

# TOWN OF EXETER, NEW HAMPSHIRE

10 FRONT STREET • EXETER, NH • 03833-3792 • (603) 778-0591 •FAX 772-4709 <u>www.exeternh.gov</u>

EXETER PLANNING BOARD MEETING JULY 13, 2023 7:00 Pm.

> Nowak Room 10 Front Street Exeter, N.H.

PLANNING BOARD CASE #23-2

BLIND TIGER, LLC (EXETER COUNTRY CLUB)

**58 JADY HILL AVENUE** 

ADDITIONAL MATERIALS RECEIVED ON 7/7/23

### OWNER

EXETER COUNTRY CLUB P.O. BOX 1088 EXETER, NH 03833

### **APPLICANT**

BLIND TIGER, LLC 3 WRIGHT LANE EXETER, NH 03833

### **CIVIL ENGINEER**

EMANUEL ENGINEERING, INC.
118 PORTSMOUTH AVENUE, SUITE A202
STRATHAM, NH 03885

### WETLAND SCIENTIST

GOVE ENVIRONMENTAL SERVICES, INC. 8 CONTINENTAL DRIVE, BUILDING 2, UNIT H EXETER, NH 03833

### LAND SURVEYOR

JAMES VERRA & ASSOCIATES, INC. 101 SHATTUCK WAY, SUITE 8 NEWINGTON, NH 03801

### **ARCHITECT**

DYNAMIC DESIGNS, P.C. 259 EAST FRANK STREET BIRMINGHAM, MI 48009

### LIGHTING

EXPOSURE LIGHTING 6 SCOTT ROAD, UNIT A HAMPTON, NH 03842

BRENTWOOD, NH 03833

### LANDSCAPING

THORN AND THISTLE GARDENS 480 MIDDLE ROAD

# SITE PLAN FOR BLIND TIGER, LLC

EXETER TAX MAP 52 LOT 1
58 JADY HILL AVENUE (SITE)
EXETER, NH 03833



4 JULY 6, 2023 FOR APPROVAL

3 MAY 23, 2023 FOR APPROVAL

1 JAN 24, 2023 FOR APPROVAL

ISS. DATE: DESCRIPTION OF ISSUE: CHK

DRAWN: JJM DESIGN: JJM

CHECKED: BDS CHECKED: BDS

APPROVED BY THE TOWN OF EXETER PLANNING BOARD

DATE

EMANUEL ENGINEERING

© structural consultants, land planners
118 Portsmouth Avenue, A202
Stratham, NH 03885
P: 603-772-4400 F: 603-772-4487
WWW.EMANUELENGINEERING.COM

CLIENT:

PROJECT LOCUS PLAN

1" = 1,000 '

BLIND TIGER, LLC 3 WRIGHT LANE EXETER, NH 03833

00\/ED

COVER SHEET

FOR
EXETER COUNTRY CLUB
58 JADY HILL AVENUE (SITE)
EXETER, NH 03833

T: SCALE: SHEET: COVER

### PROJECT DRAWING SET:

### COVER SHEET

1 & 2 OF 2 PLAN OF LAND IN EXETER, NH

EXETER COUNTRY CLUB (BY GREAT BAY ENGINEERING, INC.)

31 ABUTTER KEY

C1 EXISTING CONDITIONS

C2 SITE PLAN

C3A & C3B GRADING & DRAINAGE PLAN

C4A UTILITIES PLAN

C4B PROPOSED SEPTIC PROFILE

C5 PAVING & CURBING PLAN

D1 NOTES & EROSION CONTROL DETAILS

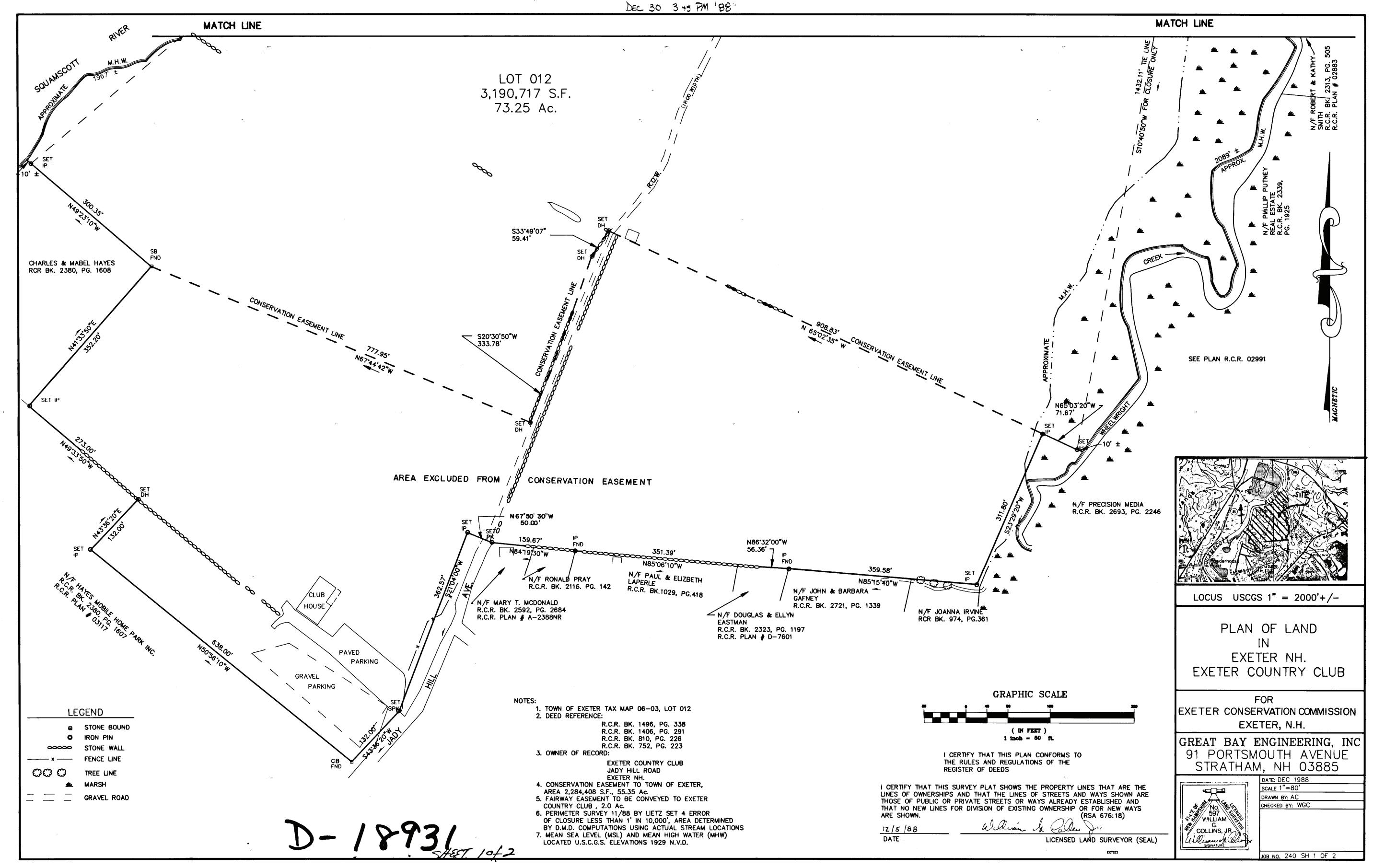
D2 DRAINAGE DETAILS

D3 UTILITY DETAILS

D4 SITE DETAILS

LO1 LIGHTING PLAN (BY EXPOSURE LIGHTING)

LA1 LANDSCAPING PLAN (BY THORN AND THISTLE GARDENS)



₩c 30 3 45 PH '98 DEC 30 345 PM '88 N/F JOANNA IRVINE & HAYES MOBILE HOME PARK RCR BK. 974, PG. 361 RCR BK. 2380, PG. 1605 N/F JOANNA IRVINE RCR BK. 974, PG. 361 OLD FOUNDATION N/F LIONEL & GRETA LABONTE R.C.R. BK. 1970, PG. 472 R.C.R. PLAN # D-18051 FAIRWAY EASEMENT 87,120 S.F. 2.00 Ac. N/F FOLGER & ANITA WENTWORTH R.C.R. BK. 1718, PG. 29 R.C.R. PLAN # D−13038 LOT 012 3,190,717 S.F. 73.25 Ac. N/F ANNE S. LAZLO R.C.R. BK. 1048, PG. 2300 # R.C.R. PLAN # 02883 & #D-13038 MATCH LINE MATCH LINE SEE SHEET 1 FOR LEGEND AND NOTES. PLAN OF LAND EXETER NH. EXETER COUNTRY CLUB

FOR EXETER CONSERVATION COMMISSION

LICENSED LAND SURVEYOR (SEAL)

I CERTIFY THAT THIS PLAN CONFORMS TO THE RULES AND REGULATIONS OF THE REGISTER OF DEEDS

Willem &

EXETER NH.

GREAT BAY ENGINEERING, INC 91 PORTSMOUTH AVENUE STRATHAM, NH 03885

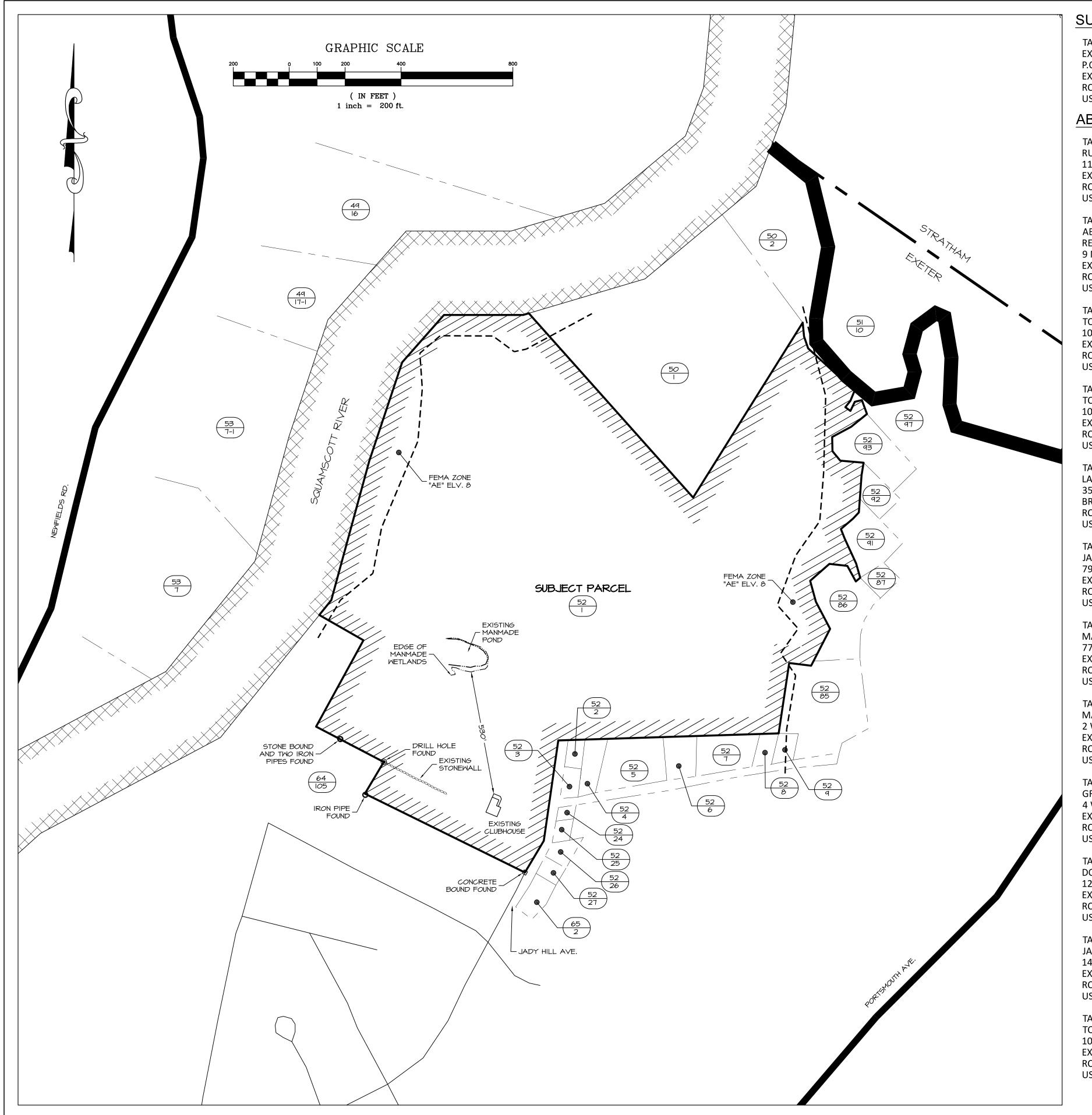
DATE: DEC 1988 SCALE 1"=80" DRAWN BY: AC CHECKED BY: WGC

JOB NO. 240 SH 2 OF 2

CERTIFY THAT THIS SURVEY PLAT SHOWS THE PROPERTY LINES THAT ARE THE LINES OF OWNERSHIPS AND THAT THE LINES OF STREETS AND WAYS SHOWN ARE THOSE OF PUBLIC OR PRIVATE STREETS OR WAYS ALREADY ESTABLISHED AND THAT NO NEW LINES FOR DIVISION OF EXISTING OWNERSHIP OR FOR NEW WAYS ARE SHOWN.

(RSA 676:18) ( IN FEET ) 1 inch = 80 ft. DATE

GRAPHIC SCALE



### SUBJECT PARCEL:

TAX MAP 52 LOT 1 **EXETER COUNTRY CLUB** P.O. BOX 1088 EXETER, NH 03833 RCRD BK1406 PG0290 **USE: GOLF CRSE** 

## ABUTTERS:

TAX MAP 49 LOT 16 RUSSELL F. FREDERICKSEN 11 NEWFIELDS ROAD EXETER, NH 03833 RCRD BK3488 PG2807 USE: MULTI HSES

TAX MAP 49 LOT 17-1 ABIGAIL A. PHILLIPS REVOCABLE TRUST 9 NEWFIELDS ROAD EXETER, NH 03833 RCRD BK3502 PG1209 USE: SINGLE FAM

TAX MAP 50 LOT 1 TOWN OF EXETER **10 FRONT STREET EXETER, NH 03833** RCRD BK2782 PG0389 **USE: EXEMPT FARMLAND** 

TAX MAP 50 LOT 2 TOWN OF EXETER **10 FRONT STREET** EXETER, NH 03833 RCRD BK2782 PG0400 **USE: MUNICIPAL** 

TAX MAP 51 LOT 10 LABONTE INVESTMENT REALTY LLC RCRD BK4988 PG1827 355 ROUTE 125 BRENTWOOD, NH 03833 RCRD BK5561 PG1932 USE: RES ACLNUD

TAX MAP 52 LOT 2 JANET A. CHECK 79 JADY HILL AVENUE EXETER, NH 03833 RCRD BK3241 PG1941 USE: SINGLE FAM

TAX MAP 52 LOT 3 MARIA GEORGE CARRASQUILLO 77 JADY HILL AVENUE EXETER, NH 03833 RCRD BK5985 PG0579 **USE: SINGLE FAM** 

TAX MAP 52 LOT 4 MARSHMAN FAMILY TRUST 2 WEBSTER AVENUE EXETER, NH 03833 RCRD BK6402 PG1467 **USE: SINGLE FAM** 

TAX MAP 52 LOT 5 **GREGORY MCCARTHY 4 WEBSTER AVENUE** EXETER, NH 03833 RCRD BK5383 PG1401 USE: SINGLE FAM

TAX MAP 52 LOT 6 DOUGLAS B. EASTMAN 12 WEBSTER AVENUE EXETER, NH 03833 RCRD BK3172 PG0776 **USE: SINGLE FAM** 

TAX MAP 52 LOT 7 JACQUES P. WAGEMAKER 14 WEBSTER AVENUE EXETER, NH 03833 RCRD BK5517 PG0405 USE: SINGLE FAM

TAX MAP 52 LOT 8 TOWN OF EXETER **10 FRONT STREET** EXETER, NH 03833 RCRD BK2887 PG2683 **USE: MUNICIPAL** 

### (ABUTTERS: CONTINUED):

TAX MAP 52 LOT 9 TOWN OF EXETER **10 FRONT STREET** EXETER, NH 03833 RCRD BK3680 PG2336 **USE: MUNICIPAL** 

TAX MAP 52 LOT 24 LEON N. MORSE 73 JADY HILL AVENUE EXETER, NH 03833 RCRD BK2533 PG0786 USE: SINGLE FAM

TAX MAP 52 LOT 25 MICHAEL S. JOHNSON 71 JADY HILL AVENUE EXETER, NH 03833 RCRD BK5497 PG0681 USE: SINGLE FAM

TAX MAP 52 LOT 26 TIMOTHY GAGNON 69 JADY HILL AVENUE EXETER, NH 03833 RCRD BK5601 PG2630 USE: SINGLE FAM

THOMAS NASH **67 JADY HILL AVENUE** EXETER, NH 03833 RCRD BK5954 PG1279 USE: SINGLE FAM

TAX MAP 52 LOT 27

TAX MAP 52 LOT 85 ARUBA CAPITAL PO BOX 1540 EXETER, NH 03833 **USE: OFFICE BLD** 

TAX MAP 52 LOT 86 TRACY J. MIDDLETON FAMILY TRUST 7 DOWNING COURT EXETER, NH 03833 RCRD BK6247 PG2422 **USE: SINGLE FAM** 

TAX MAP 52 LOT 87 CLIVE TOMLINSON **1803 TUALATIN STREET** ST. HELENS, OREGON 97051 RCRD BK5873 PG0742 **USE: SINGLE FAM** 

TAX MAP 52 LOT 91 **BARRY W SPRACKLIN** 2 MELODY LANE EXETER, NH 03833 RCRD BK2921 PG1464 **USE: SINGLE FAM** 

TAX MAP 52 LOT 92 WILLIAM C. UNGER 1 MELODY LANE EXETER, NH 03833 RCRD BK5325 PG1379 **USE: SINGLE FAM** 

TAX MAP 52 LOT 93 ANNE S. LASZLO **27 ALLEN STREET** EXETER, NH 03833 RCRD BK2300 PG1084 **USE: SINGLE FAM** 

### (ABUTTERS: CONTINUED):

TAX MAP 52 LOT 97 TOWN OF EXETER **10 FRONT STREET EXETER, NH 03833** RCRD BK2828 PG1102 **USE: MUNICIPAL** 

TAX MAP 53 LOT 7 CATHLEEN A. TOOMEY REVOCABLE TRUST 1 NEWFIELDS ROAD EXETER, NH 03833 RCRD BK6361 PG1158 **USE: SINGLE FAM** 

TAX MAP 53 LOT 7-1 CARPE DIEM TRUST 5 NEWFIELDS ROAD EXETER, NH 03833 RCRD BK5828 PG1557 USE: SINGLE FAM

TAX MAP 64 LOT 105 HAYES MOBILE HOME PARK INC 56 JADY HILL AVENUE EXETER, NH 03833 RCRD BK3178 PG0286 USE: SINGLE FAM

TAX MAP 65 LOT 2 DANIEL W. CHARTRAND 63 JADY HILL AVENUE EXETER, NH 03833 RCRD BK5319 PG1110 USE: SINGLE FAM

### NOTES:

- I. OWNER OF RECORD: TAX MAP 52, LOT I EXETER COUNTRY CLUB P.O. BOX 1088 EXETER, NH 03833 RCRD BK1406 PG0290
- 2. THE INTENT OF THIS PLAN IS TO SHOW ALL THE ABUTTERS AND THEIR INFORMATION OF THE SUBJECT PARCEL LOCATED AT EXETER, NH TAX MAP 52, LOT I. IT IS ALSO THE INTENT TO SHOW THE SURVEYED BOUNDS OF THE SUBJECT PARCEL THAT ARE NOT IN THE VICINITY OF THE PROPOSED IMPROVEMENTS ON SITE, ONLY A PORTION OF THE BOUNDARY WAS SURVEYED. THIS IS NOT A BOUNDARY PLAN.
- 3. PARCEL IS ZONED R-2 SINGLE FAMILY PER THE 2019 ZONING MAP OF EXETER, NEW HAMPSHIRE.
- 4. A PORTION OF THE PARCEL IS WITHIN IN FLOOD HAZARD ZONES "AE" (EL 8) AND "X"; REFERENCE FLOOD INSURANCE RATE MAPS 33015C0402E \$ 33015C0406E, DATED MAY 17, 2005.
- 5. FIELDWORK COMPLETED BY JAMES VERRA AND ASSOCIATES, INC. IN SPRING 2022. NH GRID; NAVD 1988.
- 6. WETLANDS DELINEATED BY GOVE ENVIRONMENTAL SERVICES, INC. IN SPRING 2022. THE DELINEATION WAS LIMITED TO THE AREAS OF PROPOSED WORK DEPICTED ON THESE PLANS. THE LANDOWNER IS RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL WETLANDS REGULATIONS, INCLUDING ANY PERMITTING AND SETBACK REQUIREMENTS REQUIRED UNDER THESE REGULATIONS.
- 7. THIS PLAN WAS PREPARED WITH ON-SITE FIELD SURVEY AND EXISTING PLANS. THE CONTRACTOR SHOULD NOTIFY EMANUEL ENGINEERING, INC. DURING CONSTRUCTION IF ANY DISCREPANCY TO THE PLAN IS FOUND ON SITE.

### **METLAND NOTES:**

WETLANDS WERE DELINEATED BY GOVE ENVIRONMENTAL SERVICES INC. IN SPRING 2022 UTILIZING THE FOLLOWING STANDARDS:

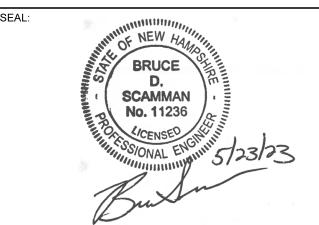
- I. REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTHCENTRAL AND NORTHEAST REGION, (VERSION 2.0) JANUARY 2012, U.S. ARMY CORPS OF ENGINEERS.
- 2. FIELD INDICATORS OF HYDRIC SOILS IN THE UNITED STATES, A GUIDE FOR IDENTIFYING AND DELINEATING HYDRIC SOILS, VERSION 8.2. UNITED STATES DEPARTMENT OF AGRICULTURE (2018).
- 3. NEW ENGLAND HYDRIC SOILS TECHNICAL COMMITTEE. 2020 VERSION 4, FIELD INDICATORS FOR IDENTIFYING HYDRIC SOILS IN NEW ENGLAND. NEW ENGLAND INTERSTATE WATER POLLUTION CONTROL COMMISSION, LOWELL, MA.
- 4. U.S. ARMY CORPS OF ENGINEERS NATIONAL WETLAND PLANT LIST, VERSION 3.5. (2020)

	3	MAY 23, 2023	FOR A	PPROVAL					
	2	APR 20, 2023	FOR A	FOR APPROVAL					
	1	JAN 24, 2023	FOR A	PPROVAL					
IS	SS.	DATE:	DESCRI	PTION OF ISS	SUE:	CHK.			
D	RA	<sup>WN:</sup> JJM	-	DESIGN:	JJM				
С	HE	CKED: BDS		CHECKED:	BDS				



118 Portsmouth Avenue, A202 STRATHAM, NH 03885 P: 603-772-4400 F: 603-772-4487

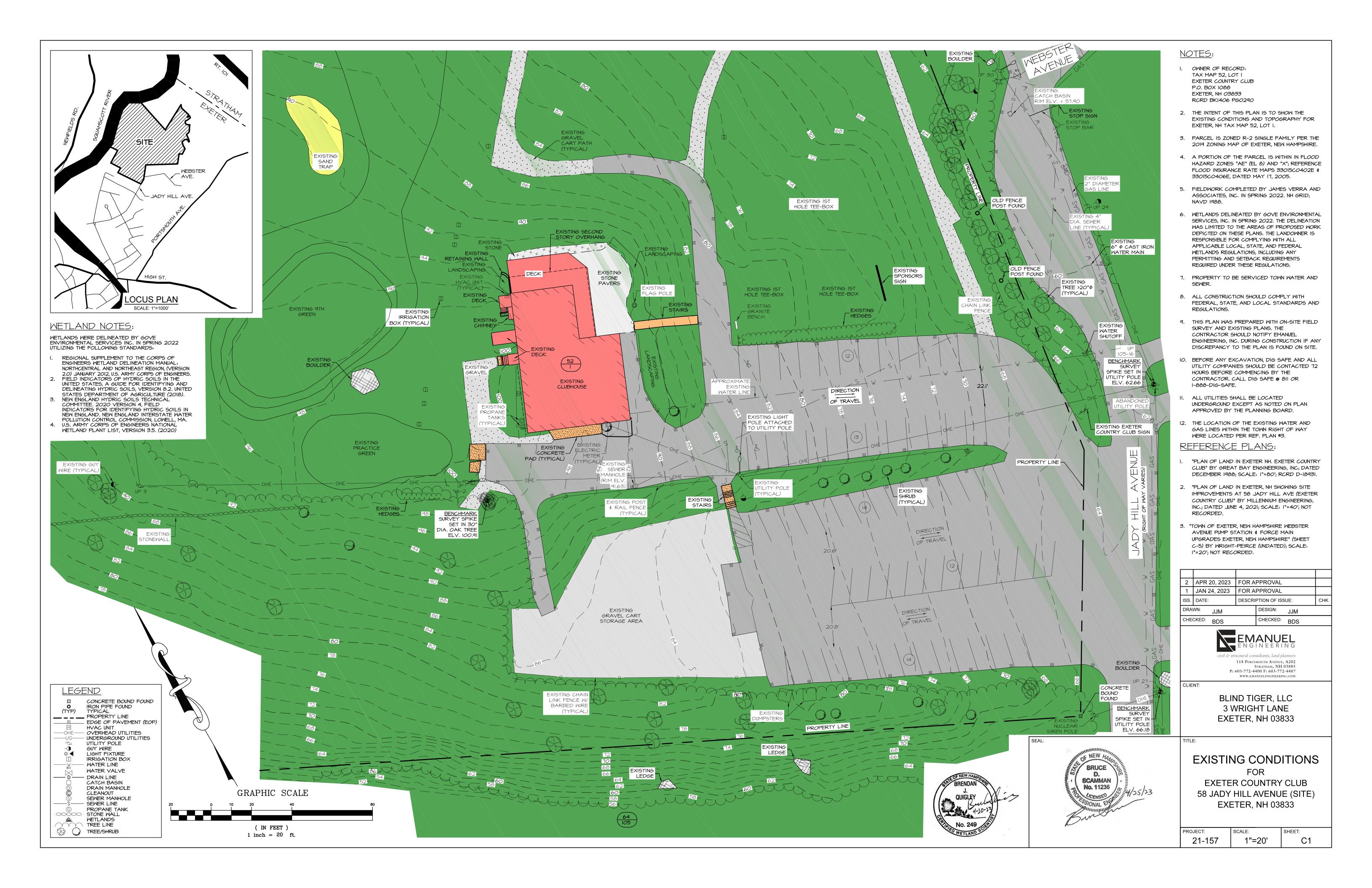
BLIND TIGER, LLC 3 WRIGHT LANE EXETER, NH 03833

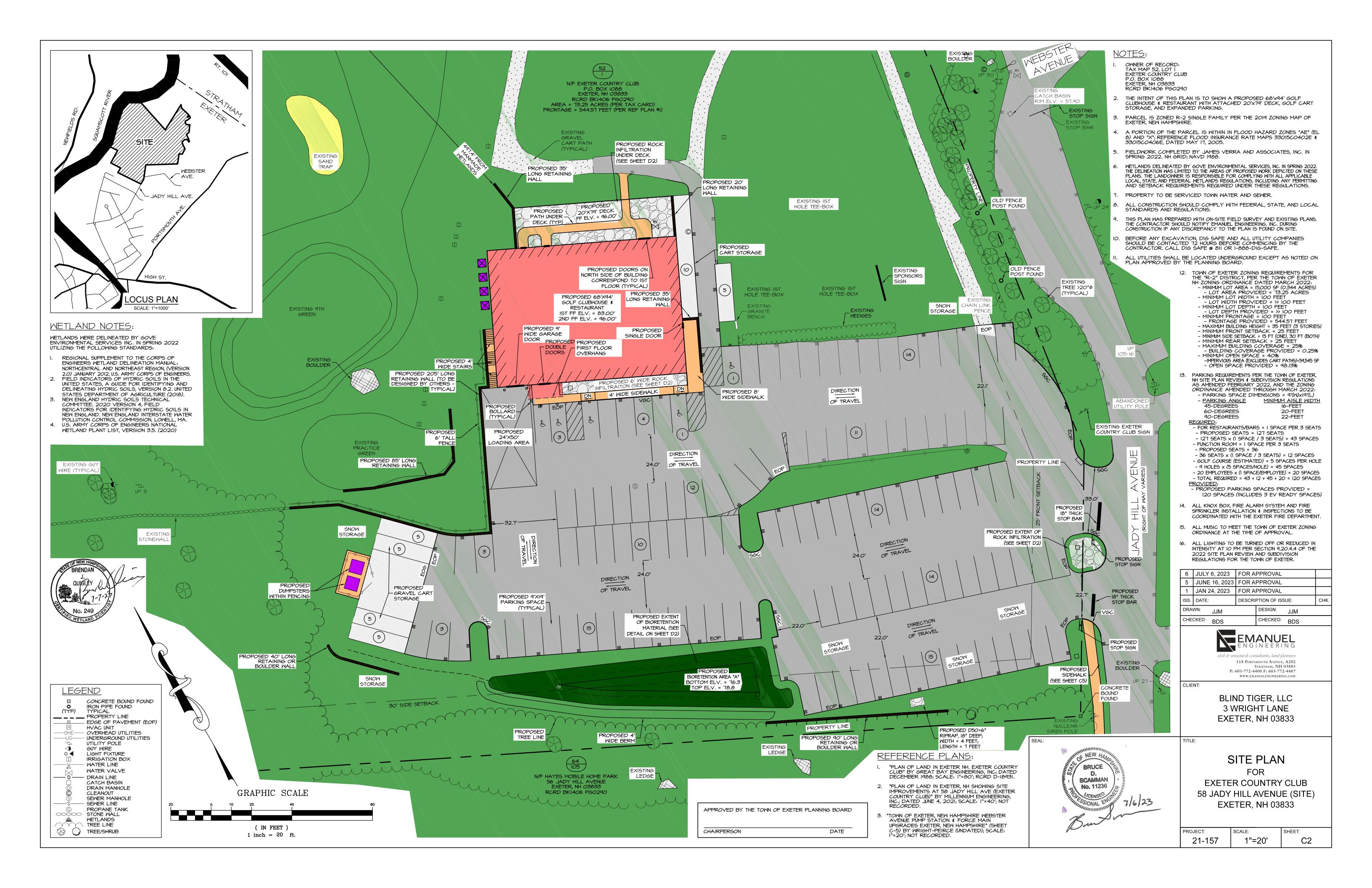


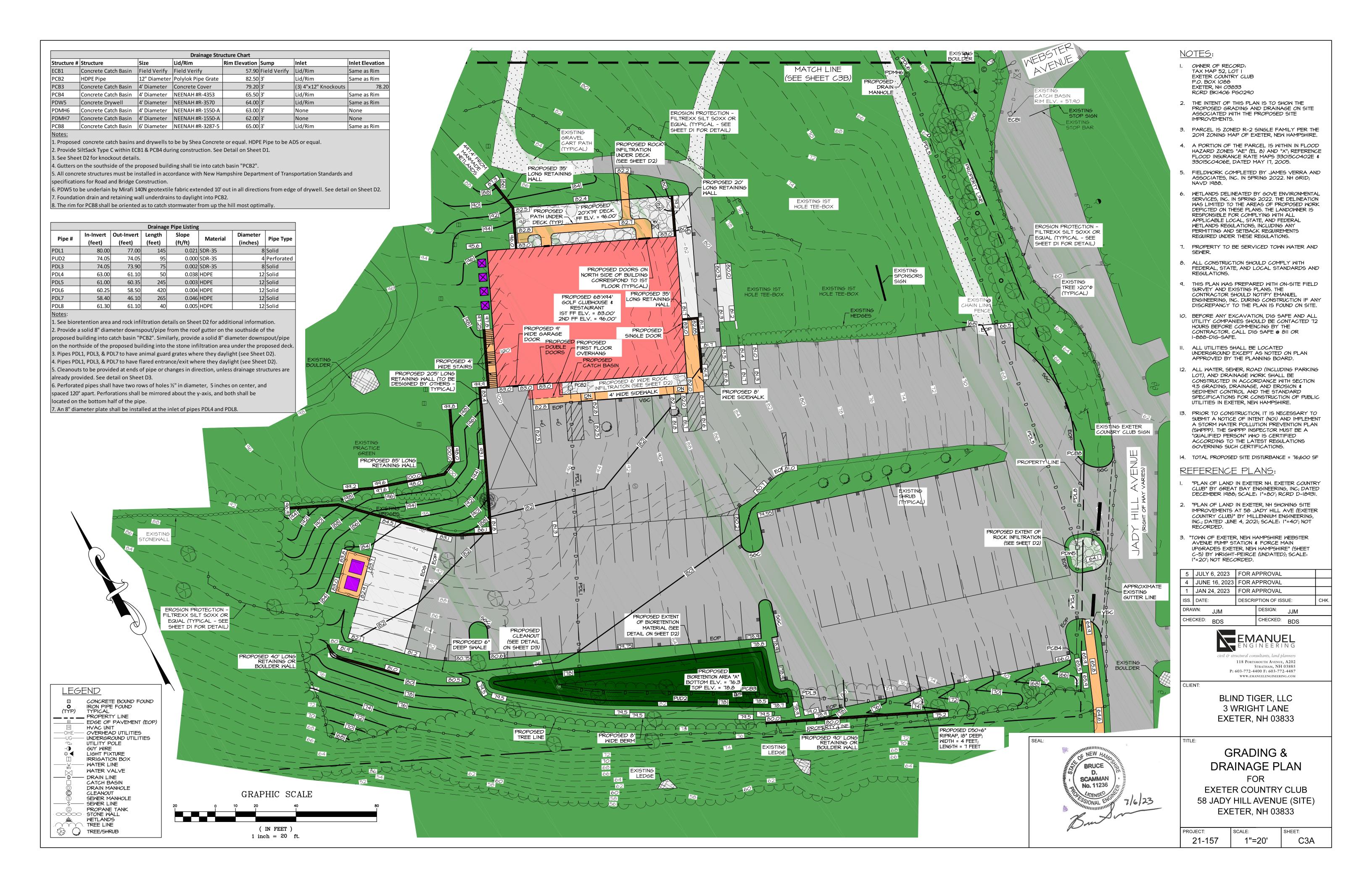
**ABUTTER KEY** 

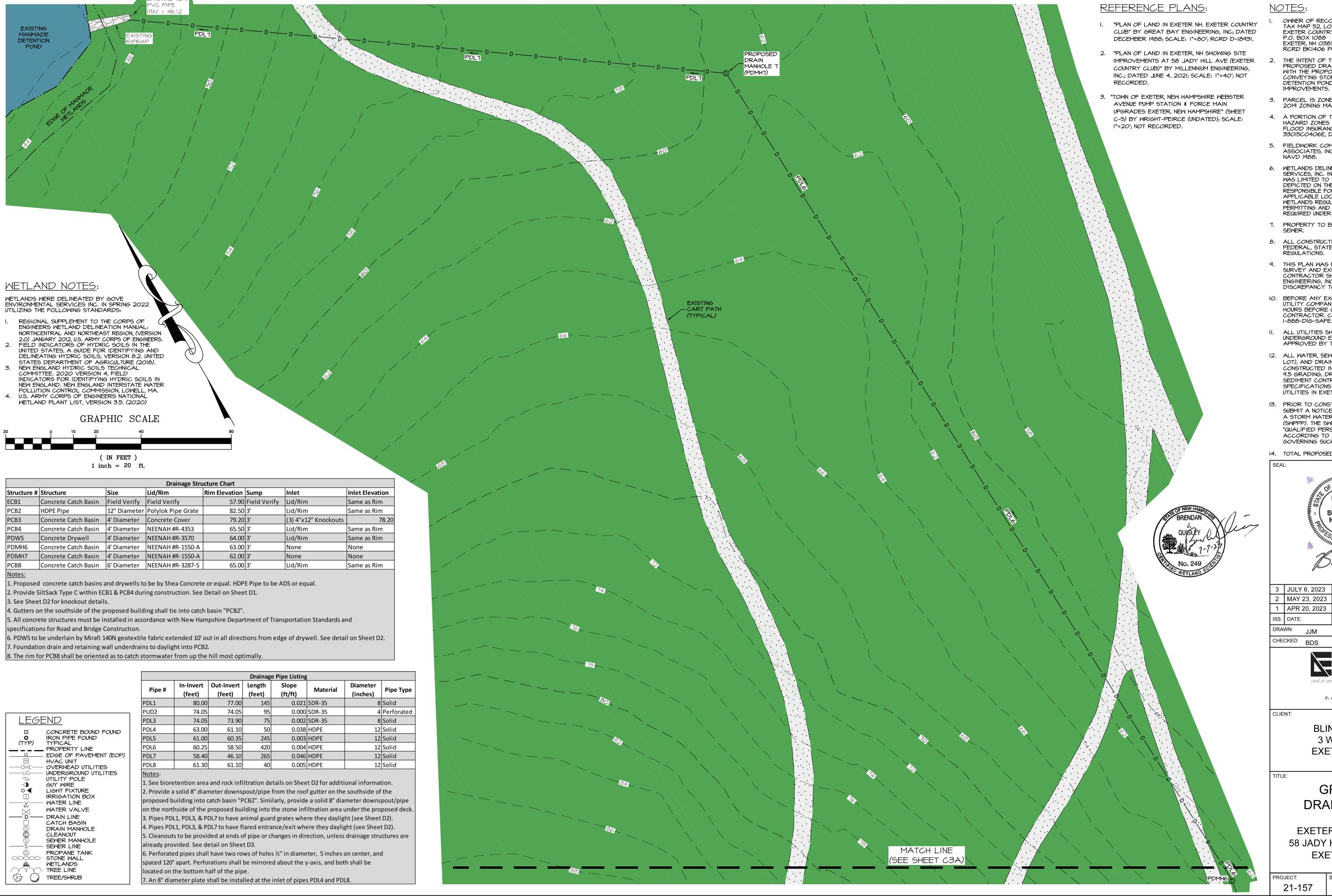
FOR **EXETER COUNTRY CLUB** 58 JADY HILL AVENUE (SITE) EXETER, NH 03833

PROJECT: SHEET: 21-157 1"=200' B1



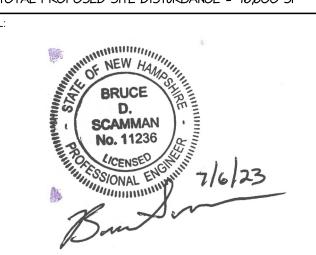






### NOTES:

- OWNER OF RECORD: TAX MAP 52, LOT I EXETER COUNTRY CLUB P.O. BOX 1088 EXETER, NH 03833 RCRD BK1406 PG0290
- THE INTENT OF THIS PLAN IS TO SHOW THE PROPOSED DRAINAGE ON SITE ASSOCIATED WITH THE PROPOSED SITE IMPROVEMENTS CONVEYING STORMWATER TO THE EXISTING DETENTION POND NORTH OF THE PROPOSED
- 3. PARCEL IS ZONED R-2 SINGLE FAMILY PER THE 2019 ZONING MAP OF EXETER, NEW HAMPSHIRE.
- 4. A PORTION OF THE PARCEL IS WITHIN IN FLOOD HAZARD ZONES "AE" (EL 8) AND "X"; REFERENCE FLOOD INSURANCE RATE MAPS 33015C0402E \$ 33015C0406E, DATED MAY 17, 2005.
- 5. FIELDWORK COMPLETED BY JAMES VERRA AND ASSOCIATES, INC. IN SPRING 2022. NH GRID;
- 6. WETLANDS DELINEATED BY GOVE ENVIRONMENTAL SERVICES, INC. IN SPRING 2022. THE DELINEATION WAS LIMITED TO THE AREAS OF PROPOSED WORK DEPICTED ON THESE PLANS. THE LANDOWNER IS RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL WETLANDS REGULATIONS, INCLUDING ANY PERMITTING AND SETBACK REQUIREMENTS REQUIRED UNDER THESE REGULATIONS.
- 7. PROPERTY TO BE SERVICED TOWN WATER AND
- 8. ALL CONSTRUCTION SHOULD COMPLY WITH FEDERAL, STATE, AND LOCAL STANDARDS AND
- 9. THIS PLAN WAS PREPARED WITH ON-SITE FIELD SURVEY AND EXISTING PLANS. THE CONTRACTOR SHOULD NOTIFY EMANUEL ENGINEERING, INC. DURING CONSTRUCTION IF ANY DISCREPANCY TO THE PLAN IS FOUND ON SITE.
- IO. BEFORE ANY EXCAVATION, DIG SAFE AND ALL UTILITY COMPANIES SHOULD BE CONTACTED 12 HOURS BEFORE COMMENCING BY THE CONTRACTOR. CALL DIG SAFE @ 811 OR I-888-DIG-SAFE.
- II. ALL UTILITIES SHALL BE LOCATED UNDERGROUND EXCEPT AS NOTED ON PLAN APPROVED BY THE PLANNING BOARD.
- 12. ALL WATER, SEWER, ROAD (INCLUDING PARKING LOT), AND DRAINAGE WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 9.5 GRADING, DRAINAGE, AND EROSION & SEDIMENT CONTROL AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION OF PUBLIC UTILITIES IN EXETER, NEW HAMPSHIRE.
- 13. PRIOR TO CONSTRUCTION, IT IS NECESSARY TO SUBMIT A NOTICE OF INTENT (NOI) AND IMPLEMENT A STORM WATER POLLUTION PREVENTION PLAN (SMPPP). THE SMPPP INSPECTOR MUST BE A "QUALIFIED PERSON" WHO IS CERTIFIED ACCORDING TO THE LATEST REGULATIONS GOVERNING SUCH CERTIFICATIONS.
- 14. TOTAL PROPOSED SITE DISTURBANCE = 76,600 SF



3	JULY 6, 2023	FOR A	PPROVAL		
2	MAY 23, 2023	FOR A	PPROVAL		
1	APR 20, 2023	FOR A	PPROVAL		
ISS.	DATE:	DESCRI	PTION OF ISS	SUE:	СН
DRA	WN: JJM		DESIGN:	JJM	
CHE	CKED: RDS		CHECKED:	RDS	

EMANUEL ENGINEERING

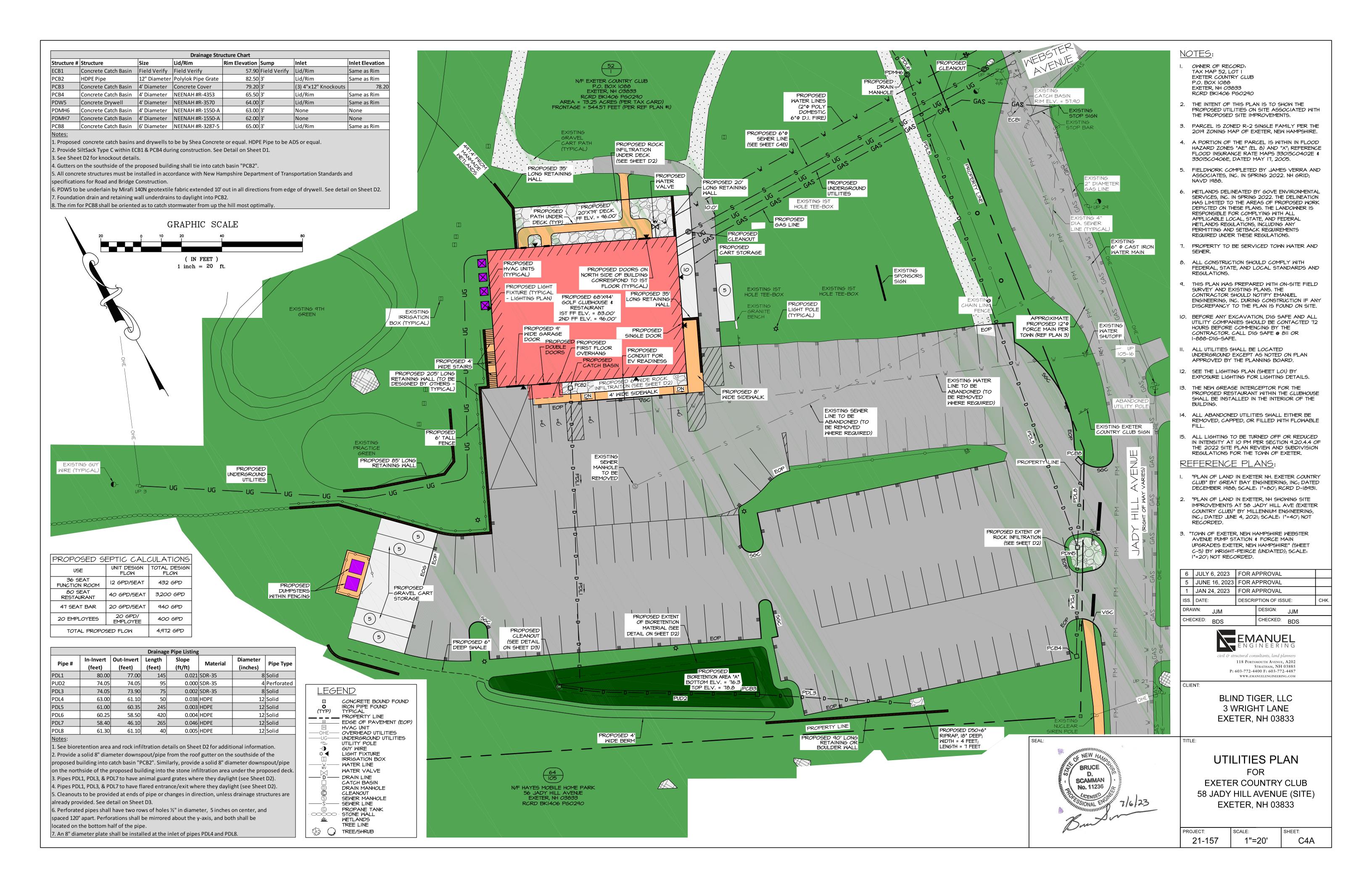
118 Portsmouth Avenue, A202 STRATHAM, NH 03885 P: 603-772-4400 F: 603-772-4487

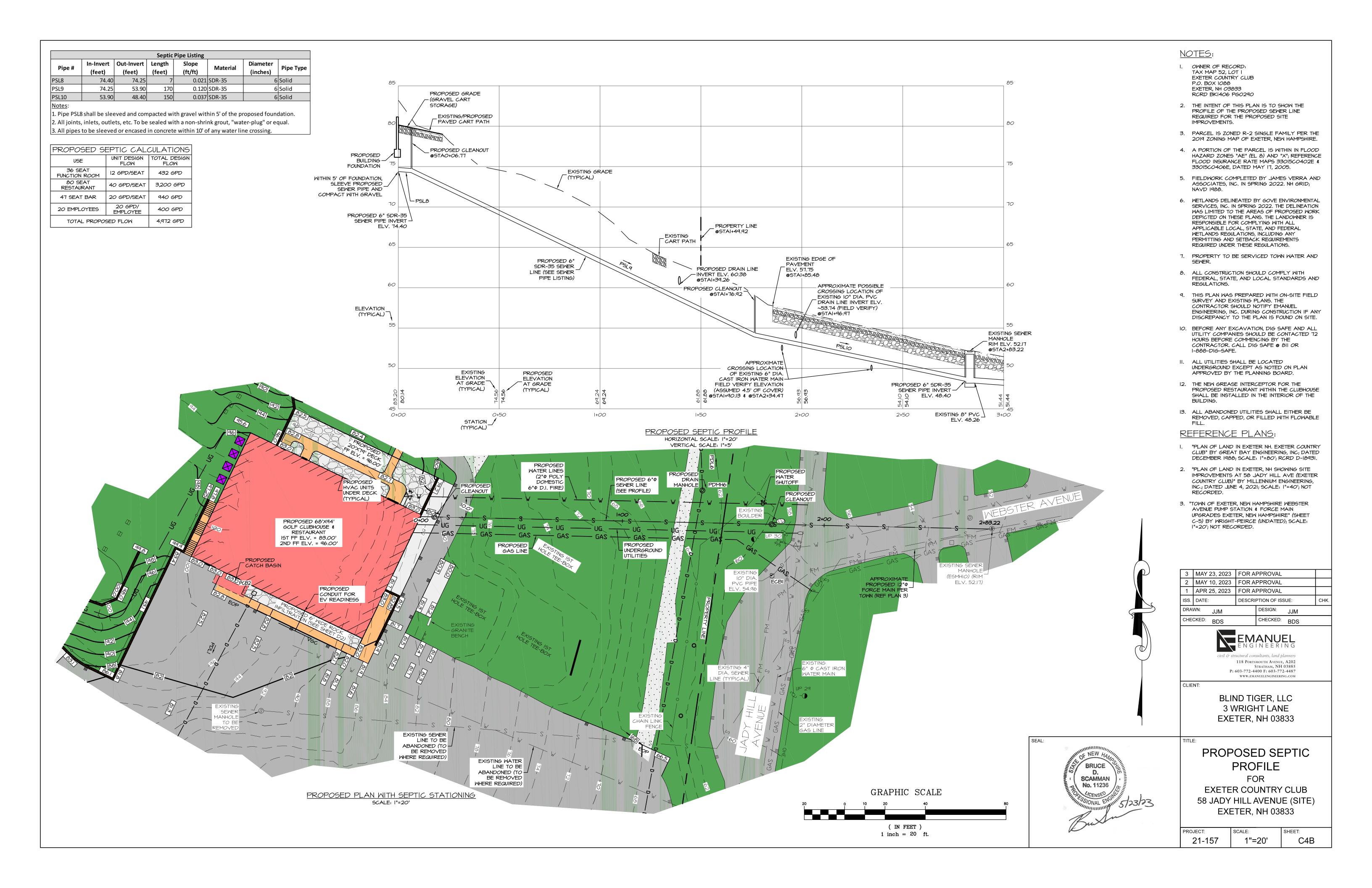
BLIND TIGER, LLC 3 WRIGHT LANE EXETER, NH 03833

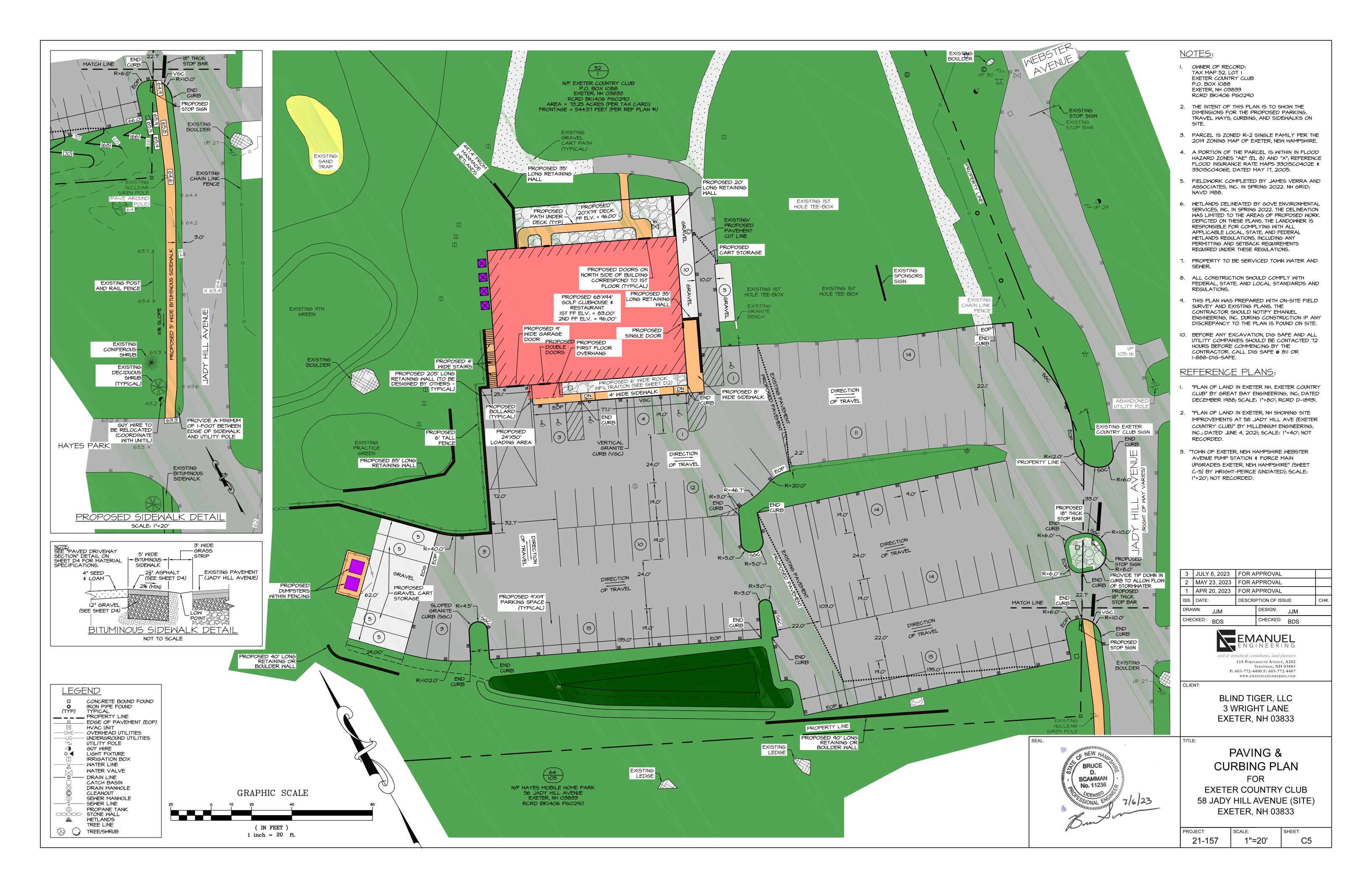
**GRADING &** DRAINAGE PLAN FOR

**EXETER COUNTRY CLUB** 58 JADY HILL AVENUE (SITE) EXETER, NH 03833

SHEET: 21-157 1"=20' C3B







#### <u>EROSION AND SEDIMENTATION</u> CONTROL - CONSTRUCTION PHASING AND SEQUENCING:

SEE "EROSION AND SEDIMENTATION CONTROL GENERAL NOTES" WHICH ARE TO BE AN INTEGRAL

PART OF THIS PROCESS.

- 2. INSTALL SILT FENCING AND/OR HAY BALE BARRIERS AS PER DETAILS AND AT SEDIMENT
- 3. CONSTRUCT TREATMENT SWALES, LEVEL SPREADERS AND DETENTION STRUCTURES AS DEPICTED ON DRAWINGS.
- 4. INSTALL TEMPORARY GRAVEL CONSTRUCTION ENTRANCE(S) AS PER DETAIL AND AT LOCATIONS SHOWN ON THE DRAWINGS. MAINTAIN (TOP DRESS) REGULARLY TO PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC
- 5. STRIP AND STOCKPILE TOPSOIL. STABILIZE PILES OF SOIL CONSTRUCTION MATERIAL.
- 6. ROUGH GRADE SITE. INSTALL CULVERTS AND ROAD DITCHES.
- 7. FINISH GRADE AND COMPACT SITE.
- 8. RE-SPREAD AND ADD TOPSOIL TO ALL ROADSIDE SLOPES. TOTAL TOPSOIL THICKNESS TO BE A MINIMUM OF FOUR TO SIX INCHES.
- 9. STABILIZE ALL AREAS OF BARE SOIL WITH MULCH AND SEEDING.
- IO. RE-SEED PER EROSION AND SEDIMENTATION CONTROL GENERAL NOTES.
- II. SILT FENCING AND HAY BALES TO REMAIN AND BE MAINTAINED FOR TWENTY FOUR MONTHS AFTER CONSTRUCTION TO INSURE ESTABLISHMENT OF ADEQUATE SOIL STABILIZATION AND VEGETATIVE COVER. ALL SILT FENCING, HAY BALES AND TRAPPED SILT ARE THEN TO BE REMOVED FROM THE SITE AND PROPERLY DISPOSED OF.
- 12. PERIMETER CONTROLS SHALL BE INSTALLED PRIOR TO EARTH MOVING OPERATIONS.
- 13. PONDS AND SWALES SHALL BE INSTALLED EARLY ON IN THE CONSTRUCTION SEQUENCE -BEFORE ROUGH GRADING THE SITE.
- 14. ALL DITCHES AND SMALES SHALL BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.
- 15. ALL ROADWAYS AND PARKING LOTS SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
- 16. ALL CUT AND FILL SLOPES SHALL BE SEEDED/LOAMED WITHIN 72 HOURS OF ACHIEVING FINISH GRADE
- 17. ALL EROSION CONTROLS SHALL BE INSPECTED WEEKLY AND AFTER EVERY HALF-INCH OF RAINFALL
- 18. BUOYANCY CALCULATIONS HAVE NOT BEEN PERFORMED. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ANCHORAGE FOR ALL TANKS

#### WINTER CONSTRUCTION NOTES (OCTOBER 15 TO MAY I):

- . ALL PROPOSED VEGETATED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELSEWHERE. THE INSTALLATION OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPETED IN ADVANCE OF THAW OR SPRING MELT EVENT.
- 2. ALL DITCHES OR SMALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.
- 3. AFTER OCTOBER 15TH, INCOMPLETE ROAD OR PARKING SURFACES, WHERE WORK HAS STOPPED FOR THE WINTER SEASON, SHALL BE PROTECTED WITH A MINIMUM OF 3 INCHES OF CRUSHED GRAVEL PER NHDOT ITEM 304.3.

SUCH AS; FALLEN TREES, DEBRIS, AND SEDIMENT

WATER DEPTHS ON THE PIPES. REPAIRS MUST BE

DAMAGE TO THE OUTLET PROTECTION APRON.

CARRIED OUT IMMEDIATELY TO AVOID ADDITIONAL

THAT COULD CHANGE FLOW PATTERNS AND/OR TAIL

#### ROCK INFILTRATION AREA MAINTENANCE:

THE ROCK INFILTRATION AREA SHOULD BE CHECKED AT LEAST ANNUALLY AND AFTER EVERY MAJOR STORM. IF THE ROCK HAS BEEN DISPLACED, UNDERMINED, OR DAMAGED, IT SHOULD BE REPAIRED

6. SEED BED PREPARATION IMMEDIATELY. THE CHANNEL IMMEDIATELY BELOW ANY OUTLET SHOULD BE CHECKED TO SEE THAT EROSION IS NOT OCCURRING. THE DOWNSTREAM CHANNEL SHOULD BE KEPT CLEAR OF OBSTRUCTIONS

#### EROSION AND SEDIMENTATION CONTROL - GENERAL NOTES:

- . CONDUCT ALL CONSTRUCTION IN A MANNER AND SEQUENCE THAT CAUSES THE LEAST PRACTICAL DISTURBANCE OF THE PHYSICAL ENVIRONMENT, BUT IN NO CASE SHALL EXCEED 5 ACRES AT ANY ONE TIME BEFORE DISTURBED AREAS ARE STABILIZED
- 2. ALL EROSION AND SEDIMENTATION CONTROL MEASURES IN THE PLAN SHALL MEET THE DESIGN BASED ON NEW HAMPSHIRE STORMWATER MANUAL, VOLUMES I-3: DATED DECEMBER 2008, PREPARED BY NHDES.
- 3. AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED: • BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED. • A MINIMUM OF 85% VEGETATED GROWTH HAS
- BEEN ESTABLISHED. • A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIP RAP HAS BEEN
- EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.
- 4. ALL AREAS SHALL BE STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE.
- 5. SEE WINTER CONSTRUCTION NOTES IF SCHEDULE AND DATES ARE APPLICABLE.
- 6. ALL DITCHES, SWALES AND PONDS MUST BE
- 7. ALL GROUND AREAS OPENED UP FOR CONSTRUCTION WILL BE STABILIZED IN THE SHORTEST PRACTICAL TIME. ALL SOILS FINISH GRADED MUST BE STABILIZED WITHIN SEVENTY TWO HOURS OF DISTURBANCE.

STABILIZED PRIOR TO DIRECTING FLOW TO THEM.

- 8. EMPLOY TEMPORARY EROSION AND SEDIMENTATION CONTROL DEVICES AS DETAILED ON THIS PLAN AS NECESSARY UNTIL ADEQUATE STABILIZATION HAS BEEN ASSURED.
- 9. TEMPORARY & LONG TERM SEEDING: USE SEED MIXTURES, FERTILIZER, LIME AND MULCHING AS RECOMMENDED (SEE SEEDING AND STABILIZATION NOTES).
- IO. STRAW OR HAY BALE BARRIERS AND SILTATION FENCING TO BE SECURELY EMBEDDED AND STAKED AS DETAILED. WHEREVER POSSIBLE A VEGETATED STRIP OF AT LEAST TWENTY FIVE FEET IS TO BE KEPT BETWEEN SILT FENCE AND ANY EDGE OF WET AREA.
- II. SEEDED AREAS WILL BE FERTILIZED AND RE-SEEDED AS NECESSARY TO ENSURE VEGETATIVE ESTABLISHMENT.
- 12. SEDIMENT BASIN(S), IF REQUIRED, TO BE CHECKED AFTER EACH SIGNIFICANT RAINFALL AND CLEANED AS NEEDED TO RETAIN DESIGN
- 13. STRAW BALE AND/OR SILT FENCE BARRIERS WILL BE CHECKED REGULARLY AND AFTER EACH SIGNIFICANT RAINFALL, NECESSARY REPAIRS WILL BE MADE TO CORRECT UNDERMINING OR DETERIORATION OF THE BARRIER AS WELL AS CLEANING, REMOVAL AND PROPER DISPOSAL OF TRAPPED SEDIMENT.
- 14. TREATMENT SWALES WILL BE CHECKED WEEKLY AND REPAIRED WHEN NECESSARY UNTIL ADEQUATE VEGETATIVE COVER HAS BEEN
- 15. THE PROJECT IS TO BE MANAGED IN A MANNER THAT MEETS THE REQUIREMENTS AND INTENT OF RSA 430:53 AND CHAPTER AGR 3800 RELATIVE TO INVASIVE SPECIES.
- 16. TEMPORARY WATER DIVERSION (SWALES, BASINS, ETC.) MUST BE USED AS NECESSARY UNTIL AREAS ARE STABILIZED.

### SEEDING AND STABILIZATION FOR LOAMED SITE:

- I. FOR TEMPORARY & LONG TERM SEEDINGS (BY SEPTEMBER 15 OF THE SAME YEAR OF DISTURBANCE) USE AGWAY'S SOIL CONSERVATION GRASS SEED OR EQUAL.
- 2. COMPONENTS: ANNUAL RYE GRASS, PERENNIAL RYE GRASS, WHITE CLOVER, 2 FESCUES, SEED AT A RATE OF 100 POUNDS PER ACRE.
- 3. FERTILIZER & LIME: NITROGEN (N) 50 LBS/ACRE, PHOSPHATE (P205) 100 LBS/ACRE, POTASH (K20) 100 LBS/ACRE, LIME 2000 LBS/ACRE.
- 4. MULCH: HAY OR STRAW 1.5-2 TONS/ACRE.
- 5. GRADING AND SHAPING: SLOPES SHALL NOT BE STEEPER THAN 2:1; 3:1 SLOPES OR FLATTER ARE PREFERRED. WHERE MOWING WILL BE DONE, 3:1 SLOPES OR FLATTER ARE RECOMMENDED.
- SURFACE AND SEEPAGE WATER SHOULD BE DRAINED OR DIVERTED FROM THE SITE TO PREVENT DROWNING OR WINTER KILLING OF THE
- **PLANTS** - STONES LARGER THAN 4 INCHES AND TRASH SHOULD BE REMOVED BECAUSE THEY INTERFERE WITH SEEDING AND FUTURE MAINTENANCE OF THE AREA. WHERE FEASIBLE, THE SOIL SHOULD BE TILLED TO A DEPTH OF ABOUT 4 INCHES TO PREPARE A SEEDBED AND MIX FERTILIZER AND LIME INTO THE SOIL. THE SEEDBED SHOULD BE LEFT IN A REASONABLY FIRM AND SMOOTH CONDITION. THE LAST TILLAGE OPERATION SHOULD BE PERFORMED ACROSS THE SLOPE WHEREVER PRACTICAL.

### STABILIZATION CONSTRUCTION ENTRANCE SPECIFICATIONS:

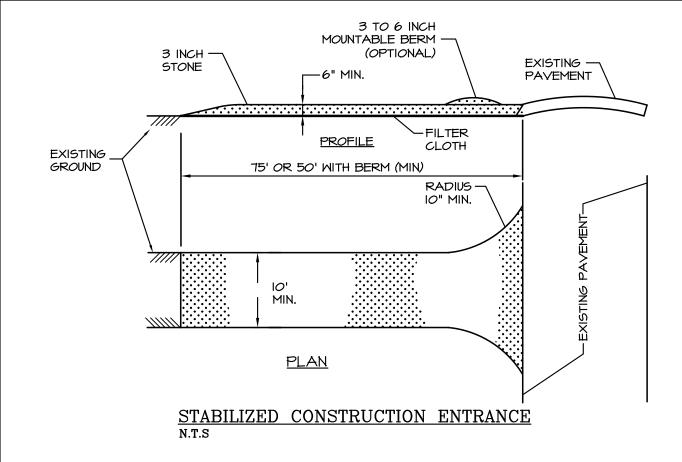
- STONE FOR A STABILIZED CONSTRUCTION ENTRANCE SHALL BE 3 INCH STONE (MINIMUM), RECLAIMED STONE, OR RECYCLED CONCRETE
- THE LENGTH OF THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 75 FEET (OR 50 FEET WITH A 3 TO 6 INCH MOUNTABLE BERM).
- THE THICKNESS OF THE STONE FOR THE STABILIZATION ENTRANCE SHALL NOT BE LESS THAN 6 INCHES.
- THE WIDTH OF THE ENTRANCE SHALL NOT BE LESS THAN THE FULL WIDTH OF THE ENTRANCE WHERE INGRESS OR EGRESS OCCURS OR IO FEET WHICH EVER IS GREATER.
- GEOTEXTILE FILTER CLOTH SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING THE
- ALL SURFACE WATER THAT IS FLOWING TO OR DIVERTED TOWARDS THE CONSTRUCTION ENTRANCE SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A BERM WITH 5:1 SLOPES THAT CAN BE CROSSED BY VEHICLES MAY BE SUBSTITUTED FOR THE PIPE.
- 7. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING OF ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, WASHED, OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED PROMPTLY.
- WHEELS SHALL BE CLEANED TO REMOVE MUD PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.

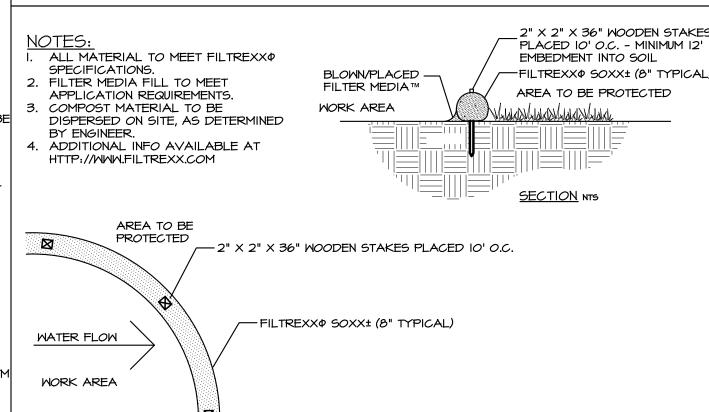
#### FILTREXX LAND IMPROVEMENT SYSTEMS INSPECTION & MAINTENANCE:

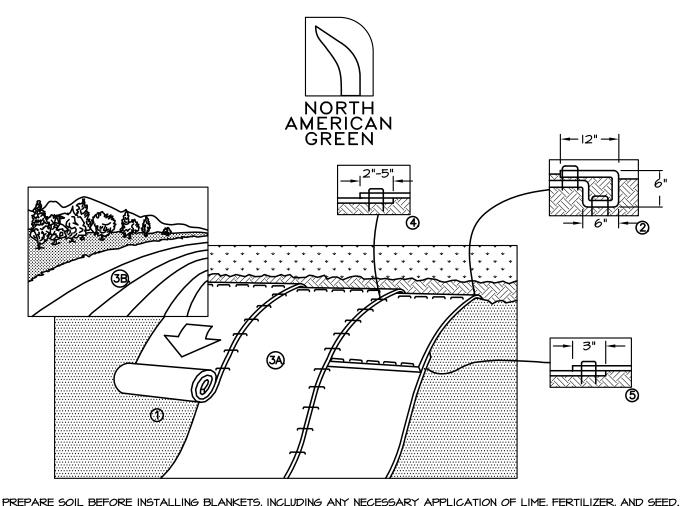
- CONSULT FILTREXX SWPP CUT SHEETS FOR ALL FILTREXX PRODUCTS PRIOR TO INSTALLATION AND FOR MAINTENANCE GUIDELINES. HTTP://WWW.FILTREXX.COM/DESIGN\_CUT\_SHEETS.HTM
- ROUTINE INSPECTION SHOULD BE CONDUCTED WITHIN 24 HRS OF A RUNOFF EVENT OR AS DESIGNATED BY THE REGULATING AUTHORITY UNITS SHOULD BE REGULARLY INSPECTED TO MAKE SURE THEY MAINTAIN THEIR SHAPE AND ARE PRODUCING ADEQUATE HYDRAULIC FLOW-THROUGH, DITCH/CHANNEL EROSION CONTROL, AND SEDIMENT REMOVAL.

PLAN NTS

- 3. IF PONDING BECOMES EXCESSIVE, ADDITIONAL CHECK DAMS, LEVEL SPREADERS, OR SEDIMENT CONTROL UNITS FOR SEDIMENT REMOVAL MAY BE REQUIRED.
- SEDIMENT ACCUMULATION SHOULD BE REMOVED ONCE IT REACHES THE HEIGHT OF THE CHECK DAM OR UNIT. ALTERNATIVELY, ANOTHER UNIT MAY BE INSTALLED SLIGHTLY UPSLOPE, ON TOP OF THE EXISTING ONE. THIS PROCESS IS NOT CONSIDERED A SOIL DISTURBING ACTIVITY.
- STORM DEBRIS ACCUMULATION BEHIND CHECK DAMS, LEVEL SPREADER, SEDIMENT CONTROL UNIT, ETC. SHOULD NEVER BE HIGHER THAN THE SIDES OF THE CHECK DAM/UNIT. STORM RUNOFF OVERFLOW SHALL MAINTAIN THE UNITS IN A FUNCTIONAL CONDITION AT ALL TIMES AND IT SHALL BE ROUTINELY INSPECTED.
- 6. IF A UNIT HAS BEEN DAMAGED, IT SHALL BE REPAIRED, OR REPLACED IF BEYOND REPAIR.
- 7. THE CONTRACTOR SHALL REMOVE SEDIMENT AT THE BASE OF THE UPSLOPE SIDE OF UNITS WHEN ACCUMULATION HAS REACHED 1/2 OF THE EFFECTIVE HEIGHT OF THE SOXX, OR AS DIRECTED BY THE ENGINEER.
- 8. AS AN ALTERNATIVE, ANOTHER SOXX UNIT MAY BE INSTALLED ADJACENT AND PARALLEL TO THE UPSLOPE SIDE OF THE ORIGINAL TO INCREASE SEDIMENT STORAGE CAPACITY. SOXX SEDIMENT BACKUP IN CENTER OF THE DITCH/CHANNEL SHALL REMAIN LOWER THAN THE
- 9. IF SOXX UNIT BECOMES CLOGGED WITH DEBRIS AND SEDIMENT, IMMEDIATE REMOVAL OF DEBRIS AND SEDIMENT SHOULD BE CONDUCTED TO ASSURE PROPER DRAINAGE AND WATER FLOW THROUGH THE DITCH OR CHANNEL. STORM RUNOFF OVERFLOW OF THE SOXX UNIT IS ACCEPTABLE.
- IO. SOXX UNITS SHALL BE MAINTAINED UNTIL DISTURBED AREA AROUND THE DEVICE HAS BEEN PERMANENTLY STABILIZED AND CONSTRUCTION ACTIVITY HAS CEASED.
- THE FILTERMEDIATM MAY BE DISPERSED ON SITE ONCE DISTURBED AREA HAS PERMANENTLY STABILIZED, CONSTRUCTION ACTIVITY CEASED, OR DETERMINED BY THE ENGINEER.
- 12. PERMANENT VEGETATED FILTER STRIPS WILL BE







NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN . BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" (15cm) DEEP X 6" (15cm) WIDE TRENCH MITH APPROXIMATELY 12" (30cm) OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30cm) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30cm) PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30cm) APART ACROSS THE WIDTH OF THE BLANKET. . ROLL THE BLANKETS (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING OPTIONAL DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2"-5" (5cm-12.5cm) OVERLAP DEPENDING

ON BLANKET TYPE. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH ON THE PREVIOUSLY INSTALLED BLANKET. I. CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE " (1.5cm) OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" (30cm) APART ACROSS ENTIRE

\*IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15cm) MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.

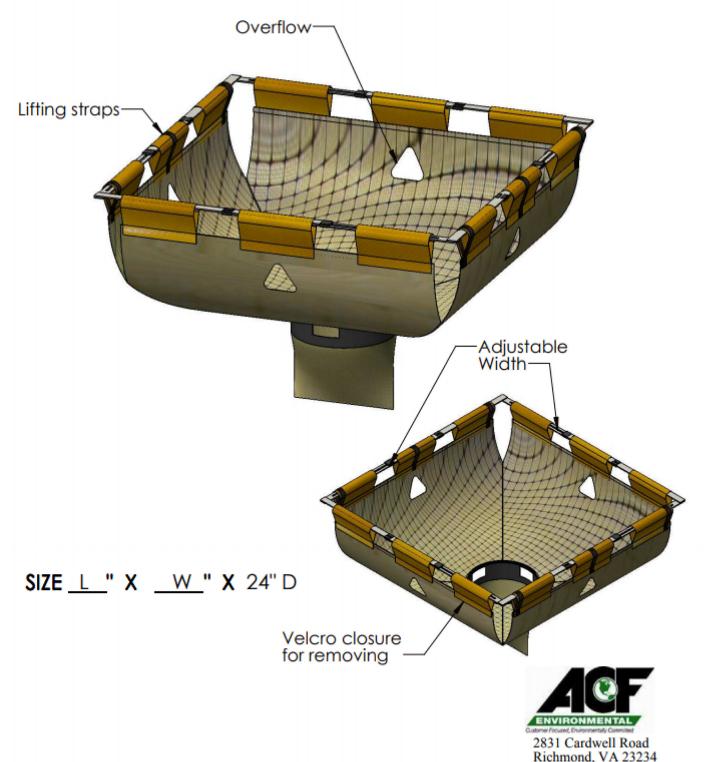
A. OVERLAPS AND SEAMS B. PROJECTED WATER LINE C. CHANNEL BOTTOM/SIDE SLOPE VERTICES

\* HORIZONTAL STAPLE SPACING SHOULD BE ALTERED IF NECESSARY TO ALLOW STAPLES TO SECURE THE CRITICAL POINTS ALONG THE CHANNEL SURFACE.

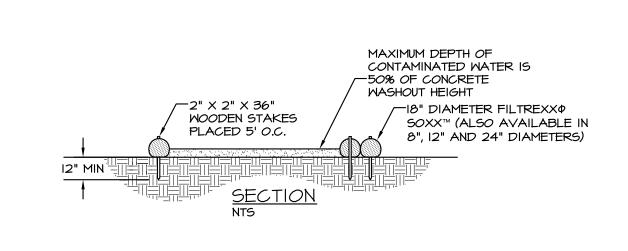
\*\* IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENTHS IN EXCESS OF 6" (15 CM) MAY BE NECESSARY TO PROPERLY

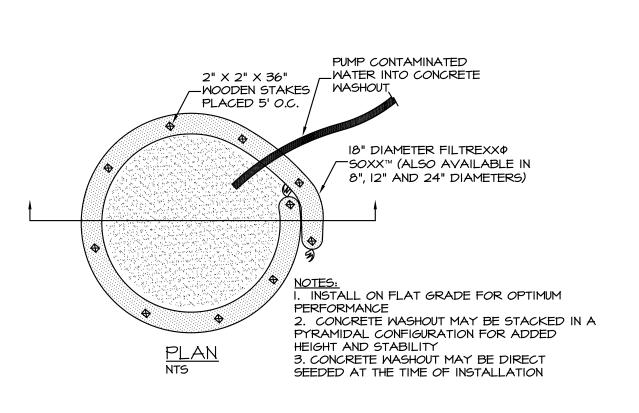
14649 HIGHWAY 41 NORTH, EVANSVILLE, INDIANA 47725 USA I-800-TT2-2040 CANADA I-800-448-2040

# |Silt Sack - Type C



WWW.ACFENVIRONMENTAL.COM





FILTREXX® CONCRETE WASHOUT DETAIL

BRUCE D. **No. 11236** 2 APR 20, 2023 FOR APPROVAL JAN 24, 2023 FOR APPROVAL **DESCRIPTION OF ISSUE** DRAWN: DESIGN: JJM CHECKED: BDS CHECKED: BDS

> EMANUEL 118 Portsmouth Avenue, A202 STRATHAM, NH 03885 P: 603-772-4400 F: 603-772-4487

CLIENT:

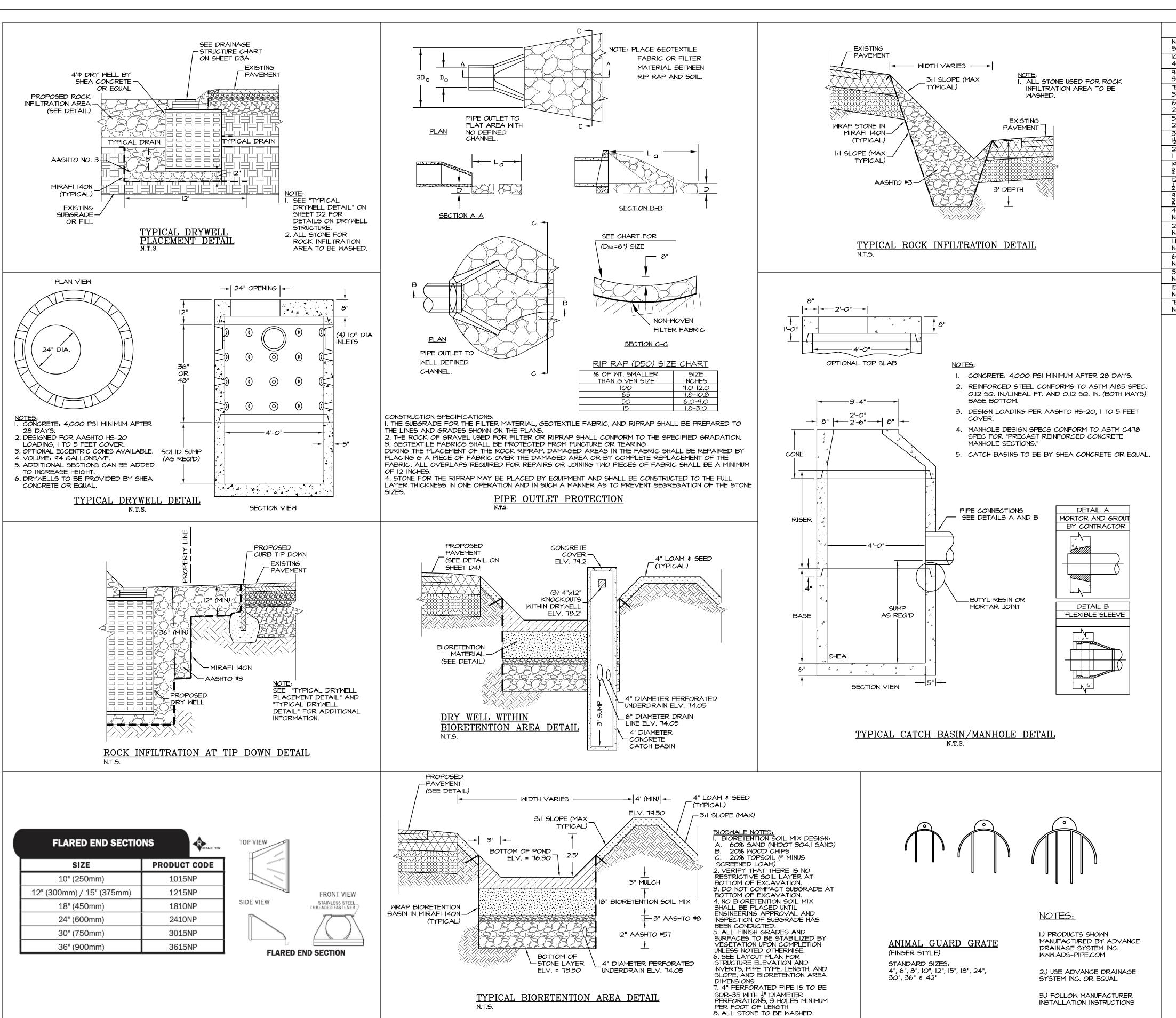
BLIND TIGER, LLC 3 WRIGHT LANE EXETER, NH 03833

**NOTES & EROSION CONTROL DETAILS** FOR

**EXETER COUNTRY CLUB** 58 JADY HILL AVENUE (SITE) **EXETER, NH 03833** 

21-157 AS SHOWN

SHEET: D1



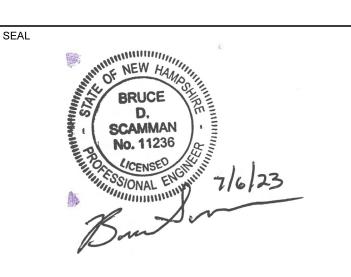
GRADATION FOR AASHTO #3							
NOMINAL SIZE SQUARE OPENINGS	AMOUNTS FINER THAN EACH LABORATORY SIEVE (SQUARE OPENINGS), PERCENTAGE BY WEIGHT						
100 MM 4 IN.							
90 MM 3½ IN.							
75 MM 3 IN.							
63 MM 2½ IN.	100						
50 MM 2 IN.	90-100						
37.5 MM I½ IN.	35-10						
25 MM I IN.	O-I5						
19 MM 3 IN.							
12.5 MM ½ IN.	<i>O-</i> 5						
9.5 MM 뤃 IN.							
4.75 MM NO. 4							
2.36 MM NO. 8							
1.18 MM NO. 16							
600 µM NO. 30							
300 µM NO. 50							
150 µM NO. 100							
75 µM NO. 200							

		EM	ANU	ΞL			
CHE	<sup>CKED:</sup> BDS		CHECKED:	BDS			
DRA	WN: JJM		DESIGN:	JJM			
ISS.	DATE:	DESCRI	DESCRIPTION OF ISSUE:				
1	JAN 24, 2022	FOR A	FOR APPROVAL				
3	MAY 23, 2023	FOR A	FOR APPROVAL				
4	JULY 6, 2023	FOR A	PPROVAL				



118 Portsmouth Avenue, A202 STRATHAM, NH 03885 P: 603-772-4400 F: 603-772-4487

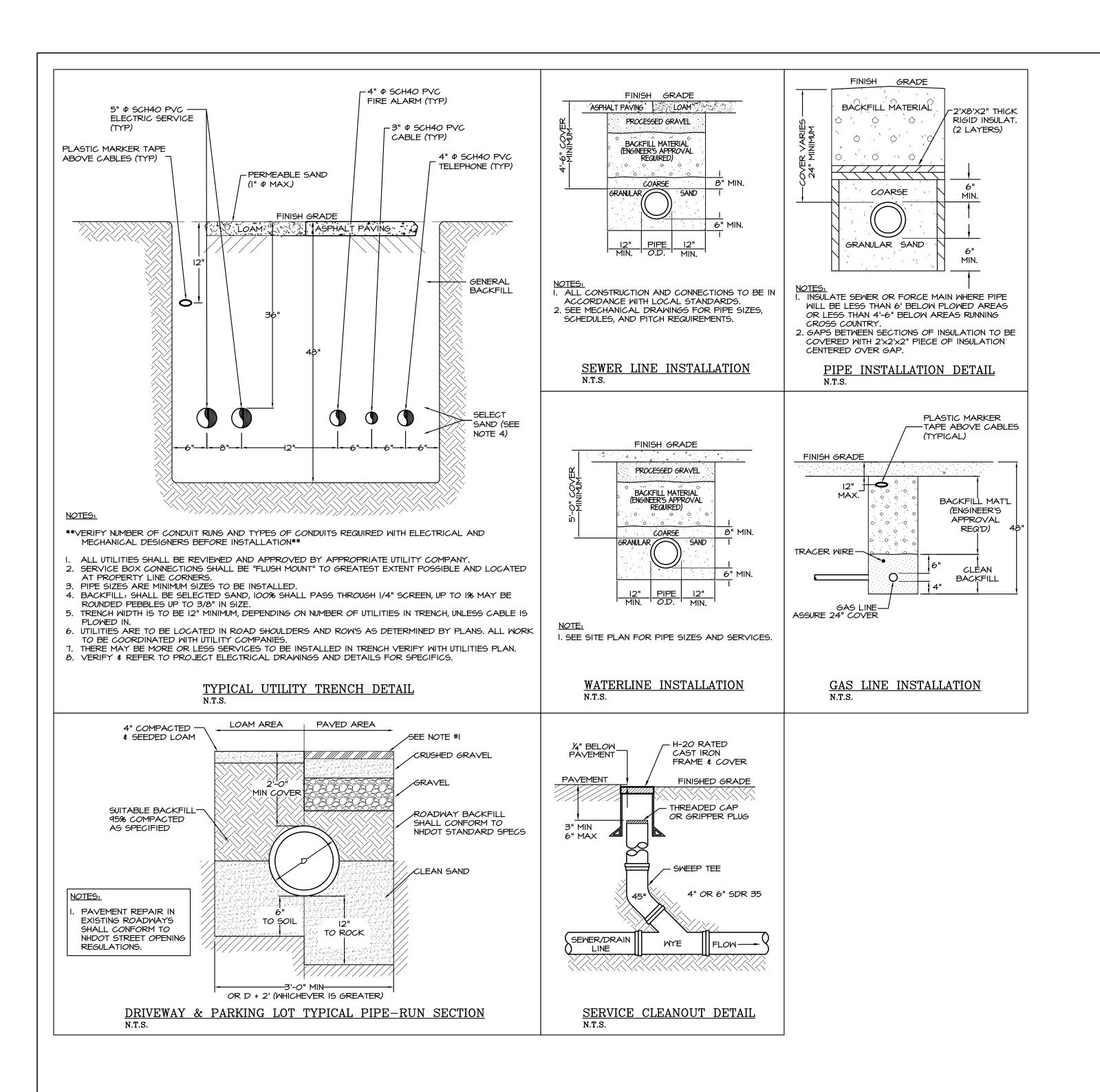
BLIND TIGER, LLC 3 WRIGHT LANE EXETER, NH 03833



# DRAINAGE DETAILS

FOR **EXETER COUNTRY CLUB** 58 JADY HILL AVENUE (SITE) EXETER, NH 03833

PROJECT:	SCALE:	SHEET:
21-157	AS SHOWN	D2



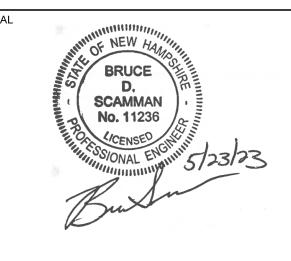
3	MAY 23, 2023	FOR AF	PPROVAL		
2	APR 20, 2023	FOR AF	PPROVAL		
1	JAN 24, 2022	FOR AF	PPROVAL		
ISS.	DATE:	DESCRIF	PTION OF ISS	UE:	CHK.
DRA	WN: JJM		DESIGN:	JJM	
CHE	CKED: BDS		CHECKED:	BDS	



118 Portsmouth Avenue, A202 Stratham, NH 03885 P: 603-772-4400 F: 603-772-4487 www.emanuelengineering.com

CLIENT:

BLIND TIGER, LLC 3 WRIGHT LANE EXETER, NH 03833

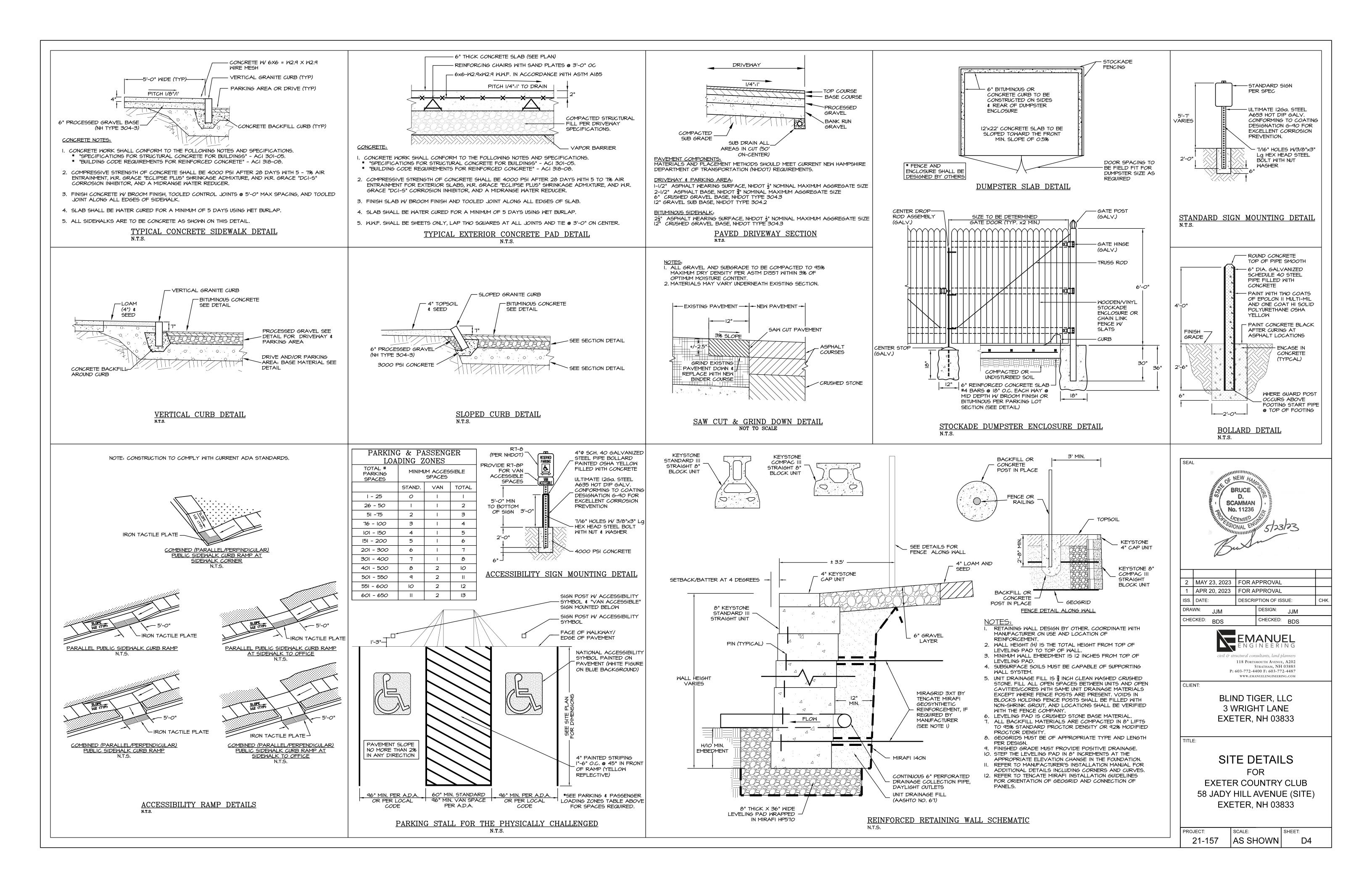


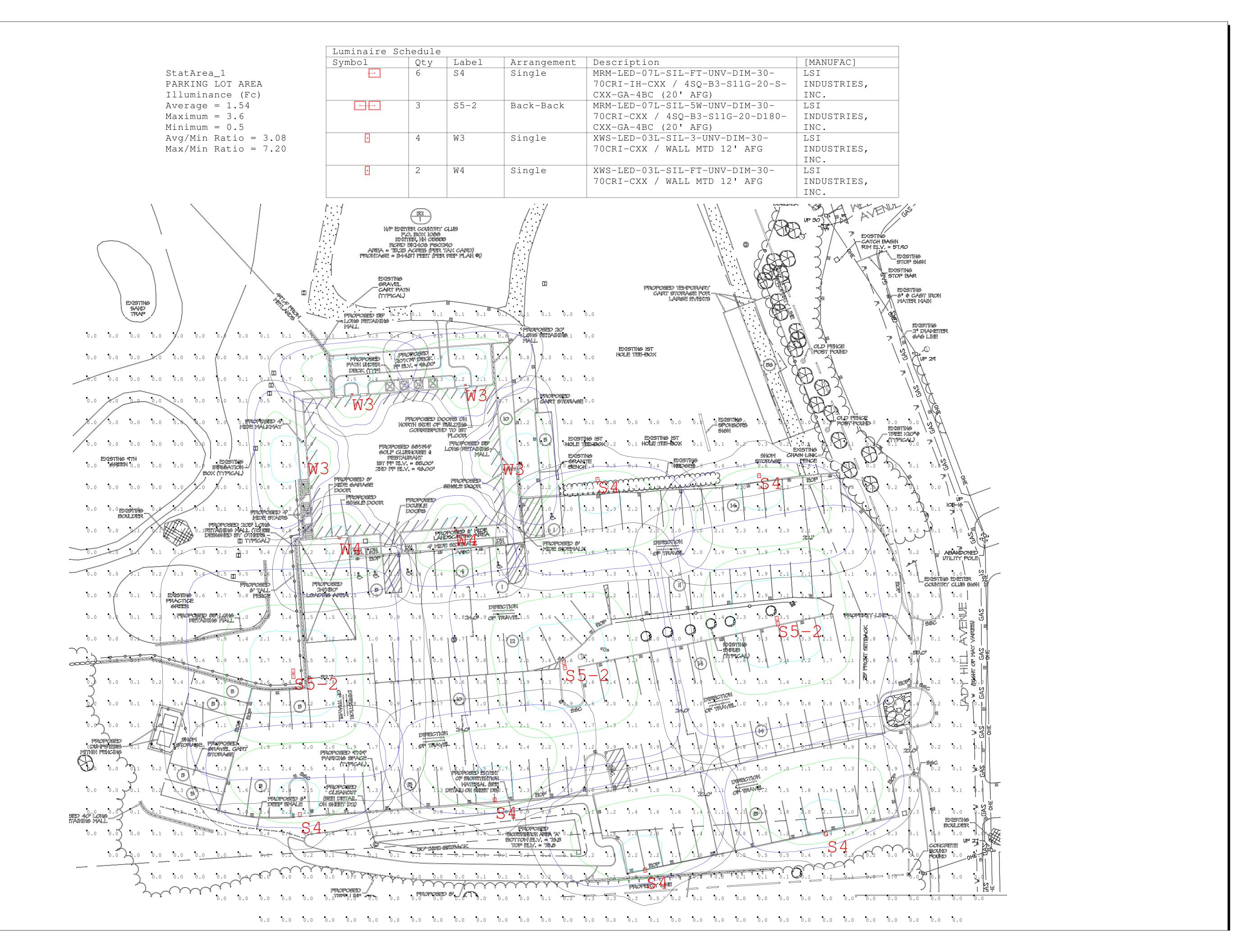
TITLE:

# UTILITY DETAILS

FOR
EXETER COUNTRY CLUB
58 JADY HILL AVENUE (SITE)
EXETER, NH 03833

PROJECT:	SCALE:	SHEET:
21-157	AS SHOWN	D3







Exposure Lighting 6 Scott Rd, Unit A Hampton, NH 03842 603-601-8080

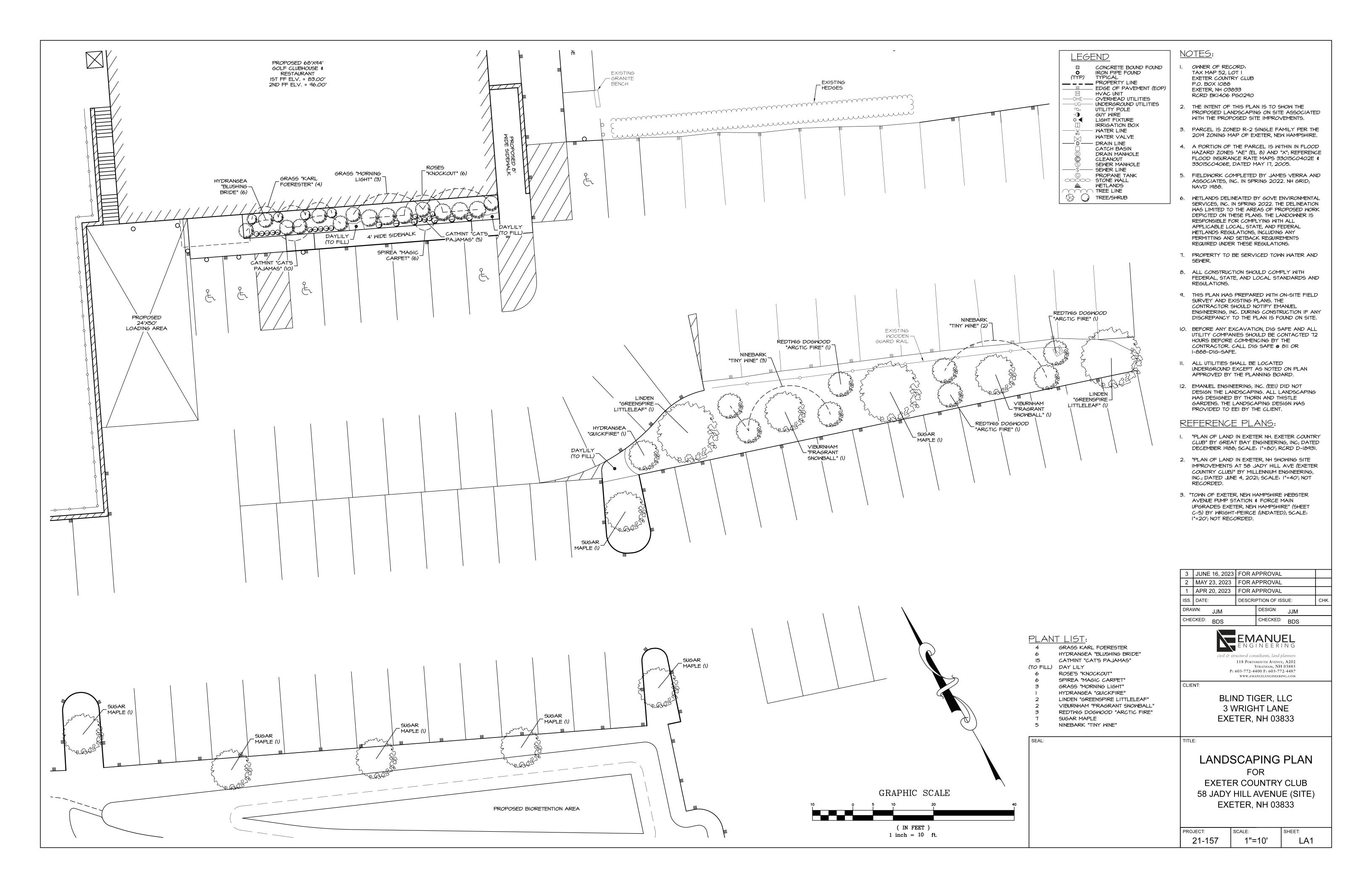
# Revisions	١,			ı		ı	
# Revisions		omments					
Revisions							
		#	Re	evis	sion	ıs	
	] [						

.wn By: cked By: a:4/13/2023

COUNTRY CLUB Che Date

EXETER 58 JADY

L01



#### STORMWATER ANALYSIS AREA WORKSHEET

EMANUEL ENGINEERING INC.

21-157 Blind Tiger - Exeter Country Club 7/7/2023 JJM

JOB: DATE: ENGINEER:

#### POST DEVELOPMENT DRAINAGE AREAS:

SOIL TYPE	SOIL GROUP	CN#	SUBCAT PS25A Area (SF)	SUBCAT PS25B Area (SF)	SUBCAT PS26 Area (SF)	SUBCAT PS27A Area (SF)	SUBCAT PS27B Area (SF)	SUBCAT PS27C Area (SF)	SUBCAT PS28 Area (SF)	SUBCAT PS29 Area (SF)	SUBCAT PS30 Area (SF)	SUBCAT PS31 Area (SF)	SUBCAT PS32 Area (SF)	TOTAL AREA
Grass	В	61	1,430		32,900	13,160	65	2,060	475	1,455	6,820	8,395	8,840	76,000
Woods	В	55	0	0	0	1,365	0	0	0	0	22,470	74,625	0	98,460
Gravel	В	85	0	0	1,265	1,775	0	0	0	0	0	0	1,800	4,840
Building	В	98	4,960	3,255	0	0	0	0	0	0	0	0	0	8,215
Pavement	В	98	270	0	525	820	10,125	10,115	6,895	2,580	0	0	15,160	46,490
Total Area (SF)			6,660	3,655	34,690	17,120	10,190	12,175	7,370	4,035	29,290	83,020	25,800	234,005
Area (Acres)			0.15	0.08	0.80	0.39	0.23	0.28	0.17	0.09	0.67	1.91	0.59	5.37
Total Impervious (SF)			5,230	3,255	1,790	2,595	10,125	10,115	6,895	2,580	0	0	16,960	59,545
Impervious (Acres)			0.12	0.07	0.04	0.06	0.23	0.23	0.16	0.06	0.00	0.00	0.39	1.37

### STORMWATER/DRAINAGE SUMMARY

**EMANUEL ENGINEERING, INC.** 

JOB: 21-157 Blind Tiger - Exeter Country Club

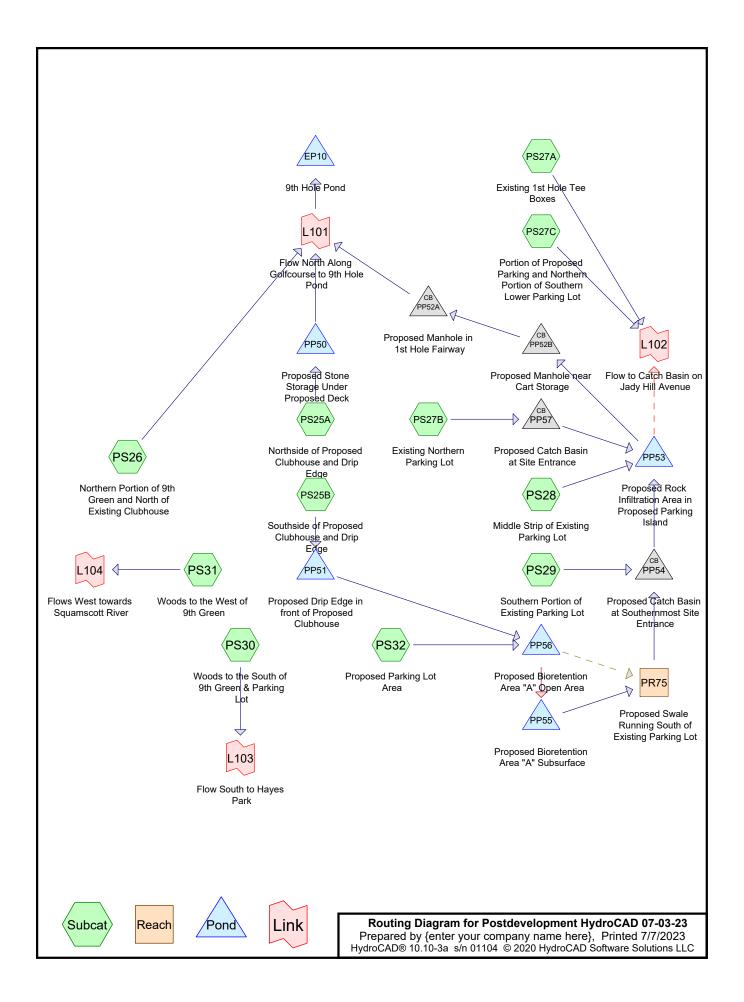
DATE: 7/7/2023 ENGINEER: JJM

#### PEAK FLOWS FROM HYDROCAD

Subcatchment Area	. ,						25-Year Storm 6.24"		50-Year Storm 7.49"	
	Pre (CFS)	Post (CFS)	Pre (CFS)	Post (CFS)	Pre (CFS)	Post (CFS)	Pre (CFS)	Post (CFS)	Pre (CFS)	Post (CFS)
POINTS OF DISCHARGE										
LINK L101	0.00	0.34	0.33	1.65	1.09	2.96	1.77	3.98	2.41	5.35
LINK L102	0.13	0.13	3.13	0.97	5.18	1.69	6.74	2.28	8.11	2.81
LINK L103	0.00	0.00	0.07	0.05	0.73	0.53	1.39	1.01	2.04	1.48
LINK L104	0.00	0.00	0.14	0.14	1.32	1.32	2.52	2.52	3.73	3.73
FLOW TOTALS (CFS)	0.13	0.47	3.67	2.81	8.32	6.50	12.42	9.79	16.29	13.37
Net Increase/(Decrease) (CFS)		0.34		(0.86)		(1.82)		(2.63)		(2.92)

#### **VOLUMES FROM HYDROCAD**

Subcatchment Area	. ,						25-Year Storm 6.24"		50-Year Storm 7.49"	
	Pre (AF)	Post (AF)	Pre (AF)	Post (AF)	Pre (AF)	Post (AF)	Pre (AF)	Post (AF)	Pre (AF)	Post (AF)
POINTS OF DISCHARGE	( /	( /	( /	( /	( /	( /	( /	( /	( /	( /
LINK L101	0.000	0.024	0.040	0.213	0.109	0.422	0.177	0.601	0.247	0.778
LINK L102	0.018	0.009	0.222	0.075	0.422	0.145	0.589	0.206	0.749	0.266
LINK L103	0.000	0.000	0.022	0.016	0.077	0.056	0.134	0.098	0.196	0.142
LINK L104	0.000	0.000	0.045	0.045	0.158	0.158	0.276	0.276	0.404	0.404
Voume TOTALS (CFS)	0.018	0.033	0.329	0.349	0.766	0.781	1.176	1.181	1.596	1.590
Net Increase/(Decrease) (CFS)		0.015		0.020	·	0.015		0.005		(0.006)



### Postdevelopment HydroCAD 07-03-23

Prepared by {enter your company name here}
HydroCAD® 10.10-3a s/n 01104 © 2020 HydroCAD Software Solutions LLC

Printed 7/7/2023 Page 2

### **Project Notes**

Copied 9 events from NH-Exeter 08-23-22 24-hr S1 storm

Printed 7/7/2023 Page 3

#### **Rainfall Events Listing**

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	1-inch	NH-Exeter 08-23-22 24-hr S1	1-yr	Default	24.00	1	1.00	2
2	1-yr	NH-Exeter 08-23-22 24-hr S1	1-yr	Default	24.00	1	2.68	2
3	2-yr	NH-Exeter 08-23-22 24-hr S1	2-yr	Default	24.00	1	3.22	2
4	5-yr	NH-Exeter 08-23-22 24-hr S1	5-yr	Default	24.00	1	4.09	2
5	10-yr	NH-Exeter 08-23-22 24-hr S1	10-yr	Default	24.00	1	4.91	2
6	25-yr	NH-Exeter 08-23-22 24-hr S1	25-yr	Default	24.00	1	6.24	2
7	50-yr	NH-Exeter 08-23-22 24-hr S1	50-yr	Default	24.00	1	7.49	2
8	100-yr	NH-Exeter 08-23-22 24-hr S1	100-yr	Default	24.00	1	9.00	2
9	200-yr	NH-Exeter 08-23-22 24-hr S1	200-yr	Default	24.00	1	10.81	2
10	500-yr	NH-Exeter 08-23-22 24-hr S1	500-yr	Default	24.00	1	13.77	2

Printed 7/7/2023 Page 4

#### Area Listing (all nodes)

Area	CN	Description
(acres)		(subcatchment-numbers)
1.745	61	>75% Grass cover, Good, HSG B (PS25A, PS25B, PS26, PS27A, PS27B, PS27C,
		PS28, PS29, PS30, PS31, PS32)
0.111	85	Gravel roads, HSG B (PS26, PS27A, PS32)
1.067	98	Paved parking, HSG B (PS25A, PS26, PS27A, PS27B, PS27C, PS28, PS29, PS32)
0.189	98	Roofs, HSG B (PS25A, PS25B)
2.260	55	Woods, Good, HSG B (PS27A, PS30, PS31)
5.372	68	TOTAL AREA

Printed 7/7/2023 Page 5

#### Soil Listing (all nodes)

Are	ea Soil	Subcatchment
(acre	s) Group	Numbers
0.0	00 HSG A	
5.3	72 HSG B	PS25A, PS25B, PS26, PS27A, PS27B, PS27C, PS28, PS29, PS30, PS31, PS32
0.0	00 HSG C	
0.0	00 HSG D	
0.0	00 Other	
5.3	72	TOTAL AREA

Printed 7/7/2023 Page 6

### **Ground Covers (all nodes)**

				•	•		
HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
 0.000	1.745	0.000	0.000	0.000	` ,		
0.000	1.745	0.000	0.000	0.000	1.745	>75% Grass cover, Good	
							PS25B,
							PS26,
							PS27A,
							PS27B,
							PS27C,
							PS28,
							PS29,
							PS30,
							PS31,
0.000	0.444	0.000	0.000	0.000	0.444		PS32
0.000	0.111	0.000	0.000	0.000	0.111	Gravel roads	PS26,
							PS27A,
	4 00=				4 00=	<b>5</b>	PS32
0.000	1.067	0.000	0.000	0.000	1.067	Paved parking	PS25A,
							PS26,
							PS27A,
							PS27B,
							PS27C,
							PS28,
							PS29,
							PS32
0.000	0.189	0.000	0.000	0.000	0.189	Roofs	PS25A,
							PS25B
0.000	2.260	0.000	0.000	0.000	2.260	Woods, Good	PS27A,
							PS30,
							PS31
0.000	5.372	0.000	0.000	0.000	5.372	TOTAL AREA	

Printed 7/7/2023 Page 7

#### Pipe Listing (all nodes)

Line#	Node	In-Invert	Out-Invert	Length	Slope	n	Diam/Width	Height	Inside-Fill
	Number	(feet)	(feet)	(feet)	(ft/ft)		(inches)	(inches)	(inches)
1	PP51	80.00	77.00	145.0	0.0207	0.010	8.0	0.0	0.0
2	PP52A	58.40	46.10	265.0	0.0464	0.010	12.0	0.0	0.0
3	PP52B	60.25	58.50	420.0	0.0042	0.012	12.0	0.0	0.0
4	PP53	61.00	60.35	245.0	0.0027	0.012	12.0	0.0	0.0
5	PP54	63.00	61.10	50.0	0.0380	0.010	12.0	0.0	0.0
6	PP55	74.05	73.90	75.0	0.0020	0.010	8.0	0.0	0.0
7	PP57	61.30	61.10	40.0	0.0050	0.012	12.0	0.0	0.0

#### Postdevelopment HydroCAD 07-03-23 NH-Exeter 08-23-22 24-hr S1 10-yr Rainfall=4.91" Prepared by {enter your company name here} Printed 7/7/2023 Page 8

HydroCAD® 10.10-3a s/n 01104 © 2020 HydroCAD Software Solutions LLC

Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points x 3 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment PS25A: Northside of Runoff Area=6,660 sf 78.53% Impervious Runoff Depth=3.79"

Tc=5.0 min CN=90 Runoff=0.58 cfs 0.048 af

Runoff Area=3,655 sf 89.06% Impervious Runoff Depth=4.22" Subcatchment PS25B: Southside of

Tc=5.0 min CN=94 Runoff=0.34 cfs 0.030 af

Runoff Area=34,690 sf 1.51% Impervious Runoff Depth=1.38" Subcatchment PS26: Northern Portion of Flow Length=235' Tc=7.1 min CN=62 Runoff=0.90 cfs 0.092 af

Subcatchment PS27A: Existing 1st Hole Tee Runoff Area=17,120 sf 4.79% Impervious Runoff Depth=1.59" Tc=5.0 min CN=65 Runoff=0.60 cfs 0.052 af

Runoff Area=10,190 sf 99.36% Impervious Runoff Depth=4.67" Subcatchment PS27B: Existing Northern

Tc=5.0 min CN=98 Runoff=0.99 cfs 0.091 af

Runoff Area=12,175 sf 83.08% Impervious Runoff Depth=4.00" Subcatchment PS27C: Portion of

Tc=5.0 min CN=92 Runoff=1.10 cfs 0.093 af

Runoff Area=7,370 sf 93.55% Impervious Runoff Depth=4.44" Subcatchment PS28: Middle Strip of

Tc=5.0 min CN=96 Runoff=0.70 cfs 0.063 af

Runoff Area=4,035 sf 63.94% Impervious Runoff Depth=3.28" Subcatchment PS29: Southern Portion of

Tc=5.0 min CN=85 Runoff=0.31 cfs 0.025 af

Subcatchment PS30: Woods to the South of Runoff Area=29,290 sf 0.00% Impervious Runoff Depth=1.00" Flow Length=233' Tc=5.0 min CN=56 Runoff=0.53 cfs 0.056 af

Subcatchment PS31: Woods to the West of Runoff Area=83,020 sf 0.00% Impervious Runoff Depth=1.00" Flow Length=345' Tc=7.4 min CN=56 Runoff=1.32 cfs 0.158 af

Runoff Area=25,800 sf 58.76% Impervious Runoff Depth=3.19" Subcatchment PS32: Proposed Parking Tc=5.0 min CN=84 Runoff=1.93 cfs 0.157 af

Reach PR75: Proposed Swale Running Avg. Flow Depth=0.14' Max Vel=3.40 fps Inflow=0.20 cfs 0.152 af n=0.022 L=90.0' S=0.0944 '/' Capacity=37.88 cfs Outflow=0.20 cfs 0.152 af

Pond EP10: 9th Hole Pond Peak Elev=38.79' Storage=18,366 cf Inflow=2.96 cfs 0.422 af Outflow=0.00 cfs 0.000 af

Pond PP50: Proposed Stone Storage Under Peak Elev=78.30' Storage=1,119 cf Inflow=0.58 cfs 0.048 af

Discarded=0.02 cfs 0.048 af Primary=0.00 cfs 0.000 af Outflow=0.02 cfs 0.048 af

Pond PP51: Proposed Drip Edge in front of Peak Elev=80.32' Storage=51 cf Inflow=0.34 cfs 0.030 af Discarded=0.00 cfs 0.005 af Primary=0.31 cfs 0.024 af Outflow=0.32 cfs 0.030 af

Pond PP52A: Proposed Manhole in 1st Hole Fairway Peak Elev=59.21' Inflow=2.10 cfs 0.330 af 12.0" Round Culvert n=0.010 L=265.0' S=0.0464 '/' Outflow=2.10 cfs 0.330 af

Postdevelopment HydroCAD 07-03-23 NH-Exeter 08-23-22 24-hr S Prepared by {enter your company name here} HydroCAD® 10.10-3a s/n 01104 © 2020 HydroCAD Software Solutions LLC	S1 10-yr Rainfall=4.91" Printed 7/7/2023 Page 9
Pond PP52B: Proposed Manhole near Cart Storage Peak Elev=61.20   12.0" Round Culvert n=0.012 L=420.0' S=0.0042 '/'	0' Inflow=2.10 cfs 0.330 af Outflow=2.10 cfs 0.330 af
<b>Pond PP53: Proposed Rock Infiltration Area in</b> Peak Elev=62.12' Storage=55 of Discarded=0.00 cfs 0.002 af Primary=2.10 cfs 0.330 af Secondary=0.00 cfs 0.000 af	
Pond PP54: Proposed Catch Basin at Southernmost Site  Peak Elev=63.54	1' Inflow=0.42 cfs 0.178 af Outflow=0.42 cfs 0.178 af
Pond PP55: Proposed Bioretention Area "A" Peak Elev=74.37' Storage=637 of Discarded=0.01 cfs 0.029 af Primary=0.20 cfs 0.152 af	
Pond PP56: Proposed Bioretention Area "A" Peak Elev=78.11' Storage=2,667 of Primary=0.21 cfs 0.182 af Secondary=0.00 cfs 0.000 af Tertiary=0.00 cfs 0.000 af	
Pond PP57: Proposed Catch Basin at Site Entrance Peak Elev=62.46	6' Inflow=0.99 cfs 0.091 af Outflow=0.99 cfs 0.091 af
Link L101: Flow North Along Golfcourse to 9th Hole Pond	Inflow=2.96 cfs 0.422 af Primary=2.96 cfs 0.422 af
Link L102: Flow to Catch Basin on Jady Hill Avenue	Inflow=1.69 cfs 0.145 af Primary=1.69 cfs 0.145 af
Link L103: Flow South to Hayes Park	Inflow=0.53 cfs 0.056 af Primary=0.53 cfs 0.056 af
Link L104: Flows West towards Squamscott River	Inflow=1.32 cfs 0.158 af Primary=1.32 cfs 0.158 af

Total Runoff Area = 5.372 ac Runoff Volume = 0.865 af Average Runoff Depth = 1.93" 76.62% Pervious = 4.116 ac 23.38% Impervious = 1.256 ac

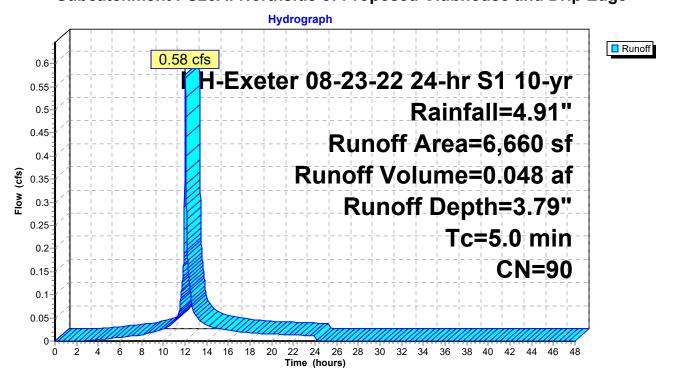
#### Summary for Subcatchment PS25A: Northside of Proposed Clubhouse and Drip Edge

Runoff = 0.58 cfs @ 12.03 hrs, Volume= 0.048 af, Depth= 3.79"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs NH-Exeter 08-23-22 24-hr S1 10-yr Rainfall=4.91"

A	rea (sf)	CN	Description						
	1,430	61	>75% Gras	s cover, Go	ood, HSG B				
	4,960	98	Roofs, HSG	ВВ					
	270	98	Paved park	ing, HSG B	3				
	6,660	90	Weighted A	verage					
	1,430		21.47% Pei	vious Area	l				
	5,230	,	78.53% Imp	ervious Ar	ea				
То	Longth	Clana	\/alaaitu	Canacity	Description				
Tc	Length	Slope	,	Capacity	Description				
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)					
5.0					Direct Entry, Minimum Tc				

#### Subcatchment PS25A: Northside of Proposed Clubhouse and Drip Edge



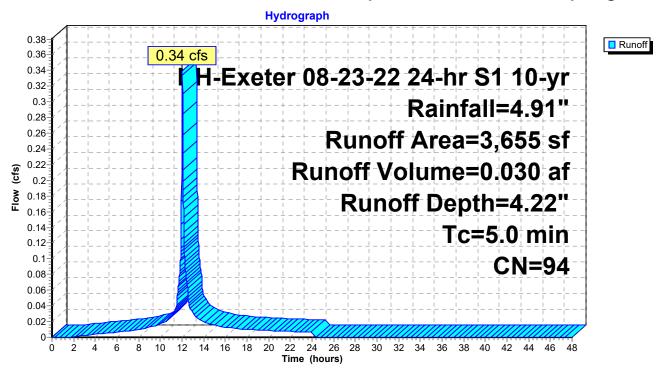
#### Summary for Subcatchment PS25B: Southside of Proposed Clubhouse and Drip Edge

Runoff = 0.34 cfs @ 12.03 hrs, Volume= 0.030 af, Depth= 4.22"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs NH-Exeter 08-23-22 24-hr S1 10-yr Rainfall=4.91"

	Area (sf)	CN	Description						
	400	61	>75% Gras	s cover, Go	ood, HSG B				
	3,255	98	Roofs, HSG B						
	3,655 400 3,255		Weighted Average 10.94% Pervious Area 89.06% Impervious Area						
T (mir	c Length	Slope (ft/ft	,	Capacity (cfs)	Description				
5.	.0	·			Direct Entry, Minimum Tc				

#### Subcatchment PS25B: Southside of Proposed Clubhouse and Drip Edge



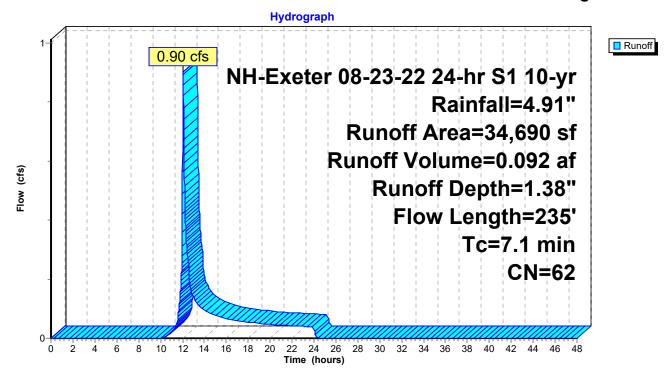
#### Summary for Subcatchment PS26: Northern Portion of 9th Green and North of Existing Clubhouse

Runoff = 0.90 cfs @ 12.06 hrs, Volume= 0.092 af, Depth= 1.38"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs NH-Exeter 08-23-22 24-hr S1 10-yr Rainfall=4.91"

_	Α	rea (sf)	CN E	Description						
		32,900	61 >	61 >75% Grass cover, Good, HSG B						
		1,265	85 C	Gravel road	ls, HSG B					
_		525	98 F	Paved park	ing, HSG B					
		34,690	62 V	Veighted A	verage					
		34,165	Ç	98.49% Per	vious Area					
		525	1	1.51% Impe	ervious Area	a				
	_									
	Tc	Length	Slope	Velocity	Capacity	Description				
_	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)					
	5.6	50	0.0200	0.15		Sheet Flow, Grass				
						Grass: Short n= 0.150 P2= 3.22"				
	0.6	55	0.0550	1.64		Shallow Concentrated Flow, Grass				
						Short Grass Pasture Kv= 7.0 fps				
	0.9	130	0.1100	2.32		Shallow Concentrated Flow, Grass				
_						Short Grass Pasture Kv= 7.0 fps				
	7.1	235	Total							

#### Subcatchment PS26: Northern Portion of 9th Green and North of Existing Clubhouse



HydroCAD® 10.10-3a s/n 01104 © 2020 HydroCAD Software Solutions LLC

#### Summary for Subcatchment PS27A: Existing 1st Hole Tee Boxes

Page 13

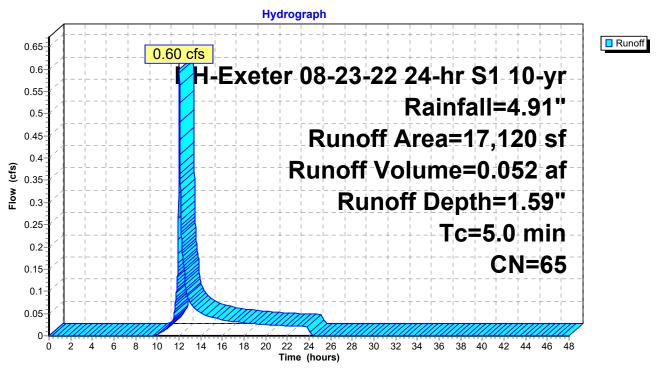
Runoff = 0.60 cfs @ 12.03 hrs, Volume= 0.052 af, Depth= 1.59"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs NH-Exeter 08-23-22 24-hr S1 10-yr Rainfall=4.91"

Area (sf)	CN	Description						
13,160	61	>75% Grass cover, Good, HSG B						
1,365	55	Woods, Good, HSG B						
1,775	85	Gravel roads, HSG B						
820	98	Paved parking, HSG B						
17,120	65	Weighted Average						
16,300		95.21% Pervious Area						
820		4.79% Impervious Area						
Tc Length	Slop	pe Velocity Capacity Description						
(min) (feet)	(ft/	ft) (ft/sec) (cfs)						
5.0		Direct Entry Minimum To						

Direct Entry, Minimum 1c

#### **Subcatchment PS27A: Existing 1st Hole Tee Boxes**



HydroCAD® 10.10-3a s/n 01104 © 2020 HydroCAD Software Solutions LLC

#### **Summary for Subcatchment PS27B: Existing Northern Parking Lot**

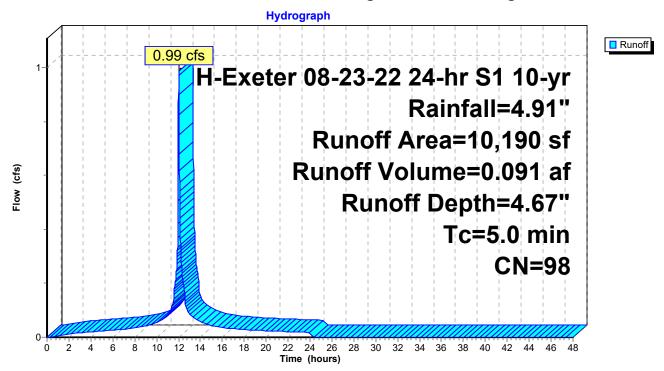
Page 14

Runoff = 0.99 cfs @ 12.03 hrs, Volume= 0.091 af, Depth= 4.67"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs NH-Exeter 08-23-22 24-hr S1 10-yr Rainfall=4.91"

	Area (sf)	CN	Description					
	65	61	>75% Gras	s cover, Go	ood, HSG B			
	10,125	98	Paved park	ing, HSG B				
	10,190 65 10,125		Weighted Average 0.64% Pervious Area 99.36% Impervious Area					
- <u>(mi</u>	Гс Length n) (feet)	Slope (ft/ft	,	Capacity (cfs)	Description			
5	.0				Direct Entry, Minimum Tc			

#### **Subcatchment PS27B: Existing Northern Parking Lot**



### ary for Subcatchment PS27C: Portion of Proposed Parking and Northern Portion of Southern Lower Pa

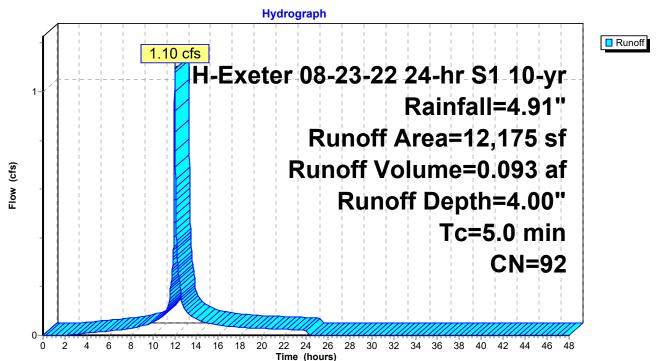
Runoff 1.10 cfs @ 12.03 hrs, Volume= 0.093 af, Depth= 4.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs NH-Exeter 08-23-22 24-hr S1 10-yr Rainfall=4.91"

_	A	rea (sf)	CN	Description						
		2,060	61	>75% Gras	s cover, Go	ood, HSG B				
_		10,115	98	Paved park	ing, HSG B					
		12,175	92	Weighted Average						
		2,060		16.92% Per	vious Area					
		10,115		83.08% Imp	ervious Are	ea				
	Tc	Length	Slope	,	Capacity	Description				
_	(min)	(feet)	(ft/ft	) (ft/sec)	(cfs)					
	5.0					Direct Entry, Minimum Tc				

**Direct Entry, Minimum Tc** 

### Subcatchment PS27C: Portion of Proposed Parking and Northern Portion of Southern Lower Parking L



HydroCAD® 10.10-3a s/n 01104 © 2020 HydroCAD Software Solutions LLC

#### Summary for Subcatchment PS28: Middle Strip of Existing Parking Lot

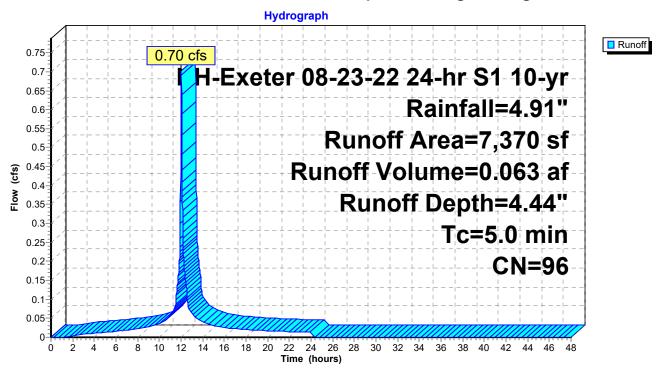
Page 16

Runoff = 0.70 cfs @ 12.03 hrs, Volume= 0.063 af, Depth= 4.44"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs NH-Exeter 08-23-22 24-hr S1 10-yr Rainfall=4.91"

A	rea (sf)	CN	Description						
	475	61	>75% Gras	s cover, Go	ood, HSG B				
	6,895	98	Paved parking, HSG B						
	7,370 475 6,895		Weighted Average 6.45% Pervious Area 93.55% Impervious Area						
Tc (min)	Length (feet)	Slope (ft/ft	,	Capacity (cfs)	Description				
5.0					Direct Entry, Minimum Tc				

#### **Subcatchment PS28: Middle Strip of Existing Parking Lot**



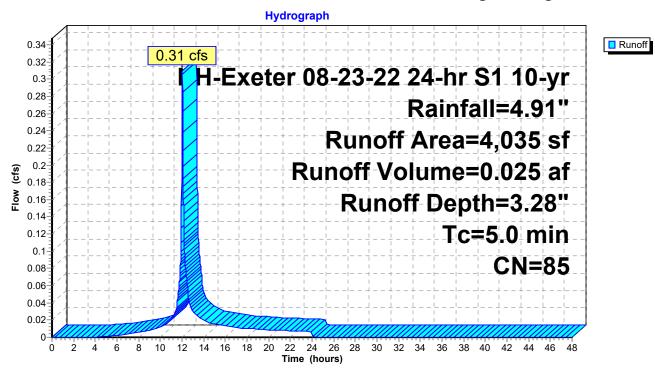
### Summary for Subcatchment PS29: Southern Portion of Existing Parking Lot

Runoff = 0.31 cfs @ 12.03 hrs, Volume= 0.025 af, Depth= 3.28"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs NH-Exeter 08-23-22 24-hr S1 10-yr Rainfall=4.91"

	Area (sf)	CN	Description				
	1,455	61	>75% Gras	s cover, Go	ood, HSG B		
	2,580	98	Paved park	ing, HSG B	3		
	4,035	85	Weighted Average				
	1,455		36.06% Pervious Area				
	2,580		63.94% Imp	pervious Are	rea		
_							
To	J	Slope	,	Capacity	Description		
(min	) (feet)	(ft/ft	) (ft/sec)	(cfs)			
5.0	)				Direct Entry, Minimum Tc		

#### **Subcatchment PS29: Southern Portion of Existing Parking Lot**



Page 18

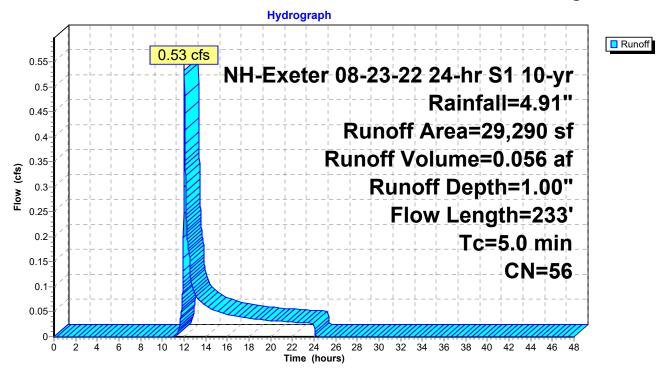
### Summary for Subcatchment PS30: Woods to the South of 9th Green & Parking Lot

Runoff = 0.53 cfs @ 12.04 hrs, Volume= 0.056 af, Depth= 1.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs NH-Exeter 08-23-22 24-hr S1 10-yr Rainfall=4.91"

	Α	rea (sf)	CN D	escription		
		6,820	61 >	75% Gras	s cover, Go	ood, HSG B
_		22,470	55 V	Voods, Go	od, HSG B	
		29,290	56 V	Veighted A	verage	
		29,290	1	00.00% Pe	ervious Are	a
	_					
	Tc	Length	Slope	Velocity	Capacity	Description
_	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
	3.6	50	0.0600	0.23		Sheet Flow, Grass
						Grass: Short n= 0.150 P2= 3.22"
	0.1	15	0.1200	2.42		Shallow Concentrated Flow, Grass
						Short Grass Pasture Kv= 7.0 fps
	0.2	10	0.0200	0.71		Shallow Concentrated Flow, Gravel
						Woodland Kv= 5.0 fps
	0.1	8	0.1200	2.42		Shallow Concentrated Flow, Grass
						Short Grass Pasture Kv= 7.0 fps
	1.0	150	0.2500	2.50		Shallow Concentrated Flow, Woods
						Woodland Kv= 5.0 fps
	5.0	233	Total			

#### Subcatchment PS30: Woods to the South of 9th Green & Parking Lot



Page 19

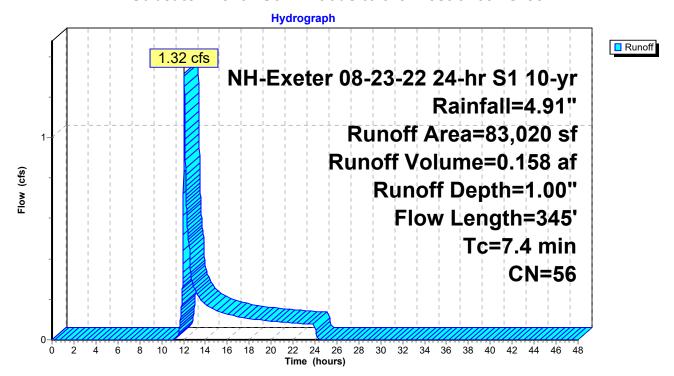
#### Summary for Subcatchment PS31: Woods to the West of 9th Green

Runoff = 1.32 cfs @ 12.06 hrs, Volume= 0.158 af, Depth= 1.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs NH-Exeter 08-23-22 24-hr S1 10-yr Rainfall=4.91"

Α	rea (sf)	CN D	escription		
	8,395	61 >	75% Gras	s cover, Go	ood, HSG B
	74,625	55 V	Voods, Go	od, HSG B	
	83,020	56 V	Veighted A	verage	
	83,020	1	00.00% Pe	ervious Are	a
_		01			B
Tc	Length	Slope	Velocity	Capacity	Description
<u>(min)</u>	(feet)	(ft/ft)	(ft/sec)	(cfs)	
4.3	50	0.0400	0.20		Sheet Flow, Grass
					Grass: Short n= 0.150 P2= 3.22"
0.3	22	0.0400	1.40		Shallow Concentrated Flow, Grass
					Short Grass Pasture Kv= 7.0 fps
0.1	11	0.0200	2.28		Shallow Concentrated Flow, Gravel
					Unpaved Kv= 16.1 fps
0.1	12	0.0400	1.40		Shallow Concentrated Flow, Grass
					Short Grass Pasture Kv= 7.0 fps
2.6	250	0.1000	1.58		Shallow Concentrated Flow, Woods
					Woodland Kv= 5.0 fps
7.4	345	Total			•

#### Subcatchment PS31: Woods to the West of 9th Green



#### **Summary for Subcatchment PS32: Proposed Parking Lot Area**

Page 20

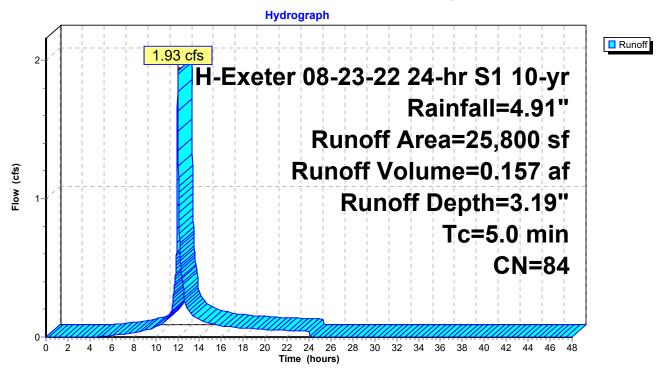
Runoff = 1.93 cfs @ 12.03 hrs, Volume= 0.157 af, Depth= 3.19"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs NH-Exeter 08-23-22 24-hr S1 10-yr Rainfall=4.91"

A	rea (sf)	CN	Description				
	8,840	61	>75% Gras	s cover, Go	ood, HSG B		
	1,800	85	Gravel road	s, HSG B			
	15,160	98	Paved park	ing, HSG B	3		
	25,800	84	4 Weighted Average				
	10,640		41.24% Pervious Area				
	15,160		58.76% Imp	rea			
Tc	Length	Slope	<ul><li>Velocity</li></ul>	Capacity	Description		
(min)	(feet)	(ft/ft	(ft/sec)	(cfs)			
5.0					Direct Entry, Minimum Tc		

Direct Entry, Minimum Tc

### **Subcatchment PS32: Proposed Parking Lot Area**



Page 21

#### Summary for Reach PR75: Proposed Swale Running South of Existing Parking Lot

Inflow Area = 0.676 ac, 62.52% Impervious, Inflow Depth = 2.70" for 10-yr event

Inflow = 0.20 cfs @ 13.23 hrs, Volume= 0.152 af

Outflow = 0.20 cfs @ 13.24 hrs, Volume= 0.152 af, Atten= 0%, Lag= 0.3 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 3

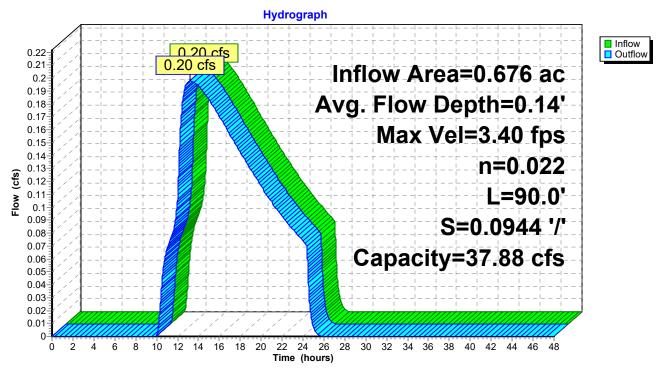
Max. Velocity= 3.40 fps, Min. Travel Time= 0.4 min Avg. Velocity = 2.84 fps, Avg. Travel Time= 0.5 min

Peak Storage= 5 cf @ 13.24 hrs Average Depth at Peak Storage= 0.14', Surface Width= 0.84' Bank-Full Depth= 1.00' Flow Area= 3.0 sf, Capacity= 37.88 cfs

0.00' x 1.00' deep channel, n= 0.022 Earth, clean & straight Side Slope Z-value= 3.0 '/' Top Width= 6.00' Length= 90.0' Slope= 0.0944 '/' Inlet Invert= 74.00', Outlet Invert= 65.50'



#### Reach PR75: Proposed Swale Running South of Existing Parking Lot



Page 22

#### **Summary for Pond EP10: 9th Hole Pond**

Inflow Area = 2.121 ac, 47.37% Impervious, Inflow Depth = 2.39" for 10-yr event

Inflow = 2.96 cfs @ 12.04 hrs, Volume= 0.422 af

Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 3 Peak Elev= 38.79' @ 25.91 hrs Surf.Area= 12,336 sf Storage= 18,366 cf

Flood Elev= 44.00' Surf.Area= 28,470 sf Storage= 127,940 cf

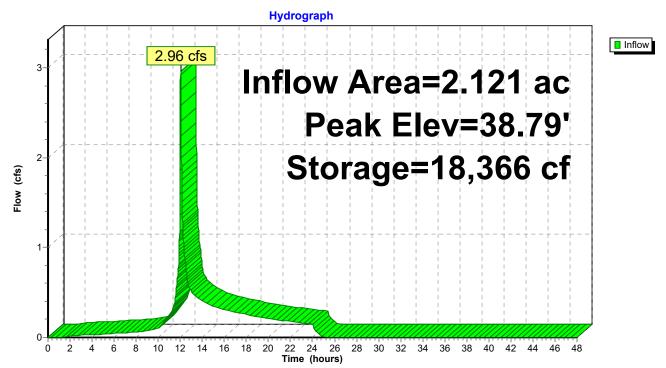
Plug-Flow detention time= (not calculated: initial storage exceeds outflow)

Center-of-Mass det. time= (not calculated: no outflow)

Volume	Invert	Avail.Storage	Storage Description
#1	36.00'	127,940 cf	Pond by 9th Hole Tee Boxes (Prismatic)Listed below (Recalc)

Elevation	Surf.Area	Inc.Store	Cum.Store
(feet)	(sq-ft)	(cubic-feet)	(cubic-feet)
36.00	850	0	0
38.00	9,050	9,900	9,900
40.00	17,350	26,400	36,300
44.00	28,470	91,640	127,940

#### Pond EP10: 9th Hole Pond



Printed 7/7/2023

HydroCAD® 10.10-3a s/n 01104 © 2020 HydroCAD Software Solutions LLC

Page 23

#### Summary for Pond PP50: Proposed Stone Storage Under Proposed Deck

Inflow Area = 0.153 ac, 78.53% Impervious, Inflow Depth = 3.79" for 10-yr event

Inflow = 0.58 cfs @ 12.03 hrs, Volume= 0.048 af

Outflow = 0.02 cfs @ 18.81 hrs, Volume= 0.048 af, Atten= 97%, Lag= 407.0 min

Discarded = 0.02 cfs @ 18.81 hrs, Volume= 0.048 af Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 3 Peak Elev= 78.30' @ 18.81 hrs Surf.Area= 2,150 sf Storage= 1,119 cf

Flood Elev= 80.00' Surf.Area= 2,150 sf Storage= 2,580 cf

Plug-Flow detention time= 657.0 min calculated for 0.048 af (100% of inflow)

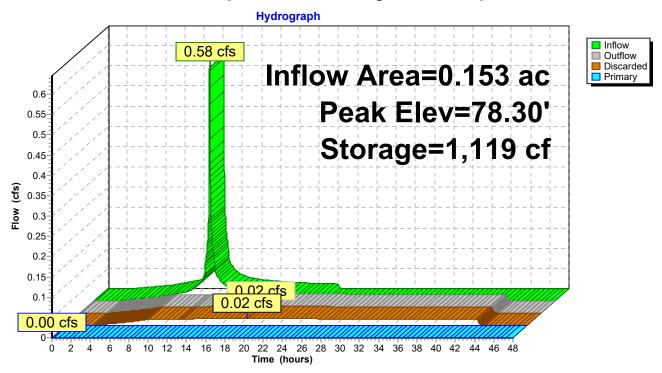
Center-of-Mass det. time= 656.9 min ( 1,463.7 - 806.8 )

Volume	Invert	Avail.Sto	rage Storage I	Description		
#1	77.00'	2,58	30 cf <b>Stone St</b> 6,450 cf (	<b>orage (Conic)</b> List Overall x 40.0% V	ted below (Recalc) roids	
Elevatio		rf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft <u>)</u>	
77.0		2,150	0	0	2,150	
80.0	00	2,150	6,450	6,450	2,643	
Device	Routing	Invert	Outlet Devices			
#1	Primary	79.90'		35.0' breadth Ove		
					0 1.00 1.20 1.40 1.60	
40	Diseased	77.00	` • ,		2.64 2.63 2.64 2.64 2.63	
#2	Discarded	77.00'	Phase-In= 0.0		oundwater over Wetted area	

**Discarded OutFlow** Max=0.02 cfs @ 18.81 hrs HW=78.30' (Free Discharge) **2=Exfiltration into Groundwater** (Exfiltration Controls 0.02 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=77.00' TW=0.00' (Dynamic Tailwater) 1=Overflow (Controls 0.00 cfs)

## Pond PP50: Proposed Stone Storage Under Proposed Deck



Printed 7/7/2023

HydroCAD® 10.10-3a s/n 01104 © 2020 HydroCAD Software Solutions LLC

Page 25

### Summary for Pond PP51: Proposed Drip Edge in front of Proposed Clubhouse

Inflow Area = 0.084 ac, 89.06% Impervious, Inflow Depth = 4.22" for 10-yr event

Inflow = 0.34 cfs @ 12.03 hrs, Volume= 0.030 af

Outflow = 0.32 cfs @ 12.05 hrs, Volume= 0.030 af, Atten= 7%, Lag= 1.3 min

Discarded = 0.00 cfs @ 12.05 hrs, Volume= 0.005 af Primary = 0.31 cfs @ 12.05 hrs, Volume= 0.024 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 3

Peak Elev= 80.32' @ 12.05 hrs Surf.Area= 400 sf Storage= 51 cf

Flood Elev= 83.00' Surf.Area= 400 sf Storage= 480 cf

Plug-Flow detention time= 8.2 min calculated for 0.029 af (100% of inflow)

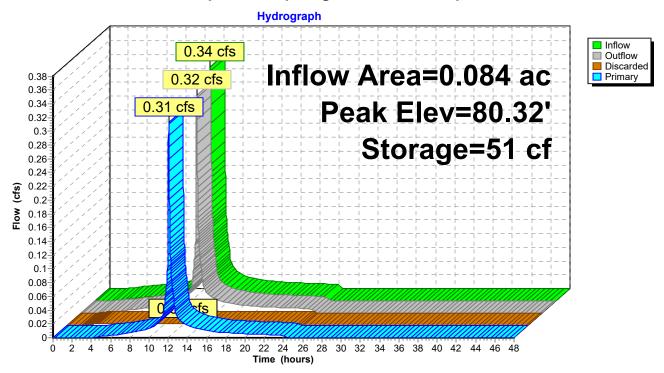
Center-of-Mass det. time= 8.2 min ( 790.9 - 782.7 )

Volume	Inve	ert Avail.Sto	orage Storage	Description		
#1	80.0	0' 4			ed below (Recalc)	
			1,200 cf	Overall x 40.0% V	olds	
Elevation		Surf.Area	Inc.Store	Cum.Store	Wet.Area	
(fee	et)	(sq-ft)	(cubic-feet)	(cubic-feet)	<u>(sq-ft)</u>	
80.0	00	400	0	0	400	
83.0	00	400	1,200	1,200	613	
Device	Routing	Invert	Outlet Devices	S		
#1	Primary	80.00'	8.0" Round 8	" SDR-35 Pipe		
,, .					adwall, Ke= 0.500	
				, ,	0' S= 0.0207 '/' Cc= 0.900	1
			· -			,
					Flow Area= 0.35 sf	
#2	Discarde	d 80.00'	0.300 in/hr Ex	filtration into Gro	undwater over Wetted are	а

**Discarded OutFlow** Max=0.00 cfs @ 12.05 hrs HW=80.32' (Free Discharge) **2=Exfiltration into Groundwater** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.31 cfs @ 12.05 hrs HW=80.32' TW=77.50' (Dynamic Tailwater) 1=8" SDR-35 Pipe (Inlet Controls 0.31 cfs @ 1.92 fps)

Pond PP51: Proposed Drip Edge in front of Proposed Clubhouse



Page 27

#### Summary for Pond PP52A: Proposed Manhole in 1st Hole Fairway

Inflow Area = 1.172 ac, 74.47% Impervious, Inflow Depth = 3.38" for 10-yr event

Inflow = 2.10 cfs @ 12.03 hrs, Volume= 0.330 af

Outflow = 2.10 cfs @ 12.03 hrs, Volume= 0.330 af, Atten= 0%, Lag= 0.0 min

Primary = 2.10 cfs @ 12.03 hrs, Volume= 0.330 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 3

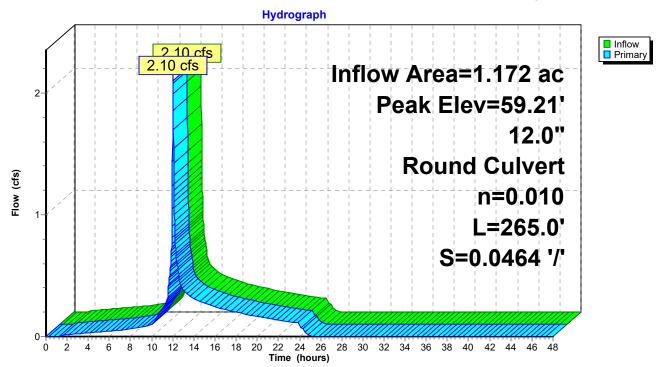
Peak Elev= 59.21' @ 12.03 hrs

Flood Elev= 62.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	58.40'	12.0" Round 12" HDPE Pipe
			L= 265.0' CPP, square edge headwall, Ke= 0.500
			Inlet / Outlet Invert= 58.40' / 46.10' S= 0.0464 '/' Cc= 0.900
			n= 0.010 PVC, smooth interior. Flow Area= 0.79 sf

Primary OutFlow Max=2.10 cfs @ 12.03 hrs HW=59.21' TW=0.00' (Dynamic Tailwater) 1=12" HDPE Pipe (Inlet Controls 2.10 cfs @ 3.07 fps)

#### Pond PP52A: Proposed Manhole in 1st Hole Fairway



Page 28

#### **Summary for Pond PP52B: Proposed Manhole near Cart Storage**

Inflow Area = 1.172 ac, 74.47% Impervious, Inflow Depth = 3.38" for 10-yr event

Inflow = 2.10 cfs @ 12.03 hrs, Volume= 0.330 af

Outflow = 2.10 cfs @ 12.03 hrs, Volume= 0.330 af, Atten= 0%, Lag= 0.0 min

Primary = 2.10 cfs @ 12.03 hrs, Volume= 0.330 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 3

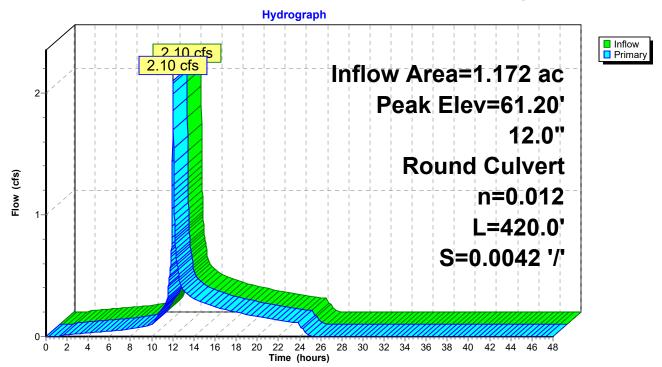
Peak Elev= 61.20' @ 12.03 hrs

Flood Elev= 63.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	60.25'	12.0" Round 12" HDPE Pipe
	-		L= 420.0' CPP, square edge headwall, Ke= 0.500
			Inlet / Outlet Invert= 60.25' / 58.50' S= 0.0042 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior. Flow Area= 0.79 sf

Primary OutFlow Max=2.10 cfs @ 12.03 hrs HW=61.20' TW=59.21' (Dynamic Tailwater) 1=12" HDPE Pipe (Outlet Controls 2.10 cfs @ 3.51 fps)

## Pond PP52B: Proposed Manhole near Cart Storage



Page 29

## Summary for Pond PP53: Proposed Rock Infiltration Area in Proposed Parking Island

Inflow Area = 1.172 ac, 74.47% Impervious, Inflow Depth = 3.39" for 10-yr event Inflow 2.11 cfs @ 12.03 hrs, Volume= 0.331 af 2.10 cfs @ 12.03 hrs, Volume= Outflow = 0.331 af, Atten= 0%, Lag= 0.3 min 0.00 cfs @ 12.03 hrs, Volume= Discarded = 0.002 af Primary 2.10 cfs @ 12.03 hrs, Volume= 0.330 af Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 3 Peak Elev= 62.12' @ 12.03 hrs Surf.Area= 91 sf Storage= 55 cf

Flood Elev= 64.00' Surf.Area= 800 sf Storage= 198 cf

Plug-Flow detention time= 2.6 min calculated for 0.331 af (100% of inflow)

Center-of-Mass det. time= 2.7 min ( 883.0 - 880.2 )

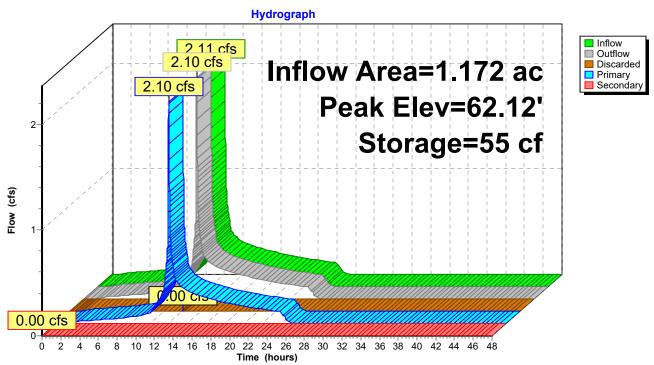
Volume	Invert	: Avail.Sto	rage Storage [	Description	
#1	60.50	19		orage (Prisma verall x 40.0% \	tic)Listed below (Recalc) Voids
Elevation	on S	urf.Area	Inc.Store	Cum.Store	
(fee	et)	(sq-ft)	(cubic-feet)	(cubic-feet)	
60.5	50	80	0	0	
63.5	50	100	270	270	
64.0	00	800	225	495	
Device	Routing	Invert	Outlet Devices		
#1	Primary	61.00'		<b>12" HDPE Pipe</b> P. square edge	headwall, Ke= 0.500
				, i	0.35' S= 0.0027 '/' Cc= 0.900
			n= 0.012 Corr	ugated PP, smo	ooth interior, Flow Area= 0.79 sf
#2	Secondary	63.90'			verflow into Road
					0.80 1.00 1.20 1.40 1.60
110	Disconded	00.50	` • ,		70 2.64 2.63 2.64 2.64 2.63
#3	Discarded	60.50'	U.3UU IN/NY EX	tiitration into G	Broundwater over Surface area

**Discarded OutFlow** Max=0.00 cfs @ 12.03 hrs HW=62.11' (Free Discharge) **3=Exfiltration into Groundwater** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=2.10 cfs @ 12.03 hrs HW=62.11' TW=61.20' (Dynamic Tailwater) 1=12" HDPE Pipe (Outlet Controls 2.10 cfs @ 3.00 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=60.50' TW=0.00' (Dynamic Tailwater) 2=Overflow into Road ( Controls 0.00 cfs)

Pond PP53: Proposed Rock Infiltration Area in Proposed Parking Island



## **Summary for Pond PP54: Proposed Catch Basin at Southernmost Site Entrance**

Inflow Area = 0.769 ac, 62.69% Impervious, Inflow Depth = 2.77" for 10-yr event

Inflow 0.42 cfs @ 12.03 hrs, Volume= 0.178 af

0.42 cfs @ 12.03 hrs, Volume= Outflow 0.178 af, Atten= 0%, Lag= 0.0 min

0.42 cfs @ 12.03 hrs, Volume= Primary 0.178 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 3

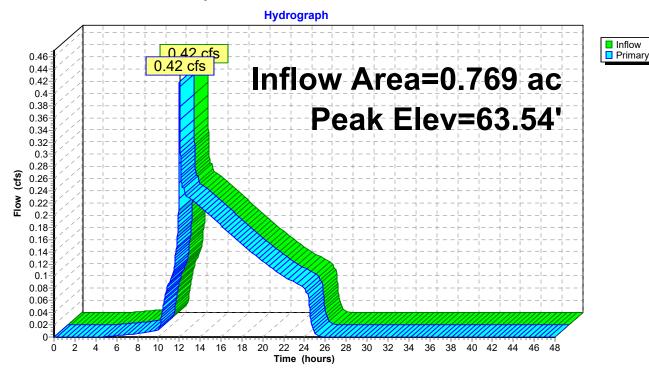
Peak Elev= 63.54' @ 12.03 hrs

Flood Elev= 65.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	63.00'	12.0" Round 12" HDPE Pipe
			L= 50.0' CPP, square edge headwall, Ke= 0.500
			Inlet / Outlet Invert= 63.00' / 61.10' S= 0.0380 '/' Cc= 0.900
			n= 0.010 PVC, smooth interior, Flow Area= 0.79 sf
#2	Device 1	63.17'	<b>8.0" Vert. 8" Oriface</b> C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.42 cfs @ 12.03 hrs HW=63.54' TW=62.11' (Dynamic Tailwater) -1=12" HDPE Pipe (Passes 0.42 cfs of 1.10 cfs potential flow) -2=8" Oriface (Orifice Controls 0.42 cfs @ 2.08 fps)

#### Pond PP54: Proposed Catch Basin at Southernmost Site Entrance



Prepared by {enter your company name here}

Printed 7/7/2023

HydroCAD® 10.10-3a s/n 01104 © 2020 HydroCAD Software Solutions LLC

Page 32

### Summary for Pond PP55: Proposed Bioretention Area "A" Subsurface

Inflow Area = 0.676 ac, 62.52% Impervious, Inflow Depth = 3.23" for 10-yr event

Inflow = 0.21 cfs @ 13.08 hrs, Volume= 0.182 af

Outflow = 0.21 cfs @ 13.23 hrs, Volume= 0.182 af, Atten= 0%, Lag= 9.3 min

Discarded = 0.01 cfs @ 13.23 hrs, Volume= 0.029 af Primary = 0.20 cfs @ 13.23 hrs, Volume= 0.152 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 3

Peak Elev= 74.37' @ 13.23 hrs Surf.Area= 1,490 sf Storage= 637 cf

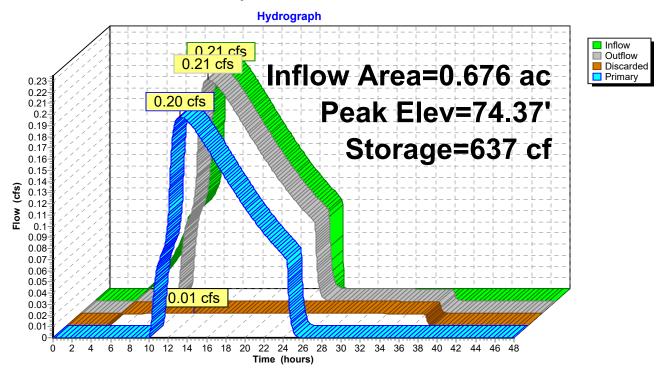
Plug-Flow detention time= 95.0 min calculated for 0.182 af (100% of inflow) Center-of-Mass det. time= 95.2 min (1,054.4 - 959.2)

Volume	Invert	Avail.Sto	rage Storaç	ge Description		
#1	74.55'	52		Bioretention Filter Layers (Conic)Listed below		
#2	73.30'	74	15 cf Biore	2,608 cf Overall x 20.0% Voids <b>Bioretention Storage Layers (Conic)</b> Listed below (Recalc) 1,863 cf Overall x 40.0% Voids		
		1,26	67 cf Total /	Available Storage		
Elevation (feet)		f.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)	
74.55		1,490	0	0	1,490	
76.30		1,490	2,608	2,608	1,729	
Elevation (feet)		f.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)	
73.30	)	1,490	0	0	1,490	
74.55		1,490	1,863	1,863	1,661	
Device I	Routing	Invert	Outlet Device	ces		
#1	Primary	74.05'	8.0" Round	d 8" SDR-35 Pipe		
	·		Inlet / Outle	= 75.0' CPP, square edge headwall, Ke= 0.500  nlet / Outlet Invert= 74.05' / 73.90' S= 0.0020 '/' Cc= 0.900  = 0.010 PVC, smooth interior, Flow Area= 0.35 sf		
#2 I	Discarded	73.30'	0.300 in/hr Phase-In=		roundwater over Wet	ted area

**Discarded OutFlow** Max=0.01 cfs @ 13.23 hrs HW=74.37' (Free Discharge) **2=Exfiltration into Groundwater** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.20 cfs @ 13.23 hrs HW=74.37' TW=74.14' (Dynamic Tailwater) 1=8" SDR-35 Pipe (Outlet Controls 0.20 cfs @ 1.76 fps)

## Pond PP55: Proposed Bioretention Area "A" Subsurface



Printed 7/7/2023

HydroCAD® 10.10-3a s/n 01104 © 2020 HydroCAD Software Solutions LLC

<u>Page 34</u>

#### Summary for Pond PP56: Proposed Bioretention Area "A" Open Area

Inflow Area = 0.676 ac, 62.52% Impervious, Inflow Depth = 3.23" for 10-yr event Inflow 2.23 cfs @ 12.03 hrs. Volume= 0.182 af 0.21 cfs @ 13.08 hrs, Volume= Outflow = 0.182 af, Atten= 91%, Lag= 62.8 min 0.21 cfs @ 13.08 hrs, Volume= Primary 0.182 af Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af 0.000 af Tertiary 0.00 cfs @ 0.00 hrs, Volume=

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 3 Peak Elev= 78.11' @ 13.08 hrs Surf.Area= 2,242 sf Storage= 2,667 cf Flood Elev= 78.80' Surf.Area= 2,970 sf Storage= 4,467 cf

Plug-Flow detention time= 130.3 min calculated for 0.182 af (100% of inflow)

Center-of-Mass det. time= 130.3 min ( 959.2 - 828.9 )

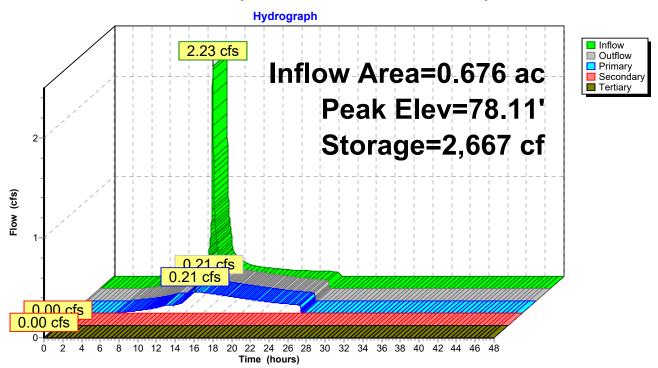
Volume	Invert	Avail.Sto	rage Storage D	escription		
#1	76.30'	4,4	67 cf Bioretent	ion Area "A" (	(Conic)Listed below (	Recalc)
Elevation (fee		rf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)	
76.3	30	825	0	0	825	
78.8	30	2,970	4,467	4,467	3,001	
Device	Routing	Invert	Outlet Devices			
#1	Primary	76.30'			gh Bioretention Mix	over Wetted area
#2	Secondary	78.20'	Phase-In= 0.0 12.0" W x 4.0" Limited to weir to	H Vert. (3) 4"x	x12" Knockouts X 3.0	<b>00</b> C= 0.600
#3	Tertiary	78.50'	5.0' long x 5.0'			
					0.80 1.00 1.20 1.40	1.60 1.80 2.00
			2.50 3.00 3.50			165 165 165
			2.65 2.67 2.66		70 2.68 2.68 2.66 2 74 2 79 2 88	05 2.05 2.05

Primary OutFlow Max=0.21 cfs @ 13.08 hrs HW=78.11' TW=74.37' (Dynamic Tailwater) 1=Exfiltration through Bioretention Mix (Exfiltration Controls 0.21 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=76.30' TW=73.30' (Dynamic Tailwater) = 2=(3) 4"x12" Knockouts (Controls 0.00 cfs)

**Tertiary OutFlow** Max=0.00 cfs @ 0.00 hrs HW=76.30' TW=74.00' (Dynamic Tailwater) **3=Overflow** (Controls 0.00 cfs)

## Pond PP56: Proposed Bioretention Area "A" Open Area



Page 36

#### **Summary for Pond PP57: Proposed Catch Basin at Site Entrance**

Inflow Area = 0.234 ac, 99.36% Impervious, Inflow Depth = 4.67" for 10-yr event

Inflow = 0.99 cfs @ 12.03 hrs, Volume= 0.091 af

Outflow = 0.99 cfs @ 12.03 hrs, Volume= 0.091 af, Atten= 0%, Lag= 0.0 min

Primary = 0.99 cfs @ 12.03 hrs, Volume= 0.091 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 3

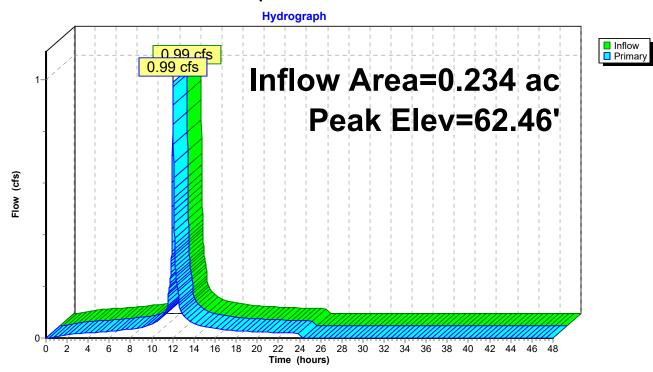
Peak Elev= 62.46' @ 12.03 hrs

Flood Elev= 65.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	61.30'	12.0" Round 12" HDPE Pipe
	•		L= 40.0' CPP, projecting, no headwall, Ke= 0.900
			Inlet / Outlet Invert= 61.30' / 61.10' S= 0.0050 '/' Cc= 0.900
			n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf
#2	Device 1	61.46'	<b>8.0" Vert. 8" Oriface</b> C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.99 cfs @ 12.03 hrs HW=62.45' TW=62.11' (Dynamic Tailwater)
1=12" HDPE Pipe (Passes 0.99 cfs of 1.75 cfs potential flow)
2=8" Oriface (Orifice Controls 0.99 cfs @ 2.82 fps)

#### **Pond PP57: Proposed Catch Basin at Site Entrance**



## Summary for Link L101: Flow North Along Golfcourse to 9th Hole Pond

Page 37

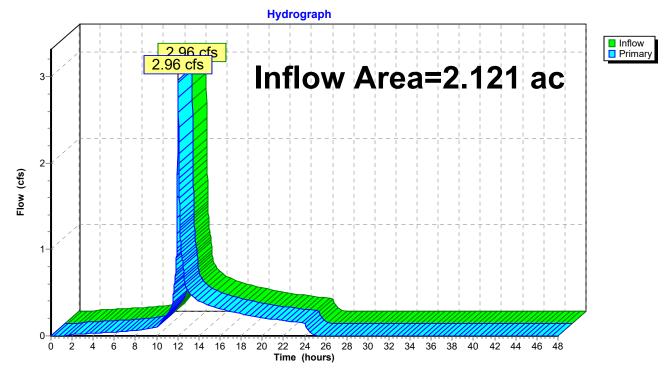
Inflow Area = 2.121 ac, 47.37% Impervious, Inflow Depth = 2.39" for 10-yr event

Inflow 2.96 cfs @ 12.04 hrs, Volume= 0.422 af

2.96 cfs @ 12.04 hrs, Volume= 0.422 af, Atten= 0%, Lag= 0.0 min Primary

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

#### Link L101: Flow North Along Golfcourse to 9th Hole Pond



#### Summary for Link L102: Flow to Catch Basin on Jady Hill Avenue

Page 38

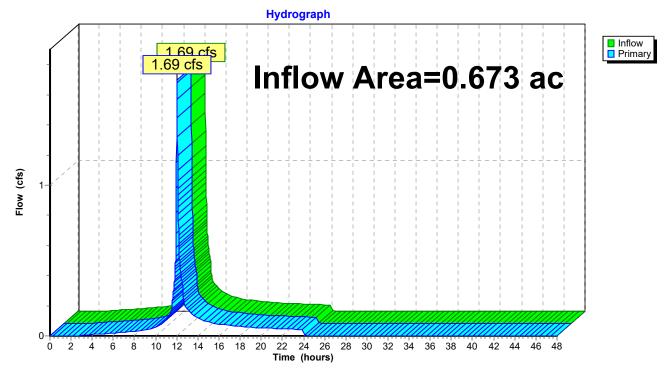
Inflow Area = 0.673 ac, 37.33% Impervious, Inflow Depth = 2.59" for 10-yr event

Inflow = 1.69 cfs @ 12.03 hrs, Volume= 0.145 af

Primary = 1.69 cfs @ 12.03 hrs, Volume= 0.145 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

#### Link L102: Flow to Catch Basin on Jady Hill Avenue



Page 39

#### Summary for Link L103: Flow South to Hayes Park

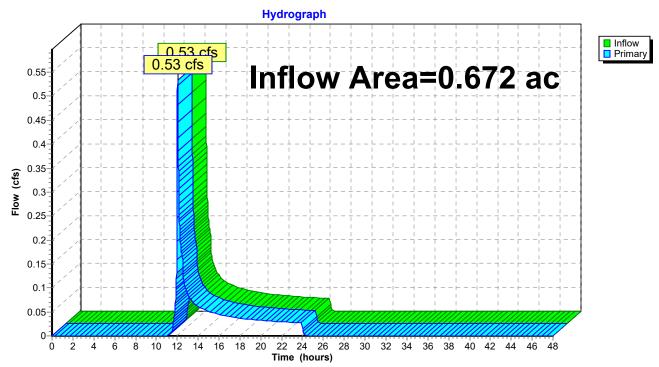
Inflow Area = 0.672 ac, 0.00% Impervious, Inflow Depth = 1.00" for 10-yr event

Inflow = 0.53 cfs @ 12.04 hrs, Volume= 0.056 af

Primary = 0.53 cfs @ 12.04 hrs, Volume= 0.056 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

# Link L103: Flow South to Hayes Park



#### Summary for Link L104: Flows West towards Squamscott River

Page 40

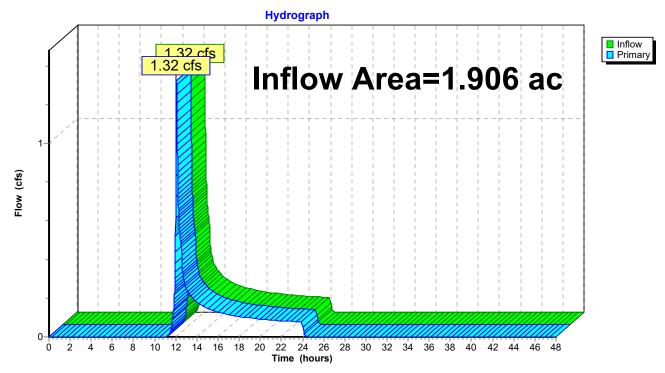
Inflow Area = 1.906 ac, 0.00% Impervious, Inflow Depth = 1.00" for 10-yr event

Inflow = 1.32 cfs @ 12.06 hrs, Volume= 0.158 af

Primary = 1.32 cfs @ 12.06 hrs, Volume= 0.158 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

#### Link L104: Flows West towards Squamscott River



#### Postdevelopment HydroCAD 07-03- NH-Exeter 08-23-22 24-hr S1 1-yr 1-inch Rainfall=1.00" Prepared by {enter your company name here} Printed 7/7/2023 Page 41

HydroCAD® 10.10-3a s/n 01104 © 2020 HydroCAD Software Solutions LLC

Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points x 3 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Runoff Area=6,660 sf 78.53% Impervious Runoff Depth=0.32" Subcatchment PS25A: Northside of

Tc=5.0 min CN=90 Runoff=0.05 cfs 0.004 af

Runoff Area=3,655 sf 89.06% Impervious Runoff Depth=0.50" Subcatchment PS25B: Southside of

Tc=5.0 min CN=94 Runoff=0.05 cfs 0.004 af

Runoff Area=34,690 sf 1.51% Impervious Runoff Depth=0.00" Subcatchment PS26: Northern Portion of

Flow Length=235' Tc=7.1 min CN=62 Runoff=0.00 cfs 0.000 af

Subcatchment PS27A: Existing 1st Hole Tee Runoff Area=17,120 sf 4.79% Impervious Runoff Depth=0.00"

Tc=5.0 min CN=65 Runoff=0.00 cfs 0.000 af

Runoff Area=10,190 sf 99.36% Impervious Runoff Depth=0.79" Subcatchment PS27B: Existing Northern

Tc=5.0 min CN=98 Runoff=0.20 cfs 0.015 af

Runoff Area=12,175 sf 83.08% Impervious Runoff Depth=0.40" Subcatchment PS27C: Portion of

Tc=5.0 min CN=92 Runoff=0.13 cfs 0.009 af

Runoff Area=7,370 sf 93.55% Impervious Runoff Depth=0.63" Subcatchment PS28: Middle Strip of

Tc=5.0 min CN=96 Runoff=0.12 cfs 0.009 af

Subcatchment PS29: Southern Portion of Runoff Area=4,035 sf 63.94% Impervious Runoff Depth=0.17"

Tc=5.0 min CN=85 Runoff=0.01 cfs 0.001 af

Subcatchment PS30: Woods to the South of Runoff Area=29,290 sf 0.00% Impervious Runoff Depth=0.00" Flow Length=233' Tc=5.0 min CN=56 Runoff=0.00 cfs 0.000 af

Subcatchment PS31: Woods to the West of Runoff Area=83,020 sf 0.00% Impervious Runoff Depth=0.00" Flow Length=345' Tc=7.4 min CN=56 Runoff=0.00 cfs 0.000 af

Runoff Area=25,800 sf 58.76% Impervious Runoff Depth=0.15" Subcatchment PS32: Proposed Parking Tc=5.0 min CN=84 Runoff=0.06 cfs 0.007 af

Reach PR75: Proposed Swale Running Avg. Flow Depth=0.00' Max Vel=0.00 fps Inflow=0.00 cfs 0.000 af n=0.022 L=90.0' S=0.0944 '/' Capacity=37.88 cfs Outflow=0.00 cfs 0.000 af

Pond EP10: 9th Hole Pond Peak Elev=36.54' Storage=1,056 cf Inflow=0.34 cfs 0.024 af

Outflow=0.00 cfs 0.000 af

Peak Elev=77.03' Storage=24 cf Inflow=0.05 cfs 0.004 af Pond PP50: Proposed Stone Storage Under

Discarded=0.01 cfs 0.004 af Primary=0.00 cfs 0.000 af Outflow=0.01 cfs 0.004 af

Pond PP51: Proposed Drip Edge in front of Peak Elev=80.09' Storage=15 cf Inflow=0.05 cfs 0.004 af Discarded=0.00 cfs 0.002 af Primary=0.03 cfs 0.001 af Outflow=0.03 cfs 0.004 af

Peak Elev=58.69' Inflow=0.34 cfs 0.024 af Pond PP52A: Proposed Manhole in 1st Hole Fairway 12.0" Round Culvert n=0.010 L=265.0' S=0.0464 '/' Outflow=0.34 cfs 0.024 af

Postdevelopment HydroCAD 07-03- NH-Exeter 08-23-22 24-hr S1 1-y	vr 1-inch Rainfall=1.00"
Prepared by {enter your company name here}	Printed 7/7/2023
HydroCAD® 10.10-3a s/n 01104 © 2020 HydroCAD Software Solutions LLC	Page 42
	<del>-</del>
	3' Inflow=0.34 cfs 0.024 af
12.0" Round Culvert n=0.012 L=420.0' S=0.0042 '/'	Outflow=0.34 cfs 0.024 af
Pond PP53: Proposed Rock Infiltration Area in Peak Elev=61.37' Storage=29	of Inflow=0.34 efc 0.026 of
Pond PP53: Proposed Rock Infiltration Area in Peak Elev=61.37' Storage=29 of Discarded=0.00 cfs 0.001 af Primary=0.34 cfs 0.024 af Secondary=0.00 cfs 0.000 af	
Discarded-0.00 dis 0.001 al 1 filmary-0.04 dis 0.024 al 0econdary-0.00 dis 0.000 al	Outilow-0.54 Cis 0.020 ai
Pond PP54: Proposed Catch Basin at Southernmost Site Peak Elev=63.23	3' Inflow=0.01 cfs 0.001 af
•	Outflow=0.01 cfs 0.001 af
Pond PP55: Proposed Bioretention Area "A" Peak Elev=73.47' Storage=104 of the storage Proposed Bioretention Area "A" Peak Elev=73.47' Storage=104 of the storage Proposed Bioretention Area "A" Peak Elev=73.47' Storage=104 of the storage Proposed Bioretention Area "A" Peak Elev=73.47' Storage=104 of the storage Proposed Bioretention Area "A" Peak Elev=73.47' Storage=104 of the storage Proposed Bioretention Area "A" Peak Elev=73.47' Storage=104 of the storage Proposed Bioretention Area "A" Peak Elev=73.47' Storage=104 of the storage Proposed Bioretention Area "A" Peak Elev=73.47' Storage=104 of the storage Proposed Bioretention Area "A" Peak Elev=73.47' Storage=104 of the storage Proposed Bioretention Area "A" Peak Elev=73.47' Storage=104 of the storage Proposed Bioretention Area "A" Peak Elev=73.47' Storage=104 of the storage Proposed Bioretention Area "A" Peak Elev=73.47' Storage Proposed Bioretention Area "A" Proposed Bioretention Are	
Discarded=0.01 cfs 0.009 af Primary=0.00 cfs 0.000 af	Outflow=0.01 cfs 0.009 at
Pond PP56: Proposed Bioretention Area "A" Peak Elev=76.31' Storage=9	of Inflow=0.09 cfs 0.009 af
Primary=0.08 cfs 0.009 af Secondary=0.00 cfs 0.000 af Tertiary=0.00 cfs 0.000 af	
,	
Pond PP57: Proposed Catch Basin at Site Entrance Peak Elev=61.7	1' Inflow=0.20 cfs 0.015 af
	Outflow=0.20 cfs 0.015 af
1: 1 1 404 Et N (1 41 0 15	
Link L101: Flow North Along Golfcourse to 9th Hole Pond	Inflow=0.34 cfs 0.024 af
	Primary=0.34 cfs 0.024 af
Link L102: Flow to Catch Basin on Jady Hill Avenue	Inflow=0.13 cfs 0.009 af
- I I I I I I I I I I I I I I I I I I I	Primary=0.13 cfs 0.009 af
	•
Link L103: Flow South to Hayes Park	Inflow=0.00 cfs 0.000 af
	Primary=0.00 cfs 0.000 af
Link Land Element West towards Owners and Discour	l-fl0 00 -f- 0 000 f
Link L104: Flows West towards Squamscott River	Inflow=0.00 cfs 0.000 af Primary=0.00 cfs 0.000 af
	Filliary-0.00 dis 0.000 al

Total Runoff Area = 5.372 ac Runoff Volume = 0.050 af Average Runoff Depth = 0.11" 76.62% Pervious = 4.116 ac 23.38% Impervious = 1.256 ac

# Postdevelopment HydroCAD 07-03-23 NH-

NH-Exeter 08-23-22 24-hr S1 2-yr Rainfall=3.22"

Prepared by {enter your company name here}

Printed 7/7/2023

HydroCAD® 10.10-3a s/n 01104 © 2020 HydroCAD Software Solutions LLC

Page 43

Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points x 3
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment PS25A: Northside of Runoff Area=6,660 sf 78.53% Impervious Runoff Depth=2.19"

Tc=5.0 min CN=90 Runoff=0.39 cfs 0.028 af

Subcatchment PS25B: Southside of Runoff Area=3,655 sf 89.06% Impervious Runoff Depth=2.56"

Tc=5.0 min CN=94 Runoff=0.24 cfs 0.018 af

Subcatchment PS26: Northern Portion of Runoff Area=34,690 sf 1.51% Impervious Runoff Depth=0.49"

Flow Length=235' Tc=7.1 min CN=62 Runoff=0.25 cfs 0.032 af

Subcatchment PS27A: Existing 1st Hole Tee Runoff Area=17,120 sf 4.79% Impervious Runoff Depth=0.61"

Tc=5.0 min CN=65 Runoff=0.21 cfs 0.020 af

Subcatchment PS27B: Existing Northern Runoff Area=10,190 sf 99.36% Impervious Runoff Depth=2.99"

Tc=5.0 min CN=98 Runoff=0.74 cfs 0.058 af

Subcatchment PS27C: Portion of Runoff Area=12,175 sf 83.08% Impervious Runoff Depth=2.37"

Tc=5.0 min CN=92 Runoff=0.77 cfs 0.055 af

Subcatchment PS28: Middle Strip of Runoff Area=7,370 sf 93.55% Impervious Runoff Depth=2.77"

Tc=5.0 min CN=96 Runoff=0.52 cfs 0.039 af

Subcatchment PS29: Southern Portion of Runoff Area=4,035 sf 63.94% Impervious Runoff Depth=1.77"

Tc=5.0 min CN=85 Runoff=0.19 cfs 0.014 af

Subcatchment PS30: Woods to the South of Runoff Area=29,290 sf 0.00% Impervious Runoff Depth=0.29"

Flow Length=233' Tc=5.0 min CN=56 Runoff=0.05 cfs 0.016 af

Subcatchment PS31: Woods to the West of Runoff Area=83,020 sf 0.00% Impervious Runoff Depth=0.29" Flow Length=345' Tc=7.4 min CN=56 Runoff=0.14 cfs 0.045 af

Subcatchment PS32: Proposed Parking Runoff Area=25,800 sf 58.76% Impervious Runoff Depth=1.70"

Tc=5.0 min CN=84 Runoff=1.18 cfs 0.084 af

**Reach PR75: Proposed Swale Running** Avg. Flow Depth=0.12' Max Vel=3.09 fps Inflow=0.14 cfs 0.071 af n=0.022 L=90.0' S=0.0944 '/' Capacity=37.88 cfs Outflow=0.14 cfs 0.071 af

Pond EP10: 9th Hole Pond Peak Elev=37.93' Storage=9,260 cf Inflow=1.65 cfs 0.213 af

Outflow=0.00 cfs 0.000 af

Pond PP50: Proposed Stone Storage Under Peak Elev=77.61' Storage=526 cf Inflow=0.39 cfs 0.028 af

Discarded=0.02 cfs 0.028 af Primary=0.00 cfs 0.000 af Outflow=0.02 cfs 0.028 af

Pond PP51: Proposed Drip Edge in front of Peak Elev=80.26' Storage=42 cf Inflow=0.24 cfs 0.018 af

Discarded=0.00 cfs 0.005 af Primary=0.22 cfs 0.013 af Outflow=0.22 cfs 0.018 af

Pond PP52A: Proposed Manhole in 1st Hole Fairway

Peak Elev=59.04' Inflow=1.45 cfs 0.180 af
12.0" Round Culvert n=0.010 L=265.0' S=0.0464 '/' Outflow=1.45 cfs 0.180 af

Postdevelopment HydroCAD 07-03-23 NH-Exeter 08-23-22 24-h. Prepared by {enter your company name here} HydroCAD® 10.10-3a s/n 01104 © 2020 HydroCAD Software Solutions LLC	r S1 2-yr Rainfall=3.22" Printed 7/7/2023 Page 44
Pond PP52B: Proposed Manhole near Cart Storage Peak Elev=60.9 12.0" Round Culvert n=0.012 L=420.0' S=0.0042 '/'	9' Inflow=1.45 cfs 0.180 af
<b>Pond PP53: Proposed Rock Infiltration Area in</b> Peak Elev=61.84' Storage=45 Discarded=0.00 cfs 0.002 af Primary=1.45 cfs 0.180 af Secondary=0.00 cfs 0.000 af	
Pond PP54: Proposed Catch Basin at Southernmost Site Peak Elev=63.4	1' Inflow=0.19 cfs 0.084 af Outflow=0.19 cfs 0.084 af
Pond PP55: Proposed Bioretention Area "A" Peak Elev=74.32' Storage=607 Discarded=0.01 cfs 0.026 af Primary=0.14 cfs 0.071 af	
Pond PP56: Proposed Bioretention Area "A" Peak Elev=77.38' Storage=1,273 Primary=0.15 cfs 0.097 af Secondary=0.00 cfs 0.000 af Tertiary=0.00 cfs 0.000 af	
Pond PP57: Proposed Catch Basin at Site Entrance Peak Elev=62.0	5' Inflow=0.74 cfs 0.058 af Outflow=0.74 cfs 0.058 af
Link L101: Flow North Along Golfcourse to 9th Hole Pond	Inflow=1.65 cfs 0.213 af Primary=1.65 cfs 0.213 af
Link L102: Flow to Catch Basin on Jady Hill Avenue	Inflow=0.97 cfs 0.075 af Primary=0.97 cfs 0.075 af
Link L103: Flow South to Hayes Park	Inflow=0.05 cfs 0.016 af Primary=0.05 cfs 0.016 af
Link L104: Flows West towards Squamscott River	Inflow=0.14 cfs 0.045 af Primary=0.14 cfs 0.045 af

Total Runoff Area = 5.372 ac Runoff Volume = 0.410 af Average Runoff Depth = 0.92" 76.62% Pervious = 4.116 ac 23.38% Impervious = 1.256 ac

# Postdevelopment HydroCAD 07-03-23 NH-Exeter 08-23-22 24-hr S1 10-yr Rainfall=4.91" Prepared by {enter your company name here} Printed 7/7/2023 HydroCAD® 10.10-3a s/n 01104 © 2020 HydroCAD Software Solutions LLC Page 45

Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points x 3
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment PS25A: Northside of Runoff Area=6,660 sf 78.53% Impervious Runoff Depth=3.79"

Tc=5.0 min CN=90 Runoff=0.58 cfs 0.048 af

Subcatchment PS25B: Southside of Runoff Area=3,655 sf 89.06% Impervious Runoff Depth=4.22"

Tc=5.0 min CN=94 Runoff=0.34 cfs 0.030 af

Subcatchment PS26: Northern Portion of Runoff Area=34,690 sf 1.51% Impervious Runoff Depth=1.38"

Flow Length=235' Tc=7.1 min CN=62 Runoff=0.90 cfs 0.092 af

Subcatchment PS27A: Existing 1st Hole Tee Runoff Area=17,120 sf 4.79% Impervious Runoff Depth=1.59"
Tc=5.0 min CN=65 Runoff=0.60 cfs 0.052 af

Northern Runoff Area=10,190 sf 99.36% Impervious Runoff Depth=4.67"

Subcatchment PS27B: Existing Northern Runoff Area=10,190 sf 99.36% Impervious Runoff Depth=4.67" Tc=5.0 min CN=98 Runoff=0.99 cfs 0.091 af

Subcatchment PS27C: Portion of Runoff Area=12,175 sf 83.08% Impervious Runoff Depth=4.00"

Tc=5.0 min CN=92 Runoff=1.10 cfs 0.093 af

Subcatchment PS28: Middle Strip of Runoff Area=7,370 sf 93.55% Impervious Runoff Depth=4.44"

Tc=5.0 min CN=96 Runoff=0.70 cfs 0.063 af

Subcatchment PS29: Southern Portion of Runoff Area=4,035 sf 63.94% Impervious Runoff Depth=3.28"

Tc=5.0 min CN=85 Runoff=0.31 cfs 0.025 af

Subcatchment PS30: Woods to the South of Runoff Area=29,290 sf 0.00% Impervious Runoff Depth=1.00" Flow Length=233' Tc=5.0 min CN=56 Runoff=0.53 cfs 0.056 af

Subcatchment PS31: Woods to the West of Runoff Area=83,020 sf 0.00% Impervious Runoff Depth=1.00"

Flow Length=345' Tc=7.4 min CN=56 Runoff=1.32 cfs 0.158 af

Subcatchment PS32: Proposed Parking Runoff Area=25,800 sf 58.76% Impervious Runoff Depth=3.19"
Tc=5.0 min CN=84 Runoff=1.93 cfs 0.157 af

**Reach PR75: Proposed Swale Running** Avg. Flow Depth=0.14' Max Vel=3.40 fps Inflow=0.20 cfs 0.152 af n=0.022 L=90.0' S=0.0944 '/' Capacity=37.88 cfs Outflow=0.20 cfs 0.152 af

**Pond EP10: 9th Hole Pond**Peak Elev=38.79' Storage=18,366 cf Inflow=2.96 cfs 0.422 af Outflow=0.00 cfs 0.000 af

Pond PP50: Proposed Stone Storage Under Peak Elev=78.30' Storage=1,119 cf Inflow=0.58 cfs 0.048 af Discarded=0.02 cfs 0.048 af Primary=0.00 cfs 0.000 af Outflow=0.02 cfs 0.048 af

Pond PP51: Proposed Drip Edge in front of Discarded=0.00 cfs 0.005 af Primary=0.31 cfs 0.024 af Outflow=0.32 cfs 0.030 af

Pond PP52A: Proposed Manhole in 1st Hole Fairway Peak Elev=59.21' Inflow=2.10 cfs 0.330 af 12.0" Round Culvert n=0.010 L=265.0' S=0.0464 '/' Outflow=2.10 cfs 0.330 af

Postdevelopment HydroCAD 07-03-23 NH-Exeter 08-23-22 24-hr 3 Prepared by {enter your company name here} HydroCAD® 10.10-3a s/n 01104 © 2020 HydroCAD Software Solutions LLC	S1 10-yr Rainfall=4.91" Printed 7/7/2023 Page 46
Pond PP52B: Proposed Manhole near Cart Storage Peak Elev=61.20	0' Inflow=2.10 cfs 0.330 af Outflow=2.10 cfs 0.330 af
<b>Pond PP53: Proposed Rock Infiltration Area in</b> Peak Elev=62.12' Storage=55 of Discarded=0.00 cfs 0.002 af Primary=2.10 cfs 0.330 af Secondary=0.00 cfs 0.000 af	
Pond PP54: Proposed Catch Basin at Southernmost Site  Peak Elev=63.54	4' Inflow=0.42 cfs 0.178 af Outflow=0.42 cfs 0.178 af
Pond PP55: Proposed Bioretention Area "A" Peak Elev=74.37' Storage=637 of Discarded=0.01 cfs 0.029 af Primary=0.20 cfs 0.152 af	
Pond PP56: Proposed Bioretention Area "A" Peak Elev=78.11' Storage=2,667 of Primary=0.21 cfs 0.182 af Secondary=0.00 cfs 0.000 af Tertiary=0.00 cfs 0.000 af	
Pond PP57: Proposed Catch Basin at Site Entrance Peak Elev=62.46	6' Inflow=0.99 cfs 0.091 af Outflow=0.99 cfs 0.091 af
Link L101: Flow North Along Golfcourse to 9th Hole Pond	Inflow=2.96 cfs 0.422 af Primary=2.96 cfs 0.422 af
Link L102: Flow to Catch Basin on Jady Hill Avenue	Inflow=1.69 cfs 0.145 af Primary=1.69 cfs 0.145 af
Link L103: Flow South to Hayes Park	Inflow=0.53 cfs 0.056 af Primary=0.53 cfs 0.056 af
Link L104: Flows West towards Squamscott River	Inflow=1.32 cfs 0.158 af Primary=1.32 cfs 0.158 af

Total Runoff Area = 5.372 ac Runoff Volume = 0.865 af Average Runoff Depth = 1.93" 76.62% Pervious = 4.116 ac 23.38% Impervious = 1.256 ac

# Prepared by {enter your company name here} HydroCAD 07-03-23 NH-Exeter 08-23-22 24-hr S1 25-yr Rainfall=6.24" Printed 7/7/2023 HydroCAD® 10.10-3a s/n 01104 © 2020 HydroCAD Software Solutions LLC Page 47

Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points x 3
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment PS25A: Northside of	Runoff Area=6,660 sf 78.53% Impervious Runoff Depth=5.08" Tc=5.0 min CN=90 Runoff=0.72 cfs 0.065 af
Subcatchment PS25B: Southside of	Runoff Area=3,655 sf 89.06% Impervious Runoff Depth=5.53" Tc=5.0 min CN=94 Runoff=0.41 cfs 0.039 af
Subcatchment PS26: Northern Portion of	Runoff Area=34,690 sf 1.51% Impervious Runoff Depth=2.26" Flow Length=235' Tc=7.1 min CN=62 Runoff=1.49 cfs 0.150 af
Subcatchment PS27A: Existing 1st Hole Te	Runoff Area=17,120 sf 4.79% Impervious Runoff Depth=2.53" Tc=5.0 min CN=65 Runoff=0.93 cfs 0.083 af
Subcatchment PS27B: Existing Northern	Runoff Area=10,190 sf 99.36% Impervious Runoff Depth=6.00" Tc=5.0 min CN=98 Runoff=1.18 cfs 0.117 af
Subcatchment PS27C: Portion of	Runoff Area=12,175 sf 83.08% Impervious Runoff Depth=5.31" Tc=5.0 min CN=92 Runoff=1.34 cfs 0.124 af
Subcatchment PS28: Middle Strip of	Runoff Area=7,370 sf 93.55% Impervious Runoff Depth=5.77" Tc=5.0 min CN=96 Runoff=0.85 cfs 0.081 af
Subcatchment PS29: Southern Portion of	Runoff Area=4,035 sf 63.94% Impervious Runoff Depth=4.53" Tc=5.0 min CN=85 Runoff=0.40 cfs 0.035 af
Subcatchment PS30: Woods to the South o	of Runoff Area=29,290 sf 0.00% Impervious Runoff Depth=1.74" Flow Length=233' Tc=5.0 min CN=56 Runoff=1.01 cfs 0.098 af
	F Runoff Area=83,020 sf 0.00% Impervious Runoff Depth=1.74" Flow Length=345' Tc=7.4 min CN=56 Runoff=2.52 cfs 0.276 af
Subcatchment PS32: Proposed Parking	Runoff Area=25,800 sf 58.76% Impervious Runoff Depth=4.42" Tc=5.0 min CN=84 Runoff=2.49 cfs 0.218 af
	vg. Flow Depth=0.22' Max Vel=4.58 fps Inflow=0.66 cfs 0.220 af 0.0' S=0.0944 '/' Capacity=37.88 cfs Outflow=0.66 cfs 0.220 af
Pond EP10: 9th Hole Pond	Peak Elev=39.37' Storage=26,174 cf Inflow=3.98 cfs 0.601 af Outflow=0.00 cfs 0.000 af

Pond PP50: Proposed Stone Storage Under Peak Elev=78.96' Storage=1,683 cf Inflow=0.72 cfs 0.065 af Discarded=0.02 cfs 0.058 af Primary=0.00 cfs 0.000 af Outflow=0.02 cfs 0.058 af

Pond PP51: Proposed Drip Edge in front of Discarded=0.00 cfs 0.005 af Primary=0.39 cfs 0.033 af Outflow=0.41 cfs 0.039 af Outflow=0.39 cfs 0.039 af

Pond PP52A: Proposed Manhole in 1st Hole Fairway Peak Elev=59.34' Inflow=2.52 cfs 0.451 af 12.0" Round Culvert n=0.010 L=265.0' S=0.0464 '/' Outflow=2.52 cfs 0.451 af

Postdevelopment HydroCAD 07-03-23 NH-Exeter 08-23-22 24-hr Prepared by {enter your company name here} HydroCAD® 10.10-3a s/n 01104 © 2020 HydroCAD Software Solutions LLC	S1 25-yr Rainfall=6.24" Printed 7/7/2023 Page 48
Pond PP52B: Proposed Manhole near Cart Storage Peak Elev=61.3 12.0" Round Culvert n=0.012 L=420.0' S=0.0042 '/'	7' Inflow=2.52 cfs 0.451 af Outflow=2.52 cfs 0.451 af
<b>Pond PP53: Proposed Rock Infiltration Area in</b> Peak Elev=62.66' Storage=75 Discarded=0.00 cfs 0.002 af Primary=2.52 cfs 0.451 af Secondary=0.00 cfs 0.000 af	cf Inflow=2.57 cfs 0.453 af Outflow=2.52 cfs 0.453 af
Pond PP54: Proposed Catch Basin at Southernmost Site Peak Elev=63.7	0' Inflow=0.74 cfs 0.255 af Outflow=0.74 cfs 0.255 af
Pond PP55: Proposed Bioretention Area "A" Peak Elev=74.69' Storage=787 Discarded=0.02 cfs 0.032 af Primary=0.66 cfs 0.220 af	
<b>Pond PP56: Proposed Bioretention Area "A"</b> Peak Elev=78.33' Storage=3,202 Primary=0.23 cfs 0.227 af Secondary=0.47 cfs 0.025 af Tertiary=0.00 cfs 0.000 af	
Pond PP57: Proposed Catch Basin at Site Entrance Peak Elev=63.1	4' Inflow=1.18 cfs 0.117 af Outflow=1.18 cfs 0.117 af
Link L101: Flow North Along Golfcourse to 9th Hole Pond	Inflow=3.98 cfs 0.601 af Primary=3.98 cfs 0.601 af
Link L102: Flow to Catch Basin on Jady Hill Avenue	Inflow=2.28 cfs 0.206 af Primary=2.28 cfs 0.206 af
Link L103: Flow South to Hayes Park	Inflow=1.01 cfs 0.098 af Primary=1.01 cfs 0.098 af
Link L104: Flows West towards Squamscott River	Inflow=2.52 cfs 0.276 af Primary=2.52 cfs 0.276 af

Total Runoff Area = 5.372 ac Runoff Volume = 1.285 af Average Runoff Depth = 2.87" 76.62% Pervious = 4.116 ac 23.38% Impervious = 1.256 ac

# Prepared by {enter your company name here} HydroCAD 07-03-23 NH-Exeter 08-23-22 24-hr S1 50-yr Rainfall=7.49" Printed 7/7/2023 HydroCAD® 10.10-3a s/n 01104 © 2020 HydroCAD Software Solutions LLC Page 49

Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points x 3
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment PS25A: Northside of Runoff Area=6,660 sf 78.53% Impervious Runoff Depth=6.30"
Tc=5.0 min CN=90 Runoff=0.84 cfs 0.080 af

Subcatchment PS25B: Southside of Runoff Area=3,655 sf 89.06% Impervious Runoff Depth=6.77"
Tc=5.0 min CN=94 Runoff=0.48 cfs 0.047 af

**Subcatchment PS26: Northern Portion of** Runoff Area=34,690 sf 1.51% Impervious Runoff Depth=3.17" Flow Length=235' Tc=7.1 min CN=62 Runoff=2.04 cfs 0.210 af

Subcatchment PS27A: Existing 1st Hole Tee Runoff Area=17,120 sf 4.79% Impervious Runoff Depth=3.49"

Tc=5.0 min CN=65 Runoff=1.25 cfs 0.114 af

Subcatchment PS27B: Existing Northern Runoff Area=10,190 sf 99.36% Impervious Runoff Depth=7.25"

Tc=5.0 min CN=98 Runoff=1.36 cfs 0.141 af

**Subcatchment PS27C: Portion of**Runoff Area=12,175 sf 83.08% Impervious Runoff Depth=6.54"
Tc=5.0 min CN=92 Runoff=1.56 cfs 0.152 af

Subcatchment PS28: Middle Strip of Runoff Area=7,370 sf 93.55% Impervious Runoff Depth=7.01"

Tc=5.0 min CN=96 Runoff=0.97 cfs 0.099 af

**Subcatchment PS29: Southern Portion of** Runoff Area=4,035 sf 63.94% Impervious Runoff Depth=5.72" Tc=5.0 min CN=85 Runoff=0.47 cfs 0.044 af

Subcatchment PS30: Woods to the South of Runoff Area=29,290 sf 0.00% Impervious Runoff Depth=2.54" Flow Length=233' Tc=5.0 min CN=56 Runoff=1.48 cfs 0.142 af

Subcatchment PS31: Woods to the West of Runoff Area=83,020 sf 0.00% Impervious Runoff Depth=2.54" Flow Length=345' Tc=7.4 min CN=56 Runoff=3.73 cfs 0.404 af

Subcatchment PS32: Proposed Parking Runoff Area=25,800 sf 58.76% Impervious Runoff Depth=5.61"

Tc=5.0 min CN=84 Runoff=2.98 cfs 0.277 af

**Reach PR75: Proposed Swale Running** Avg. Flow Depth=0.28' Max Vel=5.40 fps Inflow=1.27 cfs 0.285 af n=0.022 L=90.0' S=0.0944 '/' Capacity=37.88 cfs Outflow=1.27 cfs 0.285 af

**Pond EP10: 9th Hole Pond**Peak Elev=39.86' Storage=33,870 cf Inflow=5.35 cfs 0.778 af

Outflow=0.00 cfs 0.000 af

Pond PP50: Proposed Stone Storage Under Peak Elev=79.64' Storage=2,273 cf Inflow=0.84 cfs 0.080 af Discarded=0.02 cfs 0.062 af Primary=0.00 cfs 0.000 af Outflow=0.02 cfs 0.062 af

Pond PP51: Proposed Drip Edge in front of Discarded=0.00 cfs 0.005 af Primary=0.45 cfs 0.042 af Outflow=0.48 cfs 0.047 af

Pond PP52A: Proposed Manhole in 1st Hole Fairway Peak Elev=59.66' Inflow=3.30 cfs 0.567 af 12.0" Round Culvert n=0.010 L=265.0' S=0.0464 '/' Outflow=3.30 cfs 0.567 af

Postdevelopment HydroCAD 07-03-23 NH-Exeter 08-23-22 24-hr	
Prepared by {enter your company name here}	Printed 7/7/2023
HydroCAD® 10.10-3a s/n 01104 © 2020 HydroCAD Software Solutions LLC	Page 50
Pond PP52B: Proposed Manhole near Cart Storage Peak Elev=63.0 12.0" Round Culvert n=0.012 L=420.0' S=0.0042 '/'	0' Inflow=3.30 cfs 0.567 af Outflow=3.30 cfs 0.567 af
<b>Pond PP53: Proposed Rock Infiltration Area in</b> Peak Elev=63.57' Storage=112 Discarded=0.00 cfs 0.002 af Primary=3.30 cfs 0.567 af Secondary=0.00 cfs 0.000 af	
Pond PP54: Proposed Catch Basin at Southernmost Site Peak Elev=64.2	0' Inflow=1.41 cfs 0.329 af
	Outflow=1.41 cfs 0.329 af
Pond PP55: Proposed Bioretention Area "A" Peak Elev=75.36' Storage=987	cf Inflow=1.52 cfs 0.319 af
Discarded=0.02 cfs 0.034 af Primary=1.27 cfs 0.285 af	
Pond PP56: Proposed Bioretention Area "A" Peak Elev=78.46' Storage=3,522	cf Inflow=3.41 cfs 0.319 af
Primary=0.24 cfs 0.259 af Secondary=1.28 cfs 0.060 af Tertiary=0.00 cfs 0.000 af	
Pond PP57: Proposed Catch Basin at Site Entrance Peak Elev=64.3	1' Inflow=1.36 cfs 0.141 af
·	Outflow=1.36 cfs 0.141 af
Link L101: Flow North Along Golfcourse to 9th Hole Pond	Inflow=5.35 cfs 0.778 af
	Primary=5.35 cfs 0.778 af
Link L102: Flow to Catch Basin on Jady Hill Avenue	Inflow=2.81 cfs 0.266 af
	Primary=2.81 cfs 0.266 af
Link L103: Flow South to Hayes Park	Inflow=1.48 cfs 0.142 af
	Primary=1.48 cfs 0.142 af
Link L104: Flows West towards Squamscott River	Inflow=3.73 cfs 0.404 af
Lilik Liva. I lows West towards squamscott River	Primary=3.73 cfs 0.404 af

Total Runoff Area = 5.372 ac Runoff Volume = 1.712 af Average Runoff Depth = 3.82" 76.62% Pervious = 4.116 ac 23.38% Impervious = 1.256 ac

