PRELIMINARY STORMWATER MANAGEMENT ANALYSIS & REPORT

FOR

THE PROSPERITA & ORION STEM SCHOOLS

NAPERVILLE, ILLINOIS

REVISED FEBRUARY 14, 2023
REVISED JANUARY 30, 2023
REVISED DECEMBER 20, 2022
REVISED SEPTEMBER 30, 2022
REVISED SEPTEMBER 14, 2022
AUGUST 30, 2022

JOB NO. 904.426

PROFESSIONAL ENGINEER'S CERTIFICATION

STATE OF ILLINOIS }
SS.
COUNTY OF DUPAGE }

I, RANDALL W. BUS, A LICENSED PROFESSIONAL ENGINEER OF ILLINOIS, HEREBY CERTIFY THAT THIS TECHNICAL SUBMISSION WAS PREPARED ON BEHALF OF VRUTTHI, LLC BY CEMCON, LTD. UNDER MY PERSONAL DIRECTION.

DATED THIS 14th **DAY OF** February**, AD, 2023**

RANDALL W. BUS
62-32381
REGISTERED PROFESSIONAL ENGINEER OF ILLINOIS

ILLINOIS LICENSED PROFESSIONAL ENGINEER NO. 062-032381

MY LICENSE EXPIRES ON NOVEMBER 30, 2023

PROFESSIONAL DESIGN FIRM LICENSE NO. 184002937 – EXPIRES APRIL 30, 2023

NOTE: UNLESS THIS DOCUMENT BEARS THE ORIGINAL SIGNATURE AND IMPRESSED SEAL OF THE DESIGN PROFESSIONAL ENGINEER, IT IS NOT A VALID TECHNICAL SUBMISSION.

PREPARED FOR:

VRUTTHI, LLC
3644 WHITE EAGLE CIRCLE
NAPERVILLE, IL 600504

630-803-5768

PREPARED BY:

CEMCON, LTD.
2280 WHITE OAK CIRCLE
SUITE 100
AURORA, IL 60502-9675

630-862-2100

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PRELIMINARY STORMWATER MANAGEMENT ANALYSIS & REPORT

FOR

THE PROSPERITA & ORION STEM SCHOOLS

NAPERVILLE, ILLINOIS

I. PROJECT DESCRIPTION

The Prosperita & Orion STEM Schools Project will be platted and developed on a 12.35± acre property assemblage comprised of small lots and vacated rights-of-way in Naper Villa Manor originally subdivided in 1926. The property abuts Diehl Rd. on the north, Mill St. on the east, West St. (ironically) on the west, and Harborchase of Naperville on the south (see Exhibit A). Additional rights-of-way (0.36± acres) will be dedicated for the Mill St. pavements and street lights which already encroach onto the property and for future public use sidewalks. The north half of the existing driveway of Harborchase was previously included in the stormwater management system for that project (0.18± acres), so site runoff storage and PCBMPs have already been provided. The proposed Mill St. ROW dedication of 0.36± acres represents either "Roadway Development" per Section 15-72.B or "Special Case of Development" per Section 15.72.C.5 so the net "Development Site" is 12.35 – 0.54 = 11.81± acres.

This Development Site will be platted into two (2) lots, one of which to the north on 5.01± acres will be the site of a private STEM school for grades K – 8, and on the lot of 6.80± acres to the south, 76 townhome units will be constructed, all of which development will be accessed via private streets but served by the City's public sanitary sewer collection and water distribution systems that will be extended within PU&DE along with both public and private street access easements. The Prosperita & Orion STEM School Project also has access rights to the private driveway previously constructed along the north and east sides of Harborchase with access to West St. and to Commons Dr. (and the traffic signal at Mill St. and Commons Dr.). Otherwise, a right-in-right-out driveway off Mill St. is proposed along with a full access driveway on West St. (see Preliminary Plat and Preliminary Site Development Plan in Exhibit B).

II. EXISTING DRAINAGE CONDITIONS

There is approximately 12 feet of topographic relief across the property from the high point near the northeasterly corner at 738.8± to the low point at the end section of a15-inch RCP stubbed from the Harborchase development with a flowline of 726.7±. There is a very slight depressional area near the southerly central portion of the site a few tenths of a foot deep which is not likely to afford any attenuating effect on existing rates of runoff and two (2) slightly deeper depressional areas in the northwesterly corner of the site that overflow to the southeast into a swale which depressions may have a potential attenuating effect so they were modeled in the Existing Condition Flood Routing Analysis in revised Exhibit E. There is an existing 18-inch public storm drain along West St. that is fairly shallow and extends northward to Diehl Rd. and then westward along Diehl Rd. and a deeper 36-inch storm sewer (FL = 721.3±) along Mill St. that extends southward to a large stormwater management facility at Bauer and Mill St.

Soils over the property consist of about 8-10 feet of silty clay Type C soils underlain by a continuous coarse sand and gravel layer extending to at least 25-feet below existing ground surfaces with a transmissibility rate projected by the soils consultant of around 3.6 inches/Hr (see Soils Investigation Report and Soil Permeability Table, Exhibit C). There was no ground water observed in any of the borings down to 25 feet either before or after drilling and none expected as the open bottoms of the storage modules will be well into the gravelly coarse sand formation underlying the site to depths of 30 feet (from nearby well logs).

In the Existing (Without-Project) Condition, about 11.96 (12.35 – 0.39) acres of the gross 12.35± acre site are directly tributary to the West St. / Harborchase drainage systems and 0.39± acres are directly tributary to the Mill St. drainage system. About 0.50± acres of the West St. and Diehl Road ROWs are tributary to the site and to the West St. / Harborchase drainage system while 0.36± acres of the West St. parkway / ROW are directly tributary to the West St. drainage system and 0.37± acres of the Mill St. parkway / ROW are directly tributary to the Mill St. drainage system. A Pondpack flood routing model was developed for each of these catchments based on the respective CN's and Tc's with the insertion of the minor temporary attenuating effects of the slight depressional areas which were flood routed for the 2-Yr and 100-Yr 24-Hr design rainstorm events. For the combined 11.96± acre plus 0.50± = 12.46± acre catchment tributary to the West St. / Harborchase drainage system, peak runoff rates for the 2-Year and 100-Yr 24-Hr events taking into account the slight depressional storage volume were determined to be 1.73± cfs and 7.83± cfs respectively (but 27± cfs for the critical 100-Yr 2-Hr storm event). For the 100-Yr 24-Hr

and critical 2-Hr storms, the peak rates of runoff both with and without depressional attenuation were the same as storm runoff quickly fills the depressions and cascades down through the swale low point and enters the 15-inch FES connected to the West St. drainage system or overflows to the Harborchase drainage system. For the aggregate 0.76± acre catchments tributary to Mill St., peak rates of runoff were determined to be 0.14± cfs for the 2-Yr and 0.51± cfs for the 100-Yr 24-Hr storm events but 2.77± cfs in the critical 100-Yr 1-Hr event.

III. PROPOSED WITH-PROJECT CONDITION STORMWATER MANAGEMENT & PCBMP SYSTEMS

Given the somewhat restrictive site area available and desire to create landscaped open areas for neighborhood gatherings, Developer Vrutthi, LLC has elected to provide site runoff storage in sub-surface vaults. Based on the Type C soils and impervious surface coverings for the school site with a gymnasium and the 76 townhome sites, composite coefficients of runoff of 86 and 88 were computed for the school site and townhome site respectively and a Pondpack hydraulic / hydrologic model was devised for the Project given the restrictive release of 0.1 cfs/Ac. with discharge to the deeper 36" storm sewer along Mill St.

In addition to the 11.81± acres of net Development Site, the sidewalks and multi-use trail impervious surfaces potentially need to be accounted for in the on-site stormwater management system. If these improvements within either existing rights-of-way or proposed rights-of-way or public access easements are considered by the City to be "Roadway Developments" under Sections 15-72,A.4 & 15.72.B. in that, if the with-development impervious areas in aggregate are less than 25,000 SF when compared to the pre-development condition, then only Site Runoff Storage is required. Site Runoff Storage need only be that volume required such that the pre-development peak discharges for the 2-Yr and 100-Yr 24-Hr duration rainfall events are not increased. If these improvements are considered by the City to be "Special Cases of Development" under Sections 15-72.C and 15-72.C.5, then site runoff storage is not required at all.

Should the City elect the more conservative approach and determine these improvements are "Roadway Development", the aggregate impervious surfaces computed for the West St. sidewalk and driveway pavement of 6,025± SF, the Diehl Rd. multi-use trail of 2,605± SF, and the Mill St.

sidewalk and driveway pavements of 5,890± SF add up to only 14,520± SF in total which is below the threshold so only Site Runoff Storage is required to attenuate peak discharges for the 2-Yr and 100-Yr 24-Hr duration storm events at or below the existing condition (see Proposed Condition Catchment Exhibit F). Existing Condition runoff hydrographs for the same 14,520± SF of area to be paved were first derived and peak rates of 0.10± cfs and 0.25± cfs were determined for the 2-Yr and 100-Yr 24-Hr storms respectively. In the Proposed Condition, for the same 14,520± SF of aggregate impervious surfaces, 5,520± SF of necessity will drain into the on-site stormwater management system. In several instances, the existing parkways fall off rather abruptly into the site and, without extensive raising of and adjustments to existing utility structures, this drainage condition cannot be reversed. When the peak design storm flow rates from this 5,520± SF of impervious surfaces are deducted from the total impervious surfaces of 14,520±, the remaining 9,000± SF of impervious surfaces in the Proposed Condition will generate peak rates of 0.06± cfs and 0.16± cfs respectively in the 2-Yr and 100-Yr 24-Hr duration storm events which is less than or equal to the existing condition and satisfies the provisions of Section 15-72.B. (see Exhibit G).

Therefore, under the determination that the 5,520± SF of impervious surfaces which will drain into the site are to be added to the 11.81± acre net Development Site for a total of 11.81± Ac. plus 0.13± Ac. = 11.94± Ac., then that is the development area to be used when computing the allowable release rate (11.94± Ac. x 0.1 cfs/Ac. = 1.19 cfs) and the required Site Runoff Storage volume (but not the PCBMP volume). Should the City more plausibly determine the site improvements are “Special Cases of Development,” these area would not be considered areas of the Development (although 38% of these surfaces will drain into the proposed stormwater management system for the Project site) and the Development Site would remain at 11.81± acres. Pondpack flood routing models were again developed for only the more conservative determination of “Roadway Development” by the City with CN’s as computed above and the respective Tc’s.

In the Proposed With-Project Condition, all of the on-site runoff that was formerly directed to the Harborchase / West St. drainage systems will be captured, conveyed and stored in the sub-surface modules. Peak rates to that system will be close to zero or less than in the existing condition for either the 100-Yr or 2-Yr 24-Hr design storm events. For the 11.94± acre Development Site (under the Roadway Development option) being captured and conveyed to the storage modules and tributary to the Harborchase / Mill St. drainage system, the rate of discharge

through the control structure under No Tailwater Conditions will be 0.45± cfs for the 2-Yr 24-Hr design storm and 1.14± cfs (0.82± cfs with tailwater) for the 100-Yr 24-Hr duration storm with peak discharges occurring much later in each storm event when peak rates in the Mill St. system have long subsided (see Collective Exhibit H). In reality, peak discharges are likely to be much less given that some flow in the westerly curbline of Mill St. from a 0.30± acre section of pavement will be partially diverted into the Project Site at the proposed RI / RO driveway and there will be an appreciable rate of exfiltration into the sub-surface gravelly coarse sand formations underlying the Site. his partial diversion (estimated to be 0.5± cfs) would reduce runoff rates into the Mill St. drainage system and, taking into account the exfiltration rate of runoff over the contact area of the open-graded bedding under the storage modules estimated to be 3.82± cfs, discharges through the control structure to the Mill St. storm sewer under No Tailwater Conditions would be reduced to less than 0.1± cfs from 1.14± cfs with no exfiltration and no diversion (versus 0.51± cfs in the Existing Condition). For the 2-Yr 24-Hr storm event and most of the more frequent storm events, discharges to the Mill St. storm sewer would be zero or very small.

Site Runoff Storage for the 11.94± acres of aggregate Site Development with the more conservative approach of "Roadway Development" was computed at 5.94± Ac.-Ft. with a peak discharge of 0.82± cfs against a pipe full tailwater condition in the existing 36" storm sewer at 724.5± and 1.14± cfs discharge against no tailwater and a HWL of 727.48± as noted above. This volume of Site Runoff Storage can be accommodated in 348± subsurface concrete modules with bottom holes and pass through portals between modules with each module accommodating about 660± cubic feet (a total of 5.27± Ac.-Ft.) along with a minimum 2± foot thick or more of open graded, porous aggregate bedding (0.72± Ac.-Ft.). The design starting water surface elevation within each module will be 721.5± at a HWL of 727.5± with discharges controlled by a 4.25 inch circular orifice restrictor and an internal overflow weir. The storage modules, designed for H-20 loadings, will be constructed in open space areas and / or under pavements (driveways, courtyards, etc.) at locations where runoff can be collected and the modules at each location will be hydraulically interconnected with low flow flat gradient drain conduits of a size sufficient (about 24-inch dia.) to allow the unrestricted transfer of storage between module locations (i.e., an energy equalizer system). (See Exhibits B, C and I).

A number of the modules will have surface ports with high capacity grates for the entry of local surface runoff and to intercept the overland flood routes that will be designed along street pavements and open space corridors to convey excess accumulated runoff to the three (3) sub-

surface storage module sites. Each module will also have side-to-side and end-to-end hatchways to allow the unrestricted passage of stormwater between modules in addition to the interconnected equalizer conduits (see Illustration on Special Subsurface Module, Exhibit I).

The required PCBMP storage for the impervious surfaces of about 6.4± acres (see Exhibit I) can be provided by installing modules with bottom holes underlain by 2± feet of porous granular material and allowing the 1.25± inches x 6.4 acres = 0.67± Ac.-Ft. of required PCBMP volume control runoff to infiltrate into the sand and gravel seams underlying the property in accordance with Article VIII Section 15-64.C (see Soils Report and Rates of Permeability in Exhibit C).

In accordance with Section 15.73.A.2., the overflow conveyance system for the upstream catchment at 1 cfs / acre of roughly 12 cfs was analyzed. Under Existing Pre-Development Conditions, stormwater runoff leaves the site along the common driveway that transverses the southerly property line and then principally flows at 11.7± cfs southward down the westerly driveway through Harborchase with a minor overflow of 0.24± cfs flowing down the easterly driveway. These overflows were modeled as a weir and it was determined that the maximum water surface elevation reached at the westerly driveway would be 730.3± and at the easterly driveway maximum WSEL would be 730.6±. The lowest proposed finished floor of the Townhome units nearest the westerly driveway will be 732.0 so there will be 1.7 feet of freeboard and at the easterly driveway the lowest finished Townhome floor will be 733.4 with 2.8± feet of freeboard.

IV. SWPP PLAN IMPLEMENTATION

Erosion and sedimentation measures and devices to minimize and control erosion for the Project would consist of silt fencing, inlet and manhole filter inserts, a construction entrance off West St. to minimize traffic disruptions, a concrete wash-out facility, protective fencing for the few quality trees on the site that may form a part of the Landscaping Plan to be approved for the Project, and catch basins / debris traps. Such measures and devices would be periodically maintained during construction and vegetative stabilization established as building sites are developed. An NPDES Permit will need to be obtained for this Project which will exceed more than 1 acre.

V. STORMWATER SYSTEMS MAINTENANCE PLAN

As there would otherwise be frequent accumulations of debris and sediments in the sub-surface storage modules, discharges into the modules would first be routed through large diameter catch basin debris and sediment traps which accumulations will need to be periodically removed and sediments vacuumed out (see Exhibit I). Both the school and townhome HOA would be charged with these tasks through a Monitoring, Maintenance and Reporting Program that would be incorporated into the covenants recorded with the Plat of Subdivision against each lot. There would also be infrequent but scheduled inspections of the storage modules through access ports that would be provided at regular intervals which would allow relatively quick visual inspection without necessarily entering the modules.

VI. SPECIAL MANAGEMENT AREAS

There are no wetlands or flood plains on the site either indicated on the DuPage County Wetland Maps or D-FIRM Maps (see Exhibit J) nor were wetlands inventoried in the Negative Wetland Findings Report conducted by ENCAP, Inc. (see Exhibit K).

VII. SURETY

Surety for the stormwater management components (earthwork, SWPP Plan implementation, storm sewers and drainage system improvements, storage systems, PCBMP systems, etc.) would be posted as part of the required stormwater certification for the Project.

VIII. SUMMARY & CONCLUSION

It is our professional opinion the Prosperita & Orion STEM Schools Project, when constructed in accordance with the general description of this Preliminary Site Development Plan and narrative, can comply with the provisions of the City of Naperville's version of the "Countywide Stormwater and Flood Plain Ordinance" as well as good engineering practices.

TAB 1

PROJECT OVERVIEW

EXHIBIT A

LOCATION MAP

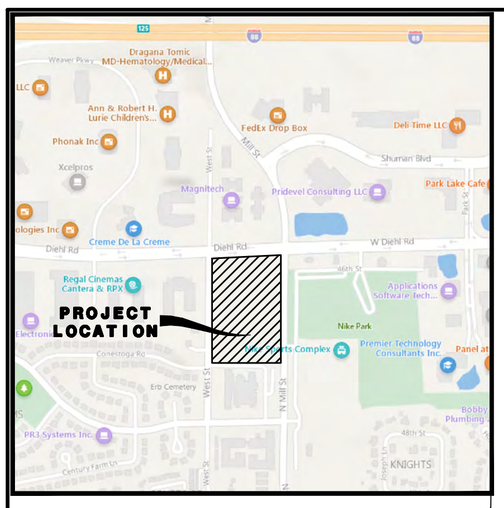
The Prosperita & Orion STEM School
T38N, R9E, SEC. 1
NAPERVILLE QUADRANGLE

CEMCON, Ltd.	PROJECT / CLIENT: Vrutthi, LLC. 3644 White Eagle Drive Naperville, IL 60564 (630) 803-5768	DRAWN BY:	DJF	08-30-22
		CHECKED BY:		
		APPROVED:		
		SCALE: N.T.S.		

EXHIBIT B

PRELIMINARY SITE DEVELOPMENT PLAN & PRELIMINARY PLAT OF SUBDIVISION

PRELIMINARY SITE DEVELOPMENT PLAN
FOR
THE PROSPERITA & ORION STEM SCHOOL



LOCATION MAP

;OVERALL PARCEL DESCRIPTION

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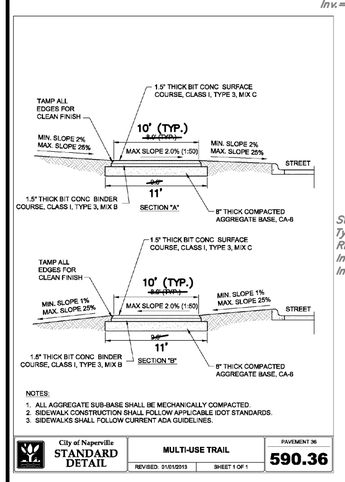
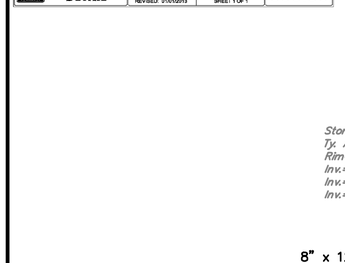
THAT PART OF THE SOUTH HALF OF SECTION 1 AND THE NORTH HALF OF SECTION 12, TOWNSHIP 38 NORTH, RANGE 9 EAST OF THE THIRD PRINCIPAL MERIDIAN BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: BEGINNING AT THE NORTHWEST CORNER OF LOT 1 IN THE FINAL PLAT OF SUBDIVISION FOR HARBORCHASE OF NAPERVILLE RECORDED AS DOCUMENT R2014–088045 SAID POINT ALSO BEING ON THE EAST LINE OF WEST STREET DEDICATED PER DOCUMENTS R95–183401, R97–92072 AND R98–117566; THENCE NORTH.0 DEGREES 28 MINUTES 30 SECONDS EAST 933.27 FEET ALONG SAID EAST LINE OF WEST STREET TO A POINT ON THE SOUTH LINE OF LAND CONVEYED TO THE COUNTY OF DUPAGE FOR DIEHL ROAD BY WARRANTY DEED RECORDED JULY 14, 1989 AS DOCUMENT R89–084247; THENCE NORTH 87 DEGREES 43 MINUTES 22 SECONDS EAST 467.87 FEET ALONG SAID SOUTH LINE TO A POINT OF CURVATURE; THENCE SOUTHEASTERLY 99.23 FEET ALONG A CURVE TO THE RIGHT HAVING A RADIUS OF 100.0 FEET AND A CHORD BEARING NORTH 63 DEGREES 50 MINUTES 56 SECONDS WEST; THENCE NORTH 87 DEGREES 46 MINUTES 40 SECONDS EAST 17.02 FEET TO A POINT ON THE WESTERLY LINE OF MILL STREET (COUNTY HIGHWAY 32) DEDICATED PER DOCUMENTS 213969 AND R2010–041209; THENCE SOUTH.0 DEGREES 28 MINUTES 30 SECONDS WEST 915.28 FEET ALONG SAID WESTERLY LINE TO THE NORTHEAST CORNER OF LOT 1 IN THE AFOREMENTIONED HARBORCHASE OF NAPERVILLE; THENCE NORTH 89 DEGREES 31 MINUTES 30 SECONDS WEST 570.14 ALONG THE NORTH LINE OF SAID LOT 1 TO THE POINT OF BEGINNING, ALL IN DUPAGE COUNTY, ILLINOIS.

N



NOTES:
1. ALL AGGREGATE SUB-BASE SHALL BE MECHANICALLY COMPACTED.
2. SIDEWALK CONSTRUCTION SHALL FOLLOW APPLICABLE IDOT STANDARDS.
3. SIDEWALKS SHALL FOLLOW CURRENT ADA GUIDELINES.

City of Naperville STANDARD DETAIL | MULTI-USE TRAIL | REVISED: 01/01/2013 | SHEET 1 OF 1 | PAVEMENT 36 | 590.36



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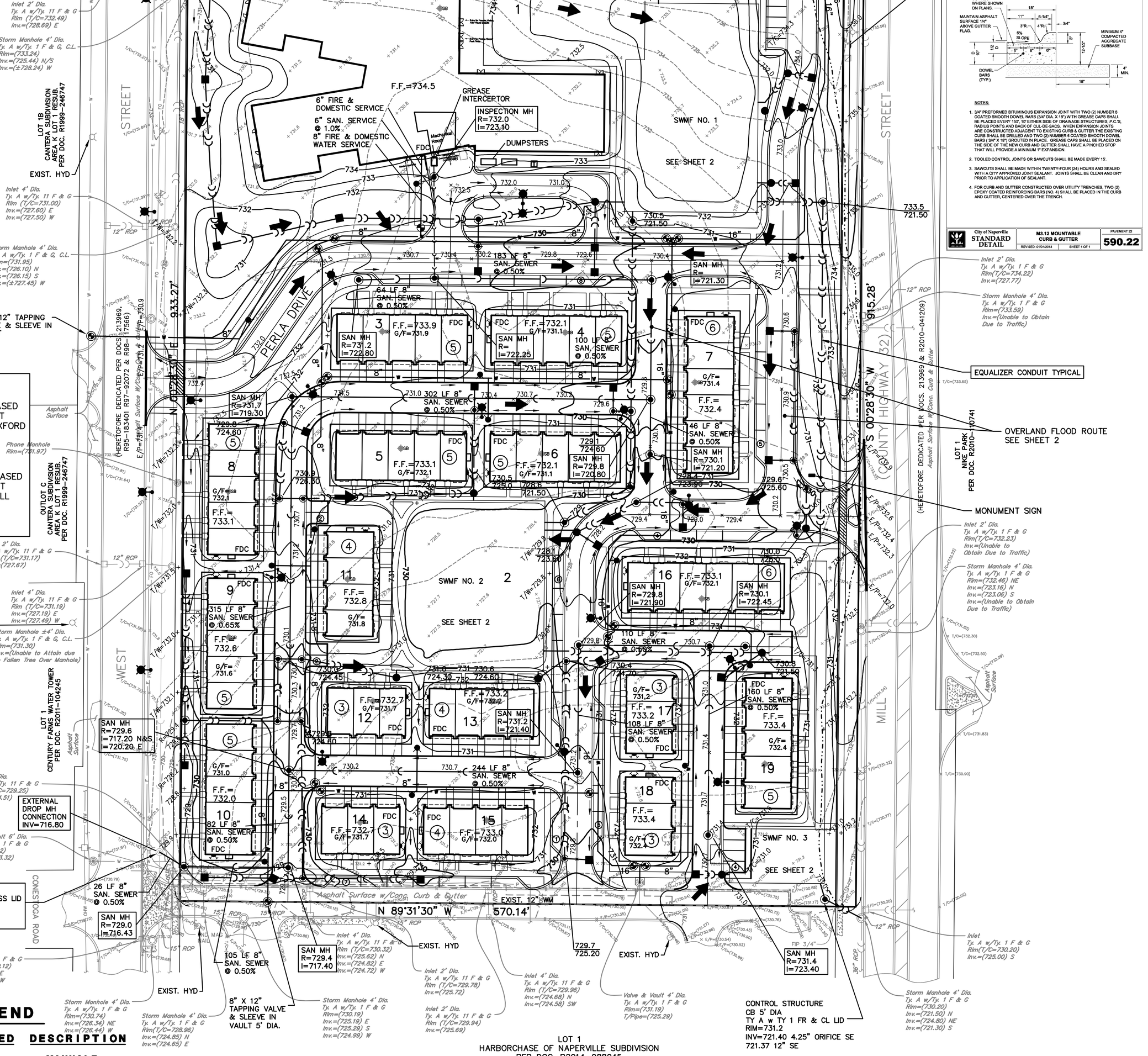

NOTES:
1. 3/4" PREFORMED BITUMINOUS EXPANSION JOINT WITH TWO (2) NUMBER 6 COATED SMOOTH DOWEL BARS (3/4" DIA. X 18") WITH GREASE CAPS SHALL BE PLACED EVERY 150', 10' EITHER SIDE OF DRAINAGE STRUCTURES, P.C.'S, RADIUS POINTS AND BACK OF CUL-DE-SACS. WHEN EXPANSION JOINTS ARE CONSTRUCTED ADJACENT TO EXISTING CURB & GUTTER THE EXISTING CURB SHALL BE DRILLED AND TWO (2) NUMBER 6 COATED SMOOTH DOWEL BARS (3/4" X 18") GROUTED IN PLACE. GREASE CAPS SHALL BE PLACED ON THE SIDE OF THE NEW CURB AND GUTTER SHALL HAVE A PINCHED STOP THAT WILL PROVIDE A MINIMUM 1" EXPANSION.
2. TOOLED CONTROL JOINTS OR SAWCUTS SHALL BE MADE EVERY 15'.
3. SAWCUTS SHALL BE MADE WITHIN TWENTY-FOUR (24) HOURS AND SEALED WITH A CITY APPROVED JOINT SEALANT. JOINTS SHALL BE CLEAN AND DRY PRIOR TO APPLICATION OF SEALANT.
4. FOR CURB AND GUTTER CONSTRUCTED OVER UTILITY TRENCHES, TWO (2) EPOXY COATED REINFORCING BARS (NO. 4) SHALL BE PLACED IN THE CURB AND GUTTER, CENTERED OVER THE TRENCH.

City of Naperville STANDARD DETAIL | M3.12 MOUNTABLE CURB & GUTTER | REVISED: 01/01/2013 | SHEET 1 OF 1 | PAVEMENT 22 | 590.22

BENCHMARKS

NAPERVILLE BM 526 – FLANGE ENCASED ROD LOCATED NEAR THE SOUTHEAST CORNER OF THE INTERSECTION OF OXFORD LANE AND 75TH STREET.

ELEVATION = 681.48 (NAVD 88)

NAPERVILLE BM 1506 – FLANGE ENCASED ROD LOCATED NEAR THE NORTHWEST CORNER OF THE INTERSECTION OF MILL STREET AND 5TH AVENUE.

ELEVATION = 690.61 (NAVD 88)

LEGEND

EXISTING	PROPOSED	DESCRIPTION
◎	◉	MANHOLE
○	●	CATCH BASIN/DEBRIS TRAP
□	■	INLET
	⬢	CLEANOUT
	▭	SLOPE INLET BOX
⊢(	⊢(	HEADWALL
◁	◀	END SECTION
CC	CC	STORM SEWER
C C	C C	SANITARY SEWER
W	W	WATERMAIN
⊗	◔	VALVE & BOX
⊗	◉	WATER VALVE IN VAULT
♉	♉	FIRE HYDRANT
		CONTOURS
(ELEV)	ELEV	ELEVATIONS
☼	✦	STREET LIGHT
	▨	WATERMAIN PROTECTION
	▣	SILT FENCE INLET PROTECTOR
	◠	TEMPORARY STRAW BALE DITCH CHECK
		SILT FENCE DITCH CHECK
	▩	RIP-RAP
	➡	OVERFLOW ROUTE

LED WALL MOUNTED LUMINAIRE

LED SITE LUMINAIRE w/POLE AND DOUBLE OR SINGLE MAST ARM

CURB LEGEND

- B-6.12 CURB & CUTTER
- MOUNTABLE CURB
- CARRIAGE CURB
- DEPRESSED CURB

NOTES:

UNDERGROUND STORMWATER STORAGE CHAMBERS AND PRIVATE ROADWAYS TO BE PRIVATELY OWNED AND MAINTAINED.

LOT 1
HARBORCHASE OF NAPERVILLE SUBDIVISION
PER DOC. R2014–088045

PREPARED FOR:

VRUTTHI LLC
3644 WHITE EAGLE DRIVE
NAPERVILLE, ILLINOIS 60564
(630) 803–5768

PREPARED BY:

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Consulting Engineers, Land Surveyors & Planners
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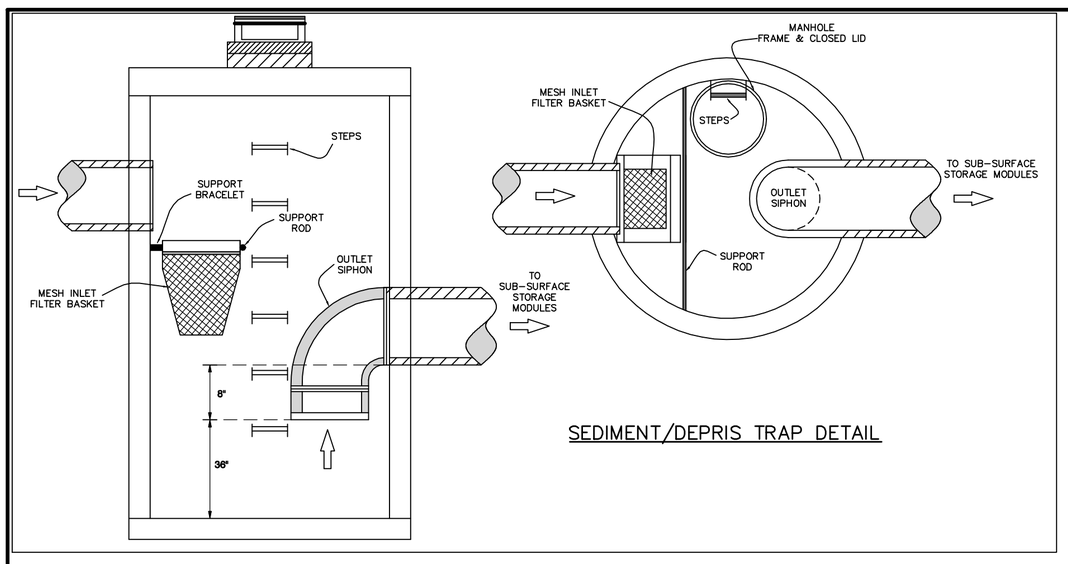
Aurora, Illinois 60502–9675
PH: 630.862.2100 FAX: 630.862.2199
E–Mail: info@cemcon.com Website: www.cemcon.com

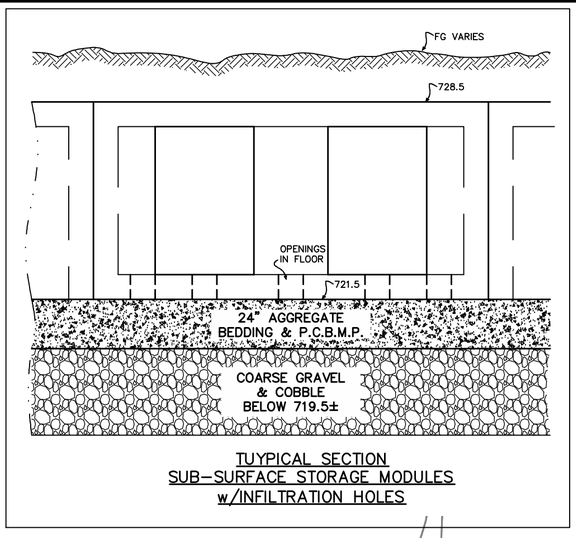
DISC NO.: 904426 FILE NAME: PREOVER
DRAWN BY: KMS FLD. BK. / PG. NO.: ------
COMPLETION DATE: 09–08–22 JOB NO.: 904.426
XREF : TOPO PROJECT MANAGER : RWB
REV.: 09–15–22/KMS, 09–22–22/KMS, 09–27–22/KMS 09–30–22/KMS, 12–13–22/KMS ENTIRE PLAN REVISED, 01–23–23/KMS, 02–14–23/KMS

PRELIMINARY ENGINEERING PLAN FOR THE PROSPERITA & ORION STEM SCHOOLS
CITY OF NAPERVILLE PROJECT NO.. 22-10000097

PLOT FILE CREATED: 2/14/2023 BY: KRISTIN STAEBKEL DRAWING PATH: P:\904426\DWG\ENG\DRAWINGS\PRELIMINARY\PREOVER.DWG



SEDIMENT/DEPRIS TRAP DETAIL



TUYPICAL SECTION
SUB-SURFACE STORAGE MODULES
w/INFILTRATION HOLES

ILLUSTRATION OF SUB-SURFACE VAULT
"SIGNLETRAP" BY STORMTRAP SYSTEMS

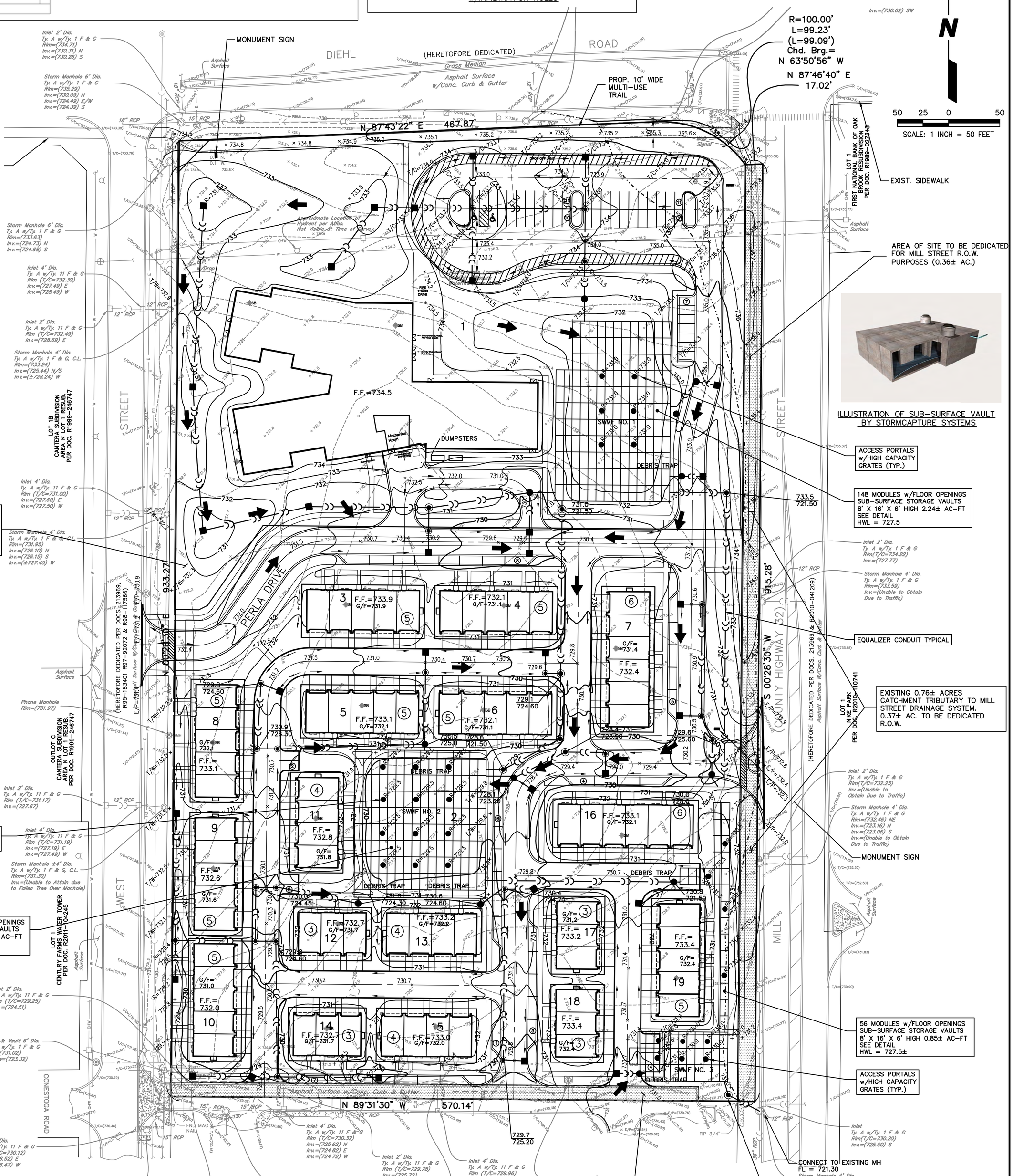


ILLUSTRATION OF SUB-SURFACE VAULT
BY STORMCAPTURE SYSTEMS

N

50 25 0 50
SCALE: 1 INCH = 50 FEET

LEGEND

EXISTING	PROPOSED	DESCRIPTION
◎	◉	MANHOLE
○	●	CATCH BASIN/DEBRIS TRAP
□	■	INLET
	⬢	CLEANOUT
	▭	SLOPE INLET BOX
⊣	⊣	HEADWALL
◁	◀	END SECTION
CC	CC	STORM SEWER
C C	C C	SANITARY SEWER
W	W	WATERMAIN
⊗	◔	VALVE & BOX
⊗	◉	WATER VALVE IN VAULT
♉	♉	FIRE HYDRANT
		CONTOURS
(ELEV)	ELEV	ELEVATIONS
☼	✚	STREET LIGHT
		WATERMAIN PROTECTION
		SILT FENCE INLET PROTECTOR
		TEMPORARY STRAW BALE DITCH CHECK
		SILT FENCE DITCH CHECK
		RIP-RAP
	➡	OVERFLOW ROUTE

LED WALL MOUNTED LUMINAIRE

LED SITE LUMINAIRE w/POLE AND DOUBLE OR SINGLE MAST ARM

CURB LEGEND

- B-6.12 CURB & CUTTER
- MOUNTABLE CURB
- CARRIAGE CURB
- DEPRESSED CURB

LOT 1
HARBORCHASE OF NAPERVILLE SUBDIVISION
PER DOC. R2014-088045

PROPOSED CONDITION STORMWATER MANAGEMENT SUMMARY

NET DEVELOPMENT AREA OF PROJECT SITE PLUS ROADWAY DEVELOPMENT	11.94± AC.
ALLOWABLE RELEASE RATE	1.19 cfs
BULLETIN 75 100-YR 24 HOUR STORAGE REQUIRED	5.94 AC.-FT.
STORAGE IN SUB-SURFACE MODULES	5.27± AC.-FT.
IMPERVIOUS AREA OF DEVELOPMENT SITE	6.4± AC.-FT.
PCBMP VOLUME REQUIRED	0.67± AC.-FT.
PCBMP VOLUME PROVIDED	0.72± AC.-FT.

EXISTING CONDITION DRAINAGE ANALYSIS

TOTAL NET EXISTING CONDITION AREA OF SITE	12.35 AC.±
AREA OF SITE TRIBUTARY TO MILL STREET	0.39± AC.±
AREA OF SITE TRIBUTARY TO WEST STREET OR HARBOR CHASE	11.96± AC.±

PREPARED FOR:
VRUTTHI LLC
3644 WHITE EAGLE DRIVE
NAPERVILLE, ILLINOIS 60564
(630) 803-5768

PREPARED BY:
CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
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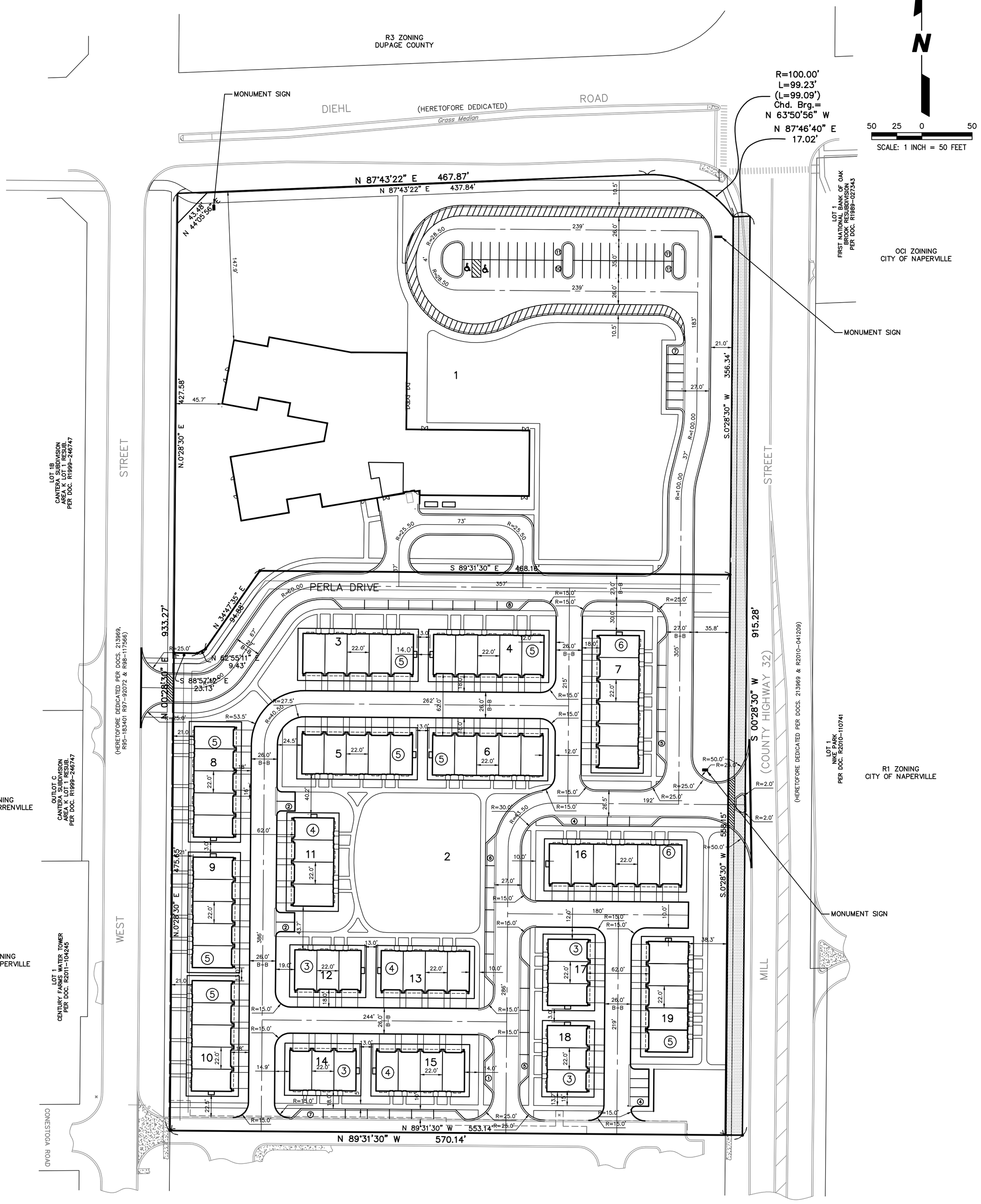
E-Mail: info@cemcon.com Website: www.cemcon.com

DISC NO.: 904426 FILE NAME: PREOVER
DRAWN BY: KMS FLD. BK. / PG. NO.: ------
COMPLETION DATE: 09-08-22 JOB NO.: 904.426
XREF : TOPO PROJECT MANAGER : RWB
REV.: 12-13-22/KMS ENTIRE PLAN REVISED, SHEET 2 ADDED FOR CLARITY, 01-23-23/KMS, 02-14-23/KMS

PRELIMINARY ENGINEERING PLAN FOR THE PROSPERITA & ORION STEM SCHOOLS
CITY OF NAPERVILLE PROJECT NO.: 22-10000097

PLOT FILE CREATED: 2/14/2023 BY: KRISTIN STAERKEL DRAWING PATH: P:\904426\DWG\ENG\DRAWINGS\PRELIMINARY\PREOVER.DWG



LOT 1
HARBORCHASE OF NAPERVILLE SUBDIVISION
PER DOC. R2014-088045

OCI ZOINING
CITY OF NAPERVILLE

PREPARED FOR:

VRUTTHI LLC
3644 WHITE EAGLE DRIVE
NAPERVILLE, ILLINOIS 60564
(630) 803-5768

PREPARED BY:

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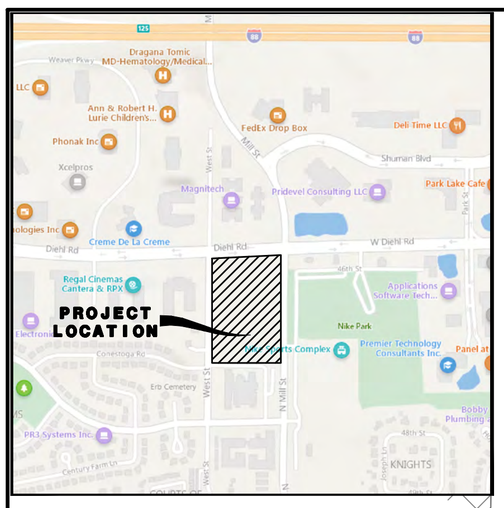
DISC NO.: 904426 FILE NAME: PREOVER
DRAWN BY: PRP FLD. BK. / PG. NO.: -----
COMPLETION DATE: 09-21-22 JOB NO.: 904.426
XREF : TOPO PROJECT MANAGER : RWB
REV.: 12-13-22/KMS ENTIRE PLAN REVISED, SHEET 3 ADDED FOR CLARITY, 01-23-23/KMS, 02-14-23/KMS

PRELIMINARY SITE PLAN FOR
THE PROSPERITA & ORION STEM SCHOOLS
CITY OF NAPERVILLE PROJECT NO.: 22-10000097

PLOT FILE CREATED: 2/14/2023 BY: KRISTIN STAERKEL DRAWING PATH: P:\904426\DWG\ENG\DRAWINGS\PRELIMINARY\PREOVER.DWG

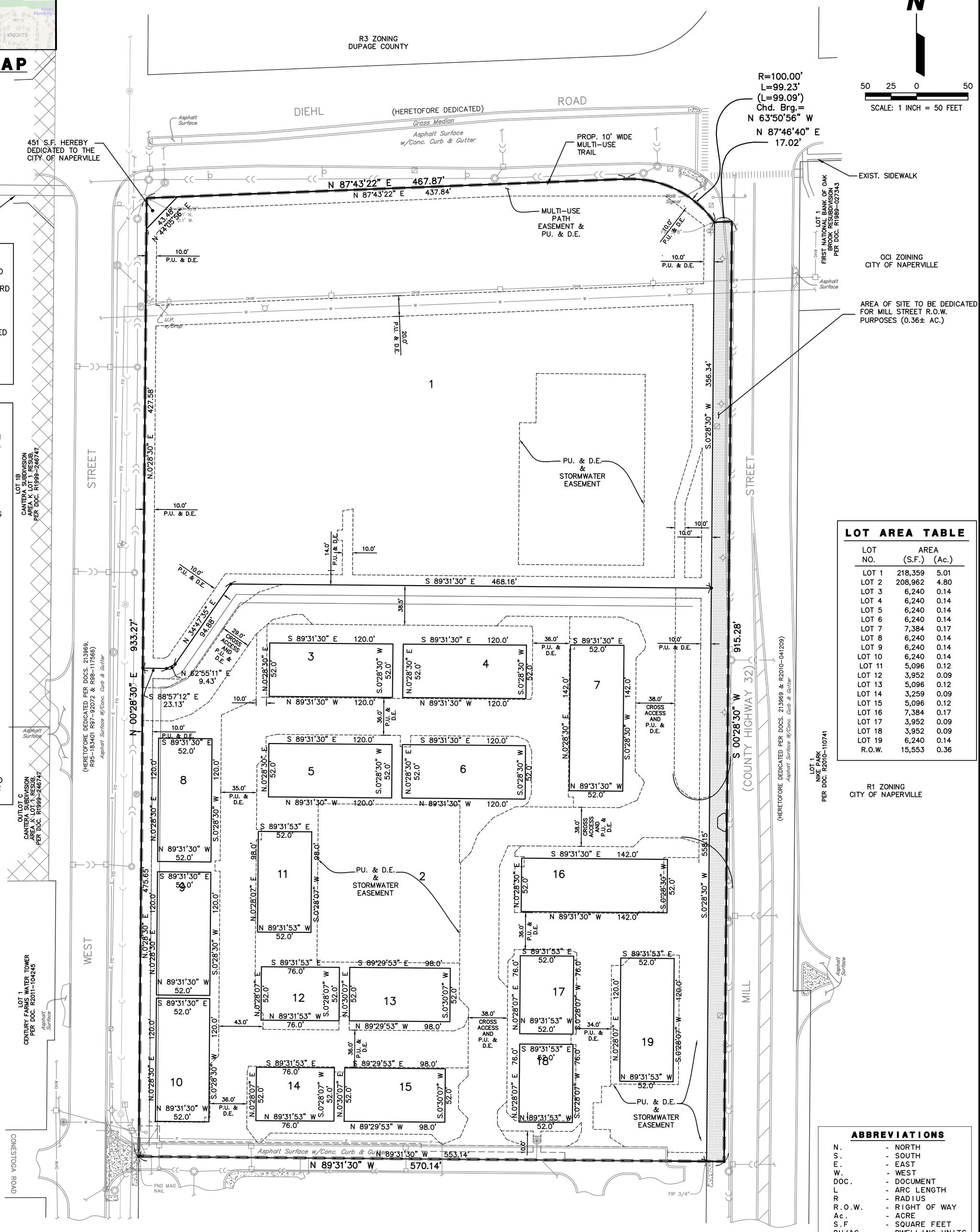
PRELIMINARY PLAT OF SUBDIVISION
FOR
THE PROSPERITA & ORION STEM SCHOOL



LOCATION MAP

;OVERALL PARCEL DESCRIPTION

THAT PART OF THE SOUTH HALF OF SECTION 1 AND THE NORTH HALF OF SECTION 12, TOWNSHIP 38 NORTH, RANGE 9 EAST OF THE THIRD PRINCIPAL MERIDIAN BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: BEGINNING AT THE NORTHWEST CORNER OF LOT 1 IN THE FINAL PLAT OF SUBDIVISION FOR HARBORCHASE OF NAPERVILLE RECORDED AS DOCUMENT R2014–088045 SAID POINT ALSO BEING ON THE EAST LINE OF WEST STREET DEDICATED PER DOCUMENTS R95–183401, R97–92072 AND R98–117566; THENCE NORTH.0 DEGREES 28 MINUTES 30 SECONDS EAST 933.27 FEET ALONG SAID EAST LINE OF WEST STREET TO A POINT ON THE SOUTH LINE OF LAND CONVEYED TO THE COUNTY OF DUPAGE FOR DIEHL ROAD BY WARRANTY DEED RECORDED JULY 14, 1989 AS DOCUMENT R89–084247; THENCE NORTH 87 DEGREES 43 MINUTES 22 SECONDS EAST 467.87 FEET ALONG SAID SOUTH LINE TO A POINT OF CURVATURE; THENCE SOUTHEASTERLY 99.23 FEET ALONG A CURVE TO THE RIGHT HAVING A RADIUS OF 100.0 FEET AND A CHORD BEARING NORTH 63 DEGREES 50 MINUTES 56 SECONDS WEST; THENCE NORTH 87 DEGREES 46 MINUTES 40 SECONDS EAST 17.02 FEET TO A POINT ON THE WESTERLY LINE OF MILL STREET (COUNTY HIGHWAY 32) DEDICATED PER DOCUMENTS 213969 AND R2010–041209; THENCE SOUTH.0 DEGREES 28 MINUTES 30 SECONDS WEST 915.28 FEET ALONG SAID WESTERLY LINE TO THE NORTHEAST CORNER OF LOT 1 IN THE AFOREMENTIONED HARBORCHASE OF NAPERVILLE; THENCE NORTH 89 DEGREES 31 MINUTES 30 SECONDS WEST 570.14 ALONG THE NORTH LINE OF SAID LOT 1 TO THE POINT OF BEGINNING, ALL IN DUPAGE COUNTY, ILLINOIS.



50 25 0 50
SCALE: 1 INCH = 50 FEET

BENCHMARKS

NAPERVILLE BM 526 – FLANGE ENCASED ROD LOCATED NEAR THE SOUTHEAST CORNER OF THE INTERSECTION OF OXFORD LANE AND 75TH STREET.

ELEVATION = 681.48 (NAVD 88)

NAPERVILLE BM 1506 – FLANGE ENCASED ROD LOCATED NEAR THE NORTHWEST CORNER OF THE INTERSECTION OF MILL STREET AND 5TH AVENUE.

ELEVATION = 690.61 (NAVD 88)

NOTES

1. ADDITIONAL P.U. & D.E. EASEMENTS MAY BE REQUIRED ON FINAL PLATS BASED ON UTILITY SIZE AND LOCATIONS FROM FINAL ENGINEERING.
2. A BLANKET STYLE STORMWATER MANAGEMENT EASEMENT WILL BE GRANTED ON ALL STORMWATER MANAGEMENT AREAS AND STORMWATER OVERFLOW ROUTES.
3. DIMENSIONS SHOWN ALONG CURVED LINES ARE ARC DISTANCES.
4. ALL RIGHT–OF–WAYS ARE TO BE PUBLIC DEDICATIONS.
5. ALL UTILITY PIPES AND MAINS SHALL BE PUBLICLY OWNED AND MAINTAINED.
6. ALL EASEMENTS DEPICTED ON THIS PLAT WILL BE GRANTED ON THE FINAL SUBDIVISION PLATS (UNLESS OTHERWISE NOTED)
7. ALL EASEMENTS ON THE PLAT MAP ARE FOR PUBLIC UTILITIES AND DRAINAGE PURPOSES (UNLESS OTHERWISE NOTED)
8. STORMWATER MANAGEMENT EASEMENTS WILL BE GRANTED ON THE FINAL SUBDIVISION PLATS (UNLESS OTHERWISE NOTED)
9. STORMWATER STORAGE VOLUMES TO BE PROVIDED AND THE DESIGN OF STORMWATER MANAGEMENT FACILITIES SHALL BE IN ACCORDANCE WITH CITY OF NAPERVILLE AND DUPAGE COUNTY REQUIREMENTS.
10. EASEMENTS TO BE PROVIDED PER CITY AND UTILITY COMPANY REQUIREMENTS.
11. FOR PROPOSED CONTOURS, GRADES, UTILITIES, STREETS, AND WALLS REFER TO THE PRELIMINARY ENGINEERING PLAN FOR THIS DEVELOPMENT.

LOT AREA TABLE

LOT NO.	AREA (S.F.)	(Ac.)
LOT 1	218,359	5.01
LOT 2	208,962	4.80
LOT 3	6,240	0.14
LOT 4	6,240	0.14
LOT 5	6,240	0.14
LOT 6	6,240	0.14
LOT 7	7,384	0.17
LOT 8	6,240	0.14
LOT 9	6,240	0.14
LOT 10	6,240	0.14
LOT 11	5,096	0.12
LOT 12	3,952	0.09
LOT 13	5,096	0.12
LOT 14	3,259	0.09
LOT 15	5,096	0.12
LOT 16	7,384	0.17
LOT 17	3,952	0.09
LOT 18	3,952	0.09
LOT 19	6,240	0.14
R.O.W.	15,553	0.36

ABBREVIATIONS

N.	- NORTH
S.	- SOUTH
E.	- EAST
W.	- WEST
DOC.	- DOCUMENT
L	- ARC LENGTH
R	- RADIUS
R.O.W.	- RIGHT OF WAY
Ac.	- ACRE
S.F	- SQUARE FEET
DU/AC	- DWELLING UNITS PER ACRE
B/C	- BACK OF CURB
B-B	- BACK TO BACK
MIN.	- MINIMUM
TYP.	- TYPICAL

PERMANENT TAX INDEX NUMBERS

07–01–401–012	07–01–405–032
07–01–401–014	07–01–405–033
07–01–401–016	07–01–405–034
07–01–401–017	07–01–406–010
07–01–402–013	07–01–406–011
07–01–402–016	07–01–406–012
07–01–402–018	07–01–406–013
07–01–402–019	07–01–406–014
07–01–405–002	07–01–406–015
07–01–405–003	07–01–406–028
07–01–405–004	07–01–406–029
07–01–405–005	07–01–406–030
07–01–405–006	07–01–406–032
07–01–405–007	07–01–406–033
07–01–405–024	07–01–406–034
07–01–405–026	07–01–406–035
07–01–405–027	07–01–406–036
07–01–405–029	07–01–406–037
07–01–405–030	07–12–200–030
07–01–405–031	07–12–201–034

● - IRON PIPE

CURB LEGEND

- B-6.12 CURB & CUTTER
- MOUNTABLE CURB
- CARRIAGE CURB
- DEPRESSED CURB

LINE LEGEND

- ADJACENT LOT LINE/PROPERTY LINE (Light Solid Line)
- SUBDIVISION BOUNDARY LINE (Heavy Solid Line)
- LOT LINE/PROPERTY LINE (Solid Line)
- EASEMENT LINE/LIMITS OF EASEMENT (Short Dashed Line)
- EXISTING EASEMENT LINE (Dashed Dotted Line)
- CENTERLINE (Single Dashed Lines)
- EXISTING CORPORATE LIMITS OF THE CITY OF NAPERVILLE (Heavy Dashed Line)
- CITY OF WARRENVILLE

LOT DIMENSIONS & AREAS ARE APPROXIMATIONS & WILL VARY AT TIME OF FINAL PLATTING.

PREPARED FOR:
VRUTTHI LLC
3644 WHITE EAGLE DRIVE
NAPERVILLE, ILLINOIS 60564
(630) 803–5768

PREPARED BY:

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PRELIMINARY PLAT OF SUBDIVISION FOR THE PROSPERITA & ORION STEM SCHOOLS
CITY OF NAPERVILLE PROJECT NO.: 22-10000097

PLOT FILE CREATED: 2/14/2023 BY: KRISTIN STAERKEL DRAWING PATH: P:\904426\DWG\ENG\DRAWINGS\PRELIMINARY\PREOVER.DWG

EXHIBIT C

SOILS INVESTIGATION REPORT BY RUBINO ENGINEERING, INC. AND PERMEABILITY RATES

REPORT TRANSMITTAL

August 19, 2022

To: Selvei Rajkumar
Vrutthi LLC & Brio Estates LLC
2719 Beebe Drive
Naperville, Illinois 60564

Re: **Preliminary Geotechnical Engineering Services Report**
Proposed Townhomes & STEM Academy
SW Corner of Diehl Road and Mill Street
Naperville, Illinois 60563

Rubino Report No. G22.148

Via email: selvei.rajkumar@gmail.com

Dear Ms. Rajkumar,

Rubino Engineering, Inc. (Rubino) is pleased to submit our Preliminary Geotechnical Engineering Services Report for the proposed Townhomes & STEM Academy in Naperville, Illinois.

Report Description

Enclosed is the Preliminary Geotechnical Engineering Services Report including results of field and laboratory testing, as well as preliminary recommendations for foundation design, pavement design, and general site development.

Authorization and Correspondence History

- Rubino Proposal No. Q22.256g_REV2 dated July 21, 2022; Signed and authorized by Selvei Rajkumar of Vrutthi, LLC on July 23, 2022.

Closing

Rubino appreciates the opportunity to provide preliminary geotechnical services for this project and we look forward to continued participation during the design and in future construction phases of this project.

If you have questions pertaining to this report, or if Rubino may be of further service, please contact our office at (847) 931-1555.

Respectfully submitted,
RUBINO ENGINEERING, INC.

Michelle A. Lipinski, PE
President

michelle.lipinski@rubinoeng.com

MAL/file/ Enclosures

Preliminary Geotechnical Engineering Services Report

PROPOSED TOWNHOMES & STEM ACADEMY

DIEHL ROAD AND MILL STREET

NAPERVILLE, ILLINOIS

RUBINO PROJECT NO. G22.148

Drilling
Laboratory Testing
Geotechnical Analysis

PREPARED BY:

DAVID LEWENDOWSKI, PE

rubino ENGINEERING INC.

Michelle A. Lipinski, PE
President
IL No. 062-061241, Exp. 11/30/23

PREPARED FOR:

VRUTTHI LLC & BRIO ESTATES LLC

2719 BEEBE DRIVE
NAPERVILLE, ILLINOIS

AUGUST 19, 2022

TABLE OF CONTENTS

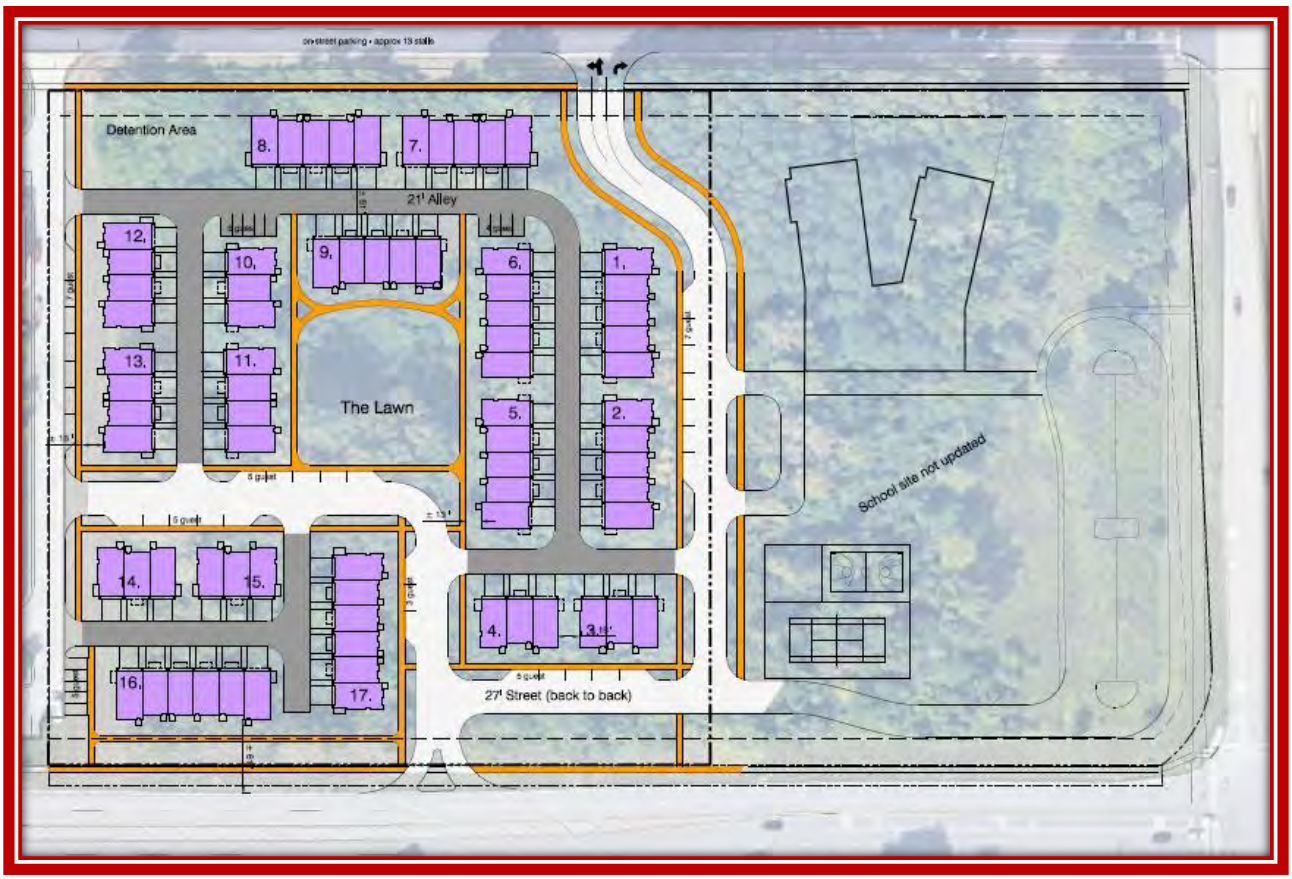
PROJECT INFORMATION

Rubino Engineering, Inc. (Rubino) understands that Vrutthi is planning to construct a townhome development at the southern half of the site. In addition, Brio Estates is planning to build a STEM Academy at the northern part of the site.

The proposed townhome structures will be 3-stories in height with probable slab-on-grade construction. Each townhome unit will have dimensions of 20 feet by 40 feet with an attached 2-car garage. One townhome building will include 3 or 5 townhome units. Therefore, a 3-unit building will have plan dimensions of 40 feet by 60 feet and 5-unit building will be 40 feet by 100 feet. Per the preliminary site plan, there will be a total of 17 buildings in the new development.

The proposed school building will be 2-stories in height with probable slab-on-grade construction. The building is a V-shape. The plan area is on the order of 15,000 to 20,000 square feet.

A Draft Site Plan provided by the client is shown in the image below.



A site grading plan was not received but is based on the following:

- Site grading including cuts being less than 2 feet and fills being less than 2 feet.
- Finished floor elevations of proposed buildings not available at the time of this preliminary report.

Structural loads were not received; however, this report is based on the following:

- Individual column loads not exceeding 100 kips
- Bearing wall loads not exceeding 5 kips per lineal foot (klf)
- Grade-supported slab live loads not exceeding 125 psf.
- Site grading including cuts and fills being less than 2 feet

Documents received:

- Preliminary Site Plan received from Vrutthi LLC & Brio Estates LLCon July 13, 2022
- Draft Site Plan received from Vrutthi LLC & Brio Estates LLC on July 27, 2022
- Topographic Survey received from Cemcon, Ltd., prepared by Cemcon, dated July 8, 2022

Project Correspondence:

- RFP phone call from Selvei Rajkumar of Vrutthi LLC & Brio Estates LLCon July 19, 2022
- Authorization to proceed in the form of signed Proposal No. Q22.256g_REV2 on July 23, 2022
- Structural loads not provided to date

The preliminary geotechnical recommendations presented in this report are based on the available project information and the subsurface materials described in this report. If any of the information on which this report is based is incorrect, please inform Rubino in writing so that we may amend the recommendations presented in this report (if appropriate, and if desired by the client). Rubino will not be responsible for the implementation of our recommendations if we are not notified of changes in the project.

Purpose / Scope of Services

The purpose of this study was to explore the subsurface conditions at the site in order to prepare preliminary geotechnical recommendations for foundation design and general site development for the proposed construction. Rubino's scope of services included the following drilling program:

Table 1: Drilling Scope

NUMBER OF BORINGS	DEPTH (FEET BEG*)	LOCATION
B-03, B-07, B-12, and B-16	25	Proposed Townhomes
B-19	25	Proposed STEM Academy

*BEG = below existing grade

Representative soil samples obtained during the field exploration program were transported to the laboratory for additional classification and laboratory testing.

This preliminary report briefly outlines the following:

- *Summary of client-provided project information and report basis*
- *Overview of encountered subsurface conditions*
- *Overview of field and laboratory tests performed including results*
- *Preliminary geotechnical recommendations pertaining to:*
  - *Subgrade preparation and cut / fill recommendations*
  - *Foundations, including suitable foundation type(s), allowable bearing pressure(s), and estimated settlement*
  - *Seismic design site classification parameters per International Building Code (IBC) 2018*
  - *Utility Installation and backfill recommendations*
  - *Dewatering*
- *Construction considerations, including temporary excavation and construction control of water*

DRILLING, FIELD, AND LABORATORY TEST PROCEDURES

Rubino selected the number of borings and the boring depths. Rubino located the borings in the field based on the Draft Site Plan and existing aerial imagery (Google Earth Pro). Rubino generated GPS coordinates for the boring locations. Subsequently, Rubino staked the borings with a manual GPS device. The borings were advanced utilizing 3 ¼ inch inside-diameter, hollow stem auger drilling methods and soil samples were routinely obtained during the drilling process.

Selected soil samples were tested in the laboratory to determine material properties for this report. Drilling, sampling, and laboratory tests were accomplished in general accordance with ASTM procedures. The following items are further described in the Appendix of this report.

- *Field Penetration Tests and Split-Barrel Sampling of Soils (ASTM D1586)*
- *Field Water Level Measurements*
- *Laboratory Determination of Water (Moisture) Content of Soil by Mass (ASTM D2216)*
- *Laboratory Determination of Atterberg Limits (ASTM D4318)*
- *Laboratory Organic Content by Loss on Ignition (ASTM D2974)*

The laboratory testing program was conducted in general accordance with applicable ASTM specifications. The results of these tests are to be found on the accompanying boring logs located in the Appendix.

SUMMARY OF GEOTECHNICAL CONSIDERATIONS

The main geotechnical design and construction considerations at this site are:

SUBSURFACE SOILS

- **Subgrade soils** generally consisted of natural brown to gray, stiff to very stiff silty clay soils underlain by medium dense to dense, occasionally very dense, granular soils. However, strata of **high plasticity clay soils** were encountered in the upper profile in two borings. See the *Subsurface Conditions* and *Expansive Soil Discussion* sections for more detailed information.

BUILDING STRUCTURE

- **Shallow Foundations** are a possible foundation design option at this site with the possibility of undercuts. See *Foundation Recommendations* section for more detailed information.

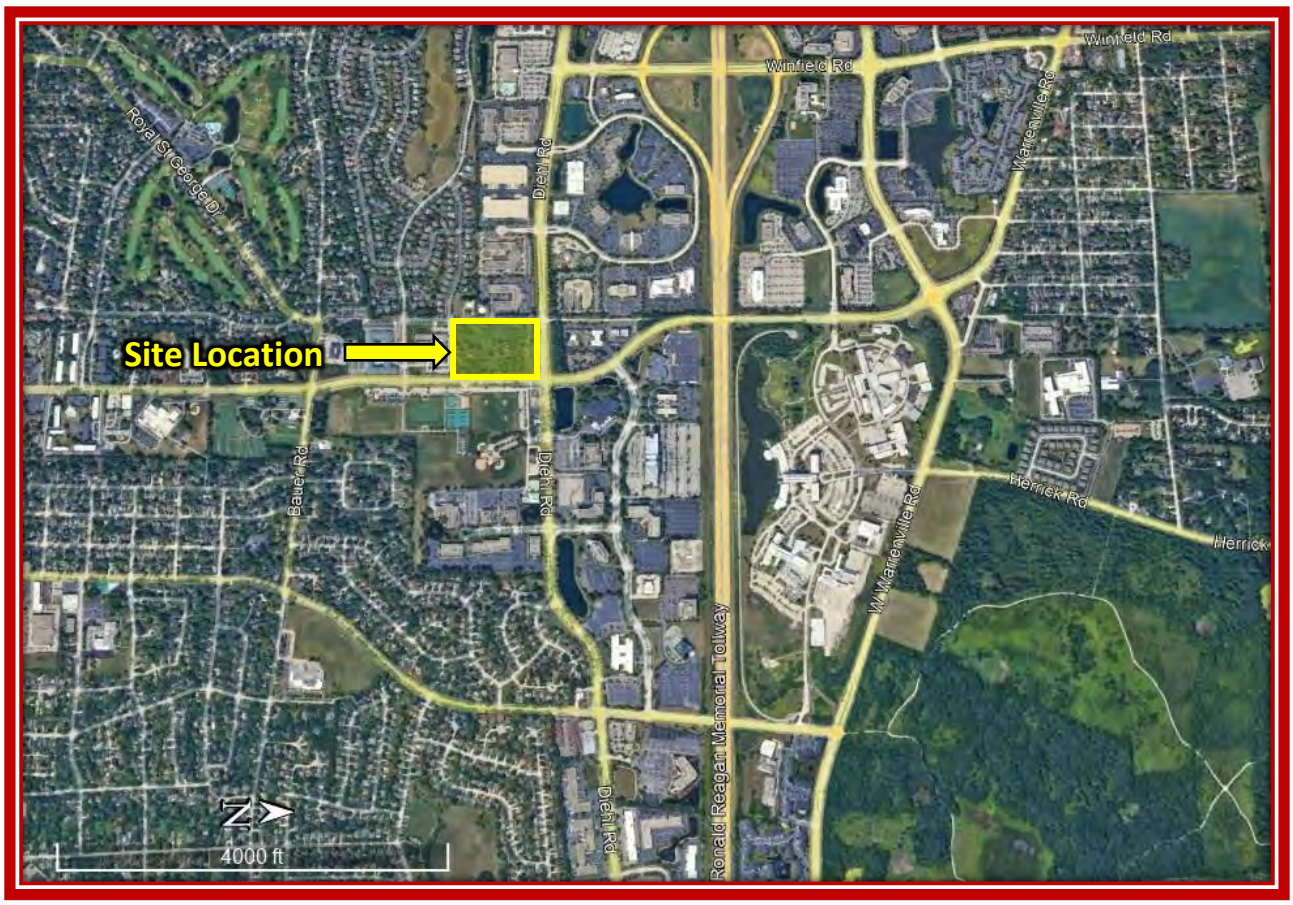
The geotechnical-related preliminary recommendations in this report are presented based on the subsurface conditions encountered and Rubino's understanding of the project. Should changes in the project criteria occur, a review must be made by Rubino to determine if modifications to our recommendations will be necessary.

SITE AND SUBSURFACE CONDITIONS

Site Location and Description

The subject site is located southwest of the intersection of N. Mill Street and Diehl Road in Naperville, Illinois. The site is reported to be about 12 ½ acres in area. Per Google Earth Pro imagery dating back to the year 1994, the site was undeveloped and covered with trees and vegetation.

Per the Topographic Survey provided, the elevations range from approximately EL. 738 feet at the northeast site corner to about EL. 728 feet at the southwest site corner. Therefore, the terrain slopes generally downward to the south / southwest. An aerial image from Google Earth Pro is shown on the following page.



The midpoint of the project site has an approximate latitude and longitude of 41.7998º and -88.1560º, respectively.

Subsurface Conditions

- The **topsoil** thickness ranged between 2 and 14 inches
- The native **silty clay** soils were generally stiff to very stiff in consistency
- The native **silt** soils were generally stiff to very stiff in consistency
- The **granular** soils were generally medium dense to very dense in apparent density

Table 2: Subsurface Conditions Summary

ELEVATION RANGE (FEET)	SOIL DESCRIPTION	SPT N-VALUES (BLOWS PER FOOT)	MOISTURE CONTENT (%)	ESTIMATED SHEAR STRENGTH
Borings B-03, B-07, B-12, B-16, and B-19				
731 - 720	Stiff to very stiff, light brown and brown silty CLAY	8 - 20	12 - 21	c = 1,200 to 3,000 psf
730 – 727 ½	Stiff, dark brown-black silty CLAY *(B-19)*	10 - 11	19 - 27	c = 1,500 to 1,650 psf
730 - 725	Stiff to very stiff, brown / brown and gray HIGH PLASTICITY SILTY CLAY	10 - 22	21 - 27	c = 1,500 to 3,000 psf
728 ½ – 720 ½	Stiff to very stiff, light brown SILT	12 - 20	9 - 20	c = 1,800 - 3,000 psf
9 ½ - 25	Medium dense to very dense brown gravelly SAND to SAND	16 – 50+	3 - 8	ϕ = 32° - 45°

*BEG = Below existing grade

The native soils were visually classified as silty clay (CL), high plasticity silty clay (CH), silt (ML), and poorly graded sand (SP) according to the Unified Soil Classification System (USCS). The above table is a general summary of subsurface conditions. Please refer to the boring logs for more detailed information.

Estimated shear strength of clay soils is based on empirical correlations using N-values, moisture content, and unconfined compressive strength.

Groundwater Conditions

Groundwater was not observed in the borings during the soil sampling operations. It should be noted that elevated moisture contents were found in some of the silty clay and silt soils at an approximate depth range of 6 to 10 feet BEG (EL. 726 - 721± feet). These moisture conditions may indicate that the soils are saturated. Water may seep into open trenches where saturated soils are encountered.

It should be noted that fluctuations in the groundwater level should be anticipated throughout the year depending on variations in climatological conditions and other factors not apparent at the time the borings were performed. Groundwater may not have been observed in some areas due to the low permeability of soils. Additionally, discontinuous zones of perched water may exist within the soils. The possibility of groundwater level fluctuation should be considered when developing the design and construction plans for the project.

PRELIMINARY EVALUATION AND RECOMMENDATIONS

The geotechnical-related preliminary recommendations in this report are presented based on the subsurface conditions encountered and Rubino's understanding of the project. Should changes in the project criteria occur, a review must be made by Rubino to determine if modifications to our recommendations will be necessary.

Topsoil Discussion

Topsoil materials as described in this report have not been analyzed for quality according to any minimum specifications. If topsoil is to be imported to or exported from this site, Rubino recommends that it meet the minimum specifications defined in **Section 1081.05** of the, "Standard Specifications for Road and Bridge Construction," adopted by the Illinois Department of Transportation, January 1st, 2022.

Rubino has reported topsoil thicknesses at each boring based on visual observation of surficial soils. Surficial topsoil thickness was visually observed to be between approximately 10 and 14 inches at most boring locations.

Expansive Soil Discussion

Soils with moderate expansive properties were observed in B-12 and B-19 to elevations ranging from 660 ½ - 654 feet (approximately ¼ to 7 feet below existing grade) during the drilling operations. There is a possibility that expansive soils could be encountered at other locations on the site. **Rubino recommends that the outstanding borings on the Boring Location Plan in the Appendix be completed prior to final design and construction.**

Table 3: Expansive Soils by Location

BORING NO. / LOCATION	SOIL DESCRIPTION	ELEVATION RANGE (FEET)	LIQUID LIMIT (LL)	PLASTICITY INDEX (PI)
B-12	Very stiff, brown HIGH PLASTICITY SILTY CLAY	730 – 726 ½	54	26
B-19	Stiff, brown and gray HIGH PLASTICITY SILTY CLAY	727 - 725	57	28

Expansive soils are considered unsuitable for construction due to their tendency to absorb moisture from the ground or atmosphere which causes swelling and, in turn, an increase in volume. Soils with Liquid Limits greater than 50% (LL > 50%) may exhibit highly plastic behavior and may be considered to have expansive properties (IDOT Manual 2015).

Expansive soils have high frost susceptibility and may have higher moisture contents which could contribute to failed proof-rolls, however expansive soils are difficult to visually delineate in the field during construction. For that reason, **Rubino recommends that surface and subsurface drainage plans be designed to mitigate moisture changes of the soil during operation of the roadway.**

Where expansive soils are encountered, subgrade treatment options may include, but are not limited to:

- Provide surface and subsurface drainage techniques to reduce moisture changes in the soil.
- Removal and replacement (recommendations presented herein)
- Treatment with additives (such as lime stabilization) to reduce the plasticity of the material

Site Preparation Recommendations

The following comments are considered site-specific. To reference general subgrade preparation recommendations and compaction recommendations, please refer to the Appendix of this report.

- During construction, the site should be stripped of existing concrete, foundations, abandoned utilities, and pavement sections including asphalt, subbase, and curbs if applicable.

- The presence of high plasticity soils in the upper soils may require undercutting and replacement or chemical treatment to achieve stability for fill placement or support of structural elements.

- Please note that silty clay subgrade soils are sensitive to moisture and can be easily disturbed by precipitation, groundwater, or construction equipment. Therefore, extra care should be used to avoid disturbing these soils during construction activities.

Preliminary Shallow Foundation Recommendations

Design – Soil Bearing Pressure

Based the borings performed up to this point, the proposed structures can be supported on shallow, spread footing foundations. Rubino recommends that foundations extend through high plasticity clays and be supported on the natural stiff to very stiff silty clay soils or compacted and documented structural fill over suitable natural soils. Preliminary bearing capacities range from approximately 2,500 to 4,000 psf. Additional borings in the individual building plans and final grades are required to provide allowable bearing pressures for specific structures.

Maximum net allowable soil bearing pressures based on dead load plus design live load for sizing the shallow foundations.

Design / Construction – Frost Protection

Exterior footings should be located at a depth of at least 3 ½ feet below the outside final exterior grades to provide adequate frost protection. If the building is constructed during winter months

or if the footings will likely be subjected to freezing temperatures after construction is completed, then the footings should be protected from freezing.

Interior footings should be founded at least 2 feet below the final floor slab level for proper confinement of the bearing soils or as recommended above. Both depths should bear on soils described above.

- **Fine-grained soils such as silts and clays are susceptible to moisture fluctuations and freezing weather**, therefore concrete for the foundations should ideally be poured right after the foundations have been dug and formed if rain is being predicted. Otherwise, foundations that have already been excavated should be protected from rain or surface runoff water.

Design – Settlement Estimate

Given that final grades and structural loading are not available at the time of this preliminary report, settlement estimates cannot be provided at this time. Once the aforementioned data is available and additional borings are performed, settlement analyses can be performed.

Dewatering Recommendations

Dewatering may be necessary during excavation of soils due to precipitation, surficial runoff, and the presence of sand seams or other conditions not apparent at the time of drilling. Shoring or trench boxes may be required where the soils are granular, saturated, or have low shear strengths. Please reference the anticipated groundwater levels on the attached boring logs and in the *Groundwater Conditions* section of this report. Additional borings across the site may provide more information about the likelihood of groundwater infiltration.

Seismic Site Classification

Per the City of Naperville website, the 2018 International Building Code (IBC) is in use. IBC 2018 requires a site class for the calculation of earthquake design forces. This class is a function of soil type (i.e., depth of soil and strata types). Given the limited number of borings and the absence of final grades, Site Class “D” is the preliminary recommendation for the proposed structures at this site. After additional borings are performed in the proposed building plans and a site grading plan is provided, analyses can be performed to more accurately determine the site class.

Utility Installation and Backfill Recommendations

If granular material is used for the backfill of the utility trench, the **granular material should have a gradation that will filter protect the backfill material from the adjacent soils**. If this gradation is not available, a geosynthetic non-woven filter fabric should be used to reduce the potential for the migration of fines into the backfill material. Granular backfill material shall be compacted to meet requirements outlined in Appendix C.

Recommendations for Additional Testing

Given the size of the site and the numerous proposed structures, Rubino recommends that the outstanding borings on the Boring Location Plan in the Appendix be completed. The additional subsurface data from the borings will allow Rubino to more accurately provide foundation recommendations for the proposed structures. These recommendations would be provided in a final geotechnical report. In addition, once the structural loads and grading plan are finalized, please notify Rubino so that we can review our preliminary recommendations and use the additional subsurface data for the direct use of the structure and development of the site. Changes in building locations, foundation depth, and structural loading can affect the geotechnical recommendations for this site.

During construction, Rubino recommends that one of our representatives be onsite for typical **observations and documentation** of exposed subgrade for trench excavation, support of floor slabs, and foundations, including proofrolling and penetrometer testing.

CLOSING

The preliminary recommendations submitted are based on the available subsurface information obtained by Rubino Engineering, Inc. and design details furnished by Vrutthi LLC & Brio Estates LLC for the proposed project. Rubino recommends that the outstanding borings be completed to better evaluate the subsurface conditions for the proposed structures at this site. Subsequently, a final geotechnical report can be issued. If there are any revisions to the plans for this project or if deviations from the subsurface conditions noted in this preliminary report (or final report) are encountered during construction, Rubino should be notified immediately to determine if changes in the foundation recommendations are required. If Rubino is not retained to perform these functions, we will not be responsible for the impact of those conditions on the project.

The scope of services did not include an environmental assessment to determine the presence or absence of wetlands, or hazardous or toxic materials in the soil, bedrock, surface water, groundwater or air on, below, or around this site. Any statements in this report and/or on the boring logs regarding odors, colors, and/or unusual or suspicious items or conditions are strictly for informational purposes.

After the plans and specifications are more complete, the geotechnical engineer should be retained and provided the opportunity to review the final design plans and specifications to check that our engineering recommendations have been properly incorporated into the design documents. At this time, it may be necessary to submit supplementary recommendations. This report has been prepared for the exclusive use of Vrutthi LLC & Brio Estates LLC and their consultants for the specific application to the proposed Townhomes and STEM Academy in Naperville, Illinois.

Appendix A – Drilling, Field, and Laboratory Test Procedures

ASTM D1586 Penetration Tests and Split-Barrel Sampling of Soils

During the sampling procedure, Standard Penetration Tests (SPT's) were performed at regular intervals to obtain the standard penetration (N-value) of the soil. The results of the standard penetration test are used to estimate the relative strength and compressibility of the soil profile components through empirical correlations to the soils' relative density and consistency. The split-barrel sampler obtains a soil sample for classification purposes and laboratory testing, as appropriate for the type of soil obtained.

Water Level Measurements

Water level observations were attempted during and upon completion of the drilling operation using a 100-foot tape measure. The depths of observed water levels in the boreholes are noted on the boring logs presented in the appendix of this report. In the borings where water is unable to be observed during the field activities, in relatively impervious soils, the accurate determination of the groundwater elevation may not be possible even after several days of observation. Seasonal variations, temperature and recent rainfall conditions may influence the levels of the groundwater table and volumes of water will depend on the permeability of the soils.

Ground Surface Elevations

The Topographic Survey was prepared by Cemcon. Rubino interpolated the ground surface elevations at the boring locations from this figure.

ASTM D2216 Water (Moisture) Content of Soil by Mass (Laboratory)

The water content is an important index property used in expressing the phase relationship of solids, water, and air in a given volume of material and can be used to correlate soil behavior with its index properties. In fine grained cohesive soils, the behavior of a given soil type often depends on its natural water content. The water content of a cohesive soil along with its liquid and plastic limits as determined by Atterberg Limit testing are used to express the soil's relative consistency or liquidity index.

ASTM D2974 Standard Test Method for Organic Soils using Loss on Ignition (Laboratory)

These test methods cover the measurement of moisture content, ash content, and organic matter in peats and other organic soils, such as organic clays, silts, and mucks. Ash content of a peat or organic soil sample is determined by igniting the oven-dried sample from the moisture content determination in a muffle furnace at 440°C (Method C) or 750°C (Method D). The substance remaining after ignition is the ash. The ash content is expressed as a percentage of the mass of the oven-dried sample. 2.4 Organic matter is determined by subtracting percent ash content from 100.

ASTM D4318 Atterberg Limits (Laboratory)

Atterberg limit testing defines the liquid limit (LL) and plastic limit (PL) states of a given soil. These limits are used to determine the moisture content limits where the soil characteristics changes from behaving more like a fluid on the liquid limit end to where the soil behaves more like individual soil particles on the plastic limit end. The liquid limit is often used to determine if a soil is a low or high plasticity soil. The plasticity index (PI) is difference between the liquid limit and the plastic limit. The plasticity index is used in conjunction with the liquid limit to determine if the material will behave like a silt or clay.

Appendix B – Site Preparation – Clearing & Grubbing

Rubino recommends that unsuitable soils or fill be removed from the site, as applicable. Unsuitable soils or fills can be described as, but are not limited to:

- organic soil / topsoil / plants / trees / shrubs / grass
- frozen soil
- existing asphalt or concrete pavement sections
- existing foundations
- building debris
- existing curbs

Stripping operations should extend a minimum of: **10** feet beyond proposed building limits and **5** feet beyond proposed pavement limits

Exceptions: where property limits allow. Notify geotechnical engineer if there are property boundary limitations. Stripping operations should be monitored and documented by a representative of the geotechnical engineer at the time of construction.

Proofrolling:

After stripping and excavating to the proposed subgrade level, as required, the floor slab areas should be proof-rolled and scarified and compacted to at least 95 percent of the standard Proctor maximum dry density ASTM D 698 for a depth of at least 8 inches below the surface during a period of dry weather.

Proofrolling Equipment:

Tandem-axle dump truck or similar rubber-tired vehicles are acceptable and should be loaded with at least 9 tons per axle.

Benefits of Proofrolling:

- Aids in providing a firm base for compaction of fill soils
- Helps to delineate soft, loose, or disturbed areas that may exist below subgrade level.

Subgrade Stability:

Soils which are observed to rut or deflect excessively (typically greater than 1 inch) under the moving load should either be scarified and re-compacted, or undercut and replaced.
Subgrade soils may be **stabilized** by one of the following **options**:

- **Scarifying and re-compacting** the existing subgrade soil to at least 95% compaction per ASTM D698 Standard Proctor (12-inch depth).
- **Remove and replace** with non-woven filter fabric and 3-inch stone capped with CA-06 stone.
  - A layer of non-woven filter geotextile should be placed between silty clay soil and an open-graded stone.
  - The contractor can also attempt to stabilize the existing subgrade in place by “losing” 3-inch stone into the subgrade until the until the voids of the 3-inch stone are filled with the soft soil and the subgrade “locks up,” showing minimal deflection under a proof-roll.
- **Geogrid and a stone mat** per manufacturer’s installation specifications could reduce the amount of stone required and provide additional lateral support for foundation loads in service.
- **Lime or other chemical additive** stabilization (12 to 14 inches). This can be done as part of a lift structure. Compaction requirements still apply.

Appendix C – Fill Recommendations

In general, fill materials should meet the following:

- Standard Proctor maximum dry density >100 pcf
- Free of organic or other deleterious materials
- Have a maximum particle size no greater than 3 inches
- Have a liquid limit <45 and plasticity index <25
- Testing should include areas at least 5 feet outside the parking area perimeters, if applicable
- Each lift of compacted, engineered fill should be tested and documented by a representative of the geotechnical engineer prior to placement of subsequent lifts
- If a fine-grained silt or clay soil is used for fill (CL or ML), close moisture content control will be essential to achieve the recommended degree of compaction
- If water must be added, it should be uniformly applied and thoroughly mixed into the soil by disking or scarifying

Suitable Soil Classifications:

CL, SC, GW, and SW will generally be suitable for use as structural fill under pavements.

Unsuitable Soil Classifications:

OL, OH, MH, ML, SM, CH and PT should be considered unsuitable.

Structural fill added to the site shall be evaluated in accordance with the following table:

Material Tested	Proctor Type*-1	Min % Dry Density	Placement Moisture Content Range	Frequency of Testing*-2	Maximum Loose Lift Height
Structural Fill (Cohesive & Well-graded Granular)	Standard	98%	-2 to +3 %	1 per 2,500 yd^2 of fill placed	8 inches
Random Fill (non-load bearing)	Standard	95%	-3 to +3 %	1 per 5,000 yd^2 of fill placed	8 inches
Utility Trench Backfill	Standard	95%	-2 to +2 %	1 per 50 LF of fill placed	6 inches

*-1 The test frequency for the laboratory reference shall be one laboratory Proctor or Relative Density test for each material used on the site. If the borrow or source of fill material changes, a new reference moisture/density test should be performed.

*-2A minimum of one test per lift is recommended unless otherwise specified.

Tested fill materials that do not achieve either the required dry density or moisture content range shall be recorded, the location noted, and reported to the Contractor and Owner. A re-test of that area should be performed after the Contractor performs remedial measures. The above test frequencies should be discussed with the contractor prior to starting the work.

The geotechnical engineer of record can only certify work that was performed under their direct observation, or under the observation of a competent person under their specific direction.

Appendix D – Foundation Construction Recommendations

Rubino recommends that soils at the bottom of the footing design elevation be observed, documented, and tested by a representative of Rubino prior to concrete placement to evaluate the consistency of the soils in the field with the geotechnical report findings. The remedial procedures described in the following paragraph can be used to provide suitable foundation support where unsuitable material such as soft or loose soils, existing fill, or organic soils are encountered.

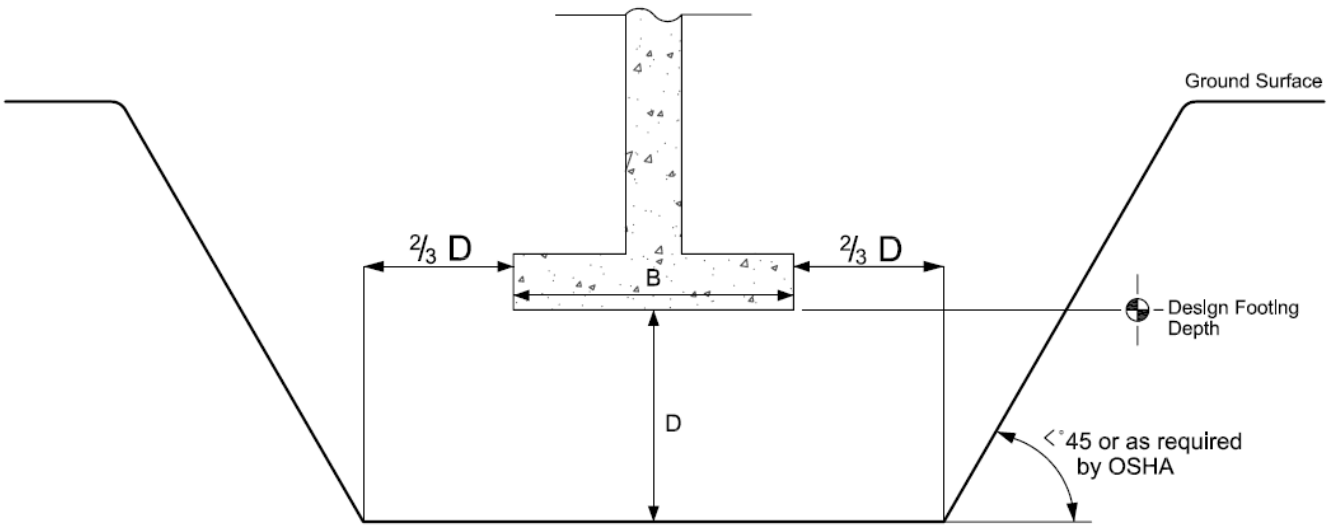
After opening, footing excavations should be observed and concrete placed as quickly as possible to avoid exposure of the footing bottoms to wetting and drying. Surface runoff water should be drained away from the excavations and not be allowed to pond. If possible, the foundation concrete should be placed during the same day the excavation is made. If it is required that footing excavations be left open for more than one day, the soils in the excavation should be protected to reduce evaporation or entry of moisture.

If unsuitable bearing soils are encountered in a footing excavation, the footing should be deepened to competent bearing soil and the footing could be lowered, or an over excavation and backfill procedure could be performed. If an over excavation and backfill procedure will be utilized, it would require widening the deepened excavation in all directions at least 8 inches beyond the edges of the footing for each 12 inches of over excavation depth (See "Over Excavation and Backfill Procedure" diagram below).

The over excavation should then be backfilled in a maximum of 8-inches thick loose lifts with suitable granular fill material, such as ¾ -inch stone with fines (CA-6), compacted to at least 98% of the maximum Standard Proctor dry density (ASTM D 698).

Another alternative is to undercut and refill the unsuitable area with flowable mortar up to the design elevation of the footings. The flowable mortar would serve as a protection to the subgrade during construction of the foundations. In this case, widening the footings is not necessary.

Over Excavation and Backfill Procedure



* Drawing not to scale

Appendix E – Report Limitations

Subsurface Conditions:

The subsurface description is of a generalized nature to highlight the major subsurface stratification features and material characteristics. The boring logs included in the appendix should be reviewed for specific information at individual boring locations. These records include soil descriptions, stratifications, penetration resistances, locations of the samples and laboratory test data as well as water level information. The stratifications shown on the boring logs represent the conditions only at the actual boring locations. Variations may occur and should be expected between boring locations. The stratifications represent the approximate boundary between subsurface materials and the actual transition between layers may be gradual. The samples, which were not altered by laboratory testing, will be retained for up to 60 days from the date of this report and then will be discarded.

Geotechnical Risk:

The concept of risk is an important aspect of the geotechnical evaluation. The primary reason for this is that the analytical methods used to develop geotechnical recommendations do not comprise an exact science. The analytical tools that geotechnical engineers use are generally empirical and must be used in conjunction with engineering judgment and experience. Therefore, the solutions and recommendations presented in the geotechnical evaluation should not be considered risk-free, and more importantly, are not a guarantee that the interaction between the soils and the proposed structure will perform as planned. The engineering recommendations, presented in the preceding section, constitute Rubino's professional estimate of the necessary measures for the proposed structure to perform according to the proposed design based on the information generated and reference during this evaluation, and Rubino's experience in working with these conditions.

Warranty:

The geotechnical engineer warrants that the findings, recommendations, specifications, or professional advice contained herein have been made in accordance with generally accepted professional geotechnical engineering practices in the local area. No other warranties are implied or expressed.

Federal Excavation Regulations:

In Federal Register, Volume 54, No. 209 (October 1989), the United States Department of Labor, Occupational Safety and Health Administration (OSHA) amended its "Construction Standards for Excavations, 29 CFR, part 1926, Subpart P". This document was issued to better ensure the safety of workmen entering trenches or excavations. This federal regulation mandates that all excavations, whether they be utility trenches, basement excavation or footing excavations, be constructed in accordance with the new OSHA guidelines. It is our understanding that these regulations are being strictly enforced and if they are not closely followed, the owner and the contractor could be liable for substantial penalties.

The contractor is solely responsible for designing and constructing stable, temporary excavations and should shore, slope, or bench the sides of the excavations as required to maintain stability of both the excavation sides and bottom. The contractor's "responsible person," as defined in 29 CFR Part 1926, should evaluate the soil exposed in the excavations as part of the contractor's safety procedures. In no case should slope height, slope inclination, or excavation depth, including utility trench excavation depth, exceed those specified in local, state, and federal safety regulations. Rubino is providing this information solely as a service to our client. Rubino is not assuming responsibility for construction site safety or the contractor's activities; such responsibility is not being implied and should not be inferred.

Appendix F – Soil Classification General Notes

DRILLING & SAMPLING SYMBOLS:

SS:	Split Spoon - 1 3/8" I.D., 2" O.D., unless otherwise noted	PS:	Piston Sample
ST:	Thin-Walled Tube - 3" O.D., Unless otherwise noted	WS:	Wash Sample
PM:	Pressuremeter	HA:	Hand Auger
RB:	Rock Bit	HS:	Hollow Stem Auger
DB:	Diamond Bit - 4", N, B	BS:	Bulk Sample

Standard "N" Penetration: Blows per foot of a 140-pound hammer falling 30 inches on a 2-inch O.D. split spoon sampler (SS), except where noted.

WATER LEVEL MEASUREMENT SYMBOLS:
Water levels indicated on the boring logs are the levels measured in the borings at the times indicated. In pervious soils, the indicated levels may reflect the location of groundwater. In low permeability soils, the accurate determination of ground water levels is not possible with only short-term observations.

DESCRIPTIVE SOIL CLASSIFICATION:
Soil Classification is based on the Unified Soil Classification System as defined in ASTM D-2487 and D-2488. Coarse Grained Soils have more than 50% of their dry weight retained on a #200 sieve; they are described as: boulders, cobbles, gravel or sand. Fine Grained Soils have less than 50% of their dry weight retained on a #200 sieve; they are described as: clays, if they are plastic, and silts if they are slightly plastic or non-plastic. Major constituents may be added as modifiers and minor constituents may be added according to the relative proportions based on grain size. In addition to gradation, coarse grained soils are defined on the basis of their relative in-place density and fine-grained soils on the basis of their consistency. Example: Lean clay with sand, trace gravel, stiff (CL); silty sand, trace gravel, medium dense (SM).

CONSISTENCY OF FINE-GRAINED SOILS:

Unconfined Compressive Strength, Qu (tsf)			N-Blows/ft.			Consistency
	<	0.25	< 2			Very Soft
0.25	-	0.5	2	-	4	Soft
0.5	-	1	4	-	8	Medium Stiff
1	-	2	8	-	15	Stiff
2	-	4	15	-	30	Very Stiff
4	-	8	30	-	50	Hard
>	-	8	> 50			Very Hard

RELATIVE DENSITY OF COARSE-GRAINED SOILS

N-Blows/ft.			Relative Density
0	-	3	Very Loose
4	-	9	Loose
10	-	29	Medium Dense
30	-	49	Dense
50	-	80	Very Dense
		80+	Extremely Dense

RELATIVE PROPORTIONS OF SAND & GRAVEL

Descriptive Term	% of Dry Weight		
Trace		<	15
With	15	-	29
Modifier		>	30

RELATIVE PROPORTIONS OF FINES

Descriptive Term	% of Dry Weight		
Trace		<	5
With	5	-	12
Modifier		>	12

*Descriptive Terms apply to components also present in sample

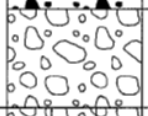
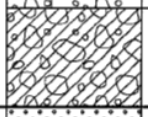
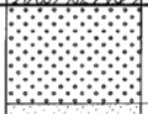
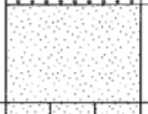
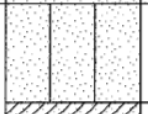
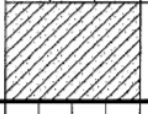
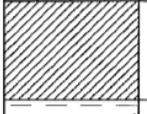
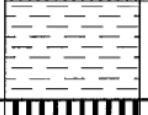
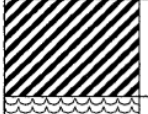
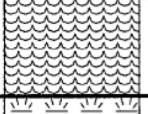
GRAIN SIZE TERMINOLOGY

Major Component	Size Range
Boulders	Over 12 in. (300mm)
Cobbles	12 in. To 3 in. (300mm to 75mm)
Gravel	3 in. To #4 sieve (75mm to 4.75mm)
Sand	#4 to #200 sieve (4.75mm to 0.75mm)

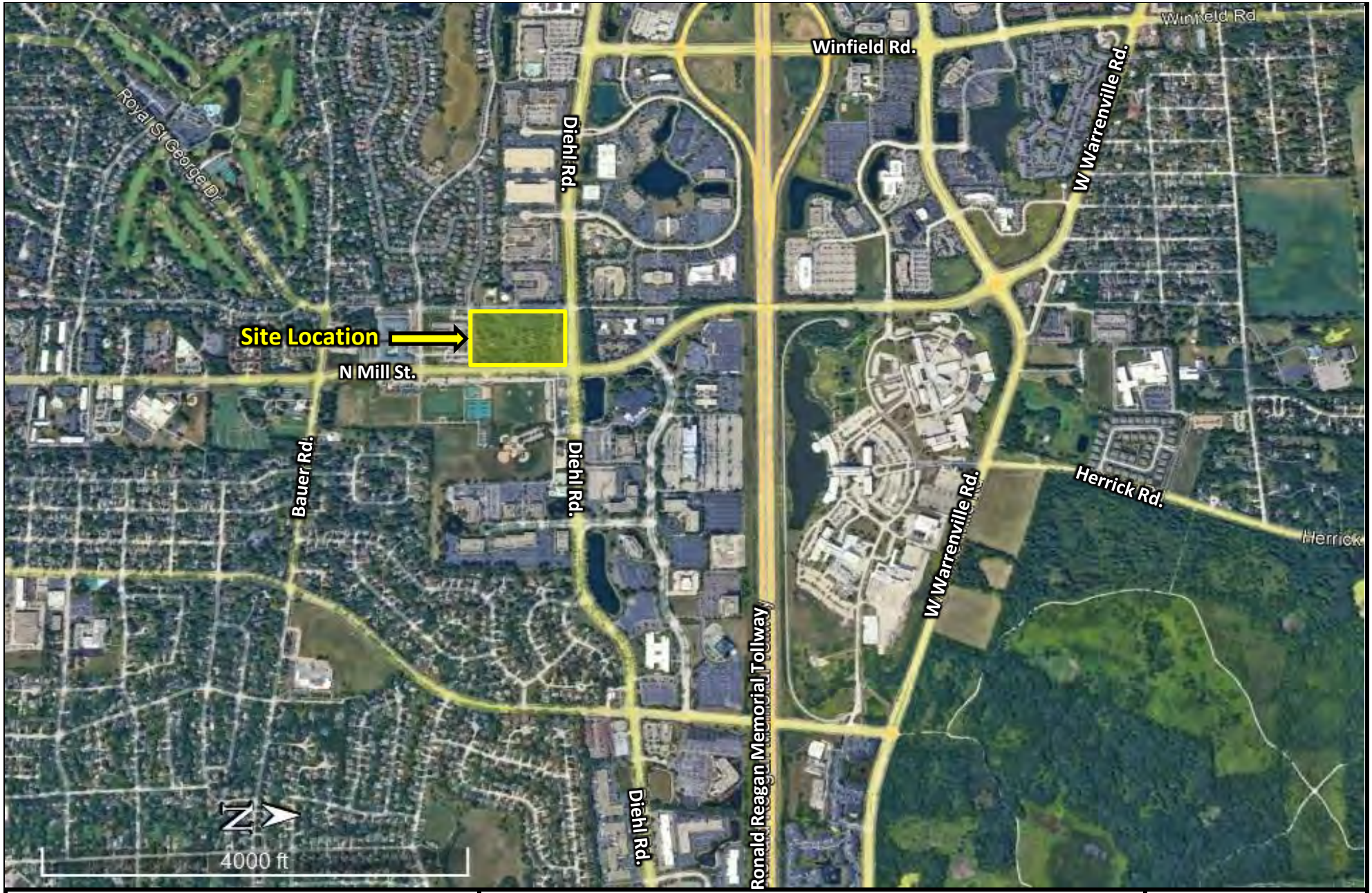
Appendix G – Soil Classification Chart

SOIL CLASSIFICATION CHART

NOTE: DUAL SYMBOLS ARE USED TO INDICATE BORDERLINE SOIL CLASSIFICATIONS

MAJOR DIVISIONS			SYMBOLS: GRAPH	SYMBOLS: LETTER	TYPICAL DESCRIPTIONS
COARSE GRAINED SOILS — MORE THAN 50% OF MATERIAL IS LARGER THAN NO. 200 SIEVE SIZE	GRAVEL AND GRAVELLY SOILS — MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE	CLEAN GRAVELS (LITTLE OR NO FINES)		GW	WELL-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
				GP	POORLY-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
		GRAVELS WITH FINES (APPRECIABLE AMOUNT OF FINES)		GM	SILTY GRAVELS, GRAVEL - SAND - SILT MIXTURES
				GC	CLAYEY GRAVELS, GRAVEL - SAND - CLAY MIXTURES
	SAND AND SANDY SOILS — MORE THAN 50% OF COARSE FRACTION PASSING ON NO. 4 SIEVE	CLEAN SANDS (LITTLE OR NO FINES)		SW	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
				SP	POORLY-GRADED SANDS, GRAVELLY SAND, LITTLE OR NO FINES
		SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)		SM	SILTY SANDS, SAND - SILT MIXTURES
				SC	CLAYEY SANDS, SAND - CLAY MIXTURES
FINE GRAINED SOILS — MORE THAN 50% OF MATERIAL IS SMALLER THAN NO. 200 SIEVE SIZE	SILTS AND CLAYS	LIQUID LIMIT LESS THAN 50		ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY
				CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
				OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
	SILTS AND CLAYS	LIQUID LIMIT GREATER THAN 50		MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILTY SOILS
				CH	INORGANIC CLAYS OF HIGH PLASTICITY
				OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
HIGHLY ORGANIC SOILS				PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS

Appendix H – Site Vicinity Map & Boring Location Plan

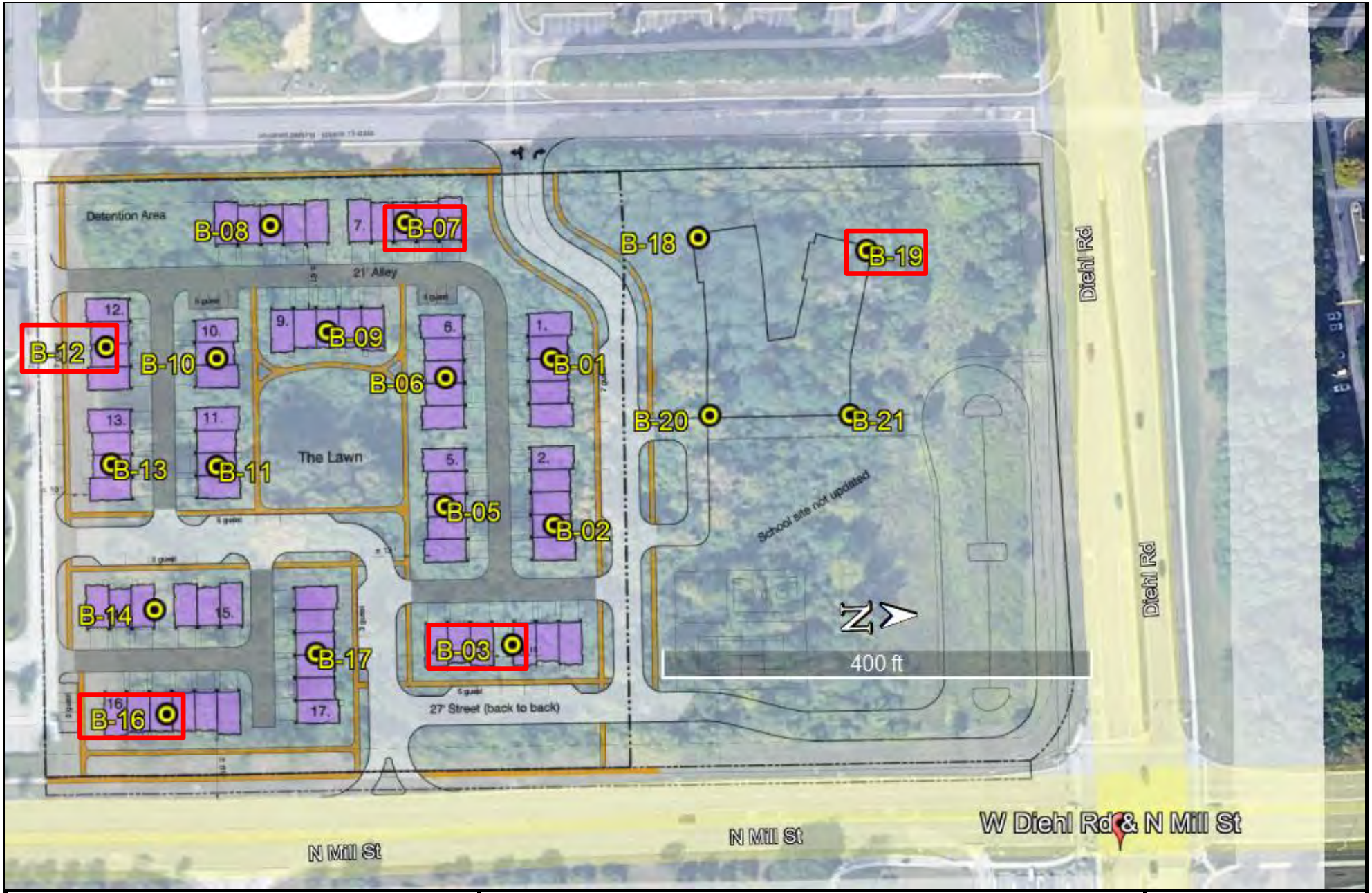


rubino ENGINEERING INC.

425 Shepard Drive
Elgin, Illinois 60123

Project Name:	Proposed Townhomes & STEM Academy
Project Location:	SWC W. Diehl Rd. and N. Mill St. Naperville, Illinois
Client:	Vrutthi, LLC & Brio Estates, LLC
Rubino Project # :	G22.148

Site Vicinity Map



rubino ENGINEERING INC.

425 Shepard Drive
Elgin, Illinois 60123

Project Name: Proposed Townhomes & STEM Academy
Project Location: SWC W. Diehl Rd. and N. Mill St.
Naperville, Illinois
Client: Vrutthi, LLC & Brio Estates, LLC
Rubino Project # : G22.148

Boring Location Plan

Appendix I – Borings Logs

Rubino Engineering, Inc.
425 Shepard Drive
Elgin, IL 60123
Telephone: 847-931-1555
Fax: 847-931-1560

LOG OF BORING B-03

Rubino Job No.:	G22.148
Project:	Proposed Townhomes & STEM Academy
Location:	SWC Diehl Road and Mill Street
City, State:	Naperville, Illinois
Client:	Vrutthi LLC & Brio Estates LLC

Drilling Method:	3 ¼ Hollow Stem Auger
Sampling Method:	Split Spoon
Hammer Type:	Automatic
Boring Location:	Townhomes #3 and #4

WATER LEVELS***	
While Drilling	N/A
Upon Completion	N/A
Delay	N/A

Station: N/A
Offset: N/A

Elevation (feet)	Depth, (feet)	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch	Moisture, %	Additional Remarks
	0			**Surface Elev.:** 730 ft				
		1	10	Approximately 10 inches of TOPSOIL: dark brown silty clay with organic matter				
				Stiff, brown silty CLAY, trace sand and gravel	CL	6-6-8 N=14	21	>>✳ Qp=4.5 tsf
				Stiff to very stiff, light brown silty CLAY, with medium grain sand and gravel			12	
		2	16	*Sand and gravel proportion decreases to trace at 3 ½ feet below existing grade*		6-6-8 N=14	16	>>✳ Qp=4.5 tsf
725	5	3	16		CL	4-5-7 N=12	18	✳ Qp=4.0 tsf
		4	13			4-7-13 N=20	20	✳ Qp=3.0 tsf
				Very stiff, light brown SILT with fine grain sand, trace gravel	ML			
720	10			Dense to very dense, brown fine grain gravelly SAND			15	
		5	14	*Potential cobbles / boulders*		33-22-32 N=54	3	>>✳
				Rig chatter starts at approximately 11 feet below existing grade				
		6	13	*Sand grain sizes increase to medium at approximately 13 ½ feet below existing grade*		20-21-23 N=44	3	
715	15				SP			
		7	12			13-14-23 N=37	4	
710	20							
		8	0	*Cobbles appear in auger cuttings at approximately 23 ½ feet below existing grade*		50-50/3-		>>✳
705	25			End of boring at approximately 25 feet below existing grade.				

STANDARD PENETRATION TEST DATA
Moisture, PL, LL (0 – 25 – 50)
STRENGTH, tsf: Qu (Rimac) ✳Qp/Qr (0 – 2.0 – 4.0)

Completion Depth:	25.0 ft
Date Boring Started:	8/10/22
Date Boring Completed:	8/10/22
Logged By:	P.P.
Drilling Contractor:	Rubino Engineering, Inc.

Sample Types:
- Auger Cutting
- Split-Spoon
- Rock Core
- Pressuremeter
- Shelby Tube
- Grab Sample
- No Recovery

Latitude: 41.7997
Longitude: -88.1554
Drill Rig: Geoprobe 7822DT
Remarks: Offset 5 ft. East due to tree branch
Log Entry: P. Patel
Checked By:

The stratification lines represent approximate boundaries. The transition may be gradual.
***Please reference the geotechnical report text for specific groundwater / dewatering recommendations.

Rubino Engineering, Inc.
425 Shepard Drive
Elgin, IL 60123
Telephone: 847-931-1555
Fax: 847-931-1560

LOG OF BORING B-07

Rubino Job No.:	G22.148	Drilling Method:	3 ¼ Hollow Stem Auger	WATER LEVELS***	
Project:	Proposed Townhomes & STEM Academy	Sampling Method:	Split Spoon	While Drilling	N/A
Location:	SWC Diehl Road and Mill Street	Hammer Type:	Automatic	Upon Completion	N/A
City, State:	Naperville, Illinois	Boring Location:	Townhome #7	Delay	N/A
Client:	Vrutthi LLC & Brio Estates LLC				

Station: N/A
Offset: N/A

Surface Elev.: 731 ft

Elevation (feet)	Depth, (feet)	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch	Moisture, %	Additional Remarks
730	0	1	10	Approximately 14 inches of TOPSOIL: dark brown silty clay with organic matter		3-4-4 N=8	20	Qp=4.5 tsf
				Very stiff, brown and gray silty CLAY, trace sand and gravel				
		2	12		CL	7-8-12 N=20	17	Qp=4.5 tsf
	5							
725		3	18	Stiff to very stiff, brown silty CLAY, trace sand and gravel		7-7-10 N=17	17	Qp=4.5 tsf
		4	18		CL	4-5-7 N=12	22	Qp=4.0 tsf
	10							
720		5	12	*Rig chatter starts at approximately 10 ½ feet below existing grade*		15-11-10 N=21	3	
				Medium dense to dense, brown gravelly SAND				
		6	14	*Gravel size increases to coarse gravel and cobbles at approximately 13 ½ feet below existing grade*		9-9-7 N=16	8	
	15							
715								
		7	6		SP	15-11-10 N=21	4	
	20							
710								
		8	12			19-17-14 N=31	4	
	25			End of boring at approximately 25 feet below existing grade.				

STANDARD PENETRATION TEST DATA
Moisture | PL | LL
0 25 50
STRENGTH, tsf
Qu (Rimac) | Qp/Qr
0 2.0 4.0

Completion Depth:	25.0 ft	Sample Types:	Latitude: 41.7994
Date Boring Started:	8/8/22	Auger Cutting	Longitude: -88.1568
Date Boring Completed:	8/9/22	Split-Spoon	Drill Rig: Geoprobe 7822DT
Logged By:	J.W.	Rock Core	Remarks:
Drilling Contractor:	Rubino Engineering, Inc.	Pressuremeter / Shelby Tube / Grab Sample / No Recovery	Log Entry: P. Patel
			Checked By:

The stratification lines represent approximate boundaries. The transition may be gradual.
***Please reference the geotechnical report text for specific groundwater / dewatering recommendations.

Rubino Engineering, Inc.
425 Shepard Drive
Elgin, IL 60123
Telephone: 847-931-1555
Fax: 847-931-1560

LOG OF BORING B-12

Rubino Job No.:	G22.148
Project:	Proposed Townhomes & STEM Academy
Location:	SWC Diehl Road and Mill Street
City, State:	Naperville, Illinois
Client:	Vrutthi LLC & Brio Estates LLC
Drilling Method:	3 ¼ Hollow Stem Auger
Sampling Method:	Split Spoon
Hammer Type:	Automatic
Boring Location:	Townhome #12

WATER LEVELS***

While Drilling	N/A
Upon Completion	N/A
Delay	N/A

Station: N/A
Offset: N/A

Elevation (feet)	Depth, (feet)	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch	Moisture, %	Additional Remarks
	0			**Surface Elev.:** 730 ft				
		1	10	Approximately 2 inches of TOPSOIL: dark brown silty clay with organic matter Very stiff, brown HIGH PLASTICITY SILTY CLAY, trace sand and gravel	CH	4-8-14 N=22	21	Qp=4.5 tsf LL = 54 PL = 28
		2	12	Stiff, brown silty CLAY, trace sand and gravel	CL	5-6-9 N=15	15	Qp=4.5 tsf
725	5	3	12	Stiff, light brown SILT, trace sand and gravel	ML	5-6-8 N=14	17 16	Qp=3.0 tsf
		4	10	Medium dense to dense, brown gravelly SAND		7-16-10 N=26	5	
720	10			*Rig chatter starts at approximately 10 feet below existing grade*				
		5	12			10-18-9 N=27	4	
		6	12			25-19-10 N=29	4	
715	15				SP			
		7	18	*Potential cobbles / boulders at approximately 18 ½ feet below existing grade*		19-22-23 N=45	5	
710	20							
		8	12	Medium dense, brown fine grain sand, trace gravel	SP	10-9-8 N=17	6	
705	25			End of boring at approximately 25 feet below existing grade.				

STANDARD PENETRATION TEST DATA
Moisture | PL | LL
0 25 50
STRENGTH, tsf
Qu (Rimac) Qp/Qr
0 2.0 4.0

Completion Depth:	25.0 ft
Date Boring Started:	8/8/22
Date Boring Completed:	8/8/22
Logged By:	J.W.
Drilling Contractor:	Rubino Engineering, Inc.

Sample Types:
Auger Cutting
Split-Spoon
Rock Core
Pressuremeter
Shelby Tube
Grab Sample
No Recovery

Latitude: 41.7987
Longitude: -88.1564
Drill Rig: Geoprobe 7822DT
Remarks:
Log Entry: P. Patel
Checked By:

The stratification lines represent approximate boundaries. The transition may be gradual.
***Please reference the geotechnical report text for specific groundwater / dewatering recommendations.

Rubino Engineering, Inc.
425 Shepard Drive
Elgin, IL 60123
Telephone: 847-931-1555
Fax: 847-931-1560

LOG OF BORING B-16

Rubino Job No.:	G22.148
Project:	Proposed Townhomes & STEM Academy
Location:	SWC Diehl Road and Mill Street
City, State:	Naperville, Illinois
Client:	Vrutthi LLC & Brio Estates LLC

Drilling Method:	3 ¼ Hollow Stem Auger
Sampling Method:	Split Spoon
Hammer Type:	Automatic
Boring Location:	Townhome #16

WATER LEVELS***	
While Drilling	N/A
Upon Completion	N/A
Delay	N/A

Station: N/A
Offset: N/A

Elevation (feet)	Depth, (feet)	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch	Moisture, %	Additional Remarks
	0			**Surface Elev.:** 732 ft				
				Approximately 12 inches of TOPSOIL: dark brown silty clay with organic matter				
730		1	6	Stiff, brown silty CLAY, trace sand and gravel	CL	5-5-6 N=11	20	
		2	10	Stiff, light brown SILT with fine grain sand, trace gravel	ML	6-6-6 N=12	9	
	5							
725		3	12	Stiff, brown silty CLAY with interspersed medium grain sand lenses of 1 inch, trace gravel	CL	3-3-5 N=8	20	Qp=4.5 tsf
		4	10	Dense to very dense, light brown gravelly SAND *Potential cobbles / boulders*		18-16-21 N=37	4	
	10			*Rig chatter starts at approximately 10 feet below existing grade*				
720		5	0			50/2--		
		6	13			19-22-25 N=47	4	
	15							
715					SP			
		7	14	*Increase in gravel proportion at approximately 18 ½ feet below existing grade*		22-21-19 N=40	3	
	20							
710								
		8	12	*Cobbles appear in auger cuttings at approximately 23 ½ feet below existing grade*		23-33-25 N=58	3	
	25			End of boring at approximately 25 feet below existing grade.				

STANDARD PENETRATION TEST DATA
Moisture, PL, LL
0 25 50
STRENGTH, tsf
Qu (Rimac) Qp/Qr
0 2.0 4.0

Completion Depth:	25.0 ft
Date Boring Started:	8/10/22
Date Boring Completed:	8/10/22
Logged By:	P.P.
Drilling Contractor:	Rubino Engineering, Inc.

Sample Types:
Auger Cutting
Split-Spoon
Rock Core
Pressuremeter
Shelby Tube
Grab Sample
No Recovery

Latitude: 41.7988
Longitude: -88.1551
Drill Rig: Geoprobe 7822DT
Remarks: Offset 3 ft. West due to tree branch
Log Entry: P. Patel
Checked By:

The stratification lines represent approximate boundaries. The transition may be gradual.
***Please reference the geotechnical report text for specific groundwater / dewatering recommendations.

Rubino Engineering, Inc.
425 Shepard Drive
Elgin, IL 60123
Telephone: 847-931-1555
Fax: 847-931-1560

LOG OF BORING B-19

Rubino Job No.:	G22.148
Project:	Proposed Townhomes & STEM Academy
Location:	SWC Diehl Road and Mill Street
City, State:	Naperville, Illinois
Client:	Vrutthi LLC & Brio Estates LLC

Drilling Method:	3 ¼ Hollow Stem Auger
Sampling Method:	Split Spoon
Hammer Type:	Automatic
Boring Location:	STEM Academy Northwest corner

WATER LEVELS***	
While Drilling	N/A
Upon Completion	N/A
Delay	N/A

Station: N/A
Offset: N/A

Elevation (feet)	Depth, (feet)	Sample No.	Recovery (inches)	MATERIAL DESCRIPTION	USCS Classification	SPT Blows per 6-inch	Moisture, %	Additional Remarks
				Surface Elev.: 731 ft				
730	0	1	16	Approximately 12 inches of TOPSOIL: dark brown silty clay with organic matter Stiff, dark brown to black silty CLAY, trace sand, gravel, and organics	CL	7-5-6 N=11	19	Qp=4.0 tsf 4% Organic content
		2	12			4-5-5 N=10		Qp=3.5 tsf
725	5	3	6	Stiff, brown and gray HIGH PLASTICITY SILTY CLAY, trace sand and gravel Stiff, light brown silty CLAY, trace sand and gravel	CH	4-6-5 N=11	27	LL = 57 PL = 29 2% Organic content Qp=3.0 tsf
		4	12		CL	5-5-6 N=11	17 18	Qp=3.3 tsf
720	10	5	0	Dense to very dense, brown gravelly SAND *Potential cobbles / boulders* *No recovery at 11 feet, observation from auger cuttings* *Rig chatter starts at approximately 10 feet below existing grade*		50/2--		>>
		6	12		SP	48-20-18 N=38	3	
715	15	7	6			40-50/1-	3	>>
710	20			End of boring at 19 feet, 2 inches below existing grade due to auger refusal.				
	25							

STANDARD PENETRATION TEST DATA
Moisture | PL | LL
0 25 50
STRENGTH, tsf
Qu (Rimac) Qp/Qr
0 2.0 4.0

Completion Depth:	25.0 ft
Date Boring Started:	8/9/22
Date Boring Completed:	8/9/22
Logged By:	J.W.
Drilling Contractor:	Rubino Engineering, Inc.

Sample Types:
Auger Cutting
Split-Spoon
Rock Core
Pressuremeter
Shelby Tube
Grab Sample
No Recovery

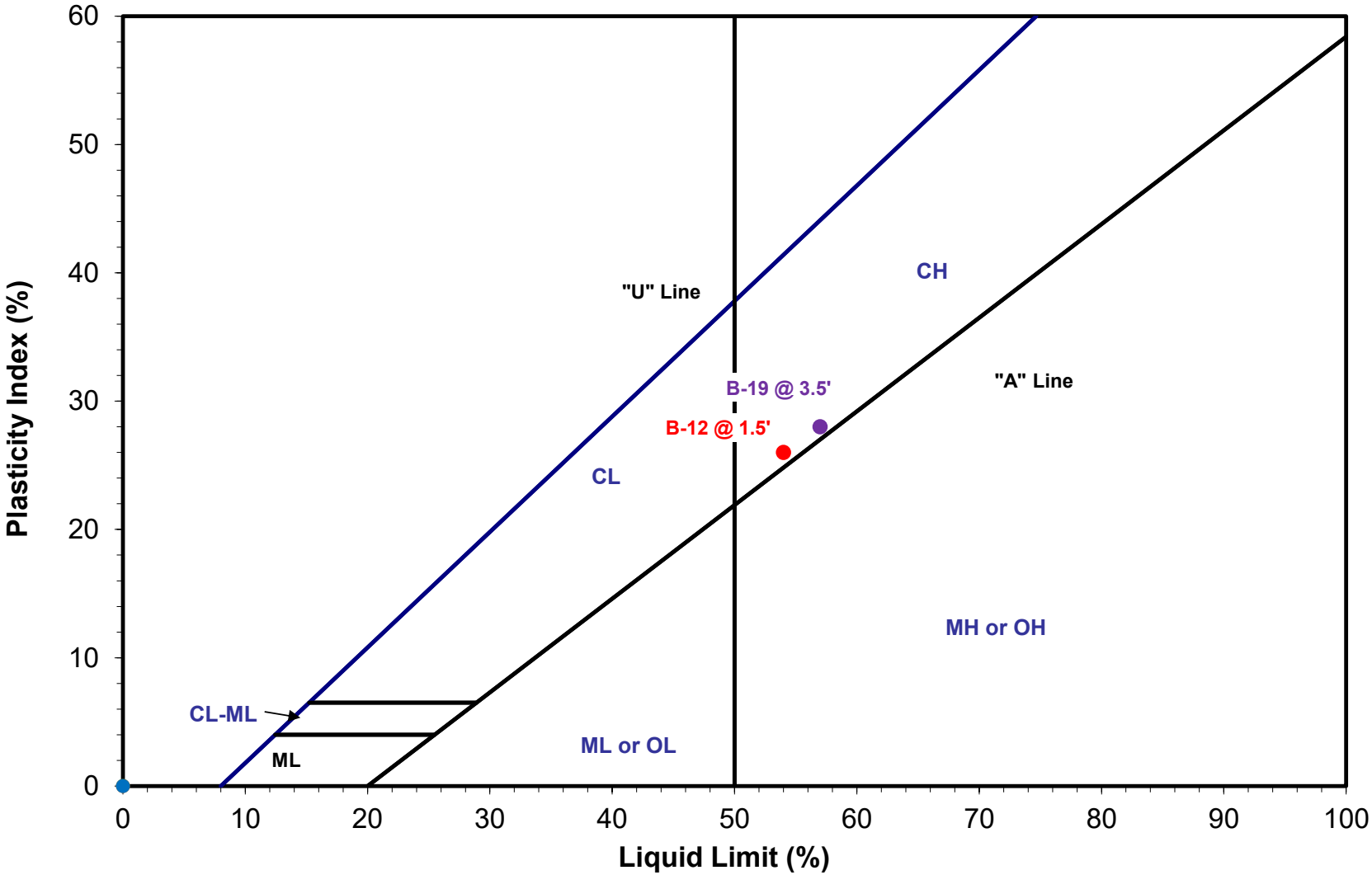
Latitude: 41.8007
Longitude: -88.1566
Drill Rig: Geoprobe 7822DT
Remarks: Offset 10 ft. North due to tree branch
Log Entry: P. Patel
Checked By:

The stratification lines represent approximate boundaries. The transition may be gradual.
***Please reference the geotechnical report text for specific groundwater / dewatering recommendations.

Appendix J – Laboratory Test Results

rubino ENGINEERING INC.

Report of Atterberg Limits Test (ASTM D4318 / AASHTO T89 / AASHTO T90)



Boring #	B-12 @ 1.5'	B-19 @ 3.5'				
LL	54	57				
PL	28	29				
PI	26	28				

Project: Proposed Townhomes & STEM Academy
Location: Naperville, Illinois
Client: Vrutthi LLC & Brio Estates LLC
Project #: G22.148

SOIL PERMEABILITY RATES

Soil Separate	Particle size Diameter (mm)	Permeability	Permeability Rate/ Percolation Rate (inches/hour)	Permeability (gal/day/ft² soil area)
Clay	Below 0.002	Very slow	Less than 0.05	0.025
Silt	0.05–0.002	Slow	0.05–0.2	0.5
Very fine sand	0.10–0.05	Moderately slow	0.2–0.8	50
Fine sand	0.25–0.10	Moderate	0.8–2.5	100
Medium sand	0.5–0.25	Moderately rapid	2.5–5.0	250
Coarse sand	1.0–0.5	Rapid	5.0–10.0	2500
Very coarse sand	2.0–1.0	Very rapid	10.0 and over	>2500

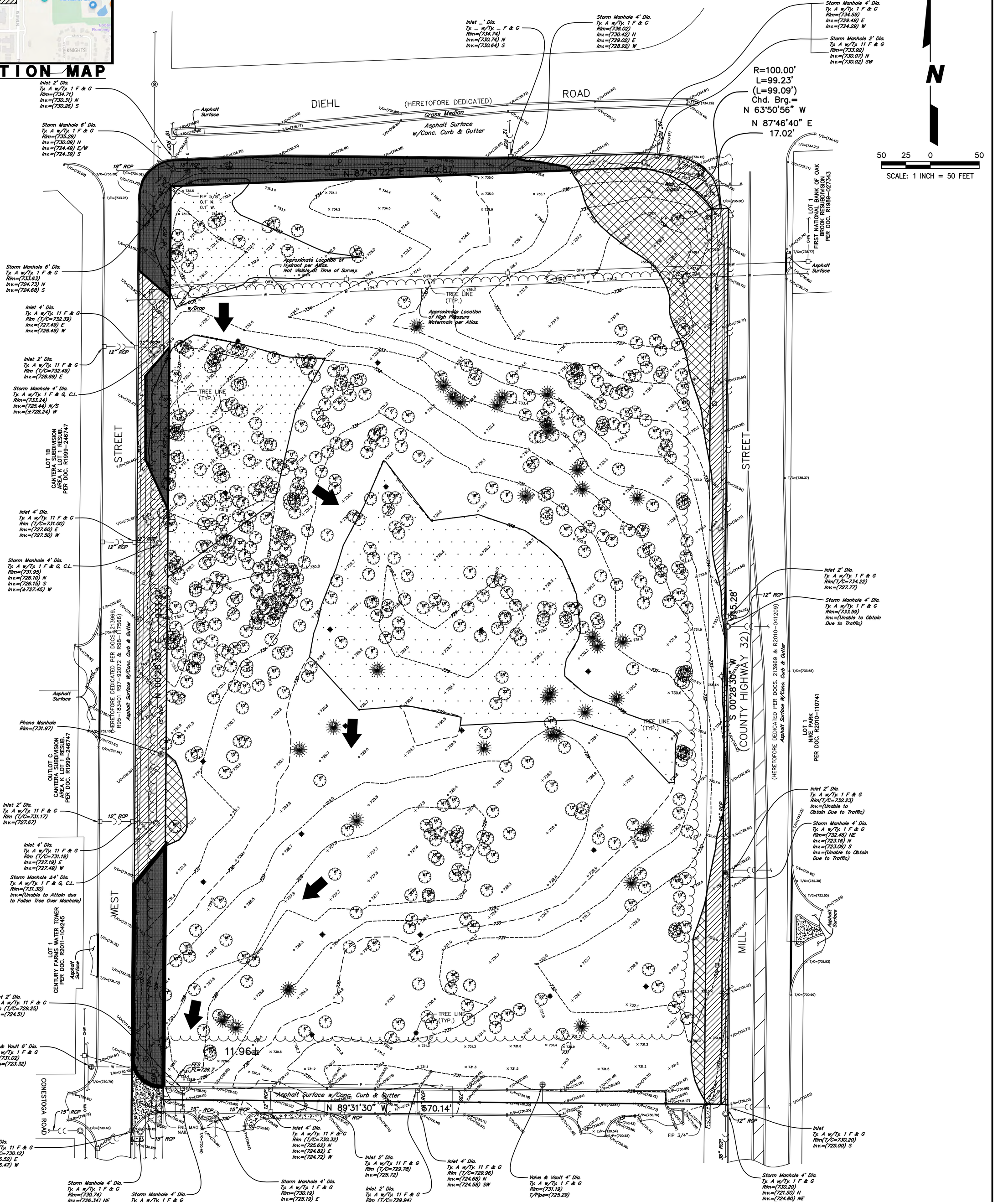
EXHIBIT D

EXISTING CONDITION

CATCHMENT EXHIBIT

EXHIBIT D - EXISTING CONDITIONS
CATCHMENT EXHIBIT
FOR
THE PROSPERITA & ORION STEM SCHOOL

LOCATION MAP



LEGEND

EXISTING	PROPOSED	DESCRIPTION
◎	◎	MANHOLE
○	●	CATCH BASIN/DEBRIS TRAP
□	□	INLET
	⬢	CLEANOUT
	▮	SLOPE INLET BOX
—(	—(	HEADWALL
—◁	—▷	END SECTION
—CC—	—CC—	STORM SEWER
—C—C—	—C—C—	SANITARY SEWER
—W—	—W—	WATERMAIN
⊗	✦	VALVE & BOX
⊗	◉	WATER VALVE IN VAULT
♉	●	FIRE HYDRANT
----------	————	CONTOURS
(ELEV)	ELEV	ELEVATIONS
☼	✸	STREET LIGHT
	▨	WATERMAIN PROTECTION
	▣	SILT FENCE INLET PROTECTOR
	⌒	TEMPORARY STRAW BALE DITCH CHECK
		SILT FENCE DITCH CHECK
	▩	RIP-RAP
	➡	OVERFLOW ROUTE

SITE DEVELOPMENT LEGEND

▩ - DEPRESSIONAL STORAGE AREAS

⬅ - FLOW PATH

EXISTING CATCHMENT LEGEND

▨ - ON-SITE AREA TRIBTARY TO ROW (0.43 ACRES)
0.04 ACRES TO WEST ST
0.39 ACRES TO MILL ST

■ - ROW TRIBUTARY TO SITE (0.50 ACRES)

▨ - ROW TRIBUTARY TO ROW (0.73 ACRES TOTAL)
0.36 ACRES TO WEST ST
0.37 ACRES TO MILL ST

□ - ON-SITE AERA TRIBUTARY TO WEST ST/HARBORCHASE (11.96± ACRES)

LED WALL MOUNTED LUMINAIRE

LED SITE LUMINAIRE w/POLE AND DOUBLE OR SINGLE MAST ARM

CURB LEGEND

——— - B-6.12 CURB & CUTTER

——— - MOUNTABLE CURB

——— - CARRIAGE CURB

——— - DEPRESSED CURB

PREPARED FOR:
VRUTTHI LLC
3644 WHITE EAGLE DRIVE
NAPERVILLE, ILLINOIS 60564
(630) 803-5768

PREPARED BY:

CEMCON, Ltd.
Consulting Engineers, Land Surveyors & Planners
2280 White Oak Circle, Suite 100
Aurora, Illinois 60502-9675
PH: 630.862.2100 FAX: 630.862.2199
E-Mail: info@cemcon.com Website: www.cemcon.com

DISC NO.: 904426 FILE NAME: 2023-01-31 EXIST CATCH EXH D
DRAWN BY: DJF FLD. BK. / PG. NO.: -----
COMPLETION DATE: 2022-12-15 JOB NO.: 904.426
XREF : TOPO PROJECT MANAGER : RWB
REV.: 01-31-23/KMS

PRELIMINARY ENGINEERING PLAN FOR THE PROSPERITA & ORION STEM SCHOOLS
CITY OF NAPERVILLE PROJECT NO.: XX-XXXXXXX

PLOT FILE CREATED: 1/31/2023 BY: KRISTIN STAERKEL DRAWING PATH: P:\904426\ENG\DRAWINGS\EXHIBITS\2023-01-31 EXISTING CONDITIONS CATCHMENT EXHIBIT D.DWG

EXHIBIT E

EXISTING CONDITION PONDPACK FLOOD ROUTING MODEL FOR EACH CATCHMENT BASED ON CN & TC (REVISED)

EXISTING CONDITION PONDPACK SCHEMATIC

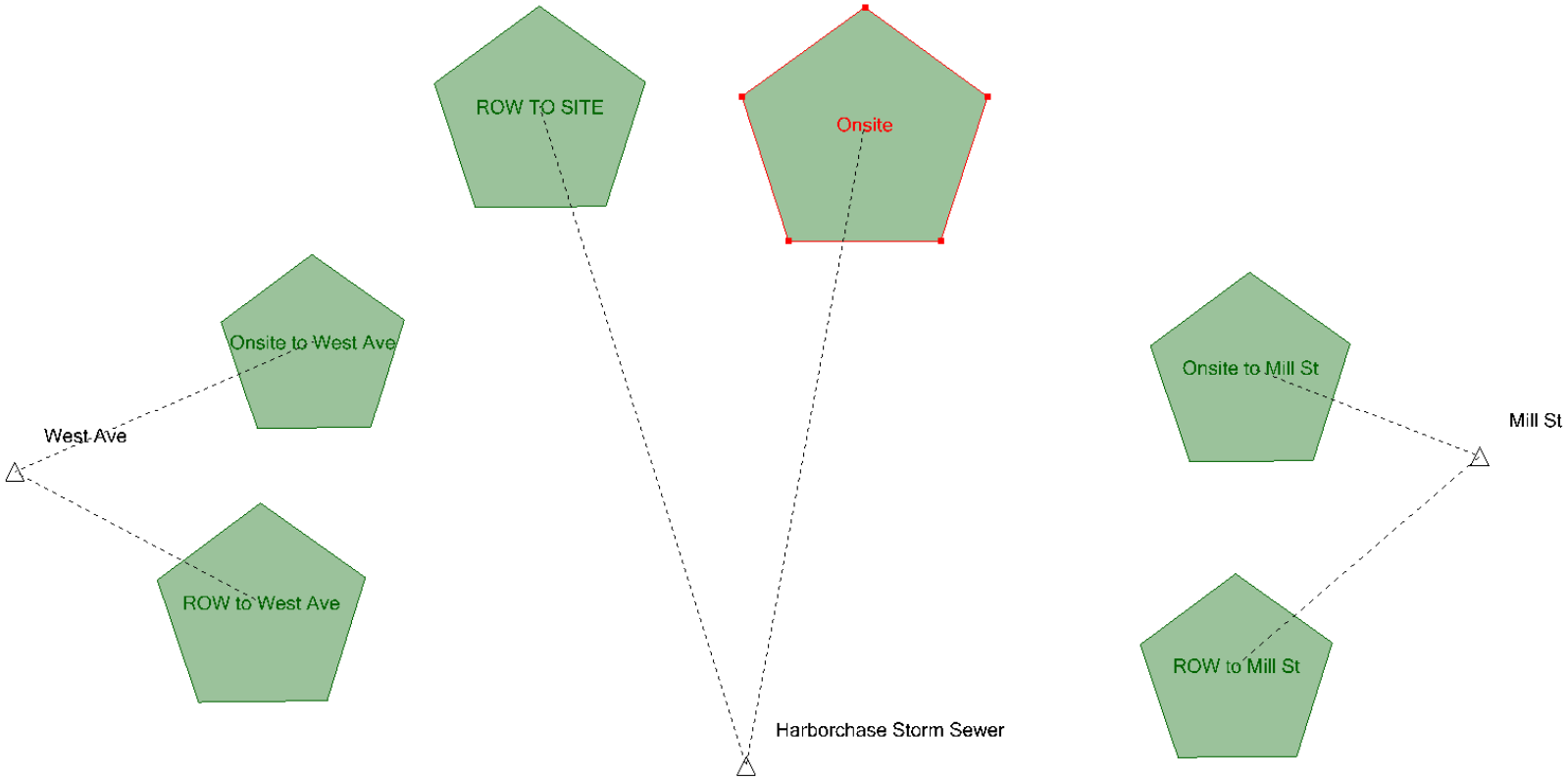


Table of Contents

Subsection: Time-Depth Curve
Label: UPDATED 100YR 12HR-48HR

Return Event: 100 years
Storm Event: 100YR-24HR

Time-Depth Curve: 100YR-24HR	
Label	100YR-24HR
Start Time	0.000 hours
Increment	1.000 hours
End Time	24.000 hours
Return Event	100 years

CUMULATIVE RAINFALL (in)
Output Time Increment = 1.000 hours
Time on left represents time for first value in each row.

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
0.000	0.0	0.2	0.4	0.6	0.8
5.000	1.0	1.2	1.4	1.7	2.0
10.000	2.3	2.7	3.1	3.8	4.5
15.000	5.2	6.0	6.7	7.3	7.7
20.000	8.0	8.2	8.3	8.4	8.6

Storm Event	100YR-24HR
Return Event	100 years
Duration	48.000 hours
Depth	8.6 in
Time of Concentration (Composite)	0.170 hours
Area (User Defined)	11.570 acres

Computational Time Increment	0.023 hours
Time to Peak (Computed)	16.003 hours
Flow (Peak, Computed)	7.63 ft³/s
Output Increment	0.010 hours
Time to Flow (Peak Interpolated Output)	16.000 hours
Flow (Peak Interpolated Output)	7.63 ft³/s

Drainage Area	
SCS CN (Composite)	76.000
Area (User Defined)	11.570 acres
Maximum Retention (Pervious)	3.2 in
Maximum Retention (Pervious, 20 percent)	0.6 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	5.7 in
Runoff Volume (Pervious)	5.476 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	5.476 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.170 hours
Computational Time Increment	0.023 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	77.11 ft³/s
Unit peak time, Tp	0.113 hours

SCS Unit Hydrograph Parameters	
Unit receding limb, Tr	0.453 hours
Total unit time, Tb	0.567 hours

Storm Event	100YR-24HR
Return Event	100 years
Duration	48.000 hours
Depth	8.6 in
Time of Concentration (Composite)	0.167 hours
Area (User Defined)	0.390 acres

Computational Time Increment	0.022 hours
Time to Peak (Computed)	16.010 hours
Flow (Peak, Computed)	0.26 ft³/s
Output Increment	0.010 hours
Time to Flow (Peak Interpolated Output)	16.010 hours
Flow (Peak Interpolated Output)	0.26 ft³/s

Drainage Area	
SCS CN (Composite)	76.000
Area (User Defined)	0.390 acres
Maximum Retention (Pervious)	3.2 in
Maximum Retention (Pervious, 20 percent)	0.6 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	5.7 in
Runoff Volume (Pervious)	0.185 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.185 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.167 hours
Computational Time Increment	0.022 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	2.65 ft³/s
Unit peak time, Tp	0.111 hours

SCS Unit Hydrograph Parameters	
Unit receding limb, Tr	0.445 hours
Total unit time, Tb	0.557 hours

Storm Event	100YR-24HR
Return Event	100 years
Duration	48.000 hours
Depth	8.6 in
Time of Concentration (Composite)	0.167 hours
Area (User Defined)	0.040 acres

Computational Time Increment	0.022 hours
Time to Peak (Computed)	16.010 hours
Flow (Peak, Computed)	0.03 ft³/s
Output Increment	0.010 hours
Time to Flow (Peak Interpolated Output)	16.010 hours
Flow (Peak Interpolated Output)	0.03 ft³/s

Drainage Area	
SCS CN (Composite)	76.000
Area (User Defined)	0.040 acres
Maximum Retention (Pervious)	3.2 in
Maximum Retention (Pervious, 20 percent)	0.6 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	5.7 in
Runoff Volume (Pervious)	0.019 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.019 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.167 hours
Computational Time Increment	0.022 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	0.27 ft³/s
Unit peak time, Tp	0.111 hours

SCS Unit Hydrograph Parameters	
Unit receding limb, Tr	0.445 hours
Total unit time, Tb	0.557 hours

Storm Event	100YR-24HR
Return Event	100 years
Duration	48.000 hours
Depth	8.6 in
Time of Concentration (Composite)	0.167 hours
Area (User Defined)	0.370 acres

Computational Time Increment	0.022 hours
Time to Peak (Computed)	16.010 hours
Flow (Peak, Computed)	0.25 ft³/s
Output Increment	0.010 hours
Time to Flow (Peak Interpolated Output)	16.010 hours
Flow (Peak Interpolated Output)	0.25 ft³/s

Drainage Area	
SCS CN (Composite)	78.000
Area (User Defined)	0.370 acres
Maximum Retention (Pervious)	2.8 in
Maximum Retention (Pervious, 20 percent)	0.6 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	5.9 in
Runoff Volume (Pervious)	0.183 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.183 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.167 hours
Computational Time Increment	0.022 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	2.51 ft³/s
Unit peak time, Tp	0.111 hours

SCS Unit Hydrograph Parameters	
Unit receding limb, Tr	0.445 hours
Total unit time, Tb	0.557 hours

Storm Event	100YR-24HR
Return Event	100 years
Duration	48.000 hours
Depth	8.6 in
Time of Concentration (Composite)	0.167 hours
Area (User Defined)	0.500 acres

Computational Time Increment	0.022 hours
Time to Peak (Computed)	16.010 hours
Flow (Peak, Computed)	0.34 ft³/s
Output Increment	0.010 hours
Time to Flow (Peak Interpolated Output)	16.010 hours
Flow (Peak Interpolated Output)	0.34 ft³/s

Drainage Area	
SCS CN (Composite)	78.000
Area (User Defined)	0.500 acres
Maximum Retention (Pervious)	2.8 in
Maximum Retention (Pervious, 20 percent)	0.6 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	5.9 in
Runoff Volume (Pervious)	0.247 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.247 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.167 hours
Computational Time Increment	0.022 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	3.39 ft³/s
Unit peak time, Tp	0.111 hours

SCS Unit Hydrograph Parameters	
Unit receding limb, Tr	0.445 hours
Total unit time, Tb	0.557 hours

Storm Event	100YR-24HR
Return Event	100 years
Duration	48.000 hours
Depth	8.6 in
Time of Concentration (Composite)	0.167 hours
Area (User Defined)	0.360 acres

Computational Time Increment	0.022 hours
Time to Peak (Computed)	16.010 hours
Flow (Peak, Computed)	0.24 ft³/s
Output Increment	0.010 hours
Time to Flow (Peak Interpolated Output)	16.010 hours
Flow (Peak Interpolated Output)	0.24 ft³/s

Drainage Area	
SCS CN (Composite)	78.000
Area (User Defined)	0.360 acres
Maximum Retention (Pervious)	2.8 in
Maximum Retention (Pervious, 20 percent)	0.6 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	5.9 in
Runoff Volume (Pervious)	0.178 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.178 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.167 hours
Computational Time Increment	0.022 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	2.44 ft³/s
Unit peak time, Tp	0.111 hours

SCS Unit Hydrograph Parameters	
Unit receding limb, Tr	0.445 hours
Total unit time, Tb	0.557 hours

Index

Scenario Calculation Summary

Scenario Summary	
ID	1
Label	100 YR - 24 HR
Notes	
Active Topology	Base Active Topology
Hydrology	Base Hydrology
Rainfall Runoff	100 YR - 24 HR
Physical	Base Physical
Initial Condition	Base Initial Condition
Boundary Condition	Base Boundary Condition
Infiltration and Inflow	Base Infiltration and Inflow
Output	Base Output
User Data Extensions	Base User Data Extensions
PondPack Engine Calculation Options	24 HR

Output Summary			
Output Increment	0.010 hours	Duration	48.000 hours

Rainfall Summary			
Return Event Tag	100	Rainfall Type	Time-Depth Curve
Total Depth	8.6 in	Storm Event	100YR-24HR

Executive Summary (Nodes)

Label	Scenario	Return Event (years)	Truncation	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft^3/s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ac-ft)
Harborchase Storm Sewer	100 YR - 24 HR	100	None	5.722	16.000	7.96	(N/A)	(N/A)
Mill St	100 YR - 24 HR	100	None	0.367	16.010	0.51	(N/A)	(N/A)
Onsite	100 YR - 24 HR	100	None	5.476	16.000	7.63	(N/A)	(N/A)
Onsite to Mill St	100 YR - 24 HR	100	None	0.185	16.010	0.26	(N/A)	(N/A)
Onsite to West Ave	100 YR - 24 HR	100	None	0.019	16.010	0.03	(N/A)	(N/A)
ROW TO SITE	100 YR - 24 HR	100	None	0.247	16.010	0.34	(N/A)	(N/A)
ROW to Mill St	100 YR - 24 HR	100	None	0.183	16.010	0.25	(N/A)	(N/A)
ROW to West Ave	100 YR - 24 HR	100	None	0.178	16.010	0.24	(N/A)	(N/A)
West Ave	100 YR - 24 HR	100	None	0.197	16.010	0.27	(N/A)	(N/A)

Scenario Calculation Summary

Executive Summary (Links)

Label	Type	Location	Hydrograph Volume (ac-ft)	Peak Time (hours)	Peak Flow (ft^3/s)	End Point	Node Flow Direction

Scenario Calculation Summary

Scenario Summary	
ID	27
Label	100 YR - 18 HR
Notes	
Active Topology	<I> Base Active Topology
Hydrology	<I> Base Hydrology
Rainfall Runoff	100 YR - 18 HR
Physical	<I> Base Physical
Initial Condition	<I> Base Initial Condition
Boundary Condition	<I> Base Boundary Condition
Infiltration and Inflow	<I> Base Infiltration and Inflow
Output	<I> Base Output
User Data Extensions	<I> Base User Data Extensions
PondPack Engine Calculation Options	<I> 24 HR

Output Summary			
Output Increment	0.010 hours	Duration	48.000 hours

Rainfall Summary			
Return Event Tag	100	Rainfall Type	Time-Depth Curve
Total Depth	8.1 in	Storm Event	100YR-18HR

Executive Summary (Nodes)

Label	Scenario	Return Event (years)	Truncation	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft^3/s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ac-ft)
Harborchase Storm Sewer	100 YR - 18 HR	100	None	5.253	12.010	9.82	(N/A)	(N/A)
Mill St	100 YR - 18 HR	100	None	0.337	12.000	0.63	(N/A)	(N/A)
Onsite	100 YR - 18 HR	100	None	5.026	12.010	9.40	(N/A)	(N/A)
Onsite to Mill St	100 YR - 18 HR	100	None	0.169	12.010	0.32	(N/A)	(N/A)
Onsite to West Ave	100 YR - 18 HR	100	None	0.017	12.010	0.03	(N/A)	(N/A)
ROW TO SITE	100 YR - 18 HR	100	None	0.227	12.000	0.42	(N/A)	(N/A)
ROW to Mill St	100 YR - 18 HR	100	None	0.168	12.000	0.31	(N/A)	(N/A)
ROW to West Ave	100 YR - 18 HR	100	None	0.163	12.000	0.30	(N/A)	(N/A)
West Ave	100 YR - 18 HR	100	None	0.181	12.000	0.33	(N/A)	(N/A)

Scenario Calculation Summary

Executive Summary (Links)

Label	Type	Location	Hydrograph Volume (ac-ft)	Peak Time (hours)	Peak Flow (ft^3/s)	End Point	Node Flow Direction

Scenario Calculation Summary

Scenario Summary	
ID	28
Label	100 YR - 12 HR
Notes	
Active Topology	<I> Base Active Topology
Hydrology	<I> Base Hydrology
Rainfall Runoff	100 YR - 12 HR
Physical	<I> Base Physical
Initial Condition	<I> Base Initial Condition
Boundary Condition	<I> Base Boundary Condition
Infiltration and Inflow	<I> Base Infiltration and Inflow
Output	<I> Base Output
User Data Extensions	<I> Base User Data Extensions
PondPack Engine Calculation Options	<I> 24 HR

Output Summary			
Output Increment	0.010 hours	Duration	48.000 hours

Rainfall Summary			
Return Event Tag	100	Rainfall Type	Time-Depth Curve
Total Depth	7.5 in	Storm Event	100YR-12HR

Executive Summary (Nodes)

Label	Scenario	Return Event (years)	Truncation	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft^3/s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ac-ft)
Harborchase Storm Sewer	100 YR - 12 HR	100	None	4.706	5.010	12.47	(N/A)	(N/A)
Mill St	100 YR - 12 HR	100	None	0.303	5.010	0.80	(N/A)	(N/A)
Onsite	100 YR - 12 HR	100	None	4.502	5.010	11.93	(N/A)	(N/A)
Onsite to Mill St	100 YR - 12 HR	100	None	0.152	5.010	0.40	(N/A)	(N/A)
Onsite to West Ave	100 YR - 12 HR	100	None	0.016	5.010	0.04	(N/A)	(N/A)
ROW TO SITE	100 YR - 12 HR	100	None	0.204	5.010	0.54	(N/A)	(N/A)
ROW to Mill St	100 YR - 12 HR	100	None	0.151	5.010	0.40	(N/A)	(N/A)
ROW to West Ave	100 YR - 12 HR	100	None	0.147	5.010	0.39	(N/A)	(N/A)
West Ave	100 YR - 12 HR	100	None	0.162	5.010	0.43	(N/A)	(N/A)

Scenario Calculation Summary

Executive Summary (Links)

Label	Type	Location	Hydrograph Volume (ac-ft)	Peak Time (hours)	Peak Flow (ft^3/s)	End Point	Node Flow Direction

Scenario Calculation Summary

Scenario Summary	
ID	29
Label	100 YR - 6 HR
Notes	
Active Topology	<I> Base Active Topology
Hydrology	<I> Base Hydrology
Rainfall Runoff	100 YR - 6 HR
Physical	<I> Base Physical
Initial Condition	<I> Base Initial Condition
Boundary Condition	<I> Base Boundary Condition
Infiltration and Inflow	<I> Base Infiltration and Inflow
Output	<I> Base Output
User Data Extensions	<I> Base User Data Extensions
PondPack Engine Calculation Options	<I> 24 HR

Output Summary			
Output Increment	0.010 hours	Duration	48.000 hours

Rainfall Summary			
Return Event Tag	100	Rainfall Type	Time-Depth Curve
Total Depth	6.4 in	Storm Event	100YR- 6HR

Executive Summary (Nodes)

Label	Scenario	Return Event (years)	Truncation	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft^3/s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ac-ft)
Harborchase Storm Sewer	100 YR - 6 HR	100	None	3.785	1.290	18.59	(N/A)	(N/A)
Mill St	100 YR - 6 HR	100	None	0.244	1.290	1.20	(N/A)	(N/A)
Onsite	100 YR - 6 HR	100	None	3.619	1.290	17.77	(N/A)	(N/A)
Onsite to Mill St	100 YR - 6 HR	100	None	0.122	1.290	0.60	(N/A)	(N/A)
Onsite to West Ave	100 YR - 6 HR	100	None	0.013	1.290	0.06	(N/A)	(N/A)
ROW TO SITE	100 YR - 6 HR	100	None	0.165	1.290	0.82	(N/A)	(N/A)
ROW to Mill St	100 YR - 6 HR	100	None	0.122	1.290	0.60	(N/A)	(N/A)
ROW to West Ave	100 YR - 6 HR	100	None	0.119	1.290	0.59	(N/A)	(N/A)
West Ave	100 YR - 6 HR	100	None	0.131	1.290	0.65	(N/A)	(N/A)

Scenario Calculation Summary

Executive Summary (Links)

Label	Type	Location	Hydrograph Volume (ac-ft)	Peak Time (hours)	Peak Flow (ft^3/s)	End Point	Node Flow Direction

Scenario Calculation Summary

Scenario Summary	
ID	30
Label	100 YR - 3 HR
Notes	
Active Topology	<I> Base Active Topology
Hydrology	<I> Base Hydrology
Rainfall Runoff	100 YR - 3 HR
Physical	<I> Base Physical
Initial Condition	<I> Base Initial Condition
Boundary Condition	<I> Base Boundary Condition
Infiltration and Inflow	<I> Base Infiltration and Inflow
Output	<I> Base Output
User Data Extensions	<I> Base User Data Extensions
PondPack Engine Calculation Options	<I> 24 HR

Output Summary			
Output Increment	0.010 hours	Duration	48.000 hours

Rainfall Summary			
Return Event Tag	100	Rainfall Type	Time-Depth Curve
Total Depth	5.5 in	Storm Event	100YR- 3HR

Executive Summary (Nodes)

Label	Scenario	Return Event (years)	Truncation	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft^3/s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ac-ft)
Harborchase Storm Sewer	100 YR - 3 HR	100	None	2.970	0.770	28.06	(N/A)	(N/A)
Mill St	100 YR - 3 HR	100	None	0.192	0.740	1.82	(N/A)	(N/A)
Onsite	100 YR - 3 HR	100	None	2.839	0.770	26.83	(N/A)	(N/A)
Onsite to Mill St	100 YR - 3 HR	100	None	0.096	0.760	0.90	(N/A)	(N/A)
Onsite to West Ave	100 YR - 3 HR	100	None	0.010	0.760	0.09	(N/A)	(N/A)
ROW TO SITE	100 YR - 3 HR	100	None	0.131	0.710	1.24	(N/A)	(N/A)
ROW to Mill St	100 YR - 3 HR	100	None	0.097	0.710	0.92	(N/A)	(N/A)
ROW to West Ave	100 YR - 3 HR	100	None	0.094	0.710	0.89	(N/A)	(N/A)
West Ave	100 YR - 3 HR	100	None	0.104	0.710	0.99	(N/A)	(N/A)

Scenario Calculation Summary

Executive Summary (Links)

Label	Type	Location	Hydrograph Volume (ac-ft)	Peak Time (hours)	Peak Flow (ft^3/s)	End Point	Node Flow Direction

Scenario Calculation Summary

Scenario Summary	
ID	31
Label	100 YR - 2 HR
Notes	
Active Topology	<I> Base Active Topology
Hydrology	<I> Base Hydrology
Rainfall Runoff	100 YR - 2 HR
Physical	<I> Base Physical
Initial Condition	<I> Base Initial Condition
Boundary Condition	<I> Base Boundary Condition
Infiltration and Inflow	<I> Base Infiltration and Inflow
Output	<I> Base Output
User Data Extensions	<I> Base User Data Extensions
PondPack Engine Calculation Options	<I> 24 HR

Output Summary			
Output Increment	0.010 hours	Duration	48.000 hours

Rainfall Summary			
Return Event Tag	100	Rainfall Type	Time-Depth Curve
Total Depth	5.0 in	Storm Event	100YR- 2HR

Executive Summary (Nodes)

Label	Scenario	Return Event (years)	Truncation	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft^3/s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ac-ft)
Harborchase Storm Sewer	100 YR - 2 HR	100	None	2.533	0.560	34.70	(N/A)	(N/A)
Mill St	100 YR - 2 HR	100	None	0.164	0.550	2.26	(N/A)	(N/A)
Onsite	100 YR - 2 HR	100	None	2.421	0.560	33.15	(N/A)	(N/A)
Onsite to Mill St	100 YR - 2 HR	100	None	0.082	0.560	1.12	(N/A)	(N/A)
Onsite to West Ave	100 YR - 2 HR	100	None	0.008	0.560	0.11	(N/A)	(N/A)
ROW TO SITE	100 YR - 2 HR	100	None	0.112	0.550	1.55	(N/A)	(N/A)
ROW to Mill St	100 YR - 2 HR	100	None	0.083	0.550	1.14	(N/A)	(N/A)
ROW to West Ave	100 YR - 2 HR	100	None	0.081	0.550	1.11	(N/A)	(N/A)
West Ave	100 YR - 2 HR	100	None	0.089	0.550	1.23	(N/A)	(N/A)

Scenario Calculation Summary

Executive Summary (Links)

Label	Type	Location	Hydrograph Volume (ac-ft)	Peak Time (hours)	Peak Flow (ft^3/s)	End Point	Node Flow Direction

Scenario Calculation Summary

Scenario Summary	
ID	32
Label	100 YR - 1 HR
Notes	
Active Topology	<I> Base Active Topology
Hydrology	<I> Base Hydrology
Rainfall Runoff	100 YR - 1 HR
Physical	<I> Base Physical
Initial Condition	<I> Base Initial Condition
Boundary Condition	<I> Base Boundary Condition
Infiltration and Inflow	<I> Base Infiltration and Inflow
Output	<I> Base Output
User Data Extensions	<I> Base User Data Extensions
PondPack Engine Calculation Options	<I> 24 HR

Output Summary			
Output Increment	0.010 hours	Duration	48.000 hours

Rainfall Summary			
Return Event Tag	100	Rainfall Type	Time-Depth Curve
Total Depth	4.0 in	Storm Event	100YR- 1HR

Executive Summary (Nodes)

Label	Scenario	Return Event (years)	Truncation	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft^3/s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ac-ft)
Harborchase Storm Sewer	100 YR - 1 HR	100	None	1.778	0.360	41.83	(N/A)	(N/A)
Mill St	100 YR - 1 HR	100	None	0.116	0.350	2.77	(N/A)	(N/A)
Onsite	100 YR - 1 HR	100	None	1.698	0.360	39.93	(N/A)	(N/A)
Onsite to Mill St	100 YR - 1 HR	100	None	0.057	0.350	1.35	(N/A)	(N/A)
Onsite to West Ave	100 YR - 1 HR	100	None	0.006	0.350	0.14	(N/A)	(N/A)
ROW TO SITE	100 YR - 1 HR	100	None	0.080	0.350	1.91	(N/A)	(N/A)
ROW to Mill St	100 YR - 1 HR	100	None	0.059	0.350	1.41	(N/A)	(N/A)
ROW to West Ave	100 YR - 1 HR	100	None	0.057	0.350	1.37	(N/A)	(N/A)
West Ave	100 YR - 1 HR	100	None	0.063	0.350	1.51	(N/A)	(N/A)

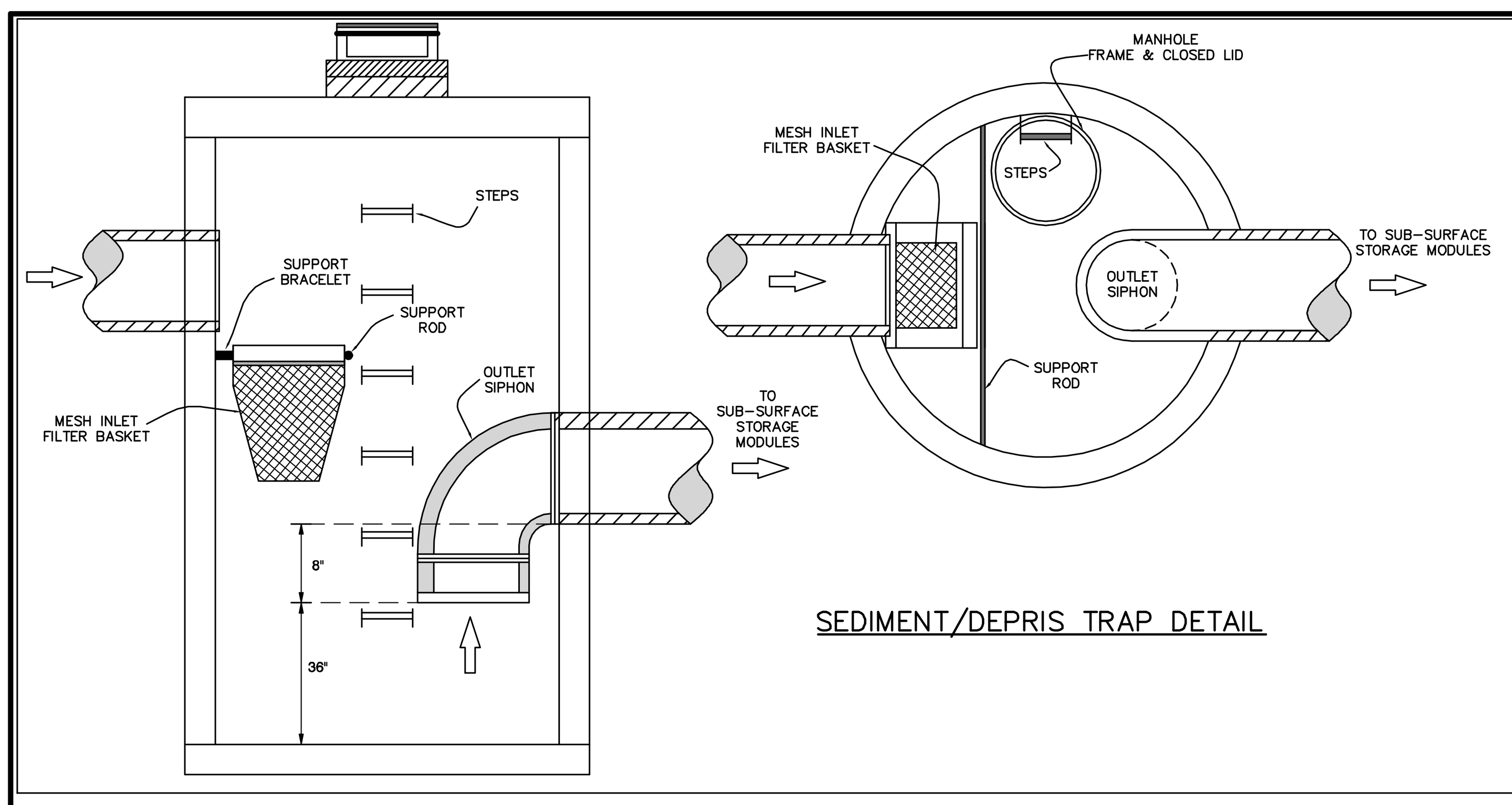
Scenario Calculation Summary

Executive Summary (Links)

Label	Type	Location	Hydrograph Volume (ac-ft)	Peak Time (hours)	Peak Flow (ft^3/s)	End Point	Node Flow Direction

APPENDIX F

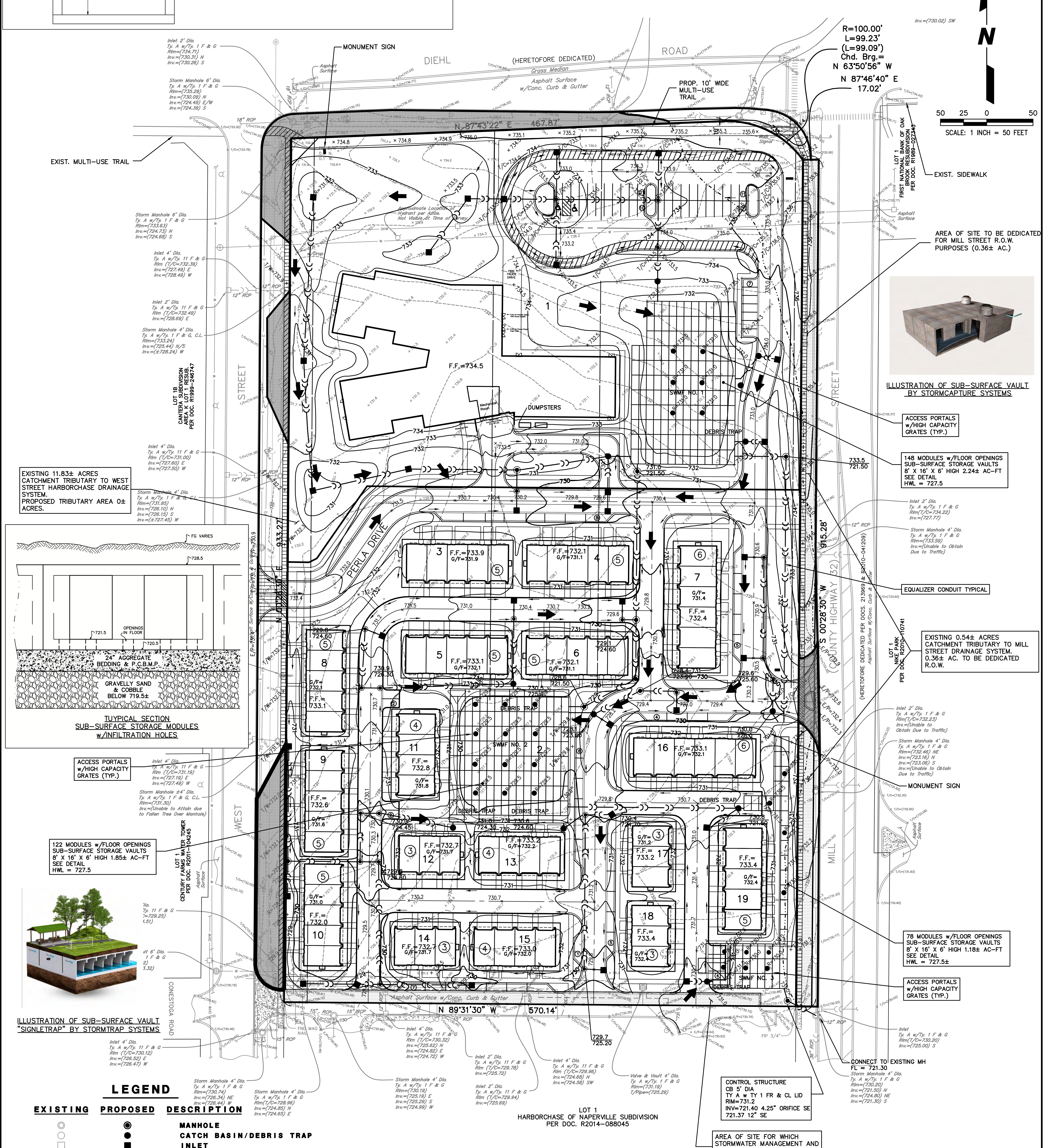
PROPOSED CONDITION CATCHMENT EXHIBIT FOR ROADWAY DEVELOPMENT AREAS (WITH CITY CONCURRENCE OF THIS MORE CONSERVATIVE APPROACH)



SEDIMENT/DEBRIS TRAP DETAIL

EXHIBIT F - PROPOSED CATCHMENT EXHIBIT FOR ROADWAY DEVELOPMENT AREAS FOR

THE PROSPERITA & ORION STEM SCHOOL



LEGEND

EXISTING	PROPOSED	DESCRIPTION
		MANHOLE
		CATCH BASIN/DEBRIS TRAP
		INLET
		CLEANOUT
		SLOPE INLET BOX
		HEADWALL
		END SECTION
		STORM SEWER
		SANITARY SEWER
		WATERMAIN
		VALVE & BOX
		WATER VALVE IN VAULT
		FIRE HYDRANT
		CONTOURS
(ELEV)	ELEV	ELEVATIONS
		STREET LIGHT
		WATERMAIN PROTECTION
		SILT FENCE INLET PROTECTOR
		TEMPORARY STRAW BALE DITCH CHECK
		SILT FENCE DITCH CHECK
		RIP-RAP
		OVERFLOW ROUTE

LED WALL MOUNTED LUMINAIRE

LED SITE LUMINAIRE w/POLE AND DOUBLE OR SINGLE MAST ARM

CURB LEGEND

- B-6.12 CURB & CUTTER
- MOUNTABLE CURB
- CARRIAGE CURB
- DEPRESSED CURB

PROPOSED CONDITION STORMWATER MANAGEMENT SUMMARY

NET DEVELOPMENT AREA OF PROJECT SITE PLUS ROADWAY DEVELOPMENT	11.94± AC.
ALLOWABLE RELEASE RATE	1.19 cfs
BULLETIN 75 100-YR 24 HOUR STORAGE REQUIRED	5.94 AC.-FT.
STORAGE IN SUB-SURFACE MODULES	5.27± AC.-FT.
IMPERVIOUS AREA OF DEVELOPMENT SITE	6.4± AC.-FT.
PCBMP VOLUME REQUIRED	0.67± AC.-FT.
PCBMP VOLUME PROVIDED	0.72± AC.-FT.

ROADWAY DEVELOPMENT LEGEND

- ROW TRIBUTARY TO ROAD (0.80 ACRES)
- IMPERVIOUS AREA OF ROADWAY DEVELOPMENT DRAINING TO ROADWAY DRAINAGE SYSTEM (0.18 ACRES)
- ROW AREAS DRAINING TO ON SITE DRAINAGE SYSTEM (0.55 ACRES)
- IMPERVIOUS SURFACES DRAINING TO ONSITE ONSITE DRAINAGE SYSTEM (0.13 ACRES)

EXISTING CONDITION DRAINAGE ANALYSIS

TOTAL NET EXISTING CONDITION AREA OF SITE	12.35 AC.±
AREA OF SITE TRIBUTARY TO MILL STREET	0.54± AC.±
AREA OF SITE TRIBUTARY TO WEST STREET OR HARBOR CHASE	11.81± AC.±

PREPARED FOR:
VRUTTHI LLC
3644 WHITE EAGLE DRIVE
NAPERVILLE, ILLINOIS 60564
(630) 803-5768

PREPARED BY:

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PRELIMINARY ENGINEERING PLAN FOR THE PROSPERITA & ORION STEM SCHOOLS
CITY OF NAPERVILLE PROJECT NO.: 22-10000097

PLOT FILE CREATED: 2/14/2023 BY: KRISTIN STAEHKEL DRAWING PATH: P:\904426\DWG\ENG\DRAWINGS\EXHIBITS\EXHIBIT F CATCHMENT.DWG

APPENDIX G

PROPOSED CONDITION PONDPACK MODEL FOR ROADWAY DEVELOPMENT

EXISTING/PROPOSED ROW CONDITION PONDPACK SCHEMATIC

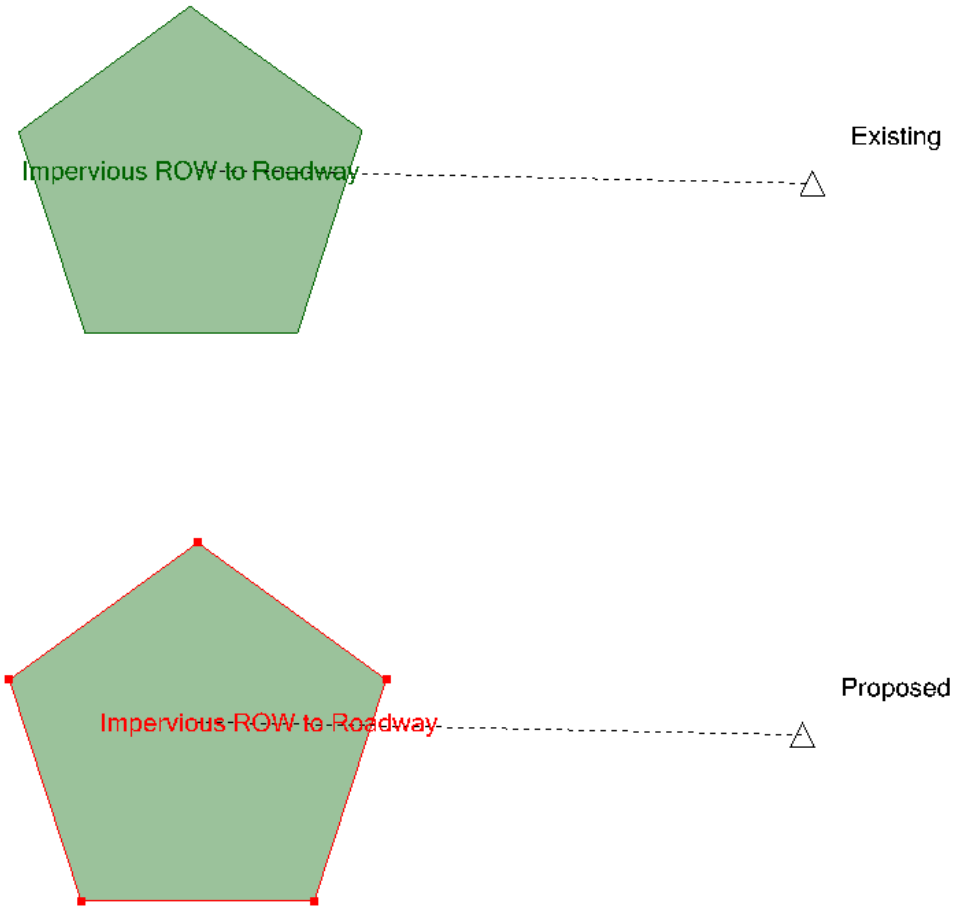

Table of Contents

Subsection: Time-Depth Curve
Label: UPDATED 100YR 12HR-48HR

Return Event: 100 years
Storm Event: 100YR-24HR

Time-Depth Curve: 100YR-24HR	
Label	100YR-24HR
Start Time	0.000 hours
Increment	1.000 hours
End Time	24.000 hours
Return Event	100 years

CUMULATIVE RAINFALL (in)
Output Time Increment = 1.000 hours
Time on left represents time for first value in each row.

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
0.000	0.0	0.2	0.4	0.6	0.8
5.000	1.0	1.2	1.4	1.7	2.0
10.000	2.3	2.7	3.1	3.8	4.5
15.000	5.2	6.0	6.7	7.3	7.7
20.000	8.0	8.2	8.3	8.4	8.6

Storm Event	100YR-24HR
Return Event	100 years
Duration	48.000 hours
Depth	8.6 in
Time of Concentration (Composite)	0.167 hours
Area (User Defined)	0.330 acres

Computational Time Increment	0.022 hours
Time to Peak (Computed)	14.985 hours
Flow (Peak, Computed)	0.25 ft³/s
Output Increment	0.010 hours
Time to Flow (Peak Interpolated Output)	14.990 hours
Flow (Peak Interpolated Output)	0.25 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.330 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	8.3 in
Runoff Volume (Pervious)	0.229 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.229 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.167 hours
Computational Time Increment	0.022 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	2.24 ft³/s
Unit peak time, Tp	0.111 hours

SCS Unit Hydrograph Parameters	
Unit receding limb, Tr	0.445 hours
Total unit time, Tb	0.557 hours

Storm Event	100YR-24HR
Return Event	100 years
Duration	48.000 hours
Depth	8.6 in
Time of Concentration (Composite)	0.167 hours
Area (User Defined)	0.210 acres

Computational Time Increment	0.022 hours
Time to Peak (Computed)	14.985 hours
Flow (Peak, Computed)	0.16 ft³/s
Output Increment	0.010 hours
Time to Flow (Peak Interpolated Output)	14.990 hours
Flow (Peak Interpolated Output)	0.16 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.210 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	8.3 in
Runoff Volume (Pervious)	0.146 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.146 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.167 hours
Computational Time Increment	0.022 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	1.42 ft³/s
Unit peak time, Tp	0.111 hours

SCS Unit Hydrograph Parameters	
Unit receding limb, Tr	0.445 hours
Total unit time, Tb	0.557 hours

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Scenario Calculation Summary

Scenario Summary	
ID	1
Label	100 YR - 24 HR
Notes	
Active Topology	Base Active Topology
Hydrology	Base Hydrology
Rainfall Runoff	100 YR - 24 HR
Physical	Base Physical
Initial Condition	Base Initial Condition
Boundary Condition	Base Boundary Condition
Infiltration and Inflow	Base Infiltration and Inflow
Output	Base Output
User Data Extensions	Base User Data Extensions
PondPack Engine Calculation Options	24 HR

Output Summary			
Output Increment	0.010 hours	Duration	48.000 hours

Rainfall Summary			
Return Event Tag	100	Rainfall Type	Time-Depth Curve
Total Depth	8.6 in	Storm Event	100YR-24HR

Executive Summary (Nodes)

Label	Scenario	Return Event (years)	Truncation	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft^3/s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ac-ft)
Existing	100 YR - 24 HR	100	None	0.229	14.990	0.25	(N/A)	(N/A)
Impervious ROW to Roadway	100 YR - 24 HR	100	None	0.229	14.990	0.25	(N/A)	(N/A)
Impervious ROW to Roadway	100 YR - 24 HR	100	None	0.146	14.990	0.16	(N/A)	(N/A)
Proposed	100 YR - 24 HR	100	None	0.146	14.990	0.16	(N/A)	(N/A)

Executive Summary (Links)

Label	Type	Location	Hydrograph Volume (ac-ft)	Peak Time (hours)	Peak Flow (ft^3/s)	End Point	Node Flow Direction

Scenario Calculation Summary

Scenario Summary	
ID	42
Label	2 YR - 24 HR
Notes	
Active Topology	Base Active Topology
Hydrology	Base Hydrology
Rainfall Runoff	2 YR - 24 HR
Physical	Base Physical
Initial Condition	Base Initial Condition
Boundary Condition	Base Boundary Condition
Infiltration and Inflow	Base Infiltration and Inflow
Output	Base Output
User Data Extensions	Base User Data Extensions
PondPack Engine Calculation Options	24 HR

Output Summary			
Output Increment	0.010 hours	Duration	48.000 hours

Rainfall Summary			
Return Event Tag	2	Rainfall Type	Time-Depth Curve
Total Depth	3.3 in	Storm Event	2YR-24HR

Executive Summary (Nodes)

Label	Scenario	Return Event (years)	Truncation	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft^3/s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ac-ft)
Existing	2 YR - 24 HR	2	None	0.085	15.000	0.10	(N/A)	(N/A)
Impervious ROW to Roadway	2 YR - 24 HR	2	None	0.085	15.000	0.10	(N/A)	(N/A)
Impervious ROW to Roadway	2 YR - 24 HR	2	None	0.054	15.000	0.06	(N/A)	(N/A)
Proposed	2 YR - 24 HR	2	None	0.054	15.000	0.06	(N/A)	(N/A)

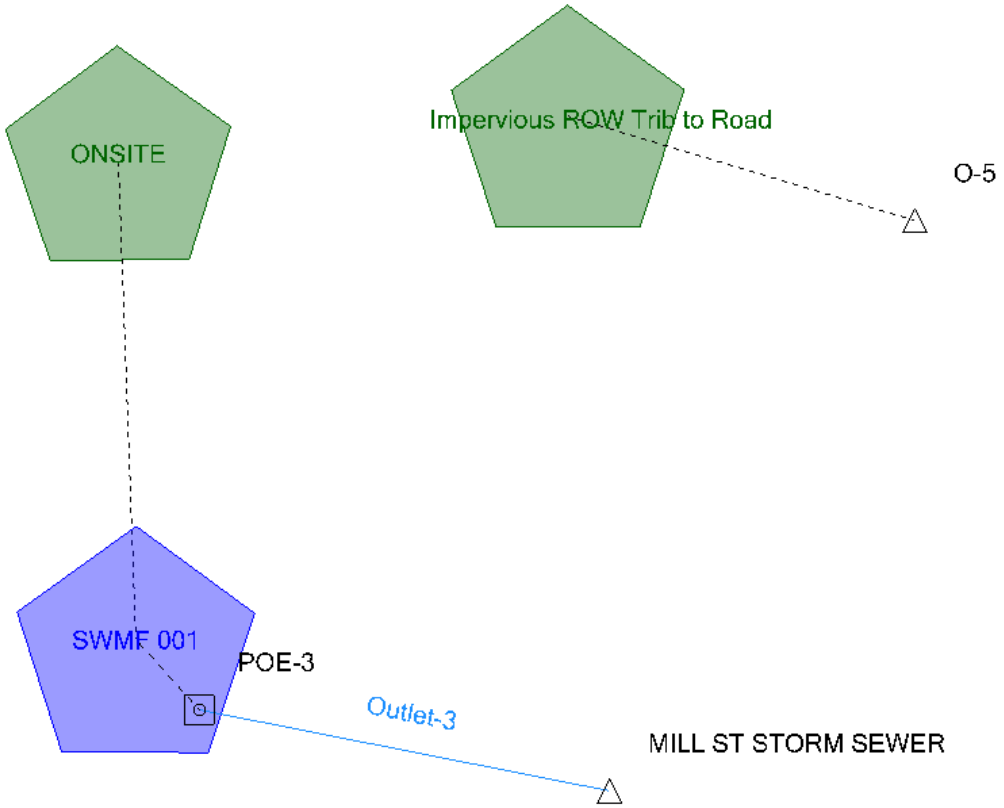
Executive Summary (Links)

Label	Type	Location	Hydrograph Volume (ac-ft)	Peak Time (hours)	Peak Flow (ft^3/s)	End Point	Node Flow Direction

EXHIBIT H

PROPOSED CONDITION COLLECTIVE EXHIBIT OF PONDPACK MODELS INCLUDING ROADWAY DEVELOPMENT

PROPOSED CONDITION PONDPACK SCHEMATIC



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Subsection: Time-Depth Curve
Label: UPDATED 100YR 12HR-48HR

Return Event: 100 years
Storm Event: 100YR-24HR

Time-Depth Curve: 100YR-24HR	
Label	100YR-24HR
Start Time	0.000 hours
Increment	1.000 hours
End Time	24.000 hours
Return Event	100 years

CUMULATIVE RAINFALL (in)
Output Time Increment = 1.000 hours
Time on left represents time for first value in each row.

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
0.000	0.0	0.2	0.4	0.6	0.8
5.000	1.0	1.2	1.4	1.7	2.0
10.000	2.3	2.7	3.1	3.8	4.5
15.000	5.2	6.0	6.7	7.3	7.7
20.000	8.0	8.2	8.3	8.4	8.6

Storm Event	100YR-24HR
Return Event	100 years
Duration	120.000 hours
Depth	8.6 in
Time of Concentration (Composite)	0.167 hours
Area (User Defined)	0.180 acres

Computational Time Increment	0.022 hours
Time to Peak (Computed)	14.985 hours
Flow (Peak, Computed)	0.14 ft³/s
Output Increment	0.010 hours
Time to Flow (Peak Interpolated Output)	14.990 hours
Flow (Peak Interpolated Output)	0.14 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.180 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	8.3 in
Runoff Volume (Pervious)	0.125 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.125 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.167 hours
Computational Time Increment	0.022 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	1.22 ft³/s
Unit peak time, Tp	0.111 hours

SCS Unit Hydrograph Parameters	
Unit receding limb, Tr	0.445 hours
Total unit time, Tb	0.557 hours

Storm Event	100YR-24HR
Return Event	100 years
Duration	120.000 hours
Depth	8.6 in
Time of Concentration (Composite)	0.167 hours
Area (User Defined)	11.930 acres

Computational Time Increment	0.022 hours
Time to Peak (Computed)	15.987 hours
Flow (Peak, Computed)	8.72 ft³/s
Output Increment	0.010 hours
Time to Flow (Peak Interpolated Output)	15.990 hours
Flow (Peak Interpolated Output)	8.72 ft³/s

Drainage Area	
SCS CN (Composite)	86.600
Area (User Defined)	11.930 acres
Maximum Retention (Pervious)	1.5 in
Maximum Retention (Pervious, 20 percent)	0.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	7.0 in
Runoff Volume (Pervious)	6.917 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	6.917 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.167 hours
Computational Time Increment	0.022 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	80.94 ft³/s
Unit peak time, Tp	0.111 hours

SCS Unit Hydrograph Parameters	
Unit receding limb, Tr	0.445 hours
Total unit time, Tb	0.557 hours

Time vs. Volume (ac-ft)

Output Time increment = 0.010 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
0.000	0.000	0.000	0.000	0.000	0.000
0.050	0.000	0.000	0.000	0.000	0.000
0.100	0.000	0.000	0.000	0.000	0.000
0.150	0.000	0.000	0.000	0.000	0.000
0.200	0.000	0.000	0.000	0.000	0.000
0.250	0.000	0.000	0.000	0.000	0.000
0.300	0.000	0.000	0.000	0.000	0.000
0.350	0.000	0.000	0.000	0.000	0.000
0.400	0.000	0.000	0.000	0.000	0.000
0.450	0.000	0.000	0.000	0.000	0.000
0.500	0.000	0.000	0.000	0.000	0.000
0.550	0.000	0.000	0.000	0.000	0.000
0.600	0.000	0.000	0.000	0.000	0.000
0.650	0.000	0.000	0.000	0.000	0.000
0.700	0.000	0.000	0.000	0.000	0.000
0.750	0.000	0.000	0.000	0.000	0.000
0.800	0.000	0.000	0.000	0.000	0.000
0.850	0.000	0.000	0.000	0.000	0.000
0.900	0.000	0.000	0.000	0.000	0.000
0.950	0.000	0.000	0.000	0.000	0.000
1.000	0.000	0.000	0.000	0.000	0.000
1.050	0.000	0.000	0.000	0.000	0.000
1.100	0.000	0.000	0.000	0.000	0.000
1.150	0.000	0.000	0.000	0.000	0.000
1.200	0.000	0.000	0.000	0.000	0.000
1.250	0.000	0.000	0.000	0.000	0.000
1.300	0.000	0.000	0.000	0.000	0.000
1.350	0.000	0.000	0.000	0.000	0.000
1.400	0.000	0.000	0.000	0.000	0.000
1.450	0.000	0.000	0.000	0.000	0.000
1.500	0.000	0.000	0.000	0.000	0.000
1.550	0.000	0.000	0.000	0.000	0.000
1.600	0.000	0.000	0.000	0.000	0.000
1.650	0.000	0.000	0.000	0.000	0.000
1.700	0.000	0.000	0.000	0.000	0.000
1.750	0.000	0.000	0.000	0.000	0.000
1.800	0.000	0.000	0.000	0.000	0.000
1.850	0.000	0.000	0.000	0.000	0.000
1.900	0.000	0.000	0.000	0.000	0.000
1.950	0.000	0.001	0.001	0.001	0.001
2.000	0.001	0.001	0.001	0.001	0.001
2.050	0.001	0.001	0.002	0.002	0.002
2.100	0.002	0.002	0.002	0.002	0.002

Time vs. Volume (ac-ft)

Output Time increment = 0.010 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
2.150	0.003	0.003	0.003	0.003	0.003
2.200	0.003	0.004	0.004	0.004	0.004
2.250	0.004	0.005	0.005	0.005	0.005
2.300	0.005	0.006	0.006	0.006	0.006
2.350	0.007	0.007	0.007	0.007	0.008
2.400	0.008	0.008	0.008	0.009	0.009
2.450	0.009	0.010	0.010	0.010	0.010
2.500	0.011	0.011	0.011	0.012	0.012
2.550	0.012	0.013	0.013	0.013	0.014
2.600	0.014	0.014	0.015	0.015	0.015
2.650	0.016	0.016	0.017	0.017	0.017
2.700	0.018	0.018	0.019	0.019	0.019
2.750	0.020	0.020	0.021	0.021	0.021
2.800	0.022	0.022	0.023	0.023	0.024
2.850	0.024	0.024	0.025	0.025	0.026
2.900	0.026	0.027	0.027	0.028	0.028
2.950	0.029	0.029	0.030	0.030	0.031
3.000	0.031	0.032	0.032	0.033	0.033
3.050	0.034	0.034	0.035	0.035	0.036
3.100	0.036	0.037	0.037	0.038	0.038
3.150	0.039	0.040	0.040	0.041	0.041
3.200	0.042	0.042	0.043	0.044	0.044
3.250	0.045	0.045	0.046	0.047	0.047
3.300	0.048	0.048	0.049	0.050	0.050
3.350	0.051	0.052	0.052	0.053	0.054
3.400	0.054	0.055	0.056	0.056	0.057
3.450	0.058	0.058	0.059	0.060	0.060
3.500	0.061	0.062	0.062	0.063	0.064
3.550	0.064	0.065	0.066	0.066	0.067
3.600	0.068	0.069	0.069	0.070	0.071
3.650	0.071	0.072	0.073	0.074	0.074
3.700	0.075	0.076	0.077	0.077	0.078
3.750	0.079	0.080	0.080	0.081	0.082
3.800	0.083	0.084	0.084	0.085	0.086
3.850	0.087	0.087	0.088	0.089	0.090
3.900	0.091	0.091	0.092	0.093	0.094
3.950	0.095	0.095	0.096	0.097	0.098
4.000	0.099	0.100	0.100	0.101	0.102
4.050	0.103	0.104	0.105	0.106	0.106
4.100	0.107	0.108	0.109	0.110	0.111
4.150	0.112	0.113	0.113	0.114	0.115
4.200	0.116	0.117	0.118	0.119	0.120
4.250	0.121	0.122	0.123	0.124	0.125

Time vs. Volume (ac-ft)

Output Time increment = 0.010 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
4.300	0.126	0.127	0.128	0.129	0.129
4.350	0.130	0.131	0.132	0.133	0.134
4.400	0.135	0.136	0.137	0.138	0.139
4.450	0.140	0.141	0.142	0.143	0.144
4.500	0.145	0.146	0.147	0.148	0.149
4.550	0.150	0.151	0.152	0.153	0.155
4.600	0.156	0.157	0.158	0.159	0.160
4.650	0.161	0.162	0.163	0.164	0.165
4.700	0.166	0.167	0.168	0.169	0.170
4.750	0.171	0.172	0.173	0.175	0.176
4.800	0.177	0.178	0.179	0.180	0.181
4.850	0.182	0.183	0.184	0.185	0.187
4.900	0.188	0.189	0.190	0.191	0.192
4.950	0.193	0.194	0.195	0.197	0.198
5.000	0.199	0.200	0.201	0.202	0.203
5.050	0.204	0.206	0.207	0.208	0.209
5.100	0.210	0.211	0.213	0.214	0.215
5.150	0.216	0.217	0.218	0.220	0.221
5.200	0.222	0.223	0.224	0.226	0.227
5.250	0.228	0.229	0.230	0.232	0.233
5.300	0.234	0.235	0.237	0.238	0.239
5.350	0.240	0.241	0.243	0.244	0.245
5.400	0.246	0.248	0.249	0.250	0.251
5.450	0.253	0.254	0.255	0.256	0.258
5.500	0.259	0.260	0.261	0.263	0.264
5.550	0.265	0.266	0.268	0.269	0.270
5.600	0.271	0.273	0.274	0.275	0.277
5.650	0.278	0.279	0.280	0.282	0.283
5.700	0.284	0.286	0.287	0.288	0.290
5.750	0.291	0.292	0.293	0.295	0.296
5.800	0.297	0.299	0.300	0.301	0.303
5.850	0.304	0.305	0.307	0.308	0.309
5.900	0.311	0.312	0.313	0.315	0.316
5.950	0.317	0.319	0.320	0.321	0.323
6.000	0.324	0.325	0.327	0.328	0.329
6.050	0.331	0.332	0.333	0.335	0.336
6.100	0.337	0.339	0.340	0.342	0.343
6.150	0.344	0.346	0.347	0.348	0.350
6.200	0.351	0.352	0.354	0.355	0.356
6.250	0.358	0.359	0.360	0.362	0.363
6.300	0.364	0.366	0.367	0.368	0.370
6.350	0.371	0.372	0.374	0.375	0.376
6.400	0.378	0.379	0.380	0.382	0.383

Time vs. Volume (ac-ft)

Output Time increment = 0.010 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
6.450	0.385	0.386	0.387	0.389	0.390
6.500	0.391	0.393	0.394	0.395	0.397
6.550	0.398	0.400	0.401	0.402	0.404
6.600	0.405	0.406	0.408	0.409	0.411
6.650	0.412	0.413	0.415	0.416	0.418
6.700	0.419	0.420	0.422	0.423	0.425
6.750	0.426	0.427	0.429	0.430	0.432
6.800	0.433	0.434	0.436	0.437	0.439
6.850	0.440	0.441	0.443	0.444	0.446
6.900	0.447	0.449	0.450	0.451	0.453
6.950	0.454	0.456	0.457	0.459	0.460
7.000	0.461	0.463	0.464	0.466	0.467
7.050	0.469	0.470	0.472	0.473	0.474
7.100	0.476	0.477	0.479	0.480	0.482
7.150	0.483	0.485	0.487	0.488	0.490
7.200	0.491	0.493	0.494	0.496	0.497
7.250	0.499	0.500	0.502	0.504	0.505
7.300	0.507	0.508	0.510	0.511	0.513
7.350	0.515	0.516	0.518	0.519	0.521
7.400	0.523	0.524	0.526	0.527	0.529
7.450	0.531	0.532	0.534	0.535	0.537
7.500	0.538	0.540	0.542	0.543	0.545
7.550	0.547	0.548	0.550	0.551	0.553
7.600	0.555	0.556	0.558	0.559	0.561
7.650	0.563	0.564	0.566	0.568	0.569
7.700	0.571	0.572	0.574	0.576	0.577
7.750	0.579	0.581	0.582	0.584	0.585
7.800	0.587	0.589	0.590	0.592	0.594
7.850	0.595	0.597	0.599	0.600	0.602
7.900	0.604	0.605	0.607	0.608	0.610
7.950	0.612	0.613	0.615	0.617	0.618
8.000	0.620	0.622	0.623	0.625	0.627
8.050	0.628	0.630	0.632	0.634	0.635
8.100	0.637	0.639	0.641	0.642	0.644
8.150	0.646	0.648	0.650	0.652	0.654
8.200	0.655	0.657	0.659	0.661	0.663
8.250	0.665	0.667	0.669	0.671	0.673
8.300	0.675	0.677	0.678	0.680	0.682
8.350	0.684	0.686	0.688	0.690	0.692
8.400	0.694	0.696	0.698	0.700	0.702
8.450	0.704	0.706	0.708	0.710	0.712
8.500	0.714	0.716	0.718	0.720	0.722
8.550	0.724	0.726	0.728	0.730	0.732

Time vs. Volume (ac-ft)

Output Time increment = 0.010 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
8.600	0.734	0.736	0.738	0.739	0.741
8.650	0.743	0.745	0.747	0.749	0.751
8.700	0.753	0.755	0.757	0.759	0.761
8.750	0.763	0.765	0.767	0.769	0.771
8.800	0.773	0.775	0.777	0.779	0.781
8.850	0.784	0.786	0.788	0.790	0.792
8.900	0.794	0.796	0.798	0.800	0.802
8.950	0.804	0.806	0.808	0.810	0.812
9.000	0.814	0.816	0.818	0.820	0.822
9.050	0.824	0.826	0.828	0.830	0.832
9.100	0.834	0.837	0.839	0.841	0.843
9.150	0.845	0.848	0.850	0.852	0.854
9.200	0.857	0.859	0.861	0.863	0.866
9.250	0.868	0.870	0.873	0.875	0.877
9.300	0.880	0.882	0.884	0.886	0.889
9.350	0.891	0.893	0.896	0.898	0.900
9.400	0.903	0.905	0.907	0.910	0.912
9.450	0.914	0.917	0.919	0.921	0.924
9.500	0.926	0.928	0.931	0.933	0.935
9.550	0.937	0.940	0.942	0.944	0.947
9.600	0.949	0.951	0.954	0.956	0.958
9.650	0.961	0.963	0.965	0.968	0.970
9.700	0.972	0.975	0.977	0.979	0.982
9.750	0.984	0.986	0.989	0.991	0.993
9.800	0.995	0.998	1.000	1.002	1.005
9.850	1.007	1.009	1.012	1.014	1.016
9.900	1.019	1.021	1.023	1.026	1.028
9.950	1.030	1.032	1.035	1.037	1.039
10.000	1.042	1.044	1.046	1.049	1.051
10.050	1.053	1.056	1.058	1.061	1.063
10.100	1.066	1.068	1.071	1.073	1.076
10.150	1.079	1.082	1.085	1.087	1.090
10.200	1.093	1.096	1.099	1.102	1.105
10.250	1.108	1.111	1.114	1.117	1.120
10.300	1.123	1.126	1.129	1.132	1.135
10.350	1.138	1.141	1.144	1.147	1.150
10.400	1.153	1.156	1.159	1.162	1.165
10.450	1.168	1.171	1.174	1.177	1.180
10.500	1.183	1.186	1.189	1.192	1.195
10.550	1.198	1.201	1.204	1.207	1.210
10.600	1.213	1.216	1.219	1.222	1.225
10.650	1.228	1.231	1.234	1.237	1.240
10.700	1.243	1.246	1.249	1.252	1.255

Time vs. Volume (ac-ft)

Output Time increment = 0.010 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
10.750	1.258	1.261	1.264	1.267	1.270
10.800	1.273	1.276	1.279	1.282	1.285
10.850	1.288	1.291	1.294	1.297	1.301
10.900	1.304	1.307	1.310	1.313	1.316
10.950	1.319	1.322	1.325	1.328	1.331
11.000	1.334	1.337	1.340	1.343	1.346
11.050	1.349	1.352	1.355	1.358	1.362
11.100	1.365	1.368	1.371	1.375	1.378
11.150	1.381	1.385	1.388	1.392	1.395
11.200	1.399	1.402	1.406	1.409	1.413
11.250	1.417	1.420	1.424	1.427	1.431
11.300	1.435	1.438	1.442	1.445	1.449
11.350	1.453	1.456	1.460	1.463	1.467
11.400	1.471	1.474	1.478	1.481	1.485
11.450	1.489	1.492	1.496	1.500	1.503
11.500	1.507	1.510	1.514	1.518	1.521
11.550	1.525	1.529	1.532	1.536	1.539
11.600	1.543	1.547	1.550	1.554	1.558
11.650	1.561	1.565	1.569	1.572	1.576
11.700	1.579	1.583	1.587	1.590	1.594
11.750	1.598	1.601	1.605	1.608	1.612
11.800	1.616	1.619	1.623	1.627	1.630
11.850	1.634	1.638	1.641	1.645	1.649
11.900	1.652	1.656	1.659	1.663	1.667
11.950	1.670	1.674	1.678	1.681	1.685
12.000	1.689	1.692	1.696	1.700	1.703
12.050	1.707	1.711	1.715	1.719	1.723
12.100	1.727	1.731	1.736	1.740	1.745
12.150	1.750	1.754	1.759	1.764	1.769
12.200	1.774	1.779	1.784	1.789	1.795
12.250	1.800	1.805	1.810	1.815	1.820
12.300	1.826	1.831	1.836	1.841	1.847
12.350	1.852	1.857	1.862	1.868	1.873
12.400	1.878	1.883	1.889	1.894	1.899
12.450	1.905	1.910	1.915	1.921	1.926
12.500	1.931	1.936	1.942	1.947	1.952
12.550	1.958	1.963	1.968	1.974	1.979
12.600	1.984	1.989	1.995	2.000	2.005
12.650	2.011	2.016	2.021	2.027	2.032
12.700	2.037	2.043	2.048	2.053	2.059
12.750	2.064	2.069	2.074	2.080	2.085
12.800	2.090	2.096	2.101	2.106	2.112
12.850	2.117	2.122	2.128	2.133	2.138

Time vs. Volume (ac-ft)

Output Time increment = 0.010 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
12.900	2.144	2.149	2.154	2.160	2.165
12.950	2.170	2.176	2.181	2.186	2.192
13.000	2.197	2.202	2.208	2.213	2.218
13.050	2.224	2.229	2.235	2.240	2.246
13.100	2.251	2.257	2.262	2.268	2.273
13.150	2.279	2.285	2.290	2.296	2.302
13.200	2.308	2.313	2.319	2.325	2.331
13.250	2.337	2.342	2.348	2.354	2.360
13.300	2.366	2.371	2.377	2.383	2.389
13.350	2.395	2.401	2.406	2.412	2.418
13.400	2.424	2.430	2.436	2.441	2.447
13.450	2.453	2.459	2.465	2.471	2.477
13.500	2.482	2.488	2.494	2.500	2.506
13.550	2.512	2.517	2.523	2.529	2.535
13.600	2.541	2.547	2.553	2.558	2.564
13.650	2.570	2.576	2.582	2.588	2.594
13.700	2.599	2.605	2.611	2.617	2.623
13.750	2.629	2.635	2.641	2.646	2.652
13.800	2.658	2.664	2.670	2.676	2.682
13.850	2.687	2.693	2.699	2.705	2.711
13.900	2.717	2.723	2.729	2.734	2.740
13.950	2.746	2.752	2.758	2.764	2.770
14.000	2.776	2.781	2.787	2.793	2.799
14.050	2.805	2.811	2.817	2.823	2.829
14.100	2.835	2.841	2.847	2.853	2.860
14.150	2.866	2.872	2.878	2.885	2.891
14.200	2.897	2.904	2.910	2.917	2.923
14.250	2.929	2.936	2.942	2.949	2.955
14.300	2.962	2.968	2.974	2.981	2.987
14.350	2.994	3.000	3.007	3.013	3.019
14.400	3.026	3.032	3.039	3.045	3.052
14.450	3.058	3.065	3.071	3.078	3.084
14.500	3.090	3.097	3.103	3.110	3.116
14.550	3.123	3.129	3.136	3.142	3.149
14.600	3.155	3.162	3.168	3.174	3.181
14.650	3.187	3.194	3.200	3.207	3.213
14.700	3.220	3.226	3.233	3.239	3.246
14.750	3.252	3.258	3.265	3.271	3.278
14.800	3.284	3.291	3.297	3.304	3.310
14.850	3.317	3.323	3.330	3.336	3.343
14.900	3.349	3.355	3.362	3.368	3.375
14.950	3.381	3.388	3.394	3.401	3.407
15.000	3.414	3.420	3.427	3.433	3.440

Time vs. Volume (ac-ft)

Output Time increment = 0.010 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
15.050	3.446	3.453	3.459	3.465	3.472
15.100	3.478	3.485	3.491	3.498	3.504
15.150	3.511	3.517	3.524	3.530	3.537
15.200	3.543	3.549	3.556	3.562	3.569
15.250	3.575	3.582	3.588	3.595	3.601
15.300	3.608	3.614	3.621	3.627	3.633
15.350	3.640	3.646	3.653	3.659	3.666
15.400	3.672	3.679	3.685	3.692	3.698
15.450	3.704	3.711	3.717	3.724	3.730
15.500	3.737	3.743	3.750	3.756	3.763
15.550	3.769	3.776	3.782	3.788	3.795
15.600	3.801	3.808	3.814	3.821	3.827
15.650	3.834	3.840	3.847	3.853	3.859
15.700	3.866	3.872	3.879	3.885	3.892
15.750	3.898	3.905	3.911	3.918	3.924
15.800	3.931	3.937	3.943	3.950	3.956
15.850	3.963	3.969	3.976	3.982	3.989
15.900	3.995	4.002	4.008	4.015	4.021
15.950	4.027	4.034	4.040	4.047	4.053
16.000	4.060	4.066	4.073	4.079	4.086
16.050	4.092	4.098	4.105	4.111	4.117
16.100	4.124	4.130	4.136	4.142	4.149
16.150	4.155	4.161	4.167	4.173	4.179
16.200	4.185	4.191	4.197	4.203	4.209
16.250	4.215	4.221	4.228	4.234	4.240
16.300	4.246	4.252	4.258	4.264	4.270
16.350	4.276	4.281	4.287	4.293	4.299
16.400	4.305	4.311	4.317	4.323	4.329
16.450	4.335	4.341	4.347	4.353	4.359
16.500	4.365	4.371	4.377	4.383	4.389
16.550	4.395	4.401	4.407	4.413	4.419
16.600	4.425	4.431	4.437	4.443	4.449
16.650	4.455	4.461	4.467	4.473	4.479
16.700	4.485	4.491	4.497	4.503	4.509
16.750	4.515	4.521	4.527	4.533	4.539
16.800	4.545	4.551	4.557	4.563	4.569
16.850	4.575	4.581	4.587	4.593	4.599
16.900	4.604	4.610	4.616	4.622	4.628
16.950	4.634	4.640	4.646	4.652	4.658
17.000	4.664	4.670	4.676	4.682	4.688
17.050	4.694	4.700	4.706	4.711	4.717
17.100	4.722	4.728	4.733	4.738	4.744
17.150	4.749	4.754	4.759	4.764	4.769

Time vs. Volume (ac-ft)

Output Time increment = 0.010 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
17.200	4.774	4.779	4.784	4.788	4.793
17.250	4.798	4.803	4.807	4.812	4.817
17.300	4.822	4.826	4.831	4.836	4.841
17.350	4.845	4.850	4.855	4.859	4.864
17.400	4.869	4.874	4.878	4.883	4.888
17.450	4.892	4.897	4.902	4.906	4.911
17.500	4.916	4.920	4.925	4.930	4.934
17.550	4.939	4.944	4.949	4.953	4.958
17.600	4.963	4.967	4.972	4.977	4.981
17.650	4.986	4.991	4.995	5.000	5.005
17.700	5.009	5.014	5.019	5.023	5.028
17.750	5.033	5.037	5.042	5.047	5.051
17.800	5.056	5.061	5.066	5.070	5.075
17.850	5.080	5.084	5.089	5.094	5.098
17.900	5.103	5.108	5.112	5.117	5.122
17.950	5.126	5.131	5.136	5.140	5.145
18.000	5.150	5.154	5.159	5.164	5.168
18.050	5.173	5.177	5.182	5.186	5.190
18.100	5.194	5.198	5.202	5.206	5.210
18.150	5.214	5.217	5.221	5.224	5.228
18.200	5.231	5.234	5.237	5.241	5.244
18.250	5.247	5.250	5.254	5.257	5.260
18.300	5.263	5.266	5.269	5.272	5.276
18.350	5.279	5.282	5.285	5.288	5.291
18.400	5.294	5.297	5.300	5.304	5.307
18.450	5.310	5.313	5.316	5.319	5.322
18.500	5.325	5.328	5.331	5.334	5.338
18.550	5.341	5.344	5.347	5.350	5.353
18.600	5.356	5.359	5.362	5.365	5.368
18.650	5.371	5.375	5.378	5.381	5.384
18.700	5.387	5.390	5.393	5.396	5.399
18.750	5.402	5.405	5.408	5.412	5.415
18.800	5.418	5.421	5.424	5.427	5.430
18.850	5.433	5.436	5.439	5.442	5.445
18.900	5.449	5.452	5.455	5.458	5.461
18.950	5.464	5.467	5.470	5.473	5.476
19.000	5.479	5.482	5.485	5.489	5.492
19.050	5.495	5.497	5.500	5.503	5.506
19.100	5.509	5.511	5.514	5.516	5.519
19.150	5.521	5.523	5.525	5.527	5.529
19.200	5.532	5.534	5.536	5.538	5.540
19.250	5.542	5.544	5.546	5.547	5.549
19.300	5.551	5.553	5.555	5.557	5.559

Time vs. Volume (ac-ft)

Output Time increment = 0.010 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
19.350	5.561	5.563	5.565	5.567	5.568
19.400	5.570	5.572	5.574	5.576	5.578
19.450	5.580	5.582	5.583	5.585	5.587
19.500	5.589	5.591	5.593	5.595	5.597
19.550	5.598	5.600	5.602	5.604	5.606
19.600	5.608	5.610	5.612	5.613	5.615
19.650	5.617	5.619	5.621	5.623	5.625
19.700	5.627	5.628	5.630	5.632	5.634
19.750	5.636	5.638	5.640	5.642	5.643
19.800	5.645	5.647	5.649	5.651	5.653
19.850	5.655	5.657	5.658	5.660	5.662
19.900	5.664	5.666	5.668	5.670	5.671
19.950	5.673	5.675	5.677	5.679	5.681
20.000	5.683	5.685	5.686	5.688	5.690
20.050	5.692	5.694	5.695	5.697	5.699
20.100	5.700	5.702	5.703	5.704	5.706
20.150	5.707	5.708	5.709	5.711	5.712
20.200	5.713	5.714	5.715	5.716	5.717
20.250	5.718	5.719	5.720	5.721	5.722
20.300	5.723	5.724	5.725	5.725	5.726
20.350	5.727	5.728	5.729	5.730	5.731
20.400	5.732	5.733	5.734	5.735	5.736
20.450	5.737	5.738	5.738	5.739	5.740
20.500	5.741	5.742	5.743	5.744	5.745
20.550	5.746	5.747	5.748	5.749	5.749
20.600	5.750	5.751	5.752	5.753	5.754
20.650	5.755	5.756	5.757	5.758	5.759
20.700	5.760	5.760	5.761	5.762	5.763
20.750	5.764	5.765	5.766	5.767	5.768
20.800	5.769	5.770	5.771	5.771	5.772
20.850	5.773	5.774	5.775	5.776	5.777
20.900	5.778	5.779	5.780	5.781	5.781
20.950	5.782	5.783	5.784	5.785	5.786
21.000	5.787	5.788	5.789	5.790	5.791
21.050	5.791	5.792	5.793	5.794	5.795
21.100	5.796	5.796	5.797	5.798	5.798
21.150	5.799	5.800	5.800	5.801	5.801
21.200	5.802	5.803	5.803	5.804	5.804
21.250	5.805	5.805	5.806	5.806	5.807
21.300	5.807	5.808	5.808	5.809	5.809
21.350	5.810	5.810	5.811	5.811	5.812
21.400	5.812	5.813	5.813	5.814	5.814
21.450	5.815	5.815	5.816	5.816	5.817

Time vs. Volume (ac-ft)

Output Time increment = 0.010 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
21.500	5.817	5.817	5.818	5.818	5.819
21.550	5.819	5.820	5.820	5.821	5.821
21.600	5.822	5.822	5.823	5.823	5.824
21.650	5.824	5.825	5.825	5.826	5.826
21.700	5.827	5.827	5.828	5.828	5.829
21.750	5.829	5.830	5.830	5.831	5.831
21.800	5.832	5.832	5.833	5.833	5.833
21.850	5.834	5.834	5.835	5.835	5.836
21.900	5.836	5.837	5.837	5.838	5.838
21.950	5.839	5.839	5.840	5.840	5.841
22.000	5.841	5.842	5.842	5.843	5.843
22.050	5.844	5.844	5.845	5.845	5.845
22.100	5.846	5.846	5.847	5.847	5.847
22.150	5.848	5.848	5.849	5.849	5.849
22.200	5.850	5.850	5.850	5.851	5.851
22.250	5.851	5.852	5.852	5.852	5.853
22.300	5.853	5.853	5.853	5.854	5.854
22.350	5.854	5.855	5.855	5.855	5.856
22.400	5.856	5.856	5.857	5.857	5.857
22.450	5.858	5.858	5.858	5.858	5.859
22.500	5.859	5.859	5.860	5.860	5.860
22.550	5.861	5.861	5.861	5.862	5.862
22.600	5.862	5.862	5.863	5.863	5.863
22.650	5.864	5.864	5.864	5.865	5.865
22.700	5.865	5.866	5.866	5.866	5.866
22.750	5.867	5.867	5.867	5.868	5.868
22.800	5.868	5.869	5.869	5.869	5.870
22.850	5.870	5.870	5.870	5.871	5.871
22.900	5.871	5.872	5.872	5.872	5.873
22.950	5.873	5.873	5.874	5.874	5.874
23.000	5.874	5.875	5.875	5.875	5.876
23.050	5.876	5.876	5.877	5.877	5.877
23.100	5.877	5.878	5.878	5.878	5.879
23.150	5.879	5.879	5.879	5.880	5.880
23.200	5.880	5.880	5.881	5.881	5.881
23.250	5.881	5.882	5.882	5.882	5.882
23.300	5.883	5.883	5.883	5.883	5.884
23.350	5.884	5.884	5.884	5.885	5.885
23.400	5.885	5.885	5.886	5.886	5.886
23.450	5.886	5.887	5.887	5.887	5.887
23.500	5.888	5.888	5.888	5.888	5.889
23.550	5.889	5.889	5.889	5.890	5.890
23.600	5.890	5.890	5.891	5.891	5.891

Time vs. Volume (ac-ft)

Output Time increment = 0.010 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
23.650	5.891	5.892	5.892	5.892	5.892
23.700	5.893	5.893	5.893	5.893	5.894
23.750	5.894	5.894	5.894	5.895	5.895
23.800	5.895	5.895	5.896	5.896	5.896
23.850	5.896	5.897	5.897	5.897	5.897
23.900	5.898	5.898	5.898	5.898	5.899
23.950	5.899	5.899	5.899	5.900	5.900
24.000	5.900	5.900	5.901	5.901	5.901
24.050	5.901	5.901	5.901	5.901	5.901
24.100	5.901	5.901	5.901	5.900	5.900
24.150	5.899	5.899	5.898	5.897	5.897
24.200	5.896	5.895	5.894	5.893	5.893
24.250	5.892	5.891	5.890	5.889	5.888
24.300	5.887	5.886	5.886	5.885	5.884
24.350	5.883	5.882	5.881	5.880	5.879
24.400	5.878	5.877	5.876	5.875	5.874
24.450	5.873	5.873	5.872	5.871	5.870
24.500	5.869	5.868	5.867	5.866	5.865
24.550	5.864	5.863	5.862	5.861	5.860
24.600	5.859	5.858	5.858	5.857	5.856
24.650	5.855	5.854	5.853	5.852	5.851
24.700	5.850	5.849	5.848	5.847	5.846
24.750	5.845	5.844	5.843	5.842	5.842
24.800	5.841	5.840	5.839	5.838	5.837
24.850	5.836	5.835	5.834	5.833	5.832
24.900	5.831	5.830	5.829	5.828	5.827
24.950	5.827	5.826	5.825	5.824	5.823
25.000	5.822	5.821	5.820	5.819	5.818
25.050	5.817	5.816	5.815	5.814	5.813
25.100	5.812	5.812	5.811	5.810	5.809
25.150	5.808	5.807	5.806	5.805	5.804
25.200	5.803	5.802	5.801	5.800	5.799
25.250	5.798	5.798	5.797	5.796	5.795
25.300	5.794	5.793	5.792	5.791	5.790
25.350	5.789	5.788	5.787	5.786	5.785
25.400	5.784	5.784	5.783	5.782	5.781
25.450	5.780	5.779	5.778	5.777	5.776
25.500	5.775	5.774	5.773	5.772	5.771
25.550	5.770	5.770	5.769	5.768	5.767
25.600	5.766	5.765	5.764	5.763	5.762
25.650	5.761	5.760	5.759	5.758	5.757
25.700	5.757	5.756	5.755	5.754	5.753
25.750	5.752	5.751	5.750	5.749	5.748

Time vs. Volume (ac-ft)

Output Time increment = 0.010 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
25.800	5.747	5.746	5.745	5.744	5.744
25.850	5.743	5.742	5.741	5.740	5.739
25.900	5.738	5.737	5.736	5.735	5.734
25.950	5.733	5.732	5.731	5.731	5.730
26.000	5.729	5.728	5.727	5.726	5.725
26.050	5.724	5.723	5.722	5.721	5.720
26.100	5.719	5.718	5.718	5.717	5.716
26.150	5.715	5.714	5.713	5.712	5.711
26.200	5.710	5.709	5.708	5.707	5.706
26.250	5.705	5.705	5.704	5.703	5.702
26.300	5.701	5.700	5.699	5.698	5.697
26.350	5.696	5.695	5.694	5.693	5.693
26.400	5.692	5.691	5.690	5.689	5.688
26.450	5.687	5.686	5.685	5.684	5.683
26.500	5.682	5.681	5.681	5.680	5.679
26.550	5.678	5.677	5.676	5.675	5.674
26.600	5.673	5.672	5.671	5.670	5.669
26.650	5.669	5.668	5.667	5.666	5.665
26.700	5.664	5.663	5.662	5.661	5.660
26.750	5.659	5.658	5.657	5.657	5.656
26.800	5.655	5.654	5.653	5.652	5.651
26.850	5.650	5.649	5.648	5.647	5.646
26.900	5.646	5.645	5.644	5.643	5.642
26.950	5.641	5.640	5.639	5.638	5.637
27.000	5.636	5.635	5.635	5.634	5.633
27.050	5.632	5.631	5.630	5.629	5.628
27.100	5.627	5.626	5.625	5.624	5.623
27.150	5.623	5.622	5.621	5.620	5.619
27.200	5.618	5.617	5.616	5.615	5.614
27.250	5.613	5.612	5.612	5.611	5.610
27.300	5.609	5.608	5.607	5.606	5.605
27.350	5.604	5.603	5.602	5.601	5.601
27.400	5.600	5.599	5.598	5.597	5.596
27.450	5.595	5.594	5.593	5.592	5.591
27.500	5.591	5.590	5.589	5.588	5.587
27.550	5.586	5.585	5.584	5.583	5.582
27.600	5.581	5.580	5.580	5.579	5.578
27.650	5.577	5.576	5.575	5.574	5.573
27.700	5.572	5.571	5.570	5.570	5.569
27.750	5.568	5.567	5.566	5.565	5.564
27.800	5.563	5.562	5.561	5.560	5.559
27.850	5.559	5.558	5.557	5.556	5.555
27.900	5.554	5.553	5.552	5.551	5.550

Time vs. Volume (ac-ft)

Output Time increment = 0.010 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
27.950	5.549	5.549	5.548	5.547	5.546
28.000	5.545	5.544	5.543	5.542	5.541
28.050	5.540	5.539	5.539	5.538	5.537
28.100	5.536	5.535	5.534	5.533	5.532
28.150	5.531	5.530	5.529	5.529	5.528
28.200	5.527	5.526	5.525	5.524	5.523
28.250	5.522	5.521	5.520	5.519	5.519
28.300	5.518	5.517	5.516	5.515	5.514
28.350	5.513	5.512	5.511	5.510	5.510
28.400	5.509	5.508	5.507	5.506	5.505
28.450	5.504	5.503	5.502	5.501	5.500
28.500	5.500	5.499	5.498	5.497	5.496
28.550	5.495	5.494	5.493	5.492	5.491
28.600	5.491	5.490	5.489	5.488	5.487
28.650	5.486	5.485	5.484	5.483	5.482
28.700	5.481	5.481	5.480	5.479	5.478
28.750	5.477	5.476	5.475	5.474	5.473
28.800	5.472	5.472	5.471	5.470	5.469
28.850	5.468	5.467	5.466	5.465	5.464
28.900	5.463	5.463	5.462	5.461	5.460
28.950	5.459	5.458	5.457	5.456	5.455
29.000	5.454	5.454	5.453	5.452	5.451
29.050	5.450	5.449	5.448	5.447	5.446
29.100	5.445	5.445	5.444	5.443	5.442
29.150	5.441	5.440	5.439	5.438	5.437
29.200	5.436	5.436	5.435	5.434	5.433
29.250	5.432	5.431	5.430	5.429	5.428
29.300	5.427	5.427	5.426	5.425	5.424
29.350	5.423	5.422	5.421	5.420	5.419
29.400	5.418	5.418	5.417	5.416	5.415
29.450	5.414	5.413	5.412	5.411	5.410
29.500	5.410	5.409	5.408	5.407	5.406
29.550	5.405	5.404	5.403	5.402	5.401
29.600	5.401	5.400	5.399	5.398	5.397
29.650	5.396	5.395	5.394	5.393	5.392
29.700	5.392	5.391	5.390	5.389	5.388
29.750	5.387	5.386	5.385	5.384	5.384
29.800	5.383	5.382	5.381	5.380	5.379
29.850	5.378	5.377	5.376	5.376	5.375
29.900	5.374	5.373	5.372	5.371	5.370
29.950	5.369	5.368	5.367	5.367	5.366
30.000	5.365	5.364	5.363	5.362	5.361
30.050	5.360	5.359	5.359	5.358	5.357

Time vs. Volume (ac-ft)

Output Time increment = 0.010 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
30.100	5.356	5.355	5.354	5.353	5.352
30.150	5.351	5.351	5.350	5.349	5.348
30.200	5.347	5.346	5.345	5.344	5.343
30.250	5.343	5.342	5.341	5.340	5.339
30.300	5.338	5.337	5.336	5.335	5.335
30.350	5.334	5.333	5.332	5.331	5.330
30.400	5.329	5.328	5.327	5.327	5.326
30.450	5.325	5.324	5.323	5.322	5.321
30.500	5.320	5.319	5.319	5.318	5.317
30.550	5.316	5.315	5.314	5.313	5.312
30.600	5.311	5.311	5.310	5.309	5.308
30.650	5.307	5.306	5.305	5.304	5.304
30.700	5.303	5.302	5.301	5.300	5.299
30.750	5.298	5.297	5.296	5.296	5.295
30.800	5.294	5.293	5.292	5.291	5.290
30.850	5.289	5.288	5.288	5.287	5.286
30.900	5.285	5.284	5.283	5.282	5.281
30.950	5.281	5.280	5.279	5.278	5.277
31.000	5.276	5.275	5.274	5.273	5.273
31.050	5.272	5.271	5.270	5.269	5.268
31.100	5.267	5.266	5.266	5.265	5.264
31.150	5.263	5.262	5.261	5.260	5.259
31.200	5.258	5.258	5.257	5.256	5.255
31.250	5.254	5.253	5.252	5.251	5.251
31.300	5.250	5.249	5.248	5.247	5.246
31.350	5.245	5.244	5.244	5.243	5.242
31.400	5.241	5.240	5.239	5.238	5.237
31.450	5.236	5.236	5.235	5.234	5.233
31.500	5.232	5.231	5.230	5.229	5.229
31.550	5.228	5.227	5.226	5.225	5.224
31.600	5.223	5.222	5.222	5.221	5.220
31.650	5.219	5.218	5.217	5.216	5.215
31.700	5.215	5.214	5.213	5.212	5.211
31.750	5.210	5.209	5.208	5.208	5.207
31.800	5.206	5.205	5.204	5.203	5.202
31.850	5.201	5.201	5.200	5.199	5.198
31.900	5.197	5.196	5.195	5.194	5.194
31.950	5.193	5.192	5.191	5.190	5.189
32.000	5.188	5.187	5.187	5.186	5.185
32.050	5.184	5.183	5.182	5.181	5.180
32.100	5.180	5.179	5.178	5.177	5.176
32.150	5.175	5.174	5.173	5.173	5.172
32.200	5.171	5.170	5.169	5.168	5.167

Time vs. Volume (ac-ft)

Output Time increment = 0.010 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
32.250	5.166	5.166	5.165	5.164	5.163
32.300	5.162	5.161	5.160	5.160	5.159
32.350	5.158	5.157	5.156	5.155	5.154
32.400	5.153	5.153	5.152	5.151	5.150
32.450	5.149	5.148	5.147	5.146	5.146
32.500	5.145	5.144	5.143	5.142	5.141
32.550	5.140	5.140	5.139	5.138	5.137
32.600	5.136	5.135	5.134	5.133	5.133
32.650	5.132	5.131	5.130	5.129	5.128
32.700	5.127	5.126	5.126	5.125	5.124
32.750	5.123	5.122	5.121	5.120	5.120
32.800	5.119	5.118	5.117	5.116	5.115
32.850	5.114	5.113	5.113	5.112	5.111
32.900	5.110	5.109	5.108	5.107	5.107
32.950	5.106	5.105	5.104	5.103	5.102
33.000	5.101	5.101	5.100	5.099	5.098
33.050	5.097	5.096	5.095	5.094	5.094
33.100	5.093	5.092	5.091	5.090	5.089
33.150	5.088	5.088	5.087	5.086	5.085
33.200	5.084	5.083	5.082	5.082	5.081
33.250	5.080	5.079	5.078	5.077	5.076
33.300	5.075	5.075	5.074	5.073	5.072
33.350	5.071	5.070	5.069	5.069	5.068
33.400	5.067	5.066	5.065	5.064	5.063
33.450	5.063	5.062	5.061	5.060	5.059
33.500	5.058	5.057	5.057	5.056	5.055
33.550	5.054	5.053	5.052	5.051	5.051
33.600	5.050	5.049	5.048	5.047	5.046
33.650	5.045	5.045	5.044	5.043	5.042
33.700	5.041	5.040	5.039	5.038	5.038
33.750	5.037	5.036	5.035	5.034	5.033
33.800	5.033	5.032	5.031	5.030	5.029
33.850	5.028	5.027	5.027	5.026	5.025
33.900	5.024	5.023	5.022	5.021	5.021
33.950	5.020	5.019	5.018	5.017	5.016
34.000	5.015	5.015	5.014	5.013	5.012
34.050	5.011	5.010	5.009	5.009	5.008
34.100	5.007	5.006	5.005	5.004	5.003
34.150	5.003	5.002	5.001	5.000	4.999
34.200	4.998	4.997	4.997	4.996	4.995
34.250	4.994	4.993	4.992	4.991	4.991
34.300	4.990	4.989	4.988	4.987	4.986
34.350	4.985	4.985	4.984	4.983	4.982

Time vs. Volume (ac-ft)

Output Time increment = 0.010 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
34.400	4.981	4.980	4.980	4.979	4.978
34.450	4.977	4.976	4.975	4.974	4.974
34.500	4.973	4.972	4.971	4.970	4.969
34.550	4.968	4.968	4.967	4.966	4.965
34.600	4.964	4.963	4.963	4.962	4.961
34.650	4.960	4.959	4.958	4.957	4.957
34.700	4.956	4.955	4.954	4.953	4.952
34.750	4.951	4.951	4.950	4.949	4.948
34.800	4.947	4.946	4.946	4.945	4.944
34.850	4.943	4.942	4.941	4.940	4.940
34.900	4.939	4.938	4.937	4.936	4.935
34.950	4.935	4.934	4.933	4.932	4.931
35.000	4.930	4.929	4.929	4.928	4.927
35.050	4.926	4.925	4.924	4.924	4.923
35.100	4.922	4.921	4.920	4.919	4.918
35.150	4.918	4.917	4.916	4.915	4.914
35.200	4.913	4.913	4.912	4.911	4.910
35.250	4.909	4.908	4.907	4.907	4.906
35.300	4.905	4.904	4.903	4.902	4.902
35.350	4.901	4.900	4.899	4.898	4.897
35.400	4.896	4.896	4.895	4.894	4.893
35.450	4.892	4.891	4.891	4.890	4.889
35.500	4.888	4.887	4.886	4.886	4.885
35.550	4.884	4.883	4.882	4.881	4.880
35.600	4.880	4.879	4.878	4.877	4.876
35.650	4.875	4.875	4.874	4.873	4.872
35.700	4.871	4.870	4.870	4.869	4.868
35.750	4.867	4.866	4.865	4.865	4.864
35.800	4.863	4.862	4.861	4.860	4.859
35.850	4.859	4.858	4.857	4.856	4.855
35.900	4.854	4.854	4.853	4.852	4.851
35.950	4.850	4.849	4.849	4.848	4.847
36.000	4.846	4.845	4.844	4.844	4.843
36.050	4.842	4.841	4.840	4.839	4.839
36.100	4.838	4.837	4.836	4.835	4.834
36.150	4.834	4.833	4.832	4.831	4.830
36.200	4.829	4.828	4.828	4.827	4.826
36.250	4.825	4.824	4.823	4.823	4.822
36.300	4.821	4.820	4.819	4.818	4.818
36.350	4.817	4.816	4.815	4.814	4.813
36.400	4.813	4.812	4.811	4.810	4.809
36.450	4.808	4.808	4.807	4.806	4.805
36.500	4.804	4.803	4.803	4.802	4.801

Time vs. Volume (ac-ft)

Output Time increment = 0.010 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
36.550	4.800	4.799	4.798	4.798	4.797
36.600	4.796	4.795	4.794	4.793	4.793
36.650	4.792	4.791	4.790	4.789	4.788
36.700	4.788	4.787	4.786	4.785	4.784
36.750	4.783	4.783	4.782	4.781	4.780
36.800	4.779	4.779	4.778	4.777	4.776
36.850	4.775	4.774	4.774	4.773	4.772
36.900	4.771	4.770	4.769	4.769	4.768
36.950	4.767	4.766	4.765	4.764	4.764
37.000	4.763	4.762	4.761	4.760	4.759
37.050	4.759	4.758	4.757	4.756	4.755
37.100	4.754	4.754	4.753	4.752	4.751
37.150	4.750	4.749	4.749	4.748	4.747
37.200	4.746	4.745	4.745	4.744	4.743
37.250	4.742	4.741	4.740	4.740	4.739
37.300	4.738	4.737	4.736	4.735	4.735
37.350	4.734	4.733	4.732	4.731	4.731
37.400	4.730	4.729	4.728	4.727	4.726
37.450	4.726	4.725	4.724	4.723	4.722
37.500	4.721	4.721	4.720	4.719	4.718
37.550	4.717	4.716	4.716	4.715	4.714
37.600	4.713	4.712	4.712	4.711	4.710
37.650	4.709	4.708	4.707	4.707	4.706
37.700	4.705	4.704	4.703	4.703	4.702
37.750	4.701	4.700	4.699	4.698	4.698
37.800	4.697	4.696	4.695	4.694	4.693
37.850	4.693	4.692	4.691	4.690	4.689
37.900	4.689	4.688	4.687	4.686	4.685
37.950	4.684	4.684	4.683	4.682	4.681
38.000	4.680	4.680	4.679	4.678	4.677
38.050	4.676	4.675	4.675	4.674	4.673
38.100	4.672	4.671	4.671	4.670	4.669
38.150	4.668	4.667	4.666	4.666	4.665
38.200	4.664	4.663	4.662	4.662	4.661
38.250	4.660	4.659	4.658	4.657	4.657
38.300	4.656	4.655	4.654	4.653	4.653
38.350	4.652	4.651	4.650	4.649	4.648
38.400	4.648	4.647	4.646	4.645	4.644
38.450	4.644	4.643	4.642	4.641	4.640
38.500	4.639	4.639	4.638	4.637	4.636
38.550	4.635	4.635	4.634	4.633	4.632
38.600	4.631	4.631	4.630	4.629	4.628
38.650	4.627	4.626	4.626	4.625	4.624

Time vs. Volume (ac-ft)

Output Time increment = 0.010 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
38.700	4.623	4.622	4.622	4.621	4.620
38.750	4.619	4.618	4.617	4.617	4.616
38.800	4.615	4.614	4.613	4.613	4.612
38.850	4.611	4.610	4.609	4.609	4.608
38.900	4.607	4.606	4.605	4.605	4.604
38.950	4.603	4.602	4.601	4.600	4.600
39.000	4.599	4.598	4.597	4.596	4.596
39.050	4.595	4.594	4.593	4.592	4.592
39.100	4.591	4.590	4.589	4.588	4.587
39.150	4.587	4.586	4.585	4.584	4.583
39.200	4.583	4.582	4.581	4.580	4.579
39.250	4.579	4.578	4.577	4.576	4.575
39.300	4.575	4.574	4.573	4.572	4.571
39.350	4.571	4.570	4.569	4.568	4.567
39.400	4.566	4.566	4.565	4.564	4.563
39.450	4.562	4.562	4.561	4.560	4.559
39.500	4.558	4.558	4.557	4.556	4.555
39.550	4.554	4.554	4.553	4.552	4.551
39.600	4.550	4.550	4.549	4.548	4.547
39.650	4.546	4.546	4.545	4.544	4.543
39.700	4.542	4.542	4.541	4.540	4.539
39.750	4.538	4.537	4.537	4.536	4.535
39.800	4.534	4.533	4.533	4.532	4.531
39.850	4.530	4.529	4.529	4.528	4.527
39.900	4.526	4.525	4.525	4.524	4.523
39.950	4.522	4.521	4.521	4.520	4.519
40.000	4.518	4.517	4.517	4.516	4.515
40.050	4.514	4.513	4.513	4.512	4.511
40.100	4.510	4.509	4.509	4.508	4.507
40.150	4.506	4.505	4.505	4.504	4.503
40.200	4.502	4.501	4.501	4.500	4.499
40.250	4.498	4.497	4.497	4.496	4.495
40.300	4.494	4.493	4.493	4.492	4.491
40.350	4.490	4.489	4.489	4.488	4.487
40.400	4.486	4.485	4.485	4.484	4.483
40.450	4.482	4.481	4.481	4.480	4.479
40.500	4.478	4.477	4.477	4.476	4.475
40.550	4.474	4.473	4.473	4.472	4.471
40.600	4.470	4.469	4.469	4.468	4.467
40.650	4.466	4.466	4.465	4.464	4.463
40.700	4.462	4.462	4.461	4.460	4.459
40.750	4.458	4.458	4.457	4.456	4.455
40.800	4.454	4.454	4.453	4.452	4.451

Time vs. Volume (ac-ft)

Output Time increment = 0.010 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
40.850	4.450	4.450	4.449	4.448	4.447
40.900	4.446	4.446	4.445	4.444	4.443
40.950	4.442	4.442	4.441	4.440	4.439
41.000	4.439	4.438	4.437	4.436	4.435
41.050	4.435	4.434	4.433	4.432	4.431
41.100	4.431	4.430	4.429	4.428	4.427
41.150	4.427	4.426	4.425	4.424	4.423
41.200	4.423	4.422	4.421	4.420	4.420
41.250	4.419	4.418	4.417	4.416	4.416
41.300	4.415	4.414	4.413	4.412	4.412
41.350	4.411	4.410	4.409	4.408	4.408
41.400	4.407	4.406	4.405	4.405	4.404
41.450	4.403	4.402	4.401	4.401	4.400
41.500	4.399	4.398	4.397	4.397	4.396
41.550	4.395	4.394	4.393	4.393	4.392
41.600	4.391	4.390	4.390	4.389	4.388
41.650	4.387	4.386	4.386	4.385	4.384
41.700	4.383	4.382	4.382	4.381	4.380
41.750	4.379	4.379	4.378	4.377	4.376
41.800	4.375	4.375	4.374	4.373	4.372
41.850	4.371	4.371	4.370	4.369	4.368
41.900	4.368	4.367	4.366	4.365	4.364
41.950	4.364	4.363	4.362	4.361	4.360
42.000	4.360	4.359	4.358	4.357	4.357
42.050	4.356	4.355	4.354	4.353	4.353
42.100	4.352	4.351	4.350	4.350	4.349
42.150	4.348	4.347	4.346	4.346	4.345
42.200	4.344	4.343	4.342	4.342	4.341
42.250	4.340	4.339	4.339	4.338	4.337
42.300	4.336	4.335	4.335	4.334	4.333
42.350	4.332	4.332	4.331	4.330	4.329
42.400	4.328	4.328	4.327	4.326	4.325
42.450	4.325	4.324	4.323	4.322	4.321
42.500	4.321	4.320	4.319	4.318	4.318
42.550	4.317	4.316	4.315	4.314	4.314
42.600	4.313	4.312	4.311	4.311	4.310
42.650	4.309	4.308	4.307	4.307	4.306
42.700	4.305	4.304	4.304	4.303	4.302
42.750	4.301	4.300	4.300	4.299	4.298
42.800	4.297	4.297	4.296	4.295	4.294
42.850	4.293	4.293	4.292	4.291	4.290
42.900	4.290	4.289	4.288	4.287	4.286
42.950	4.286	4.285	4.284	4.283	4.283

Time vs. Volume (ac-ft)

Output Time increment = 0.010 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
43.000	4.282	4.281	4.280	4.279	4.279
43.050	4.278	4.277	4.276	4.276	4.275
43.100	4.274	4.273	4.273	4.272	4.271
43.150	4.270	4.269	4.269	4.268	4.267
43.200	4.266	4.266	4.265	4.264	4.263
43.250	4.262	4.262	4.261	4.260	4.259
43.300	4.259	4.258	4.257	4.256	4.256
43.350	4.255	4.254	4.253	4.252	4.252
43.400	4.251	4.250	4.249	4.249	4.248
43.450	4.247	4.246	4.246	4.245	4.244
43.500	4.243	4.242	4.242	4.241	4.240
43.550	4.239	4.239	4.238	4.237	4.236
43.600	4.235	4.235	4.234	4.233	4.232
43.650	4.232	4.231	4.230	4.229	4.229
43.700	4.228	4.227	4.226	4.226	4.225
43.750	4.224	4.223	4.222	4.222	4.221
43.800	4.220	4.219	4.219	4.218	4.217
43.850	4.216	4.216	4.215	4.214	4.213
43.900	4.212	4.212	4.211	4.210	4.209
43.950	4.209	4.208	4.207	4.206	4.206
44.000	4.205	4.204	4.203	4.203	4.202
44.050	4.201	4.200	4.199	4.199	4.198
44.100	4.197	4.196	4.196	4.195	4.194
44.150	4.193	4.193	4.192	4.191	4.190
44.200	4.190	4.189	4.188	4.187	4.186
44.250	4.186	4.185	4.184	4.183	4.183
44.300	4.182	4.181	4.180	4.180	4.179
44.350	4.178	4.177	4.177	4.176	4.175
44.400	4.174	4.173	4.173	4.172	4.171
44.450	4.170	4.170	4.169	4.168	4.167
44.500	4.167	4.166	4.165	4.164	4.164
44.550	4.163	4.162	4.161	4.161	4.160
44.600	4.159	4.158	4.158	4.157	4.156
44.650	4.155	4.154	4.154	4.153	4.152
44.700	4.151	4.151	4.150	4.149	4.148
44.750	4.148	4.147	4.146	4.145	4.145
44.800	4.144	4.143	4.142	4.142	4.141
44.850	4.140	4.139	4.139	4.138	4.137
44.900	4.136	4.136	4.135	4.134	4.133
44.950	4.132	4.132	4.131	4.130	4.129
45.000	4.129	4.128	4.127	4.126	4.126
45.050	4.125	4.124	4.123	4.123	4.122
45.100	4.121	4.120	4.120	4.119	4.118

Time vs. Volume (ac-ft)

Output Time increment = 0.010 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
45.150	4.117	4.117	4.116	4.115	4.114
45.200	4.114	4.113	4.112	4.111	4.111
45.250	4.110	4.109	4.108	4.108	4.107
45.300	4.106	4.105	4.105	4.104	4.103
45.350	4.102	4.102	4.101	4.100	4.099
45.400	4.099	4.098	4.097	4.096	4.096
45.450	4.095	4.094	4.093	4.092	4.092
45.500	4.091	4.090	4.089	4.089	4.088
45.550	4.087	4.086	4.086	4.085	4.084
45.600	4.083	4.083	4.082	4.081	4.080
45.650	4.080	4.079	4.078	4.077	4.077
45.700	4.076	4.075	4.074	4.074	4.073
45.750	4.072	4.071	4.071	4.070	4.069
45.800	4.068	4.068	4.067	4.066	4.065
45.850	4.065	4.064	4.063	4.062	4.062
45.900	4.061	4.060	4.059	4.059	4.058
45.950	4.057	4.056	4.056	4.055	4.054
46.000	4.053	4.053	4.052	4.051	4.051
46.050	4.050	4.049	4.048	4.048	4.047
46.100	4.046	4.045	4.045	4.044	4.043
46.150	4.042	4.042	4.041	4.040	4.039
46.200	4.039	4.038	4.037	4.036	4.036
46.250	4.035	4.034	4.033	4.033	4.032
46.300	4.031	4.030	4.030	4.029	4.028
46.350	4.027	4.027	4.026	4.025	4.024
46.400	4.024	4.023	4.022	4.021	4.021
46.450	4.020	4.019	4.018	4.018	4.017
46.500	4.016	4.015	4.015	4.014	4.013
46.550	4.013	4.012	4.011	4.010	4.010
46.600	4.009	4.008	4.007	4.007	4.006
46.650	4.005	4.004	4.004	4.003	4.002
46.700	4.001	4.001	4.000	3.999	3.998
46.750	3.998	3.997	3.996	3.995	3.995
46.800	3.994	3.993	3.992	3.992	3.991
46.850	3.990	3.990	3.989	3.988	3.987
46.900	3.987	3.986	3.985	3.984	3.984
46.950	3.983	3.982	3.981	3.981	3.980
47.000	3.979	3.978	3.978	3.977	3.976
47.050	3.975	3.975	3.974	3.973	3.973
47.100	3.972	3.971	3.970	3.970	3.969
47.150	3.968	3.967	3.967	3.966	3.965
47.200	3.964	3.964	3.963	3.962	3.961
47.250	3.961	3.960	3.959	3.959	3.958

Time vs. Volume (ac-ft)

Output Time increment = 0.010 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
47.300	3.957	3.956	3.956	3.955	3.954
47.350	3.953	3.953	3.952	3.951	3.950
47.400	3.950	3.949	3.948	3.947	3.947
47.450	3.946	3.945	3.945	3.944	3.943
47.500	3.942	3.942	3.941	3.940	3.939
47.550	3.939	3.938	3.937	3.937	3.936
47.600	3.935	3.934	3.934	3.933	3.932
47.650	3.931	3.931	3.930	3.929	3.928
47.700	3.928	3.927	3.926	3.926	3.925
47.750	3.924	3.923	3.923	3.922	3.921
47.800	3.920	3.920	3.919	3.918	3.917
47.850	3.917	3.916	3.915	3.915	3.914
47.900	3.913	3.912	3.912	3.911	3.910
47.950	3.909	3.909	3.908	3.907	3.906
48.000	3.906	3.905	3.904	3.904	3.903
48.050	3.902	3.901	3.901	3.900	3.899
48.100	3.898	3.898	3.897	3.896	3.896
48.150	3.895	3.894	3.893	3.893	3.892
48.200	3.891	3.890	3.890	3.889	3.888
48.250	3.888	3.887	3.886	3.885	3.885
48.300	3.884	3.883	3.882	3.882	3.881
48.350	3.880	3.880	3.879	3.878	3.877
48.400	3.877	3.876	3.875	3.874	3.874
48.450	3.873	3.872	3.872	3.871	3.870
48.500	3.869	3.869	3.868	3.867	3.867
48.550	3.866	3.865	3.864	3.864	3.863
48.600	3.862	3.861	3.861	3.860	3.859
48.650	3.859	3.858	3.857	3.856	3.856
48.700	3.855	3.854	3.853	3.853	3.852
48.750	3.851	3.851	3.850	3.849	3.848
48.800	3.848	3.847	3.846	3.846	3.845
48.850	3.844	3.843	3.843	3.842	3.841
48.900	3.840	3.840	3.839	3.838	3.838
48.950	3.837	3.836	3.835	3.835	3.834
49.000	3.833	3.833	3.832	3.831	3.830
49.050	3.830	3.829	3.828	3.828	3.827
49.100	3.826	3.825	3.825	3.824	3.823
49.150	3.822	3.822	3.821	3.820	3.820
49.200	3.819	3.818	3.817	3.817	3.816
49.250	3.815	3.815	3.814	3.813	3.812
49.300	3.812	3.811	3.810	3.810	3.809
49.350	3.808	3.807	3.807	3.806	3.805
49.400	3.805	3.804	3.803	3.802	3.802

Time vs. Volume (ac-ft)

Output Time increment = 0.010 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
49.450	3.801	3.800	3.799	3.799	3.798
49.500	3.797	3.797	3.796	3.795	3.794
49.550	3.794	3.793	3.792	3.792	3.791
49.600	3.790	3.789	3.789	3.788	3.787
49.650	3.787	3.786	3.785	3.784	3.784
49.700	3.783	3.782	3.782	3.781	3.780
49.750	3.779	3.779	3.778	3.777	3.777
49.800	3.776	3.775	3.774	3.774	3.773
49.850	3.772	3.772	3.771	3.770	3.769
49.900	3.769	3.768	3.767	3.767	3.766
49.950	3.765	3.765	3.764	3.763	3.762
50.000	3.762	3.761	3.760	3.760	3.759
50.050	3.758	3.757	3.757	3.756	3.755
50.100	3.755	3.754	3.753	3.752	3.752
50.150	3.751	3.750	3.750	3.749	3.748
50.200	3.747	3.747	3.746	3.745	3.745
50.250	3.744	3.743	3.742	3.742	3.741
50.300	3.740	3.740	3.739	3.738	3.738
50.350	3.737	3.736	3.735	3.735	3.734
50.400	3.733	3.733	3.732	3.731	3.730
50.450	3.730	3.729	3.728	3.728	3.727
50.500	3.726	3.725	3.725	3.724	3.723
50.550	3.723	3.722	3.721	3.721	3.720
50.600	3.719	3.718	3.718	3.717	3.716
50.650	3.716	3.715	3.714	3.713	3.713
50.700	3.712	3.711	3.711	3.710	3.709
50.750	3.709	3.708	3.707	3.706	3.706
50.800	3.705	3.704	3.704	3.703	3.702
50.850	3.702	3.701	3.700	3.699	3.699
50.900	3.698	3.697	3.697	3.696	3.695
50.950	3.694	3.694	3.693	3.692	3.692
51.000	3.691	3.690	3.690	3.689	3.688
51.050	3.687	3.687	3.686	3.685	3.685
51.100	3.684	3.683	3.683	3.682	3.681
51.150	3.680	3.680	3.679	3.678	3.678
51.200	3.677	3.676	3.676	3.675	3.674
51.250	3.673	3.673	3.672	3.671	3.671
51.300	3.670	3.669	3.669	3.668	3.667
51.350	3.666	3.666	3.665	3.664	3.664
51.400	3.663	3.662	3.662	3.661	3.660
51.450	3.659	3.659	3.658	3.657	3.657
51.500	3.656	3.655	3.655	3.654	3.653
51.550	3.652	3.652	3.651	3.650	3.650

Time vs. Volume (ac-ft)

Output Time increment = 0.010 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
51.600	3.649	3.648	3.648	3.647	3.646
51.650	3.645	3.645	3.644	3.643	3.643
51.700	3.642	3.641	3.641	3.640	3.639
51.750	3.639	3.638	3.637	3.636	3.636
51.800	3.635	3.634	3.634	3.633	3.632
51.850	3.632	3.631	3.630	3.629	3.629
51.900	3.628	3.627	3.627	3.626	3.625
51.950	3.625	3.624	3.623	3.623	3.622
52.000	3.621	3.620	3.620	3.619	3.618
52.050	3.618	3.617	3.616	3.616	3.615
52.100	3.614	3.614	3.613	3.612	3.611
52.150	3.611	3.610	3.609	3.609	3.608
52.200	3.607	3.607	3.606	3.605	3.605
52.250	3.604	3.603	3.602	3.602	3.601
52.300	3.600	3.600	3.599	3.598	3.598
52.350	3.597	3.596	3.596	3.595	3.594
52.400	3.593	3.593	3.592	3.591	3.591
52.450	3.590	3.589	3.589	3.588	3.587
52.500	3.587	3.586	3.585	3.585	3.584
52.550	3.583	3.582	3.582	3.581	3.580
52.600	3.580	3.579	3.578	3.578	3.577
52.650	3.576	3.576	3.575	3.574	3.574
52.700	3.573	3.572	3.571	3.571	3.570
52.750	3.569	3.569	3.568	3.567	3.567
52.800	3.566	3.565	3.565	3.564	3.563
52.850	3.563	3.562	3.561	3.560	3.560
52.900	3.559	3.558	3.558	3.557	3.556
52.950	3.556	3.555	3.554	3.554	3.553
53.000	3.552	3.552	3.551	3.550	3.550
53.050	3.549	3.548	3.547	3.547	3.546
53.100	3.545	3.545	3.544	3.543	3.543
53.150	3.542	3.541	3.541	3.540	3.539
53.200	3.539	3.538	3.537	3.537	3.536
53.250	3.535	3.534	3.534	3.533	3.532
53.300	3.532	3.531	3.530	3.530	3.529
53.350	3.528	3.528	3.527	3.526	3.526
53.400	3.525	3.524	3.524	3.523	3.522
53.450	3.522	3.521	3.520	3.519	3.519
53.500	3.518	3.517	3.517	3.516	3.515
53.550	3.515	3.514	3.513	3.513	3.512
53.600	3.511	3.511	3.510	3.509	3.509
53.650	3.508	3.507	3.507	3.506	3.505
53.700	3.505	3.504	3.503	3.503	3.502

Time vs. Volume (ac-ft)

Output Time increment = 0.010 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
53.750	3.501	3.500	3.500	3.499	3.498
53.800	3.498	3.497	3.496	3.496	3.495
53.850	3.494	3.494	3.493	3.492	3.492
53.900	3.491	3.490	3.490	3.489	3.488
53.950	3.488	3.487	3.486	3.486	3.485
54.000	3.484	3.484	3.483	3.482	3.482
54.050	3.481	3.480	3.480	3.479	3.478
54.100	3.477	3.477	3.476	3.475	3.475
54.150	3.474	3.473	3.473	3.472	3.471
54.200	3.471	3.470	3.469	3.469	3.468
54.250	3.467	3.467	3.466	3.465	3.465
54.300	3.464	3.463	3.463	3.462	3.461
54.350	3.461	3.460	3.459	3.459	3.458
54.400	3.457	3.457	3.456	3.455	3.455
54.450	3.454	3.453	3.453	3.452	3.451
54.500	3.451	3.450	3.449	3.449	3.448
54.550	3.447	3.447	3.446	3.445	3.445
54.600	3.444	3.443	3.443	3.442	3.441
54.650	3.441	3.440	3.439	3.439	3.438
54.700	3.437	3.437	3.436	3.435	3.435
54.750	3.434	3.433	3.432	3.432	3.431
54.800	3.430	3.430	3.429	3.428	3.428
54.850	3.427	3.426	3.426	3.425	3.424
54.900	3.424	3.423	3.422	3.422	3.421
54.950	3.420	3.420	3.419	3.418	3.418
55.000	3.417	3.416	3.416	3.415	3.414
55.050	3.414	3.413	3.412	3.412	3.411
55.100	3.410	3.410	3.409	3.408	3.408
55.150	3.407	3.406	3.406	3.405	3.404
55.200	3.404	3.403	3.403	3.402	3.401
55.250	3.401	3.400	3.399	3.399	3.398
55.300	3.397	3.397	3.396	3.395	3.395
55.350	3.394	3.393	3.393	3.392	3.391
55.400	3.391	3.390	3.389	3.389	3.388
55.450	3.387	3.387	3.386	3.385	3.385
55.500	3.384	3.383	3.383	3.382	3.381
55.550	3.381	3.380	3.379	3.379	3.378
55.600	3.377	3.377	3.376	3.375	3.375
55.650	3.374	3.373	3.373	3.372	3.371
55.700	3.371	3.370	3.369	3.369	3.368
55.750	3.367	3.367	3.366	3.365	3.365
55.800	3.364	3.363	3.363	3.362	3.361
55.850	3.361	3.360	3.359	3.359	3.358

Time vs. Volume (ac-ft)

Output Time increment = 0.010 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
55.900	3.358	3.357	3.356	3.356	3.355
55.950	3.354	3.354	3.353	3.352	3.352
56.000	3.351	3.350	3.350	3.349	3.348
56.050	3.348	3.347	3.346	3.346	3.345
56.100	3.344	3.344	3.343	3.342	3.342
56.150	3.341	3.340	3.340	3.339	3.338
56.200	3.338	3.337	3.336	3.336	3.335
56.250	3.335	3.334	3.333	3.333	3.332
56.300	3.331	3.331	3.330	3.329	3.329
56.350	3.328	3.327	3.327	3.326	3.325
56.400	3.325	3.324	3.323	3.323	3.322
56.450	3.321	3.321	3.320	3.319	3.319
56.500	3.318	3.318	3.317	3.316	3.316
56.550	3.315	3.314	3.314	3.313	3.312
56.600	3.312	3.311	3.310	3.310	3.309
56.650	3.308	3.308	3.307	3.306	3.306
56.700	3.305	3.304	3.304	3.303	3.303
56.750	3.302	3.301	3.301	3.300	3.299
56.800	3.299	3.298	3.297	3.297	3.296
56.850	3.295	3.295	3.294	3.293	3.293
56.900	3.292	3.291	3.291	3.290	3.290
56.950	3.289	3.288	3.288	3.287	3.286
57.000	3.286	3.285	3.284	3.284	3.283
57.050	3.282	3.282	3.281	3.280	3.280
57.100	3.279	3.278	3.278	3.277	3.277
57.150	3.276	3.275	3.275	3.274	3.273
57.200	3.273	3.272	3.271	3.271	3.270
57.250	3.269	3.269	3.268	3.267	3.267
57.300	3.266	3.266	3.265	3.264	3.264
57.350	3.263	3.262	3.262	3.261	3.260
57.400	3.260	3.259	3.258	3.258	3.257
57.450	3.257	3.256	3.255	3.255	3.254
57.500	3.253	3.253	3.252	3.251	3.251
57.550	3.250	3.249	3.249	3.248	3.248
57.600	3.247	3.246	3.246	3.245	3.244
57.650	3.244	3.243	3.242	3.242	3.241
57.700	3.240	3.240	3.239	3.239	3.238
57.750	3.237	3.237	3.236	3.235	3.235
57.800	3.234	3.233	3.233	3.232	3.231
57.850	3.231	3.230	3.230	3.229	3.228
57.900	3.228	3.227	3.226	3.226	3.225
57.950	3.224	3.224	3.223	3.222	3.222
58.000	3.221	3.221	3.220	3.219	3.219

Time vs. Volume (ac-ft)

Output Time increment = 0.010 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
58.050	3.218	3.217	3.217	3.216	3.215
58.100	3.215	3.214	3.214	3.213	3.212
58.150	3.212	3.211	3.210	3.210	3.209
58.200	3.208	3.208	3.207	3.207	3.206
58.250	3.205	3.205	3.204	3.203	3.203
58.300	3.202	3.201	3.201	3.200	3.200
58.350	3.199	3.198	3.198	3.197	3.196
58.400	3.196	3.195	3.194	3.194	3.193
58.450	3.193	3.192	3.191	3.191	3.190
58.500	3.189	3.189	3.188	3.187	3.187
58.550	3.186	3.186	3.185	3.184	3.184
58.600	3.183	3.182	3.182	3.181	3.180
58.650	3.180	3.179	3.179	3.178	3.177
58.700	3.177	3.176	3.175	3.175	3.174
58.750	3.174	3.173	3.172	3.172	3.171
58.800	3.170	3.170	3.169	3.168	3.168
58.850	3.167	3.167	3.166	3.165	3.165
58.900	3.164	3.163	3.163	3.162	3.162
58.950	3.161	3.160	3.160	3.159	3.158
59.000	3.158	3.157	3.156	3.156	3.155
59.050	3.155	3.154	3.153	3.153	3.152
59.100	3.151	3.151	3.150	3.150	3.149
59.150	3.148	3.148	3.147	3.146	3.146
59.200	3.145	3.144	3.144	3.143	3.143
59.250	3.142	3.141	3.141	3.140	3.139
59.300	3.139	3.138	3.138	3.137	3.136
59.350	3.136	3.135	3.134	3.134	3.133
59.400	3.133	3.132	3.131	3.131	3.130
59.450	3.129	3.129	3.128	3.128	3.127
59.500	3.126	3.126	3.125	3.124	3.124
59.550	3.123	3.123	3.122	3.121	3.121
59.600	3.120	3.119	3.119	3.118	3.118
59.650	3.117	3.116	3.116	3.115	3.114
59.700	3.114	3.113	3.113	3.112	3.111
59.750	3.111	3.110	3.109	3.109	3.108
59.800	3.108	3.107	3.106	3.106	3.105
59.850	3.104	3.104	3.103	3.103	3.102
59.900	3.101	3.101	3.100	3.099	3.099
59.950	3.098	3.098	3.097	3.096	3.096
60.000	3.095	3.094	3.094	3.093	3.093
60.050	3.092	3.091	3.091	3.090	3.090
60.100	3.089	3.088	3.088	3.087	3.086
60.150	3.086	3.085	3.085	3.084	3.083

Time vs. Volume (ac-ft)

Output Time increment = 0.010 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
60.200	3.083	3.082	3.081	3.081	3.080
60.250	3.080	3.079	3.078	3.078	3.077
60.300	3.077	3.076	3.075	3.075	3.074
60.350	3.073	3.073	3.072	3.072	3.071
60.400	3.070	3.070	3.069	3.068	3.068
60.450	3.067	3.067	3.066	3.065	3.065
60.500	3.064	3.064	3.063	3.062	3.062
60.550	3.061	3.060	3.060	3.059	3.059
60.600	3.058	3.057	3.057	3.056	3.056
60.650	3.055	3.054	3.054	3.053	3.052
60.700	3.052	3.051	3.051	3.050	3.049
60.750	3.049	3.048	3.048	3.047	3.046
60.800	3.046	3.045	3.044	3.044	3.043
60.850	3.043	3.042	3.041	3.041	3.040
60.900	3.040	3.039	3.038	3.038	3.037
60.950	3.036	3.036	3.035	3.035	3.034
61.000	3.033	3.033	3.032	3.032	3.031
61.050	3.030	3.030	3.029	3.029	3.028
61.100	3.027	3.027	3.026	3.025	3.025
61.150	3.024	3.024	3.023	3.022	3.022
61.200	3.021	3.021	3.020	3.019	3.019
61.250	3.018	3.018	3.017	3.016	3.016
61.300	3.015	3.014	3.014	3.013	3.013
61.350	3.012	3.011	3.011	3.010	3.010
61.400	3.009	3.008	3.008	3.007	3.007
61.450	3.006	3.005	3.005	3.004	3.004
61.500	3.003	3.002	3.002	3.001	3.000
61.550	3.000	2.999	2.999	2.998	2.997
61.600	2.997	2.996	2.996	2.995	2.994
61.650	2.994	2.993	2.993	2.992	2.991
61.700	2.991	2.990	2.990	2.989	2.988
61.750	2.988	2.987	2.987	2.986	2.985
61.800	2.985	2.984	2.983	2.983	2.982
61.850	2.982	2.981	2.980	2.980	2.979
61.900	2.979	2.978	2.977	2.977	2.976
61.950	2.976	2.975	2.974	2.974	2.973
62.000	2.973	2.972	2.971	2.971	2.970
62.050	2.970	2.969	2.968	2.968	2.967
62.100	2.967	2.966	2.965	2.965	2.964
62.150	2.964	2.963	2.962	2.962	2.961
62.200	2.961	2.960	2.959	2.959	2.958
62.250	2.958	2.957	2.956	2.956	2.955
62.300	2.955	2.954	2.953	2.953	2.952

Time vs. Volume (ac-ft)

Output Time increment = 0.010 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
62.350	2.952	2.951	2.950	2.950	2.949
62.400	2.949	2.948	2.947	2.947	2.946
62.450	2.946	2.945	2.944	2.944	2.943
62.500	2.943	2.942	2.941	2.941	2.940
62.550	2.940	2.939	2.938	2.938	2.937
62.600	2.937	2.936	2.935	2.935	2.934
62.650	2.934	2.933	2.932	2.932	2.931
62.700	2.931	2.930	2.929	2.929	2.928
62.750	2.928	2.927	2.926	2.926	2.925
62.800	2.925	2.924	2.923	2.923	2.922
62.850	2.922	2.921	2.920	2.920	2.919
62.900	2.919	2.918	2.917	2.917	2.916
62.950	2.916	2.915	2.914	2.914	2.913
63.000	2.913	2.912	2.912	2.911	2.910
63.050	2.910	2.909	2.909	2.908	2.907
63.100	2.907	2.906	2.906	2.905	2.904
63.150	2.904	2.903	2.903	2.902	2.901
63.200	2.901	2.900	2.900	2.899	2.898
63.250	2.898	2.897	2.897	2.896	2.896
63.300	2.895	2.894	2.894	2.893	2.893
63.350	2.892	2.891	2.891	2.890	2.890
63.400	2.889	2.888	2.888	2.887	2.887
63.450	2.886	2.885	2.885	2.884	2.884
63.500	2.883	2.883	2.882	2.881	2.881
63.550	2.880	2.880	2.879	2.878	2.878
63.600	2.877	2.877	2.876	2.875	2.875
63.650	2.874	2.874	2.873	2.872	2.872
63.700	2.871	2.871	2.870	2.870	2.869
63.750	2.868	2.868	2.867	2.867	2.866
63.800	2.865	2.865	2.864	2.864	2.863
63.850	2.862	2.862	2.861	2.861	2.860
63.900	2.860	2.859	2.858	2.858	2.857
63.950	2.857	2.856	2.855	2.855	2.854
64.000	2.854	2.853	2.853	2.852	2.851
64.050	2.851	2.850	2.850	2.849	2.848
64.100	2.848	2.847	2.847	2.846	2.846
64.150	2.845	2.844	2.844	2.843	2.843
64.200	2.842	2.841	2.841	2.840	2.840
64.250	2.839	2.838	2.838	2.837	2.837
64.300	2.836	2.836	2.835	2.834	2.834
64.350	2.833	2.833	2.832	2.832	2.831
64.400	2.830	2.830	2.829	2.829	2.828
64.450	2.827	2.827	2.826	2.826	2.825

Time vs. Volume (ac-ft)

Output Time increment = 0.010 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
64.500	2.825	2.824	2.823	2.823	2.822
64.550	2.822	2.821	2.820	2.820	2.819
64.600	2.819	2.818	2.818	2.817	2.816
64.650	2.816	2.815	2.815	2.814	2.813
64.700	2.813	2.812	2.812	2.811	2.811
64.750	2.810	2.809	2.809	2.808	2.808
64.800	2.807	2.807	2.806	2.805	2.805
64.850	2.804	2.804	2.803	2.803	2.802
64.900	2.801	2.801	2.800	2.800	2.799
64.950	2.798	2.798	2.797	2.797	2.796
65.000	2.796	2.795	2.794	2.794	2.793
65.050	2.793	2.792	2.792	2.791	2.790
65.100	2.790	2.789	2.789	2.788	2.788
65.150	2.787	2.786	2.786	2.785	2.785
65.200	2.784	2.784	2.783	2.782	2.782
65.250	2.781	2.781	2.780	2.779	2.779
65.300	2.778	2.778	2.777	2.777	2.776
65.350	2.775	2.775	2.774	2.774	2.773
65.400	2.773	2.772	2.771	2.771	2.770
65.450	2.770	2.769	2.769	2.768	2.767
65.500	2.767	2.766	2.766	2.765	2.765
65.550	2.764	2.763	2.763	2.762	2.762
65.600	2.761	2.761	2.760	2.759	2.759
65.650	2.758	2.758	2.757	2.757	2.756
65.700	2.755	2.755	2.754	2.754	2.753
65.750	2.753	2.752	2.751	2.751	2.750
65.800	2.750	2.749	2.749	2.748	2.747
65.850	2.747	2.746	2.746	2.745	2.745
65.900	2.744	2.744	2.743	2.742	2.742
65.950	2.741	2.741	2.740	2.740	2.739
66.000	2.738	2.738	2.737	2.737	2.736
66.050	2.736	2.735	2.734	2.734	2.733
66.100	2.733	2.732	2.732	2.731	2.730
66.150	2.730	2.729	2.729	2.728	2.728
66.200	2.727	2.726	2.726	2.725	2.725
66.250	2.724	2.724	2.723	2.723	2.722
66.300	2.721	2.721	2.720	2.720	2.719
66.350	2.719	2.718	2.717	2.717	2.716
66.400	2.716	2.715	2.715	2.714	2.713
66.450	2.713	2.712	2.712	2.711	2.711
66.500	2.710	2.710	2.709	2.708	2.708
66.550	2.707	2.707	2.706	2.706	2.705
66.600	2.704	2.704	2.703	2.703	2.702

Time vs. Volume (ac-ft)

Output Time increment = 0.010 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
66.650	2.702	2.701	2.701	2.700	2.699
66.700	2.699	2.698	2.698	2.697	2.697
66.750	2.696	2.696	2.695	2.694	2.694
66.800	2.693	2.693	2.692	2.692	2.691
66.850	2.690	2.690	2.689	2.689	2.688
66.900	2.688	2.687	2.687	2.686	2.685
66.950	2.685	2.684	2.684	2.683	2.683
67.000	2.682	2.682	2.681	2.680	2.680
67.050	2.679	2.679	2.678	2.678	2.677
67.100	2.677	2.676	2.675	2.675	2.674
67.150	2.674	2.673	2.673	2.672	2.671
67.200	2.671	2.670	2.670	2.669	2.669
67.250	2.668	2.668	2.667	2.666	2.666
67.300	2.665	2.665	2.664	2.664	2.663
67.350	2.663	2.662	2.661	2.661	2.660
67.400	2.660	2.659	2.659	2.658	2.658
67.450	2.657	2.656	2.656	2.655	2.655
67.500	2.654	2.654	2.653	2.653	2.652
67.550	2.652	2.651	2.650	2.650	2.649
67.600	2.649	2.648	2.648	2.647	2.647
67.650	2.646	2.645	2.645	2.644	2.644
67.700	2.643	2.643	2.642	2.642	2.641
67.750	2.640	2.640	2.639	2.639	2.638
67.800	2.638	2.637	2.637	2.636	2.635
67.850	2.635	2.634	2.634	2.633	2.633
67.900	2.632	2.632	2.631	2.631	2.630
67.950	2.629	2.629	2.628	2.628	2.627
68.000	2.627	2.626	2.626	2.625	2.624
68.050	2.624	2.623	2.623	2.622	2.622
68.100	2.621	2.621	2.620	2.620	2.619
68.150	2.618	2.618	2.617	2.617	2.616
68.200	2.616	2.615	2.615	2.614	2.614
68.250	2.613	2.612	2.612	2.611	2.611
68.300	2.610	2.610	2.609	2.609	2.608
68.350	2.608	2.607	2.606	2.606	2.605
68.400	2.605	2.604	2.604	2.603	2.603
68.450	2.602	2.601	2.601	2.600	2.600
68.500	2.599	2.599	2.598	2.598	2.597
68.550	2.597	2.596	2.596	2.595	2.594
68.600	2.594	2.593	2.593	2.592	2.592
68.650	2.591	2.591	2.590	2.590	2.589
68.700	2.588	2.588	2.587	2.587	2.586
68.750	2.586	2.585	2.585	2.584	2.584

Time vs. Volume (ac-ft)

Output Time increment = 0.010 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
68.800	2.583	2.582	2.582	2.581	2.581
68.850	2.580	2.580	2.579	2.579	2.578
68.900	2.578	2.577	2.577	2.576	2.575
68.950	2.575	2.574	2.574	2.573	2.573
69.000	2.572	2.572	2.571	2.571	2.570
69.050	2.569	2.569	2.568	2.568	2.567
69.100	2.567	2.566	2.566	2.565	2.565
69.150	2.564	2.564	2.563	2.562	2.562
69.200	2.561	2.561	2.560	2.560	2.559
69.250	2.559	2.558	2.558	2.557	2.557
69.300	2.556	2.555	2.555	2.554	2.554
69.350	2.553	2.553	2.552	2.552	2.551
69.400	2.551	2.550	2.550	2.549	2.548
69.450	2.548	2.547	2.547	2.546	2.546
69.500	2.545	2.545	2.544	2.544	2.543
69.550	2.543	2.542	2.542	2.541	2.540
69.600	2.540	2.539	2.539	2.538	2.538
69.650	2.537	2.537	2.536	2.536	2.535
69.700	2.535	2.534	2.533	2.533	2.532
69.750	2.532	2.531	2.531	2.530	2.530
69.800	2.529	2.529	2.528	2.528	2.527
69.850	2.527	2.526	2.526	2.525	2.524
69.900	2.524	2.523	2.523	2.522	2.522
69.950	2.521	2.521	2.520	2.520	2.519
70.000	2.519	2.518	2.518	2.517	2.516
70.050	2.516	2.515	2.515	2.514	2.514
70.100	2.513	2.513	2.512	2.512	2.511
70.150	2.511	2.510	2.510	2.509	2.508
70.200	2.508	2.507	2.507	2.506	2.506
70.250	2.505	2.505	2.504	2.504	2.503
70.300	2.503	2.502	2.502	2.501	2.501
70.350	2.500	2.499	2.499	2.498	2.498
70.400	2.497	2.497	2.496	2.496	2.495
70.450	2.495	2.494	2.494	2.493	2.493
70.500	2.492	2.492	2.491	2.491	2.490
70.550	2.489	2.489	2.488	2.488	2.487
70.600	2.487	2.486	2.486	2.485	2.485
70.650	2.484	2.484	2.483	2.483	2.482
70.700	2.482	2.481	2.481	2.480	2.479
70.750	2.479	2.478	2.478	2.477	2.477
70.800	2.476	2.476	2.475	2.475	2.474
70.850	2.474	2.473	2.473	2.472	2.472
70.900	2.471	2.471	2.470	2.470	2.469

Time vs. Volume (ac-ft)

Output Time increment = 0.010 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
70.950	2.468	2.468	2.467	2.467	2.466
71.000	2.466	2.465	2.465	2.464	2.464
71.050	2.463	2.463	2.462	2.462	2.461
71.100	2.461	2.460	2.460	2.459	2.459
71.150	2.458	2.458	2.457	2.456	2.456
71.200	2.455	2.455	2.454	2.454	2.453
71.250	2.453	2.452	2.452	2.451	2.451
71.300	2.450	2.450	2.449	2.449	2.448
71.350	2.448	2.447	2.447	2.446	2.446
71.400	2.445	2.445	2.444	2.444	2.443
71.450	2.442	2.442	2.441	2.441	2.440
71.500	2.440	2.439	2.439	2.438	2.438
71.550	2.437	2.437	2.436	2.436	2.435
71.600	2.435	2.434	2.434	2.433	2.433
71.650	2.432	2.432	2.431	2.431	2.430
71.700	2.430	2.429	2.428	2.428	2.427
71.750	2.427	2.426	2.426	2.425	2.425
71.800	2.424	2.424	2.423	2.423	2.422
71.850	2.422	2.421	2.421	2.420	2.420
71.900	2.419	2.419	2.418	2.418	2.417
71.950	2.417	2.416	2.416	2.415	2.415
72.000	2.414	2.414	2.413	2.413	2.412
72.050	2.412	2.411	2.410	2.410	2.409
72.100	2.409	2.408	2.408	2.407	2.407
72.150	2.406	2.406	2.405	2.405	2.404
72.200	2.404	2.403	2.403	2.402	2.402
72.250	2.401	2.401	2.400	2.400	2.399
72.300	2.399	2.398	2.398	2.397	2.397
72.350	2.396	2.396	2.395	2.395	2.394
72.400	2.394	2.393	2.393	2.392	2.392
72.450	2.391	2.391	2.390	2.390	2.389
72.500	2.389	2.388	2.387	2.387	2.386
72.550	2.386	2.385	2.385	2.384	2.384
72.600	2.383	2.383	2.382	2.382	2.381
72.650	2.381	2.380	2.380	2.379	2.379
72.700	2.378	2.378	2.377	2.377	2.376
72.750	2.376	2.375	2.375	2.374	2.374
72.800	2.373	2.373	2.372	2.372	2.371
72.850	2.371	2.370	2.370	2.369	2.369
72.900	2.368	2.368	2.367	2.367	2.366
72.950	2.366	2.365	2.365	2.364	2.364
73.000	2.363	2.363	2.362	2.362	2.361
73.050	2.361	2.360	2.360	2.359	2.359

Time vs. Volume (ac-ft)

Output Time increment = 0.010 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
73.100	2.358	2.358	2.357	2.357	2.356
73.150	2.356	2.355	2.355	2.354	2.354
73.200	2.353	2.353	2.352	2.352	2.351
73.250	2.351	2.350	2.350	2.349	2.349
73.300	2.348	2.348	2.347	2.347	2.346
73.350	2.346	2.345	2.345	2.344	2.344
73.400	2.343	2.343	2.342	2.342	2.341
73.450	2.341	2.340	2.340	2.339	2.339
73.500	2.338	2.338	2.337	2.337	2.336
73.550	2.336	2.335	2.335	2.334	2.334
73.600	2.333	2.333	2.332	2.332	2.331
73.650	2.331	2.330	2.330	2.329	2.329
73.700	2.328	2.328	2.327	2.327	2.326
73.750	2.326	2.325	2.325	2.324	2.324
73.800	2.323	2.323	2.322	2.322	2.321
73.850	2.321	2.320	2.320	2.319	2.319
73.900	2.318	2.318	2.317	2.317	2.316
73.950	2.316	2.315	2.315	2.314	2.314
74.000	2.313	2.313	2.312	2.312	2.311
74.050	2.311	2.310	2.310	2.309	2.309
74.100	2.308	2.308	2.307	2.307	2.306
74.150	2.306	2.305	2.305	2.304	2.304
74.200	2.303	2.303	2.302	2.302	2.301
74.250	2.301	2.300	2.300	2.299	2.299
74.300	2.298	2.298	2.297	2.297	2.296
74.350	2.296	2.295	2.295	2.294	2.294
74.400	2.293	2.293	2.292	2.292	2.291
74.450	2.291	2.290	2.290	2.289	2.289
74.500	2.288	2.288	2.288	2.287	2.287
74.550	2.286	2.286	2.285	2.285	2.284
74.600	2.284	2.283	2.283	2.282	2.282
74.650	2.281	2.281	2.280	2.280	2.279
74.700	2.279	2.278	2.278	2.277	2.277
74.750	2.276	2.276	2.275	2.275	2.274
74.800	2.274	2.273	2.273	2.272	2.272
74.850	2.271	2.271	2.270	2.270	2.269
74.900	2.269	2.268	2.268	2.267	2.267
74.950	2.267	2.266	2.266	2.265	2.265
75.000	2.264	2.264	2.263	2.263	2.262
75.050	2.262	2.261	2.261	2.260	2.260
75.100	2.259	2.259	2.258	2.258	2.257
75.150	2.257	2.256	2.256	2.255	2.255
75.200	2.254	2.254	2.253	2.253	2.252

Time vs. Volume (ac-ft)

Output Time increment = 0.010 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
75.250	2.252	2.251	2.251	2.250	2.250
75.300	2.250	2.249	2.249	2.248	2.248
75.350	2.247	2.247	2.246	2.246	2.245
75.400	2.245	2.244	2.244	2.243	2.243
75.450	2.242	2.242	2.241	2.241	2.240
75.500	2.240	2.239	2.239	2.238	2.238
75.550	2.237	2.237	2.236	2.236	2.236
75.600	2.235	2.235	2.234	2.234	2.233
75.650	2.233	2.232	2.232	2.231	2.231
75.700	2.230	2.230	2.229	2.229	2.228
75.750	2.228	2.227	2.227	2.226	2.226
75.800	2.225	2.225	2.224	2.224	2.224
75.850	2.223	2.223	2.222	2.222	2.221
75.900	2.221	2.220	2.220	2.219	2.219
75.950	2.218	2.218	2.217	2.217	2.216
76.000	2.216	2.215	2.215	2.214	2.214
76.050	2.213	2.213	2.213	2.212	2.212
76.100	2.211	2.211	2.210	2.210	2.209
76.150	2.209	2.208	2.208	2.207	2.207
76.200	2.206	2.206	2.205	2.205	2.204
76.250	2.204	2.203	2.203	2.203	2.202
76.300	2.202	2.201	2.201	2.200	2.200
76.350	2.199	2.199	2.198	2.198	2.197
76.400	2.197	2.196	2.196	2.195	2.195
76.450	2.194	2.194	2.194	2.193	2.193
76.500	2.192	2.192	2.191	2.191	2.190
76.550	2.190	2.189	2.189	2.188	2.188
76.600	2.187	2.187	2.186	2.186	2.185
76.650	2.185	2.185	2.184	2.184	2.183
76.700	2.183	2.182	2.182	2.181	2.181
76.750	2.180	2.180	2.179	2.179	2.178
76.800	2.178	2.177	2.177	2.177	2.176
76.850	2.176	2.175	2.175	2.174	2.174
76.900	2.173	2.173	2.172	2.172	2.171
76.950	2.171	2.170	2.170	2.170	2.169
77.000	2.169	2.168	2.168	2.167	2.167
77.050	2.166	2.166	2.165	2.165	2.164
77.100	2.164	2.163	2.163	2.162	2.162
77.150	2.162	2.161	2.161	2.160	2.160
77.200	2.159	2.159	2.158	2.158	2.157
77.250	2.157	2.156	2.156	2.155	2.155
77.300	2.155	2.154	2.154	2.153	2.153
77.350	2.152	2.152	2.151	2.151	2.150

Time vs. Volume (ac-ft)

Output Time increment = 0.010 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
77.400	2.150	2.149	2.149	2.149	2.148
77.450	2.148	2.147	2.147	2.146	2.146
77.500	2.145	2.145	2.144	2.144	2.143
77.550	2.143	2.142	2.142	2.142	2.141
77.600	2.141	2.140	2.140	2.139	2.139
77.650	2.138	2.138	2.137	2.137	2.136
77.700	2.136	2.136	2.135	2.135	2.134
77.750	2.134	2.133	2.133	2.132	2.132
77.800	2.131	2.131	2.130	2.130	2.130
77.850	2.129	2.129	2.128	2.128	2.127
77.900	2.127	2.126	2.126	2.125	2.125
77.950	2.124	2.124	2.124	2.123	2.123
78.000	2.122	2.122	2.121	2.121	2.120
78.050	2.120	2.119	2.119	2.119	2.118
78.100	2.118	2.117	2.117	2.116	2.116
78.150	2.115	2.115	2.114	2.114	2.113
78.200	2.113	2.113	2.112	2.112	2.111
78.250	2.111	2.110	2.110	2.109	2.109
78.300	2.108	2.108	2.108	2.107	2.107
78.350	2.106	2.106	2.105	2.105	2.104
78.400	2.104	2.103	2.103	2.103	2.102
78.450	2.102	2.101	2.101	2.100	2.100
78.500	2.099	2.099	2.098	2.098	2.097
78.550	2.097	2.097	2.096	2.096	2.095
78.600	2.095	2.094	2.094	2.093	2.093
78.650	2.092	2.092	2.092	2.091	2.091
78.700	2.090	2.090	2.089	2.089	2.088
78.750	2.088	2.088	2.087	2.087	2.086
78.800	2.086	2.085	2.085	2.084	2.084
78.850	2.083	2.083	2.083	2.082	2.082
78.900	2.081	2.081	2.080	2.080	2.079
78.950	2.079	2.078	2.078	2.078	2.077
79.000	2.077	2.076	2.076	2.075	2.075
79.050	2.074	2.074	2.074	2.073	2.073
79.100	2.072	2.072	2.071	2.071	2.070
79.150	2.070	2.069	2.069	2.069	2.068
79.200	2.068	2.067	2.067	2.066	2.066
79.250	2.065	2.065	2.065	2.064	2.064
79.300	2.063	2.063	2.062	2.062	2.061
79.350	2.061	2.061	2.060	2.060	2.059
79.400	2.059	2.058	2.058	2.057	2.057
79.450	2.056	2.056	2.056	2.055	2.055
79.500	2.054	2.054	2.053	2.053	2.052

Time vs. Volume (ac-ft)

Output Time increment = 0.010 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
79.550	2.052	2.052	2.051	2.051	2.050
79.600	2.050	2.049	2.049	2.048	2.048
79.650	2.048	2.047	2.047	2.046	2.046
79.700	2.045	2.045	2.044	2.044	2.044
79.750	2.043	2.043	2.042	2.042	2.041
79.800	2.041	2.040	2.040	2.040	2.039
79.850	2.039	2.038	2.038	2.037	2.037
79.900	2.036	2.036	2.036	2.035	2.035
79.950	2.034	2.034	2.033	2.033	2.033
80.000	2.032	2.032	2.031	2.031	2.030
80.050	2.030	2.029	2.029	2.029	2.028
80.100	2.028	2.027	2.027	2.026	2.026
80.150	2.025	2.025	2.025	2.024	2.024
80.200	2.023	2.023	2.022	2.022	2.022
80.250	2.021	2.021	2.020	2.020	2.019
80.300	2.019	2.018	2.018	2.018	2.017
80.350	2.017	2.016	2.016	2.015	2.015
80.400	2.014	2.014	2.014	2.013	2.013
80.450	2.012	2.012	2.011	2.011	2.011
80.500	2.010	2.010	2.009	2.009	2.008
80.550	2.008	2.007	2.007	2.007	2.006
80.600	2.006	2.005	2.005	2.004	2.004
80.650	2.004	2.003	2.003	2.002	2.002
80.700	2.001	2.001	2.001	2.000	2.000
80.750	1.999	1.999	1.998	1.998	1.997
80.800	1.997	1.997	1.996	1.996	1.995
80.850	1.995	1.994	1.994	1.994	1.993
80.900	1.993	1.992	1.992	1.991	1.991
80.950	1.991	1.990	1.990	1.989	1.989
81.000	1.988	1.988	1.988	1.987	1.987
81.050	1.986	1.986	1.985	1.985	1.984
81.100	1.984	1.984	1.983	1.983	1.982
81.150	1.982	1.981	1.981	1.981	1.980
81.200	1.980	1.979	1.979	1.978	1.978
81.250	1.978	1.977	1.977	1.976	1.976
81.300	1.975	1.975	1.975	1.974	1.974
81.350	1.973	1.973	1.972	1.972	1.972
81.400	1.971	1.971	1.970	1.970	1.969
81.450	1.969	1.969	1.968	1.968	1.967
81.500	1.967	1.966	1.966	1.966	1.965
81.550	1.965	1.964	1.964	1.963	1.963
81.600	1.963	1.962	1.962	1.961	1.961
81.650	1.960	1.960	1.960	1.959	1.959

Time vs. Volume (ac-ft)

Output Time increment = 0.010 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
81.700	1.958	1.958	1.957	1.957	1.957
81.750	1.956	1.956	1.955	1.955	1.954
81.800	1.954	1.954	1.953	1.953	1.952
81.850	1.952	1.952	1.951	1.951	1.950
81.900	1.950	1.949	1.949	1.949	1.948
81.950	1.948	1.947	1.947	1.946	1.946
82.000	1.946	1.945	1.945	1.944	1.944
82.050	1.943	1.943	1.943	1.942	1.942
82.100	1.941	1.941	1.940	1.940	1.940
82.150	1.939	1.939	1.938	1.938	1.938
82.200	1.937	1.937	1.936	1.936	1.935
82.250	1.935	1.935	1.934	1.934	1.933
82.300	1.933	1.932	1.932	1.932	1.931
82.350	1.931	1.930	1.930	1.930	1.929
82.400	1.929	1.928	1.928	1.927	1.927
82.450	1.927	1.926	1.926	1.925	1.925
82.500	1.925	1.924	1.924	1.923	1.923
82.550	1.922	1.922	1.922	1.921	1.921
82.600	1.920	1.920	1.919	1.919	1.919
82.650	1.918	1.918	1.917	1.917	1.917
82.700	1.916	1.916	1.915	1.915	1.914
82.750	1.914	1.914	1.913	1.913	1.912
82.800	1.912	1.912	1.911	1.911	1.910
82.850	1.910	1.909	1.909	1.909	1.908
82.900	1.908	1.907	1.907	1.907	1.906
82.950	1.906	1.905	1.905	1.904	1.904
83.000	1.904	1.903	1.903	1.902	1.902
83.050	1.902	1.901	1.901	1.900	1.900
83.100	1.900	1.899	1.899	1.898	1.898
83.150	1.897	1.897	1.897	1.896	1.896
83.200	1.895	1.895	1.895	1.894	1.894
83.250	1.893	1.893	1.893	1.892	1.892
83.300	1.891	1.891	1.890	1.890	1.890
83.350	1.889	1.889	1.888	1.888	1.888
83.400	1.887	1.887	1.886	1.886	1.886
83.450	1.885	1.885	1.884	1.884	1.883
83.500	1.883	1.883	1.882	1.882	1.881
83.550	1.881	1.881	1.880	1.880	1.879
83.600	1.879	1.879	1.878	1.878	1.877
83.650	1.877	1.877	1.876	1.876	1.875
83.700	1.875	1.874	1.874	1.874	1.873
83.750	1.873	1.872	1.872	1.872	1.871
83.800	1.871	1.870	1.870	1.870	1.869

Time vs. Volume (ac-ft)

Output Time increment = 0.010 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
83.850	1.869	1.868	1.868	1.868	1.867
83.900	1.867	1.866	1.866	1.866	1.865
83.950	1.865	1.864	1.864	1.863	1.863
84.000	1.863	1.862	1.862	1.861	1.861
84.050	1.861	1.860	1.860	1.859	1.859
84.100	1.859	1.858	1.858	1.857	1.857
84.150	1.857	1.856	1.856	1.855	1.855
84.200	1.855	1.854	1.854	1.853	1.853
84.250	1.853	1.852	1.852	1.851	1.851
84.300	1.851	1.850	1.850	1.849	1.849
84.350	1.849	1.848	1.848	1.847	1.847
84.400	1.847	1.846	1.846	1.845	1.845
84.450	1.845	1.844	1.844	1.843	1.843
84.500	1.843	1.842	1.842	1.841	1.841
84.550	1.841	1.840	1.840	1.839	1.839
84.600	1.838	1.838	1.838	1.837	1.837
84.650	1.837	1.836	1.836	1.835	1.835
84.700	1.835	1.834	1.834	1.833	1.833
84.750	1.833	1.832	1.832	1.831	1.831
84.800	1.831	1.830	1.830	1.829	1.829
84.850	1.829	1.828	1.828	1.827	1.827
84.900	1.827	1.826	1.826	1.825	1.825
84.950	1.825	1.824	1.824	1.823	1.823
85.000	1.823	1.822	1.822	1.821	1.821
85.050	1.821	1.820	1.820	1.819	1.819
85.100	1.819	1.818	1.818	1.817	1.817
85.150	1.817	1.816	1.816	1.815	1.815
85.200	1.815	1.814	1.814	1.813	1.813
85.250	1.813	1.812	1.812	1.812	1.811
85.300	1.811	1.810	1.810	1.810	1.809
85.350	1.809	1.808	1.808	1.808	1.807
85.400	1.807	1.806	1.806	1.806	1.805
85.450	1.805	1.804	1.804	1.804	1.803
85.500	1.803	1.802	1.802	1.802	1.801
85.550	1.801	1.801	1.800	1.800	1.799
85.600	1.799	1.799	1.798	1.798	1.797
85.650	1.797	1.797	1.796	1.796	1.795
85.700	1.795	1.795	1.794	1.794	1.793
85.750	1.793	1.793	1.792	1.792	1.792
85.800	1.791	1.791	1.790	1.790	1.790
85.850	1.789	1.789	1.788	1.788	1.788
85.900	1.787	1.787	1.786	1.786	1.786
85.950	1.785	1.785	1.785	1.784	1.784

Time vs. Volume (ac-ft)

Output Time increment = 0.010 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
86.000	1.783	1.783	1.783	1.782	1.782
86.050	1.781	1.781	1.781	1.780	1.780
86.100	1.779	1.779	1.779	1.778	1.778
86.150	1.778	1.777	1.777	1.776	1.776
86.200	1.776	1.775	1.775	1.774	1.774
86.250	1.774	1.773	1.773	1.773	1.772
86.300	1.772	1.771	1.771	1.771	1.770
86.350	1.770	1.769	1.769	1.769	1.768
86.400	1.768	1.768	1.767	1.767	1.766
86.450	1.766	1.766	1.765	1.765	1.765
86.500	1.764	1.764	1.763	1.763	1.763
86.550	1.762	1.762	1.761	1.761	1.761
86.600	1.760	1.760	1.760	1.759	1.759
86.650	1.758	1.758	1.758	1.757	1.757
86.700	1.756	1.756	1.756	1.755	1.755
86.750	1.755	1.754	1.754	1.753	1.753
86.800	1.753	1.752	1.752	1.752	1.751
86.850	1.751	1.750	1.750	1.750	1.749
86.900	1.749	1.748	1.748	1.748	1.747
86.950	1.747	1.747	1.746	1.746	1.745
87.000	1.745	1.745	1.744	1.744	1.744
87.050	1.743	1.743	1.742	1.742	1.742
87.100	1.741	1.741	1.741	1.740	1.740
87.150	1.739	1.739	1.739	1.738	1.738
87.200	1.738	1.737	1.737	1.736	1.736
87.250	1.736	1.735	1.735	1.735	1.734
87.300	1.734	1.733	1.733	1.733	1.732
87.350	1.732	1.732	1.731	1.731	1.730
87.400	1.730	1.730	1.729	1.729	1.729
87.450	1.728	1.728	1.727	1.727	1.727
87.500	1.726	1.726	1.726	1.725	1.725
87.550	1.724	1.724	1.724	1.723	1.723
87.600	1.723	1.722	1.722	1.721	1.721
87.650	1.721	1.720	1.720	1.720	1.719
87.700	1.719	1.718	1.718	1.718	1.717
87.750	1.717	1.717	1.716	1.716	1.715
87.800	1.715	1.715	1.714	1.714	1.714
87.850	1.713	1.713	1.712	1.712	1.712
87.900	1.711	1.711	1.711	1.710	1.710
87.950	1.710	1.709	1.709	1.708	1.708
88.000	1.708	1.707	1.707	1.707	1.706
88.050	1.706	1.705	1.705	1.705	1.704
88.100	1.704	1.704	1.703	1.703	1.703

Time vs. Volume (ac-ft)

Output Time increment = 0.010 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
88.150	1.702	1.702	1.701	1.701	1.701
88.200	1.700	1.700	1.700	1.699	1.699
88.250	1.698	1.698	1.698	1.697	1.697
88.300	1.697	1.696	1.696	1.696	1.695
88.350	1.695	1.694	1.694	1.694	1.693
88.400	1.693	1.693	1.692	1.692	1.692
88.450	1.691	1.691	1.690	1.690	1.690
88.500	1.689	1.689	1.689	1.688	1.688
88.550	1.688	1.687	1.687	1.686	1.686
88.600	1.686	1.685	1.685	1.685	1.684
88.650	1.684	1.683	1.683	1.683	1.682
88.700	1.682	1.682	1.681	1.681	1.681
88.750	1.680	1.680	1.679	1.679	1.679
88.800	1.678	1.678	1.678	1.677	1.677
88.850	1.677	1.676	1.676	1.676	1.675
88.900	1.675	1.674	1.674	1.674	1.673
88.950	1.673	1.673	1.672	1.672	1.672
89.000	1.671	1.671	1.670	1.670	1.670
89.050	1.669	1.669	1.669	1.668	1.668
89.100	1.668	1.667	1.667	1.667	1.666
89.150	1.666	1.665	1.665	1.665	1.664
89.200	1.664	1.664	1.663	1.663	1.663
89.250	1.662	1.662	1.662	1.661	1.661
89.300	1.660	1.660	1.660	1.659	1.659
89.350	1.659	1.658	1.658	1.658	1.657
89.400	1.657	1.656	1.656	1.656	1.655
89.450	1.655	1.655	1.654	1.654	1.654
89.500	1.653	1.653	1.653	1.652	1.652
89.550	1.651	1.651	1.651	1.650	1.650
89.600	1.650	1.649	1.649	1.649	1.648
89.650	1.648	1.648	1.647	1.647	1.647
89.700	1.646	1.646	1.645	1.645	1.645
89.750	1.644	1.644	1.644	1.643	1.643
89.800	1.643	1.642	1.642	1.642	1.641
89.850	1.641	1.641	1.640	1.640	1.639
89.900	1.639	1.639	1.638	1.638	1.638
89.950	1.637	1.637	1.637	1.636	1.636
90.000	1.636	1.635	1.635	1.635	1.634
90.050	1.634	1.633	1.633	1.633	1.632
90.100	1.632	1.632	1.631	1.631	1.631
90.150	1.630	1.630	1.630	1.629	1.629
90.200	1.629	1.628	1.628	1.628	1.627
90.250	1.627	1.626	1.626	1.626	1.625

Time vs. Volume (ac-ft)

Output Time increment = 0.010 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
90.300	1.625	1.625	1.624	1.624	1.624
90.350	1.623	1.623	1.623	1.622	1.622
90.400	1.622	1.621	1.621	1.621	1.620
90.450	1.620	1.620	1.619	1.619	1.618
90.500	1.618	1.618	1.617	1.617	1.617
90.550	1.616	1.616	1.616	1.615	1.615
90.600	1.615	1.614	1.614	1.614	1.613
90.650	1.613	1.613	1.612	1.612	1.612
90.700	1.611	1.611	1.611	1.610	1.610
90.750	1.609	1.609	1.609	1.608	1.608
90.800	1.608	1.607	1.607	1.607	1.606
90.850	1.606	1.606	1.605	1.605	1.605
90.900	1.604	1.604	1.604	1.603	1.603
90.950	1.603	1.602	1.602	1.602	1.601
91.000	1.601	1.601	1.600	1.600	1.600
91.050	1.599	1.599	1.599	1.598	1.598
91.100	1.597	1.597	1.597	1.596	1.596
91.150	1.596	1.595	1.595	1.595	1.594
91.200	1.594	1.594	1.593	1.593	1.593
91.250	1.592	1.592	1.592	1.591	1.591
91.300	1.591	1.590	1.590	1.590	1.589
91.350	1.589	1.589	1.588	1.588	1.588
91.400	1.587	1.587	1.587	1.586	1.586
91.450	1.586	1.585	1.585	1.585	1.584
91.500	1.584	1.584	1.583	1.583	1.583
91.550	1.582	1.582	1.582	1.581	1.581
91.600	1.581	1.580	1.580	1.579	1.579
91.650	1.579	1.578	1.578	1.578	1.577
91.700	1.577	1.577	1.576	1.576	1.576
91.750	1.575	1.575	1.575	1.574	1.574
91.800	1.574	1.573	1.573	1.573	1.572
91.850	1.572	1.572	1.571	1.571	1.571
91.900	1.570	1.570	1.570	1.569	1.569
91.950	1.569	1.568	1.568	1.568	1.567
92.000	1.567	1.567	1.566	1.566	1.566
92.050	1.565	1.565	1.565	1.564	1.564
92.100	1.564	1.563	1.563	1.563	1.562
92.150	1.562	1.562	1.561	1.561	1.561
92.200	1.560	1.560	1.560	1.559	1.559
92.250	1.559	1.558	1.558	1.558	1.557
92.300	1.557	1.557	1.556	1.556	1.556
92.350	1.555	1.555	1.555	1.554	1.554
92.400	1.554	1.554	1.553	1.553	1.553

Time vs. Volume (ac-ft)

Output Time increment = 0.010 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
92.450	1.552	1.552	1.552	1.551	1.551
92.500	1.551	1.550	1.550	1.550	1.549
92.550	1.549	1.549	1.548	1.548	1.548
92.600	1.547	1.547	1.547	1.546	1.546
92.650	1.546	1.545	1.545	1.545	1.544
92.700	1.544	1.544	1.543	1.543	1.543
92.750	1.542	1.542	1.542	1.541	1.541
92.800	1.541	1.540	1.540	1.540	1.539
92.850	1.539	1.539	1.538	1.538	1.538
92.900	1.537	1.537	1.537	1.536	1.536
92.950	1.536	1.536	1.535	1.535	1.535
93.000	1.534	1.534	1.534	1.533	1.533
93.050	1.533	1.532	1.532	1.532	1.531
93.100	1.531	1.531	1.530	1.530	1.530
93.150	1.529	1.529	1.529	1.528	1.528
93.200	1.528	1.527	1.527	1.527	1.526
93.250	1.526	1.526	1.525	1.525	1.525
93.300	1.525	1.524	1.524	1.524	1.523
93.350	1.523	1.523	1.522	1.522	1.522
93.400	1.521	1.521	1.521	1.520	1.520
93.450	1.520	1.519	1.519	1.519	1.518
93.500	1.518	1.518	1.517	1.517	1.517
93.550	1.517	1.516	1.516	1.516	1.515
93.600	1.515	1.515	1.514	1.514	1.514
93.650	1.513	1.513	1.513	1.512	1.512
93.700	1.512	1.511	1.511	1.511	1.510
93.750	1.510	1.510	1.510	1.509	1.509
93.800	1.509	1.508	1.508	1.508	1.507
93.850	1.507	1.507	1.506	1.506	1.506
93.900	1.505	1.505	1.505	1.504	1.504
93.950	1.504	1.503	1.503	1.503	1.503
94.000	1.502	1.502	1.502	1.501	1.501
94.050	1.501	1.500	1.500	1.500	1.499
94.100	1.499	1.499	1.498	1.498	1.498
94.150	1.497	1.497	1.497	1.497	1.496
94.200	1.496	1.496	1.495	1.495	1.495
94.250	1.494	1.494	1.494	1.493	1.493
94.300	1.493	1.492	1.492	1.492	1.492
94.350	1.491	1.491	1.491	1.490	1.490
94.400	1.490	1.489	1.489	1.489	1.488
94.450	1.488	1.488	1.488	1.487	1.487
94.500	1.487	1.486	1.486	1.486	1.485
94.550	1.485	1.485	1.484	1.484	1.484

Time vs. Volume (ac-ft)

Output Time increment = 0.010 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
94.600	1.483	1.483	1.483	1.483	1.482
94.650	1.482	1.482	1.481	1.481	1.481
94.700	1.480	1.480	1.480	1.479	1.479
94.750	1.479	1.479	1.478	1.478	1.478
94.800	1.477	1.477	1.477	1.476	1.476
94.850	1.476	1.475	1.475	1.475	1.474
94.900	1.474	1.474	1.474	1.473	1.473
94.950	1.473	1.472	1.472	1.472	1.471
95.000	1.471	1.471	1.471	1.470	1.470
95.050	1.470	1.469	1.469	1.469	1.468
95.100	1.468	1.468	1.467	1.467	1.467
95.150	1.467	1.466	1.466	1.466	1.465
95.200	1.465	1.465	1.464	1.464	1.464
95.250	1.463	1.463	1.463	1.463	1.462
95.300	1.462	1.462	1.461	1.461	1.461
95.350	1.460	1.460	1.460	1.460	1.459
95.400	1.459	1.459	1.458	1.458	1.458
95.450	1.457	1.457	1.457	1.457	1.456
95.500	1.456	1.456	1.455	1.455	1.455
95.550	1.454	1.454	1.454	1.454	1.453
95.600	1.453	1.453	1.452	1.452	1.452
95.650	1.451	1.451	1.451	1.451	1.450
95.700	1.450	1.450	1.449	1.449	1.449
95.750	1.448	1.448	1.448	1.447	1.447
95.800	1.447	1.447	1.446	1.446	1.446
95.850	1.445	1.445	1.445	1.445	1.444
95.900	1.444	1.444	1.443	1.443	1.443
95.950	1.442	1.442	1.442	1.442	1.441
96.000	1.441	1.441	1.440	1.440	1.440
96.050	1.439	1.439	1.439	1.439	1.438
96.100	1.438	1.438	1.437	1.437	1.437
96.150	1.437	1.436	1.436	1.436	1.435
96.200	1.435	1.435	1.434	1.434	1.434
96.250	1.434	1.433	1.433	1.433	1.432
96.300	1.432	1.432	1.431	1.431	1.431
96.350	1.431	1.430	1.430	1.430	1.429
96.400	1.429	1.429	1.429	1.428	1.428
96.450	1.428	1.427	1.427	1.427	1.426
96.500	1.426	1.426	1.426	1.425	1.425
96.550	1.425	1.424	1.424	1.424	1.424
96.600	1.423	1.423	1.423	1.422	1.422
96.650	1.422	1.422	1.421	1.421	1.421
96.700	1.420	1.420	1.420	1.419	1.419

Time vs. Volume (ac-ft)

Output Time increment = 0.010 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
96.750	1.419	1.419	1.418	1.418	1.418
96.800	1.417	1.417	1.417	1.417	1.416
96.850	1.416	1.416	1.415	1.415	1.415
96.900	1.415	1.414	1.414	1.414	1.413
96.950	1.413	1.413	1.413	1.412	1.412
97.000	1.412	1.411	1.411	1.411	1.411
97.050	1.410	1.410	1.410	1.409	1.409
97.100	1.409	1.408	1.408	1.408	1.408
97.150	1.407	1.407	1.407	1.406	1.406
97.200	1.406	1.406	1.405	1.405	1.405
97.250	1.404	1.404	1.404	1.404	1.403
97.300	1.403	1.403	1.402	1.402	1.402
97.350	1.402	1.401	1.401	1.401	1.400
97.400	1.400	1.400	1.400	1.399	1.399
97.450	1.399	1.398	1.398	1.398	1.398
97.500	1.397	1.397	1.397	1.396	1.396
97.550	1.396	1.396	1.395	1.395	1.395
97.600	1.395	1.394	1.394	1.394	1.393
97.650	1.393	1.393	1.393	1.392	1.392
97.700	1.392	1.391	1.391	1.391	1.391
97.750	1.390	1.390	1.390	1.389	1.389
97.800	1.389	1.389	1.388	1.388	1.388
97.850	1.387	1.387	1.387	1.387	1.386
97.900	1.386	1.386	1.385	1.385	1.385
97.950	1.385	1.384	1.384	1.384	1.384
98.000	1.383	1.383	1.383	1.382	1.382
98.050	1.382	1.382	1.381	1.381	1.381
98.100	1.380	1.380	1.380	1.380	1.379
98.150	1.379	1.379	1.379	1.378	1.378
98.200	1.378	1.377	1.377	1.377	1.377
98.250	1.376	1.376	1.376	1.375	1.375
98.300	1.375	1.375	1.374	1.374	1.374
98.350	1.374	1.373	1.373	1.373	1.372
98.400	1.372	1.372	1.372	1.371	1.371
98.450	1.371	1.371	1.370	1.370	1.370
98.500	1.369	1.369	1.369	1.369	1.368
98.550	1.368	1.368	1.367	1.367	1.367
98.600	1.367	1.366	1.366	1.366	1.366
98.650	1.365	1.365	1.365	1.364	1.364
98.700	1.364	1.364	1.363	1.363	1.363
98.750	1.363	1.362	1.362	1.362	1.361
98.800	1.361	1.361	1.361	1.360	1.360
98.850	1.360	1.360	1.359	1.359	1.359

Time vs. Volume (ac-ft)

Output Time increment = 0.010 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
98.900	1.358	1.358	1.358	1.358	1.357
98.950	1.357	1.357	1.357	1.356	1.356
99.000	1.356	1.356	1.355	1.355	1.355
99.050	1.354	1.354	1.354	1.354	1.353
99.100	1.353	1.353	1.353	1.352	1.352
99.150	1.352	1.351	1.351	1.351	1.351
99.200	1.350	1.350	1.350	1.350	1.349
99.250	1.349	1.349	1.349	1.348	1.348
99.300	1.348	1.347	1.347	1.347	1.347
99.350	1.346	1.346	1.346	1.346	1.345
99.400	1.345	1.345	1.345	1.344	1.344
99.450	1.344	1.343	1.343	1.343	1.343
99.500	1.342	1.342	1.342	1.342	1.341
99.550	1.341	1.341	1.341	1.340	1.340
99.600	1.340	1.339	1.339	1.339	1.339
99.650	1.338	1.338	1.338	1.338	1.337
99.700	1.337	1.337	1.337	1.336	1.336
99.750	1.336	1.336	1.335	1.335	1.335
99.800	1.334	1.334	1.334	1.334	1.333
99.850	1.333	1.333	1.333	1.332	1.332
99.900	1.332	1.332	1.331	1.331	1.331
99.950	1.331	1.330	1.330	1.330	1.329
100.000	1.329	1.329	1.329	1.328	1.328
100.050	1.328	1.328	1.327	1.327	1.327
100.100	1.327	1.326	1.326	1.326	1.326
100.150	1.325	1.325	1.325	1.325	1.324
100.200	1.324	1.324	1.323	1.323	1.323
100.250	1.323	1.322	1.322	1.322	1.322
100.300	1.321	1.321	1.321	1.321	1.320
100.350	1.320	1.320	1.320	1.319	1.319
100.400	1.319	1.319	1.318	1.318	1.318
100.450	1.318	1.317	1.317	1.317	1.317
100.500	1.316	1.316	1.316	1.315	1.315
100.550	1.315	1.315	1.314	1.314	1.314
100.600	1.314	1.313	1.313	1.313	1.313
100.650	1.312	1.312	1.312	1.312	1.311
100.700	1.311	1.311	1.311	1.310	1.310
100.750	1.310	1.310	1.309	1.309	1.309
100.800	1.309	1.308	1.308	1.308	1.308
100.850	1.307	1.307	1.307	1.307	1.306
100.900	1.306	1.306	1.306	1.305	1.305
100.950	1.305	1.305	1.304	1.304	1.304
101.000	1.304	1.303	1.303	1.303	1.303

Time vs. Volume (ac-ft)

Output Time increment = 0.010 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
101.050	1.302	1.302	1.302	1.301	1.301
101.100	1.301	1.301	1.300	1.300	1.300
101.150	1.300	1.299	1.299	1.299	1.299
101.200	1.298	1.298	1.298	1.298	1.297
101.250	1.297	1.297	1.297	1.296	1.296
101.300	1.296	1.296	1.295	1.295	1.295
101.350	1.295	1.294	1.294	1.294	1.294
101.400	1.293	1.293	1.293	1.293	1.292
101.450	1.292	1.292	1.292	1.292	1.291
101.500	1.291	1.291	1.291	1.290	1.290
101.550	1.290	1.290	1.289	1.289	1.289
101.600	1.289	1.288	1.288	1.288	1.288
101.650	1.287	1.287	1.287	1.287	1.286
101.700	1.286	1.286	1.286	1.285	1.285
101.750	1.285	1.285	1.284	1.284	1.284
101.800	1.284	1.283	1.283	1.283	1.283
101.850	1.282	1.282	1.282	1.282	1.281
101.900	1.281	1.281	1.281	1.280	1.280
101.950	1.280	1.280	1.279	1.279	1.279
102.000	1.279	1.278	1.278	1.278	1.278
102.050	1.278	1.277	1.277	1.277	1.277
102.100	1.276	1.276	1.276	1.276	1.275
102.150	1.275	1.275	1.275	1.274	1.274
102.200	1.274	1.274	1.273	1.273	1.273
102.250	1.273	1.272	1.272	1.272	1.272
102.300	1.271	1.271	1.271	1.271	1.271
102.350	1.270	1.270	1.270	1.270	1.269
102.400	1.269	1.269	1.269	1.268	1.268
102.450	1.268	1.268	1.267	1.267	1.267
102.500	1.267	1.266	1.266	1.266	1.266
102.550	1.265	1.265	1.265	1.265	1.265
102.600	1.264	1.264	1.264	1.264	1.263
102.650	1.263	1.263	1.263	1.262	1.262
102.700	1.262	1.262	1.261	1.261	1.261
102.750	1.261	1.261	1.260	1.260	1.260
102.800	1.260	1.259	1.259	1.259	1.259
102.850	1.258	1.258	1.258	1.258	1.257
102.900	1.257	1.257	1.257	1.257	1.256
102.950	1.256	1.256	1.256	1.255	1.255
103.000	1.255	1.255	1.254	1.254	1.254
103.050	1.254	1.253	1.253	1.253	1.253
103.100	1.253	1.252	1.252	1.252	1.252
103.150	1.251	1.251	1.251	1.251	1.250

Time vs. Volume (ac-ft)

Output Time increment = 0.010 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
103.200	1.250	1.250	1.250	1.250	1.249
103.250	1.249	1.249	1.249	1.248	1.248
103.300	1.248	1.248	1.247	1.247	1.247
103.350	1.247	1.247	1.246	1.246	1.246
103.400	1.246	1.245	1.245	1.245	1.245
103.450	1.244	1.244	1.244	1.244	1.244
103.500	1.243	1.243	1.243	1.243	1.242
103.550	1.242	1.242	1.242	1.241	1.241
103.600	1.241	1.241	1.241	1.240	1.240
103.650	1.240	1.240	1.239	1.239	1.239
103.700	1.239	1.238	1.238	1.238	1.238
103.750	1.238	1.237	1.237	1.237	1.237
103.800	1.236	1.236	1.236	1.236	1.236
103.850	1.235	1.235	1.235	1.235	1.234
103.900	1.234	1.234	1.234	1.233	1.233
103.950	1.233	1.233	1.233	1.232	1.232
104.000	1.232	1.232	1.231	1.231	1.231
104.050	1.231	1.231	1.230	1.230	1.230
104.100	1.230	1.229	1.229	1.229	1.229
104.150	1.229	1.228	1.228	1.228	1.228
104.200	1.227	1.227	1.227	1.227	1.227
104.250	1.226	1.226	1.226	1.226	1.225
104.300	1.225	1.225	1.225	1.224	1.224
104.350	1.224	1.224	1.224	1.223	1.223
104.400	1.223	1.223	1.222	1.222	1.222
104.450	1.222	1.222	1.221	1.221	1.221
104.500	1.221	1.221	1.220	1.220	1.220
104.550	1.220	1.219	1.219	1.219	1.219
104.600	1.219	1.218	1.218	1.218	1.218
104.650	1.217	1.217	1.217	1.217	1.217
104.700	1.216	1.216	1.216	1.216	1.215
104.750	1.215	1.215	1.215	1.215	1.214
104.800	1.214	1.214	1.214	1.213	1.213
104.850	1.213	1.213	1.213	1.212	1.212
104.900	1.212	1.212	1.212	1.211	1.211
104.950	1.211	1.211	1.210	1.210	1.210
105.000	1.210	1.210	1.209	1.209	1.209
105.050	1.209	1.208	1.208	1.208	1.208
105.100	1.208	1.207	1.207	1.207	1.207
105.150	1.207	1.206	1.206	1.206	1.206
105.200	1.205	1.205	1.205	1.205	1.205
105.250	1.204	1.204	1.204	1.204	1.204
105.300	1.203	1.203	1.203	1.203	1.203

Time vs. Volume (ac-ft)

Output Time increment = 0.010 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
105.350	1.202	1.202	1.202	1.202	1.201
105.400	1.201	1.201	1.201	1.201	1.200
105.450	1.200	1.200	1.200	1.200	1.199
105.500	1.199	1.199	1.199	1.198	1.198
105.550	1.198	1.198	1.198	1.197	1.197
105.600	1.197	1.197	1.197	1.196	1.196
105.650	1.196	1.196	1.196	1.195	1.195
105.700	1.195	1.195	1.194	1.194	1.194
105.750	1.194	1.194	1.193	1.193	1.193
105.800	1.193	1.193	1.192	1.192	1.192
105.850	1.192	1.192	1.191	1.191	1.191
105.900	1.191	1.191	1.190	1.190	1.190
105.950	1.190	1.189	1.189	1.189	1.189
106.000	1.189	1.188	1.188	1.188	1.188
106.050	1.188	1.187	1.187	1.187	1.187
106.100	1.187	1.186	1.186	1.186	1.186
106.150	1.186	1.185	1.185	1.185	1.185
106.200	1.185	1.184	1.184	1.184	1.184
106.250	1.184	1.183	1.183	1.183	1.183
106.300	1.182	1.182	1.182	1.182	1.182
106.350	1.181	1.181	1.181	1.181	1.181
106.400	1.180	1.180	1.180	1.180	1.180
106.450	1.179	1.179	1.179	1.179	1.179
106.500	1.178	1.178	1.178	1.178	1.178
106.550	1.177	1.177	1.177	1.177	1.177
106.600	1.176	1.176	1.176	1.176	1.176
106.650	1.175	1.175	1.175	1.175	1.175
106.700	1.174	1.174	1.174	1.174	1.174
106.750	1.173	1.173	1.173	1.173	1.173
106.800	1.172	1.172	1.172	1.172	1.172
106.850	1.171	1.171	1.171	1.171	1.171
106.900	1.170	1.170	1.170	1.170	1.170
106.950	1.169	1.169	1.169	1.169	1.169
107.000	1.168	1.168	1.168	1.168	1.168
107.050	1.167	1.167	1.167	1.167	1.167
107.100	1.166	1.166	1.166	1.166	1.166
107.150	1.165	1.165	1.165	1.165	1.165
107.200	1.164	1.164	1.164	1.164	1.164
107.250	1.163	1.163	1.163	1.163	1.163
107.300	1.163	1.162	1.162	1.162	1.162
107.350	1.162	1.161	1.161	1.161	1.161
107.400	1.161	1.160	1.160	1.160	1.160
107.450	1.160	1.159	1.159	1.159	1.159

Time vs. Volume (ac-ft)

Output Time increment = 0.010 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
107.500	1.159	1.158	1.158	1.158	1.158
107.550	1.158	1.157	1.157	1.157	1.157
107.600	1.157	1.156	1.156	1.156	1.156
107.650	1.156	1.156	1.155	1.155	1.155
107.700	1.155	1.155	1.154	1.154	1.154
107.750	1.154	1.154	1.153	1.153	1.153
107.800	1.153	1.153	1.152	1.152	1.152
107.850	1.152	1.152	1.152	1.151	1.151
107.900	1.151	1.151	1.151	1.150	1.150
107.950	1.150	1.150	1.150	1.149	1.149
108.000	1.149	1.149	1.149	1.148	1.148
108.050	1.148	1.148	1.148	1.148	1.147
108.100	1.147	1.147	1.147	1.147	1.146
108.150	1.146	1.146	1.146	1.146	1.145
108.200	1.145	1.145	1.145	1.145	1.145
108.250	1.144	1.144	1.144	1.144	1.144
108.300	1.143	1.143	1.143	1.143	1.143
108.350	1.142	1.142	1.142	1.142	1.142
108.400	1.142	1.141	1.141	1.141	1.141
108.450	1.141	1.140	1.140	1.140	1.140
108.500	1.140	1.140	1.139	1.139	1.139
108.550	1.139	1.139	1.138	1.138	1.138
108.600	1.138	1.138	1.137	1.137	1.137
108.650	1.137	1.137	1.137	1.136	1.136
108.700	1.136	1.136	1.136	1.135	1.135
108.750	1.135	1.135	1.135	1.135	1.134
108.800	1.134	1.134	1.134	1.134	1.133
108.850	1.133	1.133	1.133	1.133	1.133
108.900	1.132	1.132	1.132	1.132	1.132
108.950	1.131	1.131	1.131	1.131	1.131
109.000	1.131	1.130	1.130	1.130	1.130
109.050	1.130	1.130	1.129	1.129	1.129
109.100	1.129	1.129	1.128	1.128	1.128
109.150	1.128	1.128	1.128	1.127	1.127
109.200	1.127	1.127	1.127	1.127	1.126
109.250	1.126	1.126	1.126	1.126	1.125
109.300	1.125	1.125	1.125	1.125	1.125
109.350	1.124	1.124	1.124	1.124	1.124
109.400	1.124	1.123	1.123	1.123	1.123
109.450	1.123	1.123	1.122	1.122	1.122
109.500	1.122	1.122	1.121	1.121	1.121
109.550	1.121	1.121	1.121	1.120	1.120
109.600	1.120	1.120	1.120	1.120	1.119

Time vs. Volume (ac-ft)

Output Time increment = 0.010 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
109.650	1.119	1.119	1.119	1.119	1.119
109.700	1.118	1.118	1.118	1.118	1.118
109.750	1.118	1.117	1.117	1.117	1.117
109.800	1.117	1.117	1.116	1.116	1.116
109.850	1.116	1.116	1.116	1.115	1.115
109.900	1.115	1.115	1.115	1.115	1.114
109.950	1.114	1.114	1.114	1.114	1.114
110.000	1.113	1.113	1.113	1.113	1.113
110.050	1.113	1.112	1.112	1.112	1.112
110.100	1.112	1.112	1.111	1.111	1.111
110.150	1.111	1.111	1.111	1.110	1.110
110.200	1.110	1.110	1.110	1.110	1.109
110.250	1.109	1.109	1.109	1.109	1.109
110.300	1.108	1.108	1.108	1.108	1.108
110.350	1.108	1.108	1.107	1.107	1.107
110.400	1.107	1.107	1.107	1.106	1.106
110.450	1.106	1.106	1.106	1.106	1.105
110.500	1.105	1.105	1.105	1.105	1.105
110.550	1.104	1.104	1.104	1.104	1.104
110.600	1.104	1.104	1.103	1.103	1.103
110.650	1.103	1.103	1.103	1.102	1.102
110.700	1.102	1.102	1.102	1.102	1.101
110.750	1.101	1.101	1.101	1.101	1.101
110.800	1.101	1.100	1.100	1.100	1.100
110.850	1.100	1.100	1.099	1.099	1.099
110.900	1.099	1.099	1.099	1.099	1.098
110.950	1.098	1.098	1.098	1.098	1.098
111.000	1.097	1.097	1.097	1.097	1.097
111.050	1.097	1.097	1.096	1.096	1.096
111.100	1.096	1.096	1.096	1.095	1.095
111.150	1.095	1.095	1.095	1.095	1.095
111.200	1.094	1.094	1.094	1.094	1.094
111.250	1.094	1.093	1.093	1.093	1.093
111.300	1.093	1.093	1.093	1.092	1.092
111.350	1.092	1.092	1.092	1.092	1.092
111.400	1.091	1.091	1.091	1.091	1.091
111.450	1.091	1.090	1.090	1.090	1.090
111.500	1.090	1.090	1.090	1.089	1.089
111.550	1.089	1.089	1.089	1.089	1.089
111.600	1.088	1.088	1.088	1.088	1.088
111.650	1.088	1.088	1.087	1.087	1.087
111.700	1.087	1.087	1.087	1.087	1.086
111.750	1.086	1.086	1.086	1.086	1.086

Time vs. Volume (ac-ft)

Output Time increment = 0.010 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
111.800	1.085	1.085	1.085	1.085	1.085
111.850	1.085	1.085	1.084	1.084	1.084
111.900	1.084	1.084	1.084	1.084	1.083
111.950	1.083	1.083	1.083	1.083	1.083
112.000	1.083	1.082	1.082	1.082	1.082
112.050	1.082	1.082	1.082	1.081	1.081
112.100	1.081	1.081	1.081	1.081	1.081
112.150	1.080	1.080	1.080	1.080	1.080
112.200	1.080	1.080	1.079	1.079	1.079
112.250	1.079	1.079	1.079	1.079	1.079
112.300	1.078	1.078	1.078	1.078	1.078
112.350	1.078	1.078	1.077	1.077	1.077
112.400	1.077	1.077	1.077	1.077	1.076
112.450	1.076	1.076	1.076	1.076	1.076
112.500	1.076	1.075	1.075	1.075	1.075
112.550	1.075	1.075	1.075	1.075	1.074
112.600	1.074	1.074	1.074	1.074	1.074
112.650	1.074	1.073	1.073	1.073	1.073
112.700	1.073	1.073	1.073	1.072	1.072
112.750	1.072	1.072	1.072	1.072	1.072
112.800	1.072	1.071	1.071	1.071	1.071
112.850	1.071	1.071	1.071	1.070	1.070
112.900	1.070	1.070	1.070	1.070	1.070
112.950	1.070	1.069	1.069	1.069	1.069
113.000	1.069	1.069	1.069	1.068	1.068
113.050	1.068	1.068	1.068	1.068	1.068
113.100	1.068	1.067	1.067	1.067	1.067
113.150	1.067	1.067	1.067	1.067	1.066
113.200	1.066	1.066	1.066	1.066	1.066
113.250	1.066	1.065	1.065	1.065	1.065
113.300	1.065	1.065	1.065	1.065	1.064
113.350	1.064	1.064	1.064	1.064	1.064
113.400	1.064	1.064	1.063	1.063	1.063
113.450	1.063	1.063	1.063	1.063	1.063
113.500	1.062	1.062	1.062	1.062	1.062
113.550	1.062	1.062	1.062	1.061	1.061
113.600	1.061	1.061	1.061	1.061	1.061
113.650	1.060	1.060	1.060	1.060	1.060
113.700	1.060	1.060	1.060	1.059	1.059
113.750	1.059	1.059	1.059	1.059	1.059
113.800	1.059	1.058	1.058	1.058	1.058
113.850	1.058	1.058	1.058	1.058	1.057
113.900	1.057	1.057	1.057	1.057	1.057

Time vs. Volume (ac-ft)

Output Time increment = 0.010 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
113.950	1.057	1.057	1.056	1.056	1.056
114.000	1.056	1.056	1.056	1.056	1.056
114.050	1.056	1.055	1.055	1.055	1.055
114.100	1.055	1.055	1.055	1.055	1.054
114.150	1.054	1.054	1.054	1.054	1.054
114.200	1.054	1.054	1.053	1.053	1.053
114.250	1.053	1.053	1.053	1.053	1.053
114.300	1.052	1.052	1.052	1.052	1.052
114.350	1.052	1.052	1.052	1.052	1.051
114.400	1.051	1.051	1.051	1.051	1.051
114.450	1.051	1.051	1.050	1.050	1.050
114.500	1.050	1.050	1.050	1.050	1.050
114.550	1.050	1.049	1.049	1.049	1.049
114.600	1.049	1.049	1.049	1.049	1.048
114.650	1.048	1.048	1.048	1.048	1.048
114.700	1.048	1.048	1.048	1.047	1.047
114.750	1.047	1.047	1.047	1.047	1.047
114.800	1.047	1.046	1.046	1.046	1.046
114.850	1.046	1.046	1.046	1.046	1.046
114.900	1.045	1.045	1.045	1.045	1.045
114.950	1.045	1.045	1.045	1.045	1.044
115.000	1.044	1.044	1.044	1.044	1.044
115.050	1.044	1.044	1.044	1.043	1.043
115.100	1.043	1.043	1.043	1.043	1.043
115.150	1.043	1.042	1.042	1.042	1.042
115.200	1.042	1.042	1.042	1.042	1.042
115.250	1.041	1.041	1.041	1.041	1.041
115.300	1.041	1.041	1.041	1.041	1.040
115.350	1.040	1.040	1.040	1.040	1.040
115.400	1.040	1.040	1.040	1.039	1.039
115.450	1.039	1.039	1.039	1.039	1.039
115.500	1.039	1.039	1.038	1.038	1.038
115.550	1.038	1.038	1.038	1.038	1.038
115.600	1.038	1.037	1.037	1.037	1.037
115.650	1.037	1.037	1.037	1.037	1.037
115.700	1.037	1.036	1.036	1.036	1.036
115.750	1.036	1.036	1.036	1.036	1.036
115.800	1.035	1.035	1.035	1.035	1.035
115.850	1.035	1.035	1.035	1.035	1.034
115.900	1.034	1.034	1.034	1.034	1.034
115.950	1.034	1.034	1.034	1.033	1.033
116.000	1.033	1.033	1.033	1.033	1.033
116.050	1.033	1.033	1.033	1.032	1.032

Time vs. Volume (ac-ft)

Output Time increment = 0.010 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
116.100	1.032	1.032	1.032	1.032	1.032
116.150	1.032	1.032	1.031	1.031	1.031
116.200	1.031	1.031	1.031	1.031	1.031
116.250	1.031	1.031	1.030	1.030	1.030
116.300	1.030	1.030	1.030	1.030	1.030
116.350	1.030	1.029	1.029	1.029	1.029
116.400	1.029	1.029	1.029	1.029	1.029
116.450	1.029	1.028	1.028	1.028	1.028
116.500	1.028	1.028	1.028	1.028	1.028
116.550	1.028	1.027	1.027	1.027	1.027
116.600	1.027	1.027	1.027	1.027	1.027
116.650	1.027	1.026	1.026	1.026	1.026
116.700	1.026	1.026	1.026	1.026	1.026
116.750	1.026	1.025	1.025	1.025	1.025
116.800	1.025	1.025	1.025	1.025	1.025
116.850	1.025	1.024	1.024	1.024	1.024
116.900	1.024	1.024	1.024	1.024	1.024
116.950	1.024	1.023	1.023	1.023	1.023
117.000	1.023	1.023	1.023	1.023	1.023
117.050	1.023	1.022	1.022	1.022	1.022
117.100	1.022	1.022	1.022	1.022	1.022
117.150	1.022	1.021	1.021	1.021	1.021
117.200	1.021	1.021	1.021	1.021	1.021
117.250	1.021	1.021	1.020	1.020	1.020
117.300	1.020	1.020	1.020	1.020	1.020
117.350	1.020	1.020	1.019	1.019	1.019
117.400	1.019	1.019	1.019	1.019	1.019
117.450	1.019	1.019	1.018	1.018	1.018
117.500	1.018	1.018	1.018	1.018	1.018
117.550	1.018	1.018	1.018	1.017	1.017
117.600	1.017	1.017	1.017	1.017	1.017
117.650	1.017	1.017	1.017	1.016	1.016
117.700	1.016	1.016	1.016	1.016	1.016
117.750	1.016	1.016	1.016	1.016	1.015
117.800	1.015	1.015	1.015	1.015	1.015
117.850	1.015	1.015	1.015	1.015	1.015
117.900	1.014	1.014	1.014	1.014	1.014
117.950	1.014	1.014	1.014	1.014	1.014
118.000	1.014	1.013	1.013	1.013	1.013
118.050	1.013	1.013	1.013	1.013	1.013
118.100	1.013	1.013	1.012	1.012	1.012
118.150	1.012	1.012	1.012	1.012	1.012
118.200	1.012	1.012	1.012	1.011	1.011

Subsection: Time vs. Volume
Label: SWMF 001

Return Event: 100 years
Storm Event: 100YR-24HR

Time vs. Volume (ac-ft)

Output Time increment = 0.010 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
118.250	1.011	1.011	1.011	1.011	1.011
118.300	1.011	1.011	1.011	1.011	1.010
118.350	1.010	1.010	1.010	1.010	1.010
118.400	1.010	1.010	1.010	1.010	1.010
118.450	1.009	1.009	1.009	1.009	1.009
118.500	1.009	1.009	1.009	1.009	1.009
118.550	1.009	1.008	1.008	1.008	1.008
118.600	1.008	1.008	1.008	1.008	1.008
118.650	1.008	1.008	1.008	1.007	1.007
118.700	1.007	1.007	1.007	1.007	1.007
118.750	1.007	1.007	1.007	1.007	1.006
118.800	1.006	1.006	1.006	1.006	1.006
118.850	1.006	1.006	1.006	1.006	1.006
118.900	1.006	1.005	1.005	1.005	1.005
118.950	1.005	1.005	1.005	1.005	1.005
119.000	1.005	1.005	1.004	1.004	1.004
119.050	1.004	1.004	1.004	1.004	1.004
119.100	1.004	1.004	1.004	1.004	1.003
119.150	1.003	1.003	1.003	1.003	1.003
119.200	1.003	1.003	1.003	1.003	1.003
119.250	1.003	1.002	1.002	1.002	1.002
119.300	1.002	1.002	1.002	1.002	1.002
119.350	1.002	1.002	1.002	1.001	1.001
119.400	1.001	1.001	1.001	1.001	1.001
119.450	1.001	1.001	1.001	1.001	1.001
119.500	1.000	1.000	1.000	1.000	1.000
119.550	1.000	1.000	1.000	1.000	1.000
119.600	1.000	1.000	0.999	0.999	0.999
119.650	0.999	0.999	0.999	0.999	0.999
119.700	0.999	0.999	0.999	0.999	0.999
119.750	0.998	0.998	0.998	0.998	0.998
119.800	0.998	0.998	0.998	0.998	0.998
119.850	0.998	0.998	0.997	0.997	0.997
119.900	0.997	0.997	0.997	0.997	0.997
119.950	0.997	0.997	0.997	0.997	0.997
120.000	0.996	(N/A)	(N/A)	(N/A)	(N/A)

Elevation-Volume

Pond Elevation (ft)	Pond Volume (ac-ft)
719.30	0.000
720.00	0.254
721.00	0.617
721.50	0.798
727.50	5.916

Requested Pond Water Surface Elevations	
Minimum (Headwater)	719.30 ft
Increment (Headwater)	0.10 ft
Maximum (Headwater)	727.50 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Orifice-Circular	Orifice - 1	Forward	TW	721.50	727.50
Tailwater Settings	Tailwater			(N/A)	(N/A)

Structure ID: Orifice - 1 Structure Type: Orifice-Circular	
Number of Openings	1
Elevation	721.50 ft
Orifice Diameter	4.3 in
Orifice Coefficient	0.600

Structure ID: TW Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall

Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft^3/s
Flow Tolerance (Maximum)	10.000 ft^3/s

Index

Scenario Calculation Summary

Scenario Summary	
ID	1
Label	100 YR - 24 HR
Notes	
Active Topology	Base Active Topology
Hydrology	Base Hydrology
Rainfall Runoff	100 YR - 24 HR
Physical	Base Physical
Initial Condition	Base Initial Condition
Boundary Condition	Base Boundary Condition
Infiltration and Inflow	Base Infiltration and Inflow
Output	Base Output
User Data Extensions	Base User Data Extensions
PondPack Engine Calculation Options	24 HR

Output Summary			
Output Increment	0.010 hours	Duration	120.000 hours

Rainfall Summary			
Return Event Tag	100	Rainfall Type	Time-Depth Curve
Total Depth	8.6 in	Storm Event	100YR-24HR

Executive Summary (Nodes)

Label	Scenario	Return Event (years)	Truncation	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft^3/s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ac-ft)
Impervious ROW Trib to Road	100 YR - 24 HR	100	None	0.125	14.990	0.14	(N/A)	(N/A)
MILL ST STORM SEWER	100 YR - 24 HR	100	None	5.920	24.070	1.14	(N/A)	(N/A)
O-5	100 YR - 24 HR	100	None	0.125	14.990	0.14	(N/A)	(N/A)
ONSITE	100 YR - 24 HR	100	None	6.917	15.990	8.72	(N/A)	(N/A)
SWMF 001 (IN)	100 YR - 24 HR	100	None	6.917	15.990	8.72	(N/A)	(N/A)
SWMF 001 (OUT)	100 YR - 24 HR	100	None	5.920	24.070	1.14	727.48	5.901

Executive Summary (Links)

Label	Type	Location	Hydrograph Volume (ac-ft)	Peak Time (hours)	Peak Flow (ft^3/s)	End Point	Node Flow Direction
Outlet-3	Pond Outlet	Upstream	6.917	15.990	8.72	SWMF 001	Pond Inflow

Scenario Calculation Summary

Executive Summary (Links)

Label	Type	Location	Hydrograph Volume (ac-ft)	Peak Time (hours)	Peak Flow (ft^3/s)	End Point	Node Flow Direction
Outlet-3	Pond Outlet	Outflow	5.920	24.070	1.14	SWMF 001	Pond Outflow
Outlet-3	Pond Outlet	Link	5.920	24.070	1.14		
Outlet-3	Pond Outlet	Downstream	5.920	24.070	1.14	MILL ST STORM SEWER	

Scenario Calculation Summary

Scenario Summary	
ID	48
Label	100 YR - 18 HR
Notes	
Active Topology	<I> Base Active Topology
Hydrology	<I> Base Hydrology
Rainfall Runoff	100 YR - 18 HR
Physical	<I> Base Physical
Initial Condition	<I> Base Initial Condition
Boundary Condition	<I> Base Boundary Condition
Infiltration and Inflow	<I> Base Infiltration and Inflow
Output	<I> Base Output
User Data Extensions	<I> Base User Data Extensions
PondPack Engine Calculation Options	<I> 24 HR

Output Summary			
Output Increment	0.010 hours	Duration	120.000 hours

Rainfall Summary			
Return Event Tag	100	Rainfall Type	Time-Depth Curve
Total Depth	8.1 in	Storm Event	100YR-18HR

Executive Summary (Nodes)

Label	Scenario	Return Event (years)	Truncation	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft^3/s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ac-ft)
Impervious ROW Trib to Road	100 YR - 18 HR	100	None	0.117	11.240	0.17	(N/A)	(N/A)
MILL ST STORM SEWER	100 YR - 18 HR	100	None	5.477	18.100	1.12	(N/A)	(N/A)
O-5	100 YR - 18 HR	100	None	0.117	11.240	0.17	(N/A)	(N/A)
ONSITE	100 YR - 18 HR	100	None	6.423	12.000	10.86	(N/A)	(N/A)
SWMF 001 (IN)	100 YR - 18 HR	100	None	6.423	12.000	10.86	(N/A)	(N/A)
SWMF 001 (OUT)	100 YR - 18 HR	100	None	5.477	18.100	1.12	727.24	5.694

Executive Summary (Links)

Label	Type	Location	Hydrograph Volume (ac-ft)	Peak Time (hours)	Peak Flow (ft^3/s)	End Point	Node Flow Direction
Outlet-3	Pond Outlet	Upstream	6.423	12.000	10.86	SWMF 001	Pond Inflow

Scenario Calculation Summary

Executive Summary (Links)

Label	Type	Location	Hydrograph Volume (ac-ft)	Peak Time (hours)	Peak Flow (ft^3/s)	End Point	Node Flow Direction
Outlet-3	Pond Outlet	Outflow	5.477	18.100	1.12	SWMF 001	Pond Outflow
Outlet-3	Pond Outlet	Link	5.477	18.100	1.12		
Outlet-3	Pond Outlet	Downstream	5.477	18.100	1.12	MILL ST STORM SEWER	

Scenario Calculation Summary

Scenario Summary	
ID	50
Label	100 YR - 12 HR
Notes	
Active Topology	<I> Base Active Topology
Hydrology	<I> Base Hydrology
Rainfall Runoff	100 YR - 12 HR
Physical	<I> Base Physical
Initial Condition	<I> Base Initial Condition
Boundary Condition	<I> Base Boundary Condition
Infiltration and Inflow	<I> Base Infiltration and Inflow
Output	<I> Base Output
User Data Extensions	<I> Base User Data Extensions
PondPack Engine Calculation Options	<I> 24 HR

Output Summary			
Output Increment	0.010 hours	Duration	120.000 hours

Rainfall Summary			
Return Event Tag	100	Rainfall Type	Time-Depth Curve
Total Depth	7.5 in	Storm Event	100YR-12HR

Executive Summary (Nodes)

Label	Scenario	Return Event (years)	Truncation	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft^3/s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ac-ft)
Impervious ROW Trib to Road	100 YR - 12 HR	100	None	0.108	4.980	0.24	(N/A)	(N/A)
MILL ST STORM SEWER	100 YR - 12 HR	100	None	4.939	12.120	1.06	(N/A)	(N/A)
O-5	100 YR - 12 HR	100	None	0.108	4.980	0.24	(N/A)	(N/A)
ONSITE	100 YR - 12 HR	100	None	5.844	5.010	14.77	(N/A)	(N/A)
SWMF 001 (IN)	100 YR - 12 HR	100	None	5.844	5.010	14.77	(N/A)	(N/A)
SWMF 001 (OUT)	100 YR - 12 HR	100	None	4.939	12.120	1.06	726.69	5.228

Executive Summary (Links)

Label	Type	Location	Hydrograph Volume (ac-ft)	Peak Time (hours)	Peak Flow (ft^3/s)	End Point	Node Flow Direction
Outlet-3	Pond Outlet	Upstream	5.844	5.010	14.77	SWMF 001	Pond Inflow

Scenario Calculation Summary

Executive Summary (Links)

Label	Type	Location	Hydrograph Volume (ac-ft)	Peak Time (hours)	Peak Flow (ft^3/s)	End Point	Node Flow Direction
Outlet-3	Pond Outlet	Outflow	4.939	12.120	1.06	SWMF 001	Pond Outflow
Outlet-3	Pond Outlet	Link	4.939	12.120	1.06		
Outlet-3	Pond Outlet	Downstream	4.939	12.120	1.06	MILL ST STORM SEWER	

Scenario Calculation Summary

Scenario Summary	
ID	51
Label	100 YR - 6 HR
Notes	
Active Topology	<I> Base Active Topology
Hydrology	<I> Base Hydrology
Rainfall Runoff	100 YR - 6 HR
Physical	<I> Base Physical
Initial Condition	<I> Base Initial Condition
Boundary Condition	<I> Base Boundary Condition
Infiltration and Inflow	<I> Base Infiltration and Inflow
Output	<I> Base Output
User Data Extensions	<I> Base User Data Extensions
PondPack Engine Calculation Options	<I> 24 HR

Output Summary			
Output Increment	0.010 hours	Duration	120.000 hours

Rainfall Summary			
Return Event Tag	100	Rainfall Type	Time-Depth Curve
Total Depth	6.4 in	Storm Event	100YR- 6HR

Executive Summary (Nodes)

Label	Scenario	Return Event (years)	Truncation	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft^3/s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ac-ft)
Impervious ROW Trib to Road	100 YR - 6 HR	100	None	0.093	0.820	0.48	(N/A)	(N/A)
MILL ST STORM SEWER	100 YR - 6 HR	100	None	3.980	6.160	0.97	(N/A)	(N/A)
O-5	100 YR - 6 HR	100	None	0.093	0.820	0.48	(N/A)	(N/A)
ONSITE	100 YR - 6 HR	100	None	4.857	1.050	25.12	(N/A)	(N/A)
SWMF 001 (IN)	100 YR - 6 HR	100	None	4.857	1.050	25.12	(N/A)	(N/A)
SWMF 001 (OUT)	100 YR - 6 HR	100	None	3.980	6.160	0.97	725.85	4.512

Executive Summary (Links)

Label	Type	Location	Hydrograph Volume (ac-ft)	Peak Time (hours)	Peak Flow (ft^3/s)	End Point	Node Flow Direction
Outlet-3	Pond Outlet	Upstream	4.857	1.050	25.12	SWMF 001	Pond Inflow

Scenario Calculation Summary

Executive Summary (Links)

Label	Type	Location	Hydrograph Volume (ac-ft)	Peak Time (hours)	Peak Flow (ft^3/s)	End Point	Node Flow Direction
Outlet-3	Pond Outlet	Outflow	3.980	6.160	0.97	SWMF 001	Pond Outflow
Outlet-3	Pond Outlet	Link	3.980	6.160	0.97		
Outlet-3	Pond Outlet	Downstream	3.980	6.160	0.97	MILL ST STORM SEWER	

Scenario Calculation Summary

Scenario Summary	
ID	52
Label	100 YR - 3 HR
Notes	
Active Topology	<I> Base Active Topology
Hydrology	<I> Base Hydrology
Rainfall Runoff	100 YR - 3 HR
Physical	<I> Base Physical
Initial Condition	<I> Base Initial Condition
Boundary Condition	<I> Base Boundary Condition
Infiltration and Inflow	<I> Base Infiltration and Inflow
Output	<I> Base Output
User Data Extensions	<I> Base User Data Extensions
PondPack Engine Calculation Options	<I> 24 HR

Output Summary			
Output Increment	0.010 hours	Duration	120.000 hours

Rainfall Summary			
Return Event Tag	100	Rainfall Type	Time-Depth Curve
Total Depth	5.5 in	Storm Event	100YR- 3HR

Executive Summary (Nodes)

Label	Scenario	Return Event (years)	Truncation	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft^3/s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ac-ft)
Impervious ROW Trib to Road	100 YR - 3 HR	100	None	0.079	0.520	0.80	(N/A)	(N/A)
MILL ST STORM SEWER	100 YR - 3 HR	100	None	3.105	3.200	0.87	(N/A)	(N/A)
O-5	100 YR - 3 HR	100	None	0.079	0.520	0.80	(N/A)	(N/A)
ONSITE	100 YR - 3 HR	100	None	3.966	0.640	39.18	(N/A)	(N/A)
SWMF 001 (IN)	100 YR - 3 HR	100	None	3.966	0.640	39.18	(N/A)	(N/A)
SWMF 001 (OUT)	100 YR - 3 HR	100	None	3.105	3.200	0.87	725.03	3.811

Executive Summary (Links)

Label	Type	Location	Hydrograph Volume (ac-ft)	Peak Time (hours)	Peak Flow (ft^3/s)	End Point	Node Flow Direction
Outlet-3	Pond Outlet	Upstream	3.966	0.640	39.18	SWMF 001	Pond Inflow

Scenario Calculation Summary

Executive Summary (Links)

Label	Type	Location	Hydrograph Volume (ac-ft)	Peak Time (hours)	Peak Flow (ft^3/s)	End Point	Node Flow Direction
Outlet-3	Pond Outlet	Outflow	3.105	3.200	0.87	SWMF 001	Pond Outflow
Outlet-3	Pond Outlet	Link	3.105	3.200	0.87		
Outlet-3	Pond Outlet	Downstream	3.105	3.200	0.87	MILL ST STORM SEWER	

Scenario Calculation Summary

Scenario Summary	
ID	53
Label	100 YR - 2 HR
Notes	
Active Topology	<I> Base Active Topology
Hydrology	<I> Base Hydrology
Rainfall Runoff	100 YR - 2 HR
Physical	<I> Base Physical
Initial Condition	<I> Base Initial Condition
Boundary Condition	<I> Base Boundary Condition
Infiltration and Inflow	<I> Base Infiltration and Inflow
Output	<I> Base Output
User Data Extensions	<I> Base User Data Extensions
PondPack Engine Calculation Options	<I> 24 HR

Output Summary			
Output Increment	0.010 hours	Duration	120.000 hours

Rainfall Summary			
Return Event Tag	100	Rainfall Type	Time-Depth Curve
Total Depth	5.0 in	Storm Event	100YR- 2HR

Executive Summary (Nodes)

Label	Scenario	Return Event (years)	Truncation	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft^3/s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ac-ft)
Impervious ROW Trib to Road	100 YR - 2 HR	100	None	0.071	0.380	1.05	(N/A)	(N/A)
MILL ST STORM SEWER	100 YR - 2 HR	100	None	2.626	2.230	0.80	(N/A)	(N/A)
O-5	100 YR - 2 HR	100	None	0.071	0.380	1.05	(N/A)	(N/A)
ONSITE	100 YR - 2 HR	100	None	3.478	0.490	49.80	(N/A)	(N/A)
SWMF 001 (IN)	100 YR - 2 HR	100	None	3.478	0.490	49.80	(N/A)	(N/A)
SWMF 001 (OUT)	100 YR - 2 HR	100	None	2.626	2.230	0.80	724.53	3.382

Executive Summary (Links)

Label	Type	Location	Hydrograph Volume (ac-ft)	Peak Time (hours)	Peak Flow (ft^3/s)	End Point	Node Flow Direction
Outlet-3	Pond Outlet	Upstream	3.478	0.490	49.80	SWMF 001	Pond Inflow

Scenario Calculation Summary

Executive Summary (Links)

Label	Type	Location	Hydrograph Volume (ac-ft)	Peak Time (hours)	Peak Flow (ft^3/s)	End Point	Node Flow Direction
Outlet-3	Pond Outlet	Outflow	2.626	2.230	0.80	SWMF 001	Pond Outflow
Outlet-3	Pond Outlet	Link	2.626	2.230	0.80		
Outlet-3	Pond Outlet	Downstream	2.626	2.230	0.80	MILL ST STORM SEWER	

Scenario Calculation Summary

Scenario Summary	
ID	54
Label	100 YR - 1 HR
Notes	
Active Topology	<I> Base Active Topology
Hydrology	<I> Base Hydrology
Rainfall Runoff	100 YR - 1 HR
Physical	<I> Base Physical
Initial Condition	<I> Base Initial Condition
Boundary Condition	<I> Base Boundary Condition
Infiltration and Inflow	<I> Base Infiltration and Inflow
Output	<I> Base Output
User Data Extensions	<I> Base User Data Extensions
PondPack Engine Calculation Options	<I> 24 HR

Output Summary			
Output Increment	0.010 hours	Duration	120.000 hours

Rainfall Summary			
Return Event Tag	100	Rainfall Type	Time-Depth Curve
Total Depth	4.0 in	Storm Event	100YR- 1HR

Executive Summary (Nodes)

Label	Scenario	Return Event (years)	Truncation	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft^3/s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ac-ft)
Impervious ROW Trib to Road	100 YR - 1 HR	100	None	0.057	0.270	1.50	(N/A)	(N/A)
MILL ST STORM SEWER	100 YR - 1 HR	100	None	1.773	1.270	0.65	(N/A)	(N/A)
O-5	100 YR - 1 HR	100	None	0.057	0.270	1.50	(N/A)	(N/A)
ONSITE	100 YR - 1 HR	100	None	2.612	0.320	65.89	(N/A)	(N/A)
SWMF 001 (IN)	100 YR - 1 HR	100	None	2.612	0.320	65.89	(N/A)	(N/A)
SWMF 001 (OUT)	100 YR - 1 HR	100	None	1.773	1.270	0.65	723.58	2.569

Executive Summary (Links)

Label	Type	Location	Hydrograph Volume (ac-ft)	Peak Time (hours)	Peak Flow (ft^3/s)	End Point	Node Flow Direction
Outlet-3	Pond Outlet	Upstream	2.612	0.320	65.89	SWMF 001	Pond Inflow

Scenario Calculation Summary

Executive Summary (Links)

Label	Type	Location	Hydrograph Volume (ac-ft)	Peak Time (hours)	Peak Flow (ft^3/s)	End Point	Node Flow Direction
Outlet-3	Pond Outlet	Outflow	1.773	1.270	0.65	SWMF 001	Pond Outflow
Outlet-3	Pond Outlet	Link	1.773	1.270	0.65		
Outlet-3	Pond Outlet	Downstream	1.773	1.270	0.65	MILL ST STORM SEWER	

EXHIBIT I

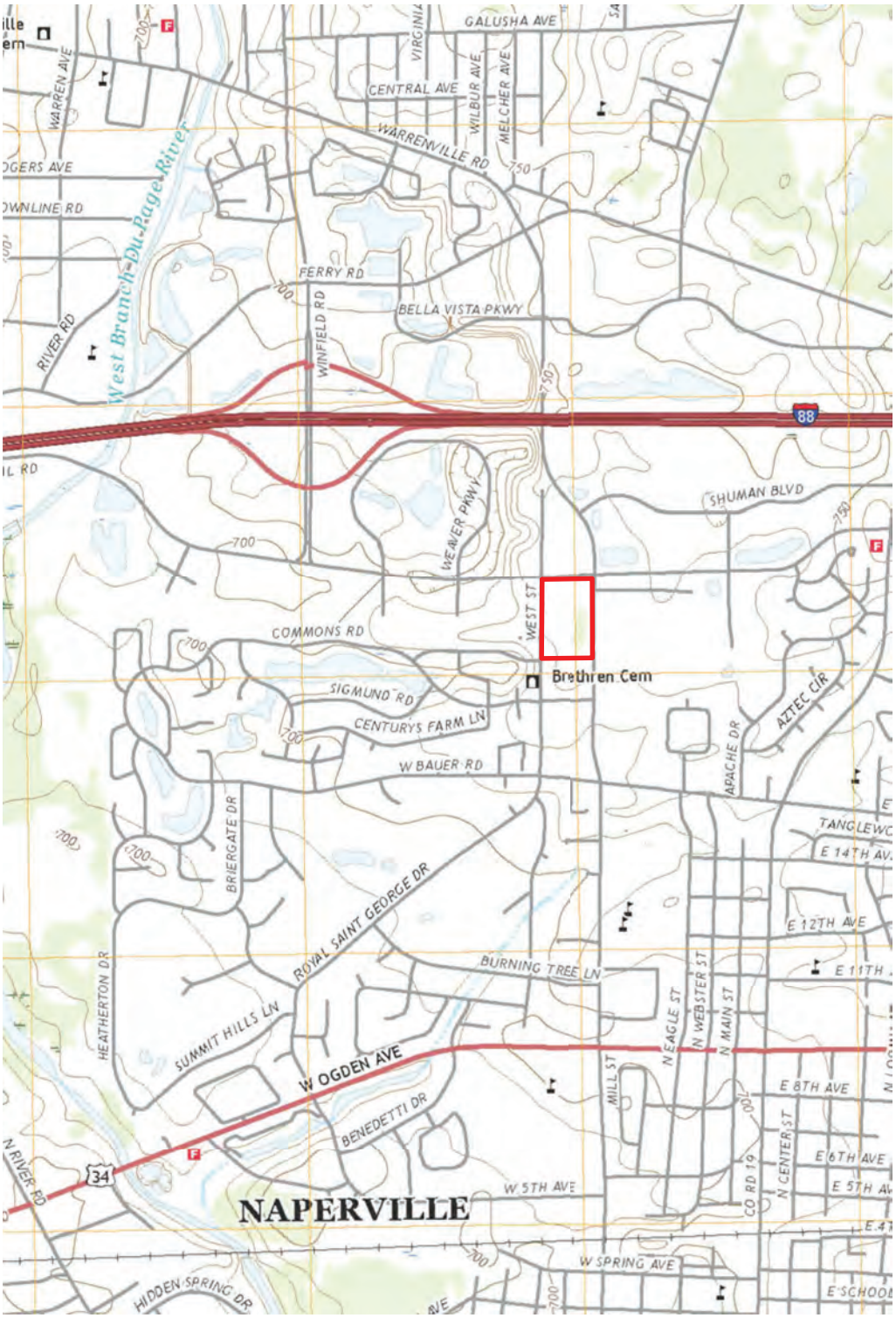
ILLUSTRATION OF SPECIAL SUB-SURFACE MODULES EXHIBIT WITH REQUIRED PCBMP STORAGE AND TYPICAL SECTIONS

(SEE EXHIBIT F)

EXHIBIT J

WETLAND MAPS AND

FLOOD PLAIN MAPS



ENCAP INCORPORATED

LEGEND:

Project Area

Location Map

Source: U.S. Geological Survey
Section 1 T38N R9E
Latitude: 41.799906 Longitude: -88.155993

SWC Diehl Rd & N Mill St

Project Number: 22-0511A

Vrutthi LLC

0 1000 2000 4000

SCALE: 1"= 2000'

NORTH

Exhibit A

ENCAP INCORPORATED

LEGEND:

Project Area

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

National Wetlands Inventory

Source: U.S. Fish & Wildlife Service

0 100 200 400

SCALE: 1"=200'

NORTH

SWC Diehl Rd & N Mill St

Project Number: 22-0511A

Vrutthi LLC

Exhibit B

ENCAP INCORPORATED

LEGEND:

Project Area

LAKES_PONDS

Wetlands

Critical Wetland

Regulatory Wetland

DuPage County Wetland Inventory

Source: DuPage County Stormwater Management

SWC Diehl Rd & N Mill St

Project Number: 22-0511A

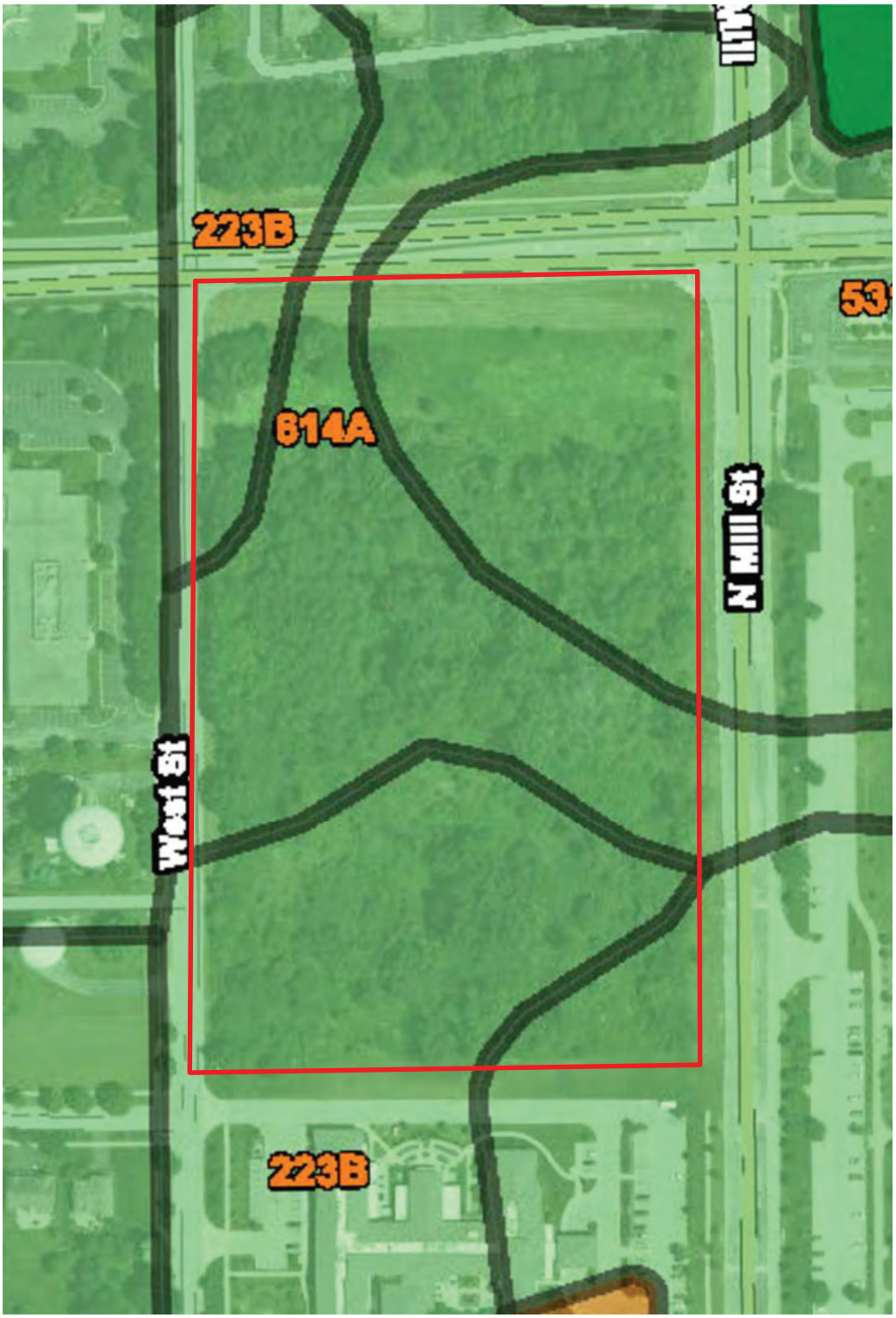
Vrutthi LLC

0 100 200 400

SCALE: 1"=200'

NORTH

Exhibit C



ENCAP INCORPORATED

LEGEND:

Project Area

- Hydric (100%)
- Hydric (66 to 99%)
- Hydric (33 to 65%)
- Hydric (1 to 32%)
- Not Hydric (0%)
- Not rated or not available

Soil Map

Source: U.S. Department of Agriculture
Natural Resources Conservation Service
Web Soil Survey 3.1

0 100 200 400

SCALE: 1"=200'

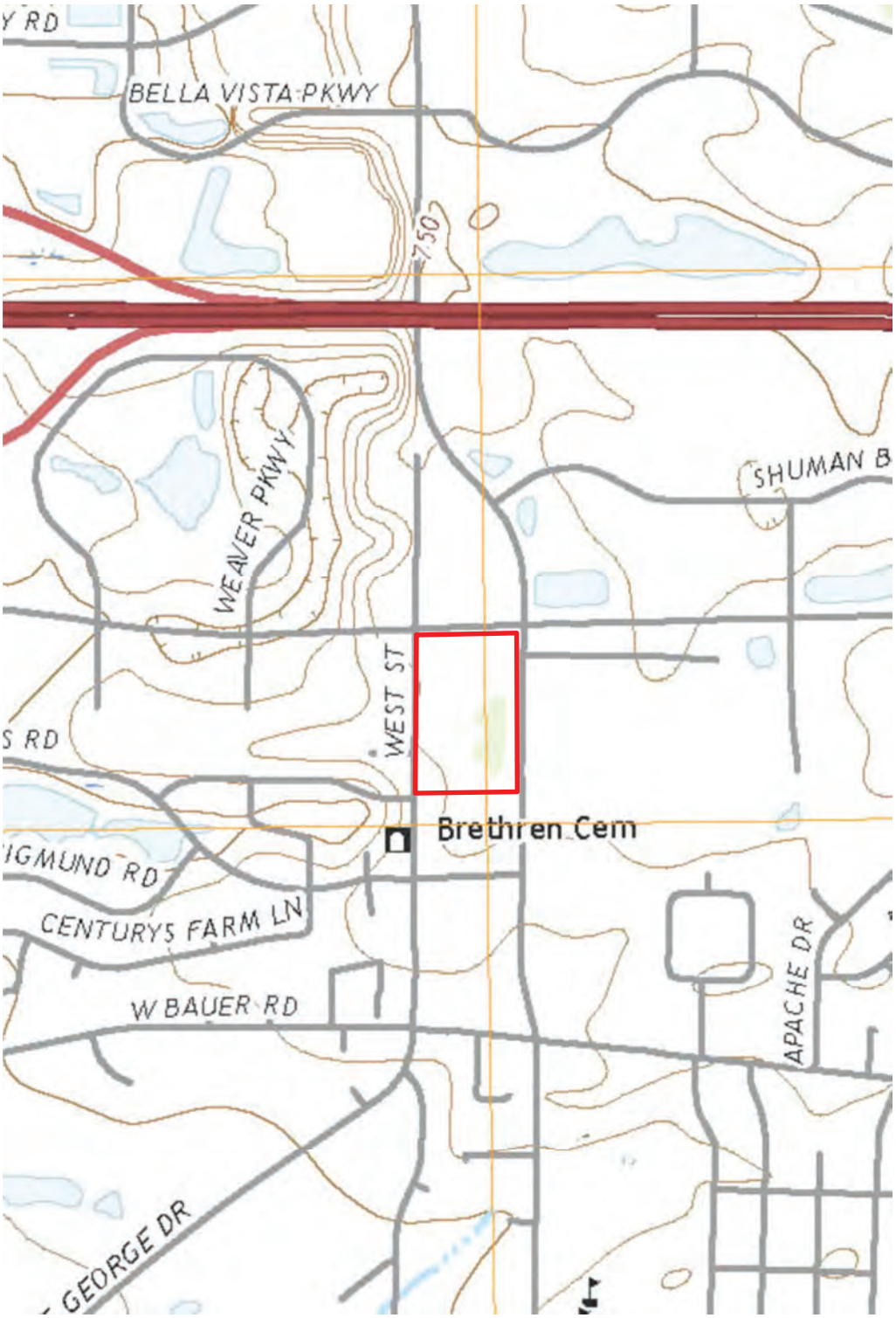
NORTH

SWC Diehl Rd & N Mill St

Project Number: 22-0511A

Vrutthi LLC

Exhibit D



ENCAP INCORPORATED

LEGEND:

Project Area

RIVERS, LAKES, AND CANALS
- Perennial stream
- Perennial river
- Intermittent stream
- Intermittent river
- Disappearing stream

SUBMERGED AREAS AND BOGS
- Marsh or swamp
- Submerged marsh or swamp
- Wooded marsh or swamp
- Submerged wooded marsh or swamp
- Land subject to inundation

VEGETATION
- Woodland
- Shrubland
- Orchard
- Vineyard
- Mangrove
- Land subject to inundation

2021 USGS Topographic Map

Source: U.S. Geological Survey
Naperville Quadrangle

0 500 1000 2000

SCALE: 1"=1000'

NORTH

SWC Diehl Rd & N Mill St

Project Number: 22-0511A

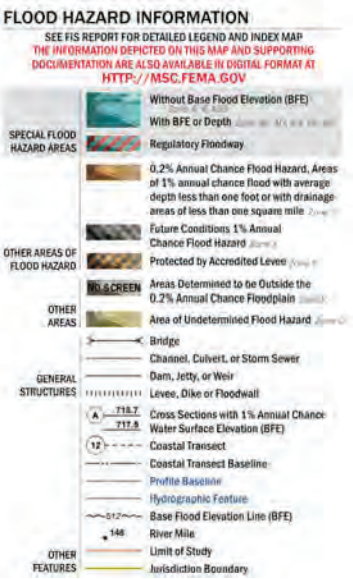
Vrutthi LLC

Exhibit E

ENCAP INCORPORATED

LEGEND:

Project Area



Flood Insurance Rate Map

Source: Federal Emergency Management Agency (FEMA)
Panel Number: 17043C0142J
Effective Date: August 1, 2019

SWC Diehl Rd & N Mill St

Project Number: 22-0511A

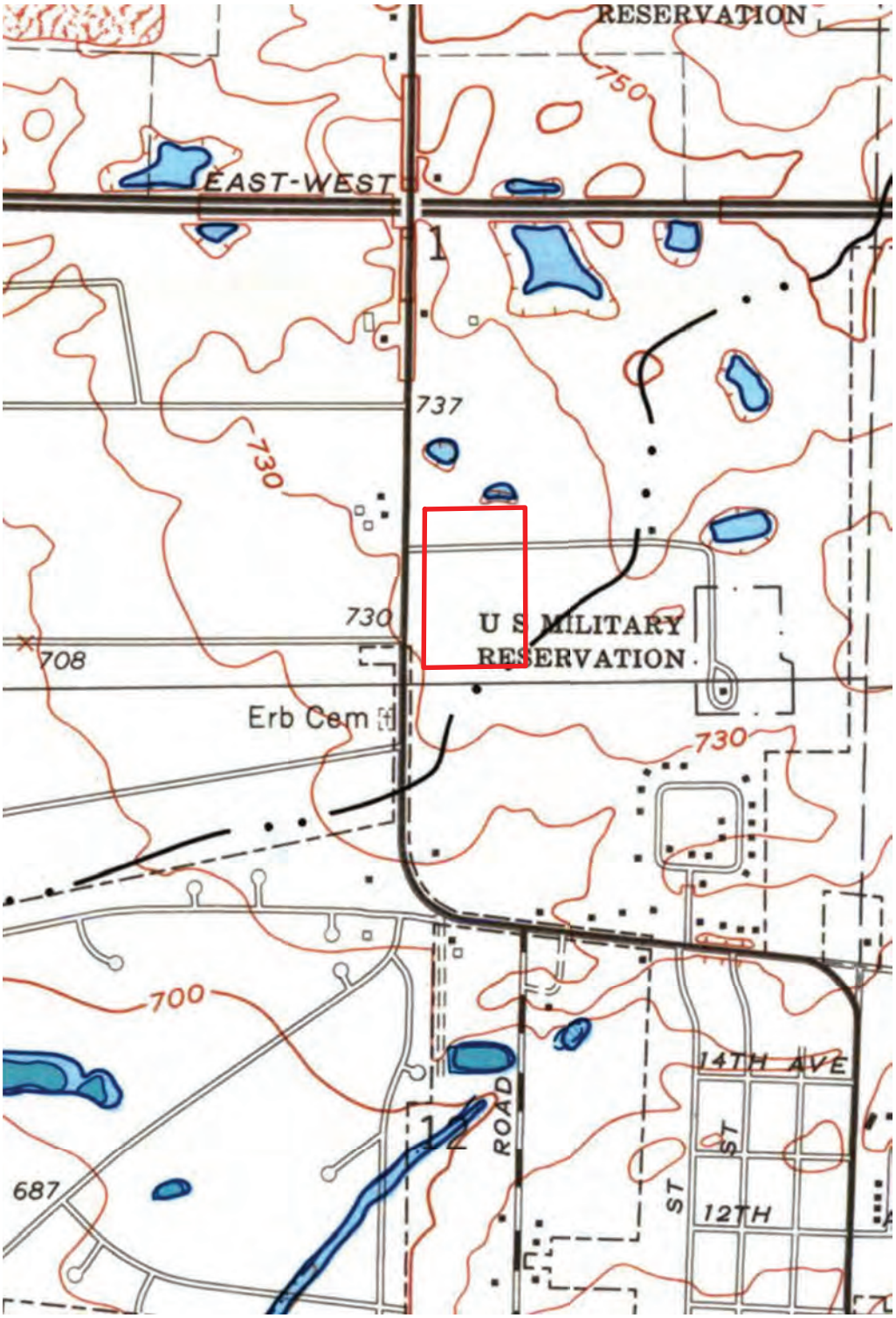
Vrutthi LLC

0 100 200 400

SCALE: 1"=200'

NORTH

Exhibit F



ENCAP INCORPORATED

LEGEND:

Project Area

Hydrologic Atlas

Source: U.S. Geological Survey
Naperville Quadrangle

0 500 1000 2000

SCALE: 1"=1000'

NORTH

SWC Diehl Rd & N Mill St

Project Number: 22-0511A

Vrutthi LLC

Exhibit G

ENCAP INCORPORATED

LEGEND:

Project Area

National Register Properties

- Part of a NR Historic District
- Determined eligible for the NR
- Part of a NR Historic District - contributing
- Entered in the NR
- Undetermined
- Other

Historic Architectural Resources Geographic Information System

Source: Illinois State Historic Preservation Office

0 200 400 800

SCALE: 1"=400'

NORTH

SWC Diehl Rd & N Mill St

Project Number: 22-0511A

Vrutthi LLC

Exhibit H

ENCAP INCORPORATED

LEGEND:

Project Area

Sample Points A-C

WL Delineation Field Work
Completed 05.24.2022

Aerial Photograph

Map data: ©2020Google
Image Date: 2018

0 100 200 400
SCALE: 1"=200'

NORTH

SWC Diehl Rd & N Mill St

Project Number: 22-0511A

Vrutthi LLC

Exhibit I

EXHIBIT K

NEGATIVE WETLAND FINDINGS

REPORT BY ENCAP, INC.

ENCAP INCORPORATED

2585 Wagner Ct.
DeKalb, IL 60115
Phone: 815.748.4500
Fax: 815.748.4255
www.encapinc.net

TRANSMITTAL LETTER

TO:	**Vrutthi LLC**	**DATE:**	July 14, 2022
	3644 White Eagle Drive	**PROJECT:**	SWC Diehl Road and N. Mill Street
	Naperville, Illinois 60564		
ATTN:	**Ms. Selvei Rajkumar** selvei.rajkumar@gmail.com	**ENCAP Project #**	22-0511A

We are sending you:	**Date of Enclosed Materials**	**# of Copies**
2022 Negative Wetland Findings Report	July 14, 2022	PDF

CC:	**Date of Enclosed Materials**	**# of Copies**

Via: ☐ **UPS Ground** ☐ **UPS Overnight** ☐ **U.S. Mail** ☒ **Electronic**

THESE ARE TRANSMITTED AS CHECKED BELOW:

☐ **For Approval** ☐ **As Requested** ☒ **For your review** ☒ **For your use**

REMARKS: _____

_____

_____

_____

Signed: Susan Rowley, PWS, CWS, LEED AP
srowley@encapinc.net

NEGATIVE WETLAND FINDINGS REPORT

SWC DIEHL ROAD AND N MILL STREET

NAPERVILLE TOWNSHIP, DUPAGE COUNTY, ILLINOIS

Prepared for: Ms. Selvei Rajkumar
Vrutthi LLC
3644 White Eagle Drive
Naperville, IL 60564

Prepared by: ENCAP, Inc.
Ms. Susan Rowley, PWS, CWS, LEED AP

Date Prepared: July 14, 2022

ENCAP, Inc. Project #: 22-0511A

ENCAP INCORPORATED

2585 Wagner Ct.
DeKalb, IL 60115
Phone: 815.748.4500
Fax: 815.748.4255
www.encapinc.net

NEGATIVE WETLAND FINDINGS REPORT

SWC Diehl Road and N Mill Street / Vrutthi LLC

Table of Contents

Attachments:

NEGATIVE WETLAND FINDINGS REPORT

Project Name and Client: SWC Diehl Road and N Mill Street / Vrutthi LLC

Project Number: 22-0511A

Location: Illinois, DuPage County, Naperville Township, City of Naperville, T38N R9E, Section 1; Latitude: 41.799844; Longitude: -88.156023

Date of Site Visit: May 24, 2022

Field Investigators: S. DeDina, R. Van Herik

EXECUTIVE SUMMARY

The project area (approximately 12.5 acres in size) is located on the southwest corner of Diehl Road and N. Mill Street, Naperville, DuPage County, Illinois (Exhibit A: Location Map). It is generally bounded by Diehl Road to the north, commercial development to the south, N. Mill Street to the east, and West Street to the west. The project area consists of undeveloped, unmanaged woodland dominated by invasive woody brush. The topography of the site is flat with no buildings on site.

On May 24, 2022 ENCAP, Inc. performed an investigation of the project area in order to identify regulated surface water resources on, or within 100 feet of the site. A floodplain determination was not included as part of our investigation. No wetlands or other waters of the U.S. were identified within or adjacent to the project area.

METHODS AND FINDINGS

Map Review

Prior to the field investigation, a preliminary site evaluation was performed using natural resource mapping. Reviewed maps are attached as Exhibits B - H and summarized below.

- The **National Wetland Inventory** does not identify any water resources or wetlands within the project area (Exhibit B).

- The **DuPage County Wetland Inventory Map** does not identify any wetlands within the project area (Exhibit C).

- The **Soil Map** identifies the following soils within the project area: Varna silt loam, 2 to 4 percent slopes (223B), Markham silt loam, 2 to 4 percent slopes (531B), Graymont silt loam, 2 to 5 percent slopes (541B), and Chenoa silty clay loam, 0 to 2 percent slopes (614A). None of the soils present are considered predominantly hydric in DuPage County (Exhibit D).

- The **2021 United States Geological Survey (USGS) Topographic Map** does not identify any surface drainage within or adjacent to the project area (Exhibit E).

- The **FEMA Flood Insurance Rate Map** identifies the project area outside the 500-year floodplain (Exhibit F).

- The **U.S.G.S. Hydrologic Atlas** does not identify any historic flooding on the project area (Exhibit G).

- The **Illinois State Historic Preservation Office (ISHPO) Historic Architectural Resources Geographic Information System (HARGIS) Map** does not identify any properties or objects that have been listed in the National Register of Historic Places, determined eligible, or surveyed without determination within the project area (Exhibit H).

Field Investigation

ENCAP, Inc. performed a site investigation to determine if any areas within the project area meet the requirements for a wetland based on U.S. Army Corps of Engineers (USACE) parameters of vegetation, hydrology, and soils. In general, positive indication of each of the three parameters must be demonstrated to classify an area as wetland. Each of these parameters is discussed below.

- **Vegetation** – Three vegetative indicators are applied to plant communities in order to determine if the hydrophytic vegetation criterion is met.
  1. More than 50% of the dominant plant species across all strata must be hydrophytic (water tolerant). The U.S. Army Corps of Engineers has prepared a regional list of plants occurring in wetlands which assigns the plant species different indicators. Wetland plants fall into three indicator classes based on differing tolerances to water level and soil saturation. These indicators are rated obligate wetland (OBL), facultative wetland (FACW), or facultative (FAC). Dominant plant species are recorded at sample points within investigated areas.
  2. The prevalence index is 3.0 or less. The prevalence index is a weighted-average wetland indicator status of all plant species in a sampling plot. Each indicator status category is given a numeric value (OBL = 1, FACW = 2, FAC = 3, FACU = 4, and UPL = 5) and weighting is by abundance. A prevalence index of 3.0 or less indicates that hydrophytic vegetation is present. The prevalence index is used to determine whether hydrophytic vegetation is present on sites where indicators of hydric soil and wetland hydrology are present but the vegetation initially fails the dominance test.
  3. The plant community passes either the dominance test (Indictor 1) or the prevalence index (Indicator 2) after reconsideration of the indicator status of certain plant species that exhibit morphological adaptations for life in wetlands. Common morphological adaptations include but are not limited to adventitious roots, multi-stemmed trunks, shallow root systems developed on or near the soil surface, and buttressing in tree species. To apply this indicator, these morphological features must be observed on more than 50% of the individuals of a FACU species living in an area where indicators of hydric soil and wetland hydrology are present.

- **Hydrology** – To be considered a wetland, an area must have 14 or more consecutive days of flooding or ponding, or a water table 12 inches or less below the soil surface, during the growing season at a minimum frequency of 5 years in 10. Wetland hydrology indicators are divided into four groups as described below:

- **Group A** – indicators are based on the direct observation of surface water or groundwater during a site visit.
- **Group B** – consists of evidence that the site is subject to flooding or ponding, although it may not be inundated currently. These indicators include water marks, drift deposits, sediment deposits, and similar features.
- **Group C** – consists of other evidence that the soil is saturated currently or was saturated recently. Some of these indicators, such as oxidized rhizopheres surrounding living roots and the presence of reduced iron or sulfur in the soil profile, indicate that the soil has been saturated for an extended period.
- **Group D** – consists of landscape and vegetation characteristics that indicate contemporary rather than historical wet conditions. These indicators include stunted or stressed plants, geomorphic position, and the FAC-neutral test.

Wetland hydrology indicators are intended as one-time observations of site conditions that are sufficient evidence of wetland hydrology. Within each group, indicators are divided into two categories – *primary* and *secondary*. One primary indicator from any group is sufficient to conclude that wetland hydrology is present. In the absence of a primary indicator, two or more secondary indicators from any group are required to conclude that wetland hydrology is present.

- **Soils** - To be considered a wetland, an area must contain hydric soil. Hydric soils are formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic (lacking oxygen) conditions in the upper part. Soils generally, but not always, will develop indicators that are formed predominantly by the accumulation or loss of iron, manganese, sulfur, or carbon compounds in a saturated and anaerobic environment. The most current edition of the United States Department of Agriculture, Natural Resource Conservation Service *Field Indicators of Hydric Soils in the United States* is used for identification of hydric soils. Field indicators of hydric soils include but are not limited to the presence of any of the following: histic epipedon, sulfidic odor, at least 2 centimeters of muck, depleted matrix, and/or redoximorphic features. Field indicators are usually examined in the top 24 inches of the soil. Soil colors are determined using *Munsell Soil Color Charts*.

At the time of the field investigation, the majority of the project area consisted of undeveloped, unmanaged woodland dominated by invasive woody brush such as Common Buckthorn (*Rhamnus cathartica*), Black Cherry (*Prunus serotina*), and Eastern Cottonwood (*Populus deltoides*). There were several openings in the woodland which were examined to determine if they satisfied wetland criteria. None of these sites so qualified. Each area is briefly described below and U.S. Army Corps of Engineers data forms are provided to support our negative findings (See Wetland Determination Data Forms).

Investigated Area 1. This investigated area is located in the southwestern portion of the project area (Exhibit I: Aerial Photograph – Sample Point A). This area was investigated because it consisted of an opening in the woodland and contained hydrophytic vegetation (Photograph 1).

The area around Investigated Area 1 was primarily vegetated by Box Elder Maple (*Acer negundo*), Black Cherry, Eastern Cottonwood, Gray Dogwood *(Cornus racemosa*), Blackberry (*Rubus allegheniensis*), and Riverside Grape (*Vitis riparia*). The mapped soil series is Varna silt loam, 2 to 4 percent slopes (223B), a non-hydric soil. The field investigated soils did not exhibit

hydric characteristics. Evidence of persistent hydrology was not observed (See USACE data forms).

Based on the non-persistent hydrology and the presence of non-hydric soil, Investigated Area 1 does not qualify as wetland.

Investigated Area 2. This investigated area is located in the western portion of the project area (Exhibit I: Aerial Photograph – Sample Point B). This area was investigated because it consisted of an opening in the woodland and contained hydrophytic vegetation (Photograph 2).

The area around Investigated Area 2 was primarily vegetated by Black Locust (*Robinia pseudoacacia*), Siberian Elm (*Ulmus pumila)*, White Mulberry (*Morus alba*), Common Buckthorn, and Tatarian Honeysuckle (*Lonicera tatarica*). The mapped soil series is Chenoa silty clay loam, 0 to 2 percent slopes (614A), a non-hydric soil. The field investigated soils did not exhibit hydric characteristics. Evidence of persistent hydrology was not observed (See USACE data forms).

Based on the dominance of upland plant species, non-persistent hydrology, and the presence of non-hydric soil, Investigated Area 2 does not qualify as wetland.

Investigated Area 3. This investigated area is located in the southeastern portion of the project area (Exhibit I: Aerial Photograph – Sample Point C). This area was investigated because it consisted of an opening in the woodland and contained hydrophytic vegetation (Photograph 3).

The area around Investigated Area 3 was primarily vegetated by Eastern Cottonwood, Black Cherry, and Common Buckthorn. The mapped soil series is Varna silt loam, 2 to 4 percent slopes (223B), a non-hydric soil. The field investigated soils did not exhibit hydric characteristics. Evidence of persistent hydrology was not observed (See USACE data forms).

Based on the non-persistent hydrology and the presence of non-hydric soil, Investigated Area 3 does not qualify as wetland.

CONCLUSIONS AND RECOMMENDATIONS

No wetlands or other waters of the U.S. were identified on, or within 100 feet of the project area. Further concurrence with regulatory agencies is not required at this time. ENCAP, Inc. recommends that this report be submitted as part of a development package as necessary for future development of the property.

REFERENCES

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Wilhelm, G. and L. Rericha. 2017, "Flora of the Chicago Region: A Floristic and Ecological Synthesis", Indianapolis: Indiana Academy of Science.

Wetland Determination Data Forms

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Diehl Rd and N Mill Street City/County: Naperville/ DuPage Sampling Date: May 24, 2022

Applicant/Owner: Vrutthi LLC State: IL Sampling Point: A

Investigator(s) S. DeDina, R. Van Herik Section, Township, Range: S1 T38N R9E

Landform (hillslope, terrace, etc.): Woodland opening Local Relief (concave, convex, none): none

Slope (%): 0% *Lat: 41.799185 *Long: -88.156088 Datum: Investigated Area 1

Soil Map Unit Name: Varna silt loam, 2 to 4 percent slopes (223B) NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☐ No ☒ (If no explain in remarks)

Are vegetation ☐ Soil ☐ Hydrology ☐ significantly disturbed? Are normal circumstances present? Yes ☒ No ☐

Are vegetation ☐ Soil ☐ Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒ No ☐	
Hydric Soils Present?	Yes ☐ No ☒	**Is the Sampled Area Within a Wetland?** **Yes ☐ No ☒**
Wetland Hydrology Present?	Yes ☐ No ☒	

Remarks: Precipitation data from the previous 3 months indicates the climatic/hydrologic conditions have been wetter than normal.

*Coordinates obtained from Google Earth.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. *Prunus serotina*	20	Y	FACU
2. *Acer negundo*	15	Y	FAC
3. *Populus deltoides*	15	Y	FAC
4.			
5.			
	50	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15')			
1. *Rubus allegheniensis*	25	Y	FACU
2. *Cornus racemosa*	20	Y	FAC
3. *Rhamnus cathartica*	5	N	FAC
4.			
5.			
6.			
	50	=Total Cover	
Herb Stratum (Plot size: 5')			
1. *Cercis canadensis*	10	Y	FACU
2. *Calystegia sepium*	3	Y	FAC
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	13	=Total Cover	
Woody Vine Stratum (Plot size: 30')			
1. *Vitis riparia*	50	Y	FACW
2.			
	50	=Total Cover	

Dominance Test worksheet:
Number of Dominant Species That are OBL, FACW, or FAC: 5 (A)
Total Number of Dominant Species Across All Strata: 8 (B)
Percent of Dominant Species That are OBL, FACW, or FAC 63% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1	
FACW species		x 2	
FAC species		x 3	
FACU species		x 4	
UPL species		x 5	
TOTALS (A)		(B)	

Prevalence Index (B/A) =

Hydrophytic Vegetation Indicators:

☐ Rapid Test for Hydrophytic Vegetation
☒ Dominance Test is >50%
☐ Prevalence Index is ≤ 3.0[1]
☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
☐ Problematic Hydrophytic Vegetation[1] (Explain)
[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Hydrophytic Vegetation Present? Yes ☒ No ☐

Remarks: (Include photo numbers here or on a separate sheet)
Photograph 1

SOIL

Sampling Point A

Profile Description: (Describe the depth needed to document the indicator or confirm the absence of indicators

Depth (Inches)	Matrix Color (Moist)	Matrix %	Redox Features Color (Moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-24	**10YR 3/1**	**100**					**SiL**	
24-30	**10YR 4/2**	**85**	**10YR 5/3**	**5**	**C**	**M**	**SiCL**	
			10YR 3/1	**10**	**N/A**	**M**		

[1]Type: C = Concentration, D= Depletion, RM = Reduced Matrix, CS = Covered or Coated Sand Grains [2]Locaton: PL =Pore Lining, M = Matrix

Hydric Soil Indicators

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron- Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic.

Restrictive Layer (if observed)

Type: _____

Depth: _____

Hydric Soil Present? Yes ☐ No ☒

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (Minimum of one is required: check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water Stained Leaves (B9)
- ☐ Aquatic Fauna (B 3)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches) N/A

Water Table Present? Yes ☐ No ☒ Depth (inches) N/A

Saturation Present? (includes capillary fringe) Yes ☐ No ☒ Depth (inches) N/A

Wetland Hydrology Present? Yes ☐ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Diehl Rd and N Mill Street City/County: Naperville/ DuPage Sampling Date: May 24, 2022

Applicant/Owner: Vrutthi LLC State: IL Sampling Point: B

Investigator(s) S. DeDina, R. Van Herik Section, Township, Range: S1 T38N R9E

Landform (hillslope, terrace, etc.): Woodland Local Relief (concave, convex, none): none

Slope (%): 0% *Lat: 41.799670 *Long: -88.156664 Datum: Investigated Area 2

Soil Map Unit Name: Chenoa silty clay loam, 0 to 2 percent slopes (614A) NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☐ No ☒ (If no explain in remarks)

Are vegetation ☐ Soil ☐ Hydrology ☐ significantly disturbed? Are normal circumstances present? Yes ☒ No ☐

Are vegetation ☐ Soil ☐ Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☐ No ☒	
Hydric Soils Present?	Yes ☐ No ☒	**Is the Sampled Area Within a Wetland?** **Yes ☐ No ☒**
Wetland Hydrology Present?	Yes ☐ No ☒	

Remarks: Precipitation data from the previous 3 months indicates the climatic/hydrologic conditions have been wetter than normal.

*Coordinates obtained from Google Earth.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. *Robinia pseudoacacia*	30	Y	FACU
2. *Ulmus pumila*	15	Y	FACU
3. *Morus alba*	15	Y	FAC
4.			
5.			
	60	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15')			
1. *Rhamnus cathartica*	60	Y	FAC
2. *Lonicera tatarica*	20	Y	FACU
3.			
4.			
5.			
	80	=Total Cover	
Herb Stratum (Plot size: 5')			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
		=Total Cover	
Woody Vine Stratum (Plot size: 30')			
1.			
2.			
		=Total Cover	

Dominance Test worksheet:
Number of Dominant Species That are OBL, FACW, or FAC: 2 (A)
Total Number of Dominant Species Across All Strata: 5 (B)
Percent of Dominant Species That are OBL, FACW, or FAC 40% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1	
FACW species		x 2	
FAC species		x 3	
FACU species		x 4	
UPL species		x 5	
TOTALS	(A)		(B)

Prevalence Index (B/A) =

Hydrophytic Vegetation Indicators:

☐ Rapid Test for Hydrophytic Vegetation
☐ Dominance Test is >50%
☐ Prevalence Index is ≤ 3.0[1]
☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
☐ Problematic Hydrophytic Vegetation[1] (Explain)
[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Hydrophytic Vegetation Present? Yes☐ No ☒

Remarks: (Include photo numbers here or on a separate sheet)
Photograph 2

SOIL

Sampling Point B

Profile Description: (Describe the depth needed to document the indicator or confirm the absence of indicators

Depth (Inches)	Matrix Color (Moist)	Matrix %	Redox Features Color (Moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-14	10YR 3/1	100					SiL	
14-18	10YR 4/3	80	10YR 3/1	15	N/A	M	SiCL	
			10YR 5/6	5	C	M		
18-24	10YR 4/4	85	10YR 5/6	10	C	M	SiCL	
			10YR 3/1	5	N/A	M		

[1]Type: C = Concentration, D= Depletion, RM = Reduced Matrix, CS = Covered or Coated Sand Grains [2]Locaton: PL =Pore Lining, M = Matrix

Hydric Soil Indicators

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron- Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic.

Restrictive Layer (if observed)

Type:

Depth:

Hydric Soil Present? Yes ☐ No ☒

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (Minimum of one is required: check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water Stained Leaves (B9)
- ☐ Aquatic Fauna (B 3)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches) N/A

Water Table Present? Yes ☐ No ☒ Depth (inches) N/A

Saturation Present? (includes capillary fringe) Yes ☐ No ☒ Depth (inches) N/A

Wetland Hydrology Present? Yes ☐ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Diehl Rd and N Mill Street City/County: Naperville/ DuPage Sampling Date: May 24, 2022

Applicant/Owner: Vrutthi LLC State: IL Sampling Point: C

Investigator(s) S. DeDina, R. Van Herik Section, Township, Range: S1 T38N R9E

Landform (hillslope, terrace, etc.): Woodland Local Relief (concave, convex, none): none

Slope (%): 0% *Lat: *Long: Datum: Investigated Area 3

Soil Map Unit Name: Varna silt loam, 2 to 4 percent slopes (223B) NWI classification: none

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☐ No ☒ (If no explain in remarks)

Are vegetation ☐ Soil ☐ Hydrology ☐ significantly disturbed? Are normal circumstances present? Yes ☒ No ☐

Are vegetation ☐ Soil ☐ Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☒ No ☐	
Hydric Soils Present?	Yes ☐ No ☒	**Is the Sampled Area Within a Wetland?** **Yes ☐ No ☒**
Wetland Hydrology Present?	Yes ☐ No ☒	

Remarks: Precipitation data from the previous 3 months indicates the climatic/hydrologic conditions have been wetter than normal.

*Coordinates obtained from Google Earth.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. *Populus deltoides*	40	Y	FAC
2. *Prunus serotina*	20	Y	FACU
3. *Betula papyrifera*	10	N	UPL
4.			
5.			
	70	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15')			
1. *Rhamnus cathartica*	60	Y	FAC
2.			
3.			
4.			
5.			
	60	=Total Cover	
Herb Stratum (Plot size: 5')			
1. *Rhamnus cathartica*	5	Y	FAC
2. *Prunus serotina*	5	Y	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	10	=Total Cover	
Woody Vine Stratum (Plot size: 30')			
1.			
2.			
		=Total Cover	

Dominance Test worksheet:
Number of Dominant Species That are OBL, FACW, or FAC: 3 (A)
Total Number of Dominant Species Across All Strata: 5 (B)
Percent of Dominant Species That are OBL, FACW, or FAC 60% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1	
FACW species		x 2	
FAC species		x 3	
FACU species		x 4	
UPL species		x 5	
TOTALS (A)		(B)	

Prevalence Index (B/A) =

Hydrophytic Vegetation Indicators:

☐ Rapid Test for Hydrophytic Vegetation
☒ Dominance Test is >50%
☐ Prevalence Index is ≤ 3.0[1]
☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
☐ Problematic Hydrophytic Vegetation[1] (Explain)
[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Hydrophytic Vegetation Present? Yes☒ No ☐

Remarks: (Include photo numbers here or on a separate sheet)
Photograph 3

SOIL

Sampling Point C

Profile Description: (Describe the depth needed to document the indicator or confirm the absence of indicators

Depth (Inches)	Matrix Color (Moist)	Matrix %	Redox Features Color (Moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-16	**10YR 3/1**	**100**					**SiL**	
16-24	**10YR 3/1**	**95**	**10YR 4/4**	**5**	**C**	**M**	**SiL**	

[1]Type: C = Concentration, D= Depletion, RM = Reduced Matrix, CS = Covered or Coated Sand Grains [2]Locaton: PL =Pore Lining, M = Matrix

Hydric Soil Indicators

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10)
- ☐ Depleted below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]

- ☐ Coast Prairie Redox (A16)
- ☐ Dark Surface (S7)
- ☐ Iron- Manganese Masses (F12)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic.

Restrictive Layer (if observed)

Type: _____

Depth: _____

Hydric Soil Present? Yes ☐ No ☒

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (Minimum of one is required: check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water Stained Leaves (B9)
- ☐ Aquatic Fauna (B 3)
- ☐ True Aquatic Plants (B14)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Gauge or Well Data (D9)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches) N/A

Water Table Present? Yes ☐ No ☒ Depth (inches) N/A

Saturation Present? (includes capillary fringe) Yes ☐ No ☒ Depth (inches) N/A

Wetland Hydrology Present? Yes ☐ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Site Photographs

PHOTOGRAPH 1	
DESCRIPTION: Diehl Road & N. Mill Street / Vrutthi LLC Investigated Area 1 Sample Point A Facing West	
DATE PHOTO TAKEN: May 24, 2022	

PHOTOGRAPH 2	
DESCRIPTION: Diehl Road & N. Mill Street / Vrutthi LLC Investigated Area 2 Sample Point B Facing West	
DATE PHOTO TAKEN: May 24, 2022	

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PHOTOGRAPH 3	
DESCRIPTION: Diehl Road & N. Mill Street / Vrutthi LLC Investigated Area 3 Sample Point C Facing West	
DATE PHOTO TAKEN: May 24, 2022	

PHOTOGRAPH 4	
DESCRIPTION: Diehl Road & N. Mill Street / Vrutthi LLC Site Boundary Overview Facing West	
DATE PHOTO TAKEN: May 24, 2022	

ENCAP INCORPORATED

PHOTOGRAPH 5	
DESCRIPTION: Diehl Road & N. Mill Street / Vrutthi LLC Site Overview Facing West	
DATE PHOTO TAKEN: May 24, 2022	

PHOTOGRAPH 6	
DESCRIPTION: Diehl Road & N. Mill Street / Vrutthi LLC Site Overview Facing East	
DATE PHOTO TAKEN: May 24, 2022	

PHOTOGRAPH 7	
DESCRIPTION: Diehl Road & N. Mill Street / Vrutthi LLC Site Overview Facing West	
DATE PHOTO TAKEN: May 24, 2022	

PHOTOGRAPH 8	
DESCRIPTION: Diehl Road & N. Mill Street / Vrutthi LLC Site Overview Facing Southwest	
DATE PHOTO TAKEN: May 24, 2022	

ENCAP INCORPORATED

PHOTOGRAPH 9	
DESCRIPTION: Diehl Road & N. Mill Street / Vrutthi LLC Site Overview Facing North	
DATE PHOTO TAKEN: May 24, 2022	

PHOTOGRAPH 10	
DESCRIPTION: Diehl Road & N. Mill Street / Vrutthi LLC Site Overview Facing North	
DATE PHOTO TAKEN: May 24, 2022	

ENCAP INCORPORATED

PHOTOGRAPH 11	
DESCRIPTION: Diehl Road & N. Mill Street / Vrutthi LLC Site Overview Facing Southeast	
DATE PHOTO TAKEN: May 24, 2022	

PHOTOGRAPH 12	
DESCRIPTION: Diehl Road & N. Mill Street / Vrutthi LLC Site Overview Facing North	
DATE PHOTO TAKEN: May 24, 2022	

PHOTOGRAPH 13	
DESCRIPTION: Diehl Road & N. Mill Street / Vrutthi LLC Fire Hydrant Facing South	
DATE PHOTO TAKEN: May 24, 2022	

PHOTOGRAPH 14	
DESCRIPTION: Diehl Road & N. Mill Street / Vrutthi LLC Site Overview Facing West	
DATE PHOTO TAKEN: May 24, 2022	

ENCAP INCORPORATED

PHOTOGRAPH 15	
DESCRIPTION: Diehl Road & N. Mill Street / Vrutthi LLC Site Boundary Overview Facing West	
DATE PHOTO TAKEN: May 24, 2022	

PHOTOGRAPH 16	
DESCRIPTION: Diehl Road & N. Mill Street / Vrutthi LLC Site Boundary Overview Facing South	
DATE PHOTO TAKEN: May 24, 2022	

ENCAP INCORPORATED

PHOTOGRAPH 17	
DESCRIPTION: Diehl Road & N. Mill Street / Vrutthi LLC Site Overview Facing North	
DATE PHOTO TAKEN: May 24, 2022	

PHOTOGRAPH 18	
DESCRIPTION: Diehl Road & N. Mill Street / Vrutthi LLC Site Overview Facing South	
DATE PHOTO TAKEN: May 24, 2022	

ENCAP INCORPORATED

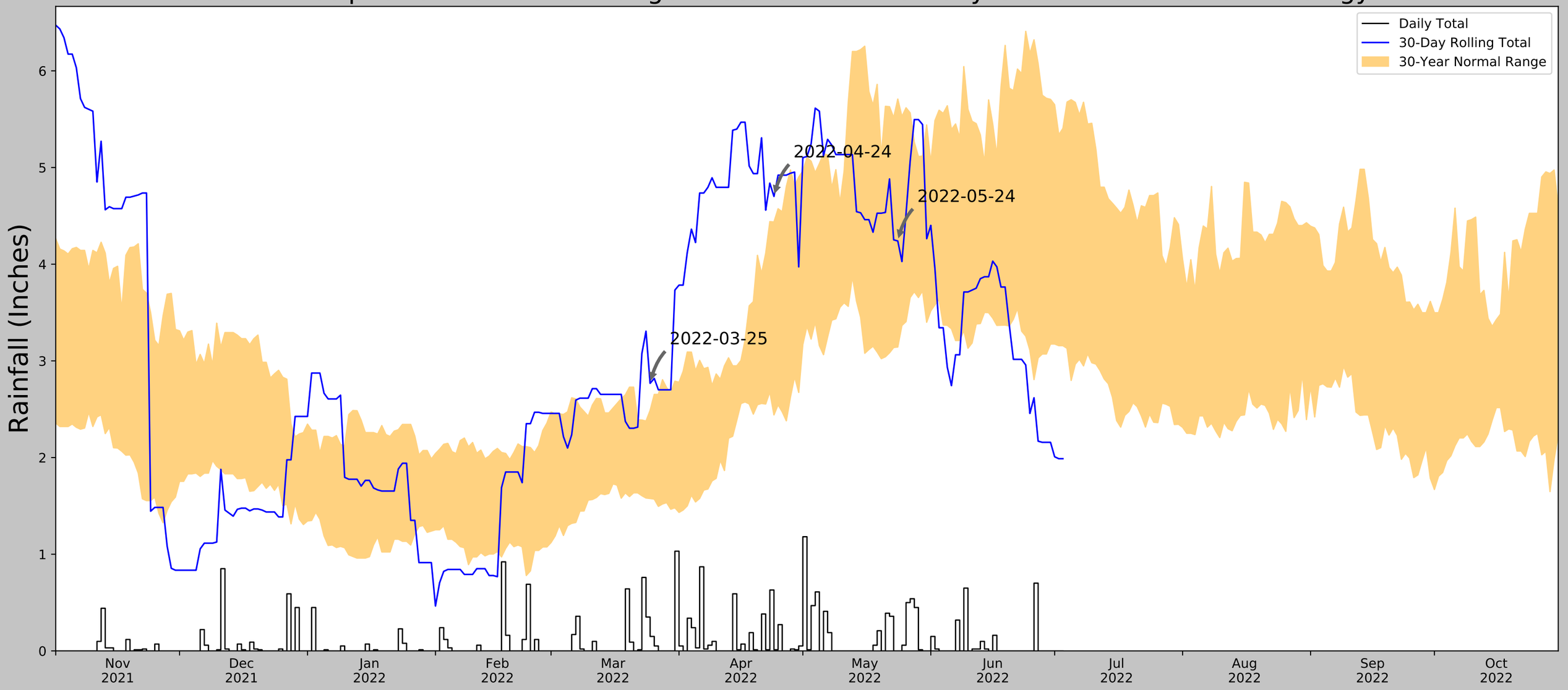
PHOTOGRAPH 19	
DESCRIPTION: Diehl Road & N. Mill Street / Vrutthi LLC Culvert Pipe Facing Southwest	
DATE PHOTO TAKEN: May 24, 2022	

PHOTOGRAPH 20	
DESCRIPTION: Diehl Road & N. Mill Street / Vrutthi LLC Site Overview Facing Northeast	
DATE PHOTO TAKEN: May 24, 2022	

ENCAP INCORPORATED

USACE Antecedent Precipitation Tool Figure & Tables (05/24/2022)

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	41.799844, -88.156023
Observation Date	2022-05-24
Elevation (ft)	731.97
Drought Index (PDSI)	Incipient wetness
WebWIMP H_2O Balance	Wet Season

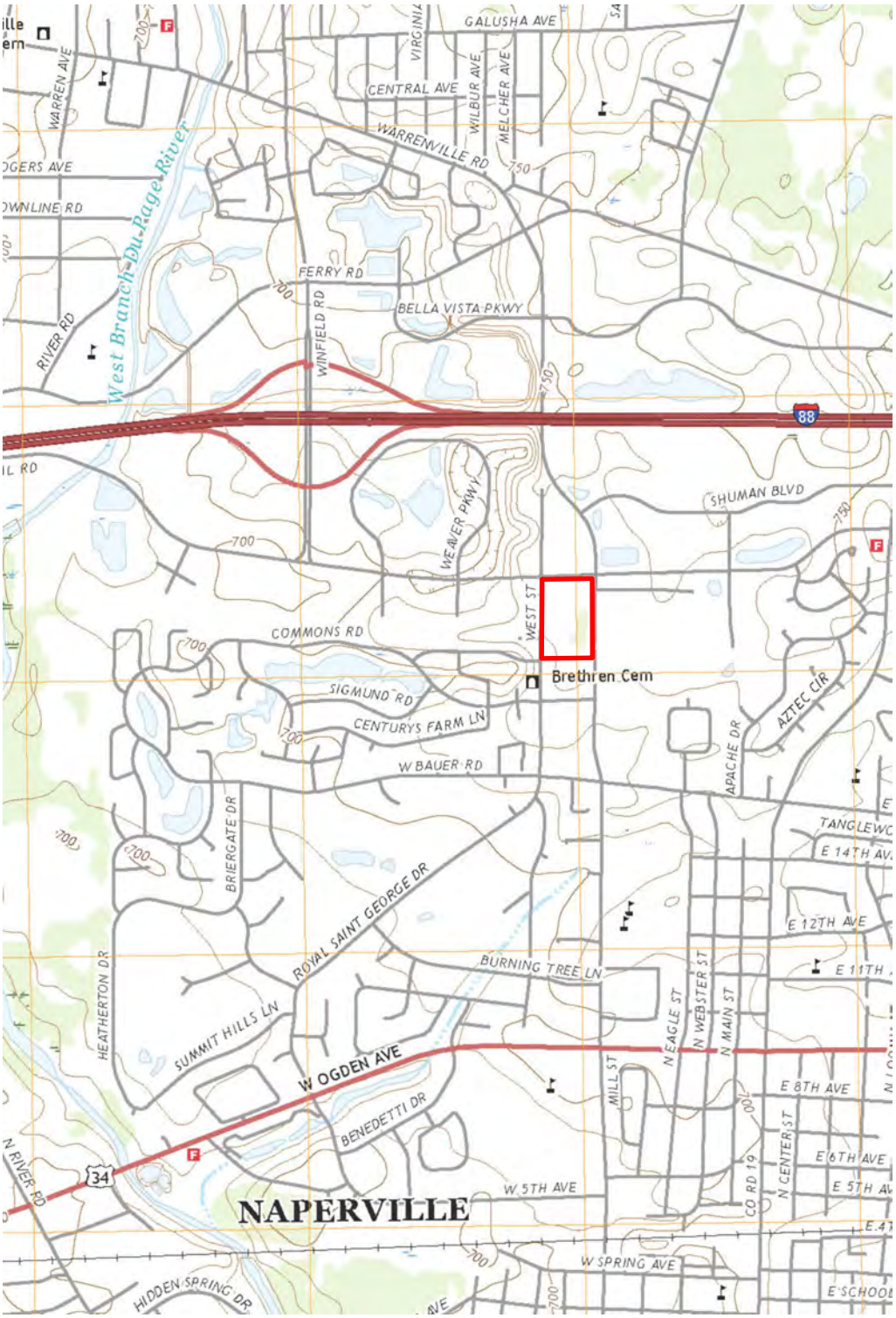
30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2022-05-24	3.143307	5.708268	4.240158	Normal	2	3	6
2022-04-24	2.440551	4.437008	4.700788	Wet	3	2	6
2022-03-25	1.576378	2.487795	2.767717	Wet	3	1	3
Result							Wetter than Normal - 15

Figure and tables made by the
Antecedent Precipitation Tool
Version 1.0

Written by Jason Deters
U.S. Army Corps of Engineers

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days (Normal)	Days (Antecedent)
AURORA	41.7803, -88.3092	660.105	8.006	71.865	4.178	11292	88
NAPERVILLE 1.1 NW	41.7729, -88.1713	691.929	2.021	40.041	0.99	6	0
NAPERVILLE 0.5 NW	41.7685, -88.1603	675.853	2.177	56.117	1.102	1	2
NAPERVILLE 1.9 ENE	41.7682, -88.1174	748.032	2.956	16.062	1.378	2	0
WHEATON 3 SE	41.8128, -88.0728	680.118	4.379	51.852	2.198	52	0

Exhibits A - I



ENCAP INCORPORATED

LEGEND:

Project Area

Location Map

Source: U.S. Geological Survey
Section 1 T38N R9E
Latitude: 41.799906 Longitude: -88.155993

SWC Diehl Rd & N Mill St

Project Number: 22-0511A

Vrutthi LLC

0 1000 2000 4000

SCALE: 1"= 2000'

NORTH

Exhibit A

ENCAP INCORPORATED

LEGEND:

Project Area

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

National Wetlands Inventory

Source: U.S. Fish & Wildlife Service

0 100 200 400

SCALE: 1"=200'

NORTH

SWC Diehl Rd & N Mill St

Project Number: 22-0511A

Vrutthi LLC

Exhibit B

ENCAP INCORPORATED

LEGEND:

Project Area

LAKES_PONDS

Wetlands

Critical Wetland

Regulatory Wetland

DuPage County Wetland Inventory

Source: DuPage County Stormwater Management

SWC Diehl Rd & N Mill St

Project Number: 22-0511A

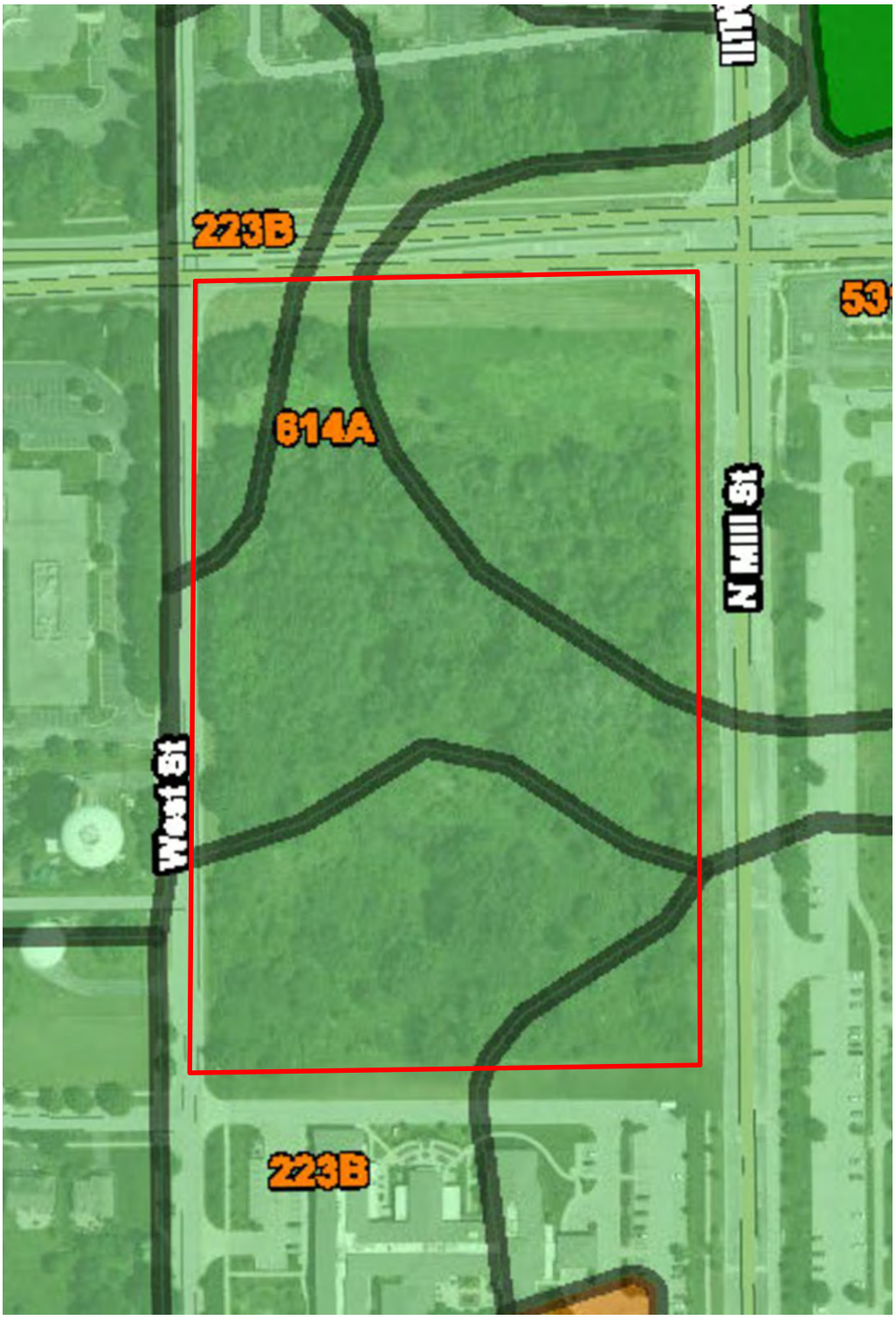
Vrutthi LLC

0 100 200 400

SCALE: 1"=200'

NORTH

Exhibit C



ENCAP INCORPORATED

LEGEND:

Project Area

- Hydric (100%)
- Hydric (66 to 99%)
- Hydric (33 to 65%)
- Hydric (1 to 32%)
- Not Hydric (0%)
- Not rated or not available

Soil Map

Source: U.S. Department of Agriculture
Natural Resources Conservation Service
Web Soil Survey 3.1

0 100 200 400

SCALE: 1"=200'

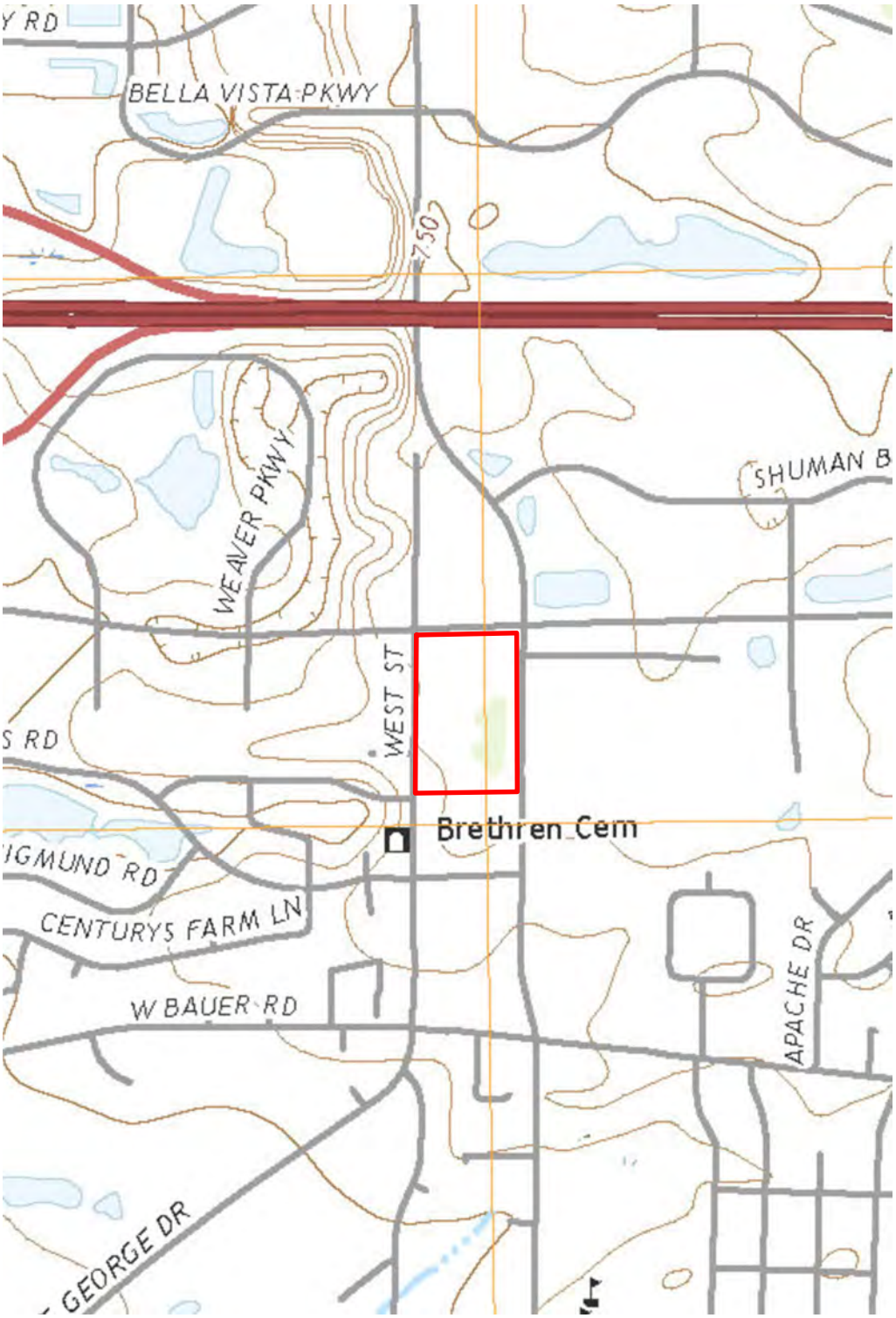
NORTH

SWC Diehl Rd & N Mill St

Project Number: 22-0511A

Vrutthi LLC

Exhibit D



ENCAP INCORPORATED

LEGEND:

Project Area

RIVERS, LAKES, AND CANALS
- Perennial stream
- Perennial river
- Intermittent stream
- Intermittent river
- Disappearing stream

SUBMERGED AREAS AND BOGS
- Marsh or swamp
- Submerged marsh or swamp
- Wooded marsh or swamp
- Submerged wooded marsh or swamp
- Land subject to inundation

VEGETATION
- Woodland
- Shrubland
- Orchard
- Vineyard
- Mangrove
- Land subject to inundation

2021 USGS Topographic Map

Source: U.S. Geological Survey
Naperville Quadrangle

0 500 1000 2000

SCALE: 1"=1000'

NORTH

SWC Diehl Rd & N Mill St

Project Number: 22-0511A

Vrutthi LLC

Exhibit E

ENCAP INCORPORATED

LEGEND:

Project Area

Flood Insurance Rate Map

Source: Federal Emergency Management Agency (FEMA)
Panel Number: 17043C0142J
Effective Date: August 1, 2019

SWC Diehl Rd & N Mill St

Project Number: 22-0511A

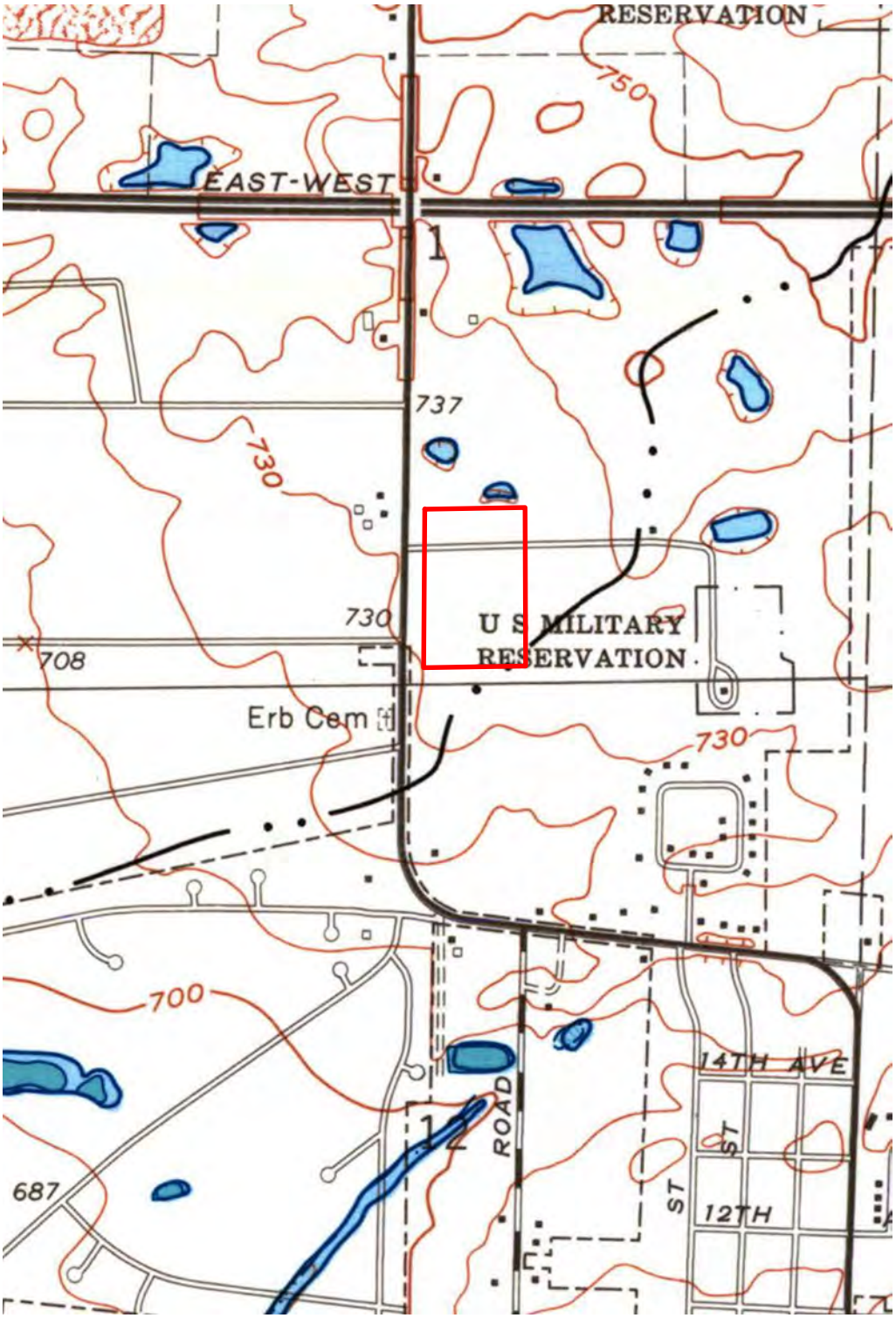
Vrutthi LLC

0 100 200 400

SCALE: 1"=200'

NORTH

Exhibit F



ENCAP INCORPORATED

LEGEND:

Project Area

Hydrologic Atlas

Source: U.S. Geological Survey
Naperville Quadrangle

0 500 1000 2000

SCALE: 1"=1000'

NORTH

SWC Diehl Rd & N Mill St

Project Number: 22-0511A

Vrutthi LLC

Exhibit G

ENCAP INCORPORATED

LEGEND:

Project Area

National Register Properties

- Part of a NR Historic District
- Determined eligible for the NR
- Part of a NR Historic District - contributing
- Entered in the NR
- Undetermined
- Other

Historic Architectural Resources Geographic Information System

Source: Illinois State Historic Preservation Office

0 200 400 800

SCALE: 1"=400'

NORTH

SWC Diehl Rd & N Mill St

Project Number: 22-0511A

Vrutthi LLC

Exhibit H

ENCAP INCORPORATED

LEGEND:

Project Area

Sample Points A-C

WL Delineation Field Work
Completed 05.24.2022

Aerial Photograph

Map data: ©2020Google
Image Date: 2018

0 100 200 400
SCALE: 1"=200'

NORTH

SWC Diehl Rd & N Mill St

Project Number: 22-0511A

Vrutthi LLC

Exhibit I