



MEMORANDUM

CITY OF WATERTOWN, NEW YORK
PLANNING AND COMMUNITY DEVELOPMENT DEPARTMENT
245 WASHINGTON STREET, ROOM 305, WATERTOWN, NY 13601
PHONE: 315-785-7741 – FAX: 315-782-9014

TO: Planning Commission Members

FROM: Michael A. Lumbis, Planning & Community Development Director

PRIMARY REVIEWER: Joseph Albinus, Planner

SUBJECT: Site Plan Approval – 1068 Arsenal Street

DATE: August 28, 2025

Request: Site Plan Approval to construct a 510 square-foot (SF), drive-through coffee shop, a 388 SF storage building and associated site improvements at **1068 Arsenal Street**, Parcel Number 8-47-106.200

Applicant: Brian Evans of Brew Team NY, LLC

Proposed Use: Restaurant with Drive Through, Accessory

Property Owners: 1068 Arsenal St RE, LLC

Submitted:

Property Survey: Yes	Preliminary Architectural Drawings: Yes
Site Plan: Yes	Preliminary Site Engineering Plans: Yes
Vehicle and Pedestrian Circulation Plan: Yes	Construction Time Schedule: Yes
Landscaping and Grading Plan: Yes	Description of Uses, Hours & Traffic Volume: Yes

SEQRA: Unlisted

Jefferson County 239-m Review: Yes

Zoning Information:

District: Commercial	Maximum Lot Coverage: 70
Setback Requirements: F: 20', S: 5', R: 10'	Buffer Zones Required: Yes

Application Status UPDATE: The Planning Board considered this application at its August 5, 2025, meeting and voted to table the application. The applicant submitted an updated drawing set that included revisions to nearly all plans. The applicant also included a response letter with responses to each of the summary items that appeared in Staff's July 31, 2025, memorandum to the Planning Commission.

Summary Items UPDATE: Staff's July 31, 2025, memorandum to the Planning Board contained five summary items. The resubmission alleviates most of Staff's concerns, and based on the modifications, it is possible to remove two of the summary items. However, several items must remain, particularly related to permits required for the site.

The following lists identify which summary items the applicant has satisfied, and which summary items must remain or may benefit from further Planning Commission discussion. Staff comments are in *italics*.

The Planning Commission may eliminate the following summary items:

1. The applicant shall either achieve conformity with the 70 percent lot area coverage requirement or obtain an Area Variance from the Zoning Board of Appeals. *The applicant's Subdivision was approved by the Planning Commission at its August 5, 2025, meeting and the final plat was submitted to the City with all required changes.*

4. The applicant shall increase the size of the snow storage area located along the rear property line by shifting the proposed plantings further north. *The applicant has increased the width of the snow storage area from 10 feet to 30 feet.*

The following summary items are topics that either the Planning Commission may wish to discuss further or that must remain as conditions to work out with Staff Prior to the permitting process:

6. The applicant shall address and provide required information as outlined in the "Engineering Comments" section of this report. *The applicant has submitted revised drawings and most of the previous comments have been satisfied. However, the break-away signpost detail provided is of the type used for a sign on an interstate that is supported by wide flanged structural steel column support posts. The detail should be a Type A sign support detail. Please see the link for a list of acceptable break-a-way signs <https://www.dot.ny.gov/divisions/engineering/technical-services/technical-services-repository/alme/pages/910-1.html>*

7. The applicant must obtain the following permits, minimally, prior to construction: Building Permit, Sanitary Sewer Connection Permit, Water Supply Permit and a Zoning Compliance Certificate. *The applicant has acknowledged this requirement, but it must remain as a summary item.*

8. The applicant must obtain a Highway Work Permit from the New York State Department of Transportation (NYSDOT) for any work to be performed within the Arsenal Street Right-of-Way. *The applicant has submitted a package to NYSDOT and received feedback from them but has not received a Highway Work Permit. The DOT review process has resulted in the driveway being moved towards the west and it has gained a more tapered appearance. The need to obtain a Highway Work Permit must remain as a summary item. If the DOT requires any additional changes to the approved site plan, Staff will determine if they are significant enough to warrant a reconsideration and resubmission of the site plan to the Planning Commission.*

Staff Recommendation and Summary: Staff recommends that the Planning Commission grant Site Plan Approval with the following conditions:

1. The applicant shall revise the break-away signpost detail to a Type A sign support detail.
2. The applicant must obtain the following permits, minimally, prior to construction: Building Permit, Sanitary Sewer Connection Permit, Water Supply Permit and a Zoning Compliance Certificate.
3. The applicant must obtain a Highway Work Permit from the New York State Department of Transportation (NYSDOT) for any work to be performed within the Arsenal Street Right-of-Way.

cc: Thomas Compo, P.E., City Engineer
Brian Evans, Director of Entitlements, Brew Team, NY, LLC, 3108 Vestal Parkway East,
Vestal, NY 13850
1068 Arsenal St RE, LLC, 1080 Pittsford Victor Rd Ste 300, Pittsford NY, 14534

August 22, 2025

091.164 - Watertown, NY 01 (Arsenal)

RE: Seven Brew Coffee – Watertown


Please accept this letter as our response to the NYSDOT review comments dated 08.18.2025 for the approval of civil construction documents for a 7—Brew drive-thru coffee kiosk. For your convenience, comments have been provided in italics and our response in blue. Construction drawings have been revised and noted as Revision 4, dated 08.22.2025, with the incorporated changes to the corresponding comments below.

NYSDOT

1. Design the driveway entrance utilizing the Taper Method, not the Radius Method..
Response: The proposed driveway entrance has been revised to utilize the Taper Method, see revised C2.1 – Site Plan.
2. The driveway design shall only have one entrance and one exit lane.
Response: The proposed driveway entrance has been revised to provide one entrance lane and one exit lane, see revised C2.1 – Site Plan.
3. Provide a dimension from proposed driveway to adjacent driveways.
Response: A dimension has been added from the proposed driveway entrance to the adjacent driveway, see revised C2.1 – Site Plan.
4. *Make sure the proposed driveway meeting the required spacing from these adjacent driveways as outlined in the NYSDOT Highway Design Manual, Chapter 5, Appendix A..*
Response: Driveway spacing has been confirmed to measure 75 feet from edge of driveway to edge of driveway, see revised C2.1 – Site Plan.
5. What is the reasoning behind the 6" water main crossing and pavement cut in Arsenal St?..
Response: A fire hydrant is required to be located on the project side of the street.
6. Show the easement needed from adjacent property owner for drainage outlet pipe.
Response: A keynote has been added to define a proposed 10-foot storm drain easement for the stormwater pipe, see revised C2.1 – Site Plan.
7. Provide a drainage study following the template in Chapter 8 of Highway Design Manual for the drainage that outlets into the NYSDOT drainage ditch.
Response: A stormwater report has been prepared and submitted to the Town, see attached stormwater report.
8. Provide an actual cross section at the driveway instead of the generic detail shown on Sheet C7.4.
Response: A cross section of the proposed driveway has been included, see revised C7.2 – Details.

9. Because the snow storage area is narrow in this section of roadway, consider maintaining the same slope as sidewalk down to curb to provide a smoother entrance/exit on Arsenal St. This would require the sidewalk elevation be dropped at the driveway.
Response: The proposed driveway has been designed with this consideration.
10. Label transition locations and slopes according to ADA requirements.
Response: Spot elevations have been added to define ADA transitions and slopes, see revised C3.1 – Grading Plan.
11. Pedestrian facilities will need to comply with ED 15-004. See attached and provide necessary documentation.
Response: Pedestrian facilities have been designed in consideration of ED 15-004.
12. A pedestrian detour/diversion will be needed if the sidewalk is going to be closed in the area of the project. Easiest solution would be to direct them to nearest crossing.
Response: A pedestrian detour has been added, see revised C1.3 – Traffic Control Plan.
13. Change Region 7 Notes on Sheet C1.3 to the attached.
Response: Region 7 Notes have been updated, see revised C1.3 – Traffic Control Plan.

John Kelly



Professional Engineer

SITE DEVELOPMENT PLANS FOR



WATERTOWN, NY

1068 ARSENAL STREET,
WATERTOWN, NY 13601

PROJECT NUMBER:
91164

SHEET INDEX	
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ROW DETAILS	C7.4



KNOWN EXISTING UTILITIES		
UTILITY	PROVIDER	PHONE NUMBER
ELECTRIC	NATIONAL GRID	800-642-4272
WATER	CITY OF WATERTOWN	315-785-7757
SANITARY SEWER	CITY OF WATERTOWN	315-785-7757



JOHN W. KELLY III - ENGINEER
PE# 084736

ENGINEER OF RECORD:

NAME: JOHN W. KELLY III

LICENSE NO. 084736

PROJECT NUMBER:

91164

REVISION:

06-10-2025 REVIEW / MINOR CHANGE

08-14-2025 CITY REVIEW COMMENTS

7 BREW COFFEE
WATERTOWN, NY

1068 ARSENAL STREET,
WATERTOWN, NY 13601

C0.0

COVER SHEET

DATE: MAY 29, 2025

JOHN W. KELLY PE ENGINEERING D.P.C.

1070 W. SYCAMORE ST
SPRINGFIELD, MO 65810
Ph: 417-888-0645 Fax: 417-888-0657

CO# 017476
EXPIRES: 06/30/2026



NOTE: DRAWING REPRODUCTION
AND SCALING MAY CHANGE THE
INDICATED GRAPHIC SCALES
H. SCALE: 1" = 500'

ABBREVIATIONS

BC	BACK OF CURB
CC	STANDARD CATCH CURB
CL	CENTER LINE
CMP	CORRUGATED METAL PIPE
EP	EDGE OF PAVEMENT
EX	EXISTING
FES	FLARED END SECTION
FL	FLOW LINE
GT	GUTTER INVERT
GY	GUY WIRE
HDPE	HIGH DENSITY POLYETHYLENE
INV	INVERT
LF	LINEAR FEET
MC	MOUNTABLE CURB
R/W	RIGHT-OF-WAY
RCP	REINFORCED CONCRETE PIPE
SC	SPILL CURB
TB	TOP OF BASE ROCK
TC	TOP OF CURB
TG	TOP OF GROUND
TP	TOP OF PAVEMENT
TS	TOP OF SIDEWALK
TW	TOP OF WALL
TGV	TOP OF GRAVEL
EX TP	EXISTING TOP OF PAVEMENT

CIVIL LEGENDS

SYMBOLS

MARKER STONE	PL	PROPERTY LINE
RIGHT OF WAY MARKER	RW	RIGHT OF WAY LINE
IRON PIN FOUND	S	SANITARY SEWER LINE
IRON PIN SET	FM	SANITARY SEWER FORCE MAIN
CUT CROSS	ST	STORM SEWER LINE
CONTROL POINT	IRR	IRRIGATION WATER LINE
BENCHMARK	FL	FLOW LINE
SANITARY SEWER MANHOLE	OHE	OVERHEAD ELECTRIC LINE
STORM SEWER INLET	UE	UNDERGROUND ELECTRIC LINE
TELEPHONE MANHOLE	G	GAS LINE
POWER POLE	W	WATER LINE
GUY ANCHOR	C	COMMUNICATIONS LINE
LIGHT POLE	T	TELEPHONE LINE
TELEPHONE RISER	FO	FIBER OPTIC LINE
GAS VALVE	CTV	CABLE TELEVISION
GAS METER	O	CHAIN LINK FENCE
WATER VALVE	X	BARBED WIRE FENCE
WATER METER	D	WOOD FENCE
FIRE HYDRANT	1000	EXISTING MAJOR CONTOUR
SPRINKLER HEAD	1001	EXISTING MINOR CONTOUR
IRRIGATION VALVE	1000	PROPOSED MAJOR CONTOUR
WELL	1001	PROPOSED MINOR CONTOUR
MAIL BOX		TREE LINE
POST	FPL	FEMA FLOODPLAIN
CLEANOUT	FFW	FEMA FLOODWAY
SIGN		
AIR CONDITIONING UNIT		

LINETYPES

PROJECT CONTROL

BENCHMARKS

NEW YORK STATE PLANE COORDINATE SYSTEM, CENTRAL ZONE, NAD '83 FOR HORIZONTAL VALUES AND NAVD88 FOR VERTICAL VALUES.

SURVEY NOTES:

THE BOUNDARY LINES SHOWN HEREON ARE BASED ON A SURVEY PERFORMED JULY 16, 2025 BY VINCENT P. AUSFELD, NY STATE PROFESSIONAL LAND SURVEYOR NO. 049697 AND IS NOT A PRODUCT OF TOTB & ASSOCIATES.

CONTROL POINT TABLE

POINT NUMBER	NORTHING	EASTING	ELEVATION	DESCRIPTION
CP 3003	1450131.1540	990208.0978	396.720	MAG NAIL FOUND
CP 3004	1450125.2250	990367.9803	398.230	MAG NAIL FOUND

FLOOD PLAIN INFORMATION:

FEMA PANEL #: 360354 0001 E - EFFECTIVE DATE: JANUARY 17, 1990
FEMA ZONE - X: THE SUBJECT PROPERTY IS NOT WITHIN THE 100 YEAR FLOOD ZONE

DEVELOPER:

BREW TEAM NY, LLC
ATTN: MR. LARRY WILSON
3108 VESTAL PARKWAY EAST, SUITE 1
VESTAL, NY 13850
607-427-3221

OWNER:

1068 ARSENAL ST RE LLC
1080 PITTSFORD VICTOR RD STE 300
PITTSFORD NY 14534



GENERAL CIVIL NOTES

- THE GENERAL NOTES ON THE DRAWINGS ARE INTENDED TO SUPPLEMENT THE GENERAL CONDITIONS AND TECHNICAL SPECIFICATIONS. WHEN THE NOTES ON THE DRAWINGS CONFLICT WITH THE TECHNICAL REQUIREMENTS OUTLINED IN THE SPECIFICATIONS, THE MORE STRINGENT CRITERIA WILL GOVERN.
- CONSTRUCTION METHODS AND MATERIALS SHALL CONFORM TO THESE DRAWINGS, THE PROJECT TECHNICAL SPECIFICATIONS, AND THE APPLICABLE STANDARDS AND SPECIFICATIONS OF THE LOCAL AUTHORITY, UNLESS OTHERWISE NOTED.
- ALL TRAFFIC CONTROL SHALL BE IN CONFORMANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). DURING CONSTRUCTION, ACCESS SHALL BE MAINTAINED FOR EMERGENCY VEHICLES AND LOCAL TRAFFIC. THE FIRE, POLICE AND AMBULANCE DEPARTMENTS, SCHOOL BUS COMPANIES AND POST OFFICE ARE TO BE NOTIFIED 48 HOURS PRIOR TO ANY ROAD CLOSINGS.
- THE EXISTING UTILITY LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE AND MAY NOT INCLUDE ALL UTILITIES PRESENT. THE CONTRACTOR SHALL BE RESPONSIBLE TO CALL THE STATE'S UTILITY LOCATE PHONE NUMBER AND COORDINATE FIELD LOCATION OF EXISTING UNDERGROUND UTILITIES PRIOR TO BEGINNING CONSTRUCTION ACTIVITIES. DURING CONSTRUCTION CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF EXISTING UTILITIES WHERE CONFLICTS MIGHT OCCUR WITH PROPOSED UTILITIES OR GRADING ACTIVITIES. IF A CONFLICT BECOMES APPARENT THE CONTRACTOR SHALL CONTACT ENGINEER FOR DIRECTION. PRIOR TO COMMENCEMENT OF WORK, THE CONTRACTOR SHALL NOTIFY ALL THOSE UTILITY COMPANIES WHICH HAVE FACILITIES IN THE NEAR VICINITY OF THE CONSTRUCTION BEING PERFORMED.
- EXISTING UNDERGROUND UTILITIES IN THE VICINITY OF THE WORK TO BE DONE ARE INDICATED ON THE DRAWINGS ONLY TO THE EXTENT SUCH INFORMATION HAS BEEN MADE AVAILABLE OR DISCOVERED BY THE ENGINEER IN PREPARATION OF THE DRAWINGS. THERE IS NO GUARANTEE AS TO THE ACCURACY OR COMPLETENESS OF SUCH INFORMATION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR LOCATING UNDERGROUND UTILITIES, INCLUDING SERVICE CONNECTIONS, IN ADVANCE OF CONSTRUCTION ACTIVITIES BY CONTACTING THE OWNERS THEREOF AND BY PROSPECTING. THE CONTRACTOR SHALL IMMEDIATELY INFORM THE OWNER AND ENGINEER IN WRITING OF ANY DISCREPANCIES WITH THE PLAN INFORMATION. ALL DAMAGE TO EXISTING UTILITIES, INCLUDING SERVICE CONNECTIONS, SHALL BE REPAIRED BY AND AT THE EXPENSE OF THE CONTRACTOR.
- THE CONTRACTOR SHALL NOT CHANGE OR DEViate FROM THE PLANS WITHOUT FIRST OBTAINING WRITTEN APPROVAL FROM THE OWNER AND ENGINEER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND OWNER WILL PAY ALL FEES AS REQUIRED BY PERMITS FOR THIS CONSTRUCTION.
- ALL WORK WITHIN ROAD RIGHT OF WAY SHALL CONFORM TO EITHER THE LOCAL JURISDICTION OR THE STATE DEPARTMENT OF TRANSPORTATION REQUIREMENTS; WHICH EVER IS APPLICABLE.
- ALL TRENCHES CROSSING THROUGH PAVED AREAS OR AREAS TO BE PAVED SHALL BE BACKFILLED FULL DEPTH WITH COMPACTED CRUSHED STONE MATERIAL AS PER PROJECT DETAILS AND SPECIFICATIONS.
- ALL WORK AND MATERIALS SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY THE OWNER OR THE OWNER'S REPRESENTATIVE.
- ANY ESTIMATES OF QUANTITIES ARE FOR INFORMATIONAL PURPOSES ONLY. CONTRACTOR AND SUBCONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING ALL QUANTITIES. CONTRACTOR SHALL PROVIDE ALL WORK AND MATERIALS SHOWN ON PLANS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING THE PUBLIC STREETS IN THE VICINITY OF THE JOB CLEAN AND FREE OF ROCKS, SOIL AND DEBRIS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE RESTORATION OF THE RIGHT OF WAY AND FOR DAMAGED IMPROVEMENTS SUCH AS CURBS, SIDEWALKS, STREET LIGHT AND TRAFFIC SIGNAL JUNCTION BOXES, TRAFFIC SIGNAL LOOP WIRING, SIGNAL POLES AND ETC. DAMAGED IMPROVEMENTS SHALL BE REPAIRED IN CONFORMANCE WITH THE LATEST CITY AND STATE REGULATIONS AND TO THEIR SATISFACTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTROL EROSION AND SILTATION DURING ALL PHASES OF CONSTRUCTION AS OUTLINED IN THE EROSION CONTROL PLAN AND THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP), IF APPLICABLE. EROSION CONTROL PROCEDURES SHALL BE IN PLACE PRIOR TO GRADING ACTIVITIES.
- THE CONTRACTOR SHALL CLEAN OUT ALL INLETS, PIPES AND MANHOLES OF DEBRIS AND SEDIMENTATION AT THE COMPLETION OF SITE WORK. THIS WORK SHALL BE DONE TO THE SATISFACTION OF THE OWNER AND LOCAL JURISDICTION.
- THE CONTRACTOR IS RESPONSIBLE FOR PROTECTION OF ALL PROPERTY CORNERS. ANY PROPERTY CORNERS DISTURBED OR DAMAGED BY CONSTRUCTION ACTIVITIES SHALL BE RESET BY A PROFESSIONAL LAND SURVEYOR LICENSED IN THE STATE IN WHICH THE PROJECT IS LOCATED, AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL HAVE ONE (1) SIGNED COPY OF THE APPROVED PLANS, AND ONE (1) COPY OF THE APPROPRIATE DESIGN AND CONSTRUCTION STANDARDS AND SPECIFICATIONS AT THE SITE AT ALL TIMES.
- THE CONTRACTOR IS OBLIGATED TO INSPECT FOR EXISTING CONDITIONS AND/OR INSTALLATIONS AND AVAILABLE INFORMATION PRIOR TO SUBMITTING A BID. NO EXTRA COSTS WILL BE PAID TO THE CONTRACTOR DUE TO UNANTICIPATED EXISTING CONDITIONS AND/OR INSTALLATIONS. ANY DELAY, ADDITIONAL WORK, FEES OR EXTRA COST TO THE CONTRACTOR CAUSED BY OR RESULTING FROM DAMAGE TO OR MODIFICATION OF EXISTING INSTALLATIONS BY THE CONTRACTOR OR AFFECTED UTILITY COMPANY SHALL NOT CONSTITUTE A CLAIM FOR EXTRA WORK, ADDITIONAL PAYMENT OR DAMAGES.

DEMOLITION NOTES

JOB CONDITIONS

- THE OWNER ASSUMES NO RESPONSIBILITY FOR THE ACTUAL CONDITION OF ANY STRUCTURES TO BE DEMOLISHED.
- ITEMS OF SALVAGEABLE VALUE TO THE CONTRACTOR MAY BE REMOVED FROM THE PROJECT SITE AT THE APPROVAL OF THE OWNER. TRANSPORT THE SALVAGED ITEMS FROM THE SITE AS THEY ARE REMOVED.
- THE USE OF EXPLOSIVES WILL NOT BE PERMITTED ON THIS PROJECT.
- THE CONTRACTOR SHALL CONDUCT THE DEMOLITION OPERATIONS AND REMOVAL OF DEBRIS TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, WALKS AND OTHER ADJACENT OCCUPIED AND USED FACILITIES.
- THE CONTRACTOR SHALL INSURE SAFE PASSAGE OF PERSONS AROUND THE DEMOLITION AREA. CONDUCT OPERATIONS TO PREVENT DAMAGE TO ADJACENT BUILDING STRUCTURES AND OTHER FACILITIES THAT ARE TO REMAIN; AND INJURY TO PERSONS.
- PROVIDE INTERNAL AND EXTERNAL SHORING, BRACING OR SUPPORT TO PREVENT MOVEMENT, SETTLEMENTS OR COLLAPSE OF ANY STRUCTURES TO BE DEMOLISHED AND ANY ADJACENT FACILITIES TO REMAIN.
- MAINTAIN EXISTING UTILITIES INDICATED TO STAY IN SERVICE AND PROTECT AGAINST DAMAGE DURING DEMOLITION OPERATIONS. DISCONNECT ALL UTILITIES SERVING ANY STRUCTURES TO BE DEMOLISHED, PRIOR TO START OF DEMOLITION WORK.

DEMOLITION

- POLLUTION CONTROLS: USE WATER SPRINKLING, TEMPORARY ENCLOSURES AND OTHER SUITABLE METHODS TO LIMIT DUST AND DIRT RISING AND SCATTERING IN AIR, COMPLY WITH GOVERNMENT REGULATIONS PERTAINING TO ENVIRONMENTAL PROTECTION.
- CLEAN ADJACENT STRUCTURES AND IMPROVEMENTS OF DUST, DIRT AND DEBRIS CAUSED BY DEMOLITION OPERATIONS. RETURN ADJACENT AREAS TO CONDITIONS AS THEY EXIST PRIOR TO START OF WORK.
- BREAK UP AND REMOVE CONCRETE SLABS ON GRADE, UNLESS OTHERWISE SHOWN TO REMAIN.
- BELOW-GRADE CONSTRUCTION: DEMOLISH FOUNDATION WALLS AND OTHER BELOW GRADE CONSTRUCTION, INCLUDING CONCRETE SLABS, TO A DEPTH OF NOT LESS THAN 12" BELOW THE LOWEST FOUNDATION LEVEL.
- FILLING VOIDS: COMPLETELY FILL BELOW-GRADE AREAS AND VOIDS RESULTING FROM DEMOLITION AS OUTLINED BELOW.
- USE SATISFACTORY SOIL MATERIALS AS DEFINED IN THE GEOTECHNICAL ENGINEERING REPORT, IF AVAILABLE. CONSISTING OF STONE, GRAVEL AND SAND, FREE FROM DEBRIS, TRASH, FROZEN MATERIALS, ROOTS AND OTHER ORGANIC MATTER.
- PRIOR TO PLACEMENT OF FILL MATERIAL, ENSURE THAT AREAS TO BE FILLED ARE FREE OF STANDING WATER, FROST OR FROZEN MATERIAL, TRASH AND DEBRIS.
- PLACE FILL MATERIAL IN HORIZONTAL LAYERS AT DEPTHS AND MOISTURE CONTENTS AS RECOMMENDED BY THE GEOTECHNICAL ENGINEERING REPORT, IF AVAILABLE.
- AFTER FILL PLACEMENT AND COMPACTION, GRADE THE SURFACE TO MEET ADJACENT CONTOURS AND TO PROVIDE FLOW TO SURFACE STRUCTURES.
- ALL TREES INDICATED TO BE REMOVED SHALL BE REMOVED IN ACCORDANCE WITH THE STATE PARKS AND WILDLIFE'S WILD HABITAT ASSESSMENT PROGRAM FOR THE SITE PER THE STATE PARKS AND WILDLIFE'S WILD HABITAT ASSESSMENT REPORT, IF AVAILABLE. TREES ON THE SITE MAY BE SAFELY REMOVED FROM NOVEMBER 1 THROUGH MARCH 31. IF ANY TREES NEED TO BE REMOVED OUTSIDE OF THIS TIMEFRAME, CONTRACTOR SHALL FOLLOW BEST PRACTICES AS PRESCRIBED BY THE US FISH AND WILDLIFE SERVICE TO PRESERVE THE HABITAT OF ANY ENDANGERED SPECIES POTENTIALLY PRESENT ON SITE.

DISPOSAL OF DEMOLISHED MATERIALS

- REMOVE FROM SITE ACCUMULATED VEGETATION, DEBRIS, RUBBISH AND OTHER MATERIAL RESULTING FROM THE DEMOLITION OPERATION.
- BURNINGS OF COMBUSTIBLE MATERIALS FROM DEMOLISHED STRUCTURES AND VEGETATION WILL NOT BE PERMITTED ON SITE.
- REMOVAL: TRANSPORT MATERIALS REMOVED FROM DEMOLISHED STRUCTURES, VEGETATION, PAVEMENT AND BASE ROCK AND LEGALLY DISPOSE OFF SITE.

PROTECTION OF EXISTING STRUCTURES AND VEGETATION

- CONTRACTOR SHALL INSTALL 6" STEEL FENCE POSTS, DRIVEN 18" INTO THE GROUND, AT 10' ON CENTER AT TREE DRIP LINES AND INSTALL 4" TENAX ORANGE WARNING BARRIER, OR EQUAL, ATTACHED AS RECOMMENDED BY THE MANUFACTURER, TO PROTECT EXISTING TREES DURING CONSTRUCTION. CONTRACTOR SHALL REMOVE POSTS AND FENCE FABRIC AFTER ALL CONSTRUCTION IS COMPLETE.

SEDIMENT & EROSION CONTROL NOTES

- THE EROSION CONTROL PLAN SHOWS THE LOCATION AND DETAILS FOR PRIMARY EROSION CONTROLS TO BE CONSTRUCTED. THE CONTRACTOR IS RESPONSIBLE FOR CONTROLLING EROSION AND DISCHARGE OF SEDIMENT FROM THE SITE AT ALL TIMES DURING CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE NECESSARY MEASURES DURING ALL PHASES OF HIS OPERATIONS REGARDLESS OF WHETHER THEY ARE SPECIFICALLY NOTED ON THE EROSION CONTROL PLAN AND SHALL MAINTAIN AND REPLACE CONTROLS AS NECESSARY DURING THE COURSE OF HIS OPERATIONS.
- INITIAL SEDIMENT CONTROLS SHOWN ON THE EROSION CONTROL PLAN MUST BE INSTALLED PRIOR TO ANY OTHER WORK.
- THE CONTRACTOR SHALL CLEAN ALL STREETS BOTH INTERIOR AND ADJACENT TO THE SITE, AS NEEDED AFTER EACH RAINFALL AND AT THE END OF CONSTRUCTION.
- THE CONTRACTOR IS RESPONSIBLE FOR CONTROLLING DUST DURING CONSTRUCTION AND SHALL WATER CONSTRUCTION AREAS WHENEVER CONDITIONS WARRANT.
- THE CONTRACTOR IS RESPONSIBLE FOR CLEANING SILT FROM STORM DRAINS, INLETS, CULVERTS, ETC. PRIOR TO APPROVAL OF CONSTRUCTION.
- ALL DISTURBED AREAS NOT RECEIVING OTHER PERMANENT STABILIZATION SUCH AS PAVEMENT, ROOFS, SOD AND ETC. SHALL BE SEEDED AND MULCHED, AS PER THE PROJECT SPECIFICATIONS BEFORE TEMPORARY SEDIMENT CONTROLS CAN BE REMOVED AND PRIOR TO FINAL APPROVAL OF CONSTRUCTION.
- IF APPLICABLE THE CONTRACTOR SHALL CONFORM TO ALL REQUIREMENTS AS PUT FORTH IN THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP). THE SWPPP SHALL BE CONSIDERED AS A STARTING POINT FOR SEDIMENT AND EROSION CONTROLS AND THE CONTRACTOR WILL BE RESPONSIBLE FOR REVISING AND UPDATING EROSION CONTROLS AS SITE CONDITIONS CHANGE DURING THE COURSE OF CONSTRUCTION.

UTILITY CONSTRUCTION NOTES

- THE EXISTING UTILITY LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE AND MAY NOT INCLUDE ALL UTILITIES PRESENT. THE CONTRACTOR SHALL BE RESPONSIBLE TO CALL THE STATE'S UTILITY LOCATE PHONE NUMBER AND COORDINATE FIELD LOCATION OF EXISTING UNDERGROUND UTILITIES PRIOR TO BEGINNING UTILITY CONSTRUCTION ACTIVITIES. DURING CONSTRUCTION CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF EXISTING UTILITIES WHERE CONFLICTS MIGHT OCCUR WITH PROPOSED UTILITIES. IF A CONFLICT BECOMES APPARENT THE CONTRACTOR SHALL CONTACT ENGINEER FOR DIRECTION. PRIOR TO COMMENCEMENT OF WORK, THE CONTRACTOR SHALL NOTIFY ALL THOSE UTILITY COMPANIES WHICH HAVE FACILITIES IN THE NEAR VICINITY OF THE CONSTRUCTION BEING PERFORMED.
- ALL TRENCHES CROSSING PAVED AREAS OR AREAS TO BE PAVED SHALL BE BACKFILLED FULL DEPTH WITH COMPACTED BEDDING MATERIAL IN CONFORMANCE WITH PROJECT DETAILS AND SPECIFICATIONS.
- ALL UTILITY CONSTRUCTION AND MATERIALS SHALL BE IN CONFORMANCE WITH CITY AND LOCAL FIRE DEPARTMENT REQUIREMENTS AND STANDARD PLANS AND SPECIFICATIONS.
- THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS NOT OBTAINED BY THE OWNER.
- INSTALL TRACER WIRE WITH ALL SANITARY SEWER AND POTABLE WATER UTILITIES AS REQUIRED. CONNECT TRACER WIRE TO EXISTING TRACER WIRE AND STUB UP END OF THE TRACER WIRE AT THE ENDS OF RUNS IN ACCORDANCE WITH UTILITY OWNER'S SPECIFICATIONS.
- ALL HDPE PIPE, JOINTS AND FITTINGS SHALL BE ADS N-12 OR EQUAL. INSTALL PER MANUFACTURER'S SPECIFICATIONS.
- COORDINATE THE INSTALLATION OF THE STORM SEWER WITH THE INSTALLATION OF THE POTABLE WATER, COMMUNICATION, ELECTRIC AND SANITARY SEWER TO AVOID CONFLICTS.
- EARTHWORK SHALL BE PLACED TO FINISH GRADE IN THE IMMEDIATE AREA OF UTILITIES PRIOR TO CONSTRUCTION OF UTILITIES TO INSURE PROPER DEPTH OF COVER FOR UTILITIES.
- ALL MATERIALS TO BE SUPPLIED AND LABOR TO BE DONE BY CONTRACTOR SHALL BE COMPLETED AS A PART OF THIS WORK, UNLESS STATED OTHERWISE.
- ALL UTILITY SERVICE LINES SHALL BE KEPT IN SERVICE AND PROTECTED DURING CONSTRUCTION OPERATIONS. THE DRAWINGS INDICATE THE LOCATION OF KNOWN EXISTING UTILITY SERVICE LINES AS COULD BE DETERMINED.
- ANY RELOCATION OF UTILITY SERVICE LINES THAT ARE REQUIRED TO COMPLETE THE PROJECT IS TO BE COMPLETED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE AND IS TO BE CONSIDERED SUBSIDIARY TO OTHER PROJECT COSTS.
- ALL WATER, SEWER, FIBER OPTIC CABLE, GAS SERVICE AND OTHER UTILITY REQUIREMENTS SHALL BE COORDINATED WITH THE APPROPRIATE LOCAL UTILITY PROVIDERS PRIOR TO INSTALLATION. ALL COSTS ASSOCIATED WITH THE WATER, SEWER, FIBER OPTIC CABLE, GAS SERVICE ENTRANCE AND OTHER UTILITY REQUIREMENTS SHALL BE BORNE BY THE CONTRACTOR, INCLUDING THOSE COSTS, IF ANY, FROM THE LOCAL UTILITY PROVIDERS AND INCLUDE ALL COSTS ASSOCIATED WITH WORK PERFORMED BY THE LOCAL UTILITY PROVIDERS AND CONNECTION FEES INTO THEIR BID.

SITE GRADING NOTES

- THE EXISTING UTILITY LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE AND MAY NOT INCLUDE ALL UTILITIES PRESENT. THE CONTRACTOR SHALL BE RESPONSIBLE TO CALL THE STATE'S UTILITY LOCATE PHONE NUMBER AND COORDINATE FIELD LOCATION OF EXISTING UNDERGROUND UTILITIES PRIOR TO BEGINNING SITE GRADING ACTIVITIES. DURING GRADING ACTIVITIES THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF EXISTING UTILITIES WHERE CONFLICTS MIGHT OCCUR. IF A CONFLICT BECOMES APPARENT THE CONTRACTOR SHALL CONTACT ENGINEER FOR DIRECTION. PRIOR TO COMMENCEMENT OF WORK, THE CONTRACTOR SHALL NOTIFY ALL THOSE UTILITY COMPANIES WHICH HAVE FACILITIES IN THE NEAR VICINITY OF THE CONSTRUCTION BEING PERFORMED.
- CONTRACTOR SHALL USE CAUTION AROUND ALL EXISTING UTILITIES LOCATED ON SITE. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIRS OF SUCH STRUCTURES WHEN BROKEN OR OTHERWISE DAMAGED BY CONSTRUCTION.
- SEDIMENT AND EROSION CONTROLS IN CONFORMANCE WITH THE EROSION CONTROL PLAN AND THE APPLICABLE SPECIFICATIONS SHALL BE INSTALLED PRIOR TO COMMENCEMENT OF SITE GRADING ACTIVITIES.
- CONTRACTOR SHALL STRIP THE TOPSOIL FROM ALL AREAS TO BE DISTURBED AND STOCKPILE IT IN A LOCATION CHOSEN BY THE OWNER PRIOR TO BEGINNING SITE GRADING. OWNER SHALL BE CONTACTED TO DETERMINE WHAT SHALL BE DONE WITH EXCESS TOPSOIL. PROPER DRAINAGE OF THE STOCKPILES SHALL BE MAINTAINED.
- THE SUBGRADE FOR THE PROJECT SITE SHALL BE COMPACTED TO 95% STANDARD PROCTOR AS DETERMINED BY ASTM-D698. COMPACTION SHALL BE ACCOMPLISHED AT MOISTURE CONTENTS AS SPECIFIED IN THE GEOTECHNICAL ENGINEER'S REPORT. ALL SOFT AREAS FOUND DURING COMPACTION SHALL BE REMEDIATED IN CONFORMANCE WITH THE GEOTECHNICAL ENGINEERING REPORT, IF AVAILABLE.
- STONES OR BOULDERS MEASURING GREATER THAN 12" IN ANY DIMENSION SHALL NOT BE PLACED IN THE UPPER 3 FEET OF THE FILL. IN STUMP HOLES, AROUND PIPE AND STRUCTURES AND IN OTHER RESTRICTED AREAS WHERE IT IS NOT PRACTICAL TO USE A ROLLER, THE MATERIAL SHALL BE COMPACTED BY HAND.
- CONTRACTOR IS RESPONSIBLE FOR ADDRESSING AND CORRECTING UNSUITABLE SOIL CONDITIONS RELATED TO WET SOILS AND OTHER CONDITIONS. THE UNSUITABLE CONDITIONS MUST BE CORRECTED IN ACCORDANCE WITH THE GEOTECHNICAL ENGINEERING REPORT, IF AVAILABLE, TO MEET PROJECT NEEDS.
- CONTRACTOR SHALL NOTIFY THE OWNERS OR THEIR REPRESENTATIVE FOR INSPECTION PRIOR TO PLACEMENT OF CRUSHED STONE BASE AND ALSO PRIOR TO PLACEMENT OF PAVEMENT MATERIALS.
- THE CONTOURS, SPOT ELEVATIONS AND BUILDING FLOOR ELEVATIONS SHOWN ARE TO FINISH GRADE FOR SURFACE OF PAVEMENT, TOP OF SIDEWALKS AND CURBS, TOP OF FLOOR SLABS ETC. REFER TO TYPICAL SECTIONS FOR PAVING, SLAB AND AGGREGATE BASE THICKNESS TO DEDUCT FOR GRADING LINE ELEVATIONS.
- CONTRACTOR SHALL FINISH GRADE EARTH SLOPES AS SHOWN TO NO STEEPER THAN 1 FOOT VERTICAL TO 3 FEET HORIZONTAL.
- CONTRACTOR SHALL GRADE LANDSCAPED AREAS AT A MINIMUM OF 1% TO PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDINGS AND SIDEWALKS WHEN FINISH LANDSCAPE MATERIALS ARE IN PLACE.
- CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING ALL EARTHWORK QUANTITIES. CONTRACTOR SHALL PROVIDE ALL WORK AND MATERIALS AS SHOWN ON THE PLANS. NO EXTRA PAYMENT WILL BE MADE FOR OBTAINING FILL MATERIAL FROM OFF-SITE AREAS REQUIRED TO CONSTRUCT FILL TO THE LINES AND GRADES INDICATED ON THE DRAWINGS.
- NO CLASSIFICATION OF EXCAVATED MATERIALS WILL BE MADE UNLESS OTHERWISE SPECIFIED IN THE PROJECT DOCUMENTS. EXCAVATION WORK SHALL INCLUDE THE REMOVAL AND SUBSEQUENT HANDLING OF ALL MATERIALS EXCAVATED OR OTHERWISE REMOVED FOR THE PERFORMANCE OF THE WORK, REGARDLESS OF TYPE, CHARACTER, COMPOSITION OR CONDITION THEREOF. NO ADDITIONAL PAYMENT WILL BE MADE FOR ROCK EXCAVATIONS UNLESS OTHERWISE SPECIFIED IN THE PROJECT DOCUMENTS. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DETERMINING THE AMOUNT OF ROCK EXCAVATION, IF ANY, TO BE INCLUDED IN HIS BID.
- ALL DISTURBED AREAS, NOT RECEIVING PERMANENT STABILIZATION, SHALL HAVE 4" OF TOPSOIL REPLACED, TO LEAVE A SMOOTH SEEDBED SUITABLE TO RECEIVE SEED. SURFACE ROCK 1-1/2" OR GREATER IN ANY DIMENSION SHALL BE REMOVED FROM ALL FINISH GRADED AREAS. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SEEDING WORK.
- THE CONTRACTOR SHALL GRADE ALL AREAS DISTURBED DURING THE COMPLETION OF THIS PROJECT TO PREVENT PONDING OR EROSION ON THIS SITE OR ADJACENT UNDISTURBED AREAS.
- ALL ITEMS REMOVED SHALL BE DISPOSED OFF SITE BY THE CONTRACTOR IN ACCORDANCE WITH REQUIREMENTS OF LOCAL AUTHORITIES.
- PRIOR TO MOVING OFF THE PROJECT SITE, THE CONTRACTOR SHALL NOTIFY THE ENGINEER TO MAKE A FINAL REVIEW OF THE CONSTRUCTION SITE.
- IN THE EVENT THAT BLASTING IS PERMITTED ON THE PROJECT, THE CONTRACTOR SHALL COMPLY WITH ALL LAWS, ORDINANCES, APPLICABLE SAFETY CODE REQUIREMENTS AND REGULATIONS RELATIVE TO THE HANDLING, STORAGE AND USE OF EXPLOSIVES AND THE PROTECTION OF LIFE AND PROPERTY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGE CAUSED BY HIS BLASTING OPERATIONS.

SAFETY NOTICE TO CONTRACTOR

- IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.
- THE DUTY OF THE ENGINEER OR OWNER TO CONDUCT CONSTRUCTION REVIEW OF THE CONTRACTOR'S PERFORMANCE IS NOT INTENDED TO INCLUDE REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES, IN, ON OR NEAR THE CONSTRUCTION SITE.

UTILITY DISCLAIMER

- INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF UNDERGROUND AND OTHER UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO TYPE AND LOCATION OF UNDERGROUND AND OTHER UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO.

USE OF CONSTRUCTION DOCUMENTS

- DRAWINGS AND SPECIFICATIONS ARE PROVIDED AS A SERVICE. DRAWINGS AND SPECIFICATIONS ARE NOT INTENDED FOR USE ON OTHER PROJECTS AT THIS SITE OR OTHER SITES WITHOUT WRITTEN APPROVAL OF THE ENGINEER.
- DRAWING REPRODUCTION AND SCALING MAY ALTER THE INDICATED GRAPHIC SCALES.



JOHN W. KELLY III - ENGINEER
PE# 084736

ENGINEER OF RECORD:

NAME: JOHN W. KELLY III

LICENSE NO. 084736

PROJECT NUMBER:

91164

REVISION:

7 BREW COFFEE
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JOHN W KELLY PE ENGINEERING D.P.C.

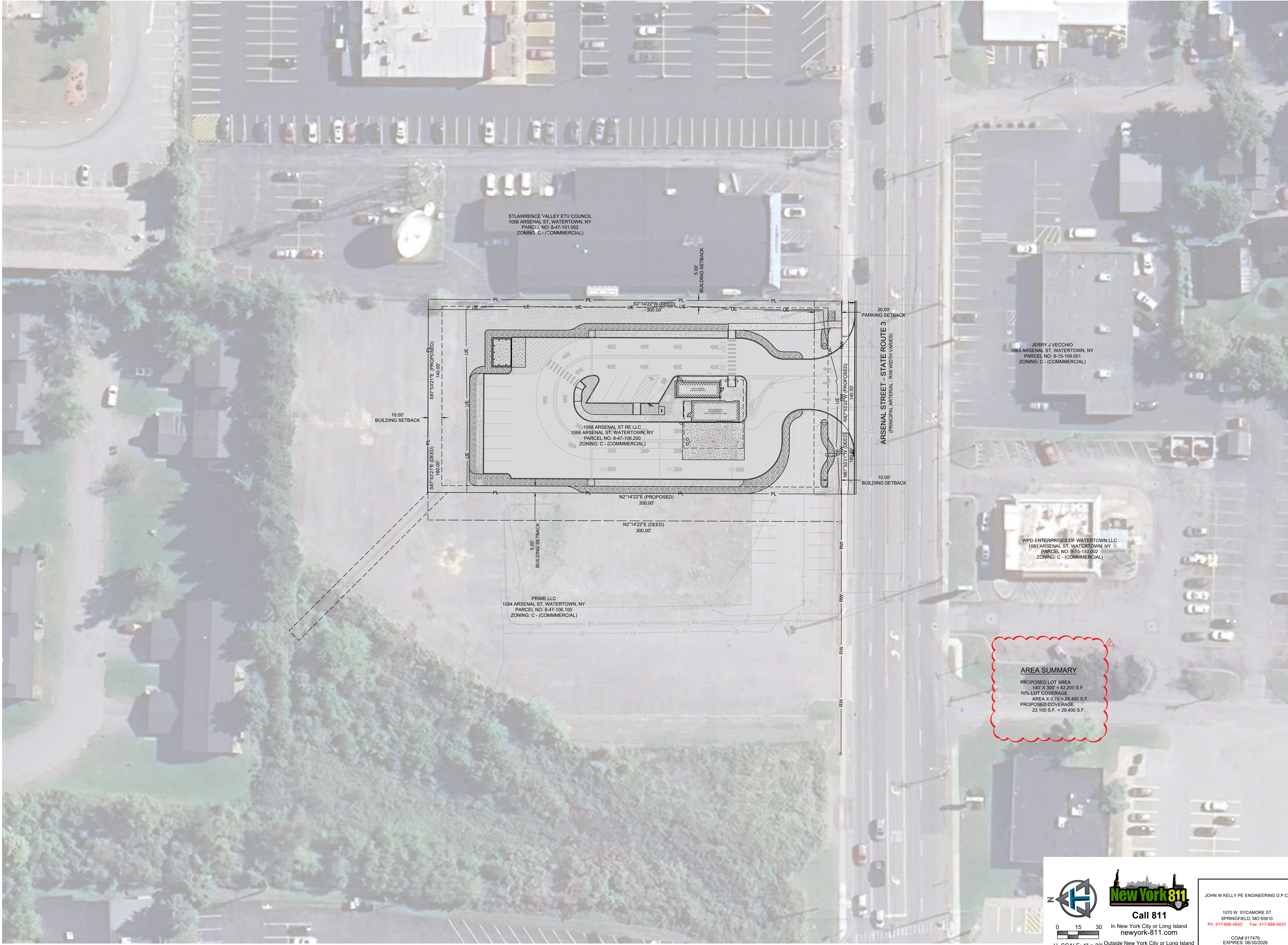
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SPRINGFIELD, MO 65810
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COAR 017478
EXPIRES: 06/30/2026

C0.1

GENERAL NOTES

DATE: MAY 29, 2025



JOHN W. KELLY III - ENGINEER
PE# 084736
ENGINEER OF RECORD:
NAME: JOHN W. KELLY III
LICENSE NO. 084736

PROJECT NUMBER:
91 164

REVISION:
07-02-2025 PLANNING COMMISSION

7 BREW COFFEE
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1068 ARSENAL STREET,
WATERTOWN, NY 13601

C0.2
AREA PLAN

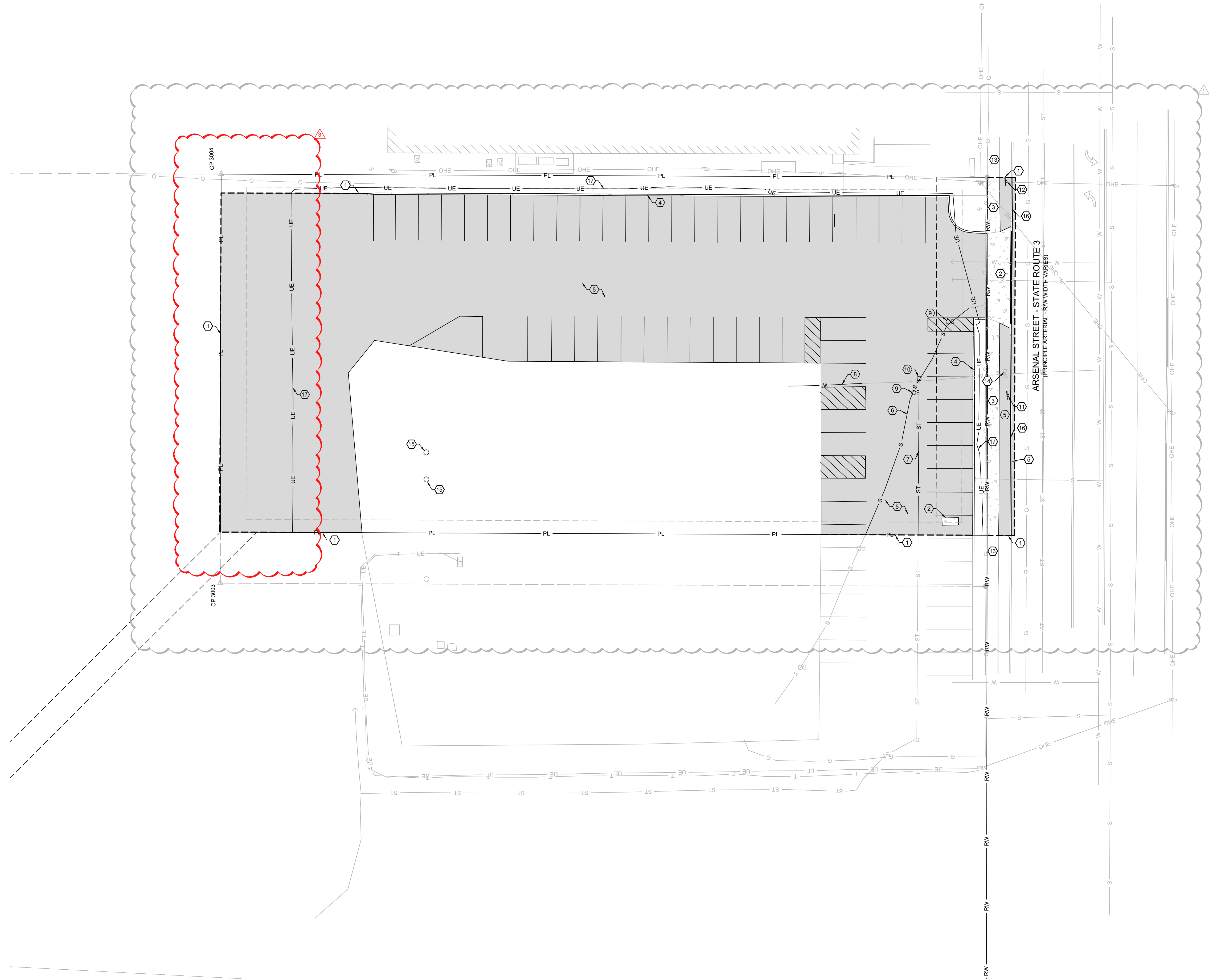
DATE: MAY 29, 2025



0 15 30
H. SCALE: 1" = 30'

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HATCH LEGEND:

[Hatch] = ASPHALT AREA TO BE REMOVED.

[Hatch] = CONCRETE AREA TO BE REMOVED.

KEY NOTES:

- 1 SAW CUT CLEAN EDGE FOR PAVEMENT REMOVAL. PROTECT EDGE OF PAVEMENT DURING CONSTRUCTION.
- 2 REMOVE 352 S.F. OF CONCRETE PAVEMENT.
- 3 REMOVE 532 S.F. OF CONCRETE SIDEWALKS.
- 4 REMOVE 442 L.F. OF CONCRETE CURB.
- 5 REMOVE 26,520 S.F. OF ASPHALT PAVEMENT.
- 6 REMOVE 102 L.F. OF SANITARY SEWER LINE.
- 7 REMOVE 62 L.F. OF STORM SEWER LINE.
- 8 REMOVE 29 L.F. OF WATER LINE.
- 9 REMOVE SANITARY CLEANOUT.
- 10 REMOVE STORM STRUCTURE.
- 11 REMOVE AND RELOCATE "NO STANDING ANYTIME" SIGN POST AND FOUNDATION. SEE SHEET C6.1 STRIPING PLAN FOR PROPOSED LOCATION.
- 12 REMOVE AND RELOCATE SPEED LIMIT 35 SIGN POST AND FOUNDATION. SEE SHEET C6.1 STRIPING PLAN FOR PROPOSED LOCATION.
- 13 EXISTING SIDEWALK, DO NOT DISTURB.
- 14 PROTECT EXISTING WATERVALVE.
- 15 REMOVE BOLLARDS, TYPICAL.
- 16 REMOVE 140 L.F. OF GRANITE CURB.
- 17 REMOVE EXISTING SITE LIGHTING UNDERGROUND ELECTRIC LINES.



JOHN W. KELLY III - ENGINEER
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ENGINEER OF RECORD:
NAME: JOHN W. KELLY III
LICENSE NO. 084736

PROJECT NUMBER:
91 164

REVISION:
06-10-2025 REVIEW / MINOR CHANGE
08-14-2025 CITY REVIEW COMMENTS

7 BREW COFFEE
WATERTOWN, NY
1068 ARSENAL STREET,
WATERTOWN, NY 13601

C1.1
DEMOLITION PLAN

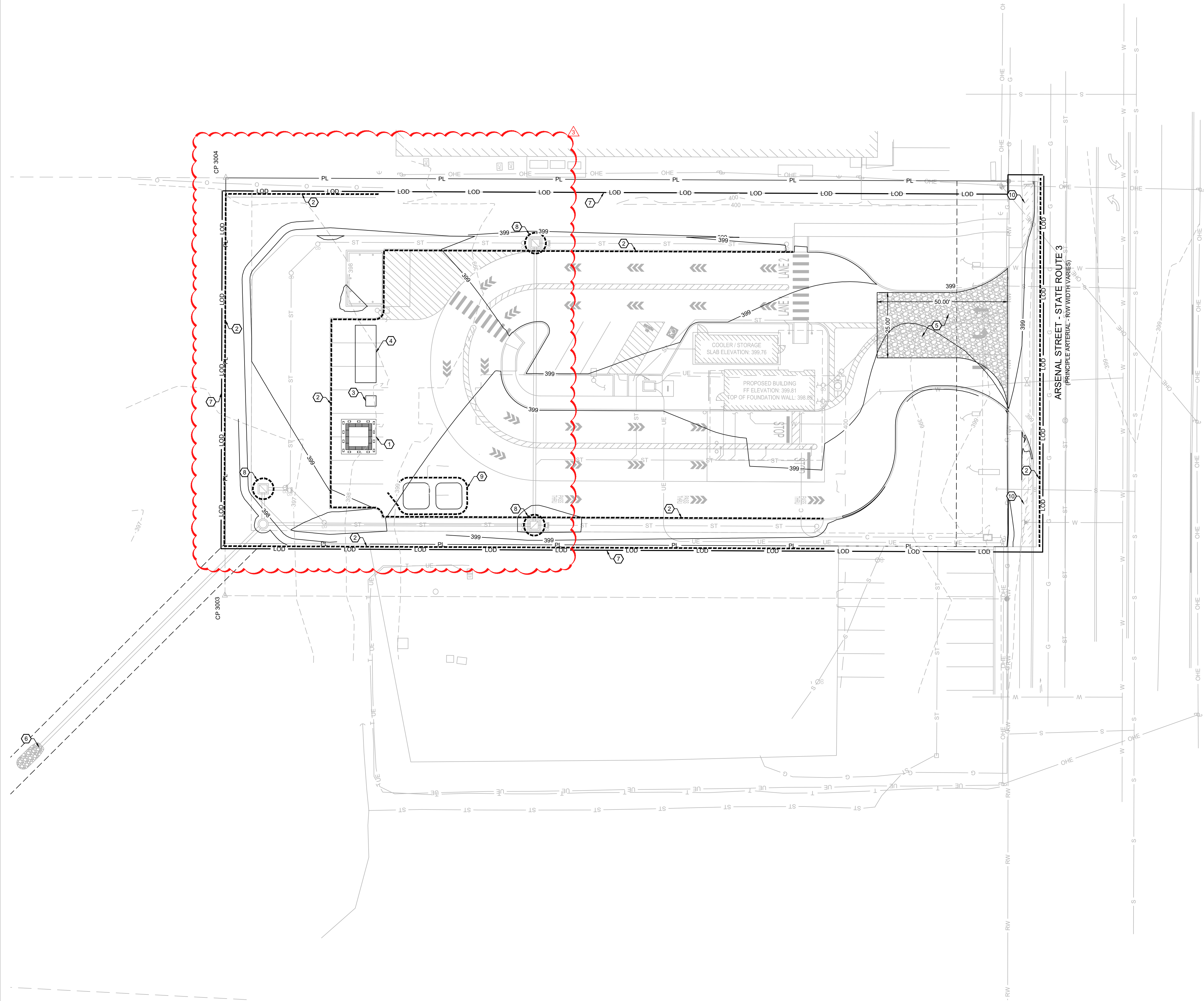


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KEY NOTES:

1. APPROXIMATE LOCATION OF CONCRETE WASHOUT PER DETAIL 1.03 SHEET C7.1.
2. INSTALL 1,030 L.F. ± OF COMPOST FILTER SOCK PER DETAIL 1.02 SHEET C7.1.
3. APPROXIMATE LOCATION OF PORTABLE RESTROOM.
4. APPROXIMATE LOCATION OF TEMPORARY ROLL-OFF DUMPSTER.
5. INSTALL TEMPORARY CONSTRUCTION ENTRANCE PER DETAIL 1.01 SHEET C7.1.
6. PROPOSED OUTFALL.
7. LIMITS OF DISTURBANCE = 0.99 ACRES.
8. INSTALL 25 L.F. OF COMPOST FILTER SOCK AROUND AREA INLET, PER STORM INLET PROTECTION DETAIL 1.05 SHEET C7.2.
9. APPROXIMATE LOCATION OF SOIL STOCKPILES. PROTECT STOCKPILES WITH COMPOST FILTER SOCK.
10. APPLY TEMPORARY SEED AND STRAW MULCH IN ROW PER NYS DOT DETAIL 1.06 SHEET C7.4. APPLY WATER DAILY FOLLOWING CONSTRUCTION ACTIVITIES UNTIL SEED HAS GERMINATED. RE-SEED AS NECESSARY TO ACHIEVE TEMPORARY STABILIZATION.

EROSION & SEDIMENT CONTROL MEASURES

UNLESS OTHERWISE INDICATED, ALL STRUCTURAL AND VEGETATIVE EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE CONSTRUCTED AND MAINTAINED ACCORDING TO THE MINIMUM STANDARDS AND SPECIFICATIONS OF THE NYS DEC BLUE BOOK.

STRUCTURAL PRACTICES

1. COMPOST FILTER SOCKS: COMPOST FILTER SOCKS WILL BE PLACED AS NEEDED ALONG THE DOWN GRADIENT SIDE OF THE DISTURBED AREA TO REDUCE MIGRATION OF SEDIMENT FROM THE SITE. COMPOST FILTER SOCKS WILL ALSO BE PLACED AROUND STOCKPILED TOPSOIL ON THE SITE. COMPOST FILTER SOCKS SHALL BE REPLACED AS DETERMINED BY REGULAR FIELD INSPECTIONS.
2. TEMPORARY CONSTRUCTION ENTRANCE: TEMPORARY CONSTRUCTION ENTRANCE WILL BE LOCATED AT THE PROPERTY ACCESS TO ARSENAL STREET. THE TEMPORARY CONSTRUCTION ENTRANCE SHALL BE REPAIRED OR REPLACED AS DETERMINED BY REGULAR FIELD INSPECTIONS.
3. OTHER PRACTICES SHALL BE PROVIDED AS DETERMINED BY THE ENGINEER OR BY E&S ADMINISTRATOR.

VEGETATIVE PRACTICES

1. TOP SOILING (STOCKPILE): TOPSOIL WILL BE STRIPPED FROM AREAS TO BE GRADED AND STOCKPILED FOR LATER USE AND WILL BE STABILIZED BY SILT FENCING, OR SEEDING WITH APPROPRIATE SEED MIX FOR THE TIME OF YEAR.
2. EROSION CONTROL, BLANKETS OR MULCH AND SEEDING: EROSION CONTROL BLANKETS, IF NEEDED, WILL BE INSTALLED OVER FILL SLOPES GREATER THAN 2.5:1 WHICH HAVE BEEN BROUGHT TO FINAL GRADE AND HAVE BEEN SEEDED TO PROTECT THE SLOPES FROM RILL AND GULLY EROSION AND TO ALLOW SEED TO GERMINATE PROPERLY. MULCH (STRAW OR FIBER) WILL BE USED ON RELATIVELY FLAT AREAS AND WILL BE APPLIED AS A SECOND STEM PIN IN THE SEEDING OPERATION.

TEMPORARY AND PERMANENT STABILIZATION


ALL AREAS DISTURBED BY CONSTRUCTION AND NO OTHERWISE STABILIZED, SHALL BE STABILIZED WITH PERMANENT SEEDING WITHIN 7 DAYS FOLLOWING FINISH GRADING. SEEDING SHALL BE APPLIED DEPENDING ON TIME OF THE YEAR ACCORDING TO NYS DEC BLUE BOOK SPECIFICATIONS. IN ALL SEEDING OPERATIONS, SEED, FERTILIZER, AND LIME WILL BE APPLIED PRIOR TO MULCHING. EROSION CONTROL BLANKETS WILL BE INSTALLED OVER FILL SLOPES WHICH HAVE BEEN BROUGHT TO FINAL GRADE AND HAVE BEEN SEEDED TO PROTECT THE SLOPES FOR RILL AND GULLY EROSION AND TO ALLOW SEED TO GERMINATE PROPERLY. MULCH (STRAW OR FIBER) WILL BE USED ON RELATIVELY FLAT AREAS. IN ALL SEEDING OPERATION S SEED, FERTILIZER, AND LIME WILL BE APPLIED PRIOR TO MULCHING.

MANAGEMENT STRATEGIES

1. SCHEDULE AND CONDUCT PRECONSTRUCTION MEETING WITH THE CITY OF WATERTOWN.
2. SEDIMENT TRAPPING MEASURES TO BE INSTALLED PRIOR TO ANY EXCAVATION ON SITE.
3. CONSTRUCTION WILL BE SEQUENCED SO THAT EXISTING COVER WILL NOT BE DISTURBED ANYMORE THAN NECESSARY.
4. CONSTRUCTION WILL BE SEQUENCED SO THAT GRADING OPERATIONS CAN BEGIN AND END AS QUICKLY AS POSSIBLE.
5. TEMPORARY SEEDING OR OTHER STABILIZATION WILL FOLLOW IMMEDIATELY AFTER GRADING.
6. AREAS, WHICH ARE TO BE DISTURBED, WILL BE CLEARLY MARKED BY FLAGS, SIGNS ETC.
7. THE JOB SUPERINTENDENT SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL PRACTICES.
8. AFTER ACHIEVING ADEQUATE STABILIZATION TO THE SATISFACTION OF THE E&S ADMINISTRATOR, THE TEMPORARY E&S CONTROLS WILL BE CLEANED UP.
9. WHERE CONSTRUCTION VEHICLE ACCESS ROUTES INTERSECT PAVED ROAD OR PUBLIC ROADS, PROVISIONS SHALL BE MADE TO MINIMIZE THE TRANSPORT OF SEDIMENT BY VEHICULAR TRACKING ONTO THE PAVED SURFACE. WHERE SEDIMENT IS TRANSPORTED ONTO A PAVED OR PUBLIC ROAD SURFACE, THE ROAD SHALL BE CLEANED THOROUGHLY AT THE END OF EACH DAY. SEDIMENT SHALL BE REMOVED FROM THE ROAD BY SHOVELING OR SWEEPING AND TRANSPORTED TO A SEDIMENT CONTROL DISPOSAL AREA. A STREET WASHING SHALL BE ALLOWED ONLY AFTER SEDIMENT IS REMOVED IN THIS MANNER.
10. REMOVED ALL TEMPORARY EQUIPMENT, CONSTRUCTION MATERIALS, AND DEBRIS FROM THE SITE.
11. REMOVE REMAINING TEMPORARY EROSION & SEDIMENT CONTROL MEASURES WITHIN THIRTY DAYS AFTER FINAL SITE STABILIZATION.

MAINTENANCE

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING EACH CONTROL MEASURE SHOWN ON THE EROSION AND SEDIMENT CONTROL PLAN AND THOSE DEEMED NECESSARY BY THE CITY ENGINEER AS CONSTRUCTION CONTINUES.
2. THE CONTRACTOR SHALL INSPECT ALL SEDIMENT AND EROSION CONTROL STRUCTURES AT A MINIMUM FREQUENCY OF ONCE PER TOW WEEKS AND WITHIN 24 HOURS AFTER EACH RUNOFF-PRODUCING RAINFALL EVENT. INSPECTION RECORDS SHALL BE KEPT.
3. SILT SHALL BE REMOVED FROM BEHIND SEDIMENT BARRIER ONCE THE DEPTH IS EQUAL TO SIX INCHES OR AS REQUIRED TO MAINTAIN FUNCTIONALITY.
4. DAMAGED OR DETERIORATED ITEMS WILL BE REPAIRED IMMEDIATELY AFTER IDENTIFICATION.
5. ALL SEDIMENT THAT IS COLLECTED IN STRUCTURES SHALL BE DISPOSED OF PROPERLY AND COVERED IF STORED ON-SITE.
6. ALL SPOIL MATERIALS SHALL BE DISPOSED OF LEGALLY, OFFSITE OR AS OTHERWISE DESCRIBED IN THE CONTRACT DOCUMENTS, BY THE CONTRACTOR AT THEIR EXPENSE. ALL OFFSITE ELAND DISTURBING ACTIVITIES SHALL BE CONDUCTED UNDER AN APPROVED SEPARATE EROSION AND SEDIMENT CONTROL PLAN.
7. EROSION CONTROLS AND PERIMETER CONTROL SHALL REMAIN IN PLACE UNTIL ALL DISTURBED AREAS HAVE BEEN SECURELY STABILIZED. AFTER REMOVAL OF STRUCTURES, DISTURBED AREAS SHALL BE RE-GRADED AND STABILIZED AS NECESSARY.
8. ALL SEEDED AREAS SHALL BE CHECKED ONCE PER WEEK TO ENSURE A GOOD STAND OF PLANT MATERIAL IS MAINTAINED. SEEDED AREAS FOUND TO BE DEFICIENT SHALL BE RE-SEED AS NECESSARY.

 = NYS DOT TEMPORARY SEED AND STRAW MULCH (209.1003). PER NYS DOT DETAIL 1.06 SHEET C7.4.

PHASING TABLE:

PHASE	CONSTRUCTION ACTIVITIES	BEST MANAGEMENT PRACTICES INSTALLED
PHASE 1 (PRE - CONSTRUCTION)	INSTALLATION OF PRE-CON BMP'S	~ TREE PROTECTION ~ CONSTRUCTION ENTRANCE ~ PERIMETER CONTROL (SILT SOCK)
PHASE 2	CLEARING	~ RETAIN TOPSOIL ~ STOCK PILE PROTECTION ~ DEWATERING ~ DUST CONTROL
PHASE 3	CONSTRUCTION	~ CONCRETE WASHOUT PIT ~ CONSTRUCTION ENTRANCE ~ TEMPORARY SEEDING
PHASE 4 (FINAL STABILIZATION)	FINAL STABILIZATION OF ALL DISTURBED AREAS	~ HYDROSEED ~ RIP RAP PLACEMENT ~ SEED / STRAW



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CO# 017476
EXPIRES: 06/30/2026



JOHN W. KELLY III - ENGINEER
PE# 084736

ENGINEER OF RECORD:

NAME: JOHN W. KELLY III

LICENSE NO. 084736

PROJECT NUMBER:

91 164

REVISION:

 08-14-2025 CITY REVIEW COMMENTS

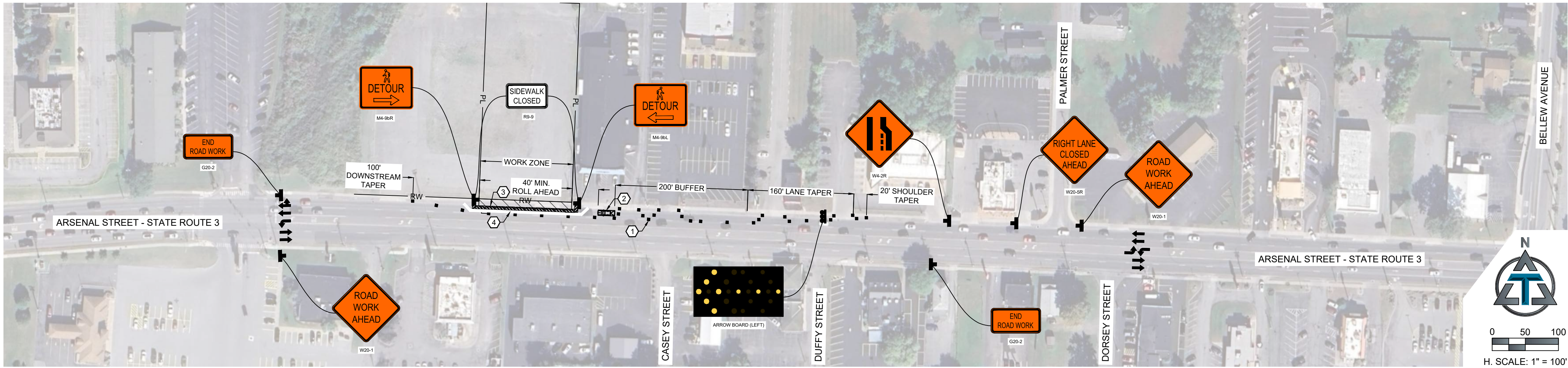
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WATERTOWN, NY 13601

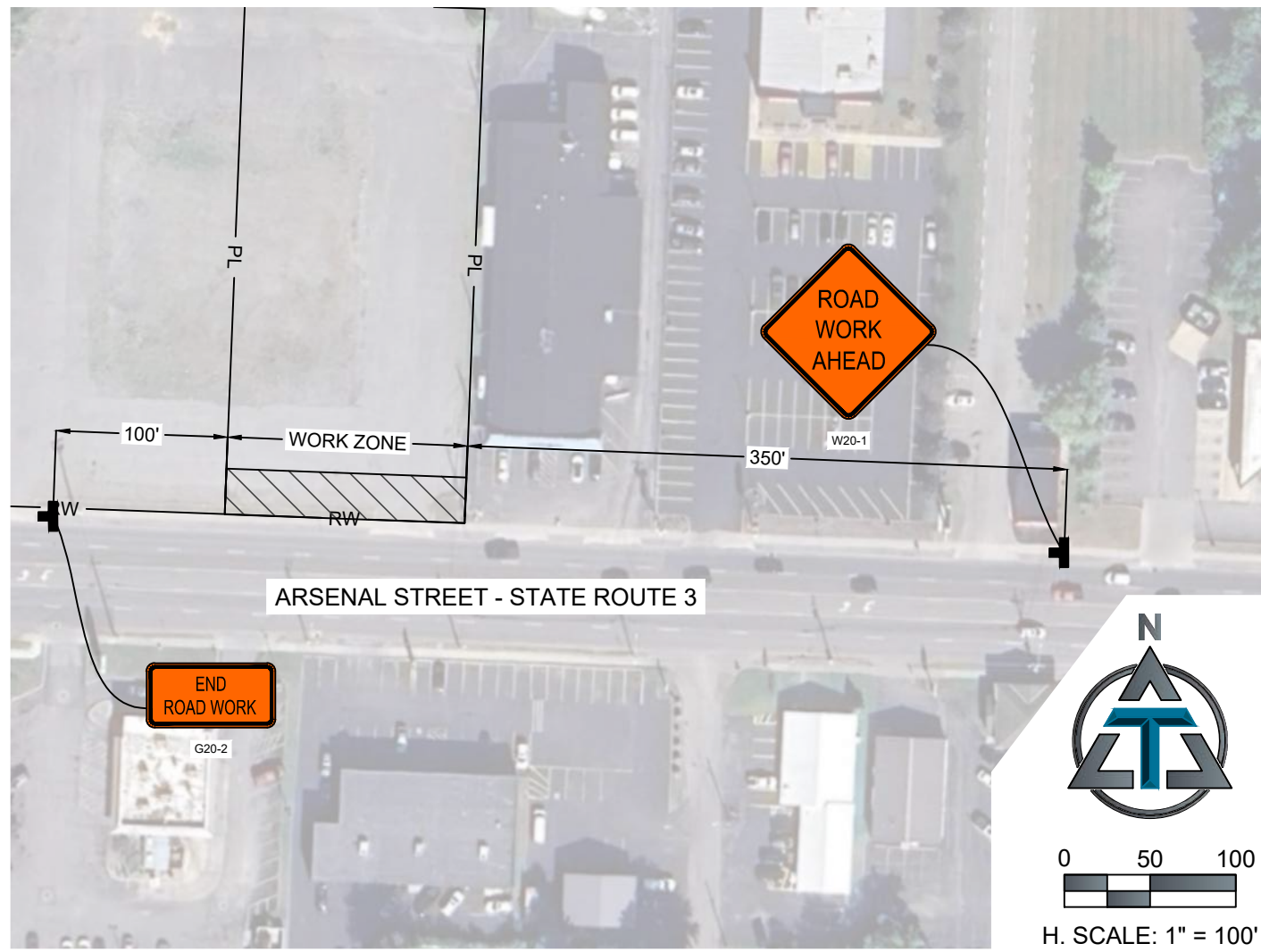
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EROSION
CONTROL PLAN

DATE: MAY 29, 2025



LANE 1 & SIDEWALK CLOSURE PLAN



TRAFFIC CONTROL FOR WORK BEYOND THE SHOULDER ON ARSENAL STREET (HWY 3)

WORK BEYOND SHOULDER NOTES

- THIS SETUP IS A SPECIAL OPERATION, AND CAN BE USED REGARDLESS OF THE WORK.
- END ROAD WORK SIGN MAY BE OMITTED IF WORK DURATION IS LESS THAN 1 HOUR.

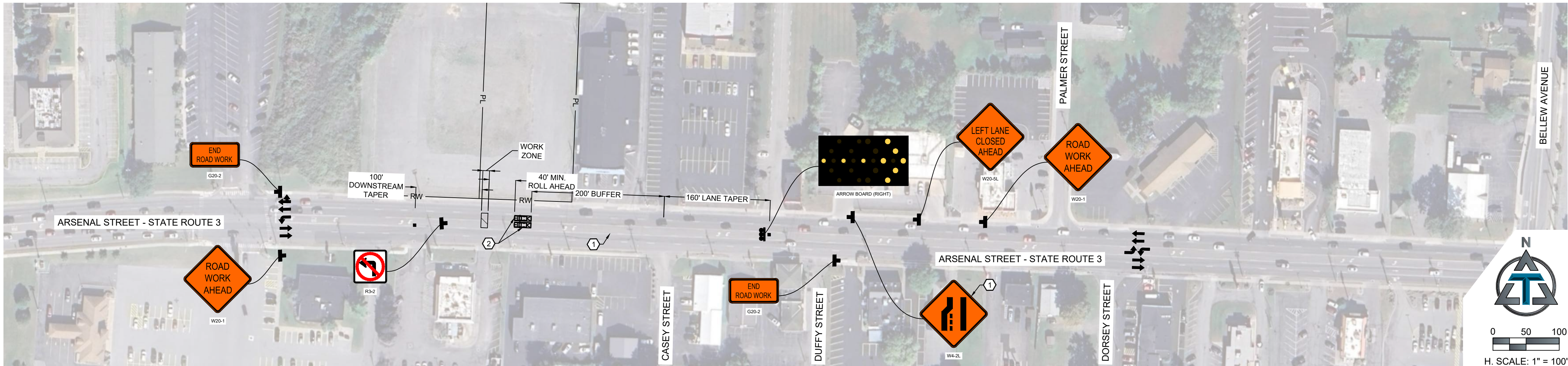
LANE DESIGNATION LEGEND:

- DIRECTIONAL TRAFFIC
- TURN LANE

KEY NOTES:

SIDEWALK DIVERSION NOTES

- SHORT-TERM STATIONARY IS DAYTIME WORK THAT OCCUPIES A LOCATION FOR MORE THAN 1 HOUR WITHIN A SINGLE DAYLIGHT PERIOD.
- ANY SIDEWALK DIVERSION MUST BE ADA COMPLIANT AND FOLLOW THE PUBLIC RIGHTS-OF-WAY ACCESSIBILITY GUIDELINES (PROWAG). TEMPORARY RAMPS AND OTHER TEMPORARY PEDESTRIAN FACILITIES SHALL BE PAID FOR UNDER THE APPROPRIATE ITEM FOR HOT MIX ASPHALT (HMA) SIDEWALKS.
- PROWAG SECTION R205 AND MUTCD PART 6 SHALL APPLY TO ALL CONSTRUCTED TEMPORARY ALTERNATIVE PEDESTRIAN PATHWAYS.
- ONLY THE WORK ZONE TRAFFIC CONTROL DEVICES RELATED TO PEDESTRIANS ARE SHOWN, OTHER DEVICES, SUCH AS A LANE/SHOULDER CLOSURE, ROAD NARROWS SIGNS (W5-4), OR NO PARKING SIGNS MAY BE USED TO CONTROL VEHICULAR TRAFFIC.
- TYPE III BARRICADES SHALL BE THE FULL WIDTH OF THE PATH BEING CLOSED.
- ACCESS TO BUSINESS ENTRANCES AND TRANSIT STOPS WILL NEED TO BE MAINTAINED. IF THE PEDESTRIAN CONSULT THE TRANSIT AUTHORITIES THAT SERVICE THE AFFECTED STOP TO DETERMINE HOW TO ACCOMMODATE THE FACILITY CURRENTLY HAS A TRANSIT STOP THAT WILL BE AFFECTED BY THE WORK ZONE, PRACTITIONERS SHOULD STOP.
- THE GRADE (RUNNING SLOPE) OF A TEMPORARY CURB RAMP FOR DESIGN AND LAYOUT SHALL BE A MAXIMUM OF 7.5%. THE GRADE FOR ADA ACCESSIBILITY AND WORK ACCEPTANCE SHALL BE A MAXIMUM OF 8.3%.



LANE 2 & LEFT TURN LANE CLOSURE PLAN

TRAFFIC CONTROL FOR SHORT TERM MULTI-STAGE SINGLE LANE CLOSURES ON ARSENAL STREET (HWY 3) FOR RIGHT OF WAY IMPROVEMENTS

WORK ZONE TRAFFIC CONTROL NOTES

1. WORK ZONE TRAFFIC CONTROL REVISIONS

PROPOSED REVISIONS TO THE WORK ZONE TRAFFIC CONTROL (WZTC) PLAN OR MODIFICATIONS TO THE 619 STANDARD SHEETS SHALL BE SUBMITTED TO THE ENGINEER FOR THE REVIEW AND APPROVAL BY THE REGIONAL TRAFFIC ENGINEER PRIOR TO THE PLANNED IMPLEMENTATION OF SUCH REVISIONS OR MODIFICATIONS. THE CONTRACTOR SHALL NOT IMPLEMENT THE PROPOSED REVISIONS WITHOUT APPROVAL FROM THE REGIONAL TRAFFIC ENGINEER.

2. TRAVEL LANE WIDTHS IN WORK ZONES

WHERE NOT SHOWN IN THE WZTC PLANS OR OTHERWISE AUTHORIZED BY NYS DOT (OR THE ENGINEER), TRAVEL LANE WIDTHS IN WORK ZONES SHALL BE A MINIMUM OF 11 FT ON FREEWAYS, RAMP, EXPRESSWAYS AND MULTI-LANE CONVENTIONAL ROADWAYS AND 10 FT ON ALL OTHER CONVENTIONAL ROADWAYS.

*MULTI-LANE ROADWAYS ARE THOSE WITH TWO OR MORE THRU LANES IN ONE OR BOTH DIRECTIONS.)

3. DAILY LANE, RAMP AND SHOULDER CLOSURE RESTRICTIONS

WORK ZONES SHALL BE RESTRICTED TO ONE SIDE OF THE ROADWAY AT A TIME IN EACH DIRECTION ON DIVIDED ROADWAYS, UNLESS APPROVED BY THE ENGINEER. THE CONTRACTOR SHALL SCHEDULE WORK SO THAT ALL TRAVEL LANES AND RAMPS IN EACH DIRECTION ARE OPEN WHEN THE CONTRACTOR'S OPERATIONS ARE CLOSED DOWN OR SUBSTANTIALLY CLOSED DOWN. DAILY CLOSURES MAY OCCUR OFF OF LONG-TERM CLOSURES AND SHALL BE SUBJECT TO DAILY CLOSURE RESTRICTIONS. WORK ZONES SHALL BE RESTRICTED TO ONE SIDE OF THE ROADWAY AT A TIME ON UNDIVIDED HIGHWAYS.

4. FLAGGING OPERATIONS

WHEN A PEDESTRIAN APPROACHES A FLAGGER STATION, THE FLAGGER SHALL STOP TRAFFIC AND DIRECT THE PEDESTRIAN TO A SAFE ROUTE THROUGH THE WORK AREA. FLAGGERS SHALL COORDINATE THE FLAGGING OF THE WORK ZONE TO ENSURE PEDESTRIANS CAN SAFELY PROCEED THROUGH THE AREA. IF THERE IS MORE THAN THE OCCASIONAL PEDESTRIAN WITHIN THE PROJECT LIMITS, REFER TO THE SITE SPECIFIC PEDESTRIAN WZTC PLAN.

5. SIGNALIZED INTERSECTIONS

WHEN CONSTRUCTION OPERATIONS EFFECT SIGNALIZED INTERSECTIONS, THE TRAFFIC SIGNAL SHALL BE TURNED OFF BEFORE PROCEEDING WITH THE FLAGGING OPERATION, AND ANY EXISTING W3-3 SIGNS COVERED. THE CONTRACTOR SHALL RETURN THE SIGNAL TO A 3-COLOR OPERATION AT THE END OF THE WORK OPERATION. IF THE SIGNAL DOES NOT RETURN TO 3-COLOR OPERATION, THE CONTRACTOR SHALL NOTIFY THE REGION 3 SIGNAL CREW AND MUST CONTINUE FLAGGING UNTIL THE SIGNAL CREW ARRIVES AND THE SIGNAL IS REPAIRED. THE CONTRACTOR SHALL OBTAIN A POLICE PANEL KEY FROM, AND RETURN IT TO, THE REGION 3 NYS DOT SIGNAL CREW EIC. THE NYS DOT SIGNAL CREW EIC CAN BE REACHED AT 315-428-4064 OR 315-426-2131.

6. DAILY LANE CLOSURES ON FREEWAYS - NOT APPLICABLE

7. HOLIDAY CLOSURE RESTRICTIONS

DAILY LANE, RAMP AND SHOULDER CLOSURES SHALL NOT BE PERMITTED ON STATE OWNED ROADWAYS DURING MAJOR HOLIDAYS. FOR A LIST OF THE MAJOR HOLIDAYS, SEE SPECIAL NOTE IN THE CONTRACT PROPOSAL FOR TEMPORARY LANE CLOSURE RESTRICTIONS FOR MAJOR HOLIDAYS. DAILY LANE, RAMP AND SHOULDER CLOSURES SHALL NOT BE PERMITTED AS DESCRIBED IN E1 17-010. BELOW ARE HOLIDAY PERIODS BASED ON GUIDELINES FROM E1 17-010. ALL RESTRICTIONS ARE FROM 6:00 AM ON THE FIRST DAY UNTIL 6:00 AM ON THE LAST DAY OF THE RESTRICTION.

2025

- 6:00 AM FRIDAY, AUGUST 29, 2025 THRU 6:00 AM TUESDAY, SEPTEMBER 2, 2025 - (LABOR DAY HOLIDAY)
- 6:00 AM WEDNESDAY, NOVEMBER 26, 2025 THRU 6:00 AM MONDAY, DECEMBER 1, 2025 - (THANKSGIVING HOLIDAY)
- 6:00 AM WEDNESDAY, DECEMBER 24, 2025 THRU 6:00 AM MONDAY, DECEMBER 29, 2025 - (CHRISTMAS HOLIDAY)

2026

- 6:00 AM TUESDAY, JANUARY 1, 2026 THRU 6:00 AM MONDAY, JANUARY 5, 2026 - (NEW YEAR'S HOLIDAY)

8. SPECIAL EVENT CLOSURE RESTRICTIONS - NOT APPLICABLE

9. ROUTE 81 WEEKEND RESTRICTIONS - NOT APPLICABLE

10. NOTIFICATION REQUIREMENTS

REGION 7 HAS A WORK ZONE TRAFFIC CONTROL (WZTC) NOTIFICATION POLICY WHICH REQUIRES ENGINEERS TO NOTIFY THE REGIONAL TRANSPORTATION MANAGEMENT CENTER (RTMC) PRIOR TO ALLOWING A CONTRACTOR TO IMPLEMENT WORK ZONE TRAFFIC CONTROL ACTIVITIES WITHIN THE HIGHWAY RIGHT OF WAY. WORK ZONE NOTIFICATION IS REQUIRED FOR THE FOLLOWING:

- FREEWAYS AND EXPRESSWAYS: ALL LANE, SHOULDER, ROAD, RAMP OR BRIDGE CLOSURES.
- (THIS INCLUDES MOBILE OPERATIONS WHICH OCCUPY THE LANE OR SHOULDERS.)
- ALL OTHER STATE HIGHWAYS: ALL LANE CLOSURES WHOSE DURATION WILL BE GREATER THAN 2 HOURS AND ALL ROAD/BRIDGE CLOSURES.
- THE CONTRACTOR SHALL REPORT PROPOSED WZTC ACTIVITIES NOTED ABOVE TO THE ENGINEER BY 6:00 AM OF THE BUSINESS WEEK DAY (I.E. MONDAY THROUGH FRIDAY EXCLUDING HOLIDAYS) PRECEDING THE PROPOSED WZTC ACTIVITY. FAILURE TO DO SO WILL RESULT IN DISAPPROVAL TO PERFORM THE UNREPORTED WZTC ACTIVITY UNTIL THE ABOVE NOTIFICATIONS REQUIREMENTS ARE SATISFIED.
- NO PLANNED WZTC ACTIVITY SHALL BE IMPLEMENTED WITHOUT FIRST RECEIVING CLEARANCE FROM THE RTMC.

11. WORK AREA COORDINATION

THE CONTRACTOR SHALL COORDINATE WORK ACTIVITIES WITH OTHER CONTRACTS WITHIN AND/OR ADJACENT TO THE CONTRACT WORK LIMITS.

12. ACCESS

THE CONTRACTOR SHALL ENSURE THAT ACTIVE LANES OF TRAFFIC ON FREEWAYS ARE NOT CROSSED BY PEDESTRIAN WORKERS FOR ALL OTHER HIGHWAYS, THE CONTRACTOR SHALL ENSURE THAT PEDESTRIAN WORKERS CROSS ACTIVE LANES OF TRAFFIC ONLY AT PROPERLY MARKED OR UNMARKED CROSSEWALKS AND/OR DEDICATED PEDESTRIAN WALKWAYS. IT IS REQUIRED THAT THE PROJECT SAFETY AND HEALTH PLAN ADDRESS ACCESS TO EACH WORK AND STAGING AREA. WHERE IT IS FEASIBLE, VEHICLES AND EQUIPMENT USED FOR THE WORK AND TRANSPORTING OF WORKERS TO/FROM THE WORK SITE SHALL ENTER AND LEAVE THE AREA CLOSED BY CHANNELIZING DEVICES WITHIN THE TERMINATION AREA OF THE TEMPORARY TRAFFIC CONTROL ZONE. WHERE SUCH ACCESS WITHIN THE TERMINATION AREA IS NOT FEASIBLE, OTHER AREAS FOR ENTRY AND EXIT SHALL BE DETERMINED AND INCLUDED IN THE PROJECT SAFETY & HEALTH PLAN, INCLUDING ILLUSTRATED EXAMPLES (TYPICALS) TO CLEARLY SHOW THE TEMPORARY TRAFFIC CONTROL ELEMENTS THAT WILL BE PROVIDED.

13. CHANNELIZING DEVICES

ALL CHANNELIZING DEVICES SHALL BE PLACED SO AS TO PROVIDE A 2 FOOT LATERAL CLEARANCE TO THE TRAVELED WAY UNLESS OTHERWISE SHOWN ON THE PLANS. WHERE POSSIBLE A LATERAL BUFFER SPACE OF 2 FOOT MINIMUM SHALL BE PROVIDED BETWEEN THE WORK SPACE AND THE CHANNELIZING DEVICES. CHANNELIZING DEVICE SPACING (CENTER TO CENTER) SHALL BE 40' MAXIMUM FOR POSTED SPEED LIMITS 40 MPH OR GREATER AND 20' MAXIMUM FOR POSTED SPEED LIMITS 35 MPH OR LESS. STANDARD CONES AND TUBULAR MARKERS SHALL NOT BE USED FOR CHANNELIZATION AND DELINEATION DURING THE HOURS OF DARKNESS, WHICH IS DEFINED AS THE PERIOD BETWEEN SUNSET AND SUNRISE.

14. SIGNS

ALL CONSTRUCTION SIGNS SHALL BE MOUNTED AT A HEIGHT OF 7 FEET ABOVE THE EDGE OF TRAVEL LANE. SIGNS SHALL NOT ENCRoACH MORE THAN 4" INTO SHOULDERS USED BY PEDESTRIANS OR BICYCLES. WHERE SHOULDER WIDTHS ARE LIMITED AND SIGNS CANNOT BE ERECTED BEYOND THE SHOULDER, CONSTRUCTION SIGNS MAY NEED TO BE MOUNTED ON CONCRETE MEDIAN BARRIERS, BRIDGE PARAPETS, ETC.

17. DELINEATORS

SINGLE LARGE DELINEATORS WITH RETROREFLECTIVE ASTM TYPE IX SHEETING 6" X 12", SHALL BE INSTALLED AT 20 FOOT INTERVALS FOR ALL LOCATIONS WHERE TEMPORARY CONCRETE BARRIER IS USED AND FOR ALL LOCATIONS WHERE PERMANENT CONCRETE BARRIER, GUIDE RAILING, AND/OR BRIDGE RAILING IS ADJACENT TO A LANE AND/OR SHOULDER WHERE THE WIDTH IS LESS THAN EXISTING. THE COLOR OF THE RETROREFLECTIVE DELINEATOR SURFACE SHALL MATCH THE COLOR OF THE EDGE OF PAVEMENT MARKINGS AS VIEWED BY APPROACHING TRAFFIC. DELINEATORS SHALL BE CLEARLY VISIBLE UNDER NORMAL CONDITIONS FROM A DISTANCE OF 1000 FEET WHEN ILLUMINATED BY THE HIGH BEAMS OF STANDARD AUTOMOBILE HEADLIGHTS. THE COST (INCLUDING REMOVAL) SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 619.01, BASIC WORK ZONE TRAFFIC CONTROL.

18. WINTERING OVER

PRIOR TO THE WINTER SEASON, IF THE TOP PAVEMENT COURSE IS PLACED, SHOULDER MARKS SHALL BE INSTALLED AND FINAL PAVEMENT MARKINGS OR FINAL FULL WIDTH TEMPORARY PAVEMENT MARKINGS SHALL BE APPLIED. IF THE BINDER PAVEMENT COURSE IS WHAT TRAFFIC WILL TRAVEL ON, FINAL FULL WIDTH TEMPORARY PAVEMENT MARKINGS SHALL BE INSTALLED. WORK PROGRESS AND DAILY LANE CLOSURES DURING THE WINTER SEASON WILL ONLY BE ALLOWED IF WEATHER CONDITIONS PERMIT. IF, IN THE OPINION OF THE ENGINEER, WEATHER CONDITIONS WILL NOT PERMIT WORK TO BE PERFORMED SAFELY, LANE CLOSURES WILL NOT BE ALLOWED. THE CONTRACTOR SHALL REPLACE ANY CHANNELIZING DRUMS DISPLACED OR DAMAGED BY PLOWING OPERATIONS.

19. MILLED SURFACES - NOT APPLICABLE

20. MISCELLANEOUS (LOCAL OR PERMIT PROJECTS)

1. THE CONTRACTOR SHALL BE AWARE THAT THE WORK ZONE TRAFFIC CONTROL IS A VERY CRITICAL ITEM OF THE PERMIT AND SHALL BE PROVIDED IN ACCORDANCE WITH SECTION 619 "WORK ZONE TRAFFIC CONTROL" OF THE STANDARD SPECIFICATIONS, THE 2009 EDITION OF THE NATIONAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, AND STATE SUPPLEMENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR WORK ZONE TRAFFIC CONTROL AT ALL TIMES FOR THE DURATION OF THE PERMITTED WORK.

2. ACTUAL FIELD CONDITIONS MAY REQUIRE OTHER SIGNS AND OTHER ARRANGEMENTS OF SIGNS. DISTANCES SHALL BE ADAPTED TO PREVAILING CONDITIONS. SIGNS SHALL BE LOCATED TO PROVIDE OPTIMUM VISIBILITY. SIGNS THAT ARE NOT APPLICABLE SHALL BE COVERED OR OBSCURED FROM SIGHT. ALL SIGN NUMBERS REFER TO THE 2009 EDITION OF THE NATIONAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS AND THE NEW YORK STATE SUPPLEMENT.

3. PEDESTRIAN ACCOMMODATIONS SHALL BE MAINTAINED FOR THE DURATION OF THE PROPOSED WORK. ANY DISTURBED AREAS WITHIN THE STATE RIGHT-OF-WAY SHALL BE ADEQUATELY FENCED TO PREVENT PEDESTRIAN ACCESS WHEN THE CONTRACTORS OPERATIONS ARE SHUT DOWN.

4. MATERIALS, EQUIPMENT AND VEHICLES SHALL NOT BE STORED OR PARKED WITHIN THE STATE RIGHT-OF-WAY BEFORE WORK BEGINS OR AFTER CONTRACTOR'S OPERATIONS ARE SHUT DOWN. STAGING AREAS OUTSIDE THE RIGHT-OF-WAY SHALL BE USED TO STOCKPILE ALL CONSTRUCTION MATERIALS. DURING WORKING HOURS, NO CONSTRUCTION MATERIAL MAY BE STORED OR PLACED ON THE ROADWAY OR ROADBED EXCEPT WITHIN A PROTECTED WORK AREA.

5. VEHICLES BELONGING TO THE CONTRACTOR OR WORKERS SHALL NOT BE PARKED WITHIN 30 FEET OF THE EDGE OF PAVEMENT ALONG A ROADWAY BEING USED BY THE GENERAL PUBLIC, UNLESS THEY ARE PARKED WITHIN A PROTECTED WORK AREA. DURING NON-WORKING HOURS, CONSTRUCTION EQUIPMENT AND MATERIALS SHALL NOT BE STORED WITHIN 30 FEET OF THE EDGE OF PAVEMENT.

6. W20-7A "FLAGGER" SIGNS SHALL BE USED WHENEVER FLAGGING OCCURS FOR MORE THAN A BRIEF PERIOD OF TIME. THE SIGNS SHALL BE PROMPTLY REMOVED, COVERED, OR FACED AWAY FROM TRAFFIC WHEN THE FLAGGING OPERATION CEASES. ALL FLAGGING STATIONS AND LANE CLOSURES SHOULD BE LOCATED TO ENSURE MAXIMUM VISIBILITY.

7. NO DROP-OFF GREATER THAN SIX INCHES SHALL BE LEFT OVERNIGHT WITHIN 30 FEET OF THE EDGE OF PAVEMENT. DROP-OFFS LESS THAN SIX INCHES WILL BE PERMITTED IF PROPER DELINEATION AND SIGNING IS PROVIDED, AND PRIOR PERMISSION IS GRANTED IN WRITING BY A REPRESENTATIVE OF THE DEPARTMENT. A DROP-OFF IS CONSIDERED ELIMINATED IF TAPERED AWAY BY A 1 ON 6 SLOPE OR FLATTER.

8. CARE SHALL BE TAKEN TO INSURE THAT NO DAMAGE OCCURS TO THE EXISTING PAVEMENT/SHOULDER/CURB AREAS AS A RESULT OF CONSTRUCTION EQUIPMENT MOVEMENT.

9. THE CONTRACTOR MAY SUBMIT REVISIONS TO THIS PLAN FOR APPROVAL, BUT ANY CHANGE THAT ALTERS THE BASIC CONCEPTS OF THE PLAN MUST BE APPROVED BY THE NYS DOT REGIONAL DIRECTOR OR HIS DESIGNEE.

NYSDOT REGION 7 GENERAL NOTES:

- THE ROADWAY SHALL BE KEPT CLEAN OF MUD AND DEBRIS AT ALL TIMES.
- ROADSIDE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.
- MATERIALS, EQUIPMENT AND VEHICLES SHALL NOT BE STORED OR PARKED WITHIN THE NEW YORK STATE RIGHT-OF-WAY.
- WORK ZONE TRAFFIC CONTROL SHALL COMPLY WITH THE 2009 EDITION OF THE NATIONAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS AND THE NEW YORK STATE SUPPLEMENT, AND SHALL BE IN ACCORDANCE WITH THE NYSDOT CONTRACT OR HIGHWAY WORK PERMIT DOCUMENTS AND AS DEEMED NECESSARY BY THE NYS ENGINEER IN CHARGE.
- NOTIFY NEW YORK STATE DEPARTMENT OF TRANSPORTATION RESIDENT ENGINEER AT THE APPLICABLE RESIDENCY, THREE WORKING DAYS PRIOR TO WORKING IN THE STATE RIGHT-OF-WAY. JEFFERSON COUNTY RESIDENT ENGINEER: MATT BUSH - (315) 785-9317
- NOTIFY DIG SAFELY NEW YORK THREE WORKING DAYS PRIOR TO DIGGING, DRILLING OR BLASTING AT 1-800-962-7962, FOR A UTILITY STAKE-OUT.
- ALL WORK CONTEMPLATED AND MATERIALS USED WITHIN THE NYS RIGHT-OF-WAY SHALL BE COVERED BY AND IN CONFORMITY WITH THE NYS DEPARTMENT OF TRANSPORTATION MAY 1, 2008 SPECIFICATIONS BOOK AND ANY SUBSEQUENT ADDENDA ALONG WITH ANY APPROPRIATE CURRENT NYS DEPARTMENT OF TRANSPORTATION STANDARD SHEETS, EXCEPT AS MODIFIED IN THESE PLANS AND IN THE ITEMIZED PROPOSAL. METRIC UNITS MAY BE CONVERTED TO ENGLISH.
- QUALITY CONTROL OF ASPHALT CONCRETE SHALL MEET THE REQUIREMENTS OF SECTION 402 OF THE STANDARD SPECIFICATIONS. ASPHALT COURSE DEPTHS SHOWN ON THE PLANS ARE COMPACTED DEPTHS.
- NO NIGHT WORK WILL BE ALLOWED UNLESS PRIOR APPROVAL IS GIVEN BY THE DEPARTMENT. ADDITIONAL MAINTENANCE AND PROTECTION OF TRAFFIC WILL BE REQUIRED INCLUDING THE ADDITION OF REFLECTIVE MATERIALS AND LIGHTING.



JOHN W. KELLY III - ENGINEER
PE# 084736

ENGINEER OF RECORD:

NAME: JOHN W. KELLY III

LICENSE NO. 084736

PROJECT NUMBER:

91 164

REVISION:

7 BREW COFFEE
WATERTOWN, NY

1068 ARSENAL STREET,
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JOHN W KELLY PE ENGINEERING D.P.C.

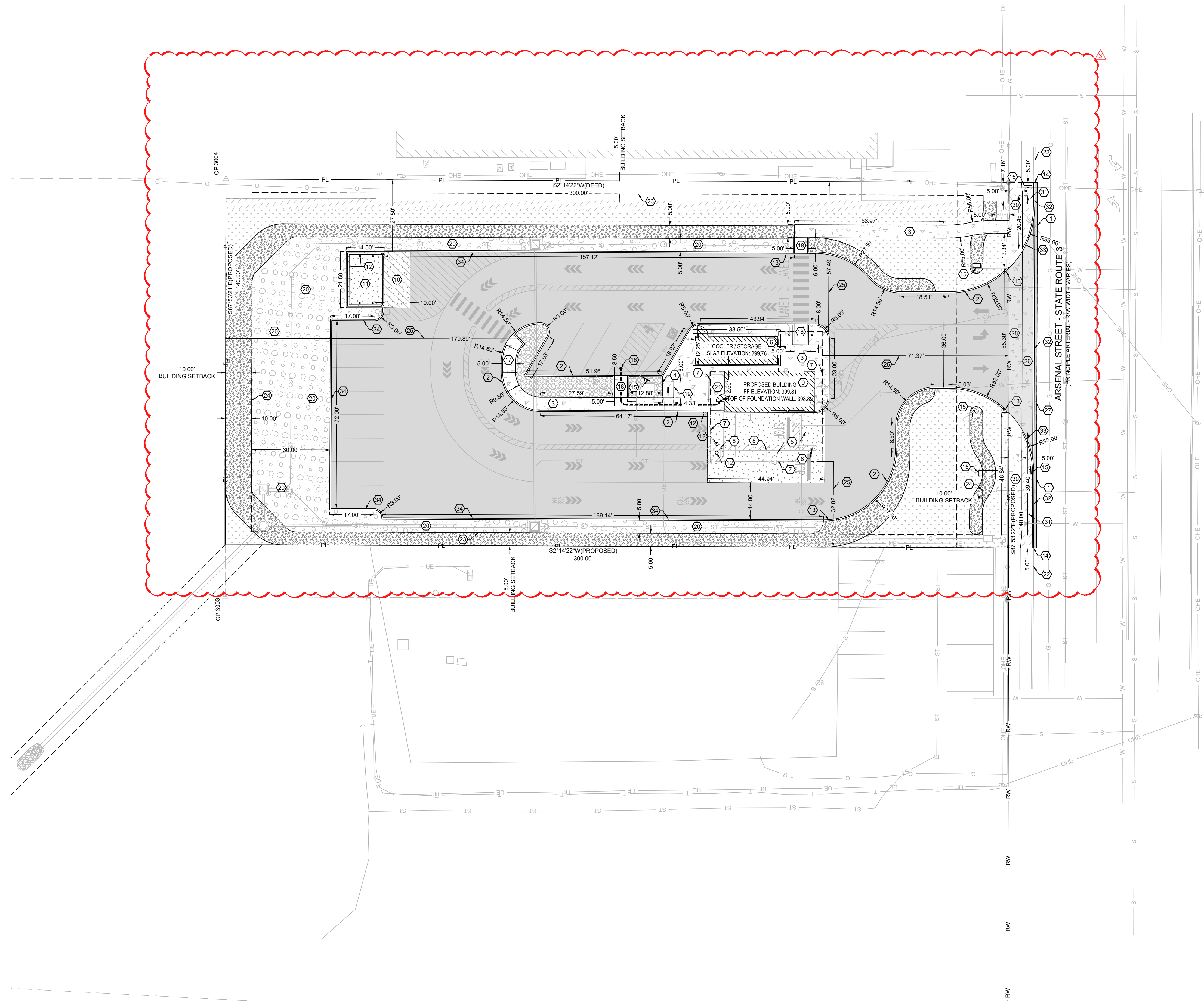
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COAR 017478
EXPIRES: 06/30/2026

C1.3

TRAFFIC CONTROL
PLAN

DATE: MAY 29, 2025



HATCH LEGEND:

- ASPHALT PAVEMENT
PER DETAIL 2.06, SHEET C7.1.
- CONCRETE SIDEWALK
PER SIDEWALK DETAIL 2.02, SHEET C7.1.
- CONCRETE PAVEMENT
PER CONCRETE PAVEMENT DETAIL 2.03 AND 2.05, SHEET C7.1.
- COOLER/STORAGE PAD
PER STRUCTURAL DETAIL 7 SHEET S2.1.
- TURF GRASS SOD
= INSTALL PER SUPPLIER'S INSTALLATION INSTRUCTIONS.
- LANDSCAPE ROCK
= PLACE 6" OF 1" - 2" RIVER ROCK OVER COMMERCIAL GRADE WEED FABRIC.
- SNOW STACK AREA
= PLACE 4" OF PEA GRAVEL OVER 12" OF #2 ROUND STONE OVER COMMERCIAL GRADE WEED FABRIC PER DETAIL 2.08 SHEET C7.1.
- 6" THICK NYSDOT CONCRETE PAVEMENT
= PER NYSDOT CONCRETE PAVEMENT DETAIL 2.21 SHEET C7.4.
- LAWN RESTORATION.
INSTALL TOPSOIL, SEED, & MULCH IN ACCORDANCE WITH PROJECT SPECIFICATIONS. EXTENTS SHOWN DO NOT NECESSARY REFLECT FULL EXTENTS OF RESTORATION REQUIRED. CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS.
- LANDSCAPE MULCH.
SMOOTH SOIL SHALL BE COVERED BY WEED FABRIC = AND TOPPED WITH 3 TO 4-INCH LAYER OF SHREDDED HARDWOOD MULCH. MATCH EXISTING COLOR.

KEY NOTES:

- MATCH EXISTING PAVEMENT.
- CONCRETE CURB PER DETAIL 2.01, SHEET C7.1.
- SIDEWALK PER DETAIL 2.02, SHEET C7.1.
- EDGE OF CONCRETE SLAB TO BE THICKENED CONCRETE PER STOOPWALK EDGE DETAIL 2.04, SHEET C7.1.
- CONCRETE PAVEMENT PER CONCRETE PAVEMENT DETAILS 2.03 & 2.05, SHEET C7.1.
- REMOTE COOLER LOCATION, COOLER TO BE INSTALLED ON 4" THICK CONCRETE PAD WITH THICKENED EDGE PER STRUCTURAL PLANS.
- BUILDING CANOPY OUTLINE.
- CANOPY COLUMNS LOCATIONS, TYPICAL.
- BUILDING FOUNDATION WALL AND FOOTING PER STRUCTURAL PLANS. REFER TO DETAIL 2.07, SHEET C7.1 FOR FOUNDATION WALL ELEVATION.
- CONCRETE PAVEMENT FOR TRASH ENCLOSURE PER CONCRETE PAVEMENT DETAILS 2.03 & 2.05, SHEET C7.1.
- TRASH ENCLOSURE AND GATE, PER ARCHITECTURAL PLANS.
- 6" PIPE BOLLARD, TYPICAL PER DETAIL 2.09, SHEET C7.1.
- INSTALL CURB TRANSITION PER DETAIL 2.15, SHEET C7.2.
- CONNECT TO EXISTING CURB.
- SIGN, SEE SHEET C6.1.
- ACCESSIBLE PATH FROM PARKING TO BUILDING.
- TYPE 2 ADA CURB RAMP PER DETAIL 2.12, SHEET C7.2.
- TYPE 4 ADA CURB RAMP PER DETAIL 2.14, SHEET C7.2.
- BICYCLE RACK PER DETAIL 2.17, SHEET C7.2.
- SNOW STACK AREA PER DETAIL 4.09 SHEET C7.1.
- FROST PROOF SLAB PER DETAIL 9 SHEET S2.1.
- EXISTING CURB, DO NOT DISTURB.
- 5 FOOT BUILDING SETBACK LINE.
- 10 FOOT BUILDING SETBACK LINE.
- DIMENSION FROM PROPERTY LINE TO NEAREST BUILDING STRUCTURE.
- NYSDOT CONCRETE DRIVEWAY(608.0101) PER DETAILS 2.20 AND 2.21 SHEET C7.4.
- NYSDOT ASPHALT PAVEMENT(404.0963) PER DETAILS 2.22 SHEET C7.4.
- NYSDOT 6" CONCRETE SIDEWALK THROUGH DRIVEWAY(608.0101). PER DETAIL 2.25 SHEET C7.4. SIDEWALK AND DRIVEWAY SHALL BE SCORED SEPARATE TO ENSURE THAT THE SIDEWALK IS DISTINCT FROM THE DRIVEWAY APRON.
- NYSDOT GRANITE CURB(609.0212) PER DETAIL 2.23 SHEET C7.4.
- NYSDOT 4" CONCRETE SIDEWALK(608.0101) PER DETAIL 2.25 SHEET C7.4.
- NYSDOT LAWN RESTORATION: INSTALL TURF(610.1601) PER DETAIL 2.27 SHEET C7.4.
- INSTALL 90 L.F. OF NYSDOT GRANITE DROP CURB WITH 1" REVEAL PER DETAILS 2.23 AND 2.24 SHEET C7.4.
- INSTALL NYSDOT GRANITE CURB TRANSITION PER DETAIL 2.24, SHEET C7.4.
- INSTALL DROP CURB PER DETAIL 4.09 SHEET C7.1.

PROPOSED USE:

RESTAURANT WITH DRIVE THRU.

ZONING:

ZONING: C-COMMERCIAL.

PARKING REQUIREMENTS:

1 SPACE PER EMPLOYEE DURING LARGEST SHIFT = 6 STALLS.
PROVIDED = 9 STALLS, 8 STANDARD AND 1 ADA.
1 BICYCLE / 10 PARKING SPACES REQUIRED
@ 12 PARKING SPACES = 2 BICYCLE PARKING SPACES

STORMWATER NOTES:

PRE-PROJECT IMPERVIOUS AREA = 40,092 S.F.
PRE-PROJECT PERVIOUS AREA = 1,908 S.F.
TOTAL = 42,000 S.F.
POST-PROJECT IMPERVIOUS AREA = 24,855 S.F.
POST-PROJECT PERVIOUS AREA = 17,145 S.F.
TOTAL = 42,000 S.F.
PRE-PROJECT IMPERVIOUS PERCENTAGE = 95%
POST-PROJECT IMPERVIOUS PERCENTAGE = 59%
PROPOSED REDUCTION = 36%

NOTE:
CALCULATIONS PROVIDED FOR IMPERVIOUS SURFACE LIMITS ARE THE PROPOSED PROPERTY LINES.

BUILDING AND LOT DATA:

PROJECT FOOTPRINT 42,000 S.F. = 0.96 ACRES
PROPOSED BUILDING (1 STORY) - RETAIL = 510 S.F.
REMOTE COOLER = 410 S.F.
CONSTRUCTION TYPE: V-B

QUANTITIES

CONCRETE CURB: 1,075 L.F.
ASPHALT PAVEMENT: 18,155 S.F.
6" CONCRETE PAVEMENT: 1,740 S.F.
4" CONCRETE SIDEWALK: 1,460 S.F.
TURF GRASS SOD: 4,855 S.F.
LANDSCAPING ROCK: 505 S.F.
LANDSCAPE MULCH: 4,475 S.F.
LAWN RESTORATION: 1,395 S.F.
SNOW STACK AREA: 5,235 S.F.

NYSDOT QUANTITIES

GRANITE CURB(609.0212): 205 L.F.
ASPHALT PAVEMENT(404.0963): 145 S.F.
CONCRETE PAVEMENT(608.0101): 630 S.F.
CONCRETE SIDEWALK(608.0101): 395 S.F.
TURF(610.1601): 245 S.F.



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JOHN W. KELLY III - ENGINEER
PER 084736
ENGINEER OF RECORD:
NAME: JOHN W. KELLY III
LICENSE NO. 084736

PROJECT NUMBER:
91 164

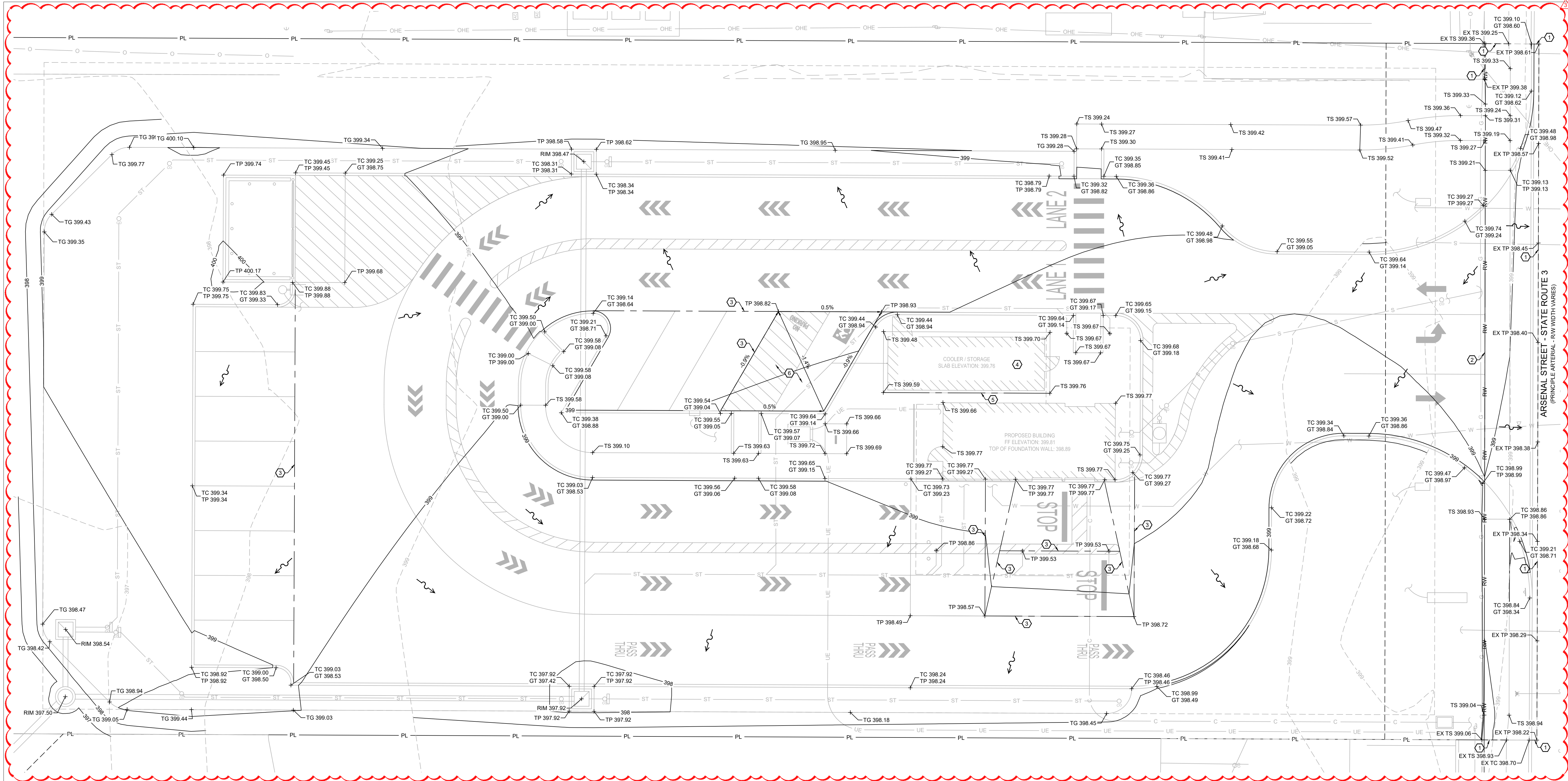
REVISION:
07-02-2025 PLANNING COMMISSION
08-14-2025 CITY REVIEW COMMENTS

7 BREW COFFEE
WATERTOWN, NY

1068 ARSENAL STREET,
WATERTOWN, NY 13601

C2.1
SITE PLAN

DATE: MAY 29, 2025



KEY NOTES:

- ① MATCH EXISTING ELEVATION.
- ② HIGH POINT IN PAVEMENT.
- ③ CENTERLINE OF GRADE BREAK IN PAVEMENT.
- ④ PROPOSED REMOTE COOLER.
- ⑤ PROVIDE POSITIVE DRAINAGE IN BETWEEN BUILDING AND REMOTE COOLER.
- ⑥ ADA PARKING AREA NOT TO EXCEED 2% SLOPES IN ALL DIRECTIONS.
- ⑦ OMITTED.

ABBREVIATIONS

BC	BACK OF CURB	PVC	POLYVINYL CHLORIDE PIPE
CC	STANDARD CATCH CURB	R/W	RIGHT-OF-WAY
CL	CENTER LINE	RCP	REINFORCED CONCRETE PIPE
CMP	CORRUGATED METAL PIPE	SC	SPILL CURB
EP	EDGE OF PAVEMENT	TB	TOP OF BASE ROCK
FES	FLARED END SECTION	TC	TOP OF CURB
FL	FLOW LINE	TG	TOP OF GROUND
GT	GUTTER INVERT	TP	TOP OF PAVEMENT
GY	GUY WIRE	TS	TOP OF SIDEWALK
HDPE	HIGH DENSITY POLYETHYLENE	TW	TOP OF WALL
INV	INVERT	EX TP	EXISTING TOP OF PAVEMENT
LF	LINEAR FEET	EX TS	EXISTING TOP OF SIDEWALK
MC	MOUNTABLE CURB		DIRECTION OF SHEET FLOW



0 5 10
H. SCALE: 1" = 10'



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EXPIRES: 06/30/2026



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PE# 084736
ENGINEER OF RECORD:
NAME: JOHN W. KELLY III
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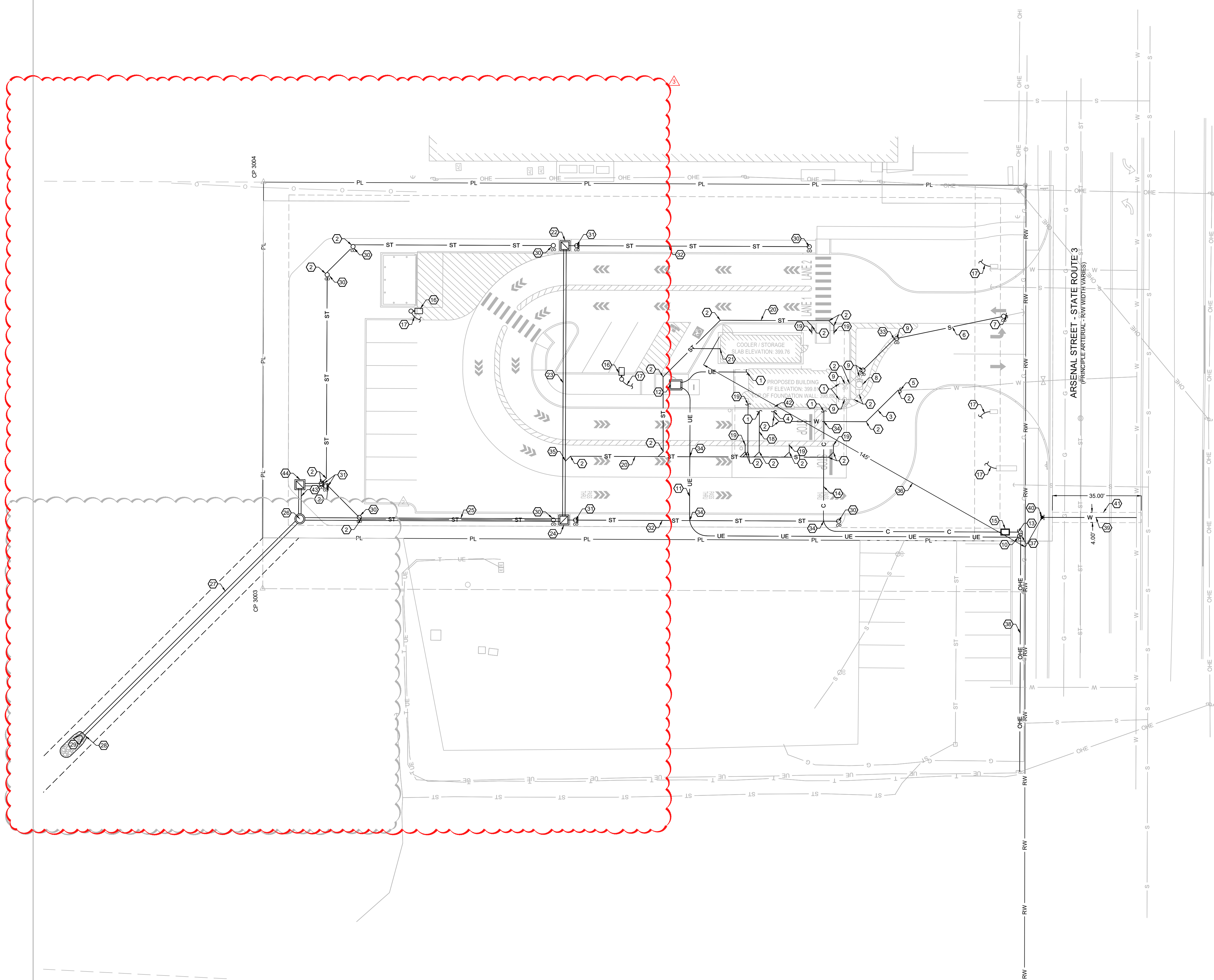
PROJECT NUMBER:
91 164
REVISION:
③ 08-14-2025 CITY REVIEW COMMENTS

7 BREW COFFEE
WATERTOWN, NY

1068 ARSENAL STREET,
WATERTOWN, NY 13601

C3.1
GRADING PLAN

DATE: MAY 29, 2025



- KEY NOTES:**
- CONTINUATION OF UTILITY TO BUILDING.
 - INSTALL 45° BEND, TYPICAL.
 - INSTALL 60 L.F. ± OF 1" SCH. 80 PVC WATER LINE FROM EXISTING WATER SERVICE LINE TO BUILDING PER PIPE INSTALLATION DETAIL 4.01, SHEET C7.2.
 - WATER METER AND BACKFLOW TO BE INSIDE BUILDING. COORDINATE WITH THE CITY OF WATERTOWN WATER DEPARTMENT. SEE MEP PLANS FOR THE COORDINATED LOCATION AND DETAIL.
 - CONNECTION OF WATER SERVICE TO BE COORDINATED WITH WATER PROVIDER.
 - INSTALL 60 L.F. ± OF 4" SCH. 40 PVC SANITARY SEWER SERVICE AT A MINIMUM SLOPE OF 1.00% PER PIPE INSTALLATION DETAIL 4.01, SHEET C7.2.
 - CONTRACTOR TO CONNECT 4" SCH. 40 PVC SANITARY SEWER SERVICE LINE TO EXISTING SEWER LINE. INSTALL SEWER LATERAL CLEAN OUT AT CONNECTION PER DETAIL 4.02, SHEET C7.2. CONTRACTOR TO VERIFY DEPTH AND LOCATION OF SEWER LINE TO ENSURE NO CONFLICT PRIOR TO CONSTRUCTION. COORDINATE CONNECTION WITH SEWER UTILITY PROVIDER. APPROX. I.E. 393.95
 - 125 GALLON SCHIER 68-75 GREASE INTERCEPTOR WITH PEDESTRIAN OR H-20 RATED CAST IRON COVER, PER MEP PLANS.
 - SEWER LATERAL CLEAN OUT PER DETAIL 4.02, SHEET C7.2.
 - ROUTING OF PROPOSED ELECTRIC UTILITY AND POINT OF CONNECTION SHOWN IS APPROXIMATE. CONTRACTOR TO COORDINATE WITH ELECTRIC UTILITY PROVIDER TO DETERMINE FINAL LOCATION PRIOR TO INSTALLATION OF ELECTRIC SERVICE LINE.
 - BURIED ELECTRIC LINE. SEE MEP PLANS.
 - PAD MOUNTED TRANSFORMER. SEE MEP PLANS. COORDINATE WITH ELECTRIC UTILITY PROVIDER.
 - ROUTING OF PROPOSED COMMUNICATION UTILITY AND POINT OF CONNECTION SHOWN IS APPROXIMATE. CONTRACTOR TO COORDINATE WITH COMMUNICATION UTILITY PROVIDER TO DETERMINE FINAL LOCATION PRIOR TO INSTALLATION OF COMMUNICATION SERVICE LINE.
 - (2) 2" COMMUNICATIONS CONDUITS WITH PULLWIRE.
 - COMMUNICATIONS PULL BOX. SEE MEP PLANS. COORDINATE WITH COMMUNICATIONS UTILITY PROVIDER.
 - LIGHT POLE. SEE MEP PLANS.
 - BURIED ELECTRIC LINE FOR SITE LIGHTING AND SIGNAGE. SEE MEP PLANS.
 - INSTALL 20 L.F. ± OF 2.0" DIA. SCH. 40 PVC DISCHARGE LINE FROM SUMP PUMP. TERMINATE DISCHARGE LINE INTO ROOF DRAINAGE SYSTEM.
 - DOWNSPOUT CONNECTION PER DETAIL 4.07, SHEET C7.2. SEE ARCHITECTURAL PLANS.
 - INSTALL 215 L.F. ± 8-INCH HDPE DOWNSPOUT HEADER STORM LINE AT 1% SLOPE. PER PIPE INSTALLATION DETAIL 4.01, SHEET C7.2.
 - 2" PVC WALK IN COOLER DRAIN PIPE. PROVIDE AIR GAP FLUSH TO CONCRETE SLAB FOR WALK IN COOLER DRAIN OUTLET. DOWNSPOUT END TO CONNECT TO ROOF DRAINAGE SYSTEM. PROVIDE POSITIVE FLOW. 1% MINIMUM.
 - 4" x 4" O.D. CONCRETE AREA INLET PER DETAIL 4.05 SHEET C7.2. RIM 398.47, 4" PVC FL IN 397.25 (S), 12" HDPE FL OUT 396.12 (W).
 - INSTALL 105 L.F. ± 12-INCH HDPE STORM LINE AT 1% SLOPE. PER PIPE INSTALLATION DETAIL 4.01, SHEET C7.2.
 - 4" x 4" O.D. CONCRETE AREA INLET PER DETAIL 4.05 SHEET C7.2. RIM 397.92, 12" HDPE FL IN 395.07 (E), 4" PVC FL IN 396.59 (S), 12" HDPE FL OUT 394.87 (N).
 - INSTALL 100 L.F. ± 12-INCH HDPE STORM LINE AT 1% SLOPE. PER PIPE INSTALLATION DETAIL 4.01, SHEET C7.2.
 - NYSDOT JUNCTION PER DRAINAGE STRUCTURE DETAIL 604-02, SHEET C7.3. RIM 397.50, 12" HDPE FL IN 393.87 (S), 12" HDPE FL IN 393.87 (E), 12" HDPE FL OUT 393.87 (NW).
 - INSTALL 120 L.F. ± 15-INCH HDPE STORM LINE AT 0.5% SLOPE. PER PIPE INSTALLATION DETAIL 4.01, SHEET C7.2.
 - FLARED END SECTION PER DETAIL 4.08 SHEET C7.4. INVERT ELEVATION 393.07.
 - INSTALL RIP RAP PER DETAIL 4.04 SHEET C7.2.
 - STORMWATER LATERAL CLEAN OUT PER DETAIL 4.03 SHEET C7.2.
 - 6" x 2" x 1.5" ANTISEEP CONCRETE COLLAR & CLEANOUT PER DETAIL 4.10 SHEET C7.1.
 - SNOW STACK AREA SUBDRAIN 4" PERFORATED PVC PIPE PER DETAIL 4.09 SHEET C7.1.
 - INSTALL 22.5' ± 11.25" BEND.
 - UTILITY CROSSING. CONTRACTOR TO COORDINATE DEPTH IN FIELD.
 - CONNECT 8-INCH DOWNSPOUT HEADER STORM LINE TO 12-INCH HDPE STORM SEWER LINE.
 - DISTANCE TO NEAREST FIRE HYDRANT.
 - APPROXIMATE LOCATION OF PROPOSED POWER POLE. SEE MEP PLANS. COORDINATE WITH ELECTRIC UTILITY PROVIDER.
 - APPROXIMATE LOCATION OF PROPOSED OVERHEAD ELECTRIC LINE. SEE MEP PLANS. COORDINATE WITH ELECTRIC UTILITY PROVIDER.
 - INSTALL 40 L.F. ± OF 6" DUCTILE IRON PIPE PER AWWA C600 SPECIFICATIONS AND DETAIL 4.01 SHEET C7.2.
 - INSTALL FIRE HYDRANT AND VALVE PER DETAIL 4.12 SHEET C7.4.
 - INSTALL NYSDOT ASPHALT PAVEMENT(404.0963) PER DETAILS 2.22 SHEET C7.4.
 - METER AND BACKFLOW LOCATION INSIDE BUILDING.
 - INSTALL 10 L.F. ± 12-INCH HDPE STORM LINE AT 1% SLOPE. PER PIPE INSTALLATION DETAIL 4.01, SHEET C7.2.
 - 4" x 4" O.D. CONCRETE AREA INLET PER DETAIL 4.05 SHEET C7.2. RIM 398.54, 4" PVC FL IN 397.21(S), 4" PVC FL IN 397.21(S), 12" HDPE FL OUT 393.98.

EXISTING UTILITY PROVIDER CONTACT INFORMATION:

- | | |
|-------------|-----------------------------------------------------------------------------------|
| 1. WATER | CITY OF WATERTOWN
245 WASHINGTON STREET
WATERTOWN, NY 13601
315-785-7757 |
| 2. ELECTRIC | NATIONAL GRID
300 ERIE BOULEVARD WEST
SYRACUSE, NY 13202
800-642-4272 |
| 3. SEWER | CITY OF WATERTOWN
245 WASHINGTON STREET
WATERTOWN, NY 13601
315-785-7757 |

WATER UTILITY NOTE

ALL WATER MAIN AND SERVICE WORK MUST BE COORDINATED WITH THE CITY OF WATERTOWN WATER DEPARTMENT. THE WATER DEPARTMENT REQUIREMENTS SUPERSEDE ALL OTHER PLANS AND SPECIFICATIONS PROVIDED.



0 10 20
H. SCALE: 1" = 20'
Outside New York City or Long Island
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JOHN W KELLY PE ENGINEERING D.P.C.
1070 W. SYCAMORE ST
SPRINGFIELD, MO 65810
Ph: 417-888-0645 Fax: 417-888-0657
COAR 0117476
EXPIRES: 06/30/2026



JOHN W. KELLY III - ENGINEER
PE# 084736
ENGINEER OF RECORD:
NAME: JOHN W. KELLY III
LICENSE NO. 084736

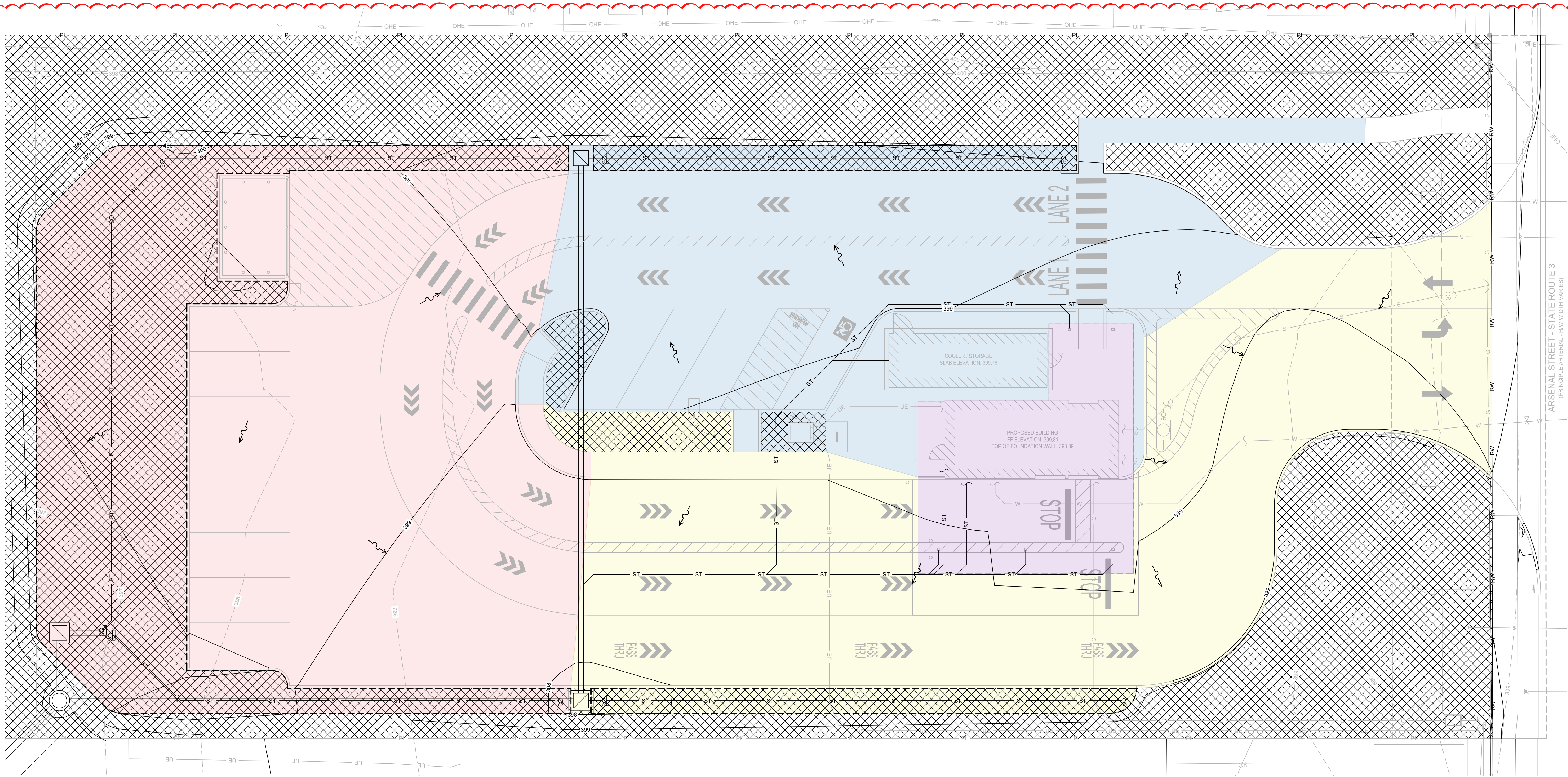
PROJECT NUMBER:
91 164

REVISION:
07-02-2025 PLANNING COMMISSION
08-14-2025 CITY REVIEW COMMENTS

7 BREW COFFEE
WATERTOWN, NY
1068 ARSENAL STREET,
WATERTOWN, NY 13601

C4.1
UTILITY PLAN

DATE: MAY 29, 2025



HATCH LEGEND:

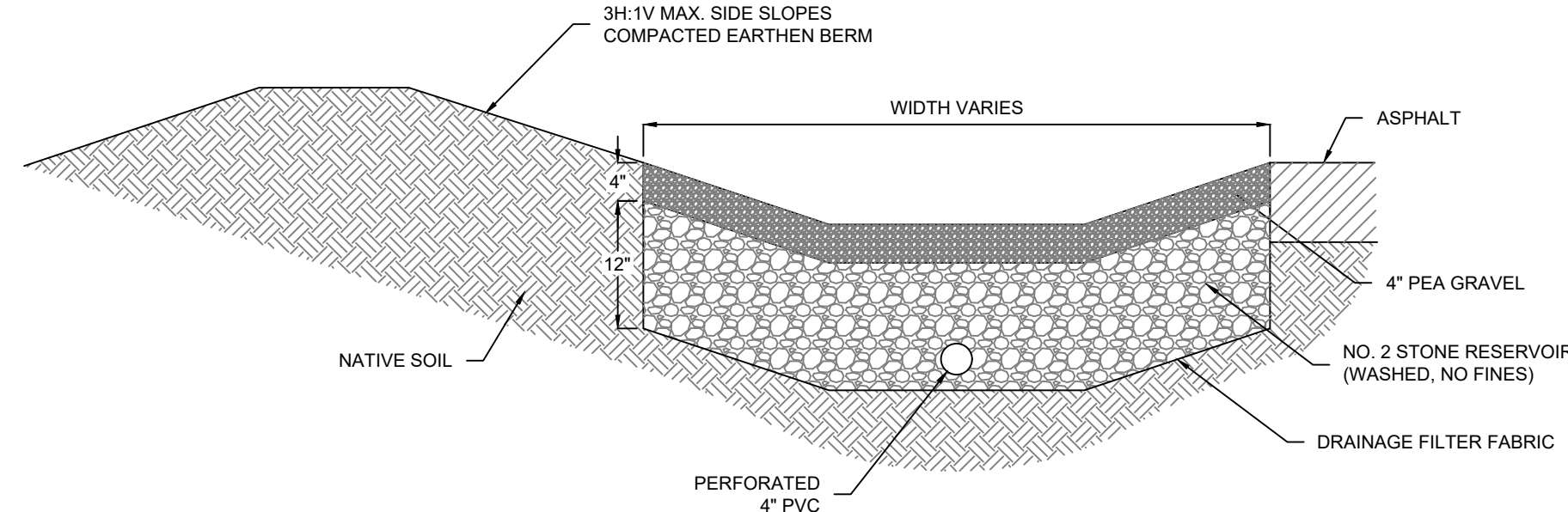
- = PERVIOUS AREA
- = PROPOSED DRAINAGE AREA 1:
IMPERVIOUS AREA: 0.180 ACRES
PERVIOUS AREA: 0.019 ACRES
TOTAL AREA: 0.199 ACRES
- = PROPOSED DRAINAGE AREA 2:
IMPERVIOUS AREA: 0.170 ACRES
PERVIOUS AREA: 0.097 ACRES
TOTAL AREA: 0.267 ACRES
- = PROPOSED DRAINAGE AREA 3:
IMPERVIOUS AREA: 0.145 ACRES
PERVIOUS AREA: 0.016 ACRES
TOTAL AREA: 0.161 ACRES
- = PROPOSED DRAINAGE AREA 4:
IMPERVIOUS AREA: 0.040 ACRES
PERVIOUS AREA: 0.000 ACRES
TOTAL AREA: 0.040 ACRES

SYMBOLS

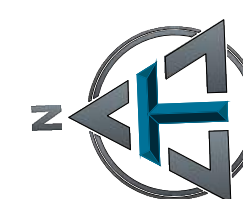
DIRECTION OF SHEET FLOW

INFILTRATION TRENCH VOLUME CALCULATION SUMMARY				
AREA ID	SURFACE AREA (SF)	CELL DEPTH (FT)	INFILTRATION MEDIA VOLUME (CF)	VOID SPACE INFILTRATION VOLUME* (CF)
AREA 1	538	1	538	215
AREA 2	4221	1	4221	1688
AREA 3	481	1	481	192
			TOTAL	2095

* n = 40% POROSITY FOR INFILTRATION MEDIA.



4.04 INFILTRATION TRENCH TYPICAL SECTION DETAIL
SCALE: NONE



0 5 10
H. SCALE: 1" = 10'



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SPRINGFIELD, MO 65810
Ph: 417-888-0645 Fax: 417-888-0657

COA# 017476
EXPIRES: 06/30/2026



JOHN W. KELLY III - ENGINEER
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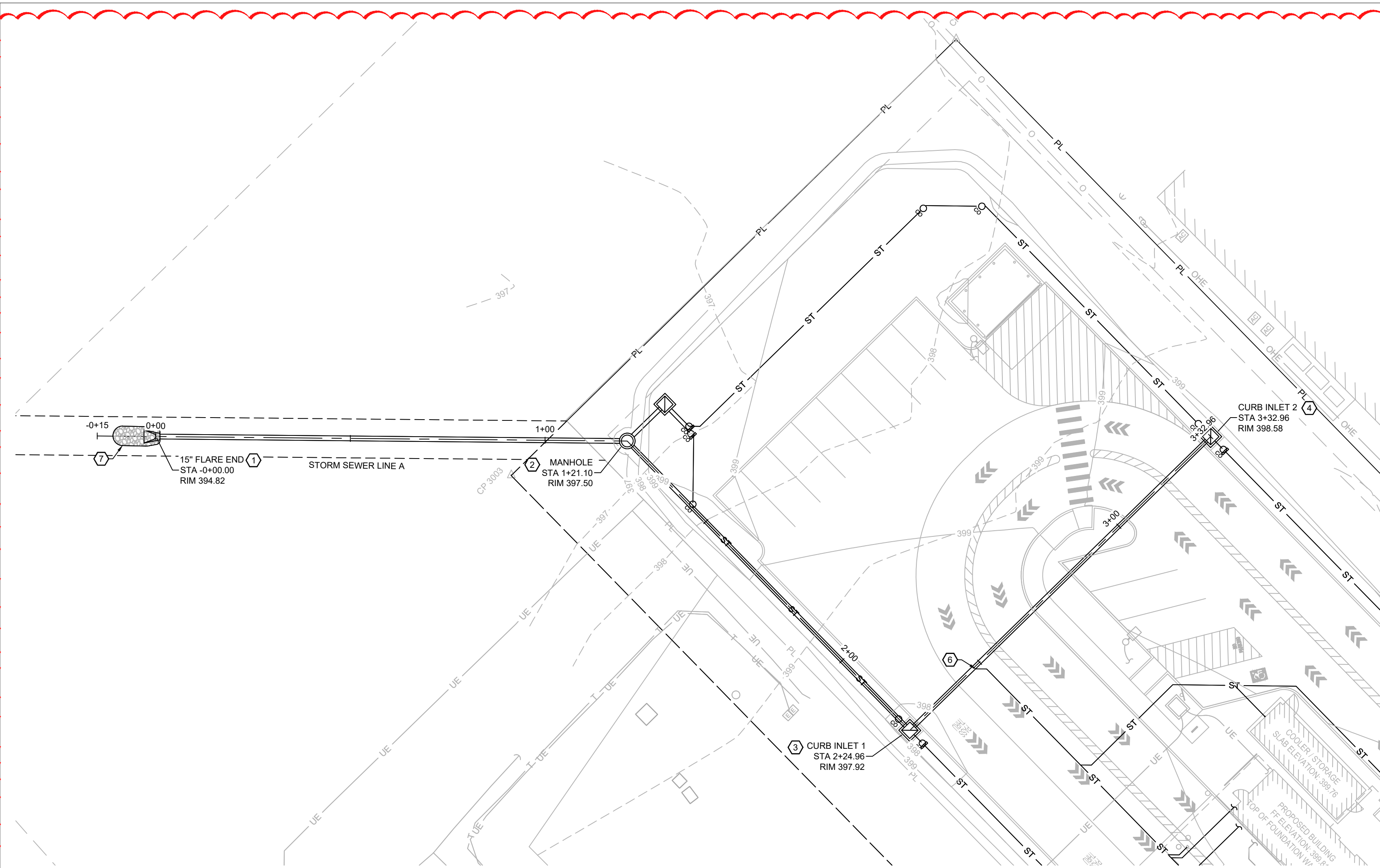
PROJECT NUMBER:
91 164
REVISION:
08-15-2025 CITY REVIEW COMMENTS

7 BREW COFFEE
WATERTOWN, NY

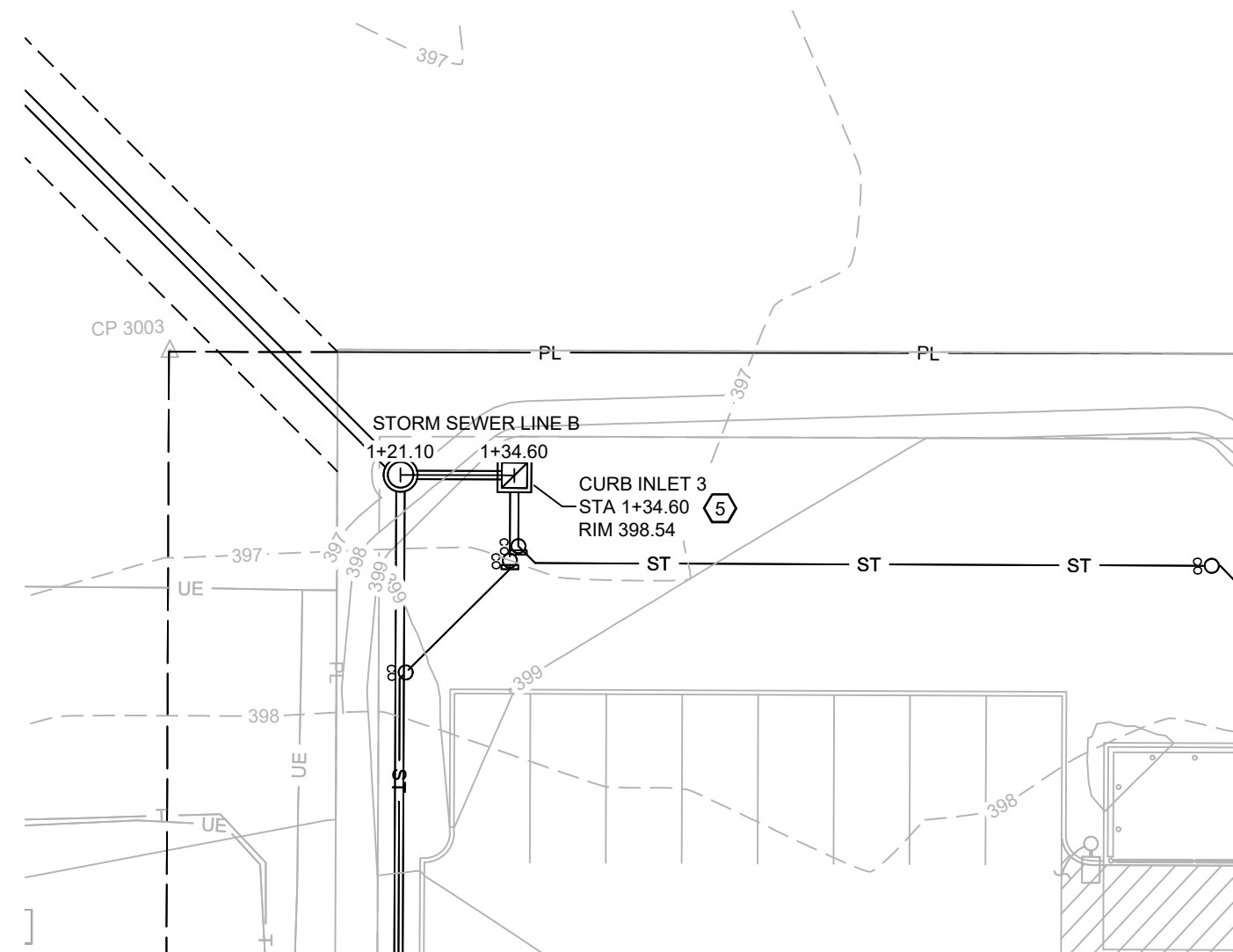
1068 ARSENAL STREET,
WATERTOWN, NY 13601

C4.2
DRAINAGE PLAN

DATE: MAY 29, 2025



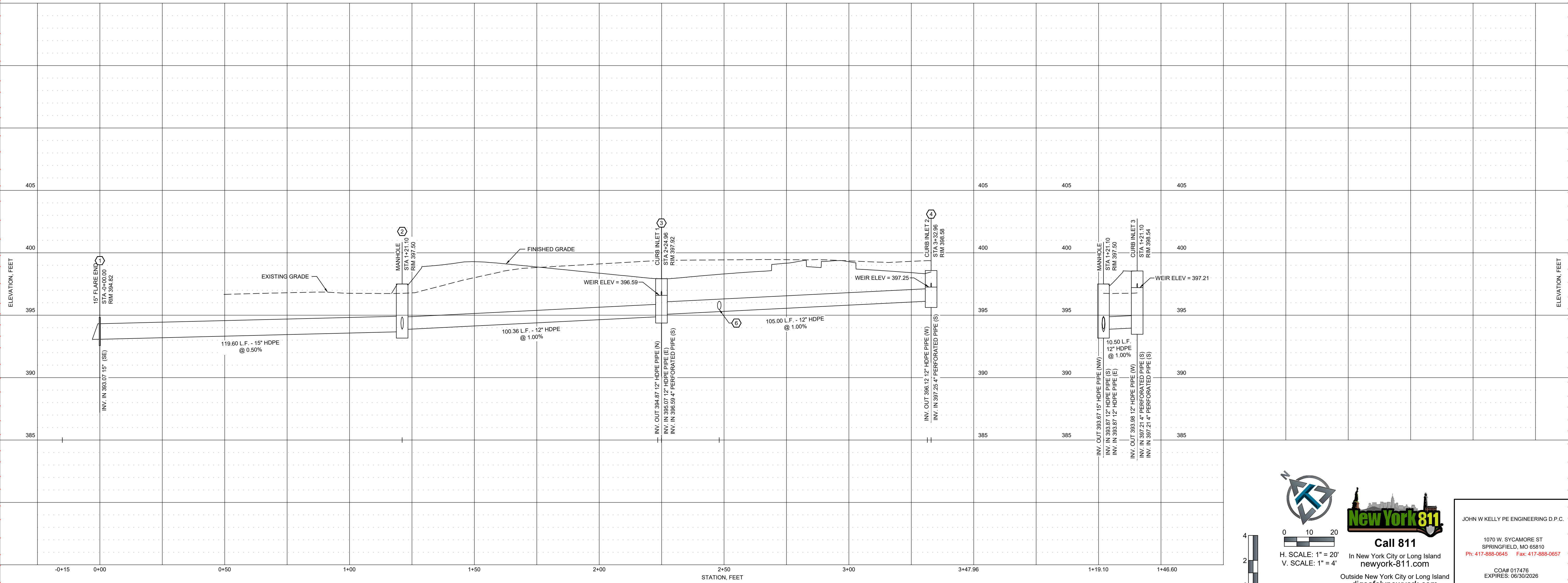
STORM SEWER LINE A - STATION 0+00.00 TO 3+32.96



STORM SEWER LINE B - STATION 1+21.10 TO 1+34.60

KEY NOTES:

- 15" FLARE END PER DETAIL 4.08 SHEET C7.3.
- MANHOLE PER NYSDOT DETAIL 4.09 SHEET C7.3.
- 4'X4' O.D. CONCRETE AREA INLET PER DETAIL 4.05 SHEET C7.2.
- 4'X4' O.D. CONCRETE AREA INLET PER DETAIL 4.05 SHEET C7.2.
- 4'X4' O.D. CONCRETE AREA INLET PER DETAIL 4.05 SHEET C7.2.
- 8"X12" DOWNSPOUT WYE.
- INSTALL RIP RAP PER DETAIL 4.04 SHEET C7.2.
- STORM STRUCTURE INTERNAL PLATE, SEE DETAIL 4.05 SHEET C7.2.



H. SCALE: 1" = 20'
V. SCALE: 1" = 4'



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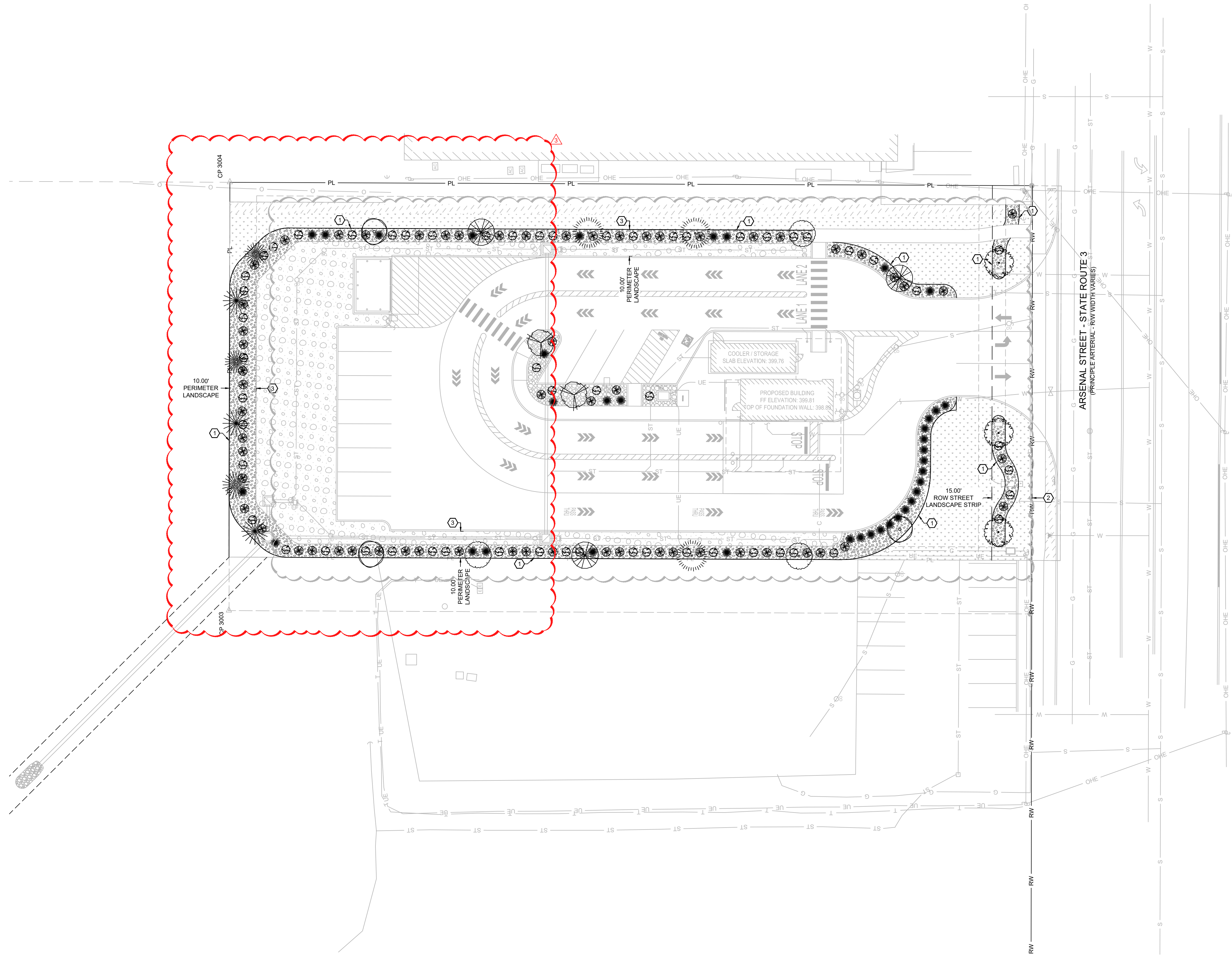
PROJECT NUMBER:
91 164
REVISION:
3 08-14-2025 CITY REVIEW COMMENTS

7 BREW COFFEE
WATERTOWN, NY
1068 ARSENAL STREET,
WATERTOWN, NY 13601

C4.3

STORM PLAN AND PROFILE

DATE: MAY 29, 2025



LANDSCAPING REQUIREMENTS:

15 FOOT STREET LANDSCAPING STRIP
ALONG PUBLIC RIGHT OF WAY:
SHRUBS OR GROUND COVER
= 8 SHRUB
104 L.F. @ 1 SHADE TREE / 40 L.F. OF ROW LINE
= 3 SHADE TREES

SCREENING OF VEHICLE USE AREA (VUA)
ALONG PUBLIC RIGHT OF WAY:
CONTINUOUS EVERGREEN SCREENING
EVERGREEN SHRUBS
= NO MIN REQ.
= 18 EVERGREEN SHRUBS

ALONG WEST PROPERTY LINE:
220 L.F. @ 1 SHADE TREE / 40 L.F.
SHRUB SCREENING
= 6 SHADE TREES
= 60 SHRUBS

ALONG NORTH PROPERTY LINE:
105 L.F. @ 1 EVERGREEN TREE / 20 L.F.
SHRUB SCREENING
= 6 EVERGREEN TREES
= 29 SHRUBS

ALONG EAST PROPERTY LINE:
220 L.F. @ 1 SHADE TREE / 40 L.F.
SHRUB SCREENING
= 6 SHADE TREES
= 48 SHRUBS

INTERIOR VUA LANDSCAPING
1 SHADE TREE / 15 PARKING SPACES
SHRUBS OR GROUND COVER
= 2 MEDIUM TREES
= 12 SHRUBS

HATCH LEGEND:

= TURF GRASS SOD
INSTALL TOPSOIL, SEED, & MULCH IN ACCORDANCE
WITH PROJECT SPECIFICATIONS. EXTENTS SHOWN
DO NOT NECESSARILY REFLECT FULL EXTENTS OF
RESTORATION REQUIRED. CONTRACTOR SHALL
RESTORE ALL DISTURBED AREAS.

= LANDSCAPE ROCK
PLACE 6" OF 1"-2" RIVER ROCK OVER
COMMERCIAL GRADE WEED FABRIC.

= SNOW STORAGE AREA
PLACE 4" OF PEA GRAVEL OVER 12" OF #2
ROUND STONE OVER COMMERCIAL GRADE
WEED FABRIC PER DETAIL 2.08 SHEET C7.1.

KEY NOTES:

1. INSTALL HEAVY DUTY METAL
EDGING (MIN 3/16" THICK) TO
SEPARATE LANDSCAPE
PLANTING AREAS FROM
TURF AREAS.

2. 15 FOOT ROW STREET
LANDSCAPE STRIP.

3. 10 FOOT PERIMETER
LANDSCAPE.

= LAWN RESTORATION.
INSTALL TOPSOIL, SEED, & MULCH IN ACCORDANCE
WITH PROJECT SPECIFICATIONS. EXTENTS SHOWN
DO NOT NECESSARILY REFLECT FULL EXTENTS OF
RESTORATION REQUIRED. CONTRACTOR SHALL
RESTORE ALL DISTURBED AREAS.

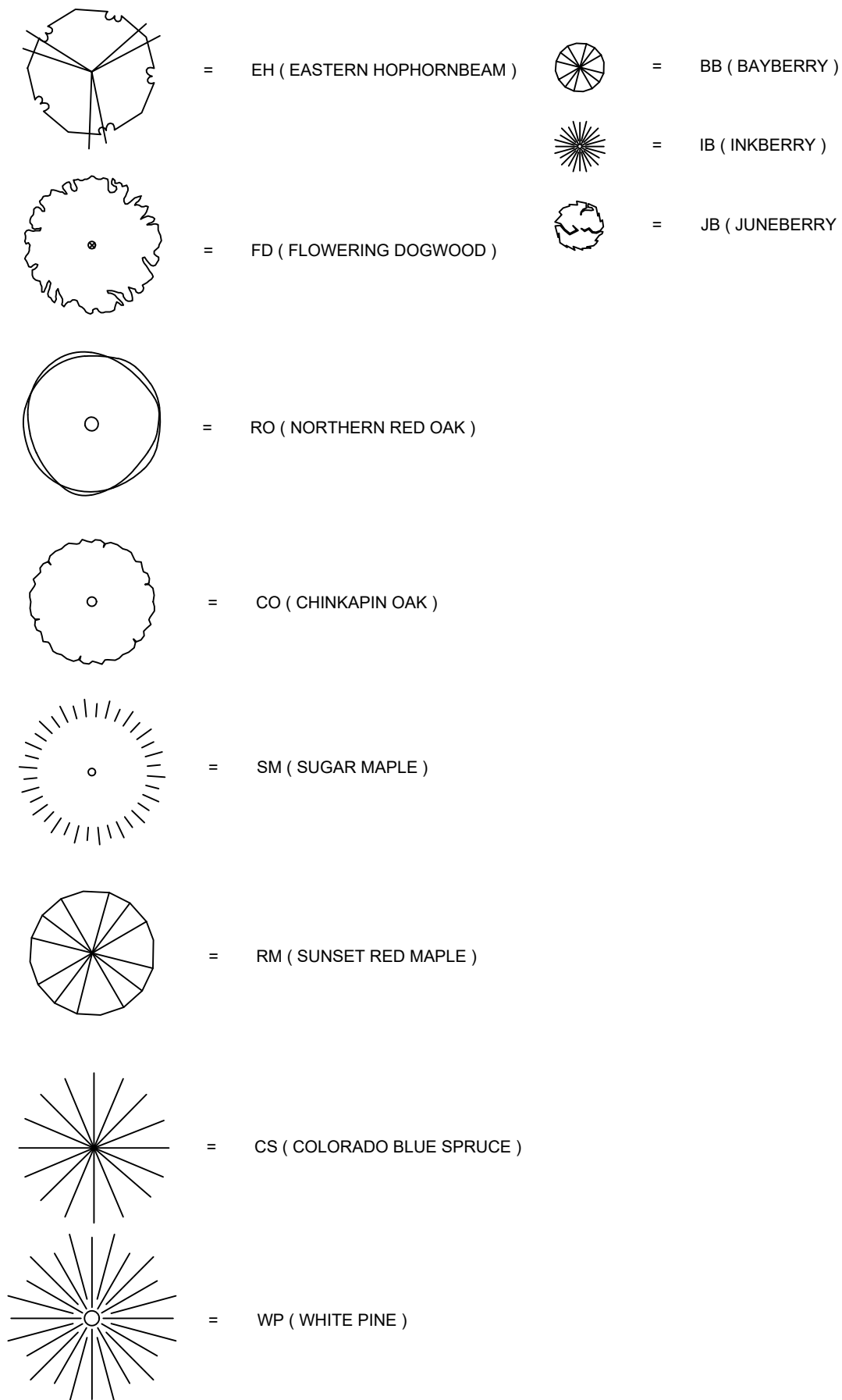
= LANDSCAPE MULCH.
SMOOTH SOIL SHALL BE COVERED BY WEED FABRIC
AND TOPPED WITH 3 TO 4-INCH LAYER OF
SHREDDED HARDWOOD MULCH, MATCH EXISTING
COLOR.

PLANTING LIST					
TYPE	COMMON NAME (SCIENTIFIC NAME)	QUANTITY REQUIRED	QUANTITY PROVIDED	CONDITION AND SIZE	APPROXIMATE MATURE SIZE (HT x SP)
CANOPY TREES					
RO	NORTHERN RED OAK (QUERCUS RUBRA)	3	3	3" CAL. B&B	50'X40'
SM	SUGAR MAPLE (ACER SACCHARUM)	3	3	3" CAL. B&B	50'X40'
CO	CHINKAPIN OAK (QUERCUS MUEHLENBERGII)	3	3	3" CAL. B&B	50'X40'
RM	SUNSET RED MAPLE (ACER RUBRUM)	3	3	3" CAL. B&B	50'X40'
FLOWERING TREES					
EH	EASTERN HOPHORNBEAM (OSTRYA VIRGINIANA)	2	2	3" CAL. B&B	25'X20'
FD	FLOWERING DOGWOOD (CORNUS FLORIDA)	3	3	3" CAL. B&B	25'X20'
EVERGREEN TREES					
WP	WHITE PINE (PINUS STROBUS)	3	3	3" CAL. B&B	50'X30'
CS	COLORADO BLUE SPRUCE (PICEA PUNGENS)	3	3	3" CAL. B&B	50'X30'
SHRUBS					
BB	BAYBERRY (MORELLA CAROLINIENSIS)	58	58	18" MIN.	30" MIN.
IB	INKBERRY (ILEX GLABRA)	37	37	18" MIN.	30" MIN.
JB	JUNEBERRY (AMELANCHIER CANADENSIS)	53	53	18" MIN.	30" MIN.

GENERAL LANDSCAPING NOTES

- CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UTILITY LINES AND OTHER ABOVE OR BELOW GROUND OBSTRUCTIONS SO THAT PROPER PRECAUTIONS SHALL BE TAKEN NOT TO DISTURB OR DAMAGE SUCH IMPROVEMENTS. REFER TO CIVIL DRAWINGS FOR PROPOSED AND EXISTING UTILITY LOCATIONS.
- STANDARDS SET FORTH IN "AMERICAN STANDARDS FOR NURSERY STOCK" REPRESENT GENERAL GUIDELINE SPECIFICATIONS ONLY AND WILL CONSTITUTE MIN. QUALITY REQUIREMENTS FOR PLANT MATERIAL.
- THE ARCHITECT OR OWNER'S REPRESENTATIVE RESERVES THE RIGHT TO REJECT ANY PLANT MATERIAL NOT MEETING SPECIFICATIONS.
- ALL TREES SHALL BE CALIPERED AND UNDERSIZED TREES SHALL BE REJECTED.
- SPECIFIED CALIPER MEASUREMENT FOR TREES SHALL BE MEASURED AT 6" ABOVE THE GRADE.
- ANY MATERIAL WHICH DIES OR DEFOLIATES PRIOR TO ACCEPTANCE OF THE WORK SHALL BE PROMPTLY REMOVED AND REPLACED.
- CONTRACTOR IS RESPONSIBLE FOR SOIL SAMPLING AND TESTING TO DETERMINE EXACT FERTILIZER REQS.
- PLANTS AND OTHER MATERIALS ARE QUANTIFIED AND SUMMARIZED FOR THE CONVENIENCE OF THE CITY AND LOCAL GOVERNING BODIES. CONFIRM AND INSTALL SUFFICIENT QUANTITIES TO COMPLETE THE WORK AS DRAWN.
- BACKFILL TREE AND SHRUB PITS WITH A PREPARED PLANTING MIX AS FOLLOWS U.N.O.:
 - 2 PARTS BY VOLUME TOPSOIL.
 - 1 PART BY VOLUME BROWN RIVER SAND.
 - 1 PART BY VOLUME PEAT MOSS.
 - 1 LB. COMMERCIAL FERTILIZER PER C.Y. OF MIX.
- ALL TREE PITS SHALL RECEIVE A MINIMUM OF 24" OF THE SPECIFIED PLANTING MIX.
- ALL PLANTINGS SHALL BE MULCHED WITH A 3"-4" LAYER OF SHREDDED HARDWOOD MULCH AFTER INSTALLATION OF PLANT MATERIAL.
- ALL SHRUB PLANTING MATERIAL SHALL MEASURE A MIN. OF 18" IN HEIGHT AT THE TIME OF PLANTING.
- THE PLAN IS SUBJECT TO CHANGES BASED ON PLANT SIZE AND MATERIAL AVAILABILITY. ANY DEVIATION TO THE APPROVED FINAL LANDSCAPING PLAN SHALL REQUIRE THE WRITTEN APPROVAL OF THE ARCHITECT PRIOR TO INSTALLATION.
- KILL AND REMOVE ALL EXISTING WEEDS FROM THE SITE AREA PRIOR TO PLANTING.
- REFER TO SITE GRADING PLAN FOR FINISH GRADES.
- THE CONTRACTOR IS RESPONSIBLE FOR COMPLETELY MAINTAINING THE WORK (INCLUDING BUT NOT LIMITED TO: WATERING, MULCHING, SPRAYING, FERTILIZING, ETC.) OF ALL PLANTINGS UNTIL TOTAL ACCEPTANCE OF THE WORK BY THE ARCHITECT AND OWNER.
- CONTRACTOR WILL STAKE OR MARK ALL PLANT MATERIAL LOCATIONS PRIOR TO INSTALLATION. CONTRACTOR SHALL HAVE OWNER'S REPRESENTATIVE APPROVE ALL STAKING PRIOR TO INSTALLATION.
- THE LANDSCAPE CONTRACTOR SHALL COMPLETELY GUARANTEE ALL WORK FOR A PERIOD OF ONE YEAR BEGINNING AT THE DATE OF SUBSTANTIAL COMPLETION. CONTRACTOR SHALL MAKE ALL REPLACEMENTS PROMPTLY (AS PER DIRECTION OF OWNER).
- REFER TO SITE PLAN FOR GROUND COVERING REQUIREMENTS.
- SEEDING AREAS SHALL BE REASONABLY SMOOTH AND FREE FROM STONES, ROOTS, OR OTHER DEBRIS.
- SODDED AREAS SHALL BE INSTALLED PER SUPPLIER'S INSTALLATION INSTRUCTIONS.
- PERMANENT SEEDING SEASON RUNS FROM MARCH 1ST TO JUNE 1ST AND SEPTEMBER 15TH TO NOVEMBER 1ST. SEEDING AND MULCHING MUST BE DONE WHENEVER WORK IS COMPLETE REGARDLESS OF THE SEASON. WHENEVER SEEDING AND MULCH IS INSTALLED OUTSIDE THE PERMANENT SEEDING SEASON, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLANTING AND MULCHING ANY AREAS WHERE GROWTH HAS NOT BECOME ESTABLISHED DURING THE NEXT PERMANENT SEASON.
- IT IS THE CONTRACTORS RESPONSIBILITY TO SUBMIT AND OBTAIN THE REVIEW AND APPROVAL FROM THE LOCAL GOVERNMENT AGENCY THAT HAS JURISDICTION OVER THE LANDSCAPE IMPROVEMENTS INCLUDED IN THIS SET OF DRAWINGS.
- IT IS THE CONTRACTORS RESPONSIBILITY TO SUBMIT AND OBTAIN THE REVIEW AND APPROVAL FROM THE LOCAL GOVERNMENT AGENCY THAT HAS JURISDICTION OVER THE IRRIGATION IMPROVEMENTS INCLUDED IN THIS SET OF DRAWINGS.

PLANTING KEY



0 10 20
H. SCALE: 1" = 20'
In New York City or Long Island
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JOHN W KELLY PE ENGINEERING D.P.C.

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SPRINGFIELD, MO 65810
Ph: 417-888-0645 Fax: 417-888-0657

COAR# 017478
EXPIRES: 06/30/2026



JOHN W. KELLY III - ENGINEER
PE# 084736

ENGINEER OF RECORD:

NAME: JOHN W. KELLY III

LICENSE NO. 084736

PROJECT NUMBER:
91 164

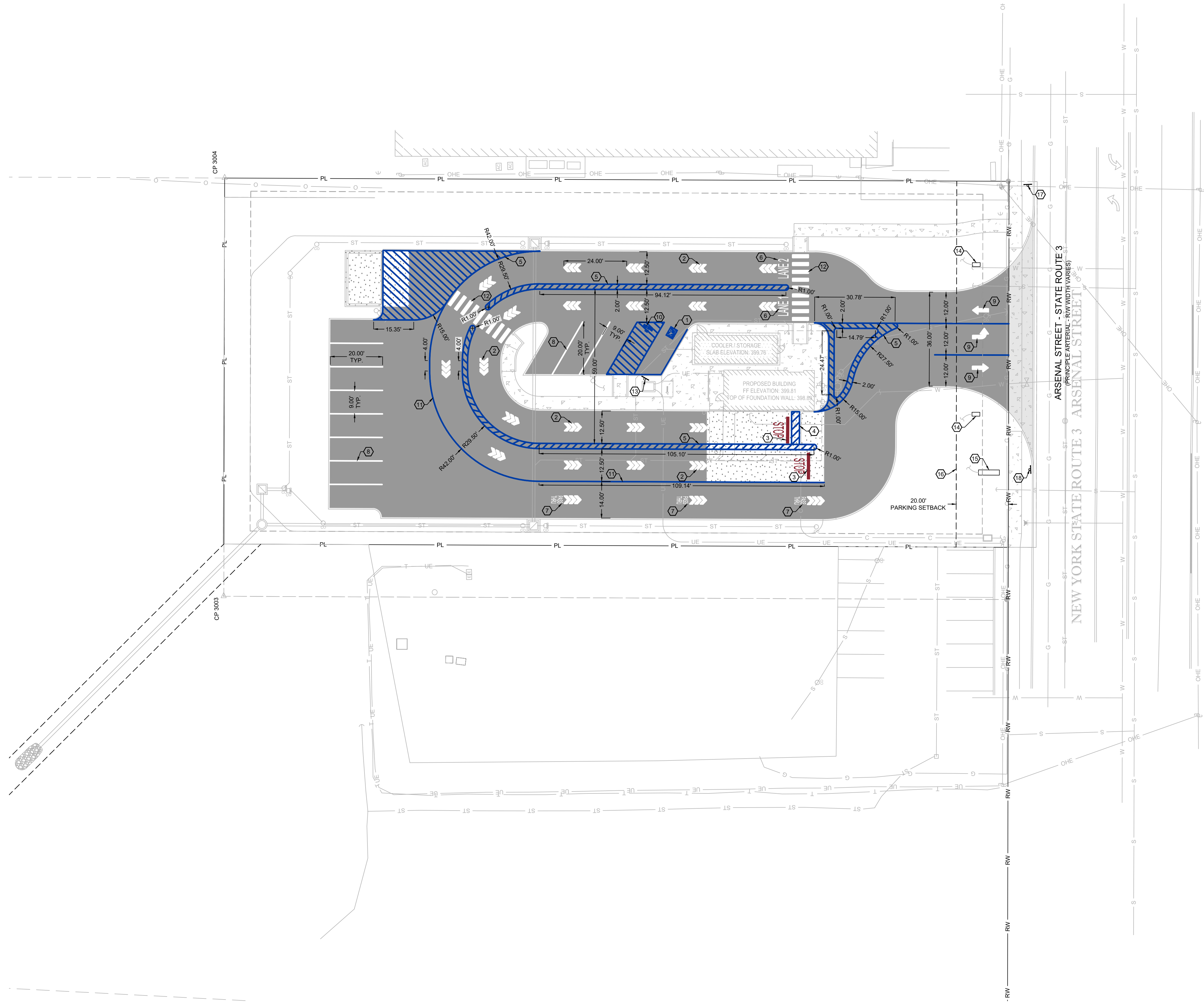
REVISION:
07-02-2025 PLANNING COMMISSION
08-14-2025 CITY REVIEW COMMENTS

7 BREW COFFEE
WATERTOWN, NY

1068 ARSENAL STREET,
WATERTOWN, NY 13601

C5.1
LANDSCAPE PLAN

DATE: MAY 29, 2025

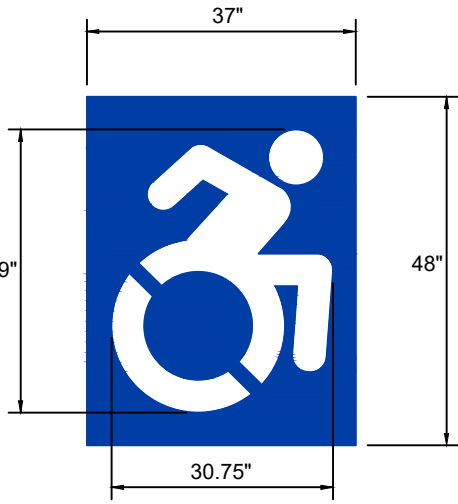


HATCH LEGEND:

- ASPHALT PAVEMENT
PER DETAIL 2.06, SHEET C7.1.
- CONCRETE SIDEWALK
PER SIDEWALK DETAIL 2.02, SHEET C7.1.
- CONCRETE PAVEMENT
PER CONCRETE PAVEMENT DETAIL 2.03 AND 2.05, SHEET C7.1.
- COOLER/STORAGE PAD
PER STRUCTURAL DETAIL 7 SHEET S2.1.
- 6" THICK NYSDOT CONCRETE PAVEMENT
PER NYSDOT CONCRETE PAVEMENT
DETAIL 2.21 SHEET C7.3.

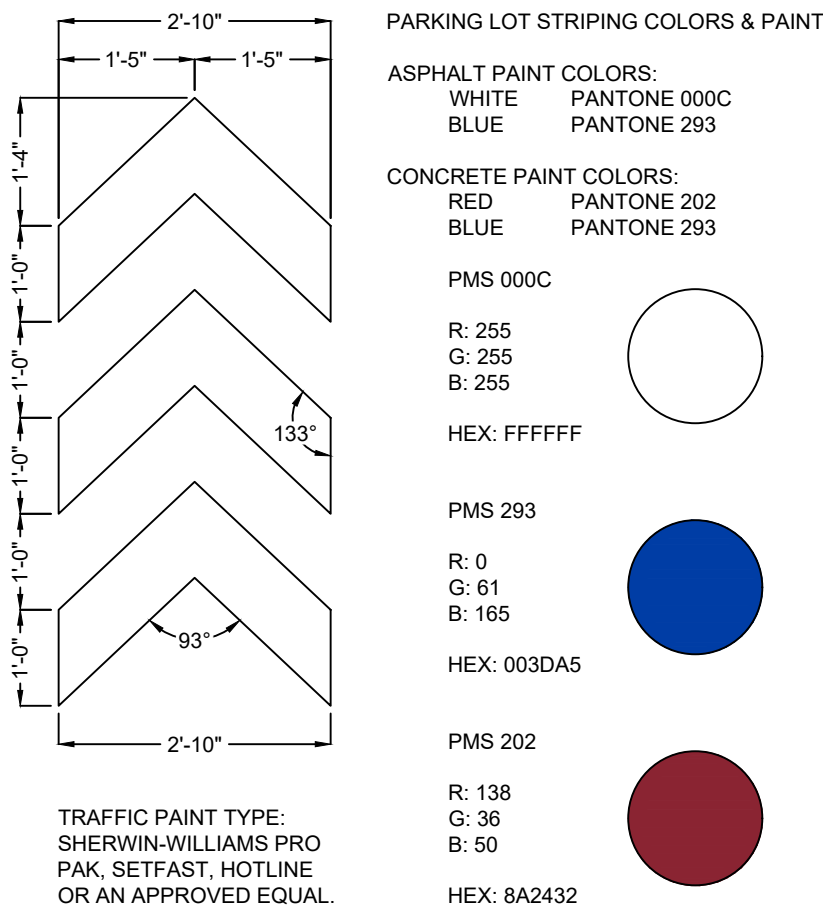
KEY NOTES:

- BLUE PAINTED ADA ACCESSIBLE PARKING SYMBOL PER DETAIL 6.01 THIS SHEET.
- SOLID WHITE TRIPLE ARROW PAVEMENT MARKER, PER DETAIL 6.02 THIS SHEET.
- 12" SOLID RED STOP BAR WITH 48-INCH TALL "STOP" TEXT PAINTED IN RED.
- ALIGN 4" SOLID BLUE CROSS WALK MARKER WITH SLIDING DOOR PANEL AT FRONT OPENING.
- 4-INCH SOLID BLUE PAVEMENT MARKER, TYPICAL. MIDLINES SPACE AT 24" O.C.
- 48-INCH TALL "LANE #" PAINTED IN WHITE.
- 24-INCH TALL "PASS THRU" PAINTED IN WHITE.
- 4-INCH SOLID WHITE PAVEMENT MARKER FOR PARKING, TYPICAL.
- SOLID WHITE DIRECTIONAL ARROW PAVEMENT MARKING.
- "NO PARKING" PAINTED IN ACCESS AISLE, ALL CAPITAL LETTERS < 12-INCH
HEIGHT LETTERS, 2-INCH STROKE.
- 4-INCH SOLID BLUE PAVEMENT MARKER.
- CROSS WALK PAVEMENT MARKING, 12" WIDE BY 6' LONG SOLID WHITE PAINT SPACED EVERY 3'.
ORIENT THE STRIPES IN THE DIRECTION SHOWN PARALLEL TO THE DIRECTION OF TRAFFIC.
- ADA VAN ACCESSIBLE SIGN PER DETAIL 6.03, SHEET C7.1.
- DIRECTIONAL SIGN.
- PYLON SIGN.
- 20 FOOT PARKING SETBACK.
- RELOCATE SPEED LIMIT 30 MPH SIGN, COORDINATE WITH NYSDOT FOR FINAL LOCATION.
INSTALL BASE PER NYSDOT DETAIL SHEET C7.4.
- RELOCATE "NO STANDING ANYTIME" SIGN, COORDINATE WITH NYSDOT FOR FINAL LOCATION.
INSTALL BASE PER NYSDOT DETAIL SHEET C7.4.



DYNAMIC "ACCESSIBILITY SYMBOL"

SCALE: NONE



PARKING LOT STRIPING COLORS & PAINT

SCALE: NONE



0 10 20
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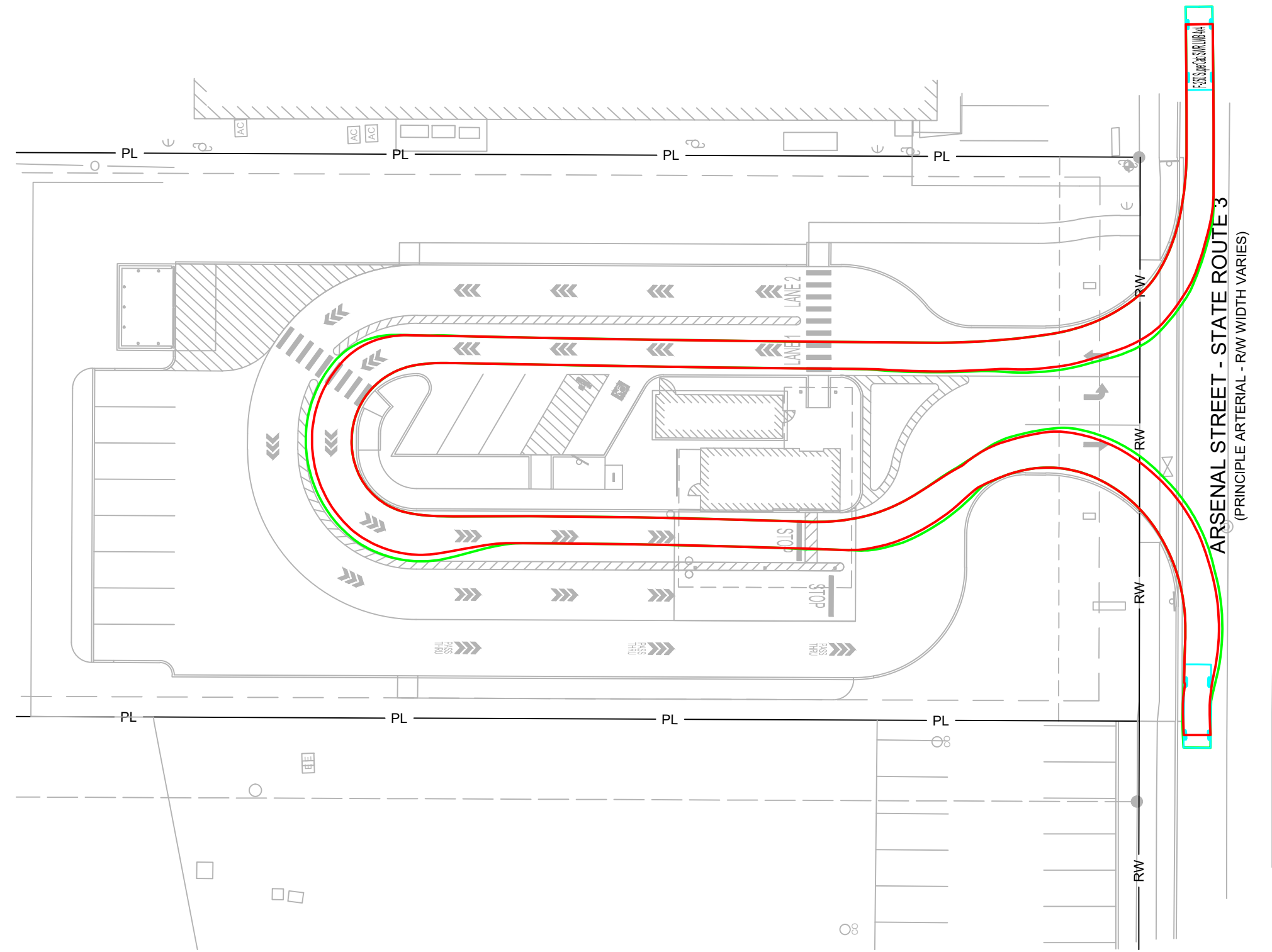
JOHN W. KELLY III - ENGINEER
PE# 084736
ENGINEER OF RECORD:
NAME: JOHN W. KELLY III
LICENSE NO. 084736

PROJECT NUMBER:
91 164
REVISION:
06-10-2025 REVIEW / MINOR CHANGE
08-14-2025 CITY REVIEW COMMENTS

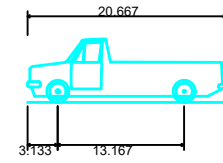
7 BREW COFFEE
WATERTOWN, NY
1068 ARSENAL STREET,
WATERTOWN, NY 13601

C6.1
STRIPING PLAN

DATE: MAY 29, 2025

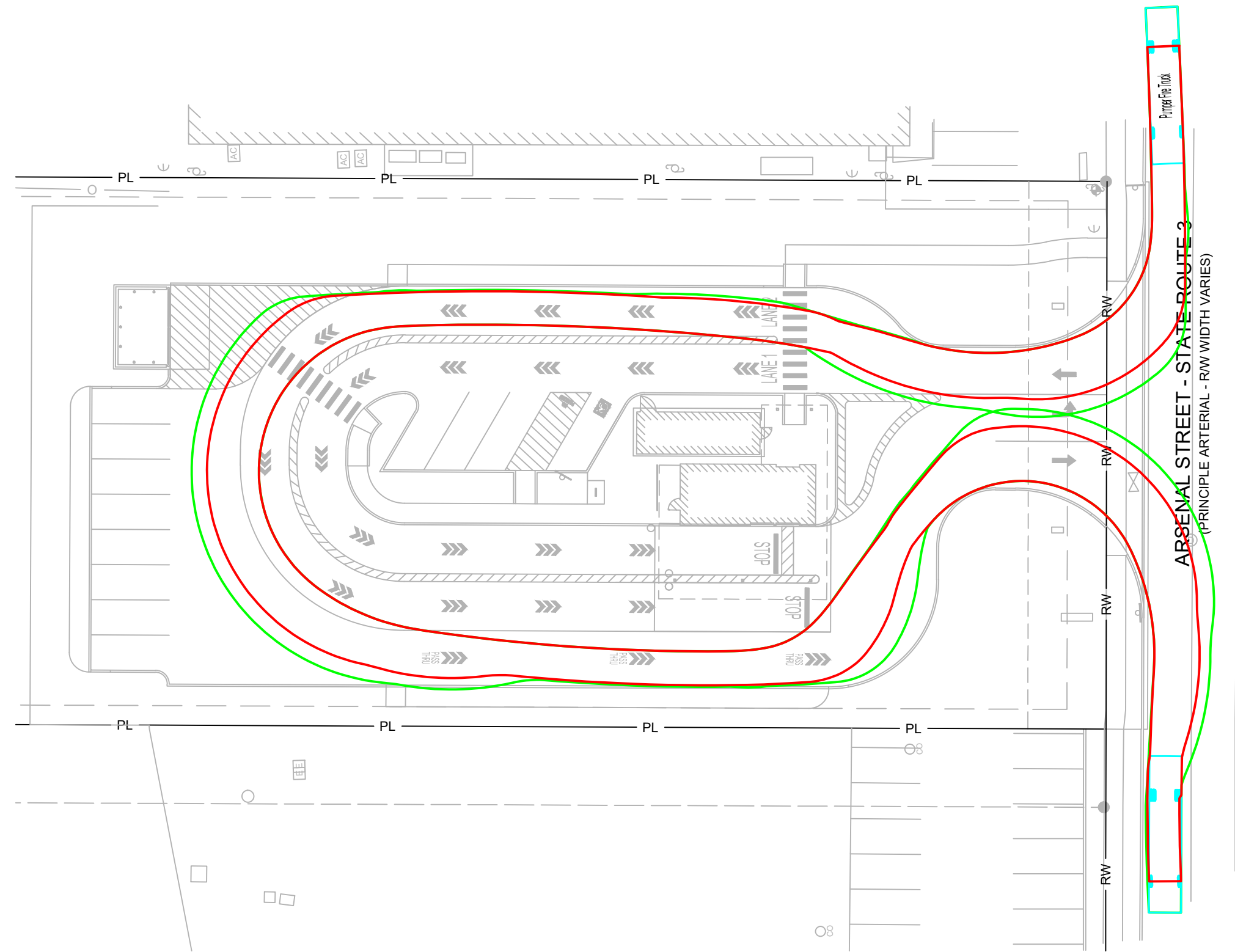


PASSENGER CAR/TRUCK

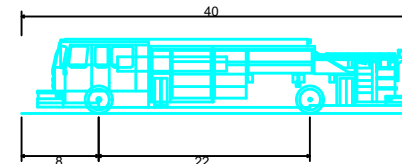


F-250 SuperCab SWR LWB 4x4
Overall Length
Overall Width
Overall Body Height
Min Body Ground Clearance
Track Width
Lock-to-lock time
Curb to Curb Turning Radius

20.667ft
6.658ft
6.617ft
0.656ft
6.658ft
5.00s
26.180ft

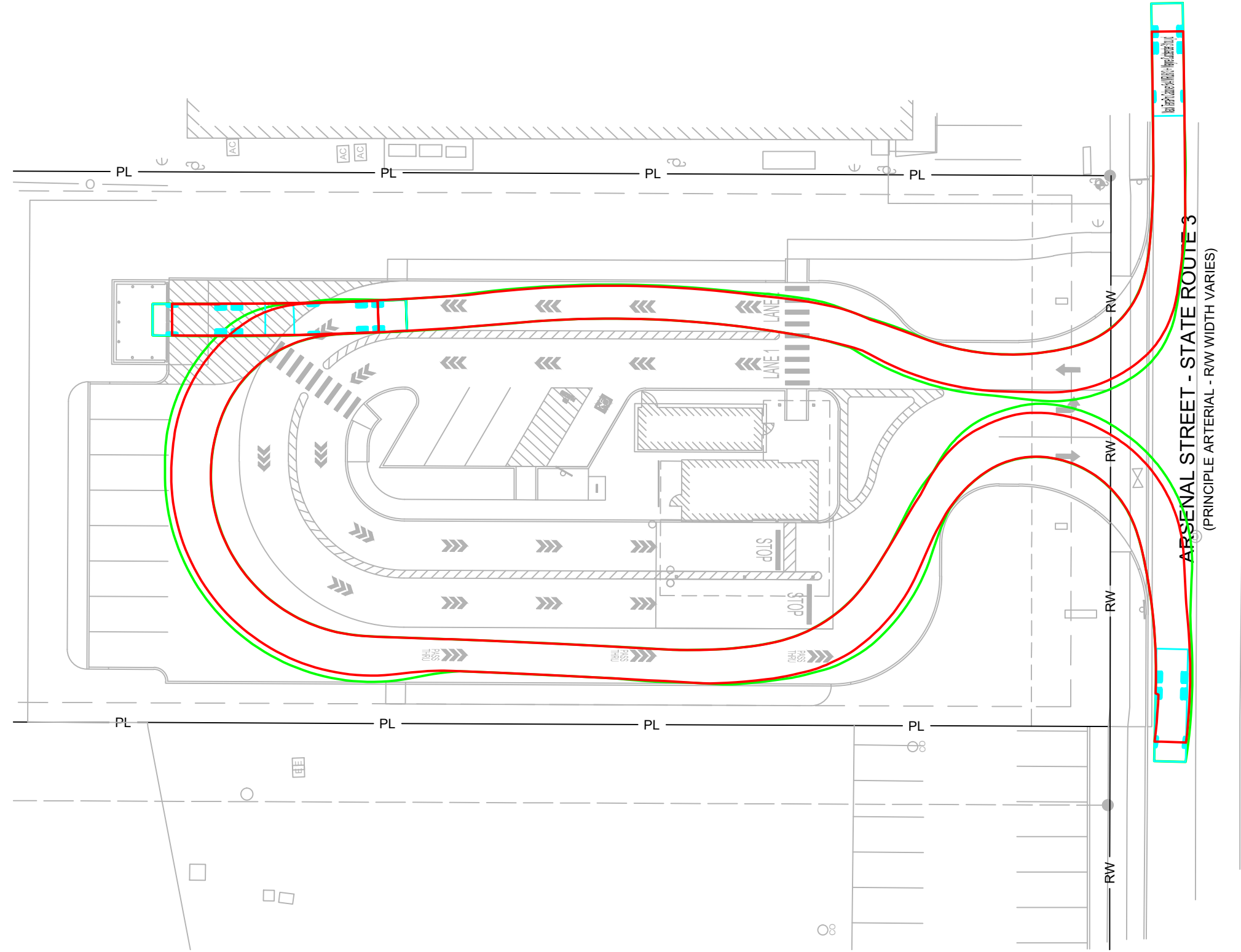


CITY FIRE TRUCK

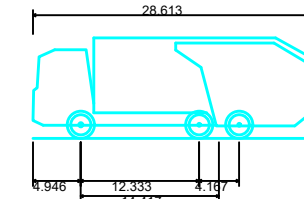


Pumper Fire Truck
Overall Length
Overall Width
Overall Body Height
Min Body Ground Clearance
Track Width
Lock-to-lock time
Max Wheel Angle

40.000ft
8.167ft
7.745ft
0.656ft
8.167ft
5.00s
45.00°

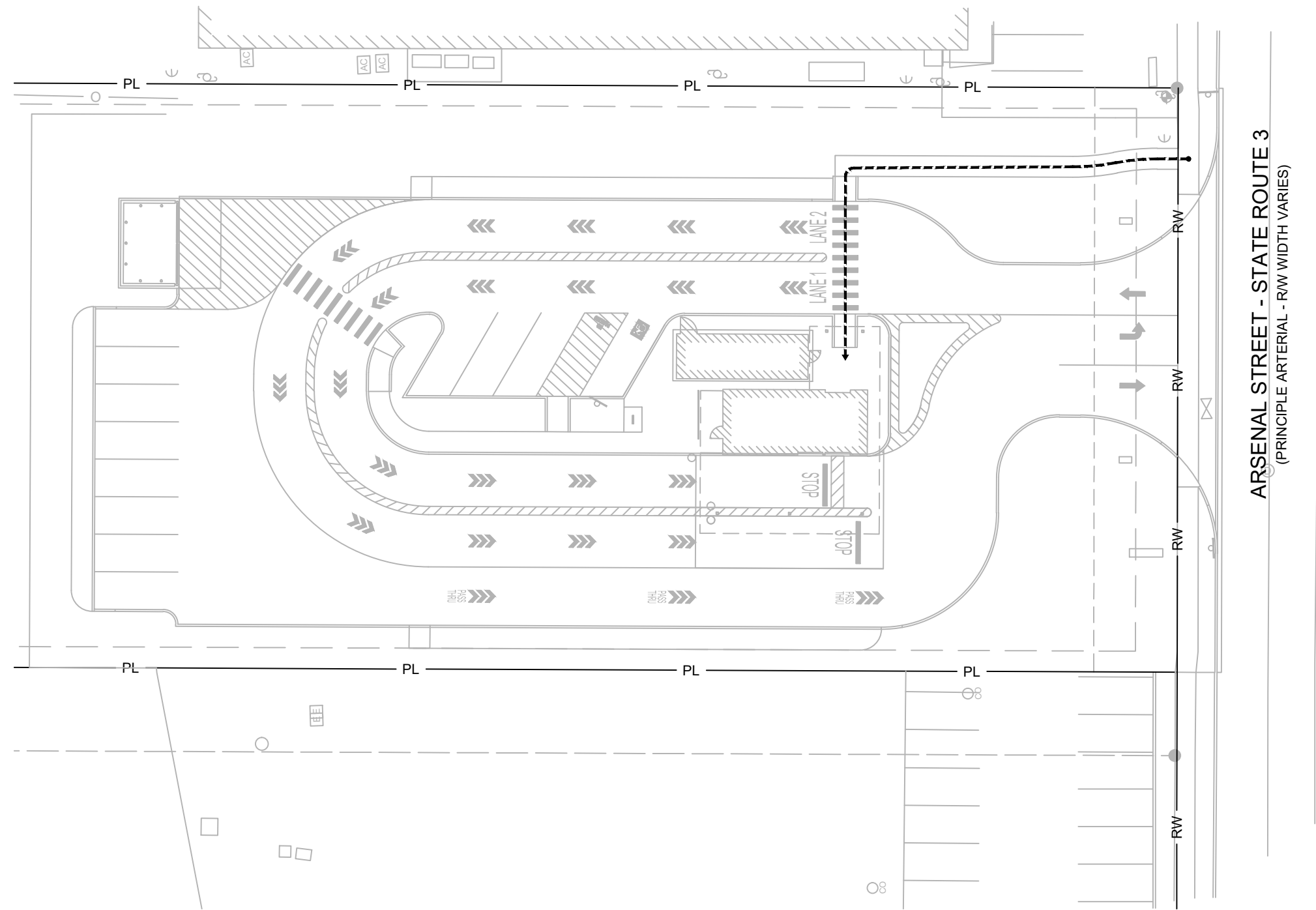


DELIVERY/REFUSE VEHICLE



Mack TerraPro Cabover 6x4 MRU613 + Wayne Curbtender 31cu yd
Overall Length
Overall Width
Overall Body Height
Min Body Ground Clearance
Track Width
Lock-to-lock time
Curb to Curb Turning Radius

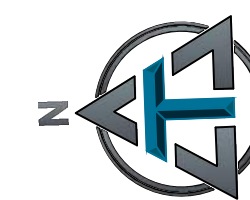
28.813ft
12.233ft
14.817ft
1.311ft
8.000ft
6.00s
33.500ft



PEDESTRIAN PATH FROM RIGHT OF WAY

HATCH LEGEND:

- VEHICLE
- VEHICLE BODY ENVELOPE PATH
- VEHICLE WHEEL TRACK



H. SCALE: 1" = 30'



Outside New York City or Long Island
digsafelynewyork.com

JOHN W KELLY PE ENGINEERING D.P.C.

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COAR# 017476
EXPIRES: 06/30/2026



JOHN W. KELLY III - ENGINEER
PE# 084736

ENGINEER OF RECORD:

NAME: JOHN W. KELLY III

LICENSE NO. 084736

PROJECT NUMBER:

91 164

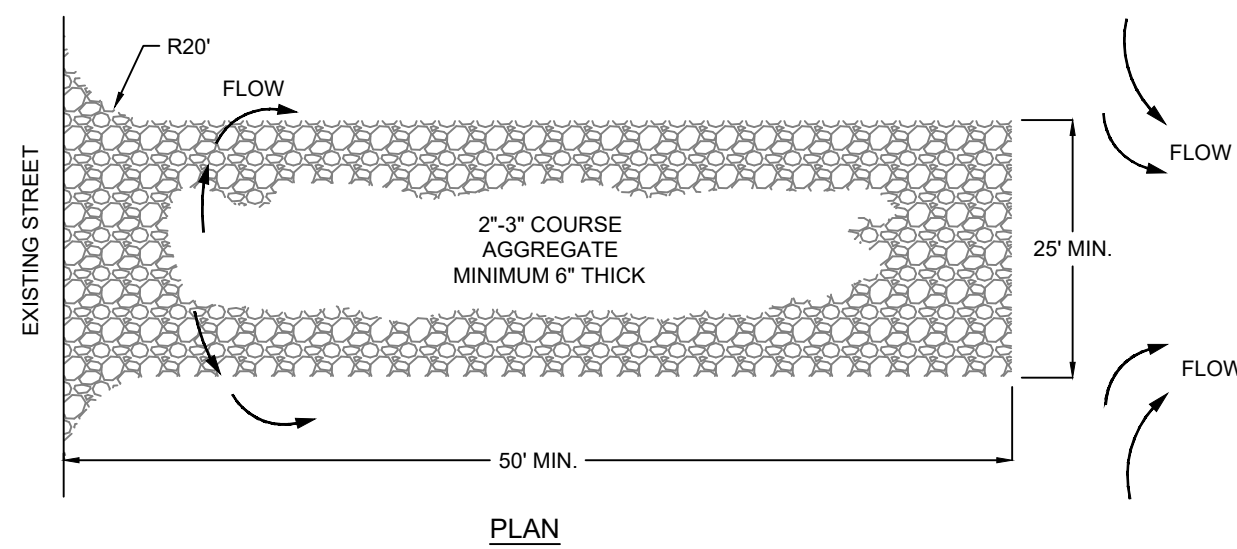
REVISION:

7 BREW COFFEE
WATERTOWN, NY

1068 ARSENAL STREET,
WATERTOWN, NY 13601

C6.2
CIRCULATION PLAN

DATE: MAY 29, 2025

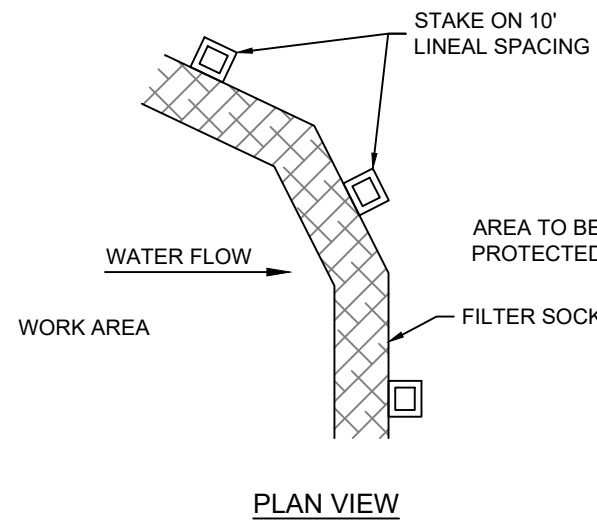


NOTES:

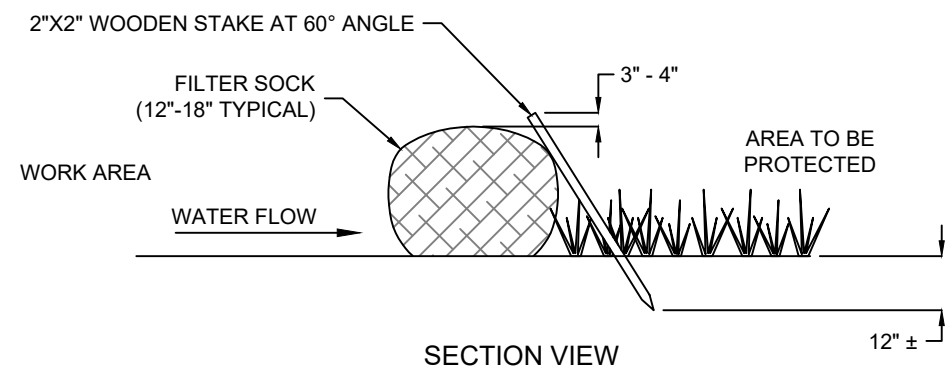
1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEAN OUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.

TEMPORARY CONSTRUCTION ENTRANCE

1.01 SCALE: NONE



PLAN VIEW



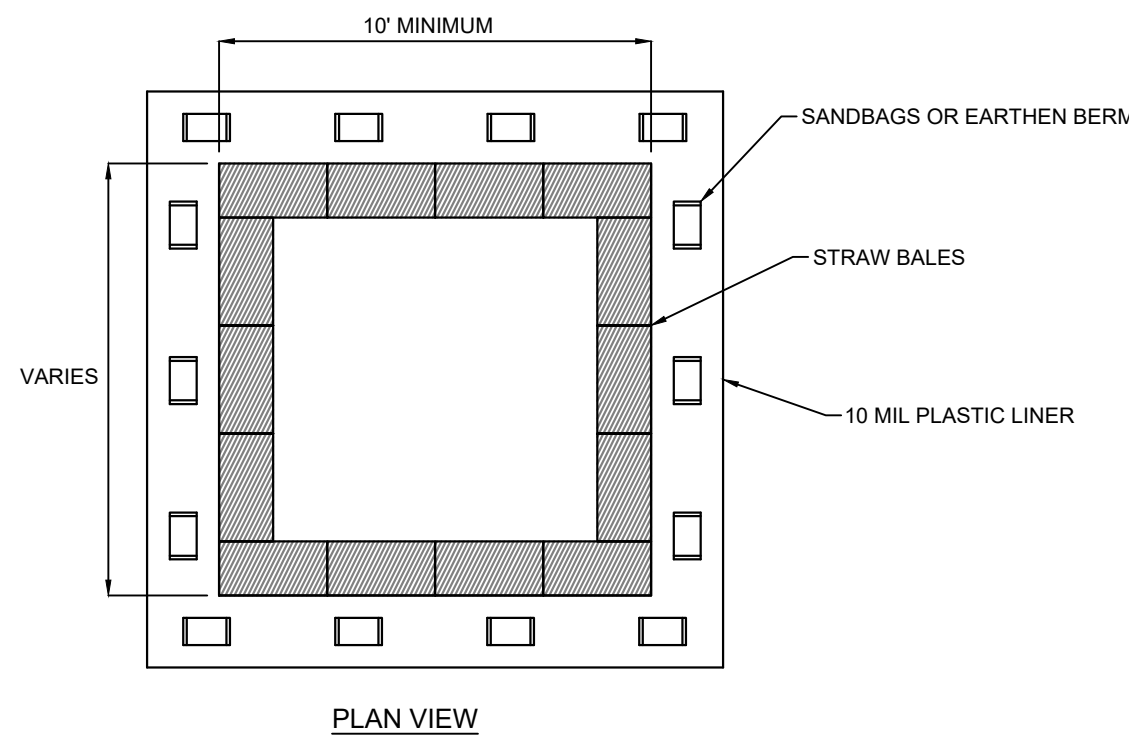
SECTION VIEW

NOTES:

1. ALL MATERIAL TO MEET MANUFACTURER'S REQUIREMENTS.
2. FILTER SOCK DEPICTED IS FOR MINIMUM SLOPES. GREATER SLOPES MAY REQUIRE LARGER SOCKS PER ENGINEER.
3. COMPOST MATERIAL TO BE DISPERSED ON SITE, AS DETERMINED BY ENGINEER.

COMPOST FILTER SOCK DETAIL

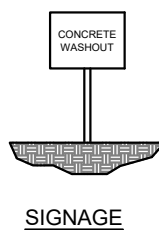
1.02 SCALE: NONE



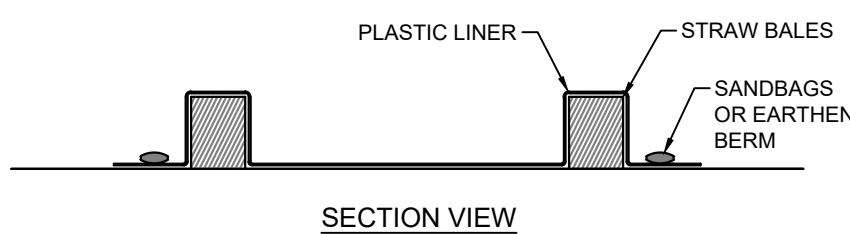
PLAN VIEW

NOTES:

1. WASHOUT CONTAINMENT SHALL BE INSTALLED FOR DURATION OF CONCRETE WORK AND RETAIN CONCRETE AND OTHER WASHOUT LIQUIDS UNTIL EVAPORATION OR REMOVAL BY PUMP.
2. CONTAINMENT SHALL BE SIZED FOR EXPECTED WASHOUT VOLUMES.
3. AVOID PLACING NEAR STORM DRAINS, STREAMS, SINKHOLES, OUTFALLS OR OTHER LOW AREAS WHERE WATER PONDS OR FLOWS.
4. OTHER APPROVED LEAK-PROOF CONTAINMENT IS ACCEPTABLE.
5. TRAPS SHALL BE ROUTINELY MAINTAINED AT 75% CAPACITY AND REPLACED AS NECESSARY TO PERFORM.
6. THE WASHOUT PIT SHALL BE COVERED BEFORE PREDICTED RAIN EVENTS TO PREVENT OVERFLOW.
7. THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30FT OF THE TEMPORARY CONCRETE WASHOUT FACILITY.



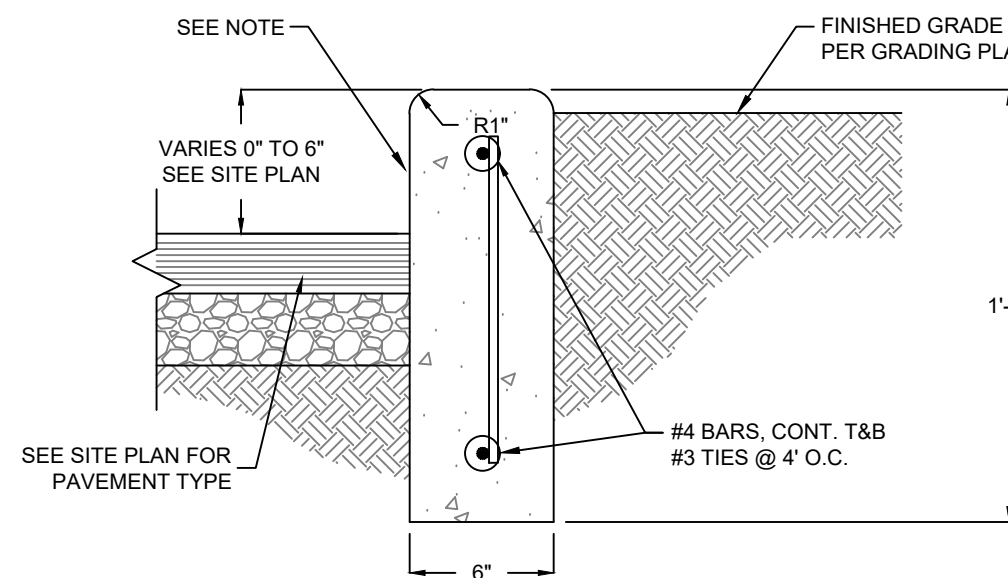
SIGNAGE



SECTION VIEW

CONCRETE WASHOUT

1.03 SCALE: NONE

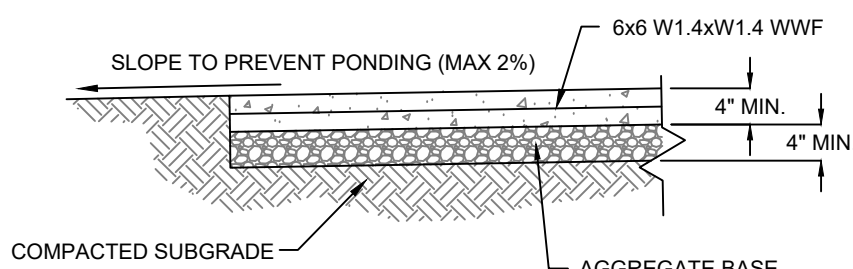


NOTES:

1. CURB FACE SHALL HAVE A CLEAN, SMOOTH FINISH; FREE OF BUMPS, HONEYCOMB, AND VOIDS.

CONCRETE CURB DETAIL

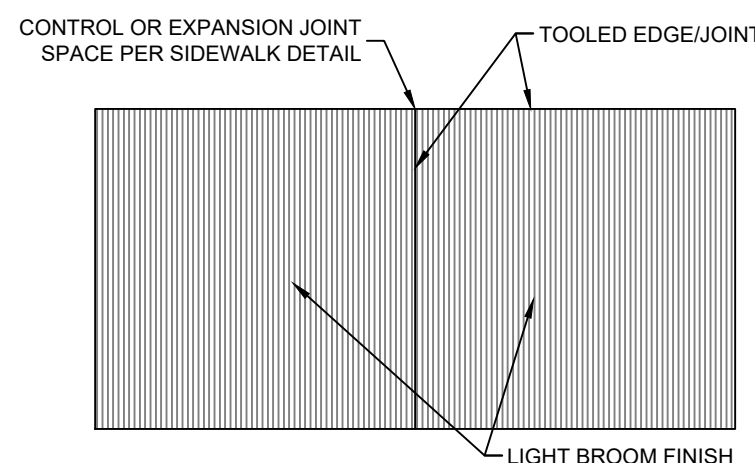
2.01 SCALE: NONE



NOTES:

1. PROVIDE CONTROL JOINTS @ 5' O.C. MAX. OR WIDTH OF SIDEWALK. SEE JOINT DETAIL.
2. PROVIDE EXPANSION JOINTS @ 20' O.C. MAX. & AS INDICATED ON SITE PLAN.
3. WHERE WALK ABUTS ANOTHER WALK, CONCRETE CURBS, DRIVEWAYS AND SIMILAR STRUCTURES, PROVIDE 1/2\"/>

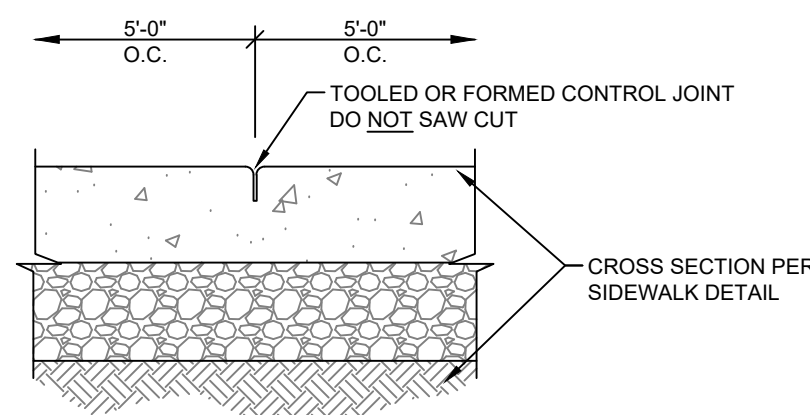
SECTION



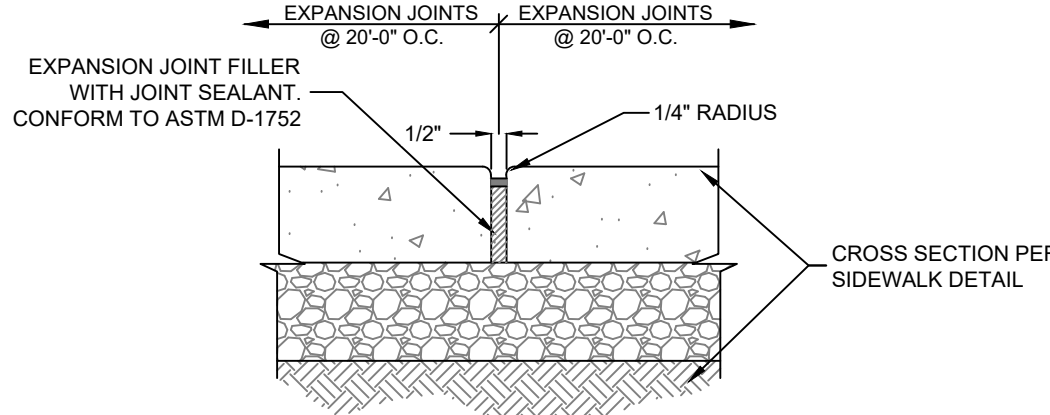
NOTES:

1. CONTRACTOR SHALL TOOL EDGES AND JOINTS AS SHOWN THEN LIGHTLY BROOM FINISH ENTIRE SIDEWALK SURFACE.

FINISH PLAN



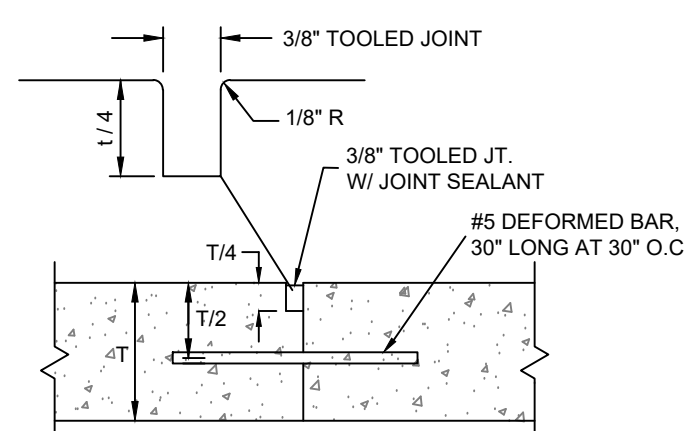
CONTROL JOINT



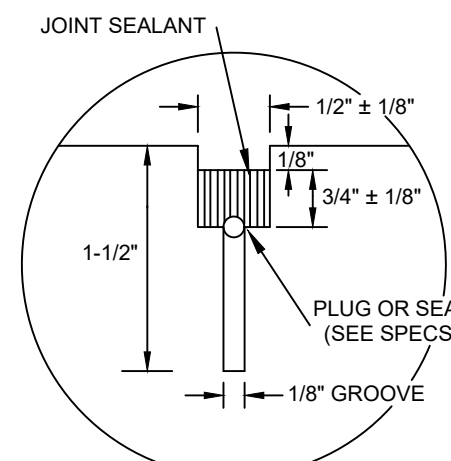
EXPANSION JOINT

SIDEWALK DETAILS

2.02 SCALE: NONE



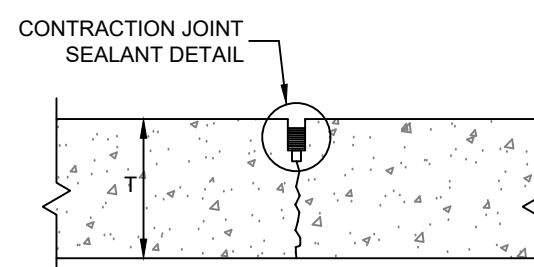
DOWELED CONSTRUCTION JOINT



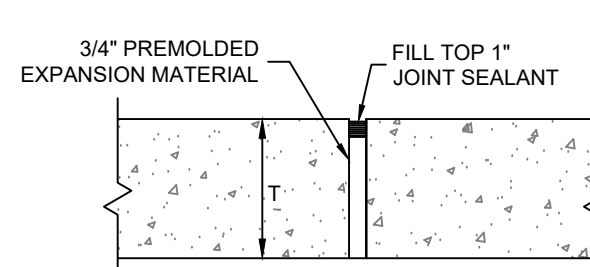
CONTRACTION JOINT SEALANT DETAIL

CONCRETE JOINT NOTES:

1. CONSTRUCTION JOINTS SHALL BE PLACED AS REQUIRED BY THE CONTRACTOR.
2. EXPANSION JOINTS SHALL BE PLACED WHERE CONCRETE ABUTS STRUCTURES OR EXISTING PAVEMENT AND AT 45 FEET ON CENTER, EACH DIRECTION (OR AS SHOWN ON PLAN).
3. CONTRACTION JOINTS SHALL BE PLACED AT 15 FEET MINIMUM SPACING IN EACH DIRECTIONS.



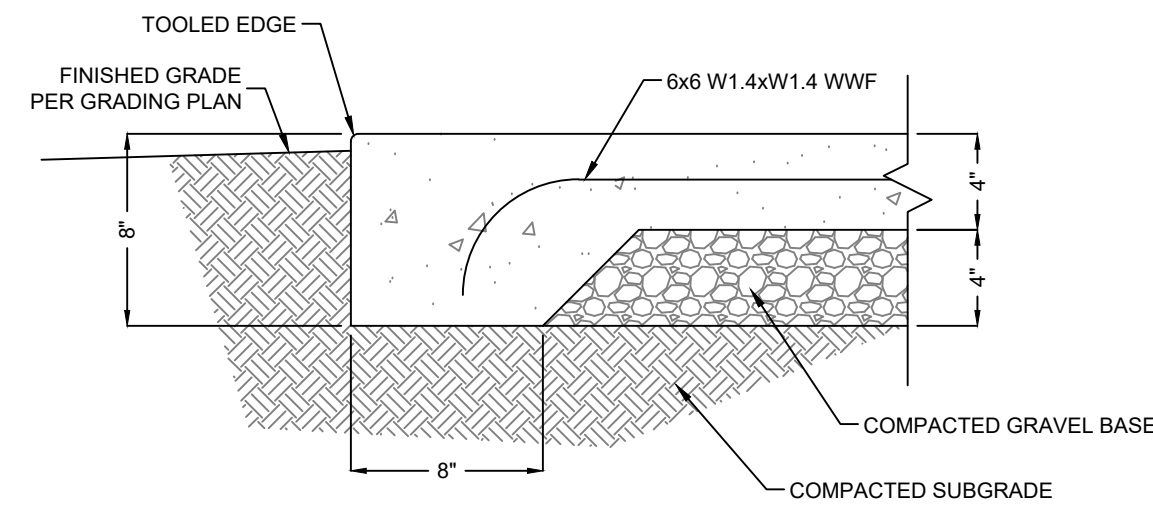
SAWED CONSTRUCTION JOINT



EXPANSION JOINT

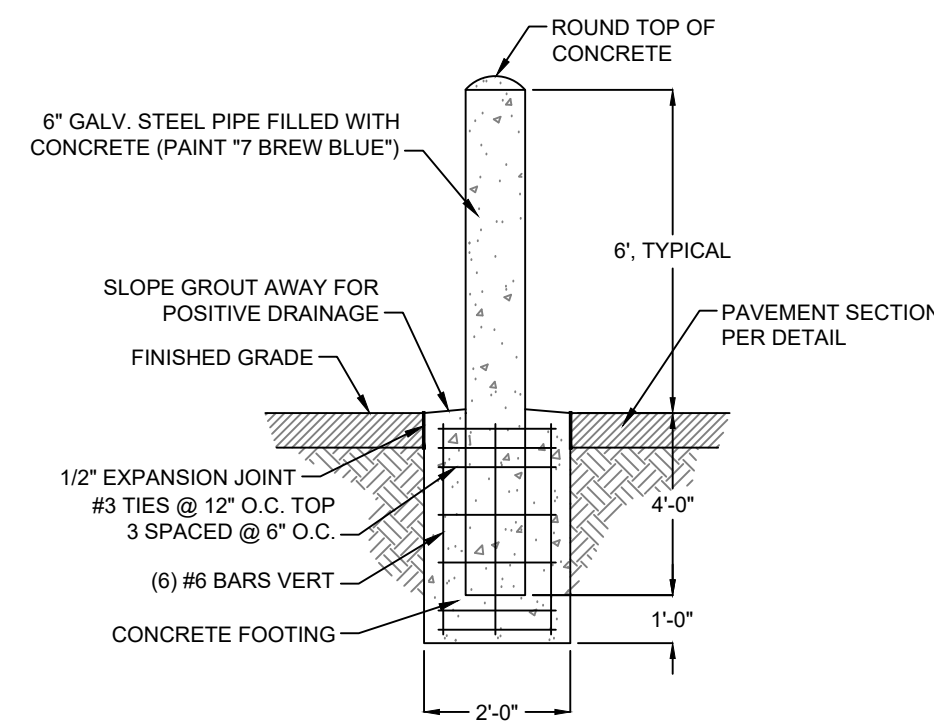
CONCRETE PAVEMENT JOINT DETAILS

2.03 SCALE: NONE



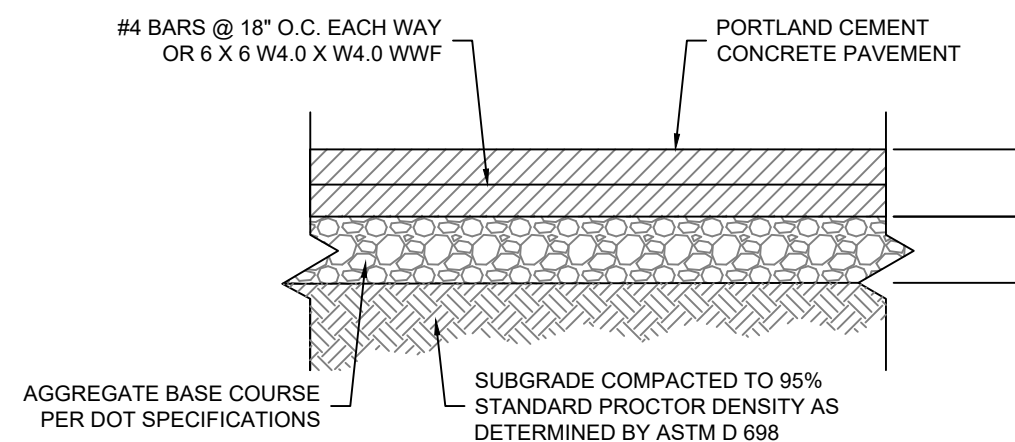
CONCRETE STOOP/WALK EDGE

2.04 SCALE: NONE



PIPE BOLLARD

2.09 SCALE: NONE

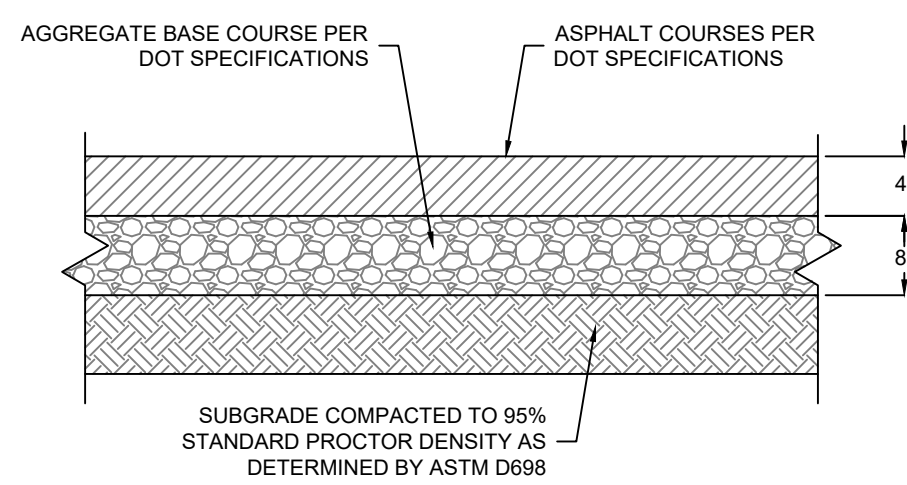


NOTES:

1. SEE CONCRETE PAVEMENT JOINT DETAILS AND NOTES.
2. CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 4,000 PSI AND BE PLACED WITH A MAXIMUM SLUMP OF 4 INCHES PER GEOTECHNICAL ENGINEERING REPORT IF AVAILABLE.
3. ALL MATERIALS SHALL MEET THE CURRENT DOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

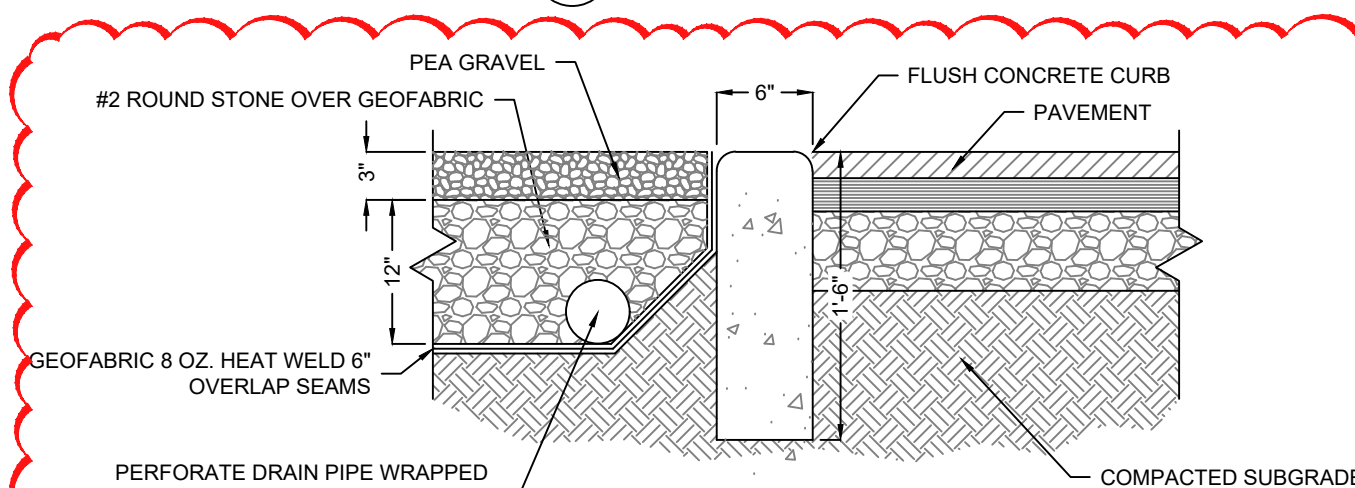
CONCRETE PAVEMENT

2.05 SCALE: NONE



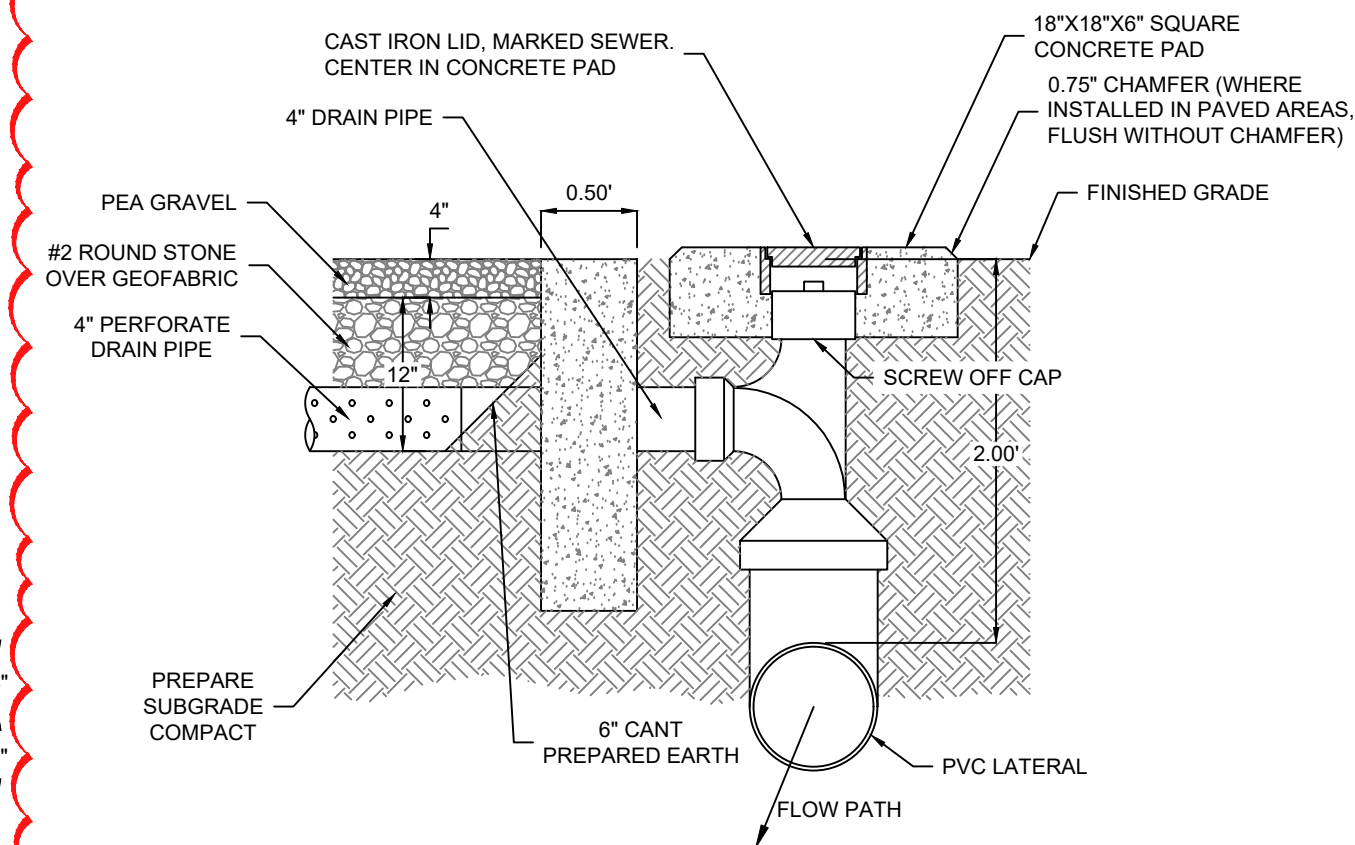
ASPHALT PAVEMENT

2.06 SCALE: NONE



FLUSH CURB - SNOW STACK AREA

4.09 SCALE: NONE



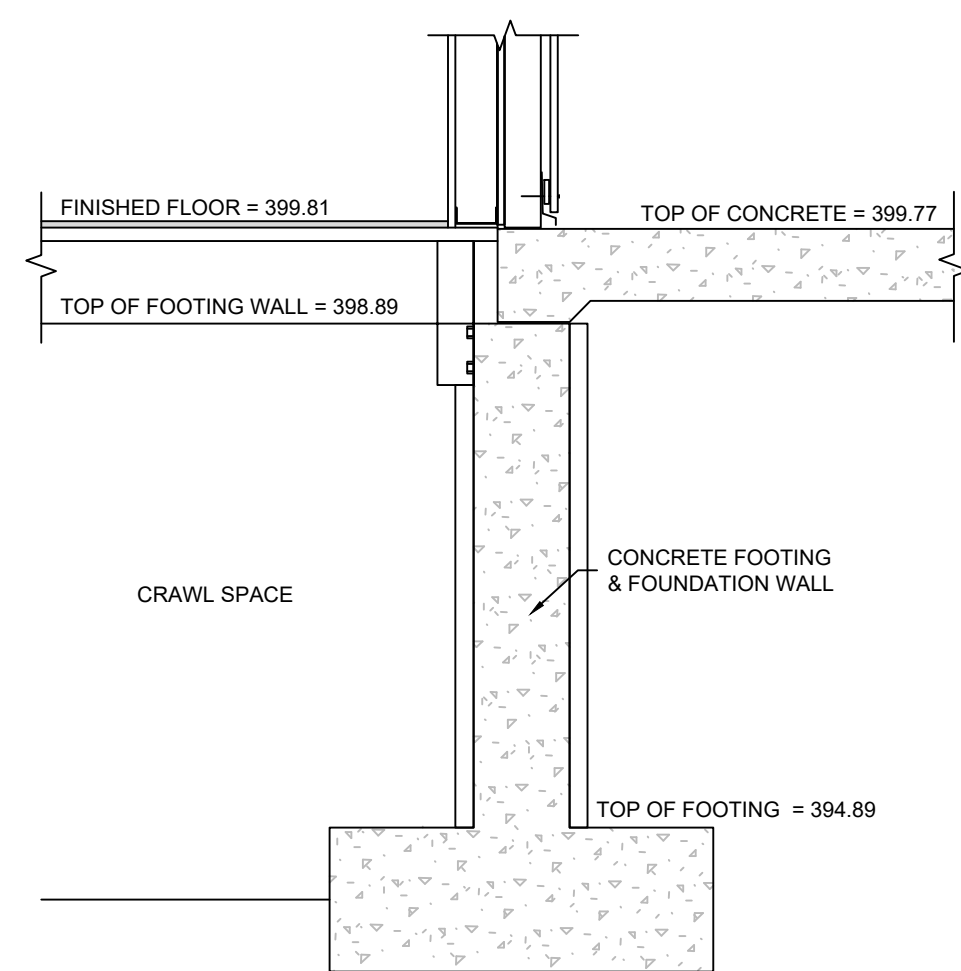
SECTION VIEW

NOTES:

1. SIZE AND MATERIAL OF FITTINGS AND PIPE TO MATCH THAT OF LATERAL.
2. INSTALL CLEANOUTS AT ALL BENDS AND AT MAXIMUM 50' SPACING.

SUB-DRAIN ANTISEEP & CLEANOUT DETAIL

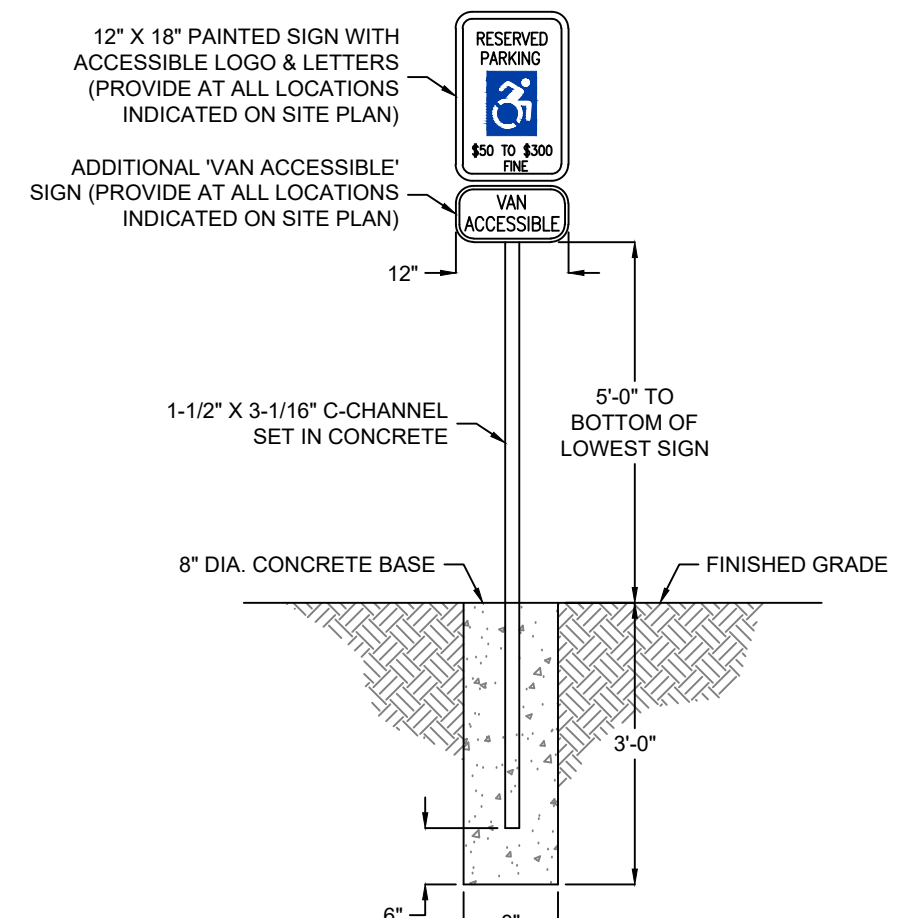
4.10 SCALE: NONE



NOTE: THIS DETAIL IS PROVIDED FOR CLARIFICATION OF ELEVATION ONLY. REFER TO STRUCTURAL DETAILS 5 AND 7 SHEET S1.0 FOR STRUCTURAL STEM WALL DETAILING.

WALL ELEVATION SECTION DETAIL

2.07 SCALE: NONE



ADA ACCESSIBLE SIGN DETAIL

6.03 SCALE: NONE

JOHN W KELLY PE ENGINEERING D.P.C.

1070 W. SYCAMORE ST
SPRINGFIELD, MO 65810
Ph: 417-888-0645 Fax: 417-888-0657

COAR 017478
EXPIRES: 06/30/2026



JOHN W. KELLY III - ENGINEER
PE# 084736

ENGINEER OF RECORD:

NAME: JOHN W. KELLY III

LICENSE NO. 084736

PROJECT NUMBER:

91 164

REVISION:

08-14-2025 CITY REVIEW COMMENTS

7 BREW COFFEE
WATERTOWN, NY

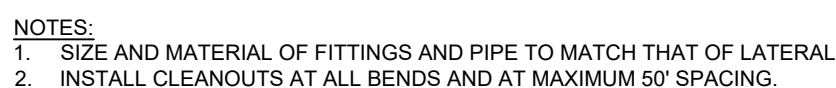
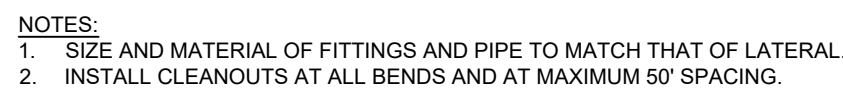
1068 ARSENAL STREET,
WATERTOWN, NY 13601

C7.1
DETAILS

DATE: MAY 29, 2025

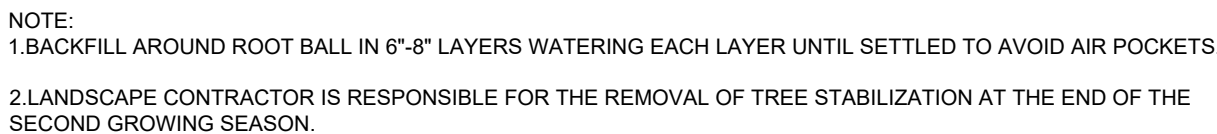
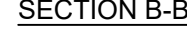


1. DETECTABLE WARNING CURB RAMP SURFACE SHALL CONSIST OF TRUNCATED DOMES (FOR THE ENTIRE WIDTH OF THE RAMP) AND SHALL CONTRAST VISUALLY W/ ADJOINING SURFACES. PROVIDE ARMOR-TILE ADA TACTILE EPOXY POLYMER CAST IN PLACE WARNING TILES WITH TRUNCATED DOMES OR APPROVED EQUAL.
2. TRUNCATED DOMES SHALL HAVE A DIAMETER OF 0.9 INCH AT THE BOTTOM, A DIAMETER OF 0.4 INCH AT THE TOP, A HEIGHT OF 0.2 INCH AND A CENTER-TO-CENTER SPACING OF 1.7 INCHES MEASURED ALONG ONE SIDE OF A SQUARE ARRANGEMENT.



NOTES:

1. USE CLASS "A" CONCRETE (AE) THROUGHOUT.
2. FLOOR OF INLET SHALL BE SHAPED WITH NON-REINFORCED CLASS "A" CONCRETE (AE) INVERT TO PROVIDE SMOOTH FLOW.
3. EXPANSION JOINTS SHALL BE EITHER HOT OR COLD POURED JOINT SEALING COMPOUND, OR PREMOLDED EXPANSION JOINT FILLER.
4. STEEL INLET FRAME SPACERS SHALL BE PLACED AT EQUAL SPACINGS, NOT TO EXCEED 4'-0".
5. BEVEL ALL EXPOSED EDGES WITH 3/4" TRIANGULAR MOLDING.



COA# 017476
EXPIRES: 06/30/2026




JOHN W. KELLY III - ENGINEER
PE# 084736

ENGINEER OF RECORD:

NAME: JOHN W. KELLY I

LICENSE NO. 084736

PROJECT NUMBER:
91 164

REVISION:	
07-02-2025	PLANNING COMMISSION
 08-14-2025	CITY REVIEW COMMENT:

7 BREW COFFEE
WATERTOWN, NY

1068 ARSENAL STREET,
WATERTOWN, NY 13601

JOHN W KELLY PE ENGINEERING D.P.C.

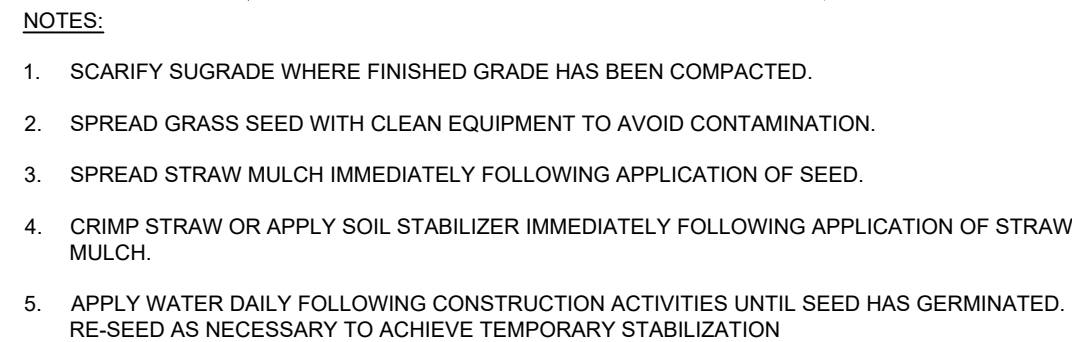
1070 W. SYCAMORE ST
SPRINGFIELD, MO 65810
Ph: 417-888-0645 Fax: 417-888-0651

COA# 017476
EXPIRES: 06/30/2026

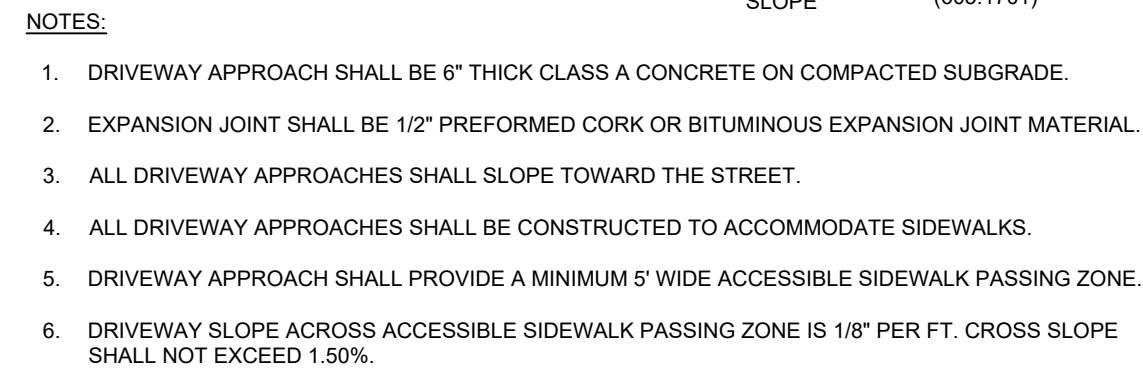
C7.3

DETAILS

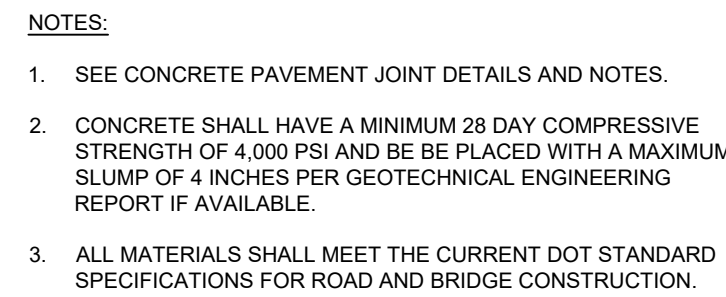
DATE: MAY 29, 2025



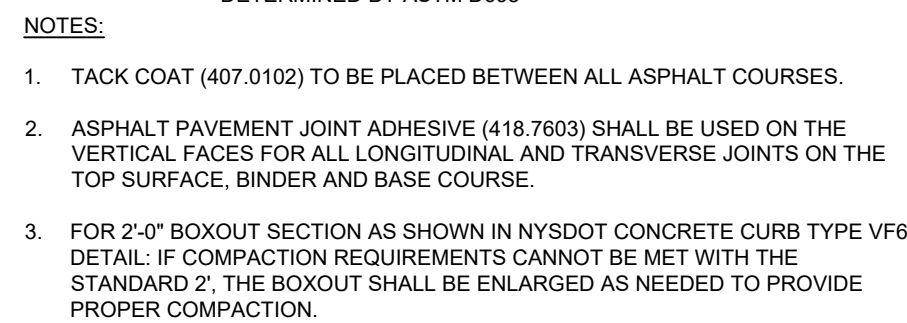
(1.06) SCALE: NONE



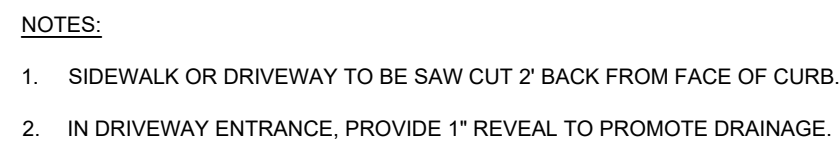
(2.20) SCALE: NONE



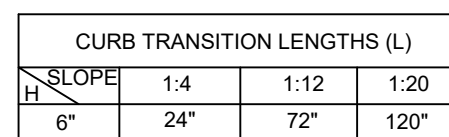
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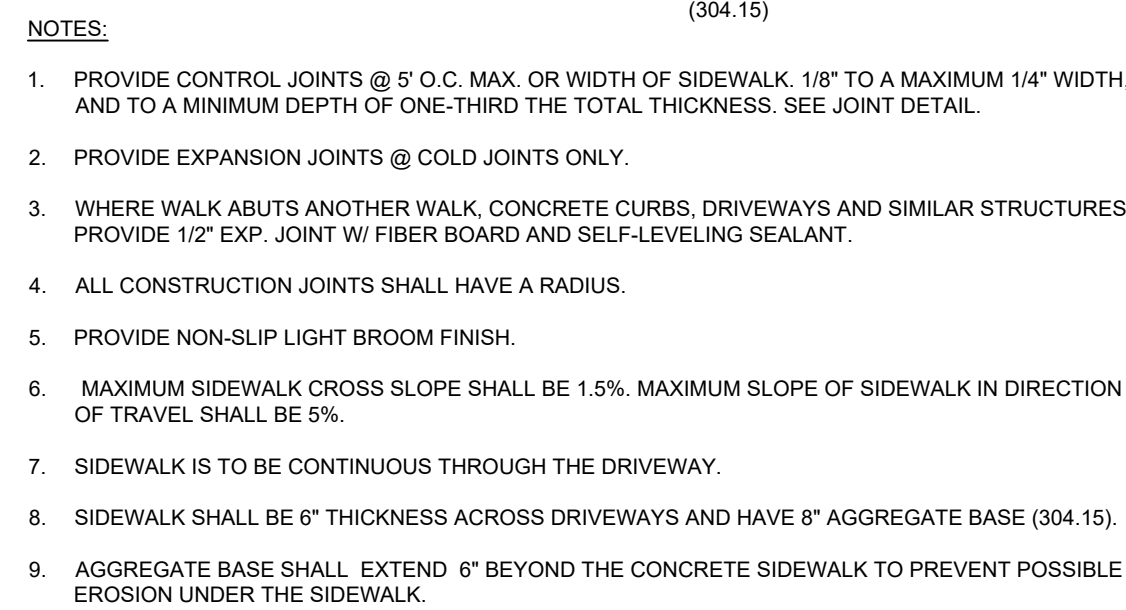
2.22 SCALE: NONE



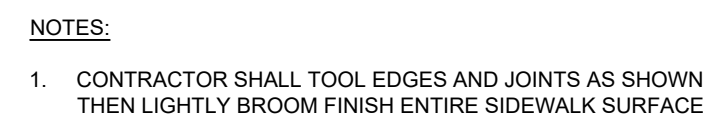
2.23 NY SD
SCALE: NONE



2.24 SCALE: NONE



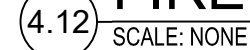
FINISH PLAN



AND EXPANSION JOINT



(2.25) $\frac{NYSE}{SCALE: NONE}$



1. ALL WORK WITHIN THE NYSDOT RIGHT OF WAY SHALL MEET CURRENT NYSDOT STANDARDS. IF DETAILS ON THIS PLAN VARY FROM THE NYSDOT STANDARDS, THE NYSDOT STANDARD SHALL BE USED.

COA# 017476
EXPIRES: 06/30/2026

3 08-14-2025 PLANNING COMMISSION

1068 ARSENAL STREET,
WATERTOWN, NY 13601

DATE: MAY 29, 2025



1550 East Republic Road
Springfield, MO 65804
tothassociates.com
417.888.0645

STORMWATER ENGINEERING REPORT

**7 Brew Coffee
1068 Arsenal Street
Watertown NY 13601**

August 18, 2025



TABLE OF CONTENTS

REPORT

1. Introduction
2. Water Quality
3. Design Criteria

Exhibits

- A. Site Location
- B. Existing Drainage Map
- C. Proposed Drainage Map
- D. Soil Map and Report

APPENDICES

- A. Hydrograph Calculations
- B. Calculations

1. Introduction

This report outlines the design of a stormwater collection and conveyance system, as well as infiltration trenches, for a commercial development located at 1068 Arsenal Street, Watertown NY 13601.

The proposed stormwater management system includes an underground detention facility, an outlet structure, and a network of stormwater collection and conveyance components designed to accommodate the new development. All infrastructure is sized in accordance with the New York Stormwater Management Design Manual.

Existing Conditions:

The 0.964-acre site has been previously developed with the north half being mostly impervious. The runoff from the south side of the site flows predominately north towards Arsenal Street, while the runoff of the north side of the site flows off-site to the north and sides of the site. Currently, no site runoff is collected or managed. No off-site or run-on drainage enters the property. Existing conditions and flow directions are provided in **Exhibit B: Existing Drainage Map**.

Proposed Conditions:

The site will be redeveloped as a drive-through coffee restaurant with a small building footprint, employee-only parking, drive-through lanes, landscaping, and a remote cooler. The redevelopment will decrease impervious surface area, resulting in lower stormwater runoff volumes. The proposed site conditions and flow patterns are provided in **Exhibit B: Proposed Drainage Map**.

The redevelopment will provide on-site water quality treatment through infiltration trenches. Stormwater will be managed by directing surface sheet flow to the flush concrete curbs at the snow stacks located at the north, east and south side of the site, while roof drainage will be captured and conveyed via underground piping. The snow stack will consist of a top layer of pea gravel and the first flush will be stored in the stone underneath to be infiltrate into the soil. A perforated pipe is set at the bottom of the trenches to infiltrate any standing water. The perforated pipe directs treated water into area inlets at the ends of the infiltration trenches. These inlets also will take in overflow volume for larger storms. Treated storm water is then directed into a manhole that conveys water out to a flare end.

2. Water Quality

The infiltration trenches are designed to accommodate the required water quality volume of 2,039 cu-ft. Calculations for the water quality volume have been provided in **Appendix B**. The trenches are designed to be a minimum of 5 feet in width and 1 1/3 feet in depth. The water quality volume is stored within 1-foot of stone of 40% porosity. The volume is then to be infiltrated into the native soils. A plate is placed inside the inlet structures with a weir at the level of the top of the stone elevation level. This allows for the water quality volume to be detained until the elevation of the water head rises above the required water quality levels. The soils map shows that the general soil distribution over the entirety of the project area is 76.0% Wareham loamy fine sand (Wa) in the developed portion of the lot and the 24Deerfield loamy fine sand, 0 to 8 percent slopes (DeB). Both soils are of Hydrologic Soil Group type A. A soil map and report has been provided as **Exhibit D**. The infiltration time has been provided in **Appendix B**, satisfying the requirement for water quality volume to be infiltrated within 48 hours.

3. Design Criteria

Stormwater runoff hydrographs were developed using the Hydraflow Hydrographs Extension for AutoCAD Civil 3D. The major design assumptions and techniques used to determine the flow rates are as follows:

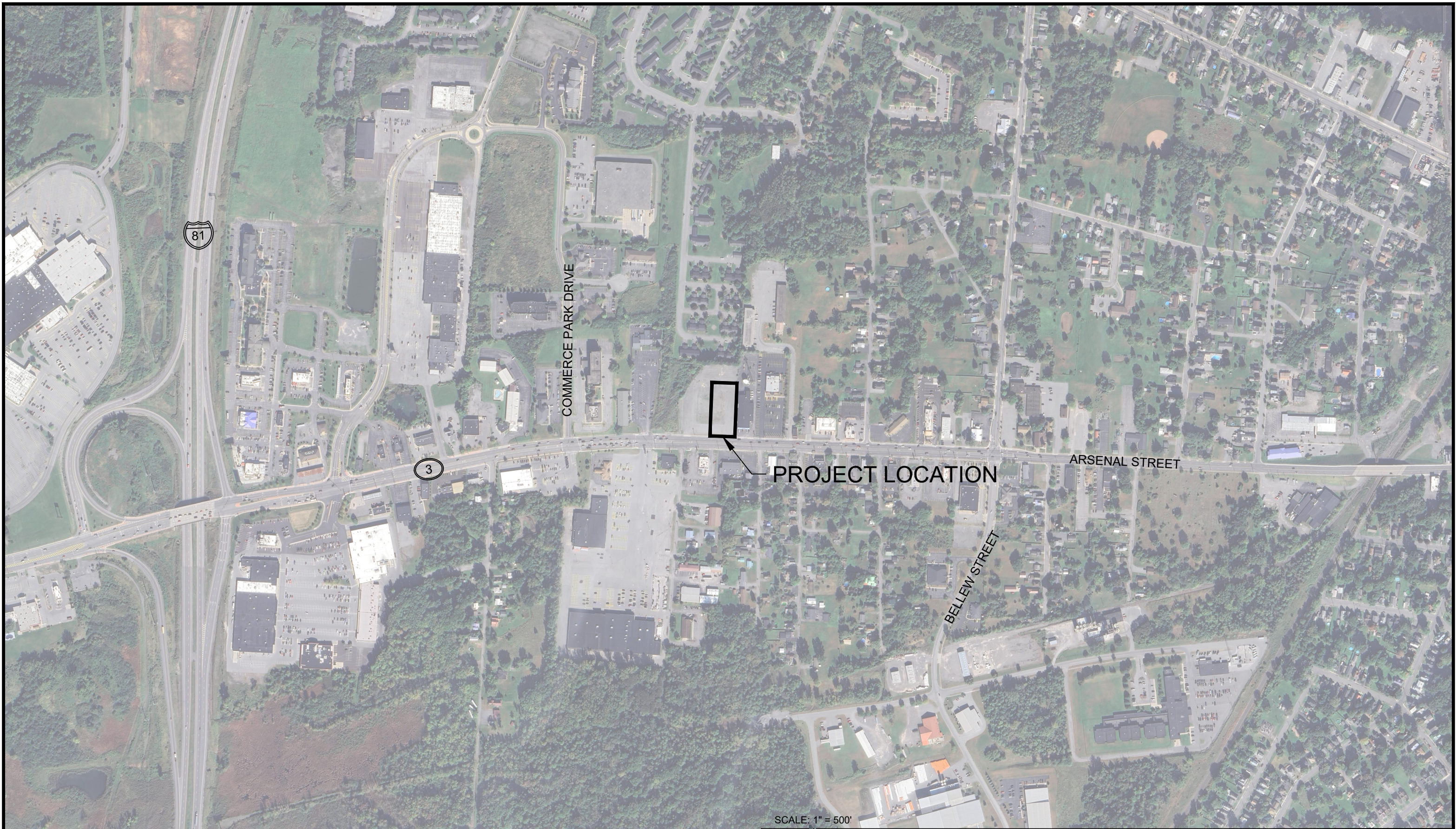
1. The 24-hour design storm was modeled using the SCS Type II rainfall distribution to determine the flow rates for the site.

2. Peak flows were analyzed for the 1, 10, and 100-year return frequencies.
3. Time of concentration of 15 minutes was used in the pre-developed and post-developed analysis.

The resulting flows show a decrease in the flow of the outlet pipe from 0.605 cfs to 0.001 cfs for the 1-year 24-hour storm event, known as the Channel Protection Volume (CPv) and decreased from 1.289 cfs to 0.140 cfs for the 10-year 24-hour storm event, known as the Overbank Flood (Qp). The 100-year 24-hour storm, known as the Extreme Flood (Qf) has decreased from 2.091 cfs to 0.596 cfs. The Hydrograph results are provided in **Appendix A**. The 15-inch outlet pipe has sufficient capacity for the post development 100-year Extreme Flood event. The pipe hydraulic calculations can be found in **Appendix B**.

EXHIBITS

- A. SITE LOCATION
- B. EXISTING DRAINAGE MAP
- C. PROPOSED DRAINAGE MAP
- D. SOILS MAP AND REPORT



SCALE: 1" = 500'



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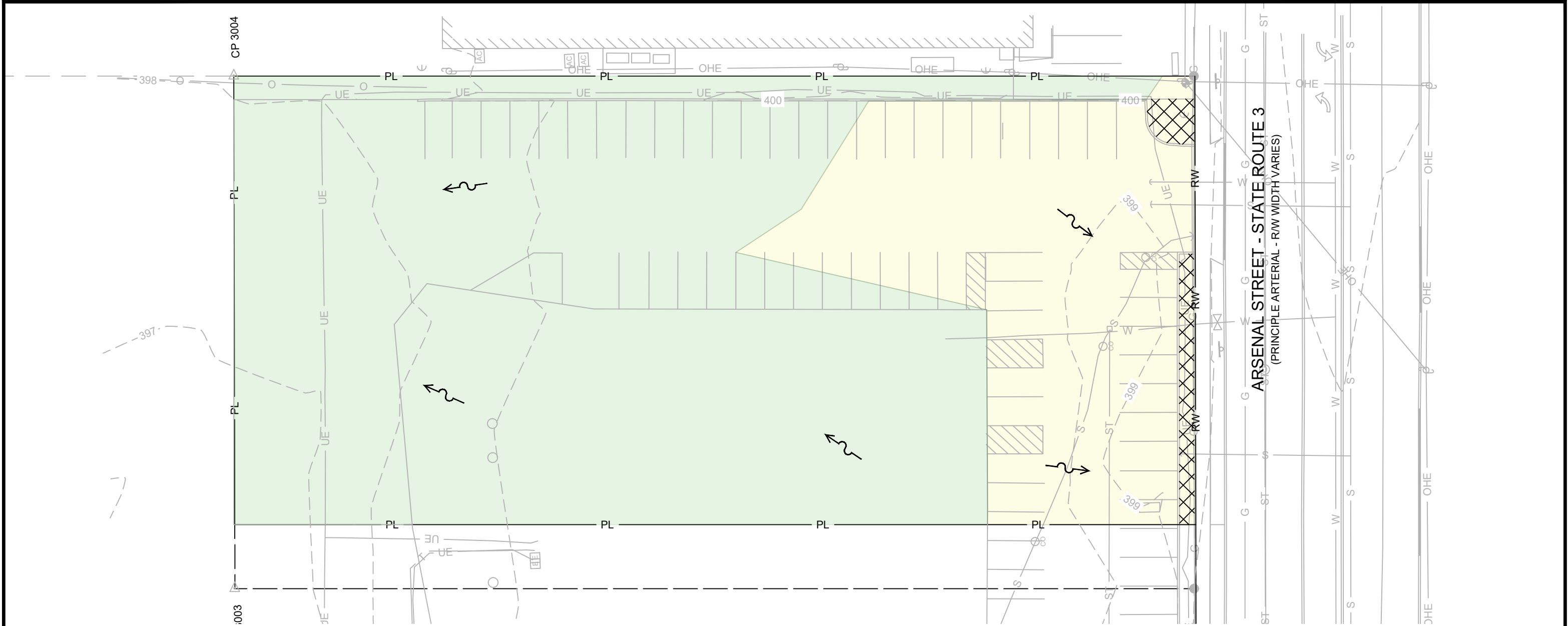
EXHIBIT 1- SITE LOCATION
 7 BREW COFFEE
 1068 ARSENAL STREET
 WATERTOWN, NY

JOB NUMBER: 91.164
 ISSUED DATE: 08/18/2025






1550 E. Republic Road, Springfield MO. 65804

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 OH # 05960



HATCH LEGEND:

-  = PERVIOUS AREA
-  =
DRAINAGE AREA 1:
IMPERVIOUS AREA: 0.240 ACRES
PERVIOUS AREA: 0.034 ACRES
TOTAL AREA: 0.274 ACRES
-  =
DRAINAGE AREA 2:
IMPERVIOUS AREA: 0.690 ACRES
PERVIOUS AREA: 0.000 ACRES
TOTAL AREA: 0.690 ACRES

SYMBOLS


 DIRECTION OF SHEET FLOW

SURFACE CONDITIONS:

NRCS SOIL SURVEY: WAREHAM LOAMY FINE SAND
HYDRAULIC SOILS GROUP - A

TOTAL DRAINAGE AREA	= 0.964 ACRES	COMPOSITE CURVE NUMBER CN	= 96
IMPERVIOUS AREA	= 0.930 ACRES	CURVE NUMBER CN	= 98
PERVIOUS AREA	= 0.034 ACRES	CURVE NUMBER CN	= 49

SCALE: 1" = 30'




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EXHIBIT 2 - EXISTING DRAINAGE PLAN

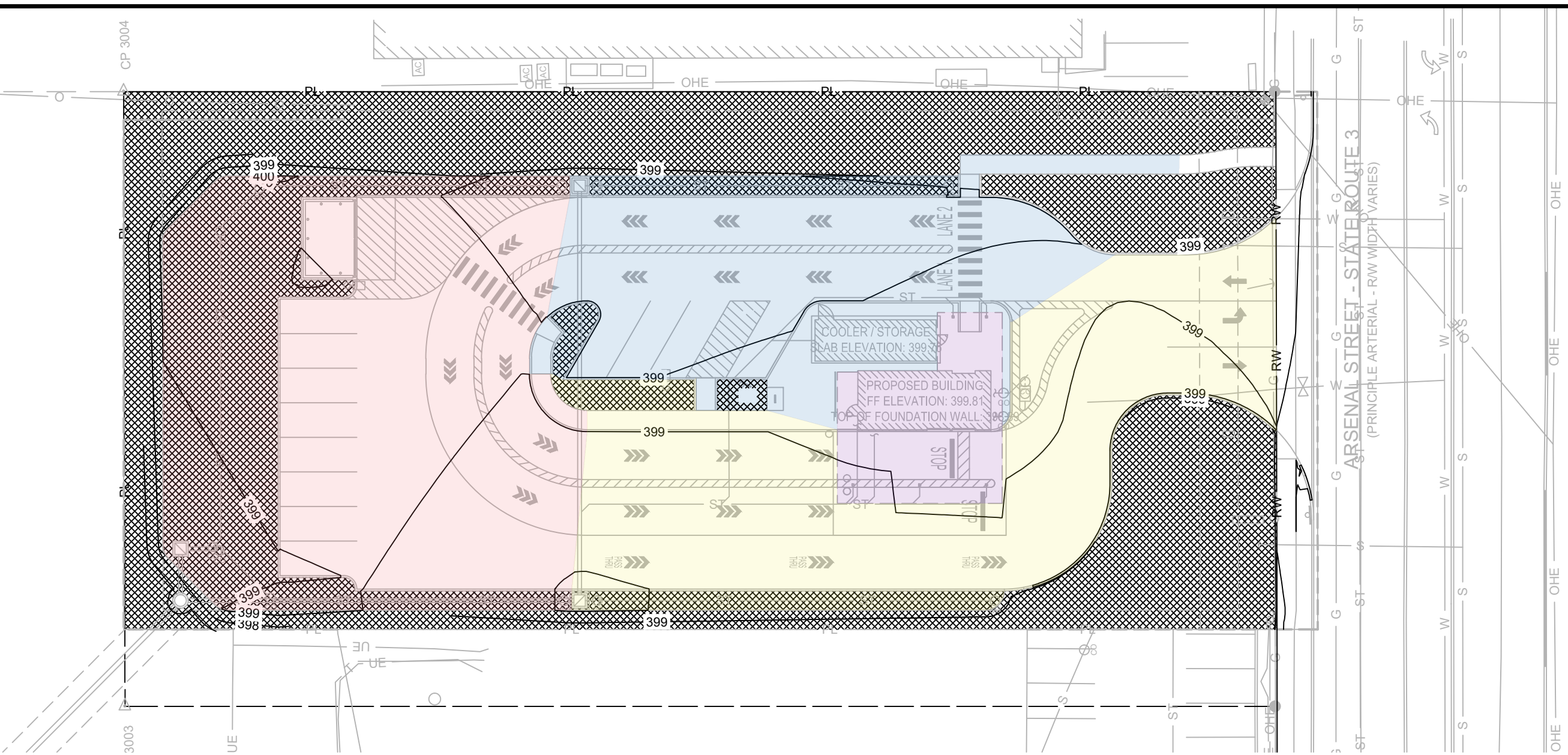
7 BREW COFFEE
1068 ARSENAL STREET
WATERTOWN, NY

JOB NUMBER:	91.164
ISSUED DATE:	08/18/2025



1550 E. Republic Road, Springfield MO. 65804

Toth & Associates, Inc.
OH # 05960



HATCH LEGEND:

	=	PERVIOUS AREA
	=	PROPOSED DRAINAGE AREA 1: IMPERVIOUS AREA: 0.180 ACRES PERVIOUS AREA: 0.019 ACRES TOTAL AREA: 0.199 ACRES
	=	PROPOSED DRAINAGE AREA 2: IMPERVIOUS AREA: 0.170 ACRES PERVIOUS AREA: 0.097 ACRES TOTAL AREA: 0.267 ACRES
	=	PROPOSED DRAINAGE AREA 3: IMPERVIOUS AREA: 0.145 ACRES PERVIOUS AREA: 0.016 ACRES TOTAL AREA: 0.161 ACRES
	=	PROPOSED DRAINAGE AREA 4: IMPERVIOUS AREA: 0.040 ACRES PERVIOUS AREA: 0.000 ACRES TOTAL AREA: 0.040 ACRES

SYMBOLS

	DIRECTION OF SHEET FLOW
<u>AREA TO INFILTRATION TRENCHES:</u>	
DRAINAGE AREA	= 0.627 ACRES
IMPERVIOUS AREA	= 0.495 ACRES
PERVIOUS AREA	= 0.132 ACRES
<u>AREA GOING AWAY FROM INFILTRATION TRENCHES:</u>	
DRAINAGE AREA	= 0.297 ACRES
IMPERVIOUS AREA	= 0.000 ACRES
PERVIOUS AREA	= 0.297 ACRES
BUILDING/CANOPY AREA	= 0.040 ACRES

SURFACE CONDITIONS:

NRCS SOIL SURVEY: WAREHAM LOAMY FINE SAND HYDRAULIC SOILS GROUP - A			
TOTAL DRAINAGE AREA	= 0.964 ACRES	COMPOSITE CURVE NUMBER CN	= 76
IMPERVIOUS AREA	= 0.535 ACRES	CURVE NUMBER CN	= 98
PERVIOUS AREA	= 0.429 ACRES	CURVE NUMBER CN	= 49

SCALE: 1" = 30'



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EXHIBIT 3- DEVELOPED DRAINAGE PLAN
7 BREW COFFEE
1068 ARSENAL STREET
WATERTOWN, NY

JOB NUMBER:	91.164
ISSUED DATE:	08/18/2025



TOTH & ASSOCIATES
1550 E. Republic Road, Springfield MO. 65804
Toth & Associates, Inc.
OH # 05960



United States
Department of
Agriculture

NRCS

Natural
Resources
Conservation
Service

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

Custom Soil Resource Report for **Jefferson County, New York**



August 1, 2025

Preface

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

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

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

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

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

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

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DeB—Deerfield loamy fine sand, 0 to 8 percent slopes.....	13
Wa—Wareham loamy fine sand.....	14
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How Soil Surveys Are Made

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

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

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

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

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

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

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

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

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

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

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

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

Custom Soil Resource Report

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

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

Custom Soil Resource Report Soil Map



Custom Soil Resource Report

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

 Blowout

 Borrow Pit

 Clay Spot

 Closed Depression

 Gravel Pit

 Gravelly Spot

 Landfill

 Lava Flow

 Marsh or swamp

 Mine or Quarry

 Miscellaneous Water

 Perennial Water

 Rock Outcrop

 Saline Spot

 Sandy Spot

 Severely Eroded Spot

 Sinkhole

 Slide or Slip

 Sodic Spot

 Spoil Area

 Stony Spot

 Very Stony Spot

 Wet Spot

 Other

 Special Line Features

Water Features

 Streams and Canals

Transportation

 Rails

 Interstate Highways

 US Routes

 Major Roads

 Local Roads

Background

 Aerial Photography

MAP INFORMATION

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

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

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

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

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

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

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

Soil Survey Area: Jefferson County, New York
Survey Area Data: Version 24, Aug 29, 2024

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

Date(s) aerial images were photographed: Sep 15, 2022—Oct 28, 2022

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

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
DeB	Deerfield loamy fine sand, 0 to 8 percent slopes	0.3	24.0%
Wa	Wareham loamy fine sand	1.0	76.0%
Totals for Area of Interest		1.3	100.0%

Map Unit Descriptions

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

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

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

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

onsite investigation is needed to define and locate the soils and miscellaneous areas.

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

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

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

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

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

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

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

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

Jefferson County, New York

DeB—Deerfield loamy fine sand, 0 to 8 percent slopes

Map Unit Setting

National map unit symbol: 9sn8

Elevation: 0 to 1,000 feet

Mean annual precipitation: 33 to 50 inches

Mean annual air temperature: 45 to 46 degrees F

Frost-free period: 110 to 170 days

Farmland classification: Farmland of statewide importance

Map Unit Composition

Deerfield and similar soils: 80 percent

Minor components: 20 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Deerfield

Setting

Landform: Terraces, outwash plains, deltas

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Tread

Down-slope shape: Concave

Across-slope shape: Convex

Parent material: Sandy glaciofluvial or deltaic deposits derived mainly from granite, gneiss, or sandstone

Typical profile

H1 - 0 to 7 inches: loamy fine sand

H2 - 7 to 28 inches: loamy fine sand

H3 - 28 to 60 inches: fine sand

Properties and qualities

Slope: 0 to 8 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Moderately well drained

Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)

Depth to water table: About 18 to 36 inches

Frequency of flooding: None

Frequency of ponding: None

Available water supply, 0 to 60 inches: Low (about 3.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3w

Hydrologic Soil Group: A

Ecological site: F142XB003VT - Moist Outwash

Hydric soil rating: No

Minor Components

Unnamed soils, sand pits, wet spots, marshes

Percent of map unit: 10 percent

Hydric soil rating: Yes

Windsor

Percent of map unit: 5 percent

Hydric soil rating: No

Scarboro

Percent of map unit: 3 percent

Hydric soil rating: Yes

Deerfield

Percent of map unit: 2 percent

Hydric soil rating: No

Wa—Wareham loamy fine sand

Map Unit Setting

National map unit symbol: 9ss4

Elevation: 100 to 1,000 feet

Mean annual precipitation: 33 to 50 inches

Mean annual air temperature: 45 to 46 degrees F

Frost-free period: 110 to 170 days

Farmland classification: Farmland of statewide importance

Map Unit Composition

Wareham, poorly drained, and similar soils: 50 percent

Wareham, somewhat poorly drained, and similar soils: 30 percent

Minor components: 20 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Wareham, Poorly Drained

Setting

Landform: Depressions

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Tread

Down-slope shape: Concave

Across-slope shape: Concave

Parent material: Sandy glaciofluvial or deltaic deposits

Typical profile

H1 - 0 to 5 inches: loamy fine sand

H2 - 5 to 24 inches: loamy sand

H3 - 24 to 60 inches: sand

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Poorly drained

Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)

Depth to water table: About 0 to 12 inches

Frequency of flooding: None

Custom Soil Resource Report

Frequency of ponding: None

Available water supply, 0 to 60 inches: Low (about 4.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 4w

Hydrologic Soil Group: A/D

Ecological site: F142XB003VT - Moist Outwash, F142XB004VT - Wet Outwash

Depression

Hydric soil rating: Yes

Description of Wareham, Somewhat Poorly Drained

Setting

Landform: Depressions

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Tread

Down-slope shape: Concave

Across-slope shape: Concave

Parent material: Sandy glaciofluvial or deltaic deposits

Typical profile

H1 - 0 to 5 inches: loamy fine sand

H2 - 5 to 24 inches: loamy sand

H3 - 24 to 60 inches: sand

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Somewhat poorly drained

Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)

Depth to water table: About 6 to 18 inches

Frequency of flooding: None

Frequency of ponding: None

Available water supply, 0 to 60 inches: Low (about 4.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 4w

Hydrologic Soil Group: A/D

Ecological site: F142XB003VT - Moist Outwash

Hydric soil rating: No

Minor Components

Scarboro

Percent of map unit: 10 percent

Landform: Depressions

Hydric soil rating: Yes

Deerfield

Percent of map unit: 10 percent

Hydric soil rating: No

References

- American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.
- American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.
- Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.
- Federal Register. July 13, 1994. Changes in hydric soils of the United States.
- Federal Register. September 18, 2002. Hydric soils of the United States.
- Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.
- National Research Council. 1995. Wetlands: Characteristics and boundaries.
- Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_054262
- Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577
- Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580
- Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.
- United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.
- United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374
- United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. <http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelpdb1043084>

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

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf

APPENDIX A
HYDROGRAPH CALCULATIONS

Watershed Model Schematic

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023



Legend

<u>Hyd.</u>	<u>Origin</u>	<u>Description</u>
1	SCS Runoff	Pre-developed
2	SCS Runoff	Post-Developed

Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	0.605	2	722	1,698	-----	-----	-----	Pre-developed
2	SCS Runoff	0.001	2	920	49	-----	-----	-----	Post-Developed
Watertown.gpw					Return Period: 1 Year			Friday, 08 / 15 / 2025	

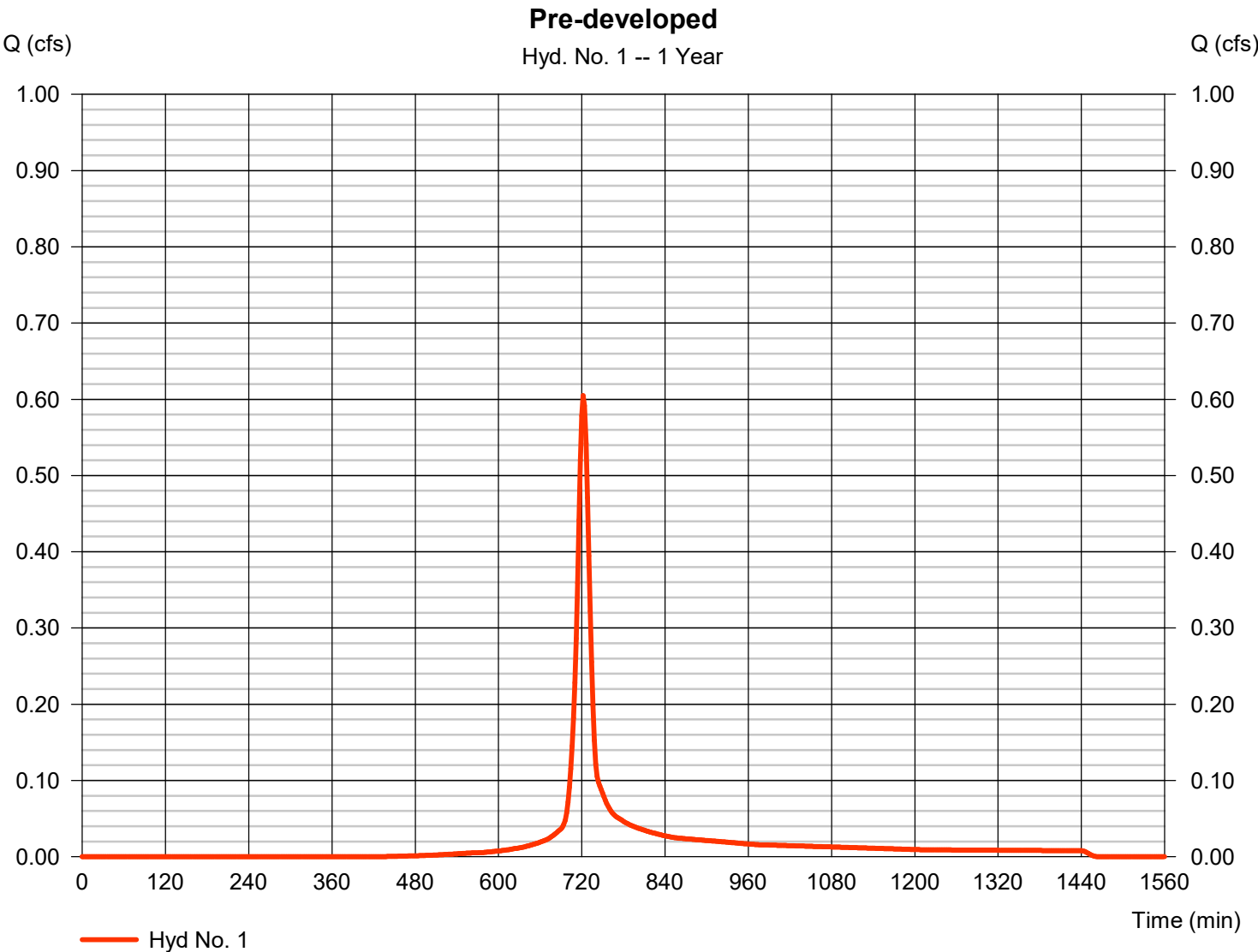
Hydrograph Report

Hyd. No. 1

Pre-developed

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.605 cfs
Storm frequency	=	1 yrs	Time to peak	=	722 min
Time interval	=	2 min	Hyd. volume	=	1,698 cuft
Drainage area	=	0.964 ac	Curve number	=	96*
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	User	Time of conc. (Tc)	=	15.00 min
Total precip.	=	0.85 in	Distribution	=	Type II
Storm duration	=	24 hrs	Shape factor	=	484

* Composite (Area/CN) = [(0.147 x 94) + (0.490 x 98)] / 0.964



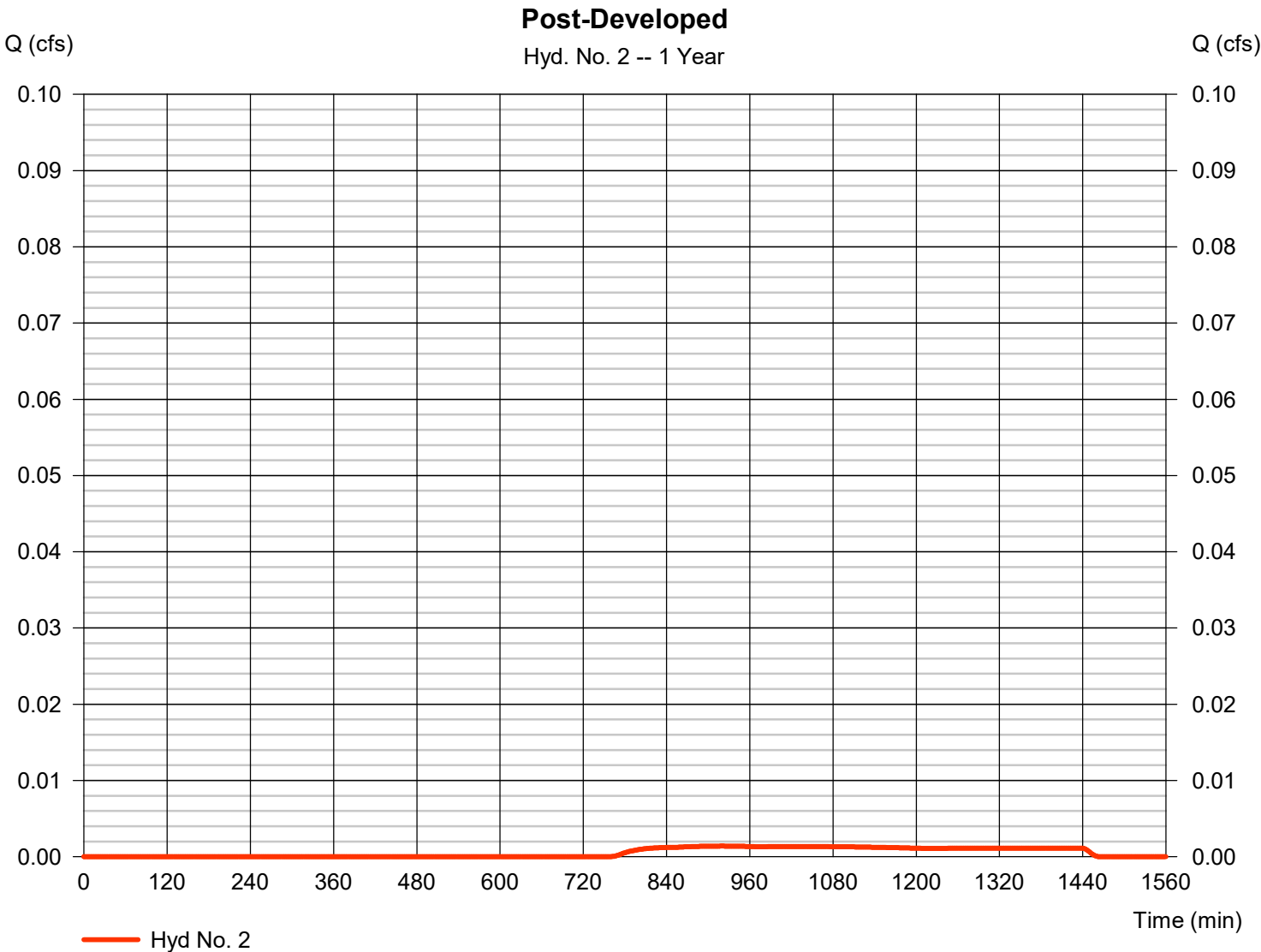
Hydrograph Report

Hyd. No. 2

Post-Developed

Hydrograph type	= SCS Runoff	Peak discharge	= 0.001 cfs
Storm frequency	= 1 yrs	Time to peak	= 920 min
Time interval	= 2 min	Hyd. volume	= 49 cuft
Drainage area	= 0.964 ac	Curve number	= 76*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 15.00 min
Total precip.	= 0.85 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = [(0.098 x 98) + (0.869 x 69)] / 0.964



Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	1.289	2	722	3,703	-----	-----	-----	Pre-developed
2	SCS Runoff	0.140	2	726	626	-----	-----	-----	Post-Developed
Watertown.gpw					Return Period: 10 Year			Friday, 08 / 15 / 2025	

Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

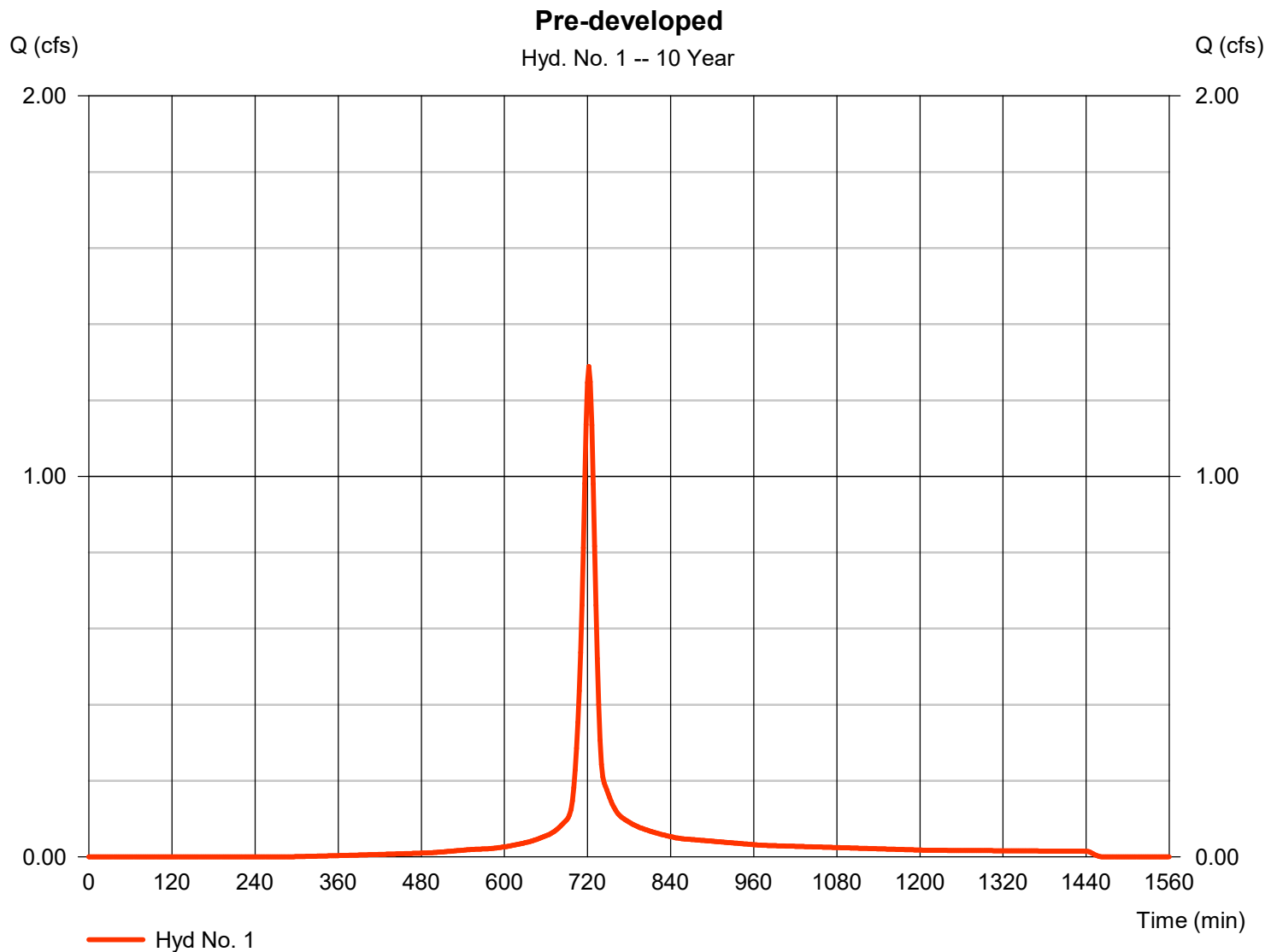
Friday, 08 / 15 / 2025

Hyd. No. 1

Pre-developed

Hydrograph type	= SCS Runoff	Peak discharge	= 1.289 cfs
Storm frequency	= 10 yrs	Time to peak	= 722 min
Time interval	= 2 min	Hyd. volume	= 3,703 cuft
Drainage area	= 0.964 ac	Curve number	= 96*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 15.00 min
Total precip.	= 1.49 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = $[(0.147 \times 94) + (0.490 \times 98)] / 0.964$



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

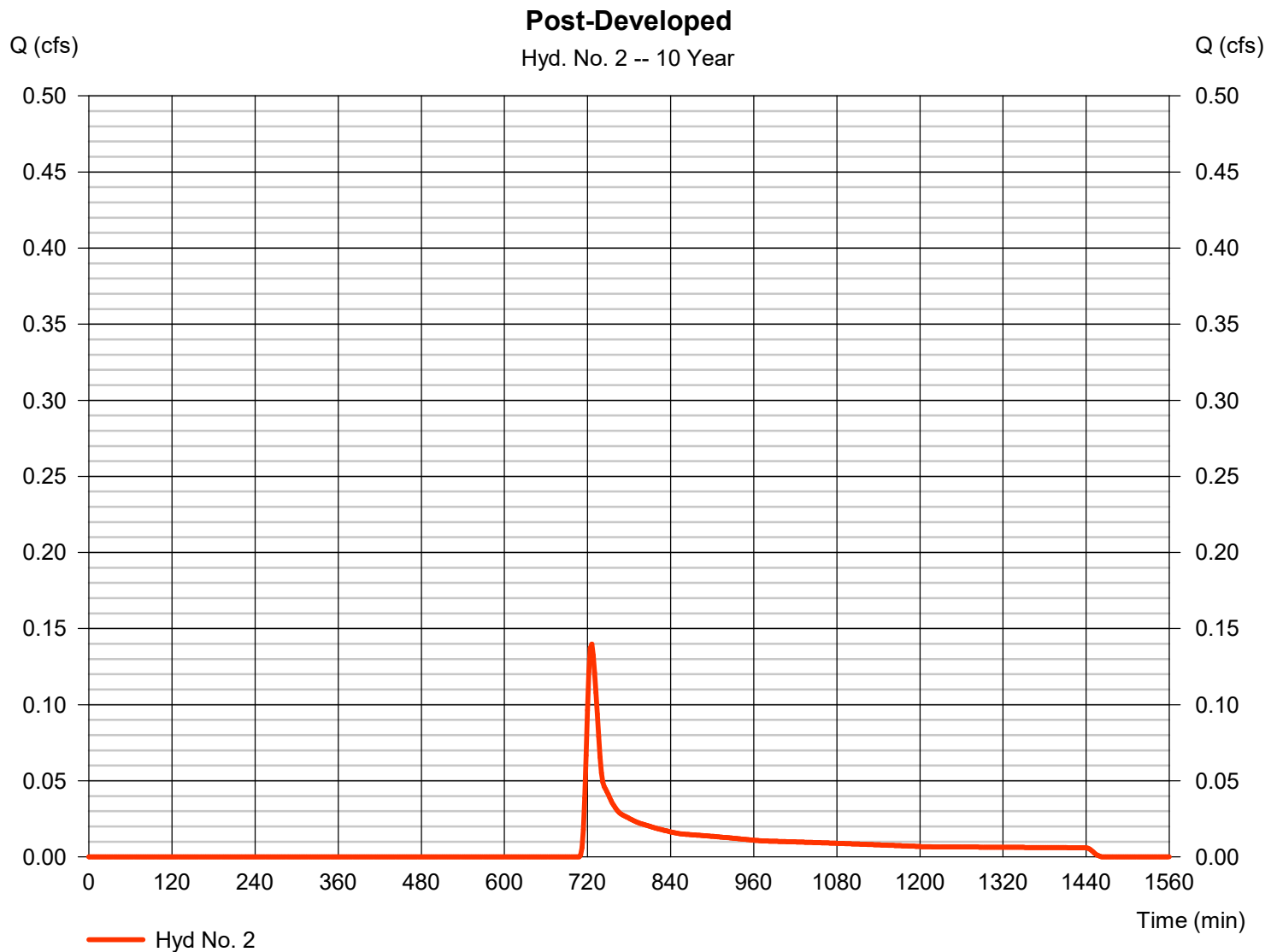
Friday, 08 / 15 / 2025

Hyd. No. 2

Post-Developed

Hydrograph type	= SCS Runoff	Peak discharge	= 0.140 cfs
Storm frequency	= 10 yrs	Time to peak	= 726 min
Time interval	= 2 min	Hyd. volume	= 626 cuft
Drainage area	= 0.964 ac	Curve number	= 76*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 15.00 min
Total precip.	= 1.49 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = $[(0.098 \times 98) + (0.869 \times 69)] / 0.964$



Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	2.091	2	722	6,167	-----	-----	-----	Pre-developed
2	SCS Runoff	0.596	2	724	1,852	-----	-----	-----	Post-Developed
Watertown.gpw					Return Period: 100 Year			Friday, 08 / 15 / 2025	

Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

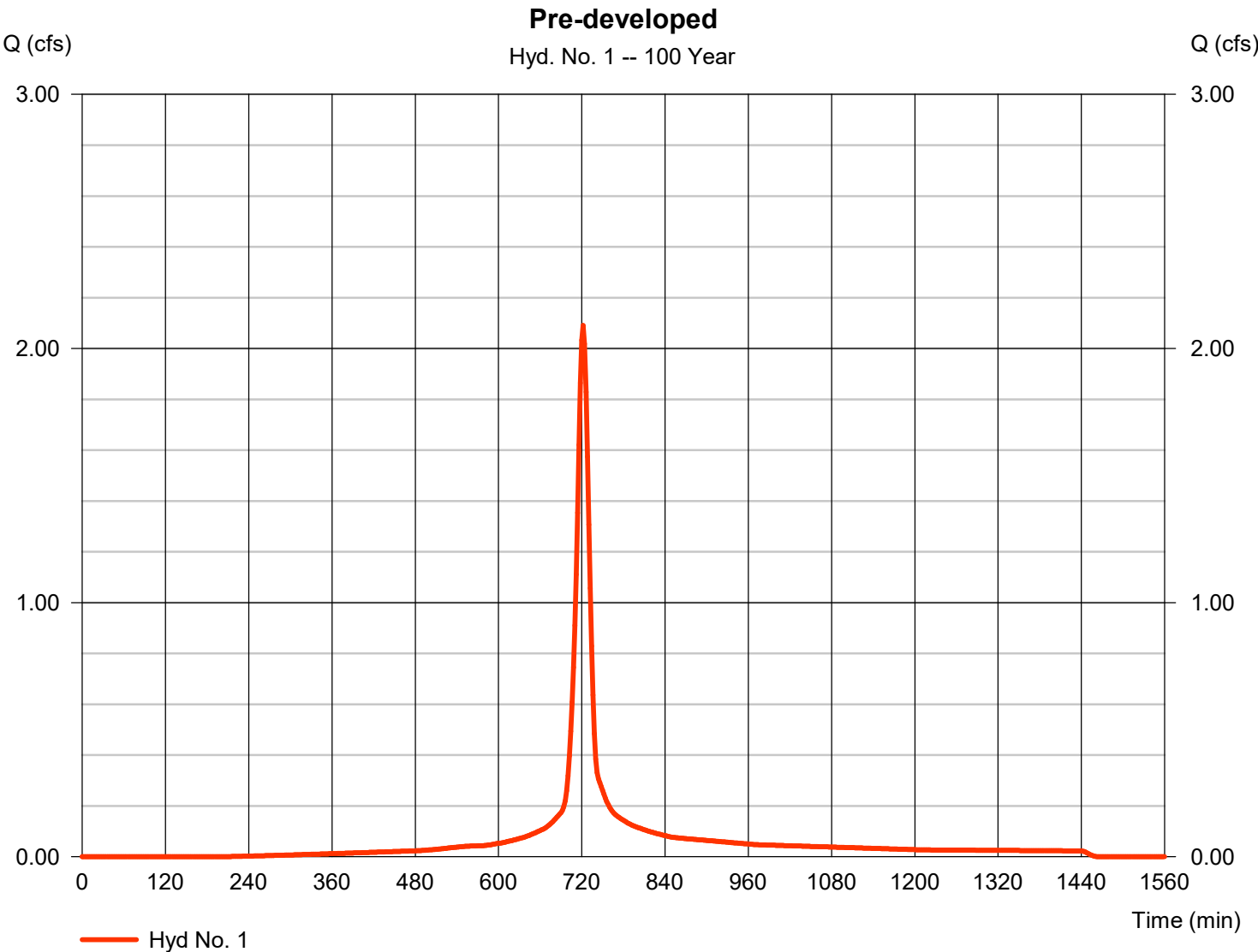
Friday, 08 / 15 / 2025

Hyd. No. 1

Pre-developed

Hydrograph type	= SCS Runoff	Peak discharge	= 2.091 cfs
Storm frequency	= 100 yrs	Time to peak	= 722 min
Time interval	= 2 min	Hyd. volume	= 6,167 cuft
Drainage area	= 0.964 ac	Curve number	= 96*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 15.00 min
Total precip.	= 2.24 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = [(0.147 x 94) + (0.490 x 98)] / 0.964



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

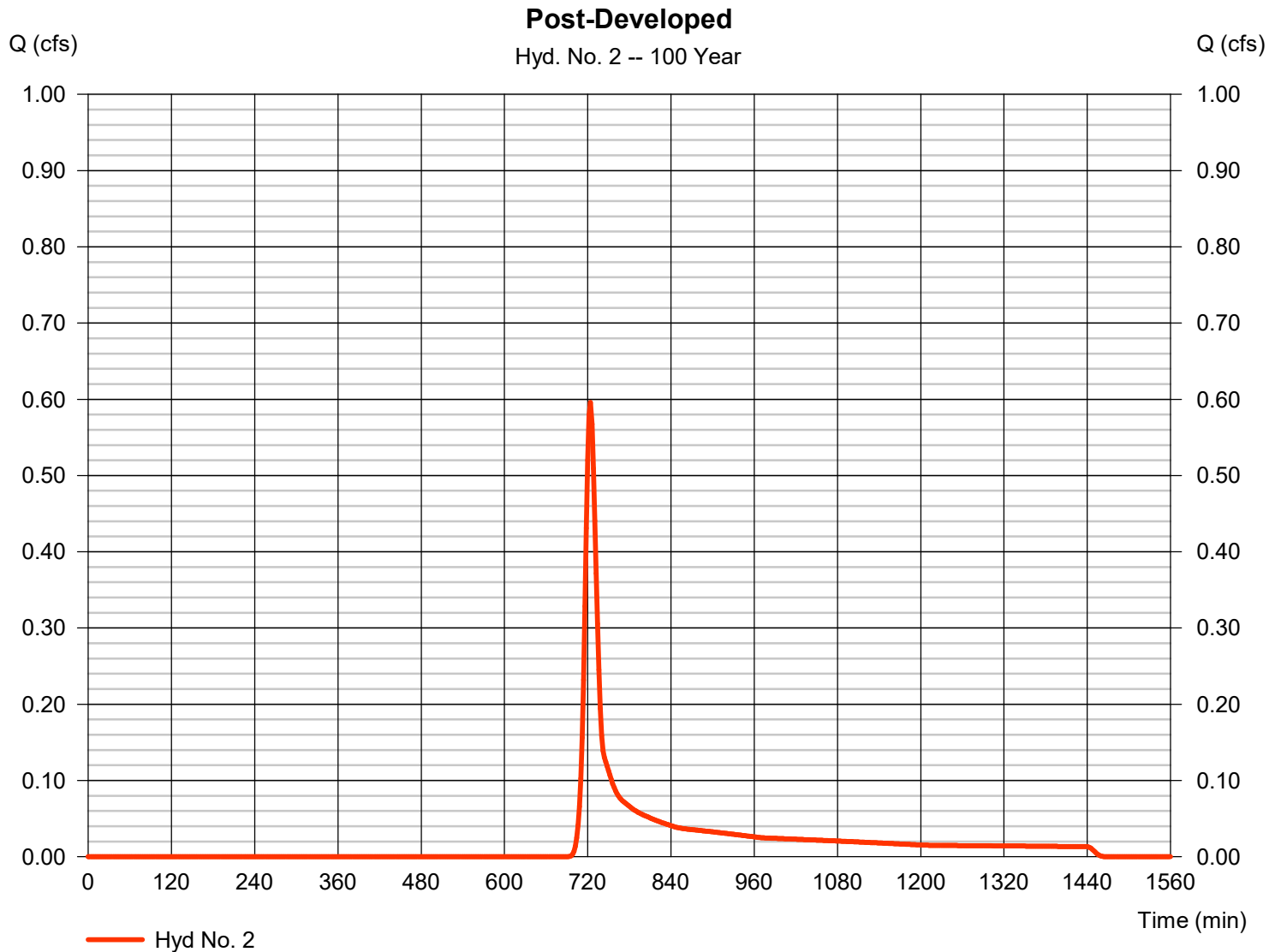
Friday, 08 / 15 / 2025

Hyd. No. 2

Post-Developed

Hydrograph type	= SCS Runoff	Peak discharge	= 0.596 cfs
Storm frequency	= 100 yrs	Time to peak	= 724 min
Time interval	= 2 min	Hyd. volume	= 1,852 cuft
Drainage area	= 0.964 ac	Curve number	= 76*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 15.00 min
Total precip.	= 2.24 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = $[(0.098 \times 98) + (0.869 \times 69)] / 0.964$



Return Period (Yrs)	Intensity-Duration-Frequency Equation Coefficients (FHA)			
	B	D	E	(N/A)
1	49.8143	12.7000	0.8875	-----
2	58.7088	13.0000	0.8793	-----
3	0.0000	0.0000	0.0000	-----
5	60.6959	12.8000	0.8366	-----
10	57.8706	12.1000	0.7949	-----
25	50.7167	10.7000	0.7316	-----
50	49.2990	10.3000	0.7020	-----
100	44.5918	9.3000	0.6582	-----

File name: Watertown.IDF

$$\text{Intensity} = B / (Tc + D)^E$$

Return Period (Yrs)	Intensity Values (in/hr)											
	5 min	10	15	20	25	30	35	40	45	50	55	60
1	3.89	3.12	2.61	2.26	1.99	1.78	1.61	1.48	1.36	1.27	1.18	1.11
2	4.62	3.73	3.14	2.71	2.40	2.15	1.95	1.79	1.65	1.54	1.44	1.35
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	5.46	4.44	3.76	3.27	2.91	2.62	2.39	2.20	2.04	1.90	1.78	1.68
10	6.06	4.94	4.20	3.67	3.27	2.96	2.71	2.50	2.32	2.17	2.04	1.93
25	6.77	5.53	4.72	4.14	3.71	3.37	3.10	2.87	2.68	2.52	2.37	2.25
50	7.26	5.96	5.10	4.50	4.04	3.68	3.39	3.15	2.95	2.77	2.62	2.49
100	7.74	6.36	5.46	4.83	4.35	3.98	3.68	3.43	3.22	3.04	2.88	2.74

Tc = time in minutes. Values may exceed 60.

cip. file name: J:\Projects\91 7 Brew (Wilson)\164 Watertown, NY 01 (Arsenal)\Calculations\Stormwater\Watertown.pcp

[illegible]

APPENDIX B
CALCULATIONS

RATIONAL CALCULATIONS

ENGINEER: M. Lozano

1068 Arsenal Street, Watertown NY 13601

DATE: 8/15/2025

Location	Ground Cover	Area (ft ²)	Area (ac)	%	C	% x C	Composite C
Predeveloped							0.86
	Grass	1,908	0.0438	5%	0.1	0.00	
	Paving/Building	40,092	0.9204	95%	0.9	0.86	
Postdeveloped			0.9642				0.57
	Grass	17,145	0.3936	41%	0.1	0.04	
	Paving/Building	24,855	0.5706	59%	0.9	0.53	
			0.9642				
Total Area			0.9642				

Section 4.2 Water Quality Volume (WQ_v)

$$WQ_v = (P) (R_v) (A) / 12$$

WQ_v = 0.0468 ac-ft

WQ_v = 2039 cf Required

P = 1.00 90% Rainfall Event Number

R_v = 0.583 = 0.05 + 0.9 (I)

I = 59% percent impervious cover

Total Project Area A= 0.964 acres

Proposed Impervious area = 0.571 acres

Section 4.4 Runoff Reduction Volume (RR_v)

$$RR_v = (WQ_v) \text{ (Volume Reduction)}$$

Volume Reduction = 100% for infiltration practices

RR_v = 2039 cf

RR_v = WQ_v

PIPE HYDRAULIC CALCULATIONS - MANNING'S EQUATION

	Contributing Q ₁₀₀ (cfs)	Diameter (in)	Slope (ft/ft)	n		A (sf)	Rh (ft)	Velocity (fps)	Q (cfs)	check
Outlet Pipe	0.596	15.00	0.01	0.012	HDPE	0.83	0.36	6.266	7.02	OK

1550 E. Republic Rd, Suite A
 Springfield, MO 65804
 Ph: 417.888.0645



Volume Calculations

ENGINEER: Moises Lozano

PROJECT: 7 Brew - Watertown, NY

DATE: 8/15/2025

	Surface Area (sf)	Cell Depth (ft)	Infiltration Media Volume (cf)	Void Space Infiltration Volume (cf)
Area 1	538	1	538	215
Area 2	4221	1	4221	1688
Area 3	481	1	481	192

Total Volume = 2,096 cf

Media Depth = 1 foot

Void Ratio = 40% (No. 2 Stone Reservoir)

$V > WQ_v$

Infiltration Volume

Infiltration Volume: 2039 cf
 Surface Area of Infiltration: 5240 sf
 Depth of Infiltrating Volume : 4.8 in
 coefficient of Permeability, K^* : 12.97 in/hr

Time to filter RP_v^{**} : 22 min

OK

*median value assumed from range of 5.95-19.98 in/hr provided by Exhibit D: Soil Map and Report

** RP_v shall infiltrate within 48 hours (Ch.6 NY Stormwater Management Design Manual)