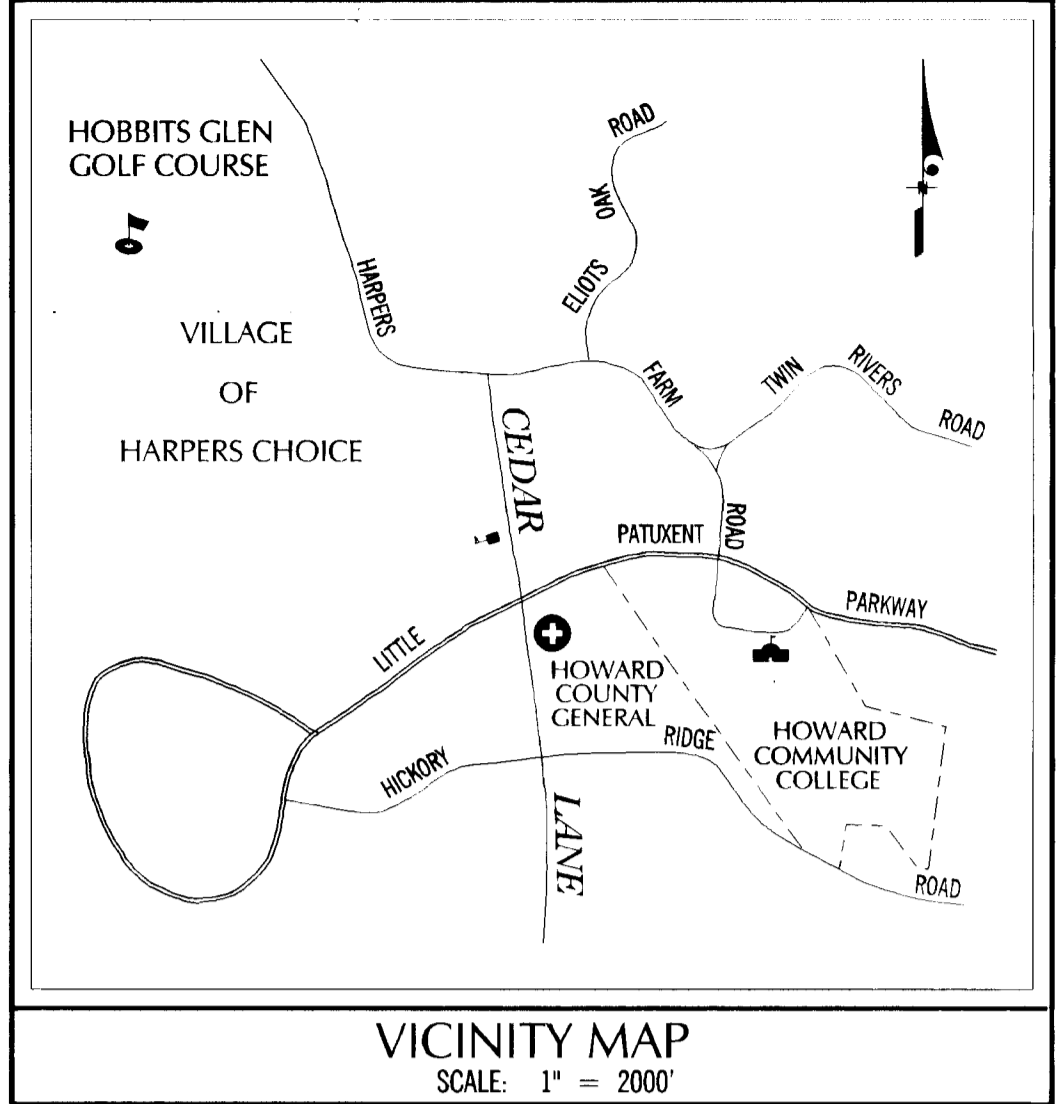
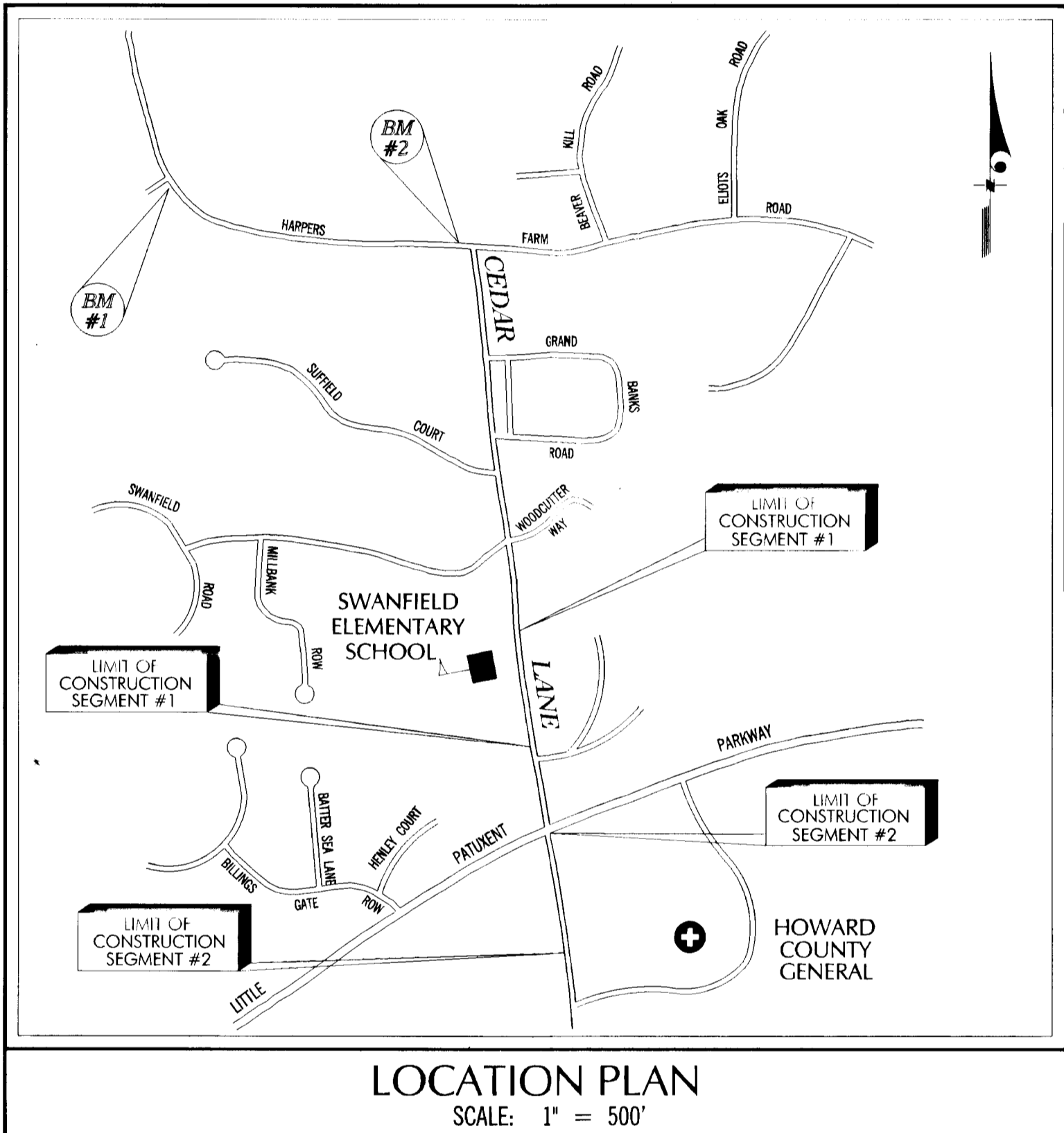


CEDAR LANE ROAD IMPROVEMENTS CAPITAL PROJECT J-4120 HOWARD COUNTY, MARYLAND



GENERAL NOTES

- All construction shall be in accordance with the latest standards and specifications of Howard County plus MSHA standards and specifications, if applicable.
- The Contractor shall notify the Department of Public Works/Bureau of Construction Inspection at (301) 313-1870 at least five (5) working days prior to the start of work.
- The Contractor shall notify "MISS UTILITY" at 1-800-257-7777 at least 48 hours prior to the start of any excavation work.
- Traffic control devices, markings, and signing shall be in accordance with the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD). All street and regulatory signs shall be placed prior to the placement of any asphalt.
- Horizontal and vertical datums based on Howard County recovery cards 2739002 and 2739005.
- Topographic survey performed by Greenhorne & O'Mara, Inc., February 1992, 2' contour interval.



SHEET INDEX

SHEET NO.	DESCRIPTION
1	COVER SHEET
2	ROAD IMPROVEMENT PLAN - SEGMENT 1
3	ROAD IMPROVEMENT PLAN - SEGMENT 2
4	SEDIMENT CONTROL PLAN
5	SEDIMENT CONTROL DETAILS
6	SIGNAGE AND MARKING PLAN - SEGMENT 1
7	SIGNAGE AND MARKING PLAN - SEGMENT 2
8	TRAFFIC CONTROL PLAN
9	CROSS SECTIONS
10	CROSS SECTIONS
11	CROSS SECTIONS
12	CROSS SECTIONS
13	CROSS SECTIONS
14	CROSS SECTIONS
15	CROSS SECTIONS
16	CROSS SECTIONS
17	CROSS SECTIONS
18	CROSS SECTIONS

DEVELOPER'S CERTIFICATION

"I/We certify that all development and construction will be done according to this plan, and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of 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."

Signature of Developer: *Ronald G. Lefson* Date: *8/20/95*
 RONALD G. LEFSON, HOWARD COUNTY D.P.W.

ENGINEER'S CERTIFICATION

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

Signature of Engineer: *Jeffrey B. Retterer* Date: *8-21-95*
 JEFFREY B. RETTERER, PE#13677-13716
 GREENHORNE & O'MARA, INC.
 113 West Road, Suite 208
 Baltimore, Maryland 21204
 (410) 296-4100

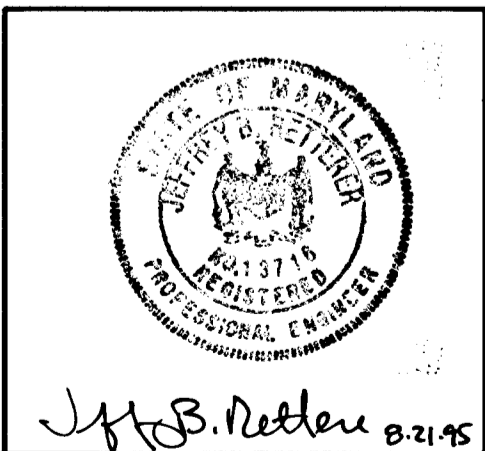
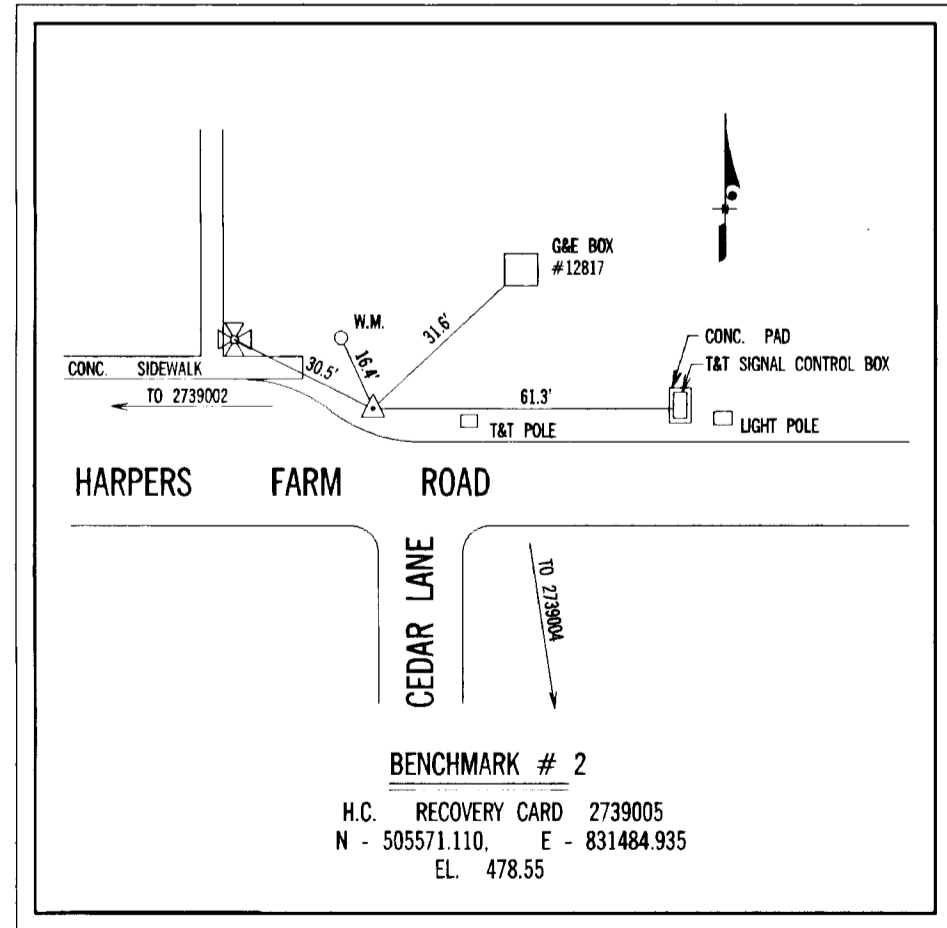
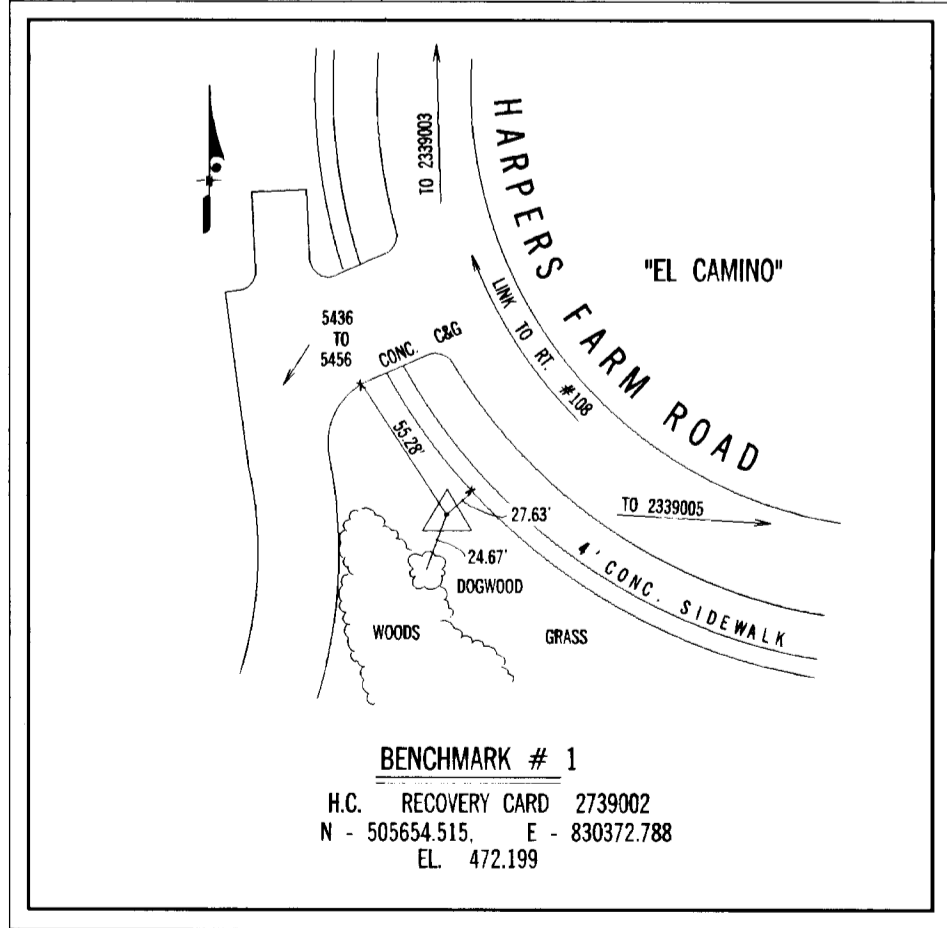
REVIEWED FOR HOWARD COUNTY S.C.D.
 MEETS TECHNICAL REQUIREMENTS

U.S. Soil Conservation Service Date

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

Howard S.C.D. Date

NOTE:
 *SEDIMENT CONTROL TO BE IMPLEMENTED IN ACCORDANCE WITH SECTION 219 OF THE STANDARDS & SPECIFICATIONS (VOL. IV) OF THE HOWARD COUNTY DESIGN MANUAL AND THESE PLANS.



BEFORE BEGINNING CONSTRUCTION, CONTACT MISS UTILITY AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO CONSTRUCTION

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

Signature of Director: *James J. ...* Date: *11/20/95*
 DIRECTOR OF PUBLIC WORKS

Signature of Chief: *Ronald G. Lefson* Date: *8/20/95*
 CHIEF, BUREAU OF ENGINEERING

Signature of Chief: *Jeffrey B. Retterer* Date: *8/21/95*
 CHIEF, DIVISION OF TRANSPORTATION PROJECTS AND WATERSHED MANAGEMENT

No.	REVISION	DATE	BY

ENGINEERS • ARCHITECTS • PLANNERS • SCIENTISTS • SURVEYORS • PHOTOGRAMMETRISTS

GREENHORNE & O'MARA, INC.
 15020 SHADY GROVE ROAD, SUITE 400
 ROCKVILLE, MD. 20850
 (301) 738-3890

ANNAPOLIS, MD. • ATLANTA, GA. • AURORA, CO. • CULPEPER, VA. • DULUTH, GA. • EXPORT, PA. • FAIRFAX, VA. • GREENBELT, MD. • LEESBURG, VA. • MANASSAS, VA. • ORLANDO, FL. • RALEIGH, NC. • BALTIMORE, MD. • TAMPA, FL. • WEST PALM BEACH, FL.

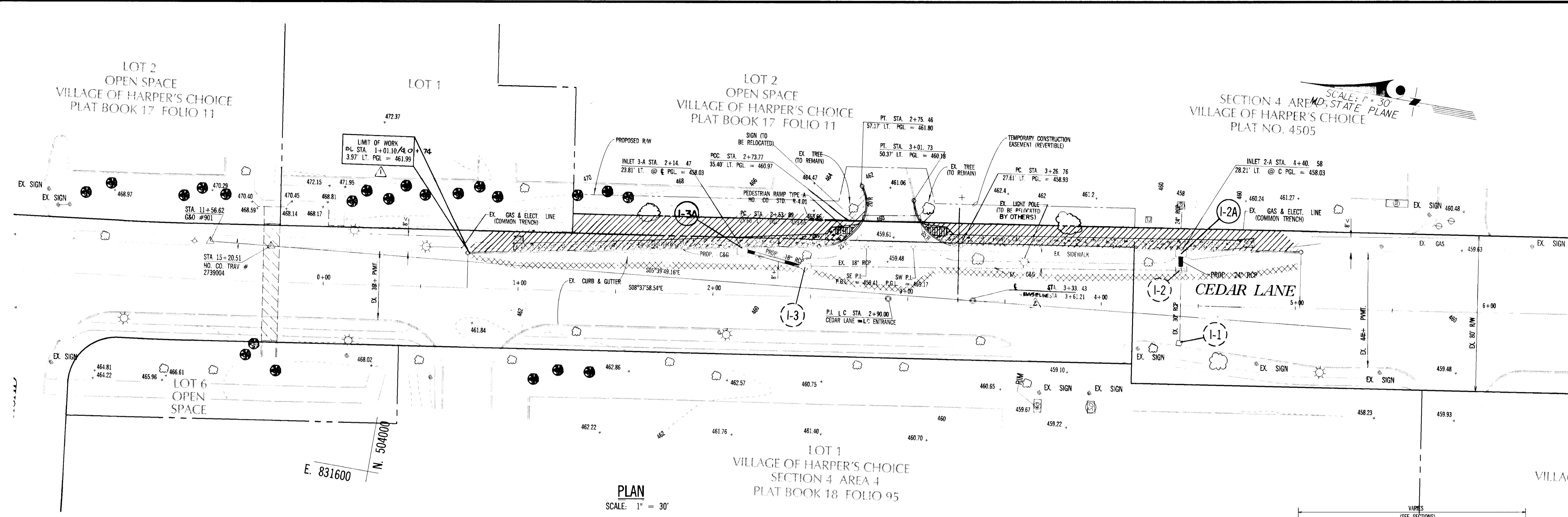
COVER SHEET
 FOR
CEDAR LANE ~ CAPITAL PROJECT J-4120

ZONED NT
 6th ELECTION DISTRICT

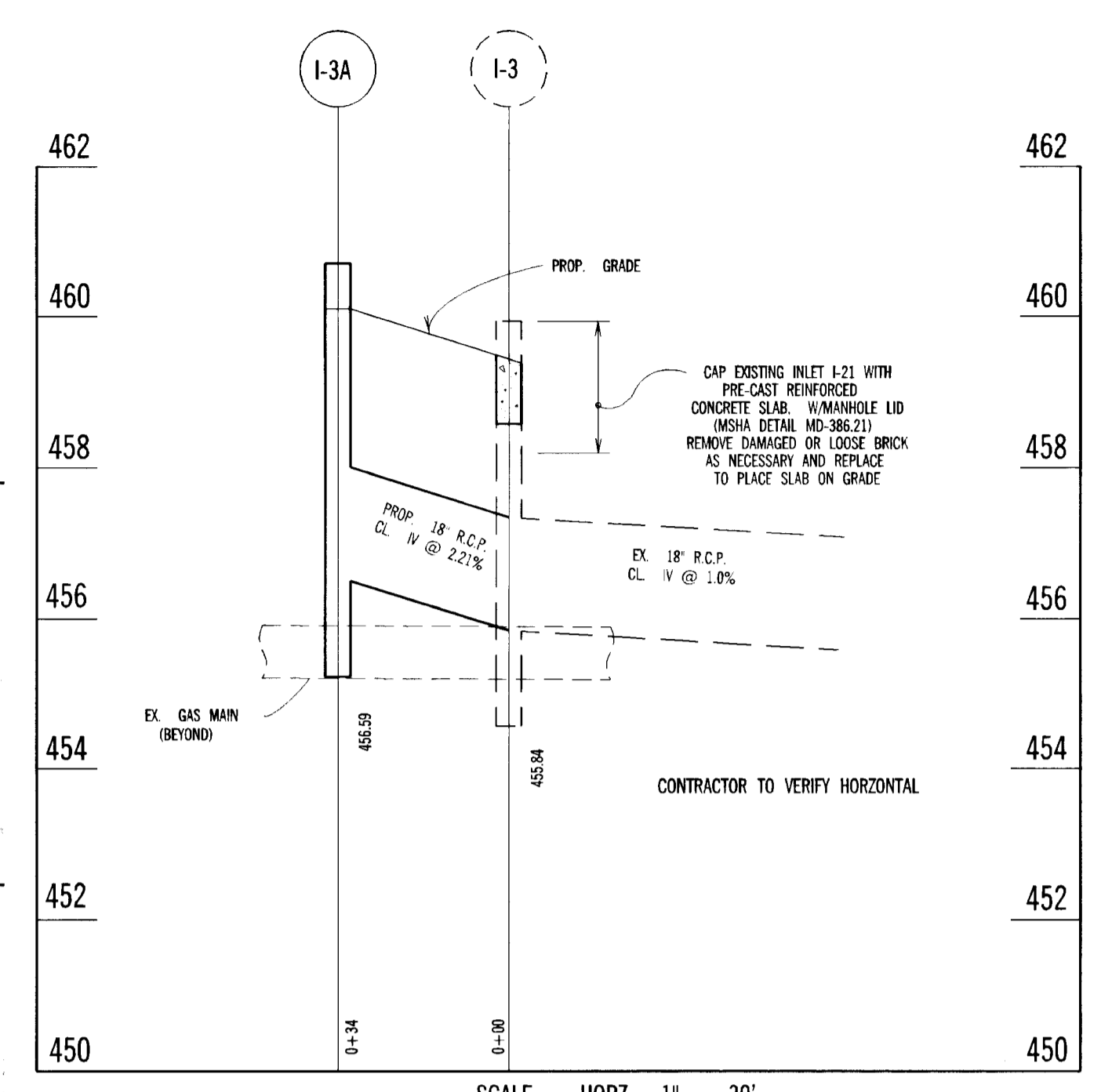
ZONING MAP 36
 HOWARD COUNTY, MARYLAND

DESIGN	SCALE	AS SHOWN
DRAWN		1 OF 18
SAA		
CHECKED		

JULY 93 DATE
 7779-000 PROJ No.
 R-2985-X FILE No.



PLAN
SCALE: 1" = 30'



SCALE: HORZ. 1" = 30'
VERT. 1" = 2'

GENERAL NOTES

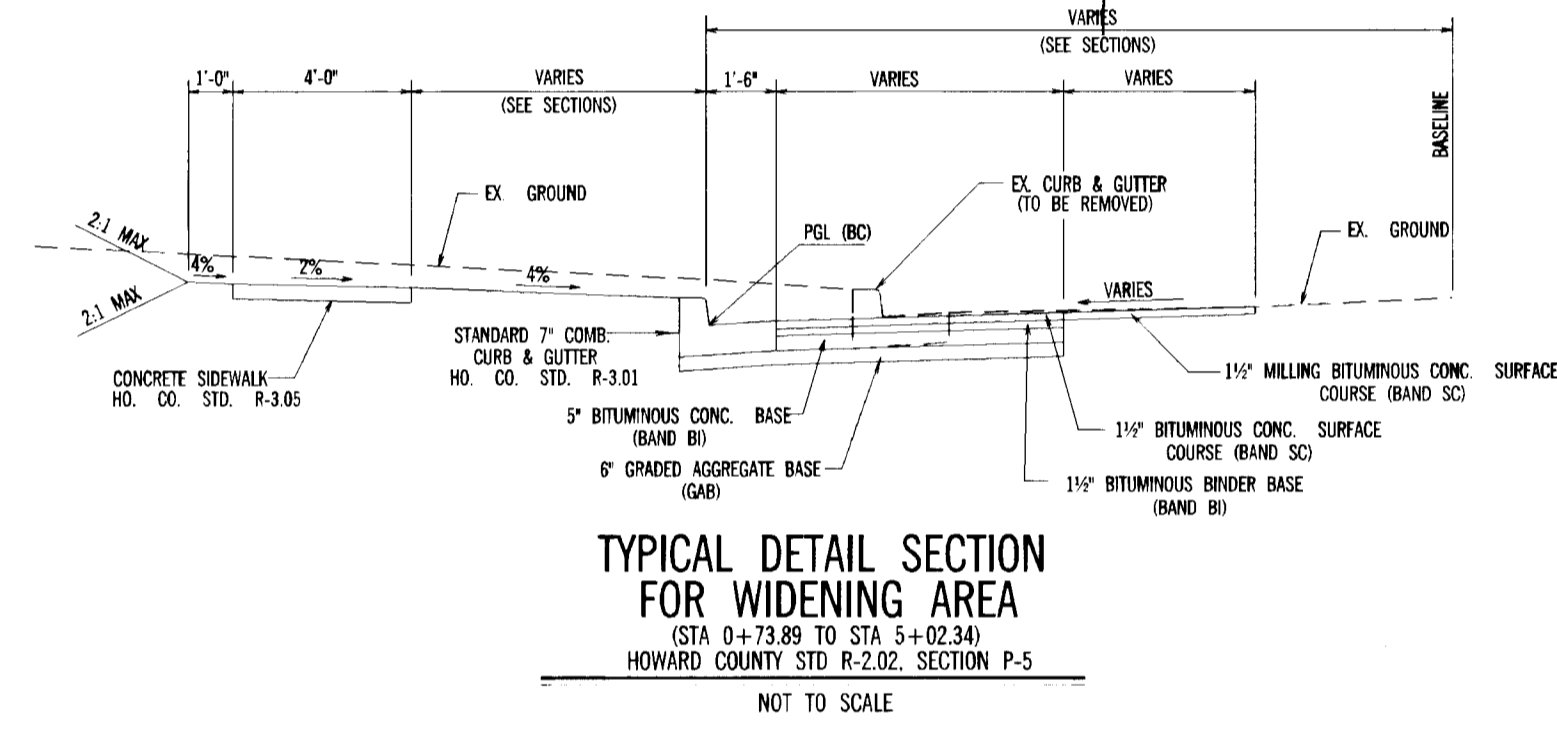
- CONTRACTOR IS TO VERIFY LOCATION OF EXISTING GAS MAIN AND ELECTRIC CONDUIT TO HIS SATISFACTION, BY TEST PIT AT INLET I-3A AND INLET I-2A

SYMBOLS

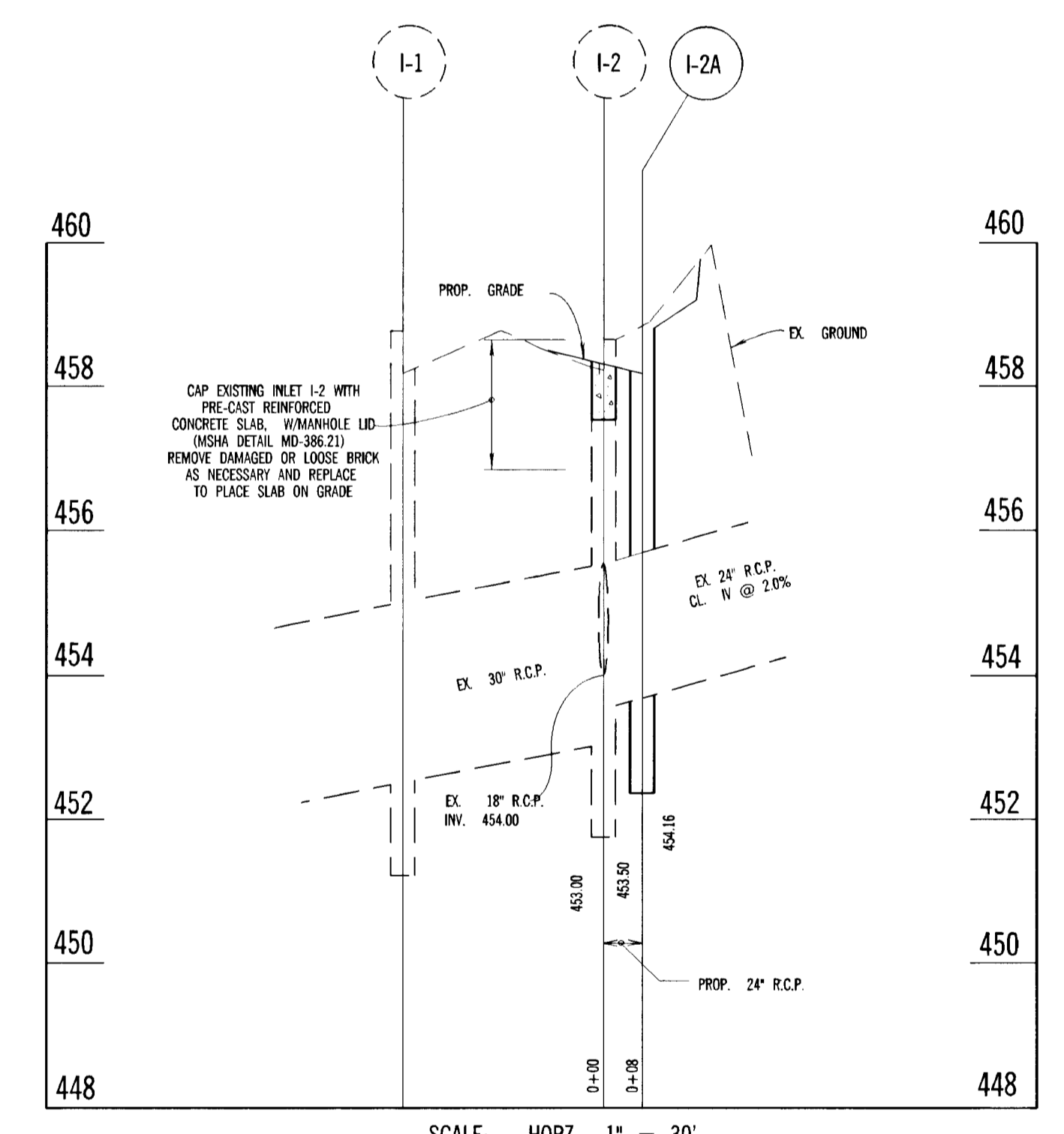
- INDICATES APPROXIMATE LIMIT OF PROPOSED PAVING
- INDICATES APPROXIMATE AREA TO BE MILLED TO A DEPTH OF 1 1/2" AND RESURFACED WITH A VARIABLE DEPTH OF BITUMINOUS CONCRETE SURFACE COURSE (BAND SC)
- INDICATES APPROXIMATE LIMIT OF PROPOSED CONCRETE WALK (4" DEPTH)
- INDICATES APPROXIMATE LIMIT OF PROPOSED CUT SLOPE TO BE TOPSOIL AND SODDED

PIPE SCHEDULE - SEGMENTS 1 & 2

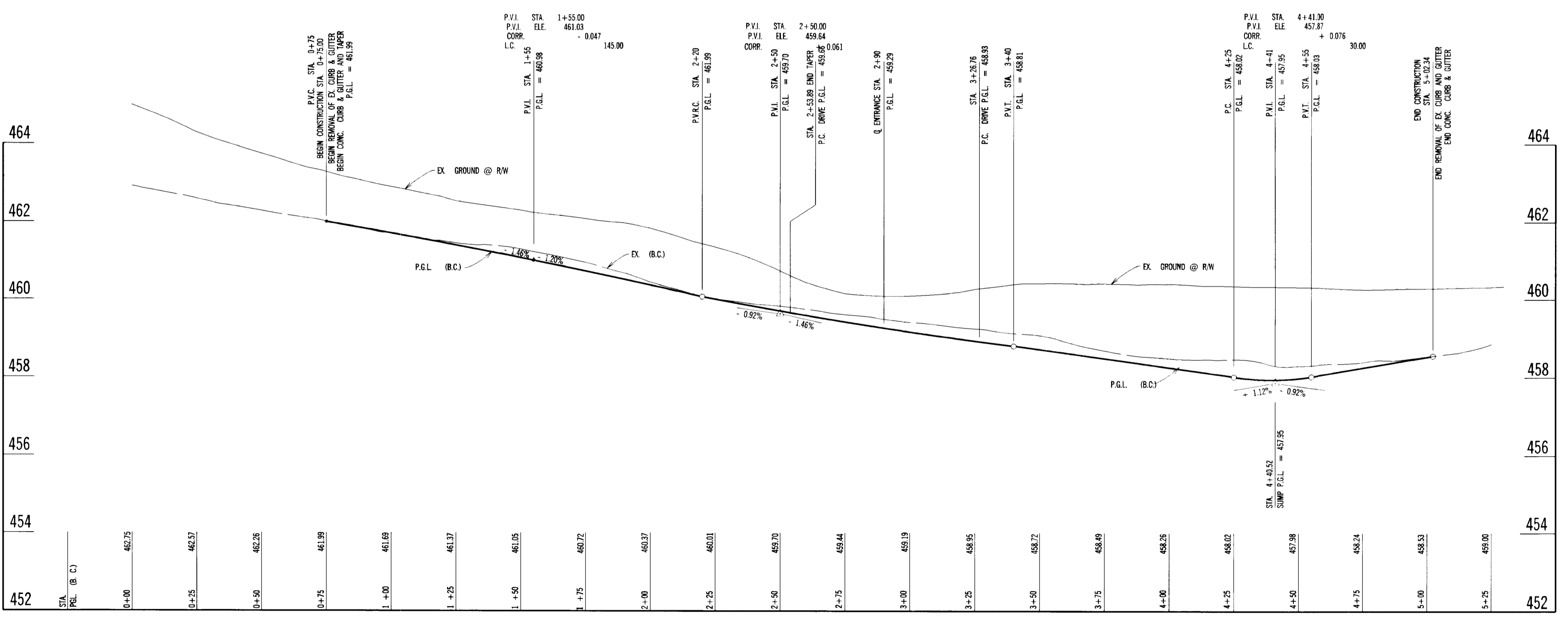
SIZE	TYPE	LENGTH
15 IN.	CL. IV RCCP	3 FT.
18 IN.	CL. IV RCCP	49 FT.
24 IN.	CL. IV RCCP	8 FT.



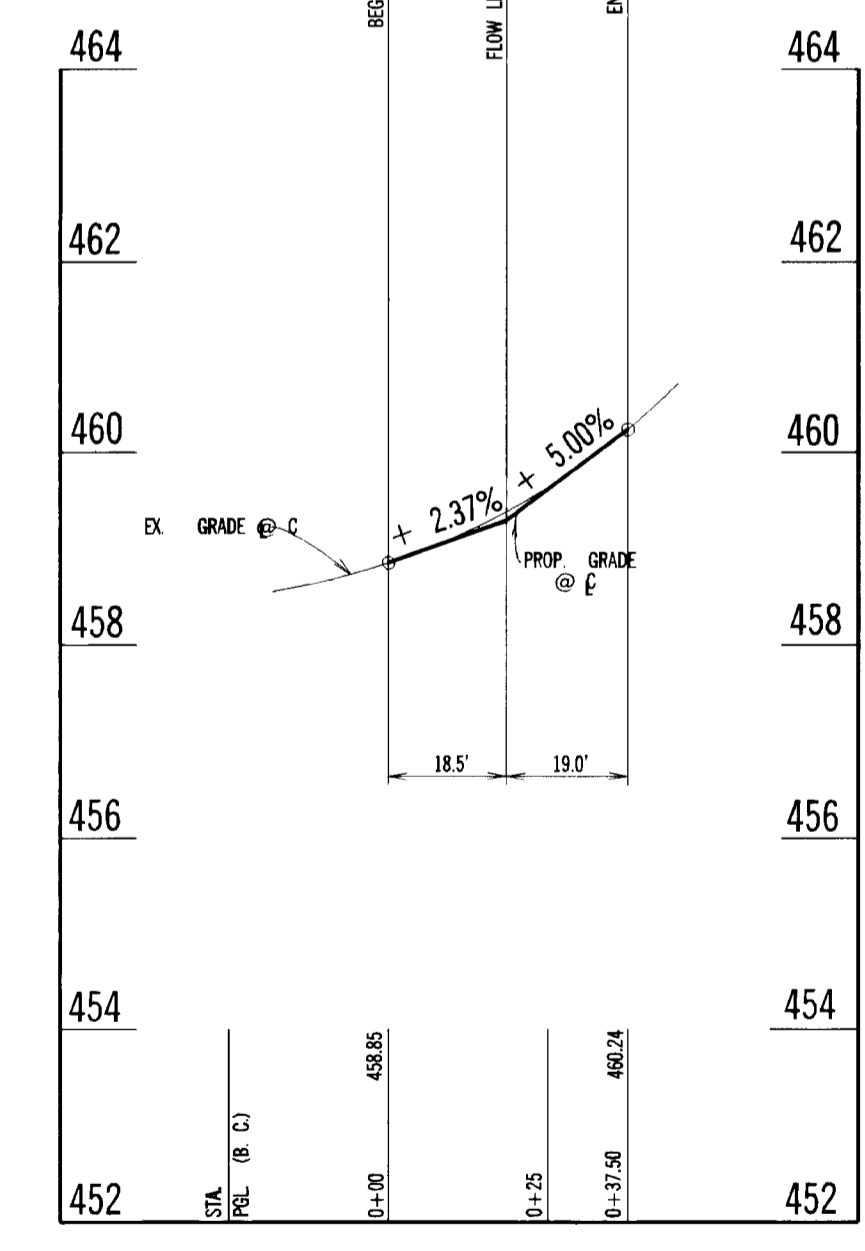
TYPICAL DETAIL SECTION FOR WIDENING AREA
(STA 0+73.89 TO STA 3+02.34)
HOWARD COUNTY STD R-2.02, SECTION P-5
NOT TO SCALE



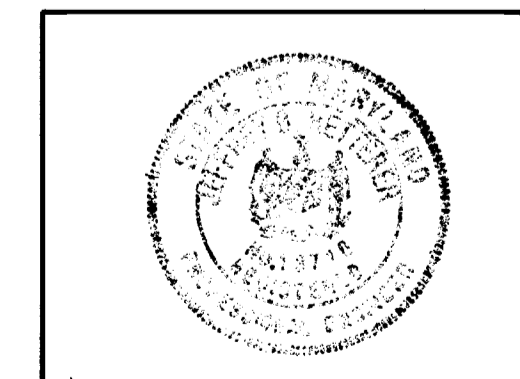
SCALE: HORZ. 1" = 30'
VERT. 1" = 2'



FLOWLINE PROFILE
SCALE: HORZ. 1" = 30'
VERT. 1" = 2'



PROPOSED ENTRANCE PROFILE
SCALE: HORZ. 1" = 30'
VERT. 1" = 2'



BEFORE BEGINNING CONSTRUCTION, CONTACT MISS UTILITY AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO CONSTRUCTION

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Sam P. Lee 11/6/95
DIRECTOR OF PUBLIC WORKS
DATE

Paul J. Sepp 8/23/95
CHIEF, BUREAU OF ENGINEERING
DATE

Andrew M. Daniels 11-20-95
CHIEF, BUREAU OF HIGHWAYS
DATE

Elizabeth Anderson-Celia 8/24/95
CHIEF, DIVISION OF TRANSPORTATION PROJECTS AND WATERSHED MANAGEMENT
DATE

No.	REVISION	DATE	BY
1	ADD BL AND E OF 74 TO LIMIT OF WORK NOTE.	11/0/95	BAC
2	ERASE "BASELINE", CHANGE "SURVEY" TO "BASELINE"	11/0/95	BAC



ENGINEERS • ARCHITECTS • PLANNERS • SCIENTISTS • SURVEYORS • PHOTOGRAMMETRISTS

GREENHORNE & O'MARA, INC.
15020 SHADY GROVE ROAD, SUITE 400
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(301) 738-3890

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LEESBURG, VA. • MANASSAS, VA. • ORLANDO, FL. • RALEIGH, NC. • BALTIMORE, MD. • TAMPA, FL. • WEST PALM BEACH, FL.

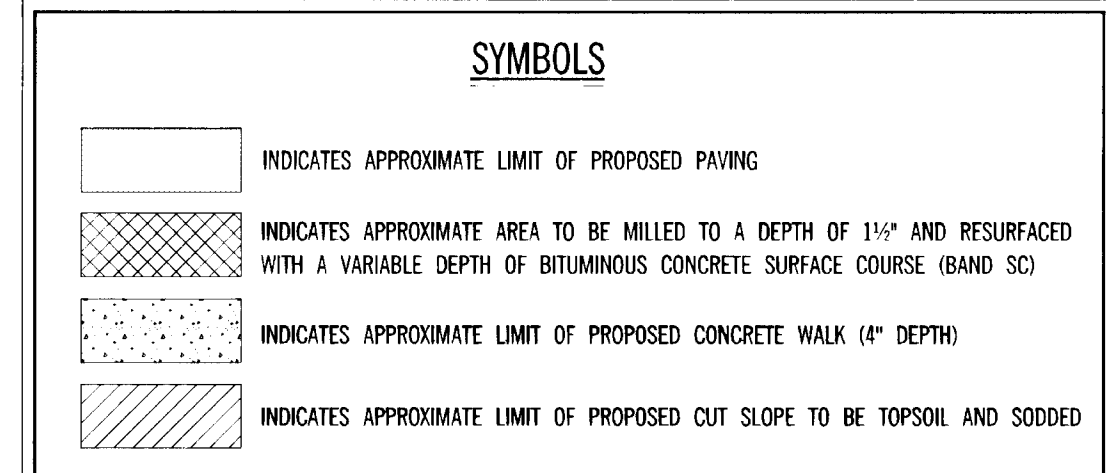
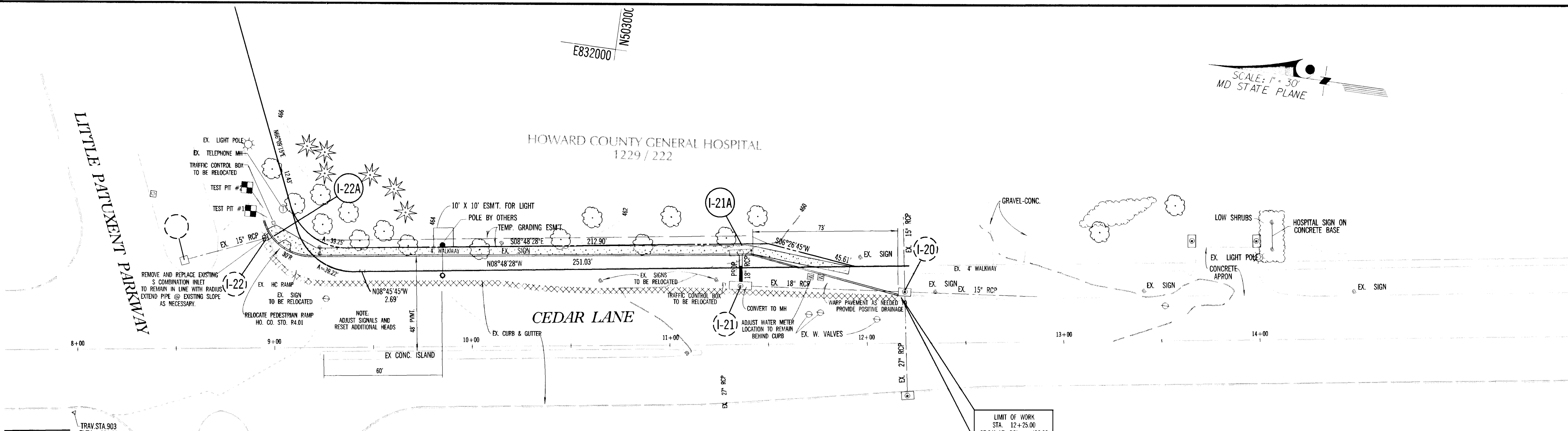
ROAD IMPROVEMENT PLAN - SEGMENT 1
FOR
CEDAR LANE ~ CAPITAL PROJECT J-4120

DESIGN SCALE 1" = 30'

DRAWN 2 OF 18
SAA CHECKED SHEET
DATE JULY 93
PROJ No. 7779-000
FILE No. R-2985-X

ZONED NT
6th ELECTION DISTRICT

ZONING MAP 36
HOWARD COUNTY, MARYLAND



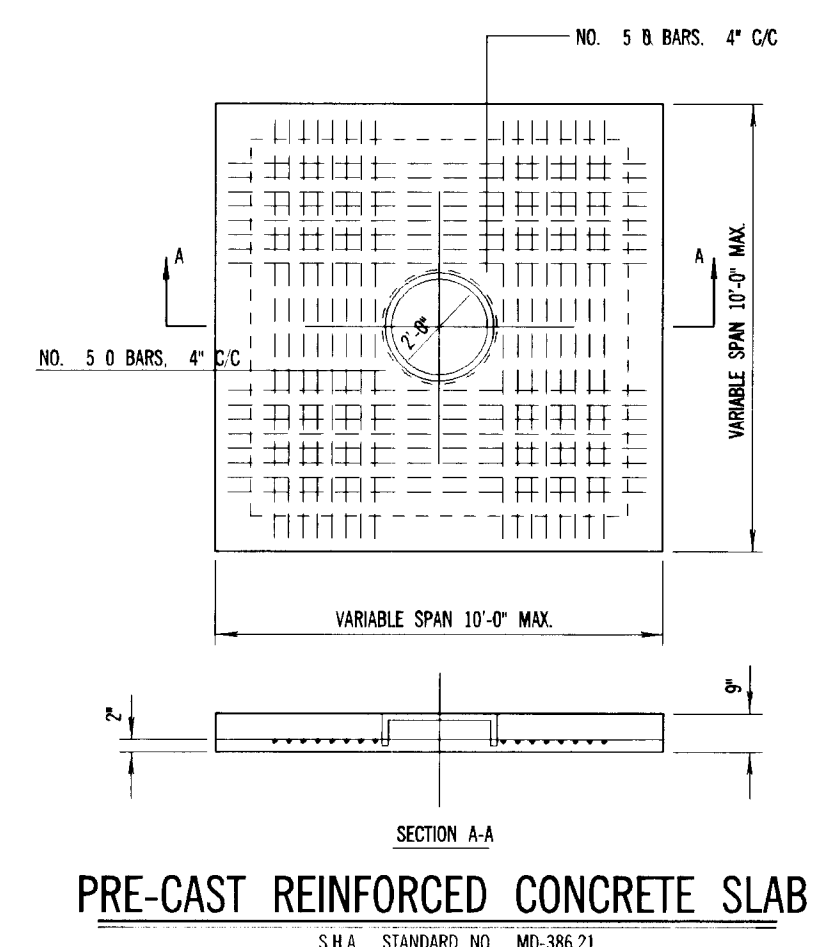
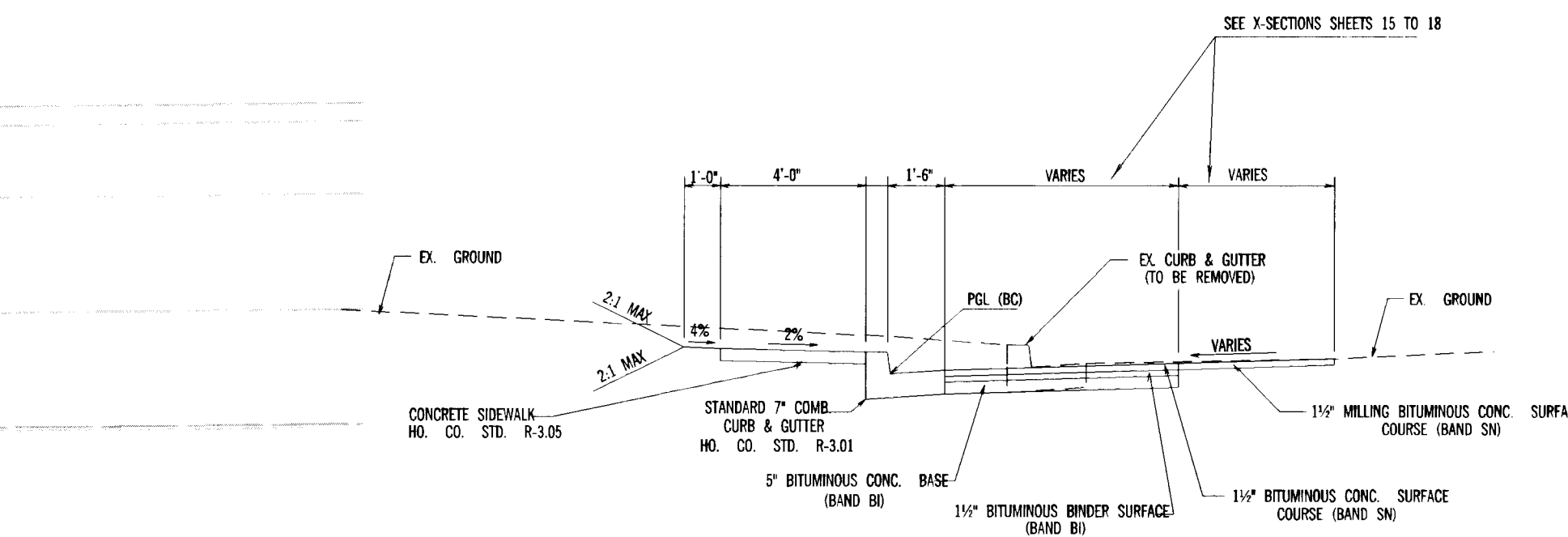
SCALE: 1" = 30'
MD STATE PLANE

HOWARD COUNTY GENERAL HOSPITAL
1229 / 222

CEDAR LANE

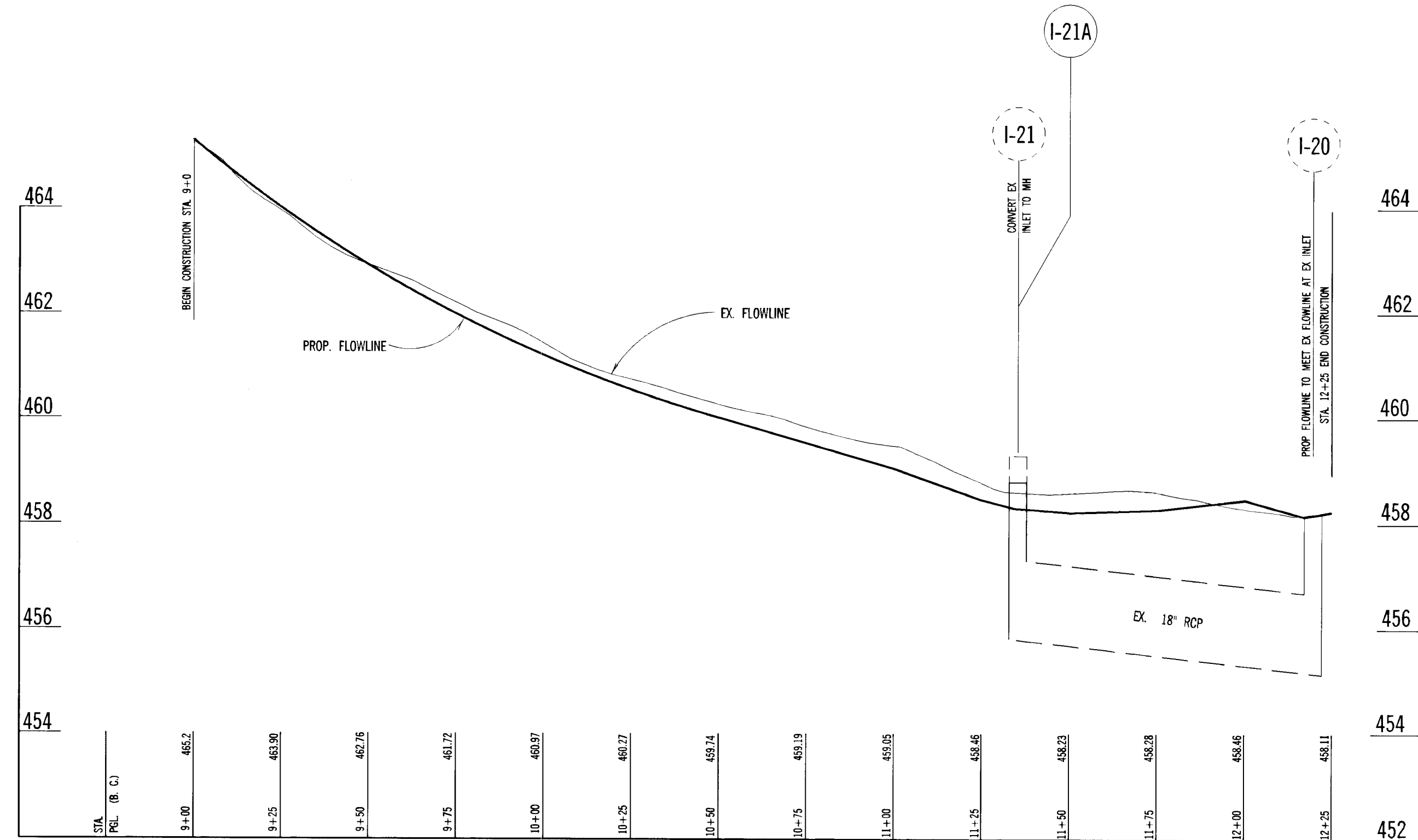
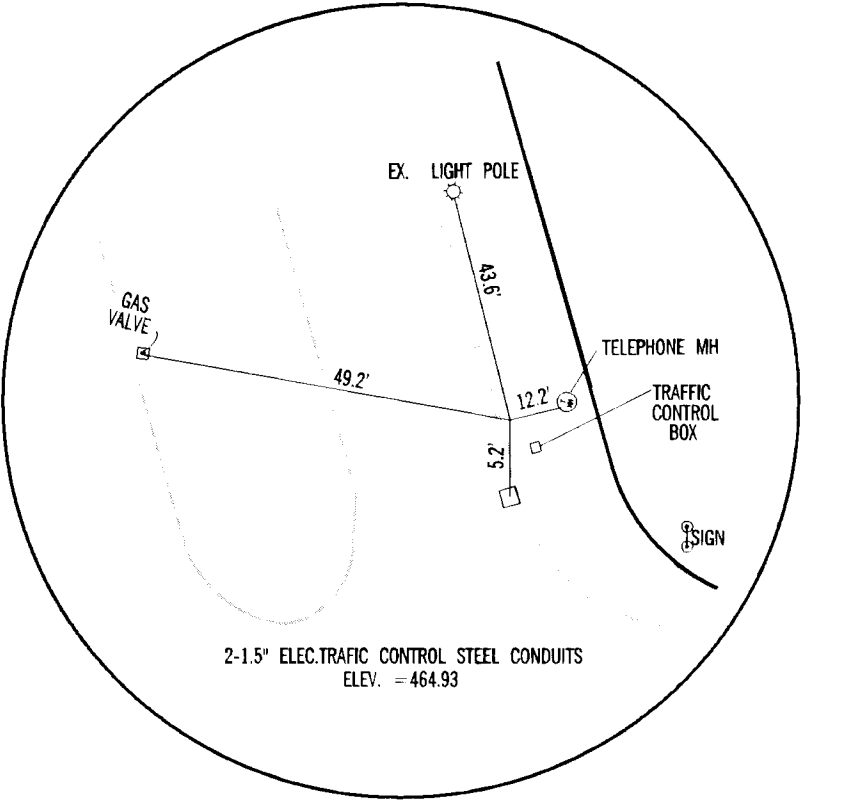
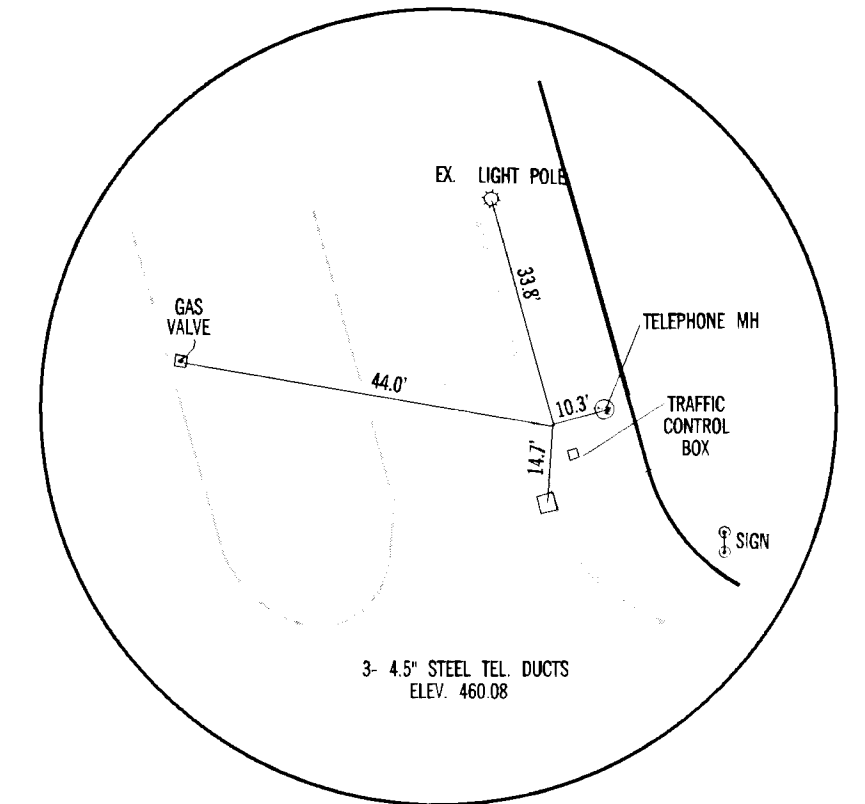
PLAN
SCALE: 1" = 30'

INLET SCHEDULE - SEGMENT 1						
NO.	TYPE	INV. IN	INV. OUT	TOP CURB EL.	REMARKS	
I-2A	DBL - S COMB.	454.16	454.16	458.80	NO. CO. STD. SD 4.34,	PRECAST
I-3A	DBL - S COMB.	459.69	459.69	460.76	NO. CO. STD. SD 4.34,	PRECAST
SEGMENT 2						
I-21A	A - 10	455.98	458.80	458.80	NO. CO. STD. SD 4.41	
I-22A	SGL S COMB.	461.57	465.72	465.72	NO. CO. STD. SD 4.32,	PRECAST

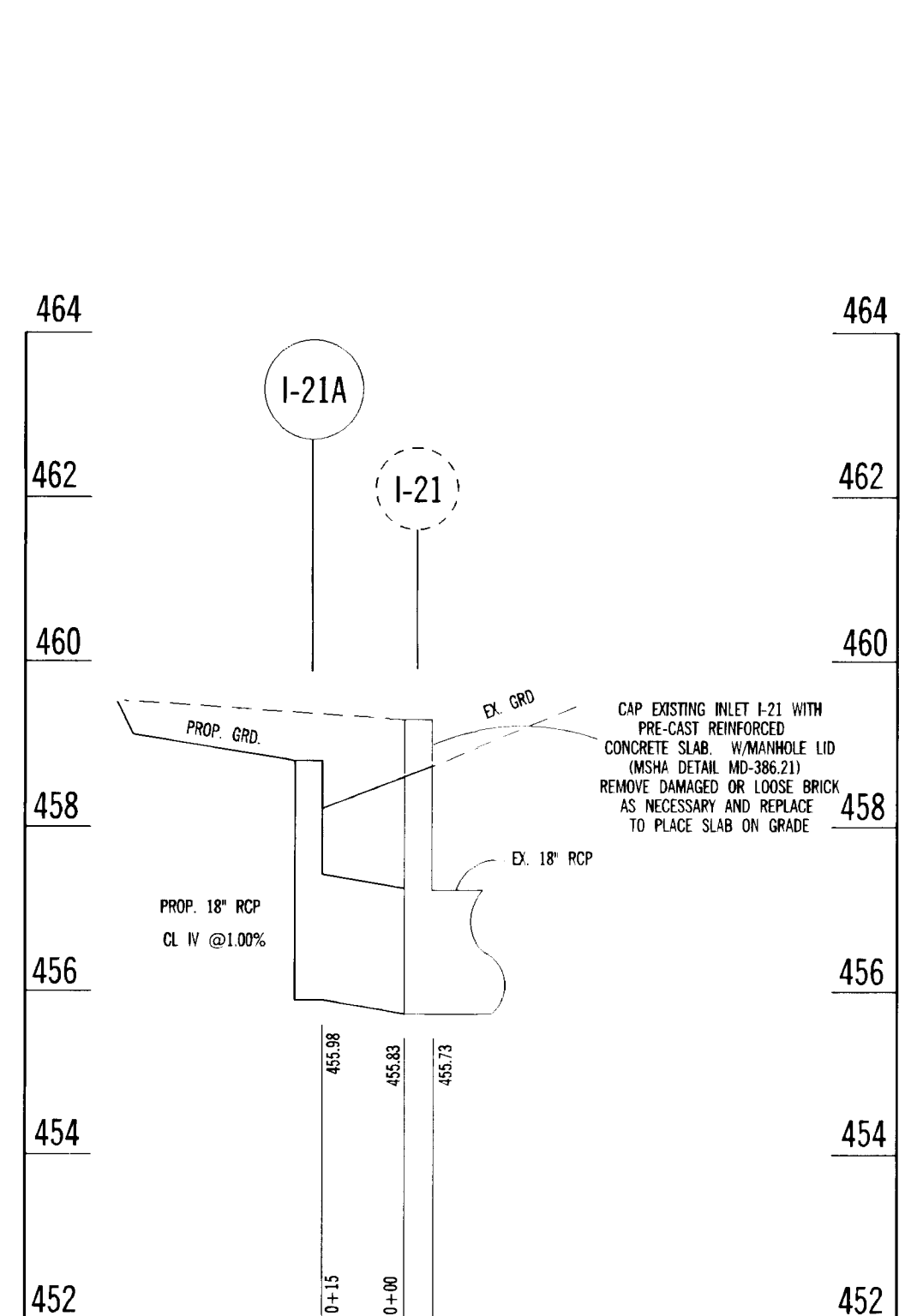


GENERAL NOTES:
CONCRETE - SEE S.H.A. SPECIFICATIONS
REINFORCEMENT - DEFORMED BARS
MANHOLE CASTINGS - INSIDE DIA. 2'-0"
MANHOLE CASTINGS - MAXIMUM DEPTH 6'-7"
ALL MATERIAL TO CONFORM TO S.H.A. SPECIFICATIONS

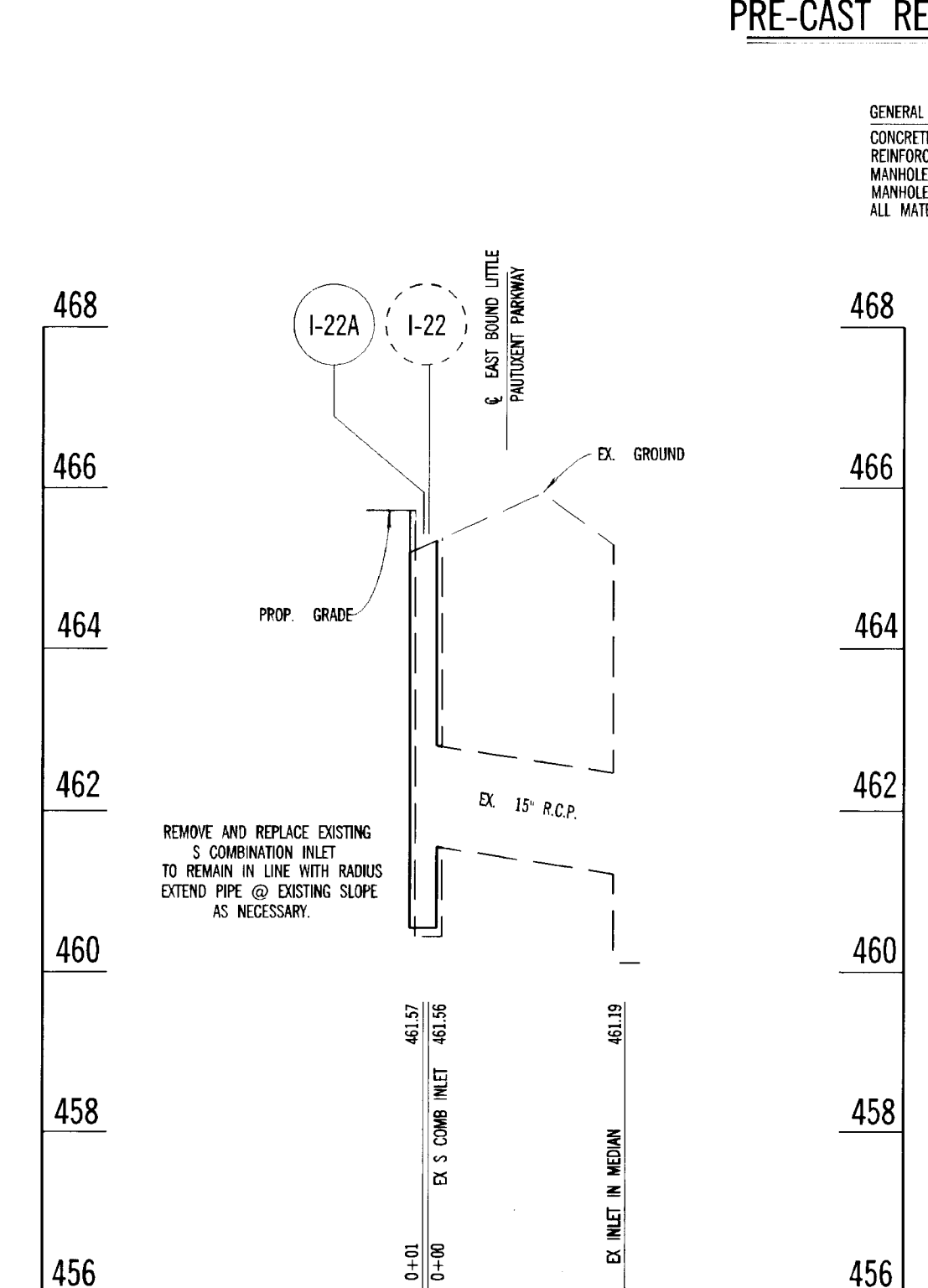
TYPICAL DETAIL SECTION
FOR WIDENING AREA
(STA. 9+00 TO STA. 12+25)



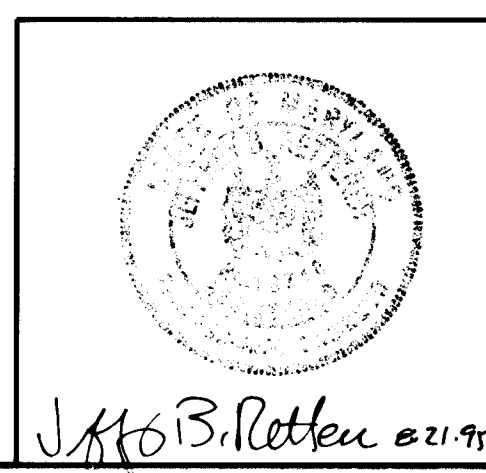
FLOWLINE PROFILE
SCALE: HORZ. 1" = 30'
VERT. 1" = 2'



SCALE: HORZ. 1" = 30'
VERT. 1" = 2'



SCALE: HORZ. 1" = 30'
VERT. 1" = 2'



BEFORE BEGINNING CONSTRUCTION, CONTACT
MISS UTILITY AT 1-800-257-7777 AT LEAST
48 HOURS PRIOR TO CONSTRUCTION

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

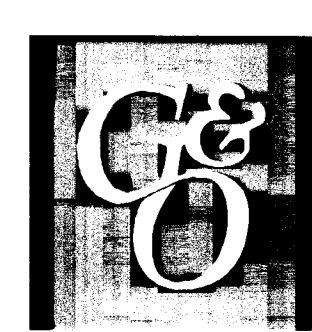
James J. Schum 11/20/95
DIRECTOR OF PUBLIC WORKS DATE

Robert J. Ryan 8/29/95
CHIEF, BUREAU OF ENGINEERING DATE

Andrew M. Dauler 11-20-95
CHIEF, BUREAU OF HIGHWAYS DATE

Elizabeth Anderson Caloca 8/29/95
CHIEF, DIVISION OF TRANSPORTATION PROJECTS
AND WATERSHED MANAGEMENT DATE

No.	REVISION	DATE	BY



ENGINEERS • ARCHITECTS • PLANNERS • SCIENTISTS • SURVEYORS • PHOTOGRAMMETRISTS

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15020 SHADY GROVE ROAD, SUITE 400
ROCKVILLE, MD. 20850
(301) 738-3890

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LEESBURG, VA. • MANASSAS, VA. • ORLANDO, FL. • RALEIGH, NC. • BALTIMORE, MD. • TAMPA, FL. • WEST PALM BEACH, FL.

ROAD IMPROVEMENTS PLAN - SEGMENT 2
FOR
CEDAR LANE ~ CAPITAL PROJECT J-4120

ZONING MAP 36
6th ELECTION DISTRICT

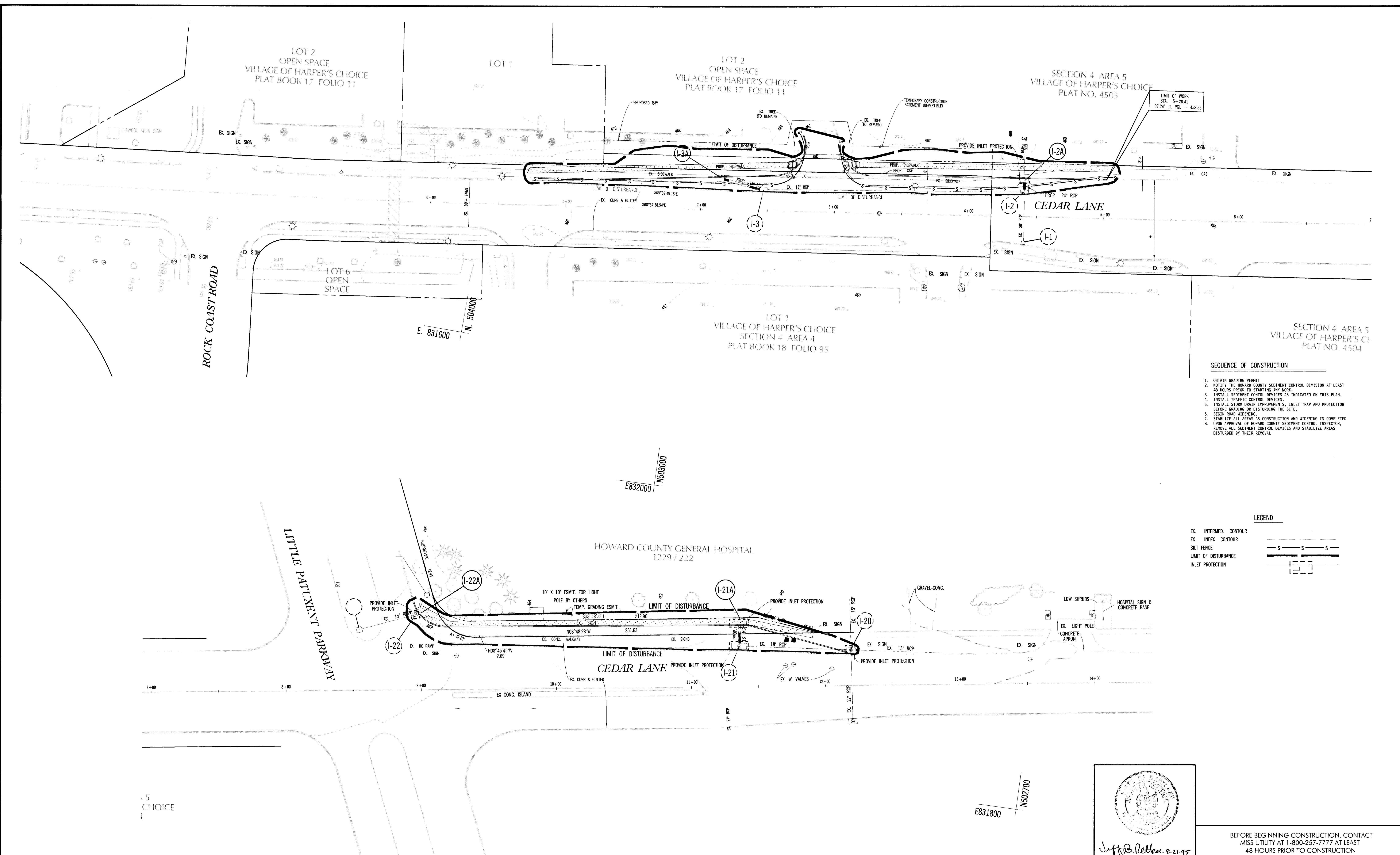
DATE: JULY 93
PROJ No. 7779-000
FILE No. R-2985-X

DESIGN SCALE 1" = 30'

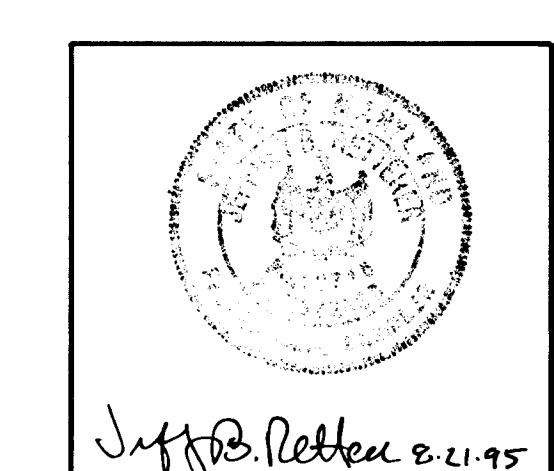
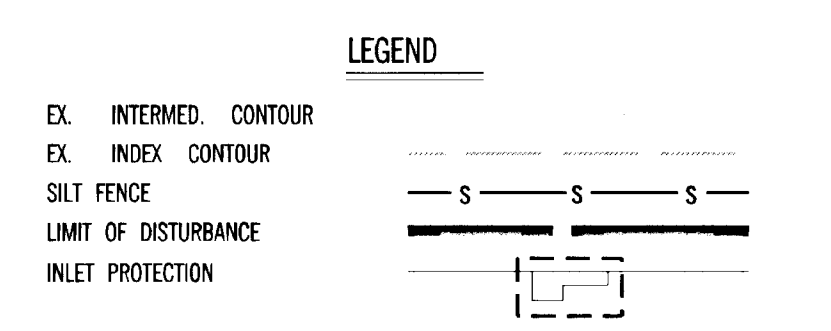
DRAWN 3 OF 18

CHECKED SAA

SHEET



- SEQUENCE OF CONSTRUCTION**
1. OBTAIN GRADING PERMIT
 2. NOTIFY THE HOWARD COUNTY SEDIMENT CONTROL DIVISION AT LEAST 48 HOURS PRIOR TO STARTING ANY WORK.
 3. INSTALL SEDIMENT CONTROL DEVICES AS INDICATED ON THIS PLAN.
 4. INSTALL TRAFFIC CONTROL DEVICES.
 5. INSTALL STORM DRAIN IMPROVEMENTS, INLET TRAP AND PROTECTION BEFORE GRADING OR DISTURBING THE SITE.
 6. BEGIN ROAD WIDENING.
 7. STABILIZE ALL AREAS AS CONSTRUCTION AND WIDENING IS COMPLETED.
 8. UPON APPROVAL OF HOWARD COUNTY SEDIMENT CONTROL INSPECTOR, REMOVE ALL SEDIMENT CONTROL DEVICES AND STABILIZE AREAS DISTURBED BY THEIR REMOVAL.



BEFORE BEGINNING CONSTRUCTION, CONTACT MISS UTILITY AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO CONSTRUCTION

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

James P. Blair 11/20/95
DIRECTOR OF PUBLIC WORKS DATE

Richard S. Jagan 8/22/95
CHIEF, BUREAU OF ENGINEERING DATE

Andrew M. Donohue 11-20-95
CHIEF, BUREAU OF HIGHWAYS DATE

Elizabeth Henderson-Carlin 8/29/95
CHIEF, DIVISION OF TRANSPORTATION PROJECTS AND WATERSHED MANAGEMENT DATE

No.	REVISION	DATE	BY

ENGINEERS • ARCHITECTS • PLANNERS • SCIENTISTS • SURVEYORS • PHOTOGRAMMETRISTS

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SEDIMENT CONTROL PLAN
FOR
CEDAR LANE ~ CAPITAL PROJECT J-4120

DESIGN SCALE 1" = 30'

DRAWN 4 OF 18

SAF

CHECKED SHEET

DATE JULY 93 PROJ. No. 7779-000 FILE No. R-2985-X

ZONED NT
6th ELECTION DISTRICT

ZONING MAP 36
HOWARD COUNTY, MARYLAND

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, DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.

SOIL AMENDMENTS: IN LIEU OF SOIL TEST RECOMMENDATIONS, USE ONE OF THE FOLLOWING SCHEDULES:

- 1) PREFERRED - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92lbs./1000sq.ft.) AND 600lbs. PER ACRE 10-10-10 FERTILIZER (141bs./1000sq.ft.) BEFORE SEEDING. HARROW OR DISK UPPER THREE INCHES OF SOIL. AT TIME OF SEEDING, APPLY 400lbs. PER ACRE 30-0-0 UREAFORM FERTILIZER (91bs./1000sq.ft.).
- 2) ACCEPTABLE - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92lbs./1000sq.ft.) AND 1000lbs. PER ACRE 10-10-10 FERTILIZER (231bs./1000sq.ft.) BEFORE SEEDING. HARROW OR DISK INTO UPPER THREE INCHES OF SOIL.

SEEDING: FOR THE PERIODS MARCH 1 THRU APRIL 30, AND AUGUST 1 THRU OCTOBER 15, SEED WITH 60lbs. PER ACRE (1.41bs/1000sq.ft.) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THRU JULY 31, SEED WITH 60lbs. KENTUCKY 31 TALL FESCUE PER ACRE AND 21bs. PER ACRE (.051bs./1000sq.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 SOO. OPTION (3) - SEED WITH 60lbs PER ACRE OF KENTUCKY 31 TALL FESCUE AND MULCH WITH 2 TONS PER ACRE OF WELL ANCHORED STRAW.

MULCHING: APPLY 1-1/2 TO 2 TONS PER ACRE (70 TO 90lbs/1000sq.ft.) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GALLONS PER ACRE (9gal./1000sq.ft.) OR EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FEET OR HIGHER, USE 348 GALLONS PER ACRE (9gal./1000sq.ft.) FOR ANCHORING.

MAINTENANCE: INSPECT ALL SEEDING 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, DISKING, OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.

SOIL AMENDMENTS: APPLY 600lbs. PER ACRE 10-10-10 FERTILIZER (141bs./1000sq.ft.)

SEEDING: FOR PERIODS MARCH 1 THRU APRIL 30 AND FROM AUGUST 15 THRU OCTOBER 15, SEED WITH 2-1/2 BUSHEL PER ACRE OF ANNUAL RYE (3.21bs./1000sq.ft.). FOR PERIOD MAY 1 THRU AUGUST 14, SEED WITH 31bs. PER ACRE OF WEEPING LOVEGRASS (.071bs./1000sq.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 SOO.

MULCHING: APPLY 1-1/2 TO 2 TONS PER ACRE (70 TO 90lbs/1000sq.ft.) OF UNROTTED WEED FREE SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GALLONS PER ACRE (9gal./1000sq.ft.) OR EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FEET OR HIGHER, USE 348 GALLONS PER ACRE (9gal./1000sq.ft.) FOR ANCHORING.

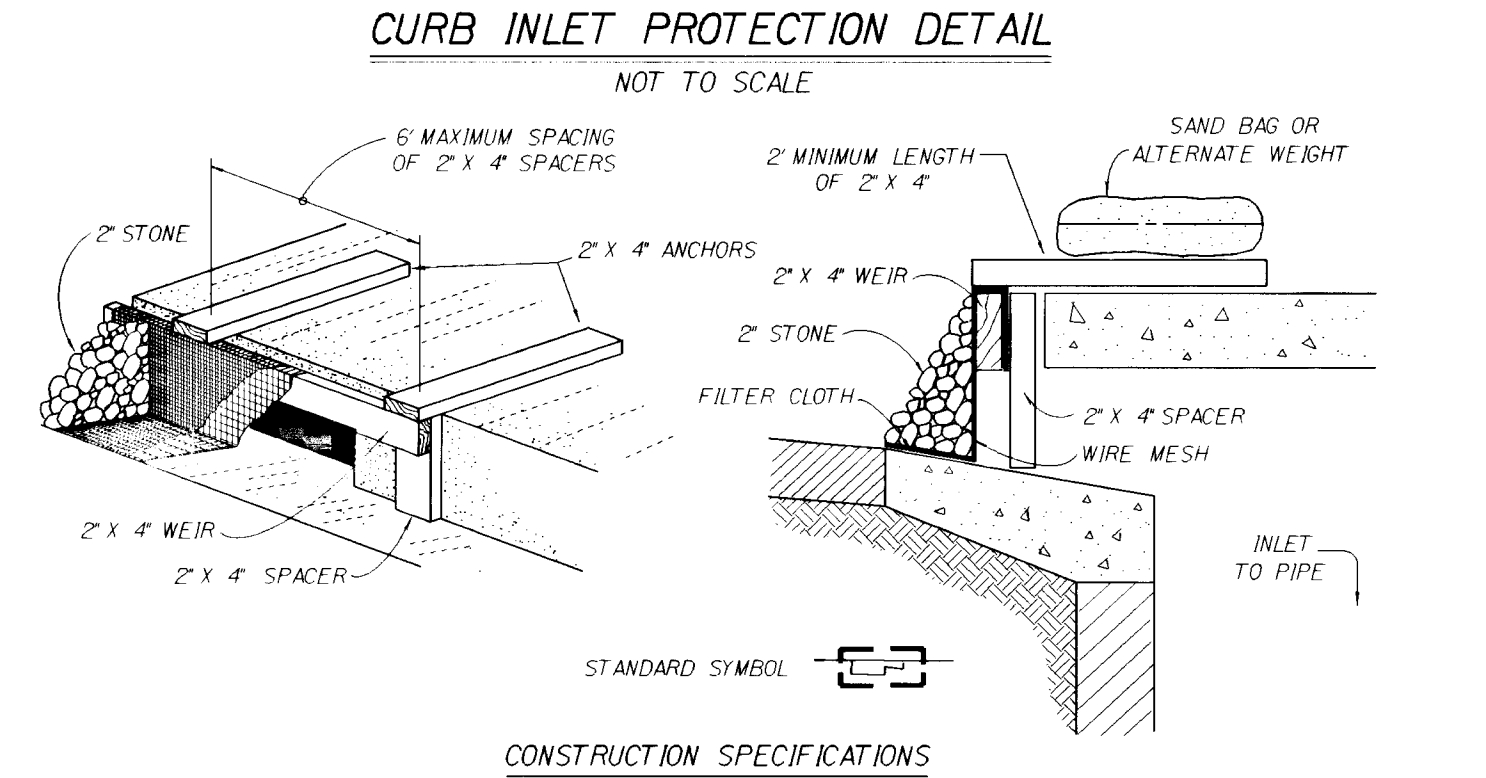
REFER TO THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR ADDITIONAL RATES AND METHODS NOT COVERED.

SEDIMENT CONTROL NOTES

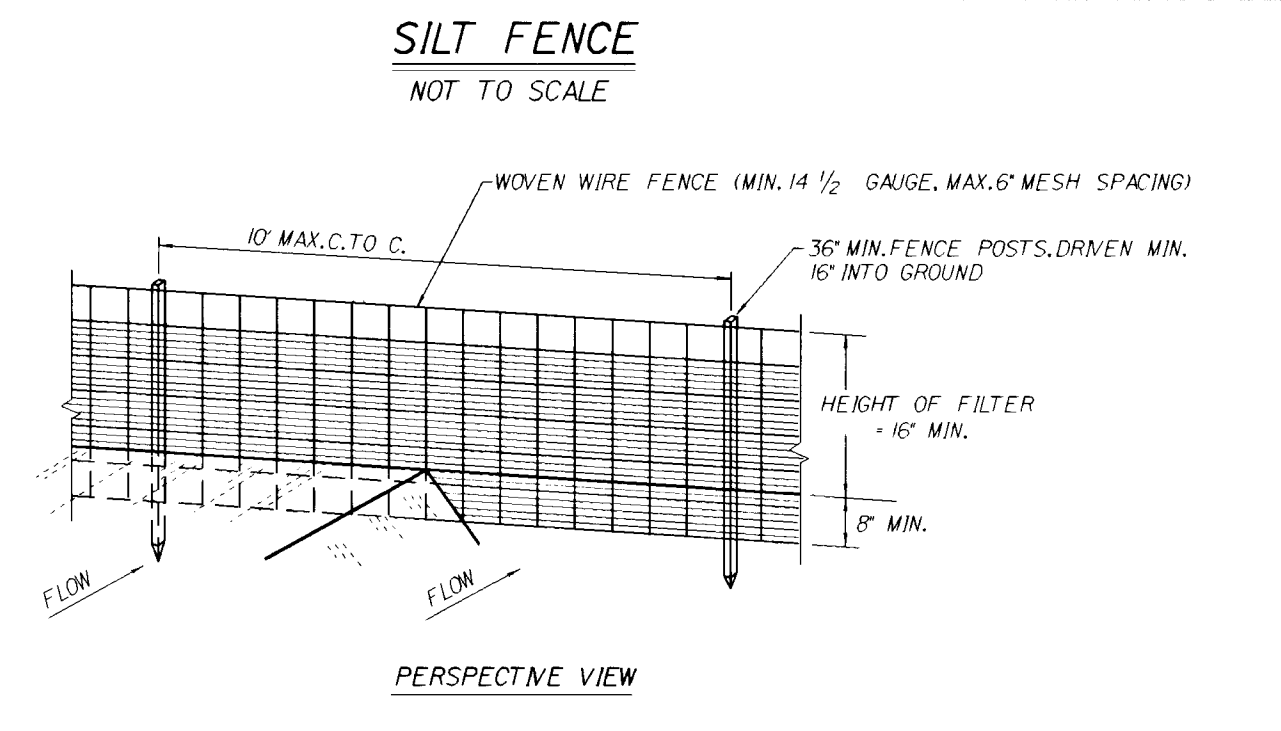
1. A MINIMUM OF 24 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY OFFICE OF INSPECTION AND PERMITS PRIOR TO THE START OF ANY CONSTRUCTION.
2. ALL VEGETATION AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH 1983 MARYLAND STANDARDS 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 PERMANENT SEDIMENT CONTROL STRUCTURES, DIKES, PERMANENT SLOPES AND ALL SLOPES GREATER THAN 3:1 B) 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
4. ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOLUME 1, CHAPTER 12, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
5. ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDINGS (SECTION 51), SOO (SECTION 54), TEMPORARY SEEDING (SECTION 50) AND MULCHING (SECTION 52). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
6. ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND 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	N/A ACRES
AREA DISTURBED	0.28 ACRES
AREA TO BE ROOFED OR PAVED	0.16 ACRES
AREA TO BE VEGETATIVELY STABILIZED	0.12 ACRES
TOTAL CUT	365.43 CU.YDS.
TOTAL FILL	1.24 CU.YDS.

OFFSITE WASTE/AREA LOCATION: TO BE BID AND DETERMINED BY THE CONTRACTOR AND PREVIOUSLY APPROVED BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.
8. ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
9. ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY DPW SEDIMENT CONTROL INSPECTOR.
10. ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.
11. TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH CAN BE BACKFILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.



- CONSTRUCTION SPECIFICATIONS**
- I. MATERIALS FRAME
 - A. WOODEN FRAME IS TO BE CONSTRUCTED OF 2" x 4" CONSTRUCTION GRADE LUMBER.
 - B. WIRE MESH MUST BE OF SUFFICIENT STRENGTH TO SUPPORT FILTER FABRIC, AND STONE FOR CURB INLETS, WITH WATER FULLY IMPOUNDED AGAINST IT.
 - C. FILTER CLOTH MUST BE OF A TYPE APPROVED FOR THIS PURPOSE, RESISTANT TO SUNLIGHT WITH SIEVE SIZE, EDS. 40-85, TO ALLOW SUFFICIENT PASSAGE OF WATER AND REMOVAL OF SEDIMENT.
 - D. STONE IS TO BE 2" IN SIZE AND CLEAN, SINCE FINES WOULD CLOG THE CLOTH.
 - II. PROCEDURE - CURB INLET PROTECTION
 1. ATTACH A CONTINUOUS PIECE OF WIRE MESH (30" MINIMUM WIDTH BY THROAT LENGTH PLUS 4") TO THE 2" x 4" WEIR (MEASURING THROAT LENGTH PLUS 2") AS SHOWN ON THE STANDARD DRAWING.
 2. PLACE A PIECE OF APPROVED FILTER CLOTH (40-85 SIEVE) OF THE SAME DIMENSIONS AS THE WIRE MESH OVER THE WIRE MESH AND SECURELY ATTACH TO THE 2" x 4" WEIR.
 3. SECURELY NAIL THE 2" x 4" WEIR TO 9" LONG VERTICAL SPACERS TO BE LOCATED BETWEEN THE WEIR AND INLET FACE (MAX. 6" APART).
 4. PLACE THE ASSEMBLY AGAINST THE INLET THROAT AND NAIL (MINIMUM 2" LENGTHS OF 2" x 4") TO THE TOP OF THE WEIR AT SPACER LOCATIONS. THESE 2" x 4" ANCHORS SHALL EXTEND ACROSS THE INLET TOP AND BE HELD IN PLACE BY SANDBAGS OR ALTERNATE WEIGHT.
 5. THE ASSEMBLY SHALL BE PLACED SO THAT THE END SPACERS ARE A MINIMUM 1" BEYOND BOTH ENDS OF THE THROAT OPENING.
 6. FOR THE WIRE MESH AND FILTER CLOTH TO THE CONCRETE GUTTER AND AGAINST THE FACE OF CURB ON BOTH SIDES OF THE INLET. PLACE CLEAN 2" STONE OVER THE WIRE MESH AND FILTER FABRIC IN SUCH A MANNER AS TO PREVENT WATER FROM ENTERING THE INLET UNDER OR AROUND THE FILTER CLOTH.
 7. THIS TYPE OF PROTECTION MUST BE INSPECTED FREQUENTLY AND THE FILTER CLOTH AND STONE REPLACED WHEN CLOGGED WITH SEDIMENT.
 8. ASSURE THAT STORM FLOW DOES NOT BYPASS INLET BY INSTALLING TEMPORARY EARTH OR ASPHALT DIKES DIRECTING FLOW INTO INLET.
- SOURCE: 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL



- CONSTRUCTION NOTES FOR FABRICATED SILT FENCE**
1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
 2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
 3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY 516" INCHES AND FOLDED.
 4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.
- POSTS: STEEL EITHER T OR U TYPE OR 2" HARDWOOD.
 FENCE: WOVEN WIRE, 14 GA. 6" MAX. MESH OPENING.
 FILTER CLOTH: FILTER X, MIRAFI 100X, STABILINKA T140N OR APPROVED EQUAL.
 PREFABRICATED UNIT: GEOFAB, EM190-FENCE, OR APPROVED EQUAL.
- SOURCE: 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

SEQUENCE OF CONSTRUCTION

1. OBTAIN GRADING PERMIT
2. NOTIFY THE HOWARD COUNTY SEDIMENT CONTROL DIVISION AT LEAST 48 HOURS PRIOR TO STARTING ANY WORK.
3. INSTALL SEDIMENT CONTROL DEVICES AS INDICATED ON THIS PLAN.
4. INSTALL TRAFFIC CONTROL DEVICES.
5. INSTALL STORM DRAIN IMPROVEMENTS, INLET TRAP AND PROTECTION BEFORE GRADING OR DISTURBING THE SITE.
6. BEGIN ROAD WIDENING.
7. STABILIZE ALL AREAS AS CONSTRUCTION AND WIDENING IS COMPLETED.
8. UPON APPROVAL OF HOWARD COUNTY SEDIMENT CONTROL INSPECTOR, REMOVE ALL SEDIMENT CONTROL DEVICES AND STABILIZE AREAS DISTURBED BY THEIR REMOVAL.

SEDIMENT CONTROL

By the Developer:
 "I/We certify that all development and/or construction will be done according to these plans, and that any responsible personnel involved in the construction project will have a Certification of Attendance at a Department of 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."

Signature of Developer _____ Date _____

Printed Name _____

By the Engineer:
 "I certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions. This plan was prepared in accordance with the requirements of the Howard Soil Conservation District."
Jeff B. Retter 8/21/95
 Signature of Engineer _____ Date _____

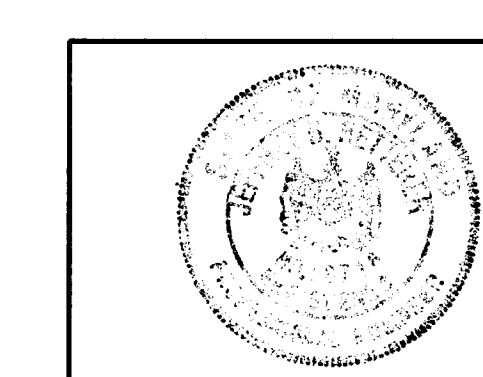
Reviewed for Howard Soil Conservation District and meets technical requirements

U.S. Soil Conservation Service _____ Date _____

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

Howard Soil Conservation Service _____ Date _____

BEFORE BEGINNING CONSTRUCTION, CONTACT MISS UTILITY AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO CONSTRUCTION



Jeff B. Retter 8/21/95

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

James P. Stuenkel 11/20/95
 DIRECTOR OF PUBLIC WORKS DATE

Richard L. Johnson 8/29/95
 CHIEF, BUREAU OF ENGINEERING DATE

Andrew M. Daney 11-20-95
 CHIEF, BUREAU OF HIGHWAYS DATE

Elizabeth Henderson Calia 8/29/95
 CHIEF, DIVISION OF TRANSPORTATION PROJECTS AND WATERSHED MANAGEMENT DATE

No.	REVISION	DATE	BY



ENGINEERS • ARCHITECTS • PLANNERS • SCIENTISTS • SURVEYORS • PHOTOGRAMMETRISTS

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 15020 SHADY GROVE ROAD, SUITE 400
 ROCKVILLE, MD. 20850
 (301) 738-3890

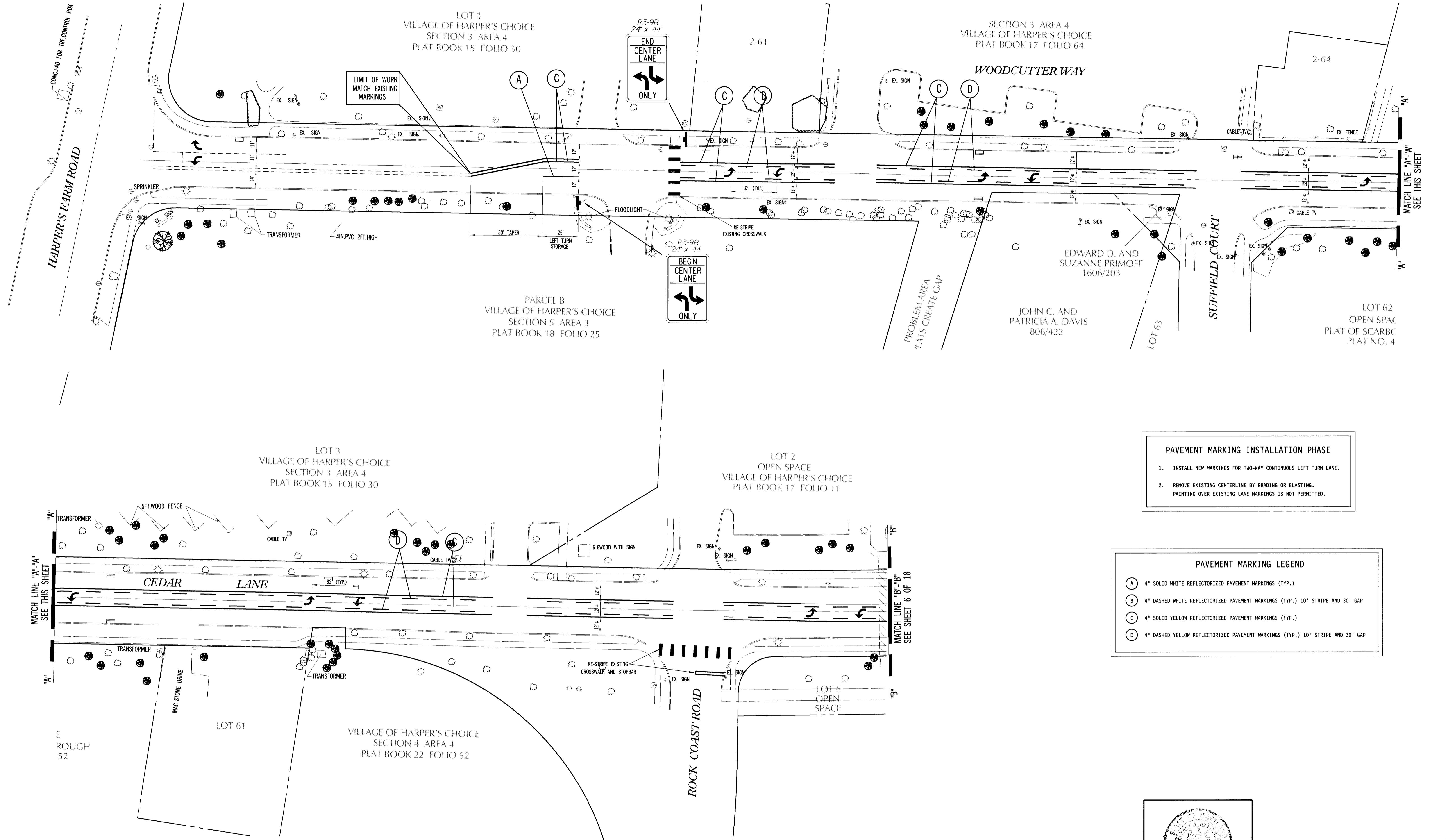
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SEDIMENT CONTROL DETAILS
 FOR
CEDAR LANE ~ CAPITAL PROJECT J-4120

ZONED IT
 6th ELECTION DISTRICT

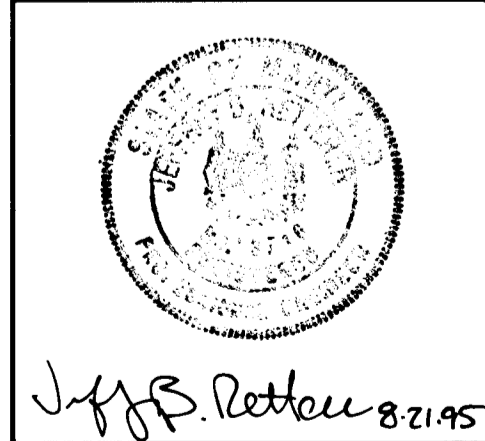
ZONING MAP 36
 HOWARD COUNTY, MARYLAND

DESIGN	SCALE	1" = 30'
DRAWN	5 OF 18	
SA-CHECKED	SHEET	
JULY 93	7779-000	R-2985-X
DATE	PROJ No.	FILE No.



- PAVEMENT MARKING INSTALLATION PHASE**
1. INSTALL NEW MARKINGS FOR TWO-WAY CONTINUOUS LEFT TURN LANE.
 2. REMOVE EXISTING CENTERLINE BY GRADING OR BLASTING. PAINTING OVER EXISTING LANE MARKINGS IS NOT PERMITTED.

- PAVEMENT MARKING LEGEND**
- (A) 4" SOLID WHITE REFLECTORIZED PAVEMENT MARKINGS (TYP.)
 - (B) 4" DASHED WHITE REFLECTORIZED PAVEMENT MARKINGS (TYP.) 10' STRIPE AND 30' GAP
 - (C) 4" SOLID YELLOW REFLECTORIZED PAVEMENT MARKINGS (TYP.)
 - (D) 4" DASHED YELLOW REFLECTORIZED PAVEMENT MARKINGS (TYP.) 10' STRIPE AND 30' GAP



BEFORE BEGINNING CONSTRUCTION, CONTACT MISS UTILITY AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO CONSTRUCTION

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

James J. Lane 11/20/95
DIRECTOR OF PUBLIC WORKS DATE

Paul E. Eason 8/29/95
CHIEF, BUREAU OF ENGINEERING DATE

Richard M. Daniels 11-20-95
CHIEF, BUREAU OF HIGHWAYS DATE

Merabell Anderson-Lake 8/29/95
CHIEF, DIVISION OF TRANSPORTATION PROJECTS AND WATERSHED MANAGEMENT DATE

No.	REVISION	DATE	BY

ENGINEERS • ARCHITECTS • PLANNERS • SCIENTISTS • SURVEYORS • PHOTOGRAMMETRISTS

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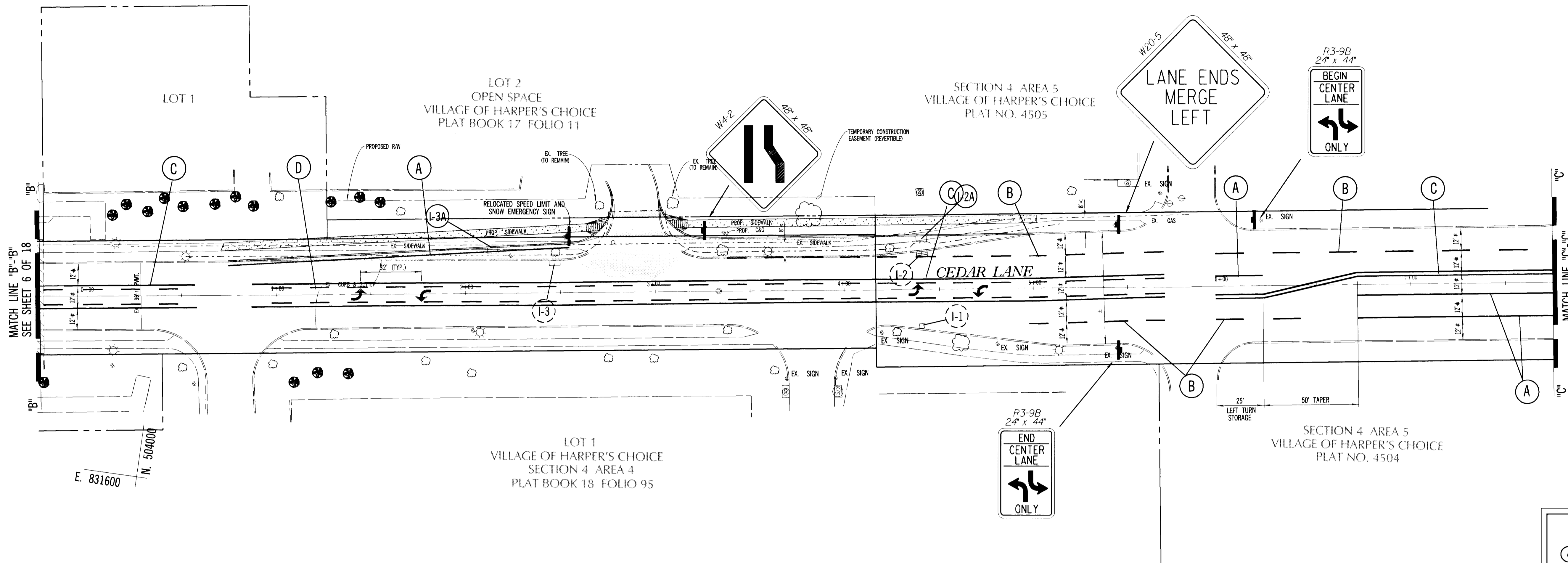
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SIGNING AND MARKING PLAN - SEGMENT 1
FOR
CEDAR LANE ~ CAPITAL PROJECT J-4120

ZONED NT
6th ELECTION DISTRICT

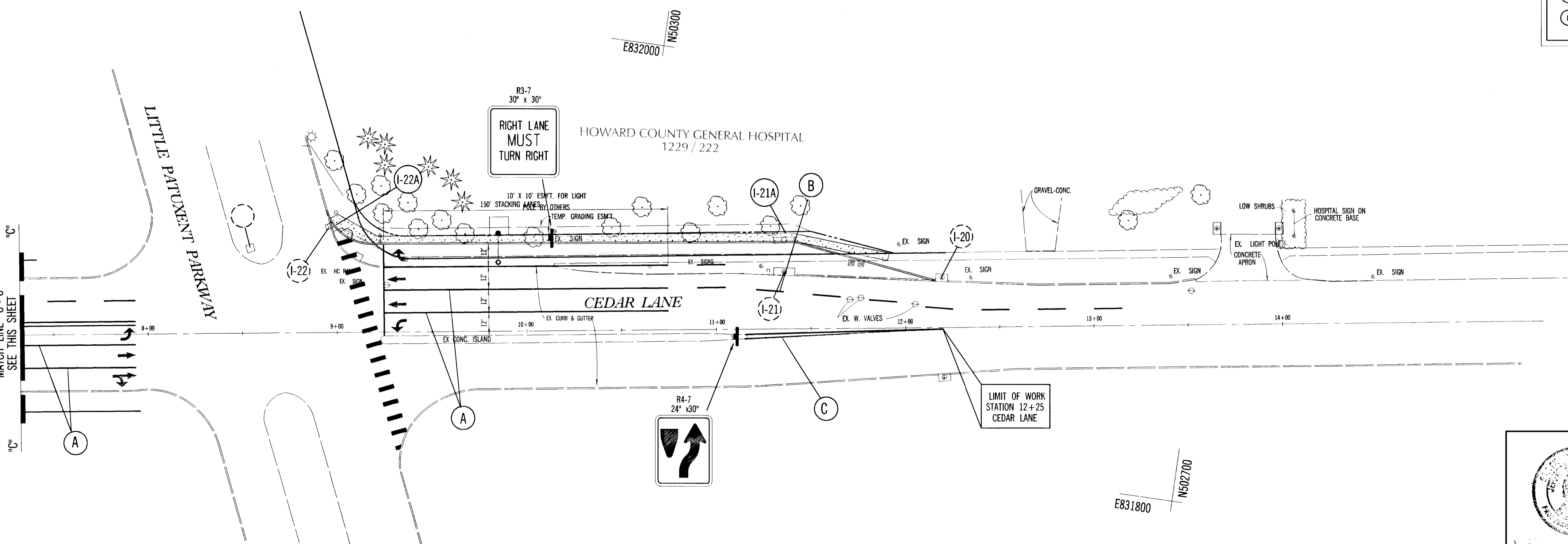
HOWARD COUNTY, MARYLAND
ZONING MAP 36

DESIGN	SCALE	1" = 30'
DRAWN	6 OF 18	
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CHECKED		
DATE	PROJ No.	FILE No.
JULY 93	7779-000	R-2985-X



PAVEMENT MARKING LEGEND

- (A) 4" SOLID WHITE REFLECTORIZED PAVEMENT MARKINGS (TYP.)
- (B) 4" DASHED WHITE REFLECTORIZED PAVEMENT MARKINGS (TYP.) 10' STRIPE AND 30' GAP
- (C) 4" SOLID YELLOW REFLECTORIZED PAVEMENT MARKINGS (TYP.)
- (D) 4" DASHED YELLOW REFLECTORIZED PAVEMENT MARKINGS (TYP.) 10' STRIPE AND 30' GAP



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Director of Public Works: *James P. Linn* 11/20/95
 Chief, Bureau of Engineering: *Robert J. Sepp* 8/29/95
 Chief, Bureau of Highways: *Andrew M. Daniels* 11-20-95
 Chief, Division of Transportation Projects and Watershed Management: *Alexander Anderson* 8/29/95

No.	REVISION	DATE	BY



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SIGNING AND MARKING PLAN
 FOR
CEDAR LANE ~ CAPITAL PROJECT J-4120

ZONED NT
 6th ELECTION DISTRICT

HOWARD COUNTY, MARYLAND

DESIGN	SCALE	1" = 30'
DRAWN	7 OF 18	
SAA	CHECKED	SHEET
DATE	PROJ No.	FILE No.

J. P. B. Petter 8-21-95

TRAFFIC CONTROL NOTES

- Flashing warning lights and/or flags may be used to call attention to early warning signs.
- Warning lights may be used to mark channelizing devices as needed.
- Channelizing devices are to be extended to a point where they are visible to approaching traffic. A full taper length (on two lane, two-way roadways) shall always be provided in advance of curves.
- Taper formula:
L=SW for speeds greater than (>) 40 mph
L=WS / 60 for speeds equal to or less than (<=) 40 mph
Where: L = minimum length of taper
S = numerical value of vehicle speed
W = width of offset
- Maximum spacing between channelizing devices:
a. Taper - approximately equal in feet to the speed limit.
b. Tangent - twice the above taper value.
- Flood lights should be provided mark flagger stations at night.
- If flaggers are not able to see each other, two-way radio communications shall be used.
- If entire work area is visible from one station, a single flagger may be used.
- Pavement markings no longer applicable shall be removed or obliterated as soon as practicable. Temporary markings shall be used as necessary.

Alternate traffic control plans may be presented to the DEPARTMENT OF PUBLIC WORKS for approval in accordance with section 814.02 of the MDOOT's Standard Specifications for Construction and Materials, January 1982 and any revisions thereto.

For emergency repair operations, a minimum number of traffic control devices (TCD's) may be used. This generally will consist of one sign per direction, flashing lights on the vehicle, a minimum number of channelizing devices, and flags or high level devices. Additional TCD's such as, arrow panel(s), more signing, etc., will be placed as soon as possible to present an array of devices which are consistent with the standard work zone traffic control typicals.

An arrow panel in the flashing arrow mode shall be used anytime there is a lane closure on a multi-lane highway. Arrow panels shall not be used along two lane roadways unless they display MSHA's "four corner" lamp array.

Vehicles should not occupy or be stopped in a lane beyond a horizontal curve or a vertical curve (H+V). Instead vehicles stopping area to be pulled as far off the road as possible or be otherwise parked in a manner as to inhibit the movement of traffic as little as possible. If stopping is necessary and no backup vehicle is available place channelizing devices in accordance with general note #3 along with the appropriate signing.

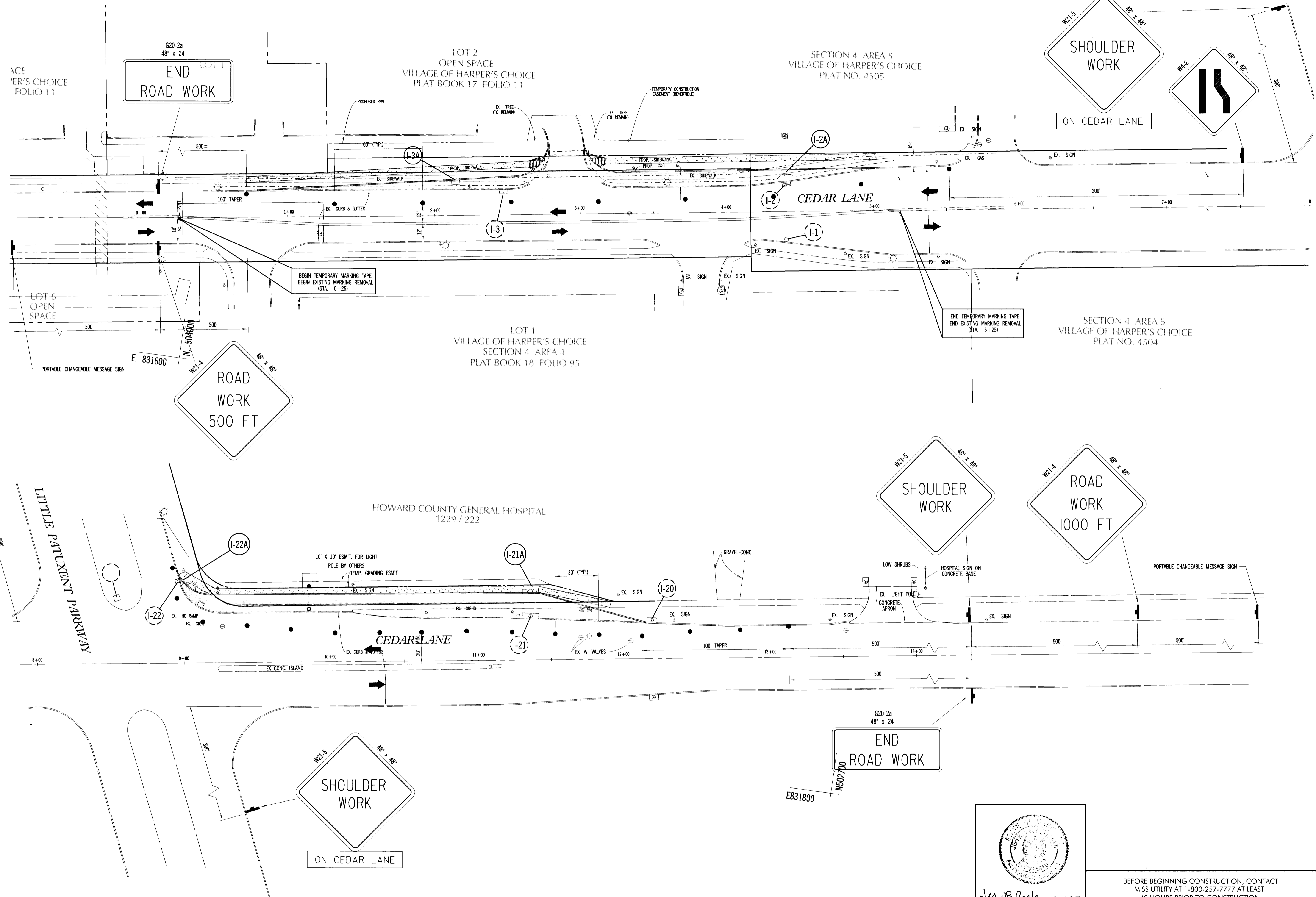
Warning signs mounted on wood post(s) for the over 24 hour operations shall be installed as shown in Figure 6-1, Part VI of the MUTCD. The bottom of the signs mounted on portable supports shall be not less than one foot above pavement elevation. All signs shall be installed in such a manner as to provide adequate visibility of these signs and all other existing signs on the highway to the driver.

In urban areas along streets where the prevailing speed is 35 MPH or less, along secondary roads where the Average Daily Traffic (ADT) is less than 1000 vehicles, the minimum size of 36" x 36" may be used.

For utility operations, advance warning signs may utilize the word "AHEAD" in lieu of distances up to and including 1500 feet. At greater distances, such as 1/2 mile or 1 mile; however, the correct distance value is to be used on such warning signs. Also the UTILITY WORK AHEAD sign may be used in lieu of ROAD CONSTRUCTION, ROAD WORK, or SHOULDER WORK signs only.

No work operations which interferes with the flow of traffic may take place during the peak hours 6 A.M. - 9 A.M. and 3 P.M. - 7 P.M. Monday - Friday unless written approval is received from the HOWARD COUNTY BUREAU OF CONSTRUCTION INSPECTION.

All signs, channelizing devices, etc. shall be in accordance with The Manual on Uniform Traffic Control Devices (MUTCD)



- LEGEND**
- TRAFFIC DRUM
 - SIGN FACE
 - SIGN POST
 - ➔ DIRECTION OF TRAFFIC

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

James P. Shaw 11/20/95
DIRECTOR OF PUBLIC WORKS DATE

Richard G. Epp 8/29/95
CHIEF, BUREAU OF ENGINEERING DATE

Charles M. Daniels 11-20-95
CHIEF, BUREAU OF HIGHWAYS DATE

Elizabeth Anderson-Calka 8/29/95
CHIEF, DIVISION OF TRANSPORTATION PROJECTS AND WATERSHED MANAGEMENT DATE

No.	REVISION	DATE	BY



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(301) 738-3890

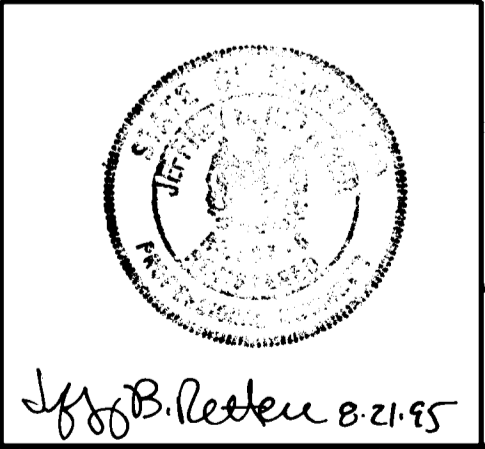
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TRAFFIC CONTROL PLAN
FOR
CEDAR LANE ~ CAPITAL PROJECT J-4120

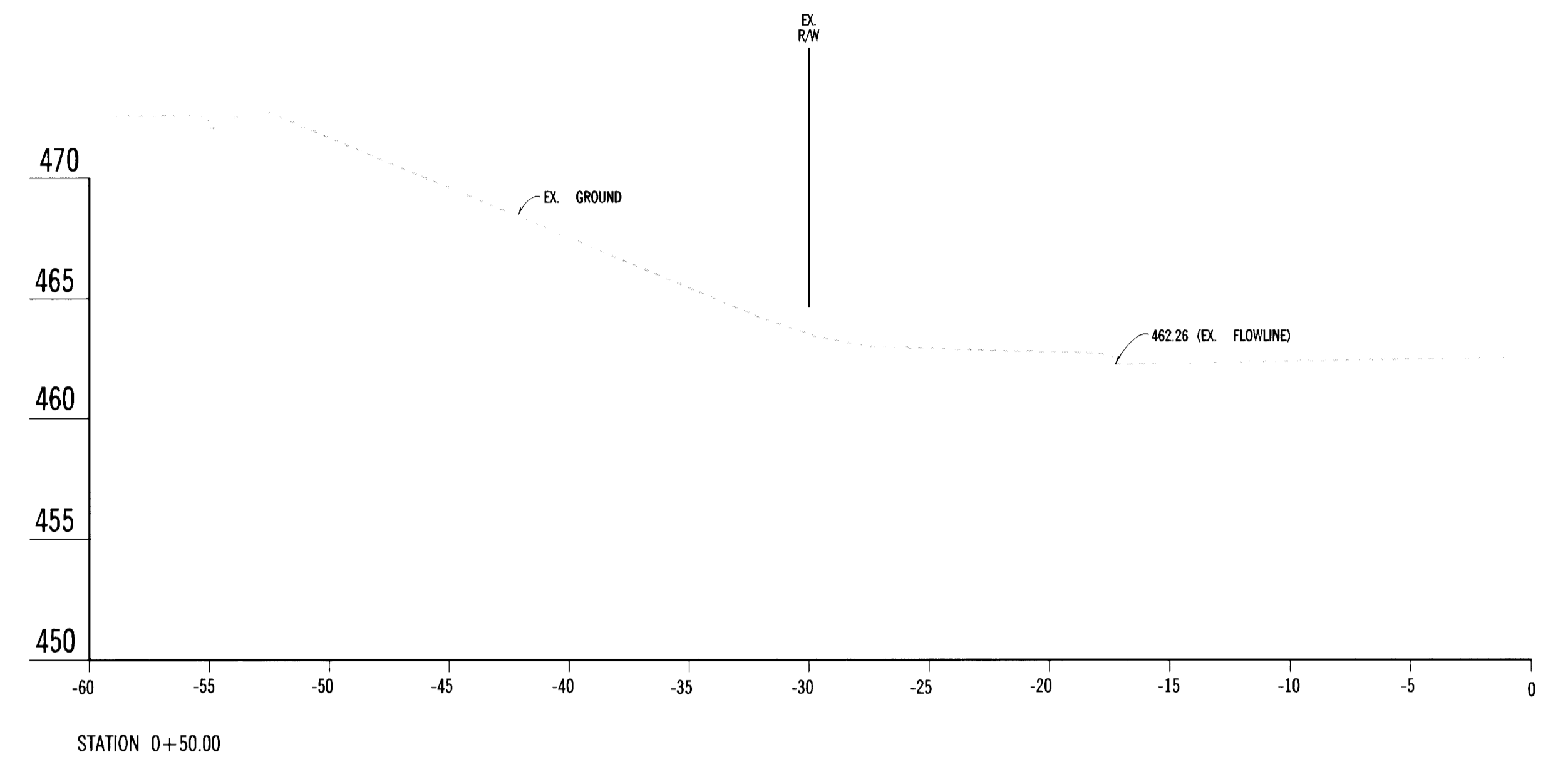
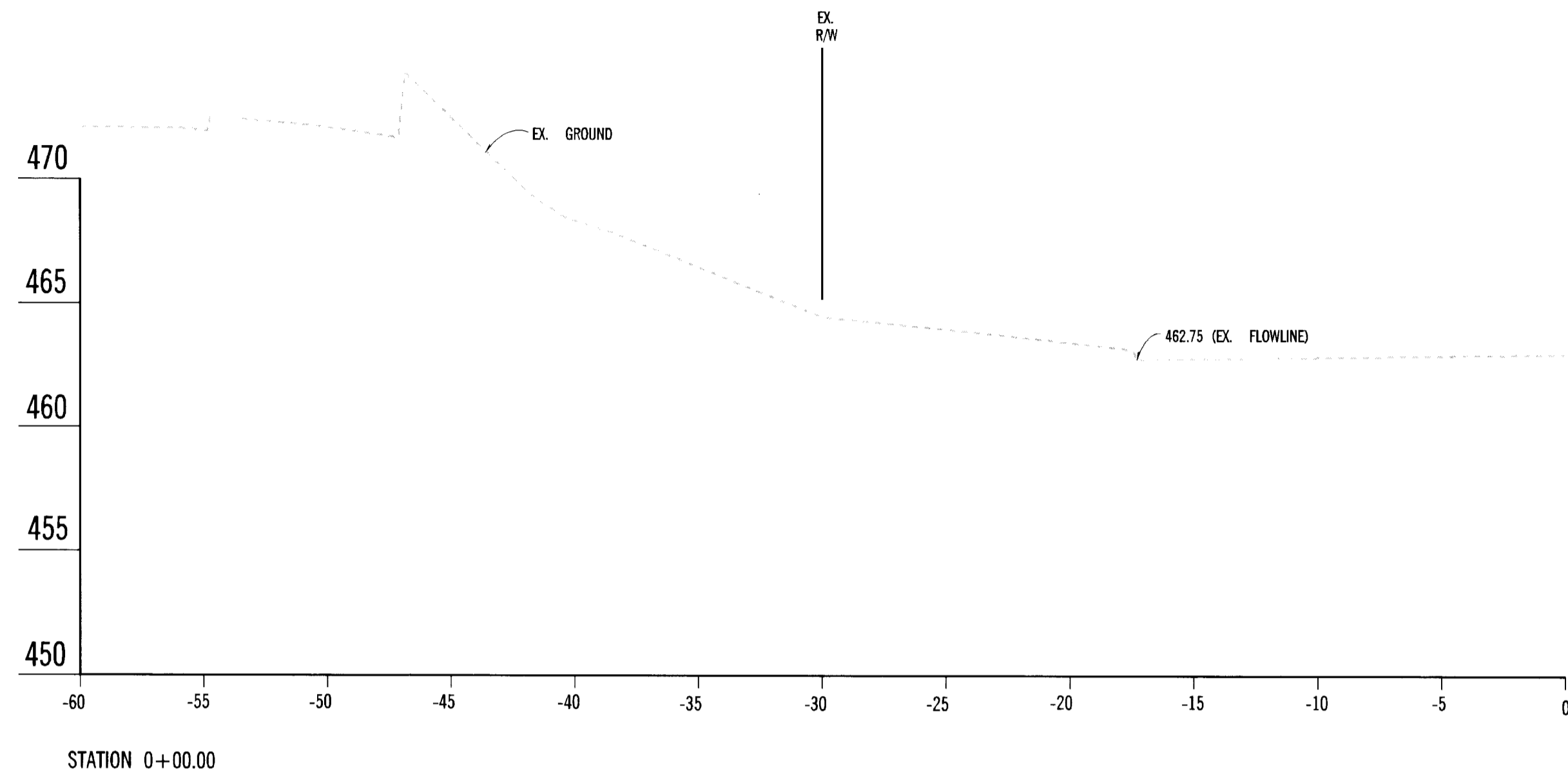
ZONED NT
6th ELECTION DISTRICT

ZONING MAP 36
HOWARD COUNTY, MARYLAND

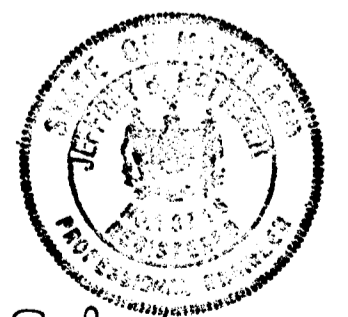
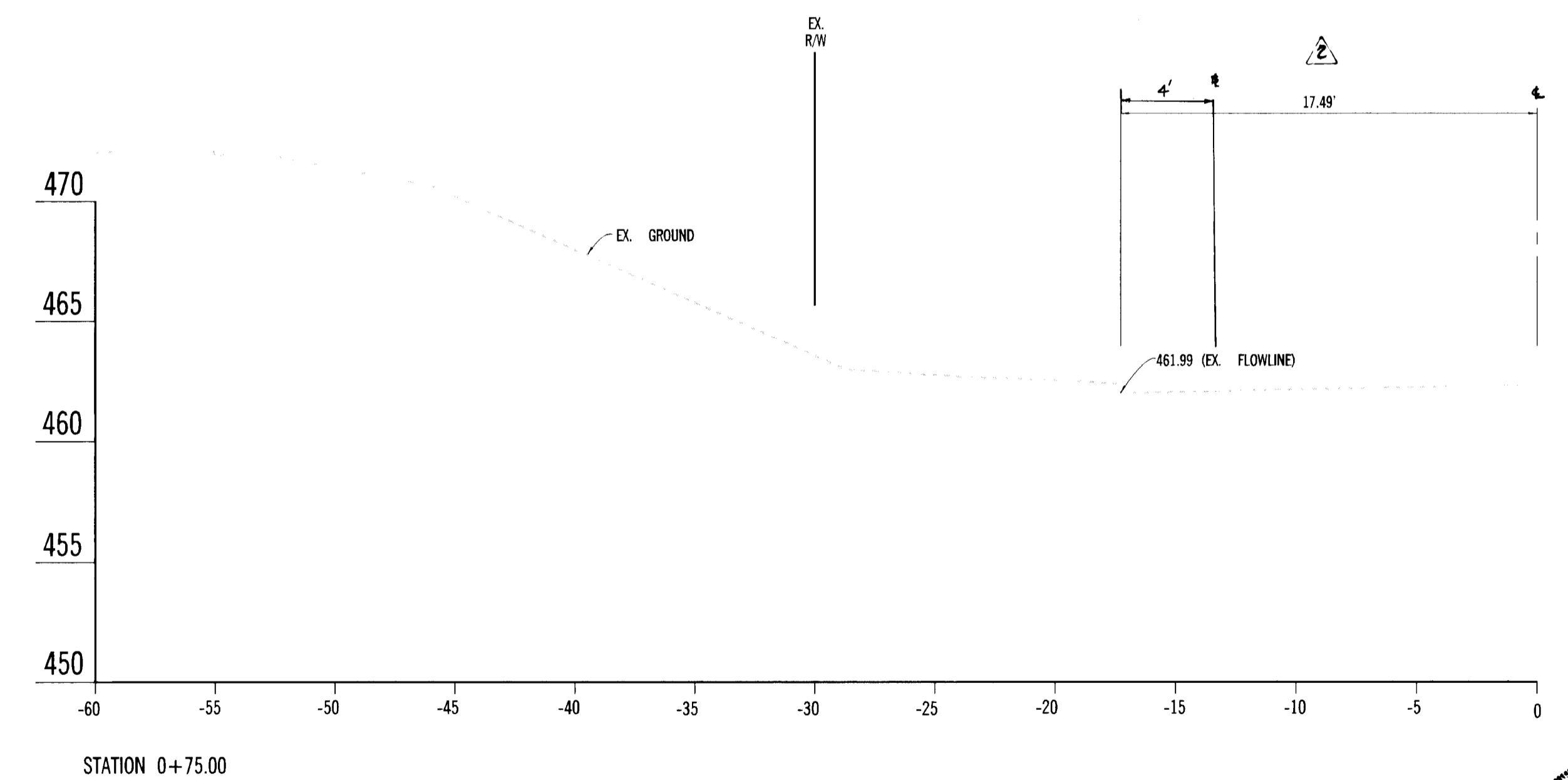
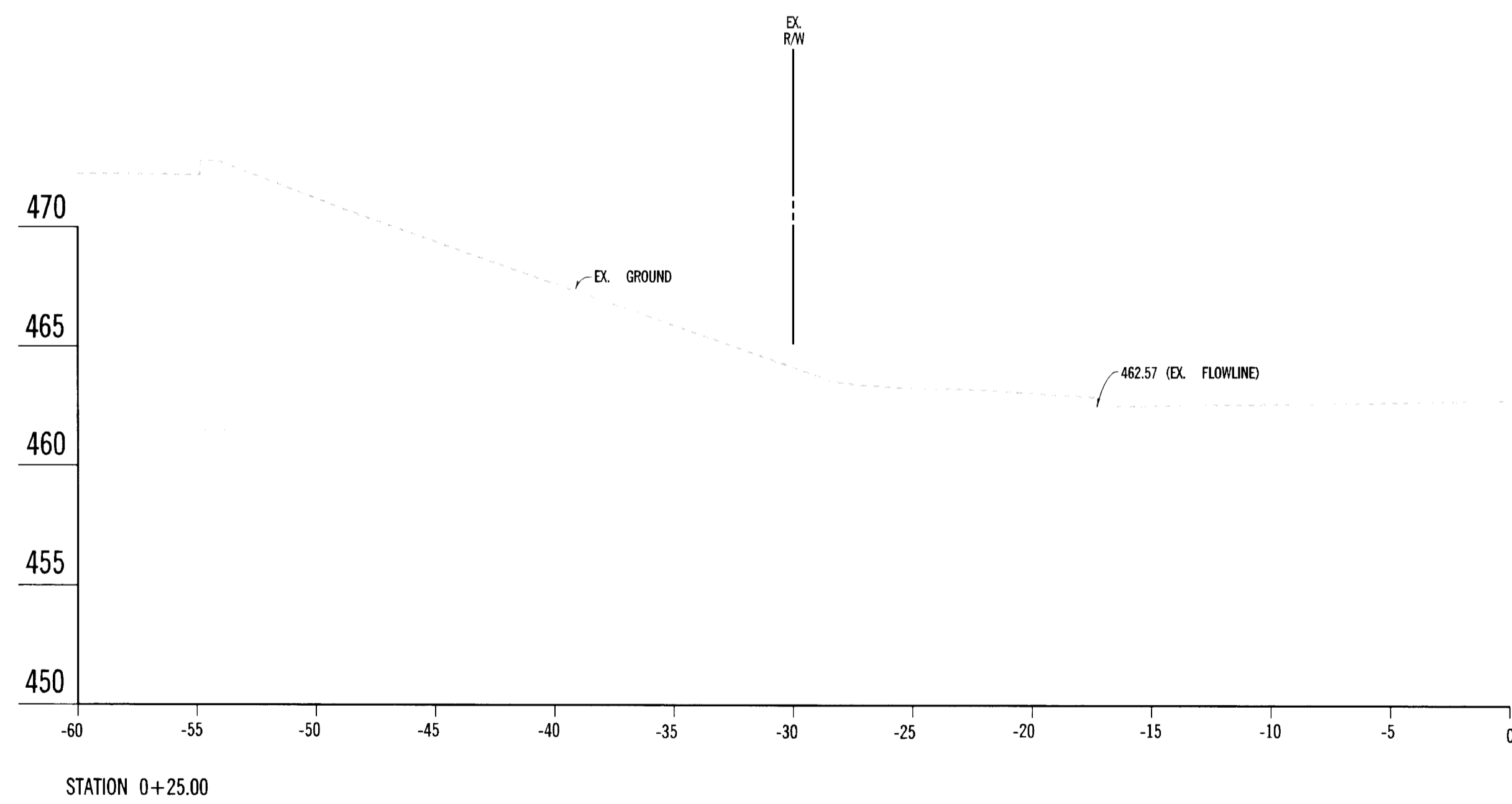
DESIGN	SCALE	1" = 30'
DRAWN	8 OF 18	
CHECKED	SHEET	
DATE	PROJ. No.	FILE No.
JULY 93	7779-000	R-2985-X



BEFORE BEGINNING CONSTRUCTION, CONTACT
MISS UTILITY AT 1-800-257-7777 AT LEAST
48 HOURS PRIOR TO CONSTRUCTION



NOTE: FOR CUT AND FILL QUANTITIES, SEE SHEET 14 OF 18



Jeff B. Ritten e. 21.95

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Lamon P. Shum 11/20/95
DIRECTOR OF PUBLIC WORKS DATE
Andrew M. Doucette 11-20-95
CHIEF, BUREAU OF HIGHWAYS DATE
Paul G. Eppson 8/22/95
CHIEF, BUREAU OF ENGINEERING DATE
Clayton Anderson 8/22/95
CHIEF, DIVISION OF TRANSPORTATION PROJECTS AND WATERSHED MANAGEMENT DATE

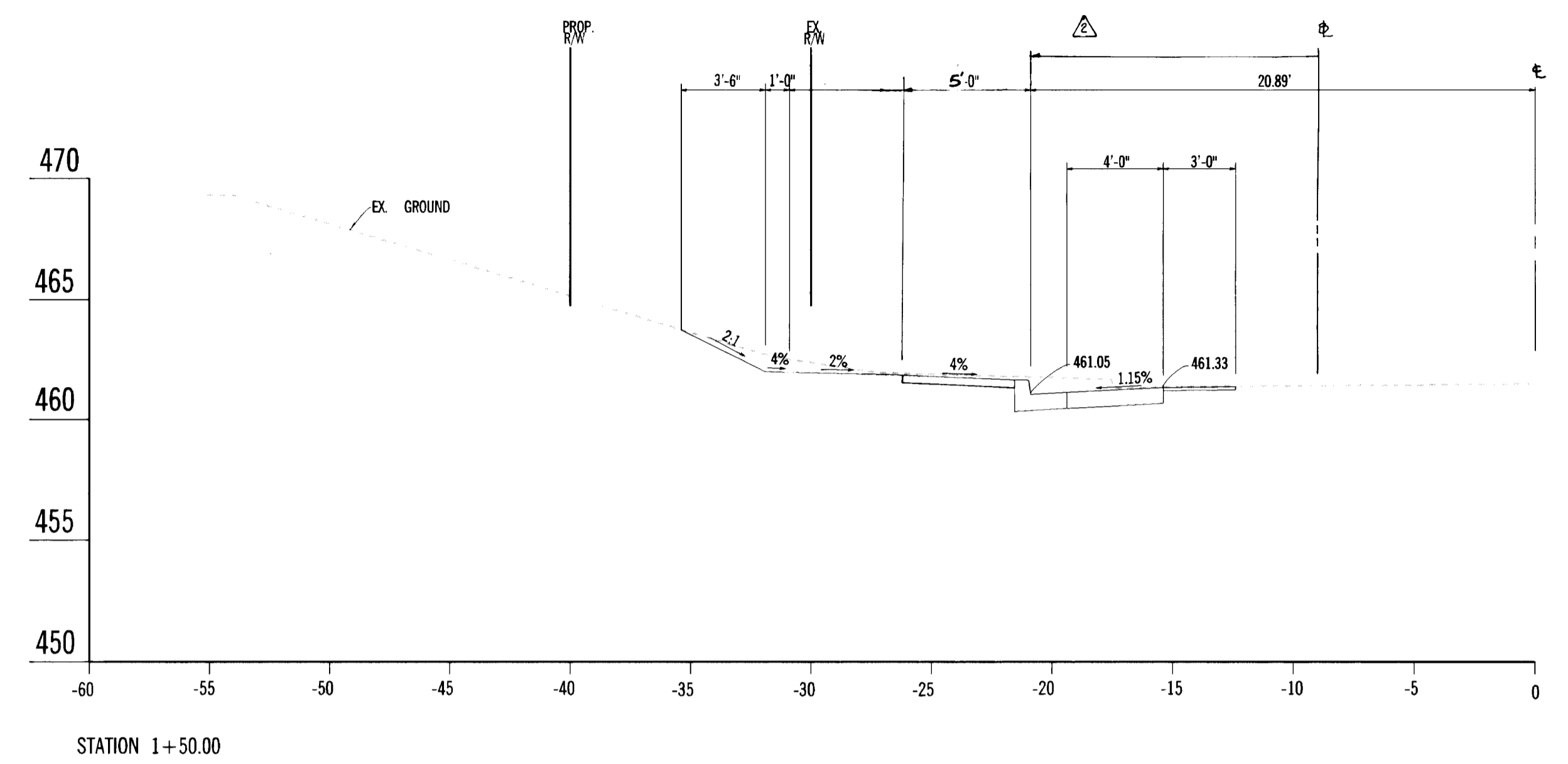
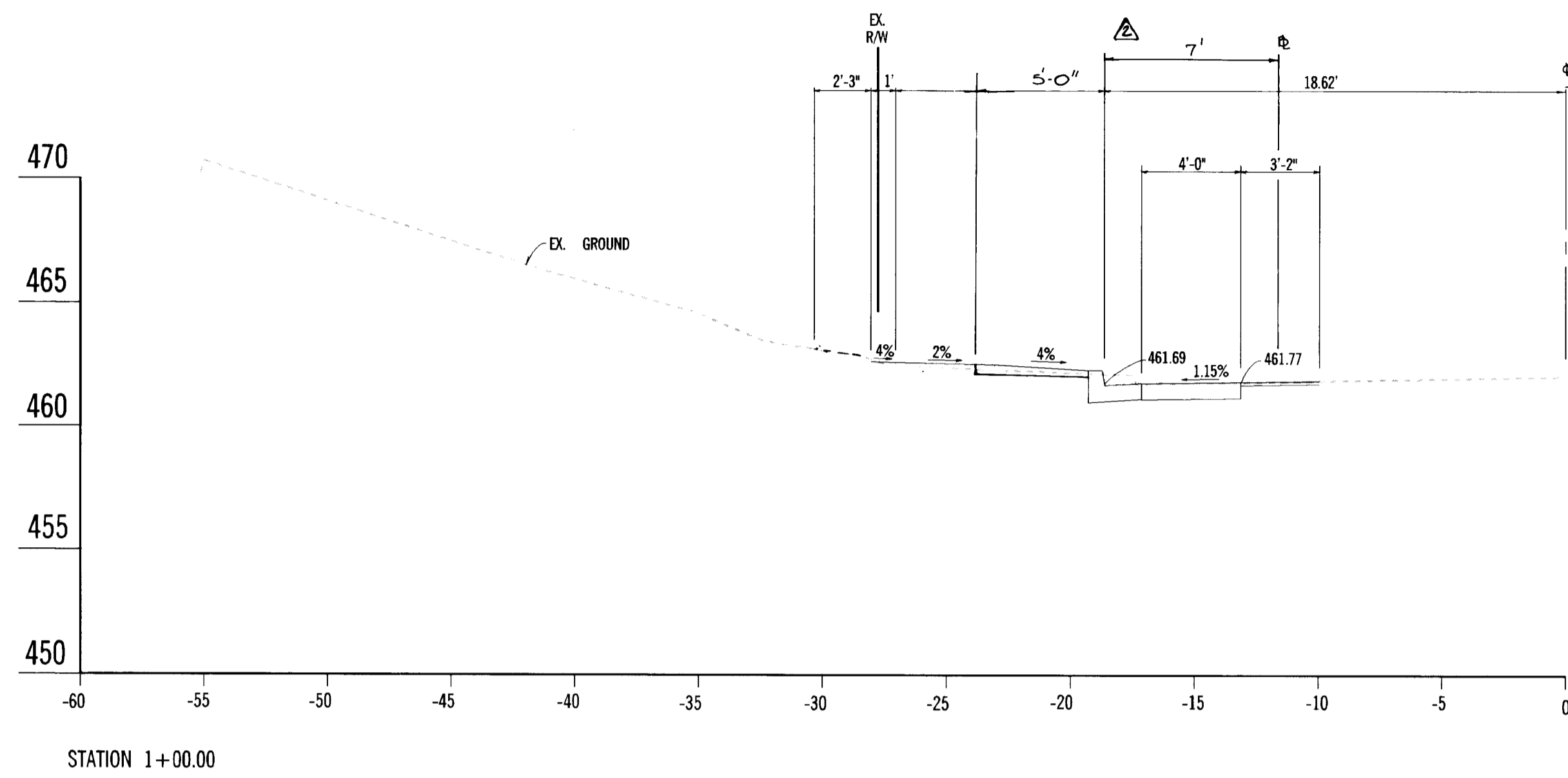
No.	REVISION	DATE	BY
1	REVISED PER HOWARD COUNTY COMMENTS	10-3-94	TAT
2	CHANGE PROFILE @ STA. 0+75.00	11-2-95	PAC



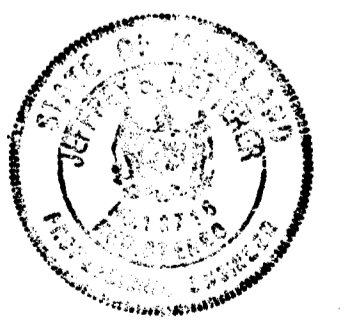
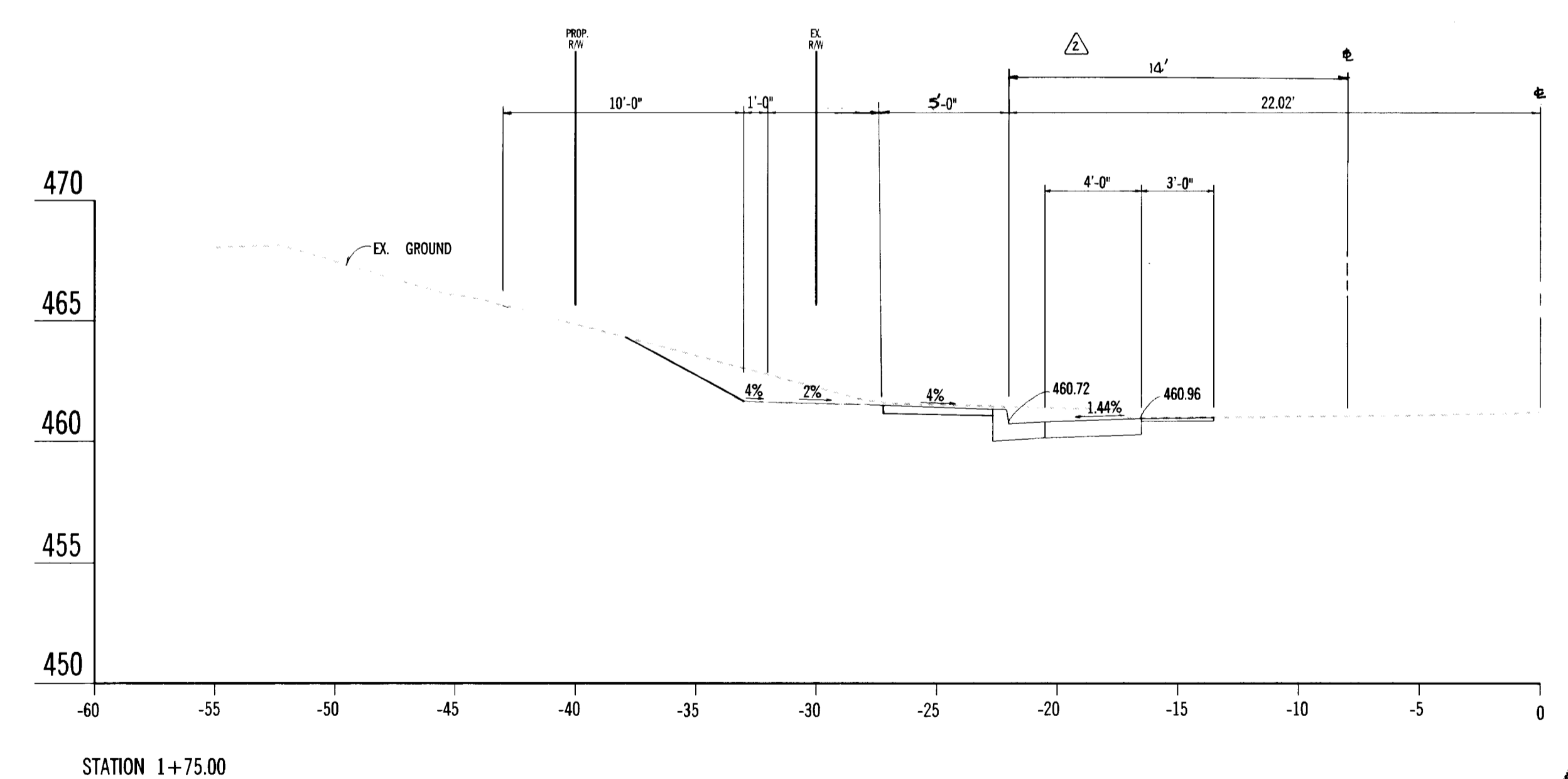
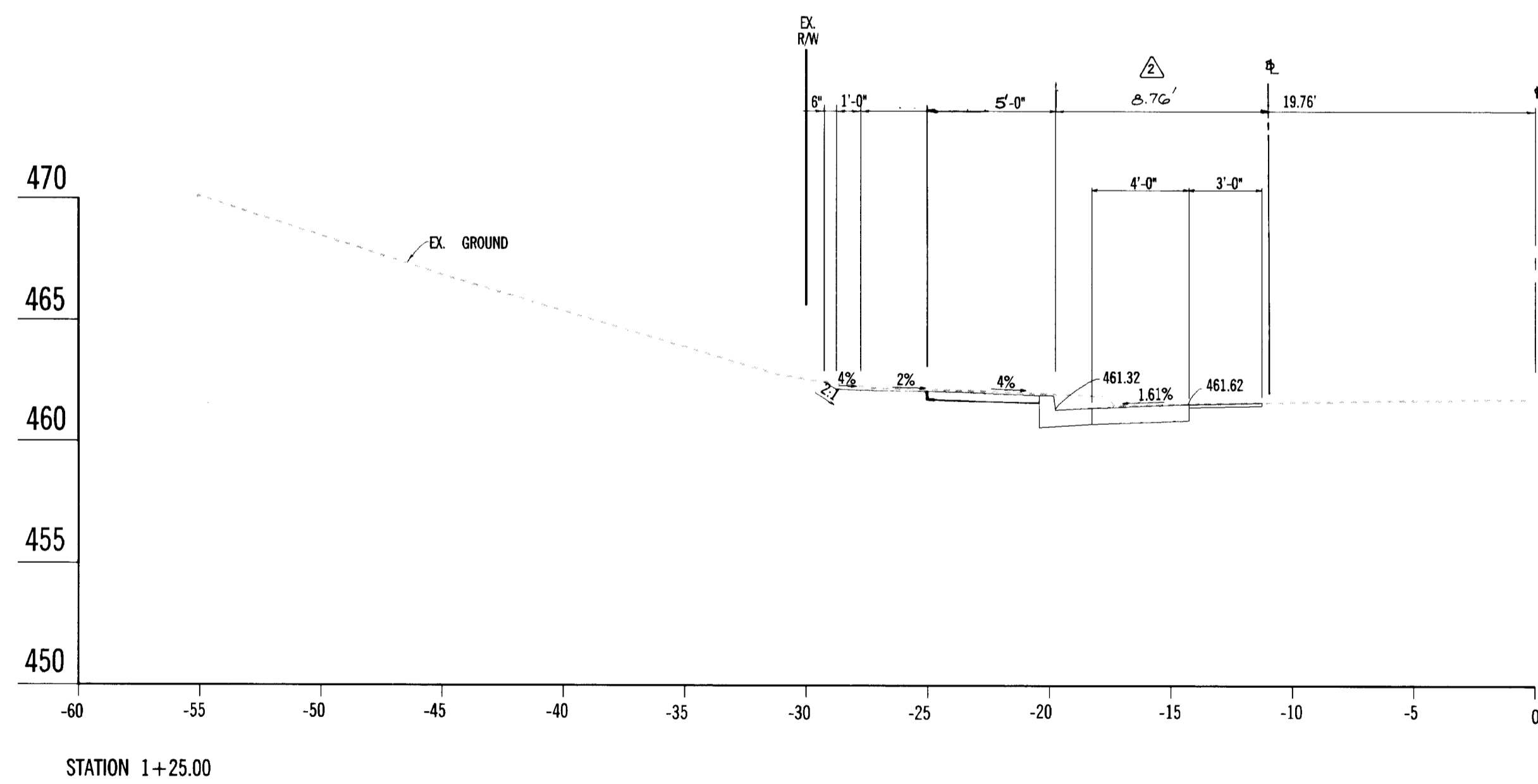
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ROCKVILLE, MD. 20850
(301) 738-3890
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CROSS SECTIONS
FOR
CEDAR LANE ~ CAPITAL PROJECT J-4120
ZONED NT
6th ELECTION DISTRICT
ZONING MAP 36
HOWARD COUNTY, MARYLAND

DESIGN	SCALE	HORIZ: 1" = 5'	VERT: 1" = 5'
DRAWN	9 OF 18		
CHECKED	SHEET	DATE	FILE No.
SAW	7779-000	JULY 93	R-2985-X
PROJ No.	7779-000	DATE	FILE No.



NOTE: FOR CUT AND FILL QUANTITIES, SEE SHEET 14 OF 18



James B. Peterson
8-21-95

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Lawrence J. Shum 11/26/95
DIRECTOR OF PUBLIC WORKS DATE

Paul G. Seaman 8/22/95
CHIEF, BUREAU OF ENGINEERING DATE

Andrew M. Danek 11-20-95
CHIEF, BUREAU OF HIGHWAYS DATE

Elizabeth Henderson-Cole 8/29/95
CHIEF, DIVISION OF TRANSPORTATION PROJECTS AND WATERSHED MANAGEMENT DATE

No.	REVISION	DATE	BY
1	REVISED PER HOWARD COUNTY COMMENTS	10-3-94	TAT
2	CHANGE CROSS PER HO. CO. REVISION	11/10/95	DAC



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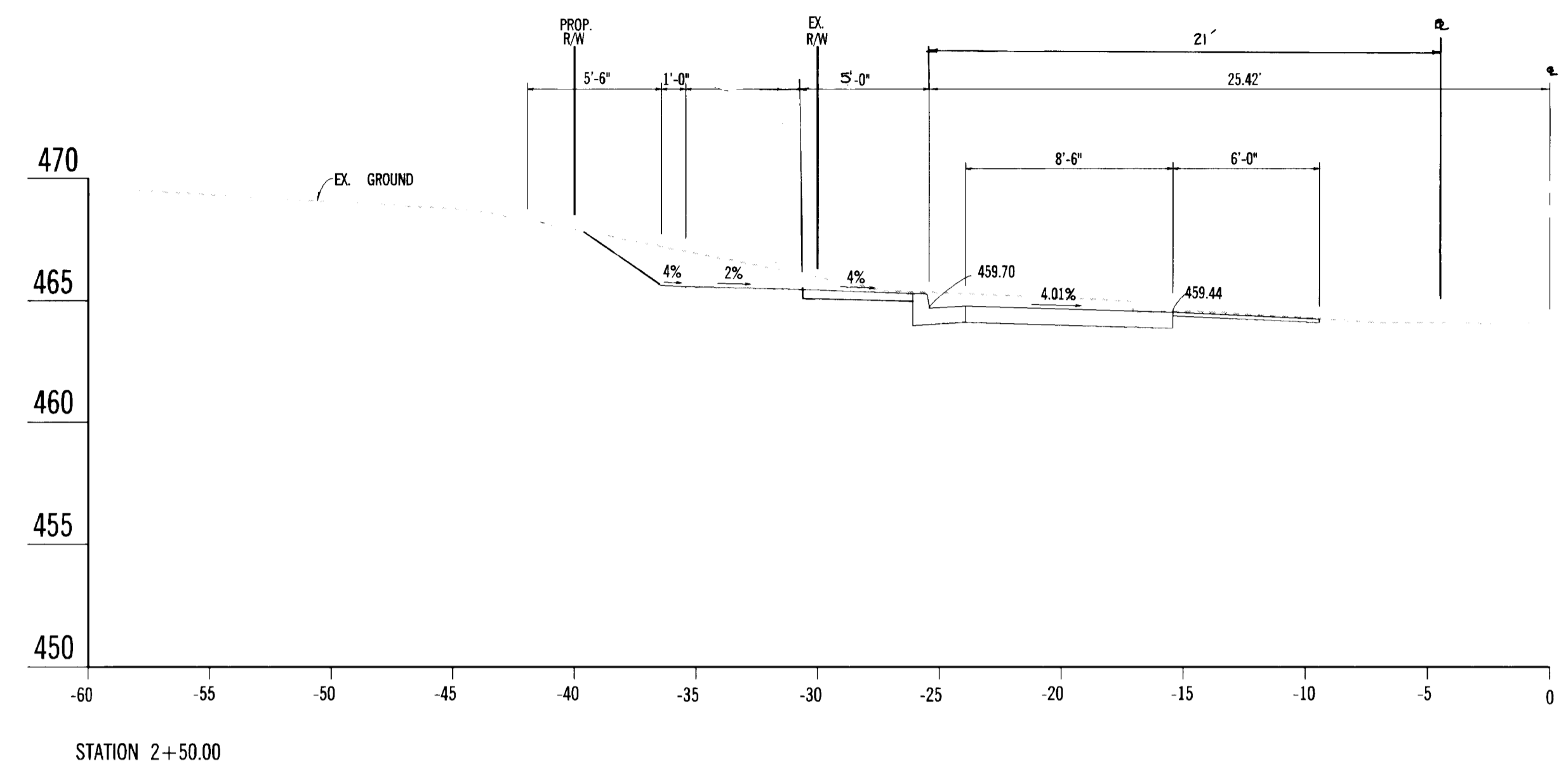
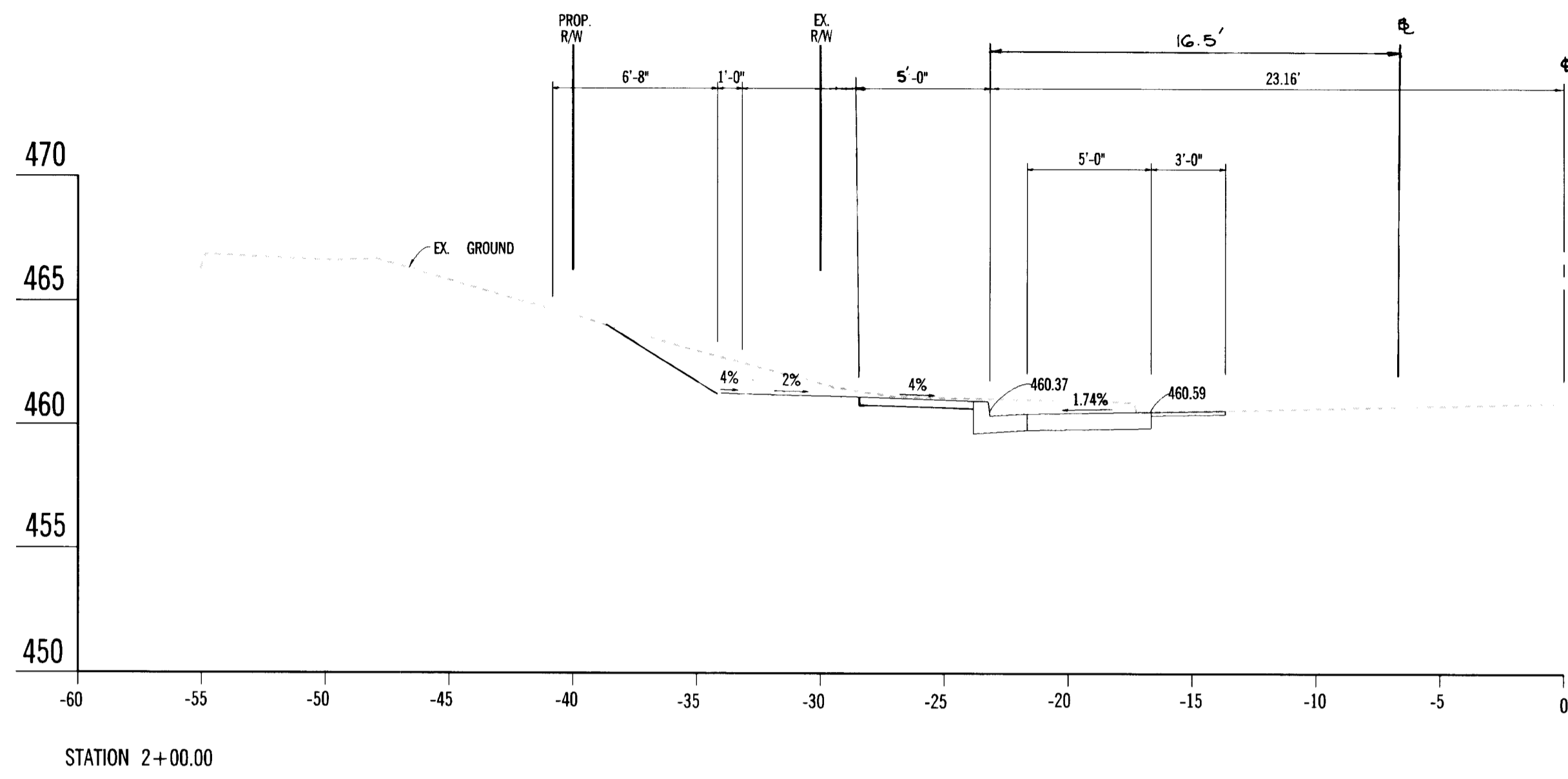
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LEESBURG, VA. • MANASSAS, VA. • ORLANDO, FL. • RALEIGH, NC. • BALTIMORE, MD. • TAMPA, FL. • WEST PALM BEACH, FL.

CROSS SECTIONS
FOR
CEDAR LANE ~ CAPITAL PROJECT J-4120

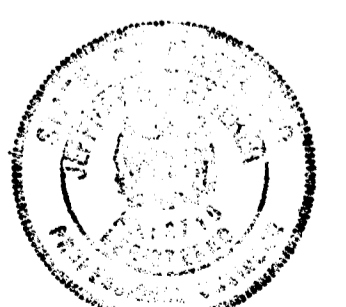
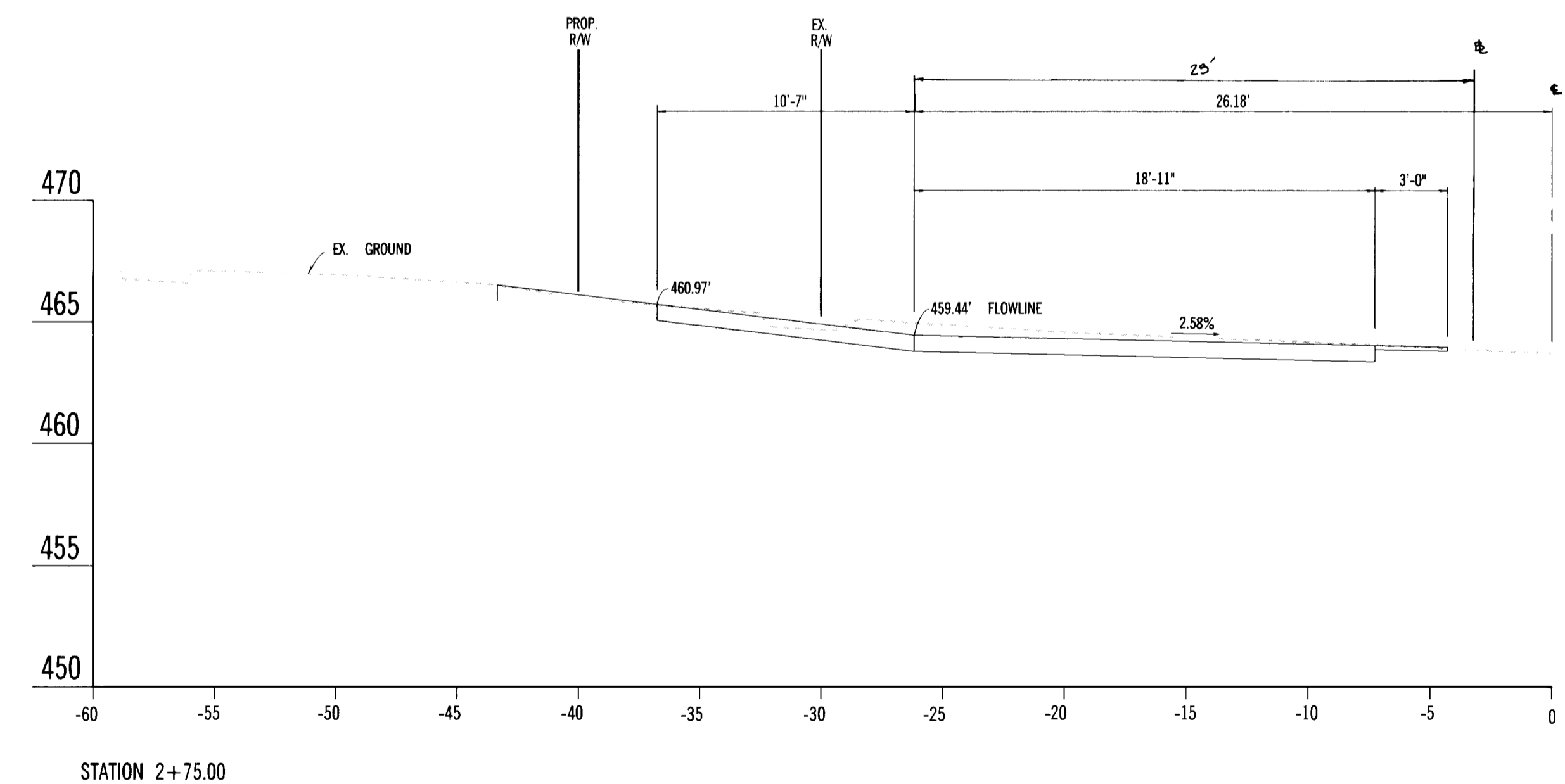
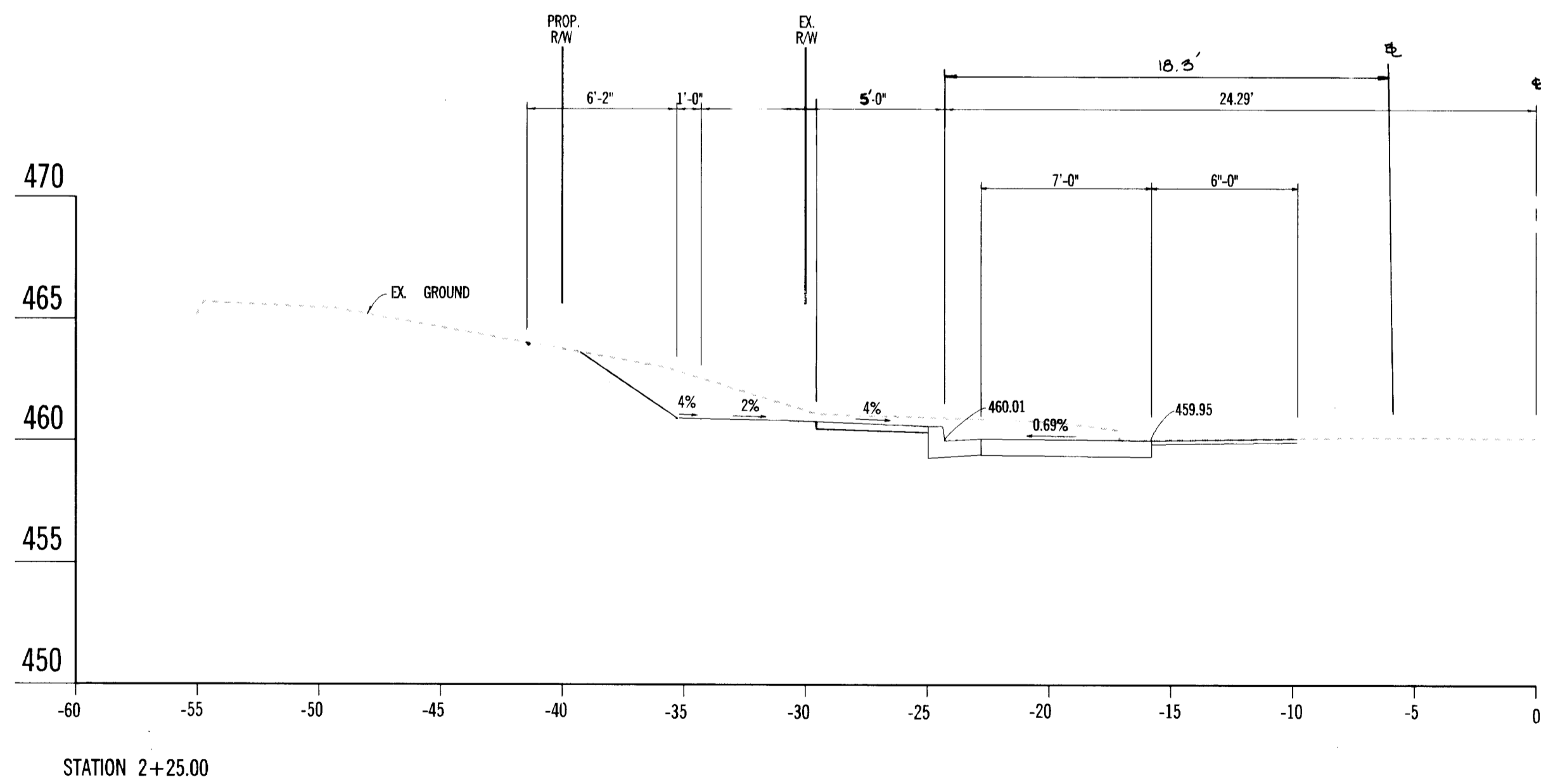
ZONED NT
6th ELECTION DISTRICT

ZONING MAP 36
HOWARD COUNTY, MARYLAND

DESIGN	SCALE	HORIZ: 1" = 5'	VERT: 1" = 5'
DRAWN	10 OF 18		
SAA	SHEET		
CHECKED	JULY 93	7779-000	R-2985-X
DATE	PROJ No.	FILE No.	



NOTE: FOR CUT AND FILL QUANTITIES, SEE SHEET 14 OF 18



J. B. Retter
21195

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

James P. Swan 11/20/95
DIRECTOR OF PUBLIC WORKS DATE
Richard M. Dauler 11-20-95
CHIEF, BUREAU OF HIGHWAYS DATE
Richard P. Seppan 8/29/95
CHIEF, BUREAU OF ENGINEERING DATE
Charles H. Anderson 8/29/95
CHIEF, DIVISION OF TRANSPORTATION PROJECTS AND WATERSHED MANAGEMENT DATE

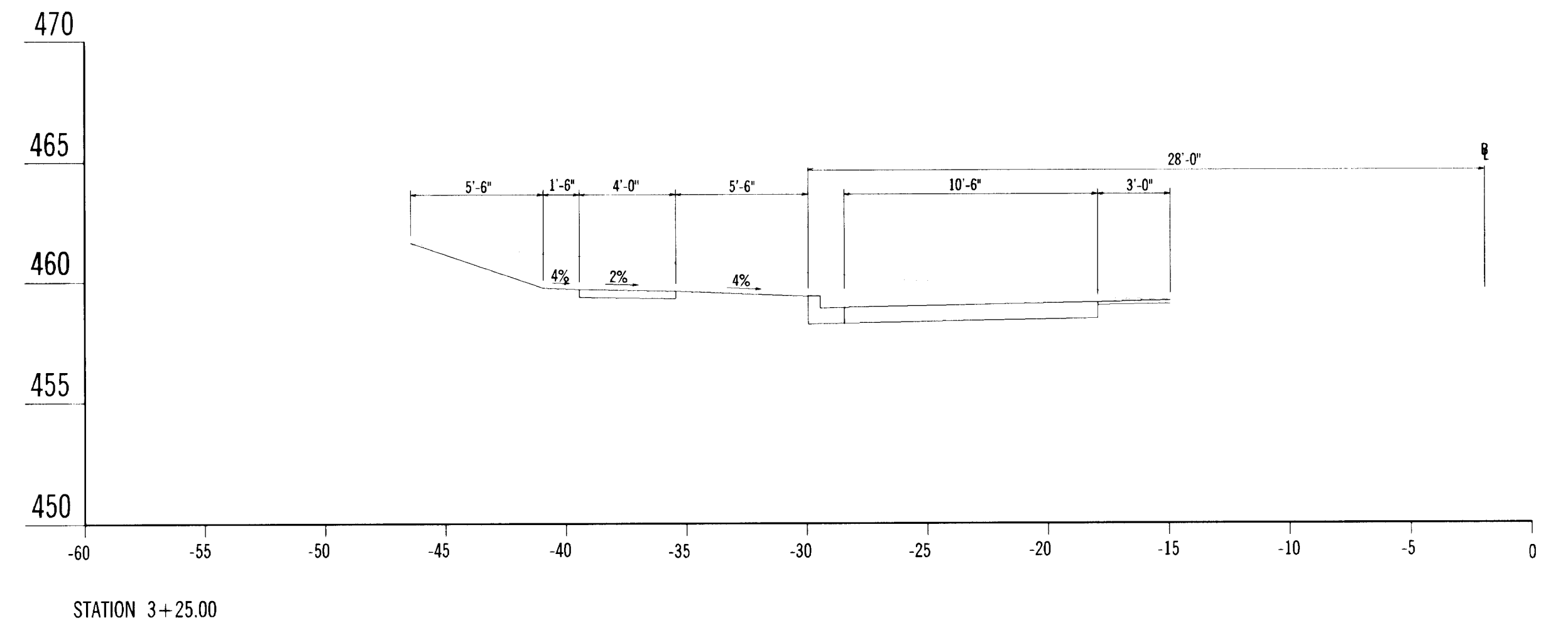
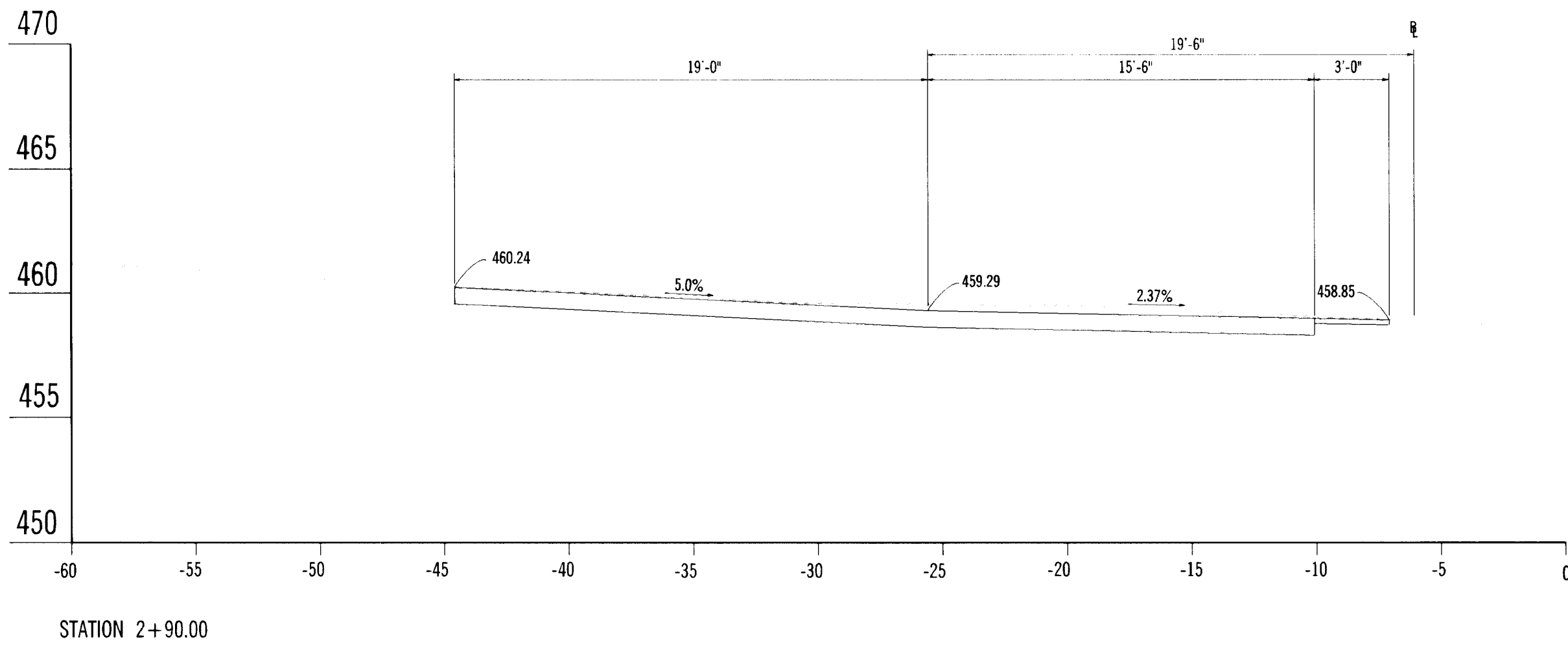
No.	REVISION	DATE	BY
1	REVISED PER HOWARD COUNTY COMMENTS	10-3-94	TAT
2	CHANGE CROSS SECTION PER HO. CO.	11-15-95	SAC



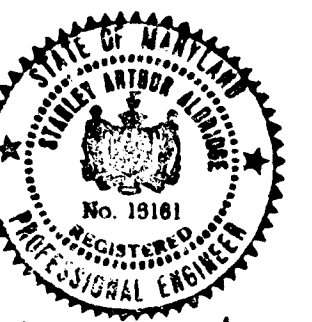
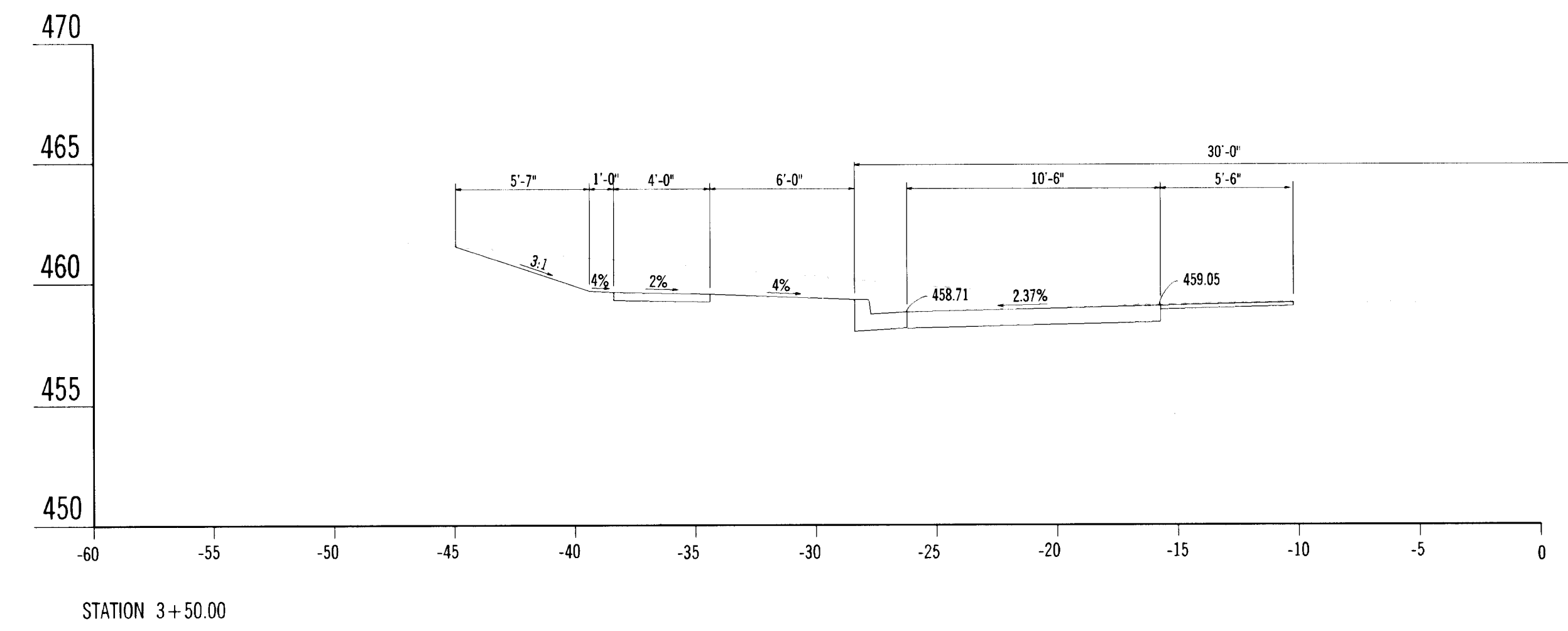
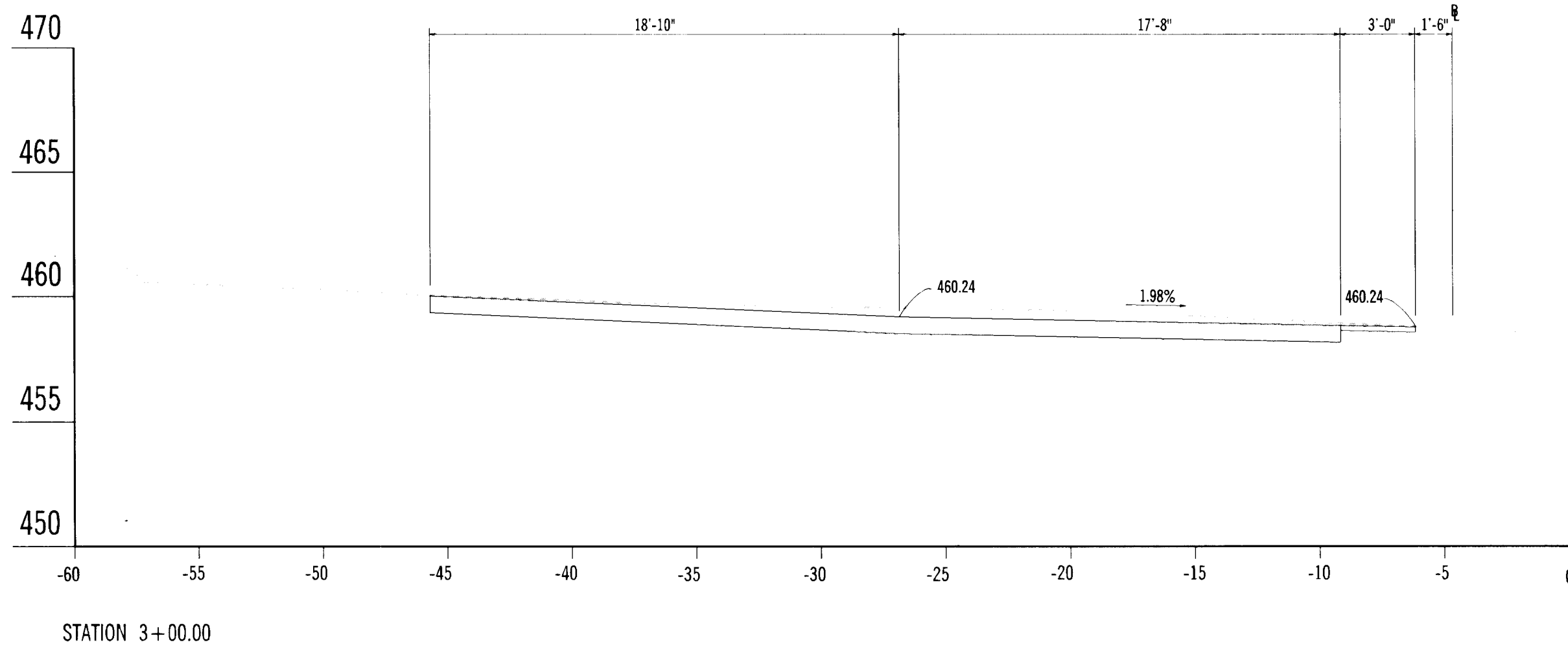
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LEESBURG, VA. • MANASSAS, VA. • ORLANDO, FL. • RALEIGH, NC. • BALTIMORE, MD. • TAMPA, FL. • WEST PALM BEACH, FL.

CROSS SECTIONS
FOR
CEDAR LANE ~ CAPITAL PROJECT J-4120
ZONED NT
6th ELECTION DISTRICT
ZONING MAP 36
HOWARD COUNTY, MARYLAND

DESIGN	HORIZ: 1" = 5'
SCALE	VERT: 1" = 5'
DRAWN	11 OF 18
SAA	
CHECKED	SHEET
DATE	PROJ. No.
JULY 93	7779-000
	R-2985-X
	FILE No.



NOTE: FOR CUT AND FILL QUANTITIES, SEE SHEET 14 OF 18



Alan Aldridge
10/13/95

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

James M. Parker 11/20/95
DIRECTOR OF PUBLIC WORKS
CHIEF, BUREAU OF HIGHWAYS

Paul D. Sporn 8/29/95
CHIEF, BUREAU OF ENGINEERING

Elizabeth Anderson Calver 8/29/95
CHIEF, DIVISION OF TRANSPORTATION PROJECTS AND WATERSHED MANAGEMENT

No.	REVISION	DATE	BY
1	REVISED PER HOWARD COUNTY COMMENTS	10-3-94	TAT
2	REVISED BASELINE LOCATIONS	10-13-95	TAT

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(301) 738-3890

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LEESBURG, VA. • MANASSAS, VA. • ORLANDO, FL. • RALEIGH, NC. • BALTIMORE, MD. • TAMPA, FL. • WEST PALM BEACH, FL.

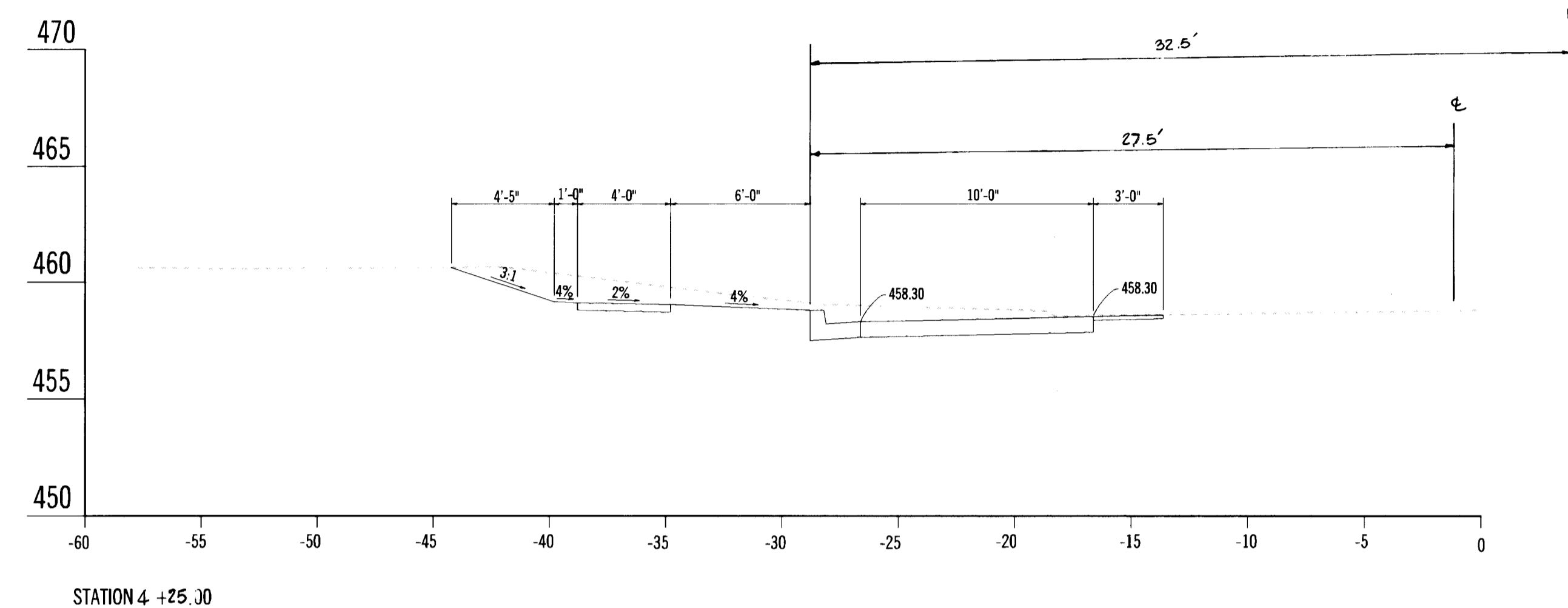
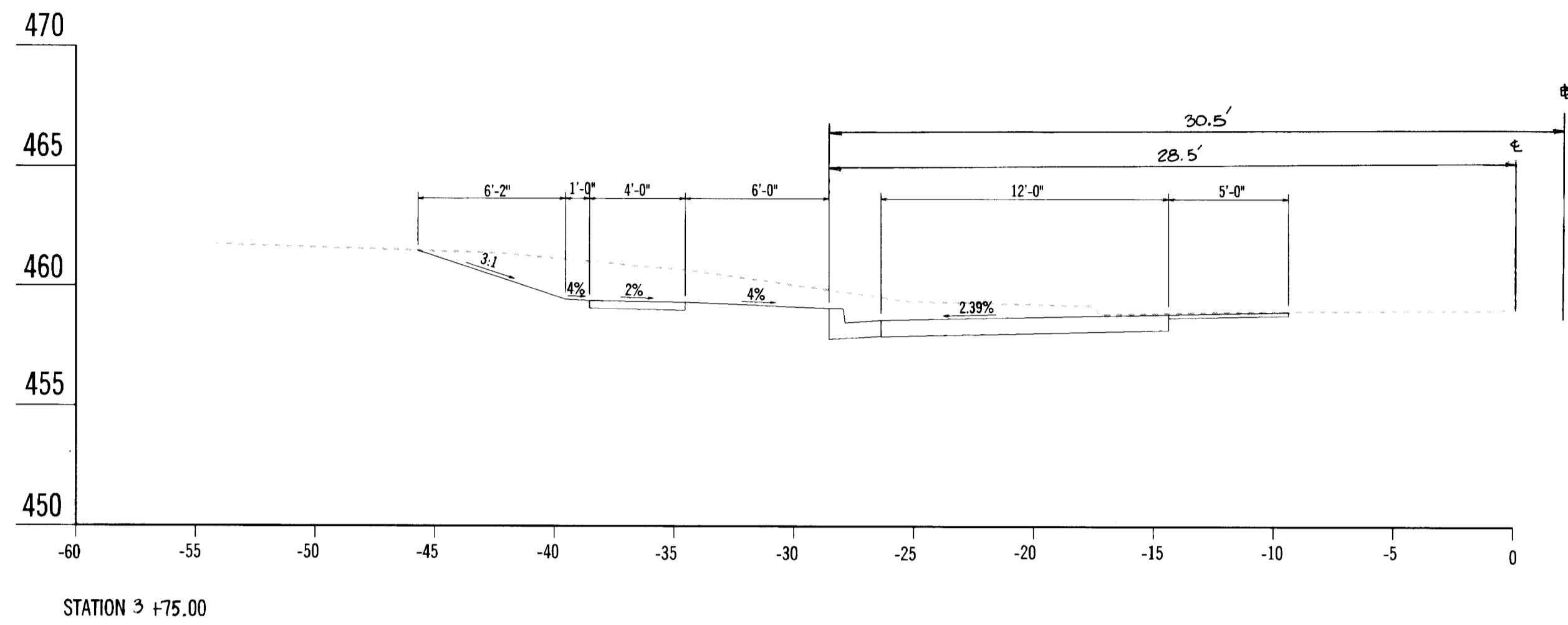
CROSS SECTIONS
FOR
CEDAR LANE ~ CAPITAL PROJECT J-4120

ZONED INT
6th ELECTION DISTRICT

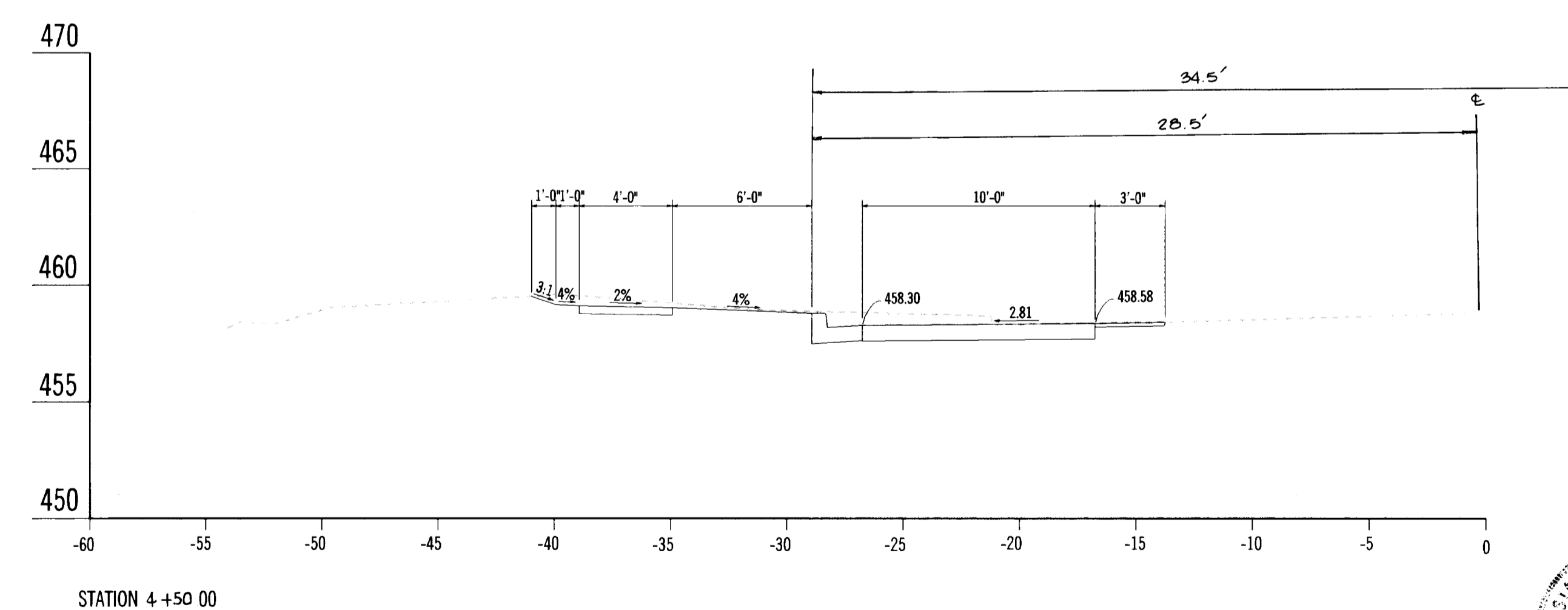
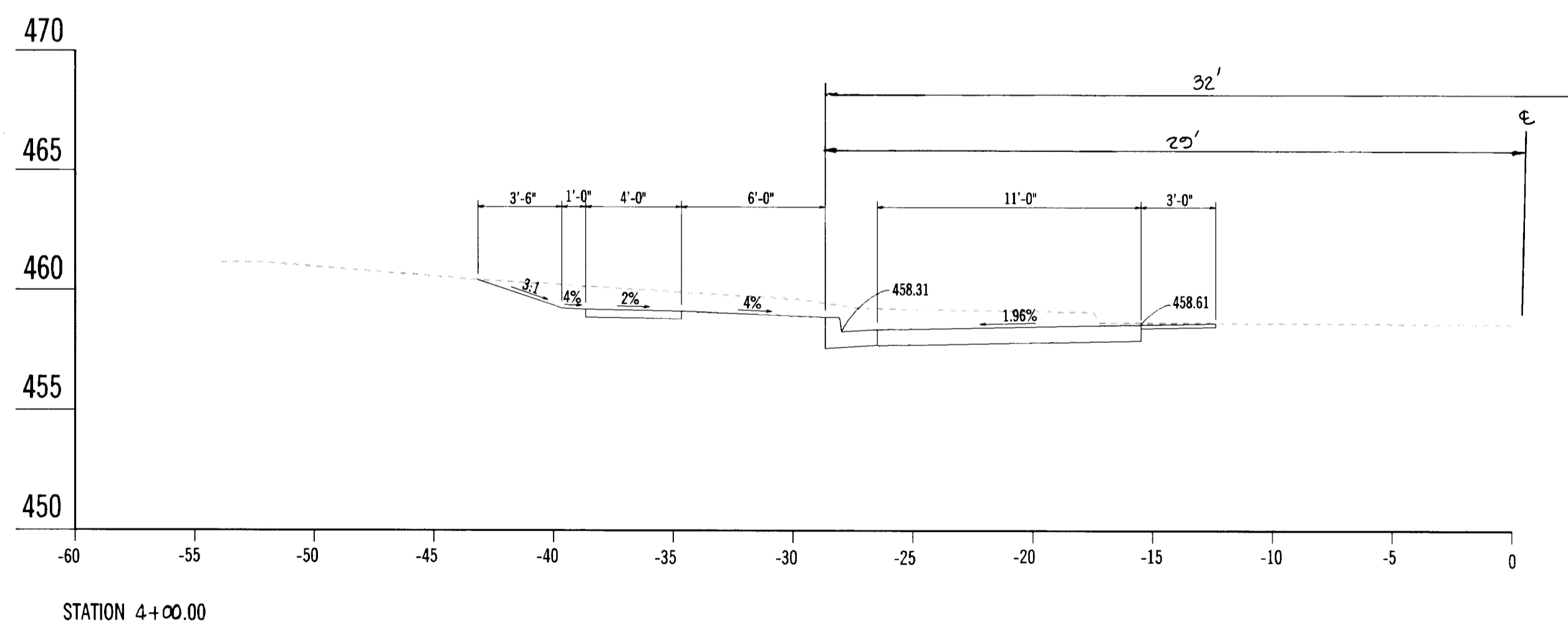
ZONING MAP 35
HOWARD COUNTY, MARYLAND

DESIGN	SCALE	HORIZ: 1" = 5'	VERT: 1" = 5'
DRAWN	12 OF 18		
CHECKED	SHEET	PROJ No.	FILE No.
DATE	JULY 93	7779-000	R-2985-X

10-15-95 GE 1113000011130000 11113000011130000 11113000011130000 11113000011130000 11113000011130000



NOTE: FOR CUT AND FILL QUANTITIES, SEE SHEET 14 OF 18



Jeff B. Rettera
8/21/95

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

[Signature] 11/20/95
 DIRECTOR OF PUBLIC WORKS DATE
 [Signature] 8/23/95
 CHIEF, BUREAU OF ENGINEERING DATE
 [Signature] 11-20-95
 CHIEF, BUREAU OF HIGHWAYS DATE
 [Signature] 8/24/95
 CHIEF, DIVISION OF TRANSPORTATION PROJECTS AND WATERSHED MANAGEMENT DATE

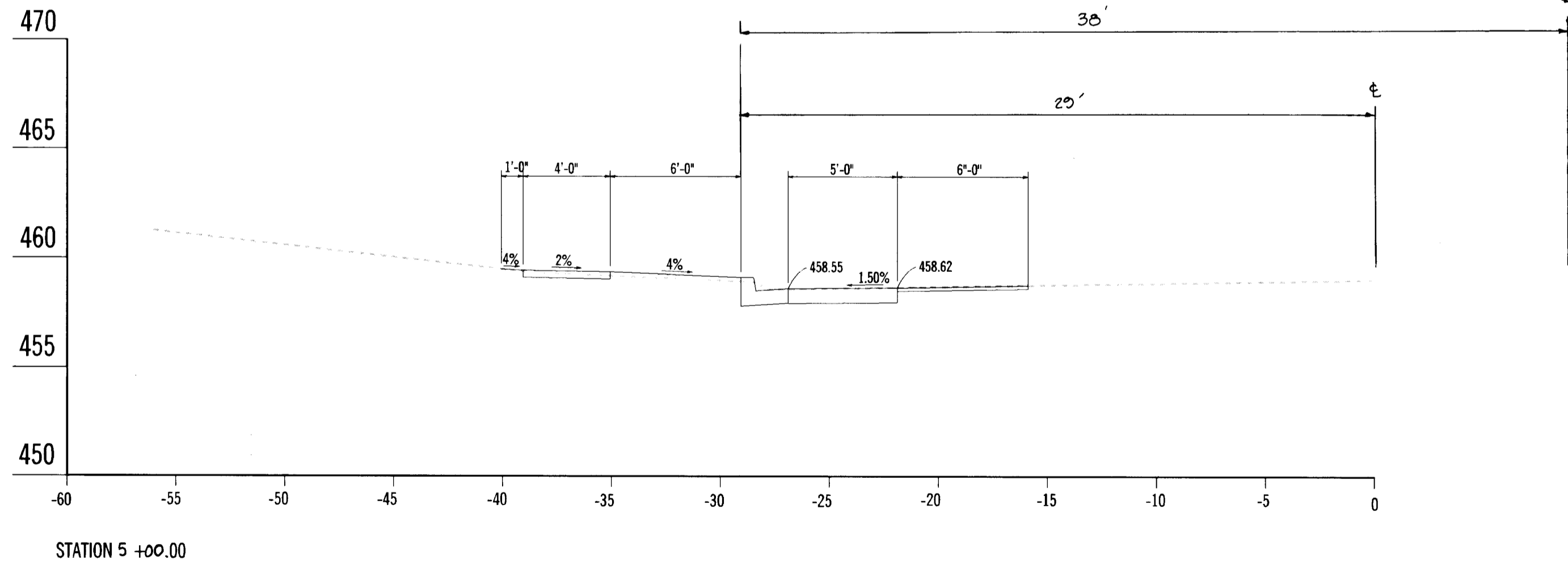
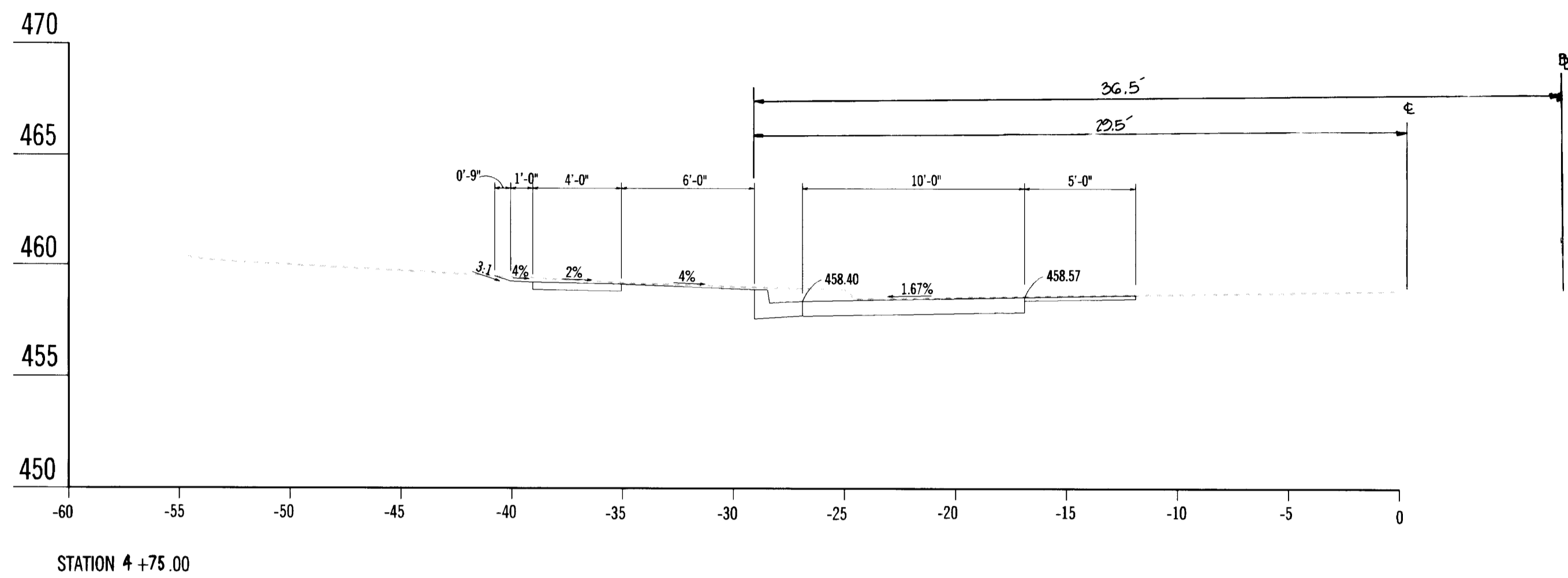
No.	REVISION	DATE	BY
1	REVISED PER HOWARD COUNTY COMMENTS	10-3-94	TAT
2	CHANGE CROSS SECTION PER HO CO REVISIONS	11-13-95	BAC



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 LEESBURG, VA. • MANASSAS, VA. • ORLANDO, FL. • RALEIGH, NC. • BALTIMORE, MD. • TAMPA, FL. • WEST PALM BEACH, FL.

CROSS SECTIONS
 FOR
CEDAR LANE ~ CAPITAL PROJECT J-4120
 ZONED NT
 6th ELECTION DISTRICT
 ZONING MAP 36
 HOWARD COUNTY, MARYLAND

DESIGN	SCALE	HORIZ: 1" = 5'	VERT: 1" = 5'
DRAWN	13 OF 18		
CHECKED	SHEET		
DATE	PROJ No.	FILE No.	



CUT & FILL QUANTITIES
SEGMENT 1

STA.	CUT	FILL
1+00		
1+25	9.84	.52
1+50	10.88	
1+75	12.73	
2+00	17.25	
2+25	25.46	
2+50	28.13	
2+75	24.42	
3+00	25.17	
3+25	28.37	
3+50	31.94	
3+75	38.89	
4+00	37.00	
4+25	26.74	
4+50	19.44	
4+75	16.67	
5+00	12.50	.72
TOTAL	365.43	1.24

CUT & FILL QUANTITIES
SEGMENT 2

STA.	CUT	FILL
9+00		
9+25	21.67	
9+50	37.92	
9+75	38.94	
10+00	36.44	
10+25	37.87	
10+50	40.14	
10+75	43.61	
11+00	41.76	
11+25	42.87	
11+50	40.60	
11+75	26.99	
12+00	12.59	
TOTAL	421.39	



Jeffrey S. Retter
21145

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

James M. Law
DIRECTOR OF PUBLIC WORKS
DATE 11/20/95

Paul J. Eppson
CHIEF, BUREAU OF ENGINEERING
DATE 8/29/95

Andrew M. Rankin
CHIEF, BUREAU OF HIGHWAYS
DATE 11-20-95

Glenn Anderson
CHIEF, DIVISION OF TRANSPORTATION PROJECTS
AND WATERSHED MANAGEMENT
DATE 8/29/95

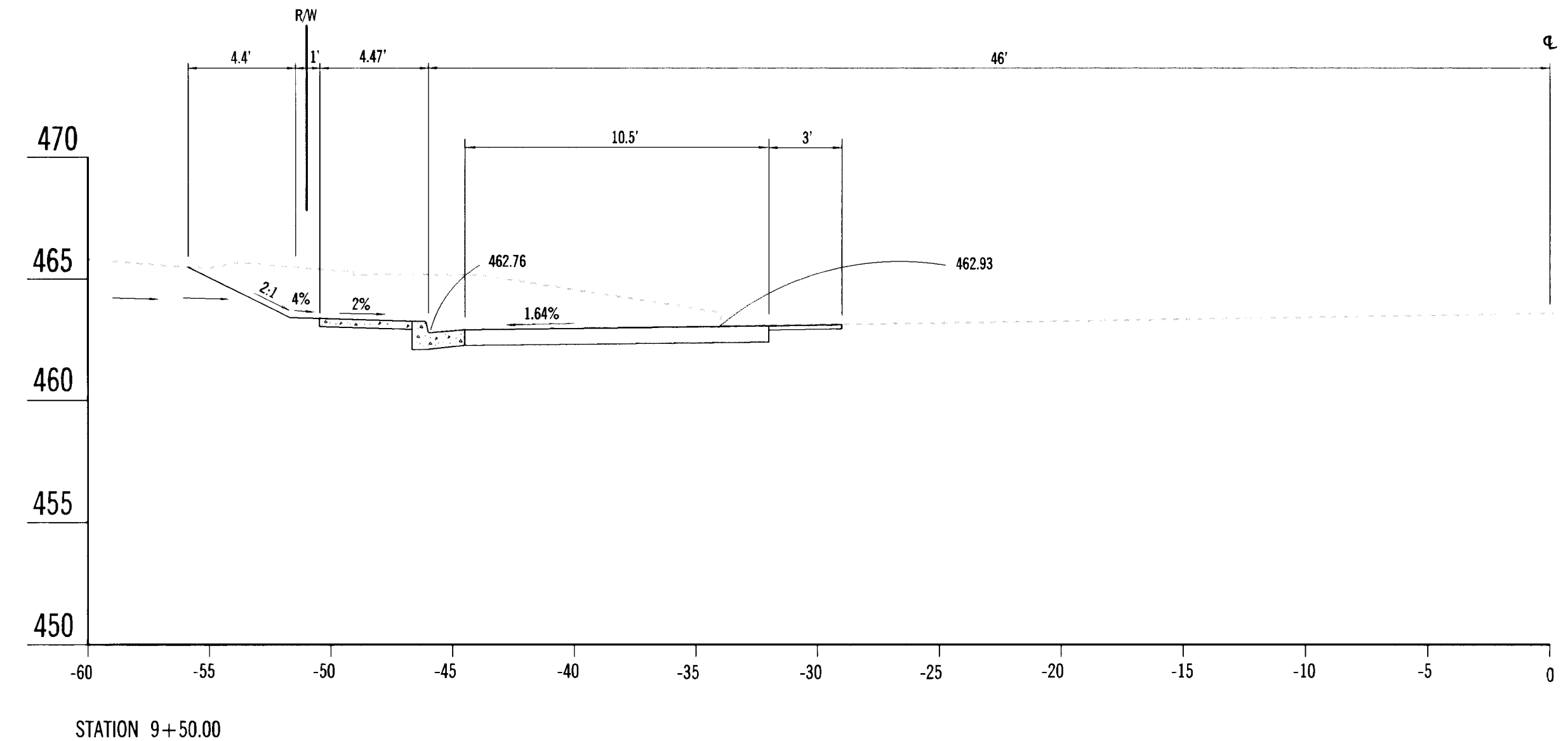
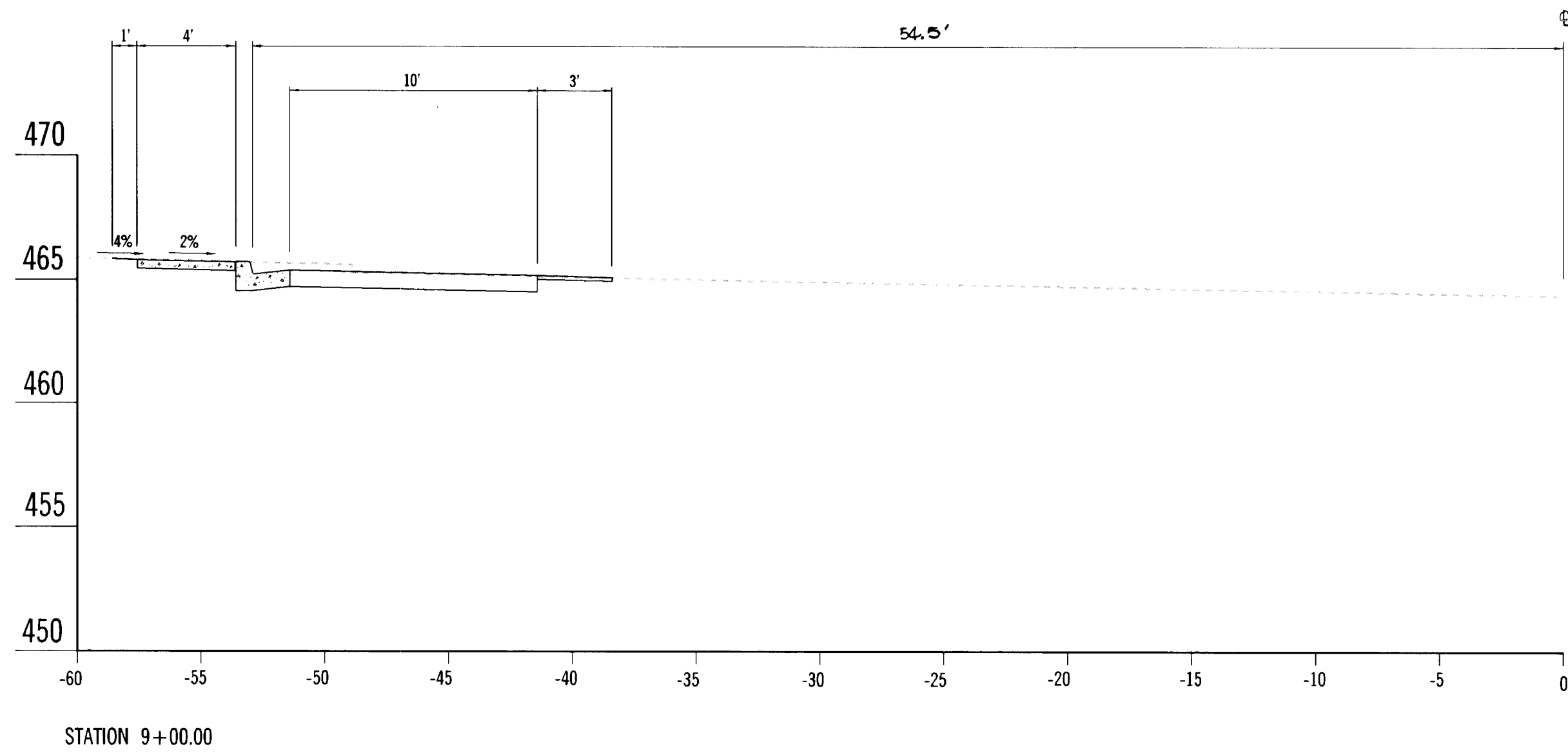
No.	REVISION	DATE	BY
1	REVISED PER HOWARD COUNTY COMMENTS	10-3-94	TAT
2	CHANGE CROSS SECTIONS PER HO. CO. REVISION	11/14/95	JSC



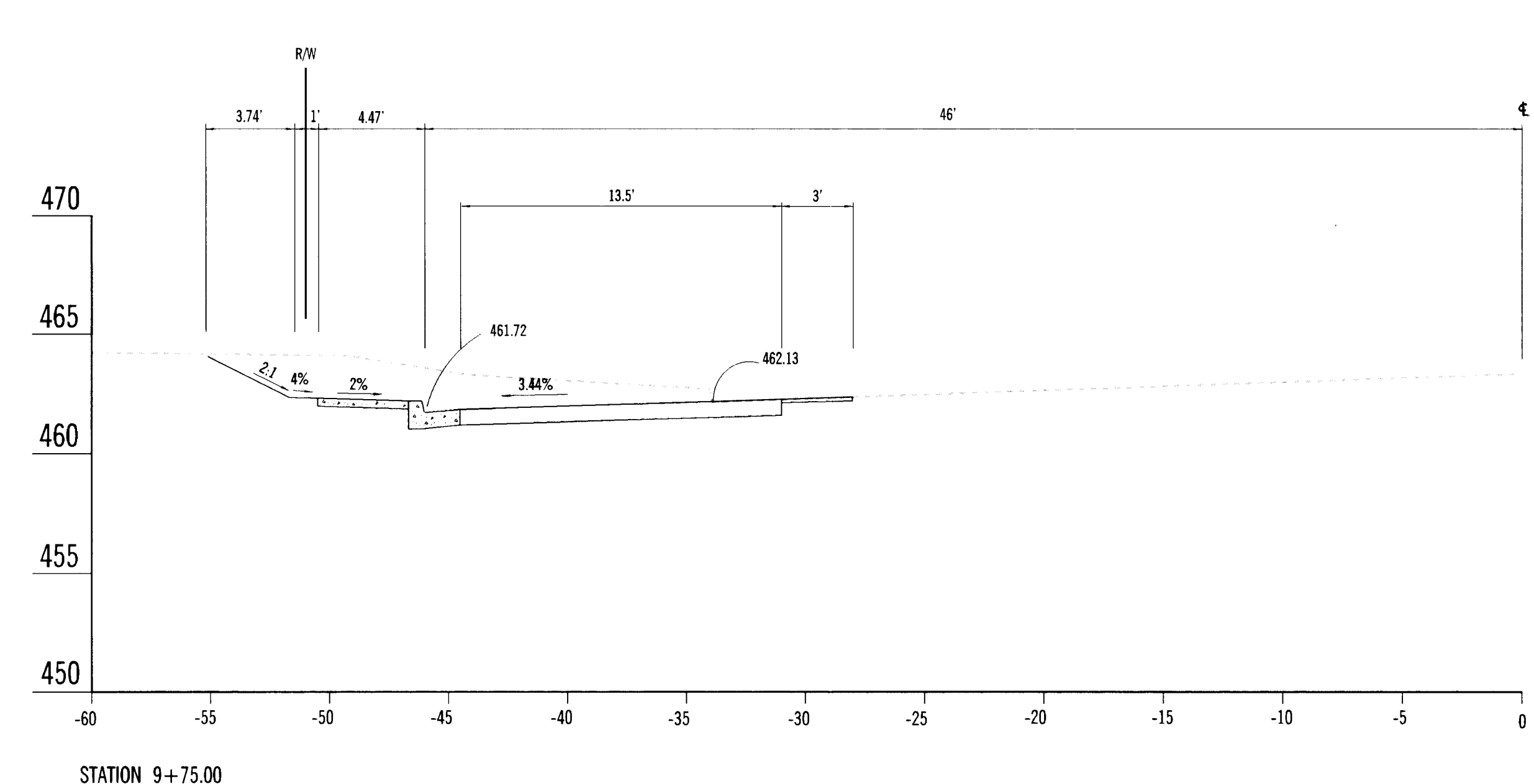
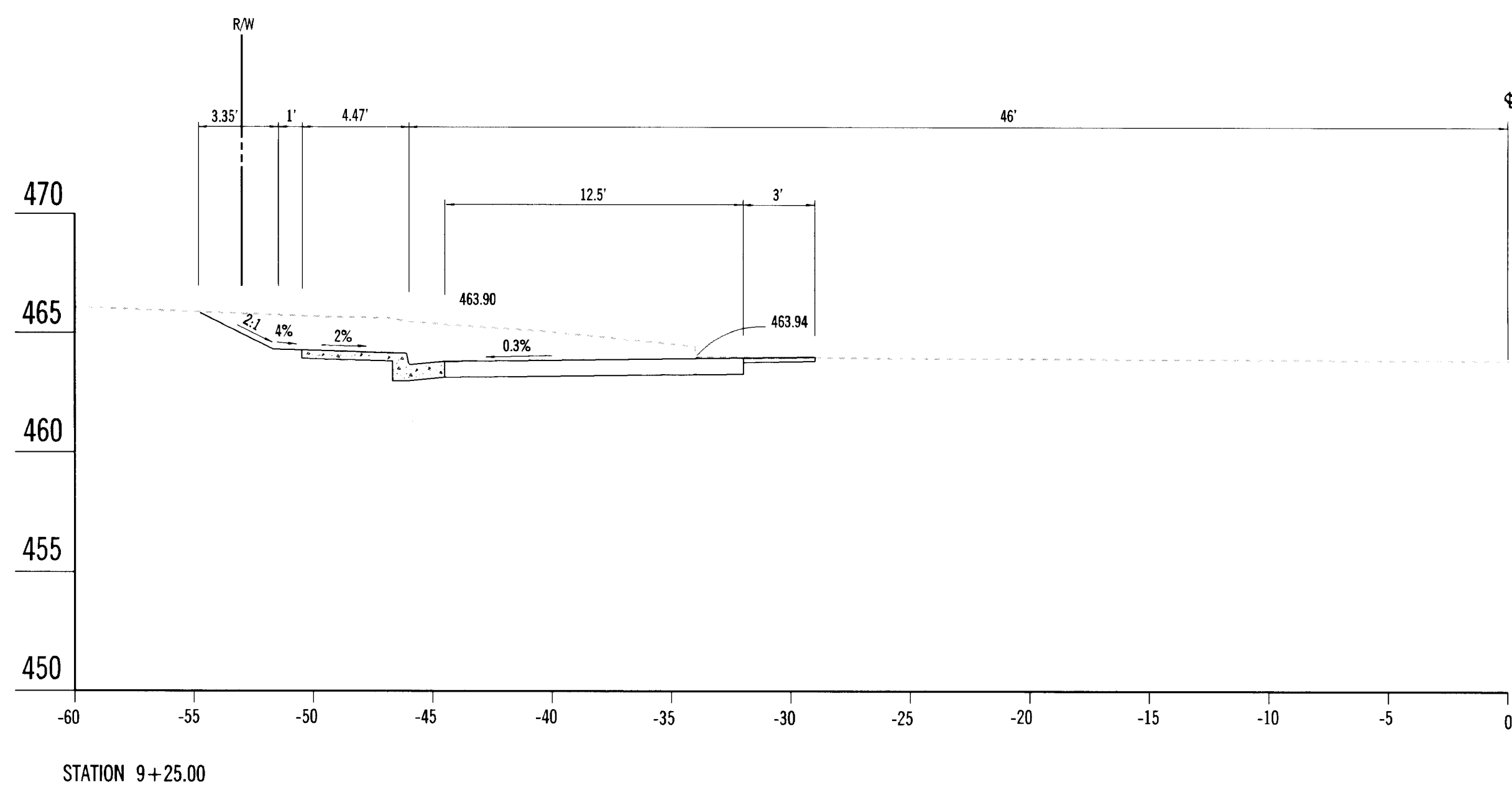
ENGINEERS • ARCHITECTS • PLANNERS • SCIENTISTS • SURVEYORS • PHOTOGRAMMETRISTS
GREENHORNE & O'MARA, INC.
15020 SHADY GROVE ROAD, SUITE 400
ROCKVILLE, MD. 20850
(301) 738-3890
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LEESBURG, VA. • MANASSAS, VA. • ORLANDO, FL. • RALEIGH, NC. • BALTIMORE, MD. • TAMPA, FL. • WEST PALM BEACH, FL.

CROSS SECTIONS
FOR
CEDAR LANE ~ CAPITAL PROJECT J-4120
ZONED NT
6th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
ZONING MAP 36

DESIGN	SCALE	HORIZ: 1" = 5'	VERT: 1" = 5'
DRAWN	14 OF 18		
CHECKED	SHEET		
DATE	PROJ No.	FILE No.	



NOTE: FOR CUT AND FILL QUANTITIES, SEE SHEET 14 OF 18



Jff B. Rettore
8-21-95

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

James M. Sun 11/20/95
DIRECTOR OF PUBLIC WORKS DATE

Richard J. Eggen 8/22/95
CHIEF, BUREAU OF ENGINEERING DATE

Andrew M. Schuler 11-20-95
CHIEF, BUREAU OF HIGHWAYS DATE

Elizabeth Anderson 8/22/95
CHIEF, DIVISION OF TRANSPORTATION PROJECTS AND WATERSHED MANAGEMENT DATE

No.	REVISION	DATE	BY
1	REVISED PER HOWARD COUNTY COMMENTS	10-3-94	TAT
	CHANGE "B" TO "E" ON ALL CROSS SECTIONS	11-14-95	SAC

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15020 SHADY GROVE ROAD, SUITE 400
ROCKVILLE, MD. 20850
(301) 738-3890

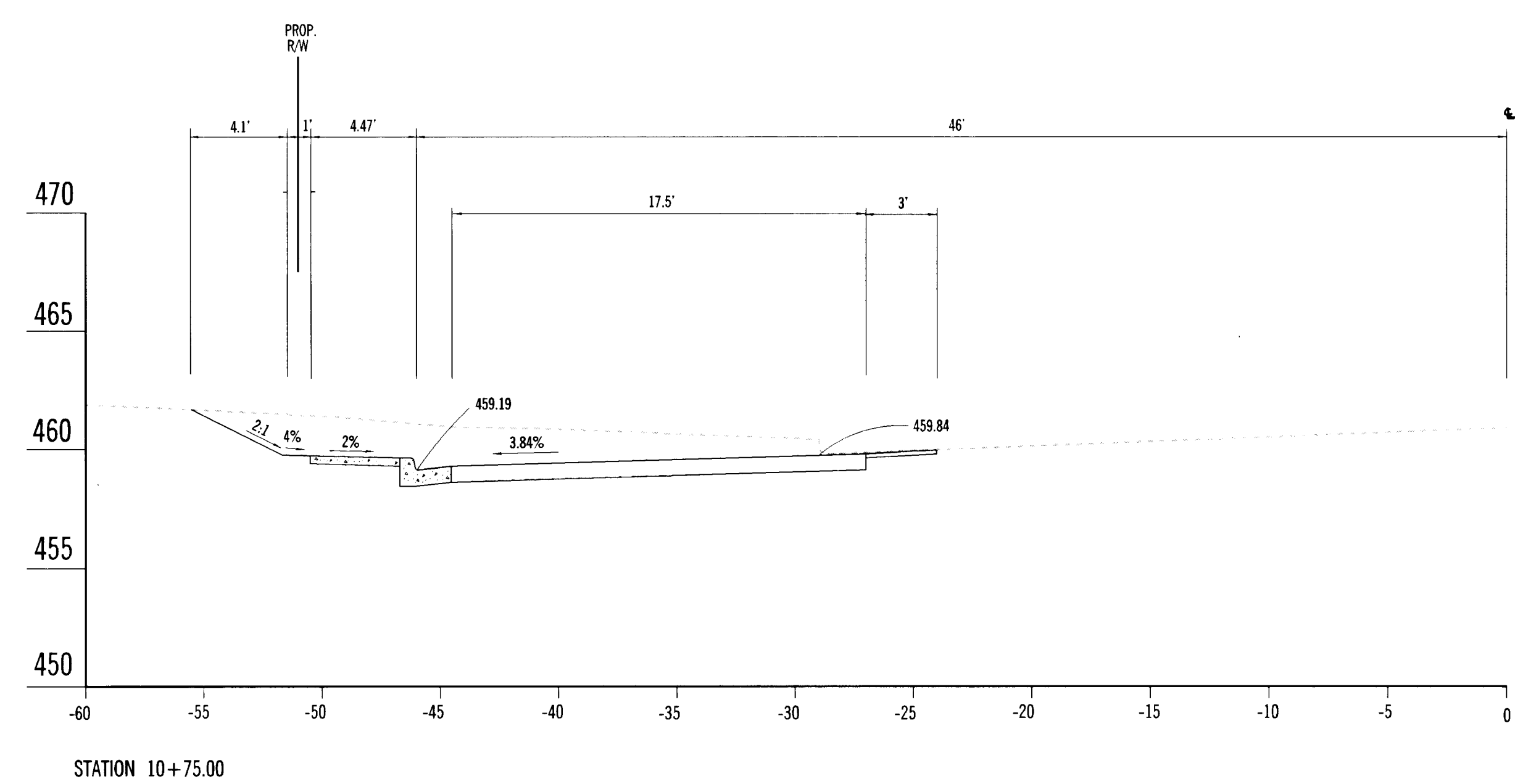
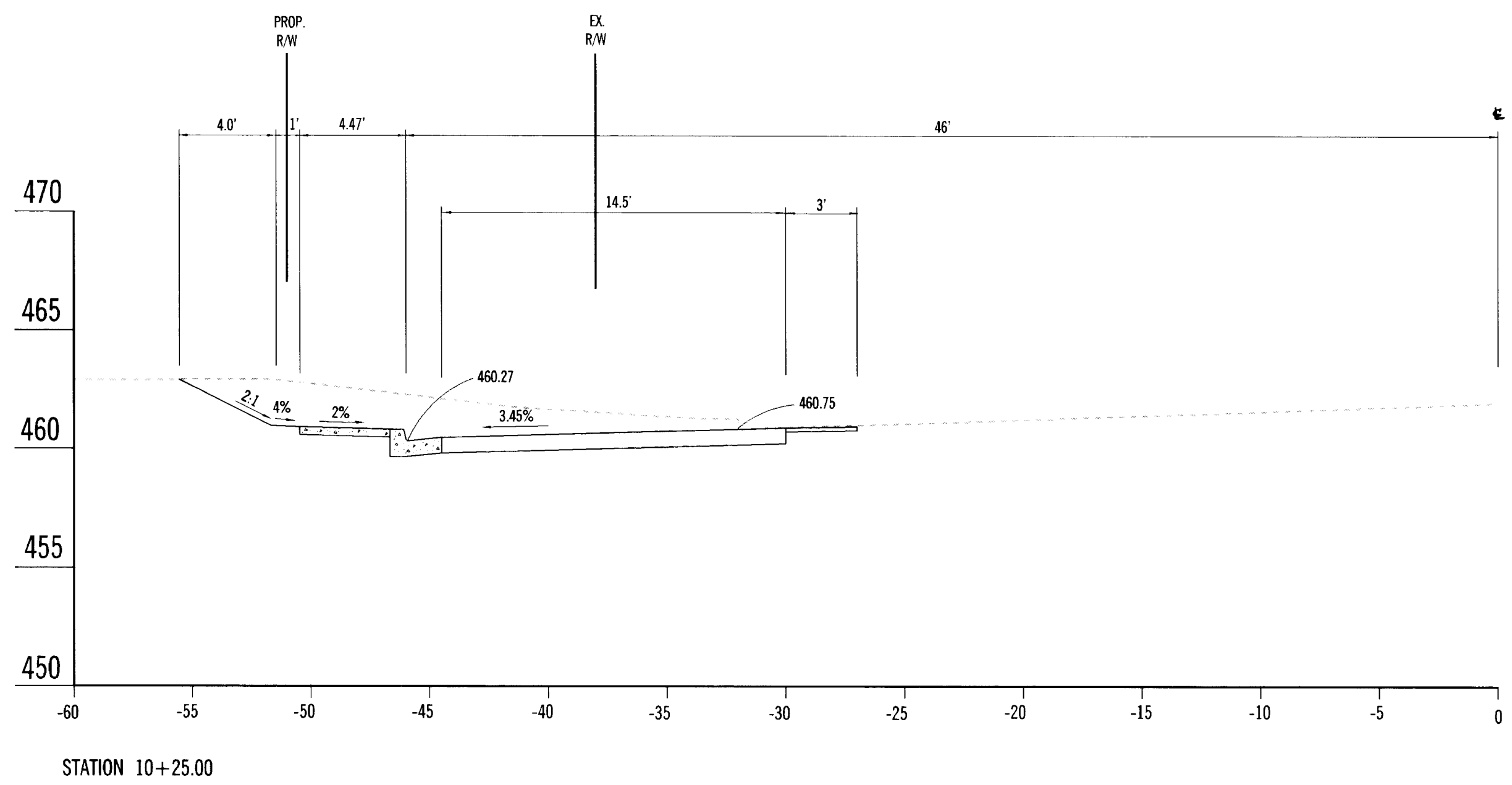
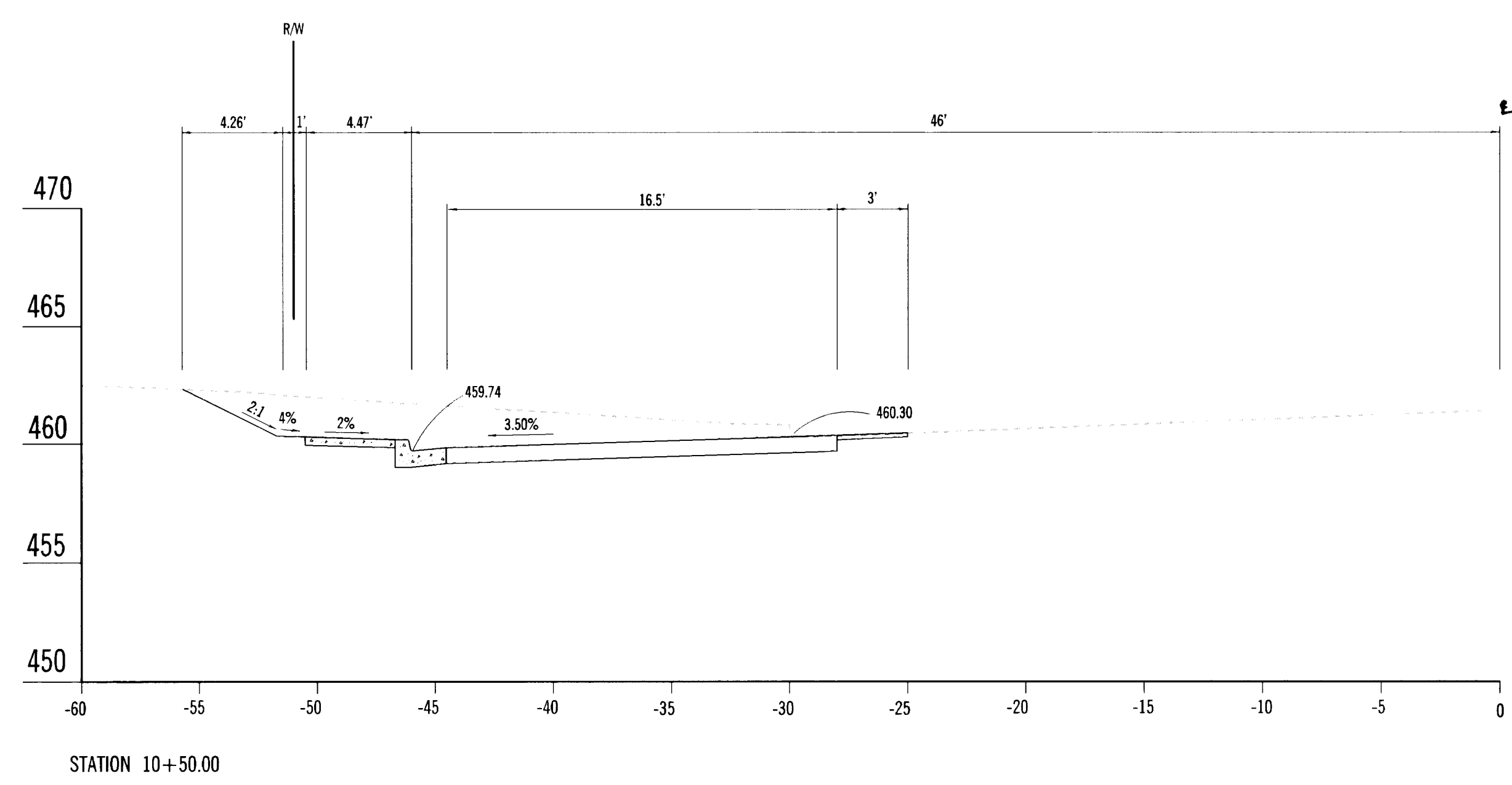
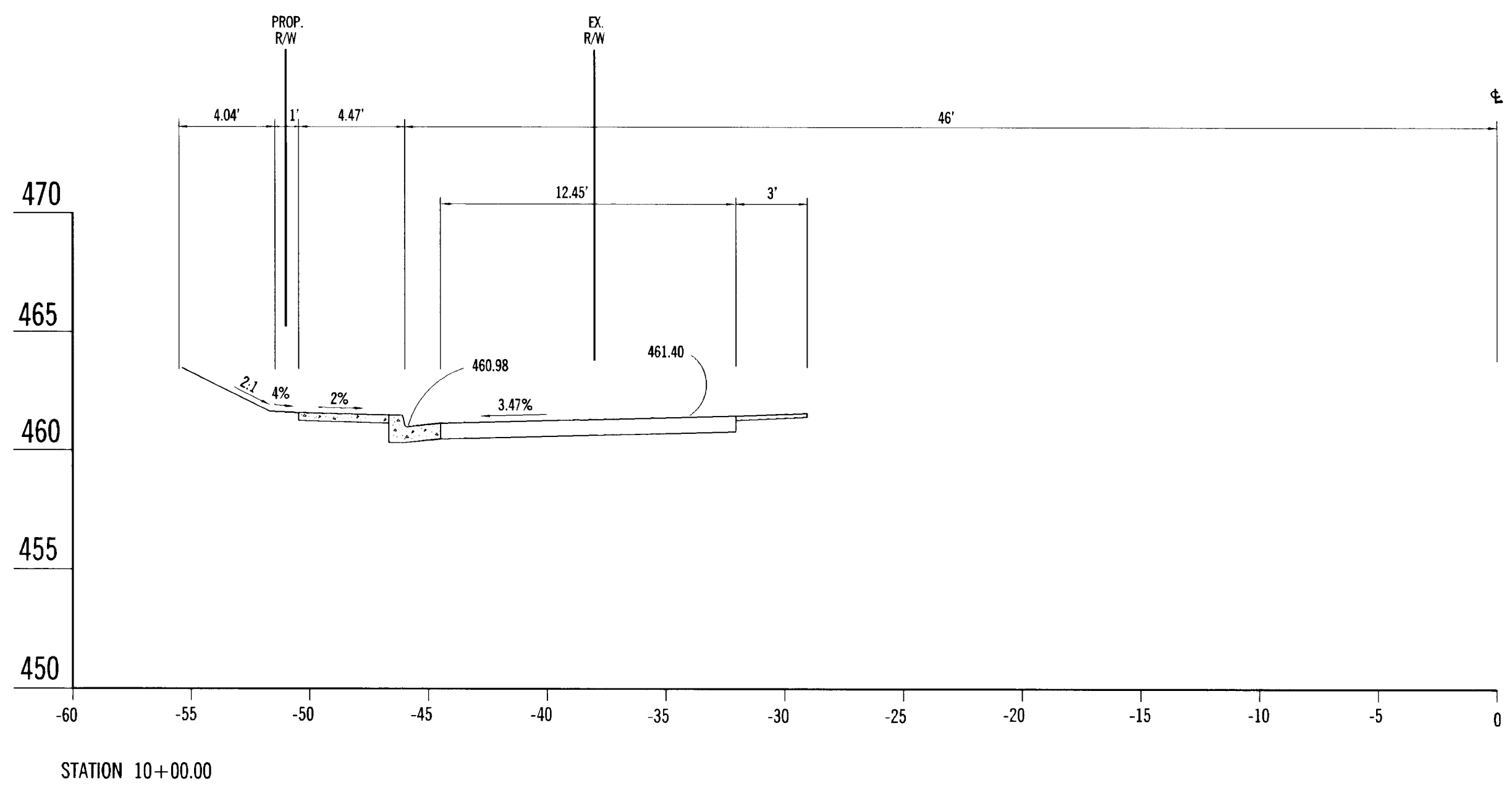
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LEESBURG, VA. • MANASSAS, VA. • ORLANDO, FL. • RALEIGH, NC. • BALTIMORE, MD. • TAMPA, FL. • WEST PALM BEACH, FL.

CROSS SECTIONS
FOR
CEDAR LANE ~ CAPITAL PROJECT J-4120

ZONED NT
6th ELECTION DISTRICT

ZONING MAP 36
HOWARD COUNTY, MARYLAND

DESIGN	SCALE	HORIZ: 1" = 5'	VERT: 1" = 5'
DRAWN	15 OF 18		
SAACHECKED	SHEET	DATE	PROJ. No.
		JULY 93	7779-000
			R-2985-X
			FILE No.



J. H. B. Retterer
8-21-95

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

James P. Clum 11/20/95
DIRECTOR OF PUBLIC WORKS DATE

Paul J. Seppan 8/23/95
CHIEF, BUREAU OF ENGINEERING DATE

Andrew M. Daniels 11-20-95
CHIEF, BUREAU OF HIGHWAYS DATE

Quarrell Anderson 8/24/95
CHIEF, DIVISION OF TRANSPORTATION PROJECTS AND WATERSHED MANAGEMENT DATE

No.	REVISION	DATE	BY
1	REVISED PER HOWARD COUNTY COMMENTS	10-3-94	TAT
	CHANGE "E" TO "E" ON ALL CROSS SECTIONS	11-14-95	3AC



ENGINEERS • ARCHITECTS • PLANNERS • SCIENTISTS • SURVEYORS • PHOTOGRAMMETRISTS

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(301) 738-3890

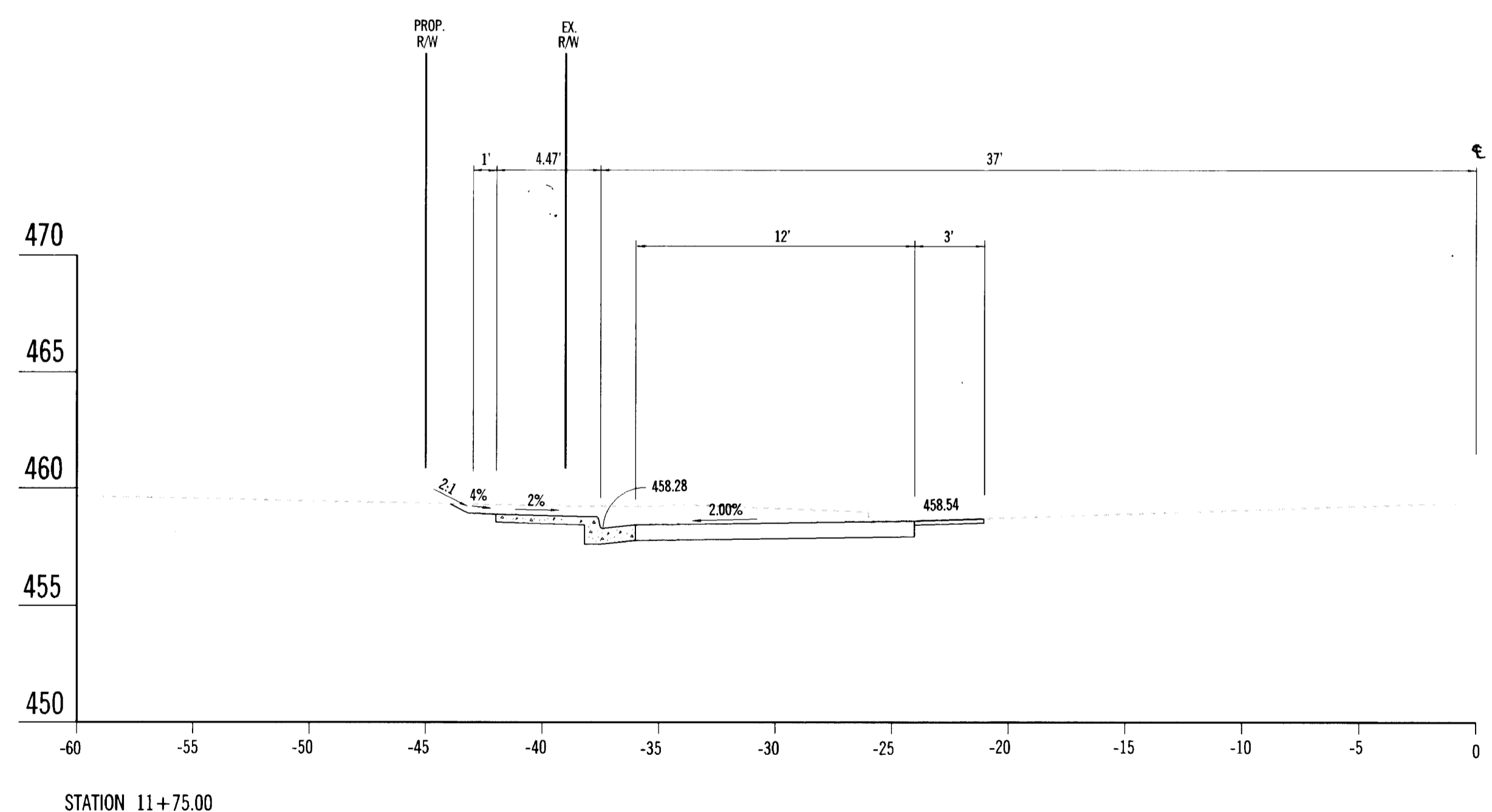
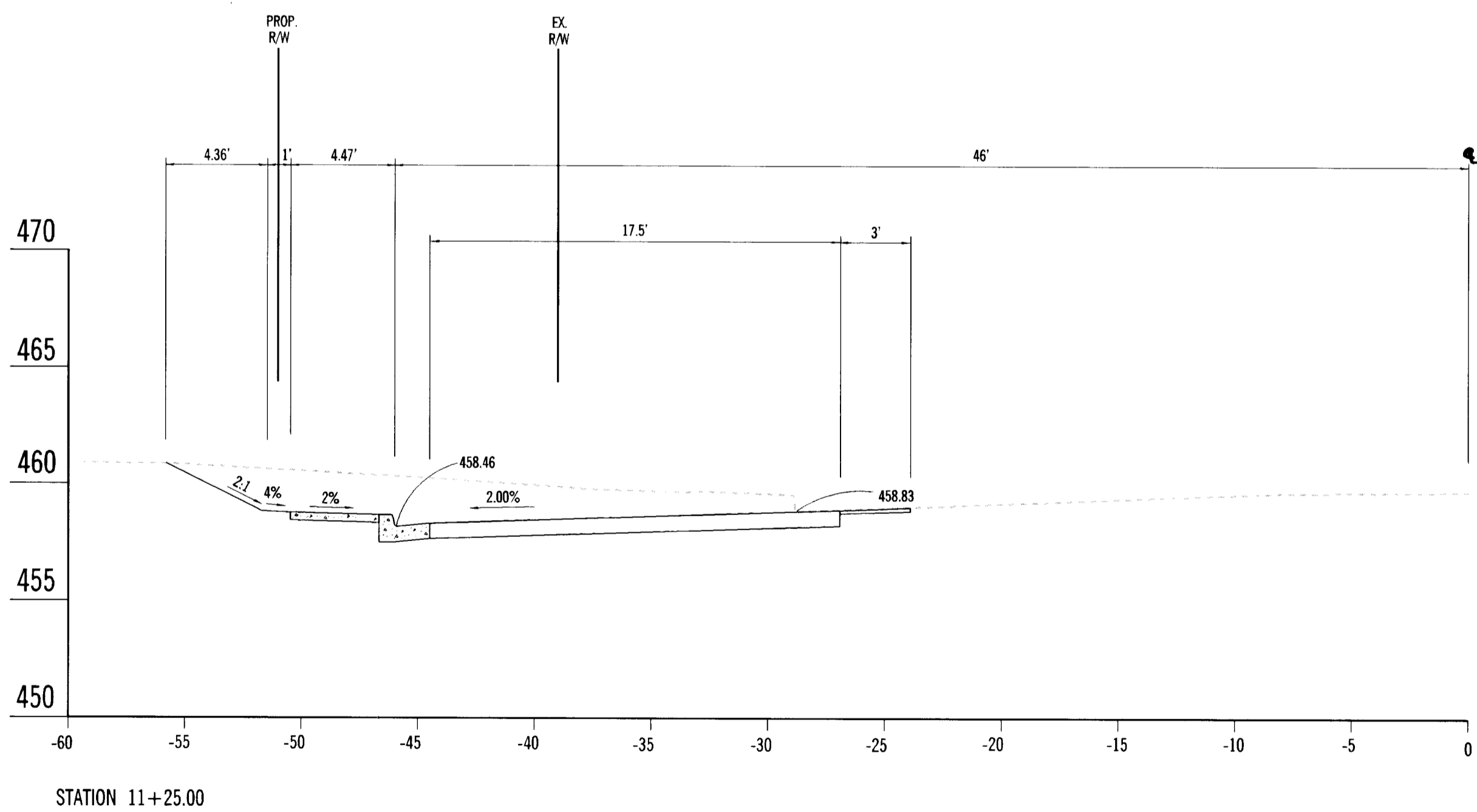
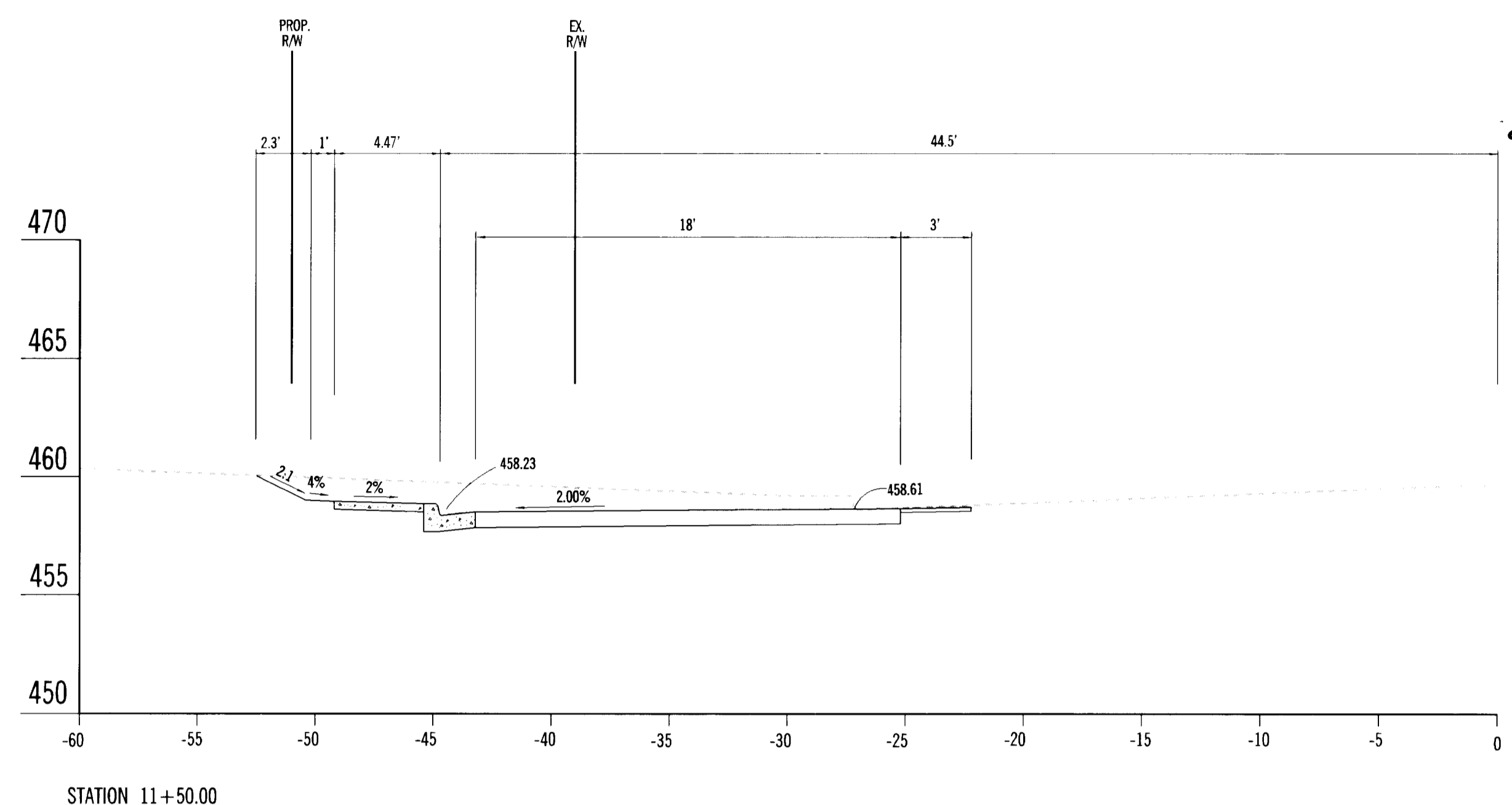
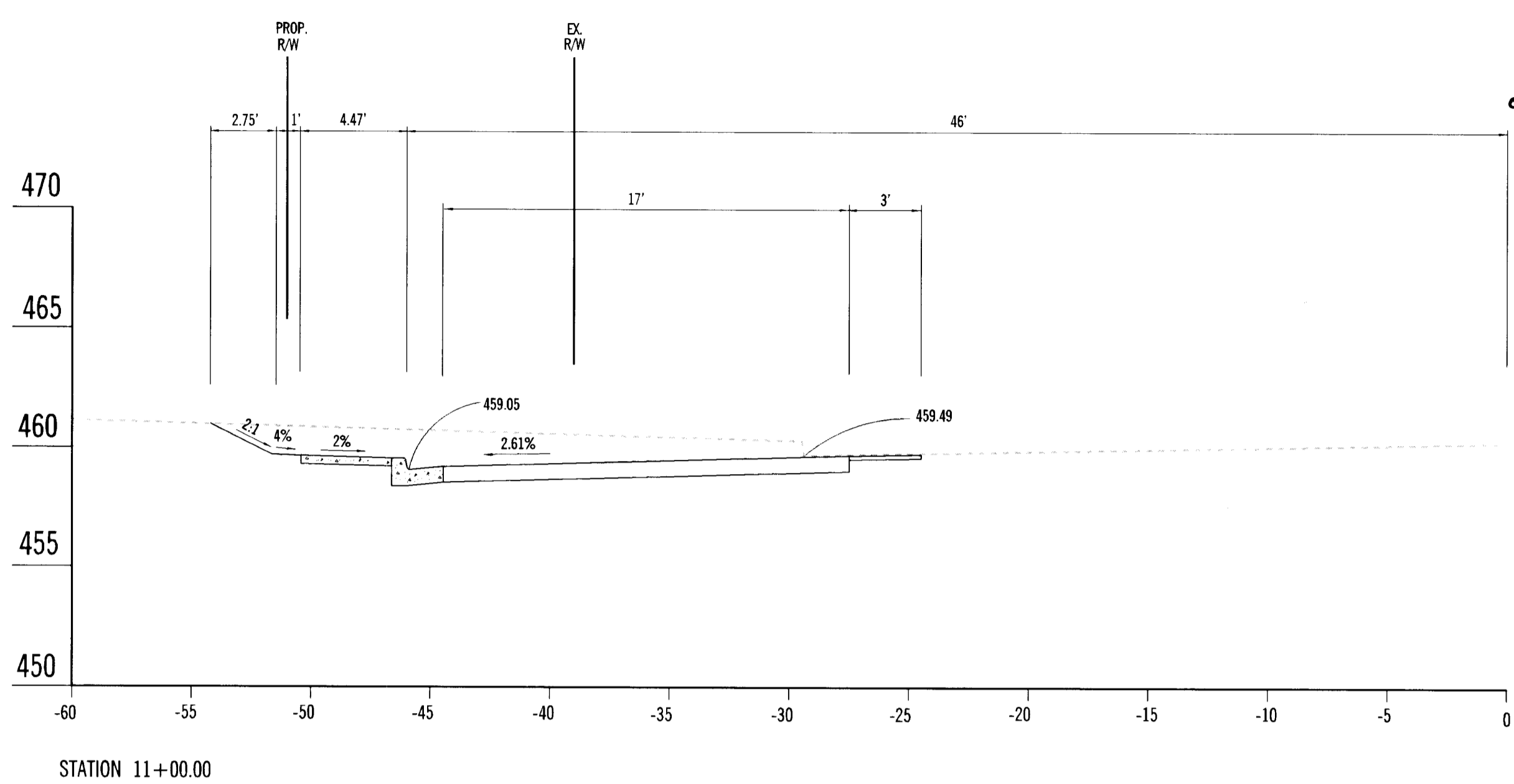
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LEESBURG, VA. • MANASSAS, VA. • ORLANDO, FL. • RALEIGH, NC. • BALTIMORE, MD. • TAMPA, FL. • WEST PALM BEACH, FL.

CROSS SECTIONS
FOR
CEDAR LANE ~ CAPITAL PROJECT J-4120

ZONING NT
6th ELECTION DISTRICT

ZONING MAP 36
HOWARD COUNTY, MARYLAND

DESIGN	SCALE	HORIZ: 1" = 5'	VERT: 1" = 5'
DRAWN	16 OF 18		
SAA	SHEET		
CHECKED	DATE	PROJ No.	FILE No.
	JULY 93	7779-000	R-2985-X



Jeff B. Rettner
8-21-95

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

James P. ... 11/20/95
DIRECTOR OF PUBLIC WORKS
Andrew M. ... 11-20-95
CHIEF, BUREAU OF HIGHWAYS

Richard ... 8/29/95
CHIEF, BUREAU OF ENGINEERING

Elizabeth ... 8/29/95
CHIEF, DIVISION OF TRANSPORTATION PROJECTS AND WATERSHED MANAGEMENT

No.	REVISION	DATE	BY



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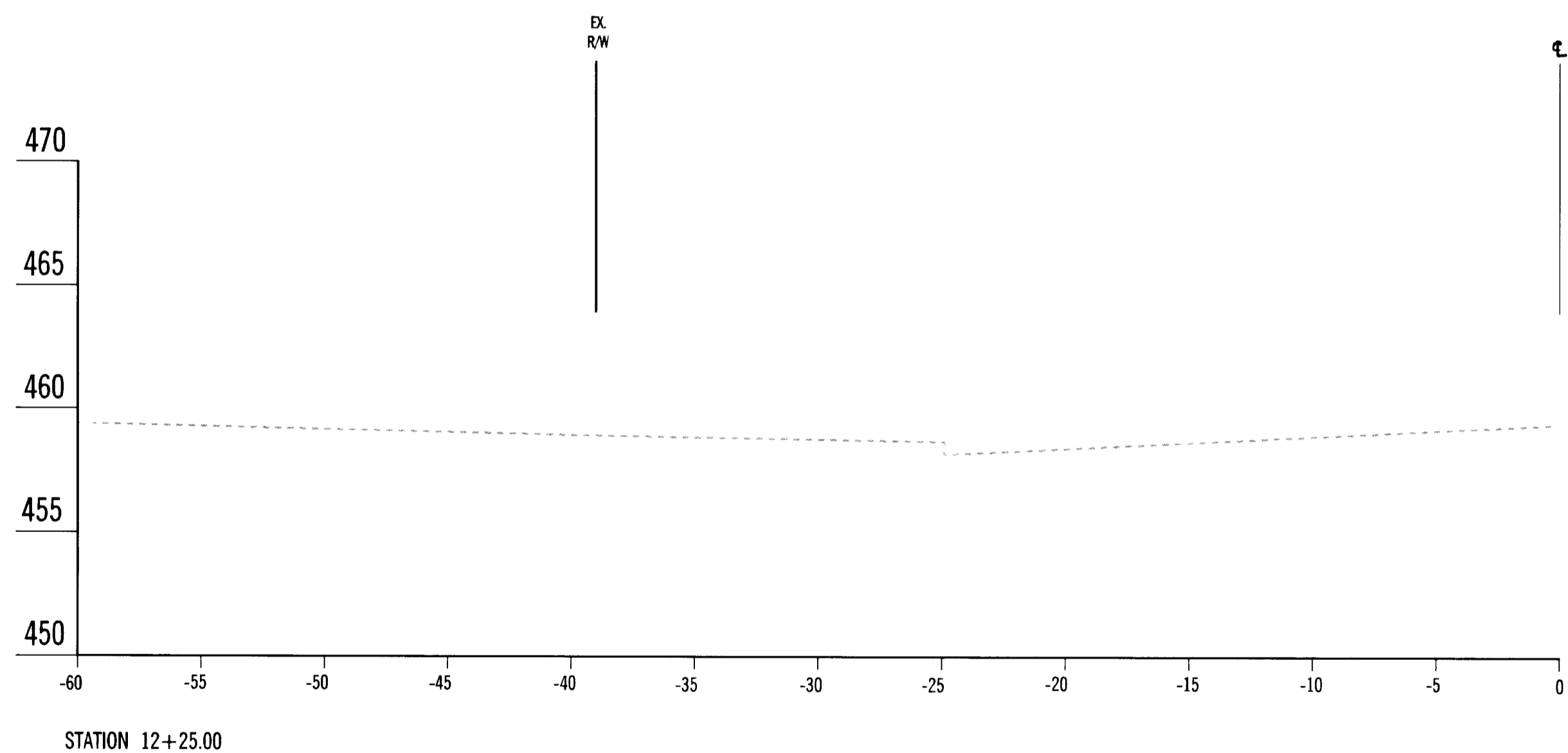
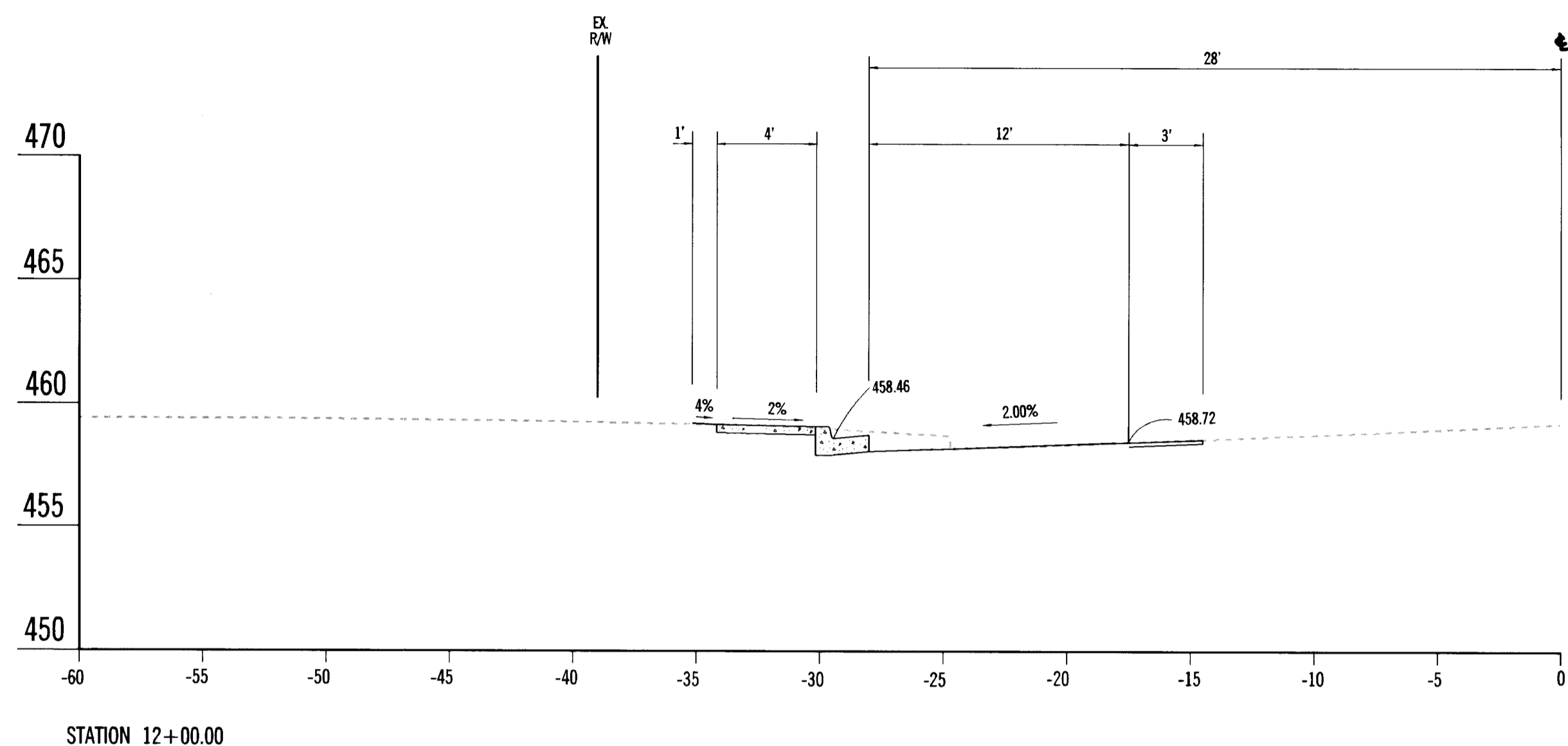
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LEESBURG, VA. • MANASSAS, VA. • ORLANDO, FL. • RALEIGH, NC. • BALTIMORE, MD. • TAMPA, FL. • WEST PALM BEACH, FL.

CROSS SECTIONS
FOR
CEDAR LANE ~ CAPITAL PROJECT J-4120

ZONED NT
6th ELECTION DISTRICT

ZONING MAP 36
HOWARD COUNTY, MARYLAND

DESIGN	SCALE	HORIZ: 1" = 5'	VERT: 1" = 5'
DRAWN	17 OF 18		
CHECKED	SHEET		
DATE	PROJ No.	7779-000	R-2985-X
			FILE No.



Jeffrey B. Reeter
8.21.95

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

James A. Lew 11/20/95
 DIRECTOR OF PUBLIC WORKS DATE
Andrew M. Ducker 11-20-95
 CHIEF, BUREAU OF HIGHWAYS DATE
Paul J. Simpson 8/29/95
 CHIEF, BUREAU OF ENGINEERING DATE
Elizabeth Anderson-Cella 8/29/95
 CHIEF, DIVISION OF TRANSPORTATION PROJECTS AND WATERSHED MANAGEMENT DATE

No.	REVISION	DATE	BY



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 LEESBURG, VA. • MANASSAS, VA. • ORLANDO, FL. • RALEIGH, NC. • BALTIMORE, MD. • TAMPA, FL. • WEST PALM BEACH, FL.

CROSS SECTIONS
 FOR
 CEDAR LANE ~ CAPITAL PROJECT J-4120

ZONED NT
 6th ELECTION DISTRICT

ZONING MAP 36
 HOWARD COUNTY, MARYLAND

DESIGN	SCALE	HORIZ: 1" = 5'	VERT: 1" = 5'
DRAWN	18 OF 18		
CHECKED	SHEET		
DATE	PROJ No.	7779-000	R-2985-X
JULY 93	FILE No.		