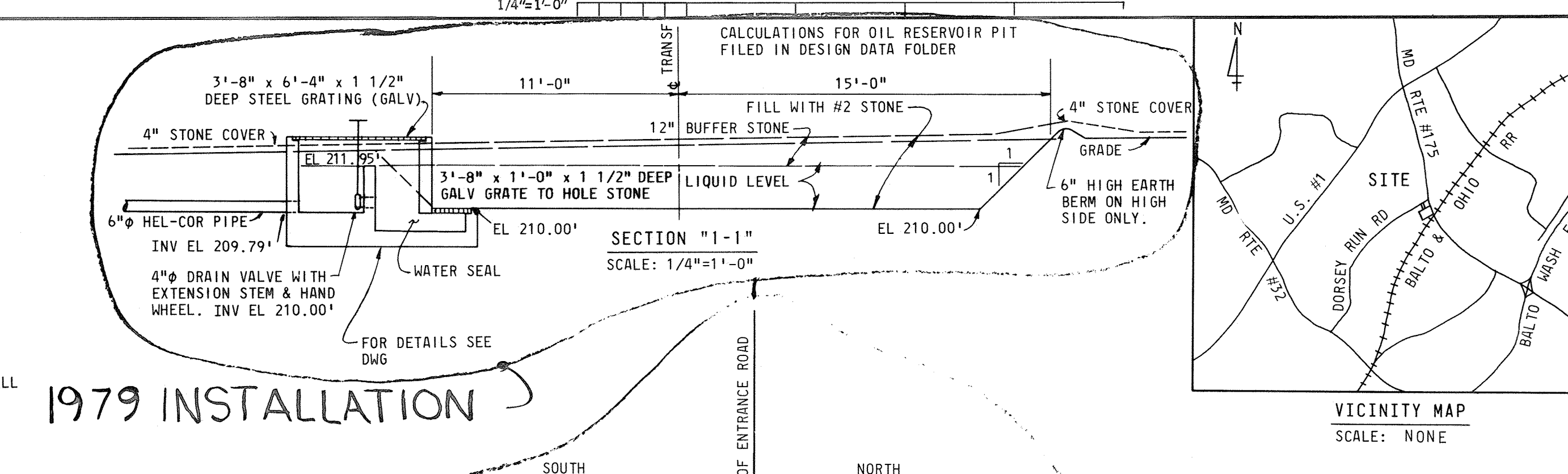
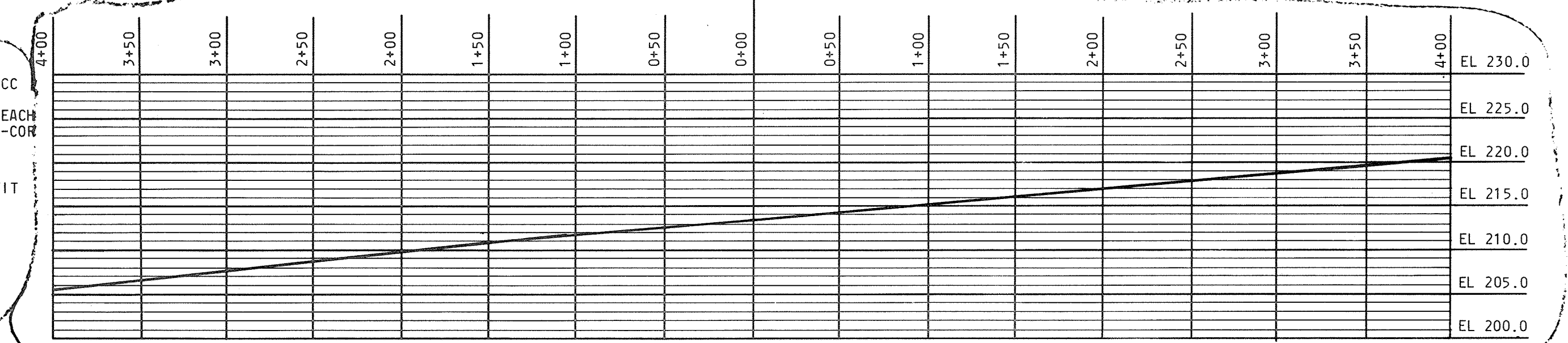


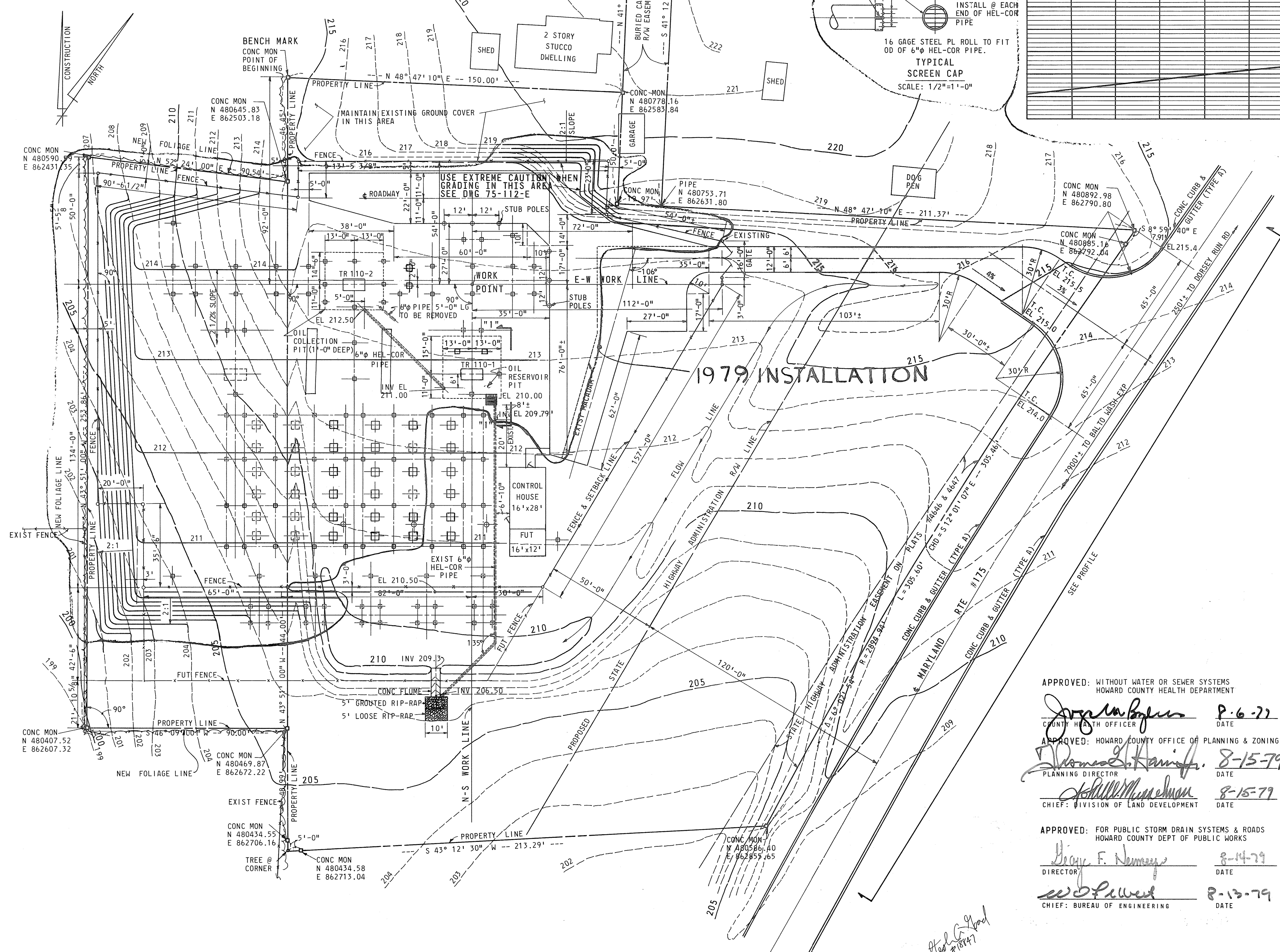
CONCRETE FLUME DETAILS
SCALE: 1/2"=1'-0"



1979 INSTALLATION



MARYLAND ROUTE #175
PROFILE
SCALE: 1"=10'-0"
HOR 1"=50'-0"



1979 INSTALLATION

- NOTES:
- ALL ELEVATIONS SHOWN HEREON ARE BASED ON HOWARD COUNTY BENCH MARK NO. 9 (EL 229.292) MD COORDINATES N 479038.46, E 863943.00.
 - GRADING: DOTTED CONTOUR LINES INDICATE EXISTING TOP OF GRADE. SOLID CONTOUR LINES INDICATE NEW TOP OF GRADE. ALL FILL TO BE WELL COMPACTED TO 95% OF MAXIMUM DENSITY (ASTM D1557-70).
 - FENCE: TO BE CHAIN LINK CONSTRUCTION WITH AN OVERALL HEIGHT OF 8'-0" CONSISTING OF 7'-0" OF FABRIC WITH THREE (3) STRANDS OF BARBED WIRE TURNED OUT.
 - STONE AREA: FENCED IN AREA TO BE COVERED WITH 4" OF STONE COVER OVER NEW GRADE. STONE COVER GRADATION SHALL BE IN ACCORDANCE WITH MARYLAND STATE HIGHWAY ADMINISTRATION SHA-4. STONE SHALL BE GRAY IN COLOR WITH A LOS ANGELES ABRASION RATING LESS THAN 50%.
 - ROADWAY: COMPACT SUBGRADE TO 95% DENSITY AS DETERMINED BY (ASTM-1557-70). INSTALL 8" OF CR-467 CRUSHED STONE BASE IN TWO LIFTS & COMPACT EACH LIFT WITH A 10 TON ROLLER. INSTALL 2" BITUMINOUS BINDER COURSE, (BI BAND). INSTALL 1" BITUMINOUS CONCRETE SURFACE, (SN BAND) AS PER MARYLAND STATE HIGHWAY ADMINISTRATION SPEC.
 - BENCH MARK: EL 214.58 (TOP OF CONC MON) LOCATED APPROXIMATELY 410' FROM ☐ OF MD ROUTE #175 @ NW CORNER OF PROPERTY.
 - SCREEN CAP: TO BE INSTALLED OVER HEL-COR PIPE AT EACH TERMINAL POINT TO PREVENT #2 STONE FROM ENTERING PIT. (SEE DETAIL)
 - SEEDING: ALL AREAS DISTURBED BY GRADING OTHER THAN THOSE COVERED WITH STONE SHALL BE STABILIZED BY SEEDING AND MULCHING AS SOON AS AREAS ARE AVAILABLE FOR GROUNDS PREPARATION. APPROXIMATELY 2 INCHES OF TOP SOIL WILL BE APPLIED & SEEDED WITH 70% KENTUCKY FESCUE, 20% DOMESTIC RYE & 10% CREEPING RED FESCUE AT THE RATE OF 6 POUNDS PER 1000 SQ FT WITH RYE GRAIN APPLIED AS NECESSARY FOR TEMPORARY COVER, & FERTILIZED WITH 25 POUNDS OF 10-10-10 PER 1000 SQ FT. LIME AS NEEDED BY TEST. SLOPE STABILIZATION WILL INCLUDE SEEDING, FERTILIZING & MULCHING. CRITICAL AREAS AROUND FENCE, STEEP SLOPE AREAS & DIVERSIONS SHALL HAVE LUDLOW "SOIL SAVER" JUTE NETTING APPLIED TO SURFACES WITH SIX INCH WIRE STAPLES. OTHER AREAS TO BE MULCHED WITH STRAW & SECURED.

APPROVED: WITHOUT WATER OR SEWER SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT
James D. Hicks 8-6-79
COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
James D. Hicks 8-15-79
PLANNING DIRECTOR DATE

APPROVED: DIVISION OF LAND DEVELOPMENT
James D. Hicks 8-15-79
CHIEF OF DIVISION OF LAND DEVELOPMENT DATE

APPROVED: FOR PUBLIC STORM DRAIN SYSTEMS & ROADS
HOWARD COUNTY DEPT OF PUBLIC WORKS
Biggy F. Nunez 8-14-79
DIRECTOR DATE

W. P. Powell 8-13-79
CHIEF: BUREAU OF ENGINEERING DATE

APPROVED
DIVISION OF LAND DEVELOPMENT
HOWARD COUNTY, MARYLAND
DATE 7-20-79
JDM

FILE NO. SDP79-165
SHEET 2 OF 6
THIS DRAWING SUPERSEDES
DWG OF SAME NUMBER, DATED 12-1-70.

HOWARD COUNTY MARYLAND
ELECTION DISTRICT 6
TAX MAP #43 SDP #

GRADING PLAN
FENCE & ROADWAY

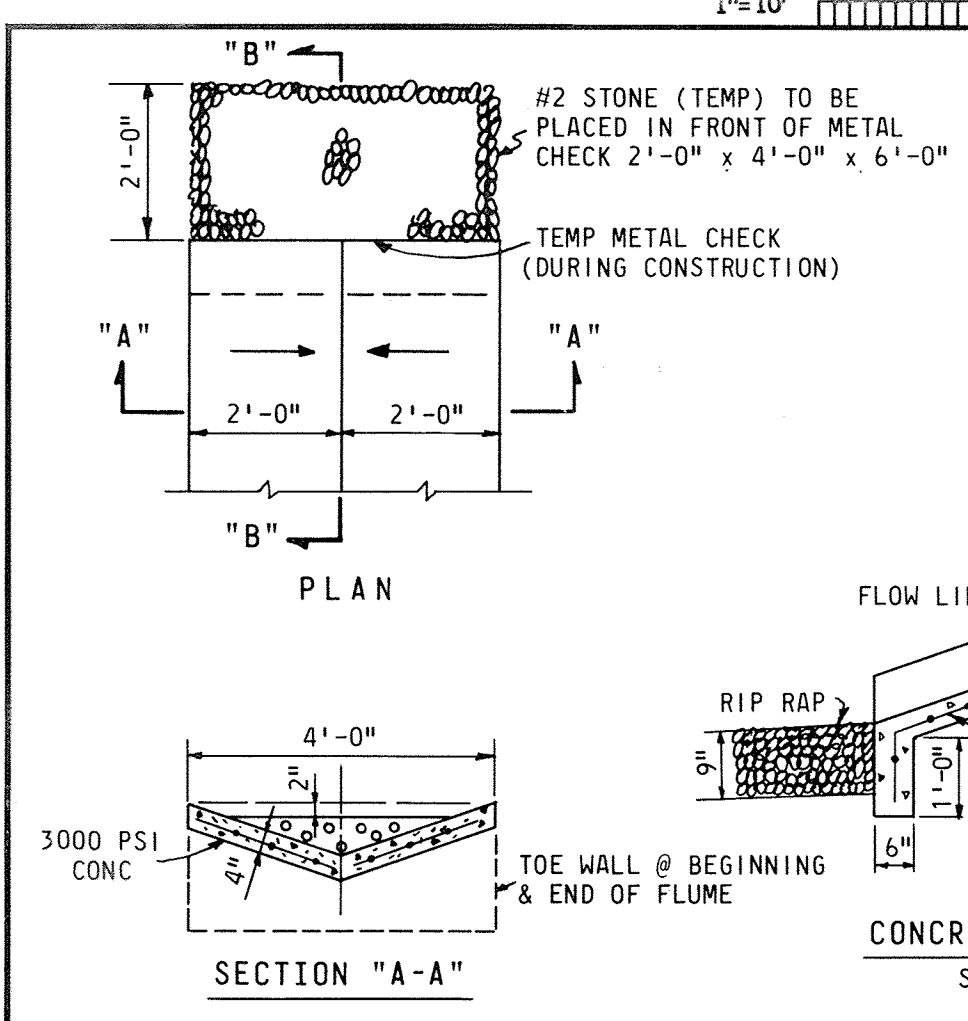
115-13KV SUBSTATION
DORSEY RUN

Rev.	Date	Job Order	Description	Approved	ENGINEERING
	1979	EC-1723	INSTL 1-40MVA TRANSF & 4-13KV FDR POS		Civil: <i>JDM</i> Elec: <i>W.P.P.</i>
A	11/17/2000	DOI216	INSTALL 2-138KV FDR POS & 1-13KV FDR # 7744		Mech: _____ Trans: _____ Chief Eng: <i>JDM</i> Manager: _____
		DO0878	INSTALL 2-7200KVAR 13.8KV METAL ENCLOSED CAP		

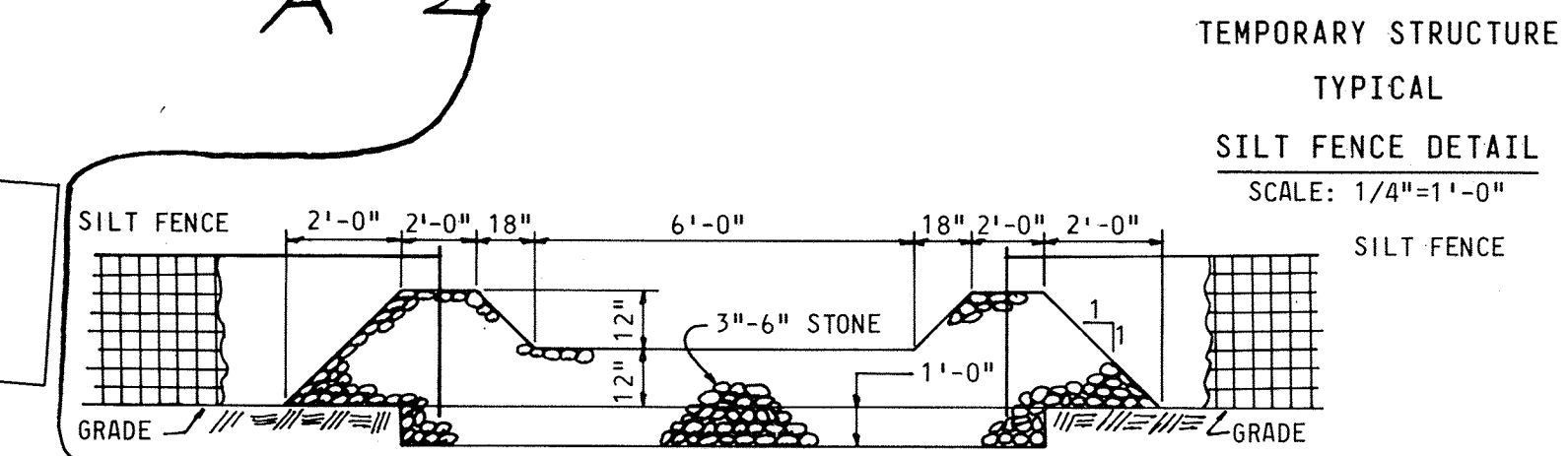
File	Scale	Microfilmed	Dwg	Rev.
75-104-E	1"=25'-0"		75-104-E	A

THE COORDINATES AND ELEVATIONS SHOWN HEREON ARE TAKEN FROM A SURVEY BY JAMES D. HICKS & ASSOC INC, DATED 1-6-70 & REVISED 5-25-71.

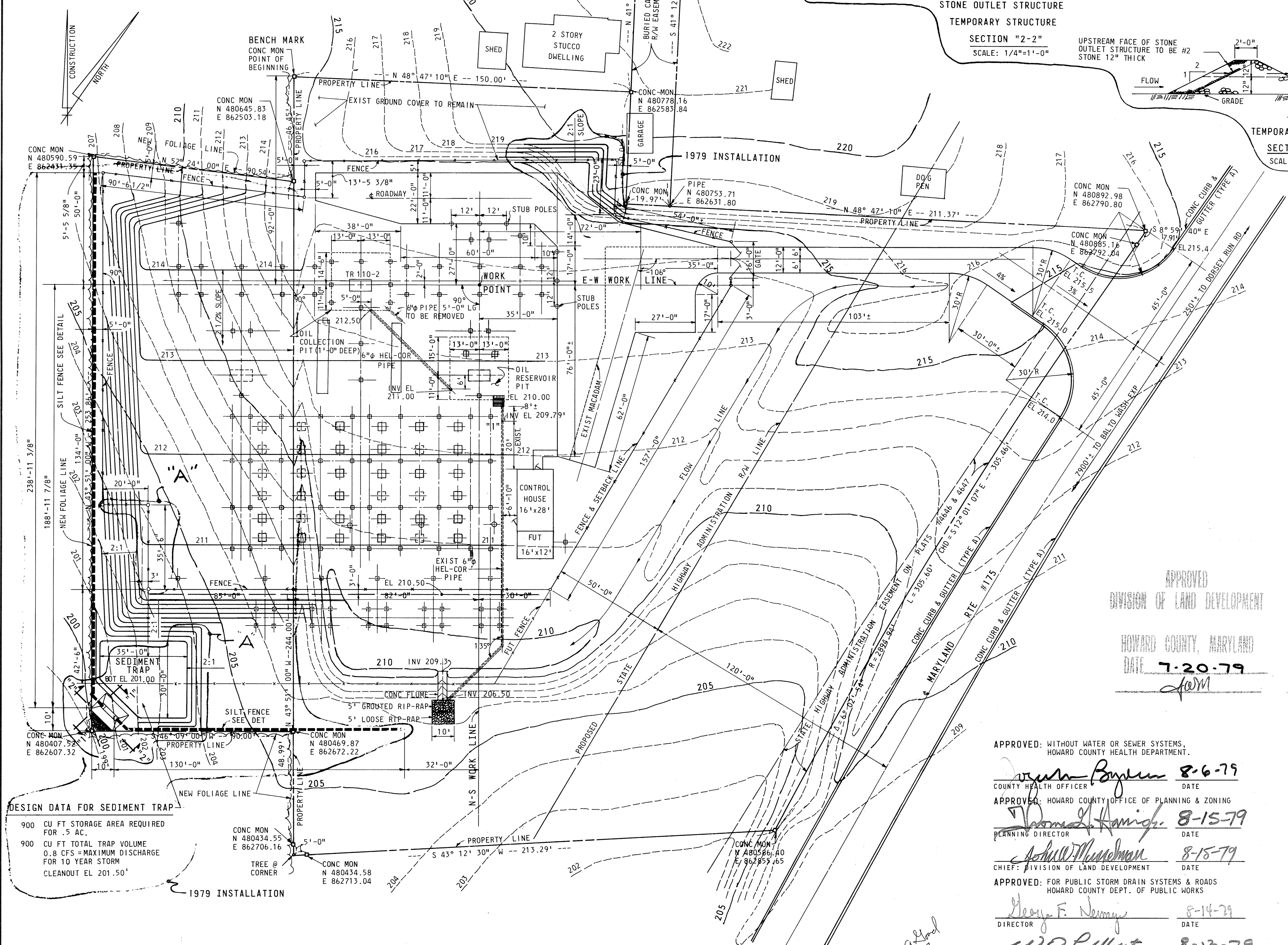
Handwritten signature and date
75-104-E



EXISTING CONCRETE FLUME DETAILS
SCALE: 1/2"=1'-0"



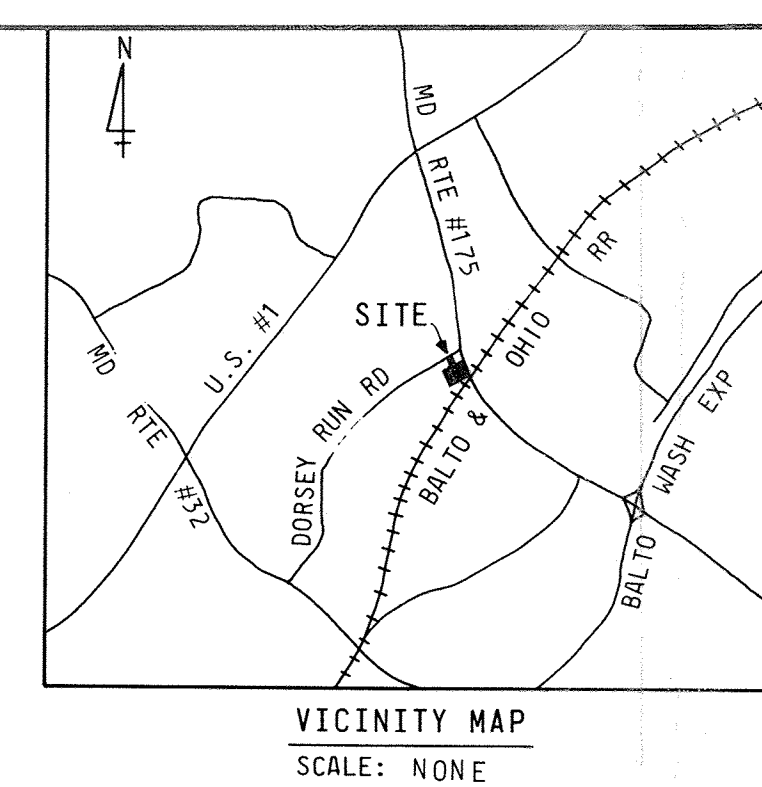
TEMPORARY STRUCTURE SECTION "1-1"
SCALE: 1/4"=1'-0"



DESIGN DATA FOR SEDIMENT TRAP

900 CU FT STORAGE AREA REQUIRED FOR .5 AC.
900 CU FT TOTAL TRAP VOLUME
0.8 CFS = MAXIMUM DISCHARGE FOR 10 YEAR STORM CLEANOUT EL 201.50'

THE COORDINATES AND ELEVATIONS SHOWN HEREON ARE TAKEN FROM A SURVEY BY JAMES D. HICKS & ASSOC INC, DATED 1-6-70 & REVISED 5-25-71.



- NOTES:**
- ALL ELEVATIONS SHOWN HEREON ARE BASED ON HOWARD COUNTY BENCH MARK IE NO. 9 (EL. 229.292) MD COORDINATES N 479038.46, E 863963.00
 - GRADING:** DOTTED CONTOUR LINES INDICATE EXISTING TOP OF GRADE. SOLID CONTOUR LINES INDICATE NEW TOP OF GRADE. ALL FILL TO BE WELL COMPACTED TO 95% OF MAXIMUM DENSITY (ASTM D1557-70).
 - FENCE:** TO BE CHAIN LINK CONSTRUCTION WITH AN OVERALL HEIGHT OF 8'-0" CONSISTING OF 7'-0" OF FABRIC WITH THREE (3) STRANDS OF BARBED WIRE TURNED OUT.
 - STONE AREA:** FENCED IN AREA TO BE COVERED WITH 4" OF STONE COVER OVER NEW GRADE. STONE COVER GRADATION SHALL BE IN ACCORDANCE WITH MARYLAND STATE HIGHWAY ADMINISTRATION SHA-4. STONE SHALL BE GRAY IN COLOR WITH A LOS ANGELES ABRASION RATING LESS THAN 50%.
 - ROADWAY:** COMPACT SUBGRADE TO 95% DENSITY AS DETERMINED BY (ASTM-1557-70). INSTALL 8" OF CR-467 CRUSHED STONE BASE IN TWO LIFTS & COMPACT EACH LIFT WITH A 10-TON ROLLER. INSTALL 2" BITUMINOUS BINDER COURSE, (101 BAND). INSTALL 1" BITUMINOUS CONCRETE SURFACE, (CSN BAND) AS PER MARYLAND STATE HIGHWAY ADMINISTRATION SPEC.
 - BENCH MARK:** EL 214.58 (TOP OF CONC MON) LOCATED APPROXIMATELY 410' FROM E. OF MD ROUTE #175 @ NW CORNER OF PROPERTY.
 - SCREEN CAP:** TO BE INSTALLED OVER HEL-COR PIPE AT EACH TERMINAL POINT TO PREVENT #2 STONE FROM ENTERING PIPE.
 - SEEDING:** ALL AREAS DISTURBED BY GRADING OTHER THAN THOSE COVERED WITH STONE SHALL BE STABILIZED BY SEEDING AND MULCHING AS SOON AS AREAS ARE AVAILABLE FOR GROUND PREPARATION. APPROXIMATELY 2 INCHES OF TOP SOIL WILL BE APPLIED & SEEDING WITH 70% KENTUCKY FESCUE, 20% DOMESTIC RYE & 10% CREEPING RED FESCUE AT THE RATE OF 6 POUNDS PER 1000 SQ FT WITH RYE GRAIN APPLIED AS NECESSARY FOR TEMPORARY COVER, & FERTILIZED WITH 25 POUNDS OF 10-10-10 PER 1000 SQ FT, LIME AS NEEDED BY TEST. SLOPE STABILIZATION WILL INCLUDE SEEDING, FERTILIZING & MULCHING. CRITICAL AREAS AROUND FENCE, STEEP SLOPE AREAS & DIVERSIONS SHALL HAVE LUDLOM "SOIL SAVER" JUTE NETTING APPLIED TO SURFACES WITH SIX INCH WIRE STAPLES. OTHER AREAS TO BE MULCHED WITH STRAW & SECURED.
 - SEQUENCE OF CONSTRUCTION:**
 - OBTAIN PERMIT, CLEAR AND GRUB
 - INSTALL SEDIMENT DEVICES TEMP STABILIZATION
 - INSTALL GRADING
 - INSTALL ROADWAY
 - INSTALL EQUIPMENT
 - FINISH GRADING
 - INSTALL STONE COVER AND SEED; REMOVE TEMPORARY SEDIMENT CONTROL
 - CONSTRUCTION SCHEDULE:**
 - BEGIN CONSTRUCTION: 8-1-79
 - END GRADING; STABILIZATION OF ALL DISTURBED AREAS, NOT TO BE BUILT ON BY: 9-1-79
 - END CONSTRUCTION 5-1-81
 - SITE ANALYSIS:**
 - TOTAL AREA OF SITE = 2.5923 AC ±
 - TOTAL DISTURBED AREA: .80 AC ±
 - TOTAL AREA OF STONE COVER: 1.00 AC ±
 - TOTAL AREA TO BE PAVED: .20 AC ±
 - AREA TO BE STABILIZED: .60 AC ±
 - HOWARD COUNTY BUREAU OF INSPECTIONS AND PERMITS TO BE CONTACTED 48 HOURS PRIOR TO BEGINNING WORK (465-3180 OR 465-5000 EX 328).
 - RING UP INDICATES GRADING WORK TO BE PERFORMED UNDER THIS APPLICATION. OTHER AREAS WERE COMPLETED ON ORIGINAL PROJECT UNDER SDP #71-42 DATED 12/9/71.**
 - ANY SOIL USED FOR FILL SHALL COME FROM AN AREA WITH AN APPROVED GRADING PERMIT.

APPROVED
DIVISION OF LAND DEVELOPMENT
HOWARD COUNTY, MARYLAND
DATE 7-20-79
JWM

CERTIFICATION STATEMENTS

BY THE DEVELOPER:
"I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION & SEDIMENT CONTROL, AND I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY. NO DEVIATION FROM THIS PLAN WILL NOT BE MADE UNLESS AUTHORIZED BY HOWARD SOIL CONSERVATION DISTRICT."
F. W. LINK, JR. - DEVELOPER
DATE 7/20/79

BY THE ENGINEER:
"I CERTIFY THAT THIS PLAN FOR EROSION & 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 SOIL CONSERVATION DISTRICT."
D. T. WARD - ENGINEER
DATE 7-26-79

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS
Wendell T. Ward
DATE 8-3-79

APPROVED: WITHOUT WATER OR SEWER SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.
COUNTY HEALTH OFFICER
DATE 8-6-79

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
PLANNING DIRECTOR
DATE 8-15-79

APPROVED: FOR PUBLIC STORM DRAIN SYSTEMS & ROADS HOWARD COUNTY DEPT. OF PUBLIC WORKS
DIRECTOR
DATE 8-14-79

APPROVED: DIVISION OF LAND DEVELOPMENT
CHIEF: BUREAU OF ENGINEERING
DATE 8-13-79

FILE NO. SDP79-165
SHEET 3 OF 6
THIS DRAWING SUPERSEDES DWG 75-105-E DATED 11-24-70
HOWARD COUNTY MARYLAND ELECTION DISTRICT 6
TAX MAP #43 SDP #

Rev.	Date	Job Order	Description	Approved
	1978	EC-1723	INSTL 1-40MVA TRANSF & 3-13KV FDR POS	
A	4-20-79	EC-1723	UPDATED AS PER ENGR REQUEST	
B	4/11/00	D00216	INSTALL 2-13.8KV FDR POS # 1-13KV FDR #7744	
		D00878	INSTALL 2-7200KVAR 13.8KV METAL ENCLOSED CAP	

Rev.	Date	Job Order	Description	Approved
	1978	EC-1723	INSTL 1-40MVA TRANSF & 3-13KV FDR POS	
A	4-20-79	EC-1723	UPDATED AS PER ENGR REQUEST	
B	4/11/00	D00216	INSTALL 2-13.8KV FDR POS # 1-13KV FDR #7744	
		D00878	INSTALL 2-7200KVAR 13.8KV METAL ENCLOSED CAP	

Rev.	Date	Job Order	Description	Approved
	1978	EC-1723	INSTL 1-40MVA TRANSF & 3-13KV FDR POS	
A	4-20-79	EC-1723	UPDATED AS PER ENGR REQUEST	
B	4/11/00	D00216	INSTALL 2-13.8KV FDR POS # 1-13KV FDR #7744	
		D00878	INSTALL 2-7200KVAR 13.8KV METAL ENCLOSED CAP	

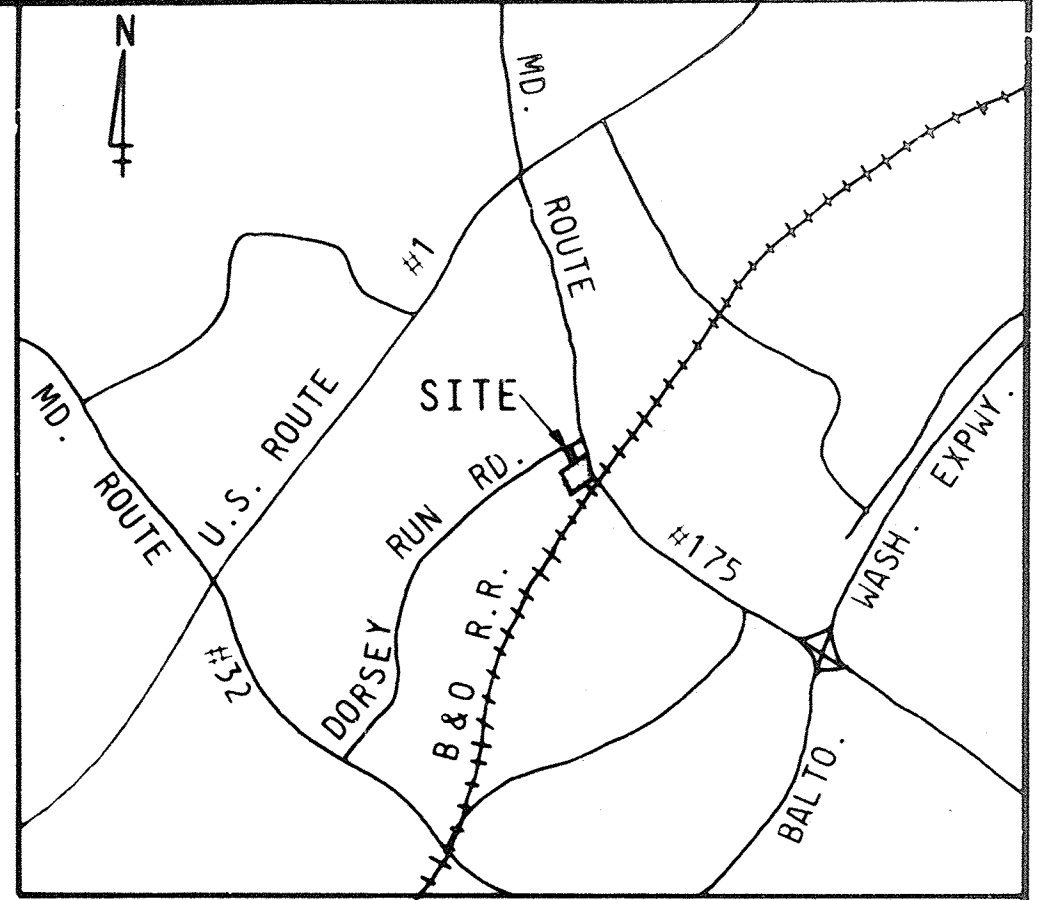
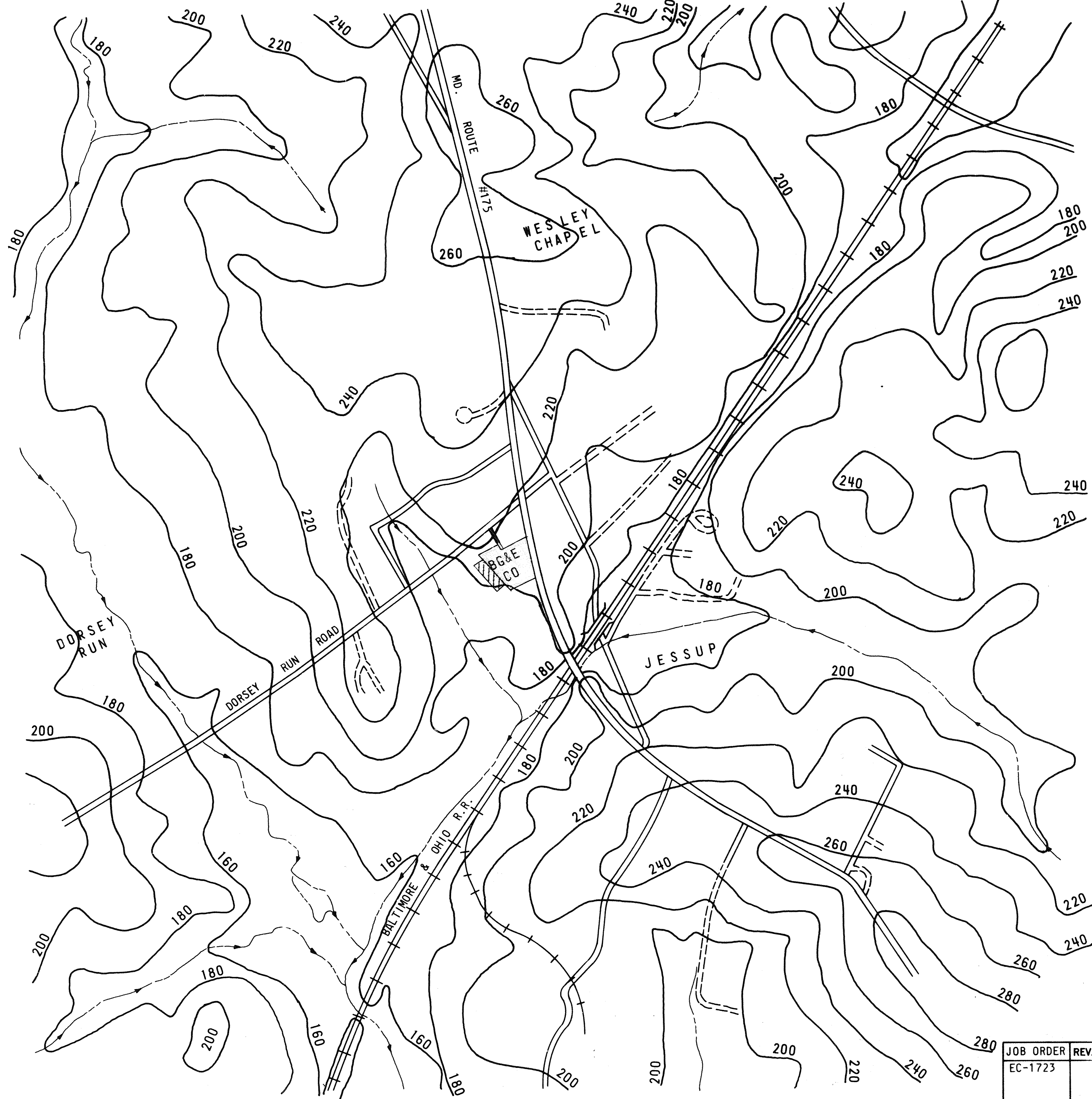
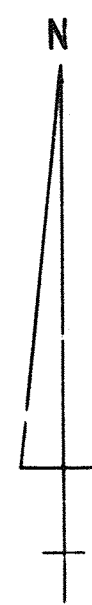
Frederick W. Link, Jr.
7/20/79

D. T. Ward
7-26-79

Wendell T. Ward
8-3-79

George F. Neer
8-14-79

W. O. P. Hunt
8-13-79



VICINITY MAP
SCALE: NONE

- LEGEND:
- INDICATES EXISTING OUTDOOR SUBSTATION SITE.
 - INDICATES DRAINAGE AREA TO SUBSTATION SITE ADDITION.

- NOTES:
- CONTOURS SHOWN HEREON WERE TAKEN FROM A U.S. GEOLOGICAL SURVEY PREPARED IN 1953.
 - AREA DRAINED IS EQUAL TO 0.5 ACRES.
 - RUNOFF FROM DRAINAGE AREA IS EQUAL TO 1.9 CFS WITH A MAXIMUM VELOCITY EQUAL TO 0.8 FPS FOR A 10 YEAR STORM.
 - BALTIMORE GAS & ELECTRIC COMPANY PROPERTY IS EQUAL TO 2.592± ACRES.

APPROVED: WITHOUT WATER OR SEWER SYSTEMS,
HOWARD COUNTY HEALTH DEPARTMENT

[Signature] 8-6-79
COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
[Signature] 8-15-79
PLANNING DIRECTOR DATE

[Signature] 8-15-79
CHIEF: DIVISION OF LAND DEVELOPMENT DATE

APPROVED: FOR PUBLIC STORM DRAIN SYSTEMS & ROADS
HOWARD COUNTY DEPT. OF PUBLIC WORKS

[Signature] 8-14-79
DIRECTOR DATE

[Signature] 8-13-79
CHIEF: BUREAU OF ENGINEERING DATE

APPROVED
DIVISION OF LAND DEVELOPMENT

HOWARD COUNTY, MARYLAND
DATE 7-20-79

FILE NO. SDP79-165
SHEET 4 OF 6
THIS DRAWING SUPERSEDES DRAWING
OF SAME NUMBER DATED 12-15-70.

HOWARD COUNTY, MARYLAND
ELECTION DISTRICT #6
TAX MAP #43 S. D. P.

JOB ORDER	REV.	DATE	DESCRIPTION	APPROVAL
EC-1723		1979	INSTLN OF 1- 40MVA TRANSF & 4- 13KV FDR POS	

ENGINEERING
CIVIL *[Signature]*
MECH. *[Signature]*
ELEC. *[Signature]*
CHIEF ENGINEER
MANAGER *[Signature]*

DESIGN & DRAFTING
DESIGNED *[Signature]*
DRAWN *[Signature]*
CHECKED *[Signature]*
APPROVED 5-8-79
w e c
DATED *[Signature]*

DRAINAGE AREA
MAP

115-13KV SUBSTATION
DORSEY RUN

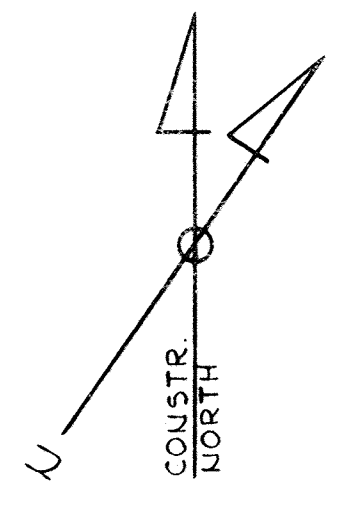
BALTIMORE GAS AND ELECTRIC COMPANY
ELECTRIC ENGINEERING DEPARTMENT

REPROD. FROM DWG. SCALE NONE REV.
DWG. NO. 75-114-D

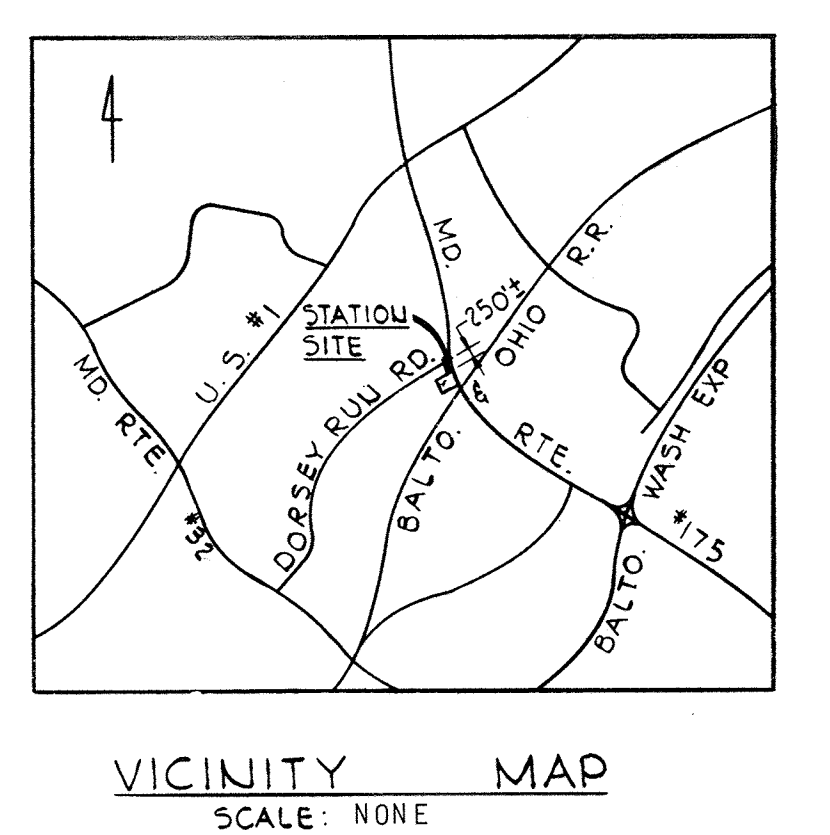
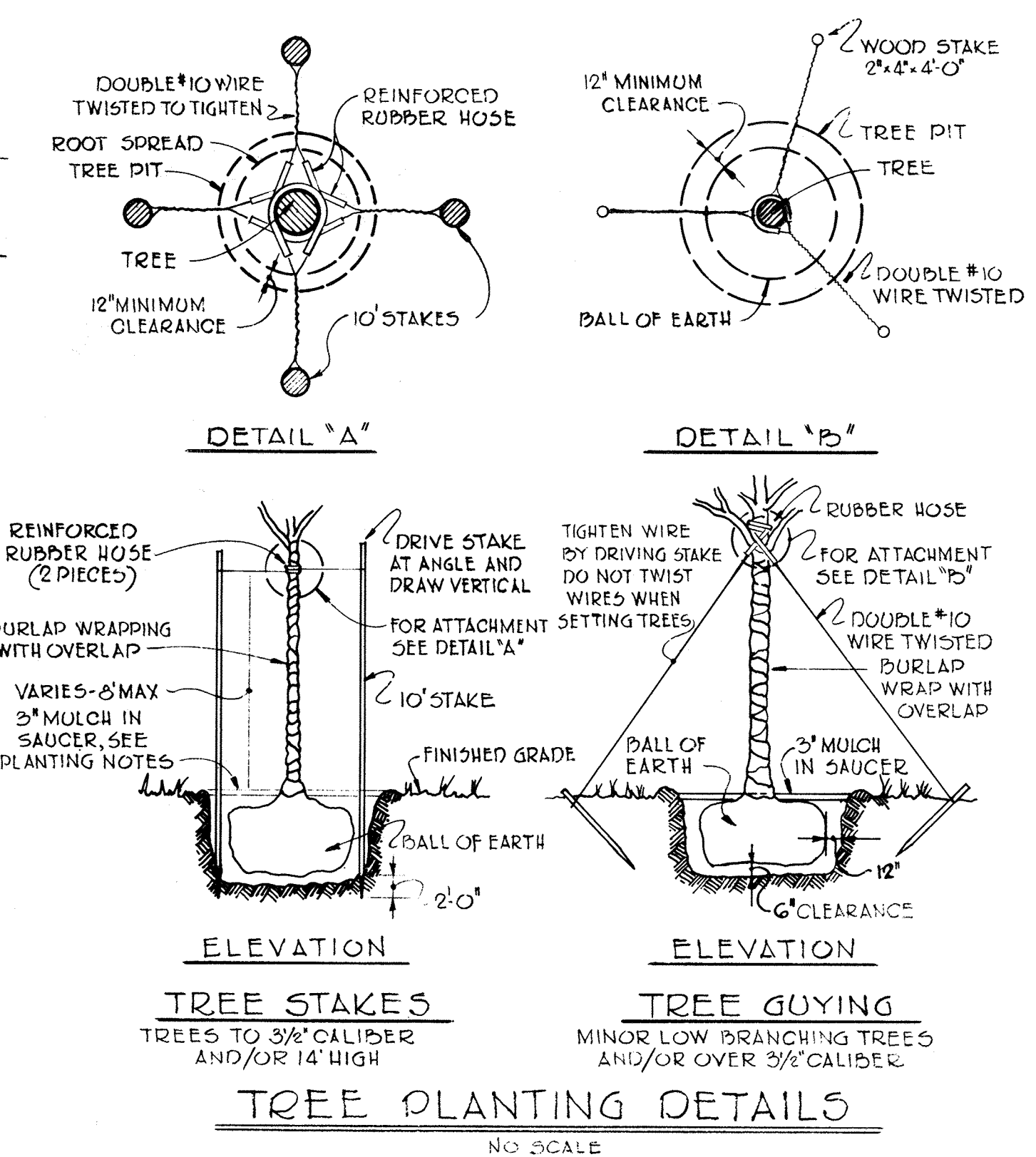
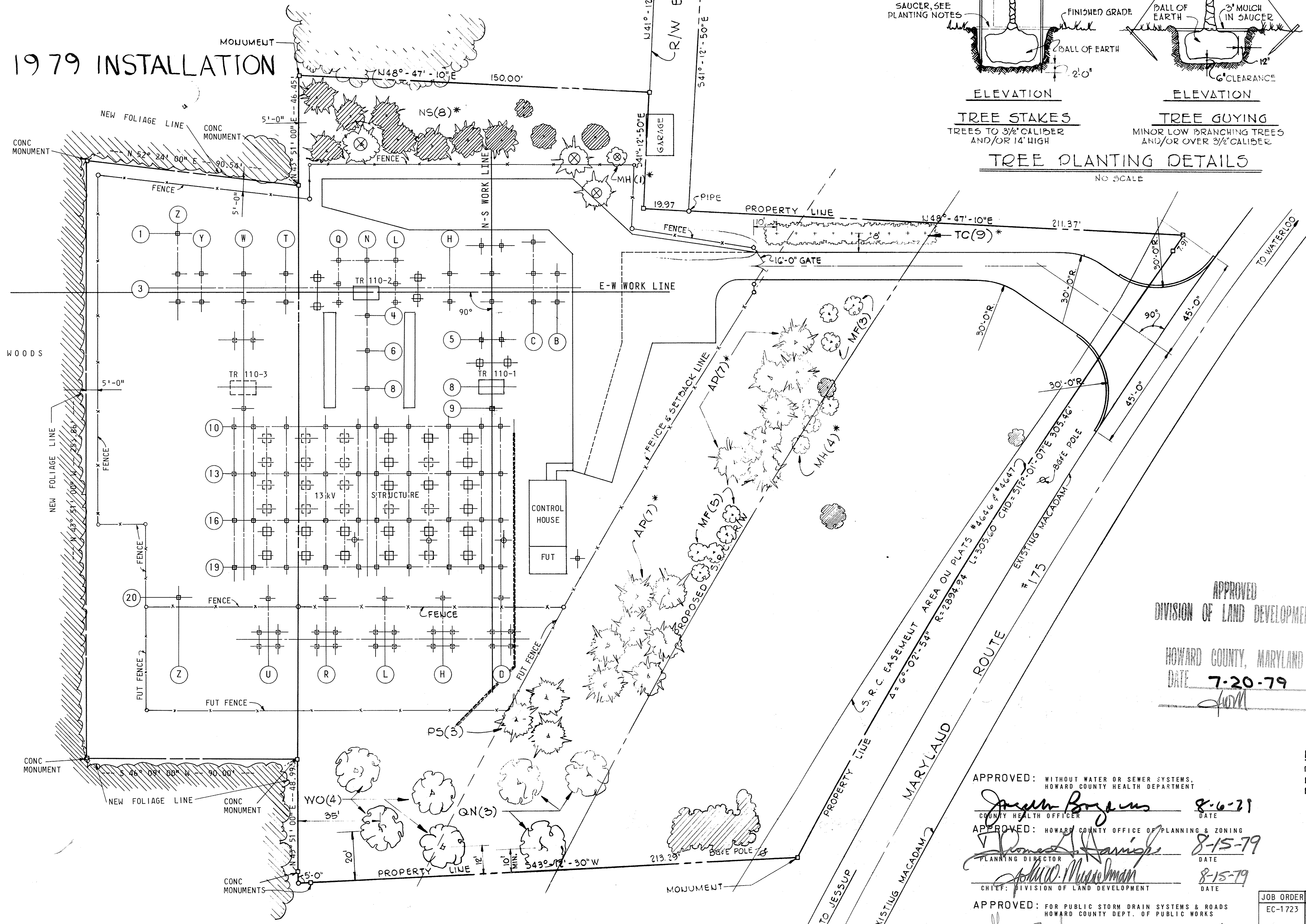
[Signature]
#2942

75-114-E

[Signature]
#1423



1979 INSTALLATION



- NOTES:
- FENCE: TO BE CHAIN LINK CONSTRUCTION WITH AN OVERALL HEIGHT OF 8'-0" CONSISTING OF 7'-0" OF FABRIC WITH THREE (3) STRANDS OF BARBED WIRE TURNED OUT.
 - STONE AREA: 4" OF STONE COVER TO BE PLACED OVER NEW FINISHED GRADE WHERE INDICATED. STONE COVER GRADATION SHALL BE IN ACCORDANCE WITH MARYLAND STATE HIGHWAY ADMINISTRATION SHA-4. STONE SHALL BE GRAY IN COLOR WITH A LOS ANGELES ABRASION RATING LESS THAN 50%.
 - ROADWAY: COMPACT SUBGRADE TO 95% DENSITY AS DETERMINED BY (ASTM-1557-70). INSTALL 8" OF CR-467 CRUSHED STONE BASE IN TWO LIFTS & COMPACT EACH LIFT WITH A 10 TON ROLLER. INSTALL 2" BITUMINOUS BINDER COURSE, (BT BAND). INSTALL 1" BITUMINOUS CONCRETE SURFACE, (SN BAND) AS PER MARYLAND STATE HIGHWAY ADMINISTRATION SPEC.
 - FOR SEEDING SEE DWG 75-104-E.

SYMBOL	LEGEND
	EXISTING TREE TO REMAIN
	EXISTING SHRUBS TO REMAIN
	REMOVE PLANT

PLANT LIST				
CODE	NOMENCLATURE	SIZE	QUANTITY	COMMENTS
MF	MALUS FLORIBUNDA - JAPANESE BLOSSOMING CRAB	5'-6"	8	WELL-BRANCHED
MH	MALUS HOPA - HOPA CRAB	7'-8"	5	WELL-BRANCHED
NS	PICEA ABIES - NORWAY SPRUCE	6'-8"	8	
AP	PINUS NIGRA - AUSTRIAN PINE	8'-10"	14	
PS	PINUS STROBUS - WHITE PINE	10'-12"	3	
QN	QUERCUS NIGRA - WATER OAK	3 1/2" CAL.	3	30'-0" %
WO	QUERCUS PHELLOS - WILLOW OAK	2 1/2" CAL.	3	25'-0" %
TC	TSUGA CANADENSIS - CANADIAN HEMLOCK	6'-8"	3	CLIPPED HEDGE

PLANTING NOTES: ALL PLANT MATERIAL TO BE NURSERY GROWN, DELIVERED TO SITE BALLED AND BURLAPPED.

TREES SHOWN ON PLAN PS(3) QUANTITY NAME OF SPECIE

ALL TREES TO BE STAKED SEE DETAIL

TOPSOIL BACKFILL IN TREE PITS TO BE 3 PARTS CLEAN TOPSOIL, 1 PART PEATMOSS.

ALL TREE SAUCERS TO BE MULCHED WITH 3" TANROOT.

* EXTREME CARE TO BE TAKEN AVOIDING UNDERGROUND UTILITIES. SEE DWG. # 75-112-E.

APPROVED
DIVISION OF LAND DEVELOPMENT
HOWARD COUNTY, MARYLAND
DATE 7-20-79

APPROVED: WITHOUT WATER OR SEWER SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
James Boyers 8-6-79
COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
Thomas A. Smith 8-15-79
PLANNING DIRECTOR DATE

APPROVED: DIVISION OF LAND DEVELOPMENT
Richard M. ... 8-15-79
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

APPROVED: FOR PUBLIC STORM DRAIN SYSTEMS & ROADS HOWARD COUNTY DEPT. OF PUBLIC WORKS
John F. ... 8-14-79
DIRECTOR DATE

Robert ... 8-13-79
CHIEF, BUREAU OF ENGINEERING DATE

JOB ORDER	REV.	DATE	DESCRIPTION	APPROVAL
EC-1723		1979	INSTLN OF 1-40MVA TRANSF & 4-13KV FDR POS	
DO1216	A	9/11/00	INSTALL 2-13.8KV FDR POS # 1-13KV FDR # 7744	
DO0878			INSTALL 2-TZ00 KVAR 13.8KV METAL ENCLOSED CAP	

ENGINEERING	APPROVAL
CIVIL <i>Dep</i>	
MECH	
ELEC. <i>10/5/79</i>	
CHIEF ENGINEER <i>10/5/79</i>	
MANAGER <i>10/5/79</i>	

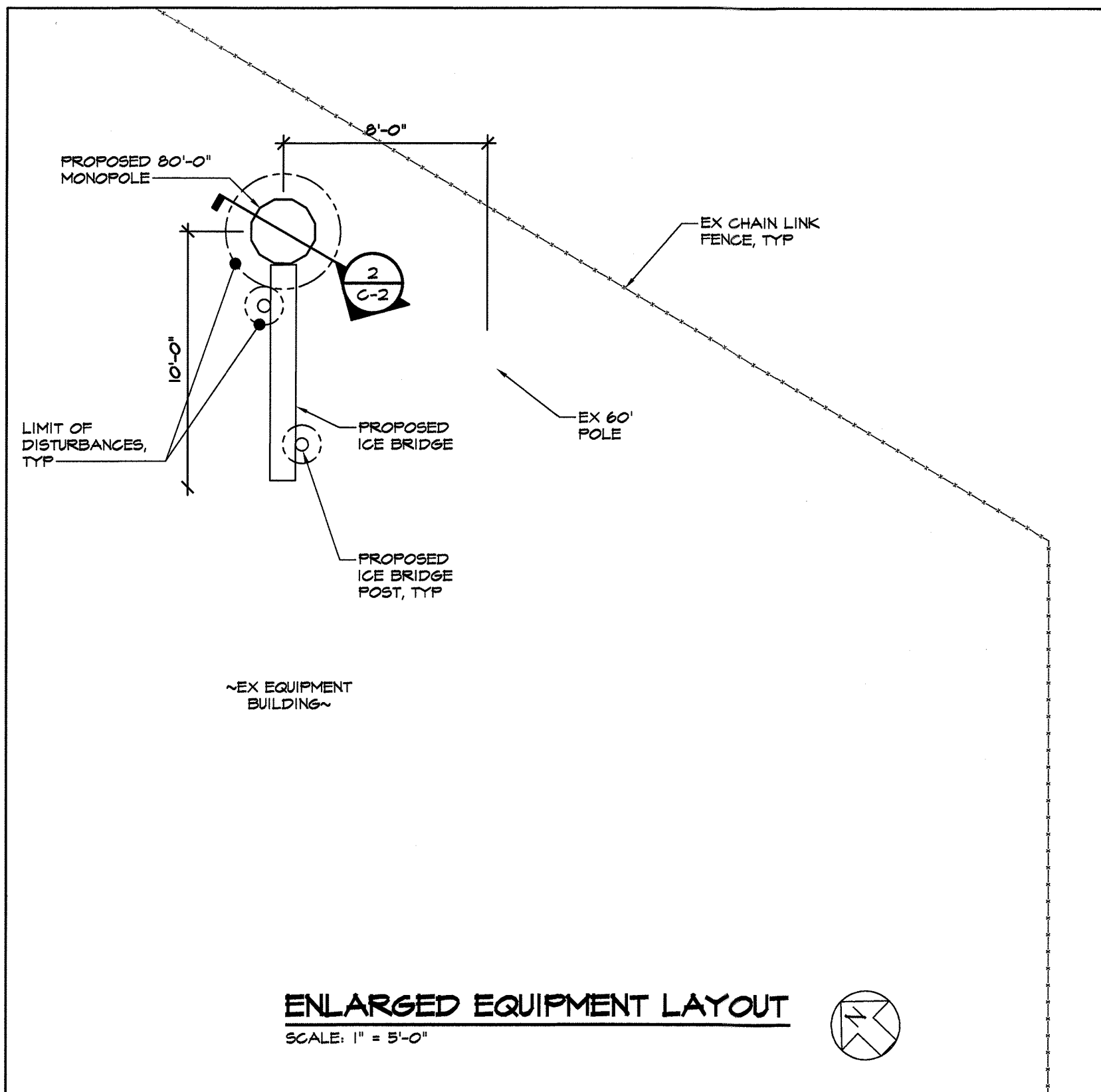
DESIGN & DRAFTING	APPROVAL
DESIGNED <i>10/5/79</i>	
DRAWN <i>10/5/79</i>	
CHECKED <i>10/5/79</i>	
APPROVED <i>10/5/79</i>	

REPROD. FROM DWG	SCALE	REV.
75-107-E	NONE	
DWG. NO. 75-107-E		

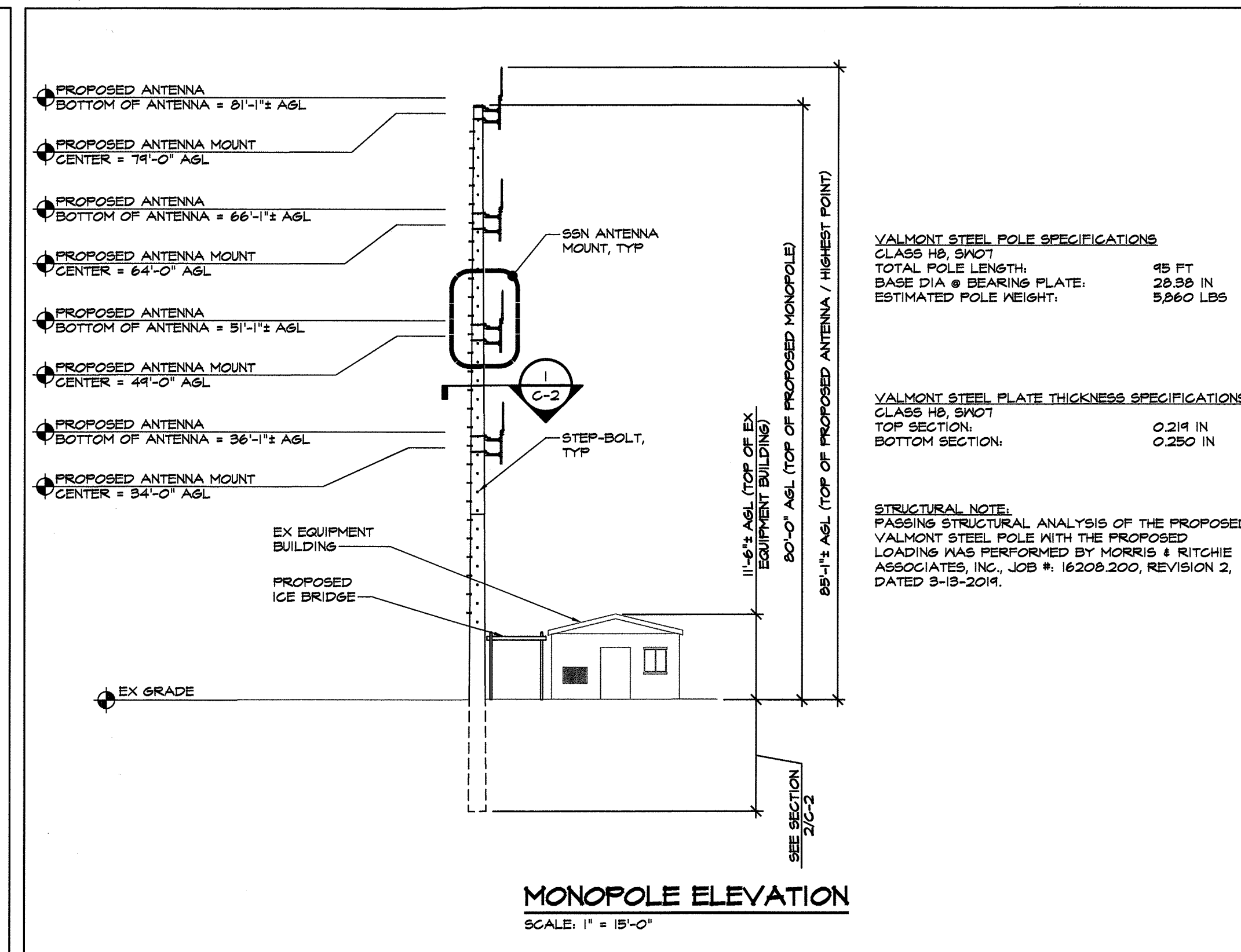
FILE NO. SDP79-165
SHEET 5 OF 6

WHITMAN, REQUARDT AND ASSOCIATES
ENGINEERS - CONSULTANTS
1804 ST. PAUL STREET
BALTIMORE, MARYLAND

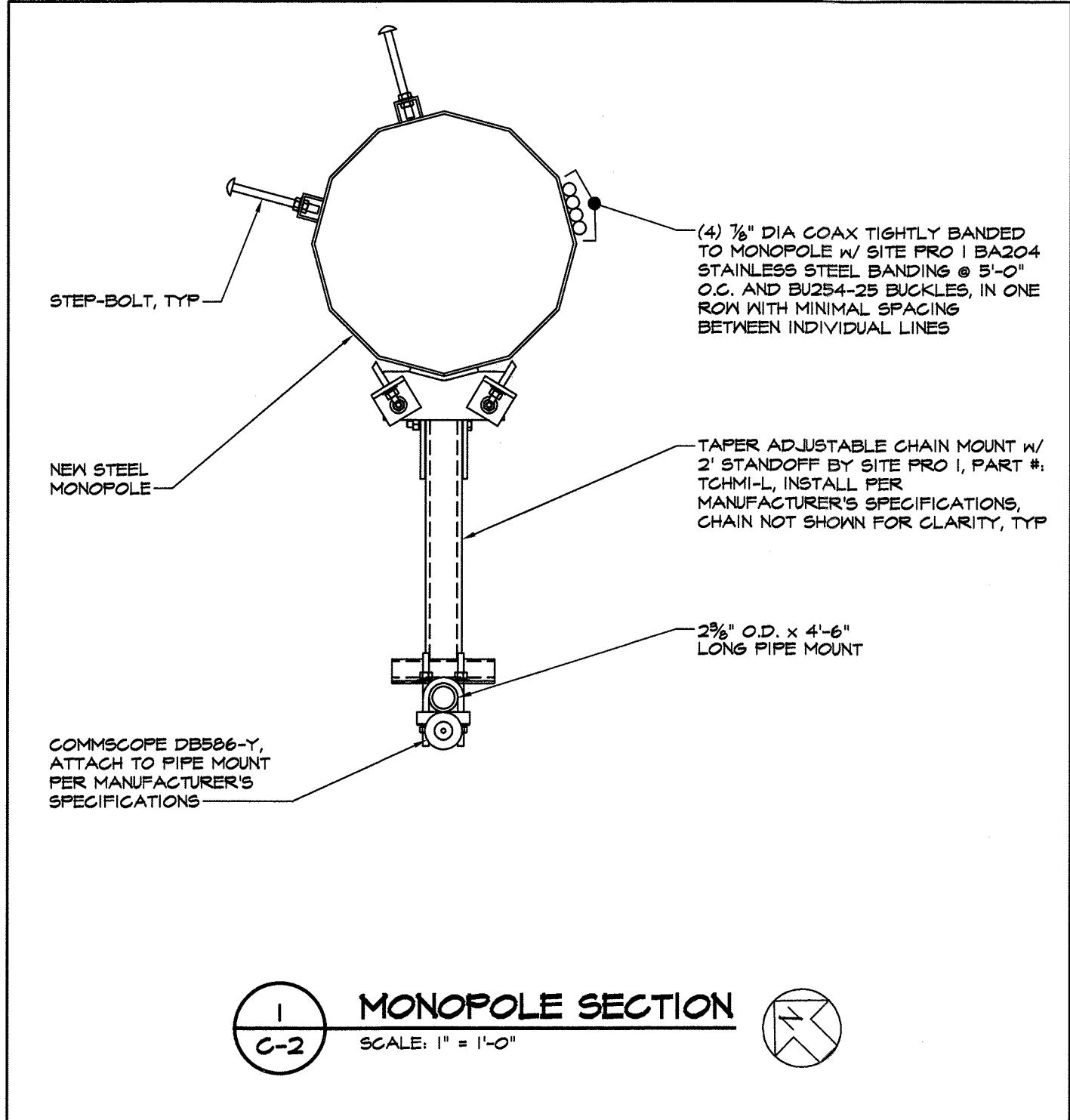
LANDSCAPE PLANTING PLAN
115-13KV SUBSTATION
DORSEY RUN
BALTIMORE GAS AND ELECTRIC COMPANY
ELECTRIC ENGINEERING DEPARTMENT 4



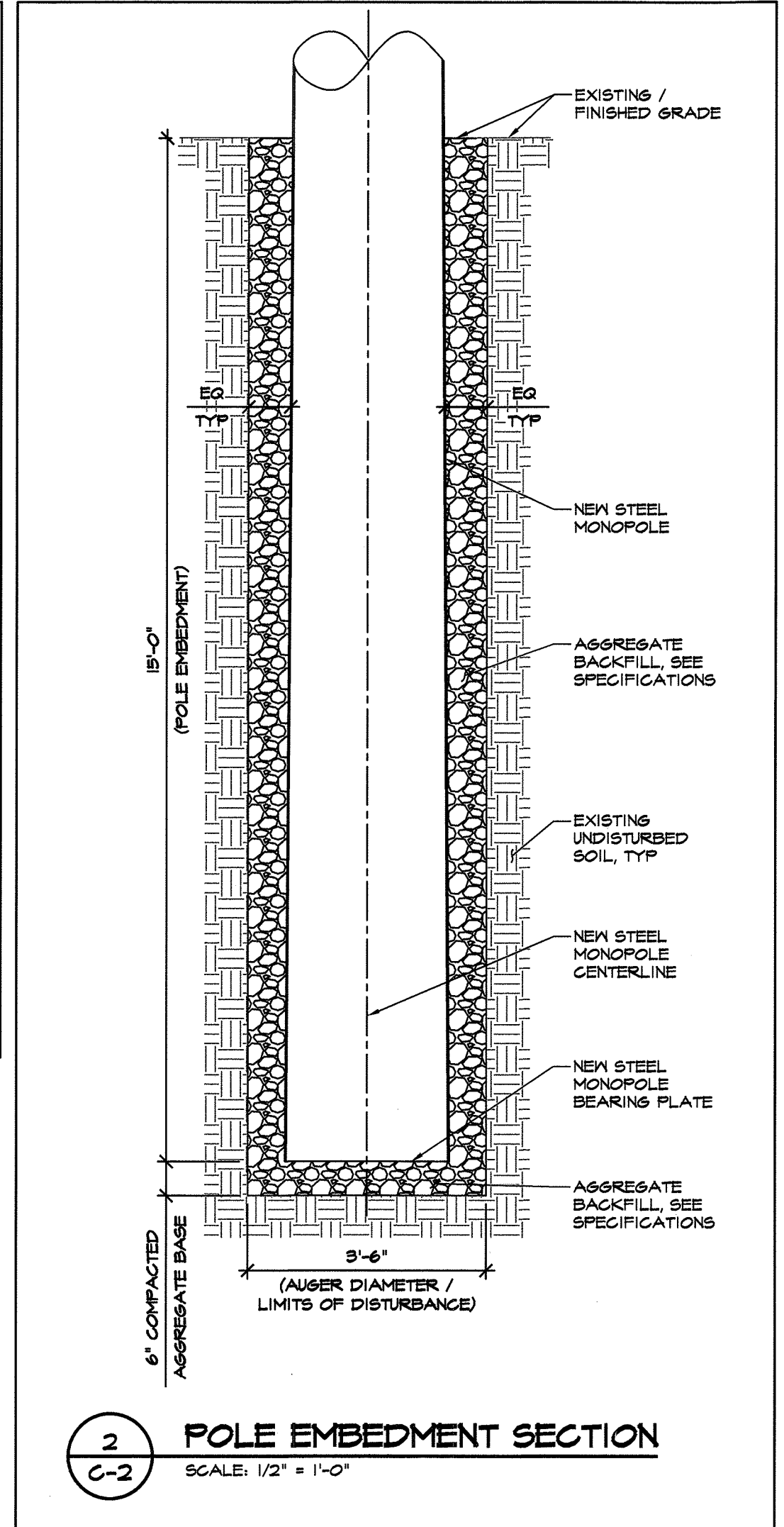
ENLARGED EQUIPMENT LAYOUT
SCALE: 1" = 5'-0"



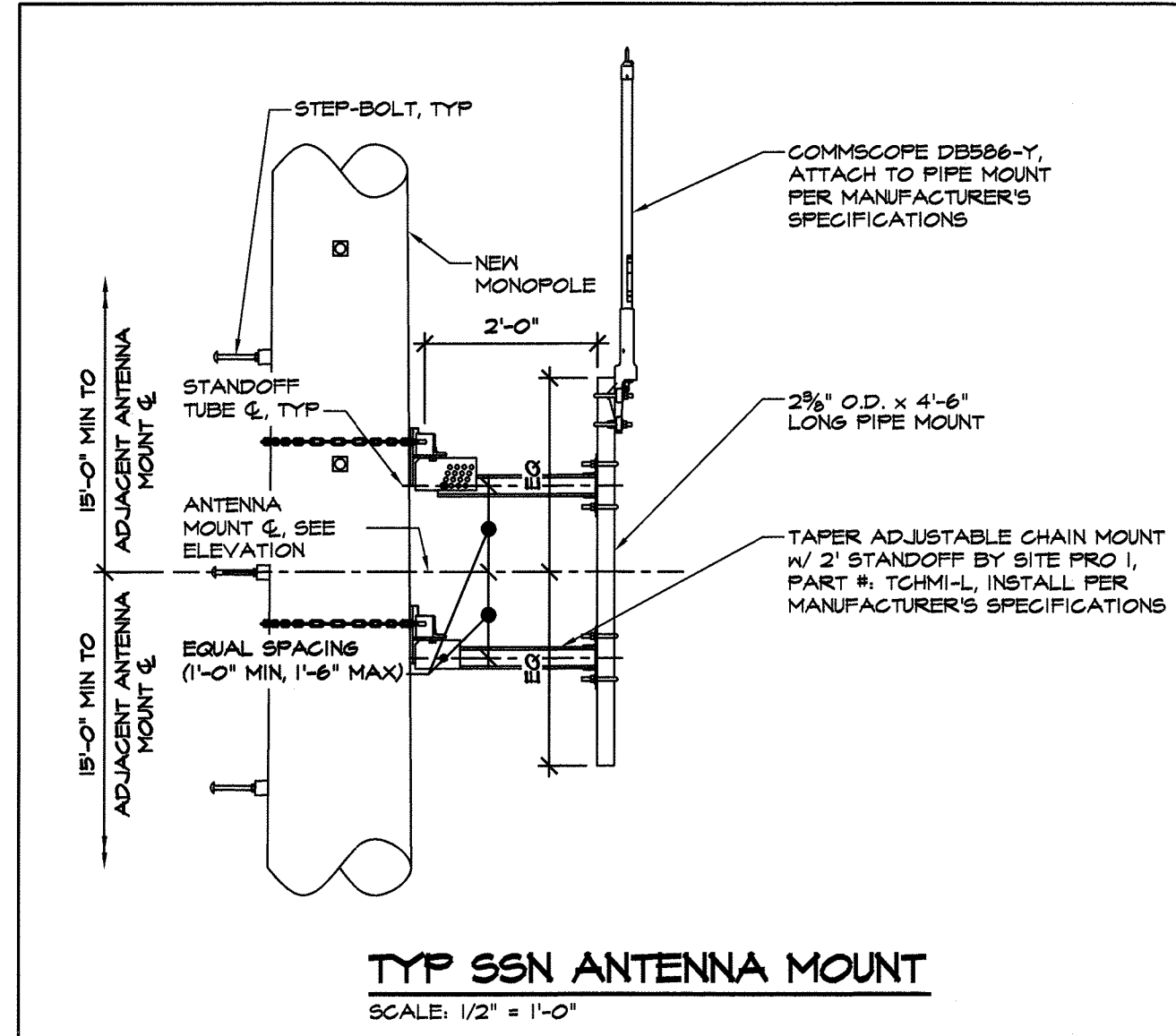
MONOPOLE ELEVATION
SCALE: 1" = 15'-0"



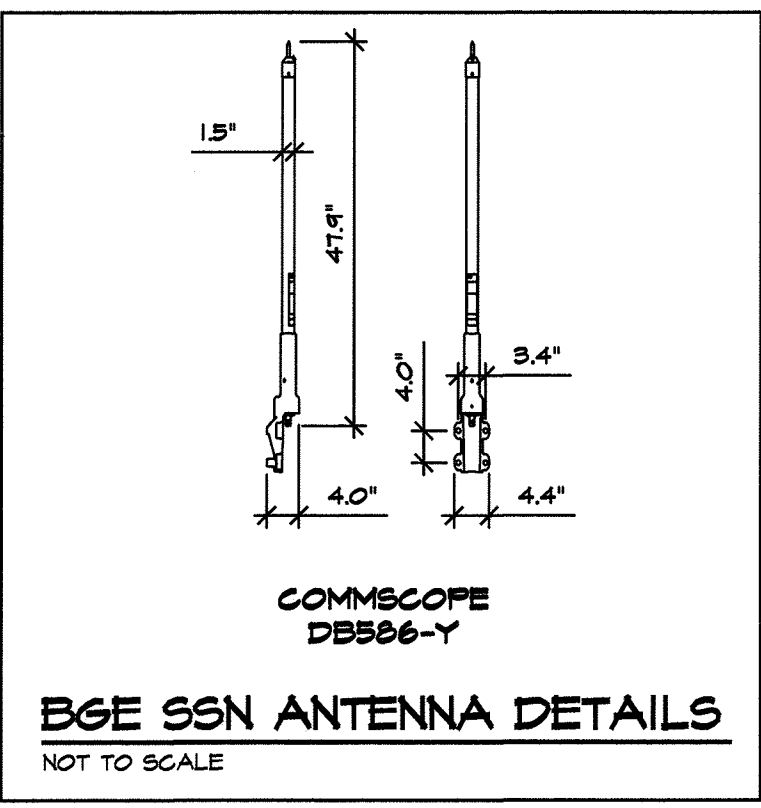
MONOPOLE SECTION
SCALE: 1" = 1'-0"



POLE EMBEDMENT SECTION
SCALE: 1/2" = 1'-0"



TYP SSN ANTENNA MOUNT
SCALE: 1/2" = 1'-0"



BGE SSN ANTENNA DETAILS
NOT TO SCALE



PROTECT YOURSELF, GIVE THREE WORKING DAYS NOTICE
THIS DRAWING DOES NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. ALL CONSTRUCTION MUST BE DONE IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 AND ALL RULES AND REGULATIONS THERE TO APPURTENANT.

- SITE NOTES:**
1. SITE DATA:
DEED BOOK: 00526 PAGE: 00812
PARCEL ID: 381818
TRACT AREA: 2.0700 ACRES
DISTRICT: 03
ADDRESS: 7940 WATERLOO RD
JESSUP, MD 20714
EXISTING USE: UTILITY SUBSTATION
 2. ZONING: M-2
 3. TOTAL DISTURBED AREA = (1/4) * (9.5 FT²/2) + (2 * (1/4) * (1.5 FT²/2)) = ~18 SF
 4. TOTAL DISTURBED VOLUME = (9.5 FT * (1/4) * (9.5 FT²/2) + (2 * (9.5 FT * (1/4) * (1.5 FT²/2))) = ~161 CF = ~6 CY
 5. HORIZONTAL CONTROL SHOWN HEREON IS BASED ON A GPS LATITUDE AND LONGITUDE BY MORRIS & RITCHE ASSOCIATES, INC. DATED DECEMBER 20, 2017.
LATITUDE: N34° 04' 10.40"
LONGITUDE: W76° 46' 49.03"
GROUND ELEVATION: 204.0' AMSL (AVG)
TOP OF PROPOSED MONOPOLE: 80.0' ASL
HIGHEST APPURTENANCE ON MONOPOLE: 85.1' ASL
TOTAL ELEVATION (AMSL): 244.1' AMSL

6. THE PROPOSED FACILITIES WILL CONSIST OF FOUR (4) OMNI-DIRECTIONAL ANTENNAS MOUNTED ON A NEW 60'-0" MONOPOLE FOR THE RECEPTION OF BALTIMORE GAS & ELECTRIC TELECOMMUNICATIONS.
7. THE STRUCTURE WILL NOT SUPPORT LIGHTS OR SIGNS UNLESS REQUIRED FOR AIRCRAFT WARNING OR OTHER SAFETY RECORDS.
8. THE APPLICANT WILL PROVIDE A CERTIFICATION FROM A REGISTERED ENGINEER THAT THE STRUCTURE WILL MEET THE APPLICABLE DESIGN STANDARDS FOR WIND LOADS PER THE REQUIREMENTS OF THE TELECOMMUNICATIONS INDUSTRY ASSOCIATION.
9. IF THE ANTENNAS ARE NO LONGER USED FOR TELECOMMUNICATIONS PURPOSES FOR A CONTINUOUS PERIOD OF ONE (1) YEAR, THEY SHALL BE REMOVED BY THE ANTENNA OWNER AT OWNER'S EXPENSE.
10. NO WATER OR SANITARY UTILITIES ARE REQUIRED FOR THE OPERATION OF THIS FACILITY.
11. STORMWATER MANAGEMENT NOTE: NO STORMWATER MANAGEMENT IS REQUIRED FOR THIS SITE.
12. BOUNDARY SHOWN PER JURISDICTIONAL RECORDS.
13. THIS PLAN PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT. PLAN IS SUBJECT TO EASEMENTS AND RESTRICTIONS OF RECORD.
14. ALL DETAILS SHOWN ARE 'STANDARD' OR 'TYPICAL' FOR REFERENCE ONLY. FOR ACTUAL DETAILS, SEE ARCHITECTURAL, STRUCTURAL, OR CONSTRUCTION PLANS BY OTHERS.
15. STRUCTURAL ANALYSIS/DESIGN TO BE PERFORMED BY OTHERS AT CLIENT AND/OR OWNER'S DISCRETION PRIOR TO COMMENCEMENT OF ANY WORK.

- GENERAL NOTES:**
1. CONTRACTOR SHALL NOTIFY "MISS UTILITY" (1-800-281-TITI) 48 HOURS PRIOR TO DOING ANY EXCAVATION IN THIS AREA. CONTRACTOR SHALL CONTACT A SUBSURFACE UTILITY LOCATOR FOR LOCATION OF EXISTING UTILITIES PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES. CONTRACTOR SHALL VERIFY EXISTING UTILITY LOCATIONS BY TEST PIT AS NECESSARY. LOCATION OF UTILITIES SHOWN ON THIS PLAN ARE APPROXIMATE AND FOR PLANNING PURPOSES ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. DAMAGE TO UTILITIES OR PROPERTY OF OTHER BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE REPAIRED TO PRECONSTRUCTION CONDITIONS BY THE CONTRACTOR.

- MONOPOLE NOTES:**
- CODES:**
- A. ANSI/TIA-222-G-2-2014 'STRUCTURAL STANDARD FOR ANTENNA SUPPORTING STRUCTURES AND ANTENNAS', AND ALL SUBSEQUENT SUPPLEMENTS
 - B. INTERNATIONAL BUILDING CODE (IBC-2015)
 - C. IN ADDITION, ALL CONSTRUCTION SHALL CONFORM WITH THE GOVERNING LOCAL BUILDING CODE
- DESIGN LOADS:**
- A. THE EMBEDDED STEEL MONOPOLE HAS BEEN DESIGNED TO SUPPORT THE APPURTENANCES LISTED IN THE MONOPOLE ANALYSIS REPORT BY MORRIS & RITCHE ASSOCIATES, JOB NO. 16208.200, DATED MARCH 18, 2019.
 - B. WIND LOAD DESIGN DATA
ULTIMATE WIND SPEED (NO ICE): V_{ult} = 120 MPH
BASIC WIND SPEED (WITH ICE): V_i = 40 MPH
DESIGN RADIAL ICE THICKNESS: R_i (ICE THICKNESS INCREASES WITH HEIGHT)
RISK CATEGORY: III/IV
EXPOSURE CATEGORY: C
TOPOGRAPHIC CATEGORY: I
 - C. EARTHQUAKE LOAD DESIGN DATA
NOT APPLICABLE. S_e < 1.00
 - D. THE CONTRACTOR SHALL PROVIDE TEMPORARY BRACINGS AS REQUIRED DURING ERECTION AND CONSTRUCTION. DESIGN OF TEMPORARY BRACINGS IS THE RESPONSIBILITY OF THE CONTRACTOR. SEE CONTROLLED LOW-STRENGTH MATERIAL SECTION OF NOTES FOR ADDITIONAL INFORMATION.
- MISCELLANEOUS:**
- A. THE CONTRACTOR SHALL INSTALL THE EMBEDDED STEEL MONOPOLE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS, IN ADDITION TO THE SPECIFICATIONS ON THESE DRAWINGS.
 - B. THE CONTRACTOR SHALL LOCATE ALL UTILITIES IN THE AREA OF CONSTRUCTION AND PREVENT DAMAGE TO THEM. SHOULD DAMAGE OCCUR TO ANY UTILITIES, THE CONTRACTOR IS REQUIRED TO REPAIR THE DAMAGE TO THE SATISFACTION OF THE OWNER AT HIS OWN EXPENSE.
 - C. IN CASES OF CONFLICT BETWEEN THE DRAWINGS AND/OR SPECIFICATIONS OR EXISTING CONDITIONS, CONTRACTOR SHALL NOTIFY THE DESIGN PROFESSIONALS AND OBTAIN CLARIFICATION PRIOR TO BIDDING AND PROCEEDING WITH WORK.
 - D. THE CONTRACTOR SHALL NOT SUBMIT REPRODUCTIONS OF THE STRUCTURAL CONTRACT DOCUMENTS AS SHOP DRAWINGS.
 - E. SCALES SHOWN ON THE STRUCTURAL CONTRACT DRAWINGS ARE FOR GENERAL INFORMATION ONLY. DIMENSIONAL INFORMATION SHALL NOT BE OBTAINED BY SCALING THE DRAWINGS.
 - F. APPLY DETAILS, SECTIONS AND NOTES ON THE DRAWINGS WHERE CONDITIONS ARE SIMILAR TO THOSE INDICATED BY DETAIL, DETAIL TITLE OR NOTE.
 - G. PROVIDE SHORING AND PROTECTION FOR EXCAVATION AS NECESSARY TO PREVENT CAVING AND COMPLY WITH ALL APPLICABLE OSHA RULES AND REGULATIONS.
 - H. SHOP DRAWINGS FOR ALL STRUCTURAL ELEMENTS SHOWN ON THE CONTRACT DOCUMENTS MUST BE SUBMITTED BY THE CONTRACTOR OR OWNER FOR REVIEW BY THE ENGINEER. IF THE CONTRACTOR OR OWNER FAILS TO SUBMIT THE SHOP DRAWINGS, THE ENGINEER WILL NOT BE RESPONSIBLE FOR STRUCTURAL CERTIFICATION AND DESIGN OF THE PROJECT. THE SHOP DRAWINGS SHALL INDICATE ANY DEVIATIONS OR OMISSIONS FROM THE CONTRACT DOCUMENTS. THE GENERAL CONTRACTOR SHALL REVIEW ALL SHOP DRAWINGS PRIOR TO SUBMISSION AND MAKE ALL CORRECTIONS DEEMED NECESSARY.

- EMBEDDED STEEL MONOPOLE:**
- A. STEEL MONOPOLE SPECIFICATIONS:
MANUFACTURER: VALMONT NEWMARK
DESIGNATION: CLASS HB, RUS 5-04.0 (2-SIDED)
POLE TYPE: THREE-PIECE WITH SLIP JOINTS
TOTAL POLE LENGTH: SEE DRAWINGS
TOP SECTION THICKNESS: 0.214 IN
MIDDLE SECTION THICKNESS: 0.250 IN
BOTTOM SECTION THICKNESS: 0.281 IN
BASE DIA & BEARING PLATE: 92.38 IN
GROUNDLINE MOMENT CAPACITY: 1064.8 K-FT
APPROXIMATE POLE WEIGHT: 8,242 LBS
EMBEDMENT LENGTH: SEE DRAWINGS
 - B. MISCELLANEOUS SPECIFICATIONS:
STEEL FINISH: GALVANIZED
CORROSION: 1'-6" ABOVE GRADE TO BOTTOM OF POLE
CLIMBING HARDWARE: STEP-BOLTS 10' ABOVE GRADE TO TOP OF POLE

- STRUCTURAL AND MISCELLANEOUS STEEL:**
- A. ALL STEEL CONSTRUCTION SHALL CONFORM TO THE LATEST EDITION OF THE AISC STEEL CONSTRUCTION MANUAL, 'SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS' (ANSI/AISC 360) AND THE AISC 'CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES'.
 - B. ALL PIPE SHALL CONFORM TO ASTM A53, GRADE B (F_y = 85 KSI).
 - C. ALL U-BOLTS SHALL CONFORM TO ASTM A307 (F_u = 60 KSI).
 - D. ALL NUTS SHALL CONFORM TO ASTM A563.
 - E. ALL WASHERS SHALL CONFORM TO ASTM F436.
 - F. FIELD WELDING IS NOT PERMITTED.
 - G. THE CONTRACTOR SHALL NOT SPlice OR CUT OPENINGS IN STEEL MEMBERS NOT SHOWN ON CONTRACT DRAWINGS WITHOUT THE PERMISSION OF THE STRUCTURAL ENGINEER.
 - H. ALL STEEL MEMBERS, FABRICATIONS AND ASSEMBLIES SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A129 AFTER FABRICATION. ALL BOLTS, WASHERS & NUTS SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM F2324.
 - I. DAMAGED GALVANIZED SURFACES SHALL BE REPAIRED BY COLD GALVANIZING IN ACCORDANCE WITH ASTM A780.
 - J. AN INDEPENDENT INSPECTION AGENCY SHALL INSPECT ALL STRUCTURAL STEEL AND VERIFY THAT IT CONFORMS TO THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. FIELD INSPECTION REPORTS SHALL BE SUBMITTED TO THE ENGINEER WITHIN 5 DAYS OF THE INSPECTION. THE CONTRACTOR SHALL NOTIFY THE INSPECTION AGENCY OF ALL PHASES OF STEEL CONSTRUCTION AND WELDING.

- STRUCTURAL BACKFILL:**
- AGGREGATE:**
- A. ALL STRUCTURAL BACKFILL, BELOW AND AROUND THE ANNULUS OF THE EMBEDDED PORTION OF THE POLE, SHALL CONFORM TO THE GRADATION REQUIREMENTS OF SIZE NUMBER 57 COARSE AGGREGATE PER ASTM C55.
 - B. ALL STRUCTURAL BACKFILL SHALL BE INSTALLED IN A CONTROLLED MANNER TO ENSURE NO VOIDS ARE PRESENT DURING BACKFILLING OPERATIONS (PREVENT OUTSIDE DEBRIS, REFUSE, ETC. FROM FALLING INTO HOLES).
 - C. ALL STRUCTURAL BACKFILL SHALL BE FREE FROM ORGANIC MATTER, REFUSE, DEBRIS, OR OTHER FOREIGN OBJECTS

GENERAL NOTES (CONTINUED):

2. BUILDING PERMIT WILL BE OBTAINED BY BALTIMORE GAS & ELECTRIC. GENERAL CONTRACTOR SHALL SECURE ELECTRICAL PERMIT FROM ALL APPLICABLE GOVERNMENTAL AGENCIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ABIDING BY ALL CONDITIONS AND REQUIREMENTS OF THE PERMITS.
3. CONTRACTOR SHALL COORDINATE ALL UTILITY CONNECTIONS WITH APPROPRIATE UTILITY OWNERS.
4. THESE PLANS ARE NOT FOR REGRADATION OR CONVEYANCE.
5. EXISTING PAVEMENT AND OTHER SURFACES DISTURBED BY CONTRACTOR (WHICH ARE NOT TO BE REMOVED) SHALL BE REPAIRED TO PRECONSTRUCTION CONDITIONS BY THE CONTRACTOR.

MORRIS & RITCHE ASSOCIATES, INC.
ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS
14280 PARK CENTER DRIVE
LAUREL, MD 20707
(410) 792-9792 / (301) 776-1690
FAX: (410) 792-7395
MRAGTA.COM
Copyright 2019 Morris & Ritchie Associates, Inc.

DORSEY RUN SUBSTATION - BGE
SDP-79-165
ESSENTIAL TELECOMMUNICATION STRUCTURE
CONSTRUCTION DETAILS AND NOTES
Revised
COUNCIL DISTRICT 3, ZONE M-2 (MANUFACTURING HEAVY)
7940 WATERLOO ROAD
JESSUP, MARYLAND 20794 - HOWARD COUNTY

DATE	REVISIONS	JOB NO.:
11/20/18	REVISED SITE DEVELOPMENT PLAN FOR TELECOM	16208200
4/02/19	STRUCTURE AND NEW SHEET & MONOPOLE DETAILS	SCALE: SEE DETAIL
	REVISED SITE DEVELOPMENT PLAN FOR SHORTER TELECOM STRUCTURE AND UPDATED DETAIL SHEET & MONOPOLE	DATE: 4-2-2019
		DRAWN BY: MAM
		DESIGN BY: MAM
		REVIEW BY: TM
		SHEET: 6 OF 6

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE: 5-2-19

 CHIEF, DIVISION OF LAND DEVELOPMENT DATE: 5-07-19

 DIRECTOR OF PLANNING AND ZONING DATE: 5-7-19