Mitchell R. Olson
molson@axley.com
608.283.6724

MEMORANDUM

TO: Dane County Zoning & Land Regulation Committee

FROM: Attorney Mitchell Olson

RE: K&D Stone
Dane County CUP 2582
Our File No. 26199.85032

DATE: October 1, 2025

CC: Roger Lane, Zoning Administrator; Dan Everson, Asst. Zoning Administrator

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I am writing to supplement the record before the Dane County ZLR Committee based on public records which have been obtained by this law firm. Given the due process property rights at stake in this matter, specifically, the revocation of a conditional use permit for an established and operating non-metallic mine, it is imperative that all relevant information be presented to the ZLR.

Under Part I, below, the ZLR will see that the alleged period of long-term permit non-compliance is explicitly denied by County Staff as of June 17, 2025. This is on top of staff communicating compliance six months prior.

Under Part II, we additionally share a series of communications that show the frequency and extent of communications by Operator with County Staff. This was never a case where the Operator ignored staff, disobeyed staff, or did anything other than openly communicate and attempt to address concerns.

I. DANE COUNTY ZONING STAFF COMMUNICATIONS OF COMPLIANCE

K&D Stone previously highlighted that statements from County Zoning Staff clearly confirmed there was full CUP compliance as of December 17, 2024. (See Axley Memo of August 28, 2025, at pages 2 – 3). The December 17, 2024, ZLR Meeting reached a clear and certain result that there were no violations despite numerous complaints.

We have since located an email message from Mr. Roger Lane, Zoning Administrator, to Ms. Kerry Marren, County Board Supervisor, dated **June 17, 2025**. The email addressed a complaint by a resident, Jodi Igl, who was demanding revocation of CUP 2582. Mr. Lane wrote the following to Sup. Marren:

> **Assistant Zoning Administrator Dan Everson conducted a site inspection at the K&D Stone Quarry and also reviewed the allegations with quarry operator Kevin Hahn. An inspection report was prepared to document the concerns and the report was sent to Jodi Igl and the Town of Rutland…. The determination is that the quarry in [sic] operating within the CUP conditions and revocation is not warranted.**

(Exhibit A)(Emphasis Added)

Mr. Lane later comments in the same message:

> Ms. Igl is still very upset that CUP 2582 was approved for the operation of a quarry on Center Road in the Town of Rutland. Over the past two years the Zoning Division have responded to **over a dozen complaints that were lodged by Ms. Igl. Inspections were conducted for each complaint and it was found that the quarry was operating in compliance with there [sic] approvals or corrections were being made in a timely manner.** Basically, Jodi Igl is displeased with the actions of the Zoning Division because we will not initiate the revocation of the CUP for the quarry.

(Exhibit A) (Emphasis Added)

Given this record, it is impossible to maintain the argument posed by Staff at the September 2, 2025 Hearing, that K&D Stone has been in constant violation of its CUP for months, if not the entirety of its permit.

Keep in mind the Zoning Division escalated this matter for alleged violations and public hearing for revocation via Memo of **July 22, 2025**. There is no record of any new evidence or conditions at the subject quarry, between June 17, 2025, and July 22, 2025, a period of 35 days, to move from FULL COMPLIANCE TO IMMEDIATE REVOCATION. Whatever conditions existed on June 17, existed on July 22, 2025.

Moreover, there was no notice of violation and opportunity to cure issued by the Zoning Division, after June 17, 2025, except with respect to unhealthy evergreen trees on the road-side berm – which issue was cured in under 10 days.

Under these circumstances, there is no material basis for action to revoke CUP 2582.

II. THE OPERATOR HAS CONSTANTLY COMMUNICATED WITH COUNTY STAFF AND RESPONDED TO STAFF WITH APPROPRIATE ACTIONS.

There is an unfair perception that the Operator does not communicate sufficiently with County Zoning Staff. Operator, Kevin Hahn, often communicates via telephone call and in person meetings, as preferred over emails. In addition, there is a paper trail, via reports and emails, that confirms this Operator does communicate and respond to Staff appropriately. The provided Exhibits B through M establish this fact.

Exhibit B: May 23, 2023 Staff Memo – Shows Operator complied with inspection and making satisfactory progress.

Exhibit C: February 19-22, 2024 Emails – Shows Operator communication and cooperation.

Exhibit D: April 17, 2024 Email – Shows Operator communication and cooperation with inspection.

Exhibit E: May 8-28, 2024 Emails – Shows Operator communication and cooperation.

Exhibit F: Aug 1-20, 2024 Emails – Shows Operator communication and cooperation.

Exhibit G: Dec 20, 2024 – Jan 31, 2025 Emails – Shows Operator communication and cooperation.

Exhibit H: May 14-28, 2025 Emails – Shows Operator communication and cooperation.

Exhibit I: June 24, 2025 Email – Shows Operator communication.

Exhibit J: June 25 – July 2, 2025 Emails – Shows Operator (via counsel) attempting to schedule meeting with County Zoning staff and staff's refusal without preconditions not set by ZLR Committee.

Exhibit K: July 16, 2025 Emails – Shows Operator communication and cooperation.

Exhibit L: July 16-18 Emails – Shows Operator communication and cooperation.

Exhibit M:

III. SUPPLEMENTAL INFORMATION FROM SCOTT ANDERSON, P.E.

At the conclusion of ZLR public hearing, there was direction for County Zoning and Land and Water Resources Staff to meet with operator's engineer, Scott Anderson. That occurred on September 11, 2025, and Mr. Anderson has authored updated reports documenting his professional opinions. Those documents are attached at Exhibit M. The conclusions reached are that (1) all stormwater is being internally drained as required; and (2) the current stormwater

management system is consistent with and compliant with the CUP and Operations Plan originally approved.

Operator has gone to considerable efforts and expense to document the site is functioning in compliance with all permits related to stormwater. There is no reason for any concerns on this issue going forward.

This is clear evidence of a constantly cooperative operator who was engaged and cooperative. This should be taken into account.

Thank you for your attention to this matter.

EXHIBIT
A

I will follow up with Ms. Igl.

Best,
Kerry

Kerry Marren
(she, her)
Dane County Supervisor District 37
(608) 216-8798

From: Lane, Roger
Sent: Tuesday, June 17, 2025 12:11 PM
To: Marren, Kerry
Cc: Violante, Todd
Subject: RE: CUP Repeat Violation Action demand

Dear Supervisor Marren,

The Dane County Zoning Division is aware of the complaints raised by Jodi Igl and have responded to the concerns raised.

Assistant Zoning Administrator Dan Everson conducted an inspection at the K&D Stone Quarry and also reviewed the allegations with the quarry operator Kevin Hahn. An inspection report was prepared to document the concerns and the report was sent to Jodi Igl and the Town of Rutland. See attached report. The determination is that the quarry in operating within the CUP conditions and revocation is not warranted.

I conducted an inspection on the property located at 1161 US Highway 14 regarding concerns of vehicle parking, businesses operating from buildings, and hazardous materials stored on the property on June 9th. The property is currently zoned HC which allows for both indoor and outdoor commercial activity. The property is deed restricted to limit the commercial activity as approved under Rezoning petition Dane County - File #: 11913 . The site inspection revealed that the property was developed per the site plan which allowed storage/warehouse buildings on the property. One portion of one building was being used for the office to manage the storage site. Other buildings inspected were being used for the storage of building materials and equipment. Note: All buildings were approved for cold storage with no plumbing inside buildings. The outside storage was contained within the designated area. The overall appearance of the site was orderly. I did not observe anything that was hazardous or concerning. No inspection report was created.

The Dane Count Zoning Division has four full-time inspectors which are responsible for issuing zoning p mits, conducting inspections, and responding to complaints (Each inspector covers a 200 sq re mile area). It is unfortunately that we do not have the personnel to monitor all prop rties and have to rely on landowner written complaints in order to determine compliance issu . The Zoning Division's policy is to act only on written complaints in order to manage the wo load responsibly. Over 50% of a zoning inspector's time is spent in responding to c nplaints and working with landowners to achieve compliance.

Ms. Igl is still ve upset that CUP 2582 was approved for the operation of a quarry on Center Road in the Tow of Rutland. Over the past two years the Zoning Division have responded to over a dozen co plaints that were lodged by Ms. Igl. Inspections were conducted for each complaint and it was found that the quarry was operating in compliance with there approvals or corrections w re made in a timely manner. Basically, Jodi Igl is displeased with the actions of the Zoning Di sion because we will not initiate the revocation process of the CUP for the quarry.

If you have furth r questions or concerns, please let me know.

Regards,

Roger Lane
Dane County Zo ng Administrator
608-266-9078

From: Marren, K rry <Marren.Kerry@danecounty.gov>
Sent: Tuesday, J ne 17, 2025 11:23 AM
To: Lane, Roger <Lane.Roger@danecounty.gov>
Subject: Fw: CU Repeat Violation Action demand

Hi Roger,
I wanted to forw rd this email to you to see if you are familiar with this issue and if these complaints have been addressed?
I will respond to Ms. Igl but wanted to get your input.
Thanks!

Kerry

Kerry Marren
(she, her)

EXHIBIT
B

Room 116, City-County Building, Madison, Wisconsin 53703
Fax (608) 267-1540

DANE COUNTY PLANNING & DEVELOPMENT

Housing & Economic Development
(608)266-4270, Rm. 362

Planning
(608)266-4251, Rm. 116

Records & Support
(608)266-4251, Rm. 116

Zoning
(608)266-4266, Rm. 116

TO: **Town of Rutland**

FROM: **Dan Everson, Assistant Zoning Adm.**

DATE: **May 23, 2023**

RE: **CUP 2582 Mineral extraction summary**

To whom it may concern,

This memo serves as a summary of CUP 2582 owned and operated by K& D STONE. Conditional Use Permit #2582 took effect on April 13, 2023. The new Certified Survey Map was recorded on April 13, 2023 combining the parcels together as one lot. In addition, the reclamation permit was approved on April 25, 2023.

On May 5, 2023, I conducted a site inspection to see how operations are progressing. A safety fence that meets condition #22 has been installed surrounding the new area. A short section of fence has been connected to the existing fence along the right-of-way of Center Road.

A new entrance along Center Rd. has been constructed with gates and a new service road is being constructed within the site that will allow for trucks and equipment to move within the site.

Looking south along Center Rd.

Stripping of topsoil is underway and the construction of the berm along the road right-of-way has been started. Once the berm is shaped, the operator will need to stabilize the berm with seed and mulch.

Looking westerly south of the existing mine site.

Bulk fuel storage is located within the existing portion of the site and meets the requirements of being three feet above the water table. The two 2 foot by 4 foot signs have been ordered and will be posted in the near future.

A copy of the limited liability insurance is attached with this report. A bond is on file for the financial assurance which is directly related to the reclamation aspects of the site. The required amount is set at $1500 per unreclaimed acre. The operator will need to make adjustments to this amount over time and make sure the bond is current.

Speed limit (15 mph) signs and "All Loads Are To Be Tarped" sign have been delivered and are being installed this week.

Dan Everson
Assistant Zoning Administrator
267-1541
everson.daniel@countyofdane.com

CC:
K & D Stone

EXHIBIT
C

Gmail

Kevin Hahn <nelsonexcavatingandson@gmail.com>

RE: Berm follow up

3 messages

Everson, Daniel <Everson.daniel@countyofdane.com> Mon, Feb 19, 2024 at 11:54 AM
To: "nelsonexcavatingandson@gmail.com" <nelsonexcavatingandson@gmail.com>

Hi Kevin, I will stop out Wednesday afternoon sometime.

Thank you,

Dan Everson

Plat Review Officer/

Regulatory Authority
608.267.1541 o

608.720.0169 c

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Office Address:

Dane County Planning

CCB, RM 116

210 Martin Luther King Jr. Blvd.

Madison, WI 53703

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From: Lane, Roger <lane.roger@countyofdane.com>
Sent: Monday, February 19, 2024 11:32 AM
To: 'Henry Spelter' <hspelter48@gmail.com>
Cc: Everson, Daniel <Everson.daniel@countyofdane.com>
Subject: RE: Berm follow up

Dear Mr. Spelter,

I would disagree with your analysis of the berm distances. If the excavation (base of the pit) is below 20 feet of the surface, the berms along the north, south, and east property lines can be reduced to 3-foot tall. The berms can be inside the 20-foot setback perimeter buffer.

Assistant Zoning Administrator Dan Everson will be conducting an update inspection on the Hahn Quarry this week to see if the site is in compliance with the conditions of CUP 2582

Respectfully,

Roger Lane

Dane County Zoning Administrator

608-266-9078

From: Henry Spelter <hspelter48@gmail.com>
Sent: Monday, February 19, 2024 10:35 AM
To: Lane, Roger <lane.roger@countyofdane.com>
Subject: Berm follow up

Good morning Roger,

Following up on our conversation Friday I enclose my conception of what the Hahn quarry perimeter berms were supposed to be but are not yet insofar as it affects me. Please let me know if these are not what the plans submitted in their "Operation Plan" on page seven of their application are.

Looking forward to hearing back after Mr Everson pays the site a visit.

Regards.

Henry

Gmail

Kevin Hahn <nelsonexcavatingandson@gmail.com>

Site Visit

Everson, Daniel <Everson.daniel@countyofdane.com> Thu, Feb 22, 2024 at 8:25 AM
To: Kevin Hahn <nelsonexcavatingandson@gmail.com>

Good morning Kevin,

One thing to mention as a reminder is that the berms are to be at least 5 feet or more from the property line. This is consistent with the topography ordinance as well as your reclamation plan mentioned in exhibit 1.

No one can alter the grade within 5 feet of a property line.

Also, remember the berms have many purposes...

- Safety is number one. Provides a deterrent from adjacent properties and their land uses.
- Screening, a visual buffer from operations and provides an overall pleasing aesthetics or appearance.
- Sound buffer from operations and associated equipment.
    - 32) Noise Limitation shall not exceed 75 decibels at a point 100 feet away from the property line. The decibel level shall be measured in DbA for average over a 15-minute period.
- Erosion control and stormwater, stabilization to prevent runoff from large storm events.
    - 14) The applicant shall submit an erosion control plan under Chapter 14, Dane County Code covering the entire CUP area for the duration of operations, and receive approval of an erosion control permit prior to commencing extraction operations.
- Berms are where the topsoil is to be stored for future reclamation.
    - 13) Topsoil, or appropriate topsoil substitute as approved in a reclamation plan under Chapter74, Dane County Code, from the area of operation shall be saved and stored on site for reclamation of the area. Topsoil or approved topsoil substitute must be returned to the top layer of fill resulting from reclamation.

Also, make sure the existing fence is straight and not falling down. Any new sections are to be a minimum of 4 feet in height.

- 22) There shall be a safety fence around the entire extraction area at all times. That safety fence shall be a minimum of 4 feet in height.

Thank you,

Dan Everson

Plat Review Officer/

Regulatory Authority
608.267.1541 o

608.720.0169 c

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Office Address:

Dane County Planning

CCB, RM 116

210 Martin Luther King Jr. Blvd.

Madison, WI 53703

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From: Everson, Daniel
Sent: Tuesday, February 20, 2024 5:08 PM
To: Kevin Hahn <nelsonexcavatingandson@gmail.com>
Subject: Re: Site Visit

Sure thing

From: Kevin Hahn <nelsonexcavatingandson@gmail.com>
Sent: Tuesday, February 20, 2024 4:12:08 PM
To: Everson, Daniel
Subject: Site Visit

Dan, I have a VA Doctor's appointment at 2 pm that I can not reschedule. Can we meet around noon? Let me know. Thanks

EXHIBIT
D

Gmail

Kevin Hahn <nelsonexcavatingandson@gmail.com>

I'll stop by later today to look at the berms

1 message

Everson, Daniel <Everson.Daniel@danecounty.gov> Wed, Apr 17, 2024 at 8:23 AM
To: "nelsonexcavatingandson@gmail.com" <nelsonexcavatingandson@gmail.com>

Thank you,

Dan Everson

Land Division Plat Review Officer/

Mining Regulatory Authority
608.267.1541 o

608.720.0169 c

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Office Address:

Dane County Planning

CCB, RM 116

210 Martin Luther King Jr. Blvd.

Madison, WI 53703

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EXHIBIT
E

Everson, Daniel <Everson.Daniel@danecounty.gov> Tue, May 28, 2024 at 11:52 AM
To: "Mark Pynnonen (mpynnonen@birrenkottsurveying.com)" <mpynnonen@birrenkottsurveying.com>
Cc: "nelsonexcavatingandson@gmail.com" <nelsonexcavatingandson@gmail.com>

I haven't seen the CSM review fee yet for this one.

[Quoted text hidden]
[Quoted text hidden]

Kevin Hahn <nelsonexcavatingandson@gmail.com> Tue, May 28, 2024 at 3:50 PM
To: "Everson, Daniel" <Everson.Daniel@danecounty.gov>

I'll come in and pay in the am. Sorry
[Quoted text hidden]

Gmail Kevin Hahn <nelsonexcavatingandson@gmail.com>

RE: Hahn proposed 3-Lot Certified Survey Map, for review/comments

3 messages

Everson, Daniel <Everson.Daniel@danecounty.gov> Wed, May 15, 2024 at 10:52 AM
To: "nelsonexcavatingandson@gmail.com" <nelsonexcavatingandson@gmail.com>

Hi Kevin, when you get a chance to mail in the CSM review fee so I can start the review process.

$795 payable to Dane County Treasurer

Thank you,

Dan Everson

Land Division Plat Review Officer/

Mining Regulatory Authority
608.267.1541 o

608.720.0169 c

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Office Address:

Dane County Planning

CCB, RM 116

210 Martin Luther King Jr. Blvd.

Madison, WI 53703

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From: Hausbeck, John <JHausbeck@publichealthmdc.com>
Sent: Thursday, May 9, 2024 9:21 AM
To: Everson, Daniel <Everson.Daniel@danecounty.gov>; Town of Rutland (clerk@town.rutland.wi.us) <clerk@town.rutland.wi.us>; Frick, Daniel <Frick.Daniel@danecounty.gov>

Cc: Mark Pynnonen (mpynnonen@birrenkottsurveying.com) <mpynnonen@birrenkottsurveying.com>
Subject: RE: Hahn proposed 3-Lot Certified Survey Map, for review/comments

Public Health has no concern with the proposed CSM.

John

From: Everson, Daniel <Everson.Daniel@danecounty.gov>
Sent: Wednesday, May 8, 2024 8:50 AM
To: Town of Rutland (clerk@town.rutland.wi.us) <clerk@town.rutland.wi.us>; Hausbeck, John <JHausbeck@publichealthmdc.com>; Frick, Daniel <Frick.Daniel@danecounty.gov>
Cc: Mark Pynnonen (mpynnonen@birrenkottsurveying.com) <mpynnonen@birrenkottsurveying.com>
Subject: Hahn proposed 3-Lot Certified Survey Map, for review/comments

Thank you,

Dan Everson

Land Division Plat Review Officer/

Mining Regulatory Authority
608.267.1541 o

608.720.0169 c

-

Office Address:

Dane County Planning

CCB, RM 116

210 Martin Luther King Jr. Blvd.

Madison, WI 53703

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EXHIBIT
F

Gmail

Kevin Hahn <nelsonexcavatingandson@gmail.com>

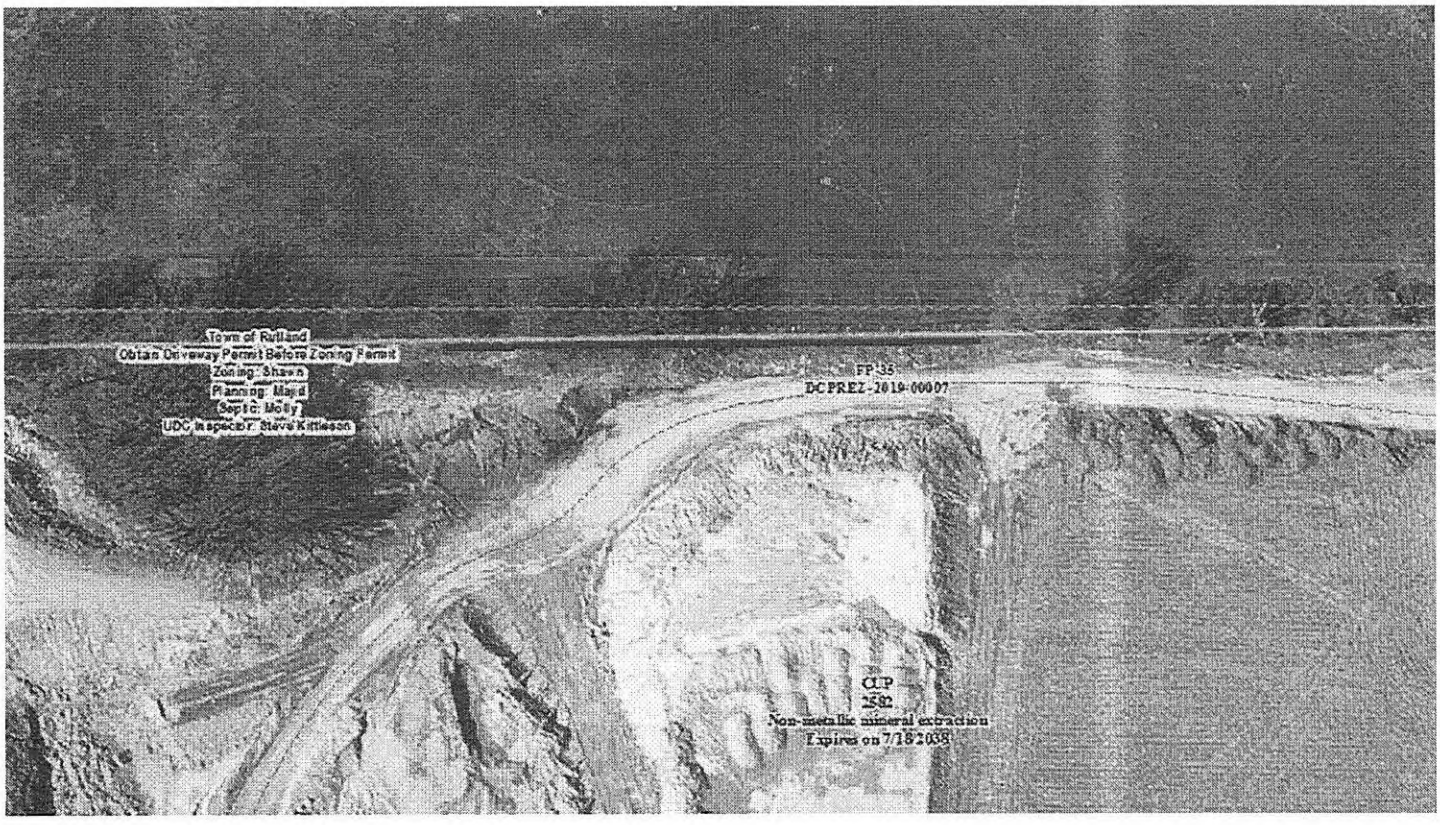
8/1/2024 Inspection

2 messages

Everson, Daniel <Everson.Daniel@danecounty.gov> Thu, Aug 1, 2024 at 1:42 PM
To: "nelsonexcavatingandson@gmail.com" <nelsonexcavatingandson@gmail.com>
Cc: "Lane, Roger" <Lane.Roger@danecounty.gov>

Hi Kevin,

There is just one area of concern with the berms. The red line is approximate, but the toe of the slope needs topsoil, to be seeded and mulched in order to be considered stabilized. See pictures as well.



Keep working on the stormwater controls near the new entrance and the area re-graded looks much better. I didn't see any garbage in the material being dumped back there.

The separated asphalt and concrete debris looks fine and it appears that will be recycled over time.

Lastly, condition #30 of the CUP states, This CUP is limited to K&D Stone only. CUP#2582 is non-transferrable to a different operator. Be prepared to explain what role NW Stone has within your site.

Thank you,

Dan Everson

Land Division Plat Review Officer/

Mining Regulatory Authority
608.267.1541 o

608.720.0169 c

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Office Address:

Dane County Planning

CCB, RM 116

210 Martin Luther King Jr. Blvd.

Madison, WI 53703

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3 attachments

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20240801_085543.jpg
4484K

20240801_085632.jpg
5084K

Kevin Hahn <nelsonexcavatingandson@gmail.com> Mon, Aug 5, 2024 at 7:36 AM
To: Trevor Evans <trevorevans1998@gmail.com>

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5 attachments

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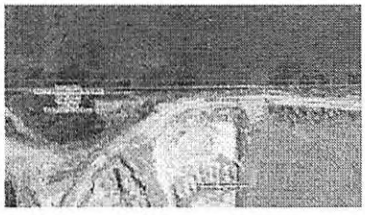

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Gmail

Kevin Hahn <nelsonexcavatingandson@gmail.com>

August 5th summary

1 message

Everson, Daniel <Everson.Daniel@danecounty.gov> Tue, Aug 6, 2024 at 10:18 AM
To: "nelsonexcavatingandson@gmail.com" <nelsonexcavatingandson@gmail.com>

Kevin,

Update the fence so it meets the condition of the CUP. The length is about 158 feet.

22) There shall be a safety fence around the entire extraction area at all times. That safety fence shall be a minimum of 4 feet in height.

Clean out the ditch south side of the new entrance. Remove any stone/dirt material from that area by the culvert.

Stabilize the new berm that has been constructed near the scale house.

Lastly, the berm where we were standing yesterday near the Spelter property will need to be added to. The CUP states the following…

31) Berms and landscaping shall be established and maintained. A permanent 8-foot minimum berm shall be located along Center Road. The berm shall be planted with an EVERGREEN Tree (min 4' B&B) every 50 feet. Other operational berms shall be 8 feet tall as needed with 3:1 SIDE SLOPES.

-

I was thinking about this last night and that area should provide screening from view of any of the operations, equipment, crushing, conveyors, etc. This will also help with the decibel levels too.

I will stop out one day next week as well to follow up on these issues.

Thank you,

Dan Everson

Land Division Plat Review Officer/

Mining Regulatory Authority
608.267.1541 o

608.720.0169 c

-

Office Address:

Dane County Planning

CCB, RM 116

210 Martin Luther King Jr. Blvd.

Madison, WI 53703

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5 attachments

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ditch.jpg
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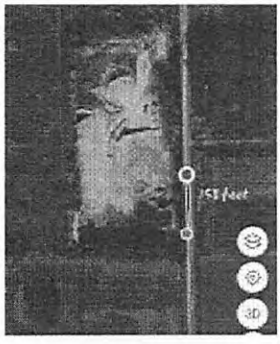

fence.jpg
291K

interior berm.jpg
3814K

stormwater berm.jpg
3510K

Gmail

Kevin Hahn <nelsonexcavatingandson@gmail.com>

Site inspection

2 messages

Everson, Daniel <Everson.Daniel@danecounty.gov> Mon, Aug 19, 2024 at 11:03 AM
To: "nelsonexcavatingandson@gmail.com" <nelsonexcavatingandson@gmail.com>

Hi Kevin,

I am planning on stopping out tomorrow morning for one last inspection prior to the 8/27 meeting. I have to finish my report by Wednesday for the agenda.

I'll be looking at east-west berm along the Spelter property and the two near the entrance.

Thank you,

Dan Everson

Land Division Plat Review Officer/

Mining Regulatory Authority
608.267.1541 o

608.720.0169 c

-

Office Address:

Dane County Planning

CCB, RM 116

210 Martin Luther King Jr. Blvd.

Madison, WI 53703

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Kevin Hahn <nelsonexcavatingandson@gmail.com> Tue, Aug 20, 2024 at 6:58 AM
To: "Everson, Daniel" <Everson.Daniel@danecounty.gov>

Do you have an estimated time ?
[Quoted text hidden]

Gmail

Kevin Hahn <nelsonexcavatingandson@gmail.com>

Seeded areas

3 messages

Kevin Hahn <nelsonexcavatingandson@gmail.com> Tue, Aug 20, 2024 at 1:31 PM
To: "Everson, Daniel" <Everson.Daniel@danecounty.gov>

4 attachments

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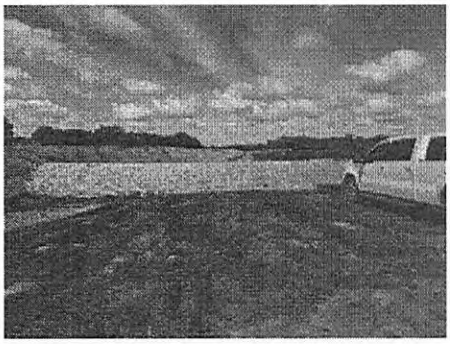
5948K



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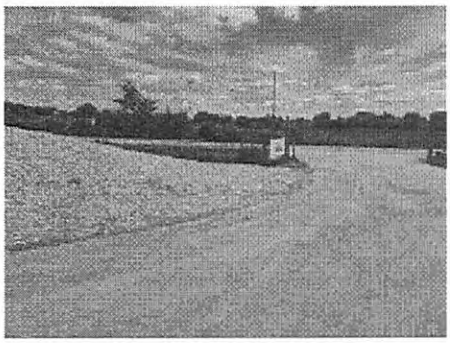

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3895K

20240820_124742.jpg
4147K

Everson, Daniel <Everson.Daniel@danecounty.gov> Tue, Aug 20, 2024 at 1:41 PM
To: Kevin Hahn <nelsonexcavatingandson@gmail.com>
Cc: "Lane, Roger" <Lane.Roger@danecounty.gov>

Looks good and thanks for the update.

Just let me know when the east-west berm along the Spelter property is built up more. This is the last item on my list to follow up on.

Thank you,

Dan Everson

Land Division Plat Review Officer/

Mining Regulatory Authority
608.267.1541 o

608.720.0169 c

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Office Address:

Dane County Planning

CCB, RM 116

210 Martin Luther King Jr. Blvd.

Madison, WI 53703

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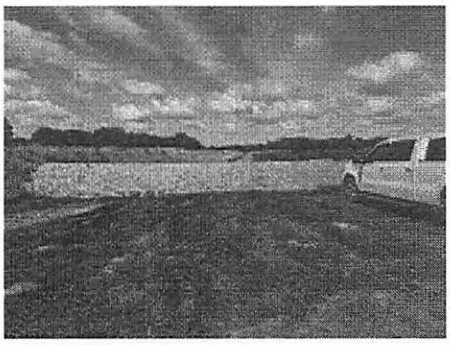
From: Kevin Hahn <nelsonexcavatingandson@gmail.com>
Sent: Tuesday, August 20, 2024 1:31 PM
To: Everson, Daniel <Everson.Daniel@danecounty.gov>
Subject: Seeded areas

4 attachments



20240820_102728.jpg
4456K

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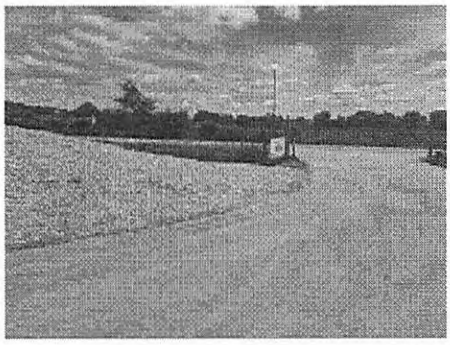
4147K



20240820_124744.jpg
3895K

20240820_132950.jpg
5948K

Kevin Hahn <nelsonexcavatingandson@gmail.com> Tue, Aug 20, 2024 at 1:47 PM
To: "Everson, Daniel" <Everson.Daniel@danecounty.gov>

I will try to get the area built up this week and send pictures to you. Thanks
[Quoted text hidden]

EXHIBIT
G

Gmail

Kevin Hahn <nelsonexcavatingandson@gmail.com>

Brush material

8 messages

Everson, Daniel <Everson.Daniel@danecounty.gov> Fri, Dec 20, 2024 at 10:10 AM
To: Kevin Hahn <nelsonexcavatingandson@gmail.com>

Hi Kevin,

I wanted to bring to your attention that Roger wants the brush material gone within the next 30 days. We both were under the impression this material was from the CUP area, but it sounds like your excavating business has brought some of that material in. There are separate requirements within the zoning code and a separate conditional use permit would be required to bring in landscape materials. That activity falls under solid waste operations. In addition, a couple of county board supervisors seem to be concerned with large amount of brush material and how that will be disposed of.

Your options are to burn the material, shred it or chip it and then spread it out. I will follow up with you on site in January sometime and if the material isn't removed, then I will formally send out a violation notice.

Thank you,

Dan Everson

Land Division Plat Review Officer/

Mining Regulatory Authority
608.267.1541 o

608.720.0169 c

-

Office Address:

Dane County Planning

CCB, RM 116

210 Martin Luther King Jr. Blvd.

Madison, WI 53703

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-

Everson, Daniel <Everson.Daniel@danecounty.gov> Mon, Jan 13, 2025 at 11:03 AM
To: Kevin Hahn <nelsonexcavatingandson@gmail.com>

Hi Kevin,

Has the wood, tree, brush material been removed? Maybe tomorrow after noon I can stop out there and take a look.

[Quoted text hidden]
[Quoted text hidden]

Kevin Hahn <nelsonexcavatingandson@gmail.com> Mon, Jan 13, 2025 at 11:37 AM
To: "Everson, Daniel" <Everson.Daniel@danecounty.gov>

Dan, I am waiting for DNR approval to burn the pile. I just spoke with them last week and will be getting a email with approval soon. I spoke with Roger and explained that I might need a extension. Please call and I will discuss everything with you. Thanks

[Quoted text hidden]

Everson, Daniel <Everson.Daniel@danecounty.gov> Mon, Jan 13, 2025 at 11:38 AM
To: Kevin Hahn <nelsonexcavatingandson@gmail.com>

Sounds good and keep me posted.

[Quoted text hidden]
[Quoted text hidden]

Everson, Daniel <Everson.Daniel@danecounty.gov> Tue, Jan 28, 2025 at 10:37 AM
To: Kevin Hahn <nelsonexcavatingandson@gmail.com>

Any update on this matter?

Thanks,

Dan

[Quoted text hidden]
[Quoted text hidden]

Kevin Hahn <nelsonexcavatingandson@gmail.com> Wed, Jan 29, 2025 at 7:52 AM
To: "Everson, Daniel" <Everson.Daniel@danecounty.gov>

Dan, I have moved the wood pile off of the hill and over the bank. All of the dirt was separated out. I have received permission from the dnr to burn. As of now I am waiting for a calm day to burn it. Pictures attached. Call me if you have any questions. Thanks

[Quoted text hidden]

2 attachments

20250129_074441.jpg
3556K

20250129_074542.jpg
4297K

Everson, Daniel <Everson.Daniel@danecounty.gov> Wed, Jan 29, 2025 at 10:25 AM
To: Kevin Hahn <nelsonexcavatingandson@gmail.com>

Also, as a reminder to send in the annual report. The reports are due by 1/31.

Thank you,

Dan

From: Kevin Hahn <nelsonexcavatingandson@gmail.com>
Sent: Wednesday, January 29, 2025 7:52 AM
To: Everson, Daniel <Everson.Daniel@danecounty.gov>
Subject: Re: Brush material

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[Quoted text hidden]

Everson, Daniel <Everson.Daniel@danecounty.gov> Fri, Jan 31, 2025 at 7:32 AM
To: Kevin Hahn <nelsonexcavatingandson@gmail.com>

I'll stop by about 9:00 am this morning.

From: Kevin Hahn <nelsonexcavatingandson@gmail.com>
Sent: Wednesday, January 29, 2025 7:52 AM
To: Everson, Daniel <Everson.Daniel@danecounty.gov>
Subject: Re: Brush material

[Quoted text hidden]
[Quoted text hidden]

EXHIBIT
H

Gmail

Kevin Hahn <nelsonexcavatingandson@gmail.com>

Center Road berm and northerly driveway

1 message

Everson, Daniel <Everson.Daniel@danecounty.gov> Wed, May 14, 2025 at 10:36 AM
To: Kevin Hahn <nelsonexcavatingandson@gmail.com>
Cc: "Lane, Roger" <Lane.Roger@danecounty.gov>

Hi Kevin,

I was in your area yesterday and wanted to follow up with the landscaping of the road side berm, specifically the evergreen trees. I want this message to serve as notice that the trees will need to be replaced and perhaps the berm will need more attention to whether or not there is enough topsoil to support the growth and health of the trees.

31) Berms and landscaping shall be established and maintained. A permanent 8-foot minimum berm shall be located along Center Road. The berm shall be planted with an EVERGREEN Tree (min 4' B&B) every 50 feet. Other operational berms shall be 8 feet tall as needed with 3:1 SIDE SLOPES.

Please adhere to the minimum of 4 foot trees or possibly larger. I would like to see this completed within the next few weeks.

Lastly, Condition 33 states:

The maximum number of driveways shall be limited to one. The northerly driveway shall be removed within 2 years of the date of the conditional use permit and the site will utilize the southerly driveway as shown in the operations plan.

The date that CUP 2582 was approved was April 13, 2023. It's been over a month and the northerly driveway is still present. I don't have the ability to extend this date.

Thank you,

Dan Everson

Land Division Plat Review Officer/

Mining Regulatory Authority
608.267.1541 o

608.720.0169 c

-

Office Address:

Dane County Planning

CCB, RM 116

210 Martin Luther King Jr. Blvd.

Madison, WI 53703

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-

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CUP 2582.pdf
274K

Gmail Kevin Hahn <nelsonexcavatingandson@gmail.com>

North Gate

2 messages

Kevin Hahn <nelsonexcavatingandson@gmail.com> Mon, May 19, 2025 at 1:36 PM
To: "Everson, Daniel" <Everson.Daniel@danecounty.gov>

Thought it was sometime in June, but it's done. Fence going up this afternoon.

20250519_133342.jpg
5435K

Everson, Daniel <Everson.Daniel@danecounty.gov> Wed, May 28, 2025 at 10:15 AM
To: Kevin Hahn <nelsonexcavatingandson@gmail.com>

I'll stop by tomorrow morning. I should be there @ 9:00 am.

From: Kevin Hahn <nelsonexcavatingandson@gmail.com>
Sent: Monday, May 19, 2025 1:37 PM
To: Everson, Daniel <Everson.Daniel@danecounty.gov>
Subject: North Gate

Thought it was sometime in June, but it's done. Fence going up this afternoon.

EXHIBIT
I

Gmail

Kevin Hahn <nelsonexcavatingandson@gmail.com>

Security Footage

1 message

K&D Stone LLC <kdstoneinc@gmail.com> Tue, Jun 24, 2025 at 4:09 PM
To: Kevin Hahn <nelsonexcavatingandson@gmail.com>, MOlson@axley.com, Everson.Daniel@danecounty.gov, Lane.Roger@danecounty.gov

All,

Subject: June 24th ZLR Report

After reviewing our K&D Stone security footage, I found the date and time of the photo submitted (stating June 17, 7:20PM) and as you compare these two images you can see the time and date stamped on our video footage shows no black pick up truck parked next to the dump truck like it is in the other photo. It appears that this photo was not taken as represented.

Thanks,
--
Gretchen Buss
Office Manager
439 Center Rd, Oregon, Wi 53575
Phone: (608) 501-4676

K&D STONE

CALL: 608-501-4676

2 attachments

IMG_0761.PNG
1945K

ACFrOgDVkeQlFxOczK1EShjmiMt7w-UN1XZWqCqvD9nB4D9RyCaLTDyikEcGoL56XVt36gpwn1rjifecgkj-hjflob87ss9F32gU2a2DtPrgXLk2_6ahde1KjBvyKzizF2mmhrBC668Ug3XqkHK-1QNTTOKEzMF2iLhpMQpMzA==.pdf
192K

Gmail

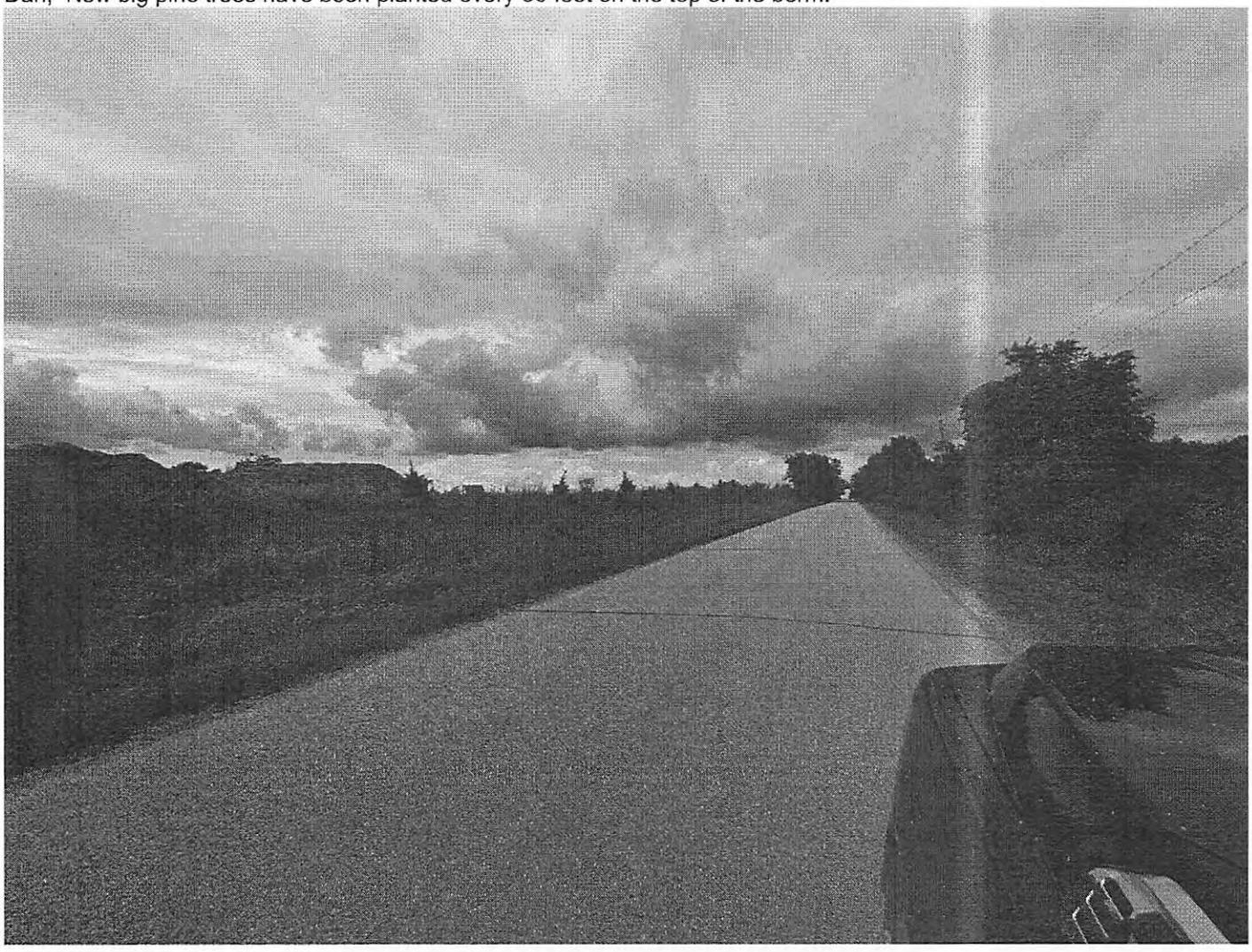
Kevin Hahn <nelsonexcavatingandson@gmail.com>

Trees

1 message

Kevin Hahn <nelsonexcavatingandson@gmail.com> Tue, Jun 24, 2025 at 4:37 PM
To: "Everson, Daniel" <Everson.Daniel@danecounty.gov>, "Lane, Roger" <lane.roger@countyofdane.com>

Dan, New big pine trees have been planted every 50 feet on the top of the berm.



20250624_163156.jpg
2494K

EXHIBIT
J

Gmail

Kevin Hahn <nelsonexcavatingandson@gmail.com>

Fwd: K&D Stone

K&D Stone LLC <kdstoneinc@gmail.com> Wed, Jun 25, 2025 at 9:39 AM
To: Kevin Hahn <nelsonexcavatingandson@gmail.com>

---------- Forwarded message ---------
From: **Mitchell R. Olson** <MOlson@axley.com>
Date: Wed, Jun 25, 2025 at 9:35 AM
Subject: K&D Stone
To: everson.daniel@danecounty.gov <everson.daniel@danecounty.gov>, lane.roger@danecounty.gov <lane.roger@danecounty.gov>
Cc: K&D Stone LLC <kdstoneinc@gmail.com>, Elizabeth A. Eugster <EEugster@axley.com>

Gentlemen –

This follows the ZLR meeting last night. Looking at the calendar, can we find a time to meet either July 10 or 11? We can do that at my office or yours. We also will want to schedule a site inspection, I presume.

We will be doing our homework and addressing all pending issues as discussed last night, starting right away, so we are prepared to meet with you in a productive fashion.

Thank you.

Mitch

Mitchell Olson
Attorney

AXLEY BRYNELSON LLP
2 E. Mifflin St. Ste 200 | Madison, WI 53703
P.O. Box 1767 | Madison, WI 53701-1767
Phone: 608.283.6724 | Fax: 608.257.5444
Email: MOlson@axley.com | bio | axley.com

Legal Assistant: Elizabeth Eugster
Phone: 608.314.3350 | Email: EEugster@axley.com

Gmail Kevin Hahn <nelsonexcavatingandson@gmail.com>

Fwd: K&D Stone

K&D Stone LLC <kdstoneinc@gmail.com> Wed, Jun 25, 2025 at 10:53 AM
To: Kevin Hahn <nelsonexcavatingandson@gmail.com>

---------- Forwarded message ---------
From: **Lane, Roger** <Lane.Roger@danecounty.gov>
Date: Wed, Jun 25, 2025 at 10:50 AM
Subject: RE: K&D Stone
To: Mitchell R. Olson <MOlson@axley.com>, Everson, Daniel <Everson.Daniel@danecounty.gov>, Holloway, Rachel <Holloway.Rachel@danecounty.gov>
Cc: K&D Stone LLC <kdstoneinc@gmail.com>, Elizabeth A. Eugster <EEugster@axley.com>

Dear Mitch,

Prior to the meeting, I have one question:

Does the operator feel that he is in compliance with the conditions of the CUP, the operations plan, and other State/Federal requirements for operating a non-metallic mineral extraction site?

If so, I would suggest having more than a one-word answer. If he does not feel that he is in compliance, what efforts will be made to bring the operation into compliance with the regulations.

When we receive the answer, we can continue with a meeting.

Regards,

Roger Lane

Dane County Zoning Administrator

608-266-9078

From: Mitchell R. Olson <MOlson@axley.com>
Sent: Wednesday, June 25, 2025 9:35 AM
To: Everson, Daniel <Everson.Daniel@danecounty.gov>; Lane, Roger <Lane.Roger@danecounty.gov>

Cc: K&D Stone LLC <kdstoneinc@gmail.com>; Elizabeth A. Eugster <EEugster@axley.com>
Subject: K&D Stone

Gentlemen –

This follows the ZLR meeting last night. Looking at the calendar, can we find a time to meet either July 10 or 11? We can do that at my office or yours. We also will want to schedule a site inspection, I presume.

We will be doing our homework and addressing all pending issues as discussed last night, starting right away, so we are prepared to meet with you in a productive fashion.

Thank you.

Mitch

Mitchell Olson
Attorney

AXLEY BRYNELSON LLP
2 E. Mifflin St. Ste 200 | Madison, WI 53703
P.O. Box 1767 | Madison, WI 53701-1767
Phone: 608.283.6724 | Fax: 608.257.5444
Email: MOlson@axley.com | bio | axley.com

Legal Assistant: Elizabeth Eugster
Phone: 608.314.3350 | Email: EEugster@axley.com

[Quoted text hidden]

Gmail Kevin Hahn <nelsonexcavatingandson@gmail.com>

Fwd: K&D Stone

K&D Stone LLC <kdstoneinc@gmail.com> Wed, Jul 2, 2025 at 10:53 AM
To: Kevin Hahn <nelsonexcavatingandson@gmail.com>

---------- Forwarded message ---------
From: **Lane, Roger** <Lane.Roger@danecounty.gov>
Date: Wed, Jul 2, 2025 at 10:50 AM
Subject: RE: K&D Stone
To: Mitchell R. Olson <MOlson@axley.com>
Cc: K&D Stone LLC <kdstoneinc@gmail.com>, Elizabeth A. Eugster <EEugster@axley.com>, Everson, Daniel <Everson.Daniel@danecounty.gov>, Holloway, Rachel <Holloway.Rachel@danecounty.gov>

Dear Mitch,

Just wondering about the question that I posed?

Does the operator feel that he is in compliance with the conditions of the CUP, the operations plan, and other State/Federal requirements for operating a non-metallic mineral extraction site?

Regards,

Roger Lane

Dane County Zoning Administrator

608-266-9078

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Gmail Kevin Hahn <nelsonexcavatingandson@gmail.com>

Fwd: K&D Stone

K&D Stone LLC <kdstoneinc@gmail.com> Wed, Jul 2, 2025 at 1:17 PM
To: Kevin Hahn <nelsonexcavatingandson@gmail.com>

-------- Forwarded message --------
From: **Mitchell R. Olson** <MOlson@axley.com>
Date: Wed, Jul 2, 2025 at 1:12 PM
Subject: RE: K&D Stone
To: Lane, Roger <Lane.Roger@danecounty.gov>
Cc: K&D Stone LLC <kdstoneinc@gmail.com>, Elizabeth A. Eugster <EEugster@axley.com>, Everson, Daniel <Everson.Daniel@danecounty.gov>, Holloway, Rachel <Holloway.Rachel@danecounty.gov>

Hi Roger –

I have scheduled a meeting with the operator next week Tuesday to review the entire permit and its conditions, the operating plan, etc. He is also independently having the operation reviewed by his engineer/consultant, and multiple oversight agencies.

I will report back to you next week after I review all of this with the operator.

I would again propose that we have a date scheduled to meet in July as per the direction of the ZLR. We will be prepared for such meeting.

Thank you.

Mitch

Mitchell Olson
Attorney

AXLEY BRYNELSON LLP
2 E. Mifflin St. Ste 200 | Madison, WI 53703
P.O. Box 1767 | Madison, WI 53701-1767
Phone: 608.283.6724 | Fax: 608.257.5444
Email: MOlson@axley.com | bio | axley.com

Legal Assistant: Elizabeth Eugster
Phone: 608.314.3350 | Email: EEugster@axley.com

From: Lane, Roger <Lane.Roger@danecounty.gov>
Sent: Wednesday, July 2, 2025 10:50 AM
To: Mitchell R. Olson <MOlson@axley.com>

Cc: 'K&D Stone LLC' <kdstoneinc@gmail.com>; Elizabeth A. Eugster <EEugster@axley.com>; Everson, Daniel <Everson.Daniel@danecounty.gov>; Holloway, Rachel <Holloway.Rachel@danecounty.gov>
Subject: RE: K&D Stone

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[Quoted text hidden]

EXHIBIT
K

Gmail

Kevin Hahn <nelsonexcavatingandson@gmail.com>

Notice moved

1 message

Kevin Hahn <nelsonexcavatingandson@gmail.com> Wed, Jul 16, 2025 at 3:11 PM
To: "Everson, Daniel" <Everson.Daniel@danecounty.gov>, K&D Stone LLC <Kdstoneinc@gmail.com>

Dan, I moved the notice of the cup from the window of the scale house to the gate as requested. Thanks

Kevin Hahn
Nelson Excavating And Son LLC
439 Center Rd, Oregon, Wi 53575
Phone: 608-333-5607

NELSON EXCAVATING
AND SON LLC

20250716_150935.jpg
3513K

EXHIBIT
L

Gmail

Kevin Hahn <nelsonexcavatingandson@gmail.com>

Meeting

3 messages

Kevin Hahn <nelsonexcavatingandson@gmail.com> Wed, Jul 16, 2025 at 5:54 AM
To: "Everson, Daniel" <Everson.Daniel@danecounty.gov>

Dan, I am out of the hospital and will be available to meet with you today. Let me know what time works for you. Thanks

Kevin Hahn
Nelson Excavating And Son LLC
439 Center Rd, Oregon, Wi 53575
Phone: 608-333-5607

NELSON EXCAVATING
AND SON LLC

Everson, Daniel <Everson.Daniel@danecounty.gov> Wed, Jul 16, 2025 at 7:50 AM
To: Kevin Hahn <nelsonexcavatingandson@gmail.com>

Roger and I will be there @ 8:30-8:45 am today.

From: Kevin Hahn <nelsonexcavatingandson@gmail.com>
Sent: Wednesday, July 16, 2025 5:55 AM
To: Everson, Daniel <Everson.Daniel@danecounty.gov>
Subject: Meeting

Dan, I am out of the hospital and will be available to meet with you today. Let me know what time works for you. Thanks

Kevin Hahn

Nelson Excavating And Son LLC

439 Center Rd, Oregon, Wi 53575

Phone: 608-333-5607

Sent Securely via TLS from County of Dane by **Proofpoint**

Kevin Hahn <nelsonexcavatingandson@gmail.com> Wed, Jul 16, 2025 at 7:51 AM
To: "Everson, Daniel" <Everson.Daniel@danecounty.gov>

Ok, see you then.

Kevin Hahn
Nelson Excavating And Son LLC
439 Center Rd, Oregon, Wi 53575
Phone: 608-333-5607

NELSON EXCAVATING
AND SON LLC

[Quoted text hidden]

~WRD0000.jpg
1K

Gmail Kevin Hahn <nelsonexcavatingandson@gmail.com>

The Quarry

1 message

Kevin Hahn <nelsonexcavatingandson@gmail.com> Fri, Jul 18, 2025 at 12:48 PM
To: "Everson, Daniel" <Everson.Daniel@danecounty.gov>

Dan, Do you have some time Monday to stop out ?

Kevin Hahn
Nelson Excavating And Son LLC
439 Center Rd, Oregon, Wi 53575
Phone: 608-333-5607

NELSON EXCAVATING
AND SON LLC

EXHIBIT
M

SNYDER & ASSOCIATES

IOWA | MISSOURI | NEBRASKA | SOUTH DAKOTA | WISCONSIN

Memorandum

To: Jeremy Balousek, Division Manager **Date:** 9-22-2025

From: Scott Anderson, PE

CC: Kevin Hahn, K&D Stone
Mitchell Olson, Axley Brynelson LLP
Dan Everson, Assistant Zoning Administrator

RE: K&D Stone, CUP 2582
Stormwater Management Plan

Thanks again for meeting Kevin and myself onsite a few weeks ago on Thursday, September 11th. As discussed onsite, the K&D Quarry operation is internally drained via the stormwater management facility that was installed onsite near the southerly property line. Also while onsite we discussed adding a rock overflow weir to the settling basin. This was completed last week and pictures have been attached showing such.

The quarry is now in compliance with the originally approved CUP that stated that the site shall be internal drained.

Please find the updated stormwater management showing the updated stormwater features as described above. If you have any questions or comments, please let us know at once.

5010 VOGES ROAD | MADISON, WI 53718-6928
P: 608-838-0444 I F: 608-838-0455 I SNYDER-ASSOCIATES.COM


4700

Memorandum

To: Kevin Hahn **Date:** 2025-09-17

From: Alex Keefe

CC: Scott Anderson

RE: Stormwater Management K&D Stone

The K&D Stone quarry is located in the Town of Rutland at 345 Center Road. The purpose of this stormwater management memo is to demonstrate that the site is internally drained. There are berms around the entire site to prevent water from flowing offsite except the water on the backslopes. There is a map attached outlining the internally drained area.

There is only one entrance and it is built to contain the water on site. There is an asphalt swale graded with a ridge near the location of the gate to prevent water from flowing offsite through the driveway. This swale is designed to flow into the stormwater pond, which is located along the south property line. This pond will then outlet to the southwest corner of the site, which is approximately 940.

There is a sediment trap installed to capture flow from the areas of site that are being disturbed to capture sediment before it reaches the stormwater pond. There is an overflow into the stormater pond which has rip rap to minimize erosion. The drainage area and sediment trap area are shown in the attached exhibits.

A pond exhibit, driveway grading exhibit, drainage map, map showing internal drainage, and the hydrocad calculations are attached. The parking lot swale was modeled as a pond which flows into the stormwater pond. The overflow elevations for each of the ponds where the water would begin flowing off site is the ridge in the driveway entrance, which is 958.83. A summary of the peak elevations for both the swale and pond are in the table below. In the 500-yr storm event, all of the water that flows either directly to the pond, or to the swale, stays on site.

Storm Event (Yr.)	1P Peak Water Surface Elevation (ft.)	2P Peak Water Surface Elevation (ft.)
25	958.68	956.68
50	958.69	956.88
100	958.71	957.08
200	958.73	957.26
500	958.74	957.52

BOTTOM OF
SEDIMENT TRAP

OUTLET ELEVATION 955.00

BOTTOM OF
SURVEYED POND

EXISTING
RIP RAP

TOP OF SURVEYED POND

OVERFLOW OFFSITE
ELEV=958.83

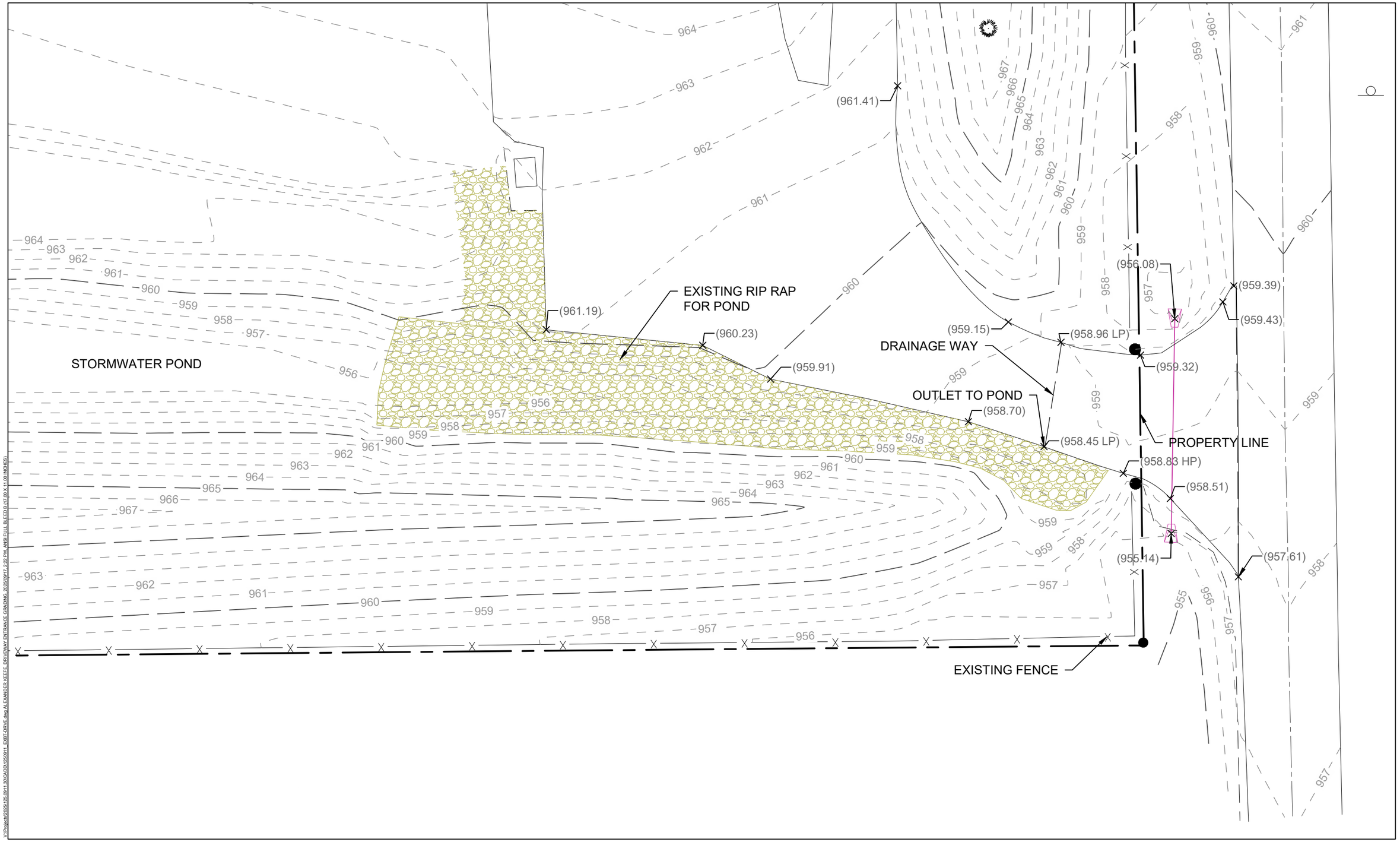
SNYDER
& ASSOCIATES

0 50
FEET

K&D STONE

STORMWATER POND

TOWN OF RUTLAND, DANE COUNTY, WI | 09/17/2025



SNYDER & ASSOCIATES

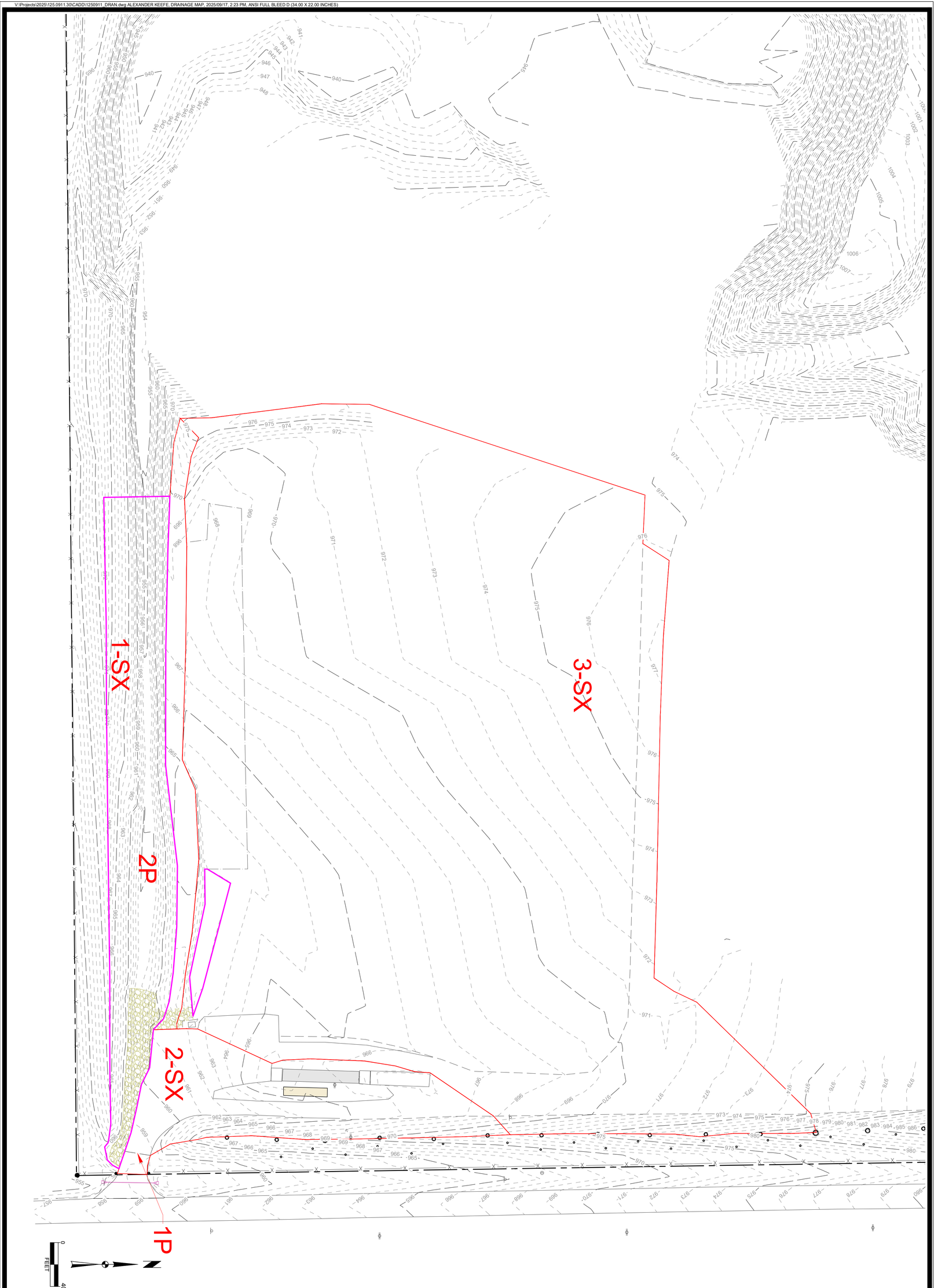
0 20
FEET

K&D STONE

DRIVEWAY ENTRANCE GRADING

TOWN OF RUTLAND, DANE COUNTY, WI | 08/13/2025

V:\Projects\2025\125.0911.30\CADD\1250911_DRAN.dwg ALEXANDER KEEFE, DRAINAGE MAP, 2025/09/17, 2:23 PM, ANSI FULL BLEED D (34.00 X 22.00 INCHES)



K&D STONE

DRAINAGE MAP

TOWN OF RUTLAND, DANE COUNTY, WI

SNYDER & ASSOCIATES, INC.

5010 VOGES ROAD
MADISON, WISCONSIN 53718
608-838-0444 | www.snyder-associates.com

MARK	REVISION	DATE	BY

Engineer: SJA	Checked By: CHKD	Scale: 1" = 40'
Technician: AJK	Date: 09-17-2025	T-R-S: T05N-R10E-S28

Project No: 125.0911.30

Sheet EXBT

Project No: 125.0911.30

Sheet EXBT

V:\Projects\2025\125-0911.30\CADD\1250911 - DRAN.dwg ALEXANDER KEEFE - INTERNALLY DRAINED AREA - 2025/09/17 2:35 PM - ANSI FULL BLEED B (17.00 X 11.00 INCHES)

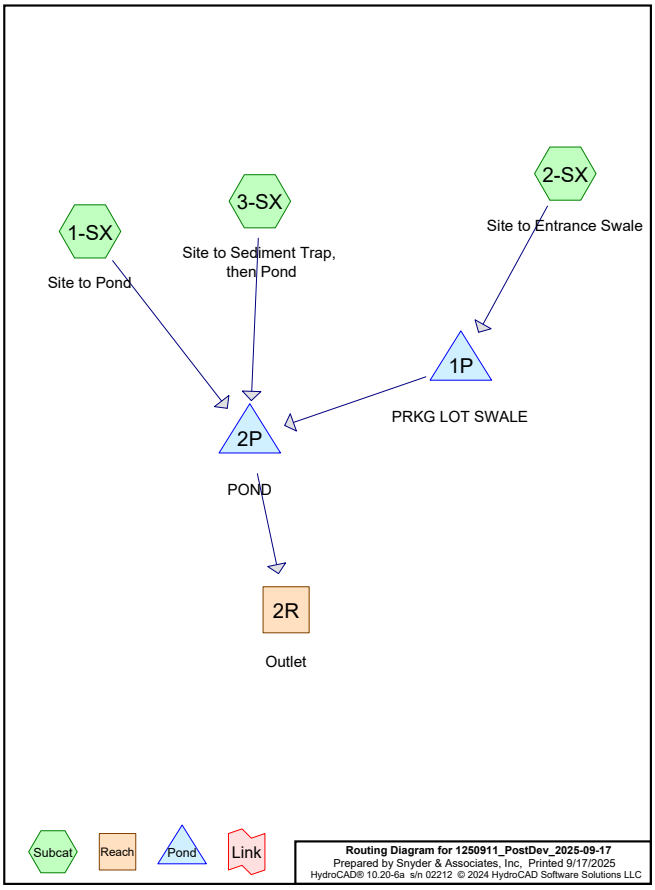
SNYDER & ASSOCIATES

0 200
FEET

N

INTERNALLY DRAINED AREA

K&D STONE | TOWN OF RUTLAND, DANE COUNTY, WI | 09/17/2025



Rainfall Events Listing (selected events)

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	25-yr. Dane	MSE 24-hr	4	Default	24.00	1	5.01	2
2	50-yr. Dane	MSE 24-hr	4	Default	24.00	1	5.80	2
3	100-yr. Dane	MSE 24-hr	4	Default	24.00	1	6.66	2
4	200-yr. Dane	MSE 24-hr	4	Default	24.00	1	7.53	2
5	500-yr. Dane	MSE 24-hr	4	Default	24.00	1	8.94	2

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
5.957	74	>75% Grass cover, Good, HSG C (1-SX, 2-SX, 3-SX)
1.283	98	Paved parking, HSG C (2-SX, 3-SX)
0.355	83	Small grain, straight row, Good, HSG C (3-SX)

Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.000	5.957	0.000	0.000	5.957	>75% Grass cover, Good	1-SX, 2-SX, 3-SX
0.000	0.000	1.283	0.000	0.000	1.283	Paved parking	2-SX, 3-SX
0.000	0.000	0.355	0.000	0.000	0.355	Small grain, straight row, Good	3-SX

Time span=0.00-96.00 hrs, dt=0.01 hrs, 9601 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment1-SX: Site to Pond Runoff Area=40,321 sf 0.00% Impervious Runoff Depth=2.37"
Tc=6.0 min CN=74 Runoff=3.57 cfs 0.183 af

Subcatchment2-SX: Site to Entrance Runoff Area=23,909 sf 75.34% Impervious Runoff Depth=4.10"
Tc=6.0 min CN=92 Runoff=3.36 cfs 0.187 af

Subcatchment3-SX: Site to Sediment Runoff Area=266,580 sf 14.20% Impervious Runoff Depth=2.72"
Tc=6.0 min CN=78 Runoff=26.95 cfs 1.387 af

Reach 2R: Outlet Inflow=29.90 cfs 1.753 af
Outflow=29.90 cfs 1.753 af

Pond 1P: PRKG LOT SWALE Peak Elev=958.68' Storage=6 cf Inflow=3.36 cfs 0.187 af
Outflow=3.36 cfs 0.187 af

Pond 2P: POND Peak Elev=956.68' Storage=6,091 cf Inflow=33.89 cfs 1.758 af
Outflow=29.90 cfs 1.753 af

Summary for Subcatchment 1-SX: Site to Pond

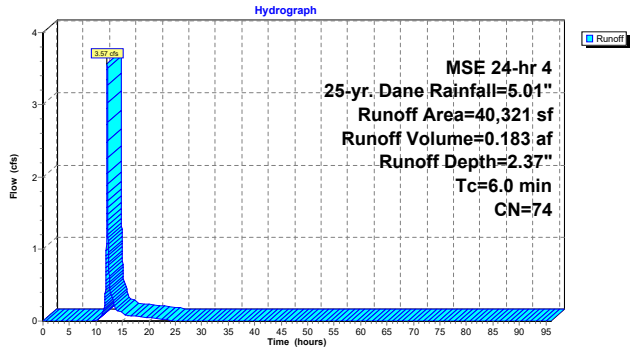
Runoff = 3.57 cfs @ 12.13 hrs, Volume= 0.183 af, Depth= 2.37"
Routed to Pond 2P : POND

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs
MSE 24-hr 4 25-yr. Dane Rainfall=5.01"

Area (sf)	CN	Description
40,321	74	>75% Grass cover, Good, HSG C
40,321		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment 1-SX: Site to Pond



Summary for Subcatchment 2-SX: Site to Entrance Swale

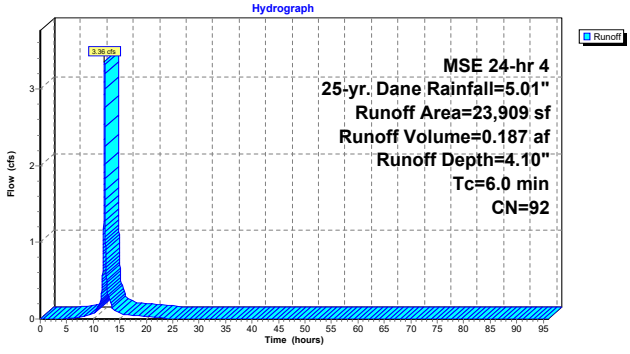
Runoff = 3.36 cfs @ 12.13 hrs, Volume= 0.187 af, Depth= 4.10"
Routed to Pond 1P : PRKG LOT SWALE

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs
MSE 24-hr 4 25-yr. Dane Rainfall=5.01"

Area (sf)	CN	Description
18,012	98	Paved parking, HSG C
5,897	74	>75% Grass cover, Good, HSG C
23,909	92	Weighted Average
5,897		24.66% Pervious Area
18,012		75.34% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment 2-SX: Site to Entrance Swale



Summary for Subcatchment 3-SX: Site to Sediment Trap, then Pond

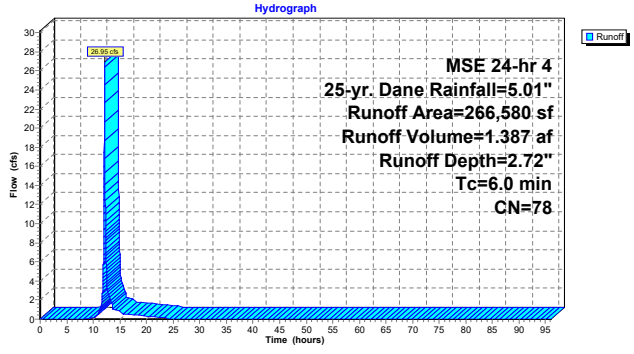
Runoff = 26.95 cfs @ 12.13 hrs, Volume= 1.387 af, Depth= 2.72"
Routed to Pond 2P : POND

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs
MSE 24-hr 4 25-yr. Dane Rainfall=5.01"

Area (sf)	CN	Description
37,866	98	Paved parking, HSG C
15,445	83	Small grain, straight row, Good, HSG C
213,269	74	>75% Grass cover, Good, HSG C
266,580	78	Weighted Average
228,714		85.80% Pervious Area
37,866		14.20% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment 3-SX: Site to Sediment Trap, then Pond

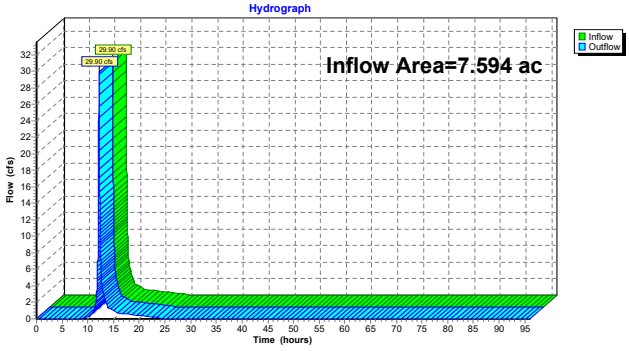


Summary for Reach 2R: Outlet

Inflow Area = 7.594 ac, 16.89% Impervious, Inflow Depth = 2.77" for 25-yr. Dane event
Inflow = 29.90 cfs @ 12.16 hrs, Volume= 1.753 af
Outflow = 29.90 cfs @ 12.16 hrs, Volume= 1.753 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs

Reach 2R: Outlet



Summary for Pond 1P: PRKG LOT SWALE

Inflow Area = 0.549 ac, 75.34% Impervious, Inflow Depth = 4.10" for 25-yr. Dane event
Inflow = 3.36 cfs @ 12.13 hrs, Volume= 0.187 af
Outflow = 3.36 cfs @ 12.13 hrs, Volume= 0.187 af, Atten= 0%, Lag= 0.0 min
Primary = 3.36 cfs @ 12.13 hrs, Volume= 0.187 af
Routed to Pond 2P : POND

Routing by Dyn-Stor-Ind method, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs
Peak Elev= 958.68' @ 12.13 hrs Surf.Area= 83 sf Storage= 6 cf

Plug-Flow detention time= 0.0 min calculated for 0.187 af (100% of inflow)
Center-of-Mass det. time= 0.0 min (776.7 - 776.6)

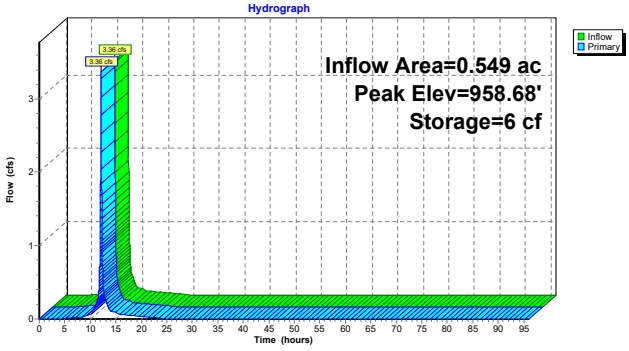
Volume	Invert	Avail.Storage	Storage Description
#1	958.45'	123 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
958.45	1	0	0
958.50	3	0	0
958.60	28	2	2
958.70	100	6	8
958.80	246	17	25
958.90	488	37	62
959.00	721	60	123

Device	Routing	Invert	Outlet Devices
#1	Primary	958.45'	**Custom Weir/Orifice, Cv= 2.62 (C= 3.28)**
			Head (feet) 0.00 0.15 0.38
			Width (feet) 1.00 15.00 39.00

Primary OutFlow Max=3.36 cfs @ 12.13 hrs HW=958.68' TW=956.60' (Dynamic Tailwater)
↑**1=Custom Weir/Orifice** (Weir Controls 3.36 cfs @ 1.27 fps)

Pond 1P: PRKG LOT SWALE



Summary for Pond 2P: POND

Inflow Area = 7.594 ac, 16.89% Impervious, Inflow Depth = 2.78" for 25-yr. Dane event
Inflow = 33.89 cfs @ 12.13 hrs, Volume= 1.758 af
Outflow = 29.90 cfs @ 12.16 hrs, Volume= 1.753 af, Atten= 12%, Lag= 1.9 min
Primary = 29.90 cfs @ 12.16 hrs, Volume= 1.753 af
Routed to Reach 2R : Outlet

Routing by Dyn-Stor-Ind method, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs
Peak Elev= 956.68' @ 12.16 hrs Surf.Area= 5,645 sf Storage= 6,091 cf

Plug-Flow detention time= 7.3 min calculated for 1.753 af (100% of inflow)
Center-of-Mass det. time= 5.7 min (816.4 - 810.7)

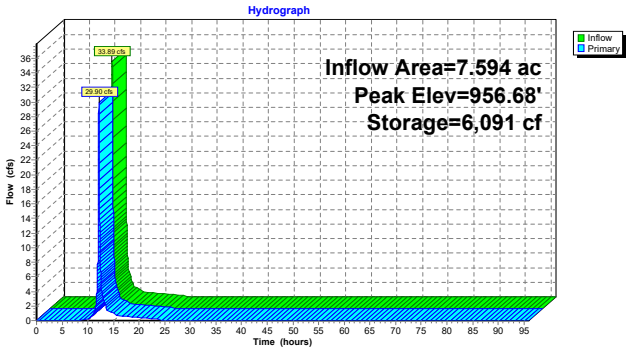
Volume	Invert	Avail.Storage	Storage Description
#1	954.60'	15,513 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
954.60	68	0	0
955.00	917	197	197
955.25	1,688	326	523
955.50	2,443	516	1,039
955.75	3,419	733	1,772
956.00	4,218	955	2,726
957.00	6,310	5,264	7,990
958.00	8,735	7,523	15,513

Device	Routing	Invert	Outlet Devices
#1	Primary	955.00'	**Custom Weir/Orifice, Cv= 2.62 (C= 3.28)**
			Head (feet) 0.00 1.00 2.00 3.00 4.00 5.00
			Width (feet) 2.00 5.30 8.10 11.00 13.80 16.50

Primary OutFlow Max=29.84 cfs @ 12.16 hrs HW=956.68' TW=0.00' (Dynamic Tailwater)
↑**1=Custom Weir/Orifice** (Weir Controls 29.84 cfs @ 3.78 fps)

Pond 2P: POND



Time span=0.00-96.00 hrs, dt=0.01 hrs, 9601 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment1-SX: Site to Pond Runoff Area=40,321 sf 0.00% Impervious Runoff Depth=3.02"
Tc=6.0 min CN=74 Runoff=4.53 cfs 0.233 af

Subcatchment2-SX: Site to Entrance Runoff Area=23,909 sf 75.34% Impervious Runoff Depth=4.87"
Tc=6.0 min CN=92 Runoff=3.95 cfs 0.223 af

Subcatchment3-SX: Site to Sediment Runoff Area=266,580 sf 14.20% Impervious Runoff Depth=3.40"
Tc=6.0 min CN=78 Runoff=33.51 cfs 1.735 af

Reach 2R: Outlet Inflow=37.45 cfs 2.187 af
Outflow=37.45 cfs 2.187 af

Pond 1P: PRKG LOT SWALE Peak Elev=958.69' Storage=7 cf Inflow=3.95 cfs 0.223 af
Outflow=3.95 cfs 0.223 af

Pond 2P: POND Peak Elev=956.88' Storage=7,262 cf Inflow=41.99 cfs 2.191 af
Outflow=37.45 cfs 2.187 af

Summary for Subcatchment 1-SX: Site to Pond

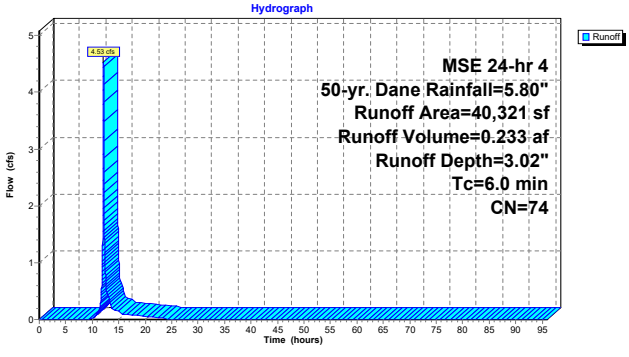
Runoff = 4.53 cfs @ 12.13 hrs, Volume= 0.233 af, Depth= 3.02"
Routed to Pond 2P : POND

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs
MSE 24-hr 4 50-yr. Dane Rainfall=5.80"

Area (sf)	CN	Description
40,321	74	>75% Grass cover, Good, HSG C
40,321		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment 1-SX: Site to Pond



Summary for Subcatchment 2-SX: Site to Entrance Swale

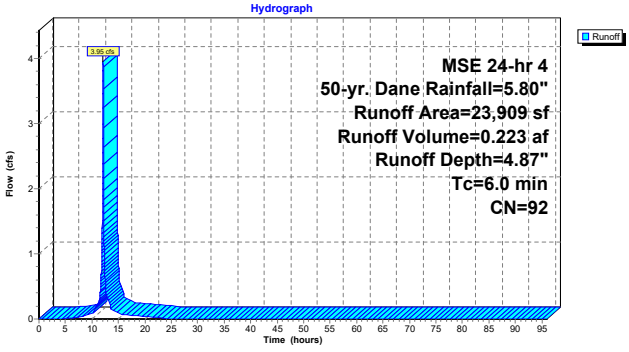
Runoff = 3.95 cfs @ 12.13 hrs, Volume= 0.223 af, Depth= 4.87"
Routed to Pond 1P : PRKG LOT SWALE

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs
MSE 24-hr 4 50-yr. Dane Rainfall=5.80"

Area (sf)	CN	Description
18,012	98	Paved parking, HSG C
5,897	74	>75% Grass cover, Good, HSG C
23,909	92	Weighted Average
5,897		24.66% Pervious Area
18,012		75.34% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment 2-SX: Site to Entrance Swale



Summary for Subcatchment 3-SX: Site to Sediment Trap, then Pond

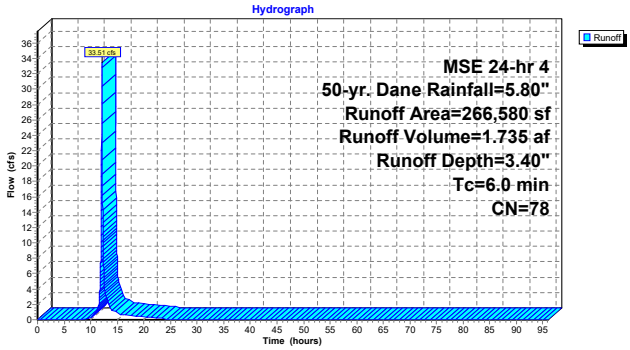
Runoff = 33.51 cfs @ 12.13 hrs, Volume= 1.735 af, Depth= 3.40"
Routed to Pond 2P : POND

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs
MSE 24-hr 4 50-yr. Dane Rainfall=5.80"

Area (sf)	CN	Description
37,866	98	Paved parking, HSG C
15,445	83	Small grain, straight row, Good, HSG C
213,269	74	>75% Grass cover, Good, HSG C
266,580	78	Weighted Average
228,714		85.80% Pervious Area
37,866		14.20% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 3-SX: Site to Sediment Trap, then Pond

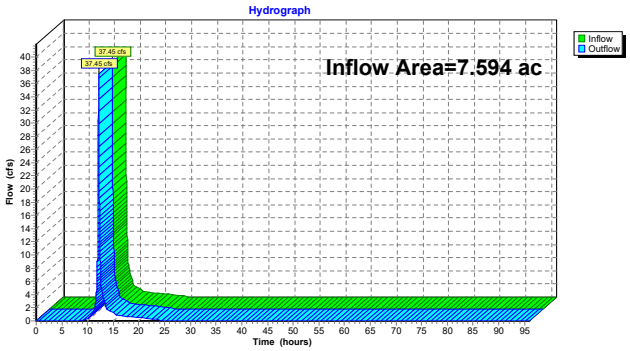


Summary for Reach 2R: Outlet

Inflow Area = 7.594 ac, 16.89% Impervious, Inflow Depth = 3.45" for 50-yr. Dane event
Inflow = 37.45 cfs @ 12.16 hrs, Volume= 2.187 af
Outflow = 37.45 cfs @ 12.16 hrs, Volume= 2.187 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs

Reach 2R: Outlet



Summary for Pond 1P: PRKG LOT SWALE

Inflow Area = 0.549 ac, 75.34% Impervious, Inflow Depth = 4.87" for 50-yr. Dane event
Inflow = 3.95 cfs @ 12.13 hrs, Volume= 0.223 af
Outflow = 3.95 cfs @ 12.13 hrs, Volume= 0.223 af, Atten= 0%, Lag= 0.0 min
Primary = 3.95 cfs @ 12.13 hrs, Volume= 0.223 af
Routed to Pond 2P : POND

Routing by Dyn-Stor-Ind method, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs
Peak Elev= 958.69' @ 12.13 hrs Surf.Area= 94 sf Storage= 7 cf

Plug-Flow detention time= 0.0 min calculated for 0.223 af (100% of inflow)
Center-of-Mass det. time= 0.0 min (772.8 - 772.8)

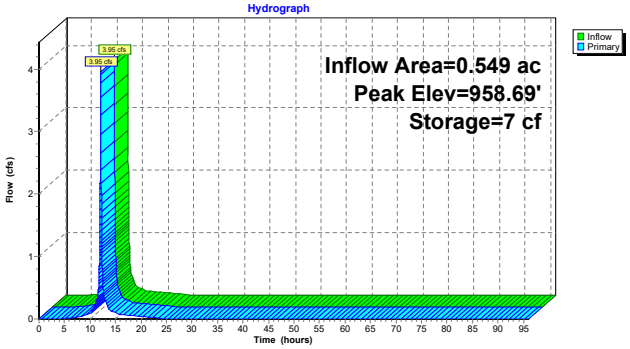
Volume	Invert	Avail.Storage	Storage Description
#1	958.45'	123 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
958.45	1	0	0
958.50	3	0	0
958.60	28	2	2
958.70	100	6	8
958.80	246	17	25
958.90	488	37	62
959.00	721	60	123

Device	Routing	Invert	Outlet Devices
#1	Primary	958.45'	**Custom Weir/Orifice, Cv= 2.62 (C= 3.28)** Head (feet) 0.00 0.15 0.38 Width (feet) 1.00 15.00 39.00

Primary OutFlow Max=3.95 cfs @ 12.13 hrs HW=958.69' TW=956.80' (Dynamic Tailwater)
↑**1=Custom Weir/Orifice** (Weir Controls 3.95 cfs @ 1.31 fps)

Pond 1P: PRKG LOT SWALE



Summary for Pond 2P: POND

Inflow Area = 7.594 ac, 16.89% Impervious, Inflow Depth = 3.46" for 50-yr. Dane event
Inflow = 41.99 cfs @ 12.13 hrs, Volume= 2.191 af
Outflow = 37.45 cfs @ 12.16 hrs, Volume= 2.187 af, Atten= 11%, Lag= 1.8 min
Primary = 37.45 cfs @ 12.16 hrs, Volume= 2.187 af
Routed to Reach 2R : Outlet

Routing by Dyn-Stor-Ind method, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs
Peak Elev= 956.88' @ 12.16 hrs Surf.Area= 6,064 sf Storage= 7,262 cf

Plug-Flow detention time= 6.8 min calculated for 2.187 af (100% of inflow)
Center-of-Mass det. time= 5.4 min (811.1 - 805.7)

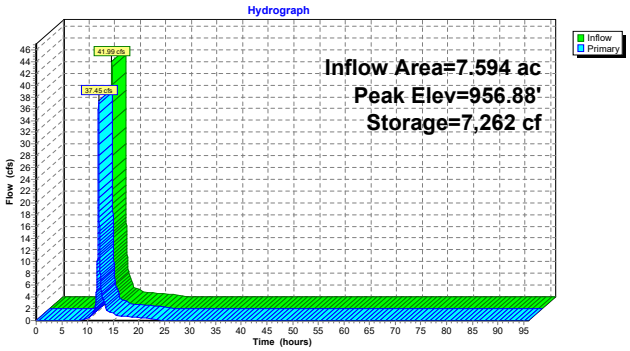
Volume	Invert	Avail.Storage	Storage Description
#1	954.60'	15,513 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
954.60	68	0	0
955.00	917	197	197
955.25	1,688	326	523
955.50	2,443	516	1,039
955.75	3,419	733	1,772
956.00	4,218	955	2,726
957.00	6,310	5,264	7,990
958.00	8,735	7,523	15,513

Device	Routing	Invert	Outlet Devices
#1	Primary	955.00'	**Custom Weir/Orifice, Cv= 2.62 (C= 3.28)**
			Head (feet) 0.00 1.00 2.00 3.00 4.00 5.00
			Width (feet) 2.00 5.30 8.10 11.00 13.80 16.50

Primary OutFlow Max=37.39 cfs @ 12.16 hrs HW=956.88' TW=0.00' (Dynamic Tailwater)
↑**1=Custom Weir/Orifice** (Weir Controls 37.39 cfs @ 3.98 fps)

Pond 2P: POND



Time span=0.00-96.00 hrs, dt=0.01 hrs, 9601 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment1-SX: Site to Pond Runoff Area=40,321 sf 0.00% Impervious Runoff Depth=3.75"
Tc=6.0 min CN=74 Runoff=5.60 cfs 0.289 af

Subcatchment2-SX: Site to Entrance Runoff Area=23,909 sf 75.34% Impervious Runoff Depth=5.72"
Tc=6.0 min CN=92 Runoff=4.59 cfs 0.262 af

Subcatchment3-SX: Site to Sediment Runoff Area=266,580 sf 14.20% Impervious Runoff Depth=4.17"
Tc=6.0 min CN=78 Runoff=40.73 cfs 2.125 af

Reach 2R: Outlet Inflow=45.81 cfs 2.672 af
Outflow=45.81 cfs 2.672 af

Pond 1P: PRKG LOT SWALE Peak Elev=958.71' Storage=9 cf Inflow=4.59 cfs 0.262 af
Outflow=4.59 cfs 0.262 af

Pond 2P: POND Peak Elev=957.08' Storage=8,500 cf Inflow=50.92 cfs 2.676 af
Outflow=45.81 cfs 2.672 af

Summary for Subcatchment 1-SX: Site to Pond

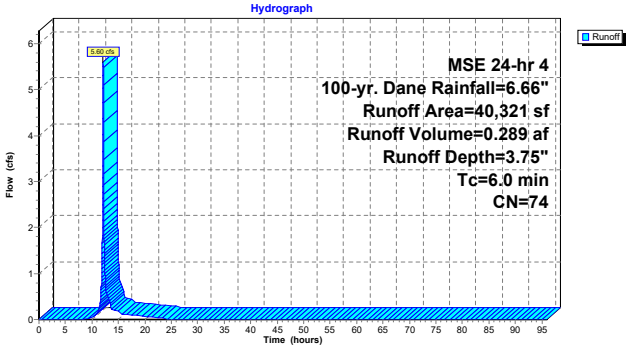
Runoff = 5.60 cfs @ 12.13 hrs, Volume= 0.289 af, Depth= 3.75"
Routed to Pond 2P : POND

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs
MSE 24-hr 4 100-yr. Dane Rainfall=6.66"

Area (sf)	CN	Description
40,321	74	>75% Grass cover, Good, HSG C
40,321		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 1-SX: Site to Pond



Summary for Subcatchment 2-SX: Site to Entrance Swale

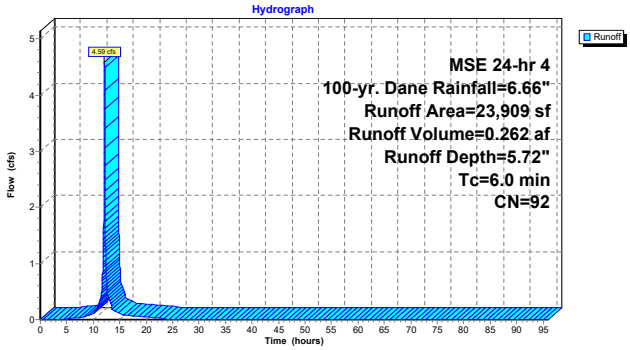
Runoff = 4.59 cfs @ 12.13 hrs, Volume= 0.262 af, Depth= 5.72"
Routed to Pond 1P : PRKG LOT SWALE

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs
MSE 24-hr 4 100-yr. Dane Rainfall=6.66"

Area (sf)	CN	Description
18,012	98	Paved parking, HSG C
5,897	74	>75% Grass cover, Good, HSG C
23,909	92	Weighted Average
5,897		24.66% Pervious Area
18,012		75.34% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 2-SX: Site to Entrance Swale



Summary for Subcatchment 3-SX: Site to Sediment Trap, then Pond

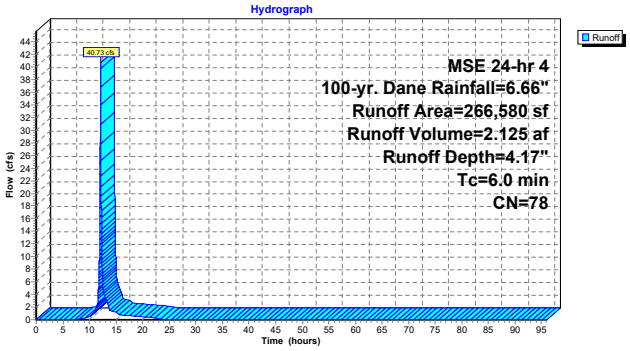
Runoff = 40.73 cfs @ 12.13 hrs, Volume= 2.125 af, Depth= 4.17"
Routed to Pond 2P : POND

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs
MSE 24-hr 4 100-yr. Dane Rainfall=6.66"

Area (sf)	CN	Description
37,866	98	Paved parking, HSG C
15,445	83	Small grain, straight row, Good, HSG C
213,269	74	>75% Grass cover, Good, HSG C
266,580	78	Weighted Average
228,714		85.80% Pervious Area
37,866		14.20% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 3-SX: Site to Sediment Trap, then Pond

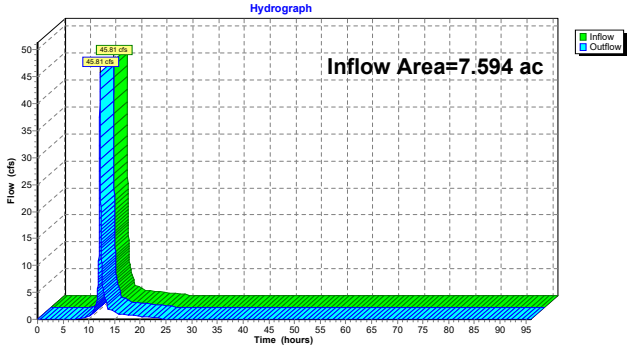


Summary for Reach 2R: Outlet

Inflow Area = 7.594 ac, 16.89% Impervious, Inflow Depth = 4.22" for 100-yr. Dane event
Inflow = 45.81 cfs @ 12.16 hrs, Volume= 2.672 af
Outflow = 45.81 cfs @ 12.16 hrs, Volume= 2.672 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs

Reach 2R: Outlet



Summary for Pond 1P: PRKG LOT SWALE

Inflow Area = 0.549 ac, 75.34% Impervious, Inflow Depth = 5.72" for 100-yr. Dane event
Inflow = 4.59 cfs @ 12.13 hrs, Volume= 0.262 af
Outflow = 4.59 cfs @ 12.13 hrs, Volume= 0.262 af, Atten= 0%, Lag= 0.0 min
Primary = 4.59 cfs @ 12.13 hrs, Volume= 0.262 af
Routed to Pond 2P : POND

Routing by Dyn-Stor-Ind method, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs
Peak Elev= 958.71' @ 12.13 hrs Surf.Area= 111 sf Storage= 9 cf

Plug-Flow detention time= 0.0 min calculated for 0.262 af (100% of inflow)
Center-of-Mass det. time= 0.0 min (769.4 - 769.3)

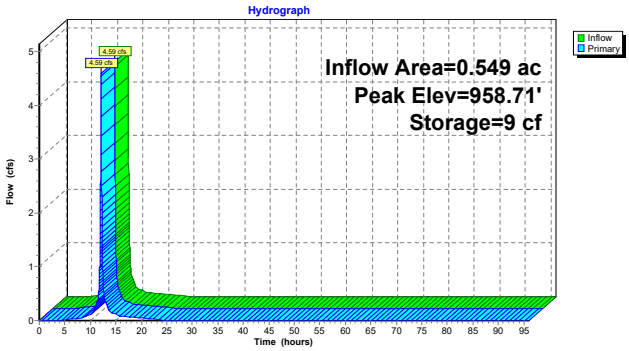
Volume	Invert	Avail.Storage	Storage Description
#1	958.45'	123 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
958.45	1	0	0
958.50	3	0	0
958.60	28	2	2
958.70	100	6	8
958.80	246	17	25
958.90	488	37	62
959.00	721	60	123

Device	Routing	Invert	Outlet Devices
#1	Primary	958.45'	**Custom Weir/Orifice, Cv= 2.62 (C= 3.28)** Head (feet) 0.00 0.15 0.38 Width (feet) 1.00 15.00 39.00

Primary OutFlow Max=4.59 cfs @ 12.13 hrs HW=958.71' TW=957.00' (Dynamic Tailwater)
↑**1=Custom Weir/Orifice** (Weir Controls 4.59 cfs @ 1.35 fps)

Pond 1P: PRKG LOT SWALE



Summary for Pond 2P: POND

Inflow Area = 7.594 ac, 16.89% Impervious, Inflow Depth = 4.23" for 100-yr. Dane event
Inflow = 50.92 cfs @ 12.13 hrs, Volume= 2.676 af
Outflow = 45.81 cfs @ 12.16 hrs, Volume= 2.672 af, Atten= 10%, Lag= 1.7 min
Primary = 45.81 cfs @ 12.16 hrs, Volume= 2.672 af
Routed to Reach 2R : Outlet

Routing by Dyn-Stor-Ind method, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs
Peak Elev= 957.08' @ 12.16 hrs Surf.Area= 6,503 sf Storage= 8,500 cf

Plug-Flow detention time= 6.2 min calculated for 2.671 af (100% of inflow)
Center-of-Mass det. time= 5.1 min (806.3 - 801.2)

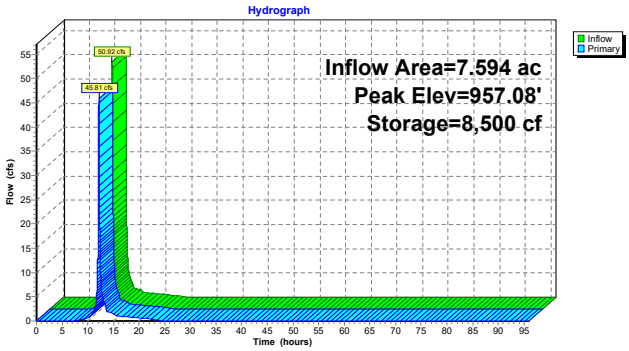
Volume	Invert	Avail.Storage	Storage Description
#1	954.60'	15,513 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
954.60	68	0	0
955.00	917	197	197
955.25	1,688	326	523
955.50	2,443	516	1,039
955.75	3,419	733	1,772
956.00	4,218	955	2,726
957.00	6,310	5,264	7,990
958.00	8,735	7,523	15,513

Device	Routing	Invert	Outlet Devices
#1	Primary	955.00'	**Custom Weir/Orifice, Cv= 2.62 (C= 3.28)**
			Head (feet) 0.00 1.00 2.00 3.00 4.00 5.00
			Width (feet) 2.00 5.30 8.10 11.00 13.80 16.50

Primary OutFlow Max=45.78 cfs @ 12.16 hrs HW=957.08' TW=0.00' (Dynamic Tailwater)
↑**1=Custom Weir/Orifice** (Weir Controls 45.78 cfs @ 4.16 fps)

Pond 2P: POND



Time span=0.00-96.00 hrs, dt=0.01 hrs, 9601 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment1-SX: Site to Pond Runoff Area=40,321 sf 0.00% Impervious Runoff Depth=4.51"
Tc=6.0 min CN=74 Runoff=6.70 cfs 0.348 af

Subcatchment2-SX: Site to Entrance Runoff Area=23,909 sf 75.34% Impervious Runoff Depth=6.58"
Tc=6.0 min CN=92 Runoff=5.23 cfs 0.301 af

Subcatchment3-SX: Site to Sediment Runoff Area=266,580 sf 14.20% Impervious Runoff Depth=4.96"
Tc=6.0 min CN=78 Runoff=48.09 cfs 2.529 af

Reach 2R: Outlet Inflow=54.32 cfs 3.173 af
Outflow=54.32 cfs 3.173 af

Pond 1P: PRKG LOT SWALE Peak Elev=958.72' Storage=11 cf Inflow=5.23 cfs 0.301 af
Outflow=5.23 cfs 0.301 af

Pond 2P: POND Peak Elev=957.26' Storage=9,719 cf Inflow=60.02 cfs 3.177 af
Outflow=54.32 cfs 3.173 af

Summary for Subcatchment 1-SX: Site to Pond

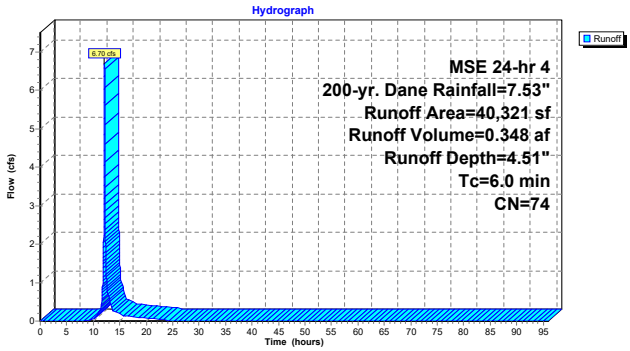
Runoff = 6.70 cfs @ 12.13 hrs, Volume= 0.348 af, Depth= 4.51"
Routed to Pond 2P : POND

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs
MSE 24-hr 4 200-yr. Dane Rainfall=7.53"

Area (sf)	CN	Description
40,321	74	>75% Grass cover, Good, HSG C
40,321		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment 1-SX: Site to Pond



Summary for Subcatchment 2-SX: Site to Entrance Swale

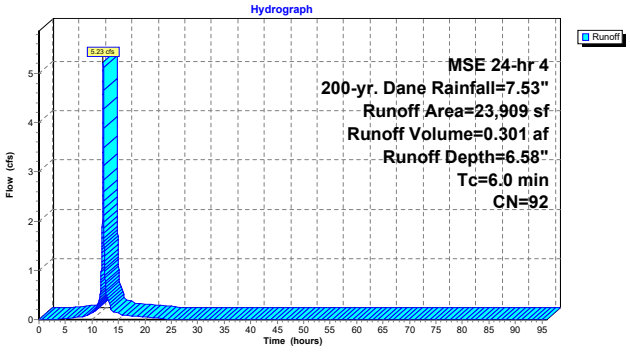
Runoff = 5.23 cfs @ 12.13 hrs, Volume= 0.301 af, Depth= 6.58"
Routed to Pond 1P : PRKG LOT SWALE

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs
MSE 24-hr 4 200-yr. Dane Rainfall=7.53"

Area (sf)	CN	Description
18,012	98	Paved parking, HSG C
5,897	74	>75% Grass cover, Good, HSG C
23,909	92	Weighted Average
5,897		24.66% Pervious Area
18,012		75.34% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment 2-SX: Site to Entrance Swale



Summary for Subcatchment 3-SX: Site to Sediment Trap, then Pond

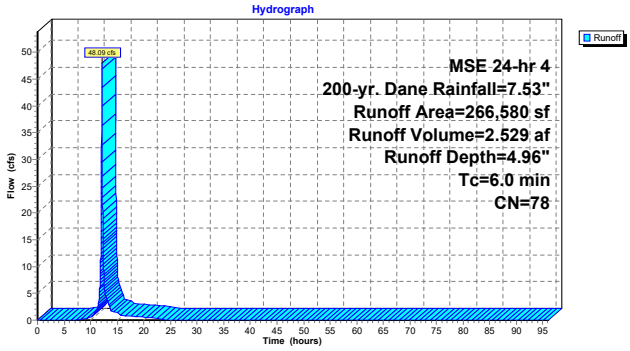
Runoff = 48.09 cfs @ 12.13 hrs, Volume= 2.529 af, Depth= 4.96"
Routed to Pond 2P : POND

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs
MSE 24-hr 4 200-yr. Dane Rainfall=7.53"

Area (sf)	CN	Description
37,866	98	Paved parking, HSG C
15,445	83	Small grain, straight row, Good, HSG C
213,269	74	>75% Grass cover, Good, HSG C
266,580	78	Weighted Average
228,714		85.80% Pervious Area
37,866		14.20% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment 3-SX: Site to Sediment Trap, then Pond

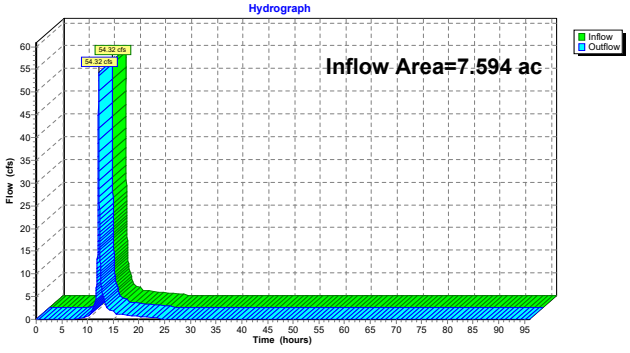


Summary for Reach 2R: Outlet

Inflow Area = 7.594 ac, 16.89% Impervious, Inflow Depth = 5.01" for 200-yr. Dane event
Inflow = 54.32 cfs @ 12.16 hrs, Volume= 3.173 af
Outflow = 54.32 cfs @ 12.16 hrs, Volume= 3.173 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs

Reach 2R: Outlet



Summary for Pond 1P: PRKG LOT SWALE

Inflow Area = 0.549 ac, 75.34% Impervious, Inflow Depth = 6.58" for 200-yr. Dane event
Inflow = 5.23 cfs @ 12.13 hrs, Volume= 0.301 af
Outflow = 5.23 cfs @ 12.13 hrs, Volume= 0.301 af, Atten= 0%, Lag= 0.0 min
Primary = 5.23 cfs @ 12.13 hrs, Volume= 0.301 af
Routed to Pond 2P : POND

Routing by Dyn-Stor-Ind method, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs
Peak Elev= 958.72' @ 12.13 hrs Surf.Area= 131 sf Storage= 11 cf

Plug-Flow detention time= 0.0 min calculated for 0.301 af (100% of inflow)
Center-of-Mass det. time= 0.0 min (766.4 - 766.4)

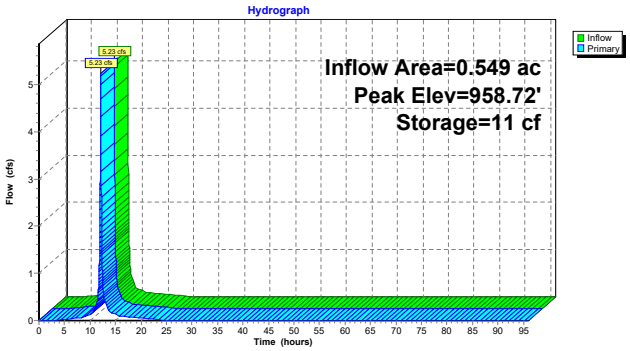
Volume	Invert	Avail.Storage	Storage Description
#1	958.45'	123 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
958.45	1	0	0
958.50	3	0	0
958.60	28	2	2
958.70	100	6	8
958.80	246	17	25
958.90	488	37	62
959.00	721	60	123

Device	Routing	Invert	Outlet Devices
#1	Primary	958.45'	**Custom Weir/Orifice, Cv= 2.62 (C= 3.28)**
			Head (feet) 0.00 0.15 0.38
			Width (feet) 1.00 15.00 39.00

Primary OutFlow Max=5.23 cfs @ 12.13 hrs HW=958.72' TW=957.18' (Dynamic Tailwater)
↑**1=Custom Weir/Orifice** (Weir Controls 5.23 cfs @ 1.38 fps)

Pond 1P: PRKG LOT SWALE



Summary for Pond 2P: POND

Inflow Area = 7.594 ac, 16.89% Impervious, Inflow Depth = 5.02" for 200-yr. Dane event
Inflow = 60.02 cfs @ 12.13 hrs, Volume= 3.177 af
Outflow = 54.32 cfs @ 12.16 hrs, Volume= 3.173 af, Atten= 9%, Lag= 1.7 min
Primary = 54.32 cfs @ 12.16 hrs, Volume= 3.173 af
Routed to Reach 2R : Outlet

Routing by Dyn-Stor-Ind method, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs
Peak Elev= 957.26' @ 12.16 hrs Surf.Area= 6,942 sf Storage= 9,719 cf

Plug-Flow detention time= 5.8 min calculated for 3.172 af (100% of inflow)
Center-of-Mass det. time= 4.9 min (802.2 - 797.3)

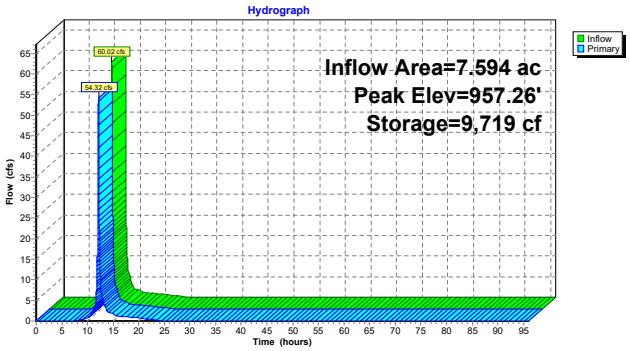
Volume	Invert	Avail.Storage	Storage Description
#1	954.60'	15,513 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
954.60	68	0	0
955.00	917	197	197
955.25	1,688	326	523
955.50	2,443	516	1,039
955.75	3,419	733	1,772
956.00	4,218	955	2,726
957.00	6,310	5,264	7,990
958.00	8,735	7,523	15,513

Device	Routing	Invert	Outlet Devices
#1	Primary	955.00'	**Custom Weir/Orifice, Cv= 2.62 (C= 3.28)**
			Head (feet) 0.00 1.00 2.00 3.00 4.00 5.00
			Width (feet) 2.00 5.30 8.10 11.00 13.80 16.50

Primary OutFlow Max=54.31 cfs @ 12.16 hrs HW=957.26' TW=0.00' (Dynamic Tailwater)
↑**1=Custom Weir/Orifice** (Weir Controls 54.31 cfs @ 4.32 fps)

Pond 2P: POND



Time span=0.00-96.00 hrs, dt=0.01 hrs, 9601 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment1-SX: Site to Pond Runoff Area=40,321 sf 0.00% Impervious Runoff Depth=5.77"
Tc=6.0 min CN=74 Runoff=8.50 cfs 0.445 af

Subcatchment2-SX: Site to Entrance Runoff Area=23,909 sf 75.34% Impervious Runoff Depth=7.97"
Tc=6.0 min CN=92 Runoff=6.27 cfs 0.365 af

Subcatchment3-SX: Site to Sediment Runoff Area=266,580 sf 14.20% Impervious Runoff Depth=6.27"
Tc=6.0 min CN=78 Runoff=60.05 cfs 3.196 af

Reach 2R: Outlet Inflow=68.20 cfs 4.001 af
Outflow=68.20 cfs 4.001 af

Pond 1P: PRKG LOT SWALE Peak Elev=958.74' Storage=14 cf Inflow=6.27 cfs 0.365 af
Outflow=6.27 cfs 0.365 af

Pond 2P: POND Peak Elev=957.52' Storage=11,635 cf Inflow=74.81 cfs 4.006 af
Outflow=68.20 cfs 4.001 af

Summary for Subcatchment 1-SX: Site to Pond

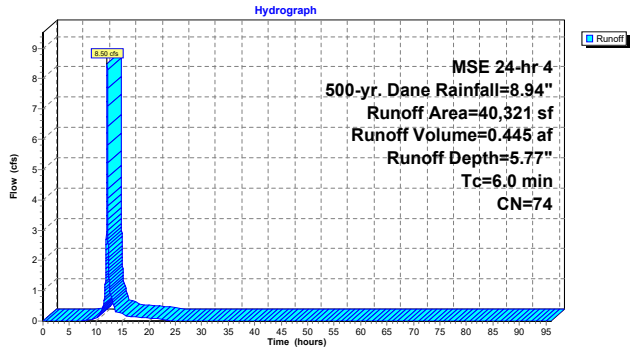
Runoff = 8.50 cfs @ 12.13 hrs, Volume= 0.445 af, Depth= 5.77"
Routed to Pond 2P : POND

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs
MSE 24-hr 4 500-yr. Dane Rainfall=8.94"

Area (sf)	CN	Description
40,321	74	>75% Grass cover, Good, HSG C
40,321		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment 1-SX: Site to Pond



Summary for Subcatchment 2-SX: Site to Entrance Swale

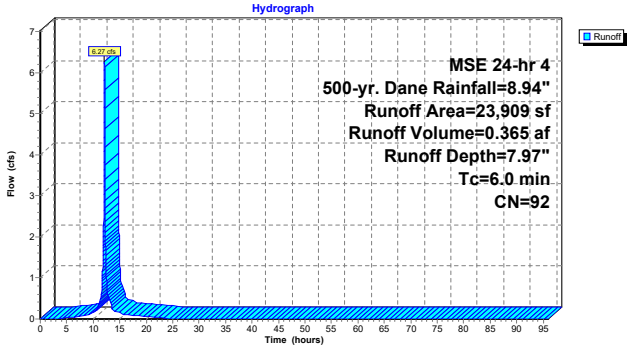
Runoff = 6.27 cfs @ 12.13 hrs, Volume= 0.365 af, Depth= 7.97"
Routed to Pond 1P : PRKG LOT SWALE

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs
MSE 24-hr 4 500-yr. Dane Rainfall=8.94"

Area (sf)	CN	Description
18,012	98	Paved parking, HSG C
5,897	74	>75% Grass cover, Good, HSG C
23,909	92	Weighted Average
5,897		24.66% Pervious Area
18,012		75.34% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment 2-SX: Site to Entrance Swale



Summary for Subcatchment 3-SX: Site to Sediment Trap, then Pond

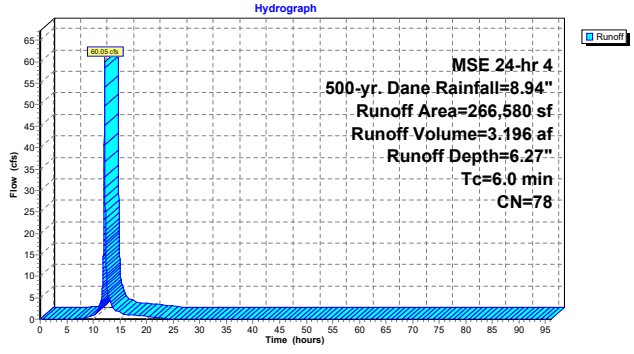
Runoff = 60.05 cfs @ 12.13 hrs, Volume= 3.196 af, Depth= 6.27"
Routed to Pond 2P : POND

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs
MSE 24-hr 4 500-yr. Dane Rainfall=8.94"

Area (sf)	CN	Description
37,866	98	Paved parking, HSG C
15,445	83	Small grain, straight row, Good, HSG C
213,269	74	>75% Grass cover, Good, HSG C
266,580	78	Weighted Average
228,714		85.80% Pervious Area
37,866		14.20% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment 3-SX: Site to Sediment Trap, then Pond

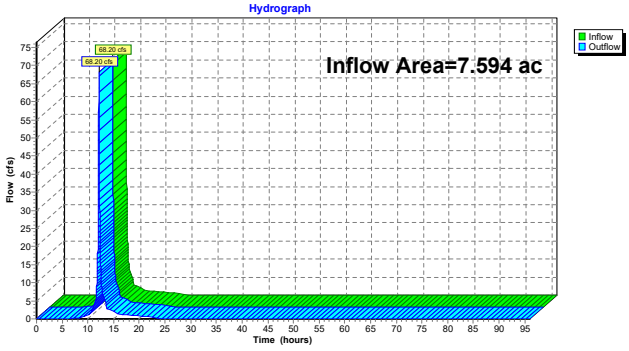


Summary for Reach 2R: Outlet

Inflow Area = 7.594 ac, 16.89% Impervious, Inflow Depth = 6.32" for 500-yr. Dane event
Inflow = 68.20 cfs @ 12.16 hrs, Volume= 4.001 af
Outflow = 68.20 cfs @ 12.16 hrs, Volume= 4.001 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs

Reach 2R: Outlet



Summary for Pond 1P: PRKG LOT SWALE

Inflow Area = 0.549 ac, 75.34% Impervious, Inflow Depth = 7.97" for 500-yr. Dane event
Inflow = 6.27 cfs @ 12.13 hrs, Volume= 0.365 af
Outflow = 6.27 cfs @ 12.13 hrs, Volume= 0.365 af, Atten= 0%, Lag= 0.0 min
Primary = 6.27 cfs @ 12.13 hrs, Volume= 0.365 af
Routed to Pond 2P : POND

Routing by Dyn-Stor-Ind method, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs
Peak Elev= 958.74' @ 12.13 hrs Surf.Area= 162 sf Storage= 14 cf

Plug-Flow detention time= 0.0 min calculated for 0.365 af (100% of inflow)
Center-of-Mass det. time= 0.0 min (762.5 - 762.5)

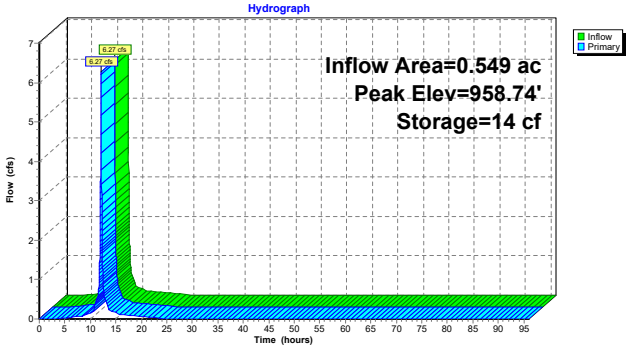
Volume	Invert	Avail.Storage	Storage Description
#1	958.45'	123 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
958.45	1	0	0
958.50	3	0	0
958.60	28	2	2
958.70	100	6	8
958.80	246	17	25
958.90	488	37	62
959.00	721	60	123

Device	Routing	Invert	Outlet Devices
#1	Primary	958.45'	**Custom Weir/Orifice, Cv= 2.62 (C= 3.28)**
			Head (feet) 0.00 0.15 0.38
			Width (feet) 1.00 15.00 39.00

Primary OutFlow Max=6.27 cfs @ 12.13 hrs HW=958.74' TW=957.44' (Dynamic Tailwater)
↑**1=Custom Weir/Orifice** (Weir Controls 6.27 cfs @ 1.43 fps)

Pond 1P: PRKG LOT SWALE



Summary for Pond 2P: POND

Inflow Area = 7.594 ac, 16.89% Impervious, Inflow Depth = 6.33" for 500-yr. Dane event
Inflow = 74.81 cfs @ 12.13 hrs, Volume= 4.006 af
Outflow = 68.20 cfs @ 12.16 hrs, Volume= 4.001 af, Atten= 9%, Lag= 1.6 min
Primary = 68.20 cfs @ 12.16 hrs, Volume= 4.001 af
Routed to Reach 2R : Outlet

Routing by Dyn-Stor-Ind method, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs
Peak Elev= 957.52' @ 12.16 hrs Surf.Area= 7,582 sf Storage= 11,635 cf

Plug-Flow detention time= 5.4 min calculated for 4.001 af (100% of inflow)
Center-of-Mass det. time= 4.7 min (796.6 - 792.0)

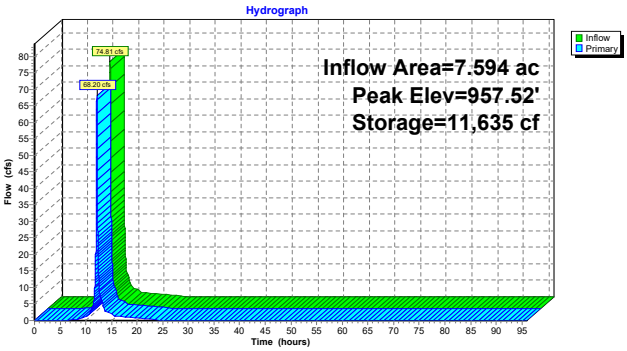
Volume	Invert	Avail.Storage	Storage Description
#1	954.60'	15,513 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
954.60	68	0	0
955.00	917	197	197
955.25	1,688	326	523
955.50	2,443	516	1,039
955.75	3,419	733	1,772
956.00	4,218	955	2,726
957.00	6,310	5,264	7,990
958.00	8,735	7,523	15,513

Device	Routing	Invert	Outlet Devices
#1	Primary	955.00'	**Custom Weir/Orifice, Cv= 2.62 (C= 3.28)**
			Head (feet) 0.00 1.00 2.00 3.00 4.00 5.00
			Width (feet) 2.00 5.30 8.10 11.00 13.80 16.50

Primary OutFlow Max=68.11 cfs @ 12.16 hrs HW=957.52' TW=0.00' (Dynamic Tailwater)
↑**1=Custom Weir/Orifice** (Weir Controls 68.11 cfs @ 4.55 fps)

Pond 2P: POND


Hydrograph
Inflow
Primary
74.81 cfs
68.20 cfs
Inflow Area=7.594 ac
Peak Elev=957.52'
Storage=11,635 cf
Flow (cfs)
Time (hours)