

MASS. STATE PLANE COORD.



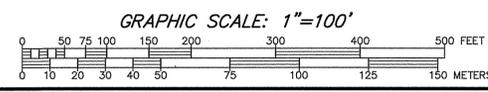
- GENERAL NOTES:**
- EXISTING TOPOGRAPHY IS BASED UPON AERIAL PHOTOGRAMMETRY OBTAINED FROM COL-EAST, INC. ELEVATIONS ARE BASED UPON NORTH AMERICAN VERTICAL DATUM (NAVD) OF 1988.
 - PROPERTY LINES ARE BASED UPON ON-GROUND SURVEY BY CONNORSTONE ENGINEERING, INC. AS SHOWN ON MODIFIED DEFINITIVE PLANS FOR GRAFTON HILL IN GRAFTON, MA DATED SEPTEMBER 30, 2015.
 - ALL SOILS ARE IN HYDROLOGIC GROUP "C", WHICH INCLUDE PAXTON AND WOODBRIDGE. BASED ON THE LATEST SOIL REPORTS FROM THE UNITED STATES DEPARTMENT OF AGRICULTURE, NATURAL RESOURCE CONSERVATION SERVICE.
 - THE RAILROAD DEMARKS THE CHANGE IN ZONING ON THE SITE. THE LAND TO THE EAST OF THE R.R. TRACKS LIES IN THE R/40 ZONE, LAND TO THE WEST LIES WITHIN THE R/20 ZONE.
 - WETLAND DELINEATION ON LOCUS WAS PERFORMED BY GODDARD CONSULTING, AND FIELD LOCATED BY CONNORSTONE ENGINEERING, INC. BETWEEN DECEMBER 2011 AND AUGUST 2012.
 - THE SITE IS NOT LOCATED WITHIN THE 100 YEAR FEDERAL FLOOD HAZARD AREA AS SHOWN ON THE FLOOD INSURANCE RATE MAPS FOR WORCESTER COUNTY, MAP No. 25027C0829E AND 25027C0833E, DATED JULY 4, 2010.
 - EXISTING UTILITY LINES SHOWN ON THIS DRAWING ARE FROM AVAILABLE INFORMATION AND ARE APPROXIMATE LOCATIONS. THE ENGINEER DOES NOT GUARANTEE THEIR ACCURACY OR THAT ALL UTILITIES AND SUBSURFACE STRUCTURES ARE SHOWN. THE CONTRACTOR SHALL VERIFY SIZE, LOCATION AND INVERT ELEVATIONS OF THE UTILITIES AND STRUCTURES, AS REQUIRED PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCIES WITH RECORD DATA SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY. THE CONTRACTOR SHALL CONTACT DIG SAFE: 1-800-344-7233 (72 HOURS BEFORE DIGGING), AND TOWN DPW FOR UTILITY LOCATIONS PRIOR TO EXCAVATION. TEST PITS SHALL BE UTILIZED FOR UTILITY CONNECTIONS.

- CONSTRUCTION NOTES:**
- ALL MATERIALS AND CONSTRUCTION PRACTICES SHALL BE IN CONFORMANCE WITH THE STANDARDS AND SPECIFICATIONS GRAFTON DEPARTMENT OF PUBLIC WORKS, OR THE LATEST EDITION OF THE MASSACHUSETTS HIGHWAY DEPARTMENT (MHD) CONSTRUCTION STANDARDS AND THE MHD "STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES", WHICHEVER IS MORE STRINGENT.
 - SEWER AND WATER CONNECTIONS SHALL BE INSTALLED IN COMPLIANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE GRAFTON DEPARTMENT OF PUBLIC WORKS. CONNECTIONS SHALL BE MADE IN ACCORDANCE WITH APPLICABLE PERMITS (TO BE OBTAINED BY THE CONTRACTOR).
 - THE CONTRACTOR SHALL KEEP ACCURATE RECORDS OF ALL CONCEALED AND UNDERGROUND WORK. AS BUILT PLANS WILL BE FURNISHED TO THE DEPARTMENT OF PUBLIC WORKS IN DUPLICATE, BY THE CONTRACTOR, OR OWNER, AT THE COMPLETION OF THE PROJECT. THE PLANS IN PARTICULAR WILL DEPICT EXACT DISTANCES BETWEEN GATE VALVES, AND TIES TO GATE VALVES BOTH IN THE MAIN AND ON HYDRANT BRANCHES. CURB BOX LOCATIONS SHALL BE REFERENCED TO THE HOUSE OR BUILDING THAT IT SERVES BY AT LEAST TWO TIES FROM PERMANENT POINTS.
 - THE LAYOUT AND INSTALLATION OF ELECTRIC, GAS, TELEPHONE AND CATV UTILITY CONNECTIONS AND SERVICES SHALL IN ACCORDANCE WITH THE REQUIREMENTS OF THE RESPECTIVE UTILITY.
 - IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE HIS WORK WITH THE APPROPRIATE HIGHWAY & UTILITY DEPARTMENTS. CONTRACTOR SHALL MAINTAIN ALL EXISTING AND NEWLY INSTALLED UTILITIES IN GOOD WORKING ORDER AND SHALL PROTECT THEM FROM DAMAGE AT ALL TIMES UNTIL THE WORK IS COMPLETED AND ACCEPTED.
 - WORK WITHIN THE HIGHWAY LAYOUT, IF APPLICABLE, SHALL CONFORM TO THE CONDITIONS OF THE PERMIT ISSUED BY THE MASSACHUSETTS HIGHWAY DEPARTMENT AND/OR LOCAL AUTHORITY AS APPROPRIATE.
 - THE CONTRACTOR SHALL UTILIZE ALL MEASURES AND MATERIALS NECESSARY TO ENSURE THE SAFETY OF ALL PERSONS AND PROPERTIES AT THE SITE DURING CONSTRUCTION. ALL EXCAVATIONS SHALL CONFORM TO CURRENT OSHA STANDARDS.
 - ALL SIGN SIZES AND MATERIAL SHALL CONFORM TO THE "MANUAL ON UNIFORM TRAFFIC DEVICES" (MUTCD) AND THE OFFICE OF TRAFFIC OPERATIONS, FEDERAL HIGHWAY ADMINISTRATION, U.S. DEPARTMENT OF TRANSPORTATION.
 - ALL RAMP, CURB CUTS, SIDEWALKS, AND ACCESSIBLE SPACES SHALL COMPLY WITH THE AMERICANS WITH DISABILITIES ACT REGULATIONS AND WITH ARCHITECTURAL ACCESS BOARD REGULATIONS (521 CMR 1-47).
 - ALL EXCAVATION AND EARTHWORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF THE MASSACHUSETTS HIGHWAY DEPARTMENT (MHD) STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES, SECTIONS 120, 140, 150, AND 170.

APPROVAL UNDER THE SUBDIVISION CONTROL LAW, IS REQUIRED. GRAFTON PLANNING BOARD

DATE: _____

I, _____ CLERK OF THE TOWN OF GRAFTON RECEIVED AND RECORDED APPROVAL FROM THE PLANNING BOARD OF THIS PLAN ON _____ AND NO APPEAL WAS TAKEN FOR TWENTY (20) DAYS THEREAFTER.



APPLICANT:
WESTERLY SIDE GRAFTON LLC
 117 WATER ST., SUITE 201
 MILFORD, MA 01757



MODIFIED DEFINITIVE SUBDIVISION PLAN
EXISTING CONDITIONS PLAN
 OF
GRAFTON HILL
 IN
GRAFTON, MA

1/8/2016
12/28/2015
11/23/2015
REVISIONS
SEPTEMBER 30, 2015

<p>CONNORSTONE CONSULTING CIVIL ENGINEERS AND LAND SURVEYORS 10 SOUTHWEST CUTOFF, SUITE 7 NORTHBOROUGH, MASSACHUSETTS 01532 PHONE: (508)-393-9727 FAX: (508)-393-5242</p>	DESIGNED BY: VC, REM
	CHECKED BY: VC
	COMPUTED BY:
	FIELD SURVEY: VHH
	DRAWN BY: REM
	SCALE: 1" = 100'
SHEET 1 OF 11	

APPROVAL UNDER THE
SUBDIVISION CONTROL LAW,
IS REQUIRED.
GRAFTON PLANNING BOARD

DATE: _____

I, _____ CLERK OF THE TOWN OF GRAFTON
RECEIVED AND RECORDED APPROVAL FROM THE PLANNING BOARD
OF THIS PLAN ON _____ AND NO APPEAL WAS TAKEN
FOR TWENTY (20) DAYS THEREAFTER.

N/F
RICHARD E. & VIRGINIA A. ENGVALL
NOMINEE TRUST
MAP 47, LOT 49
BOOK 22477, PAGE 155

N/F
STEPHEN & KATHRYN BAVOSI
MAP 48, LOT 4A

N/F
OWEN & SANTINA CARR
MAP 48, LOT 4B

N/F
DAVID MASON
MAP 48, LOT 8B

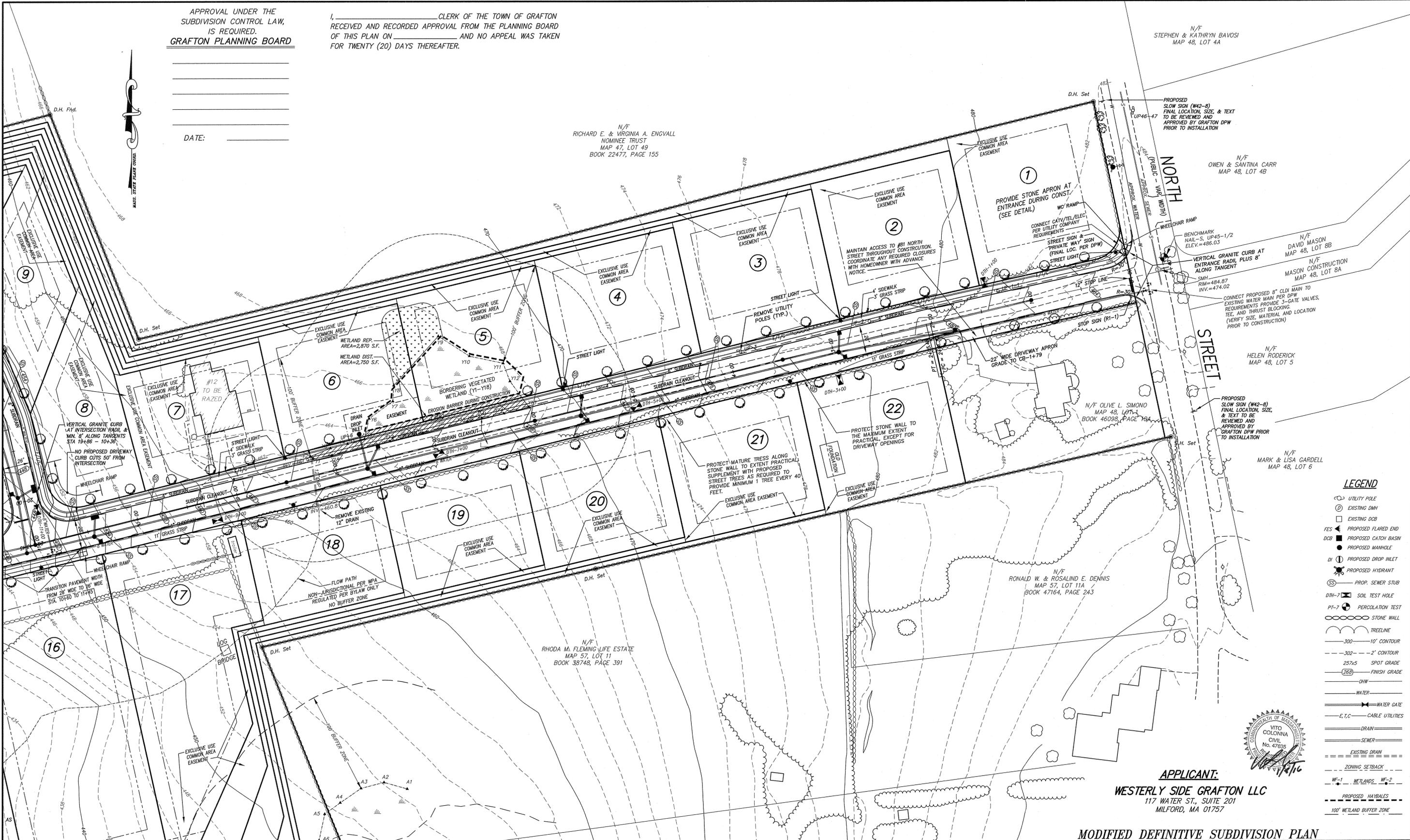
N/F
MASON CONSTRUCTION
MAP 48, LOT 8A

N/F
HELEN RODERICK
MAP 48, LOT 5

N/F
MARK & LISA GARDELL
MAP 48, LOT 6

N/F
RONALD W. & ROSALIND E. DENNIS
MAP 57, LOT 11A
BOOK 47164, PAGE 243

N/F
RHODA M. FLEMING LIFE ESTATE
MAP 57, LOT 11
BOOK 38748, PAGE 391



LEGEND

- ⊙ UTILITY POLE
- ⊙ EXISTING DMH
- EXISTING DCB
- FES ◀ PROPOSED FLARED END
- DCB ◼ PROPOSED CATCH BASIN
- PROPOSED MANHOLE
- DI ◻ PROPOSED DROP INLET
- ⊙ PROPOSED HYDRANT
- SS ◻ PROP. SEWER STUB
- DH-1 ◻ SOIL TEST HOLE
- PT-7 ◻ PERCOLATION TEST
- ○ ○ ○ ○ STONE WALL
- TREELINE
- 300' 10' CONTOUR
- 302' 2' CONTOUR
- 257.5 SPOT GRADE
- (268) FINISH GRADE
- CHW
- WATER
- WATER GATE
- E.T.C. CABLE UTILITIES
- DRAIN
- SEWER
- EXISTING DRAIN
- ZONING SETBACK
- WF-1 WETLANDS WF-2
- PROPOSED HAYBALES
- 100' WETLAND BUFFER ZONE



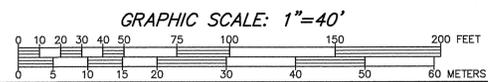
APPLICANT:
WESTERLY SIDE GRAFTON LLC
117 WATER ST., SUITE 201
MILFORD, MA 01757

MODIFIED DEFINITIVE SUBDIVISION PLAN

TOPOGRAPHIC PLAN
OF
GRAFTON HILL
IN
GRAFTON, MA

1/8/2016
12/28/2015
11/23/2015
REVISIONS
SEPTEMBER 30, 2015

	CONNORSTONE	DESIGNED BY: VC, REM
	CONSULTING CIVIL ENGINEERS AND LAND SURVEYORS	CHECKED BY: VC
	10 SOUTHWEST CUTOFF, SUITE 7	COMPUTED BY:
	NORTHBOROUGH, MASSACHUSETTS 01532	FIELD SURVEY: VHH
	PHONE: (508)-393-9727 FAX: (508)-393-5242	DRAWN BY: REM
		SCALE: 1" = 40'
		SHEET 2 OF 11

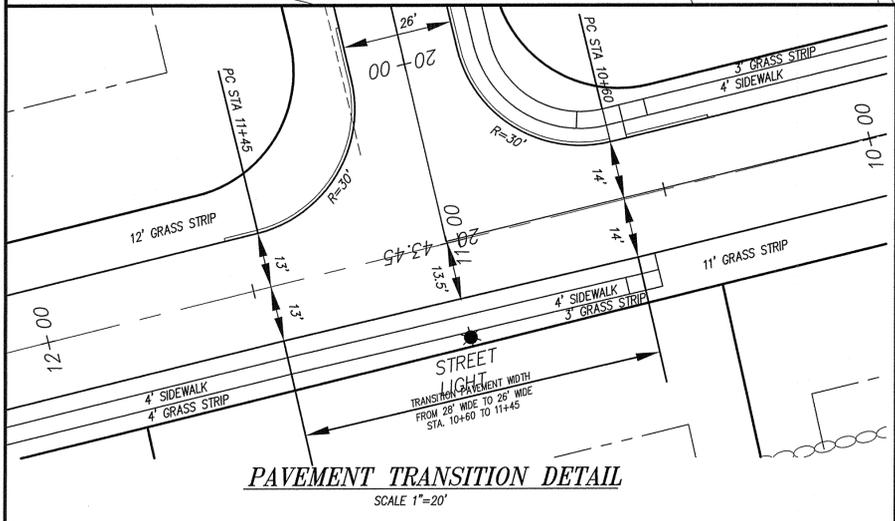
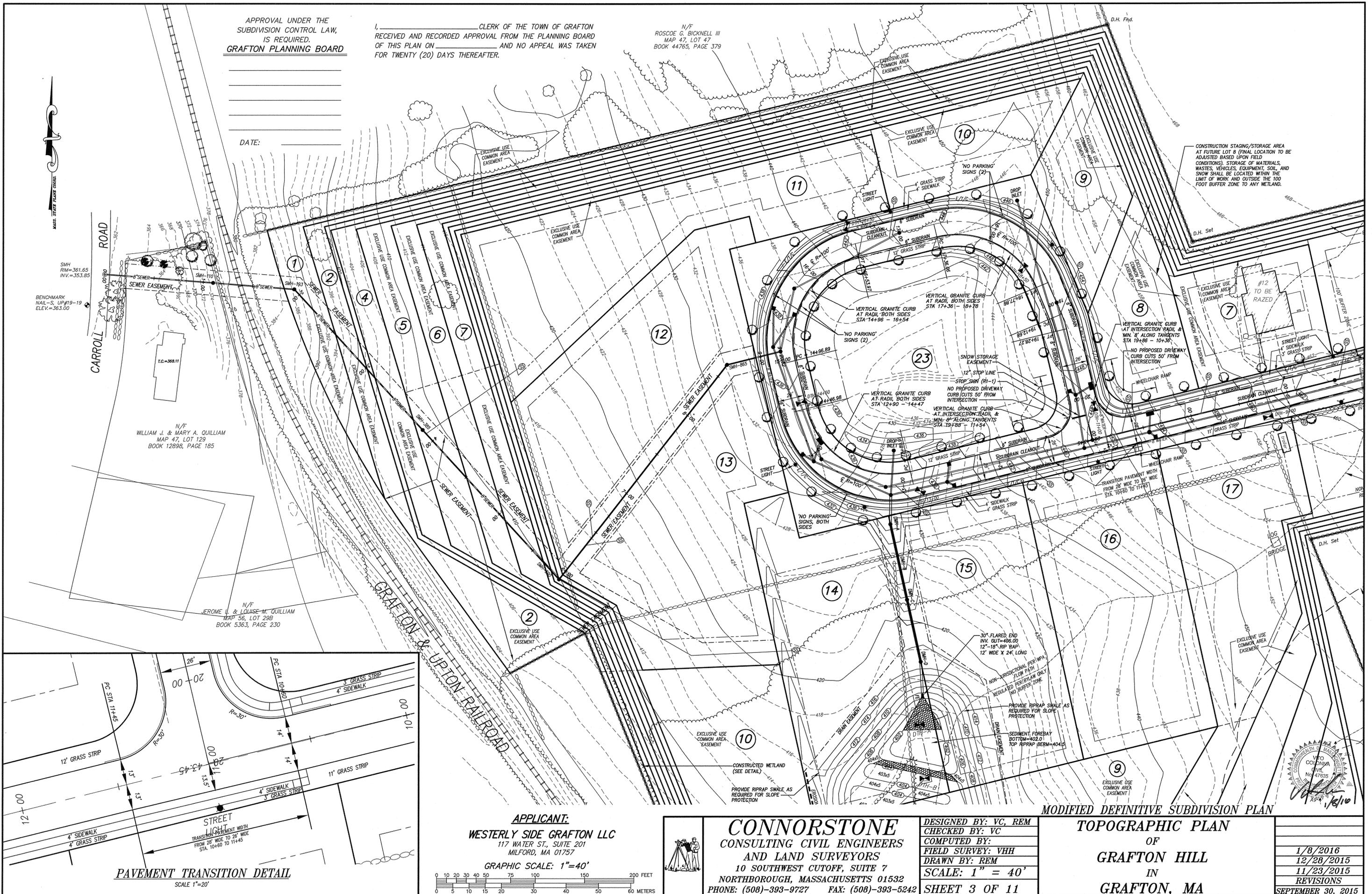


APPROVAL UNDER THE
SUBDIVISION CONTROL LAW,
IS REQUIRED.
GRAFTON PLANNING BOARD

I, _____ CLERK OF THE TOWN OF GRAFTON
RECEIVED AND RECORDED APPROVAL FROM THE PLANNING BOARD
OF THIS PLAN ON _____ AND NO APPEAL WAS TAKEN
FOR TWENTY (20) DAYS THEREAFTER.

N/F
ROSCOE G. BICKNELL III
MAP 47, LOT 47
BOOK 44765, PAGE 379

DATE: _____



APPLICANT:
WESTERLY SIDE GRAFTON LLC
117 WATER ST., SUITE 201
MILFORD, MA 01757

GRAPHIC SCALE: 1"=40'

0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 FEET
0 5 10 15 20 30 40 50 60 METERS



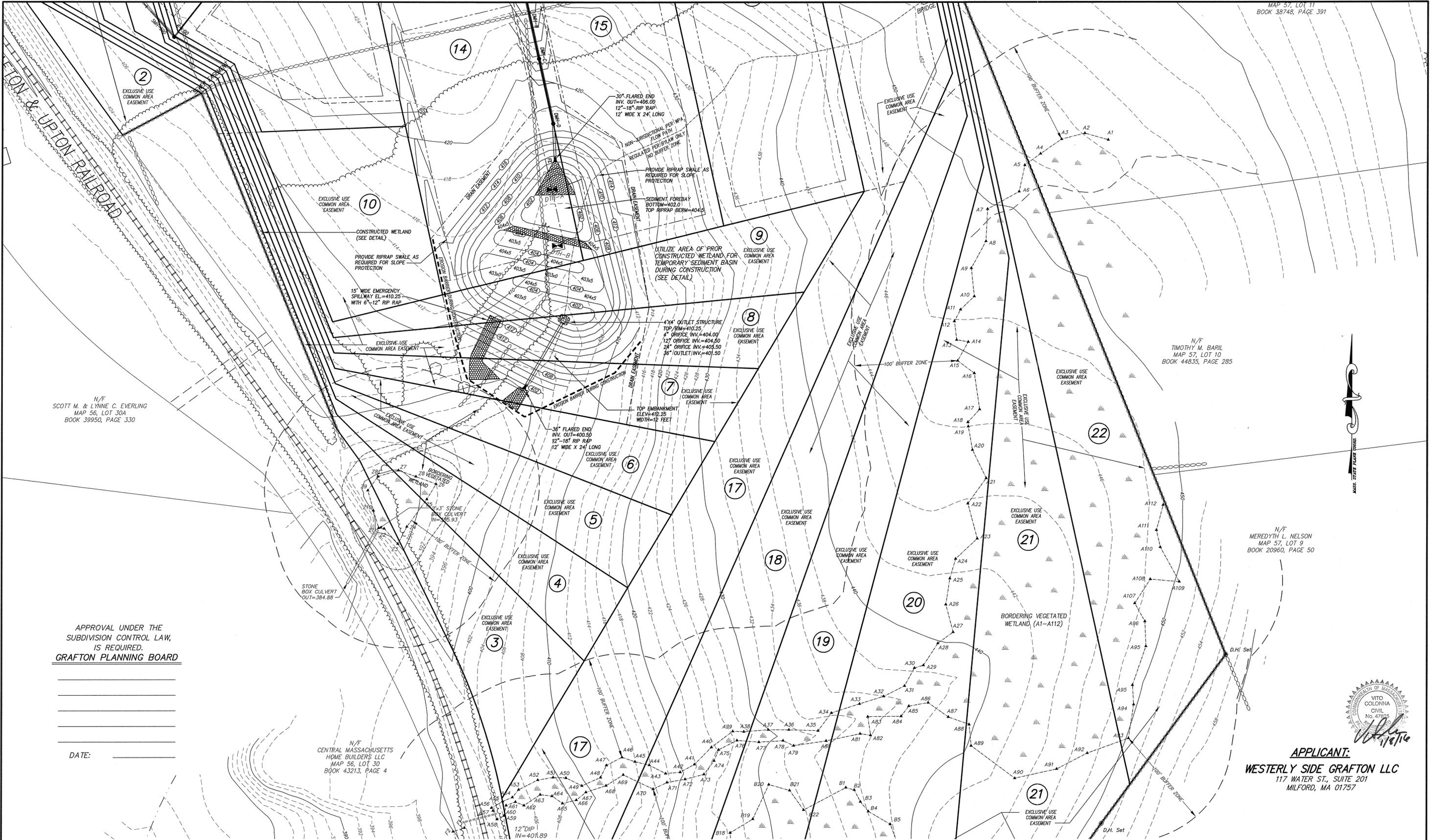
CONNORSTONE
CONSULTING CIVIL ENGINEERS
AND LAND SURVEYORS
10 SOUTHWEST CUTOFF, SUITE 7
NORTHBOROUGH, MASSACHUSETTS 01532
PHONE: (508)-393-9727 FAX: (508)-393-5242

DESIGNED BY: VC, REM
CHECKED BY: VC
COMPUTED BY:
FIELD SURVEY: VHH
DRAWN BY: REM
SCALE: 1" = 40'
SHEET 3 OF 11

MODIFIED DEFINITIVE SUBDIVISION PLAN
TOPOGRAPHIC PLAN
OF
GRAFTON HILL
IN
GRAFTON, MA



1/8/2016
12/28/2015
11/23/2015
REVISIONS
SEPTEMBER 30, 2015



N/F
SCOTT M. & LYNNIE C. EVERLING
MAP 56, LOT 30A
BOOK 39950, PAGE 330

N/F
TIMOTHY M. BARIL
MAP 57, LOT 10
BOOK 44835, PAGE 285

N/F
MEREDYTH L. NELSON
MAP 57, LOT 9
BOOK 20960, PAGE 50

N/F
CENTRAL MASSACHUSETTS
HOME BUILDERS LLC
MAP 56, LOT 30
BOOK 43213, PAGE 4

APPROVAL UNDER THE
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IS REQUIRED.
GRAFTON PLANNING BOARD

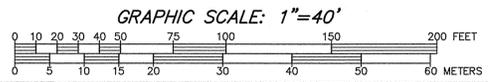
DATE: _____



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WESTERLY SIDE GRAFTON LLC
117 WATER ST., SUITE 201
MILFORD, MA 01757

MODIFIED DEFINITIVE SUBDIVISION PLAN

I, _____ CLERK OF THE TOWN OF GRAFTON
RECEIVED AND RECORDED APPROVAL FROM THE PLANNING BOARD
OF THIS PLAN ON _____ AND NO APPEAL WAS TAKEN
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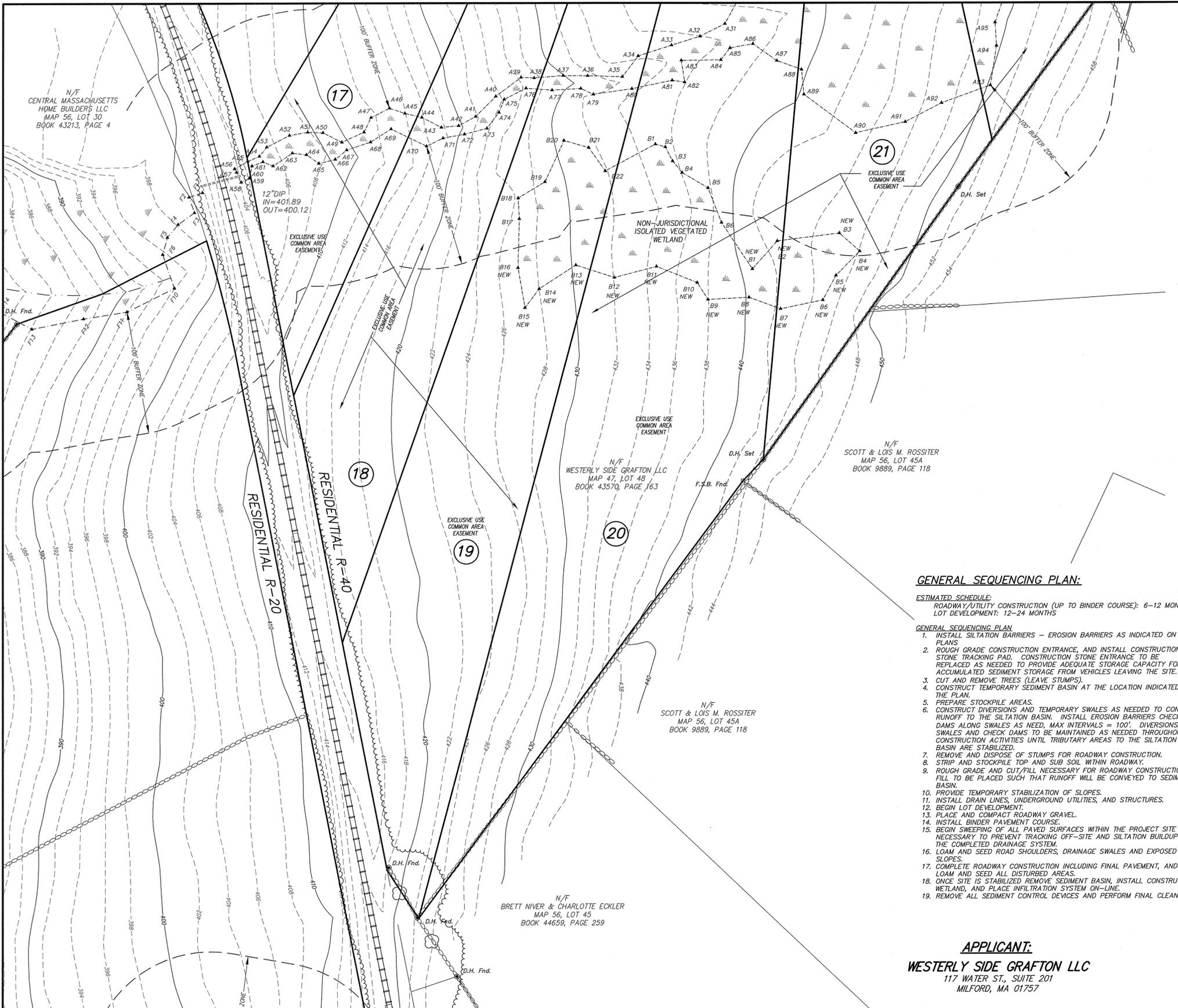


CONNORSTONE
CONSULTING CIVIL ENGINEERS
AND LAND SURVEYORS
10 SOUTHWEST CUTOFF, SUITE 7
NORTHBOROUGH, MASSACHUSETTS 01532
PHONE: (508)-393-9727 FAX: (508)-393-5242

DESIGNED BY: VC, REM
CHECKED BY: VC
COMPUTED BY:
FIELD SURVEY: VHH
DRAWN BY: REM
SCALE: 1" = 40'
SHEET 4 OF 11

TOPOGRAPHIC PLAN
OF
GRAFTON HILL
IN
GRAFTON, MA

1/8/2016
12/28/2015
11/23/2015
REVISIONS
SEPTEMBER 30, 2015



SOIL TEST LOGS

DTH-1+00
0-14" Ap SANDY LOAM 10YR3/3
14-32" Bw SANDY LOAM 10YR4/6
32-120" C1 SANDY LOAM 2.5Y5/3
NO GROUND WATER OR REFUSAL MOTTLES AT 27"

DTH-13+00
0-8" Ap SANDY LOAM 10YR3/3
8-18" Bw SANDY LOAM 10YR5/6
18-120" C1 SANDY LOAM 2.5Y5/3
NO GROUND WATER OR REFUSAL MOTTLES AT 18"

DTH-3+00
0-8" Ap SANDY LOAM 10YR3/3
8-20" Bw SANDY LOAM 10YR4/6
20-36" C1 SANDY LOAM 2.5Y5/3
36-110" C2 SANDY LOAM 2.5Y5/4
NO GROUND WATER OR REFUSAL MOTTLES AT 24"

DTH-5+00
0-12" Ap SANDY LOAM 10YR3/3
12-28" Bw SANDY LOAM 10YR4/6
28-120" C1 SANDY LOAM 2.5Y5/4
NO GROUND WATER OR REFUSAL MOTTLES AT 24"

DTH-7+00
0-16" Ap SANDY LOAM 10YR3/3
16-32" Bw SANDY LOAM 10YR5/6
32-122" C1 SANDY LOAM 2.5Y5/3
WATER AT 120"
MOTTLES AT 32"

DTH-9+00
0-20" FILL
20-26" Ap SANDY LOAM 10YR3/3
26-40" Bw SANDY LOAM 10YR5/6
40-130" C1 SANDY LOAM 2.5Y5/3
WATER AT 128"
MOTTLES AT 40"

DTH-11+00
0-8" Ap SANDY LOAM 10YR3/3
8-22" Bw SANDY LOAM 10YR5/6
22-120" C1 SANDY LOAM 2.5Y5/3
NO GROUND WATER
REFUSAL/BOULDER AT 120"
MOTTLES AT 22"

DTH-14+50
0-8" Ap SANDY LOAM 10YR3/3
8-24" Bw SANDY LOAM 10YR5/6
24-126" C1 SANDY LOAM 2.5Y5/3
NO GROUND WATER OR REFUSAL MOTTLES AT 24"

DTH-16+50
0-10" Ap SANDY LOAM 10YR3/3
10-24" Bw SANDY LOAM 10YR5/6
24-130" C1 SANDY LOAM 2.5Y5/3
NO GROUND WATER OR REFUSAL MOTTLES AT 24"

DTH-18+50
0-6" Ap SANDY LOAM 10YR3/3
6-20" Bw SANDY LOAM 10YR5/6
20-128" C1 SANDY LOAM 2.5Y5/3
NO GROUND WATER OR REFUSAL MOTTLES AT 20"

DTH-A
0-14" Ap SANDY LOAM 10YR3/3
14-24" Bw SANDY LOAM 10YR5/6
24-102" C1 SANDY LOAM 2.5Y5/3
NO GROUND WATER OR REFUSAL MOTTLES AT 32"

DTH-B
0-10" Ap SANDY LOAM 10YR3/3
10-28" Bw SANDY LOAM 10YR5/6
28-78" C1 SANDY LOAM 2.5Y5/3
NO GROUND WATER OR REFUSAL MOTTLES AT 32"

APPROVAL UNDER THE
SUBDIVISION CONTROL LAW,
IS REQUIRED.
GRAFTON PLANNING BOARD

DATE: _____

EROSION AND SEDIMENTATION CONTROL NOTES:

- ALL WORK SHALL BE IN ACCORDANCE WITH THE ORDER OF CONDITIONS ISSUED BY THE LOCAL CONSERVATION COMMISSION, AND THE PROJECT STORMWATER POLLUTION PREVENTION PLAN.
- PRIOR TO INITIATING CONSTRUCTION, ALL SEDIMENTATION AND EROSION CONTROL MEASURES SHALL BE INSTALLED AS SHOWN ON THE PLANS AND DETAIL DRAWINGS.
- THIS PLAN DEPICTS THE MINIMUM REQUIRED SEDIMENTATION AND EROSION CONTROLS. THE CONTRACTOR SHALL EMPLOY ADDITIONAL SEDIMENTATION AND EROSION CONTROL MEASURES AS NECESSITATED BY SITE CONDITIONS, OR AS DIRECTED BY THE OWNER, THE OWNER'S REPRESENTATIVE, OR THE CONSERVATION COMMISSION TO ENSURE PROTECTION OF ALL WETLAND RESOURCES AND CONTROL SEDIMENT TRANSPORT. IF SEDIMENTATION PLUMES OCCUR, THE CONTRACTOR SHALL STOP WORK AND INSTALL ADDITIONAL SEDIMENTATION CONTROL DEVICES IMMEDIATELY TO PREVENT FURTHER SEDIMENTATION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL TEMPORARY AND PERMANENT SEDIMENTATION AND EROSION CONTROLS UNTIL WORK IS COMPLETE AND ALL AREAS HAVE BEEN PERMANENTLY STABILIZED. AT SUCH TIME THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL SEDIMENTATION AND EROSION CONTROL MEASURES.
- THE CONTRACTOR SHALL INSPECT SEDIMENTATION AND EROSION CONTROLS ON A DAILY BASIS AND IMMEDIATELY AFTER EACH RAINFALL. REPAIRS SHALL BE MADE BY THE END OF THE WORKING DAY. ACCUMULATED SEDIMENT SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR WHEN THE VOLUME REACHES 1/4 TO 1/2 THE HEIGHT OF WEED FREE HAYBALE OR SEDIMENT TRAP, OR AS DIRECTED BY THE LOCAL AUTHORITY.
- SOIL STOCKPILES SHALL BE STABILIZED TO PREVENT EROSION, AND A PERIMETER SEDIMENT CONTROL BARRIER SHALL BE INSTALLED. NO MATERIALS SUBJECT TO EROSION SHALL BE STOCKPILED OVERNIGHT WITHIN 100 FEET OF A WETLAND UNLESS COVERED.
- TOPSOIL STOCKPILES AND DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY TEMPORARILY CEASES FOR AT LEAST 7 DAYS WILL BE STABILIZED WITH A TEMPORARY SEED AND MULCH NO LATER THAN 7 DAYS FROM THE LAST CONSTRUCTION ACTIVITY IN THAT AREA. THE TEMPORARY SEED SHALL BE EROSION CONTROL MIX. DISTURBED PORTIONS OF THE SITE WHERE FINAL GRADE HAS BEEN MET AND CONSTRUCTION ACTIVITY CEASES SHALL BE STABILIZED WITH PERMANENT SEED NO LATER THAN 7 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY. THE PERMANENT SEED MIX CONSISTS OF TALL FESCUE, AND ANNUAL RYE. PRIOR TO SEEDING, GROUND AGRICULTURAL LIMESTONE SHALL BE APPLIED AS REQUIRED. SEEDING SHALL BE NUTRIENT ENRICHED HYDROSEED WITH TACKLERS AND CELLULOSE OR OTHER DEGRADABLE FIBERS CAPABLE OF RETAINING MOISTURE. IF NOT DURING THE GROWING SEASON, THESE AREAS SHALL BE MULCHED WITH HAY AND SECURED.
- DEWATERING OPERATIONS, IF REQUIRED, SHALL DISCHARGE ONTO STABILIZED AREAS, AND ALL DISCHARGE WATER IS TO PASS THROUGH SEDIMENTATION CONTROL DEVICES TO PREVENT IMPACTS UPON WATER BODIES, BORDERING VEGETATED WETLANDS, DRAINAGE SYSTEMS AND ADJUTING PROPERTIES. AT A MINIMUM ALL DISCHARGES SHALL BE INTERCEPTED BY HAYBALE CORRAL AND HAYBALE CHECK DAMS SPACED 10' APART.
- STAKED WEED FREE STRAW OF HAY BALES AND SILT FENCE SHALL BE INSTALLED ALONG THE EDGE OF PROPOSED DEVELOPMENT OR AS INDICATED ON THE PLANS. ADDITIONAL WEED FREE BALES AND SILT FENCE SHALL BE LOCATED AS CONDITIONS WARRANT, AND IN SOME AREAS WEED FREE BALE/SILT FENCING STRUCTURES MAY HAVE TO BE DUPLICATED AT REGULAR INTERVALS UP GRADIENT OF WETLANDS.
- STREET SWEEPING IN THE VICINITY OF THE PROJECT AREA SHALL BE PERFORMED AS NEEDED UNTIL THE PROJECT LIMITS HAVE BEEN STABILIZED. ALL SEDIMENT TRACKED ONTO PUBLIC RIGHT-OF-WAYS SHALL BE SWEEPED AT THE END OF EACH WORKING DAY.
- ALL EXISTING AND PROPOSED DRAINAGE SYSTEM INLETS, WHICH MAY RECEIVE STORMWATER FLOW FROM DISTURBED AREAS, SHALL BE PROVIDED WITH INLET PROTECTION (CATCH BASIN INSERTS, STREAMGUARD - MODEL 3003, OR APPROVED EQUAL). THE CONTRACTOR SHALL MAINTAIN THESE DEVICES PER THE MANUFACTURERS RECOMMENDATIONS UNTIL ALL WORK IS COMPLETED AND ALL AREAS HAVE BEEN ADEQUATELY STABILIZED.
- DUST CONTROL MEASURES SHALL BE IMPLEMENTED AND MAINTAINED PROPERLY THROUGHOUT DRY WEATHER PERIODS UNTIL ALL DISTURBED AREAS HAVE BEEN PERMANENTLY STABILIZED. METHODS FOR DUST CONTROL SHALL INCLUDE WATER SPRINKLING AND/OR OTHER METHODS APPROVED BY THE ENGINEER.
- ALL VEHICLES SHALL ENTER AND EXIT THE SITE VIA THE STABILIZED CONSTRUCTION ENTRANCE CONSISTING OF 2" TO 3" INCH CRUSHED STONE TO A DEPTH OF 6" FOR A MINIMUM OF THE FIRST 50 FEET FROM EXISTING PAVED STREETS. EXTENDING THE PAD BEYOND 50 FEET AS NECESSARY BASED UPON FIELD CONDITIONS; IF THE SITE CONDITIONS ARE SUCH THAT THE GRAVEL PAD DOES NOT REMOVE THE MAJORITY OF THE MUD AND DEBRIS, THEN THE TIRES SHALL BE WASHED BEFORE ANY VEHICLES ENTER ADJACENT ROADWAYS. ALL WATER USED FOR TIRE WASHING SHALL BE COLLECTED AND TREATED PRIOR TO ENTERING THE DRAINAGE SYSTEM. THE CONTRACTOR SHALL INSPECT THE CONSTRUCTION ENTRANCE DAILY AND AFTER HEAVY USE.
- EQUIPMENT NOT IN USE SHALL NOT BE PARKED WITHIN WETLANDS OR BUFFER AREAS.

GENERAL SEQUENCING PLAN:

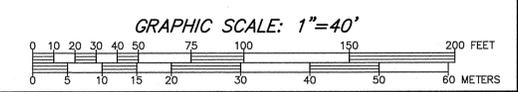
ESTIMATED SCHEDULE:
ROADWAY/UTILITY CONSTRUCTION (UP TO BINDER COURSE): 6-12 MONTHS
LOT DEVELOPMENT: 12-24 MONTHS

- GENERAL SEQUENCING PLAN**
- INSTALL SILTATION BARRIERS - EROSION BARRIERS AS INDICATED ON THE PLANS
 - ROUGH GRADE CONSTRUCTION ENTRANCE, AND INSTALL CONSTRUCTION STONE TRACKING PAD. CONSTRUCTION STONE ENTRANCE TO BE REPLACED AS NEEDED TO PROVIDE ADEQUATE STORAGE CAPACITY FOR ACCUMULATED SEDIMENT STORAGE FROM VEHICLES LEAVING THE SITE.
 - CUT AND REMOVE TREES (LEAVE STUMPS).
 - CONSTRUCT TEMPORARY SEDIMENT BASIN AT THE LOCATION INDICATED ON THE PLAN.
 - PREPARE STOCKPILE AREAS.
 - CONSTRUCT DIVERSIONS AND TEMPORARY SWALES AS NEEDED TO CONVEY RUNOFF TO THE SILTATION BASIN. INSTALL EROSION BARRIERS CHECK DAMS ALONG SWALES AS NEEDED. MAX INTERVALS = 100'. DIVERSIONS, SWALES AND CHECK DAMS TO BE MAINTAINED AS NEEDED THROUGHOUT CONSTRUCTION ACTIVITIES UNTIL TRIBUTARY AREAS TO THE SILTATION BASIN ARE STABILIZED.
 - REMOVE AND DISPOSE OF STUMPS FOR ROADWAY CONSTRUCTION.
 - STRIP AND STOCKPILE TOP AND SUB SOIL WITHIN ROADWAY.
 - ROUGH GRADE AND CUT/FILL NECESSARY FOR ROADWAY CONSTRUCTION. FILL TO BE PLACED SUCH THAT RUNOFF WILL BE CONVEYED TO SEDIMENT BASIN.
 - PROVIDE TEMPORARY STABILIZATION OF SLOPES.
 - INSTALL DRAIN LINES, UNDERGROUND UTILITIES, AND STRUCTURES.
 - BEGIN LOT DEVELOPMENT.
 - PLACE AND COMPACT ROADWAY GRAVEL.
 - INSTALL BINDER PAVEMENT COURSE.
 - BEGIN SWEEPING OF ALL PAVED SURFACES WITHIN THE PROJECT SITE AS NECESSARY TO PREVENT TRACKING OFF-SITE AND SILTATION BUILDUP IN THE COMPLETED DRAINAGE SYSTEM.
 - LOAM AND SEED ROAD SHOULDERS, DRAINAGE SWALES AND EXPOSED SLOPES.
 - COMPLETE ROADWAY CONSTRUCTION INCLUDING FINAL PAVEMENT, AND LOAM AND SEED ALL DISTURBED AREAS.
 - ONCE SITE IS STABILIZED REMOVE SEDIMENT BASIN, INSTALL CONSTRUCTED WETLAND, AND PLACE INFILTRATION SYSTEM ON-LINE.
 - REMOVE ALL SEDIMENT CONTROL DEVICES AND PERFORM FINAL CLEANUP.

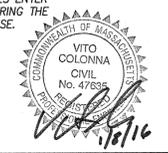
APPLICANT:

WESTERLY SIDE GRAFTON LLC
117 WATER ST., SUITE 201
MILFORD, MA 01757

_____, CLERK OF THE TOWN OF GRAFTON
RECEIVED AND RECORDED APPROVAL FROM THE PLANNING BOARD
OF THIS PLAN ON _____ AND NO APPEAL WAS TAKEN
FOR TWENTY (20) DAYS THEREAFTER.



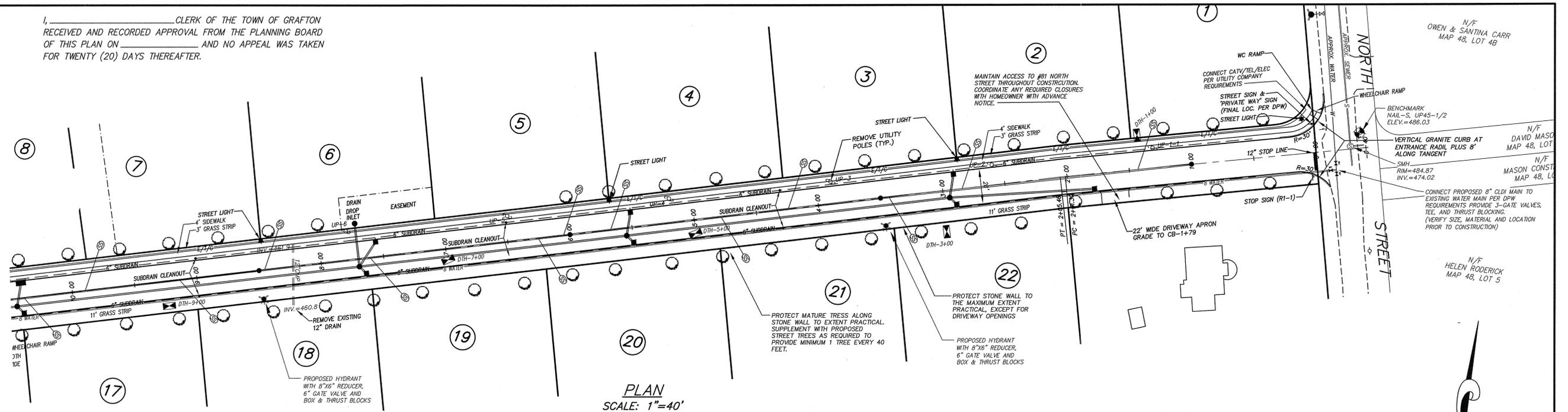
<p>CONNORSTONE CONSULTING CIVIL ENGINEERS AND LAND SURVEYORS 10 SOUTHWEST CUTOFF, SUITE 7 NORTHBOROUGH, MASSACHUSETTS 01532 PHONE: (508)-393-9727 FAX: (508)-393-5242</p>	DESIGNED BY: VC, REM	<p>TOPOGRAPHIC PLAN OF GRAFTON HILL IN GRAFTON, MA</p>	<p>1/8/2016 12/28/2015 11/23/2015 REVISIONS SEPTEMBER 30, 2015</p>
	CHECKED BY: VC		
	COMPUTED BY:		
	FIELD SURVEY: VHH		
	DRAWN BY: REM		
	SCALE: 1" = 40'		
	SHEET 5 OF 11		



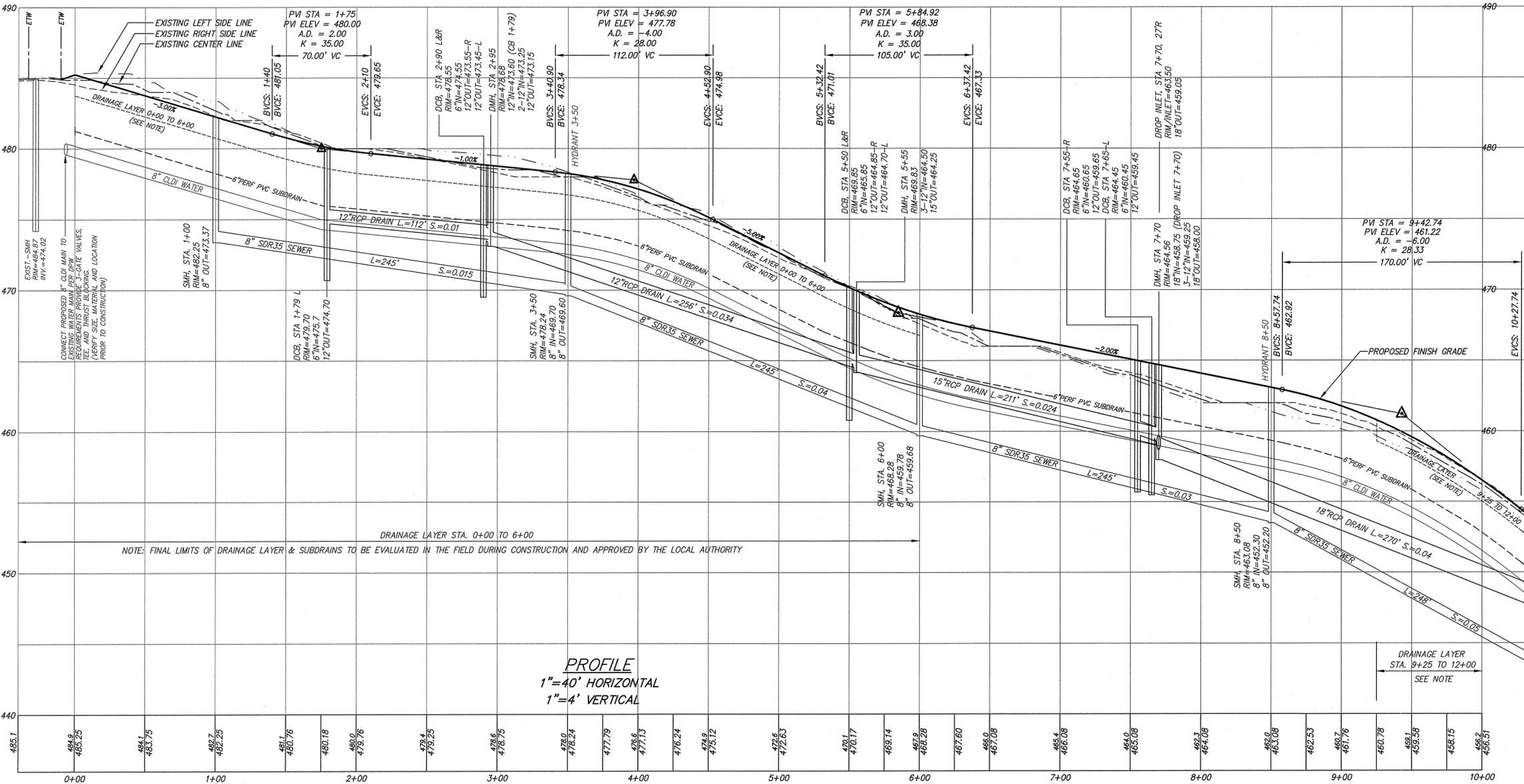
APPROVAL UNDER THE
SUBDIVISION CONTROL LAW,
IS REQUIRED.
GRAFTON PLANNING BOARD

I, _____ CLERK OF THE TOWN OF GRAFTON
RECEIVED AND RECORDED APPROVAL FROM THE PLANNING BOARD
OF THIS PLAN ON _____ AND NO APPEAL WAS TAKEN
FOR TWENTY (20) DAYS THEREAFTER.

DATE: _____



PLAN
SCALE: 1"=40'



PROFILE
1"=40' HORIZONTAL
1"=4' VERTICAL



APPLICANTS:
WESTERLY SIDE GRAFTON LLC
117 WATER ST., SUITE 201
MILFORD, MA 01757

MODIFIED DEFINITIVE SUBDIVISION PLAN
ROADWAY PLAN & PROFILE
OF
GRAFTON HILL
IN
GRAFTON, MA

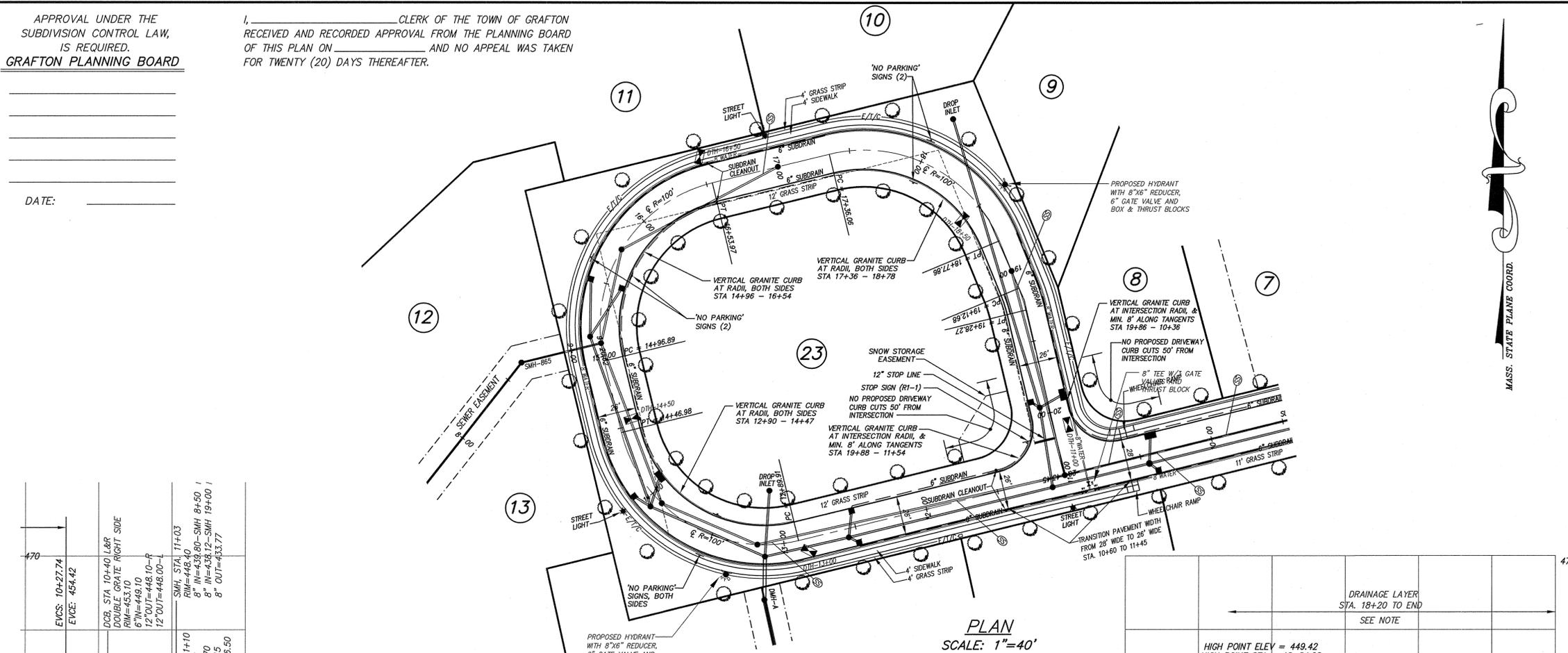
CONNORSTONE
CONSULTING CIVIL ENGINEERS
AND LAND SURVEYORS
10 SOUTHWEST CUTOFF, SUITE 7
NORTHBOROUGH, MASSACHUSETTS 01532
PHONE: (508)-393-9727 FAX: (508)-393-5242

DESIGNED BY: VC, REM	
CHECKED BY: VC	
COMPUTED BY:	
FIELD SURVEY: VHH	1/8/2016
DRAWN BY: REM	12/28/2015
SCALE: AS SHOWN	11/23/2015
SHEET 6 OF 11.	REVISIONS
	SEPTEMBER 30, 2015

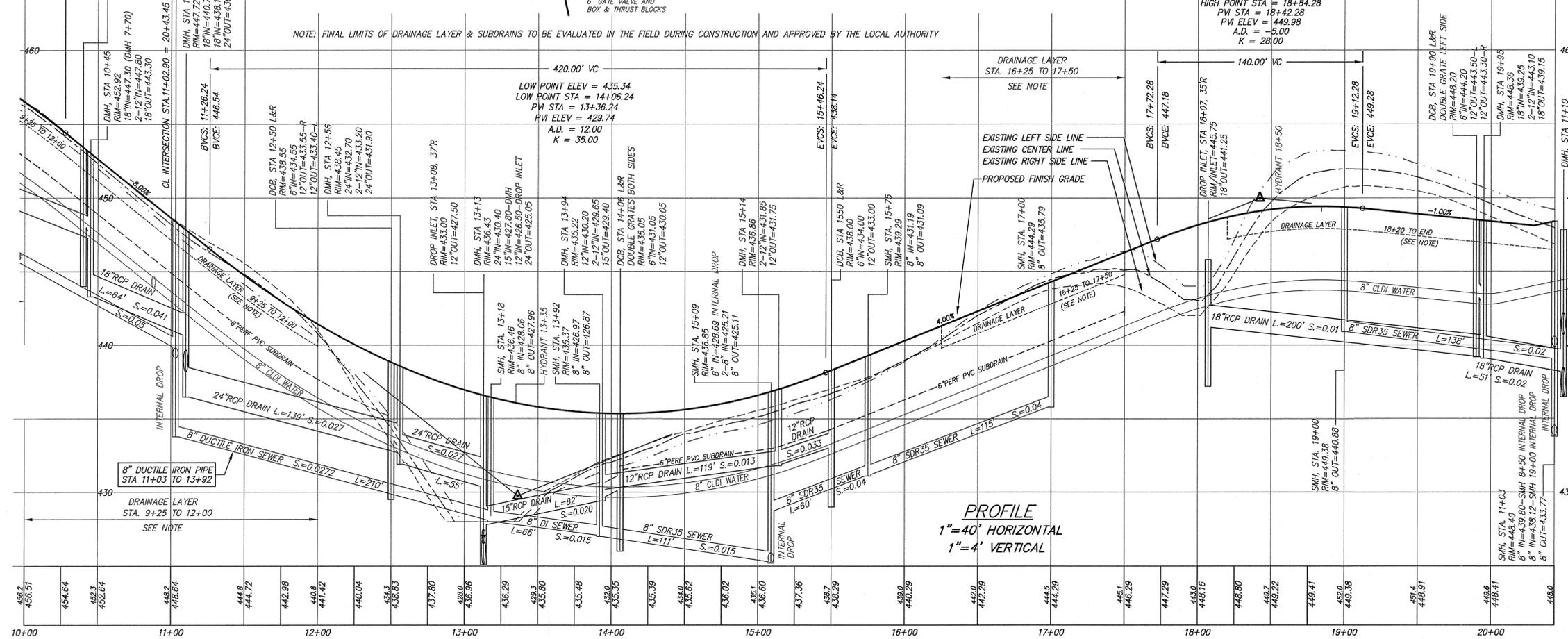
APPROVAL UNDER THE
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GRAFTON PLANNING BOARD

I, _____ CLERK OF THE TOWN OF GRAFTON
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OF THIS PLAN ON _____ AND NO APPEAL WAS TAKEN
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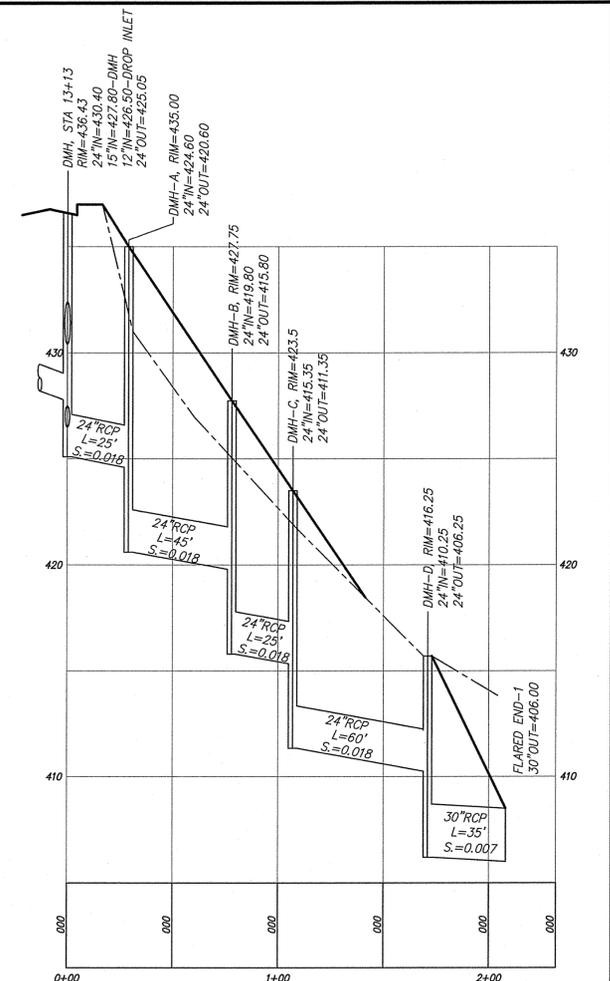
DATE: _____



PLAN
SCALE: 1"=40'



PROFILE
1"=40' HORIZONTAL
1"=4' VERTICAL



DRAIN PROFILE
1"=40' HORIZONTAL
1"=4' VERTICAL

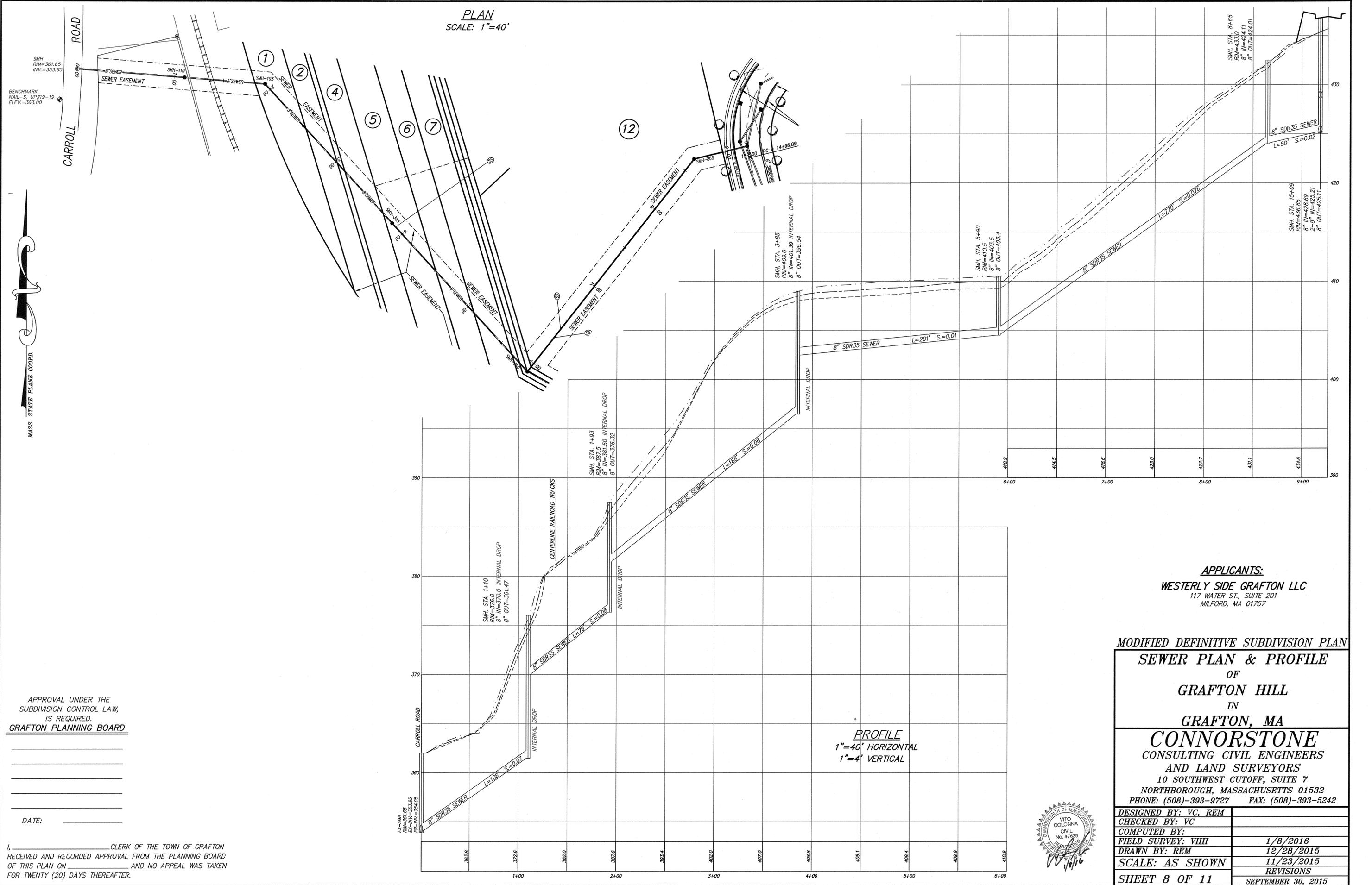


APPLICANTS:
WESTERLY SIDE GRAFTON LLC
117 WATER ST., SUITE 201
MILFORD, MA 01757

MODIFIED DEFINITIVE SUBDIVISION PLAN
ROADWAY PLAN & PROFILE
OF
GRAFTON HILL
IN
GRAFTON, MA
CONNORSTONE
CONSULTING CIVIL ENGINEERS
AND LAND SURVEYORS
10 SOUTHWEST CUTOFF, SUITE 7
NORTHBOROUGH, MASSACHUSETTS 01532
PHONE: (508)-393-9727 FAX: (508)-393-5242

DESIGNED BY: VC, REM	
CHECKED BY: VC	
COMPUTED BY:	
FIELD SURVEY: VHH	1/8/2016
DRAWN BY: REM	12/28/2015
SCALE: AS SHOWN	11/23/2015
SHEET 7 OF 11	REVISIONS
	SEPTEMBER 30, 2015

PLAN
SCALE: 1"=40'



APPROVAL UNDER THE
SUBDIVISION CONTROL LAW,
IS REQUIRED.
GRAFTON PLANNING BOARD

DATE: _____

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RECEIVED AND RECORDED APPROVAL FROM THE PLANNING BOARD
OF THIS PLAN ON _____ AND NO APPEAL WAS TAKEN
FOR TWENTY (20) DAYS THEREAFTER.

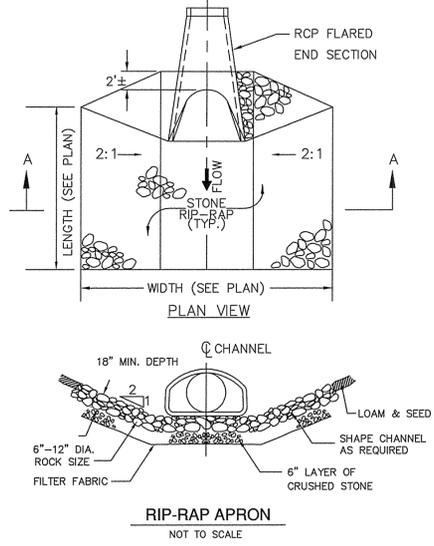
APPLICANTS:
WESTERLY SIDE GRAFTON LLC
117 WATER ST., SUITE 201
MILFORD, MA 01757

MODIFIED DEFINITIVE SUBDIVISION PLAN
SEWER PLAN & PROFILE
OF
GRAFTON HILL
IN
GRAFTON, MA

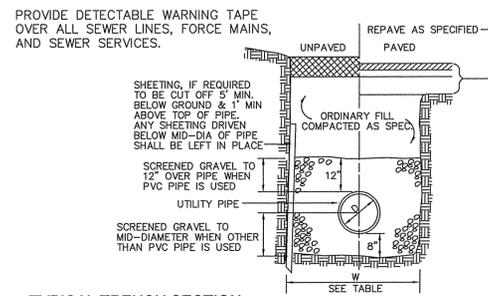
CONNORSTONE
CONSULTING CIVIL ENGINEERS
AND LAND SURVEYORS
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DESIGNED BY: VC, REM	
CHECKED BY: VC	
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FIELD SURVEY: VHH	1/8/2016
DRAWN BY: REM	12/28/2015
SCALE: AS SHOWN	11/23/2015
SHEET 8 OF 11	REVISIONS
	SEPTEMBER 30, 2015

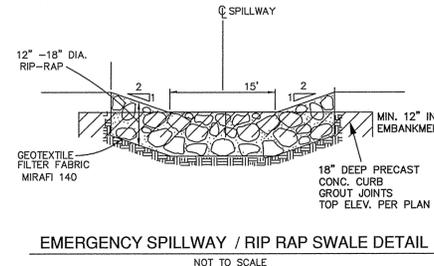




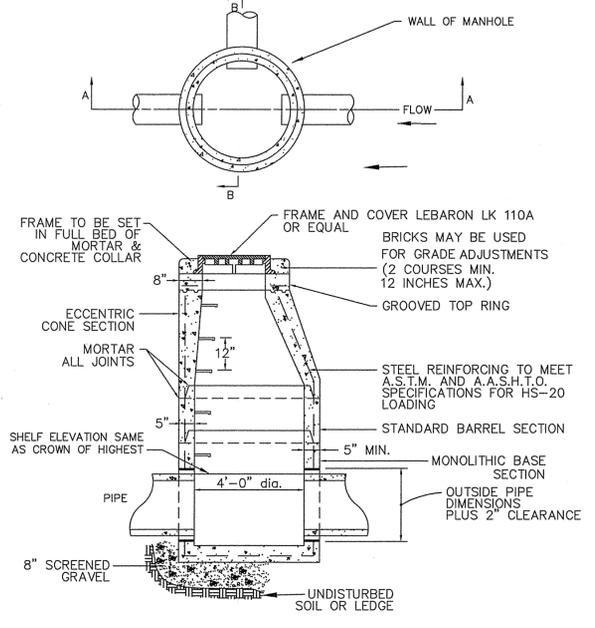
TRENCH WIDTH (W)			
D	W	W	W
DIAMETER OF PIPE	UN-SHEATED	SHEATED	
12"	3'	4'	
14"	4'	5'	
30"	5'	6'	



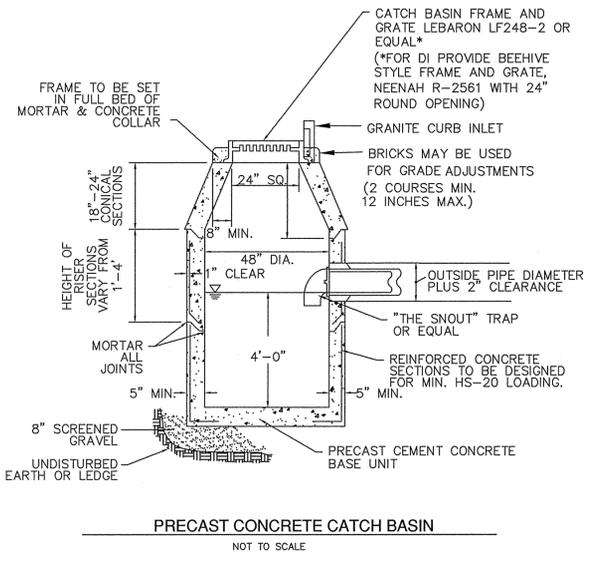
TYPICAL TRENCH SECTION
NOT TO SCALE



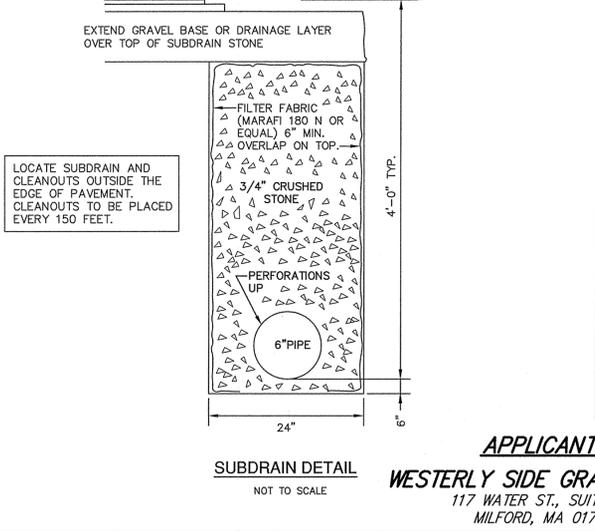
EMERGENCY SPILLWAY / RIP RAP SWALE DETAIL
NOT TO SCALE



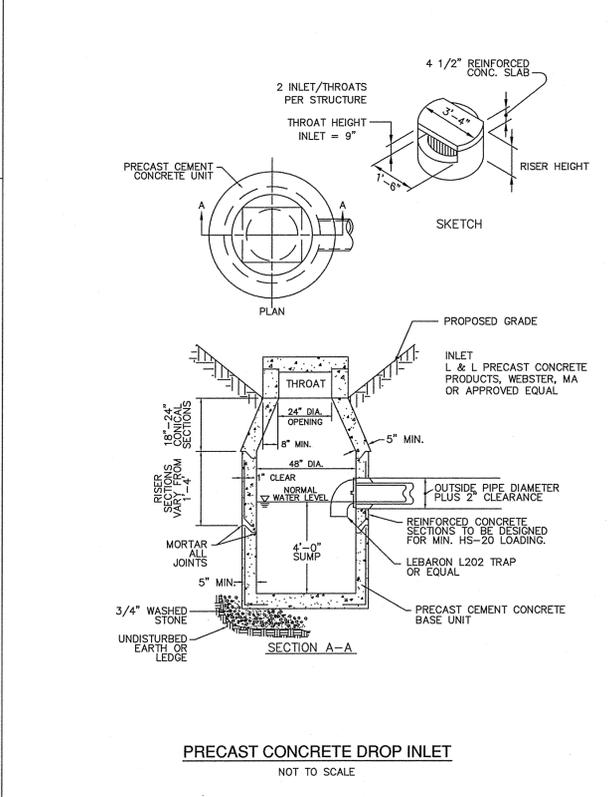
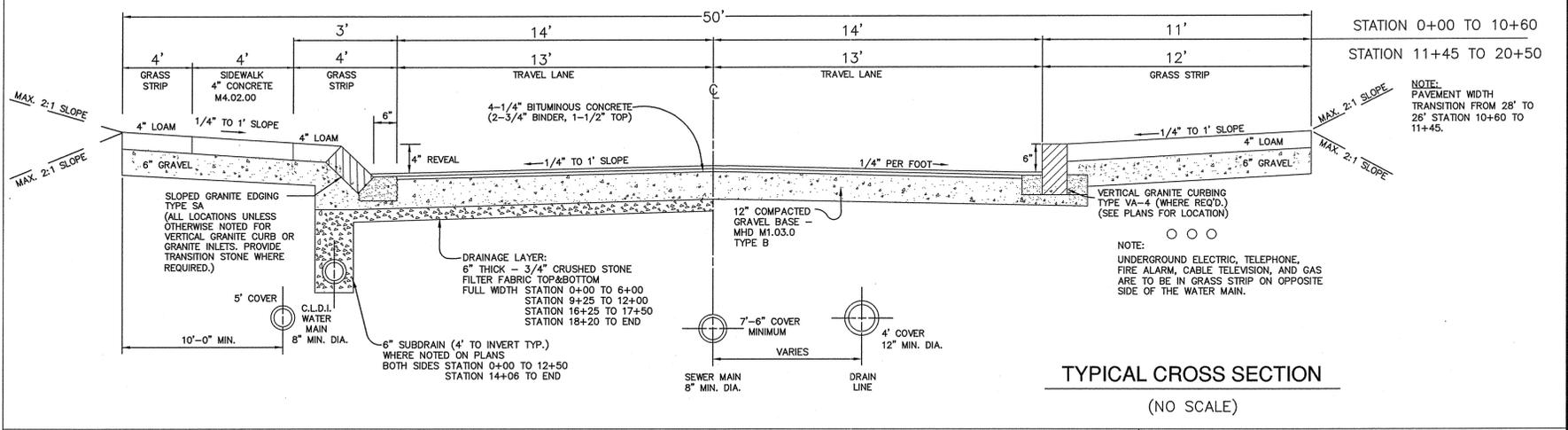
PRECAST CONCRETE DRAIN MANHOLE
NOT TO SCALE
THICKNESS - 6 INCHES



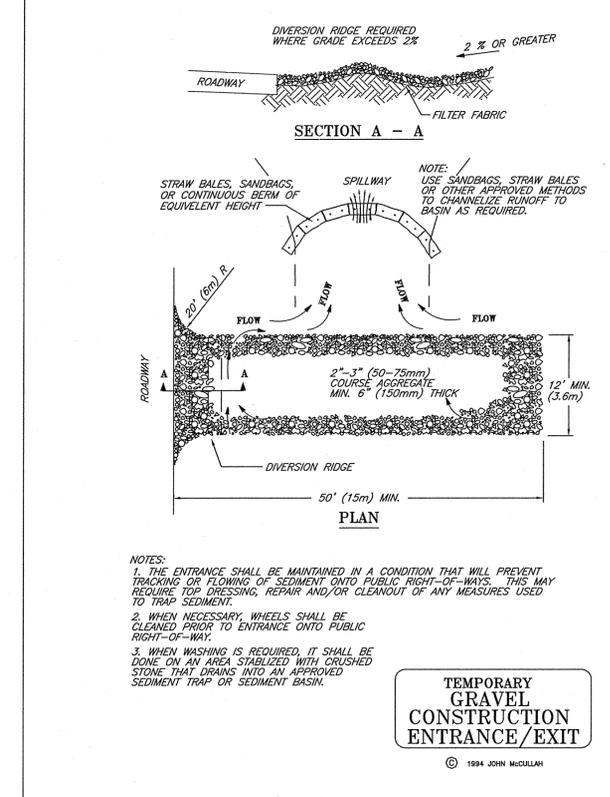
PRECAST CONCRETE CATCH BASIN
NOT TO SCALE



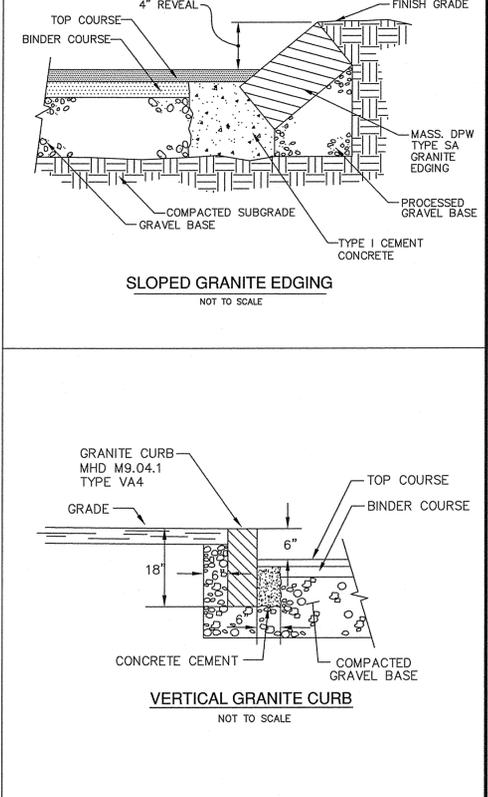
SUBDRAIN DETAIL
NOT TO SCALE



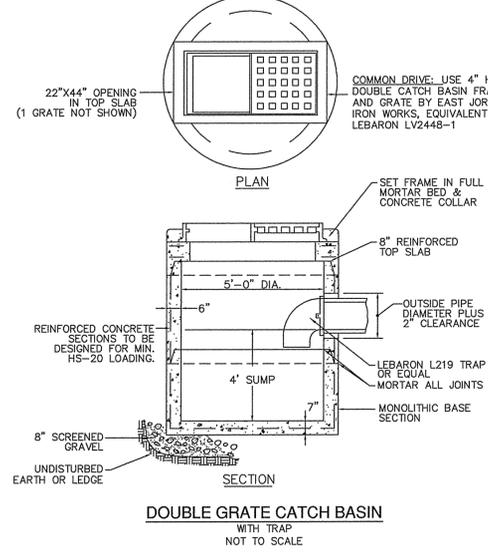
PRECAST CONCRETE DROP INLET
NOT TO SCALE



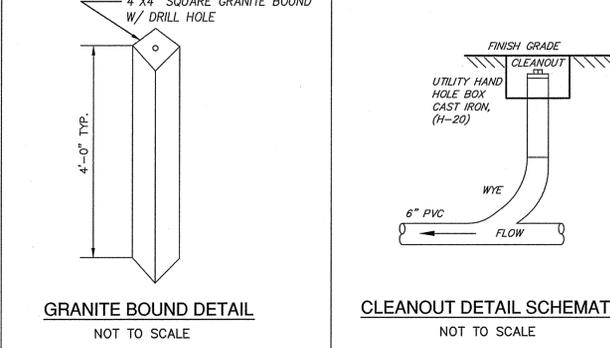
TEMPORARY GRAVEL ENTRANCE/EXIT
NOT TO SCALE



VERTICAL GRANITE CURB
NOT TO SCALE

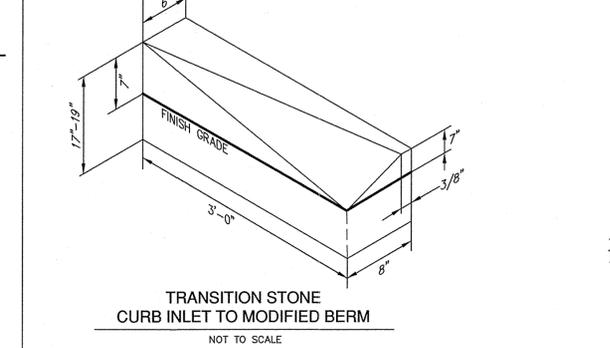


DOUBLE GRATE CATCH BASIN
NOT TO SCALE



GRANITE BOUND DETAIL
NOT TO SCALE

1. SET 1" ABOVE FINISH GRADE.
2. A CLEARANCE OF AT LEAST THREE FEET (3') FROM A BOUND POINT SHALL BE PROVIDED TO PERMIT FREE USE OF THE BOUND BOTH Laterally AND ALONG SIDELINES



TRANSITION STONE CURB INLET TO MODIFIED BERM
NOT TO SCALE

APPROVAL UNDER THE SUBDIVISION CONTROL LAW, IS REQUIRED.
GRAFTON PLANNING BOARD

DATE: _____

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APPLICANT:
WESTERLY SIDE GRAFTON LLC
117 WATER ST., SUITE 201
MILFORD, MA 01757



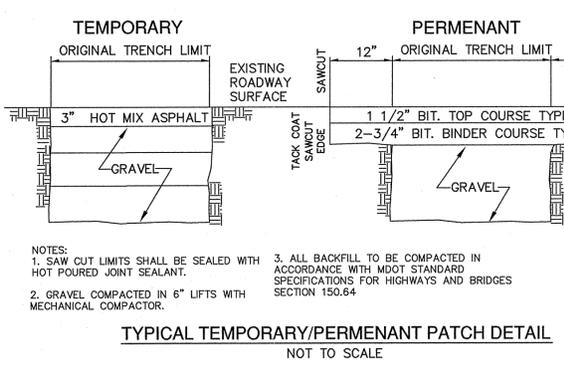
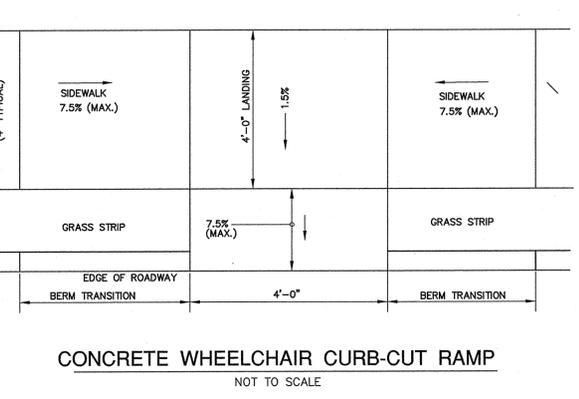
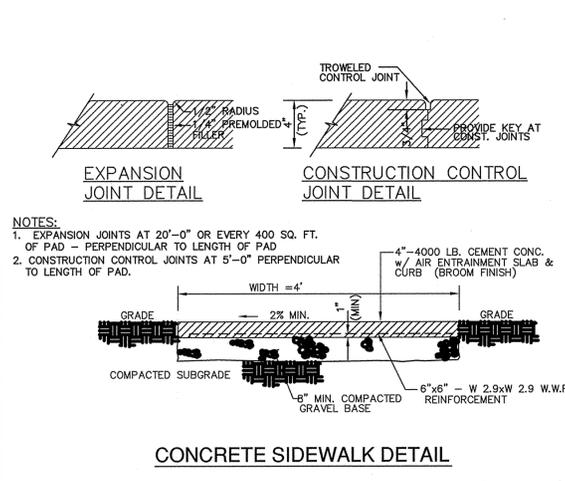
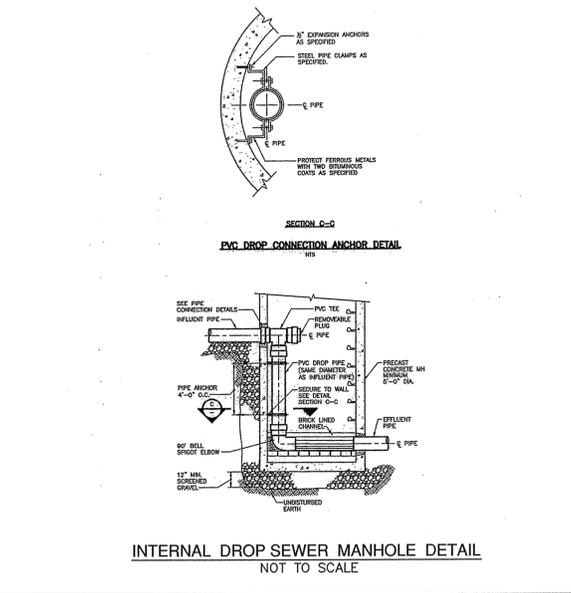
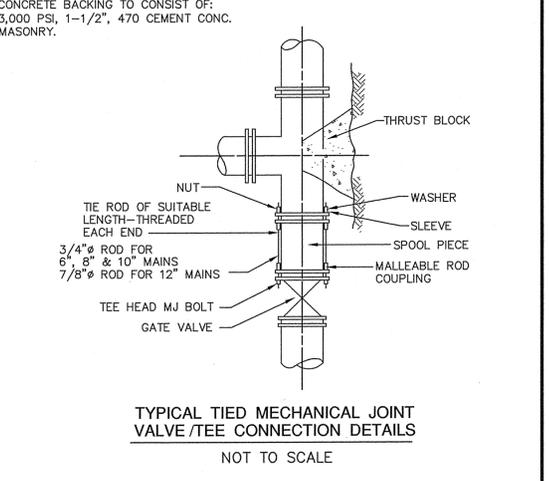
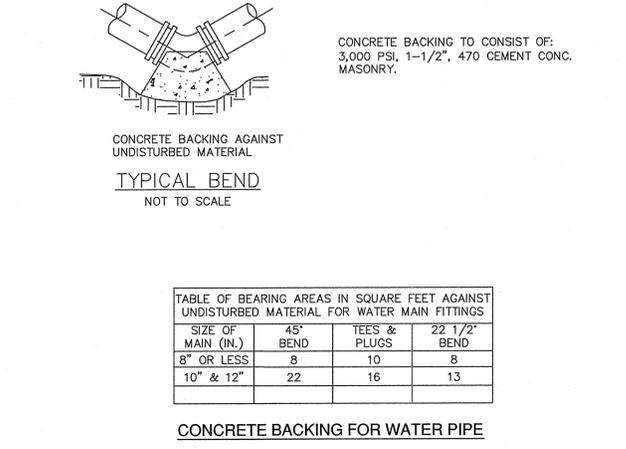
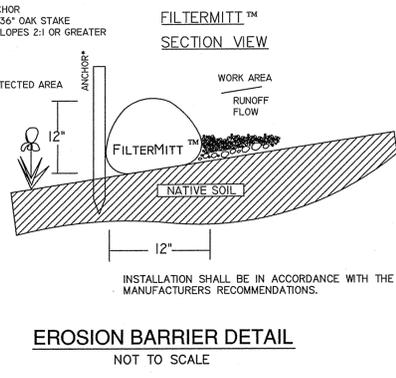
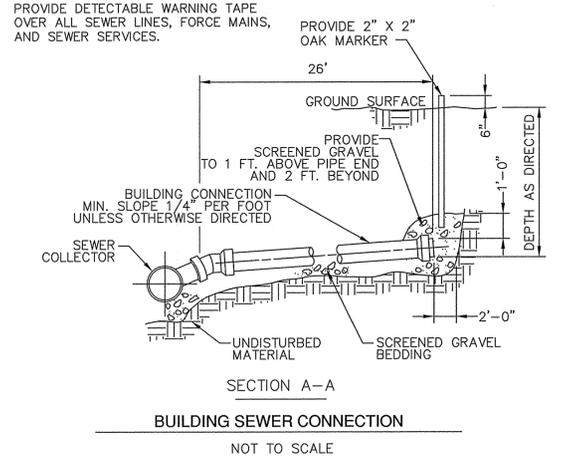
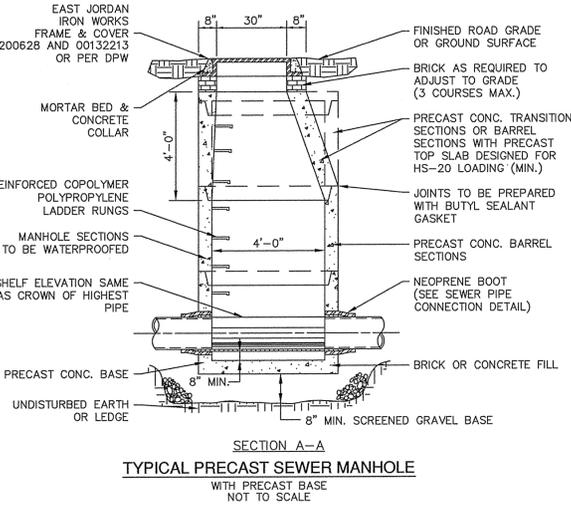
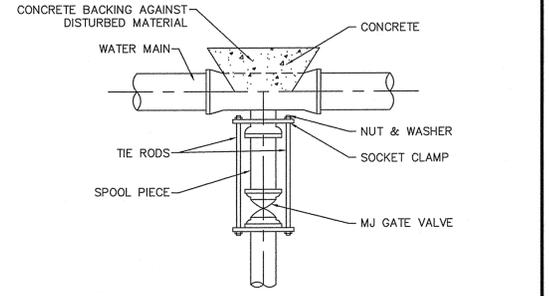
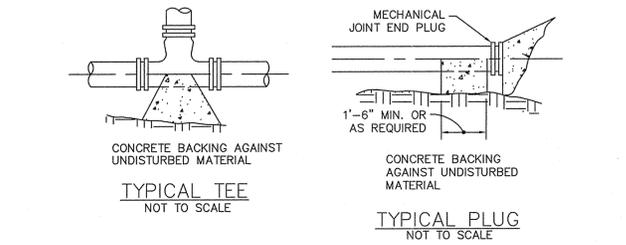
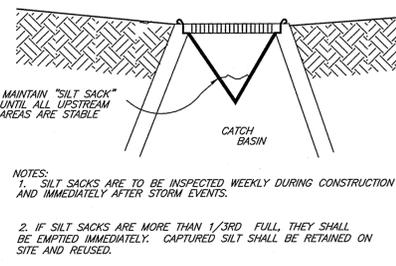
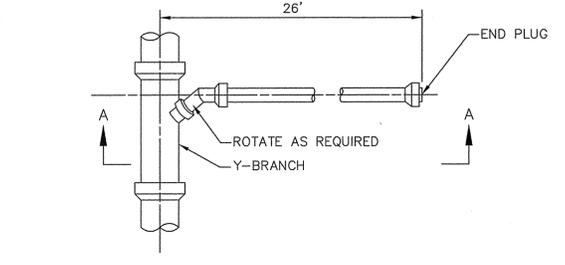
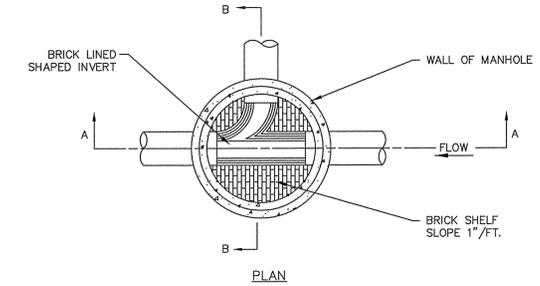
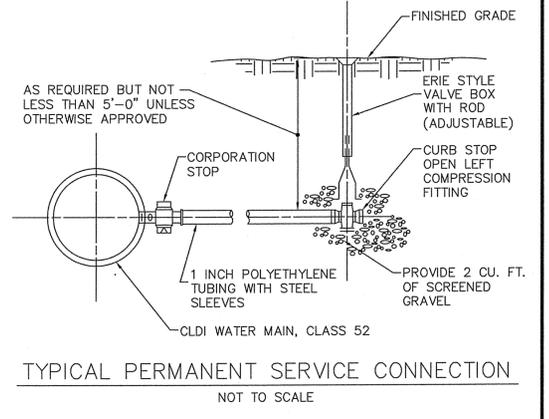
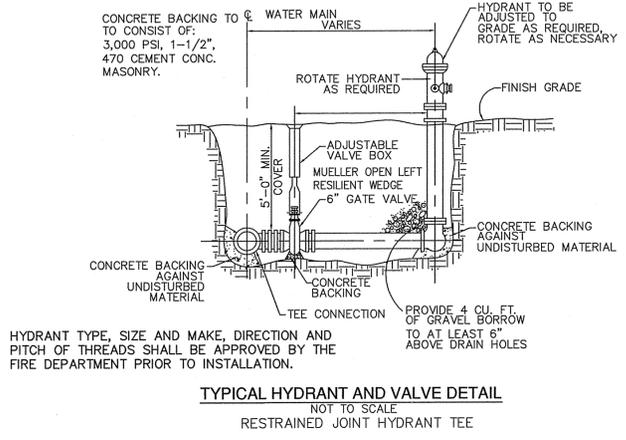
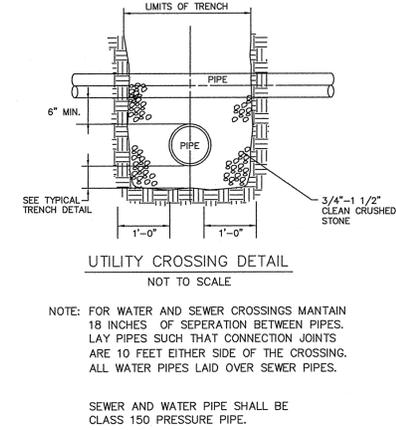
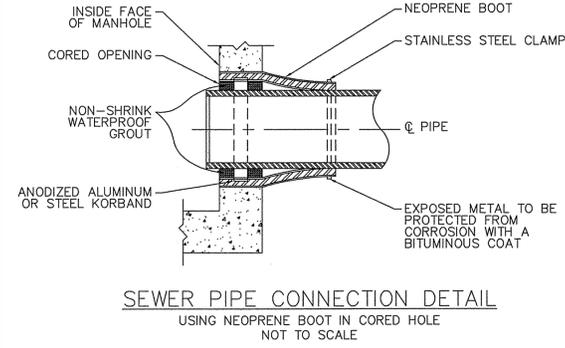
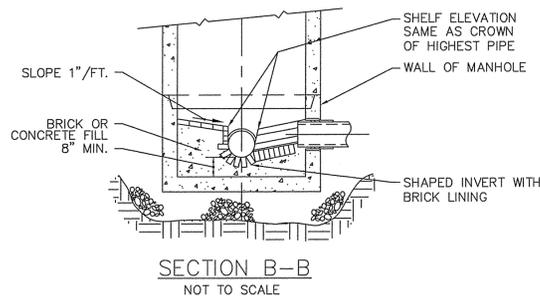
CONNORSTONE
CONSULTING CIVIL ENGINEERS
AND LAND SURVEYORS
10 SOUTHWEST CUTOFF, SUITE 7
NORTHBOROUGH, MASSACHUSETTS 01532
PHONE: (508)-393-9727 FAX: (508)-393-5242

DESIGNED BY: VC, REM
CHECKED BY: VC
COMPUTED BY:
FIELD SURVEY:
DRAWN BY: REM
SCALE: NONE
SHEET 9 OF 11

MODIFIED DEFINITIVE SUBDIVISION PLAN

CONSTRUCTION DETAILS
OF
GRAFTON HILL
IN
GRAFTON, MA

1/8/2016
12/28/2015
11/23/2015
REVISIONS
SEPTEMBER 30, 2015



APPROVAL UNDER THE SUBDIVISION CONTROL LAW, IS REQUIRED.
GRAFTON PLANNING BOARD

DATE: _____

(Signature)

APPLICANT:
WESTERLY SIDE GRAFTON LLC
 117 WATER ST., SUITE 201
 MILFORD, MA 01757

CONNORSTONE
 CONSULTING CIVIL ENGINEERS
 AND LAND SURVEYORS
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 SCALE: NONE
 SHEET 10 OF 11

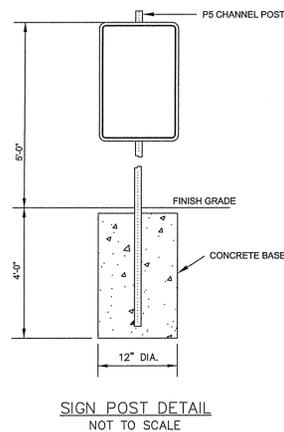
MODIFIED DEFINITIVE SUBDIVISION PLAN
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 OF
GRAFTON HILL
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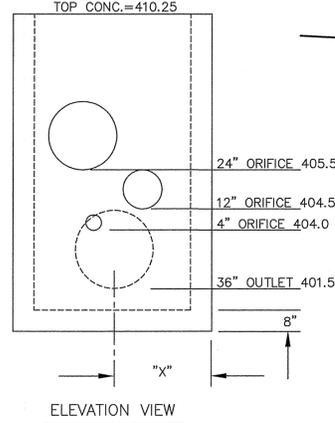
TRAFFIC SIGN SUMMARY			
M.U.T.C.D. NUMBER	SPECIFICATIONS		DESCRIPTION
	WIDTH	HEIGHT	
R1-1	30"	30"	
R7-1	12"	18"	
R14-X	*	*	
W42-8	24"	24"	

(1) SIZE PER DPW REQUIREMENTS
(2) FINAL LOCATION, SIZE, AND TEXT TO BE COORDINATED AND APPROVED BY DPW PRIOR TO INSTALLATION.

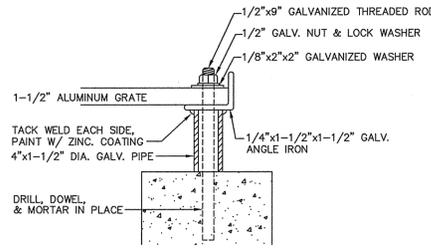
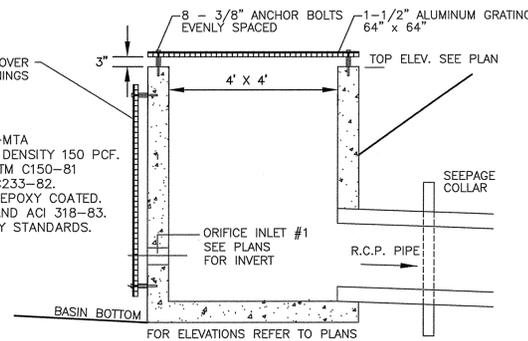
TYPICAL SIGNAGE DETAILS
NOT TO SCALE



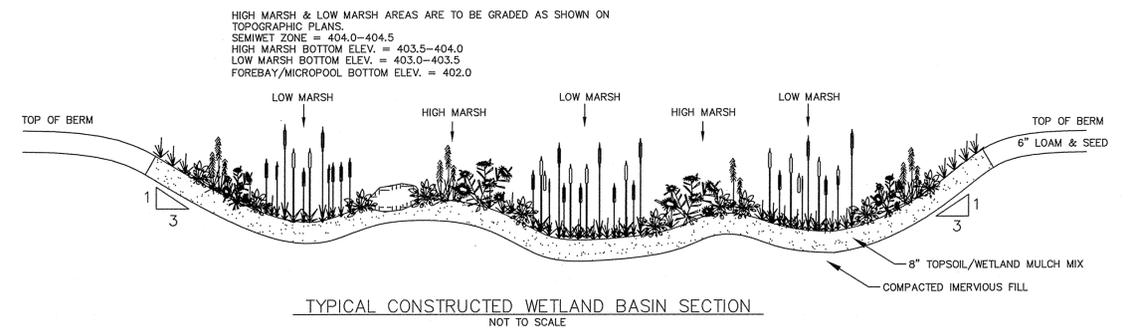
DESIGN DATA & GENERAL NOTES
1.) CHASE PRECAST CORP. PRODUCT #D1 42-MTA
2.) CONCRETE STRENGTH f'c 5,000 28 DAYS. DENSITY 150 PCF.
3.) CEMENT, PORTLAND TYPE I OR III PER ASTM C150-81
4.) ADMIXTURES & PLASTICIZERS PER ASTM C233-82.
5.) REINFORCING PER ASTM A615 GRADE 60. EPOXY COATED.
6.) DESIGN LOADING PER AASHTO HS20-44 AND ACI 318-83.
7.) CONFORMS TO MASS. TURNPIKE AUTHORITY STANDARDS.
8.) INTERIOR FINISH BY CONTRACTOR.
9.) APPROXIMATE WEIGHT: 10,500 LBS..



TYPICAL OUTLET STRUCTURE DETAIL
NOT TO SCALE



HOLD DOWN BOLT DETAIL



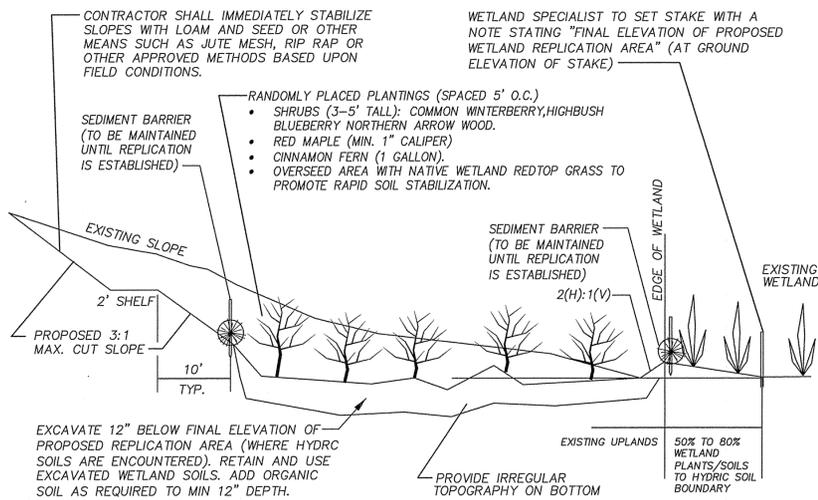
TYPICAL CONSTRUCTED WETLAND BASIN SECTION
NOT TO SCALE

CONSTRUCTION SEQUENCE:
RECOMMENDED PROCESS PER MA DEP STORM WATER HANDBOOK:

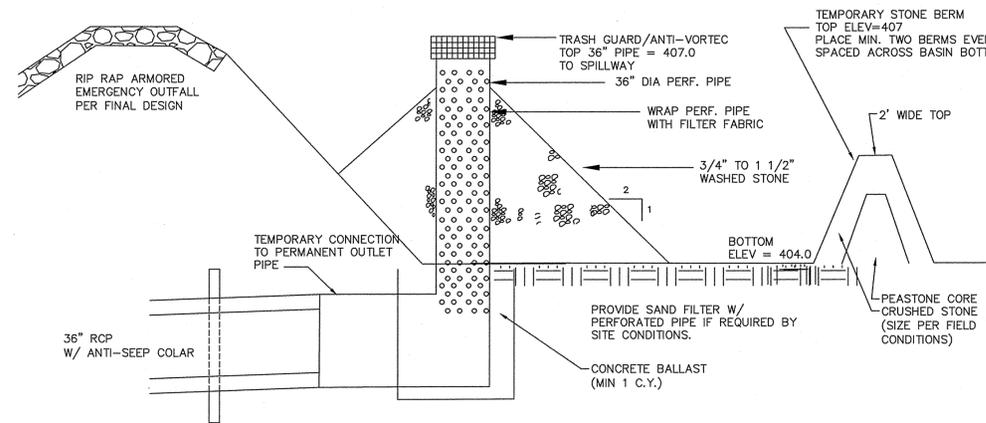
- ONCE THE CONSTRUCTED STORM WATER WETLAND VOLUME HAS BEEN EXCAVATED, GRADE THE WETLAND TO CREATE THE MAJOR INTERNAL FEATURES (POOL, AQUATIC BENCH, DEEP WATER CHANNELS, ETC.).
- ADD TOPSOIL AND/OR WETLAND MULCH TO THE WETLAND EXCAVATION. IF AVAILABLE, WETLAND MULCH IS PREFERABLE TO TOPSOIL.
- AFTER THE MULCH OR TOPSOIL HAS BEEN ADDED, GRADE THE CONSTRUCTED STORM WATER WETLAND TO ITS FINAL ELEVATIONS. TEMPORARILY STABILIZE ALL WETLAND FEATURES ABOVE THE NORMAL POOL. AFTER FINAL GRADING ALLOW THE POOL TO FILL. EVALUATE THE WETLAND ELEVATIONS DURING A STANDING PERIOD TO ASSESS HOW THE CONSTRUCTED STORM WATER WETLAND RESPONDS TO STORM FLOWS AND INUNDATION, WHERE THE POND-SCAPING ZONES ARE LOCATED, AND WHETHER THE FINAL GRADE AND MICRO-TOPOGRAPHY WILL PERSIST OVER TIME.
- PREPARE FINAL POND-SCAPING AND GRADING PLANS FOR THE CONSTRUCTED STORM WATER WETLAND. AT THE SAME TIME, ORDER WETLAND PLANT STOCKS FROM AQUATIC NURSERIES.
- BEFORE PLANTING, MEASURE THE CONSTRUCTED STORMWATER WETLAND DEPTHS TO THE NEAREST INCH TO CONFIRM PLANTING DEPTH. IF NECESSARY, MODIFY THE POND-SCAPE PLAN AT THIS TIME TO REFLECT ALTERED DEPTHS OR AVAILABILITY OF PLANT STOCK.
- AGGRESSIVELY APPLY EROSION CONTROLS DURING THE STANDING AND PLANTING PERIODS. STABILIZE THE VEGETATION IN ALL AREAS ABOVE THE NORMAL POOL ELEVATION DURING THE STANDING PERIOD (TYPICALLY BY HYDROSEEDING).
- DEWATER THE CONSTRUCTED STORMWATER WETLAND AT LEAST THREE DAYS BEFORE PLANTING.
- PERFORM FINAL PLANTING AND STABILIZATION. ALLOW POND TO FILL.

SEMI WET ZONE PLANTINGS:	SIZE:	SPACING:
HIGH BUSH BLUEBERRY	2'-3"	12' O.C.
SILKY DOGWOOD	2'-3"	12' O.C.
NORTHERN ARROWWOOD	2'-3"	12' O.C.
HIGH MARSH ZONE PLANTINGS: (0" - 6" POOL DEPTH)		
CATTAILS	2" PLUG	2.5' O.C.
JOE-PYE WEED	2" PLUG	2.5' O.C.
WOOLGRASS	2" PLUG	2.5' O.C.
LOW MARSH ZONE PLANTINGS: (6" TO 18" POOL DEPTH)		
BURREED	2" PLUG	2.5' O.C.
NORTHERN ARROWHEAD	2" PLUG	2.5' O.C.
SOFT-STEM BULRUSH	2" PLUG	2.5' O.C.
OVERSEED HIGH/LOW MARSH/FOREBAY/MICROPOOL:		
NEW ENGLAND WETMIX (WETLAND SEED MIX)		
PRODUCED BY: NEW ENGLAND WETLAND PLANTS, INC.		
APPLICATION RATE: 1 LB/2,500 S.F.		
BASIN SIDE SLOPES:		
SEEDED WITH NEW ENGLAND CONSERVATION/WLDLIFE MIX, BY NEW ENGLAND WETLAND PLANTS, INC. OR EQUAL.		

*BASIN PLANTINGS ARE A GUIDE, AND MAY BE MODIFIED BASED UPON FIELD CONDITIONS.



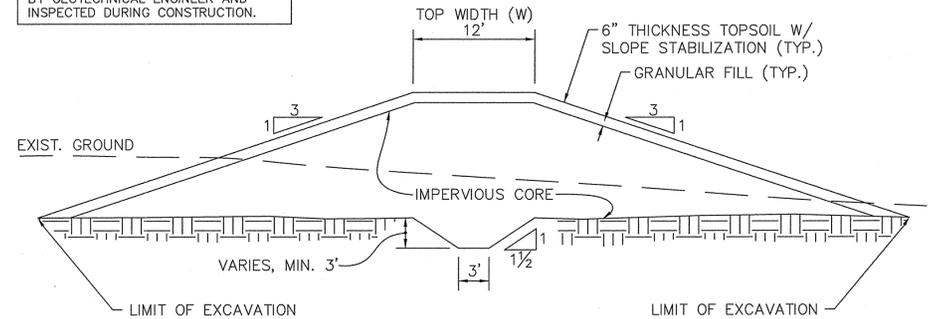
WETLAND REPLICATION AREA CROSS-SECTION
NOT TO SCALE



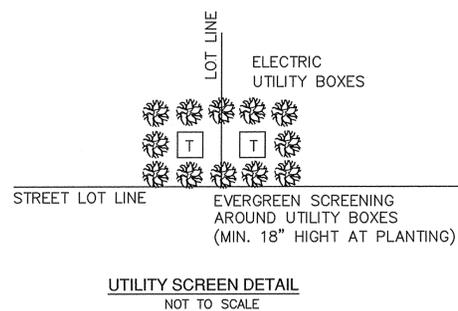
TEMPORARY SEDIMENT BASIN
NOT TO SCALE

TEMPORARY SEDIMENT BASIN SHALL BE LOCATED IN THE FUTURE LOCATION OF THE PROPOSED CONSTRUCTED WETLAND. BOTTOM OF SEDIMENT BASIN SHALL BE AT ELEV. 403.5. ONCE THE SITE IS STABILIZED, ALL SEDIMENT SHALL BE REMOVED AND THE CONSTRUCTED WETLAND INSTALLED PER THE PLANS AND DETAILS.

NOTES:
1. ANY PIPE PENETRATIONS THROUGH EMBANKMENT SHALL BE EQUIPPED WITH ANTI-SEEPAGE COLLARS.
2. EMBANKMENT CONSTRUCTION AND MATERIALS SHALL BE REVIEWED BY GEOTECHNICAL ENGINEER AND INSPECTED DURING CONSTRUCTION.



TYPICAL EARTH EMBANKMENT SECTION
NOT TO SCALE



UTILITY SCREEN DETAIL
NOT TO SCALE

APPROVAL UNDER THE SUBDIVISION CONTROL LAW, IS REQUIRED.
GRAFTON PLANNING BOARD

DATE: _____



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CHECKED BY: VC
COMPUTED BY:
FIELD SURVEY:
DRAWN BY: REM
SCALE: NONE
SHEET 11 OF 11

APPLICANTS:
WESTERLY SIDE GRAFTON LLC
117 WATER ST., SUITE 201
MILFORD, MA 01757

MODIFIED DEFINITIVE SUBDIVISION PLAN

CONSTRUCTION DETAILS
OF
GRAFTON HILL
IN
GRAFTON, MA



1/8/2016
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