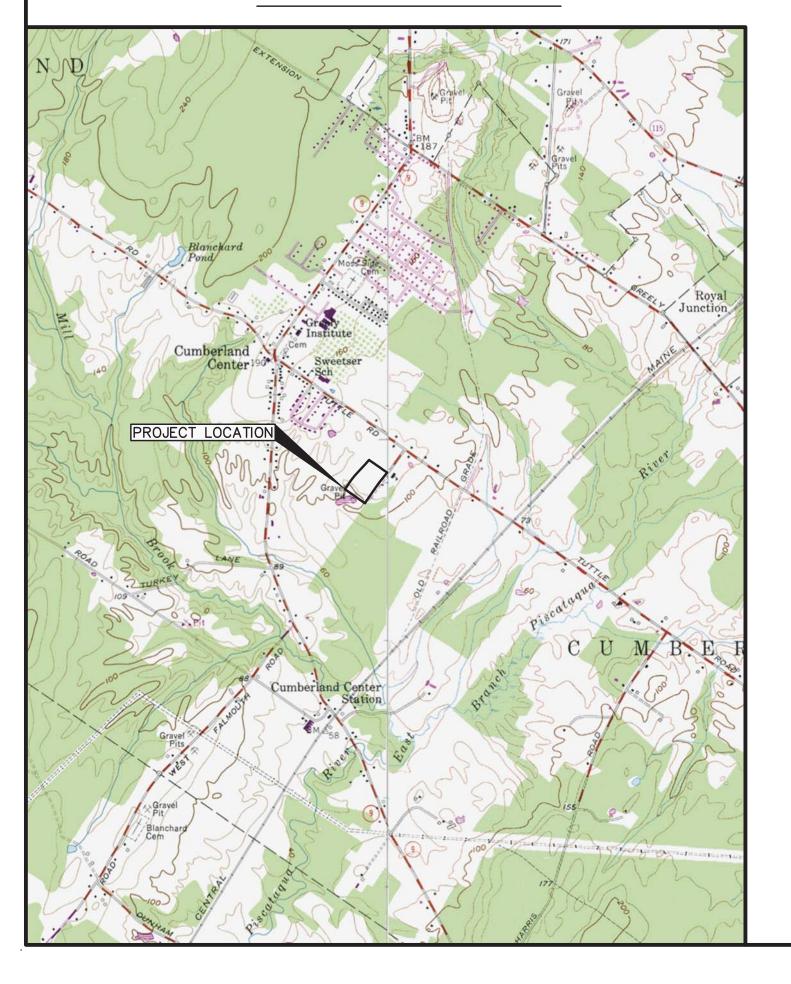
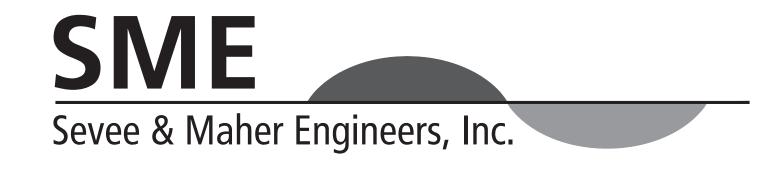
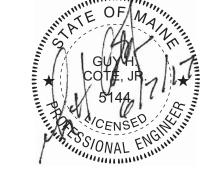
# TOWN OF CUMBERLAND WOOD WASTE/CDD LANDFILL CLOSURE DROWNE ROAD CUMBERLAND, MAINE

# **LOCATION MAP**



TITLE	DWG NO
COVER SHEET	
SYMBOLS AND ABBREVIATIONS	C-100
EXISTING CONDITIONS PLAN	C-101
WASTE GRADING AND DEMOLITION PLAN	C-102
FINAL GRADING PLAN	C-103
EROSION CONTROL NOTES AND DETAILS	C-300
SECTIONS AND DETAILS	C-301
SECTIONS AND DETAILS	C-302
SECTIONS	C-303
EXISTING CONDITIONS ANALYSIS	D-100
PROPOSED CONDITIONS ANALYSIS	D-101





ENVIRONMENTAL • CIVIL • GEOTECHNICAL • WATER • COMPLIANCE

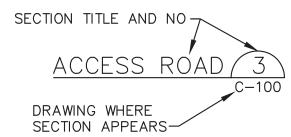
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# <u>SYMBOLS</u>

EXISTING	PROPOSED		EXISTING	PROPOSED		EXISTING	PROPOSED	
		NORTH ARROW (TRUE)	<b>-&gt;</b> ->	<b></b>	DRAINAGE COURSE (WITH DIRECTION)	G	G	UNDERGROUND GAS MAIN
DATE 😞		NORTH ARROW (MAGNETIC)			EDGE OF WATER	UCC	UCC	UNDERGROUND TELEPHONE LIN
N		NORTH ARROW (PLAN NORTH)		<u>\</u>	WATER ELEVATION (GROUND OR SURFACE)	UGE	UGE	UNDERGROUND ELECTRICAL LIN
25	25	CONTOUR LINES	-0	-0	FENCE LINE (STOCKADE)	ОНU	———ОНИ———	OVERHEAD ELECTRICAL LINE
	INV 25.56	SPOT ELEVATION (INVERT ELEVATION)	x	x	FENCE LINE (WIRE)	——от——	——от——	OVERHEAD TELEPHONE LINE
		EXISTING GROUND	000000000		STONE WALL	12"SS	12"SS	SANITARY SEWER
		PROPERTY LINE OR R.O.W.			RETAINING WALL	8"FM	8"FM	FORCE MAIN
35°-10'-10"W 251.17'	N35°-10'-10"W 251.17'	PROPERTY LINE W/ BEARING AND DISTANCE			GUARD RAIL	8"W	8"W	WATER MAIN
	0+00 1+00	CONSTRUCTION BASELINE	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		BUILDING AND STRUCTURES	12"SD	12"SD	STORM DRAIN
		RAILROAD		1 OR 2:1	SLOPE RATIO (HORIZONTAL TO VERTICAL)	8"UD	8"UD	UNDERDRAIN
•	[3]	SURVEY MONUMENT		23.7	SLOPES (WITH SLOPE RATIO)	6"PD	6"PD	PERIMETER DRAIN
		SURVEY CONTROL			EDGE OF PAVEMENT	6"LT	6"LT	LEACHATE TRANSPORT
0	•	PROPERTY PIN, DRILL HOLE, PK, OR STAKE			EDGE OF GRAVEL	6"LC	6"LC	LEACHATE COLLECTION
~~~	$\sim\sim\sim$	WOODS OR BRUSH LINE			BITUMINOUS PAVEMENT	6"LD	6"LD	LEAK DETECTION
8		INDIVIDUAL TREE		4	CONCRETE	6"GC	6"GC	GAS COLLECTION
<u> </u>		WETLAND	⊕ B−12 MW−12 P−12	◆ B-12 MW-12 P-12	TEST BORING, MONITORING WELL, OR PIEZOMETER AND NUMBER		SB	SEDIMENT BARRIER
•	•	GAS VENT	TP-12	- <b>TP</b> -12	TEST PIT AND NUMBER		SF	SILTATION FENCE
$\oslash$	0	CLEAN OUT STRUCTURE	<u></u> SW−12	<b>▲</b> SW−12	SURFACE WATER SAMPLE LOCATION		CLL	CLEARING LIMIT LINE
		CULVERT		-	GAS EXTRACTION WELL		LOW	LIMIT OF WORK
$\triangleright$	<b>•</b>	REDUCER	0	•	MANHOLE			
		MECHANICAL CAP OR PLUG			CATCH BASIN			
		COUPLING	->-		WATER OR GAS VALVE			
L	T <sub>1</sub>	BEND	V	~	HYDRANT			
Щ	<del>L</del>	TEE	Ø	<b>*</b>	UTILITY POLE			
	***************************************	PIPE TO BE ABANDONED						
<b>‡</b>	*	LIGHT POLE						
		DRAINAGE INLET STRUCTURE						

ACCMP	ASPHALT COATED CMP	D	DEGREE OF CURVE	HDPE	HIGH DENSITY POLYETHYLENE	PERF	PERFORATED
ACP	ASBESTOS CEMENT PIPE	DBL	DOUBLE	HORZ	HORIZONTAL	PP	POWER POLE
AC	ACRE	DEG OR °	DEGREE	HP	HORSEPOWER	PSI	POUNDS PER SQUARE INCH
AGG	AGGREGATE	DEPT	DEPARTMENT	HYD	HYDRANT	PVC	POLYVINYL CHLORIDE
ALUM	ALUMINUM	DI	DUCTILE IRON			PVMT	PAVEMENT
APPD	APPROVED	DIA	DIAMETER	ID	INSIDE DIAMETER		
APPROX	APPROXIMATE	DIM	DIMENSION	INV	INVERT	QTY	QUANTITY
ARMH	AIR RELEASE MANHOLE	DIST	DISTANCE	INV EL	INVERT ELEVATION	QTT	QUANTITI
ASB	ASBESTOS	DMH	DRAINAGE MANHOLE			RCP	REINFORCED CONCRETE PIPE
ASP	ASPHALT	DN	DOWN	LB	POUND	ROW	RIGHT OF WAY
AUTO	AUTOMATIC	DR	DRAIN	LC	LEACHATE COLLECTION	RAD	RADIUS
AUX	AUXILIARY	DWG	DRAWING	LD	LEAK DETECTION	REQD	REQUIRED
AVE	AVENUE	EA	EACH	LF	LINEAR FEET	RT	RIGHT
AZ	AZIMUTH	EG		LOC	LOCATION	RTE	ROUTE
		ELEC	EXISTING GROUND OR GRADE	LOW	LIMIT OF WORK	RIE	ROUTE
ВССМР	BITUMINOUS COATED CMP		ELECTRIC ELEVATION	LT	LEACHATE TRANSPORT	S	SLOPE
BM	BENCH MARK	EL ELB	ELEVATION			SCH	SCHEDULE
BIT	BITUMINOUS	EOP	EDGE OF PAVEMENT	MH	MANHOLE	SF	SQUARE FEET
BLDG	BUILDING		EQUIPMENT	MJ	MECHANICAL JOINT	SHT	SHEET
BOT	BOTTOM	EQUIP		MATL	MATERIAL	SMH	SANITARY MANHOLE
BRG	BEARING	EST	ESTIMATED	MAX	MAXIMUM	ST	STREET
BV	BALL VALVE	EXC	EXCAVATE	MFR	MANUFACTURE	STA	STATION
D <b>v</b>	DALL VALVE	EXIST	EXISTING	MIN	MINIMUM	SY	SQUARE YARD
CB	CATCH BASIN	FG	FINISH GRADE	MISC	MISCELLANEOUS		
CEN	CENTER	FBRGL	FIBERGLASS	MON	MONUMENT	TAN	TANGENT
CEM LIN	CEMENT LINED	FDN	FOUNDATION			TDH	TOTAL DYNAMIC HEAD
CMP	CORRUGATED METAL PIPE	FLEX	FLEXIBLE	NITC	NOT IN THIS CONTRACT	TEMP	TEMPORARY
CO	CLEAN OUT	FLG	FLANGE	NTS	NOT TO SCALE	TYP	TYPICAL
CF	CUBIC FEET	FLR	FLOOR	N/F	NOW OR FORMERLY	UD	UNDERDRAIN
CFS	CUBIC FEET PER SECOND	FPS	FEET PER SECOND	NO OR #	NUMBER		
CI	CAST IRON	FT OR '	FEET	"		V	VOLTS
CL	CLASS	FTG	FOOTING	OC	ON CENTER	VA TEE	VALVE ANCHORING TEE
CLL	CLEARING LIMIT LINE			OD	OUTSIDE DIAMETER	VERT	VERTICAL
CONC	CONCRETE	GA	GAUGE				
CONST	CONSTRUCTION	GAL	GALLON	PC	POINT OF CURVE	WG	WATER GATE
CONTR	CONTRACTOR	GALV	GALVANIZED	PD	PERIMETER DRAIN	W/	WITH
CS	CURB STOP	GC	GAS COLLECTION	PI	POINT OF INTERSECTION	w/o	WITHOUT
CTR	CENTER	GPD	GALLONS PER DAY	PIV	POST INDICATOR VALVE	<b>**</b> / O	WITHOUT
CU	COPPER	GPM	GALLONS PER MINUTE	PT	POINT OF TANGENT	YD	YARD
CY	CUBIC YARD	GT	GAS TRANSPORT			טו	IAKU

VIEW MARKERS AND IDENTIFICATION



MANHOLE
SEE DWG C-300

DRAWING WHERE
DETAIL APPEARS

		BDP	6/2017	ISSUED FOR CONSTRUCTION
		DPD	2/2017	ISSUED FOR BID
		BDP	9/2014	SUBMITTED TO MEDEP
	REV.	BY	DATE	STATUS
- 1		·		



TOWN OF CUMBERLAND
WOOD WASTE/CDD LANDFILL CLOSURE
DROWNE ROAD
CUMBERLAND, MAINE

, it's	SYMBOLS AND ABBREVI	ATIONS
	CNAE	DESIGN BY: CEB
	SME	DRAWN BY: JRL
	Sevee & Maher Engineers, Inc.	DATE: 7/24/14

Sevee & Maher Engineers, Inc.

ENVIRONMENTAL • CIVIL • GEOTECHNICAL • WATER • COMPLIANCE

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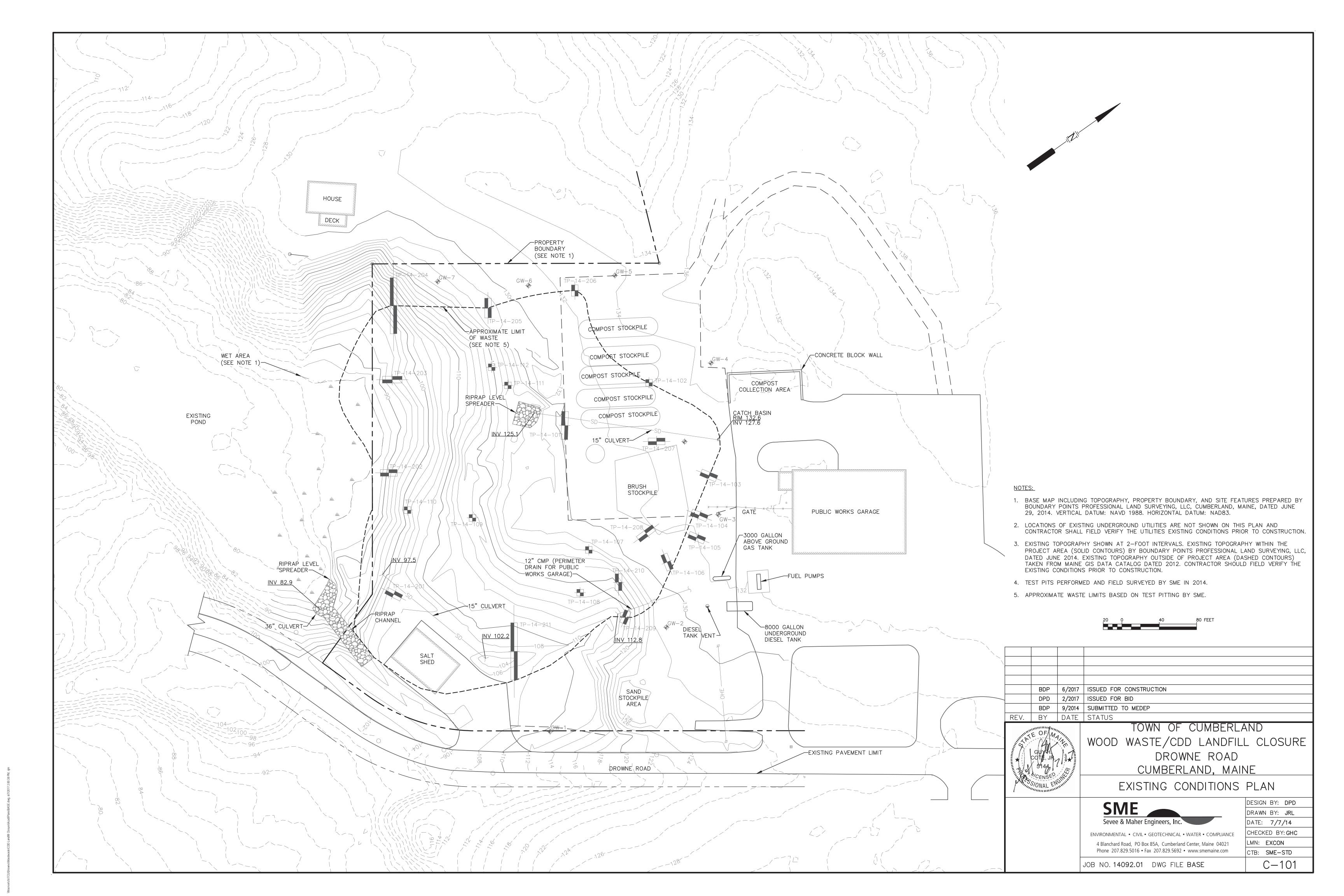
 Phone 207.829.5016 • Fax 207.829.5692 • www.smemaine.com
 CTB: SME-STD

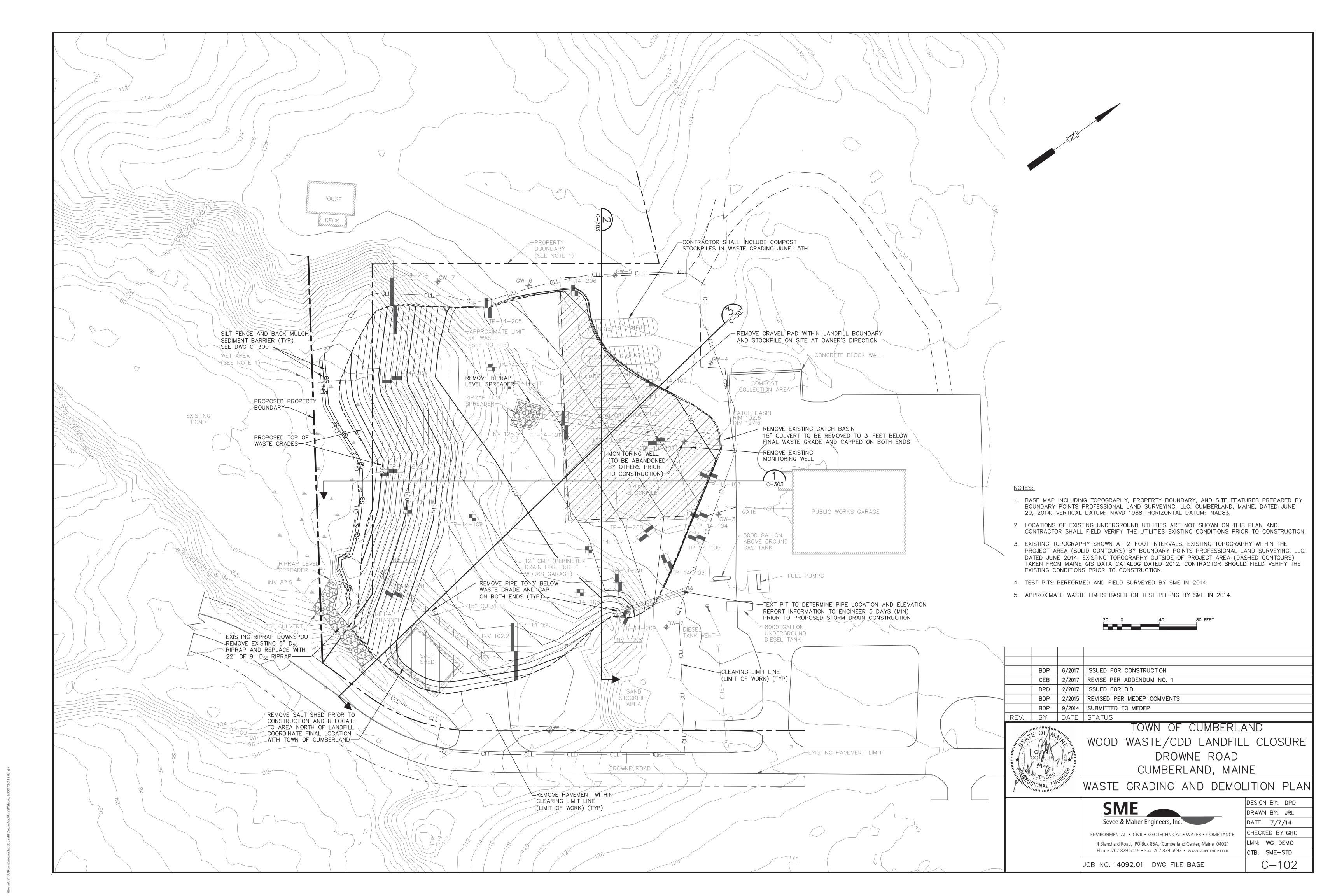
 JOB NO. 14092.01 DWG FILE SYMSHT
 C-100

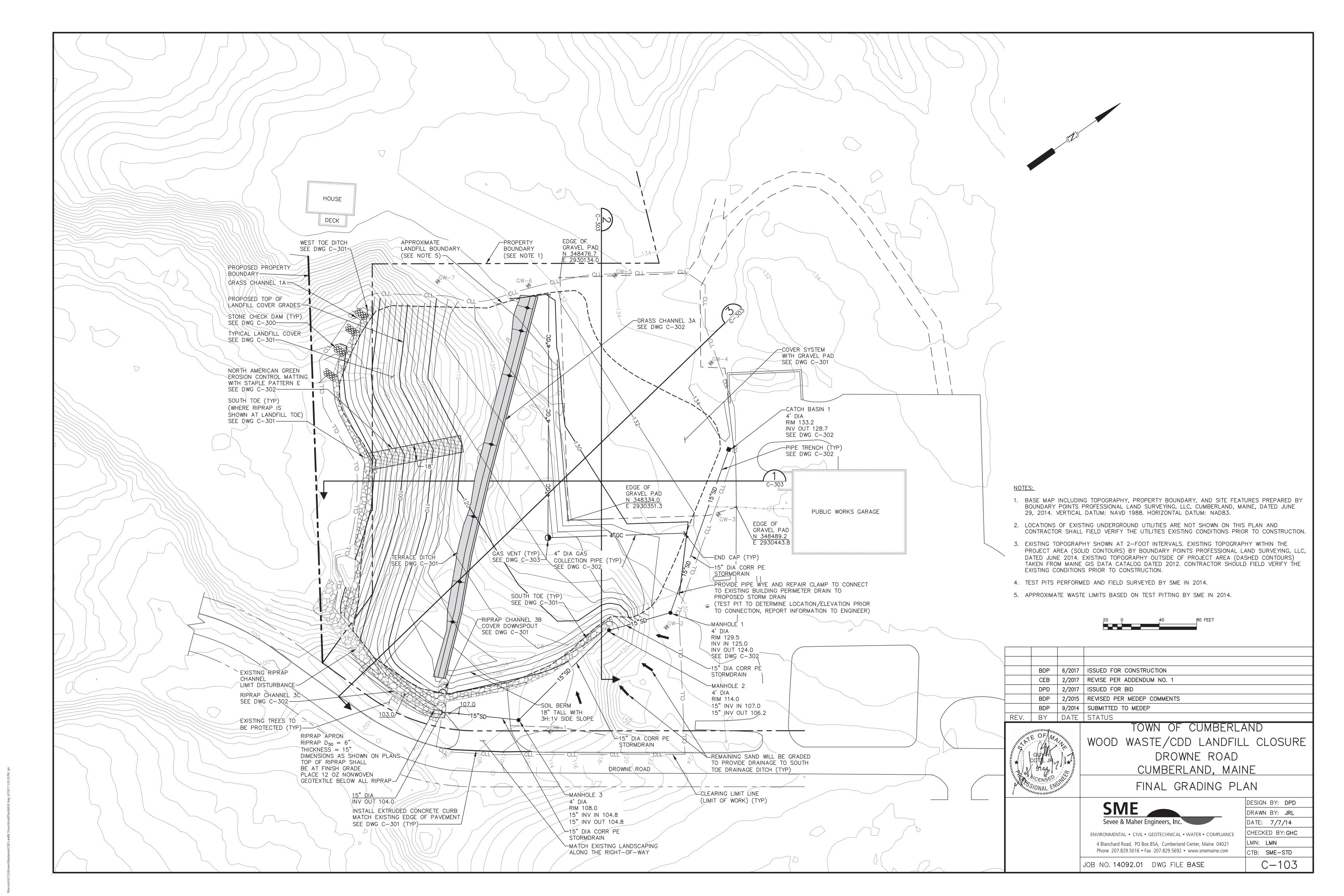
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LMN: LMN

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- A. GENERAL
- 1. All soil erosion and sediment control will be done in accordance with: (1) the Maine Erosion and Sediment Control Handbook: Best Management Practices, Maine Department of Environmental Protection (MEDEP), March 2003
- 2. The contractor will be responsible for the repair/replacement/ maintenance of all erosion control measures until all disturbed areas are stabilized.
- 3. Disturbed areas will be permanently stabilized within 7 days of final grading. Disturbed areas not to be worked upon within 14 days of disturbance will be temporarily stabilized within 7 days of the disturbance.
- 4. In all areas, removal of trees, bushes and other vegetation, as well as disturbance of topsoil will be kept to a minimum while allowing proper site operations.
- B. TEMPORARY MEASURES
- 1. STABILIZED CONSTRUCTION ENTRANCE/EXIT

A crushed stone stabilized construction entrance/exit will be placed at any point of vehicular access to the site, in accordance with the detail shown on this sheet.

- 2. SILT FENCE
- a. Silt fence will be installed prior to all construction activity, where soil disturbance may result in erosion. Silt fence will be erected at locations shown on the plans and/or downgrade of all construction activity.
- b. Silt fences will be removed when they have served their useful purpose, but not before the upgradient areas have been permanently stabilized.
- c. Silt fences will be inspected immediately after each rainfall and at least daily during prolonged rainfall. They will be inspected if there are any signs of erosion or sedimentation below them. Any required repairs will be made immediately. If there are signs of undercutting at the center or the edges, or impounding of large volumes of water behind them, they will be replaced with a temporary crushed stone check dam.
- d. Sediment deposits will be removed after each storm event if significant build—up has occurred or if deposits exceed half the height of the barrier.
- 3. STONE CHECK DAMS

Stone check dams will be installed in grass—lined swales and ditches during construction.

- 4. BARK MULCH SEDIMENT BARRIER
- a. Where approved, bark mulch sediment barriers may be used as a substitute for silt fence. See the details in this drawing set for specifications.
- b. Rock Filter Berms: To provide more filtering capacity or to act as a velocity check dam, a berm's center can be composed of clean crushed rock ranging in size from the french drain stone to
- 5. TEMPORARY SEEDING

Stabilize disturbed areas that will not be brought to final grade for a year or less. Temporary seeding rate is 112 lbs/acre of Winter

### 6. TEMPORARY MULCHING

- Use temporary mulch in the following locations and/or circumstances: •In sensitive areas (within 100 feet of streams, wetlands and in lake watersheds) temporary mulch will be applied within 7 days of
- exposing spill or prior to any storm event. • Apply temporary mulch within 14 days of disturbance or prior to
- any storm event in all other areas. • Areas, which have been temporarily or permanently seeded. will be mulched immediately following seeding • Areas which cannot be seeded within the growing season will be
- mulched for over-winter protection and the area will be seeded at the beginning of the growing season. •Mulch can be used in conjunction with tree, shrub, vine, and
- ground cover plantings.
- •Mulch anchoring will be used on slopes greater than 5 percent in late fall (past October 15), and over—winter (October 15 - April 1).
- The following materials may be used for temporary mulch:
- a. Hay or Straw material shall be air—dried, free of seeds and coarse material. Apply 2 bales/1,000 sf or 2 tons/acre to cover ground surface.
- b. Erosion Control Mix: It can be used as a stand-alone reinforcement
- on slopes 2 horizontal to 1 vertical or less;
- •on frozen ground or forested areas; and at the edge of gravel parking areas and areas under construction.
- c. Erosion control mix alone is not suitable: on slopes with groundwater seepage;
- at low points with concentrated flows and in gullies;
- •at the bottom of steep perimeter slopes exceeding 100 feet in length;
- •below culvert outlet aprons; and around catch basins and closed storm systems.
- d. Chemical Mulches and Soil Binders: Wide ranges of synthetic spray—on materials are marketed to protect the soil surface. These are emulsions that are mixed with water and applied to the

wood fiber, hydro-mulches or straw to the soil surface.

e. Erosion Control Blankets and Mats: Mats are manufactured combinations of mulch and netting designed to retain soil moisture and modify soil temperature. During the growing season (April 15 to October 15) use mats indicated on drawings

soil. They may be used alone, but most often are used to hold

- 7. VEGETATIVE SOIL STOCKPILES SHALL BE AT LOCATIONS DESIGNATED
- a. Stockpiles shall not be placed within 100 feet of wetlands and will be at least 50 feet upgradiant of the stockpoles perimeter silt
- b. Sideslopes of stockpiles will not exceed 2:1.
- c. Silt fence will be installed around the perimeter of all topsoil stockpiles.
- d. Temporarily seed stockpiles within 7 days with aroostook rye, annual or perennial ryegrass.
- C. PERMANENT MEASURES
- 1. Riprapped Aprons: All storm drain pipe outlets and the inlet and outlet of culverts will have riprap aprons to protect against scour and deterioration.
- 2. Topsoil, Seed, and Mulch: All areas disturbed during construction, but not subject to other restoration (paving ,riprap, etc.) will be loamed, limed, fertilized, seeded, and mulched.
- a. Seeded Preparation: Use stockpiled materials spread to the depths shown on the plans, if available. Approved topsoil substitutes may be used. Grade the site as needed.
- b. Seeding will be completed between August 1 and September 15 of each year. Late season seeding may be done between September 15 and October 15. Areas not seeded or which do not obtain satisfactory growth by October 15, will be seeded with Aroostook Rye or mulched. After November 1, or the first killing frost, disturbed areas will be seeded at double the specified application rates, mulched, and anchored.

### PERMANENT SEEDING SPECIFICATIONS

	Percentage
Mixture:	_
Kentucky Bluegrass	15%
White Clover	5%
Creeping Red Fescue	50%
Annual Ryegrass	25%
Red Top	2%
Birdsfoot Trefoil	3%

Permanent seeding rate is 100 lbs/acre

- c. Mulch in accordance with specifications for temporary mulching.
- d. If permanent vegetated stabilization cannot be established due to the season of the year, all exposed and disturbed areas not to undergo further disturbance are to have dormant seeding applied and be temporarily mulched to protect the site.
- 3. Ditches and Channels: All ditches on—site will be lined with North American Green S75 erosion control matting (or an approved equal) upon installation of loam and seed.
- D. OVER-WINTER CONSTRUCTION EROSION CONTROL MEASURES
- 1. Stabilization of Disturbed Soil: By October 15, all disturbed soils on areas having a slope less than 15 percent will be seeded and mulched. If the contractor fails to stabilize these soils by this date, then the contractor shall stabilize the soil for late fall and winter, by using either temporary seeding or mulching.
- 2. Stabilization of Disturbed Slopes: All slopes to be vegetated will be completed by October 15. The owner will consider any area having a grade greater than 15 percent (6.5H:1V) to be a slope. Slopes not vegetated by October 15 will receive one of the following actions to stabilize the slope for late fall and winter:
- a. Stabilize the soil with temporary vegetation and erosion control
- b. Stabilize the slope with erosion control mix.

c. Stabilize the slope with stone riprap.

- 3. Stabilization of Ditches and Channels: All stone—lined ditches and channels to be used to convey runoff through the winter will be constructed and stabilized by November 15. Grass—lined ditches and channels will be complete by September 15. Grass—lined ditches not stabilized by September 15 shall be lined with either sod or riprap.
- MAINTENANCE PLAN
- 1. Routine Maintenance: Inspection will be performed as outlined in the project's Erosion Control Plan. Inspection will be by a qualified person during wet weather to ensure that the facility performs as intended. Inspection priorities will include checking erosion controls for accumulation of sediments.
- G. CONSTRUCTION SEQUENCE
- In general, the expected sequence of construction for each phase is provided below.
- Site preparation; • Install temporary erosion control measures; Perform site demolition/removal;
- Regrade landfill; Install gas vent sand; • Install barrier soil;
- •Install gravel pad (geotextile, common borrow and gravel);
- Install terrace ditch, downspout, and perimeter ditches;
- Install vegetative soil;
- Seed and mulch; • Clean sediment from temporary collection structures;
- •Remove temporary erosion control measures after all disturbed areas are

-SILT FENCE FABRIC HARDWOOD STAKES SPACED AT 6'-0" MAX OC ON DOWNSTREAM SIDE Me hale Malendhan - LOAM AND SEED **ELEVATION** SILT FENCE -— ANCHOR BOTTOM OF FENCE IN TRENCH WITH EXCAVATED MATERIAL. FLOW -SILT FENCE

> SILT FENCE NTS

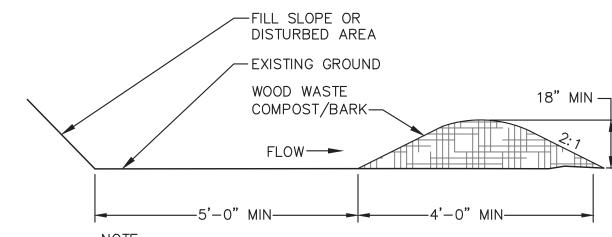
FABRIC

OVERLAP JOINTS

TOP OF STAKES

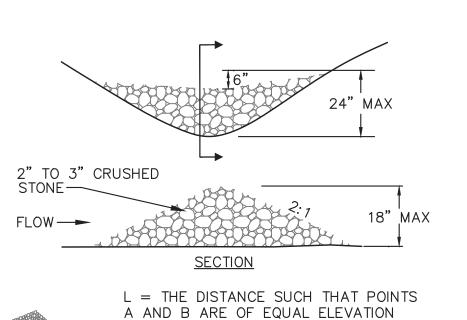
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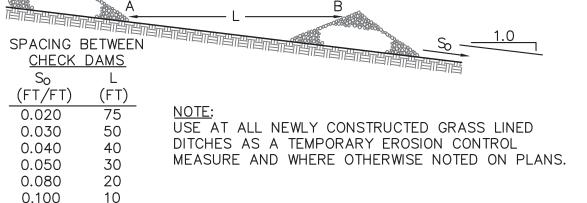
**SECTION** 



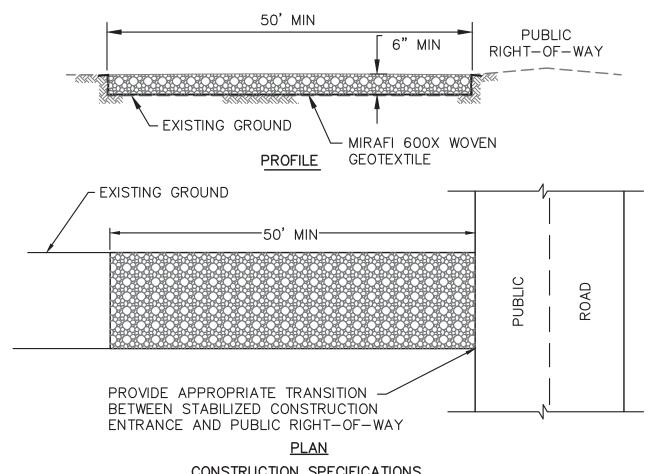
BARK MULCH SEDIMENT BARRIERS MAY BE USED AS AN ALTERNATE TO SILT FENCE WHEN APPROVED BY THE ENGINEER.

BARK MULCH SEDIMENT BARRIER





STONE CHECK DAM

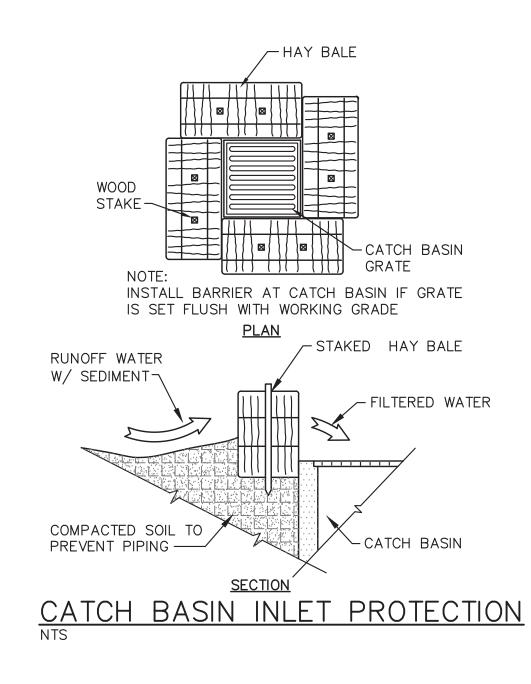


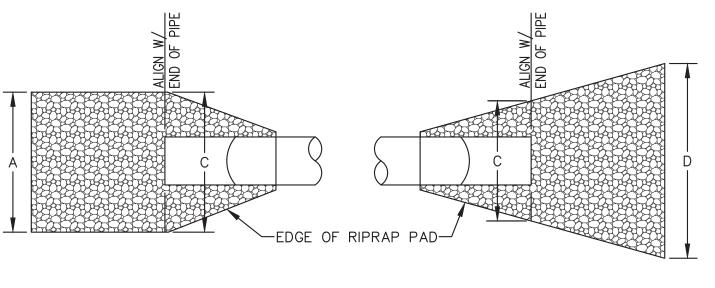
**CONSTRUCTION SPECIFICATIONS** 

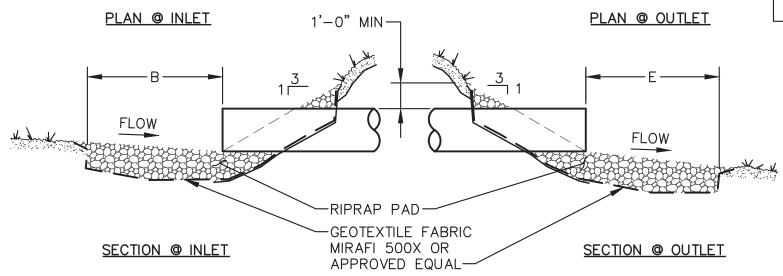
1. STONE SIZE - 2" TO 3" STONE OR RECLAIMED OR RECYCLED CONCRETE, OR EQUIVALENT.

- 2. LENGTH AS EFFECTIVE, BUT NOT LESS THAN 50 FEET.
- 3. THICKNESS NOT LESS THAN SIX (6) INCHES.
- 4. WIDTH 10 FEET MINIMUM, OR NOT LESS THAN FULL WIDTH OF ALL POINTS OF INGRESS OR EGRESS.
- 5. MAINTENANCE THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC REPAIR AND TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.

### STABILIZED CONSTRUCTION ENTRANCE/EXIT

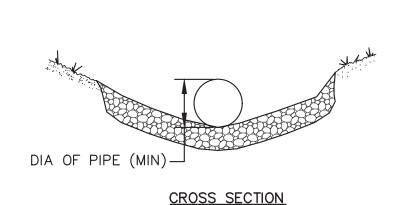




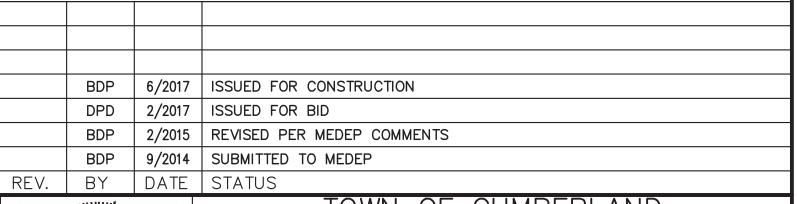


HOURS OF INSTALLING NEW PIPE OR CULVERT. 3 FT. | 2 FT. | 3 FT. | 9 FT. | 8 FT. 15" | 3.75 FT. | 2.5 FT. | 3.75 FT. | 11.5 FT. | 10 FT. | 18" | 4.5 FT. | 3 FT. | 4.5 FT. | 11.5 FT. | 10 FT. | 24" | 6 FT. | 4 FT. | 6 FT. | 15 FT. | 12 FT. | 7.5" 30" | 7.5 FT. | 5 FT. | 7.5 FT. | 20.5 FT. | 18 FT. |

RIPRAP PAD MUST BE INSTALLED WITHIN 48



RIPRAP INLET/OUTLET PROTECTION



TOWN OF CUMBERLAND WOOD WASTE/CDD LANDFILL CLOSURE DROWNE ROAD

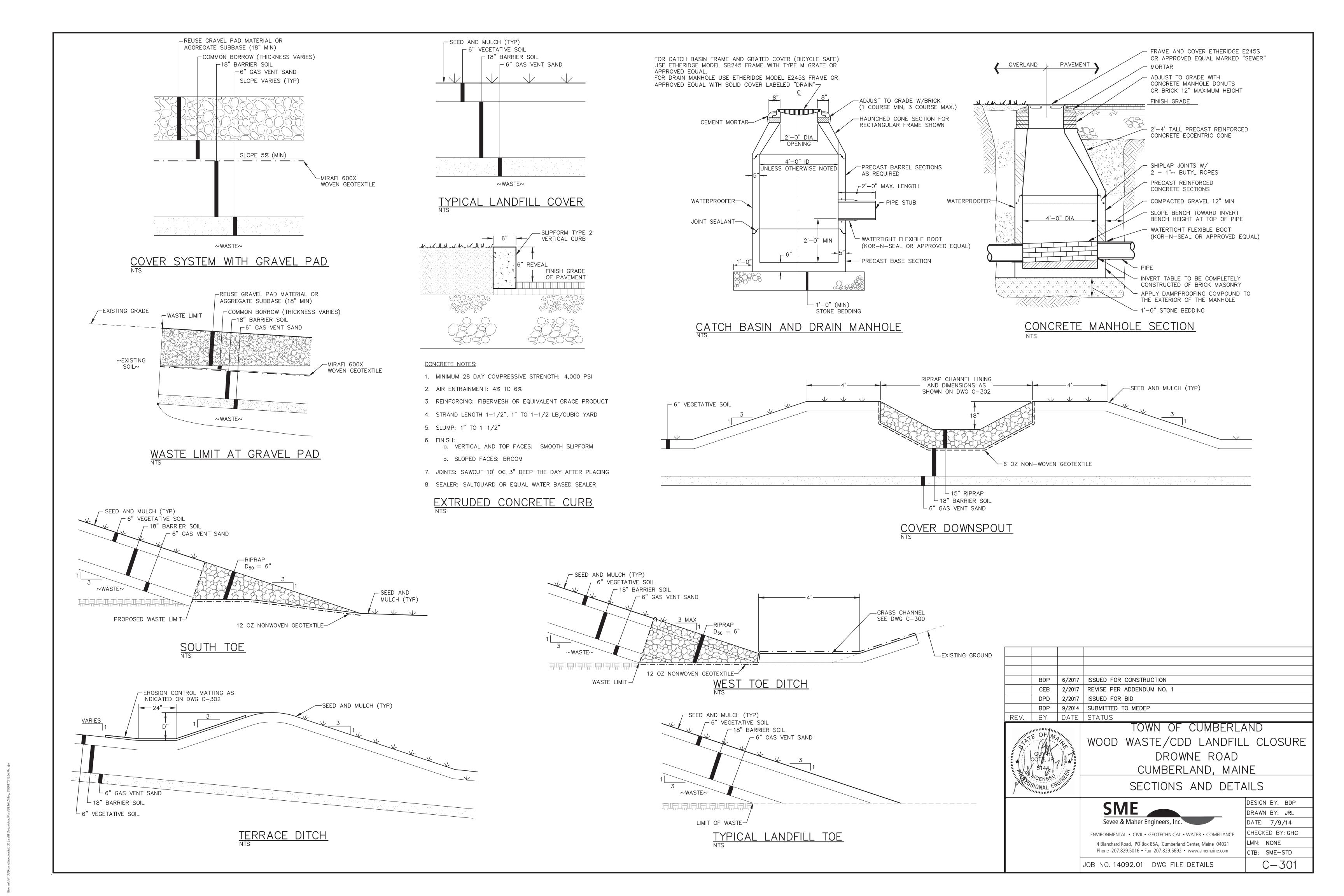
EROSION CONTROL NOTES AND DETAILS

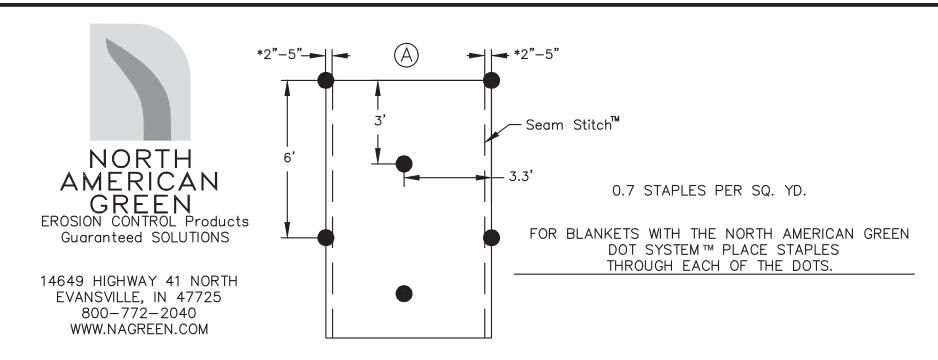
CUMBERLAND, MAINE

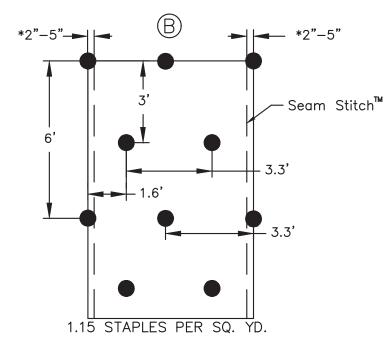
DESIGN BY: BDP **SME** DRAWN BY: JRL Sevee & Maher Engineers, Inc. DATE: 7/9/14 CHECKED BY: GHC ENVIRONMENTAL • CIVIL • GEOTECHNICAL • WATER • COMPLIANCE LMN: NONE 4 Blanchard Road, PO Box 85A, Cumberland Center, Maine 04021 Phone 207.829.5016 • Fax 207.829.5692 • www.smemaine.com

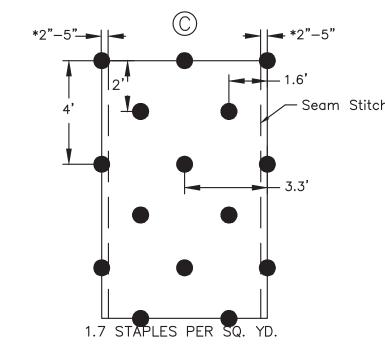
JOB NO. 14092.01 DWG FILE DETAILS

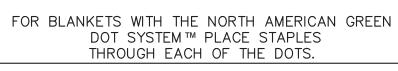
CTB: SME-STD C - 300









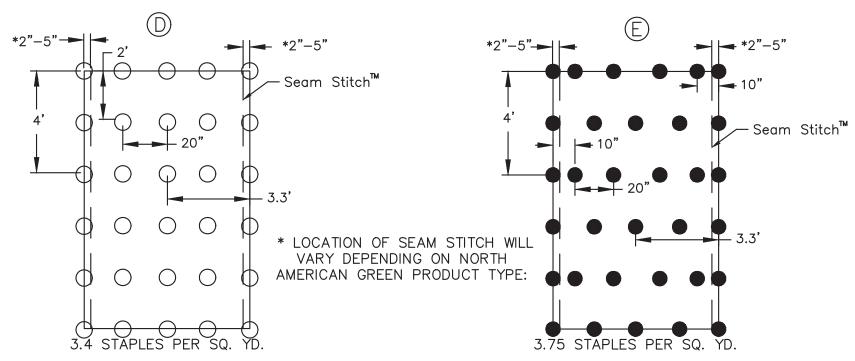


FOR BLANKETS WITH THE NORTH AMERICAN GREEN

THROUGH EACH OF THE DOTS

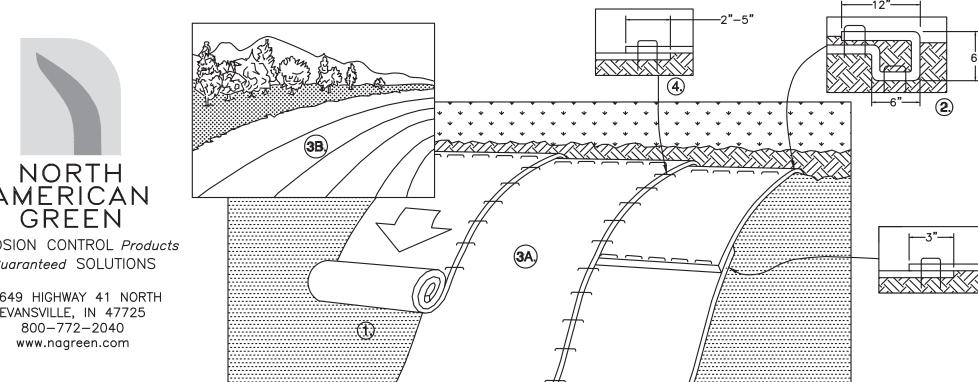
DOT SYSTEM™ PLACE STAPLES

FOR BLANKETS WITH THE NORTH AMERICAN GREEN DOT SYSTEM™ PLACE STAPLES THROUGH EACH OF THE DOTS.



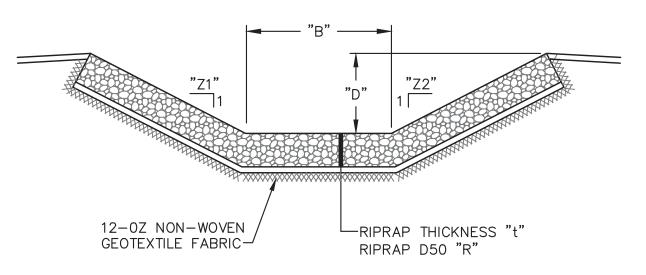
FOR BLANKETS WITH THE NORTH AMERICAN GREEN DOT SYSTEM™ PLACE STAPLES THROUGH EACH OF THE DOTS.

# ECB STAPLE PATTERN GUIDE



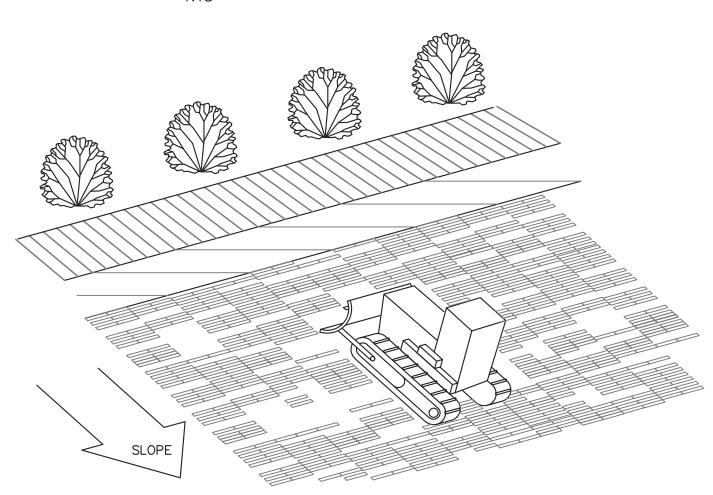
- **AMERICAN**
- EROSION CONTROL Products Guaranteed SOLUTIONS
- 14649 HIGHWAY 41 NORTH EVANSVILLE, IN 47725
- 1. PREPARE BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECP'S). INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER AND SEED.
- 2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE RECP'S IN A 6"DEEPx6"WIDE TRENCH WITH APPROXIMATELY 12" OF RECP'S EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE RECP'S WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF RECP'S BACK OVER SEED AND COMPACTED SOIL. SECURE RECP'S OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE RECP'S.
- 3. ROLL THE RECP'S (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. RECP'S WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECP'S MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM™, STAPLES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
- 4. THE EDGES OF PARALLEL RECP'S MUST BE STAPLED WITH APPROXIMATELY 2"-5" OVERLAP DEPENDING ON
- 5. CONSECUTIVE RECP'S SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART ACROSS
- \*IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE RECP'S.

SLOPE INSTALLATION NTS



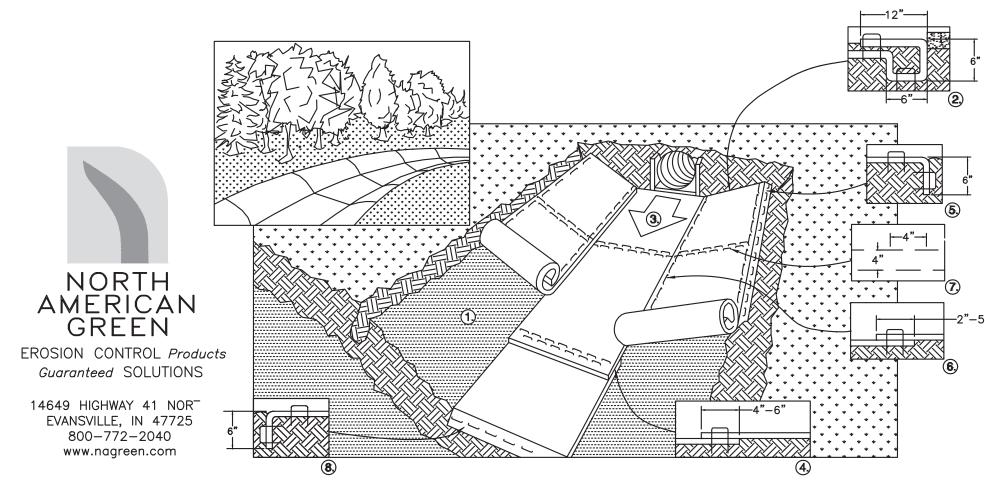
CHANINE	TVDE	D (ET)	D (ET)	71	70	RIPRAP	t (FT)	
CHANNEL	TYPE	B (FT)	D (FT)	Z1	Z2	D <sub>50</sub> (IN)		
3B	DOWNSPOUT	4	2	2	2	6	1.25	
3C	TOE CHANNEL	4	2	2	2	6	1.25	

# RIPRAP CHANNEL

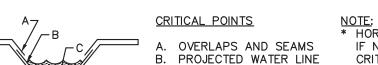


- 1. SLOPE TRACKING SHALL BE PERFORMED BY CONTRACTOR ON ALL FINISHED AREAS TO BE SEEDED.
- 2. TRACKING SHALL BE PERFORMED BY RUNNING TRACKED MACHINERY UP AND DOWN SLOPES LEAVING TREAD MARKS PARALLEL TO THE CONTOUR.

# SLOPE TRACKING



- 1. PREPARE BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECP'S). INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER AND SEED.
- 2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE RECP'S IN A 6"DEEPx6"WIDE TRENCH WITH APPROXIMATELY 12" OF RECP'S EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE RECP'S WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF RECP'S BACK OVER SEED AND COMPACTED SOIL. SECURE RECP'S OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE RECP'S.
- 3. ROLL CENTER RECP'S IN THE DIRECTION OF WATER FLOW IN BOTTOM OF CHANNEL. RECP'S WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECP'S MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM™, STAPLES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
- 4. PLACE CONSECUTIVE RECP'S END OVER END (SHINGLE STYLE) WITH A 4" TO 6" OVERLAP. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4" ON CENTER TO SECURE RECP'S.
- 5. FULL LENGTH EDGE OF RECP'S AT OF SIDE SLOPES MUST BE ANCHORED WITH A ROW OF STAPLES APPROXIMATELY 12" APART IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
- 6. ADJACENT RECP'S MUST BE OVERLAPPED APPROXIMATELY 2" TO 5" (DEPENDING ON RECP'S TYPE) AND STAPLED.
- 7. IN HIGH FLOW CHANNEL APPLICATIONS, A STAPLE CHECK SLOT IS RECOMMENDED AT 30 TO 40 FOOT INTERVALS. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4" ON CENTER OVER ENTIRE WIDTH OF THE CHANNEL.
- 8. THE TERMINAL END OF THE RECP'S MUST BE ANCHORED WITH A ROW OF STAPLES APPROXIMATELY 12" APART IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
- \*IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE RECP'S.



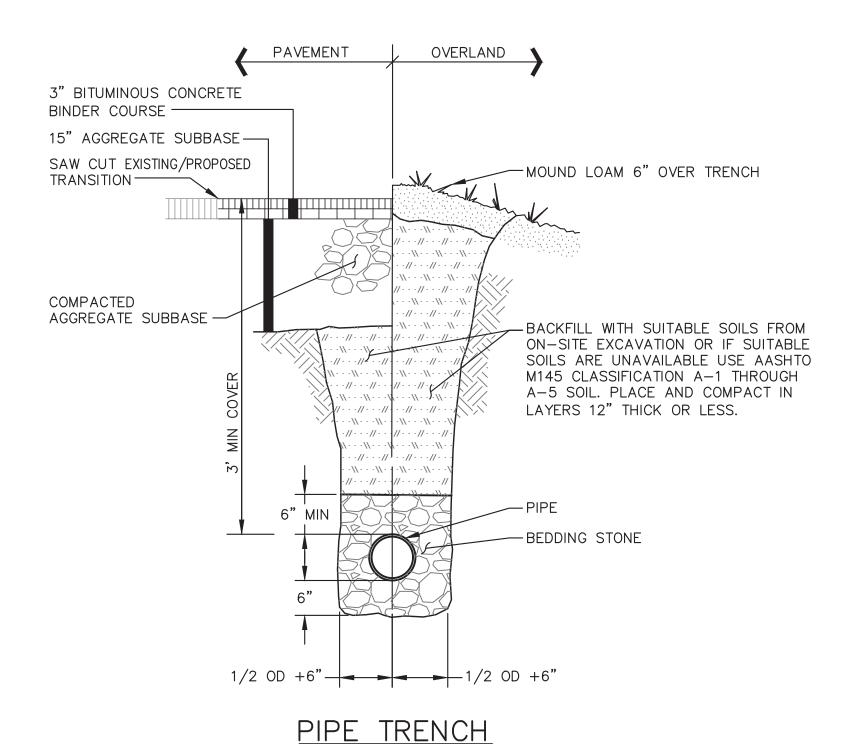
SLOPE VERTICES

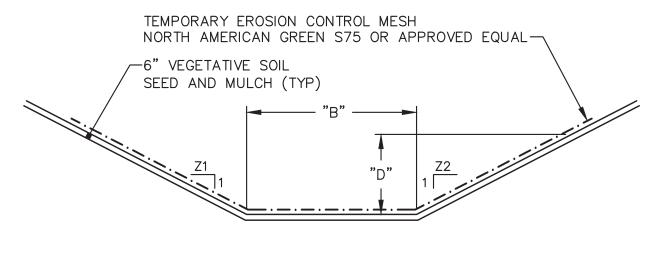
NOTE:

\* HORIZONTAL STAPLE SPACING SHOULD BE ALTERED

\* OTABLES TO SECURE THE IF NECESSARY TO ALLOW STAPLES TO SECURE THE CRITICAL POINTS ALONG THE CHANNEL SURFACE. C. CHANNEL BOTTOM/SIDE

CHANNEL INSTALLATION





GRASS CHANNEL	TYPE	B (FT)	D (FT)	Z1	Z2	LINING
3A	TERRACE DITCH	2	2	3	3 +/-	NAG S75
1A	TOE DITCH	4	2	3	2-3 +/-	NAG S75

\*SEE MANUFACTURER'S LINING INSTALLATION DETAIL FOR STAPLE PATTERNS, AND VEGETATIVE STABILIZATION SPECIFICATIONS FOR SOIL AMENDMENTS, SEED MIXTURES AND MULCHING INFORMATION.

1. ALL CHANNELS MUST BE KEPT FREE OF OBSTRUCTIONS SUCH AS FILL GROUND, FALLEN LEAVES AND WOODY DEBRIS, ACCUMULATED SEDIMENT AND CONSTRUCTION MATERIALS/WASTES. CHANNELS SHOULD BE KEPT MOWED AND/OR FREE OF ALL WEEDY, BRUSHY OR WOODY GROWTH. ANY UNDERGROUND UTILITIES RUNNING ACROSS/THROUGH THE CHANNEL(S) SHALL BE IMMEDIATELY BACKFILLED AND THE CHANNEL(S) REPAIRED AND STABILIZED PER THE CHANNEL CROSS SECTION DETAIL.

2. VEGETATED CHANNELS SHALL BE CONSTRUCTED FREE OF ROCKS, TREE ROOTS, STUMPS OR OTHER PROJECTIONS THAT WILL IMPEDE NORMAL CHANNEL FLOW AND/OR PREVENT GOOD LINING TO SOIL CONTACT. THE CHANNEL SHALL BE INITIALLY OVER-ESXCAVATED TO ALLOW FOR THE PLACEMENT OF TOPSOIL.

### GRASS CHANNEL

	DPD	6/2017	ISSUED FOR CONSTRUCTION
	DPD	2/2017	ISSUED FOR BID
	BDP	9/2014	SUBMITTED TO MEDEP
REV.	BY	DATE	STATUS
	antilling.		TOWN OF CHMPEDIAND

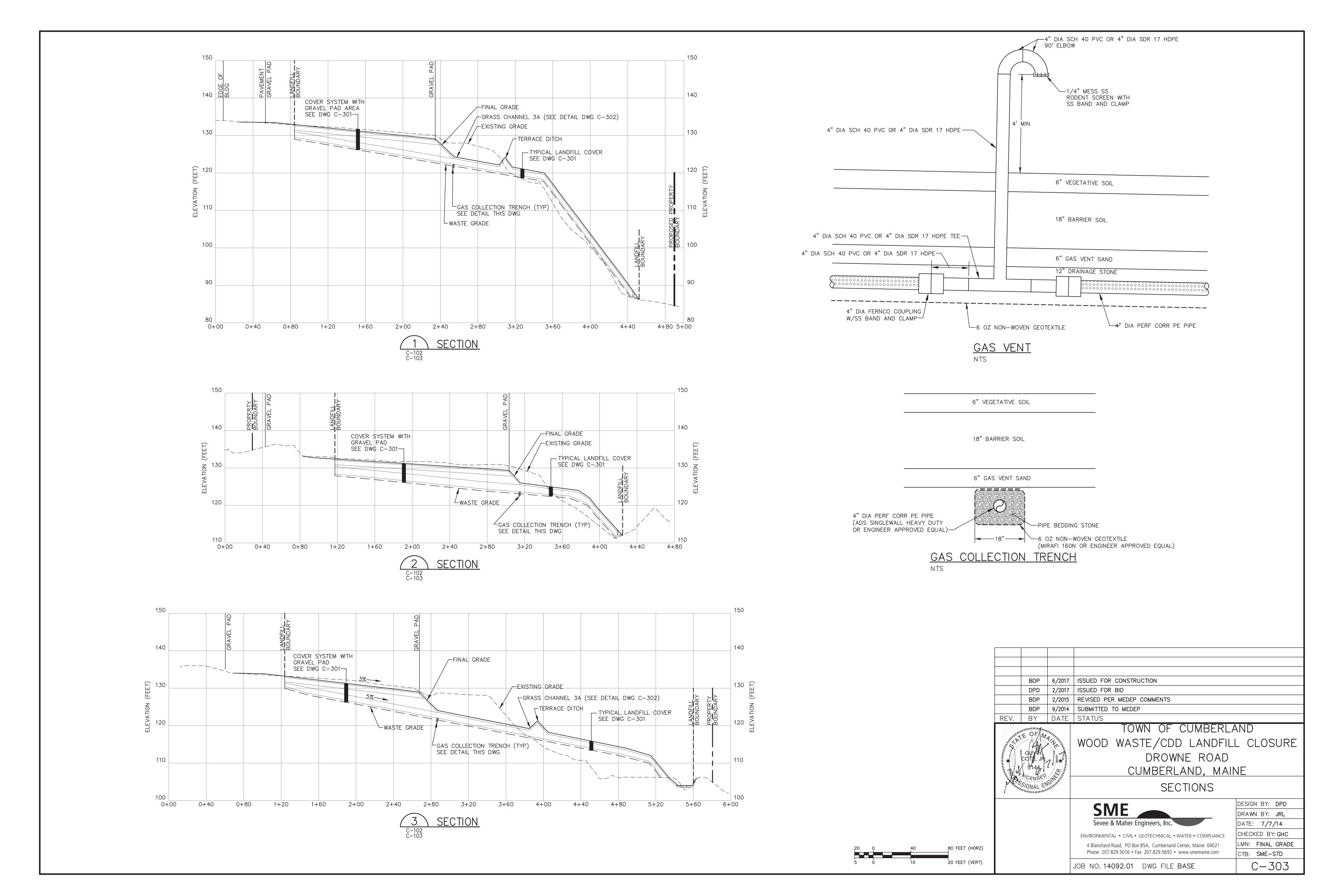
### TOWN OF COMBERLAND WOOD WASTE/CDD LANDFILL CLOSURE DROWNE ROAD CUMBERLAND, MAINE

### SECTIONS AND DETAILS

CNAE	DESIG	N BY: BDP
SME	DRAW	N BY: JRL
Sevee & Maher Engineers, Inc.	DATE:	7/9/14
ENVIRONMENTAL • CIVIL • GEOTECHNICAL • WATER • COMPLIANCE	CHEC	KED BY: GHC
4 Blanchard Road, PO Box 85A, Cumberland Center, Maine 04021	LMN:	NONE
Phone 207.829.5016 • Fax 207.829.5692 • www.smemaine.com	ств:	SME-STD

JOB NO. 14092.01 DWG FILE DETAILS

MN: NONE TB: SME-STD C - 302



(TCU/Drowne)Woodwaste\CDD Landfill Closure\Acad\Plans\BASE.dwg, 67/2017 2:14.22 PN

