

NOTE: All Areas Disturbed During Construction That are Not Paved or Replaced With Crusher Run Stone Shall Be Sodded By The Contractor Upon Completion of The Work in Accordance with Section 5.01 of the Standard Specification.

Contractor Shall Extend Brick Wall Up to Pumping Station Foundation. 1/2" Expansion Joint Material Shall Be Placed Between Brick Wall Foundation and Existing Pumping Station Foundation.

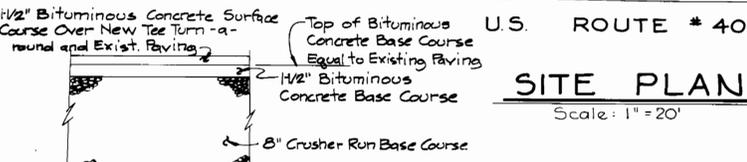
Ex. Paving Within Limits of Fencing And Brick Wall Shall Be Removed and Replaced With Md. S.H.A. No. 6 Stone and Brought to Existing Grade

7'-0" High Chain Link Fence (See Std Detail Q8.01 and Q8.02 and 12" Opening Double Gate (See Std Detail Q8.03))

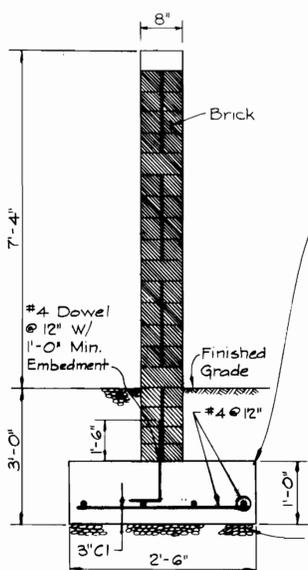
NOTE: Chesapeake & Potomac Telephone Co. and Balto. Gas & Electric Co. Utilities Located by Miss Utility. Locations Shown are Approximate.

LEGEND

Ex. Contour --- 380 ---
Prop. Contour --- 378 ---

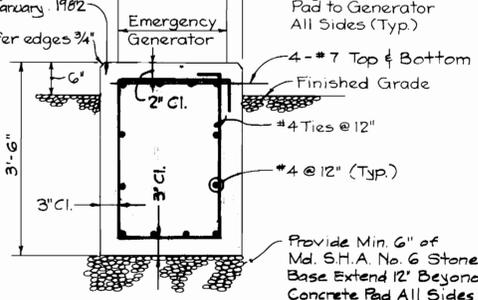


PAVING SECTION
Not to Scale

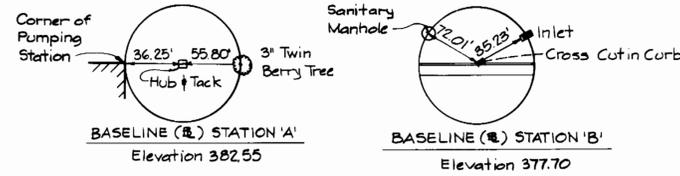


DETAIL BRICK WALL
Not to Scale

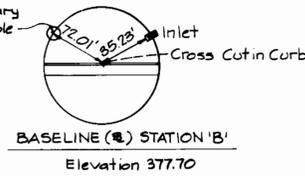
Concrete - Mix No. 3 and Reinforcing Shall Conform to Section 610, Maryland State Highway Administration "Specification for Construction and Materials", dtd. January, 1982



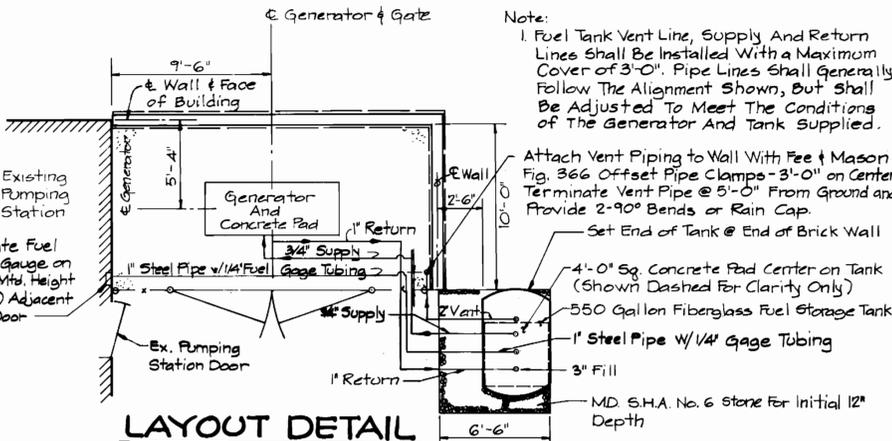
DETAIL GENERATOR PAD
Not to Scale



Corner of Pumping Station 36.25' 55.80' Hub & Tack 3" Twin Berry Tree



BASELINE (R.L.) STATION 'B' Elevation 377.70



LAYOUT DETAIL BRICK WALL - GENERATOR - FUEL TANK
Not to Scale

Note: 1. Fuel Tank Vent Line, Supply And Return Lines Shall Be Installed With a Maximum Cover of 3'-0". Pipe Lines Shall Generally Follow The Alignment Shown, But Shall Be Adjusted To Meet The Conditions of The Generator And Tank Supplied.

Attach Vent Piping to Wall With Tee & Mason Fig. 366 Offset Pipe Clamps - 3'-0" on Center. Terminate Vent Pipe @ 5'-0" From Ground and Provide 2-90° Bends or Rain Cap.

Set End of Tank @ End of Brick Wall

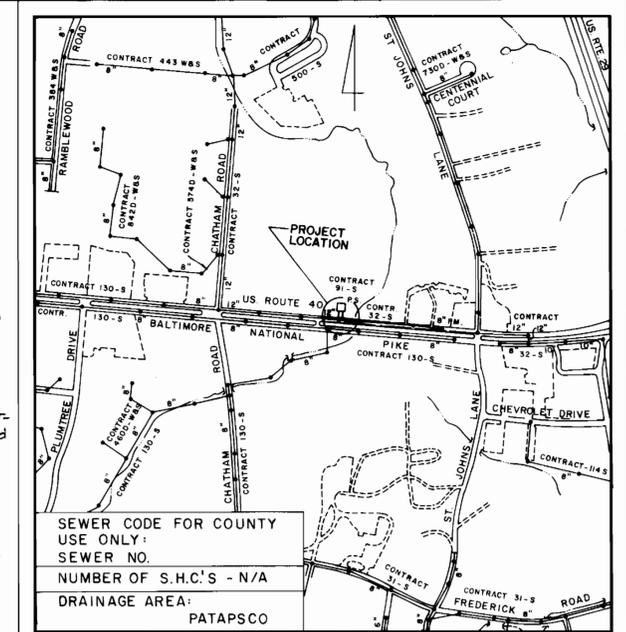
4'-0" Sq. Concrete Pad Center on Tank (Shown Dashed for Clarity Only)

550 Gallon Fiberglass Fuel Storage Tank

1" Steel Pipe W/ 1/4" Gage Tubing

3" Fill

MD. S.H.A. No. 6 Stone For Initial 12" Depth



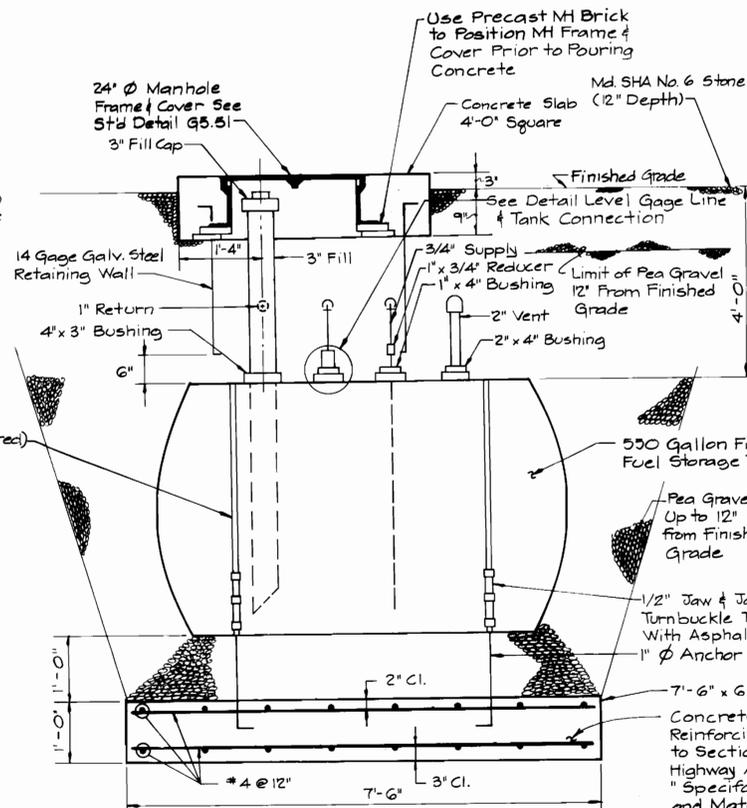
SEWER CODE FOR COUNTY USE ONLY:
SEWER NO.
NUMBER OF S.H.C.'S - N/A
DRAINAGE AREA: PATAPSCO

LOCATION PLAN
Scale: 1" = 600'

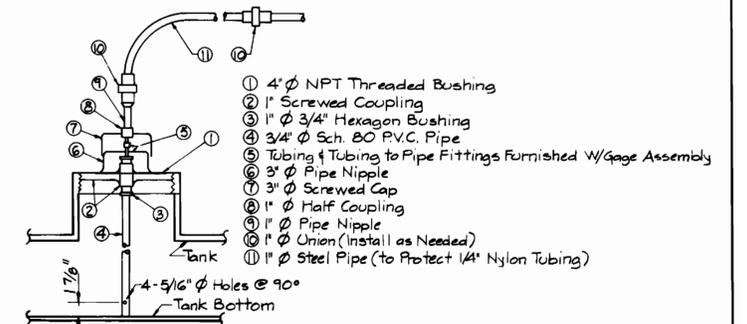
GENERAL NOTES

1. Approximate Location of Existing Mains are Shown. The Contractor shall take all Necessary Precautions to Protect Existing Mains and Services and Maintain Uninterrupted 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 Assumed.
4. All Pipe Elevations shown are Invert Elevations.
5. Clear all Utilities by a minimum of 6".
6. For Details not shown on the Drawings, and for Materials and Construction Methods, use Howard County Design Manual, Volume IV, Standard Specifications and Details for Construction. The Contractor shall have a copy of Volume IV on the Job.
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 dug shall be Verified by the Contractor to His Own Satisfaction. Any Damage to Existing Facilities Due to Contractor's Negligence Shall be Repaired at the Contractor's Expense.
8. Contractor shall notify the following Utilities or Agencies at least five (5) working days before starting Work shown on these plans:
State Highway Administration - 531-5533
Baltimore Gas & Electric Company - Contractor Services - 561-2585
Baltimore Gas & Electric Company - Underground Damage Control - 234-5621
Baltimore Gas & Electric Company - Trouble Shooting - 298-9013
"Miss Utility" - 1-559-0100
Colonial Pipeline Company - 795-1390
Bureau of Utilities Howard County Department of Public Works - *992-2366
9. Trees and Shrubs to be Protected from Damage to Maximum Extent. Trees and Shrubs within the Construction Strip are not to be Removed or Damaged by the Contractor.
10. Contractor shall remove Trees, Stumps and Roots along the Line of Excavation as directed by the Engineer. Payment for such Removal shall be included in the Lump Sum Price Bid.

NOTE: All Piping Associate With Fuel Storage Tank Shall Be Installed With A Minimum Cover Of 3'-0".



SECTION FUEL OIL STORAGE TANK
Scale: 3/4" = 1'-0"



DETAIL LEVEL GAGE LINE & TANK CONNECTION
No Scale

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

KIDDE CONSULTANTS, INC.
CONSULTING ENGINEERS
BALTIMORE, MARYLAND

DES: W.B.H.	
DRN: J.M.G.	
CHK: W.B.H.	
DATE: 8/26/85	
BY: NO.	REVISION

SITE PLAN
AND
DETAILS

ROUTE 40 WASTEWATER PUMPING STATION
CAPITAL PROJECT S-6113-S
CONTRACT NO. 10-1392
ELECTION DISTRICT NO. 2
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 1 OF 3

SEDIMENT CONTROL NOTES

1. A Minimum of 24 Hours notice must be given to the Howard County Office of Inspections and Permits prior to the start of any Construction (*992-2437).
 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 1983 Maryland Standards and Specifications for Soil Erosion and Sediment Control.
 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 greater than 3:1, b) 14 Days as to all other Disturbed or Graded Areas on the Project Site.
 4. All Sediment Traps/Basins shown must be fenced and warning signs posted around their Perimeter in accordance with Volume 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 1983 Maryland Standards and Specifications for Soil Erosion and Sediment Control for Permanent Seedings (Sec.51) sod (Sec.54), temporary seeding (Sec.50) and mulching (Sec.52). Temporary Stabilization with mulch alone 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	0.22 Acres ±
Area Disturbed	0.019 Acres
Area to be Roofed or Paved	0.005 Acres
Area to be Vegetatively Stabilized	0.10 Acres *
Total Cut	N/A Cu.Yards
Total Fill	N/A Cu.Yards

Offsite Waste/Borrow Area Location - Contractor To Supply
 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 DPW Sediment Control Inspector.
- * Variable depending on area Contractor disturbs.

DEVELOPER'S CERTIFICATION

"I/ We certify that all development and construction will be done according to this plan, and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of Natural Resources Approved Training Program for the Control of Sediment and Erosion before beginning the project."

William B. Ray Date: 9-10-85
 BUREAU OF ENGINEERING &
 DEPARTMENT OF PUBLIC WORKS

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

J. Owen McNeil Date: 8/30/85
 U.S. SOIL CONSERVATION SERVICE

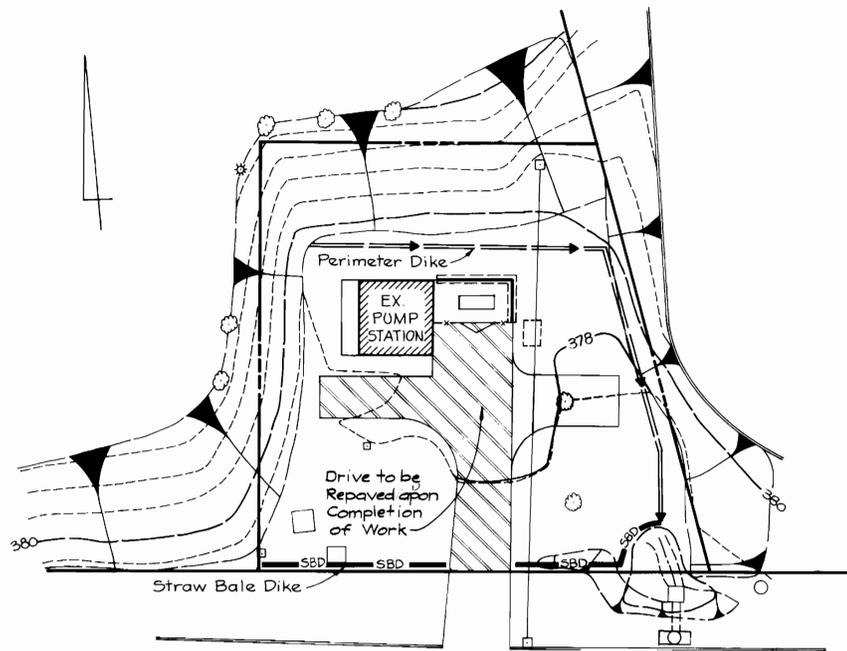
This development plan is approved for soil erosion and sediment control by The Howard County Soil Conservation District.

Approved: _____ Date: _____
 HOWARD COUNTY S.C.D.

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 site conditions and that it was prepared in accordance with the requirements of the Howard County Soil Conservation District.

William B. Ray Date: 9/12/85
 KIDDE CONSULTANTS INC.
 1020 CROMWELL BRIDGE ROAD
 TOWSON, MD. 21204



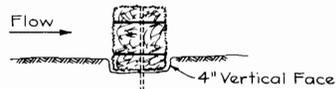
U.S. ROUTE # 40

SEDIMENT CONTROL PLAN

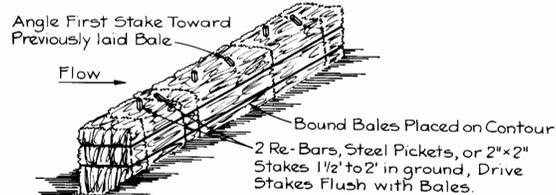
Scale: 1" = 20'

CONSTRUCTION SEQUENCE

1. Install Perimeter Dike & Straw Bale Dike Before Beginning Construction
2. Maintain Perimeter Dike & Straw Bale Dike During Entire Length of Construction Period
3. Remove Sediment Control Device Upon Completion of Work and Only Upon Obtaining Approval from Howard Co. Sediment Control Inspector



BEDDING DETAIL



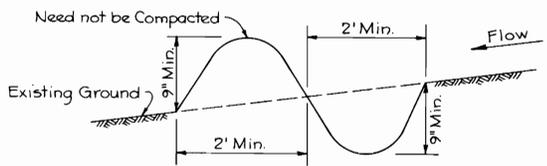
ANCHORING DETAIL

CONSTRUCTION SPECIFICATIONS

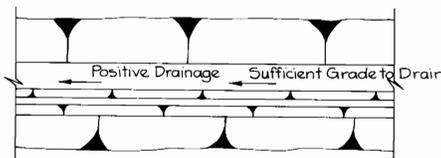
1. Bales shall be placed at the Toe of a Slope or on the Contour and in a Row with Ends tightly abutting the Adjacent Bales.
2. Each Bale shall be Embedded in the Soil a Minimum of (4) inches, and placed so the Bindings are Horizontal.
3. Bales shall be Securely Anchored in place by either Two Stakes or Re-Bars driven through the Bale. The first Stake in each Bale shall be driven toward the previously laid Bale at an angle to force the Bales together. Stakes shall be driven Flush with the Bale.
4. Inspection shall be Frequent and Repair Replacement shall be made promptly as needed.
5. Bales shall be Removed when they have Served Their Usefulness so as not to Block or Impede Storm Flow or Drainage.

STRAW BALE DIKE

Not to Scale



CROSS SECTION



PLAN VIEW

CONSTRUCTION SPECIFICATIONS

1. All Perimeter Dike/Swale shall have Uninterrupted Positive Grade to an Outlet.
2. Diverted Runoff from a Disturbed Area shall be conveyed to a Sediment Trapping Device.
3. Diverted Runoff from an Undisturbed Area shall outlet into an Undisturbed Stabilized Area at Non-Erosion Velocity.
4. The Swale shall be Excavated or Shaped to Line, Grade, and Cross Section as required to meet the Criteria Specified in the Standard.
5. Stabilization of the Area Disturbed by the Dike and Swale shall be done in Accordance with the Standard and Specification for Seed and Straw Mulch, and shall be done within 10 Days.
6. Periodic Inspection and Required Maintenance must be Provided after each Rain Event.

PERIMETER DIKE/SWALE

Not to Scale

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

Robert F. Neering 9-3-85
 DIRECTOR OF PUBLIC WORKS DATE

William B. Ray 9-3-85
 CHIEF, BUREAU OF ENGINEERING DATE

Paul J. Pappas 2-3-85

KIDDE CONSULTANTS, INC.
 CONSULTING ENGINEERS
 BALTIMORE, MARYLAND

DES: W.B.H.			
DRN: J.M.G.			
CHK: W.B.H.			
DATE: 8/26/85			
BY	NO.	REVISION	DATE

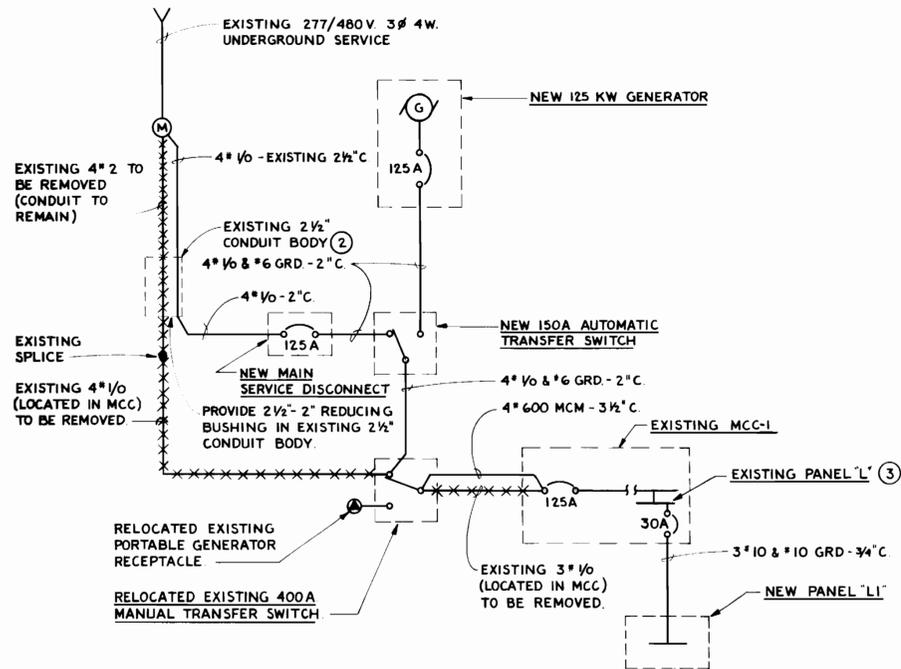
SEDIMENT CONTROL AND DETAILS

600' SCALE MAP NO. S-14 BLOCK NO. 5

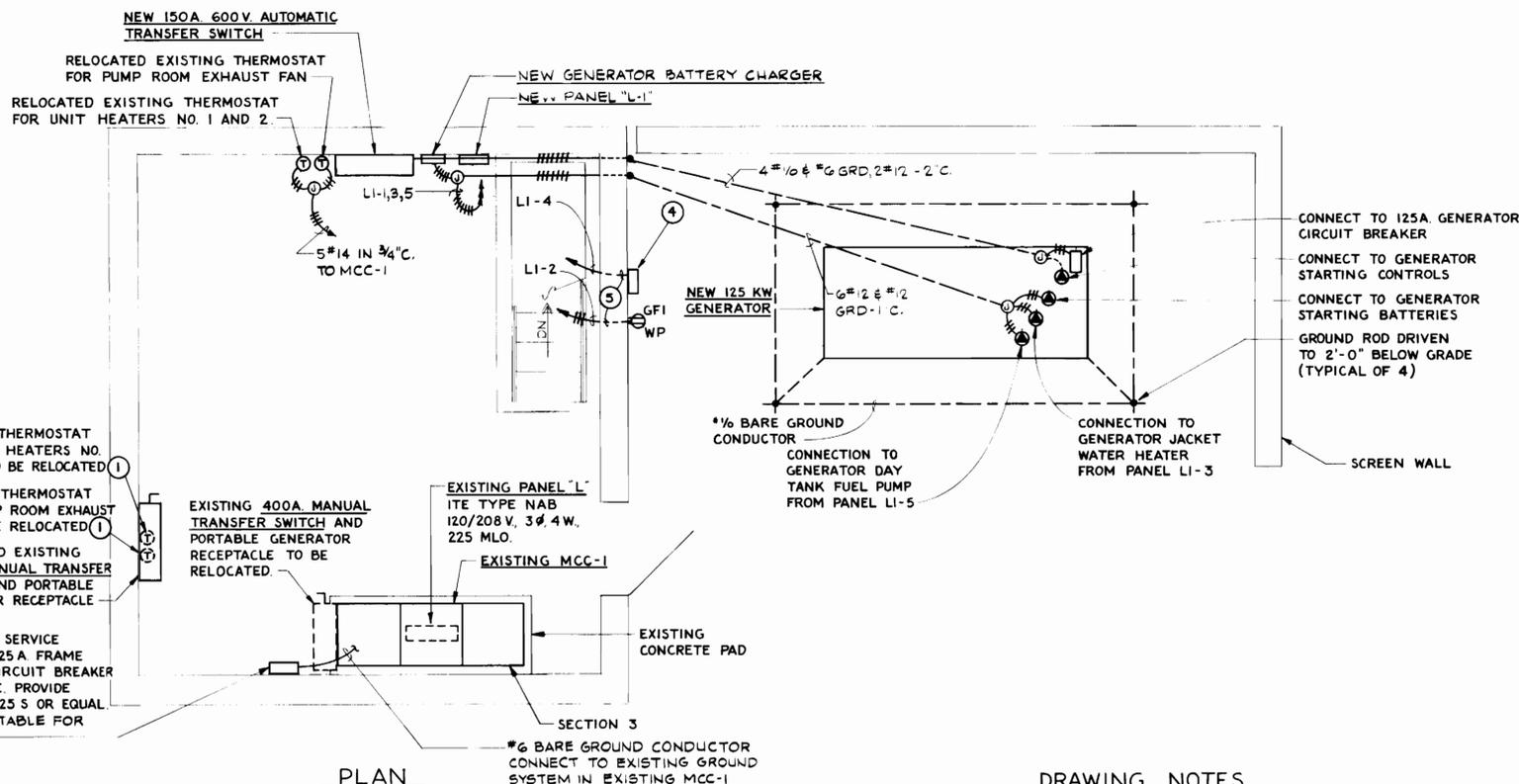
ROUTE 40 WASTEWATER PUMPING STATION
 CAPITAL PROJECT S-6113-S
 CONTRACT NO. 10-1392
 ELECTION DISTRICT NO. 2
 HOWARD COUNTY, MARYLAND

SCALE AS SHOWN

SHEET 2 OF 3



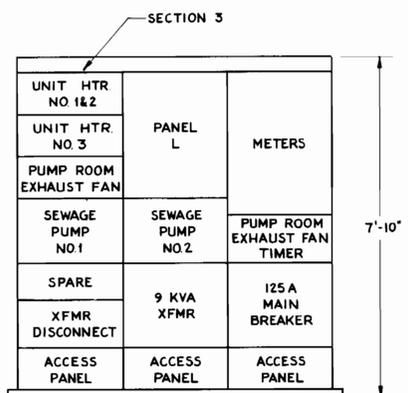
ONE LINE DIAGRAM
NO SCALE



PLAN
SCALE 3/8" = 1'-0"

ELECTRICAL LEGEND	
①	SEE NOTE OF SAME NUMBER
---	CONDUIT OR CONDUCTOR AS NOTED - UNDERGROUND OR THRU WALL
--->	HOMERUN TO PANEL - NO OF ARROWS INDICATE NO OF CIRCUITS AND NO OF CROSSLINES INDICATES NO OF CONDUCTORS
---	EXISTING CONDUCTORS TO BE REMOVED
⊙	SPECIAL OUTLET OR CONNECTION AS NOTED
---	CONDUIT - DOWN WALL

SCHEDULE OF PANEL "LI"						
120/208 VOLTS, 1 PHASE, 3 WIRE						
100 A MLO						
CKT. NO.	EQUIPMENT SERVED	PHASE & VOLTS	CKT. POLES	BKR. TRIP	WIRING NO. SIZE	COND.
1	GENERATOR BATTERY CHARGER	1# 120V	1	20	2 12 12	3/4"
2	GFI RECEPTACLE	1# 120V	1	20	2 12 12	3/4"
3	GEN JACKET WATER HEATER	1# 120V	1	30	2 10 10	1"
4	OUTSIDE LIGHT	1# 120V	1	20	2 12 12	3/4"
5	DAY TANK FUEL PUMP	1# 120V	1	20	2 12 12	1"
6, 7	SPARES	1# 120V	1	20	---	---
8-12	SPACES	---	---	---	---	---



ELEVATION - EXISTING
MOTOR CONTROL CENTER (MCC-1)
NOT TO SCALE

- DRAWING NOTES**
- REMOVE EXISTING TWO #14 CONDUCTORS FROM EXISTING 3/4" CONDUIT BACK TO STARTER LOCATED IN MOTOR CONTROL CENTER. PATCH AND PAINT WALL TO MATCH EXISTING FINISH.
 - CONTRACTOR SHALL REUSE EXISTING 2 1/2" C. FROM EXISTING POWER CO. METER TO EXISTING 2 1/2" CONDUIT BODY LOCATED BELOW MOTOR CONTROL CENTER IN PUMP ROOM. CONTRACTOR SHALL PROVIDE NEW 2" C. FROM EXISTING 2 1/2" CONDUIT BODY TO NEW 125 A MAIN SERVICE DISCONNECT.
 - PROVIDE NEW 2 POLE 30A BREAKER IN EXISTING PANEL "L" TO SUBFEED NEW PANEL "LI".
 - PROVIDE NEW SURFACE, WALL MOUNTED 250 W. HIGH PRESSURE SODIUM LIGHT FIXTURE. FIXTURE HOUSING SHALL BE RUGGED CAST ALUMINUM AND CORROSION RESISTANT U.L. LISTED SUITABLE FOR WET LOCATIONS. FIXTURE SHALL INCORPORATE A HIGH POWER FACTOR BALLAST MOUNTED ON FRONT HOUSING FOR EASE OF INSTALLATION AND REPAIR. FIXTURE SHALL BE LITHONIA CAT. NO. TWH 120 OR EQUAL WITH A WIRE GUARD FOR VANDAL PROTECTION. LAMP SHALL BE A CLEAR MOGUL BASE, E-18 BULB WITH AN INITIAL LUMEN OUTPUT OF 27,500. FIXTURE SHALL BE MOUNTED AT 7'-10" TO TOP.
 - CONTRACTOR SHALL SURFACE RUN CONDUITS ALONG WALL STAYING AS CLOSE TO THE TOP AS POSSIBLE. FOR THE GFI RECEPTACLE, SURFACE RUN CONDUIT DOWN THE INSIDE WALL AND OUT TO THE RECEPTACLE.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
9-3-85
9-3-85

KIDDE CONSULTANTS, INC.
CONSULTING ENGINEERS
BALTIMORE, MARYLAND
2-3-85

DES: JBH
DRN: MSM
CHK: CEC
DATE: 8/26/85

ELECTRICAL PLAN AND DETAILS
600' SCALE MAP NO. S-14 BLOCK NO. 5

ROUTE 40 WASTEWATER PUMPING STATION
CAPITAL PROJECT S-6113-S
CONTRACT NO. 10-1392
ELECTION DISTRICT NO. 2
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 3 OF 3