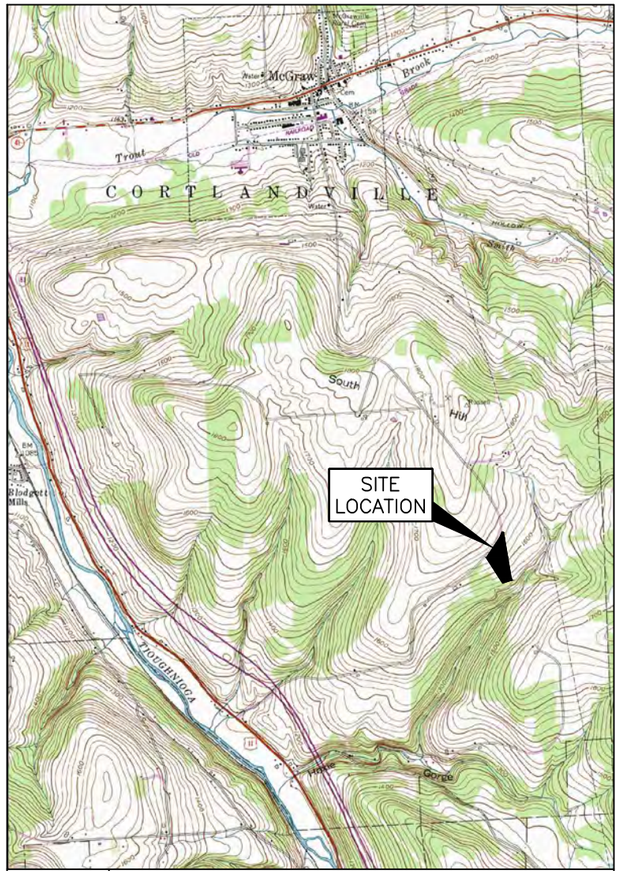
REMEDIAL ACTION
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SOUTH HILL DUMP SITE, SITE NO. 712009
CORTLANDVILLE, NEW YORK

MARCH 2011
CONTRACT NO. D007992



NEW YORK — QUADRANGLE LOCATION

N

MAP SOURCE: USGS QUANDRANGLE – McGRAW, NY 1955, PHOTO REVISIONS 1979

PROJECT SITE:
SOUTH HILL DUMP
COUNTY OF CORTLAND
CORTLANDVILLE, NEW YORK

LOCUS MAP

0 500 1000 2000
SCALE IN FEET

DRAWING INDEX

INCLUDED THIS SUBMITTAL	SHEET NUMBER	DRAWING TITLE	DISCIPLINE NUMBER
•	1	COVER SHEET	G–001
•	2	LEGEND, ABBREVIATIONS, AND GENERAL NOTES	G–002
•	3	EXISTING CONDITIONS PLAN	C–101
•	4	EXCAVATION PLAN 1	C–102
•	5	EXCAVATION PLAN 2	C–103
•	6	SUBGRADE AND EROSION AND SEDIMENT CONTROL PLAN 1	C–104
•	7	SUBGRADE AND EROSION AND SEDIMENT CONTROL PLAN 2	C–105
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•	10	EROSION AND SEDIMENT CONTROL NOTES	C–301
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•	13	CIVIL DETAILS 2	C–304
•	14	CIVIL DETAILS 3	C–305
•	15	GROUNDWATER MONITORING WELL DETAILS	C–306

NEW YORK — CORTLAND COUNTY

N

MAP SOURCE: NEW YORK STATE GEOGRAPHIC INFORMATION SYSTEMS CLEARINGHOUSE, ORTHOIMAGERY, 2006

PROJECT SITE:
SOUTH HILL DUMP
COUNTY OF CORTLAND
CORTLANDVILLE, NEW YORK

SITE MAP

0 75 150 300
SCALE IN FEET

STATE OF NEW YORK — LICENSED ENGINEER — M.J. STELMACK — MARCH 04, 2011

NO.	DATE	DSGN	DR	CHK	APVD
0	03/04/11	J.P. McCRADY	D.E. LAWRENCE	S.H. MITCHELL	M.J. STELMACK

ISSUED FOR BID — JPM — MJS
REVISION — BY — APVD

New York State Department of Environmental Conservation

REMEDIAL ACTION
SOUTH HILL DUMP SITE
SOUTH HILL ROAD
CORTLANDVILLE, NEW YORK
NYSDEC SITE NO. 712009, CONTRACT NO. D007992

MACTEC Engineering and Consulting, Inc.
P.O. Box 1071, 11 Commercial Street
Portland, Maine 04112–7050
(207) 775–5401

MACTEC

GENERAL
COVER SHEET

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE	03/04/2011
PROJ	3612-09-2133
DWG	G-001
SHEET	1 OF 15

GENERAL NOTES:

1 DRAWING INFORMATION:

A. SITE LOCATION, TOPOGRAPHY, AND BOUNDARY INFORMATION BASED ON A PLAN ENTITLED ñBOUNDARY & TOPOGRAPHIC MAP, PREPARED FOR THE NEW YORK STATE D.E.C., FORMER SOUTH HILL DUMP SITE, BEING PART OF LOT #100, TOWN OF CORTLANDVILLE, COUNTY OF CORTLAND, STATE OF NEW YORK,ò BY THE POPLI DESIGN GROUP, DATED JANUARY 20, 2010.

B. TEST PIT TRENCH LOCATIONS, DESIGNATED AS "TP-X", ARE BASED ON A PLAN ENTITLED, "TOPOGRAPHIC SURVEY SOUTH HILL DUMP SITE", PREPARED BY SPENCER F. THEW, P.E., L.S., DATED 7/7/97.

C. TEST PIT TRENCH LOCATIONS DESIGNATED AS "TP 10-X", ARE BASED ON GPS LOCATIONS COLLECTED BY MACTEC ENGINEERING AND CONSULTING, PC IN NOVEMBER 2010.

D. APPROXIMATE LOCATION OF BULKY WASTE AND DEBRIS STOCKPILES BASED ON FIELD OBSERVATIONS BY MACTEC ENGINEERING AND CONSULTING, PC DURING A SITE VISIT ON APRIL 28, 2005.

E. APPROXIMATE LOCATION OF EXISTING SOLID WASTE BOUNDARY (LIMIT OF WASTE) IS BASED ON GEOPHYSICAL SURVEY INCLUDING HIGH RESOLUTION METAL DETECTION AND GROUND PENETRATING RADAR PERFORMED BY MACTEC ENGINEERING AND CONSULTING, PC. IN THE FALL 2009.

2 SURVEY INFORMATION:

A. MAPPING REFERENCED TO THE NORTH AMERICAN DATUM OF 1983 (CORS) – NEW YORK STATE PLANE COORDINATE SYSTEM, CENTRAL ZONE.

B. ELEVATIONS SHOWN HEREON ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988.

C. MAPPING UNITS ARE SHOWN IN U.S. SURVEY FEET.

D. THE CONTOUR INTERVAL IS 1 FOOT.

E. THE SITE WAS SNOW COVERED AT THE TIME OF SURVEY.

F. SURVEY CONTROL POINTS ESTABLISHED BY THE POPLI DESIGN GROUP DURING THEIR FIELD SURVEY IN 2009/2010 ARE SHOWN IN THE SURVEY CONTROL POINT LOCATION DIAGRAMS, THIS SHEET.

G. FOR BOUNDARY DEED REFERENCES AND NOTES, REFER TO THE PLAN ENTITLED ñBOUNDARY & TOPOGRAPHIC MAP, PREPARED FOR THE NEW YORK STATE D.E.C., FORMER SOUTH HILL DUMP SITE, BEING PART OF LOT #100, TOWN OF CORTLANDVILLE, COUNTY OF CORTLAND, STATE OF NEW YORK,ò BY THE POPLI DESIGN GROUP, DATED JANUARY 20, 2010.

3. EXISTING SOLID WASTE BOUNDARY (LIMIT OF WASTE):

A. THE EXISTING SOLID WASTE BOUNDARY AS SHOWN ON DRAWING SHEET C-101 IS LOCATED BASED ON TEST PITTING AND GEOPHYSICAL SURVEY AND IS APPROXIMATE.

B. THE DEPTH OF WASTE AT THE IDENTIFIED SOLID WASTE BOUNDARY IS UNKNOWN, HOWEVER, HAS BEEN ESTIMATED TO BE APPROXIMATELY 2.5 FEET.

4. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING PERMISSIONS AND ACCESS AGREEMENTS TO PERMIT WORK INCLUDING, BUT NOT LIMITED TO, CLEARING, GRUBBING, EXCAVATING, GRADING, AND FILLING IN THE SOUTH HILL ROAD RIGHT-OF-WAY OWNED BY THE TOWN OF CORTLANDVILLE. THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION IS RESPONSIBLE FOR SECURING ANY OTHER ACCESS AGREEMENTS REQUIRED TO PROVIDE ACCESS TO THE CONTRACTOR.

5. EAST AND WEST PROPERTY BOUNDARIES SHALL BE MARKED IN THE FIELD BY A NEW YORK STATE LICENSED SURVEYOR TO ENSURE DISTURBANCE OCCURS ONLY WITHIN THE TOWN OF CORTLANDVILLE PROPERTY WITH THE EXCEPTION OF THE NEGOTIATED PERMISSIONS/ACCESS AGREEMENTS.

6. WASTE CONSOLIDATION SHALL CONSIST OF:

A. REMOVING AND RELOCATING ON-SITE SOLID WASTES AS DEFINED IN THE SPECIFICATIONS TO WITHIN THE NEW SOLID WASTE BOUNDARY.

B. REMOVING GRUBBINGS AND RELOCATION TO WITHIN THE IDENTIFIED AREA INSIDE THE NEW SOLID WASTE BOUNDARY.

C. ONLY THOSE CLASSIFICATIONS OF WASTES AS DEFINED IN THE SPECIFICATIONS SHALL BE ALLOWED TO BE CONSOLIDATED ON-SITE.

7. GRADING PERFORMANCE CRITERIA:

SUBGRADE CONTOURS WITHIN THE NEW SOLID WASTE BOUNDARY SHOWN ON DRAWING SHEET C-104 AND C-105 REPRESENT THE REGRADED SURFACE OF THE LANDFILL ON WHICH THE COVER SYSTEM WILL BE INSTALLED. THE REGRADED SURFACE TAKES INTO ACCOUNT THE FILL QUANTITIES GENERATED FROM WASTE CONSOLIDATION, EXCESS EXCAVATED SOILS FROM OUTSIDE THE NEW SOLID WASTE BOUNDARY, AND GRUBBINGS DISPOSAL. HOWEVER, THE WASTE CONSOLIDATION VOLUME IS BASED ON AN ESTIMATED DEPTH OF WASTE AND MAY DIFFER FROM THE DESIGN ESTIMATES. THEREFORE, FLEXIBILITY IN THE ELEVATION OF SUBGRADE IS REQUIRED TO ACCOMMODATE DIFFERENCES DUE TO ACTUAL FIELD CONDITIONS. THE SUBGRADE DRAWING IS INTENDED TO SHOW GENERAL SLOPES AND DRAINAGE PATTERNS; IT DOES NOT MANDATE ELEVATIONS TO BE ACHIEVED. DEVIATIONS FROM THE SUBGRADE ELEVATIONS ARE ALLOWED WITH ENGINEER APPROVAL, PROVIDED THE FOLLOWING GRADING CRITERIA ARE MET:

A. MAXIMUM ALLOWABLE SUBGRADE SLOPE IS 3 FEET IN THE HORIZONTAL TO 1 FOOT IN THE VERTICAL (3:1) OR 33 PERCENT.

B. MINIMUM ALLOWABLE SUBGRADE SLOPE IS 20 FEET IN THE HORIZIONTAL TO 1 FOOT IN THE VERTICAL (20:1) OR 5 PERCENT.

C. ON-SITE SOLID WASTE, COVER SOILS, GRUBBINGS, AND EXCESS SOILS SHALL BE PLACED, GRADED, AND COMPACTED IN LANDFILL FILL AREAS TO MEET THE MINIMUM AND MAXIMUM SLOPE CRITERIA.

D. SUBRADE SHALL BE ESTABLISHED WITH THE MINIMAL AMOUNT OF IMPORTED SELECT BORROW POSSIBLE. IMPORTED SELECT BORROW SHALL BE USED ONLY WITH THE APPROVAL OF THE ENGINEER TO AUGMENT AVAILABLE ON-SITE MATERIALS.

E. ON-SITE FILL MATERIALS SHALL BE INSTALLED IN A PLANNED SEQUENCE TO ACCOMMODATE THE TOTAL AVAILABLE QUANTITIES AND MINIMIZE THE REQUIRED QUANTITY OF IMPORTED SELECT BORROW. EACH LIFT OF MATERIAL PLACED SHALL MEET THE MINIMUM AND MAXIMUM SLOPE CRITERIA.

F. GRADING ACTIVITIES SHALL BE PERFORMED IN A MANNER THAT MAINTAINS ALL SITE FEATURES IN CONFORMANCE WITH THE DESIGN, INCLUDING BUT NOT LIMITED TO SLOPES, SLOPE BENCHES, APRONS, SOLID WASTE BOUNDARY, ROADS, AND DRAINAGE CHANNELS/SWALES.

ABBREVIATIONS:

APPROX	APPROXIMATELY
ASF	AUGMENTED SILTATION FENCE
℄	CENTER LINE
CONC	CONCRETE
CP	CONTROL POINT (SURVEY)
CPE	CORRUGATED POLYETHYLENE
D_{50}	MEDIAN STONE SIZE
DD	DOWNDRAIN
DIA	DIAMETER
E	EASTING, EAST, END
EDS	EAST DRAINAGE SWALE
ELEV	ELEVATION
'	FEET
GV	GAS VENT
GW	GROUNDWATER
HDPE	HIGH DENSITY POLYETHYLENE
HR	HOUR
ID	IDENTIFICATION, INSIDE DIAMETER
"	INCHES
INV	INVERT
LF	LINEAR FEET
LOG	LIMIT OF GRADING
LOW	LIMIT OF WORK
MAG	MAGNETIC
MAX	MAXIMUM
MIN	MINIMUM
MM	MILLIMETER
MW	MONITORING WELL
N	NORTHING, NORTH
NE	NORTHEAST
NO.	NUMBER
NTS	NOT TO SCALE
NW	NORTHWEST
NYSDEC	NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION, DEPARTMENT
NYSDOT	NEW YORK STATE DEPARTMENT OF TRANSPORTATION
OD	OUTSIDE DIAMETER
OZ	OUNCE
℗	PROPERTY LINE
PSI	POUNDS PER SQUARE INCH
PT	POINT
PVC	POLYVINYL CHLORIDE
RC	RIPRAP CHANNEL
S	SOUTH, SLOPE, START
SB	SOIL BORING, SLOPE BENCH
SCD	STONE CHECK DAM
SE	SOUTHEAST
SF	SQUARE FEET OR SILTATION FENCE
SS	STANDARD SPECIFICATIONS
SW	SOUTHWEST
TP	TEST PIT
TYP	TYPICAL
YR	YEAR

LEGEND – EXISTING:

- PROPERTY LINE
- TOPOGRAPHIC CONTOUR
- EDGE OF PAVEMENT
- CHAINLINK FENCE
- x — BARBED-WIRE FENCE
- E TP37 S — TEST PIT
- SW006/SD005 — SURFACE WATER/SEDIMENT LOCATION
- MW-1B — GROUNDWATER MONITORING WELL
- EM1 — LIMIT OF METAL DEBRIS IDENTIFIED BY EM SURVEY, INTERPRETED SOLID WASTE BOUNDARY
- LIMIT OF SOLID WASTE IDENTIFIED BY TEST PITTING, INTERPRETED SOLID WASTE BOUNDARY
- TREE LINE
- INV 1659.XX — STORM DRAIN PIPE W/ INVERT ELEVATIONS
- POSSIBLE DRUMS REMAINING
- KNOWN DRUMS REMAINING
- DRUMS, METAL — SURFACE MATERIALS OR CONDITIONS AS OBSERVED DURING THE APRIL 28, 2005 SITE WALK

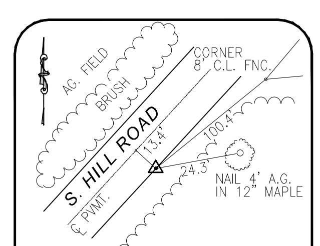
LEGEND – PROPOSED:

- SF — SILTATION FENCE
- ASF — AUGMENTED SILTATION FENCE
- o — CHAIN LINK FENCE
- LOW — LIMIT OF WORK
- LOG — LIMIT OF GRADING
- LOW-LOG — LIMIT OF WORK AND GRADING
- NEW SOLID WASTE BOUNDARY
- ℄ DRAINAGE SWALE
- ℄ ACCESS ROAD
- EDGE OF ACCESS ROAD
- 1600 — TOPOGRAPHIC CONTOUR (MAJOR)
- 1602 — TOPOGRAPHIC CONTOUR (MINOR)
- LIMIT OF CLEARING
- MW-1B — GROUNDWATER MONITORING WELL
- GV-1 — GAS VENT
- SCD — STONE CHECK DAM
- COLLECTED SITE STORMWATER RUNOFF (CONSTRUCTION WATER)
- DIVERTED STORMWATER RUNON
- UD — UNDERDRAIN PIPE

REFERENCE LEGEND:

- A — DETAIL LETTER
- C-301 — WHERE DETAIL APPEARS
- C-103 — WHERE DETAIL TAKEN

SURVEY CONTROL POINT LOCATION DIAGRAMS:



CP-10 - MAG NAIL
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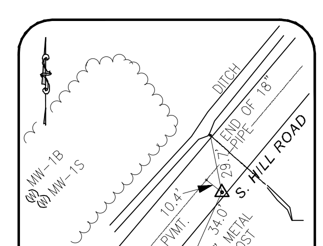
E. 956275.42
EL. 1647.80'



CP-20 - MAG NAIL
N. 933887.16
E. 956552.87
EL. 1561.88'

SOURCE: ñBOUNDARY & TOPOGRAPHIC MAP, PREPARED FOR THE NEW YORK STATE D.E.C., FORMER SOUTH HILL DUMP SITE, BEING PART OF LOT #100, TOWN OF CORTLANDVILLE, COUNTY OF CORTLAND, STATE OF NEW YORK,ò BY THE POPLI DESIGN GROUP, DATED JANUARY 20, 2010.

MARK JAMES STELMACK — STATE OF NEW YORK — LICENSED PROFESSIONAL ENGINEER — 080317

MARCH 04, 2011

NO.	DATE	REVISION	BY	APVD
0	03/04/11	ISSUED FOR BID	JPM	MJS

DSGN J.P. McCRADY | DR M.R. STACEY | CHK S.H. MITCHELL | APVD M.J. STELMACK

New York State Department of Environmental Conservation

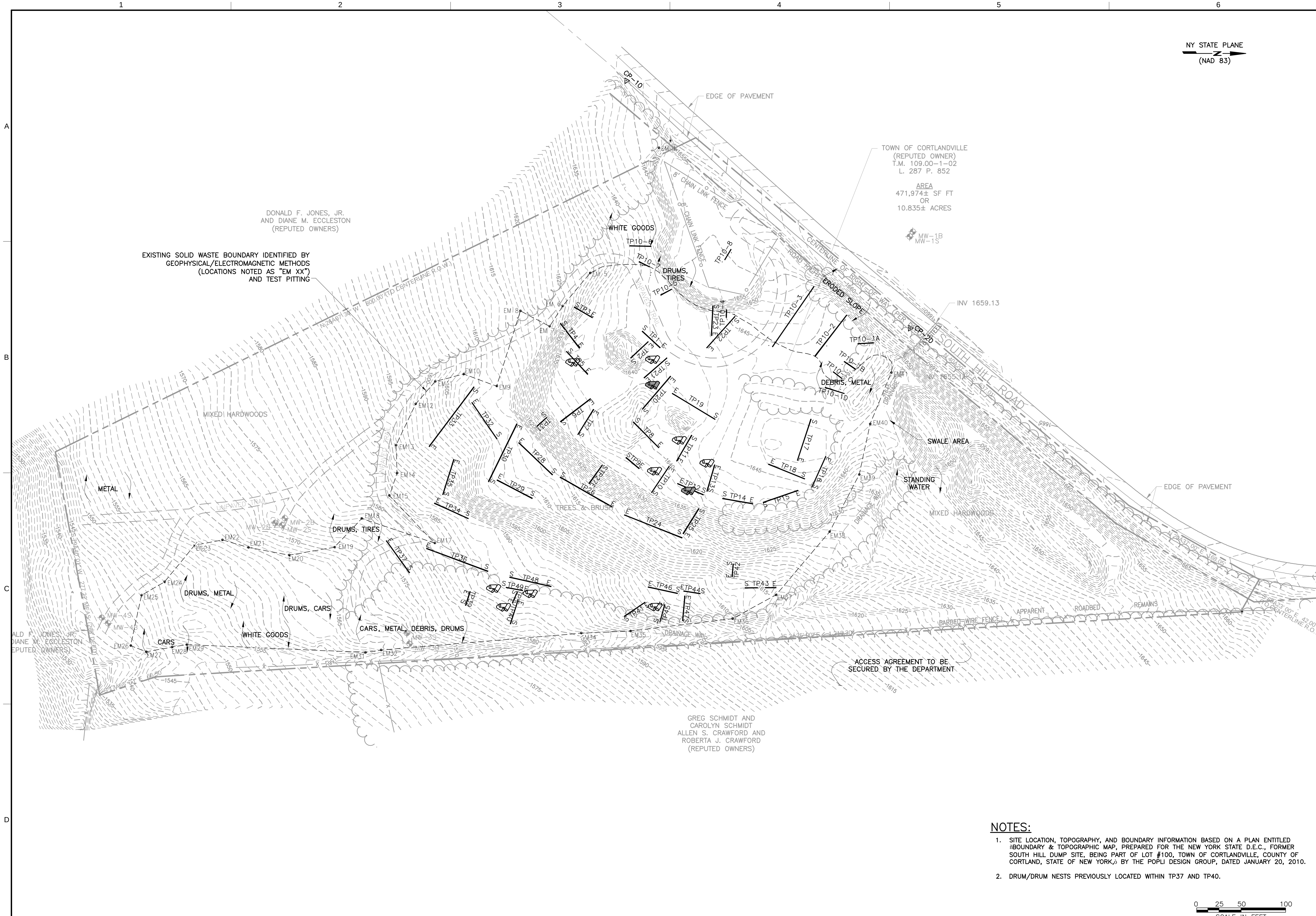
REMEDIAL ACTION
SOUTH HILL DUMP SITE
SOUTH HILL ROAD
CORTLANDVILLE, NEW YORK
NYSDEC SITE NO. 712009, CONTRACT NO. D007992

MACTEC
MACTEC Engineering and Consulting, Inc.
P.O. Box 7050, 511 Congress Street
Portland, Maine 04112-7050
(207) 775-5401

CIVIL
LEGEND, ABBREVIATIONS, AND GENERAL NOTES

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE	03/04/2011
PROJ	3612-09-2133
DWG	G-002
SHEET	2 OF 15



NOTES:

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2. DRUM/DRUM NESTS PREVIOUSLY LOCATED WITHIN TP37 AND TP40.

NO.	DATE	REVISION	BY	APVD
0	03/04/11	ISSUED FOR BID	JPM	MJS

DSGN J.P. McCRADY | DR M.R. STACEY | CHK S.H. MITCHELL | APVD M.J. STELMACK

MARCH 04, 2011

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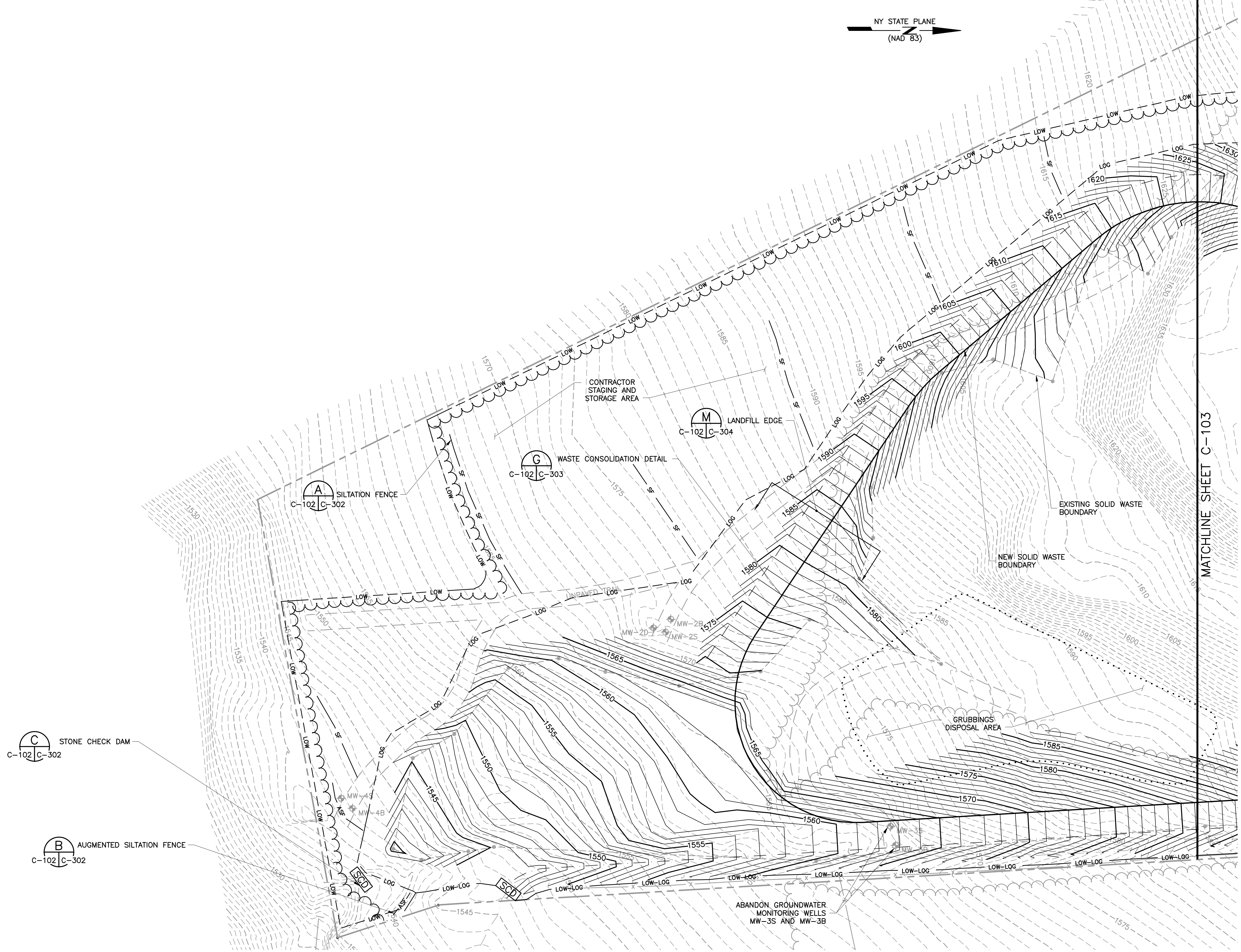
New York State Department of Environmental Conservation

REMEDIAL ACTION
SOUTH HILL DUMP SITE
SOUTH HILL ROAD
CORTLANDVILLE, NEW YORK
NYSDEC SITE NO. 712009, CONTRACT NO. D007992

GENERAL
EXISTING CONDITIONS PLAN

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE	03/04/2011
PROJ	3612-09-2133
DWG	C-101
SHEET	3 OF 15



NOTE:

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FILE NAME: M:\Projects\nysdec1\SOUTH HILL DUMP\RD-C-102.dwg PLOT DATE: Mon, 07 Mar 2011 PLOT TIME: 10:52 AM

MARCH 04, 2011

NO.	DATE	REVISION	BY	APVD
0	03/04/11	ISSUED FOR BID	JPM	MJS

DSGN J.P. McCRADY | DR M.R. STACEY | CHK S.H. MITCHELL | APVD M.J. STELMACK

New York State Department of Environmental Conservation

REMEDIAL ACTION
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CORTLANDVILLE, NEW YORK
NYSDEC SITE NO. 712009, CONTRACT NO. D007992

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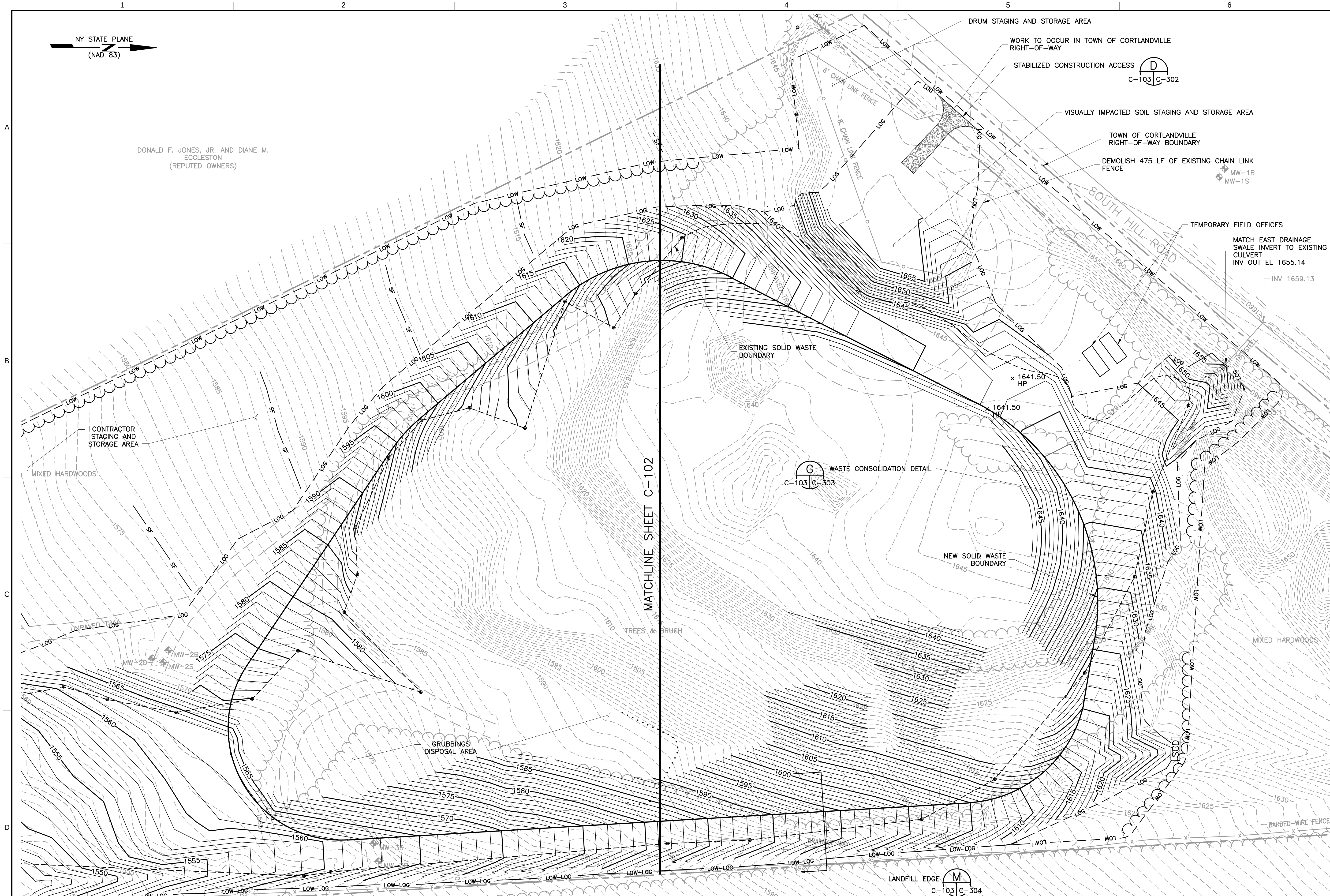
(207) 775-5401

CIVIL

EXCAVATION PLAN 1

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE	03/04/2011
PROJ	3612-09-2133
DWG	C-102
SHEET	4 OF 15



NOTE:
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0	03/04/11	ISSUED FOR BID	JPM	MJS

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New York State Department of Environmental Conservation

REMEDIAL ACTION
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SOUTH HILL ROAD
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NYSDEC SITE NO. 712009, CONTRACT NO. D007992

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CIVIL

EXCAVATION PLAN 2

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

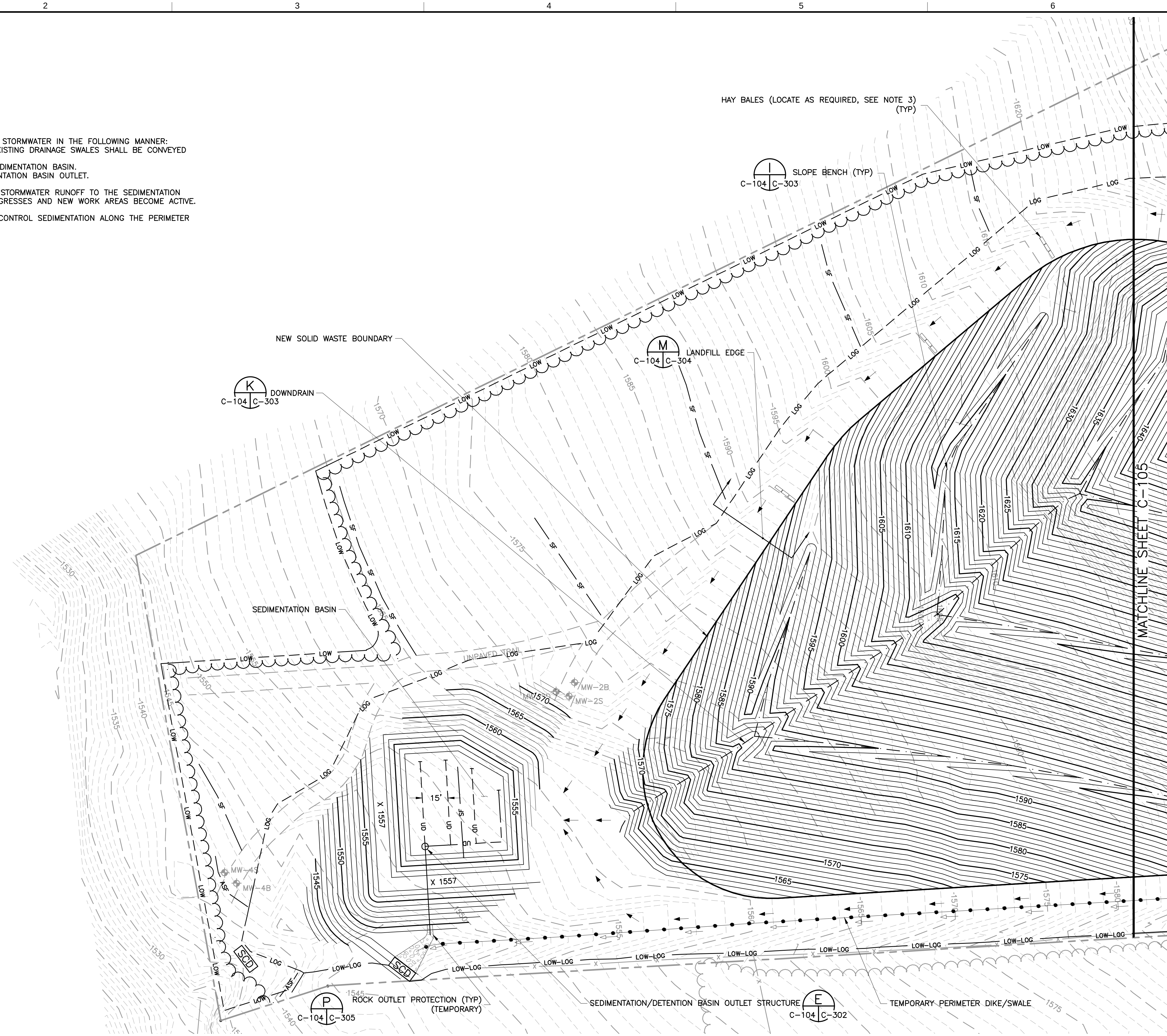
DATE	03/04/2011
PROJ	3612-09-2133
DWG	C-103
SHEET	5 OF 15

FILE NAME: M:\Projects\nysdec1\SOUTH HILL DUMP\RD-C-103.dwg PLOT DATE: Mon, 07 Mar 2011 PLOT TIME: 10:54 AM

NY STATE PLANE
Z
(NAD 83)

NOTES:

1. INSTALL TEMPORARY PERIMETER DIKE/SWALE TO SEPARATE AND CONVEY STORMWATER IN THE FOLLOWING MANNER:
   - RUNON FROM THE SOUTH HILL ROAD CULVERT AND ASSOCIATED EXISTING DRAINAGE SWALES SHALL BE CONVEYED THROUGH AND BEYOND THE PROJECT SITE.
   - RUNOFF FROM THE SITE SHALL BE CONVEYED TO THE ON-SITE SEDIMENTATION BASIN.
   - RUNOFF AND RUNON SHALL REMAIN SEPARATE UP TO THE SEDIMENTATION BASIN OUTLET.
2. PROVIDE TEMPORARY SWALE AND DIVERSION MEASURES TO DIRECT SITE STORMWATER RUNOFF TO THE SEDIMENTATION BASIN DURING CONSTRUCTION. ADJUST THESE MEASURES AS WORK PROGRESSES AND NEW WORK AREAS BECOME ACTIVE.
3. PROVIDE HAY BALE BARRIERS OR SIMILAR SUPPLEMENTAL MEASURE TO CONTROL SEDIMENTATION ALONG THE PERIMETER OF THE NEW SOLID WASTE BOUNDARY DURING CONSTRUCTION.



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0 15 30 60
SCALE IN FEET

NO.	DATE	REVISION	BY	APVD
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DSGN J.P. McCRADY DR M.R. STACEY CHK S.H. MITCHELL APVD M.J. STELMACK

MARCH 04, 2011

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New York State Department of Environmental Conservation

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CIVIL
SUBGRADE AND EROSION AND SEDIMENT CONTROL PLAN 1

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE	03/04/2011
PROJ	3612-09-2133
DWG	C-104
SHEET	6 OF 15

FILE NAME: M:\Projects\nysdec1\SOUTH HILL DUMP\RD-C-104.dwg PLOT DATE: Mon, 07 Mar 2011 PLOT TIME: 11:05 AM

NOTES:

1. INSTALL TEMPORARY PERIMETER DIKE/SWALE TO SEPARATE AND CONVEY STORMWATER IN THE FOLLOWING MANNER:
   - RUNON FROM THE SOUTH HILL ROAD CULVERT AND ASSOCIATED EXISTING DRAINAGE SWALES SHALL BE CONVEYED THROUGH AND BEYOND THE PROJECT SITE.
   - RUNOFF FROM THE SITE SHALL BE CONVEYED TO THE ON-SITE SEDIMENTATION BASIN.
   - RUNOFF AND RUNON SHALL REMAIN SEPARATE UP TO THE SEDIMENTATION BASIN OUTLET.
2. PROVIDE TEMPORARY SWALE AND DIVERSION MEASURES TO DIRECT SITE STORMWATER RUNOFF TO THE SEDIMENTATION BASIN DURING CONSTRUCTION. ADJUST THESE MEASURES AS WORK PROGRESSES AND NEW WORK AREAS BECOME ACTIVE.
3. PROVIDE HAY BALE BARRIERS OR SIMILAR SUPPLEMENTAL MEASURE TO CONTROL SEDIMENTATION ALONG THE PERIMETER OF THE NEW SOLID WASTE BOUNDARY DURING CONSTRUCTION.

NY STATE PLANE
(NAD 83)

HAYBALES (LOCATE AS REQUIRED, SEE NOTE 3) (TYP)

SLOPE BENCH
C-105 C-303

NEW SOLID WASTE BOUNDARY

8' CHAIN LINK FENCE

MW-1B
MW-1S

SOUTH HILL ROAD

INV 1659.13

INV 1655.11

MATCHLINE SHEET C-104

SEDIMENTATION BASIN

MW-2B
MW-2S

X 1557

LANDFILL EDGE
C-105 C-304

SCD

DRAINAGE WAY

BARBED WIRE FENCE

TEMPORARY PERIMETER DIKE/SWALE

NOTE:
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0 15 30 60
SCALE IN FEET

STATE OF NEW YORK — MARK J. STELMACK — LICENSED PROFESSIONAL ENGINEER
MARCH 04, 2011

NO.	DATE	DSGN	DR	CHK	APVD
0	03/04/11	J.P. McCRADY	M.R. STACEY	S.H. MITCHELL	M.J. STELMACK

REVISION: ISSUED FOR BID — BY: JPM — APVD: MJS

New York State Department of Environmental Conservation

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CORTLANDVILLE, NEW YORK
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Portland, Maine 04112-7050
(207) 775-5401

CIVIL
SUBGRADE AND EROSION AND SEDIMENT CONTROL PLAN 2

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

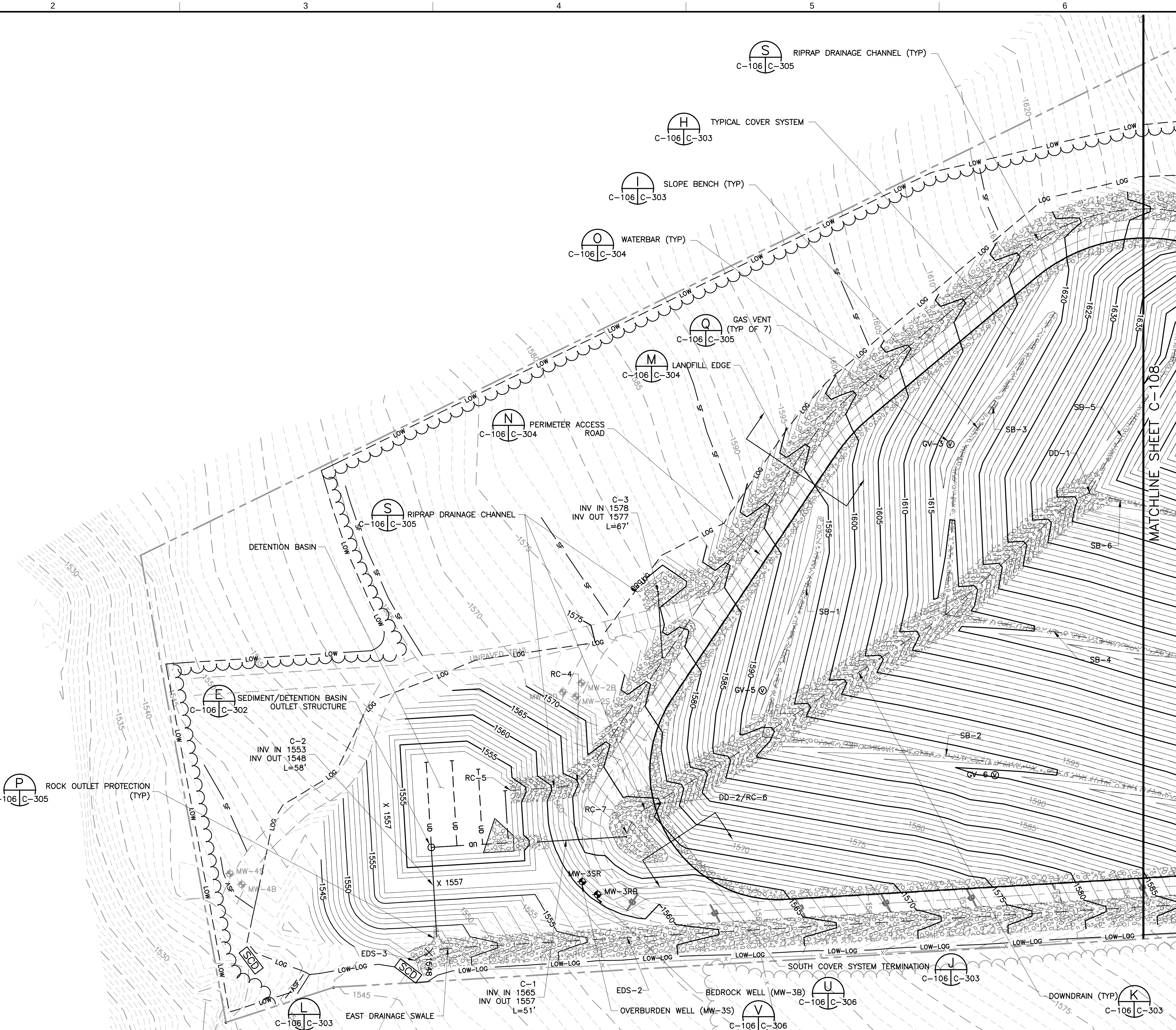
DATE	03/04/2011
PROJ	3612-09-2133
DWG	C-105
SHEET	7 OF 15

FILE NAME: M:\Projects\nysdec1\SOUTH HILL DUMP\RD-C-105.dwg PLOT DATE: Mon, 07 Mar 2011 PLOT TIME: 11:11 AM

NY STATE PLANE
(NAD 83)

NOTES:

1. TOPSOIL, SEED, AND MULCH ALL VEGETATED AREAS WITHIN THE LIMIT OF GRADING.
2. SEED AND MULCH ALL DISTURBED AREAS WITH THE LIMIT OF WORK.



NOTE:

SITE LOCATION, TOPOGRAPHY, AND BOUNDARY INFORMATION BASED ON A PLAN ENTITLED "BOUNDARY & TOPOGRAPHIC MAP, PREPARED FOR THE NEW YORK STATE D.E.C., FORMER SOUTH HILL DUMP SITE, BEING PART OF LOT #100, TOWN OF CORTLANDVILLE, COUNTY OF CORTLAND, STATE OF NEW YORK," BY THE POPLI DESIGN GROUP, DATED JANUARY 20, 2010.

0 15 30 60
SCALE IN FEET

FILE NAME: M:\Projects\nysdec1\SOUTH HILL DUMP\RD-C-106.dwg PLOT DATE: Mon, 07 Mar 2011 PLOT TIME: 11:32 AM

NO.	DATE	REVISION	BY	APVD
0	03/04/11	ISSUED FOR BID	JPM	MJS

DSGN J.P. McCRADY DR M.R. STACEY CHK S.H. MITCHELL APVD M.J. STELMACK

MARCH 04, 2011

New York State Department of Environmental Conservation

REMEDIAL ACTION
SOUTH HILL DUMP SITE
SOUTH HILL ROAD
CORTLANDVILLE, NEW YORK
NYSDEC SITE NO. 712009, CONTRACT NO. D007992

MACTEC Engineering and Consulting, Inc.
P.O. Box 7050, 511 Congress Street
Portland, Maine 04112-7050
(207) 775-5401

MACTEC

CIVIL

FINAL CONDITIONS PLAN 1

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE	03/04/2011
PROJ	3612-09-2133
DWG	C-106
SHEET	8 OF 15

NY STATE PLANE
(NAD 83)

NOTES:

1. TOPSOIL, SEED, AND MULCH ALL VEGETATED AREAS WITHIN THE LIMIT OF GRADING.
2. SEED AND MULCH ALL DISTURBED AREAS WITHIN THE LIMIT OF WORK.
3. ADD AGGREGATE BASE, GRADE, AND COMPACT AS REQUIRED TO ESTABLISH A FREE-DRAINING FINAL GRADE GRAVEL SURFACE.

H C-107 C-303 TYPICAL COVER SYSTEM

I C-107 C-303 SLOPE BENCH (TYP)

O C-107 C-304 WATERBAR (TYP OF 11)

N C-107 C-304 ACCESS ROAD

S C-107 C-305 RIPRAP DRAINAGE CHANNEL

MATCHLINE SHEET C-107

CHAIN LINK FENCE DOUBLE GATE R C-107 C-305

GRAVEL PARKING AREA (SEE NOTE 3)

CHAIN LINK FENCE INSTALL 730 LF T C-107 C-305

SOUTH HILL ROAD

MW-1B
MW-1S

ACCESS ROAD N C-107 C-304

GAS VENT (TYP OF 7) Q C-107 C-305

EAST DRAINAGE SWALE L C-107 C-303

LANDFILL EDGE M C-107 C-304

WATERBAR (TYP. OF 16) O C-107 C-304

RC-1 RC-2 RC-3 RC-4 RC-5 RC-7 DD-1 DD-2/RC-6

SB-1 SB-2 SB-3 SB-4 SB-5 SB-6

GV-1 GV-2 GV-3 GV-4 GV-5 GV-6 GV-7

MW-2B MW-2S

EDS-1 EDS-2

HP 1643.50

X 1557 X 1548

NOTE:

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0 15 30 60
SCALE IN FEET

STATE OF NEW YORK MICHAEL J. STELMACK LICENSED PROFESSIONAL ENGINEER
MARCH 04, 2011

NO.	DATE	DSGN	DR	CHK	APVD
0	03/04/11	J.P. McCRADY	M.R. STACEY	S.H. MITCHELL	M.J. STELMACK

REVISION

BY	APVD
JPM	MJS

ISSUED FOR BID

New York State Department of Environmental Conservation

REMEDIAL ACTION
SOUTH HILL DUMP SITE
SOUTH HILL ROAD
CORTLANDVILLE, NEW YORK
NYSDEC SITE NO. 712009, CONTRACT NO. D007992

MACTEC Engineering and Consulting, Inc.
P.O. Box 5075, 511 Congress Street
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CIVIL

FINAL CONDITIONS PLAN 2

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE	03/04/2011
PROJ	3612-09-2133
DWG	C-107
SHEET	9 OF 15

FILE NAME: M:\Projects\nysdec1\SOUTH HILL DUMP\RD-C-107.dwg PLOT DATE: Mon, 07 Mar 2011 PLOT TIME: 11:42 AM

GENERAL EROSION AND SEDIMENT CONTROL NOTES:

1. ALL WORK IS TO BE DONE IN ACCORDANCE WITH THE NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL (STATE STANDARDS) AND THE CONTRACT DOCUMENTS, SPECIFICALLY:
   - SPECIFICATION SECTION 02370 "EROSION AND SEDIMENTATION CONTROL";
   - DRAWING C-103 "SUBGRADE AND EROSION AND SEDIMENT CONTROL PLAN";
   - DRAWING C-301 "EROSION AND SEDIMENT CONTROL NOTES"; AND
   - DRAWING C-302 "EROSION AND SEDIMENT CONTROL DETAILS".

   IF A DISCREPANCY EXISTS BETWEEN THE STATE STANDARDS AND THE CONTRACT DOCUMENTS, THE STATE STANDARDS SHALL TAKE PRECEDENCE.
2. ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES ARE TO BE INSTALLED PRIOR TO ANY MAJOR SOIL DISTURBANCE, OR IN THEIR PROPER SEQUENCE, AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED.
3. EROSION AND SEDIMENTATION CONTROLS SHALL BE AUGMENTED OR SUPPLEMENTED IF THE INSTALLED MEASURES DO NOT PROVIDE ADEQUATE PROTECTION OF DOWNSTREAM RESOURCES AS DETERMINED BY THE ENGINEER OR DEPARTMENT.
4. ANY DISTURBED AREAS THAT WILL BE LEFT EXPOSED MORE THAN FOURTEEN (14) DAYS, AND NOT SUBJECT TO CONSTRUCTION TRAFFIC, WILL IMMEDIATELY RECEIVE A TEMPORARY SEEDING. IF THE SEASON PREVENTS THE ESTABLISHMENT OF TEMPORARY COVER, THE DISTURBED AREAS WILL BE MULCHED WITH HAY OR STRAW, OR EQUIVALENT MATERIAL, AT A RATE OF 2 TONS PER ACRE, ACCORDING TO STATE STANDARDS.
5. IMMEDIATELY FOLLOWING INITIAL DISTURBANCE OR ROUGH GRADING, ALL CRITICAL AREAS SUBJECT TO EROSION (I.E. STEEP SLOPES AND ROADWAY EMBANKMENTS) WILL RECEIVE TEMPORARY SEEDING IN COMBINATION WITH HAY OR STRAW MULCH OR A SUITABLE EQUIVALENT, AT A RATE OF 2 TONS PER ACRE, ACCORDING TO STATE STANDARDS.
6. ANY STEEP SLOPES (I.E. SLOPES GREATER THAN 3:1) WILL BE COMPLETELY GRADED AND STABILIZED DAILY, AS CONSTRUCTION PROGRESSES.
7. THE STANDARD FOR STABILIZED CONSTRUCTION ENTRANCE REQUIRES THE INSTALLATION OF A PAD OF CLEAN CRUSHED STONE AT POINTS WHERE TRAFFIC WILL BE ACCESSING THE CONSTRUCTION SITE.
8. ALL SOIL WASHED, DROPPED, SPILLED, OR TRACKED OUTSIDE THE LIMIT OF WORK OR ONTO PUBLIC RIGHT-OF-WAYS SHALL BE REMOVED IMMEDIATELY.
9. PERMANENT VEGETATION IS TO BE SEEDED OR SODDED ON ALL EXPOSED AREAS AS SOON AS POSSIBLE AFTER FINAL GRADING. IF SEEDING IS NOT PERFORMED WITHIN 48 HOURS OF COMPLETION OF FINAL GRADING, ADDITIONAL SURFACE SCARIFICATION SHALL BE COMPLETED PRIOR TO SEEDING.
10. AT THE TIME THAT SITE PREPARATION FOR PERMANENT VEGETATIVE STABILIZATION IS TO BE UNDERTAKEN, ANY SOIL THAT WILL NOT PROVIDE A SUITABLE ENVIRONMENT TO SUPPORT ADEQUATE VEGETATIVE GROWTH SHALL BE REMOVED OR TREATED IN SUCH A WAY THAT WILL PERMANENTLY ADJUST THE SOIL CONDITIONS AND RENDER IT SUITABLE TO SUSTAIN VEGETATIVE GROWTH. IF THE REMOVAL OR TREATMENT OF THE SOIL WILL NOT PROVIDE SUITABLE CONDITIONS, NON-VEGETATIVE MEANS OF PERMANENT STABILIZATION SHALL BE EMPLOYED.
11. UNFILTERED DEWATERING IS NOT PERMITTED. NECESSARY PRECAUTIONS MUST BE TAKEN DURING ALL DEWATERING OPERATIONS TO MINIMIZE SEDIMENT TRANSFER. ANY DEWATERING METHODS USED MUST BE IN ACCORDANCE WITH THE STANDARD FOR DEWATERING.
12. SHOULD THE CONTROL OF DUST AT THE SITE BE NECESSARY, THE SITE WILL BE SPRINKLED WITH WATER UNTIL THE SURFACE IS WET. TEMPORARY VEGETATIVE COVER SHALL BE ESTABLISHED OR MULCH SHALL BE APPLIED PER THE STATE STANDARDS. CALCIUM CHLORIDE SHALL ONLY BE USED FOR DUST CONTROL DURING FREEZING CONDITIONS.
13. STOCKPILE AND STAGING LOCATIONS ESTABLISHED IN THE FIELD SHALL BE PLACED WITHIN THE LIMIT OF WORK WITH APPROPRIATE PROTECTIVE EROSION AND SEDIMENTATION CONTROLS.
14. ALL SOIL STOCKPILES ARE TO BE TEMPORARILY STABILIZED IN ACCORDANCE WITH GENERAL EROSION AND SEDIMENT CONTROL NOTE NO. 4.
15. CONDUIT OUTLET PROTECTION MUST BE INSTALLED AT ALL REQUIRED OUTFALLS PRIOR TO THE DRAINAGE SYSTEM BECOMING OPERATIONAL.
16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY EROSION OR SEDIMENTATION THAT MAY OCCUR DOWNGRADIENT OF STORMWATER OUTFALLS/OUTLETS OR OFFSITE AS A RESULT OF CONSTRUCTION OF THE PROJECT.

SOIL EROSION AND SEDIMENT CONTROL INSPECTION AND MAINTENANCE:

1. STABILIZED CONSTRUCTION ENTRANCE
   - A. STABILIZED CONSTRUCTION ENTRANCES SHALL, AT A MINIMUM, BE INSPECTED WEEKLY AND WITHIN 24 HOURS AFTER EVERY PRECIPITATION EVENT THAT PRODUCES 0.5 INCHES OF RAIN OR MORE DURING A 24-HOUR PERIOD.
   - B. STABILIZED CONSTRUCTION ENTRANCES SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OF SEDIMENT ONTO PAVED SURFACES. CHECK FOR DAMAGE/DETERIORATION/CLOGGING AND IMMEDIATELY REPAIR OR RECONSTRUCT AS NECESSARY.
   - C. THE PERFORMANCE OF STABILIZED CONSTRUCTION ENTRANCES SHALL BE MAINTAINED BY LENGTHENING, SCRAPING, OR TOP-DRESSING WITH ADDITIONAL AGGREGATE.
   - D. STABILIZED CONSTRUCTION ENTRANCES SHALL HAVE A 6-INCH MINIMUM THICKNESS.
   - E. INSPECT ADJACENT IMPERVIOUS SURFACES DAILY (MINIMUM). IMMEDIATELY REMOVE VISIBLE ACCUMULATED SEDIMENT DEPOSITED ON PAVED SURFACES VIA SWEEPING, VACUUMING, OR WASHING. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH AGGREGATE, WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE. PROPERLY DISPOSE OF SEDIMENT.
2. SEDIMENT BARRIERS
   - A. SILTATION FENCE
     - A.1. SILTATION FENCES SHALL, AT A MINIMUM, BE INSPECTED WEEKLY AND WITHIN 24 HOURS AFTER EVERY PRECIPITATION EVENT THAT PRODUCES 0.5 INCHES OF RAIN OR MORE DURING A 24- HOUR PERIOD.
     - A.2. REMOVE THE SEDIMENT DEPOSITS OR INSTALL A SECONDARY BARRIER UPSLOPE FROM THE EXISTING BARRIER WHEN SEDIMENT DEPOSITS REACH ONE HALF THE HEIGHT OF THE FENCE. PROPERLY DISPOSE OF SEDIMENT.
     - A.3. REPLACE OR REPAIR FENCES WITHIN 24 HOURS OF OBSERVED FAILURE (E.G., DAMAGE OR DECOMPOSITION; FENCE MOVED OUT OF POSITION; UNDERCUTTING, OVERTOPPING, OR FLOW CHANNELS AROUND THE END OF FENCES).
     - A.4. MAINTAIN SILTATION FENCES UNTIL THE CONTRIBUTING AREA IS STABILIZED.

SOIL EROSION AND SEDIMENT CONTROL INSPECTION AND MAINTENANCE:

- B. AUGMENTED SILTATION FENCE
  - B.1. AUGMENTED SILTATION FENCES SHALL, AT A MINIMUM, BE INSPECTED WEEKLY AND WITHIN 24 HOURS AFTER EVERY PRECIPITATION EVENT THAT PRODUCES 0.5 INCHES OF RAIN OR MORE DURING A 24-HOUR PERIOD.
  - B.2. REMOVE THE SEDIMENT DEPOSITS OR INSTALL A SECONDARY BARRIER UPSLOPE FROM THE EXISTING BARRIER WHEN SEDIMENT DEPOSITS REACH ONE HALF THE HEIGHT OF THE FENCE. PROPERLY DISPOSE OF SEDIMENT.
  - B.3. REPLACE OR REPAIR FENCES WITHIN 24 HOURS OF OBSERVED FAILURE (E.G., DAMAGE OR DECOMPOSITION; FENCE MOVED OUT OF POSITION; UNDERCUTTING, OVERTOPPING, OR FLOW CHANNELS AROUND THE END OF FENCES).
  - B.4. RESHAPE, ADD ADDITIONAL MATERIAL, OR REPLACE FILTER BERM WHEN DISTURBED BY CONSTRUCTION ACTIVITIES OR SIGNIFICANT STORM EVENTS.
  - B.5. MAINTAIN AUGMENTED SILTATION FENCES UNTIL THE CONTRIBUTING AREA IS STABILIZED.

1. PERIMETER DIKE/SWALE
   - A. PERIMETER DIKES/SWALES SHALL, AT A MINIMUM, BE INSPECTED WEEKLY AND WITHIN 24 HOURS AFTER EVERY PRECIPITATION EVENT THAT PRODUCES 0.5 INCHES OF RAIN OR MORE DURING A 24-HOUR PERIOD.
   - B. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES ONE HALF THE HEIGHT OF THE PERIMETER DIKE/SWALE. PROPERLY DISPOSE OF SEDIMENT.
   - C. REGRADE SWALE AND REPAIR DIKE AS REQUIRED TO CAPTURE CONSTRUCTION RUNOFF FROM THE LANDFILL AND CONVEY IT TO THE SEDIMENTATION BASIN.
   - D. MAINTAIN PERIMETER DIKES/SWALES UNTIL THE AREA IS STABILIZED.

4. TEMPORARY SWALE
   - A. TEMPORARY SWALES SHALL, AT A MINIMUM, BE INSPECTED WEEKLY AND WITHIN 24 HOURS AFTER EVERY PRECIPITATION EVENT THAT PRODUCES 0.5 INCHES OF RAIN OR MORE DURING A 24-HOUR PERIOD.
   - B. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES ONE HALF THE HEIGHT OF THE TEMPORARY SWALE. PROPERLY DISPOSE OF SEDIMENT.
   - C. MAINTAIN TEMPORARY SWALES UNTIL THE AREA IS STABILIZED.
   - D. TEMPORARY CONVEYANCES SHOULD BE COMPLETELY REMOVED OR CONVERTED TO PERMANENT CONVEYANCES AS SOON AS THE SURROUNDING DRAINAGE AREA HAS BEEN STABILIZED OR AT THE COMPLETION OF CONSTRUCTION.
5. CHECK DAMS
   - A. CHECK DAMS SHALL, AT A MINIMUM, BE INSPECTED WEEKLY AND WITHIN 24 HOURS AFTER EVERY PRECIPITATION EVENT THAT PRODUCES 0.5 INCHES OF RAIN OR MORE DURING A 24 HOUR PERIOD.
   - B. REPLACE OR REPAIR CHECK DAMS WITHIN 24 HOURS OF OBSERVED FAILURE (E.G., MOVED STONE, ERODED SOIL AROUND OR UNDER THE CHECK DAM, TRAPPED SEDIMENTS OVERTOPPING CHECK DAM).
   - C. UNLESS INCORPORATED INTO A PERMANENT STORMWATER MANAGEMENT SYSTEM, CHECK DAMS SHALL BE REMOVED ONCE THE FINAL GRADING AND CHANNEL STABILIZATION IS APPLIED.
   - D. SEDIMENT DEPOSITS SHALL BE REMOVED WHEN DEPOSITS REACH HALF THE HEIGHT OF THE CHECK DAM. REMOVAL OF SEDIMENT MAY REQUIRE REPLACEMENT OF STONE. PROPERLY DISPOSE OF SEDIMENT.
6. ROCK OUTLET PROTECTION
   - A. ROCK OUTLET PROTECTION SHALL, AT A MINIMUM, BE INSPECTED WEEKLY AND WITHIN 24 HOURS AFTER EVERY PRECIPITATION EVENT THAT PRODUCES 0.5 INCHES OF RAIN OR MORE DURING A 24 HOUR PERIOD.
   - B. REPAIR ROCK OUTLET PROTECTION WITHIN 24 HOURS IF DISLODGED STONES; ERODED SOIL AROUND OR UNDER THE RIPRAP OR UNDERLYING FABRIC; OR TREE GROWTH IS OBSERVED.
7. SEDIMENTATION BASIN
   - A. SEDIMENTATION BASINS SHALL, AT A MINIMUM, BE INSPECTED WEEKLY AND WITHIN 24 HOURS AFTER EVERY PRECIPITATION EVENT THAT PRODUCES 0.5 INCHES OF RAIN OR MORE DURING A 24-HOUR PERIOD.
   - B. REMOVE SEDIMENT DEPOSITS WHEN SEDIMENT ACCUMULATION REACHES ONE HALF OF THE WET STORAGE CAPACITY OF THE BASIN OR WHEN THE DEPTH OF THE AVAILABLE POOL IS REDUCED TO 18 INCHES, WHICHEVER IS ACHIEVED FIRST.
   - C. IF THE OUTLET BECOMES CLOGGED, IT SHALL BE CLEANED TO RESTORE FLOW CAPACITY.
   - D. DISPOSE OF SEDIMENT WITHIN THE NEW SOLID WASTE BOUNDARY OR OFF-SITE IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS.
8. TEMPORARY SEEDING AND MULCHING
   - A. AREAS RECEIVING TEMPORARY SEEDING AND MULCHING SHALL, AT A MINIMUM, BE INSPECTED WEEKLY AND WITHIN 24 HOURS AFTER EVERY PRECIPITATION EVENT THAT PRODUCES 0.5 INCHES OF RAIN OR MORE DURING A 24-HOUR PERIOD.
   - B. WHERE SEED/MULCH HAS MOVED OR SOIL EROSION HAS OCCURRED, REPAIR THE AREA APPROPRIATELY AND RE-APPLY SEED AND/OR MULCH. APPLY NETTING, TACKIFIER, OR OTHER ANCHORING TECHNIQUES AS NECESSARY TO PREVENT FAILURE. ADDITIONAL TEMPORARY MEASURES MAY ALSO BE INSTALLED TO CONTROL STORMWATER RUNOFF AND SEDIMENT MOVEMENT.
   - C. CONTINUE INSPECTION AND MAINTENANCE OF AREAS RECEIVING TEMPORARY SEEDING AND MULCHING UNTIL AT LEAST 90% OF THE SOIL SURFACE IS BE COVERED BY MATURE, ESTABLISHED VEGETATION CAPABLE OF CONTROLLING SOIL EROSION AND SURVIVING SEVERE WEATHER.
9. DUST CONTROL
   - A. AREAS THAT HAVE DUST CONTROL PRACTICES SHALL, AT A MINIMUM, BE INSPECTED DAILY.
   - B. REPEAT APPLICATION OF DUST CONTROL MEASURES WHEN FUGITIVE DUST BECOMES EVIDENT.

GENERAL CONSTRUCTION SEQUENCE:

1. INSTALL STABILIZED CONSTRUCTION ENTRANCE AND TEMPORARY FACILITIES AND CONTROLS.
2. INSTALL PERIMETER EROSION AND SEDIMENT CONTROLS INCLUDING SILTATION FENCE, AUGMENTED SILTATION FENCE, AND STONE CHECK DAMS.
3. REMOVE STOCKPILED BULKY WASTES FOR OFF-SITE DISPOSAL.
4. CLEAR AND GRUB ALL AREAS BETWEEN THE EXISTING AND NEW SOLID WASTE BOUNDARIES, BETWEEN THE OUTERMOST WASTE BOUNDARY AND THE LIMIT OF GRADING, AND WITHIN THE LIMITS OF THE DESIGNATED GRUBBING DISPOSAL AREAS. DISPOSE OF GRUBBINGS WITHIN THE NEW SOLID WASTE BOUNDARY IN THE DESIGNATED LOCATION.
5. REALIGN AND IMPROVE THE EXISTING EAST DRAINAGE SWALE ALONG THE EAST PROPERTY BOUNDARY TO CONVEY STORMWATER RUN-ON THROUGH AND BEYOND THE SITE. THIS ACTIVITY MAY COINCIDE WITH ITEM 6.
6. EXCAVATE ON-SITE WASTE OUTSIDE THE NEW SOLID WASTE BOUNDARY AND CONSOLIDATE WITHIN THE NEW SOLID WASTE BOUNDARY.
7. ABANDON EXISTING GROUNDWATER MONITORING WELLS.
8. INSTALL ADDITIONAL EROSION AND SEDIMENTATION CONTROLS AND MEASURES ADJACENT TO THE NEW SOLID WASTE BOUNDARY INCLUDING TEMPORARY PERIMETER DIKE/SWALES, TEMPORARY SWALES, STONE CHECK DAMS, HAYBALES, A SEDIMENTATION BASIN WITH OUTLET STRUCTURE, AND TEMPORARY ROCK OUTLET PROTECTION.
9. GRADE LANDFILL TO THE REQUIRED SUBGRADE. CUT AND FILL WASTE, EXISTING COVER SOILS, WASTE SOILS, AND GRUBBING WITHIN THE NEW SOLID WASTE BOUNDARY, AS REQUIRED, TO ACHIEVE SUBGRADE. LANDFILL STORMWATER CONTROLS (SLOPE BENCHES AND DOWNDRAIN) WILL BE EXCAVATED AND SHAPED AS SUBGRADE IS ESTABLISHED.
10. INSTALL LANDFILL COVER SYSTEM INCLUDING ASSOCIATED LANDFILL STORMWATER CONTROLS (SLOPE BENCHES AND DOWNDRAIN).
11. INSTALL LANDFILL GAS VENTS.
12. STABILIZE LANDFILL WITH SEED AND EROSION CONTROL MATTING, OR RIPRAP, AS REQUIRED.
13. INSTALL PERIMETER ACCESS ROAD WITH WATERBARS.
14. INSTALL PERIMETER STORMWATER CONTROLS INCLUDING RIRAP DRAINAGE CHANNELS, EAST DRAINAGE SWALE, AND CULVERTS.
15. INSTALL FINAL GRADE OF ACCESS ROAD.
16. CLEAN SEDIMENT BASIN AND OUTLET STRUCTURE OF ACCUMULATED SEDIMENT; REPAIR AS REQUIRED; AND CONVERT TO A STORMWATER DETENTION BASIN.
17. INSTALL NEW GROUNDWATER MONITORING WELLS.
18. INSTALL TOPSOIL, SEED, AND MULCH/EROSION CONTROL MATTING IN ALL AREAS WITHIN THE LIMIT OF GRADING. SEED AND MULCH ALL VEGETATED AREAS DISTURBED WITHIN THE LIMIT OF WORK.
19. REMOVE TEMPORARY EROSION AND SEDIMENT CONTROLS DOWNGRADIENT OF STABILIZED AREAS.
20. INSTALL PERMANENT SITE CONTROLS INCLUDING CHAIN LINK FENCE/GATE AND PERIMETER SIGNAGE.
21. MAINTAIN VEGETATED AREAS IN ACCORDANCE WITH SECTION VIII, ARTICLE 12.1 OF THE CONTRACT DOCUMENTS.

M.J. STELMACK
MARCH 04, 2011

NO.	DATE	REVISION	BY	APVD
0	03/04/11	ISSUED FOR BID	JPM	MJS

DSGN J.P. McCRADY | DR M.R. STACEY | CHK S.H. MITCHELL | APVD M.J. STELMACK

New York State Department of Environmental Conservation

REMEDIAL ACTION
SOUTH HILL DUMP SITE
SOUTH HILL ROAD
CORTLANDVILLE, NEW YORK
NYSDEC SITE NO. 712009, CONTRACT NO. D007992

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VERIFY SCALE
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DATE	03/04/2011
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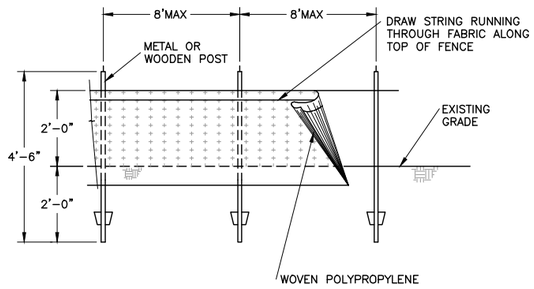
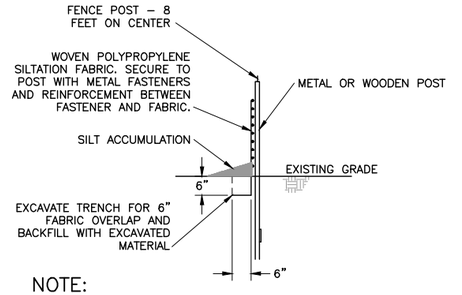
SHEET	10 OF 15

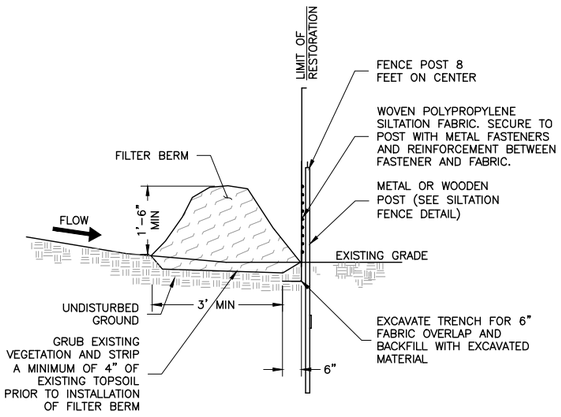




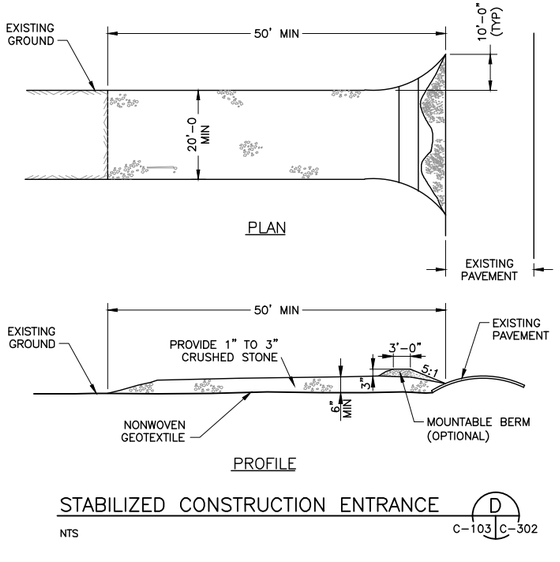
NOTE:

WHERE REQUIRED AT CRITICAL LOCATIONS, AUGMENTED SILTATION FENCE OR SILTATION FENCE REINFORCED WITH HOG OR CHICKEN WIRE OR INTEGRAL PLASTIC MESH REINFORCING MAY BE USED.

SILTATION FENCE A
NTS
C-102 | C-302



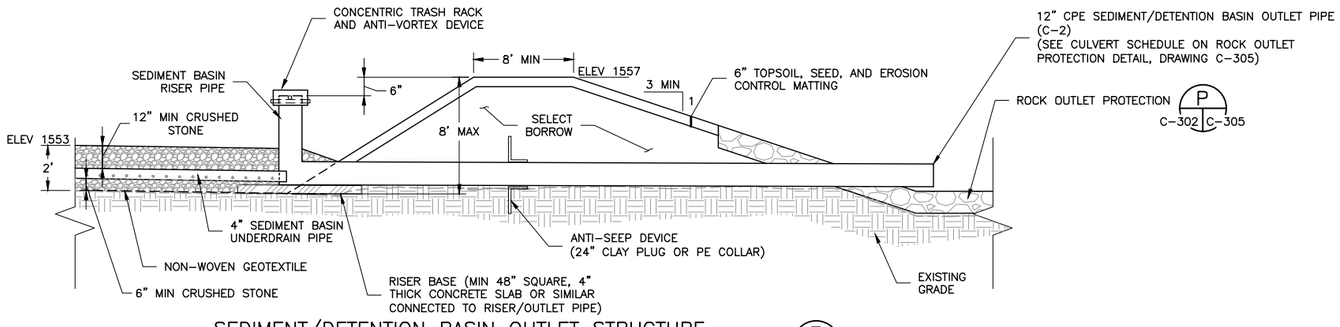
AUGMENTED SILTATION FENCE B
NTS
C-102 | C-302



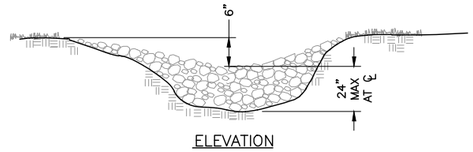
PLAN

PROFILE

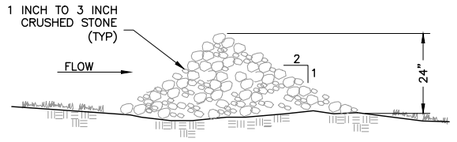
STABILIZED CONSTRUCTION ENTRANCE D
NTS
C-103 | C-302



SEDIMENT/DETENTION BASIN OUTLET STRUCTURE E
NTS
C-104 | C-106 | C-302



ELEVATION



SECTION

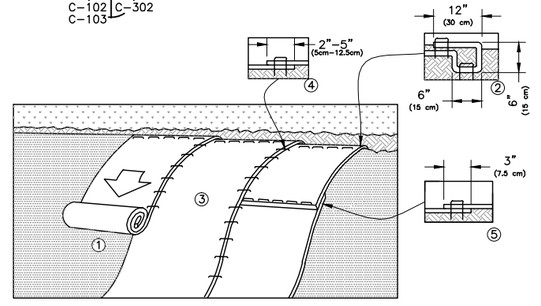
S (FT/FT)	L (FT)
0.005	400
0.010	200
0.020	100
0.030	66
0.040	50

L = THE DISTANCE SUCH THAT POINT A AND B ARE OF THE SAME ELEVATION.

S = SLOPE

PROFILE

TEMPORARY STONE CHECK DAM C
NTS
C-102 | C-302 | C-103



NOTE:

1. PREPARE TOPSOIL BEFORE INSTALLING MATTING, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET 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 TOPSOIL AND FOLD REMAINING 12" PORTION OF BLANKET BACK OVER SEED AND COMPACTED TOPSOIL. SECURE BLANKET OVER COMPACTED GROWING MEDIUM WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30cm) APART ACROSS THE WIDTH OF THE BLANKET.
3. ROLL THE MATTING DOWN THE SLOPE. MATTING WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE TOPSOIL SURFACE. ALL MATTING MUST BE SECURELY FASTENED TO TOPSOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING MANUFACTURER STAPLE PATTERN MARKING, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED MARKS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. THE EDGES OF PARALLEL MATTING MUST BE STAPLED WITH APPROXIMATELY 2"-5" OVERLAP DEPENDING ON MATTING TYPE. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING MATTING (MATTING BEING INSTALLED ON TOP) EVEN WITH THE SEAM ON THE PREVIOUSLY INSTALLED MATTING.
5. CONSECUTIVE MATTING 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 ENTIRE MATTING WIDTH.
6. DETAIL PROVIDED BY NORTH AMERICAN GREEN È.
7. INSTALL ON ALL FINAL STABILIZED SURFACES TO BE VEGETATED WITHIN THE NEW SOLID WASTE BOUNDARY (SWB) ANI ON ALL AREAS OUTSIDE THE SWB BUT INSIDE THE LIMIT OF GRADING WITH SLOPES GREATER THAN 10%.

EROSION CONTROL MATTING F
NTS
C-303 | C-302

STATE OF NEW YORK LICENSED PROFESSIONAL ENGINEER — MARCH 04, 2011

NO.	DATE	DSGN	DR	CHK	APVD
0	03/04/11	J.P. McCRADY	M.R. STACEY	S.H. MITCHELL	M.J. STELMACK
			ISSUED FOR BID	JPM	MJS
			REVISION	BY	APVD

New York State Department of Environmental Conservation

REMEDIAL ACTION
SOUTH HILL DUMP SITE
SOUTH HILL ROAD
CORTLANDVILLE, NEW YORK
NYSDEC SITE NO. 712009, CONTRACT NO. D007992

MACTEC Engineering and Consulting, Inc.
P.O. Box 7050, 511 Congress Street
Portland, Maine 04112-7050
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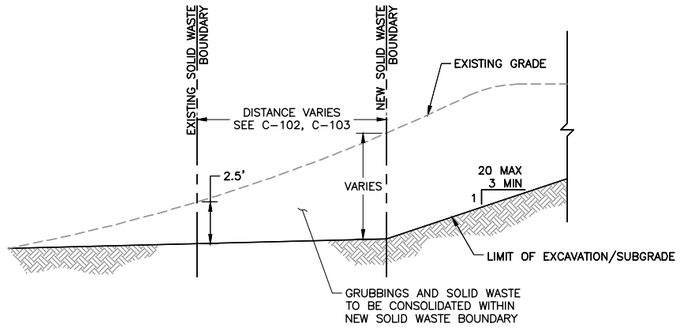
CIVIL
EROSION AND SEDIMENTION CONTROL DETAILS

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

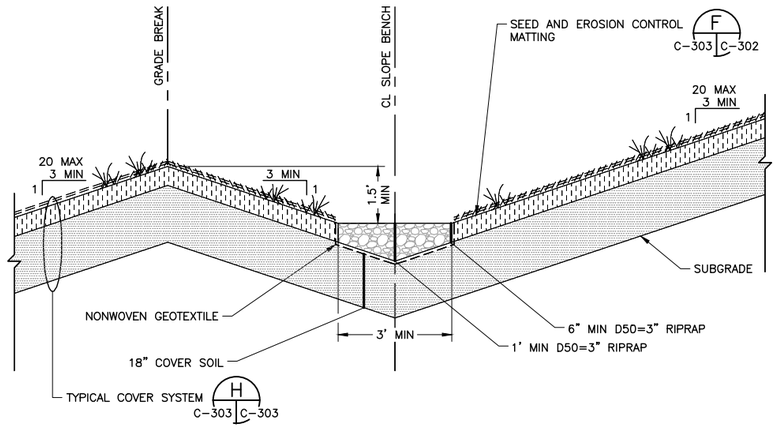
DATE	03/04/2011
PROJ	3612-09-2133
DWG	C-302
SHEET	11 OF 15

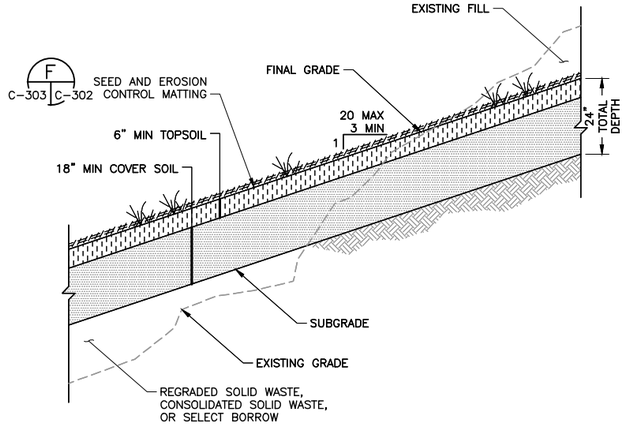


WASTE CONSOLIDATION DETAIL G

NTS

C-102 | C-303
C-103

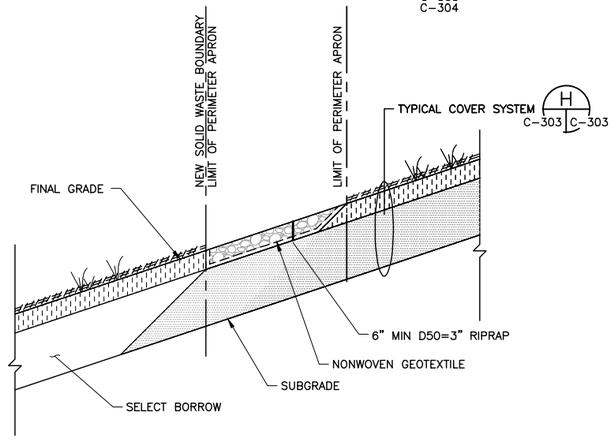




TYPICAL COVER SYSTEM H

NTS

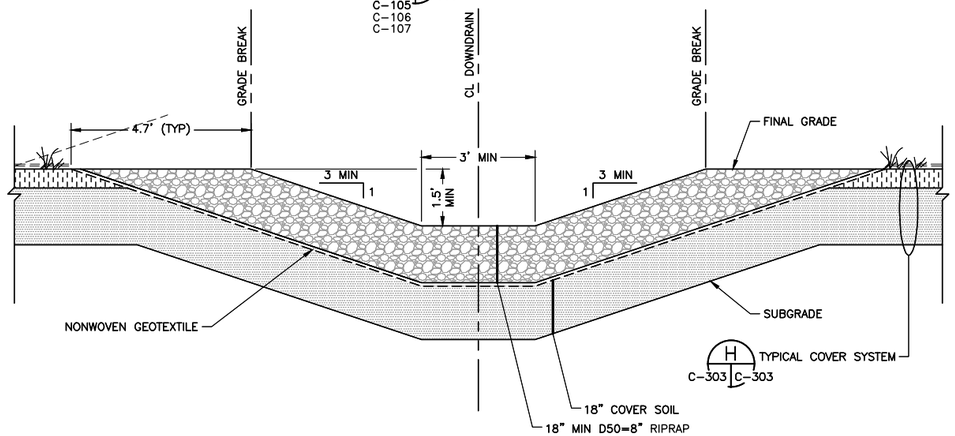
C-106 | C-303
C-107
C-303
C-304



TYPICAL SLOPE BENCH I

NTS

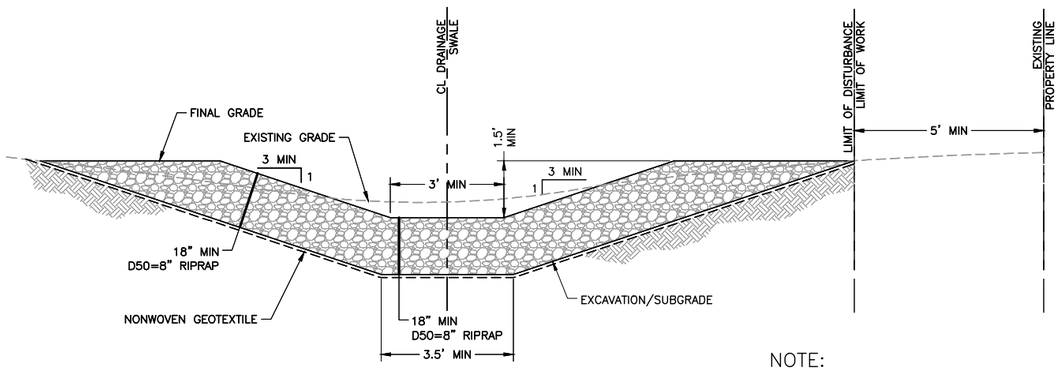
C-104 | C-303
C-105
C-106
C-107



SOUTH COVER SYSTEM TERMINATION J

NTS

C-106 | C-303



TYPICAL DOWNDRAIN K

NTS

C-104 | C-303
C-106

EAST DRAINAGE SWALE L

NTS

C-106 | C-303
C-107

NOTE:
THIS DETAIL APPLIES TO LOCATIONS OF THE EAST DRAINAGE SWALE NOT DIRECTLY ADJACENT TO THE PERIMETER ACCESS ROAD. SEE DETAIL M, SHEET C-304 FOR AREAS ADJACENT TO THE PERIMETER ACCESS ROAD.

STATE OF NEW YORK LICENSED PROFESSIONAL ENGINEER
MARCH 04, 2011

NO.	DATE	REVISION	CHK	APVD
0	03/04/11	ISSUED FOR BID	JPM	MJS

DSGN J.P. McCRADY | DR M.R. STACEY | CHK S.H. MITCHELL | APVD M.J. STELMACK

New York State Department of Environmental Conservation

REMEDIAL ACTION
SOUTH HILL DUMP SITE
SOUTH HILL ROAD
CORTLANDVILLE, NEW YORK
NYSDEC SITE NO. 712009, CONTRACT NO. D007992

MACTEC Engineering and Consulting, Inc.
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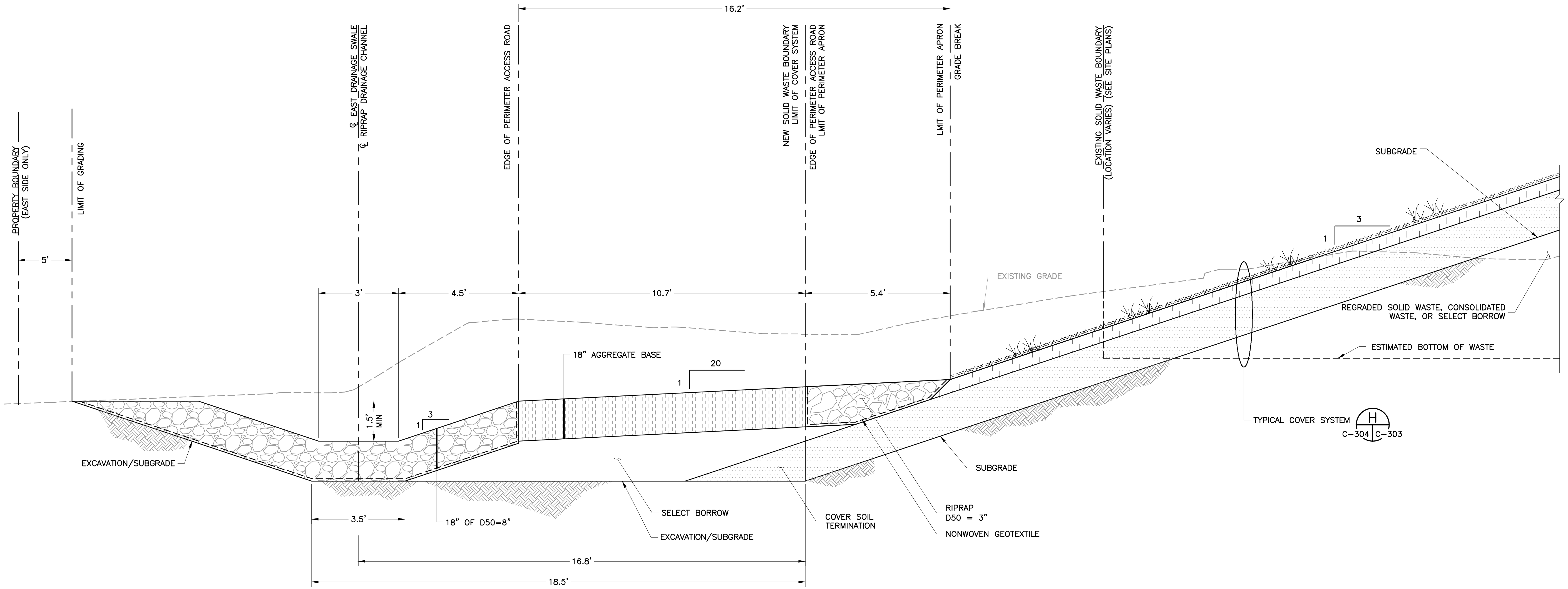
CIVIL
CIVIL DETAILS 1

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE 03/04/2011
PROJ 3612-09-2133
DWG C-303
SHEET 12 OF 15

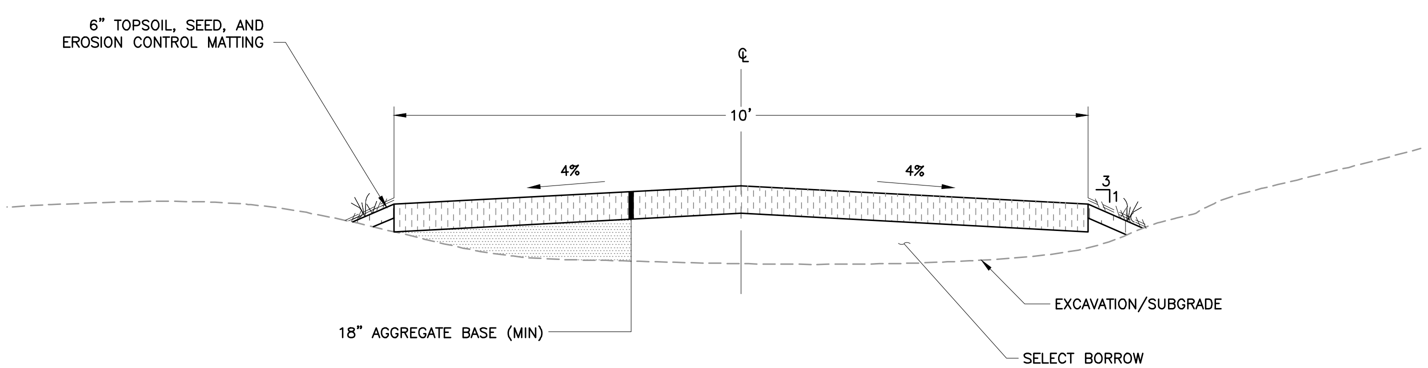
FILE NAME: M:\Projects\nysdec1\SOUTH HILL DUMP\RD-C-303.dwg PLOT DATE: Mon, 07 Mar 2011 PLOT TIME: 1:16 PM



LANDFILL EDGE

NTS

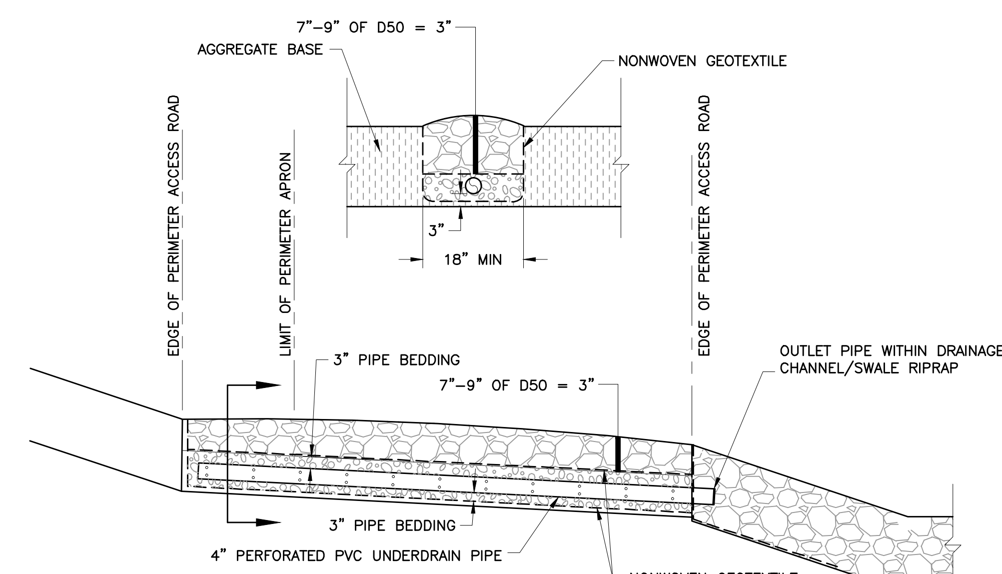
M — C-102, C-103, C-104, C-105, C-106, C-107 | C-304



ACCESS ROAD

NTS

N — C-106, C-107 | C-304



NOTE:

EXTEND UNDERDRAIN PIPE A MIN OF 6" INTO PERIMETER APRON AND DRAINAGE CHANNEL/SWALE

WATERBAR

NTS

O — C-106, C-107 | C-304

NO.	DATE	REVISION	BY	APVD
0	03/04/11	ISSUED FOR BID	JPM	MJS

DSGN J.P. McCRADY | DR M.R. STACEY | CHK S.H. MITCHELL | APVD M.J. STELMACK

MARCH 04, 2011

New York State Department of Environmental Conservation

REMEDIAL ACTION
SOUTH HILL DUMP SITE
SOUTH HILL ROAD
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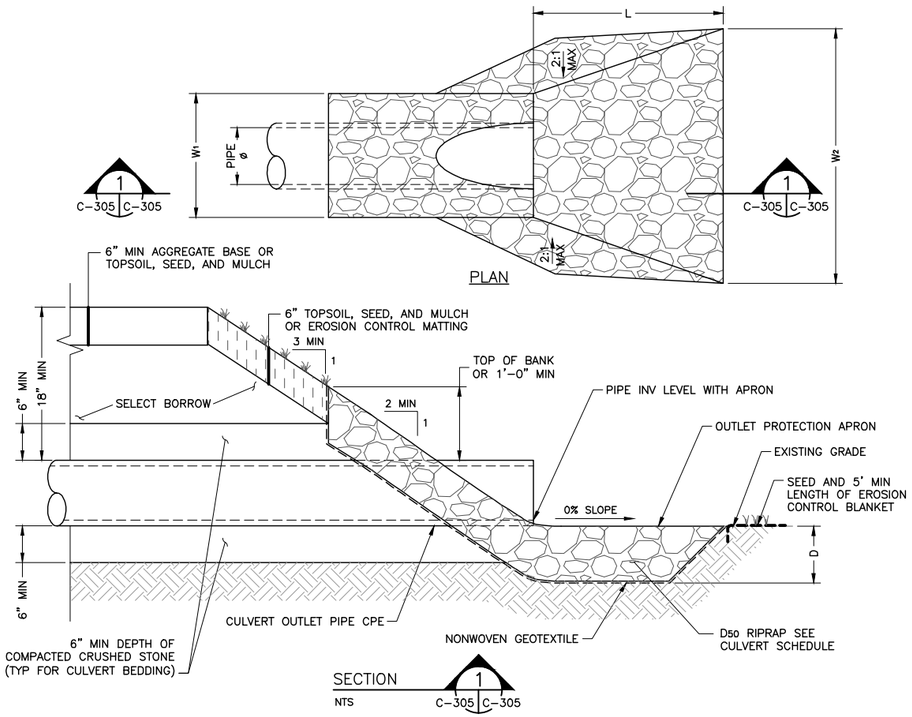
CIVIL
CIVIL DETAILS 2

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE	03/04/2011
PROJ	3612-09-2133
DWG	C-304
SHEET	13 OF 15

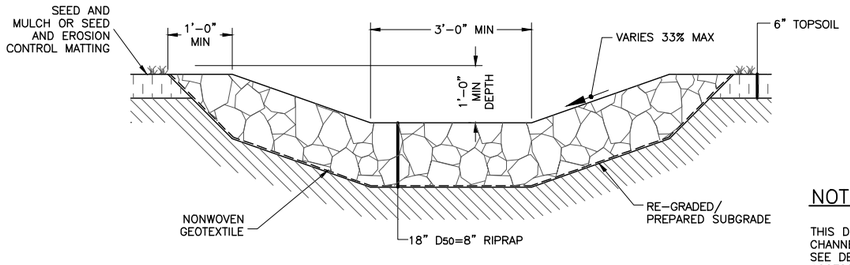


CULVERT SCHEDULE									
	CULVERT					OUTLET PROTECTION APRON			
ID	PIPE DIAMETER INCHES	INVERT IN FEET	INVERT OUT FEET	LENGTH FEET	D50 INCHES	APRON LENGTH (L) FEET (MIN)	START WIDTH (W_1) FEET (MIN)	END WIDTH (W_2) FEET (MIN)	DEPTH (D) INCHES (MIN)
FINAL									
C-1	24	1565.0	1557.0	51	8	15	6	21	18
C-2	12	1551.0	1548.0	58	8	BLEND WITH EDS	3	BLEND WITH EDS	18
C-3	12	1578.0	1577.0	39	8	–	–	–	18
TEMPORARY									
C-2	12	1551.0	1548.0	58	8	20	3	15	18

NOTES:

1. NONWOVEN GEOTEXTILE SHALL BE INSTALLED BENEATH THE RIPRAP AND AT ALL SOIL/RIPRAP INTERFACES.
2. MINIMUM D_{50} OF 6 INCHES
3. SINGLE CULVERT APRON START WIDTH = 3 x PIPE DIAMETER
4. END WIDTH = START WIDTH + LENGTH
5. RIPRAP DEPTH = 2.25 x D_{50}
6. CLEARING AND GRUBBING SHALL OCCUR AT ROCK OUTLET PROTECTION TO A MINIMUM DISTANCE OF 5' BEYOND THE APRON INSTALLATION.
7. ALL DISTURBED AREAS BEYOND THE APRON INSTALLATION SHALL BE SEEDED AND MULCHED.

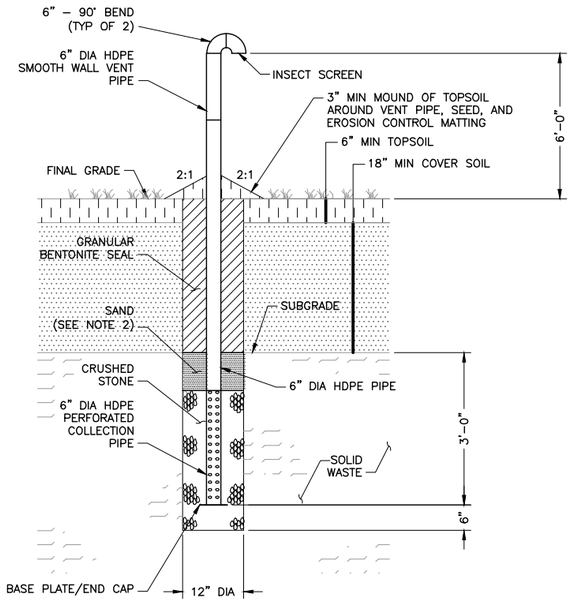
ROCK OUTLET PROTECTION — NTS — P — C-104 C-106 C-302 C-305



RIPRAP DRAINAGE CHANNEL (TYP) — NTS — S — C-106 C-305

NOTE:

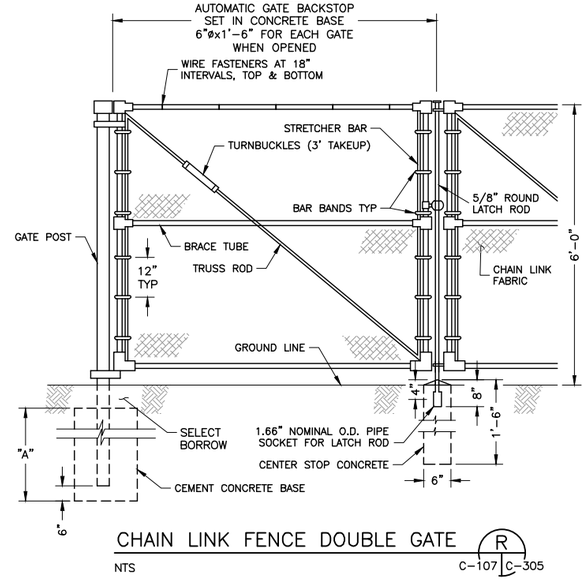
THIS DETAIL APPLIES TO LOCATIONS OF THE RIPRAP DRAINAGE CHANNEL NOT DIRECTLY ADJACENT TO THE PERIMETER ACCESS ROAD, SEE DETAIL M, SHEET 304 FOR AREAS ADJACENT TO THE PERIMETER ACCESS ROAD.



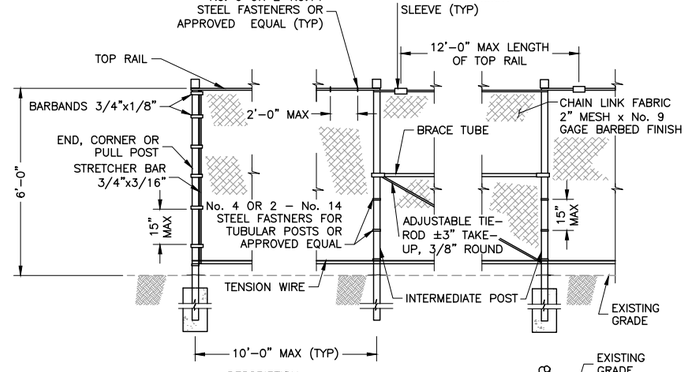
NOTE:

1. PERFORATED AND SOLID HDPE PIPE TO BE SDR 17.
2. PROVIDE 6" MIN OF SAND AS FILTER BETWEEN BENTONITE AND CRUSHED STONE.

GAS VENT (TYP) — NTS — Q — C-107 C-305



CHAIN LINK FENCE DOUBLE GATE — NTS — R — C-107 C-305



DESCRIPTION

END, CORNER AND PULL POSTS FOR FABRIC HEIGHT:

ROUND	2.375"ø	3.65#/FT.
SQUARE	2.0"	3.60#/FT.

INTERMEDIATE POSTS FOR FABRIC HEIGHTS:

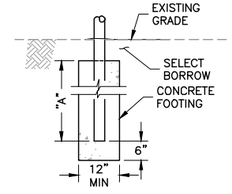
ROUND	1.90"	2.72#/FT.
H–SECTION	1.875"x 1.625"x 0.113"	2.70#/FT.

BRACE TUBES:
1.66"O.D. NOMIMAL, 1.806#/FT. GALVANIZED STEEL PIPE

STRETCHER BARS:
LENGTH TO BE 1" LESS THAN FULL HEIGHT OF FABRIC. ONE STRETCHER BAR FOR EACH GATE AND END POST. TWO STRETCHER BARS FOR CORNERS AND BRACING.

TOP RAIL:
1.66"O.D. NOMIMAL, 1.806#/FT. GALVANIZED STEEL PIPE

TENSION WIRE:
7 GAUGE GALVANIZED



FOOTING DETAIL

LINE,GATE AND END POST BASE

"A" 4'-0" FOR FENCE 8' HIGH
6'-0" FOR ALL END, CORNER, PULL, AND GATE POSTS PER FO-3

NOTES:

1. POST DIMENSIONS SHOWN ARE O.D. NOMINAL.
2. 4–6 FENCE POSTS MAY REQUIRE INSTALLATION IN SHALLOW BEDROCK

CHAIN LINK FENCE — NTS — T — C-107 C-305

NO.	DATE	DSGN	DR	CHK	APVD	BY	APVD
0	03/04/11	J.P. McCRADY	M.R. STACEY	S.H. MITCHELL	M.J. STELMACK	JPM	MJS

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REVISION

STATE OF NEW YORK — LICENSED ENGINEER — M.J. STELMACK — MARCH 04, 2011

New York State Department of Environmental Conservation

REMEDIAL ACTION
SOUTH HILL DUMP SITE
SOUTH HILL ROAD
CORTLANDVILLE, NEW YORK
NYSDEC SITE NO. 712009, CONTRACT NO. D007992

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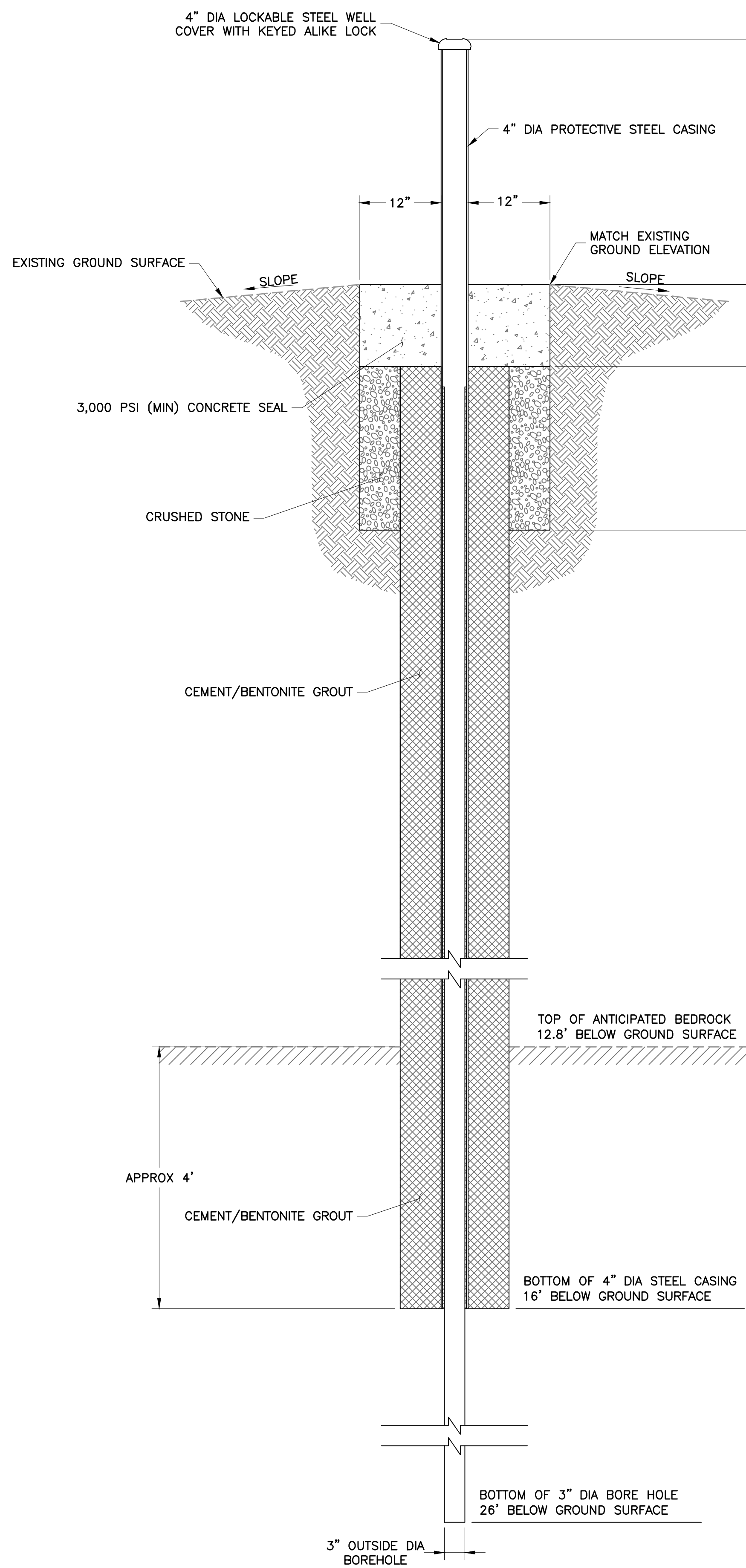
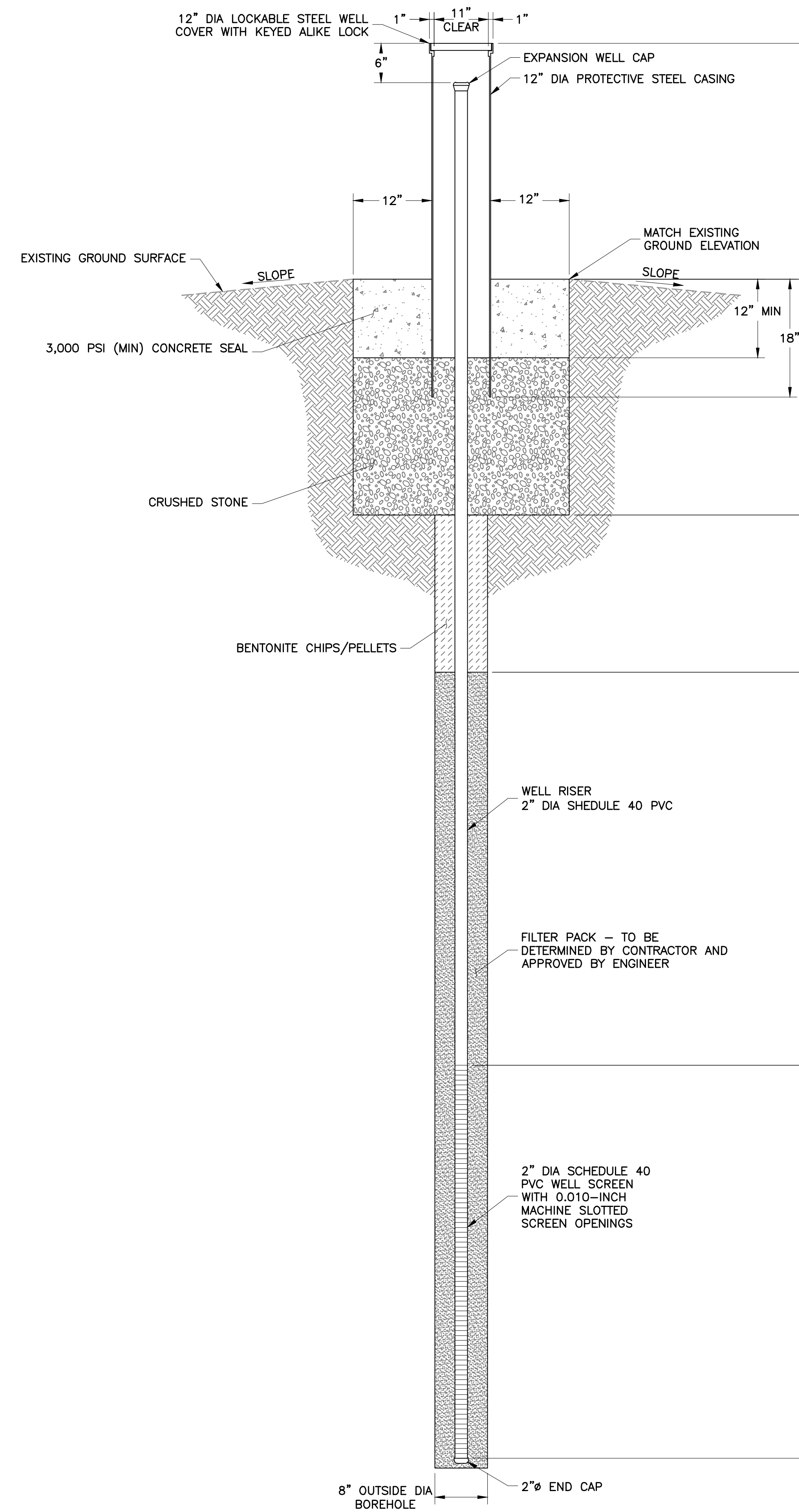
CIVIL
CIVIL DETAILS 3

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE	03/04/2011
PROJ	3612-09-2133
DWG	C-305
SHEET	14 OF 15



BEDROCK WELL (MW-3B)
NTS
U
C-106 C-306



OVERBURDEN WELL (MW-3S)
NTS
V
C-106 C-306

MARCH 04, 2011

NO.	DATE	REVISION	BY	APVD
0	03/04/11	ISSUED FOR BID	JPM	MJS

DSGN J.P. McCRADY | DR M.R. STACEY | CHK S.H. MITCHELL | APVD M.J. STELMACK

New York State Department of Environmental Conservation

REMEDIAL ACTION
SOUTH HILL DUMP SITE
SOUTH HILL ROAD
CORTLANDVILLE, NEW YORK
NYSDEC SITE NO. 712009, CONTRACT NO. D007992

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CIVIL
GROUNDWATER MONITORING WELL DETAILS

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.
0 1"

DATE	03/04/2011
PROJ	3612-09-2133
DWG	C-306
SHEET	15 OF 15