



Amendment to Approved Project City of Rochester, New Hampshire

Property Address 60 Farmington Road Case # 216-8, 9, 10 Type of project: Site Plan X; Subdivision ___; Lot Line Adjustment ___; Other Project name Proposed Excavation Expansion / ProposedCommercial Development Date of original Planning Board approval February 22, 2016 (Last Amended 8/17) Description of amendment The Applicant is seeking to add an additional phase to the project by expanding the previously approved excavation area (approved in January 2017). The excavation of the site would include the cutting of trees, filling of wetlands (approved by the NHDES in 2017), relocation of streams, construction of temporary sedimentation basins, excavation of materials, and stabilization of the area. In addition, the applicant is providing additional detail in support of the conceptual layout design approved by the the Planning Board in August 2017. The layout change includes a reduction of the total footprint of proposed structures, wetland impacts, and an increase in the infiltration of stormwater. Would this affect a wetland or wetland buffer or require a conditional use? Yes X No Name of applicant or agent filling out this form Kenneth A. Mavroegeorge, PE Phone Number: 603-433-8818 Email Address: kamavrogeorge@tighebond.com Applicant? _____ Agent? X Today's date 3/5/2018 Please note: There is a \$125.00 fee for amendments. They are reviewed by the Planning Board and a public hearing is held. Abutters must be renotified by the applicant. The applicant must submit any supplementary materials necessary to explain and support the amendment, such as a narrative and plans. This form, the abutter's list, the fee when applicable, and other necessary materials must be submitted at least 17 days prior to the Planning Board meeting at which the amendment will be presented (by the Friday, 2-1/2 weeks prior to the meeting to allow for public notice). ----- Office use below ------Fee required? Yes No Check # Staff initials that check received Amendment approved Amendment denied Date of Planning Board action

Signature:

______ Date: Macintosh HD:Users:jaredrose:Desktop:Application for Amendment.doc

Case # 216-8, 9, 10

Proposed Excavation Area/Commercial Development 60 Farmington Road - Rochester, NH

March 5, 2017

Narrative:

On February 26, 2016, the Rochester Planning Board approved the site plans for the second phase of the Ridge Marketplace with approximately 161,660 sf in commercial space. In December of 2016, the Planning Board approved breaking the project up into two phases. The first phase of work included selective clearing of approximately 2 acres at the site. As of March 2018, this clearing has

Subsequently, in January of 2017, the Planning Board approved a third phase to the construction to allow for the excavation of approximately 6.8 acres of the site. In August of 2017, the Applicant obtained an AOT permit (for excavation) from the NHDES for this phase and as of March 2018, this

With this current application, the Applicant seeks to further define the phasing of the development by expanding the ongoing excavation activities. Thus, they have provided an updated excavation plan set that includes a proposed expansion to the ongoing work that was originally approved in January 2017. This updated excavation area plan set also includes a phasing plan sheet that outlines

Phase I: Tree Clearing (Approved in December 2016)

Phase II: Excavation of Approximate 6.8 acres (Approved in January 2017)

Phase III: Excavation of Approximate 15.5 acres (Proposed in March 2018)

Phase IV: Commercial Development (Layout Conceptually Approved in August 2017)

In addition to the revised phasing of the development, the excavation plan set proposes the construction of a temporary stormwater basin located in the area where an infiltration basin will reside under the full build out of the development (Phase IV). The goal of this additional excavation work is to bring the site down to subgrade by removing excess ledge. Bringing the site down to subgrade will increase marketability for tenants, reduce site cost by removing materials over a longer period of time, and provide for the relocation of the onsite stream networks during the dryer months of the year (projected in summer of 2018). As stated in previous meetings with the Planning Board, no infrastructure work (buildings, parking, utilities, landscaping, etc.) will progress at the site until detailed design drawings are provided to the City and other required state permits are secured **State Permitting Update:**

Wetlands:

In April of 2017, the Applicant made changes to the site plan which reduced the amount of wetland impacts by nearly 9,000 sf. With this reduction in impacts, the Applicant was able to address the concerns of the NHDES and other wetland permitting agencies and secure the wetland dredge and fill permit. In the fall of 2017, the Applicant submitted a payment to the state for the Aquatic Resource Mitigation Fund (ARM Fund). Alteration of Terrain:

Since the August 2017 PB meeting, the Applicant has also submitted and obtained an Alteration of Terrain Permit for the full commercial development layout. The layout presented to the Alteration of Terrain Bureau was the same as the one conceptually approved by the Planning Board back in August and approved by the NHDES Wetlands Bureau with the exceptions noted in the breakdown on the next page. A copy of the NHDES approved plans and a copy of the permit has been provided to the Planning Department.

Proposed Commercial Development – 60 Farmington Road Rochester, NH

1 of 2

NHDOT:

Discussions between the NHDOT and the Applicant are ongoing and updates will be provided to City Staff as they are obtained.

List of Submitted Plans

- "60 Farmington Road Proposed Excavation Area Site Plans", last revised March 5, 2018;
- "60 Farmington Road Proposed Commercial Development Site Plans", last revised March 5, 2018;

Modifications to the Site Plan

The following is a summary of the changes made to the site plan that were a result of the permitting processes with the NHDES between August and December 2017.

- Parking Lot Revisions:
 - The total parking proposed increased from 658 to 694 spaces. This provides approximately 6.3 spaces per 1000 sf of GFA. This is an increase from the previously approved design which had 4.07 spaces per 1000 sf of GFA. The increase is due to tenant specific requests for additional parking.
- Wetland Impacts/Stormwater
 - o The NHDES AoT Bureau approved stormwater management plan for this revised design includes, four (4) underground infiltration basins, three (3) rain gardens, and one (1) stormwater wetland. These treatment devices have been located strategically in areas where fill is to be placed due to the presence of ledge at the
 - o Due to the addition of the infiltration areas, the gravel wetland has been removed and the stormwater wetland has been sized to accommodate for future development (increased impervious area).
- Marketplace Boulevard
 - o The proposed future City right of way, Marketplace Boulevard, has been extended further south and west through the development in response to feedback received from property abutters. The relocation of this road allows for two additional bus stops in the commercial district (one in each direction) and a road that will cross the abutting property at a more perpendicular angle.

Special Note

As discussed previously with the Board, developments of this size are fluid in nature and evolve as tenants are secured. It is extremely likely that these will not be the final changes to the site plan as more tenants sign on to be a part of The Ridge Phase II.

Proposed Commercial Development – 60 Farmington Road Rochester, NH

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W-2157-1 March 5, 2018

Mr. Seth Creighton, Chief Planner City Hall, Second Floor 31 Wakefield Street Rochester, NH 03867-1917



Re: Application for Amendment to an Approved Project Proposed Commercial Development 60 Farmington Road (Route 11)

Dear Mr. Creighton:

On behalf of Farmington Associates Properties, LLC, we are pleased to submit the following additional information in support of the Application for Amendment to an Approved Project for The Ridge Marketplace:

- Three 22" x 34" copies of the "60 Farmington Road Proposed Excavation Area Site Plans", last revised March 5, 2018;
- Twenty-two 11" x 17" copies of the "60 Farmington Road Proposed Excavation Area Site Plans", last revised March 5, 2018;
- Three 22" x 34" copies of the "60 Farmington Road Proposed Commercial Development Site Plans", last revised March 5, 2018;
- Twenty-two 11" x 17" copies of the "60 Farmington Road Proposed Commercial Development Site Plans", last revised March 5, 2018;
- Twenty-two copies of the Application for Amendment to an Approved Project, dated March 5, 2018;
- Twenty-two copies of the "Project Narrative", dated March 5, 2018;
- Three sets of Abutter Labels;
- Check in the amount of \$179.88 of which \$125.00 is for the Application fee and \$54.88 is for abutter fees;
- CD-ROM of the above materials.

The enclosed application proposes amend the Rochester Planning Board approval to incorporate the site layout changes made during the wetland permitting process, stormwater management system changes designed as part of the Alteration of Terrain permitting process, and the addition of an additional phase to the ongoing excavation work at the site.

Wetlands:

In April of 2017, the Applicant made changes to the proposed development's site plan which reduced the amount of wetland impacts by nearly 9,000 sf. With this reduction, the Applicant was able to address the concerns of the NHDES and other wetland permitting agencies and secure the wetland dredge and fill permit. In the fall of last year, the Applicant submitted a payment to the state for the Aquatic Resource Mitigation Fund (ARM Fund). The enclosed plan set for the commercial development incorporates the layout changes from the NHDES approved set.

177 Corporate Drive • Portsmouth, NH 03801-6825 • Tel 603.433.8818

www.tighebond.com



Alteration of Terrain:

Since the August 2017 PB meeting, the Applicant has also submitted and obtained an Alteration of Terrain Permit for the commercial development. The layout presented to the Alteration of Terrain Bureau was the same as the one conceptually approved by the Planning Board back in August and approved by the NHDES Wetlands Bureau. A copy of the NHDES approved plans and a copy of the permit has been provided to the Planning Department.

Site Plan Review:

As was requested at that Planning Board meeting in August 2017, the Applicant is providing a more detailed plan set in support of the site layout that was conceptually approved by the Rochester Planning Board. Additional details that have been added include preliminary site, grading, utility, and landscaping layouts as well as truck turning and construction detail sheets.

Phasing/Excavation Expansion:

As the Applicant has made clear in the past, it is their intent to phase the construction of the project. Thus, they have provided an updated excavation plan set that includes a proposed expansion to the ongoing excavation area (originally approved in January 2017). This updated excavation area plan set includes a phasing sheet that outlines the following phases of construction:

Phase I: Tree Clearing (Approved in December 2016)

Phase II: Excavation of Approximate 6.8 acres (Approved in January 2017)

Phase III: Excavation of Approximate 15.5 acres (Proposed in March 2018)

Phase IV: Commercial Development (Layout Conceptually Approved in August 2017)

A more in-depth summary of the proposed changes has been included on the enclosed narrative.

We respectfully request to be placed on the March 15, 2018 TRG and on the Planning Board's April 2, 2018 meeting agendas to discuss the above described Amendment to the Approved Site Plan.

We look forward to continuing to work with the City of Rochester staff and Planning Board on this project. Please contact me at (603) 433-8818 if you have any questions.

Sincerely,

Kenneth A. Mavrogeorge, P.E.

Project Manager

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Enclosures

Cc: Doug Richardson, Farmington Associates Properties, LLC, (via email)
Josh Levy, Farmington Associates Properties, LLC, (via email)

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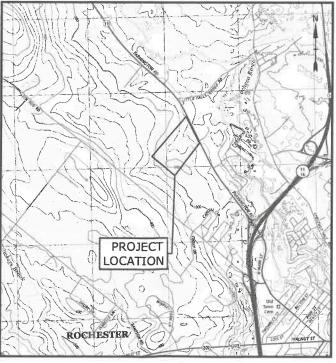






DECEMBE	R 13, 20	16)
LAST REVISED	MARCH	5,	2018

	LIST OF DRAWINGS	
SHEET NO.	SHEET TITLE	LAST REVISED
	COVER SHEET	03/05/2018
1 OF 3	EXISTING CONDITIONS PLAN	10/23/2016
2 OF 3	EXISTING CONDITIONS PLAN	10/23/2016
3 OF 3	EXISTING CONDITIONS PLAN	10/23/2016
C-101	EXISTING CONDITIONS / SUBSURFACE DATA LOCATION PLAN	03/05/2018
C-102	PHASE II EXCAVATION GRADING, DRAINAGE & EROSION CONTROL PLAN	03/05/2018
C-103	PHASE III EXCAVATION EXPANSION PLAN	03/05/2018
C-501	EROSION CONTROL NOTES & DETAILS SHEET	03/05/2018
C-601	PHASING PLAN	03/05/2018



LOCATION MAP

PREPARED BY:







OWNERS/APPLICANT:

Farmington Associates Properties, LLC 322 Reservoir Street Needham, MA 02494

PERMIT	STATUS	PERMIT NO.	DATE
ROCHESTER SITE PLAN REVIEW	APPROVED	216-8, 9, 10-GRD-15	2/25/2016
NHDES ALTERATION OF TERRAIN (PHASE II EXCAVATION)	APPROVED	AoT-1234	4/6/2017
NHDES ALTERATION OF TERRAIN (PHASE IV COMMERCIAL DEVELOPMENT)	APPROVED	AoT-1351	12/7/2017
NHDES STANDARD DREDGE AND FILL	APPROVED	2016-00333	4/14/2017

CERTIFIED BY	DATE

FOR MORE INFORMATION ABOUT THESE SITE PLANS CONTACT THE CITY OF ROCHESTER PLANNING DEPARTMENT (603) 335-1338.

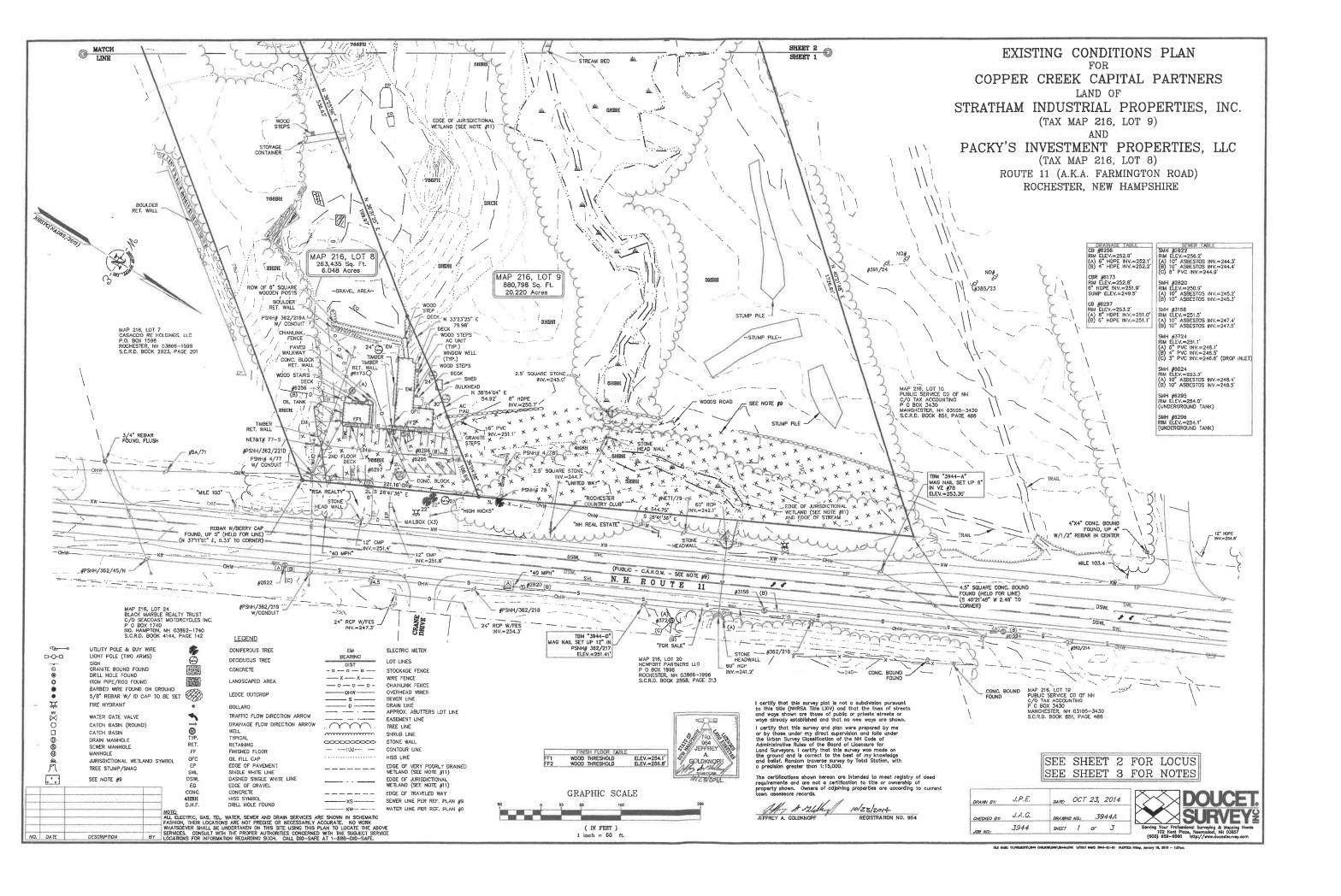


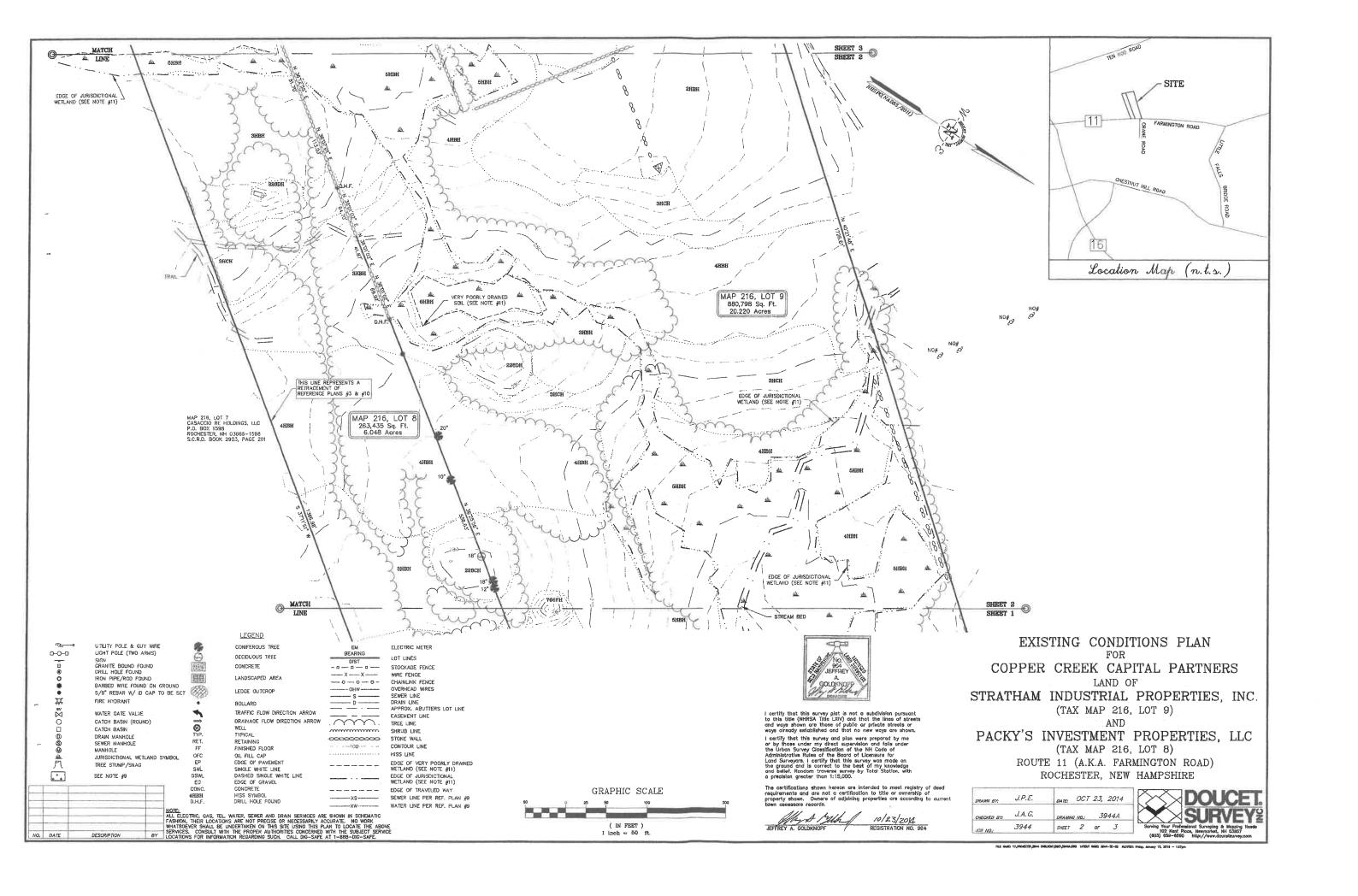
<u>INSTRUCTION NOTES:</u>
THE CONTRACTOR SHALL NOT RELY ON SCALED DIMENSIONS AND SHALL CONTACT THE ENGINEER FOR CLARIFICATION IF A

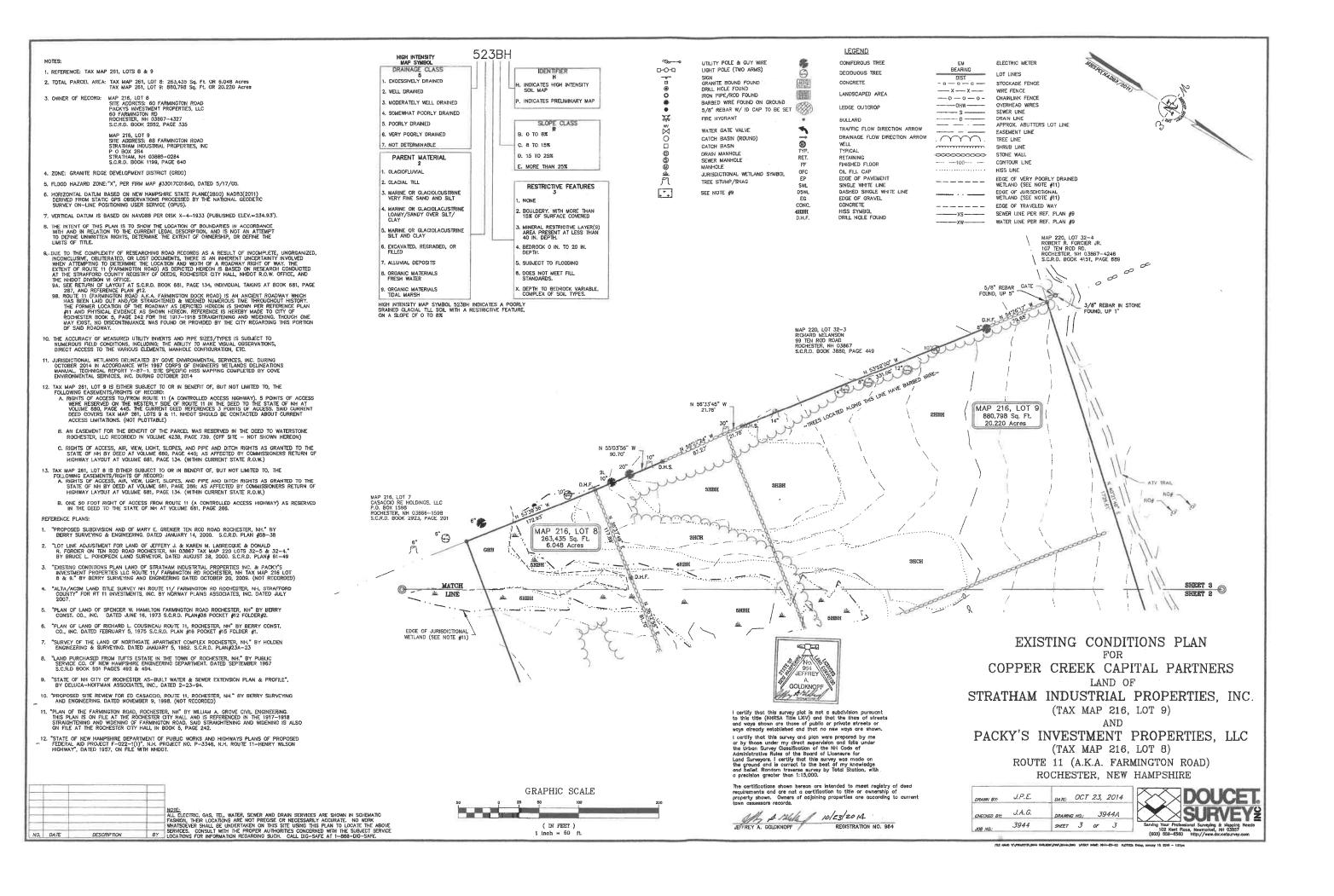
TIGHE & BOND. ASSUMES NO RESPONSIBILITY FOR ANY ISSUES LEGAL OR OTHERWISE, RESULTING FROM CHANGES MADE TO THESE DRAWINGS WITHOUT WRITTEN AUTHORIZATION OF TIGHE & BOND.

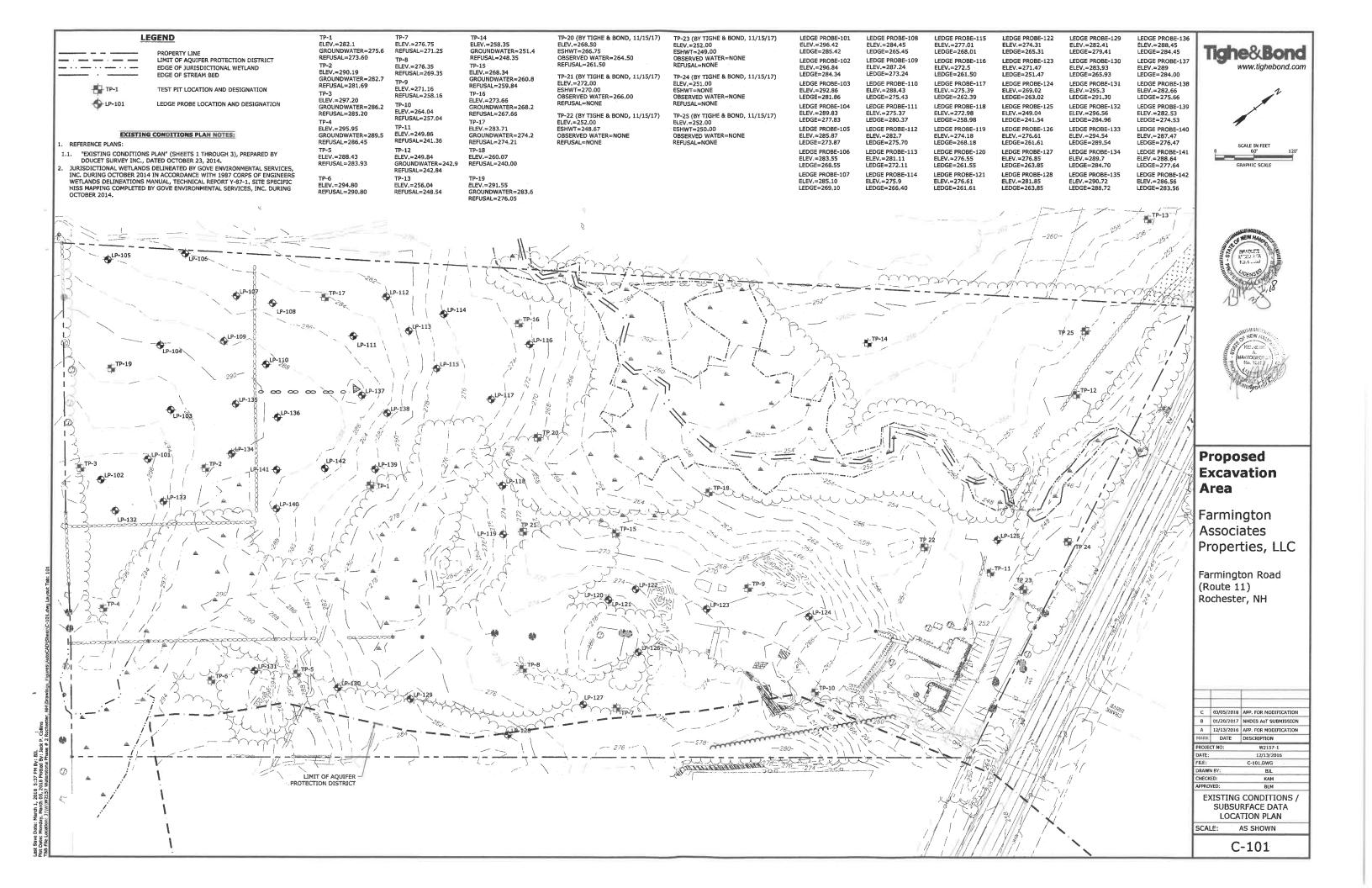


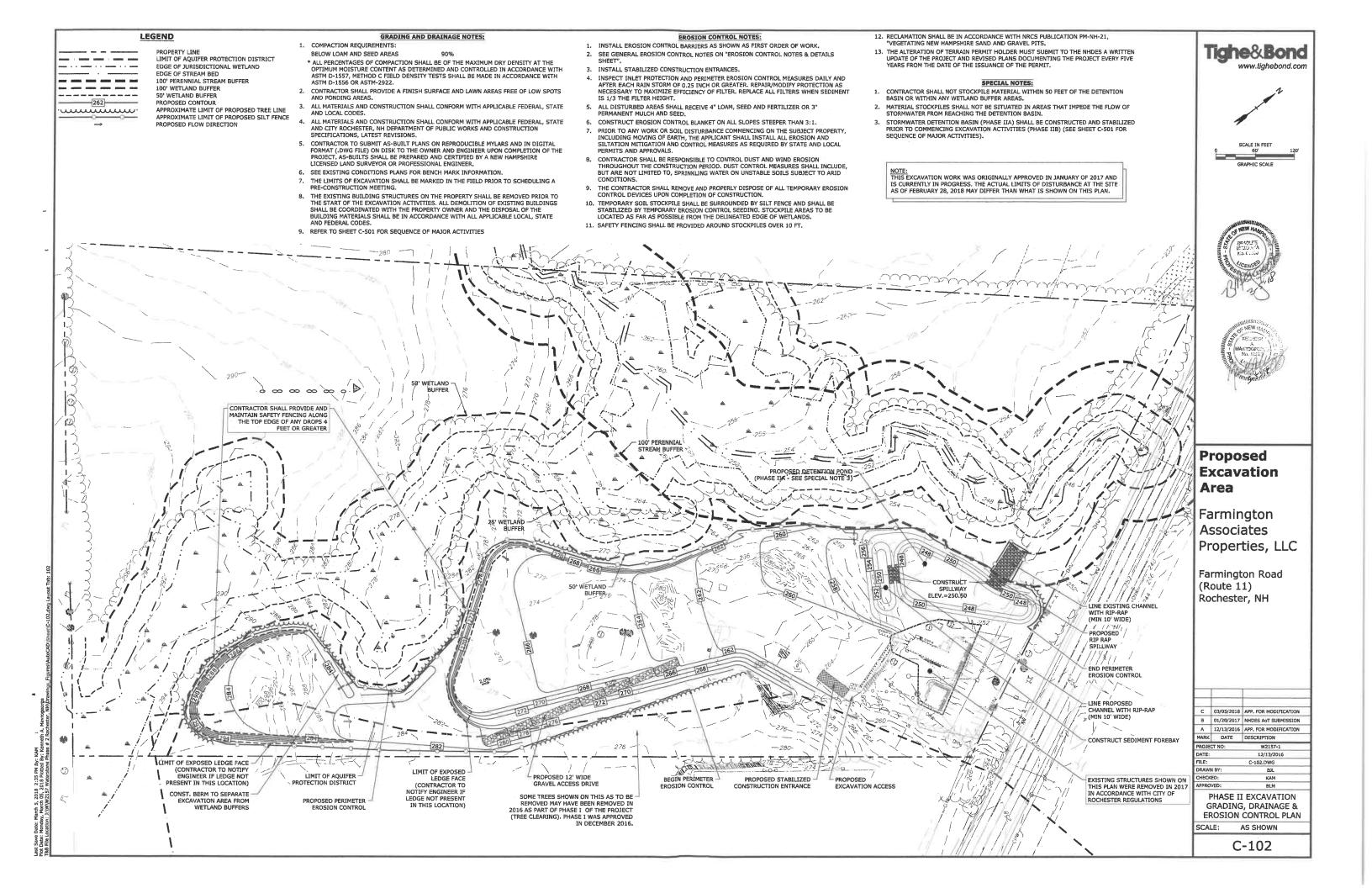
THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION MEANS AND METHODS, AND FOR SITE CONDITIONS THROUGHOUT CONSTRUCTION. NEITHER THE PLANS NOR THE SEAL OF THE ENGINEER AFFIXED HEREON EXTEND TO OR INCLUDE SYSTEMS REQUIRED FOR THE SAFETY OF THE CONTRACTOR, THEIR EMPLOYEES, AGENTS OR REPRESENTATIVES IN THE PERFORMANCE OF THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING AND IMPLEMENTING SAFETY PROCEDURES AND SYSTEMS AS REQUIRED BY THE UNITED STATES OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA), AND ANY STATE OR LOCAL SAFETY REGULATIONS.

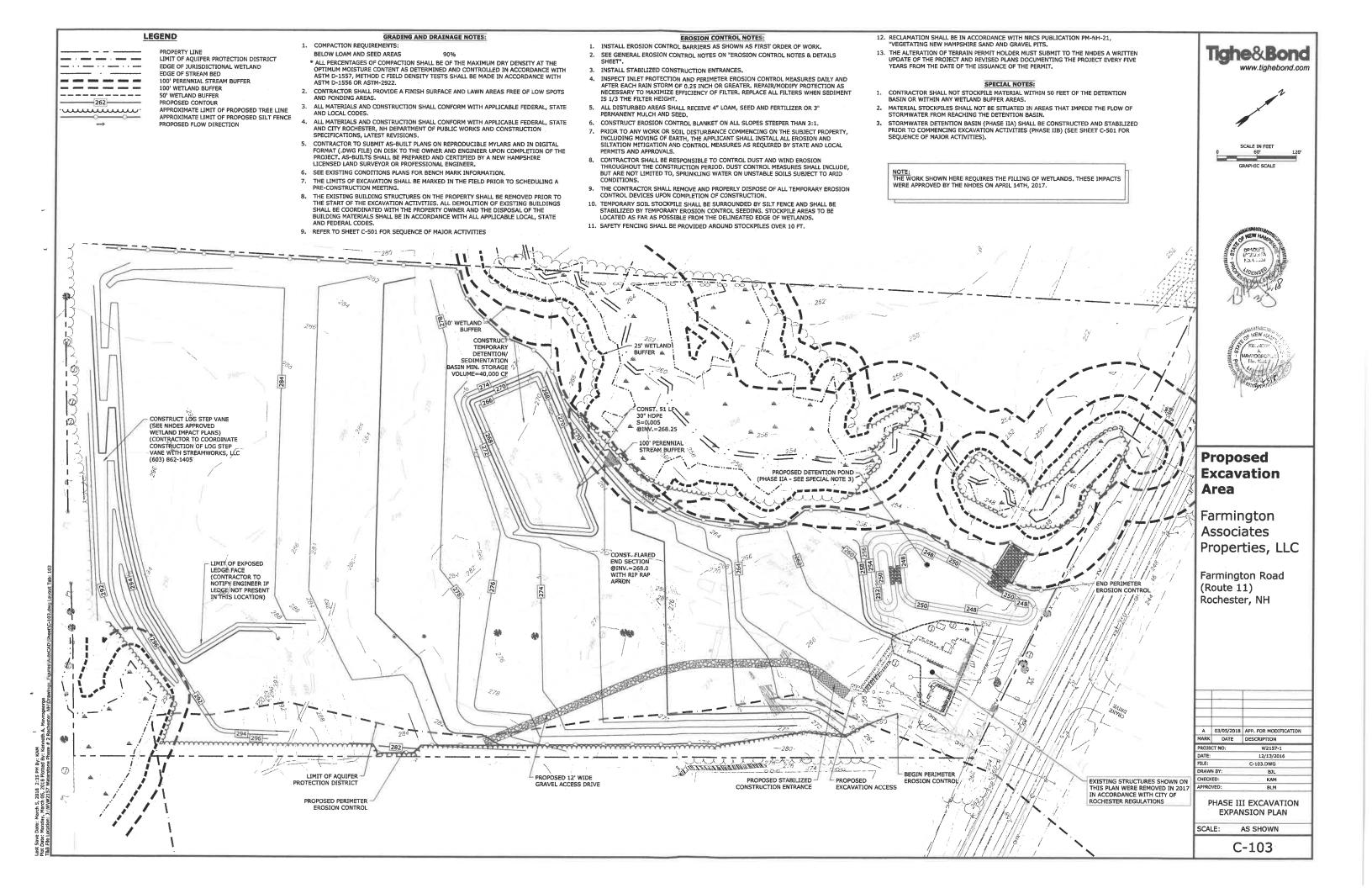












DESCRIPTION

THE PRODECT CONSISTS OF THE CONSTRUCTION OF A COMMERCIAL DEVELOPMENT WITH ASSOCIATED PARKING, DRAINAGE, UTILITIES, LANDSCAPING AND A NEW FRONTAGE ROAD CONSISTENT WITH THE CITY OF ROCHESTER'S MASTER BYAN, THE PROJECT IS TO BE CONSTRUCTED IN A PHASED MANNER. THE FIRST PHASE WILL CONSIST OF THE CUTTOR OF TREES ON SITE. THE SECOND PHASE INCLUDES THE EXCAVATION OF MATERIAL. THE THIRD AND FINAL PHASE WOULD CONSIST OF THE CONSTRUCTION OF THE COMBINED OF THE SECOND PHASE INCLUDES THE EXCAVATION OF MATERIAL. THE THIRD AND FINAL PHASE WOULD CONSIST OF THE CONSTRUCTION OF THE COMPRECIAL DEVELOPMENT.

DISTURBED AREA TO BE DISTURBED IS APPROXIMATELY ± 6.8 ACRES FOR PHASE II AND ± 15.5 ACRES FOR PHASE III.

SOIL CHARACTERISTICS
BASED ON SITE SPECIFIC SOIL SURVEY CONDUCTED BY NHSC, INC. THE SITE CONSISTS MAINLY OF MODERATELY WELL TO POORLY DRAINED SOILS WITH HYDROLOGIC SOIL GROUPS A, B, C, AND D. <u>NAME OF RECEIVING WATERS</u>
THE STORM WATER RUNOFF WILL BE DISCHARGED VIA OVERLAND FLOW TO UNNAMED STREAM WHICH ULTIMATELY FLOWS TO

SEQUENCE OF MAJOR ACTIVITIES

CONSTRUCT TEMPORARY AND PERMANENT SEDIMENT, EROSION AND DETENTION CONTROL FACILITIES. EROSION SEDIMENT AND DETENTION MEASURES SHALL BE INSTALLED PRIOR TO ANY EARTH MOVING OPERATIONS THAT WI INFLUENCE STORMWATER RUNDET SUCH AS

- NEW CONSTRUCTION DEVELOPMENT OF BORROW PIT AREAS

- NICW CONSTRUCT FOR BORROW DTT AREAS
 DISPOSAL OF SEDIMENT SPOIL, STUMP AND OTHER SOLID WASTE
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 CONTR

- DAILY, ON AS REQUIRED, CONSTRUCT TEMPOPART BERINS, DIRAINS, DITCHES, SILT FERCES, SEDIMENT TRAPS, ETC., MUCCH AND SECO AS REQUIRED AND SEDIMENT CONTROL MEASURES. COMPLETE PERMANENT SEEDIMEND AND LANDSCAPING. REMOVE TRAPPED SEDIMENTS FROM COLLECTOR DEVICES AS APPROPRIATE AND THEN REMOVE TEMPORARY EROSION CONTROL MEASURES.

E: THE CONSTRUCTION SEQUENCE MUST LIMIT THE DURATION AND AREA OF DISTURBANCE. THE PROJECT IS TO BE MANAGED IN A MANNER THAT MEETS THE REQUIREMENTS AND INTENT OF RSA 430:53 AND CHAPTER AGE 3800 RELATIVE TO INVASIVE SPECIES.

SION CONTROL NOTES
ALL EROSION CONTROL MEASURES AND PRACTICES SHALL COMFORM TO THE "NEW HAMPSHIRE STORMWATER MANUAL
YOLIME 3: REOSION AND SEDIMENT CONTROLS EURING CONSTRUCTION" PREPARED BY THE NINDES.
CONTRACTOR SHALL INSTALL TEMPORARY EROSION CONTROL BARBIERS, INCLUDING HAY BALE, SILT FENCES, SILT
SACKS AND SILT SOCKS, AS SHOWN IN THESE DRAWINGS AS THE FIRST ORDER OF WORK.
SILT SACK INLET PROTECTION SHALL BE INSTALLED IN ALL EXISTING AND PROPOSED CATCH BASIN INLETS WITHIN THE
WORK LIMITS AND BE MAINTAINED FOR THE DURATION OF THE PROJECT.

- WORK LIMITS AND BE MAINTAINED FOR THE DURATION OF THE PRODECT.

 PERIMETER CONTROLS INCLUDING SLIT FENCES, HAV BALE BARRIERS, AND/OR SLIT SOCKS SHALL MAINTAINED FOR THE

 DURATION OF THE PROJECT UNTIL NON-PAVED AREAS HAVE BEEN STABILIZED.

 THE CONTRACTOR SHALL REMOVE AND PROPERLY DISPOSE OF ALL TEMPORARY EROSION CONTROL DEVICES UPON

 COMPLETION OF CONSTRUCTION.

 ALL DISTURBED AREAS NOT OTHERWISE BEING TREATED SHALL RECEIVE 6" LOAM, SEED, AND FERTILIZER.

 INSPECT ALL INLET PROTECTION AND PERIMETER CONTROLS WEEKLY AND AFTER EACH RAIN STORM OF 0.25 INCH OR

 GREATER, REPAIR/MODIFY PROTECTION AS INCESSBART YOU MAINTIZE EFFICIENCY OF FILTER, REPLACE ALL FILTERS

 WHITE SUMMENT 13 THE FILLER HIGHT.

 CONSTRUCT EROSION CONTROL BLANKETS ON ALL SLOPES STEEPER THAN 3:1.

- 8. CONSTRUCT EROSION CONTROL BLANKETS ON ALL SLOPES STEEPER THAN 3:1.

 STABILIZATION
 1. AN AREA SHALL BE CONSIDERED STABLE WHEN ONE OF THE FOLLOWING HAS OCCURRED:
 A. BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED.
 B. A MINIMOM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED.
 C. A MINIMOM OF 95% OF NON-ROSINE MATERIAL SUCH AS STONE OR RIPPAP HAS BEEN INSTALLED

 WINTER STABILIZATION PRACTICES.
 A. ALL PROPOSED POST-DEVEL OPMENT VEGETATED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATED GROWTH BY NOVEMBER 15TH, OR WHICH ARE DISTURBED AFTER NOVEMBER 15TH, SHALL BE STABILIZED BY SEEDING AND INSTALLINE EROSION CONTROL BLANKETS ON SUPPES REASTER THAM 4:1, AND ESPENIED AND PLACING 3 TO 4 TONS OF MUICH PER ACRE, SECURED WITH ANCHOR NETTING, ELSEWHERE.
 B. ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATED GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCCURRENCE THAN 6:1, AND ESPENIED AND PLACING 3 TO 4 TONS OF MUICH PER ACRE, SECURED WITH ANCHOR NETTING, ELSEWHERE.
 B. ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 65% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITION.
 C. AFTER NOVEMBER 15TH, INCOMPLETE BOAD SURFACES SHALL BE PROTECTED WITH A MINIMUM OF J-INCHES OF CRUSHED GRAVE, PER MIDD IT THE 505-0, OR FC CONSTRUCTION IS TO CONTINUE THROUGH THE WINTER SEASON ACTIVITY SHALL NOT OCCUR FOR MORE THAN TWENTY-ONE (21) CALENDAD AREAS, WHERE CONSTRUCTION ACTIVITY HAS PERMANENTLY OR TEMPORARILY CEASED IN THAT AREA. STABILIZATION ACTIVITY SHALL NOT OCCUR FOR MORE THAN TWENTY-ONE (21) CALENDAD AREAS, WHERE CONSTRUCTION ACTIVITY HAS PERMANENTLY OR TEMPORARILY CEASED IN THAT AREA. STABILIZATION ACTIVITY HAS PERMANENTLY OR TEMPORARILY CEASED IN THAT AREA. STABILIZATION ALTERPORARY SEEDING
 B. MULCHING
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- TEMPORAR' MULCHING
- B. MULCHING
 WHEN CONSTRUCTION ACTIVITY PERMANENTLY OR TEMPORARILY CEASES WITHIN 100 FEET OF NEARBY SUBFACE
 WHENE CONSTRUCTION ACTIVITY PERMANENTLY OR TEMPORARILY CEASES WITHIN SEVEN (7) DAYS OR PRIOR TO A BALE
 EVENT, ONCE CONSTRUCTION ACTIVITY CEASES PERMANENTHY IN AN THESE RABES, SILL FENCES AND HAY BALE
 BARRIERS AND ANY EARTH/DIKES SHALL BE REMOVED ONCE PERMANENT MEASURES ARE ESTABLISHED.
 DURING CONSTRUCTION, RUNOFF WILL BE DEVERTED AROUND THE SITE WITH EARTH DIKES, PIPING OR STABILIZED
 CHANNELS WHERE POSSIBLE. SHEET RUNOFF FROM THE SITE WILL BE FILTERED THROUGH HAY BALE BARRIERS AND
 SILT FENCES OR SILT SOCKS, ALL STORM DRAIN BASIN INLETS SHALL BE PROVIDED WITH FLARED END SECTIONS AND
 TRASH RACKS. THE SITE SHALL BE STABILIZED FOR THE WINTER BY NOVEMBER 15.

- ST CONTROL:
 THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTROL DUST THROUGHOUT THE CONSTRUCTION PERIOD.
 DUST CONTROL METHODS SHALL INCLUDE, BUT BE NOT LIMITED TO SPRINKLING WATER ON EXPOSED AREAS, COVERING
 LOADED DUMP TRUCKS LEAVING THE STTE, AND TEMPORARY MULCHING.
 DUST CONTROL MEASURES SHALL BE UTILIZED SOA STO PREVENT THE MIGRATION OF DUST FROM THE SITE TO
 ABUTTING AREAS INCLUDING BUT NOT LIMITED TO ROUTE 11 (FARMINGTON ROAD).

- PRECEPTIATION.
 PERIMETER BARRIERS SHOULD BE MAINTAINED AT ALL TIMES, AND ADJUSTED AS NEEDED TO ACCOMMODATE THE
 DELIVERY AND REMOVAL OF MATERIALS FROM THE STOCKPILE. THE INTEGRITY OF THE BARRIER SHOULD BE INSPECTED
 AT THE END OF EACH WORKING DAY.
 PROTECT ALL STOCKPILES FROM STORNWATER RUN-OFF USING TEMPORARY EROSION CONTROL MEASURES SUCH AS
 BERMS, SLIT SOCK, OR OTHER APPROVED PRACTICE TO PREVENT MIGRATION OF MATERIAL BEYOND THE IMMEDIATE

<u>off site vehicle tracking</u> The contractor shall construct stabilized construction entrances prior to any excavation activities.

- SECOBED PREPARATION:
 APPLY FERTILIZER AT THE RATE OF 600 POUNDS PER ACRE OF 10-10-10. APPLY LIMESTONE (EQUIVALENT TO 50 PERCENT CALCIUM PLUS MAGNESIUM OXIDE) AT A RATE OF THREE (3) TONS PER ACRE.
- B. SEEDING
 UTILIZE ANNUAL RYE GRASS AT A RATE OF 40 LBS/ACCE.
 WHERE THE SOLL HAS BEEN COMPACTED BY CONSTRUCTION OPERATIONS, LOOSEN SOIL TO A DEPTH OF TWO
 (2)
 INCHES BEFORE APPLYING FERTILIZEE, LINE AND SEED.
 APPLY SEED UNIFORNLY BY HAND, CYCLONE SEEDER, OR HYDROSEEDER (SLURRY INCLUDING SEED AND
 FERTILIZES), LINE OR SEEDINGS, WHICH INCLUDE MULCH, MAY BE LEFT ON SOIL SURFACE. SEEDING RATES
 MUST BE INCREASED 10% WHEN HYDROSEEDING.
 C. MAINTENBACE
- MAINTENANCE
 TEMPORARY SEEDING SHALL BE PERIODICALLY INSPECTED. AT A MINIMUM, 95% OF THE SOIL SURFACE SHOULD BE
 COVERED BY VEGETATION. IF AMY EVIDENCE OF EROSION OR SEDIMENTATION IS APPARENT, REPAIRS SHALL BE
 MADE AND OTHER TEMPORARY MEASURES USED IN THE INTERIM (MULCH, FILTER BARRIERS, CHECK DAMS, ETC.).

- VEGETATIVE PRACTICE
 A. FOR PERMANENT MEASURES AND PLANTINGS.
 LIMESTONS SHALL BE THOROUGHLY INCORPORATED INTO THE LOAM LAYER AT A RATE OF THREE (3) TONS
- LINESTIONS STALL BE THOROUGHLY INCORPORATED INTO THE LOAM LAYER AT A RATE OF THREE (3) TORS PER ACRE IN ORDER TO PROYDE A PH VALUE OF 5.5 TO 6.5. FERTILIZER SHALL BE SPREAD ON THE TOP LAYER OF LOAM AND WORKED INTO THE SURFACE. FERTILIZER APPLICATION BATE SHALL BE 600 POUNDS PER ACRE OF 10-20-20 FERTILIZER.

- Soil conditioners and fertilizes shall be adried at the recommended rates and shal be thoroughly worked into the Loam. Loam Shall be raked until the surface is finely pulverized, smooth and even, and then compacted to an even surface conforming to the required lines and grades with approved rollers weighing between 4-1/2 pounds
- THE REQUIRED LINES AND GRADE'S WITH APPROVED ROLLERS WEIGHING BETWEEN 4-1/2 POUNDS AND 5-1/2 POUNDS PER INCH OF WIDTH.
 SEED SHALL BE SOWN AT THE RATE SHOWN BELOW. SOWING SHALL BE DONE ON A CALM, DRY DAY, PREFERABLY BY MACHINE, BUT IF BY HAND, ONLY BY EXPERIENCED WORKING. IMMEDIATELY BEFORE SEEDING, THE SOIL SHALL BE LIGHTLY RAKED, ONE HALF THE SEED SHALL BE SOWN IN ONE DIRECTION MOT THE SHALL BE LIGHTLY RAKED. ONE HALF THE SEED SHALL BE SOWN IN ONE LIGHTLY RAKED INTO THE SOIL TO A DEPTH NOT DEVEN 1/4 INCH AND ROLLED WITH A HAND ROLLED WITH
- AMBITISES AWAIT THE SOIL, WHITE THE GRASS IS WELL ESTABLISHED, ANY AREAS WHICH ARE NOT SATISFACTORITY COVERED WITH GRASS SHALL BE RESECTED, AND ALL NOXIOUS WEEDS REMOVED. THE CONTRACTOR SHALL PROTECT AND MAINTAIN THE SECTED AREAS UNTIL ACCEPTED. A GRASS SEED MIXTURE CONTAINING THE FOLLOWING SEED REQUIREMENTS SHALL BE APPLIED AT THE INDICATED RATE:
- PERENNIAL RYE GRASS

 10 LBS/ACRE
 10 NO CASE SHALL THE WEED CONTENT EXCEED ONE (1) PERCENT BY WEIGHT, ALL SEED SHALL
 COMPLY WITH SATE AND FEDERAL SEED LAWS. SEEDING SHALL BE DONE NO LATER THAN
 SEPTEMBER 15. IN NO CASE SHALL SEEDING TAKE PLACE OVER SNOW,
- DORMANT SEEDING (SEPTEMBER 15 TO FIRST SNOWFALL)

 A. FOLLOW PERMANENT MEASURES SLOPE, LINE, FERTILIZER AND GRADING REQUIREMENTS. APPLY SEED MIXTURE AT TWICE THE INDICATED RATE. APPLY MULCH AS INDICATED FOR PERMANENT MEASURES.

- CONCRETE WASHOUT AREA

 1. THE FOLLOWING ARE THE ONLY NON-STORMWATER DISCHARGES ALLOWED. ALL OTHER NON-STORMWATER DISCHARGES ARE PROHIBITED ON SITE.

 THE CONCRETE DELIVERY TRUCKS SHALL, WHENEVER POSSIBLE, USE WASHOUT FACILITIES AT THEIR OWN
 - IN COMMANDE DELIVENT TRUCKS STRALL, WHEREVER POSSIBLE, USE WASHOUT FACILITIES AT THEIR OWN PLANT OR DISPATCH FACILITY.

 IF IT IS INCESSARY, SITE CONTRACTOR SHALL DESIGNATE SPECIFIC WASHOUT AREAS AND DESIGN FACILITIES TO HANDLE ANTICIPATED WASHOUT WATER.

 CONTRACTOR SHALL LOCATE WASHOUT AREAS AT LEAST 150 FEET AWAY FROM STORM DRAINS, SWALES AND SURFACE WATERS OR DELINEATED WETHANDS.

 INSPECT WASHOUT FACILITIES DAILY TO DETECT LEAKS OR TEARS AND TO IDENTIFY WHEN MATERIALS NEED TO BE REMOVED.

ALLOWABLE NON-STORMWATER DISCHARGES DISCHARGES FROM FIRE-FIGHTING ACTIVITIES

- DISCHARGES FROM FIRE-FIGHTING ACTIVITIES
 FIRE-HYDRANT FLUSHINGS
 WATERS USED TO WASH VEHICLES WHERE DETERGENTS ARE NOT USED
 WATER USED TO CONTROL DUST
 POTABLE WATER INC. UNCONTAMINATED WATER LINE FLUSHINGS
 ROUTINE EXTERNAL BUILDING WASH DOWN -NO DETERGENTS
 PAVEMENT WASH WATERS -NO SPILLS OR DETERGENTS
 UNCONTRAINTATED AIR CONDITIONING/COMPRESSOR CONDENSATE
- UNCONTAMINATED AIR CONDITIONING/COMPRESSOR

- SIE MATERIALS
 ALL WASTE MATERIALS SHALL BE COLLECTED AND STORED IN SECURELY LIDDED RECEPTACLES. ALL TRASH
 AND CONSTRUCTION DEBRIS FROM THE SITE SHALL BE DEPOSITED IN A DUMPSTER.
 NO CONSTRUCTION WASTE MATERIALS SHALL BE BURIED ON SITE.
 ALL PERSONNEL SHALL BE INSTRUCTED REGARDING THE CORRECT PROCEDURE FOR WASTE DISPOSAL BY THE

- HAZARDOUS WASTE

 A. ALL HAZARDOUS WASTE MATERIALS SHALL BE DISPOSED OF IN THE MANNER SPECIFIED BY LOCAL OR STATE REGULATION OR BY THE MANUFACTURER.

 B. SITE PERSONNEL SHALL BE INSTRUCTED IN THESE PRACTICES BY THE SUPERINTENDENT.
- SANITARY WASTE SANIL BE COLLECTED FROM THE PORTABLE UNITS A MINIMUM OF ONCE PER WEEK BY A LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR.

- SPIL PREVENTION

 CONTRACTOR SHALL BE FAMILIAR WITH SPILL PREVENTION MEASURES REQUIRED BY LOCAL, STATE AND FEDERAL
 AGENCIES. AT A MINIMUM, CONTRACTOR SHALL FOLLOW THE BEST MANAGEMENT SPILL PREVENTION PRACTICES
 OUTLINED BELOW.

 THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT SHALL BE USED TO REDUCE THE RISK OF SPILLS
 OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES DURING CONSTRUCTION TO STORMWATER
 DIVIDED.
- - GOOD HOUSEKEEPING:
 THE FOLLOWING GOOD HOUSEKEEPING PRACTICES SHALL BE FOLLOWED ON SITE
 DURING THE CONSTRUCTION PROJECT:
 URING THE CONSTRUCTION PROJECT:
 ONLY SUPPLICIENT AMOUNTS OF PRODUCTS TO DO THE JOB SHALL BE STORED ON SITE.
 ALL MATERIALS STORED ON SITE SHALL BE STORED IN A NEAT, ORDERLY MANNIER IN THEIR PROPER
 (ONGINAL IF POSSIBLE CONTAINERS AND, IF POSSIBLE, UNDER A ROOF OR OTHER ENCLOSURE.
 MANUFACTURERS RECOMMENDATIONS FOR PROPER USE AND DISPOSAL SHALL BE FOLLOWED.
 THE SITE SPERITIFIEDENT SHALL INSPECT DAILY TO TO SHURE PROPER USE AND DISPOSAL OF MATERIALS.
 WHENEVER POSSIBLE ALL OF A PRODUCT SHALL BE USED UP BEFORE DISPOSING OF THE CONTAINER.
- HAZARDOUS PRODUCTS:
 THE FOLLOWING PRACTICES SHALL BE USED TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS
- PRODUCTS SHALL BE KEPT IN THEIR ORIGINAL CONTAINERS UNLESS THEY ARE NOT RESEALABLE. ORIGINAL LABELS AND MATERIAL SAFETY DATA SHALL BE RETAINED FOR IMPORTANT PRODUCT
- 2. OKIGINAL LABLES AND MATERIAL SAFET DATA STUDE. B. NETONES TO AN ANALYSIS INFORMATION.
 3. SURRIUS PRODUCT THAT MUST BE DISPOSED OF SHALL BE DISCARDED ACCORDING TO THE MANUFACTURER'S RECOMMENDED METHODS OF DISPOSAL.

 PRODUCT SPECIFICATION PRACTICES.

 1. PERROLLOWING PRODUCT SECIFIC PRACTICES SHALL BE FOLLOWED ON SITE:

 1. PERROLLOWING PRODUCT SECIFIC PRACTICES SHALL BE FOLLOWED ON SITE:

 2. ALL ON SITE VEHICLES SHALL BE MOINTORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE.
- MAIL UN SITE VEHICLES SHALL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE LEAKAGE.

 B. PETROLEUM PRODUCTS SHALL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABLED, ANY ASPHALT BASED SUBSTANCES USED ON SITE SHALL BE APPLIED ACCORDING TO THE MARUFACTURER'S RECOMMENDATIONS.

 FERTILIZERS.
- TILIZERS:
 FERTILIZERS USED SHALL BE APPLIED ONLY IN THE MINIMUM AMOUNTS DIRECTED BY THE SPECIFICATIONS.
 ONCE APPLIED FERTILIZER SHALL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORMWATER.
 STORAGE SHALL BE IN A COVERED SHED OR ENCLOSED TRAILERS. THE CONTENTS OF ANY
 PARTIALLY USED BAGS OF FERTILIZER SHALL BE TRAINSFERRED TO A SEALABLE PLASTIC BIN TO
 AVOID SPILLS.
- ITS:
 ALL CONTAINERS SHALL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE.
 EXCESS PAINT SHALL NOT BE DISCHARGED TO THE STORM SEWER SYSTEM.
 EXCESS PAINT SHALL BE DISPOSED OF PROPERLY ACCORDING TO MANUFACTURER'S INSTRUCTIONS
 OR STATE AND LOCAL REGULATIONS.
- SPILL CONTROL PRACTICES

 IN ADDITION TO GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS

 SECTION, THE FOLLOWING PRACTICES SHALL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:

 1. MANUFACTURER'S RECOMMENDED METHODS FOR SPILL LEARNLY SHALL BE CLEARLY POSTED TO AND SITE
 PERSONNEL SHALL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION AND
- PERSONNEL SHALL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION AND CLEANING SUPPLIES.

 MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANING SHALL BE KEPT IN THE MATERIAL STORAGE AREA ON STEE. EQUIPMENT AND MATERIALS SHALL INCLIDE BUT NOT BE LIMITED TO BROOMS, DUSTFANS, MOPS, DASS, GLOVES, GOGGLES, KITTY LITTER, SAND, SANDUST AND PLASTIC OR METAL TRASH CONTAINERS SPECIFICALLY FOR THIS PRIVINGS.

 TRASH CONTAINERS SPECIFICALLY FOR THIS PRIVINGS.

 THE SPILL AREA SHALL BE KEPT WELL VENTILATED AND PERSONNEL SHALL WEAR APPROPRIATE PROTECTIVE CONTINUE OF TOXIC OR HAZARDOUS MATERIAL SHALL BE REPORTED TO THE APPROPRIATE COLD SPILLS OF TOXIC OR HAZARDOUS MATERIAL SHALL BE REPORTED TO THE APPROPRIATE LOCAL, STATE OR FEFDRAL AREACKIES AS REQUIRED.

- SYLLS OF IDAIL OR MACAROUDS MALERIAL SHALL BE REPORTED TO THE APPROPRIATE LOCAL, STATE OF FEDERAL AGENCIES AS REQUIRED.

 THE SITE SUPERINTENDENT RESPONSIBLE FOR DAY-TO-DAY SITE OPERATIONS SHALL BE THE SPILL PREVENTION AND CLEANIP CORDINATORS.

 CLE FUELING AND MAINTENANCE PRACTICE:

 CONTRACTOR SHALL MAKE AN EFFORT TO PERFORM EQUIPTMENT/VEHICAL FUELING AND MAINTENANCE.
- CONTRACTOR SHALL MAKE AR ETTOR TO FAIL MORE ASSOCIATION OF THE CONTRACTOR SHALL PROVIDE AN ONE-STEE FUELING AND MAINTENANCE AREA THAT IS CLEAN AND DRY. IF POSSIBLE THE CONTRACTOR SHALL KEEP AREA COVERED AND MAINTENANCE AREA COMMONDOR SHALL KEEP AS SHALL BE FIRSTED AND MAINTENANCE AREA. CONTRACTOR SHALL VEHICLES SHALL BE INSPECTED REGULARLY FOR LEAKS AND DAMAGE.

- CONTRACTOR SHALL USE DRIP PANS, DRIP CLOTHS, OR ABSORBENT PADS WHEN REPLACING SPENT FLUID.

ROSTIN CONTROL OBSERVATIONS AND MAINTENANCE PRACTICES.
HIS PROJECT EXCEEDS ONE (1) ACRE OF DISTURBANCE AND THUS REQUIRES A SWPPP. THE SWPPP SHALL BE PREPARED BY THE CONTRACTOR, THE CONTRACTOR SHALL BE FAMILIAR WITH THE SWPPP AND KEEP AN

- HE FOLLOWING REPRESENTS THE GENERAL OBSERVATION AND REPORTING PRACTICES THAT SHALL BE FOLLOWED AS PART OF THIS PROJECT.

 1. OBSERVATIONS OF THE PROJECT FOR COMPLIANCE WITH THE SWPPP SHALL BE MADE BY THE CONTRACTOR AT LEAST ONCE A WEEK OR WITHIN 24 HOURS OF A STORM 0.25 INCHES OR GREATER.

 2. AN OBSERVATION REPORT SHALL BE MADE BY EAVAINTON AND DISTRIBUTED TO THE ENGINEET, THE OWNER, AND THE CONTRACTOR.

 3. A REPRESENTATIVE OF THE SITE CONTRACTOR, SHALL BE RESPONSIBLE FOR MAINTENANCE AND REPAIR ACTIVITIES.

 4. IF A REPAIR IS NECESSARY, IT SHALL BE INITIATED WITHIN 24 HOURS OF REPORT.

- BLASTING NOTES

 1. IF MORE THAN 5000 CUBIC VARDS ARE TO BE BLASTED A BLASTING PLAN SHALL BE PROVIDED. BLASTING PLAN SHALL INCLUDE:

 1. A. LOCATION AND IDENTIFICATION OF DRINKING WATER WELLS LOCATED WITHIN 2000 FEET OF THE PROPOSED BLASTING ACTIVITIES.

 8. A GROUNDWATER QUALITY SAMPLING PROGRAM, APPROVED BY NHDES PRIOR TO INITIATING BLASTING, TO MONITOR

 IN OTHER WELLS THAT ARE REPRESENTATIVE OF THE PRINKING WATER SUPPLY WELLS IN THE AREA.

 1. THE CROINDWATER SAMDLING PROGRAM MIST BE IMPLEMENTED ONCE APPROVED BY NHDES.
 - THE GROUNDWATER SAMPLING PROGRAM MUST BE IMPLEMENTED ONCE APPROVED BY NHDES.
 THE FOLLOWING BEST MANAGEMENT PROCEDURES FOR BLASTING SHALL BE COMPLIED WITH:
 - - LOADING PRACTICES.

 THE FOLLOWING BLASTHOLE LOADING PRACTICES TO MINIMIZE ENVIRONMENTAL EFFECTS SHALL BE FOLLOWED:

 DRILLING LOGS SHALL BE MAINTAINED BY THE DRILLER AND COMMUNICATED DIRECTLY TO THE BLASTER. THE LOGS SHALL INDICATE DEPTHS AND LENGTHS OF VOIDS, CAVITIES, AND FAULT ZONES OR OTHER WEAK ZONES ENCOUNTERED AS WELL AS GROUNDWARTER CONDITIONS.

 EXPLOSIVE PRODUCTS SHALL BE MAINAGED ON SITE SO THAT THEY ARE EITHER USED IN THE BOREHOLE, RETURNED TO THE DELIVERY VEHICLE, OR PLACED IN SECURE CONTAINERS FOR DEF-SITE

 - DISPOSAL FUND THE BOREHOLE SHALL EITHER BE PLACED IN THE BOREHOLE OR CLEANED UP AND RETURNED TO AN APPROPRIATE VEHICLE FOR HANDLING OR PLACEMENT IN SECURED CONTAINERS FOR OFF-SITE DISPOSAL.

 LOADED EXPLOSIVES SHALL BE DETONATED AS SOON AS POSSIBLE AND SHALL NOT BE LEFT IN THE BLASTHOLES OVERNIGHT, UNLESS WEATHER OR OTHER SAFETY CONCERNS REASONABLY DICTATE THAT DETONATION SHOULD BE POSTPONED.

 LOADING EQUIPMENT SHALL BE CLEANED IN AN AREA WHERE WASTEWATER CAN BE PROPERLY CONTAINED AND HANDLED IN A MANNER THAT PREVENTS RELEASE OF CONTAMINANTS TO THE SANDINAMENT.
 - EXPLOSIVES SHALL BE LOADED TO MAINTAIN GOOD CONTINUITY IN THE COLUMN LOAD TO PROMOTE COMPLETE DETONATION. INDUSTRY ACCEPTED LOADING PRACTICES FOR PRIMING, STEMMING, DECKING AND COLUMN RISE NEED TO BE ATTENDED TO.

 - DECKING AND COLUMN RISE NEED TO BE ATTENDED TO.

 DECKING AND COLUMN RISE NEED TO BE ATTENDED TO.

 EXPLOSIVE SELECTION
 THE FOLLOWING BMPS SHALL BE FOLLOWED TO REDUCE THE POTENTIAL FOR GROUNDWATER CONTAMINATION WHEN EXPLOSIVES ARE USED;
 1. EXPLOSIVE PRODUCTS SHALL BE SELECTED THAT ARE APPROPRIATE WATER RESISTANCE FOR THE SITE CONDITIONS PRESENT TO MINIMIZE THE POTENTIAL FOR HAZARDOUS EFFECT OF THE PRODUCT UPON GROUNDWATER.
 PREVENTION OF MISFIRES. APPROPRIATE PRACTICES SHALL BE DEVELOPED AND IMPLEMENTED TO PREVENT MISFIRES.

 MUCK PILE MANAGEMENT
 MUCK PILES (THE BLASTED PIECES OF ROCK) AND ROCK PILES SHALL BE MANAGED IN A MANNER TO REDUCE THE POTENTIAL FOR CONTAMINATION BY IMPLEMENTING THE FOLLOWING MEASURES:
 1. REMOVE THE MUCK PILE FROM THE BLAST RAEA AS SOON AS REASONABLY POSSIBLE.
 2. MANAGE THE INTERACTION OF BLASTED ROCK PILES AND STORMWATER TO PREVENT CONTAMINATION OF WATER SUPPLY WELLS OR SURFACE WATER.

 SPILL PREVENTION AND SPILL MITIGATION MEASURES SHALL BE IMPLEMENTED TO PREVENT THE RELEASE OF FUEL AND OTHER RELATED SUBSTANCES TO THE ENVIRONMENT. THE MEASURES SHALL INCLUDE TO A MINIMUM:
 1. THE FUEL STORAGE REQUIREMENTS SHALL INCLUDE:

 - FUEL STORAGE REQUIREMENTS SHALL INCLUDE:
 STORAGE OF REGULATED SUBSTANCES ON AN IMPERVIOUS SURFACE;
 SECURE STORAGE AREAS AGAINST UNAUTHORIZED ENTRY;
 LABEL REGULATED CONTAINERS CLEARLY AND VISIBLY;
 INSPECT STORAGE AREAS WEEKLY;
 COYER REGULATED CONTAINERS IN OUTSIDE STORAGE AREAS;
 WHEREYER REGULATED CONTAINERS IN OUTSIDE STORAGE AREAS;
 WHEREYER ROSSIBLE, KEEP REGULATED CONTAINERS THAT ARE STORED OUTSIDE MORE THAN 50 FEET FROM SURFACE WATER AND STORM DRAINS, 75 FEET FROM PRIVATE WELLS, AND 400

SEDIMENT CONTROL

AREA OF EMBANKMENT CONSTRUCTION OR ANY DISTURBED AREA TO BE

AREA TO REMAIN

PAVEMENT

MIRAFI FW-700

EXISTING GRADE

STABILIZED

NATURAL

(DOWNHILL)

(UPHILL)

FRONT VIEW

3' MAX. HEIGHT EMBEDDED

12" MIN.

2. INSTALL PER SILT FENCE PER MANUFACTURER'S

SILT FENCE

Put. Put.

PLAN VIEW

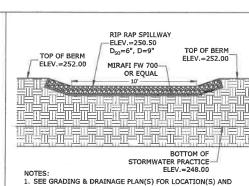
PROFILE

STABILIZED CONSTRUCTION ENTRANCE

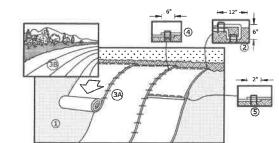
EXISTING

SIDE VIEW L. SEE EROSION CONTROL NOTES FOR MATERIAL, INSTALLATION AND MAINTENANCE REQUIREMENTS.





DETENTION POND RIP RAP SPILLWAY



PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY

- APPLICATION OF LIME, FERTILIZER AND SEED.

 BÉGIN AT THE TOP OF THE SLOPE, 36" OVER THE GRADE BREAK, BY ANCHORING
 THE BLANKET IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UPSLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF TAPLES/STAKES 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER 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 SPACED 12" APART ACROSS THE WIDTH OF TH
- BLANKET.
 ROLL THE BLANKETS DOWN THE SLOPE. ALL BLANKETS MUST BE SECURELY FASTENED TO THE SOIL SURFACE BY PLACING STAPLES IN APPROPRIATE OCATIONS AS SHOWN ON THE STAPLE PATTERN GUIDE
- STAPLE LENGTHS SHALL BE A MINIMUM OF 8 INCHES.

EROSION CONTROL BLANKET FOR SLOPE PROTECTION

Tighe&Bond





Proposed Excavation Area

Farmington **Associates** Properties, LLC

Farmington Road (Route 11) Rochester, NH

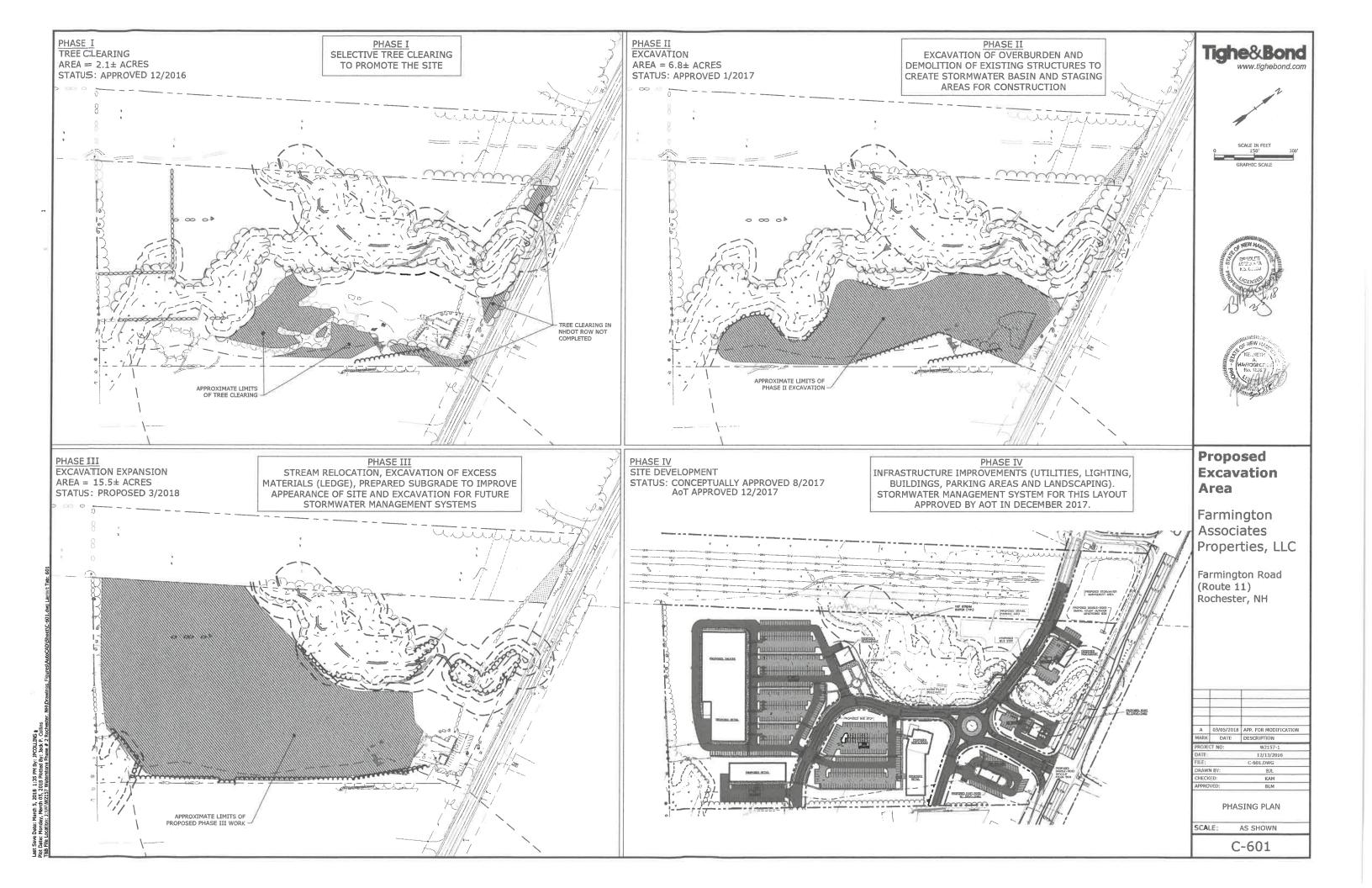
В	03/05/2018	APP, FOR MODIFICATION
A	12/13/2016	APP. FOR MODIFICATION
MARK	DATE	DESCRIPTION
PROJECT NO:		W2157-1
DATE:		12/13/2016
FILE:		G-501.DWG
DRAWN BY:		· BJL
CHECKED:		KAM
100000100		2.77

EROSION CONTROL NOTES & DETAILS SHEET

SCALE: AS SHOWN

C-501

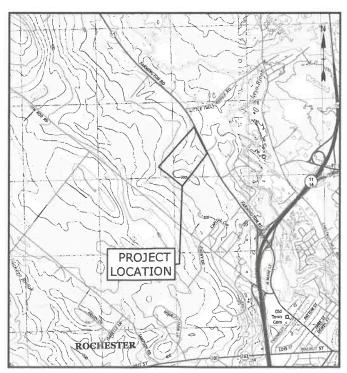
rch 2, 2018 11:37 AM By: BJL March 05, 2018 Plotted By: Jack P



AUGUST 28, 2018 LAST REVISED MARCH 5, 2018



	LIST OF DRAWINGS	
SHEET NO.	SHEET TITLE	LAST REVISED
	COVER SHEET	03/05/2018
1 OF 3	EXISTING CONDITIONS PLAN	10/23/2016
2 OF 3	EXISTING CONDITIONS PLAN	10/23/2016
3 OF 3	EXISTING CONDITIONS PLAN	10/23/2016
C-1	OVERALL EXISTING CONDITIONS AND DEMOLITION PLAN	03/05/2018
C-2	OVERALL SITE PLAN	03/05/2018
C-3	OVERALL GRADING PLAN	03/05/2018
C-4	OVERALL UTILITIES PLAN	03/05/2018
C-5	OVERALL LANDSCAPE PLAN	03/05/2018
C-6	FIRE TRUCK TURNING PLAN	03/05/2018
C-7	TRUCK TURNING PLAN	03/05/2018
C-8	EROSION CONTROL NOTES AND DETAILS SHEET	03/05/2018
C-9	EROSION CONTROL DETAILS SHEET	03/05/2018
C-10	DETAILS SHEET	03/05/2018
C-11	DETAILS SHEET	03/05/2018
C-12	DETAILS SHEET	03/05/2018
C-13	DETAILS SHEET	03/05/2018
C-14	DETAILS SHEET	03/05/2018
C-15	DETAILS SHEET	03/05/2018
C-16	DETAILS SHEET	03/05/2018
C-17	DETAILS SHEET	03/05/2018
C-18	DETAILS SHEET	03/05/2018
C-19	RAIN GARDEN DETAILS SHEET	03/05/2018
C-20	UNDERGROUND INFILTRATION BASIN DETAILS SHEET	03/05/2018



LOCATION MAP







OWNERS/APPLICANT:

Farmington Associates Properties, LLC 322 Reservoir Street Needham, MA 02494

PERMIT	STATUS	PERMIT NO.	DATE
ROCHESTER SITE PLAN REVIEW	APPROVED	216-8, 9, 10-GRD-15	2/25/2016
NHDES ALTERATION OF TERRAIN (PHASE II EXCAVATION)	APPROVED	AoT-1234	4/6/2017
NHDES ALTERATION OF TERRAIN (PHASE IV COMMERCIAL DEVELOPMENT)	APPROVED	AoT-1351	12/7/2017
NHDES STANDARD DREDGE AND FILL	APPROVED	2016-00333	4/14/2017

INAL APPROVAL BY ROCHES	TER PLANNING BOARD
CERTIFIED BY	DATE

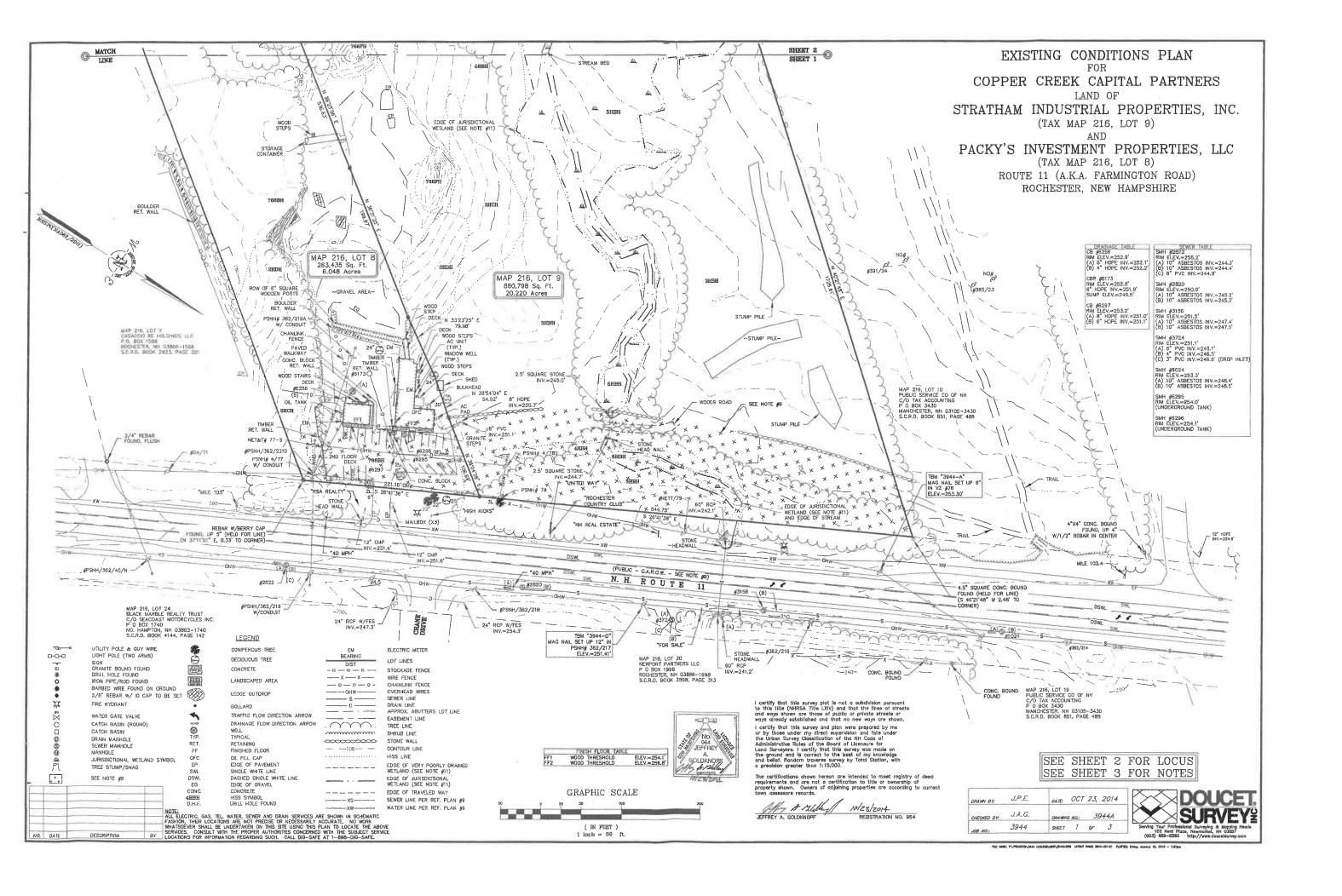
FOR MORE INFORMATION ABOUT THESE SITE PLANS CONTACT THE CITY OF ROCHESTER PLANNING DEPARTMENT (603) 335-1338.

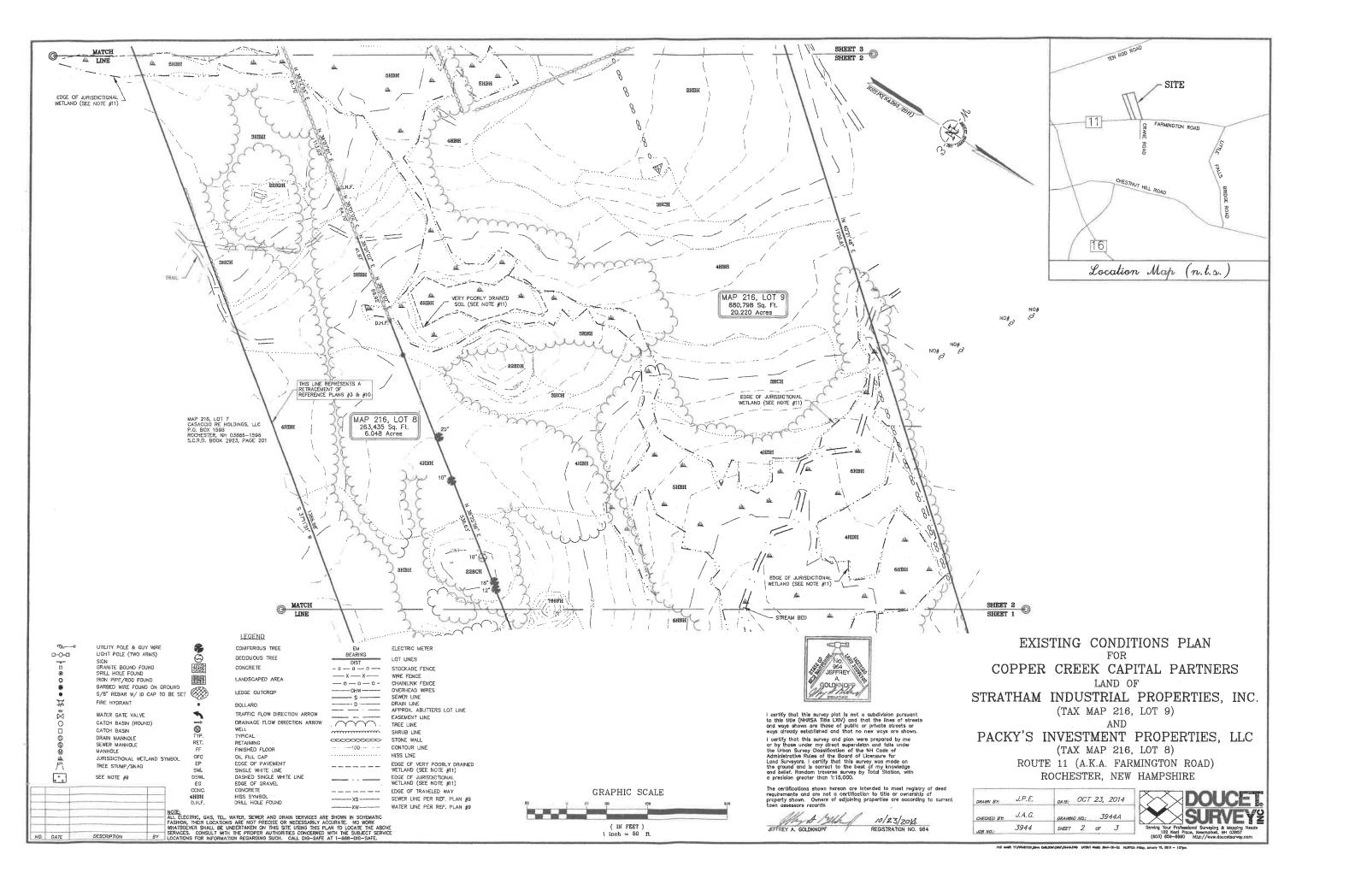
<u>ONSTRUCTION NOTES:</u> . THE CONTRACTOR SHALL NOT RELY ON SCALED DIMENSIONS AND SHALL CONTACT THE ENGINEER FOR CLARIFICATION IF A

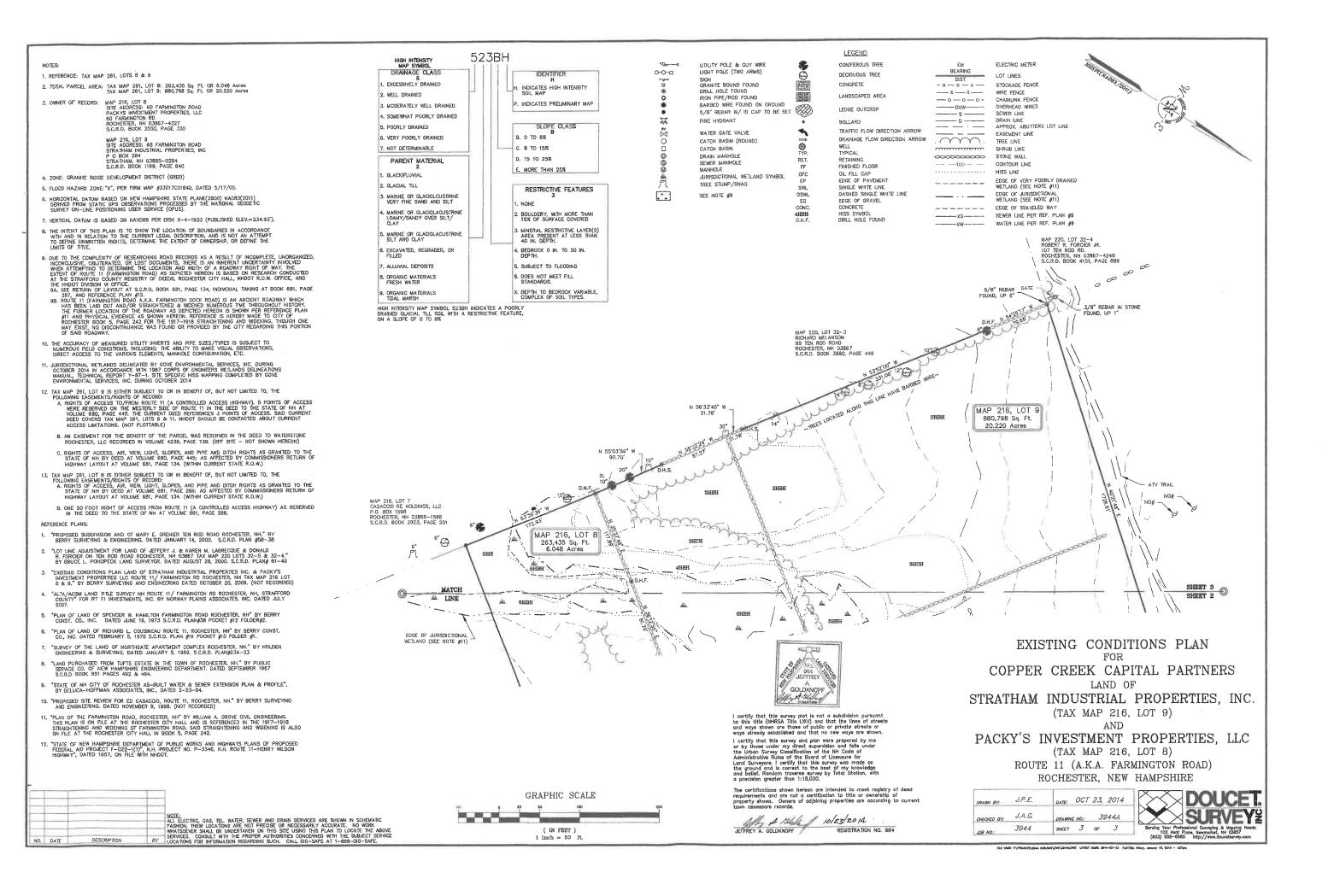
THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION MEANS AND METHODS, AND FOR SITE CONDITIONS THROUGHOU CONSTRUCTION. NEITHER THE PLANS NOR THE SEAL OF THE ENGINEER AFFIXED HEREON EXTEND TO OR INCLUDE SYSTEMS REQUIRED FOR THE SAFETY OF THE CONTRACTOR, THEIR EMPLOYEES, AGENTS OR REPRESENTATIVES IN THE PERFORMANCE OF THE WORK, THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING AND IMPLEMENTING SAFETY PROCEDURES AND SYSTEMS AS REQUIRED BY THE UNITED STATES OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA), AND ANY STATE OR LOCAL SAFETY REGULATIONS.

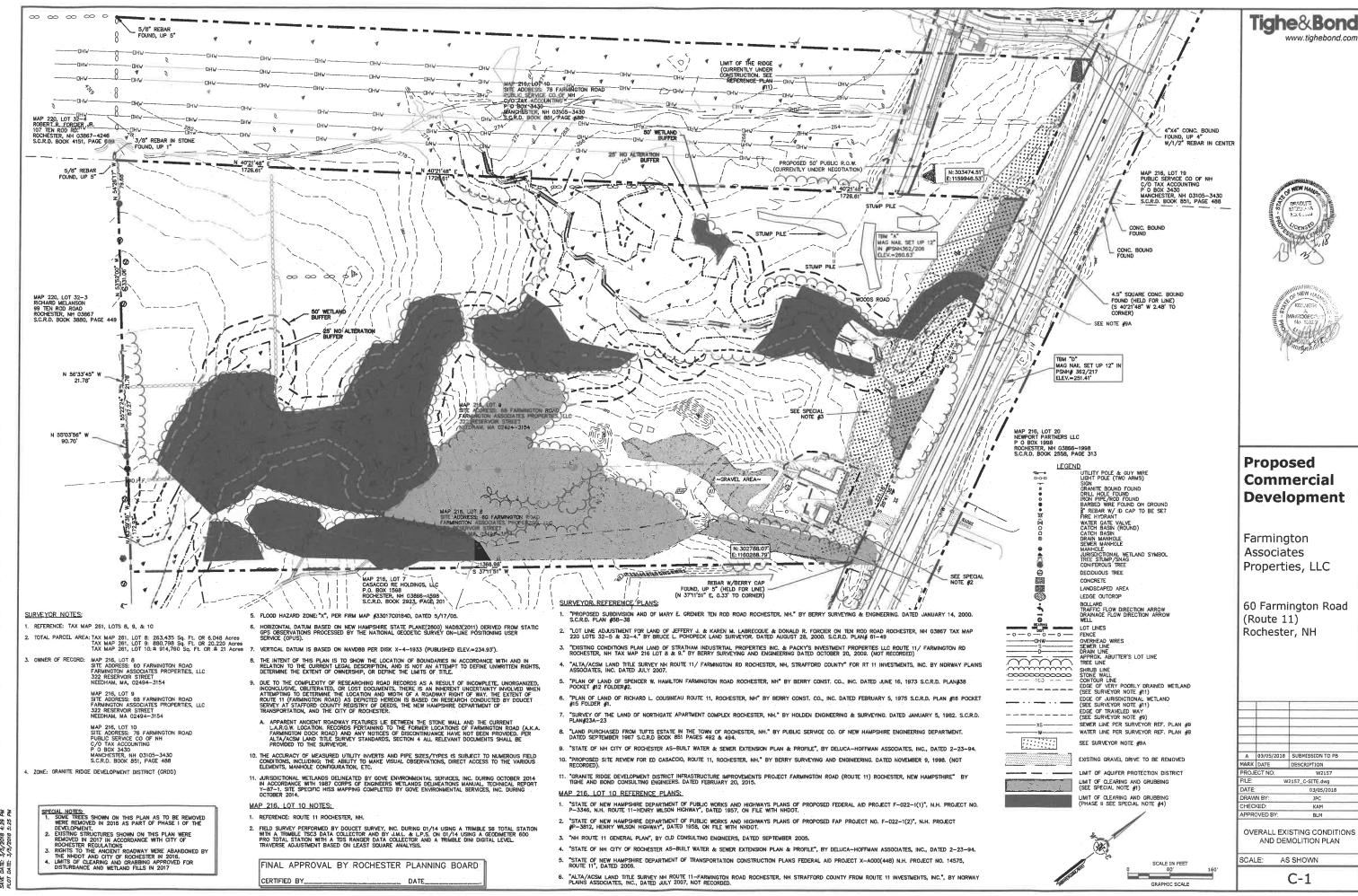
TIGHE & BOND, ASSUMES NO RESPONSIBILITY FOR ANY ISSUES LEGAL OR OTHERWISE, RESULTING FROM CHANGES MADE TO



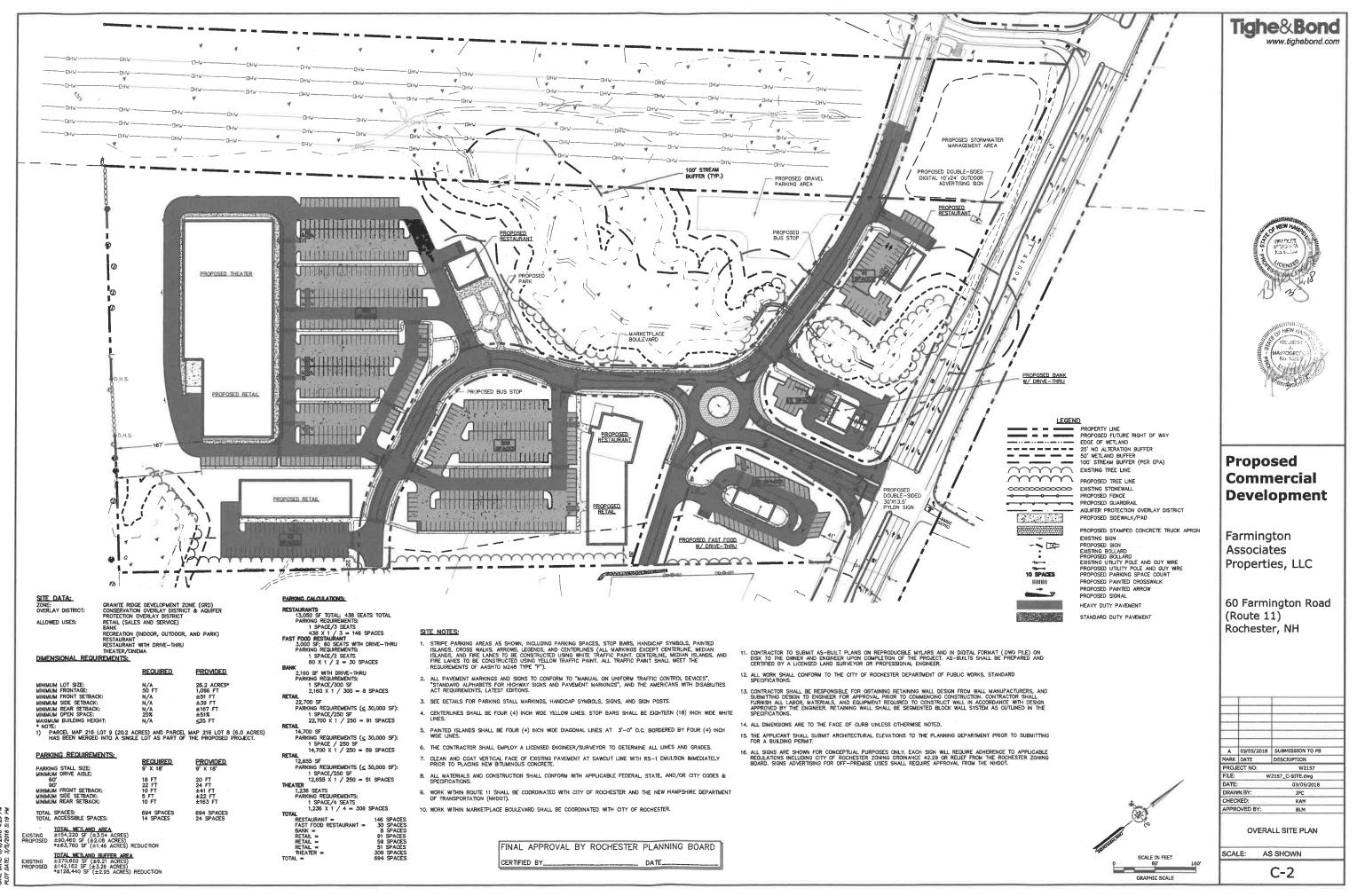




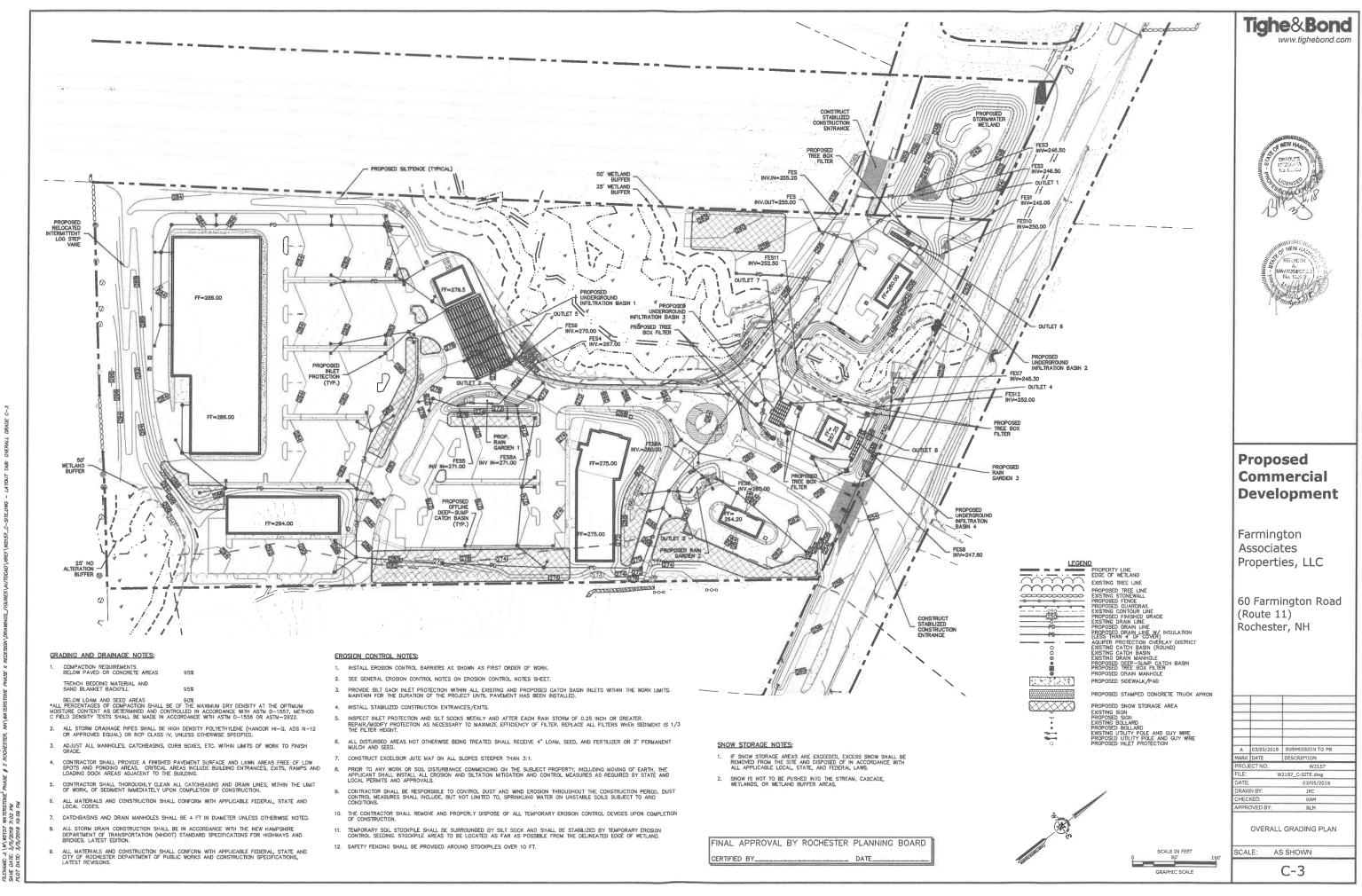




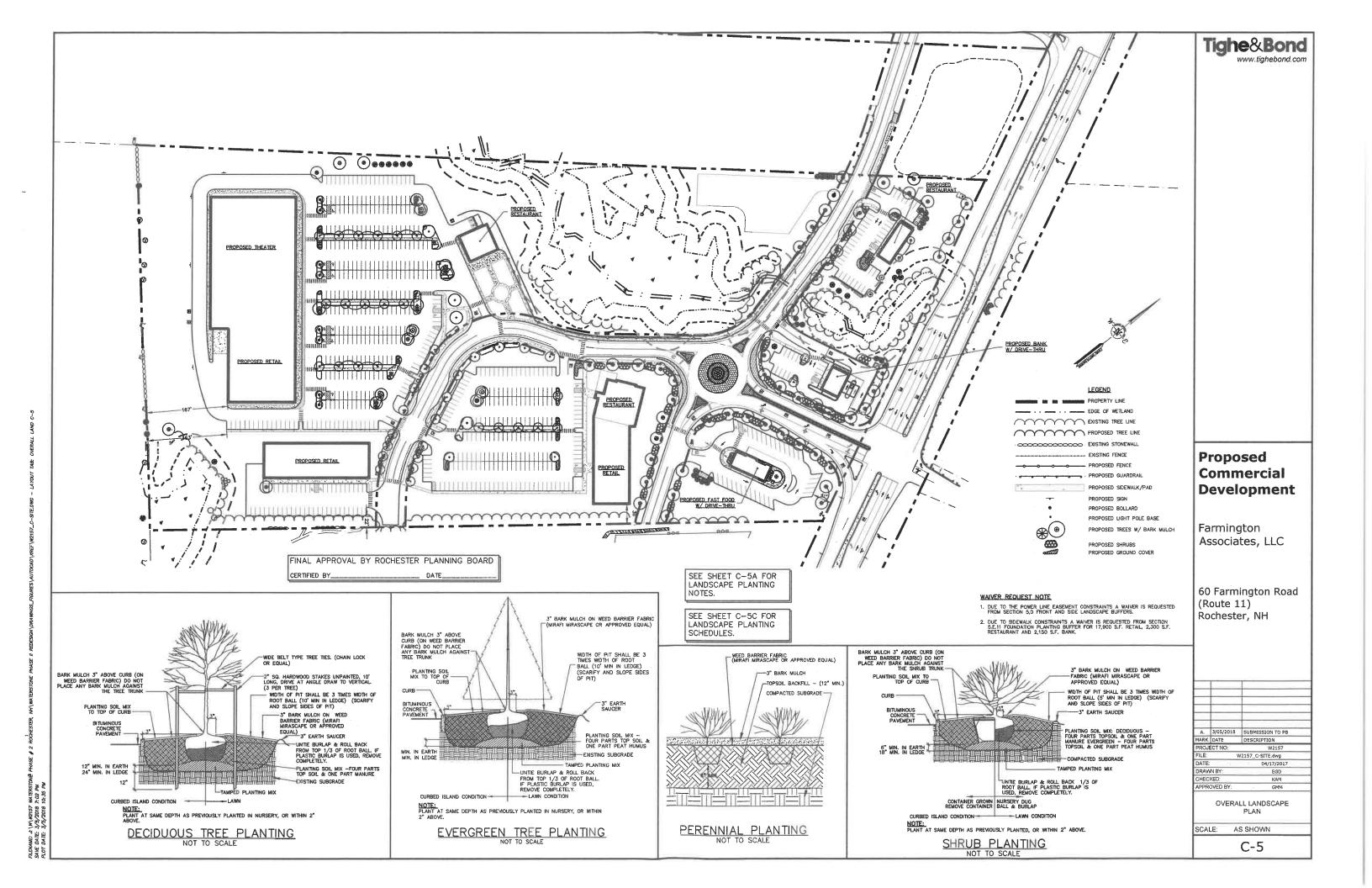
FILENAME & \W\WRIST WATESTONE PHASE # 2 ROCHESTER, WH\WATESTONE PHASE II REDESION\DRAWINGS_FIGURES\AUTOCAD\XRET\WZIST_C-SITEDING - LAYOUT

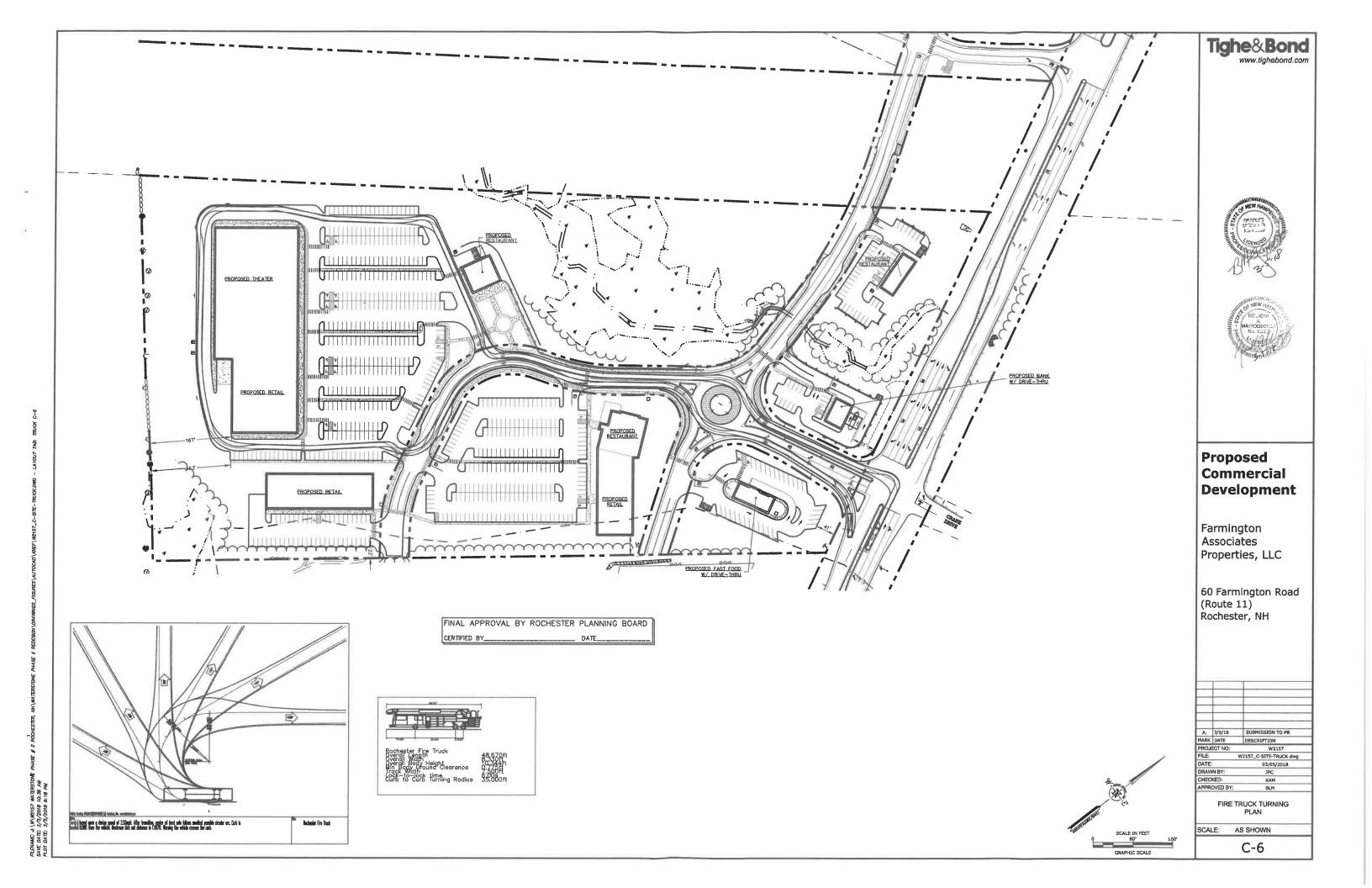


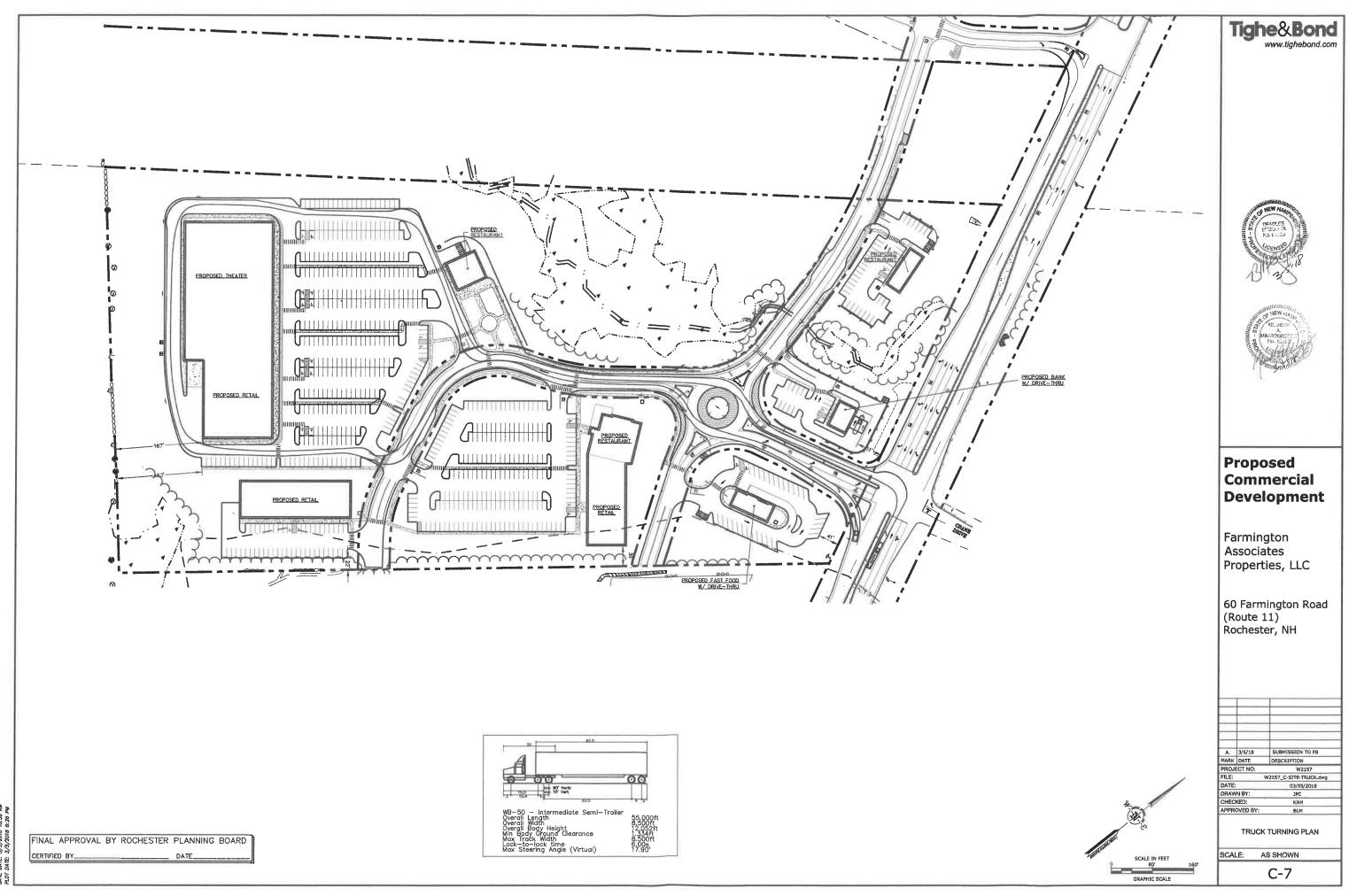
) FILENAME: A. (W.) WEIST WATERSTONE PHASE № 2 ROCHESTER, NAY WATERSTONE PHASE II REDESIGN\DRAWNOS_FIGURES\AUTOCAU\XREF\WEIST_C-STE.DWG — LAYOUT T. SANF DATE: V. ACTORIA A. 90 DAI



TLENAME. &\W\WZI57 WITESTONE PHASE ∮ 2 ROCHESTER, NH\WATERSTONE PHASE II REDESIGN\DRAWNOS_FIGURES\AUTOCAD\AREY\WZI57_G-STEDWG → I SANE DATE: 3/5/2018 7:02 PM







LENAME: J. \W\W2157 WATERSTON'S PHASE & 2 ROCHESTER,

43°-19'-45"N 71°-00'-18"W

<u>DESCRIPTION</u>

THE PROJECT CONSISTS OF THE CONSTRUCTION OF A COMMERCIAL DEVELOPMENT WITH ASSOCIATED PARKING, ORAINAGE, UTILITIES, LANDSCAPING AND A NEW FRONTAGE ROAD CONSISTENT WITH THE CITY OF ROCHESTER'S MASTER PLAN.

DISTURBED AREA THE TOTAL AREA TO BE DISTURBED IS APPROXIMATELY ±25.0 ACRES.

SOIL CHARACTERISTICS
BASED ON SITE SPECIFIC SOIL SURVEY CONDUCTED BY GOVE ENVIRONMENTAL SERVICES, INC. THE SITE CONSISTS MAINLY
OF WELL TO POORLY DRAINED SOILS WITH HYDROLOGIC SOIL GROUPS B, C, AND D.

NAME OF RECEIVING WATERS THE STORM WATER RUNOFF WILL BE DISCHARGED VIA OVERLAND FLOW TO UNNAMED STREAM WHICH ULTIMATELY FLOWS TO

- SQUENCE OF MAJOR ACTIVITIES

 CUT AND CLEAR TREES.
 CONSTRUCT TEMPORARY AND PERMANENT SEDIMENT, EROSION AND DETENTION CONTROL FACILITIES. EROSION, SEDIMENT AND DETENTION MEASURES SHALL BE INSTALLED PRIOR TO ANY EARTH MOVING OPERATIONS THAT WILL INFLUENCE STORMWATER RUNOFF SUCH AS:

 NEW CONSTRUCTION

 DEVELOPMENT OF BORROW PIT AREAS

 DISPOSAL OF SEDIMENT SPOIL, STUMP AND OTHER SOLID WASTE

 FLOOD PLAIN EXCAVATION WORK

 STREAM CHANNEL MODIFICATIONS

 CONTROL OF DUST

 CONSTRUCTION OF ACCESS AND HAUL ROAD

 NEARNESS OF CONSTRUCTION SITE TO RECEIVING WATERS

 CONSTRUCTION DUST

 ALL PERMANENT DITCHES, SWALES, DETENTION, RETENTION AND SEDIMENTATION BASINS TO BE STABILIZED USING THE VEGETATIVE AND MON-STRUCTURAL BURNEY PRIOR OF LOTHERM.

 CLEAR AND DISPOSE OF DEBRIS.
 CONSTRUCT TEMPORARY CULVERTS AND DIVERSION CHANNELS AS REQUIRED.
 COASTRUCT TEMPORARY CULVERTS AND PARKING AREAS ALL ROADS AND PARKING AREA SHALL BE STABILIZED MIMEDIATELY AFTER THEIR CONSTRUCT TEMPORARY CULVERTS AND PARKING AREAS ALL ROADS AND PARKING AREA SHALL BE STABILIZED MIMEDIATELY AFTER THEIR CONSTRUCTION BERD AND MILCHING. ALL CLUT AND FILL SLOPES HALL BE SEEDED AND MINICALLY AFTER THEIR CONSTRUCTION BERD WILL FILL FROM SEMMS AND PARKING AREAS ALL ROADS AND PARKING AREA SHALL BE SEEDED AND MINICALLY AFTER THEIR CONSTRUCTION.

 BEGIN PERMANENT AND TEMPORARY SEEDING AND MULCHING. ALL CLUT AND FILL SLOPES HALL BE SEEDED AND MULCHING ARE SEMMEDIATELY AFTER THEIR CONSTRUCTION.

 BEGIN PERMANENT AND TEMPORARY SEEDING AND BRING, DITCHES, SILT FENCES, SEDIMENT TRAPS, ETC., MERCH SEED AND SEMMS, DITCHES, SILT FENCES, SEDIMENT TRAPS, ETC., MERCH SENTENCES, AND ADMINIST LITTER.

- DALLY, OR AS REQUIRED, CONSTRUCT TEMPORARY BERMS, DRAINS, DITCHES, SILT FENCES, SEDIMENT TRAPS, ETC., MULCH AND SEED AS REQUIRED.
 FINISH PAVING ALL ROADWAYS AND PARKING LOTS.
 INSPECT AND MAINTAIN ALL REGISION AND SEDIMENT CONTROL MEASURES.
 COMPLETE PERMANENT SEEDING AND LANDSCAPING.
 REMOVE TRAPPED SEDIMENTS FROM COLLECTOR DEVICES AS APPROPRIATE AND THEN REMOVE TEMPORARY EROSION CONTROL MEASURES.

NOTE: THE CONSTRUCTION SEQUENCE MUST LIMIT THE DURATION AND AREA OF DISTURBANCE.

- EROSION CONTROL NOTES

 1. ALL EROSION CONTROL HEASURES AND PRACTICES SHALL CONFORM TO THE "NEW HAMPSHIRE STORMWATER MANUAL VOLUME 3: EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION" PREPARED BY THE NHDES.

 2. CONTRACTOR SHALL INSTALL TEMPORARY EROSION CONTROL BARRIERS, INCLUDING HAY BALE, SILT FENCES, SILT CONTRACTOR SHALL INSTALL TEMPORARY EROSION CONTROL BARRIERS, INCLUDING HAY BALE, SILT FENCES, SILT CONTRACTOR SHALL INSTALL TEMPORARY EROSION CONTROL BARRIERS, INCLUDING HAY BALE, SILT FENCES, SILT CONTRACTOR SHALL INSTALL TEMPORARY EROSION CONTROL BARRIERS, INCLUDING HAY BALE, SILT FENCES, SILT CONTROL BARRIERS, INCLUDING HAY BALE, SILT FENCES, SILT FENCE
- COMMON STABLE HER THAT I ENHINDENT ENGINEET ENGINEETS, INCLUDING THAT STALL, SILL'I FENCES, SILL'I FENCES, SILL'I SACKS, AND SILT SOCKS, AS SHOWN IN THESE DRAWINGS AS THE FIRST ORDER OF WORK.

 SILT'S ACK INLET PROTECTION SHALL BE INSTALLED IN ALL EXISTING AND PROPOSED CATCH BASIN INLETS WITHIN THE

 WORK LIMITS, AND DE MAINTAINED FOR THE DURATION OF THE PROJECT.

 PERMITTER CONTROLS INCLUDING SILT FENCES, HAY BALE BARRIERS, AND/OR SILT SOCKS SHALL MAINTAINED FOR THE

 DURATION OF THE PROJECT UNTIL NON-PAVED AREAS HAVE BEEN STABILIZED.

- DURATION OF THE PROJECT UNTIL NON-PAVED AREAS HAVE BEEN STÄBILIZED.
 THE CONTRACTOR SHALL REMOVE AND PROPERLY DISPOSE OF ALL TEMPORARY EROSION CONTROL DEVICES UPON
 COMPLETION OF CONSTRUCTION.
 ALL DISTURBED AREAS NOT OTHERWISE BEING TREATED SHALL RECEIVE 6" LOAM, SEED, AND FERTILIZER.
 ALL DISTURBED AREAS NOT OTHERWISE BEING TREATED SHALL RECEIVE 6" LOAM, SEED, AND FERTILIZER.
 INSPECT ALL INLET PROTECTION AND PERIMETER CONTROLS WEEKLY AND AFTER EACH RAIN STORM OF 0.25 INCH OR
 GREATER, REPAIR/MODIFY PROTECTION AS MECESSARY TO MAXIMIZE EFFICIENCY OF FILTER. REPLACE ALL FILTERS
 WHEN SEDIMENT IS 1/3 THE FILTER HEIGHT.
 CONSTRUCT EROSION CONTROL BLANKETS ON ALL SLOPES STEEPER THAN 3:1.

- 8. CONSTRUCT EROSION CONTROL BLANKETS ON ALL SLOPES STEEPER THAN 3:1.

 STABILIZATION

 1. A SITE SHALL BE CONSIDERED STABLE WHEN IT IS IN A CONDITION IN WHICH THE SOILS ONT HE SITE WILL NOT ERODE UNDER THE CONDITIONS OF A 10-YEAR STORM, SUCH AS BUT NOT LIMITED TO:

 A. IN ARRAS THAT WILL NOT BE RAVED, A MINIMUM OF 85% VEGETATIVE COVER HAS BEEN ESTABLISHED, A MINIMUM OF 3 INCHES OF NON-ENGISIVE MATERIAL SUCH AS STONE OR RIPRAP HAS BEEN INSTALLED, OR EROSION CONTROL BLANKETS HAVE BEEN INSTALLED IN ACCORDANCE WITH ENV-WQ 1506.03; OR EROSION CONTROL BLANKETS HAVE BEEN INSTALLED. AND STABLED HAVE BEEN INSTALLED IN ACCORDANCE WITH ENV-WQ 1506.03; OR 100 STANDARD SPECIFICATION FOR ROADS EQUIRED BEING CONSTRUCTION, 2006, ITEM NO. 30-4.7 HAVE BEEN INSTALLED.

 2. WINTER STABILIZATION PRACTICES:

 3. A ALL PROPOSED POST-DEVELOPMENT VEGETATED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATED GROWTH BY OCTOBER 15TH, ON WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 4:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACER, SECURED WITH ANCHOR NETTING, ELSEWHIERD.

 B. ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER STABILIZED WITH STONE OR REDON CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITION.

 C. AFTER OCTOBER 15TH, MICHOPHER COTOBER 15TH, SHALL BE STABILIZED WITH STONE OR REDON CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITION.

 C. AFTER OCTOBER 15TH, MICHOPHER ROADS SURFACES SHALL BE PROTECTED WITH A MINIMUM OF 3-INCHES OF CRUSHED GRAVEL PER NHIOTI TIEM 30-3, OR IF CONSTRUCTION IS TO CONTINUE THROUGH THE WINTER SEASON BE CLEARED OF ANY ACCUMULATES SONG AFTER EACH STORM EVENT.

 3. STABILIZATION SHALL BE INITIATED ON ALL LOAM STOCKPILES, AND DISTURBED AREAS, WHERE CONSTRUCTION ACTUTY HAS PERMANENTLY OR TEMPORARILY CEASED IN THAT AREA, STABILIZATION MEASURES TO BE USED INCLUDE:

- RUCTION ACTIVITY PERMANENTLY OR TEMPORARILY CEASES WITHIN 100 FEET OF NEARBY SURFACE WHEN CONSTRUCTION ACTIVITY PERMANEMILY OR TEMPORARILY CEASES WITHIN 100 FEET OF NEAR SUFFACE WATERS OR DELINEATED WETLANDS, THE RAES SHALL BE STABILIZED WITHIN SEVEN (7) DAYS OR PRIOR TO A RAIN EVENT. ONCE CONSTRUCTION ACTIVITY CEASES PERMANENTLY IN AN THESE AREAS, SILT FENCES AND HAY BALE BARRIERS AND ANY EARTH/DIKES SHALL BE REMOVED ONCE PERMANENT MEASURES ARE ESTABLISHED. DURING CONSTRUCTION, RUNOFF WILL BE DIVERTOR AROUND THE SITE WITH EARTH DIKES, PIPING OR STABILIZED CHANNELS WERE POSSIBLE. SHEET RUNOFF ROM THE SITE WITH EARTH DIKES, PIPING OR STABILIZED CHANNELS WERE POSSIBLE. SHEET RUNOF FROM THE SITE WITH EARTH DIKES, PIPING OR STABILIZED SILT FENCES OR SILT SICKS. ALL STORM DRAIN INLETS STABLL BE PROVIDED WITH FLARED END SECTIONS AND TRASH ROCKS. SILE ITS SOCKS. ALL STORM DRAIN INLETS STABLL BE PROVIDED WITH FLARED END SECTIONS AND TRASH ROCKS.

- DUST CONTROL:

 1. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTROL DUST THROUGHOUT THE CONSTRUCTION PERIOD.

 2. DUST CONTROL METHODS SHALL INCLUDE, BUT BE NOT LIMITED TO SPRINKLING WATER ON EXPOSED AREAS, COVERING LOADED DUMP TRUCKS LEAVING THE STE, AND TEMPORARY MULCHING.

 3. DUST CONTROL MEASURES SHALL BE UTILIZED SO AS TO REVENT THE MIGRATION OF DUST FROM THE SITE TO ABUTTING AREAS INCLUDING BUT NOT LIMITED TO ROUTE 11 (FARMINGTON ROAD).

- STOCKPILES

 1. LOCATE STOCKPILES A MINIMUM OF 50 FEET AWAY FROM CATCH BASINS, SWALES, AND CULVERTS.

 2. ALL STOCKPILES SHOULD BE SURROUNDED WITH TEMPORARY EROSION CONTROL MEASURES PRIOR TO THE ONSET OF PRECIPITATION. PRECIPITATION.
 PERIMETER BARRIERS SHOULD BE MAINTAINED AT ALL TIMES, AND ADJUSTED AS REEDED TO ACCOMMODATE THE
 DELIVERY AND REMOVAL OF MATERIALS FROM THE STOCKPILE. THE INTEGRITY OF THE BARRIERS SHOULD BE INSPECTED
 AT THE END OF EACH WORKING DAY.
 PROTECT ALL STOCKPILES FROM STORMWATER RUN-OFF USING TEMPORARY EROSION CONTROL MEASURES SUCH AS
 BERNS, SILT SOCK, OR OTHER APPROVED PRACTICE TO PREVENT MIGRATION OF MATERIAL BEYOND THE IMMEDIATE
 OFFICE AND ALL STOCKPILES FOR THE STOCKPILES FROM STORMWATER RUN-OFF USING TEMPORARY EROSION CONTROL MEASURES SUCH AS
 BERNS, SILT SOCK, OR OTHER APPROVED PRACTICE TO PREVENT MIGRATION OF MATERIAL BEYOND THE IMMEDIATE
 OFFICE AND ALL STOCKPILES FOR THE STOC

OFF SITE VEHICLE TRACKING
THE CONTRACTOR SHALL CONSTRUCT STABILIZED CONSTRUCTION ENTRANCES PRIOR TO ANY EXCAVATION ACTIVITIES.

- SSEEDBED PREPARATION: APPLY FERTILIZER AT THE RATE OF 600 POUNDS PER ACRE OF 10-10-10. APPLY LIMESTONE (EQUIVALENT TO 50 PERCENT CALCIUM PLUS MAGNESIUM OXIDE) AT A RATE OF THREE (3) TONS PER ACRE.
- DING
 UTILIZE ANNUAL RYE GRASS AT A PATE OF 40 LBS/ACRE.
 WHERE THE SOIL HAS BEEN COMPACTED BY CONSTRUCTION OPERATIONS, LOOSEN SOIL TO A DEPTH OF TWO
 (2) INCHES BEFORE APPLYING FERTILIZER, LUME AND SEED
 APPLY SEED UNIFORNIT BY HAND, CYCLONE SEEDER, OR HYDROSEEDER, (SLURRY INCLUDING SEED AND
 FERTILIZER), HYDROSEEDINGS, WHICH INCLIDE MULCH, MAY BE LEFT ON SOIL SURFACE. SEEDING RATES
 MUST BE INCREASED 10% WHEN HYDROSEEDING.
- MAINTENANCE
 TEMPORARY SEEDING SHALL BE PERIODICALLY INSPECTED. AT A MINIMUM, 95% OF THE SOIL SURFACE SHOULD BE COVERED BY VEGETATION. IF ANY EVIDENCE OF EROSION OR SEDIMENTATION IS APPARENT, REPRAIS SHALL BE ADE AND OTHER TEMPORARY MEASURES USED IN THE INTERIM (MULCH, FILTER BARRIERS, CHECK DAMS, ETC.).

- VEGETATIVE PRACTICE

 A. FOR PERMANENT MEASURES AND PLANTINGS.

 1. LIMESTONE SHALL BE THOROUGHLY INCORPORATED INTO THE LOAM LAYER AT A RATE OF THREE (3) TONS PER ACKE IN ORDER TO PROVIDE A PH VALUE OF 5.5 TO 6.5.

 2. FERTILIZER SHALL BE SPREAD ON THE TOP LAYER OF LOAM AND WORKED INTO THE SURFACE. FERTILIZER APPLICATION RATE SHALL BE 800 POUNDS PER ACRE OF 10-20-20 FERTILIZER.

- SOIL CONDITIONERS AND FERTILIZER SHALL BE APPLIED AT THE RECOMMENDED RATES AND SHALL BE
- WIDTH.

 SEED SHALL BE SOWN AT THE RATE SHOWN BELOW. SOWING SHALL BE DONE ON A CALM, DRY DAY,
 PREFERABLY BY MACKINE, BUT IF BY HAND, ONLY BY EXPERIENCED WORKMEN. IMMEDIATELY BEFORE
 SEEDING, THE SOIL SHALL BE LIGHTLY RAKED. ONE HALF THE SEED SHALL BE SOWN IN ONE DIRECTION AND
 THE OTHER HALF AT RIGHT ANGLES TO THE ORIGINAL DIRECTION. IT SHALL BE LIGHTLY RAKED INTO THE SO
 TO A DEPTH NOT OVER 1/4 INCH AND ROLLED WITH A HAND ROLLER WEIGHING NOT OVER 10P DOUNDS PER.
- Linear foot of width.

 Hay much shall be applied immediately after seeding as indicated above.
 The surface shall be watered and kept moist with a fine spray as required, without washing
 away the soil, until the grass is well established, any areas which are not satisfactorily
 covered with grass shall be reserbed, and all noxious weeds removed. THE CONTRACTOR SHALL PROTECT AND MAINTAIN THE SEEDED AREAS UNTIL ACCEPTED. A GRASS SEED MIXTURE CONTAINING THE FOLLOWING SEED REQUIREMENTS SHALL BE APPLIED AT THE
- INDICATED RATE:
 CREEPING RED FESCUE
 KENTUCKY BLUEGRASS
 PERRENIAL RYE GRASS 50 LBS/ACRE 100 LBS/ACRE 50 LBS/ACRE
- PERRENIAL RYE GRASS 50.185/ÁCRE
 IN OC ASE SHALL THE WEED CONTENT EXCEED ONE (1) PERCENT BY WEIGHT, ALL SEED SHALL COMPLY WITH
 STATE AND FEDERAL SEED LAWS. SEEDING SHALL BE DONE NO LATER THAN SEPTEMBER 15. IN NO CASE SHALL
 SEEDING TAKE PLACE OVER SNOW.

 DORMANT SEEDING (SEPTEMBER 15 TO FIRST SNOWFALL)
 FOLLOW FERNAMENT MEASURES SLOPE, LIME, FERTILIZER AND GRADING REQUIREMENTS. APPLY SEED
 MIXTURE AT TWICE THE INDICATED RATE. APPLY MULCH AS INDICATED FOR PERMANENT MEASURES.

- CONCRETE WASHOUT AREA

 1. THE FOLLOWING ARE THE ONLY NON-STORMWATER DISCHARGES ALLOWED. ALL OTHER NON-STORMWATER DISCHARGES
 ARE PROHIBITED ON SITE.

 A. THE CONCRETE DELIVERY TRUCKS SHALL, WHENEVER POSSIBLE, USE WASHOUT FACILITIES AT THEIR OWN

 - THE CONCRETE DELIVERY TRUCKS SHALL, WHENEVER POSSIBLE, USE WASHOUT FACILITIES AT THEIR OWN PLANT OR DISPATCH FACILITIES.

 IF IT IS NECESSARY, SITE CONTRACTOR SHALL DESIGNATE SPECIFIC WASHOUT AREAS AND DESIGN FACILITIES TO HANDLE ANTICIPATED WASHOUT WATER.

 CONTRACTOR SHALL LOCATE WASHOUT AREAS AT LEAST 150 FEET AWAY FROM STORM DRAINS, SWALES AND SURFACE WATERS OR DELINEATED WETLANDS.

 INSPECT WASHOUT FACILITIES DAILY TO DETECT LEAKS OR TEARS AND TO IDENTIFY WHEN MATERIALS NEED TO BE REMOVED.

- ALLOWABLE NON-STORMWATER DISCHARGES

 1. DISCHARGES FROM FIRE-FIGHTING ACTIVITIES FIRE HYDRANT FLUSHINGS WATERS USED TO WASH VEHICLES WHERE DETERGENTS ARE NOT USED
- WATER USED TO CONTROL DUST
 POTABLE WATER INC. UNCONTAMINATED WATER LINE FLUSHINGS
 ROUTINE EXTERNAL BUILDING WASH DOWN -NO DETERGENTS
- PAVEMENT WASH WATERS -NO SPILLS OR DETERGENTS PROVINCE WASH WALERS-NU SPILLS UN DETERGENTS UNCONTAMINATED AIR CONDITIONING/COMPRESSOR CONDENSATE UNCONTAMINATED GROUND WATER OR SPRING WATER FOUNDATION OR FOOTING DRAINS-NOT CONTAMINATED UNCONTAMINATED EXCAVATION DEWATERING LANDSCAPE RIRIGIATION

- DIE MAI BEKIALS
 ALL WASTE MATERIALS SHALL BE COLLECTED AND STORED IN SECURELY LIDDED RECEPTACLES. ALL TRASH AND
 CONSTRUCTION DEBRIS FROM THE STRE SHALL BE DEPOSITED IN A DUMPSTER.
 NO CONSTRUCTION MASTE MATERIALS SHALL BE BURIED ON SITE.
 ALL PERSONNEL SHALL BE INSTRUCTED REGARDING THE CORRECT PROCEDURE FOR WASTE DISPOSAL BY THE
 SUPERINTENDENT.
- ARIDUUS WASTE
 ALL HAZARDOUS WASTE MATERIALS SHALL BE DISPOSED OF IN THE MANNER SPECIFIED BY LOCAL OR STATE
 REGULATION OR BY THE MANUFACTURER.
 SITE PERSONNEL SHALL BE INSTRUCTED IN THESE PRACTICES BY THE SUPERINTENDENT.
 ITARY WASTE
- ALL SANITARY WASTE SHALL BE COLLECTED FROM THE PORTABLE UNITS A MINIMUM OF ONCE PER WEEK BY A LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR.

- SPILL PREVENTION

 1. CONTRACTOR SHALL BE FAMILIAR WITH SPILL PREVENTION MEASURES REQUIRED BY LOCAL, STATE AND FEDERAL AGENCIES. AT A MINIMUM, CONTRACTOR SHALL FOLLOW THE BEST MANAGEMENT SPILL PREVENTION PRACTICES
- OUTLINED BELOW.

 THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT SHALL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTRANCES DURING CONSTRUCTION TO STORMWATER RUNOFF:

 A. GOOD HOUSEKEEPING:
 THE FOLLOWING GOOD HOUSEKEEPING PRACTICES SHALL BE FOLLOWED ON SITE DURING THE CONSTRUCTION

 - PROJECT:

 1. ONLY SUFFICIENT AMOUNTS OF PRODUCTS TO DO THE JOB SHALL BE STORED ON SITE.

 2. ALL MATERIALS STORED ON SITE SHALL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR PROPER (ORIGINAL IF POSSIBLE) CONTAINERS AND, IF POSSIBLE, UNDER A ROOF OR OTHER ENCLOSURE.

 3. MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL SHALL BE FOLLOWED.

 4. THE SITE SUPERIMENDANT SHALL INSPECT DAILY TO HENSURE PROPER USE AND DISPOSAL OF MATERIALS.

 5. SUBSTANCES SHALL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER.

 6. WHENEVER POSSIBLE ALL OF A PRODUCT SHALL BE USED UP BEFORE DISPOSING OF THE CONTAINER.

 6. HAZARDOUS PRODUCTS:

 6. WHENEVER POSSIBLE ALL OF A PRODUCT SHALL BE USED UP BEFORE DISPOSING OF THE CONTAINER.

 6. WHENEVER POSSIBLE ALL OF A PRODUCT SHALL BE USED UP BEFORE DISPOSING OF THE CONTAINER.

 6. WHENEVER POSSIBLE ALL OF A PRODUCT SHALL BE USED UP BEFORE AND THE CONTAINER.

 6. WHENEVER POSSIBLE AND THE ORD THE CONTAINERS.

 6. WHENEVER POSSIBLE AND THE ORD THE CONTAINERS.

 6. WHENEVER POSSIBLE AND THE ORD THE PROPERTY OF THE PROP
 - THE POLLOWING PRACTICES SHALL BE USED TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS:

 PRODUCTS SHALL BE KEPT IN THEIR ORIGINAL CONTAINERS UNLESS THEY ARE NOT RESEALABLE.

 ORIGINAL LABELS AND MATERIAL SAFETY DATA SHALL BE RETAINED FOR IMPORTANT PRODUCT INFORMATION.

 SURPLUS PRODUCT SHEAL THE MUST BE DISPOSED OF SHALL BE DISCARDED ACCORDING TO THE MANUFACTURER'S RECOMMENDED METHODS OF DISPOSAL.

 PRODUCT SPECIFICATION PRACTICES

 THE FOLLOWING PRODUCT SPECIFIC PRACTICES SHALL BE FOLLOWED ON SITE:

 PETRACTICAL ON SITE YEHICLES SHALL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE LEAKAGE.

 PETROL IS NOT BY CHICKED SHALL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE LEAKAGE.

- PRINT LEMANUE: 10 REDUCE LEAKAGE.
 PETROLEUM PRODUCTS SHALL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY
 LABELED. ANY ASPHALT BASED SUBSTANCES USED ON SITE SHALL BE APPLIED ACCORDING TO THE
 MANUFACTURER'S RECOMMENDATIONS.
- FERTILIZERS USED SHALL BE APPLIED ONLY IN THE MINIMUM AMOUNTS DIRECTED BY THE
- SPECIFICATIONS.

 ONCE APPLIED FERTILIZER SHALL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORMWATER.
 STORAGE SHALL BE IN A COVERED SHED OR ENCLOSED TRAILERS. THE CONTENTS OF ANY PARTIALLY
 USED BAGS OF FERTILIZER SHALL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.
- PAINTS:
 ALL CONTAINERS SHALL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE.
 B. EXCESS FAINT SHALL BOT BE DISCHARGED TO THE STORM SEWER SYSTEM.
 C. EXCESS FAINT SHALL BE DISPOSED OF PROPERLY ACCORDING TO MANUFACTURER'S INSTRUCTIONS OR STATE AND LOCAL REGULATIONS.

 D. SPILL CONTROL PRACTICES
- SPILL CONTROL PRACTICES
 IN ADDITION TO GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS
 SECTION, THE POLLOWING PRACTICES SHALL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:

 1. MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP SHALL BE CLEARLY POSTED AND SITE
 PERSONNEL SHALL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION AND
- CLEANUP SUPPLIES.
 MATERIALS AND FOUIPMENT NECESSARY FOR SPILL CLEANUP SHALL BE KEPT IN THE MATERIAL STORAGE AREA
 ON SITE. EQUIPMENT AND MATERIALS SHALL INCLUDE BUT NOT BE LIMITED TO BROOMS, DUSTPANS, MOPS,
 RAGS, GLOVES, GOGGLES, KITTY LITTER, SAND, SAWDUST AND PLASTIC OR METAL TRASH CONTAINERS
 SPECIFICALLY FOR THIS PURPOSE.
- SPECIFICALLY FOR THIS PURPOSE.

 ALL SPILLS SHALL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY.

 HE SPILL AREA SHALL BE KEPT WELL VENTLATED AND PERSONNEL SHALL WEAR APPROPRIATE PROTECTIVE
 CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.

 SPILLS OF TOXIC OR HAZARDOUS MATERIAL SHALL BE REPORTED TO THE APPROPRIATE LOCAL, STATE OR
 FEDERAL AGENCIES AS REQUIRED.
- IDENT RESPONSIBLE FOR DAY-TO-DAY SITE OPERATIONS SHALL BE THE SPILL 6. THE SITE SUPERINTENDENT RESPONSIBLE FOR DAY-TO-DAY SITE OPERATIONS SHALL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR.
 VEHICLE FUELING AND MAINTENANCE PRACTICE:
 CONTRACTOR SHALL MAKE AN EFFORT TO PERFORM EQUIPTMENT/VEHICAL FUELING AND MAINTENANCE AT AN OFF-SITE FACILITY.
 CONTRACTOR SHALL PROVIDE AN ON-SITE FUELING AND MAINTENANCE AREA THAT IS CLEAN AND DRY.

- IF POSSIBLE THE CONTRACTOR SHALL KEEP AREA COVERED.

 CONTRACTOR SHALL KEEP A SPILL KIT AT THE FUELING AND MAINTENANCE AREA.

 CONTRACTOR SHALL KEEP A SPILL KIT AT THE FUELING AND MAINTENANCE AREA.

 CONTRACTOR SHALL USE DRIP PANS, DRIP CLOTHS, OR ABSORBENT PADS WHEN REPLACING SPENT FLUID.

EROSION CONTROL OBSERVATIONS AND MAINTENANCE PRACTICES
THIS PROJECT EXCEEDS ONE (1) ACRE OF DISTURBANCE AND THUS REQUIRES A SWPPP. THE SWPPP SHALL BE PREPARED BY THE CONTRACTOR, THE CONTRACTOR SHALL BE FAMILIAR WITH THE SWPPP AND KEEP AN
UPDATED COPY OF THE SWPPP ONSITE AT ALL TIMES.

- THE FOLLOWING REPRESENTS THE GENERAL OBSERVATION AND REPORTING PRACTICES THAT SHALL BE FOLLOWED AS PART OF THIS PROJECT.

 1. OBSERVATIONS OF THE PROJECT FOR COMPLIANCE WITH THE SWIPP SHALL BE MADE BY THE CONTRACTOR AT LEAST ONCE A WEEK OR WITHIN 24 HOURS OF A STORM 0.25 INCHES OR GREATER.

 2. AN OBSERVATION REPORT SHALL BE MADE AFTER EACH OBSERVATION AND DISTRIBUTED THE EMIGNIER, THE OWNER, AND THE CONTRACTOR.

 3. A REPRESENTATIVE OF THE SITE CONTRACTOR, SHALL BE RESPONSIBLE FOR MAINTENANCE AND REPAIR ACTIVITIES.

 4. IF A REPAIR IS NECESSARY, IT SHALL BE INITIATED WITHIN 24 HOURS OF REPORT.

- BLASTING NOTES

 1. CONTACT NINES PRIOR TO COMMENCING BLASTING.

 2. FOR ANY PROJECT FOR WHICH BLASTING OF BEDROCK IS ANTICIPATED, THE APPLICANT SHALL SUBMIT:

 A. A BLASTING PLAN THAT IDENTIFIES:

 B. WHERE THE BLASTING ESATING ESATING THE SATING SATING SATING THE SATING SATING SATING PLAN THAT IDENTIFIES:

 C. ESTIMATED QUANTITY OF BLAST ROCK IN CUBIC YARDS; AND

 C. ESTIMATED QUANTITY OF BLAST ROCK IN CUBIC YARDS; AND

 J. ENTIFICATION OF BLAST ROCK IN CUBIC YARDS; AND

 J. ENTIFICATION OF BLAST ROCK IN CUBIC YARDS; AND

 GROUNDWATER TO DETECT ANY CONTAMINATION IN SUPPICIENT THE TO PROTECT THE WATER SUPPLY WELLS GROUNDWATER WOLLS WITHIN 2000 FEET OF THE BLASTING ACTIVITIES, A PLAN TO MONITOR GROUNDWATER TO DETECT ANY CONTAMINATION IN SUPPICIENT THE TO PROTECT THE WATER SUPPLY WELLS OR IN OTHER WHILE SUPPLY WELLS OR IN OTHER WELLS WITHIN 2000 FEET OF THE BLASTING WATER SUPPLY WELLS OR IN OTHER WELLS THAT ARE REPRESENTATIVE OF THE DRINKING WATER SUPPLY WELLS IN THE AREA.

 THE GROUNDWATER SAMPLING PROGRAM MUST BE IMPLEMENTED ONCE APPROVED BY NINDES.

 1 THE GROUNDWATER SAMPLING PROGRAM MUST BE IMPLEMENTED ONCE APPROVED BY NINDES.

 - TOUCH WIRE BEST PARAMETERS I PRACTICES STALL BE COMPLED WITH:

 INDIANO, STALL BE COMPLETED WITH:

 INDIANO, STALL BE COMPLETED WITH STALL BE COMPLETED WITH:

 INDIANO, STALL BE MAINTAINED BY THE DRILLER AND COMMUNICATED DIRECTLY TO THE BLASTER. THE LOGS SHALL INDICATE DEPTHS AND LENGTHS OF VOIDS, CAVITIES, AND FAULT ZONES OR OTHER WEAK ZONES ENCOUNTEED AS WELL AS GROUNDWATER CONDITIONS.

 EXPLOSIVE PRODUCTS SHALL BE MANAGED ON-SITE SO THAT THEY ARE EITHER USED IN THE BOREHOLE, RETURNED TO THE DELIVERY VEHICLE, OR PLACED IN SECURE CONTAINERS FOR OFF-SITE

 - DISPOSAL

 SPILLAGE AROUND THE BORRHOLE SHALL EITHER BE PLACED IN THE DRENCHOLE OR CLEANED UP AND RETURNED TO AN APPROPRIATE VEHICLE FOR HANDLING OR PLACEMENT IN SECURE CONTAINERS FOR OFF-SITE DISPOSAL.

 LOADED EXPLOSIVES SHALL BE DETONATED AS SOON AS POSSIBLE AND SHALL NOT BE LEFT IN THE BLASTHOLES OVERHIGHT, UNLESS WEATHER OR OTHER SAFETY CONCERNS REASONABLY DICTATE THAT DETONATION SHOULD BE POSTPONED.

 LOADING EQUIPMENT SHALL BE CLEANED IN AN AREA WHERE WASTEWATER CAN BE PROPERLY CONTAINED AND HANDLED IN A MANNER THAT PREVENTS RELEASE OF CONTAMINANTS TO THE ENVIRONMENT.

 EMPLOSIVES SHALL BE LOADED TO MAINTAIN GOOD CONTINUITY IN THE COLUMN LOAD TO PROMOTE COMPLETE DETONATION. INDUSTRY ACCEPTED LOADING PRACTICES FOR PRIMING, STEMMING, DECKNER AND COLUMN RISE NEED TO BE ATTENDED TO.

 EXPLOSIVES SHALL BE LOADED TO BE ATTENDED TO.

 EXPLOSIVES AND LIBED TO MAINTAIN TO DE PRIVET THE POTENTIAL EDG GOUNDWATER CONTAMINATION WHEN EVOLODING ARE USED.

 - EXPLOSIVE SELECTION
 THE FOLLOWING BMPS SHALL BE FOLLOWED TO REQUEE THE POTENTIAL FOR GROUNDWATER CONTAMINATION WHEN EXPLOSIVES ARE USED:
 1. EXPLOSIVE PRODUCTS SHALL BE SELECTED THAT ARE APPROPRIATE FOR SITE CONDITIONS AND SAFE BLAST EXECUTION.
 2. EXPLOSIVE PRODUCTS SHALL BE SELECTED THAT HAVE THE APPROPRIATE WATER RESISTANCE FOR THE SITE CONDITIONS PRESENT TO MINIMIZE THE POTENTIAL FOR HAZARDOUS EFFECT OF THE PRODUCT UPON GROUNDWATER.
 PROVENTION OF MISTRES. APPROPRIATE PRACTICES SHALL BE DEVELOPED AND IMPLEMENTED TO PREVENT MISFIRES.
 MUCK PILE MANAGEMENT

 - uck plie management
 Luck plies fine Blasted Pieces of Rock) and Rock piles shall be managed in a manner to reduce the potential for contamination by implementing the following measures: A PARKET TIME OF THE POTENTIAL FOR CONTAMINATION BY IMPLE
 REMOVE THE MUCK PILE FROM THE BLAST AREA AS SOON AS REASONABLY POSSIBLE.
 MANAGE THE INTERACTION OF BLASTED ROCK FILES AND STORMWATER TO PREVENT CONTAMINATION OF WATER SUPPLY WELLS OR SURFACE WATER,
 PREVENTION HEASURES AND SPILL MITIGATION
- PRILL PREVENTION AND SPILL HILDSTANDS
 - MINIMUM:
 THE FUEL STORAGE REQUIREMENTS SHALL INCLUDE:

 STORAGE OF REGULATED SUBSTANCES ON AN IMPERVIOUS SURFACE;

WATER FLOW

WORK AREA

- STORAGE OF REQUAITED SUBSTANCES ON AN IMPERVIOUS SURFACE;
 SECURE STORAGE RABAS AGAINST UNAUTHORIZED ENTRY;
 LABEL REGULATED CONTAINERS CLEARLY AND VISIBLY;
 INSPECT STORAGE AREAS WEEKLY;
 COVER REGULATED CONTAINERS IN OUTSIDE STORAGE AREAS;
 WHEREVER ROSSIDEL, KEEP REGULATED CONTAINERS THAT ARE STORED OUTSIDE MORE THAN 50 FEET FROM SURFACE WATER AND STORM DRAINS, 75 FEET FROM PRIVATE WELLS, AND 400 FEET
 WHEREVER ROSSIDEL, KEEP REGULATED CONTAINERS THAT ARE STORED OUTSIDE MORE THAN 50 FEET FROM SURFACE WATER AND STORM DRAINS, 75 FEET FROM PRIVATE WELLS, AND 400 FEET
- MHEREVER POSSIBLE, KEEP REGULATED CUNIVARIES THAT ARE STOKED DOTAINS FROM PUBLIC WELLS; AND

 SECONDARY CONTAINMENT IS REQUIRED FOR CONTAINING REGULATED SUBSTANCES STORED OUTSIDE, EXCEPT FOR ON PREMISE USE HEATING FUEL TANKS, OR ABOVEGROUND OR JUNDERGROUND STORAGE TANKS OTHERWISE REGULATED.

 THE FIEL HANDLING REQUIREMENTS SHALL INCLIDE:

 BECEFT WHEN IN USE, KEEP CONTAINING REGULATED SUBSTANCES CLOSED AND SEALED;

(12" - 18" TYPICAL)

SILT SOCK

AREA TO BE PROTECTED

SILT SOCK

- BECCEPT WHEN IN USE, KEEP CONTAINERS CONTAINING REGULATED SUBSTANCES CLOSED AND SEALED;

 PLACE DRIP PANS UNIDER SPIGOTS, VALVES, AND PUMPS;

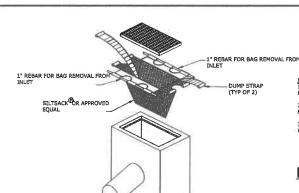
 LAVE SPILL CONTROL AND CONTAINMENT EQUIPMENT READILY AVAILABLE IN ALL WORK AREAS;

 USE FUNNIES AND DRIP PANS WHEN TRANSFERRING REGULATED SUBSTANCES; AND

 PERFORM TRANSFERS OF REGULATED SUBSTANCES OVER AN IMPREVIOUS SURFACE.

 FLET TRAINING OF ON-STEE EMPLOYEES AND THE ON-STEE POSITING OF RELEASE RESPONSE INFORMATION DESCRIBING WHAT TO DO IN THE EVENT OF A SPILL OF REGULATED SUBSTANCES.

 FUELING AND MAINTENANCE OF EXCAVATION, EARTHMOVING AND OTHER CONSTRUCTION RELATED EQUIPMENT SHALL COMPLY WITH THE REGULATIONS OF THE NEW HAMPSHIRE DEPARTMENT ENVIRONMENTAL SERVICES THESE REQUIREMENTS ARE SUBMERATED BY DEST MANAGEMENT PRACTICES FOR RELEING AND MAINTENANCE OF EXCAVATION AND EARTHMOVING EQUIPMENT OR ITS SUCCESSOR DOCUMENT, ISEE HITP://DES.NH.GOV/ORGANIZATION/COMMISSIONER/PIP/FACTSHEETS/DWGB/ODCLMENTS/DWGB-22-6-PDF]



NOTE:

1. INLET PROTECTION BARRIER SHALL BE SILT SACK BY ACF ENVIRONMENTAL OR APPROVED EQUAL.

2. INLET PROTECTION BARRIER SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. 3. INLET PROTECTION BARRIER SHALL BE USED IN CATCHBASIN WHERE PATH IS WITHIN VEHICULAR TRAVEL WAY.

INLET PROTECTION BARRIER

AREA TO BE PROTECTED

Proposed Commercial Development

Tiahe&Bond

Farmington Associates Properties, LLC

60 Farmington Road (Route 11) Rochester, NH

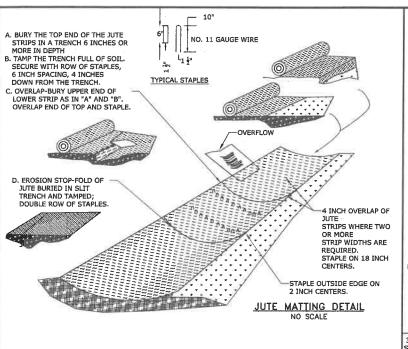
SURMISSION TO PR A 3/5/18 MARK DATE PROJECT NO DESCRIPTION W2157-C-DETAILS-180226.dwg 03/05/2018 CHECKED: KAM APPROVED BY

EROSION CONTROL NOTES AND DETAILS SHEET

SCALE: AS SHOWN

C-8

DATE: A



FLOW ------FLOW 1 1 1 1 PLAN PERFORATED DIKE, II RISER IF ECESSARY, TO DIVERT WEIR OR FLOW INTO USING STONE EXCAVATION FOR TRAP OUTLET OR PIPE 3:1 MAX. SLOPE SECTION

EXISTING: EXISTING STONE TO BE MIN. 3" EXISTING PAVEMENT MIRAFI FW-700 OR EQUAL PROFILE

SEE EROSION CONTROL NOTES FOR MATERIAL, INSTALLATION, AND MAINTENANCE REQUIREMENTS.

STABILIZED CONSTRUCTION ENTRANCE

GALVANIZED CONNECTION 7" FOR 12" TO 30" DIA. TOF PLATE 12" FOR 36" TO 48" DIA. 12" C-C REINFORCED ELEVATION EDGE CONNECTOR LUG PLAN FOR 12" THRU 24" ONLY PIPE METAL A (1" | B | H (1" | L (1" | W (2" DIA. GAGE TOL.) MAX. TOL.) TOL.) THREADED-12" 16 6" 6" 6" 21" 24" 15" 16 7" 8" 6" 18" 16 8" 13" 6" 31" 36" HOLDER 24" 16 10" 16" 6" 41" 48" FOR 30" & 36" ONLY 30" 14 12" 16" 8" 51" 60" ALTERNATE CONNECTIONS 36" 14 14" 19" 9" 60" 72" STD. COUPLING-BAND 42" 12 16" 22" 11ª 69" 84" 48" 12 18" 27" 12" 78" 90"

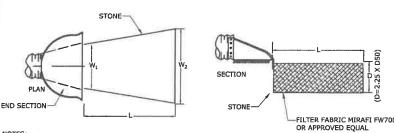
END SECTION FOR 12" TO 30" DIA. PIPE IN ONE PIECE, FOR 36" TO 48" DIA. PIPE TO BE MADE FROM TWO SHEETS JOINED BY RIVETING OR BOLTING ON CENTER LINE. TYPICAL CROSS-SECTION

CONNECTOR SECTION, CORNER PLATE AND TOE PLATE TO BE SAME THICKNESS AS END SECTION AND EACH TO BE GALVANIZED. METAL FLARED END SECTION
NO SCALE



Tighe&Bond





NOTES:
1. STONE SIZE AND MAT DIMENSIONS DETAILED ON PLANS.

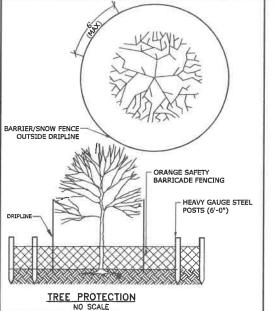
- STONE SHALL CONSIST OF SUB-ANGULAR FIELD STONE OR ROUGH UNHEWN QUARRY STONE OF APPROXIMATELY RECTANGULAR SHAPE. FLAT OR ROUND ROCKS ARE NOT ACCEPTABLE. THE STONE SHALL BE HARD AND OF SUCH QUALITY THAT IT WILL NOT DISINTEGRATE ON EXPOSURE TO WATER OR WEATHERING, BE CHEMICALLY STABLE AND IT SHALL BE SUITABLE IN ALL OTHER RESPECTS FOR THE PURPOSE INTENDED. THE BULK SPECIFIC GRAVITY (SATURATED SURFACE-DRY BASIS) OF THE INDIVIDUAL STONES SHALL BE AT LEAST 2.5.
- THE STONE SHALL BE COMPOSED OF A WELL-GRADED MIXTURE DOWN TO THE ONE-INCH SIZE PARTICLE SUCH THAT 50 PERCENT OF THE MIXTURE BY WEIGHT SHALL BE LARGER THAN THE D50 SIZE SPECIFIED. A WELL-GRADED MIXTURE IS DEFINED AS A MIXTURE COMPOSED PRIMARILY OF THE LARGER STONE SIZE BUT WITH A SUPFICIENT MIXTURE OF OTHER SIZES TO FILL THE PROGRESSIVELY SMALLER VOIDS BETWEEN THE STONES. THE DIAMETER OF THE LARGEST STONE SIZE IN SUCH A MIXTURE SHALL BE 1.5 TIMES THE D50 SIZE.

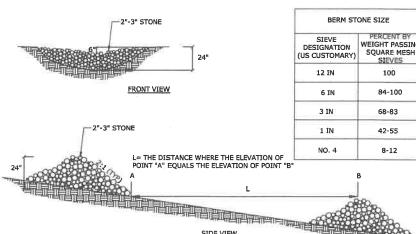
STONE APRON DETAIL

- NOTES:

 1. THE TRAP SHALL BE INSTALLED AS CLOSE TO THE DISTURBED AREA AS POSSIBLE.
- THE MAXIMUM CONTRIBUTING AREA TO A SINGLE TRAP SHALL BE LESS THAN 5 ACRES.
- THE MINIMUM VOLUME OF THE TRAP SHALL BE 3,600
 CUBIC FEET OF STORAGE FOR EACH ACRE OF DRAINAGE
- TRAP OUTLET SHALL BE MINIMUM OF ONE FOOT BELOW THE CREST OF THE TRAP.
 TRAP SHALL DISCHARGE TO A STABILIZED AREA.
- TRAP SHALL BE CLEANED WHEN 50 PERCENT OF THE ORIGINAL VOLUME IS FILLED.
- MATERIALS REMOVED FROM THE TRAP SHALL BE PROPERLY DISPOSED OF AND STABILIZED.

SEDIMENT TRAP





STONE CHECK DAM NO SCALE

Farmington Associates

60 Farmington Road (Route 11)

Rochester, NH

PROJECT NO

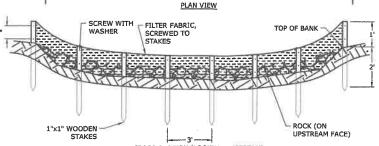
SCALE:

Properties, LLC

Proposed

Commercial

Development



IN-STREAM SEDIMENT CURTAIN

PROPOSED		MINIMUM DEPTH (SEE PLANS)
FINISH GRADE	BOTTOM WIDTH	PROPOSED FINISH GRADE
SIDESLOPE AS SHOWN ON AS	(SEE PLANS)	
SHOWN ON GRADING PLANS	(1000
PLANS		
		STATE WAYN
FINISH SUBGRADE		COVER W/ EROSION CONTROL
	1	MAT CURLEX II EXCELSIOR OR EQUAL
	6" LOAM & SEED	

NOTES:

1. THE FOUNDATION AREA OF THE WATERWAY SHALL BE CLEARED AND GRUBBED OF ALL TREES, BRUSH, STUMPS, AND OTHER OBJECTIONABLE MATERIAL.

AND THE FOUNDATION OR PROPER FUNCTIONING OF THE WATERWAY. MATERIALS REMOVED SHALL BE DISPOSED OF SO THEY WILL NOT INTERFERE WITH THE CONSTRUCTION OR PROPER FUNCTIONING OF THE WATERWAY. THE WATERWAY SHALL BE EXCAVATED OR SHAPED TO LINE, GRADE AND CROSS SECTION AS REQUIRED TO MEET THE DESIGN CRITERIA. THE WATERWAY SHALL BE FREE OF IRREGULARITIES WHICH WILL IMPEDE NORMAL FLOW.

EARTH FILLS REQUIRED TO MEET SUBGRADE REQUIREMENTS BECAUSE OF OVER EXCAVATION OR TOPOGRAPHY SHALL BE COMPACTED TO THE SAME DENSITY AS THE SURROUNDING SOIL TO PREVENT UNEQUAL SETTLEMENT THAT COULD CAUSE DAMAGE TO THE COMPLETED WATERWAY. EARTH REMOVED AND NOT NEEDED IN CONSTRUCTION SHALL BE SPREAD OR DISPOSED OF SO IT WILL NOT INTERFERE WITH THE FUNCTIONING OF THE WATERWAY.
CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER AS TO MINIMIZE EROSION AND AIR AND WATER POLLUTION. ALL APPROPRIATE

STATE AND LOCAL LAWS AND REGULATIONS SHALL BE COMPLIED WITH FOR INSTALLATION.
VEGETATION SHALL BE ESTABLISHED IN THE SWALE PRIOR TO ALLOWING STORMWATER RUNOFF TO FLOW THROUGH THE SWALE.

MAINTENANCE OF THE VEGETATION IN THE GRASSED WATERWAY IS EXTREMELY IMPORTANT IN ORDER TO PREVENT RILLING, EROSION, AND FAILURE OF THE WATERWAY. MOWING SHOULD BE DONE FREQUENTLY ENOUGH TO CONTROL ENCROACHMENT OF WEEDS AND WOODY VEGETATION AND TO KEEP THE GRASSES IN A VIGOROUS CONDITION. THE VEGETATION SHOULD NOT BE MOWED TOO CLOSELY SO AS TO REDUCE THE EROSION RESISTANCE IN THE

THE WATERWAY SHOULD BE INSPECTED PERIODICALLY AND AFTER EVERY MAJOR STORM TO DETERMINE THE CONDITION OF THE WATERWAY, RILLS AND DAMAGED AREAS SHOULD BE PROMPTLY REPAIRED AND REVEGETATED AS NECESSARY TO PREVENT FURTHER DETERIORATION. PERIODIC APPLICATIONS OF LIME AND FERTILIZER MAY BE NEEDED TO MAINTAIN VIGOROUS GROWTH.

GRASSED SWALE

MATERIALS: THE SEDIMENT CURTAIN SHALL BE COMPOSED OF: FILTER FABRIC (MIRAFI 140N OR APPROVED EQUAL) BOTTOM ANCHORING WEIGHT (STONE)

- ANCHORING POSTS (WOODEN STAKES)
 AND SECURING MECHANISM (SCREWS, ZIP TIES)
 ROCK (RIPRAP: D50=6")

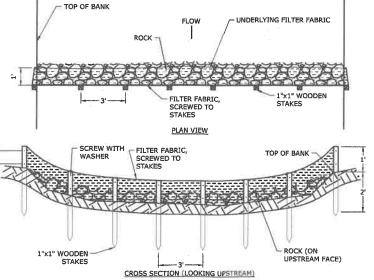
- CONSTRUCTION DETAILS:
 1. INSTALLATION
 1.1. THE SEDIMENT CURTAIN SHALL BE INSTALLED WHERE SHOWN ON THE PLANS. 1.2. STAKES (1 In BY 1 In) SHALL BE INSTALLED FROM ONE BANK TO THE OTHER, ON 3 ft CENTERS. STAKES SHALL BE DRIVEN AT LEAST 2 ft INTO THE GROUND, AND BE EXPOSED NO MORE THAN 12 IN WHERE THEY ARE IN WATER.

 1.3. A SCREW WITH WASHER SHALL CONNECT THE GEOTEXTILE TO THE STAKES (STAKES ON
- 1.3. A SCREW WITH WASHER SHALL CONNECT THE GEOTEXTILE TO THE STAKES (STAKES OI THE DOWNSTREAM SIDE OF THE FABRIC). SCREWS POSITIONED 6 In ON CENTERS. AT THE TOP OF THE STAKES, CABLE TIES MAY BE USED IF NEEDED TO FASTEN A FLAP OF GEOTEXTILE OVER THE TOP OF THE STAKE.
 1.4. AT THE STREAMBED, A GEOTEXTILE FLAP SHALL EXTEND AT LEAST 1 R UPSTREAM OF THE STAKES. STONE SHALL SIT ON THIS FLAP TO ANCHOR THE GEOTEXTILE TO THE

- OF PERFORMANCE DURING STORMS OR SIGNIFICANT FLOW EVENTS.
- 2.2. BED LOAD SEDIMENT ESCAPING THE DOWNSTREAM-MOST SEDIMENT CURTAIN SHALL CONSTITUTE INADEQUATE PERFORMANCE. THE CONTRACTOR SHALL IMMEDIATELY MODIFY, ADJUST, REPAIR OR REPLACE THE SEDIMENT CURTAIN TO CORRECT INADEQUACIES.
- INADEQUACIES.

 2.3. THE SEDIMENT CURTAIN SHALL BE REMOVED EITHER WHEN MORE THAN 0.25 IN OF RAIN IS FORECAST OR HAS FALLEN IN A 4 hr OR SHORTER PERIOD; OR WHEN IN-STREAM CONSTRUCTION ACTIVITIES WILL CEASE FOR MORE THAN 16 hrs (E.G.
- OVER WEEKENDS).

 2.4. THE SEDIMENT CURTAIN SHALL REMAIN IN PLACE UNTIL THE PROTECTED CONSTRUCTION ACTIVITIES HAVE CEASED AND THE TURBIDITY OF THE WATER ENCLOSED IS REDUCED TO ACCEPTABLE LEVELS. THE CURTAIN SHALL BE REMOVED WITHIN 72 HOURS OF THIS CONDITION BEING MET.



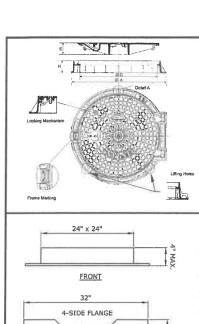
ME &

AS SHOWN C-9

EROSION CONTROL

DETAILS SHEET

W2157-C-DETAILS-180226.dwg



NOTE:
PAMREX FRAME AND COVER SHALL BE USED WITHIN THE CITY
OF ROCHESTER RIGHT-OF-WAY ONLY.

PAMREX 32-INCH MANHOLE FRAME & COVER

PLAN

DETAIL A

2" RIGID INSULATION (CLOSED CELL)

GASKET COMPRESSED BETWEEN HOOD AND STRUCTURE (SEE DETAIL B)

ANCHOR

SNOUT OIL-WATER-DEBRIS SEPARATOR

-- FINISH GRADE

NOTES: 1. INSTALLATION SHALL

MEET THE STANDARDS OF

THE CITY OF ROCHESTER

EXPANSION CONE

(NARROW END OUT)

INSTALLATION DETAIL

DRILLED

REFER TO PAVEMENT SECTION AND UTILITY TRENCH DETAILS

FOR BACKFILL SPECIFICATIONS

UTILITY PIPE INSULATION DETAIL

- FRAME AND GRATE SHALL BE REXUS HINGED GRATE OR APPROVED
- FRAME AND GRATE SHALL BE MANUFACTURED FROM DUCTILE IRON IN
- ACCORDANCE WITH ISO 1083.

 GRATE SHALL INCORPORATE A NON-CAPTIVE HINGE SYSTEM.

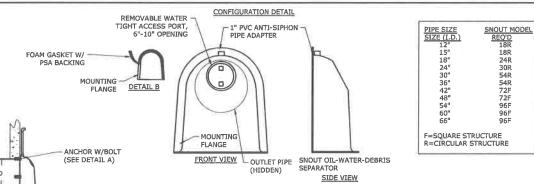
 GRATINGS SHALL BE ONE-MAN OPERABLE USING STANDARD TOOLS AND

 SHALL BE CAPABLE OF WITHSTANDING A MINIMUM LOAD OF 100,000 LBS. GRATINGS SHALL INCORPORATE A SPRING BAR LOCK AS A DETERRENT TO ACCESS BY CHILDREN OR UNAUTHORIZED ADULTS. THE SPRING BAR LOCK SHOULD AUTOMATICALLY ACTIVATE WHEN THE GRATING IS
- PROPERLY CLOSED. GRATINGS SHALL BE NON-ROCKING AND SILENT IN USE.
- GRATINGS SHALL BE CAPABLE OF BEING FITTED WITH ADDITIONAL SECURITY DEVICES AFTER INSTALLATION.
 GRATINGS WILL FEATURE RAISED STUDS AND SLOTS LAYOUT FOR
- INCREASED HYDRAULIC PERFORMANCE AND PEDESTRIAN AND CYCLIST
- SAFETY.

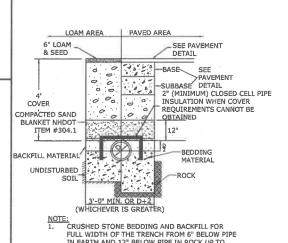
 9. WATERWAY AREA SHALL NOT BE LESS THAN 290 SQUARE INCHES.

 10. FRAME DEPTH SHALL NOT EXCEED 4" AND FLANGES SHALL INCORPORATE
- BOLT HOLES.
 11. ALL COMPONENTS SHALL BE BLACK COATED.

REXUS CATCHBASIN FRAME AND GRATE NO SCALE







CRUSHED STONE BEDDING AND BACKFILL FOR FULL WIDTH OF THE TRENCH FROM 6" BELOW PIPE IN EARTH AND 12" BELOW PIPE IN ROCK UP TO

BEDDING MATERIAL SHALL BE RUN TO THE TOP OF PIPE FOR PIPES GREATER THAN 24 INCHES IN STORM DRAIN TRENCH

NO SCALE

60' RIGHT-OF-WAY 6" LOAM -& SEED HOT BITUMINOUS CONCRETE NHDOT SECTION 6" LOAM 401 4" NOMINAL VARIES 1 1/2" 9.5 MM SUPERPAVE WEARING COURSE 2 1/2" 19 MM SUPERPAVE BASE COURSE 6" LOAM & SEED & SEED CONCRETE SIDEWALK SEE CURB DETAIL AND SITE PLAN FOR LOCATIONS 6" CRUSHED GRAVEL BASE NHDOT ITEM #304.3 (SLOPE TO MATCH PAVEMENT SLOPE) NOTE: THIS DETAIL IS BASED ON THE FRONTAGE ROAD DESIGN REQUIREMENTS IN THE CITY OF ROCHESTER ZONING ORDINANCES. FINIAL COMPACTED COMMON FILL 12" GRAVEL SUBBASE NHDOT ITEM #304.2 (SLOPE TO SEE CURB DETAIL AND SITE PAVEMENT DESIGN SHOULD BE BASED ON THE RECOMMENDATIONS OF A GEOTECHNICAL ENGINEER AFTER A SITE INVESTIGATION. MATCH PAVEMENT SLOPE) SEE GRADING PLAN FOR SLOPE LIMITS PLAN FOR LOCATIONS COMPACTED SUBGRADE-NOTE:

ALL OUTLETS TO HAVE— "SNOUT" OIL/WATER SEPARATOR (OR EQUAL)

SEE DETAIL A

-6" CRUSHED STONE

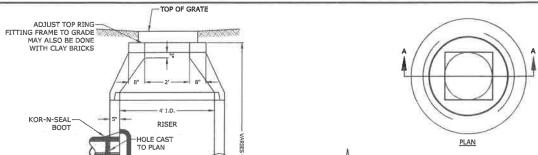
(NHDOT 304.4)

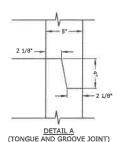
BASE

THE TONGUE AND GROOVE JOINT SHALL BE SEALED WITH ONE STRIP OF BUTYL

- SEE SITE PLAN FOR PAVEMENT WIDTH AND LOCATION.
 SEE GRADING, DRAINAGE AND EROSION CONTROL PLAN FOR PAVEMENT SLOPE AND CROSS-SLOPE.
 A TACK COAT SHALL BE PLACED ON TOP OF BINDER COURSE PAVEMENT PRIOR TO PLACING WEARING

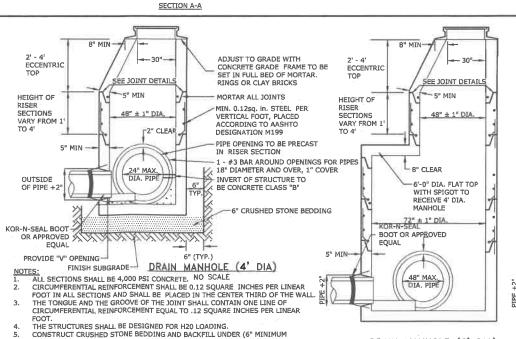
MARKETPLACE BOULEVARD CROSS SECTION



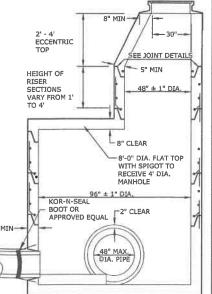


- 1. ALL SECTIONS SHALL BE CONCRETE CLASS AA(4000 psi).
 2. CIRCUMFERENTIAL REINFORCEMENT SHALL BE 0.12 SQ.IN. PER LINEAR FT. IN ALL SECTIONS AND SHALL BE PLACED IN THE CENTER THIRD OF THE WALL.
- 3. THE TONGUE AND GROOVE OF THE JOINT SHALL CONTAIN ONE LINE OF CIRCUMFERENTIAL REINFORCEMENT EQUAL TO 0.12 SQ. IN. PER LINEAR FT.
- 4. RISERS OF 1', 2', 3' & 4' CAN BE USED TO REACH DESIRED DEPTH. 4. KISERS OF 1, 2, 3 & 4 CAN BE USED TO REACH DESIRED DE-5. THE STRUCTURES SHALL BE DESIGNED FOR H20 LOADING. 6. THE TONGUE AND GROOVE JOINT SHALL BE SEALED WITH ONE STRIP OF BUTYL RUBBER SEALANT.

4' DIAMETER CATCHBASIN



DRAIN MANHOLE (6' DIA) NO SCALE



DRAIN MANHOLE (8' DIA)

Tighe&Bond





Proposed Commercial Development

Farmington Associates Properties, LLC

60 Farmington Road (Route 11) Rochester, NH

A.	3/5/18	SUBMISSION TO PB		
IARK	DATE	DESCRIPTION		
ROJECT NO: W2157				
ILE:	1	W2157-C-DETAILS-180226.dwg		
ATE:		03/05/2018		
RAW	N BY:	JPC		
HEC	KED:	KAM		
PPR	OVED 8Y:	BLM		
DETAILS SHEET				
CAL	.E: ,	AS SHOWN		

NON-WOVEN GEOTEXTILE FABRIC SURFACE SHALL BE 3" OF BARK (MIRAFI 140-N OR EQUAL) MULCH WITH APPROVED PLANTINGS TOP OF BERM (SEE RAIN GARDEN PLANTING PLAN) (SEE TABLE) TOP OF FILTER (SEE TABLE) (SEE TABLE) (SEE TABLE) BOTTOM OF RESERVOIR MASHTO NO. 57 STONE JO -6 INCH PERFORATED HDPE UNDERDRAIN (MIRAFI 140-N OR EOUAL) (WHERE SHOWN ON PLANS) SECTION VIEW

	FILTER MEDIA COMPOSIT	ION:			
OMPONENT MATERIAL	PERCENT OF MIXTURE	GRADATI	GRADATION OF MATERIAL		
	BY VOLUME	SIEVE NO.	PERCENT PASSING		
STM C-33 CONCRETE SAND	50-55	SEE I	NOTE #5		
DAMY SAND TOPSOIL	20-30	200	15-25		
ODERATELY FINE SHREDDED	20-30	200	5 MAX		
BARK OR WOOD FIBER MULCH					

RG-3 TOP OF BERM 274.00 262.50 250.00 TOP OF FILTER 272.00 260.00 248.00 BOTTOM OF FILTER 269.50 258.50 246.50 BOTTOM OF RESERVOIR 268.25 257.00 245.00

NOTES:

1. BARK MULCH SHALL BE AGED A MINIMUM OF 12 MONTHS AND SHALL NOT FLOAT.

#100

UNDERGROUND INFILTRATION BASINS

- RAIN GARDENS SHALL NOT BE PLACED INTO SERVICE UNTIL THE PRACTICE HAS BEEN PLANTED AND
- TIS CONTRIBUTING AREAS HAVE BEEN FULLY STABILIZED.

 DO NOT TRAFFIC EXPOSED SOIL SURFACES WITH CONSTRUCTION EQUIPMENT, CONTRACTOR SHALL KEEP ALL EXCAVATION EQUIPMENT OUTSIDE OF THE LIMIT OF THE RAIN GARDEN.
- SEE GRADING, DRAINAGE & EROSION CONTROL PLAN FOR LOCATIONS, LAYOUTS, AND ELEVATIONS. THE SAND PORTION OF THE FILTER MEDIA SHALL MEET THE FOLLOWING GRADATION (ASTM C-33):

SIEVE SI	ZE PERCENT PASSING	LUZA OTTALL T	TEET STILL TOL	LOWING OIGH	DATION (ASI	
3/8 #4	100	100 AASHTO #8 95-100 (#8 to 3)			AASHTO #57 STONE (#4 to 1")	
#8	80-100	SIEVE SIZE	% PASSING	SIEVE SIZE	% PASSING	
#16	50-85	1/2"	1.00	1-1/2"	100	
#30	25-60	3/8"	85-100	1"	95-100	
#50	23-00	#4	10-30	1/2"	25-60	

FOR ALL RAIN GARDENS, A LETTER SHALL BE PROVIDED TO THE NHDES ALTERATION OF TERRAIN BUREAU BY A QUALIFIED ENGINEER STATING THAT THE INDIVIDUAL OBSERVED SUCH SYSTEMS PRIOR TO BACKFILL AND THAT THE SYSTEM CONFORMS TOT HE APPROVED PLANS AND SPECIFICATIONS.

RAIN GARDEN NO SCALE



Tighe&Bond



- 2. MANUFACTURER TO SUBMIT PLANS STAMPED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW HAMPSHIRE.
- THE DESIGN ENGINEER SHALL PROVIDE SUFFICIENT INSPECTION TO CERTIFY THAT THE SYSTEM HAS BEEN INSTALLED PER THE PROPOSED DESIGN PLAN.
- DESIGN SHALL REQUIRE INSPECTION PORTS/COVERS SUCH THAT SYSTEM CAN BE CLEANED BY VACUUM TRUCK. MIN. ONE EACH CORNER.
- 5. EXCAVATE 24 INCHES OF NATIVE MATERIALS BELOW BOTTOM OF SYSTEM AND REPLACE WITH FILL MATERIAL WITH AN INFILTRATION RATE OF 10 IN/HR.
- 6. A QUALIFIED SOIL SCIENTIST, GEOLOGIST, OR ENGINEER SHALL BE RETAINED TO DESIGN THE SOIL AMENDMENT AND PERFORM INFILIPATION TESTING AT THE BASIN LOCATION. THE INFORMATION AND TEST RESULTS SHALL BE PROVIDED TO THE NIDES ALTERATION OF TERRAIN BUREAU TO VERIFY THE ASSUMED DESIGN INFILITRATION RATES OF 5 IN/HR (ACTUAL INFILITRATION RATE OF 10 IN/HR) AND A MINIMUM SEPARATION OF 5 FEET FROM THE BOTTOM OF THE POIND TO THE ELEVATION OF SEASONAL HIGH WATER. THE DEPTH OF AMENDED SOIL MUST BE AT LEAST 24 INCHES.

ACCEPTABLE FILL MATERIALS: STORMTECH SC-740 & SC-310 CHAMBER SYSTEMS

270.94 2YR

	MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	FINAL FILL: FILL MATERIAL FOR LAYER 'I') STARTS FROM THE TOP OF THE "C'LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE "D' LAYER	COMMON FILL (LOAM AND SEED AREAS) OR PAVEMENT SUBBASE (PAVED AREAS)	NA	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
С	INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE (B' LAYER) TO 16 ABOVE THE TOP OF THE CHAMBER, NOTE THAT PAVELMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	THE TOP OF THE EMBEDMENT FINES OR PROCESSED AGGREGATE. ER) TO 18" ABOVE THE TOP OF THE TE THAT PAVEMENT SUBBASE MAY MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU		BESIN COMPACTIONS AFTER 12" OF MATERIAL OVER THE CAMBERS IS REACHED. COMPATION OF THE CAMBERS IS REACHED. COMPATION OF THE CAMBERS IN STATE OF THE CAMBERS OF T
В	EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE POUNDATION STONE (A' CAYER) TO THE 'C LAYER ABOVE. CHAMBERS FROM THE POUNDATION STONE (A' CLEAN, CRUSHED, ANGULAR STON		AASHTO M43 #57	NO COMPACTION REQUIRED.
A	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43 #57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. 1

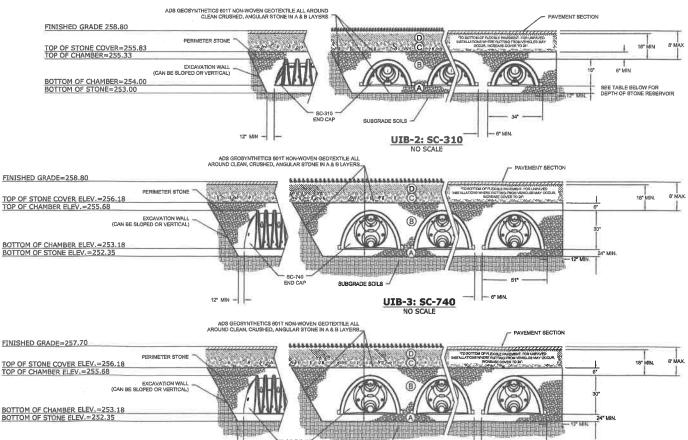
WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.

STORMTECH SC-740 AND SC-310 NOTES:

- 2. SC-740 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLUMN CHAMBERS."
- 3. "ACCEPTABLE FILL MATERIALS" TABLE ABOVE PROVIDES MATERIAL LOCATIONS, DESCRIPTIONS, GRADATIONS, AND COMPACTION REQUIREMENTS FOR FOUNDATION, EMBEDMENT, AND FILL MATERIALS.

UNDERGROUND INFILTRATION BASIN NOTES

- 2. EXPOSED SOIL SURFACE SHALL NOT BE TRAFFICKED WITH CONSTRUCTION EQUIPMENT. IF FEASIBLE, EXCAVATIONS SHALL BE PERFORMED WITH EQUIPMENT POSITIONED OUTSIDE THE LIMITS OF THE INFILITATION SYSTEM.
- 3. AFTER AREA IS EXCAVATED TO FINAL DESIGN ELEVATION, THE FLOOR SHOULD BE DEEPLY TILLED WITH A ROTARY TILLER OR DISC HARROW TO RESTORE INFILTRATION RATES, FOLLOWED BY A PASS WITH A LEVELING DRAG.
- INFILTRATION SYSTEMS SHALL NOT BE PLACED INTO SERVICE UNTIL THE CONTRIBUTING AREAS HAVE BEEN FULLY STABILIZED
- 5. FOR ALL UNDERGROUND INFILTRATION SYSTEMS, A LETTER SHALL BE PROVIDED TO THE INDES ALTERATION OF TERRAIN BUREAU BY A QUALIFIED ENGINEER STATING THAT THE INDIVIDUAL OBSERVED SUCH SYSTEMS PRIOR TO BACKFILL AND THAT THE SYSTEM CONFORMS TOT HE APPROVED PLANS AND SPECIFICATIONS.



UIB-4: SC-740 NO SCALE

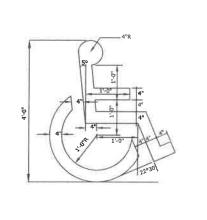
Proposed Commercial Development

Farmington Associates Properties, LLC

60 Farmington Road (Route 11) Rochester, NH



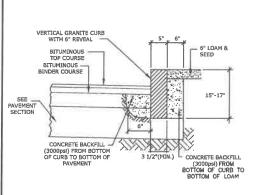
MATER 10:04 DATE

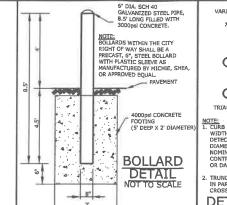


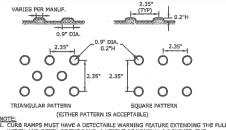
NOTES:

1. SYMBOL SHALL BE CONSTRUCTED IN ALL ACCESSIBLE SPACES USING FAST DRYING TRAFFIC PAINT, MEETING THE REQUIREMENTS OF AASHTO M248-TYPE F. PAINT SHALL BE APPLIED AS SPECIFIED BY MANUFACTURER 2. SYMBOL SHALL BE CONSTRUCTED TO THE LATEST ADA, STATE AND LOCAL REQUIREMENTS.

ACCESSIBLE SYMBOL







CUBB RAMPS MUST HAVE A DETECTABLE WARNING FEATURE EXTENDING THE FULL WIDTH AND DEPTH OF THE RAMP, A HEIGHT OF NOMINAL 2, JINCHES, THE DETECTABLE SURFACE MUST CONSIST OF RAISED TRUNCATED DOMES WITH A DIAMPETER OF NOMINAL 2, 38 INCHES AND A CENTER TO CENTER SPACING OF NOMINAL 2.35 INCHES. THE TEXTURE OF THE DETECTABLE WARNING FEATURE MUST CONTRAST VISUALLY WITH THE SURROUNDING SURFACES (EITHER LIGHT-ON-DAF OR DARK-ON-LIGHT).

SECTION

NOTES:

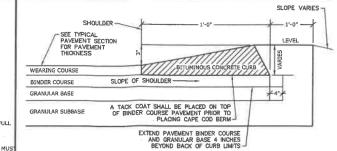
1. RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT AND LOCAL AND STATE REQUIREMENTS

2. PROVIDE 6° COMPACTED CRUSHED GRAVEL BASE BENEATH RAMPS

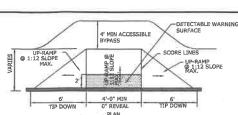
3. DETECTABLE WARNING STRIP SHALL BE ADS SOLUTIONS, INC. CAST IN PLACE RAMP. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.

DETECTABLE WARNING SURFACE NOT TO SCALE

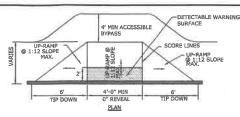
0° REVEAL SIDEWALK FLUSH WITH PAVEMENT



CAPE COD BERM



CONCRETE WHEELCHAIR ACCESSIBLE RAMP



Proposed

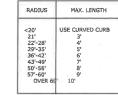
Farmington

Associates

Commercial

Development

Tighe&Bond



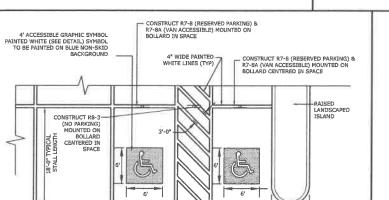
NOTES:

1. SEE SITE PLAN FOR LIMITS OF CURBING.

2. ADJOINING STONES SHALL HAVE THE SAME OR APPROXIMATELY THE SAME LENGTH.

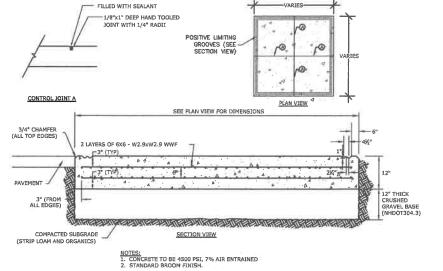
3. MINIMUM LENGTH OF CURB STONES = 3' MAXIMUM LENGTH OF CURB STONES = 10'
MAXIMUM LENGTH OF STRAIGHT CURB STONES LAID ON CURVES 5. MANAMON ...
(SEE CHART).
6. ALL RADII 20 FEET AND SMALLER SHALL BE CONSTRUCTED USING CURVED SECTIONS
7. JOINTS BETWEEN STONES SHALL BE MORTARED.

VERTICAL GRANITE CURB NOT TO SCALE

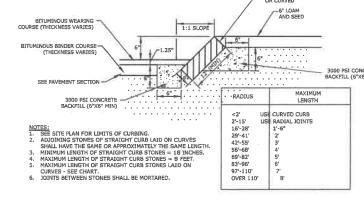


- SYMBOLS & PARKING STALLS SHALL CONFORM TO THE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT AND LOCAL AND STATE REQUIREMENTS.
- FINISH PAVEMENT GRADES AT ALL HANDICAP ACCESSIBLE STALLS AND PAINTED ACCESS AISLES SHALL NOT EXCEED 2% IN ANY DIRECTION.

STALL STRIPING-SINGLE STRIPE NOT TO SCALE



DUMPSTER PAD

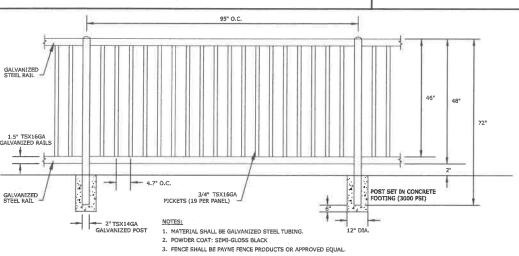


NOT TO SCALE

SLOPED GRANITE CURB

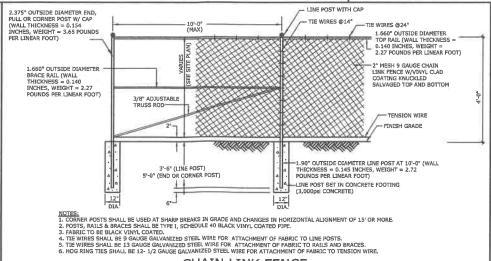
60 Farmington Road (Route 11) Rochester, NH

Properties, LLC

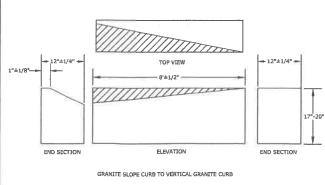


ORNAMENTAL FENCE

NOT TO SCALE



CHAIN LINK FENCE NOT TO SCALE

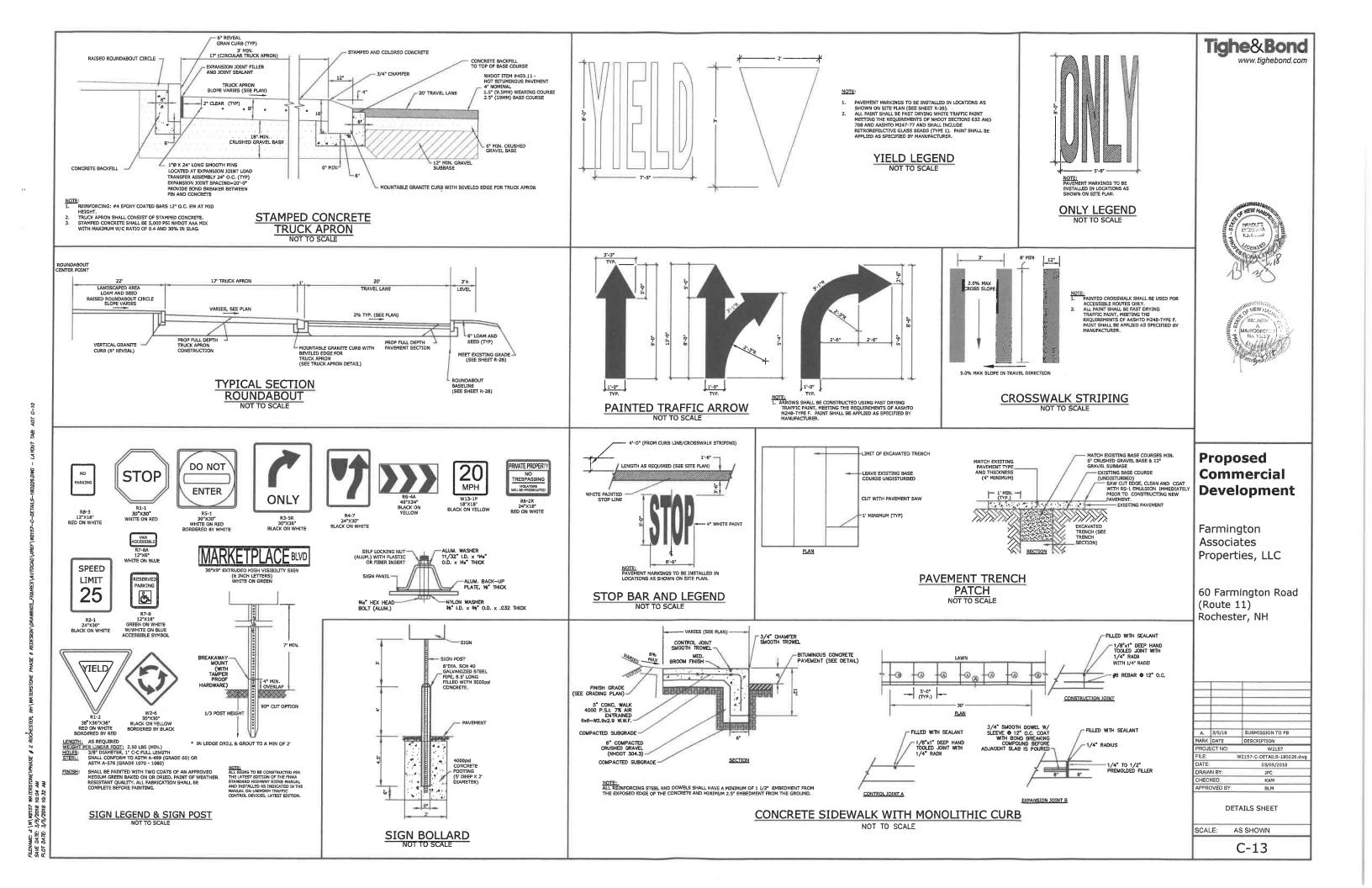


CURB TRANSITION NOT TO SCALE

KAM DETAILS SHEET

W2157-C-DETAILS-180226.dwg

SCALE: AS SHOWN



RETAINING WALL NOTES: 1. RETAINING WALL SHALL BE REDI ROCK OR APPROVED EQUAL.

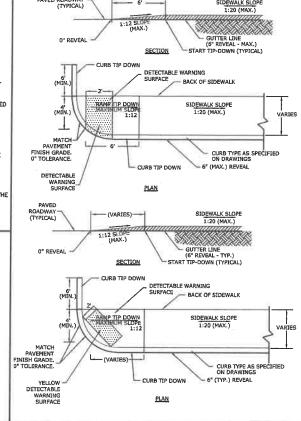
- THE CONTRACTOR SHALL SUBJULT DESIGN AND CALCULATIONS FOR THE RETAINING WALL THAT SHALL BE STAMPED BY A
 PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW HAMPSHIRE, CALCULATIONS SHALL INCLUDE A GLOBAL STABILITY.
- MINIMUM DESIGN PARARMETERS:

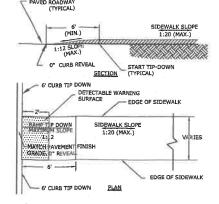
 GLOBAL STABILITY FACTOR OF SAFETY = 1.5

 OF SUBMIC FACTOR OF SAFETY = 2.0

 SUBMIC FACTOR OF SAFETY = 1.5

 GEOGRAPH PULLOUT FACTOR OF SAFETY = 1.5
- WALL DESIGNS SHALL CONSIDER EFFECTS OF SLOPE, TRAFFIC LOADS, BUILDING LOADS, GUARDRAIL AND/OR FENCING AS REQUIRED.
- WALL DESIGN ENGINEER SHALL CONSIDER HEIGHT AND SPECIFY SAFETY RAIL WHERE REQUIRED



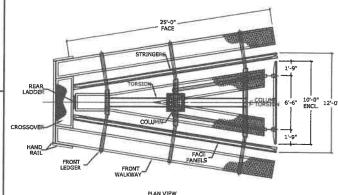


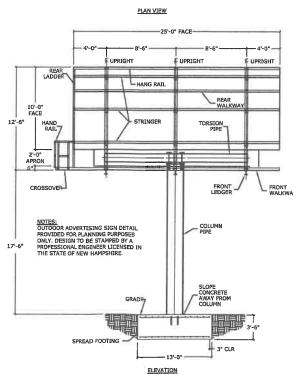
NOTES:

RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT AND LOCAL AND STATE REQUIREMENTS.
PROVIDE 6" COMPACTED CRUSHED GRAVEL BASE BENEATH RAMPS

3. DETECTABLE WARNING STRIP SHALL BE ADA SOLUTIONS, INC. CAST IN PLACE RAMP. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
4. DETECTABLE WARNING SURFACE SHALL BE INSTALLED PERPENDICULAR TO THE INTENDED DIRECTION OF TRAVEL.

CONCRETE SIDEWALK TIP DOWN RAMP





OUTDOOR ADVERTISING SIGN

NOT TO SCALE

Proposed Commercial Development

Tighe&Bond

www.tighebond.com

Farmington Associates Properties, LLC

60 Farmington Road (Route 11) Rochester, NH

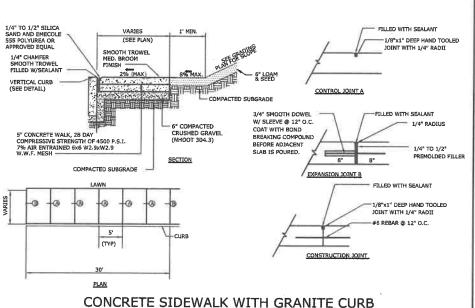


C-14

ALL INSTALLATION PROCEDURES SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION MANUAL AND THE WALL DESIGN ENGINEER'S DESIGN PLANS AND SPECIFICATIONS, WHERE INFORMATION ON THESE PLANS CONFLICTS WITH MANUFACTURER'S RECOMMENDATIONS, THE MANUFACTURER'S RECOMMENDATIONS SHALL SUPERSECT THE WALL DESIGN ENGINEER SHALL COMPLETE SUFFICIENT INSPECTIONS DURING CONSTRUCTION TO CERTIFY WORK IS COMPLETED IN ACCORDANCE WITH DESIGN. CONTRACTOR SHALL SUBMIT AS-BUILT DRAWINGS OF WALL WITH WALL DESIGNER'S CERTIFICATION TO OWNER. CONTRACTOR SHALL DIRECT SURFACE RUNOFF AWAY FROM THE WALL DURING CONSTRUCTION. CONTRACTOR SHALL SUPPLY SAMPLE TO THE OWNER FOR APPROVAL PRIOR TO WALL CONSTRUCTION. ANY SURFACE DRAINAGE FEATURES, FINISH GRADING, PAVEMENT OR OTHER SURFACE TREATMENT SHALL BE INSTALLED IN THE AREA OF THE WALL IMMEDIATELY AFTER THE WALL IS COMPLETE. 12. GEOTECHNICAL ENGINEER SHALL VERIFY FOUNDATION SOILS AS BEING COMPETENT. 13. ALL WALLS 4' OR GREATER REQUIRE INSTALLATION OF A SAFETY RAIL. 14. IF CONDITIONS ARE DIFFERENT THAN THOSE STATED IN THESE DRAWINGS AND SPECIFICATIONS, CONTRACTOR MUST CONTACT THE DESIGN ENGINEER PRIOR TO PROCEEDING WITH THE CONSTRUCTION OF THE WALL. NOTES:

1. SEE SITE PLAN FOR SIDEWALK WIDTH, LOCATIONS AND CURB -2" BITUMINOUS SIDEWALK TYPE.

2. SEE GRADING, DRAINAGE & EROSION CONTROL PLAN FOR WALK AND SIDESLOPE GRADES. 6" LOAM AND SEED r1.25 6" CRUSHED GRAVEL (NHDOT 304.3) FINISH SUBGRADE (TYP.) -**BITUMINOUS CONCRETE** SIDEWALK NOT TO SCALE NEUTRAL AXIS -

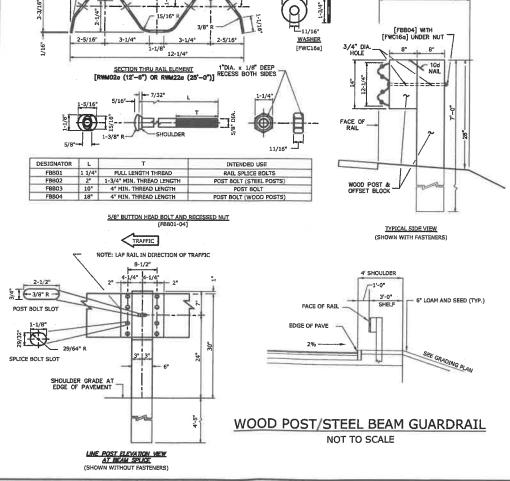


NOTES:
1. THE LENGTH OF NEED IS THE TOTAL LENGTH OF A LONGITUDINAL BARRIER NEEDED TO SHIELD AN AREA OF CONCERN. TO DETERMINE THE LENGTH OF NEED, REFER TO THE "ROADSIDE DESIGN GUIDE" - AASHTO (1989).

- 2. DESIGNATION PROVIDED IN BRACKETS () REFERENCE STANDARD ELEMENTS DETAILED IN "A GUIDE TO STANDARDIZED HIGHWAY BARRIER RAIL HARDWARE" (1979) AASHTO AGC ARTBA JOINT COOPERATIVE COMMITTEE.
- 3. USE 12'-6" LENGTH RAIL ELEMENT IN CURVES OF LESS THAN 300' RAIL RADIUS.
- 4. ALL DIMENSIONS SUBJECT TO MANUFACTURER'S TOLERANCES

5. USE 6"-0" LONG POSTS WHEN FILL SLOPE IS 4:1 OR FLATTER AND/OR WHEN FIELD CONDITIONS DICTATE (e.g., LEDGE FILLS), AS DETERMINED BY THE ENGINEER.

6. WHEN GUARDRAIL IS INSTALLED BEHIND CURB, EITHER 6"-0" BEHIND SLOPE CURB ON A CLOSED RAMP OR AT THE BACK OF SIDEWALK WITH BARRIER CURB. THE RAIL HEIGHT SHALL BE SET FROM THE GRADE AT THE FACE OF RAIL.





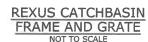


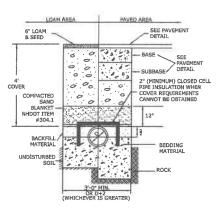


- REXUS or similar approved Grating and Frame. Gratings and Frames shall be manufactured from Duetile Iron in accordance with ISO 1083.
- · Gratings shall incorporate a non-captive
- Gratings shall be one-man operable using stand tools and shall be capable of withstanding a minimum load of 100,000 lbs.
- atings shall incorporate a spring bar lock as a terrent to access by children or unauthorized
- adults The spring bar lock should automatically activate when the Grating is properly closed.
- · Gratings shall be non-rocking and silent in use Gratings shall be copable of being fitted with additional security devices after installation.
- Gratings will feature raised study and slots layor for increased hydraulic performance and pedest and cyclist snfety
- Waterway area shall not be less than 290 square inches.
- Frame depth shall not exceed 4° and flanges shall incorporate bolt holes.

 All components shall be black coated.

 $\frac{\text{NOTE:}}{\text{REXUS FRAME}}$ and grate shall be used within the city of rochester right-of-way only,

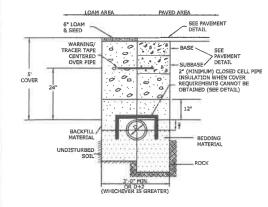




E:

CRUSHED STONE BEDDING AND BACKFILL
FOR FULL WIDTH OF THE TRENCH FROM 6"
BELOW PIPE IN EARTH AND 12" BELOW PIPE
IN ROCK UP TO MIDPOINT OF PIPE.
BEDDING MATERIAL SHALL BE RUN TO THE
TOP OF PIPE FOR PIPES GREATER THAN 24
INCHES IN DIAMETER.

STORM DRAIN TRENCH NOT TO SCALE

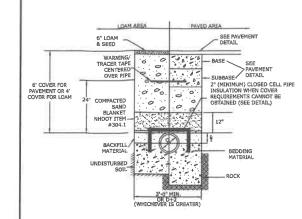


NOTES:

1. SAND BEDDING FOR FULL WIDTH OF THE TRENCH FROM 6" BELOW PIPE IN EARTH AND 12" BELOW PIPE IN ROCK UP TO MIDPOINT OF PIPE.

2. SAND BACKFILL FOR FULL WIDTH OF THE TRENCH TO 12 INCHES ABOVE PIPE.

WATER TRENCH NOT TO SCALE



NOTE:

1. CRUSHED STONE BEDDING AND BACKFILL FOR FULL WIDTH OF THE TRENCH FROM 8" BELOW PIPE IN EARTH AND 12" BELOW PIPE IN ROCK UP TO MIDPOINT OF PIPE. BEDDING MATERIAL SHALL BE RUN TO THE TOP OF

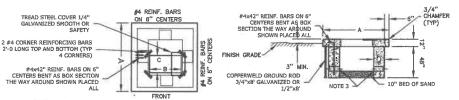
PIPE FOR PIPES GREATER THAN 24 INCHES IN DIAMETER. **SEWER TRENCH**

NOT TO SCALE

PAVED AREA

Tighe&Bond





XIES.

SET CONCRETE BOX PAD ON SUITABLE GRAVEL BASE AND PROVIDE ADEQUATE DRAINAGE AWAY FROM PAD. REINFORCE AS SHOWN. LOCATION
TO BE ACCESSIBLE BY TRUCK AND SUITABLY PROTECTED FROM PLOW AND TRAFFIC DAMAGE.

"FROIN" DENOTES THE SIDE ON WHICH THE ACCESS DOORS ARE LOCATED. THE PAD MUST BE INSTALLED SO THAT THE FRONT IS READILY
ACCESSIBLE.

PROVIDE 8" X 12" CABLE HOLES—ONE PER WALL OR MORE IF NEEDED. LINE UP WITH TRENCHES. HOLES MAY EXTEND TO BOTTOM OF WALLS.
PROVIDE 8" X 12" CABLE HOLES—ONE PER WALL OR MORE IF NEEDED. LINE UP WITH TRENCHES. HOLES MAY EXTEND TO BOTTOM OF WALLS.
PROVIDE 8" X 12" CABLE HOLES—ONE PER WALL OR MORE IF NEEDED. LINE UP WITH TRENCHES. HOLES MAY EXTEND TO BOTTOM OF WALLS.
PROVIDE 8" X 12" CABLE HOLES—ONE PER WALL OR MORE IF NEEDED. LINE UP WITH TRENCHES. HOLES MAY EXTEND TO BOTTOM OF WALLS.
PROVIDE 8" X 12" CABLE HOLES—ONE PER WALL OR MORE OF PAD. TOP OF GROUND ROD TO BE 8" BELOW FINAL GRADE.

COORDINATE AND VERIFY ALL PAD DIMENSIONS, LOCATIONS AND INSTALLATION WHIT THE LOCAL LECTRICAL POWAL GRADE.

12" MIN.EACH SIDE

PRECAST CONCRETE
TRANSFORMER PAD
NOT TO SCALE

KVA	KV	A	В	С	D	STEEL COVER
750 - 2500	15	9'-0	5'8	1'-6	12"	24"X24"X1/4"
150 - 2500	35	9'-0	5'-8	1'-6	12"	24"X24"X1/4"
75 - 500	15	7'-0	4'-0	1'-6	8"	16"X24"X1/4"
75 - 150	35	7'-0	4'-0	1'8	8"	16"X24"X1/4"

36" MIN. OR UTILITY SEE TYPICAL CROSS SECTIONS (SHEET R-4) WHICHEVER IS GREATER) - 5.5 — 1 - 1-1/2" STREET LIGHTING CONDUIT 1 - 1" STREET LIGHTING 00 0 0-2 - 3" CADEL 2 - 4" TELEPHONE CONDUITS 3" (MIN.) 3" (MIN.) UNDISTURBED SOIL-MIN. MIN. - SAND BEDDING (SEE NOTE 8)

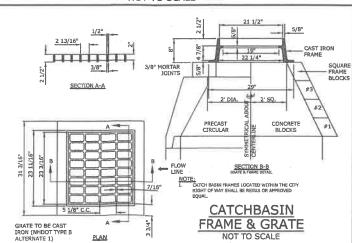
LOAM AREA

- NUMBER, MATERIAL, AND SIZE OF LITLITY CONDUITS TO BE DETERMINED BY LOCAL UTILITY OR AS SHOWN ON ELECTRICAL DRAWINGS. CONTRACTOR TO PROVIDE ONE SPARE CONDUIT FOR EACH UTILITY TO BUILDING. DIMENSIONS SHOWN REPRESENT OWNERS MIXIMUM REQUIREMENTS. ACTUAL DIMENSIONS MAY BE GREATER BASED ON UTILITY COMPANY STANDARDS, BUT SHALL NOT BE LESS THAN THOSE SHOWN. NO CONDUIT RUN SHALL EXCEED 360 DEGREES IN TOTAL BEINDS.
 A SUITABLE PULLING STRING, CAPABLE OF 200 POUNDS OF PULL, MUST BE INSTALLED IN THE CONDUIT DEFORE THE RUN IS ASSEMBLED TO AVOID BONDING THE STRING SHOULD BE BLOWN INTO THE CONDUIT AFTER THE RUN IS ASSEMBLED TO AVOID BONDING THE STRING TO THE CONDUIT OF TO BACKFILL. THE

- THE RUN IS ASSEMBLED TO AVOID BONDING THE STRING TO THE CONDUIT. UITLITY COMPANY MUST BE GIVEN THE OPPORTUNITY TO INSPECT THE CONDUIT PRIOR TO BACKFILL. THE CONTRACTOR IS RESPONSIBLE FOR ALL REPAIRS SHOULD THE UTILITY COMPANY BE UNABLE TO INSTALL ITS CABLE IN A SUITABLE MANNER.

 ALL CONDUIT INSTALLATIONS MUST CONFORM TO THE CURRENT EDITION OF THE NATIONAL ELECTRIC SAFETY CODE, STATE AND LOCAL CODES AND ORDINANCES, AND, WHERE APPLICABLE, THE NATIONAL ELECTRIC CODE. ALL 90° SWEEPS WITH A 36 TO 48 INCH RADIUS. SAND BEDDING TO BE REPLACED WITH CONCRETE ENCASEMENT WHERE COVER IS LESS THAN 3 FEET, WHEN LOCATED BELOW PAYEMENT, OR WHERE SHOWN ON THE UTILITIES PLAN.

ELECTRICAL AND COMMUNICATION CONDUIT



Commercial Development

Proposed

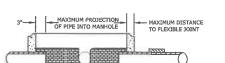
Farmington Associates Properties, LLC

60 Farmington Road (Route 11) Rochester, NH

SUBMISSION TO DR DESCRIPTION W2157-C-DETAILS-180226.dw 03/05/2018 HECKED APPROVED BY DETAILS SHEET SCALE: AS SHOWN

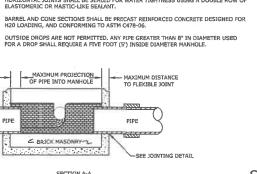
C-15

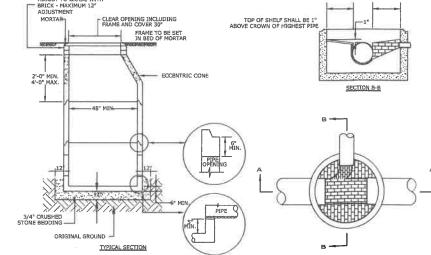
- 1. INVERT AND SHELF TO BE PLACED AFTER EACH LEAKAGE TEST.
- CARE SHALL BE TAKEN TO INSURE THAT THE BRICK INVERT IS A SMOOTH CONTINUATION OF THE SEWER INVERT.
- 4. BITUMINOUS WATERPROOF COATING TO BE APPLIED TO ENTIRE EXTERIOR OF MANHOLE.
- FRAMES AND COVERS MANHOLE FRAMES AND COVERS SHALL BE OF HEAVY DUTY DESIGN AND PROVIDE A 30-INCH CLEAR OPENING. A 3-INCH (MINIMUM HEIGHT) WORD "SEWER" SHALL BE PLAINLY CAST INTO THE CENTER OF EACH COVER.
- HORIZONTAL JOINTS SHALL BE SEALED FOR WATER TIGHTNESS USING A DOUBLE ROW OF ELASTOMERIC OR MASTIC-LIKE SEALANT.
- BARREL AND CONE SECTIONS SHALL BE PRECAST REINFORCED CONCRETE DESIGNED FOR H20 LOADING, AND CONFORMING TO ASTM C478-06.



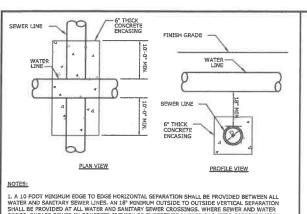
SECTION A-A

- BRICK MASONHY-L





SEWER MANHOLE



1. A 10 FOOT MINIMUM EDGE TO EDGE HORIZONTAL SEPARATION SHALL BE PROVIDED BETWEEN ALL WATER AND SANITARY SEWER LINES. AN 18" MINIMUM OUTSIDE TO OUTSIDE VERTICAL SEPARATION SHALL BE PROVIDED AT ALL WATER AND SANITARY SEWER CROSSINGS. WHERE SEWER AND WATER CROSS, ENCASE SEWER IN CONCRETE 6" THICK OR SUBSTITUTE RUBBER GASKETED PRESSURE PIPE

WATER & SEWER CROSSING

HOT BITUMINOUS CONCRETE NHDOT SECTION

401 3.5" NOMINAL 1 1/2" 9.5 MM SUPERPAVE WEARING COURSE 2" 19 MM SUPERPAVE BASE COURSE

EI.
SEE SITE PLAN FOR PAVEMENT WIDTH AND LOCATION.
SEE GRADING, DRAINAGE AND EROSION CONTROL PLAN FOR
PAVEMENT SLOPE AND CROSS-SLOPE.
A TACK COAT SHALL BE PLACED ON TOP OF BINDER COURSE
PAVEMENT PIOR TO PLACING WEARING COURSE.
THIS DETAIL IS FOR PLANNING PURPOSES ONLY. FINAL
PAVEMENT DESIGN SHOULD BE BASED ON THE
RECOMMENDATIONS OF A GEOTECHNICAL ENGINEER AFTER A
SITE INVESTIGATION.

STANDARD DUTY

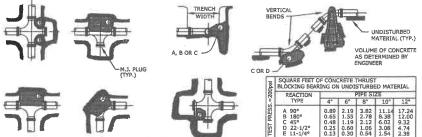
PAVEMENT SECTION

NOT TO SCALE

NHDOT ITEM 304.3 6" CRUSHED GRAVEL (SLOPE TO MATCH PAVEMENT SLOPE)

NHDOT ITEM 304.2

9" COMPACTED GRAVEL (SLOPE TO MATCH PAVEMENT SLOPE)



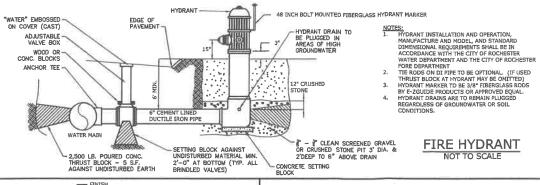
MATERIAL, WHERE TRENCH WALL HAS BEEN DISTURBED, EXCAVATE LOOSE MATERIAL AND EXTEND THRUST BLOCK TO UNDISTURBED ATERIAL. NO JOINTS SHALL BE COVERED WITH

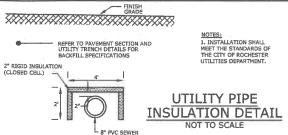
HOT BITUMINOUS CONCRETE NHDOT SECTION

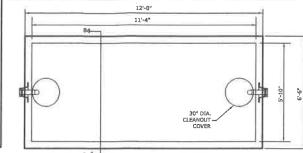
401 4" NOMINAL 1 1/2" 9.5 MM SUPERPAVE WEARING COURSE 2 1/2" 19 MM SUPERPAVE BASE COURSE

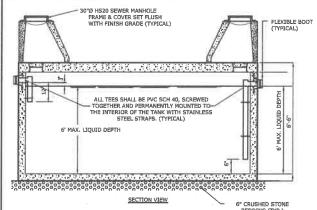
MATERIAL. NO JOINTS SHALL BE COVERED WITH CONCRETE.
ON BENDS AND TEES, EXTEND THRUST BLOCKS FULL LENGTH OF FITTING.
PLACE BOARD IN FRONT OF ALL PLUGS BEFORE POURING THRUST BLOCKS.
WHERE M.J. PIPE IS USED, M.J. PLUG WITH RETAINER GLAND MAY BE SUBSTITUTED FOR END BLOCKINGS. BLOCKINGS.
INSTALLATION AND STANDARD DIMENSIONAL

REQUIREMENTS SHALL BE PER CITY OF ROCHESTER WATER DEPARTMENT STANDARDS.



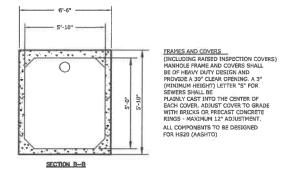






2,000 GALLON GREASE TRAP (TYP)

NOT TO SCALE

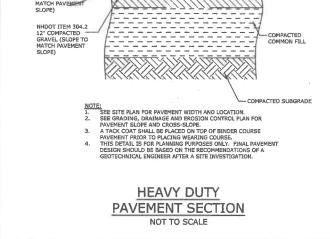


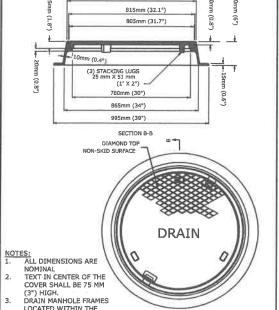
NOTES. 1. ALL COMPONENTS TO BE DESIGNED FOR AASHTO H2D LOADING. 2. MANHOLE FRAME & COVERS SHALL BE OF HEAVY DUTY DESIGN. 3. FILL WITH WATER BEFORE REMOVAL OF DEWATERIN DEVICES. 4. GREASE TRAP SHALL BE VENIED AS REQUIRED BY CODE.

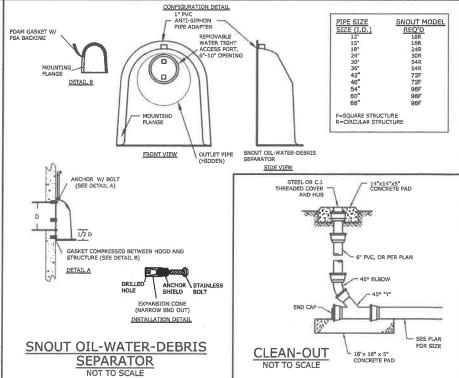
NHDOT ITEM 304.3 6" CRUSHED GRAVEL (SLOPE TO MATCH PAVELENT SLOPE) NHDOT ITEM 304.2 12" COMPACTED — GRAVEL (SLOPE TO MATCH PAVEMENT SLOPE)

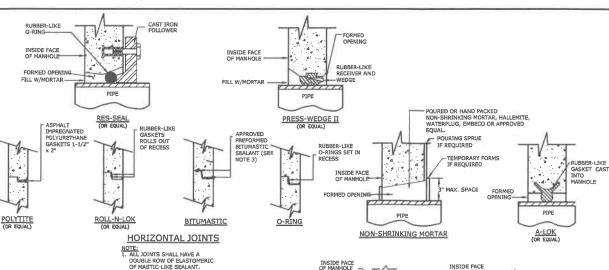
CONFIGURATION DETAIL

THRUST BLOCKING DETAIL









INSIDE FACE OF MANHOLE FILL W/MORTAR PIPE STAINLESS STEE

 FOR BITUMASTIC TYPE JOINTS THE AMOUNT OF SEALANT SHALL BE SUFFICIENT TO FILL AT LEAST 75% OF THE JOINT CAVITY. 4. ALL GASKETS, SEALANTS, MORTAR, ETC. SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' WRITTEN INSTRUCTIONS.

1. HORIZONTAL JOINTS BETWEEN THE SECTIONS OF PRECAST CONCRETE BARRELS SHALL BE OF A TYPE APPROVED BY THE ENGINEER, WHICH TYPE SHALL BE SEALED FOR WATER TIGHTNIESS USING A DOUBLE ROW OF ELASTOMERIC OR MASTIC-LIKE SEALANT.

DOUBLE ROW OF ELASTOPIERIO OF PRISTAGE AND ADMINISTRAÇÃO DE THE ENGINEER IN GENERAL AND, IN GENERAL, WILL DEPEND FOR WATER TIGHTNESS UPON EITHER AN APPROVED NON-SHRINKING

SEWER MANHOLE JOINTS NOT TO SCALE

KOR-N-SEAL JOINT SLEEVE (OR EQUAL) PIPE TO MANHOLE JOINTS

AS SHOWN

C-16

SCALE:

Tighe&Bond





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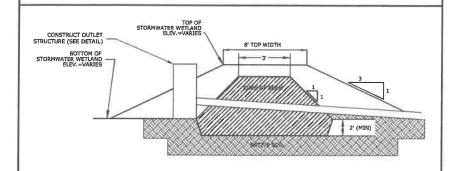
60 Farmington Road (Route 11) Rochester, NH

> W2157-C-DETAILS-180226.dwg 03/05/2018 KAM **DETAILS SHEET**

DRAIN MANHOLE FRAME & GRATE

CITY RIGHT OF WAY SHALL BE PAMREX OR APPROVED

STORMWATER WETLAND 1 OUTLET STRUCTURE NOT TO SCALE



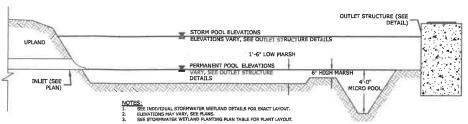
NOTES:

1. CORE MATERIAL SHALL MEET USGS CLASSIFICATION SC,
SM, CL. OR ML AND HAVE A MAXIMUM PARTICLE SIZE OF 3"
AND A PERMEABILITY LESS THAN 0.000005 CM/S, AND MEET
THE FOLLOWING GRADATION

SIEVE SIZE 3 INCH No. 200 PERCENT FINER BY WEIGHT

100 50 -100. 2. PIPE SHALL BE FULLY EMBEDDED IN CORE TO ELIMINATE SEEPAGE

STORMWATER WETLAND BERM
NOT TO SCALE



TYPICAL STORMWATER WETLAND CROSS-SECTION

STORMWATER WETLAND #1

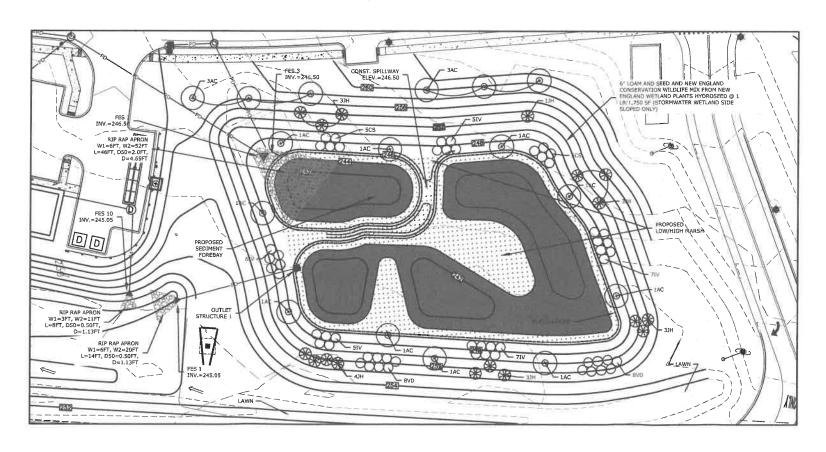
PLANT SCHEDULE

_	SHRUB AND TREE PLANTING (EL.246-252)	SYMBOL	QUANTITY	DESCRIPTION
•	ILEX VERTICILLATA	īv	30	2-3' HT./CONTAINER
_	CORNUS STOLINIFERA	CS -	10	2-3' HT./CONTAINER
	VIBURNUM DENTATUM	VD	16	2-3' HT./CONTAINER
	AMALANCHIER CANADENSIS	AC .	16	7-8' HT./B & B
	JUNIPERUS HILLSPIRE	ЭH	17	6-7' HT./B & B
	LOW/HIGH MARSH (EL.244-255)	SYMBOL	OUANTITY	DESCRIPTION
1111	IRIS VERSICOLOR	STPIBUL		O.C. BARE ROOT/PLU
	THIS VERSICULOR			O.C. BARE ROOT/PLU

MICRO-POOL (EL.242)
POTAMOGETON NODOSUS

SYMBOL QUANTITY DESCRIPTION
30 @ 6' O.C. BARE ROOT/PLUG

ALL BARE ROOT PLUGS ARE TO BE PLANTED IN A STAGGERED ARRANGEMENT TO FILL THE LIMITS OF THE INTENDED AREA IN MASS GROUPINGS OF THE SAME SPECIES



STORMWATER WETLAND DETAIL

SCALE: 1" = 30'







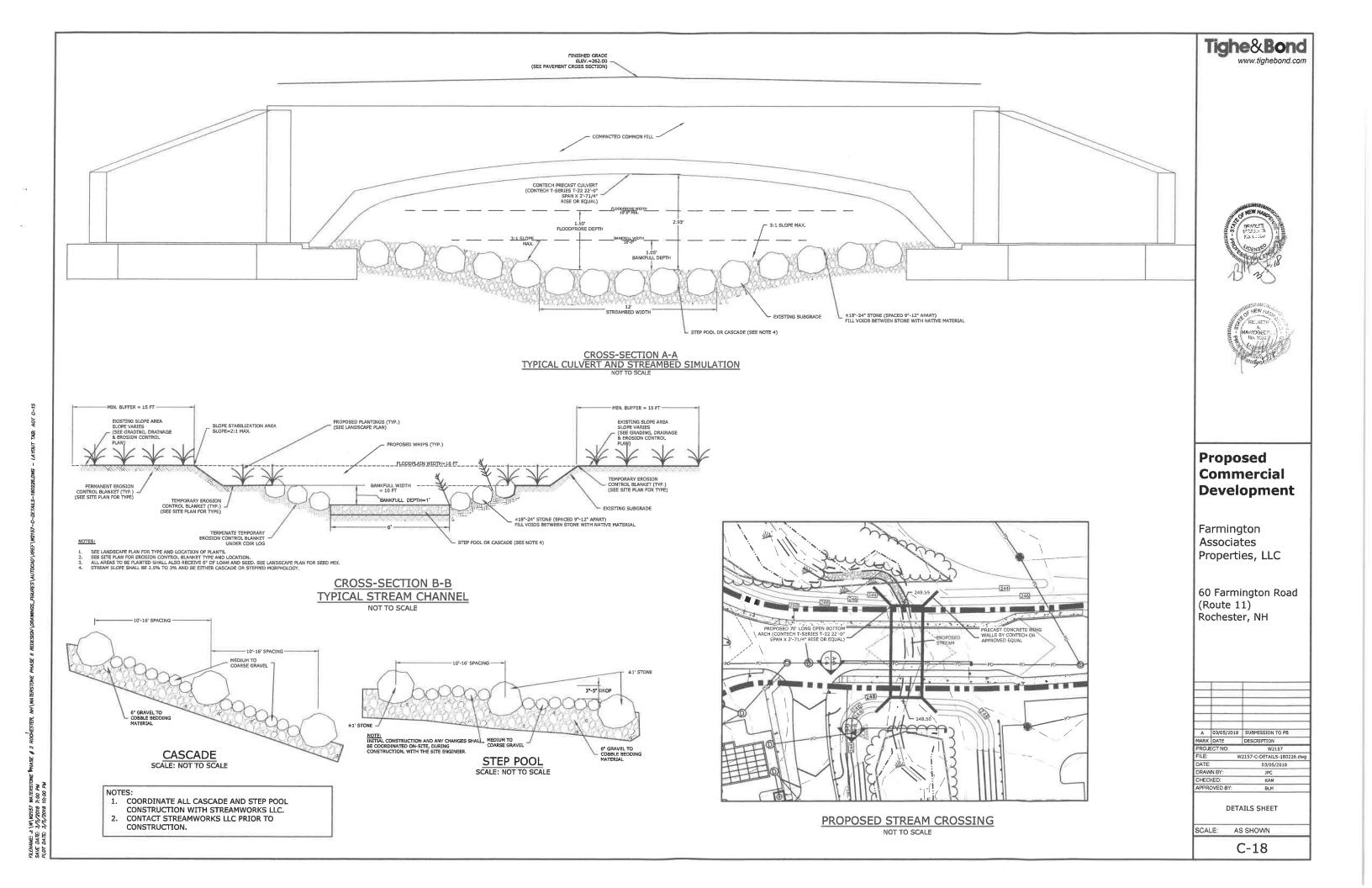
Proposed Commercial Development

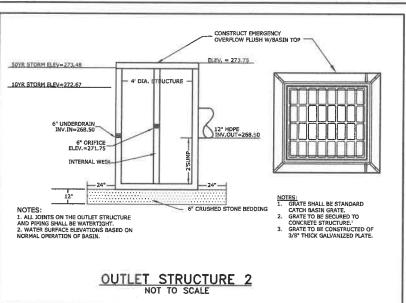
Farmington Associates Properties, LLC

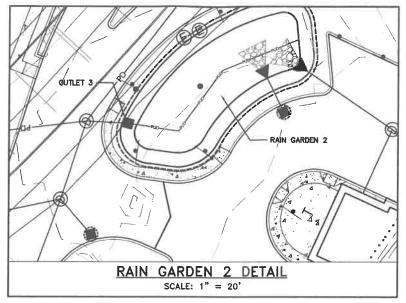
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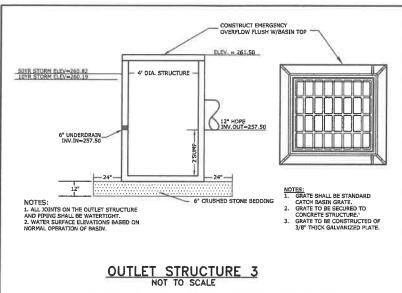
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1			
	3/5/18	SUBMISSION TO PB	
ĸ	DATE	DESCRIPTION	
JE	CT NO:	W2157	
:	,	W2157-C-DETAILS-180226.dwg	
Έ:		03/05/2018	
WN BY:		JPC	
CKED:		KAM	
ROVED BY:		BLM	

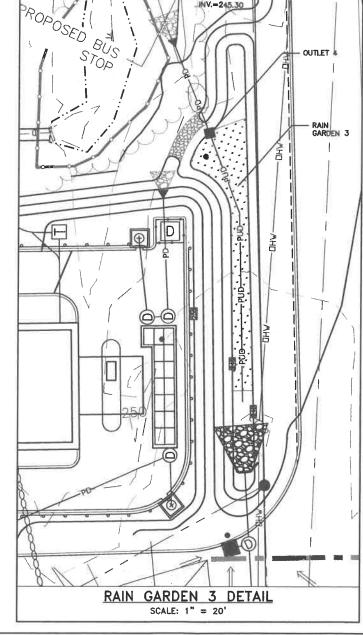
SCALE: AS SHOWN

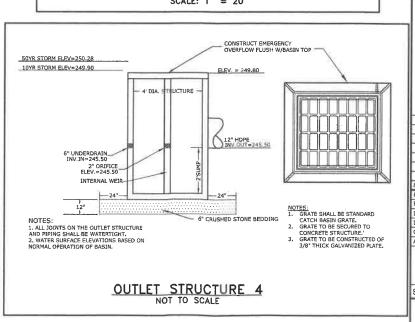


















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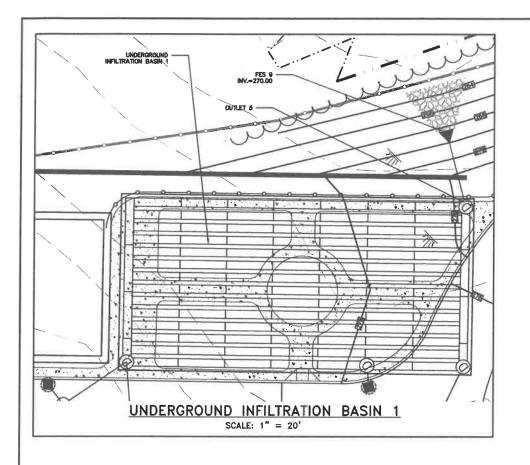
Farmington Associates Properties, LLC

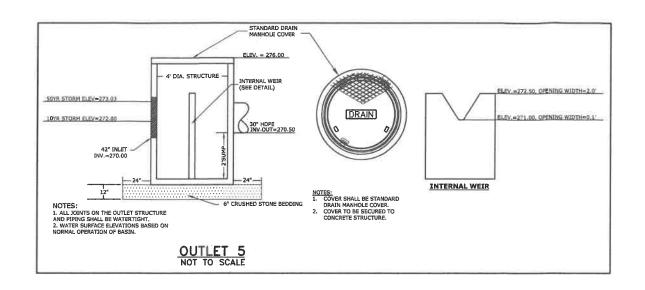
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RAIN GARDEN DETAILS SHEET

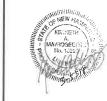
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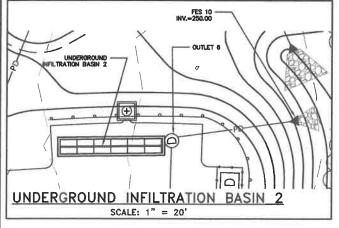


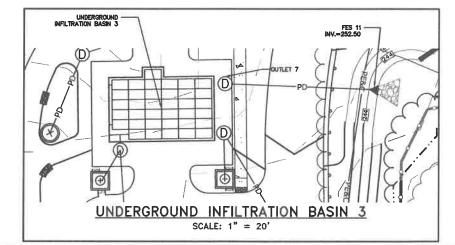


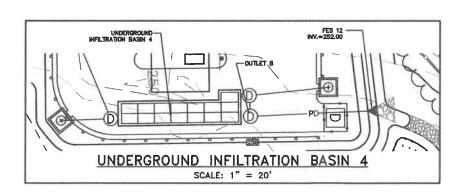


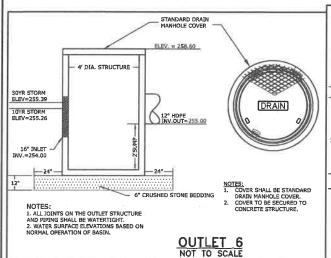


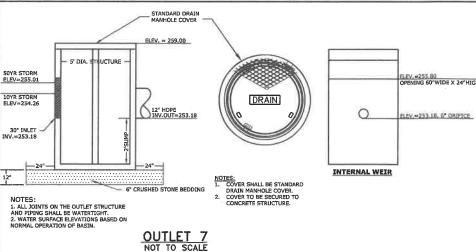


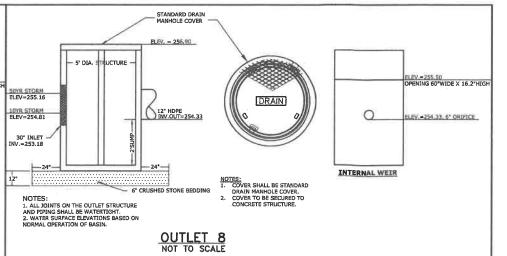












Proposed Commercial Development

Farmington Associates Properties, LLC

60 Farmington Road (Route 11) Rochester, NH

Α	03/05/2018	SUBMISSION TO PB		
MARK	DATE	DESCRIPTION		
PROJE	CT NO:	W2157		
FILE:	W	2157-C-DETAILS-180226.dwg		
DATE:		03/05/2018		
DRAWN BY:		JPC		
CHECKED:		KAM		
APPRO	OVED BY:	BLM ·		
UNDERGROUND INFILTRATION BASIN DETAILS SHEET				

SCALE: AS SHOWN