

Cortland County Soil and Water Conservation District

100 Grange Place, Room 202, Cortland, NY 13045 Phone: (607) 756-5991 • Fax: (607) 756-0029 www.cortlandswcd.org

SWCI) - Celebrating 70 years of promoting the conservation and wise use of our county's natural resources

August 22, 2018

Bruce Weber, Planning and Zoning Officer Town of Cortlandville 3577 Terrace Road Cortland, NY 13045

> Re: Economy Paving 1819 NYS Rte 13 Cortlandville, NY

Dear Mr. Weber:

Cortland County SWCD staff, comprised of Amanda Barber, Pat Reidy and myself, inspected Economy Paving's stormwater facilities on August 18, 2018. During that inspection, we were unable to understand how stormwater on the property could behave in the manner described by the engineering consultant (Brent Cross) in his February 21, 2018 Engineer's Report. It appeared to us that stormwater from a recent rain had ponded significantly along the entrance drive along the southwest property line and that the inflow pipe to the retention basin was elevated such that it would take considerable ponding outside the basin before any stormwater would enter the basin. In addition, we saw little evidence of significant recent construction on the site that would improve stormwater facility performance.

We have requested a site visit with Brent so that he could explain the functioning of the stormwater facilities. Until that time, we are unable to agree that changes have been made to improve performance such that they are consistent with requirements of the Cortlandville stormwater ordinance.

Please call me at 756-5991 if you have any questions.

Sincerely,

Kathleen E. McGrath

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Water Quality Specialist

Cc: Amanda Barber, Cortland SWCD (email), Pat Reidy (email)

From:

Kathleen McGrath

Sent: To: Tuesday, August 28, 2018 2:12 PM Patrick J. Reidy; Amanda A. Barber

Subject:

Economy Paving

Pat and Amanda,

FYI some updates regarding Economy Paving before we meet onsite on Thursday:

John Barden (Diesel Man) stopped in today and left me with a flash drive of photos and a video taken on 7/2/18, showing significant turbid runoff from Economy Paving across Barden's driveway along the road. They're in the stormwater/2018/EconomyPaving folder.

I also looked up total rainfall on that day. The best data I could find were from a USGS gauge station on the Otselic River in Cincinnatus, that recorded 1.11 inches that day. That isn't even a 1 year 24 hour storm. Stormwater facilities are supposed to contain the 100 year storm, which would be 5.54 inches. But, summer storms can be very spotty so it's hard to know what Cortland got.

The stormwater basin did look fairly full. And, a road drain in front of Barden's property was largely blocked by debris – he would have done well to have kept that clear.

Amanda, John asked me to share with him the letter from Compagni to me last week. I deferred until I had talked to you. He also asked whether we had FOIL forms and I also deferred on that until I had talked to you. But, I owe him a response.

I welcome feedback!

Cheers, Kathy

Kathleen McGrath
Water Quality Specialist
Cortland County Soil & Water Conservation District
100 Grange Place Room 202
Cortland County, NY 13045
607.345.4624 (Mobile)
607.756.0029 (Fax)

From:

Kathleen McGrath

Sent:

Tuesday, September 04, 2018 9:50 AM

To:

'Stephen Compagni'

Subject:

Stormwater facility Status Reports 2016 and 2017 and site meeting scheduling

Attachments:

CurrentStatusForm_2016_17_fourpage.pdf

Stephen,

Earlier this year self-inspection forms were mailed to you for completion. We haven't received them back in our office as requested. All facilities in Cortlandville regulated by the Town (there are currently about 45) and inspected by Cortland SWCD receive these forms from us annually as part of the Town's inspection program. We are currently drafting the final report for 2017 and responses to these forms will be included in the report.

I've attached the forms and would appreciate it if you would fill them out and mail or email them back to us. Please let me know if you have any questions.

We'll schedule a site visit to Economy Paving as soon as we get a response from you and Brent to the Doodle poll I sent out previously.

Thank you, Kathy

Kathleen McGrath
Water Quality Specialist
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SWCD...established to promote the conservation and wise use of our county's natural resources

September 12, 2017

Bruce Weber, Planning and Zoning Officer Town of Cortlandville 3577 Terrace Road Cortland, NY 13045

Subject: Economy Paving Stormwater

Dear Mr. Weber:

Economy Paving Stormwater Pollution Prevention Plan (SWPPP) was originally reviewed by SWCD in 1999. It was subsequently reviewed as part of the Town's Stormwater Maintenance Program in 2013, as reported to the Town in November 2014.

The Economy Paving stormwater management system was designed by engineer Brent Cross, and was required under the Town's stormwater ordinance. The original design was for runoff from approximately eight acres to flow to a stormwater basin adjacent to Route 13. SWCD inspected the stormwater system in 2013, and visual observations indicate that runoff from approximately 3 to 4 acres from the northwest part of the site does not flow to the stormwater basin. Instead it flows uncontrolled down the western part of the site to Route 13. Therefore, the stormwater management system does not appear to be functioning as designed.

Please call me at 756-5991 if you have any questions.

annada a Barber

Sincerely,

Amanda A. Barber District Manager

From:

Kathleen McGrath

Sent:

Friday, September 21, 2018 10:39 AM

To: Subject:

Amanda A. Barber; Patrick J. Reidy Economy Paving

Just returned a call to Bruce Weber regarding Economy Paving – he had left a phone message asking where we were on setting up a meeting.

He advised that at this point we do not need to try again to set up a meeting since Mr. Compagni did not respond the last time we tried, and that we should sit tight.

The Town has filed a motion in court against Economy Paving and the ball is in the Town Attorney's court to pursue/push. And, Mr. Barden has filed a motion against the Town and Bruce personally.

Bruce advised that any calls from Mr. Barden's attorney should be referred to the Town.

You probably know all this but some of it was news to me.

Cheers, Kathy

Kathleen McGrath
Water Quality Specialist
Cortland County Soil & Water Conservation District
100 Grange Place Room 202
Cortland County, NY 13045
607.345.4624 (Mobile)
607.756.0029 (Fax)

From:

Kathleen McGrath

Sent:

Wednesday, November 21, 2018 3:26 PM

To:

Amanda A. Barber; Patrick J. Reidy; 'Bruce Weber'

Subject:

update on Economy Paving

Brent Cross called to provide an update on the stormwater issues at Economy Paving. He is working on an analysis of the site with respect the Cortlandville's 1997 regulations (it is my understanding that these are the regulations that apply to Economy Paving, please correct me if I'm wrong).

He provided some details of his approach and assured that it would be a numeric analysis, applying the Simple Rational Method as described in NYS DOT a document for areas <200 acres.

He also said that the pipe into the infiltration basin was sufficiently large to handle the 50-year event but that the driveway slope appeared inadequate to direct the full flow to the inlet pipe. He is discussing with Mr. Compagni potential regrading solutions to address this challenge. He also said he would design into the infiltration basin a spillway for events greater than the 50-yr event that would direct excess flows away from the adjacent landowner to the southwest.

He expects to have his analysis submitted to us by approximately November 30.

Cheers, Kathy

Kathleen McGrath
Water Quality Specialist
Cortland County Soil & Water Conservation District
100 Grange Place Room 202
Cortland County, NY 13045
607.345.4624 (Mobile)
607.756.0029 (Fax)

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April 12, 2018

Mr. John Barden Fastlane Automotive 1799 NYS Route 13 Cortland, NY 13045

Re:

RZE #18026

Drainage Evaluation 1799/1819 NYS Route 13 Cortlandville, NY

Dear Mr. Barden,

On April 12, 2018, a representative of RZ Engineering performed a site visit at the above referenced site to evaluate drainage conditions. Our office also reviewed materials provided by you regarding the adjacent property. Evaluation of drainage conditions were focused on the influence of stormwater runoff from 1819 Route 13 on your neighboring parcel (#1799 NYS Route 13). The materials reviewed include the following.

- 1. Photos and video of rain events at both sites from the past few years.
- 2. Photos obtained during our site visit.
- 3. Surveys of the properties located at 1819 and 1799 NYS Route 13 from 1998 thru 2014 provided by licensed land surveyors.
- 4. Town meeting minutes from 1999 thru 2018.
- 5. Plans for the property located at 1819 NYS Route 13 (known as Economy Paving) proposing site development from 1999 thru 2001 prepared by Karl H. Wendt Architect.
- 6. Engineering reports and supplemental Engineering analyses prepared by Lacross Development from 1999 thru 2018.
- 7. Engineering reports prepared by Resource Associates from 2001.
- 8. County comments and resolutions from 1999 thru 2001.
- 9. Site plan applications and SEQR documents submitted to the town from 1999 thru 2001.
- 10. Cortland County Soil & Water Conservation District comments and inspection records from 1999 thru 2014.

Our observations, analysis and conclusions were based on information provided within these materials.

RZ Engineering, PLLC is a Licensed Professional Engineering firm in the State of New York with additional certificates as a Certified Professionals in Erosion and Sediment Control, Storm Water Quality and Erosion, Sediment and Stormwater Inspectors. RZ Engineering staff possess approximately 24 years of experience in Civil Engineering design which includes expertise in Stormwater Collection and Conveyance Systems, Stormwater Best Management Practice and Green Infrastructure Design, NYSDEC regulatory compliance with NYSDEC Phase II Stormwater Regulations, General Permit for Construction Activity and the NYSDEC Stormwater Design Manual. These regulations have been enacted to ensure property treatment and control of stormwater runoff when developing sites in NYS. Outlined in these regulations are requirements

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for treatment and control of discharge including maintenance of existing drainage flows and drainageways.

During our evaluation of the materials noted above we reviewed surveys for the two properties. One survey of both properties dated 10/28/98 (Attachment A) shows topography and site features for both sites at a time prior to any development on the 1819 parcel. Drainage patterns show existing flows from the upland areas to the north flowing south toward NYS Route 13, generally. Areas within both sites (1799 and 1819 NYS Route 13) both contain high points and low points which direct runoff to the southwest and northeast. One main path appears to flow between the two properties almost exactly north to south toward NYS Route 13 following their mutual property boundary. It appears water flowed around the buildings and paved areas located on 1799 eastward and southward along the mutual boundary toward NYS Route 13 under conditions prior to development in the year 1999. In addition, only a small sliver of land flowed along this mutual property path. Surveyed topography contained in the 1999 Stockwin Survey document shows a high point ridge located on 1799 from it's northwest corner thru the garage noted on the 1799 property and to approximately a point on the mutual property boundary about 80-100 feet north of NYS Route 13. Additionally, another high ridge appears to be located along a path between the area designated as "future shop" on that survey and NYS Route 13. This would allow only a small watershed to be contributory to an area between 1799 and 1819 along the mutual property line for any runoff to flow.

These patterns appear to have been altered as part of the 1999 Wendt Design Attachment B). The 1999 Wendt design includes a "future shop" and shows drainage labeled as "ed" (assumed to be "existing drainage") and "fs" (assumed to be "future swale"). This "fs" depicts what is assumed to be channelized drainage around the "future shop" instead of thru it as the "ed" and existing contours would suggest happens under pre development conditions. This "fs" or future swale" appears to discharge to an area labeled "retention pond" which makes reference to a common stormwater management practice in 1999. The retention pond noted also appears to accept runoff from the office building and impervious surfaces around it in an effort to mitigate the increases in runoff generated by the development. This rerouting of runoff from upland areas to the north around the "future shop" and to the retention pond would significantly reduce the amount of runoff flowing along the 1799/1819 mutual property boundary. As part of the 1999 application and project approval, an Engineer's Report on Stormwater Management Plan, prepared by LaCross Development was submitted. This Engineer's Report further confirms that water from upland areas to the north and west was to be routed behind (to the north of) the future shop and to the "detention pond" (as it's referred to in the Engineer's Report). The site plan sketch included with this Engineer's report is presented as Attachment C. It should be noted that the "future shop" was not constructed as part of this application. After comment by the Cortland County Soil Water Conservation District in August of 1999, Wendt resubmitted a map (Attachment D) showing drainage patterns and how they would be constructed as part of the development in September of 1999. As we understand it, some time after the resubmittal the office was constructed in accordance with these documents.

The drainage patterns appeared to have then been altered again, in contradiction with the 1999 plans when Economy Paving attempted to build the Mechanic Facility (previously referred to as the "future shop"). As part of Economy Paving's application an "Application for Aquifer Permit and Conditional Permit" was prepared by Resource Associates in May of 2001. This application included a "Site Plan" showing a new culvert to the existing "Stormwater Retention Basin" on the basin's western side to the south of the new Mechanic Facility. This culvert is shown to start east

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of the Mechanic Facility Driveway and flow to daylight within the basin. The drawing does not denote whether this pipe is existing or proposed. However, we would conclude that it would be proposed, since the 1999 plan shows the majority of the drainage from upland areas to flow around the rear (north) of the Mechanic Facility and such a culvert would be unnecessary if the 1999 plan was adhered to. Additionally, a Site Grading Plan (Attachment E) was included within the Engineer's report. This plan further defines the proposed drainage concept and shows the new culvert to the pond accepting runoff from the driveway and areas west of it between the driveway and the 1799 NYS Route 13 property. Grading proposed on this plan severely alters the drainage concept from the 1999 plan and appears to no longer send runoff around the rear (north) of the Mechanic Facility. A low point is created by this plan located between the new Mechanic Facility and the 1799 property to the west by a local high point within the new driveway. No provisions to divert runoff away from 1799 NYS Route 13 are visible, however, it appears the intent is to send runoff thru this new culvert, under the new driveway to the Mechanic Facility and into the basin. No pipe sizing calculations or other engineering design such as spot elevations or flow directions, flood routing or integration into existing topography appear to be shown within this document.

As evident from the existing topography and design intent from the 1999 approved Economy Paving plans, the property at 1799 NYS Route 13 is not a defined or designated drainageway for runoff from the Economy Paving site or it's upland areas to the north and west. A topographical Survey was performed by Ianuzi & Romans Land Surveying PC of the 1799 property in July of 2014 (Attachment F). The survey shows a low point of elevation 1112 located on the mutual property line between properties 1799 and 1819 NYS Route 13 approximately 80-100 feet north of Route 13. This low point appears to correspond with the low point proposed to be created as part of Economy Paving's 2001 Mechanic Facility site plan (Attachment E). While no inverts of the proposed culverts were identified on the 2001 Site Plan by Resource Associates, one could estimate the inverts (based on appropriate pipe cover required) to be somewhere around 1111-1112 for the inlet and 1110 for the outlet to the pond. With surrounding grades of 1113-1114 on both properties and the top of berm elevation within the basin of 2014, it is unclear to us how the proposed plan from 2001 would prevent uncontrolled runoff from the Economy Paving site at 1819 NYS Route 13 from flowing onto the 1799 property. Furthermore, it appears the 1799 property may be subject to backflow from the basin during storm events that fill it.

Our office has reviewed several photos and videos taken by you during various rain events over the past few years (Attachment G). That visual evidence appears to support what we witnessed when visiting the site. In our professional opinion that runoff from upland areas owned by Economy Paving to the north and west flow south to your property. Instead of being diverted around the Mechanic Facility as designed in 1999 or flowing easterly across the driveway to a culvert shown in the 2001 Economy Paving proposal, runoff appears to flow along the 1799/1819 mutual property boundary. Photos and video show smaller storm runoff flows using this path and bypassing the culvert identified in the 2001 design. Larger storms appear to fill the Economy Paving driveway and use it as a flood route prior to overtopping into the basin or backfilling directly from the basin itself. These visually evident conditions appear to indicate the 1999 design was not adhered to and 2001 design may not be existing or even be sufficient to meet runoff requirements.

Additionally, you have provided photos and video showing the removal of an earthen berm in or about 2012, that previously existed along the mutual property boundary between 1799 and 1819 NYS Route 13. This berm presumably would have attempted to direct runoff into the culvert

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pipe before flowing onto your property or divert runoff directly to the basin itself (Attachment G). It is our understanding that flooding issues at your property significantly increased after removal of this berm and paving of the Mechanic Facility driveway.

On 2/21/18 Lacross Development provided a review of existing conditions at the site. It notes that the site has been regraded, a new pipe larger in diameter than the original has been installed and sediment accumulation has been removed. While Lacross has certified these statements, no measurements, survey data or design calculations have been provided to verify certified conditions or to verify the work put the site in compliance with approved documents and plans. In fact, based on our assessment of the elevations provided within the 1999 and 2001 designs, along with our field observations; we still question the drainageways created in 2001, which contradict the original design plans from 1999 and whether or not they were installed in accordance with the plans which has ultimately altered the landscape in a way that has negatively impacted adjacent properties.

It is our opinion, based on field observations, historical aerial photography, photographic and video evidence, a review of surveys, design data and previous plans that the Economy Paving property is a significant contributor to the stormwater issues associated with 1799 NYS Route 13 and the associated NYSDOT roadway frontage. Several other downstream areas have experienced flooding conditions in addition to flooding conditions experienced at the 1799 property. Based on current conditions, it appears several modifications to the Economy Paving site at 1819 NYS Route 13 will be required to mitigate runoff from being misdirected toward 1799 NYS Route 13 parcel and the NYSDOT road right of way. We feel immediate action should be taken to avoid further impacts to these areas. Significant damage to the property and merchandise at 1799 NYS Route 13, damage and undermining of the road surface and subsoils on NYS Route 13, along with road safety concerns with ponded water within the traveled way have already occurred and continue to occur under current conditions.

Please feel free to contact me at (315)432-1089 or email <u>rzengineering@twcny.rr.com</u> should you have any questions.

Very Truly Yours,

Rudy L. Zona, P.E.

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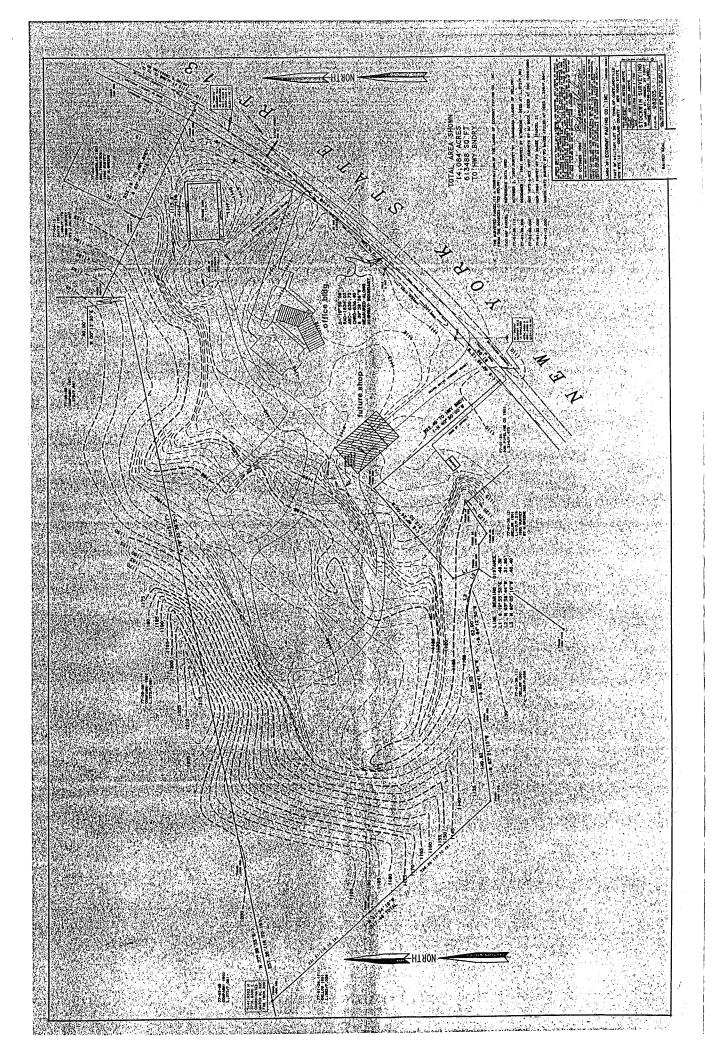
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ATTACHMENT A

1998 Survey



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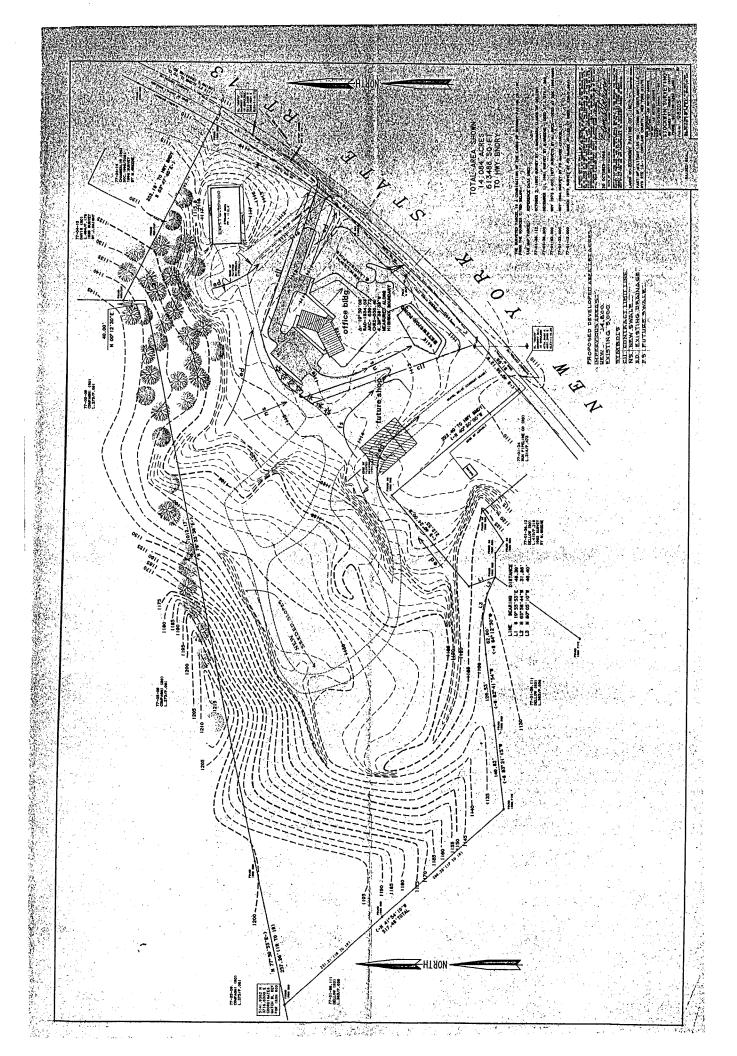
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ATTACHMENT B

1999 Wendt Design



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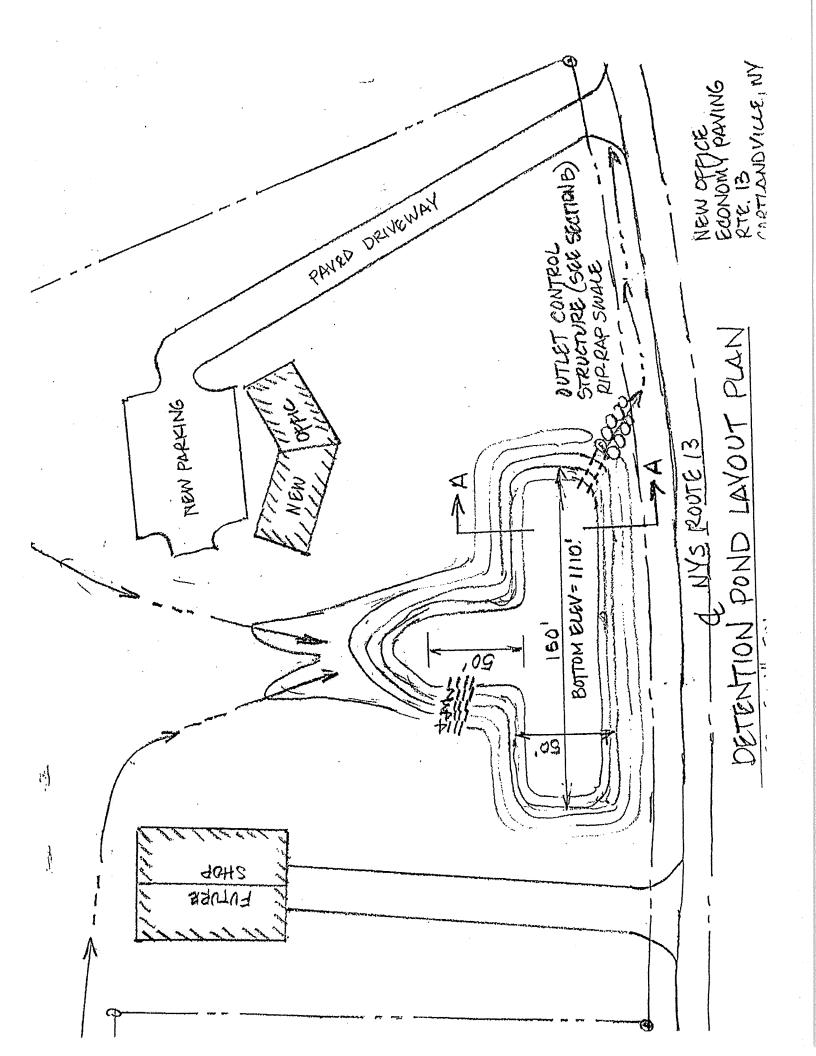
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ATTACHMENT C

1999 Lacross Sketch Plan



NEW OFFICE ECONOMY PAWING PIE. 13 CORTLANDVILLE, M POND SECTION A-A (APPEDX, OPIGINAL GRADE) AS SHOWN ON FLAN for preservato) SCALE: NONE A 1110' BOTTOM

New Oppice Economy Paving Refe is their operation

OVERPLOW/OUTLET SECTION - B

SCALE: NONE

1110' BOTTOM OF POND 1110' CENTER OF DITCHUINE IIIS' WICK ISONATION IIIL PIPE INVERT (2)18"ROP

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ATTACHMENT D

1999 Wendt Drainage Flow Map

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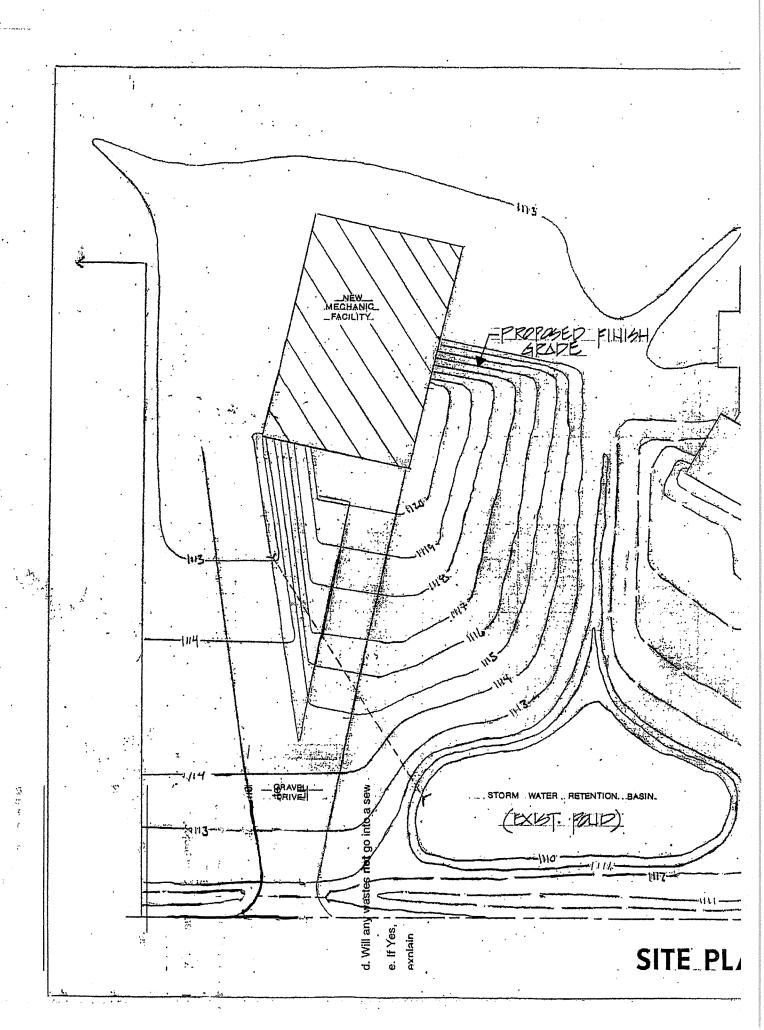
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ATTACHMENT E

2001 Resource Associates "Mechanic Facility" Site Grading Plan



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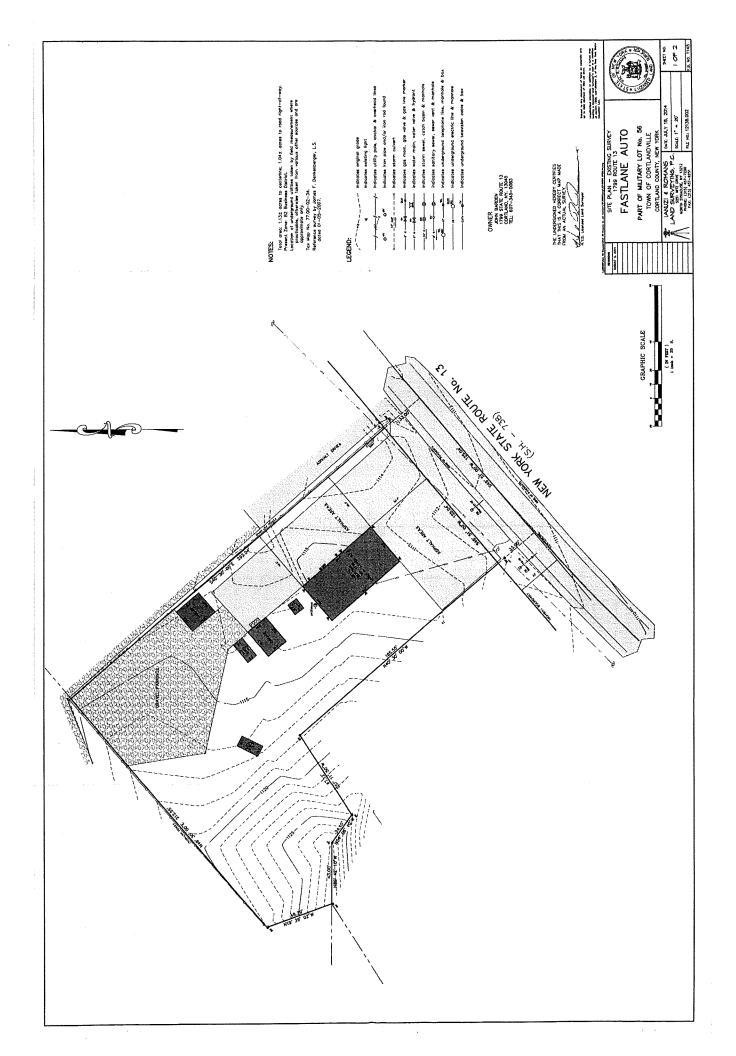
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ATTACHMENT F

2014 Ianuzi & Romans Survey of 1799 NYS Route 13



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ATTACHMENT G

Photos



