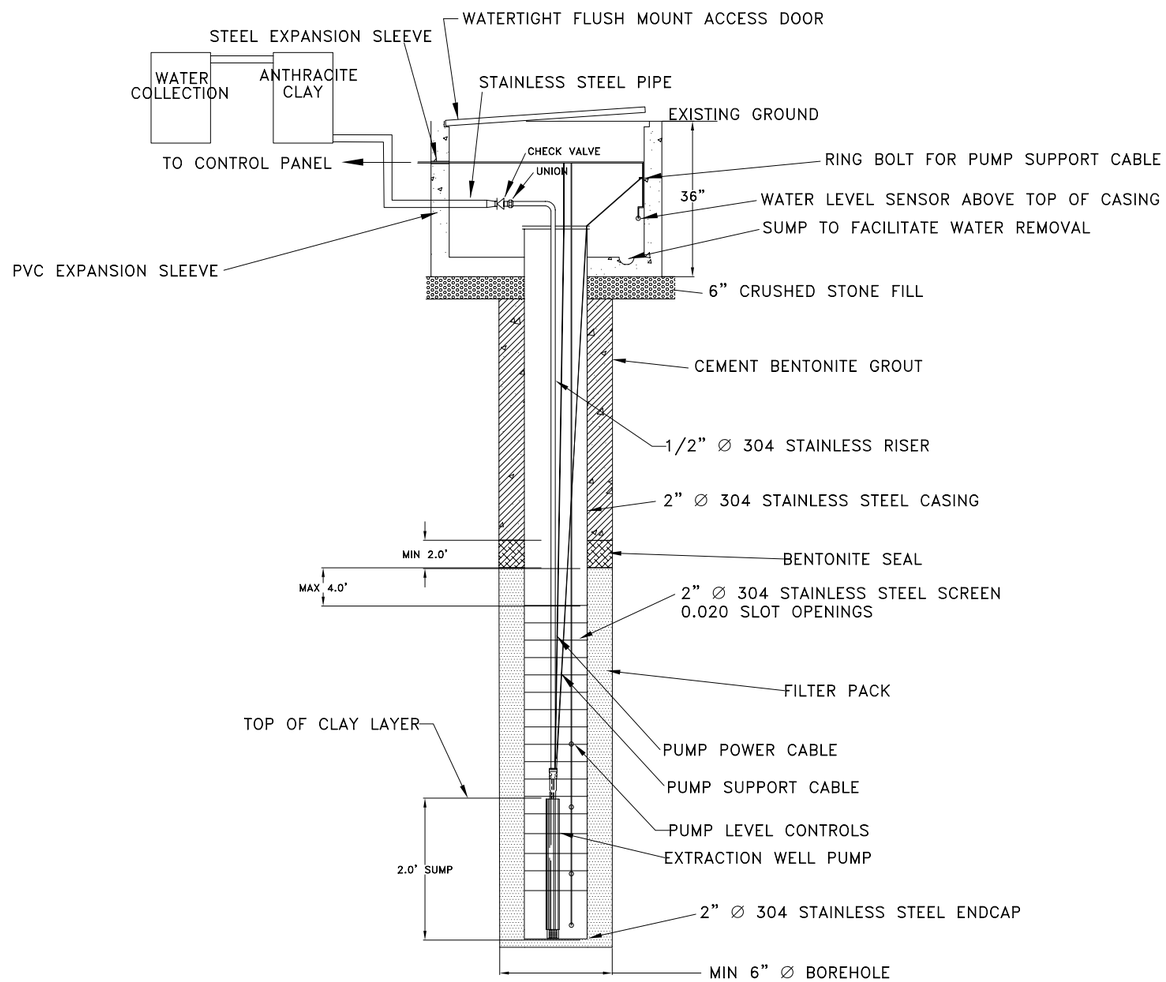


PRODUCT RECOVERY WELL AND PUMPING SYSTEM (8 / C-1)

NOT TO SCALE

NOTES

1. VAULT ACCESS DOOR SHALL BE 36" X 36" CONSTRUCTED OF GALVANIZED CARBON STEEL AND BE CUSTOMIZED WITH A WATERTIGHT GASKET AND DISCHARGE BOLTED DOWN FOR H-20 WHEEL LOADS. DOOR SHALL BE PROVIDED WITH A SPRING ASSISTED OPENING MECHANISM AND BE OPERATED WITH A REMOVABLE HANDLE FROM THE OUTSIDE.

2. EXISTING GRILL WELDED AT TOP OF STAND PIPE TO LIMIT ACCESS. CONSTRUCTED OF 1/2" DIAMETER REBAR.

3. PROPOSED 2" DIAMETER STEEL PIPE SLEEVE WITH SEALANT INSTALLED THROUGH WALL OF VAULT FOR CONVEYANCE OF PIPE BETWEEN RISER AND VAULT. INTERSECTION WITH STAND PIPE WILL BE WELDED IN PLACE.

4. RECOVERY WELL INSTALLATION SHALL BE PRECEDED BY THE INSTALLATION OF A PILOT BORING AT EACH LOCATION BY THE SUBCONTRACTOR. GEOTECHNICAL "SPLIT SPOON" SAMPLES SHALL BE COLLECTED FROM 50 FEET BELOW GROUND SURFACE (BGS) TO TOP OF CLAY LAYER BY THE SUBCONTRACTOR. THE CONTRACTOR'S RESIDENT ENGINEER WILL SELECT THREE REPRESENTATIVE SAMPLES FROM EACH OF THE PILOT BORINGS FOR SIEVE ANALYSIS TO BE PERFORMED BY THE SUBCONTRACTOR. CONTRACTOR WILL DO FILTER PACK DESIGN AND FURNISH DESIGN TO SUBCONTRACTOR. SUBCONTRACTOR WILL SUBSEQUENTLY RETURN TO THE LOCATION AND CONSTRUCT THE RECOVERY WELL.

5. STEEL PIPE SLEEVE WITH SEALANT PIPE INSTALLED THROUGH THE WALL OF VAULT FOR CONVEYANCE OF PIPING.

Symbol	Description	Date	Approved
1	INTERMEDIATE (60%) DESIGN	12/02/03	
0	PRELIMINARY (30%) DESIGN	08/23/03	

Revisions

Designed By: CW
Drawn By: HW
Checked By: CL
Reviewed By: JT
Date: 12/02/03
File No. 47118.0130
Drawing CADD Name: C-5
Contract Number:

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

BLACK & VEATCH *Special Projects Corp.*

GROUNDWATER EXTRACTION AND TREATMENT SYSTEM DESIGN STANDARD CHLORINE OF DELAWARE

PRODUCT RECOVERY WELL DETAILS

Sheet Reference Number: C-5

Symbol	Description	Date	Approved
1	PRELIMINARY (30%) DESIGN	12/02/03	
0	INTERMEDIATE (60%) DESIGN	06/06/01	

Revisions

Designed By: CW
Drawn By: HW
Checked By: CL
Reviewed By: JT
Date: 12/02/03
File No. 47118.0130
Drawing CADD Name: C-6
Contract Number:

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY

BLACK & VEATCH
Special Projects Corp.

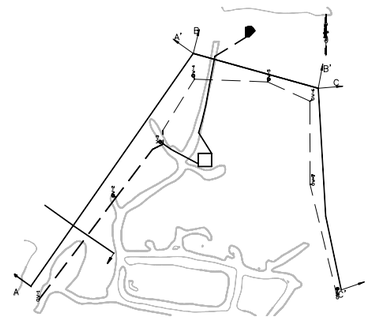
GROUNDWATER EXTRACTION
AND TREATMENT SYSTEM DESIGN
STANDARD CHLORINE OF DELAWARE

SITE LAYOUT PLAN
(GROUNDWATER BARRIER PLAN VIEW)

Sheet Reference Number:
C-6

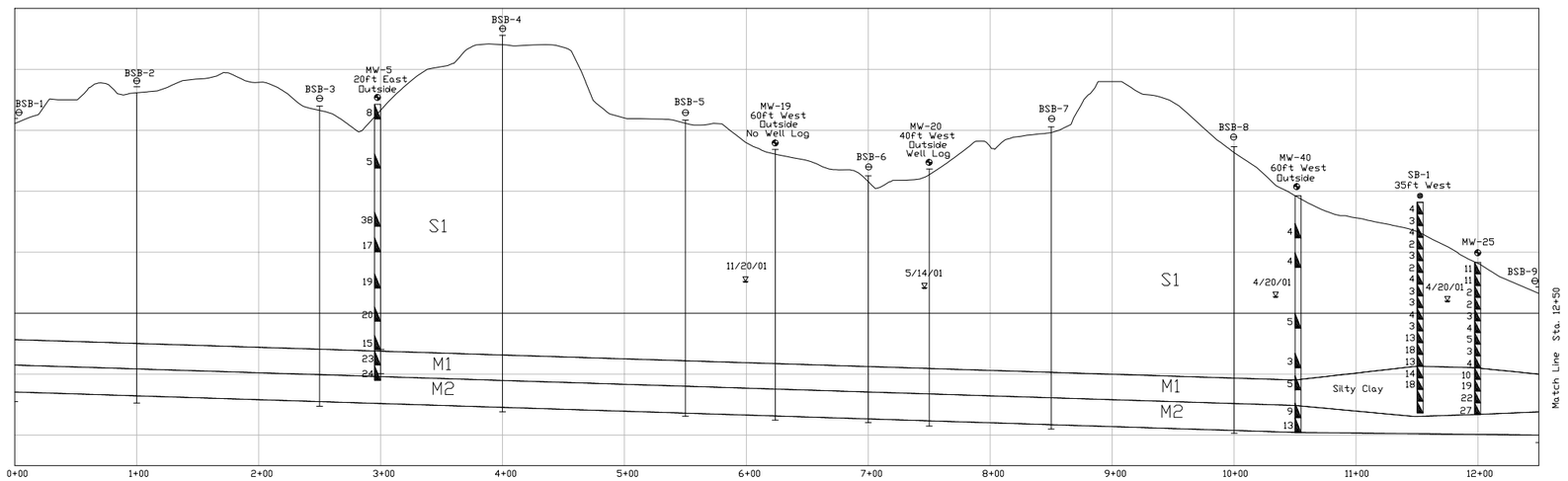
LEGEND
- Proposed Barrier Wall Soil Borings
- Existing Monitoring Wells
- Existing Soil Borings
- Approximate Static Water Level
- Interpreted Stratigraphic Boundary (Dashed)
- Proposed Key Elevation (Solid Line)
- Split Spoon w/N Value

GENERAL STRATIGRAPHIC DESCRIPTION
S1 Layer - COLUMBIA FORMATION
Orange/Yellow Brown fine and medium grained sand w/ subordinate amounts of gravel silt and occasional layer of silt/clay
M1 Layer - MERCHANTVILLE FORMATION
Dark Grey to Black Sandy Silt Micacious
M2 Layer - POTOMAC FORMATION
(Confining Unit)
Predominantly Clay and silt w/ occasional interbeds of fine sand.



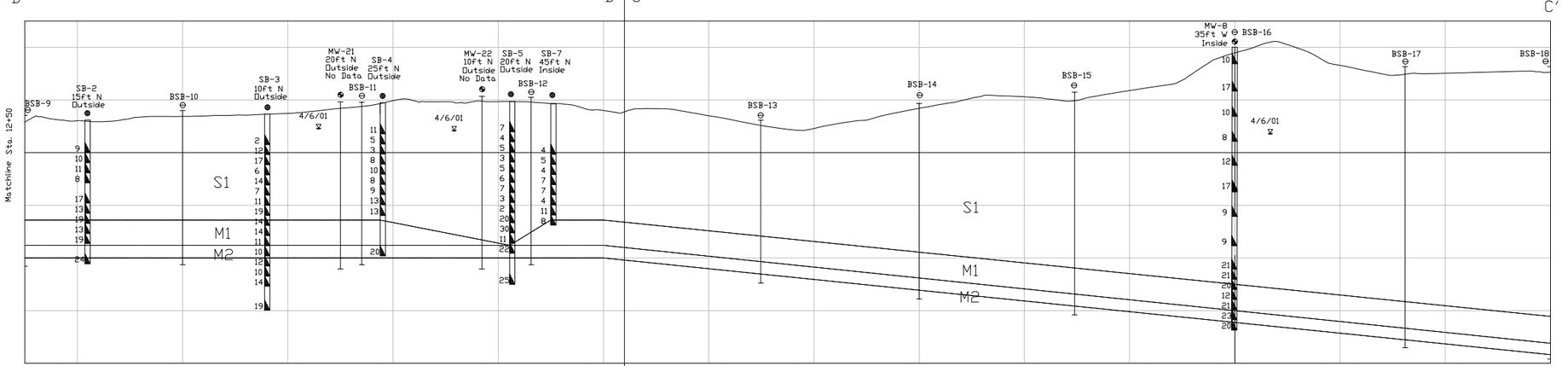
Scale: 1"=300'

A — A'



PROPOSED BARRIER WALL ALIGNMENT - STA 0+00 TO 12+50

B — B' C — C'



PROPOSED BARRIER WALL ALIGNMENT - STA 12+50 TO 27+00

10' 5' 0 10' 20'
Vertical Scale: 1"=10'

60' 30' 0 60' 120'
Horizontal Scale :1"=60'

Symbol	Description	Date	Approved
1	PRELIMINARY (30%) DESIGN	12/02/03	
0	INTERMEDIATE (60%) DESIGN	06/06/01	

Revisions

Designed By: CW	Date: 12/02/03		
Drawn By: HW	File No. 47118.0130		
Checked By: CL	Drawing CADD Name: C-7		
Reviewed By: JT	Contract Number:		

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY

BLACK & VEATCH
Special Projects Corp.

GROUNDWATER EXTRACTION
AND TREATMENT SYSTEM DESIGN
STANDARD CHLORINE OF DELAWARE

BARRIER WALL SECTIONS

Sheet
Reference
Number:
C-7