PROPOSED COMMON DRIVEWAY 649 MAIN STREET

BOLTON, MASSACHUSETTS

GENERAL NOTES:

- 1. TOPOGRAPHICAL INFORMATION SHOWN ON THIS PLAN WAS PREPARED BY DUCHARME & DILLIS CIVIL DESIGN GROUP, INC. BASED ON AN ON-THE-GROUND SURVEY AND COMPILED
- USGS INFORMATION. ELEVATIONS REFER TO NAVD 1988. PROPERTY LINE INFORMATION SHOWN ON THIS PLAN WAS PREPARED BY DUCHARME & DILLIS CIVIL DESIGN GROUP, INC. BASED ON AN ON-THE-GROUND SURVEY AND RECORDED
- RESOURCE AREAS AS DEFINED BY THE MASSACHUSETTS WETLANDS PROTECTION ACT AND THE TOWN OF BOLTON WETLANDS BYLAW WERE DELINEATED BY DUCHARME & DILLIS CIVIL
- EXISTING UTILITIES SHOWN ON THIS PLAN WERE COMPLIED FROM FIELD MEASUREMENT AND RECORD PLANS. THE UTILITIES SHOWN ON THIS PLAN ARE FOR REFERENCE ONLY AND SHOULD NOT BE ASSUMED TO BE CORRECT NOR SHOULD IT BE ASSUMED THAT THE UTILITIES SHOWN ARE THE ONLY UTILITIES LOCATED ON OR NEAR THE SITE. THE CONTRACTOR SHALL CALL DIG SAFE 1-888-DIG-SAFE PRIOR TO CONSTRUCTION IN ACCORDANCE WITH STATE LAWS.
- THIS PLAN IS INTENDED FOR THE FILING OF A COMMON DRIVEWAY SPECIAL PERMIT APPLICATION WITH THE BOLTON PLANNING BOARD AND A NOTICE OF INTENT APPLICATION WITH THE BOLTON CONSERVATION COMMISSION. IT SHOULD NOT BE USED FOR ANY OTHER PURPOSE.

VARIANCES / WAIVERS REQUIRED

BOLTON ZONING BYLAW § 250.17.B VARIANCES: NONE REQUIRED.

BOLTON PLANNING BOARD RULES & REGULATIONS WAIVERS:

- 1. DRIVEWAY CROWN. A WAIVER TO REGULATION 5.(F) DESIGN CRITERIA TO ALLOW THE
- DRIVEWAY TO BE SUPER ELEVATED IN PLACES AS OPPOSED TO CROWN TO ACCOMMODATE THE DRAINAGE TO FUNCTION AS DESIGNED.
- DRIVEWAY CROSS-SECTION. A WAIVER TO SECTION 3.C.2 OF THE RULES AND REGULATIONS FOR THE APPLICATION OF SPECIAL PERMITS UNDER BYLAW 2.4.1.2 COMMON DRIVEWAY SERVING 3 TO 5 HOUSES - TO ALLOW THE CROSS-SLOPE OF THE DRIVEWAY TO BE $\frac{1}{4}$ " PER FOOT.

SHEET INDEX

SHEET NUMBER SHEET TITLE

TITLE SHEET SHEET GRADING & DRAINAGE PLAN

SHEET DRIVEWAY PROFILE

SHEET CONSTRUCTION NOTES & DETAILS SHEET 5 WETLAND CROSSING & REPLICATION PLAN

RESERVED FOR REGISTRY USE



SPECIAL PERMIT APPROVAL IN ACCORDANCE WITH THE TOWN OF BOLTON ZONING BYLAW § 250.17.B - COMMON

		BEING A MAJORITY OF THE BOLTON PLANNING BOARD
DATE ENDORSED:)	

SPECIAL PERMIT ISSUED BY BOLTON PLANNING BOARD FILED WITH THE TOWN CLERK ON ______

, CLERK OF THE TOWN OF BOLTON HEREBY CERTIFY THAT THE NOTICE OF THE APPROVAL OF THIS PLAN BY THE PLANNING BOARD HAS BEEN RECEIVED AND RECORDED BY THIS OFFICE AND NO APPEAL WAS RECEIVED DURING THE TWENTY (20) DAYS NEXT AFTER RECEIPT AND RECORDING OF SAID NOTICE.

BOLTON TOWN CLERK DATE

I FGFND

DESCRIPTION	EXISTING DRAWING ENTITY	PROPOSED DRAWING ENTITY
DENOTES CONTOUR (INDEX)		105 —
DENOTES CONTOUR (INTERMEDIATE)		
DENOTES SEWER LINE	——————————————————————————————————————	
DENOTES WATER LINE	W	——— w ———
DENOTES OVERHEAD WIRES	OW	OW
DENOTES UNDERGROUND UTILITIES		———— ETC———
DENOTES DRAIN MANHOLE	(D)	•
DENOTES CATCH BASIN		
DENOTES SEWER MANHOLE	S	③
DENOTES EROSION CONTROL BARRIER		
DENOTES UTILITY POLE	΄δ,	
DENOTES EMERG. ACCESS DIRECTION SIGN		<u> </u>
DENOTES WETLAND FLAG	<u> 111</u>	
DENOTES EDGE OF WETLAND	WF A1 	
DENOTES 100' WETLAND BUFFER LIMIT		



CIVIL ENGINEERS • LAND SURVEYORS • WETLAND CONSULTANTS

092 MAIN STREET, P.O. BOX 428 www.DucharmeandDillis.com BOLTON, MASSACHUSETTS 01740

PAUL & LYNN LANDERS 205 SCHOOL STREET FRAMINGHAM, MASSACHUSETTS

2 ROCK DEVELOPMENT LLC 205 SCHOOL STREET FRAMINGHAM, MASSACHUSETTS

SCALE: COPYRIGHT DUCHARME & DILLIS CIVIL DESIGN GROUP, INC 2017



	DATE:	
		6,
	DESIGN	BY
	DRAWN	BY
	CHECKE	D E

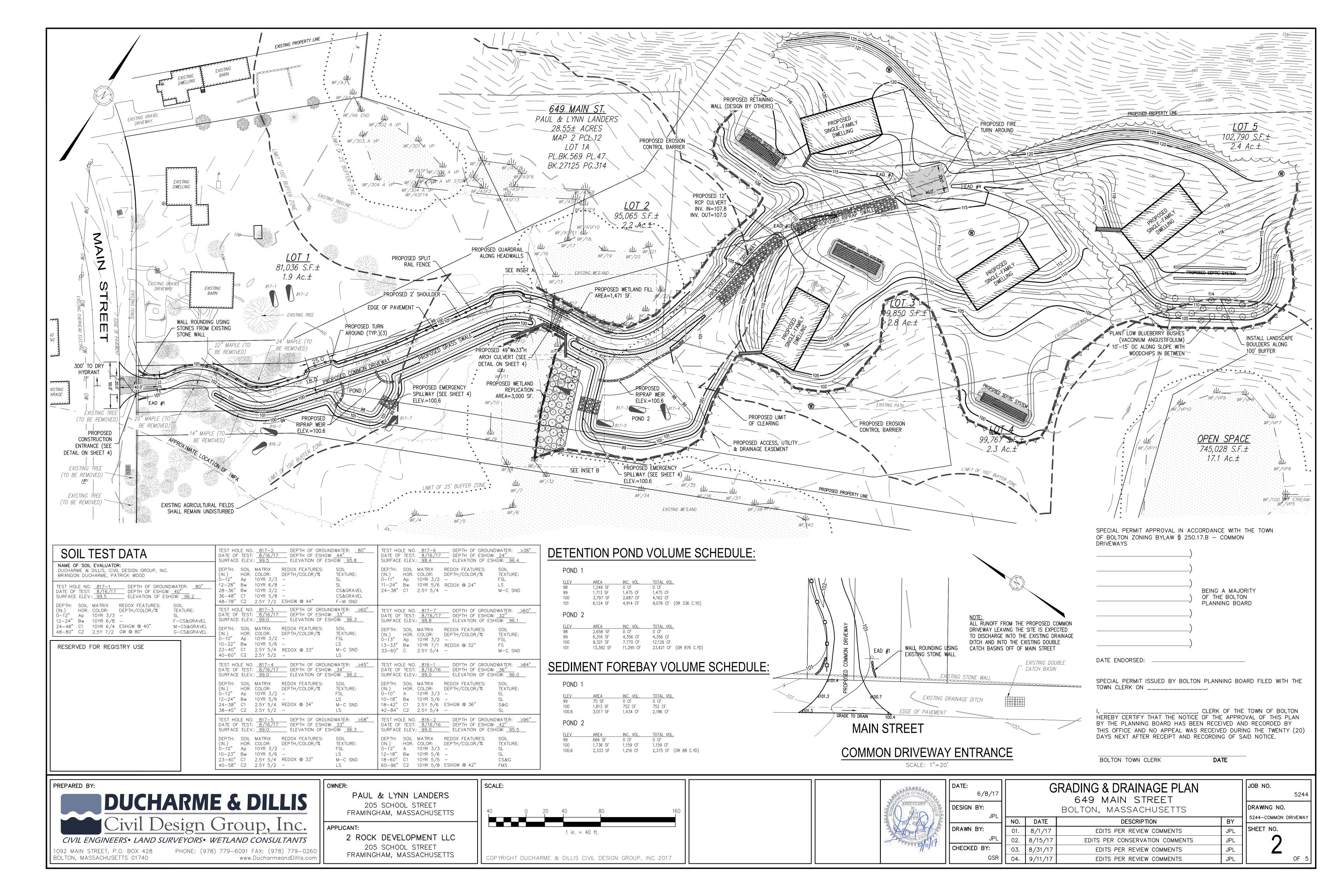
DATE:	
6/8/17	
DESIGN BY:	
JPL	
DRAWN BY:	╽┝
JPL	
CLIECKED DV:	

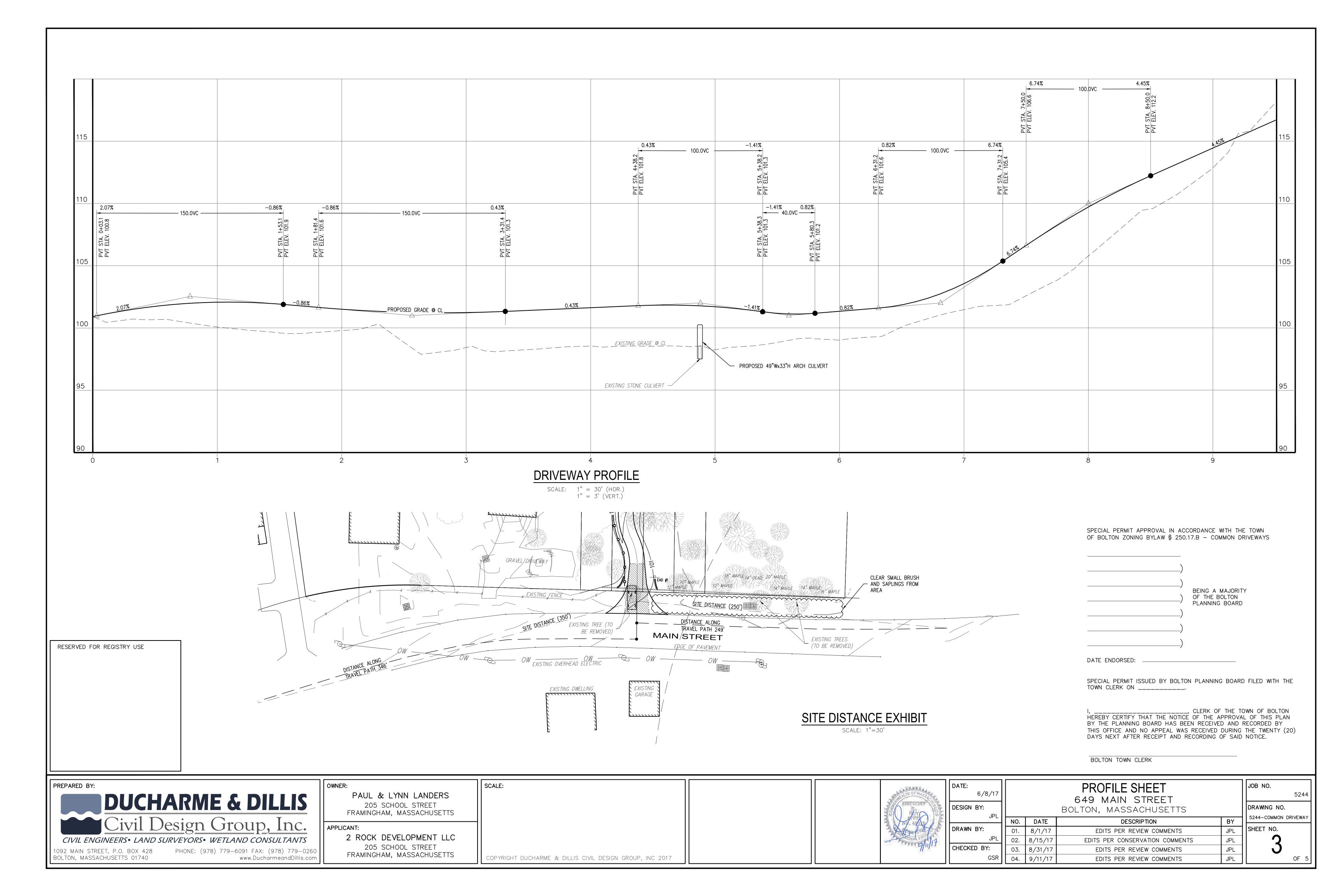
JPL		
	NO.	DATE
RAWN BY:	01.	8/1/17
JPL	02.	8/15/17
CHECKED BY:	03.	8/31/17
GSR	04.	9/11/17

TITLE SHEET 649 MAIN STREET BOLTON, MASSACHUSETTS

DESCRIPTION BY EDITS PER REVIEW COMMENTS JPL EDITS PER CONSERVATION COMMENTS JPL JPL EDITS PER REVIEW COMMENTS EDITS PER REVIEW COMMENTS

JOB NO. 5244 DRAWING NO. 5244-COMMON DRIVEWAY SHEET NO. JPL





NOTES/SPECIFICATIONS: 4 - %"ø THREADED PROPOSED GUARDRAIL (SEE RODS WITH NUT, FLAT AND SHEET 4 FOR DETAIL) LOCK WASHERS (COUNTERSINK) ALL CONSTRUCTION SHALL CONFORM TO THE BOLTON PLANNING BOARD RULES & REGULATIONS FOR COMMON ALL HARDWARE TO BE DRIVEWAYS AND THE BOLTON ZONING BYLAW SECTION 2.4.1.2 UNLESS OTHERWISE NOTED. IN THE EVENT OF A - STAINLESS STEEL SEDIMENT CONTROL FABRIC CONFLICT BETWEEN THE REGULATIONS AND THESE PLANS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER FOR 6"x 8"x 12" WOODEN POSTS AT 8' - ATTACH TO POSTS WITH STAPLES WOOD BLOCK -___ 8" CLARIFICATION PRIOR TO CONSTRUCTION. MAXIMUM SPACING _ 4"x 12" RAIL PROPOSED RETAINING WALL PROPOSED RETAINING WALL (STRUCTURAL DESIGN BY OTHERS) 2 METAL OR WOODEN (STRUCTURAL DESIGN BY OTHERS) STAKES PER BALE — THE MAXIMUM DISTANCE FROM THE TRAVELED WAY TO EACH HOUSE MEASURED ALONG THE CENTERLINE OF THE PROPOSED COMMON AND INDIVIDUAL DRIVEWAY SHALL BE 1,800 FEET. PROPOSED PAVEMENT SURFACE TOP OF CURB HAYBALES 1.0 MATERIALS 6"x 8" TIGHTLY PROPOSED 49"Wx33"H 1.1 BITUMINOUS PAVEMENT BUTTED CMP ARCH CULVERT ____ <u>/// // = 98.4</u> IN<u>V.=98</u>.1___EXISTING SURFACE TOGETHER ASPHALT FOR COMMON DRIVEWAY SHALL BE 1 ½" WEARING COURSE, COMPACTED, CONFORMING TO SSHB M03.11.03 TYPE A TOP COURSE OVER 2" BINDER COURSE, COMPACTED, CONFORMING TO SSHB M03.11.03 TYPE A BINDER 12 OF 1 WE CRUSHED STONE FINISHED GRADE-INV.=97. 1.1.2 ASPHALT FOR SINGLE FAMILY DRIVEWAYS SHALL BE 1 $\frac{1}{2}$ " WEARING COURSE, COMPACTED, CONFORMING TO SSHB M03.11.03 TYPE A TOP COURSE OVER 1 $\frac{1}{2}$ " BINDER COURSE, COMPACTED, CONFORMING TO SSHB M03.11.03 TYPE A LAYER NATURAL MATERIAL OVER BOTTOM BINDER COURSE OF CULVERT TO MATCH EXISTING GRADE -1.1.3 NO FINISH PAVING SHALL OCCUR BETWEEN NOVEMBER 15 APRIL 1. THE BITUMINOUS BINDER SHALL NOT BE UNDISTURBED └NATURAL BACKFILL APPLIED BETWEEN NOVEMBER 15 AND APRIL 1 WITHOUT PRIOR WRITTEN APPROVAL FROM THE BOARD. (6" MIN.) (SEE NOTE 3.7) SUBGRADE — 1.2 SOIL MATERIALS -EDGE SECURED IN 6" TROUGH NOTE: ALL TIMBER TO BE PRESSURE TREATED 1.2.1 ROAD GRAVEL SHALL BE PLACED AS SHOWN ON THE ROAD CROSS SECTIONS HEREON. PLACE 8" OF GRAVEL, COMPACTED, CONFORMING TO SSHB M.1.03.0 TYPE C. STRUCTURAL FILL SHALL CONFORM TO SSHB M1.03.0 GRAVEL BORROW. COMMON FILL SHALL CONFORM TO SSHB M1.01.0 ORDINARY BORROW. WOODEN GUARDRAIL DETAIL **CULVERT CROSS SECTION DETAIL** SILTATION BARRIER 1.2.4 TOPSOIL SHALL CONFORM TO SSHB M1.07.0 TOPSOIL AND PLANTABLE SOIL BORROW. TOPSOIL USED TO RESTORE THE BOTTOMS OF SWALES SHALL BE A 50%/50% MIX OF M1.07.0 AND M1.04.1 (SAND NOT TO SCALE FOR SUBDRAINS SCALE: 1"=5" NOT TO SCALE 1.2.6 CULVERT SUBSTRATE - FILL THE BOTTOM 1' OF THE PROPOSED CULVERT WITH NATURAL ROCK SUBSTRATE TO BE AN EVEN GRADATION OF 4" MINUS DOWN TO 3/4". E.A.D SIGN — - 6.0' - - 2.0' | - - - 6.0' - - | 2.0' | - 1.3.1 STONE RIP RAP SHALL BE ANGULAR AND SHALL CONFORM TO SSHB M2.02.3 STONE FOR PIPE ENDS. STONE RIP RAP SHALL BE UNDERLAIN WITH 6" (MIN.) GRAVEL. PROP. CL GRAVEL BASE FOR RIP RAP SHALL BE UNDERLAIN WITH FILTER FABRIC SIMILAR TO TENCATE MIRAFI N140. PROPOSED 49"Wx33"H STONE RIP RAP SHALL BE PLACED IN THE LOCATIONS AND QUANTITIES SHOWN ON THIS PLAN STONE RIP RAP SHALL BE PLACED IN THE LOCATIONS AND QUANTITIES SHOWN ON THIS PLAIN RIP RAP SHALL BE PLACED SUCH THAT THE TOPS OF THE ROCKS ARE AT FINAL FINISHED GRADE. CONTRACTOR *** EXISTING GRADE** CMP ARCH CULVERT TO EXCAVATE SUBGRADE TO 1.5-FEET (MIN.) BELOW FINAL FINISHED GRADES TO ACCOMMODATE GRAVEL AND 1.4 HEADWALLS 1.4.1 PROPOSED HEADWALL/RETAINING WALL FOR THE WETLAND CROSSING SHALL BE CONSTRUCTED USING VERSA-LOK LAYER NATURAL MATERIAL OVER EXISTING GRADE ____ 4" MIX OF 50% TOP BLOCKS OR APPROVED EQUAL (STRUCTURAL DESIGN BY OTHERS IF REQUIRED). BOTTOM OF CULVERT TO MATCH 1.5 GUARDRAIL EXISTING GRADE (6" MIN.) GUARDRAIL SHALL BE CONSTRUCTED IN ACCORDANCE WITH APPROVED MASS HIGHWAY DETAILS AND PRACTICES.. **GRASS SWALE SECTION** (SEE NOTE 3.7) 1.5.2 GUARDRAIL SHALL BE WOODEN WITH STEEL REINFORCEMENT CONFORMING TO THE REQUIREMENTS OF MASS GRASS OR RIPRAP 1 ½" SSHB MO3.11.03, COMPACTED, TABLE A TOP COURSE OVER, SWALE (SEE DETAIL) 1.5.3 CONTRACTOR TO SUBMIT DRAWINGS FOR APPROVAL BY THE ENGINEER PRIOR TO CONSTRUCTION OF THE "SSHB M03.11.03, COMPACTED, TABLE A BINDER COURSE OVER, SCALE: 1"=5" 8" GRAVEL, COMPACTED, IN ACCORDANCE WITH SSHB M.1.03.0, TYPE C. PLACE 1 1/2" CRUSHED DRAINAGE SPECIFICATIONS STONE BENEATH SHOULDER. 2.1 SWALE CONSTRUCTION PROPOSED CULVERT TYPICAL COMMON DRIVEWAY CROSS SECTION 2.1.1 SWALES SHALL BE CONSTRUCTED AS SHOWN ON THE DRIVEWAY CROSS-SECTION DETAIL HEREON. POST — 2.1.2 RIPRAP SHALL BE INSTALLED IN THE SWALE WHERE SHOWN ON THE PLANS. EXISTING GRADE SCALE: 1"=5" DRIVEWAY AND CULVERT CONSTRUCTION 3.1 SINGLE FAMILY DRIVEWAYS SHALL BE 1 1/2" WEARING COURSE, OVER 1 1/2" BINDER COURSE, OVER 8" OF 1.5' **CULVERT DETAIL** 3.2 SINGLE FAMILY DRIVEWAYS SHALL BE 12-FEET IN WIDTH (MINIMUM). SLEEVE 3.3 COMMON DRIVEWAY SHALL BE 1 ½" WEARING COURSE OVER, 2" BINDER COURSE, OVER 8" GRAVEL. TENCATE MIRAFI FILTER FABRIC 3.4 COMMON DRIVEWAY SHALL BE 12-FEET IN WIDTH (MINIMUM). 12" OF 4"-8" (OR APPROVED EQUAL) SIGN POSTS SHALL BE 2 INCH BLACK NOT TO SCALE 3.5 REFER TO SECTION 1.0 OF THESE NOTES FOR MATERIAL SPECIFICATIONS HOUSE NUMBERS GALVANIZED ROUND PIPE 0.095 CONCRETE ~ **LETTERING** 3.6 CULVERT INLETS AND OUTLETS SHALL BE EQUIPPED WITH HEADWALLS WHERE SHOWN ON THE PLAN. INCH WALL THICKNESS. TO BE USED ON HEIGHT 3.7 CULVER TO BE FILLED WITH 8" MINUS ROUNDED STONE. INSTALLED SIGNS RIPRAP SWALE SECTION 3" MIN. . CONCRETE SHALL BE CLASS MISCELLANEOUS ITEMS 3000, FINISH TO MATCH EXISTING SIDEWALK. 4.1 PLACE EMERGENCY ACCESS DIRECTION SIGNS REQUIRED BY THE BOLTON REGULATIONS AT THE LOCATIONS SCALE: 1"=5' SHOWN ON THE PLAN. RESTORATION BACKGROUND RCP PIPE SHALL BE INSTALLED IN FULL 5.1 RESTORE ALL DISTURBED AREAS WITH A MINIMUM OF 6" TOPSOIL, SEED, FERTILIZER AND MULCH. ACCORDANCE WITH ASTM C1479-16. 5.2 THE CONTRACTOR IS RESPONSIBLE FOR THE ESTABLISHMENT OF VEGETATION PRIOR FINAL SIGN-OFF OR REMOVAL OF EROSION CONTROL BARRIERS. LOT 5 PAVEMENT & 5.3 GRASS SEED SHALL BE SELECTED BASED ON THE SHADE/SUN CONDITIONS WHICH WILL EXIST. TYPICAL SIGN POST GRAVEL BASER PER TYPICAL CONSTRUCTION SEQUENCE PAVEMENT EAD SIGN #1 - CROSS-SECTION DURING THIS SEQUENCE ALL EROSION CONTROLS SHALL BE INSPECTED AND MAINTAINED. ALL DISTURBED AREAS SHALL BE STABILIZED BY SEEDING OR SODDING AS SOON AS POSSIBLE AFTER GRADING IS COMPLETE. EROSION BARRIERS SHALL BE REMOVED AFTER SLOPE STABILIZATION IS COMPLETE. 1.5' 1.5' 6.2 INSTALL EROSION AND SEDIMENT CONTROL MEASURES. M1.02.0; NO STONES OVER 6.3 TREE CLEARING, GRUBBING AND STUMP REMOVAL. 12" OF 4"-8" DIA. RIPRAP ─ 3" COMPACTED TO 95% CONSTRUCT STORMWATER MANAGEMENT AREAS. 6.5 PREPARE WETLAND REPLICATION AREA TO RECEIVE TRANSLOCATED SOIL. -IN 12" LIFTS LOT 4 POND 1 | 101.0 | 100.6 | SPECIAL PERMIT APPROVAL IN ACCORDANCE WITH THE TOWN 6.6 EXCAVATE AND TRANSLOCATE WETLAND SOIL TO THE PROPOSED WETLAND REPLICATION AREA. OND 2 | 101.0 | 100.6 | 1 M1.04.0; TYPE A SAND 6.7 EXCAVATE TO SUB-GRADE IN CUT SECTIONS; BRING FILL SECTIONS TO SUB-GRADE USING EXCAVATED SOIL. OF BOLTON ZONING BYLAW § 250.17.B - COMMON DRIVEWAYS COMPACTED TO 95% 6.8 INSTALL CULVERT AND PROPOSED RETAINING WALL AT WETLAND CROSSING. IN 6" LIFTS 6.9 INSTALL ROAD GRAVEL AND ROUGH GRADE SWALES. 6.10 INSTALL UTILITIES INCLUDING THE DRAINAGE SYSTEM. TOP BERM 6.11 FINISH GRADE SWALES. 6.12 PLACE RIP RAP IN THE LOCATIONS SPECIFIED ON PLANS. M1.03.0; TYPE C GRAVEL OR 6.13 LOAM, SEED AND MULCH DISTURBED AREAS. M2.01.2 CRUSHED STONE 6.14 PLACE BINDER COURSE FOR ROADWAY. COMPACTED TO MIN. 95% 6.15 REMOVE EROSION CONTROL AFTER SITE HAS BEEN STABILIZED AND AFTER APPROVAL HAS BEEN GIVEN BY THE RELATIVE DENSITY BOLTON CONSERVATION COMMISSION. LUNDISTURBED MATERIAL 12" OF 4"-8" __/ 6" MIN. -BEING A MAJORITY DIA. RIPRAP EAD SIGN #4 EAD SIGN #2 EAD SIGN #3 OF THE BOLTON PIPE -PLANNING BOARD DRAIN PIPE TRENCH DETAIL **EMERGENCY SPILLWAY EMERGENCY ACCESS DIRECTION SIGNS** NOT TO SCALE SCALE: 1"=1" RESERVED FOR REGISTRY USE DATE ENDORSED: NOTE: LENGTH = 40' MINIMUM 2.0' SHOULDER -VAIRES SEE PLAN FOR LOCATION(S) TOP OF BERM=101.0' PROPOSED COMMON DRIVEWAY TOP OF SPECIAL PERMIT ISSUED BY BOLTON PLANNING BOARD FILED WITH THE TOWN CLERK ON _____ WEIR=100.6' GRASS SWALE -6"-8" ANGULAR (SEE DETAIL) CLERK OF THE TOWN OF BOLTON STONE ELEV.=98.0' RIPRAP WEIR (4"-8"HEREBY CERTIFY THAT THE NOTICE OF THE APPROVAL OF THIS PLAN DIA. STONE) BY THE PLANNING BOARD HAS BEEN RECEIVED AND RECORDED BY PROPOSED IMPERMEABLE BARRIER MAINTAIN EXISTING IMPERMEABLE BARRIER IS TO BE COMPOSED OF (SIZE VARIES). KEY INTO THIS OFFICE AND NO APPEAL WAS RECEIVED DURING THE TWENTY (20) VEGETATION IN POND M1.08.0 IMPERVIOUS SOIL BORROW UNDER THE DAYS NEXT AFTER RECEIPT AND RECORDING OF SAID NOTICE. C-HORIZON OF EXISTING MATERIAL AS BEST AS POSSIBLE MASSACHUSETTS HIGHWAY DEPARTMENT 1995 STANDARD SPECS FOR HIGHWAYS AND BRIDGES. TEMP. CONSTRUCTION ENTRANCE DETAIL STORMWATER POND X-SECTION BOLTON TOWN CLERK DATE SCALE: 1"=4**DETAILS SHEET** SCALE: DATE: JOB NO. 6/8/17 5244 PAUL & LYNN LANDERS **DUCHARME & DILLIS** 649 MAIN STREET 205 SCHOOL STREET DESIGN BY: DRAWING NO. BOLTON, MASSACHUSETTS FRAMINGHAM. MASSACHUSETTS 5244-COMMON DRIVEWAY Civil Design Group, Inc. NO. DATE **DESCRIPTION** BY SHEET NO. DRAWN BY: 01. 8/1/17 EDITS PER REVIEW COMMENTS JPL 2 ROCK DEVELOPMENT LLC CIVIL ENGINEERS. LAND SURVEYORS. WETLAND CONSULTANTS 8/15/17 02. EDITS PER CONSERVATION COMMENTS JPL

JPL

JPL

OF 5

EDITS PER REVIEW COMMENTS

EDITS PER REVIEW COMMENTS

CHECKED BY:

GSR

03.

8/31/17

04. 9/11/17

205 SCHOOL STREET

FRAMINGHAM. MASSACHUSETTS

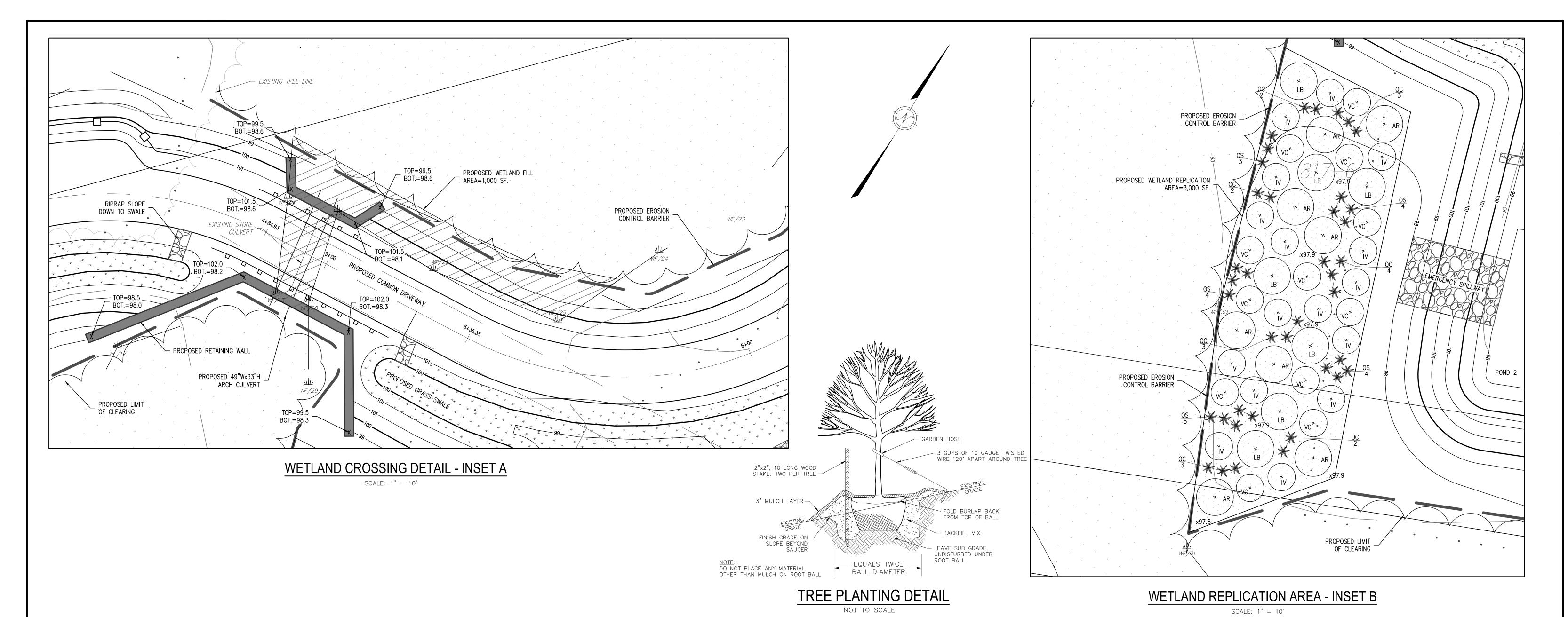
COPYRIGHT DUCHARME & DILLIS CIVIL DESIGN GROUP, INC 2017

PHONE: (978) 779-6091 FAX: (978) 779-0260

www.DucharmeandDillis.com

092 MAIN STREET, P.O. BOX 428

BOLTON, MASSACHUSETTS 01740



PLANTING SCHEDULE:

SYMBOL:	COMMON NAME:	BOTANICAL NAME:	SIZE:	SPACING:	QUANTITY:
+ AR	RED MAPLE	ACER RUBRUM	4–6' HEIGHT	AS SHOWN	8
+ LB	COMMON SPICEBUSH	LINDERA BENZOIN	3–4' HEIGHT	AS SHOWN	7
+ VC	HIGHBUSH BLUEBERRY	VACCINIUM CORYMBOSUM	3–4' HEIGHT	AS SHOWN	12
+ IV	COMMON WINTERBERRY	ILEX VERTICILLATA	3–4'	AS SHOWN	16
→ oc	CINNAMON FERN	OSMUNDA CINNAMOMEA	#1 POT	AS SHOWN	19
) os	SENSITIVE FERN	ONOCLEA SENSIBILIS	#1 POT	AS SHOWN	20

NOTE: THE ENTIRE REPLICATION AREA WILL BE SEEDED WITH "NEW ENGLAND WET MIX" (WETLAND SEED MIX) AT AN APPLICATION RATE OF 1 LB/2500 S.F.

THE MIX MAY BE APPLIED BY MECHANICAL SPREADER, OR BY HAND. WHEN APPLYING ON BARE SOIL, RAKE THE SOIL TO CREATE GROOVES, APPLY SEED, THEN LIGHTLY RAKE OVER. IN NEW ENGLAND, THE BEST RESULTS ARE OBTAINED WITH AN EARLY SPRING SEEDING. SUMMER SEEDING CAN BE SUCCESSFUL WITH A LIGHT MULCHING OF WEED FREE STRAW TO CONSERVE MOISTURE. LATE FALL AND WINTER DORMANT SEEDING REQUIRE A SLIGHT INCREASE IN THE SEEDING RATE. FERTILIZATION IS NOT REQUIRED UNLESS THE SOIL IS PARTICULARLY INFERTILE.

OWNER:

www.DucharmeandDillis.com

NOTES:

A. SPECIFICATIONS

- 1. REPLICATION AREAS SHALL BE STAKED PRIOR TO CONSTRUCTION. NOTIFY THE BOLTON CONSERVATION COMMISSION
- FOR INSPECTION AFTER STAKING AND PRIOR TO CONSTRUCTION. 2. ALL CONSTRUCTION AND EXCAVATED MATERIAL SHALL BE STORED OUTSIDE OF THE RESOURCE AREA. 3. PRIOR TO CONSTRUCTION CONTRACTOR SHALL PLACE SIGN CONTAINING DEP FILE NUMBER WHERE IT CAN BE SEEN
- 4. CONTRACTOR SHALL PLACE EROSION AND SEDIMENTATION CONTROL BARRIER AS SHOWN HEREON PRIOR TO CONSTRUCTION. NOTIFY BOLTON CONSERVATION COMMISSION FOR INSPECTION AFTER INSTALLATION AND PRIOR TO
- 5. CONTRACTOR SHALL NOTIFY WETLAND SPECIALIST AFTER TO STAKING AND PLACEMENT OF EROSION CONTROL BARRIERS. WETLAND SPECIALIST TO ESTABLISH PHOTOMETRIC REFERENCE POINTS AT THIS TIME.
- 6. CONTRACTOR TO EXCAVATE ALL REPLICATION AREAS PRIOR TO EXCAVATING WITHIN THE EXISTING WETLAND FILL AREAS. EXCAVATE ALL REPLICATION AREA TO 12" BELOW FINAL FINISHED GRADES AS SHOWN HEREON. DE-WATER EXCAVATIONS AS REQUIRED.
- 7. WETLAND SOIL SHALL BE TRANSLOCATED WHEN POSSIBLE. SOILS TO BE USED AT THE REPLICATION SITE SHOULD BE USED IMMEDIATELY IF POSSIBLE OR STOCKPILED FOR AS LITTLE TIME AS POSSIBLE. WHILE STOCKPILED, THE SOILS 5. DURING PLANTING AND SEEDING AND AFTER THE FIRST MONTH OF THE GROWING SEASON TO INSPECT SHOULD BE KEPT WET AND NOT BE ALLOWED TO DRY OUT. THE METHOD FOR MAINTAINING THE APPROPRIATE MOISTURE LEVEL SHOULD BE DOCUMENTED BY CONTRACTOR AND SUBMITTED TO THE PROJECT ENGINEER.
- CONTAMINATION OF THESE SOILS SHOULD BE PREVENTED. TRUCKS THAT HAVE PREVIOUSLY BEEN ON OTHER SITES SHOULD BE WASHED PRIOR TO INTRODUCTION TO THE REPLICATION SITE SO THAT MUD/DIRT WITH EXOTIC/INVASIVE SEEDS IS NOT INADVERTENTLY BROUGHT TO THE REPLICATION SITE.
- 8. PLACE TRANSOLCATED SOIL TO 12" DEPTH IN NEW REPLICATIONS AREAS TO FINAL FINISHED GRADES AS SHOWN 9. CONTRACTOR TO PROVIDE ADDITIONAL WETLAND SOIL AS REQUIRED TO ACHIEVE THE 12" MINIMUM DEPTH IN THE
- COMPOSTED ORGANIC MATERIAL. THE LOAM AND COMPOST SHOULD BE FREE OF LARGE STONES AND DEBRIS. CONTRACTOR TO FURNISH CONSERVATION COMMISSION WITH THE SOURCE OF OFF SITE SOIL ADDITIVES. 10. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE WETLAND SPECIALIST TO INSPECT THE WETLAND
- AREAS FOR THE PRESENCE OF INVASIVE SPECIES. INVASIVE SPECIES SHALL BE REMOVED PRIOR TO CONSTRUCTION. 11. CONTRACTOR TO PLACE TRANSLOCATED SOIL WITH SIMILAR DENSITY AS OBSERVED WITHIN THE EXISTING WETLAND
- 12. ALL PLANTING SHOULD OCCUR AT THE BEGINNING OR END OF THE GROWING SEASON UNLESS A WATERING PLAN IS

SUBMITTED AND APPROVED BY THE COMMISSION. FALL PLANTINGS SHOULD BE DONE BEFORE THE FIRST FROST. SHRUBS SHALL BE PLANTED IN ACCORDANCE WITH PLANTINGS SHOWN ON PLAN. REFER TO PLANTING DETAIL FOR TREES AND SHRUBS. SEED MIXTURES SHALL BE SOWN IN ACCORDANCE WITH NURSERY SPECIFICATIONS. EXISTING TREES SHALL BE EXCAVATED AROUND IN A MANOR TO MINIMIZE ROOT DAMAGE WHERE APPLICABLE. STABILIZED CANOPY FROM EXISTING TREES WILL FURTHER ENHANCE THE SUCCESS OF NEW PLANTINGS. NEW ENGLAND WETMIX SHALL BE SPREAD THROUGHOUT THE REPLICATION AREAS IN ACCORDANCE WITH NURSERY SPECIFICATIONS. UPON COMPLETION OF PLANTINGS REPLICATION AREAS SHALL BE COVERED WITH CLEAN STRAW HAY AND WATERED.

C. OVERSIGHT/MONITORING

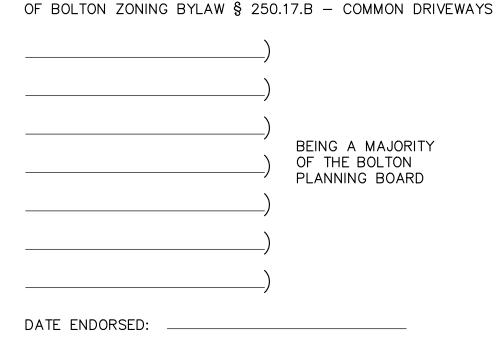
THE PROJECT SUPERVISOR OR MONITOR SHOULD BE PRESENT DURING THE MOST IMPORTANT TASKS IN REPLICATION CONSTRUCTION AS DESCRIBED BELOW.

- INSPECT SITE FLAGGING BEFORE EXCAVATION OR EROSION CONTROL INSTALLATION BEGINS.
- DURING EXCAVATION OF THE ALTERED AREA IF VEGETATION IS TO BE TRANSLOCATED TO THE REPLICATION AREA TO ENSURE SURVIVAL OF THE PLANTINGS.
- 3. BEFORE SOIL TRANSLOCATION OR ADDITION INTO THE REPLICATION AREA TO INSPECT EXCAVATED ELEVATIONS AND LIKELY POST-CONSTRUCTION GROUND WATER ELEVATIONS FOR THE REPLICATION AREA.
- 4. AFTER EACH STAGE OF GRADING WORK IS COMPLETED TO INSPECT FINISHED ELEVATIONS.
- PROPAGATION TECHNIQUES. AFTER ONE GROWING SEASON TO OBSERVE VEGETATION DEVELOPMENT AND REGULATORY COMPLIANCE.
- AFTER TWO GROWING SEASONS TO DETERMINE VEGETATION DEVELOPMENT AND REGULATORY COMPLIANCE. 8. AFTER SUBSEQUENT GROWING SEASONS, IF A GREATER THAN 2-YEAR MONITORING PROGRAM IS REQUIRED.
- MONITORING SHALL BE PERFORMED IN ACCORDANCE WITH THE BOLTON WETLAND REGULATIONS. 10. PLANTS SHALL BE REPLACED AS NECESSARY TO ENSURE A 75% SURVIVAL RATE. 11. EROSION CONTROLS SHALL BE REMOVED PRIOR TO ISSUANCE OF A CERTIFICATE OF COMPLIANCE.

REPLICATION AREAS. SUPPLEMENTAL SOIL SHALL CONSIST OF EQUAL VOLUMES OF A GOOD QUALITY LOAM AND WELL D. EROSION CONTROL SPECIFICATIONS

1. WORK SHALL BE PERFORMED DURING A DRY PERIOD TO THE MAX EXTENT POSSIBLE 2. PLACE EROSION CONTROL BARRIER (SILT FENCE ONLY AROUND REPLICATION AREAS) PRIOR TO CONSTRUCTION. NOTIFY THE BOLTON CONSERVATION COMMISSION AFTER INSTALLATION FOR INSPECTION.

SPECIAL PERMIT APPROVAL IN ACCORDANCE WITH THE TOWN



SPECIAL PERMIT ISSUED BY BOLTON PLANNING BOARD FILED WITH THE TOWN CLERK ON _____.

CLERK OF THE TOWN OF BOLTON HEREBY CERTIFY THAT THE NOTICE OF THE APPROVAL OF THIS PLAN BY THE PLANNING BOARD HAS BEEN RECEIVED AND RECORDED BY THIS OFFICE AND NO APPEAL WAS RECEIVED DURING THE TWENTY (20) DAYS NEXT AFTER RECEIPT AND RECORDING OF SAID NOTICE.

BOLTON TOWN CLERK DATE

DUCHARME & DILLIS Civil Design Group, Inc.

RESERVED FOR REGISTRY USE

BOLTON, MASSACHUSETTS 01740

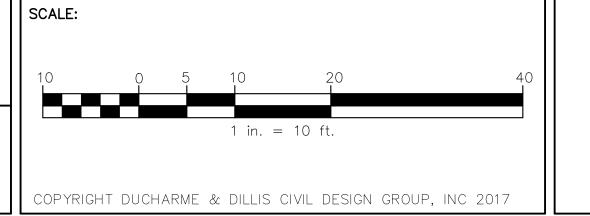
CIVIL ENGINEERS • LAND SURVEYORS • WETLAND CONSULTANTS PHONE: (978) 779-6091 FAX: (978) 779-0260 092 MAIN STREET, P.O. BOX 428

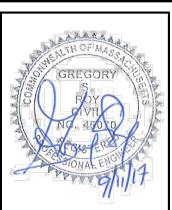
APPLICANT: 2 ROCK DEVELOPMENT LLC 205 SCHOOL STREET FRAMINGHAM, MASSACHUSETTS

PAUL & LYNN LANDERS

205 SCHOOL STREET

FRAMINGHAM. MASSACHUSETTS





	DATE:
	DESIGN
	DRAWN
11.1	CHECKE

6/8/17	WETLAND CROSSING & REPLICATION PLAN 649 MAIN STREET			
BY: JPL		BOLTON, MASSACHUSETTS		
	NO.	DATE	DESCRIPTION	BY
BY:	01.	8/1/17	EDITS PER REVIEW COMMENTS	JPL

8/15/17

8/31/17

9/11/17

02.

03.

04.

GSR

AIN STREET **1ASSACHUSETTS** DESCRIPTION BY PER REVIEW COMMENTS JPL EDITS PER CONSERVATION COMMENTS JPL JPL EDITS PER REVIEW COMMENTS JPL EDITS PER REVIEW COMMENTS

JOB NO. 5244 DRAWING NO. 5244-COMMON DRIVEWAY SHEET NO. OF 5