

CITY OF BALTIMORE
DEPARTMENT OF PUBLIC WORKS
 BUREAU OF HIGHWAYS
 GRADING, CURBING, PAVING, DRAINAGE, AND UTILITY ADJUSTMENTS.
BANCROFT ROAD

FROM WIRT AVE. TO CROSS COUNTRY BLVD.



CITY OF BALTIMORE BUREAU OF HIGHWAYS CONTRACT NO. 3115

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LOCATION PLAN
 Scale: 1"=500'

FIELD BOOKS		
NO.	TITLE	DESCRIPTION
L-1174	BANCROFT ROAD	LOCATIONS, CROSS SECTIONS

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






Cont. 3115

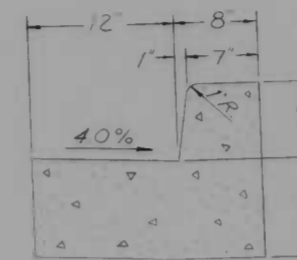
B OF H REVIEW	R/W RELEASE	GRADE EST'D	HIGHWAY DESIGN	STRUC./CIVIL	DRAINAGE	LIGHTING	COND.	SEDIMENTATION AND EROSION CONTROL	OFFICE OF TRANSPORTATION	WASTE WATER ENGINEERING	WATER ENGINEERING
BY	8/5/86	8/5/86	7-26-86		8/7/86	8/5/86	8/5/86	8/10/86	8/13/86	8/15/86	8/15/86
DATE	8/6/86	8/5/86	7-26-86		8/7/86	8/5/86	8/5/86	8/10/86	8/13/86	8/15/86	8/15/86

FILE REF.

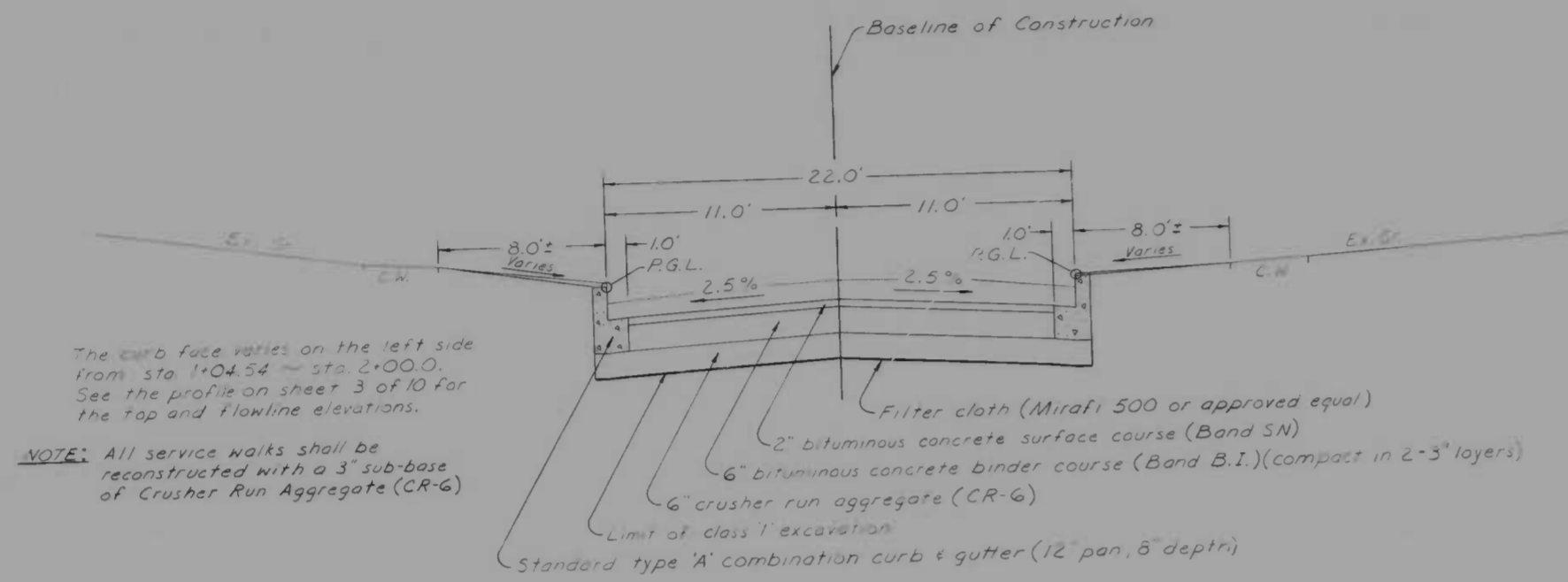
REVISIONS			
NO.	DESCRIPTION	DATE	BY

SYMBOLS

-  Approx. limit of proposed paving
-  Approx. limit of cement concrete walk (5 inches in depth)
-  Proposed driveway to be paved with 7" cement concrete mix #6 on 6" crusher run aggregate (CR-6)
-  Existing stone walk to be reset to proposed grade
-  Area between the proposed curb and existing walk, or the limits shown, to be adjusted to the proposed grade with either a flat cut or fill slope. Then tapersoled (2" minimum) and sodded.



STANDARD TYPE 'A'
COMBINATION CURB & GUTTER



The curb face varies on the left side from Sta. 1+04.54 to Sta. 2+00.0. See the profile on sheet 3 of 10 for the top and flowline elevations.

NOTE: All service walks shall be reconstructed with a 3" sub-base of Crusher Run Aggregate (CR-6)

DETAIL SECTION

Sta. 2+00.0 ~ Sta. 10+00.0

CITY OF BALTIMORE
DEPARTMENT OF PUBLIC WORKS
BUREAU OF HIGHWAYS
CONTRACT NO. 3115

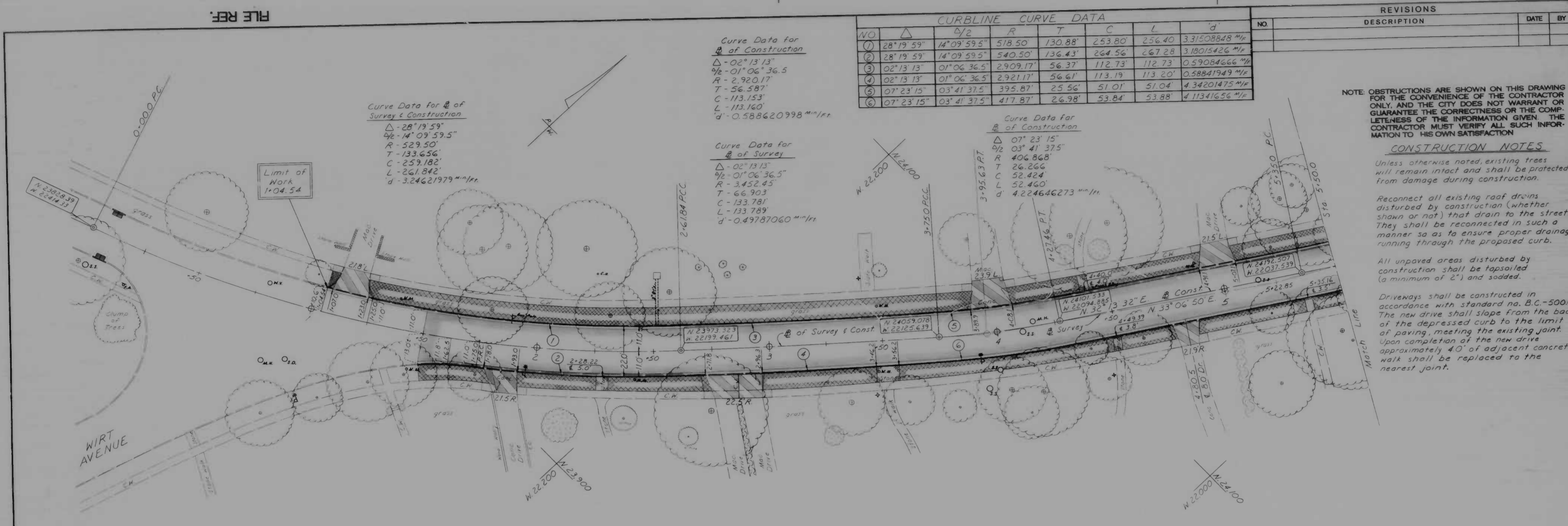
BANCROFT ROAD
WIRT AVE ~ CROSS COUNTRY BLVD
DETAIL SECTION & DETAILS

SCALE: NONE
HIGHWAY ENGINEERING DIVISION SHEET 2 OF 10

Book No: L-1174
DRAWN BY J. Yasburg
EXAMINED BY W. F. Crampton Jr.

FILE REF.

FILE REF.



CURBLINE CURVE DATA

NO	Δ	1/2 Δ	R	T	C	L	d
1	28° 19' 59"	14° 09' 59.5"	518.50	130.88	253.80	256.40	3.31508848 M ² /ft
2	28° 19' 59"	14° 09' 59.5"	540.50	136.43	264.56	267.28	3.18015426 M ² /ft
3	02° 13' 13"	01° 06' 36.5"	2909.17	56.37	112.73	112.73	0.59084666 M ² /ft
4	02° 13' 13"	01° 06' 36.5"	2921.17	56.67	113.19	113.20	0.58841949 M ² /ft
5	07° 23' 15"	03° 41' 37.5"	395.87	25.56	51.01	51.04	4.34201475 M ² /ft
6	07° 23' 15"	03° 41' 37.5"	417.87	26.98	53.84	53.88	4.11541656 M ² /ft

REVISIONS

NO	DESCRIPTION	DATE	BY

NOTE: OBSTRUCTIONS ARE SHOWN ON THIS DRAWING FOR THE CONVENIENCE OF THE CONTRACTOR ONLY, AND THE CITY DOES NOT WARRANT OR GUARANTEE THE CORRECTNESS OR THE COMPLETENESS OF THE INFORMATION GIVEN. THE CONTRACTOR MUST VERIFY ALL SUCH INFORMATION TO HIS OWN SATISFACTION.

CONSTRUCTION NOTES

Unless otherwise noted, existing trees will remain intact and shall be protected from damage during construction.

Reconnect all existing roof drains disturbed by construction (whether shown or not) that drain to the street. They shall be reconnected in such a manner so as to ensure proper drainage, running through the proposed curb.

All unpaved areas disturbed by construction shall be topsoiled (a minimum of 2") and sodded.

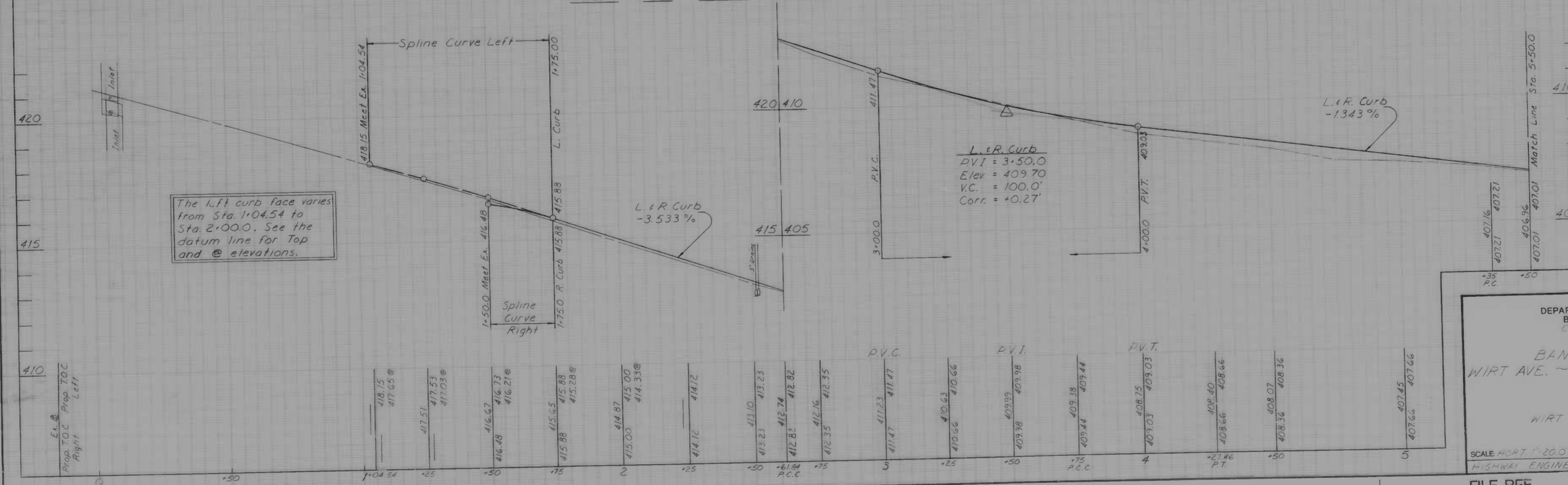
Driveways shall be constructed in accordance with standard no. B.C.-500.01. The new drive shall slope from the back of the depressed curb to the limit of paving, meeting the existing joint. Upon completion of the new drive approximately 4' of adjacent concrete walk shall be replaced to the nearest joint.

Book No. L-1174
 Drawn By: S Vosburg
 Examined By: W Compton

BANCROFT ROAD

ROAD

TOP OF CURB PROFILE



The L & R curb face varies from Sta. 1+04.54 to Sta. 2+000.00. See the datum line for Top and @ elevations.

Bench Mark Elev.
 # 6127 - Brass Screw set in the N end of the 2nd conc. terrace step to 3506 Bancroft Rd. Located 350' E. of Park Hgts. Ave. ----- 438.96

CITY OF BALTIMORE
 DEPARTMENT OF PUBLIC WORKS
 BUREAU OF HIGHWAYS
 CONTRACT NO. 3112

BANCROFT ROAD
 WIRT AVE. ~ CROSS COUNTRY BLVD.
 PLAN
 WIRT AVE. ~ STA 5+500

SCALE HORIZ. 1" = 20.0', VERT. 1" = 5.0'
 HIGHWAY ENGINEERING DIVISION SHEET 3 OF 10

FILE REF.

FILE REF.

REVISIONS		
NO.	DESCRIPTION	DATE BY

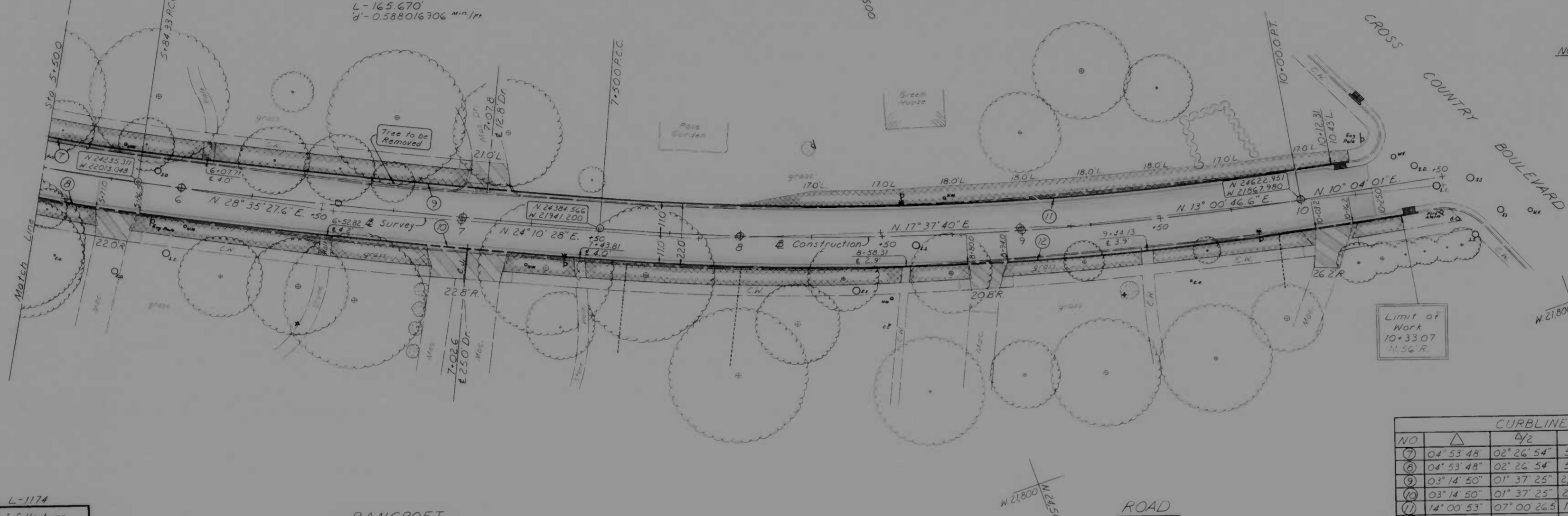
Curve Data for
of Construction
Δ - 04° 53' 48"
R - 577.209'
T - 24.680'
C - 49.315'
L - 49.33'
d' - 2.977899516 min/ft

Curve Data for
of Construction
Δ - 03° 14' 50"
R - 2,923.173'
T - 82.857'
C - 165.648'
L - 165.670'
d' - 0.588016706 min/ft

Curve Data for
of Construction
Δ - 14° 00' 53"
R - 1022.064'
T - 125.627'
C - 249.377'
L - 250.00'
d' - 1.681766875 min/ft

NOTE: OBSTRUCTIONS ARE SHOWN ON THIS DRAWING FOR THE CONVENIENCE OF THE CONTRACTOR ONLY, AND THE CITY DOES NOT WARRANT OR GUARANTEE THE CORRECTNESS OR THE COMPLETENESS OF THE INFORMATION GIVEN. THE CONTRACTOR MUST VERIFY ALL SUCH INFORMATION TO HIS OWN SATISFACTION.

NOTE: See sheet 3 of 10 for Construction Notes.

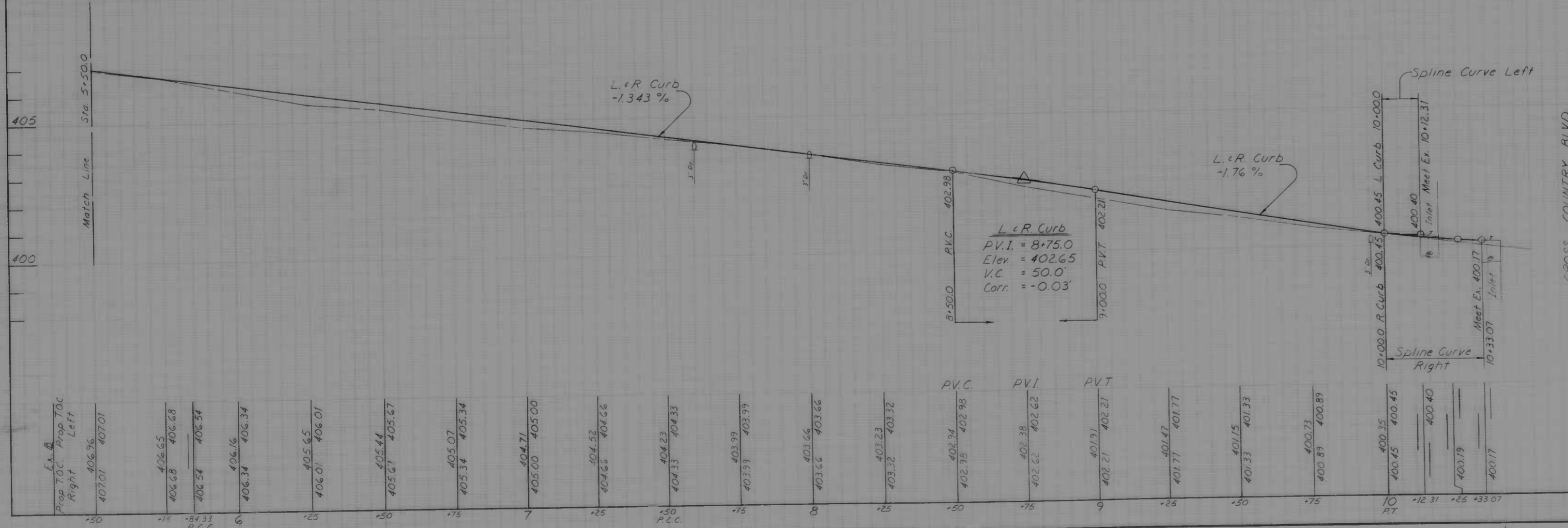


CURBLINE CURVE DATA						
NO.	Δ	R	T	C	L	d
7	04° 53' 48"	577.21	24.21	48.38	48.39	303568252 min/ft
8	03° 14' 50"	2923.17	82.86	165.02	165.05	0.59022440 min/ft
9	14° 00' 53"	1022.06	125.63	249.38	250.00	1.681766875 min/ft

Book No. L-1174
Drawn By: S. Vosburg
Examined By: W. Compton

BANCROFT

TOP OF CURB PROFILE



Bench Mark
"7458" - Brass Screw set in the S. wingwall on the E. side of the Bancroft Rd. Bridge over Western Run, 50' N. of Cross Country Blvd. ----- 403.55

CITY OF BALTIMORE
DEPARTMENT OF PUBLIC WORKS
BUREAU OF HIGHWAYS
CONTRACT NO. 3115

BANCROFT ROAD
WIRT AVE. ~ CROSS COUNTRY BLVD.
PLAN
STA. 5+500 ~ CROSS COUNTRY BLVD.

SCALE: H.O.P.T. 1"=20.0', VERT. 1"=10.0'
HIGHWAY ENGINEERING DIVISION SHEET 4 OF 10

FILE REF.

FILE REF.

REVISIONS			
NO.	DESCRIPTION	DATE	BY

- STORM DRAIN NOTES:**
- Standard Type No 1 'E' Frames And Grates (BC 376.0) Shall Be Used For All New 'E' Inlets.
 - All Inlets Are To Be Depressed 2-1/2".
 - Joints For Reinforced Concrete Pipe Shall Utilize Cement Mortar Or 'O' Ring Rubber Gaskets.
 - Before Doing Any Digging, Notify The Following Miss Utility: 1-800-257-7777, Bureau Of Highways, Street Light Section, 396-1311; Conduit Section, 396-3653.

NOTE OBSTRUCTIONS ARE SHOWN ON THIS DRAWING FOR THE CONVENIENCE OF THE CONTRACTOR ONLY AND THE CITY DOES NOT WARRANT OR GUARANTEE THE CORRECTNESS OR THE COMPLETENESS OF THE INFORMATION GIVEN. THE CONTRACTOR MUST VERIFY ALL SUCH INFORMATION TO HIS OWN SATISFACTION.

NOTE Baltimore Gas & Electric Co. C & P Telephone Co. Contact "Miss Utility" at 1-800-257-7777 at least 3 working days prior to starting work so that they can arrange to mark the location of their facilities.

Curve Data for # of Construction
 $\Delta = 02^{\circ} 13' 13''$
 $\frac{1}{2} = 01^{\circ} 06' 36.5''$
 $R = 2,920.17$
 $T = 56.587'$
 $C = 113.153'$
 $L = 113.160'$
 $d = 0.558620998 \text{ min/in}$

Curve Data for # of Construction
 $\Delta = 07^{\circ} 23' 15''$
 $\frac{1}{2} = 03^{\circ} 41' 37.5''$
 $R = 406.868$
 $T = 26.266'$
 $C = 52.424'$
 $L = 52.460'$
 $d = 4.22462273 \text{ min/in}$

Curve Data for # of Survey
 $\Delta = 02^{\circ} 13' 13''$
 $\frac{1}{2} = 01^{\circ} 06' 36.5''$
 $R = 3,452.45$
 $T = 66.903'$
 $C = 133.781'$
 $L = 133.789'$
 $d = 0.49787060 \text{ min/in}$

Curve Data for # of Survey & Construction
 $\Delta = 28^{\circ} 19' 59''$
 $\frac{1}{2} = 14^{\circ} 09' 59.5''$
 $R = 529.50$
 $T = 133.656'$
 $C = 259.182'$
 $L = 261.842'$
 $d = 3.24621979 \text{ min/in}$

Note: Set F.H. in field as close as possible to tapping valve. Tie With Retainer glands.

WATER NOTES

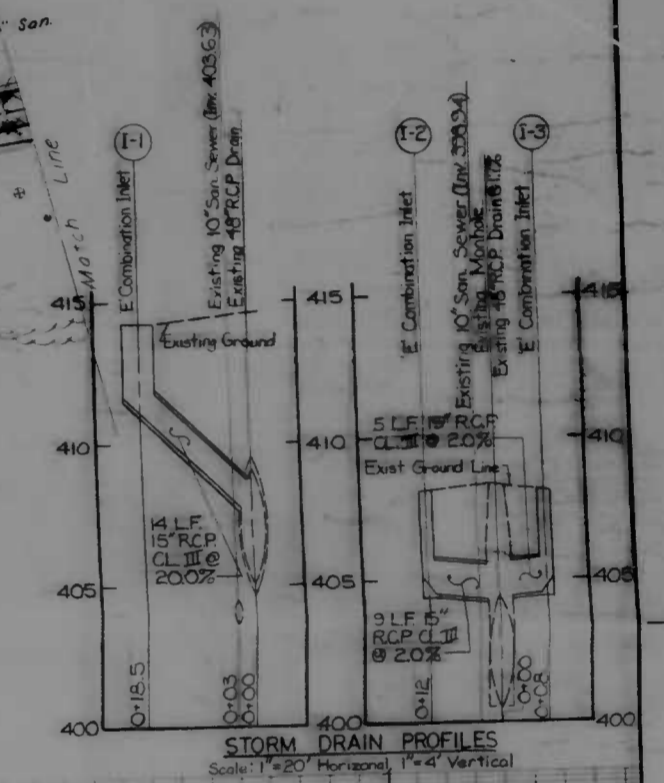
- NOTIFY THE BUREAU OF WATER & WASTE WATER MAINTENANCE DIVISION AT 596-0243 ONE WEEK BEFORE STARTING WORK.
- ALL EXISTING WATER VALVES SHALL BE OPERATED BY THE BUREAU OF WATER & WASTE WATER MAINTENANCE DIVISION FORCES ONLY.
- ALL WATER SUPPLY SERVICES AND/OR METERS FIRE HYDRANT RELOCATIONS SHALL BE DONE IN ACCORDANCE WITH CONTRACT DOCUMENTS AND THE BOOK OF STANDARDS.
- CONTRACTOR SHALL OBSERVE EXTREME CAUTION WHEN WORKING NEAR OR OVER EXISTING WATER FACILITIES.
- EXISTING WATER SUPPLY SERVICES AND/OR METERS TO BE RELOCATED IN BANCROFT ROAD
 - RELOCATION OF (3) THREE 1" WATER SUPPLY SERVICES, 3/4" METER, ITEM B01
 - RELOCATION OF (1) ONE 3/4" WATER SUPPLY SERVICE, 3/8" METER, ITEM B02
 - RELOCATION OF (1) ONE 3/4" WATER SUPPLY SERVICE, 3/8" METER, ITEM B03

CURBLINE CURVE DATA

NO.	Δ	$\Delta/2$	R	T	C	L	d
1	28° 19' 59"	14° 09' 59.5"	518.50	130.88'	253.80'	256.40'	3.31008488 min/in
2	28° 19' 59"	14° 09' 59.5"	540.50	136.43	264.56	267.28	3.18015426 min/in
3	02° 13' 13"	01° 06' 36.5"	2,909.17	56.37'	112.73	112.73'	0.58841943 min/in
4	02° 13' 13"	01° 06' 36.5"	2,921.17	56.61'	113.19	113.20'	0.58841943 min/in
5	07° 23' 15"	03° 41' 37.5"	395.87	25.56'	51.01	51.04'	4.34201415 min/in
6	07° 23' 15"	03° 41' 37.5"	417.87	26.98'	53.84'	53.88'	4.11341656 min/in

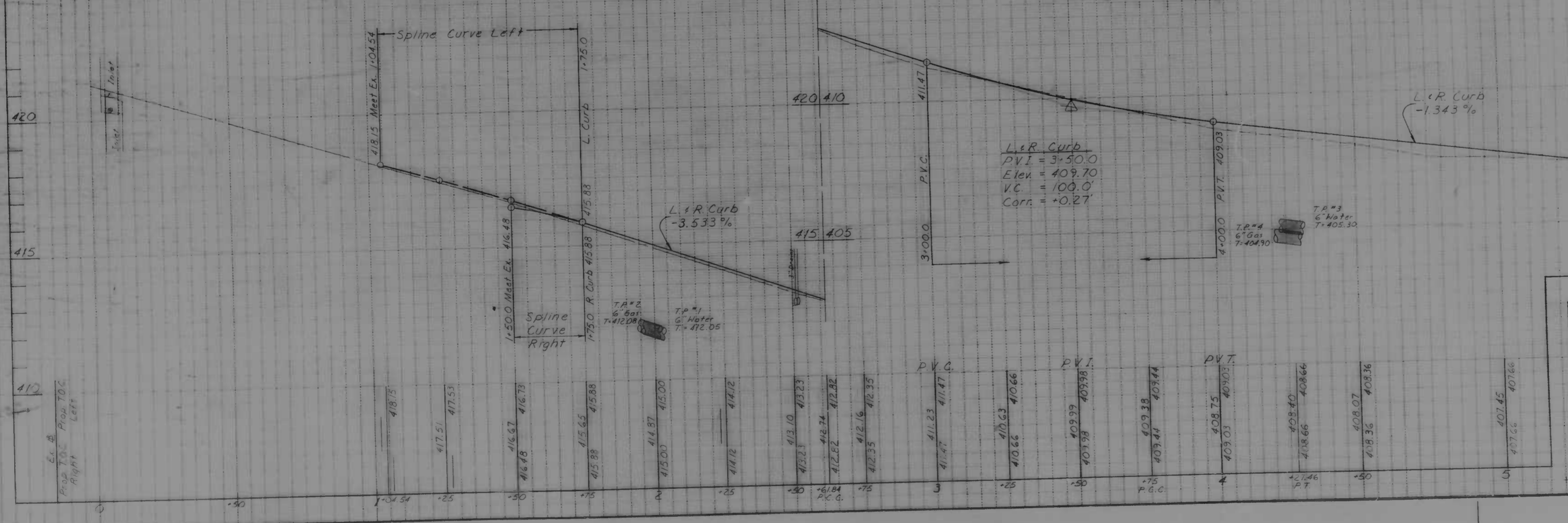
WATER ENGINEERING DIVISION ECC

DRAWN BY: M. S. McCOWAN
 CHECKED BY: Jim Walter
 CHIEF, WATER ENG. SECT.



Book No. L-1174
 Drawn By: S Vosburg
 Examined By: W. Crampert

TOP OF CURB PROFILE



CITY OF BALTIMORE
 DEPARTMENT OF PUBLIC WORKS
 BUREAU OF HIGHWAYS
 CONTRACT NO 3115

BANCROFT ROAD
 WIRT AVE. ~ CROSS COUNTRY BLVD
 UTILITY PLAN
 WIRT AVE. ~ STA 5+500

SCALE: HORIZ. 1" = 200', VERT. 1" = 4'
 MCGRAW-HILL ENGINEERING DIVISION SHEET 5 OF 10

FILE REF.

FILE REF.

Curve Data for
A of Construction
Δ - 04° 53' 48"
R - 577.209
T - 24.630
C - 49.315
L - 49.33
d - 1.317874516 m/l

Curve Data for
B of Construction
Δ - 03° 14' 50"
R - 82.857
T - 165.648
C - 165.670
L - 165.670
d - 0.588016906 m/l

Curve Data for
C of Construction
Δ - 14° 00' 53"
R - 1022.064
T - 125.627
C - 249.377
L - 250.00
d - 1.681766875 m/l

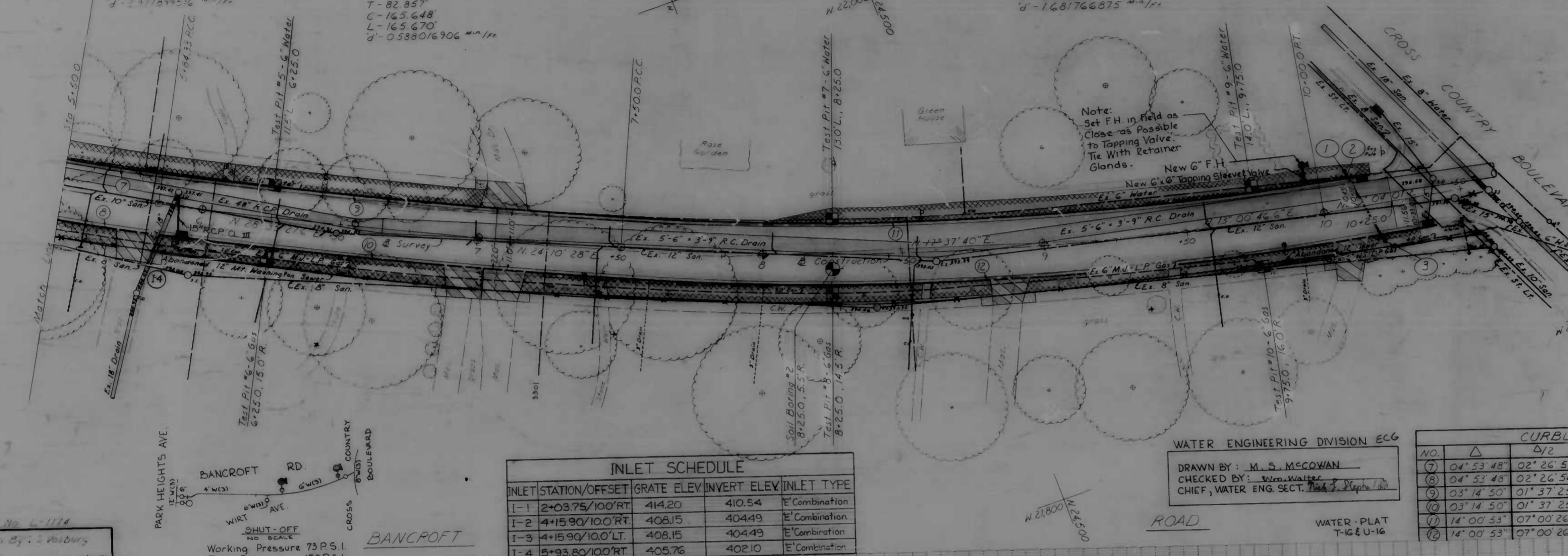
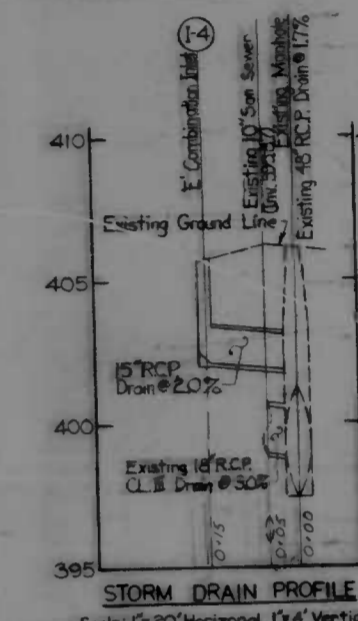
PROPOSED CONDUIT

1. Install new hand box per B.C. 804.01 at Sta. 10+00.0, 14.0' left.
2. Install 2-3" ducts from new hand box to new hand box. See B.C. 824.01.
3. Install new hand box per B.C. 804.01 at Sta. 10+20.0, 14.0' right.

REVISIONS			
NO.	DESCRIPTION	DATE	BY

NOTE: OBSTRUCTIONS ARE SHOWN ON THIS DRAWING FOR THE CONVENIENCE OF THE CONTRACTOR ONLY. AND THE CITY DOES NOT WARRANT OR GUARANTEE THE CORRECTNESS OR THE COMPLETENESS OF THE INFORMATION GIVEN. THE CONTRACTOR MUST VERIFY ALL SUCH INFORMATION TO HIS OWN SATISFACTION.

NOTE: Baltimore Gas & Electric Co. C & P Telephone Co. Contact "Miss Utility" at 1-800-257-7777 at least 3 working days prior to starting work so that they can arrange to mark the location of their facilities.



INLET SCHEDULE

INLET	STATION/OFFSET	GRATE ELEV	INVERT ELEV	INLET TYPE
I-1	2+03.75/100'RT	414.20	410.54	E'Combination
I-2	4+15.90/100'RT	408.15	404.49	E'Combination
I-3	4+15.90/100'LT	408.15	404.49	E'Combination
I-4	5+93.80/100'RT	405.76	402.10	E'Combination

TOP OF CURB PROFILE

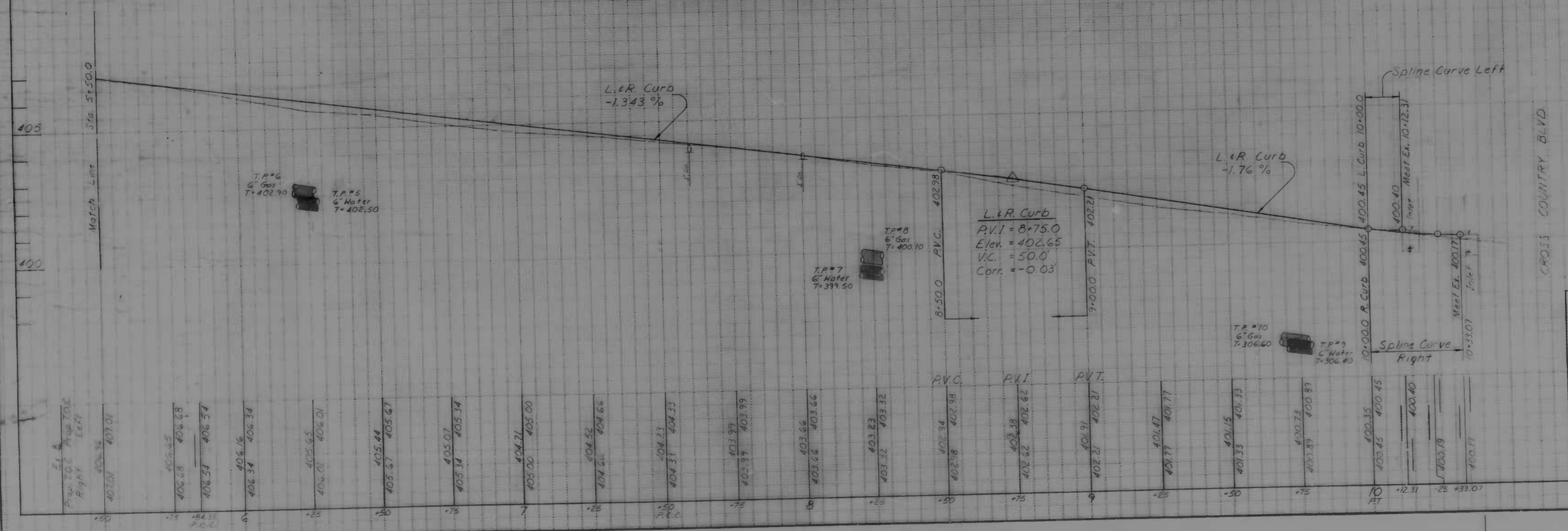
WATER ENGINEERING DIVISION ECG
DRAWN BY: M. S. MCGOWAN
CHECKED BY: Wm. Walter
CHIEF, WATER ENG. SECT.

CURBLINE CURVE DATA

NO.	Δ	D/2	R	T	C	L	d
7	04° 53' 48"	02° 26' 54"	566.21'	24.21'	48.38'	48.39'	3.03682527"
8	04° 53' 48"	02° 26' 54"	588.21'	25.15'	50.26'	50.27'	2.92143117"
9	03° 14' 50"	01° 37' 25"	2,912.17'	82.64'	165.02'	165.05'	0.570224407"
10	03° 14' 50"	01° 37' 25"	2,934.17'	83.17'	166.27'	166.29'	0.585798987"
11	14° 00' 53"	07° 00' 26.5"	1,011.06'	124.27'	246.69'	247.31'	1.700031457"
12	14° 00' 53"	07° 00' 26.5"	1,033.06'	126.98'	252.06'	252.69'	1.663827257"

Drawn By: W. W. Wadsworth
Examined By: W. W. Wadsworth

SHUT-OFF
NO. 200
Working Pressure 73 P.S.I.
Test Pressure 150 P.S.I.



CITY OF BALTIMORE
DEPARTMENT OF PUBLIC WORKS
BUREAU OF HIGHWAYS

BANCROFT ROAD
WIRT AVE - CROSS COUNTRY BLVD

UTILITY PLAN

STA 5+500 - CROSS COUNTRY BLVD

SCALE: HORIZ. 1"=200' VERT. 1"=10'
DATE: _____ SHEET 6 OF 10

FILE REF.

FILE REF.

STORM DRAIN NOTES:

- Standard Type No 1 'E' Frames And Grates (B.C. 376.0) Shall Be Used For All New 'E' Inlets.
- All Inlets Are To Be Depressed 2-1/2".
- Joints For Reinforced Concrete Pipe Shall Utilize Cement Mortar Or 'O' Ring Rubber Gaskets.
- Before Doing Any Digging Notify The Following: Miss Utility, 1800-257-7777; Bureau Of Highways, Street Light Section, 396-1311; Conduit Section, 396-3658.

NO.	DESCRIPTION	DATE	BY

NOTE OBSTRUCTIONS ARE SHOWN ON THIS DRAWING FOR THE CONVENIENCE OF THE CONTRACTOR ONLY AND THE CITY DOES NOT WARRANT OR GUARANTEE THE CORRECTNESS OR THE COMPLETENESS OF THE INFORMATION GIVEN. THE CONTRACTOR MUST VERIFY ALL SUCH INFORMATION TO HIS OWN SATISFACTION.

NOTE Baltimore Gas & Electric Co. C & P Telephone Co. Contact "Miss Utility" at 1-800-257-7777 at least 3 working days prior to starting work so that they can arrange to mark the location of their facilities.

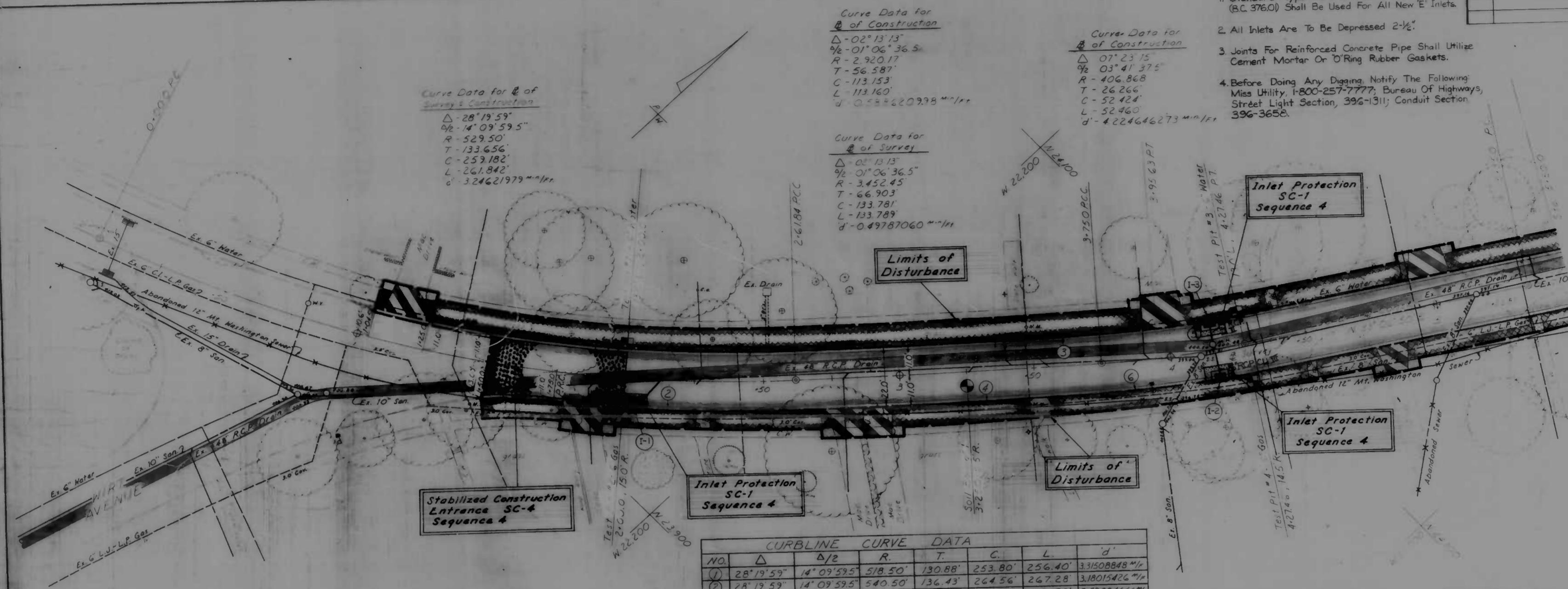
No Staging Area or Stockpiling of Materials will be permitted on this Project.

Curve Data for # of Survey Construction
 Δ - 28° 19' 59"
 1/2 - 14° 09' 59.5"
 R - 529.50'
 T - 133.656'
 C - 259.182'
 L - 261.842'
 d - 3.24621979 m/m/r

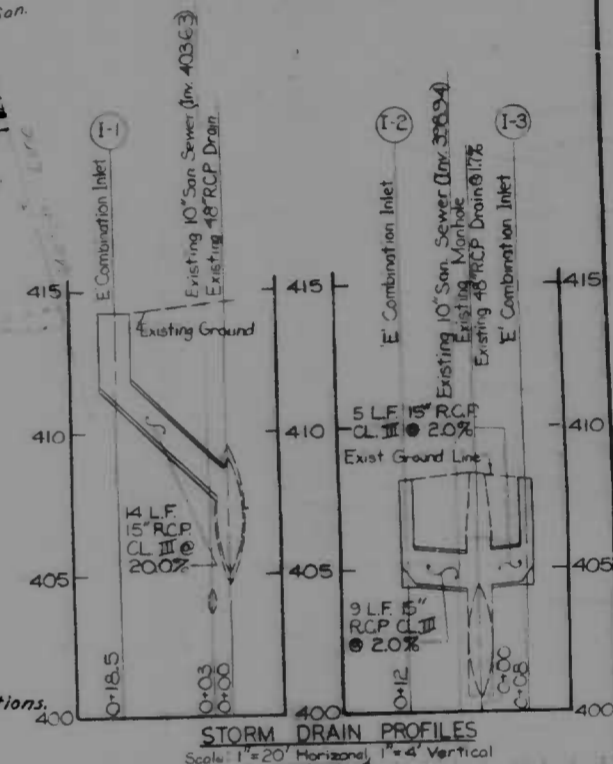
Curve Data for # of Construction
 Δ - 02° 13' 13"
 1/2 - 01° 06' 36.5"
 R - 2,920.17'
 T - 56.587'
 C - 113.160'
 L - 113.160'
 d - 0.552220978 m/m/r

Curve Data for # of Construction
 Δ - 07° 23' 15"
 1/2 - 03° 41' 37.5"
 R - 406.868'
 T - 26.266'
 C - 52.424'
 L - 52.460'
 d - 4.224646273 m/m/r

Curve Data for # of Survey
 Δ - 02° 13' 13"
 1/2 - 01° 06' 36.5"
 R - 3,452.45'
 T - 66.903'
 C - 133.781'
 L - 133.789'
 d - 0.49787060 m/m/r



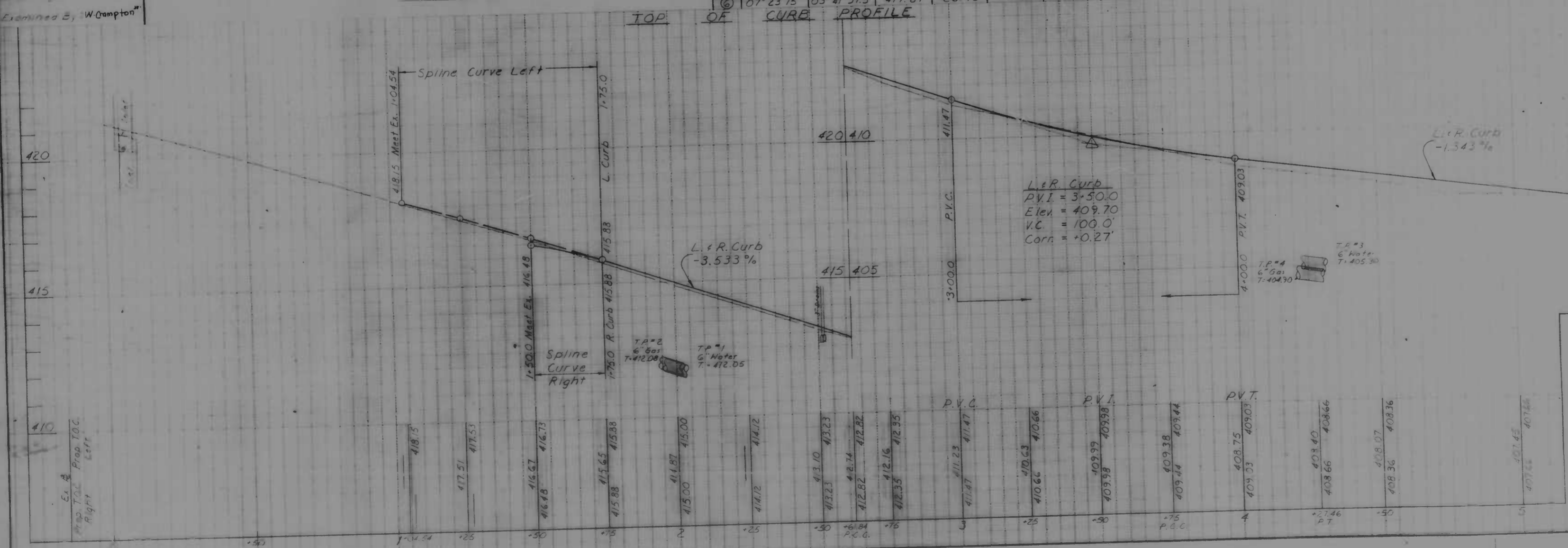
NO.	Δ	D/2	R	T	C	L	d'
1	28° 19' 59"	14° 09' 59.5"	518.50'	130.88'	243.80'	256.40'	3.31508848 m/m/r
2	28° 19' 59"	14° 09' 59.5"	540.50'	136.43'	264.56'	267.28'	3.18015426 m/m/r
3	02° 13' 13"	01° 06' 36.5"	2,909.17'	56.37'	112.73'	112.73'	0.59084666 m/m/r
4	02° 13' 13"	01° 06' 36.5"	2,921.17'	56.61'	113.19'	113.20'	0.58841949 m/m/r
5	07° 23' 15"	03° 41' 37.5"	395.87'	25.36'	51.01'	51.04'	4.34201175 m/m/r
6	07° 23' 15"	03° 41' 37.5"	417.87'	26.98'	53.84'	53.88'	4.11341656 m/m/r



Book No. L-1174
 Drawn By J. H. H. H.
 Examined By W. Compton

BANCROFT

See Special Provisions for Complete Sequence of Operations. See Sheet (9) for Erosion Control Details. See Sheet (10) for Erosion Control Notes.



CITY OF BALTIMORE
 DEPARTMENT OF PUBLIC WORKS
 BUREAU OF HIGHWAYS
 3115
 BANCROFT ROAD
 WIPY AVE - CHASE COURTYARD BLVD
 EROSION & SEDIMENT CONTROL PLAN
 401 AVE - STA 1+500
 SCALE: 1" = 20' HORIZONTAL, 1" = 4' VERTICAL
 DATE: _____
 SHEET 7 OF 11

FILE REF.

FILE REF.

Curve Data for
of Construction
Δ - 04° 53' 48"
R - 277.209
T - 24.680
C - 49.315
L - 49.33

Curve Data for
of Construction
Δ - 03° 14' 50"
R - 292.373
T - 82.857
C - 165.648
L - 165.670
d' - 0.538016906

Curve Data for
of Construction
Δ - 14° 00' 53"
R - 1022.064
T - 125.627
C - 249.377
L - 250.00
d' - 1.681766875

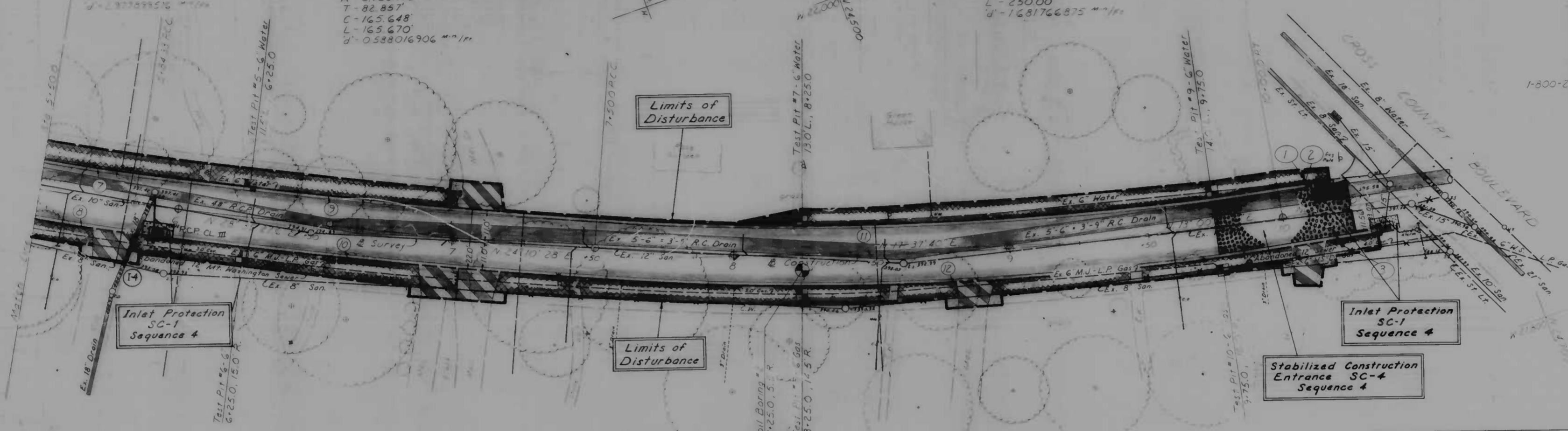
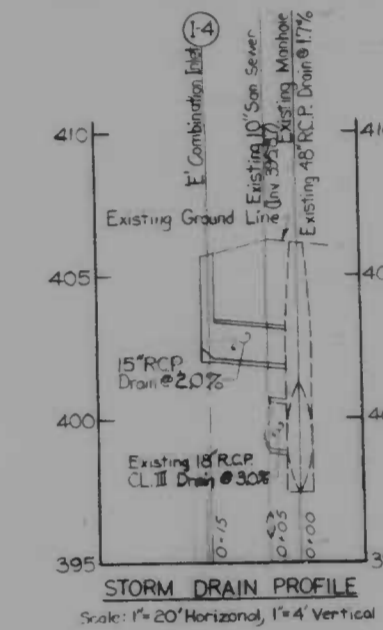
PROPOSED CONDUIT

1. Install new hand box per B.C. 804.01 of Sta 10+08.0, 14.0' left
2. Install 2-3" ducts from new hand box to new hand box. See B.C. 824.01
3. Install new hand box per B.C. 804.01 of Sta 10+20.0, 14.0' right

REVISIONS			
NO.	DESCRIPTION	DATE	BY

NOTE: OBSTRUCTIONS ARE SHOWN ON THIS DRAWING FOR THE CONVENIENCE OF THE CONTRACTOR ONLY AND THE CITY DOES NOT WARRANT OR GUARANTEE THE CORRECTNESS OR THE COMPLETENESS OF THE INFORMATION GIVEN. THE CONTRACTOR MUST VERIFY ALL SUCH INFORMATION TO HIS OWN SATISFACTION.

NOTE: Baltimore Gas & Electric Co. C & P Telephone Co. Contact "Miss Utility" at 1-800-251-7177 at least 3 working days prior to starting work so that they can arrange to mark the location of their facilities.



See Special Provisions for Complete Sequence of Operations.
See Sheet (9) for Erosion Control Details.
See Sheet (10) for Erosion Control Notes.

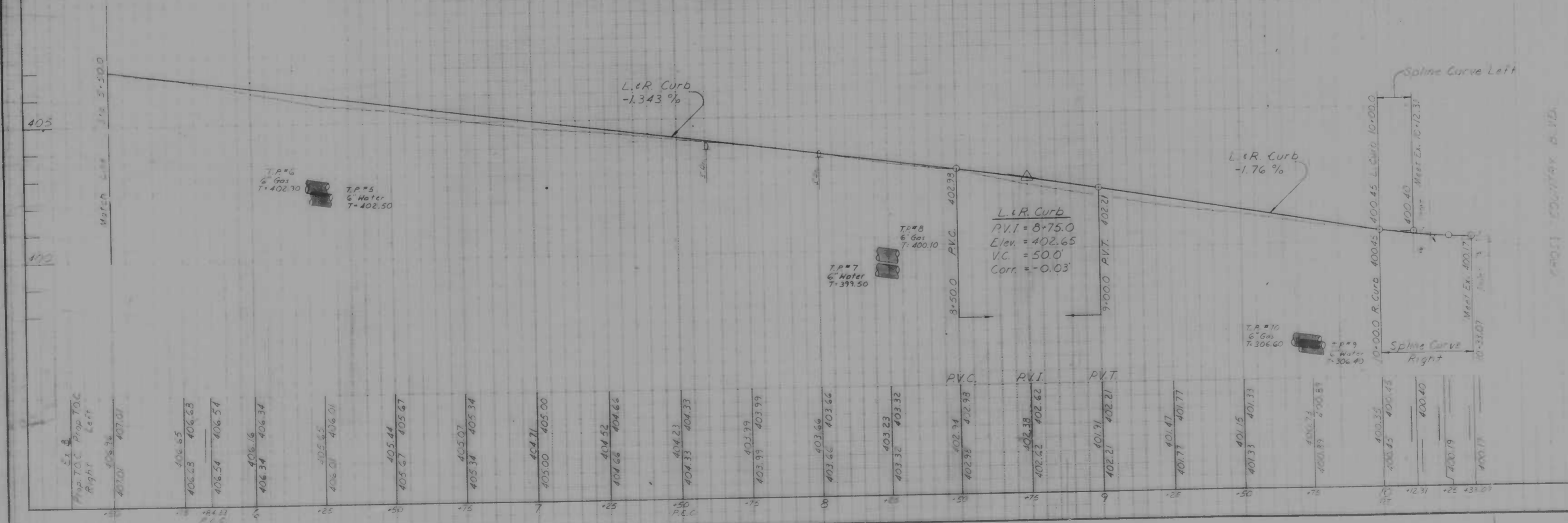
INLET SCHEDULE				
INLET	STATION/OFFSET	GRATE ELEV	INVERT ELEV	INLET TYPE
I-1	2+03.75/100'RT	414.20	410.54	E'Combination
I-2	4+15.90/100'RT	408.15	404.49	E'Combination
I-3	4+15.90/100'LT	408.15	404.49	E'Combination
I-4	5+93.80/100'RT	405.76	402.10	E'Combination

No Staging Area or Stockpiling of Materials will be Permitted on this Project.

CURVE LINE CURVE DATA							
NO.	Δ	D/C	R	T	C	L	d
(7)	04° 53' 48"	02° 26' 54"	566.21	24.27	48.38	48.34	0.0328252%
(8)	04° 53' 48"	02° 26' 54"	588.21	25.15	50.26	50.27	0.0214311%
(9)	03° 14' 50"	01° 37' 25"	2912.17	82.54	165.05	162.05	0.0902144%
(10)	03° 14' 50"	01° 37' 25"	2924.17	83.77	166.27	164.23	0.0887298%
(11)	14° 00' 53"	07° 00' 26.5"	1011.06	124.87	246.69	247.37	1.0003145%
(12)	14° 00' 53"	07° 00' 26.5"	1033.06	126.98	252.06	252.69	1.04382765%

Drawn By: W. Gampson
Examined By: W. Gampson

BANCROFT



CITY OF BALTIMORE
DEPARTMENT OF PUBLIC WORKS
BUREAU OF HIGHWAYS

BANCROFT ROAD
FROM I-83 TO CROSS COUNTRY BLVD.

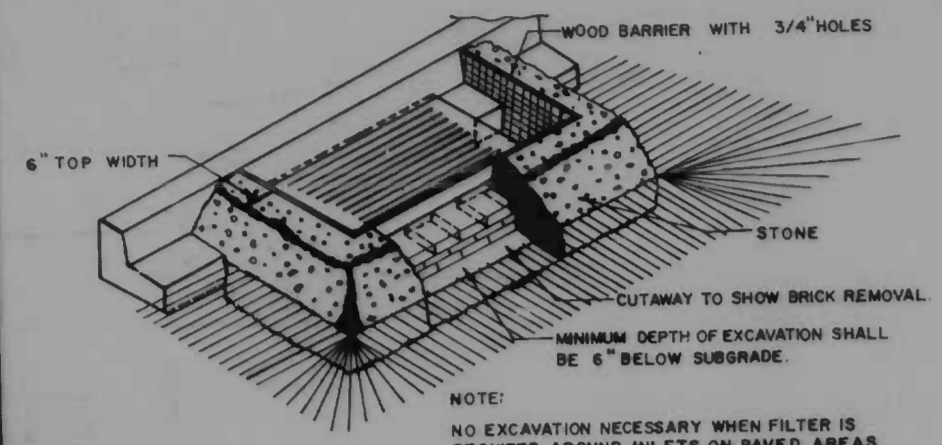
EROSION & SEDIMENT CONTROL PLAN

SCALE: 1" = 10' HORIZONTAL, 1" = 4' VERTICAL
DATE: 10/11/11
SHEET 8 OF 13

FILE REF.

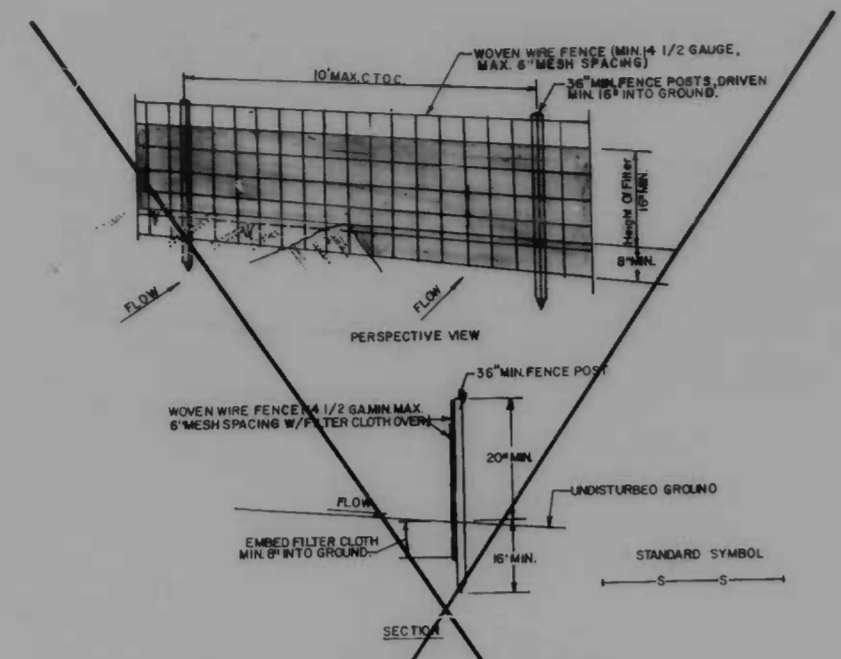
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REVISIONS			
NO.	DESCRIPTION	DATE	BY



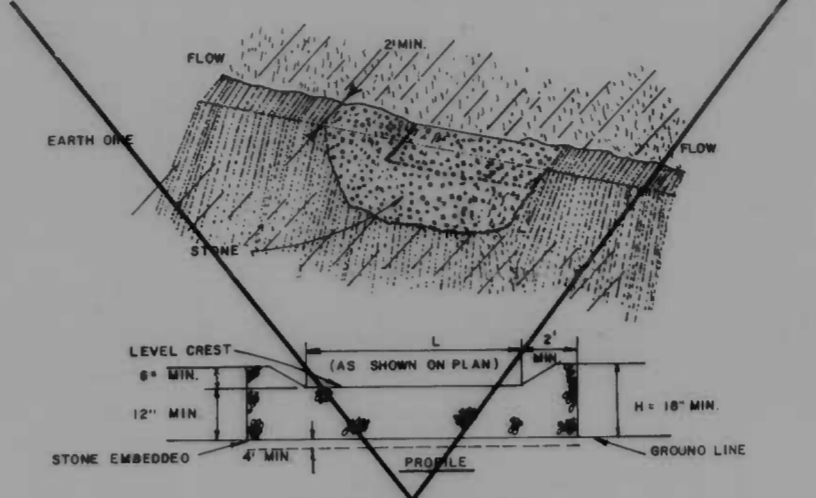
- CONSTRUCTION SPECIFICATIONS**
- Structure shall be inspected after each storm and repairs made as needed.
 - Construction operations shall be carried out in such a manner that erosion and water pollution is minimized.
 - The structure shall be removed when drainage area has been restored and stabilized.
 - The gravel area used in the outlet shall meet ASTM Specification #89 with no. 20 or its equivalent used as noted on 2. Gravel meeting the above specification may be used if approved items is not available. Gravel may be used as noted.

INLET PROTECTION
DETAIL SC-1



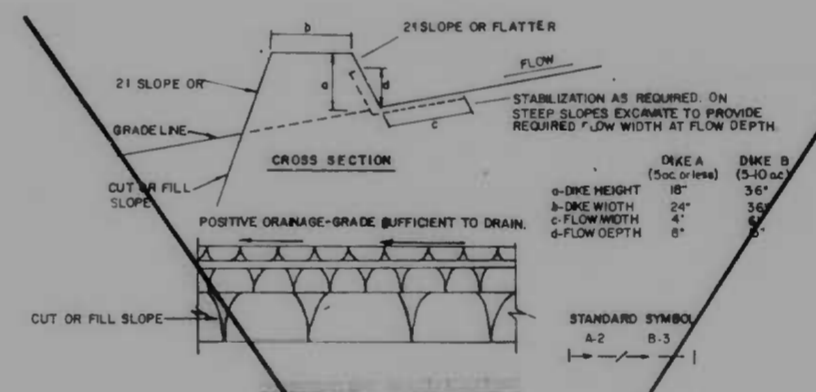
- CONSTRUCTION SPECIFICATIONS**
- Woven wire fence to be fastened securely to fence posts with wire ties or staples.
 - Filter cloth to be fastened securely to woven wire fence with staples every 12" at all vertical sections.
 - Top two sections of filter cloth to be fastened to stakes and fabric.
 - Staples shall be applied to backside of filter cloth, not to front side.

SILT FENCE
DETAIL SC-3



- CONSTRUCTION SPECIFICATIONS**
- The stone shall be crushed stone, gravel may be used if crushed stone is not available. The stone shall meet the No. 20 or its equivalent Specification #89 with no. 20.
 - The crest of the stone shall be at least one (1) inch higher than the lowest elevation of the top of the cart pile and shall be level.
 - The stone outlet structure shall be embedded into the soil a minimum of four inches.
 - The minimum length, in feet, of the crest of the stone outlet structure shall be equal to six times the number of acres of contributing drainage area.
 - The stone outlet structure shall be inspected after each rain, and the stone shall be replaced when the structure ceases to function. Intended for use after accumulation of stone, prevent construction traffic, debris, etc.

STONE OUTLET STRUCTURE
DETAIL SC-5

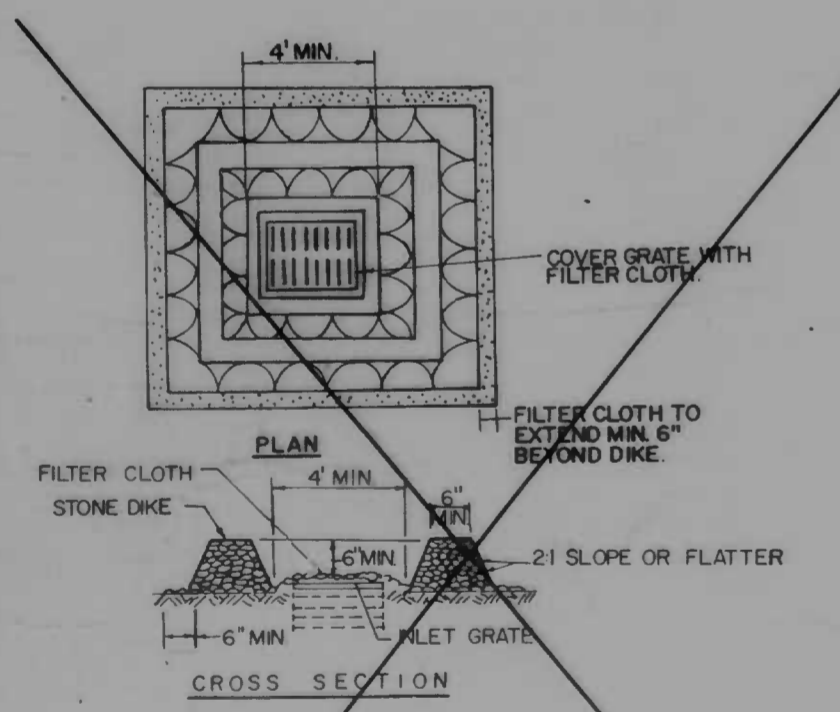


- CONSTRUCTION SPECIFICATIONS**
1. All earth shall be compacted to meet the minimum compaction requirements as specified in the contract documents.
 2. All stone shall be crushed stone, gravel may be used if crushed stone is not available. The stone shall meet the No. 20 or its equivalent Specification #89 with no. 20.
 3. The crest of the dike shall be at least one (1) inch higher than the lowest elevation of the top of the cart pile and shall be level.
 4. The dike shall be embedded into the soil a minimum of four inches.
 5. The minimum length, in feet, of the crest of the dike shall be equal to six times the number of acres of contributing drainage area.
 6. The dike shall be inspected after each rain, and the dike shall be replaced when the dike ceases to function. Intended for use after accumulation of stone, prevent construction traffic, debris, etc.

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

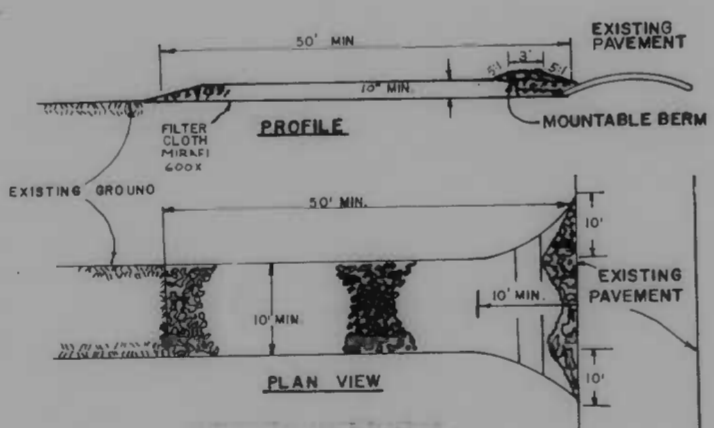
- LEGEND**
- LIMITS OF DISTURBANCE
 - INLET PROTECTION (SC-1) OR SC-2 AS NOTED
 - SILT FENCE (SC-3)
 - STABILIZED CONSTRUCTION ENTRANCE (SC-4)
 - STONE OUTLET STRUCTURE (SC-5)
 - EARTH/STONE DIKE (SC-6 OR SC-7 AS NOTED)
 - STOCKPILE AREA
 - SUMP PIT (SP-1)
 - SEDIMENT TRAP (ST-1)
 - CHECK DAM
 - CONTRACTOR STAGING AREA
 - INSTREAM SEDIMENT TRAP (SC-8)

NO STAGING AREA OR STOCKPILING OF MATERIAL WILL BE PERMITTED ON THIS PROJECT.



- CONSTRUCTION SPECIFICATIONS**
- Stone for the dike shall be crushed stone. Gravel may be used if crushed stone is not available. The stone shall meet the No. 20 or its equivalent Specification #89 with no. 20.
 - Filter cloth shall be fastened to the dike with staples every 12" at all vertical sections.
 - The structure shall be inspected after each rain and repairs made as needed.

INLET PROTECTION
DETAIL SC-2



- CONSTRUCTION SPECIFICATIONS**
- Stone for the dike shall be crushed stone. Gravel may be used if crushed stone is not available. The stone shall meet the No. 20 or its equivalent Specification #89 with no. 20.
 - Filter cloth shall be fastened to the dike with staples every 12" at all vertical sections.
 - The structure shall be inspected after each rain and repairs made as needed.

STABILIZED CONSTRUCTION ENTRANCE
DETAIL SC-4
HEAVY DUTY ENTRANCE

Book No. L-1174
DRAWN BY A. MOSCATO
EXAMINED BY W. F. Crampton

CITY OF BALTIMORE
DEPARTMENT OF PUBLIC WORKS
BUREAU OF HIGHWAYS
CONTRACT NO. 315

BANCROFT ROAD
WIRT AVE. ~ CROSS COUNTRY BLVD.

SOIL EROSION / SEDIMENT CONTROL DETAILS

SCALE: NO SCALE
HIGHWAY ENGINEERING DIVISION
DATE: 9/10/70

FILE REF.

REVISIONS			
NO.	DESCRIPTION	DATE	BY

STABILIZATION SPECIFICATIONS

TEMPORARY STABILIZATION - ARTICLE 36.12

Planting Season: Temporary seeding can be done anytime of the year except when the ground is frozen. This item shall consist of furnishing and placing all fertilizer, temporary seed and mulch on areas disturbed for more than fourteen (14) days.

Schedule of Procedure: The contractor shall provide temporary stabilization as specified in the approved sediment control plan.

Seedbed Preparation: When the area to be seeded is packed and hard, the top layer of topsoil shall be loosened by raking or other means before seed is applied.

Lime: No lime shall be required for temporary seeding.

Fertilizer: Commercial fertilizer of an analysis 5-10-5 applied at a rate of 35 pounds per 1000 square feet.

Seeding: (Section 20.2B-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. Mulch anchoring - asphalt mix at the rate of 10 gallons per 1000 square feet. The mulch shall be applied by blowing and the asphalt binder material shall be sprayed into the mulch.

PERMANENT STABILIZATION - ARTICLE 36.06

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

Sodbed Preparation: Before placing or depositing sod upon any surfaces, all shaping and dressing of such surfaces shall have been completed. The completed areas to be sodded shall present a smooth, uniform, well-tilled surface true to line and cross section and any raking required to accomplish this will be done prior to the placing of the sod.

Fertilizers: All areas to be sodded shall be fertilized with a commercial fertilizer of an analysis 10-10-10 and Ureaform fertilizer 38-0-0 applied at the rate of 20 and 5 pounds respectively per 1000 square feet.

NOTE: After sod is in place, topdress the sod with Ureaform fertilizer 38-0-0 at the rate of 5 pounds per 1000 sq. ft.

Lime: Limed at the rate of 100 pounds of ground limestone per 1000 square feet. The lime and the 10-10-10 and 38-0-0 fertilizers shall be worked into the top two (2) inches of soil prior to placing sod.

Seedmixture Grass Sod: (Section 20.2B-3)

TYPE A - Bluegrass Sod
 not less than 60% Kentucky Bluegrass
 not more than 35% Creeping Red Fescue
 not more than 10% other grasses and legumes

TYPE B - Tall Fescue Sod
 not less than 80% Tall Fescue
 not more than 20% other grasses and legumes

BALTIMORE CITY SEDIMENT CONTROL

Title 8, Subtitle II, Natural Resources, Annotated Code of Maryland and Baltimore City Ordinance 1013, require that provisions to control erosion and sediment shall be included for all City land disturbance. As required by State Law, construction cannot be started until such erosion and sediment control provisions are approved.

The Contractor must filter all run-off and control all sediment within the project. All work must comply with all requirements of the "Baltimore City Erosion and Sediment Control Manual" and the "1993 Maryland Standards And Specifications For Soil Erosion And Sediment Control", as distributed and modified by the Baltimore City Sediment Control Section.

Nothing herein relieves the Contractor from complying with any and all other Federal, State or Municipal Regulations.

EROSION AND SEDIMENT CONTROL NOTE

- All utilities to be constructed first, prior to any construction on the site.
- No pumping from foundation excavations will be allowed directly into City system unless it is filtered by way of Sediment Traps or Filter.
- All excavation material shall be placed on the high side whenever possible and confined to an area where it will not obstruct the normal flow of drainage courses.
- Continuous inspection and maintenance of all Sediment Control devices will be required.

INSTRUCTIONS

- For land disturbing activities it is understood that the following conditions will be met:
- A. Grading**
- All disturbed areas shall be protected to control erosion and to prevent sedimentation of adjacent properties, storm sewers and/or streams.
 - Sediment control devices such as, diversion berms, sediment traps, silt fences, vegetative stabilization, etc., shall be used to prevent off-site sedimentation at all times, at every location throughout the site where natural or existing conditions would cause sediment to normally wash off the site.
 - No proposed cut or fill will exceed three feet in depth (cut) or height (fill) without erosion and sediment controls. Exclusive of excavation for foundations.
 - No fill will be placed on any existing slope steeper than 5:1 without erosion and sediment controls.
 - There will be no final graded slope steeper than 2:1.
 - Borrow and/or spoil material shall not be stockpiled within the limits of this project.
 - All fills will be free of any organic or other deleterious materials and will be compacted. All areas to receive fill will have the ground surface prepared by removing all existing vegetation and root mat.
 - The proposed grading will not impair existing surface drainage, constitute a potential erosion hazard, or source of sedimentation to any adjacent property, drainage way or right-of-way.
 - All points of ingress and egress shall be protected to prevent tracking of mud onto public ways.
- B. Stabilization**
- As soon as final grading is completed, all disturbed areas will be stabilized with temporary or permanent mulch, including stone, blacktop, conc. surfacing, etc.
 - For vegetating areas steeper than three horizontal units to one vertical unit, adequate mulch, fertilizer and type of seed will be placed to ensure a vigorous ground cover and such application will be repeated, if necessary, until such growth is established.
 - Timing - Following initial solid disturbances or redisturbance, permanent or temporary stabilization shall be completed within:
 - Seven calendar days for the surface of all perimeter dikes, swales, ditches, perimeter slopes, and all slopes greater than three horizontal to one vertical (3:1) and,
 - Twenty-four (24) hours for disturbed areas such as base repairs, alley returns, curb repairs, bus pads, pedestrian ramps, sidewalks and backfilled utility trenches. Stabilization shall consist of a minimum of 4 inch Graded Aggregate Sub-base and,
 - Fourteen calendar days for all other disturbed or graded areas.
 - For details regarding temporary and permanent stabilization practices, reference the "1993 Maryland Standards And Specifications For Soil Erosion And Sediment Control", or contact the Baltimore City Sediment Control Representative.
 - Sediment control devices are to be removed only after all disturbed areas have been stabilized.

CONDITIONS

- The Contractor will submit written notification to the Baltimore City Sediment Control Representative at least three working days before starting any grading activities, stating the following:
- The day he intends to start work
 - The source of all borrow 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

DESIGNATED AREA	STABILIZATION		SCHEDULE	
	ACTIVE	INACTIVE	TYPE OF STABILIZATION	SEQUENCE #
PROPOSED PAVING	X		6" SUB-BASE, (CR-6)	#5
	X		BITUMINOUS CONCRETE	#6,7
CONCRETE WALK	X		TEMPORARY STABILIZATION 3" SUB-BASE, (CR-6)	#5
	X		6" CEMENT CONCRETE	#6
CONCRETE DRIVES	X		6" SUB-BASE, (CR-6)	#5
	X		7" CEMENT CONCRETE	#6
FLAT FILL SLOPES		X	TEMPORARY STABILIZATION ANNUAL RYEGRASS	#5
		X	PERMANENT STABILIZATION SOD	#7
STONE WALKS	X		TEMPORARY STABILIZATION 3" SUB-BASE, (CR-6)	#5
	X		STONE WALK	#6

* SEE SPECIAL PROVISIONS FOR COMPLETE "SEQUENCE OF OPERATIONS"

NO STAGING AREA OR STOCKPILING OF MATERIAL WILL BE PERMITTED ON THIS PROJECT.

TOTAL DISTURBED AREA: 36,750.0 S.F.
 TOTAL CUT: 1,114.10 C.Y.
 TOTAL FILL: 0.0 C.Y.
 TOTAL EXCESS MATERIAL: 1,114.10 C.Y.

NOTE: QUANTITIES LISTED HEREIN ARE TO BE USED ONLY TO ASSIST IN DEVELOPING THE SOIL EROSION/SEDIMENT CONTROL PLANS. THERE IS NO GUARANTEE THAT THESE QUANTITIES ARE COMPLETE AND THE CONTRACTOR SHOULD NOT RELY ON THE ACCURACY OF THESE FIGURES IN PREPARING AND SUBMITTING A BID.

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

Owners/Developers Certification

I/We hereby certify that any clearing, grading, construction and/or development will be done pursuant to this plan and that all responsible personnel involved in the construction project will have a certification of attendance at a Department of Natural Resources approved training program for the control of sediment and erosion before beginning the project.

Signature: James A. Zito Date: 8-7-86
 Print Name: JAMES A. ZITO
 Address: 204 Municipal Bldg Phone: 396-4600

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.

Signature: Robert F. Guston Date: 8-7-86
 Print Name: Robert F. Guston
 Address: 309 Municipal Bldg Phone: 396-4707

APPROVED BY: Federick M. ...
 EROSION & SEDIMENT CONTROL REPRESENTATIVE

CITY OF BALTIMORE
 DEPARTMENT OF PUBLIC WORKS
 BUREAU OF HIGHWAYS
 CONTRACT NO. 3115

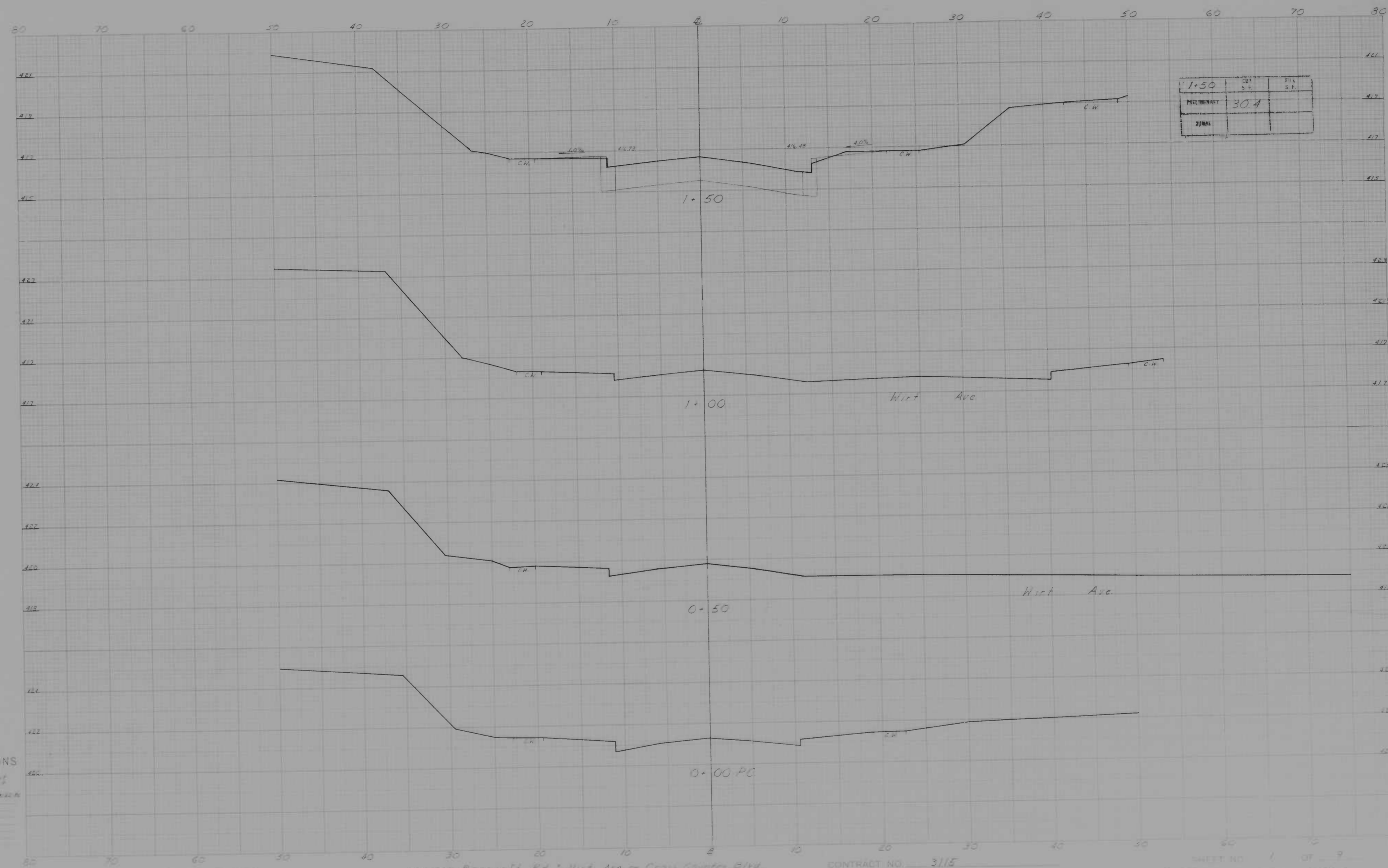
BANCROFT ROAD
 WIRT AVE. ~ CROSS COUNTRY BLVD.

SOIL EROSION / SEDIMENT CONTROL NOTES

SCALE: NONE DATE: SEPT 27, 1985
 HIGHWAY ENGINEERING DIVISION SHEET 10 OF 10

Book No. L-1174
 DRAWN BY S. Vourburg
 EXAMINED BY W. F. Campen

FILE REF.



CROSS SECTIONS

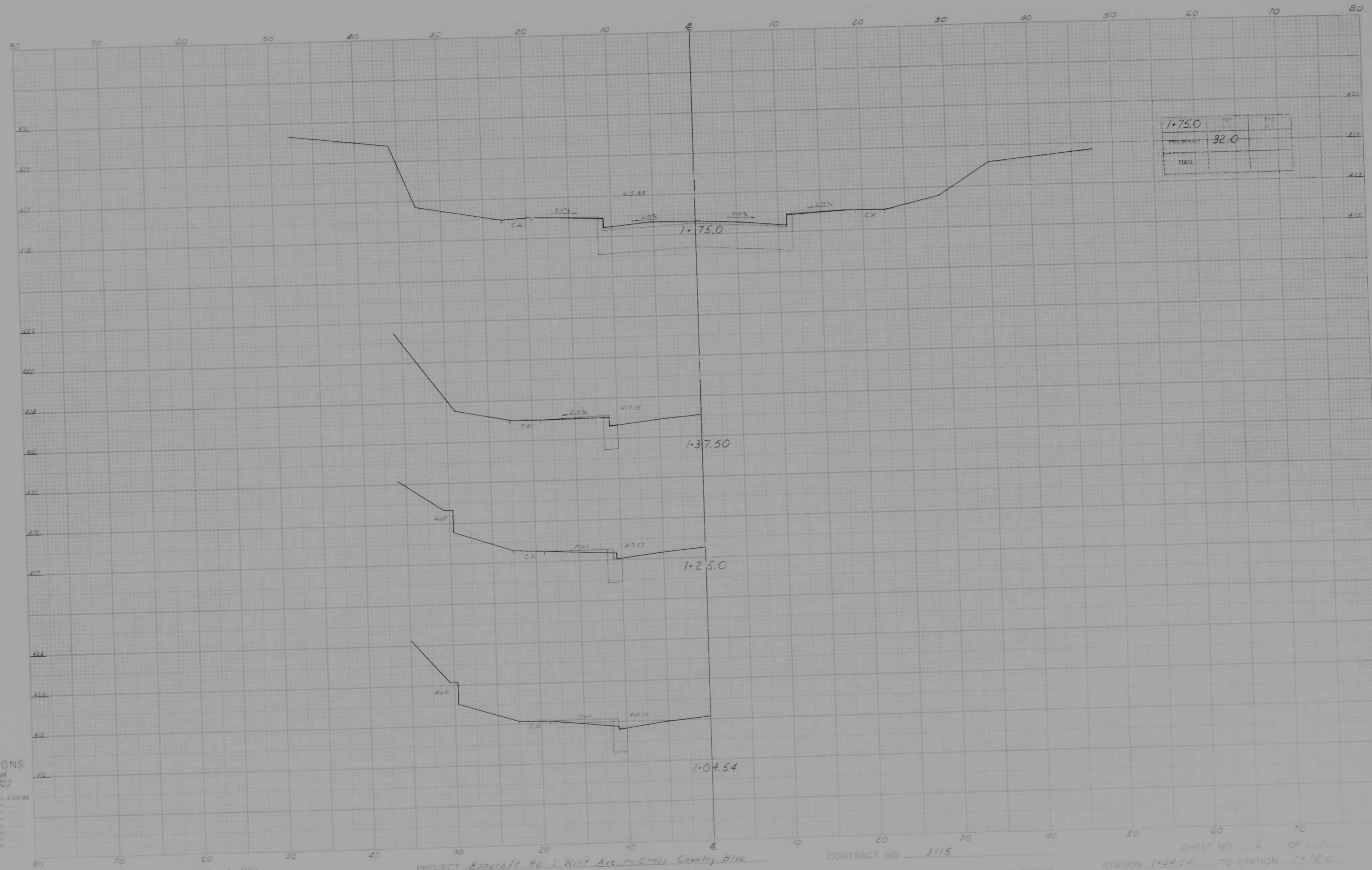
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 Original Proposed by: [blank]
 Checked by: [blank]
 Drawn by: [blank]
 Date: [blank]

BOOK NO. 6-1174

PROJECT Bancroft Rd. & Wirt Ave - Cross Country Blvd.
 DESCRIPTION X-Sections

CONTRACT NO. 3115

SHEET NO. 1 OF 8
 STATION 0+00.0 TO STATION 1+50.0



CROSS SECTIONS

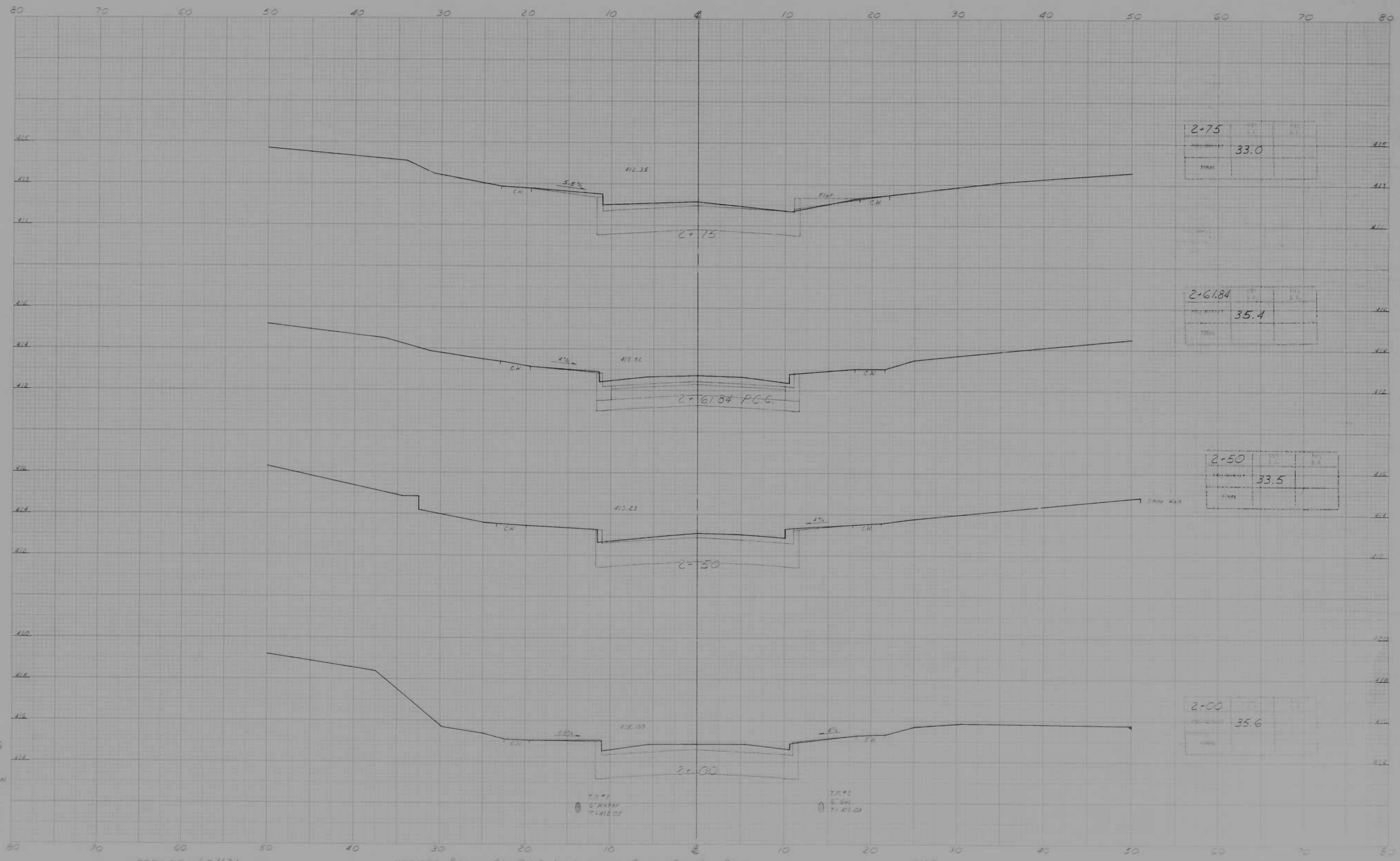
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 Vertical Scale 1 inch = 2 feet
 Horizontal Scale 1 inch = 20 feet
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 Original Ground by 2. Shading from 2160 ft
 Proposed C.K. by 2. Shading from 2160 ft
 Proposed Right of Way by 2. Shading from 2160 ft
 Proposed Left of Way by 2. Shading from 2160 ft
 Proposed Right of Way by 2. Shading from 2160 ft
 Proposed Left of Way by 2. Shading from 2160 ft

BOOK NO. 6-1124

PROJECT Bancroft Rd. : Wirt Ave. - Cross Country Blvd.
 DESCRIPTION X-Sections

CONTRACT NO. 3115

SHEET NO. 2 OF 3
 STATION 1+04.54 TO STATION 1+75.0



CROSS SECTIONS
 Scale 1 inch = 10 feet
 2.5" High
 2.5" Wide

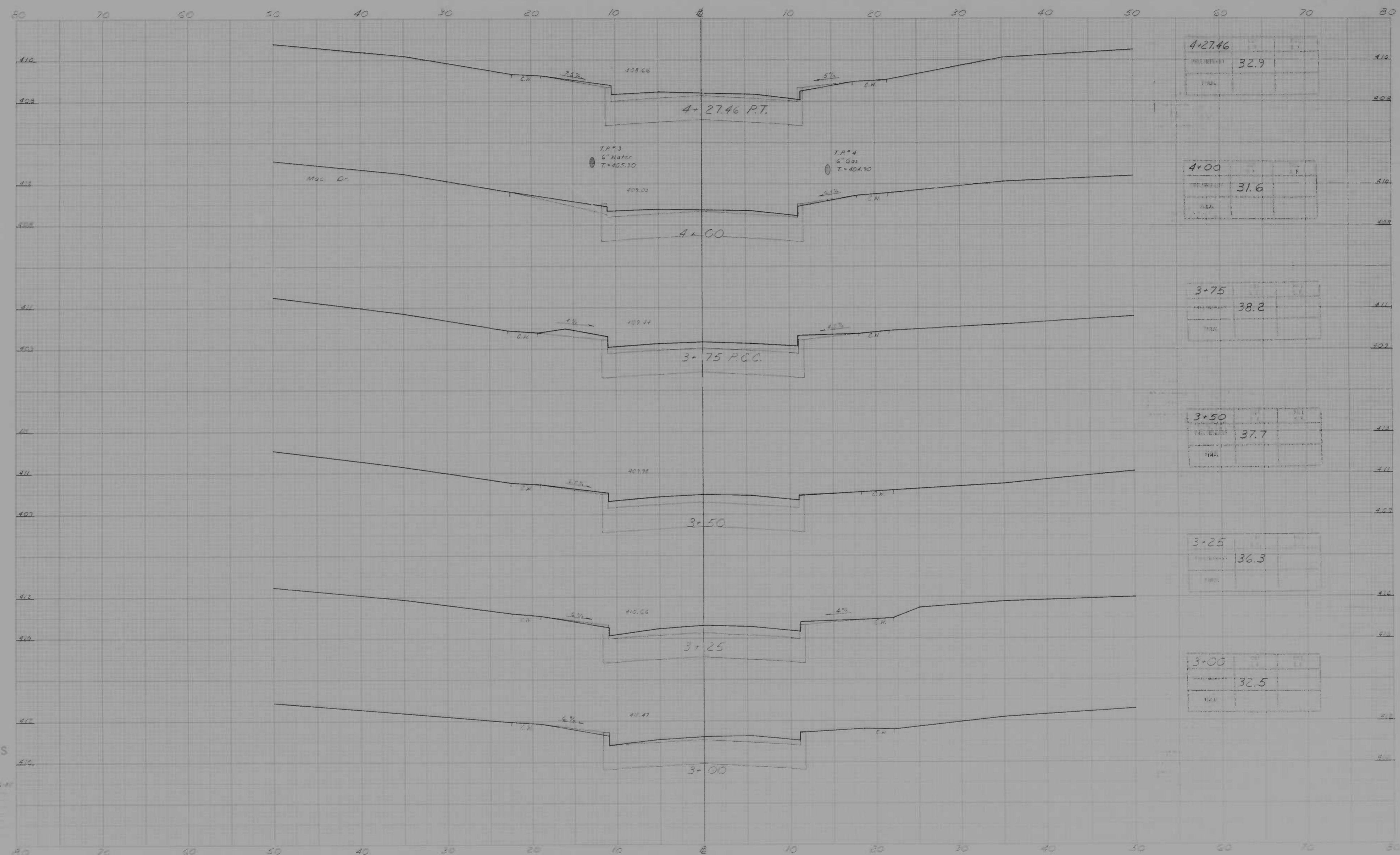
Original Stationed by: J. H. Berggren 2-26-41
 Original Checked by: []
 Proposed by: []
 Final Checked by: []
 Area by: []
 Area Checked by: []

BOOK NO. E-1174

PROJECT Boncroft Rd. West Area - Cross Country Blvd.
 DESCRIPTION X-Sections

CONTRACT NO. 3115

STATION 2+00 TO STATION 2+75



CROSS SECTIONS
 Scale: 1" = 10' Vert
 1" = 20' Horz
 1" = 40' Rad

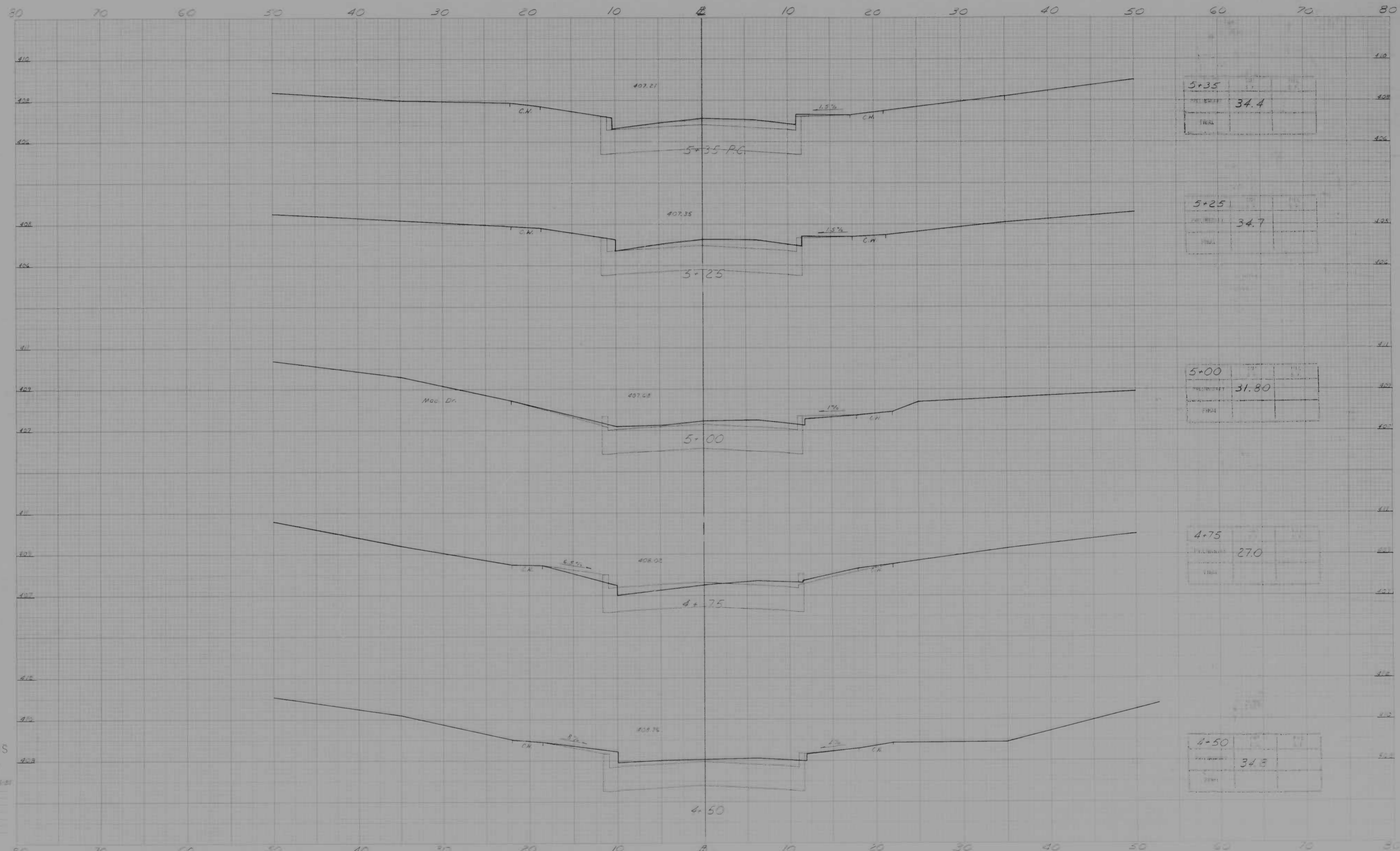
Original Stationed by: J. Shalby Date: 8-25-47
 Original Checked by: _____
 Proposed by: _____
 Approved by: _____
 Checked by: _____
 Date: _____

BOOK NO. L-1174

PROJECT Bancroft Rd. - Wirt Ave - Cross Country Blvd.
 DESCRIPTION X-Sections

CONTRACT NO. 311E

SHEET NO. 4 OF 3
 STATION 3+00.0 TO STATION 4+27.46

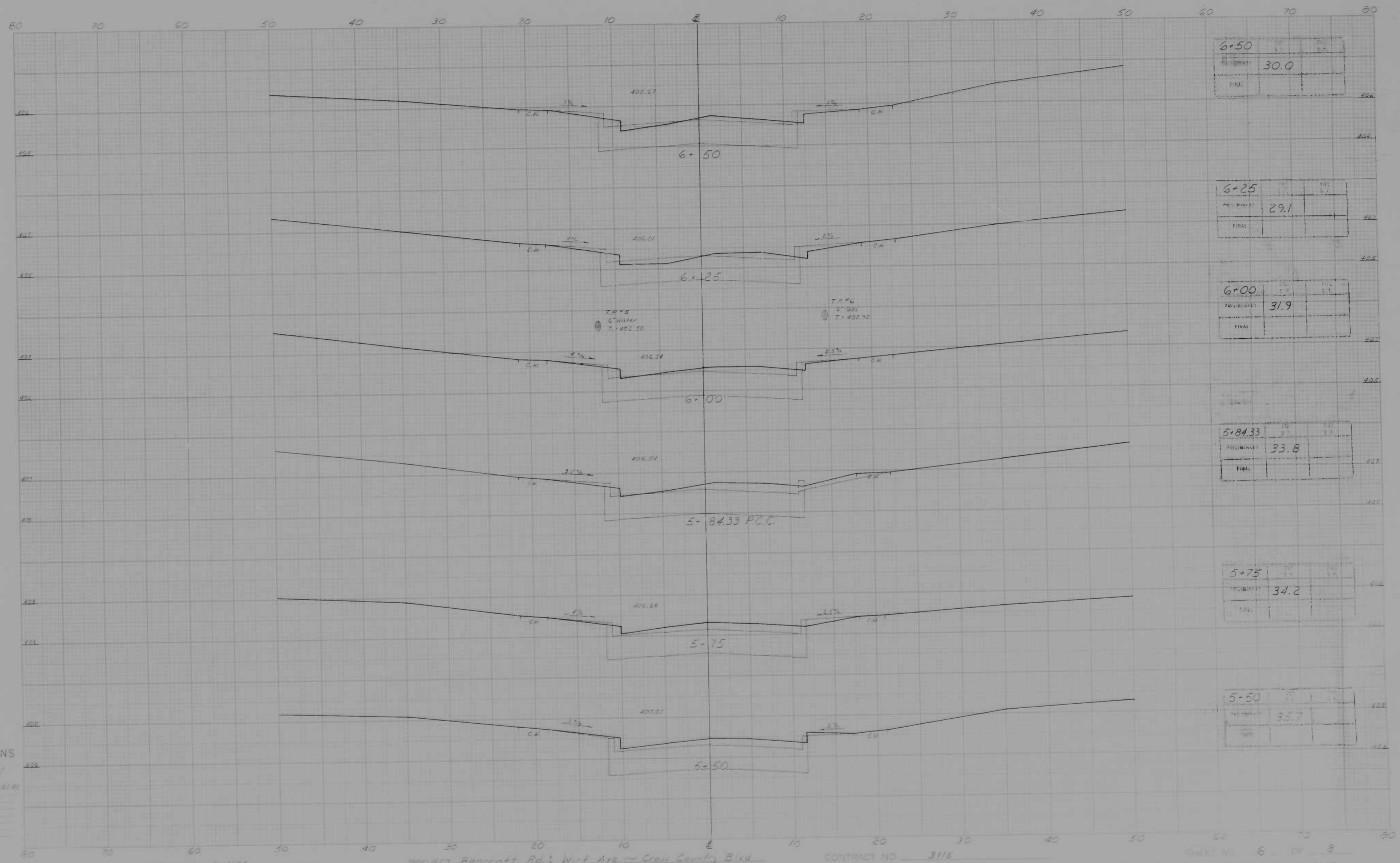


CROSS SECTIONS

Scale 1 inch = 10 feet
 2.5 feet
 5.0 feet

Original Project by: Z. Planning Inc. 4/26/01
 Design Checked by: [blank]
 Prepared by: [blank]
 Date: [blank]
 Project No.: [blank]
 Project Checked by: [blank]
 Date: [blank]
 Date: [blank]

DESCRIPTION X-Sections



CROSS SECTIONS

Scale 1 inch = 10 feet
 Vertical Scale 1 inch = 2 feet
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 Checked by: [blank]
 Prepared by: [blank]
 Plotted by: [blank]
 Date: [blank]

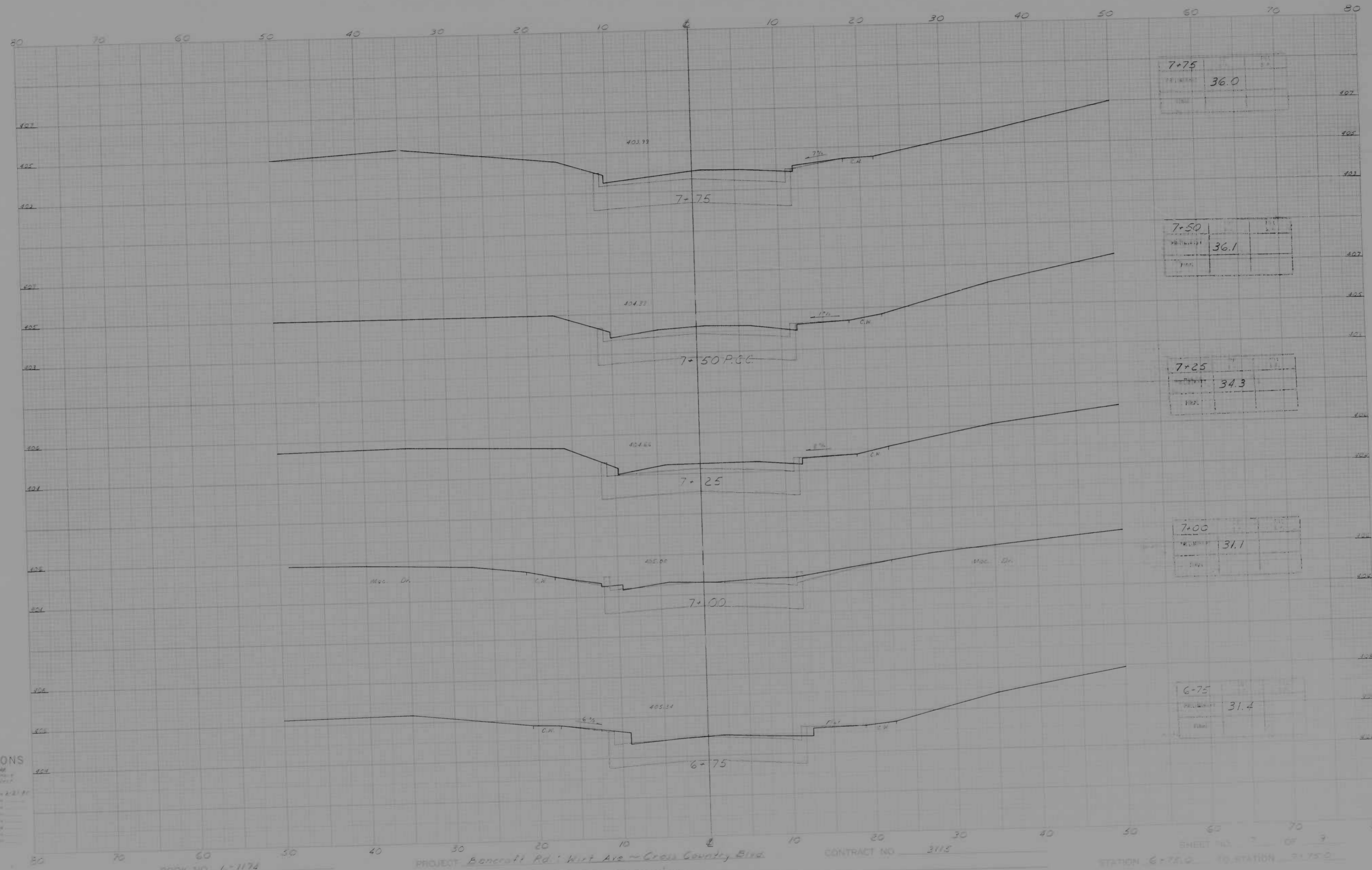
BOOK NO. 4-1174

PROJECT Bancroft Rd. West Ave - Cross County Blvd

DESCRIPTION X-sections

CONTRACT NO. 3115

SHEET NO. 6 OF 8
 STATION 5+30.0 TO STATION 6+50.0



CROSS SECTIONS

Scale 1 inch = 10 feet
 1/4" = 1' 0"

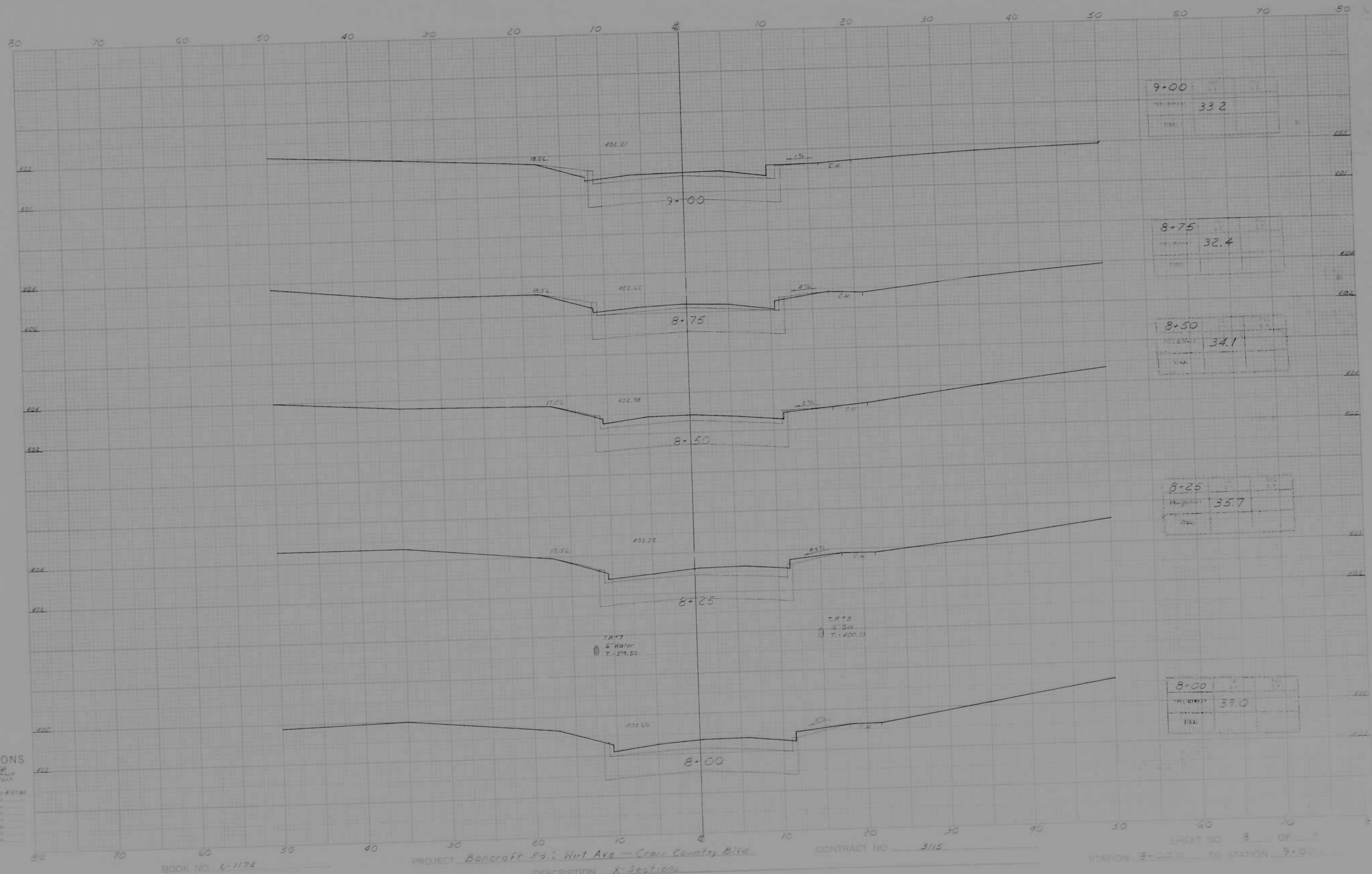
Original Stationed by: A. K. K. Co. Inc. 2/18/77
 Checked by: _____
 Prepared by: _____
 Plotted by: _____
 Drawn by: _____
 Inset by: _____
 Date: _____

BOOK NO. L-1174

PROJECT Boncroft Rd. West Ave - Cross Country Blvd.
 DESCRIPTION X-Sections

CONTRACT NO. 3118

SHEET NO. 7 OF 9
 STATION 6+75.0 TO STATION 7+75.0



CROSS SECTIONS

Scale: 1 inch = 10 feet
 Original Profile by [unclear]
 Original Grading by [unclear]
 Proposed Profile by [unclear]
 Proposed Grading by [unclear]
 Date: [unclear]
 Drawn by: [unclear]

BOOK NO. L-1178

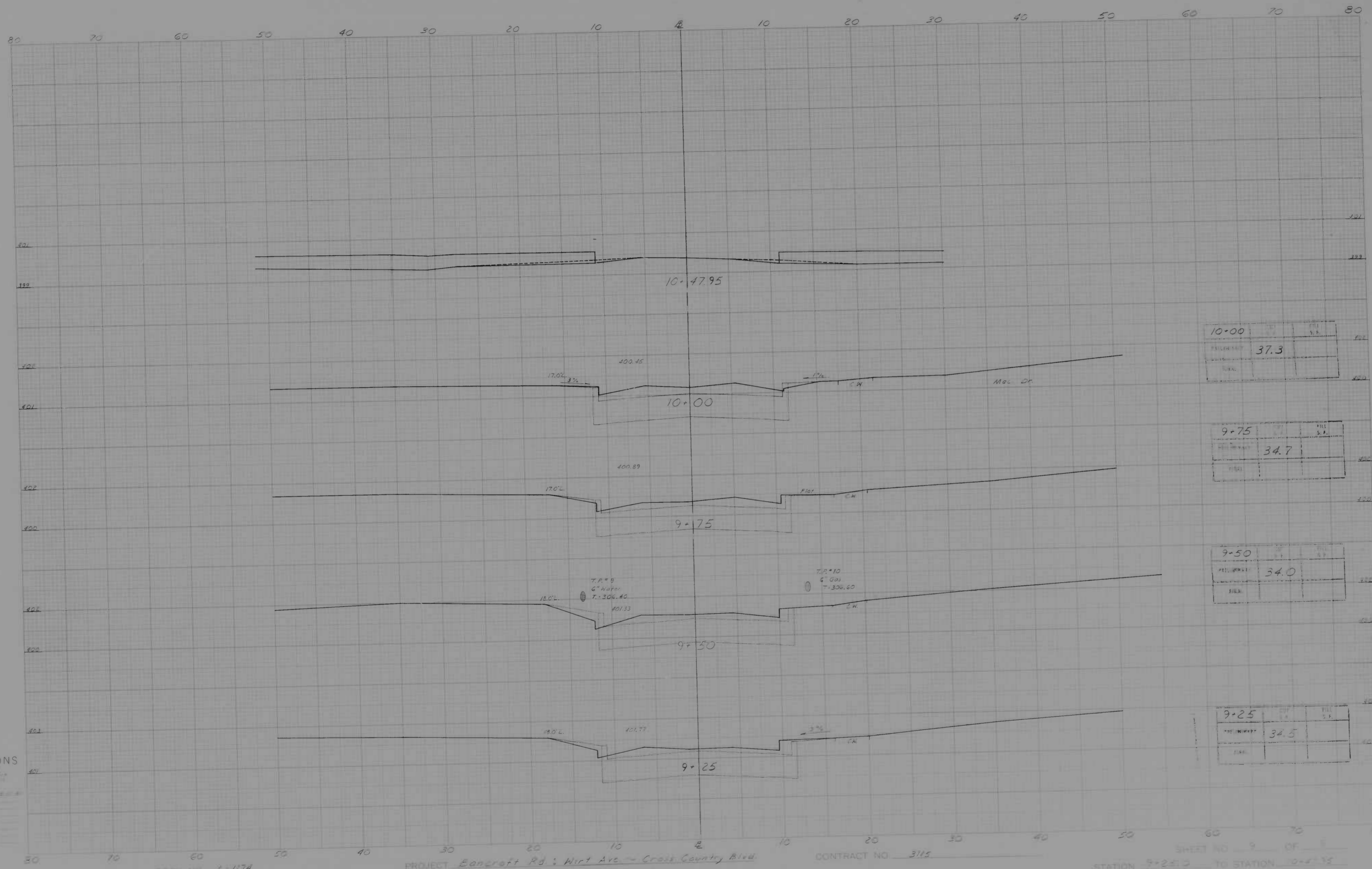
PROJECT Bancroft Rd; Wirt Ave - Cross Country Blvd
 DESCRIPTION X-Sections

CONTRACT NO. 3115

SHEET NO. 8 OF 8
 STATION 8+00 TO STATION 9+00

T.P.#7
 6" Water
 7,379.50

T.P.#5
 6" Gas
 7,400.10



STATION	10+00	PERCENT	37.3	AREA	
---------	-------	---------	------	------	--

STATION	9+75	PERCENT	34.7	AREA	
---------	------	---------	------	------	--

STATION	9+50	PERCENT	34.0	AREA	
---------	------	---------	------	------	--

STATION	9+25	PERCENT	34.5	AREA	
---------	------	---------	------	------	--

CROSS SECTIONS

Scale 1" = 20' Vert
1" = 40' Horiz

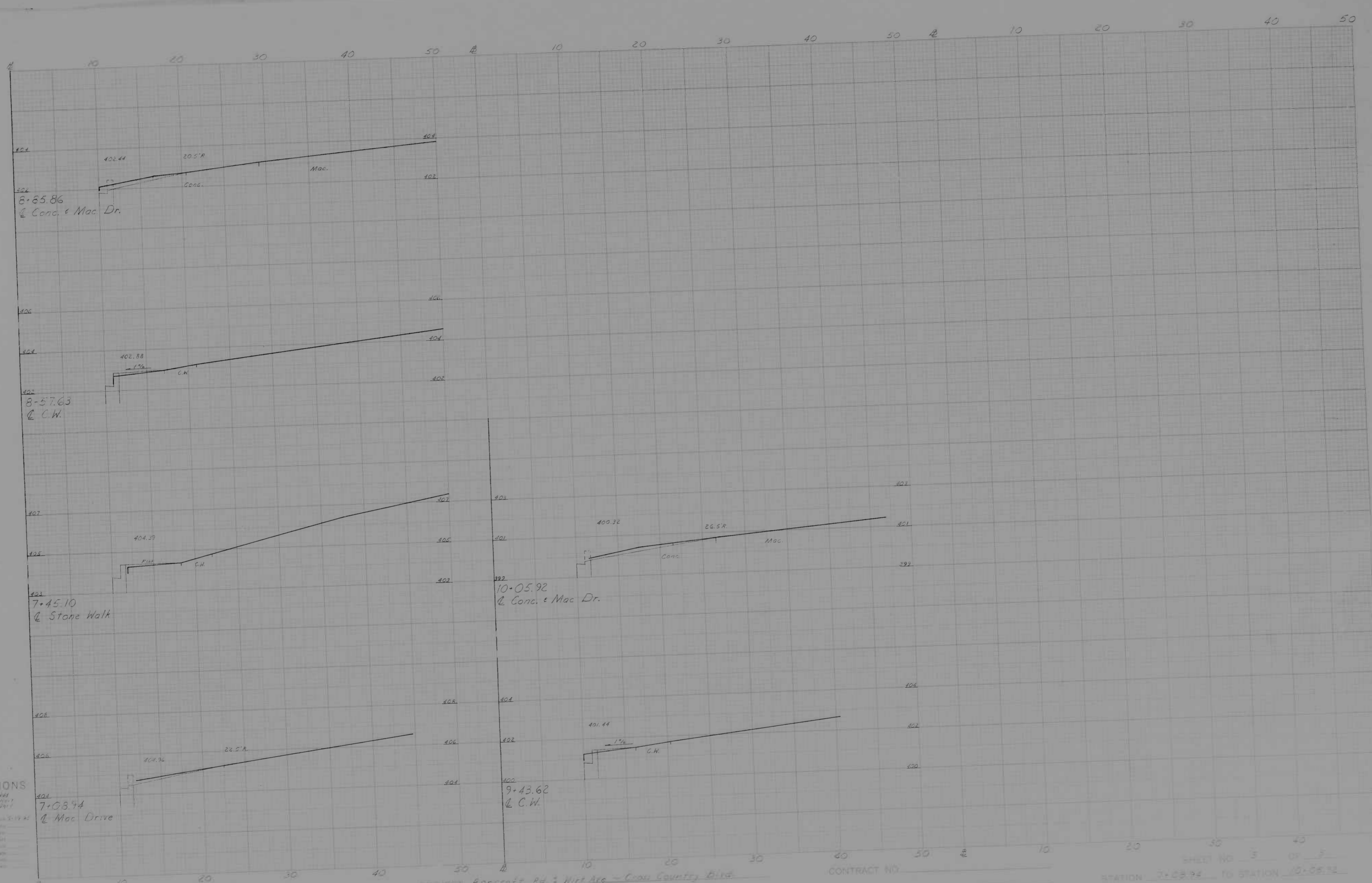
Designed by: _____
 Checked by: _____
 Date: _____

BOOK NO. L-1174

PROJECT Boonecraft Rd; Wirt Ave - Cross Country Blvd.
 DESCRIPTION X-Sections

CONTRACT NO. 3115

SHEET NO. 9 OF 9
 STATION 9+25.0 TO STATION 10+47.95



CROSS SECTIONS

Scale 1 inch = 10 feet
 5/8" = 1' = 16 ft

Checked by: _____
 Prepared by: _____
 Date: _____

7-08.94
 @ Mac Drive

7-45.10
 @ Stone Walk

8-57.63
 @ C.W.

10-05.92
 @ Conc. & Mac Dr.

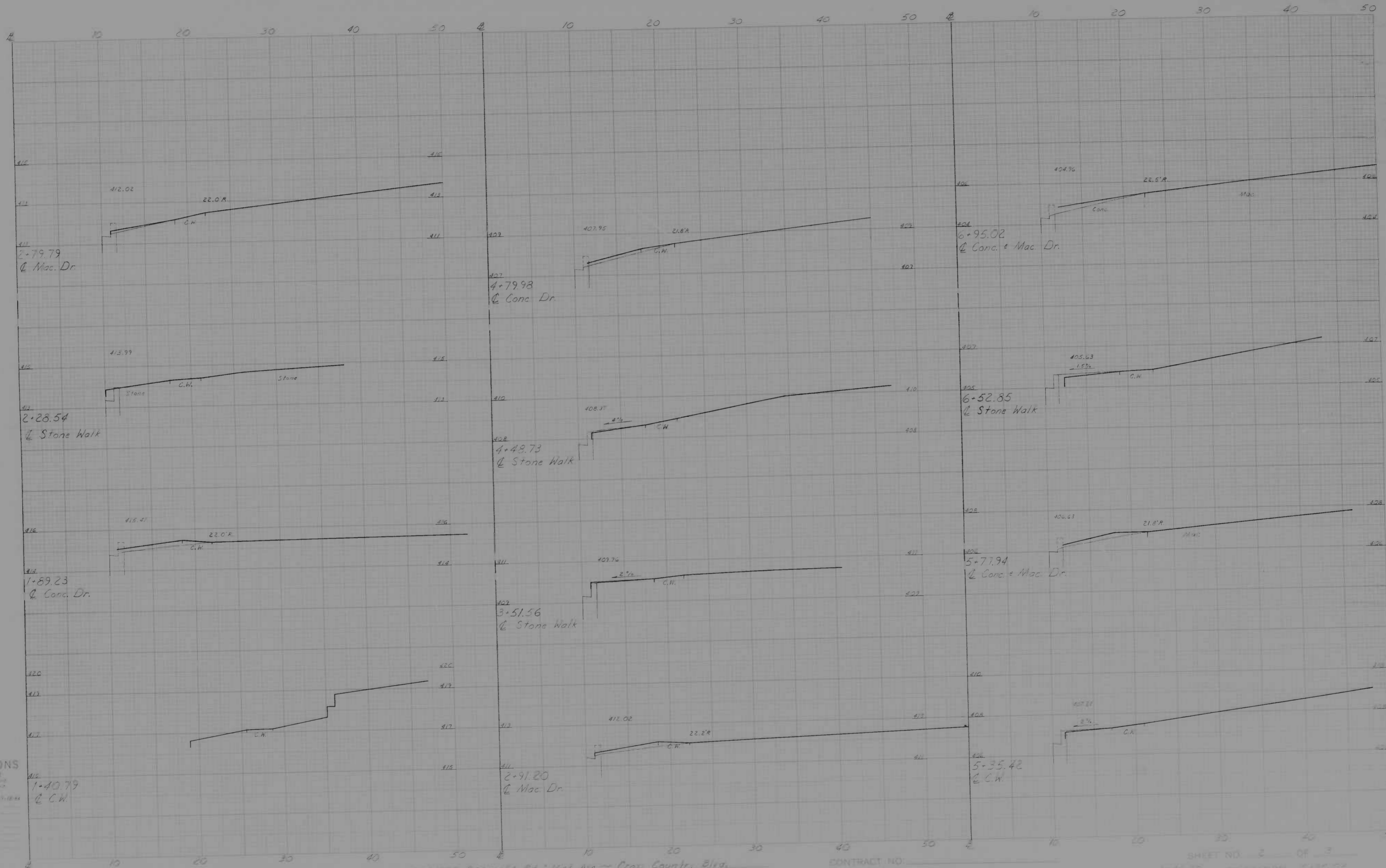
9-43.62
 @ C.W.

BOOK NO. 6-1124

PROJECT Boncroft Rd & Wirt Ave - Cross Country Blvd.
 DESCRIPTION Streets along right side

CONTRACT NO.

SHEET NO. 3 OF 5
 STATION 7+08.94 TO STATION 10+05.92



CROSS SECTIONS
 Scale 1 inch = 20 feet
 Original Proposed by: [unclear]
 Revised Proposed by: [unclear]
 Checked by: [unclear]
 Date: [unclear]
 Project: [unclear]

412
 1-40.79
 C.W.

407
 4-79.98
 Conc. Dr.

404
 6-95.02
 Conc. & Mac. Dr.

408
 4-48.73
 Stone Walk

406
 6-52.85
 Stone Walk

403
 3-51.56
 Stone Walk

405
 5-71.94
 Conc. & Mac. Dr.

411
 2-91.20
 Mac. Dr.

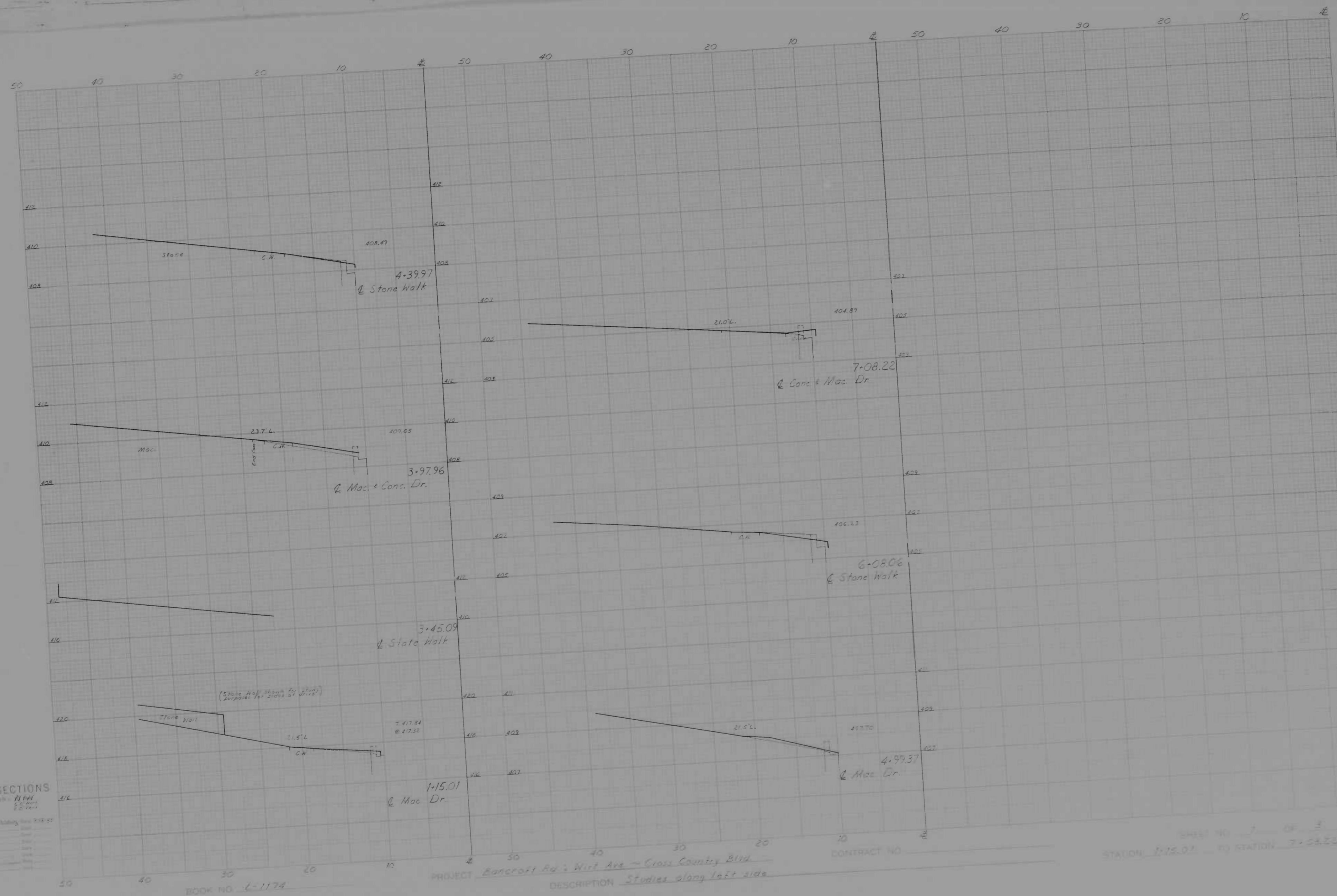
408
 5-35.42
 C.W.

BOOK NO. L-1174

PROJECT Boncroft Rd. - Hill Ave - Cross County, Miss.
 DESCRIPTION Studies along right side

CONTRACT NO.

SHEET NO. 2 OF 3
 STATION 1+40.79 TO STATION 5+35.42



CROSS SECTIONS

Scale 1 inch = 10 feet
 Vertical Scale 1 inch = 2 feet
 Horizontal Scale 1 inch = 20 feet

Designed by: C. H. ...
 Checked by: ...
 Date: ...

BOOK NO. 6-1174

PROJECT Bancroft Rd. West Ave - Cross Country Blvd
 DESCRIPTION Studies along left side

CONTRACT NO.

SHEET NO. 7 OF 8
 STATION 1+15.01 TO STATION 7+04.22