

85 Portsmouth Avenue, PO Box 219, Stratham, NH 03885 603.772.4746 - JonesandBeach.com



June 21, 2022

Rochester Planning Board Attn. Mark Collopy, Chair 31 Wakefield Street Rochester, NH 03867

RE: Major Subdivision Application Autumn Street, Rochester, NH Tax Map 104, Lot 10 JBE Project No. 22022

Dear Board Members,

Jones & Beach Engineers, Inc., respectfully submits a Major Subdivision Application for the above-referenced parcel on behalf of our client, Tuck Realty Corporation. The intent of this application is to propose a residential subdivision consisting of roughly 23 lots with single-family homes designed as an open space/conservation subdivision. The project will be served by municipal water & sewer, and power. Development will be kept as tight as is feasible to limit impacts within the shoreland zones. This project will require the approval of NHDES for an Alteration of Terrain & Shoreland Permits.

The following are provided in support of this application with the following items:

- 1. Major Subdivision Application.
- 2. Current Deed.
- 3. Signed Authorization.
- 4. Abutters List & 3 Sets of Mailing Labels.
- 5. Tax Map.
- 6. Two (2) Drainage Analysis.
- 7. Three (3) Full Size Plan Sets.
- 8. Three (3) 11x17 Plan Set.

If you have any questions or need any additional information, please feel free to contact our office. Thank you very much for your time.

Very truly yours,

JONES & BEACH ENGINEERS, INC.

Ian MacKinnon, P.E.

Project Manager

cc: Mike Garrepy, Tuck Realty Corporation (application & plans via email)



Planning Board Conservation Commission Historic District Commission Arts & Culture Commission

PLANNING & DEVELOPMENT DEPARTMENT

City Hall Annex 33 Wakefield Street, Rochester, New Hampshire 03867-1917 (603) 335-1338 - Fax (603) 330-0023

Web Site: www.rochesternh.net

MEMORANDUM

TO:

Applicants for a <u>MAJOR SUBDIVISION</u> (involving a total of four or more lots)

FROM:

Planning & Development Department

DATE:

May 2019

SUBJ:

Submission Requirements and Review Process for Formal Applications

We appreciate your interest in developing property in the City of Rochester and would like to make the application process as simple and pleasant as possible. Please review the following items carefully and feel free to contact our office with any questions, comments, or suggestions. For applicants/agents who are not highly familiar with the review process in Rochester it is strongly recommended that you speak with the Planning Department (603-335-1338) about the submission process before preparing an application. We also recommend that you speak with the Assessing Office (335-5109) about the significant financial ramifications of developing current use land.

- * Please note. On any significant site plans and on major subdivisions, especially those involving a new road, a preliminary meeting with staff and/or a preliminary (conceptual or preferably design review) discussion with the Planning Board prior to engineering the project is strongly encouraged. In most cases, initial site layout or proposed lot and road locations will change as a result of the City's review and you will save time and money if you wait to do the engineering until you receive this feedback. A separate application form is used for preliminary applications.
- A) The applicant must submit all of the following items in order for the application to be considered and processed as a formal application (see exception/clarification at the end):
 - 1) Completed application form -4 copies
 - Written narrative about the proposed project addressing the scope of operation, purpose, justification, and impacts (a simple letter of intent may suffice) 4 copies
 - Complete set of drawings on $11'' \times 17''$ sheets -2 sets folded in half
 - Complete sets of full size drawings as described in the regulations (a mylar is not required)
 3 sets

- 5) Drainage, traffic, and other studies as appropriate -2 copies
- Completed checklist (corresponding to Section II.5.A. of the Site Plan Regulations or Section 4 of the Subdivision Regulations, blank attached) filled out by applicant - 1 checklist
- 7) All items specified on the checklist (5, above) and in the regulations must be submitted unless they are not applicable or a waiver is requested and approved. For site plans please be sure to include information on lighting, signage, and architecture, as specified.
- 8) Application fee (see fee schedule). Checks should be made out to "City of Rochester".
- 9) Completed abutter's list. All parcels of land which are contiguous to the subject property at any point or which would be contiguous if not for an intervening road or stream must be listed. The list is completed by the applicant directly from information on the computer terminal located in the Assessor's Office. The list may not be filled out more than 5 days prior to the application deadline. Please note that holders of conservation or preservation easements must also be notified. If there are any they must be included on the abutter's list. One original only. The applicant must pay the City of Rochester the current postal rate for a certified letter to be mailed to everyone on the abutter list. The Planning Department will generate the public hearing notice and take it to the post office to be mailed certified. The applicant shall supply two (2) mailing labels for each name on the abutter list.
- Requests for waivers, if any. The applicant may request waivers from submission requirements and design standards. Waivers are granted by the Planning Board at its discretion. Any request must be submitted by the applicant in writing specifying the regulation number and reason for the request. If you believe that obtaining a waiver will improve your project we encourage you to apply for it. Four (4) copies or one (1) copy if requested on checklist
- 11) Please submit the four (4) application packages application form, narrative, and folded 11x17 drawings (and waivers if submitted as a separate memo) with each clipped together as one set. Staff will inform you after the TRG meeting how many final application packages to submit for the Planning Board.
- If all necessary items are not submitted, such that the application cannot be accepted as complete, the application will be treated as a preliminary application. However, at the discretion of the Planning Board, various items which can be reviewed fairly independently and readily inserted into an engineered plan such as landscaping, lighting, signage, and architecture may be submitted later, after plan acceptance, provided they are submitted in a form and timeframe to allow for full review prior to final action. Consult the Planning Department for more information. In addition, particular items such as the drainage report, for example may be submitted after the application deadline but prior to the Planning Board meeting and not affect acceptance, if the timeframe for submittal of those items is approved in advance by the Planning Department.

- B) Agents (or applicants) must attend the Technical Review Group meeting held one week after the application deadline. The applicant or agent must attend the Planning Board meeting.
- C) The application must comply with all of the following: the City of Rochester <u>Site Plan Regulations</u> or <u>Subdivision Regulations</u>, as appropriate, unless a waiver is obtained; the City of Rochester <u>Zoning Ordinance</u> unless a variance is obtained; and all other applicable local, state, and federal regulations. Applicants are encouraged to purchase a copy of the City of Rochester <u>Site Plan Regulations</u> or <u>Subdivision Regulations</u>, as appropriate.
- D) The project must be built and executed exactly as specified in the approved application package unless modifications are subsequently approved. All of the documentation submitted in the application package will be considered part of the approval unless otherwise updated, revised, or superseded.
- E) The application may be subject to the following requirements, fees, and assessments:
 - 1) A small monumentation fund fee will be assessed on all projects that are not surveyed using the New Hampshire State Plane Coordinate System.
 - 2) A connection fee will be imposed on all projects that tie into the City's water or sewer system.
 - 3) Where drainage systems, roads, sidewalks, or other infrastructure impacted by the project are substandard the applicant may be required to upgrade these facilities or contribute to an upgrade.
 - 4) Payment for inspection fees as determined by the Department of Public Works.
 - 5) Reimbursement of any out-of-pocket expenses incurred by the City in evaluating the project.
 - A sewer impact contribution must be paid for each lot prior to the issuance of a certificate of occupancy for that lot. The sewer impact is a one time payment for each house/building of \$2.00 per gallon for average daily flow, equivalent to \$300 per bedroom.
 - 7) The Planning Board may impose other requirements, fees, and assessments, as appropriate.
- F) A pre-construction meeting will be required for all projects that involve significant ground disturbance. The applicant will be required to sign pre-construction and inspection agreements after project approval. For projects substantial in scope the applicant may be required to enlist the services of the design engineer to inspect and certify the work. After construction is completed the applicant must submit as-built plans to the City.

Once again, please feel free to contact our department with any questions. Thank you for your cooperation.



MAJOR SUBDIVISION APPLICATION E

(a total of four or more lots)

City of Rochester, New Hampshire



Date:	Is a conditional needed?	Yes: <u>x</u>	No:	_ Unclear:
	(If so, we encourage you to	submit an a	application as	soon as possible.
Property information				
Tax map #: 104 ; Lo	#('s): <u>10</u> , Zon	ing district:	Residential - 1	
Property address/location:	Autumn Street			
Name of project (if applicab	le):_Residential Subdivision			
Size of site: 14.1 acres	; Overlay zoning district(s)? _None		
Property owner				
Name (include name of ind	vidual): Dana S. Coop 1985 Trust	t, Shirley L. Coop	1985 Trust	
Mailing address: PO Box 1767	, Rochester, NH 03866			
Telephone #:	E	mail:		
Applicant/developer (i	different from property own	er)		
Name (include name of indi	vidual): Tuck Realty Corporation,	Turner Porter		
Mailing address: PO Box 190,	Exeter, NH 03833			
Telephone #: 603-778-6894	E	mail: turnerpo	orterjr@gmail.com	
Engineer/surveyor				
Name (include name of indi	vidual): Ian MacKinnon P.E., Jone	s & Beach Engir	neers, Inc.	
Mailing address: PO Box 219, St	ratham, NH 03885			
Telephone #: 603-772-4746	F	ax #:		
Email address: imackinnon@jon	esandbeach.com F	Professiona	l license #:	16659
Proposed project				
Number of proposed lots: 2	; estimat	ed length o	f new roads:	1,250 +/- LF
Number of cubic yard of ear	th being removed from the	e site?_Estima	ate no removal. F	ill required
City water? yes <u>×</u> no _	_; How far is city water	from the sit	e? _at frontage	
City sewer? yes <u>×</u> no _	_; How far is city sewer	from the si	te? _at frontage	
If city water, what are the es	it. total gal. per day? <u>10,350</u>	; Are the	re pertinent o	covenants?
Where will stormwater be d	scharged? On-site - overland - a	ifter detention &	treatment	

<u>Wetlands</u> : Is any fill proposed? <u>No</u> ; area to be filled:; buffer impact? <u>No</u>
Comments
Please feel free to add any comments, additional information, or requests for waivers here:
Submission of application This application must be signed by the property owner, applicant/developer (if different from property owner), <i>and/or</i> the agent.
I(we) hereby submit this Subdivision application to the City of Rochester Planning Board pursuant to the <u>City of Rochester Subdivision Regulations</u> and attest that to the best of my knowledge all of the information on this application form and in the accompanying application materials and documentation is true and accurate. As applicant/developer (if different from property owner)/as agent, I attest that I am duly authorized to act in this capacity.
Signature of property owner: E. Ch. (w/ authorization)
Date: 6/21/22
Signature of applicant/developer: E. C. (w/ authorization)
Date: 6/21/22
Signature of agent: 2. le 1
Date: 6/21/22
Authorization to enter subject property
I hereby authorize members of the Rochester Planning Board, Zoning Board of Adjustment, Conservation Commission, Planning Department, and other pertinent City departments, boards and agencies to enter my property for the purpose of evaluating this application including performing any appropriate inspections during the application phase, review phase, post-approval phase, construction phase, and occupancy phase. This authorization applies specifically to those particular individuals legitimately involved in evaluating, reviewing, or inspecting this specific application/project. It is understood that these individuals must use all reasonable care, courtesy, and diligence when entering the property.
Signature of property owner: E. ch Me (w/ authorization)
Date:

Major Subdivision Checklist (Major subdivisions a total of 4 or more lots)

*To be filled out by applicant/agent (with notes to be inserted by staff)

See regulations for other specific requirements
City of Rochester Planning & Development Department

Project Name: Residential Subdivision		_ Map: <u> Lot:</u>			10 Date: June 21, 2022			
Applicant/agent: Tuck Realty Corporation		_ Signa	ature:_	E. ch.	uc (u/ authorization			
(Staff review by:		Date:						
General items	Yes	No	N/A	Waiver Requeste	d Comments			
4 sets completed application	x							
Total application fee	х							
4 copies of narrative	x							
3 sets of full-size plans	х							
2 sets of 11 X 17 reductions	х							
Completed abutters list	x							
Copy of existing covenants, easements,	х							
and deed restrictions								
Plan Information Basic information including: Title sheet Name of project Date North arrow Scale Legend Revision block Vicinity sketch - no less than 1" = 1,000								
Approval block (for signature by staff attesting to Planning Board approval)	x							
Name and address of developer/applicant	X							
Name, stamp, and NH license # of licensed land surveyor for platting	х							

General items Continued				Waive	
Name, stamp, and NH license # of licensed engineer for streets, utilities and drainage	Yes	No	N/A	Reque	sted Comments
City tax map & lot #'s	X				
Subdivision approval					-
statement (per regulations) Notation on plans: "For more information about this subdivision contact"					
References to neighboring plans and subdivisions	Х				
Information on abutting properties: owner name owner address tax map and lot # square footage of lots approximate building footprints use	x x				
Zoning Zoning designations of subject tract and in vicinity of tract	x				
Zoning requirements for district: • frontage • lot dimensions/density • all setbacks • lot coverage Zoning overlay districts	X X X				
Existing Topographic Features Contour lines and spot elevations Soil types and boundaries Soil test pit locations, profiles, and depth to water table and ledge	x x				
Percolation test locations and results	х				

Existing Topographic Features Continu				Waive	_	
Water features (ponds, streams)	Yes	No	N/A	Reque	ested 	Comments
Wetlands including name of certified wetlands scientist & license # who delinea	x ted				<u> </u>	
Statement whether located in flood area, and if so, 100 year flood elevation	х					
Delineation of treed and open areas	X					
Overview of types of trees and vegetation	Х					
Location of rock outcroppings			X			
Stone walls and archaeological features			X			
Locations of trails and paths			X		2 	
Other natural/cultural resources (productive farmland, habitats, scenic views, historic structures, etc.)			X			
Existing buildings/structures	Х					
Existing driveways and access points	X					
Platting Surveyed property lines including: existing and proposed bearings existing and proposed distances existing and proposed pins	x x					
Existing and proposed location of:monumentsbenchmarks	x					
Proposed square footage for each lot Subdivision # on each lot (1, 2, 3, etc.) Include error of closure statement	X					

Streets	.,			Waiver	
Street plan (including utilities)	Yes	No	N/A	Reques	sted Comments
Street profiles including vertical data and street stations and utilities	x				
Street cross sections including (if appropriate):					
 width of pavement travel and parking lanes striping curbing lawn strips sidewalks street trees drainage structure of base and pavement all utilities 					
Curb, intersection, and cul de sac radii	x				
Limits of construction/ground disturbance	х				
Traffic control devices (stop signs, etc.)	X				
Street light locations and details		X			
Spacing, species, specifications for street trees	Х				
Landscaped island in cul de sacs		Х			
Proposed street names					
<u>Utilities</u> Show existing and proposed for all subject materials, and all appropriate details.	t lots ar	nd with	in right	of way.	Include plans, profiles, sizes,
Water lines/well (with appropriate radius)	X				
Sewer lines/septic and leaching areas	X				

<u>Utilities Continued</u>				Waive		
	Yes	No	N/A	Reque	ested	Comments
Pump stations	х					
Stormwater management system: pipes, culverts, catch basins, detention/ retention basins, swales, rip rap, etc.	X					
Fire hydrant locations and details	х					
Electric, telephone, cable TV (underground)) X					
Gas lines		х				
Other Elements						
Phasing plan, if appropriate		X				
Traffic study, if appropriate		X				
Drainage study with calculations, storm water impact analysis, and mitigation plan	X					
Grading plan	X					
Earth being removed from site(in cubic yards	s)	х				
Erosion and sedimentation plan	X					
Mitigation plan for environmental impacts during construction		X				
Proposed open space areas	X					
Proposed recreation facilities on site		х			-	
School bus pickup/drop off plan		Х				
Proposed covenants, easements, and deed restrictions	Х					
Fiscal impact study (if requested)		Х			<u></u>	
Road Acceptance Policy and Procedure: ls there a public road proposed?	X					
If yes, Have you read and understand the Road acceptance procedure?	X					
Additional Comments:						

Letter of Authorization

I, Turner Porter, Jr., Tuck Realty Corporation, PO Box 190, Exeter, NH 03833, developer of property located in Rochester, NH, known as Tax Map 104, Lot 10, do hereby authorize Jones & Beach Engineers, Inc., PO Box 219, Stratham, NH, to act on my behalf concerning the previously mentioned property. The parcel is located on Autumn Street in Rochester, NH.

I hereby appoint Jones & Beach Engineers, Inc., as my agent to act on my behalf in the review process, to include any required signatures.

Witness

Turner Porter, Jr.

Tuck Realty Corporation

WARRANTY DEED

KNOW ALL MEN BY THESE PRESENTS THAT DANA S. COPP and SHIRLEY L. COPP, husband and wife, both of 635 Salmon Falls Road, Rochester, County of Strafford, State of New Hampshire 03868, for consideration paid, grants an undivided one-half interest to DANA S. COPP, TRUSTEE OF THE DANA S. COPP 1985 TRUST and an undivided one-half interest to SHIRLEY L. COPP, TRUSTEE OF THE SHIRLEY L. COPP 1985 TRUST, and their successors, both of 635 Salmon Falls Road, Rochester, County of Strafford, State of New Hampshire 03868, with warranty covenants-

PARCEL 1: (Salmon Falls Road, Rochester, NH)

A certain parcel of land located in Rochester, Strafford County, New Hampshire on the westerly side of Salmon Falls Road being more accurately described as follows:

Beginning at a steel stake on the westerly sideline of Salmon Falls Road at the southeasterly corner of land now or formerly of Joseph A. and Esther M. Vallee; thence turning and running S 55° W along land now or formerly of Vallee for a distance of four hundred six and one-tenth (406.1) feet, more or less, to a steel stake; thence turning and running southeasterly along a wire fence and land now or formerly of Dorothy H, Chalmers to a steel stake; thence turning and running northeasterly along land now or formerly of Robert D. and Gertrude E. Wilson to a point; thence turning and running N 15° 33' W along land, now or formerly, of Roger N. Allen for a distance of one hundred (100.0) feet, more or less, to a point; thence turning and running N 55° E by land now or formerly of Allen for a distance of one hundred fifty (150.0) feet, more or less, to a point on the westerly sideline of Salmon Falls Road; thence turning and running N 35° W along the westerly sideline of sid road for a distance of one hundred sixty-one and seven-tenths (161.7) feet, more or less, to the point of beginning.

Meaning and intending to convey the same premises conveyed to the above grantors by deed of Clarence Young and Evelyn Young dated December 27, 1990, recorded in Book 1536, Page 780, Strafford County Registry of Deeds.

PARCEL 2: (Route 16, Milton Road, Rochester, NH)

A certain tract or parcel of land, situate in said Rochester on (and off from) the westerly side of the Wakefield or Milton Road, or Route 16, as variously so-called, and shown on "Plan of Land, Maynard and Nora Copp, Rochester, New Hampshire ... December 20, 1957, File No. 4 3-32", made by G.L. Davis & Associates, which is recorded in the Strafford County Registry of Deeds, bounded and described as follows:

DEPARTMENT OF NEW HAMPSHIRE PROPERTY OF REVENUE ADMINISTRATION

XXXXTHOUSAND XXX HUNDRED AND X40DOLLARS

03-22-00 412337 \$ 40.00

Beginning at a stone bound at the southeasterly corner of land formerly of the heirs of John Torr (later of Samuel Belinsky) and thence running S 52 3/4° W by said former Torr land, two hundred eighty (280) feet to a steel stake in the ground (which is located 48.1 feet in a northeasterly direction from a steel stake in the ground at the northwesterly corner of the land now or formerly of Joseph V. and Doris N. Bibeau hereinafter mentioned in this description); thence turning and running generally N 37 1/4° W, by said former Torr land, and by lands formerly of Daniel J. Parsons and Jonathan T. Dodge (now of the City of Rochester) to land of, or right of way of, the boston & Maine Railroad; thence turning and running in a southwesterly direction, by said Railroad land, to Downs Brook, so-called, thence turning and running in a generally southeasterly direction, by said brook, and to the steel stake in the ground at a former location of the northwesterly end of a stump fence; thence turning and running N 54° 07' E, by land now or formerly of Dana S. and Shirley L. Copp, one hundred thirty-seven and three-tenths (137.3) feet to a steel stake in the ground; thence turning and running S 64° 34' E, by said Dana S. and Shirley L. Copp land, one hundred forty-three and nine-tenths (143.9) feet to a steel stake in the ground at the southwesterly corner of land of Joseph V. and Doris N. Bibeau, thence turning and running N 25° 26' E, by said Bibeau land, one hundred (100) feet to the northwesterly corner thereof; thence turning and running \$ 64° 34' E, by said Bibeau land, one hundred fifty (150) feet to a steel stake in the ground at said highway; thence turning and running in a northerly direction, by said highway, three hundred (300) feet, more or less, to the point of beginning.

Further, said premises are SUBJECT TO the pole line easement granted to New England Telephone & Telegraph Company by deed of Lewis Ricker, dated December 20, 1911, recorded in Book 363, Page 313.

Meaning and intending to convey the same premises described in deed of Dana S. Copp to Dana S. Copp and Shirley L. Copp dated December 24, 1985, recorded in Book 1203, Page 442, Strafford County Registry of Deeds.

PARCEL 3: (Salmon Falls Road, Rochester, NH)

A certain tract or parcel of land situate in said Rochester, southwesterly from but not adjoining the Salmon Falls Road, so-called, and bounded and described as follows, to-wit:

Beginning at the southeasterly corner of the premises herein conveyed at an iron pipe located two hundred (200) feet southwesterly from said Salmon Falls Road, between lands now or formerly of Robert E. and Jennie H. Metivier and Sumner L. and Mary Ann Chick; and thence running S 53° 30' W, by said Metivier land twenty-eight hundred sixteen (2816) feet, more or less, to an iron hub at land formerly of James Corson; thence turning and running N 35° 30' W five hundred seventy-seven (577) feet, more or less, to a point; thence turning at right angles and running northeasterly five hundred ten (510) feet, more or less, to a stake; thence turning at right angles and running northwesterly five hundred

thirty-three (533) feet, more or less, to a pin at land believed to be of one Stuart; thence turning and running N 53° 30' E, by said Stuart land, eight hundred one (801) feet to a corner; thence turning and running southeasterly one thousand forty (1,040) feet, by said Stuart land, to an iron pin; thence turning and running N 53° 30' E, by said Stuart land, seven hundred eighty-nine (789) feet to an iron pin; thence turning and running northwesterly, by said Stuart land, one thousand forty (1040) feet, more or less, to an iron pin; thence turning and running N 53° 30' E, by land formerly of Albert R. Chalmers, now of said Dana S. and Shirley L. Copp, seven hundred seven (707) feet and three and onehalf (3 1/2) inches, more or less, to the northeasterly corner of the premises herein conveyed, at the southwesterly corner of land formerly of Arthur M. Buswell, later of Charles E. Ham, at a point two hundred eight (208) feet and eight and one-half (8 1/2) inches southwesterly from an iron hub at said Salmon Falls Road (as stated in deed from Alma R. Jackson to said Arthur M. Buswell, dated may 1, 1940, and recorded in Strafford County Registry of Deeds Book 496, Page 150: "...said hub being in the driveway leading into the field of the said Chalmers, six feet from the end of the wall which is the division line between the land herein described and the Salmon Falls Road..."); thence turning and running in a southeasterly direction, parallel with said Salmon Falls Road, by said Buswell land, two hundred eight (208) feet and eight and one-half (8 1/2) inches; thence turning and running in a northeasterly direction, by said Buswell land, thirty-three (33) feet and eight and one-half (8 1/2) inches to an iron hub one hundred seventy-five (175) feet southwesterly from said Salmon Falls Road, and at land formerly of Lawrence P. and Alice M. Senter; thence turning and running in a southeasterly direction, parallel with said Salmon Falls Road, and one hundred seventy-five (175) feet southwesterly therefrom (through sundry hubs in the ground), by lands now or formerly of said Senters, of Edgar and Blanche M. Sewall, of Wallace H. and Evelyn B. Abbott, and of Paul D. Kiser, Jr. and Shirley E. Kiser, a total of five hundred (500) feet to an iron hub at land now or formerly of Kenneth A. and Norma J. Bogart; thence turning and running in a southwesterly direction, by said Bogart land, twenty-five (25) feet to an iron hub two hundred (200) feet southwesterly from said Salmon Falls Road; thence turning and running in a southeasterly direction, parallel with the Salmon Falls Road, and through an iron hub, by said Bogart land, and by land now or formerly of Donald Joseph Rennebu, a total of two hundred (200) feet to an iron hub int he ground; thence turning and running in a northeasterly direction twenty-five (25) feet to an iron hub in the ground one hundred seventy-five (175) feet southwesterly from said Salmon Falls Road, at land now or formerly of Ronald P. and Jacqueline A. Lavallee; thence turning and running in a southeasterly direction, parallel with said Salmon Falls Road, by said Lavallee land, to an iron hub at land now or formerly of said Chicks; thence turning and running in a southwesterly direction, by said Chick land, twenty-five (25) feet to an iron hub in the ground two hundred (200) feet from said Salmon Falls Road; thence turning and running in a southwesterly direction, by said Chick land, twenty-five (25) feet to an iron hub in the ground two hundred (200) feet from said Salmon Falls Road; thence turning and running in a southeasterly direction, parallel with said Salmon Falls Road, by said Chick land, one hundred (100) feet to the point of beginning.

Together with the benefits and subject to the burdens of any right of way which may run from or near the northeasterly corner of the premises herein conveyed in a northeasterly direction to said Salmon Falls Road, along and in part over the northwesterly sideline of said former Buswell property.

Meaning and intending to convey the same premises described in deed of Dana S. Copp and Shirley L. Copp to Dana S. Copp and Shirley L. Copp dated December 24, 1985, recorded in Book 1203, Page 428, Strafford County Registry of Deeds. See also corrective deed from Maybelle B. Griffin to these grantors dated January 26, 1988, recorded in Book 1373, Page 278, Strafford County Registry of Deeds.

PARCEL 4: (Barn on Salmon Falls Road, Rochester, NH)

A certain tract or parcel of land with the buildings thereon situate on Salmon Falls Road, Rochester, Strafford County, New Hampshire, bounded and described as follows:

Beginning at a steel stake set by David A. Berry on the southwesterly side of said Salmon Falls Road, at the easterly corner of land now or formerly of Albert R. Chalmers, thence running S 55° 0' W a distance of two hundred sixty (260) feet to a second steel stake set by said Berry at the southerly corner of other land of said Chalmers; thence continuing on the same compass course by other land now or formerly of said Chalmers, a distance of one hundred forty (140) feet, more or less, to a steel stake to be set in the ground; thence turning and running N 35° 33' W by other land now or formerly of said Chalmers to land now or formerly of George A. Pray; thence turning and running in a southwesterly direction by said Pray land, a distance of eight hundred (800) feet, more or less, to land now or formerly of Leo Huppe, formerly land of George A. Jacobs; thence turning and running in a southeasterly direction by said Huppe land a distance of eleven hundred twenty nine (1129) feet, more or less, to land now or formerly of the heirs of the late Ezra Pray; thence turning and running in a northeasterly direction by said Ezra Pray land a distance of twelve hundred (1200) feet, more or less, to the southwesterly side of said Salmon Falls Road; thence turning and running N 35° 33' E by the southwesterly side of said Salmon Falls Road a distance of six hundred (600) feet, more or less, to the point of beginning.

The above described premises are subject to what rights of way there may be across the southerly side of said lot.

Excepting therefrom all lots previously conveyed.

Meaning and intending to convey the same premises described in deed of Dana S. and Shirley L. Copp to Dana S. Copp and Shirley L. Copp dated December 24, 1985, recorded in Book 1203, Page 447, Strafford County Registry of Deeds.

Also another tract of land acquired by Decree of the Strafford County Superior Court Docket No. 91-E-108 recorded in Book 1586, Page 520, more particularly described as follows:

A certain parcel of land situated southerly of the Salmon Falls Road in Rochester, Strafford County, New Hampshire, as shown on, "Plan of Land, Rochester, N.H., for Dana S. & Shirley L. Copp", dated October 1988 revised November 30, 1999, by Norway Plains Associates, Inc. to be recorded Strafford County Registry of Deeds.

Beginning at an iron pipe at other land of the said Dana S. and Shirley L. Copp at the southwesterly corner of the lot herein described at the southeasterly corner of the land of the said Nettie Evelyn Clement Huppe at the boundary line between the land of the said Huppe and this lot; thence N 37° 29' 40" W, 1167.46 feet by Huppe land to an iron pipe set in the ground at land n/f George E. and Natalie I. Pray; thence by Pray land N 58° 16' 35" E, 193.22 feet, more or less, to a stump; thence continuing N 55° 12' 50" E, 216.84 feet, more or less, to other land of the said Copps; thence S 33° 42' 15" E, 1146.18 feet by Copps' other land as shown on said plan to a point at other land of the said Copps; thence S 53° 31' 05" W, 333.11 feet, more or less, by Copps' other land to the iron pipe at the point of beginning. Said parcel contains 9.83 acres, more or less, and subject to a right of way along the southerly boundary of said lot.

PARCEL 5: (Chamberlain Street, Rochester, NH)

A certain parcel of land situate in said Rochester northeasterly from Chamberlain Street and southwesterly from the Salmon Falls Road bounded on the northeast by land formerly of Clarence Griffin, now believed of said grantees; on the southeast by land formerly of David Barker, now believed by said grantees; on the southwest by land formerly of Knight and Chamberlain, now believed of said grantees, the same believed to contain approximately six (6) acres.

Meaning and intending to convey the premises described in deed of Alfredda R. Hersam to Dana S. Copp and Shirley Copp dated January 25, 1971, recorded in Book 881, Page 321, Strafford County Registry of Deeds.

PARCEL 6: (Autumn Street, Rochester, NH)

A certain tract of land situate on the northerly side of Autumn Street, so-called, in East Rochester, County of Strafford, State of New Hampshire, bounded and described as follows:

Beginning on the northerly side of said Autumn Street at an iron pin denoting the southwesterly corner of land of Paul and Wanda Bowden and the southeasterly corner of the within described premises; thence running in a northerly direction by the westerly side

of said Bowden land a distance of eleven hundred (1100) feet, more or less, to an iron pin at the Salmon Falls River denoting the northwesterly corner of said Bowden land and the northeasterly corner of the within described premises; thence turning and running in a generally westerly direction by the said Salmon Falls River to an iron pin set in the ground at the northwesterly corner of the premises herein conveyed and the northeasterly corner of land of Alden Chase; thence turning and running in a southerly direction by the easterly side of said Chase land to an iron pin set in the ground at the northerly side of said Autumn Street denoting the southeasterly corner of said Chase land and the southwesterly corner of the within described premises; thence turning and running in an easterly direction by said Autumn Street a distance of nine hundred sixty-seven (967) feet, more or less, to the point of beginning.

Excepting therefrom all lots previously conveyed.

Meaning and intending to convey a portion of the premises described in deed of Fred N. Shorey and Evelyn I. Shorey to Dana S. and Shirley L. Copp dated August 14, 1969, recorded in Book 861, Page 350, Strafford County Registry of Deeds.

PARCEL 7: (Sandina Drive, Rochester, NH)

A certain tract or parcel of land situate off the northerly end of Sandina Drive, so-called, in Rochester, Strafford County, New Hampshire, the same being more particularly delineated on plan entitled, "Lot Line Revision, Rochester, N.H. for Craig N. Therrien, Dana S. & Shirley Copp & the Estate of Joseph Gallahue. Scale 1" = 30', March 1992" by Norway Plains Associates, Inc. to be recorded herewith in the Strafford County Registry of Deeds, more particularly bounded and described as follows:

Beginning at a point on the westerly sideline of the cul-de-sac at the northerly terminus of Sandina Drive; thence running southerly on an arc to the left with a radius of sixty (60') feet along the westerly sideline of said Drive for a distance of fifty-four (54.00') feet to a point at the northeast corner of land of Louis A. and Antoinette M. Gemba; thence turning and running S 86° 12' 50" W along the northerly sideline of Gemba land for a distance of fifty-two and seventy-four hundredths (52.74') feet to a point at other land of Copp; thence turning and running N 03° 47' 10" W along said Copp land for a distance of fifty (50.00') feet to other land of Gallahue; thence turning and running N 86° 12' 50" E along Gallahue land for a distance of thirty-seven and seventy-five hundredths (37.75') feet to the point of beginning. Containing 2,052 sq. ft.

Meaning and intending to convey the same premises described in deed of Jeffrey F. Gallahue to Dana S. Copp and Shirley Copp dated May 26, 1992, recorded in Book 1613, Page 102, Strafford County Registry of Deeds.

PARCEL 8: (Autumn Street, Rochester, NH)

A certain tract or parcel of land situate on the northerly side of Autumn Street, so-called in East Rochester, in said Rochester, County of Strafford, State of New Hampshire, bounded and described as follows, to-wit:

Beginning on said Autumn Street at the southeasterly corner of land formerly of said Alton H. and Avis L. Chase, now of Ronald R. and Ann F. Judd, at an iron pipe by a stone post in the ground; and thence running in an easterly direction, by said Street, one hundred (100) feet to other land of said Dana S. and Shirley L. Copp; thence turning and running in a northerly direction, by said Copp land, by a fence one hundred (100) feet distant easterly from and parallel with the easterly side line of said Chase or Judd land to the Salmon Falls river; thence turning and running in a westerly direction, by said River, to land believed to be of Royal W. Corson; thence turning and running in a southerly direction, by said Corson land, to an iron pipe at the northeasterly corner of said Chase or Judd land; and continuing in the same course, by said Chase or Judd land, two hundred twenty (220) feet, more or less, to the point of beginning.

Excepting therefrom all lots previously conveyed.

Meaning and intending to convey the same premises described in deed of Alton H. and Avis L. Chase to Dana S. Copp and Shirley L. Copp dated August 3, 1970, recorded in Book 874, Page 478, Strafford County Registry of Deeds.

Said grantors release to said grantees all rights of homestead and other interests therein.

Executed this | day of Man, 2000.

Dana S. Copp

Shirley L. Copp by Dana S. Copp,

attorney-in-fact
(See Durable Power of Attorney recorded at Book

STATE OF FLORIDA

Michelle L Sutter

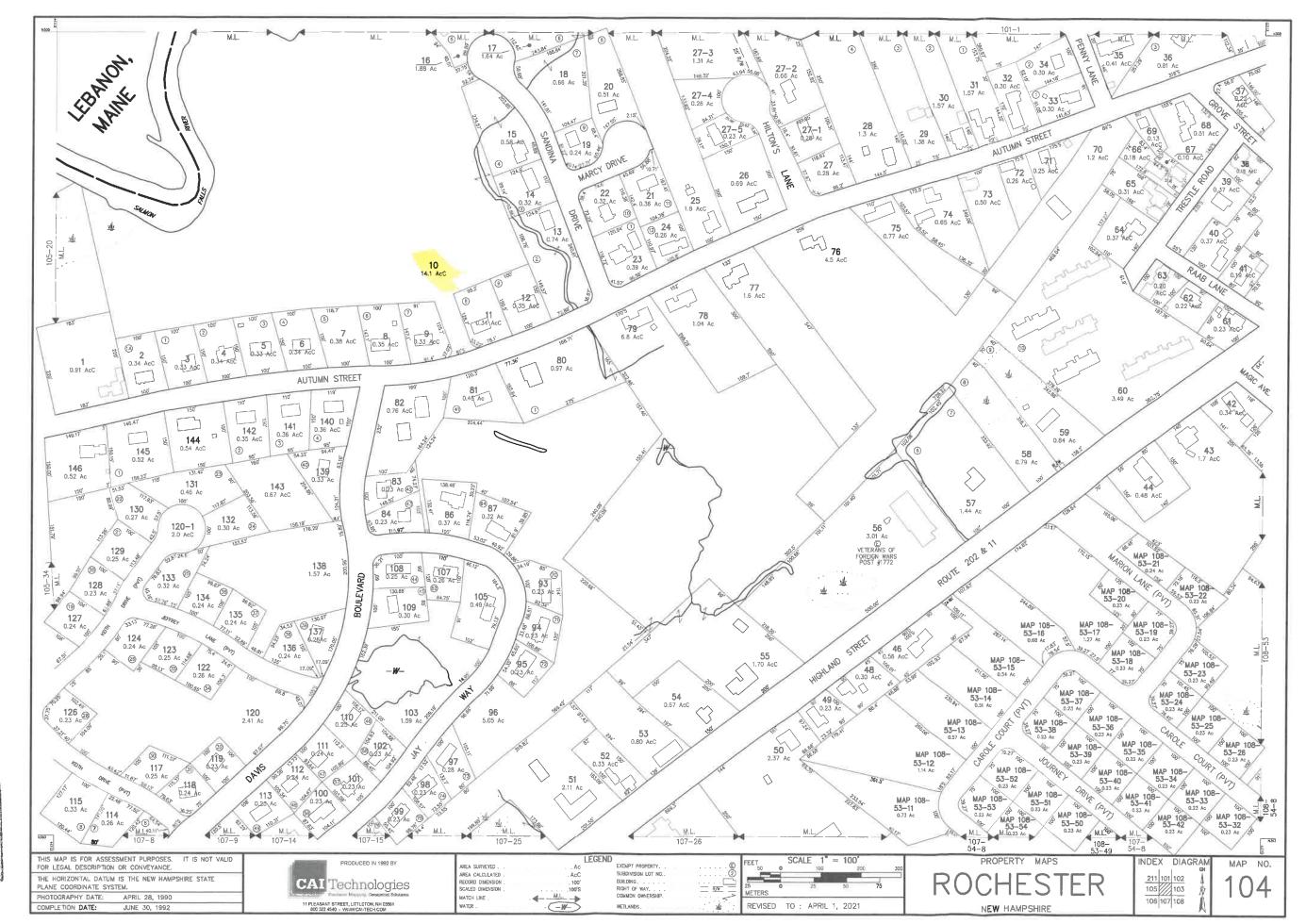
My Commission CC911356

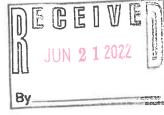
Expires February 16, 2004

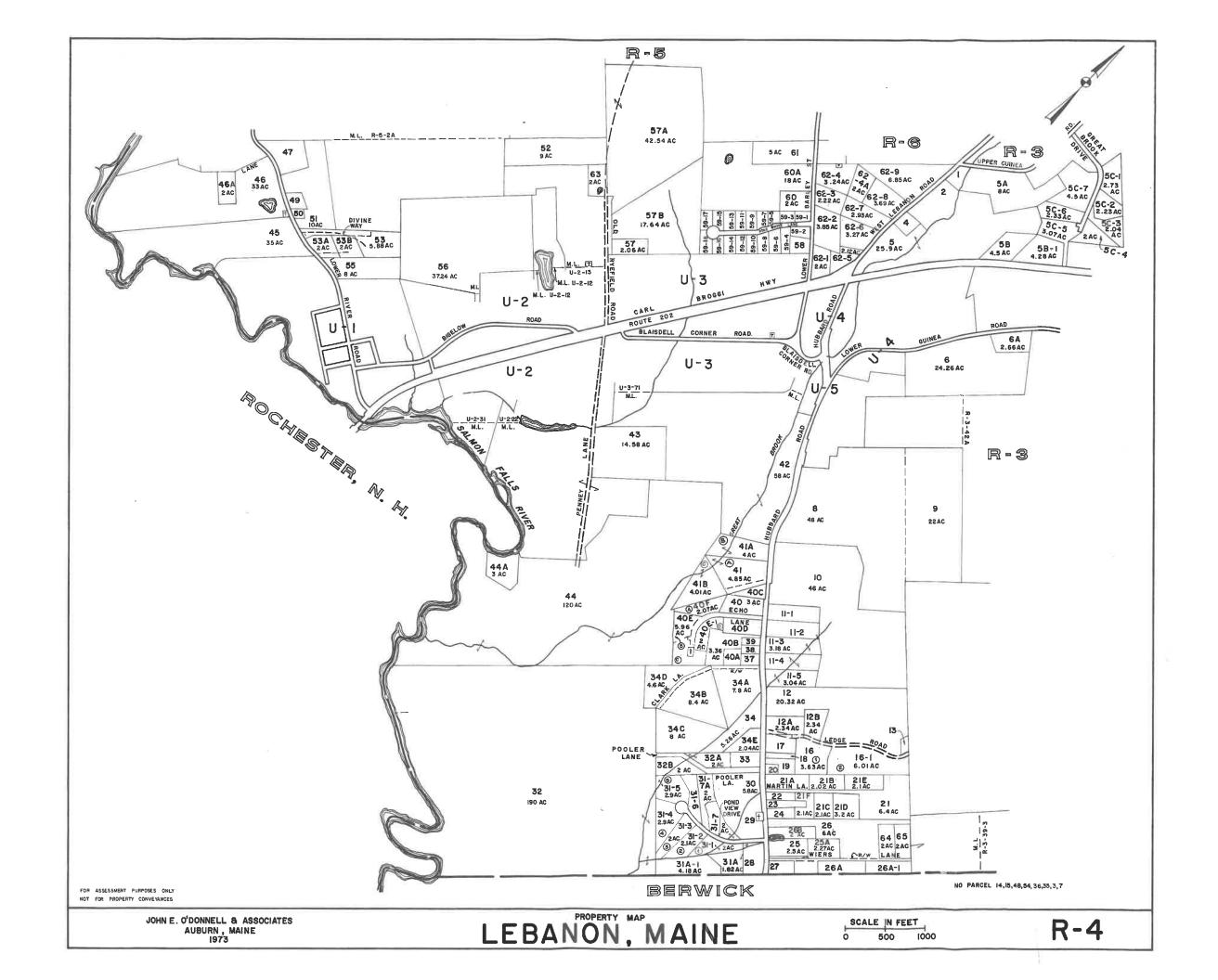
Justice of the Peace Notary Public

My Commission Expires: 2/16/200)









RESIDENTIAL SUBDIVISION **AUTUMN STREET SUBDIVISION**

TAX MAP 104, LOT 10 AUTUMN STREET, ROCHESTER, NH

SHEET INDEX

COVER SHEET

GENERAL NOTES

SUBDIVISION PLAN A1

EXISTING CONDITIONS PLAN

C2 **OVERALL SITE & UTILITY PLAN**

C2-1 - C2-2 SITE & UTILITY PLANS

GRADING & DRAINAGE PLANS

P1 - P3 PLAN & PROFILES

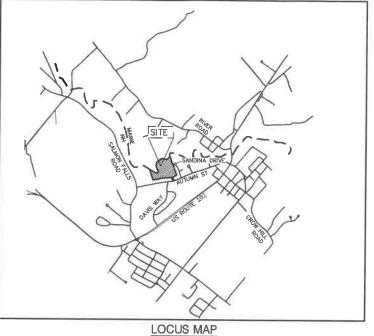
FORCEMAIN PROFILE

SEWER PUMP STATION DETAIL

D1-D3 **DETAIL SHEETS**

E1 - E2 **EROSION & SEDIMENT CONTROL DETAILS**

ESC1 **EROSION & SEDIMENT CONTROL PLAN**



SCALE 1" = 2000"

PERMITS

TYPE OF PERMIT

STATUS

EXPIRATION

NHDES ALTERATION OF TERRAIN PERMIT: SUBMITTED: NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES - WATER DIVISION PERMIT NO. 29 HAZEN DRIVE, P.O. BOX 95 CONCORD, NEW HAMPSHIRE 03302-0095 DATED:

RESPONSIBLE CONSULTANTS JONES & BEACH ENGINEERS, INC.

NHDES SHORELAND PERMIT: SUBMITTED: ENVIRONMENTAL SERVICES-PERMIT NO. SHORELANDS BUREAU 29 HAZEN DRIVE, P.O. BOX 95 DATED:

CONCORD, NEW HAMPSHIRE 03302 (603) 271-2147 RESPONSIBLE CONSULTANT-JONES & BEACH ENGINEERS, INC.

TYPE OF PERMIT

STATUS SUBMITTED

DATED:

SUBMITTED:

PERMIT NO.

EXPIRATION:

DATED:

HOCHESTER SITE PLAN APPROVAL: CITY OF ROCHESTER PLANNING BOARD 33 WAKEFIELD STREET ROCHESTER, NEW HAMPSHIRE 0386: (603) 335-7500

JONES & BEACH ENGINEERS, INC.

NHDES SEWER CONNECTION PERMIT: NHDES - WASTEWATER ENGINEERING 29 HAZEN DRIVE, P.O. BOX 95

CONCORD, NEW HAMPSHIRE 03302-0095 (603) 271-3503 RESPONSIBLE CONSULTANT JONES & BEACH ENGINEERS, INC.

USEPA NPDES PHASE II CONSTRUCTION GENERAL PERMIT. NOTICE OF INTENT (NOI), AND NOTICE OF TERMINATION (NOT) TO BE FILED IN ACCORDANCE WITH FEDERAL AND LOCAL REGULATIONS PRIOR TO AND FOLLOWING CONSTRUCTION: EPA STORMWATER NOTICE PROCESSING CENTER MAIL CODE 4203M,

1200 PENNSYLVANIA AVENUE, NW WASHINGTON, DC 20460 RESPONSIBLE CONSULTANT: JONES & BEACH ENGINEERS, INC.

APPLICANT / DEVELOPER GARREPY PLANNING CONSULTANTS, LLC 89 GLEN HILL ROAD

DOVER, NH 03820 (603) 944-7530 CONTACT: MIKE GARREPY

CIVIL ENGINEER / SURVEYOR JONES & BEACH ENGINEERS, INC. 85 PORTSMOUTH AVENUE PO BOX 219 STRATHAM, NH 03885 (603) 772-4746 CONTACT: IAN MACKINNON EMAIL: IMACKINNON@JONESANDBEACH.COM OWNER OF RECORD

DANA S. COPP 1985 TRUST (& OTHERS) PO BOX 1767

ROCHESTER, NH 03866

WETLAND CONSULTANT GOVE ENVIRONMENTAL 8 CONTINENTAL DRIVE, UNIT H EXETER, NH 03833 (603) 778-0644 CONTACT: JAMES GOVE, CWS, CSS

WATER AND SEWER ROCHESTER DEPARTMENT OF PUBLIC WORKS 31 WAKEFIELD STREET ROCHESTER, NH 03867 (603) 335-7500

ELECTRIC

EVERSOURCE 740 N COMMERCIAL ST PO BOX 330 MANCHESTER, NH 03105-0330 (800) 662-7764

CONSOLIDATED COMMUNICATIONS 100 TRI CITY ROAD SOMERWORTH, NH 03878 ATTN:DAVE KESTNER (603) 743-1114

COMCAST COMMUNICATION CORPORATION 334-B CALEF HIGHWAY EPPING, NH 03042-2325 (603) 679-5695

APPLICANT GARREPY PLANNING CONSULTANTS LLC

TOTAL LOT AREA 691,524± SQ. FT. 15.88± AC

APPROVED - ROCHESTER, NH

PLANNING BOARD

DATE:

Design: LAZ Draft: LAZ Date: 6/21/22
Checked: ISM Scale: AS NOTED Project No.: 2202
Drawing Name: 22022-PLAN.dwg HIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN

ERMISSION FROM JONES & BEACH ENGINEERS, INC. (JBE). ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT L'ARILITY TO JIRE



0	6/21/22	ISSUED FOR REVIEW	LAZ
REV.	DATE	REVISION	BY

Designed and Produced in NH Jones & Beach Engineers, Inc.

85 Portsmouth Ave. Civil Engineering Services Stratham, NH 03885

E-MAIL: JBE@JONESANDBEACH.COM

Plan Name

COVER SHEET

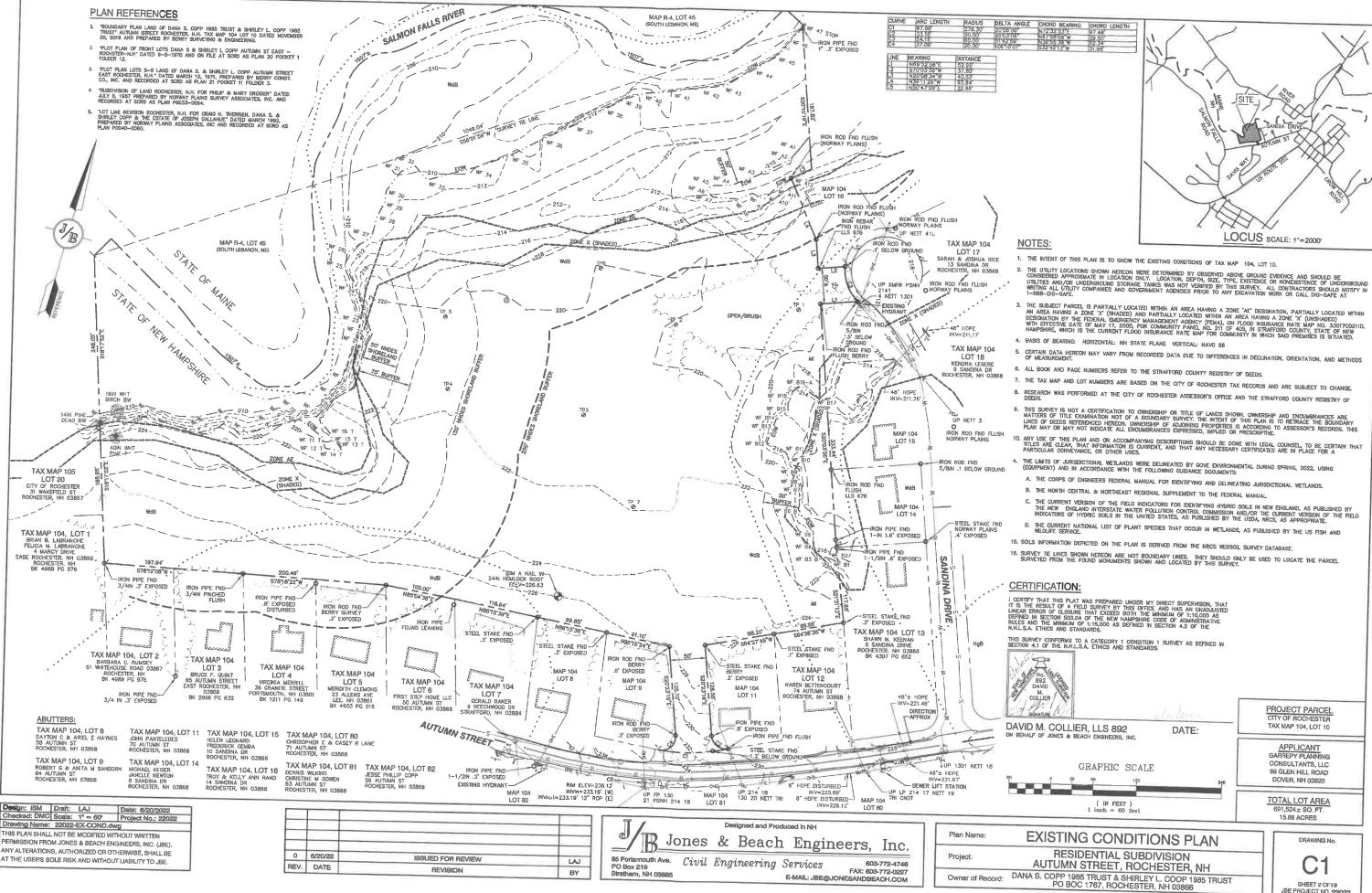
RESIDENTIAL SUBDIVISON AUTUMN STREET, ROCHESTER, NH Project:

Owner of Record: DANA S. COPP 1985 TRUST & SHIRLEY L. COOP 1985 TRUST

CS

SHEET 1 OF20 JBE PROJECT NO. 22022

DRAWING No



SHEET 2 OF 19 JBE PROJECT NO. 22022 — — 100— — — ---98---SOC

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100.00

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DESCRIPTION PROPERTY LINES CENTERLINE
FRESHWATER WETLANDS LINE STREAM CHANNEL TREE LINE FENCE SOIL BOUNDARY EASEMENT MAJOR CONTOUR MINOR CONTOUR EDGE OF PAVEMENT VERTICAL GRANITE CURB SLOPE GRANITE CURB SILT FENCE ORANGE CONSTRUCTION FENCE DRAINAGE LINE GAS LINE WATER LINE WATER SERVICE OVERHEAD ELECTRIC UNDERGROUND ELECTRIC GUARDRAIL UNDERDRAIN IRON PIPE/IRON ROD
DRILL HOLE
IRON ROD/DRILL HOLE
STONE/GRANITE BOUND

PAVEMENT SPOT GRADE CURB SPOT GRADE BENCHMARK (TBM)

SPOT GRADE

WELL TEST PIT

MONITORING WELL

TREES AND BUSHES UTILITY POLE LIGHT POLES SEWER MANHOLE WATER GATE WATER SHUT OFF REDUCER SINGLE GRATE CATCH BASIN DOUBLE GRATE CATCH BASIN NYOPLAST DRAIN BASIN DRAIN MANHOLF CULVERT W/WINGWALLS CULVERT W/FLARED END SECTION
CULVERT W/STRAIGHT HEADWALL DRAINAGE FLOW DIRECTION

RIPRAP

FRESHWATER WETLANDS

CONCRETE

RETAINING WALL

PAVEMENT

SNOW STORAGE

LANDSCAPE NOTES:

- 1. THE CONTRACTOR SHALL LOCATE AND VERIFY THE EXISTENCE OF ALL UTILITIES PRIOR TO STARTING WORK.
- THE CONTRACTOR SHALL SUPPLY ALL PLANT MATERIALS IN QUANTITIES SUFFICIENT TO COMPLETE THE PLANTINGS SHOWN ON THE DRAWINGS
- PLANTS SHALL BE SUBJECT TO INSPECTION AND APPROVAL AT THE PLACE OF GROWTH, UPON DELIVERY OR AT THE JOB SITE WHILE WORK IS ON-GOING FOR CONFORMITY TO SPECIFIED QUALITY, SIZE AND VARIETY.
- NO PLANT SHALL BE PUT IN THE GROUND BEFORE GRADING HAS BEEN FINISHED AND APPROVED BY THE PROJECT ENGINEER OR CONSTRUCTION OVERSIGHT CONSULTANT.
- 6. ALL PLANTS SHALL BE GUARANTEED BY THE CONTRACTOR FOR NOT LESS THAN ONE FULL YEAR FROM THE TIME OF PROVISIONAL ACCEPTANCE. DURING THIS TIME, THE OWNER SHALL MAINTAIN ALL PLANT MATERIALS IN THE ABOVE MANNER. IT IS THE CONTRACTOR'S RESPONSIBILITY TO INSPECT THE PLANTS TO ENSURE PROPER CARE. IF THE CONTRACTOR IS DISSAINSTED WITH THE CARE GIVEN, HE SHALL IMMEDIATELY, AND IN SUFFICIENT THE TO PERMIT THE CONDITION TO BE RECTIFIED, NOTIFY THE PROJECT ENGINEER IN WRITING OR OTHERWISE FORFEIT HIS CLAIM.
- FINAL ACCEPTANCE BY THE PROJECT ENGINEER OR OWNER WILL BE MADE UPON THE CONTRACTOR'S REQUEST AFTER ALL CORRECTIVE WORK HAS BEEN COMPLETED.
- 8. BY THE END OF THE GUARANTEE PERIOD, THE CONTRACTOR SHALL HAVE REPLACED ANY PLANT MATERIAL THAT IS MISSING, NOT TRUE TO SIZE AS SPECIFIED, THAT HAS DIED, LOST NATURAL SHAPE DUE TO DEAD BRANCHES, EXCESSIVE PRUNING OR INADEQUATE OR IMPROPER CARE, OR THAT IS, IN THE OPINION OF THE PROJECT ENGINEER, IN UNHEALTHY OR UNSIGHTLY CONDITION.
- ALL LANDSCAPE AREAS TO BE GRASS COMMON TO REGION, EXCEPT FOR INTERIOR LANDSCAPED ISLANDS OR WHERE OTHER PLANT MATERIAL IS SPECIFIED.
- 10. ALL LANDSCAPING SHALL MEET THE CITY STANDARDS AND REGULATIONS.
- 11. EXISTING TREES TO REMAIN SHALL BE PROTECTED WITH TEMPORARY SNOW FENCING AT THE DRIPLINE OF THE TREE. THE CONTRACTOR SHALL NOT STORE VEHICLES OR MATERIALS WITHIN THE LANDSCAPED AREAS. ANY DAMAGE TO EXISTING TREES, SHRUBS OR LAWN SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.

GRADING AND DRAINAGE NOTES:

- UNDERGROUND FACILITIES, UTILITIES AND STRUCTURES HAVE BEEN PLOTTED FROM PIELD OBSERVATION AND THEIR LOCATION MUST BE CONSIDERED APPROXIMATE ONLY, NEITHER JONES & BEACH ENGINEERS, INC., NOR ANY OF THEIR EMPLOYEES TAKE RESPONSIBILITY FOR THE LOCATION OF ANY UNDERGROUND STRUCTURES AND/OR UTILITIES NOT SHOWN THAT MAY EXIST. IT IS THE RESPONSIBILITY FOR THE CONTRACTOR TO HAVE ALL UNDERGROUND STRUCTURES AND/OR UTILITIES LOCATED PRIOR TO EXCAVATION WORK BY CALLING 888—DIG—SARE (888—344—7233).
- 2. VERTICAL DATUM: NAVO 88. HORIZONTAL DATUM: STATE PLANE.
- 3. ALL BENCHMARKS AND TOPOGRAPHY SHOULD BE FIELD VERIFIED BY THE CONTRACTOR.
- SITE GRADING SHALL NOT PROCEED UNTIL EROSION CONTROL MEASURES HAVE BEEN INSTALLED. SEE CONSTRUCTION SEQUENCE ON SHEET E1.
- PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR IS REQUIRED TO HAVE THE PROJECT'S LAND SURVEYOR STAKE OR FLAG CLEARING LIMITS. A MINIMUM OF 4B HOURS NOTICE IS REQUIRED.
- ALL SWALES AND DETENTION PONDS ARE TO BE STABILIZED PRIOR TO DIRECTING RUNOFF TO
- ALL SWALES AND ANY SLOPES GREATER THAN 3:1 SHALL BE STABILIZED WITH NORTH AMERICAN GREEN 575 EROSION CONTROL BLANKETS (OR AN EQUIVALENT APPROVED IN WRITING BY THE ENGINEER), UNLESS OTHERWISE SPECIFIES
- ALL DRAINAGE AND SANITARY STRUCTURE INTERIOR DIAMETERS (4' MIN) SHALL BE DETERMINED BY THE MANUFACTURER BASED ON THE PIPE CONFIGURATIONS SHOWN ON THESE PLANS. CATCH BASINS SHALL HAVE 3' DEEP SUMPS WITH GREASE HOODS, UNLESS OTHERWISE NOTED.
- ALL DRAINAGE STRUCTURES AND STORM SEWER PIPES SHALL MEET HEAVY DUTY TRAFFIC H20 LOADING AND SHALL BE INSTALLED ACCORDINGLY.
- 10. IN AREAS WHERE CONSTRUCTION IS PROPOSED ADJACENT TO ABUTTING PROPERTIES, THE CONTRACTOR SHALL INSTALL ORANGE CONSTRUCTION FENCING ALONG PROPERTY LINES IN ALL AREAS WHERE SILT FENCING IS NOT REQUIRED.
- 11. ALL DRAINAGE PIPE SHALL BE NON-PERFORATED ADS N-12 OR APPROVED EQUAL.
- 12. STONE INLET PROTECTION SHALL BE PLACED AT ALL PIPE INLETS. SEE DETAIL WITHIN THE DETAIL
- 13. LAND DISTURBING ACTIVITIES SHALL NOT COMMENCE UNTIL APPROVAL TO DO SO HAS BEEN RECEIVED BY ALL GOVERNING AUTHORITIES. THE GENERAL CONTRACTOR SHALL STRICTLY ADHERE TO THE EPA SHAPP DURING CONSTRUCTION OPERATIONS.
- ALL EXPOSED AREAS SHALL BE SEEDED AS SPECIFIED WITHIN 3 DAYS OF FINAL GRADING AND ANYTIME CONSTRUCTION STOPS FOR LONGER THAN 3 DAYS.
- MAINTAIN EROSION CONTROL MEASURES AFTER EACH RAIN EVENT OF 0.5" OR GREATER IN A 24 HOUR PERIOD AND AT LEAST ONCE A WEEK.
- THIS PLAN SHALL NOT BE CONSIDERED ALL INCLUSIVE, AS THE GENERAL CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT SEDIMENT FROM LEAVING THE SITE.
- 17. CONSTRUCTION VEHICLES SHALL UTILIZE THE STABILIZED CONSTRUCTION ENTRANCE TO THE EXTENT POSSIBLE THROUGHOUT CONSTRUCTION
- IF INSTALLATION OF STORM DRAINAGE SYSTEM SHOULD BE INTERRUPTED BY WEATHER OR NIGHTFALL, THE PIPE ENDS SHALL BE COVERED WITH FILTER FABRIC.
- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO TAKE WHATEVER MEANS NECESSARY TO ESTABLISH PERMANENT SOIL STABILIZATION.
- 20. SEDIMENT SHALL BE REMOVED FROM ALL SEDIMENT BASINS BEFORE THEY ARE 25% FULL.
- 21. ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH PROJECT SPECIFICATIONS.
- 22. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED, IF DEEMED NECESSARY BY ON-SITE INSPECTION BY ENGINEER AND/OR REGULATORY OFFICIALS.
- 23. SEE ALSO EROSION AND SEDIMENT CONTROL SPECIFICATIONS ON SHEET E1.

UTILITY NOTES:

- PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER, ARCHITECT AND/OR OWNER, IN ORDER TO OBTAIN AND/OR PAY ALL THE NECESSARY LOCAL PERMITS, CONNECTION FEES AND BONDS.
- THE CONTRACTOR SHALL PROVIDE A MINIMUM NOTICE OF FOURTEEN (14) DAYS TO ALL CORPORATIONS, COMPANIES AND/OR LOCAL AUTHORITIES OWNING OR HAVING A JURISDICTION OVER UTILITIES RUNNING TO, THROUGH OR ACROSS PROJECT AREAS PRIOR TO DEMOLITION AND/OR CONSTRUCTION ACTIVITIES.
- THE LOCATION, SIZE, DEPTH AND SPECIFICATIONS FOR CONSTRUCTION OF PROPOSED PRIVATE UTILITY SERVICES SHALL BE TO THE STANDARDS AND REQUIREMENTS OF THE RESPECTIVE UTILITY COMPANY (ELECTRIC, TELEPHONE, CABLE TELEVISION, FIRE ALARM, GAS, WATER, AND SEWER).
- A PRECONSTRUCTION MEETING SHALL BE HELD WITH THE OWNER, ENGINEER, ARCHITECT, CONTRACTOR, LOCAL OFFICIALS, AND ALL PROJECT—RELATED UTILITY COMPANIES (PUBLIC AND PRIVATE) PRIOR TO START OF CONSTRUCTION.
- ALL CONSTRUCTION SHALL CONFORM TO THE CITY STANDARDS AND REGULATIONS, AND NHDES STANDARDS AND SPECIFICATIONS, WHICHEVER ARE MORE STRINGENT, UNLESS OTHERWISE SPECIFIED.
- ALL CONSTRUCTION ACTIVITIES SHALL CONFORM TO LABOR OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) RULES AND REGULATIONS.
- 7. HOMES TO BE SERVICED BY UNDERGROUND UTILITIES UNLESS OTHERWISE NOTED.
- 8. THE CONTRACTOR IS TO VERIFY LOCATION AND DEPTH OF ALL EXISTING UTILITY STUBS PRIOR TO CONSTRUCTION AND DISCONNECT ALL EXISTING SERVICE CONNECTIONS AT THEIR RESPECTIVE MAINS IN ACCORDANCE WITH THE RESPECTIVE UTILITY COMPANY'S STANDARDS AND SPECIFICATIONS, ENGINEER TO BE NOTIFIED.
- 9. AS-BUILT PLANS SHALL BE SUBMITTED TO DEPARTMENT OF PUBLIC WORKS.
- 10. INVERTS AND SHELVES: MANHOLES SHALL HAVE A BRICK PAVED SHELF AND INVERT, CONSTRUCTED TO CONFORM TO THE SIZE OF PIPE AND FLOW AT CHANGES IN DIRECTION. THE INVERTS SHALL BE LAID OUT IN CHRYCES OF THE LONGEST RADIUS POSSIBLE TANGENT TO THE CENTER LINE OF THE SEMER PIPES. SHELL BE VIEWED SHALL BE ELEVATION OF THE THROUGH CHANNEL UNDERLAYMENT OF INVERT, AND SHELF SHALL CONSIST OF BRICK MASCONRY.
- FRAMES AND COVERS: MANHOLE FRAMES AND COVERS SHALL BE OF HEAVY DUTY DESIGN AND PROVIDE A 30 INCM DIA, CLEAR DEBINING. THE WORD "SEWER" OR DRAIN" SHALL BE CAST INTO THE CENTER OF THE UPPER FACE OF EACH COVER WITH RAISED, 3" LETTERS, 3"
- SHALLOW MANHOLE: IN LIEU OF A CONE SECTION, WHEN MANHOLE DEPTH IS LESS THAN 6 FEET, A REINFORCED
 CONCRETE SLAB COVER MAY BE USED HAVING AN ECCENTRIC ENTRANCE OPENING AND CAPABLE OF SUPPORTING HZD
- 13. CONTRACTOR SHALL PLACE 2" WIDE METAL WIRE IMPREGNATED RED PLASTIC WARNING TAPE OVER ENTIRE LENGTH OF ALL GRAVITY SEWERS, SERVICES, AND FORCE MAINS.

- 15. ALL SANITARY STRUCTURE INTERIOR DIAMETERS (4' MIN) SHALL BE DETERMINED BY THE MANUFACTURER BASED ON THE PIPE CONFIGURATIONS SHOWN ON THESE PLANS.
- 16. PROPOSED RIM ELEVATIONS OF DRAINAGE AND SANITARY MANHOLES ARE APPROXIMATE. FINAL ELEVATIONS ARE TO BE SET FLUSH WITH FINISH GRADES. ADJUST ALL OTHER RIM ELEVATIONS OF MANHOLES, WATER GATES, GAS GATES AND OTHER UTILITIES TO FINISH GRADE AS SHOWN ON THE GRADING AND DRAINAGE PLAN.
- ALL WATER MAINS AND SERVICE PIPES SHALL HAVE A MINIMUM 12" VERTICAL AND 24" HORIZONTAL SEPARATION TO MANHOLES, OR CONTRACTOR SHALL INSTALL BOARD INSULATION FOR FREEZING PROTECTION.
- 18. WATER MAINS SHALL BE HYDROSTATICALLY PRESSURE TESTED FOR LEAKAGE PRIOR TO ACCEPTANCE, WATERMAINS SHALL BE TESTED AT 1.5 TIMES THE WORKING PRESSURE OR 150 PS, WHICH EVER IS GREATER. TESTING SHALL BE CONDUCTED IN ACCORDANCE WITH SECTION 4 OF AWWA STANDARD C 650. WATERMAINS SHALL BE DISNIFECTED AFTER THE ACCEPTANCE OF THE PRESSURE AND LEAKAGE TESTS ACCORDING TO AWWA STANDARD C 650.
- 19. ALL WATER AND SANITARY LEADS TO BUILDING(S) SHALL END 5' OUTSIDE THE BUILDING LIMITS AS SHOWN ON PLANS AND SHALL BE PROVIDED WITH A TEMPORARY PLUG AND WITNESS AT END.
- 20. IF THE BUILDING IS REQUIRED TO HAVE A SPRINKLER SYSTEM, A PRECONSTRUCTION MEETING SHALL BE HELD BETWEEN THE CONTRACTOR, OWNER, ARCHITECT AND THE LOCAL FIRE DEPARTMENT PRIOR TO THE INSTALLATION.
- 21. THRUST BLOCKS SHALL BE PROVIDED AT ALL BENDS, TEES, MECHANICAL JOINTS AND FIRE HYDRANTS.
- 22. DIMENSIONS ARE SHOWN TO CENTERLINE OF PIPE OR FITTING.
- 23. CONTRACTOR TO FURNISH SHOP DRAWINGS FOR UTILITY RELATED ITEMS TO ENSURE CONFORMANCE WITH THE PLANS AND SPECIFICATIONS. SHOP DRAWINGS SHOULD BE SENT IN TRIPLICATE TO THE DESIGN ENGINEER FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.
- 24. EXISTING UTILITIES SHALL BE DIGSAFED BEFORE CONSTRUCTION.
- 25. ALL GRAVITY SEWER PIPE, MANHOLES, AND FORCE MAINS SHALL BE TESTED ACCORDING TO NHDES STANDARDS OF DESIGN AND CONSTRUCTION FOR SEWAGE AND WASTEWATER TREATMENT FACILITIES, CHAPTER ENV-WQ 700. ADOPTED ON 10-15-14.
- 26. ENV—WO 704.06 GRAMITY SEWER PIPE TESTING: GRAMITY SEWERS SHALL BE TESTED FOR WATER TIGHTINESS BY USE OF LOW-PRESSURE AIR TESTS CONFORMING WITH ASTIN FIRST-202005) OR UNI-BELL PVC PIPE ASSOCIATION UNI-B-6. LINES SHALL BE CLEANED AND TRUE PIPE AND TRUE TO JUNE AND GRADE. DEFLECTION TESTS SHALL FACE AFTER 30 DAYS FOLLOWING INSTALLATION AND THE MAXIMUM ALLOWABLE DEFLECTION OF FLIZELE SEWER PIPE SHALL BE 650 OF AMPROCE WITH A DIAMETER OF THE MAXIMUM ALLOWABLE DEFLECTION OF FIZELES SEWER PIPE SHALL BE 650 OF AMPROCE WITH A DIAMETER OF TELEST SHALL BE USED FOR TESTING PIPE DEFLECTION. THE DEFLECTION TEST SHALL BE USED FOR TESTING PIPE DEFLECTION. THE DEFLECTION TEST SHALL BE
- 27. ENV—WO 704.17 SEWER MANHOLE TESTING: SHALL BE TESTED FOR LEAKAGE USING A VACUUM TEST PRIOR TO BACKFILLING AND PLACEMENT OF SHELVES AND INVERTS.
- 28. SANITARY SEWER LINES SHALL BE LOCATED AT LEAST TEN (10) FEET HORIZONTALLY FROM AN EXISTING OR PROPOSED WATER LINE. WHEN A SEWER LINE CROSSES LINDER A WATER LINE, THE SEWER PIPE JOINTS SHALL BE LOCATED AT LEAST 6 FEET HORIZONTALLY FROM THE WATERMAIN. THE SEWER LINE SHALL ALSO MAINTAIN A VERTICAL SEPARATION OF NOT LESS THAN 18 INCHES.
- 29. SEWERS SHALL BE BURIED TO A MINIMUM DEPTH OF 6 FEET BELOW GRADE IN ALL ROADWAY LOCATIONS, AND TO A MINIMUM DEPTH OF 4 FEET BELOW GRADE IN ALL CROSS-COUNTRY LOCATIONS. PROVIDE TWO-INCHES OF R-10 FOAM BOARD INSULATION 2-FOOT WIDE TO BE INSTALLED 8-INCHES OVER SEWER PIPE IN AREAS WHERE DEPTH IS NOT ACHIEVED. A WAIVER FROM THE DEPARTMENT OF ENVIRONMENTAL SERVICES WASTEWATER ENGINEERING BUREAU IS REQUIRED PRIOR TO INSTALLING SEWER AT LESS THAN MINIMUM COVER.
- 30. ALL WATER AND SANITARY LEADS TO HOMES/LOTS SHALL END AT RIGHT OF WAY AS SHOWN ON PLANS AND SHALL BE PROVIDED WITH A TEMPORARY PLUG AND WITNESS AT END.
- 31. THE CONTRACTOR SHALL MINIMIZE THE DISRUPTIONS TO THE EXISTING SEWER FLOWS AND THOSE INTERRUPTIONS SHALL BE LIMITED TO FOUR (4) HOURS OR LESS AS DESIGNATED BY THE CITY SEWER DEPARTMENT.
- 32. ALL TRENCHING, PIPE LAYING, AND BACKFILLING SHALL BE IN ACCORDANCE WITH FEDERAL OSHA REGULATIONS.
- 33. DISINFECTION OF WATER MAINS SHALL BE CARRIED OUT IN STRICT ACCORDANCE WITH AWAY STANDARD C651, LATEST EDITION. THE BASIC PROCEDURE TO BE FOLLOWED FOR DISINFECTING WATER MAINS IS AS FOLLOWS:

 0. PREVENT CONTAMINATING MATERIALS FROM ENTERING THE WATER MAIN DURING STORAGE, CONSTRUCTION, OR REPAIR.

 1. REMOVE, BY FLUSHING OR OTHER MEANS, THOSE MATERIALS THAT MAY HAVE ENTERED THE WATER MAINS.

 1. CHLORINATE ANY RESIDUAL CONTAMINATION THAT MAY REMAIN, AND FLUSH THE CHLORINATED WATER FROM THE MAIN.
- MAIN.

 I. PROTECT THE EXISTING DISTRIBUTION SYSTEM FROM BACKFLOW DUE TO HYDROSTATIC PRESSURE TEST AND DISINFECTION PROCEDURES.

 DETERMINE THE BACTERIOLOGICAL QUALITY BY LABORATORY TEST AFTER DISINFECTION.

 MAKE FINAL CONNECTION OF THE APPROVED NEW WATER MAIN TO THE ACTIVE DISTRIBUTION SYSTEM

Design: LAZ | Draft: LAZ Checked: ISM Scale: AS NOTED Project No.: 22022

Drawing Name: 22022-PLAN.dwg

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Plan Name

GENERAL NOTES

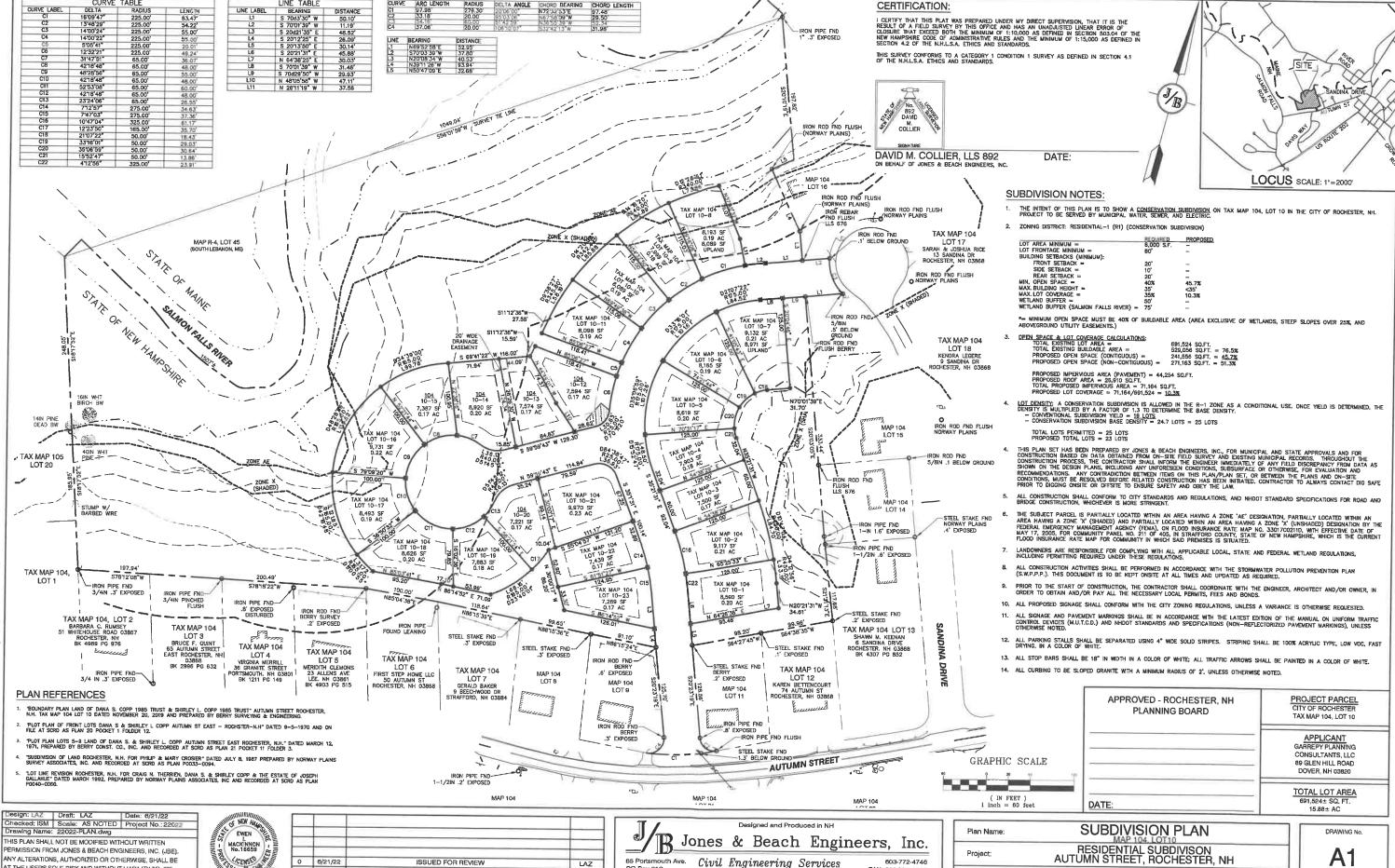
RESIDENTIAL SUBDIVISON AUTUMN STREET, ROCHESTER, NH Project:

Owner of Record: DANA S. COPP 1985 TRUST & SHIRLEY L. COOP 1985 TRUST

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DRAWING No.

SHEET 3 OF20 JBE PROJECT NO. 22022



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Stratham, NH 03885

Project:

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SHEET 4 OF20 JBE PROJECT NO. 22022



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Stratham, NH 03885				E-MAIL: JBE@J	IONESANDBE	ACH.COM

E-MAIL: JBE@JONESANDBEACH.COM

Plan Name:	OVERALL SITE & UTILITY PLAN MAP 104, LOT 10
Project:	RESIDENTIAL SUBDIVISON AUTUMN STREET, ROCHESTER, NH
Owner of Record:	DANA S. COPP 1985 TRUST & SHIRLEY L. COOP 1985 TRUST PO BOX 1767, ROCHESTER, NH 03866

DRAWING No. C2 SHEET 5 OF20 JBE PROJECT NO. 22022



SHEET 6 OF20 JBE PROJECT NO. 22022



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EWEN L MACKINNON No.15659

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Services 603-772-4746 FAX: 603-772-0227 E-MAIL: JBE@JONESANDBEACH.COM

SITE & UTILITY PLAN

MAP 104 . LOT 10

RESIDENTIAL SUBDIVISON
AUTUMN STREET, ROCHESTER, NH Owner of Record: DANA S. COPP 1985 TRUST & SHIRLEY L. COOP 1985 TRUST PO BOX 1767, ROCHESTER, NH 03866

C2-2 SHEET 7 OF20 JBE PROJECT NO. 22022



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EWEN MACKINNON No.15659

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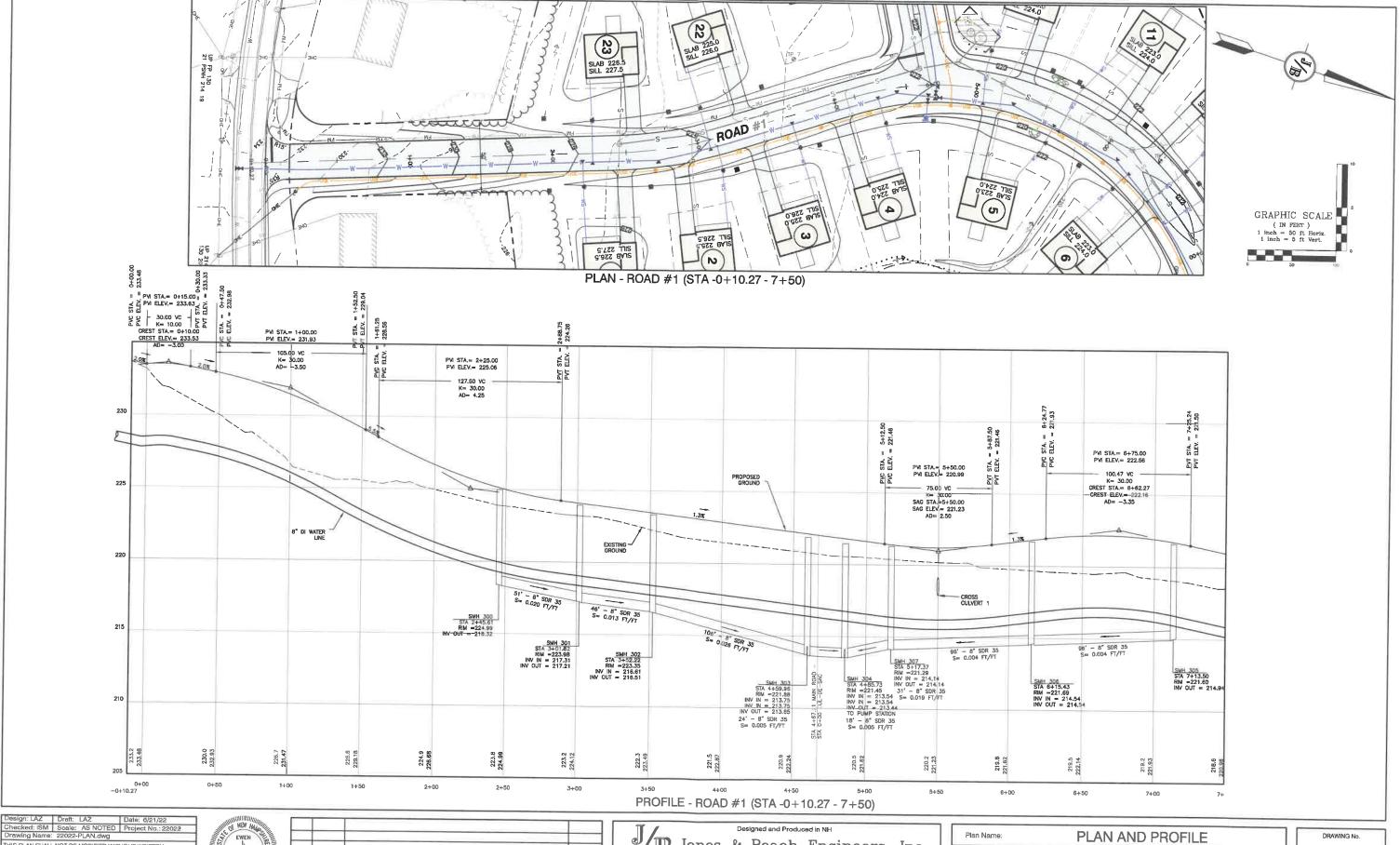
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GRADING & DRAINAGE PLAN RESIDENTIAL SUBDIVISON AUTUMN STREET, ROCHESTER, NH Owner of Record: DANA S. COPP 1985 TRUST & SHIRLEY L. COOP 1985 TRUST PO BOX 1767, ROCHESTER, NH 03866

C3-2 SHEET 9 OF20 JBE PROJECT NO. 22022



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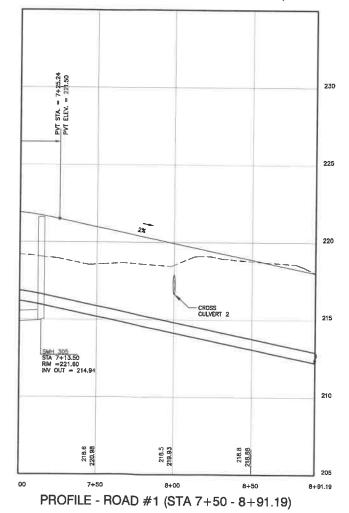
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Plan Name:	PLAN AND PROFILE
Project:	RESIDENTIAL SUBDIVISON AUTUMN STREET, ROCHESTER, NH
Owner of Record:	DANA S. COPP 1985 TRUST & SHIRLEY L. COOP 1985 TRUST PO BOX 1767, ROCHESTER, NH 03866





GRAPHIC SCALE
(IN FEET)
1 inch = 50 ft Horiz.
1 inch = 6 ft Vert.

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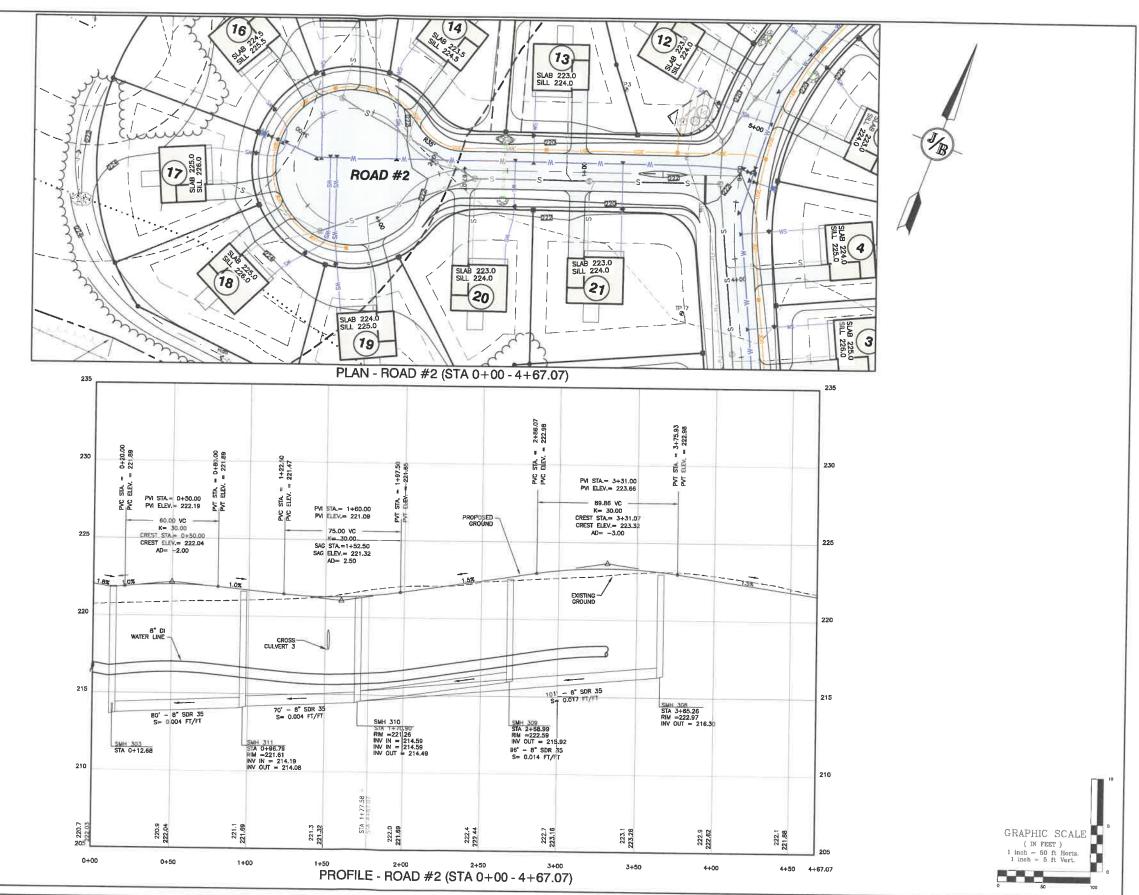
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-11	Stratham, NH 03885				F-MAIL : JRE@ I	ONESANDRE	ACH COM

Plan Name:	PLAN AND PROFILE
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Plan Name;	PLAN AND PROFILE
Project:	RESIDENTIAL SUBDIVISON AUTUMN STREET, ROCHESTER, NH
Owner of Record:	DANA S. COPP 1985 TRUST & SHIRLEY L. COOP 1985 TRUST





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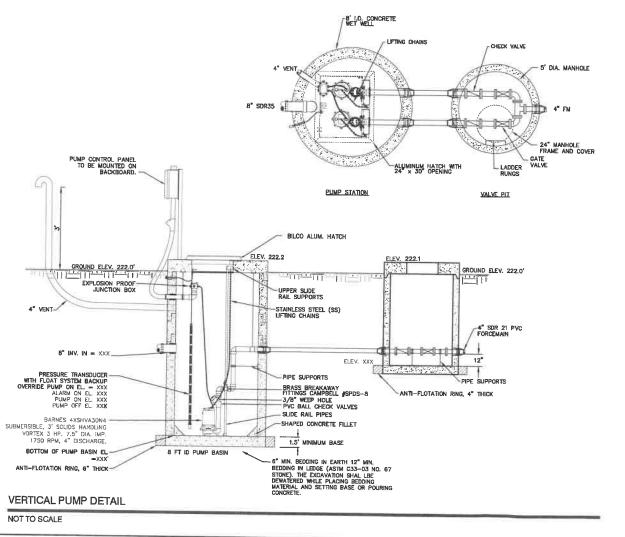
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P4

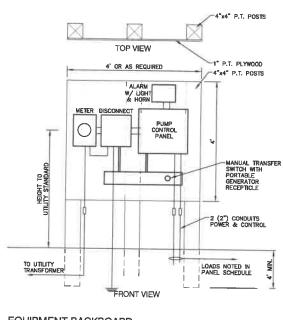
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JBE PROJECT NO. 22022



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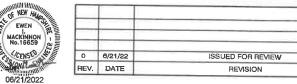


EQUIPMENT BACKBOARD

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PUMP STATION DETAIL SHEET RESIDENTIAL SUBDIVISON AUTUMN STREET, ROCHESTER, NH Project:

S1

DRAWING No

6" STEEL PIPE, 6' LONG (18.97#/FT., 6.625" OD), FILLED W/ CONCRETE, PAINTED W/ PRIMER & HIGHWAY YELLOW PAINT PROPOSED SURFACE (SEE PLANS) NHDOT CLASS "B" CONCRETE (4000 PSI) 1'-6" DIA. **BOLLARD DETAIL** NOT TO SCALE

- ALL COMPONENT PARTS OF MANHOLE STRUCTURES SHALL HAVE THE STRENGTH, LEAK RESISTANCE AND SPACE NECESSARY FOR THE INTENDED SERVICE.
- 2. MANHOLE STRUCTURES SHALL HAVE A LIFE EXPECTANCY OF AT LEAST 25 YEARS.
- MANHOLE STRUCTURES SHALL BE DESIGNED TO WITHSTAND HS-20 LOADING AND SHALL NOT LEAK IN EXCESS OF ONE GPD PER VERTICAL FOOT OF MANHOLE FOR THE LIFE OF THE STRUCTURE.
- 4. BASE SECTIONS SHALL BE OF MONOLITHIC CONSTRUCTION TO A POINT AT LEAST 6 INCHES ABOVE THE CROWN OF THE INCOMING PIPE.
- HORIZONTAL JOINTS BETWEEN SECTIONS OF PRECAST CONCRETE BARRELS SHALL BE OF AN OVERLAPPING TYPE SEALED FOR WATER TIGHTNESS USING A DOUBLE ROW OF AN ELASTOMERIC OR MASTIC-LIKE SEALANT.
- 5. PER NHDES ENV-WQ 704.13(C), MORTAR USED IN MANHOLE CONSTRUCTION SHALL COMPLY WITH THE FOLLOWING:

 (1) MORTAR SHALL BE COMPOSED OF TYPE II PORTLAND CEMENT AND SAND WITH OR WITHOUT HYDRATED LIME ADDITION

 (2) PROPORTIONS IN MORTAR OF PARTS BY VOLUMES SHALL BE PER TABLE 704-4:

 A.4.5 PARTS SAND AND 1.5 PARTS CEMENT; OR

 B.4.5 PARTS SAND, ONE PART CEMENT AND 0.5 PART HYDRATED LIME;

 (1) CEMENT SHALL BE TYPE II PORTLAND CEMENT THAT IS CERTIFIED BY ITS MANUFACTURER AS CONFORMING TO THE ASTM CSO/CISOM STANDARD IN EFFECT AT THE TIME THE TIME THE CEMENT WAS MANUFACTURED (2) HYDRATED LIME SHALL BE TYPE S THAT IS CERTIFIED BY ITS MANUFACTURER AS CONFORMING TO THE ASTM CSO STANDARD IN EFFECT AT THE TIME THE HYDRATED LIME WAS PROCESSED (3) SAND SHALL CONSIST OF INERT NATURAL SAND THAT IS CERTIFIED BY ITS SUPPLIER AS CONFORMING TO THE ASTM CSS STANDARD IN EFFECT AT THE TIME THE SAND IS PROCESSED BY "STANDARD SPECIFICATIONS FOR CONCRETE, FINE AGGREGATES

 (4) CONCRETE FOR DROP SUPPORTS SHALL CONFORM TO THE RANSPORTATIONS STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AS AVAILABLE AT:

 HTTP://WWW.HALGOV/DOT/ORG/PROJECTIONEY/OPMENT/HIGHAYDESIGN/SPECIFICATIONS/INDEX.HTM

 ALI MANHOLES SHALL RETESTED FOR LEAKAGE IN ACCORDANCE WITH ENV-WQ 704.17 (a) THROUGH 6. PER NHDES ENV-WQ 704.13(C), MORTAR USED IN MANHOLE CONSTRUCTION SHALL COMPLY WITH THE

- 7. ALL MANHOLES SHALL BE TESTED FOR LEAKAGE IN ACCORDANCE WITH ENV-WQ 704.17 (a) THROUGH (b).
- ALL PRECAST SECTIONS SHALL BE COATED ON THE EXTERIOR WITH A BITUMINOUS DAMP--PROOFING COATING IN ACCORDANCE WITH ENV-WQ 7D4.12 (J).
- 9. ALL PRECAST SECTIONS AND BASES SHALL HAVE THE DATE OF MANUFACTURE AND THE NAME OR TRADBUARK OF THE MANUFACTURER IMPRESSED OR INDELIBLY MARKED ON THE INSIDE WALL PER PROPERTY OF THE PROPER
- PUMPS AND ELECTRICAL COMPONENTS IN THE WET WELL SHALL BE DESIGNED FOR CLASS I DIVISION
 LOCATIONS.
- 11. PUMP CONTROL PANEL TO HAVE INDIVIDUAL PUMP RUN METERS.
- 12. PUMP STATION ALARM CONDITIONS
 a. HIGH WATER ALARM
 b. LOW WATER ALARM
 c. PHASE LOSS

- 13. WITHIN 60 DAYS OF SUBSTANTIAL PROJECT COMPLETION AND A FINAL OWNER/OPERATOR IS DETERMINED, THE ENGINEER WILL SUBMIT AN EMERGENCY OPERATIONS PLAN AND PROCEDURES PER ENV-WO 705-10.
- 14. A PERMANENT GENERATOR FOR BACK-UP POWER SUPPLY TO BE INSTALLED.
- 15. SHOP DRAWINGS MUST BE SUBMITTED TO PORTSMOUTH DPW AND THE PROJECT'S THIRD PARTY INSPECTOR FOR REVIEW.

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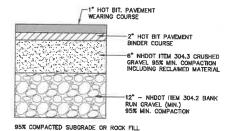
SHEET 14 OF 20 JBE PROJECT NO. 22022

NOTES:

- 1. PAVEMENT REPAIR IN EXISTING ROADWAYS SHALL CONFORM TO STREET OPENING REGULATIONS.
- 2. NEW ROADWAY CONSTRUCTION SHALL CONFORM TO PROJECT AND CITY SPECIFICATIONS.
- 3. SLOPE UNDERDRAIN PIPE TO DAYLIGHT.

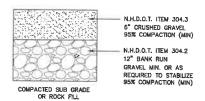
ROADWAY UNDERDRAIN TRENCH

NOT TO SCALE



TYPICAL BITUMINOUS PAVEMENT

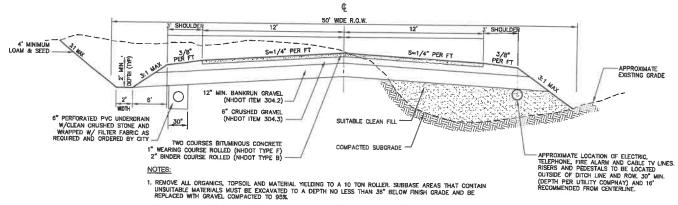
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NOTE: IN AREAS OF ROCK EXCAVATION, MINIMUM 9" BANK RUN GRAVEL SHALL BE PLACED

GRAVEL SECTION

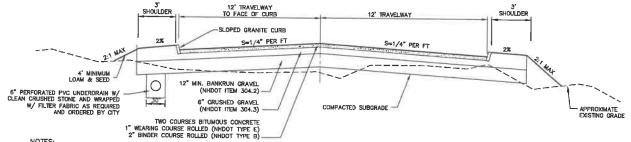
NOT TO SCALE



- ALL MATERIALS TO BE AS SPECIFIED PER CITY STANDARDS AND NHDDT, WHICHEVER IS MOST STRINGENT. GRADATION AND COMPACTION TEST RESULTS (95% MIN.) SHALL BE SUBMITTED FOR REVIEW AND APPROVAL.
- 3. CITY MAY REQUIRE UNDERDRAIN, ADDITIONAL GRAVEL AND/OR ADDITIONAL DRAINAGE IF SOIL CONDITIONS WARRANT.
- 4. WOVEN GEOTEXTILE FABRIC SHALL BE PLACED ABOVE SUBGRADE AT ALL WETLAND CROSSINGS.

TYPICAL ROADWAY SECTION

NOT TO SCALE

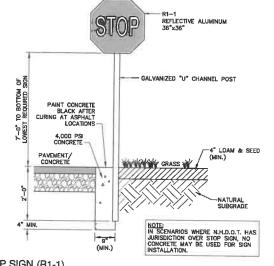


NOTES:

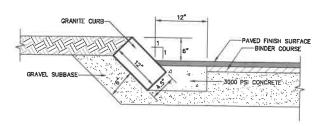
- 1. REMOVE ALL ORGANICS, TOPSOIL AND MATERIAL YIELDING TO A 10 TON ROLLER. SUBBASE AREAS THAT CONTAIN UNSUITABLE MATERIALS MUST BE EXCAVATED TO A DEPTH NO LESS THAN 36" BELOW FINISH GRADE AND BE REPLACED WITH GRAVEL COMPACTED TO 95%.
- 2. ALL MATERIALS TO BE AS SPECIFIED PER CITY STANDARDS AND NHDOT, WHICHEVER IS MOST STRINGENT. GRADATION AND COMPACTION TEST RESULTS (95% MIN.) SHALL BE SUBMITTED FOR
- 3. CITY MAY REQUIRE UNDERDRAIN AND/OR ADDITIONAL DRAINAGE IF SOIL CONDITIONS WARRANT.
- 4. WOVEN GEOTEXTILE FABRIC SHALL BE PLACED ABOVE SUBGRADE AT ALL WETLAND CROSSINGS.

TYPICAL ROADWAY SECTION W/CURBING

NOT TO SCALE



STOP SIGN (R1-1) NOT TO SCALE



- CURB TO BE PLACED PRIOR TO PLACING TOP SURFACE COURSE.
 JOINTS BETWEEN STONES SHALL BE MORTARED.

SLOPED GRANITE CURB

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Plan Name:	DETAIL SHEET
Project:	RESIDENTIAL SUBDIVISON AUTUMN STREET, ROCHESTER, NH
Owner of Record:	DANA S. COPP 1985 TRUST & SHIRLEY L. COOP 1985 TRUST PO BOX 1767, ROCHESTER, NH 03866

D1 SHEET 15 OF 20 JBE PROJECT NO. 22022

DRAWING No.

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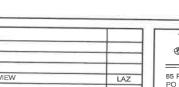
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 TRENCH BACKFILL SHALL CONFORM WITH ENV. Wq. 704.11(h) AND BE FREE OF DEBRIS, PAVEMENT, ORGANIC MATTER, TOP SOIL, WET OR SOFT MUCK, PEAT OR CLAY, EXCAVATED LEDGE OR ROCKS OVER SIX INCHES. 4. W= MAXIMUM ALLOWABLE TRENCH WIDTH TO A PLANE 12" INCHES ABOVE THE PIPE. FOR PIPES 15 INCHES NOMINAL DIAMETER OR LESS, WIDTH SHALL BE NO MORE THAN 36": FOR PIPES GREATER THAN 15 INCHES NOMINAL DIAMETER, WIDTH SHALL BE 24 INCHES PLUS PIPE 0.D. WIDTH SHALL ALSO BE THE PAYMENT WIDTH FOR LEDGE EXCAVATION AND FOR ORDERED EXCAVATION BELOW GRADE.

RIGID FOAM INSULATION TO BE PROVIDED WHERE COVER IN THE ROADWAY IS LESS THAN 6' AND CROSS COUNTRY IS LESS THAN 4', PURSUANT TO DES WAIVER BEING ISSUED.

PIPE SAND BLANKET MATERIAL SHALL BE GRADED SAND, FREE FROM ORGANIC MATERIALS, GRADED SUCH THAT 100% PASSES A 1/2 * SIEVE AND A MAXIMUM OF 15% PASSES A #200 SIEVE IN ACCORDANCE WITH Env-Wq 704.11(c).

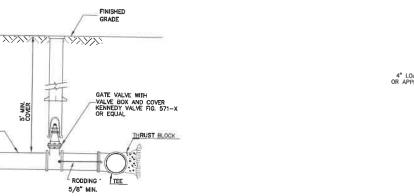
JOINT SEALS FOR PVC PIPE SHALL BE OIL RESISTANT COMPRESSION RINGS OF ELASTOMERIC MATERIAL AND CERTIFIED BY THE MANUFACTURER AS CONFORMING TO THE ASTM D3212 STANDARD IN EFFECT WHEN THE JOINT SEALS WERE MANUFACTURED, AND SHALL BE PUSH-ON, BELL-AND-SPIGOT TYPE PER Env-Wq 704.05 (a).





Plan Name **DETAIL SHEET** RESIDENTIAL SUBDIVISON AUTUMN STREET, ROCHESTER, NH Project:

DRAWING No.



SEE NOTES 1 AND 2

ROADWAY BACKFILL SHALL, CONFORM TO STANDARD SPECIFICATIONS

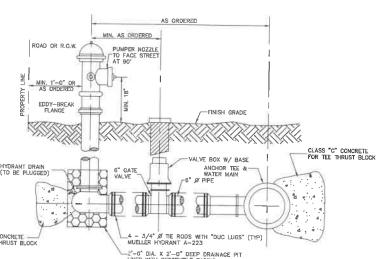
- METAL IMPREGNATED MARKING TAPE TO AID IN LOCATING BURIED PIPE WITH METAL DETECTING EQUIPMENT - 2" RIGID FOAM INSULATION PLACED 0.5' ABOVE SEWER PIPE WHERE INDICATED ON THE PLANS.

CRUSHED STONE (ASTM C33/c33M STONE SIZE NO. 87 IN ACCORDANCE WITH ENV-Wg 704.11(c) BEDDING FOR FULL WIDTH OF THE PIPE 6" BELOW PIPE IN EARTH 12" BELOW PIPE IN LEDGE

- CRUSHED GRAVEL

GRAVE

NOT TO SCALE



NOTES:

WITT. BLUDGING IN LEGISLATION

1. PER NHDES ENV-WQ 704.13(C), MORTAR USED IN MANHOLE CONSTRUCTION SHALL COMPLY WITH THE FOLLOWING.

G. MORTAR SHALL BE COMPOSED OF TYPE II PORTLAND CEMENT AND SAND WITH OR WITHOUT HYDRATED LIME ADDITION.

b. PROPORTIONS IN MORTAR OF PARTS BY VOLUMES SHALL BE PER TABLE 704—4:

(1) 4.5 PARTS SAND AND 1.5 PARTS CEMENT. OR

(2) 4.5 PARTS SAND AND 1.5 PARTS CEMENT. OR

(2) 4.5 PARTS SAND AND 1.5 PARTS CEMENT AND 0.5 PART HYDRATED LIME;

C. CEMENT SHALL BE TYPE II PORTLAND CEMENT THAT IS CERTIFIED BY ITS MANUFACTURER AS CONFORMING TO THE ASTM CISO/CISOM STANDARD IN EFFECT AT THE TIME THE OEMENT WAS MANUFACTURED.

d. HYDRATED LIME SHALL BE TYPE S THAT IS CERTIFIED BY ITS MANUFACTURER AS CONFORMING TO THE ASTM CISO/CISOM STANDARD IN EFFECT AT THE TIME THE HYDRATED LIME WAS PROCESSED BY SHAND SHALL CONSIST OF INERT NATURAL SAND THAT IS CERTIFIED BY ITS SUPPLIER AS CONFORMING TO THE ASTM CISO THE ASTM CISO STANDARD IN EFFECT AT THE TIME THE HYDRATED LIME WAS PROCESSED BY STANDARD SPECIFICATIONS FOR CONCRETE, FINE AGGREGATES

C. CONCRETE FOR DOPD SUPPORTS SHALL CONFORM TO THE ROURIEMENT FOR CLASS AAA CONCRETE OF THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATIONS STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AS AVAILABLE AT:

HTTD: //www.mim.gov./hot//org//PROLECTIO-FUELOPMENT/AHGSWAMPS-SIGN/SEPFCHICATIONS/INDEX.HTM.

6" MIN. BEDDING IN EARTH 12"

MIN. BEDDING IN LEDGE (ASTM C33-03 NO. 67 STONE)

HTTP: //WWW.NH.GOV/DOT/ORG/PROJECTDEVELOPMENT/HIGHWAYDESIGN/SPECIFICATIONS/INDEX.HTM SHELVES SHALL BE CONSTRUCTED TO THE ELEVATION OF THE HIGHEST PIPE CROWN AND SLOPED TO DRAIN TOWARD THE FLOWING THROUGH CHANNEL IN ACCORDANCE WITH ENV—WQ 704.12 (K).

3. ALL MANHOLES SHALL BE TESTED FOR LEAKAGE IN ACCORDANCE WITH ENV-WQ 704.17 (a) THROUGH

SEWER MANHOLE COVERS SHALL CONFORM TO ASTM A48/48M WITH A CASTING EQUAL TO CLASS 30 IN ACCORDANCE WITH ENV—WO 704.13 (a) (8).

5. ALL PRECAST SECTIONS SHALL BE COATED ON THE EXTERIOR WITH A BITUMINOUS DAMP-PROOFING COATING IN ACCORDANCE WITH ENV-WQ 704.12 (ϕ).

ALL PRECAST SECTIONS AND BASES SHALL HAVE THE DATE OF MANUFACTURE AND THE NAME OR TRADEMARK OF THE MANUFACTURER IMPRESSED OR INDELIBLY MARKED ON THE INSIDE WALL PER ENV—WQ 704.12(f).

7. BRICK MASONRY SHALL CONFORM TO ASTM C32 (ENV-WQ 704.12(a)(9))

SEWER MANHOLE

NOT TO SCALE

FAX: 603-772-0227 E-MAIL: JBE@JONESANDBEACH.COM

REFER TO ROCHESTER WATER DEPARTMENT SPECS

Owner of Record: DANA S. COPP 1985 TRUST & SHIRLEY L. COOP 1985 TRUST PO BOX 1767, ROCHESTER, NH 03866

___ 2-SPARE 4" PVC PRIMARY POWER 5" SCH. 80 PVC CABLE 7,200 VAC. OTHER POWER, TELEPHONE CATY, ETC., CABLES ARE NO CLOSER THAN 12" NOTE: ALL UTILITIES SHALL BE REVIEWED AND APPROVED BY APPROPRIATE UTILITY COMPANY. UTILITY TRENCH NOT TO SCALE ALTERNATE TOP SLAB FOR MANHOLES LESS THAN SIX FEET DEEP. REINFORCED TO MEET OR EXCEED THE REQUIRMENTS OF AASHTO HS20-44 LOADING

COVERS SHALL HAVE A MINIMUM OPENING OF 32" AND LABELED "SEWER" IN 3" LETTERS

30" DIA. CLEAR OPENING

NO MANHOLE STEPS UNLESS SPECIFIED BY THE LOCAL AUTHORITY

48" DIAMETER MIN.

.5 IN/FT. TYP. 3" MAX.

24" MIN. 48" MAX. VARIES

-FULL MORTAR BED (PORTLAND TYPE II CEMENT)

- ADJUST TO GRADE WITH HARD BRICK GRADE SS (MIN. 2 COURSES, MAX. 5 COURSES OR 12" MAX. ADJUSTMENT)

PRECAST CONCRETE UNITS SHALL CONFORM TO ASTM C-478

CLASS "AA" CONCRETE 4000 P.S.I.

5" MIN. REINFORCED

- 5°MIN.

WATER TIGHT JOINT

(ELASTOMERIC SEALING RING CAST IN THE MANHOLE OR EQUIL, ENV-WQ 704.12 (g) OPTIONS)

WATERTIGHT JOINT (TONGUE & GROOVE W/ A DOUBLE RING OF MASTIC

EXCAVATION AND BACKFILL IN ACCORDANCE WITH UTILITY COMPANY STANDARDS

CROSS-COUNTRY | IN PAVEMENT PAVEMENT 4" LOAM AND SEED OR APPROVED SLOPE PROTECTION - GRAVEL ROAD BASE (AS SPECIFIED) SUITABLE BACKFIL 95% COMPACTED (ASTM D1557) MIN. SAND BEDDING IN EARTH IN LEDGE WATER SYSTEM TRENCH

NOTES:

NOTES

1. ALL PIPE FITTINGS TO BE D.I. PRESSURE CLASS 350, THICKNESS CLASS 52.

2. HYDRAN'T TO BE PAINTED RED WITH WHITE "REFLECTOR" PAINT ON BONNET.

3. MECHANICAL JOINTS SHALL HAVE MEGALUG RETAINING GLANDS AS MADE BY EBBA OR APPROVED EQUAL.

4. STEAMER NOZZLE TO BE "STORCH" TYPE.

5. NATIONAL STANDARD THREAD.

6. HYDRANTS SHALL BE NON— DRAINING, NON—ROTATING STEM EQUAL TO KENNEDY K—B1—D. VALVES SHALL OPEN CLOCKWISE

HYDRANT INSTALLATION

NOT TO SCALE

MAIN

NOT TO SCALE

4" COMPACTED LOAM AND SEEDED

8" SDR 35 PVC ASTM D3034-04 UNDISTURBED SOIL

12" CLEAN_ SAND BLANKET (SEE NOTE #6)

SEWER TRENCH

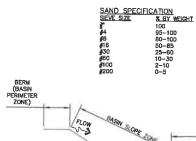
NOT TO SCALE

BURIED GATE VALVE DETAIL

NOTES:

1. PAVEMENT REPAIR IN EXISTING ROADWAYS SHALL, CONFORM TO PAVEMENT DETAILS. 2. NEW ROADWAY CONSTRUCTION SHALL CONFORM TO SUBDIVISION SPECIFICATIONS.

LOAM AREA PAVED AREA



BASIN SLOPE JOINE BASIN BOTTOM ZONE -6" THICK CLAY LINER TO PROVIDE IMPERVIOUS LAYER WITH PERMEABILITY OF

TOPSOIL SPECIFICATION LOAMY SAND TOPSOIL WITH MINIMAL CLAY CONTENT AND BETWEEN 15 TO 25% FINES PASSING THE #200 SIEVE.

MULCH SPECIFICATION
MODERATELY FINE, SHREDDED
BARK OR WOOD FIBER MULCH
WITH LESS THAN 5% PASSING
THE #200 SIEVE.

DESIGN CONSIDERATIONS

- DO NOT PLACE BIORETENTION SYSTEMS INTO SERVICE UNTIL THE BMP HAS BEEN PLANTED AND ITS CONTRIBUTING AREAS HAVE BEEN FULLY STABILIZED.
- DO NOT DISCHARGE SEDIMENT-LADEN WATERS FROM CONSTRUCTION ACTIVITIES (RUN-OFF, WATER FROM EXCAVATIONS) TO THE BIORETENTION AREA DURING ANY STAGE OF CONSTRUCTION.
- DO NOT TRAFFIC EXPOSED SOIL SURFACE WITH CONSTRUCTION EQUIPMENT. IF FEASIBLE, PERFORM EXCAVATIONS WITH EQUIPMENT OUTSIDE THE LIMITS OF THE INFILTRATION COMPONENTS OF THE SYSTEM.

PLANTING GUIDANCE

- PLANTING AREAS ARE DIVIDED INTO 3 ZONES: BASIN BOTTOM, BASIN SLOPE, BASIN PERIMETER
- BASIN BOTTOM:

 1. IF SUFFICIENT TIME IS AVAILABLE TO ALLOW SEED GERMINATION TO MATURE PLANT GROWTH PRIOR TO DIRECTING STORMWATER TO THE BASIN: INSTALL FOLLOWING SEED MIX: 50%— NEW ENGLAND PLANTS NEW ENGLAND WETLAND MIX AT A RATE OF 22 LBS/ACRE, 50% NEW ENGLAND PLANTS NEW ENGLAND EROSION CONTROL/RESTORATION MIX FOR DETENTION BASINS AND MOIST SITES AT A RATE OF 50 LBS/ACRE.

 2. IF INSUFFICIENT TIME IS AVAILABLE TO ALLOW GERMINATION TO MATURE PLANT GROWTH: INSTALL PLANTS AT A RATE OF 1 PLANT PER 12.5 SQLFT, OF BASIN BOTTOM ZONE. PLANT SELECTION SHALL INCLUDE A MIXTURE OF GRASSES, FERNS, RUSHES, AND PERENNIALS SUITABLE FOR BASIN BOTTOMS AS LISTED IN "NATIVE PLANTS FOR NEW ENGLAND RAIN GARDENS" UNH COOPPERATIVE EXTENSION.
- BASIN SLOPE ZONE: INSTALL 1 SHRUB PER 80 SQ.FT. A MINIMUM OF 3 TYPES OF SHRUBS SUITABLE FOR BASIN SLOPE AS LISTED IN "NATIVE PLANTS FOR NEW ENGLAND RAIN CARDENS" SHALL BE SELECTED. SHRUBS SHALL BE SUPPLEMENTED WITH AN EQUAL NUMBER OF GRASSES AND/OR PERENNIALS SUITABLE FOR BASIN SLOPE.
- BASIN PERIMETER ZONE: INSTALL 1 TREE PER 60 LINEAR FEET OF BASIN PERIMETER ZONE. TREES SHALL BE NATIVE TO NEW ENGLAND AND SALT RESISTANT.

MAINTENANCE REQUIREMENTS:

- SYSTEMS SHOULD BE INSPECTED AT LEAST TWICE ANNUALLY, AND FOLLOWING ANY RAINFALL EVENT EXCEDING 2.5 MICHES IN A 24 HOUR PERIOD, WITH MAINTENANCE OR REHABILITATION CONDUCTED AS WARRANTED BY SUCH INSPECTION.
- PRETREATMENT MEASURES SHOULD BE INSPECTED AT LEAST TWICE ANNUALLY, AND CLEANED OF ACCUMULATED SEDIMENT AS WARRANTED BY INSPECTION, BUT NO LESS THAN ONCE ANNUALLY.
- 3. TRASH AND DEBRIS SHOULD BE REMOVED AT EACH INSPECTION.
- 4. AT LEAST ONCE ANNUALLY, SYSTEM SHOULD BE INSPECTED FOR DRAWDOWN TIME. IF BIGRETENTION SYSTEM DOES NOT DRAIN WITHIN 72 HOURS FOLLOWING A RAINFALL EVENT, THEN A QUALIFIED PROFESSIONAL SHOULD ASSESS THE CONDITION OF THE FACILITY TO DETERMINE MEASURES REGUIRED TO RESTORE FILTRATION FUNCTION OR INFILTRATION FUNCTION (AS APPLICABLE), INCLUDING BUT NOT LIMITED TO REMOVAL OF ACCUMULATED SEDIMENTS OR RECONSTRUCTION OF THE FILTER MEDIA.
- VEGETATION SHOULD BE INSPECTED AT LEAST ANNUALLY, AND MAINTAINED IN HEALTHY CONDITION, INCLUDING PRUNING, REMOVAL AND REPLACEMENT OF DEAD OR DISEASED VEGETATION, AND REMOVAL OF INVASIVE SPECIES.
- 6. CLAY LINER MATERIAL SHALL BE CLEAN SILTY-CLAY BORROW FREE OF ROOTS, ORGANIC MATTER, AND OTHER DELETERIOUS SUBSTANCES, AND SHALL CONTAIN NO ROCKS OR LUMPS OVER THREE INCHES (3") IN DIAMETER. THIS MATERIAL SHALL BE INSTALLED IN 6" LIFTS COMPACTED TO 92% OF ASTM D-1557, AND SHALL MEET THE FOLLOWING SPECIFICATIONS: 6" PASSING 100%, 44 SIEVE 95-100%, 49 O SIEVE 40-60%, 200 SIEVE 45-60%, 200 SIEVE 45-60%, 200 SIEVE 45-60%, 200 SIEVE 45-60%, 200 SIEVE 45-45% (OF THE FRACTION PASSING THE 6" CLAY COMPONENT SHALL HAVE A PLASTICITY INDEX OF AT LEAST 8 AND A HYDRAULIC CONDUCTIVITY OF 10 TO THE -8 CM/SEC.
- COMPACTION AND MATERIALS TESTING SERVICES SHALL BE PERFORMED BY AN INDEPENDENT GEOTECHNICAL ENGINEER RETAINED BY THE OWNER.

BIORETENTION SYSTEM (with clay bottom and pipe)

NOT TO SCALE

LONGITUDINAL SECTION

- ALL DIMENSIONS GYEN IN FEET & INCHES.
 PROMME BBILLED AT INLET HEADWALL, AND SPIGOT END AT OUTLET END HEADWALL.
 CONCRETE: 5,000 PS MINIMUM AFTER 28 DAYS, CEMENT TO BE TYPE IN PER ASTM
 CONCRETE: 5,000 PS MINIMUM AFTER 28 DAYS, CEMENT TO BE TYPE IN PER ASTM
 CONCRETE: 5,000 PS MINIMUM AFTER 28 DAYS, CEMENT TO BE TYPE IN PER ASTM
 THEADED NEETERS PROVED FOR FINAL ATTROHMENT IN FIELD BY OTHERS.

PRECAST CONCRETE HEADWALL

12"

NOT TO SCALE

 Design: LAZ
 Draft: LAZ
 Date: 6/21/22

 Checked: ISM
 Scale: AS NOTED
 Project No.:22022

 Drawing Name: 22022-PLAN.dwg
 THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM JONES & BEACH ENGINEERS, INC. (JBE). ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO JBE.



DIA

SECTION A-A

FH

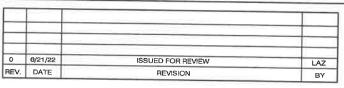
12" 4'-2" 3'-9" 1'-6" 1'-3" 1'-11" 15" 5'-11" 4'-2" 1'-6" 1'-5" 2'-0"

18" 6'-11" 4'-5" 1'-6" 1'-5" 2'-1"

24" 8'-10" 4'-11" 1'-6" 1'-5" 2'-3"

PIPE

WIDTH





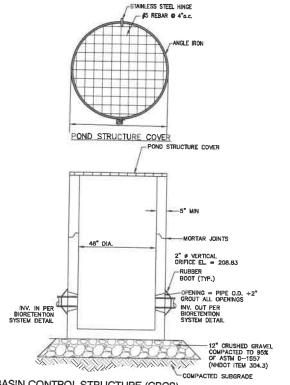
NOT TO SCALE

mouth Ave. 219	Civil	Engineering	Services	603-77 FAX: 603-77
n, NH 03885			E-MAIL: JBE@	JONESANDBEAC

PO Box : Stratharr

Inc.	Dunis
772-4746	Proje
772-0227 CH.COM	Own

Plan Name **DETAIL SHEET** RESIDENTIAL SUBDIVISON AUTUMN STREET, ROCHESTER, NH Owner of Record: DANA S. COPP 1985 TRUST & SHIRLEY L. COOP 1985 TRUST PO BOX 1767, ROCHESTER, NH 03866



CATCH BASIN CONTROL STRUCTURE (CBCS)

LEDGE-3'-0" MIN. OR D + 2' (WHICHEVER IS GREATER) NOTES:

1. PAVEMENT REPAIR IN EXISTING ROADWAYS SHALL CONFORM TO STREET OPENING REGULATIONS.

LOAM AREA | PAVED AREA

2. NEW ROADWAY CONSTRUCTION SHALL CONFORM WITH PROJECT AND CITY SPECIFICATIONS.

3. ALL MATERIALS ARE TO BE COMPACTED TO 95% OF ASTM D-1557.

DRAINAGE TRENCH

4" COMPACTED LOAM

SUITABLE BACKFILL MATERIA

NOT TO SCALE

SEE NOTES 1 AND 2

PAVEMENT CRUSHED GRAVEL (NHDOT 304.3)

GRAVEL (NHDOT 304.2)

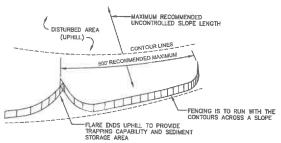
ROADWAY BACKFILL SHALL CONFORM TO STANDARD SPECIFICATIONS

DRAWING No

- 16" POST DEPTH (MIN)

CONSTRUCTION SPECIFICATIONS:

- 1. WOVEN FABRIC FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. COLOTH SHALL BE FASTENED TO WOVEN WIRE EVERY 24" AT TOP, MID AND BOTTOM AND DDED IN THE GROUND A MINIMUM OF 8" AND THEN COVERED WITH SOIL
- 2. THE FENCE POSTS SHALL BE A MINIMUM OF 48" LONG, SPACED A MAXIMUM 10' APART, AND DRIVEN A
- WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THE ENDS OF THE FABRIC SHALL BE OVERLAPPED 6°, FOLDED AND STAPLED TO PREVENT SEDIMENT FROM BY—PASSING.
- MAINTENANCE SHALL BE PERFORMED AS NEEDED AND SEDIMENT REMOVED AND PROPERLY DISPOSED OF WHEN IT IS 6" DEEP OR VISIBLE 'BULGES' DEVELOP IN THE SILT FENCE.
- 5. PLACE THE ENDS OF THE SILT FENCE UP CONTOUR TO PROVIDE FOR SEDIMENT STORAGE.
- 6. SILT FENCE SHALL REMAIN IN PLACE FOR 24 MONTHS.



SILT FENCES SHALL BE REMOVED WHEN NO LONGER NEEDED AND THE SEDIMENT COLLECTED SHALL BE DISPOSED AS DIRECTED BY THE ENGINEER. THE AREA DISTURBED BY THE REMOVAL SHALL BE SMOOTHED AND REVGETATED.

MAINTENANCE:

- SILT FENCES SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REPAIRS THAT ARE REQUIRED SHALL BE DONE IMMEDIATELY.
- IF THE FABRIC ON A SILT FENCE SHOULD DECOMPOSE OR BECOME INEFFECTIVE DURING THE EXPECTED LIFE OF THE FENCE, THE FABRIC SHALL BE REPLACED PROMPTLY.
- SEDIMENT DEPOSITS SHOULD BE INSPECTED AFTER EVERY STORM EVENT. THE DEPOSITS SHOULD BE REMOVED WHEN THEY REACH APPROXIMATELY ONE HALF THE HEIGHT OF THE BARRIER.
- 4. SEDIMENT DEPOSITS THAT ARE REMOVED, OR LEFT IN PLACE AFTER THE FABRIC HAS BEEN REMOVED, SHALL BE GRADED TO CONFORM WITH THE EXISTING TOPOGRAPHY AND VEGETATED.

BLOWN/PLACED FILTER MEDIA TO

WATER FLOW

FILTREXX® SILT SOXX™

NOT TO SCALE

12 MIN

2" X 2" X 36" WOODEN STAKES PLACED 10' O.C.

SILT FENCE

NOT TO SCALE

TEMPORARY EROSION CONTROL NOTES

THE SMALLEST PRACTICAL AREA OF LAND SHALL BE EXPOSED AT ANY ONE TIME. AT NO TIME SHALL AN AREA IN EXCESS OF 5 ACRES BE EXPOSED AT ANY ONE TIME BEFORE DISTURBED AREAS ARE STABILIZED.

EROSION, SEDIMENT AND DETENTION MEASURES SHALL BE INSTALLED AS SHOWN ON THE PLANS AND AT LOCATIONS AS REQUIRED, DIRECTED BY THE ENGINEER.

- ALL DISTURBED AREAS (INCLUDING POND AREAS BELOW THE PROPOSED WATERLINE) SHALL BE RETURNED TO PROPOSED GRADES AND ELEVATIONS. DISTURBED AREAS SHALL BE LOAMED WITH A MINIMUM OF 6" OF SCREENED ORGANIC LOAM AND SEEDED WITH SEED MIXTURE "C" AT A RATE NOT LESS THAN 1.10 POUNDS OF SEED PER 1,000 S.F. OF AREA (48 LBS. / ACRE).
- SILT FENCES AND OTHER BARRIERS SHALL BE INSPECTED EVERY SEVEN CALENDAR DAYS AND WITHIN 24
 HOURS OF A RAINFALL OF 0.5" OR GREATER, ALL DAMAGED AREAS SHALL BE REPAIRED, AND SEDIMENT
 DEPOSITS SHALL PERIODICALLY BE REMOVED AND DISPOSED OF.
- AREAS MUST BE SEEDED AND MULCHED OR OTHERWISE PERMANENTLY STABILIZED WITHIN 3 DAYS OF FINAL GRADING, OR TEMPORARILY STABILIZED WITHIN 14 DAYS OF THE INITIAL DISTURBANCE OF SOIL ALL AREAS SHALL BE STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE.
- ALL PROPOSED VEGETATED AREAS THAT DO NOT EXHIBIT A MINIMUM OF 85 PERCENT VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED BY SEEDING AND INSTALLING NORTH AMERICAN GREEN 575 EROSION CONTROL BLANKETS (OR AN EQUIVALENT APPROVED IN WRITING BY THE ENGINEER) ON SLOPES GREATER THAN 3.1, AND SEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELSEWHERE. THE INSTALLATION OF EROSION CONTROL BLANKETS OR MULCH AND KETTING SHALL NOT OCCUR OVER ACCUMULATED SHOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENTS.
- ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85 PERCENT VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.
- 10. AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
 - g. BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED:
 - b. A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
 - c. A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH STONE OR RIPRAP HAS BEEN INSTALLED; OR
 - d. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.
- PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR'S NAME, ADDRESS, AND PHONE NUMBER SHALL BE SUBMITTED TO DES VIA EMAIL (SEE BELOW).
- 13. PRIOR TO CONSTRUCTION, A PHASING PLAN THAT DELINEATES EACH PHASE OF THE PROJECT SHALL BE SUBMITTED. AUX TEMPORARY SEDIMENT BASINS THAT WILL BE NEEDED FOR DEWATERING WORK AREAS SHALL BE LOCATED AND IDENTIFIED ON THIS PLAN.
- 14. IN ORDER TO ENSURE THE STABILITY OF THE SITE AND EFFECTIVE IMPLEMENTATION OF THE SEDIMENT AND EROSION CONTROL MEASURES SPECIFIED IN THE PLANS FOR THE DURATION OF CONSTRUCTION, T CONTRACTOR SHALL BE IN STRICT COMPLIANCE WITH THE FOLLOWING INSPECTION AND MAINTEMANCE REQUIREMENTS IN ADDITION TO THOSE CALLED FOR IN THE SWPPP;
 - G. A CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL OR A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW HAMPSHIRE ("MONITOR") SHALL BE EMPLOYED TO INSPECT THE SITE FROM THE STATE TO FALTERATION OF TERRAIN ACTIVITIES UNTIL THE SITE IS IN FULL COMPLIANCE WITH THE SITE SPECIFIC PERMIT ("PERMIT").
 - b. DURING THIS PERIOD, THE MONITOR SHALL INSPECT THE SUBJECT SITE AT LEAST ONCE A WEEK, AND IF POSSIBLE, DURING ANY ½ INCH OR GREATER RAIN EVENT (I.E. ½ INCH OF PRECIPITATION OR MORE WITHIN A 24 HOUR PERIOD). IF UNABLE TO BE PRESENT DURING SUCH A STORM, THE MONITOR SHALL INSPECT THE SITE WITHIN 24 HOURS OF THIS EVENT.
 - c. THE MONITOR SHALL PROVIDE TECHNICAL ASSISTANCE AND RECOMMENDATIONS TO THE CONTRACTOR ON THE APPROPRIATE BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENT CONTROLS REQUIRED TO MEET THE REQUIREMENTS OF RSA 485 A:17 AND ALL APPLICABLE DES PERMIT CONDITIONS.
 - d. WITHIN 24 HOURS OF EACH INSPECTION, THE MONITOR SHALL SUBMIT A REPORT TO DES WA EMAIL (RIDGELY MAUCK AT: RIDGELY.MAUCK@DES.NH.GOV).
 - e. THE MONITOR SHALL MEET WITH DES TO DECIDE UPON A REPORT FORMAT. THE REPORT FORMAT SHALL BE REVIEWED AND APPROVED BY DES PRIOR TO THE START OF CONSTRUCTION.

SEEDING SPECIFICATIONS

- GRADING AND SHAPING

 A. SLOPES SHALL NOT BE STEEPER THAN 2:1 WITHOUT APPROPRIATE EROSION CONTROL MEASURES AS SPECIFIED ON THE PLANS (3:1 SLOPES OR FLATTER ARE PREFERRED).

 B. WHERE MOWING WILL BE DONE, 3:1 SLOPES OR FLATTER ARE RECOMMENDED.

- A. SURFACE AND SEEPAGE WATER SHOULD BE DRAINED OR DIVERTED FROM THE SITE TO PREVENT DROWNING
- A. SURFACE AND SEEPAGE WATER SHOULD BE DRAINED OR DIVERTED FROM THE SITE TO PREVENT DROWNING OR WHITER KILLING OF THE PLANTS.

 B. STONES LARGER THAN 4 INCHES AND TRASH SHOULD BE REMOVED BECAUSE THEY INTERFERE WITH SEEDING AND FUTURE MAINTENANCE OF THE AREA. WHERE FEASIBLE, THE SOIL SHOULD BE TILLED TO A DEPTH OF ABOUT 4 INCHES TO PREPARE A SEEDBED AND FERTILIZER AND LIME MIXED INTO THE SOIL THE SEEDBED SHOULD BE LEFT IN A REASONABLY FIRM AND SMOOTH CONDITION. THE LAST TILLAGE OPERATION SHOULD BE PERFORMED ACROSS THE SLOPE WHEREVER PRACTICAL.

3. ESTABLISHING A STAND.

A. LIME AND FERTILIZER SHOULD BE APPLIED PRIOR TO OR AT THE TIME OF SEEDING AND INCORPORATED INTO THE SOIL. TYPES AND AMOUNTS OF LIME AND FERTILIZER SHOULD BE BASED ON AN EVALUATION OF SOIL TESTS. WHEN A SOIL TEST IS NOT AVAILABLE, THE FOLLOWING MINIMUM AMOUNTS SHOULD BE AGRICULTURAL UMESTONE, 2 TONS PER ACRE OR 100 LBS. PER 1,000 SQ.FT.

NITROGEN(N), 50 LBS. PER ACRE OR 1.1 LBS. PER 1,000 S.FT.
PHOSPHATE(P205), 100 LBS. PER ACRE OR 2.2 LBS. PER 1,000 SO.FT.
POTASH(K20), 100 LBS. PER ACRE OR 2.2 LBS. PER 1,000 SO.FT.

- (NOTE: THIS IS THE EQUIVALENT OF 500 LBS. PER ACRE OF 10-20-20 FERTILIZER OR 1,000 LBS. PER
- ACRE OF 5-10-10.)

 S. SEED SHOULD BE SPREAD UNIFORMLY BY THE METHOD MOST APPROPRIATE FOR THE SITE. METHODS INCLUDE BROADCASTING, DRILLING AND HYDROSEEDING. WHERE BROADCASTING IS USED, COVER SEED WITH .25 INCH OF SOIL OR LESS, BY CULTIPACKING OR RAKING.
 REFER TO THE SEEDING GUIDE' AND SEEDING RATES "TABLES ON THIS SHEET FOR APPROPRIATE SEED MIXTURES AND RATES OF SEEDING. ALL LEGUMES (CROWNVETCH, BIRDSFOOT, TREFOIL AND FLATTERA) WILLS THE MOCULATED WITH THEIR SEEDING LATE.
 WHEN SEEDED AREAS ARE MULCHED, PLANTINGS MAY BE MADE FROM EARLY SPRING TO EARLY OCTOBER.
 WHEN SEEDED AREAS ARE NOT MULCHED, PLANTINGS SHOULD BE MADE FROM EARLY SPRING TO MAY 20th OR FROM AUGUST 10th TO SEPTEMBER 1st.

MULCH
 A. HAY, STRAW, OR OTHER MULCH, WHEN NEEDED, SHOULD BE APPLIED IMMEDIATELY AFTER SEEDING.
 B. MULCH WILL BE HELD IN PLACE USING APPROPRIATE TECHNIQUES FROM THE BEST MANAGEMENT PF
 FOR MULCHING. HAY OR STRAW MULCH SHALL BE PLACED AT A RATE OF 90 LBS PER 1000 S.F.

- 5. MAINTENANCE TO ESTABLISH A STAND.
 A. PLANTED AREAS SHOULD BE PROTECTED FROM DAMAGE BY FIRE, GRAZING, TRAFFIC, AND DENSE WEED.
- GROWTH.

 B. FERTILIZATION NEEDS SHOULD BE DETERMINED BY ONSITE INSPECTIONS. SUPPLEMENTAL FERTILIZER IS USUALLY THE KEY TO FULLY COMPLETE THE ESTABLISHMENT OF THE STAND BECAUSE MOST PERDINIALS TAKE 2 TO 3 YEARS TO BECOME FULLY ESTABLISHED.
- I WATERWAYS, CHANNELS, OR SWALES WHERE UNIFORM FLOW CONDITIONS ARE ANTICIPATED, ANNUAL MOWING MAY BE NECESSARY TO CONTROL GROWTH OF WOODY VEGETATION.

USE	SEEDING MIXTURE 1/	DROUGHTY	WELL DRAINED	MODERATELY WELL DRAINED	POORLY DRAINED
STEEP CUTS AND FILLS, BORROW AND DISPOSAL AREAS	A B C	FAIR POOR POOR	GOOD GOOD	GOOD FAIR EXCELLENT	FAIR FAIR GOOD
	D	FAIR	EXCELLENT	EXCELLENT	POOR
WATERWAYS, EMERGENCY SPILLWAYS, AND OTHER CHANNELS WITH FLOWING WATER.	Ĉ	GOOD	GOOD EXCELLENT	GOOD EXCELLENT	FAIR FAIR
LIGHTLY USED PARKING LOTS, ODD AREAS, UNUSED LANDS, AND LOW INTENSITY USE RECREATION SITES.	A B C	GOOD GOOD GOOD	GOOD GOOD EXCELLENT	GOOD FAIR EXCELLENT	FAIR POOR FAIR
PLAY AREAS AND ATHLETIC FIELDS, (TOPSOIL IS ESSENTIAL FOR GOOD TURF.)	E F	FAIR FAIR	EXCELLENT EXCELLENT	EXCELLENT EXCELLENT	2/ 2/

GRAVEL PIT, SEE NH-PM-24 IN APPENDIX FOR RECOMMENDATION REGARDING RECLAMATION OF SAND AND GRAVEL PITS.

1/ refer to seeding mixtures and rates in Table Below. 2/ poorly drained soils are not desirable for use as playing area and athletic fields.

NOTE: TEMPORARY SEED MIX FOR STABILIZATION OF TURF SHALL BE WINTER RYE OR OATS AT A RATE OF 2.5 LBS. PER 1000 S.F. AND SHALL BE PLACED PRIOR TO OCTOBER 15th, IF PERMANENT SEEDING NOT YET COMPLETS.

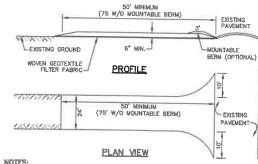
SEEDING GUIDE

POUNDS PER 1.000 Sq. F
0.45 0.45 0.05 0.95
0.35 0.25 0.35
0.75 0.95 OR 1.35
0.45 0.45 0.20 1.10
0.45 0.75 1.20
1.15 1.15 2.30
3.60
1

SEEDING RATES

CONSTRUCTION SEQUENCE

- PRIOR TO THE START OF ANY ACTIVITY, IT IS THE RESPONSIBILITY OF THE SITE'S SITE DEVELOPER (OR OWNER) TO FILE A NOTICE OF INTENT (NOI) FORM WITH THE ENVIRONMENTAL PROTECTION AGENCY (EPA) IN ORDER TO GAIN COVERAGE UNDER THE NPDES GENERAL PERMIT FOR STORM WATER DISCHARGES FROM CONSTRUCTION ACTIVITIES. A PRE CONSTRUCTION MEETING IS TO BE HELD WITH ALL DEPARTMENT HEADS PRIOR TO THE START OF CONSTRUCTION.
- WETLAND BOUNDARIES ARE TO BE CLEARLY MARKED PRIOR TO THE START OF CONSTRUCTION. AT LEAST A TEMPORARY CULVERT OR ROADBED TO BE IN PLACE PRIOR TO THE START OF CONSTRUCTION.
- 3. CUT AND REMOVE TREES IN CONSTRUCTION AREA AS REQUIRED OR DIRECTED.
- INSTALL SLT FENCING, HAY BALES AND CONSTRUCTION ENTRANCES PRIOR TO THE START OF CONSTRUCTION. THESE ARE TO BE MAINTAINED UNTIL THE FINAL PAVEMENT SURFACING AND LANDSCAPING AREAS ARE ESTABLISHED.
- CLEAR, CUT, GRUB AND DISPOSE OF DEBRIS IN APPROVED FACILITIES. THIS INCLUDES ANY REQUIRED DEMOLITION OF EXISTING STRUCTURES, UTILITIES, ETC.
- CONSTRUCT AND/OR INSTALL TEMPORARY OR PERMANENT SEDIMENT AND/OR DETENTION BASIN(S) AS REQUIRED. THESE FACILITIES SHALL BE INSTALLED AND STABILIZED PRIOR TO DIRECTING RUN-OFF TO THEM.
- PERFORM PRELIMINARY SITE GRADING IN ACCORDANCE WITH THE PLANS, INCLUDING THE CONSTRUCTION OF ANY RETAINING WALLS AND SOUND WALLS.
- 9. PREPARE BUILDING PAD(S) TO ENABLE BUILDING CONSTRUCTION TO BEGIN.
- INSTALL THE SEWER AND DRAINAGE SYSTEMS FIRST, THEN ANY OTHER UTILITIES IN ACCORDANCE WITH THE PLAN AND DETAILS. ANY CONFLICTS BETWEEN UTILITIES ARE TO BE RESOLVED WITH THE INVOLVEMENT AND APPROVAL OF THE ENGINEER.
- 11. INSTALL INLET PROTECTION AT ALL CATCH BASINS AS THEY ARE CONSTRUCTED IN ACCORDANCE WITH DETAILS.
- 12. ALL SWALES AND DRAINAGE STRUCTURES ARE TO BE CONSTRUCTED AND STABILIZED PRIOR TO HAVING RUN-OFF DIRECTED TO THEM.
- 13. DAILY, OR AS REQUIRED, CONSTRUCT TEMPORARY BERMS, DRAINAGE DITCHES, CHECK DAMS, SEDIMENT TRAPS, ETC., TO PREVENT EROSION ON THE SITE AND PREVENT ANY SILTATION OF ABUTTING WATERS
- 14. PERFORM FINAL FINE GRADING, INCLUDING PLACEMENT OF 'SELECT' SUBGRADE MATERIALS.
- 15. PAVE ALL PARKING LOTS AND ROADWAYS WITH INITIAL 'BASE COURSE'.
- 16. PERFORM ALL REMAINING SITE CONSTRUCTION (I.B. BUILDING, CURBING, UTILITY CONNECTIONS, ETC.).
- LOAM AND SEED ALL DISTURBED AREAS AND INSTALL ANY REQUIRED SEDIMENT AND EROSION CONTROL FACILITIES (I.e. RIP RAP, EROSION CONTROL BLANKETS, ETC.).
- 18. FINISH PAVING ALL ROADWAYS AND PARKING AREAS WITH 'FINISH' COURSE,
- 19. ALL ROADWAYS AND PARKING LOTS SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED
- 20. ALL CUT AND FILL SLOPES SHALL BE SEEDED/LOAMED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
- 21. COMPLETE PERMANENT SEEDING AND LANDSCAPING.
- 22. REMOVE TEMPORARY EROSION CONTROL MEASURES AFTER SEEDING AREAS HAVE BEEN 75%-85% ESTABLISHED AND SITE IMPROVEMENTS ARE COMPLETE. SMOOTH AND RE-VEGETATE ALL DISTURBED AREAS
- 23. CLEAN SITE AND ALL DRAINAGE STRUCTURES, PIPES AND SUMPS OF ALL SILT AND DEBRIS.
- 24. INSTALL ALL PAINTED PAVEMENT MARKINGS AND SIGNAGE PER THE PLANS AND DETAILS.
- 25. ALL EROSION CONTROLS SHALL BE INSPECTED WEEKLY AND AFTER EVERY HALF-INCH OF RAINFALL.
- 26. UPON COMPLETION OF CONSTRUCTION, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTHEY ANY RELEVANT PERMITTING AGENCIES THAT THE CONSTRUCTION HAS BEEN FINISHED IN A SATISFACTORY MANNER.



NOTES:

- STONE FOR STABILIZED CONSTRUCTION ENTRANCE SHALL BE 3 INCH STONE, RECLAIMED STONE, OR RECYCLED CONCRETE EQUIVALENT.
 THE LENGTH OF THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 50 FEET, 75' WITHOUT A MOUNTABLE BERM, AND EXCEPT FOR A SINGLE RESIDENTIAL LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY.
 3, THICKNESS OF THE STONE FOR THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 6 NICHES.

- 3. THICKNESS OF THE STONE FOR THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 6 INCHES.

 4. THE WIDTH OF THE ENTRANCE SHALL NOT BE LESS THAN THE FULL WIDTH OF THE ENTRANCE WHERE INGRESS OR EGRESS OCCURS, OR 10 FEET, WHICHEVER IS GREATER.

 5. GEOTEXTILE FILIER FABRIC SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING THE STONE, FILIER FABRIC IS NOT REQUIRED FOR A SINGLE FAMILY RESIDENTIAL LOT.

 6. ALL SURFACE WATER THAT IS FLOWING TO OR DIVERTED TOWARD THE CONSTRUCTION ENTRANCE SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A STONE BERM WITH 5:1 SLOPES THAT CAM BE CROSSED BY VEHICLES MAY BE SUBSTITUTED FOR THE PIPE.
- BERM WITH 5:1 SLOPES THAT LAN BE CRUSSED BY VEHICLES WAT BE SUSSITIVED FOR THE PIPE.

 7. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO THE PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERFODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEAN OUT OF ANY MEASURES USED TO TRACE SEDIMENT. ALL SEDIMENT SPILLED, WASHED, OR TRACKED ONTO THE PUBLIC RIGHT-OF-WAY MUST BE REMOVED PROMPTLY.

STABILIZED CONSTRUCTION ENTRANCE

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Design: LAZ Draft: LAZ Date: 6/21/22 Checked: ISM Scale: AS NOTED Project No.:22022 Drawing Name: 22022-PLAN.dwg THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTE ERMISSION FROM JONES & BEACH ENGINEERS, INC. (JBE). ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE

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X 1" X 36" WOODEN STAKES PLACED 10' O.C.

-FILTREXX@SILT SOXX™ (12" TYPICAL) AREA TO BE PROTECTED

FILTREXX® SILT SOXX™ /12" TYPICAL)

ALL MATERIAL TO MEET FILTREXX®

 SILT SOXX™ FILL TO MEET APPLICATION REQUIREMENTS. 3. COMPOST MATERIAL TO BE DISPERSED ON SITE, AS DETERMINED BY FNOMER



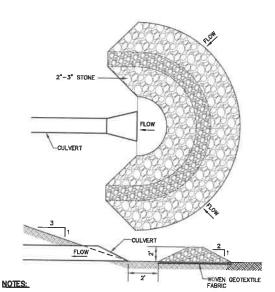
EROSION AND SEDIMENT CONTROL DETAILS RESIDENTIAL SUBDIVISON AUTUMN STREET, ROCHESTER, NH Project: DANA S. COPP 1985 TRUST & SHIRLEY L. COOP 1985 TRUST PO BOX 1767, ROCHESTER, NH 03866

Ε1

1. STONE CHECK DAMS SHOULD BE CHECKED AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY NECESSARY REPAIRS SHOULD BE MADE IMMEDIATELY. PARTICULAR ATTENTION SHOULD BE GIVEN TO BON RUN AND ECOSION AT THE DOWNSTREAM TOE OF THE STRUCTURE WHEN THE STRUCTURES ARE REMOVED, THE DISTURBED PORTION SHOULD BE BROUGHT TO THE ENSURED HOLD REPAIR OF THE STRUCTURES ARE REMOVED, THE DISTURBED PORTION SHOULD BE BROUGHT TO THE ENSURED CHANNEL GRADE AND THE AREAS PREPARED. SEEDED AND MULCHED. WHILE THIS PRACTICE IS NOT INTENDED TO BE USED PRIMABILY FOR SEDIMENT TRAPPING, SOME SEDIMENT WILL ACCUMULATE BEHIND THE STRUCTURES. SEDIMENT SHALL BE REMOVED FROM BEHIND THE STRUCTURES WHEN IT HAS ACCUMULATED TO ONE HALF OF THE ORIGINAL HEIGHT OF THE STRUCTURE.

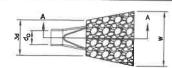
STONE CHECK DAM

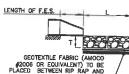
NOT TO SCALE



- TEMPORARY CULVERT INLET PROTECTION CHECK DAMS SHALL BE CONSTRUCTED OF 2-3" STONE OVER WOVEN GEOTEXTILE FABRIC.
- INLET PROTECTION MEASURES SHALL BE INSTALLED AT THE OPENINGS OF ALL EXISTING AND PROPOSED CULVETTS LOCATED BELOW (DOWNSTREAM) FROM AND WITHIN 100' OF THE PROJECT SITE.
- SEDIMENT SHALL BE REMOVED FROM BEHIND THE STRUCTURE WHEN IT HAS ACCUMULATED TO ONE HALF THE ORIGINAL HEIGHT OF THE STRUCTURE.
- STRUCTURES SHALL BE REMOVED WHEN THE SITE IS STABILIZED WITH VEGETATION AND THE CHANNEL SHALL BE SMOOTHED AND REVEGETATED.

TEMPORARY CULVERT INLET PROTECTION CHECK DAM







SECTION A-A PIPE DUTLET TO FLAT AREA WITH NO DEFINED CHANNEL SECTION A-A PIPE OUTLET TO WELL-DEFINED

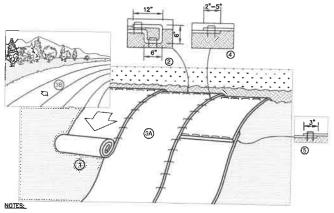
TABLE 7-24-RECOMMEND	DED RIP RAP GRADATION RANGES
THICKNESS OF RIP RAP =	1.5 FEET
d50 SIZE= 0.50	FEET 6 INCHES
% OF WEIGHT SMALLER THAN THE GIVEN d50 SIZE	SIZE OF STONE (INCHES) FROM TO
100%	9 12
85%	8 11
50%	6 9
15%	2 3

NOTES:

- THE SUBGRADE FOR THE GEOTEXTILE FABRIC AND RIP RAP SHALL BE PREPARED TO THE LINES AND GRADES SHOWN ON THE PLANS.
- 2. THE RIP RAP SHALL CONFORM TO THE SPECIFIED GRADATION.
- 3. GEOTEXTILE FABRICS SHALL BE PROTECTED FROM PUNCTURE OR TEARING DURING THE PLACEMENT OF THE ROCK RIP. DAMAGED AREAS IN THE FABRIC SHALL BE REPAIRED BY PLACING A PIECE OF FABRIC OVER THE DAMAGED AREA OR BY COMPLETE REPLACEMENT OF THE FABRIC, ALL OVERLAPS REQUIRED FOR REPAIRS OR JOINING TWO PIECES OF FABRIC SHALL BE A MINIMUM OF 12 INCHES.
- 5. OUTLETS TO A DEFINED CHANNEL SHALL HAVE 2:1 OR FLATTER SIDE SLOPES AND SHOULD BEGIN AT THE TOP OF THE CULVERT AND TAPER DOWN TO THE CHANNEL BOTTOM THROUGH THE LENGTH OF THE APRON.
- 6. MAINTENANCE: THE OUTLET PROTECTION SHOULD BE CHECKED AT LEAST ANNUALLY AND AFTER EVERY MAJOR STORM. IF THE RIP RAP HAS BEEN DISPLACED, UDERMINED OR DAMAGED, IT SHOULD BE REPAIRED MINEDIATELY. THE CHANNEL MIMEDIATELY BELOW THE OUTLET SHOULD BE CHECKED TO SEE THE CHARGE OF THE CHA

RIP RAP OUTLET PROTECTION APRON

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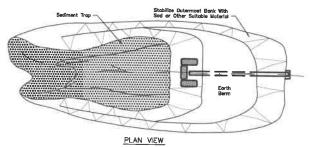
- PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL—O-SEED DO NOT SEED PREPARED AREA, CELL—O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
- 2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 8" DEEP BY 6" WIDE TRENCH WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH. BATER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE BLANKET.
- 3. ROLL THE BLANKETS (A) DOWN OR (B) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY FLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN QUIDE. WHEN USING OPTIONAL DOT SYSTEMM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
- 4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2"-5" OVERLAP DEPENDING ON BLANKET TYPE. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITICH ON THE PREVIOUSLY INSTALLED BLANKET.
- 5. CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" OVERLAP, STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART ACROSS ENTIRE BLANKET WIDTH, NOTE: IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.

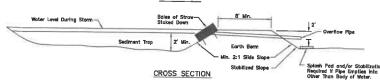


NORTH AMERICAN GREEN 14649 HIGHWAY 41 NORTH EVANSVILLE, INDIANA 47725 -800-772-2040

EROSION CONTROL BLANKET SLOPE INSTALLATION NORTH AMERICAN GREEN (800) 772-2040

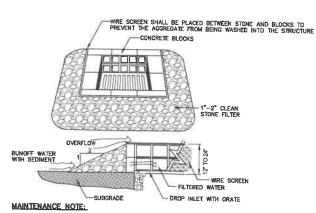
NOT TO SCALE





TEMPORARY SEDIMENT BASIN

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1. ALL STRUCTURES SHOULD BE INSPECTED AFTER EVERY RAINFALL AND REPAIRS MADE AS NECESSARY, SEDIMENT SHOULD BE REMOVED FROM TRAPPING DEVICES AFTER THE SEDIMENT HAS REACHED A MAXIMUM OF ONE HALF THE DEPTH OF THE TRAP. THE SEDIMENT SHOULD BE DISPOSED IN A SUITABLE UPLAND AREA AND PROTECTED FROM EROSION BY BITHER STRUCKE OR VEGETATIVE MEANS. THE TEMPORARY TRAPS SHOULD BE REMOVED AND THE ATER REPAIRED AS SOON AS THE CONTRIBUTING DRAINAGE AREA TO THE INLET HAS BEEN COMPLETELY STABILIZED.

TEMPORARY CATCH BASIN INLET PROTECTION (Block and Gravel Drop Inlet Sediment Filter)

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DANA S. COPP 1985 TRUST & SHIRLEY L. COOP 1985 TRUST PO BOX 1767, ROCHESTER, NH 03866

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Designed and Produced in NH Jones & Beach Engineers, Inc. 85 Portsmouth Ave.

Civil Engineering Services FAX: 603-772-0227 E-MAIL: JBE@JONESANDBEACH.COM

Plan Name **DETAIL SHEET** RESIDENTIAL SUBDIVISON AUTUMN STREET, ROCHESTER, NH Project:

Owner of Record:

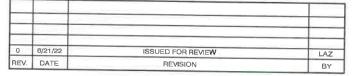
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SHEET 19 OF 20 JBE PROJECT NO, 22022



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Civil Engineering Services

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RESIDENTIAL SUBDIVISON AUTUMN STREET, ROCHESTER, NH

Owner of Record: DANA S. COPP 1985 TRUST & SHIRLEY L. COOP 1985 TRUST PO BOX 1767, ROCHESTER, NH 03866

