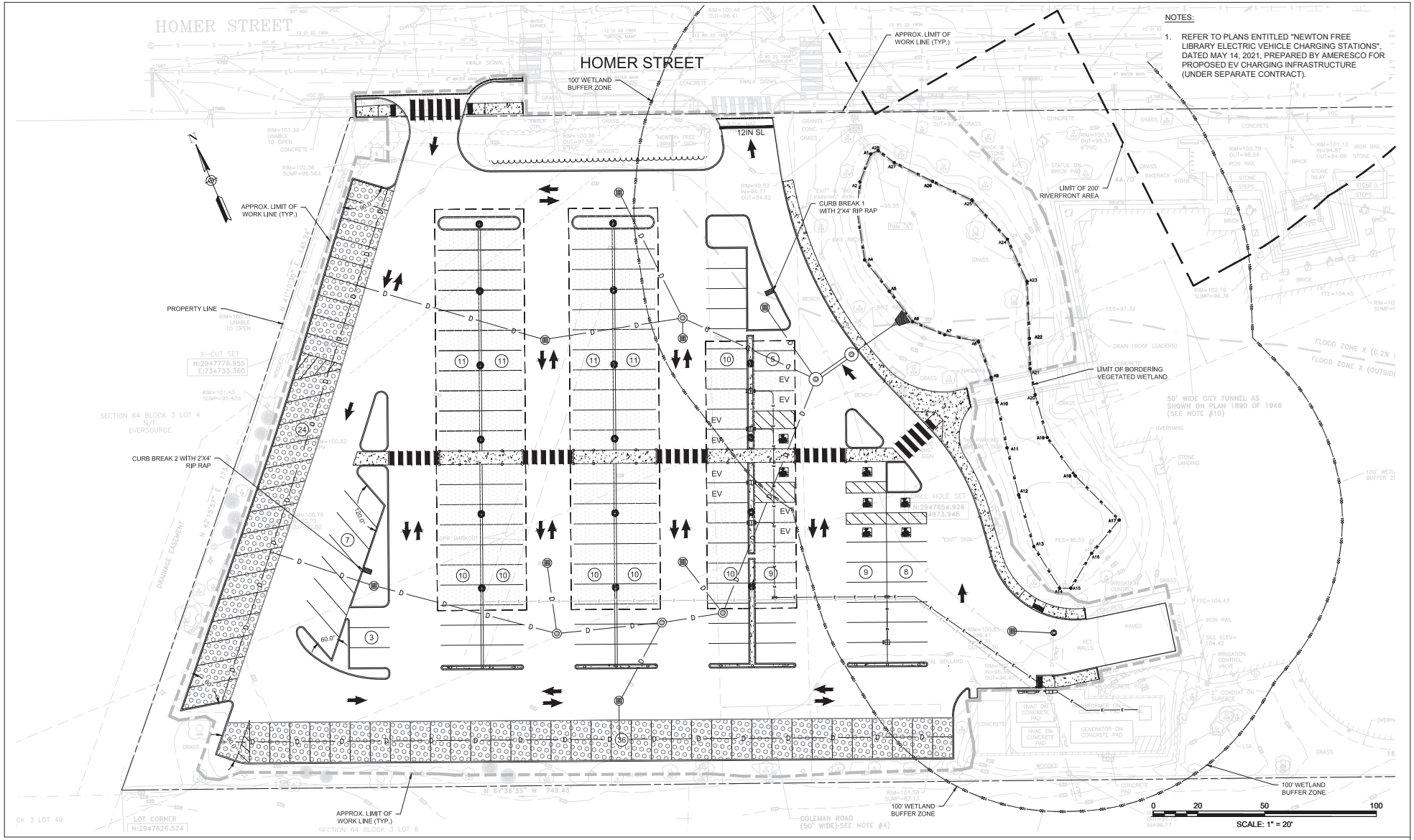


NOTES:

1. REFER TO PLANS ENTITLED "NEWTON FREE LIBRARY ELECTRIC VEHICLE CHARGING STATIONS", DATED MAY 14, 2021, PREPARED BY AMERESCO FOR PROPOSED EV CHARGING INFRASTRUCTURE (UNDER SEPARATE CONTRACT).

ENVIRONMENTAL PARTNERS
— An Apex Company —

			Scale	AS NOTED
			Date	04/27/2021
			Job No.	326-1902
4	9/21	CONSTRUCTION DOCUMENTS	Designed by	DJO/MMS
3	8/2/21	CONSTRUCTION DOCUMENTS	Drawn by	MMS
2	5/12/21	REVISIONS PER CONSERVATION COMMENTS	Checked by	DJO
1	4/27/21	CONSERVATION COMMISSION NOI FILING	Approved by	SDT

THIS LINE IS ONE INCH LONG WHEN PLOTTED AT FULL SCALE ON A 22" X 34" DRAWING

NEWTON FREE LIBRARY PARKING LOT
330 HOMER STREET
NEWTON, MASSACHUSETTS
MAP ID: 072SW, LOT ID: 64003 0005 (LOT 5, BLOCK 3, SECTION 64)

PAVEMENT MARKING PLAN

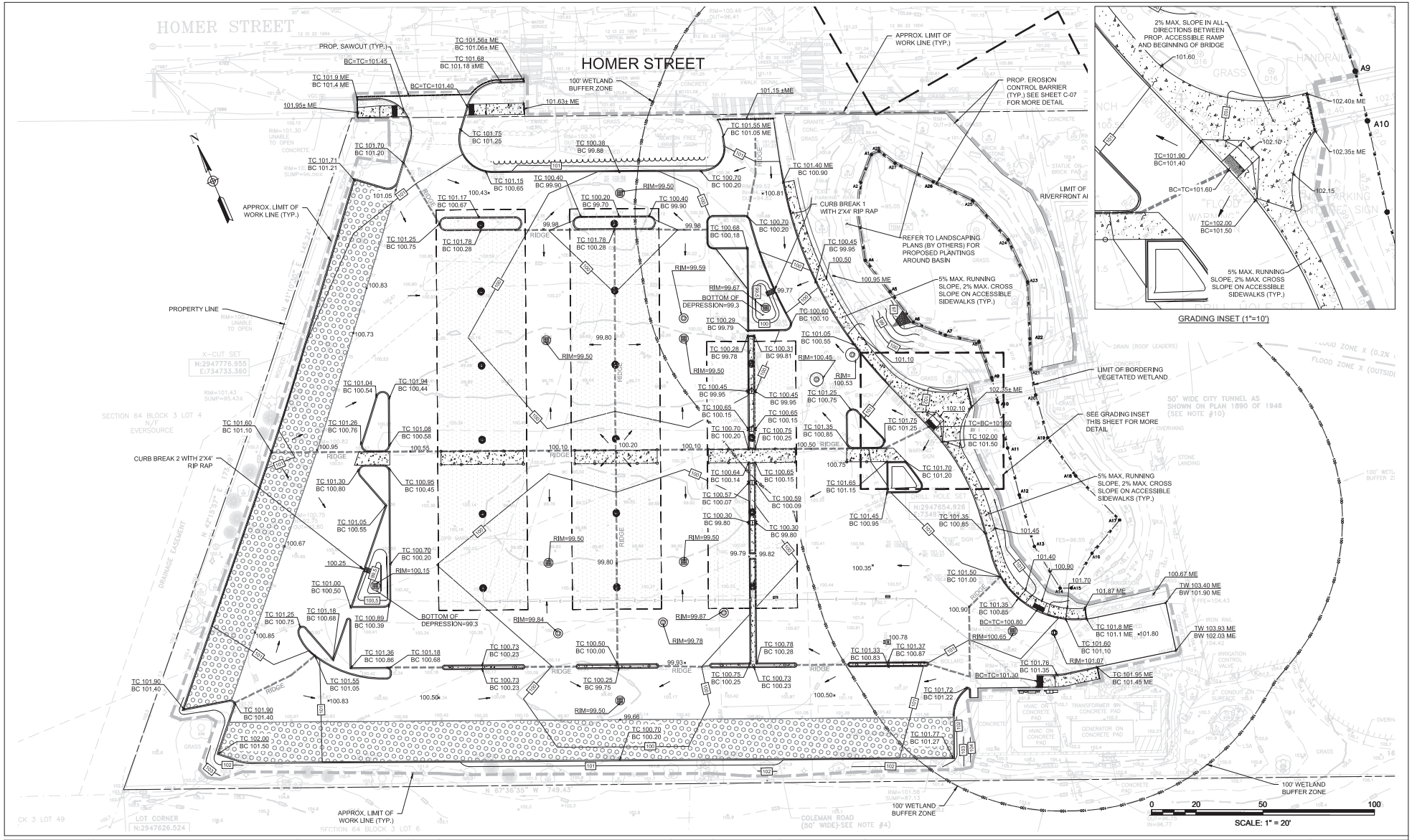
FOR CONSTRUCTION

Sheet No.

C-04

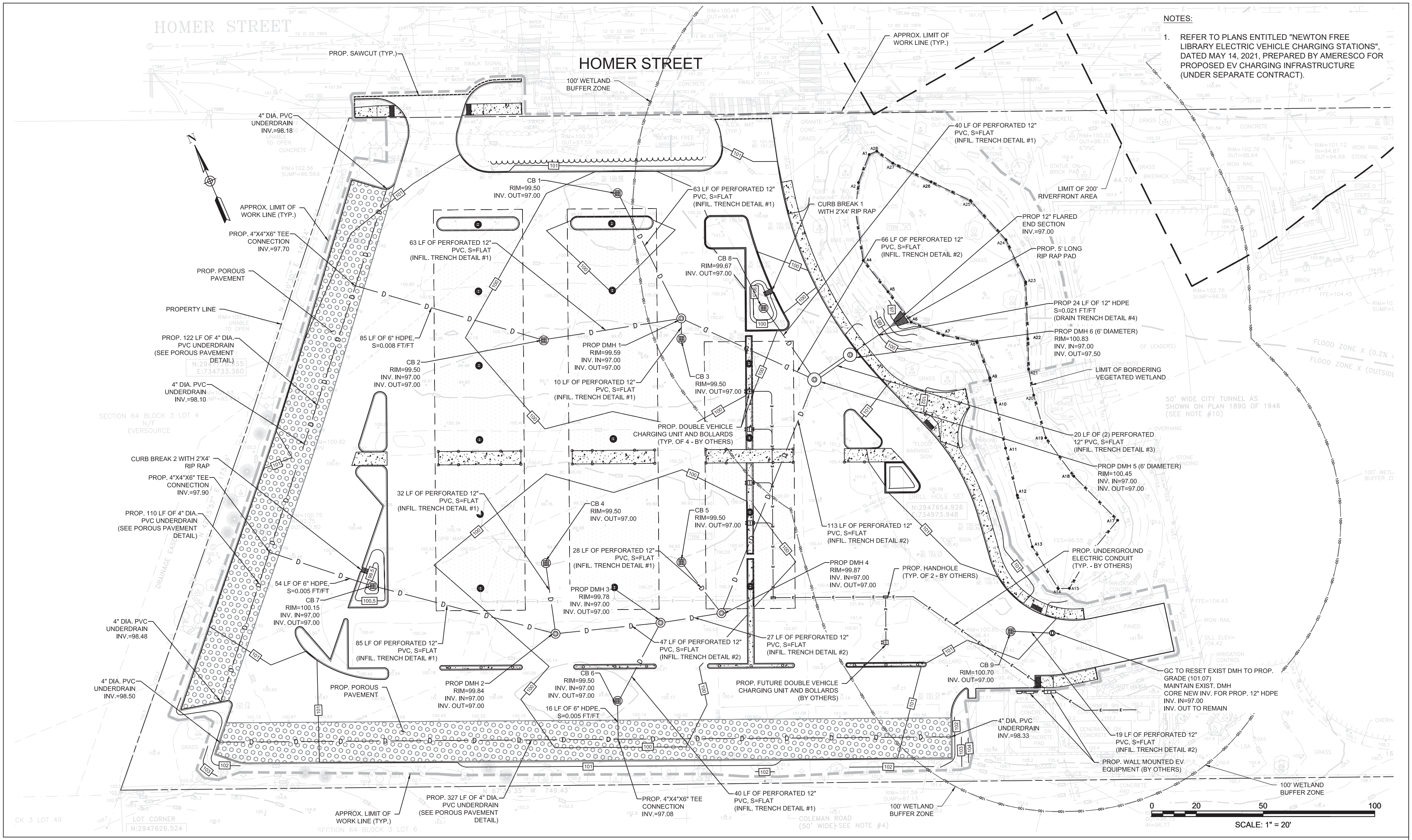
Drawing File: I:\eng-doc\2021\Projects\Newton\326-1902 Newton - Free Library Parking Lot\Comp\O-Layers\City of Newton%2021-11-04 Final EV Station, Drainage, and Grading\Newton - Free Library Pavement Marking Plan.dwg Plot Date: Nov 04, 2021 6:43pm

169-22



ENVIRONMENTAL PARTNERS — An Apex Company			Scale	AS NOTED	NEWTON FREE LIBRARY PARKING LOT 330 HOMER STREET NEWTON, MASSACHUSETTS MAP ID: 072SW, LOT ID: 64003 0005 (LOT 5, BLOCK 3, SECTION 64)	FOR CONSTRUCTION
			Date	04/27/2021		
			Job No.	326-1902		Sheet No.
4	9/21	CONSTRUCTION DOCUMENTS	Designed by	DJO/MMS		C-05
3	8/2/21	CONSTRUCTION DOCUMENTS	Drawn by	MMS	THIS LINE IS ONE INCH LONG WHEN PLOTTED AT FULL SCALE ON A 22" X 34" DRAWING	
2	5/12/21	REVISIONS PER CONSERVATION COMMENTS	Checked by	DJO		GRADING PLAN
1	4/27/21	CONSERVATION COMMISSION NOI FILING	Approved by	SDT		

Drawing File: I:\eng\Job\2021\Projects\Newton\326-1902 Newton - Free Library Parking Lot\Comp\Objects\Plans\City of Newton\2021-11-04 Final BV Station, Drainage, and Grading\Newton - Free Library Utility and Grading Plan.dwg Plot Date: Nov 04,2021 6:40pm



NOTES:

1. REFER TO PLANS ENTITLED "NEWTON FREE LIBRARY ELECTRIC VEHICLE CHARGING STATIONS", DATED MAY 14, 2021, PREPARED BY AMERESCO FOR PROPOSED EV CHARGING INFRASTRUCTURE (UNDER SEPARATE CONTRACT).

ENVIRONMENTAL PARTNERS
— An Apex Company —

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			Date	04/27/2021
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1	4/27/21	CONSERVATION COMMISSION NOI FILING	Approved by	SDT

THIS LINE IS ONE INCH LONG WHEN PLOTTED AT FULL SCALE ON A 22" X 34" DRAWING

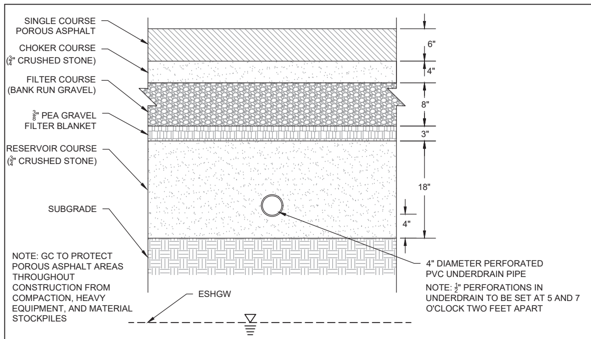
NEWTON FREE LIBRARY PARKING LOT
330 HOMER STREET
NEWTON, MASSACHUSETTS
MAP ID: 072SW, LOT ID: 64003 0005 (LOT 5, BLOCK 3, SECTION 64)

DRAINAGE AND UTILITY PLAN

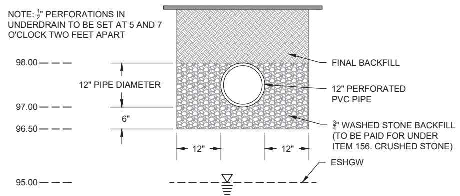
FOR CONSTRUCTION

Sheet No.

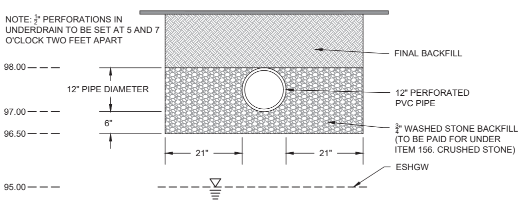
C-06



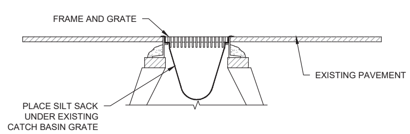
POROUS PAVEMENT DETAIL
SCALE: N.T.S.



TYPICAL DRAIN INFILTRATION TRENCH DETAIL #1
SCALE: N.T.S.



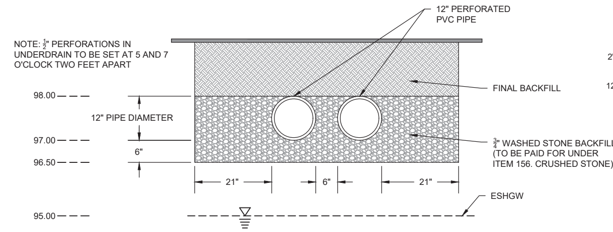
TYPICAL DRAIN INFILTRATION TRENCH DETAIL #2
SCALE: N.T.S.



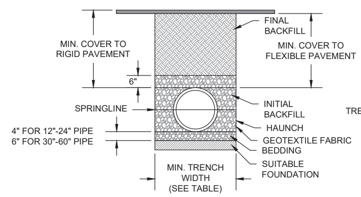
NOTES:

1. SILT SACKS SHALL BE INSPECTED WEEKLY AND ACCUMULATED SILT REMOVED TO ALLOW CATCH BASIN TO FUNCTION PROPERLY.
2. SILT SACK AS MANUFACTURED BY ACF ENVIRONMENTAL OR APPROVED EQUAL.

SEDIMENTATION CONTROL AT CATCH BASINS SILT SACKS
SCALE: N.T.S.



TYPICAL DRAIN INFILTRATION TRENCH DETAIL #3
SCALE: N.T.S.



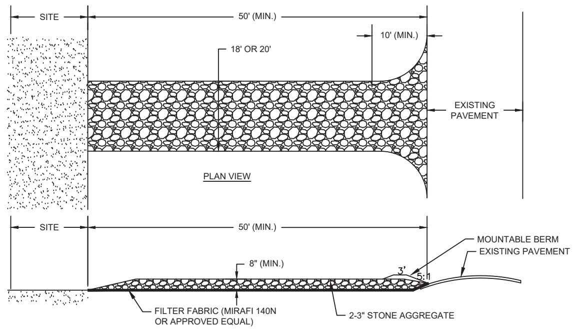
RECOMMENDED MINIMUM TRENCH WIDTHS

PIPE DIA.	MIN. TRENCH WIDTH
12"	30"
15"	34"
18"	39"
24"	48"
30"	56"

TRENCH WIDTH PAY LIMIT FOR PIPES

PIPE DIA.	MAX. TRENCH WIDTH
12" TO 22"	48"
24" & GREATER	I.D. + 24"

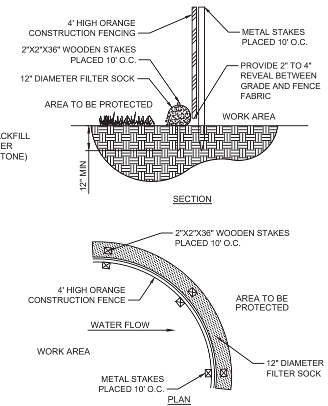
TYPICAL DRAIN TRENCH DETAIL #4
SCALE: N.T.S.



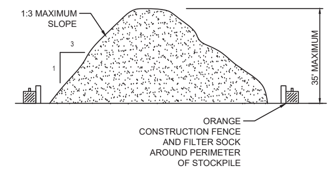
NOTES:

1. ENTRANCE WIDTH SHALL BE 18 OR 20 FEET BASED ON EXISTING ACCESS DRIVE WIDTH.
2. STABILIZED CONSTRUCTION ENTRANCE SHALL NOT EXTEND OFF THE PROPERTY
3. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH SHALL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAYS. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR OR CLEANOUT OF ANY MEASURES USED TO REAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY. BERM SHALL BE PERMITTED.
4. PERIODIC INSPECTION AND MAINTENANCE SHALL BE PROVIDED AS NEEDED OR AS DIRECTED BY ENGINEER/OWNER/CITY.
5. MANUFACTURED COMPOSITE TRACKING PADS MADE OF ULTRA-HIGH-MOLECULAR-WEIGHT POLYETHYLENE (UHMWPE) MAY BE USED IN PLACE OF CRUSHED STONE AND FILTER FABRIC. PADS SHALL BE FODS TCM MODEL #1100 OR ENGINEER APPROVED EQUAL.

STABILIZED CONSTRUCTION ENTRANCE
SCALE: N.T.S.



12" DIAMETER FILTER SOCK WITH ORANGE CONSTRUCTION FENCE
SCALE: N.T.S.



TEMPORARY STOCKPILE
SCALE: N.T.S.

EROSION CONTROL NOTES

1. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSTALLED AS SET FORTH IN THE MOST CURRENT STATE SEDIMENT AND EROSION CONTROL MANUAL.
2. AREAS UNDERGOING CONSTRUCTION WILL BE LEFT IN AN UNTREATED OR UNVEGETATED CONDITION CONSISTENT WITH THE REQUIREMENTS OF THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP). AREAS SHALL BE PERMANENTLY STABILIZED WITHIN 15 DAYS OF FINAL GRADING AND TEMPORARILY STABILIZED WITHIN 14 DAYS OF CONSTRUCTION ACTIVITIES. IF THE DISTURBANCE IS WITHIN 100 FEET OF A STREAM, POND, OR WETLAND AREA, THE AREA SHALL BE STABILIZED WITHIN 7 DAYS OR PRIOR TO ANY STORM EVENT (THIS WOULD INCLUDE WETLANDS).
3. SEDIMENT BARRIERS (SILT FENCE, STRAW BARRIERS, ETC.) SHOULD BE INSTALLED PRIOR TO ANY SOIL DISTURBANCE OF THE CONTRIBUTING DRAINAGE AREA UPSTREAM OF THE SEDIMENT BARRIERS. MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL AREAS WITH SLOPES GREATER THAN 15% AFTER OCTOBER 1ST THE SAME APPLIES FOR ALL SLOPES GREATER THAN 8%.
4. INSTALL SILTATION BARRIER AT TOE OF SLOPE TO FILTER SILT FROM RUNOFF. SEE SILTATION BARRIER DETAILS FOR PROPER INSTALLATION. SILTATION BARRIER WILL REMAIN IN PLACE PER NOTE #5.
5. ALL EROSION CONTROL STRUCTURES WILL BE INSPECTED, REPLACED AND/OR REPAIRED AS NEEDED AND IMMEDIATELY FOLLOWING ANY SIGNIFICANT RAINFALL OR SNOW MELT OR WHEN NO LONGER SERVICEABLE DUE TO SEDIMENT ACCUMULATION OR DECOMPOSITION. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE HALF THE HEIGHT OF THE BARRIER. SEDIMENT CONTROL DEVICES SHALL REMAIN IN PLACE AND BE MAINTAINED BY THE CONTRACTOR UNTIL AREAS UPSLOPE ARE STABILIZED BY TURF.
6. NO SLOPES, EITHER PERMANENT OR TEMPORARY, SHALL BE STEEPER THAN THREE TO ONE (3:1).
7. IF FINAL SEEDING OF THE DISTURBED AREAS IS NOT COMPLETED 45 DAYS PRIOR TO THE FIRST KILLING FROST, USE TEMPORARY MULCH (DORMANT SEEDING MAY BE ATTEMPTED AS WELL) TO PROTECT THE SITE AND DELAY SEEDING UNTIL THE NEXT RECOMMENDED SEEDING PERIOD.
8. TEMPORARY SEEDING OF DISTURBED AREAS THAT HAVE NOT BEEN FINAL GRADED SHALL BE COMPLETED 45 DAYS PRIOR TO THE FIRST KILLING FROST TO PROTECT FROM SPRING RUNOFF PROBLEMS.
9. DURING THE CONSTRUCTION PHASE, INTERCEPTED SEDIMENT WILL BE RETURNED TO THE SITE AND REGRADED ONTO OPEN AREAS.
10. REVEGETATION MEASURES WILL COMMENCE UPON COMPLETION OF CONSTRUCTION EXCEPT AS NOTED ABOVE. ALL DISTURBED AREAS NOT OTHERWISE STABILIZED WILL BE GRADED, SMOOTHED, AND PREPARED FOR FINAL SEEDING AS FOLLOWS:
   - 10.1. SIX INCHES OF LOAM WILL BE SPREAD OVER DISTURBED AREAS AND SMOOTHED TO A UNIFORM SURFACE.
   - 10.2. APPLY LIMESTONE AND FERTILIZER ACCORDING TO SOIL TEST. IF SOIL TESTING IS NOT FEASIBLE ON SMALL OR VARIABLE SITES, OR WHERE TIMING IS CRITICAL, FERTILIZER MAY BE APPLIED AT THE RATE OF 800 LB PER ACRE OR 18.4 LB PER 1,000 SF USING 10-20-20 OR EQUIVALENT. APPLY GROUND LIMESTONE (EQUIVALENT TO 50% CALCIUM PLUS MAGNESIUM OXIDE) AT A RATE OF 3 TONS PER ACRE (138 LB PER1,000 SF).
   - 10.3. FOLLOWING SEED BED PREPARATION, DITCHES AND BACK SLOPES WILL BE SEEDED TO A MIXTURE OF 47% CREEPING RED FESCUE, 5% REDTOP, AND 48% TALL FESCUE. THE LAWN AREAS WILL BE SEEDED TO A PREMIUM TURF MIXTURE OF 44% KENTUCKY BLUE-GRASS, 44% CREEPING RED FESCUE, AND 12% PERENNIAL RYEGRASS: SEEDING RATE IS 1.03 LBS PER 1,000 SF LAWN QUALITY SOD MAY BE SUBSTITUTED FOR SEED.
   - 10.4. STRAW MULCH AT THE RATE OF 70-90 LBS PER 1,000 SF. A HYDRO-APPLICATION OF WOOD OR PAPER FIBER SHALL BE APPLIED FOLLOWING SEEDING. A SUITABLE BINDER SUCH AS CURASOL OR RMB PLUS WILL BE USED ON STRAW MULCH FOR WIND CONTROL.
11. ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED ONCE THE SITE IS STABILIZED.
12. WETLANDS WILL BE PROTECTED W/ STRAW, COMPOST, AND/OR SILT FENCE BARRIERS INSTALLED AT THE EDGE OF THE WETLAND OR THE BOUNDARY OF WETLAND DISTURBANCE.
13. ALL AREAS WITHIN 100 FEET OF A FLAGGED WETLAND OR STREAM SHALL HAVE AN EXPOSURE WINDOW OF NOT MORE THAN 7 DAYS.
14. ALL AREAS WITHIN 100 FEET OF A FLAGGED WETLAND OR STREAM SHALL FOLLOW APPROPRIATE EROSION CONTROL MEASURES PRIOR TO EACH STORM IF NOT BEING ACTIVELY WORKED,

MULCH

LOCATION	MULCH	RATE (1000 SF)
PROTECT AREA	STRAW	100 POUNDS
WINDY AREA	SHREDDED OR CHOPPED CORNSTALKS	185-275 POUNDS
	STRAW (ANCHORED)*	100 POUNDS
MODERATE TO HIGH VELOCITY AREAS OR STEEP SLOPES GREATER THAN 3:1	JUTE MESH OR EXCELSIOR MAT	AS REQUIRED
GREATER THAN 3:1	(REFER TO GEOTECHNICAL REPORT FOR FINAL DESIGN REQUIREMENT)	

* A HYDRO-APPLICATION OF WOOD, OR PAPER FIBER MAY BE APPLIED FOLLOWING SEEDING. A SUITABLE BINDER SUCH AS CURASOL OR RMB PLUS SHALL BE USED ON STRAW MULCH FOR WIND CONTROL.

MULCH ANCHORING

ANCHOR MULCH WITH PEG AND TWINE (1 SQ. YD/BLOCK); MULCH NETTING (AS PER MANUFACTURER); WOOD CELLULOSE FIBER (750 LBS/ACRE); CHEMICAL TACK (AS PER MANUFACTURER'S SPECIFICATIONS); USE OF A SERRATED STRAIGHT DISK. WETTING FOR SMALL AREAS AND ROAD DITCHES MAY BE PERMITTED.

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— An Apex Company —

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NEWTON FREE LIBRARY PARKING LOT
330 HOMER STREET
NEWTON, MASSACHUSETTS
MAP ID: 072SW, LOT ID: 64003 0005 (LOT 5, BLOCK 3, SECTION 64)

CONSTRUCTION DETAILS V

FOR CONSTRUCTION

Sheet No.

C-12