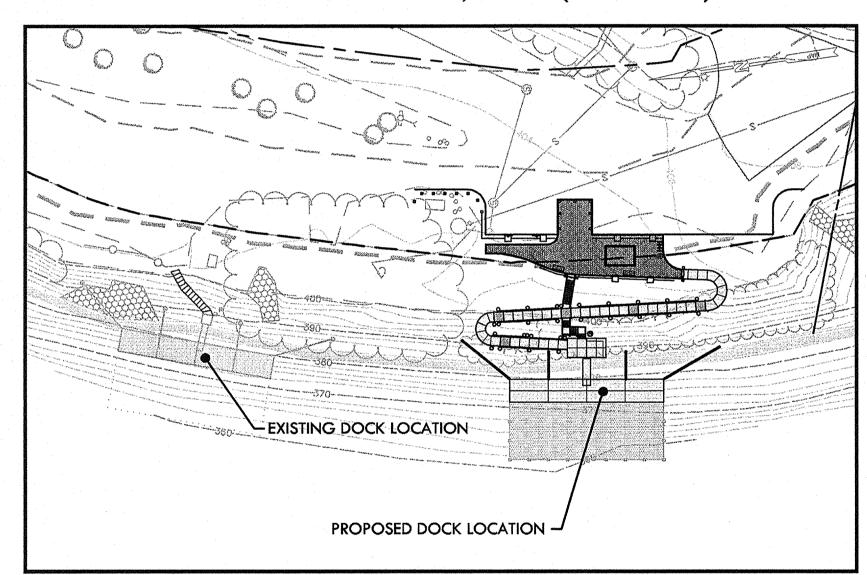
SEASONAL STUDENT SWIM DOCK DARTMOUTH COLLEGE RIVERFRONT ON THE CONNECTICUT RIVER

TUCK DRIVE HANOVER, NEW HAMPSHIRE

REGULATORY SUBMISSION FEBRUARY 4, 2011 (STATE) FEBRUARY 17, 2011 (LOCAL)



PROJECT SITE VICINITY MAP:

LIST OF DRAWINGS:

01	200 cats	TITLE
02-03	S-1-2	SURVEY WORKSHEETS
04	SP-1	SITE PLAN - EXISTING CONDITIONS
05	SP-2	SITE PLAN - LAYOUT
06	SP-3	SITE PLAN - LANDSCAPING
07	SP-4	SITE PLAN - GRADING AND UTILITIES
08-09	JA-1-2	JURISDICTIONAL AREA IMPACTS
10	CP-1	CONSTRUCTION PLAN - SEDIMENT AND EROSION CONTROL
11	D-1	DETAILS - SEDIMENT AND EROSION CONTROL NARRATIVE
12-13	D-2-3	DETAILS - SEDIMENT AND EROSION CONTROL
14	D-4	DETAILS - STRUCTURAL
15-16	D-5-7	DETAILS - SITE
		WALL THE PROPERTY OF THE PROPE

GENERAL NOTES

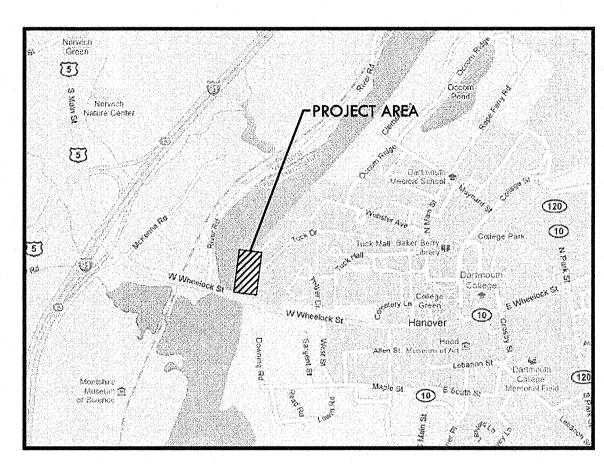
- 1. BOUNDARY INFORMATION IS BASED UPON FIELD SURVEY CONDUCTED BY: MILONE AND MACBROOM, INC. TAKEN FROM A MAP ENTITLED SURVEY WORKSHEET PREPARED FOR DARTMOUTH COLLEGE AT A SCALE OF 1"=40', DATED: DECEMBER 28, 2010
- 2. INFORMATION REGARDING THE LOCATION OF EXISTING UTILITIES HAS BEEN BASED UPON AVAILABLE INFORMATION AND MAY BE INCOMPLETE, AND WHERE SHOWN SHOULD BE CONSIDERED APPROXIMATE. THE LOCATION OF ALL EXISTING UTILITIES SHOULD BE CONFIRMED PRIOR TO BEGINNING CONSTRUCTION. CALL "DIG SAFE", 1—888—DIG—SAFE (1—888—344—7233). ALL UTILITY LOCATIONS THAT DO NOT MATCH THE VERTICAL OR HORIZONTAL CONTROL SHOWN ON THE PLANS SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR RESOLUTION.
- 3. MILONE & MACBROOM INC. ACCEPTS NO RESPONSIBILITY FOR THE ACCURACY OF MAPS AND DATA WHICH HAVE BEEN SUPPLIED BY OTHERS.
- 4. ALL UTILITY SERVICES ARE TO BE UNDERGROUND. THE EXACT LOCATION AND SIZE OF ELECTRIC, TELEPHONE, CABLE TELEVISION AND GAS ARE TO BE DETERMINED BY THE RESPECTIVE UTILITY COMPANIES.
- 5. ALL DIMENSIONS AND ELEVATIONS SHALL BE VERIFIED IN THE FIELD PRIOR TO CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT/ENGINEER.
- 6. SEDIMENT AND EROSION CONTROL MEASURES AS DEPICTED ON THESE PLANS AND DESCRIBED WITHIN THE SEDIMENT AND EROSION CONTROL NARRATIVE SHALL BE IMPLEMENTED AND MAINTAINED UNTIL PERMANENT COVER AND STABILIZATION IS ESTABLISHED. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL CONFORM TO THE "GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL, CONNECTICUT 2002, AND IN ALL CASES BEST MANAGEMENT PRACTICES SHALL PREVAIL.
- 7. ALL DISTURBED AREAS SHALL RECEIVE A MINIMUM OF 6" TOPSOIL, AND BE SEEDED WITH GRASS OR SODDED, AS SHOWN ON THE PLANS.
- 8. ALL STORM DRAIN PIPE SHALL BE SMOOTH LINED CORRUGATED PLASTIC PIPE (SLCPP) UNLESS OTHERWISE INDICATED.
- 9. ALL PROPOSED CONTOURS AND SPOT ELEVATIONS INDICATE FINISHED GRADE.
- 10. ALL CONSTRUCTION MATERIALS AND METHODS SHALL CONFORM TO THE TOWN OF HANOVER REQUIREMENTS AND TO THE APPLICABLE SECTIONS OF THE STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADS, BRIDGES, AND INCIDENTAL CONSTRUCTION.
- 11. ALL GUTTERS, ROOF DRAINS AND FOUNDATION DRAINS SHALL BE TIED INTO THE PROPOSED STORM DRAINAGE SYSTEM.
- 12. THE PLANS REQUIRE A CONTRACTOR'S WORKING KNOWLEDGE OF LOCAL, MUNICIPAL, WATER AUTHORITY, AND STATE CODES FOR UTILITY SYSTEMS. ANY CONFLICTS BETWEEN MATERIALS AND LOCATIONS SHOWN, AND LOCAL REQUIREMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO THE EXECUTION OF WORK. THE ENGINEER WILL NOT BE HELD LIABLE FOR COSTS INCURRED TO IMPLEMENT OR CORRECT WORK WHICH DOES NOT CONFORM TO LOCAL CODE.
- 13. ALL FUEL, OIL, PAINT, OR OTHER HAZARDOUS MATERIALS SHOULD BE STORED IN A SECONDARY CONTAINER AND REMOVED TO A LOCKED INDOOR AREA WITH AN IMPERVIOUS FLOOR DURING NON-WORK HOURS. ALL HAZARDOUS MATERIALS TO BE STORED OUTSIDE OF THE 100-YEAR FLOOD PLAIN.
- 14. COMPLIANCE WITH THE PERMIT CONDITIONS IS THE RESPONSIBILITY OF BOTH THE CONTRACTOR AND THE PERMITTEE.
- 15. THE PROPERTY OWNER MUST MAINTAIN (REPAIR/REPLACE WHEN NECESSARY) THE SILTATION CONTROL UNTIL ALL DEVELOPMENT ACTIVITY IS COMPLETED AND ALL DISTURBED AREAS ARE PERMANENTLY STABILIZED.

PREPARED BY:



Engineering,
Landscape Architecture
and Environmental Science

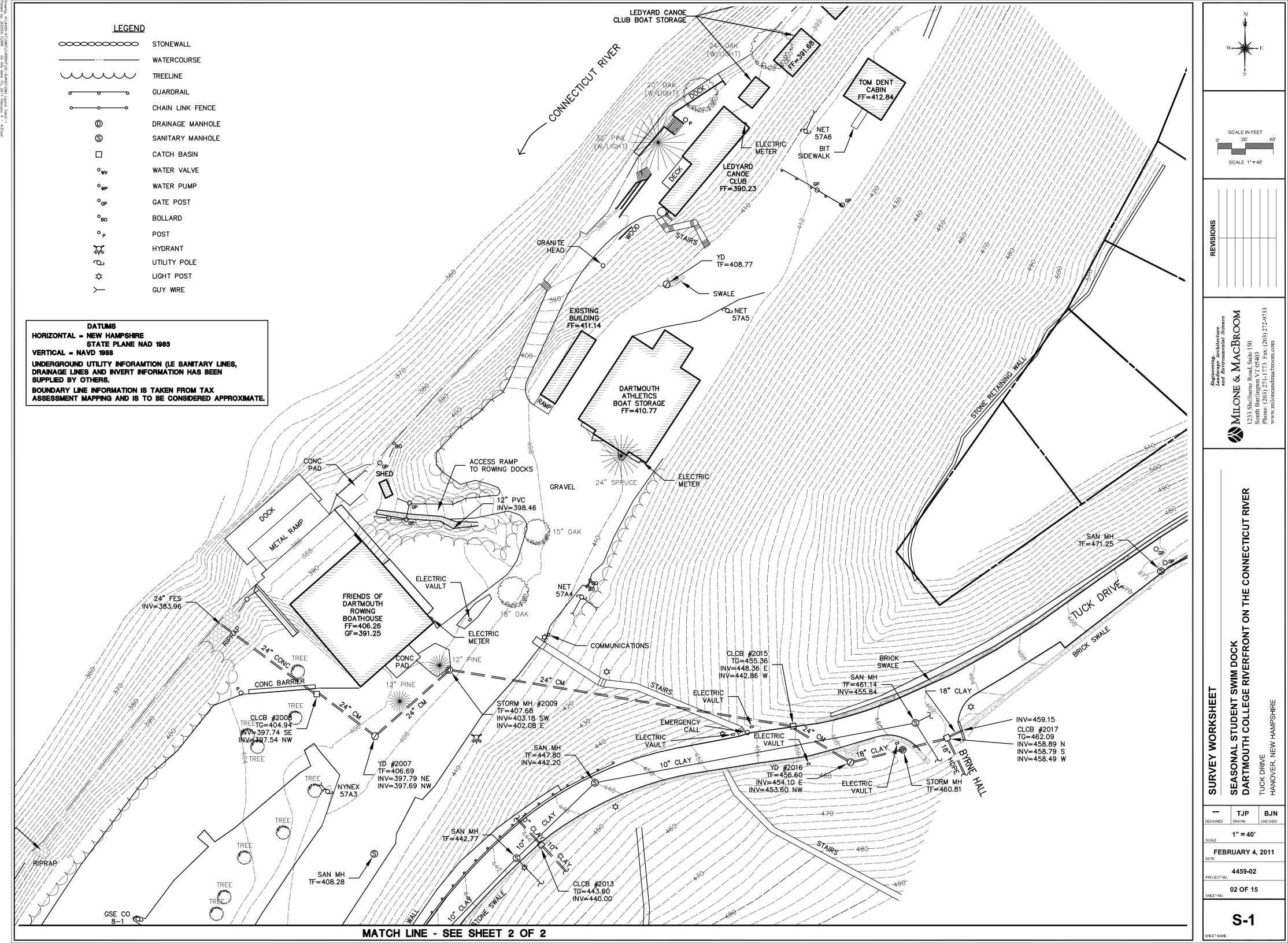
1233 Shelburne Road, Suite 150 South Burlington, Vermont 05403 (802) 864-1600 Fax (802) 864-1601 www.miloneandmacbroom.com

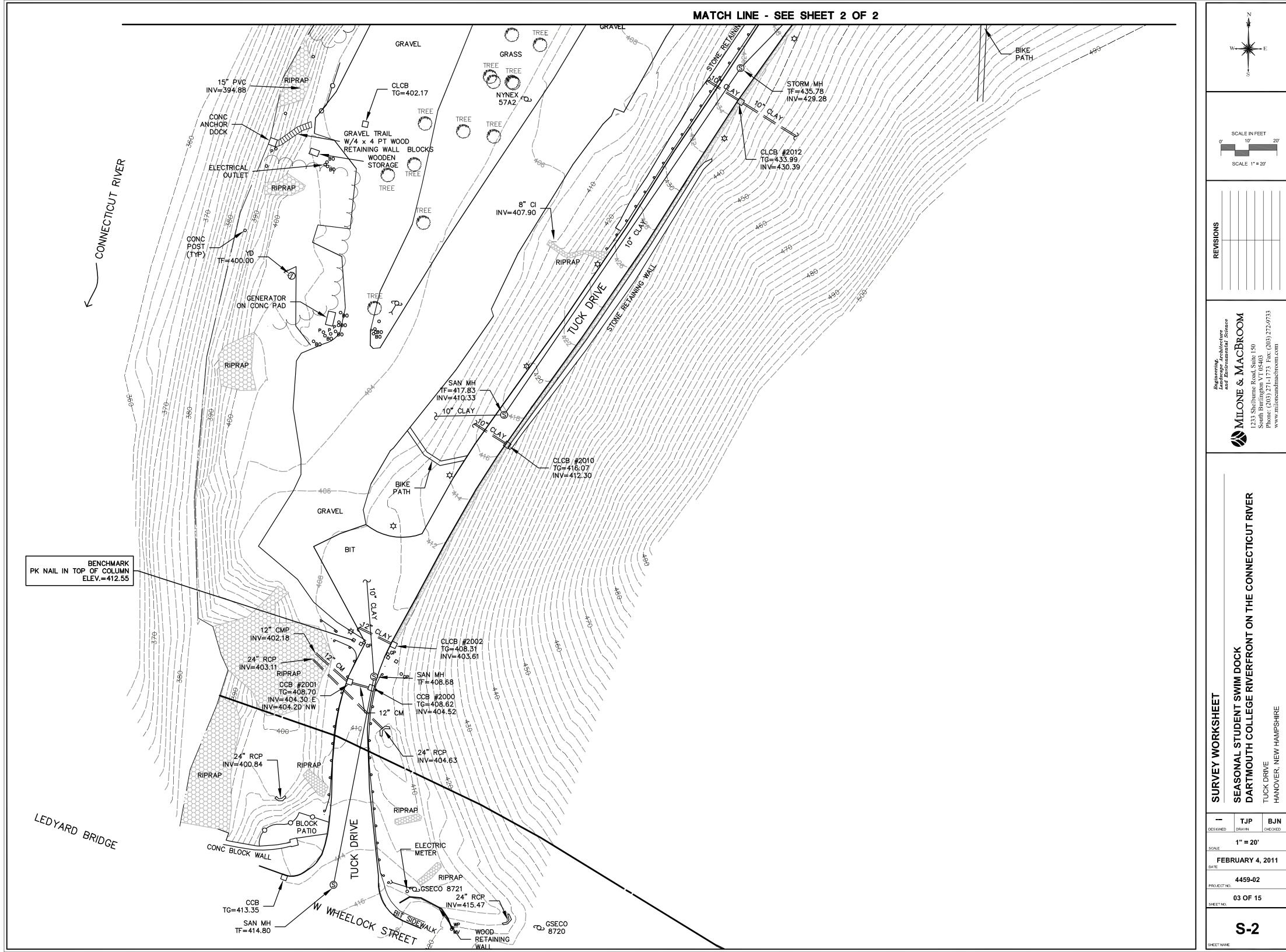


LOCATION MAP
NOT TO SCALE

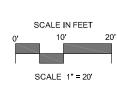
OWNER/ APPLICANT:

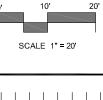
JOANNA WHITCOMB c/o TRUSTEES OF DARTMOUTH COLLEGE 63 SOUTH MAIN STREET HANOVER, NH 03755

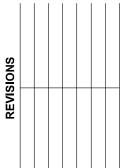








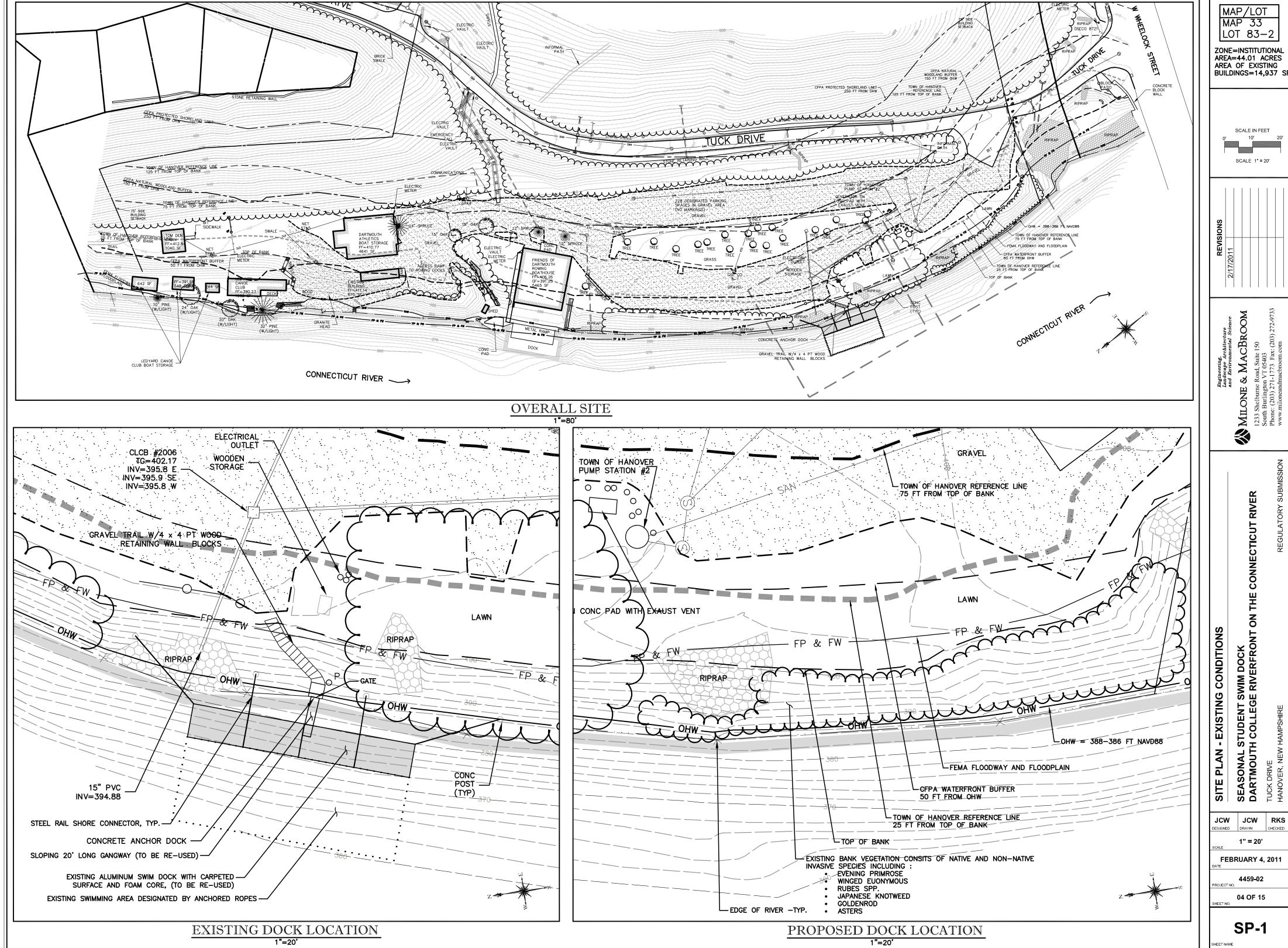






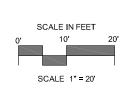
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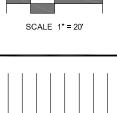
FEBRUARY 4, 2011



MAP/LOT MAP 33 LOT 83-2

ZONE=INSTITUTIONAL AREA=44.01 ACRES AREA OF EXISTING BUILDINGS=14,937 SF





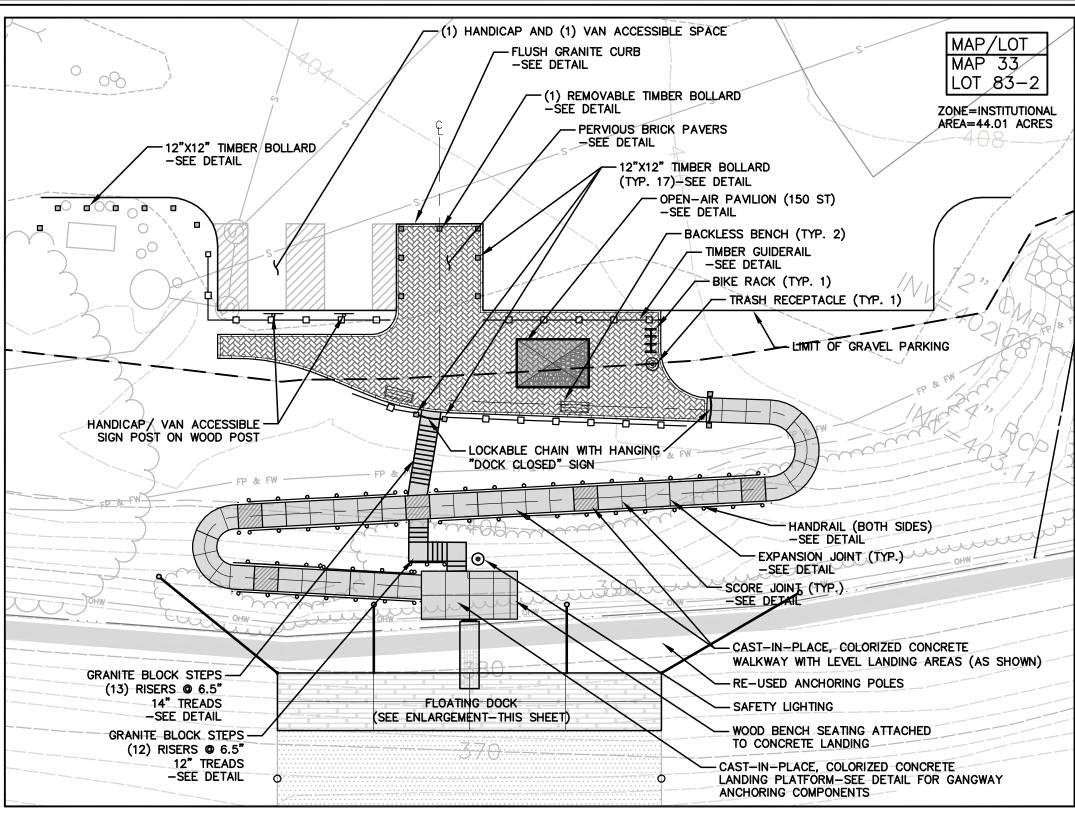


SEASONAL STUDENT S'
DARTMOUTH COLLEGE
TUCK DRIVE
HANOVER, NEW HAMPSHIRE

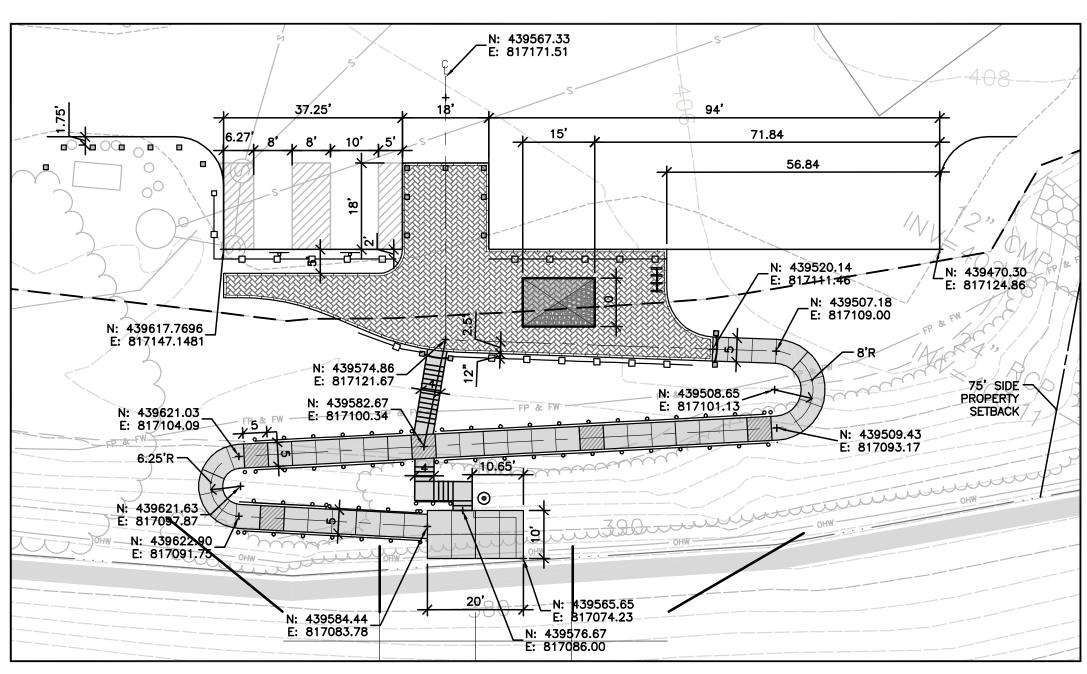
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04 OF 15

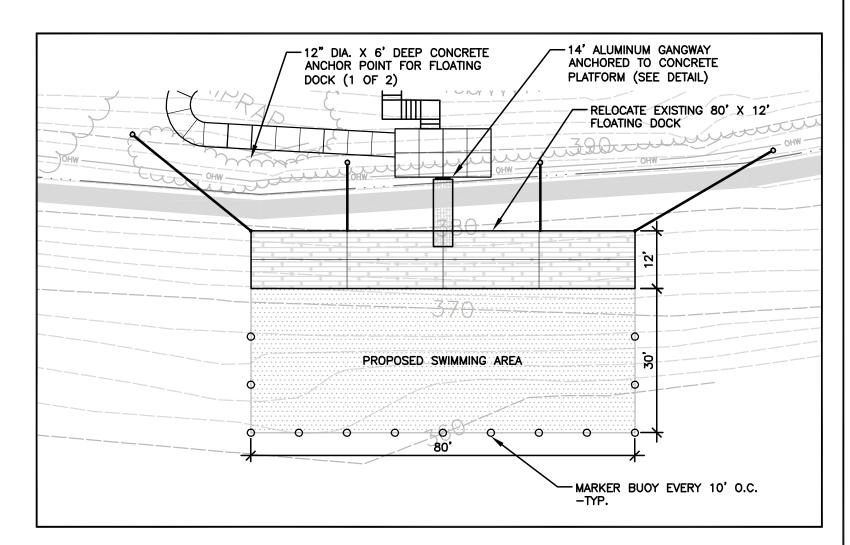
SP-1



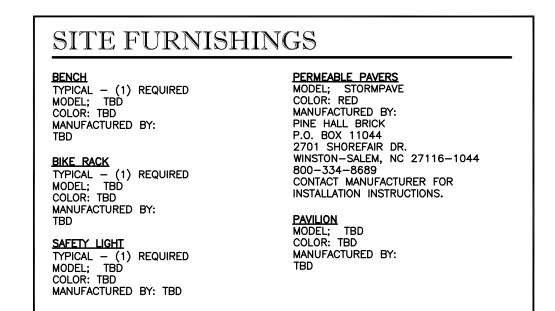
DOCK ACCESS AND PARKING — MATERIALS PLAN
(SCALE: 1"=20")

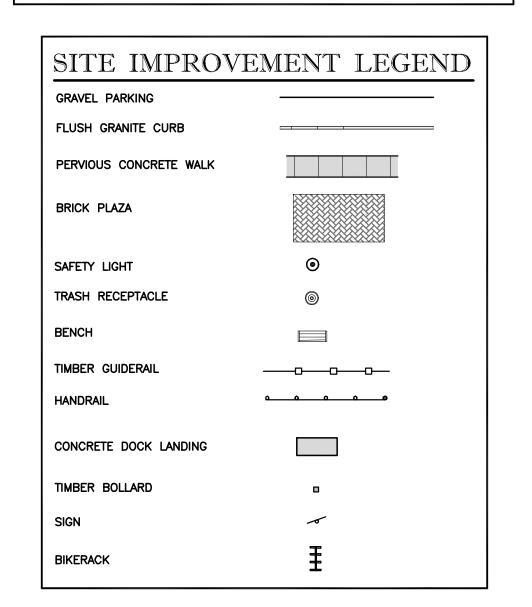


DOCK ACCESS AND PARKING — LAYOUT PLAN (SCALE: 1"=20")

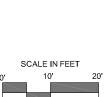


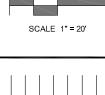
FLOATING DOCK AND SWIMMING AREA ENLARGEMENT (SCALE: 1"=20")











2/17/2011

MILONE & MACBROOM
1233 Shelburne Road, Suite 150
South Burlington VT 05403
Phone: (203) 271-1773 Fax: (203) 272-9733

SITE PLAN - LAYOUT
SEASONAL STUDENT SWIM DOCK
DARTMOUTH COLLEGE RIVERFRONT ON THE CONNECTICUT RIVER

JCW RKS
DRAWN CHECKED

1" = 20'

1" = 20'
FEBRUARY 4, 2011

4459-02 05 OF 15

SP-2

3P

JCW

PLANTING PLAN

DRIVE POST AT ANGLE AND

DRAW VERTICAL

-SUPPORT POST

1/4 WIDTH ROOTBALL

RUBBER HOSE

DOUBLE STRAND NO. 12 GAUGE

-GALVANIZED WIRE TWISTED. DO NOT OVERTIGHTEN WIRE

WOOD-CHIP MULCH

EARTH SAUCER

GRADE 1 ON 2

-GRADE 1 ON 3

GRADE 1 ON 2

12" MIN.─

tree Pit

LIMIT OF BALL-

ROOT BALL

SECTION GRADING FOR TREE ON SLOPE

2X'S ROOT BALL MIN.

NOTES:

1. SUPPORT STAKES SHALL BE

REMOVED BY THE CONTRACTOR

ONE YEAR AFTER INSTALLATION

TREE ON SLOPE DETAIL

N.T.S.

SLOPED SIDES-

PLANTING SOIL &_

PEAT BACKFILL

VARIES

GRADE 1 ON 3-

MAINTAIN SAUCER ON LOWER SIDES OR STEEPER OF PLANT TO RETAIN WATER GRADE COMPACT PLANTING SOIL MIX WATER AND TAMP TO REMOVE AIR POCKETS SHREDDED MULCH SHALL BE PLACED TO A LIMIT OF ONE FOOT BEYOND THE CENTER OF THE OUTERMOST SHRUBS IN SHRUB BED.

SHRUB ON SLOPE DETAIL

SEEDING LEGEND

ZONE A - RIVERFRONT SLOPE

CUSTOM NEW ENGLAND CONSERVATION & WILDLIFE MIX

SEED THE SLOPE AREAS OF THE BANK, AS SHOWN. BEST RESULTS ARE OBTAINED WITH AN EARLY SPRING SEEDING. SUMMER SEEDING CAN BE SUCCESSFUL WITH A LIGHT MULCH OF WEED FREE STRAW TO CONSERVE MOISTURE. LATE FALL AND WINTER DORMANT SEEDING REQUIRES A SLIGHT INCREASE IN SEEDING RATE. FERTILIZATION IS NOT REQUIRED UNLESS SOILS ARE APPLICATION RATE: 30 LBS/ACRE

ZONE B - BIO-INFILTRATION AREAS

CUSTOM NORTHEAST NATIVE WILDFLOWER & GRASS MIX

SEED BOTTOM AND PERIMETER SLOPES OF THE INFILTRATION AREAS, AS SHOWN. BEST RESULTS ARE OBTAINED WITH AN EARLY SPRING SEEDING. SUMMER SEEDING CAN BE SUCCESSFUL WITH A LIGHT MULCH OF WEED FREE STRAW TO CONSERVE MOISTURE. LATE FALL AND WINTER DORMANT SEEDING REQUIRES A SLIGHT INCREASE IN SEEDING RATE. FERTILIZATION IS NOT REQUIRED UNLESS SOILS ARE PARTICULARLY INFERTILE. APPLICATION RATE: 30 LBS/ARCE

	ZONE C - LAWN MIX	PERCENT BY WEIGHT	MIN. PURITY	MIN. GERMINATION
// \	LIBERATOR KENTUCKY BLUE GRASS	40	98	98
	(AS MANUFACTURED BY JACKLIN SEED)			
	*VICTORY II CHEWING FESCUE (AS MANUFACTURED BY BURLINGHAM SEEDS, LLC)	20	98	85
	*EPIC STRONG CREEPING RED FESCUE	20	98	85
	(AS MANUFACTURED BY PROSEEDS MARKETING, INC.) SPARTAN HARD FESCUE	20	96	85
	(AS MANUFACTURED BY PICKSEED WES, INC.)	20	30	03
	* HIGH ENDOPHYTE			

* SEEDING RATE - 220 POUNDS PER ACRE

THE SEED MIXTURE IS TO HAVE NO NOXIOUS WEEDS. OTHER CULTIVARS OF PERENNIAL RYEGRASS, CHEWING FESCUE AND CREEPING FESCUE WITH HIGH ENDOPHYTE, HARD FESCUE, AND KENTUCKY BLUEGRASS MAY BE SUBSTITUTED FOR THE ABOVE LISTED CULTIVARS WITH THE APPROVAL OF THE OWNER. HOWEVER, THE SAME NUMBER OF SPECIES AND CULTIVARS WITH THEIR PERCENTAGE BY WEIGHT IN THE MIXTURES MUST REMAIN THE SAME AS SPECIFIED ABOVE

SEE SEDIMENT AND EROSION CONTROL PLAN FOR LAWN SEEDING LOCATIONS

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TREES	QTY	KEY	BOTANICAL NAME	COMMON NAME	SIZE	COMMENTS
\ }	4	BP	Betula papyrifera	Paper Birch	1.5"-2" CAL.	B & B, Singleste
	3	AC	Amelanchier canadensis	Shadblow	6'-8' HT.	B & B, MULTI-STEM
		-				

SHRUBS PERENNIALS GROUNDCOVERS	QTY	KEY	BOTANICAL NAME	COMMON NAME	SIZE	COMMENTS
	1015 (sq.ft.)	VA	Vaccinium angustifolium	Lowbush Blueberry	SOD	FULL & DENSE
	19	CR	Cornus racemosa	Gray Dogwood	3 GAL.	FULL & DENSE
	20	SL	Spiraea latifolia	Meadowsweet	2 GAL.	FULL & DENSE
\bigcirc	157	CP	Comptonia peregrine	Sweetfern	1 GAL.	FULL & DENSE
$\odot \oplus$	154	AU	Arctostaphylos uva—ursi	Bearberry	1 GAL.	FULL & DENSE
	15	MS	Matteuccia struthiopteris	Ostrich Fern	1 GAL.	FULL & DENSE
	25	ос	Osmunda cinnamomea	Cinnamon Fern	1 GAL.	FULL & DENSE
	1395 (sq.ft.)	DP	Dennstaedtia punctilobula	Hay-scented Fern	SOD	FULL & DENSE

<u>abb</u>	revi.	<u>atio</u>	<u>NS</u>
DEV		DEV	101

REV.	=	REVISION	B&B	=	BALL AND BURL
QTY.	=	QUANTITY	GAL.	=	GALLON
QTY. SPR.	=	SPREAD	CAL.	=	CALIPER
HT.	=	HEIGHT	CONT.	=	CONTAINER
A CINT		A ALKAHA ALI IA A			

PLANTING & SEEDING NOTES

THE CONTRACTOR SHALL INSPECT SITE AND VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO BEGINNING PLANTING OPERATIONS. CONTRACTOR TO NOTIFY THE LANDSCAPE ARCHITECT OF ANY CONDITIONS THAT ARE NOT SUITABLE TO PERFORMING PLANTING OPERATIONS AND/OR ANY CONDITIONS THAT WOULD PREVENT HEALTHY GROWTH OF PLANT MATERIAL. CONTRACTOR SHALL TAKE PRECAUTIONS NOT TO DISTURB THE AESTHETIC SENSITIVITY OF THE AREA.

THE LANDSCAPE CONTRACTOR SHALL PROVIDE A 6" MINIMUM DEPTH OF TOPSOIL FOR ALL DISTURBED AND PROPOSED SEEDING AREAS. CONTRACTOR SHALL SEED ALL DISTURBED AREAS WITH SPECIFIED SEED MIX-SEE SEEDING LEGEND THIS SHEET. INSURE SEED GERMINATION THROUGH THE USE OF SPRINKLERS. ANY WEEDS THAT GERMINATE DURING SEED ESTABLISHMENT ARE TO BE PROMTLY REMOVED BY HAND.

THE LANDSCAPE CONTRACTOR SHALL PROVIDE A 12" MINIMUM DEPTH OF TOPSOIL FOR ALL PLANTING BEDS CONTAINING TREES, SHRUBS AND PERENNIALS. SHRUB PLANTINGS SHALL HAVE WELL ROTTED MANURE ADDED TO THE TOPSOIL MIX AT A RATIO OF 2 PARTS MANURE TO 7 PARTS TOPSOIL. BECAUSE OF SLOPE CONDITION, CONTRACTOR TO INSURE THAT EACH PLANT HAVE ITS OWN SOIL "SAUCER".

THE LANDSCAPE CONTRACTOR SHALL PROVIDE A 4" MIN. DEPTH OF LOCAL/ NEW ENGLAND SHREDDED CEDAR MULCH OVER ALL PLANTING BEDS AND TREE PLANTINGS. NO DYED MULCH TO BE USED. BEFORE MULCHING, EROSION CONTROL BLANKET TO BE INSTALLED AROUND PROPOSED SHRUB AND PERENNIALS PLANTINGS AND HELD IN PLACE WITH STAPLES—SEE S & E PLAN.

PLANT GROUPINGS AND LOCATIONS ARE DIAGRAMMATIC. ALL PLANT MATERIAL AND FINAL LOCATIONS TO BE INSPECTED/ LAID OUT AND APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO AND AFTER PLANTING. ALL PLANT MATERIAL SUBSTITUTIONS ARE SUBJECT TO REVIEW AND WRITTEN APPROVAL BY THE LANDSCAPE ARCHITECT. ADJUST PLANT LOCATIONS AS REQUIRED TO AVOID AREAS OF BEDROCK (IF

ALL PLANT MATERIALS SHALL CARRY A FULL GUARANTEE FOR A PERIOD OF ONE YEAR FROM THE DATE OF PROJECT COMPLETION, TO INCLUDE PROMPT TREATMENT OR REMOVAL AND REPLACEMENT OF ANY PLANTS FOUND TO BE IN AN UNHEALTHY CONDITION BY THE LANDSCAPE ARCHITECT. ALL REPLACEMENTS SHALL BE OF THE SAME KIND AND SIZE OF PLANTS SPECIFIED IN THE PLANT LIST

MAINTENANCE SHALL BEGIN IMMEDIATELY AFTER PLANTING AND SHALL CONTINUE UNTIL ACCEPTANCE BY THE LANDSCAPE ARCHITECT. MAINTENANCE SHALL INCLUDE WATERING, MULCHING, TIGHTENING & REPLACING OF GUYS, REPLACEMENT OF SICK OR DEAD PLANTS, RESETTING PLANTS TO PROPER GRADE OR UPRIGHT (PLUMB) POSITION, RESTORATION OF SAUCERS, AND ALL OTHER CARE NEEDED FOR PROPER GROWTH OF THE PLANTS.

WHERE A SIZE RANGE IS SPECIFIED AT LEAST 50% OF PLANTS PROVIDED SHALL BE OF THE LARGER

ALL TREES ARE TO BE SPECIMEN QUALITY. CONTRACTOR TO REMOVE TREE STAKES AFTER ONE GROWING

ALL PLANTS IN THE SAME PLANTING BED SHALL BE PLANTED IN GROUPINGS, BY HAND, AT THE SAME TIME. ANY PLANTS REMAINING UNPLANTED ON THE SITE FOR MORE THAN 24 HRS. SHALL BE PROTECTED AND MAINTAINED INCLUDING BUT NOT LIMITED TO WATER AND SHADE. ANY DAMAGED PLANTS SHALL BE REPLACED AS DIRECTED, AT THE CONTRACTOR'S EXPENSE,

ALL WOODY PLANT MATERIAL SHALL BE PROVIDED IN CONTAINERS THAT ARE APPROPRIATELY SIZED FOR THE SPECIFIED PLANT. HERBACEOUS PLANT MATERIAL SHALL BE A MIN. #1 CONTAINER. WETLAND PLANTS SHALL HAVE BEEN GROWN IN A LOCAL/REGIONAL NURSERY.

EROSION CONTROLS SHALL BE INSTALLED, REPAIRED AND MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD OF THE PROJECT OR UNTIL THE SITE IS FULLY STABILIZED BY VEGETATION. EROSION CONTROLS SHALL THEN BE REMOVED FROM THE SITE.

TEMPORARY STOCKPILE AREAS SHALL BE BORDERED WITH SEDIMENT AND EROSION CONTROL FENCE AND HAY BALES. SEE SEDIMENT AND EROSION CONTROL PLAN AND DETAILS.ALL TOPSOIL IS TO BE STOCKPILED AND RE-SPREAD TO COVER ALL DISTURBED AREAS. TOPSOIL STORAGE AREA TO BE REMOVED AND RESTORED TO ORIGINAL CONDITION.

SEEDING AND SHRUB, PERENNIALS, AND GROUNDCOVER PLANTINGS ARE TO BE PLANTED ONLY AFTER STABALIZATION OF CONTRIBUTING DRAINAGE AREAS.

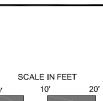
THE SOILS IN THE BIO-INFILTRATION AREAS ARE NOT TO BE COMPACTED. BOTTOM OF BIO-INFILTRATION AREAS TO HAVE AN UNDULATING TOPOGRAPHY WITH SUNKEN HUMMOCK AREAS. SEED DESIGNATED AREAS WITH SEED MIXES AS NOTED IN SEEDING LEGEND. A & B SEED MIXES SPECIFIED BY VERMONT WETLAND PLANT SUPPLY, LLC P.O. BOX 153

ORWELL, VT 05760 802-948-2522

BLUEBERRY (VACCINIUM ANGUSTIFOLIUM) AND HAY-SCENTED FERN SOD (DENNSTAEDTIA PUNCTILOBULA) PROVIDED BY:

FRED'S WILD SOD BLUE HILL, ME (207) 374-5237





SWIM DOCK E RIVERFRONT ON THE CONNECTICUT RIVER LANDS

SITE

JCW

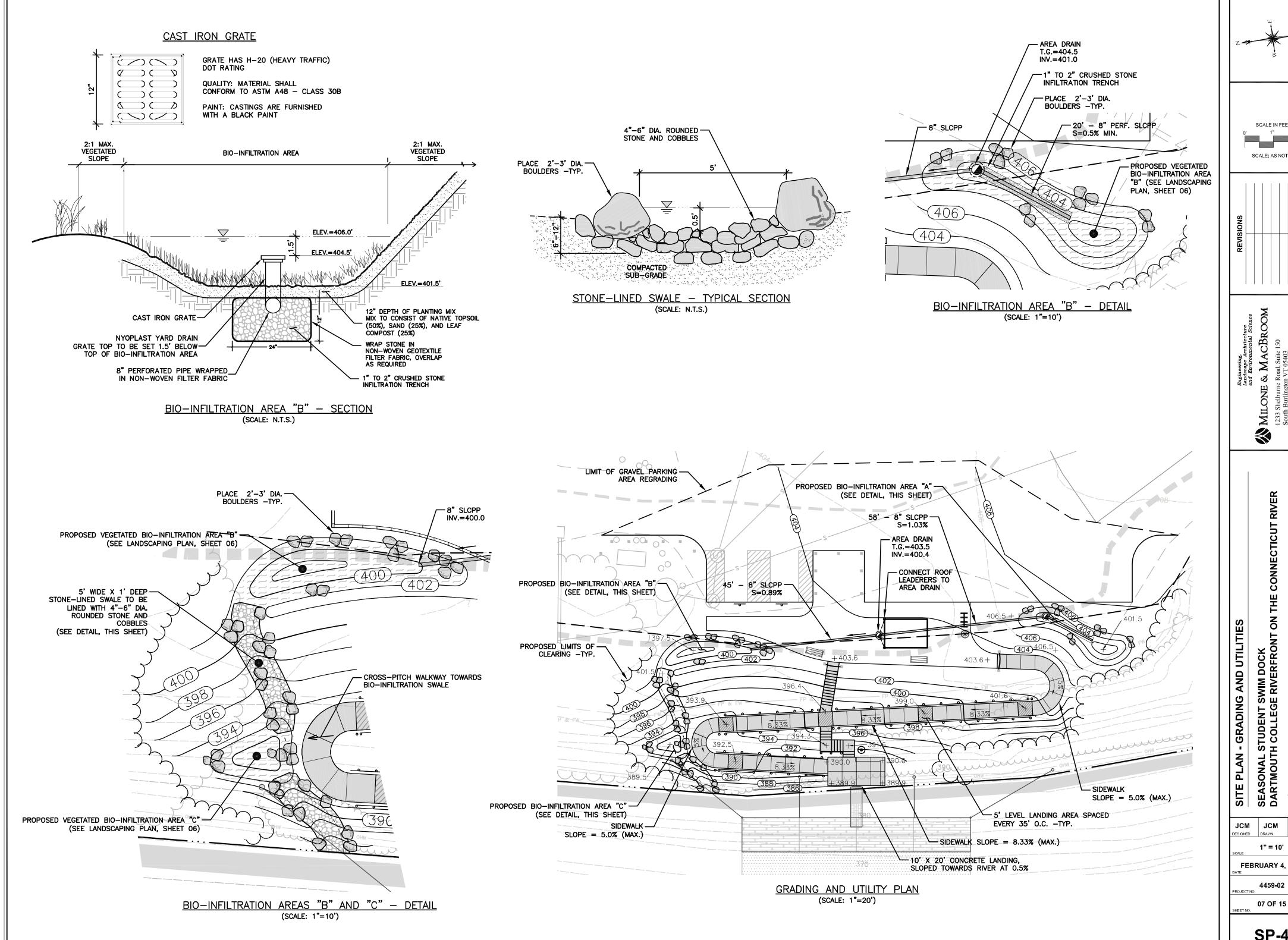
SEASONAL STUDENT S'
DARTMOUTH COLLEGE
TUCK DRIVE
HANOVER, NEW HAMPSHIRE JCW RKS

1" = 20'

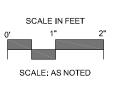
FEBRUARY 4, 2011

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SP-3







MILONE & MACBROOM
1233 Shelburne Road, Suite 150

SEASONAL STUDENT SWIM DOCK

DARTMOUTH COLLEGE RIVERFRONT ON THE CONNECTICUT RIVER
TUCK DRIVE
HANOVER, NEW HAMPSHIRE

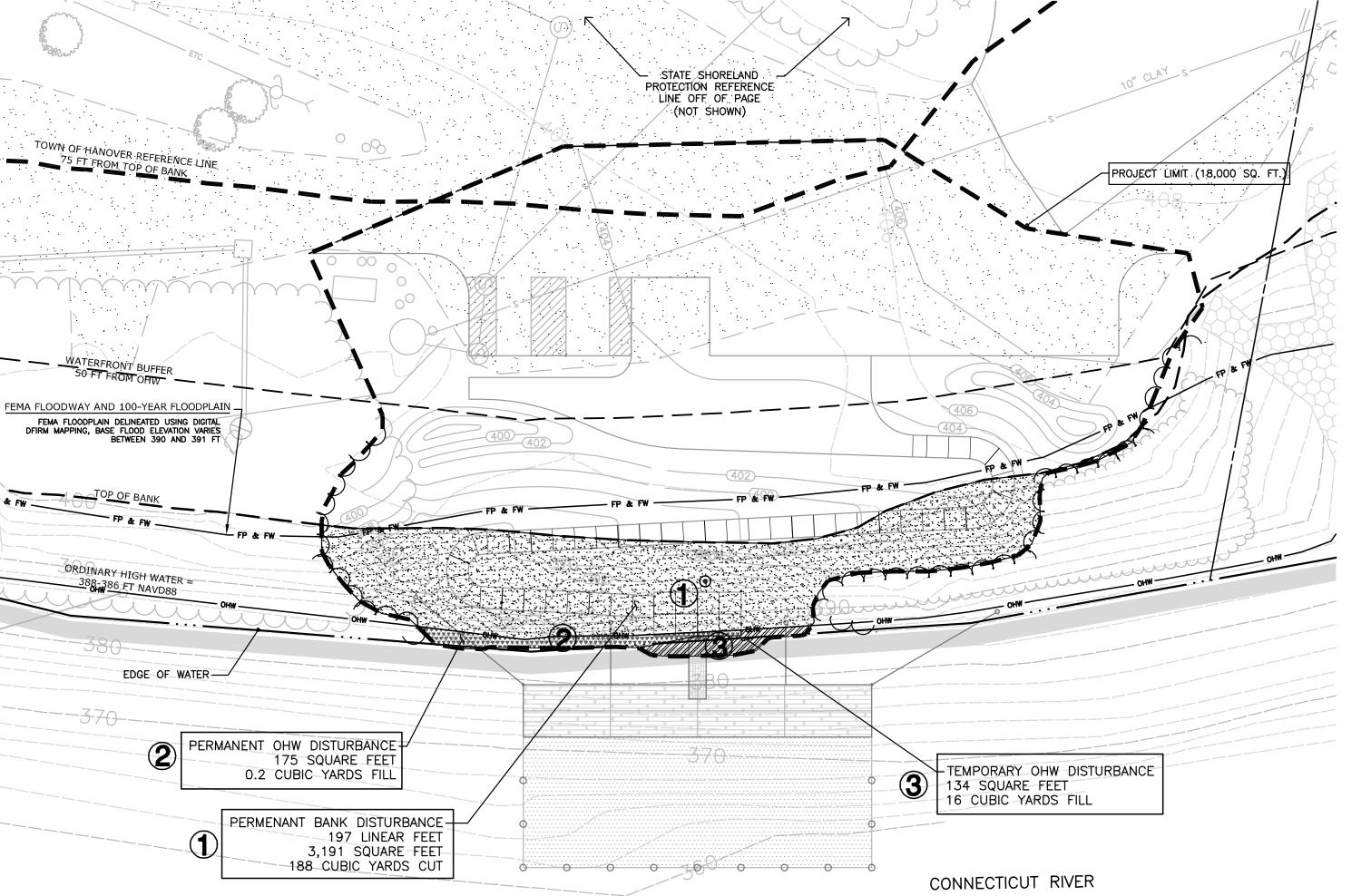
REGULATORY SUE

JCM JCM WAG

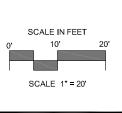
1" = 10' **FEBRUARY 4, 2011**

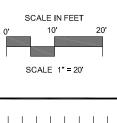
4459-02

SP-4











SEASONAL STUDENT SWIM DOCK

DARTMOUTH COLLEGE RIVERFRONT ON THE CONNECTICUT RIVER

TUCK DRIVE

HANOVER, NEW HAMPSHIRE

REGULATORY SUB

EA IMPACTS - STATE

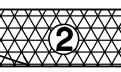
JURISDICTIONAL AR JCM JSC

1" = 20' **FEBRUARY 4, 2011**

4459-02 08 OF 15

RA-1

DISTURBANCE 25-75 FT FROM TOP OF BANK



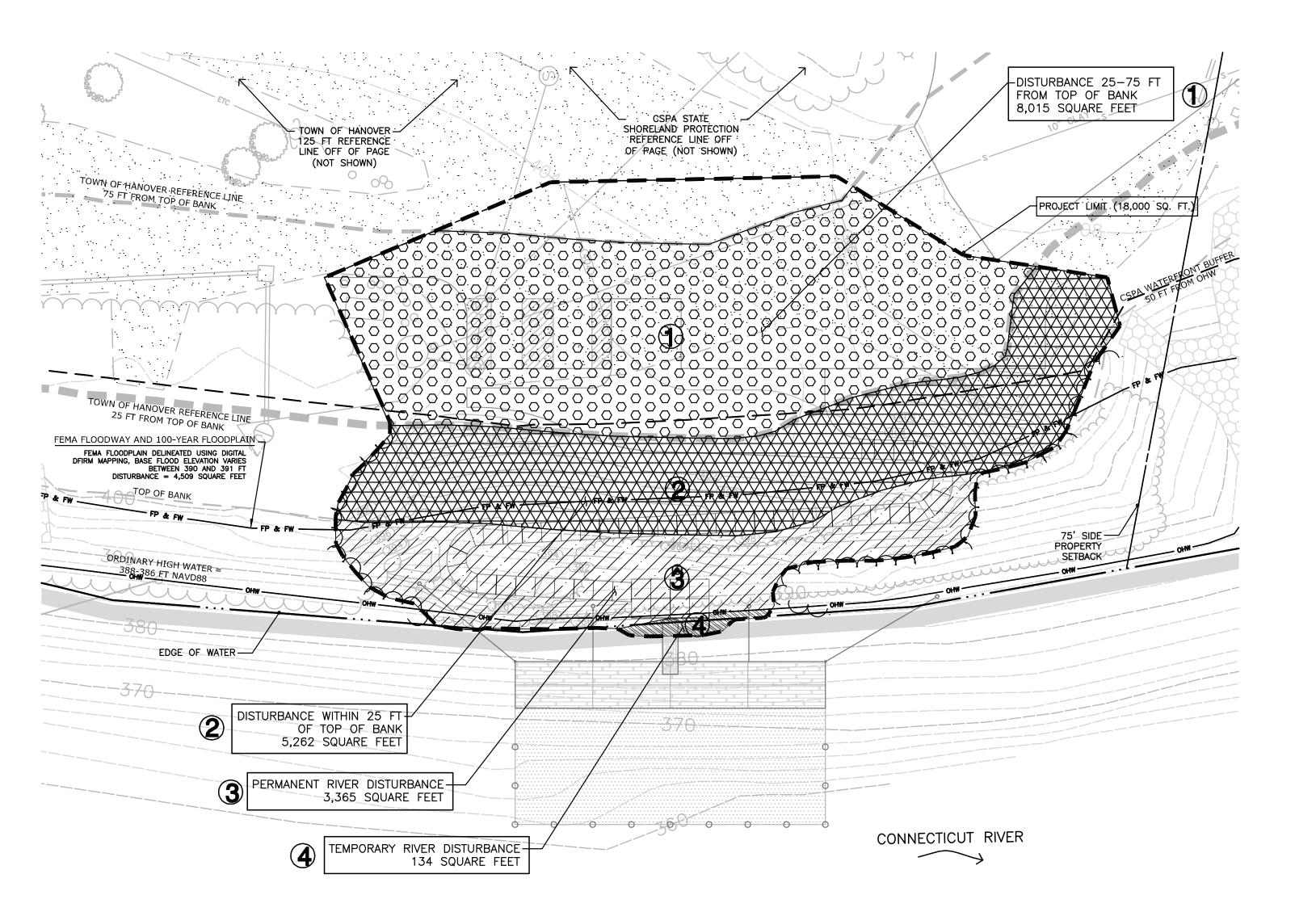
DISTURBANCE 0-25 FT FROM TOP OF BANK



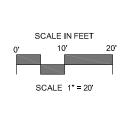
PERMANENT RIVER DISTURBANCE

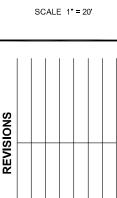


TEMPORARY RIVER DISTURBANCE

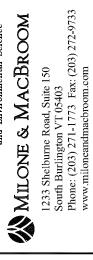












SEASONAL STUDENT SWIM DOCK
DARTMOUTH COLLEGE RIVERFRONT ON THE CONNECTICUT RIVER EA IMPACTS - STATE

JURISDICTIONAL AR

JSC JCW **FEBRUARY 17, 2011** 4459-02

JA-2

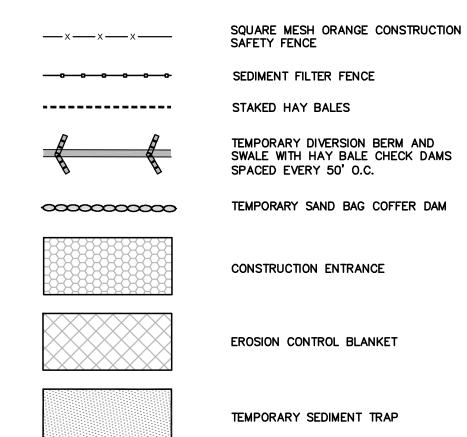
09 OF 15

CONSTRUCTION SEQUENCE:

- PRIOR TO COMMENCEMENT OF WORK A PRECONSTRUCTION MEETING SHALL BE HELD WITH CITY STAFF AND REPRESENTATIVES OF THE CONTRACTOR AND OWNER. AT THIS MEETING, ONE PERSON WILL BE PLACED IN CHARGE OF SEDIMENT AND EROSION CONTROL FOR THE ENTIRE SITE.
- 2. CONTRACTOR TO STAKE OUT LIMIT OF DISTURBANCE AND VEGETATION TO BE RETAINED. NO DISTURBANCE IS TO TAKE PLACE BEYOND THE LIMITS OF WORK SHOWN.
- 3. CONTRACTOR TO INSTALL SEDIMENT AND EROSION CONTROLS ALONG THE PERIMETER, PEDESTRIAN SAFETY FENCING AND GATES, AND STABILIZED CONSTRUCTION ENTRANCE.
- 4. CLEAR AND GRUB SITE AND STOCKPILE TOPSOIL. PLACE SEDIMENT FILTER FENCE AND HAYBALES AROUND STOCKPILE/STAGING AREA.
- 5. CONTRACTOR TO INSTALL TEMPORARY DIVERSION BERMS AND SEDIMENT BASINS PER THE SEDIMENT AND EROSION CONTROL PLAN.
- 6. ALL SLOPES SHALL BE IMMEDIATELY STABILIZED AFTER THEIR ESTABLISHMENT.
- 10. INSTALL DOCK LANDING, WALK, PAVILION, UTILITIES AND PLAZA.
- 11. TEMPORARY SEDIMENT BASINS SHALL BE INSPECTED AT LEAST ONCE A WEEK AND WITHIN 24 HOURS OF THE END OF A STORM WITH A RAINFALL AMOUNT OF 0.5 INCH OR GREATER. CLEAN THE SEDIMENT BASIN WHEN SEDIMENT ACCUMULATION EXCEEDS ONE HALF THE WET STORAGE CAPACITY OF THE BASIN OR WHEN THE DEPTH OF AVAILABLE POOL IS REDUCED TO 18 INCHES, WHICHEVER IS ACHIEVED FIRST.

- 12. SEDIMENT AND EROSION CONTROLS SHALL BE INSPECTED AT LEAST ONCE A WEEK AND WITHIN 24 HOURS OF THE END OF A STORM WITH A RAINFALL AMOUNT OF 0.5 INCH OR GREATER.
- 13. THE SEDIMENT AND EROSION CONTROL PLAN SHALL BE MODIFIED BY THE CONTRACTOR AT THE DIRECTION OF THE ENGINEER AND THE CITY'S DESIGNATED REPRESENTATIVE AS NECESSITATED BY CHANGING SITE CONDITIONS
- 14. INSPECTION OF THE SITE FOR EROSION SHALL CONTINUE FOR A PERIOD OF THREE MONTHS AFTER COMPLETION WHEN RAINFALLS OF ONE INCH OR MORE OCCUR.
- 15. ALL DEWATERING WASTE WATERS SHALL BE DISCHARGED IN A MANNER WHICH MINIMIZES THE DISCOLORATION OF THE RECEIVING WATERS.
- 16. THE SITE SHOULD BE KEPT CLEAN OF LOOSE DEBRIS, LITTER, AND BUILDING MATERIALS SUCH THAT NONE OF THE ABOVE ENTER WATERS OR WETLANDS.
- 17. A COPY OF ALL PLANS AND REVISIONS, AND THE SEDIMENT AND EROSION CONTROL PLAN SHALL BE MAINTAINED ON—SITE AT ALL TIMES DURING CONSTRUCTION.

EROSION CONTROL LEGEND

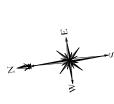


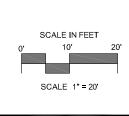
CONSTRUCTION NOTES:

- 1. THE CONSTRUCTION SEQUENCING PRESENTED ON THIS PLAN IS ONE SUGGESTED MEANS OF CONSTRUCTION. THE CONTRACTOR SHALL PREPARE AND SUBMIT A FINAL CONSTRUCTION AND WATER HANDLING PLAN FOR APPROVAL BY THE ENGINEER PRIOR TO CONSTRUCTION.
- 2. CONSTRUCTION SHALL BEGIN WITH THE PLACEMENT OF THE PROPOSED 20' X 10' CONCRETE PLATFORM AND PROCEED UPHILL. ALL DISTURBED AREAS SHALL BE STABILIZED AS INDICATED ON THIS PLAN BEFORE PROCEEDING UPHILL TO THE NEXT AREA.

TEMPORARY STAGING AND STOCKPILE AREA

- 3. ANY SLOPE 2:1 OR GREATER SHALL BE STABILIZED WITH EROSION CONTROL BLANKET.
- 4. PROPOSED BIO—INFILTRATION AREAS SHALL BE UTILIZED AS TEMPORARY SEDIMENT TRAPS DURING CONSTRUCTION. ALL RUNOFF SHALL BE DIRECTED TO THESE AREAS FOR TREATMENT USING BERMS, SWALES, HAY BALES, AND SILT FENCE AS NECESSARY.
- 5. SEDIMENT TRAPS SHALL BE INSPECTED AFTER EACH RAINFALL, AND ACCUMULATED SEDIMENT SHALL BE REMOVED.
- 6. ALL EROSION CONTROL MEASURES SHALL REMAIN IN PLACE AND BE PROPERLY MAINTAINED/REPLACED AS NECESSARY UNTIL PERMANENT STABILIZATION OF THE SITE IS ACHIEVED.
- 7. PROJECT SITE IS SUBJECT TO INUNDATION UNDER HEAVY FLOWS IN THE CONNECTICUT RIVER CONTRACTOR SHALL CEASE WORK AND STABILIZE SITE IN THE EVENT THAT THE NATIONAL WEATHER SERVICE PREDICTS MORE THAN 1" OF RAINFALL IN A 24—HOUR PERIOD.





REVISIONS

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NNECTICUT RIVER

UCTION PLAN - SEDIMENT AND EROSAL STUDENT SWIM DOCK
JTH COLLEGE RIVERFRONT ON THE CO

SEASONAL STUDENT S'
DARTMOUTH COLLEGE
TUCK DRIVE
HANOVER, NEW HAMPSHIRE

1" = 20'
ALE

TEBRUARY 4, 2011

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SEDIMENT & EROSION CONTROL SPECIFICATIONS

GENERAL:

THESE GUIDELINES SHALL APPLY TO ALL WORK CONSISTING OF ANY AND ALL TEMPORARY AND/OR PERMANENT MEASURES TO CONTROL WATER POLLUTION AND SOIL EROSION, AS MAY BE REQUIRED, DURING THE CONSTRUCTION OF THE PROJECT.

IN GENERAL, ALL CONSTRUCTION ACTIVITIES SHALL PROCEED IN SUCH A MANNER SO AS NOT TO POLLUTE ANY WETLANDS, WATERCOURSE, WATERBODY, AND CONDUIT CARRYING WATER, ETC. THE CONTRACTOR SHALL LIMIT, INSOFAR AS POSSIBLE, THE SURFACE AREA OF EARTH MATERIALS EXPOSED BY CONSTRUCTION METHODS AND IMMEDIATELY PROVIDE PERMANENT AND TEMPORARY POLLUTION CONTROL MEASURES TO PREVENT CONTAMINATION OF ADJACENT WETLANDS, WATERCOURSES, AND WATERBODIES, AND TO PREVENT, INSOFAR AS POSSIBLE, EROSION ON THE SITE.

LAND GRADING

GENERAL:

- 1. THE RESHAPING OF THE GROUND SURFACE BY EXCAVATION AND FILLING OR A COMBINATION OF BOTH, TO OBTAIN PLANNED GRADES, SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING CRITERIA:
 - a.THE CUT FACE OF EARTH EXCAVATION SHALL NOT BE STEEPER THAN TWO HORIZONTAL TO ONE VERTICAL (2:1).
 - b.THE PERMANENT EXPOSED FACES OF FILLS SHALL NOT BE STEEPER THAN TWO HORIZONTAL TO ONE VERTICAL (2:1).
 - c.THE CUT FACE OF ROCK EXCAVATION SHALL NOT BE STEEPER THAN ONE HORIZONTAL TO FOUR VERTICAL (1:4).
 - d.PROVISION SHOULD BE MADE TO CONDUCT SURFACE WATER SAFELY TO STORM DRAINS TO PREVENT SURFACE RUNOFF FROM DAMAGING CUT FACES AND FILL SLOPES.
 - e.EXCAVATIONS SHOULD NOT BE MADE SO CLOSE TO PROPERTY LINES AS TO ENDANGER ADJOINING PROPERTY WITHOUT PROTECTING SUCH PROPERTY FROM EROSION, SLIDING, SETTLING, OR CRACKING.
 - f.NO FILL SHOULD BE PLACED WHERE IT WILL SLIDE OR WASH UPON THE PREMISES OF ANOTHER OWNER OR UPON ADJACENT WETLANDS, WATERCOURSES, OR WATERBODIES.
 - g.PRIOR TO ANY REGRADING, A STABILIZED CONSTRUCTION ENTRANCE SHALL BE PLACED AT THE ENTRANCE TO THE WORK AREA IN ORDER TO REDUCE MUD AND OTHER SEDIMENTS FROM LEAVING THE SITE.

<u>TOPSOILING</u>

GENERAL:

- 1. TOPSOIL SHALL BE SPREAD OVER ALL EXPOSED AREAS IN ORDER TO PROVIDE A SOIL MEDIUM HAVING FAVORABLE CHARACTERISTICS FOR THE ESTABLISHMENT, GROWTH, AND MAINTENANCE OF VEGETATION.
- 2. UPON ATTAINING FINAL SUBGRADES, SCARIFY SURFACE TO PROVIDE A GOOD BOND WITH TOPSOIL.
- 3. REMOVE ALL LARGE STONES, TREE LIMBS, ROOTS AND CONSTRUCTION DEBRIS.
- 4. APPLY LIME ACCORDING TO SOIL TEST OR AT THE RATE OF TWO (2) TONS PER ACRE.

MATERIAL:

- 1. TOPSOIL SHOULD HAVE PHYSICAL, CHEMICAL, AND BIOLOGICAL CHARACTERISTICS FAVORABLE TO THE GROWTH OF PLANTS.
- 2. TOPSOIL SHOULD HAVE A SANDY OR LOAMY TEXTURE.
- 3. TOPSOIL SHOULD BE RELATIVELY FREE OF SUBSOIL MATERIAL AND MUST BE FREE OF STONES (OVER 1" IN DIAMETER), LUMPS OF SOIL, ROOTS, TREE LIMBS, TRASH, OR CONSTRUCTION DEBRIS. IT SHOULD BE FREE OF ROOTS OR RHIZOMES SUCH AS THISTLE, NUTGRASS, AND QUACKGRASS.
- 4. AN ORGANIC MATTER CONTENT OF SIX PERCENT (6%) IS REQUIRED. AVOID LIGHT COLORED SUBSOIL MATERIAL.
- 5. SOLUBLE SALT CONTENT OF OVER 500 PARTS PER MILLION (PPM) IS LESS SUITABLE. AVOID TIDAL MARSH SOILS BECAUSE OF HIGH SALT CONTENT AND SULFUR ACIDITY.
- 6. THE pH SHOULD BE MORE THAN 6.0. IF LESS, ADD LIME TO INCREASE pH TO AN ACCEPTABLE LEVEL.

APPLICATION

- 1. AVOID SPREADING WHEN TOPSOIL IS WET OR FROZEN.
- 2. SPREAD TOPSOIL UNIFORMLY TO A DEPTH OF AT LEAST SIX INCHES (6"), OR TO THE DEPTH SHOWN ON THE LANDSCAPING PLANS.

TEMPORARY VEGETATIVE COVER

GENERAL:

1. TEMPORARY VEGETATIVE COVER SHALL BE ESTABLISHED ON ALL UNPROTECTED AREAS THAT PRODUCE SEDIMENT, AREAS WHERE FINAL GRADING HAS BEEN COMPLETED, AND AREAS WHERE THE ESTIMATED PERIOD OF BARE SOIL EXPOSURE IS LESS THAN 12 MONTHS. TEMPORARY VEGETATIVE COVER SHALL BE APPLIED IF AREAS WILL NOT BE PERMANENTLY SEEDED BY SEPTEMBER 1.

SITE PREPARATION:

- 1. INSTALL REQUIRED SURFACE WATER CONTROL MEASURES.
- 2. REMOVE LOOSE ROCK, STONE, AND CONSTRUCTION DEBRIS FROM AREA.
- 3. APPLY LIME ACCORDING TO SOIL TEST OR AT A RATE OF ONE (1) TON OF GROUND DOLOMITIC LIMESTONE PER ACRE (5 LBS. PER 100 SQ. FT.).
- 4. APPLY FERTILIZER ACCORDING TO SOIL TEST OR AT THE RATE OF 300 LBS. OF 10-10-10 PER ACRE (7 LBS. PER 1,000 SQ. FT.) AND SECOND APPLICATION OF 200 LBS. OF 10-10-10- (5 LBS. PER 1,000 SQ. FT.) WHEN GRASS IS FOUR INCHES (4") TO SIX INCHES (6") HIGH. APPLY ONLY WHEN GRASS IS DRY.
- 5. UNLESS HYDROSEEDED, WORK IN LIME AND FERTILIZER TO A DEPTH OF FOUR (4") INCHES USING A DISK OR ANY SUITABLE EQUIPMENT.
- 6. TILLAGE SHOULD ACHIEVE A REASONABLY UNIFORM LOOSE SEEDBED. WORK ON CONTOUR IF SITE IS SLOPING.

ESTABLISHMENT:

- 1. SELECT APPROPRIATE SPECIES FOR THE SITUATION. NOTE RATES AND SEEDING DATES (SEE VEGETATIVE COVER SELECTION & MULCHING SPECIFICATION BELOW).
- 2. APPLY SEED UNIFORMLY ACCORDING TO THE RATE INDICATED BY BROADCASTING, DRILLING, OR HYDRAULIC APPLICATION.
- 3. UNLESS HYDROSEEDED, COVER RYEGRASS SEEDS WITH NOT MORE THAN 1/4 INCH OF SOIL USING SUITABLE EQUIPMENT.
- 4. MULCH IMMEDIATELY AFTER SEEDING IF REQUIRED. (SEE VEGETATIVE COVER SELECTION & MULCHING SPECIFICATION BELOW.) APPLY STRAW OR HAY MULCH AND ANCHOR TO SLOPES GREATER THAN 3% OR WHERE CONCENTRATED FLOW WILL OCCUR.

PERMANENT VEGETATIVE COVER

GENERAL:

1. PERMANENT VEGETATIVE COVER SHALL BE ESTABLISHED AS VARIOUS SECTIONS OF THE PROJECT ARE COMPLETED IN ORDER TO STABILIZE THE SOIL, REDUCE DOWNSTREAM DAMAGE FROM SEDIMENT AND RUNOFF, AND TO ENHANCE THE AESTHETIC NATURE OF THE SITE. IT WILL BE APPLIED TO ALL CONSTRUCTION AREAS SUBJECT TO EROSION WHERE FINAL GRADING HAS BEEN COMPLETED AND A PERMANENT COVER IS NEEDED.

SITE PREPARATION:

- 1. INSTALL REQUIRED SURFACE WATER CONTROL MEASURES.
- 2. REMOVE LOOSE ROCK, STONE, AND CONSTRUCTION DEBRIS FROM AREA.
- 3. PERFORM ALL PLANTING OPERATIONS PARALLEL TO THE CONTOURS OF THE SLOPE.
- 4. APPLY TOPSOIL AS INDICATED ELSEWHERE HEREIN.
- 5. APPLY FERTILIZER ACCORDING TO SOIL TEST OR:
 - SPREAD SEEDING: WORK DEEPLY IN SOIL, BEFORE SEEDING, 300 LBS.
 - FALL SEEDING: WORK DEEPLY IN SOIL, BEFORE SEEDING, 600 LBS. OF 10-10-10 FERTILIZER PER ACRE (14 LBS. PER 1,000 SQ. FT.).

EROSION CHECKS

GENERAL:

1. TEMPORARY PERVIOUS BARRIERS USING BALES OF HAY OR STRAW, HELD IN PLACE WITH STAKES DRIVEN THROUGH THE BALES AND INTO THE GROUND OR GEOTEXTILE FABRIC FASTENED TO A FENCE POST AND BURIED INTO THE GROUND, SHALL BE INSTALLED AND MAINTAINED AS REQUIRED TO CHECK EROSION AND REDUCE SEDIMENTATION.

CONSTRUCTION:

- 1. BALES SHOULD BE PLACED IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
- 2. EACH BALE SHALL BE EMBEDDED INTO THE SOIL A MINIMUM OF FOUR (4") INCHES.
- 3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY WOOD STAKES OR REINFORCEMENT BARS DRIVEN THROUGH THE BALES AND INTO THE GROUND. THE FIRST STAKE IN EACH BALE SHALL BE ANGLED TOWARD THE PREVIOUSLY LAID BALE TO FORCE BALES TOGETHER.
- 4. GEOTEXTILE FABRIC SHALL BE SECURELY ANCHORED AT THE TOP OF A THREE FOOT (3') HIGH FENCE AND BURIED A MINIMUM OF FOUR INCHES (4") TO THE SOIL. SEAMS BETWEEN SECTIONS OF FILTER FABRIC SHALL OVERLAP A MINIMUM OF TWO FEET (2').

VEGETATIVE COVER SELECTION & MULCHING

TEMPORARY MULCHING:

STRAY OR HAY 70-90 LBS./1,000 SQ.FT. (TEMPORARY VEGETATIVE AREAS)

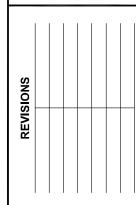
WOOD FIBER IN HYDROMULCH SLURRY 25-50 LBS./1,000 SQ. FT.

ESTABLISHMENT:

- 1. SMOOTH AND FIRM SEEDBED WITH CULTIPACKER OR OTHER SIMILAR EQUIPMENT PRIOR TO SEEDING (EXCEPT WHEN HYDROSEEDING).
- 2. SELECT ADAPTED SEED MIXTURE FOR THE SPECIFIC SITUATION. NOTE RATES AND THE SEEDING DATES (SEE VEGETATIVE COVER SELECTION & MULCHING SPEC. BELOW).
- 3. APPLY SEED UNIFORMLY ACCORDING TO RATE INDICATED, BY BROADCASTING, DRILLING, OR HYDRAULIC APPLICATION.
- 4. COVER GRASS AND LEGUME SEED WITH NOT MORE THAN 1/4 INCH OF SOIL WITH SUITABLE EQUIPMENT (EXCEPT WHEN HYDROSEEDING).
- 5. MULCH IMMEDIATELY AFTER SEEDING, IF REQUIRED, ACCORDING TO TEMPORARY MULCHING SPECIFICATIONS. (SEE VEGETATIVE COVER SELECTION & MULCHING SPECIFICATION BELOW).
- 6. USE PROPER INOCULANT ON ALL LEGUME SEEDINGS, USE FOUR (4) TIMES NORMAL RATES WHEN HYDROSEEDING.
- 7. USE SOD WHERE THERE IS A HEAVY CONCENTRATION OF WATER AND IN CRITICAL AREAS WHERE IT IS IMPORTANT TO GET A QUICK VEGETATIVE COVER TO PREVENT EROSION.

MAINTENANCE:

- 1. TEST FOR SOIL ACIDITY EVERY THREE (3) YEARS AND LIME AS REQUIRED.
- 2. ON SITES WHERE GRASSES PREDOMINATE, BROADCAST ANNUALLY 500 POUNDS OF 10-10-10 FERTILIZER PER ACRE (12 LBS. PER 1,000 SQ. FT.) OR AS NEEDED ACCORDING TO ANNUAL SOIL TESTS.
- 3. ON SITES WHERE LEGUMES PREDOMINATE, BROADCAST EVERY THREE (3) YEARS OR AS INDICATED BY SOIL TEST 300 POUNDS OF 0-20-20 OR EQUIVALENT PER ACRE (8 LBS PER 1,000 SQ. FT.).



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CONNECTICUT RIVER

NT AND EROSION CONTROL
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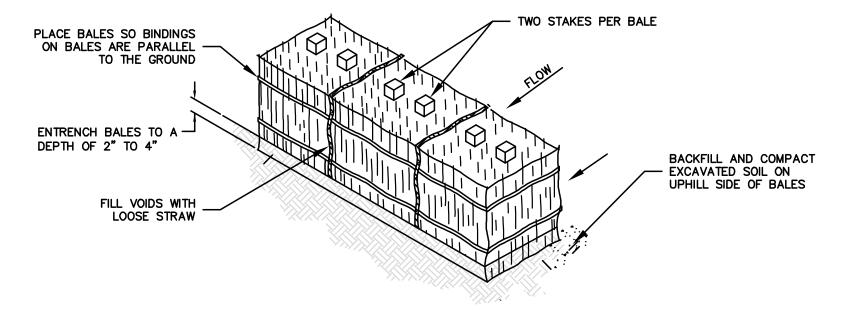
1" = 20'
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FEBRUARY 4, 2011

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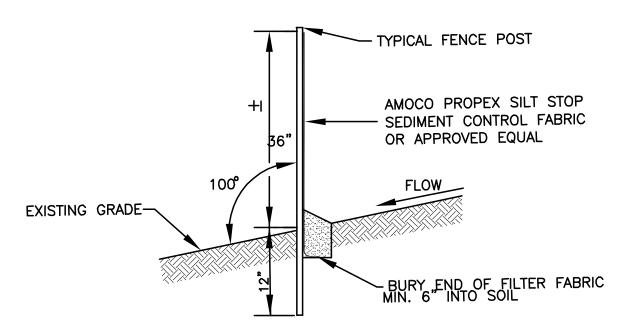
EROSION CONTROL MAINTENANCE INTERVALS								
EROSION CONTROL MEASURE	CONTROL OBJECTIVE	INSPECTION/MAINTENANCE	FAILURE INDICATORS	REMOVAL				
TEMPORARY SEDIMENT TRAP (TST)	DETAIN SEDIMENT-LADEN RUNOFF FROM SMALL DISTURBED AREAS LONG ENOUGH TO ALLOW A MAJORITY OF THE SEDIMENT TO SETTLE OUT.	INSPECT AT LEAST ONCE A WEEK AND WITHIN 24 HOURS OF THE END OF A STORM WITH A RAINFALL OF 0.5 INCHES OR MORE. STONE OUTLET SHOULD BE AT LEAST 1 FOOT BELOW CREST OF EMBANKMENT. SEDIMENT MUST BE REMOVED WHEN ACCUMULATION REACHES ½ OF THE REQUIRED WET STORAGE.	- TURBID WATER - EXCESSIVE SEDIMENT ACCUMULATION - OVERTOPPING EVIDENCE	TST MAY BE REMOVED ONCE THE CONTRIBUTING DRAINAGE AREA IS PERMANENTLY STABILIZED.				
TEMPORARY SEDIMENT BASIN (DETENTION BASIN) (SB/PST)	- INTERCEPT/RETAIN SEDIMENT DURING CONSTRUCTION PREVENT TRANSPORT AND DEPOSITION OF SEDIMENT OFF CONSTRUCTION SITE.	INSPECT AT LEAST ONCE A WEEK AND WITHIN 24 HOURS OF THE END OF A STORM WITH A RAINFALL AMOUNT OF 0.5 INCHES OR GREATER. CLEAN OUT SEDIMENT WHEN ACCUMULATION EXCEEDS ½ OF THE WET STORAGE CAPACITY OR WHEN DEPTH OF AVAILABLE POOL IS REDUCED TO 18? PLACE STAKES OR OTHER MEANS TO INDICATE THE THRESHOLD ELEVATION FOR SEDIMENT CLEANOUT.	- TURBID WATER - EXCESSIVE SEDIMENT ACCUMULATION - OVERTOPPING EVIDENCE - EROSION OF EMBANKMENTS	TEMPORARY SEDIMENT BASINS THAT ARE NOT TO FUNCTION AS PERMANENT DETENTION BASINS MAY BE REMOVED ONCE THE CONTRIBUTING DRAINAGE AREA IS PERMANENTLY STABILIZED.				
SILT FENCE (SF) (RELATED: IP, STK)	- INTERCEPT, AND REDIRECT/DETAIN SMALL AMOUNTS OF SEDIMENT FROM SMALL DISTURBED AREAS DECREASE VELOCITY OF SHEET FLOW PROTECT SENSITIVE SLOPES OR SOILS FROM EXCESSIVE WATER FLOW.	INSPECT AT LEAST ONCE A WEEK AND WITHIN 24 HOURS OF THE END OF A STORM WITH A RAINFALL OF 0.5 INCHES OR MORE. ACCUMULATED SEDIMENT MUST BE REMOVED ONCE ITS DEPTH IS EQUAL TO ½ THE TRENCH HEIGHT. INSPECT FREQUENTLY DURING PUMPING OPERATIONS IF USED FOR DEWATERING OPERATIONS.	PHYSICAL DAMAGE OR DECOMPOSITION EVIDENCE OF OVERTOPPED OR UNDERCUT FENCE EVIDENCE OF SIGNIFICANT FLOWS EVADING CAPTURE REPETITIVE FAILURE	SILT FENCE MAY BE REMOVED AFTER UPHILL AND SENSITIVE AREAS HAVE BEEN PERMANENTLY STABILIZED.				
HAY BALES (HB)	- INTERCEPT, AND REDIRECT/DETAIN SMALL AMOUNTS OF SEDIMENT FROM SMALL DISTURBED AREAS DECREASE VELOCITY OF SHEET FLOW PROTECT SENSITIVE SLOPES OR SOILS FROM EXCESSIVE WATER FLOW.	INSPECT AT LEAST ONCE A WEEK AND WITHIN 24 HOURS OF THE END OF A STORM WITH A RAINFALL OF 0.5 INCHES OR MORE. ACCUMULATED SEDIMENT MUST BE REMOVED ONCE THE DEPTH OF SEDIMENT IS EQUAL TO ½ THE HEIGHT OF THE BARRIER. INSPECT FREQUENTLY DURING PUMPING OPERATIONS IF USED FOR DEWATERING OPERATIONS.	PHYSICAL DAMAGE OR DECOMPOSITION EVIDENCE OF OVERTOPPED OR UNDERCUT FENCE EVIDENCE OF SIGNIFICANT FLOWS EVADING CAPTURE REPETITIVE FAILURE	HAY BALES MAY BE REMOVED AFTER UPHILL AREAS HAVE BEEN PERMANENTLY STABILIZED.				
TEMPORARY DIVERSION BERM/SWALE (TBS) OR TEMPORARY SWALE (TSW) OR WATER BAR (WB)	- MINIMIZE VELOCITY AND CONCENTRATION OF SHEET FLOW ACROSS CONSTRUCTION SITE TO A SEDIMENT TRAPPING FACILITY DIVERT WATER ORIGINATING FROM UNDISTURBED AREA AWAY FROM CONSTRUCTION.	WHEN LOCATED WITHIN CLOSE PROXIMITY TO ONGOING CONSTRUCTION ACTIVITIES, INSPECT AT THE END OF EACH WORK DAY AND IMMEDIATELY REPAIR DAMAGES. OTHERWISE INSPECT AT LEAST ONCE A WEEK AND WITHIN 24 HOURS OF THE END OF A STORM WITH A RAINFALL OF 0.5 INCHES OR MORE. REPAIR THE TEMPORARY MEASURE AND ANY OTHER ASSOCIATED MEASURES WITHIN 24 HOURS.	- PHYSICAL DAMAGE - EXCESSIVE SCOURING/EROSION - REPETITIVE FAILURE	TEMPORARY DIVERSIONS MAY BE REMOVED ONCE CONSTRUCTION HAS CEASED AND THE CONTRIBUTING DRAINAGE AREA HAS BEEN PERMANENTLY STABILIZED.				
CONSTRUCTION ENTRANCE (CE)	- REDUCE THE TRACKING OF SEDIMENT OFF-SITE ONTO PAVED SURFACES.	INSPECT AT THE END OF EACH WORK DAY AND IMMEDIATELY REPAIR DAMAGES. PERIODIC ADDITION OF STONE, OR LENGTHENING OF ENTRANCE MAY BE REQUIRED AS CONDITIONS DEMAND. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PAVED SURFACES AS A RESULT OF INEFFICIENCY OF CONSTRUCTION ENTRANCE SHALL BE IMMEDIATELY REMOVED.	- SEDIMENT IN ROADWAY ADJACENT TO SITE	CONSTRUCTION ENTRANCE MAY BE REMOVED ONCE THE SITE HAS BEEN PERMANENTLY STABILIZED, AND ALL OTHER SECTIONS OF ROADWAY HAVE BEEN PERMANENTLY PAVED.				
CATCH BASIN INLET PROTECTION (IP)	- PROHIBIT SILT IN CONSTRUCTION-RELATED RUNOFF FROM ENTERING STORM DRAINAGE SYSTEM.	INSPECT AFTER ANY RAIN EVENT. IF FILTER BAG INSIDE CATCH BASIN CONTAINS MORE THAN 6? OF SEDIMENT, REMOVE SEDIMENT FROM BAG. CHECK SURROUNDING SILT FENCE AND HAY BALES PER NOTED ABOVE.	- RIPPED BAG - FAILED HAY BALES / SILT FENCE - SIGNIFICANT SILT PRESENCE IN STORM DRAINAGE SYSTEM OUTFLOW.	INLET PROTECTION MAY BE REMOVED ONCE THE SITE HAS BEEN PERMANENTLY STABILIZED, AND ALL SECTIONS OF ROADWAY HAVE BEEN PERMANENTLY PAVED.				
STOCKPILE PROTECTION (STK)	- RETAIN SOIL STOCKPILE IN LOCATIONS SPECIFIED, AND REDUCE WATER-TRANSPORT.	INSPECT SILT FENCE AT THE END OF EACH WORK DAY AND IMMEDIATELY REPAIR DAMAGES. PERIODIC REINFORCEMENT OF SILT FENCE, OR ADDITION OF HAY BALES MAY BE NECESSARY.	EVIDENCE OF STOCK PILE DIMINISHING DUE TO RAIN EVENTS FAILURE OF SILT FENCE	STOCKPILE PROTECTION MAY BE REMOVED ONCE THE STOCKPILE IS USED OR REMOVED.				



- 1. IDEALLY, BALES SHOULD BE ENTRENCHED 2 TO 4 INCHES AND TIGHTLY BUTTED TOGETHER. BALES CAN BE SUCCESSFULLY PLACED WITHOUT A TRENCH IF GOOD GROUND CONTACT IS MADE. REMOVE HEAVY BRUSH AND FILL ALL VOIDS WITH LOOSE STRAW.
- 2. BALES SHALL BE ONLY USED AS A TEMPORARY BARRIER AND FOR NO LONGER THAN 60 DAYS.
- 3. WHEN SEDIMENTATION DEPOSITS REACH WITHIN 3" OF THE TOP OF BALES, REMOVE SEDIMENTATION OR ADD ADDITIONAL BALES ON SEDIMENTATION DIRECTLY BEHIND FIRST ROW OF BALES AS DIRECTED BY THE ENGINEER.
- 4. UPON ESTABLISHMENT OF GROUND COVER ON DISTURBED AREAS AND WHEN DIRECTED BY THE ENGINEER, HAY BALES WILL BE REMOVED AND USED AS MULCH. ANY SEDIMENTATION WILL BE THINLY SPREAD UPON ESTABLISHED GROUND COVER.

HAYBALE BARRIER PROTECTION

NOT TO SCALE



NOTE:

1. CONTRACTOR SHALL HAVE AVAILABLE ON—SITE A MIN. OF 300 LINEAR FEET OF SILT FENCE FOR USE IF REQUIRED BY FIELD CONDITIONS.

> SEDIMENT FILTER FENCE NOT TO SCALE

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SEASONAL STUDENT SWIM DOCK

DARTMOUTH COLLEGE RIVERFRONT ON THE CONNECTICUT RIVER

TUCK DRIVE

HANOVER, NEW HAMPSHIRE AND EROSION CONTROL

DETAILS - SEDIMENT

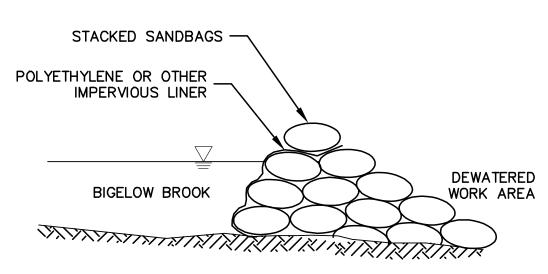
JCM JCM WAG DESIGNED 1" = 20' FEBRUARY 4, 2011

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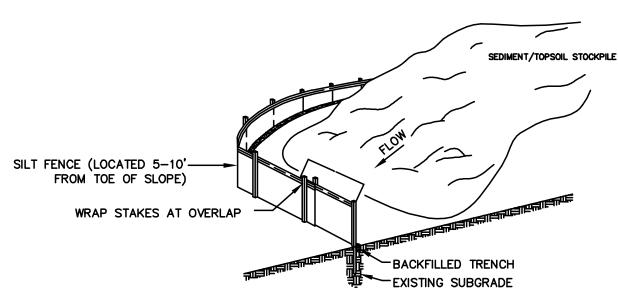
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NOTES:
REFER TO SEDIMENT & EROSION CONTROL PLAN FOR APPROXIMATE DIMENSIONS AND REQUIRED VOLUME. SOURCE: 2002 CT. GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL

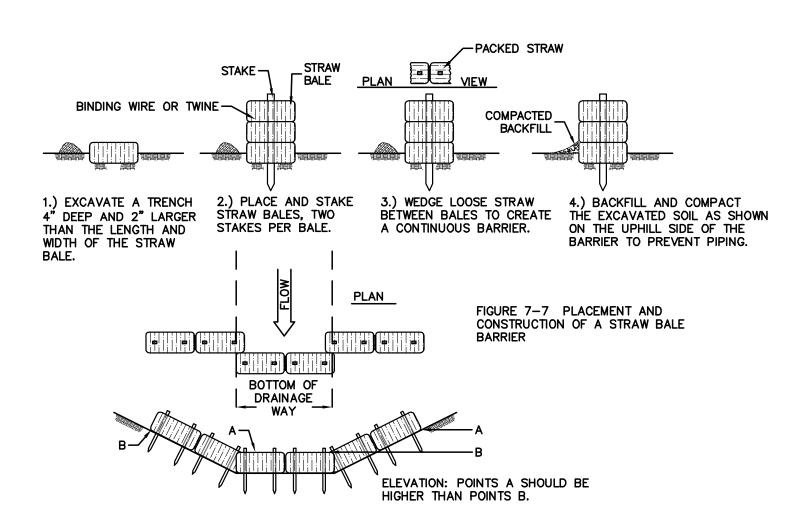
TEMPORARY SEDIMENT TRAP



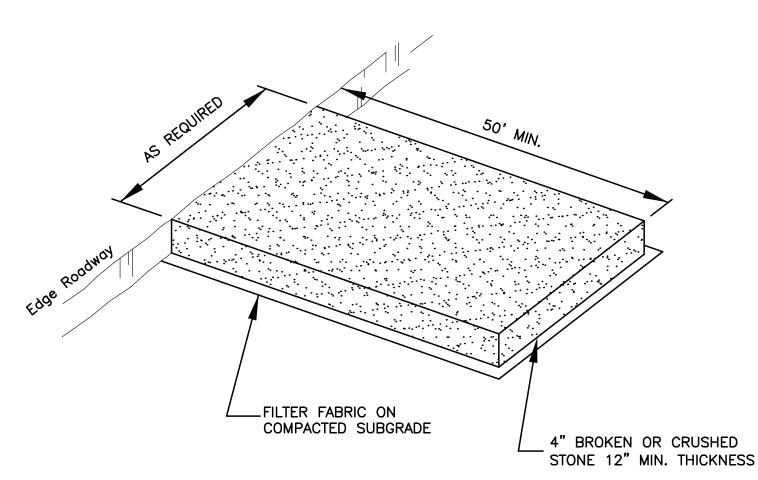
TEMPORARY WATER DIVERSION NOT TO SCALE



SEDIMENT/TOPSOIL STOCKPILE PROTECTION N.T.S.

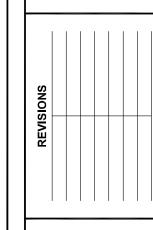


HAY BALE CHECK DAM N.T.S.



NOTE: CONSTRUCTION ENTRANCE PAD SHALL BE INSTALLED AND MAINTAINED DURING OPERATIONS WHICH PROMOTE VEHICULAR TRACKING OF MUD

> **CONSTRUCTION ENTRANCE PAD** NOT TO SCALE



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SWIM DOCK SE RIVERFRONT ON THE CONNECTICUT RIVER AND EROSION CONTROL DETAILS - SEDIMENT

SEASONAL STUDENT (DARTMOUTH COLLEGIES)

JCM JCM WAG

1" = 20' **FEBRUARY 4, 2011**

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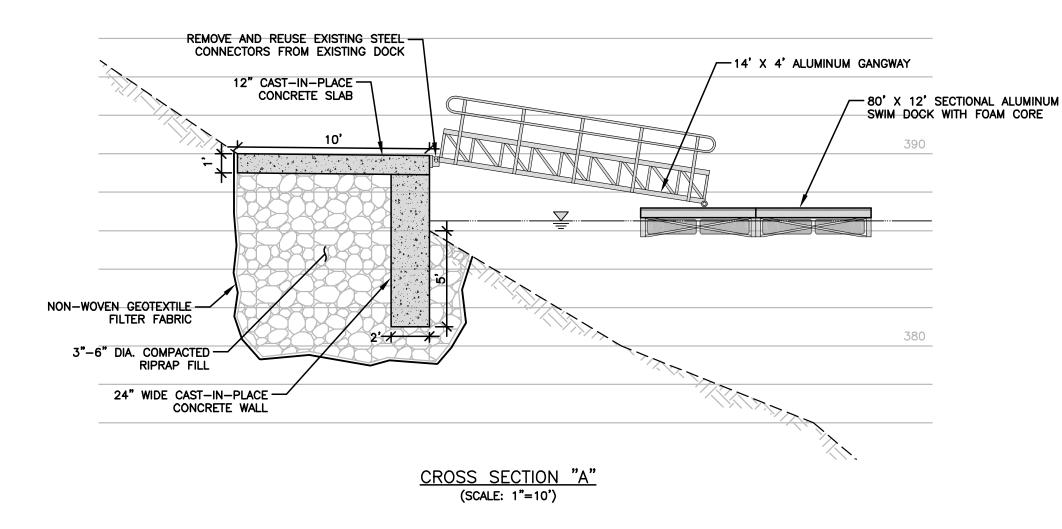
FLOATING DOCK PLAN (SCALE: 1"=10")

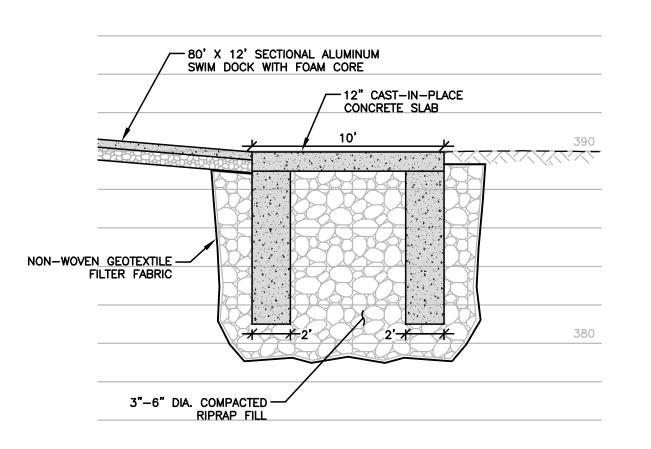
GENERAL NOTES

- 1. <u>SPECIFICATIONS</u>: CONNECTICUT DEPARTMENT OF TRANSPORTATION FORM 816 (2004), SUPPLEMENTAL SPECIFICATIONS DATED JANUARY 2007 AND SPECIAL PROVISIONS.
- 2. <u>DESIGN SPECIFICATIONS</u>: STANDARD SPECIFICATION FOR HIGHWAY BRIDGES (AASHTO-2004), WITH THE INTERIM SPECIFICATIONS UP TO AND INCLUDING JANUARY 2007, AS SUPPLEMENTED BY THE CONNECTICUT DEPARTMENT OF TRANSPORTATION BRIDGE DESIGN MANUAL (2003).
- 3. ALLOWABLE DESIGN STRESSES: CONCRETE: f'c = 3,000 PSI FOR CAST-IN-PLACE REINFORCEMENT: fy = 24,000 PSI (ASTM A615 GRADE 60)

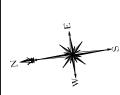
CONCRETE NOTES

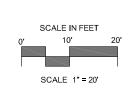
- 1. <u>REMAIN-IN-PLACE FORMS:</u> THE USE OF REMAIN-IN-PLACE FORMS ON THIS STRUCTURE IS NOT ALLOWED.
- 2. <u>CLASS "A" CONCRETE:</u> CLASS "A" CONCRETE SHALL BE USED FOR THE RETAINING WALLS, FOUNDATIONS AND CONCRETE CAPS.
- 3. <u>EXPOSED EDGES:</u> EXPOSED EDGES OF CONCRETE SHALL BE BEVELED 1" X 1" UNLESS DIMENSIONED OTHERWISE.
- 4. <u>CONCRETE COVER:</u> ALL REINFORCEMENT SHALL HAVE 2" COVER UNLESS DIMENSIONED OTHERWISE.
- 5. REINFORCEMENT: ALL REINFORCEMENT SHALL BE ASTM A615 GRADE 60.
- 6. PREFORMED EXPANSION JOINT FILLER: THE COST OF FURNISHING AND INSTALLING PREFORMED EXPANSION JOINT FILLER SHALL BE INCLUDED IN THE COST OF THE ITEM "CLASS 'A' CONCRETE."
- 7. <u>CONSTRUCTION JOINTS</u>: CONSTRUCTION JOINTS, OTHER THAN THOSE SHOWN ON THE PLANS, WILL NOT BE PERMITTED WITHOUT THE PRIOR APPROVAL OF THE ENGINEER.

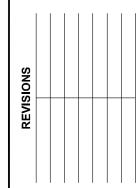




CROSS SECTION "B" (SCALE: 1"=10')







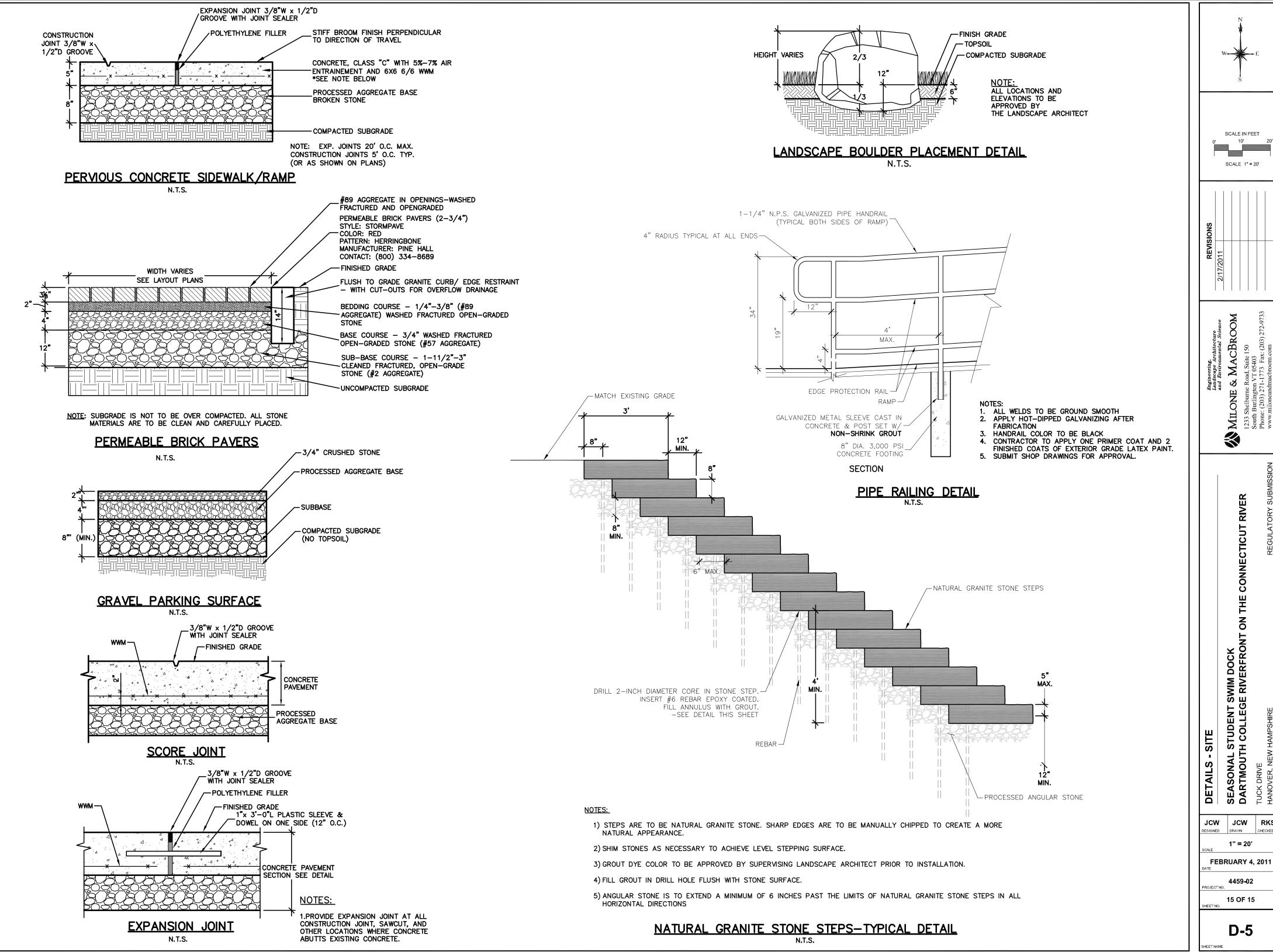
MILONE & MACBROOM
1233 Shelburne Road, Suite 150
South Burlington VT 05403
Phone: (203) 271-1773 Fax: (203) 272-9733
www.miloneandmachroom

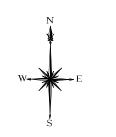
SEASONAL STUDENT SWIM DOCK DARTMOUTH COLLEGE RIVERFRONT ON THE CONNECTICUT RIVER DETAILS - STRUCTUR

JCM JCM WAG 1" = 20' **FEBRUARY 17, 2011**

4459-02

14 OF 15





SCALE IN FEET SCALE 1" = 20'

MILONE & MACBROON

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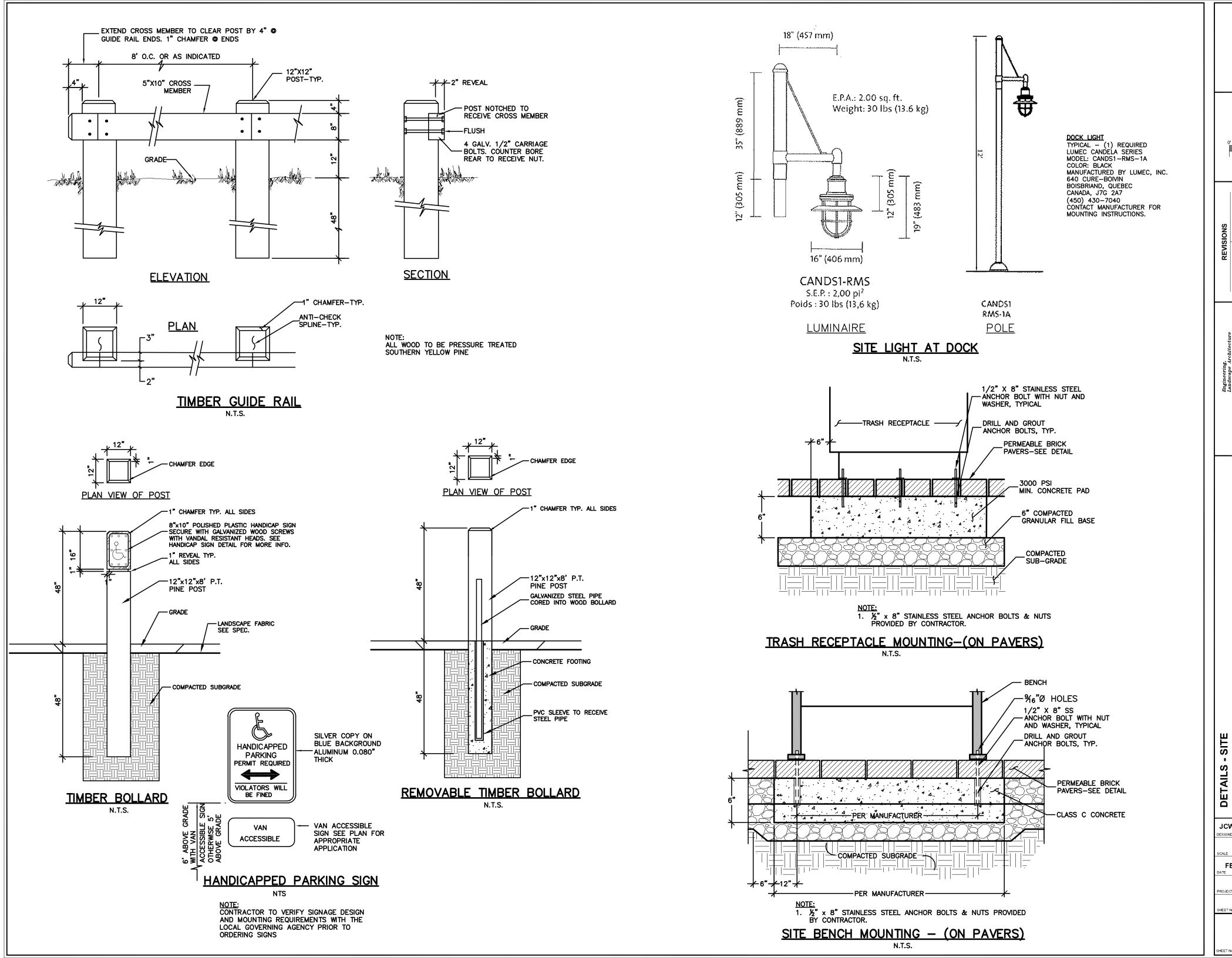
CONNECTICUT RIVER

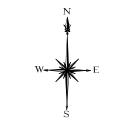
SEASONAL STUDENT DARTMOUTH COLLEG

JCW JCW RKS

4459-02

15 OF 15





SCALE IN FEET SCALE 1" = 20'

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SEASONAL STUDENT SWIM DOCK

DARTMOUTH COLLEGE RIVERFRONT ON THE CONNECTICUT RIVER
TUCK DRIVE
HANOVER, NEW HAMPSHIRE

REGULATORY SUB

JCW RKS

1" = 20' **FEBRUARY 4, 2011**

JCW

4459-02 16 OF 15