

MAJOR SUBDIVISION APPLICATION

(a total of four or more lots)

City of Rochester, New Hampshire

Date:		litional needed? Yes: No: Unclear: encourage you to submit an application as soon as possible.)
Property information	on	
Tax map #:;	Lot #('s):	; Zoning district:
Property address/location	on:	
Name of project (if appli	cable):	
Size of site: ac	res; Overlay z	zoning district(s)?
Property owner		
Name (include name of	individual):	
Mailing address:		
Telephone #:		Email:
Applicant/develope	er (if different fro	om property owner)
		Email:
Engineer/surveyor		
Name (include name of	individual):	
Mailing address:		
Telephone #:		Fax #:
Email address:		Professional license #:
Proposed project		
Number of proposed lot	s:	; estimated length of new roads:
Number of cubic yard of	earth being re	emoved from the site?
City water? yes n	o; How fa	far is city water from the site?
City sewer? yes ne	o; How fa	far is city sewer from the site?
If city water, what are th	e est. total gal.	. per day?; Are there pertinent covenants?
Where will stormwater b	e discharged?	

Wetlands: Is any fill proposed?	_; area to be filled:	; buffer impact?
Comments		
Please feel free to add any comment	ts, additional information	, or requests for waivers here:
Submission of application This application must be signed by the property owner), and/or the agent.	ne property owner, applic	cant/developer (if different from
I(we) hereby submit this Subdivision pursuant to the <u>City of Rochester Suknowledge</u> all of the information on the materials and documentation is true property owner)/as agent, I attest that	bdivision Regulations ar his application form and and accurate. As applic	nd attest that to the best of my in the accompanying application ant/developer (if different from
Signature of property owner:		ent for Owner and Applicar
Signature of applicant/developer:	Poto	
Signature of agent:		:
Authorization to enter subjec	t property	
I hereby authorize members of the R Conservation Commission, Planning boards and agencies to enter my pro- including performing any appropriate post-approval phase, construction phase specifically to those particular individ- inspecting this specific application/pro- reasonable care, courtesy, and diliger	Rochester Planning Board Department, and other property for the purpose of a inspections during the aboase, and occupancy photographics involved to ject. It is understood the	pertinent City departments, evaluating this application application phase, review phase, ase. This authorization applies d in evaluating, reviewing, or at these individuals must use all
	Date:	

<u>Major Subdivision Checklist</u> (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:		_ Map	·	Lot:	Date:
Applicant/agent:		_ Sign	ature:_		<i>Y</i>
(Staff review by:		_ Date	:)
General items	Yes	No	N/A	Waiver Requested	Comments
4 sets completed application	X				
Total application fee	X				
4 copies of narrative	X				
3 sets of full-size plans	X				
2 sets of 11 X 17 reductions	X				
Completed abutters list	X				
Copy of existing covenants, easements,			X		
and deed restrictions					
Plan Information					
Basic information including:	X				
Title sheet	x				
Name of project	X				
DateNorth arrow	X				
• Scale	X		\Box		
• Legend	X				
Revision block	x				
• Vicinity sketch - no less than 1" = 1,000	' [X]				
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	x				

General items Continued				Waiver			
Name, stamp, and NH license # of licensed engineer for streets, utilities and drainage	Yes	No	N/A	Reques	sted	Comments	
City tax map & lot #'s	X						
Subdivision approval	x						
statement (per regulations) Notation on plans: "For more information about this subdivision contact"	x						
References to neighboring plans and subdivisions	x						
Information on abutting properties: • owner name • owner address • tax map and lot # • square footage of lots • approximate building footprints • use	x x x x						
<u>Zoning</u>							
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 x						
Existing Topographic Features							
Contour lines and spot elevations	x						
Soil types and boundaries	x						
Soil test pit locations, profiles, and depth to water table and ledge							
Percolation test locations and results							

Existing Topographic Features Continu	Waiver					
Mater feetures (pende etroppe)	Yes	No	N/A	Reques	sted	Comments
Water features (ponds, streams)	x					
Wetlands including name of certified wetlands scientist & license # who delinear	x ted					_
Statement whether located in flood area, and if so, 100 year flood elevation	x					
Delineation of treed and open areas	x					
Overview of types of trees and vegetation	x					
Location of rock outcroppings	x					
Stone walls and archaeological features	x					_
Locations of trails and paths	x					_
Other natural/cultural resources (productive farmland, habitats, scenic views, historic structures, etc.)			x			
Existing buildings/structures	x					
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 x					
Existing and proposed location of:monumentsbenchmarks	x x					
Proposed square footage for each lot Subdivision # on each lot (1, 2, 3, etc.) Include error of closure statement	x x					

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

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



BERRY SURVEYING & ENGINEERING

335 Second Crown Point Road Barrington, NH 03825 Phone: (603) 332-2863

Fax: (603) 335-4623 www.BerrySurveying.Com

August 23, 2022

City of Rochester
Planning & Development

Attn: Mr. Ryan O'Connor, Senior Planner

33 Wakefield Street Rochester, NH 03867

Re: Subdivision Submission

Roadrunner Real Estate, LLC

Elizabeth Dunnells 797 Portland Street Tax Map 108, Lot 50

Mr. O'Connor,

On behalf of the land owner and the applicant, Roadrunner Real Estate Development LLC, Berry Surveying & Engineering (BS&E) is submitting a Major Subdivision application for 797 Portland Street. This is commonly known as Tax Map 108, Lot 50 and contains usable frontage and land off Crowhill Road.

BS&E has conducted a complete boundary and existing conditions plan of the project site. Between the time the Design Review was filed and this application date, the boundaries were found to be different than the tax mapping assumed and is updated with this submission with a formal boundary survey. BS&E has hired Deidra Benjamin to conduct the wetlands delineation on site and is preparing a formal report to be submitted to the TRG as well as the wetlands bureau. In general, the natural state wetlands systems onsite are known as PF01/4E with some inclusions of PEM1E wetland areas. These larger complexes on and off site drain to a stream that eventually crosses under Crowhill Road and drains to the Salmon Falls River. There are areas of jurisdictional wetlands as noted on the existing conditions plan that are man made and ditched, which appears to have been done during the last logging activity onsite. This area is specifically found between 290 feet and 480 feet off Crowhill Road. Though these areas have now naturalized they are considered low quality and do not contain the same functions and values as the primary system. In addition, there is a manmade conveyance channel that starts near the entrance on Crowhill and continues to the northwest, meandering on and off the subject parcel and abutting parcels. This channel is partially considered jurisdictional wetlands and the distinctions are made on the existing conditions plan. This channel connects and drains to the stream onsite and was a specific analysis point in the proposed conditions drainage analysis. John P. Hayes conducted a Site Specific Soils Map (SSSM) on site which is included in the project plan set. Much of the site is considered Group C soils with areas of A and B soils at the front of the site closest to Crowhill Road.

The project proposal is to construct a new roadway currently named Tibetan Drive to gain access to the buildable upland areas on site. After consultation with the TRG during the design review phase, the roadway and lot design has been modified to improve the layout as recommended by municipal staff. The project proposes a roadway that is 1,222.03 linear feet to the neck of the cul-de-sac to service 16 proposed lots. The cul-de-sac is proposed to be 24' wide and superelevated to the center. Each one of the lots is sized to allow for the construction of a duplex building, for a total of 32 units in the subdivision. The site design includes the anticipated foot prints for the duplex units which were specifically chosen based on lot size and development constraints. The project proposes municipal water throughout with each unit having dedicated curb stops with 1" water services. The site is serviced by onsite sewage disposal through the use of effluent disposal areas (EDA). Each unit is designed for 2 bedrooms with the EDA areas designed for 4-bedroom structures. The final design will likely include each unit having a dedicated tank.

The entrance to the road was intentionally offset from the abutting lot line to the north. There is an encroachment onto the subject parcel by the abutting land owner and to ensure proper buffering is provided the road is offset to account for grading, some additional proposed vegetation and natural vegetation to remain. White spruce trees are proposed as buffering along with the required street trees shown on the enclosed site plans. The mail cluster box is also provided in this general area being about 100 from the intersection.

The site currently sees a large amount of offsite flow which enters the wetlands at the southern boundary and flows through the front portion to the man-made channel that then traverses through the abutting lots. The proposed design accounts for this flow and removes much of the flow to this channel and re-directs it to a large subsurface gravel wetland. The developed site is designed with closed drainage that is directed to the gravel wetland for treatment and attenuation. Due to the design the channel that directly affects the abutting land owners sees a reduction in flow and volume, and due to the gravel wetland, the final analysis point is also reduced in flow and volume. These reductions are seen at all modeled storm events up to the 100 year/ 24hr storm. The proposed gravel wetland and other smaller detention facilities are to be owned and operated by the owner until such time as units are sold.

An HOA will be submitted for review and approval so that at such time as the units are sold the HOA is in place to take control of the drainage systems outside of the road



BERRY SURVEYING & ENGINEERING

335 Second Crown Pt. Rd., Barrington, NH 03825 (603) 332-2863 / (603) 335-4623 FAX www.BerrySurveying.Com right of way. It is understood that the City of Rochester is not accepting drainage ponds due to increased maintenance concerns. Due to the proximity to the abutting boundary, and the obvious use by the abutting land owners, the gravel wetland berm is proposed to be shielded by 6' White Spruce trees. The outlet to the pond is designed with a large level spreader set above seasonal high-water table to promote infiltration into the better soil along the rear of the site.

The project proposes a wetland crossing as well as multiple conditional use buffer impacts. These are noted on the site plans and will be further detailed in a Conditional Use Application and a Standard Wetlands Minor Impact application to NHDES Wetlands bureau. BS&E has filed with the Natural Heritage Bureau (NHB22-2667) with no species of concern noted. No additional Fish and Game (F&G) interaction is required for either the wetlands permit or the required Alteration of Terrain Permit. The wetlands crossing, given its width as well as its function and value has been designed with two culverts. One is proposed to be a 24" reinforced concrete culvert (RCP) with a bury depth of 0.5 feet and the other is a 36" reinforced concrete culvert (RCP) with a bury depth of 0.5 feet. The culverts are spread out in the crossing area to reduce channelization. The bury depths are provided to simulate natural bottom wetland systems and the RCP pipes are typically required by (F&G). Headwalls are used to limit the disturbance in the wetland areas, and are used to improve inlet efficiency in other areas of the project site. Slopes within the wetland crossing are proposed as 1.5:1 and will be matted with a natural fiber matting with natural stakes. In all areas natural products are used for sediment & erosion controls with preference given to mulch berms and silt socks over conventional silt fencing. The remaining areas of conditional use impacts are largely in areas of man-made channels and ditches and do not directly impact natural wetland systems.

At the 25' buffer stones / boulders are proposed in sensitive areas adjacent to residential uses to provide a visual barrier to the protected resources. Additionally, the City of Rochester Wetland Buffer signs are proposed along the same 25' buffer to ensure people are aware of requirements.

As was recommended during the Design Review process, the site design now contemplates refuse and recyclable toter locations for certain driveways given the operational constraints. The construction details provide for raised planters, however placement onsite for their passive use needs to be considered.



The project has been submitted to the Division of Historical Recourses (DHR) on August 9th, 2022 with their review still pending.

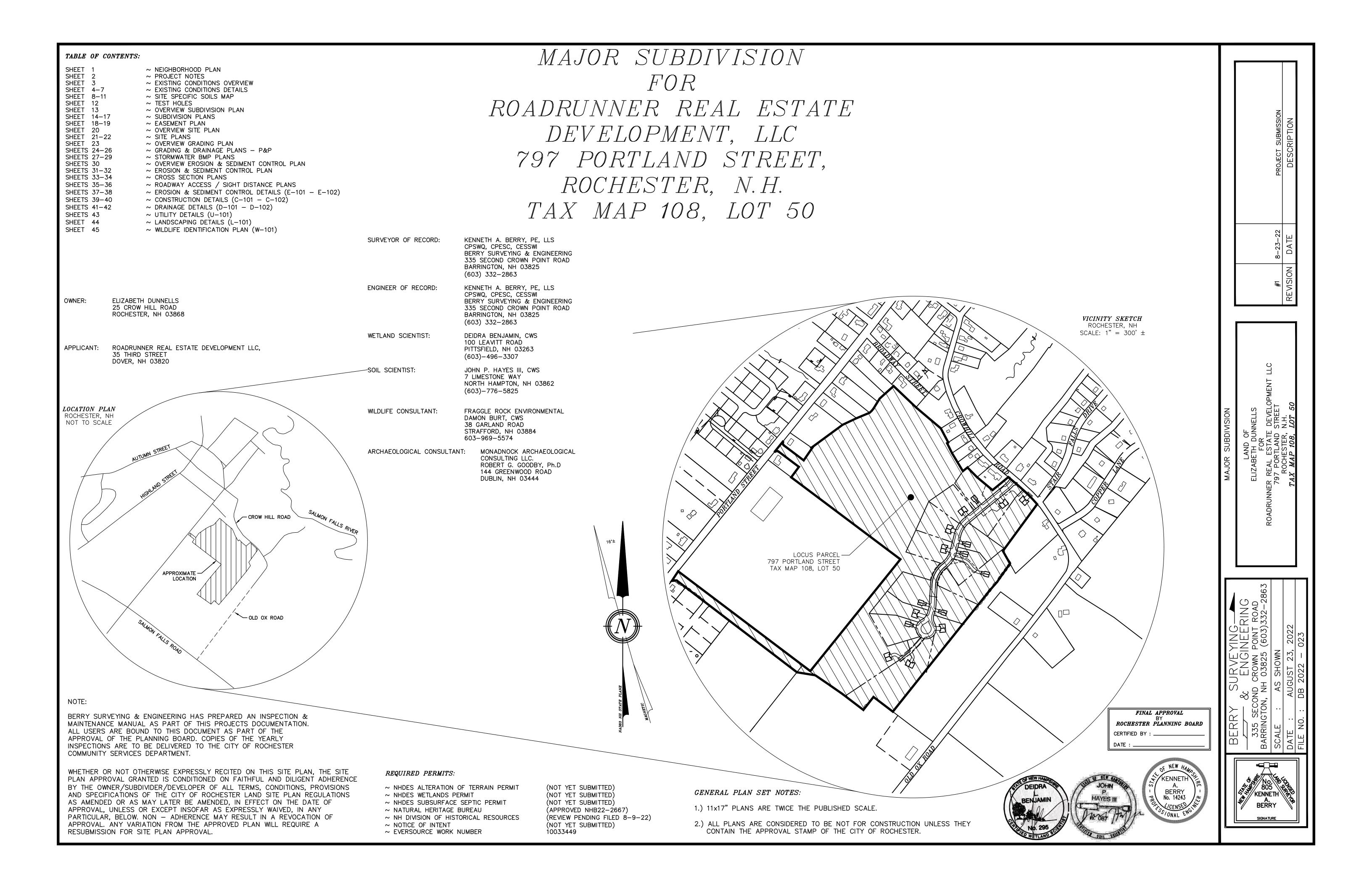
Coordination efforts have been started with Eversource as well as the City of Rochester water department for availability and letters to serve.

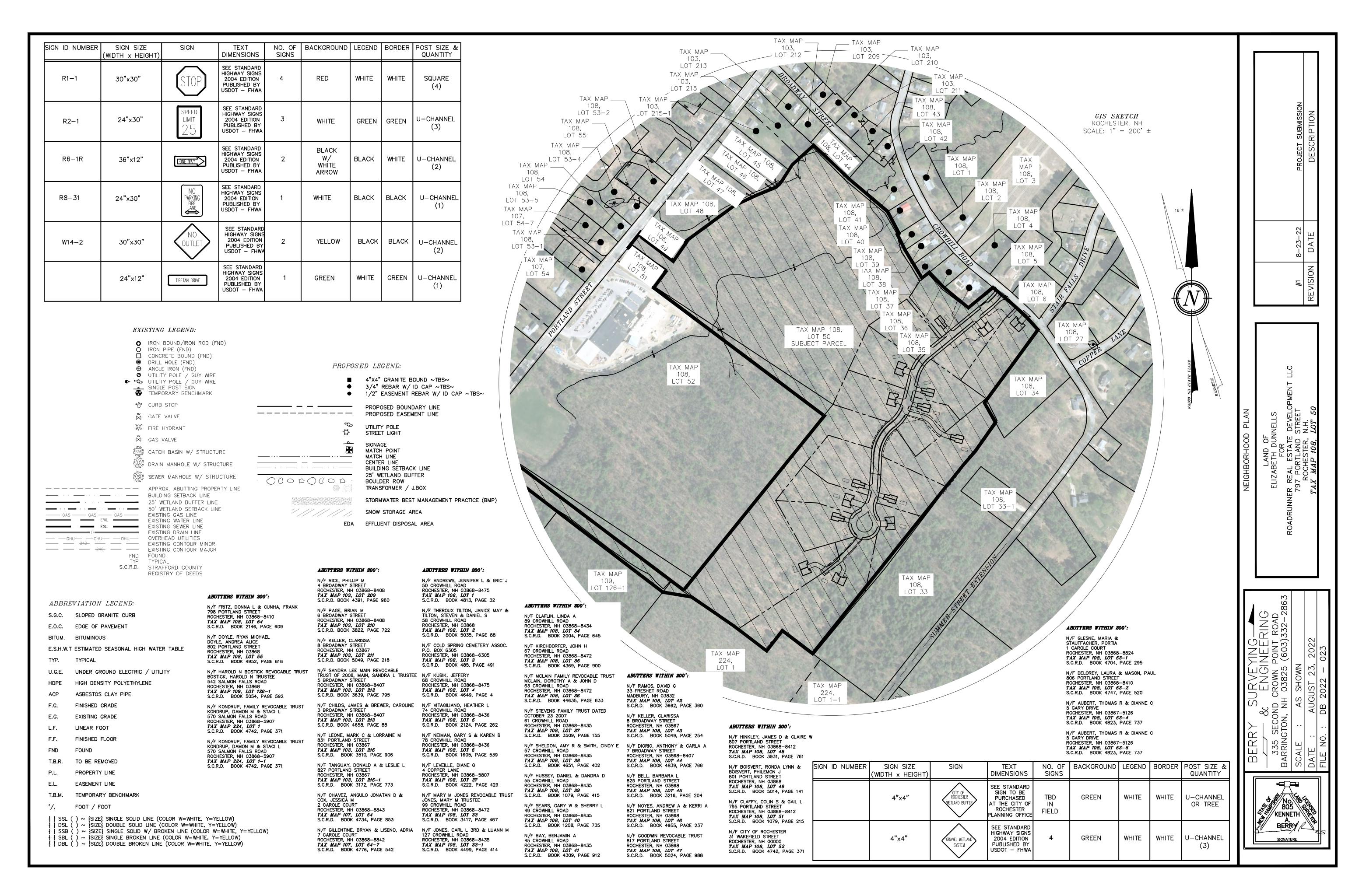
Thank you for your time and attention to this matter.

BERRY/SURVEYING & ENGINEERING

Christopher R. Berry Principal, President







STANDARD SITE PLAN NOTES:

1.) OWNER: ELIZABETH DUNNELLS 25 CROW HILL ROAD ROCHESTER, NH 03868

1A.) APPLICANT: ROADRUNNER REAL ESTATE DEVELOPMENT LLC 35 THIRD STREET

DOVER, NH 03820

2.) TAX MAP 108, LOT 50

RATES OF APPLICATION.

3.) LOT AREA: 2,199,988 Sq.Ft., 50.50 Ac.

- 4.) S.C.R.D BOOK 589, PAGE 402, STRAFFORD COUNTY PROBATE RECORD 96-0043
- 5.) AS BUILT PLANS OF SITE SHALL BE SUBMITTED ON PAPER AND IN A DIGITAL THE CITY OF ROCHESTER DEPARTMENT OF PUBLIC WORKS UPON COMPLETION OF PROJECT. AS-BUILT PLANS SHALL BE PREPARED AND CERTIFIED CORRECT BY A L.L.S. OR P.E. DIGITAL FILES SHALL BE GEO-REFERENCED TO NEW HAMPSHIRE STATE PLANE COORDINATES NAD83 AND SHALL BE EXPRESSED IN FEET.
- 6.) ALL ON-SITE UTILITIES SHALL BE INSTALLED UNDERGROUND, EXCEPT ONE REQUIRE DROP POLE.
- 7.) THE SUBJECT PARCEL IS SERVICED BY MUNICIPAL WATER AND ON SITE SEPTIC. 8.) ALL EROSION CONTROL NOTES SHALL INCLUDE PROVISIONS FOR CONSTRUCTION SEQUENCING, TEMPORARY EROSION CONTROL MEASURES, AND PERMANENT STANDARDSSUCH AS LOAM SPREAD RATE FOR DISTURBED AREAS, RATES OF TYPE AND RATES FOR FERTILIZER, AND SEED AND MULCH MIXTURE WITH
- 9.) THE LIMITS OF CONSTRUCTION ALONG THE 50' WETLAND BUFFER SHALL BE STAKED, FLAGGED AND CLEARLY IDENTIFIED PRIOR TO THE COMMENCEMENT OF
- 10.) ALL TREATMENT SWALES TO BE CONSTRUCTED SHALL HAVE SOD BOTTOMS.
- 11.) A LETTER OF CREDIT FOR THE COST OF RE-VEGETATING ALL TO BE DISTURBED AREAS ON THE SITE SHALL BE SUBMITTED PRIOR TO ANY EARTH DISTURBING ACTIVITY OCCURS. COORDINATE WITH THE CITY OF ROCHESTER DEPARTMENT OF PLANNING & DEPARTMENT OF PUBLIC WORKS.
- 12.) A PRE-CONSTRUCTION CONFERENCE WITH THE DEVELOPER, THE DESIGN ENGINEER, THE EARTHWORK CONTRACTOR, AND THE TECHNICAL STAFF WORKS SHALL OCCUR PRIOR TO ANY EARTH DISTURBING ACTIVITY.
- 13.) BUILDING ADDRESSES SHALL BE ASSIGNED BY THE ASSESSING DEPARTMENT AT THE TIME OF ISSUANCE OF A BUILDING PERMIT.
- 14.)SEE PHASING PLAN FOR PROPOSED PHASES AND DISTURBANCES. THE ROADWAY INFRASTRUCTURE AND DRAINAGE FEATURES ARE TO BE BUILT AND STABALIZED BEFORE LOT DEVELOPMENT MAY COMMENCE.
- 15.) ALL CONSTRUCTION SHALL CONFORM TO THE STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION DATED 2016. CONSTRUCTION SHALL ALSO CONFORM TO THE CITY OF ROCHESTER POLICIES AND PRACTICES.
- 16.) CALL DIG SAFE PRIOR TO BEGINNING WORK (1-888-344-7233).
- 17.) CONTRACTOR TO CONTACT ROCHESTER DPW A MINIMUM OF TWO WEEKS PRIOR TO ANY CONSTRUCTION TO COORDINATE ALL WORK CONCERNING INSTALLATION OF ANY PROPOSED WATER LINE IMPROVEMENTS AS MAY BE REQUIRED.
- 18.) CONTRACTOR SHALL COORDINATE ALL ELECTRICAL INSTALLATIONS WITH EVERSOURCE AT (603) 436-7708. ALL ELECTRIC CONDUIT INSTALLATION SHALL BE INSPECTED BY EVÉRSOURCE PRIOR TO BACKFILL. A 48-HOUR MINIMUM
- 19.)CONTRACTOR SHALL COORDINATE ALL TELECOMMUNICATIONS INSTALLATIONS WITH CONSOLIDATED COMMUNICATIONS AT (888) 941-1064 OR ATLANTIC BROADBAND
- 20.) ALL UNPAVED DISTURBED AREAS ARE TO RECEIVE 4" QUALITY LOAM AND SEED.
- 21.) THE CONSTRUCTION HOURS SHALL BE LIMITED TO MONDAY-FRIDAY 7AM-6PM, SATURDAY 8AM-6PM WITH NO SUNDAY HOURS. HOURS OF CONSTRUCTION SHALL BE DOCUMENTED ON A SITE CONSTRUCTION SIGN ALONG WITH THE CONTACT INFORMATION FOR THE GENERAL CONTRACTOR.
- 22.)FROM GROUND BREAKING THE SITE SHALL REMAIN ACCESSIBLE YEAR ROUND IN ALL WEATHER CONDITIONS.
- 23.)THIS SITE DESIGN HAS BEEN REVIEWED FOR COMPLIANCE WITH THE APPLICABLE ACCESSIBILITY REGULATIONS IN ACCORDANCE WITH NH RSA 11-A:5.
- 24.) WRITTEN DIMENSION ON THIS PLAN TAKE PRECEDENCE OVER SCALED DIMENSIONS. THE CONTRACTOR SHALL USE CAUTION WHEN SCALING REPRODUCED PLANS. IN THE EVENT OF A CONFLICT BETWEEN THIS PLAN SET AND ANY OTHER DRAWINGS AND/OR SPECIFICATIONS, THE ENGINEER SHALL BE NOTIFIED BY THE ELEVATIONS. CONFLICTS WILL BE REPORTED TO THE DESIGN ENGINEER PRIOR TO
- 25.)FOR MORE INFORMATION ABOUT THIS SITE PLAN PLEASE CONTACT THE CITY OF ROCHESTER PLANNING OFFICE AT 603-335-1338.
- 26.)DATUM: PROJECT DATUM IS BASED ON GPS COORDINATES ESTABLISHED WITH A TOPCON HIPER SR RECEIVER AND REPRESENTED IN NEW HAMPSHIRE STATE PLANE COORDINATES NAD 1983 AND VERTICALLY BY NAVD 1988.
- 27.)BACKFLOW PREVENTORS SHALL BE PROVIDED FOR DOMESTIC WATER LINES.
- 28.)THE LIMITS OF CONSTRUCTION DISTURBANCE AND TREE CLEARING LIMITS ARE TO BE MARKED OUT AND APPROVED BY THE CITY PRIOR TO WORK.
- 29.) THE FOLLOWING FEDERAL AND STATE PERMITS HAVE BEEN ISSUED FOR THE SUBJECT PROPERTY: NHDES STATE SUBDIVISION: PENDING NHDES ALTERATION OF TERRAIN PERMIT: PENDING US EPA NOI & SWPPP: PENDING NATURAL HERITAGE BUREAU:

NH DIVISION OF HISTORICAL RESOURCES: 30.) ALL LAMPS ARE TO BE SIGMA SERIES.

- 31.)STREET TREES ARE PROVIDED FOR WITHIN THIS PLAN SET. THREE SPECIES ARE SUGGESTED. IT SHOULD BE NOTED THAT A MIX OF THESE SPECIES IS REQUIRED. AN ALTERNATING PATTERN IS PREFERRED.
- 32.) ALL PROPOSED STREET TREES ARE TO BE AT LEAST 15' FROM ALL UTILITIES AND STORM DRAINS.
- 33.) BOULDERS TO BE INSTALLED AS SHOWN ON PLANS.

STANDARD UTILITY NOTES:

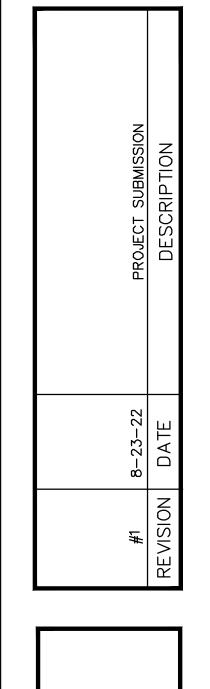
- UNDERGROUND UTILITY LOCATIONS ARE BASED UPON BEST AVAILABLE EVIDENCE AND ARE NOT FIELD VERIFIED. LOCATING AND PROTECTING ANY ABOVE AND BELOW GROUND UTILITIES IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. ANY UTILITY CONFLICTS SHOULD BE REPORTED IMMEDIATELY TO THE DESIGN
- THE CONTRACTOR SHALL CALL AND COORDINATE WITH DIGSAFE 1-888-344-7233 AT LEAST 72 HOURS PRIOR TO COMMENCING ANY EXCAVATION ON PUBLIC OR
- PROTECTION OF SUBGRADE: THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN STABLE, DEWATERED SUBGRADES, TRENCHES, AND OTHER AREAS DURING CONSTRUCTION. SUBGRADE DISTURBANCE MAY BE INFLUENCED BY EXCAVATION METHODS, MOISTURE, PRECIPITATION, GROUNDWATER CONTROL, AND CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL TAKE PRECAUTIONS TO PREVENT SUBGRADE DISTURBANCE. SUCH PRECAUTIONS MAY INCLUDE DIVERTING STORMWATER RUNOFF AWAY FROM CONSTRUCTION AREAS, REDUCING TRAFFIC IN SENSITIVE AREAS, AND MAINTAINING AN EFFECTIVE DEWATERING PROGRAM. SOILS EXHIBITING HEAVING OR INSTABILITY SHALL BE OVER EXCAVATED TO MORE COMPETENT BEARING SOIL AND REPLACED WITH FREE DRAINING STRUCTURAL FILL MEETING THE ENGINEERS SPECIFIC RECOMMENDED CRITERIA.
- IF THE EARTHWORK IS PERFORMED DURING FREEZING WEATHER (NOT ALLOWED IN CITY R.O.W.), EXPOSED SUBGRADES ARE SUSCEPTIBLE TO FROST. NO FILL OR JTILITIES SHALL BE PLACED ON FROZEN GROUND. THIS WILL LIKELY REQUIRE REMOVAL OF A FROZEN SOIL CRUST AT THE COMMENCEMENT OF EACH DAY'S OPERATION. THE FINAL SUBGRADE ELEVATION WOULD ALSO REQUIRE AN APPROPRIATE DEGREE OF INSULATION AGAINST FREEZING.

STANDARD CONSTRUCTION NOTES:

- 1.) SEE EROSION & SEDIMENT CONTROL PLANS FOR DETAILS ON PERIMETER CONTROL (MULCH BERM / FENCE / SILT SOXX).
- 2.) ONE ON SITE BENCHMARK IS PROVIDED. BS&E IS TO PROVIDE ADDITIONAL BENCHMARKS PRIOR TO CONSTRUCTION.
- 3.) EXISTING AND PROPOSED CONTOURS ARE PROVIDED AT 1' INTERVALS WITH DRAINAGE FEATURES AT MORE PRECISE
- 4.) SEE UTILITY PLANS FOR DETAILS ON THE PROPOSED WATER, AND UNDERGROUND ELECTRIC
- 5.) EXISTING CONDITIONS INFORMATION IS BASED ON A SURVEY PERFORMED BY BERRY SURVEYING & ENGINEERING AND IS ENCLOSED IN THIS PACKAGE.
- 6.) THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH NHDOT STANDARD SPECIFICATIONS DATED 2016. CURRENT STANDARD PLANS, SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS INCLUDED IN THE PROPOSAL.
- 7.) CONTRACTOR SHALL TAKE SPECIAL CARE IN NOT DISTURBING EXISTING MONUMENTS BOUNDS, AND OR BENCHMARKS WITHOUT FIRST MAKING PROVISIONS FOR RELOCATION.
- 8.) THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO LOCATE EXACTLY AND TO PRESERVE ANY AND ALL UNDERGROUND UTILITIES CALL "DIG-SAFE" 1-888-DIGSAFE (344-7233) AT LEAST 72 HOURS BEFORE COMMENCING
- 9.) WHERE AN EXISTING UNDERGROUND UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATION AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED TO THE ENGINEER FOR RESOLUTION OF THE CONFLICT.
- 10.) THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS FOR THE ALTERATION AND ADJUSTMENT OF GAS, ELECTRIC, TELEPHONE AND ANY OTHER PRIVATE UTILITIES BY THE
- 11.) AREAS OUTSIDE THE LIMITS OF PROPOSED WORK DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE. DISTURBANCE OUTSIDE AREAS SHOWN TO BE APPROVED BY DESIGN ENGINEER.
- 12.) THE TERM "PROPOSED" (PROP.) MEANS WORK TO BE CONSTRUCTED USING NEW MATERIALS, OR, WHERE APPLICABLE, RE-USING EXISTING MATERIALS IDENTIFIED AS "REMOVE & RESET" (R & R)
- 13.) ALL SYMBOLS, WORDS, TRANSVERSE MARKINGS (STOP BARS, CROSSWALK LINES, AND RAILROAD SYMBOLS), LANE LINES, AND ALL OTHER MARKINGS NOTED WITH {T} SHALL BE
- 14.) ALL ELEVATIONS TO BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. THE DESIGN ENGINEER IS TO BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCY, TEMPORARY BENCHMARKS (T.B.M.) ARE TO BE PROVIDED BY THE DESIGN ENGINEER.
- 15.) NOTE THAT THE PROJECT IS SUBJECT TO THE EPA NPDES PHASE II. THE NOTICE OF INTENT (NOI) MUST BE FILED ALONG WITH A STORMWATER POLLUTION PREVENTION PLAN (SWPPP). WEEKLY INSPECTIONS WILL BE CONDUCTED BY THE DESIGN ENGINEER OR AFTER A STORM EVENT OF GREAT THAN 0.25".
- 16.) UPON FINAL COMPLETION AND 85% STABILIZATION THE DRAINAGE SYSTEM IS TO BE CLEANED OF ALL DEBRIS TO INCLUDE THE PUMPING OF THE BASIN SUMPS.
- 17.) ALL BASINS ARE TO HAVE BOOTS INSTALLED ON ALL INLETS AND OUTLETS AND STANDARD
- 18.) WRITTEN DIMENSION ON THIS PLAN TAKE PRECEDENCE OVER SCALED DIMENSIONS. THE CONTRACTOR SHALL USE CAUTION WHEN SCALING REPRODUCED PLANS. IN THE EVENT OF A CONFLICT BETWEEN THIS PLAN SET AND ANY OTHER DRAWINGS AND/OR SPECIFICATIONS, THE ENGINEER SHALL BE NOTIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR IS TO CONFIRM ALL ELEVATIONS. CONFLICTS WILL BE REPORTED TO THE DESIGN ENGINEER PRIOR TO CONSTRUCTION.
- 19.) THE CONTRACTOR SHALL CALL AND COORDINATE WITH DIGSAFE AT 1-888-344-7233 AT LEAST 72 HOURS PRIOR TO COMMENCING ANY EXCAVATION ON PUBLIC OR PRIVATE
- 20.) SEE DETAILS CONCERNING SITE LAYOUT, UTILITY, AND SEDIMENT AND EROSION CONTROLS.
- 21.) ALL DRAINAGE PIPE IS TO BE HDPE N-12, EXCEPT FOR WHERE EXISTING PIPE IS PROPOSED TO BE REUSED, INDIVIDUAL PIPE SIZES ARE SPECIFIED.RECYCLED PIPE IS APPROVED FOR PROJECT SITE. RECYCLED HDPE PIPE "GREEN PIPE" IS ACCEPTABLE FOR THIS PROJECT SITE.
- 22.) ALL CATCH BASINS SHALL BE PRE-CAST H-20 LOADING AND SHALL BE EQUIPPED WITH DEEP SUMPS (4' MIN.) AND HOODS (SEE DETAILS) HOODS ARE TO BE "THE ELIMINATOR" BY KLEANSTREAM. RIMS ARE TO BE NHDOT "B" STYLE AND SHALL BE SET FLUSH WITH FINISH GRADE, UNLESS OTHERWISE INSTRUCTED DURING CONSTRUCTION BY ROCHESTER DPW. RIMS ABOVE FINISH GRADE WILL BE NOT BE ACCEPTED. ALL RIMS, GRATES AND COVERS ARE TO BE U.S.A MADE. HOODS ARE TO BE INSTALLED IMMEDIATELY AFTER BASIN CONSTRUCTION. THE FRAMES AND GRATES ARE TO BE SET FIRST AT BINDER ELEVATION TO ENSURE THE OPERATION OF STORMWATER DURING THE BUILD-OUT PHASE AND THEN RIM RAISED PRIOR TO FINAL COAT.
- 23.) SUMP PUMP CONNECTIONS TO THE STREET SEWER SYSTEM IS ILLEGAL.

STANDARD UTILITY NOTES CONTINUED:

- 6. FINAL UTILITY LOCATIONS TO BE COORDINATED BETWEEN THE CONTRACTOR, ALL APPROPRIATE UTILITY COMPANIES AND THE ROCHESTER DPW.
- 7. CONTRACTOR TO CONTACT ROCHESTER DPW A MINIMUM OF TWO WEEKS PRIOR TO ANY CONSTRUCTION TO COORDINATE ALL WORK CONCERNING INSTALLATION OF ANY PROPOSED WATER LINE IMPROVEMENTS.
- 8. ALL WATER MAIN AND SERVICE INSTALLATIONS SHALL CONFORM TO CITY OF ROCHESTER STANDARDS. ALL HIGHWAY CONSTRUCTION WILL MEET THE CITY OF ROCHESTER STANDARDS.
- 9. CONTRACTOR SHALL COORDINATE ALL ELECTRICAL INSTALLATIONS WITH EVERSOURCE AT (800) 662-7764. ALL ELECTRIC CONDUIT INSTALLATION SHALL BE INSPECTED BY EVÉRSOURCE PRIOR TO BACKFILL. A 48-HOUR MINIMUM NOTICE
- 10. ALL SEWER INSTALLATIONS SHALL CONFORM TO THE REQUIREMENTS OF NHDES & ROCHESTER DPW SEWER DIVISION STANDARDS. ALL PVC SEWER PIPE IS TO CONFORM WITH ENV-WQ 704.05 (c)-(e) AND CONFORM WITH ASTM D3034. PVC JOINT SEALS SHALL CONFORM WITH ASTM D3121.
- 11. ALL WATER SERVICES ARE TO BE WITNESSED WITH A 2"X4" PAINTED BLUE. ALL SEWER SERVICES ARE TO BE WITNESSED WITH A 2"X4" PAINTED YELLOW, IS STUBBED PRIOR TO BUILDING CONSTRUCTION.
- 12. CURB BOXES SHOULD BE PLACED IN THE LAWN AREA, OR IF PLACED IN PAVEMENT, A ROAD BOX IS REQUIRED.
- 13. SEE EXISTING CONDTIONS PLAN FOR DATUM. VERTICAL DATUM BASED ON NAVD88 ELEVATIONS. HORIZONTAL DATUM BASED ON NAD83 STATE PLANE COORDINATES GATHERED USING TOPCON HIPER SR SURVEY GRADE GPS.
- 14. MINIMUM SLOPE FOR ALL SEWER SERVICE CONNECTIONS IS TO BE NO LESS THAN
- 15. CONTRACTOR TO TRANSFER TEMPORARY BENCHMARK TO A SUITABLE BENCHMARK TO CONTROL CONSTRUCTION, ANY ELEVATION DISCREPANCIES ARE TO BE REPORTED TO THE THE DESIGN ENGINEER IMMEDIATELY.
- 16. WATER CONNECTION, SEWER CONNECTION, EXCAVATION & DRIVEWAY CURB-CUT PERMITS ARE TO BE APPLIED FOR DURING THE DIANE LANE/PORTLAND STREET LOCATION CONSTRUCTION PHASE.
- 17. PRIOR TO ANY CERTIFICATE OF OCCUPANCY IS APPROVED BY DPW, A SEWER ASSESSMENT FEE OF \$300/BEDROOM MUST BE PAID.

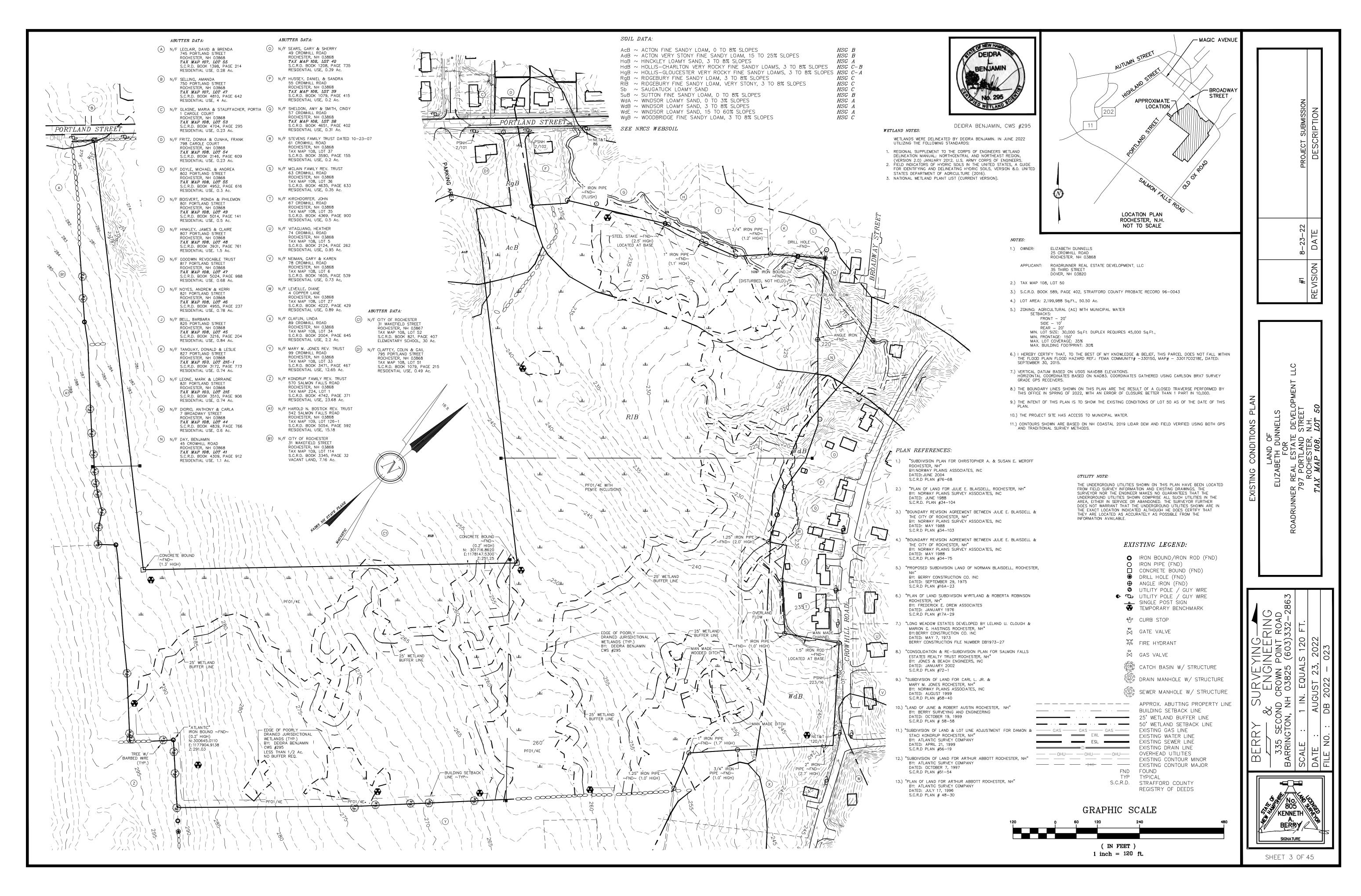


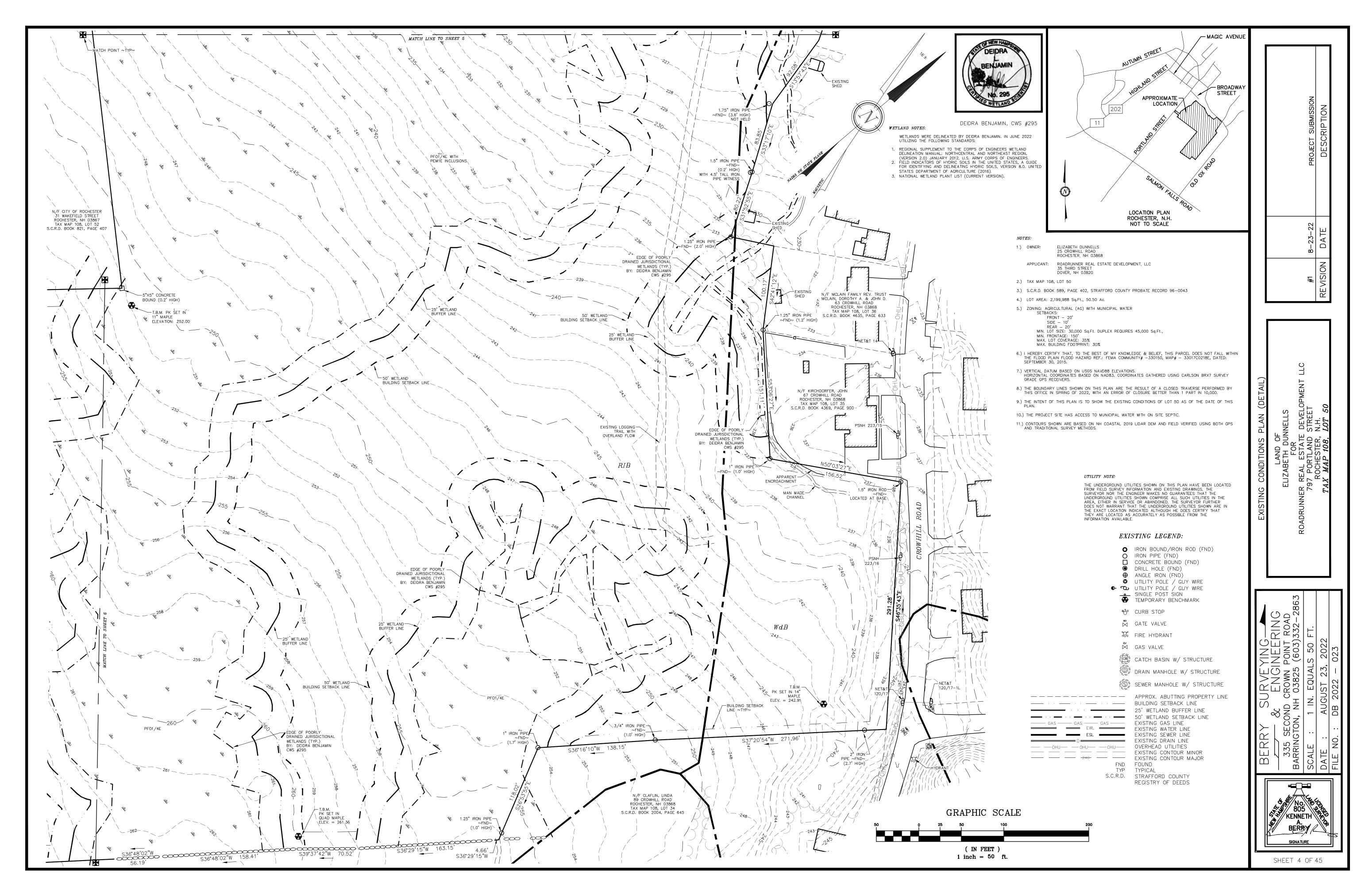
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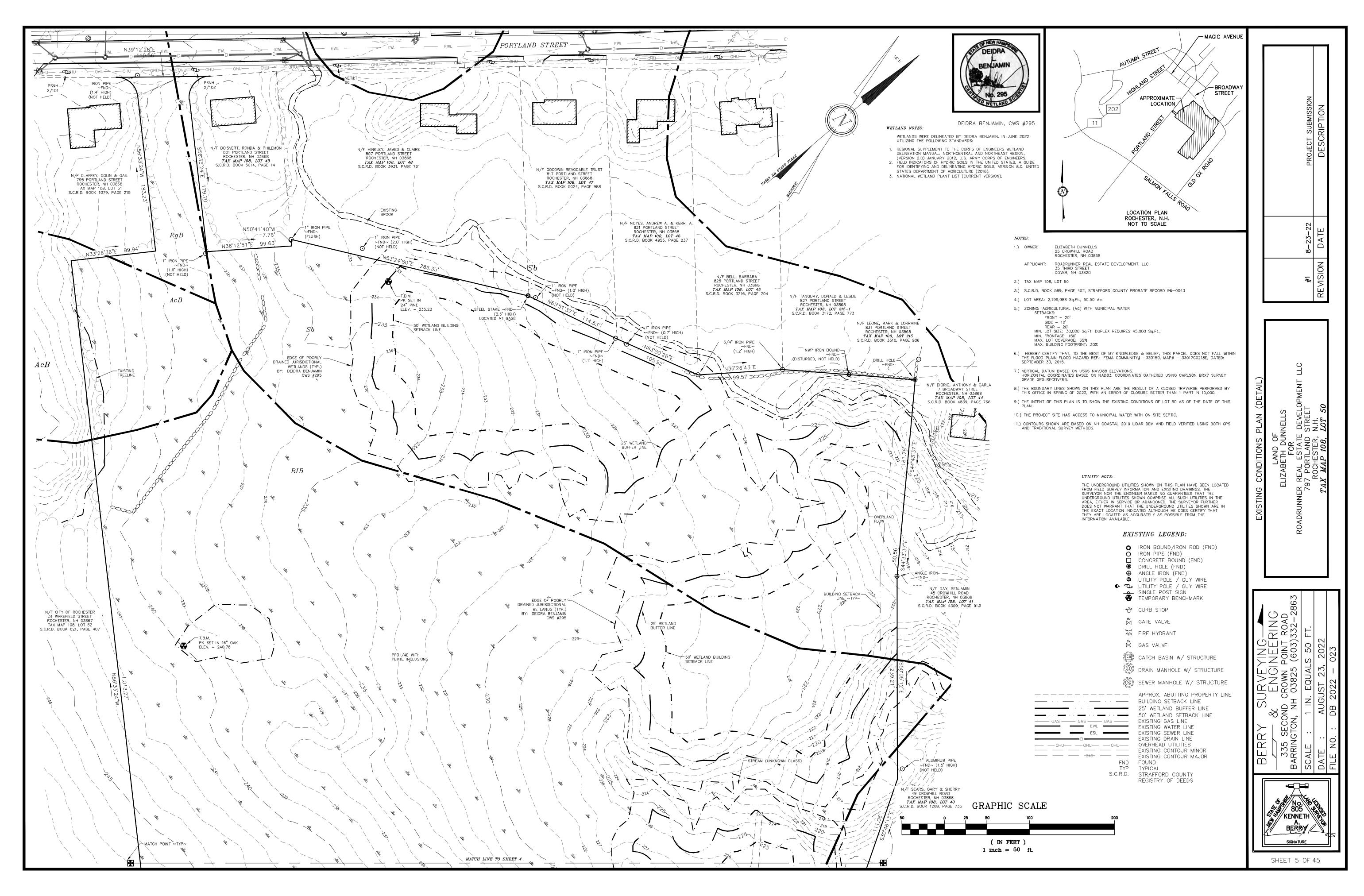
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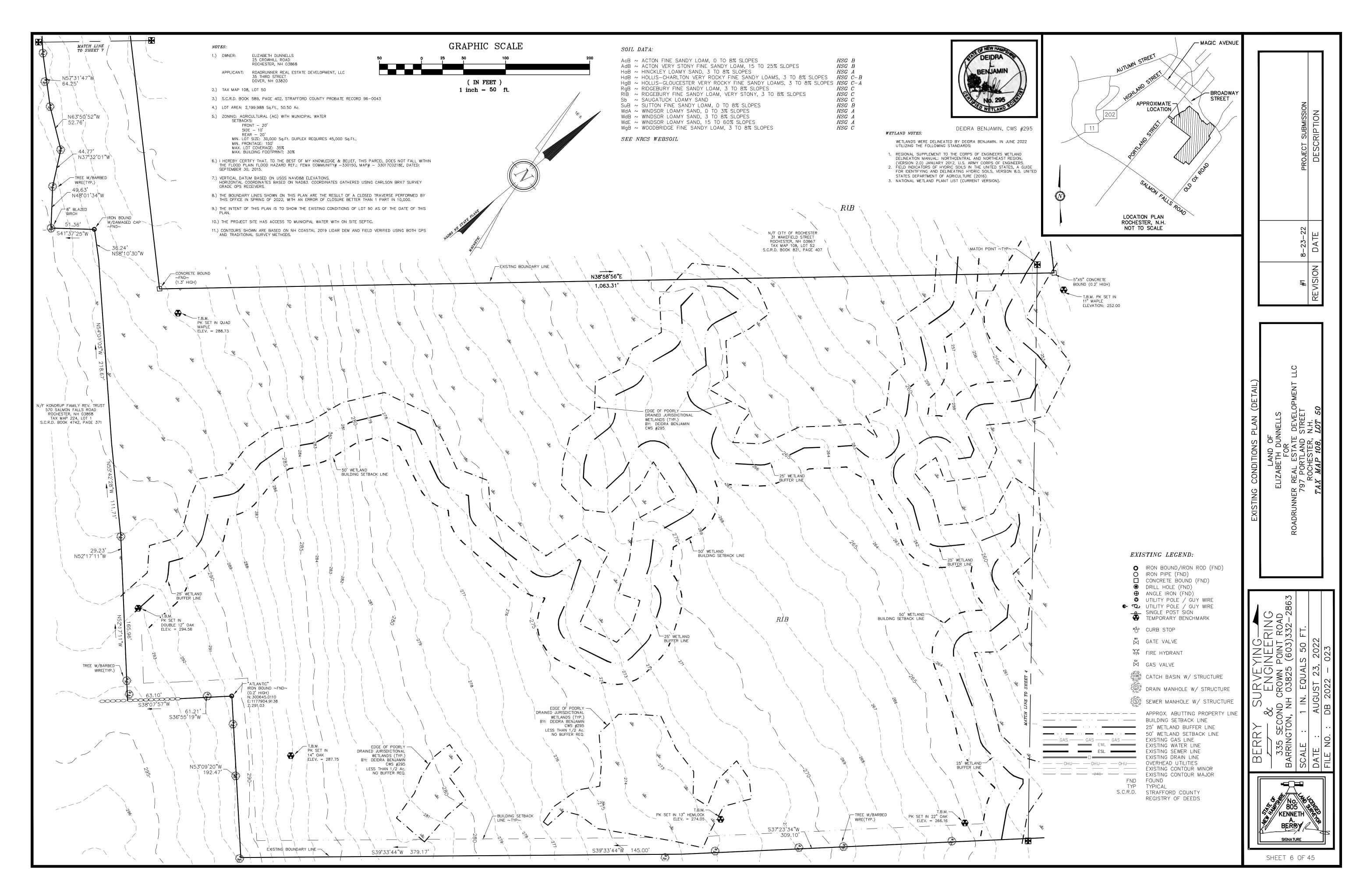
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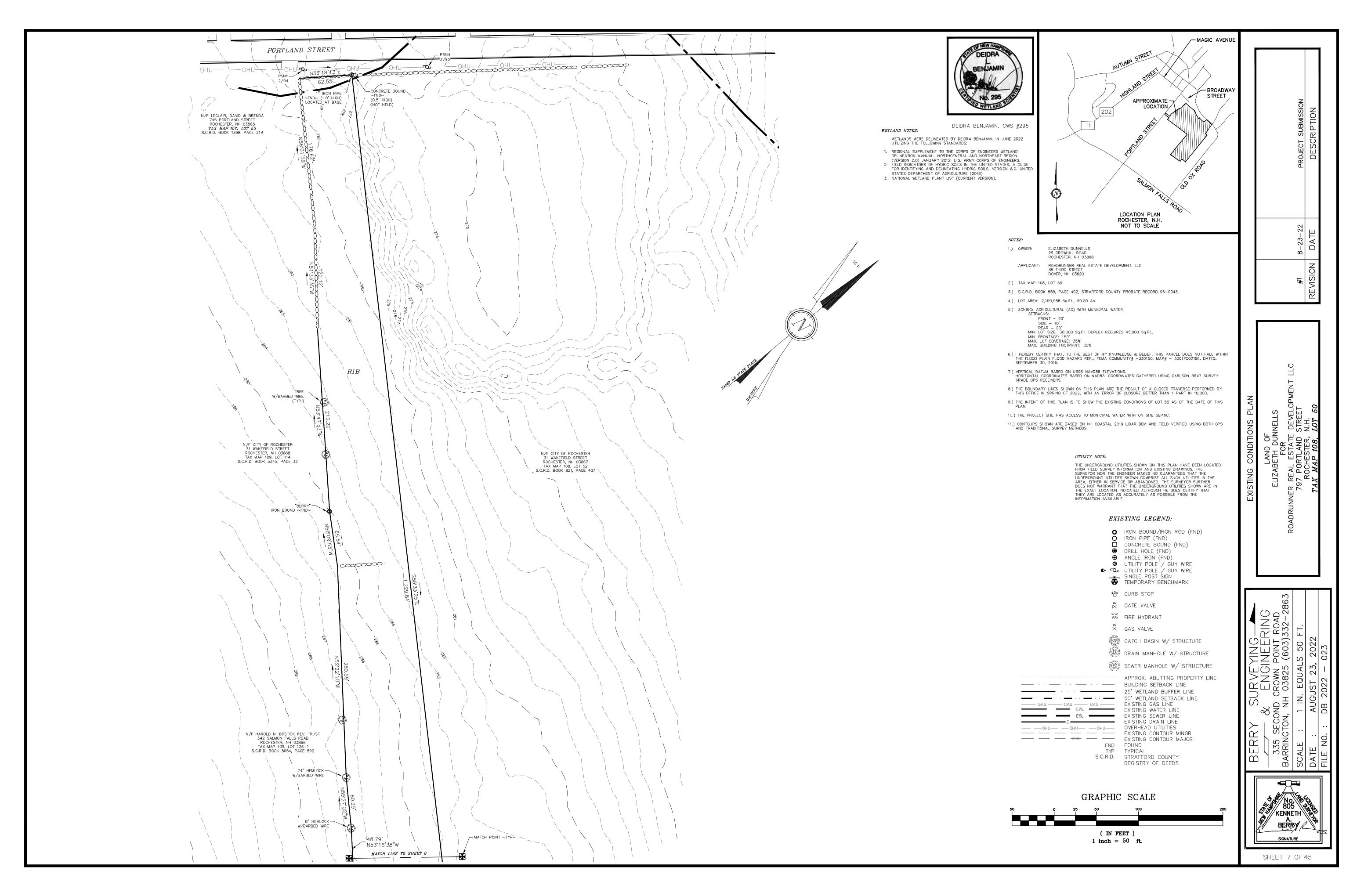
SHEET 2 OF 45

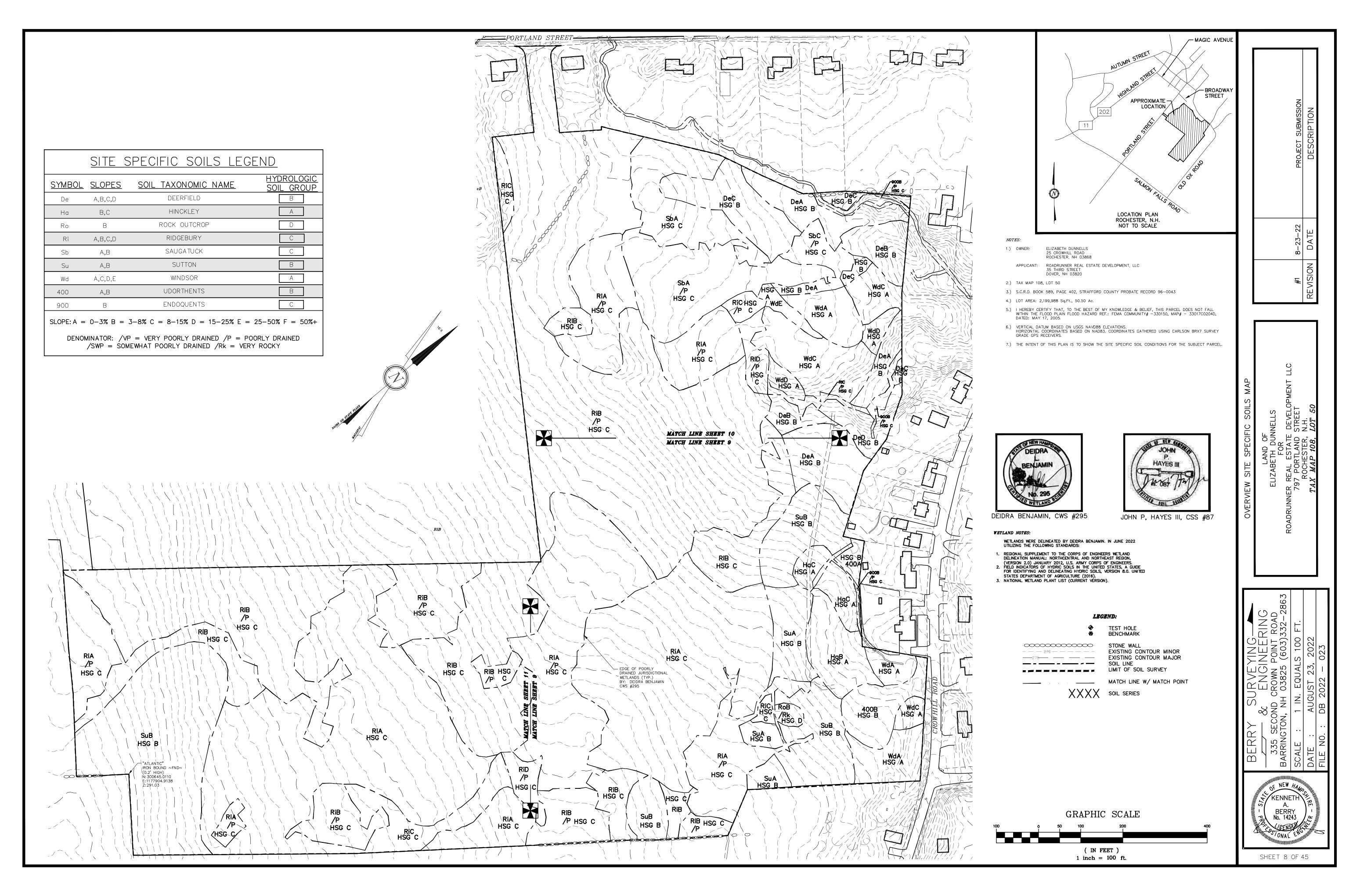


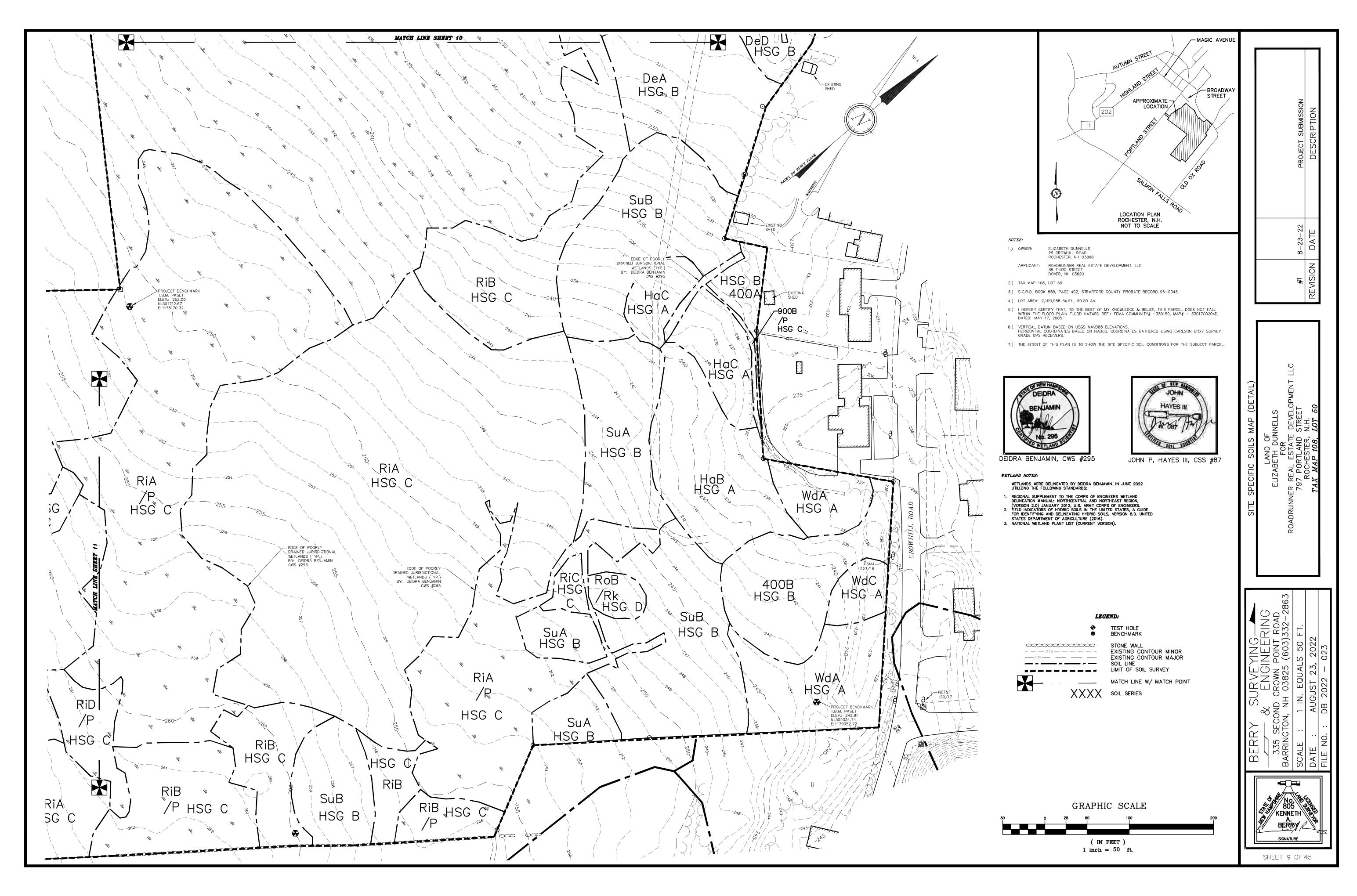


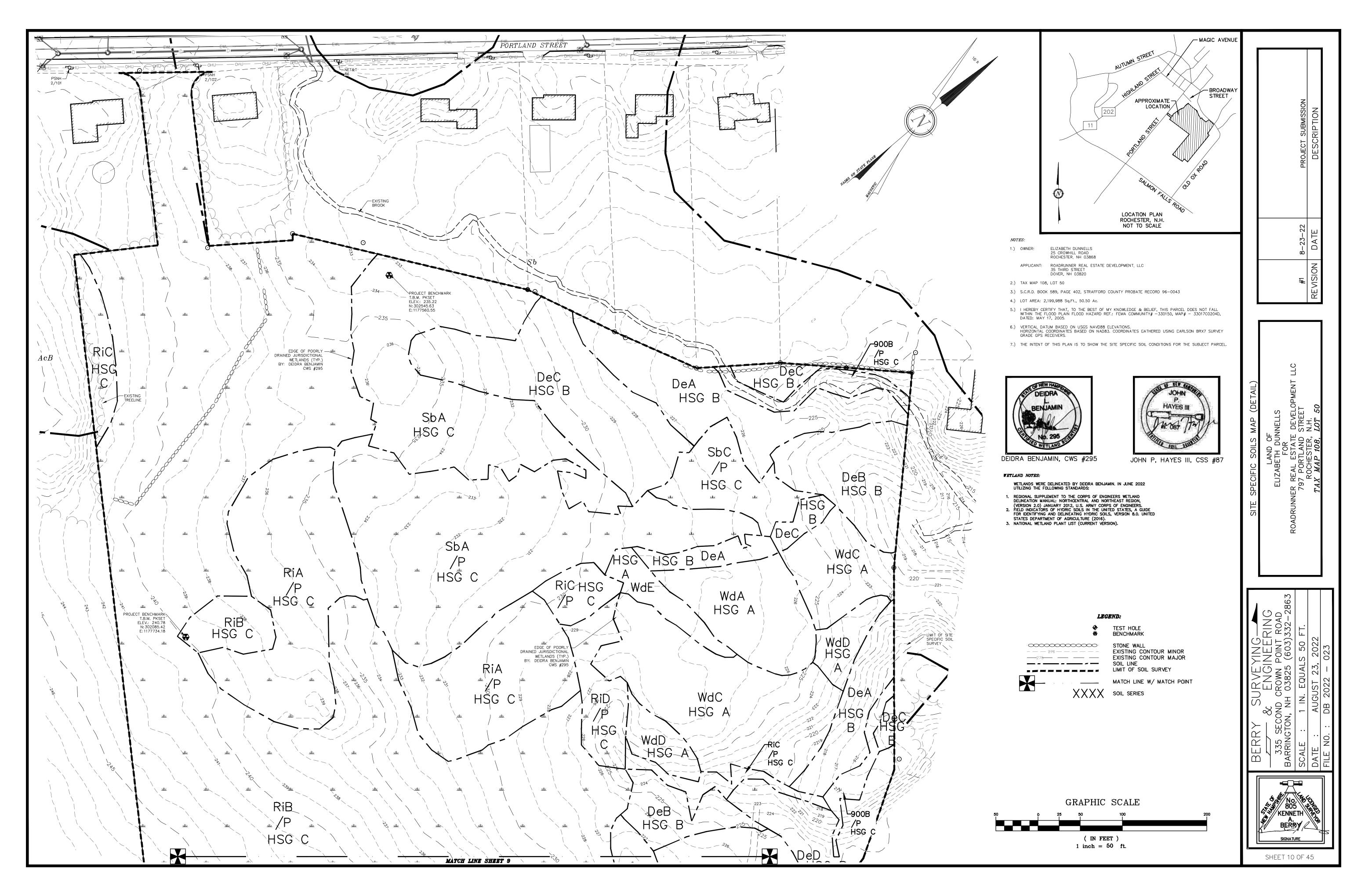


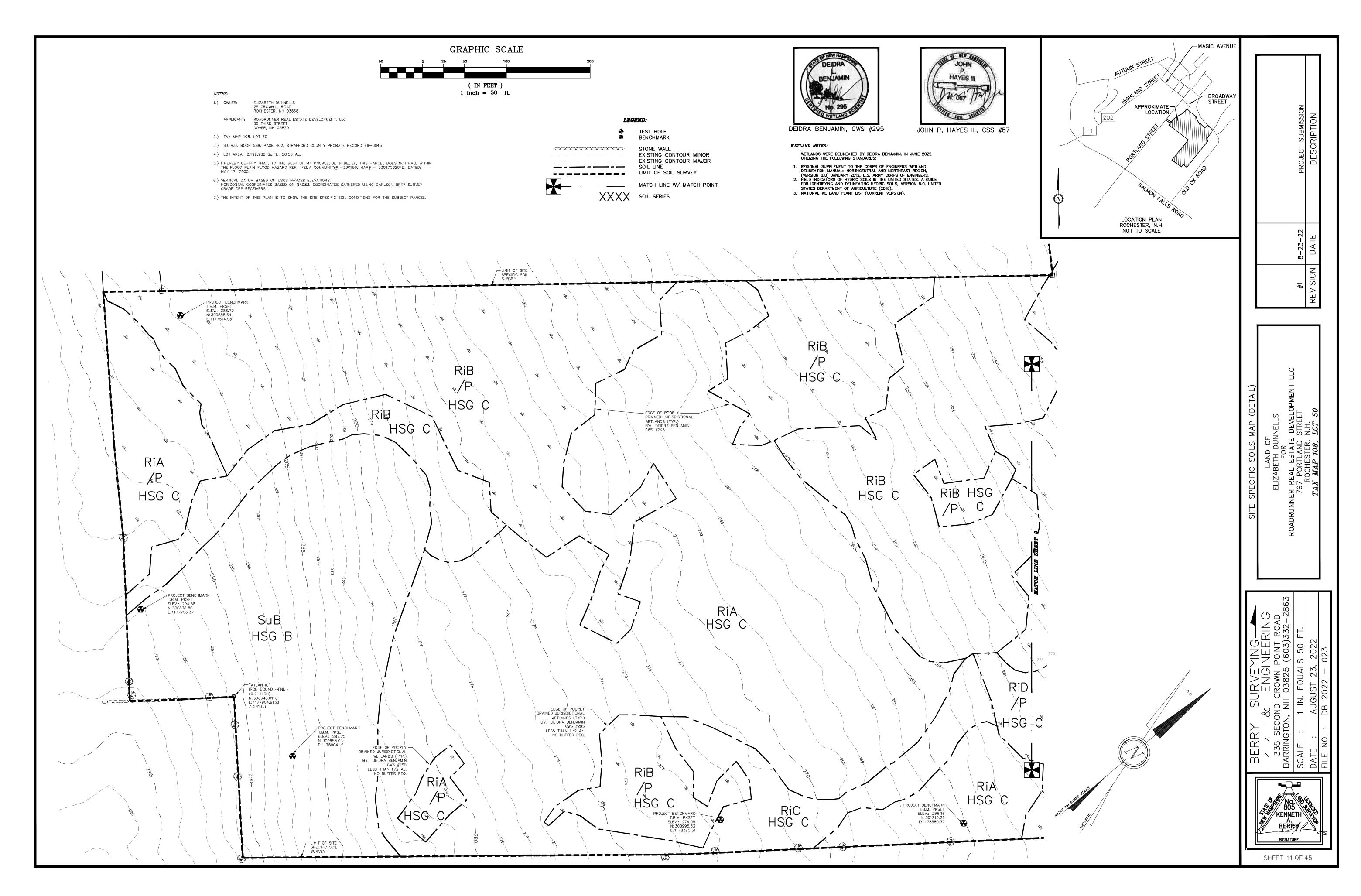


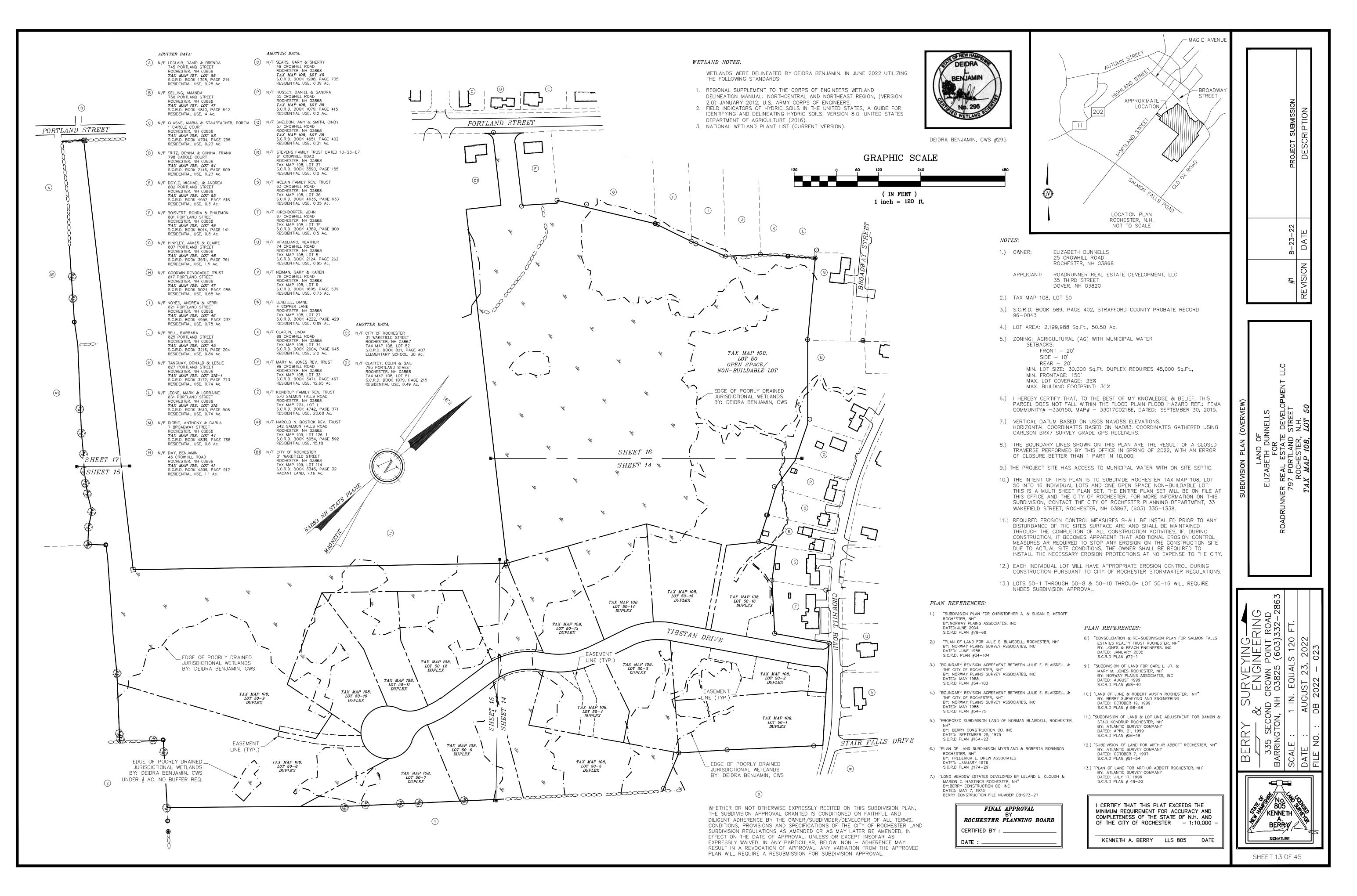


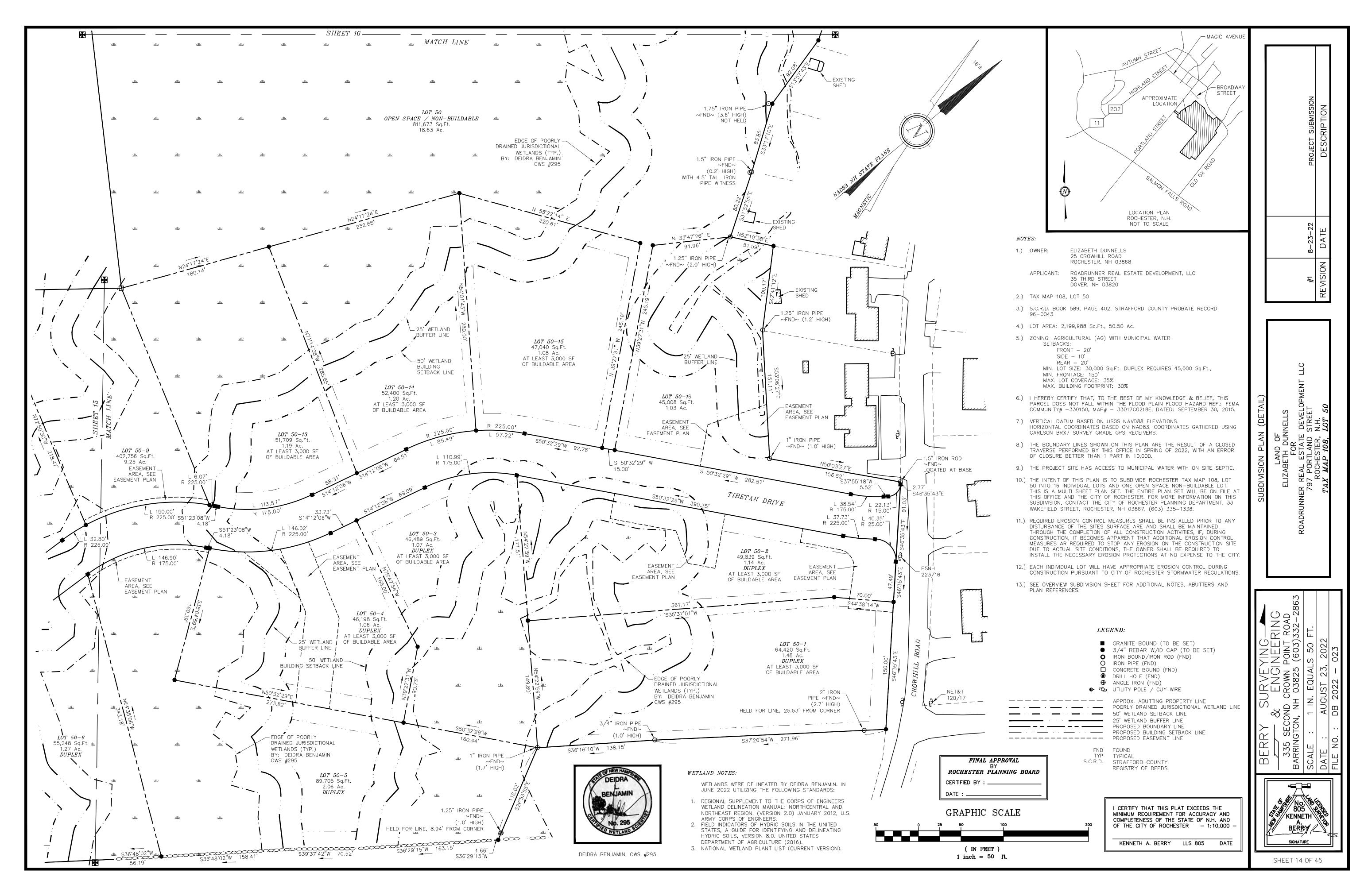


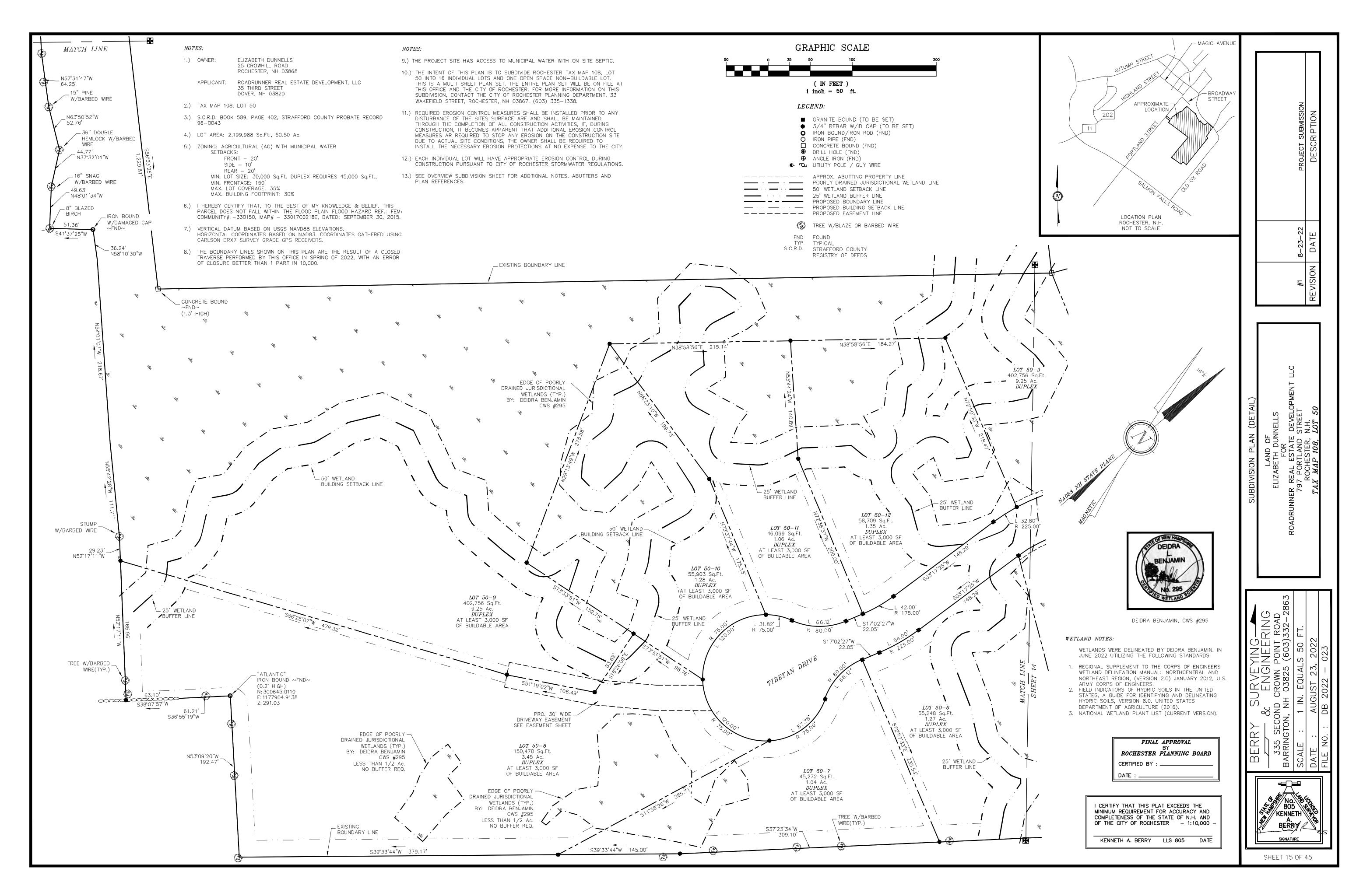


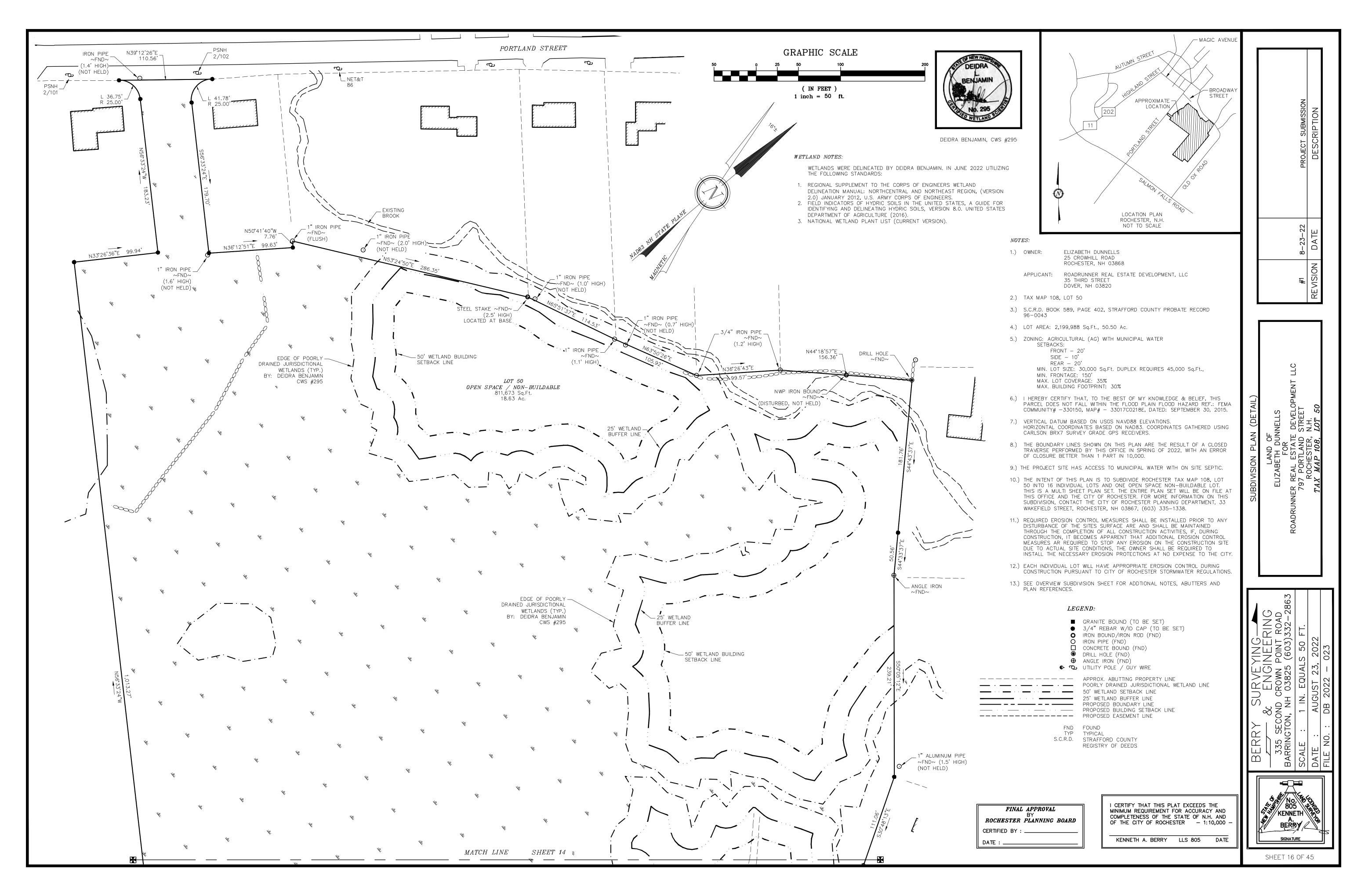


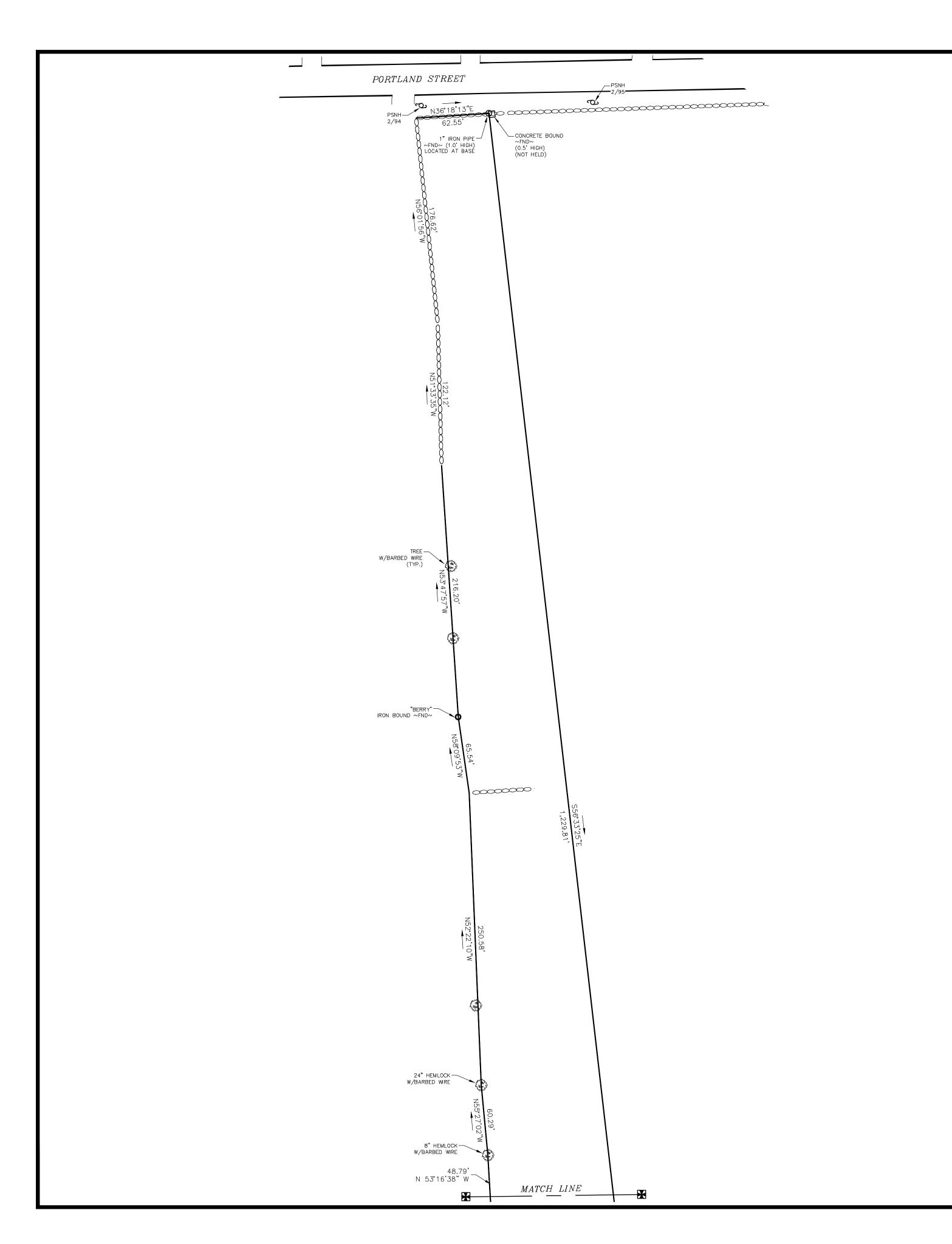








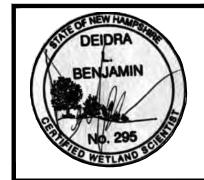




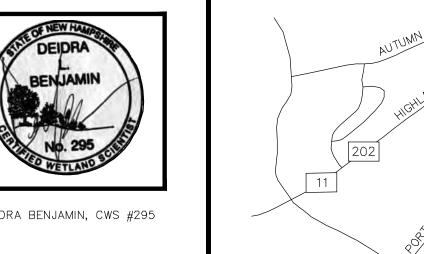
WETLAND NOTES:

- WETLANDS WERE DELINEATED BY DEIDRA BENJAMIN. IN JUNE 2022 UTILIZING THE FOLLOWING STANDARDS:
- 1. REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTHCENTRAL AND NORTHEAST REGION, (VERSION 2.0) JANUARY 2012, U.S. ARMY CORPS OF ENGINEERS.
- 2. FIELD INDICATORS OF HYDRIC SOILS IN THE UNITED STATES, A GUIDE FOR IDENTIFYING AND DELINEATING HYDRIC SOILS, VERSION 8.0. UNITED STATES DEPARTMENT OF AGRICULTURE (2016).

3. NATIONAL WETLAND PLANT LIST (CURRENT VERSION).



DEIDRA BENJAMIN, CWS #295



-BROADWA` STREET APPROXIMATE -LOCATION/ LOCATION PLAN ROCHESTER, N.H. NOT TO SCALE

NOTES:

1.) OWNER: ELIZABETH DUNNELLS 25 CROWHILL ROAD ROCHESTER, NH 03868

APPLICANT: ROADRUNNER REAL ESTATE DEVELOPMENT, LLC 35 THIRD STREET DOVER, NH 03820

- 2.) TAX MAP 108, LOT 50
- 3.) S.C.R.D. BOOK 589, PAGE 402, STRAFFORD COUNTY PROBATE RECORD 96-0043
- 4.) LOT AREA: 2,199,988 Sq.Ft., 50.50 Ac.
- 5.) ZONING: AGRICULTURAL (AG) WITH MUNICIPAL WATER

SETBACKS: FRONT - 20' SIDE - 10' REAR - 20'

MIN. LOT SIZE: 30,000 Sq.Ft. DUPLEX REQUIRES 45,000 Sq.Ft., MIN. FRONTAGE: 150' MAX. LOT COVERAGE: 35% MAX. BUILDING FOOTPRINT: 30%

- 6.) I HEREBY CERTIFY THAT, TO THE BEST OF MY KNOWLEDGE & BELIEF, THIS PARCEL DOES NOT FALL WITHIN THE FLOOD PLAIN FLOOD HAZARD REF .: FEMA COMMUNITY# -330150, MAP# - 33017C0218E, DATED: SEPTEMBER 30, 2015.
- 7.) VERTICAL DATUM BASED ON USGS NAVD88 ELEVATIONS. HORIZONTAL COORDINATES BASED ON NAD83. COORDINATES GATHERED USING CARLSON BRX7 SURVEY GRADE GPS RECEIVERS.
- 8.) THE BOUNDARY LINES SHOWN ON THIS PLAN ARE THE RESULT OF A CLOSED TRAVERSE PERFORMED BY THIS OFFICE IN SPRING OF 2022, WITH AN ERROR OF CLOSURE BETTER THAN 1 PART IN 10,000.
- 9.) THE PROJECT SITE HAS ACCESS TO MUNICIPAL WATER WITH ON SITE SEPTIC.
- 10.) THE INTENT OF THIS PLAN IS TO SUBDIVIDE ROCHESTER TAX MAP 108, LOT 50 INTO 16 INDIVIDUAL LOTS AND ONE OPEN SPACE NON-BUILDABLE LOT. THIS IS A MULTI SHEET PLAN SET. THE ENTIRE PLAN SET WILL BE ON FILE AT THIS OFFICE AND THE CITY OF ROCHESTER. FOR MORE INFORMATION ON THIS SUBDIVISION, CONTACT THE CITY OF ROCHESTER PLANNING DEPARTMENT, 33 WAKEFIELD STREET, ROCHESTER, NH 03867, (603) 335-1338.
- 11.) REQUIRED EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY DISTURBANCE OF THE SITES SURFACE ARE AND SHALL BE MAINTAINED THROUGH THE COMPLETION OF ALL CONSTRUCTION ACTIVITIES, IF, DURING CONSTRUCTION, IT BECOMES APPARENT THAT ADDITIONAL EROSION CONTROL MEASURES AR REQUIRED TO STOP ANY EROSION ON THE CONSTRUCTION SITE DUE TO ACTUAL SITE CONDITIONS, THE OWNER SHALL BE REQUIRED TO INSTALL THE NECESSARY EROSION PROTECTIONS AT NO EXPENSE TO THE CITY.
- 12.) EACH INDIVIDUAL LOT WILL HAVE APPROPRIATE EROSION CONTROL DURING CONSTRUCTION PURSUANT TO CITY OF ROCHESTER STORMWATER REGULATIONS.
- 13.) SEE OVERVIEW SUBDIVISION SHEET FOR ADDTIONAL NOTES, ABUTTERS AND PLAN REFERENCES.

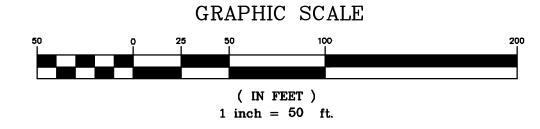
LEGEND:

GRANITE BOUND (TO BE SET) • 3/4" REBAR W/ID CAP (TO BE SET) O IRON BOUND/IRON ROD (FND) O IRON PIPE (FND) ☐ CONCRETE BOUND (FND)

ORILL HOLE (FND) ◆ ANGLE IRON (FND) • UTILITY POLE / GUY WIRE

----- APPROX. ABUTTING PROPERTY LINE POORLY DRAINED JURISDICTIONAL WETLAND LINE — 50' WETLAND SETBACK LINE 25' WETLAND BUFFER LINE ----- PROPOSED EASEMENT LINE

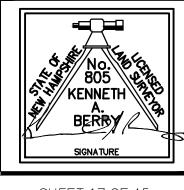
TYP TYPICAL S.C.R.D. STRAFFORD COUNTY REGISTRY OF DEEDS



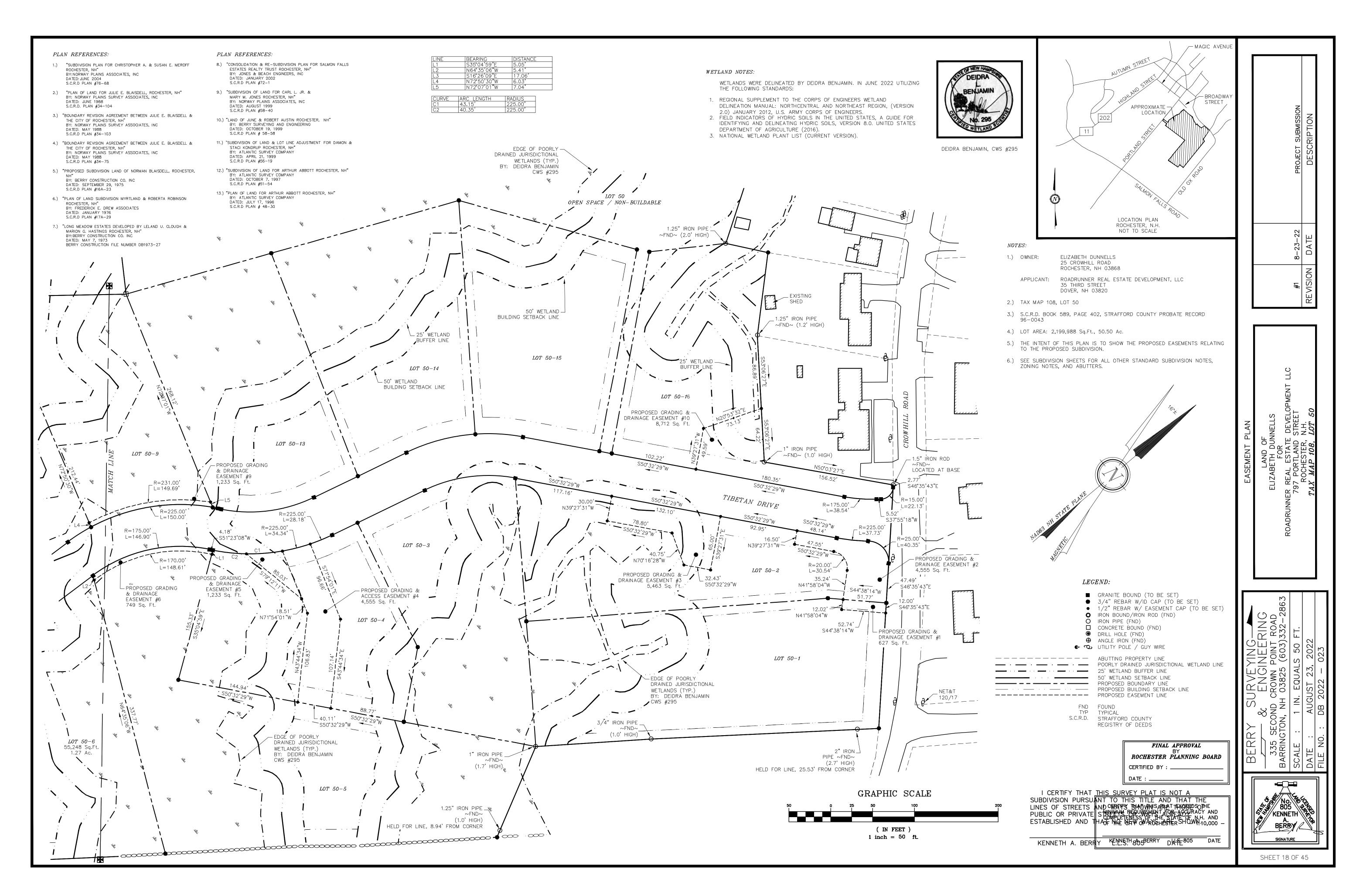
FINAL APPROVAL ROCHESTER PLANNING BOARD CERTIFIED BY :

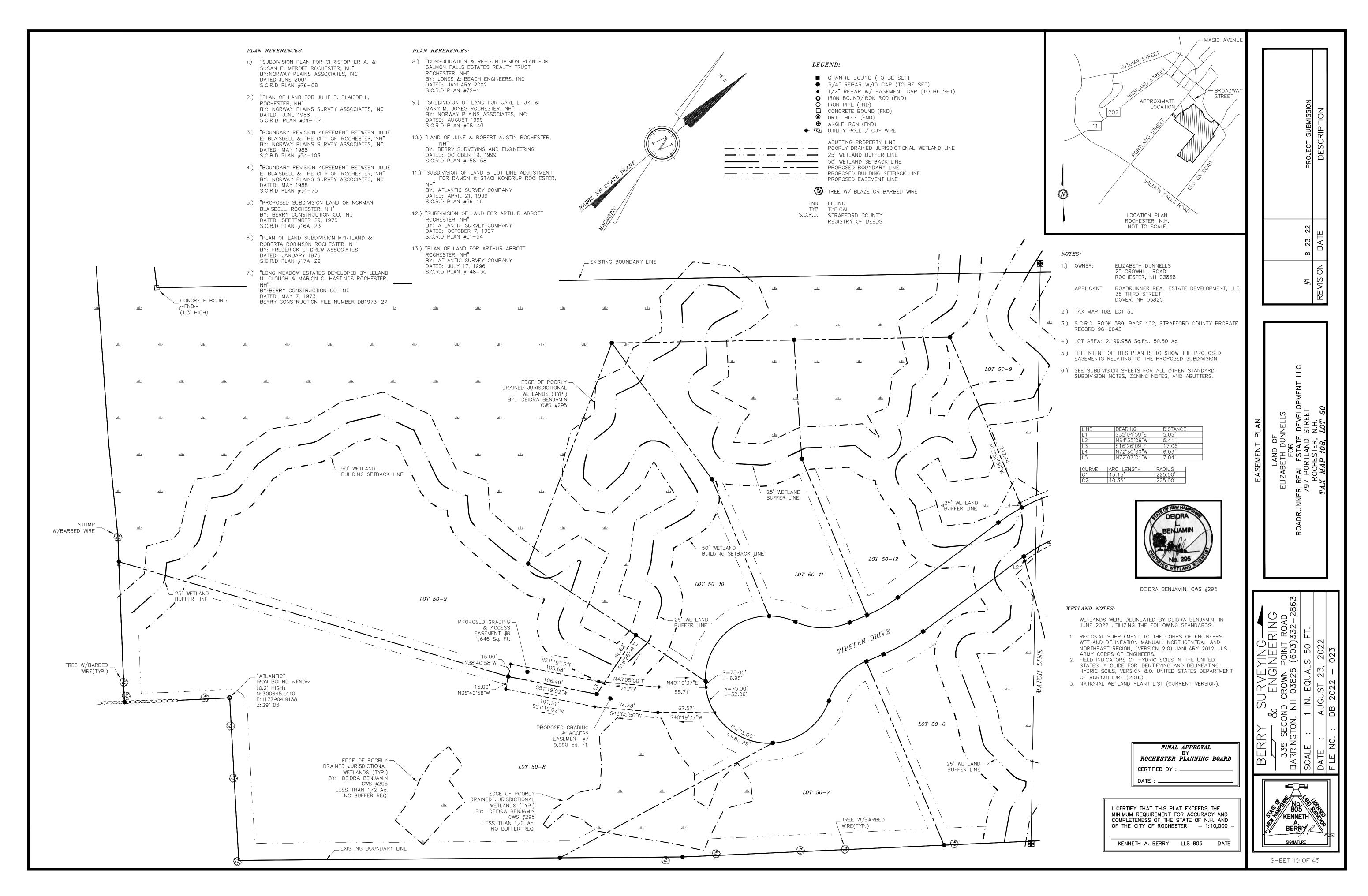
I CERTIFY THAT THIS PLAT EXCEEDS THE MINIMUM REQUIREMENT FOR ACCURACY AND COMPLETENESS OF THE STATE OF N.H. AND OF THE CITY OF ROCHESTER - 1:10,000 -

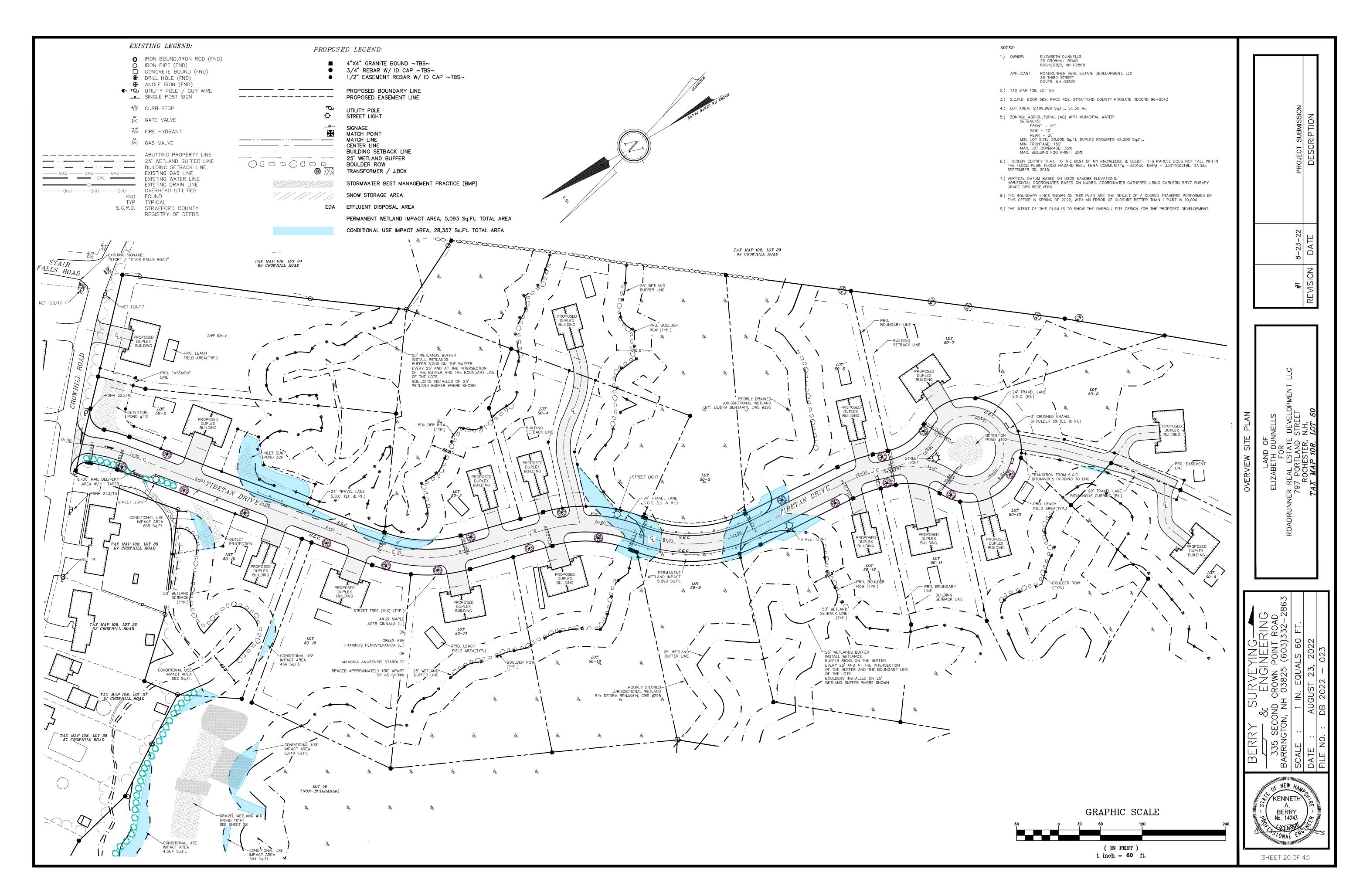
KENNETH A. BERRY LLS 805 DATE

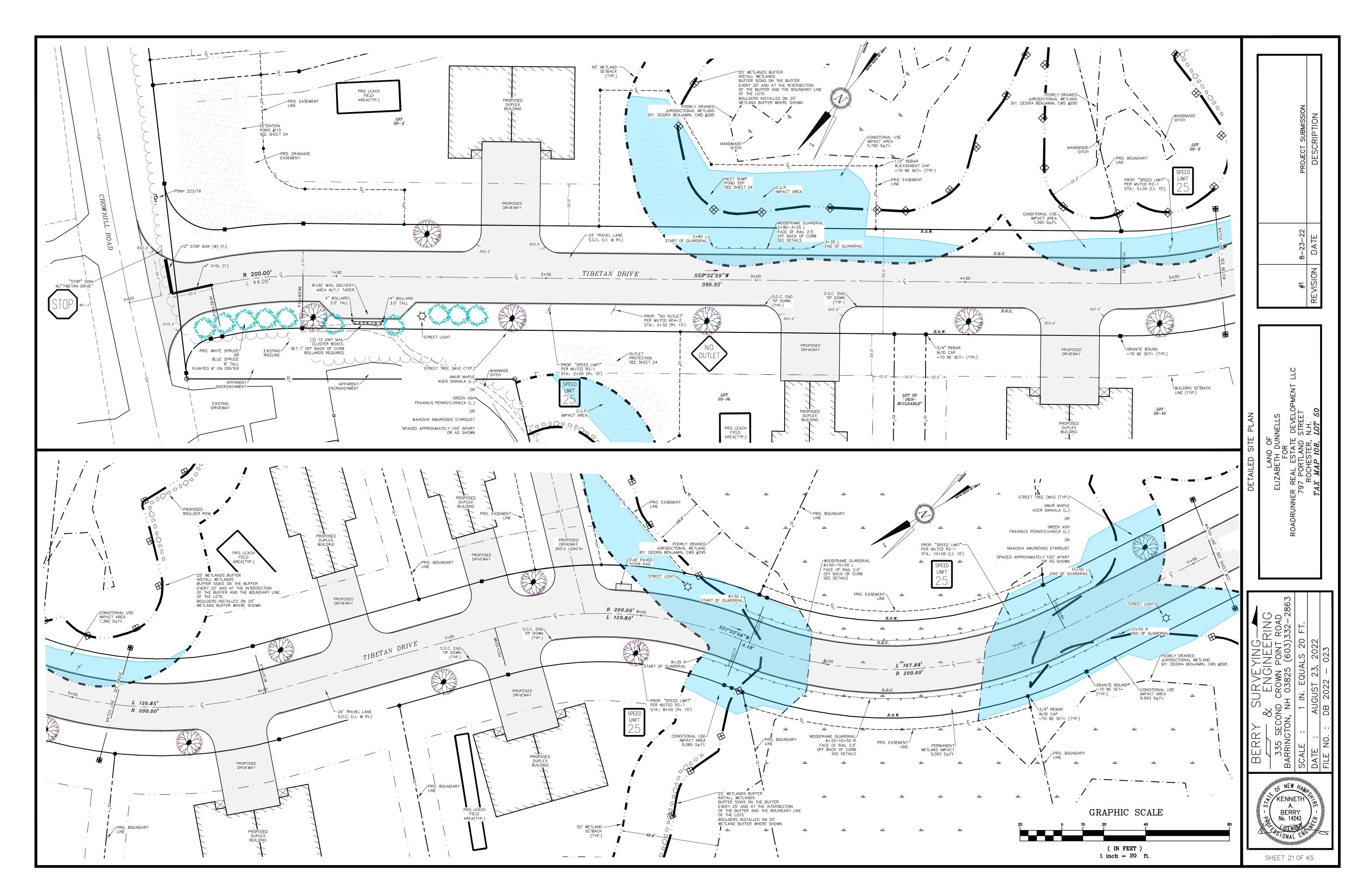


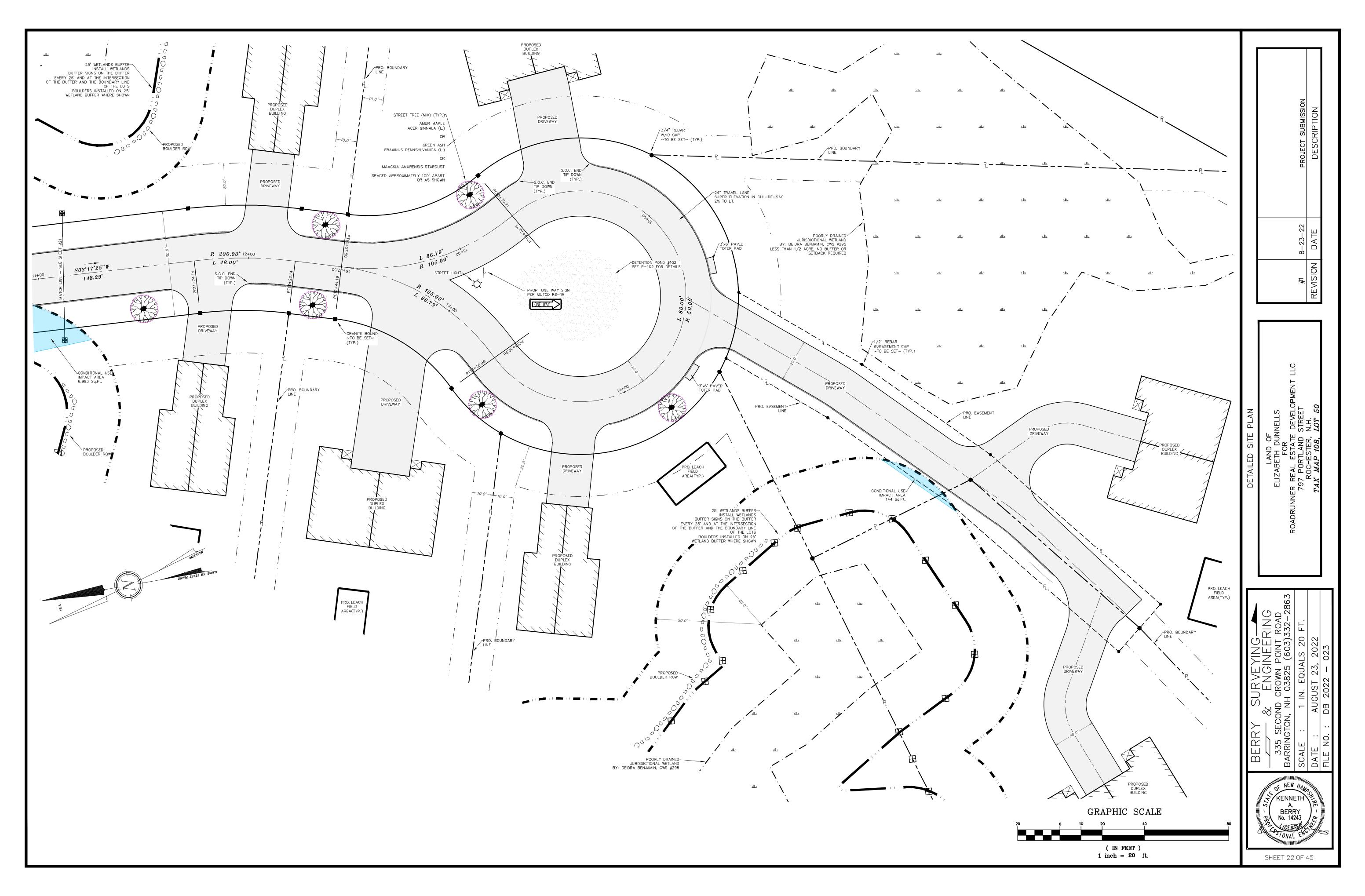
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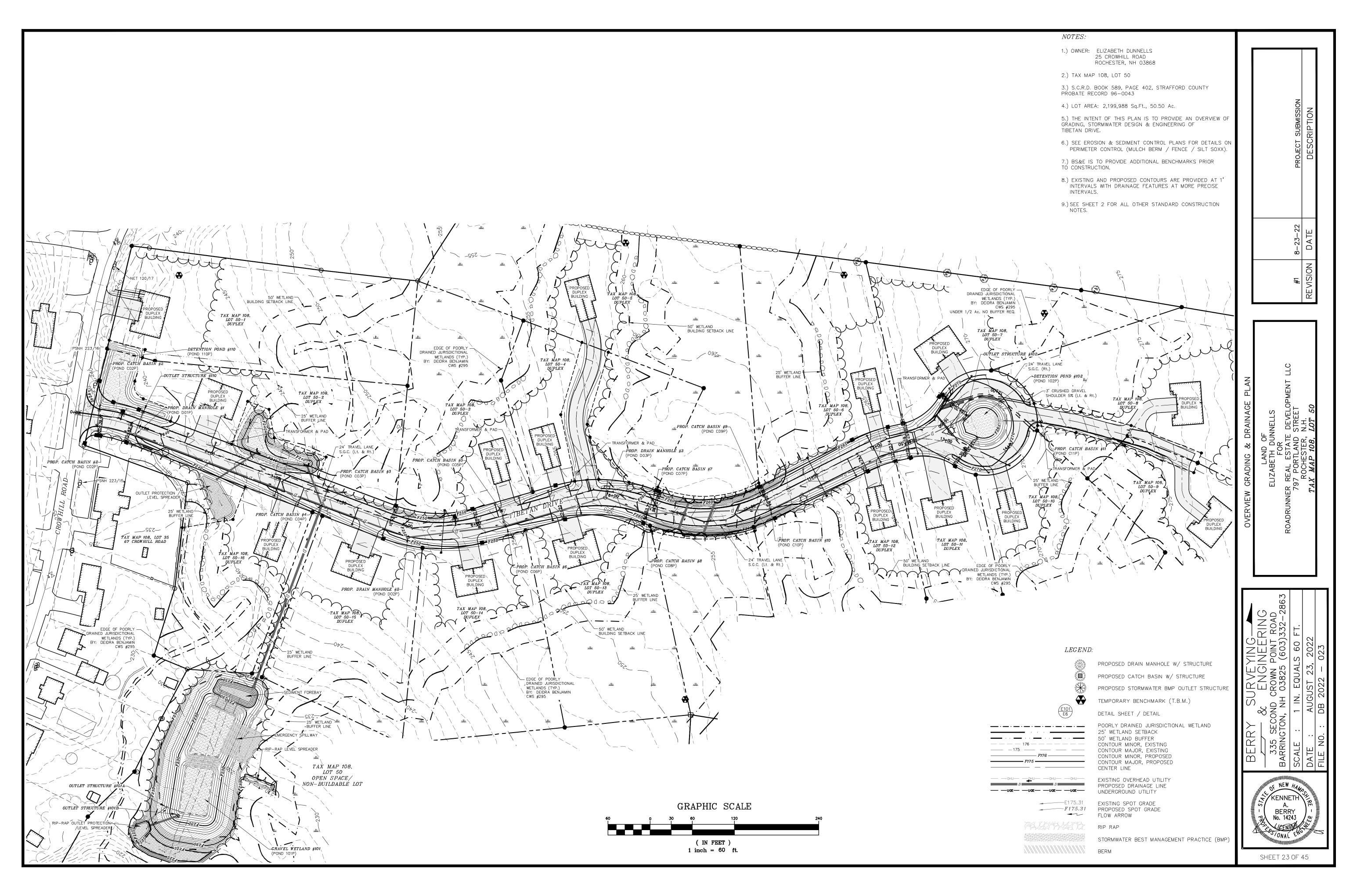


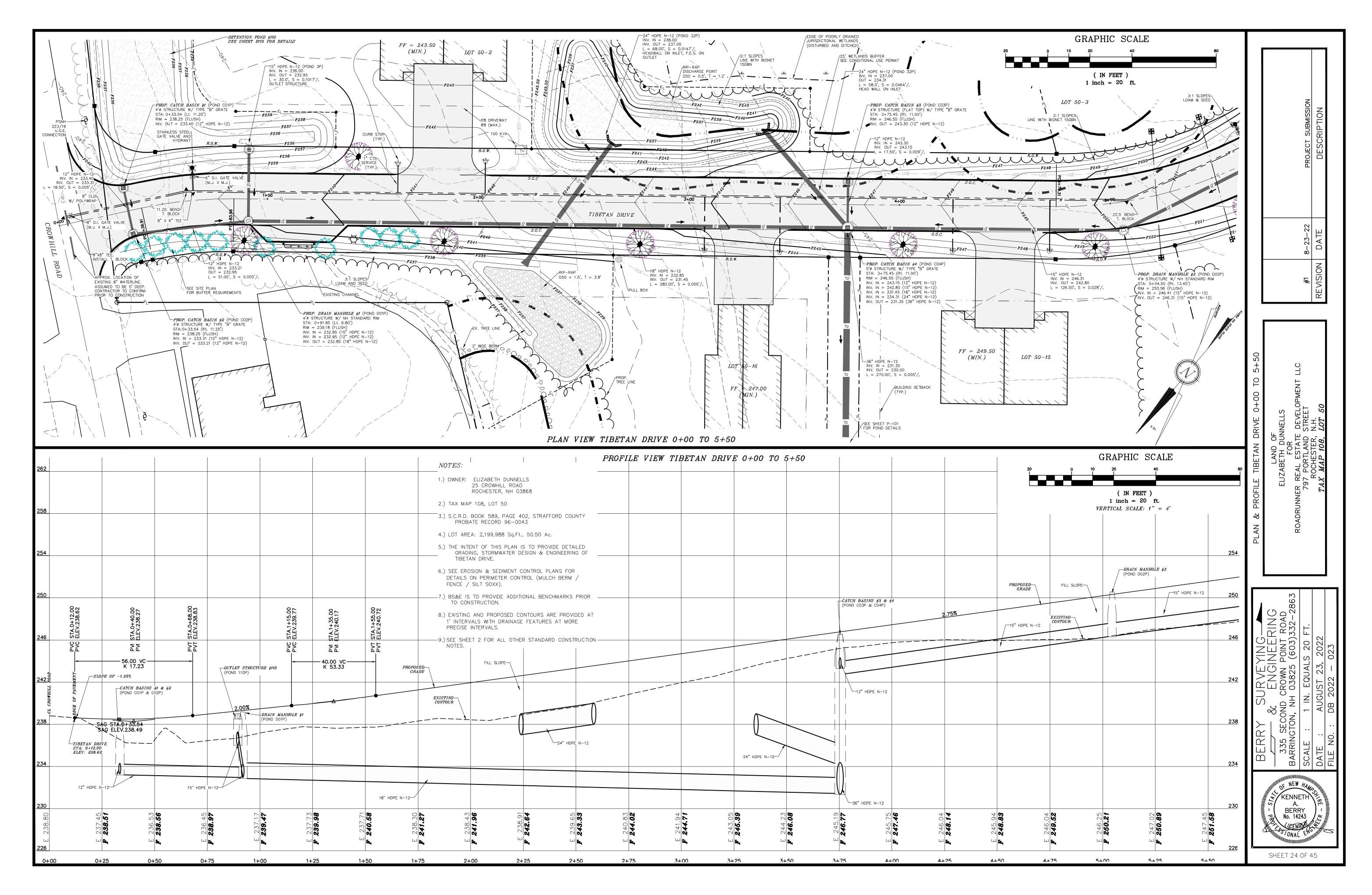


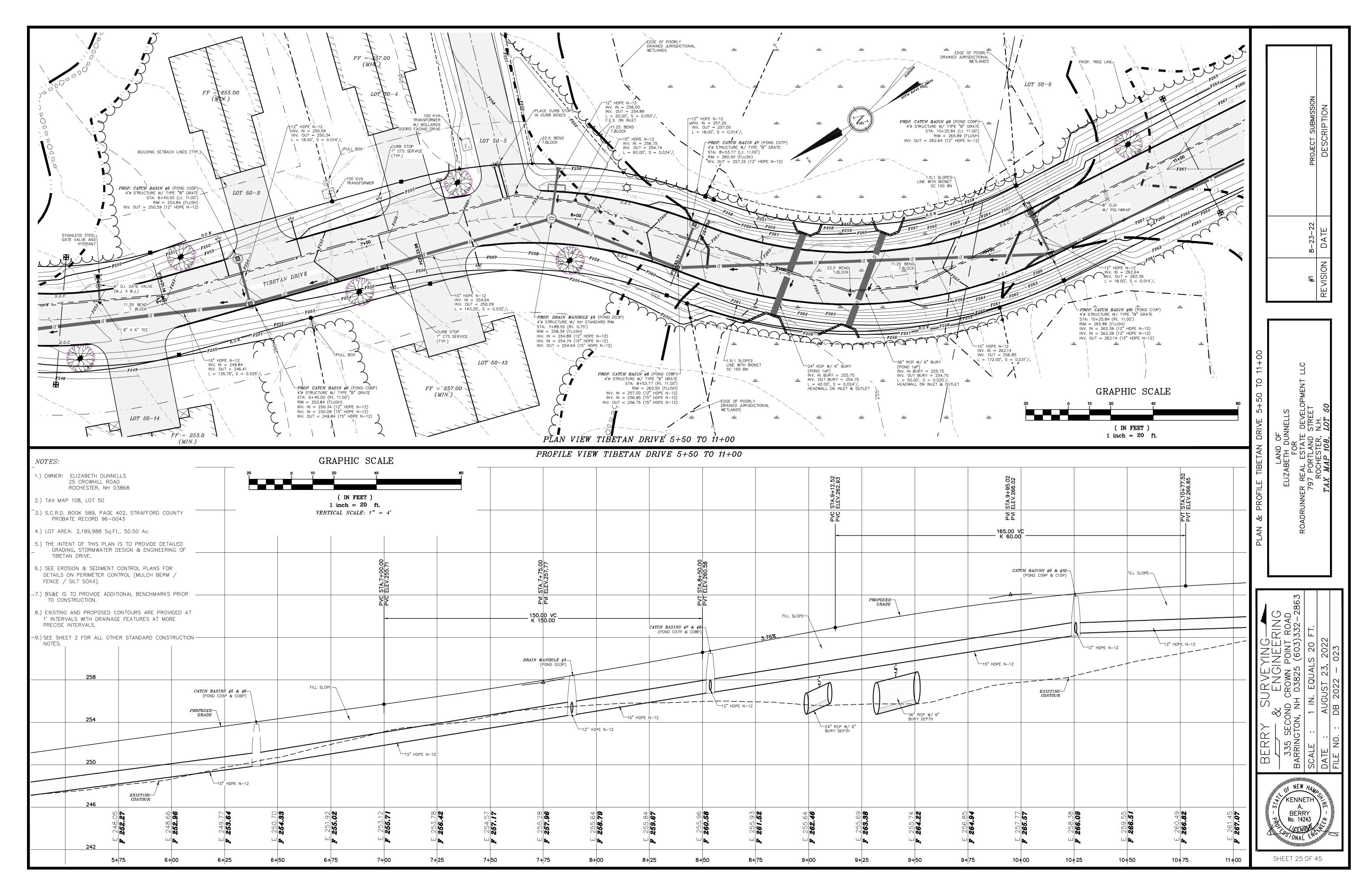


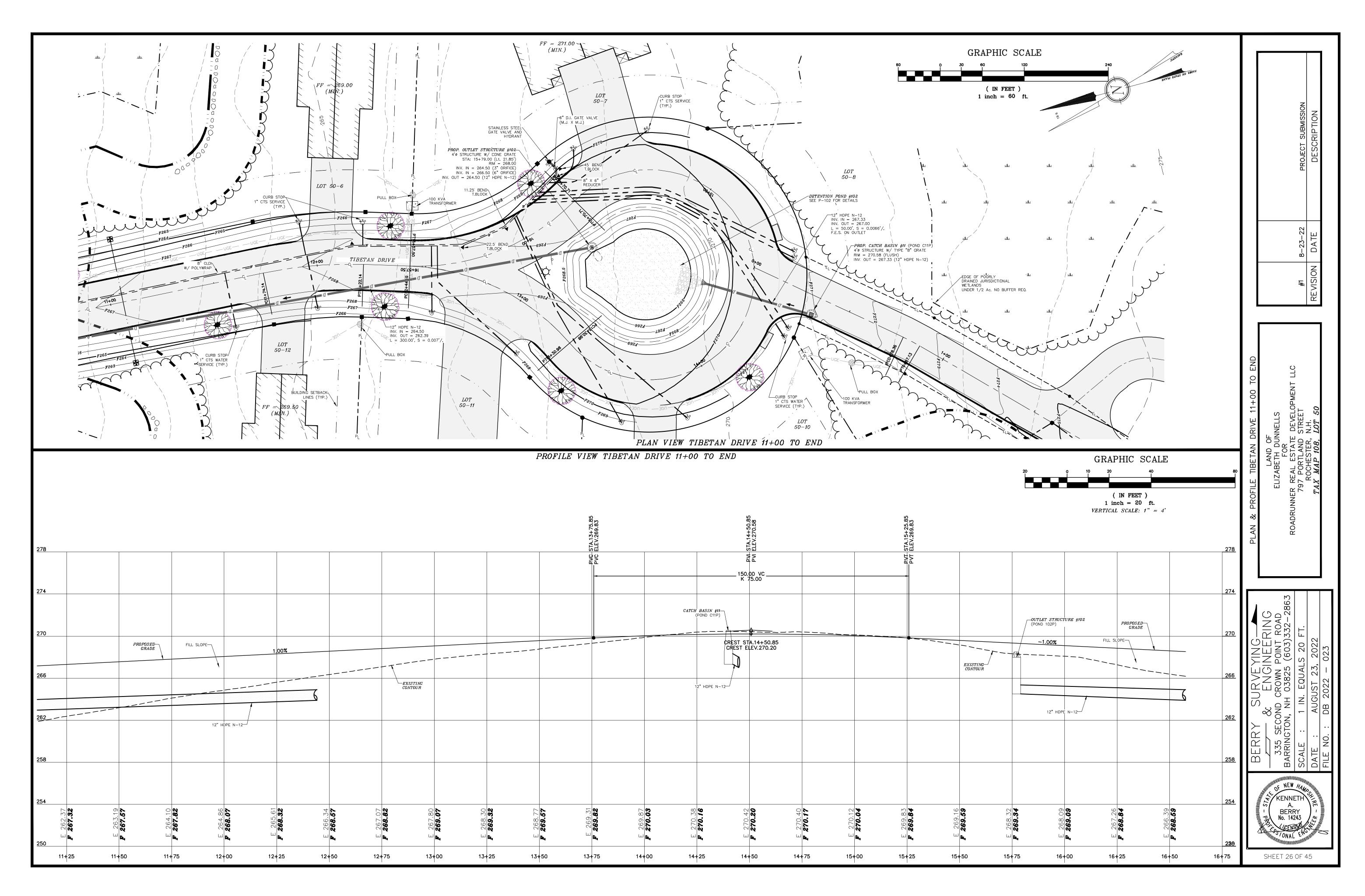


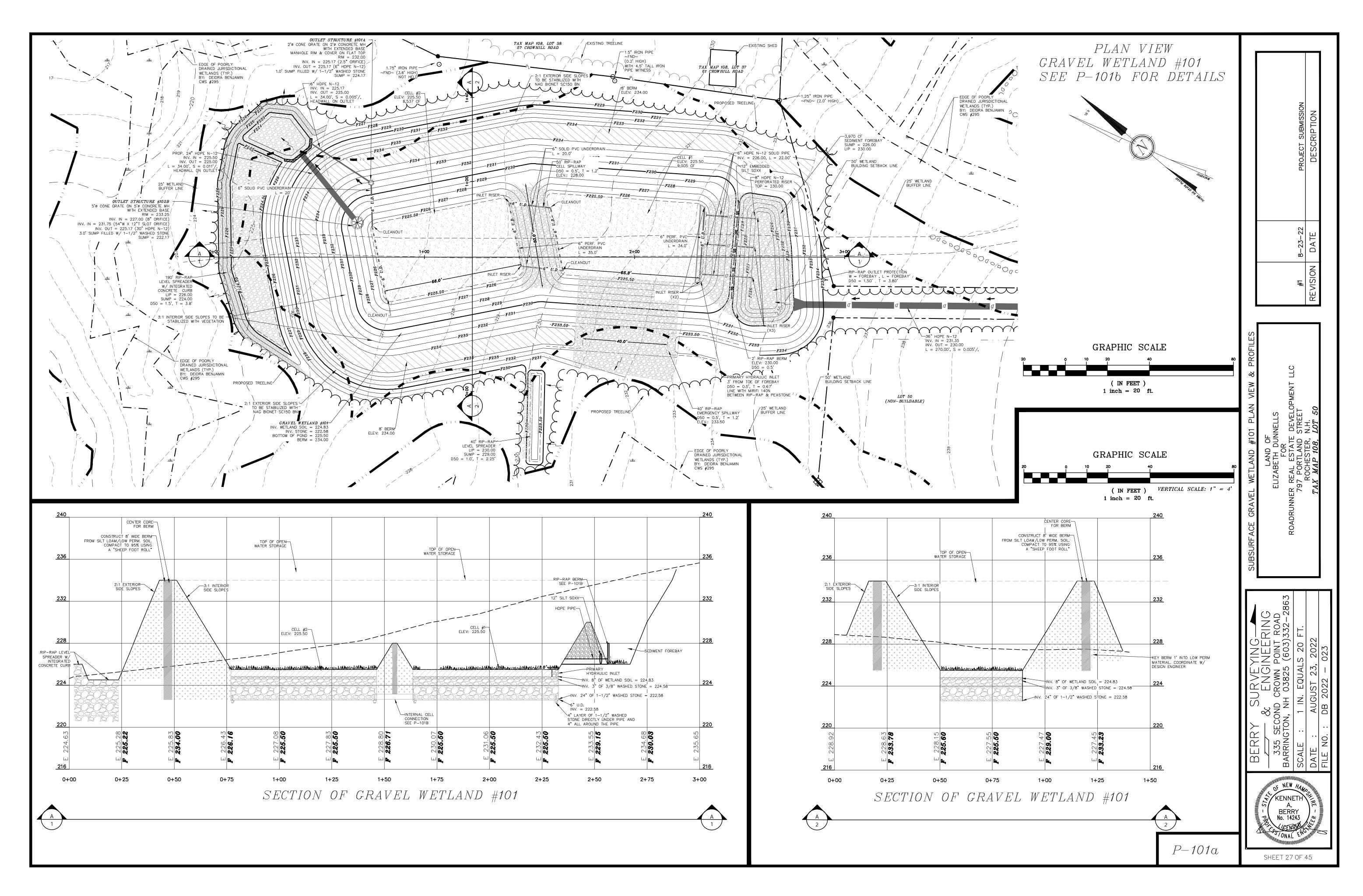


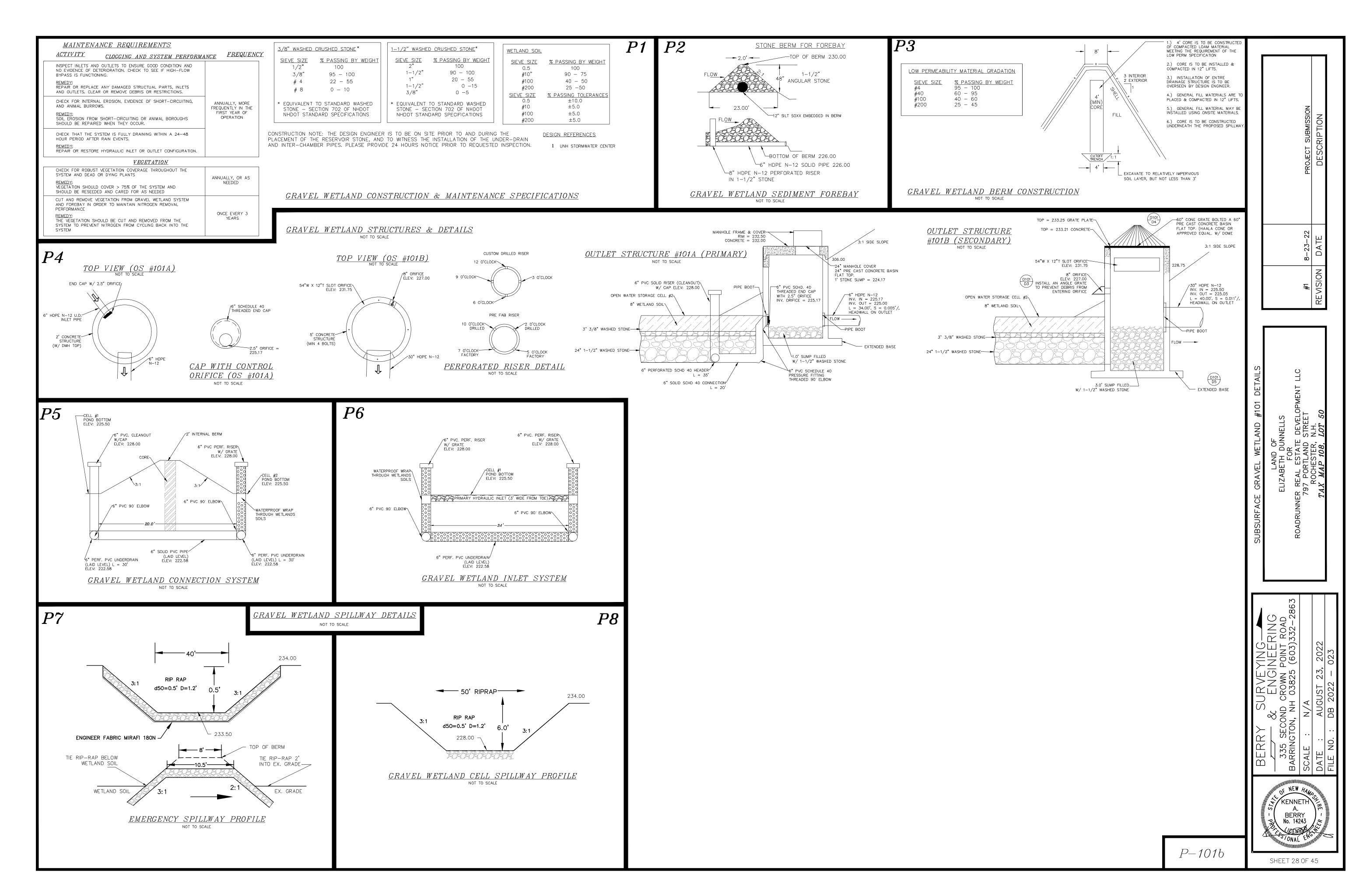


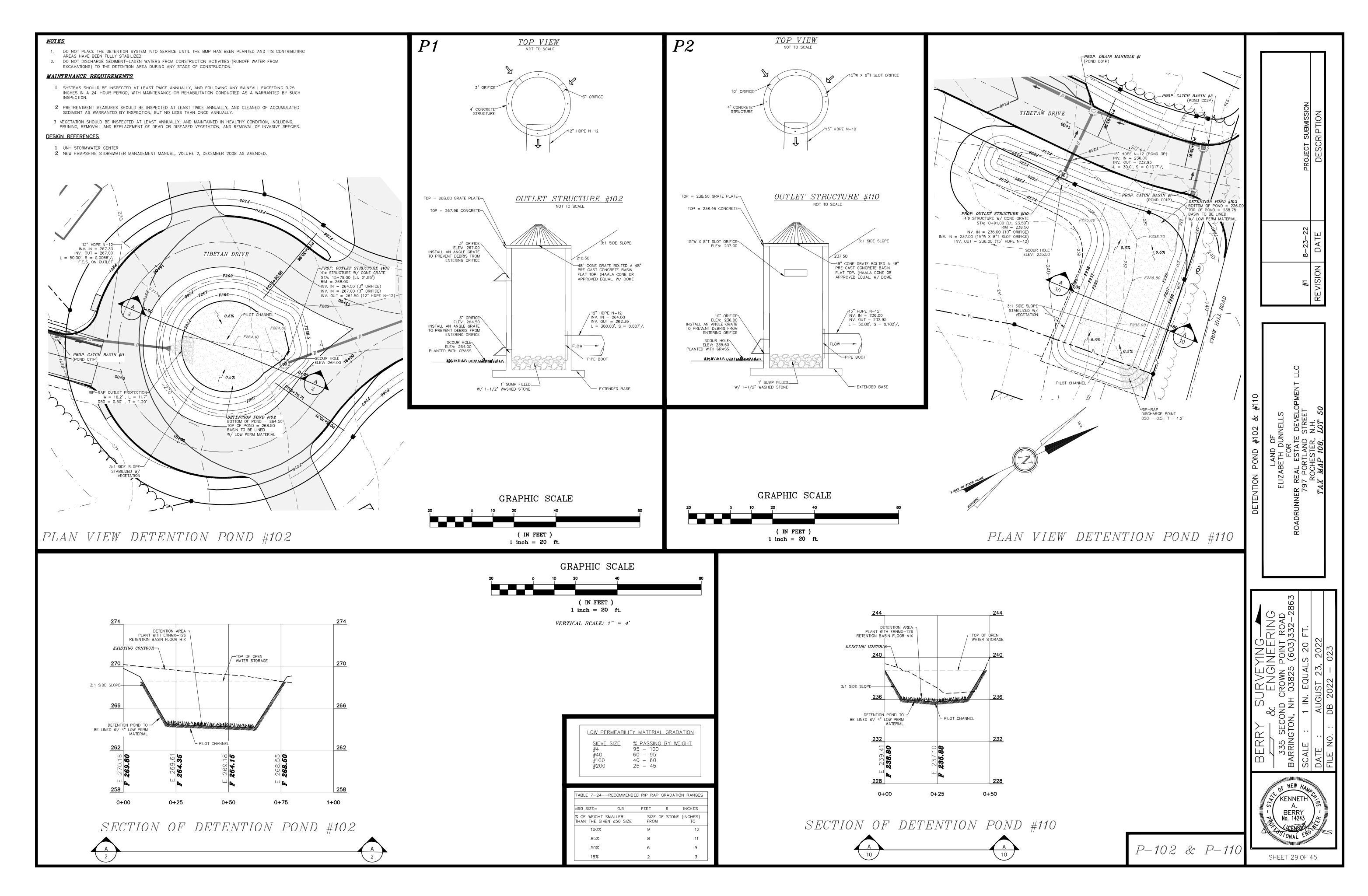


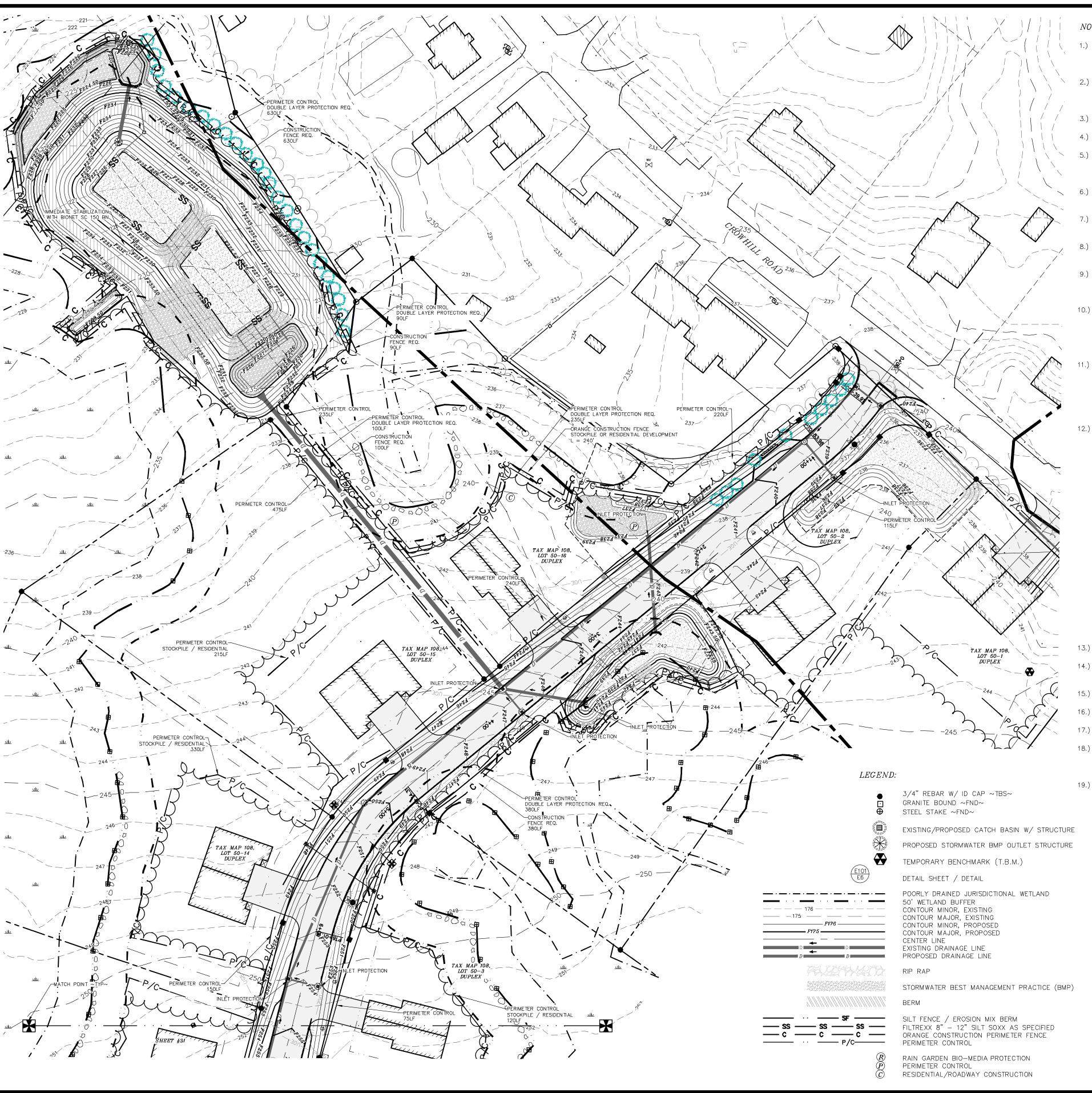












1.) OWNER: ELIZABETH DUNNELLS 25 CROW HILL ROAD ROCHESTER, NH 03868 (IN FEET) 2.) APPLICANT: ROADRUNNER REAL ESTATE DEVELOPMENT LLC, 1 inch = 30 ft.35 THIRD STREET DOVER, NH 03820 3.) THE PROJECT PARCEL IS TAX MAP 108, LOT 50 4.) LOT AREA: 2,199,988 Sq.Ft., 50.50 Ac. UNDERGROUND UTILITY LOCATIONS ARE BASED UPON BEST AVAILABLE EVIDENCE AND ARE NOT FIELD VERIFIED. LOCATING AND PROTECTING ANY ABOVE AND BELOW GROUND UTILITIES IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. ANY

THE CONTRACTOR SHALL CALL AND COORDINATE WITH DIGSAFE AT 1-888-344-7233 AT LEAST 72 HOURS PRIOR TO COMMENCING ANY EXCAVATION ON PUBLIC OR PRIVATE PROPERTY.

ALL DRAINAGE PIPE IS TO BE HDPE N-12. INDIVIDUAL PIPE SIZES ARE SPECIFIED ON GRADING AND DETAIL PLAN SHEETS, GREEN PIPE.

ALL ELEVATIONS TO BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. THE DESIGN ENGINEER IS TO BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCY. TEMPORARY BENCHMARKS (T.B.M.) ARE TO BE PROVIDED BY THE DESIGN ENGINEER.

UPON FINAL COMPLETION AND 85% STABILIZATION, THE DRAINAGE SYSTEM IS TO BE CLEANED OF ALL DEBRIS. SEDIMENT CONTROL PRACTICES REMOVED AND DISPOSED OF PROPERLY, AND ANNUAL MAINTENANCE PREFORMED ON ALL DRAINAGE PRACTICES.

10.) EROSION AND SEDIMENT CONTROL INSPECTIONS TO BE CONDUCTED ONCE PER EVERY SEVEN DAYS AND AT AN INCREASED FREQUENCY INCLUDING WITHIN 24-HOURS OF A 0.25 INCH RAIN EVENT. INSPECTIONS TO BE CONDUCTED BY A "QUALIFIED PERSON" AS DEFINED BY EPA CGP 4.1.1 AND INSPECTION REPORTS SUBMITTED TO THE CITY OF ROCHESTER, NH, ENGINEERING DEPARTMENT WITHIN 24 HOURS IN ACCORDANCE WITH CGP 4.1.7 AND MAINTAINED BY THE OWNER FOR A PERIOD OF THREE YEARS AFTER THE PROJECT IS COMPLETED.

PER EPA CGP Z.1.2.2 (INSTALL PERIMETER CONTROL), "YOU MUST INSTALL SEDIMENT CONTROLS ALONG THOSE PERIMETER AREAS OF YOUR SITE THAT WILL RECEIVE STORMWATER FROM EARTH DISTURBING ACTIVITIES." AS A RESULT OF SWPPP INSPECTIONS, THE CONTRACTOR MAY HAVE TO EXPAND PERIMETER CONTROLS TO MEET THIS REQUIREMENT. THE E&SC PLAN IS INITIAL GUIDANCE AS TO THE ANTICIPATED REQUIREMENTS AND IT THE CONTRACTORS RESPONSIBILITY TO ENSURE THAT STORMWATER VIOLATION DO NOT OCCUR. (CGP - CONSTRUCTION GENERAL PERMIT)

12.) CITY OF ROCHESTER: IN ACCORDANCE WITH SITE PLAN REVIEW REGULATIONS THE FOLLOWING STORMWATER MEASURES ARE REQUIRED.

UTILITY CONFLICTS SHOULD BE REPORTED IMMEDIATELY TO THE DESIGN ENGINEER.

A.) ALL PROPOSED BMPs WILL CONFORM TO THE NH STORMWATER MANUAL VOLUME 3.

B.) EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY SOIL LAND DISTURBANCE AND MUST BE REVIEWED AND APPROVED BY COMMUNITY SERVICE. C.) TEMPORARY STABILIZATION MEASURES SHOULD BE IN PLACE WITHIN SEVEN CALENDAR DAYS FOR EXPOSED SOILS

AREAS THAT ARE WITHIN ONE HUNDRED FEET OF A SURFACE WATER BODY OR A WETLAND AND NO MORE THAN 14 CALENDAR DAYS FOR ALL OTHER AREAS. PERMANENT STABILIZATION SHOULD BE IN PLACE WITHIN THREE CALENDAR DAYS FOLLOWING COMPLETION OF FINAL GRADING OF EXPOSED SOKL AREAS. D.) ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED IN FUNCTIONING CONDITION UNTIL

FINAL STABILIZATION IS ACCOMPLISHED. E.) COMMUNITY SERVICES DEPARTMENT OR THEIR DESIGNATED AGENT SHALL HAVE ACCESS TO THE SITE TO COMPLETE

ROUTINE INSPECTIONS AND SHALL BE NOTIFIED 24-HOURS PRIOR TO INSTALLATION OF A STORMWATER BMP IN ORDER TO SCHEDULE AN INSPECTION, DURING NORMAL WORKING HOURS. F.) THE PLANNING BOARD OR COMMUNITY SERVICES MAY REQUIRE THE DESIGN ENGINEER AND/OR AN INDEPENDENT,

THIRD-PARTY INSPECTION AND OVERSIGHT OF THE CONSTRUCTION OF STORMWATER MANAGEMENT FACILITIES AND EROSION AND SEDIMENT CONTROL AT THEIR DISCRETION. THE OWNER / APPLICANT IS RESPONSIBLE FOR ALL FEES ASSOCIATED WITH

G.) ALL SWPPP INSPECTIONS MUST BE CONDUCTED BY A QUALIFIED PROFESSIONAL SUCH AS A PROFESSIONAL ENGINEER (PE), A CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL (CPESC), A CERTIFIED EROSION SEDIMENT AND STORMWATER INSPECTOR (CESSWI), OR A CERTIFIED PROFESSIONAL IN STORMWATER QUALITY (CPSWQ). INSPECTION REPORTS WILL BE SUBMITTED TO THE COMMUNITY SERVICES DEPARTMENT.

CONTRACTOR IS REQUIRED TO HAVE A CONSTRUCTION ENTRANCE. 3" STONE IS REQUIRED.

CONTRACTOR IS RESPONSIBLE FOR SWEEPING THE ROADWAY, SIDEWALKS AND ANYTHING DISTURBED, TO ENSURE THAT NO SEDIMENT IS BEING TRACKED ONTO CROWHILL ROAD.

CONTRACTOR IS RESPONSIBLE FOR CLEANING AND MAINTAINING THE INLET PROTECTION ONCE INSTALLED.

FUGITIVE DUST IS TO BE CONTROLLED THROUGHOUT THE CONSTRUCTION PROCESS IN ACCORDANCE WITH ENV-A 1000.

CONTRACTOR IS TO MEET THE REQUIREMENTS SPECIFIED IN RSA 430:51-57 AND AGR 3800, RELATING TO INVASIVE SPECIES.

CONTRACTOR IS RESPONSIBLE FOR PROTECTING THE WATER QUALITY FROM ANY RUN OFF DURING THE CONSTRUCTION PROCESS, IN ACCORDANCE WITH ENV-WQ 1507, IN ORDER TO PREVENT VIOLATIONS OF THE STORM WATER QUALITY STANDARDS.

WINTER STABILIZATION NOTES ARE INCLUDED ON SHEET E-102 TO INCLUDE THE LIMIT OF ONE ACRE OF UNSTABILIZED SOIL AFTER OCTOBER 15TH.

> RIBWfA $\it WINDSOR$

SOILS & DEWATERING: ACTON (VERY STONY) DEERFIELDRIDGEBURY

SILT LOAM K= 0.43SILT LOAM K= 0.17SILT LOAM K= 0.24SILT LOAM K= 0.17

SEE SITE SPECIFIC SOILS MAP (SSSM) SEE WEBSOIL USDA-NRCS

ERODIBILITY FACTOR - K, CPESC MANUAL, ENVIROCERT INTERNATIONAL INC. & ROCKINGHAM COUNTTY SOIL SURVEY, ROCKWEB SOIL ATTRIBUTES.

CONTRACTOR TO BE AWARE OF THE SOIL PROFILES AND ENSURE THAT PROPER EROSION PREVENTION AND SEDIMENT CONTROL MEASURES ARE TAKEN AT ALL TIMES. ANY DEWATERING REQUIREMENTS IN NEW HAMPSHIRE REQUIRE SPECIAL PROVISIONS IN ACCORDANCE WITH THE "CLARIFICATION OF SECTION

9.1.2 (STATE OF NEW HAMPSHIRE CONDITIONS) AND OTHER NH SPECIFIC INFORMATION FOR THE U.S. EPA 2012 NPDES CONSTRUCTION GENERAL PERMIT (CGP)" DATED MAY 3, 2012 INCLUDED IN THE

COVER MANAGEMENT DURING CONSTRUCTION FOR EXPOSED SOIL WILL INCLUDE HAY / STRAW APPLIED AT A RATE OF 2.0 TONS PER ACRE, TEMPORARY SEEDING OF ANNUAL RYE GRASS, AND PERMANENT SEEDING AT THE EARLIES OPPORTUNITY. SEE ADDITIONAL REQUIREMENT FOR STABILIZATION ON THE EROSION AND SEDIMENT CONTROL DETAIL SHEETS, E-101 AND E-102.

THE CONSTRUCTION SCHEDULE WILL BE MANAGED SO THAT ALL STORMWATER STRUCTURES WILL BE BUILT AND STABILIZED PRIOR TO RECEIVING SURFACE WATER RUNOFF. CONTRACTOR TO BE RESPONSIBLE FOR ALL DIVERSIONS DURING CONSTRUCTION AND FOR INTERIM SEDIMENT AND EROSION

OF NEW HALL KENNETH **BERRY** No. 14243 SHEET 30 OF 45



NOTES:1.) OWNER: ELIZABETH DUNNELLS 25 CROW HILL ROAD ROCHESTER, NH 03868 2.) APPLICANT: ROADRUNNER REAL ESTATE DEVELOPMENT LLC, 35 THIRD STREET DOVER, NH 03820 3.) THE PROJECT PARCEL IS TAX MAP 108, LOT 50 4.) LOT AREA: 2,199,988 Sq.Ft., 50.50 Ac. UTILITY CONFLICTS SHOULD BE REPORTED IMMEDIATELY TO THE DESIGN ENGINEER. COMMENCING ANY EXCAVATION ON PUBLIC OR PRIVATE PROPERTY. GREEN PIPE. PRACTICES. 10.) EROSION AND SEDIMENT CONTROL INSPECTIONS TO BE CONDUCTED ONCE PER EVERY SEVEN DAYS AND AT PER EPA CGP Z.1.2.2 (INSTALL PERIMETER CONTROL), "YOU MUST INSTALL SEDIMENT CONTROLS ALONG THOSE PERIMETER AREAS OF YOUR SITE THAT WILL RECEIVE STORMWATER FROM EARTH DISTURBING ACTIVITIES." AS A RESULT OF SWPPP INSPECTIONS, THE CONTRACTOR MAY HAVE TO EXPAND PERIMETER CONTROLS TO MEET THIS REQUIREMENT. THE E&SC PLAN IS INITIAL GUIDANCE AS TO THE ANTICIPATED REQUIREMENTS AND IT THE CONTRACTORS RESPONSIBILITY TO ENSURE THAT STORMWATER VIOLATION DO NOT OCCUR. (CGP - CONSTRUCTION GENERAL PERMIT) 12.) CITY OF ROCHESTER: IN ACCORDANCE WITH SITE PLAN REVIEW REGULATIONS THE FOLLOWING STORMWATER MEASURES ARE REQUIRED. A.) ALL PROPOSED BMPs WILL CONFORM TO THE NH STORMWATER MANUAL VOLUME 3. B.) EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY SOIL LAND DISTURBANCE AND MUST BE REVIEWED AND APPROVED BY COMMUNITY SERVICE. C.) TEMPORARY STABILIZATION MEASURES SHOULD BE IN PLACE WITHIN SEVEN CALENDAR DAYS FOR EXPOSED SOILS AREAS THAT ARE WITHIN ONE HUNDRED FEET OF A SURFACE WATER BODY OR A WETLAND AND NO MORE THAN 14 CALENDAR DAYS FOR ALL OTHER AREAS. PERMANENT STABILIZATION SHOULD BE IN PLACE WITHIN THREE CALENDAR DAYS FOLLOWING COMPLETION OF FINAL GRADING OF EXPOSED SOKL AREAS. D.) ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED IN FUNCTIONING CONDITION UNTIL FINAL STABILIZATION IS ACCOMPLISHED. E.) COMMUNITY SERVICES DEPARTMENT OR THEIR DESIGNATED AGENT SHALL HAVE ACCESS TO THE SITE TO COMPLETE ROUTINE INSPECTIONS AND SHALL BE NOTIFIED 24-HOURS PRIOR TO INSTALLATION OF A STORMWATER BMP IN ORDER TO SCHEDULE AN INSPECTION, DURING NORMAL WORKING HOURS. F.) THE PLANNING BOARD OR COMMUNITY SERVICES MAY REQUIRE THE DESIGN ENGINEER AND/OR AN INDEPENDENT, THIRD-PARTY INSPECTION AND OVERSIGHT OF THE CONSTRUCTION OF STORMWATER MANAGEMENT FACILITIES AND EROSION AND SEDIMENT CONTROL AT THEIR DISCRETION. THE OWNER / APPLICANT IS RESPONSIBLE FOR ALL FEES ASSOCIATED WITH G.) ALL SWPPP INSPECTIONS MUST BE CONDUCTED BY A QUALIFIED PROFESSIONAL SUCH AS A PROFESSIONAL ENGINEER (PE), A CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL (CPESC), A CERTIFIED EROSION SEDIMENT AND STORMWATER INSPECTOR (CESSWI), OR A CERTIFIED PROFESSIONAL IN STORMWATER QUALITY (CPSWQ). INSPECTION REPORTS WILL BE SUBMITTED TO THE COMMUNITY SERVICES DEPARTMENT. CONTRACTOR IS REQUIRED TO HAVE A CONSTRUCTION ENTRANCE. 3" STONE IS REQUIRED. CONTRACTOR IS RESPONSIBLE FOR SWEEPING THE ROADWAY, SIDEWALKS AND ANYTHING DISTURBED, TO ENSURE THAT NO SEDIMENT IS BEING TRACKED ONTO SIXTH STREET. CONTRACTOR IS RESPONSIBLE FOR CLEANING AND MAINTAINING THE INLET PROTECTION ONCE INSTALLED. FUGITIVE DUST IS TO BE CONTROLLED THROUGHOUT THE CONSTRUCTION PROCESS IN ACCORDANCE WITH ENV-A 1000. CONTRACTOR IS TO MEET THE REQUIREMENTS SPECIFIED IN RSA 430:51-57 AND AGR 3800, RELATING TO INVASIVE SPECIES. 17.) CONTRACTOR IS RESPONSIBLE FOR PROTECTING THE WATER QUALITY FROM ANY RUN OFF DURING THE CONSTRUCTION PROCESS, IN ACCORDANCE WITH ENV-WQ 1507, IN ORDER TO PREVENT VIOLATIONS OF THE STORM WATER QUALITY WINTER STABILIZATION NOTES ARE INCLUDED ON SHEET E-102 TO INCLUDE THE LIMIT OF ONE ACRE OF UNSTABILIZED SOIL

GRAPHIC SCALE (IN FEET) 1 inch = 30 ft.5.) UNDERGROUND UTILITY LOCATIONS ARE BASED UPON BEST AVAILABLE EVIDENCE AND ARE NOT FIELD VERIFIED. LOCATING AND PROTECTING ANY ABOVE AND BELOW GROUND UTILITIES IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. ANY 6.) THE CONTRACTOR SHALL CALL AND COORDINATE WITH DIGSAFE AT 1-888-344-7233 AT LEAST 72 HOURS PRIOR TO 7.) ALL DRAINAGE PIPE IS TO BE HDPE N-12. INDIVIDUAL PIPE SIZES ARE SPECIFIED ON GRADING AND DETAIL PLAN SHEETS, 8.) ALL ELEVATIONS TO BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. THE DESIGN ENGINEER IS TO BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCY. TEMPORARY BENCHMARKS (T.B.M.) ARE TO BE PROVIDED BY THE DESIGN ENGINEER. 9.) UPON FINAL COMPLETION AND 85% STABILIZATION, THE DRAINAGE SYSTEM IS TO BE CLEANED OF ALL DEBRIS. SEDIMENT CONTROL PRACTICES REMOVED AND DISPOSED OF PROPERLY, AND ANNUAL MAINTENANCE PREFORMED ON ALL DRAINAGE AN INCREASED FREQUENCY INCLUDING WITHIN 24-HOURS OF A 0.25 INCH RAIN EVENT. INSPECTIONS TO BE CONDUCTED BY A "QUALIFIED PERSON" AS DEFINED BY EPA CGP 4.1.1 AND INSPECTION REPORTS SUBMITTED TO THE CITY OF ROCHESTER, NH. ENGINEERING DEPARTMENT WITHIN 24 HOURS IN ACCORDANCE WITH CGP 4.1.7 AND MAINTAINED BY THE OWNER FOR A PERIOD OF THREE YEARS AFTER THE PROJECT IS COMPLETED.

SC \mathbf{m} OF NEW HAM KENNETH **BERRY** No. 14243 SHEET 31 OF 45

AFTER OCTOBER 15TH.

ACTON (VERY STONY) DEFRFIFLDDeARIBRIDGEBURYWfA WINDSOR

SOILS & DEWATERING:

SILT LOAM K= 0.17SILT LOAM K= 0.24SILT LOAM K= 0.17

SILT LOAM K= 0.43

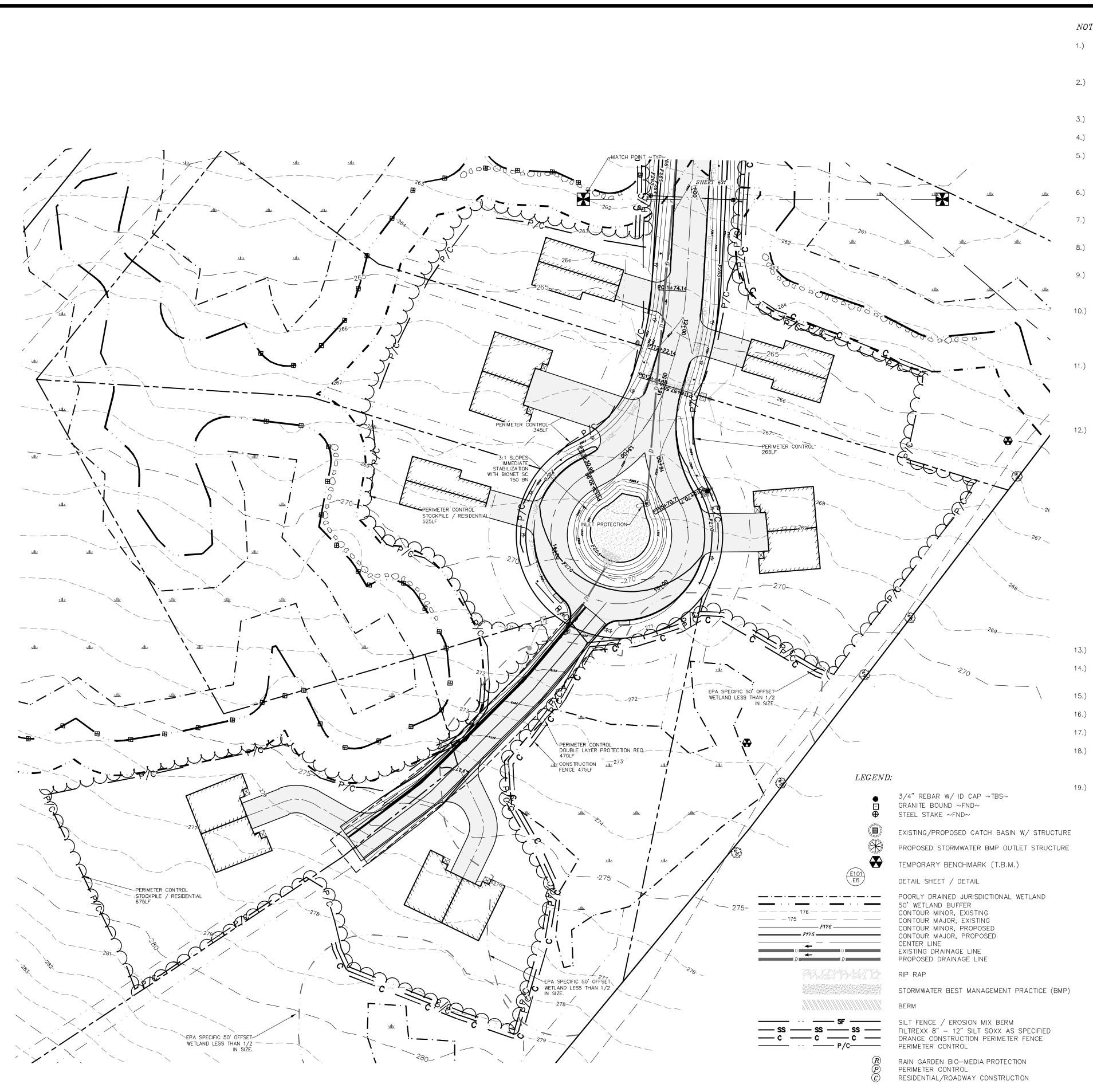
SEE SITE SPECIFIC SOILS MAP (SSSM) SEE WEBSOIL USDA-NRCS

ERODIBILITY FACTOR - K, CPESC MANUAL, ENVIROCERT INTERNATIONAL INC. & ROCKINGHAM COUNTTY SOIL SURVEY, ROCKWEB SOIL ATTRIBUTES.

CONTRACTOR TO BE AWARE OF THE SOIL PROFILES AND ENSURE THAT PROPER EROSION PREVENTION AND SEDIMENT CONTROL MEASURES ARE TAKEN AT ALL TIMES. ANY DEWATERING REQUIREMENTS IN NEW HAMPSHIRE REQUIRE SPECIAL PROVISIONS IN ACCORDANCE WITH THE "CLARIFICATION OF SECTION 9.1.2 (STATE OF NEW HAMPSHIRE CONDITIONS) AND OTHER NH SPECIFIC INFORMATION FOR THE U.S. EPA 2012 NPDES CONSTRUCTION GENERAL PERMIT (CGP)" DATED MAY 3, 2012 INCLUDED IN THE

COVER MANAGEMENT DURING CONSTRUCTION FOR EXPOSED SOIL WILL INCLUDE HAY / STRAW APPLIED AT A RATE OF 2.0 TONS PER ACRE, TEMPORARY SEEDING OF ANNUAL RYE GRASS, AND PERMANENT SEEDING AT THE EARLIES OPPORTUNITY. SEE ADDITIONAL REQUIREMENT FOR STABILIZATION ON THE EROSION AND SEDIMENT CONTROL DETAIL SHEETS, E-101 AND E-102.

THE CONSTRUCTION SCHEDULE WILL BE MANAGED SO THAT ALL STORMWATER STRUCTURES WILL BE BUILT AND STABILIZED PRIOR TO RECEIVING SURFACE WATER RUNOFF. CONTRACTOR TO BE RESPONSIBLE FOR ALL DIVERSIONS DURING CONSTRUCTION AND FOR INTERIM SEDIMENT AND EROSION CONTROL MEASURES.



NOTES:GRAPHIC SCALE 1.) OWNER: ELIZABETH DUNNELLS 25 CROW HILL ROAD ROCHESTER, NH 03868 (IN FEET) 2.) APPLICANT: ROADRUNNER REAL ESTATE DEVELOPMENT LLC, 1 inch = 30 ft.35 THIRD STREET DOVER, NH 03820 3.) THE PROJECT PARCEL IS TAX MAP 108, LOT 50 4.) LOT AREA: 2,199,988 Sq.Ft., 50.50 Ac. 5.) UNDERGROUND UTILITY LOCATIONS ARE BASED UPON BEST AVAILABLE EVIDENCE AND ARE NOT FIELD VERIFIED. LOCATING AND PROTECTING ANY ABOVE AND BELOW GROUND UTILITIES IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. ANY UTILITY CONFLICTS SHOULD BE REPORTED IMMEDIATELY TO THE DESIGN ENGINEER. 6.) THE CONTRACTOR SHALL CALL AND COORDINATE WITH DIGSAFE AT 1-888-344-7233 AT LEAST 72 HOURS PRIOR TO COMMENCING ANY EXCAVATION ON PUBLIC OR PRIVATE PROPERTY. 7.) ALL DRAINAGE PIPE IS TO BE HDPE N-12. INDIVIDUAL PIPE SIZES ARE SPECIFIED ON GRADING AND DETAIL PLAN SHEETS, GREEN PIPE. 8.) ALL ELEVATIONS TO BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. THE DESIGN ENGINEER IS TO BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCY. TEMPORARY BENCHMARKS (T.B.M.) ARE TO BE PROVIDED BY THE DESIGN ENGINEER. UPON FINAL COMPLETION AND 85% STABILIZATION, THE DRAINAGE SYSTEM IS TO BE CLEANED OF ALL DEBRIS. SEDIMENT CONTROL PRACTICES REMOVED AND DISPOSED OF PROPERLY, AND ANNUAL MAINTENANCE PREFORMED ON ALL DRAINAGE 10.) EROSION AND SEDIMENT CONTROL INSPECTIONS TO BE CONDUCTED ONCE PER EVERY SEVEN DAYS AND AT AN INCREASED FREQUENCY INCLUDING WITHIN 24-HOURS OF A 0.25 INCH RAIN EVENT. INSPECTIONS TO BE CONDUCTED BY A "QUALIFIED PERSON" AS DEFINED BY EPA CGP 4.1.1 AND INSPECTION REPORTS SUBMITTED TO THE CITY OF ROCHESTER, NH, ENGINEERING DEPARTMENT WITHIN 24 HOURS IN ACCORDANCE WITH CGP 4.1.7 AND MAINTAINED BY THE OWNER FOR A PERIOD OF THREE YEARS AFTER THE PROJECT IS COMPLETED. PER EPA CGP Z.1.2.2 (INSTALL PERIMETER CONTROL), "YOU MUST INSTALL SEDIMENT CONTROLS ALONG THOSE PERIMETER AREAS OF YOUR SITE THAT WILL RECEIVE STORMWATER FROM EARTH DISTURBING ACTIVITIES." AS A RESULT OF SWPPP INSPECTIONS, THE CONTRACTOR MAY HAVE TO EXPAND PERIMETER CONTROLS TO MEET THIS REQUIREMENT. THE E&SC PLAN IS INITIAL GUIDANCE AS TO THE ANTICIPATED REQUIREMENTS AND IT THE CONTRACTORS RESPONSIBILITY TO ENSURE THAT STORMWATER VIOLATION DO NOT OCCUR. (CGP - CONSTRUCTION GENERAL PERMIT)

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D.) ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED IN FUNCTIONING CONDITION UNTIL FINAL STABILIZATION IS ACCOMPLISHED.

E.) COMMUNITY SERVICES DEPARTMENT OR THEIR DESIGNATED AGENT SHALL HAVE ACCESS TO THE SITE TO COMPLETE

ROUTINE INSPECTIONS AND SHALL BE NOTIFIED 24—HOURS PRIOR TO INSTALLATION OF A STORMWATER BMP IN ORDER TO SCHEDULE AN INSPECTION, DURING NORMAL WORKING HOURS.

F.) THE PLANNING BOARD OR COMMUNITY SERVICES MAY REQUIRE THE DESIGN ENGINEER AND/OR AN INDEPENDENT, THIRD—PARTY INSPECTION AND OVERSIGHT OF THE CONSTRUCTION OF STORMWATER MANAGEMENT FACILITIES AND EROSION

THIRD—PARTY INSPECTION AND OVERSIGHT OF THE CONSTRUCTION OF STORMWATER MANAGEMENT FACILITIES AND EROSION AND SEDIMENT CONTROL AT THEIR DISCRETION. THE OWNER / APPLICANT IS RESPONSIBLE FOR ALL FEES ASSOCIATED WITH INSPECTIONS.

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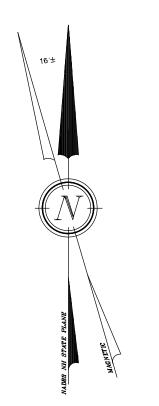
CONTRACTOR IS RESPONSIBLE FOR CLEANING AND MAINTAINING THE INLET PROTECTION ONCE INSTALLED.

FUGITIVE DUST IS TO BE CONTROLLED THROUGHOUT THE CONSTRUCTION PROCESS IN ACCORDANCE WITH ENV-A 1000.

CONTRACTOR IS TO MEET THE REQUIREMENTS SPECIFIED IN RSA 430:51-57 AND AGR 3800, RELATING TO INVASIVE SPECIES.

CONTRACTOR IS RESPONSIBLE FOR PROTECTING THE WATER QUALITY FROM ANY RUN OFF DURING THE CONSTRUCTION PROCESS, IN ACCORDANCE WITH ENV-WQ 1507, IN ORDER TO PREVENT VIOLATIONS OF THE STORM WATER QUALITY STANDARDS.

WINTER STABILIZATION NOTES ARE INCLUDED ON SHEET E-102 TO INCLUDE THE LIMIT OF ONE ACRE OF UNSTABILIZED SOIL AFTER OCTOBER 15TH.



SOILS & DEWATERING:

AcB ACTON (VERY STONY)
DeA DEERFIELD
RIB RIDGEBURY
WfA WINDSOR

SEE SITE SPECIFIC SOILS MAP (SSSM)

SEE WEBSOIL USDA-NRCS ERODIBILITY FACTOR — K, CPESC MANUAL, ENVIROCERT INTERNATIONAL INC. & ROCKINGHAM COUNTTY SOIL SURVEY, ROCKWEB SOIL ATTRIBUTES.

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SILT LOAM K= 0.43

SILT LOAM K= 0.17

SILT LOAM K= 0.17

SILT LOAM K= 0.24

COVER MANAGEMENT DURING CONSTRUCTION FOR EXPOSED SOIL WILL INCLUDE HAY / STRAW APPLIED AT A RATE OF 2.0 TONS PER ACRE, TEMPORARY SEEDING OF ANNUAL RYE GRASS, AND PERMANENT SEEDING AT THE EARLIES OPPORTUNITY. SEE ADDITIONAL REQUIREMENT FOR STABILIZATION ON THE EROSION AND SEDIMENT CONTROL DETAIL SHEETS, E-101 AND E-102.

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LAND OF
ELIZABETH DUNNELLS
FOR
ROADRUNNER REAL ESTATE DEVELOPMENT LLC

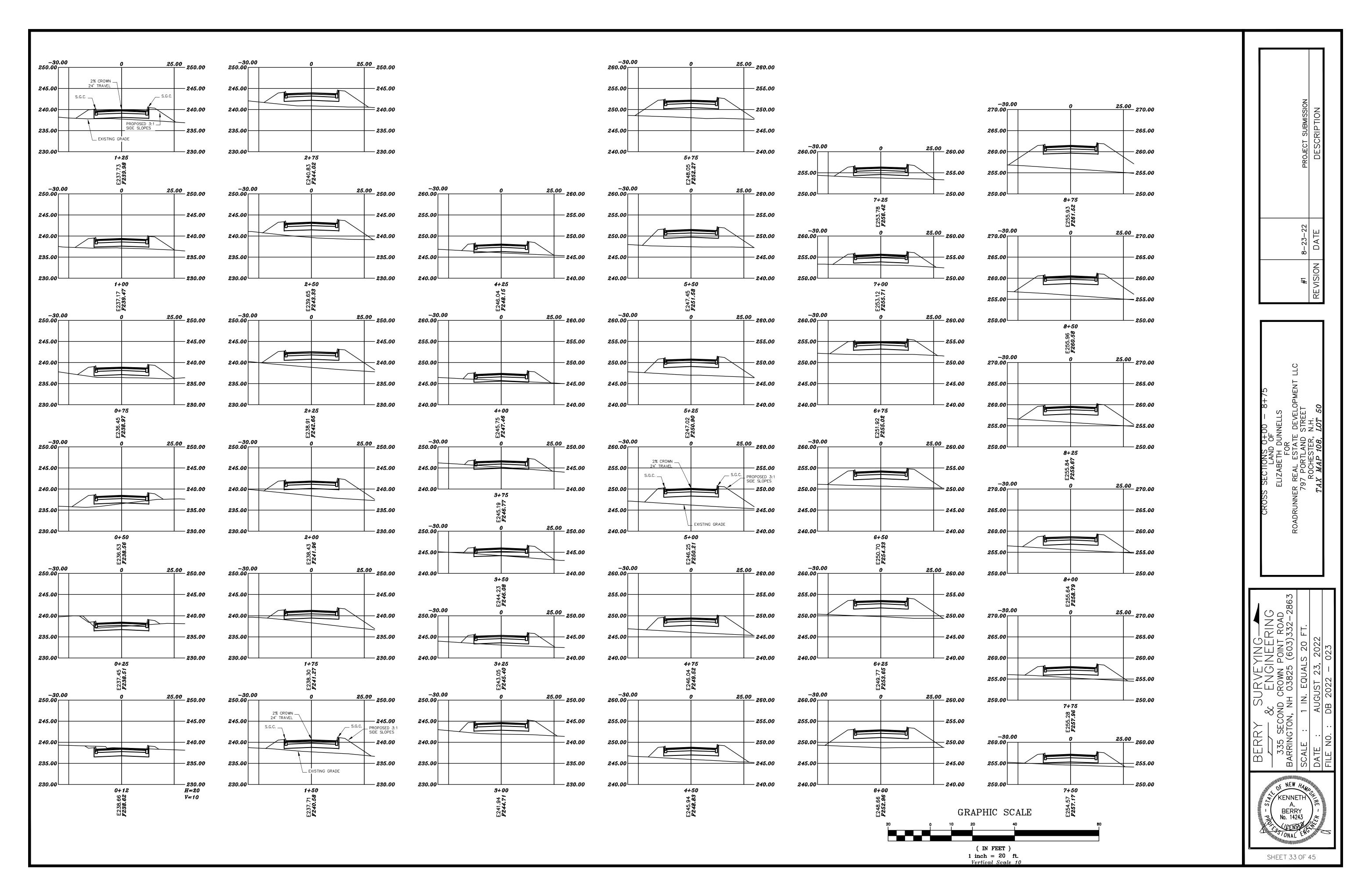
NEW HAMOSE AND SERRY No. 14243

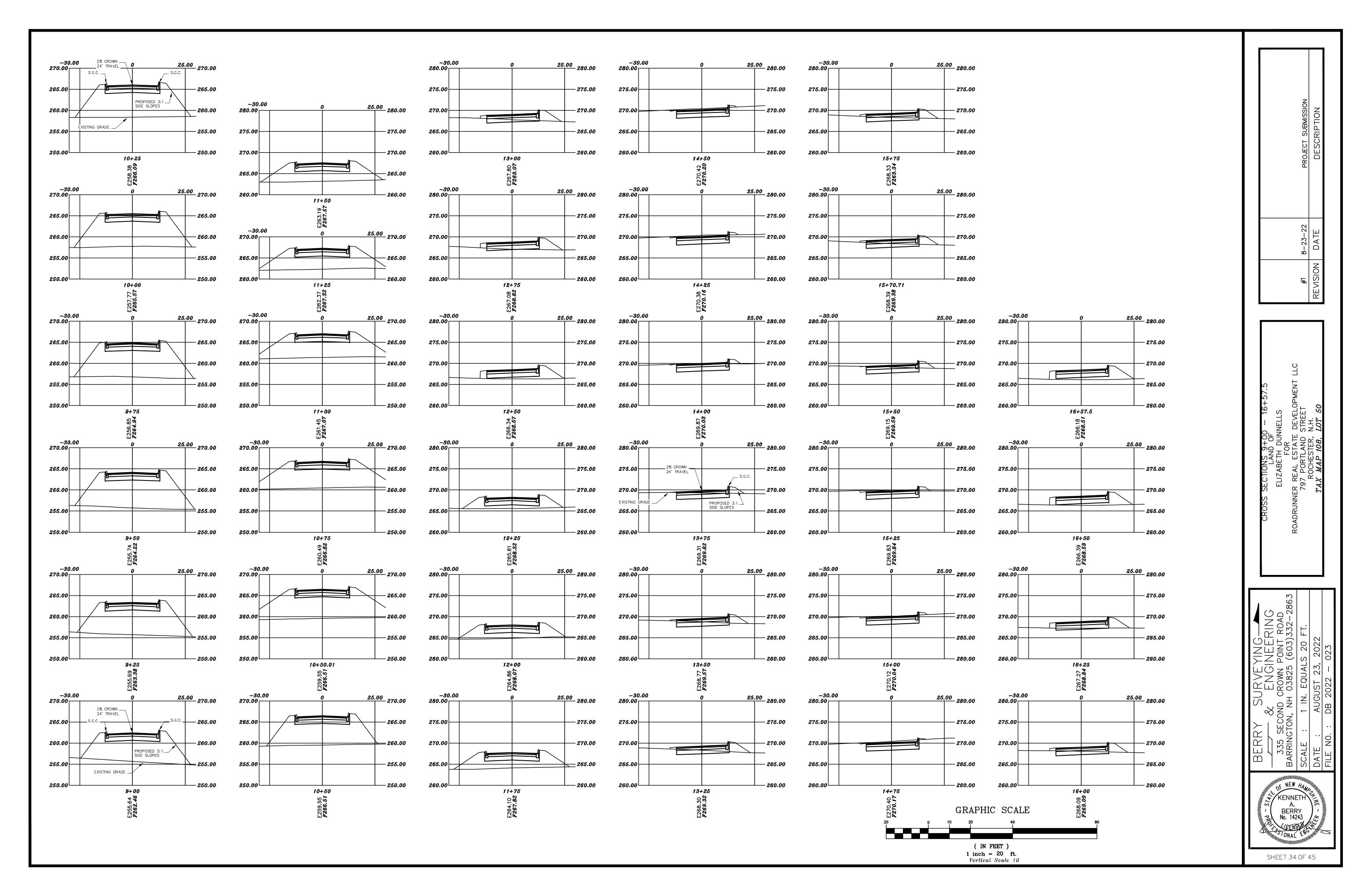
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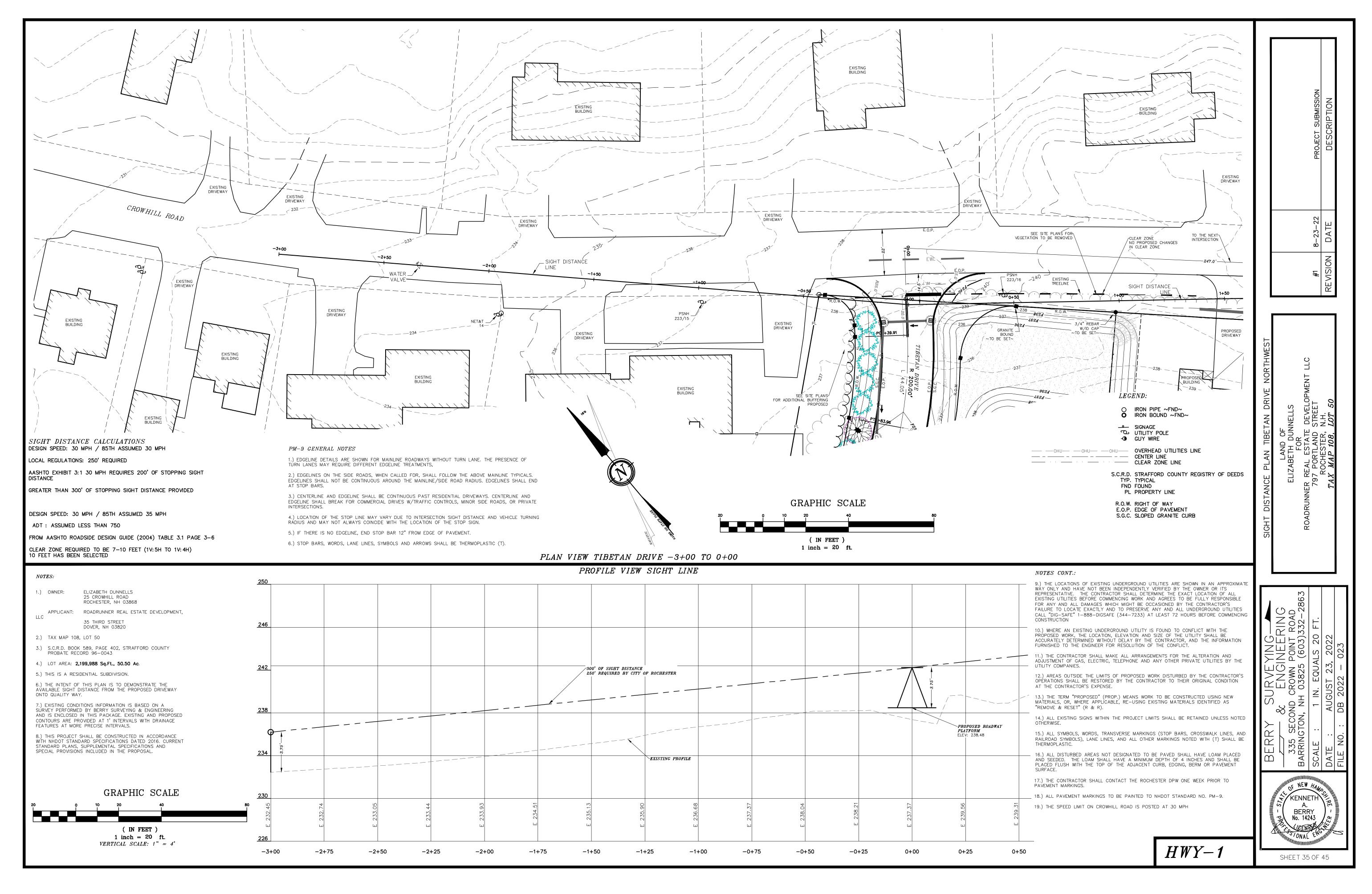
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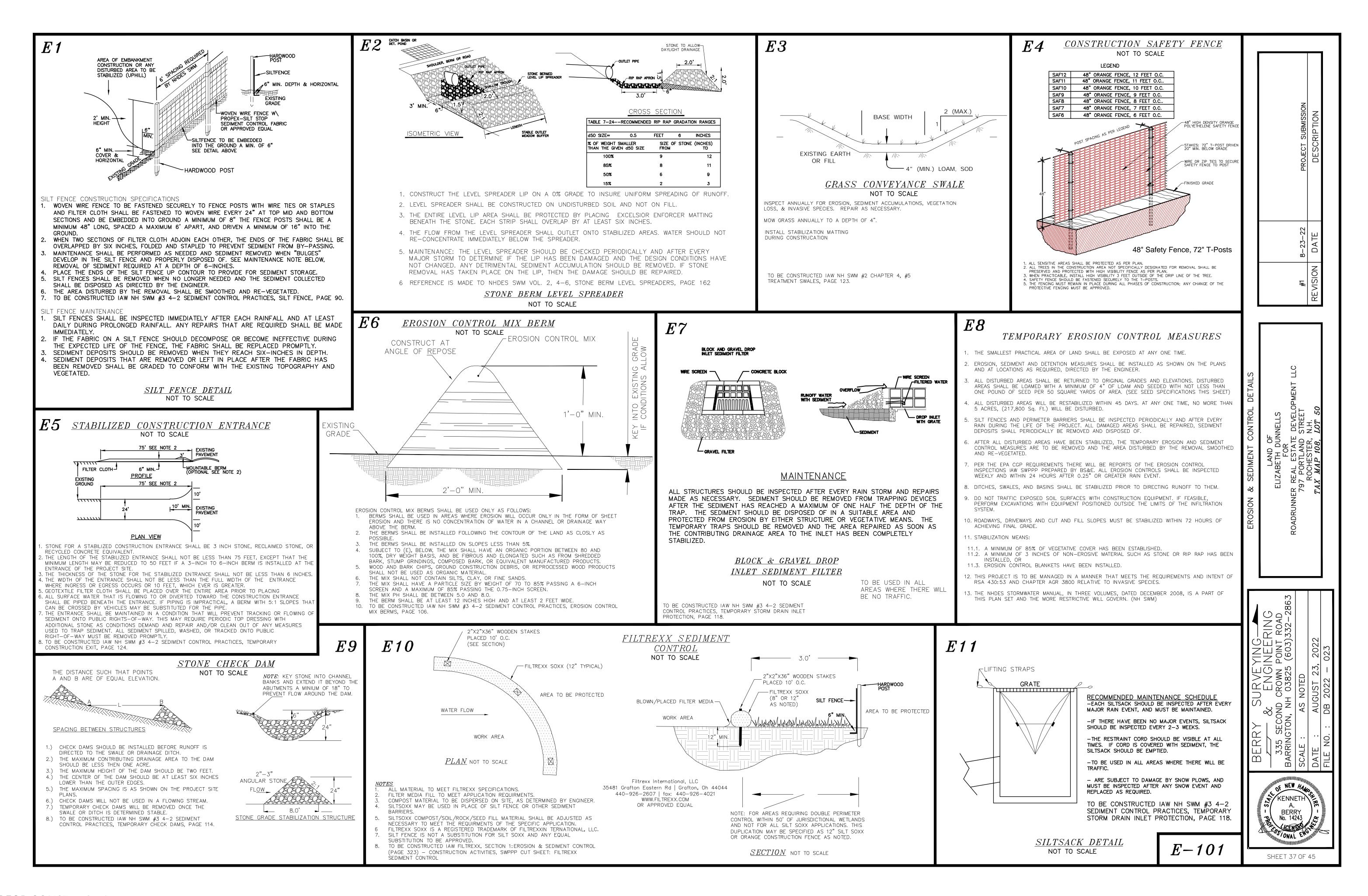
SHEET 32 OF 45

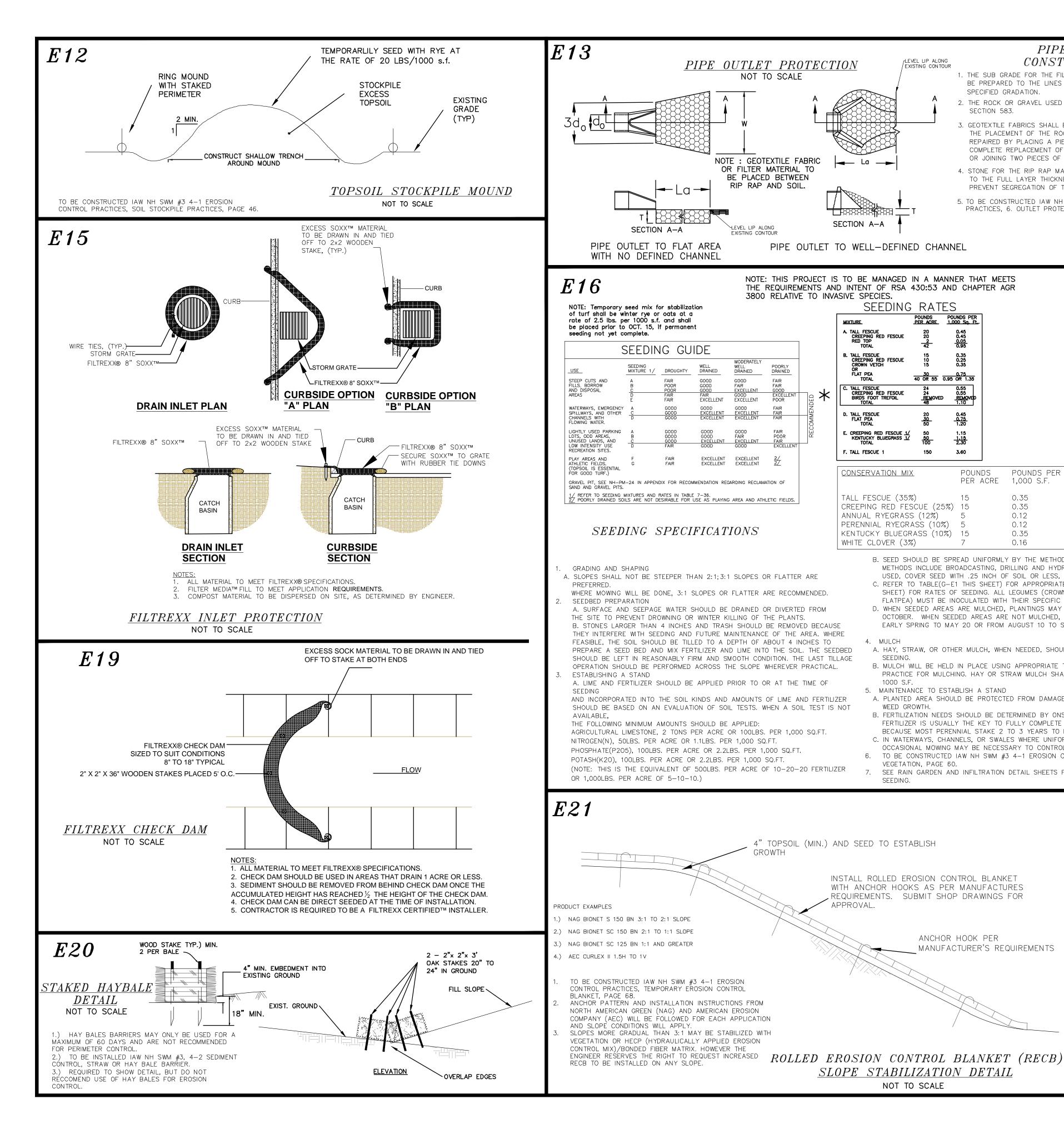












PIPE OUTLET PROTECTION CONSTRUCTION SPECIFICATIONS PIPE OUTLET PROTECTION

1. THE SUB GRADE FOR THE FILTER MATERIAL, GEOTEXTILE FABRIC, AND RIP RAP SHALL NOT TO SCALE BE PREPARED TO THE LINES AND GRADES SHOWN ON THE PLANS. SPECIFIED GRADATION. 2. THE ROCK OR GRAVEL USED FOR FILTER OF RIP RAP SHALL CONFORM TO NHDOT SECTION 583. 3. GEOTEXTILE FABRICS SHALL BE PROTECTED FROM PUNCTURE OR TEARING DURING

SECTION A-A

3800 RELATIVE TO INVASIVE SPECIES.

PIPE OUTLET TO WELL-DEFINED CHANNEL

NOTE: THIS PROJECT IS TO BE MANAGED IN A MANNER THAT MEETS

THE REQUIREMENTS AND INTENT OF RSA 430:53 AND CHAPTER AGR

TALL FESCUE
CREEPING RED FESCUE
RED TOP

TALL FESCUE CREEPING RED FESCUE CROWN VETCH

. TALL FESCUE 1

CONSERVATION MIX

TALL FESCUE (35%)

WHITE CLOVER (3%)

CREEPING RED FESCUE (25%) 15

PERENNIAL RYEGRASS (10%) 5

KENTUCKY BLUEGRASS (10%) 15

ANNUAL RYEGRASS (12%)

SEEDING RATES

POUNDS PER POUNDS PER PER ACRE 1,000 Sq. Ft.

30 0.75 40 OR 55 0.95 OR 1.35

POUNDS

PER ACRE 1,000 S.F.

150

NOTE: GEOTEXTILE FABRIC

OR FILTER MATERIAL TO

BE PLACED BETWEEN

RIP RAP AND SOIL.

SECTION A-A

SEEDING GUIDE

THE PLACEMENT OF THE ROCK RIP RAP 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. 4. STONE FOR THE RIP RAP MAY BE PLACED BY EQUIPMENT AND SHALL BE CONSTRUCTED

TO THE FULL LAYER THICKNESS IN ONE OPERATION AND IN SUCH A MANNER AS TO

5. TO BE CONSTRUCTED IAW NH SWM #2 4-6 CONVEYANCE PRACTICES, 6. OUTLET PROTECTION, PAGE 172.

PREVENT SEGREGATION OF THE STONE SIZES.

TABLE	7-24	-RECOMMENDED	RIP	RAP	GRADA ²	TION RANGES	
d50 SI	ZE=	0.5	FEE	Т	6	INCHES	
	WEIGHT S THE GIVE	SMALLER IN d50 SIZE		SIZE (OF STON	NE (INCHES) TO	
	100%		Ś)		12	
	85%		8	3		11	
	50%		6	3		9	
	15%		2	2		3	

CONSTRUCTION SEQUENCE:

.) CUT AND REMOVE TREES IN CONSTRUCTION AREA ONLY AS REQUIRED, RELOCATE ANY PROJECT T.B.M.

2.) CONSTRUCT AND/OR INSTALL TEMPORARY AND PERMANENT SEDIMENT EROSION AND DETENTION CONTROL FACILITIES AS SPECIFIED. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY SOIL LAND DISTURBANCE AND MUST BE REVIEWED AND APPROVED BY THE COMMUNITY SERVICES DEPARTMENT.

EROSION, SEDIMENT AND DETENTION CONTROL FACILITY SHALL BE INSTALLED & STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.TEMPORARY DIVERSIONS MAY BE REQUIRED. POST CONSTRUCTION STORM WATER MANAGEMENT PRACTICES MUST BE INITIATED AND STABILIZED EARLY IN THE PROCESS. RUNOFF MUST BE DIRECTED TO TEMPORARY PRACTICES UNTIL STORMWATER BMPs ARE STABILIZED.

- 4.) CLEAR, CUT AND DISPOSE OF DEBRIS IN APPROVED FACILITY
- 5.) CONSTRUCT TEMPORARY CULVERTS AS REQUIRED, OR DIRECTED
- 6.) CONSTRUCT ROADWAYS FOR ACCESS TO DESIRED CONSTRUCTION AREAS. ALL ROADS SHALL BE STABILIZED IMMEDIATELY. SEE BEST MANAGEMENT PRACTICES FOR BLASTING ON SHEET C-102.
- 7.) START BUILDING CONSTRUCTION.
- 8.) INSTALL PIPE AND CONSTRUCTION ASSOCIATED APPURTENANCES AS REQUIRED OR DIRECTED. INSTALL RAIN GARDENS. ALL DISTURBED AREAS SHALL STABILIZED IMMEDIATELY AFTER GRADING.
- BEGIN PERMANENT AND TEMPORARY SEEDING AND MULCHING. ALL CUT AND FILL SLOPES AND DISTURBED AREAS SHALL BE SEEDED OR MULCHED AS REQUIRED, OR DIRECTED. NO AREA IS ALLOWED TO BE DISTURBED FOR A LENGTH OF TIME THAT EXCEEDS 45 DAYS BEFORE BEING STABILIZED. DAILY, OR AS REQUIRED. ALL ROADWAYS AND PARKING AREAS SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADES. ALL CUT AND FILL SLOPES SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADES. LIMIT THE LENGTH OF EXPOSURE OF UNSTABILIZED
- 10.) CONSTRUCT TEMPORARY BERMS, DRAINS DITCHES, SILT FENCES, SEDIMENT TRAPS, ETC. MULCH AND SEED AS REQUIRED.
- .) INSPECT AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES DURING CONSTRUCTION. ALL SWPPP INSPECTIONS MUST BE CONDUCTED BY A QUALIFIED PROFESSIONAL SUCH AS A PROFESSIONAL ENGINEER (PE), A CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL (CPESC), A CERTIFIED EROSION SEDIMENT AND STORM WATER INSPECTOR (CESSWI), OR A CERTIFIED PROFESSIONAL IN STORM WATER QUALITY (CPSWQ). INSPECTION REPORTS SHALL BE SUBMITTED TO THE COMMUNITY SERVICES DEPARTMENT. EROSION AND SEDITMENT CONTROL PRACTICES ARE TO BE INSPECTED WEEKLY AND AFTER 0.5" OF RAINFALL.
- 12.) COMPLETE PERMANENT SEEDING AND LANDSCAPING
- 13.) REMOVE TEMPORARY EROSION CONTROL MEASURES AFTER SEEDING AREAS HAVE ESTABLISHED THEMSELVES AND SITE IMPROVEMENTS ARE COMPLETE. 14.) SMOOTH AND REVEGETATE ALL DISTURBED AREAS.
- 15.) FINISH PAVING ALL ROADWAYS.
- 16.) LOT DISTURBANCE, OTHER THAN THAT SHOWN ON THE APPROVED PLANS, SHALL NOT COMMENCE UNTIL AFTER THE ROADWAY HAS THE BASE COURSE O DESIGN ELEVATION AND THE ASSOCIATED DRAINAGE IS COMPLETE AND STABLE.

B. 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. C. REFER TO TABLE(G-E1 THIS SHEET) FOR APPROPRIATE SEED MIXTURES AND TABLE(H-E1 THIS SHEET) FOR RATES OF SEEDING. ALL LEGUMES (CROWNVETCH, BIRDSFOOT TREFOIL, AND FLATPEA) MUST BE INOCULATED WITH THEIR SPECIFIC INOCULANT.

POUNDS PER

0.35

0.35

0.12

0.12

0.35

0.16

D. 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 20 OR FROM AUGUST 10 TO SEPTEMBER 1

4. MULCH

INSTALL ROLLED EROSION CONTROL BLANKET

WITH ANCHOR HOOKS AS PER MANUFACTURES

REQUIREMENTS. SUBMIT SHOP DRAWINGS FOR

SLOPE STABILIZATION DETAIL

NOT TO SCALE

ANCHOR HOOK PER

MANUFACTURER'S REQUIREMENTS

4" TOPSOIL (MIN.) AND SEED TO ESTABLISH

APPROVAL.

- A. HAY, STRAW, OR OTHER MULCH, WHEN NEEDED, SHOULD BE APPLIED IMMEDIATELY AFTER
- B. MULCH WILL BE HELD IN PLACE USING APPROPRIATE TECHNIQUES FROM THE BEST MANAGEMENT PRACTICE FOR MULCHING, HAY OR STRAW MULCH SHALL BE PLACED AT A RATE OF 90LBS PER 5. MAINTENANCE TO ESTABLISH A STAND
- A. PLANTED AREA SHOULD BE PROTECTED FROM DAMAGE BY FIRE, GRAZING, TRAFFIC, AND DENSE
- 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 PERENNIAL STAKE 2 TO 3 YEARS TO BECOME ESTABLISHED.
- C. IN WATERWAYS, CHANNELS, OR SWALES WHERE UNIFORM FLOW CONDITIONS ARE ANTICIPATED, OCCASIONAL MOWING MAY BE NECESSARY TO CONTROL GROWTH OF WOODY VEGETATION. 6. TO BE CONSTRUCTED IAW NH SWM #3 4-1 EROSION CONTROL PRACTICES, PERMANENT
- VEGETATION, PAGE 60. SEE RAIN GARDEN AND INFILTRATION DETAIL SHEETS FOR SPECIFIC PLANTING INSTRUCTIONS AND

E18 DEFINITION OF STABLE:

PER ENV-WQ 1500 ALTERATION OF TERRAIN

- BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED. A MINIMUM OF 85 PERCENT VEGETATED GROWTH HAS BEEN ESTABLISHED. A MINIMUM OF 3 INCHES OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIP-RAP HAS BEEN INSTALLED.
- 4. OR, EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.

ADDITION STABILIZATION NOTES:

- HAY MULCH OR OTHER APPROVED METHODS SHALL BE USED TO CONTROL EROSION OF NEWLY GRADED AREAS. ALL CUT AND FILL SLOPES SHALL BE SEEDED AND MULCHED WITHIN 72 HOURS AFTER THEIR CONSTRUCTION.
- DISTURBED SOIL AREAS SHALL BE EITHER TEMPORARILY OR PERMANENTLY STABILIZED. IN AREAS WHERE FINAL GRADING HAS NOT OCCURRED, TEMPORARY STABILIZATION MEASURES SHOULD BE IN PLACE WITHIN SEVEN (7) CALENDAR DAYS FOR EXPOSED SOIL AREAS THAT ARE WITHIN ONE HUNDRED (100) FEET OF A SURFACE WATER BODY OR A WETLAND AND NO MORE THAN 14 CALENDAR DAYS FOR ALL OTHER AREAS. PERMANENT STABILIZATION SHOULD BE IN PLACE WITHIN THREE (3) CALENDAR DAYS FOLLOWING COMPLETION OF FINAL GRADING OF EXPOSED SOIL AREAS.

WINTER STABILIZATION NOTES

1. ALL DISTURBED AREAS THAT DO NOT HAVE AT LEAST 85% VEGETATIVE COVERAGE PRIOR TO OCTOBER 15TH SHALL BE STABILIZED BY APPLYING MULCH AT A RATE OF 3-4 TONS PER ACRE. ALL SIDE SLOPES, STEEPER THAN 4:1, THAT ARE NOT DIRECTED TO SWALES OR DETENTION BASINS, SHALL BE LINED WITH BIODEGRADABLE /PHOTODEGRADABLE "JUTE MATTING" (EXCELSIOR'S CURLEX II OR EQUAL). ALL OTHER SLOPES SHALL BE MULCHED AND TACKED AT A RATE OF 3-4 TONS PER ACRE. THE APPLICATION OF MULCH AND/OR JUTE MATTING SHALL NOT OCCUR OVER EXISTING SNOW COVER. IF THE SITE IS ACTIVE AFTER OCTOBER 15TH, ANY SNOW THAT ACCUMULATES ON DISTURBED AREAS SHALL BE REMOVED. PRIOR TO SPRING THAW ALL AREAS WILL BE STABILIZED, AS DIRECTED ABOVE.

2. ALL SWALES THAT DO NOT HAVE FULLY ESTABLISHED VEGETATION SHALL BE EITHER LINED WITH TEMPORARY JUTE MATTING OR TEMPORARY STONE CHECK DAMS (APPROPRIATELY SPACED). STONE CHECK DAMS WILL BE MAINTAINED THROUGHOUT THE WINTER MONTHS. IF THE SWALES ARE TO BE MATTED WITH PERMANENT LINERS OR RIPRAP WITH ENGINEERING FABRIC, THIS SHALL BE COMPLETED PRIOR TO WINTER SHUTDOWN OR AS SOON AS THEY ARE PROPERLY GRADED AND SHAPED.

3. PRIOR TO OCT. 15TH ALL ROADWAY AND PARKING AREAS SHALL BE BROUGHT UP TO AND THROUGH THE BANK RUN GRAVEL APPLICATION. IF THESE AREAS' ELEVATIONS ARE PROPOSED TO REMAIN BELOW THE PROPOSED SUBGRADE ELEVATION, THE SUBGRADE MATERIAL SHALL BE ROUGHLY CROWNED AND A 3" LAYER OF CRUSHED GRAVEL SHALL BE PLACED AND COMPACTED. THIS WILL ALLOW THE SUBGRADE TO SHED RUNOFF AND WILL REDUCE ROADWAY EROSION. THIS CRUSHED GRAVEL DOES NOT HAVE TO CONFORM TO NH DOT 304.3, BUT SHALL HAVE BETWEEN 15-25% PASSING THE #200 SIEVE AND THE LARGEST STONE SIZE SHALL BE 2". IF THE SITE IS ACTIVE AFTER OCTOBER 15TH, ANY ACCUMULATED SNOW SHALL BE REMOVED FROM ALL ROADWAY AND PARKING AREAS.

AFTER OCTOBER 15TH, THE END OF NEW HAMPSHIRE'S AVERAGE GROWING SEASON, NO ADDITIONAL LOAM SHALL BE SPREAD ON SIDE SLOPES AND SWALES. THE STOCKPILES THAT WILL BE LEFT UNDISTURBED UNTIL SPRING SHALL BE SEEDED BY THIS DATE. AFTER OCTOBER 15TH, ANY NEW OR DISTURBED PILES SHALL BE MULCHED AT A RATE OF 3-4 TONS PER ACRE. ALL STOCKPILES THAT WILL REMAIN THROUGHOUT THE WINTER SHALL BE SURROUNDED WITH SILT FENCING.

E-102

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DEVELO STREET N.H.

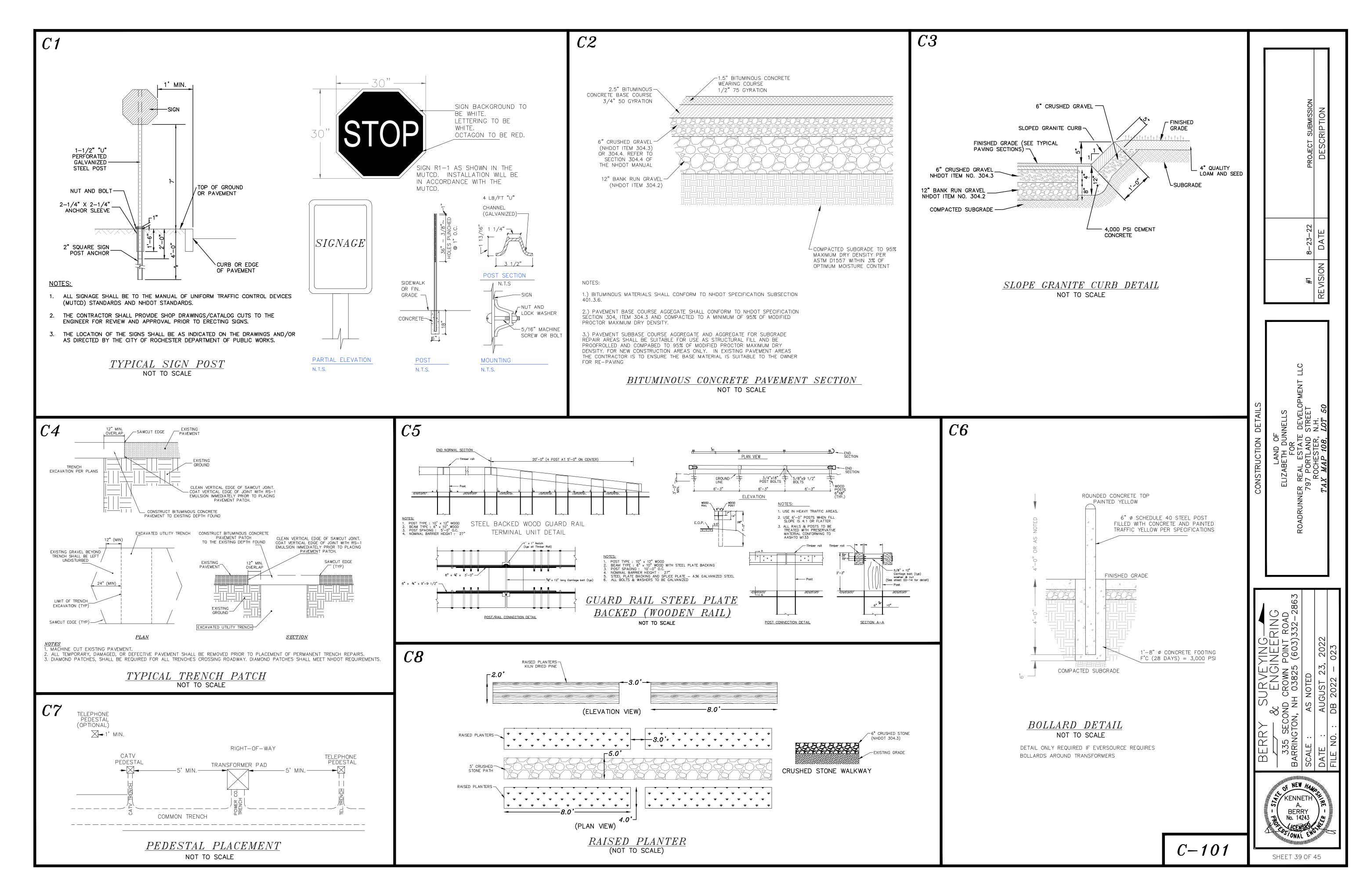
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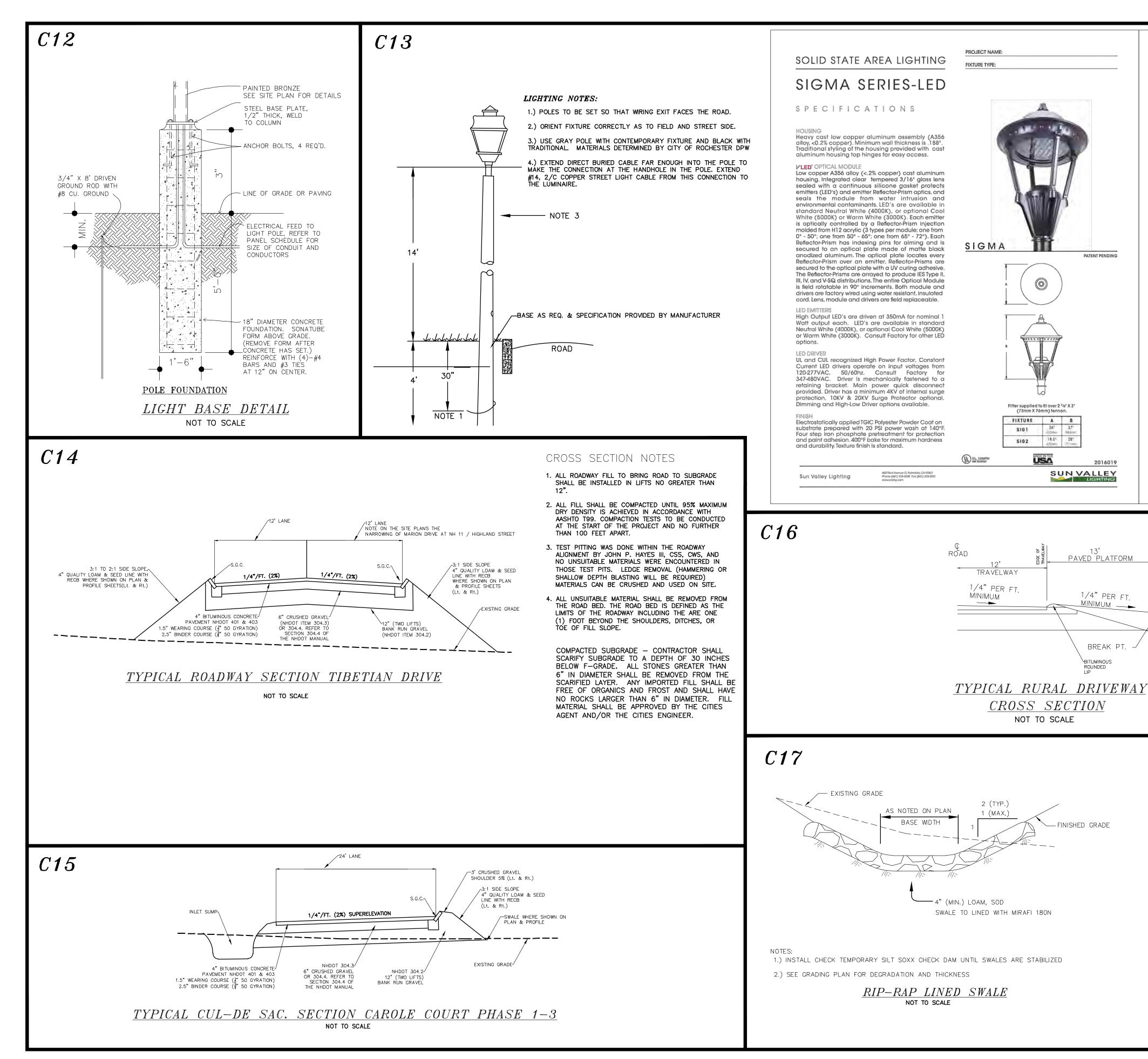
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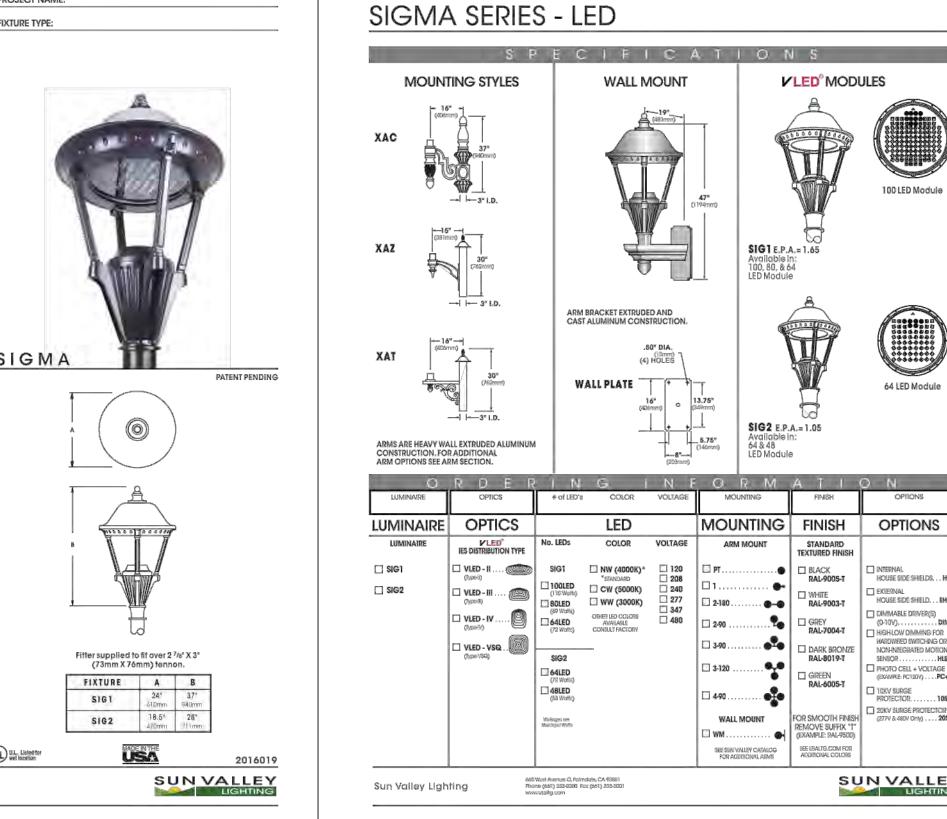
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NOT FOR CONSTRUCTION







GROUND

C18

BEST MANAGEMENT PRACTICES FOR BLASTING

(2) GROUNDWATER CONDITIONS:

(A) THE DRILLER SHALL MAINTAIN DRILLING LOGS TO DOCUMENT:

(3) PLACED IN SECURE CONTAINERS FOR OFF-SITE DISPOSAL;

1) USED IN THE BOREHOLE; 2) RETURNED TO THE DELIVERY VEHICLE; OR

(D) SPILLAGE AROUND THE BOREHOLE SHALL BE: (1) PLACED IN THE BOREHOLE; OR

(C) EXPLOSIVE PRODUCTS SHALL BE MANAGED ON SITE SUCH THAT THEY ARE:

ENV-WQ 1510.03 LOADING PRACTICES. THE FOLLOWING BLAST HOLE LOADING PRACTICES SHALL BE IMPLEMENTED:

(2) CLEANED UP AND RETURNED TO AN APPROPRIATE VEHICLE FOR HANDLING OR PLACEMENT IN SECURED CONTAINERS FOR OFF-SITE DISPOSAL;

HANDLED IN A MANNER THAT PREVENTS RELEASE OF CONTAMINANTS TO THE ENVIRONMENT; AND (G) EXPLOSIVES SHALL BE LOADED IN ACCORDANCE WITH INDUSTRY STANDARD PRACTICES FOR PRIMING, STEMMING,

DECKING AND COLUMN RISE TO MAINTAIN GOOD CONTINUITY IN THE COLUMN LOAD TO PROMOTE COMPLETE

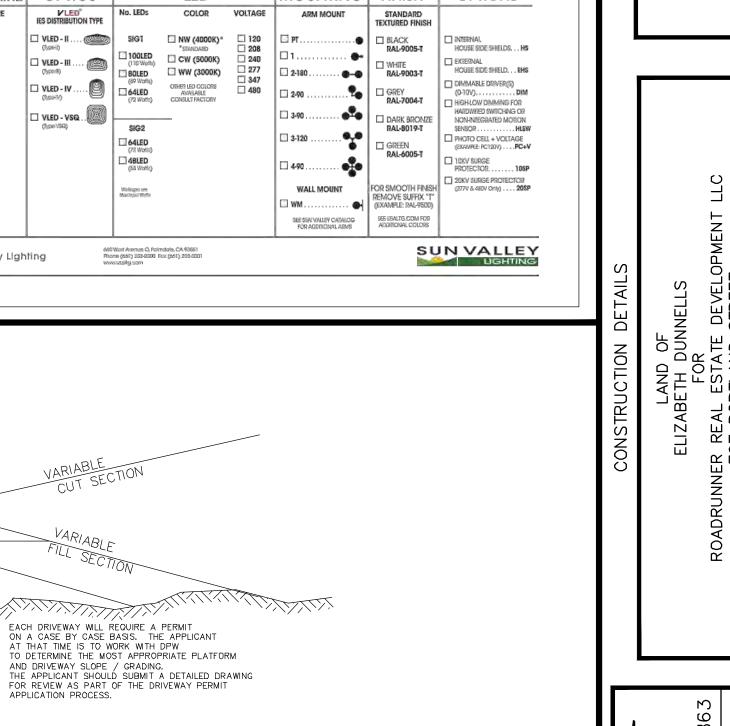
PRE-BLAST SURVEY WILL INCLUDE ALL ABUTTING PROPERTIES AND FOLLOW ALL STATE AND LOCAL REQUIREMENTS.

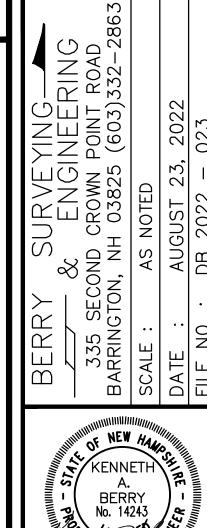
(E) LOADED EXPLOSIVES SHALL BE DETONATED AS SOON AS POSSIBLE AND NOT LEFT IN THE BLAST HOLES OVERNIGHT, UNLESS WEATHER OR OTHER SAFETY CONCERNS REASONABLY DICTATE THAT DETONATION SHOULD BE POSTPONED;

(F) LOADING EQUIPMENT SHALL BE CLEANED IN AN AREA WHERE WASTEWATER CAN BE PROPERLY CONTAINED AND

(B) THE DRILLER SHALL COMMUNICATE THE CONTENTS OF THE DRILLING LOGS DIRECTLY TO THE BLASTER;

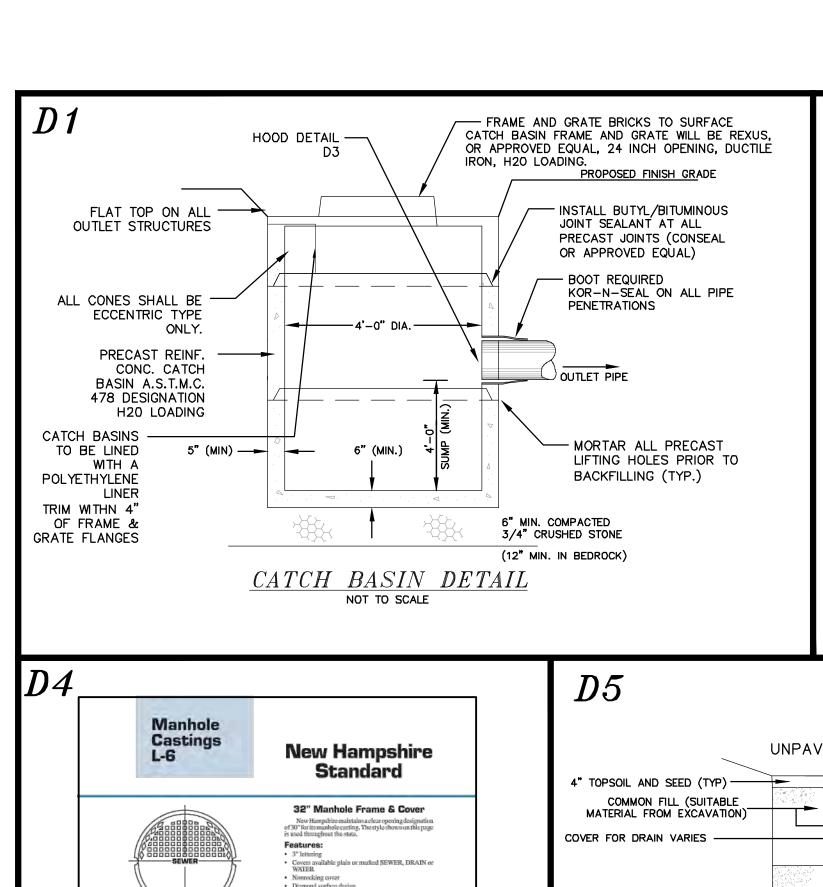
(1) THE DEPTHS AND LENGTHS OF VOIDS, CAVITIES, AND FAULT ZONES OR OTHER WEAK ZONES ENCOUNTERED; AND

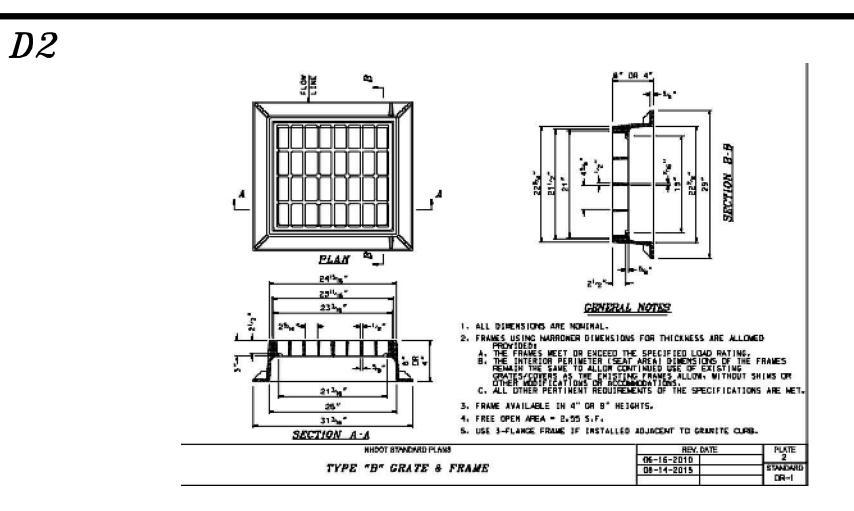




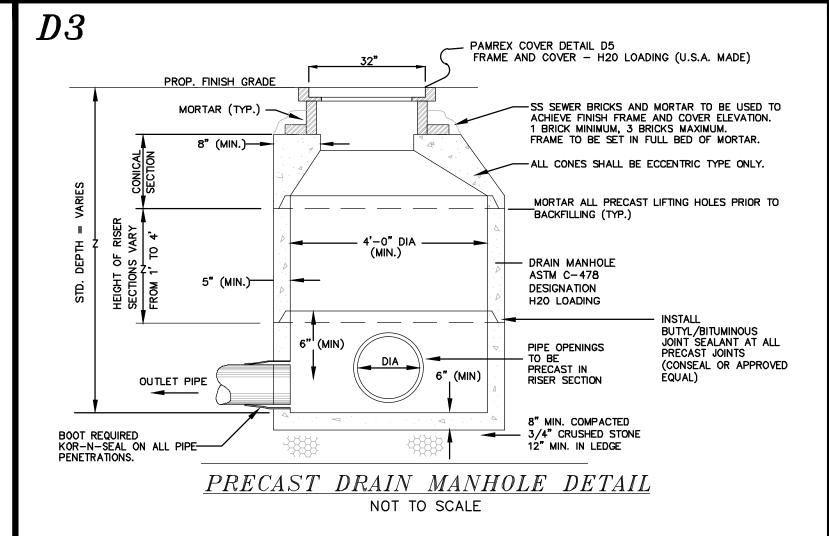
SHEET 40 OF 45

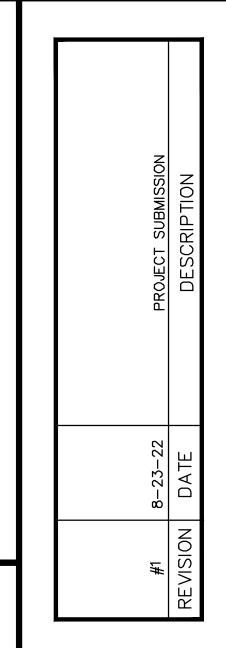
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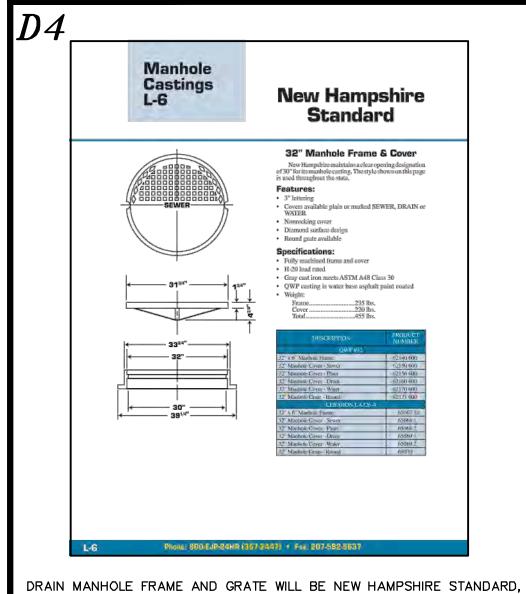




CATCH BASIN GRATE (TYPE "B") NOT TO SCALE

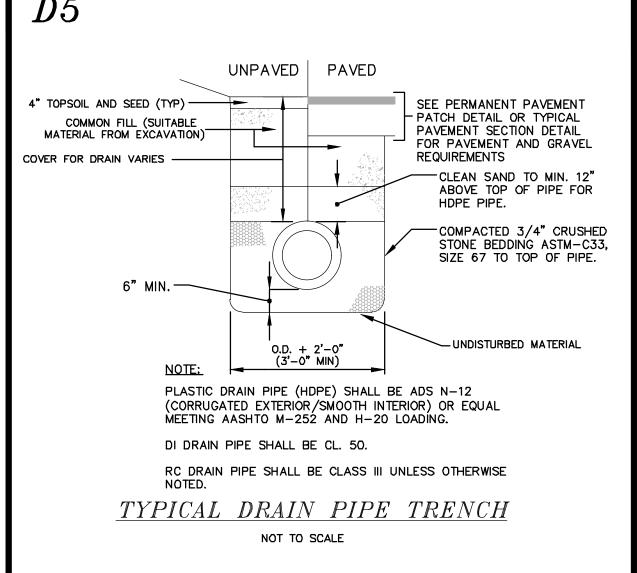


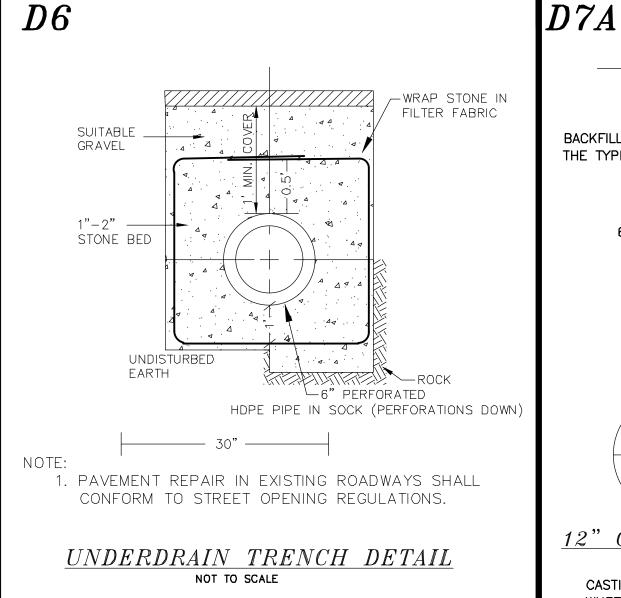


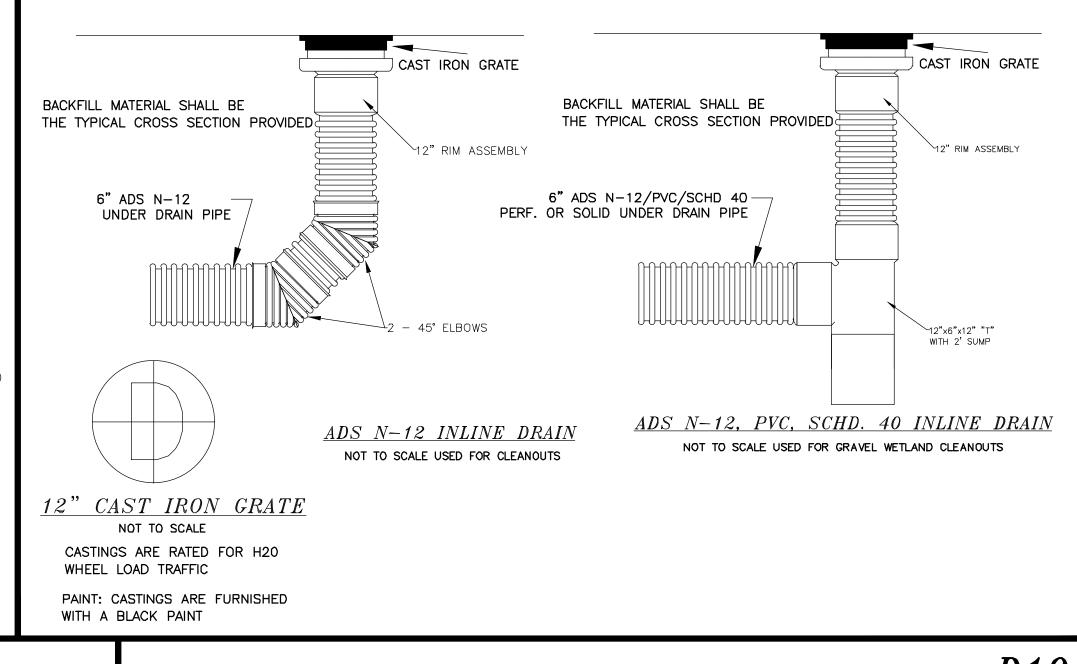


OR APPROVED EQUAL, 32 INCH OPENING, CAST IRON, H20 LOADING.

DRAIN MANHOLE COVER DETAIL NOT TO SCALE

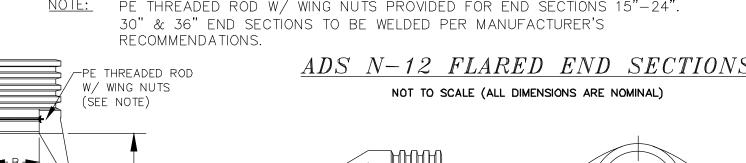


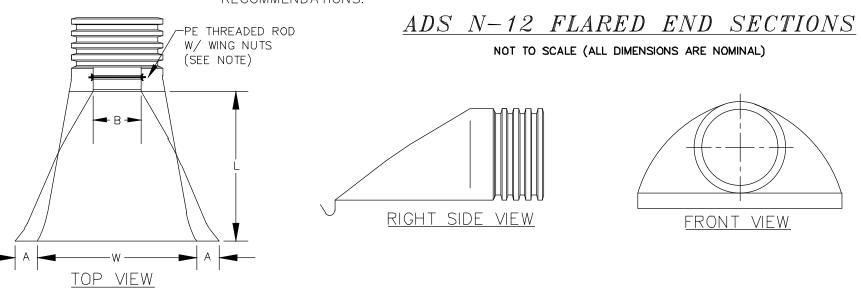


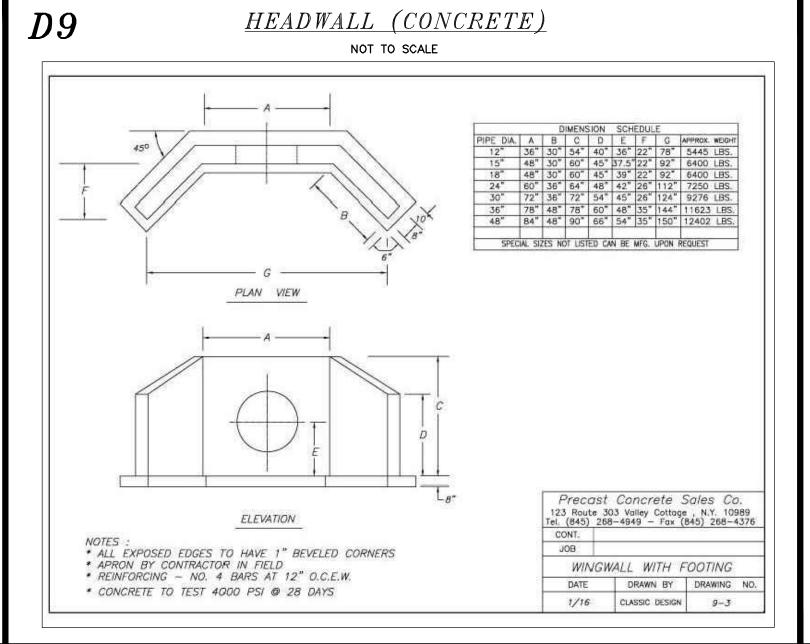


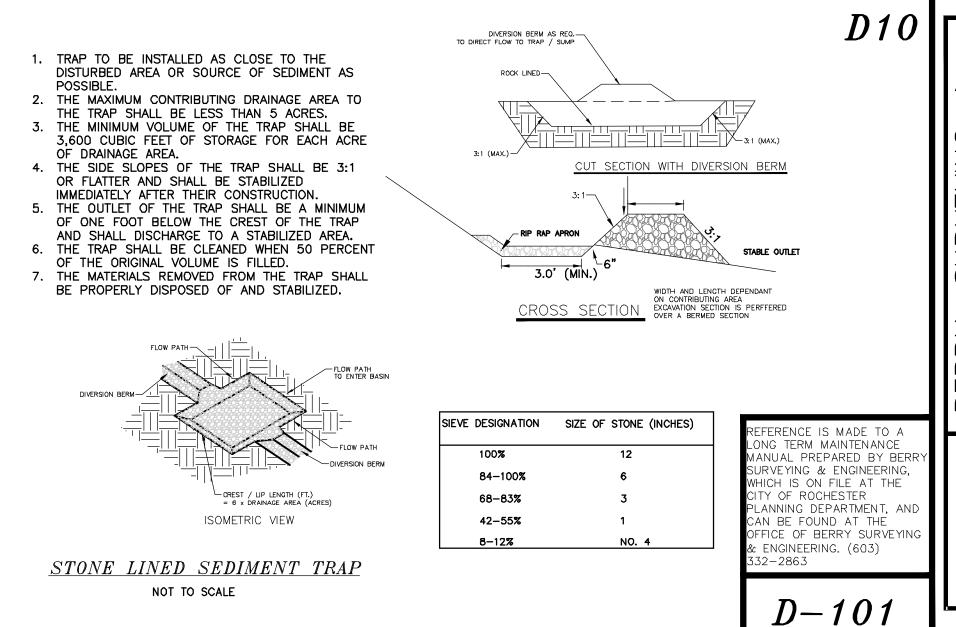
DRAINAGE CONSTRUCTION DETAILS LAND OF ELIZABETH DUNNELLS FOR FOR 797 PORTLAND STREET ROCHESTER, N.H. TAX MAP 108, LOT 50
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PART No.	PIPE SIZE	А	B(MAX)	Н	L	W
1510-NP	15"	6.5"	10"	6.5"	25"	29"
	375 mm	165 mm	254 mm	165 mm	635 mm	735 mm
1810-NP	18"	7.5"	15"	6.5"	32"	35"
	450 mm	190 mm	380 mm	165 mm	812 mm	890 mm
2410-NP	24"	7.5"	18"	6.5"	36"	45"
	600 mm	190 mm	450 mm	165 mm	900 mm	1140 mm
3010-NP	30" 750 mm	10.5" 266 mm	N/A	7.0" 178 mm	53" 1345 mm	68" 1725 mm
3610-NP	36" 900 mm	10.5" 266 mm	N/A	7.0" 178 mm	53" 1345 mm	68" 1725 mm

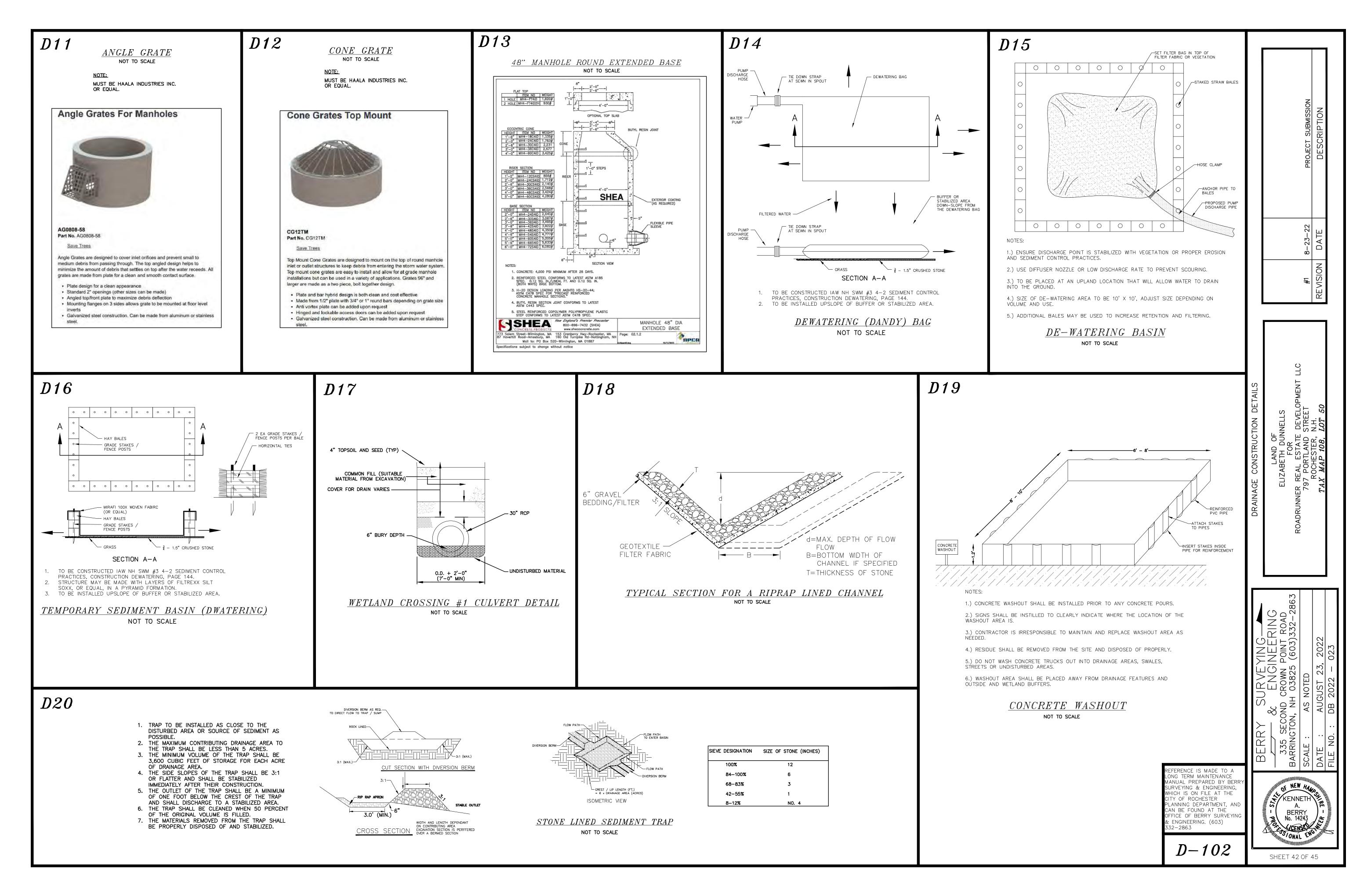


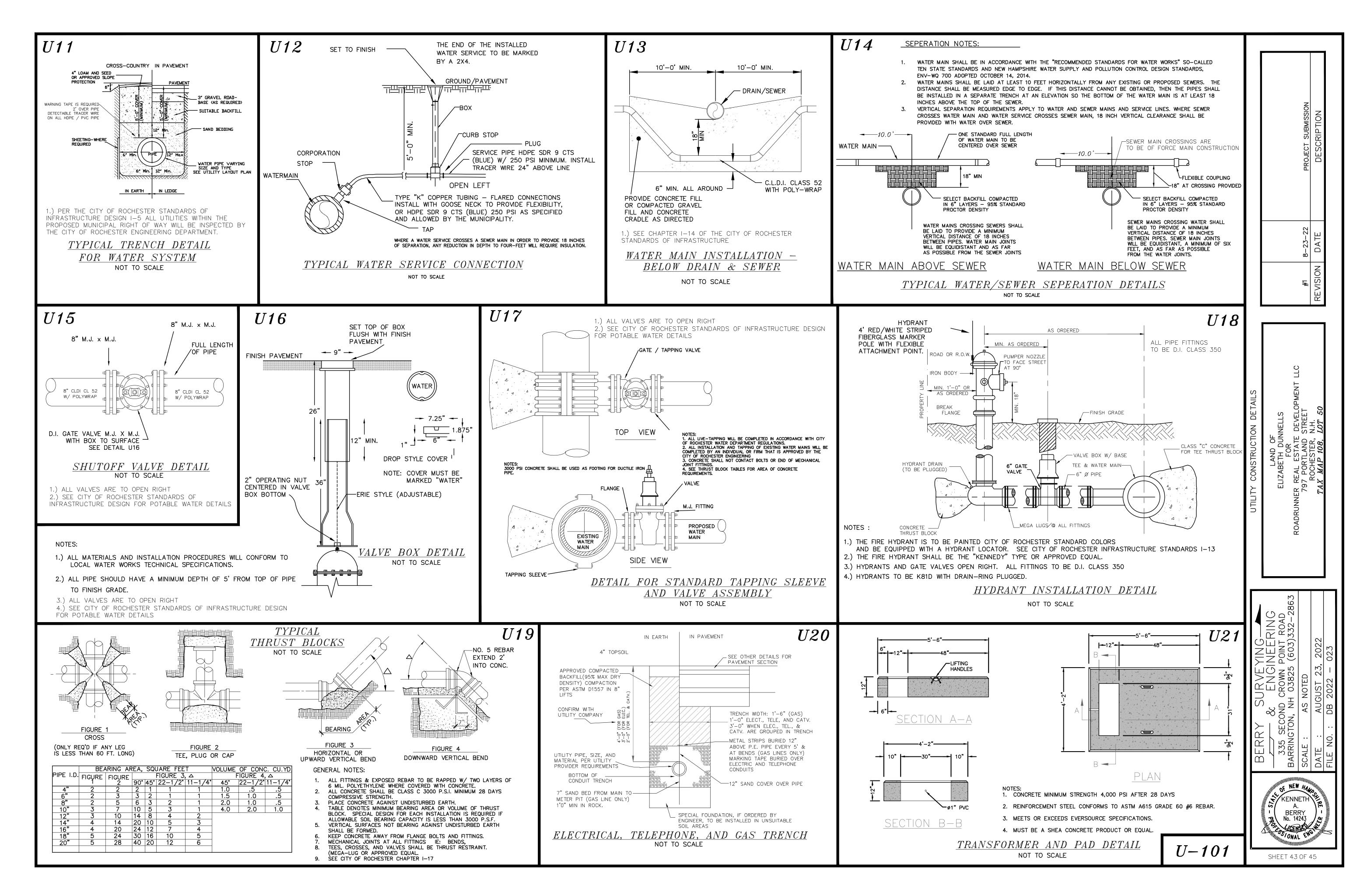


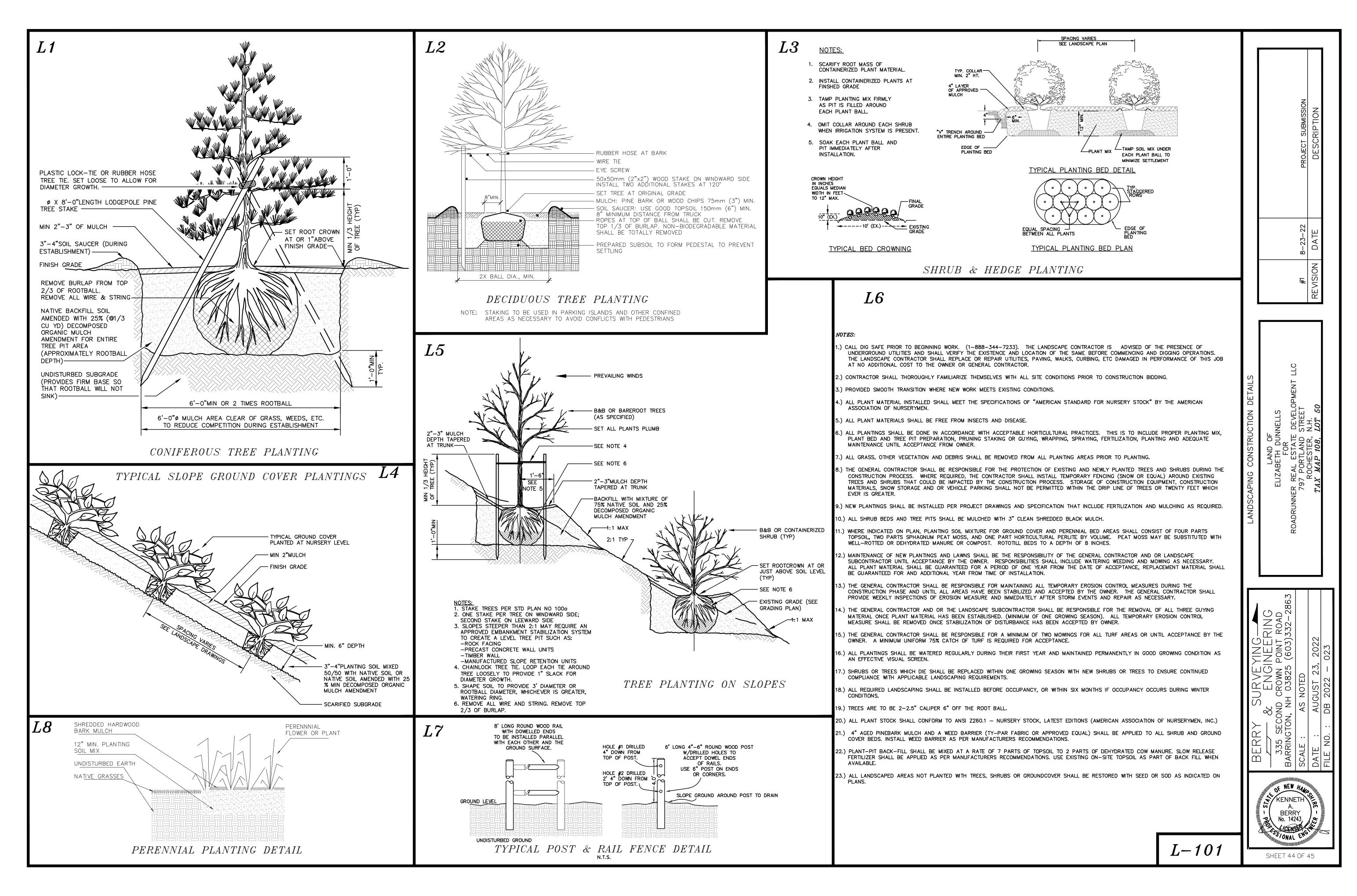


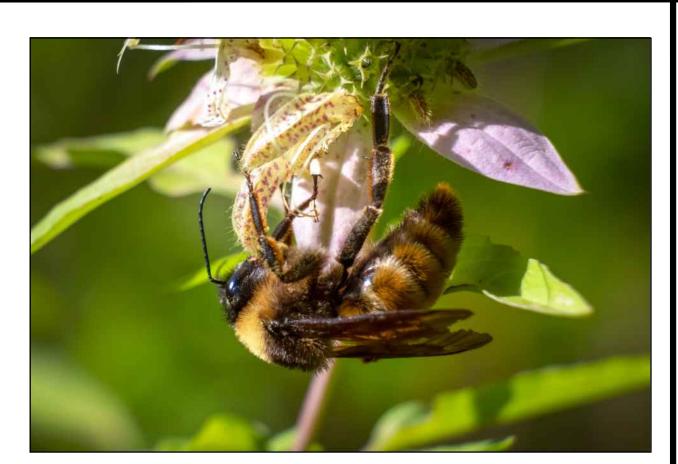


D8









AMERICAN BUMBLE BEE

IDENTIFICATION/DESCRIPTION:

BOMBUS PENSYLVANICUS IS A LARGE BUMBLE BEE WITH THE QUEEN MEASURING 1 IN, THE WORKER FROM 0.5 IN, AND THE MALE FROM 0.75 IN IN LENGTH. THE QUEEN IS MOSTLY BLACK, INCLUDING THE LEGS, SPURS AND TEGULAE (BASE OF WING). TERGITE 1, OR THE MOST ANTERIOR BACK PORTION OF THE QUEEN IS OFTEN YELLOW ESPECIALLY IN THE MIDDLE. WORKER BEES' MIDDLE TERGITES ARE YELLOW, THE TAIL BLACK, AND FACE LONG. THEIR CHEEKS ARE SLIGHTLY LONGER THAN BROAD, AND THE CLYPEUS (NOSE) HAS LARGE PUNCTURES EXCEPT ON THE MID LINE. THE HAIR ON THE TOP OF THE HEAD IS BLACK, SHORT AND EVEN. MALES HAVE A YELLOW ABDOMEN WITH A BLACK HEAD AND BLACK STRIPING IN THE LOWER THORAX.



TRI-COLORED BAT

IDENTIFICATION/DESCRIPTION:

THE TRICOLORED BAT, FORMERLY KNOWN AS THE EASTERN PIPISTRELLE (PIPISTRELLUS SUBFLAVUS), IS A SMALL BAT WEIGHING 0.2 TO 0.3 OUNCES (5 TO 8 GR) AND HAS A WINGSPAN OF 8 TO 10 INCHES. THE TERM "TRICOLORED" REFERS TO THE BAT'S YELLOWISHBROWN COAT THAT IS DARK AT THE BASE, YELLOWISH—BROWN IN THE MIDDLE, AND DARK AT THE TIPS. THE WING MEMBRANES ARE BLACKISH, BUT THE FACE AND EARS HAVE A PINKISH COLOR. AN OBVIOUS IDENTIFYING CHARACTERISTIC OF THIS SPECIES IS THE PINK COLOR OF THE SKIN ON THE RADIUS BONE. THE FEET ARE ALSO RELATIVELY LARGE COMPARED TO ITS BODY SIZE.



NORTHERN BLACK RACER

IDENTIFICATION / DESCRIPTION:

A SLENDER BLACK SNAKE MEASURING 36-60 INCHES. BLACK RACERS ARE GLOSSY BLACK ON THE TOP AND BOTTOM WITH A WHITE THROAT AND CHIN. YOUNG RACERS ARE PATTERNED WITH BROWN OR REDDISH PATCHES ON A LIGHTER BASE OF GRAY.



A THIN, SLENDER BRIGHT-GREEN SNAKE MEASURING 10-20



IDENTIFICATION / DESCRIPTION:

INCHES. THE UNDERSIDE IS WHITE OR A PALE YELLOW.



LITTLE BROWN BAT

IDENTIFICATION/DESCRIPTION:

THE LITTLE BROWN BAT IS A SMALL MAMMAL WITH A BODY LENGTH OF 2 1/2-4" AND WEIGHING APPROXIMATELY 1/8 TO 1/2 AN OUNCE. THE WINGSPAN OF LITTLE BROWN BATS RANGE FROM 9 - 11". BATS ARE THE ONLY MAMMALS THAT ENGAGE IN TRULY ACTIVE FLIGHT. AS THEIR NAME SUGGESTS THEY ARE GLOSSY BROWN ABOVE WITH A LIGHTER GRAY COLOR BELOW. THESE BATS CAN LIVE 20 TO 30



NORTHERN LONG-EARED BAT

IDENTIFICATION / DESCRIPTION:

THE NORTHERN LONG-EARED BAT IS A MEDIUM-SIZED BAT WITH A BODY LENGTH OF 3 TO 3.7 INCHES BUT A WINGSPAN OF 9 TO 10 INCHES. THEIR FUR COLOR CAN BE MEDIUM TO DARK BROWN ON THE BACK AND TAWNY TO PALE—BROWN ON THE UNDERSIDE. AS ITS NAME SUGGESTS, THIS BAT IS DISTINGUISHED BY ITS LONG EARS, PARTICULARLY AS COMPARED TO OTHER BATS IN ITS GENUS, MYOTIS



EASTERN SMALL-FOOTED BAT

IDENTIFICATION / DESCRIPTION:

THE EASTERN SMALL-FOOTED BAT HAS BROWNISH FUR, OFTEN WITH A GOLDEN SHEEN, THAT CONTRASTS WITH ITS BLACKISH FACE AND EARS, AND
BLACKISH—BROWN WINGS AND TAIL MEMBRANE. IT CAN BE DISTINGUISHED FROM
OTHER MYOTIS SPECIES BY ITS BLACK MASK AND SMALL SIZE. THE BODY IS LITTLE MORE THAN 31/2 INCHES LONG, INCLUDING A 11/2-INCH TAIL. ITS SMALL FEET, WHICH PROVIDE THE COMMON NAME, ARE LESS THAN A HALF-INCH AND ITS WINGSPAN RANGES FROM 81/4 TO 93/4 INCHES. THIS SPECIES FLIES SLOWLY AND ERRATICALLY, USUALLY ABOUT ONE TO THREE YARDS ABOVE THE GROUND.



SILVER HAIRED BAT

IDENTIFICATION / DESCRIPTION:

THE SILVER-HAIRED BAT IS A MEDIUM-SIZED BAT WITH VERY DARK FUR TIPPED WITH SILVER OR WHITE. THE WINGS AND TAIL MEMBRANE ARE BLACK. EARS ARE SHORT AND ROUND WITH A SHORT, BLUNT-TIPPED TRAGUS. THE DORSAL SURFACE OF THE TAIL MEMBRANE IS PARTIALLY FURRED AND THE CALCAR LACKS A KEEL



BLANDINGS TURTLE

IDENTIFICATION / DESCRIPTION:

A 7- TO 9-INCH TURTLE WITH YELLOW SPECKLES THAT OFTEN RUN TOGETHER TO FORM STREAKS ON THE CARAPACE. EASILY IDENTIFIED WHEN BASKING FROM ITS CHARACTERISTIC YELLOW THROAT AND CHIN.



SPOTTED TURTLE

IDENTIFICATION / DESCRIPTION:

A SMALL 3-5 INCH TURTLE RECOGNIZED BY NUMEROUS YELLOW SPOTS COVERING A DARK CARAPACE. THE NUMBER OF SPOTS IS VARIABLE. SPOTS CAN ALSO BE FOUND ON THE HEAD AND LIMBS.



WOOD TURTLE

IDENTIFICATION/DESCRIPTION:

A 5-8 INCH TURTLE CHARACTERIZED BY ITS HIGHLY SCULPTED SHELL WHERE EACH LARGE SCUTE TAKES AN IRREGULAR PYRAMIDAL SHAPE. THE NECK AND FORELIMBS ARE ORANGE.



SHEET 45 OF 45

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