
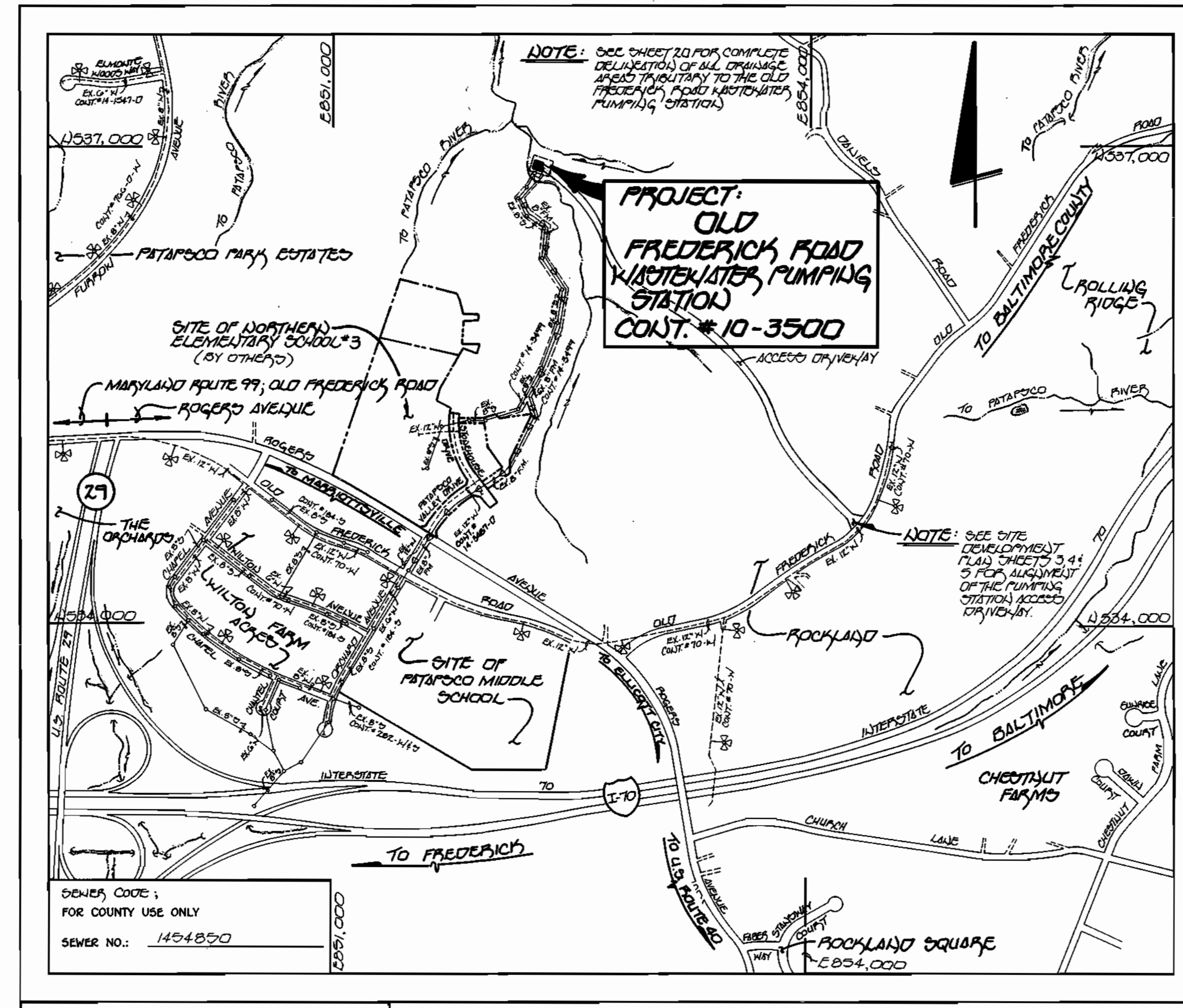


GENERAL NOTES

- 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.
- ALL HORIZONTAL CONTROLS ARE BASED ON MARYLAND STATE COORDINATES.
- ALL VERTICAL CONTROLS ARE BASED ON U.S.G.S. DATUM.
- ALL PIPE ELEVATIONS ARE INVERT ELEVATIONS.
- CLEAR ALL UTILITIES BY A MINIMUM OF 6". CLEAR ALL POLES BY 2'-0" MINIMUM.
- 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 (1991 AMENDMENTS) THE CONTRACTOR SHALL HAVE A COPY OF VOLUME IV ON THE JOB SITE.
- 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 THE CONTRACTOR'S NEGLIGENCE SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:
 - STATE HIGHWAY ADMINISTRATION - 531-5533
 - BALTIMORE GAS & ELECTRIC CO. - CONTRACTOR SERVICES - 850-4620
 - BALTIMORE GAS & ELECTRIC CO. - UNDER GROUND DAMAGE CONTROL - 787-9068
 - MISS UTILITY - 1-800-257-7777
 - COLONIAL PIPELINE CO. - 795-1390
 - BUREAU OF UTILITIES, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS - 313-4900
- TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO MAXIMUM EXTENT. TREES AND SHRUBS LOCATED WITHIN THE CONSTRUCTION STRIP ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR.
- CONTRACTOR SHALL REMOVE TREES, STUMPS AND ROOTS ALONG THE LINE OF EXCAVATION. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CONSTRUCTION OF THE MAIN.
- ALL SEWER MAINS SHALL BE D.I.P. OR P.V.C. UNLESS OTHERWISE NOTED.
- ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER UNLESS OTHERWISE NOTED.
- T.B. DENOTES TEST BORING.
- MANHOLES SHOWN WITH 12" AND 18" WALLS ARE FOR BRICK MANHOLES ONLY.
- MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATERTIGHT FRAME AND COVERS, STANDARD DETAIL G 5.52.
- WHERE WATERTIGHT MANHOLE FRAME AND COVER IS USED, SET TOP OF FRAME 1'-6" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE PLANS OR IN THE SPECIFICATIONS.
- HOUSE(S) WITH THE SYMBOL "C.N.S." INDICATES THAT THE CELLAR CANNOT BE SERVED.
- ALL WATER HOUSE CONNECTIONS SHALL BE FOR INSIDE METER SETTING, UNLESS OTHERWISE NOTED ON THE PLANS OR IN THE SPECIFICATIONS.
- MANHOLES LOCATED WITHIN THE PROPOSED ROADWAY SHALL HAVE STANDARD HEAVY TRAFFIC MANHOLE FRAMES AND COVERS, STANDARD DETAIL G5.51.
- WATER MAINS AND WATER HOUSE CONNECTION LINES MUST BE PLACED AS TO HAVE ONE (1) FOOT SEPARATION FROM THE SEWER MAIN OR SEWER HOUSE CONNECTION AS THEY PASS ABOUT IT.
- ALL WATER MAINS SHALL BE D.I.P., CLASS 52 UNLESS OTHERWISE NOTED.
- TOPS OF ALL WATER MAINS TO HAVE A MINIMUM OF 3'-1/2" COVER UNLESS OTHERWISE NOTED.
- VALVES ADJACENT TO TEES SHALL BE STRAPPED TO TEES.
- ALL FITTINGS SHALL BE BUTTRESSED OR ANCHORED WITH CONCRETE IN ACCORDANCE WITH THE STANDARD DETAILS UNLESS OTHERWISE PROVIDED FOR ON THE DRAWINGS.
- FIRE HYDRANTS SHALL BE SET TO THE BURY LINE ELEVATION SHOWN ON THE DRAWINGS. ALL FIRE HYDRANTS SHALL BE RESTRAINED AND BUTTRESSED WITH CONCRETE IN ACCORDANCE WITH THE STANDARD DETAILS (W1.11 AND W2.13). SOIL AROUND THE FIRE HYDRANT SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 1000 AND 1005 OF THE STANDARD SPECIFICATIONS.
- THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.
- ALL D.I.P. FITTINGS SHALL BE IN ACCORDANCE WITH AWWA SPECIFICATIONS C-153; DUCTILE IRON COMPACT FITTINGS, 3-INCH THROUGH 12-INCH FOR WATER AND OTHER LIQUIDS.
- THE CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD COUNTY, @ (410) 313-2450 AT LEAST FIVE WORKING DAYS BEFORE ANY OPEN CUT OF ANY COUNTY ROAD OR BORING/JACKING OPERATION IN COUNTY ROADS FOR LAYING WATER/SEWER MAINS OR HOUSE CONNECTIONS. THE APPROVAL OF THESE DRAWINGS WILL CONSTITUTE COMPLIANCE WITH DPW REQUIREMENTS PER SECTION 18.114(A) OF THE HOWARD COUNTY CODE.
- THE 8" MCH FORCE MAIN SHALL BE CLASS 54 DUCTILE IRON PIPE (D.I.P.)



VICINITY MAP
SCALE: 1"=600'

**CAPITAL PROJECT NO. S-6203
CONTRACT No. 10-3500
OLD FREDERICK ROAD
WASTEWATER PUMPING STATION**

HOWARD COUNTY, MARYLAND

QUANTITIES				
ITEM	ESTIMATED	AS-BUILT		SUPPLIER
		QUANTITIES	TYPE	
PUMPING STATION COMPLETE IN PLACE	1 EACH	1 EACH	PUMP STATION	LEE FOUNDATION
10" D.I.P. 8' L.F.	8 L.F.	8 L.F.	10" D.I.P.	
8" D.I.P. 16' L.F.	16 L.F.	16 L.F.	8" D.I.P.	
MANHOLE 5' 4"	1 EACH	1 EACH	PRECAST	
8" FORCE MAIN	72 L.F.	72 L.F.	CL 54 D.I.P.	
2" WATER	50 L.F.	67 L.F.	TYPE K COPPER	
NAME OF UTILITY CONTRACTOR: LEE FOUNDATION				
SURVEY & DRAFTING DIVISION "AS-BUILT" DATE: 1 SEPTEMBER 1997				

INDEX OF DRAWINGS	
No.	DESCRIPTION
1	TITLE SHEET
2	SITE DEVELOPMENT PLAN / PUMPING STATION LOT LAY-OUT
3	SITE DEVELOPMENT PLAN / ACCESS DRIVEWAY PLAN & PROFILE
4	SITE DEVELOPMENT PLAN / ACCESS DRIVEWAY PLAN & PROFILE
5	SITE DEVELOPMENT PLAN / ACCESS DRIVEWAY PLAN & PROFILE
6	SITE DEVELOPMENT PLAN / MISCELLANEOUS DETAILS
7	ARCHITECTURAL PLANS: ELEVATIONS & DETAILS
8	ARCHITECTURAL PLANS: SECTIONS & DETAILS
9	STRUCTURAL PLANS
10	STRUCTURAL SECTIONS
11	MECHANICAL PLANS
12	MECHANICAL SECTIONS
13	STRUCTURAL & MECHANICAL DETAILS
14	STRUCTURAL & MECHANICAL DETAILS
15	ELECTRICAL PLANS
16	ELECTRICAL LEGEND & SCHEDULES
17	ELECTRICAL ONE-LINE DIAGRAM & DETAILS
18	ELECTRICAL CONTROL DIAGRAMS
19	MISCELLANEOUS DETAILS / SOIL BORING PROFILES
20	MISCELLANEOUS DETAILS / DRAINAGE AREA MAP

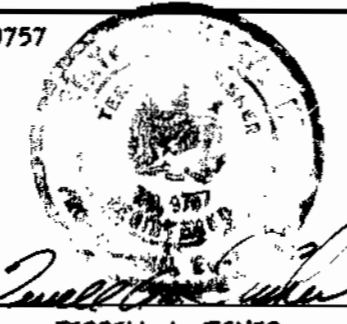
TYPE OF BUILDING:	WASTEWATER PUMPING STATION
NUMBER OF LOTS:	1 (1 BUILDABLE)
NO. OF WATER HOUSE CONNECTIONS:	1
NO. OF SEWER HOUSE CONNECTIONS:	N/A
DRAINAGE AREA:	1.57 ACRES
TREATMENT PLANT:	PATASCO WWTIP, CITY OF BALTO.
VIA OLD FREDERICK ROAD PUMPING STATION	

THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY HOWARD SOIL CONSERVATION DISTRICT.
APPROVED: *John K. Reuter* 7/26/96
HOWARD SOIL CONSERVATION DISTRICT DATE

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT & METEOROLOGICAL REQUIREMENTS
J. A. Wadsworth 7/26/96
U.S. DEPT. OF AGRICULTURE SOIL CONSERVATION SERVICE DATE

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE HOWARD COUNTY DESIGN MANUAL & STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS AS SHOWN ON THESE PLANS.
Paul J. Eppson 7/25/96
SIGNATURE OF DEVELOPER DATE

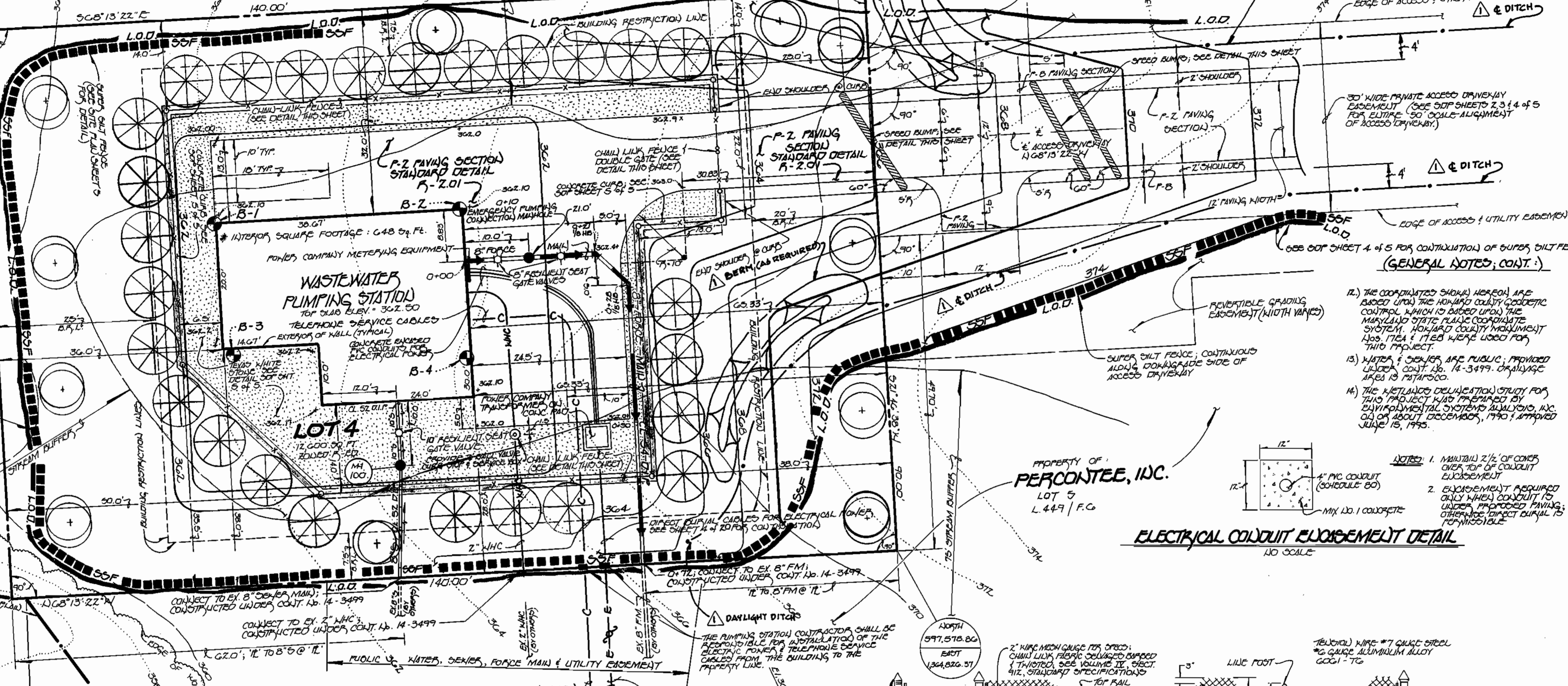
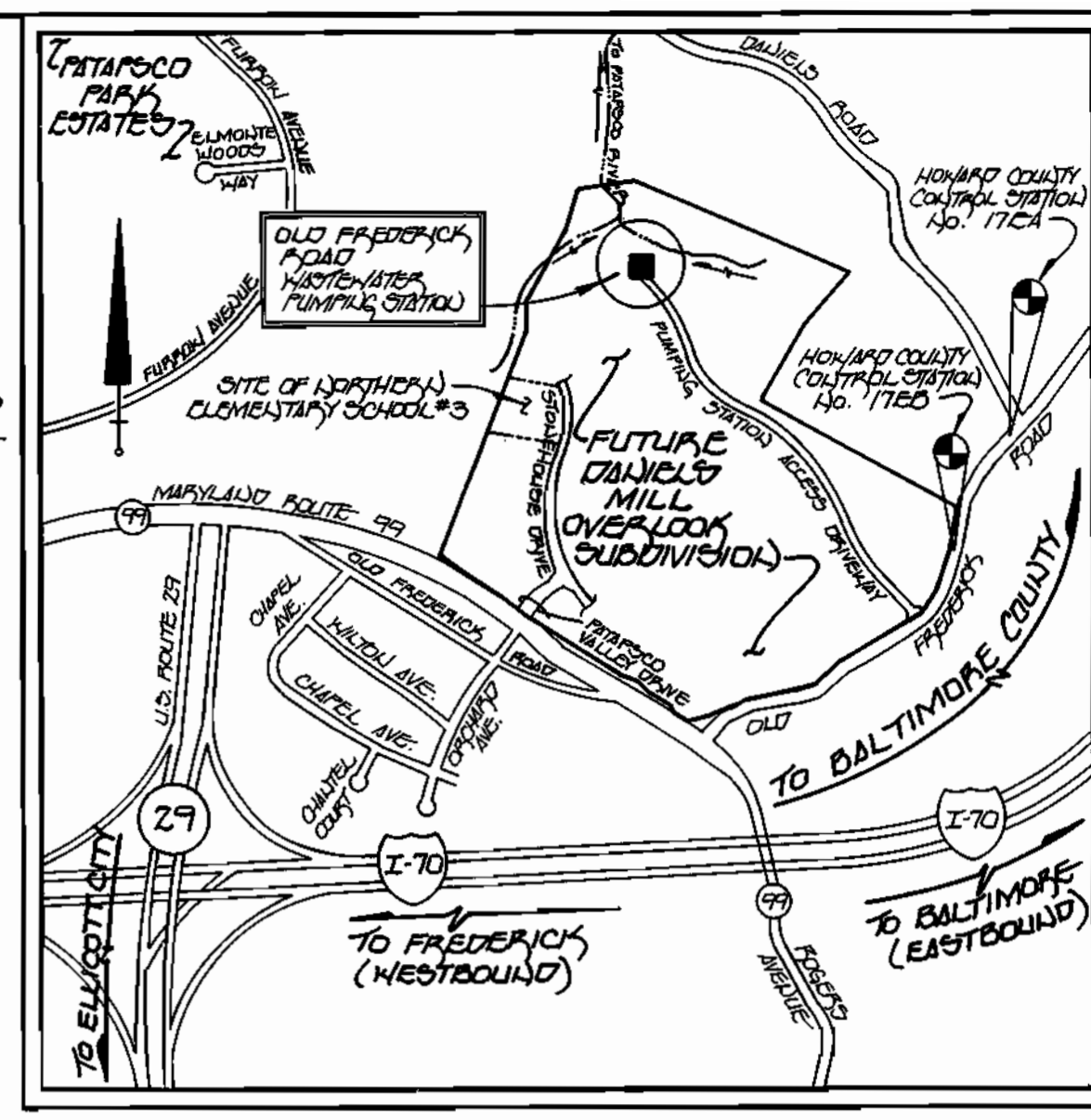
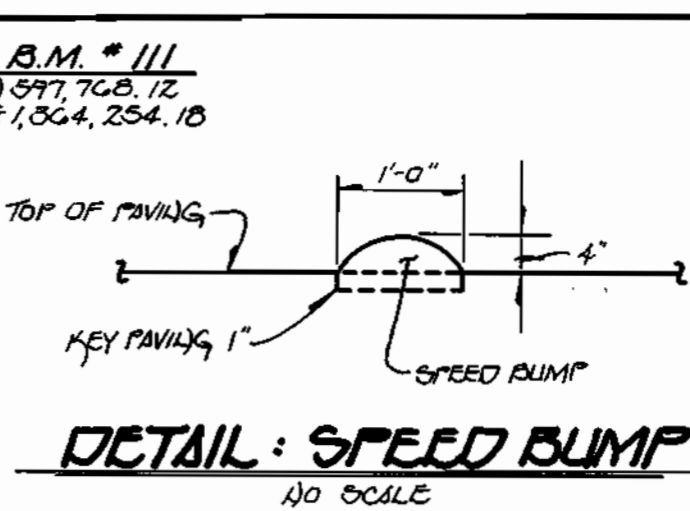
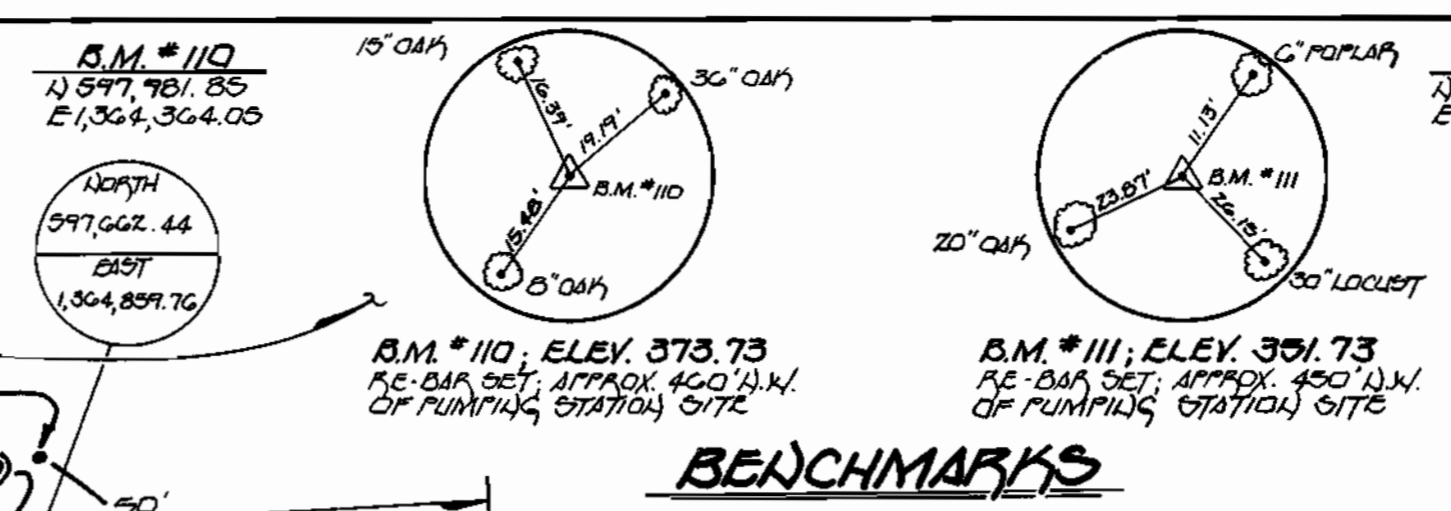
CAPITAL PROJECT S-6203
CONTRACT NO. 10-3500
OLD FREDERICK ROAD
WASTEWATER PUMPING STATION
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND <i>Janet M. ...</i> 7/25/96 CHIEF, BUREAU OF UTILITIES DATE	Fisher, Collins & Carter, Inc. CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS CENTENNIAL SQUARE OFFICE PARK 10272 Baltimore National Pike Elliott City, Maryland 21042 (410) 481-2855 #9757  TERRELL A. FISHER	DES: N.J.M./P.M.H. DRWN: J.M.H. CHK: P.W.K. DATE: 7/25/96	REVISIONS AS-BUILT CONDITIONS TITLE SHEET	600' SCALE MAP NO. 17 BLOCK NO. 12	OLD FREDERICK ROAD WASTEWATER PUMPING STATION CAPITAL PROJECT S-6203 : CONTRACT No. 10-3500 SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND	SCALE AS SHOWN SHEET 1 OF 20
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- NOTES:**
- 8" FORCE MAIN SHALL BE CURED 54 DI.
 - SEE SHEET 3 OF 20 (SITE DEVELOPMENT PLAN) SHEET 2 OF 5 FOR PROFILE OF THE DENVER MAIN WITHIN THE LIMITS OF THE PUMPING STATION SITE.
 - SEE SHEET 3 OF 20 (SHEET 4 OF 5) FOR PROFILE OF THE 8" FORCE MAIN WITHIN THE PUMPING STATION SITE.
 - 8" FORCE MAIN SHALL BE INSTALLED IN CONCRETE CHAIN LINK FENCE (SEE DETAIL THIS SHEET).
 - DEVELOP INSTALLATION OF TEXAS WHITE STONES, SEE SHEET 3 OF 5.
 - COORDINATES BASED ON 1983 MARYLAND COORDINATE SYSTEM AS PROVIDED BY HOWARD COUNTY GEODETIC CONTROL STATIONS AS SHOWN IN VICINITY MAP THIS SHEET.
 - SEE SHEET 19 OF 20 FOR SOIL BORING PROFILES.

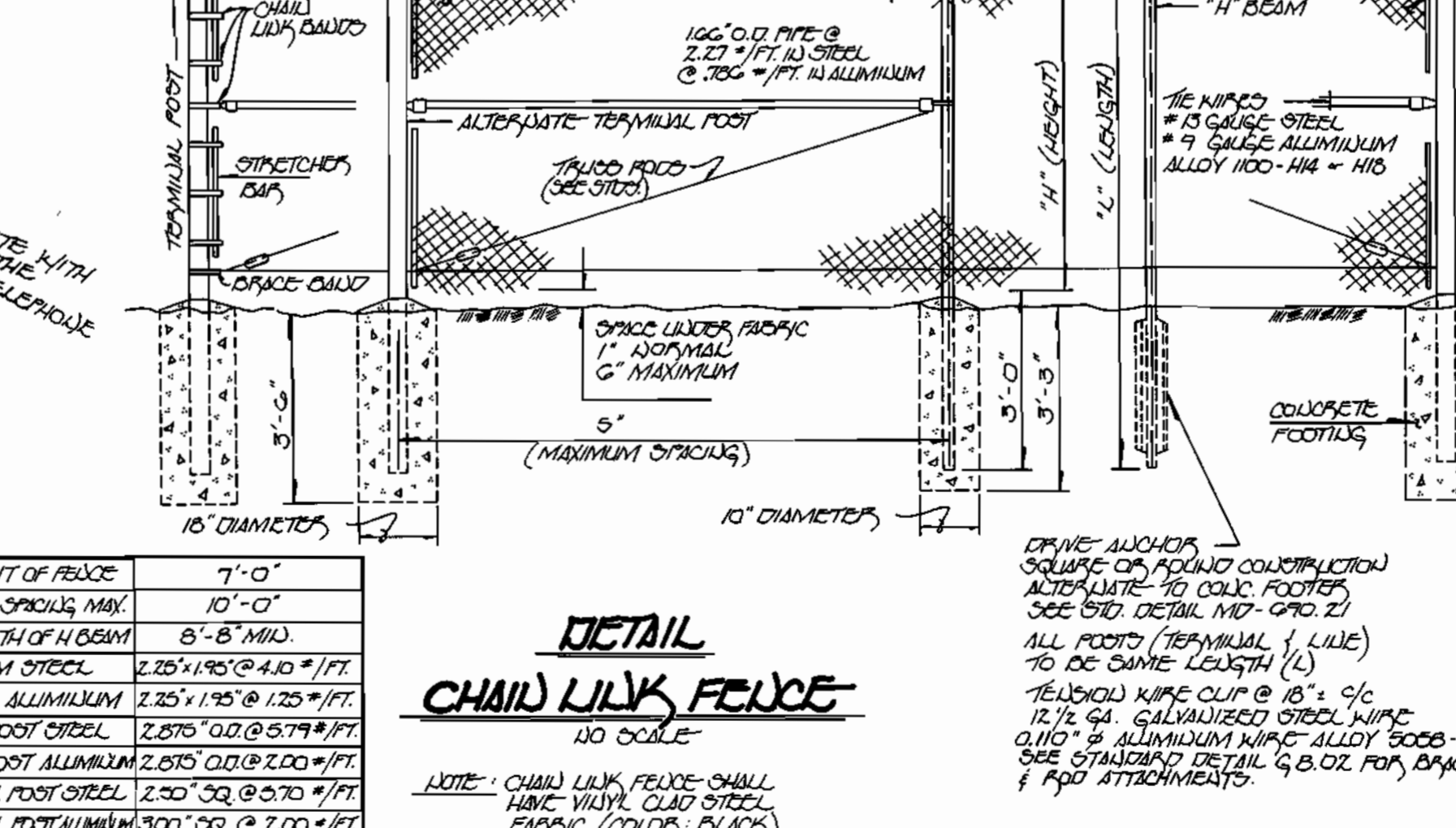
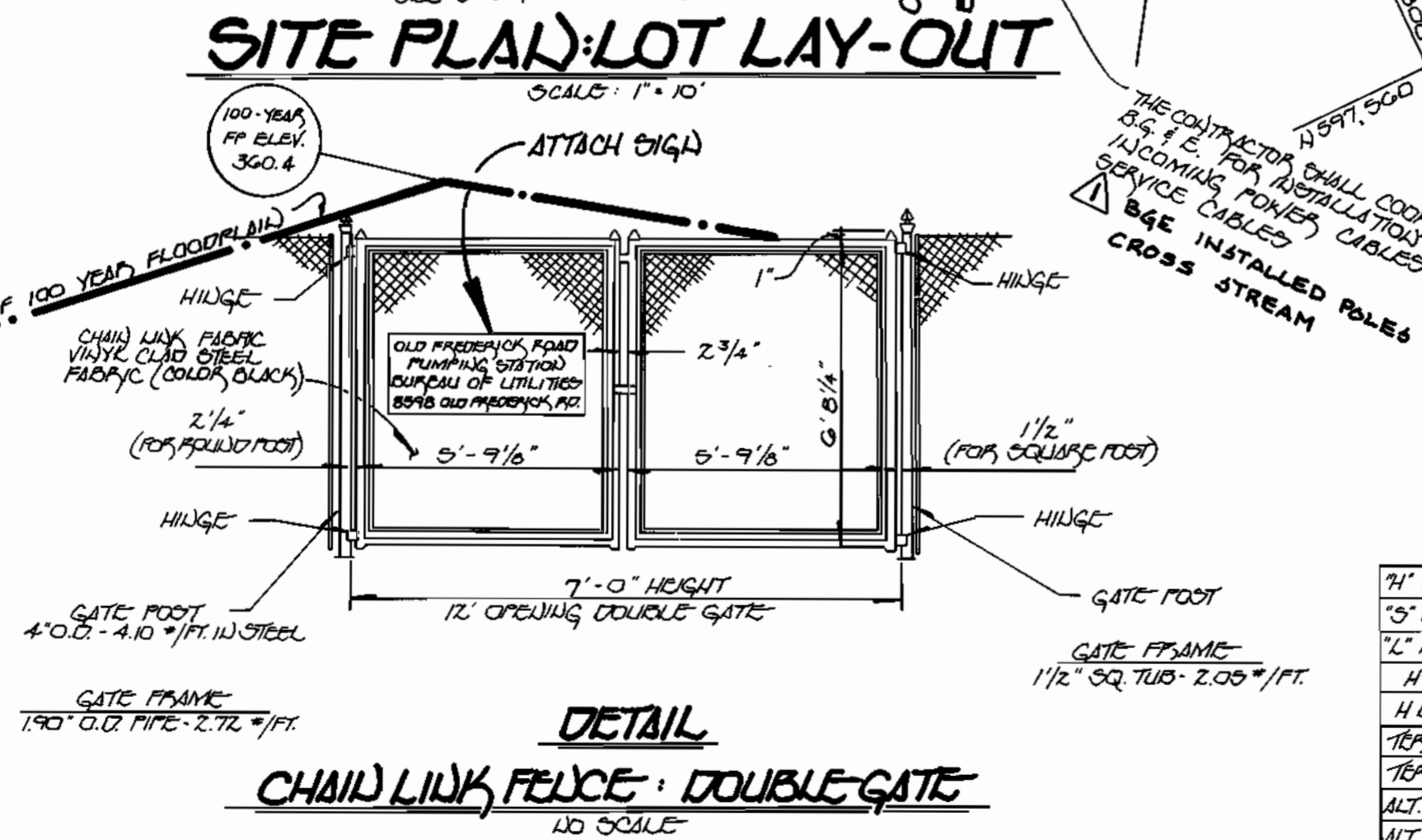
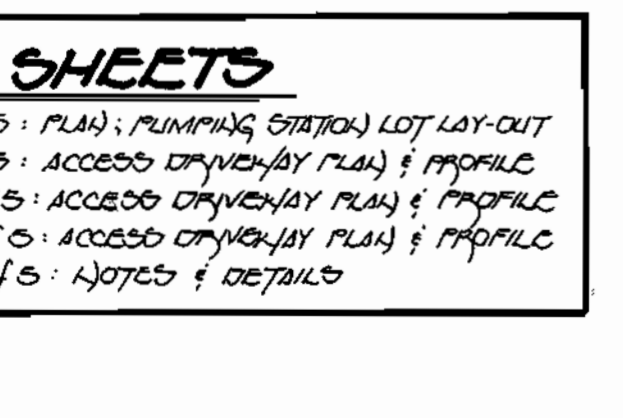
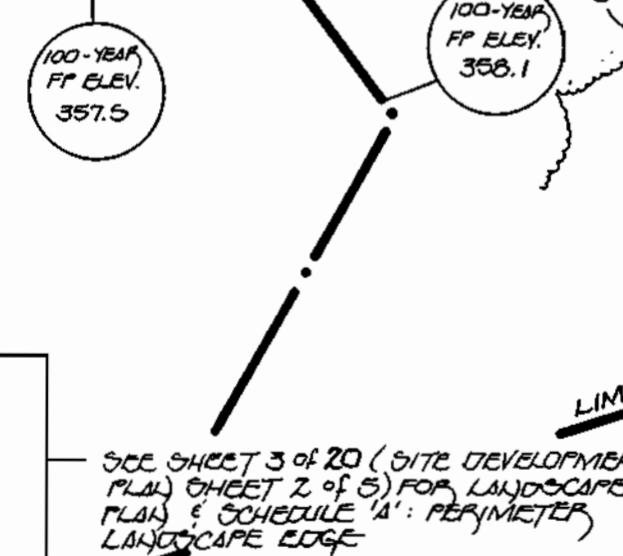
NOTE: SEE SHEET 6 OF 20 (SITE PLAN SHEET 5) FOR PROPOSED UTILITY CONTOURS & TOPOGRAPHY WITHIN LIMITS OF PUMPING STATION SITE BOUNDARY.

PROPERTY OF:
PERCOTTEE, INC.
LOT 5
L. 449 / F.G.



- GENERAL NOTES:**
- SUBJECT PROPERTY IS LOCATED ON TAX MAP 17, PARCEL 41.
 - PRESENT ZONING IS R-ED (RESIDENTIAL - ENVIRONMENTAL DEVELOPMENT).
 - TOTAL AREA OF PROPERTY IS 12,000 SQ. FT. (0.278 ACRES).
 - PROPERTY REFERENCE: PLAT NO. F-96-125.
 - PARKING DATA:
 - A. INTENDED USE OF STRUCTURE: WASTEWATER PUMPING STATION.
 - B. NUMBER OF SPACES REQUIRED: 2.
 - C. NUMBER OF SPACES PROVIDED: 3 REGULAR SPACES (9' X 18').
 - THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS / DIVISION OF CONSTRUCTION INSPECTION AT (410) 313-1200 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
 - THE CONTRACTOR SHALL NOTIFY MISS UTILITY AT 1-800-257-7177 AT LEAST FORTY-EIGHT (48) HOURS PRIOR TO ANY EXCAVATION WORK.
 - SEE SHEET 3 OF 5 FOR SCHEMATIC BUILDING PROFILES.
 - ALL EXTERIOR LIGHTING OF BUILDING WILL BE DIRECTED DOWNWARD.
 - ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARD CODES OF HOWARD COUNTY PLUS MHA STRATEGIC CODES, IF APPLICABLE.
 - REFERENCE TO: 279, N.P. 95-95 & F-96-125.
 - APPROXIMATE PLAT NO. 12280 THROUGH 12285, DENVER MILL OVERLOOK, LOT Nos. 4 & 5.

- SITE ANALYSIS**
- AREA OF LOT: 12,000 SQ. FT. / 0.278 ACRES
 - PRESENT ZONING: R-ED
 - PROPOSED USE OF STRUCTURE: WASTEWATER PUMPING STATION
 - FLOOR SPACE OF PUMPING STATION BUILDING: 648 SQ. FT. (CONTR'L & GEN. ROOM)
 - TOTAL NUMBER OF UNITS ALLOWED: NOT APPLICABLE
 - TOTAL NUMBER OF UNITS PROVIDED: ONE (1)
 - MINIMUM SQUARE FOOT FLOOR AREA: NOT APPLICABLE
 - MINIMUM NUMBER OF EMPLOYEES: NORMALLY ONE (1)
 - MINIMUM NUMBER OF EMPLOYEES BY BUSINESS OR UTILITIES MAINTENANCE PERSONNEL: NOT APPLICABLE
 - NUMBER OF PARKING SPACES REQUIRED: TWO (2), PER HOWARD COUNTY DESIGN MANUAL, VOLUME II
 - NUMBER OF PARKING SPACES PROVIDED: THREE (3)
 - AREA SPACE ON SITE: NOT APPLICABLE
 - AREA OF RECREATIONAL OPEN SPACE PROVIDED: NOT APPLICABLE
 - MINIMUM COVERAGE OF SITE: 1020 SQ. FT. ±
 - PAVED AREA OF SITE (WITHIN LOT 4 ONLY): 0.085 ACRES ±
 - PAVED AREA OF ACCESS DRIVEWAY: 1.162 ACRES ±



MINIMUM LOT SIZE CHART

LOT NO.	GROSS AREA	NET AREA	REMAINING AREA	100-YEAR FLOODPLAIN	25% SLOPED	MINIMUM LOT SIZE
4	12,000 sq. ft.	0	12,000 sq. ft.	0	1780 sq. ft.	NOT APPLICABLE

ADDRESS CHART

LOT NO.	ADDRESS
0.278 AC. 4	8598 OLD FREDERICK ROAD
LOT NO.	ADDRESS

APPROVED
PLANNING DEPT.
OF HOWARD COUNTY
DATE: 7/21/96

SEDEMENT CONTROL MEASURED FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH SECT. 219 OF THE HOWARD COUNTY DESIGN MANUAL & SUBORDINATE CODES. SEDEMENT CONTROL MEASURES DEVELOPING AREAS AS SHOWN ON THESE PLANS.
OWNER & DEVELOPER: HOWARD COUNTY, MARYLAND
DATE: 7/25/96

ENGINEER'S CERTIFICATE
I HEREBY 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 SOIL CONSERVATION DISTRICT.
SIGNATURE OF ENGINEER: [Signature]
DATE: 7/25/96

DEVELOPER'S CERTIFICATE
I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ONSITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY.
DATE: 7/25/96

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS
DATE: 7/25/96

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
DATE: 7/25/96

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND
DATE: 7/25/96

OLD FREDERICK ROAD WASTEWATER PUMPING STATION
CAPITAL PROJECT 3-6203; CONT. No. 10-3500
TAX MAP 17 PARCEL 41
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
OPEN SPACE LOT No. 4
SCALE: AS SHOWN
SITE PLAN SHEET 1 OF 5
SHEET 2 OF 20

Fisher, Collins & Carter, Inc.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE: PARK & LIZIE STS., ANNAPOLIS, MD 21403
TEL: (410) 461-2855

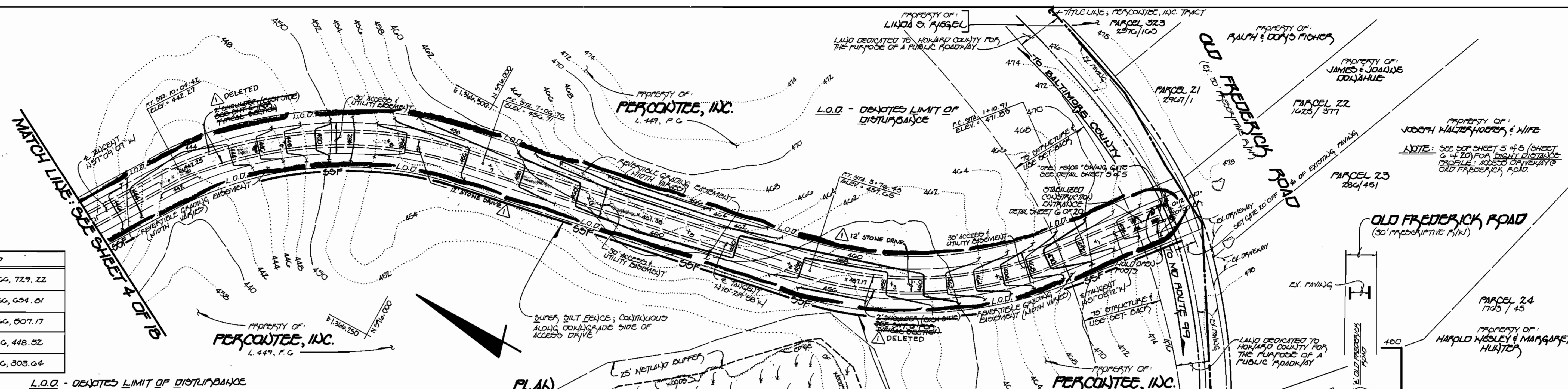
1. CURVE DATA

STA. 7+00 TO STA. 10+04.42
 R = 325.00'
 Δ = 2° 27' 00"
 Δ = 46° 39' 00"
 Δ = 107° 00'
 CHD LENGTH = 289.50'
 CHD. BEARS = 1) 83° 47' 32" W

2. CURVE DATA

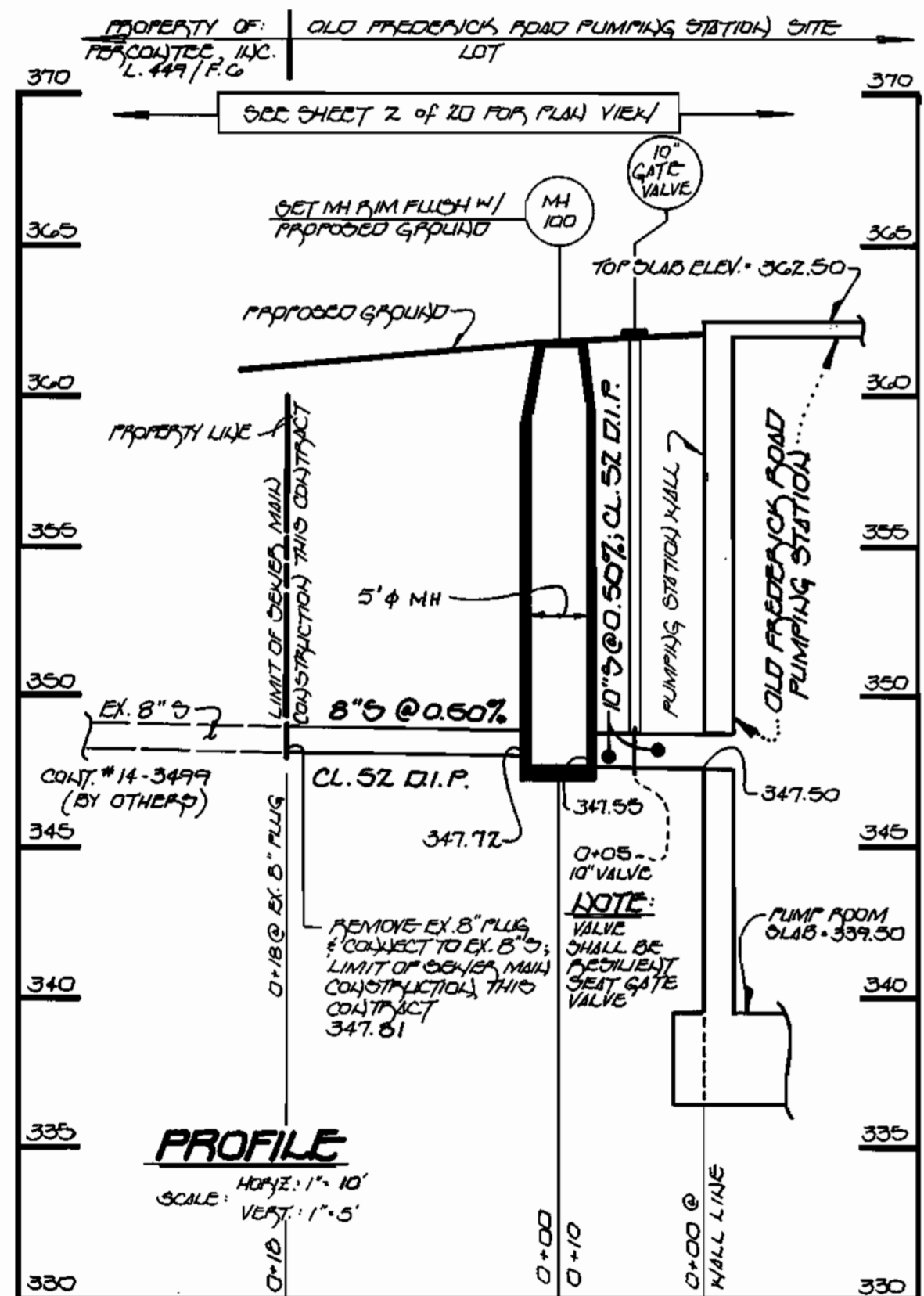
STA. 1+10.91 TO STA. 3+76.43
 R = 374.57'
 Δ = 2° 25' 32"
 Δ = 40° 30' 14"
 Δ = 130° 02'
 CHD LENGTH = 259.99'
 CHD. BEARS = 1) 30° 49' 05" W

STATION	COORDINATES
0+00 @ OLD FREDERICK ROAD	N 59° 37' 29.45" E 1,360.729.22
P.C. STA. 1+10.91	N 59° 43' 37" E 1,360.654.01
P.T. STA. 3+76.43	N 59° 05' 17.08" E 1,360.607.17
P.C. STA. 7+00.76	N 59° 48' 1.73" E 1,360.448.52
P.T. STA. 10+04.42	N 59° 03' 23.29" E 1,360.303.04



L.O.D. - DENOTES LIMIT OF DISTURBANCE

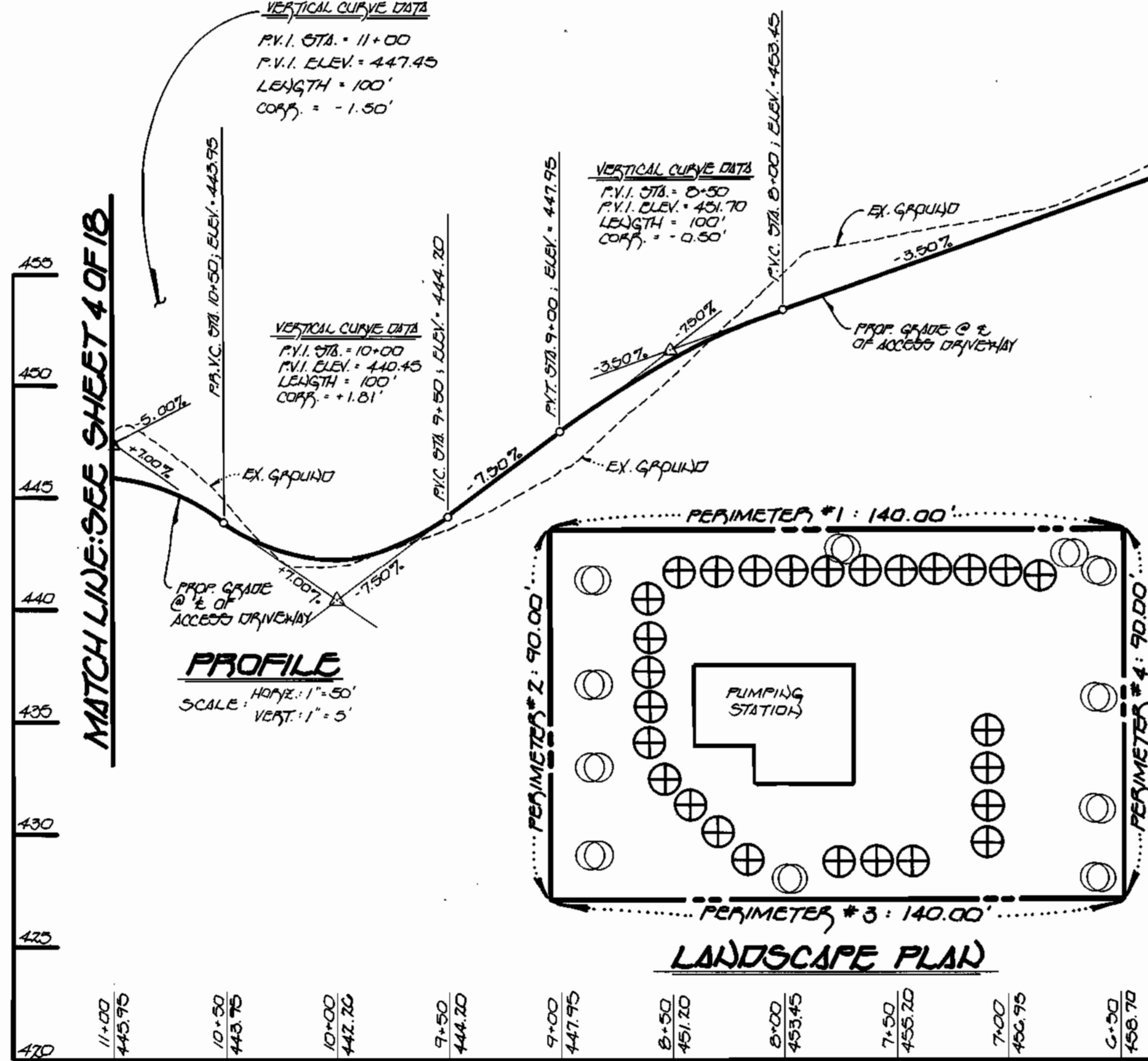
PLAN SCALE: 1" = 50'



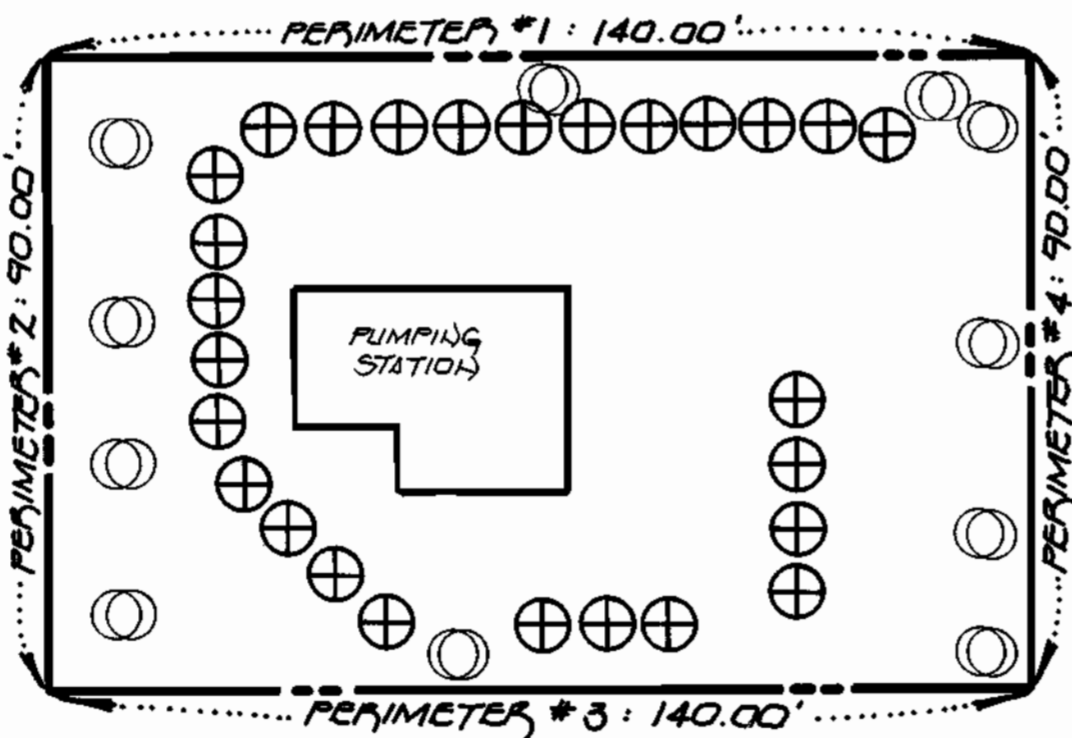
PROFILE SCALE: HORIZ. 1" = 10' VERT. 1" = 5'

MATCH LINE - SEE SHEET 4 OF 5

PROFILE SCALE: HORIZ. 1" = 50' VERT. 1" = 5'



PROFILE SCALE: HORIZ. 1" = 50' VERT. 1" = 5'



LANDSCAPE LEGEND

○ TYPE 'A' PERIMETER LANDSCAPING: SOVEREIGN PALM (QUERCUS PALM-LIKE COVERAGES)
 ⊕ WHITE PINES (PLANT OUTROOD) FOR ADDITIONAL SCREENING OF PUMPING STATION BUILDING & APPROXIMATE 1:1000

LANDSCAPE PLAN NOTE

THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE & THE LANDSCAPE MANUAL.

CATEGORY	PERIMETER LANDSCAPE EDGE			
	ADJACENT TO ROADWAYS	ADJACENT TO PERIMETER PROPERTIES		
LANDSCAPE TYPE	NOT APPLICABLE	A	A	A
LINEAR FEET OF PERIMETER	NOT APPLICABLE	PH ¹ /1000	PH ² /7000	PH ³ /1000
CREDIT FOR EXISTING VEGETATION	NOT APPLICABLE	NONE		
CREDIT FOR WALL, FENCE OR SCREEN	NOT APPLICABLE	NONE		
NUMBER OF PLANTS ACQUIRED	NOT APPLICABLE	PH ¹ /2.5	PH ² /16	PH ³ /2.3
NUMBER OF PLANTS PROVIDED	NOT APPLICABLE	PH ¹ /3	PH ² /2	PH ³ /3

ACCESS DRIVEWAY: STA. 0+00 TO STA. 11+00

OWNER AND DEVELOPER: HOWARD COUNTY, MARYLAND

ADDRESS CHART
LOT No. 4 ADDRESS
0.5 No. 4 8098 OLD FREDERICK ROAD ADDRESS
LOT No. ADDRESS
ADDRESS CHART

Fisher, Collins & Carter, Inc.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK
 10276 BALTIMORE NATIONAL PIKE
 ELICOTT CITY, MARYLAND 21042
 (410) 461-2855

ENGINEER'S CERTIFICATE
 I HEREBY 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 SOIL CONSERVATION DISTRICT.

STATE OF MARYLAND
 CHARLES E. FISHER, P.E.
 CIVIL ENGINEER
 SIGNATURE OF ENGINEER: [Signature]
 DATE: 7/24/96

DEVELOPER'S CERTIFICATE
 I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY.

THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
 APPROVED: [Signature]
 DATE: 7/25/96

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS

[Signature]
 DATE: 7/26/96

[Signature]
 DATE: 7/25/96

[Signature]
 DATE: 7/26/96

[Signature]
 DATE: 7-25-96

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

[Signature]
 DATE: 7/25/96

[Signature]
 DATE: 7/26/96

[Signature]
 DATE: 7-25-96

DEPARTMENT OF PLANNING & ZONING
 HOWARD COUNTY, MARYLAND

[Signature]
 DATE: 7/26/96

[Signature]
 DATE: 7/26/96

[Signature]
 DATE: 7/26/96

PROPERTY: DANIELS MILL OVERLOOKS
 OLD FREDERICK ROAD PUMPING STA.
 PLAT NO. 12231 BLOCK NO. 12 ZONE R-ED TAX/ZONE 17 ELEC. DIST. 2 ND CENSUS TRACT 6021

OLD FREDERICK ROAD
 HASTENHATER PUMPING STATION
 CAPITAL PROJECT 5-6203; CONTRACT No. 10-3500

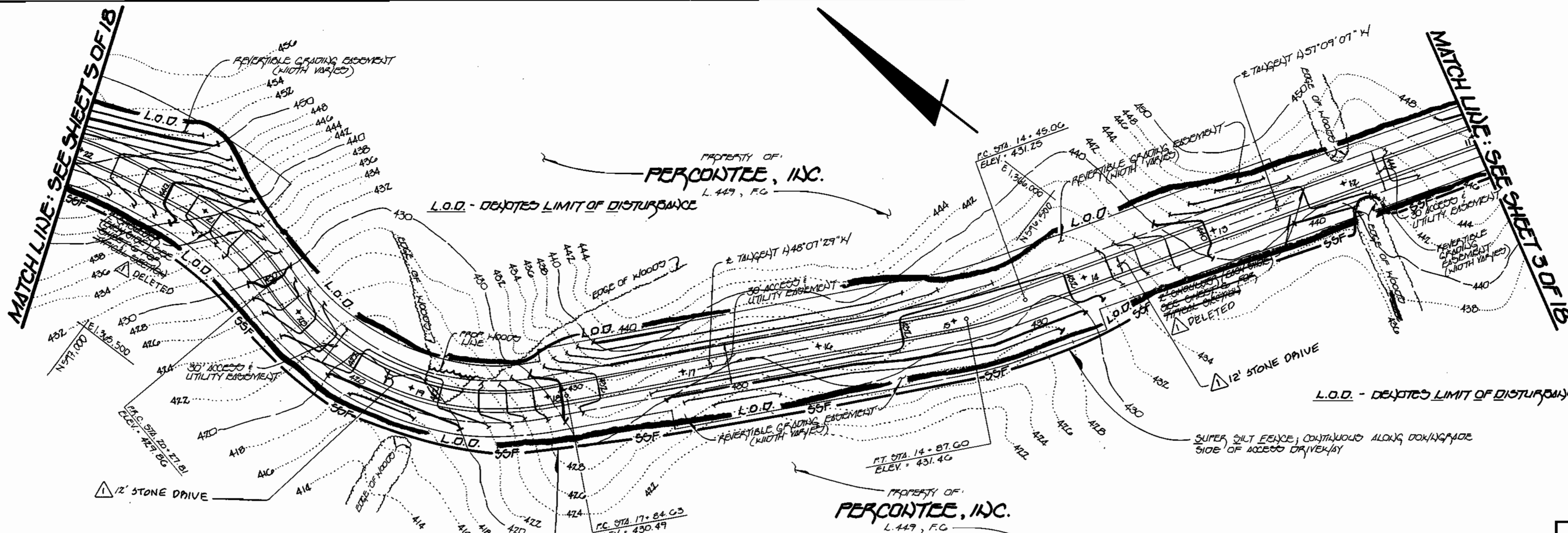
TAX MAP 17 PARCEL 41
 SECOND ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 OPEN GRACE LOT No. 4
 SCALE: AS SHOWN

SITE PLAN SHEET 2 OF 5

SHEET 3 OF 20

± CURVE DATA
 STA. 20+27.81 to STA. 23+27.20
 R = 187.50'
 Δ = 279.39'
 T = 91°27'10"
 CHD LENGTH = 228.58'
 CHD. BEG. = S 17°33'30" W

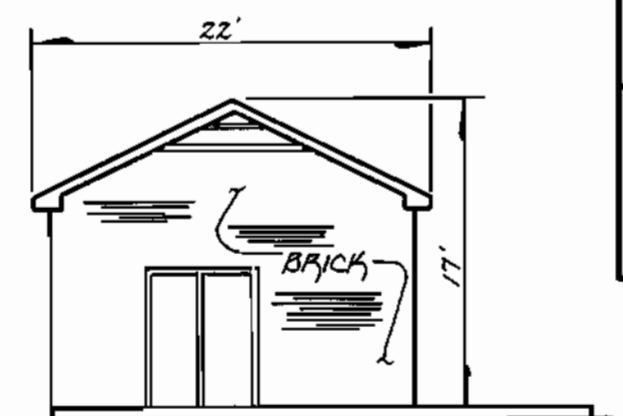
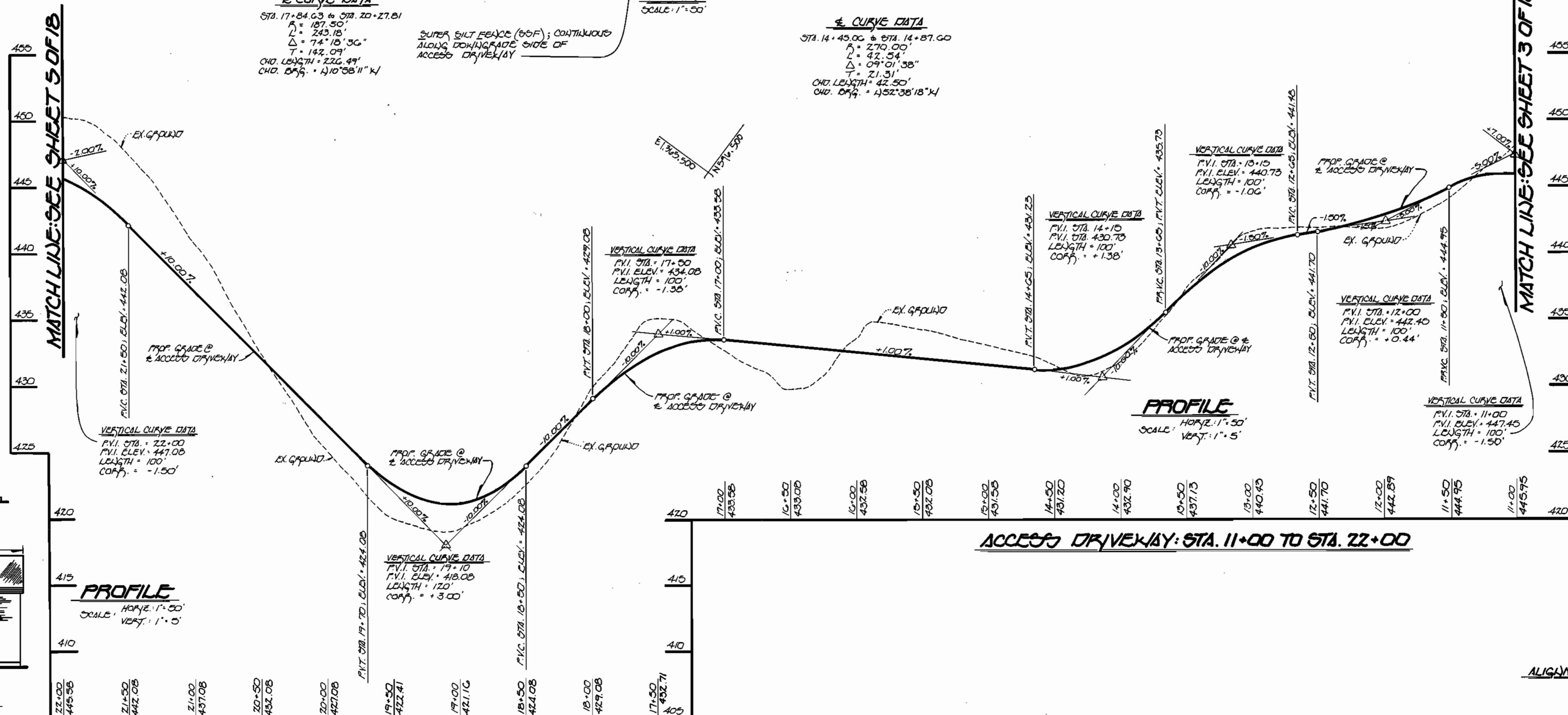
± STATION	COORDINATES		
P.C. STA. 14+45.00	N 59°G, 469.17	E 1,365, 931.52	
P.T. STA. 14+87.00	N 59°G, 494.09	E 1,365, 894.56	
P.C. STA. 17+84.03	N 59°G, 689.95	E 1,365, 678.31	
P.P.C. STA. 20+27.81	N 59°G, 910.43	E 1,365, 611.78	



± CURVE DATA
 STA. 17+84.03 to STA. 20+27.81
 R = 187.50'
 Δ = 245.18'
 T = 74°10'36"
 CHD LENGTH = 226.49'
 CHD. BEG. = S 10°08'11" W

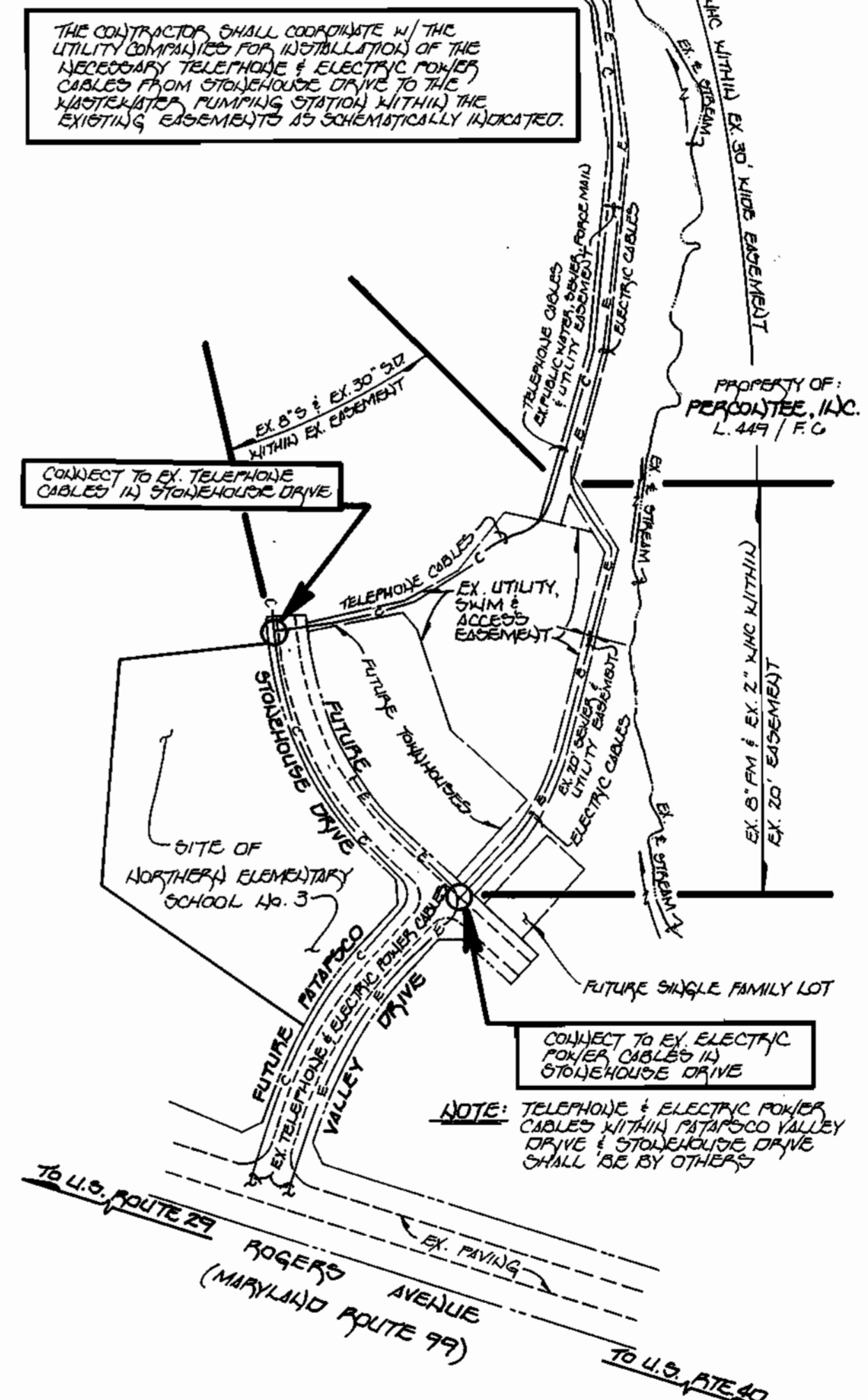
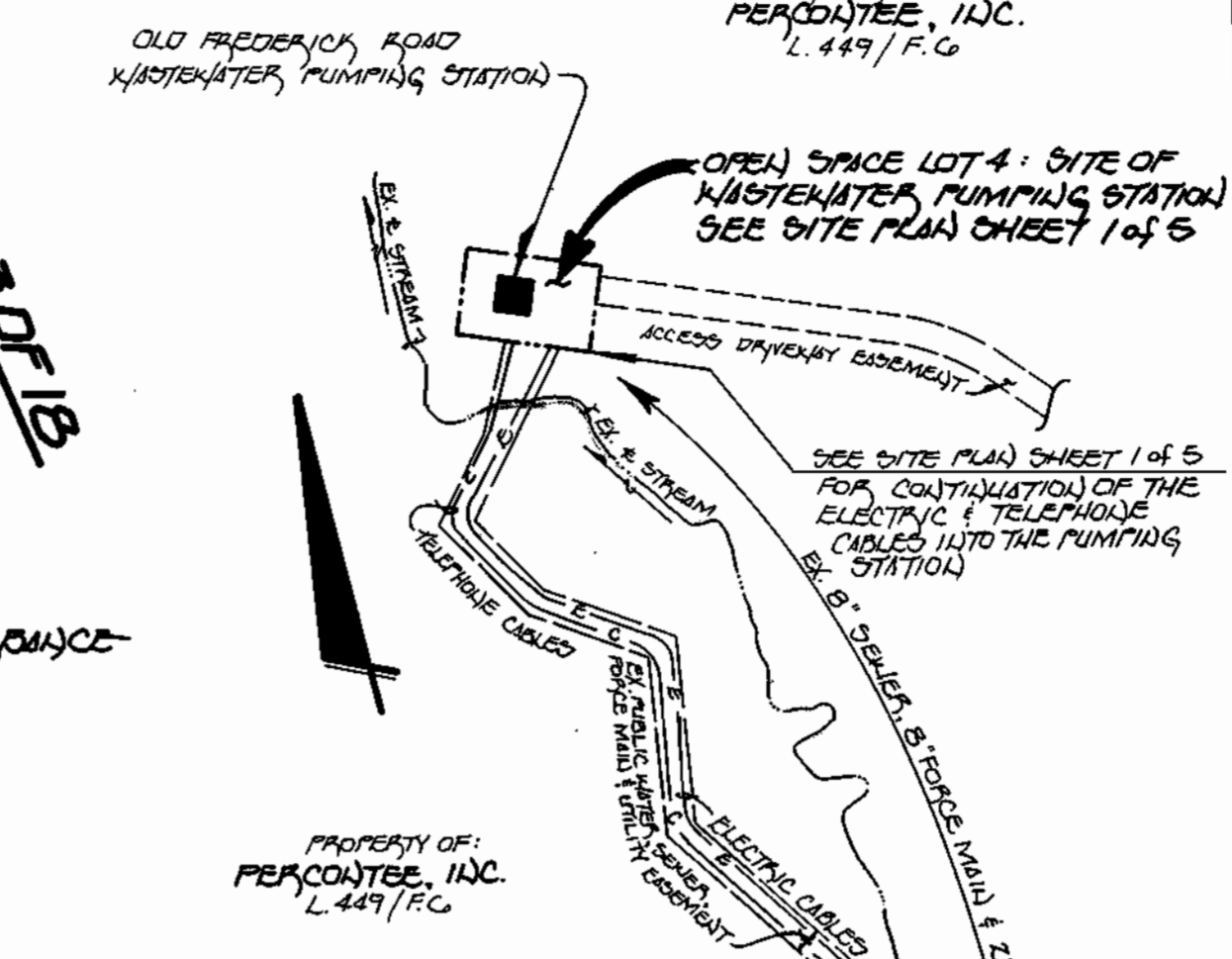
PLAN
 SCALE: 1"=50'

± CURVE DATA
 STA. 14+45.00 to STA. 14+87.00
 R = 270.00'
 Δ = 32.54'
 T = 09°01'38"
 CHD LENGTH = 42.50'
 CHD. BEG. = S 52°38'18" W



PROFILE
 SCALE: HORIZ. 1"=50', VERT. 1"=5'

ACCESS DRIVEWAY: STA. 11+00 TO STA. 22+00



ALIGNMENT & LOCATION: TELEPHONE & ELECTRIC POWER CABLE INSTALLATION
 SCALE: 1"=200'

OWNER AND DEVELOPER
 HOWARD COUNTY, MARYLAND

ADDRESS CHART
LOT No. ADDRESS
C.O. No. 4 8878 OLD FREDERICK ROAD
LOT No. ADDRESS
ADDRESS CHART

Fisher, Collins & Carter, Inc.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS

ENGINEER'S CERTIFICATE
 I HEREBY 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 SOIL CONSERVATION DISTRICT.

[Signature]
 SIGNATURE OF ENGINEER
 DATE: 7/24/96

DEVELOPER'S CERTIFICATE
 I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY.

[Signature]
 DATE: 7/25/96

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS

[Signature] 7/26/96
 J. H. Wainfield, III
 DISTRICT SUPERVISOR

THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
 APPROVED:
[Signature] 7/26/96
 John R. Robertson
 HOWARD SOIL CONSERVATION DISTRICT

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

[Signature] 7/25/96
 Director of Public Works

[Signature] 7/25/96
 Chief, Bureau of Engineering

[Signature] 7/26/96
 Michael R. Rasmussen, P.E.
 Chief, Bureau of Utilities

[Signature] 7-25-96
 Chief, Water & Sewer Design Division

DEPARTMENT OF PLANNING & ZONING
 HOWARD COUNTY, MARYLAND

[Signature] 7/26/96
 Director, Robert Hunter, Jr.

[Signature] 7/26/96
 Chief, Division of Land Development

[Signature] 7/26/96
 Chief, Development Engineering Division

PROPERTY: DANIELS MILL OVERLOOK, OLD FREDERICK ROAD PUMPING STA.	SECTION/AREA: 41 / 4	PARCEL/LOT NO.: 41 / 4
PLAT NO./L.F.: 17231	BLOCK NO.: 12	ZONE: R-ED
TAX/ZONE: 17	ELEC. DIST.: 2 ND	CENSUS TRACT: 6021
WATER CODE: HOZ	SEWER CODE: 1454850	

SITE DEVELOPMENT PLAN - ACCESS DRIVEWAY PLAN & PROFILE

OLD FREDERICK ROAD WASTEWATER PUMPING STATION
 CAPITAL PROJECT 5-G203; CONTRACT No. 10-3500
 TAX MAP 17 PARCEL 41
 SECOND ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 OPEN SPACE LOT No. 4
 SCALE: AS SHOWN
 SITE PLAN SHEET 3 OF 5

SHEET 4 of 20

LOT 4:
AREA TO BE DEDICATED IN FEE SIMPLE TO HOWARD COUNTY FOR THE SITE OF A WASTEWATER PUMPING STATION

L.O.D. - DENOTES LIMIT OF DISTURBANCE

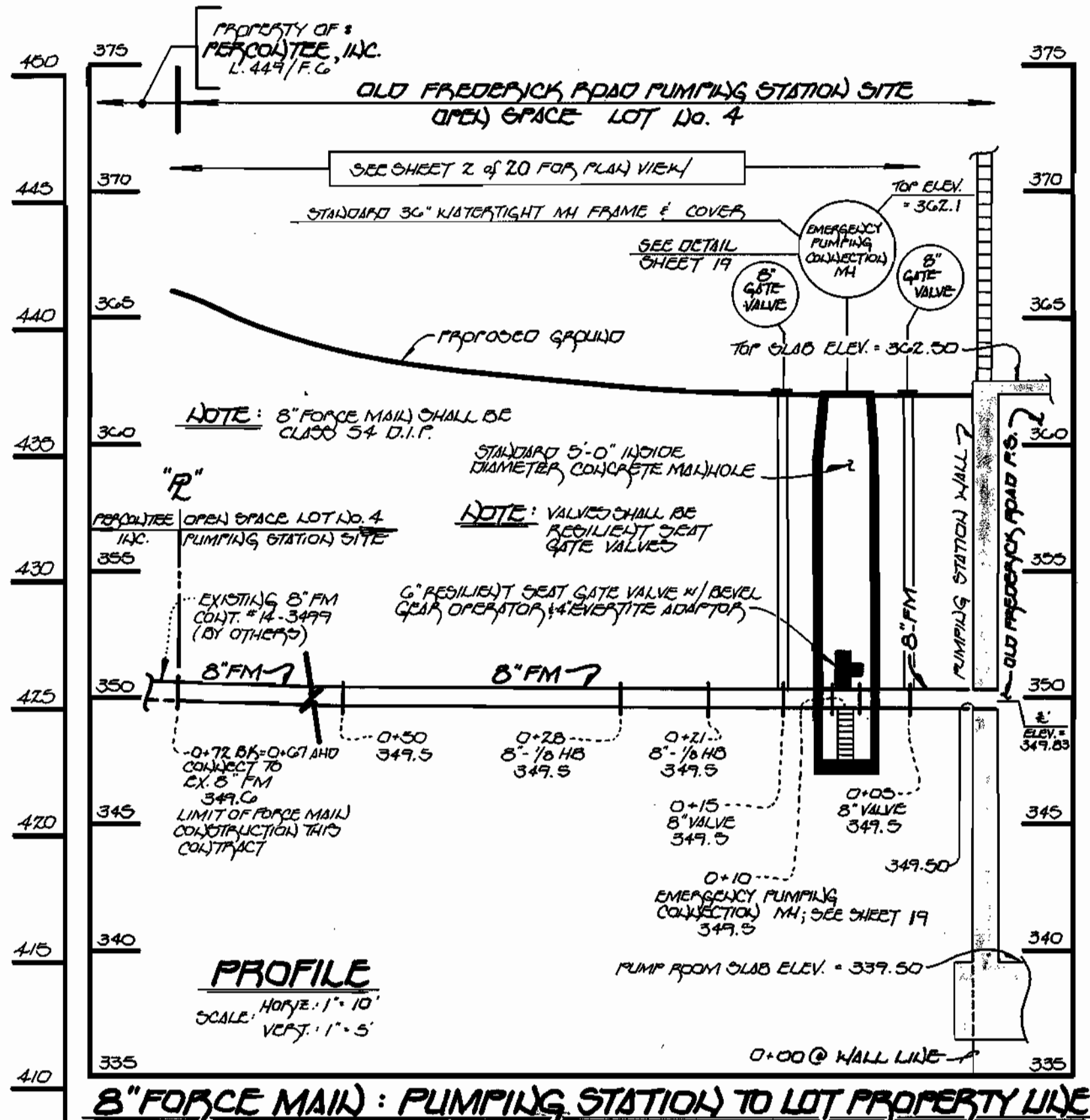
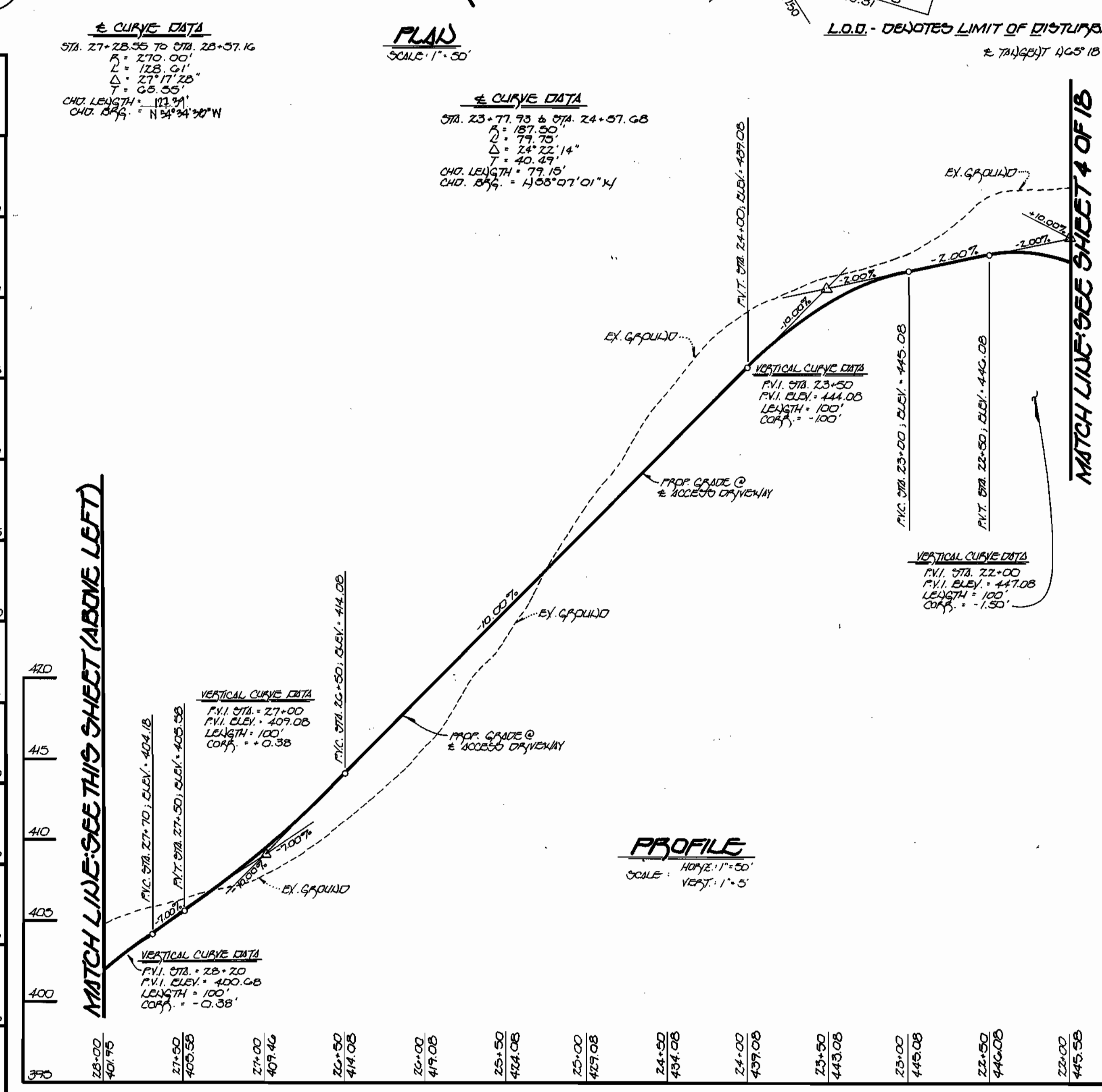
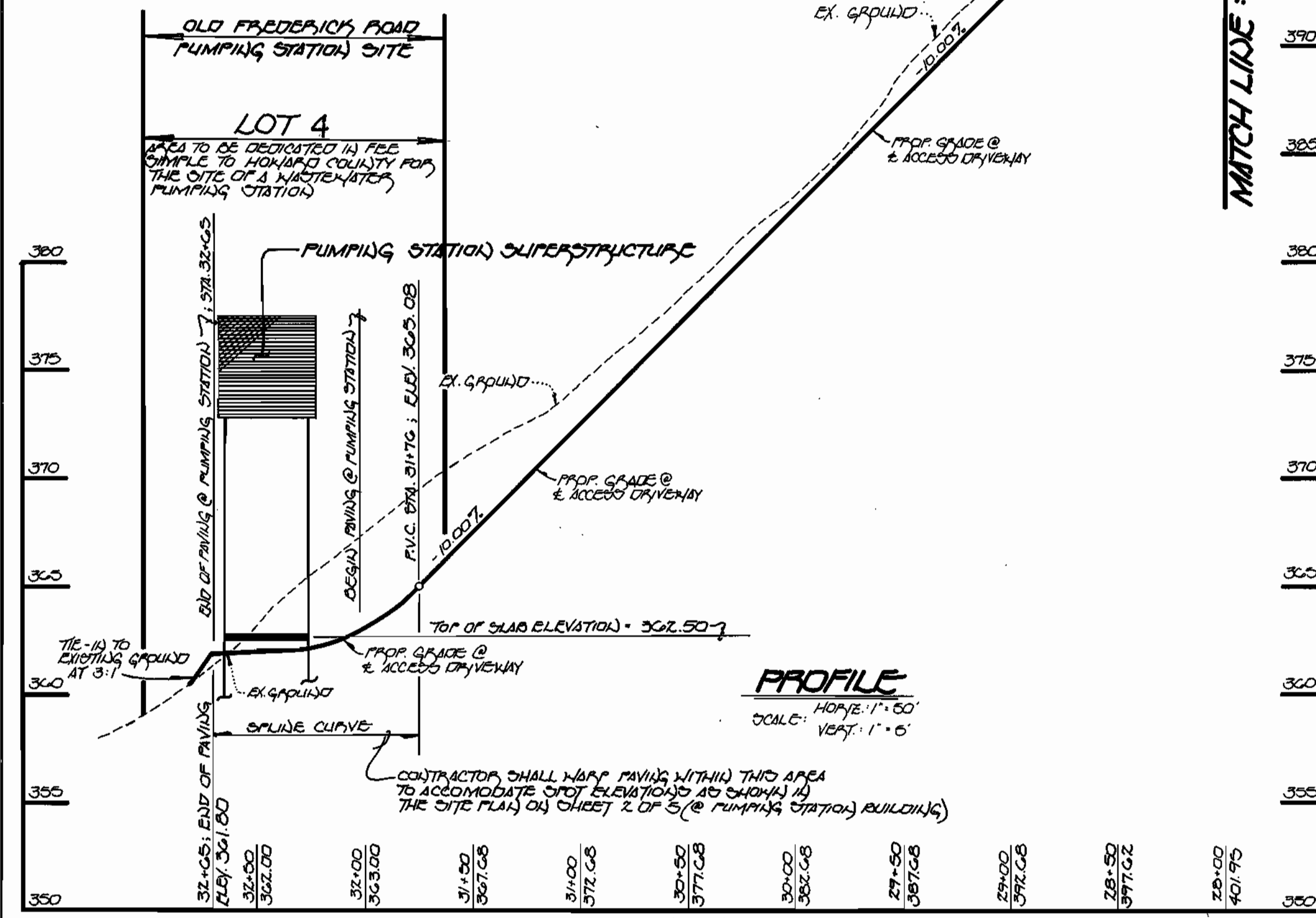
- NOTES:**
- SEE SHEET 2 OF 20, SITE DEVELOPMENT PLAN SHEET 1 OF 5 FOR LAYOUT OF THE BUILDING, FACILITIES & APPURTENANCES ON THE PUMPING STATION LOT
 - SEE THIS SHEET (SHEET 4 OF 5) FOR SHEETS 2 & 3 OF 5 FOR THE PUMPING STATION ACCESS DRIVEWAY PLAN & PROFILE

PROPERTY OF: **PERCOTTEE, INC.**
L. 449, F.C.

PROPERTY OF: **PERCOTTEE, INC.**
L. 449, F.C.

PROPERTY OF: **PERCOTTEE, INC.**
L. 449, F.C.

STATION	COORDINATES
PT. STA. 23+27.20	N 597,174.79 E 1,365,517.25
P.C. STA. 23+77.93	N 597,179.36 E 1,365,473.46
P.T. STA. 24+57.00	N 597,254.00 E 1,365,412.81
P.C. STA. 27+20.55	N 597,450.59 E 1,365,233.40
P.T. STA. 28+57.10	N 597,524.13 E 1,365,125.64



ACCESS DRIVEWAY: STA. 28+00 TO STA. 32+65

ACCESS DRIVEWAY: STA. 22+00 TO STA. 28+00

OWNER AND DEVELOPER
HOWARD COUNTY, MARYLAND

ADDRESS CHART
LOT No. ADDRESS
O.S. No. 4 8548 OLD FREDERICK ROAD
LOT No. ADDRESS

Fisher, Collins & Carter, Inc.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL MIDDLE SQUARE OFFICE PARK
10272 BALTIMORE NATIONAL PIKE
ELLSWORTH CITY, MARYLAND 21042
(410) 461-2800

ENGINEER'S CERTIFICATE
"I HEREBY 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 HOWARD SOIL CONSERVATION DISTRICT."

STATE OF MARYLAND
CHARLES COUNTY
PROFESSIONAL ENGINEER
No. 14246
DATE 7/26/96

DEVELOPER'S CERTIFICATE
"I HAVE CERTIFIED THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY."

DATE 7/25/96

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS

J. S. Williams
S.E.A. DISTRICT RESOURCE CONSERVATION SERVICE
DATE 7/26/96

THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
APPROVED: John R. Robertson
HOWARD SOIL CONSERVATION DISTRICT
DATE 7/26/96

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

James A. Sullivan
DIRECTOR OF PUBLIC WORKS
DATE 7/25/96

Michaela S. Sullivan
CHIEF, BUREAU OF UTILITIES
DATE 7/26/96

Oliver D. Sullivan
CHIEF, WATER & SEWER DEPARTMENT
DATE 7/25/96

DEPARTMENT OF PLANNING & ZONING
HOWARD COUNTY, MARYLAND

James A. Sullivan
DATE 7/26/96

Oliver D. Sullivan
DATE 7/26/96

PROPERTY: DANIELS MILL OVERLOOKS	SECTION/AREA: 41 / 4
OLD FREDERICK ROAD PUMPING STATION	PARCEL/LOT NO. 1 / 4
PLAT No. 12231	ZONE R-ED
BLOCK No. 12	TAX/ZONE 17
ELEC. DIST. 2 ND	CENSUS TRACT 6021
WATER CODE HOZ	SEWER CODE 1454850

SITE DEVELOPMENT PLAN - ACCESS DRIVEWAY PLAN & PROFILE

OLD FREDERICK ROAD WASTEWATER PUMPING STATION
CAPITAL PROJECT 3-G208; CONT. No. 10-3500

TAX MAP 17 PARCEL 41
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
OPEN SPACE LOT No. 4
SCALE: AS SHOWN

SITE PLAN SHEET 4 OF 5

SHEET 5 OF 20

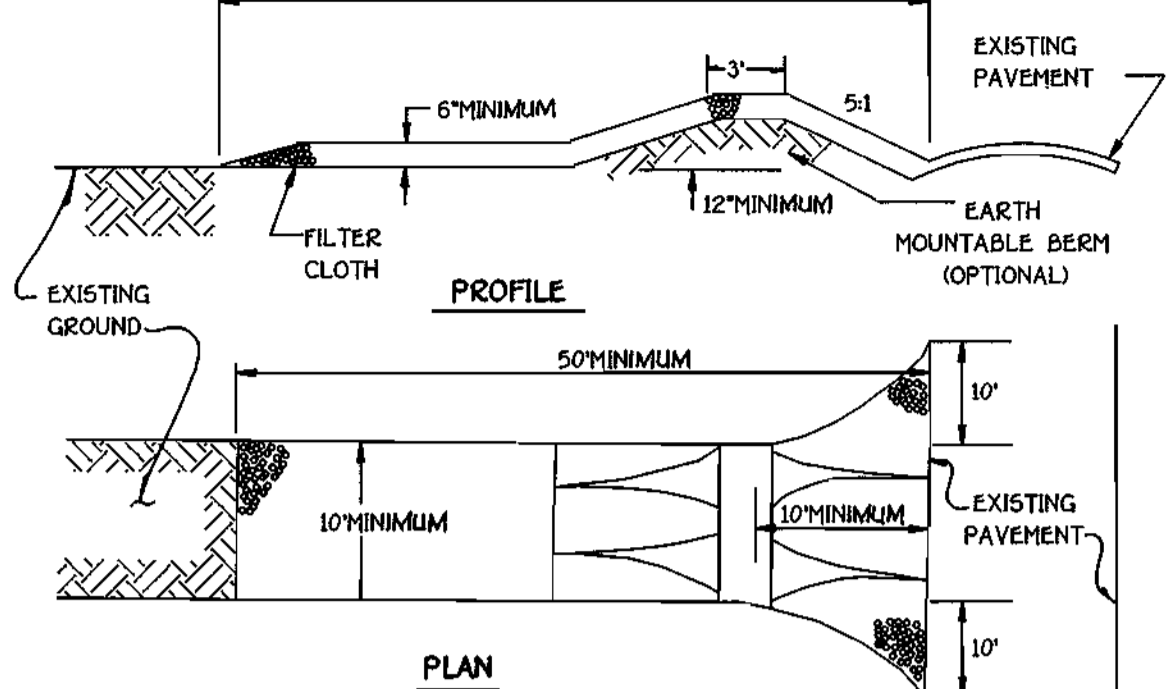
NOTE: SEE SITE DEVELOPMENT PLAN SHEET 3 FOR LOCATION OF STABILIZED CONSTRUCTION ENTRANCE.

SEQUENCE OF CONSTRUCTION

- OBTAIN THE REQUIRED GRADING PERMIT. (10 DAYS)
- NOTIFY MISS UTILITY 48 HOURS BEFORE BEGINNING ANY WORK @ (1-800-257-7777). NOTIFY HOWARD COUNTY CONSTRUCTION/INSPECTION DIVISION 24 HOURS BEFORE STARTING ANY WORK @ (410) 313-1870. (1 DAY)
- INSTALL THE REQUIRED SEDIMENT AND EROSION CONTROL DEVICES AND STABILIZED CONSTRUCTION ENTRANCE AS INDICATED ON THESE PLANS. (3 DAYS)
- CLEAR AND GRUB SITE, AND GRADE TO SUBGRADE. (10 DAYS)
- CONSTRUCT PUMPING STATION AND UTILITIES. (2 MONTHS)
- CONSTRUCT ACCESS DRIVEWAY. (1 MONTH)
- FINE GRADE PERIMETER AROUND PARKING LOT AND ACCESS DRIVEWAY. STABILIZE WITH PERMANENT SEEDING MIXTURE AND STRAW MULCH. (5 DAYS)
- THE CONTRACTOR SHALL INSPECT AND PROVIDE NECESSARY MAINTENANCE ON THE SEDIMENT AND EROSION CONTROL DEVICES SHOWING HEREON AFTER EACH RAINFALL AND ON A DAILY BASIS. (1 DAY)
- REMOVE SEDIMENT FROM ROADWAY AND DRESS STONE CONSTRUCTION ENTRANCE AS REQUIRED. (1 DAY)
- STABILIZE ALL REMAINING DISTURBED AREAS WITH PERMANENT SEEDING MIXTURE AND STRAW MULCH. (3 DAYS)
- FOLLOWING SUCCESSFUL STABILIZATION OF ALL DISTURBED AREAS, AND AFTER PERMISSION HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR, REMOVE SEDIMENT CONTROL MEASURES AND STABILIZE REMAINING DISTURBED AREAS WITH PERMANENT SEEDING MIXTURE AND STRAW MULCH. (3 DAYS)

PERMANENT SEEDING NOTES

ALL DISTURBED AREAS SHALL BE STABILIZED AS FOLLOWS:
SEEDBED PREPARATION:
 LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING.
SOIL AMENDMENTS:
 APPLY TWO TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS./1,000 SQ.FT.) AND 600 LBS. PER ACRE 0-20-20 FERTILIZER (14 LBS./1,000 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./1,000 SQ.FT.) AND 500 LBS. PER ACRE (11.5 LBS./1,000 SQ.FT.) OF 10-20-20 FERTILIZER.
SEEDING:
 FOR THE PERIODS MARCH 1 THROUGH APRIL 30, AND AUGUST 1 THROUGH OCTOBER 15, SEED WITH 100 LBS. PER ACRE (2.3 LBS./1,000 SQ.FT.) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THROUGH JULY 31, SEED WITH 60 LBS./ACRE (1.4 LBS./1,000 SQ.FT.) KENTUCKY 31 TALL FESCUE AND 2 LBS. PER ACRE (0.05 LBS./1,000 SQ.FT.) OF WEEPING LOVEGRASS. DURING THE PERIOD OF OCTOBER 15 THROUGH FEBRUARY 28, PROTECT SITE BY: OPTION (1) TWO TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING; OPTION (2) SEED WITH 100 LBS./ACRE KENTUCKY 31 TALL FESCUE AND MULCH WITH TWO TONS/ACRE WELL ANCHORED STRAW. ALL SLOPES SHALL BE HYDROSEEDED.

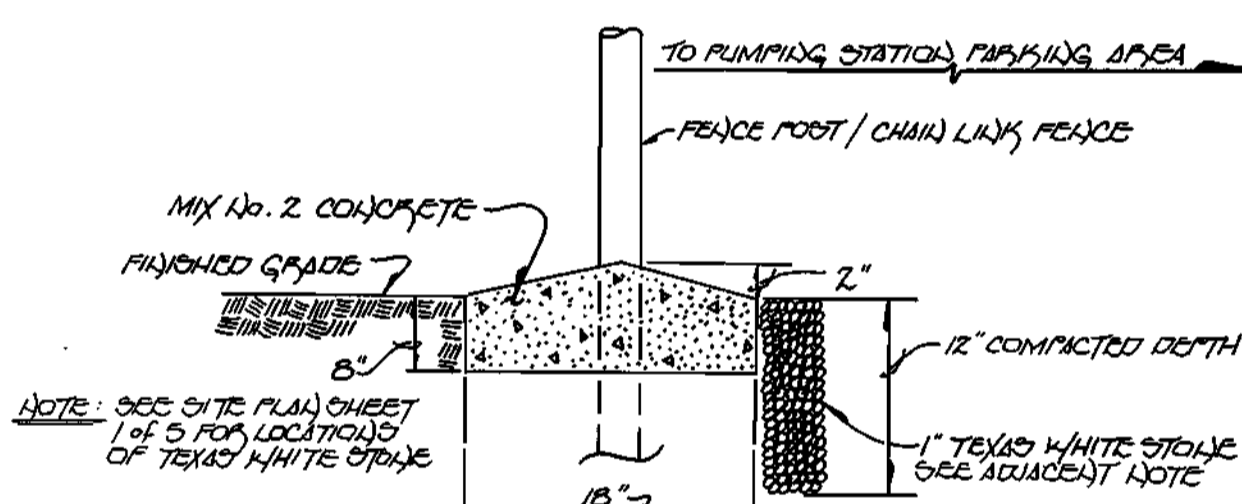


CONSTRUCTION SPECIFICATIONS

- STONE SIZE: USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
- LENGTH: AS REQUIRED, BUT NOT LESS THAN 50 FEET.
- THICKNESS: NOT LESS THAN SIX (6) INCHES.
- WIDTH: TEN (10) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
- FILTER CLOTH SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO LAYMENT OF STONE.
- SURFACE WATER: ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 51 SLOPES WILL BE PERMITTED.
- MAINTENANCE: THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
- WASHING: WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
- PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

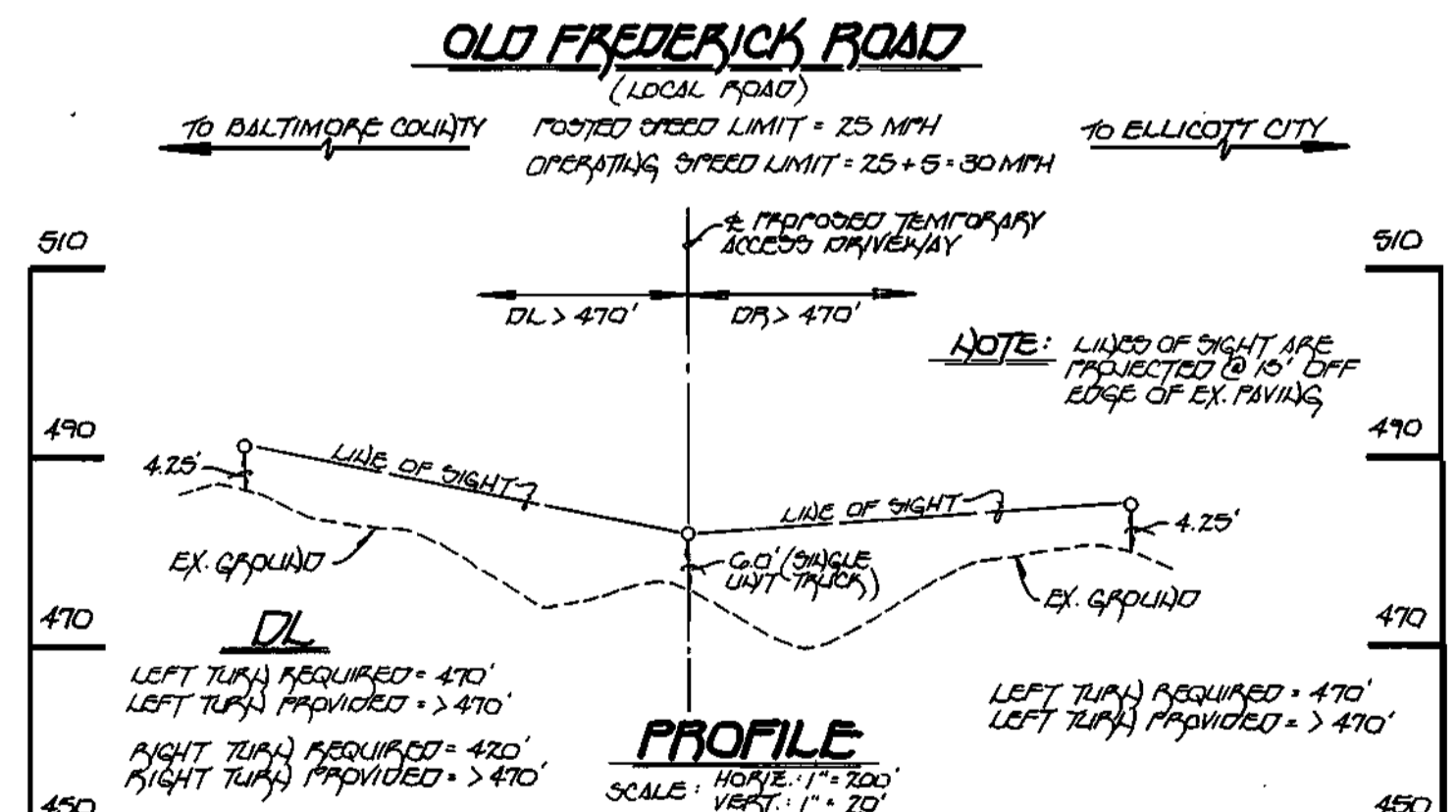
STABILIZED CONSTRUCTION ENTRANCE

NOT TO SCALE



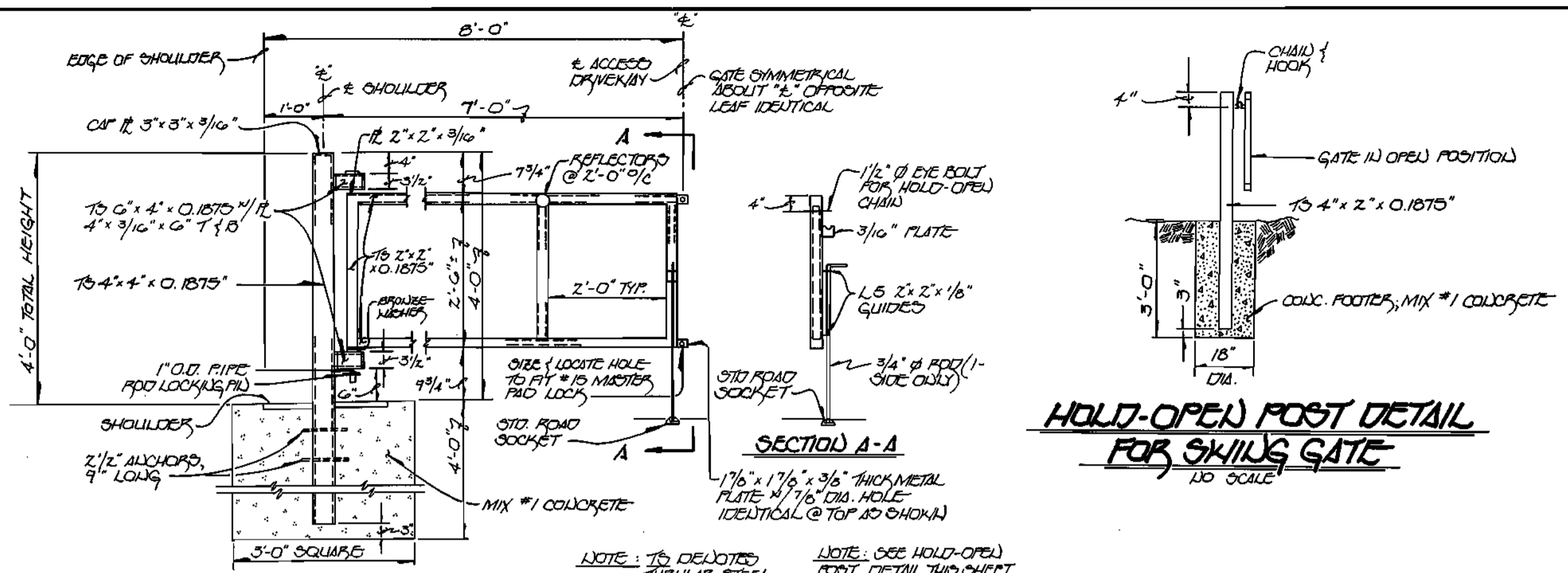
CURB/WHITE STONE DETAIL

NOT TO SCALE



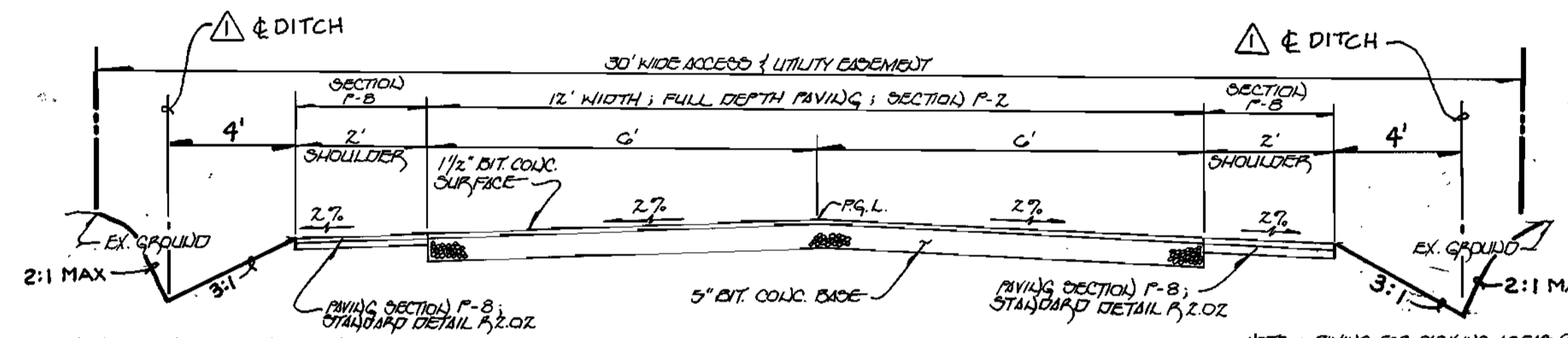
SIGHT DISTANCE PROFILE
TEMPORARY ACCESS DRIVEWAY @ OLD FREDERICK ROAD

SCALE: HORIZ. 1" = 100'



"OPEN FENCE" SKIVING GATE

NOT TO SCALE



ACCESS DRIVEWAY-TYPICAL SECTION

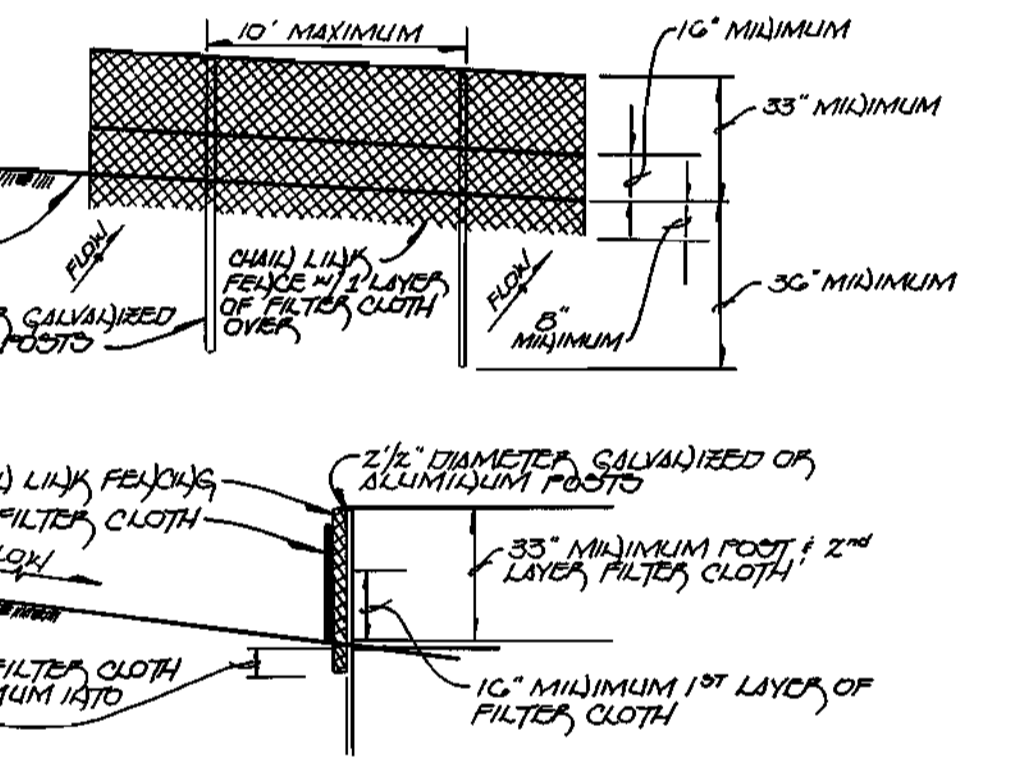
NOT TO SCALE

HOLD-OPEN POST DETAIL FOR SKIVING GATE

NOT TO SCALE

NOTE: SEE SITE DEVELOPMENT PLAN SHEET 2, 3 & 4 FOR ALTERNATE PROFILE OF ACCESS DRIVEWAY.

NOTE: PAVING FOR PARKING AREAS @ PUMPING STATION & TYPICAL AREAS SHOWN AS TYPICAL SECTION FOR ACCESS DRIVEWAY; SECTION P-2.



SUPER SILT FENCE

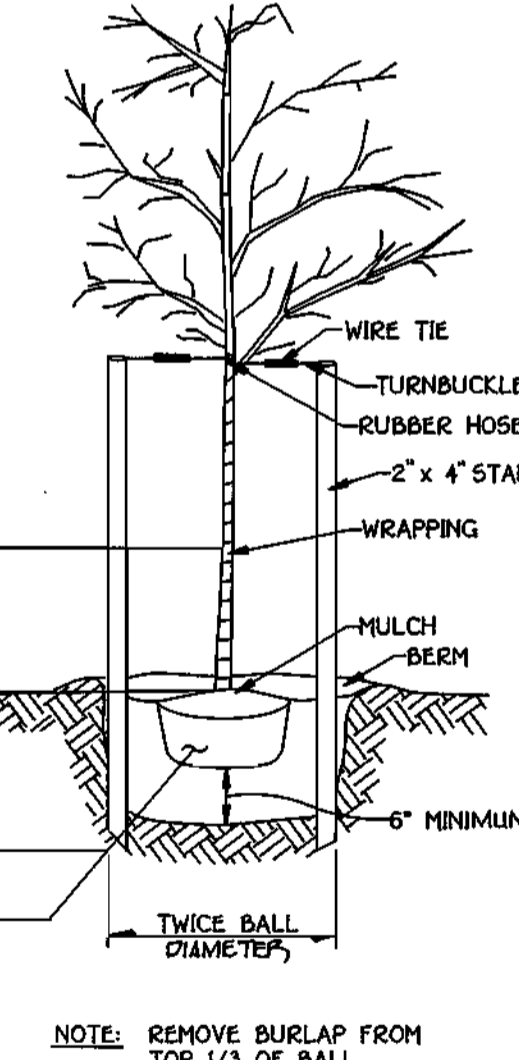
NOT TO SCALE

STANDARD SYMBOLS: ■ ■ ■ ■ ■ @ P.S. LOT @ ■ ■ ■ ■ ■ @ ACCESS DRIVEWAY

CONSTRUCTION SPECIFICATIONS

- THE POLES DO NOT NEED TO SET IN CONCRETE.
- CHAIN LINK FENCE SHALL BE FASTENED SECURELY TO THE FENCE POSTS W/ WIRE TIE OR STAPLES.
- FILTER CLOTH SHALL BE FASTENED SECURELY TO THE CHAIN LINK FENCE W/ TIES SPACED EVERY FT AT THE TOP & MID SECTION.
- FILTER CLOTH SHALL BE OVERLAPPED A MINIMUM OF 8" INTO THE GROUND.
- WHEN THE SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY 6" & FASTENED.
- MAINTENANCE SHALL BE PERFORMED AS NEEDED & SILT BUILDUP REMOVED W/ HES "BOUGIES" DEVELOP IN THE SILT FENCE.

NOTE: FENCE POST SPACING SHALL NOT EXCEED 10' CENTER TO CENTER



TREE PLANTING

GRADING FOR PLANTING ON SLOPES

TREE PLANTING DETAILS

NOT TO SCALE

ENGINEER'S CERTIFICATE

"I HEREBY 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: 7/25/96

DEVELOPER'S CERTIFICATE

"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY."

[Signature] 7/25/96
 DATE

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS

[Signature] 7/26/96
 DATE

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

[Signature] 7/25/96
 DATE

DEPARTMENT OF PLANNING & ZONING
 HOWARD COUNTY, MARYLAND

[Signature] 7/26/96
 DATE

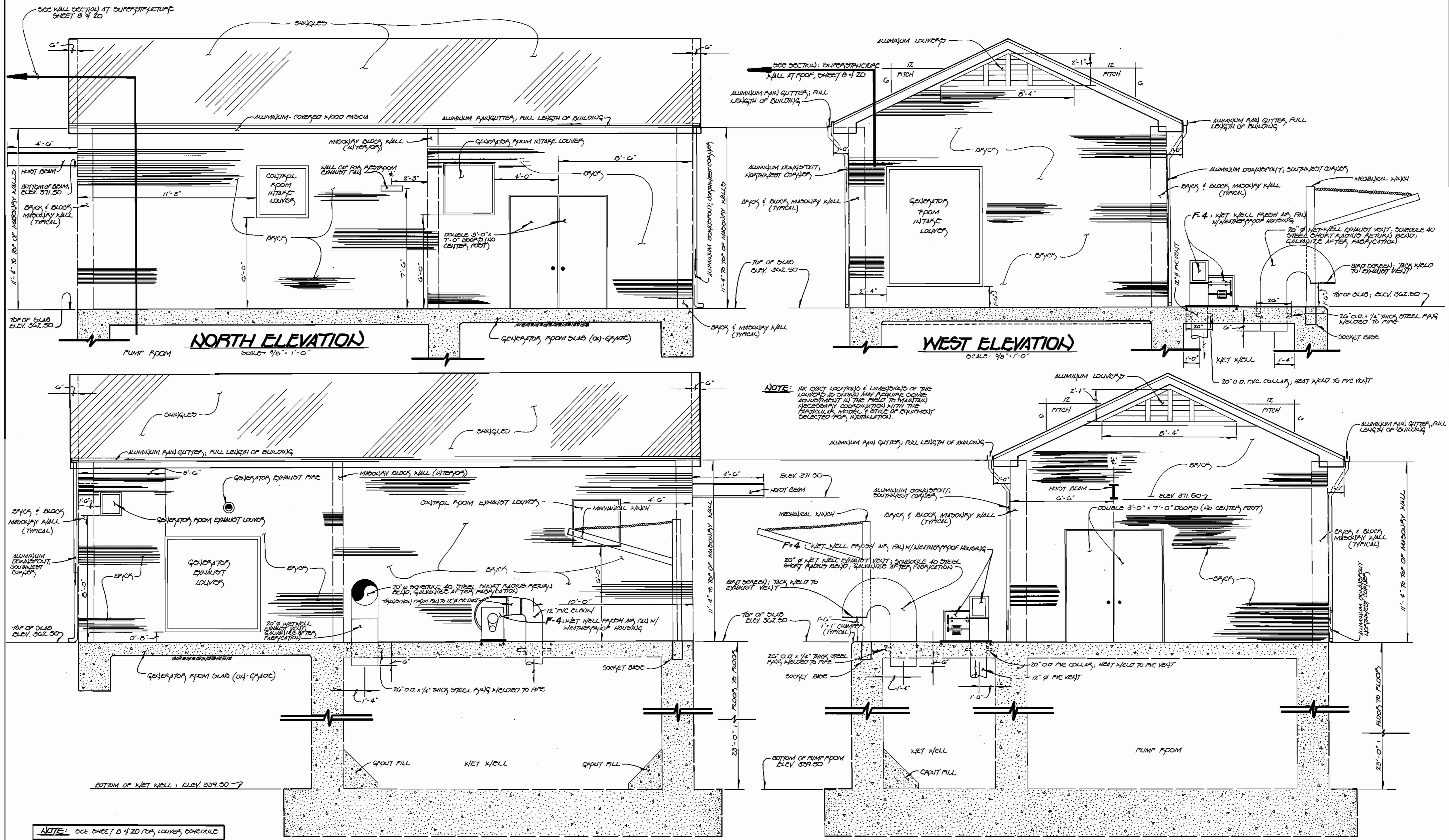
SITE DEVELOPMENT PLAN NOTES & DETAILS

OLD FREDERICK ROAD
 MAINTENANCE PUMPING STATION
 CAPITAL PROJECT 8-G203; CONTRACT NO. 10-3500
 TAX MAP 17 PARCEL 41
 SECOND ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 OPEN SPACE LOT NO. 4
 SCALE: AS SHOWN
 SHEET 6 OF 20

Fisher, Collins & Carter, Inc.

CIVIL ENGINEERING CONSULTANTS & LAND SUBYEORS

20200 WOODBURN DRIVE, OFFICE PARK
 10200 CANTONMENT LANE, OFFICE
 ELLICOTT CITY, MARYLAND 21042
 (410) 461-2850



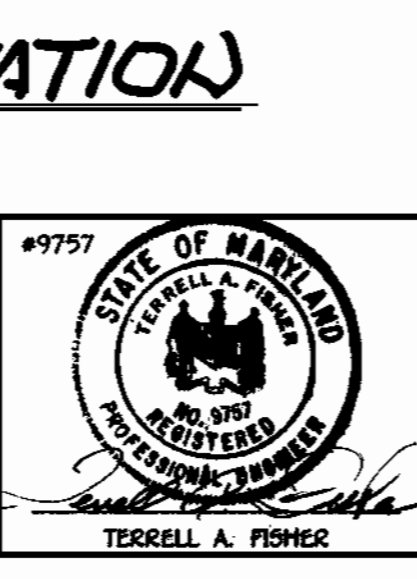
DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

James A. Lewis 7/25/96
DIRECTOR OF PUBLIC WORKS DATE

Richard A. Brounello 7/26/96
CHIEF, BUREAU OF UTILITIES DATE

Richard A. Brounello 7/25/96
CHIEF, WATER AND SEWER DESIGN DIVISION DATE

Fisher, Collins & Carter, Inc.
CIVIL ENGINEERING CONSULTANTS &
LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK
10272 Baltimore National Pike
Ellicott City, Maryland 21042
(410) 481-2865



DES: M.J.M./P.W.K.					
DRAWN: J.M.M.					
CNK: P.W.K.					
DATE: 7/25/96					
BY NO.		REVISION		DATE	

ARCHITECTURAL PLANS:
ELEVATIONS & DETAILS

600' SCALE MAP NO. 17 BLOCK NO. 12

OLD FREDERICK ROAD
WASTEWATER PUMPING STATION
CAPITAL PROJECT 5-6203
CONTRACT NO. 10-3500
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

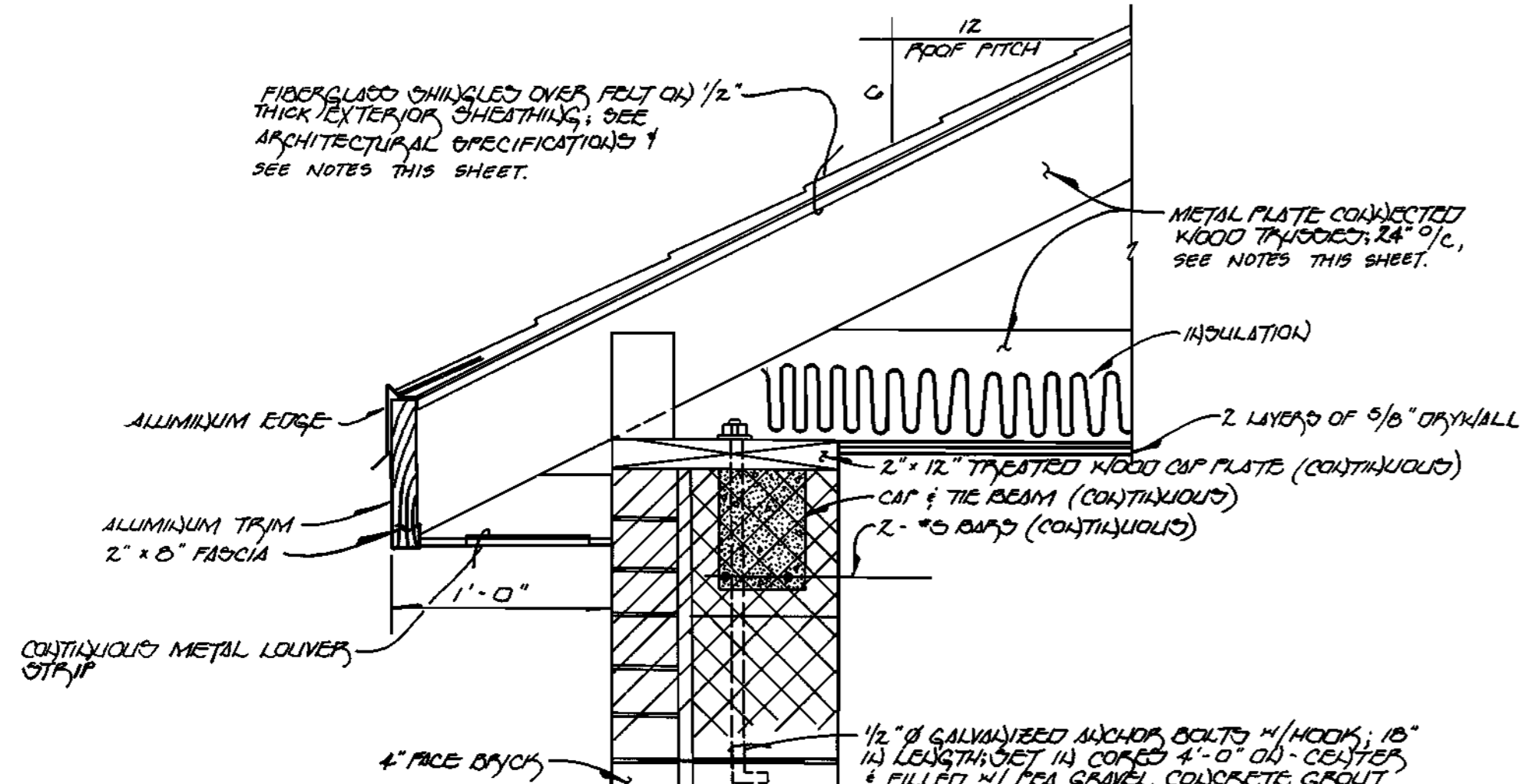
CAPITAL PROJECT 5-6203
CONTRACT NO. 10-3500
OLD FREDERICK ROAD
WASTEWATER PUMPING STATION
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 7 OF 20

NOTES - PLYWOOD SHEATHING:

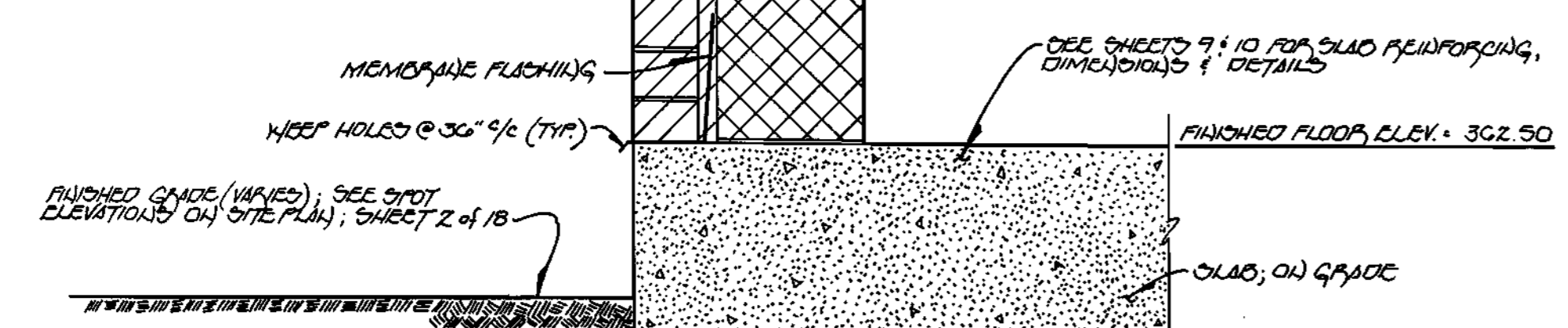
- A. PLYWOOD SHALL BE GRADED PER AMERICAN PLYWOOD ASSOCIATION STANDARDS.
- B. ROOF SHEATHING SHALL BE COX, 3/4" THICK, FASTENED WITH 6d NAILS SPACED 6 INCHES ON CENTER AT PANEL EDGES AND 12 INCHES ON CENTER AT INTERMEDIATE SUPPORTS.
- C. SPACE PANEL ENDS 1/16" AND PANEL EDGES 1/8".

NOTE: SEE ARCHITECTURAL SPECIFICATIONS FOR REQUIREMENTS REGARDING ROOF CHIMNELS, FELT & CHIMNEY; ALSO SEE NOTES THIS SHEET.



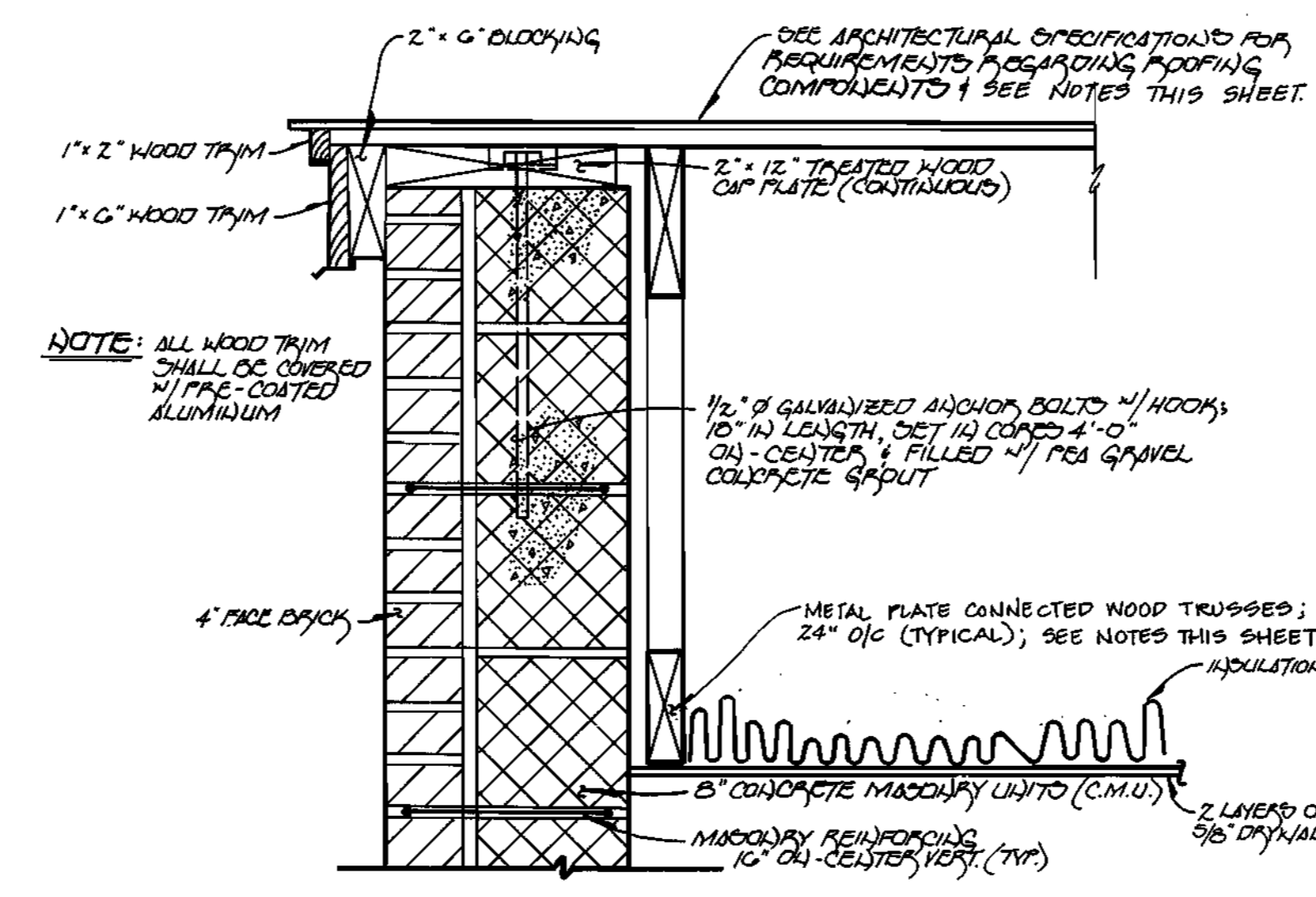
ROOF TRUSS NOTES

- A. ROOF TRUSSES SHALL BE CERTIFIED BY THE MANUFACTURER TO BE DESIGNED FOR THE CARRYING TO SUPPORT THE FOLLOWING LOADS AS REQUIRED BY CODE AND SHOWN ON DRAWINGS:
 DEAD LOAD: 30 PSF
 ROOF DRAG LOAD: 10 PSF
 WIND LOAD: 20 PSF
 LIVE LOAD (NO REDUCTIONS): 30 PSF
- B. TRUSSES SHALL BE DESIGNED IN ACCORDANCE WITH "TPI DESIGN SPECIFICATIONS FOR METAL PLATE CONNECTED WOOD TRUSSES" AND SHALL BEAR THE TPI TRADE MARK.
- C. TRUSS SHOP DRAWINGS SHALL INCLUDE BRIDGING SHOWN IN SECTIONS. TRUSSES SHALL BE BRACED RIGIDLY AND AFTER SECTION PER THE COMMENTARY AND RECOMMENDATIONS BUT-16 OF THE TRUSS PLATE INSTITUTE. INSTALL TWO ROWS OF HORIZONTAL BRIDGING ON THE BOTTOM CHORD AND VERTICAL X-BRACING AT BOTH GABLE ENDS CONSISTING OF 2x4'S FASTENED TO EACH TRUSS WITH 2-12 PENNY NAILS.



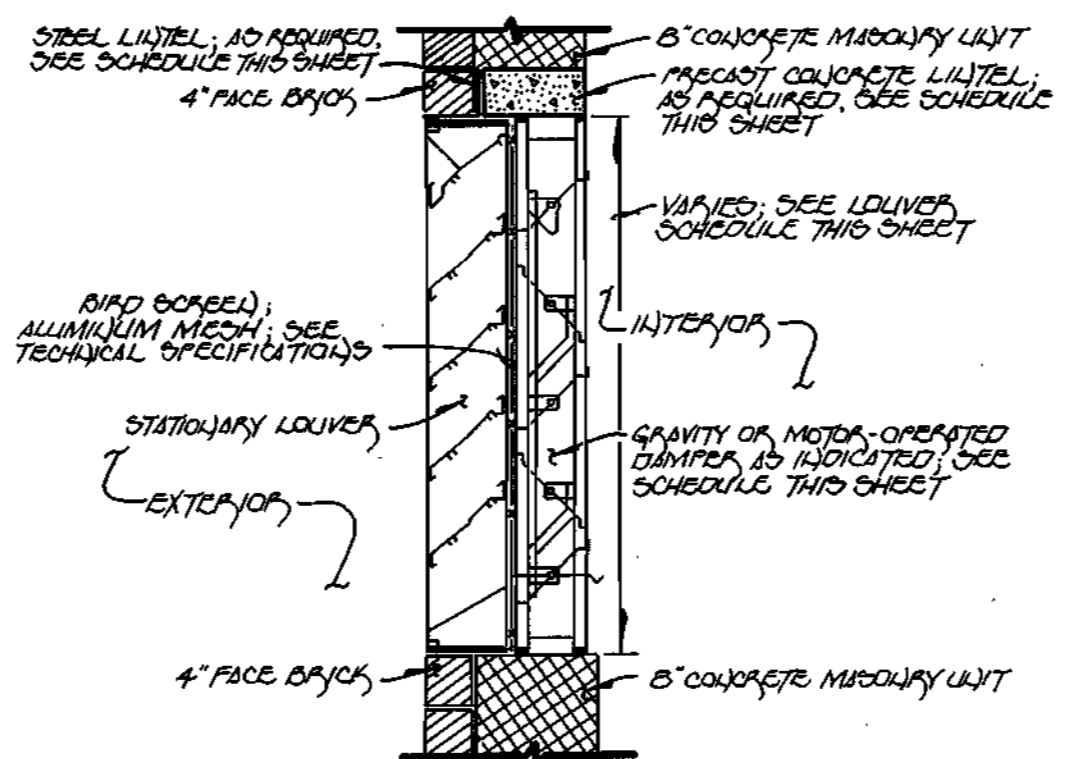
WALL SECTION AT SUPERSTRUCTURE

NO SCALE



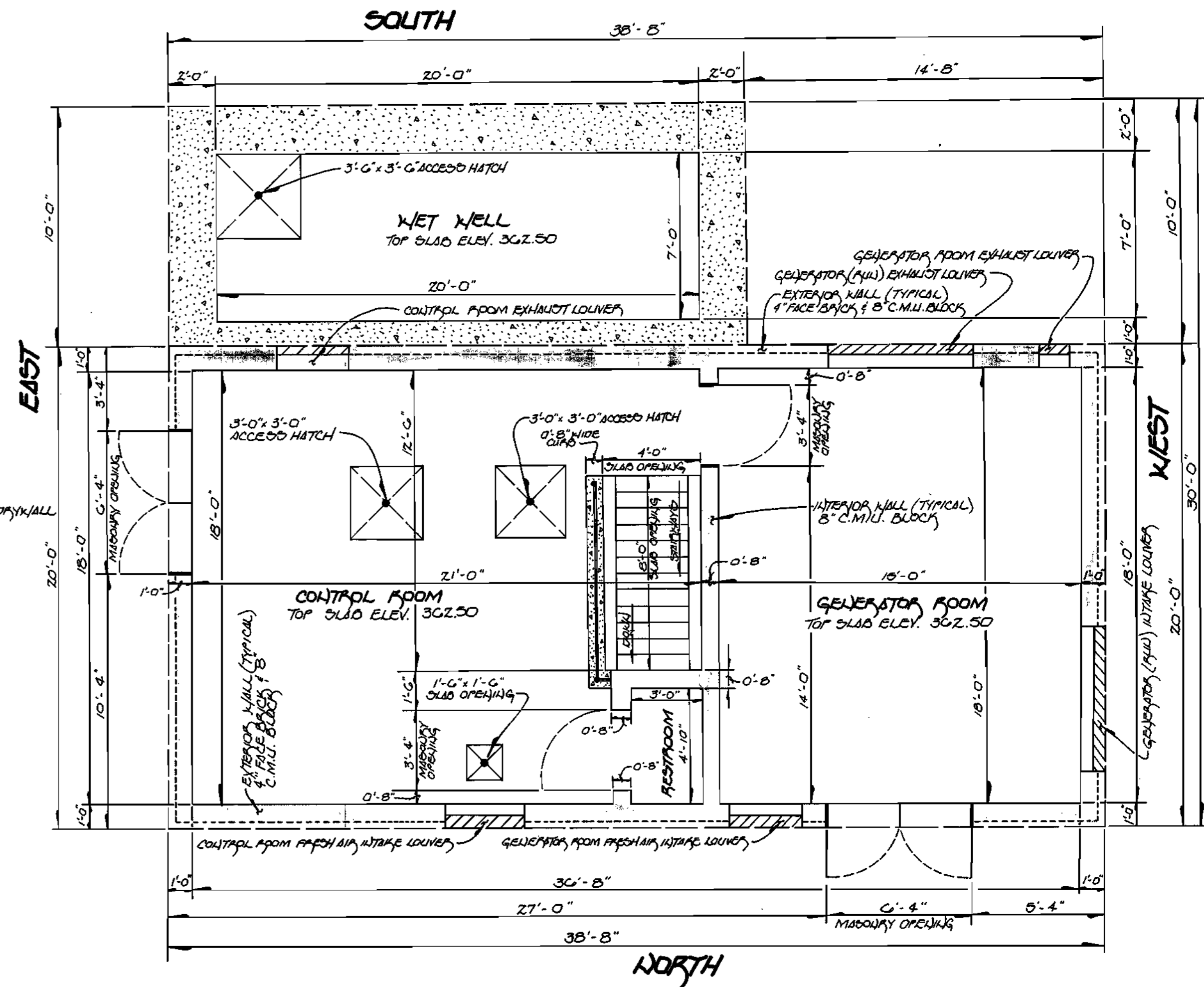
SECTION: SUPERSTRUCTURE WALL AT ROOF

NO SCALE



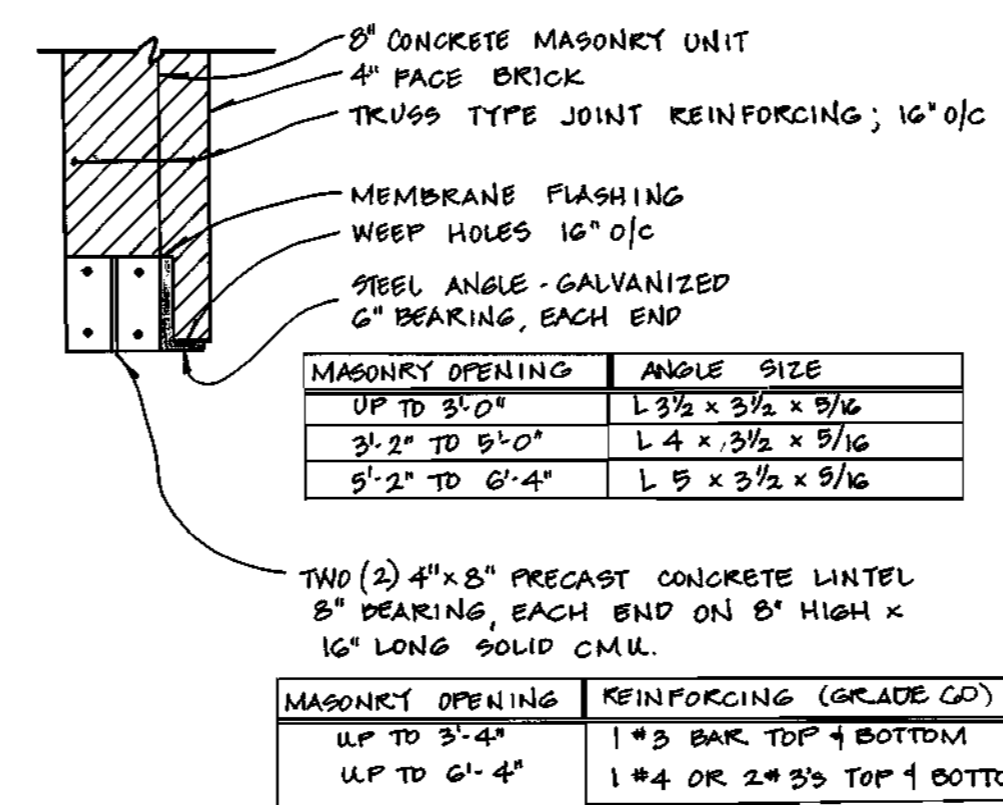
TYPICAL LOUVER / DAMPER DETAIL

NO SCALE



FLOOR PLAN AT ELEV. 362.50

SCALE: 1/4" = 1'-0"



LINTEL DETAIL

SCALE: 3/4" = 1'-0"

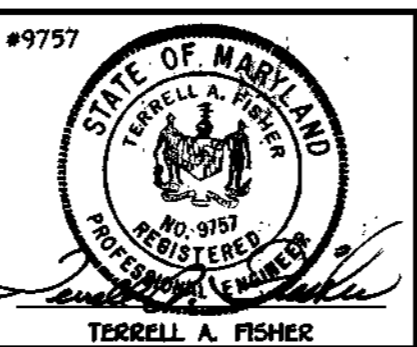
LOCATION	PURPOSE	DAMPER	SIZE #		BOTTOM ELEVATION	REMARKS
			WIDTH	HEIGHT		
NORTH WALL: CONTROL ROOM	FRESH AIR INTAKE	MOTOR-OPERATED	3'-0"	3'-0"	362.50	W/ BIRD SCREEN; INTERLOCKED W/ FRESH AIR VENTILATOR
NORTH WALL: RESTROOM	EXHAUST	NONE	W/10" x 4" DUCT		370.00	W/ BIRD SCREEN; FULLY INTERLOCKED W/ RESTROOM LIGHTING SWITCH
NORTH WALL: GENERATOR ROOM	FRESH AIR INTAKE	MOTOR-OPERATED	3'-0"	3'-0"	362.50	W/ BIRD SCREEN; INTERLOCKED W/ WALL-MOUNTED GENERATOR
WEST WALL: GENERATOR ROOM	FRESH AIR INTAKE	MOTOR-OPERATED	6'-0"	7'-0"	364.00	W/ BIRD SCREEN; INTERLOCKED W/ GENERATOR (MIA)
WEST WALL: AT ROOF GABLE	VENTILATION	NONE	VARIABLES SEE CHIT. 7	2'-0"	376.50	W/ BIRD SCREEN
SOUTH WALL: GENERATOR ROOM	EXHAUST	GRAVITY	1'-3"	1'-3"	370.60	W/ BIRD SCREEN
SOUTH WALL: GENERATOR ROOM	GENERATOR (MIA) EXHAUST	GRAVITY	6'-0"	6'-0"	363.17	W/ BIRD SCREEN
SOUTH WALL: CONTROL ROOM	EXHAUST	MOTOR-OPERATED	3'-0"	3'-0"	362.50	W/ BIRD SCREEN; INTERLOCKED W/ FRESH AIR VENTILATOR
EAST WALL: AT ROOF GABLE	VENTILATION	NONE	VARIABLES SEE CHIT. 7	2'-0"	376.50	W/ BIRD SCREEN

* THE EXACT LOCATIONS & DIMENSIONS OF THE LOUVERS & THE ASSOCIATED MASONRY OPENINGS MAY REQUIRE SOME ADJUSTMENT IN THE FIELD TO MAINTAIN COORDINATION WITH THE PARTICULAR MODEL & STYLE OF LOUVER & EQUIPMENT SELECTED FOR INSTALLATION & IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

CAPITAL PROJECT 5-6203
 CONTRACT NO. 10-3500
 OLD FREDERICK ROAD
 WASTEWATER PUMPING STATION
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 Director of Public Works
 Michael A. Romanoff, P.E. 7/26/96
 Chief, Bureau of Utilities

Fisher, Collins & Carter, Inc.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK
 10272 Baltimore National Pike
 Elliott City, Maryland 21042
 (410) 461-2856



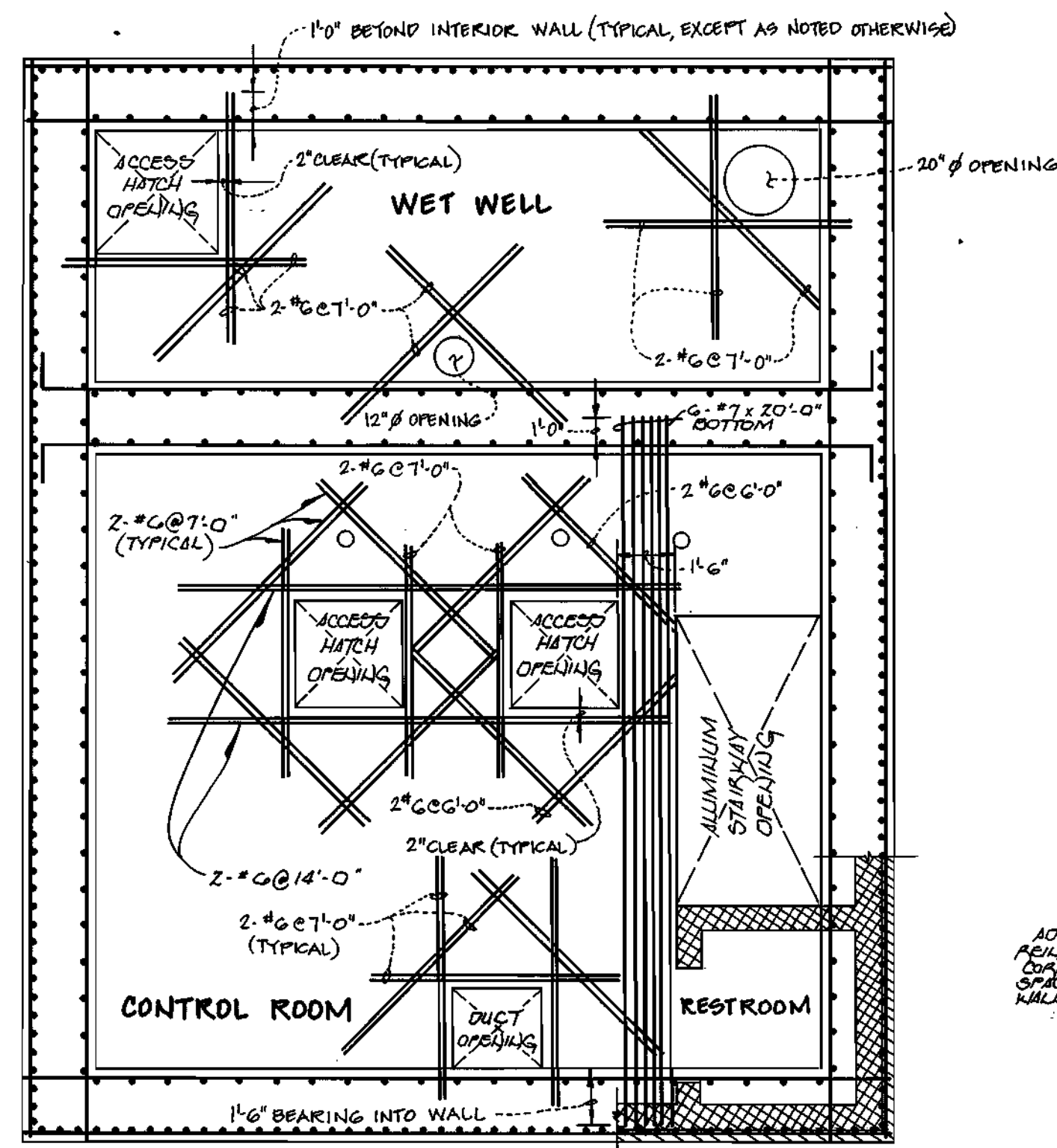
DES: M.J.M.			
DRWN: J.M.M.			
CHK: P.W.K.			
DATE: 7/25/96	BY NO.	REVISION	DATE

ARCHITECTURAL PLANS
 SECTIONS & DETAILS
 600' SCALE MAP NO. 17 BLOCK NO. 12

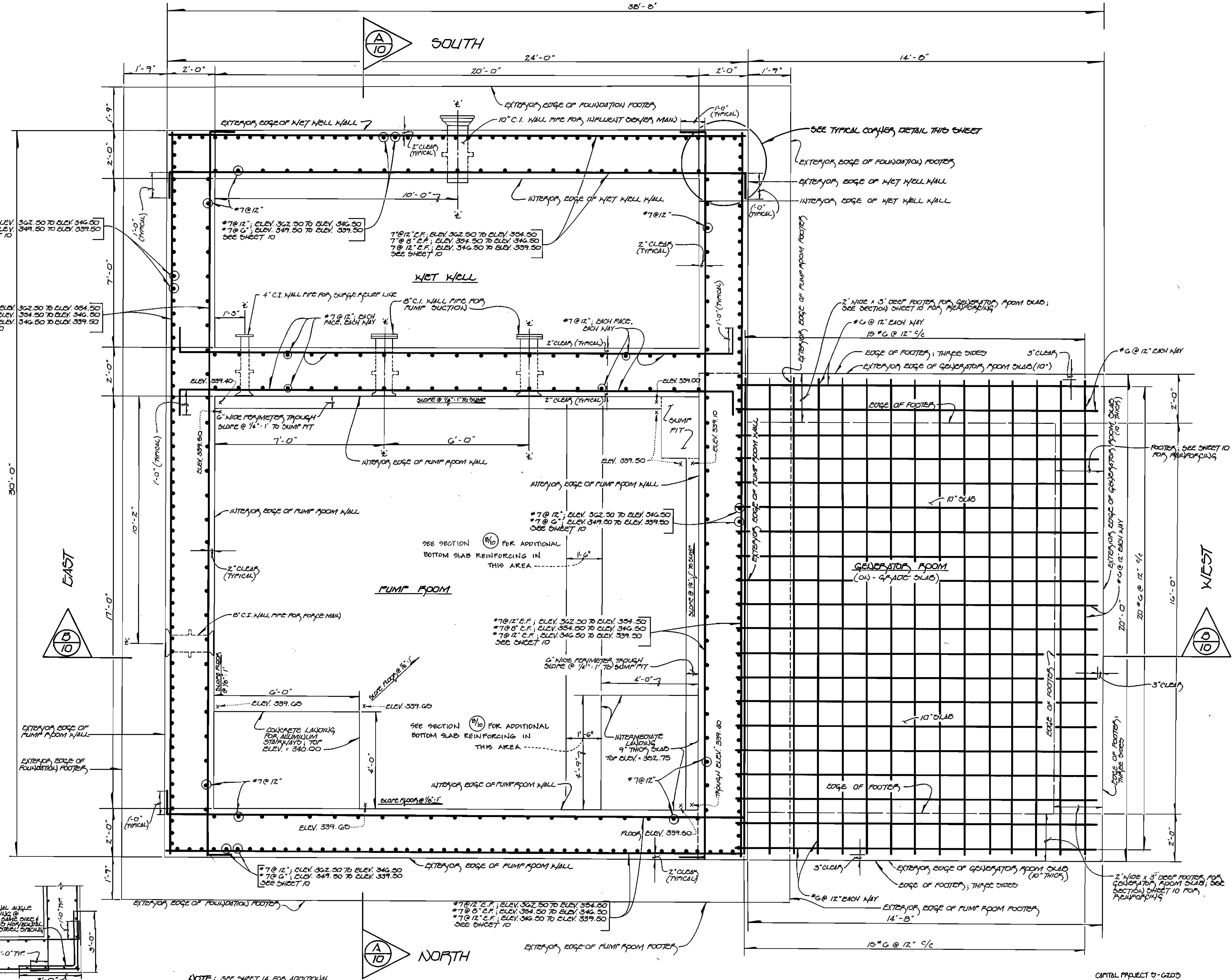
OLD FREDERICK ROAD
 WASTEWATER PUMPING STATION
 CAPITAL PROJECT 5-6203
 CONTRACT NO. 10-3500
 SECOND ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 SCALE AS SHOWN
 SHEET 6 OF 20

GENERAL STRUCTURAL NOTES

- ALL MATERIALS & METHODS OF ARCHITECTURAL & STRUCTURAL CONSTRUCTION FOR THE PUMPING STATION SHALL CONFORM TO THE HOWARD COUNTY STANDARD SPECIFICATIONS & DETAILS FOR CONSTRUCTION VOLUME IN ARTICLE 2 OF THE CONTRACT SPECIFICATIONS.
- DESIGN LIVE LOADS:**
 ROOF - 30 P.S.F.; FLOOR - 100 P.S.F. FLOOR CONCENTRATED EQUIPMENT LOADS, SPACING PLATFORM & WALKWAYS - 100 P.S.F.; HORIZONTAL WIND - 40 P.S.F.
- FLOTATION:**
 THE ENTIRE SUB-STRUCTURE COMPLETE IN PLACE & BACKFILLED, IS DESIGNED TO OPERATE UNDER FULL DRAINAGE PRESSURE. DURING CONSTRUCTION, THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT THE POSSIBILITY OF FLOTATION (PRIOR TO THE COMPLETION OF BACKFILLING OPERATIONS).
- CONCRETE:**
 A. ALL CONCRETE WORK BOTH PLAIN & REINFORCED, SHALL BE IN ACCORDANCE WITH THE LATEST A.C.I. SPECIFICATIONS.
 B. CONCRETE SHALL DEVELOP A COMPRESSIVE STRENGTH OF GOOD PRACTICE.
 C. ALL EXPOSED CORNERS SHALL BE CHAMFERED, 1" x 1" UNLESS OTHERWISE NOTED.
 D. ALL OPENINGS THROUGH WALLS SHALL BE WATER-TIGHT.
 E. THE MECHANICAL & ELECTRICAL PLANS MAY INDICATE THE LOCATIONS OF OPENINGS NOT SHOWN ON THE STRUCTURAL PLANS.
 F. ALL EXTERIOR CONCRETE WALLS BEYOND FINISHED GRADE SHALL BE WATERPROOFED IN ACCORDANCE WITH THE CONTRACT SPECIFICATIONS.
- EARTHWORKS:**
 A. ALL EXCAVATION FOR STRUCTURES SHALL BE LEFT FREE OF WATER UNTIL BACKFILL TO PROPERLY TAMPED IN PLACE TO FINISHED GRADE.
 B. NO BACKFILL SHALL BE PLACED UNTIL THE CONCRETE HAS REACHED ITS REQUIRED 28-DAY COMPRESSIVE STRENGTH.
 C. BACKFILL SHALL BE PLACED IN 6" LAYERS & COMPACTED TO 95% OF MAXIMUM DENSITY IN ACCORDANCE WITH A.S.D.H.T.O. DESIGNATION T-100 METHOD - C.
 D. CONTRACTOR SHALL ADEQUATELY PROTECT ALL WALLS DURING BACKFILL OPERATIONS.
- REINFORCING STEEL:**
 A. REINFORCING STEEL SHALL CONFORM TO A.S.T.M. DESIGNATION A-615, GRADE 60.
 B. REINFORCING STEEL SHALL BE FREE FROM RUST, OIL & OTHER NON-METALLIC COATINGS THAT ADVERSELY AFFECT CORROSION RESISTANCE.
 C. ALL SPACING OF BARS, PLACEMENT TOLERANCES & CUR SPACING SHALL CONFORM TO A.C.I. 318-77.
- STEEL WORK:**
 A. ALL STRUCTURAL STEEL SHALL BE A.S.T.M. A-36.
 B. ALL BOLTS EXCEPT NON-HEADED ANCHOR BOLTS SHALL BE A.S.T.M. A-325 HIGH STRENGTH BOLTS.
 C. ALL NON-HEADED ANCHOR BOLTS SHALL BE A.S.T.M. A-307.
 D. ALL STRUCTURAL ALUMINUM SHALL BE A.S.T.M. 6061-T6.
 E. ALL ALLOY BOLTS IN CONTACT WITH ALUMINUM SHALL BE STAINLESS STEEL.
 F. WELDED CONNECTIONS SHALL CONFORM TO THE LATEST AMERICAN WELDING SOCIETY (AWS) CODE.
- MISCELLANEOUS:**
 ALL ALUMINUM SURFACES & ALL METALS WHICH WOULD BE IN CONTACT WITH DISSIMILAR METALS, BRICK, MASONRY OR CONCRETE SHALL BE PAINTED WITH THE PRODUCTS SPECIFIED IN SECTION 5.07 OF THE TECHNICAL PORTION OF THE CONTRACT SPECIFICATIONS.



**CONTROL ROOM & WET WELL
ADDITIONAL SLAB REINFORCING**
SCALE: 1/4" = 1'-0"



TYPICAL CORNER DETAIL
NO SCALE

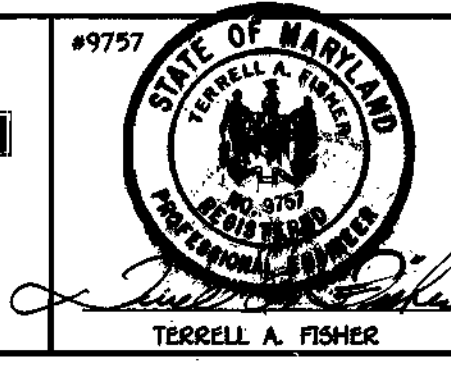
SLAB & WALL REINFORCING
SCALE: 1/2" = 1'-0"

NOTE: SEE SHEET 14 FOR ADDITIONAL REINFORCING AROUND WALL OPENINGS.

CAPITAL PROJECT 3-CZ03
 CONTRACT NO. 10-3500
 OLD FREDERICK ROAD
 WASTEWATER PUMPING STATION
 HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 Director of Public Works: *[Signature]* 7/25/96
 Chief, Bureau of Engineering: *[Signature]* 7/25/96
 Chief, Bureau of Utilities: *[Signature]* 7-25-96
 Chief, Water & Sewer Design Division: *[Signature]* 7-25-96

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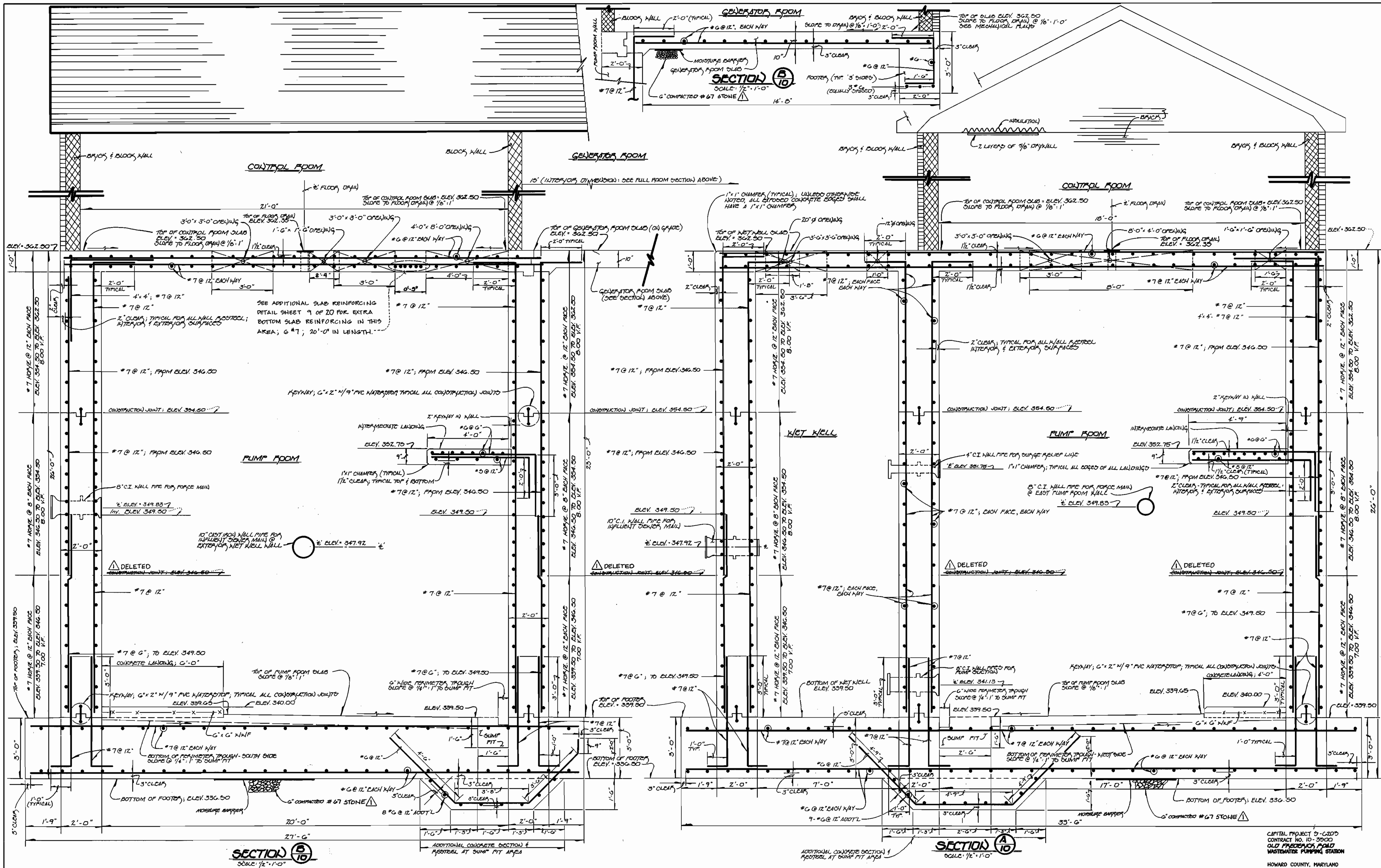


DES: M.J.M.	DATE: 7/25/96
DRWN: J.M.M.	BY: NO.
CHK: P.W.K.	REVISION
DATE: 7/25/96	DATE

STRUCTURAL PLANS
 600' SCALE MAP NO. 17 BLOCK NO. 12

**OLD FREDERICK ROAD
 WASTEWATER PUMPING STATION**
 CAPITAL PROJECT 3-CZ03: CONTRACT No. 10-3500
 SECOND ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
 SHEET 9 OF 20



DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

James H. Shaw 7/25/96
 DIRECTOR OF PUBLIC WORKS DATE

Nicholas A. Hunsicker, P.E. 7/25/96
 CHIEF, BUREAU OF UTILITIES DATE

Fisher, Collins & Carter, Inc.
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TERRELL A. FISHER

DES: M.J.M.	REJ	AS-BUILT CONDITIONS
DRWN: J.M.M.		
CHK: P.W.K.		
DATE: 7/25/96	BY NO.	REVISION

STRUCTURAL SECTIONS

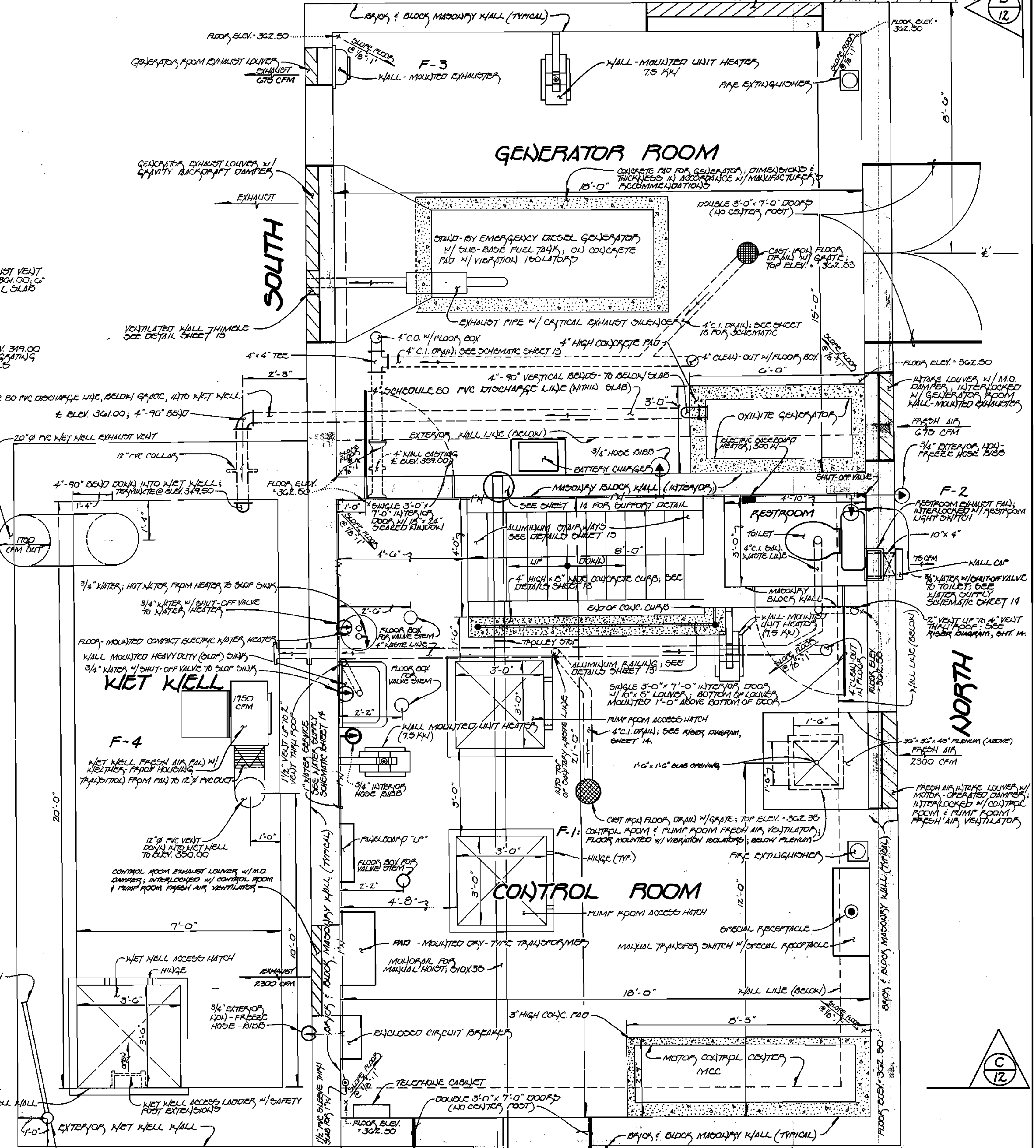
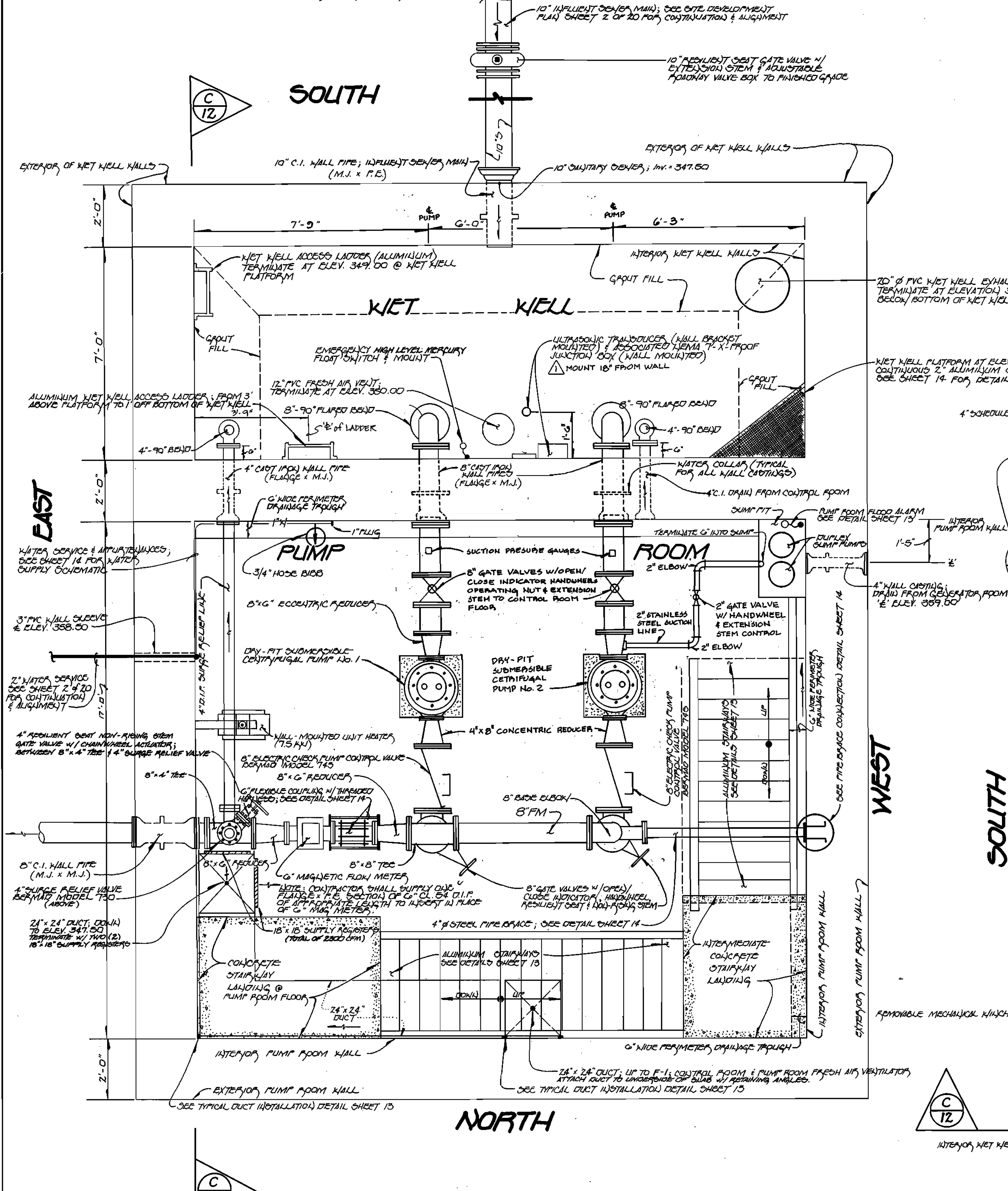
600' SCALE MAP NO. 17 BLOCK NO. 12

**OLD FREDERICK ROAD
 WASTEWATER PUMPING STATION**

CAPITAL PROJECT 9-G203 : CONTRACT No. 10-3500
 SECOND ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
 SHEET 10 OF 20

NOTE: SEE SITE DEVELOPMENT PLAN SHEET 3 OF 20 FOR CENTER MAIN PIPELINE



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Director of Public Works: *[Signature]* 7/26/96
Chief, Bureau of Engineering: *[Signature]* 7/25/96
Chief, Bureau of Utilities: *[Signature]* 7/25/96

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STATE OF MARYLAND
TERRELL A. FISHER

DES: M.J.M./P.W.K.
DRWN: J.M.M.
CHK: P.W.K.
DATE: 7/26/96

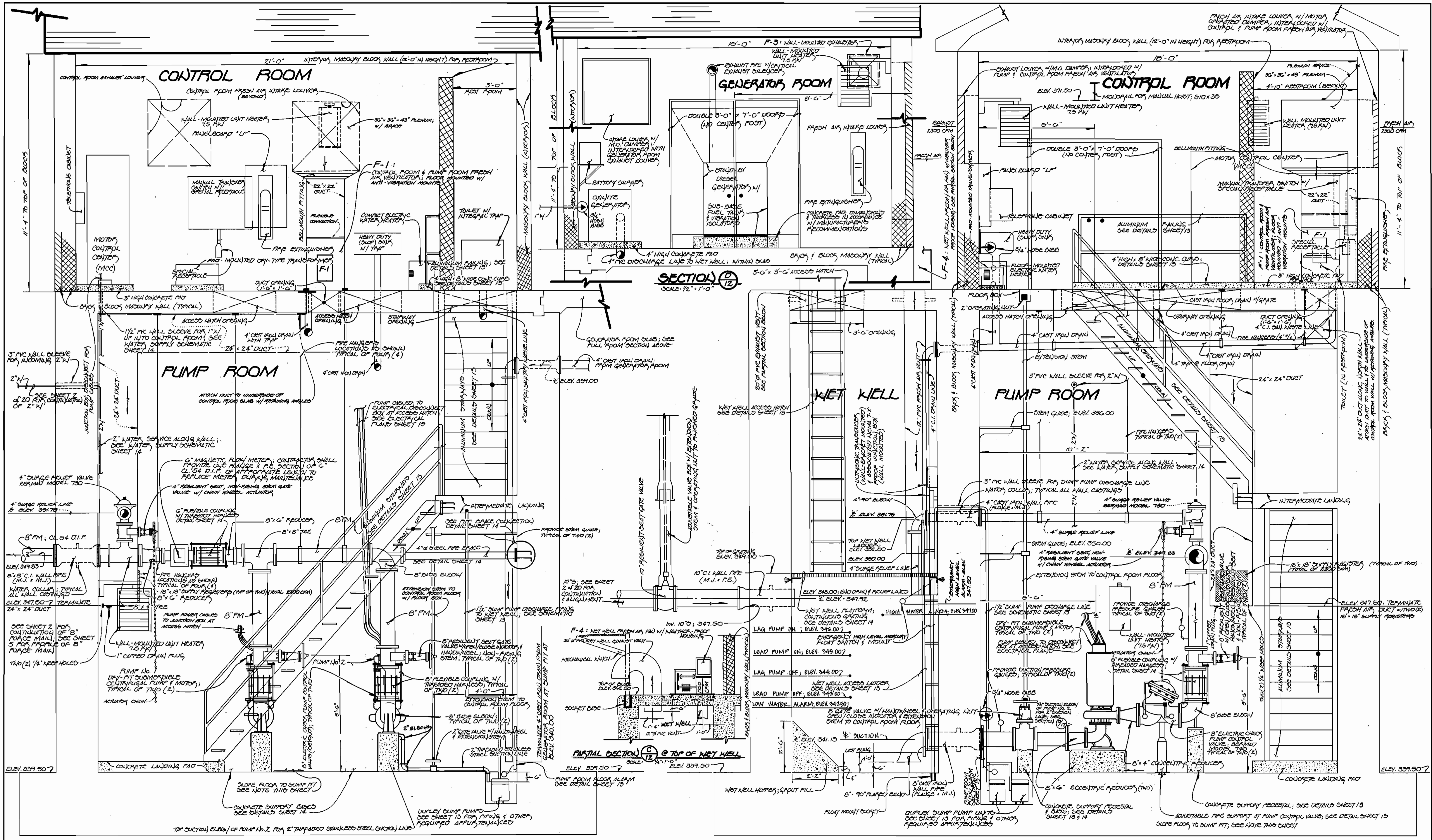
REV	BY	NO.	REVISION	DATE

MECHANICAL PLANS

60' SCALE MAP NO. 17 BLOCK NO. 12

OLD FREDERICK ROAD
WASTEWATER PUMPING STATION
CAPITAL PROJECT 5-6203
CONTRACT NO. 10-3500
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 11 OF 20



REVISED PUMP & MECH PIPING LAYOUT

NOTE: SEE STRUCTURAL PLANS FOR
SLOPE OF PUMP ROOM FLOOR,
SHEETS 9 & 10 OF 20.

REVISED PUMP & MECH PIPING LAYOUT

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Sam A. Lane 7/26/96
DIRECTOR OF PUBLIC WORKS

Richard J. Brown 7/25/96
CHIEF, BUREAU OF ENGINEERING

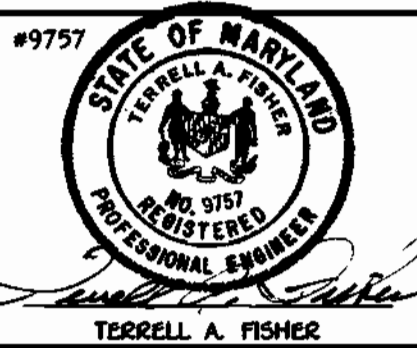
Michael A. Hunsicker 7/24/96
CHIEF, BUREAU OF UTILITIES

Debra J. ... 7-25-96
CHIEF, WATER & SEWER OPERATIONS DIVISION

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TERRELL A. FISHER



DES.	PREP.	AS-BUILT CONDITIONS
J.H.M.		
J.H.M.		
P.M.K.		
DATE: 7/25/96	BY NO.	REVISION

MECHANICAL SECTIONS

600' SCALE MAP NO. 17 BLOCK NO. 12

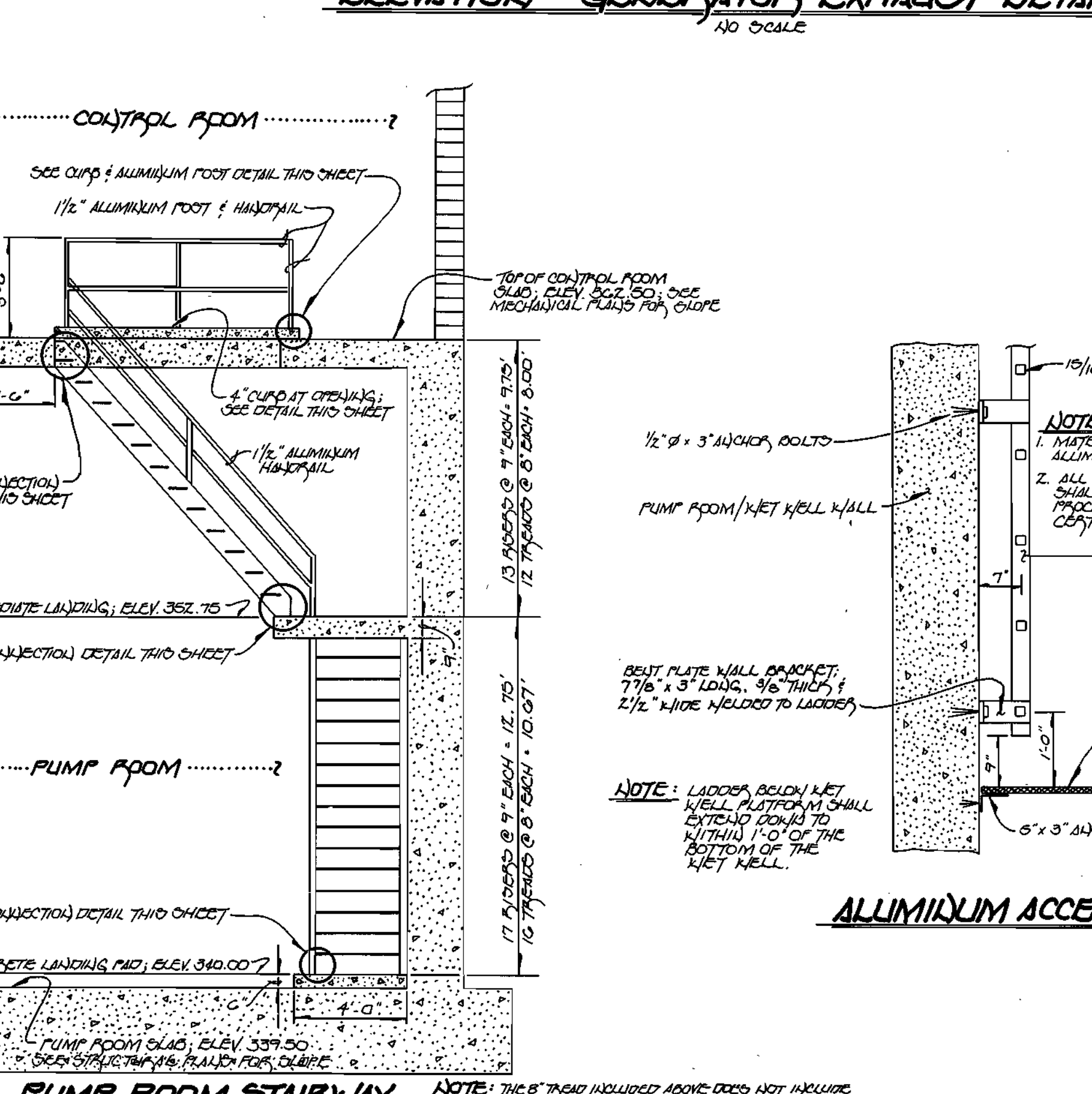
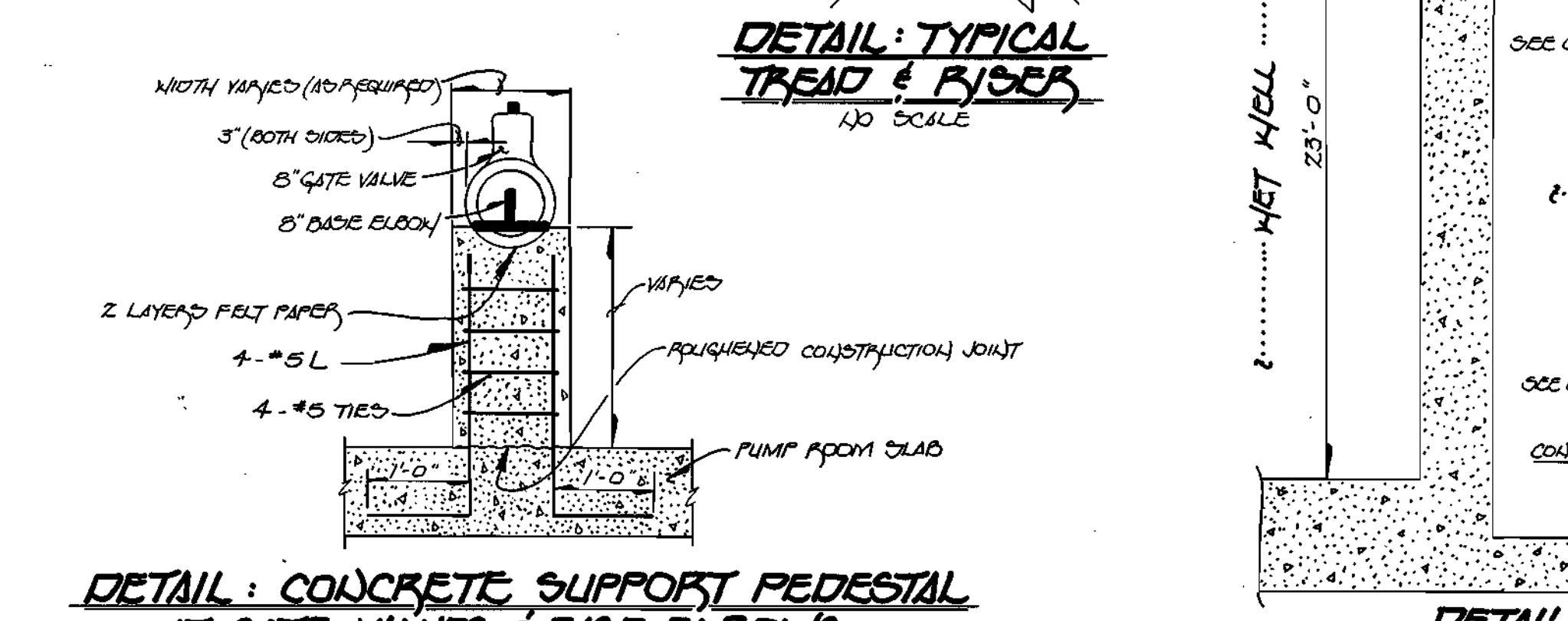
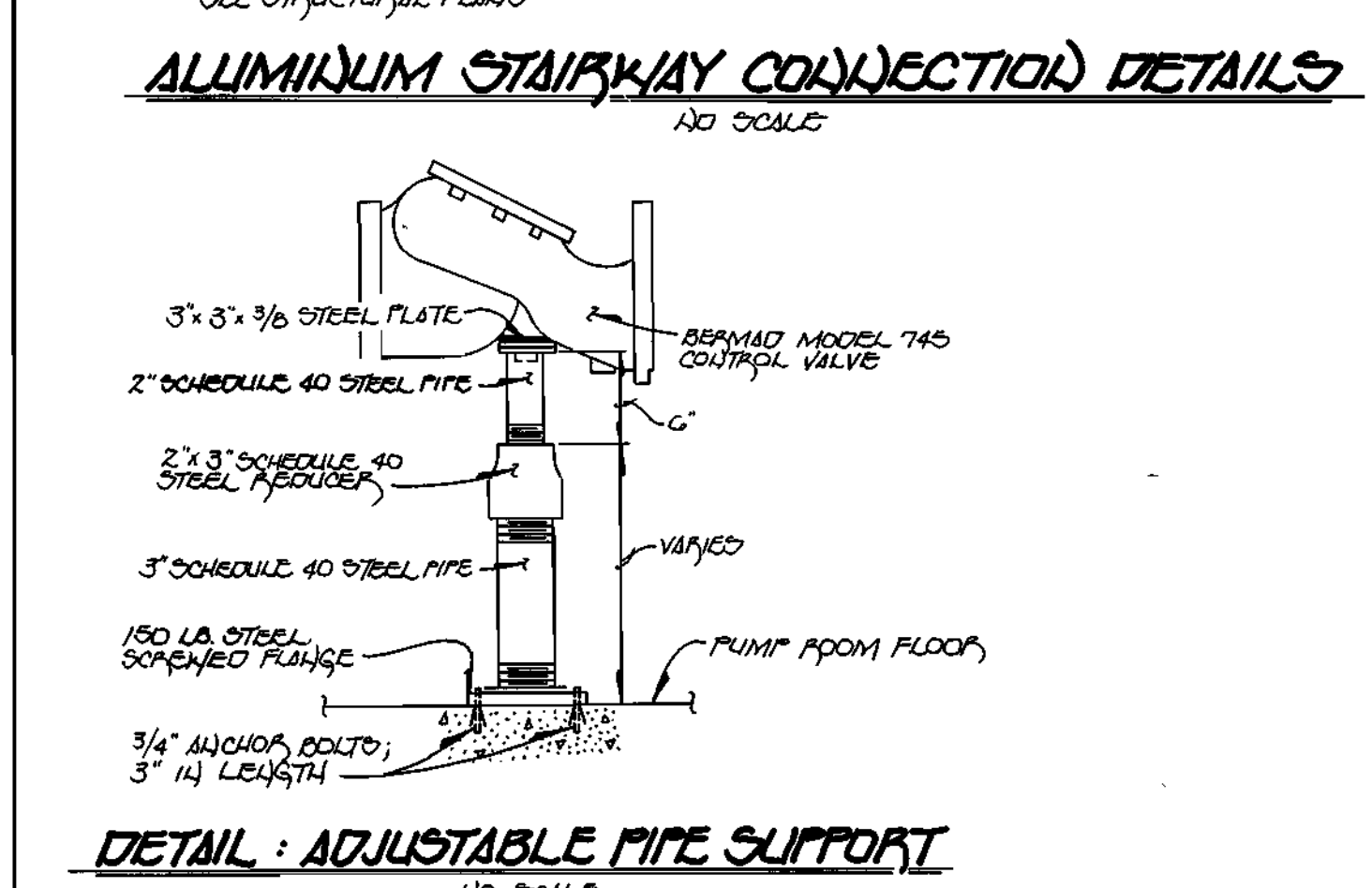
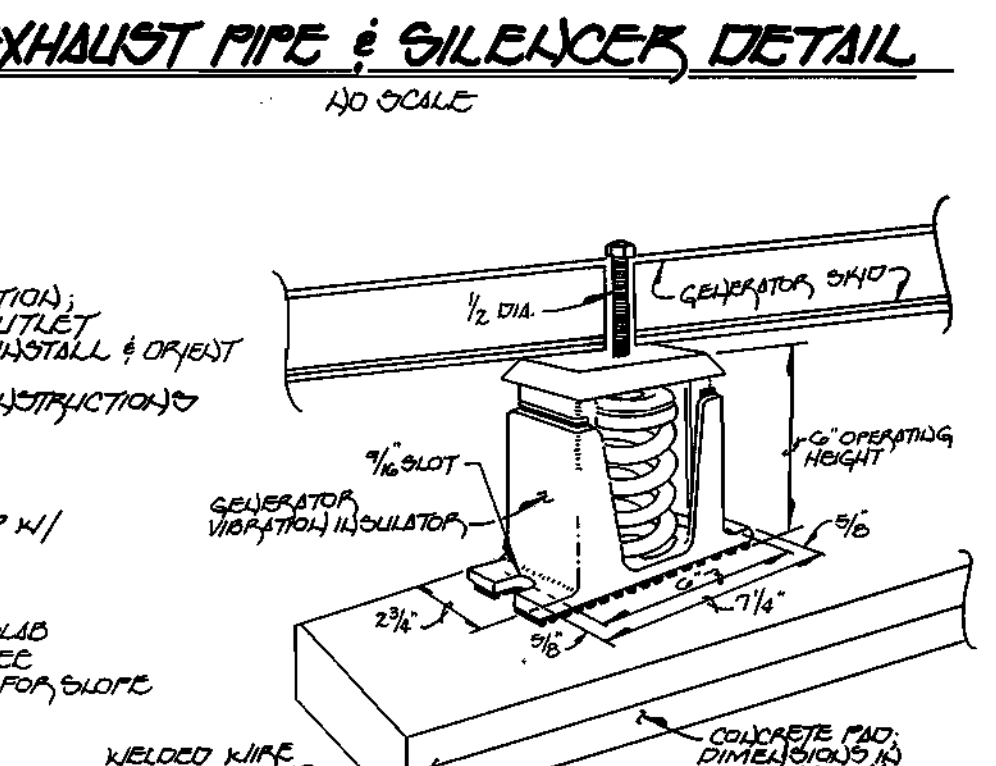
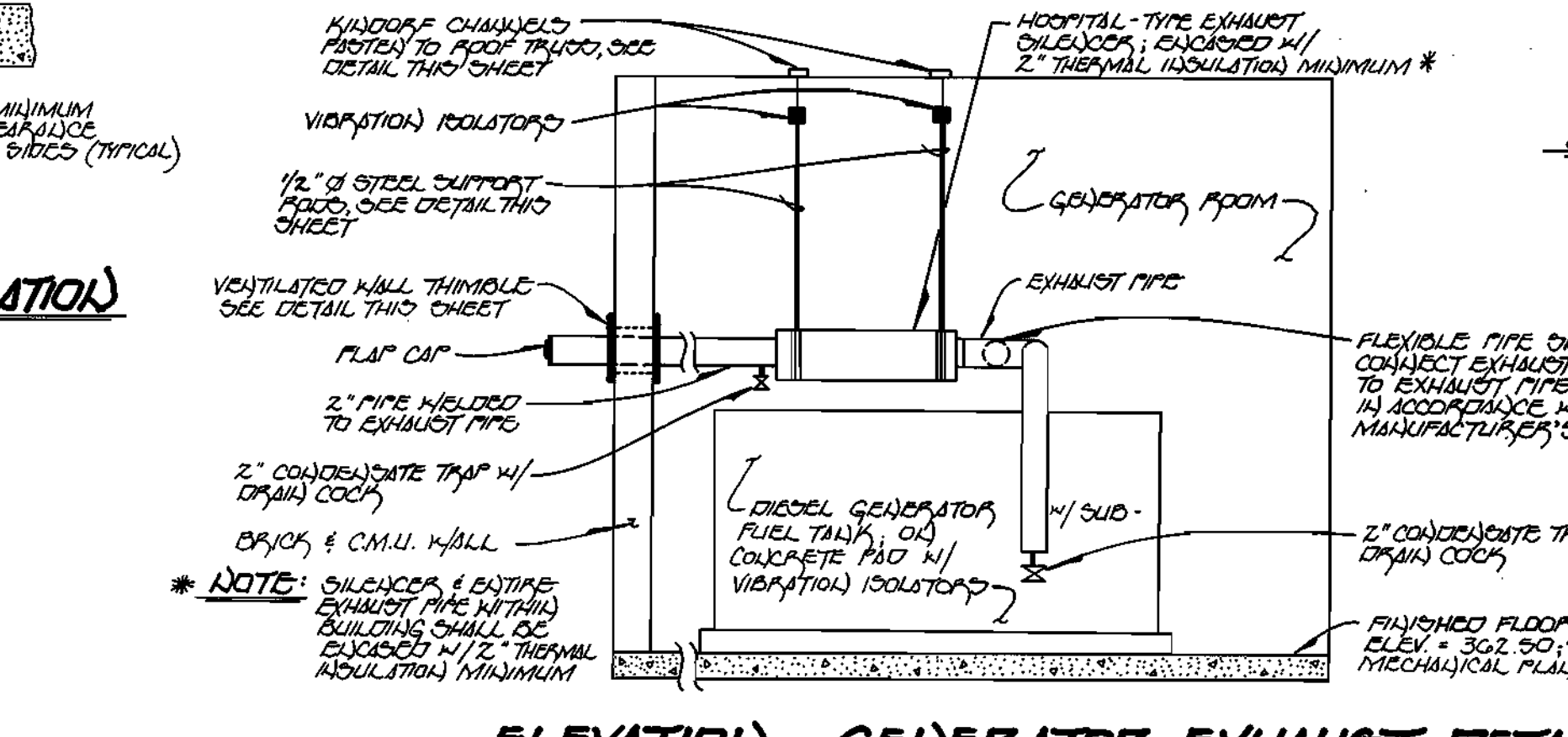
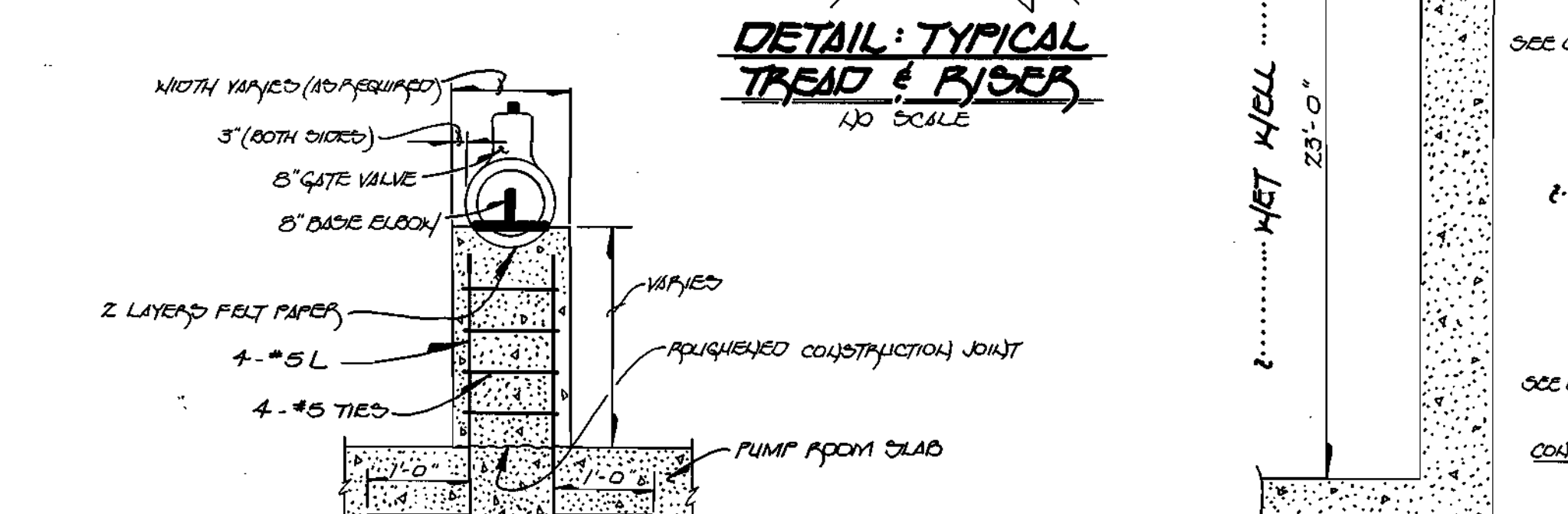
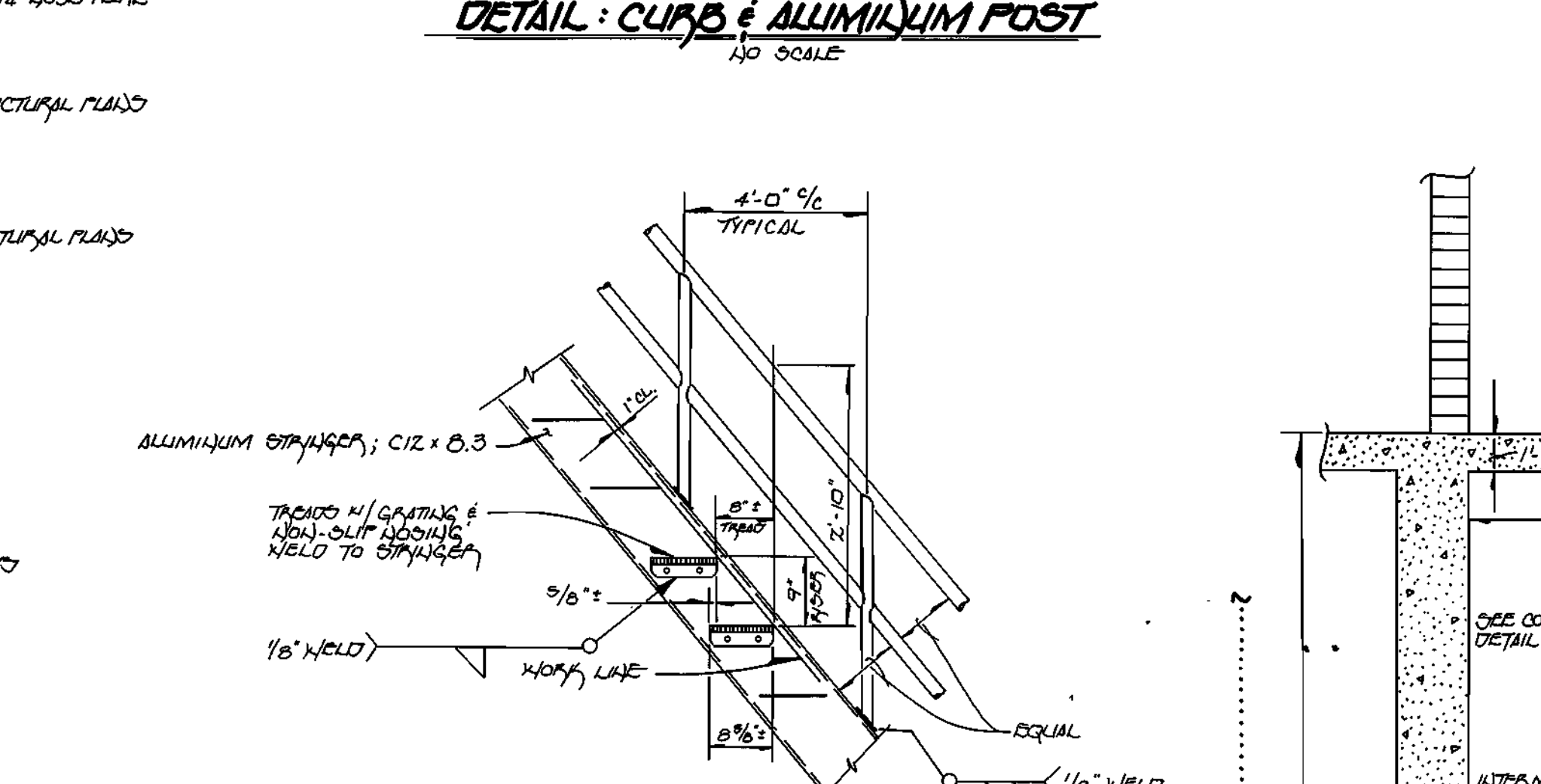
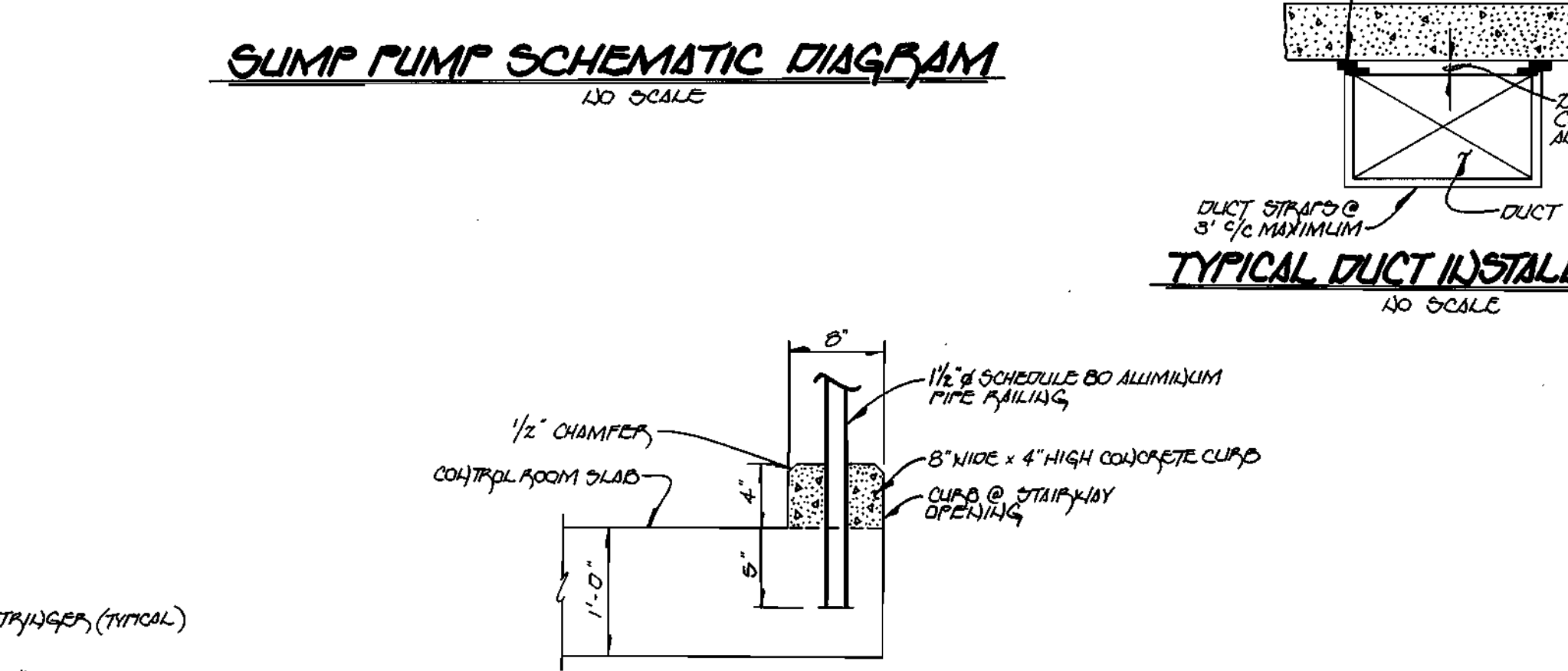
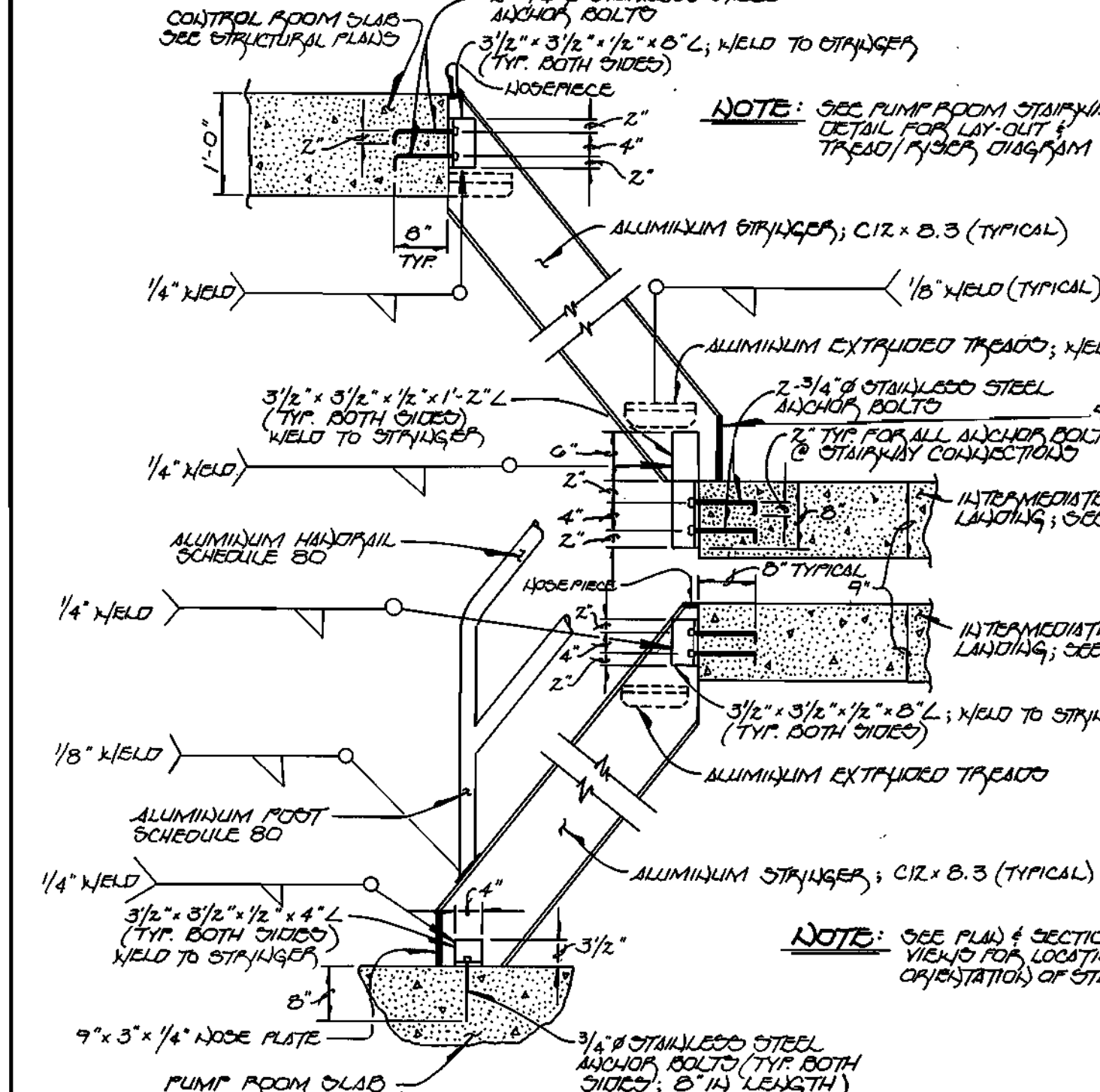
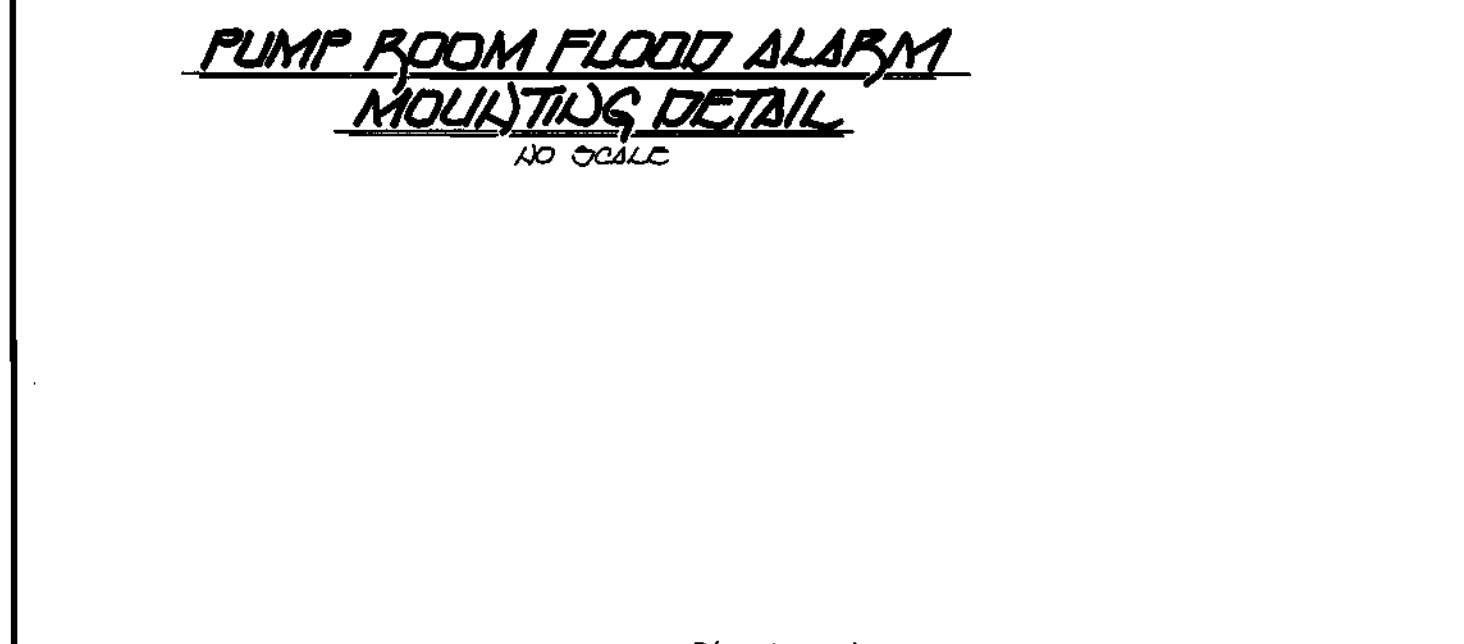
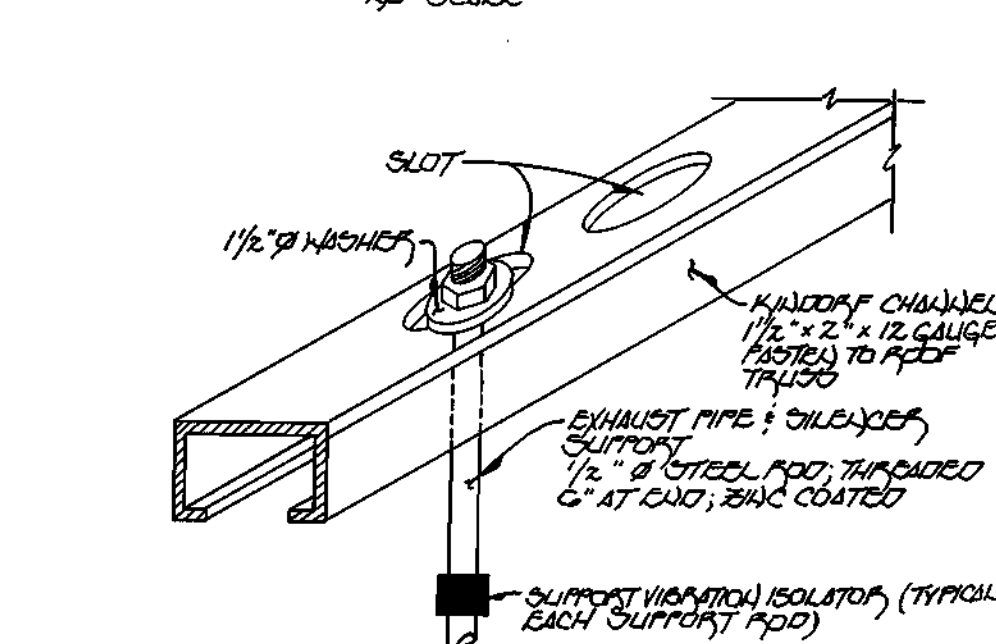
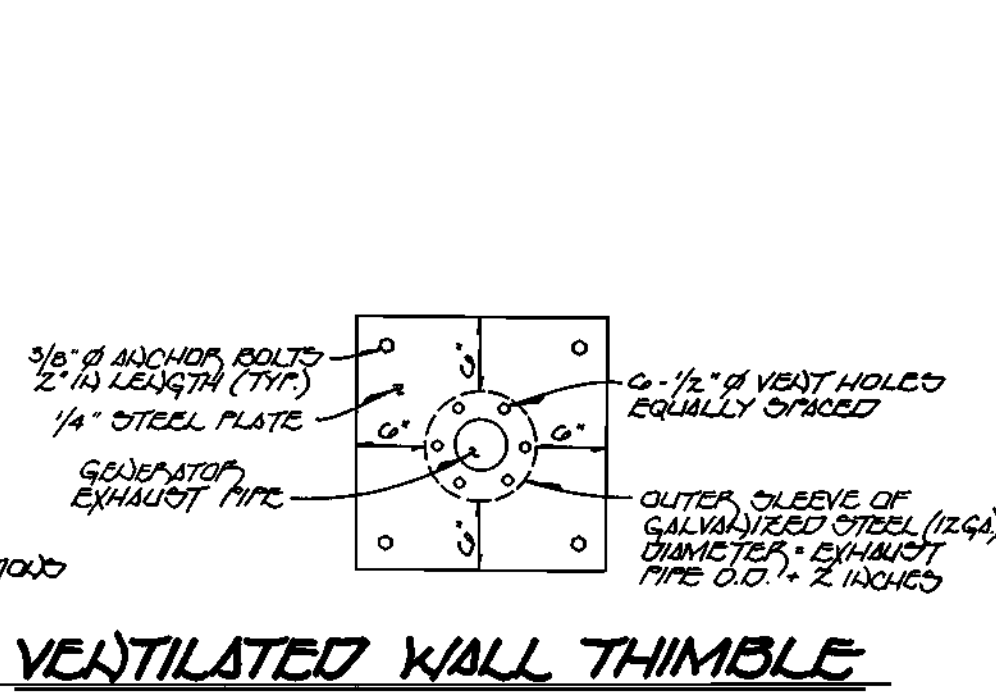
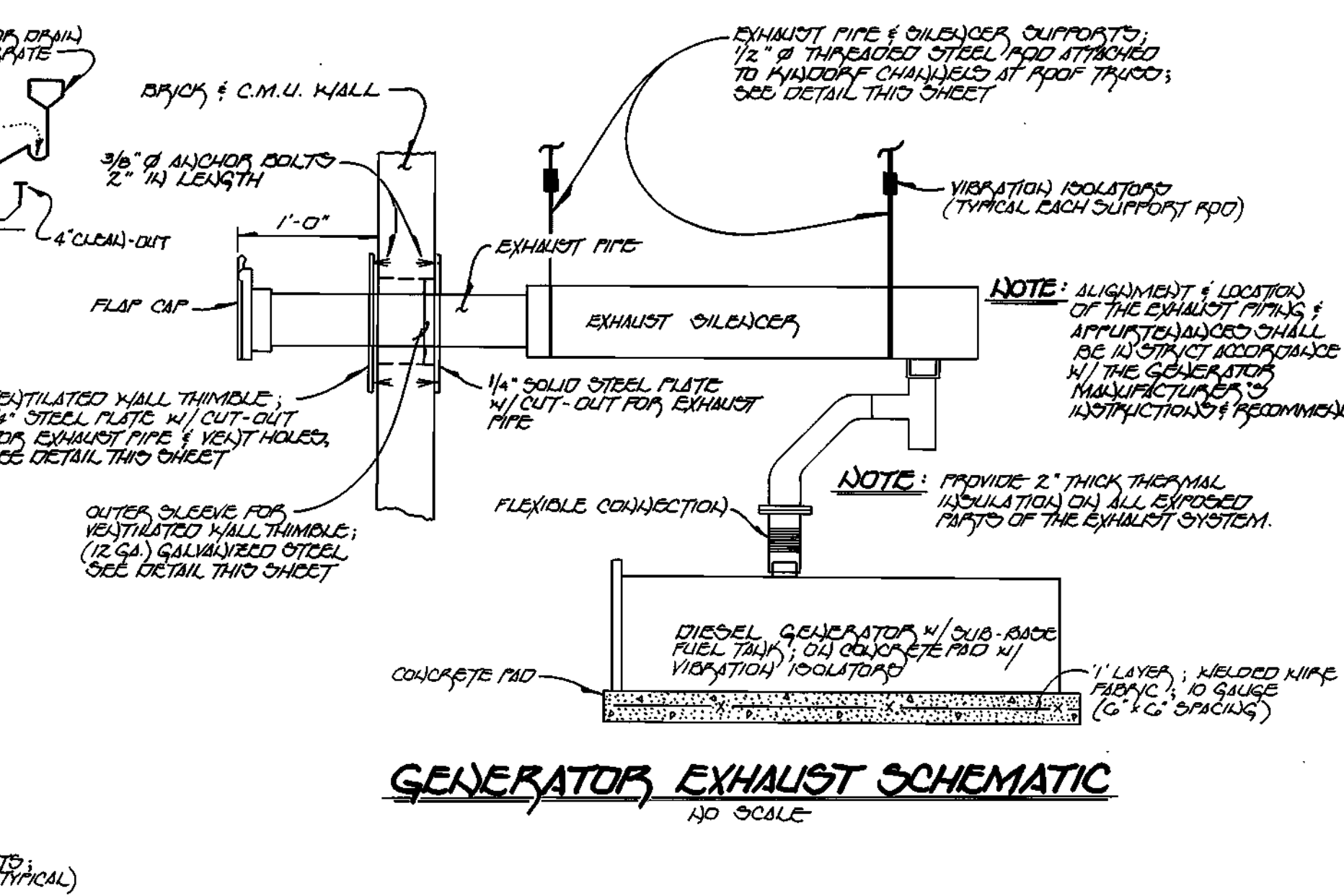
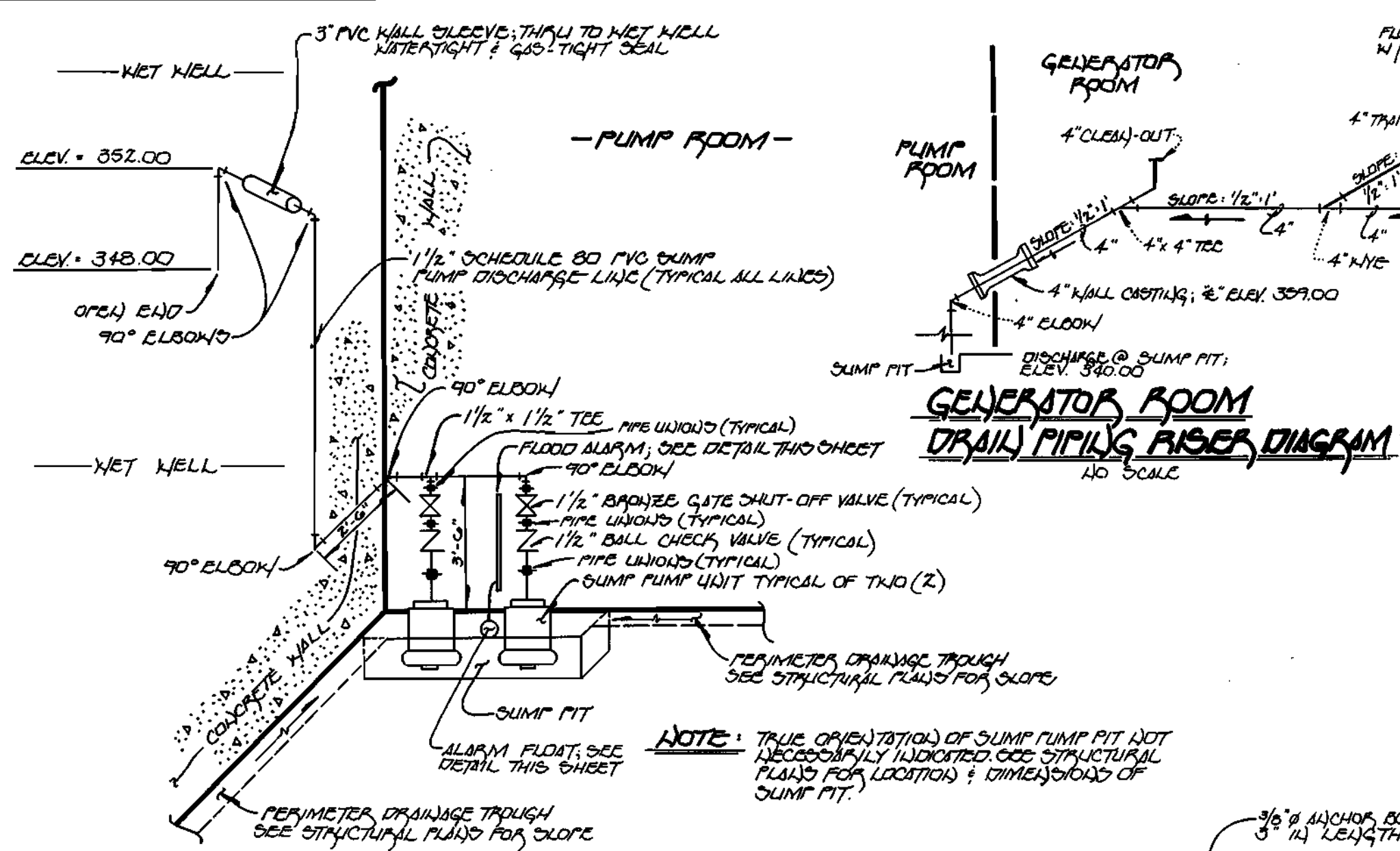
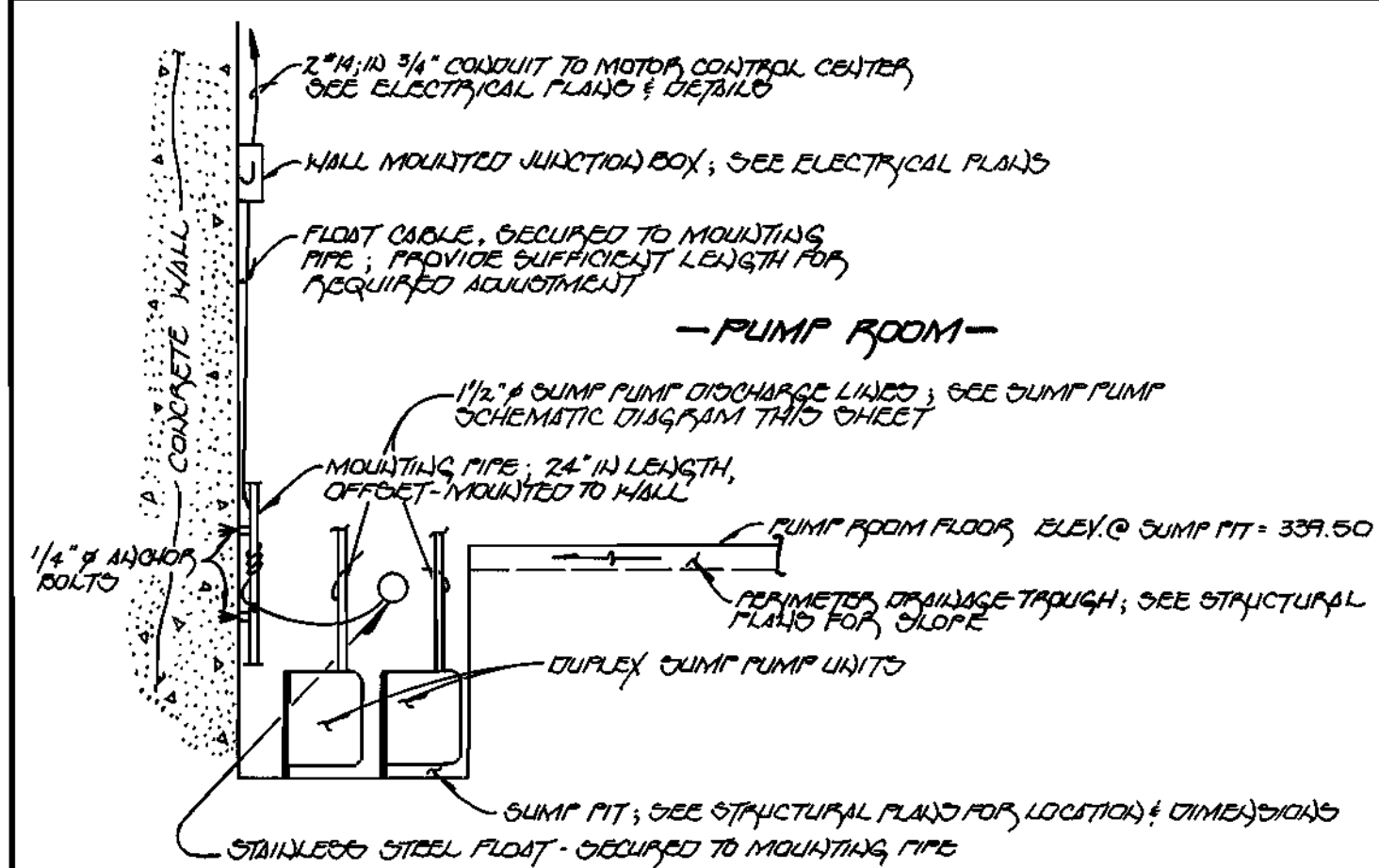
OLD FREDERICK ROAD
WASTEWATER PUMPING STATION

CAPITAL PROJECT 9-C203 : CONTRACT No. 10 - 3500

SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

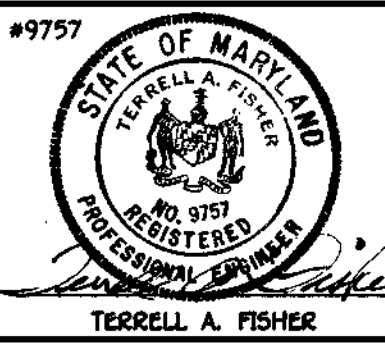
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SHEET 12 OF 20



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
7/25/96
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(410) 481-2865



DES: M.J.M.	
DRWN: J.M.M.	
CHK: P.W.K.	
DATE: 1/25/96	
BY NO.	REVISION

STRUCTURAL & MECHANICAL DETAILS
600' SCALE MAP NO. 17 BLOCK NO. 12

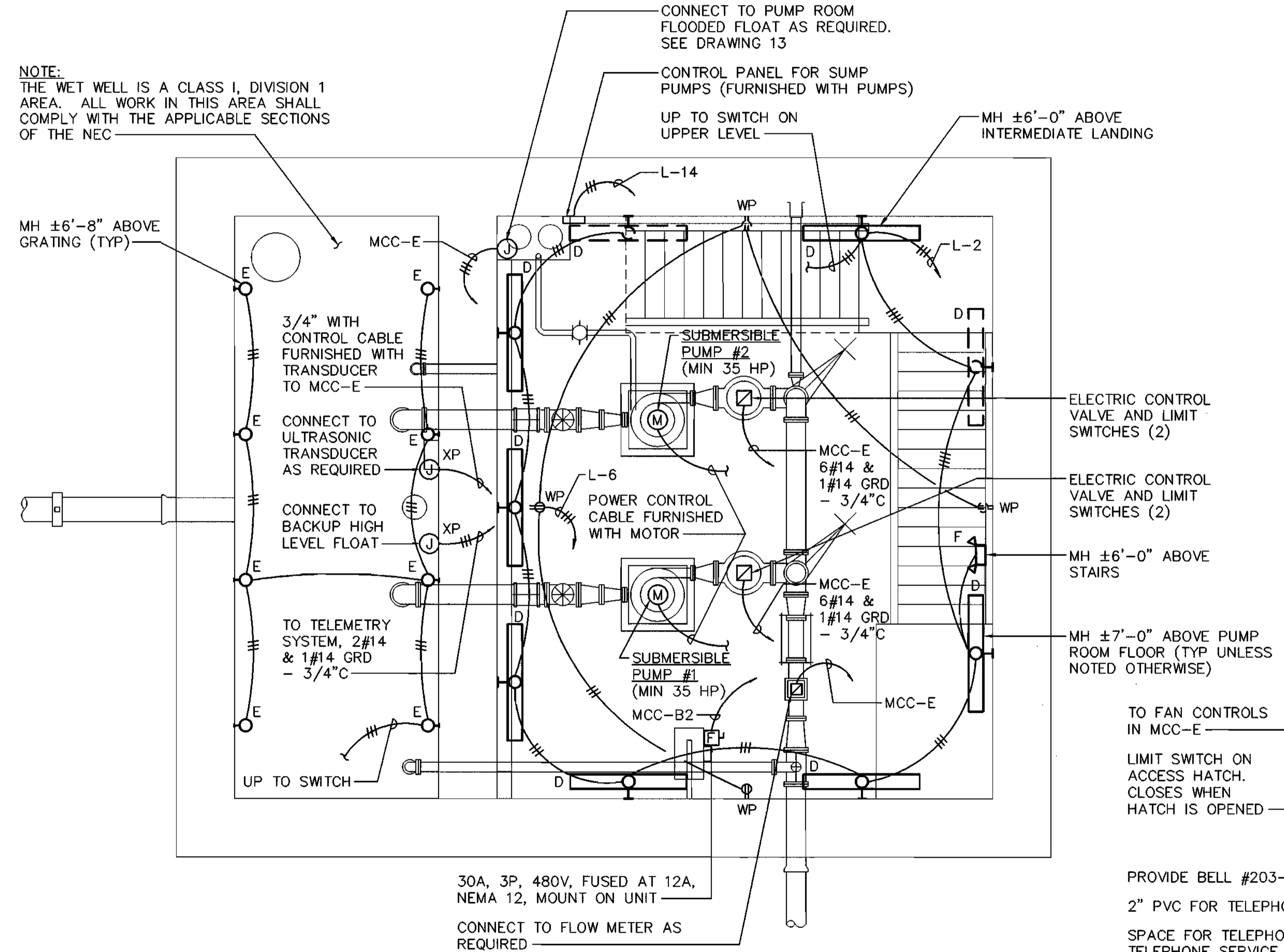
OLD FREDERICK ROAD
WASTEWATER PUMPING STATION
CAPITAL PROJECT 5-6203
CONTRACT NO. 10-3500
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 13 OF 20

DRAWING NOTES:

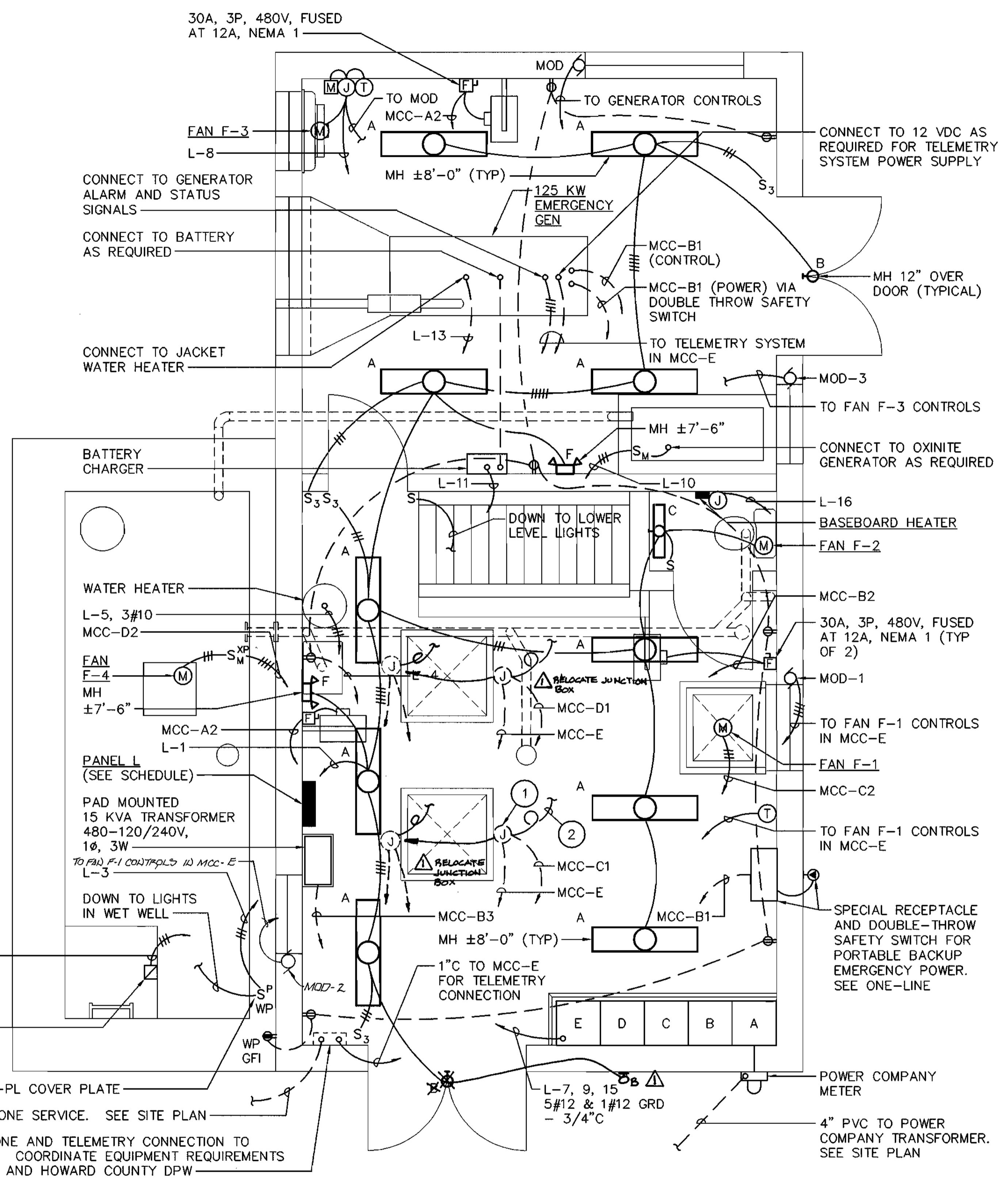
- 1 JUNCTION BOX ON UNDERSIDE OF CONTROL ROOM SLAB, ACCESSIBLE TO HATCH (TYPICAL AT 2 HATCH LOCATIONS).
- 2 POWER/CONTROL CABLE FROM SUBMERSIBLE PUMP. PROVIDE SUFFICIENT SLACK IN CABLE SO MOTOR CAN BE LIFTED AND PUT ON PUMP ROOM FLOOR (TYPICAL AT 2 HATCH LOCATIONS).

NOTE:
THE WET WELL IS A CLASS I, DIVISION 1 AREA. ALL WORK IN THIS AREA SHALL COMPLY WITH THE APPLICABLE SECTIONS OF THE NEC



PUMP ROOM & WET WELL PLAN

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



CONTROL ROOM & GENERATOR ROOM PLAN

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



CAPITAL PROJECT S-6203
CONTRACT NO. 10-3500
OLD FREDERICK ROAD
WASTEWATER PUMPING STATION
HOWARD COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DATE: 7/25/96

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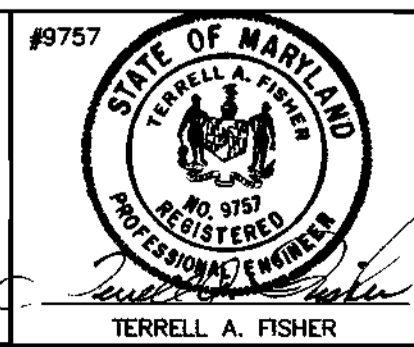
DATE: 7/26/96

DATE: 7-25-96

Fisher, Collins & Carter, Inc.

CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS

CENTENNIAL SQUARE OFFICE PARK
10272 Baltimore National Pike
Ellicott City, Maryland 21042
(410) 461-2855



DES:	M.L.B.	PREJ	AS-BUILT CONDITIONS
DRWN:	J.C.W.		
CHK:	P.O.D.		
DATE:	7/9/96		
BY:	NO.	REVISION	DATE

ELECTRICAL PLANS

600' SCALE MAP NO. 17 BLOCK NO. 12

OLD FREDERICK ROAD
WASTEWATER PUMPING STATION
CAPITAL PROJECT S-6203
CONTRACT NO. 10-3500
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN

SHEET 15 OF 20

LIGHTING FIXTURE SCHEDULE		
TYPE	DESCRIPTION	MANUFACTURER & CAT.# (OR EQUAL)
A	ENCLOSED AND GASKETED FLUORESCENT WITH PLASTIC HOUSING AND LENS, 2-40 WATT LAMPS, LOW TEMP BALLAST.	HUBBELL EDL042R-SPDR-LI
B	SECURITY LIGHT WITH POLYCARBONATE LENS, BUILT-IN PHOTOCELL AND 50 WATT HIGH PRESSURE SODIUM LAMP.	HUBBELL NRG-301-PC
C	WALL MOUNTED WRAP AROUND FLUORESCENT SUITABLE FOR WET LOCATIONS, 2-2FT LAMPS AND CLEAR ACRYLIC LENS.	PARAMOUNT 14222-120V
D	SIMILAR TO TYPE C BUT WITH 2-40 WATT, 4FT LAMPS AND LOW TEMP BALLAST.	PARAMOUNT 14432-120V
E	EXPLOSION PROOF INCANDESCENT WITH GUARD AND 200 WATT LAMP.	HUBBELL HLH-BG02200
F	INDUSTRIAL EMERGENCY BATTERY UNIT WITH 2-12V, 8W HALOGEN HEADS.	HUBBELL IMF12-50-2-P8H

PANEL SCHEDULE L									
120/240 VOLTS, 1 PHASE, 3 WIRE - SN - SURFACE									
CIR	FOR	BREAKER			CIR	FOR	BREAKER		
		FR	POLE	CAL			FR	POLE	CAL
1	LIGHTS - UPPER LEVEL	100	1	20	2	LIGHTS - PUMP ROOM	100	1	20
3	LIGHTS - WET WELL	100	1	20	-	-	-	-	-
5	WATER HEATER	100	2	30	4	RECEPTS - UPPER LEVEL	100	1	20
-	-	-	-	-	6	RECEPTS - PUMP ROOM	100	1	20
7	PUMP CONTROLS	100	1	20	8	FAN F-3 (GENERATOR ROOM)	100	1	20
9	FANS F-1 & F-4 CONTROLS	100	1	20	10	OXINITE GENERATOR	100	1	20
11	BATTERY CHARGER	100	1	20	12	SPACE AND BUS	100	2	-
13	JACKET WATER HEATER	100	2	20	-	-	-	-	-
-	-	-	-	-	14	SUMP PUMPS	100	1	20
15	FLOW METER & RECORDER	100	1	20	16	T.R. BASEBOARD HEATER	100	1	20
17	SPARE	100	1	20	18	SPARE	100	1	20
19	SPARE	100	1	20	20	SPARE	100	1	20
21	SPACE AND BUS	100	1	-	22	SPACE AND BUS	100	1	-
23	SPACE AND BUS	100	1	-	24	SPACE AND BUS	100	1	-

MAIN BREAKER 100A, FRAME 2P, CALIB 80A
* GFI TYPE BREAKER

ELECTRICAL LEGEND

SYMBOL	DESCRIPTION
	LIGHTING FIXTURE - FLUORESCENT - TYPE AS INDICATED
	LIGHTING FIXTURE - WALL MOUNTED - INCANDESCENT OR HID - TYPE AS INDICATED
	BATTERY POWERED EMERGENCY UNIT WITH INTEGRAL CHARGER - NUMBER OF HEADS AS INDICATED
S, S_2, S_3	SWITCH - SINGLE POLE, DOUBLE POLE, THREE WAY - MOUNTING HEIGHT 4'-0"
S^{WP}, S^{XP}	SWITCH - WEATHER PROOF, EXPLOSION PROOF - MOUNTING HEIGHT 4'-0"
	DUPLEX RECEPTACLE - 20A., 125V. - MOUNTING HEIGHT 18" UNLESS NOTED OTHERWISE
	GFI RECEPTACLE - 20A., 125V. - MOUNTING HEIGHT 18" UNLESS NOTED OTHERWISE
	SPECIAL RECEPTACLE WITH CONFIGURATION AS NOTED
	JUNCTION BOX - SIZE PER NEC OR AS INDICATED
	TIME SWITCH
	PANELBOARD - TYPE AS NOTED - MOUNTING HEIGHT 6'-6" TO TOP
	CONDUIT - IN OR ON CEILING OR WALLS
	CONDUIT - IN OR UNDER FLOOR
	HOMERUN TO PANEL - NUMBER OF ARROWS INDICATE NUMBER OF CIRCUITS AND NUMBER OF CROSSLINES INDICATES NUMBER OF #12 CONDUCTORS - WHERE NO CROSSLINES APPEAR 2#12 CONDUCTORS ARE IMPLIED
	DISCONNECT SWITCH - FUSED, NON-FUSED - TYPE AND RATING AS INDICATED
	MAGNETIC STARTER, COMBINATION TYPE STARTER - TYPE AND RATING AS INDICATED
M, S_M	MANUAL MOTOR STARTER, H.P. RATED SWITCH - MOUNTING HEIGHT 4'-0" - TYPE AND RATING AS REQUIRED
	ENCLOSED RELAY
	CONTROL DEVICE - TYPE AS NOTED
	UNIT HEATER - TYPE AS NOTED
M	MOTOR - HORSEPOWER AS NOTED
G	GENERATOR - SIZE AND TYPE AS NOTED
	TRANSFORMER - DRY TYPE - RATING AS INDICATED
J	BASEBOARD HEATER
T	THERMOSTAT
M	ELECTRIC SERVICE METER
RVSS	REDUCED VOLTAGE SOLID STATE STARTER
FVNR	FULL VOLTAGE NON-REVERSING STARTER
WP	WEATHERPROOF
XP	EXPLOSION PROOF

EXHAUST AND RETURN AIR FAN SCHEDULE								
NO.	SERVICE	CFM	FAN RPM	S.P. (IN W.G.)	TYPE/DRIVE	ELECTRICAL HP-V/PH/HZ	NOTES	MANUFACTURER & MODEL NO.
F-1	PUMP/CONTROL RM	2300	1320	0.375	IL/BD	3/4-480/3/60	-	PENN CENTREX SX125BA
F-2	TOILET EXHAUST	75	1280	0.375	CAB/DD	48W-120/1/60	6, 12	PENN ZEPHYRETTE ZT
F-3	GENERATOR ROOM	675	1550	0.250	PR/DD	1/7-120/1/60	6	PENN BREEZEWAY P12R
F-4	WET WELL	1750	1020	0.500	US/BD	1/2-480/3/60	3, 9, 11	PENN DYNAMO D15

TYPES/DRIVES:
RV - ROOF VENTILATOR PR - PROPELLER DD - DIRECT DRIVE
IL - IN-LINE CENTRIFUGAL CAB - CABINET BD - BELT DRIVE
US - UTILITY SET SP - SPECIAL VD - VARIABLE DRIVE

NOTES:
1 PREFAB. CURB 6 BACKDRAFT DAMPER 11 EXPLOSION PROOF
2 BUILT-UP CURB 7 MOTORIZED DAMPER 12 WALL CAP
3 BIRD SCREEN (INLET) 8 DISCONNECT
4 INSECT SCREEN 9 CORR. PROTECT. COAT.
5 LOUVER 10 UL 762 (GREASE)

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

James P. Lewis 7/25/96 *Robert J. Sporn* 7/25/96
DIRECTOR OF PUBLIC WORKS BUREAU OF ENGINEERING

Michael A. Strommillo 7/26/96 *Clayton D. ...* 7-25-96
CHIEF, BUREAU OF UTILITIES CHIEF, WATER AND SEWER DESIGN DIVISION

Fisher, Collins & Carter, Inc.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK
10272 Baltimore National Pike
Ellicott City, Maryland 21042
(410) 461-2855



DES: M.L.B.	
DRWN: J.C.W.	
CHK: P.O.D.	
DATE: 7/9/96	
BY NO.	REVISION

ELECTRICAL LEGEND AND SCHEDULES

600' SCALE MAP NO. 17 BLOCK NO. 12

OLD FREDERICK ROAD
WASTEWATER PUMPING STATION
CAPITAL PROJECT S-6203
CONTRACT NO. 10-3500
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 16 OF 20

CAPITAL PROJECT S-6203
CONTRACT NO. 10-3500
OLD FREDERICK ROAD
WASTEWATER PUMPING STATION
HOWARD COUNTY, MARYLAND

MOTOR CONTROL CENTER "MCC" SCHEDULE

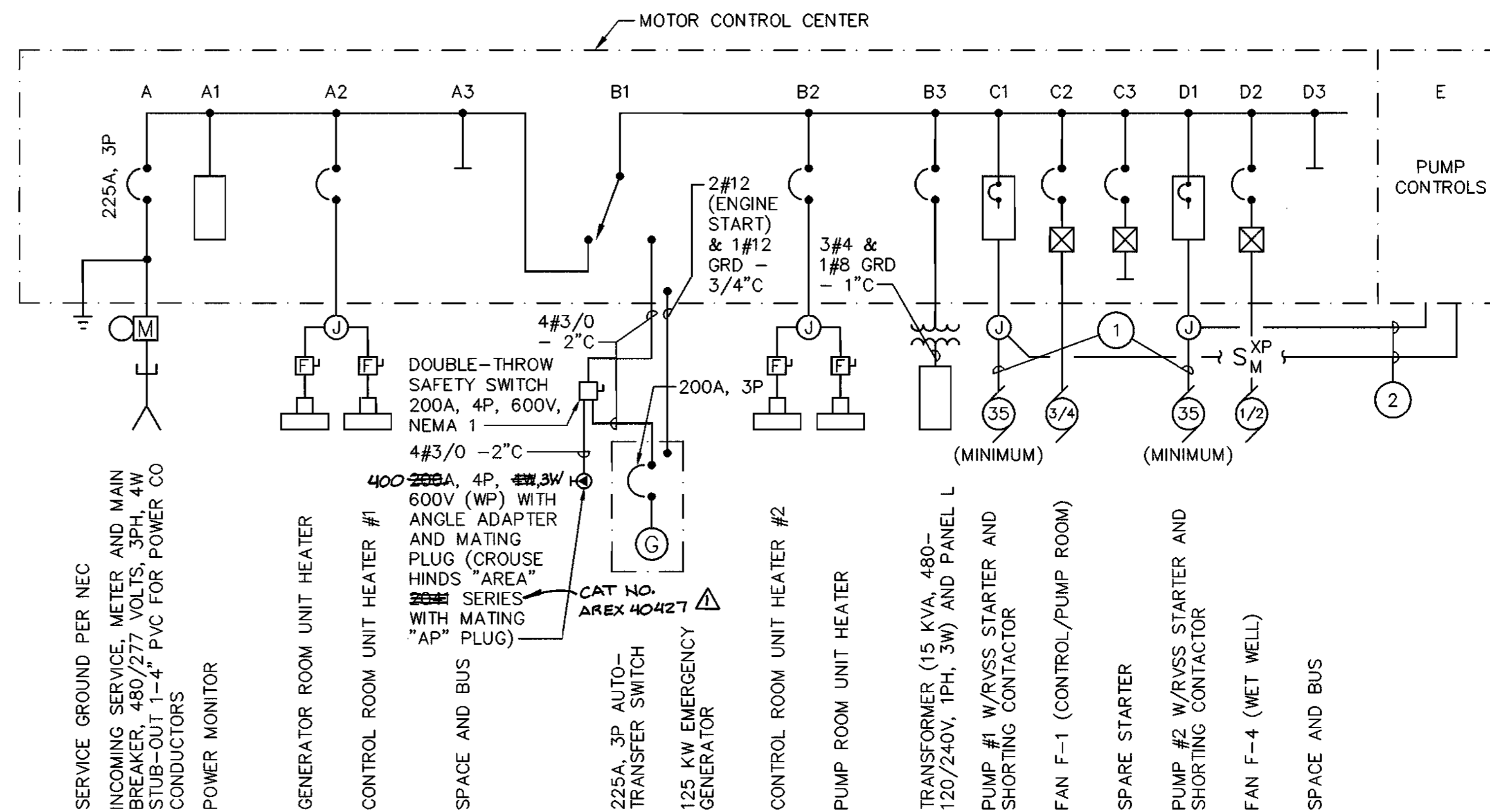
480 VOLTS - 3 PHASE - 3 WIRE - 600A. BUS - BONDED AND GROUNDED NEUTRAL TERMINATION													
CIR. NO.	EQUIPMENT DESCRIPTION	HP	BASIC DEVICE	AUX. DES.	CIRCUIT BREAKER			WIRE		GRD. WIRE SIZE	CONDUIT SIZE	LOAD (FLA)	CONTROL DIAGRAM
					FRAME	POLES	CAL.	NO.	SIZE				
A	INCOMING SERVICE 480Y/277V, 3PH, 4W	-	-	-	-	-	-	4	4/0	-	2-1/2"	-	-
A1	MAIN CIRCUIT BREAKER & POWER CIRCUIT MONITOR	-	CIRCUIT BREAKER	-	225	3	225	-	-	-	-	-	-
A2	UNIT HEATERS (GEN RM & CONTROL RM)	-	CIRCUIT BREAKER	-	100	3	30	3	10	10	3/4"	18	-
A3	SPACE AND BUS	-	-	-	-	-	-	-	-	-	-	-	-
B1	AUTOMATIC TRANSFER SWITCH, 225A, 3P	-	-	-	-	-	-	-	-	-	-	-	-
B2	UNIT HEATERS (PUMP RM & CONTROL RM)	-	CIRCUIT BREAKER	-	100	3	30	3	10	10	3/4"	18	-
B3	TRANSFORMER (PANEL L) 15 KVA	-	CIRCUIT BREAKER	-	100	2	40	2	8	10	3/4"	31	-
C1	PUMP #1	MIN 35	RVSS STARTER	3,4	100	3	90	3	6	8	1"	52	SEE SHT 18
C2	F-1 (CONTROL/PUMP ROOM)	3/4	SIZE 0 FVNR STARTER	1,2,3	100	3	15	3	12	12	3/4"	1	SEE SHT 18
C3	SPARE STARTER	-	SIZE 0 FVNR STARTER	1,2,3	100	3	15	-	-	-	-	5	-
D1	PUMP #2	MIN 35	RVSS STARTER	3,4	100	3	90	3	6	8	1"	52	SEE SHT 18
D2	F-4 (WET WELL)	1/2	SIZE 0 FVNR STARTER	1,2,3	100	3	15	3	12	12	3/4"	1	SEE SHT 18
D3	SPACE AND BUS	-	-	-	-	-	-	-	-	-	-	-	-

AUXILIARIES FOR MOTOR CONTROL CENTER

- | | |
|------------------------------|--|
| 1. HAND-OFF-AUTOMATIC SWITCH | 3. 120 VOLTS CONTROL POWER TRANSFORMER |
| 2. INDICATING LIGHTS | 4. ALARM/STATUS/CONTROLS |

NOTES

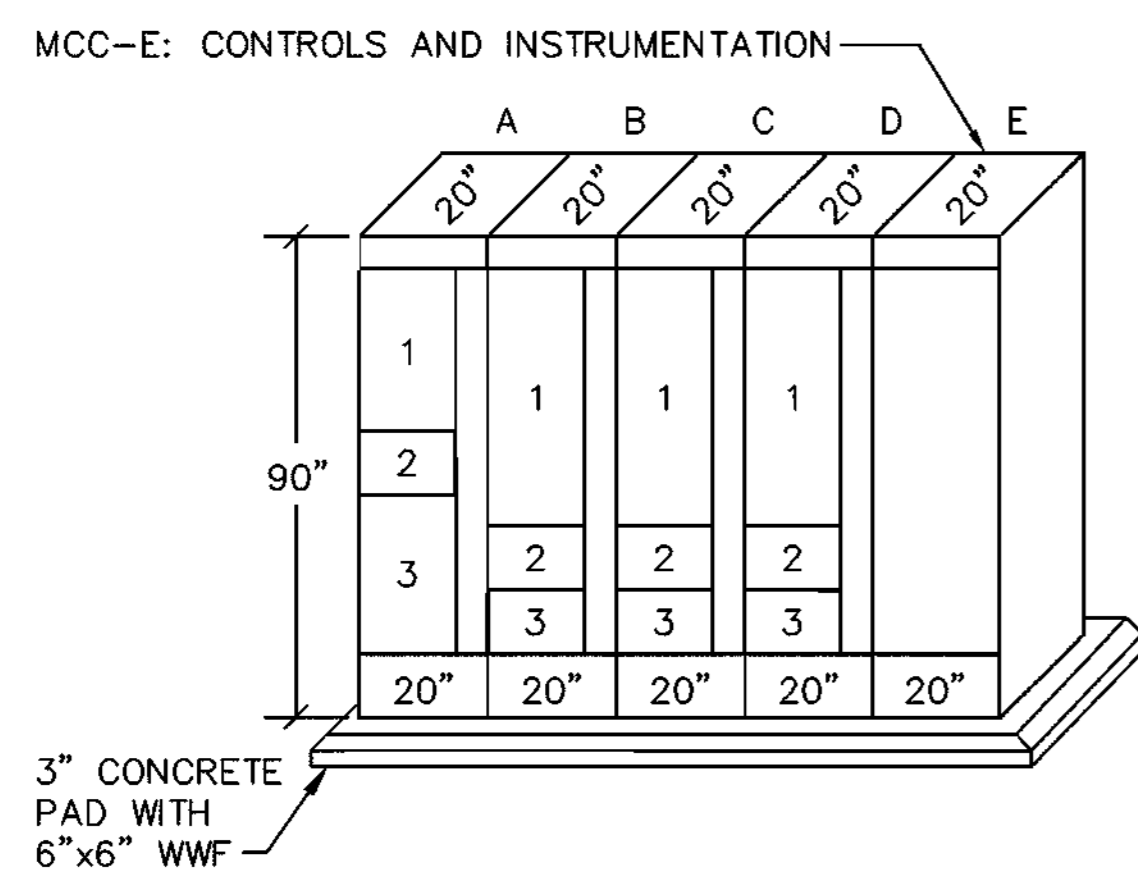
TOTAL CONNECTED LOAD: 178 AMPERES
ANTICIPATED MAXIMUM DEMAND: 145 AMPERES



ONE-LINE DIAGRAM

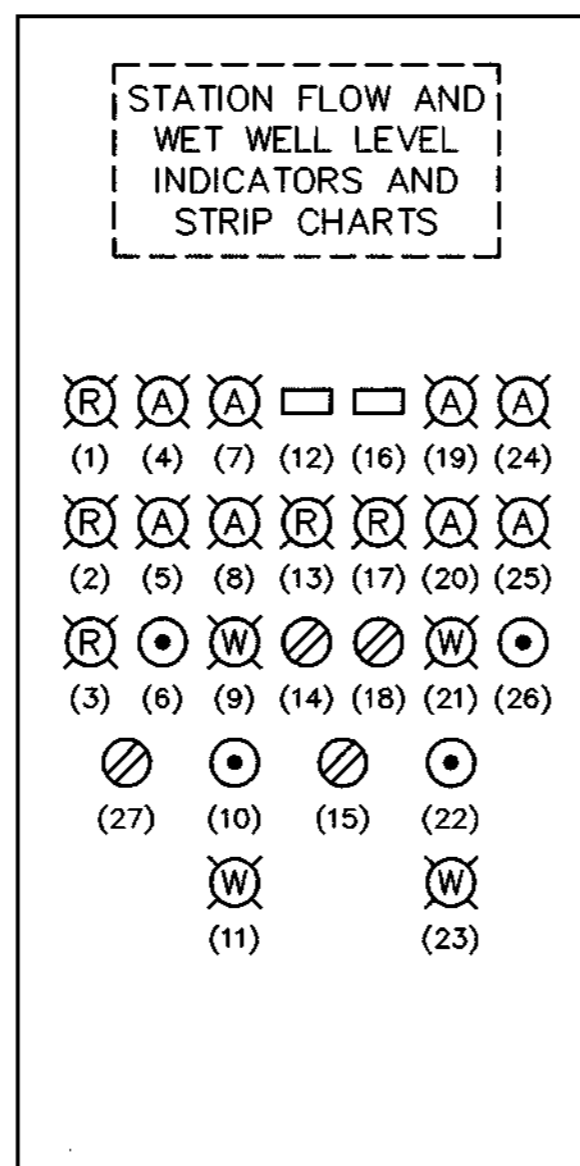
NO SCALE

- ① POWER/ALARM CABLE FURNISHED WITH PUMP MOTOR.
- ② MOTOR ALARM WIRING: 3#12 & 1#12 GRD - 3/4"C.



MOTOR CONTROL CENTER ELEVATION

NO SCALE

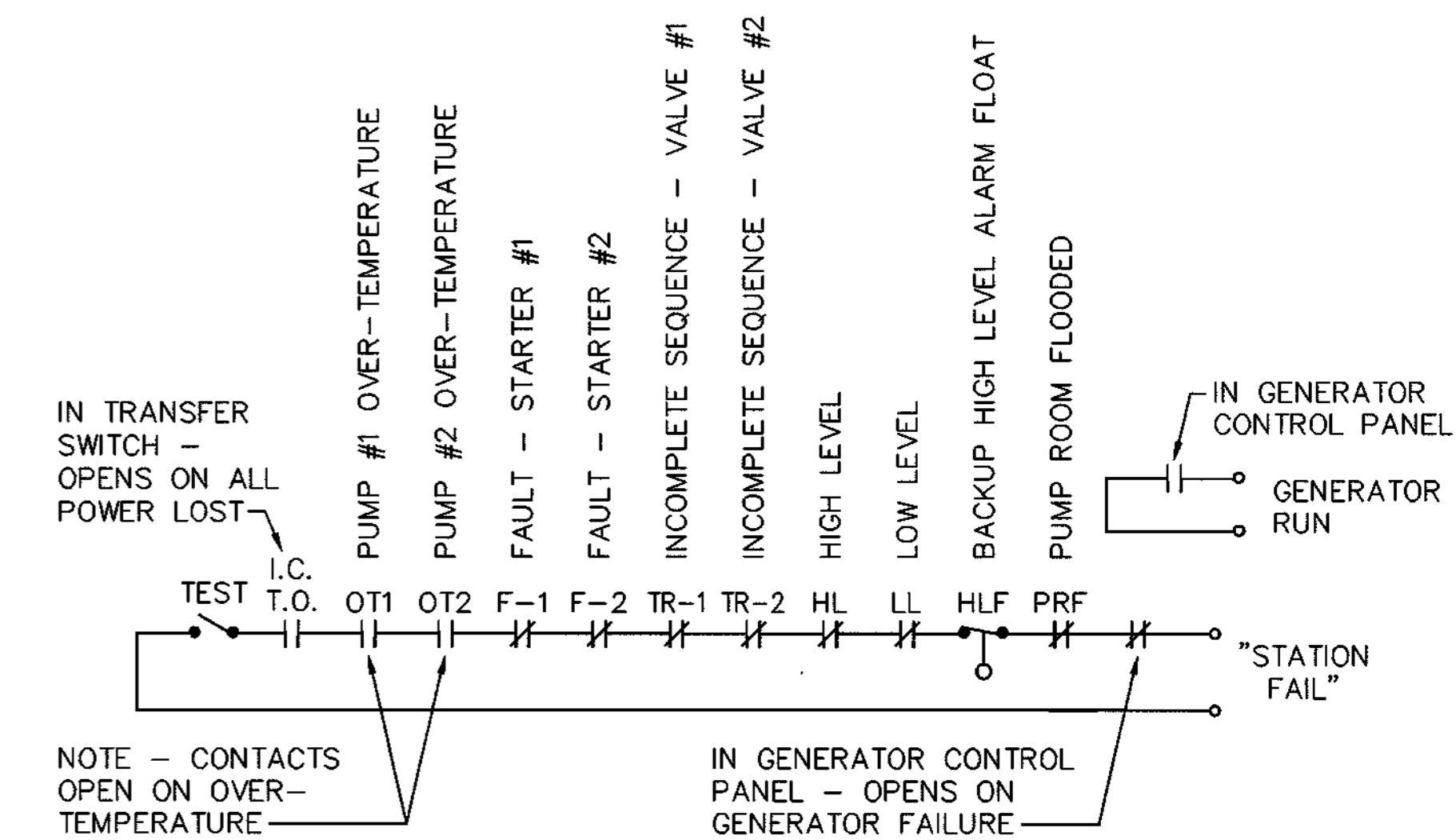


MCC-E ELEVATION

NO SCALE

- (1) HIGH WET WELL LEVEL
- (2) LOW WET WELL LEVEL
- (3) PUMP ROOM FLOODED
- (4) PUMP #1 OVER-TEMPERATURE
- (5) PUMP #1 SEAL LEAK
- (6) PUMP #1 OVER-TEMPERATURE/SEAL LEAK RESET
- (7) PUMP #1 VALVE FULLY OPEN
- (8) PUMP #1 VALVE FULLY CLOSED
- (9) VALVE #1 - INCOMPLETE SEQUENCE
- (10) VALVE #1 INCOMPLETE SEQUENCE RESET
- (11) VALVE/MOTOR #1 FAILURE/LOCKOUT
- (12) PUMP #1 ELAPSED TIME
- (13) PUMP #1 RUNNING
- (14) PUMP #1 H-O-A SELECTOR SWITCH
- (15) SELECTOR SWITCH: PUMP #1 LEAD; AUTOMATIC; PUMP #2 LEAD
- (16) PUMP #2 ELAPSED TIME
- (17) PUMP #2 RUNNING
- (18) PUMP #2 H-O-A SELECTOR SWITCH
- (19) PUMP #2 VALVE FULLY OPEN
- (20) PUMP #2 VALVE FULLY CLOSED
- (21) VALVE #2 - INCOMPLETE SEQUENCE
- (22) VALVE #2 INCOMPLETE SEQUENCE RESET
- (23) VALVE/MOTOR #2 FAILURE/LOCKOUT
- (24) PUMP #2 OVER-TEMPERATURE
- (25) PUMP #2 SEAL LEAK
- (26) PUMP #2 OVER-TEMPERATURE/SEAL LEAK RESET
- (27) TELEMETRY SYSTEM TEST SWITCH

NOTE: (A) ; A = AMBER; R = RED; W = WHITE



TELEMETRY ALARMS

NO SCALE

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

James P. Lewis 7/25/96
DIRECTOR OF PUBLIC WORKS DATE

Richard E. Sporn 7/25/96
BUREAU OF ENGINEERING DATE

Michael A. Stawinski 7/25/96
CHIEF, BUREAU OF UTILITIES DATE

Op. Don Viers 7-25-96
CHIEF, WATER AND SEWER DESIGN DIVISION DATE

Fisher, Collins & Carter, Inc.

CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS

CENTENNIAL SQUARE OFFICE PARK
10272 Baltimore National Pike
Ellicott City, Maryland 21042
(410) 461-2855

#9757

TERRELL A. FISHER

DES: M.L.B. **PEJ** **AS-BUILT CONDITIONS**

DRWN: J.C.W.

CHK: P.O.D.

DATE: 7/9/96

BY: NO. REVISION DATE

ELECTRICAL ONE-LINE DIAGRAM
AND MCC DETAILS

600' SCALE MAP NO. 17 BLOCK NO. 12

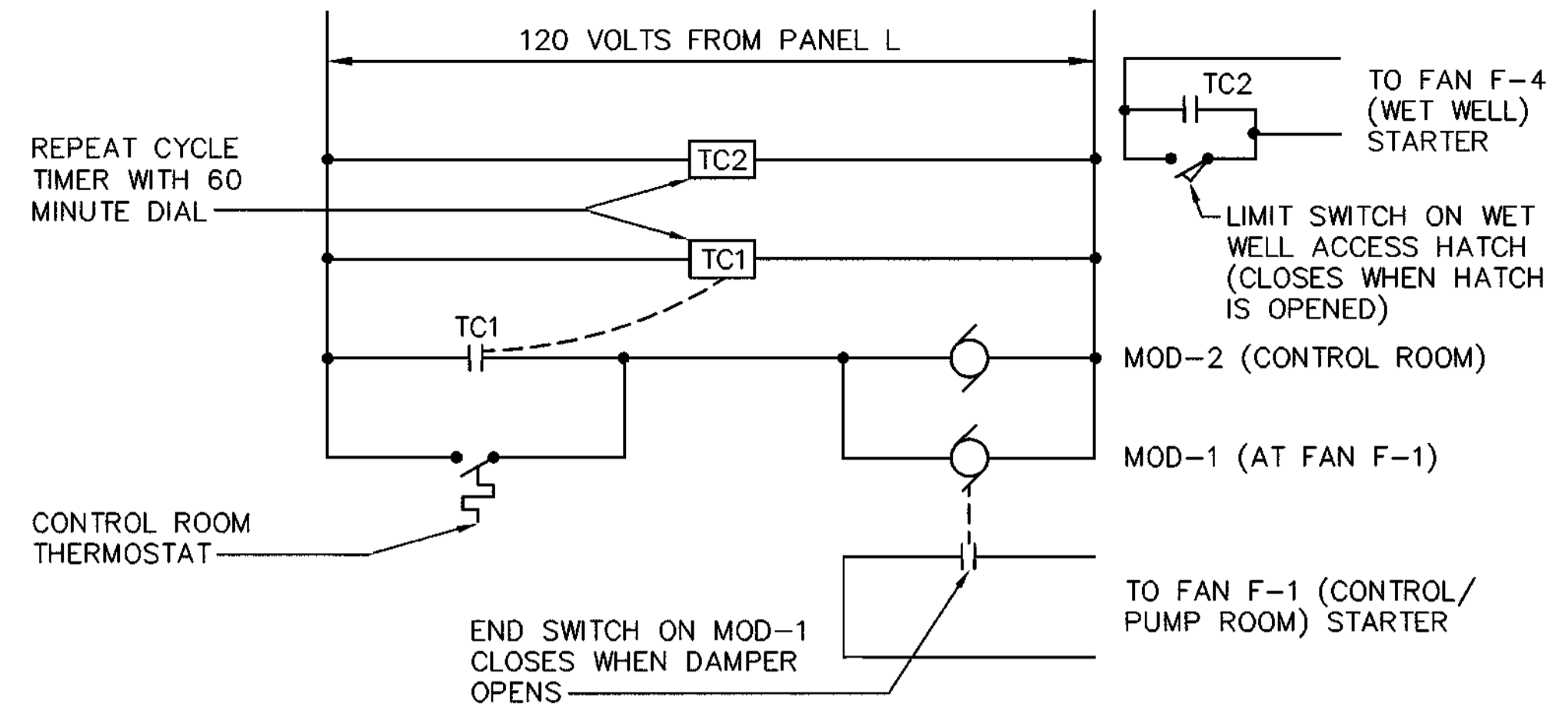
OLD FREDERICK ROAD
WASTEWATER PUMPING STATION

CAPITAL PROJECT S-6203
CONTRACT NO. 10-3500
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

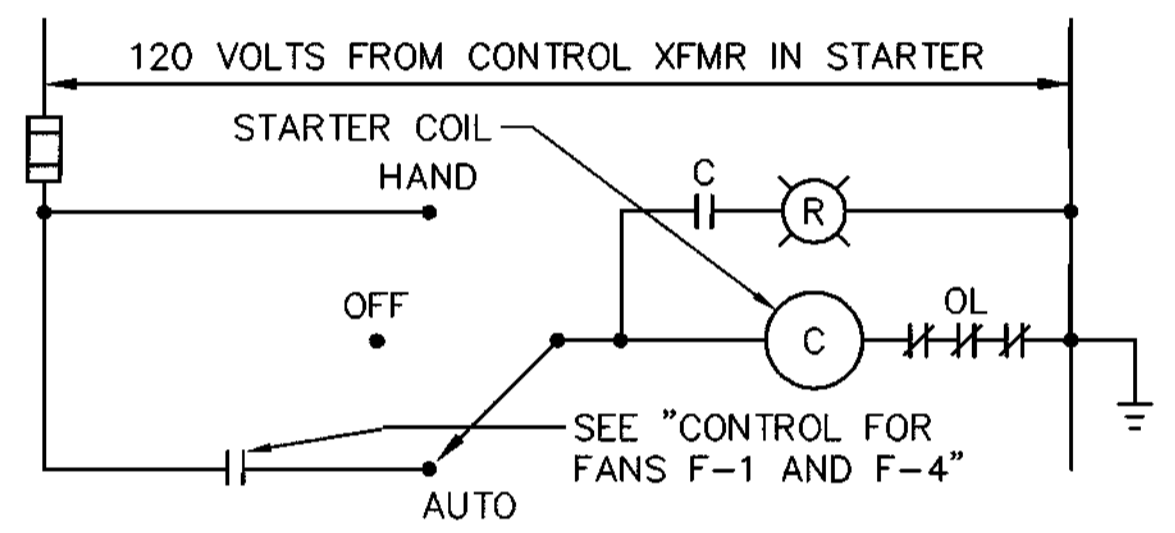
SCALE AS SHOWN

SHEET 17 OF 20

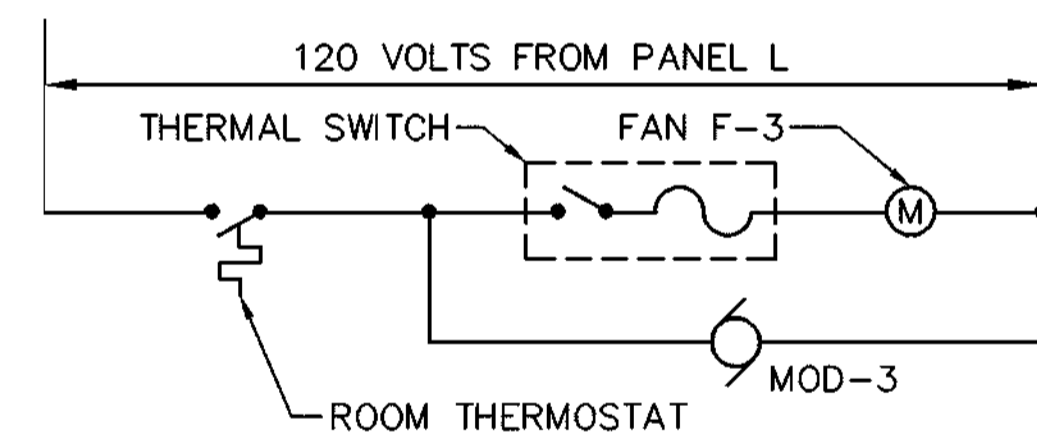
CAPITAL PROJECT S-6203
CONTRACT NO. 10-3500
OLD FREDERICK ROAD
WASTEWATER PUMPING STATION
HOWARD COUNTY, MARYLAND



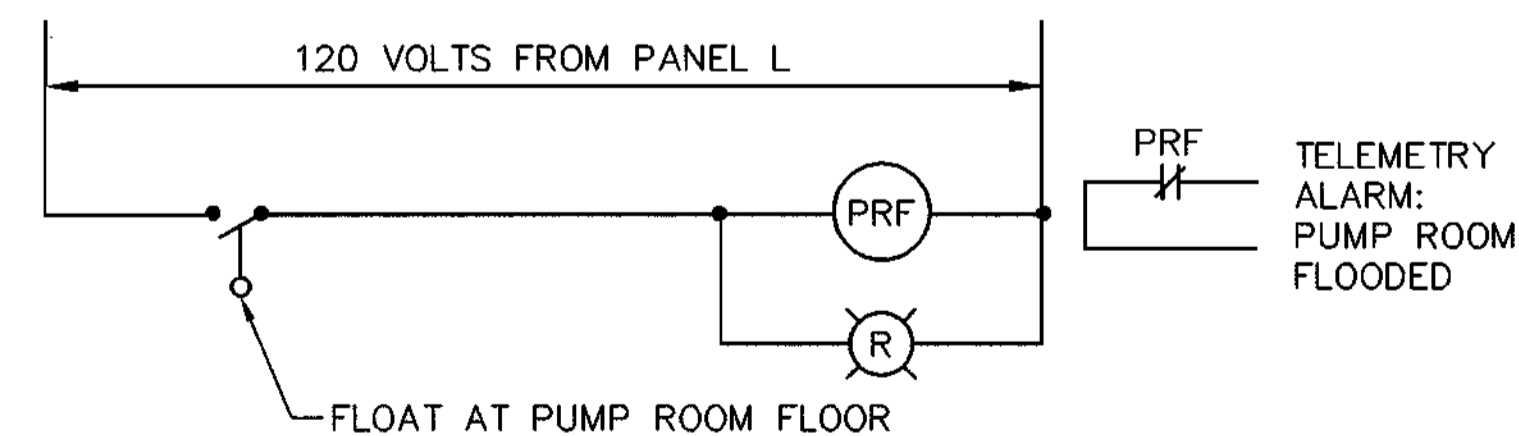
CONTROLS FOR FANS F-1 AND F-4
NO SCALE
(CONTROL/PUMP ROOM AND WET WELL)



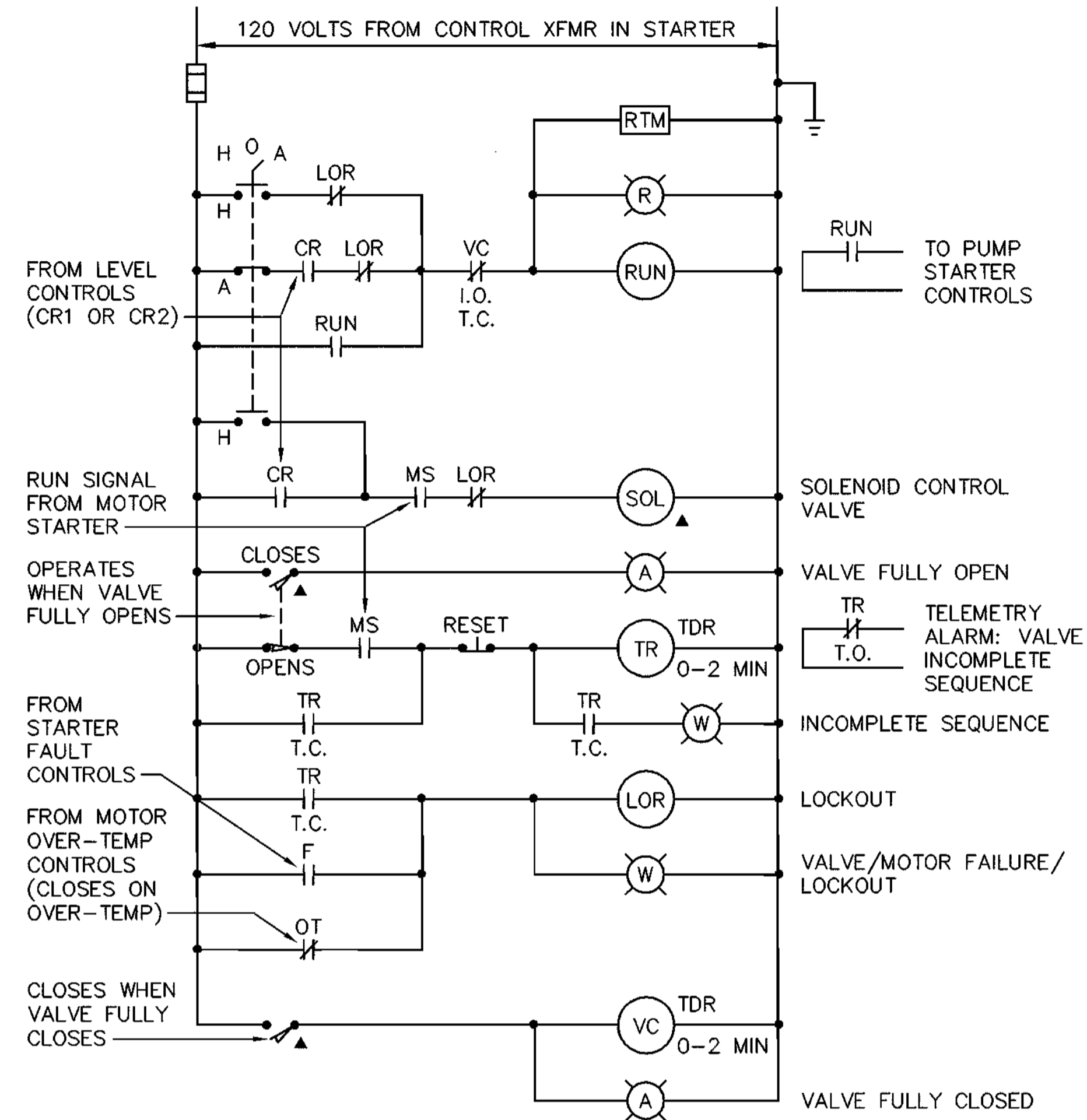
FANS F-1 AND F-4
NO SCALE
(TYPICAL)



FANS F-3
NO SCALE
(GENERATOR ROOM)

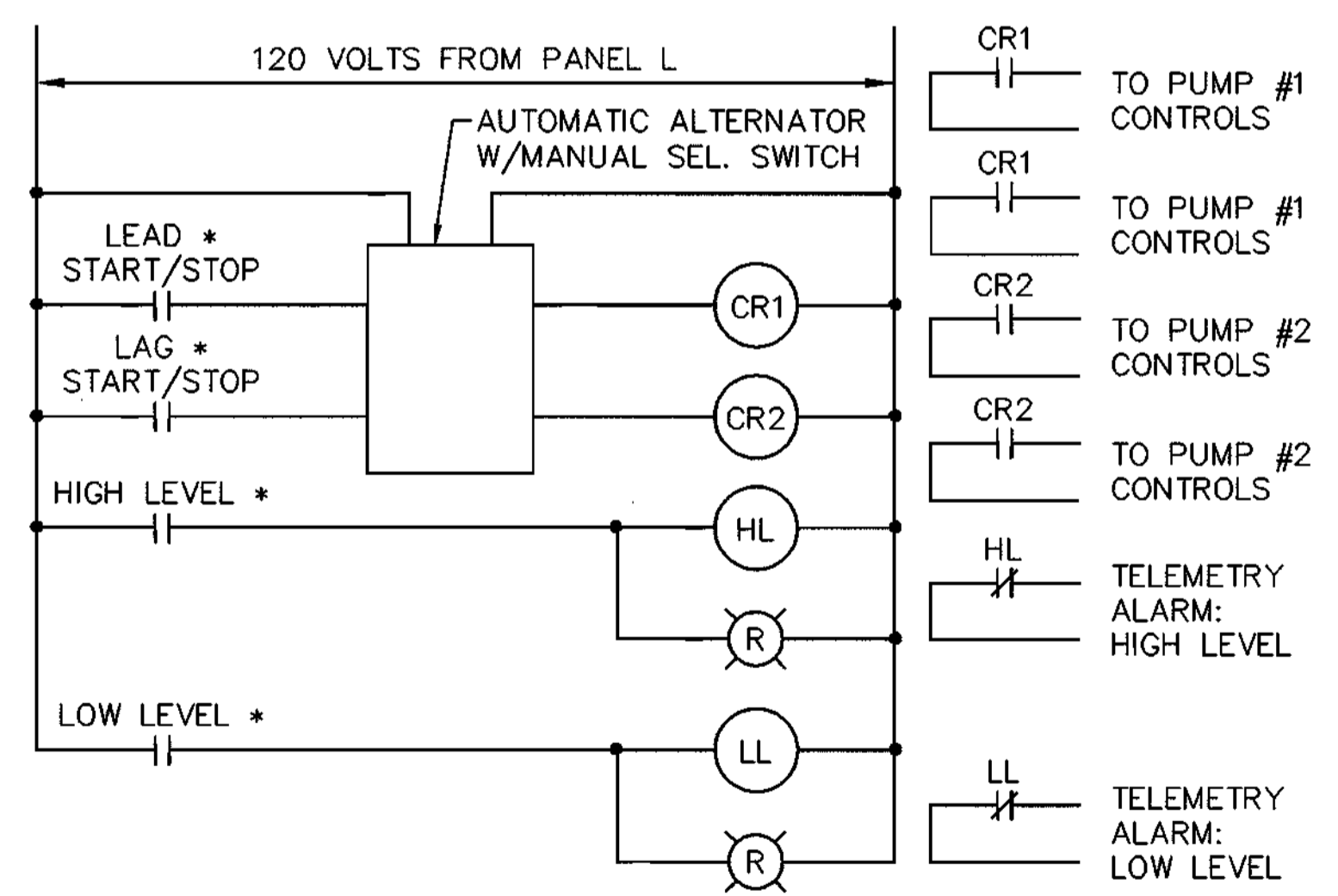


PUMP ROOM FLOODED
NO SCALE



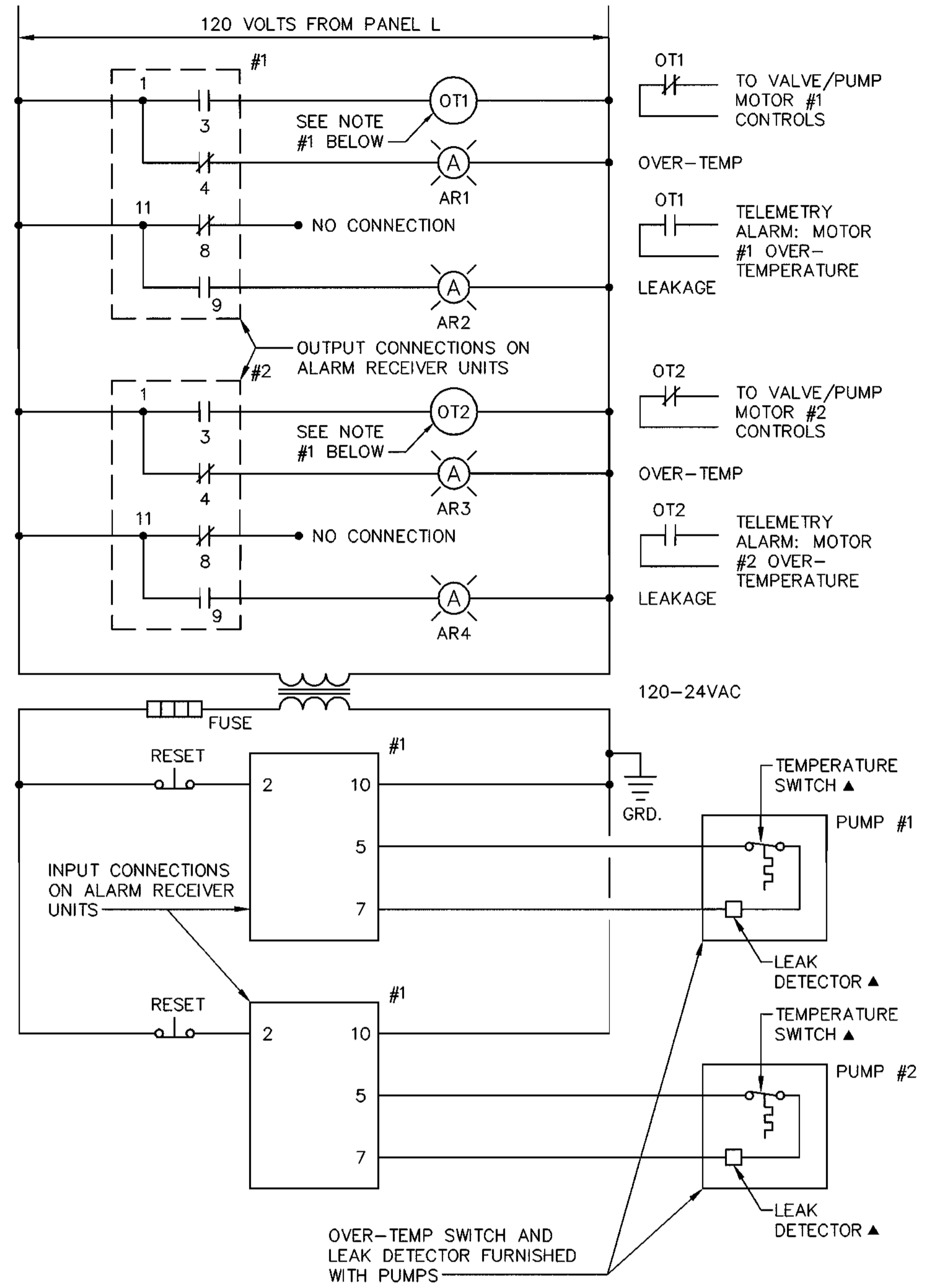
VALVE/PUMP CONTROLS
NO SCALE
(TYPICAL FOR EACH PUMP)

NOTE: ALL DEVICES ARE IN MCC-E UNLESS NOTED BY ▲ (REMOTE DEVICE)



LEVEL CONTROLS
NO SCALE

* FROM OUTPUT RELAYS IN MILLTRONICS MULTIRANGER PLUS CONTROL UNIT



PUMP LEAK DETECTION AND OVER-TEMPERATURE CONTROLS
NO SCALE

- NOTES:
- OVER-TEMPERATURE RELAYS OT1 AND OT2 ARE NORMALLY ENERGIZED. THEY DROP-OUT ON AN OVER-TEMPERATURE CONDITION.
 - ALL DEVICES ARE IN MCC-E UNLESS NOTED BY ▲ (REMOTE DEVICE)

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

James M. Swan 7/25/96
DIRECTOR OF PUBLIC WORKS DATE

Michael A. Swain 7/24/96
CHIEF, BUREAU OF UTILITIES DATE

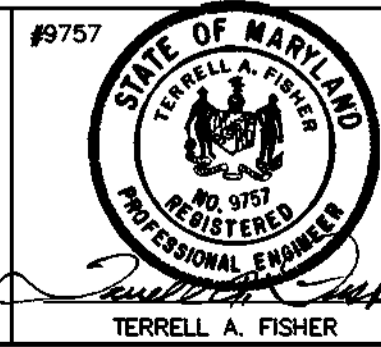
John J. Sisson 7/25/96
BUREAU OF ENGINEERING DATE

Ol. Donelan 7-25-96
CHIEF, WATER AND SEWER DESIGN DIVISION DATE

Fisher, Collins & Carter, Inc.

CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS

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Ellicott City, Maryland 21042
(410) 461-2855



DES:	M.L.B.		
DRWN:	J.C.W.		
CHK:	P.O.D.		
DATE:	7/9/96		
BY:	NO.	REVISION	DATE

ELECTRICAL CONTROL DIAGRAMS

600' SCALE MAP NO. 17 BLOCK NO. 12

**OLD FREDERICK ROAD
WASTEWATER PUMPING STATION**

CAPITAL PROJECT S-6203
CONTRACT NO. 10-3500
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN

SHEET 18 OF 20

CAPITAL PROJECT S-6203
CONTRACT NO. 10-3500
OLD FREDERICK ROAD
WASTEWATER PUMPING STATION
HOWARD COUNTY, MARYLAND

ELEV.	SOIL DESCRIPTION	DEPTH	SAMPLE				NOTES
			BLDNB/G	No	TYPE	REC.	
360	EX. GRAV. ELEV. = 362.0 - 7						
360	Yellowish brown, medium dense to very dense sand and gravel	0	4-7-9	1	DT	TOP SOIL: G	
355	USC: 5M-GF	5					
350	Olive fine sand mixed with gravel below 10.0 feet depth. Hard rock below 15.0' depth.	10	100/5"	2	DT	Groundwater encountered at 15.0'	
345		15	51/0"	4	DT	Hard drilling followed by auger refusal at 15.0'	
340		20		5	PC	Rock coring from 15.0' to 20.0'	
335		25					
330		30					
325		35					
320		40					

BORING B-1

ELEV.	SOIL DESCRIPTION	DEPTH	SAMPLE				NOTES
			BLDNB/G	No	TYPE	REC.	
360	EX. GRAV. ELEV. = 362.0 - 7						
360	Yellowish brown, medium dense to very dense sand and gravel	0	6-9-10	1	DT	Top Soil: G	
355	USC: 5M-GF	5					
350	Olive fine sand mixed with gravel below 10.0 feet depth. Hard rock below 15.0' depth.	10	20-27-50	3	DT	Groundwater encountered at 9.0 feet depth	
345		15					
340		20					
335		25					
330		30					
325		35					
320		40					

BORING B-2

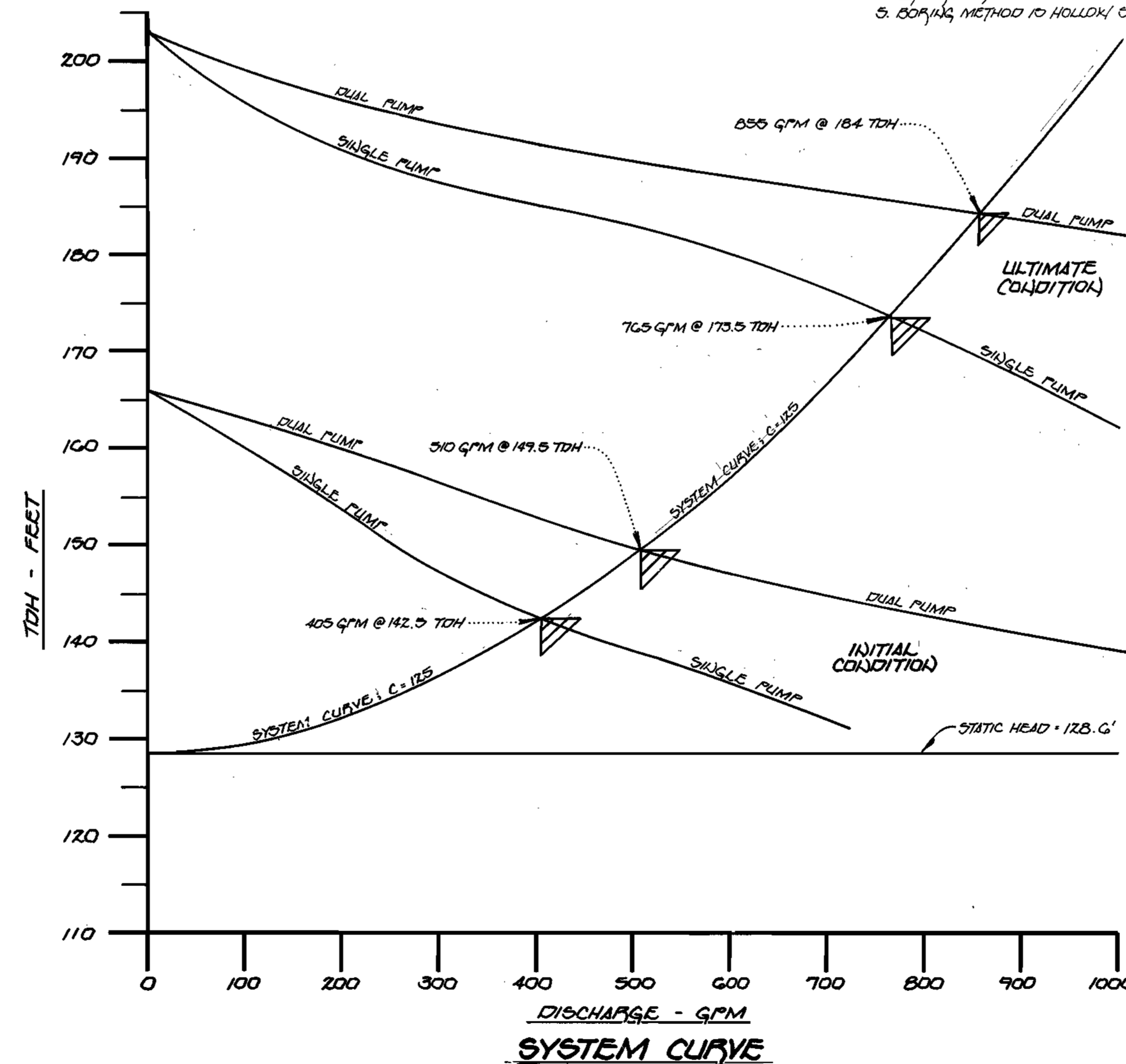
ELEV.	SOIL DESCRIPTION	DEPTH	SAMPLE				NOTES
			BLDNB/G	No	TYPE	REC.	
360	EX. GRAV. ELEV. = 362.0 - 7						
360	Yellowish brown, medium dense to very dense sand and gravel	0	2-5-6	1	DT	Top Soil: G	
355	USC: 5M-GF	5					
350	Olive green fine sand below 5.0'	10	100/4"	3	DT	Groundwater not encountered	
345		15	100/4"	4	DT	Cave in depth 10.0 feet	
340		20	100/4"	5	DT	Hard drilling of auger refusal at 13.3 feet depth	
335		25					
330		30					
325		35					
320		40					

BORING B-3

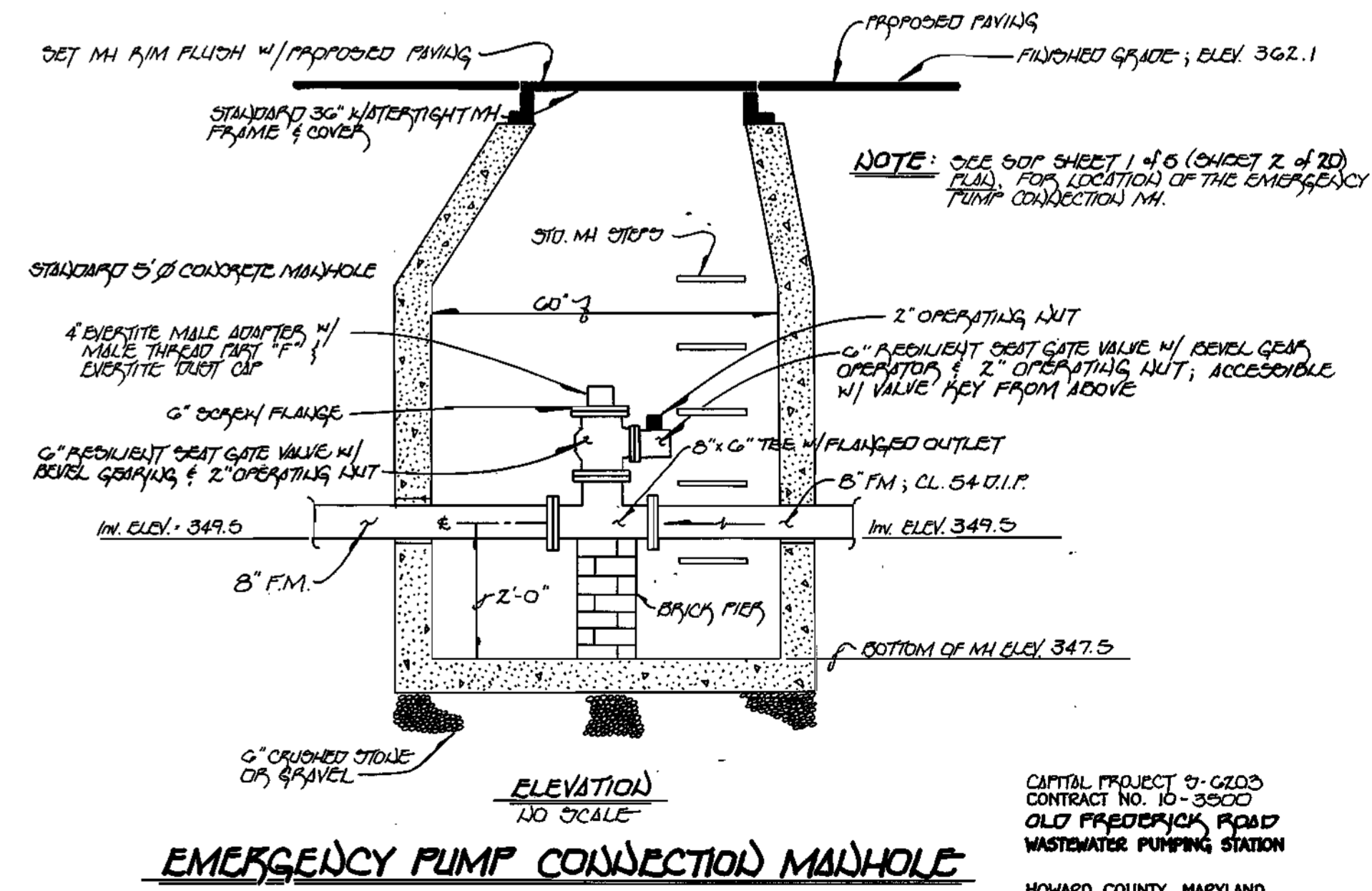
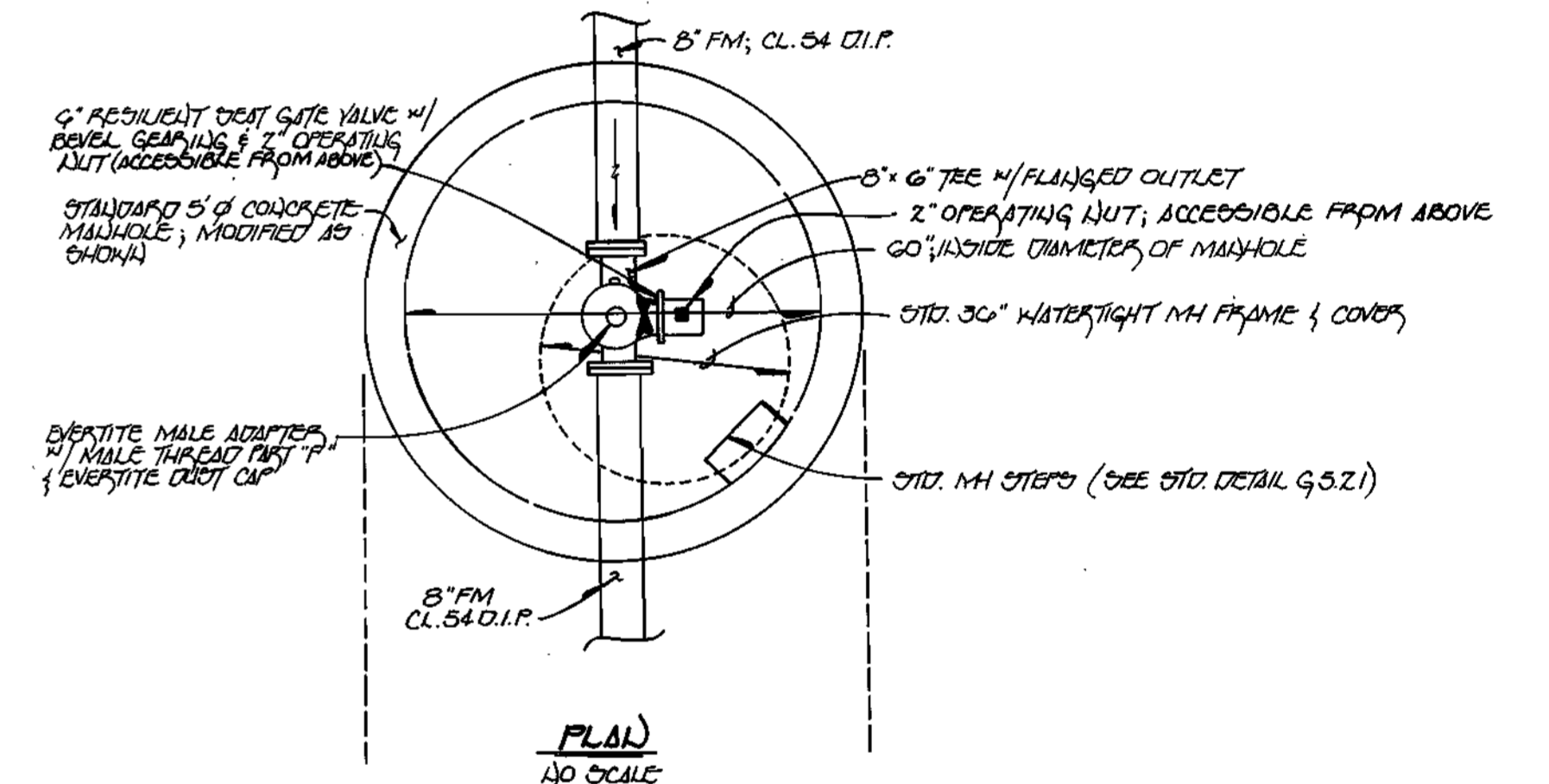
ELEV.	SOIL DESCRIPTION	DEPTH	SAMPLE				NOTES
			BLDNB/G	No	TYPE	REC.	
360	EX. GRAV. ELEV. = 362.0 - 7						
360	Olive brown, moist micaceous medium dense fine sand; rocky fragments.	0	3-6-8	1	DT	Top Soil: G	
355	USC: 5M-GF	5					
350	Olive green fine sand below 5.0'	10	6-7-9	3	DT	Groundwater not encountered	
345		15	50/1"	5	DT	Cave in depth 10.0 feet	
340		20					
335		25					
330		30					
325		35					
320		40					

BORING B-4

SOIL BORING PROFILES



- NOTES:**
- SEE SOF SHEET 1 of 5 (SHEET 2 of 20) FOR LOCATION OF THE SOIL BORINGS AT THE PUMPING STATION SITE.
 - LEGEND FOR CONDITION: 'I' DENOTES "INTACT" 'D' DENOTES "DISINTEGRATED"
 - STANDARD PENETRATION TEST (SPT) TAKEN WITH 60 LB HAMMER, 140 POUND RAINHAMMER, FALLING 30 INCHES; COUNT AT 6" INTERVALS
 - LEGEND FOR SAMPLE TYPE: 'DT' DENOTES "DRIVEN SPLIT SOON"; 'PC' DENOTES "BLOCK CORING"
 - BORING METHOD IS HOLLOW STEM AUGER.



EMERGENCY PUMP CONNECTION MANHOLE

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

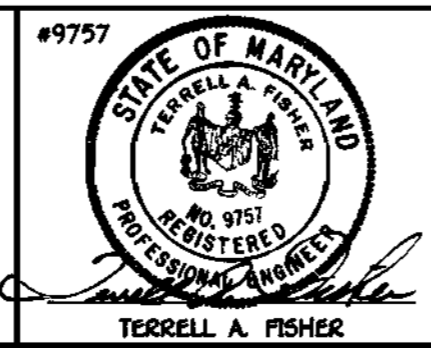
James A. ... 7/25/96
DIRECTOR OF PUBLIC WORKS

Michael A. ... 7-25-96
CHIEF, BUREAU OF UTILITIES

Fisher, Collins & Carter, Inc.

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(410) 401-2888



DES: J.M.M., P.E./P

DRWN: J.M.M.

CHK: P.W.K.

DATE: 7/25/96

MISCELLANEOUS DETAILS

600' SCALE MAP NO. 17 & 18 BLOCK NO. 12(TM 17,17(TM 18))

OLD FREDERICK ROAD
WASTEWATER PUMPING STATION

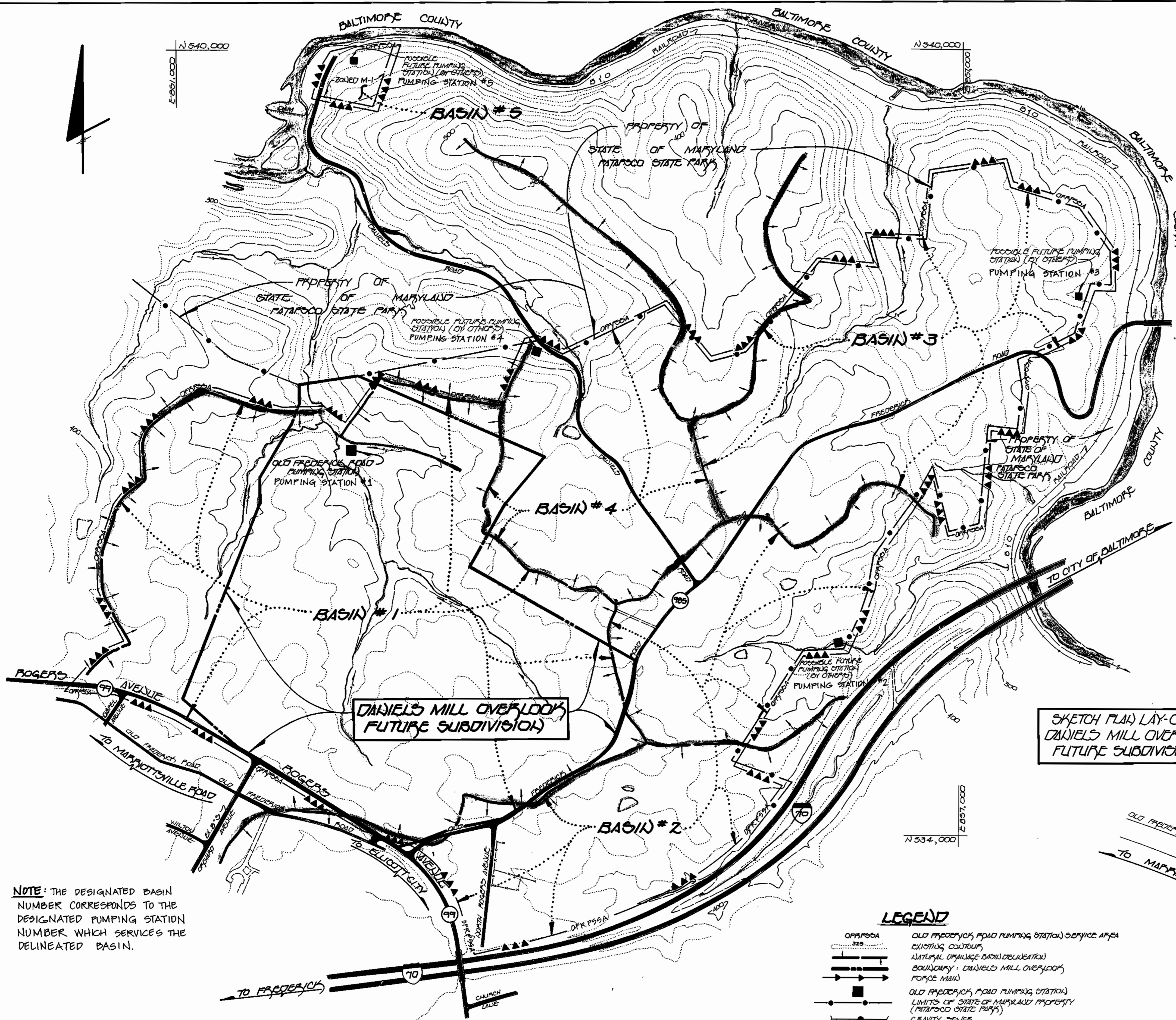
CAPITAL PROJECT 0-G203 : CONTRACT No. 10-3500

SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

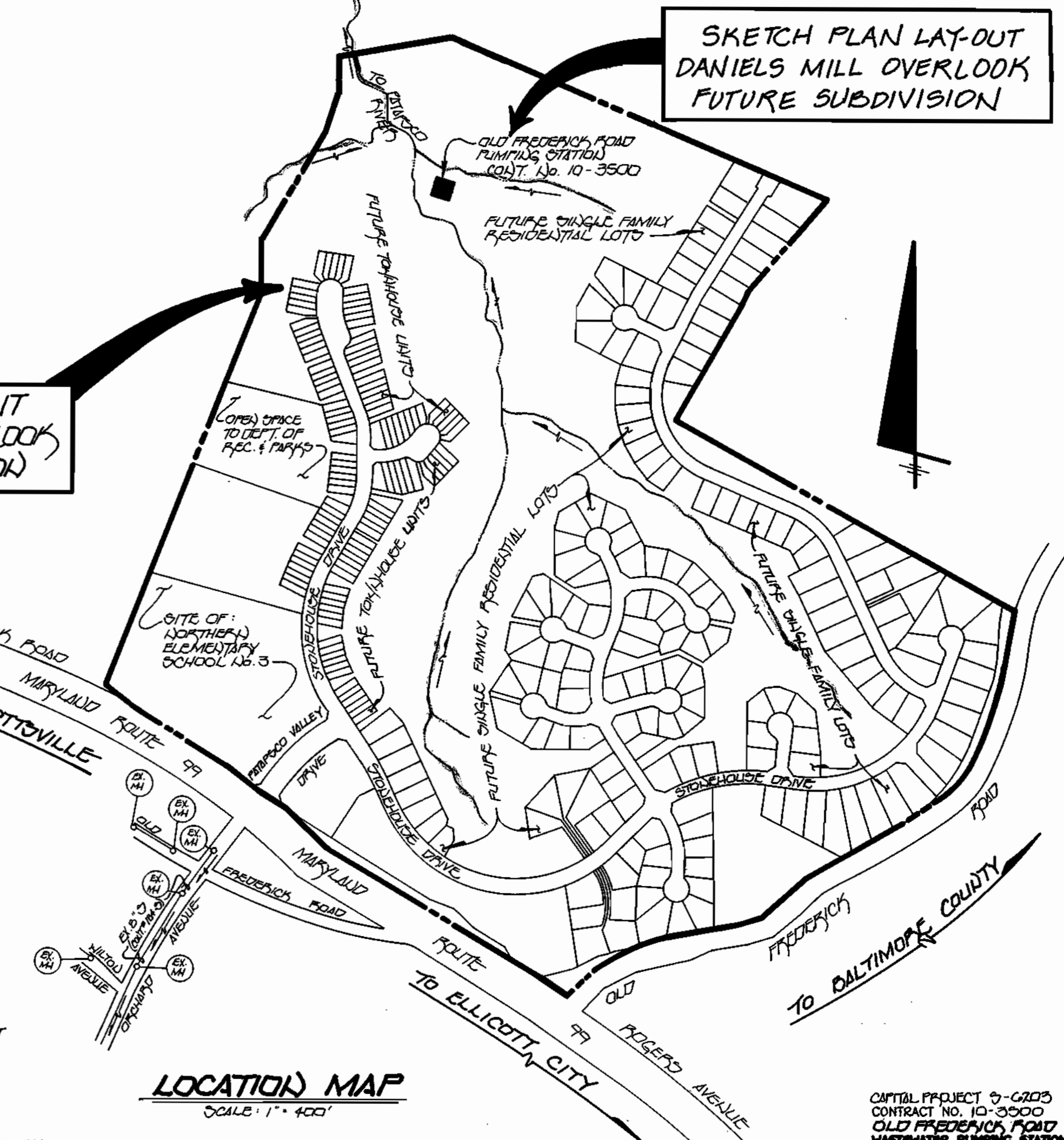
SCALE AS SHOWN

SHEET 19 OF 20

STERN.DWG



DESIGN FLOW TABULATION CHART								
SUB-BASIN	ZONING	ULTIMATE POPULATION	AVERAGE DOMESTIC FLOW	PEAK DOMESTIC FLOW	NON-DOMESTIC FLOW	INFILTRATION	TOTAL FLOW	DESIGN FLOW
1A	RED	969 PERSONS	69,768 gpd	279,012 gpd	-0-	38,760 gpd	317,832 gpd	0.318 MGD
1B	RED/R-20 EX DWELLINGS	84 PERSONS	6,048 gpd	24,192 gpd	-0-	3,360 gpd	27,552 gpd	0.028 MGD
1C	NORTHERN EVEN SCHOOL #3	640 STUDENTS & STAFF	16,000 gpd	64,000 gpd	-0-	N/A	64,000 gpd	0.064 MGD
1D	R-ED	520 PERSONS	37,397 gpd	149,587 gpd	-0-	20,800 gpd	170,387 gpd	0.170 MGD
2A	RED/R-20 EX DWELLINGS	46 PERSONS	3,312 gpd	13,248 gpd	-0-	1,840 gpd	15,088 gpd	0.015 MGD
2B	R-20	96 PERSONS	6,912 gpd	27,648 gpd	-0-	3,840 gpd	31,488 gpd	0.031 MGD
2C	R-ED	398 PERSONS	28,656 gpd	114,624 gpd	-0-	13,920 gpd	130,544 gpd	0.131 MGD
3A	R-20	81 PERSONS	5,832 gpd	23,328 gpd	-0-	3,240 gpd	26,568 gpd	0.027 MGD
3B	R-20	583 PERSONS	41,976 gpd	167,904 gpd	-0-	23,320 gpd	191,224 gpd	0.191 MGD
4A	R-20	35 PERSONS	2,520 gpd	10,080 gpd	-0-	1,400 gpd	11,480 gpd	0.011 MGD
4B	R-20	262 PERSONS	18,864 gpd	75,456 gpd	-0-	10,480 gpd	89,936 gpd	0.086 MGD
5	M-1	N/A	N/A	N/A	PEAK: 8,200 gpd	N/A	8,200 gpd	0.008 MGD
TOTALS		3,714 PERSONS	287,285 gpd	949,139 gpd	8,200 gpd	122,960 gpd	1,080,299 gpd	1.080 MGD



NOTE: THE DESIGNATED BASIN NUMBER CORRESPONDS TO THE DESIGNATED PUMPING STATION NUMBER WHICH SERVICES THE DELINEATED BASIN.

OLD FREDERICK ROAD PUMPING STATION DRAINAGE AREA MAP
SCALE: 1" = 400'

- LEGEND**
- OPRFSSA 325' OLD FREDERICK ROAD PUMPING STATION SERVICE AREA
 - EXISTING CONTOUR
 - NATURAL DRAINAGE BASIN DELINEATION
 - BOUNDARY: DANIEL'S MILL OVERLOOK FORCE MAIN
 - OLD FREDERICK ROAD PUMPING STATION
 - LIMITS OF STATE OF MARYLAND PROPERTY (PATASCO STATE PARK)
 - GRAVITY CENTER
 - POSSIBLE FUTURE PUMPING STATION (BY OTHERS): SEE NOTE THIS SHEET
 - EXISTING STREAM CHANNEL
 - OPRFSSA LIMIT OF CONTRIBUTING AREA TO THE OLD FREDERICK ROAD PUMPING STATION

NOTE: THE POSSIBLE FUTURE PUMPING STATIONS AS SHOWN ON THIS DRAINAGE AREA MAP ARE IN ACCORDANCE WITH A REPORT BY WHITMAN, AQUADUCT & ASSOCIATES, DATED OCTOBER, 1989, ENTITLED "SEWER CAPACITY IN DUCKER BRANCH SEWER, CHIEF FOR THE DANIEL'S MILL AREA."

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
Director of Public Works
7/25/96
7-25-96

Fisher, Collins & Carter, Inc.
#9757
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
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ELICOTT CITY, MARYLAND 21042
TEL: 410-285-3333
TERRELL A. FISHER

DES: M.J.M.	
DRWN: J.M.M.	
CHK: P.W.K.	
DATE: 7/25/96	
BY NO.	
REVISION	
DATE	

MISCELLANEOUS DETAILS

600' SCALE MAP NO. 17 & 18 BLOCK NO. 12(TM 17), 7(TM 18)

OLD FREDERICK ROAD WASTEWATER PUMPING STATION
CAPITAL PROJECT 9-C203 CONTRACT No. 10-3500
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 20 OF 20
STDAW.DWG