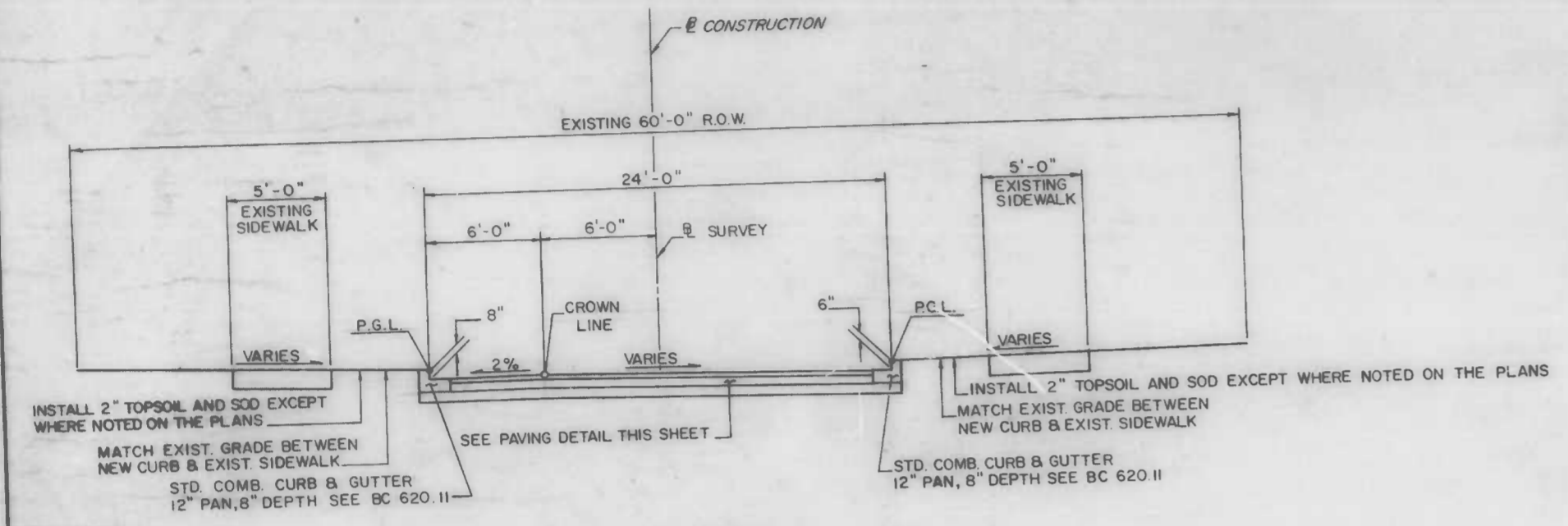


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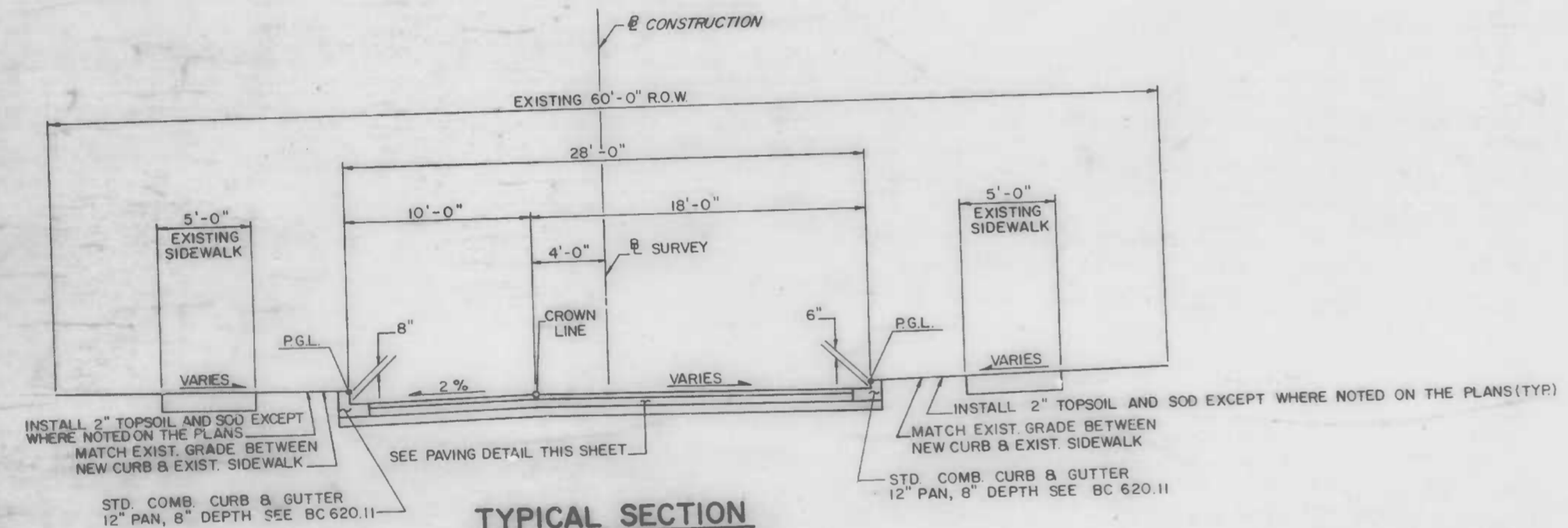
REVISIONS			
NO.	DESCRIPTION	DATE	BY

GENERAL NOTES

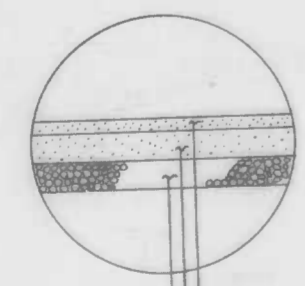
1. ALL TREES AND SHRUBS ARE TO REMAIN UNLESS OTHERWISE NOTED IN THE PLANS AND SHALL BE PROTECTED FROM DAMAGE BY THE CONTRACTOR.
2. CONTRACTOR TO EXERCISE CAUTION WHEN REMOVING EXISTING CURB AND INSTALLING NEW COMBINATION CURB AND GUTTER TO AVOID DAMAGE TO DIRECT BURIED STREET LIGHT CABLE. EXISTING STREET LIGHTS AND CABLE TO REMAIN.



TYPICAL SECTION
STA. 1+00 TO STA. 5+75
SCALE: 1" = 5'



TYPICAL SECTION
STA. 7+00 TO STA. 19+00
SCALE: 1" = 5'



2" BIT CONC SURFACE COURSE BAND SN
6" BIT CONC BAND BI, 2-3" LIFTS
6" SUB-BASE USING CRUSHER RUN, CR-6

PAVING DETAIL
SCALE: 1" = 2'

DRAWN BY
EXAMINED BY

CITY OF BALTIMORE
DEPARTMENT OF PUBLIC WORKS
BUREAU OF HIGHWAYS
CONTRACT NO. 3058

29TH STREET
FROM KIRK AVENUE TO HILLEN ROAD
MISCELLANEOUS DETAILS

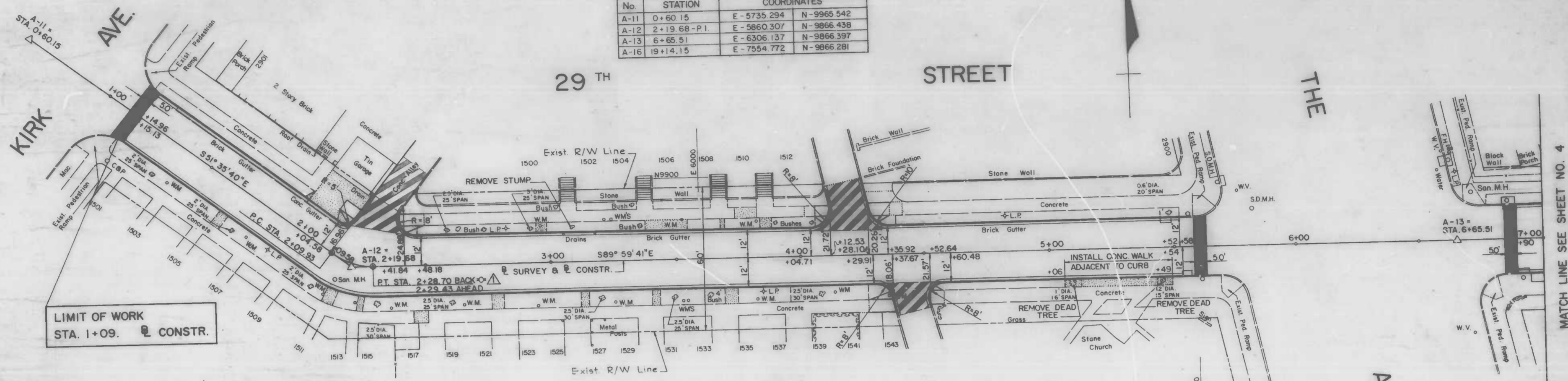
SCALE: HIGHWAY ENGINEERING DIVISION DATE: SHEET 2 OF 14

FILE REF.

FILE REF.

REVISIONS		
NO.	DESCRIPTION	DATE
1	CORRECTED & STATION	12-4-85 M.J.

BASELINE COORDINATE DATA			
No.	STATION	COORDINATES	
A-11	0+60.15	E - 5735.294	N - 9965.542
A-12	2+19.68 - P.I.	E - 5860.307	N - 9866.438
A-13	6+65.51	E - 6306.137	N - 9866.397
A-16	19+14.15	E - 7554.772	N - 9866.281



LIMIT OF WORK
STA. 1+09. CONSTR.

EXISTING CURVE DATA

Δ	= 38° 24' 01"
Dc	= 204° 37' 40"
R	= 28.0'
T	= 9.75'
L	= 18.77'

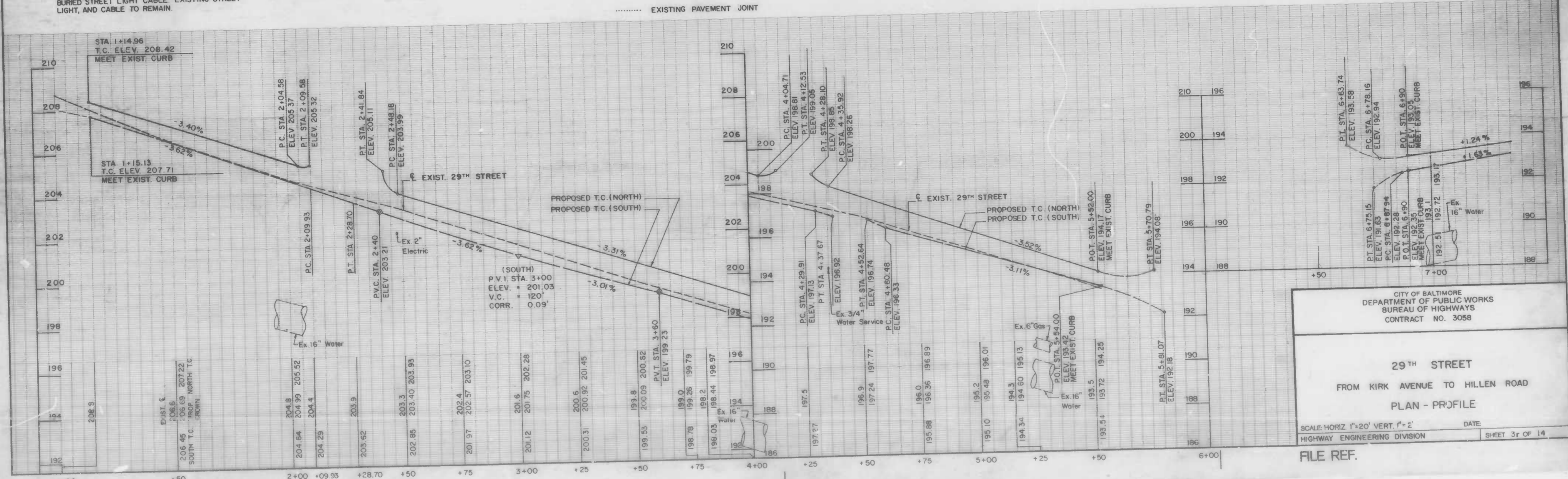
TREE REMOVAL CHART			
STATION	OFFSET	DIAMETER	SPREAD
3+09	LEFT	3"	25'
5+09	RIGHT	1"	16'
5+45	RIGHT	1.2"	15'

LEGEND

- AREA TO BE STRIPPED & RESURFACED
- PROPOSED 7" P.C.C. PAVEMENT, MIX NO. 6
- PROPOSED 5" CONCRETE
- PROPOSED CURB & GUTTER
- EXISTING PAVEMENT JOINT
- PROPOSED PEDESTRIAN RAMP

NOTE:
STA. 1+87 TO STA. 2+09.58
RECONSTRUCT DRIVEWAY ENTRANCE

NOTE:
CONTRACTOR TO EXERCISE CAUTION WHEN REMOVING
EXISTING CURB AND INSTALLING NEW COMBINATION
CURB AND GUTTER TO AVOID DAMAGE TO DIRECT
BURIED STREET LIGHT CABLE. EXISTING STREET
LIGHT, AND CABLE TO REMAIN.



CITY OF BALTIMORE
DEPARTMENT OF PUBLIC WORKS
BUREAU OF HIGHWAYS
CONTRACT NO. 3058

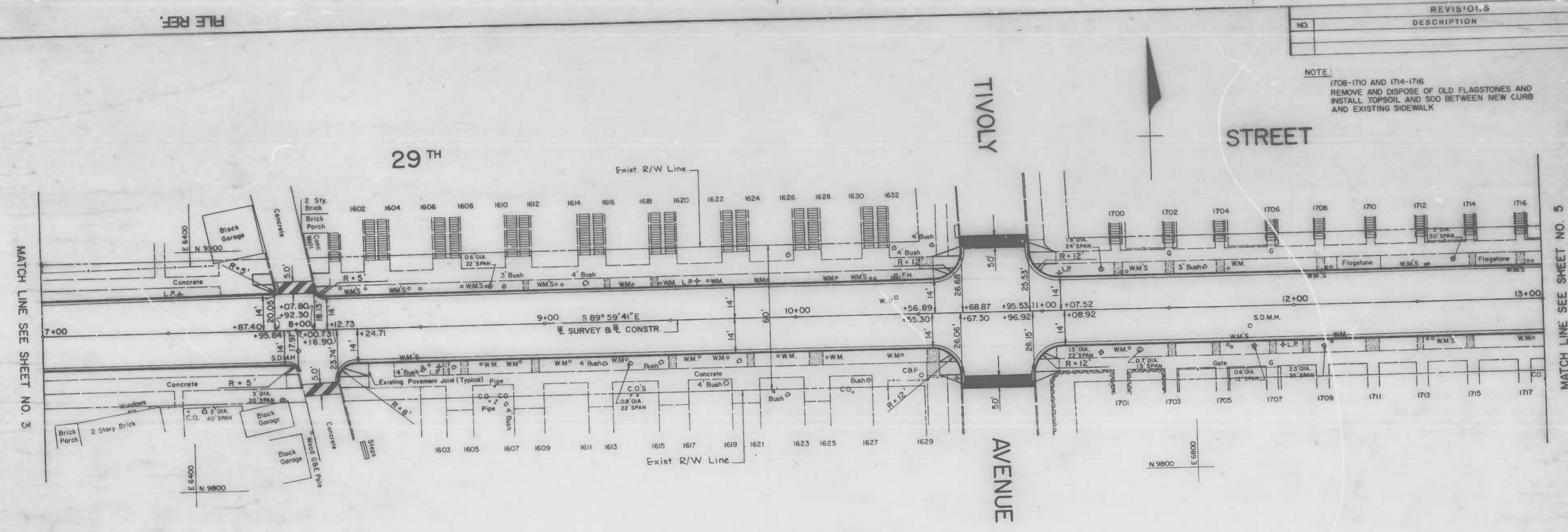
29TH STREET
FROM KIRK AVENUE TO HILLEN ROAD
PLAN - PROFILE

SCALE: HORIZ. 1"=20' VERT. 1"=2'
HIGHWAY ENGINEERING DIVISION SHEET 3r OF 14

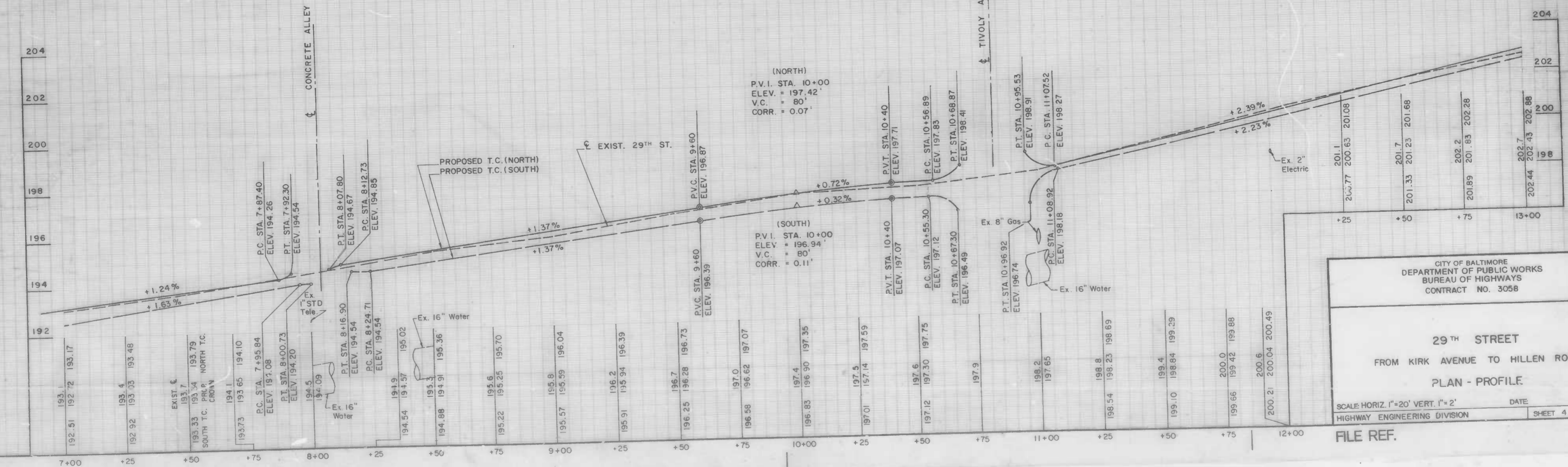
FILE REF.

REVISIONS			
NO.	DESCRIPTION	DATE	BY

NOTE:
1708-1710 AND 1714-1716
REMOVE AND DISPOSE OF OLD FLAGSTONES AND
INSTALL TOPSOIL AND SOD BETWEEN NEW CURB
AND EXISTING SIDEWALK



NOTE:
CONTRACTOR TO EXERCISE CAUTION WHEN REMOVING
EXISTING CURB AND INSTALLING NEW COMBINATION
CURB AND GUTTER TO AVOID DAMAGE TO DIRECT
BURIED STREET LIGHT CABLE EXISTING STREET
LIGHT, AND CABLE TO REMAIN.



CITY OF BALTIMORE
DEPARTMENT OF PUBLIC WORKS
BUREAU OF HIGHWAYS
CONTRACT NO. 3058

29TH STREET
FROM KIRK AVENUE TO HILLEN ROAD

PLAN - PROFILE

SCALE: HORIZ. 1"=20' VERT. 1"=2'
HIGHWAY ENGINEERING DIVISION

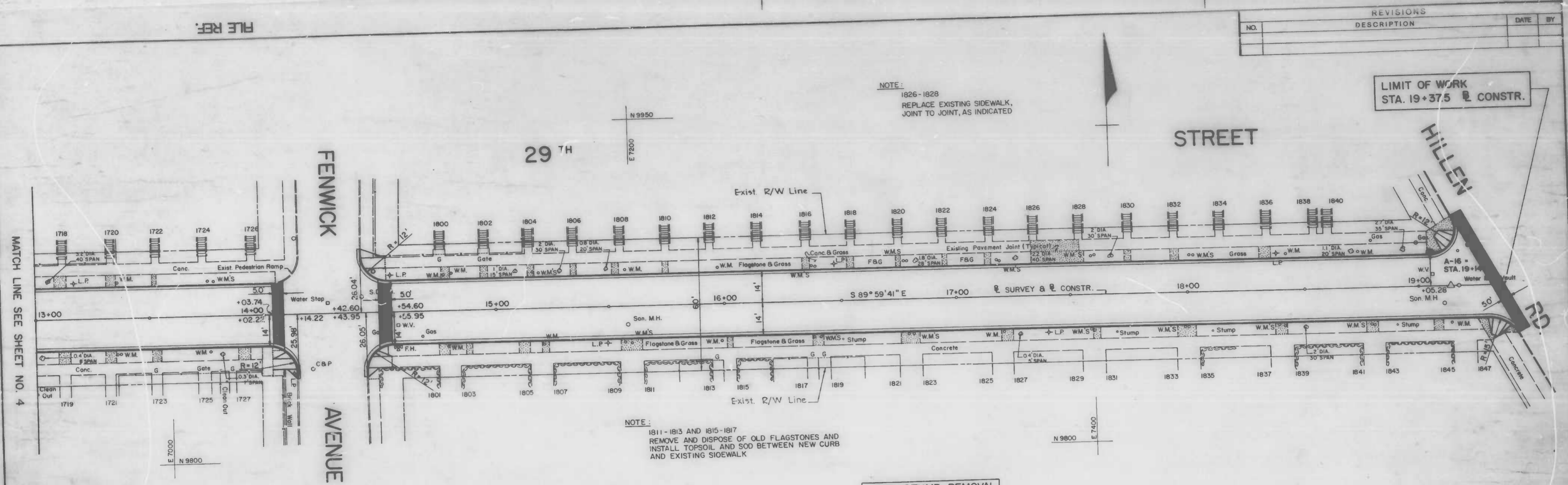
DATE: _____ SHEET 4 OF 14

FILE REF.

FILE REF.

REVISIONS			
NO.	DESCRIPTION	DATE	BY

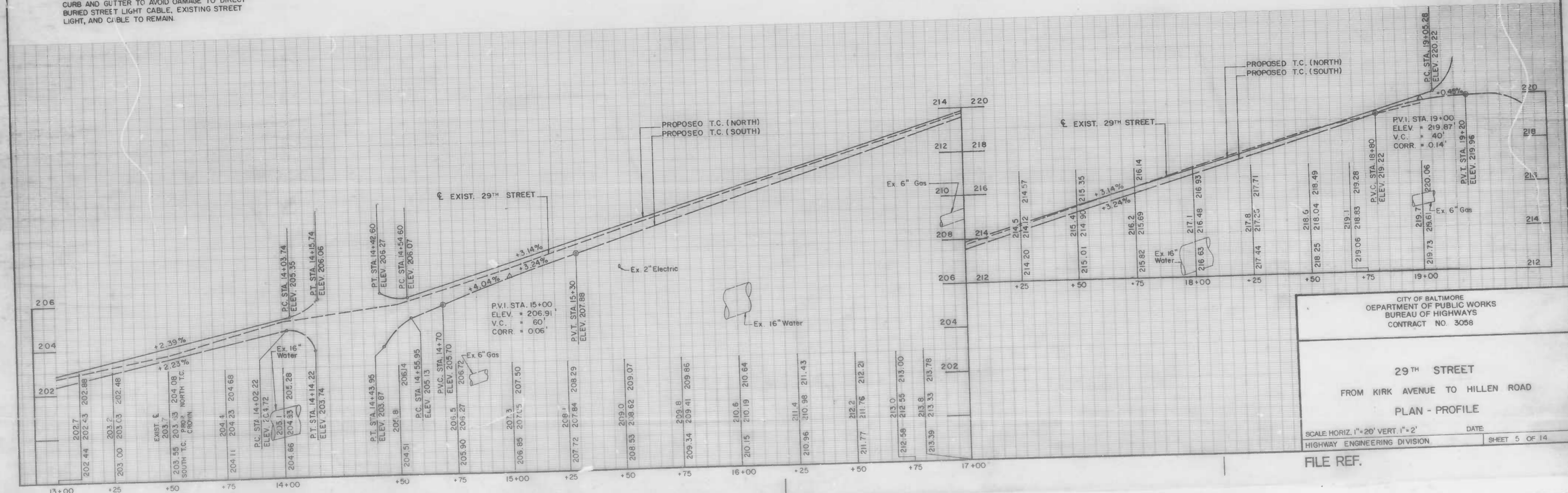
LIMIT OF WORK
STA. 19+37.5 @ CONSTR.



NOTE:
1811 - 1813 AND 1815 - 1817
REMOVE AND DISPOSE OF OLD FLAGSTONES AND
INSTALL TOPSOIL AND SOD BETWEEN NEW CURB
AND EXISTING SIDEWALK

TREE STUMP REMOVAL	
STATION	OFFSET
16+50	RIGHT
17+68.5	RIGHT
18+10	RIGHT
18+90	RIGHT

NOTE:
CONTRACTOR TO EXERCISE CAUTION WHEN REMOVING
EXISTING CURB AND INSTALLING NEW COMBINATION
CURB AND GUTTER TO AVOID DAMAGE TO DIRECT
BURIED STREET LIGHT CABLE, EXISTING STREET
LIGHT, AND CABLE TO REMAIN.



CITY OF BALTIMORE
DEPARTMENT OF PUBLIC WORKS
BUREAU OF HIGHWAYS
CONTRACT NO. 3058

29TH STREET
FROM KIRK AVENUE TO HILLEN ROAD
PLAN - PROFILE

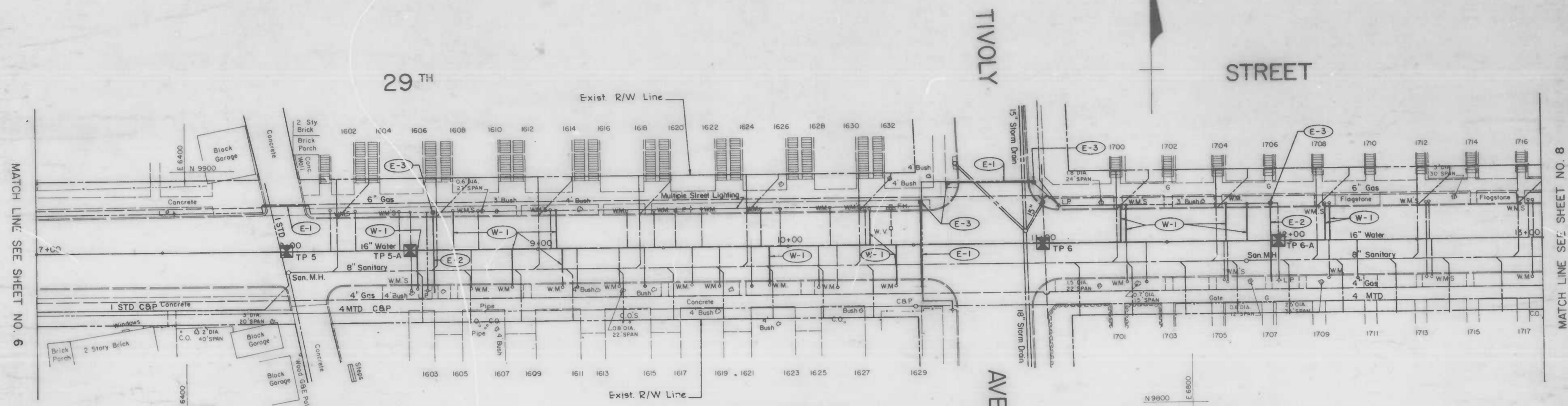
SCALE HORIZ. 1"=20' VERT. 1"=2'
HIGHWAY ENGINEERING DIVISION

DATE: _____ SHEET 5 OF 14

FILE REF.

FILE REF.

REVISIONS			
NO.	DESCRIPTION	DATE	BY



MATCH LINE SEE SHEET NO. 6

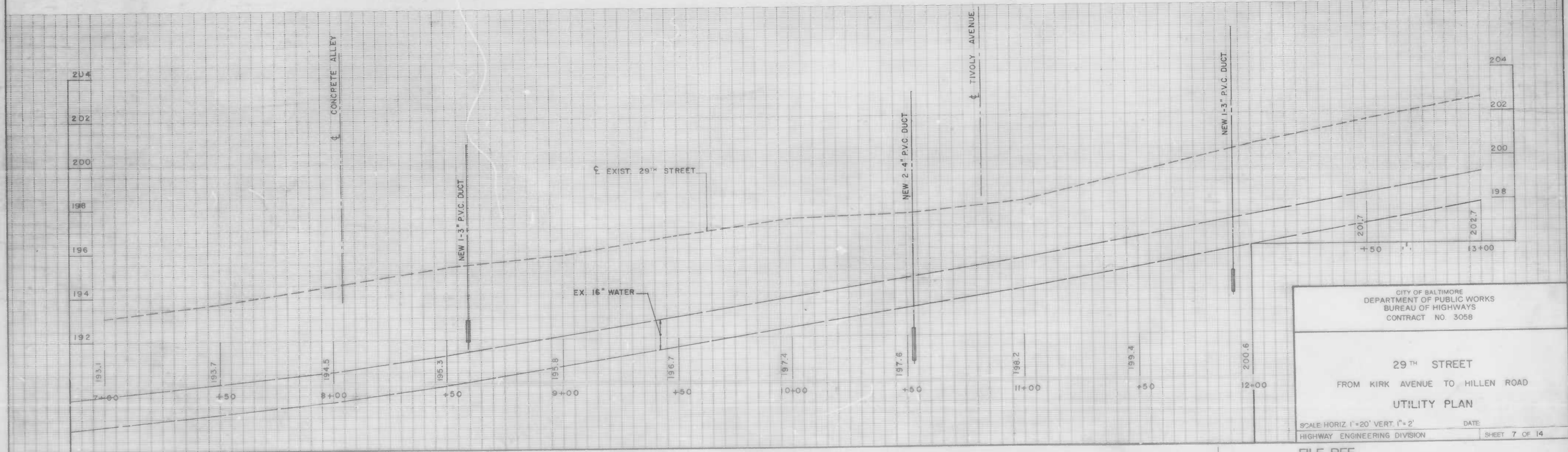
MATCH LINE SEE SHEET NO. 8

- (W-1) STA. 8+53 RT. STA. 10+33 LT. STA. 12+14 LT.
- STA. 8+67 LT. STA. 10+43 RT. STA. 12+16 LT.
- STA. 8+91 RT. STA. 11+32 LT.
- STA. 9+08 LT. STA. 11+34 LT.
- STA. 9+10 RT. STA. 11+74 LT.
- STA. 9+93 RT. STA. 11+83 LT.
- INSTALL NEW 3/4" COPPER WATER SERVICE, 5/8" METER WITH NEW 3/4" CORPORATIONS

- (E-1) INSTALL NEW 2-4" P.V.C. DUCT DB 120, CONCRETE ENCASED, MIN. 2 1/2' COVER LAY FLAT. SEE B.C. 824.01
- (E-2) INSTALL NEW 1-3" P.V.C. DUCT DB 120, CONCRETE ENCASED, MIN. COVER 2 1/2' SEE B.C. 824.01
- (E-3) INSTALL NEW HAND BOX PER B.C. 804.01 AT LOCATION SHOWN ON CHART

TEST PIT DATA			
NO.	LOCATION	TOP ELEV.	REMARKS
TP 5	STA. 8+00	192.5	1" STD CONSTR.
TP 5-A	STA. 8+50	191.3	16" WATER CONSTR.
TP 6	STA. 11+00	195.5	8" GAS CONSTR.
TP 6-A	STA. 11+95	194.6	16" WATER CONSTR.
		198.9	2" ELEC. CONSTR.

ELECTRIC HANDBOX LOCATIONS	
STATION	OFFSET
8+59.5	15.5' LT.
10+53	180' LT.
10+63.5	25.5' LT.
10+97	25.5' LT.
11+92	16.0' LT.



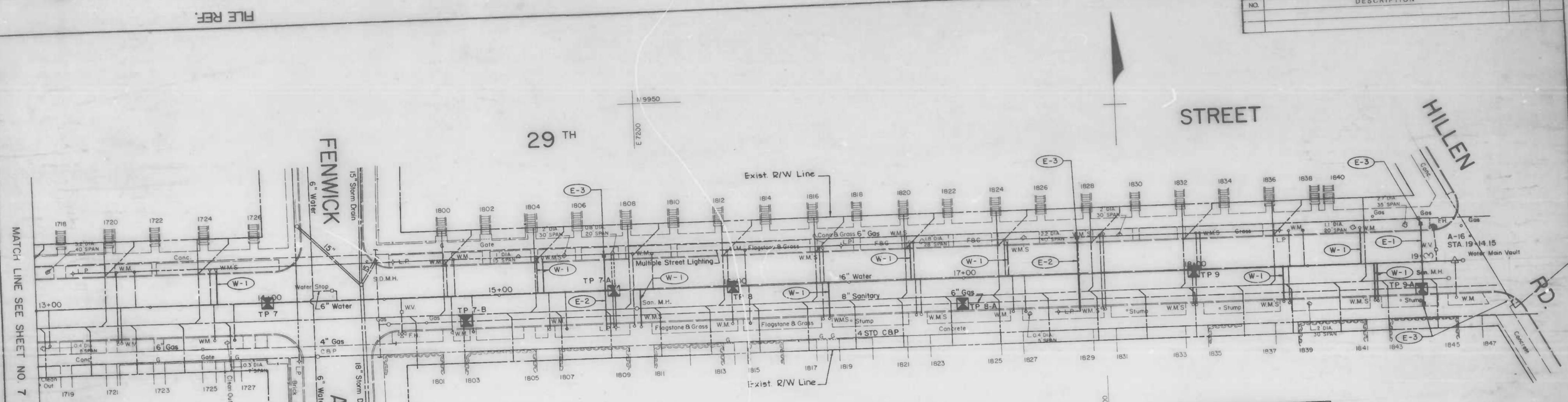
CITY OF BALTIMORE
DEPARTMENT OF PUBLIC WORKS
BUREAU OF HIGHWAYS
CONTRACT NO. 3058

29TH STREET
FROM KIRK AVENUE TO HILLEN ROAD
UTILITY PLAN

SCALE HORIZ 1"=20' VERT. 1"=2'
HIGHWAY ENGINEERING DIVISION DATE: SHEET 7 OF 14

FILE REF.

REVISIONS			
NO.	DESCRIPTION	DATE	BY



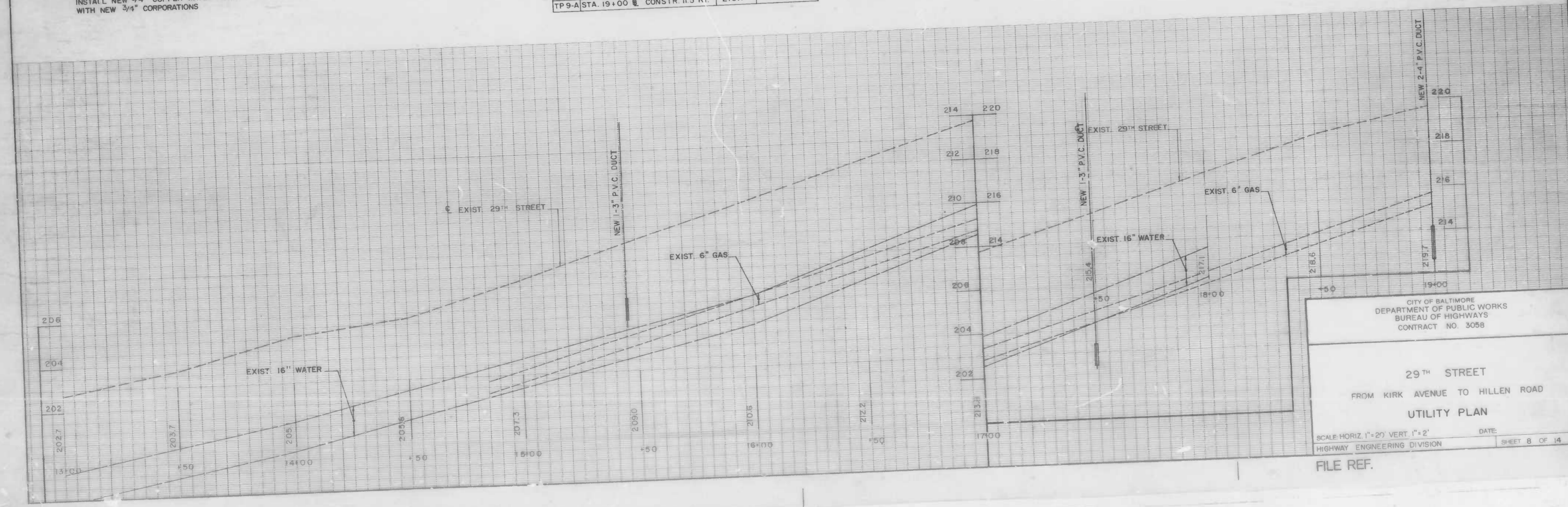
MATCH LINE SEE SHEET NO. 7

W-1 STA. 13+79 LT.
 STA. 15+17 LT.
 STA. 15+19 LT.
 STA. 15+60 RT.
 STA. 16+41 RT.
 STA. 16+77 LT.
 STA. 17+20 LT.
 STA. 18+39 RT.
 STA. 18+73 LT.
 STA. 18+79 RT.
 STA. 18+80 RT.
 INSTALL NEW 3/4" COPPER WATER SERVICE 5/8" METER
 WITH NEW 3/4" CORPORATIONS

TEST PIT DATA			
NO.	LOCATION	TOP ELEV.	REMARKS
TP 7	STA. 14+00	201.2	16" WATER
TP 7-B	STA. 14+85	202.7	6" GAS
TP 7-A	STA. 15+49	207.4	2" ELEC.
TP 8	STA. 16+00	206.2	16" WATER
TP 8-A	STA. 17+00	209.4	6" GAS
TP 9	STA. 18+00	213.6	16" WATER
TP 9-A	STA. 19+00	215.7	6" GAS

- E-1 INSTALL NEW 2-4" P.V.C. DUCT DB 120, CONCRETE ENCASED, MIN. 2 1/2" COVER LAY FLAT. SEE BC 824.01
- E-2 INSTALL NEW 1-3" P.V.C. DUCT DB 120, CONCRETE ENCASED, MIN. COVER 2 1/2" SEE BC 824.01
- E-3 INSTALL NEW HAND BOX PER BC. 804.01 AT LOCATION SHOWN ON CHART

ELECTRIC HANDBOX LOCATIONS	
STATION	OFFSET
15+45.5	160' LT.
17+49	165' LT.
19+00	170' LT.
19+37.5	180' RT.



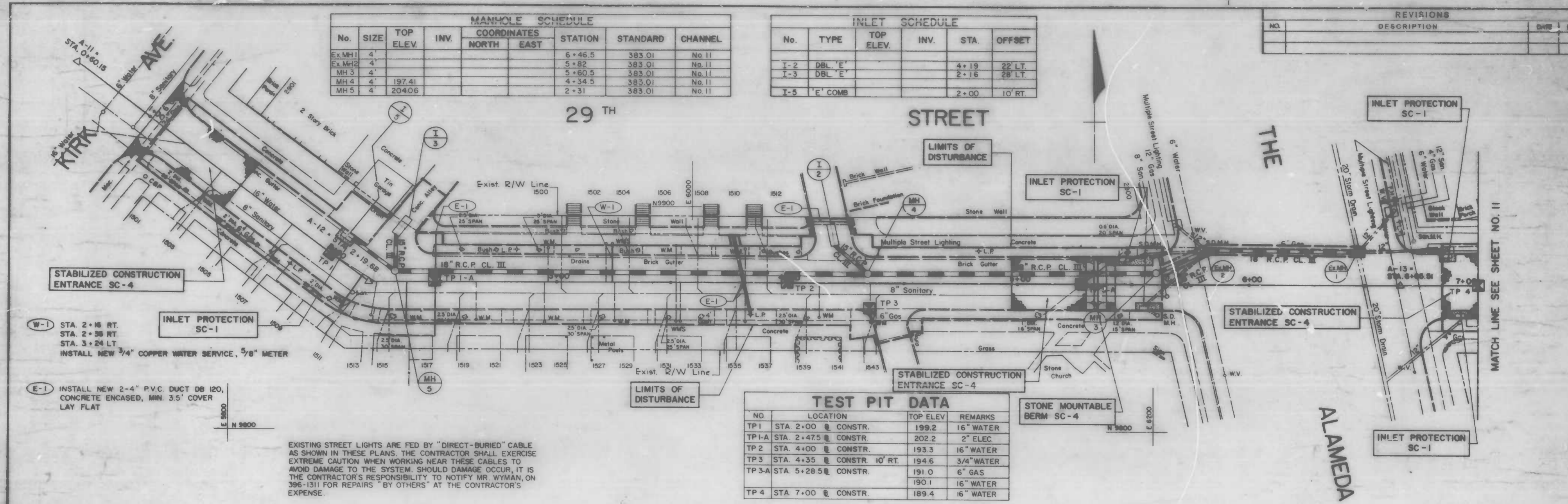
CITY OF BALTIMORE
 DEPARTMENT OF PUBLIC WORKS
 BUREAU OF HIGHWAYS
 CONTRACT NO. 3088

29TH STREET
 FROM KIRK AVENUE TO HILLEN ROAD
UTILITY PLAN

SCALE: HORIZ. 1"=20' VERT. 1"=2'
 HIGHWAY ENGINEERING DIVISION

DATE: _____
 SHEET 8 OF 14

FILE REF.



MANHOLE SCHEDULE						
No.	SIZE	TOP ELEV.	INV.	COORDINATES		CHANNEL
				NORTH	EAST	
Ex. MH1	4'			6+46.5	383.01	No. II
Ex. MH2	4'			5+82	383.01	No. II
MH 3	4'			5+60.5	383.01	No. II
MH 4	4'	197.41		4+34.5	383.01	No. II
MH 5	4'	204.06		2+31	383.01	No. II

INLET SCHEDULE					
No.	TYPE	TOP ELEV.	INV.	STA.	OFFSET
I-2	DBL 'E'			4+19	22' LT.
I-3	DBL 'E'			2+16	28' LT.
I-5	'E' COMB			2+00	10' RT.

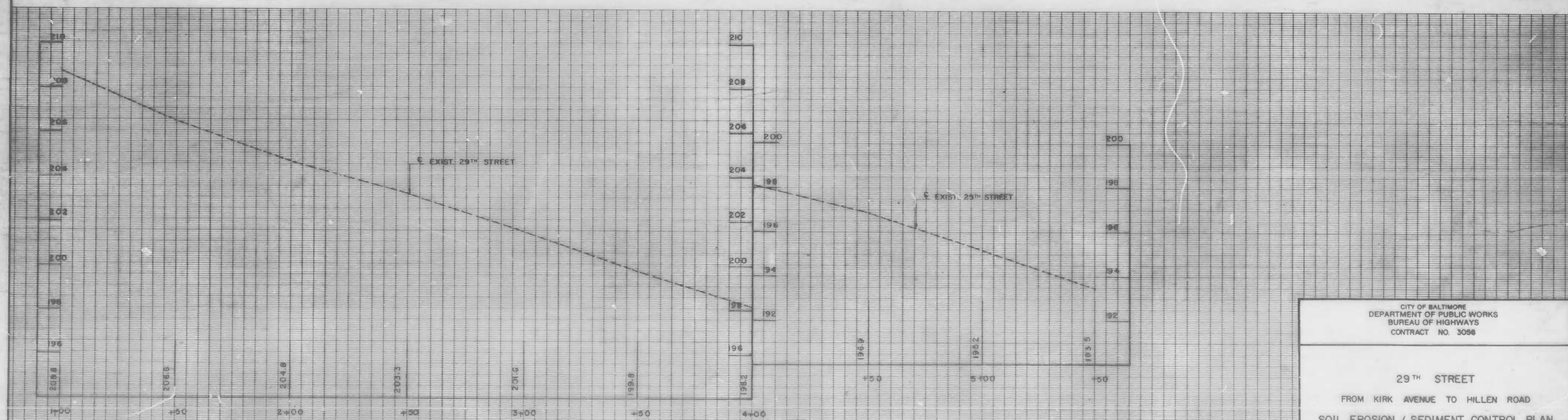
REVISIONS			
NO.	DESCRIPTION	DATE	BY

TEST PIT DATA				
NO.	LOCATION	TOP ELEV.	REMARKS	
TP1	STA 2+00 @ CONSTR.	199.2	16" WATER	
TP1-A	STA 2+47.5 @ CONSTR.	202.2	2" ELEC	
TP2	STA 4+00 @ CONSTR.	193.3	16" WATER	
TP3	STA 4+35 @ CONSTR. 10' RT.	194.6	3/4" WATER	
TP3-A	STA 5+28.5 @ CONSTR.	191.0	6" GAS	
		190.1	16" WATER	
TP4	STA 7+00 @ CONSTR.	189.4	16" WATER	

W-1 STA 2+16 RT.
STA. 2+38 RT.
STA. 3+24 LT.
INSTALL NEW 3/4" COPPER WATER SERVICE, 5/8" METER

E-1 INSTALL NEW 2-4" P.V.C. DUCT DB 120,
CONCRETE ENCASED, MIN. 3.5' COVER
LAY FLAT

EXISTING STREET LIGHTS ARE FED BY "DIRECT-BURIED" CABLE AS SHOWN IN THESE PLANS. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHEN WORKING NEAR THESE CABLES TO AVOID DAMAGE TO THE SYSTEM. SHOULD DAMAGE OCCUR, IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY MR. WYMAN, ON 396-1311 FOR REPAIRS "BY OTHERS" AT THE CONTRACTOR'S EXPENSE.



CITY OF BALTIMORE
DEPARTMENT OF PUBLIC WORKS
BUREAU OF HIGHWAYS
CONTRACT NO. 3056

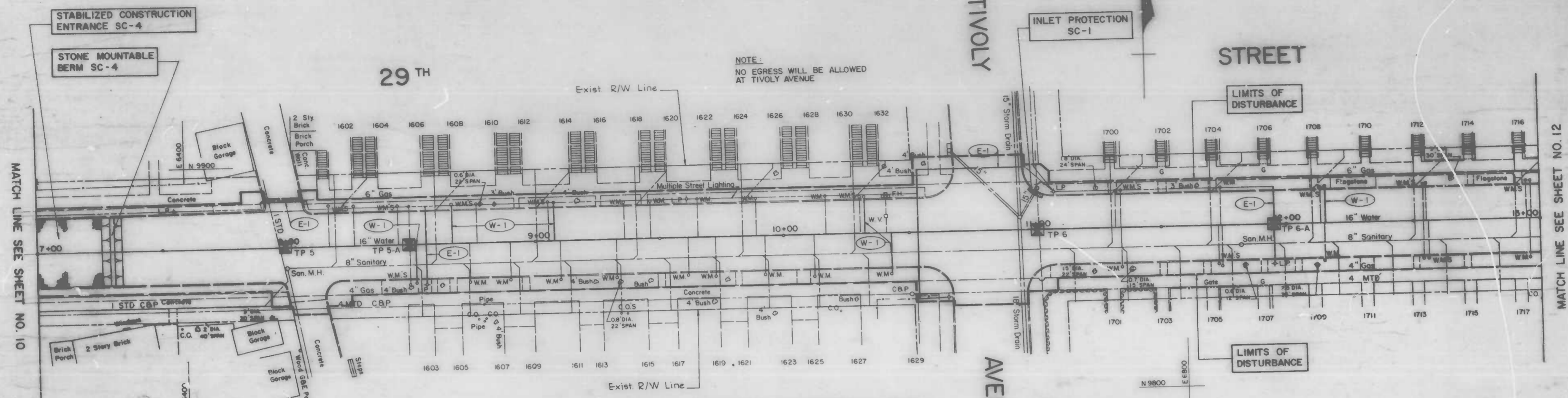
29TH STREET
FROM KIRK AVENUE TO HILLEN ROAD
SOIL EROSION / SEDIMENT CONTROL PLAN

SCALE HORIZ. 1"=20' VERT. 1"=2'
HIGHWAY ENGINEERING DIVISION
DATE: _____ SHEET 10 OF 14

FILE REF.

FILE REF.

REVISIONS			
NO.	DESCRIPTION	DATE	BY

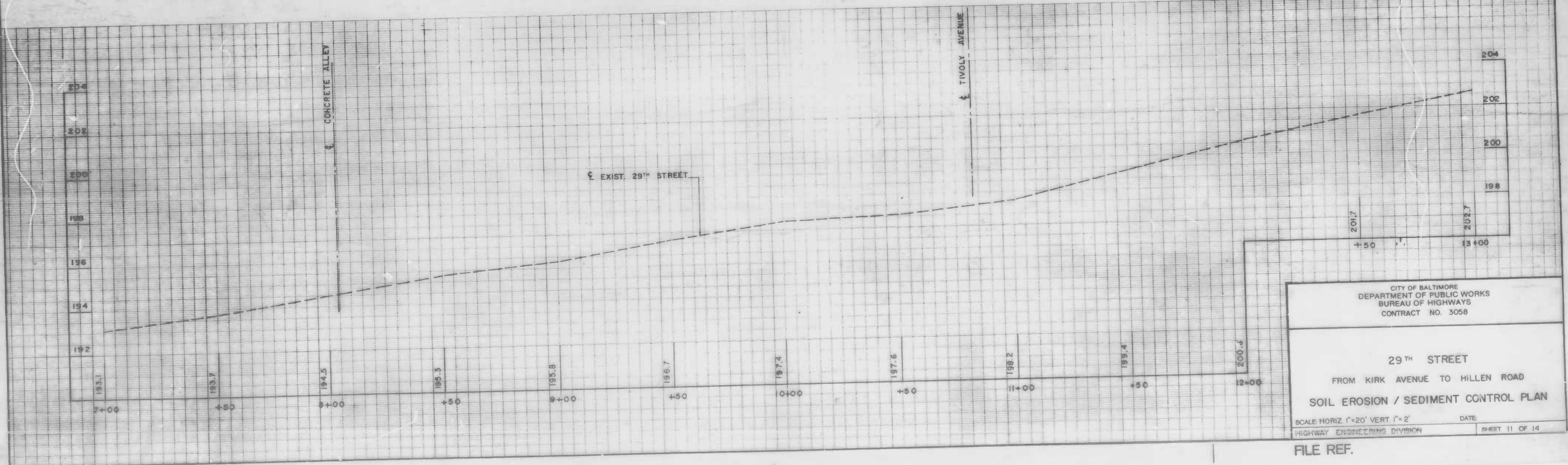


(W-1) STA 8+53 RT.
 STA 8+67 LT.
 STA 9+08 LT.
 STA 10+33 LT.
 STA 10+43 RT.
 STA 12+16 LT.
 INSTALL NEW 3/4" COPPER WATER SERVICE, 5/8" METER

(E-1) INSTALL NEW 2-4" P.V.C. DUCT DB 120,
 CONCRETE ENCASED, MIN. 3.5" COVER LAY FLAT

TEST PIT DATA			
NO.	LOCATION	TOP ELEV.	REMARKS
TP 5	STA 8+00	192.5	1" STD
		190.6	16" WATER
TP 5-A	STA 8+50	191.3	16" WATER
TP 6	STA 11+00	195.5	8" GAS
		194.6	16" WATER
TP 6-A	STA 11+95	198.9	2" ELEC.

NOTE:
 NO EGRESS WILL BE ALLOWED
 AT TIVOLY AVENUE



CITY OF BALTIMORE
 DEPARTMENT OF PUBLIC WORKS
 BUREAU OF HIGHWAYS
 CONTRACT NO. 3058

29TH STREET
 FROM KIRK AVENUE TO HILLEN ROAD
SOIL EROSION / SEDIMENT CONTROL PLAN

SCALE HORIZ 1"=20' VERT 1"=2'
 HIGHWAY ENGINEERING DIVISION

DATE: _____
 SHEET 11 OF 14

FILE REF.

REVISIONS			
NO.	DESCRIPTION	DATE	BY
1	SEE SHEET #3	12-4-86	M.J.

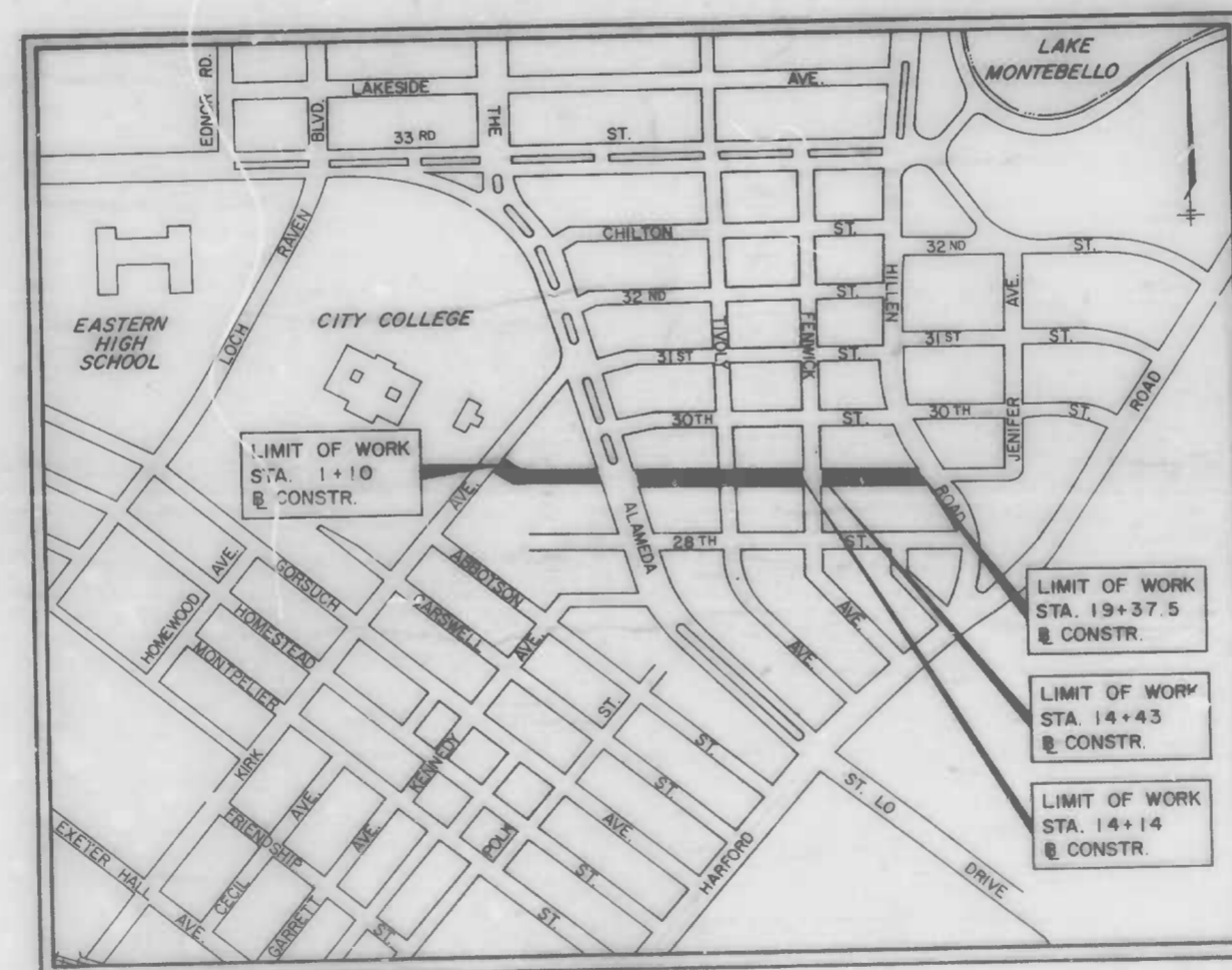
INDEX OF SHEETS	
SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	MISCELLANEOUS DETAILS
3-5	PLAN - PROFILE
6-8	UTILITY PLAN
9	STORM DRAIN PROFILE
10-12	SOIL EROSION / SEDIMENT CONTROL PLAN
13	SOIL EROSION / SEDIMENT CONTROL DETAILS
14	SOIL EROSION / SEDIMENT CONTROL NOTES

CITY OF BALTIMORE DEPARTMENT OF PUBLIC WORKS BUREAU OF HIGHWAYS

RECONSTRUCTION OF 29TH STREET FROM KIRK AVENUE TO HILLEN ROAD



CITY OF BALTIMORE BUREAU OF HIGHWAYS
CONTRACT NO. 3058



LOCATION MAP
SCALE: 1" = 500'

FIELD SURVEY BOOKS	
NO.	DESCRIPTION
X-891	TOPO & X-SECTIONS, 29 TH STREET
X-891A	TOPO & X-SECTIONS, 29 TH STREET

CONSTELLATION DESIGN GROUP, INC.
CONSULTING ENGINEERS
2323 YORK ROAD
TIMONIUM, MD 21093



CATHY S. RITTER, PE, 12008

S. OF H. REVIEW	R/W RELEASE	GRADE EST'D	HIGHWAY DESIGN	STRUCTURAL	DRAINAGE	LIGHTING	CONDUIT	SEDIMENTATION AND EROSION CONTROL	OFFICE OF TRANSPORTATION	WASTE WATER ENGINEERING	WATER ENGINEERING
BY	JG/H	R	C/S	---	✓	J Burch	J Burch	A	136	F.R.K.	R.K.
DATE	9/19/86	9/11/86	9/1/86	---	9/16/86	9/11/86	9/11/86	9/16/86	9/15/86	3/1/86	9/12/86

DEPARTMENT OF PUBLIC WORKS

BUREAU OF HIGHWAYS

APPROVED: *[Signature]*
CHIEF, HIGHWAY ENGINEERING DIVISION

APPROVED: *[Signature]*
CHIEF, ENVIRONMENTAL SERVICES DIVISION

OFFICE OF TRANSPORTATION

APPROVED: *[Signature]*
DIRECTOR OF OFFICE OF TRANSPORTATION

APPROVED

[Signature]

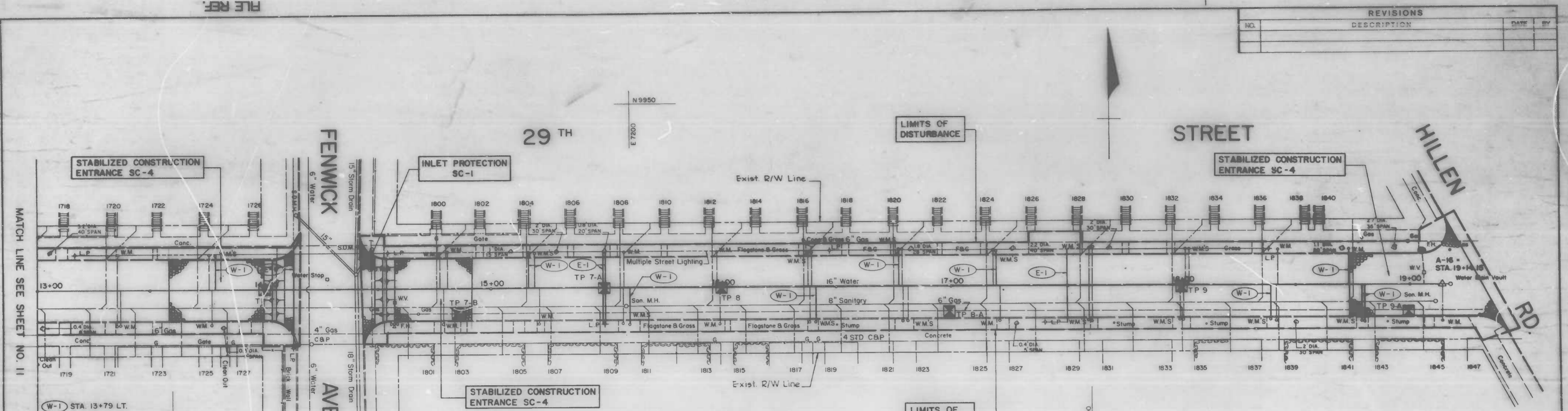
DIRECTOR OF PUBLIC WORKS

APPROVED

[Signature]

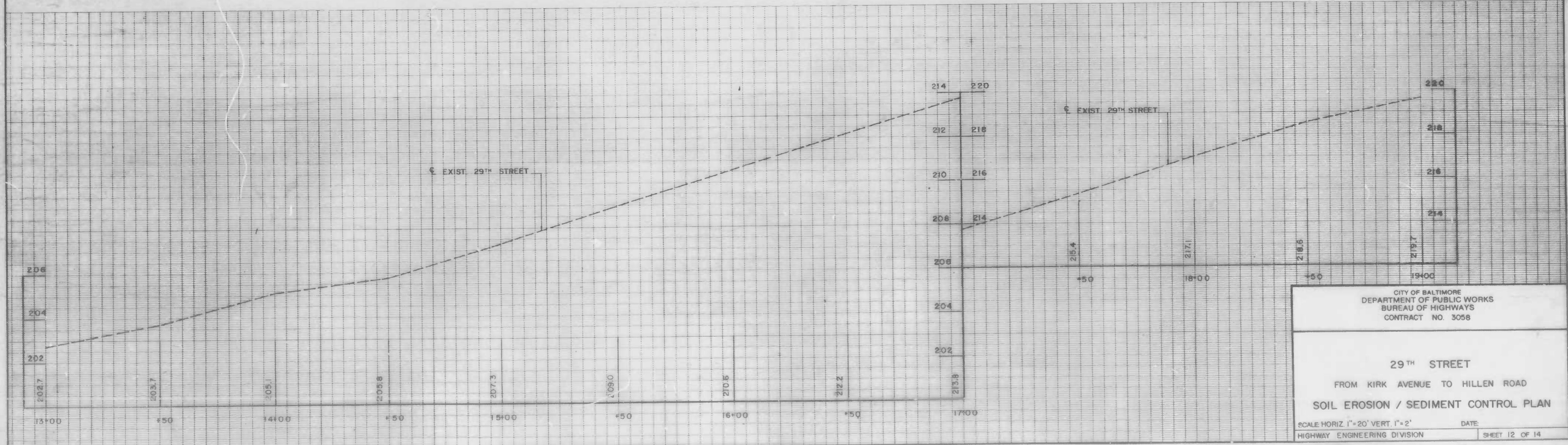
HEAD, BUREAU OF HIGHWAYS

REVISIONS		
NO.	DESCRIPTION	DATE



- (W-1) STA 13+79 LT.
 - STA 15+17 LT.
 - STA 15+19 LT.
 - STA 15+60 RT.
 - STA 16+41 RT.
 - STA 16+77 LT.
 - STA 17+20 LT.
 - STA 18+59 RT.
 - STA 18+73 LT.
 - STA 18+79 RT.
 - STA 18+80 RT.
 - INSTALL NEW 3/4" COPPER WATER SERVICE 5/8" METER
- (E-1) INSTALL NEW 2-4" P.V.C. DUCT D3 I20,
CONCRETE ENCASED, MIN. 3.5' COVER LAY FLAT

TEST PIT DATA			
NO.	LOCATION	TOP ELEV.	REMARKS
TP 7	STA 14+00 CONSTR	202.1	16" WATER
TP 7-B	STA 14+85 CONSTR 11' RT.	202.7	6" GAS
TP 7-A	STA 15+49 CONSTR	207.4	2" ELEC.
TP 8	STA 16+00 CONSTR	206.2	16" WATER
TP 8-A	STA 17+00 CONSTR 11.5' RT.	212.5	6" GAS
TP 9	STA 18+00 CONSTR	213.6	16" WATER
TP 9-A	STA 19+00 CONSTR 11.5' RT.	215.7	6" GAS



CITY OF BALTIMORE
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CONTRACT NO. 3058

29TH STREET
FROM KIRK AVENUE TO HILLEN ROAD

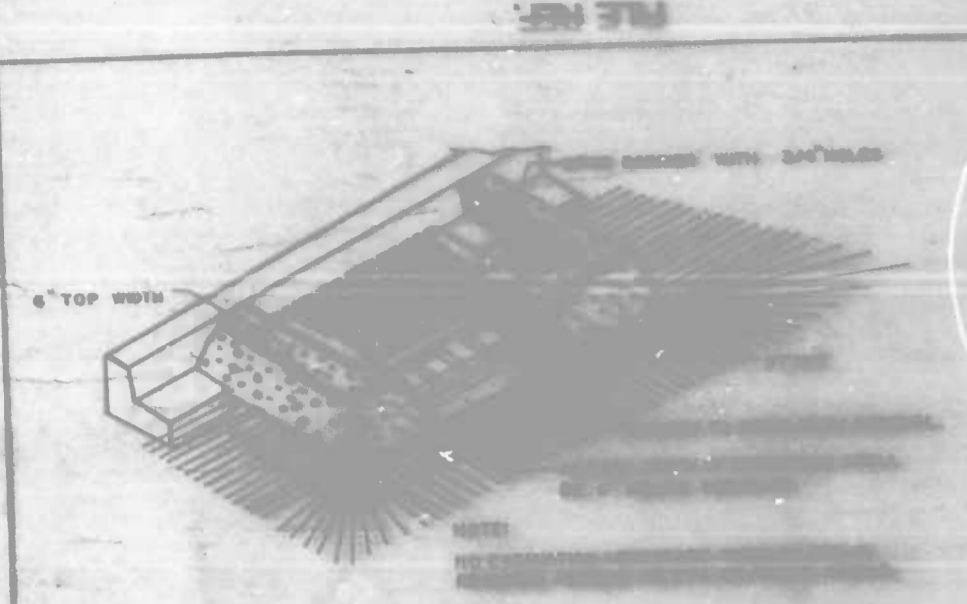
SOIL EROSION / SEDIMENT CONTROL PLAN

SCALE: HORIZ. 1" = 20' VERT. 1" = 2'
HIGHWAY ENGINEERING DIVISION

DATE: _____ SHEET 12 OF 14

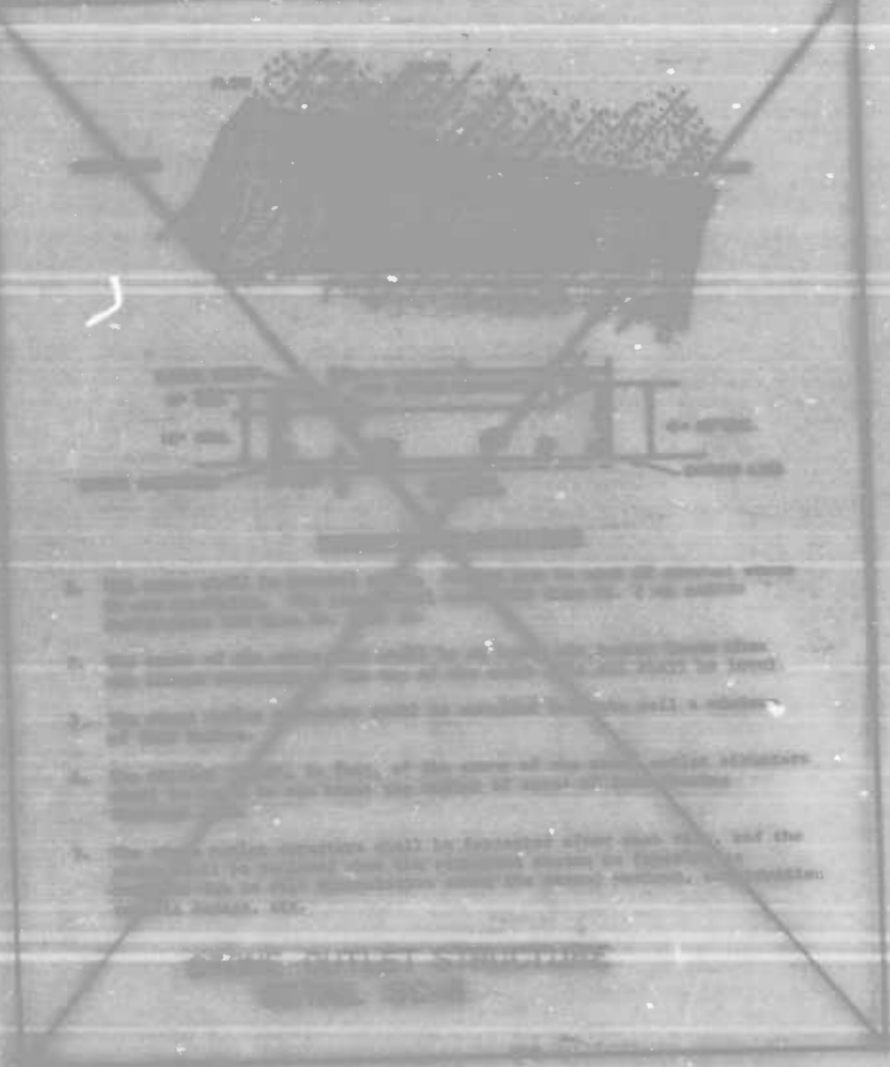
FILE REF.

NO.	DESCRIPTION	DATE	BY

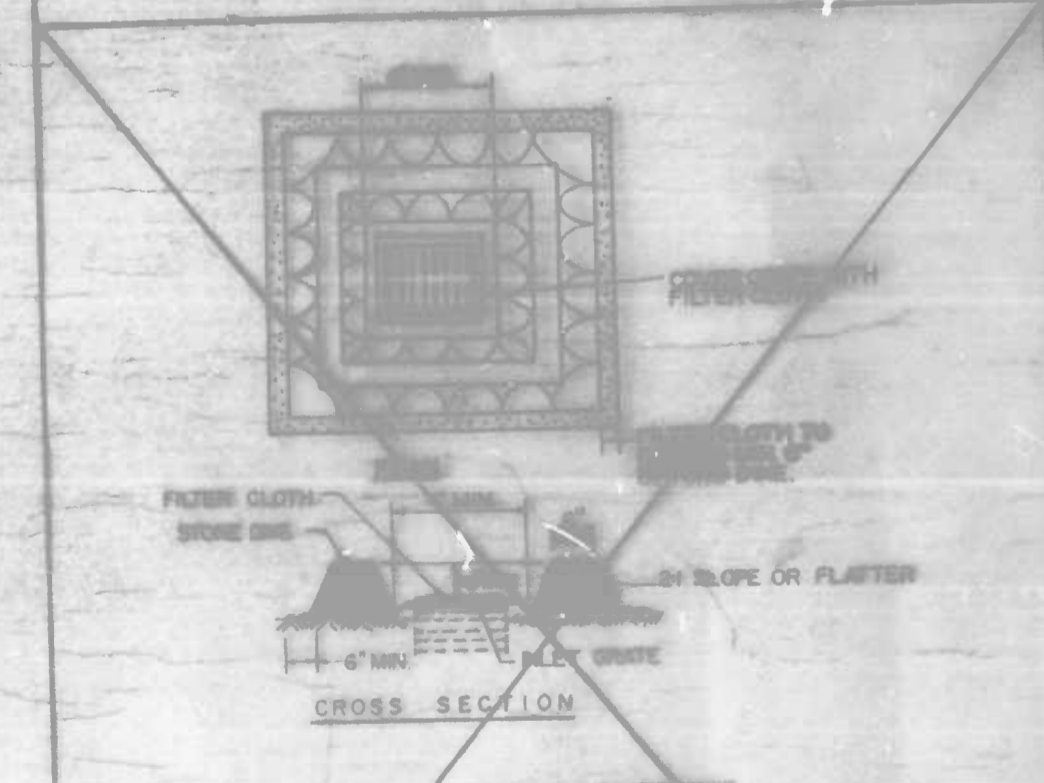


- CONSTRUCTION SPECIFICATIONS**
1. Structure shall be inspected after each storm and repairs made as needed.
 2. Construction Operations shall be carried out in such a manner that silt and water pollution is minimized.
 3. The structure shall be removed when drainage area has been properly stabilized.
- The material used in the structure shall meet ASTM Specification for class no. 2 or 24 or the equivalent with a minimum 2" mesh unless the above specification may be used if approved by the engineer. (Reference to the above specification may be made in the contract documents.)

**INLET PROTECTION
DETAIL SC-1**

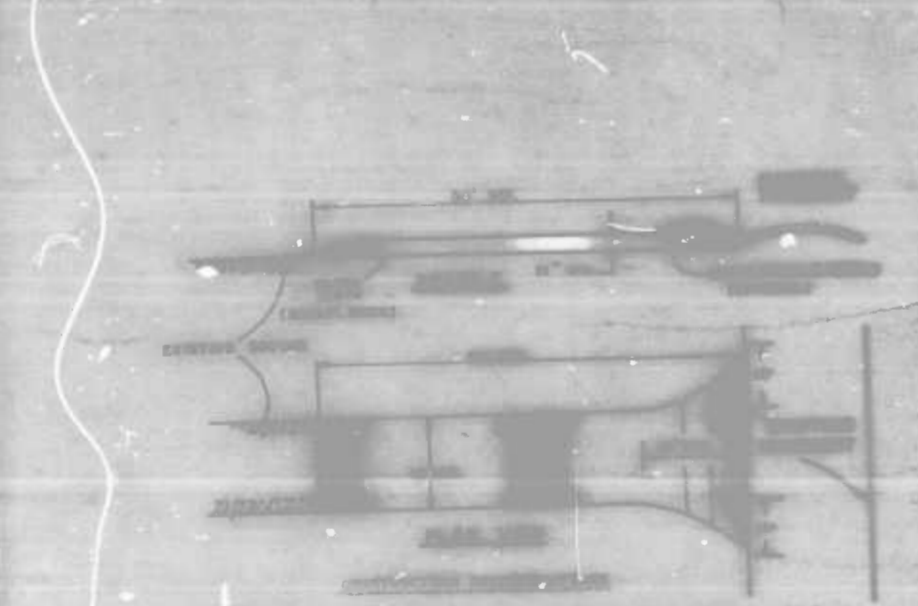


- LEGEND**
- LIMITS OF DISTURBANCE
 - INLET PROTECTION (SC-1)
 - STABILIZED CONSTRUCTION ENTRANCE (SC-4)



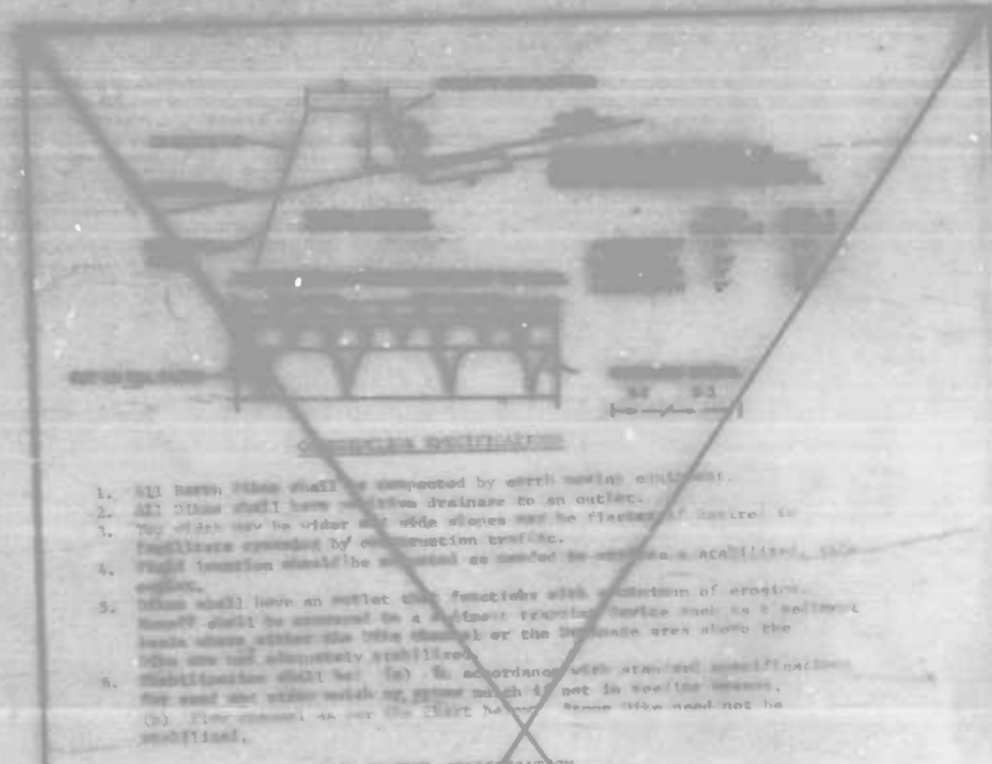
- CONSTRUCTION SPECIFICATIONS**
1. Stone for the dike shall be crushed stone. Removal may be made if crushed stone is not available. The stone shall meet ASTM class no. 2 or the equivalent with a minimum 1/2" or 3/4" mesh but no larger than 2 inches.
 2. Filter cloth shall be 1/2" mesh or approval equal.
 3. The structure shall be inspected after each rain and repairs made as needed.

**INLET PROTECTION
DETAIL SC-2**



- CONSTRUCTION SPECIFICATIONS**
1. Stone shall be 1/2" to 2" in size, or equivalent or crushed concrete equivalent. (Larger - in special cases, but not less than 5/8" (except on a storm drainage line where a 1/2" mesh is required).)
 2. Thickness - 18" high, 12" wide (10" inches) at top.
 3. Slope - 1:1 (100% slope) on both sides, but not less than the full width at bottom where drainage is across roadway.
 4. Filter cloth - shall be placed over the entire area prior to placing of stone. Filter cloth may be replaced on a whole family residence lot.
 5. Surface Water - All surface water flowing on driveway toward construction entrance shall be directed across the entrance. If grades in immediate neighborhood have 2:1 slopes shall be maintained.
 6. Maintenance - The entrance shall be maintained in a condition which will prevent erosion or flooding of adjacent roads and public rights-of-way. This may require periodic re-planting with additional stone as conditions demand and periodic cleaning of any openings used to trap sediment. All sediment, silt, debris, washed or washed into public rights-of-way must be removed immediately.
 7. Weeding - Weeds shall be removed to prevent entrance water to entrance once public rights-of-way. This weeding is required, it shall be done on an area stabilized with stone and which drains into an approved surface drainage system.
 8. Periodic Inspection and maintenance shall be provided after each rain.

**HEAVY DUTY
STABILIZED CONSTRUCTION ENTRANCE
DETAIL SC-4**



SOIL CLASSIFICATION

TYPE OF SOIL	THICKNESS	CLASS	MIN. STONE	MIN. STONE
1	0.5-1.0'	Soil and heavy brush	Soil and heavy brush	
2	1.0-1.5'	Soil and brush	Soil and brush	
3	1.5-2.0'	Soil with trees or brush	Soil with trees or brush	
4	2.0-2.5'	Soil with trees	Soil with trees	

1. Stone to be 2 inch stone, or recycled concrete equivalent, in a layer at least 2'-0" in thickness and be placed over the soil.
 2. Topsoil to be 4" thick in a layer of least 5 inches thickness placed over the soil.
 3. Approved alternatives can be substituted for any of the above materials.
- Periodic inspection and required maintenance must be provided after each rain event.

**EARTH / STONE DIKE
DETAIL SC-6/DETAIL SC-7**

CITY OF BALTIMORE
DEPARTMENT OF PUBLIC WORKS
BUREAU OF HIGHWAYS
CONTRACT NO. 3056

29TH STREET
FROM KIRK AVENUE TO HILLEN ROAD
SOIL EROSION / SEDIMENT CONTROL DETAILS

SCALE NO SCALE DATE
HIGHWAY ENGINEERING DIVISION SHEET 13 OF 14

FILE REF.

DRAWN BY A. MOSCATO
EXAMINED BY

STABILIZATION SPECIFICATIONS

TEMPORARY STABILIZATION - ARTICLE 20.18

Planting Season: Temporary seeding can be done anytime of the year, except when the ground is frozen. The seed shall be applied to the surface and covered with a minimum of 1/2 inch of soil. The seed shall be applied to the surface and covered with a minimum of 1/2 inch of soil. The seed shall be applied to the surface and covered with a minimum of 1/2 inch of soil.

Soil Preparation: When the area to be seeded is graded and laid, the top layer of topsoil shall be exposed by grading to allow means before seed is sown.

Lime: No lime shall be required for temporary seeding.

Fertilizer: Commercial fertilizer of an analysis 8-10-10 applied at a rate of 35 pounds per 1000 square feet.

Seeding: (Section 20.23-1) Seed mixture, Annual Ryegrass applied at the rate of 3 pounds per 1000 square feet.

Mulching: Applied at the rate of 100 pounds per 1000 square feet. Straw mulching - mulch one inch of straw per 1000 square feet. The mulch shall be applied by hand and the mulch shall be worked into the soil.

PERMANENT STABILIZATION - ARTICLE 20.23

Planting Season: No sod shall be placed between the dates of June 1 and August 15 inclusive nor at any time when the temperature is below thirty-two (32) degrees Fahrenheit. No frozen sod shall be used and it shall be placed upon frost-free soil.

Soil Preparation: Before placing or dropping sod, any surface, all shaping and dressing of such surfaces shall have been completed. The sod shall be laid in a regular pattern and shall be laid in a regular pattern and shall be laid in a regular pattern.

Fertilizer: All sods to be sodded shall be fertilized with a commercial fertilizer of an analysis 10-10-10 and Ureaform fertilizer 34-0-0 applied at the rate of 20 and 8 pounds respectively per 1000 square feet.

NOTE: After sod is in place, topsoil shall be applied to the surface.

Lime: Lime of 100 lbs. of 100 pounds of ground limestone per 1000 square feet. The lime and the 10-10-10 and 34-0-0 fertilizer shall be applied to the top 1/2 inch of soil prior to placing sod.

TYPE A - Sodding

not less than 80% Kentucky Bluegrass
not more than 20% other grasses and legumes

TYPE B - Tall Fescue Sod

not less than 80% Tall Fescue
not more than 20% other grasses and legumes

STABILIZATION SCHEDULE					
AREA	ACTIVE OR INACTIVE	SF	TYPE OF STABILIZATION	SEQUENCE	NO.
[Symbol]	ACTIVE	42,000	TEMPORARY PERMANENT CRUSHER RUN BIT. CONCRETE	1	6
[Symbol]	ACTIVE	8,000	TEMPORARY PERMANENT CRUSHER RUN BIT. CONCRETE	2	6
[Symbol]	ACTIVE	2,700	TEMPORARY PERMANENT ANNUAL RYEGRASS DEM. CONCRETE	5	6

* SEE PLAN SHEETS AND SOIL EROSION / SEDIMENT CONTROL PLANS FOR AREA DESIGNATIONS
** SEE SPECIAL PROVISIONS FOR STABILIZATION SEQUENCE

The Contractor shall submit a written certification to the Baltimore City Sediment Control Representative of local firms working days before starting any grading activities, stating the following:

- The day he intends to start work
- The source of all aggregate material
- The designated stockpile area
- The Contractor's staging area
- The disposal site for all excess material
- The construction sequence
- The completion day of the work

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- The construction sequence
- The completion day of the work

Department of Public Works, Bureau of Highways
Environmental Services Division, Erosion and Sediment Control Section
309 Municipal Building, Baltimore, MD 21202
Phone - (301) 396-3693

NO.	DESCRIPTION	DATE	BY

Owner / Developer Certification
I, the undersigned hereby certify that the clearing, grading, construction and/or development work to be done pursuant to this plan shall be done in accordance with the requirements of the Baltimore City Erosion and Sediment Control Section.

James A. Zito
Signature
204 Municipal Bldg.
Address
396-4600
Phone

Engineer's Certification
I certify that this plan for Erosion and Sediment Control represents a practical, workable plan based on personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Baltimore City Erosion and Sediment Control Section.

Robert F. Guston
Signature
309 Municipal Bldg.
Address
396-4707
Phone

APPROVED BY: *Frederick M. ...*
EROSION & SEDIMENT CONTROL REPRESENTATIVE

CITY OF BALTIMORE
DEPARTMENT OF PUBLIC WORKS
BUREAU OF HIGHWAYS
CONTRACT NO. 3058

29TH STREET
FROM KIRK AVENUE TO HILLEN ROAD

SOIL EROSION / SEDIMENT CONTROL NOTES

SCALE: NONE
HIGHWAY ENGINEERING DIVISION

DATE: _____
SHEET 14 OF 14

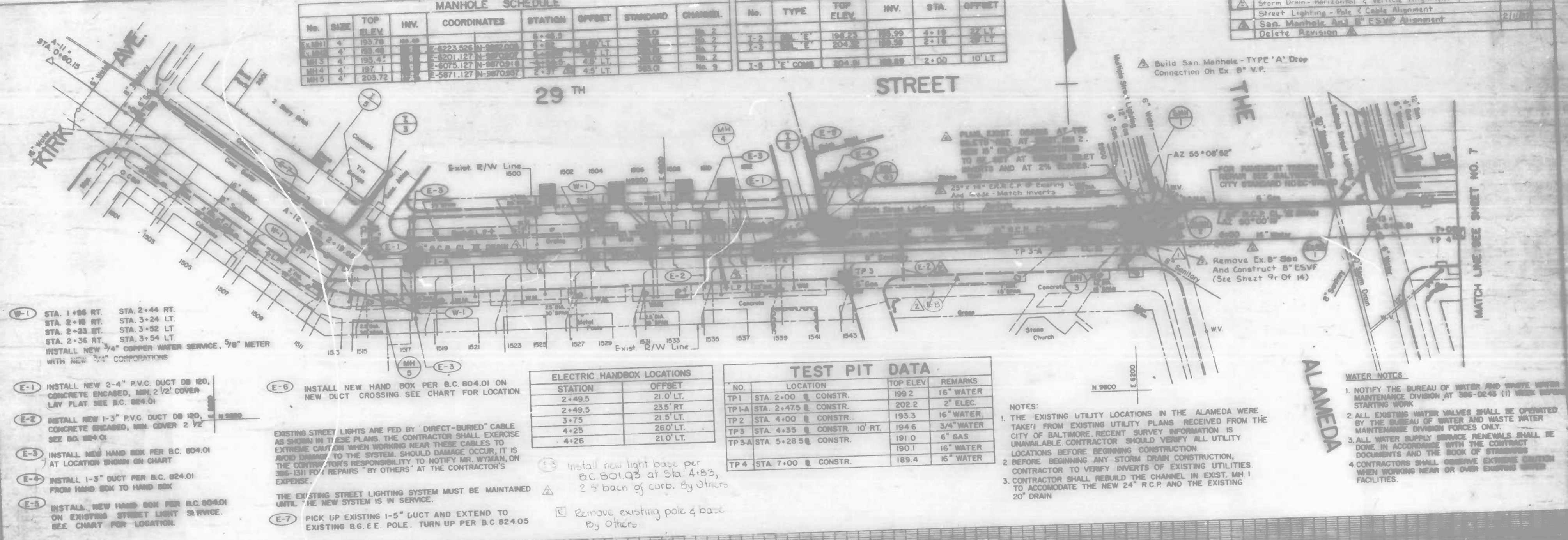
DRAWN BY
EXAMINED BY

FILE REF.

FILE REF. ESD-80-360

MANHOLE SCHEDULE							INLET SCHEDULE								
No.	SIZE	TOP ELEV.	INV.	COORDINATES	STATION	OFFSET	STANDARD	CHANNEL	No.	TYPE	TOP ELEV.	INV.	STA.	OFFSET	
MH1	4'	193.78	88.00	E-2223.526 N-9870000	6+48.0	0.0	360.0	No. 2	1-2	1'	194.23	183.99	4+18	22' LT	
MH2	4'	193.48	0.0	E-2201.127 N-9870007	6+48.0	0.0	360.0	No. 2	1-3	1'	204.30	189.59	2+18	22' LT	
MH3	4'	193.42	0.0	E-6075.127 N-9870918	2+37	4.5' LT	360.0	No. 2	1-8	1'	COMB	204.30	189.59	2+00	10' LT
MH4	4'	197.1	0.0	E-5871.127 N-9870937	2+37	4.5' LT	360.0	No. 9							
MH5	4'	203.72	0.0												

REVISIONS		
NO.	DESCRIPTION	DATE
1	Storm Drain Size Change	1/14/58
2	Storm Drain - Horizontal & Vertical Alignment	2/10/58
3	Street Lighting - Pole & Cable Alignment	2/10/58
4	San. Manhole And 8" ESVP Alignment	2/10/58
5	Delete Revision	



- (W-1) STA. 1+98 RT. STA. 2+44 RT.
STA. 2+18 RT. STA. 3+24 LT.
STA. 2+23 RT. STA. 3+52 LT.
STA. 2+36 RT. STA. 3+54 LT.
INSTALL NEW 3/4" COPPER WATER SERVICE, 5/8" METER WITH NEW 3/4" COPPER CONNECTIONS
- (E-1) INSTALL NEW 2-4" P.V.C. DUCT DB 120, CONCRETE ENCASED, MIN. 2 1/2' COVER LAY FLAT SEE BC. 824.01
- (E-2) INSTALL NEW 1-3" P.V.C. DUCT DB 120, CONCRETE ENCASED, MIN. COVER 2 1/2' SEE BC. 824.01
- (E-3) INSTALL NEW HAND BOX PER B.C. 804.01 AT LOCATION SHOWN ON CHART
- (E-4) INSTALL 1-5" DUCT PER B.C. 824.01 FROM HAND BOX TO HAND BOX
- (E-5) INSTALL NEW HAND BOX PER B.C. 804.01 ON EXISTING STREET LIGHT SERVICE. SEE CHART FOR LOCATION.

- (E-6) INSTALL NEW HAND BOX PER B.C. 804.01 ON NEW DUCT CROSSING. SEE CHART FOR LOCATION
- (E-7) PICK UP EXISTING 1-5" DUCT AND EXTEND TO EXISTING B.C. E.E. POLE. TURN UP PER B.C. 824.05

ELECTRIC HANDBOX LOCATIONS	
STATION	OFFSET
2+49.5	21.0' LT.
2+49.5	23.5' RT.
3+75	21.5' LT.
4+25	26.0' LT.
4+26	21.0' LT.

TEST PIT DATA			
NO.	LOCATION	TOP ELEV.	REMARKS
TP1	STA. 2+00 @ CONSTR.	199.2	16" WATER
TP1-A	STA. 2+47.5 @ CONSTR.	202.2	2" ELEC.
TP2	STA. 4+00 @ CONSTR.	193.3	16" WATER
TP3	STA. 4+35 @ CONSTR. 10' RT.	194.6	3/4" WATER
TP3-A	STA. 5+28.5 @ CONSTR.	191.0	6" GAS
TP4	STA. 7+00 @ CONSTR.	189.4	16" WATER

NOTES:
 1. THE EXISTING UTILITY LOCATIONS IN THE ALAMEDA WERE TAKEN FROM EXISTING UTILITY PLANS RECEIVED FROM THE CITY OF BALTIMORE. RECENT SURVEY INFORMATION IS UNAVAILABLE. CONTRACTOR SHOULD VERIFY ALL UTILITY LOCATIONS BEFORE BEGINNING CONSTRUCTION.
 2. BEFORE BEGINNING ANY STORM DRAIN CONSTRUCTION, CONTRACTOR TO VERIFY INVERTS OF EXISTING UTILITIES.
 3. CONTRACTOR SHALL REBUILD THE CHANNEL IN EXIST. MH 1 TO ACCOMMODATE THE NEW 24" R.C.P. AND THE EXISTING 20" DRAIN.

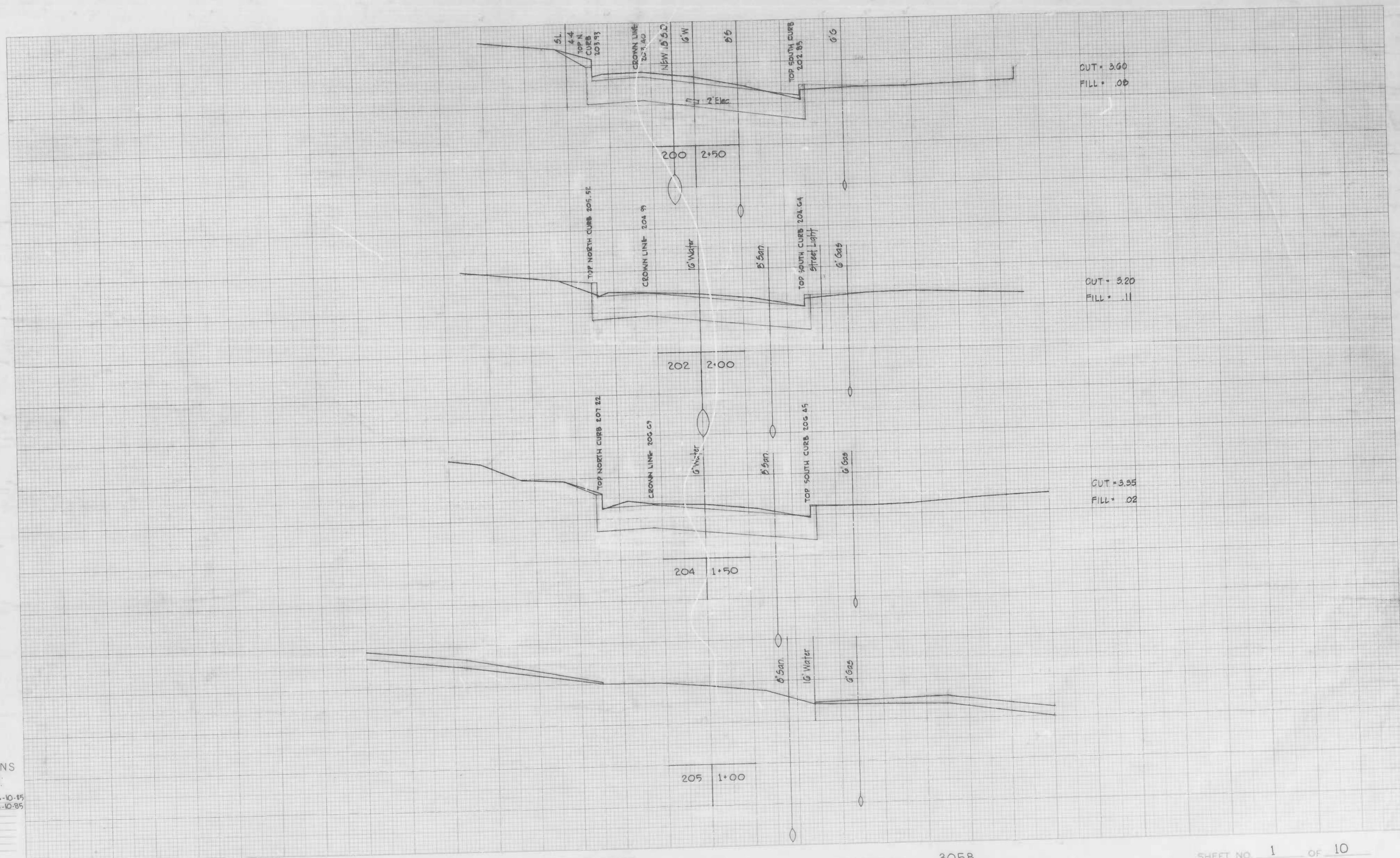
- WATER NOTES:
- NOTIFY THE BUREAU OF WATER AND WASTE WATER MAINTENANCE DIVISION AT 386-0248 (1) WEEK BEFORE STARTING WORK
 - ALL EXISTING WATER VALVES SHALL BE OPERATED BY THE BUREAU OF WATER AND WASTE WATER MAINTENANCE DIVISION FORCES ONLY.
 - ALL WATER SUPPLY SERVICE RENEWALS SHALL BE DONE IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND THE BOOK OF STREETS.
 - CONTRACTORS SHALL OBSERVE EXTREME CAUTION WHEN WORKING NEAR OR OVER EXISTING UTILITY FACILITIES.

CITY OF BALTIMORE
 DEPARTMENT OF PUBLIC WORKS
 BUREAU OF HIGHWAYS
 CONTRACT NO. 3058

29TH STREET
 FROM KIRK AVENUE TO HILLEN ROAD
 UTILITY PLAN

SCALE HORIZ. 1"=20' VERT. 1"=2'
 HIGHWAY ENGINEERING DIVISION
 SHEET 6-OF-14

FILE REF. ESD-80-360



CUT = 3.60
FILL = .06

CUT = 3.20
FILL = .11

CUT = 3.95
FILL = .02

CROSS SECTIONS
Scale 1 inch = 5' HOR.
2" VER.

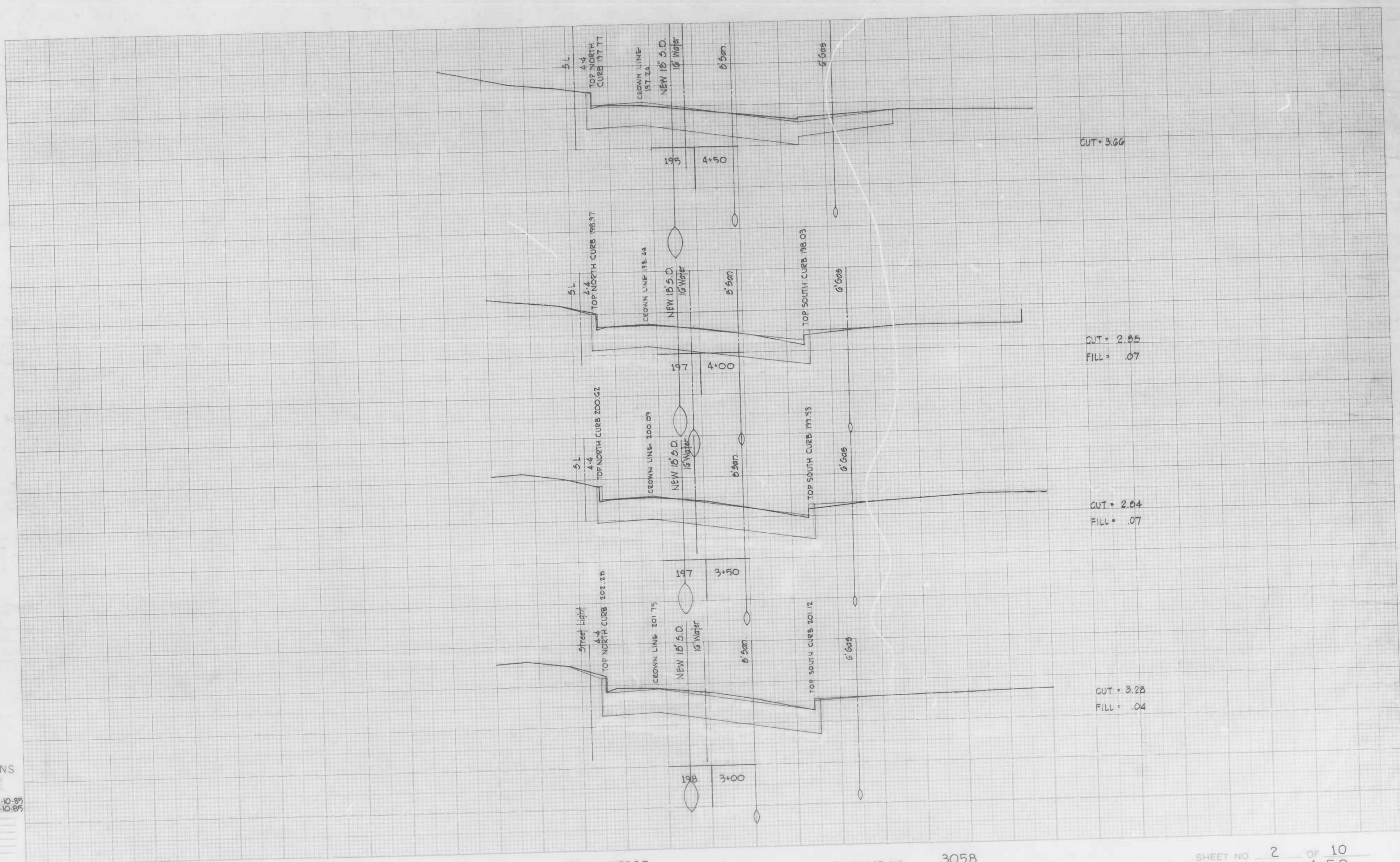
Original Plotted by WAB Date G-10-85
Original Checked by JPB Date G-10-85
Area by _____ Date _____
Final Plotted by _____ Date _____
Final Checked by _____ Date _____
Area Checked by _____ Date _____

BOOK NO. X-891

PROJECT 29TH STREET
DESCRIPTION

CONTRACT NO. 3058

SHEET NO. 1 OF 10
STATION 1.00 TO STATION 2.50



CROSS SECTIONS
Scale 1 inch 5 HOR
2 VER

Original Plotted by WAB Date 6-10-85
Original Checked by JPB Date 6-10-85
Template by _____ Date _____
Area by _____ Date _____
Finals Plotted by _____ Date _____
Finals Checked by _____ Date _____
Area by _____ Date _____
Area Drawn by _____ Date _____

BOOK NO. X- 891

PROJECT 29TH STREET
DESCRIPTION

CONTRACT NO. 3058

SHEET NO. 2 OF 10
STATION 3+00 TO STATION 4+50

CROSS SECTIONS
Scale 1 inch = 5' HOR
2" VER

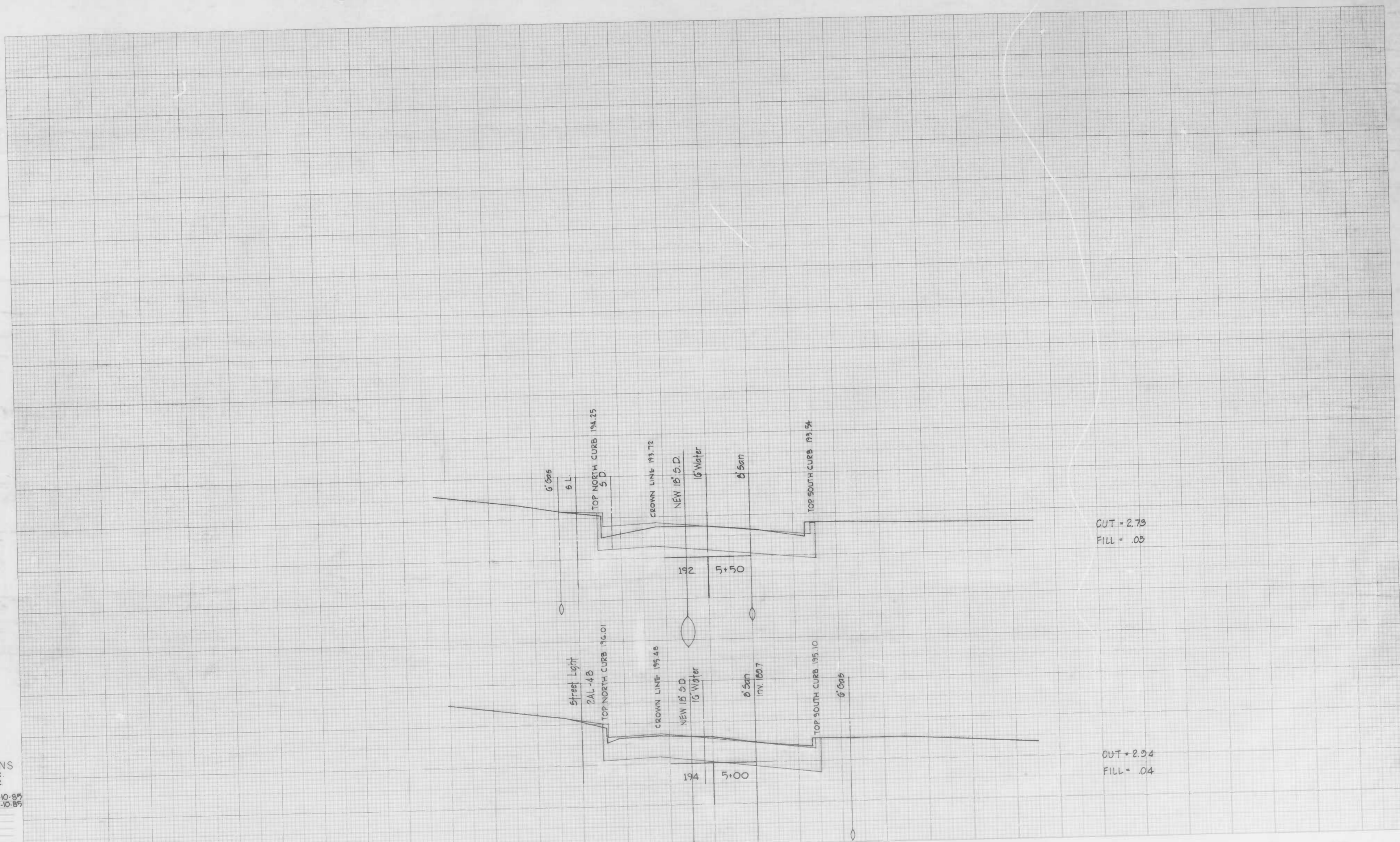
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Original Checked by	JPB	Date	6-10-89
Drawn by		Date	
Finals Plotted by		Date	
Finals Checked by		Date	
Area by		Date	
Area Checked by		Date	

BOOK NO. X-891

PROJECT 29TH STREET
DESCRIPTION

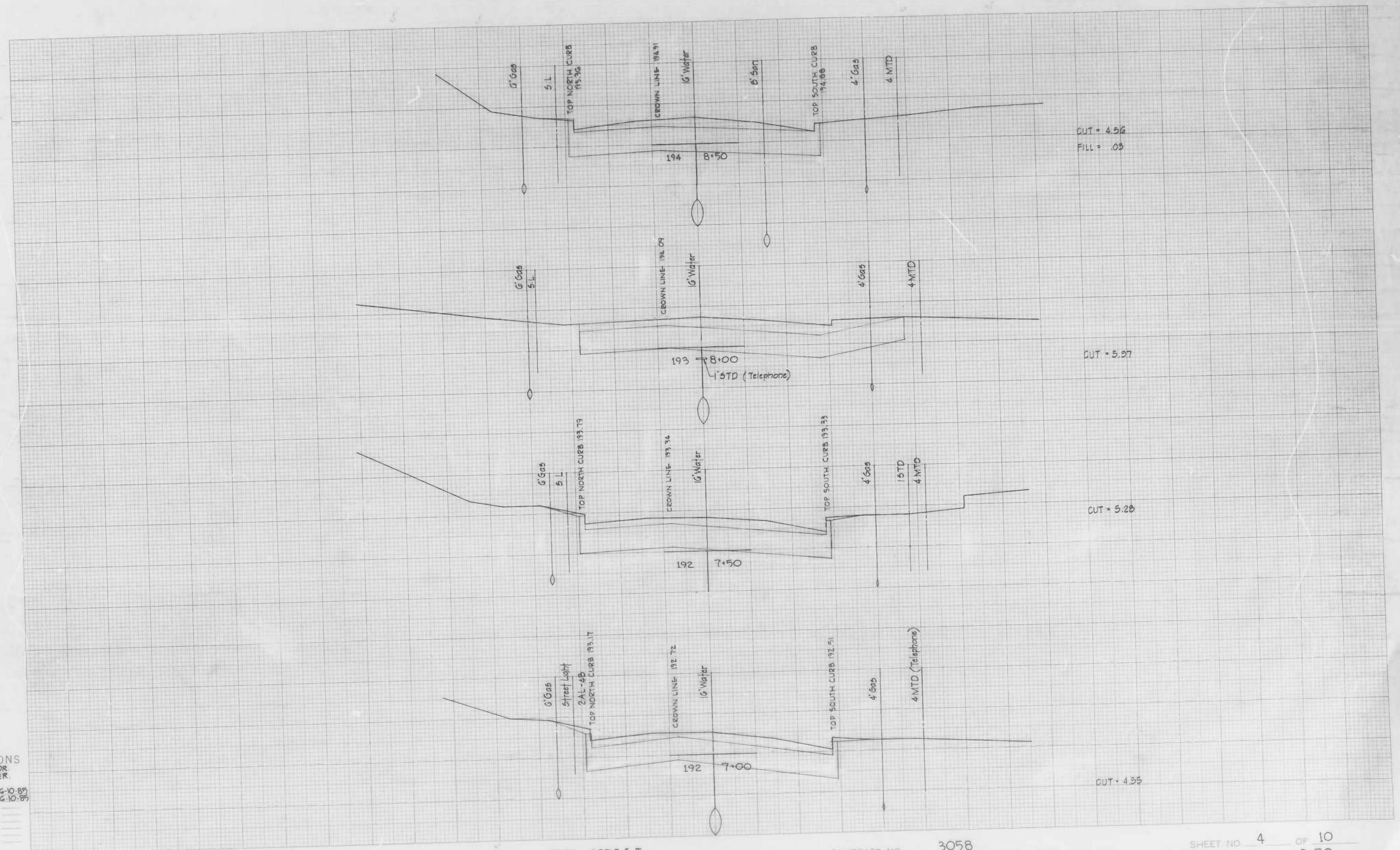
CONTRACT NO. 3058

SHEET NO. 3 OF 10
STATION 5.00 TO STATION 5.50



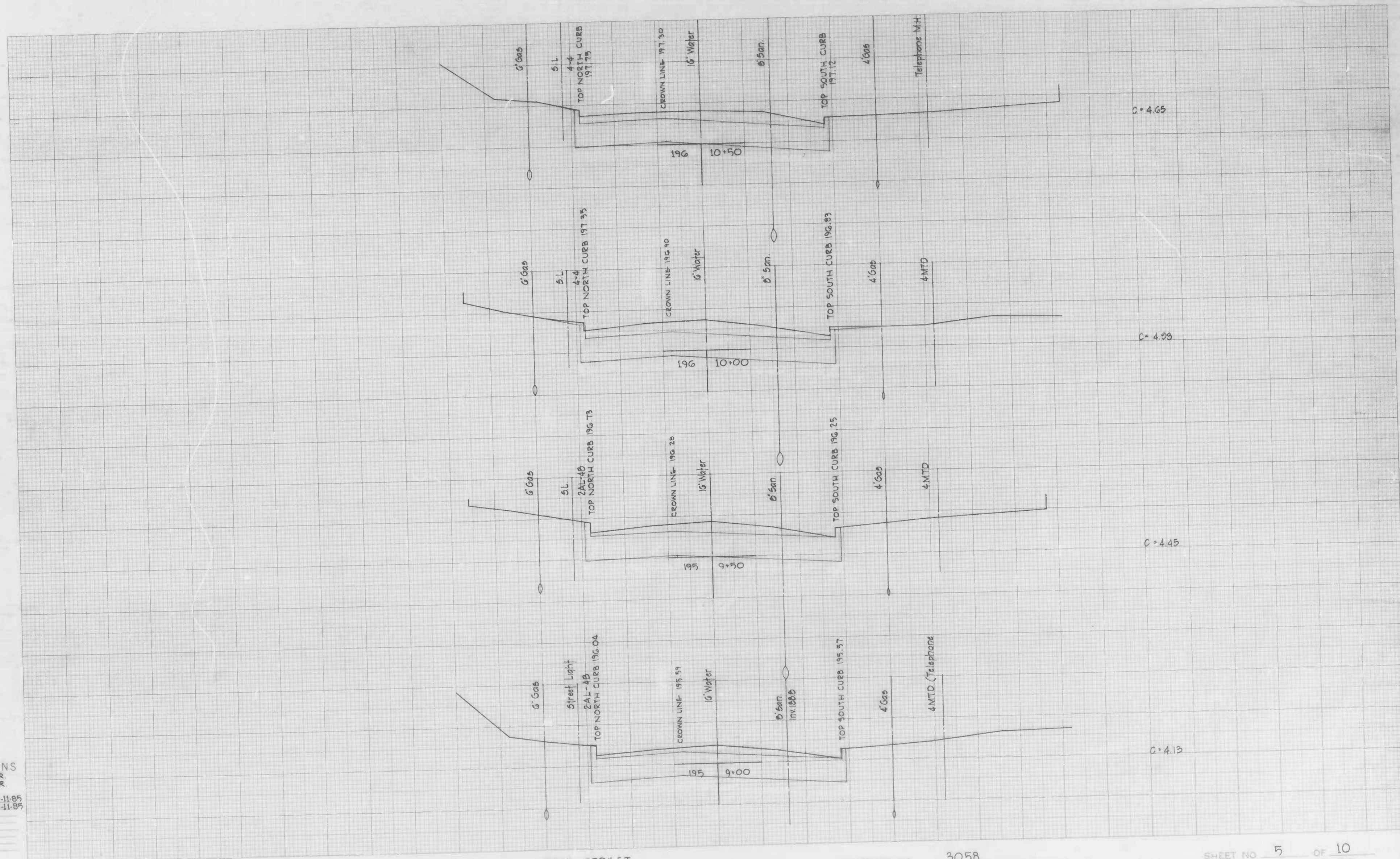
CUT = 2.73
FILL = .05

CUT = 2.34
FILL = .04



CROSS SECTIONS
Scale 1 inch = 5 HOR. 2 VER.

Original Plotted by **WAB** Date **6-10-87**
 Original Checked by **JPB** Date **6-10-87**
 Title by _____ Date _____
 Plotted by _____ Date _____
 Checked by _____ Date _____
 Area by _____ Date _____
 Area Checked by _____ Date _____



CROSS SECTIONS
Scale 1 inch = 5 HOR.
2' VER.

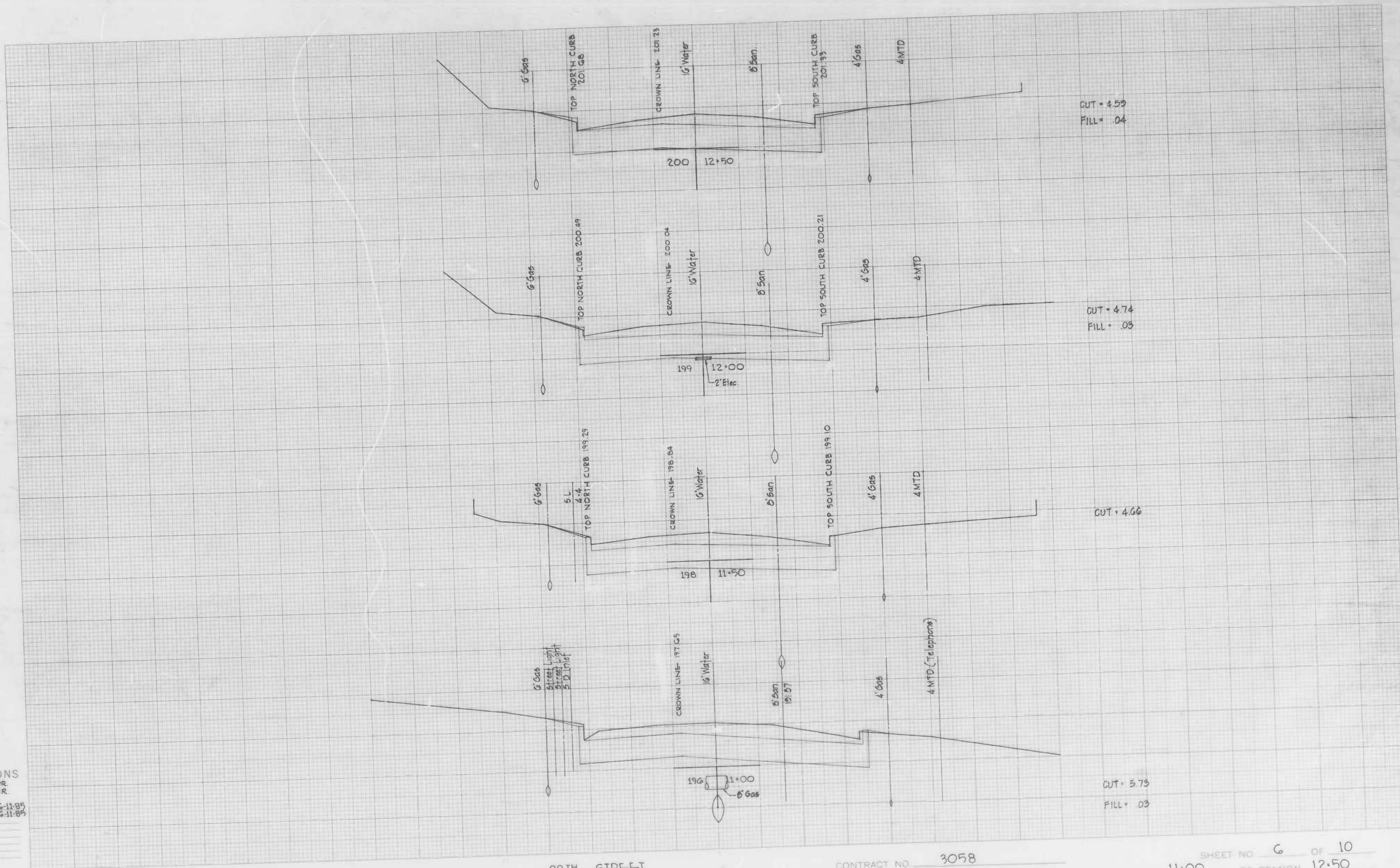
Original Plotted by WAB Date 6-11-85
Original Checked by JPB Date 6-11-85
Template by _____ Date _____
Drawn by _____ Date _____
Final Checked by _____ Date _____
Area by _____ Date _____
Area Checked by _____ Date _____

BOOK NO. X-891

PROJECT 29TH STREET
DESCRIPTION

CONTRACT NO. 3058

SHEET NO. 5 OF 10
STATION 9.00 TO STATION 10.50



CROSS SECTIONS
Scale 1 inch = 5' HOR.
2" VER.

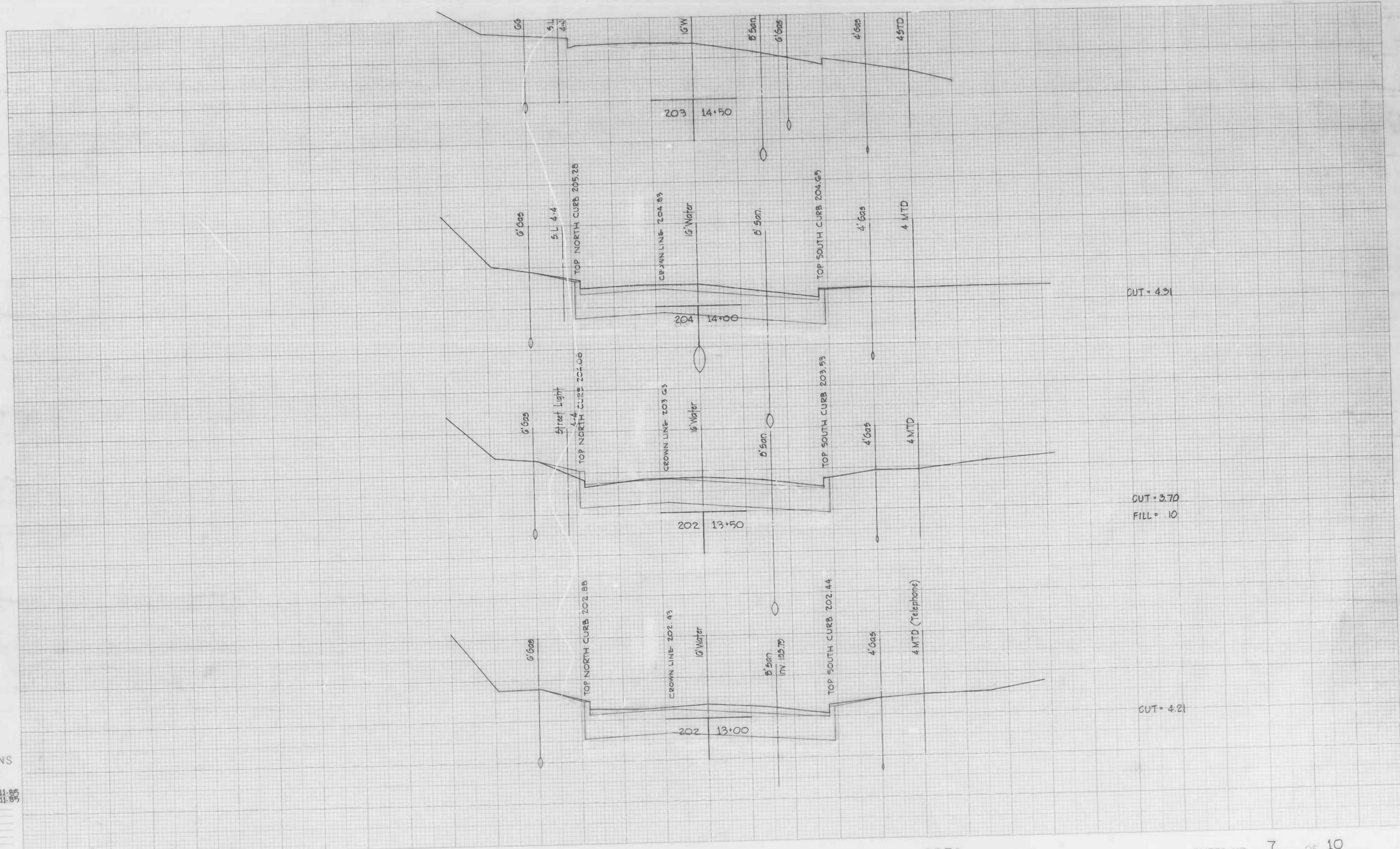
Original Plotted by WAB Date 6-11-85
 Original Checked by JPB Date 6-11-85
 Prepared by _____ Date _____
 Area by _____ Date _____
 Final Plotted by _____ Date _____
 Final Checked by _____ Date _____
 Area by _____ Date _____
 Area Checked by _____ Date _____

BOOK NO. X-891

PROJECT 29TH STREET
 DESCRIPTION _____

CONTRACT NO. 3058

SHEET NO. 6 OF 10
 STATION 11+00 TO STATION 12+50



CROSS SECTIONS
Scale 1 inch = 5' HOR
2" VER

Original Plotted by WAB Date 6-11-85
 Original Checked by JPB Date 6-11-85
 Template by _____ Date _____
 Area by _____ Date _____
 Final Plotted by _____ Date _____
 Final Checked by _____ Date _____
 Area Checked by _____ Date _____

BOOK NO. X-891

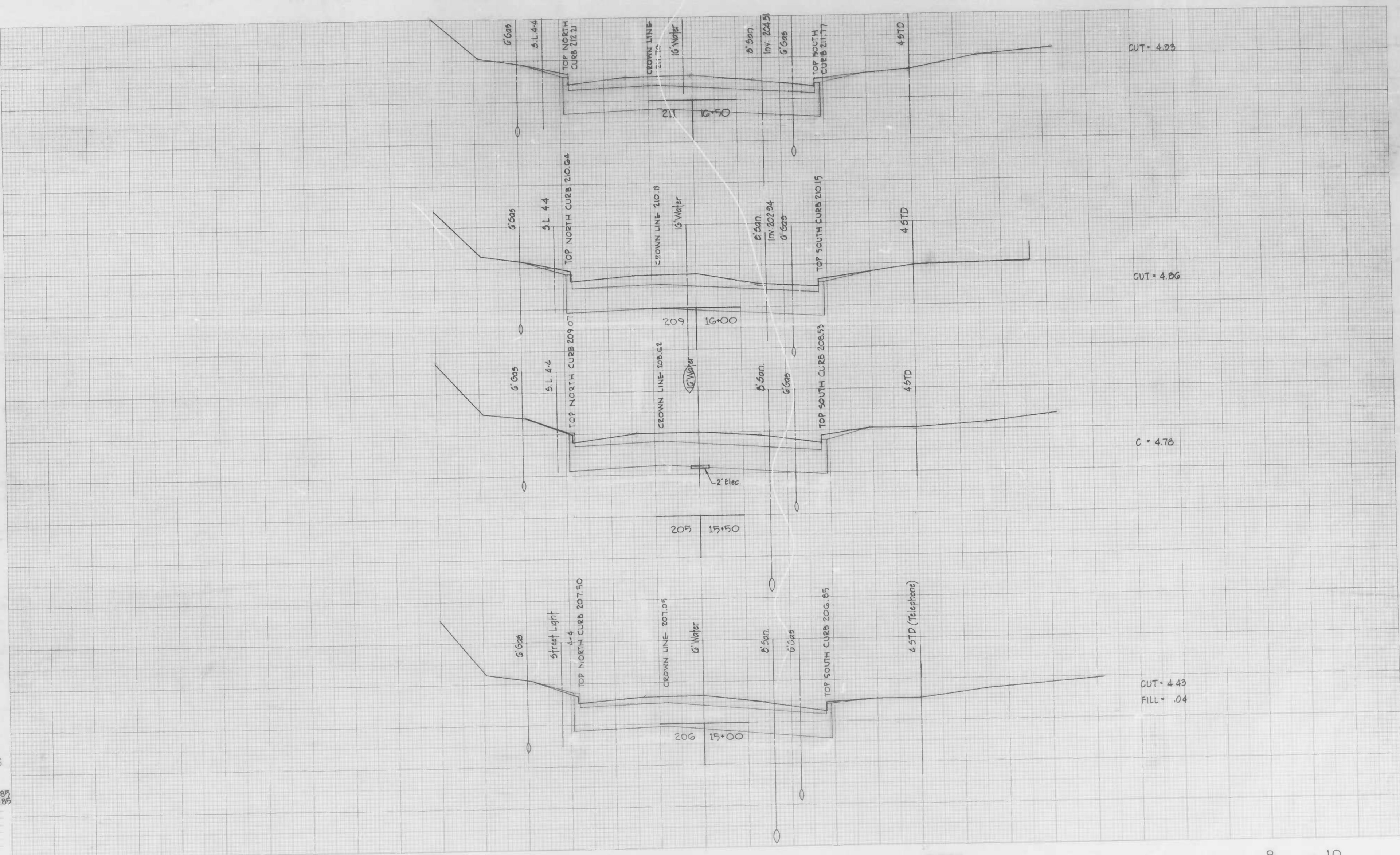
PROJECT 29TH STREET
 DESCRIPTION

CONTRACT NO. 3058

SHEET NO. 7 OF 10
 STATION 13+00 TO STATION 14+50

CROSS SECTIONS
Scale 1 inch = 5' HOR.
2" VER.

Original Plotted by WAB Date 6-11-85
 Original Checked by APB Date 6-11-85
 Template by _____ Date _____
 Area by _____ Date _____
 Final Plotted by _____ Date _____
 Final Checked by _____ Date _____
 Area by _____ Date _____
 Area Checked by _____ Date _____





CROSS SECTIONS
Scale 1 inch = 5' HOR
2" VER

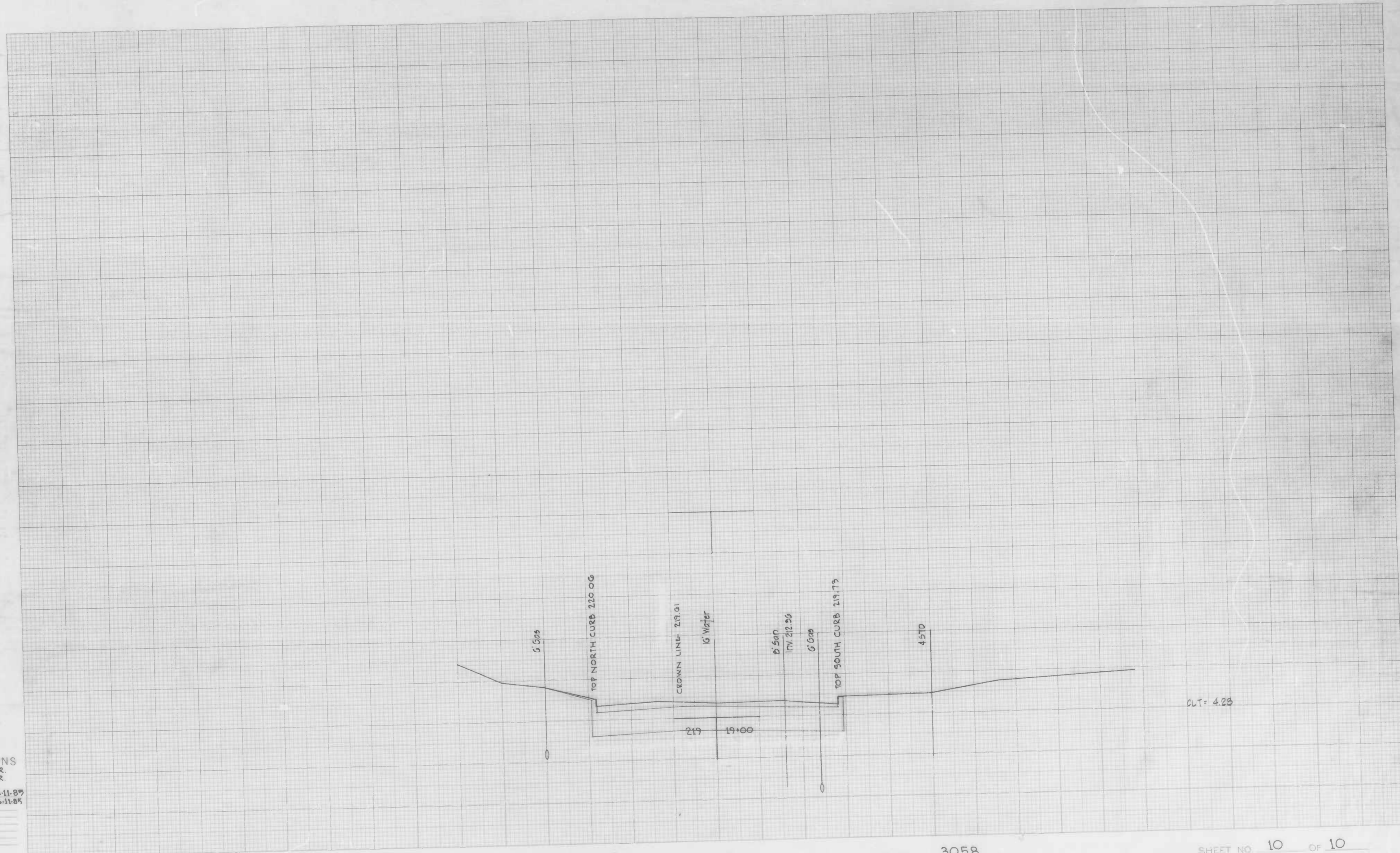
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 Original Checked by: UPB Date: 6-11-85
 Area by: _____ Date: _____
 Final Plotted by: _____ Date: _____
 Final Checked by: _____ Date: _____
 Area Checked by: _____ Date: _____

BOOK NO. X-891

PROJECT 29TH STREET
 DESCRIPTION

CONTRACT NO. 3058

STATION 17+00 TO STATION 18+50
 SHEET NO. 9 OF 10



CROSS SECTIONS
 Scale 1 inch = 5' HOR.
 2" VER.

Original Plotted by **WAB** Date **G-11-85**
 Original Checked by **JPB** Date **G-11-85**
 Template by _____ Date _____
 Area by _____ Date _____
 Plots Plotted by _____ Date _____
 Plots Checked by _____ Date _____
 Area by _____ Date _____
 Area Checked by _____ Date _____

BOOK NO X-891

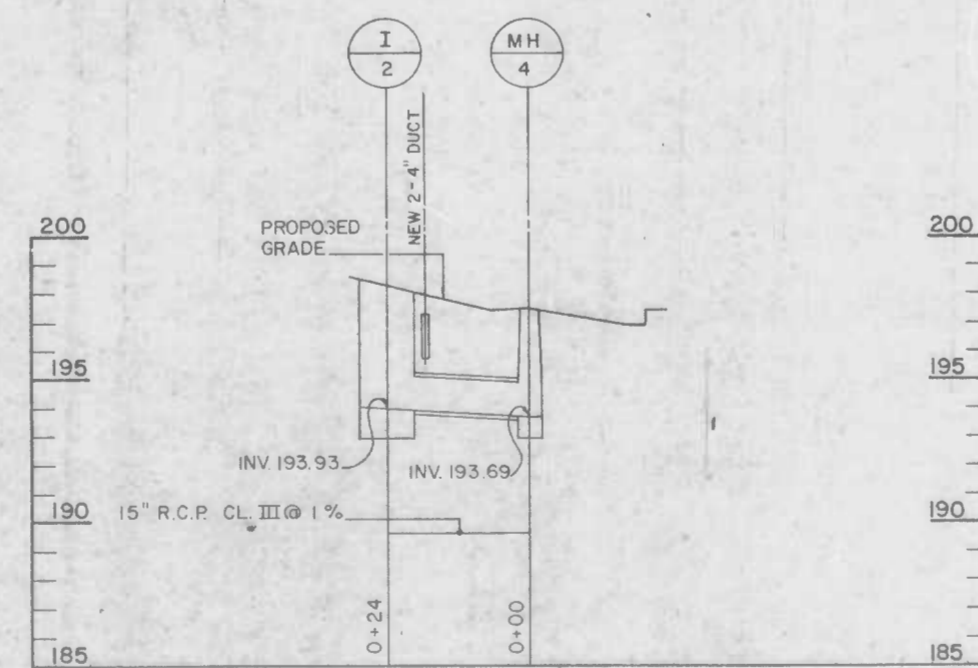
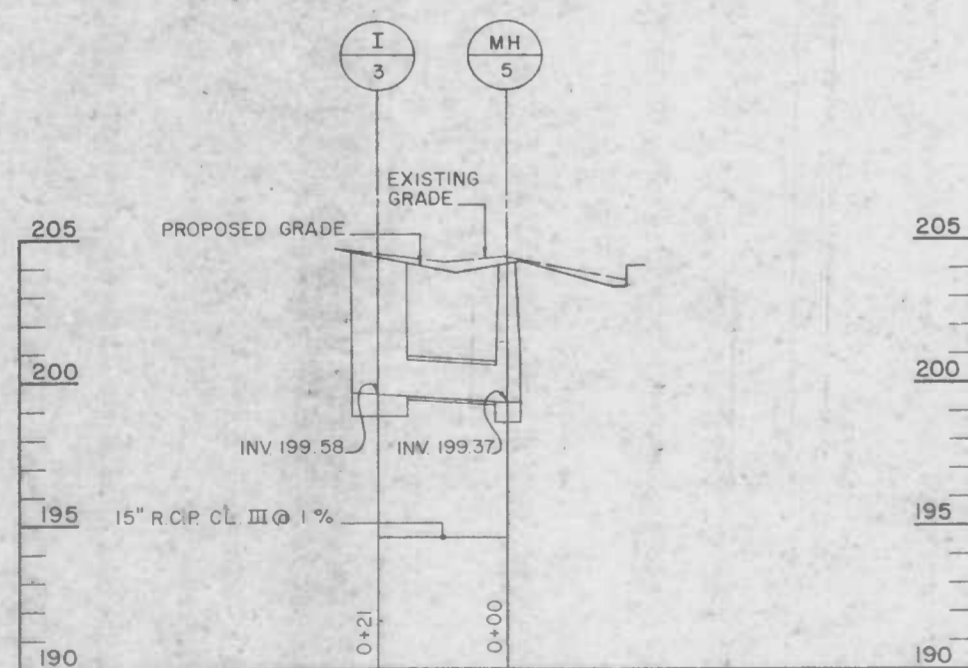
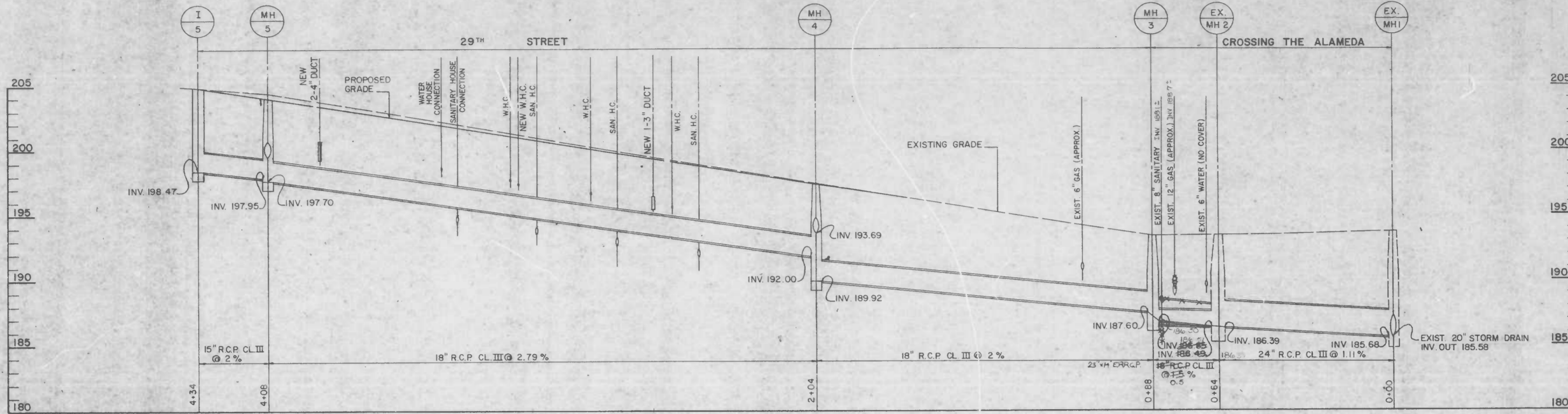
PROJECT 29TH STREET
 DESCRIPTION _____

CONTRACT NO 3058

STATION 19+00 TO STATION _____
 SHEET NO. 10 OF 10

FILE REF. ESD-80-361

REVISIONS			
NO.	DESCRIPTION	DATE	BY
1	Storm Drain Size Change	1-19-87	DEM



DRAWN BY
EXAMINED BY

CITY OF BALTIMORE
DEPARTMENT OF PUBLIC WORKS
BUREAU OF HIGHWAYS
CONTRACT NO. 3058

Original at Environment Services Division
29TH STREET
FROM KIRK AVENUE TO HILLEN ROAD
STORM DRAIN PROFILE

SCALE HORIZ. 1"=20' VERT. 1"=4' DATE _____
HIGHWAY ENGINEERING DIVISION SHEET 9 OF 14

FILE REF. ESD-80-361