

July 16, 2013

Kurt W. Hauk, P.E.
City Engineer
Room 305, City Hall
245 Washington Street
Watertown, NY 13601

**Re: Site Plan Review Application
Oral Surgeon's Office
(A&C Project #2013-093)
163 Bellew Avenue South, Watertown, NY**

Dear Mr. Hauk:

Aubertine and Currier Architects, Engineers & Land Surveyors, PLLC on behalf of Gerald Schneeberger is requesting to be included on the agenda for the August 6, 2013 City of Watertown Planning Board meeting for Site Plan review for a Proposed Oral Surgeon's Office, located at 163 Bellew Avenue South, on tax parcel no. 9-11-117.000. Included with this cover letter is a review fee check for \$50.00, seventeen (17) copies of the letter, Site Plan Application, and Short SEQR Environmental Assessment Form and four (4) copies of the Engineering Report. Also attached are four (4) full size copies of the Site Plan, Site Details, Preliminary Building Floor Plans and Elevations and Thirteen (13) 11"x17" copies.

The project consists of a proposed 48' x 75.5', 3,624 SF, Oral Surgeon's Office and associated site amenities. The building will contain two offices, six examination rooms, two restrooms, a reception area, a break room, multiple storage rooms, and a basement. Site amenities include the construction of a 6,900 SF, 21 space parking lot, concrete sidewalks, site lighting, and landscape buffers. The building will be serviced by public sewer and water, and private electric, gas and telephone utilities. Utility connections will be made to the existing utilities located along Bellew Avenue South. 112 LF of 1" Type K copper water service will connect to an existing 1" water service stub located along Bellew Avenue South frontage. 87 LF of 6" SDR-35 PVC sanitary sewer lateral will be installed and connect to the existing 6" sanitary sewer lateral stub located along Bellew Avenue South frontage. The underground electric, communication, and gas service utilities will also be connected to existing utilities located along Bellew Avenue South frontage.

The owner intends to begin construction this summer/fall as soon as approvals are granted.

If there are any questions, please feel free to contact our office at your earliest convenience.

Sincerely,
Aubertine and Currier Architects, Engineers & Land Surveyors, PLLC

Christopher W. Todd
Civil Designer

Attachments

Cc: Gerald Schneeberger – Owner
Gene Rotunda – Construction Manager



NYS WBE Certified
SBA Woman Owned
Small Business (WOSB)

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Civil Engineer

Jayson J. Jones, P.L.S.
Land Surveyor



**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: Oral Surgeon's Office
Tax Parcel Number: 9-11-117.000
Property Address: 163 Bellew Ave. S.
Existing Zoning Classification: Neighborhood Business

OWNER OF PROPERTY

Name: Patrick J. Marzano
Address: 29219 Old Town Springs Road
Chaumont, NY 13622
Telephone Number: _____
Fax Number: _____

APPLICANT

Name: Gerald Schneeberger, DDS
Address: 545 Merrick Street
Clayton, NY 13624
Telephone Number: 315-771-5833
Fax Number: 315-265-1768
Email Address: gschneeb@twcny.rr.com

ENGINEER/ARCHITECT/SURVEYOR

Name: Aubertine and Currier Architects, Engineers & Land Surveyors, PLLC
Address: 522 Bradley Street
Watertown, NY 13601
Telephone Number: 315-782-2005
Fax Number: 315-782-1472
Email Address: mrm@aubertinecurrier.com

PROJECT DESCRIPTION

Describe project and proposed use briefly:

The project consists of a proposed 3,624 SF oral surgeon's office. The building will contain two offices, six examination rooms, two restrooms, a reception area, a break room, multiple storage rooms, and a basement. The building will be serviced by public sewer and water.

Is proposed Action:

New Expansion Modification/Alteration

Amount of Land Affected:

Initially: 0.76 Acres Ultimately: 0.76 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: Neighborhood Business

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)

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

Yes No

Proposed number of housing units (if applicable): N/A

Proposed building area:

1 st Floor	<u>3,624</u>	Sq. Ft.
2 nd Floor	_____	Sq. Ft.
3 rd Floor	_____	Sq. Ft.
Total	<u>3,624</u>	Sq. Ft.

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

Number of parking spaces proposed: 21

Construction Schedule: Fall 2013

Hours of Operation: Regular Hours Monday - Friday 8:00am-5:00pm

Volume of traffic to be generated: 16.13 Peak Hour ADT

SIGNATURE

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

Applicant (please print) Gerald Schnesberger, DDS

Applicant Signature  Date: 7/16/2013

OPTIONAL DRAWINGS:

- PROVIDE AN ELECTRONIC (.DWG) COPY OF THE SITE PLAN WITH AS-BUILT REVISIONS. This will assist the City in keeping our GIS mapping up-to-date.**

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.

- ELECTRONIC COPY OF ENTIRE SUBMISSION** (PDF preferred)
- 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.
 - 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) N/A
 - 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”.

N/A 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.

N/A 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.

N/A 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).

N/A 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.

N/A All proposed easements & right-of-ways are shown and labeled.

N/A 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 supersede 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.

N/A Maintenance & protection and traffic plans & notes for all required work within City streets including driveways, water laterals, sanitary laterals, storm connections, etc. are provided.

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

N/A 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.

N/A 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.

N/A ** 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.

N/A ** 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.

** When NYSDEC or NYSDOH permitting is required, the property owner/applicant shall retain a licensed Professional Engineer to perform inspections of the proposed utility work and to certify the completed works were constructed in substantial conformance with the approved plans and specifications.

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.

N/A If an applicant proposes a site plan with multiple buildings and any of those buildings front on a private drive, the City Council will name the private drive by resolution and the building(s) will be given an address number on that private drive by City staff. The applicant may propose a name for the private drive for the City Council's consideration.

Proposed Street Name: _____

Explanation for any item not checked in the Site Plan Checklist.

Due to the small project size the Site Plan, Grading Plan, Utility Plan, Landscape Plan and Lighting Plan elements have been combined and all provided on one "Site Development Plan".

PROJECT ID Number 2013-098

Appendix G

DELR

State Environmental Quality Review

SHORT ENVIRONMENTAL ASSESSMENT FORM

PER UNLISTED ACTIONS ONLY

PART 1 - PROJECT INFORMATION (To be completed by Applicant or Project Sponsor)

1. APPLICANT/SPONSOR Gerald Schneebarger		2. PROJECT NAME Oral Surgeon's Office	
3. PROJECT LOCATION: Municipality: City of Watertown County: Jefferson			
4. PRECISE LOCATION (Street address and road intersections, prominent landmarks, etc., or provide map) 163 Bellow Avenue South Just North of the Bellow Avenue South Railroad Crossing			
5. IS PROPOSED ACTION: <input checked="" type="checkbox"/> New <input type="checkbox"/> Expansion <input type="checkbox"/> Modification/Restoration			
6. DESCRIBE PROJECT BRIEFLY: The project consists of a proposed 48' x 75.6' x 2,000 SF, oral surgeon's office and associated site amenities. The building will contain two offices, six examination rooms, two restrooms, a reception area, a break room, multiple storage rooms, and a basement. Site amenities include the construction of a 0,000 SF, 81 spaces parking lot, concrete sidewalks, site lighting, and landscape buffer. The building will be serviced by public sewer and water, and private electric, gas and telephone utilities.			
7. AMOUNT OF LAND AFFECTED: Initially <u>0.76</u> acres Minimum <u>0.76</u> acres			
8. WILL PROPOSED ACTION COMPLY WITH EXISTING ZONING OR OTHER EXISTING LAND USE RESTRICTIONS? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If no, describe briefly			
9. WHAT IS PRESENT LAND USE IN VICINITY OF PROJECT? <input checked="" type="checkbox"/> Residential <input checked="" type="checkbox"/> Industrial <input type="checkbox"/> Commercial <input type="checkbox"/> Agriculture <input type="checkbox"/> Park/Open Space <input checked="" type="checkbox"/> Other Describe: Neighborhood Business			
10. DOES ACTION INVOLVE A PERMIT APPROVAL OR FUNDS, NOW OR ULTIMATELY FROM ANY OTHER GOVERNMENTAL AGENCY (FEDERAL, STATE OR LOCAL)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If yes, list agency(ies) and permit/approval City of Watertown Planning Board - Building Permit			
11. DOES ANY ASPECT OF THE ACTION HAVE A CURRENTLY VALID PERMIT OR APPROVAL? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, list agency(ies) and permit/approval			
12. AS A RESULT OF PROPOSED ACTION, WILL EXISTING PERMIT/APPROVAL REQUIRE MODIFICATION? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
I CERTIFY THAT THE INFORMATION PROVIDED ABOVE IS TRUE TO THE BEST OF MY KNOWLEDGE			
Applicant/sponsor name: <u>Gerald Schneebarger, DDS</u>			Date: <u>07/16/2013</u>
Signature: <u><i>Gerald Schneebarger</i></u>			

If this action is in the Coastal Area, and you are a state agency, complete the Coastal Assessment Form before proceeding with this assessment

A. DOES ACTION EXCEED ANY TYPE I THRESHOLD IN 6 NYCRR, PART 617.12? If yes, coordinate the review process and use the FULL EAF.

Yes No

B. WILL ACTION RECEIVE COORDINATED REVIEW AS PROVIDED FOR UNLISTED ACTIONS IN 6 NYCRR, PART 617.6? If NO, a negative declaration may be superseded by another involved agency.

Yes No

C. COULD ACTION RESULT IN ANY ADVERSE EFFECTS ASSOCIATED WITH THE FOLLOWING: (Answers may be handwritten, if legible)

C1. Existing air quality, surface or groundwater quality or quantity, noise levels, existing traffic patterns, solid waste production or disposal, potential for erosion, drainage or flooding problems? Explain briefly:

C2. Aesthetic agricultural, archaeological, historic, or other natural or cultural resources; or community or neighborhood character? Explain briefly:

C3. Vegetation or fauna, fish shellfish or wildlife species, significant habitats, or threatened or endangered species? Explain briefly:

C4. A community's existing plans or goals as officially adopted, or a change in use or intensity of use of land or other natural resources? Explain briefly:

C5. Growth, subsequent development, or related activities likely to be induced by the proposed action? Explain briefly.

C6. Long term, short term, cumulative, or other effects not identified in C1-C5? Explain briefly.

C7. Other Impacts (including changes in use of either quantity or type of energy)? Explain briefly.

D. WILL THE PROJECT HAVE AN IMPACT ON THE ENVIRONMENTAL CHARACTERISTICS THAT CAUSED THE ESTABLISHMENT OF A CEA?

Yes No

E. IS THERE, OR IS THERE LIKELY TO BE, CONTROVERSY RELATED TO POTENTIAL ADVERSE ENVIRONMENTAL IMPACTS?

Yes No If yes, explain briefly

PART III – DETERMINATION OF SIGNIFICANCE (To be completed by Agency)

INSTRUCTIONS: For each adverse effect identified above, determine whether it is substantial, large, important or otherwise significant. Each effect should be assessed in connection with its (a) setting (i.e. urban or rural); (b) probability of occurring; (c) duration; (d) irreversibility; (e) geographic scope; and (f) magnitude. If necessary, add attachments or reference supporting materials. Ensure that explanations contain sufficient detail to show that all relevant adverse impacts have been identified and adequately addressed.

Check this box if you have identified one or more potentially large or significant adverse impacts which **MAY** occur. Then proceed directly to the FULL EAF and/or prepare a positive declaration.

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 AND provide on attachments as necessary, the reasons supporting this determination:

Name of Lead Agency

Print or Type Name of Responsible Officer in Lead Agency

Title of Responsible Officer

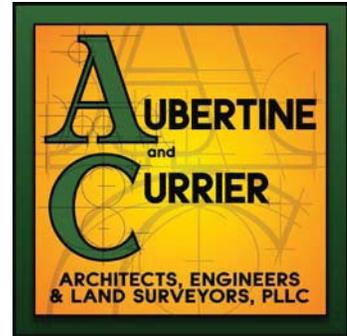
Signature of Responsible Officer in Lead Agency

Signature of Preparer (If different from responsible officer)

Date

PRELIMINARY ENGINEERING REPORT

ORAL SURGEON'S OFFICE
163 BELLEW AVENUE SOUTH
CITY OF WATERTOWN
JEFFERSON COUNTY, NEW YORK



Owner: Gerald Schneeberger
545 Merrick Street
Clayton, New York 13624

July 16, 2013

Matthew R. Morgia, P.E.
Civil Engineer

The above Engineer states that to the best of his knowledge, information and belief, the plans and specifications are in accordance with 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.

Aubertine and Currier Architects, Engineers & Land Surveyors, PLLC
522 Bradley Street Watertown, New York 13601 TELE: (315) 782-2005 FAX: (315) 782-1472

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Appendices

Appendix 1: USGS Location Map
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Soils Description
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Appendix 2: Sanitary Sewer Design Calculations

Appendix 3: Hydrologic and Hydraulic Analysis

Appendix 4: Trip Generation Calculations

1.0 SITE AND PROJECT DESCRIPTIONS

1.1 Location

The project is located within the City of Watertown at 163 Bellew Avenue South. The property is located on Tax Map Parcel No. 9-11-117.000. This parcel is zoned Neighborhood Business.

1.2 Project Description

The project consists of a proposed 48' x 75.5', 3,624 SF, Oral Surgeon's Office and associated site amenities. The building will contain two offices, six examination rooms, two restrooms, a reception area, a break room, multiple storage rooms, and a basement. Site amenities include the construction of a 6,900 SF, 21 space parking lot, concrete sidewalks, site lighting, and landscape buffers. The building will be serviced by public sewer and water, and private electric, gas and telephone utilities.

1.3 Site Topography

The existing site is relatively flat, undeveloped property. Existing site features include a concrete entrance apron between the shoulder of Bellew Avenue South and the existing sidewalk as well as a page wire fence separating the site from the neighboring parcels located within the adjacent residential zone.

Site runoff is primarily overland flow from southern end of the site to the north corner of the site. Runoff from the site drains north to a catch basins located along the edge of Bellew Avenue South. The storm drain infrastructure was installed in the spring of 1991 as part of the construction for the Bellew Avenue Extension.

The developed area of the project is not located within a 100 year flood plain.

1.4 Soil Classification

The project site is located in the City of Watertown, which is an urban environment and consists primarily of previously developed area. According to the Soils Survey of Jefferson County, New York, the project area is classified as a sandy loam and is a Hydrologic Group A.

<u>Soil Symbol</u>	<u>Soil Name</u>	<u>Hydrologic Group</u>
PoB	Plainfield sand	A
Ub	Udorthents, smoothed	A

2.0 WATER FACILITIES

2.1 Existing Water Facilities

There is an 8" municipal water main along the west side of Bellew Avenue South. There are 6" and 1" water services which were installed to the site for future use during the construction of the Bellew Avenue Extension in 1991.

2.2 Proposed Water Facilities

The proposed building will be served by connecting 114 LF of 1" Type K Copper Water Service to the existing 1" service stub located along Bellew Avenue South. The proposed 1" water service will enter along the west side of the proposed building.

2.3 Water Demand

The projected peak water usage by the Oral Surgeon's Office is 4,500 GPD. This is based upon the projected flow of 750 GPD for each of the six examination rooms containing patient chairs.

3.0 SANITARY SEWER FACILITIES

3.1 Existing Sanitary Sewer Facilities

There is a 27" municipal gravity sanitary sewer main within Bellew Avenue South. A 6" lateral was installed to the site for future service during construction of Bellew Avenue Extension in 1991.

3.2 Proposed Sanitary Sewer Facilities

The proposed building will be served by connecting 86 Lf of 6" SDR-35 PVC lateral to the existing 6" sanitary sewer lateral stub located along Bellew Avenue South. The proposed 6" lateral will enter near the northwest corner of the building.

Interior sanitary sewer plumbing construction will include the installation of wastewater collection piping and an amalgam separator to collect waste flows from the six (6) dental chairs. The Hg5 amalgam separator intercepts microscopic particles and captures dissolved mercury to keep sewer discharge more than 99% free from mercury.

3.3 Sewer Flows

The projected design flows generated by the Oral Surgeon's Office is 4,500 GPD. Sewer flows are based upon the NYS DEC 1988 Design Standards for Wastewater Treatment Works projected flow rates of 750 GPD per dental chair. The proposed layout includes 6 dental chairs.

4.0 STORMWATER FACILITIES

4.1 Existing Drainage

This property includes a 1.175 acres of undeveloped land. Existing site drainage flows from the southern end of the site to the northern corner of the site via overland sheet flow. A catch basin north of the site located along Bellew Avenue South collects excess runoff from the property and discharges to the 36" storm drain within Bellew Avenue South. Offsite drainage includes runoff from the rear yard lawns to the east.

Site runoff is primarily sheet flow from the rear to the front of the lot. The site and adjacent lots are relatively flat. The majority of runoff appears to collect within the flat, sandy lawn areas, and eventually pool and overflow to the Bellew Avenue South storm drain. Existing storm drainage inlets and piping are located within Bellew Avenue South. These drainage structures are piped through the City storm sewer system which discharges into the Black River and ultimately flows to Lake Ontario.

The existing site drainage and runoff conditions were analyzed utilizing the Rational Method. HydroCAD calculations can be found in Appendix #2. Runoff calculations were completed for the 10, 25, 50 and 100 year, 24 hour storm events. Peak discharge from the 25 year, 24 hour, storm event has been utilized for design and discussion purposes. The existing condition 25 year site discharge is 0.04 CFS.

4.2 Proposed Drainage

Site runoff from the office building, driveway, parking lot, and lawn areas will sheet flow into the lawn areas. Runoff which doesn't infiltrate into the existing soils will be collected within on-site catch basins and piped to the Bellew Avenue South storm sewer.

The proposed conditions 25 year, 24 hour storm, peak discharge is 0.07 CFS. This minor increase in peak runoff from the existing condition of the project site is due primarily to the 0.32 acre increase in impervious area resulting from the office building and parking lot construction.

5.0 ROADS / DRIVEWAYS

5.1 Existing Roads / Driveways

The property gains access from Bellew Avenue South through an existing 25' wide concrete driveway curb cut and apron.

5.2 Proposed Roads / Driveways

No new driveway access points are proposed for this project.

5.3 Traffic

Trip generation calculations were performed utilizing data from the ITE Trip Generation Manual, 7th Edition. The resulting anticipated trips to the proposed office have been calculated.

The Weekday AM Peak Hour generates approximately 9 trips/hour entering and 4 trips/hour exiting. The Weekday PM Peak Hour generates approximately 6 trips/hour entering and 10 trips/hour exiting. The Saturday Peak Hour generates approximately 7 trips/hour entering and 6 trips/hour exiting.

6.0 PRIVATE UTILITIES

6.1 Gas, Electric, Telephone and Cable

The electric, gas, cable, and telephone services will be extended to the building from the existing mains along Bellew Avenue South.

7.0 LIGHTING

7.1 Proposed Site Lighting

Proposed site lighting includes three 175 watt Metal Halide cutoff fixtures, SSM2 175MATMR/PC-8 located along the asphalt parking lot and access drive. Two lights will be located opposite of each other in the middle of the parking lot and the other light will be located opposite the exit doorway to the reception area.

8.0 LANDSCAPING

8.1 Existing Landscaping

Two 8" Box Alder trees and one 20" dead tree exists within the central portion of the site. The existing site is primarily lawn and meadow with trees and brush located along the east and west boundary of the site. There are two openings in the existing to the east of 80' and 70'. A page wire fence exists along the east boundary, separating the neighborhood business and residential B lots. The adjacent homes are located over 200' to the east and not visible from the project site due to existing trees and brush vegetation.

8.2 Proposed Landscaping

A landscape buffer consisting of nine spruce trees is proposed to infill the two opening sin the existing trees along the east property line between the residential and neighborhood business parcels.

Sincerely,
Aubertine and Currier Architects, Engineers & Land Surveyors, P.L.L.C.

Matthew R. Morgia, P.E.
Civil Engineer

APPENDIX #1

**USGS LOCATION MAP
CITY OF WATERTOWN ZONING MAP
SOILS MAP
SOILS DESCRIPTION
FLOOD INSURANCE RATE MAP, 360354 0001 E**

075° 56' 30.00" W

075° 56' 00.00" W

075° 55' 30.00" W

043° 59' 00.00" N

043° 59' 00.00" N

043° 58' 30.00" N

043° 58' 30.00" N

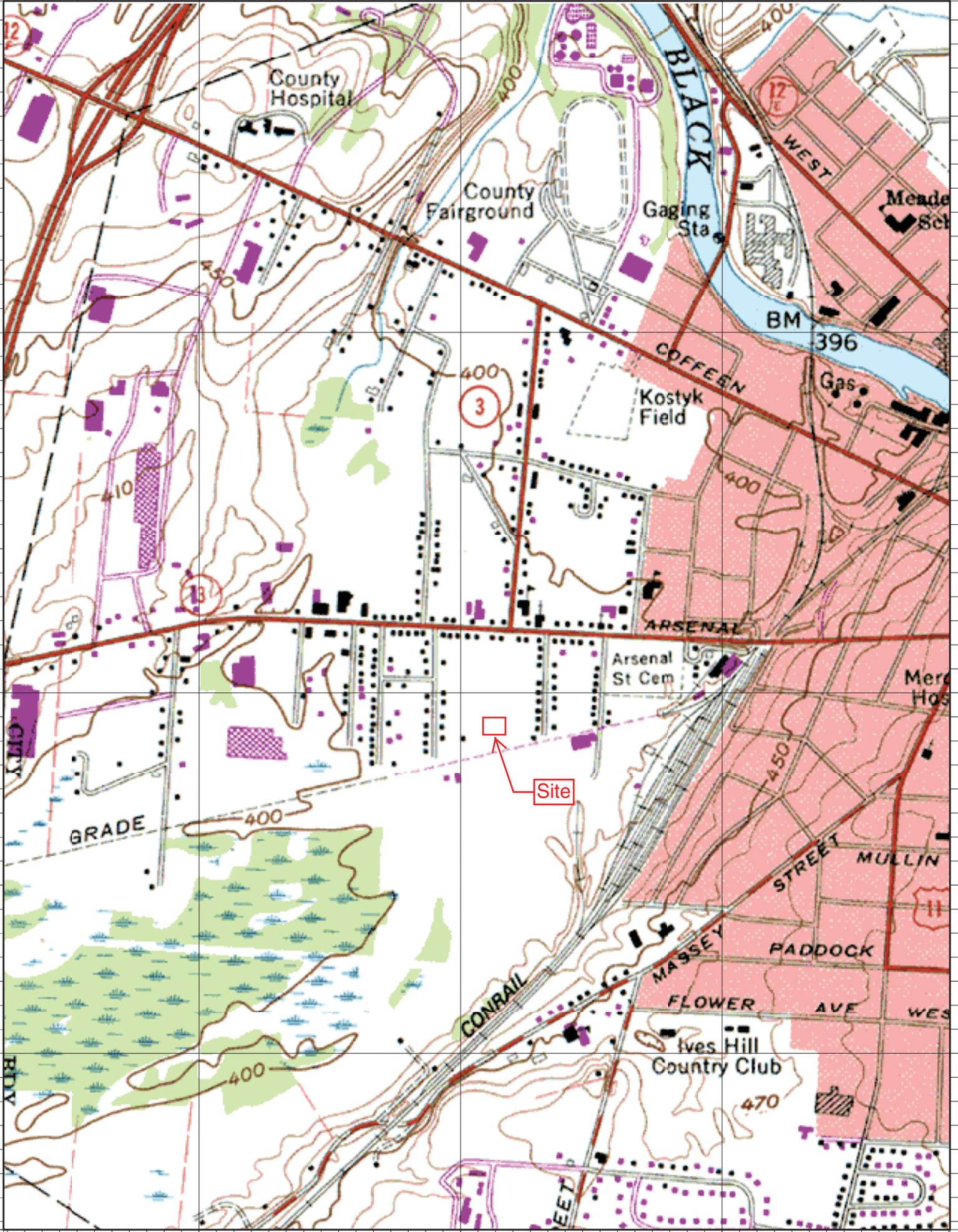
043° 58' 00.00" N

043° 58' 00.00" N

075° 56' 30.00" W

075° 56' 00.00" W

075° 55' 30.00" W

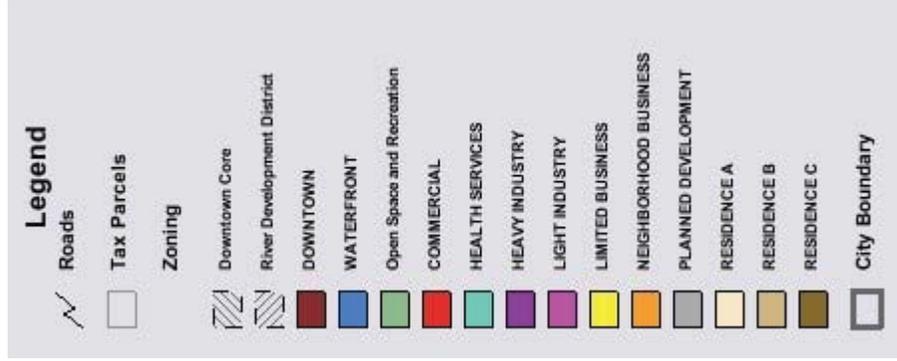


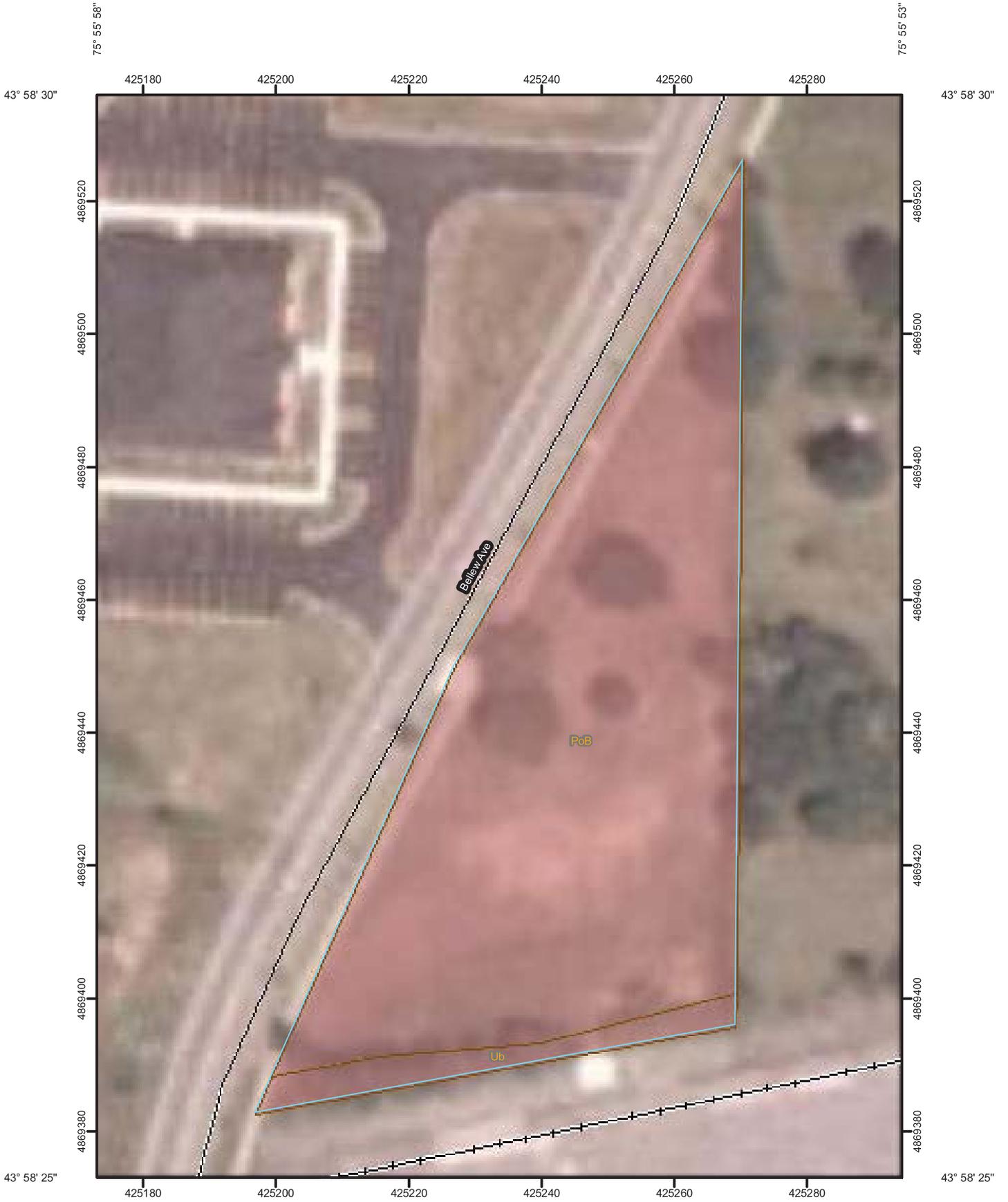
Dr. Schneeberger's Office



July 17, 2013

Disclaimer: This map was prepared by the City of Watertown Internet Mapping Application. The information was compiled using the most current data available. It is deemed accurate, but is not guaranteed.





Map Scale: 1:778 if printed on A size (8.5" x 11") sheet.



MAP LEGEND

Area of Interest (AOI)
 Area of Interest (AOI)

Soils
 Soil Map Units

Soil Ratings

 A

 A/D

 B

 B/D

 C

 C/D

 D

 Not rated or not available

Political Features

 Cities

Water Features

 Streams and Canals

Transportation

 Rails

 Interstate Highways

 US Routes

 Major Roads

 Local Roads

MAP INFORMATION

Map Scale: 1:778 if printed on A size (8.5" x 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:15,840.

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

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

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

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>

Coordinate System: UTM Zone 18N NAD83

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 9, Sep 21, 2012

Date(s) aerial images were photographed: 7/30/2006

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

Hydrologic Soil Group

Hydrologic Soil Group— Summary by Map Unit — Jefferson County, New York (NY045)				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
PoB	Plainfield sand, 0 to 8 percent slopes	A	1.2	93.9%
Ub	Udorthents,smoothed	A	0.1	6.1%
Totals for Area of Interest			1.2	100.0%

Description

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.

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.

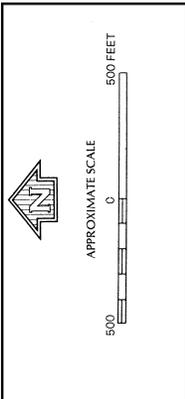
If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher



NATIONAL FLOOD INSURANCE PROGRAM

FIRM FLOOD INSURANCE RATE MAP

CITY OF
WATERTOWN,
NEW YORK
JEFFERSON COUNTY

PANEL 1 OF 4
(SEE MAP INDEX FOR PANELS NOT PRINTED)

PANEL LOCATION

COMMUNITY-PANEL NUMBER
360354 0001 E

MAP REVISED:
JANUARY 17, 1980

BEST AVAILABLE COPY
AT THIS TIME

Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using the National Flood Insurance Program's software. This map does not include changes to the original map that may have been made since the date of the original map. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov



APPENDIX #2

SANITARY SEWER DESIGN CALCULATIONS



522 BRADLEY STREET
WATERTOWN, NY 13601
TEL: (315) 782-2005
FAX: (315) 782-1472
www.AubertineCurrier.com

CALCULATION SHEET

Project Number: 2013-093 Date: 7/9/13
Project Name: Dr. Schneebenger's Office Page: 1 Of: 1
Location: S Bollew Ave, Watertown Calc'd By: LWT

Sanitary Sewer Design Calculations

Reference:

- NYS DEC Division of Water Design Standards for Wastewater Treatment Works 1988

Design Flows:

- Per Chair $\sim 750 \text{ GPD}/\text{chair} \times 6 \text{ chairs} = 4500 \text{ GPD}$
- Per SF $\sim 0.1 \text{ GPD}/\text{SF} \times 3624 \text{ SF} = 362.4 \text{ GPD}$

$$4500 \text{ GPD} \gg 362.4 \text{ GPD} \therefore \text{Design Flow} = 4500 \text{ GPD}$$

- 6) Repeat the test a minimum of three times, until the time for the water to drop one inch for two successive tests yields approximately equal results. The last test will then be taken as the stabilized rate for percolation. If different results are obtained from separate pits in the same general area, the slowest percolation rate is used in design.

NOTE: A percolation test whose results are inconsistent with the soil evaluation shall be disregarded, and the percolation test(s) shall be performed again.

DESIGN FLOW

Information on flow rate is necessary for the design of effective wastewater treatment and disposal systems. The wastewater flow rates of existing facilities can often be measured. Table 3 can be used as a basis for the design of sewage treatment and disposal facilities for new developments, and for existing establishments when the hydraulic loading cannot be measured. Alternatively, water-usage data can be used to estimate wastewater flow, if it is available for an establishment. Adjustments should be made for infiltration, and for water that will not reach the sewer (ex., boiler water).

For commercial establishments variations in flow may be extreme. In these cases it is necessary to examine the significant delivery period of the wastewater and base the peak design flow upon this information to prevent an excessive rate of flow through the treatment system. It may be desirable to include an equalization basin prior to the treatment system.

Section 15-0314 of the Environmental Conservation Law mandates the use of water-saving plumbing facilities in new and renovated buildings. Hydraulic loading, as determined from reference to Table 3 may be decreased by 20 percent in those installations serving premises equipped with certified water-saving plumbing fixtures. A combination of new and old fixtures can be considered on a pro rata basis.

New toilets which use as little as 0.5 gallons of water per flush are becoming available on the market and the reduction of wastewater flow attributable to these and other new technologies shall be considered on a case-by-case basis. The reduction allowance shall depend in part upon the ability of the builder or owner to ensure adequate maintenance and/or replacement in kind when necessary.

Table 3. Expected Hydraulic Loading Rates

<u>Type of Facility</u>	<u>Flow Rate Per Person (gal./day)</u>	<u>Flow Rate Per Unit (gal./day)</u>
Airports		
(per passenger)	3	
(per employee)	15	

Table 3. Expected Hydraulic Loading Rates (cont'd)

<u>Type of Facility</u>	<u>Flow Rate Per Person (gal./day)</u>	<u>Flow Rate Per Unit (gal./day)</u>
Apartments	75	
1 bedroom		150
2 bedroom		300
3 bedroom		400
Bathhouse - per swimmer	10	
Boarding House	75	
Bowling Alley (per lane - no food) (with food - add food service value)		75
Campgrounds (Recreational Vehicle - per site)		
Sewered Sites		100
Central Facilities		
Served Sites, 300' radius		100
Peripheral Sites, 500' radius		75
Subtractions from above		
No Showers		25
Dual Service (Central Facilities and sewered facilities overlapping the central)		25
Campground (summer camp)		
Central Facilities	50	
Separate Facilities		
Toilet	10	
Shower	25	
Kitchen	10	
Campground Dumping Stations		
Per Unsewered Site		10
Per Sewered Site		5
Camps, Day	13	
Add for lunch	3	
Add for showers	5	
Carwashes, assuming no recycle		
Tunnel, per car		80
Rollover, per car		40
Wandwash, per 5 minute cycle		20
Churches - per seat (with catering - add food service value)		3

Table 3. Expected Hydraulic Loading Rates (cont'd)

Type of Facility	Flow Rate Per Person (gal./day)	Flow Rate Per Unit (gal./day)
Clubs		
Country		
Per Resident Member		75
Per Non-resident Member		25
Racquet (per court per hour)		80
Factories		
Per person/shift	25	
Add for showers	10	
Food Service Operations (per seat)		
Ordinary Restaurant		35
24-hour Restaurant		50
Restaurant along Freeway		70
Tavern (little food service)		20
Curb Service (drive-in, per car space)		50
Catering, or Banquet Facilities	20	
Hair Dresser (per station)		170
Hospitals (per bed)		175
Hotels (per room)		120
add for banquet facilities, theatre, night club, as applicable		
Homes		
1 bedroom		150
2 bedroom		300
3 bedroom		400
4 bedroom		475
5 bedroom		550
Institutions (other than hospitals)	125	
Laundromats (per machine)		580
Mobile Home Parks		
Less than 5 units: use flow rates for homes		
Twenty or more units		
per trailer		200
double wide		300
Five to twenty units - use prorated scale		
Motels		
Per Living Unit		100
With Kitchen		150

Table 3. Expected Hydraulic Loading Rates (cont'd)

Type of Facility	Flow Rate Per Person (gal./day)	Flow Rate Per Unit (gal./day)
Office Buildings		
Per Employee	15	
Per Square Foot		0.1
Dentist--per chair/day		750
Parks (per picnicker)		
Restroom only	5	
Showers and Restroom	10	
Schools (per student)		
Boarding	75	
Day	10	
Cafeteria - Add	5	
Showers - Add	5	
Service Stations		
Per toilet (not including car wash)		400
Shopping Centers (per sq. ft. - food extra)		0.1
per employee	15	
per toilet		400
Swimming Pools (per swimmer)	10	
Sports Stadium	5	
Theatre		
Drive-in (per space)		3
Movie (per seat)		3
Dinner Theatre, Individual (per seat)	20	
with hotel	10	

TREATMENT CONSIDERATIONS

Detailed data regarding the character and quantity of the wastewater flow is necessary to facilitate the effective design of wastewater treatment and disposal systems.

Many commercial/institutional facilities generate wastewater similar in character to residential wastes. For other facilities consideration of the waste-generating sources will allow an estimate of the character of the wastewater. This will also serve to indicate the presence of any problem constituents in the wastewater such as high grease levels from restaurants and lint fibers from laundromats.

APPENDIX #3

Hydrologic and Hydraulic Analysis

**EXISTING DRAINAGE AREA SUMMARY TABLE
ORAL SURGEON'S OFFICE**

Drainage Area	Surface Description	Soil Type	CN	Area (Acre)	Composite CN	Composite Area (Acre)	Tc (Min.)
EX DA 1	Meadow, Grass, Non-Grazed	A	30	1.18	30	1.18	26.0
DESIGN POINT DRAINAGE AREA TOTAL					30	1.18	

Summary for Subcatchment 1: DA 1

Runoff = 0.03 cfs @ 0.44 hrs, Volume= 0.008 af, Depth> 0.08"

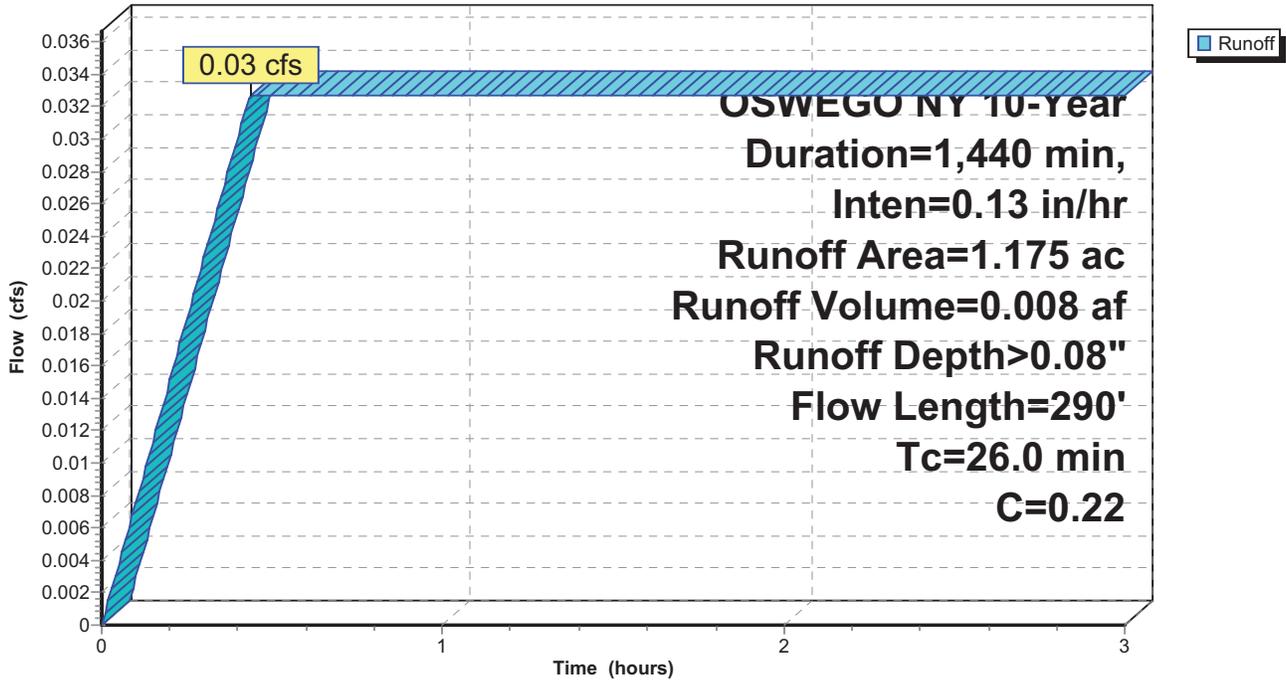
Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
 OSWEGO NY 10-Year Duration=1,440 min, Inten=0.13 in/hr

Area (ac)	C	Description
1.175	0.22	Meadow, non-grazed, HSG A
1.175		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.8	100	0.0120	0.08		Sheet Flow, Sheet Flow, Grass Grass: Dense n= 0.240 P2= 2.50"
6.2	190	0.0053	0.51		Shallow Concentrated Flow, Shallow Concentated, Grass Short Grass Pasture Kv= 7.0 fps
26.0	290	Total			

Subcatchment 1: DA 1

Hydrograph



Summary for Subcatchment 1: DA 1

Runoff = 0.04 cfs @ 0.44 hrs, Volume= 0.009 af, Depth> 0.09"

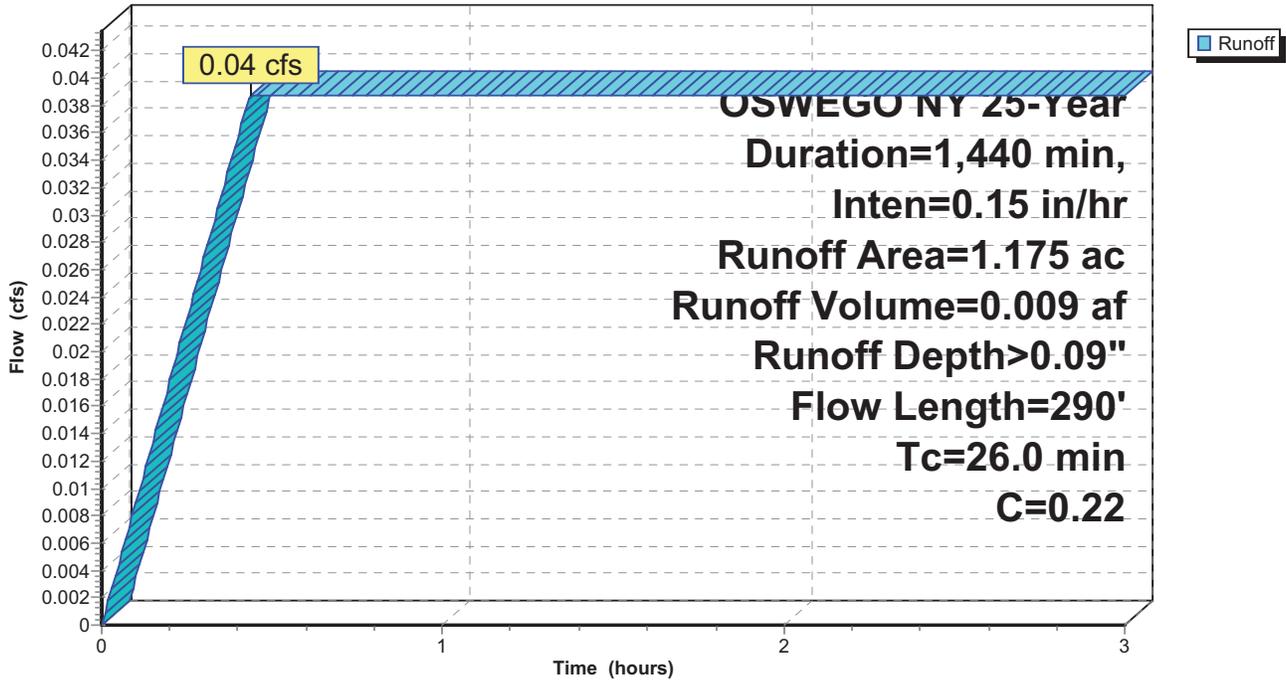
Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
 OSWEGO NY 25-Year Duration=1,440 min, Inten=0.15 in/hr

Area (ac)	C	Description
1.175	0.22	Meadow, non-grazed, HSG A
1.175		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.8	100	0.0120	0.08		Sheet Flow, Sheet Flow, Grass Grass: Dense n= 0.240 P2= 2.50"
6.2	190	0.0053	0.51		Shallow Concentrated Flow, Shallow Concentated, Grass Short Grass Pasture Kv= 7.0 fps
26.0	290	Total			

Subcatchment 1: DA 1

Hydrograph



Summary for Subcatchment 1: DA 1

Runoff = 0.04 cfs @ 0.44 hrs, Volume= 0.009 af, Depth> 0.10"

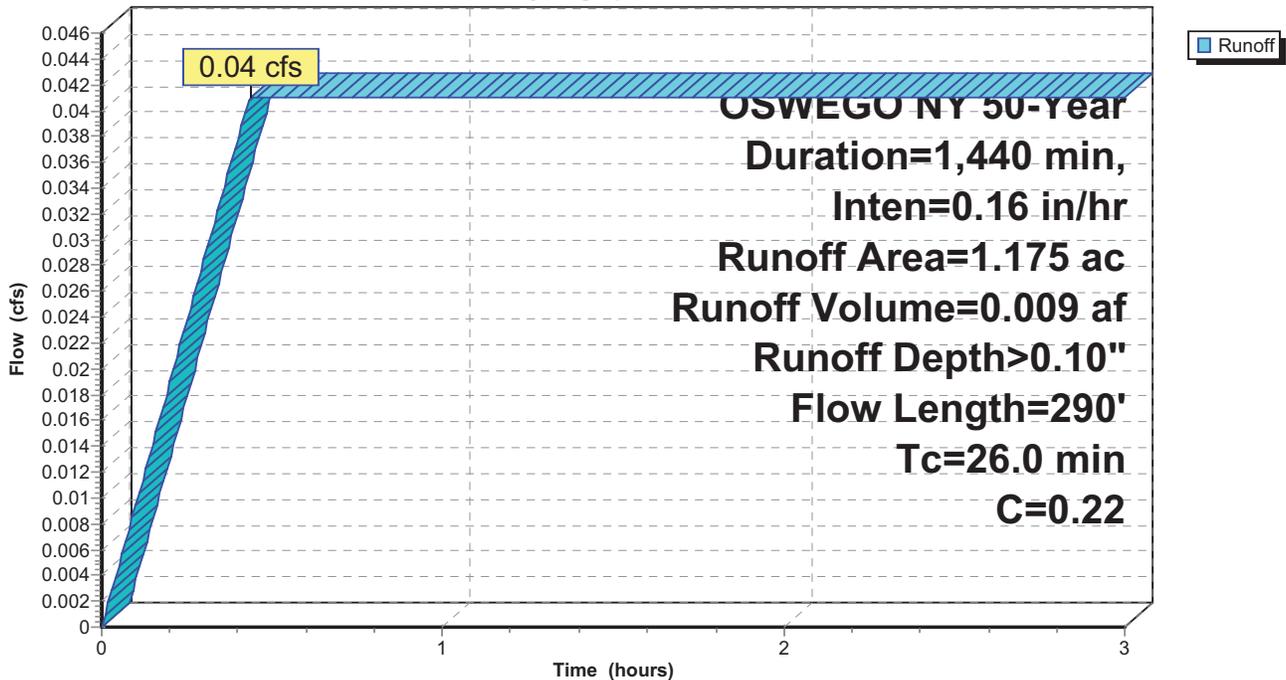
Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
 OSWEGO NY 50-Year Duration=1,440 min, Inten=0.16 in/hr

Area (ac)	C	Description
1.175	0.22	Meadow, non-grazed, HSG A
1.175		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.8	100	0.0120	0.08		Sheet Flow, Sheet Flow, Grass Grass: Dense n= 0.240 P2= 2.50"
6.2	190	0.0053	0.51		Shallow Concentrated Flow, Shallow Concentated, Grass Short Grass Pasture Kv= 7.0 fps
26.0	290	Total			

Subcatchment 1: DA 1

Hydrograph



Summary for Subcatchment 1: DA 1

Runoff = 0.05 cfs @ 0.44 hrs, Volume= 0.011 af, Depth> 0.11"

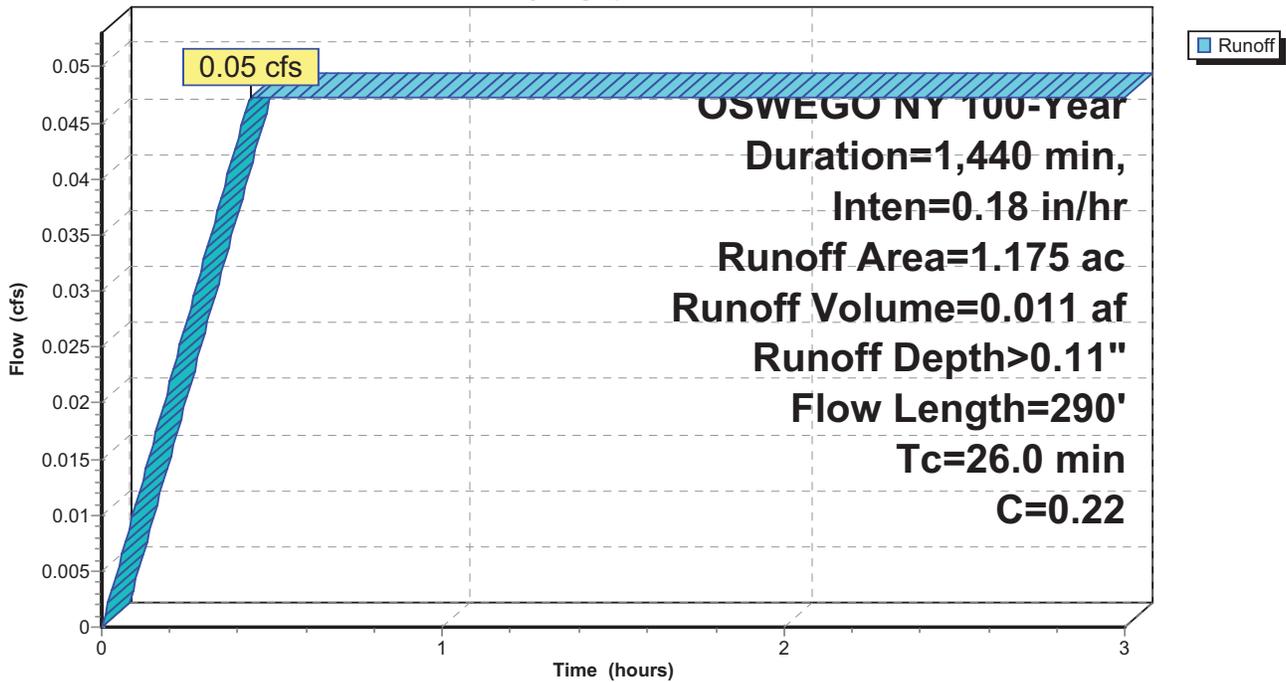
Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
 OSWEGO NY 100-Year Duration=1,440 min, Inten=0.18 in/hr

Area (ac)	C	Description
1.175	0.22	Meadow, non-grazed, HSG A
1.175		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.8	100	0.0120	0.08		Sheet Flow, Sheet Flow, Grass Grass: Dense n= 0.240 P2= 2.50"
6.2	190	0.0053	0.51		Shallow Concentrated Flow, Shallow Concentated, Grass Short Grass Pasture Kv= 7.0 fps
26.0	290	Total			

Subcatchment 1: DA 1

Hydrograph



**PROPOSED DRAINAGE AREA SUMMARY TABLE
ORAL SURGEON'S OFFICE**

Drainage Area	Surface Description	Soil Type	CN	Area (Acre)	Composite CN	Composite Area (Acre)	Tc (Min.)
PR DA 1	Paved Roads, Buildings	A	98	0.32	48	1.18	20.9
	Meadow, Grass, Non-Grazed	A	30	0.86			
DESIGN POINT DRAINAGE AREA TOTAL					48	1.18	

2013-093 Proposed

Prepared by Aubertine and Currier, PLLC

HydroCAD® 9.10 s/n 03261 © 2010 HydroCAD Software Solutions LLC

Printed 7/16/2013

Page 1

Pipe Listing (selected nodes)

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Diam/Width (inches)	Height (inches)	Fill (inches)
1	1	0.00	0.00	211.0	0.0050	0.013	12.0	0.0	0.0

Summary for Subcatchment 1: DA 1

Runoff = 0.06 cfs @ 0.35 hrs, Volume= 0.014 af, Depth> 0.14"

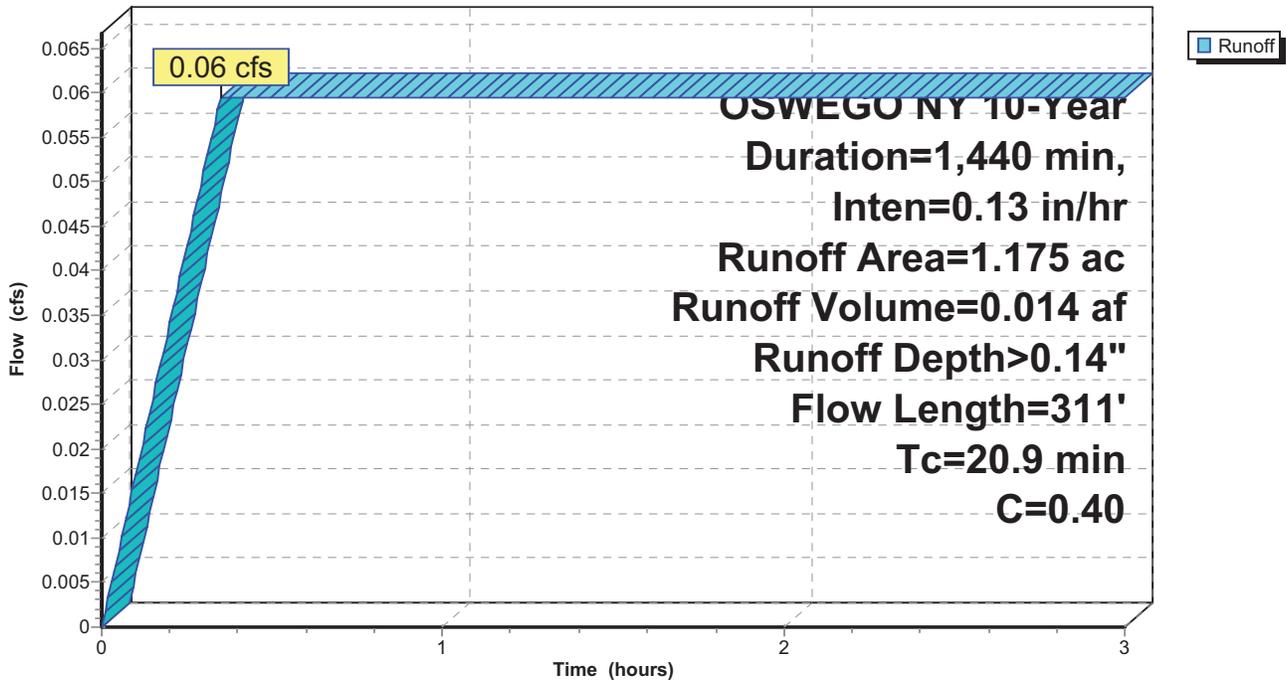
Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
 OSWEGO NY 10-Year Duration=1,440 min, Inten=0.13 in/hr

Area (ac)	C	Description
0.858	0.22	Meadow, non-grazed, HSG A
0.317	0.90	Paved Roads, Buildings
1.175	0.40	Weighted Average
1.175		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.8	100	0.0120	0.08		Sheet Flow, Sheet Flow, Grass Grass: Dense n= 0.240 P2= 2.50"
1.1	211	0.0050	3.21	2.52	Pipe Channel, 12" Storm Pipe 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.013 Corrugated PE, smooth interior
20.9	311	Total			

Subcatchment 1: DA 1

Hydrograph



Summary for Subcatchment 1: DA 1

Runoff = 0.07 cfs @ 0.35 hrs, Volume= 0.016 af, Depth> 0.17"

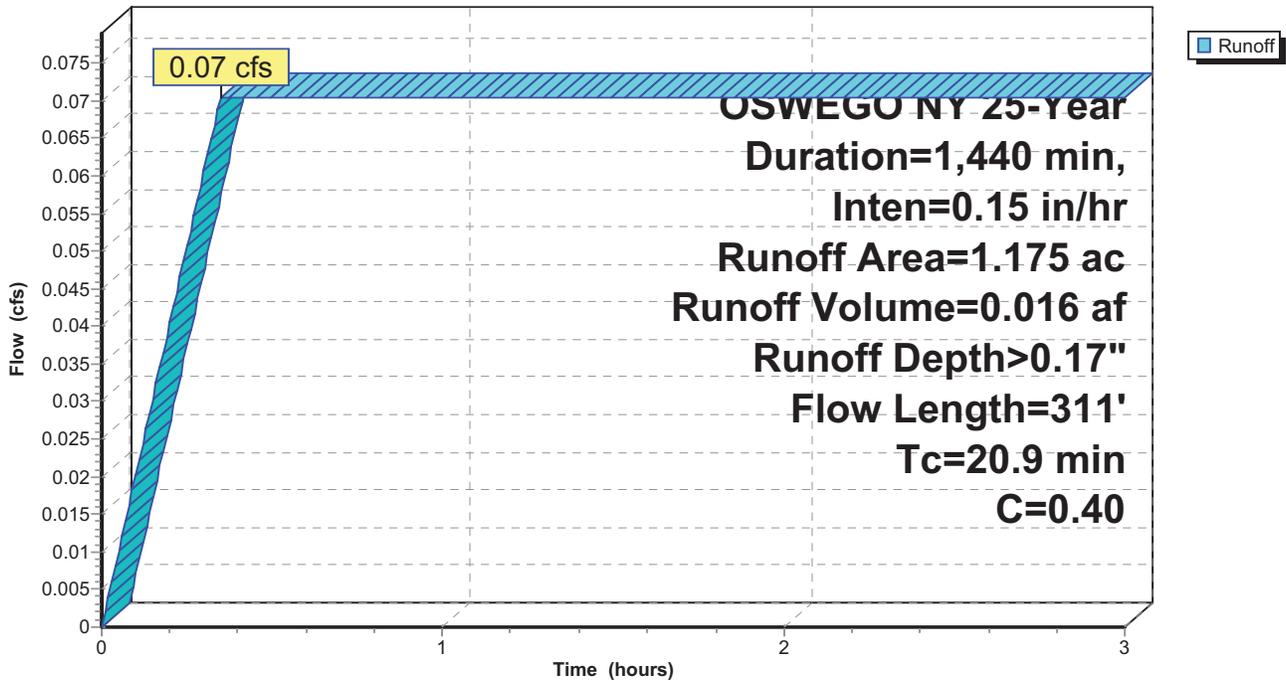
Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
 OSWEGO NY 25-Year Duration=1,440 min, Inten=0.15 in/hr

Area (ac)	C	Description
0.858	0.22	Meadow, non-grazed, HSG A
0.317	0.90	Paved Roads, Buildings
1.175	0.40	Weighted Average
1.175		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.8	100	0.0120	0.08		Sheet Flow, Sheet Flow, Grass Grass: Dense n= 0.240 P2= 2.50"
1.1	211	0.0050	3.21	2.52	Pipe Channel, 12" Storm Pipe 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.013 Corrugated PE, smooth interior
20.9	311	Total			

Subcatchment 1: DA 1

Hydrograph



Summary for Subcatchment 1: DA 1

Runoff = 0.07 cfs @ 0.35 hrs, Volume= 0.017 af, Depth> 0.18"

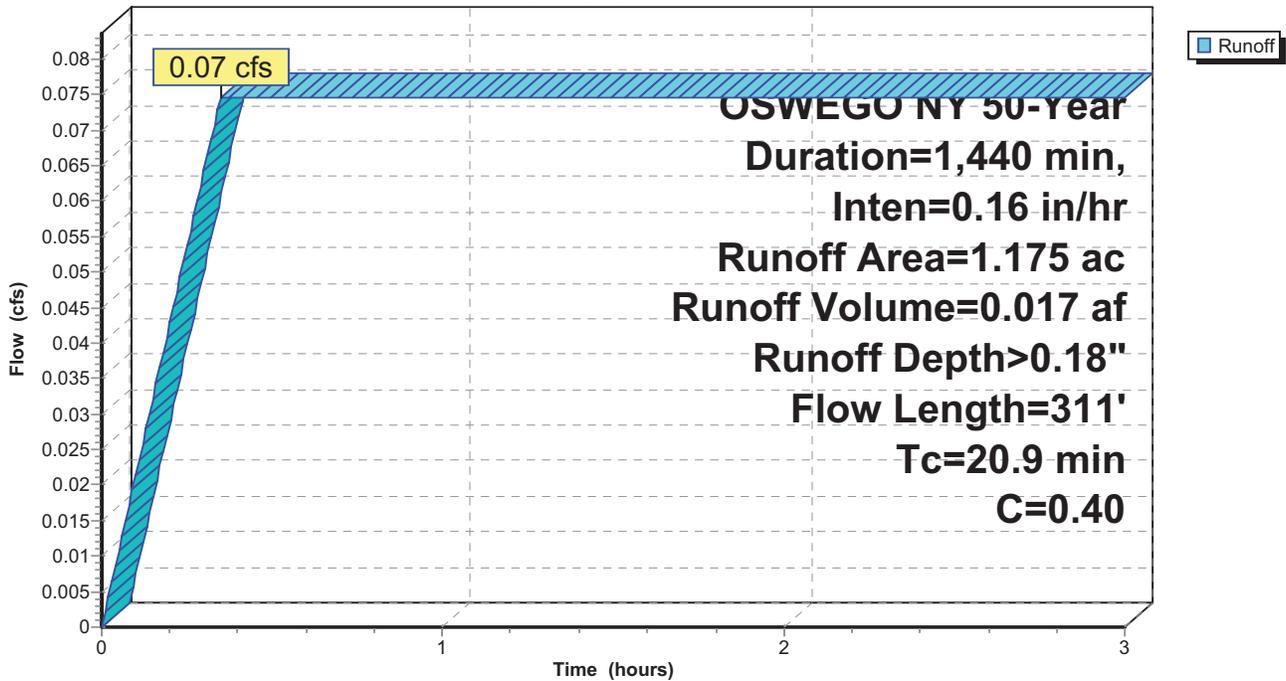
Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
 OSWEGO NY 50-Year Duration=1,440 min, Inten=0.16 in/hr

Area (ac)	C	Description
0.858	0.22	Meadow, non-grazed, HSG A
0.317	0.90	Paved Roads, Buildings
1.175	0.40	Weighted Average
1.175		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.8	100	0.0120	0.08		Sheet Flow, Sheet Flow, Grass Grass: Dense n= 0.240 P2= 2.50"
1.1	211	0.0050	3.21	2.52	Pipe Channel, 12" Storm Pipe 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.013 Corrugated PE, smooth interior
20.9	311	Total			

Subcatchment 1: DA 1

Hydrograph



Summary for Subcatchment 1: DA 1

Runoff = 0.09 cfs @ 0.35 hrs, Volume= 0.020 af, Depth> 0.21"

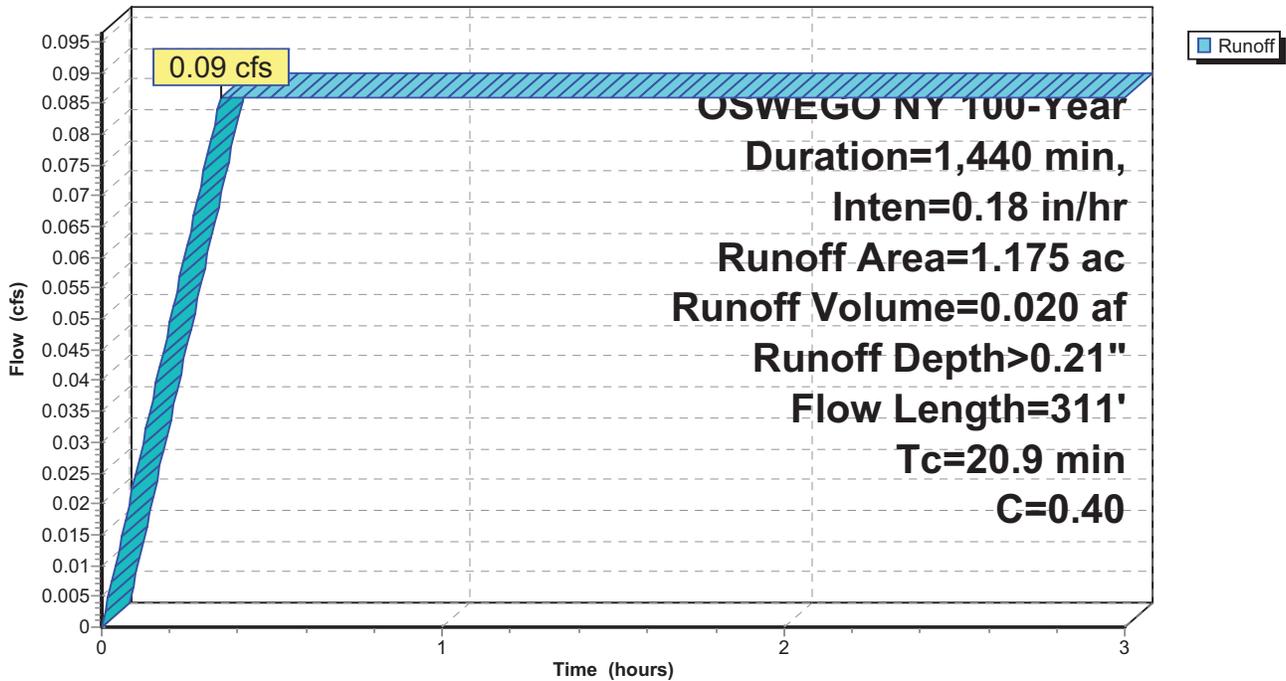
Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
 OSWEGO NY 100-Year Duration=1,440 min, Inten=0.18 in/hr

Area (ac)	C	Description
0.858	0.22	Meadow, non-grazed, HSG A
0.317	0.90	Paved Roads, Buildings
1.175	0.40	Weighted Average
1.175		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.8	100	0.0120	0.08		Sheet Flow, Sheet Flow, Grass Grass: Dense n= 0.240 P2= 2.50"
1.1	211	0.0050	3.21	2.52	Pipe Channel, 12" Storm Pipe 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.013 Corrugated PE, smooth interior
20.9	311	Total			

Subcatchment 1: DA 1

Hydrograph



**EXISTING VS. PROPOSED RUNOFF COMPARISON
ORAL SURGEON'S OFFICE**

24 HOUR STORM EVENT PEAK DISCHARGE - (CFS)

DRAINAGE AREAS	EXIST. 10 YR	PROP. 10 YR	EXIST. 25 YR	PROP. 25YR	EXIST. 50 YR	PROP. 50 YR	EXIST. 100 YR	PROP. 100 YR
1	0.03	0.06	0.04	0.07	0.04	0.07	0.05	0.09

APPENDIX #4

Trip Generation Calculations



522 BRADLEY STREET
WATERTOWN, NY 13601
TEL: (315) 782-2005
FAX: (315) 782-1472
www.AubertineCurrier.com

CALCULATION SHEET

Project Number: 2013-093 Date: 7/9/13
Project Name: Dr. Schneberger's Office Page: 1 Of: 1
Location: S Bellow Ave, Watertown Calc'd By: CWT

Traffic Generation Calculations

References:

- Trip Generation ITE 7th Edition

Calculations:

- 3624 SF Oral Surgeon's Office
- Land Use: 720 ~ Medical-Dental Office Building

- Weekday AM Peak Hour
Avg Rate 3.62 Per 1000 SF GFA
66% Entering, 34% Exiting

$$3,624 \text{ SF} \times 3.62 = 13.12 \text{ Trips/Hour}$$

9 Entering, 4 Exiting

- Weekday PM Peak Hour
Avg Rate 4.45 Per 1000 SF GFA
40% Entering, 60% Exiting

$$3,624 \text{ SF} \times 4.45 = 16.13 \text{ Trips/Hour}$$

6 Entering, 10 Exiting

- Saturday Peak Hour
Avg Rate 3.63 Per 1000 SF GFA
57% Entering, 43% Exiting

$$3,624 \text{ SF} \times 3.63 = 13.16 \text{ Trips/Hour}$$

7 Entering, 6 Exiting

Land Use: 720

Medical-Dental Office Building

Description

A medical-dental office building is a facility that provides diagnoses and outpatient care on a routine basis, but is unable to provide prolonged in-house medical and surgical care. This type of facility is generally operated by one or more private physicians or dentists.

Additional Data

The average vehicle occupancy for the six studies where information was submitted was approximately 1.37 persons per automobile. The vehicle occupancy rates ranged from 1.32 to 1.44 persons per automobile.

The sites were surveyed from the 1980s to the 1990s throughout the United States.

Source Numbers

8, 19, 98, 104, 109, 120, 157, 184, 209, 211, 253, 287, 294, 295, 304, 357, 384, 404, 407, 423, 444, 509

Medical-Dental Office Building (720)

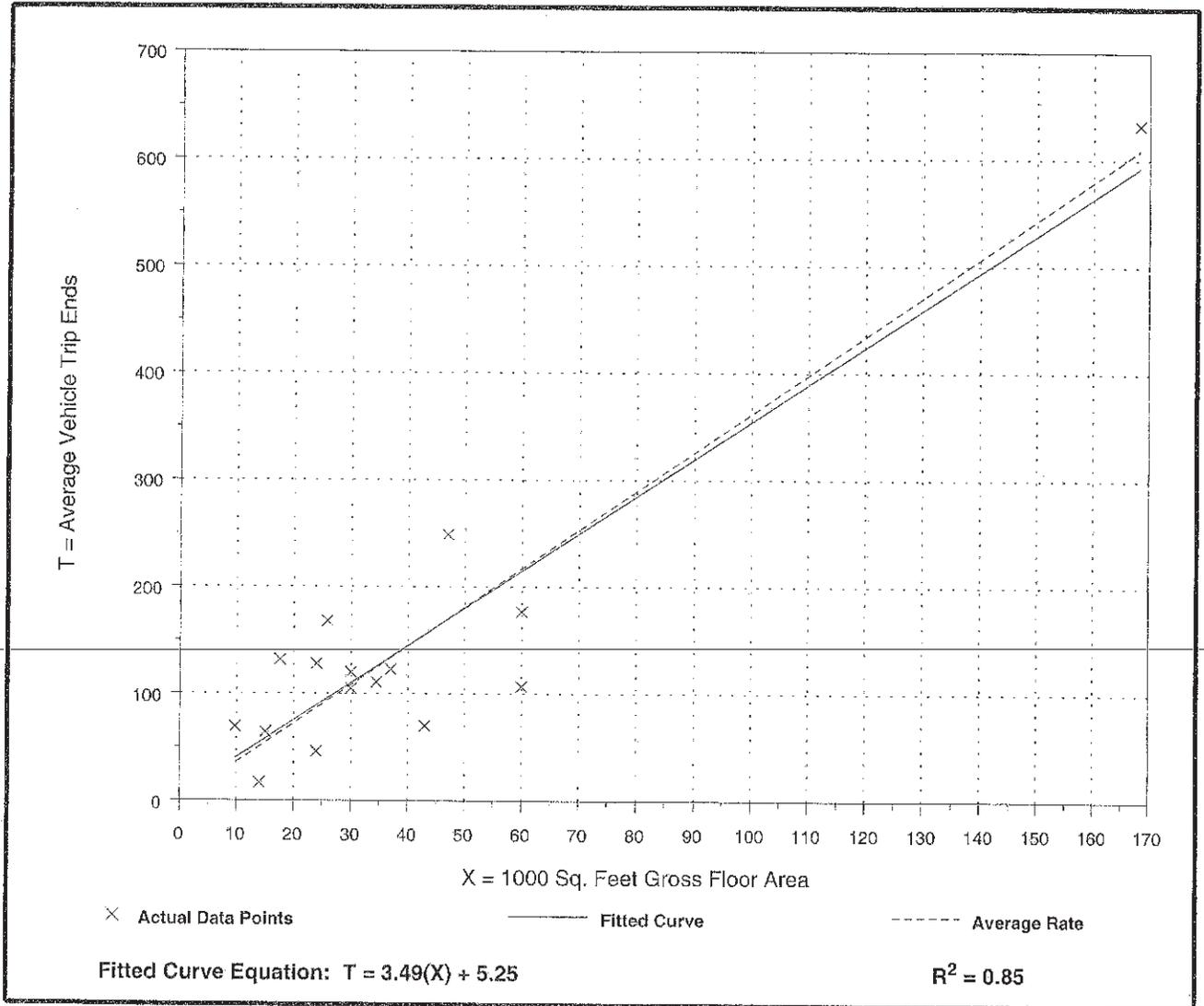
Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: Weekday,
A.M. Peak Hour of Generator

Number of Studies: 16
Average 1000 Sq. Feet GFA: 40
Directional Distribution: 66% entering, 34% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
3.62	1.21 - 7.49	2.38

Data Plot and Equation



Medical-Dental Office Building (720)

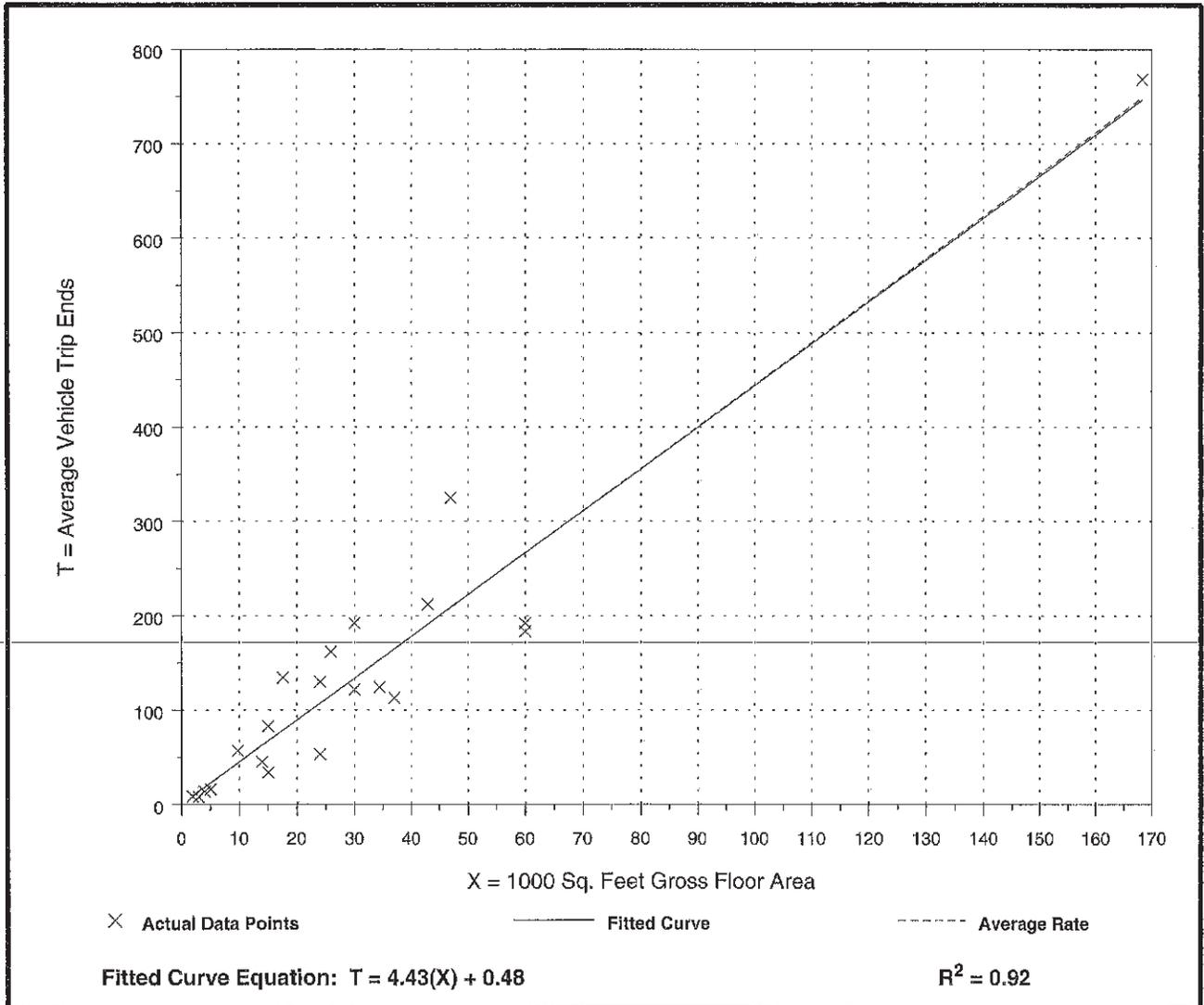
Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: Weekday,
P.M. Peak Hour of Generator

Number of Studies: 21
 Average 1000 Sq. Feet GFA: 32
 Directional Distribution: 40% entering, 60% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
4.45	2.21 - 7.60	2.50

Data Plot and Equation



Medical-Dental Office Building (720)

Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: Saturday,
Peak Hour of Generator

Number of Studies: 3
 Average 1000 Sq. Feet GFA: 28
 Directional Distribution: 57% entering, 43% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
3.63	3.08 - 4.02	1.93

Data Plot and Equation

Caution - Use Carefully - Small Sample Size

