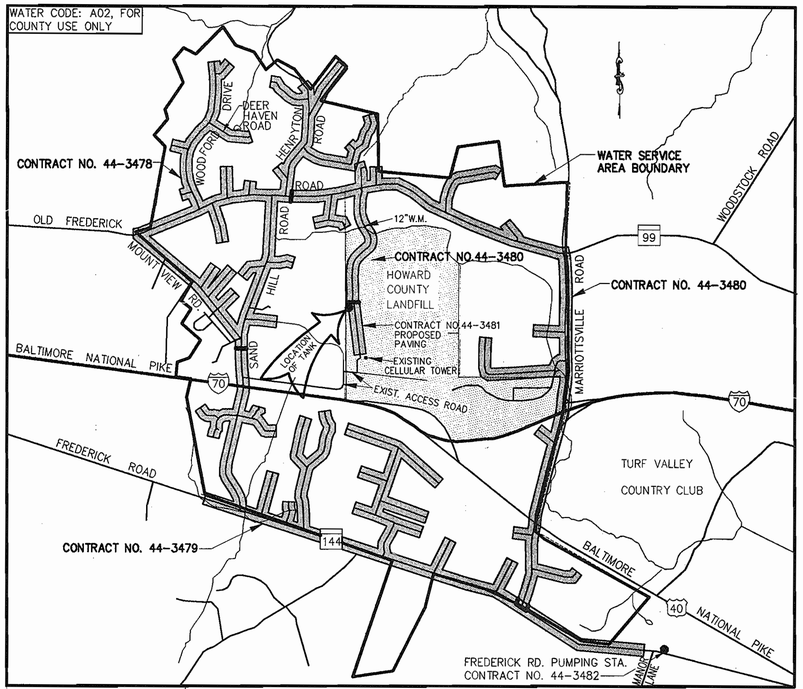
ALPHA RIDGE ELEVATED STORAGE TANK
CAPITAL PROJECT NO. W-8203
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
CONTRACT NO. 44-3481

INDEX OF DRAWINGS

SHEET NO.	DWG. NO.	DESCRIPTION
G-1	1	TITLE SHEET, VICINITY MAP, DRAWING INDEX, GENERAL NOTES
C-1	2	SITE DEVELOPMENT PLAN
C-2	3	ROAD PROFILE AND DETAILS
C-3	4	WATER MAIN AND OVERFLOW DRAIN PLAN AND PROFILES AND CHLORINE BUILDING
SM-1	5	STRUCTURAL & MECHANICAL - ELEVATED TANK, FOUNDATION AND MISCELLANEOUS DETAILS
	5A	SHEET ADDED FOR AS BUILTS
SM-2	6	STRUCTURAL & MECHANICAL - ALTITUDE VALVE VAULT AND MISCELLANEOUS DETAILS
E-1	7	ELECTRICAL - SITE PLAN AND MISCELLANEOUS DETAILS



VICINITY MAP
Scale: 1" = 2,000'

NUMBER OF WATER HOUSE CONNECTIONS: 0

GENERAL NOTES

1. Approximate Location Of Existing Mains Are Shown. The Contractor Shall Take All Necessary Precautions To Protect Existing Mains And Services And To Maintain An Uninterrupted Water Supply. Any Damage Incurred Shall Be Repaired Immediately To The Satisfaction Of The Engineer At The Contractor's Expense.
2. All Horizontal Controls Are Based On Maryland State Coordinates.
3. All Vertical Controls Are Based On U.S.G.S. Data.
4. All Pipe Elevations Shown Are Invert Elevations, Unless Otherwise Noted.
5. Clear All Utilities By A Minimum Of 6". Clear All Poles By 2'-0" Minimum Or Tunnel As Required. The Owner Has Contacted The Utility Companies And Has Made Arrangements For Bracing Of Poles As Shown On The Drawings. In The Event The Contractor's Work Requires The Bracing Of Additional Poles, Any Cost Incurred By The Owner For The Bracing Of Additional Poles Or Damages Shall Be Deducted From Money Owed The Contractor. The Contractor Shall Coordinate With The Utility Companies To Schedule The Bracing Of The Poles.
6. For All Construction Shown On The Drawings, And For Materials And Construction Methods, Use Howard County Design Manual, Volume IV, Standard Specifications And Details For Construction And MSHA Standards And Specifications. The Contractor Shall Have One Copy Of These Documents On The Site At All Times.
7. Where Test Pits Have Been Made On Existing Utilities, They Are Noted By The Symbol ⧉ At The Location Of The Test Pit. A Note Or Notes Containing The Results Of The Test Pit Or Pits Is Included On The Drawings. Existing Utilities In The Vicinity Of The Proposed Work For Which Test Pits Have Not Been Performed Shall Be Located By The Contractor Two Weeks In Advance Of Construction Operations At His Own Expense.
8. Contractor Shall Notify The Following Utility Companies Or Agencies At Least Five Working Days Before Starting Work Shown On These Plans:
   State Highway Administration - 531-5533
   Baltimore Gas And Electric - Contractor Services 850-4620
   Baltimore Gas And Electric - Underground Damage Control - 859-9004
   Miss Utility - 1-800-257-7777
   Bell Atlantic Telephone Co. - 597-8585
   Transcontinental Gas Pipeline Corp. - 1-410-465-0960
   Bureau Of Utilities, Howard County Department Of Public Works - 313-4900
   Bureau Of Engineering/Construction Inspection Division - 313-1880.
9. Trees And Shrubs Are To Be Protected From Damage To The Maximum Extent Possible. Trees And Shrubs Located Within The Construction Strip Are Not To Be Removed Or Damaged By The Contractor.
10. Contractor Shall Remove Trees, Stumps And Roots Along Line Of Excavation. Payment For Such Removal Shall Be Included In The Unit Price Bid For Construction Of The Main.
11. All Water Mains To Be D.I.P. Class 52, Unless Otherwise Noted.
12. Top Of All Water Mains Shall Have A Minimum Of 3'-6" Of Cover Unless Otherwise Noted.
13. Valves Adjacent To Tees Shall Be Strapped To Tee.
14. All Fittings Shall Be Buttressed Or Anchored With Concrete In Accordance With The Standard Details. Soil Around The Fire Hydrant Shall Be Compacted In Accordance With Section 1000 Of The Standard Specifications.
15. Fire Hydrant Shall Be Set To Bury Line Elevations Shown On The Drawings. All Fire Hydrants Shall Be Strapped And Buttressed With Concrete In Accordance With Standard Details. Soil Around The Fire Hydrant Shall Be Compacted In Accordance With Section 1000 Of The Standard Specifications.
16. The Contractor Shall Not Operate Any Water Main Valves On The Existing Water System.
17. Length Of Disturbance/Open Trench Must Be Limited To Three Pipe Sections Or To The Length Which Can Be Backfilled And Stabilized In One Working Day, Whichever Is Shorter.
18. Trench Repair Shall Be In Accordance With Howard County Standard Details.
19. All Work Shall Be In Accordance With Howard County Standards And Specifications For Soil Erosion And Sediment Control Section 219.
20. The Existing Topography Is Taken From Field Run Survey With Maximum 1' Contour Interval Prepared By Riemer Muegge And Associates Dated August 1995.
21. The Coordinates Shown Hereon Are Based Upon The Howard County Geodetic Control Which Is Based Upon The Maryland State Plane Coordinate System. Howard County Monument No. 10GA And 0012 Were Used For This Project.
22. The Increase In Final Runoff Is Insignificant. Water Quality Provided By Overland Flow.
23. Previous Files: WP-93-85, SDP-94-15, 90-37, 90-30, 90-97, 92-62

APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

DIRECTOR — DATE 12/28/95
CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 12/27/95
CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH — DATE 12/28/95 TC

SITE ANALYSIS:

TOTAL AREA OF SITE	588.34 ACRES
AREA DISTURBED	0.90 ACRES
AREA TO BE ROOFED OR PAVED	0.45 ACRES
AREA TO BE VEGETATIVELY STABILIZED	0.45 ACRES
TOTAL CUT	50 CU.YDS.
TOTAL FILL	50 CU.YDS.

Reviewed For Howard County S.C.D. and meets technical requirements.

NATURAL RESOURCES CONSERVATION SERVICE — Date: 12/28/95

This development plan is approved for soil erosion and sediment control by The Howard County Soil Conservation District.

Approved: HOWARD COUNTY SCD — Date: 12/28/95

ENGINEER'S CERTIFICATION

I certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard County Soil Conservation District.

Richard L. Hall — Date: 12/22/95
RUMMEL, KLEPPER & KAHL
CONSULTING ENGINEERS
81 MOSHER STREET BALTIMORE, MD. 21217

ADDRESS CHART

LOT NUMBER	STREET ADDRESS
2331	THOMPSON DRIVE

PERMIT INFORMATION CHART

SUBDIVISION NAME			SECTION/AREA		LOT/PARCEL
Alpha Ridge Landfill			N/A		II
PLAT	BLOCK	ZONE	TAX MAP	ELECT.	CENSUS TRACT
878/251	2	RC-DEO	16	3	6030
WATER CODE			SEWER CODE		
K02			N/A		

AS BUILT

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS — DATE 12-26-95
CHIEF, BUREAU OF ENGINEERING — DATE 12/26/95
CHIEF, BUREAU OF UTILITIES — DATE 12/26/95
CHIEF, WATER AND SEWER DESIGN DIVISION — DATE 12-26-95

RK&K
RUMMEL, KLEPPER & KAHL
CONSULTING ENGINEERS
81 MOSHER ST.
BALTIMORE, MARYLAND 21217

STATE OF MARYLAND — JAMES D. KAHL — No. 22838 — PROFESSIONAL ENGINEER

DES:	DCE
DRN:	MJS
CHK:	DCE
DATE:	12/95

BY	NO.	REVISION	DATE

TITLE SHEET, VICINITY MAP, DRAWING INDEX, GENERAL NOTES

600' SCALE MAP NO. 16 BLOCK NO. 2, Parcel #11

ALPHA RIDGE ELEVATED STORAGE TANK
CAPITAL PROJECT W-8203
CONTRACT NO. 44-3481
ELECTION DISTRICT NO. 3
HOWARD COUNTY, MARYLAND

DWG. NO. G-1
SCALE AS SHOWN
SHEET 1 OF 7

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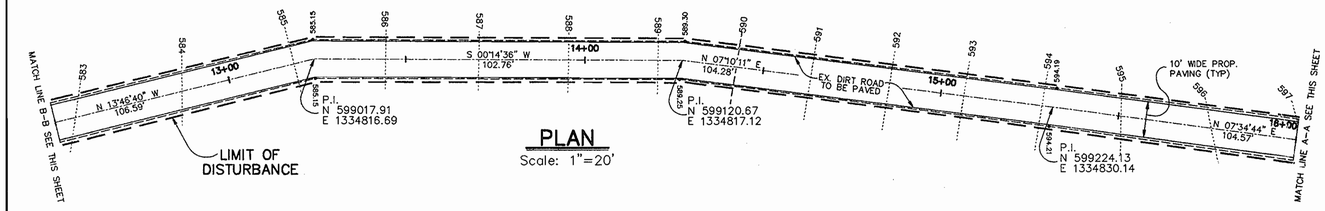
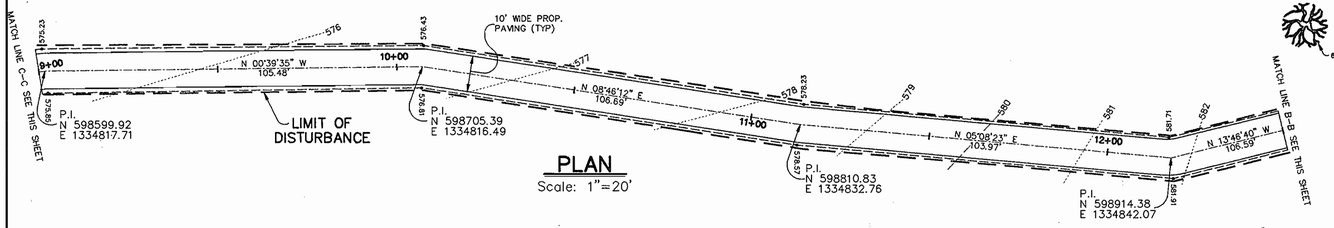
12/22/1995 14:38

SDP-96-60 1/3

STORAGE TNK.



PLAN
Scale: 1"=20'



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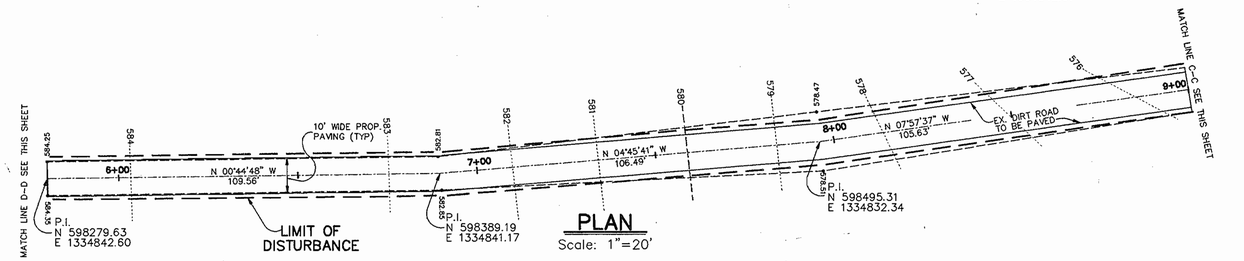
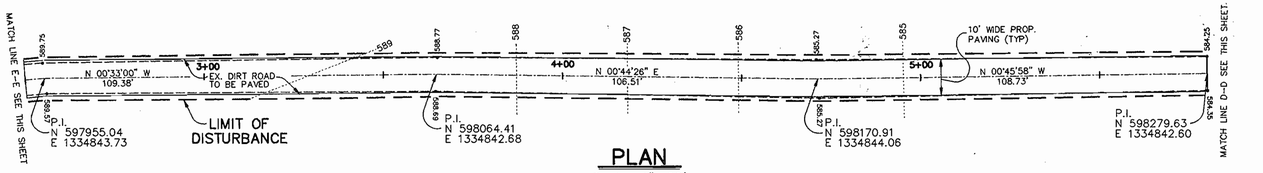
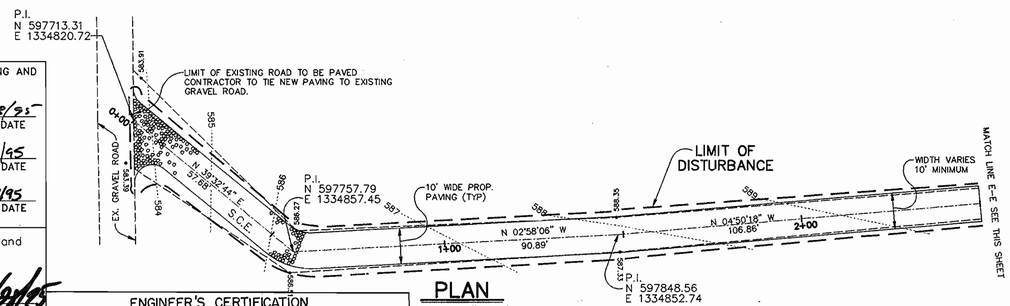


PLAN
Scale: 1"=20'



PLAN
Scale: 1"=20'



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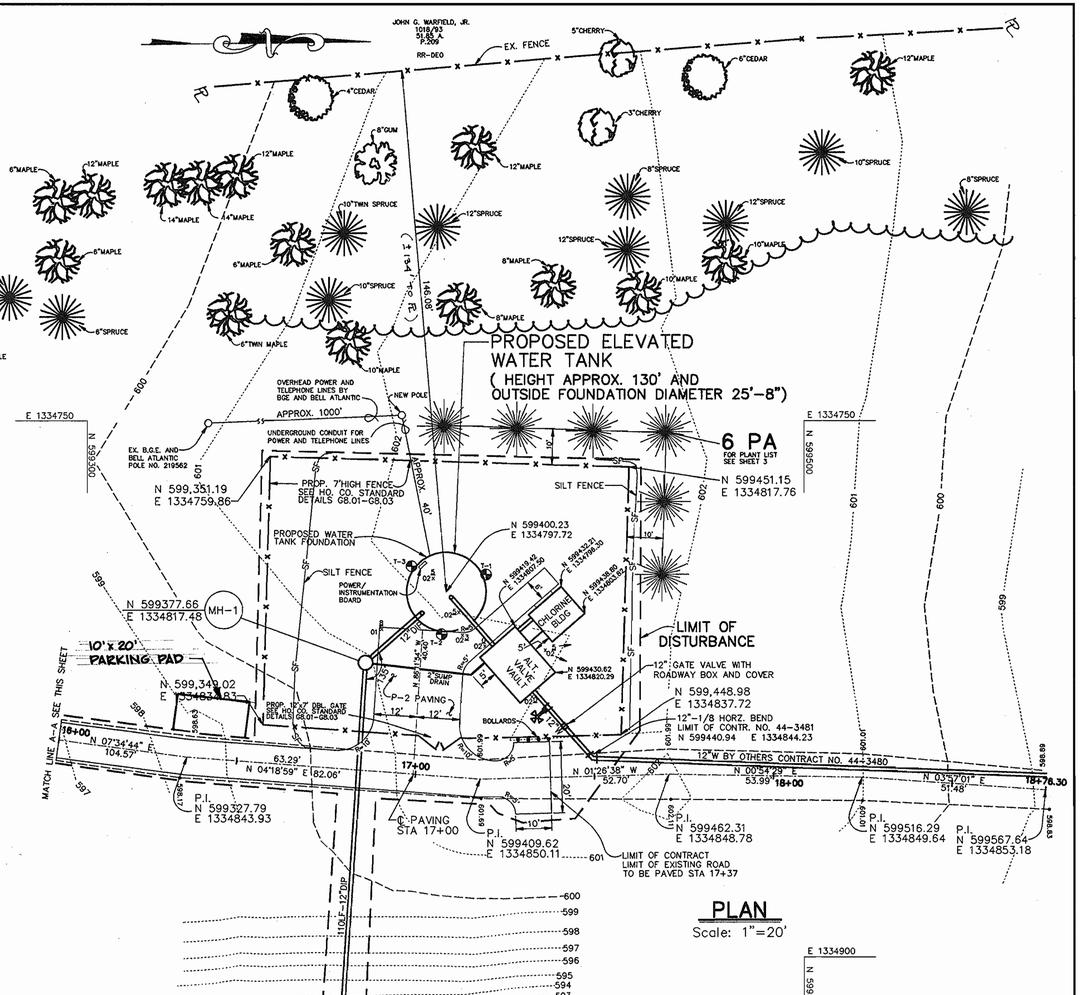
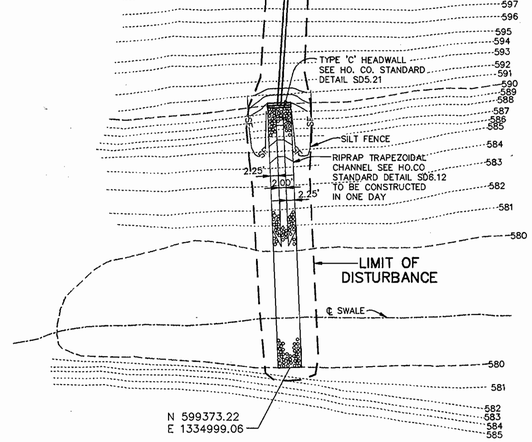
Scale: 1"=20'



PLAN
Scale: 1"=20'



LEGEND

- 581 — 1 FOOT CONTOUR
- 580 — 10 FOOT CONTOUR
- LIMIT OF DISTURBANCE
- EXISTING DIRT ROAD
- PROPOSED PAVING
- CL DRIVEWAY

AS BUILT

APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

DIRECTOR — DATE 12/28/95

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 12/20/95

CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH — DATE 12/28/95

Reviewed For Howard County S.C.D. and meets technical requirements.

NATURAL RESOURCES CONSERVATION SERVICE — Date 12/27/95

This development plan is approved for soil erosion and sediment control by The Howard County Soil Conservation District.

Approved: HOWARD COUNTY SCD — Date 12/27/95

ENGINEER'S CERTIFICATION

I certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowlegde of the site conditions and that it was prepared in accordance with the requirements of the Howard County Soil Conservation District.

Robert J. Diaz — Date: 12-27-95

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS — DATE 12/26/95
CHIEF, BUREAU OF ENGINEERING — DATE 12/26/95
CHIEF, BUREAU OF UTILITIES — DATE 12/26/95
CHIEF, WATER AND SEWER DESIGN DIVISION — DATE 12-26-95

RK&K
RUMMEL, KLEPPER & KAHL
CONSULTING ENGINEERS
81 MOSHER ST.
BALTIMORE, MARYLAND 21217

STATE OF MARYLAND — ROBERT JAMES HUMMEL — REG. NO. 19980 — PROFESSIONAL ENGINEER

DES:	CJR
DRN:	DAM
CHK:	SRK
DATE:	12/95

BY	NO.	REVISION	DATE

SITE DEVELOPMENT PLAN

600' SCALE MAP NO. 16 BLOCK NO. 2

ALPHA RIDGE ELEVATED STORAGE TANK
CAPITAL PROJECT W-8203
CONTRACT NO. 44-3481
ELECTION DISTRICT NO. 3
HOWARD COUNTY, MARYLAND

DWG. NO. C-1
SCALE AS SHOWN
SHEET 2 OF 7

SDP-96-60 2/3

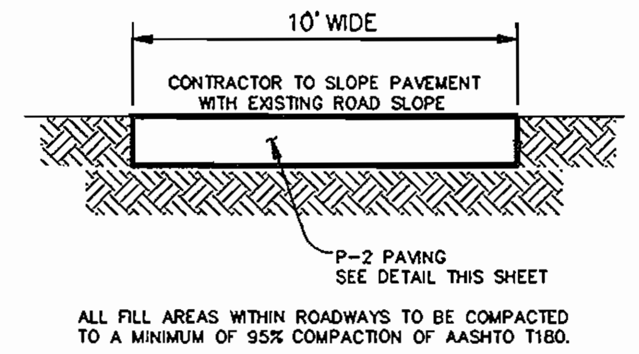
N:\SDSKPROJ\CM9473\TANK ALP-4-02.DWG 12/22/1995 14:31
BDCD/104000 BXKENNEL.PMG

PROFILE

SCALE :
HOR.-1"=50'
VERT.-1"=5'

PLANT LIST

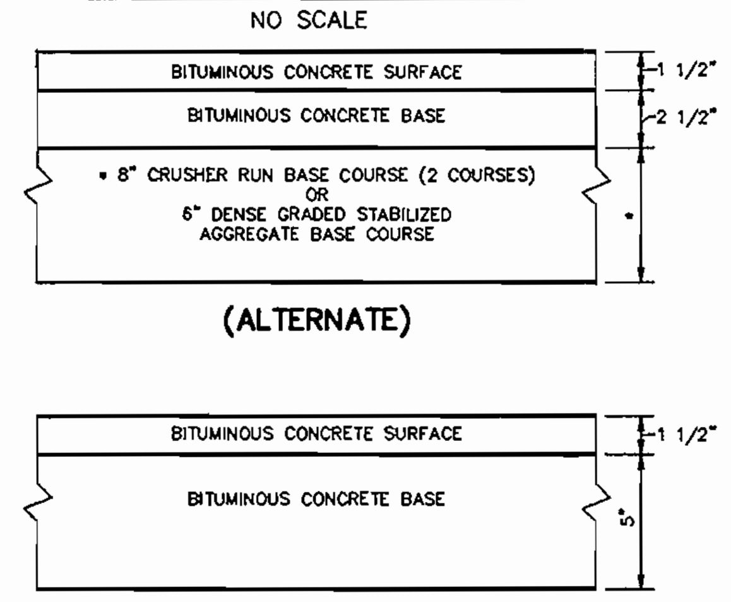
KEY	QTY.	BOTANICAL/ COMMON NAME	SIZE	STATE	COMMENTS
PA	6	PICEA ABIES NORWAY SPRUCE	6' - 8' HT.	B & B	FULL FORM, SINGLE LEADER



ALL FILL AREAS WITHIN ROADWAYS TO BE COMPACTED TO A MINIMUM OF 95% COMPACTION OF AASHTO T180.

TYPICAL SECTION

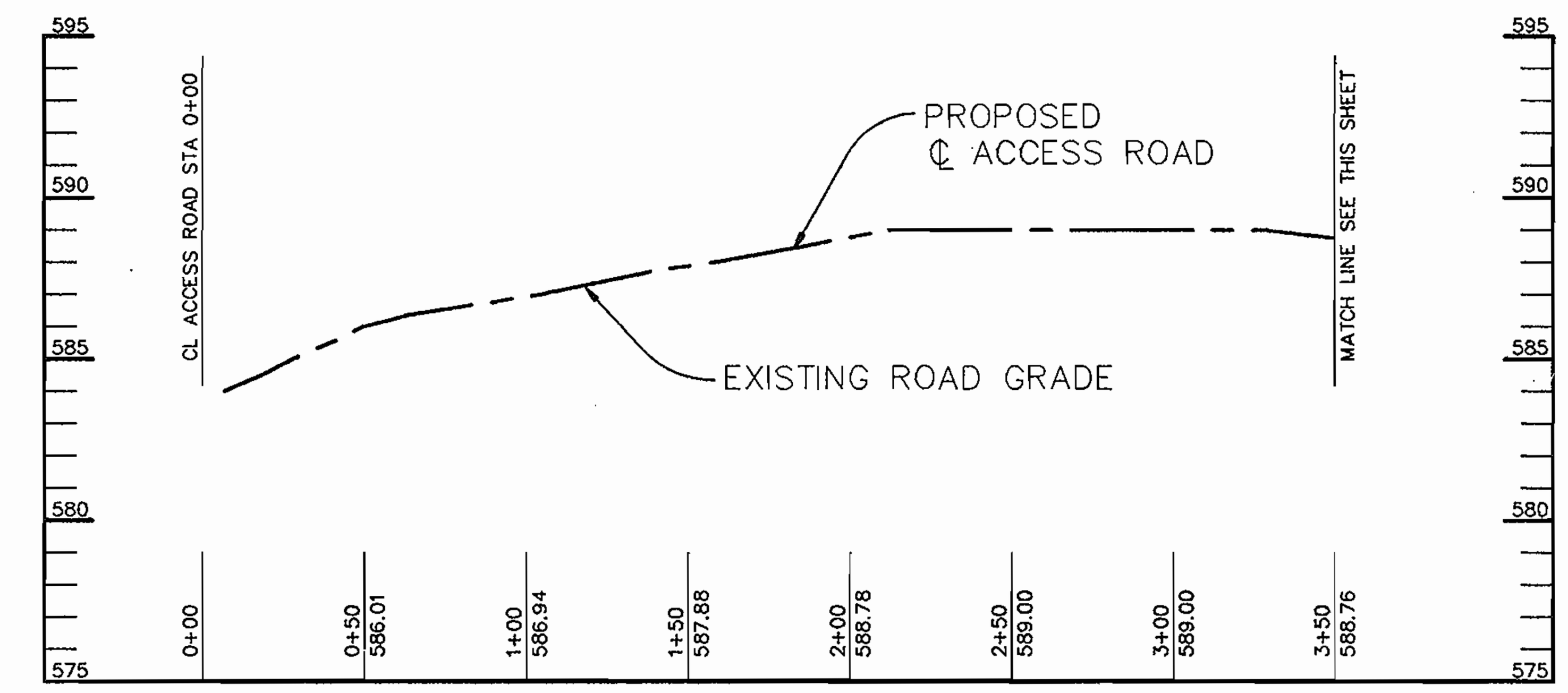
NO SCALE



HOWARD COUNTY DESIGN MANUAL VOLUME IV-STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (DRAWING R-2.01)

P-2 PAVING

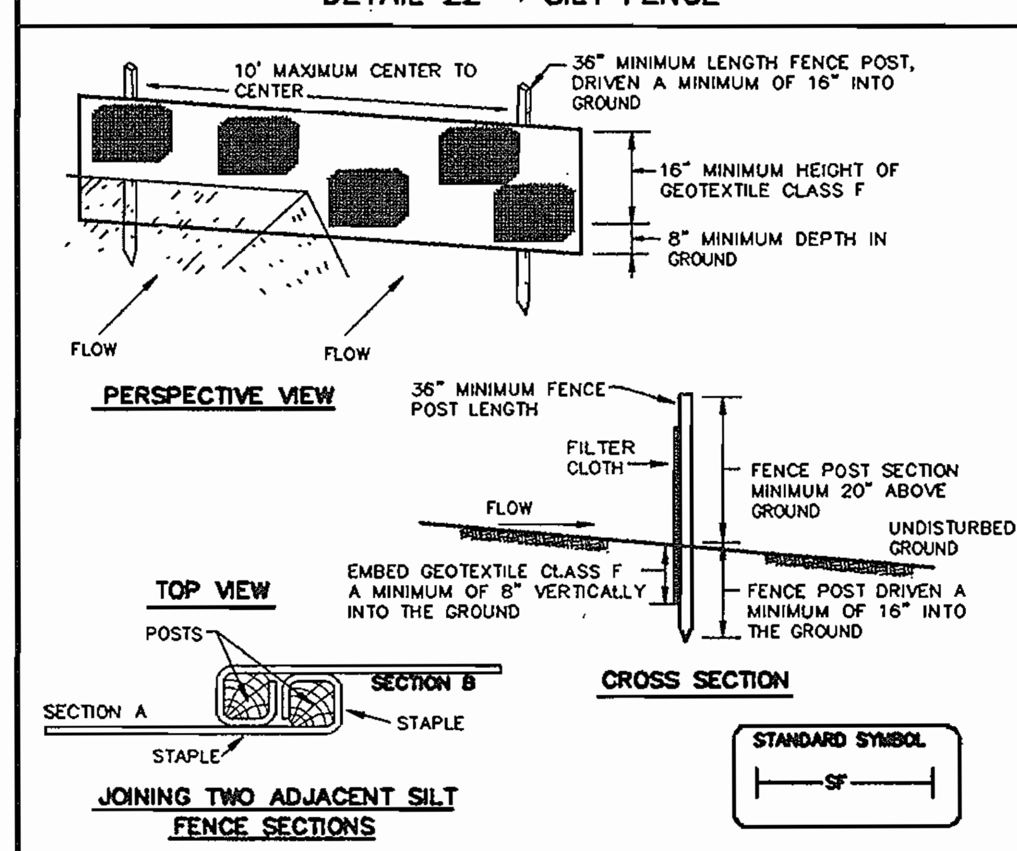
NO SCALE



PROFILE

SCALE :
HOR.-1"=50'
VERT.-1"=5'

DETAIL 22 - SILT FENCE



Construction Specifications

1. Fence posts shall be a minimum of 36" long driven 16" minimum into the ground. Wood posts shall be 11/2" x 11/2" square (minimum) cut, or 13/4" diameter (minimum) round and shall be of sound quality hardwood. Steel posts will be standard T or U section weighting not less than 1.00 pond per linear foot.

2. Geotextile shall be fastened securely to each fence post with wire ties or staples at top and mid-section and shall meet the following requirements for Geotextile Class F:

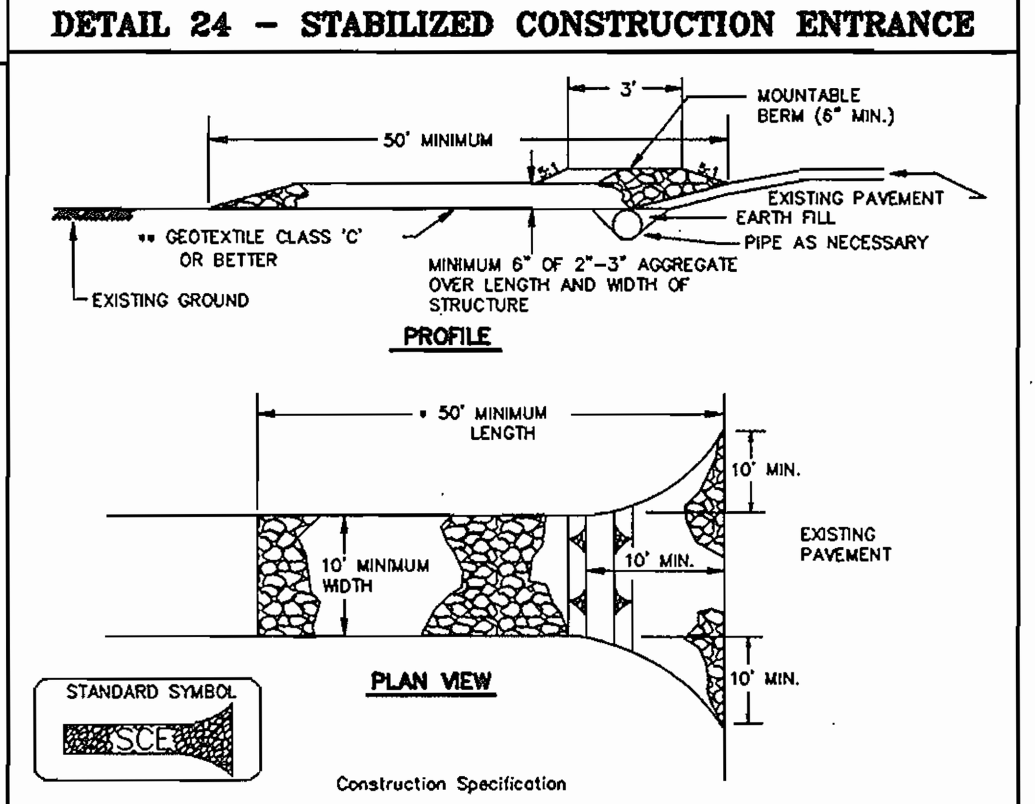
Tensile Strength	50 lbs/in (min.)	Test: MSMT 509
Tensile Modulus	20 lbs/in (min.)	Test: MSMT 509
Flow Rate	0.3 gal ft ²/ minute (max.)	Test: MSMT 322
Filtering Efficiency	75% (min.)	Test: MSMT 322

3. Where ends of geotextile fabric came together, they shall be overlapped, folded and stapled to prevent sediment bypass.

4. Silt Fence shall be inspected after each rainfall event and maintained when bulges occur or when sediment accumulation reached 50% of the fabric height.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE E - 15 - 3	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 24 - STABILIZED CONSTRUCTION ENTRANCE



Construction Specification

1. Length - minimum of 50' (*30' for single residence lot).

2. Width - 10' minimum, should be flared at the existing road to provide a turning radius.

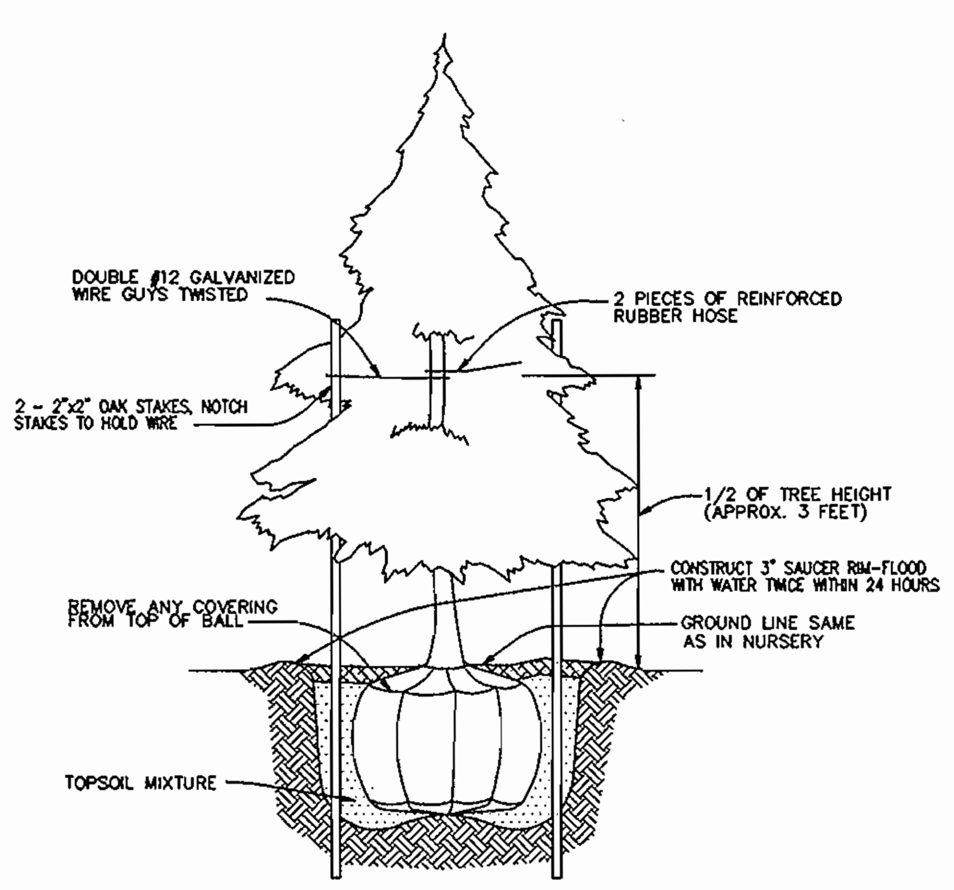
3. Geotextile fabric (filter cloth) shall be placed over the existing ground prior to placing stone. **The plan approval authority may not require single family residences to use geotextile.

4. Stone - crushed aggregate (2" to 3") or reclaimed or recycled concrete equivalent shall be placed at least 6" deep over the length and width of the entrance.

5. Surface Water - all surface water flowing to or diverted toward construction entrances shall be piped through the entrance, maintaining positive drainage. Pipe installed through the stabilized construction entrance shall be protected with a mountable berm with 5:1 slopes and a minimum of 6" of stone over the pipe. Pipe has to be sized according to the drainage. When the SCE is located at a high spot and has no drainage to convey a pipe will not be necessary. Pipe should be sized according to the amount of runoff to be conveyed. A 6" minimum will be required.

6. Location - A stabilized construction entrance shall be located at every point where construction traffic enters or leaves a construction site. Vehicles leaving the site must travel over the entire length of the stabilized construction entrance.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE F - 17 - 3	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION



EVERGREEN PLANTING DETAIL

NO SCALE

SEDIMENT CONTROL NOTES

1. A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS AND PERMITS PRIOR TO THE START OF ANY CONSTRUCTION (313-1855).
2. ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL AND EROSION CONTROL, AND REVISIONS THERETO.
3. FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: A)7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES AND ALL SLOPES GREATER THAN 3:1, B) 14 DAYS AS TO OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
4. ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THE PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 12, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
5. ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL AND EROSION CONTROL FOR PERMANENT SEEDINGS (SEC. 51), SOD (SEC. 54), TEMPORARY SEEDING (SEC. 50) AND MULCHING (SEC. 52). TEMPORARY STABILIZATION WITH MULCH ALONG CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
6. ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
7. SITE ANALYSIS:

TOTAL AREA OF SITE	588.34 ACRES
AREA DISTURBED	D.90 ACRES
AREA TO BE ROOFED OR PAVED	0.45 ACRES
AREA TO BE VEGETATIVELY STABILIZED	0.45 ACRES
TOTAL CUT	50 CU.YDS.
TOTAL FILL	50 CU.YDS.

8. ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
9. ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
10. SITE GRADING WILL BEGIN ONLY AFTER ALL PERIMETER SEDIMENT CONTROL MEASURES HAVE BEEN INSTALLED AND ARE IN A FUNCTIONING CONDITION.
11. SEDIMENT WILL BE REMOVED FROM TRAPS WHEN ITS DEPTH REACHES CLEAN OUT ELEVATION SHOWN ON THE PLANS.
12. CUT AND FILL QUANTITIES PROVIDED UNDER SITE ANALYSIS DO NOT REPRESENT BID QUANTITIES. THESE QUANTITIES DO NOT DISTINGUISH BETWEEN TOPSOIL, STRUCTURAL FILL OR EMBANKMENT MATERIAL, NOR DO THEY REFLECT CONSIDERATION OF UNDERCUTTING OR REMOVAL OF UNSUITABLE MATERIAL. THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH SITE CONDITIONS WHICH MAY AFFECT THE WORK.
13. ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 AC., APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.
14. TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH CAN BE BACKFILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.

TEMPORARY SEEDING NOTES

Apply to graded or cleared areas likely to be redisturbed where a short-term vegetative cover is needed.

Seedbed Preparation : Loosen upper three inches of soil by raking, discing or other acceptable means before seeding, if not previously loosened.

Soil Amendments : Apply 600 lbs. per acre 10-10-10 fertilizer (14 lbs. per 1000 sq.ft.).

Seeding : For periods March 1 thru April 30 and from August 15 thru November 15, seed with 2-1/2 bushels per acre of annual rye (3.2 lbs. per 1000 sq.ft.). For the period May 1 thru August 14, seed with 3 lbs. per acre of weeping lovegrass (0.07 lbs. per 1000 sq.ft.). For the period November 16 thru February 28, protect site by applying 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring, or use sod.

Mulching : Apply 1-1/2 to 2 tons per acre (70 to 90 lbs. per 1000 sq.ft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gal. per acre (5 gal. per 1000 sq.ft.) of emulsified asphalt on flat areas. On slopes, 8 ft. or higher, use 347 gal. per acre (8 gal. per 1000 sq.ft.) for anchoring.

Refer to the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for rate and methods not covered.

PERMANENT SEEDING NOTES

Apply to graded or cleared areas not subject to immediate further disturbance where a permanent long-lived vegetative cover is needed.

Seedbed Preparation : Loosen upper three inches of soil by raking, discing or other acceptable means before seeding, if not previously loosened.

Soil Amendments : In lieu of soil test recommendations, use one of the following schedules :

1) Preferred - Apply 2 tons per acre dolomitic limestone (92 lbs. per 1000 sq.ft.) and 600 lbs. per acre 10-10-10 fertilizer (14 lbs. per 1000 sq.ft.) before seeding. Harrow or disc into upper three inches of soil. At time of seeding, apply 400 lbs. per acre 30-0-0 ureaform fertilizer (9 lbs. per 1000 sq.ft.).

2) Acceptable - Apply 2 tons per acre dolomitic limestone (92 lbs. per 1000 sq.ft.) and 1000 lbs. per acre 10-10-10 fertilizer (23 lbs. per 1000 sq.ft.) before seeding. Harrow or disc into upper three inches of soil.

Seeding : For the period March 1 thru April 30 and from August 1 thru October 15, seed with 60 lbs. per acre (1.4 lbs. per 1000 sq.ft.) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 60 lbs. Kentucky 31 Tall Fescue per acre and 2 lbs. per acre (0.05 lbs. per 1000 sq.ft.) of weeping lovegrass. During the period October 16 thru February 28, protect site by one of the following options :

1) 2 tons per acre of well-anchored mulch straw and seed as soon as possible in the spring.

2) Use sod.

3) Seed with 60 lbs. per acre Kentucky 31 Tall Fescue and mulch with 2 tons per acre well anchored straw.

Mulching : Apply 1-1/2 to 2 tons per acre (70 to 90 lbs. per 1000 sq.ft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gal. per acre (5 gal. per 1000 sq.ft.) of emulsified asphalt on flat areas. On slopes, 8 ft. or higher, use 347 gal. per acre (8 gal. per 1000 sq.ft.) for anchoring.

Maintenance : Inspect all seeded areas and make needed repairs, replacements and reseedings.

SEQUENCE OF CONSTRUCTION

1. Acquire A Grading Permit.
2. Contact Howard County, Department Of Inspections And Permits (313-1810) Prior To Starting Date.
3. Install Erosion And Sediment Control Devices As Per Section 219 Of The Howard County Design Manual Vol IV.
4. Begin Construction Of Alpha Ridge Elevated Storage Tank And Other Appurtenances.
5. During Construction, And After Each Rainfall, The Contractor Shall Inspect And Provide The Necessary Maintenance On The Sediment And Erosion Control Structures.
6. Install Paving In Areas Shown On The Plans. Remove The Stabilized Construction Entrance Last.
7. Upon Permission From The Howard County Sediment And Erosion Control Inspector, Remove Sediment Control Devices.
8. Fine Grade All Disturbed Areas And Stabilize With Permanent Seeding.

ENGINEER'S CERTIFICATION

I certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard County Soil Conservation District.

[signature] Date: 12-27-95

AS BUILT

APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

[signature] 12/28/95
DIRECTOR DATE

[signature] 12/27/95
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

[signature] 12/28/95
CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH TC DATE

Reviewed For Howard County S.C.D and meets technical requirements.
[signature] Date: 12/28/95
NATURAL RESOURCES CONSERVATION SERVICE

This development plan is approved for soil erosion and sediment control by The Howard County Soil Conservation District.
Approved: [signature] Date: 12/28/95
HOWARD COUNTY S.C.D

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

[signature] 12/26/95 DIRECTOR OF PUBLIC WORKS DATE
[signature] 12/26/95 CHIEF, BUREAU OF ENGINEERING DATE
[signature] 12/26/95 CHIEF, BUREAU OF UTILITIES DATE
[signature] 12-26-95 CHIEF, WATER AND SEWER DESIGN DIVISION DATE

RK&K
RUMMEL, KLEPPER & KAHL
CONSULTING ENGINEERS
81 MOSHER ST.
BALTIMORE, MARYLAND 21217

DES: CJR
DRN: DAM
CHK: JRK
DATE: 11/30/95

BY	NO.	REVISION	DATE

ACCESS ROAD
PROFILE AND DETAIL SHEET

600' SCALE MAP NO. 16 BLOCK NO. 2

ALPHA RIDGE ELEVATED STORAGE TANK
CAPITAL PROJECT W-8203
CONTRACT NO. 44-3481
ELECTION DISTRICT NO. 3
HOWARD COUNTY, MARYLAND

DWG. NO. C-2
SCALE AS SHOWN
SHEET 3 OF 7

SDP-96-60 3/3

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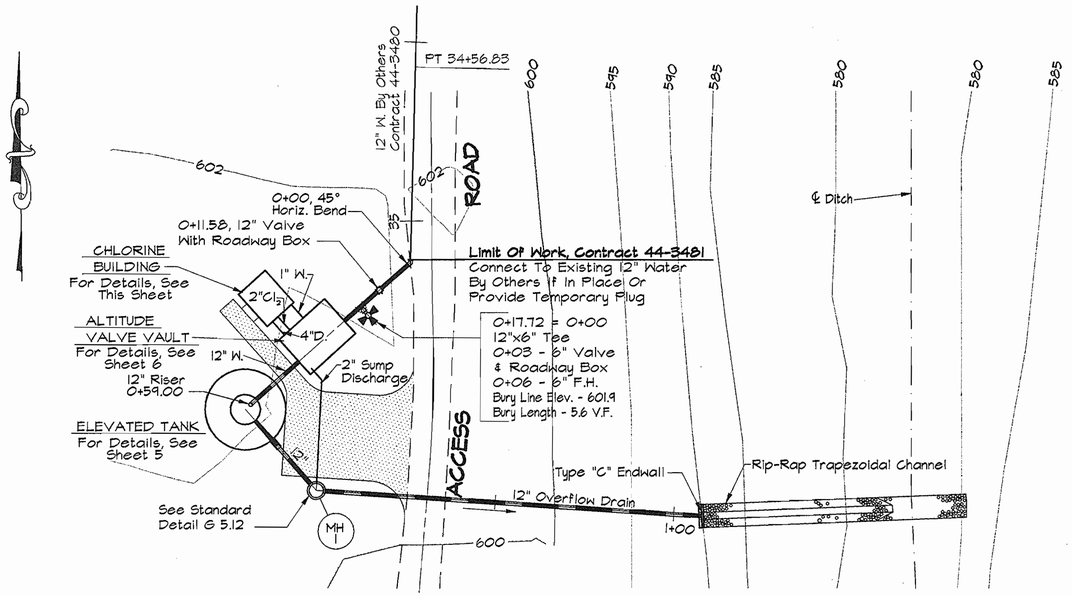
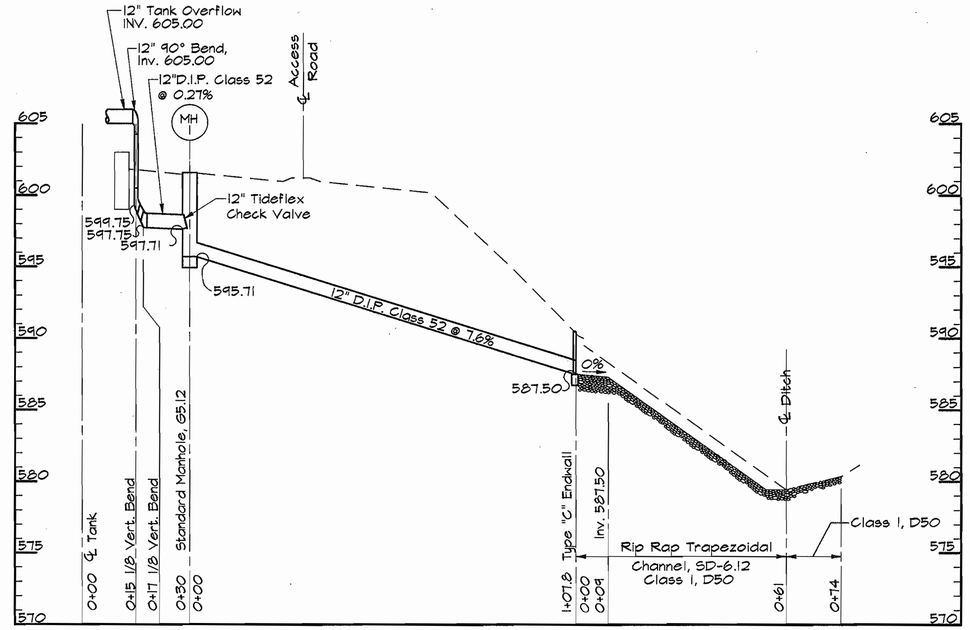
STORAGE TNK.



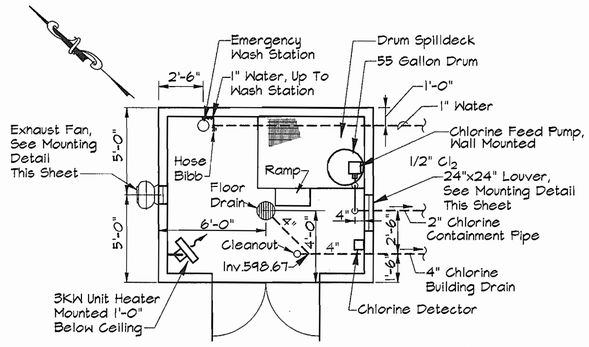
PLAN

Scale: 1"=20'



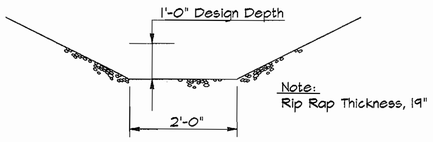
PROFILE - 12" OVERFLOW DRAIN

Horiz. 1"=20'
Vert. 1"=5'



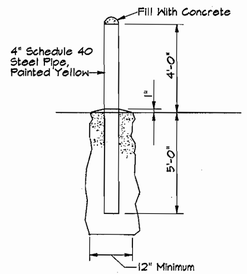
CHLORINE BUILDING PLAN

No Scale



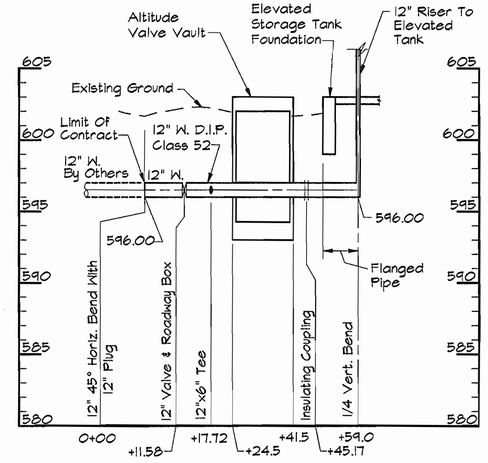
DETAIL - RIP RAP CHANNEL

No Scale



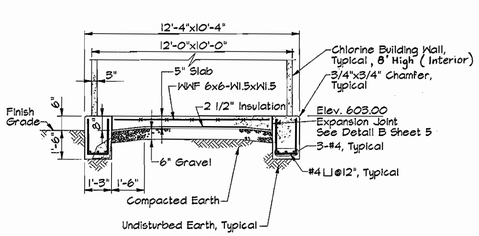
DETAIL - BOLLARD

No Scale



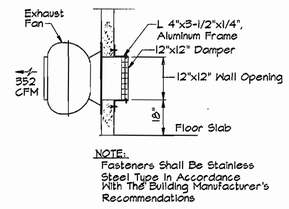
PROFILE - 12" WATER

Scale: Horiz. 1"=20'
Vert. 1"=5'



DETAIL - CHLORINE BUILDING FOUNDATION

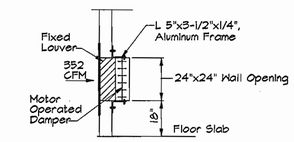
No Scale



NOTE:
Fasteners Shall Be Stainless Steel Type In Accordance With The Building Manufacturer's Recommendations

FAN MOUNTING DETAIL

No Scale



NOTE:
Fasteners Shall Be Stainless Steel Type In Accordance With The Building Manufacturer's Recommendations

LOUVER MOUNTING DETAIL

No Scale

AS BUILT

STORAGE TNK.

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12/22/1995 14:42

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS — DATE 12/26/95
CHIEF, BUREAU OF ENGINEERING — DATE 12/26/95
CHIEF, BUREAU OF UTILITIES — DATE 12/26/95
CHIEF, WATER AND SEWER DESIGN DIVISION — DATE 12-26-95

RK&K
RUMMEL, KLEPPER & KAHL
CONSULTING ENGINEERS
81 MOSHER ST.
BALTIMORE, MARYLAND 21217

STATE OF MARYLAND — ROBERT JAMES KAHL — No. 10902 — PROFESSIONAL ENGINEER

DES: SRK					
DRN: MJS					
CHK: SRK					
DATE: 12/95	BY	NO.	REVISION	DATE	

WATER MAIN AND OVERFLOW DRAIN PLAN AND PROFILES AND CHLORINE BUILDING

600' SCALE MAP NO. 16 BLOCK NO. 2

ALPHA RIDGE ELEVATED STORAGE TANK
CAPITAL PROJECT W-8203
CONTRACT NO. 44-3481
ELECTION DISTRICT NO. 3
HOWARD COUNTY, MARYLAND

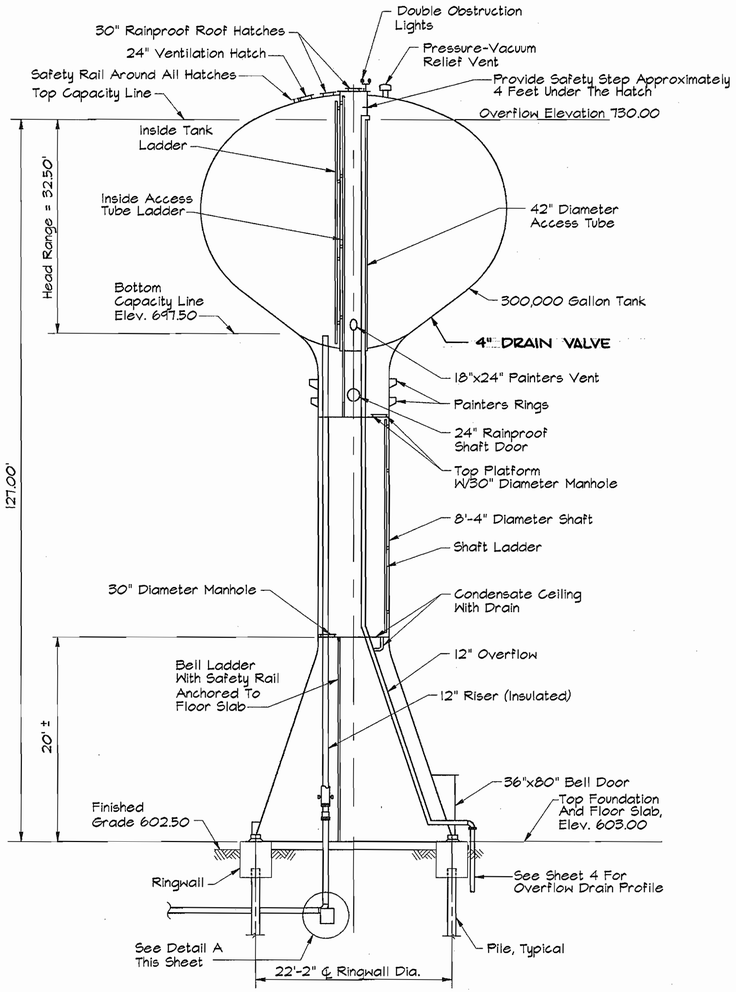
DWG. NO. C-3
SCALE AS SHOWN
SHEET 4 OF 7

PILE TIP DATA			
DESIGN DATA		ACTUAL FIELD DATA*	
MINIMUM TIP ELEVATION	ESTIMATED TIP ELEVATION	AVERAGE ACTUAL MINIMUM TIP ELEVATION	AVERAGE ACTUAL MAXIMUM TIP ELEVATION
553.00	548.00		

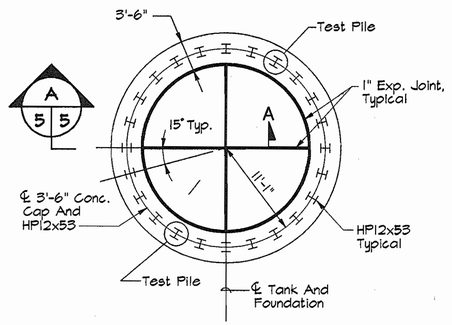
*To Be Supplied By Contractor As Constructed

PILE TIP DATA*
PILE SIZE AND TYPE:
ACTUAL BEARING OBTAINED:
HAMMER TYPE:
AVERAGE ACTUAL BLOWS/FT.:
PILE HAMMER ENERGY:
SPECIAL DRIVING CONDITIONS AND COMMENTS:

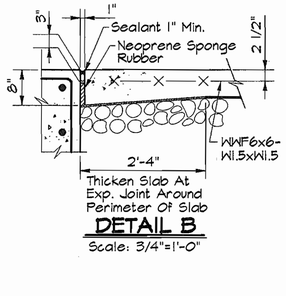
NOTES:
1. The Design Bearing Value Of The HP12x53 Piling Is 75 Tons. The Minimum Safe Bearing Value To Which The HP12x53 Piling Is To Be Driven Is 90 Tons. The Minimum Penetration Of The H12x53 Piling Shall Be To Elevation 553.00 The Estimated Tip Elevation For The HP12x53 Piling Is 548.00.
2. Shop Plans Shall Show How Rebars Are To Be Tied As Well As How They Will Be Held In Place Above Piling While Pour Is Being Made.
3. The Minimum Safe Bearing Value And Minimum Penetration Shown On These Plans Must Be Achieved For Each Pile. If The Estimated Tip Elevation Is Not Reached Or Is Exceeded While Achieving The Minimum Safe Bearing Value And The Minimum Penetration, The Pile Will Be Considered Satisfactory.



TYPICAL TANK SECTION
No Scale

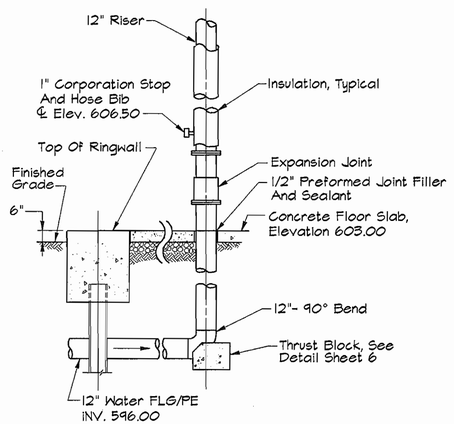


PLAN - TANK FOUNDATION
Scale: 1/8"=1'-0"

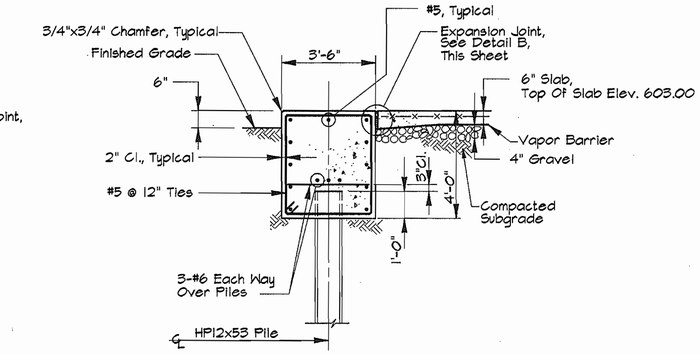


DETAIL B
Scale: 3/4"=1'-0"

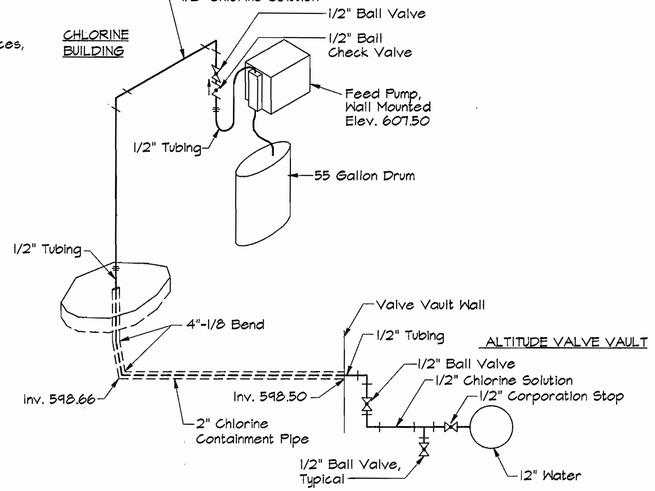
NOTES:
1. All Concrete Work Shall Conform With The Requirements Of The American Concrete Institute A.C.I. 318-89.
2. All Concrete Unless Otherwise Shall Have A Minimum Ultimate Compressive Strength Of 3,500 P.S.I. After 28 Days.
3. Reinforcing Steel Shall Be Deformed Bars Of Intermediate Grade New Billet Steel Conforming To Current Requirements Of A.S.T.M. A-615 Grade 60. Design Stress 24,000 P.S.I. Lap Bars, 40 Diameter Unless Otherwise Noted.
4. All Fill For Masonry Walls Shall Be Concrete Grout Conforming To A.S.T.M. C-476. Grouting Shall Be Placed In 5'-0" Maximum Lifts.
5. Excavations Shall Be Kept Free Of Water. No Concrete Shall Be Placed In Water.
6. Loadings (In Accordance With ANSI/AWWA D100-84)
   Floor Live Load - 300 lb/sq ft
   Snow Load - 25 lb/sq ft
   Wind Load - Corresponding To Velocity Of 100 mph 18 lb/sq ft On Projected Areas Of Cylindrical Surfaces, And 15 lb/sq ft On Projected Areas Of Conical And Double Curved Plate Surfaces.
   Assumed Soil Bearing Pressure - Pile Foundation Provided. See Details This Sheet.



DETAIL A
No Scale



SECTION A 5 5
Scale: 3/8"=1'-0"



CHLORINE FEED SYSTEM DIAGRAM
No Scale

AS BUILT

STORAGE TNK.

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12/22/1995 14:44

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS — DATE 12/26/95
CHIEF, BUREAU OF ENGINEERING — DATE 12/26/95
CHIEF, BUREAU OF UTILITIES — DATE 12/26/95
CHIEF, WATER AND SEWER DESIGN DIVISION — DATE 12-26-95

RK&K
RUMMEL, KLEPPER & KAHL
CONSULTING ENGINEERS
81 MOSHER ST.
BALTIMORE, MARYLAND 21217

STATE OF MARYLAND — JAMES S. RUMMEL — No. 7880 — PROFESSIONAL ENGINEER

DES: BB				
DRN: SJR				
CHK: SRK				
DATE: 12/95	BY	NO.	REVISION	DATE

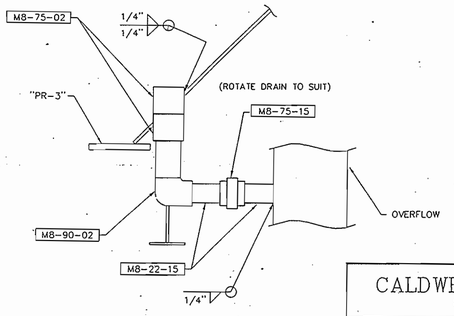
STRUCTURAL AND MECHANICAL
ELEVATED TANK, FOUNDATION AND
MISCELLANEOUS DETAILS

600' SCALE MAP NO. 16 BLOCK NO. 2

ALPHA RIDGE ELEVATED STORAGE TANK
CAPITAL PROJECT W-8203
CONTRACT NO. 44-3481
ELECTION DISTRICT NO. 3
HOWARD COUNTY, MARYLAND

DWG. NO. SM-1
SCALE AS SHOWN
SHEET 5 OF 7

BILL OF MATERIAL				
SUB-ASSY NO	PART NO	QTY	DESCRIPTION	MAT'L. REQ'D.
M8-DV-02		1	2" NON-FREEZE DRAIN VALVE	
	M8-75-02	2	COUPLING	2" 3000# THRD. STEEL
	M8-90-02	1	DRAIN VALVE	2" NON-FREEZING WATER DRAW-OFF VALVE
	M8-22-15	2	PIPE NIPPLE	1 1/2" x 8" LG.
	M8-75-15	1	PIPE UNION	FOR 1 1/2" PIPE



NOTE: WELDS MAY BE SHOP OR FIELD

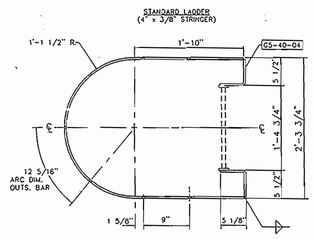
CALDWELL TANKS, INC.
LOUISVILLE, KY.

TITLE: 4" NON-FREEZE DRAIN VALVE

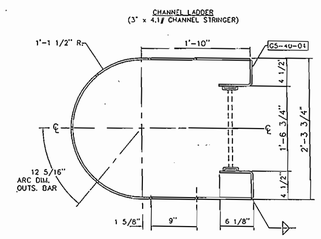
DRAWING NO.: M8

BILL OF MATERIAL					
SUB ASS'Y NO.	PART NO.	QUANTITY	DESCRIPTION	MATERIAL REQ'D.	WEIGHT
G6-CR-01		1	BOTTOM CAGE RING		
	G6-40-01	1	CAGE RING	4" x 3/8" BAR x 7'-3" LG.	
	G5-40-04	2	CAGE RING CLIP (STOCK PART)	4" x 3/8" BAR x 9 1/2" (BENT)	

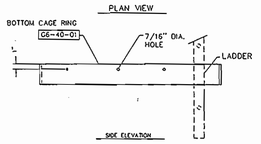
STANDARD LADDER
(2" x 3/8" STRINGER)



CHANNEL LADDER
(3" x 4.1# CHANNEL STRINGER)



PLAN VIEW



SIDE ELEVATION

NOTES:
ALL WELDS SHALL BE 3/16" FULL FILLET CONTINUOUS UNLESS OTHERWISE DESIGNATED.

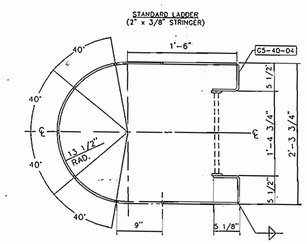
CALDWELL TANKS, INC.
LOUISVILLE, KY.

TITLE: LOWER CAGE RING

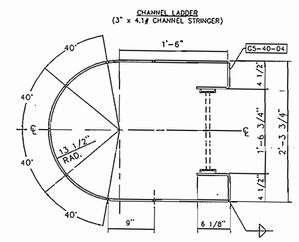
DRAWING NO.: G6

BILL OF MATERIAL					
SUB ASS'Y NO.	PART NO.	QUANTITY	DESCRIPTION	MATERIAL REQ'D.	WEIGHT
G5-CR-01		1	INTERMEDIATE CAGE RING		
	G5-40-01	1	CAGE RING	4" x 3/8" BAR x 6'-7" LG.	
	G5-40-04	2	CAGE RING CLIP (STOCK PART)	4" x 3/8" BAR x 9 1/2" (BENT)	

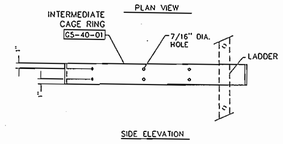
STANDARD LADDER
(2" x 3/8" STRINGER)



CHANNEL LADDER
(3" x 4.1# CHANNEL STRINGER)



PLAN VIEW



SIDE ELEVATION

NOTES:
ALL WELDS SHALL BE 3/16" FULL FILLET CONTINUOUS UNLESS OTHERWISE DESIGNATED.

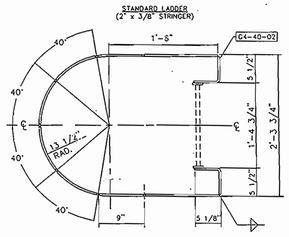
CALDWELL TANKS, INC.
LOUISVILLE, KY.

TITLE: INTERMEDIATE CAGE RING

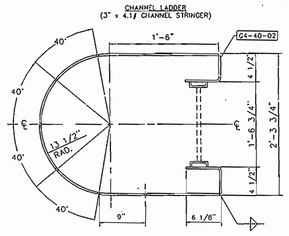
DRAWING NO.: G5

BILL OF MATERIAL					
SUB ASS'Y NO.	PART NO.	QUANTITY	DESCRIPTION	MATERIAL REQ'D.	WEIGHT
G4-CR-01		1	INTERMEDIATE CAGE RING		
	G4-40-01	1	CAGE RING	2" x 3/8" BAR x 6'-7" LG.	
	G4-40-02	2	CAGE RING CLIP (STOCK PART)	2" x 3/8" BAR x 9 1/2" (BENT)	

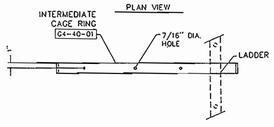
STANDARD LADDER
(2" x 3/8" STRINGER)



CHANNEL LADDER
(3" x 4.1# CHANNEL STRINGER)



PLAN VIEW



SIDE ELEVATION

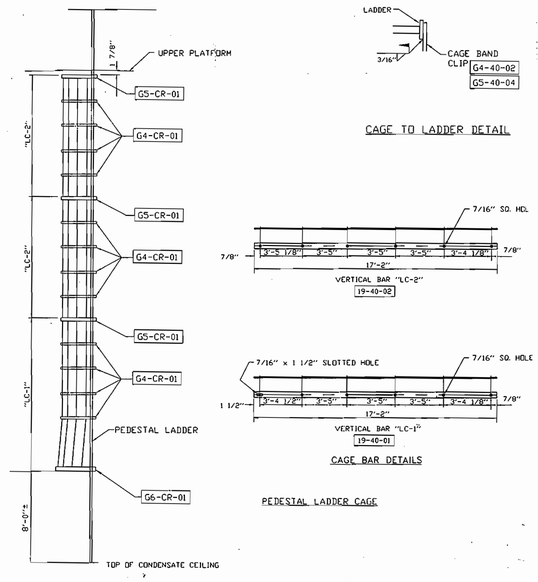
NOTES:
ALL WELDS SHALL BE 3/16" FULL FILLET CONTINUOUS UNLESS OTHERWISE DESIGNATED.

CALDWELL TANKS, INC.
LOUISVILLE, KY.

TITLE: INTERMEDIATE CAGE RING

DRAWING NO.: G4

BILL OF MATERIAL			
SUB-ASSY NO	PART NO	QTY	DESCRIPTION / MAT'L. REQ'D. / PC WT LBS
THE FOLLOWING ITEMS ARE SHIPPED LOOSE			
	19-40-01	7	CAGE BAR "LC-1" — BAR 1 1/2" x 1/4" x 17'-2" LG.
	19-40-02	14	CAGE BAR "LC-2" — BAR 1 1/2" x 1/4" x 17'-2" LG.
	G4-CR-01	12	INTERMEDIATE CAGE RING
	G6-CR-01	1	BOTTOM CAGE RING
	G5-CR-01	3	TOP CAGE RING
	19-86-01	135	CARRIAGE BOLTS — 3/8" x 1" LG.

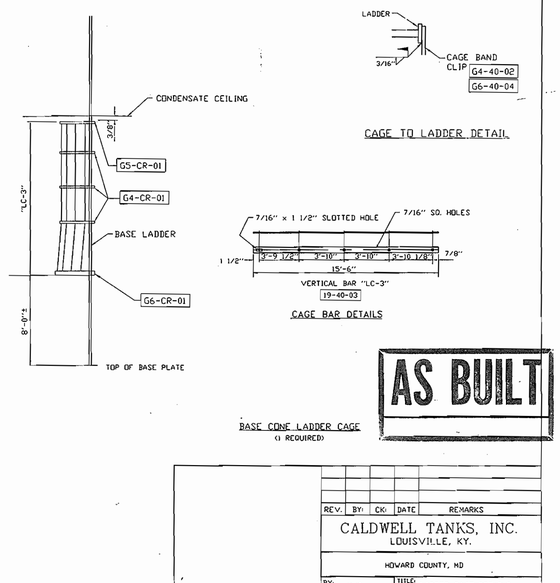


CAGE TO LADDER DETAIL

CAGE BAR DETAILS

PEDESTAL LADDER CAGE

BILL OF MATERIAL			
SUB-ASSY NO	PART NO	QTY	DESCRIPTION / MAT'L. REQ'D. / PC WT LBS
THE FOLLOWING ITEMS ARE SHIPPED LOOSE			
	19-40-03	7	CAGE BAR "LC-3" — BAR 1 1/2" x 1/4" x 15'-6" LG.
	G4-CR-01	3	INTERMEDIATE CAGE RING
	G6-CR-01	1	BOTTOM CAGE RING
	G5-CR-01	1	TOP CAGE RING
	19-86-01	40	CARRIAGE BOLTS — 3/8" x 1" LG.



CAGE TO LADDER DETAIL

CAGE BAR DETAILS

BASE CONE LADDER CAGE
(1 REQUIRED)

AS BUILT

REV.	BY:	CK:	DATE	REMARKS

CALDWELL TANKS, INC.
LOUISVILLE, KY.

HOWARD COUNTY, MD

BY: KJG

DATE: 2-97

TITLE: LADDER CAGE DETAILS

DRAWING NO: E-31490 19

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS — DATE
CHIEF, BUREAU OF ENGINEERING — DATE
CHIEF, BUREAU OF UTILITIES — DATE
CHIEF, WATER AND SEWER DESIGN DIVISION — DATE

RK&K
RUMMEL, KLEPPER & KAHL
CONSULTING ENGINEERS
81 MOSHER ST.
BALTIMORE, MARYLAND 21217

DES:					
DRN:					
CHK:					
DATE:	BY	NO.	REVISION	DATE	

AS BUILT INSERT

600' SCALE MAP NO. _____ BLOCK NO. _____

ALPHA RIDGE ELEVATED STORAGE TANK
CAPITAL PROJECT W-8203
CONTRACT NO. 44-3481
ELECTION DISTRICT NO. 3
HOWARD COUNTY, MARYLAND

DWG. NO.

SCALE AS SHOWN

SHEET 5A OF 7

STORAGE TNK.

N:\SDS\PROJ\CM9473\TANK ALP-4-06.DWG
12/22/1995 14:47

DWG. NO.	SM-2
SCALE	AS SHOWN
SHEET	6 OF 7

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS 12/26/95 DATE
CHIEF, BUREAU OF ENGINEERING 12/26/95 DATE
CHIEF, BUREAU OF UTILITIES 12/26/95 DATE
CHIEF, WATER AND SEWER DESIGN DIVISION 12-26-95 DATE

RK &K
RUMMEL, KLEPPER & KAHL
CONSULTING ENGINEERS
81 MOSHER ST.
BALTIMORE, MARYLAND 21217

STATE OF MARYLAND — PROFESSIONAL ENGINEER

DES:	SRK
DRN:	SJR
CHK:	SRK
DATE:	12/95

BY	NO.	REVISION	DATE

STRUCTURAL AND MECHANICAL
ALTITUDE VALVE VAULT AND
MISCELLANEOUS DETAILS

600' SCALE MAP NO. 16 BLOCK NO. 2

ALPHA RIDGE ELEVATED STORAGE TANK
CAPITAL PROJECT W-8203
CONTRACT NO. 44-3481
ELECTION DISTRICT NO. 3
HOWARD COUNTY, MARYLAND

SCHEDULE OF PANEL RP

125 AMP BUS CAP.
125 AMP MAIN BRKR.

1 PHASE 3 WIRE 240/120 VOLTS

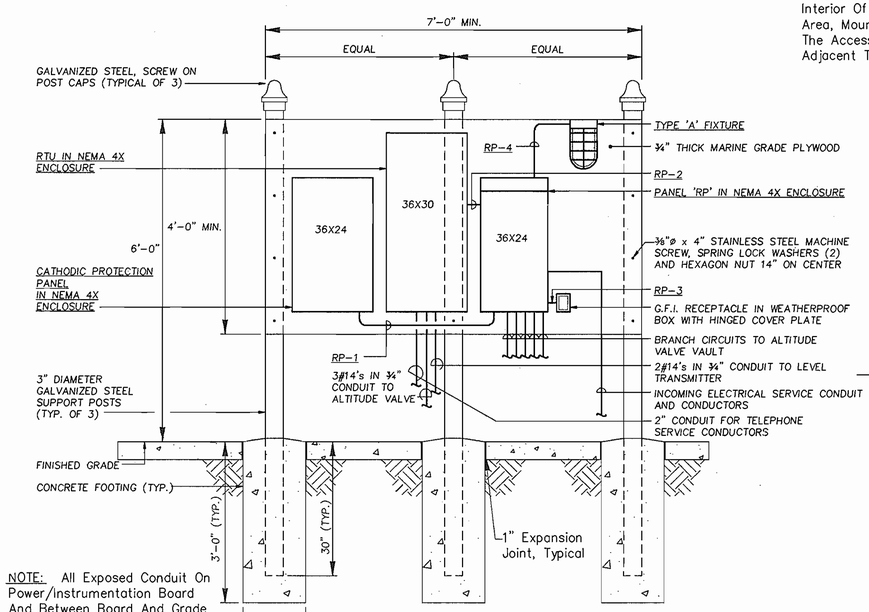
CKT. No.	FOR	WIRE No.	WIRE SIZE	RACEWAY TYPE	RACEWAY SIZE	BREAKERS POLE	BREAKERS AMP	BREAKERS VOLT	CKT. No.	FOR	WIRE No.	WIRE SIZE	RACEWAY TYPE	RACEWAY SIZE	BREAKERS POLE	BREAKERS AMP	BREAKERS VOLT
1	CATHODIC PROTECTION	3	12	C	¾"	1	15	120	2	RTU	3	12	C	¾"	1	15	120
3	PANEL RECEPTACLE	3	12	C	¾"	1	15	120	4*	PANEL LIGHT	3	12	C	¾"	1	15	120
5	VALVE VAULT RECEPTACLES	3	12	C	¾"	1	15	120	6	UNIT HEATER VALVE VAULT	3	12	C	¾"	2	15	240
7	VALVE VAULT LIGHTS	3	12	C	¾"	1	15	120	--	--	--	--	--	--	--	--	--
9	EXHAUST FAN – VALVE VAULT	3	12	C	¾"	1	20	120	8	LEVEL TRANSMITTER	3	12	C	¾"	1	15	120
11	DEHUMIDIFIER	3	12	C	¾"	1	15	120	10	SUMP PUMP	3	12	C	¾"	1	15	120
13	RECTIFIER	3	12	C	¾"	1	20	120	12	CHLORINE BLDG LIGHT & REC.	3	12	C	¾"	1	15	120
15	UNIT HEATER CHLORINE ROOM	3	12	C	¾"	2	15	240	14	CHLORINE PUMP	3	12	C	¾"	1	15	120
--	--	--	--	--	--	--	--	--	16	CHLORINE BLDG EXHAUST FAN	3	12	C	¾"	1	20	120
17	CHLORINE DETECTOR	3	12	C	¾"	1	15	120	18	ALTITUDE SOLENOID VALVE	3	12	C	¾"	1	15	120
19	INTERIOR LIGHTS – TANK	3	12	C	¾"	1	15	120	20	CABINATE SPACE HEATERS	3	12	C	¾"	1	15	120
21	DOUBLE OBSTRUCTION LIGHTS	3	12	C	¾"	1	15	120	22	ALTITUDE VALVE LIMIT SWITCH	3	12	C	¾"	1	15	120
23	SPARE	--	--	--	--	1	--	--	24	SPARE	--	--	--	--	--	15	120

NOTE: * BREAKER SHALL BE U.L. LISTED SWITCHING DUTY TYPE (SWD).

LIGHT FIXTURE SCHEDULE

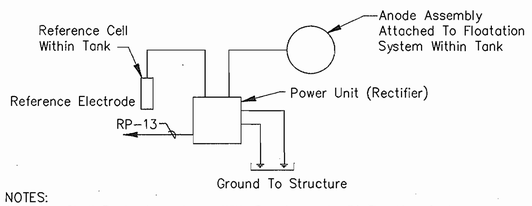
TYPE	DESCRIPTION	VOLTAGE	LAMP	MOUNTING	MANUFACTURER
A	VAPORTIGHT INCANDESCENT FIXTURE WITH DIE-CAST ALUMINUM HOUSING, GLASS GLOBE AND CAST ALUMINUM GUARD	120	100 WATT A-19	SURFACE AS NOTED	STONCO CAT. No. VWXL11GC OR APPROVED EQUAL
B	4' VAPORTIGHT FLUORESCENT FIXTURE WITH CORROSION RESISTANT PORCELAIN ENAMEL FINISH AND CLEAR ACRYLIC LENS	120	2-F40	CEILING	BENJAMIN CAT. No. FV-2324 OR APPROVED EQUAL
C	SUITABLE FOR WET LOCATIONS, DIE-CAST ALUMINUM HOUSING BASE WITH ONE-PIECE POLYCARBONATE FRONT HOUSING	120	70 WATT H.P.S.	SURFACE AS NOTED	GENERAL ELECTRIC WALLIGHTER 70 CAT. NO. WL07S1 OR APPROVED EQUAL

NOTE: ALL TANK INTERIOR LIGHTING FIXTURES ARE TYPE "A"



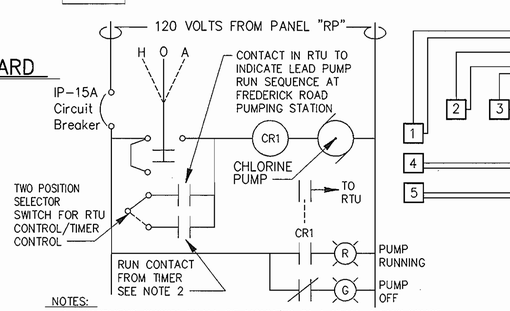
NOTE: All Exposed Conduit On Power/Instrumentation Board And Between Board And Grade Shall Be Rigid Galvanized Steel.

FRONT ELEVATION – POWER/INSTRUMENTATION BOARD
No Scale



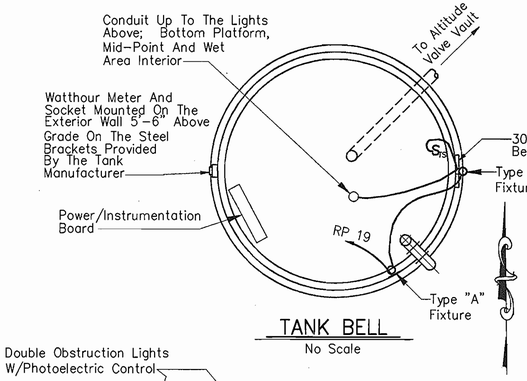
NOTES:
1. Wiring Shall Be In Accordance With Requirements Of The Manufacturer
2. All Wiring Outside Tank Bowl Shall Be In 3/4" Galvanized Rigid Steel Conduit
3. Provide Additional Reference Electrodes And Associated Wiring As Necessary

ELECTRICAL SCHEMATIC – CATHODIC PROTECTION SYSTEM
No Scale

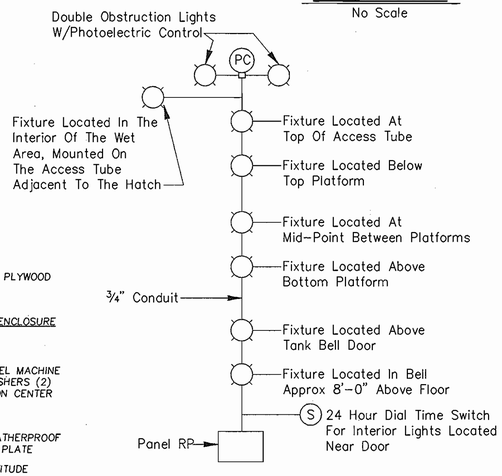


NOTES:
1. EQUIPMENT SHOWN SHALL BE MOUNTED IN A NEMA 4 ENCLOSURE
2. DIGITAL PROGRAMMABLE 7 DAY TIMER, DAYTON PARAGON EC71D SERIES OR APPROVED EQUAL. MOUNT IN CONTROL PANEL.
3. PUMP RUN CONTACT SHALL BE SENT TO RTU FOR TRANSMISSION OF RUN STATUS TO FREDERICK ROAD PUMPING STATION.

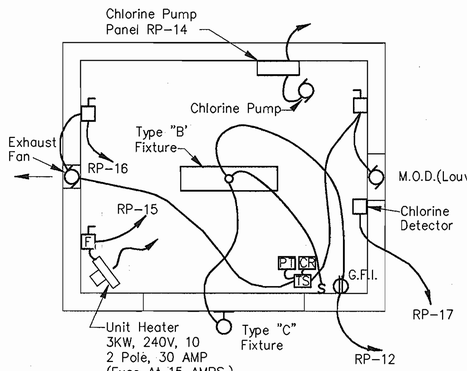
CHLORINE PUMP CONTROL WIRING SCHEMATIC
No Scale



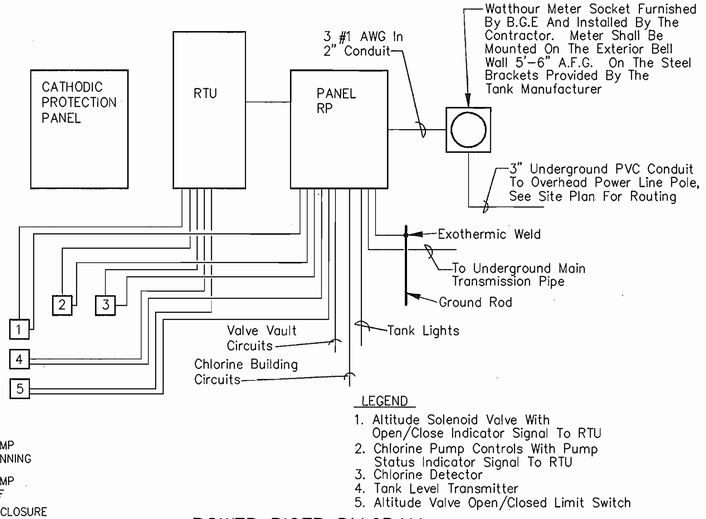
TANK BELL
No Scale



ELECTRICAL SCHEMATIC – LIGHTS
No Scale

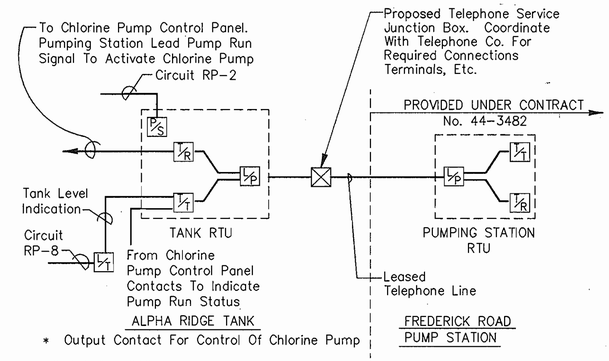


CHLORINE BUILDING PLAN
No Scale



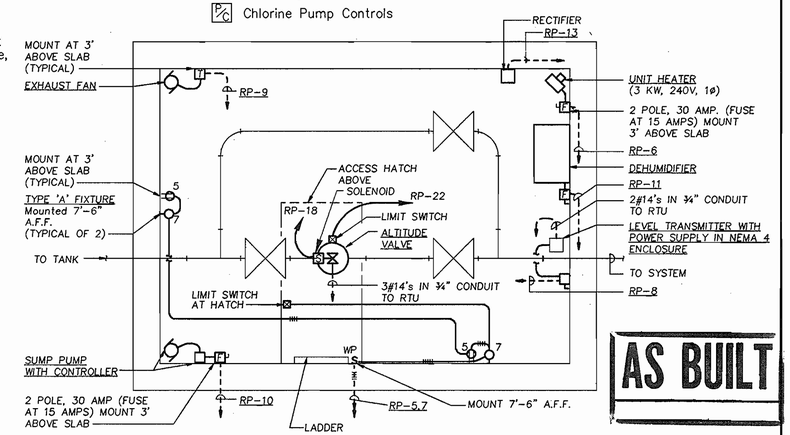
LEGEND
1. Altitude Solenoid Valve With Open/Close Indicator Signal To RTU
2. Chlorine Pump Controls With Pump Status Indicator Signal To RTU
3. Chlorine Detector
4. Tank Level Transmitter
5. Altitude Valve Open/Closed Limit Switch

POWER RISER DIAGRAM
No Scale



TELEMETRY LEGEND
- Level Transmitter
- Telemetry Transmitter
- Telemetry Receiver
- Power Supply
- Line Surge Protector
- Chlorine Pump Controls

TELEMETRY DIAGRAM TANK LEVEL TO FREDERICK ROAD PUMP STATION
No Scale



PLAN – ALTITUDE VALVE VAULT
SCALE: ⅜" = 1'-0"

AS BUILT

ABBREVIATIONS

A.F.F.	ABOVE FINISHED FLOOR
BRKR.	BREAKER
CAP.	CAPACITY
CKT.	CIRCUIT
C.	CONDUIT
DIA., ø	DIAMETER
G.F.I.	GROUND FAULT INTERRUPTER
H.P.S.	HIGH PRESSURE SODIUM
MCM	THOUSAND CIRCULAR MILS
MIN.	MINIMUM
M.O.D.	MOTOR OPERATED DAMPER
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
No.,#	NUMBER
PC	PHOTOELECTRIC CONTROL
PVC	POLYVINYL CHLORIDE
RTU	REMOTE TERMINAL UNIT
TYP.	TYPICAL
W.P.	WEATHERPROOF

ELECTRICAL LEGEND

- HOMERUN TO PANELBOARD UNLESS OTHERWISE NOTED. NUMBER OF ARROWS INDICATE NUMBER OF CIRCUITS. HASH MARKS INDICATE NUMBER OF CONDUCTORS IF MORE THAN 3. UNLESS OTHERWISE NOTED, SEE PANELBOARD SCHEDULE FOR SIZES OF CONDUCTORS AND CONDUIT.
- CONDUIT UNDERGROUND
- ELECTRICAL PANELBOARD.
- SURFACE MOUNTED CONDUIT
- SAFETY DISCONNECT SWITCH IN NEMA 4 ENCLOSURE – MOUNTED 5'-6" A.F.F.
- F — FUSIBLE DISCONNECT SWITCH IN NEMA 4 ENCLOSURE. SIZE AS NOTED. MOUNT AS NOTED.
- G.F.I. TYPE RECEPTACLE IN WEATHERPROOF ENCLOSURE WITH COVER PLATE. 125 VOLT, 3 WIRE, 20 AMP. DUPLEX WITH NEMA 5-20R CONFIGURATION. MOUNT AS NOTED.
- SPECIAL DEVICE OR EQUIPMENT AS NOTED.
- TS — THERMAL MANUAL MOTOR STARTER SWITCH IN NEMA 4 ENCLOSURE. MOUNT 4'-6" A.F.F.
- CEILING MOUNTED INCANDESCENT LIGHTING FIXTURE
- SURFACE MOUNTED INCANDESCENT LIGHT FIXTURE. MOUNT AS NOTED.
- MOTOR.
- S_{TS} — SINGLE POLE, TIME SWITCH IN WEATHERPROOF ENCLOSURE. MOUNT AS NOTED. LIGHTING SWITCHES SHALL BE SPRING-WOUND MANUALLY SET WITH 0-24 HOUR TIMING RANGE AS MANUFACTURED BY DAYTON PARAGON EC71D SERIES OR EQUAL.
- S — SINGLE POLE SWITCH IN WEATHERPROOF ENCLOSURE WITH HINGED COVER PLATE. MOUNT AS NOTED.
- B.G.E. POLE
- CR — ENCLOSED CONTROL RELAY
- PT — PERCENTAGE TIMER – M.H. 4'-6"

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12/22/1995 15:0(

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS — DATE 12/26/95
CHIEF, BUREAU OF ENGINEERING — DATE 12/26/95
CHIEF, BUREAU OF UTILITIES — DATE 12/26/95
CHIEF, WATER AND SEWER DESIGN DIVISION — DATE 12-26-95

RK&K
RUMMEL, KLEPPER & KAHL
CONSULTING ENGINEERS
81 MOSHER ST.
BALTIMORE, MARYLAND 21217

STATE OF MARYLAND — JAMES R. KAHL — No. 12858 — PROFESSIONAL ENGINEER

DES: ARP
DRN: MJS
CHK: SRK
DATE: 12/95

BY	NO.	REVISION	DATE

ELECTRICAL

600' SCALE MAP NO. 16 BLOCK NO. 2

ALPHA RIDGE ELEVATED STORAGE TANK
CAPITAL PROJECT W-8203
CONTRACT NO. 44-3481
ELECTION DISTRICT NO. 3
HOWARD COUNTY, MARYLAND

DWG. NO. E-1
SCALE AS SHOWN
SHEET 7 OF 7