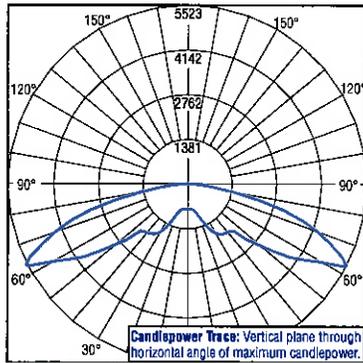
U.S. and international patents granted and pending. BetaLED is a division of Ruud Lighting, Inc. For a listing of Ruud Lighting, Inc. patents, visit [www.uspto.gov](http://www.uspto.gov).

**Field-Installed Accessories**

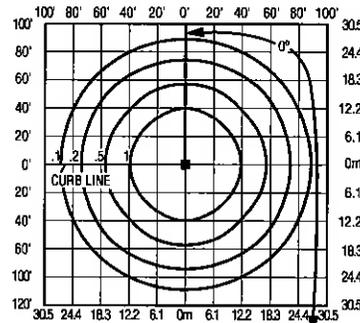


**Bird Spikes**  
XA-BRDSPK

**Photometrics**



Candlepower Trace: Vertical plane through horizontal angle of maximum candlepower.



Position of vertical plane of maximum candlepower.

Isofootcandle plot of 4300K, 120 LED Type V Medium area luminaire at 25' (7.6m) A.F.G. Luminaire with 15,341 initial delivered lumens operating at 525mA. Initial FC at grade.

Independent Testing Laboratories certified test. Report No. ITL68282. Candlepower trace of 4300K, 120 LED Type V Medium area luminaire with 16,029 initial delivered lumens operating at 525mA. All published luminaire photometric testing performed to IESNA LM-79-08 standards.

**THE EDGE® EPA & Weight Calculations**

# of LEDs	Approximate Weight 120-480V <sup>1</sup>	Approximate Weight			
		Single	2@ 180°	2@ 90°	3@ 90°
		Single	2@ 180°	2@ 90°	3@ 90°
<b>Fixed Arm Mount</b>					
20	21.0 lbs. (9.5kg)	0.60	1.20	0.87	1.47
40	23.7 lbs. (10.8kg)	0.60	1.20	0.87	1.47
60	27.0 lbs. (12.3kg)	0.60	1.20	0.92	1.51
80	28.1 lbs. (12.8kg)	0.60	1.20	0.96	1.55
100	32.3 lbs. (14.7kg)	0.60	1.20	1.00	1.60
120	33.5 lbs. (15.2kg)	0.60	1.20	1.04	1.64
140	36.9 lbs. (16.7kg)	0.60	1.20	1.08	1.68
160	41.4 lbs. (18.8kg)	0.60	1.20	1.12	1.72
200	43.3 lbs. (19.6kg)	0.61	1.21	n/a <sup>2</sup>	n/a <sup>2</sup>
240	47.6 lbs. (21.7kg)	0.69	1.38	n/a <sup>2</sup>	n/a <sup>2</sup>

1. Add 5 lbs. (2.3kg) for transformer in 347-480V fixtures when multi-level options are selected.  
2. For applications requiring 200 or more LEDs at 90 degrees refer to the DL mount version of our spec sheet.

NOTE: All data subject to change without notice.

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Made in the U.S.A. of U.S. and imported parts.  
Meets Buy American requirements within the ABBA.



Submitted by Omni-Lite



**Job Name:**  
Munro DI Program-Edge  
Architect: Design Build

**Catalog Number:**  
ARE-EDG-5M-DA-14-D-UL-BZ-525-40K-R  
**Notes:**

**Type:**  
**233W SHOEBOX**  
OMNI12-21847

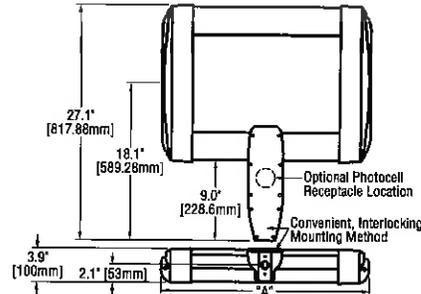
**ARE-EDG-5M-DA THE EDGE® LED Area Light – Type V Medium**

Rev. Date: 8/24/11

BetaLED Catalog #: ARE - EDG - 5M - DA - - D - -



Notes:



# of LEDs	Dim. "A"
20	12.06" [306mm]
40	12.06" [306mm]
60	14.06" [357mm]
80	16.06" [408mm]
100	18.06" [459mm]
120	20.06" [510mm]
140	22.06" [560mm]
160	24.06" [611mm]
200	28.06" [713mm]
240	32.06" [814mm]

Product	Family	Optic	Mounting	# of LEDs (x 10)	LED Series	Voltage	Color Options	Drive Current	Factory-Installed Options
ARE	EDG	5M1	DA2	<input type="checkbox"/> 02 <input type="checkbox"/> 04 <input type="checkbox"/> 06 <input type="checkbox"/> 08 <input type="checkbox"/> 10 <input type="checkbox"/> 12 <input checked="" type="checkbox"/> 14 <input type="checkbox"/> 16 <input type="checkbox"/> 20 <input type="checkbox"/> 24	D	<input checked="" type="checkbox"/> UL Universal 120-277V <input type="checkbox"/> UH Universal 347-480V <input type="checkbox"/> 34 347V	<input type="checkbox"/> SV Silver <input type="checkbox"/> BK Black <input checked="" type="checkbox"/> BZ Bronze <input type="checkbox"/> PB Platinum Bronze <input type="checkbox"/> WH White	<input type="checkbox"/> 350 350mA <input checked="" type="checkbox"/> 525* 525mA <input type="checkbox"/> 700* 700mA	<input checked="" type="checkbox"/> 43K 4300K Color Temperature <sup>5</sup> <input type="checkbox"/> DIM 0-10V Dimming <sup>6,7,8</sup> <input type="checkbox"/> F Fuse <sup>9,10,11</sup> <input type="checkbox"/> HL Hi/Low (175/350/525, dual circuit input) <sup>12</sup> <input type="checkbox"/> P Photocell <sup>13,15</sup> <input checked="" type="checkbox"/> R NEMA Photocell Receptacle <sup>11,13</sup> <input type="checkbox"/> ML Multi-Level (75/525) <sup>12</sup> <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-top: 10px;">40K</div>

**Footnotes**

- IESNA Type V Medium distribution
- Direct mounting arm for use with 3-6" (76-152mm) square or round pole
- Available on fixtures with 20-160 LEDs
- Available on fixtures with 20-80 LEDs
- Color temperature per fixture; 6000K standard; minimum 70 CRI
- Control by others
- Refer to dimming spec sheet for availability and additional information
- Can't exceed specified drive current. Consult factory if exceeding drive current is necessary
- Not available when UH voltage is selected
- When code dictates fusing use time delay fuse
- Not available with all multi-level options. Refer to the multi-level spec sheet for availability and additional information
- Refer to multi-level spec sheet for availability and additional information
- Must specify voltage other than UH
- Intended for horizontal mounting

# of LEDs	Initial Delivered Lumens - Type V Medium @ 6000K		Initial Delivered Lumens - Type V Medium @ 4300K		System Watts 120-480V	Total Current @ 120V	Total Current @ 230V	Total Current @ 277V	Total Current @ 347V	Total Current @ 480V	L <sub>80</sub> Hours* @ 25° C (77° F)	50K Hours Lumen Maintenance Factor** @ 15° C (59° F)
	B	U	G	Rating								
<b>350mA Fixture Operation at 25° C (77° F)</b>												
20	2,011 (04)	2	1	1	26	0.20	0.11	0.10	0.09	0.07	>150,000	93%
40	4,025 (04)	2	1	1	47	0.40	0.21	0.19	0.15	0.12	>150,000	
60	5,960 (06)	3	2	1	68	0.58	0.30	0.26	0.20	0.16	>150,000	
80	7,946 (08)	3	2	2	90	0.77	0.38	0.34	0.26	0.20	>150,000	
100	9,908 (10)	4	3	2	111	0.95	0.47	0.42	0.32	0.24	>150,000	
120	11,889 (12)	4	3	2	132	1.15	0.56	0.50	0.38	0.28	>150,000	
140	13,808 (14)	4	3	2	157	1.34	0.67	0.61	0.47	0.35	149,000	
160	15,781 (16)	4	3	2	179	1.54	0.76	0.68	0.53	0.39	149,000	
200	19,726 (20)	4	3	2	221	1.92	0.95	0.84	0.65	0.48	149,000	
240	23,671 (24)	5	3	3	264	2.30	1.12	1.00	0.77	0.56	149,000	
<b>525mA Fixture Operation at 25° C (77° F)</b>												
20	2,011 (02)	2	1	1	37	0.31	0.17	0.16	0.12	0.10	136,000	92%
40	5,635 (04)	3	2	1	70	0.57	0.29	0.26	0.21	0.16	136,000	
60	8,344 (06)	3	2	2	102	0.87	0.44	0.39	0.30	0.22	129,000	
80	11,125 (08)	4	3	2	133	1.14	0.56	0.49	0.39	0.29	129,000	
100	13,871 (10)	4	3	2	172	1.47	0.75	0.67	0.51	0.38	128,000	
120	16,645 (12)	4	3	2	204	1.76	0.88	0.78	0.60	0.44	128,000	
140	19,331 (14)	4	3	2	233	2.01	0.99	0.87	0.69	0.51	123,000	
160	22,029 (16)	5	3	3	265	2.29	1.11	0.99	0.78	0.57	123,000	
<b>700mA Fixture Operation at 25° C (77° F)</b>												
20	3,441 (02)	2	1	1	60	0.42	0.22	0.20	0.15	0.12	111,000	90%
40	6,883 (04)	3	2	1	93	0.79	0.40	0.35	0.27	0.20	111,000	
60	10,191 (06)	4	3	2	137	1.18	0.59	0.51	0.39	0.29	111,000	

\* For recommended lumen maintenance factor data see TD-13 \*\* For more information on the IES BUG (Backlight-Up/Up/Up/Up) Rating visit [www.iesna.org/PDF/Erratas/TM-15-07BugRatingsAddendum.pdf](http://www.iesna.org/PDF/Erratas/TM-15-07BugRatingsAddendum.pdf)

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Meets Buy American requirements within the ARRA.



Submitted by Omni-Lite



**Job Name:**  
Munro DI Program-Edge  
Architect: Design Build

**Catalog Number:**  
ARE-EDG-5M-DA-14-D-UL-BZ-525-40K-R  
Notes

**Type:**  
**233W SHOEBOX**  
OMNI12-21847

**ARE-EDG-5M-DA THE EDGE® LED Area Light – Type V Medium**

Rev. Date: 8/24/11

**General Description**

Slim, low profile design minimizes wind load requirements. Fixture sides are rugged cast aluminum with integral, weather-tight LED driver compartments and high performance aluminum heatsinks. Convenient, interlocking mounting method. Mounting housing is rugged die cast aluminum and mounts to 3-6" (76-152mm) square or round pole. Fixture is secured by two (2) 5/16-18 UNC bolts spaced on 2" (51mm) centers. Includes leaf/debris guard. Five year limited warranty on fixture.

**Electrical**

Modular design accommodates varied lighting output from high power, white, 6000K (+/- 500K per full fixture), minimum 70 CRI, long life LED sources. Optional 4300K (+/- 300K per full fixture) also available. 120-277V 50/60 Hz, Class 1 LED drivers are standard. 347-480V 50/60 Hz driver is optional. LED drivers have power factor >90% and THD <20% at full load. Units provided with integral 10kV surge suppression protection standard. Integral weather-tight electrical box with terminal strips (12Ga - 20Ga) for easy power hook-up. Surge protection tested in accordance with IEEE/ANSI C62.41.2.

**Testing & Compliance**

UL listed in the U.S. and Canada for wet locations and enclosure rated IP66 per IEC 60529 when ordered without P or R options. Consult factory for CE Certified products. Certified to ANSI C136.31-2001, 3G bridge and overpass vibration standards. Dark Sky Friendly. DA Approved. RoHS Compliant.



Product qualified on the Design Lights Consortium ("DLC") Qualified Products List ("QPL") when ordered without backlight control shield.

**Finish**

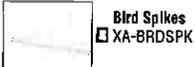
Exclusive Colorfast DeltaGuard® finish features an E-Coat epoxy primer with an ultra-durable silver powder topcoat, providing excellent resistance to corrosion, ultraviolet degradation and abrasion. Bronze, black, white and platinum bronze powder topcoats are also available. The finish is covered by our 10 year limited warranty.

Fixture and finish are endurance tested to withstand 5,000 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117.

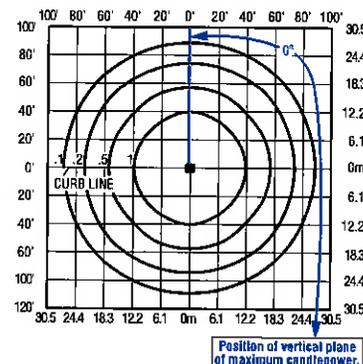
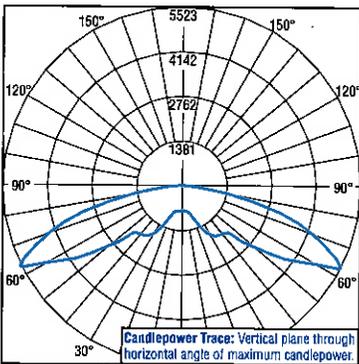
**Patents**

U.S. and international patents granted and pending. BetaLED is a division of Ruud Lighting, Inc. For a listing of Ruud Lighting, Inc. patents, visit [www.uspto.gov](http://www.uspto.gov).

**Field-Installed Accessories**



**Photometrics**



Independent Testing Laboratories certified test. Report No. ITL69292. Candlepower trace of 4300K, 120 LED Type V Medium area luminaire with 16,029 initial delivered lumens operating at 525mA. All published luminaire photometric testing performed to IESNA LM-79-08 standards.

Isofootcandle plot of 4300K, 120 LED Type V Medium area luminaire at 25' (7.6m) A.F.G. Luminaire with 15,341 initial delivered lumens operating at 525mA. Initial FC at grade.

**THE EDGE® EPA & Weight Calculations**

# of LEDs	Approximate Weight 120-480V <sup>1</sup>	Approximate Weight			
		Single	2@ 180°	2@ 90°	3@ 90° / 4@ 90°
<b>Fixed Arm Mount</b>					
20	21.0 lbs. (9.5kg)	0.60	1.20	0.87	1.47
40	23.7 lbs. (10.8kg)	0.60	1.20	0.87	1.47
60	27.0 lbs. (12.3kg)	0.60	1.20	0.92	1.51
80	28.1 lbs. (12.8kg)	0.60	1.20	0.96	1.55
100	32.3 lbs. (14.7kg)	0.60	1.20	1.00	1.60
120	33.5 lbs. (15.2kg)	0.60	1.20	1.04	1.64
140	36.9 lbs. (16.7kg)	0.60	1.20	1.08	1.68
160	41.4 lbs. (18.8kg)	0.60	1.20	1.12	1.72
200	43.3 lbs. (19.6kg)	0.61	1.21	n/a <sup>2</sup>	n/a <sup>2</sup>
240	47.8 lbs. (21.7kg)	0.69	1.38	n/a <sup>2</sup>	n/a <sup>2</sup>

1. Add 5 lbs. (2.3kg) for transformer in 347-480V fixtures when multi-level options are selected.  
2. For applications requiring 200 or more LEDs at 90 degree refer to the DL mount version of our spec sheet.

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