

HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS

ST. JOHNS LANE
CAPITAL PROJECT NO. J-4056

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- 13-15 EAST RETAINING WALL
- 16-19 EROSION AND SEDIMENT CONTROL PLANS.

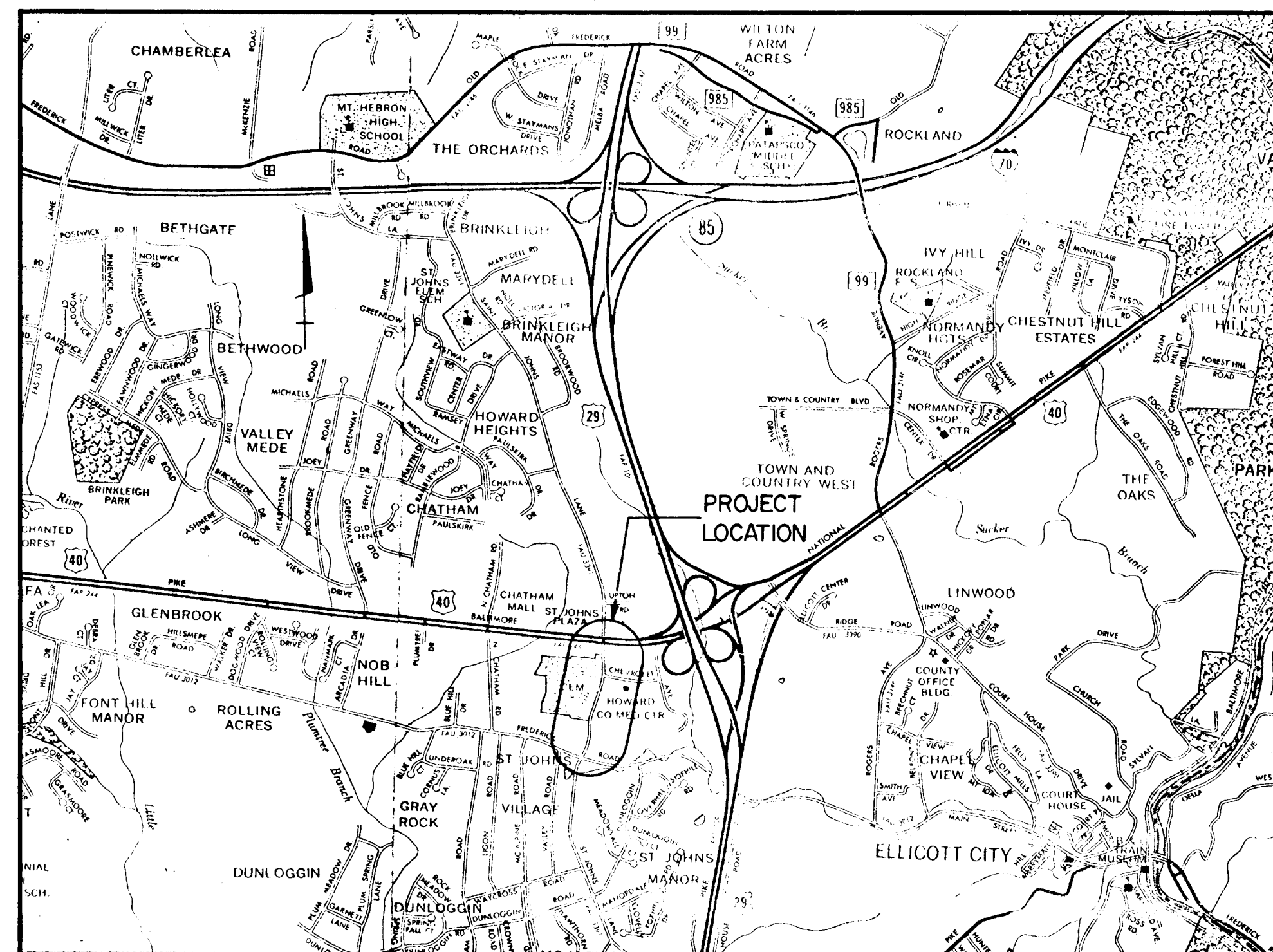
LEGEND

CONVENTIONAL SYMBOLS

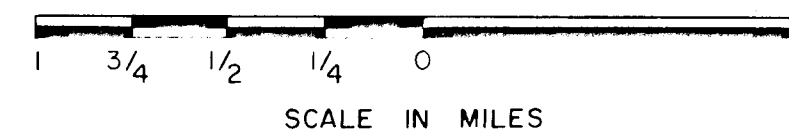
- CL CONSTRUCTION
- RIGHT OF WAY LINE
- PROPERTY LINE
- EASEMENT AREA
- TELEPHONE OR POWER POLE
- MANHOLE
- DIRECTION OF FLOW
- FULL DEPTH PAVING

ABBREVIATIONS

- CL CENTER LINE
- PL PROPERTY LINE
- INV. INVERT
- R/W RIGHT OF WAY
- EX. OR EXIST. EXISTING



LOCATION MAP



DESIGN SPEED = 40 MPH
CLASSIFICATION = MAJOR COLLECTOR

CERTIFICATION BY THE DEVELOPER

"I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT THE RESPONSIBLE PERSONNEL INVOLVED IN THIS CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT THE DEPARTMENT OF NATIONAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT & EROSION BEFORE BEGINNING THE PROJECT."

Robert S. Riley
SIGNATURE OF DEVELOPER

4-3-85
DATE

CERTIFICATION 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."

Ronald W. Walter
SIGNATURE OF ENGINEER

4/21/85
DATE

REVIEWED FOR *Howard* S.C.D. AND MEETS TECHNICAL REQUIREMENTS.

James M. Selznick
SIGNATURE
U.S. SOIL CONSERVATION SERVICE
DATE 4-9-85

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

APPROVED *Robert S. Riley* HOWARD S.C.D. DATE 4-7-85

REVISIONS	

C272C201

DEPARTMENT OF PUBLIC WORKS

KIDDE CONSULTANTS, INC.

ENGINEERS • ARCHITECTS • PLANNERS
BALTIMORE, MARYLAND

TITLE SHEET

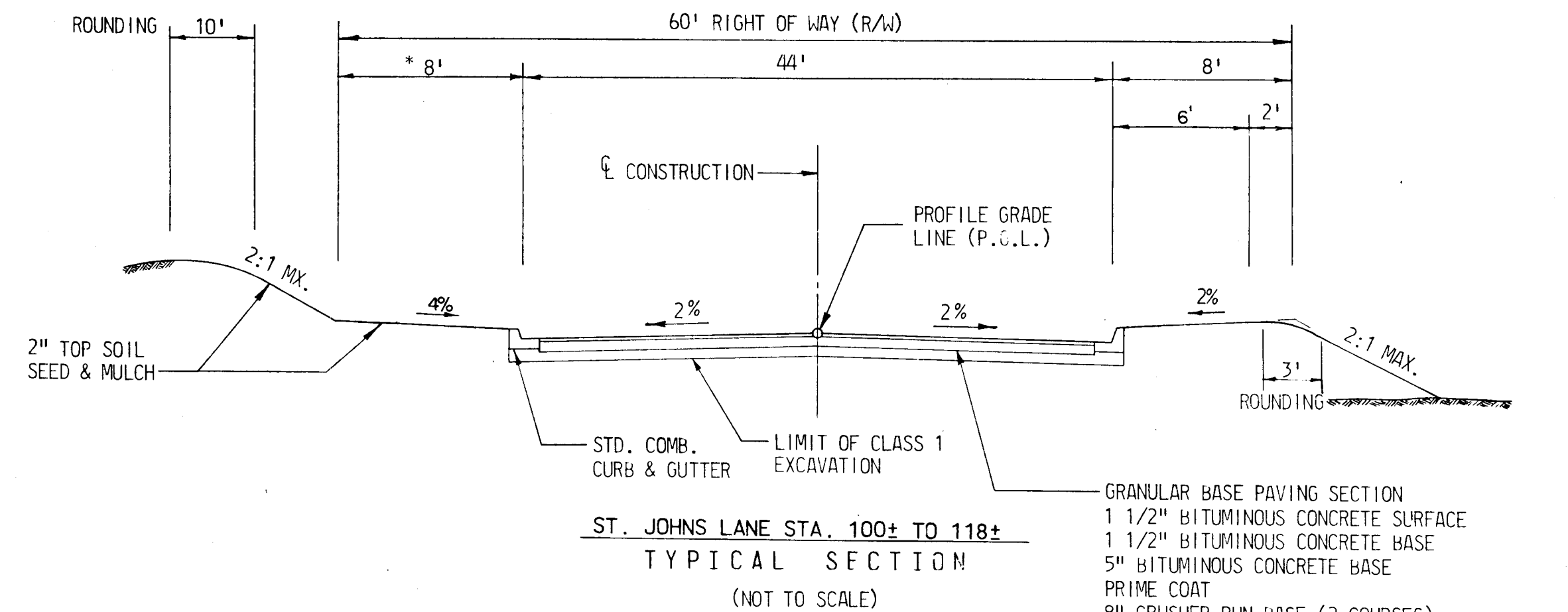
ST. JOHNS LANE
CAPITAL PROJECT NO. J-4056
ELECTION DISTRICT NO. 2
HOWARD COUNTY MARYLAND

DRAWING NO. 1 OF 19

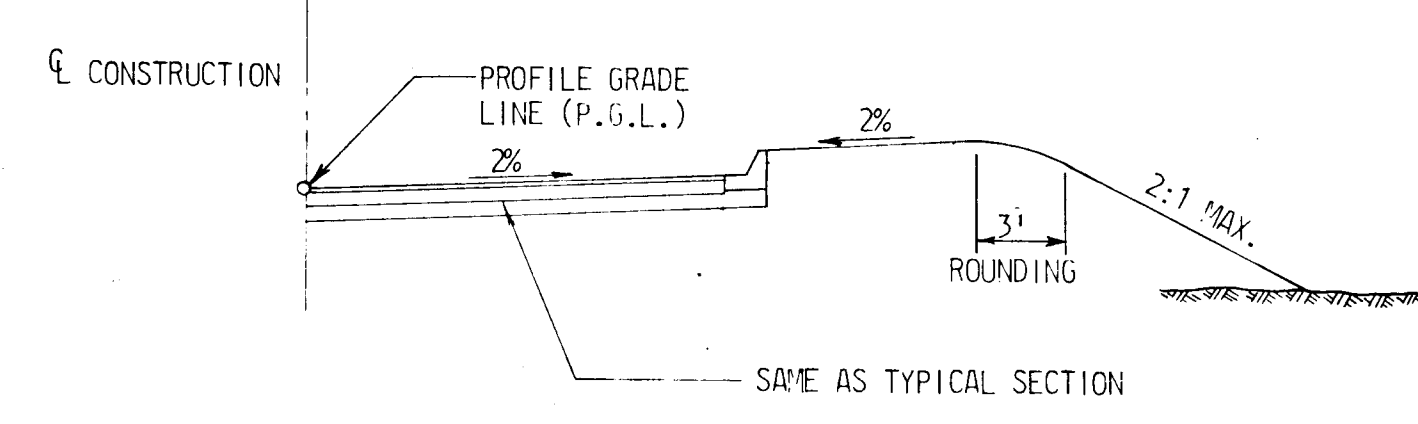
SCALE 1" = 1/2 MILE

WTP DESIGNED BY
Y.Y. DRAFTER BY
J.K.D. CHECKED BY

HOWARD COUNTY, MARYLAND
DIRECTOR OF PUBLIC WORKS DATE 4-1-85
CHIEF - BUREAU OF ENGINEERING DATE 4-1-85
CHIEF-BUREAU OF UTILITIES, CHIEF - ROADS, BRIDGES, STORM DRAINAGE DIVISION DATE 4-1-85



* WIDTH VARIES FROM FREDERICK ROAD TO STA. 105+41 LEFT AND FROM STA. 115+00 TO STA. 116+73 LEFT.

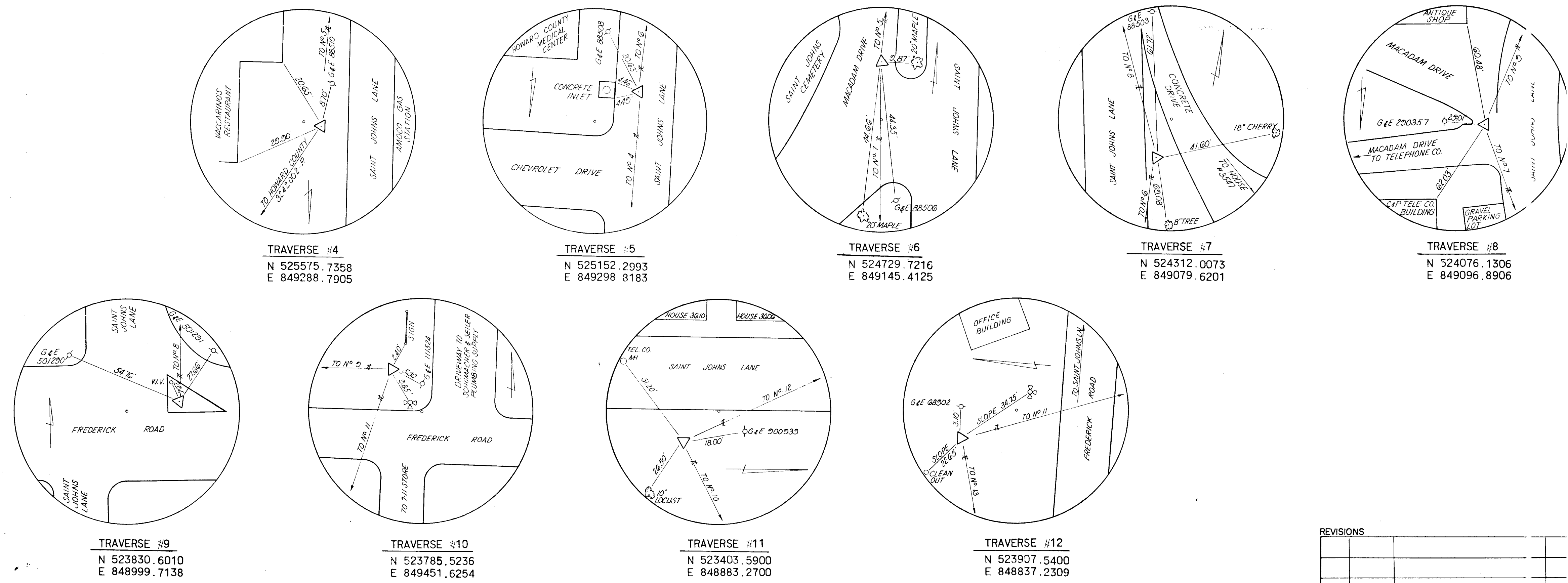


ST. JOHNS LANE STA. 100± TO 118±
REVERSE CROWN SECTION
(NOT TO SCALE)

P.C.	P.T.	% SUPERELEVATION	BEGIN TRANSITION A	BEGIN SUPERELEVATION B	END SUPERELEVATION C	END TRANSITION D	"C" FT/FT
103+09.32	104+46.90	REVERSE CROWN	101+84.32	103+09.32	104+46.90	105+71.90	0.00032
113+69.33	117+25.33	REVERSE CROWN	112+44.33	113+69.22	116+62.83	* 117+25.33	0.00032
117+25.33	118+87.79	REVERSE CROWN	117+25.33	117+87.83	118+40.00	119+40.00	0.00032

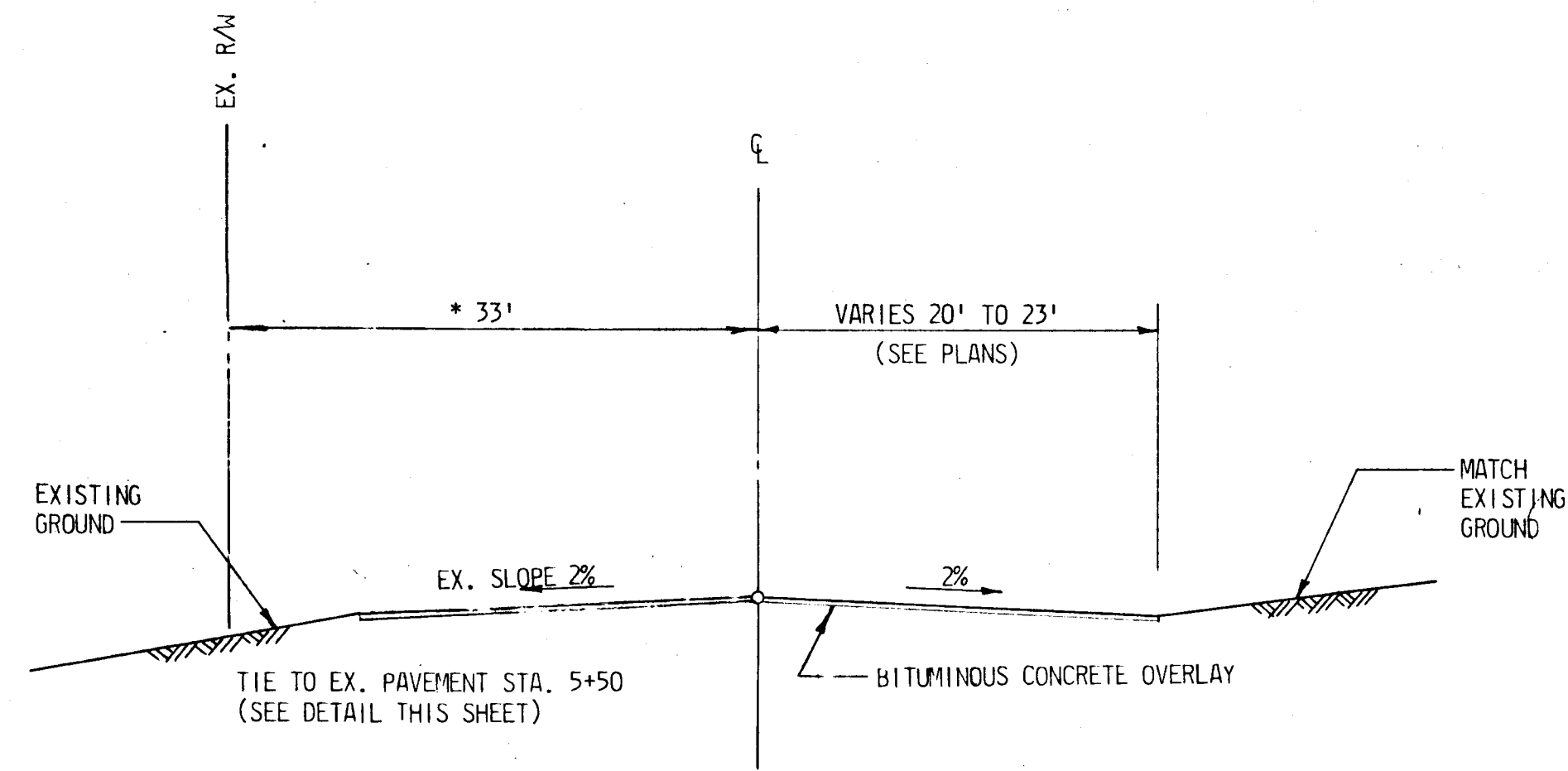
SECTION	CROWN	TRANSITION
ST. JOHNS LANE TO A	NORMAL CROWN	2% →
D TO A		← 2%
D TO ROUTE 40	REVERSE CROWN	2% →
B TO C		← 2%
STA. 117+25.33	LEVEL SECTION	0% → 0%

POINT	STATION	NORTH	EAST
ST. JOHNS LANE			
P.O.T.	94+13.63	523250.0000	848855.0000
P.C.	96+27.01	523462.8258	848870.4136
P.I.		523583.0239	848879.1188
P.T.	98+66.55	523696.4745	848919.7678
P.C.	103+09.32	524113.2959	849069.1138
P.I.		524178.1682	849092.3574
P.T.	104+46.90	524245.7056	849106.0459
P.C.	113+69.33	525149.7513	849289.2779
P.I.		525327.0057	849325.2038
P.R.C.	117+25.33	525502.8948	849283.0991
P.I.		525582.2799	849264.0957
P.T.	118+87.79	525663.9063	849264.5904
P.O.T.	119+37.79	525713.9054	849264.8934
FREDERICK ROAD			
P.O.T.	4+58.19	523740.0000	849500.0000
P.C.	9+71.32	523815.5360	848992.4663
P.I.		523829.0000	848902.0000
P.T.	11+52.23	523873.7184	848822.2147
P.C.	12+72.40	523932.4730	848717.3864
P.I.		523968.0000	848654.0000
P.T.	14+17.62	523997.3512	848587.5281
P.O.T.	14+67.62	524017.5478	848541.7887

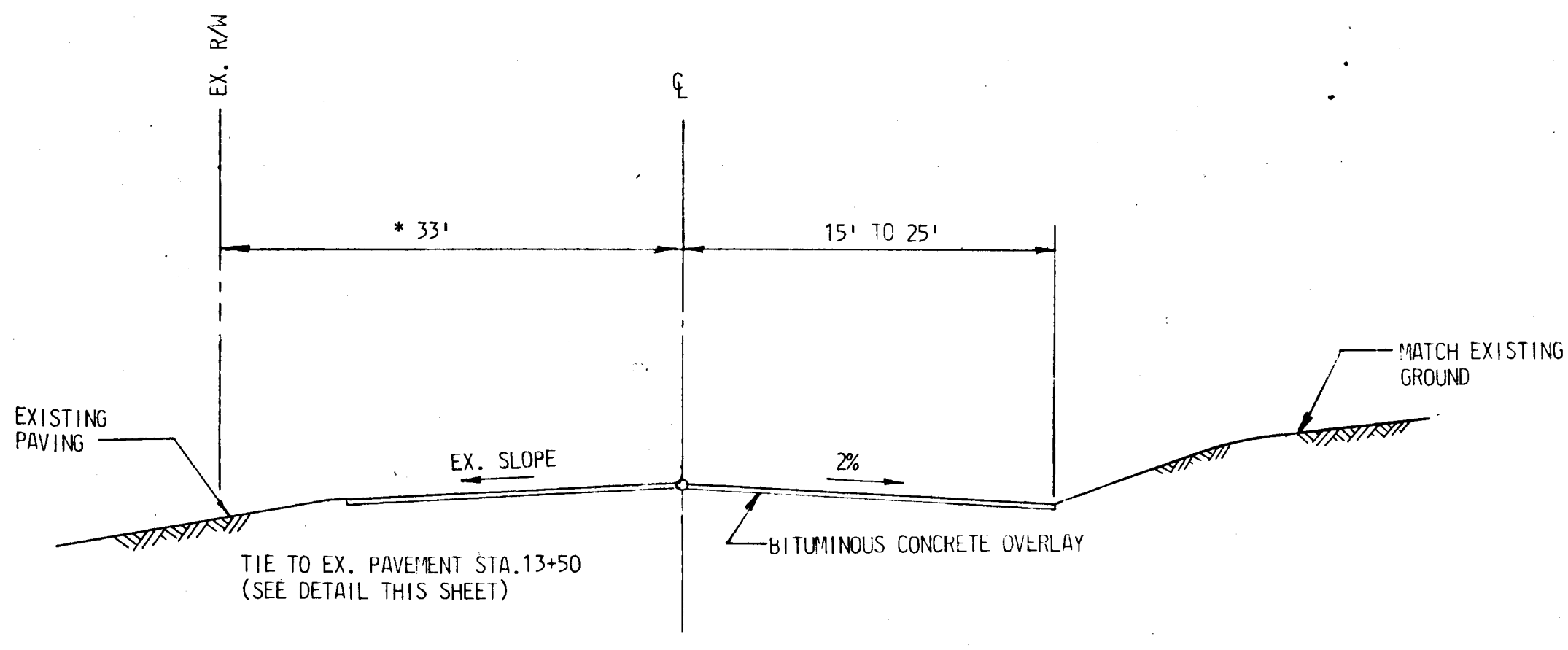


NO.	DATE	DESCRIPTION

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND DIRECTOR OF PUBLIC WORKS DATE <u>4/2/85</u> CHIEF - BUREAU OF ENGINEERING DATE <u>4/2/85</u> CHIEF - ROADS, BRIDGES, STORM DRAINAGE DIVISION DATE <u>4/2/85</u>	KIDDE CONSULTANTS, INC. ENGINEERS • ARCHITECTS • PLANNERS BALTIMORE, MARYLAND	TYPICAL SECTION & DETAILS	ST. JOHNS LANE CAPITAL PROJECT NO. J-4056 ELECTION DISTRICT NO. 2 HOWARD COUNTY MARYLAND	DRAWING NO. <u>2</u> OF <u>19</u>	SCALE W.T.P. ESIGNED BY V.V. RAFTI BY J.K. HECKE BY
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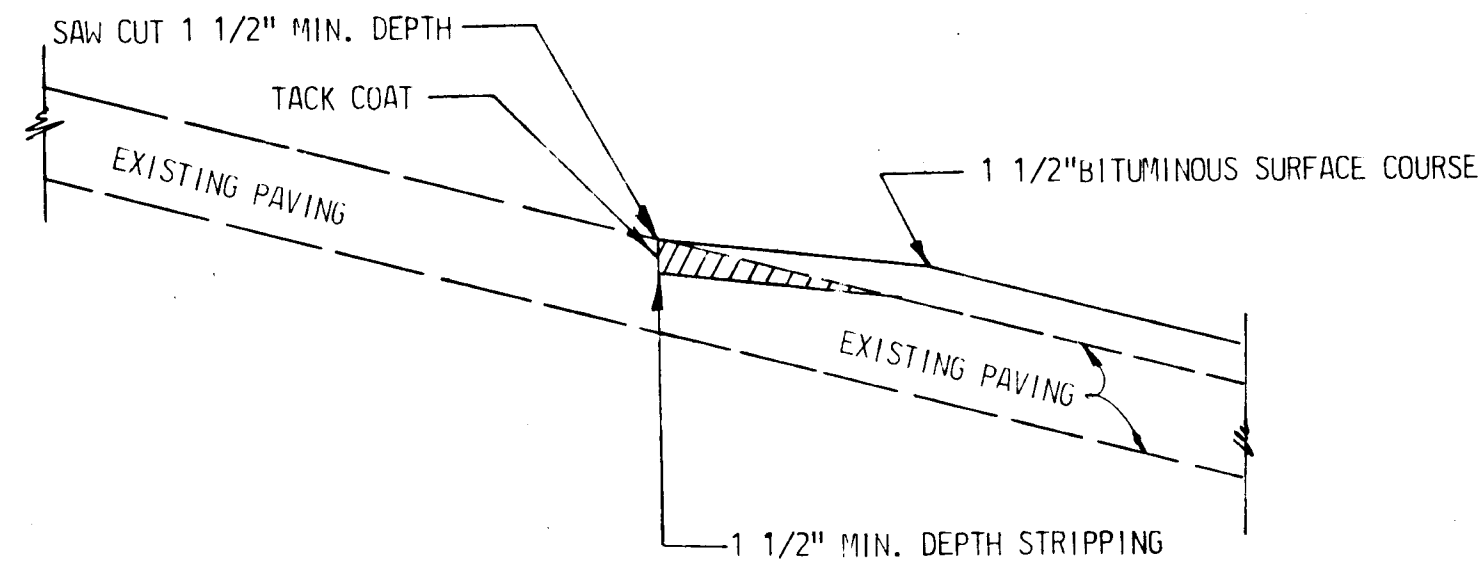


FREDERICK ROAD STA. 5+50 TO 10+00
TYPICAL SECTION
(NOT TO SCALE)



FREDERICK ROAD STA. 10+00 TO 13+50
TYPICAL SECTION
(NOT TO SCALE)

* OVERLAY AT ENTRANCES & DRIVES TO EXISTING RIGHT-OF-WAY.



PAVING DETAIL
OVERLAY TIE TO EXISTING PAVEMENT EDGES.

GENERAL NOTES

- RIGHT OF WAY LINES SHOWN ON THESE PLANS ARE SHOWN FOR ASSISTANCE IN INTERPRETING THE PLANS. FOR ANY FEE RIGHT OF WAY AND EASEMENT INFORMATION SEE RIGHT OF WAY PLATS.
- ENDWALLS ARE NOT TO BE CONSTRUCTED UNTIL GRADING IS COMPLETED. THE TYPES OF ENDWALLS ARE SUBJECT TO MODIFICATIONS.
- EXISTING PRIVATE SIDEWALKS DISTURBED BY THE WORK SHALL BE RECONSTRUCTED AND STEPS SHALL BE PROVIDED WHERE NECESSARY AS A RESULT OF GRADING.
- CLEAR ALL UTILITIES BY A MINIMUM OF 6". CLEAR ALL POLES 2'-0" MINIMUM OR TUNNEL AS REQUIRED. COST FOR TUNNELING OR BRACING OF POLES SHALL BE INCLUDED IN THE UNIT PRICES BID FOR STORM DRAINS.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
- ALL SLOPES AND/OR DISTURBED AREAS SHALL RECEIVE 2" TOPSOIL, SEED AND MULCH EXCEPT WHERE OTHERWISE INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
- THE CONTRACTOR SHALL INSTALL AND MAINTAIN ALL TEMPORARY SEDIMENT CONTROL MEASURES AS SHOWN ON THE DRAWINGS. HOWEVER, ANY SEDIMENT CONTROL MEASURES NOT SPECIFICALLY INDICATED IN THE CONTRACT DOCUMENTS, BUT REQUIRED AS A RESULT OF THE CONTRACTORS EXCAVATIONS OR ACTIVITIES SHALL NOT BE CAUSE FOR EXTRA PAYMENT.
- LOCATION POINTS FOR INLETS, MANHOLES AND STRUCTURES

ITEM	HORIZONTAL LOCATION	VERTICAL LOCATION
CURB TYPE	CENTER FACE OF CURB	TOP OF CURB
INLETS	CENTER OF GRATE	TOP OF GRATE
MANHOLES	CENTER OF COVER	TOP OF COVER
STRUCTURES	CENTER OF COVER	TOP OF COVER
WITH STACK	CENTER OF COVER	TOP OF COVER
ENDWALLS	CENTER OF WALL	TOP OF WALL
- APPROXIMATE LOCATION OF EXISTING UTILITIES IS SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING UTILITIES AND TO MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED SHALL BE REPAIRED IMMEDIATELY TO THE SATISFACTION OF THE ENGINEER BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL LOCATE EXISTING UTILITIES A MINIMUM OF TWO WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS IN VICINITY OF UTILITIES. COST SHALL BE INCLUDED IN THE UNIT PRICES BID FOR STORM DRAINS.
- CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE (5) DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:
 - MISS UTILITY (COLLECT) 1-559-0100;
 - BALTIMOR GAS & ELECTRIC COMPANY - UNDERGROUND ELECTRIC DISTRIBUTION ENGINEERING 'DAMAGE CONTROL' 234-5691;
 - BALTIMORE GAS & ELECTRIC COMPANY - UNDERGROUND GAS DISTRIBUTION ENGINEERING 234-5533;
 - CHESAPEAKE & POTOMAC TELEPHONE COMPANY 725-9976;
 - STATE HIGHWAY ADMINISTRATION 531-5533.
- ALL MANHOLES SHALL BE 4'-0" INSIDE DIAMETER.
- STANDARD DETAILS FOR THIS CONTRACT SHALL BE THE HOWARD COUNTY STANDARD DETAILS AS SUPPLEMENTED BY THE MARYLAND STATE HIGHWAY ADMINISTRATION STANDARD DETAILS.
- TREES ARE TO BE PROTECTED FROM DAMAGE TO THE MAXIMUM EXTENT.
- CONTRACTOR SHALL REMOVE TREES, STUMPS AND ROOTS ALONG LINE OF EXCAVATION AS DIRECTED BY THE ENGINEER. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR "CLEARING AND GRUBBING".
- PLACE REGULATION "MEN WORKING" AND WARNING SIGNS AS REQUIRED TO COMPLY WITH MARYLAND STATE HIGHWAY ADMINISTRATION MANUAL OF TRAFFIC CONTROL FOR HIGHWAY CONSTRUCTION AND MAINTENANCE OPERATIONS.
- TOP ELEVATIONS OF STRUCTURES SHALL BE ADJUSTED AS SHOWN TO MEET EXISTING CONDITIONS AS DIRECTED BY THE ENGINEER.
- GRADING SHALL BE DONE IN SUCH A MANNER SO AS TO INSURE POSITIVE DRAINAGE TO THE PROPOSED INLET STRUCTURES.
- HORIZONTAL AND VERTICAL CONTROLS ARE BASED ON THE MARYLAND STATE GRID COORDINATE SYSTEM.
- ALL HANDWRITTEN NOTES ARE FOR EXISTING INFORMATION.
- ALL TYPED NOTES ARE FOR PROPOSED INFORMATION.

INLET SCHEDULE

NO.	LOCATION		TOP CURB GRATE ELEV.	INV. OUTLET PIPE	TYPE	REMARKS
	STA.	OFFSET				
ST. JOHNS LANE						
I-1	117+50±	22'RT.±	395.22	387.00	DBL. S-COMB.	RETIC. GRATE
EX. I-3A	115+93±	40'RT.±	383.24	378.90		
I-3	115+00±	22'LT.±	382.26	378.50	S-COMB.	RETIC. GRATE
EX. I-3B	113+92±	37'RT.±		368.27		
EX. I-3C	114+23±	35'RT.±		368.40		
EX. I-3D	113+62±	14'RT.±		367.05		
I-5	110+55.83±	22'RT.±	366.08	363.00	DBL. S-COMB.	RETIC. GRATE
I-6	110+55.83±	22'LT.±	366.08	363.40	DBL. S-COMB.	RETIC. GRATE
I-9	108+40±	22'RT.±	370.62	367.00	S-COMB.	RETIC. GRATE
I-10	108+21±	22'LT.±	371.48	364.90	S-COMB.	RETIC. GRATE
I-11	100+68±	22'LT.±	378.35	374.50	S-COMB.	RETIC. GRATE
I-12	101+00±	22'RT.±	378.26	369.50	S-COMB.	RETIC. GRATE
FREDERICK ROAD						
I-13	9+18±	23'RT.±	372.60	364.40	S-COMB.	RETIC. GRATE
I-15	10+60±	25'RT.±	383.20	374.80	S-COMB.	RETIC. GRATE

* FUTURE
** NORMAL TO CURB

MANHOLE SCHEDULE

NO.	LOCATION		TOP ELEV.	INV. OUTLET PIPE	TYPE	REMARKS
	STA.	OFFSET				
ST. JOHNS LANE						
MH-1	117+25±	7'LT.±	393.73	386.00	G5.01/G5.12	
MH-2	109+95±	7'LT.±	366.33	355.90	G5.13	
MH-3	108+50±	7'LT.±	369.95	364.00	G5.01/G5.12	
MH-4	116+35±	40'RT.±	355.70	382.38	G5.01/G5.12	
Y-1	116+25±	7'LT.±	---	381.43	SD 1.11(SGL)	
Y-2	113+40±	7'LT.±	---	366.01	SD 1.11(SGL)	
MH-8	115+22±	20'RT.±	383.19	376.51	G5.01/G5.12	
MH-7	114+95±	7'LT.±	381.78	374.35	G5.01/G5.12	
MH-5	112+27±	7'LT.±	368.74	359.05	G5.02/G5.13	
MH-6	110+65±	7'LT.±	365.89	355.10	G5.13	
MH-2A	109+13±	78'LT.±	365.8±	360.29	G5.05/G5.12	
FREDERICK ROAD						
MH-12	6+24±	13'RT.±	355.70	351.50	G5.05/G5.12	
MH-10	10+15±	26'RT.±	379.80	369.90	G5.01/G5.12	

DRAINAGE STRUCTURE SCHEDULE

NO.	LOCATION		INV. OUTLET PIPE	TYPE	REMARKS
	STA.	OFFSET			
ST. JOHNS LANE					
S-1	112+39±	43'LT.±	359.80	"C" ENDWALL	
S-2	111+37±	50'RT.±	353.23	CONC. TYPE "O" HDWL.	
S-3	107+95	46'LT.±	365.50	"E" HEADWALL	
S-5	111+37	7'LT.±	353.50	JUNCTION CHAMBER	
S-4	4+71	20'RT.±	345.00	"C" ENDWALL	

REVISIONS

NO.	DATE	DESCRIPTION

DEPARTMENT OF PUBLIC WORKS

HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS DATE: 4/3/85
 CHIEF - BUREAU OF ENGINEERING DATE: 4/2/85
 CHIEF - ROADS, BRIDGES, STORM DRAINAGE DIVISION DATE: 4/2/85

KINDE CONSULTANTS, INC.

ENGINEERS • ARCHITECTS • PLANNERS
 BALTIMORE, MA.

TYPICAL SECTIONS & GENERAL NOTES

ST. JOHNS LANE

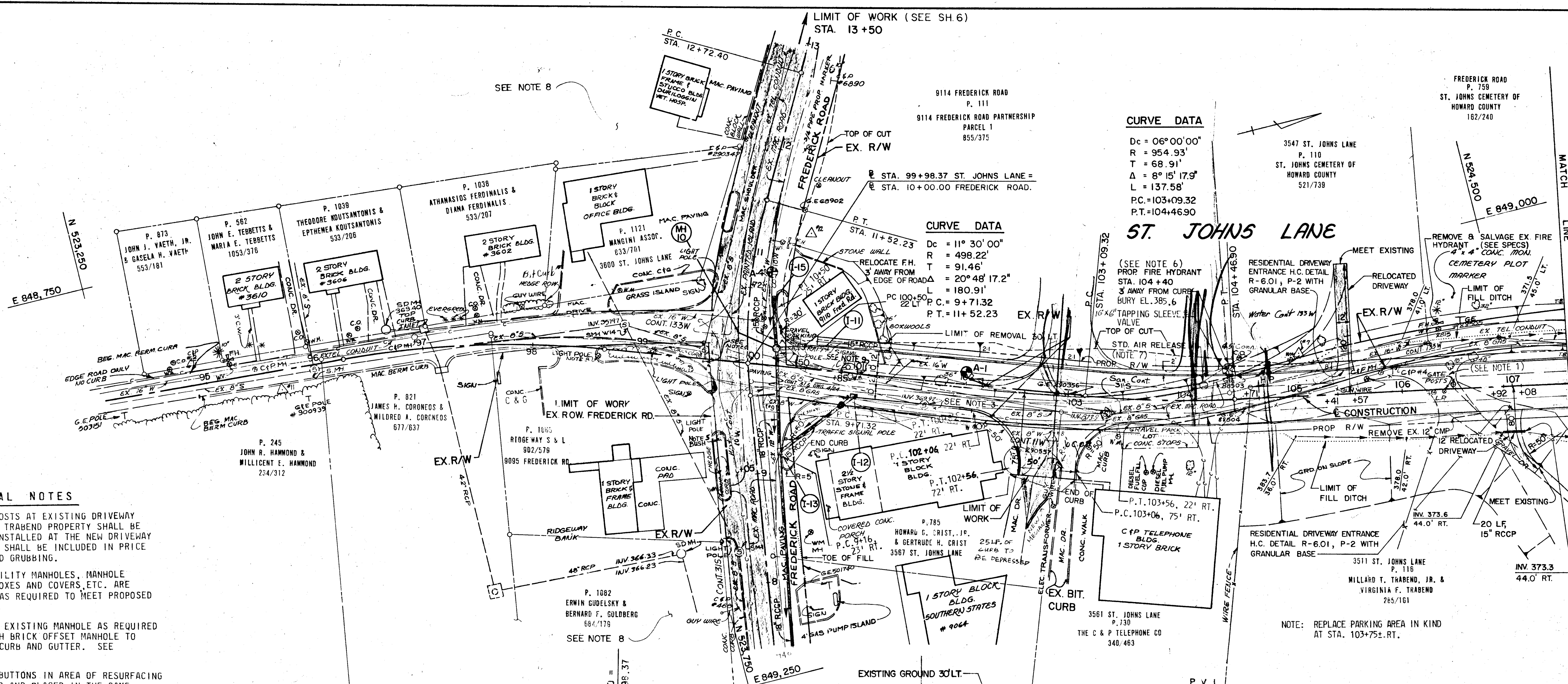
CAPITAL PROJECT NO. J-4056

ELECTION DISTRICT NO. 2
 HOWARD COUNTY MARYLAND

DRAWING NO. 3 OF 19

SCALE AS SHOWN

W.T.P. DEIGNED BY
 V.V. DRAFTED BY
 J.K.D. CHECKED BY



CURVE DATA

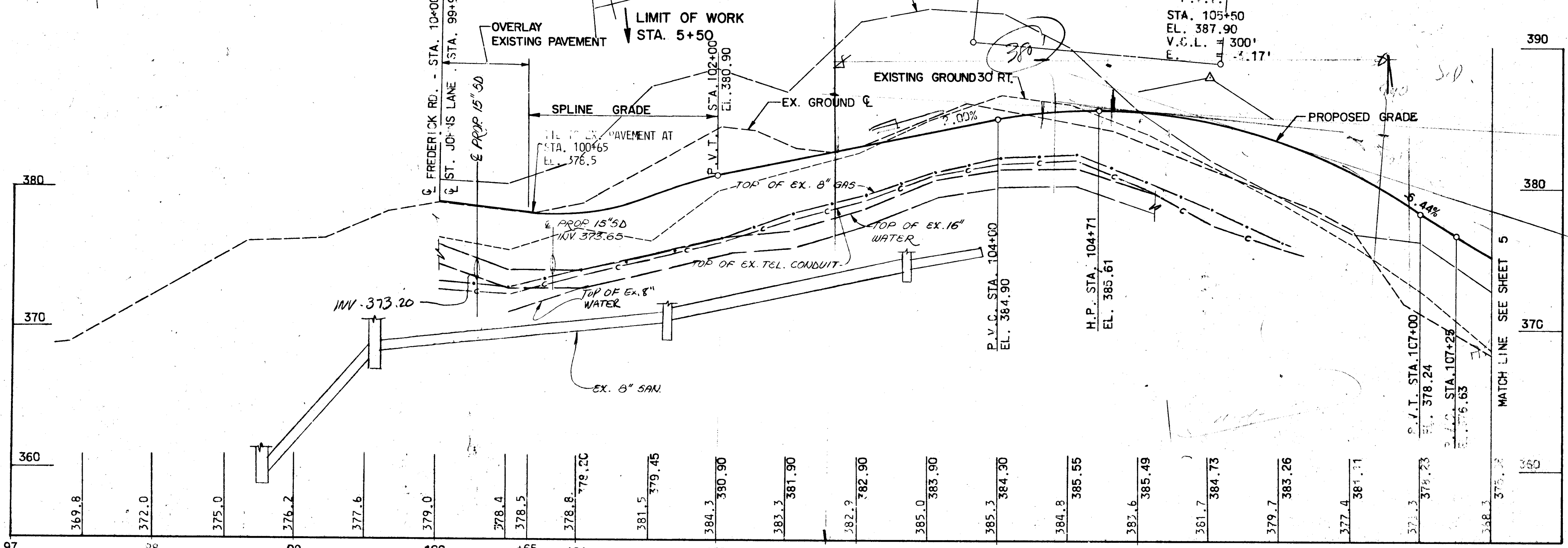
Dc = 06°00'00"
 R = 954.93'
 T = 68.91'
 Δ = 8°15'17.9"
 L = 137.58'
 P.C. = 103+09.32
 P.T. = 104+46.90

CURVE DATA

Dc = 11°30'00"
 R = 498.22'
 T = 91.46'
 Δ = 20°48'17.2"
 L = 180.91'
 P.C. = 9+71.32
 P.T. = 11+52.23

GENERAL NOTES

- GATE AND GATE POSTS AT EXISTING DRIVEWAY ENTRANCE TO THE TRABEND PROPERTY SHALL BE RELOCATED AND INSTALLED AT THE NEW DRIVEWAY LOCATION. COST SHALL BE INCLUDED IN PRICE FOR CLEARING AND GRUBBING.
- ALL EXISTING UTILITY MANHOLES, MANHOLE COVERS, VALVE BOXES AND COVERS, ETC. ARE TO BE ADJUSTED AS REQUIRED TO MEET PROPOSED GRADE.
- REMOVE WALLS OF EXISTING MANHOLE AS REQUIRED AND REPLACE WITH BRICK OFFSET MANHOLE TO CLEAR PROPOSED CURB AND GUTTER. SEE DETAIL G.5.04.
- ANY DELINEATOR BUTTONS IN AREA OF RESURFACING SHALL BE REMOVED AND PLACED IN THE SAME LOCATION AFTER PAVING.
- EXISTING LIGHT POLES TO BE RELOCATED BY OTHERS.
- GRADE AROUND FIRE HYDRANT AT STA. 104+40 LT. IN ACCORDANCE WITH STD. DETAIL NO. W1.12.
- STD. AIR RELEASE MANHOLE TO BE ADJUSTED AS REQUIRED TO PROPOSED GRADE.
- ALL EXISTING FEATURES ALONG ST. JOHNS LANE SOUTH OF FREDERICK ROAD ARE TO REMAIN.
- EXISTING WATER METER VAULT AND SANITARY CLEANOUT TO BE RELOCATED TO NEW PROPERTY LINE AS DIRECTED. (SEE SPECS.)



PROFILE - ST. JOHNS LANE

- REFERENCES:**
- FOR PLAN & PROFILE OF FREDERICK ROAD, SEE SHEET NO. 6.
 - FOR INLET, MANHOLE, AND DRAINAGE STRUCTURE SCHEDULES, SEE SHEET NO. 3.
 - FOR LIMITS OF WORK ON FREDERICK ROAD, SEE SHEET NO. 6.
 - FOR STORM DRAIN PROFILES, SEE SHEET NO. 7 AND NO. 8.
 - FOR PROFILES OF SOIL BORINGS, SEE SPECS.

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND DIRECTOR OF PUBLIC WORKS: [Signature] DATE: 4-8-85 CHIEF BUREAU OF UTILITIES: [Signature] DATE: 4/1/85		KIDDE CONSULTANTS, INC. ENGINEERS • ARCHITECTS • PLANNERS BALTIMORE, MARYLAND		PLAN AND PROFILE ST. JOHNS LANE		ST. JOHNS LANE CAPITAL PROJECT NO. J-4056 ELECTION DISTRICT NO. 2 HOWARD COUNTY MARYLAND		DRAWING NO. 4 OF 19	SCALE 1" = 50'	V.T.P. DESIGNED BY: V.V. DRAWN BY: J.K.D. CHECKED BY:
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GENERAL NOTES:

- ADJUST EXISTING PRIVATE SIDEWALK TO GIVE A GRADE CONNECTION TO THE HOUSE AT STA. 111+00± LT.
- ADJUST EXISTING INLETS I-3B AND I-3C TO PROPOSED GRADE.
- [R] TREES TO BE REMOVED.
- ALL EXISTING UTILITY MANHOLES, MANHOLE COVERS, VALVE BOXES & COVERS ETC. ARE TO BE ADJUSTED AS REQUIRED TO MEET PROPOSED GRADE.
- PLUG EXISTING 12" RCCP FROM N&S INTO EX. I-3D, REBUILD EX. INLET WALLS AS REQUIRED AND SLAB OVER EXISTING INLET AND CONNECT PROP 18" R.C.C.P. FOR SLAB CONCRETE & REINFORCING, SEE HOWARD CO. STD. DETAIL SD 3.11, OF SLAB FOR 42" PIPE.

- EXISTING LIGHT POLES TO BE RELOCATED BY OTHERS.
- PROVIDE 10' OF RIPRAP CLASS 1 STONE. BOTTOM OF CHANNEL VARIES FROM 4' AT PIPE TO 2'-6" AT PROPOSED DITCH. DEPTH OF CHANNEL = 1'-0".
- PROVIDE 20' OF RIPRAP CLASS 1 STONE. CHANNEL W = 2'-6" & D = 1'-0".
- REMOVE EXISTING 12" CMP FROM OUTLET AT STA. 112+20 RT. TO EXISTING I-3D.
- EXISTING WATER METER VAULT TO BE RELOCATED TO NEW PROPERTY LINE AS DIRECTED.

CURVE DATA

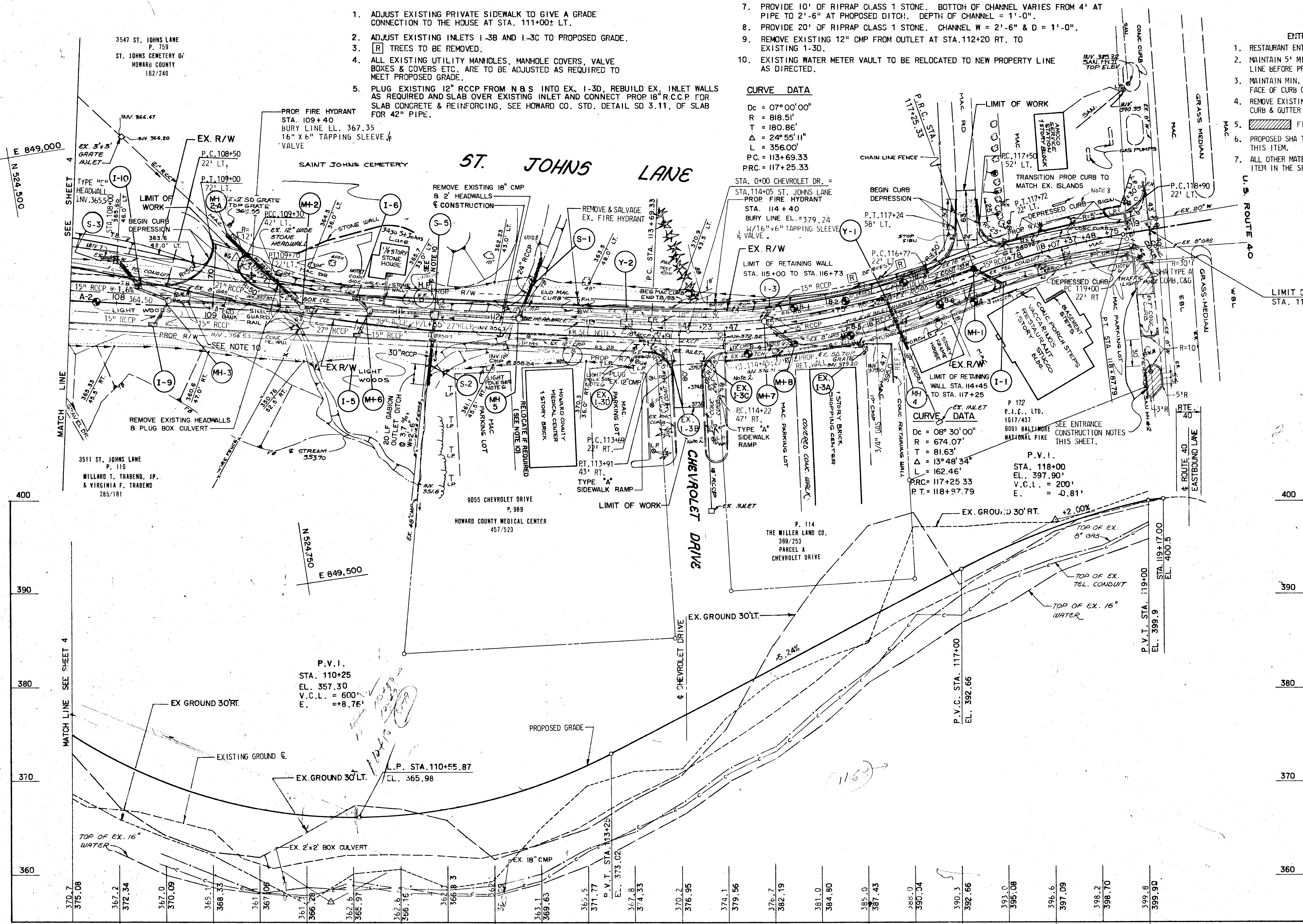
Dc = 07°00'00"
 R = 818.51'
 T = 180.86'
 Δ = 24°55'11"
 L = 356.00'
 P.C. = 113+69.33
 P.R.C. = 117+25.33

ENTRANCE CONSTRUCTION NOTES

- RESTAURANT ENTRANCE TO BE RELOCATED AS SHOWN.
- MAINTAIN 5' MIN. CURB TANGENT EITHER SIDE OF PROJECTED PROPERTY LINE BEFORE PROCEEDING WITH REMAINING ENTRANCE RELOCATION.
- MAINTAIN MIN. 3' CLEAR FROM EDGE OF TERMINAL MANHOLE #2 TO BACK FACE OF CURB CIRCLE.
- REMOVE EXISTING CURB AND TIE IN PROPOSED MD SHA TYPE A CONCRETE CURB & GUTTER AS REQUIRED.
- [Hatched Area] FILL, TOPSOIL, SEED & MULCH.
- PROPOSED SHA TYPE "A" CURB & GUTTER WILL BE PAID FOR UNDER THIS ITEM.
- ALL OTHER MATERIALS WILL BE PAID FOR UNDER THE APPROPRIATE ITEM IN THE SPECIFICATIONS.

REFERENCES

- FOR STORM DRAIN PROFILES, SEE SHEETS 7 & 8.
- FOR INLET, MANHOLE, AND DRAINAGE STRUCTURE SCHEDULES, SEE SHEET NO. 3.
- FOR LOCATION OF PROP. CONNECT THROUGH PROP. RETAINING WALL, SEE SHEET 12.
- [R] TREES TO BE REMOVED.
- FOR STORM DRAIN PROFILES SEE SHEET NO. 7 AND NO. 8.
- FOR RETAINING WALL DETAILS SEE SHEET NO. 12 TO NO. 15.
- FOR SOIL BORING PROFILES SEE SPECS.
- FOR DETAIL OF DEPRESSED CURB SEE HOWARD CO. STD. NO. R-3.01.



PROFILE - ST. JOHNS LANE

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

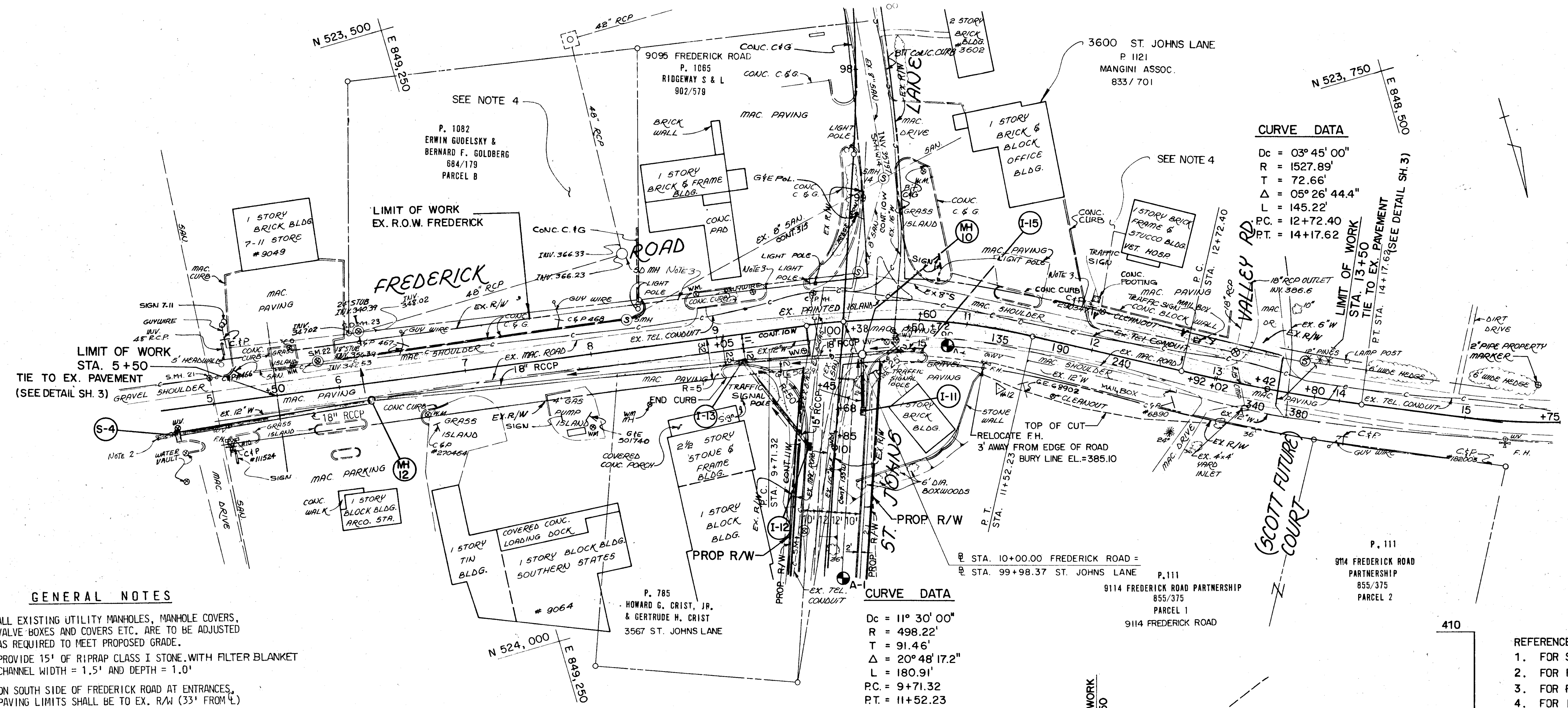
DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 DIRECTOR OF PUBLIC WORKS DATE: 4/13/85
 CHIEF-BUREAU OF ENGINEERING DATE: 4/13/85
 CHIEF-BUREAU OF UTILITIES-ROADS, BRIDGES, STORM DRAINAGE DIVISION DATE: 4/13/85

KIDDE CONSULTANTS, INC.
 ENGINEERS • ARCHITECTS • PLANNERS
 BALTIMORE, MARYLAND

PLAN AND PROFILE
 ST. JOHNS LANE

ST. JOHNS LANE
 CAPITAL PROJECT NO. J-4056
 ELECTION DISTRICT NO. 2
 HOWARD COUNTY MARYLAND

DRAWING NO. 5 OF 19	SCALE 1" = 50'	V.T.P. DESIGNED BY V.Y. DRAWN BY K.D. CHECKED BY
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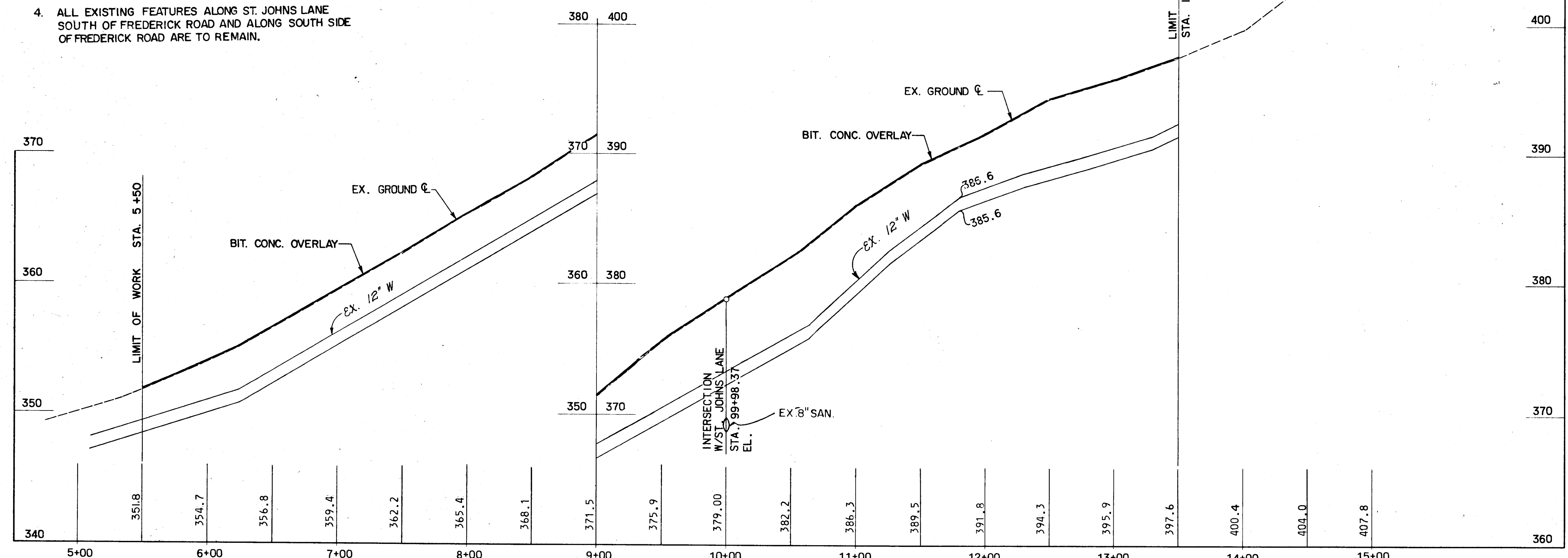


GENERAL NOTES

1. ALL EXISTING UTILITY MANHOLES, MANHOLE COVERS, VALVE BOXES AND COVERS ETC. ARE TO BE ADJUSTED AS REQUIRED TO MEET PROPOSED GRADE.
2. PROVIDE 15' OF RIPRAP CLASS I STONE, WITH FILTER BLANKET CHANNEL WIDTH = 1.5' AND DEPTH = 1.0'
3. ON SOUTH SIDE OF FREDERICK ROAD AT ENTRANCES, PAVING LIMITS SHALL BE TO EX. R/W (33' FROM E) TIE INTO EX. PAVING AS SHOWN IN DETAIL ON SHEET NO. 3.
4. ALL EXISTING FEATURES ALONG ST. JOHNS LANE SOUTH OF FREDERICK ROAD AND ALONG SOUTH SIDE OF FREDERICK ROAD ARE TO REMAIN.

REFERENCES:

1. FOR ST. JOHNS LANE, SEE SHEET NO. 4.
2. FOR PROFILES OF I-11, TO MH-10 AND I-12 TO I-13, SEE SHEET NO. 8
3. FOR PROFILE OF MH-12 TO EXISTING STUB PIPE, SEE SHEET NO. 3.
4. FOR INLET, MANHOLE, AND DRAINAGE STRUCTURE SCHEDULES, SEE SHEET NO. 3.
5. FOR DETAILED IMPROVEMENT ON TRAFFIC SIGNAL SYSTEM, SEE SHEET 11.

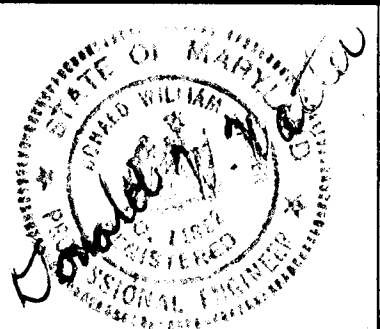


PROFILE - FREDERICK ROAD

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

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
DATE: 4-8-85
CHIEF-BUREAU OF ENGINEERING

KIDDE CONSULTANTS, INC.
ENGINEERS • ARCHITECTS • PLANNERS
BALTIMORE, MARYLAND



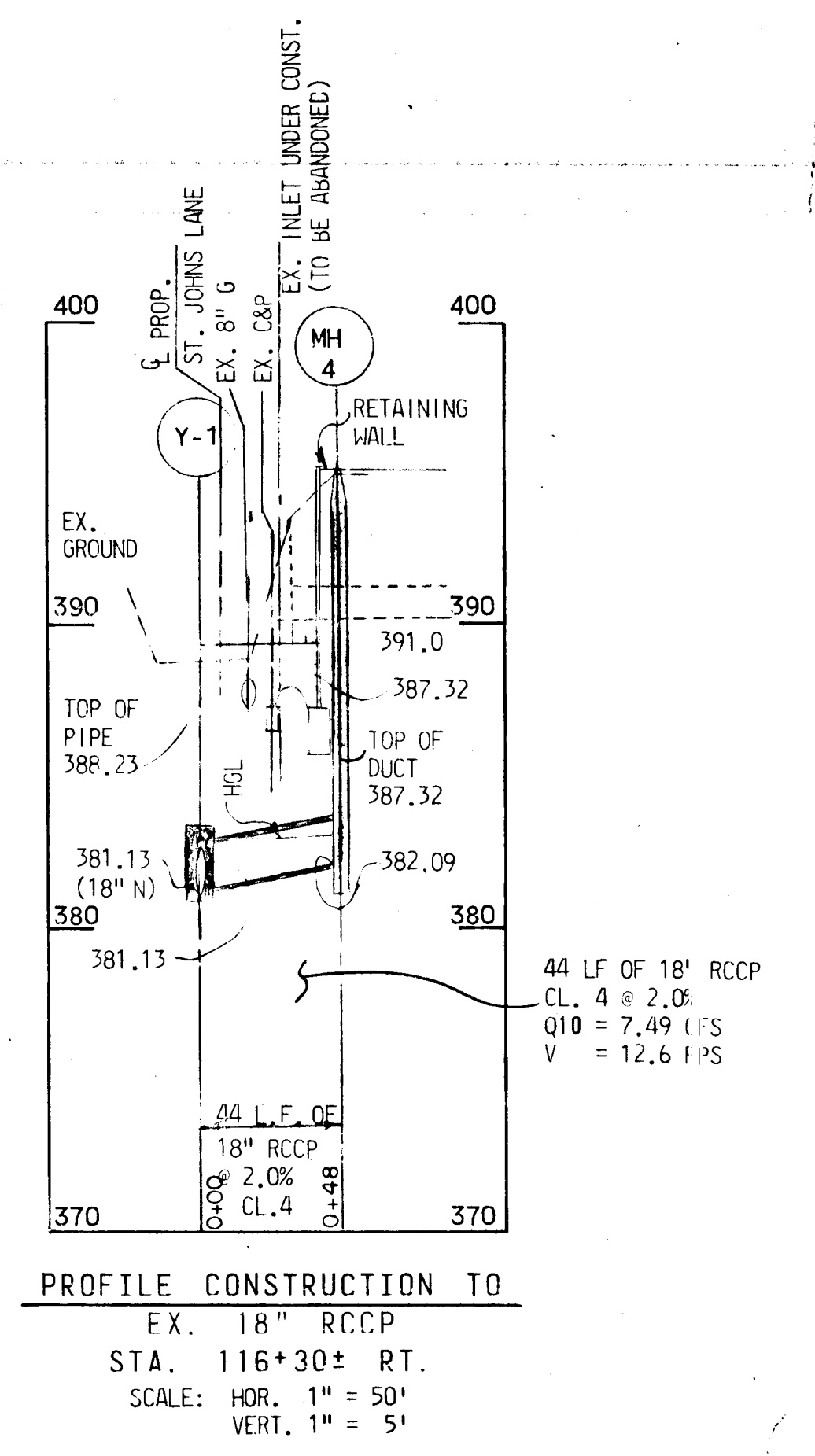
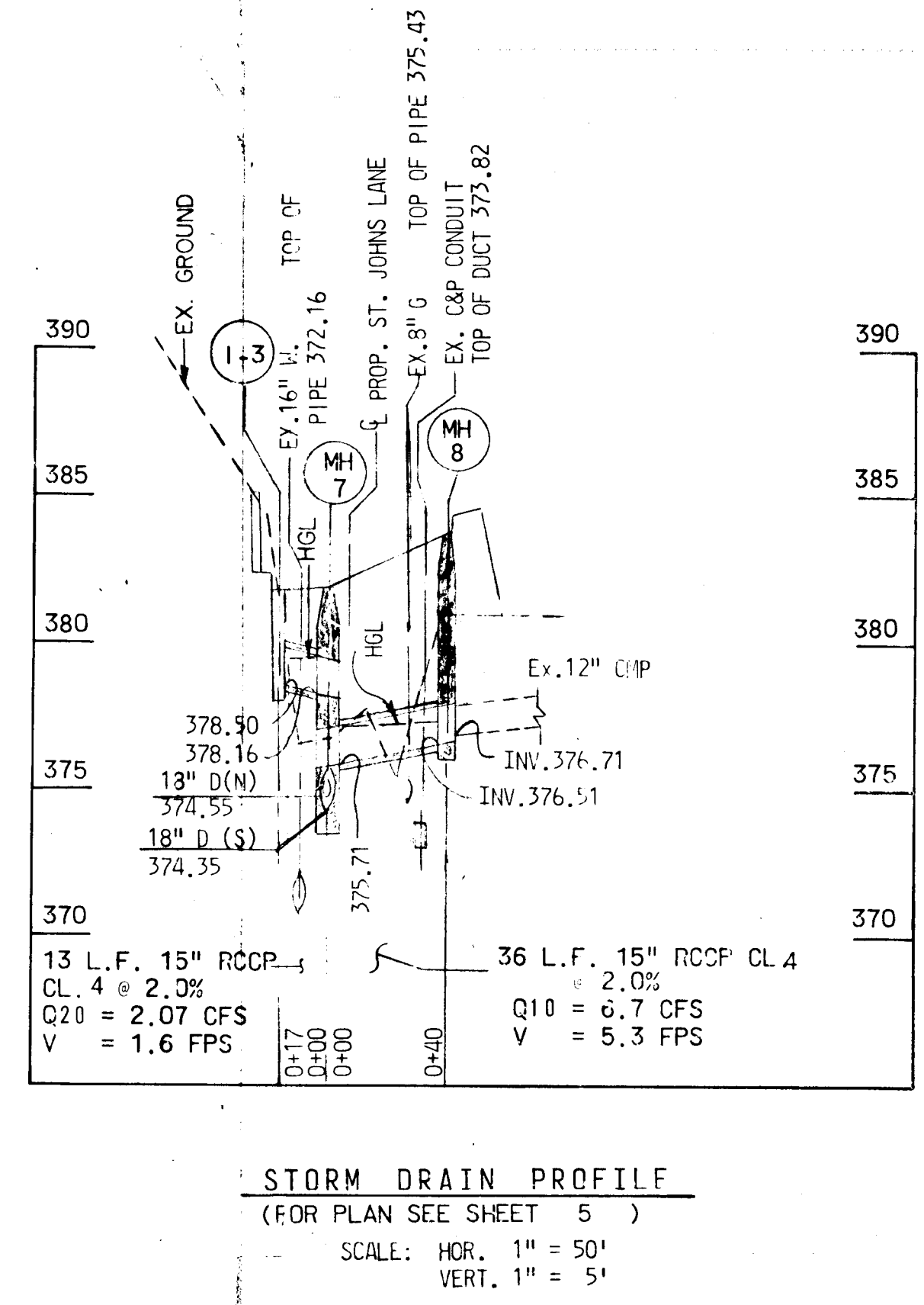
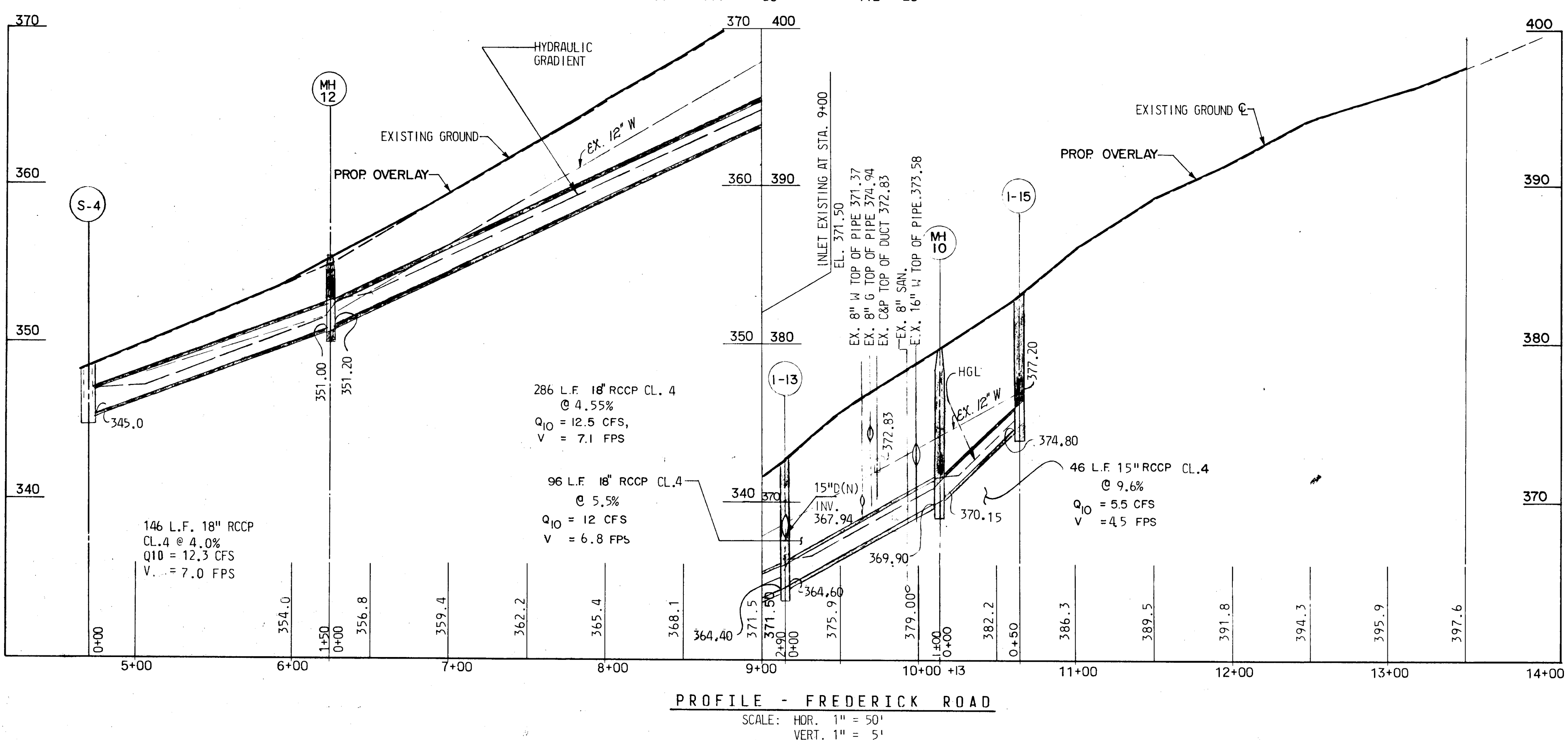
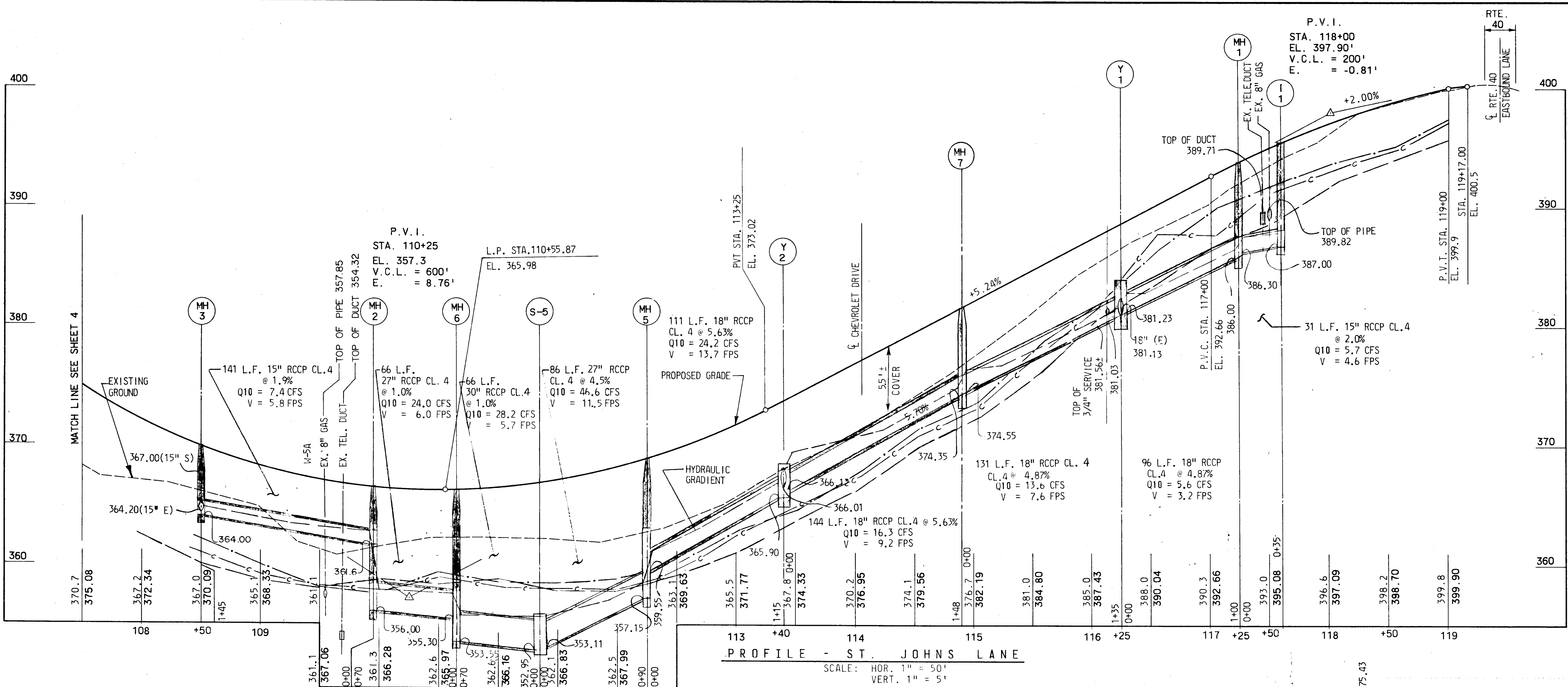
**PLAN AND PROFILE
FREDERICK ROAD**

ST. JOHNS LANE
CAPITAL PROJECT NO. J-4056
ELECTION DISTRICT NO. 2
HOWARD COUNTY, MARYLAND

DRAWING
NO. 6
OF 19

SCALE
1" = 50'

W. T. P.
DESIGNED BY: G. K.
DR. FTED BY: K. D.
CHECKED BY:



REVISIONS	

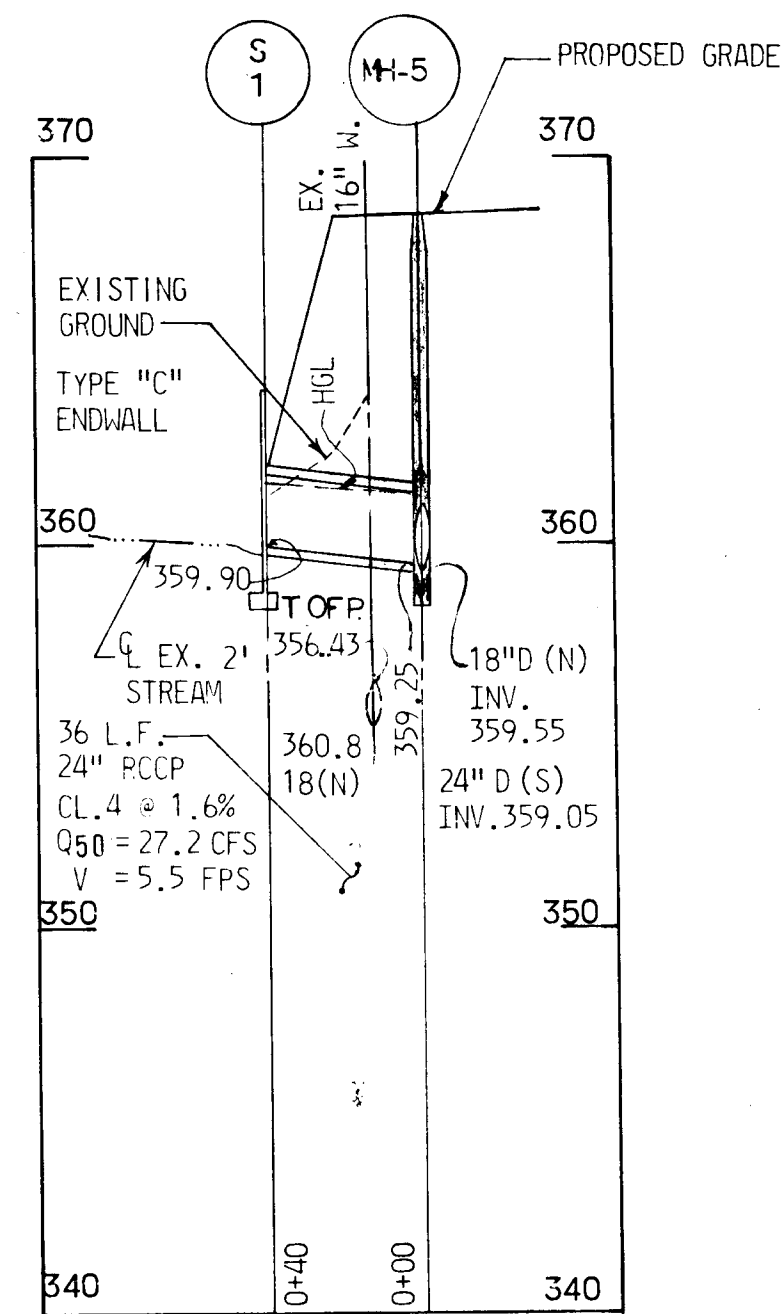
DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 DATE: 4/11/11
 CHIEF - BUREAU OF ENGINEERING
 CHIEF ROADS, BRIDGES, STORM DRAINAGE DIVISION

KIDDE CONSULTANTS, INC.
 ENGINEERS • ARCHITECTS • PLANNERS
 BALTIMORE, MARYLAND

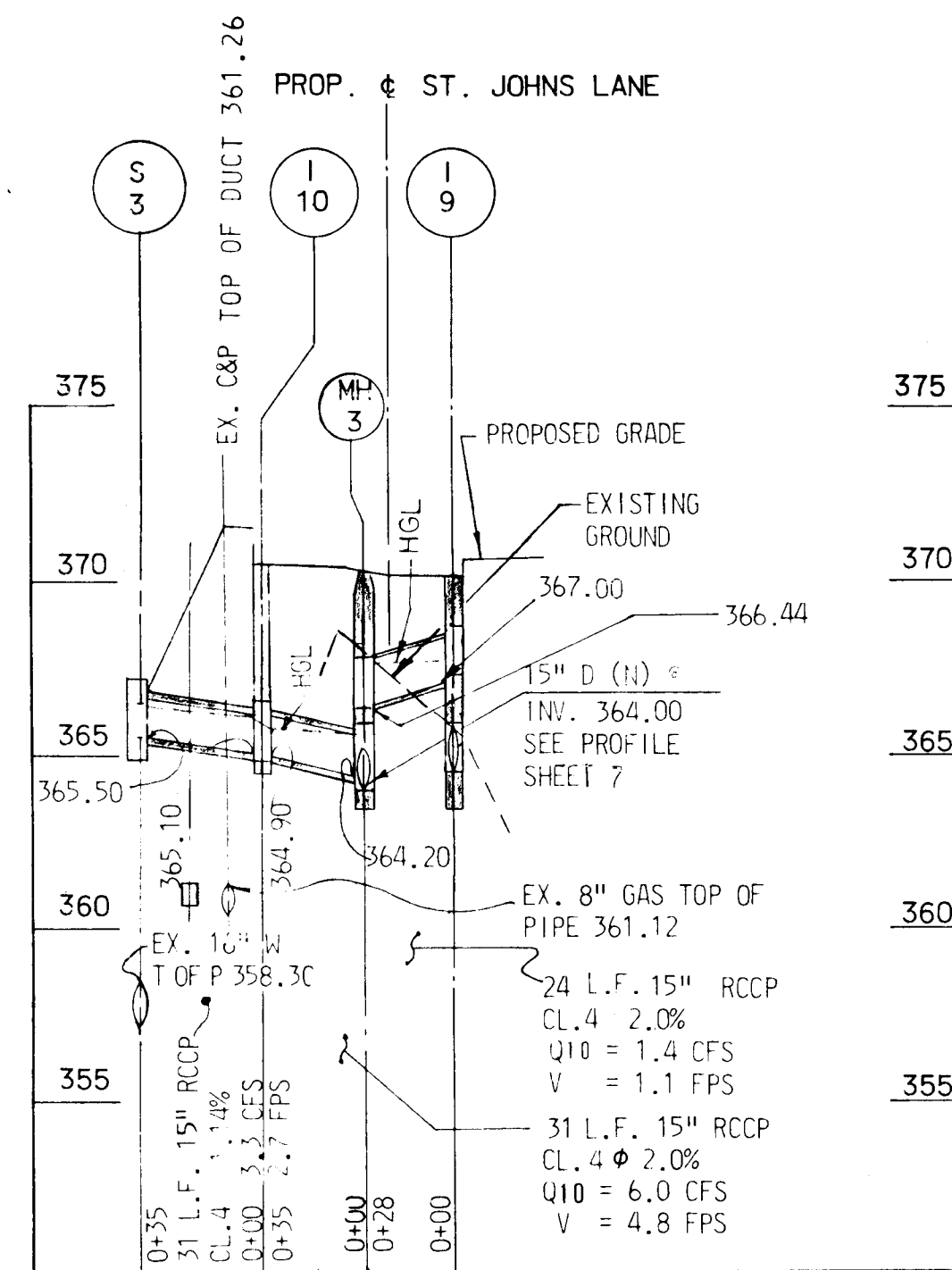
STORM DRAIN PROFILES
ST. JOHNS LANE

ST. JOHNS LANE
 CAPITAL PROJECT NO. J-4056
 ELECTION DISTRICT NO. 2
 HOWARD COUNTY, MARYLAND

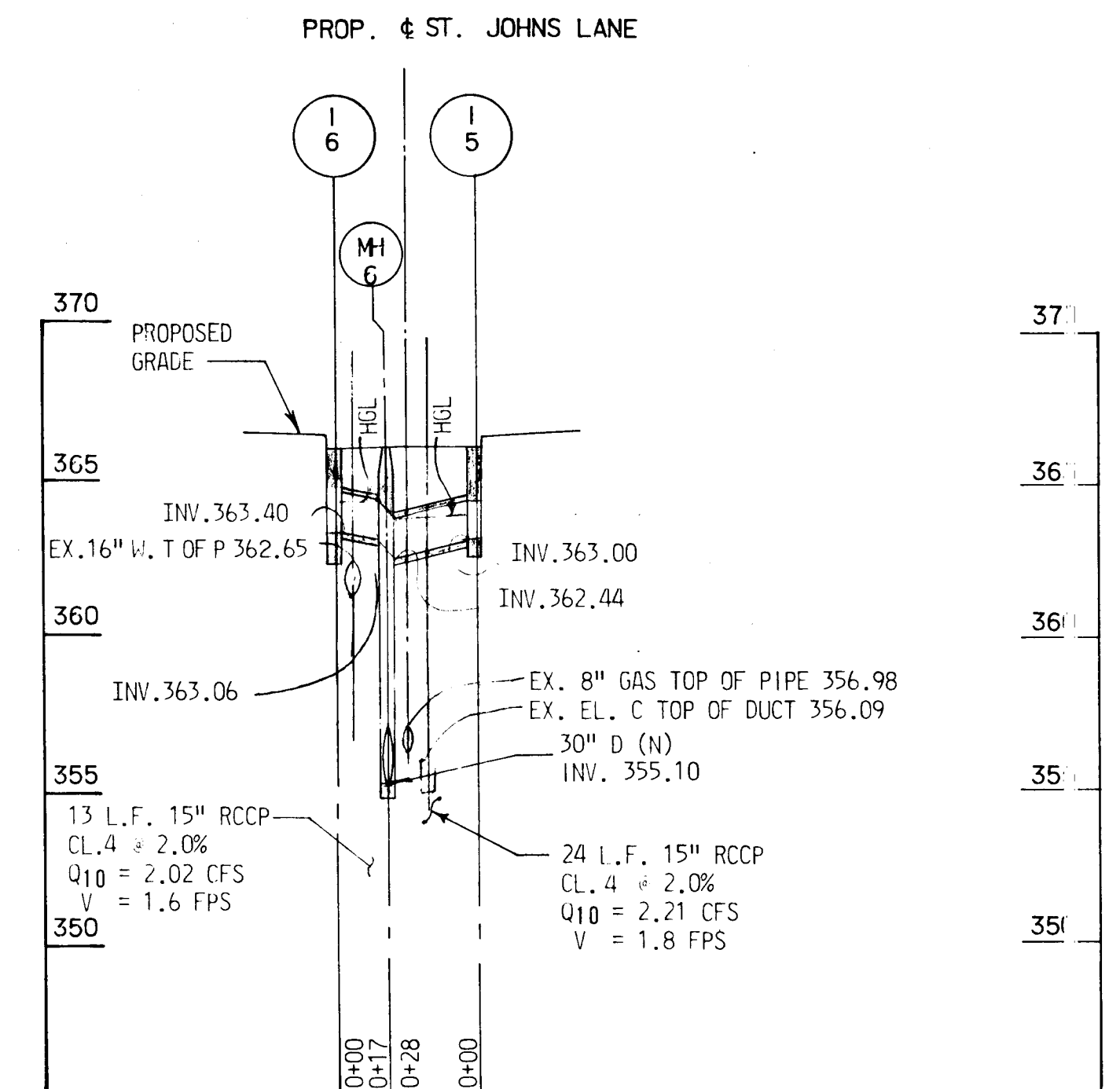
DRAWING NO. 7 OF 19
 SCALE
 I.W.W. DESIGNED BY
 G.K. DR. FTED BY
 CH. CKED BY



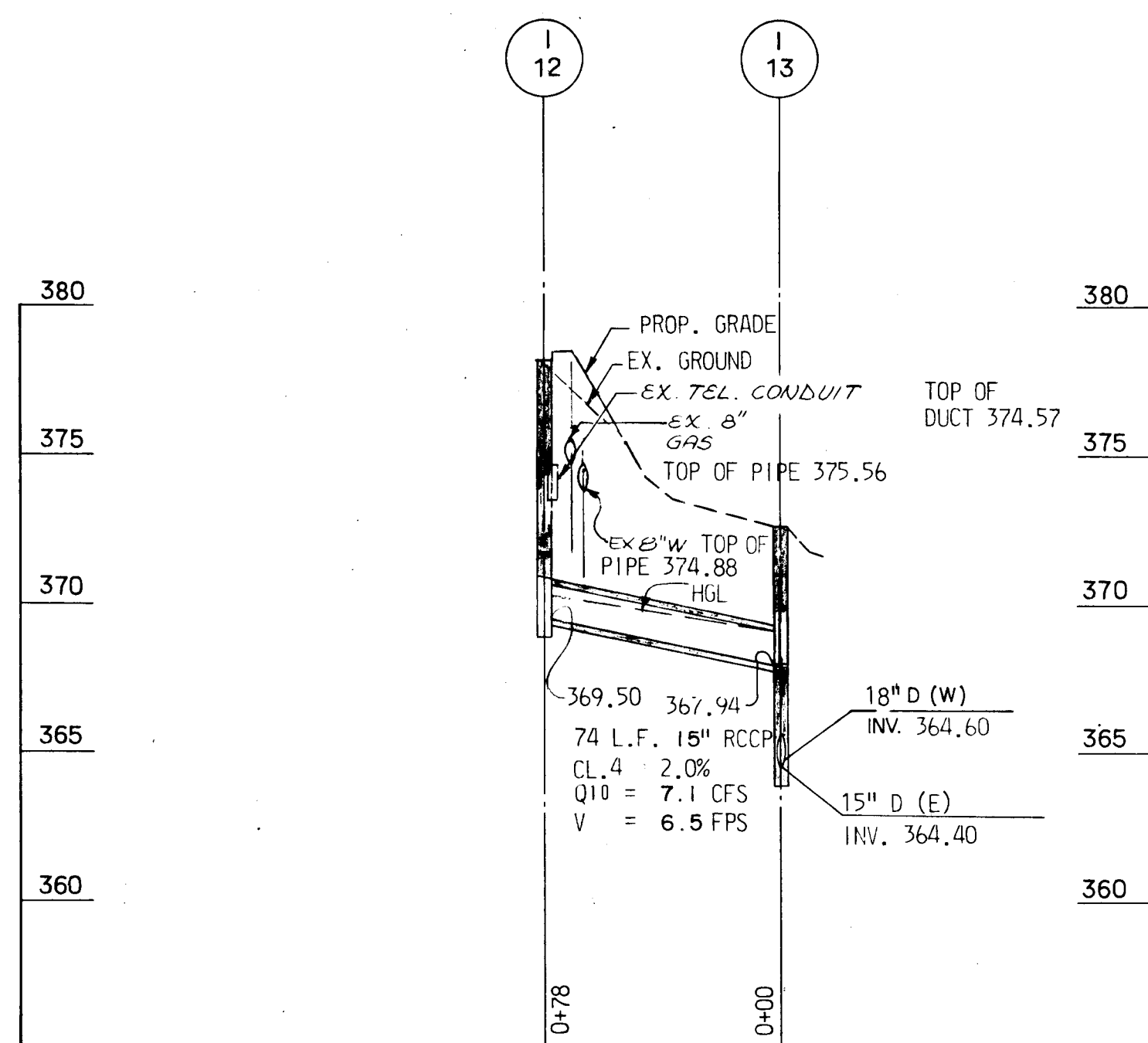
CULVERT AT STA. 112+29
(FOR PLAN SEE SHEET 5)
SCALE: HOR. 1" = 50'
VERT. 1" = 5'



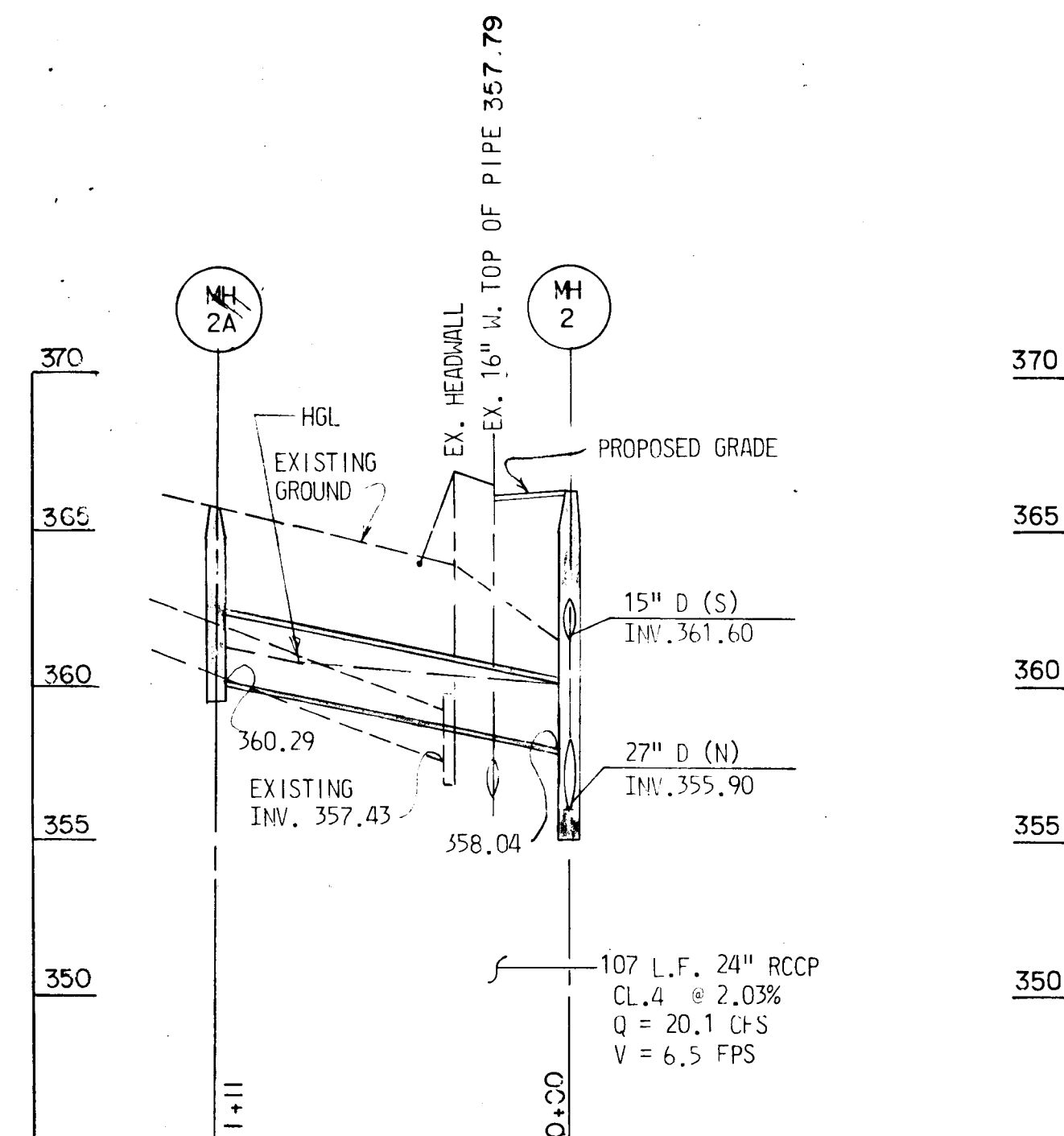
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SCALE: HOR. 1" = 50'
VERT. 1" = 5'



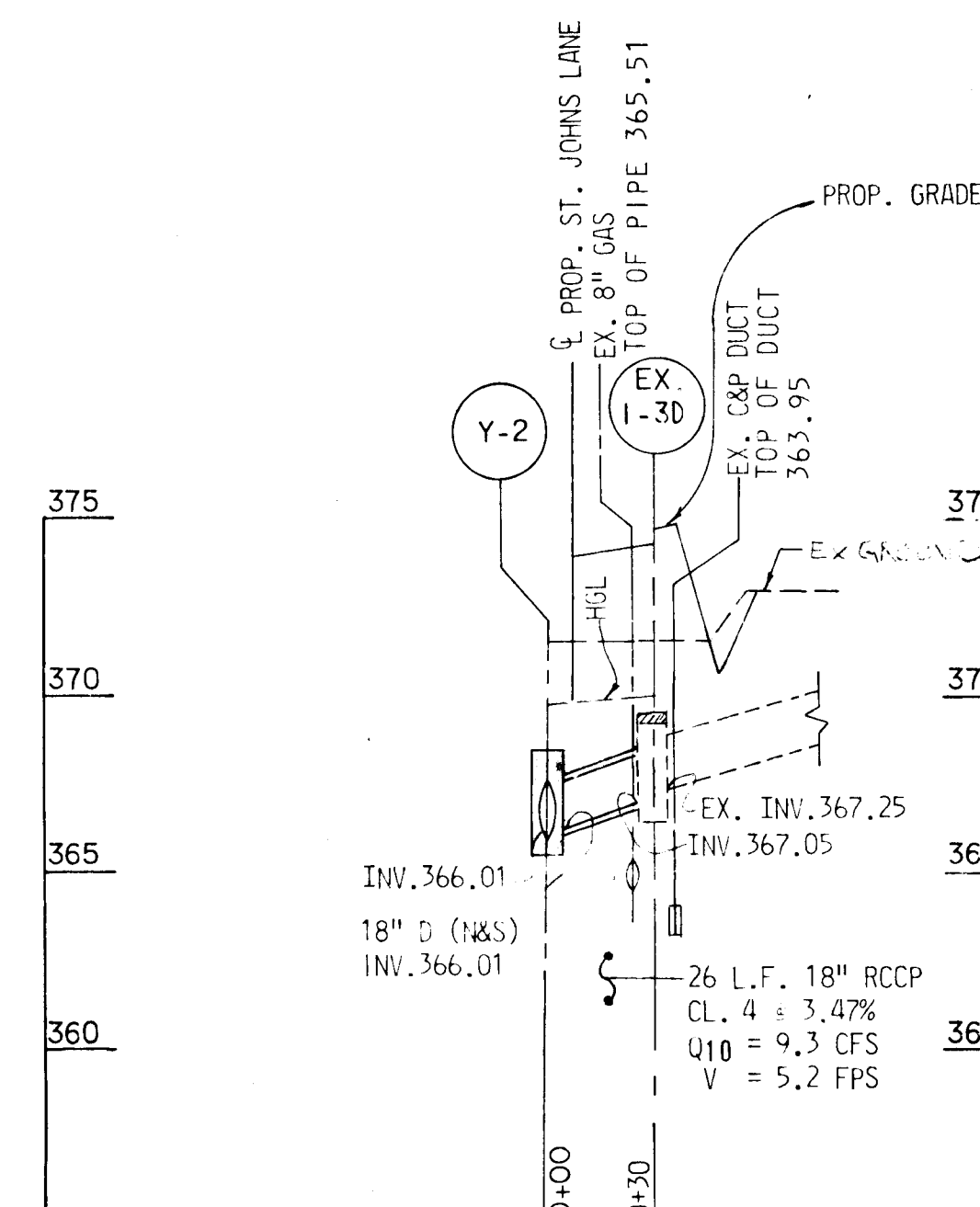
STORM DRAIN PROFILE (FOR PLAN SEE SHEET 5)
SCALE: HOR. 1" = 50'
VERT. 1" = 5'



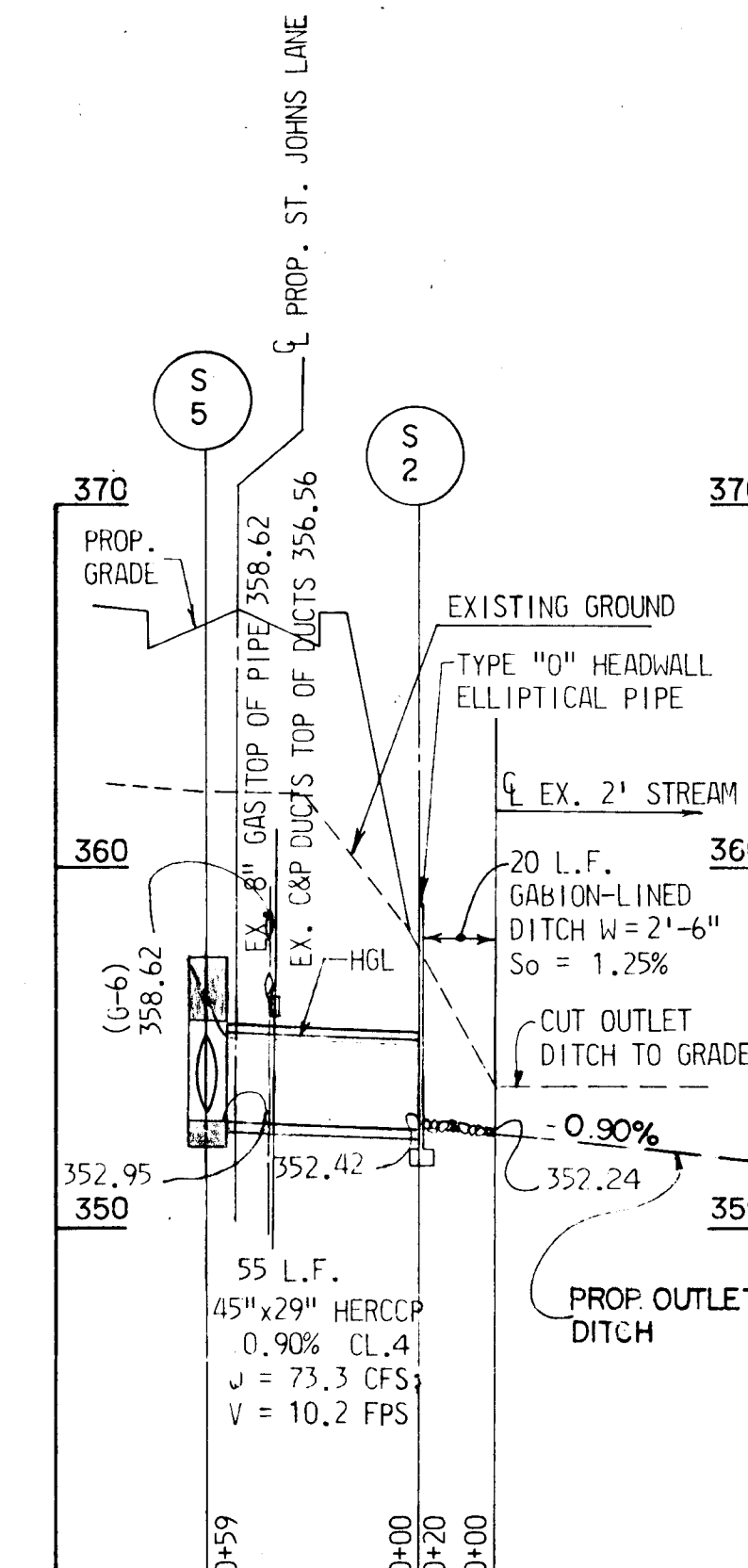
STORM DRAIN PROFILE (FOR PLAN SEE SHEET 6)
SCALE: HOR. 1" = 50'
VERT. 1" = 5'



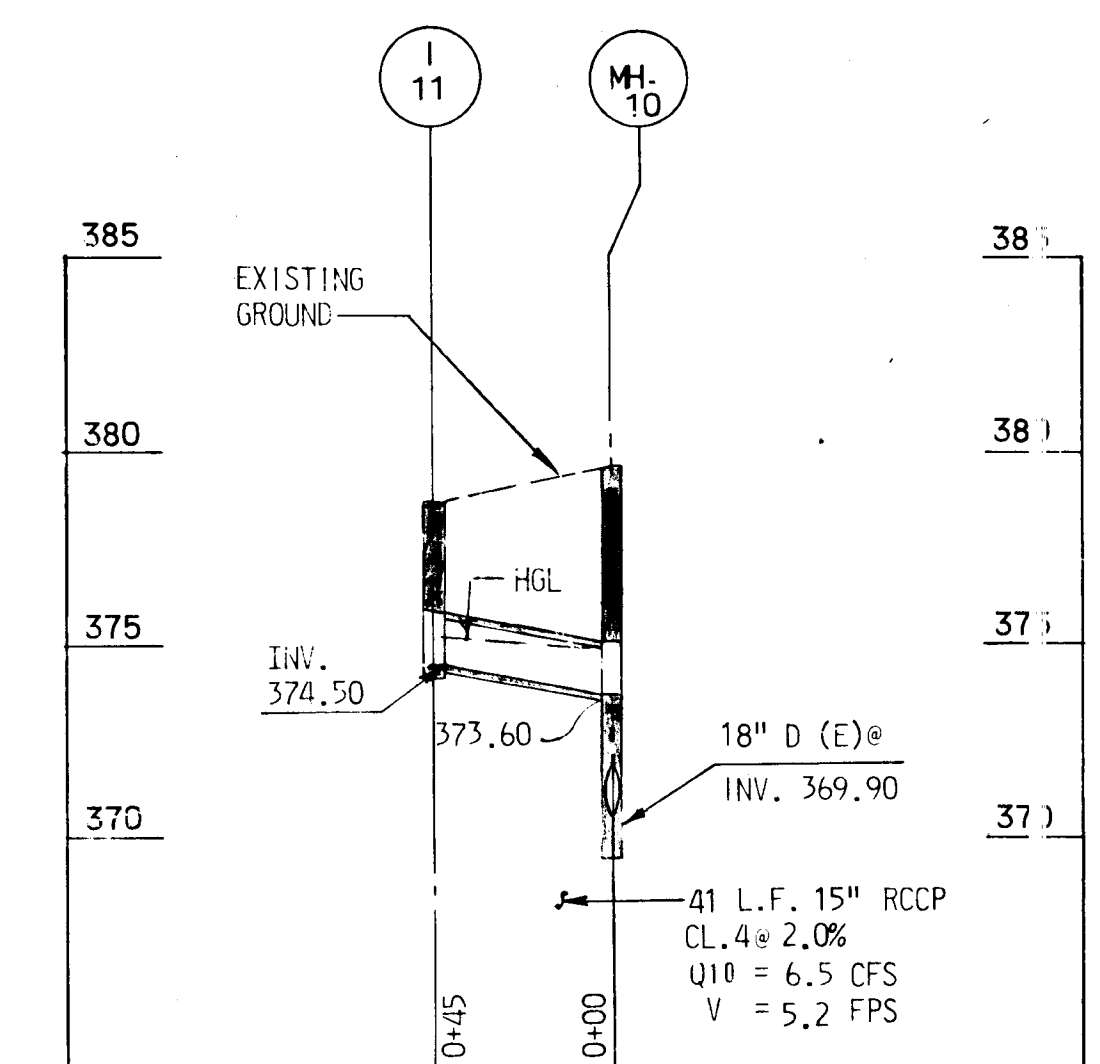
STORM DRAIN PROFILE (FOR PLAN SEE SHEET 5)
SCALE: HOR. 1" = 50'
VERT. 1" = 5'



STORM DRAIN PROFILE (FOR PLAN SEE SHEET 5)
SCALE: HOR. 1" = 50'
VERT. 1" = 5'



CULVERT AT STA. 111+35
(FOR PLAN SEE SHEET 5)
SCALE: HOR. 1" = 50'
VERT. 1" = 5'



STORM DRAIN PROFILE
STA. 100+70 ST. JOHNS LANE
(FOR PLAN SEE SHEET 4)
SCALE: HOR. 1" = 50'
VERT. 1" = 5'

DEPARTMENT OF PUBLIC WORKS

HOWARD COUNTY, MARYLAND
John F. N...
 DIRECTOR OF PUBLIC WORKS
 DATE *11/11/2011* CHIEF-BUREAU OF ENGINEERING
 DATE *11/11/2011* CHIEF ROADS, BRIDGES, STORM DRAINAGE DIVISION

KIDDE CONSULTANTS, INC.

ENGINEERS • ARCHITECTS • PLANNERS
 BALTIMORE, MARYLAND

Richard A. M...

STORM DRAIN PROFILES
 ST. JOHNS LANE

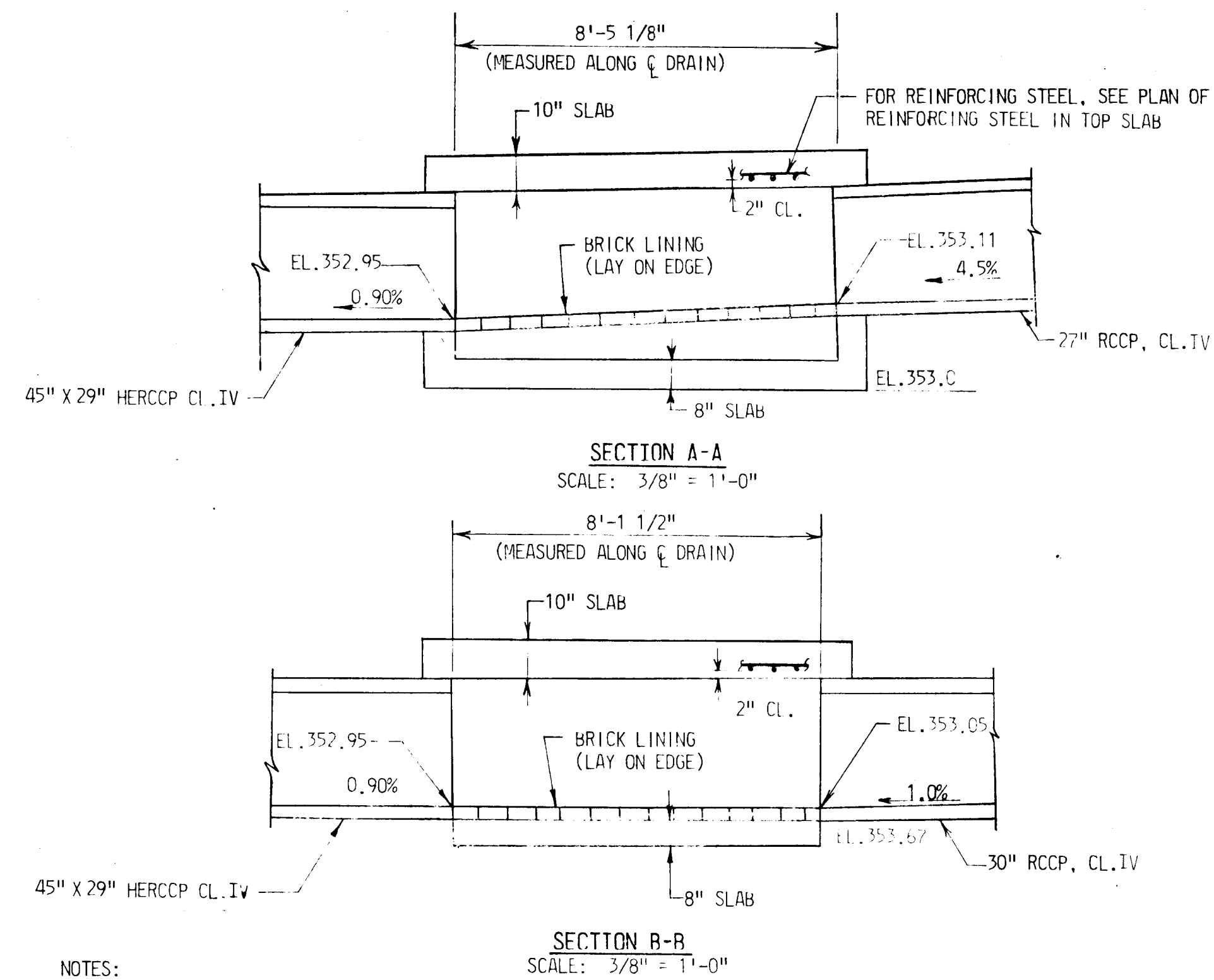
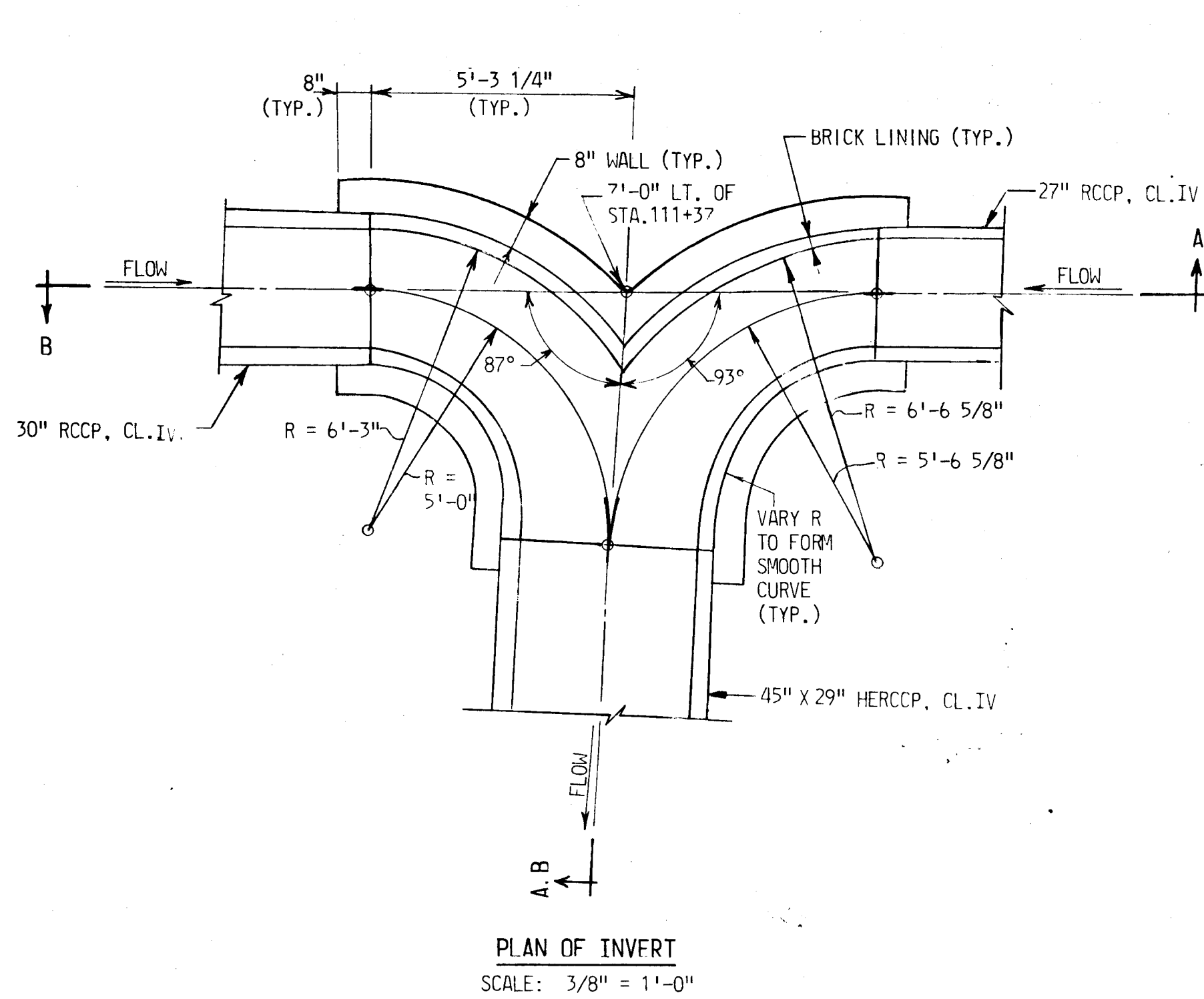
ST. JOHNS LANE
 CAPITAL PROJECT NO. J-4056

ELECTION DISTRICT NO. 2
 HOWARD COUNTY MARYLAND

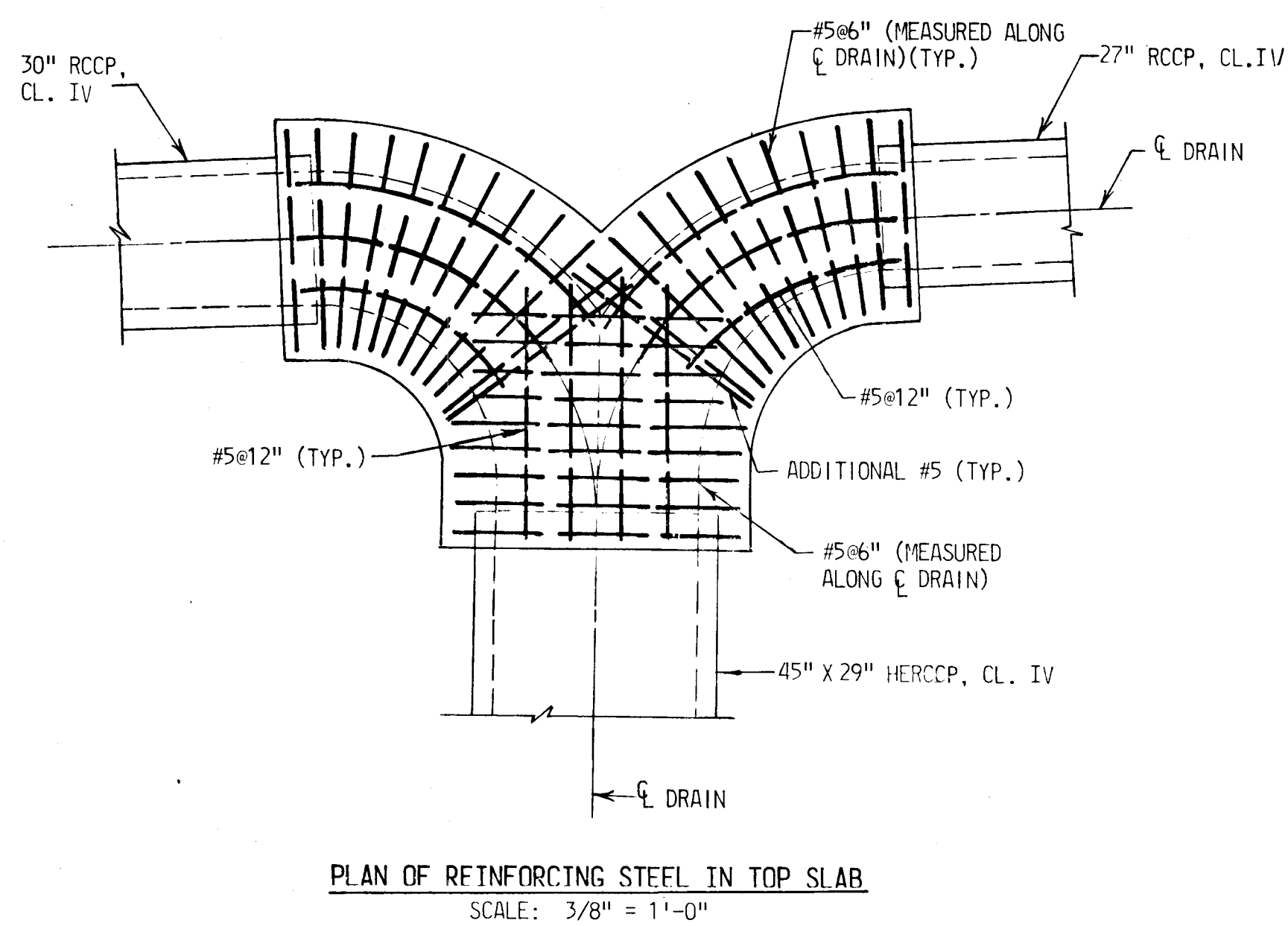
DRAWING
 NO. 8
 OF 19

SCALE
 AS SHOWN

V.T.P. BY:
 G.K. BY:
 J.K.D. BY:
 C.E.C.K. BY:



- NOTES:
1. THE WALLS OF THE JUNCTION CHAMBER MAY BE CONSTRUCTED OF BRICK OR MIX NO. 3 CONCRETE AS SHOWN ON HOWARD COUNTY STD. NO. SD 1.01 AND 1.02.
 2. THE TOP AND BOTTOM SLABS SHALL BE MIX NO. 3 CONCRETE. THE TOP SLAB SHALL BE REINFORCED IN ACCORDANCE WITH THE DETAILS SHOWN HERE. THE BOTTOM SLAB SHALL BE REINFORCED AS SHOWN ON HOWARD COUNTY STD. NO. SD 1.01 AND 1.02.
 3. THE INVERTS AND SIDES OF THE JUNCTION CHAMBER SHALL BE BRICK LINED AS SHOWN ON HOWARD COUNTY STD. NO. SD 1.01 AND 1.02.



DETAILS OF STORM DRAIN JUNCTION CHAMBER
AT STA. 111+37. 7' LT.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
DIRECTOR OF PUBLIC WORKS DATE CHIEF-BUREAU OF ENGINEERING DATE
CHIEF ROADS, BRIDGES, STORM DRAINS DIVISION DATE

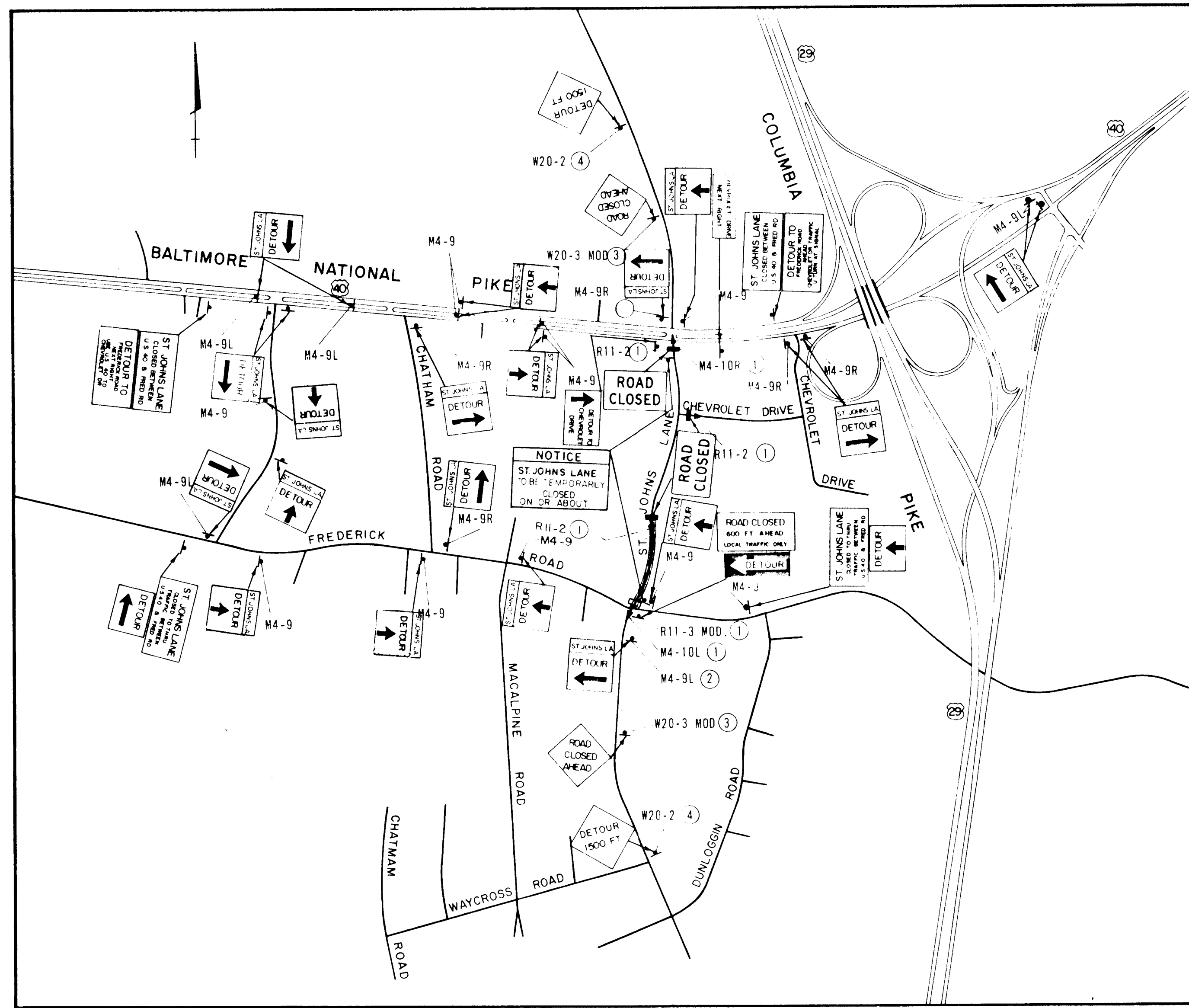
KIDDE CONSULTANTS, INC.
ENGINEERS • ARCHITECTS • PLANNERS
BALTIMORE, MARYLAND

Charles W. Walker

STORM DRAIN JUNCTION CHAMBER
PLAN AND DETAILS
ST. JOHNS LANE

ST JOHNS LANE
CAPITAL PROJECT NO. J-4056
ELECTION DISTRICT NO. 2
HOWARD COUNTY MARYLAND

DRAWING NO. 9 OF 19	SCALE AS SHOWN	BW DESIGNED BY IAD DRAFTED BY BW CHECKED BY
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LEGEND

- TYPE III BARRICADE - LEAVE 12' OPENING FOR LOCAL TRAFFIC
- TYPE III BARRICADE - BLOCK ENTIRE ROADWAY
- ⊥ SIGN POSTED ON BARRICADE
- ⊥ SIGN POSTED ON SUPPORT
- ══ MAINTAIN LOCAL TRAFFIC FROM FREDERICK ROAD TO STATION 107+00

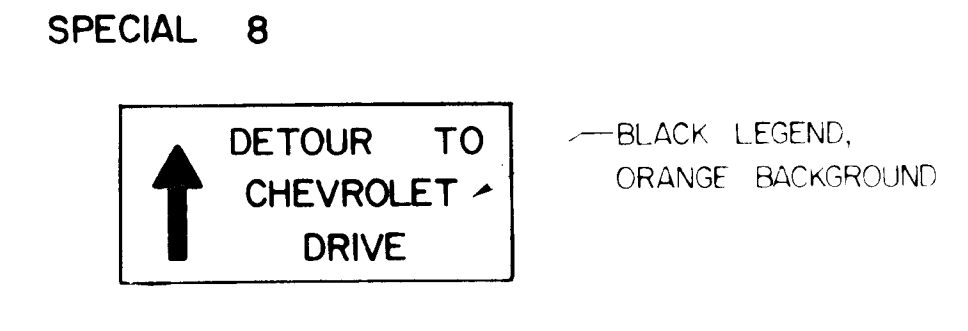
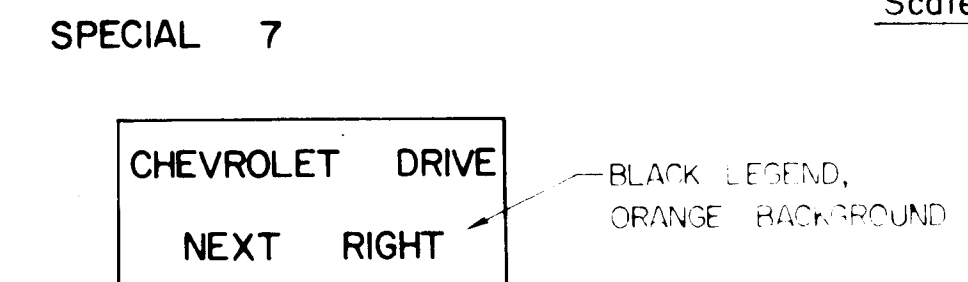
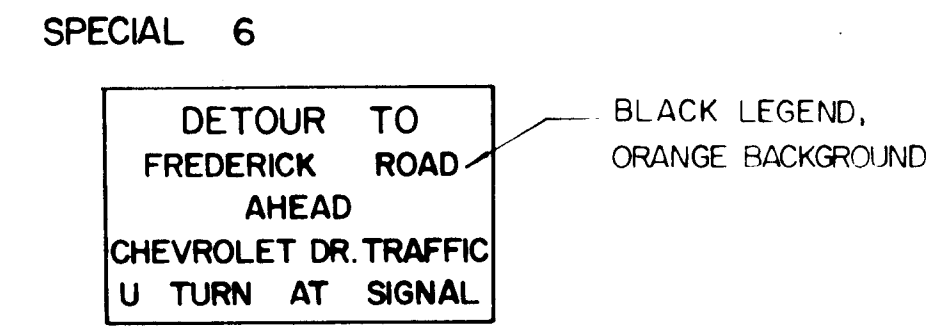
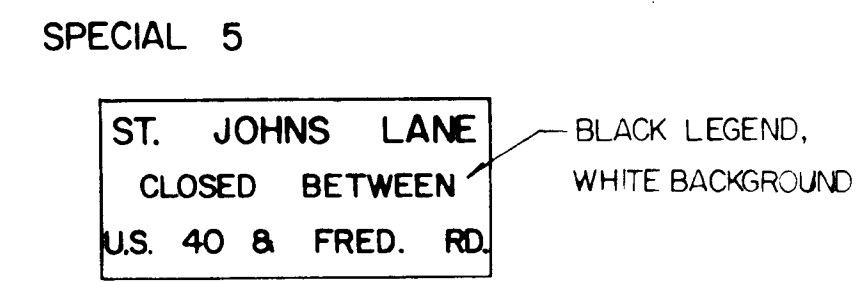
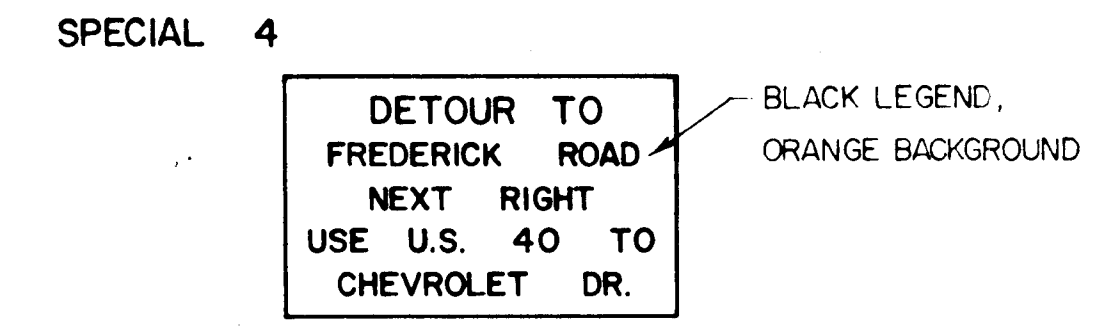
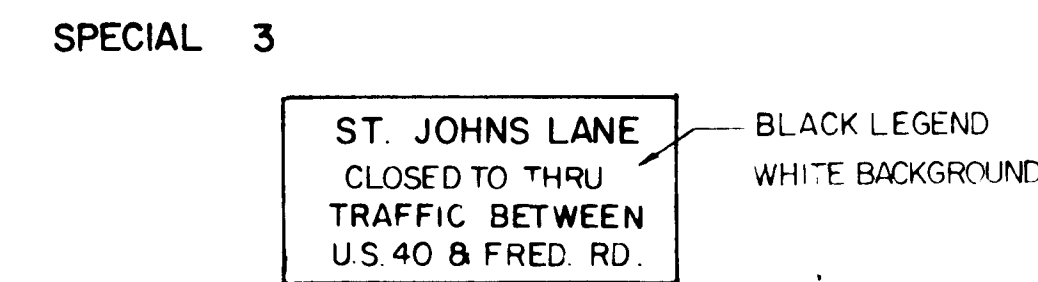
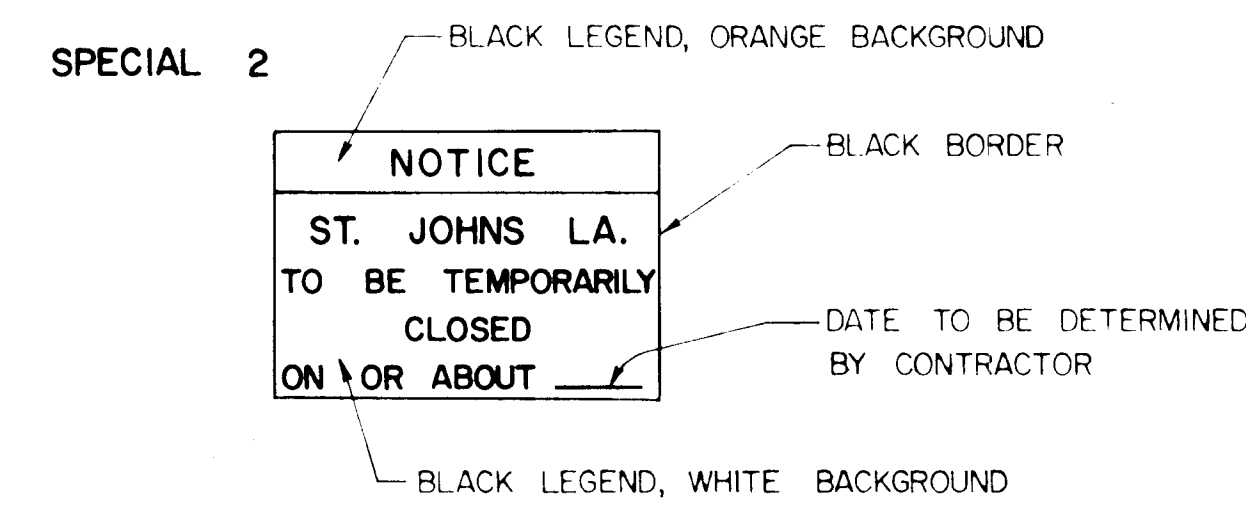
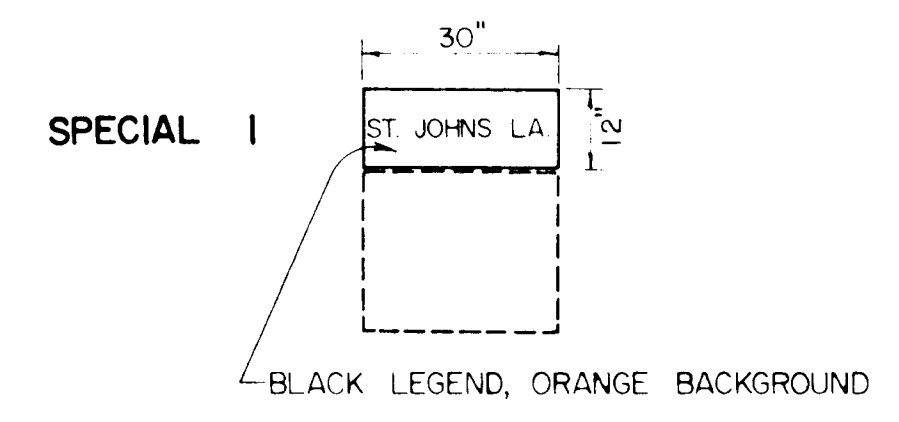
MATERIAL LIST

DEVICE *	NUMBER REQUIRED
□	1 (APPROX. 24' EACH)
■	3 (APPROX. 36' EACH)
R11-2	3
R11-3 (MOD.)	1 (600 FT AHEAD)
W20-2	2 (DETOUR 1500 FT)
W20-3 (MOD.)	2 (ROAD CLOSED AHEAD)
M4-9	11 (STRAIGHT UP ARROW)
M4-9L	6
M4-9R	7
M4-10L	1
M4-10R	1
SPECIAL 1	18
SPECIAL 2	2
SPECIAL 3	2
SPECIAL 4	1
SPECIAL 5	2
SPECIAL 6	1
SPECIAL 7	1
SPECIAL 8	1

* PLATES SHOWING DETAILS OF BARRICADES AND SIGNS ARE INCLUDED IN SPECIAL PROVISIONS.

- NOTES**
- ① ERECT ON TYPE III BARRICADE
 - ② AT 100'
 - ③ AT 800'
 - ④ AT 1500'

SPECIAL SIGNS



0 300 300 900
Scale: 1" = 600'

REVISIONS

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
DIRECTOR OF PUBLIC WORKS DATE
CHIEF - BUREAU OF ENGINEERING DATE
Elizabeth Anderson-Celia 4/2/05
CHIEF ROADS, BRIDGES, & STORM DRAINS DIVISION

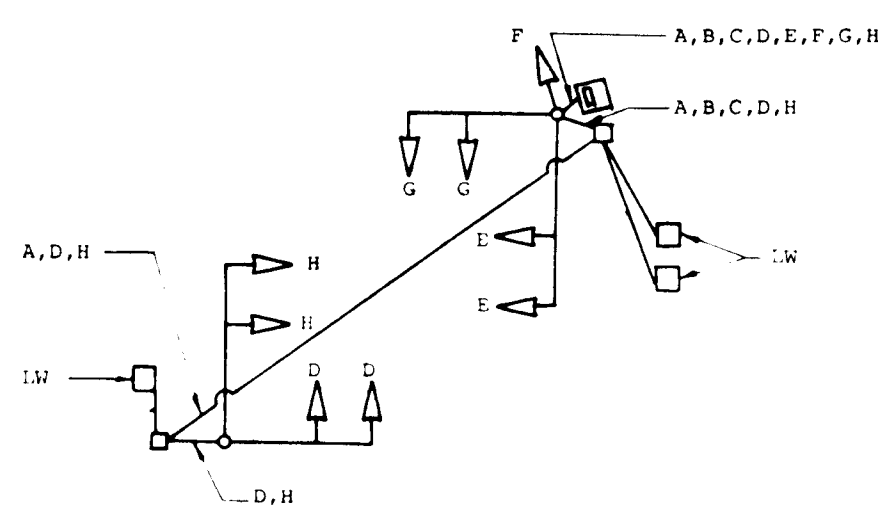
KIDDE CONSULTANTS, INC.
ENGINEERS • ARCHITECTS • PLANNERS
BALTIMORE, MARYLAND

MAINTENANCE OF TRAFFIC

ST. JOHNS LANE
CAPITAL PROJECT NO. J-4056
ELECTION DISTRICT NO. 2
HOWARD COUNTY MARYLAND

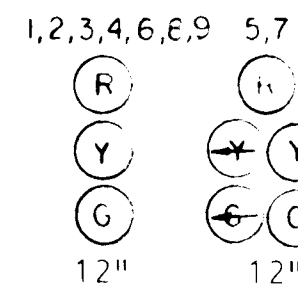
DRAWING NO. 10 OF 12
SCALE 1" = 600'
DESIGNED BY
DRAWN BY
CHECKED BY

WIRING DIAGRAM



A, B, C 2 CONDUCTOR (ALUMINUM SHIELDED) ELECTRICAL CABLE (NO. 14 AWG)
E, H 7 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
D, F, G 5 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
LW LOOP WIRE

SIGNALS



YIELD WHEN TURNING ON GREEN (BY OTHERS)
R1 - 2C 36" x 48"

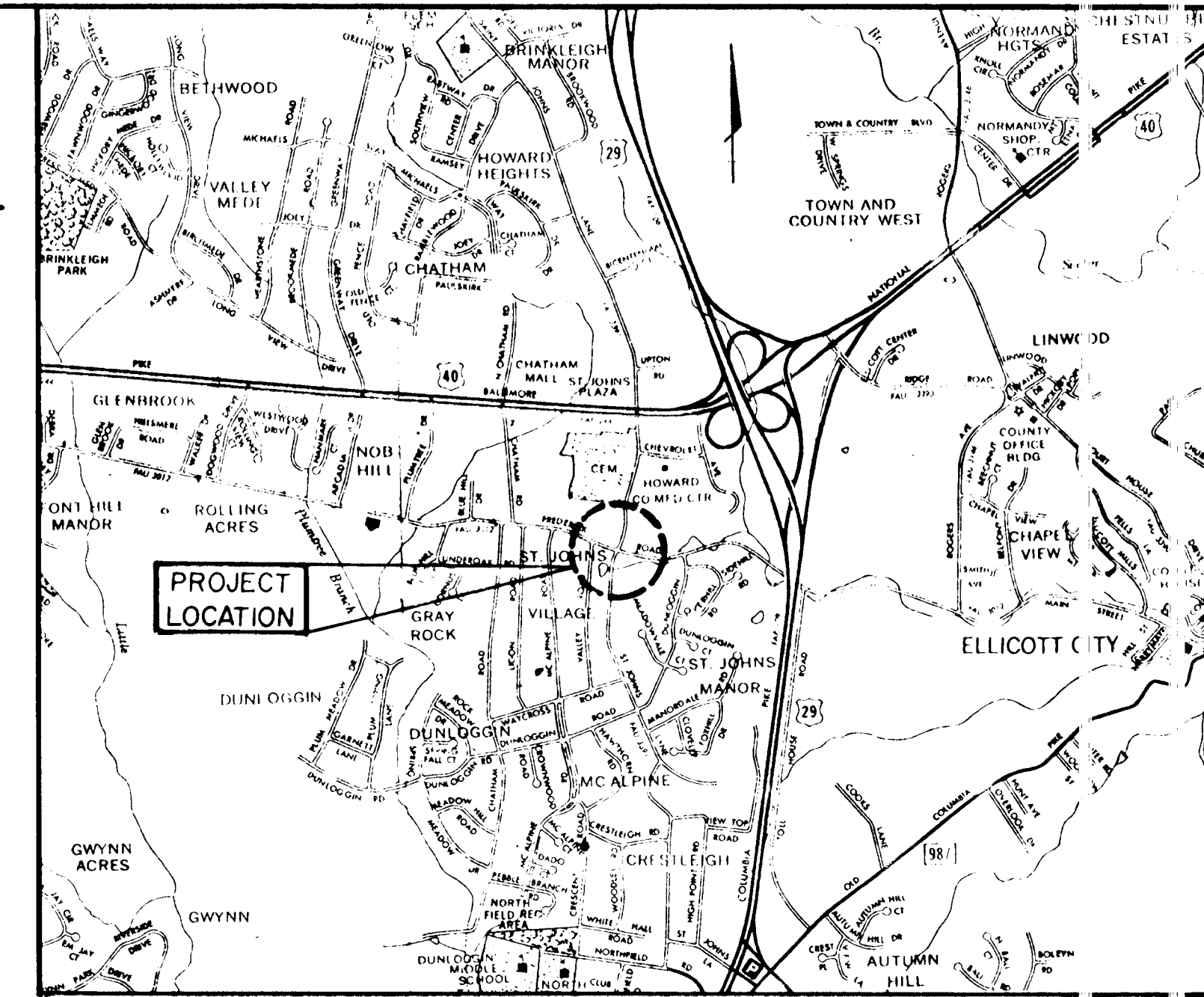
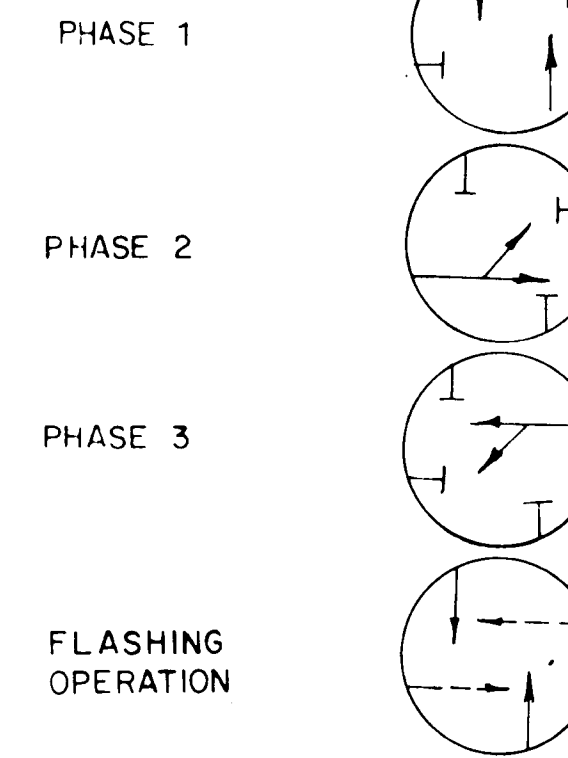
Table with columns for DISPLAY, PHASE 1, PHASE 2, PHASE 3, FLASHING OPERATION and rows for various signal functions like CHANGE, RED CLEAR, YELLOW, etc.

NOTE: PROVIDE CAPABILITY FOR ALL RED CLEARANCE PHASE AND PEDESTRIAN ACTUATION

NOTE: SIGNAL POLE 1 SHALL BE THE UNION METAL BASIC DESIGN NO. TD079219. SIGNAL POLE 2 SHALL BE THE UNION METAL BASIC DESIGN NO. TD081221.

P. III
9114 FREDERICK ROAD PARTNERSHIP
PARCEL I
855 / 375

PHASING SEQUENCE

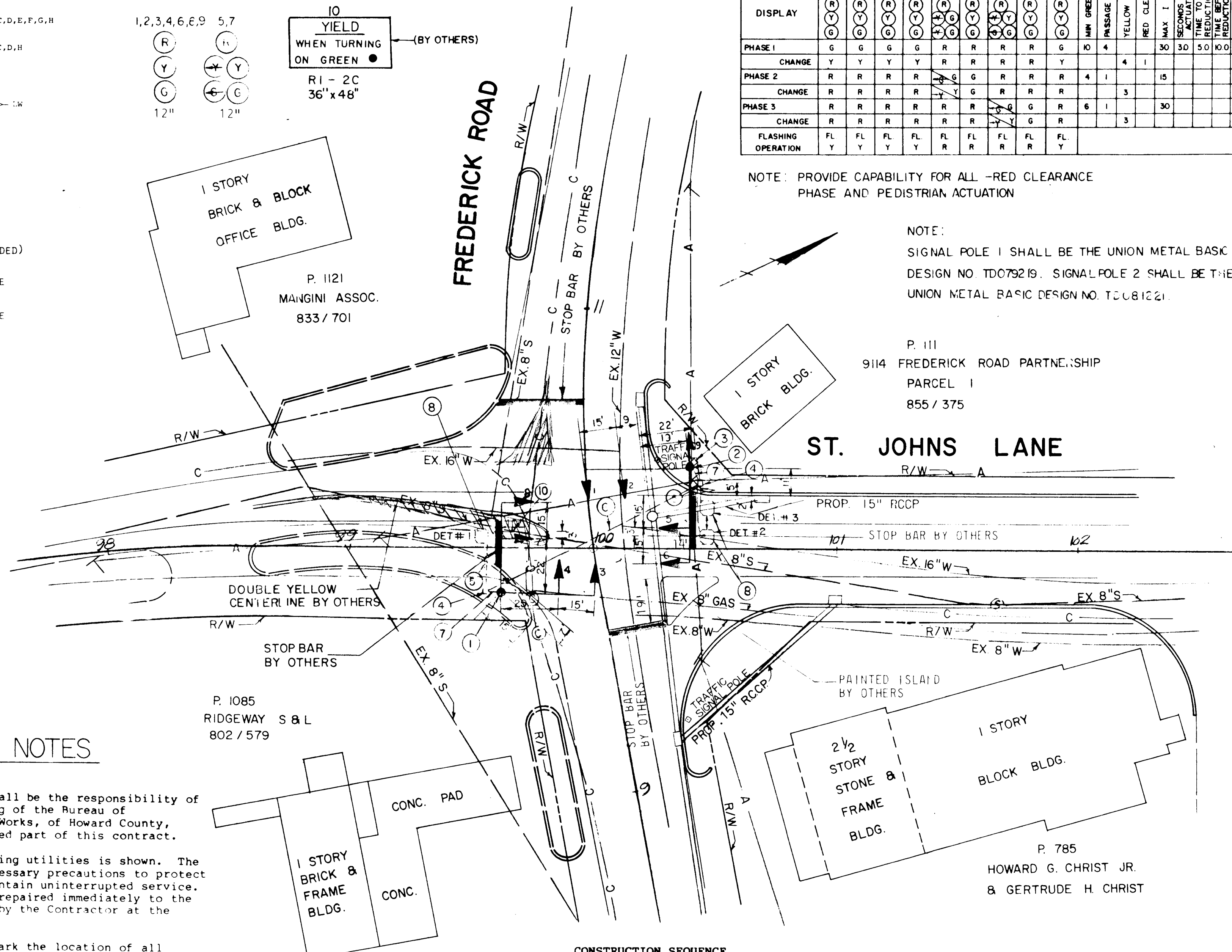


VICINITY MAP
SCALE 1" = 2000'

NOTE: EXISTING SIGNAL NOT SHOWN. EXISTING POLES ARE SHOWN ON SHEETS 4 & 6. CONTRACTOR MUST FAMILIARIZE HIMSELF WITH THIS EXISTING CONDITION.

GENERAL NOTES

- 1. All highway marking and signing shall be the responsibility of the Division of Traffic Engineering...
2. a. Approximate location of existing utilities is shown...
b. Contractor shall locate and mark the location of all existing utilities...
c. Contractor shall notify the following utilities or agencies at least five (5) days before starting work...
3. All materials and workmanship employed under this contract shall conform with the "GENERAL SPECIFICATIONS FOR INSTALLATION OF AND EQUIPMENT FOR TRAFFIC SIGNALS FOR HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS" dated October 7, 1974...
4. All disturbed areas shall be properly restored in accordance with the Contract Specifications.
5. All new signal heads shall be securely wrapped and/or bagged in burlap, prior to signal being placed in service.
6. All existing signal equipment not reused in this project shall be salvaged and delivered to the Howard County Annex at Scaggsville.
7. Existing signal pole foundations should be removed to a minimum of one (1) foot below finished grade.
8. Contractor to ensure that all road cut for signal work shall be completed prior to resurfacing of intersection.



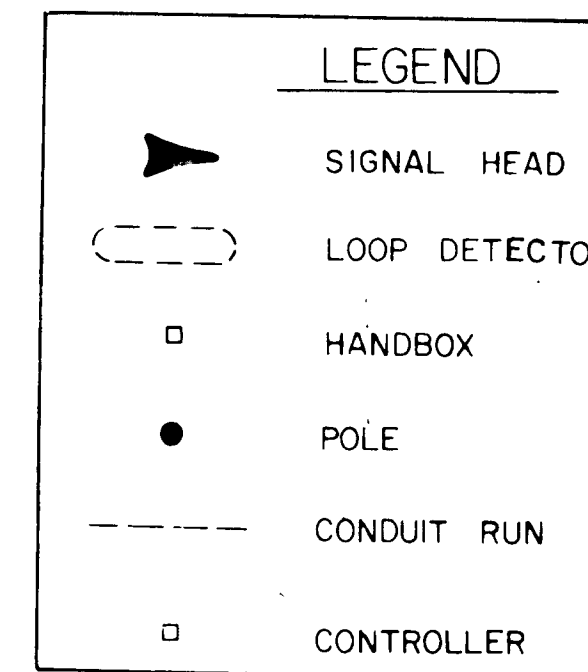
CONSTRUCTION SEQUENCE

- 1. Request County to install stop signs and turn off existing signal. The detour on this contract must be in place and operating prior to delivery of this request.
2. After the above is accomplished by the County, salvage all existing signal equipment and deliver to Howard County.
3. Construct signal as shown. Work shall be coordinated by the Contractor so as to minimize the time that the signal is out of operation. Under no circumstances shall signal be inoperative for a period longer than two months. During this entire period, the detour must be in operation.

CONSTRUCTION DETAILS

- 1. Install 20' signal pole, 37' mast arm, 38' mast arm and signals as shown (Note: One 2" 90° Elbow).
2. Install 20' signal pole, 43' mast arm, 41' mast arm and signals as shown (Note: One 2" 90° Elbow).
3. Install pole mounted cabinet and controller with all necessary equipment. Mount Electric Meter on Pole with vandal proof meter box.
4. Install Handbox.
5. Install 1" galvanized electrical conduit sleeve for detector wire.
6. Install 2" galvanized electrical conduit.
7. Install 2" polyvinyl chloride electrical conduit.
8. Install loop detector wire and connect to handbox.

EQUIPMENT LIST



LOOPS AND DETECTORS

- 1. The following new loops shall be installed:
Number Dimensions Phase
1. 6' x 6' (3 turns) 2
2. 6' x 6' (3 turns) 3
3. 6' x 6' (3 turns) 3
2. All wiring shall be in accordance with manufacturer's recommendations for correct operation.
3. The loop shall operate in presence mode.
4. Delayed timer vehicle loop detector shall be Sarasota 235T/MS or approved equal.

SIGNAL HEADS

- 1. The Contractor shall provide the following new signal heads:
Signal Number Dimensions
1, 2, 3, 4, 12" diameter red, amber and green
5, 6, 7, 8, 9
2. All signals shall have bronze baked enamel finish and shall be furnished with tunnel visors. All signals shall be mounted on the mast arm with rigid adjustable brackets.

POLES

- 1. Two (2) 20' poles with two mast arms with mounting assembly for two (2) signal heads (12" indications) on each mast arm.
2. Finish shall be all-weather bronze paint designated Sea Shore Gloss Trim #27721, Durant Bronze, Code 7557581 available from M.A. Bruder & Sons, Inc.

UNDERGROUND WIRING

- 1. Underground wiring shall be placed in new Conduits under the sidewalk or road surface as shown on the Contract Drawings.
2. The conduit shall be sized to accommodate the addition of future wiring for detectors, vehicular signals, and pedestrian (WALK/DON'T WALK) signal heads.
3. The use of direct lay cable or a combination of conduit and direct lay cable shall not be acceptable.
4. The Contractor shall furnish an "as-built" drawing as per "General Specifications - 4.02b".

DEPARTMENT OF PUBLIC WORKS

HOWARD COUNTY, MARYLAND
DIRECTOR OF PUBLIC WORKS DATE
CHIEF BUREAU OF ENGINEERING DATE
CHIEF ROADS, BRIDGES, STORM DRAINS DIVISION DATE

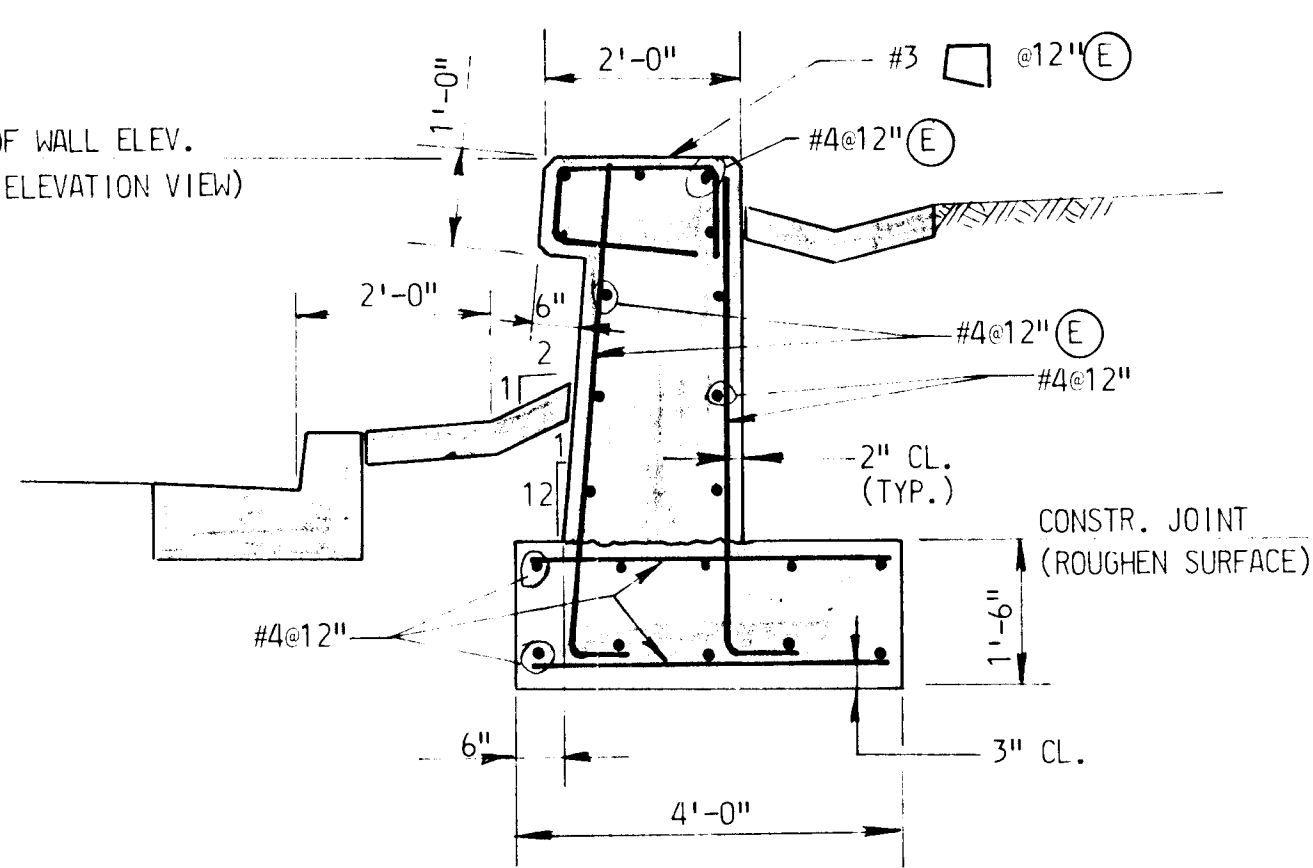
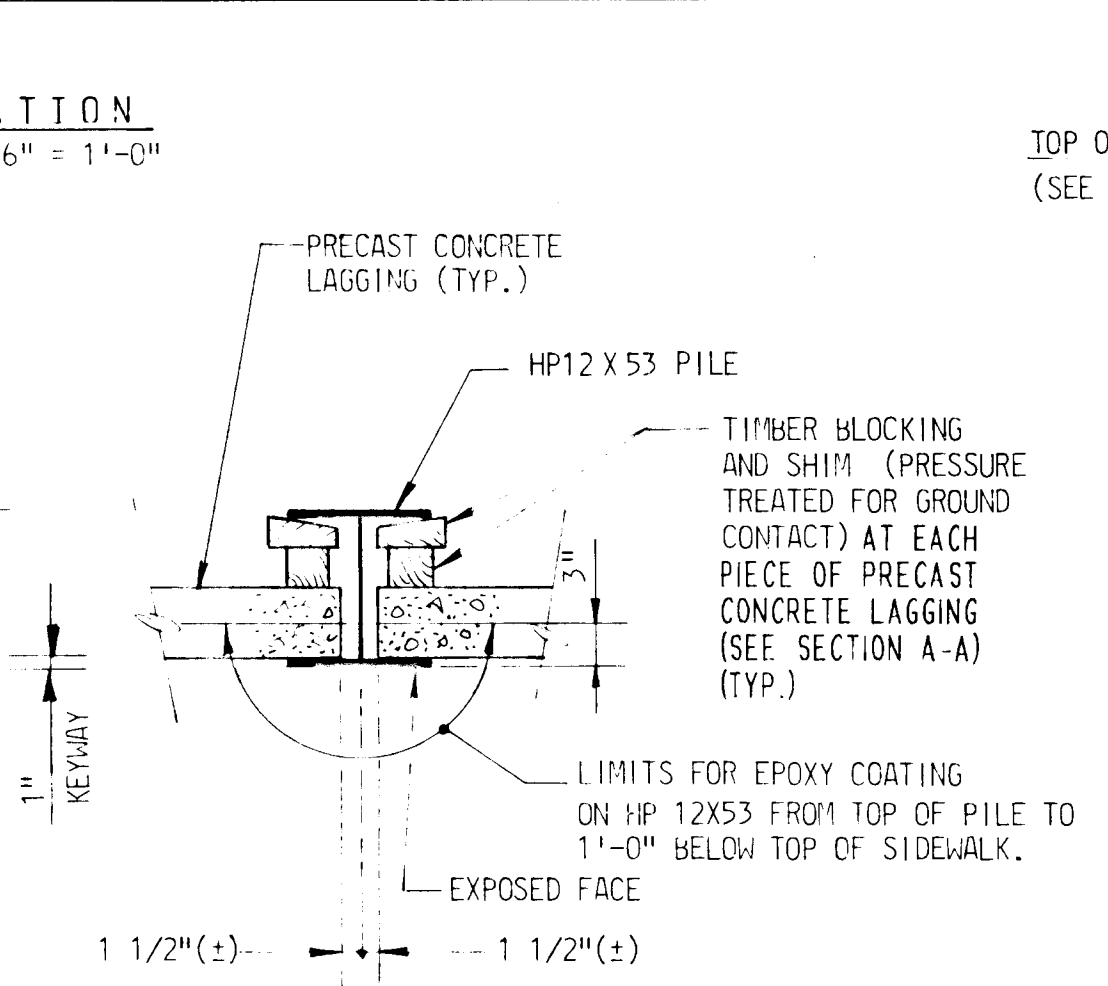
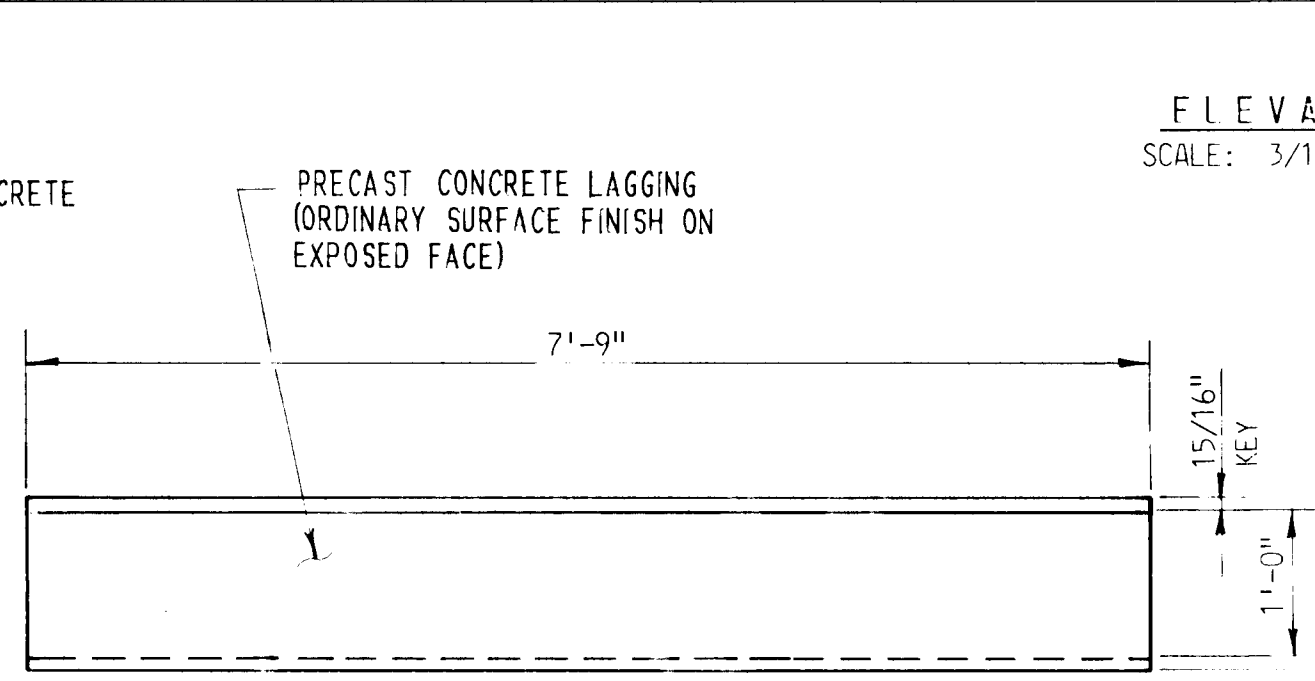
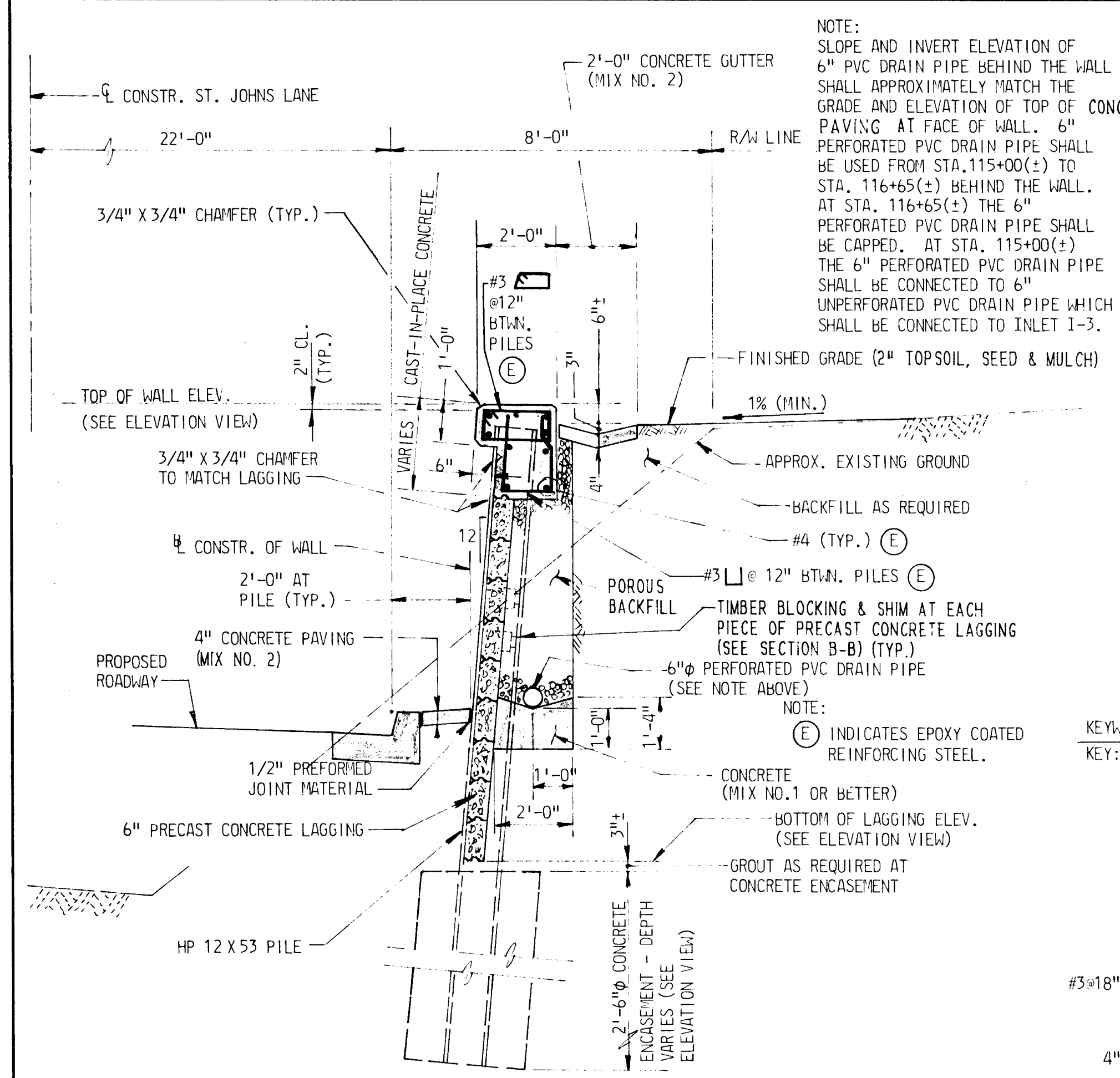
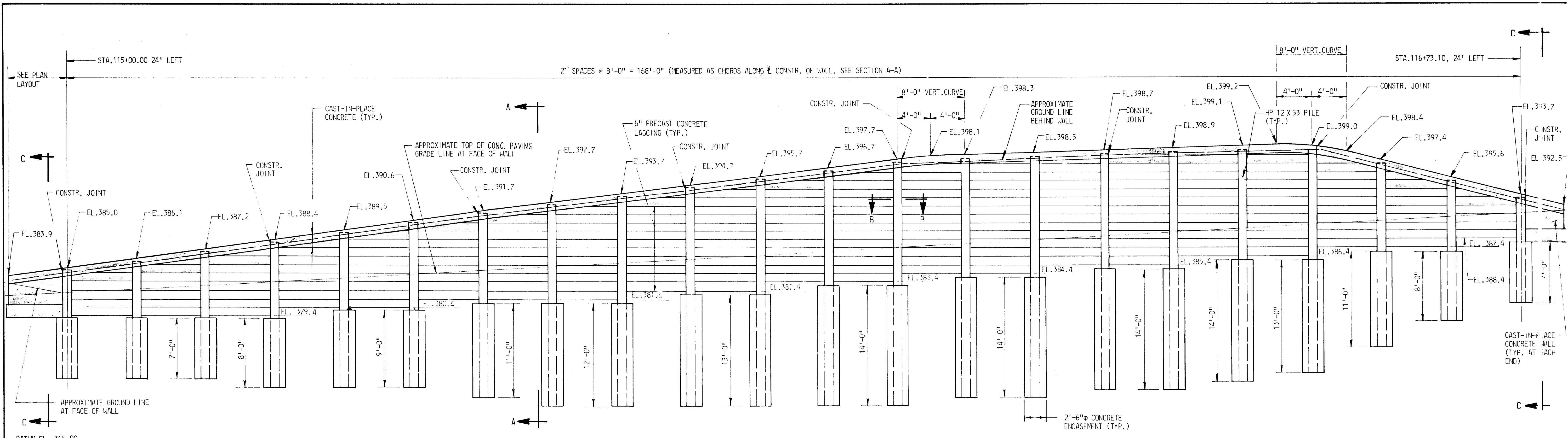
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ENGINEERS • ARCHITECTS • PLANNERS
BALTIMORE, MARYLAND

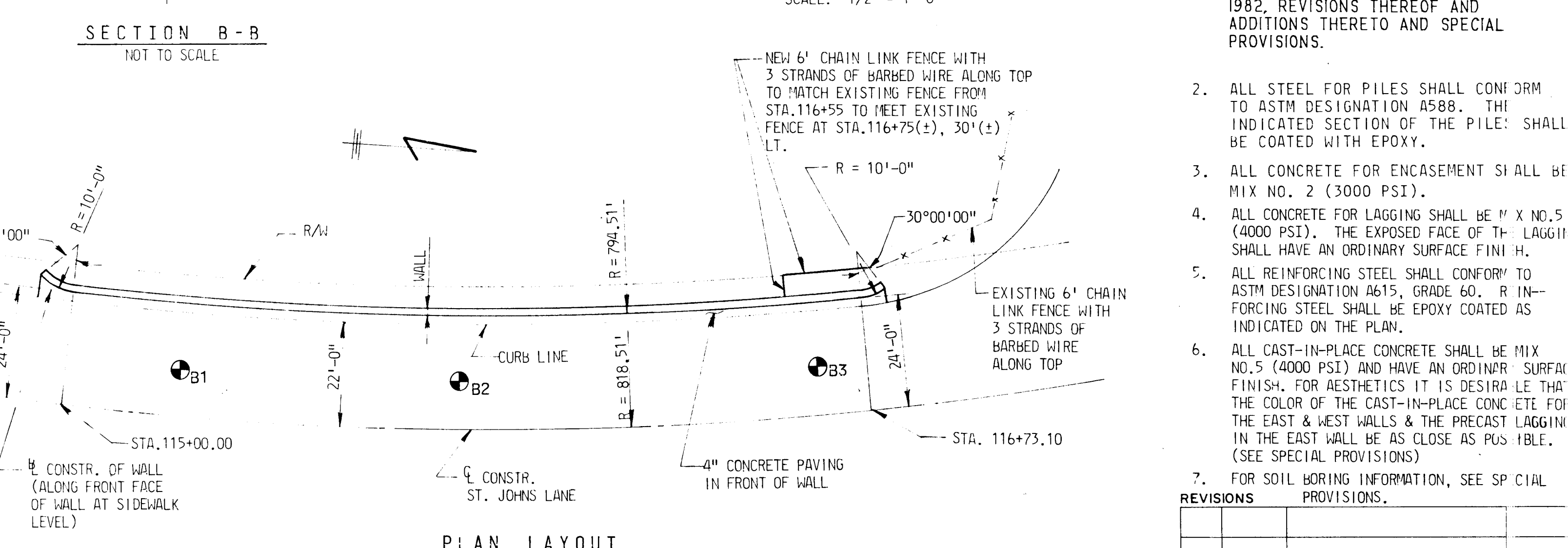
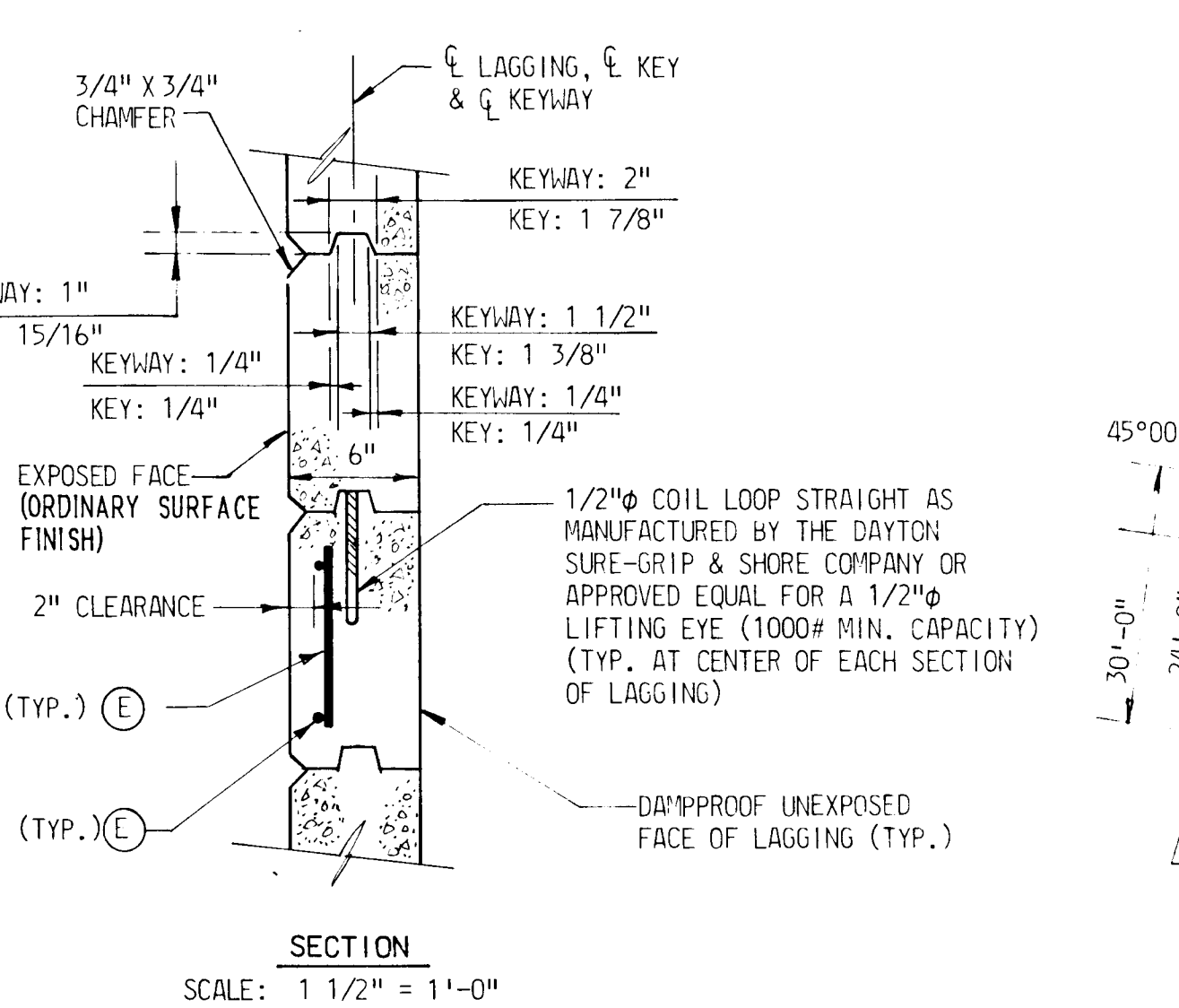
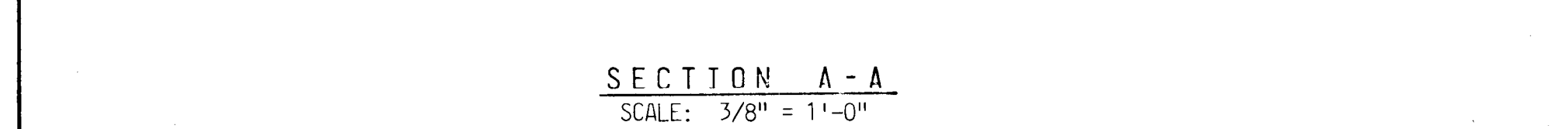
TRAFFIC SIGNAL
ST. JOHNS LANE AND
FREDERICK ROAD

ST. JOHNS LANE
CAPITAL PROJECT NO. J-4056
ELECTION DISTRICT NO. 2
HOWARD COUNTY MARYLAND

Table with columns for REVISIONS, DRAWING NO. OF, SCALE (1" = 30'), and J.W.E. (DESIGNED BY, DRAFTED BY, CHECKED BY).

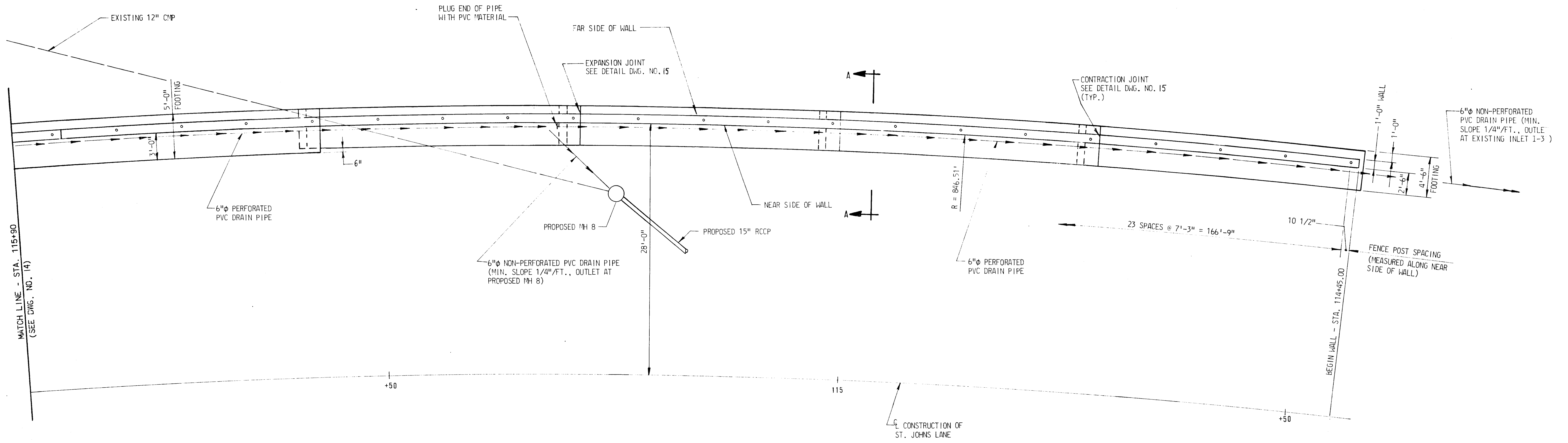


- NOTES:
- REFER TO SECTION A-A FOR ADDITIONAL DETAILS.
 - (E) INDICATES EPOXY COATED REINFORCING STEEL.

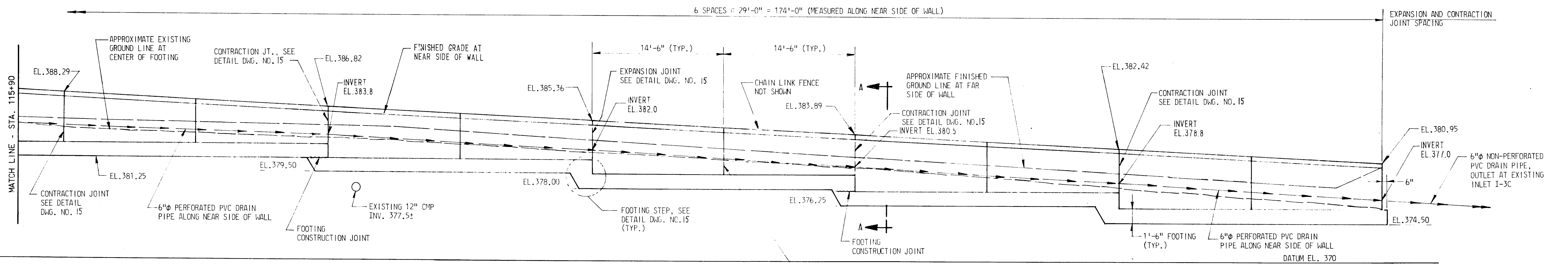


- NOTES:
- ALL MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE SHA SPECIFICATIONS DATED JANUARY 1982, REVISIONS THEREOF AND ADDITIONS THERETO AND SPECIAL PROVISIONS.
 - ALL STEEL FOR PILES SHALL CONFORM TO ASTM DESIGNATION A588. THE INDICATED SECTION OF THE PILE SHALL BE COATED WITH EPOXY.
 - ALL CONCRETE FOR ENCASEMENT SHALL BE MIX NO. 2 (3000 PSI).
 - ALL CONCRETE FOR LAGGING SHALL BE MIX NO. 5 (4000 PSI). THE EXPOSED FACE OF THE LAGGING SHALL HAVE AN ORDINARY SURFACE FINISH.
 - ALL REINFORCING STEEL SHALL CONFORM TO ASTM DESIGNATION A615, GRADE 60. REINFORCING STEEL SHALL BE EPOXY COATED AS INDICATED ON THE PLAN.
 - ALL CAST-IN-PLACE CONCRETE SHALL BE MIX NO. 5 (4000 PSI) AND HAVE AN ORDINARY SURFACE FINISH. FOR AESTHETICS IT IS DESIRABLE THAT THE COLOR OF THE CAST-IN-PLACE CONCRETE FOR THE EAST & WEST WALLS & THE PRECAST LAGGING IN THE EAST WALL BE AS CLOSE AS POSSIBLE. (SEE SPECIAL PROVISIONS)
 - FOR SOIL BORING INFORMATION, SEE SPECIAL PROVISIONS.

PRECAST CONCRETE LAGGING - SECTION



PLAN
SCALE: 3/16" = 1'-0"



ELEVATION
SCALE: 3/16" = 1'-0"

REVISIONS	

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
DIRECTOR OF PUBLIC WORKS DATE 4-1-81
CHIEF ROADS, BRIDGES & STORM DRAINS DIVISION DATE 4/1/81

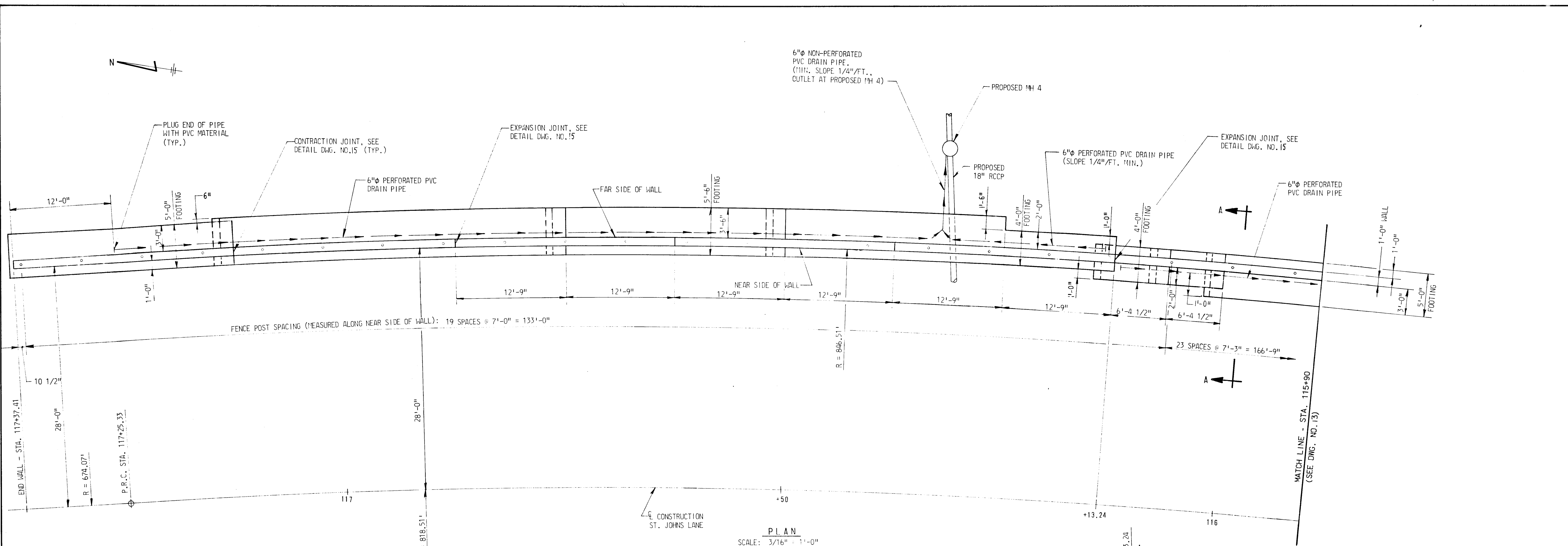
KIDDE CONSULTANTS, INC.
CONSULTING ENGINEERS
BALTIMORE, MARYLAND

Donald W. Walker

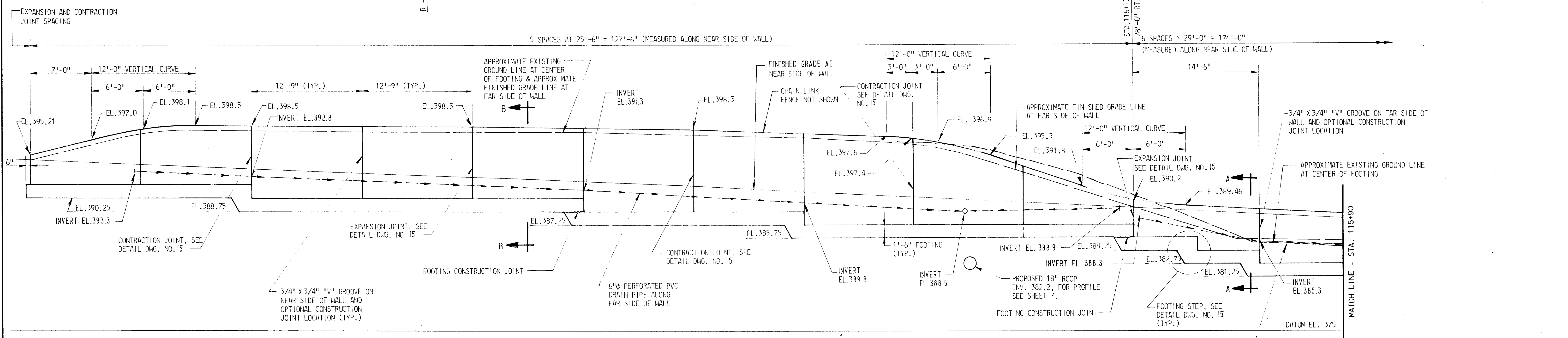
EAST RETAINING WALL
STA. 114+45.00 TO STA. 117+37.41

ST. JOHNS LANE
CAPITAL PROJECT NO. J-4056
ELECTION DISTRICT NO. 2
HOWARD COUNTY, MARYLAND

DRAWING NO. 13 OF 19	SCALE AS SHOWN	DESIGNED BY I.J.M. DRAFTED BY I.J.P. CHECKED BY E.B.V.
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PLAN
SCALE: 3/16" = 1'-0"

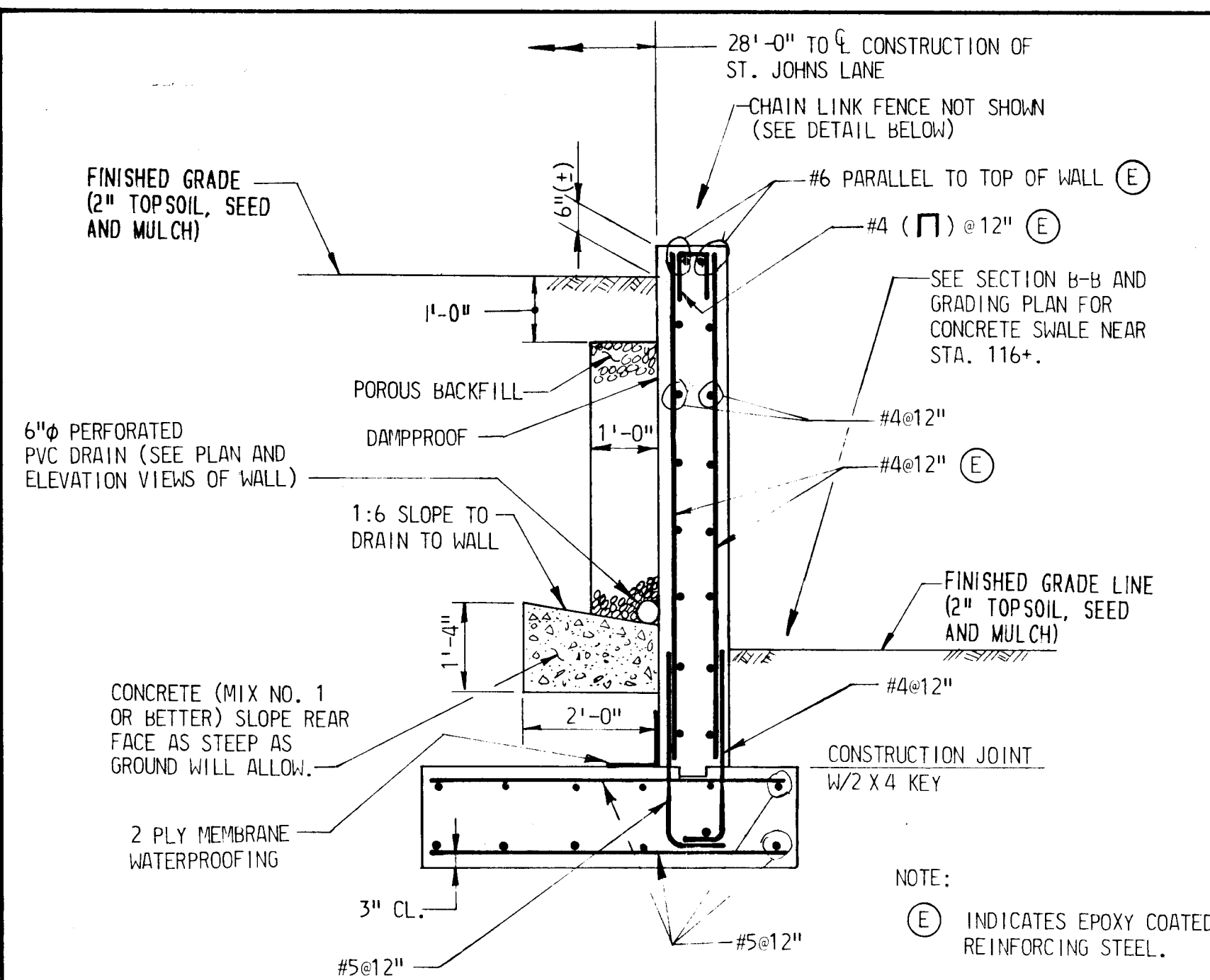


ELEVATION
SCALE: 3/16" = 1'-0"

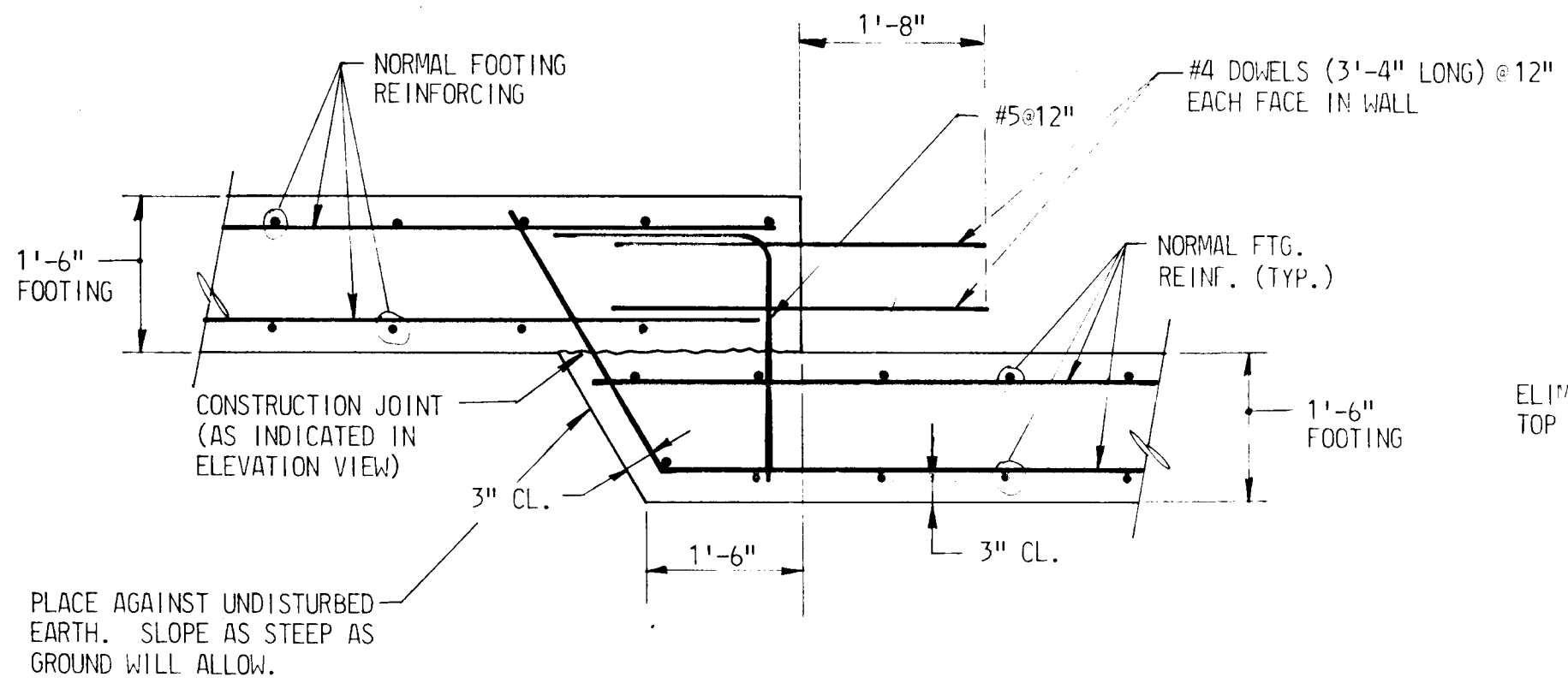
6" PERFORATED PVC DRAIN PIPE ALONG NEAR SIDE OF WALL

REVISIONS	

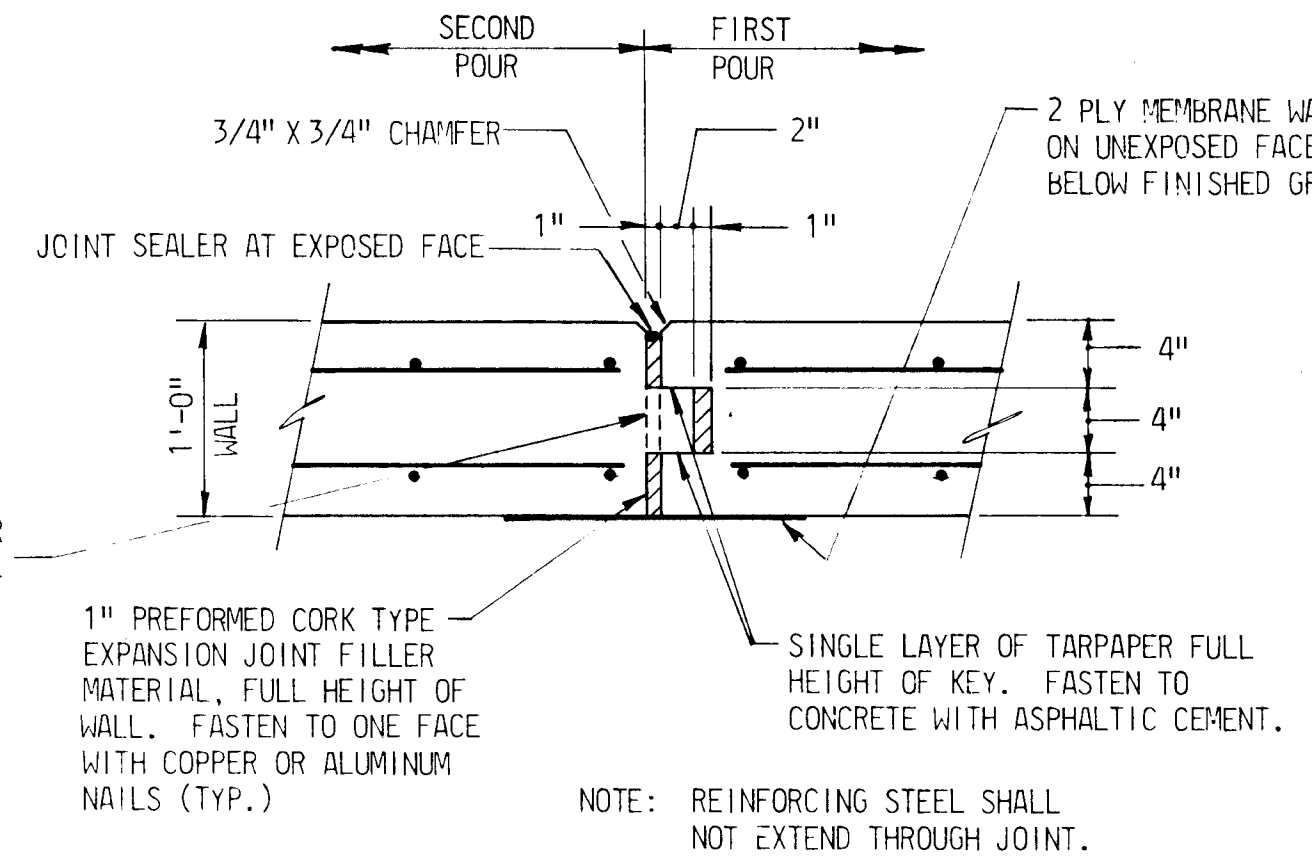
<p>DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND DIRECTOR OF PUBLIC WORKS DATE _____ CHIEF - BUREAU OF ENGINEERING DATE _____ CHIEF ROADS, BRIDGES, STORM DRAINS DIVISION DATE _____</p>	<p>KIDDE CONSULTANTS, INC. CONSULTING ENGINEERS BALTIMORE, MARYLAND</p>	<p>EAST RETAINING WALL STA. 114+45.00 TO STA. 117+37.41</p>	<p>ST. JOHNS LANE CAPITAL PROJECT NO. J-4056 ELECTION DISTRICT NO. 2 HOWARD COUNTY, MARYLAND</p>	<p>DRAWING NO. 14 OF 19 SCALE AS SHOWN DESIGNED BY: E.J.M. L.J.P. DRAFTED BY: CHECKED BY:</p>
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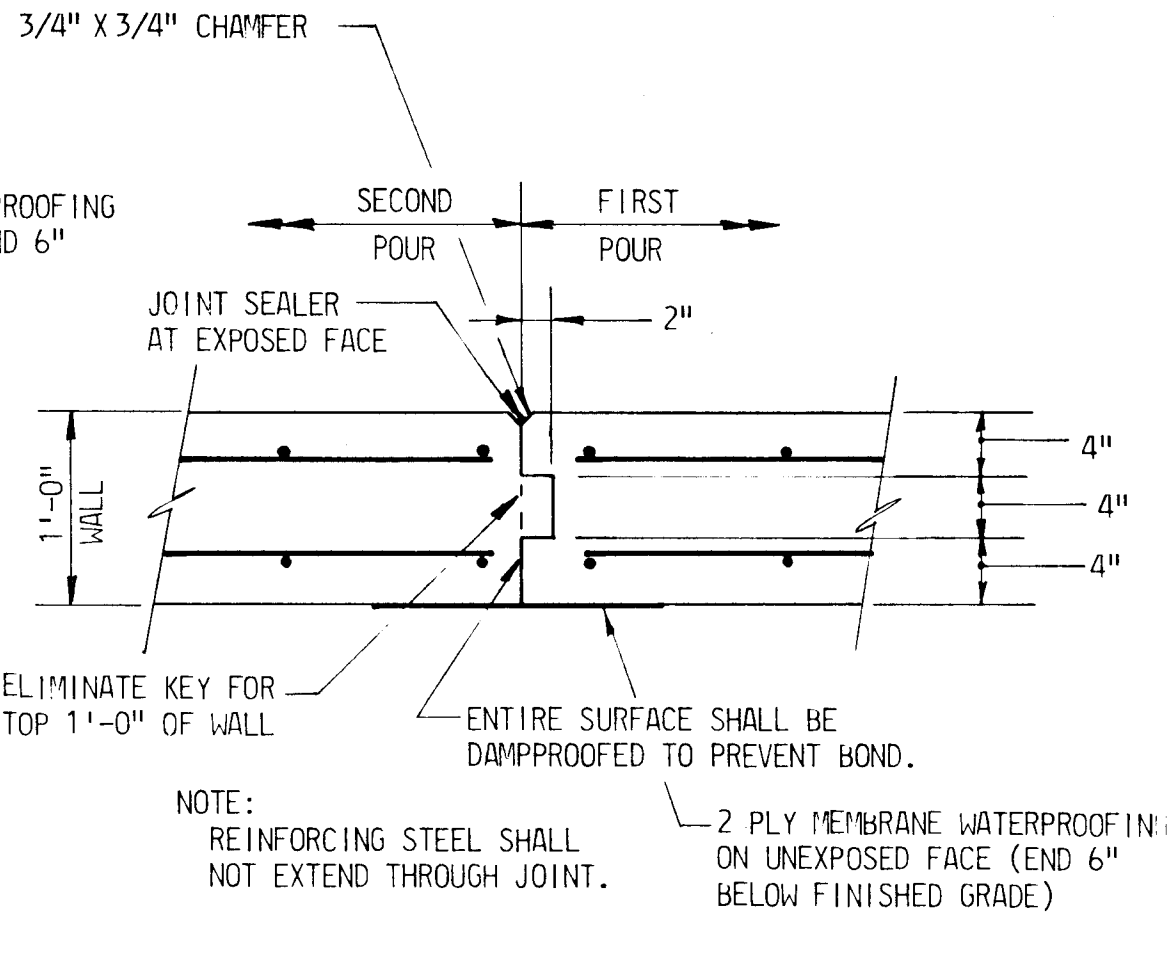
SECTION A-A
(STA. 114+45 TO STA. 116+13.24)
SCALE: 1/2" = 1'-0"



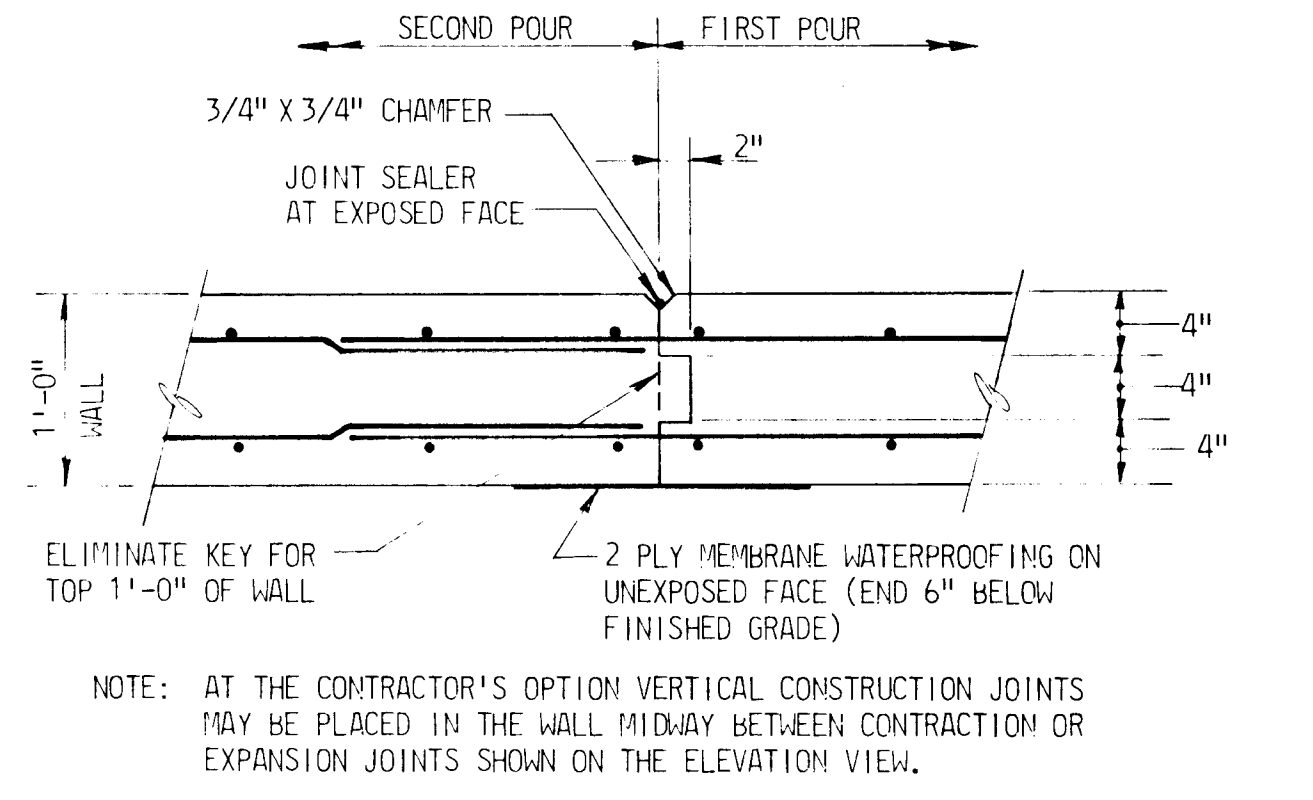
FOOTING STEP DETAIL
SCALE: 3/4" = 1'-0"



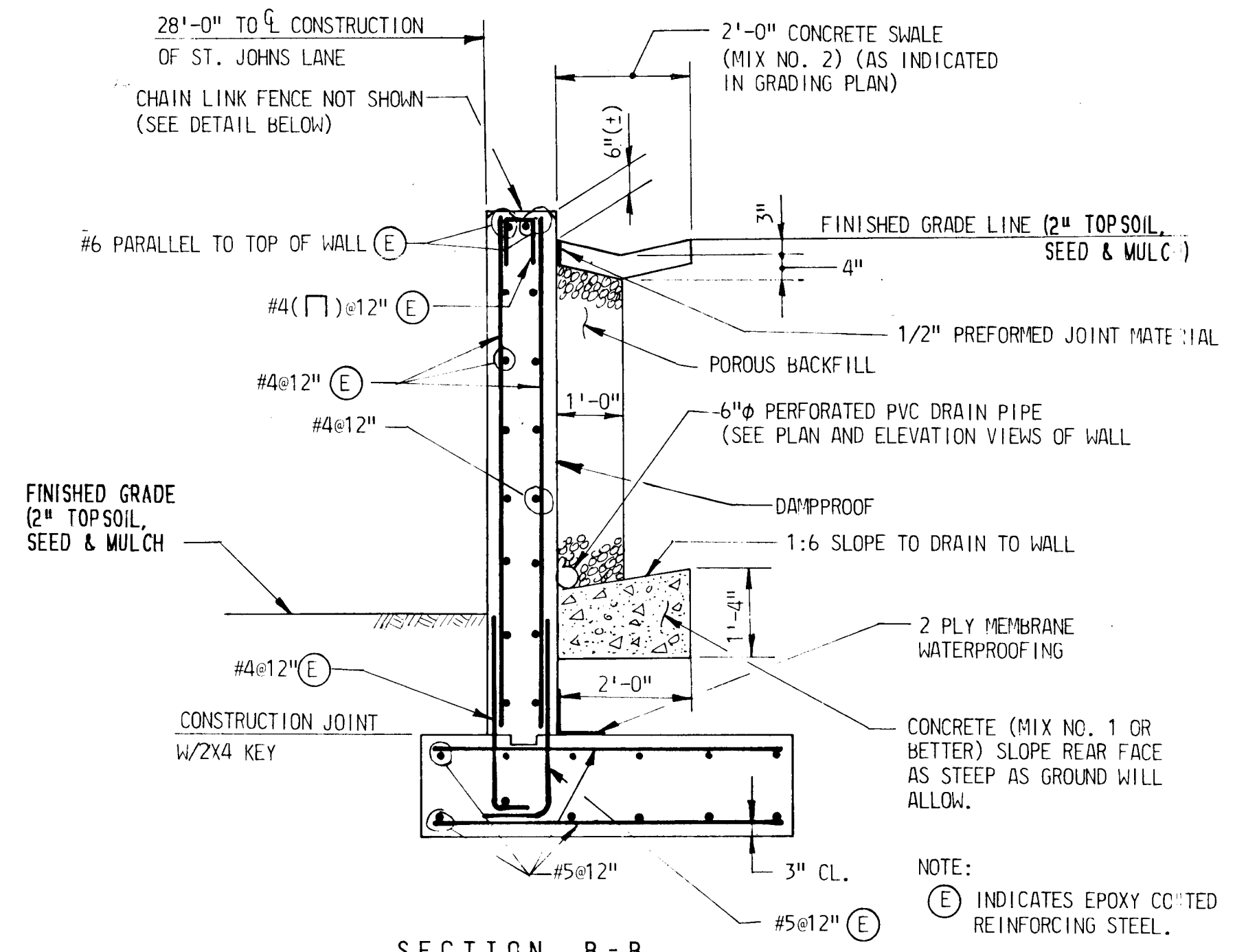
WALL EXPANSION JOINT DETAIL
SCALE: 1" = 1'-0"



WALL CONTRACTION JOINT DETAIL
SCALE: 1" = 1'-0"

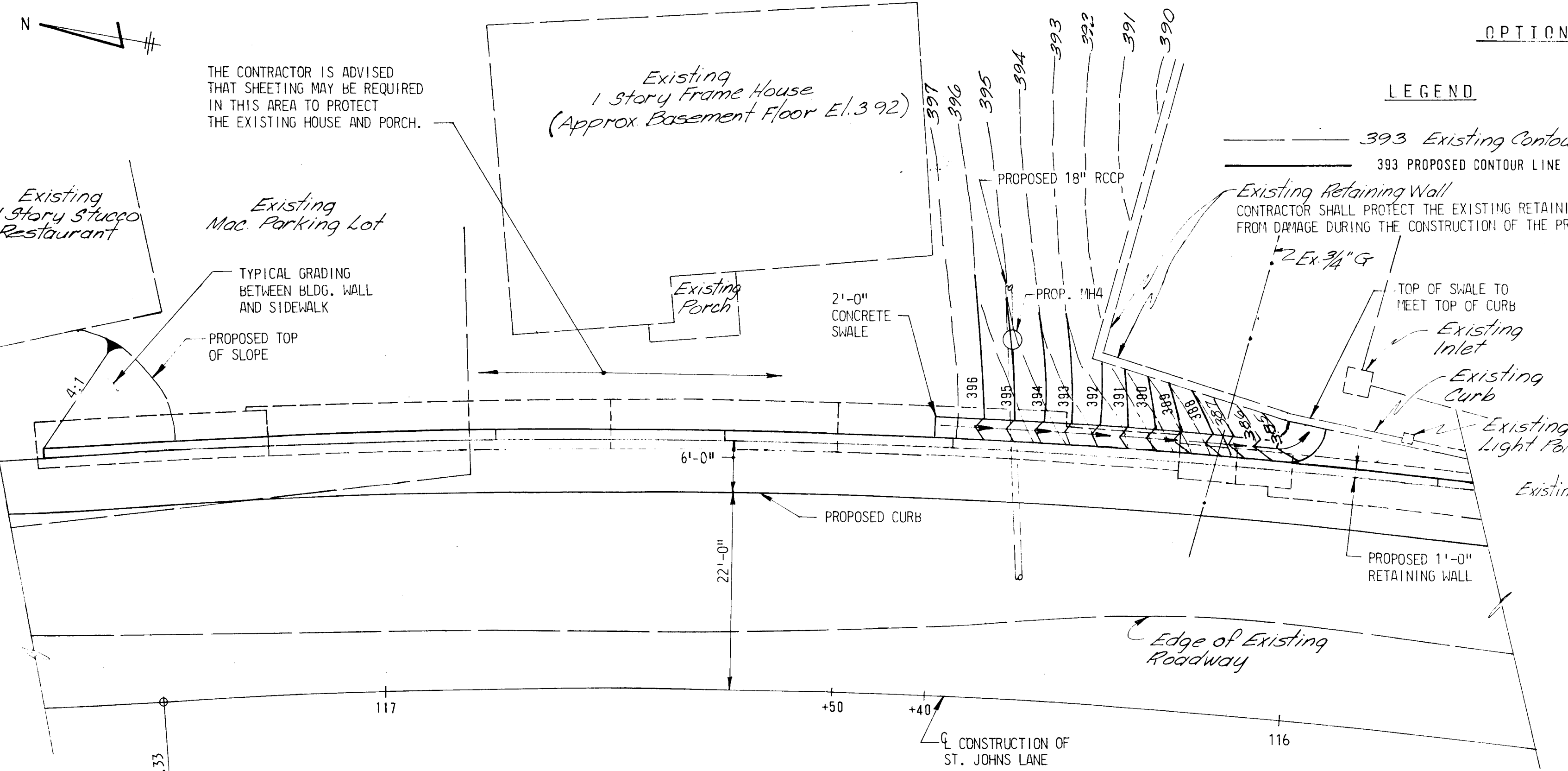


OPTIONAL WALL CONSTRUCTION JOINT DETAIL
SCALE: 1" = 1'-0"



SECTION B-B
(STA. 116+13.24 TO STA. 117+37.41)
SCALE: 1/2" = 1'-0"

- NOTES:
- ALL MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY SPECIFICATIONS, REVISIONS THEREOF AND ADDITIONS THERETO AND SPECIAL PROVISIONS.
 - ALL CONCRETE FOR RETAINING WALLS SHALL BE MIX NO. 3 (3500 PSI). SEE SPECIAL PROVISIONS.
 - ALL REINFORCING STEEL SHALL CONFORM TO ASTM DESIGNATION A615, GRADE 60. ALL SPLICES, NOT SHOWN, SHALL BE LAPPED 40 BAR DIAMETERS. MINIMUM COVER FOR ANY BAR SHALL BE 2" UNLESS OTHERWISE NOTED. REINFORCING STEEL IN THE WALL SHALL BE EPOXY COATED AS INDICATED.
 - GROUT FOR SETTING FENCE POSTS SHALL CONSIST OF ONE PART PORTLAND CEMENT TO THREE PARTS CLEAN, WELL-GRADED SAND AND THE MINIMUM AMOUNT OF WATER TO PRODUCE A WORKABLE MIX.
 - ALL EXPOSED CORNERS OF CONCRETE SHALL BE CHAMFERED WITH 3/4" X 3/4" MILLED CHAMFER STRIPS, EXCEPT ON UNEXPOSED FOOTINGS.
 - ALL KEYS ARE NOMINAL TIMBER SIZES.
 - FOR AESTHETICS IT IS DESIRABLE THAT THE COLOR OF THE CONCRETE FOR THE EAST WALL AND WEST WALL BE AS CLOSE AS POSSIBLE. SEE SPECIAL PROVISIONS.

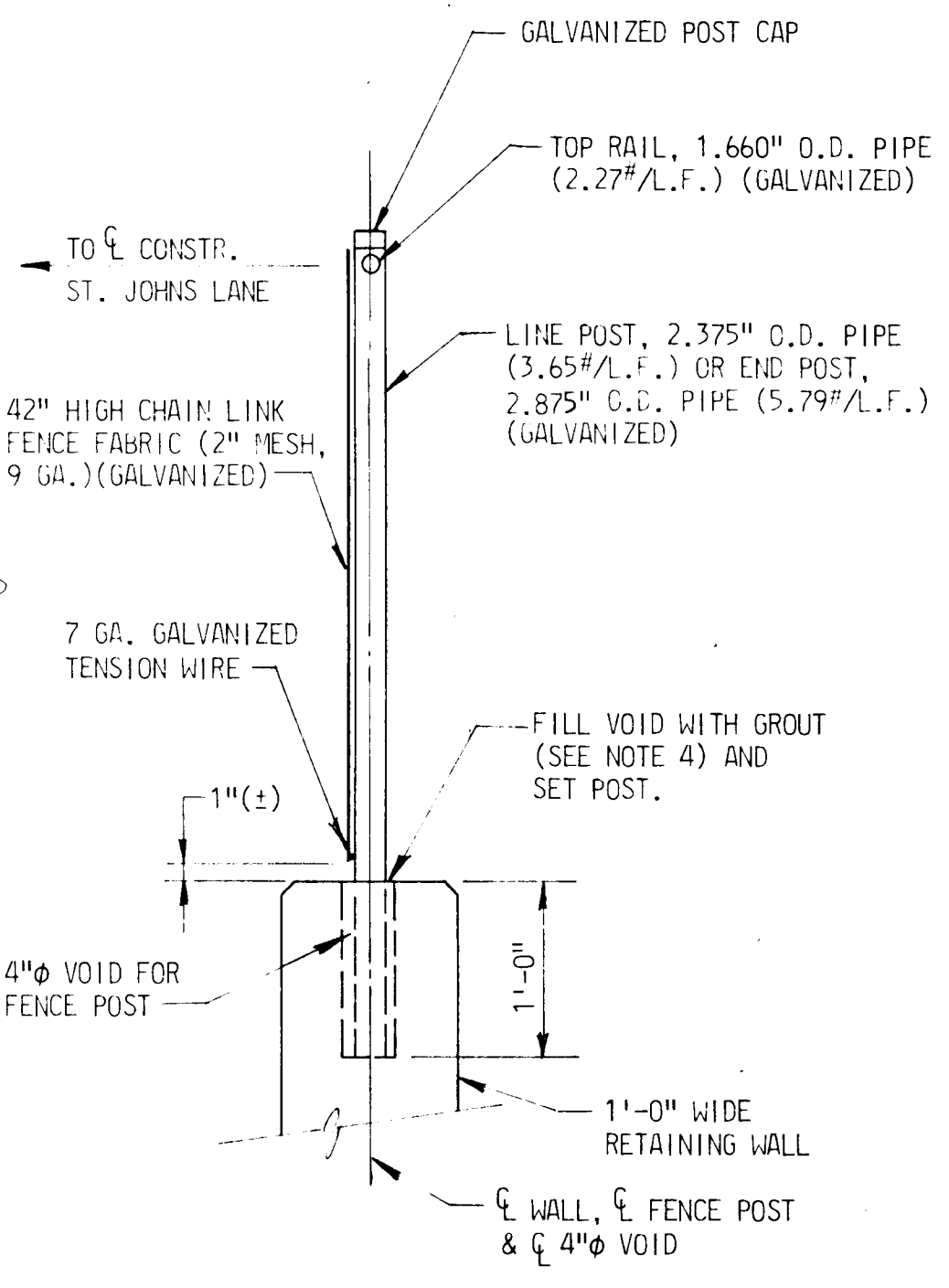


GRADING PLAN
SCALE: 1" = 10'

LEGEND

- 393 Existing Contour Line
- 393 PROPOSED CONTOUR LINE

Existing Retaining Wall
CONTRACTOR SHALL PROTECT THE EXISTING RETAINING WALL FROM DAMAGE DURING THE CONSTRUCTION OF THE PROPOSED WALL.



FENCE POST DETAIL
SCALE: 1" = 1'-0"

REVISIONS	

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
DIRECTOR OF PUBLIC WORKS DATE: 4/13/85
CHIEF - BUREAU OF ENGINEERING DATE: 4/13/85
CHIEF ROADS, BRIDGES, STORM DRAINS DIVISION DATE: 4/13/85

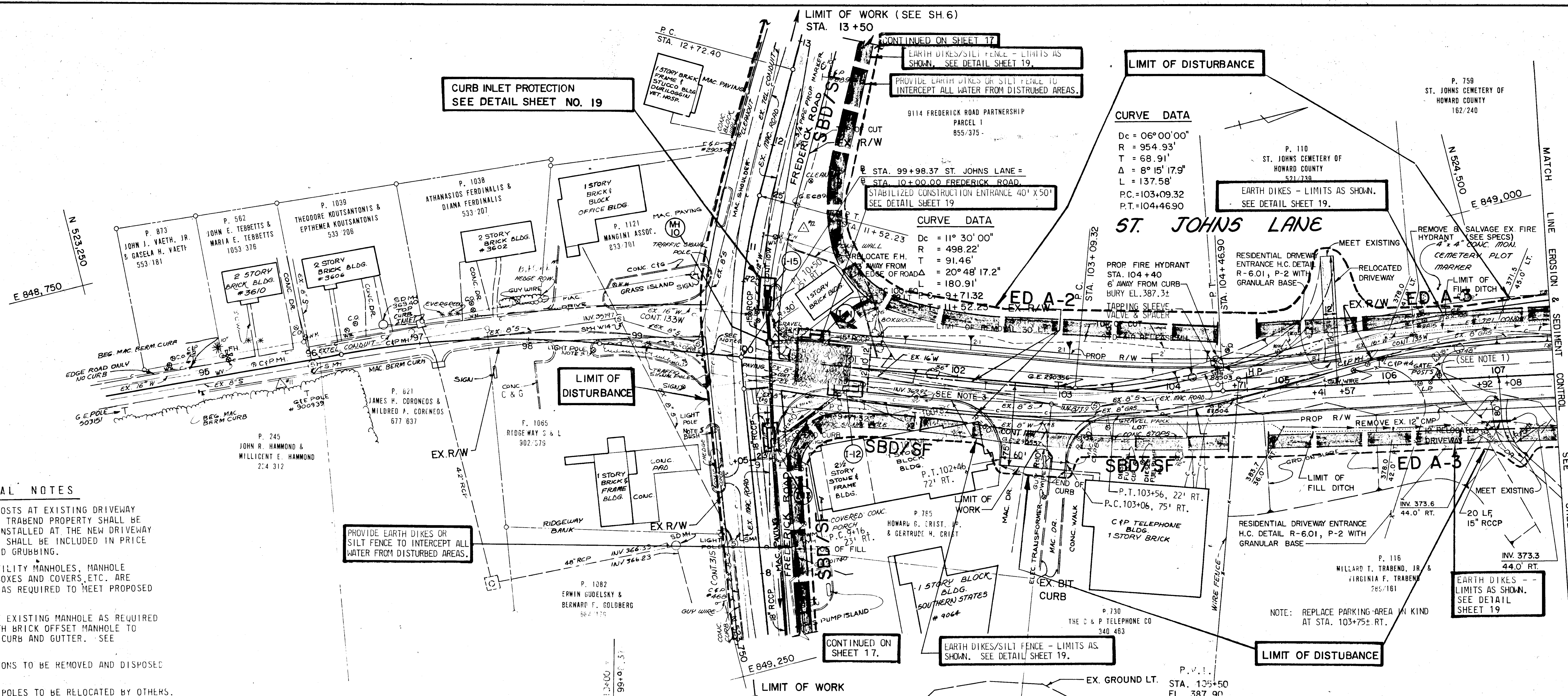
KIDDE CONSULTANTS, INC.
CONSULTING ENGINEERS
BALTIMORE, MARYLAND

EAST RETAINING WALL
STA. 114+45.00 TO STA. 117+37.41

ST. JOHNS LANE
CAPITAL PROJECT NO. J-4056
ELECTION DISTRICT NO. 2
HOWARD COUNTY, MARYLAND

DRAWING NO. 15 OF 19
SCALE AS SHOWN
DESIGNED BY: E.J.M.
DRAWN BY: L.J.P.
CHECKED BY: E.B.W.

01-87253



GENERAL NOTES

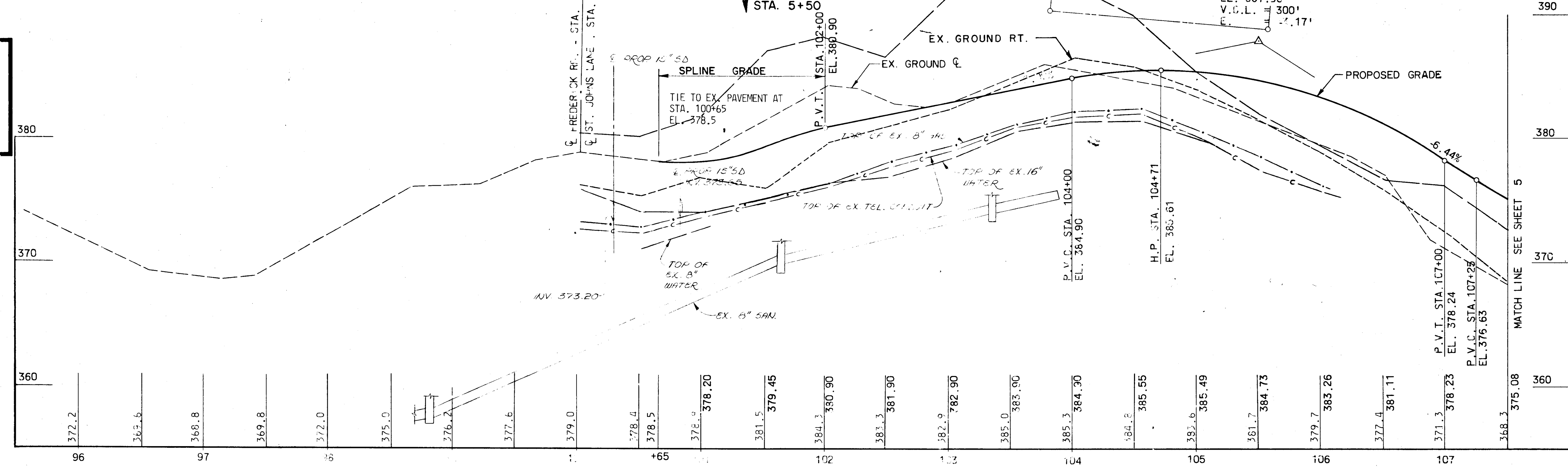
- GATE AND GATE POSTS AT EXISTING DRIVEWAY ENTRANCE TO THE TRABEND PROPERTY SHALL BE RELOCATED AND INSTALLED AT THE NEW DRIVEWAY LOCATION. COST SHALL BE INCLUDED IN PRICE FOR CLEARING AND GRUBBING.
- ALL EXISTING UTILITY MANHOLES, MANHOLE COVERS, VALVE BOXES AND COVERS, ETC. ARE TO BE ADJUSTED AS REQUIRED TO MEET PROPOSED GRADE.
- REMOVE WALLS OF EXISTING MANHOLE AS REQUIRED AND REPLACE WITH BRICK OFFSET MANHOLE TO CLEAR PROPOSED CURB AND GUTTER. SEE DETAIL G.5.04.
- DELINEATOR BUTTONS TO BE REMOVED AND DISPOSED OF AS DIRECTED.
- EXISTING LIGHT POLES TO BE RELOCATED BY OTHERS.

EROSION & SEDIMENT CONTROL NOTES

- STANDARD DRAWING AND SPECIFICATION REFERENCES ARE TAKEN FROM THE "1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL" JOINT MANUAL OF URA, SCS AND SSCC.
- COST OF ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE DEFINED IN THE SPECIFICATIONS.

- REFERENCES:**
- FOR PLAN & PROFILE OF FREDERICK ROAD, SEE SHEET NO. 6.
 - FOR INLET, MANHOLE, AND DRAINAGE STRUCTURE SCHEDULES, SEE SHEET NO. 3.
 - FOR LIMITS OF WORK ON FREDERICK ROAD, SEE SHEET NO. 6.

NOTE:
THIS PLAN TO BE USED FOR
EROSION AND SEDIMENT CONTROL ONLY.



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
DIRECTOR OF PUBLIC WORKS
DATE: 4-1-11
CHIEF - BUREAU OF ENGINEERING
DATE: 4-1-11
CHIEF - ROADS, BRIDGES, STORM DRAINAGE DIVISION

KIDDE CONSULTANTS, INC.
ENGINEERS • ARCHITECTS • PLANNERS
BALTIMORE, MARYLAND
Professional Engineer Seal: David W. McKel

EROSION AND SEDIMENT CONTROL PLAN

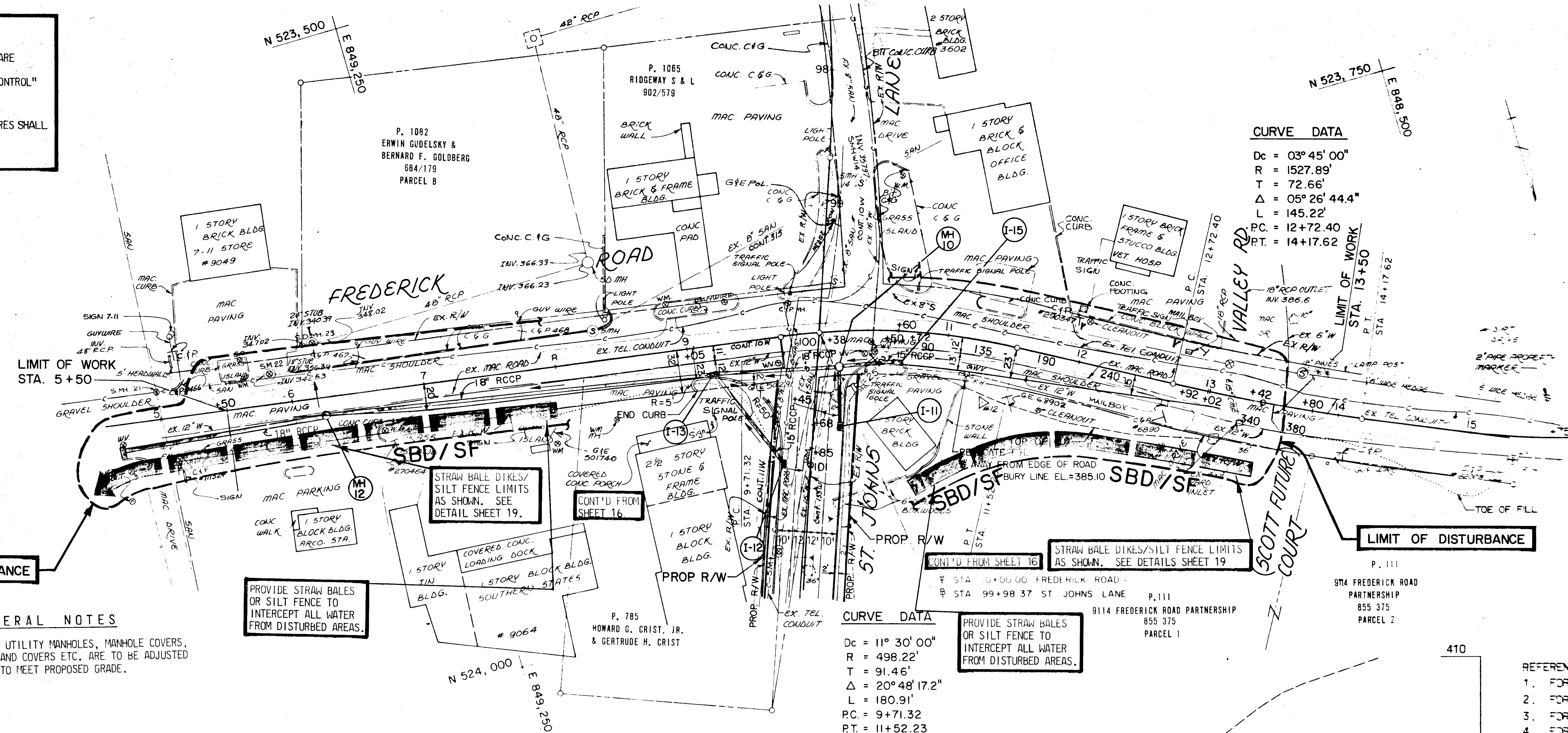
ST. JOHNS LANE
CAPITAL PROJECT NO. J-4056
ELECTION DISTRICT NO. 2
HOWARD COUNTY MARYLAND

DRAWING
NO. 16
OF 19

SCALE
1" = 50'

W.T.P.
DESIGNED BY: V.V.
CHECKED BY: J.K.D.

EROSION AND SEDIMENT CONTROL NOTES:
 1. STANDARD DRAWING AND SPECIFICATION REFERENCES ARE TAKEN FROM THE "1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL" - NRA & SCS.
 2. COST OF ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE AS DEFINED IN THE SPECIFICATIONS.

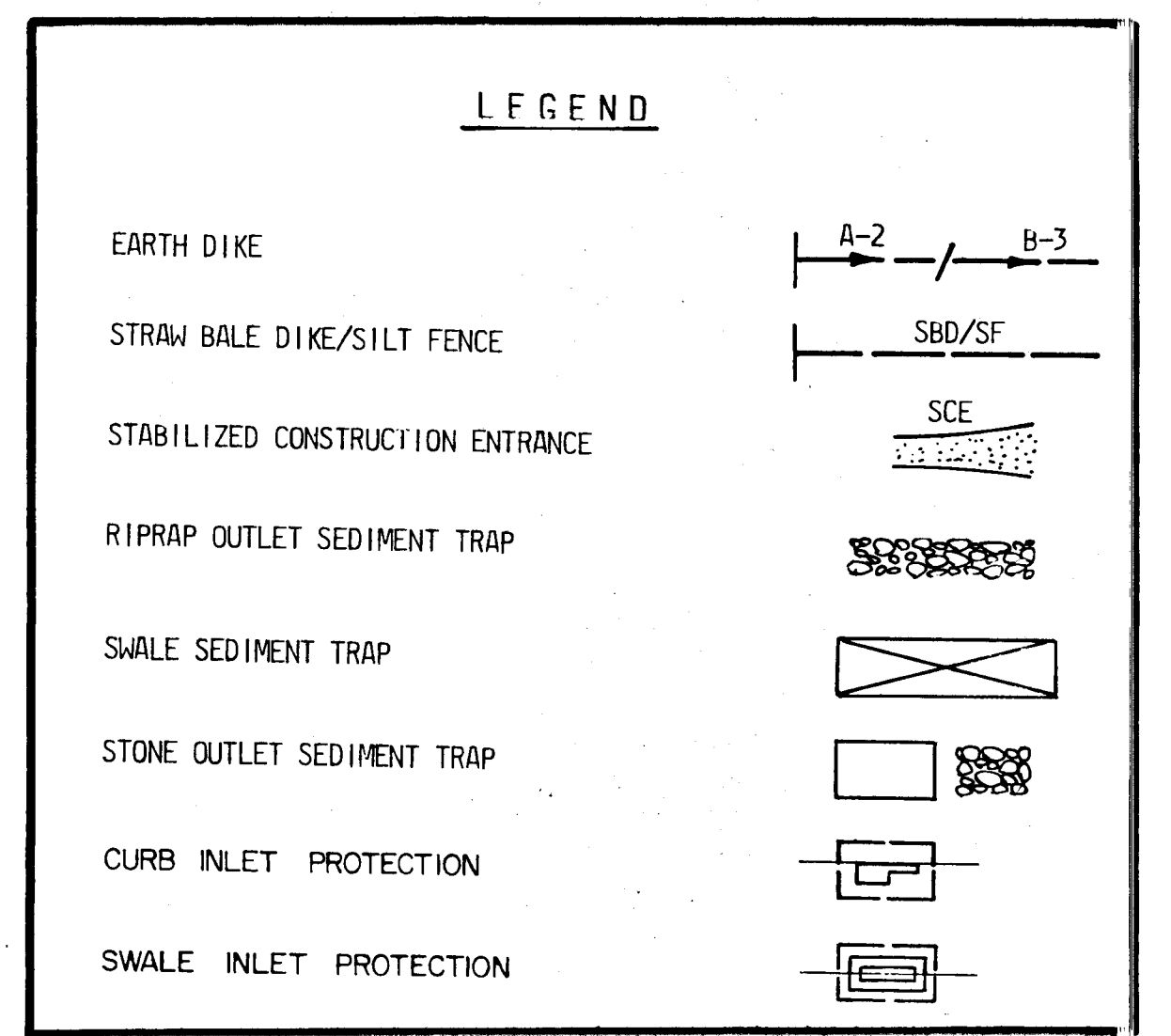
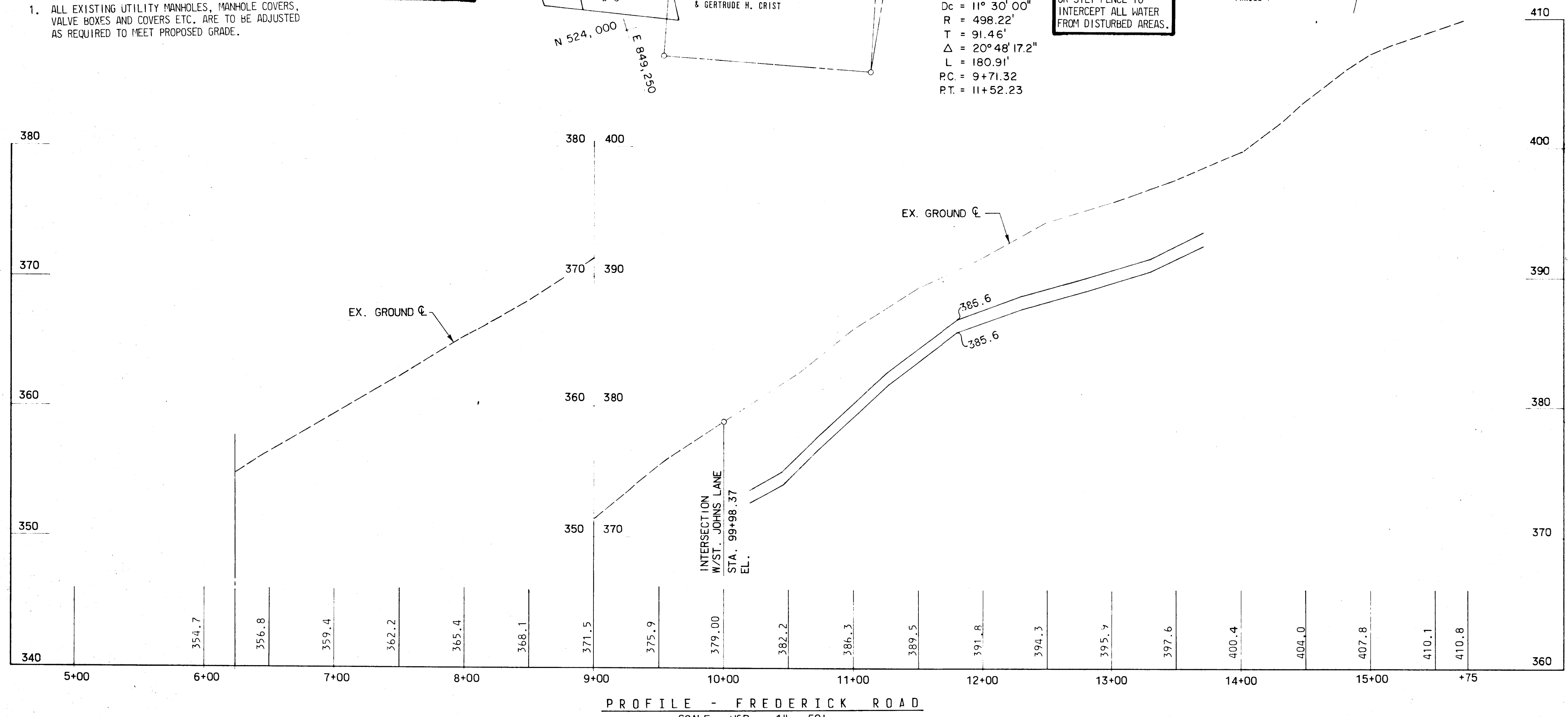


GENERAL NOTES
 1. ALL EXISTING UTILITY MANHOLES, MANHOLE COVERS, VALVE BOXES AND COVERS ETC. ARE TO BE ADJUSTED AS REQUIRED TO MEET PROPOSED GRADE.

PROVIDE STRAW BALES OR SILT FENCE TO INTERCEPT ALL WATER FROM DISTURBED AREAS.

PROVIDE STRAW BALES OR SILT FENCE TO INTERCEPT ALL WATER FROM DISTURBED AREAS.

- REFERENCES:**
- FOR ST. JOHNS LANE, SEE SHEET NO. 4.
 - FOR PROFILES OF 1-11, TO MH-10 AND 1-12 TO 1-13, SEE SHEET NO. 2
 - FOR PROFILE OF MH-12 TO EXISTING STUB PIPE, SEE SHEET NO. 2
 - FOR INLET, MANHOLE, AND DRAINAGE STRUCTURE SCHEDULES SEE SHEET NO. 3.



NOTE: THIS PLAN TO BE USED FOR EROSION AND SEDIMENT CONTROL ONLY.

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 DATE: 11/15/95

KIDDE CONSULTANTS, INC.
 ENGINEERS • ARCHITECTS • PLANNERS
 BALTIMORE, MARYLAND



EROSION AND SEDIMENT CONTROL PLAN

ST. JOHNS LANE
 CAPITAL PROJECT NO. J-4056
 ELECTION DISTRICT NO. 2
 HOWARD COUNTY, MARYLAND

DRAWING NO. 17 OF 19
 SCALE 1" = 50'
 DATE: 11/15/95

- ADJUST SIDEWALK TO GIVE A SIDEWALK CONNECTION TO THE HOUSE AT STA. 111+00± LT.
- ADJUST EXISTING INLETS 1-3B AND 1-3C TO PROPOSED GRADE.
- RELOCATE LAMPPOST AT STA. 115+00± RIGHT.
- FOR STORM DRAIN PROFILES SEE SHEET 7.
- PLUG EXISTING 12" RCCP FROM N & S, SLAB OVER EXISTING INLET AND CONNECT PROP. 18" R.C.C.P.

CURVE DATA

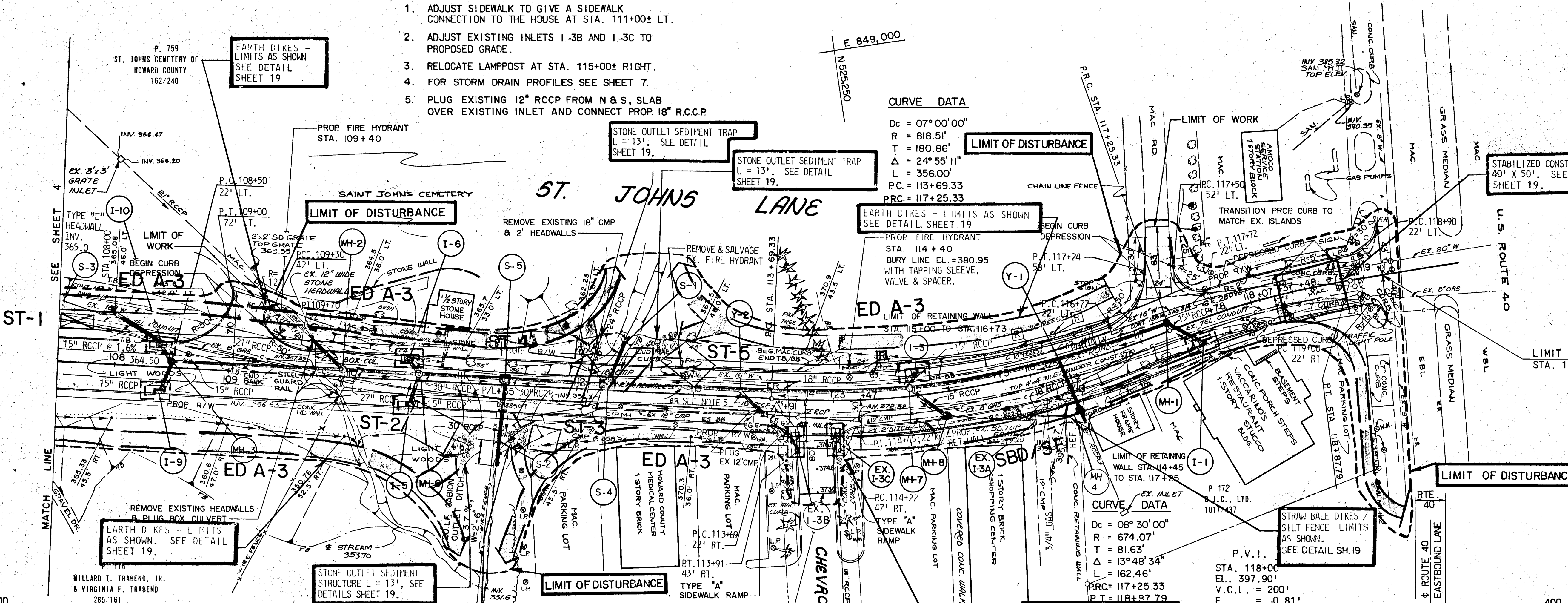
Dc = 07° 00' 00"
 R = 818.51'
 T = 180.86'
 Δ = 24° 55' 11"
 L = 356.00'
 P.C. = 113+69.33
 P.T. = 117+25.33

LIMIT OF DISTURBANCE

EARTH DIKES - LIMITS AS SHOWN SEE DETAIL SHEET 19

PROP. FIRE HYDRANT STA. 114+40 BURY LINE EL. = 360.95 WITH TAPPING SLEEVE, VALVE & SPACER.

STABILIZED CONSTRUCTION ENTRANCE 40' X 50'. SEE DETAIL SHEET 19.



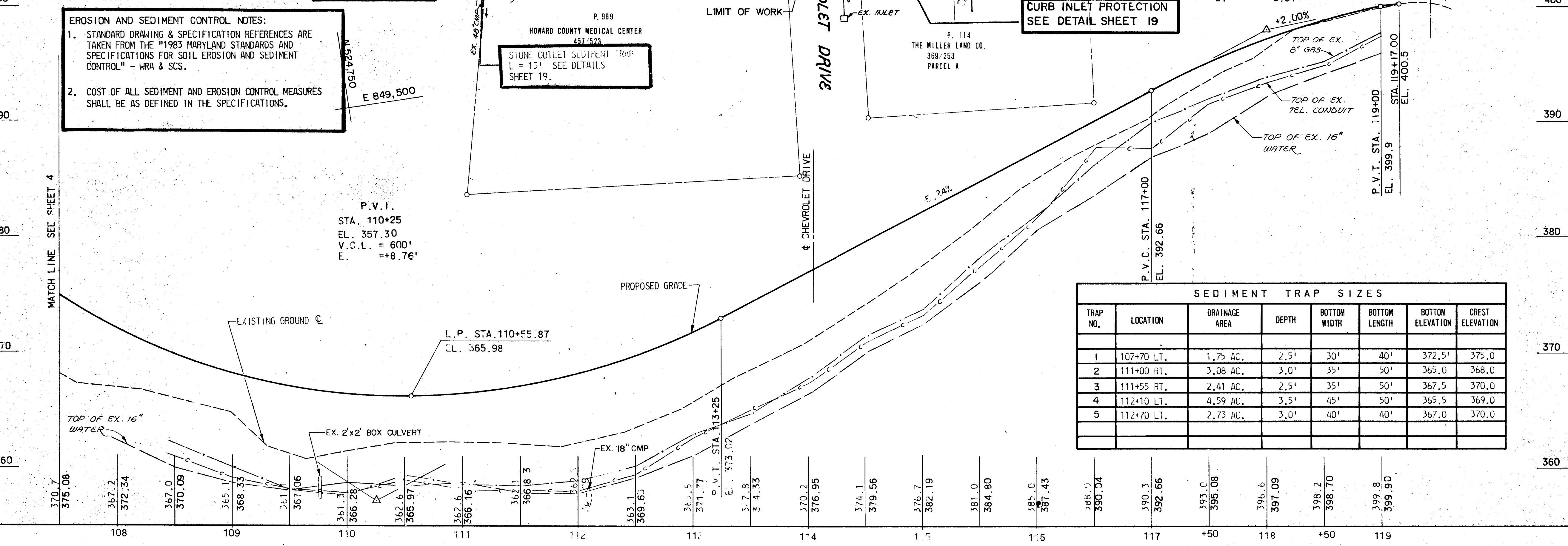
EROSION AND SEDIMENT CONTROL NOTES:

- STANDARD DRAWING & SPECIFICATION REFERENCES ARE TAKEN FROM THE "1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL" - WRA & SCS.
- COST OF ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE AS DEFINED IN THE SPECIFICATIONS.

- REFERENCES:
- FOR PROFILE OF I-10 TO I-9, I-8, TO I-7, TO I-6, TO I-5, S-1 TO I-4, TO MH-3, MH-4 TO OUTLET DITCH, SEE SHEET 7.
 - FOR INLET, MANHOLE, AND DRAINAGE STRUCTURE SCHEDULES, SEE SHEET NO. 3.
 - FOR LOCATION OF PROP. CONNECT THROUGH PROP. RETAINING WALL, SEE SHEET 12.
 - R TREES TO BE REMOVED.

SEDIMENT TRAP SIZES							
TRAP NO.	LOCATION	DRAINAGE AREA	DEPTH	BOTTOM WIDTH	BOTTOM LENGTH	BOTTOM ELEVATION	CREST ELEVATION
1	107+70 LT.	1.75 AC.	2.5'	30'	40'	372.5'	375.0
2	111+00 RT.	3.08 AC.	3.0'	35'	50'	365.0	368.0
3	111+55 RT.	2.41 AC.	2.5'	35'	50'	367.5	370.0
4	112+10 LT.	4.59 AC.	3.5'	45'	50'	365.5	369.0
5	112+70 LT.	2.73 AC.	3.0'	40'	40'	367.0	370.0

NOTE: THIS PLAN TO BE USED FOR EROSION AND SEDIMENT CONTROL ONLY.



PROFILE - ST. JOHNS LANE

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

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 DATE: 4/11/85
 CHIEF - BUREAU OF ENGINEERING
 CHIEF ROADS, BRIDGES, STORM DRAINAGE DIVISION

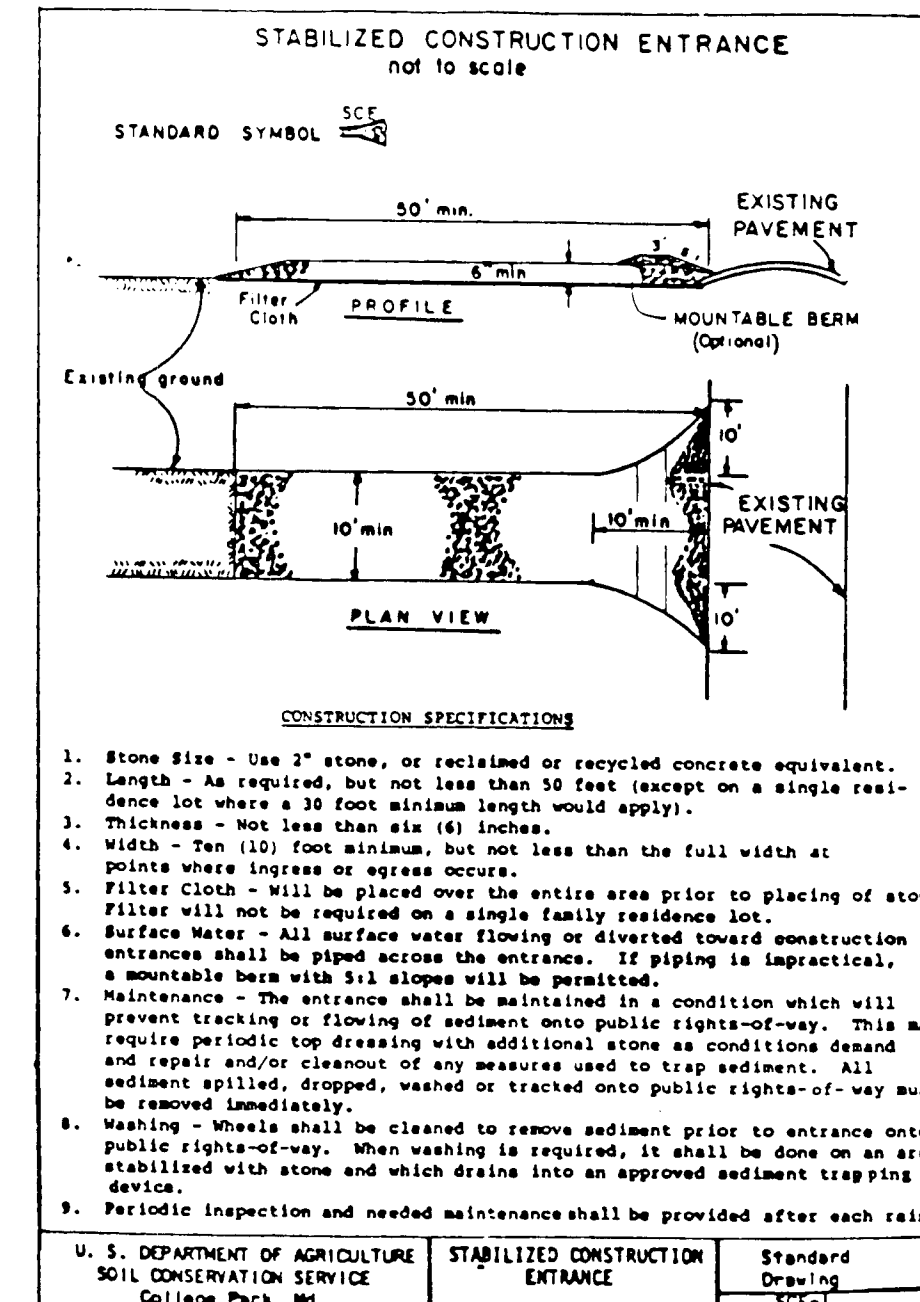
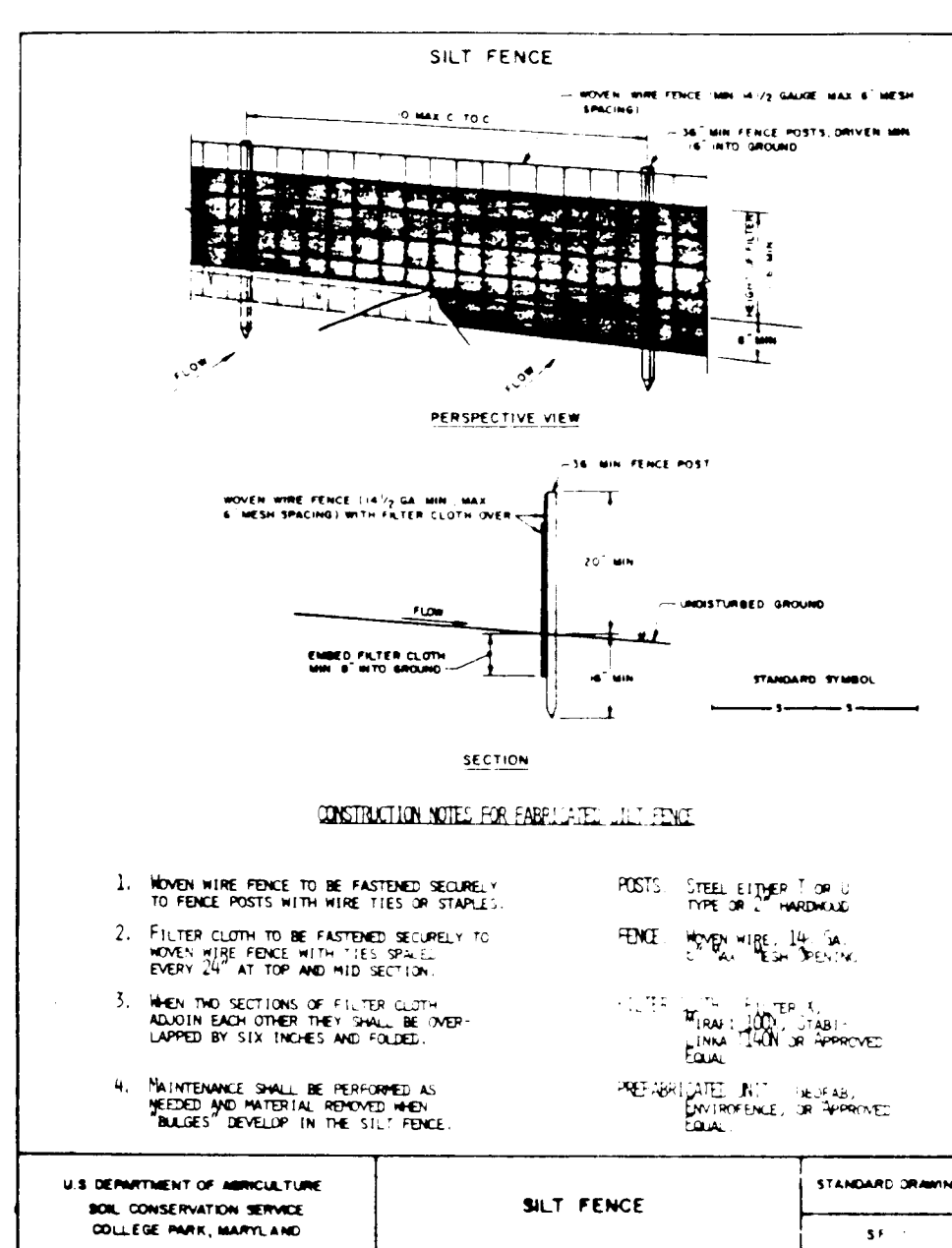
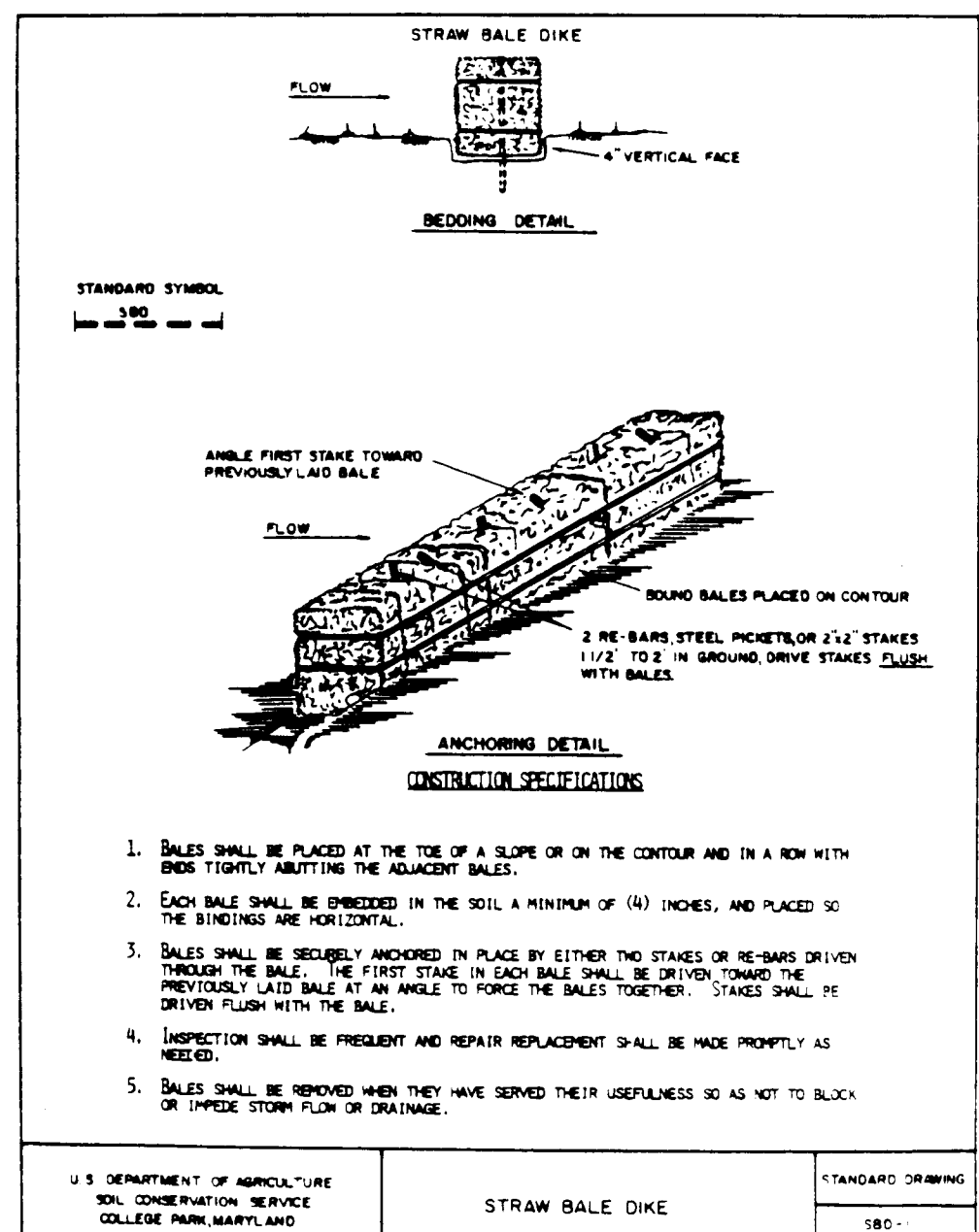
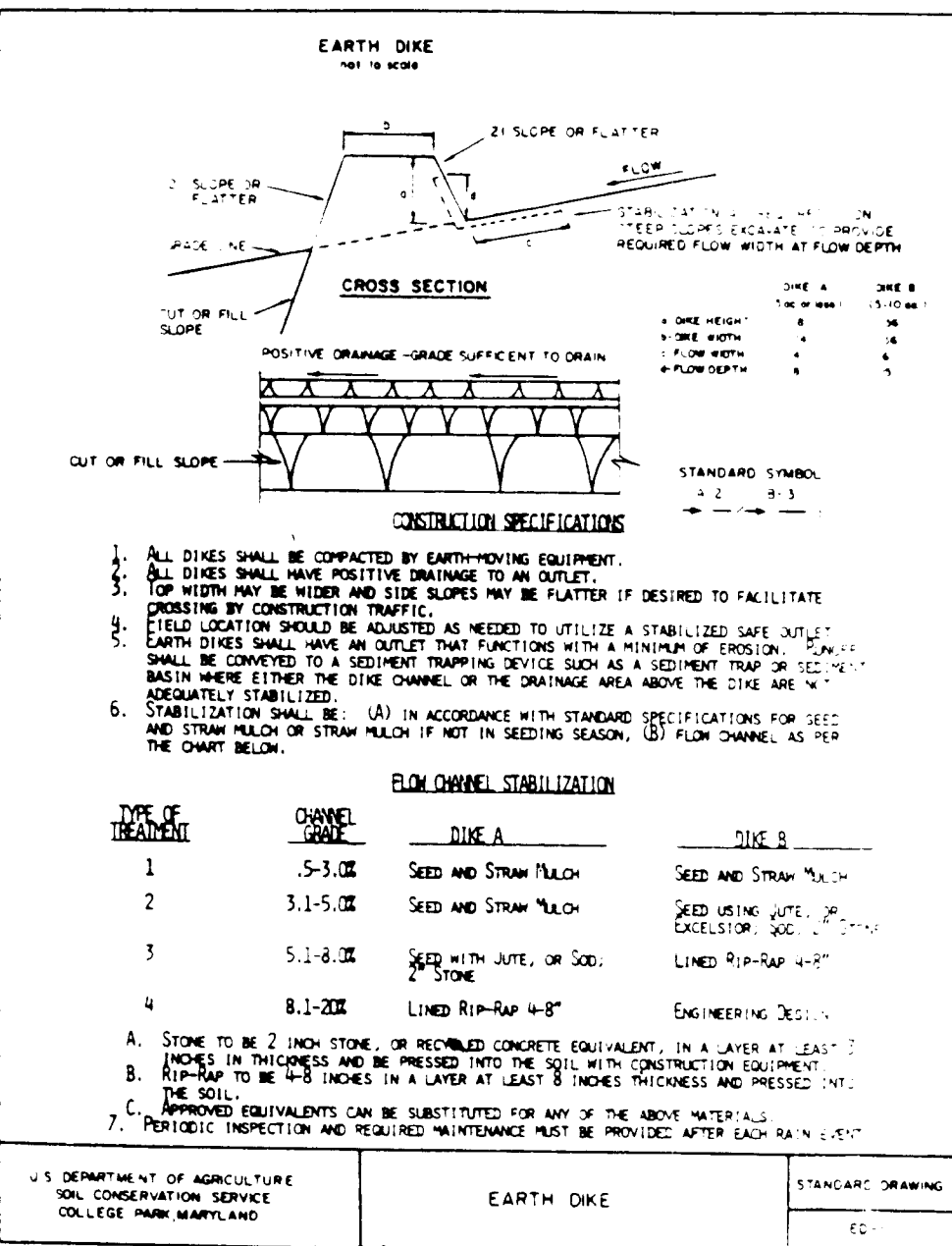
KIDDE CONSULTANTS, INC.
 ENGINEERS • ARCHITECTS • PLANNERS
 BALTIMORE, MARYLAND



EROSION AND SEDIMENT CONTROL PLAN

ST. JOHNS LANE
 CAPITAL PROJECT NO. J-4056
 ELECTION DISTRICT NO. 2
 HOWARD COUNTY MARYLAND

DRAWING NO. 18 OF 19
 SCALE 1" = 50'
 W.T.P. DESIGNED BY: V.V.
 RAFTED BY: J.K.D.
 CHECKED BY:



SEDIMENT CONTROL NOTES

- 1) A minimum of 24 hours notice must be given to the Howard County Office of Inspections and Permits prior to the start of any construction (992-2437)
- 2) All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
- 3) Following initial soil disturbance or redisturbance, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1, b) 14 days as to all other disturbed or graded areas on the project site.
- 4) All sediment traps/basins shown must be fenced and warning signs posted around their perimeter in accordance with Vol. 1, Chapter 12, of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
- 5) All disturbed areas must be stabilized within the time period specified above in accordance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seedings (Sec. 51) and (Sec. 54), temporary seeding (Sec. 50) and mulching (Sec. 52). Temporary stabilization with mulch alone can only be done when recommended seedings do not allow for proper germination and establishment of grasses.
- 6) All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector.
- 7) Site Analysis:

Total Area of Site	_____ acres
Area Disturbed	_____ acres
Area to be roofed or paved	_____ acres
Area to be vegetatively stabilized	_____ acres
Total Cut	_____ Cu. yds
Total Fill	_____ Cu. yds
Offsite waste/borrow area location	_____
- 8) Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
- 9) Additional sediment controls must be provided, if deemed necessary by the Howard County NPV sediment control inspector.

PERMANENT SEEDING NOTES

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

Seedbed Preparation: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding.

- Soil Amendments:** In lieu of soil test recommendations, use one of the following schedule:
- 1) Preferred - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sq ft) and 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq ft) before seeding. Harrow or disc into upper three inches of soil. At time of seeding, apply 400 lbs per acre 30-0-0 ureaform fertilizer (9 lbs/1000 sq ft).
 - 2) Acceptable - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sq ft) and 1000 lbs per acre 10-10-10 fertilizer (23 lbs/1000 sq ft) before seeding. Harrow or disc into upper three inches of soil.

Seeding - For the periods March 1 thru April 30, and August 1 thru October 15, seed with 60 lbs per acre (1.4 lbs/1000 sq ft) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 60 lbs Kentucky 31 Tall Fescue per acre and 2 lbs per acre (.05 lbs/1000 sq ft) of weeping lovegrass. During the period of October 16 thru February 28, protect site by: Option (1) 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring. Option (2) Use sod. Option (3) Seed with 60 lbs per acre Kentucky 31 Tall Fescue and mulch with 2 tons/acre well anchored straw.

Mulching - Apply 1 1/2 to 2 tons per acre (70 to 90 lbs/1000 sq ft) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using small anchoring tool or 218 gallons per acre (5 gal/1000 sq ft) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000 sq ft) for anchoring.

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

TEMPORARY SEEDING NOTES

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

Seedbed Preparation: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding.

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

Seeding: For periods March 1 thru April 30 and from August 15 thru November 15, seed with 2 1/2 bushel per acre of annual rye (3.2 lbs/1000 sq ft). For the period May 1 thru August 14, seed with 3 lbs per acre of weeping lovegrass (.07 lbs/1000 sq ft). For the period November 16 thru February 28, protect site by applying 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring, or use sod.

Mulching: Apply 1 1/2 to 2 tons per acre (70 to 90 lbs/1000 sq ft) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using small anchoring tool or 218 gal per acre (5 gal/1000 sq ft) of emulsified asphalt on flat areas. On slopes, 8 ft or higher, use 348 gal per acre (8 gal/1000 sq ft) for anchoring.

Refer to the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for rate and methods not covered.

