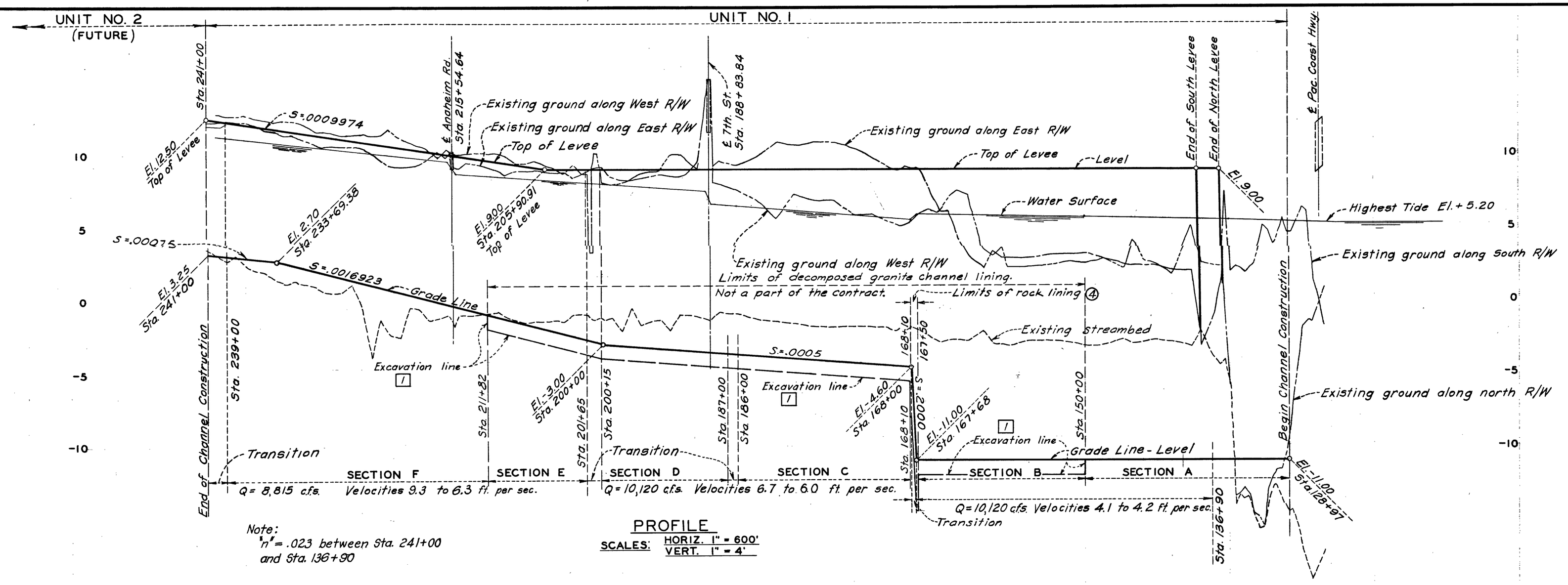
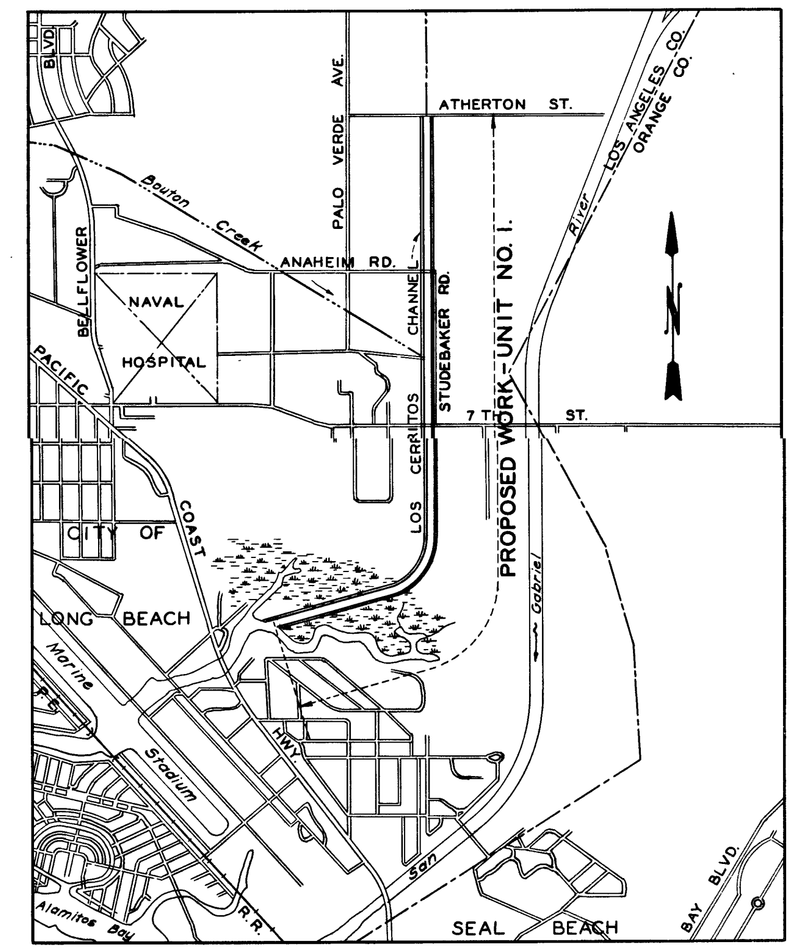


Note:
'n' = .023 between Sta. 241+00 and Sta. 136+90

PROFILE

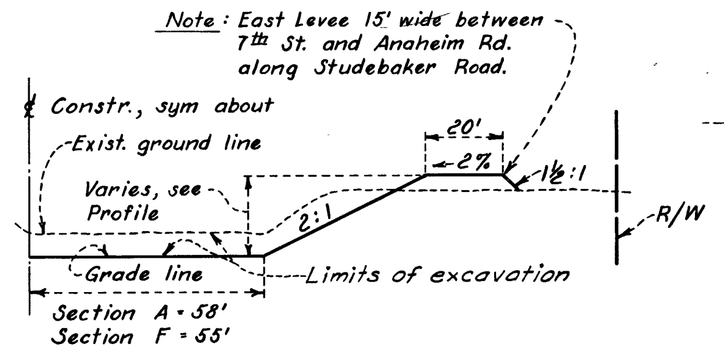
SCALES: HORIZ. 1" = 600'
VERT. 1" = 4'



VICINITY MAP

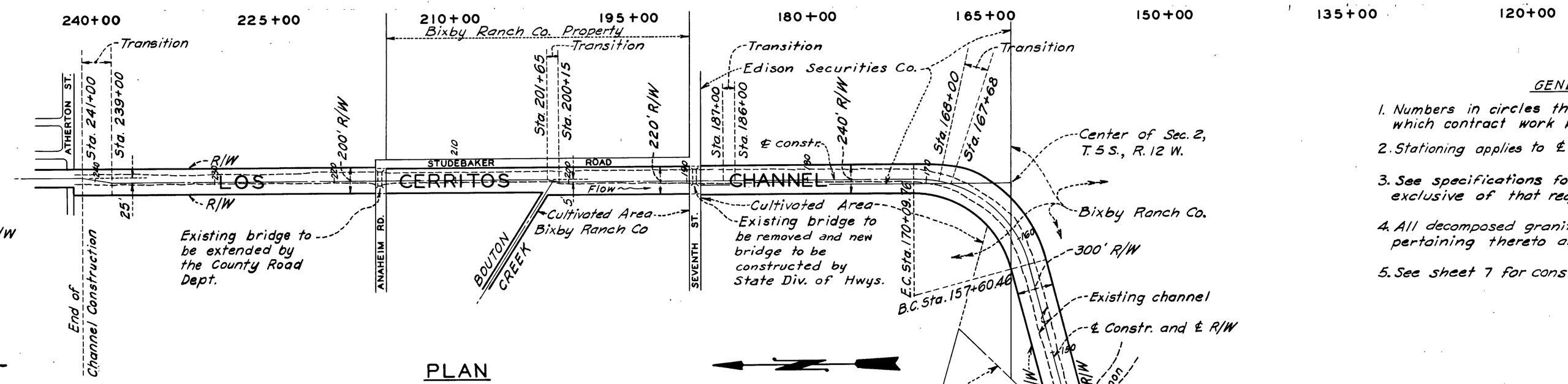
SCALE: 1" = 2000'

1000 0 1000 2000 3000 4000



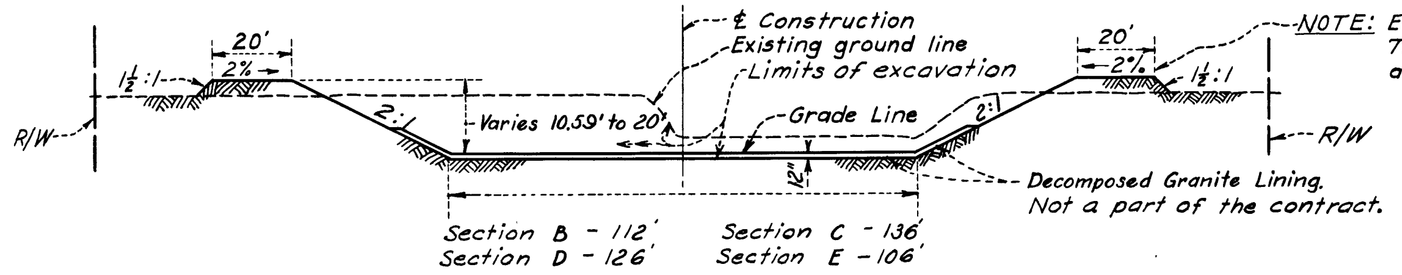
TYPICAL HALF SECTION - EARTH CHANNEL

NO SCALE



PLAN

SCALE: 1" = 600'



NOTE: East levee 15' wide between 7th St. and Anaheim Rd. along Studebaker Road.

TYPICAL SECTION - D.G. LINED CHANNEL

NO SCALE

GENERAL NOTES

1. Numbers in circles thus (1) are Item Numbers under which contract work will be paid.
2. Stationing applies to ℄ construction.
3. See specifications for disposal of excavated material exclusive of that required for levee fill.
4. All decomposed granite channel lining details and notes pertaining thereto are not a part of the contract.
5. See sheet 7 for construction tolerances.

REFERENCES

F.C. 1695
F.C. 1822
F.C. 1939
F.C. 1933
143-T4
143-T5
143-T6
143-D12.1
143-RW1.1
143-RW3.1
143-XX4
143-F93
143-FD1.1 to .8
143-F139.1 to .3
143-F118

DATUM: MEAN SEA LEVEL
L.A. COUNTY 1952 ADJUSTMENT

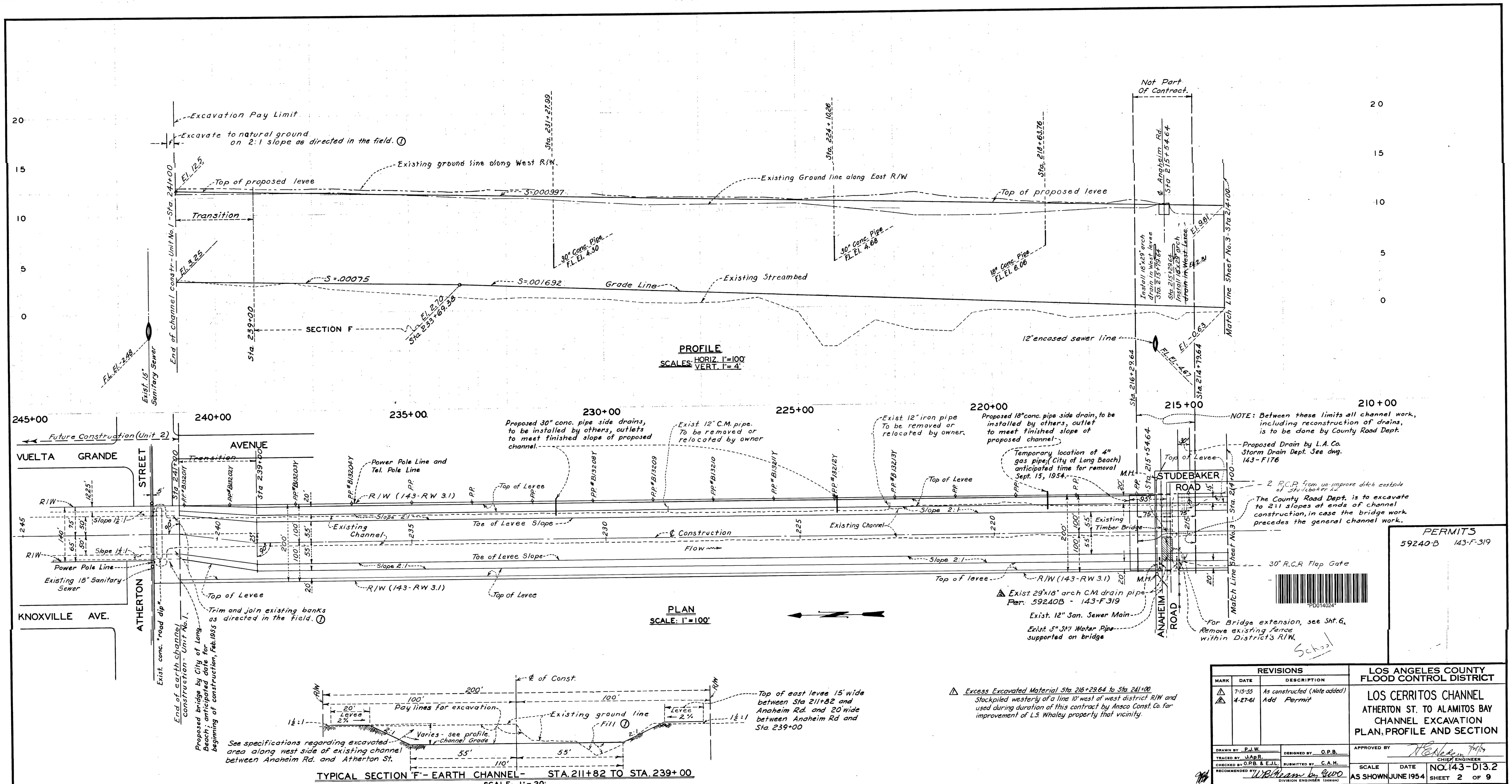
REVISIONS		
MARK	DATE	DESCRIPTION
1	1 Dec. 55	Excavation line added

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT

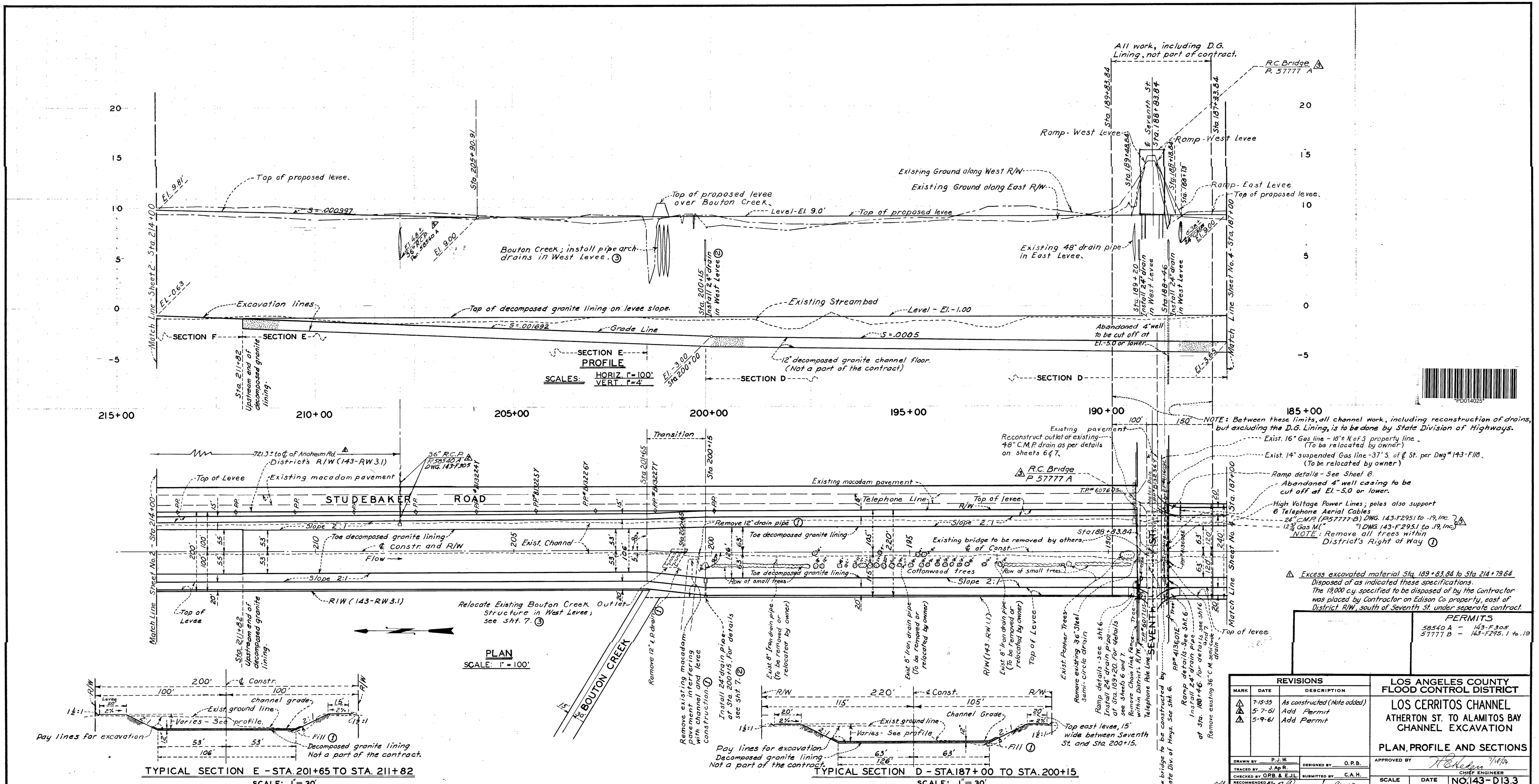
LOS CERRITOS CHANNEL
ATHERTON ST. TO ALAMITOS BAY
CHANNEL EXCAVATION
GENERAL PLAN

DRAWN BY P.J.W. & O.P.B. | DESIGNED BY O.P.B.
TRACED BY P.J.W. | SUBMITTED BY C.A.H.
CHECKED BY E.J.L.
RECOMMENDED BY W. B. Ream by GWO — DIVISION ENGINEER (DESIGN)
APPROVED BY H. Bolman 7/4/54 — CHIEF ENGINEER

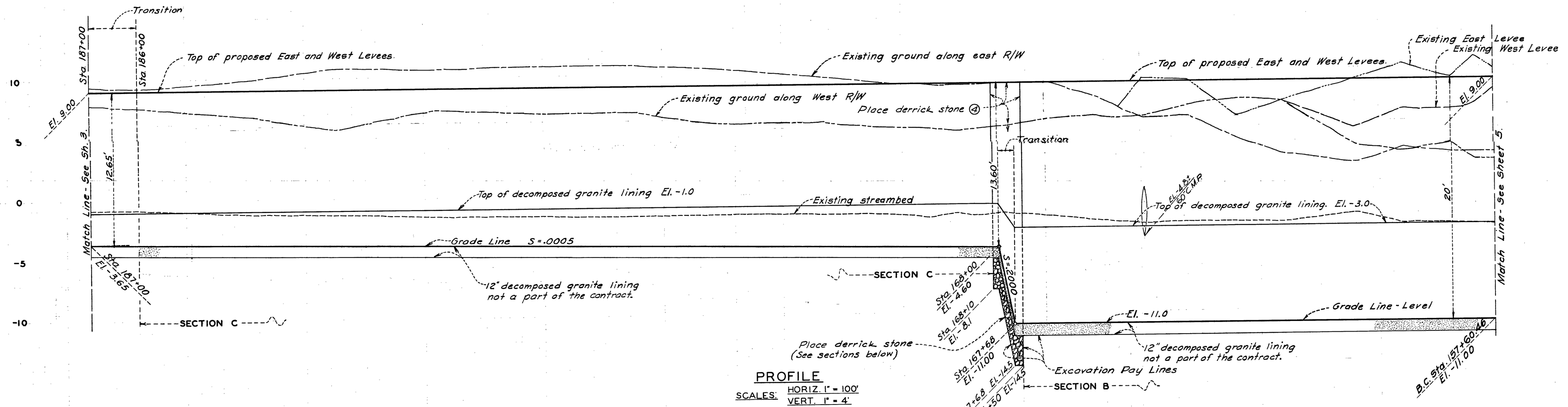
SCALE AS SHOWN | DATE JUNE 1954 | NO. 143-D13.1 | SHEET 1 OF 9



Excavation Pay Limit
Excavate to natural ground on 2:1 slope as directed in the field. ①
Existing ground line along West R/W
Existing Ground line along East R/W
Top of proposed levee
Transition
S=.000997
S=.00075
S=.001692
Grade Line
Existing Streambed
SECTION F
30" Conc. Pipe F.L. El. 4.30
30" Conc. Pipe F.L. El. 4.68
18" Conc. Pipe F.L. El. 6.06
12" encased sewer line
Not Part Of Contract.
℄ Anaheim Rd. Sta 215+54.64
Match Line Sheet No. 3 - Sta 214+00
End of channel constr - Unit No. 1 - Sta. 241+00
Exist. 15" Sanitary Sewer
PROFILE
SCALES: HORIZ. 1"=100' VERT. 1"=4'
245+00
240+00
235+00
230+00
225+00
220+00
215+00
210+00
Future Construction (Unit 2)
VUELTA GRANDE
AVENUE
STREET
ATHERTON
KNOXVILLE AVE.
STUDEBAKER ROAD
ANAHEIM ROAD
Proposed 30" conc. pipe side drains, to be installed by others, outlets to meet finished slope of proposed channel.
Exist. 12" C.M. pipe. To be removed or relocated by owner
Exist. 12" iron pipe To be removed or relocated by owner.
Proposed 18" conc. pipe side drain, to be installed by others, outlet to meet finished slope of proposed channel.
Temporary location of 4" gas pipe; (City of Long Beach) anticipated time for removal Sept. 15, 1954.
Power Pole Line and Tel. Pole Line
R/W (143-RW 3.1)
Top of Levee
Slope 2:1
Existing Channel
Toe of Levee Slope
℄ Construction
Flow
Existing Timber Bridge
Power Pole Line
Existing 15" Sanitary Sewer
Trim and join existing banks as directed in the field. ①
Exist. conc. "road dip"
End of earth channel construction - Unit No. 1
Proposed bridge by City of Long Beach; anticipated date for beginning of construction, Feb. 1955
Exist. 29"x18" arch C.M. drain pipe Per. 59240B - 143-F319
Exist. 12" San. Sewer Main
Exist. 5" St'l Water Pipe supported on bridge
For Bridge extension, see Sht. 6. Remove existing fence within District's R/W.
NOTE: Between these limits all channel work, including reconstruction of drains, is to be done by County Road Dept.
Proposed Drain by L.A. Co. Storm Drain Dept. See dwg. 143-F176
2 R.C.P. from un-improve ditch eastside of Studebaker Rd.
The County Road Dept. is to excavate to 2:1 slopes at ends of channel construction, in case the bridge work precedes the general channel work.
30" R.C.P. Flap Gate
Match Line Sheet No. 3 - Sta. 214+00
PLAN
SCALE: 1"=100'
PERMITS
59240-B 143-F-319
School
℄ of Const.
200'
100'
Pay lines for excavation
Existing ground line
Fill ①
Levee 2%
Varies - see profile. Channel Grade
See specifications regarding excavated area along west side of existing channel between Anaheim Rd. and Atherton St.
Top of east levee 15' wide between Sta 211+82 and Anaheim Rd. and 20' wide between Anaheim Rd and Sta. 239+00
TYPICAL SECTION "F" - EARTH CHANNEL - STA. 211+82 TO STA. 239+00
SCALE 1"=20'
Excess Excavated Material Sta. 216+29.64 to Sta. 241+00
Stockpiled westerly of a line 10' west of west district R/W and used during duration of this contract by Ansco Const. Co. for improvement of L.S. Whaley property that vicinity.
REVISIONS
MARK DATE DESCRIPTION
1 7-15-55 As constructed (Note added)
2 4-27-61 Add Permit
LOS ANGELES COUNTY FLOOD CONTROL DISTRICT
LOS CERRITOS CHANNEL
ATHERTON ST. TO ALAMITOS BAY
CHANNEL EXCAVATION
PLAN, PROFILE AND SECTION
DRAWN BY P.J.W.
TRACED BY J.A.P.R.
CHECKED BY O.P.B. & E.J.L.
RECOMMENDED BY W.B. Ream by GWO
DIVISION ENGINEER (DESIGN)
DESIGNED BY O.P.B.
SUBMITTED BY C.A.H.
APPROVED BY H.E. Hedgen 7/28/54
CHIEF ENGINEER
SCALE AS SHOWN
DATE JUNE 1954
NO. 143-D13.2
SHEET 2 OF 9

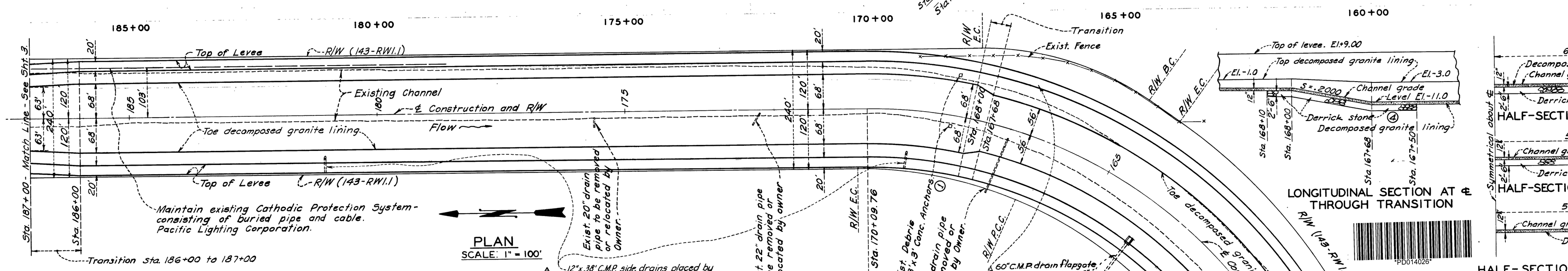


All work, including D.G. Lining, not part of contract.
R.C. Bridge P. 57777 A
Ramp - West Levee
Ramp - East Levee
Top of proposed levee.
Top of proposed levee over Bouton Creek.
Level - El. 9.0'
Existing Ground along West R/W
Existing Ground along East R/W
Bouton Creek; install pipe arch drains in West Levee. ③
Existing 48" drain pipe in East Levee.
Excavation lines
Top of decomposed granite lining on levee slope.
Existing Streambed
Level - El. -1.00
Grade Line
S = .0005
Abandoned 4" well to be cut off at El. -5.0 or lower.
12" decomposed granite channel floor. (Not a part of the contract)
SECTION F
SECTION E
SECTION D
PROFILE
SCALES: HORIZ. 1" = 100' VERT. 1" = 4'
Match Line - Sheet 2 - Sta. 214+00
Match Line Sheet No. 4 - Sta. 187+00
215+00
210+00
205+00
200+00
195+00
190+00
185+00
NOTE: Between these limits, all channel work, including reconstruction of drains, but excluding the D.G. Lining, is to be done by State Division of Highways.
Exist. 16" Gas line - 18'± N. of S. property line. (To be relocated by owner)
Exist. 14" suspended Gas line - 37' S. of ℄ St. per Dwg # 143-F118. (To be relocated by owner)
Ramp details - See Sheet 6.
Abandoned 4" well casing to be cut off at El. -5.0 or lower.
High Voltage Power Lines; poles also support 6 Telephone Aerial Cables
24" C.M.P. (P57777-B) DWG. 143-F295.1 to .19, Inc.
12¾ Gas M.(") DWG. 143-F295.1 to .19, Inc.
NOTE: Remove all trees within District's Right of Way ①
Reconstruct outlet of existing 48" C.M.P. drain as per details on sheets 6 & 7.
Existing pavement
R.C. Bridge P 57777 A
Transition
Existing macadam pavement
Telephone Line
Top of levee
STUDEBAKER ROAD
Slope 2:1
Remove 12" drain pipe ①
Toe decomposed granite lining
℄ Constr. and R/W
Exist. Channel
Flow
Existing bridge to be removed by others.
℄ of Const.
Cottonwood trees
Row of small trees
R/W (143-RW 3.1)
Relocate Existing Bouton Creek Outlet Structure in West Levee; see Sht. 7. ③
BOUTON CREEK
Remove existing macadam pavement interfering with channel and levee construction. ①
Install 24" drain pipe at Sta. 200+15. For details see Sht. 7. ②
Exist. 8" Iron drain pipe (To be removed or relocated by owner)
Exist. 8" Iron drain pipe (To be removed or relocated by owner)
Top of Levee
Exist. Pepper Trees
Remove existing 36" Steel Semi-circle drain
Ramp details - See Sht. 6
Install 24" drain pipe at Sta. 189+20. For details see Sheets 6 and 7.
Remove Chain Link Fence
Telephone Pole Line
New bridge to be constructed by State Div. of Hwys. See Sht. 6.
Ramp details - See Sht. 6
Install 24" drain pipe at Sta. 188+46. For details see Sht. 6 and 7.
Remove existing 36" C.M. semi-circle drain
Top of levee
PLAN
SCALE: 1" = 100'
Match Line Sheet No. 2 - Sta. 214+00
Match Line Sheet No. 4 - Sta. 187+00
Pay lines for excavation
Decomposed granite lining Not a part of the contract.
Fill ①
TYPICAL SECTION E - STA. 201+65 TO STA. 211+82
SCALE: 1" = 30'
Exist. ground line
Varies - See profile.
Channel Grade
Top east levee, 15' wide between Seventh St. and Sta. 200+15.
TYPICAL SECTION D - STA. 187+00 TO STA. 200+15
SCALE: 1" = 30'
PERMITS
58540 A - 143-F305
57777 B - 143-F295.1 to .19
REVISIONS
MARK | DATE | DESCRIPTION
1 | 7-15-55 | As constructed (Note added)
2 | 5-7-61 | Add Permit
3 | 5-9-61 | Add Permit
LOS ANGELES COUNTY FLOOD CONTROL DISTRICT
LOS CERRITOS CHANNEL
ATHERTON ST. TO ALAMITOS BAY
CHANNEL EXCAVATION
PLAN, PROFILE AND SECTIONS
DRAWN BY P.J.W.
TRACED BY J.Ap.R.
CHECKED BY O.P.B. & E.J.L.
DESIGNED BY O.P.B.
SUBMITTED BY C.A.H.
RECOMMENDED BY W.B. Ream by GWO
DIVISION ENGINEER (DESIGN)
APPROVED BY
CHIEF ENGINEER
SCALE AS SHOWN
DATE JUNE 1954
NO. 143-D13.3
SHEET 3 OF 9



PROFILE

SCALES: HORIZ. 1" = 100'
VERT. 1" = 4'



PLAN

SCALE: 1" = 100'

NOTE: Remove all trees within Districts R/W. ①

△ Excess excavated material southerly from 7th St. to Sta. 167+68 Disposed of by Contractor as specified and spread on Edison Co. property under seperate contract with that Co.

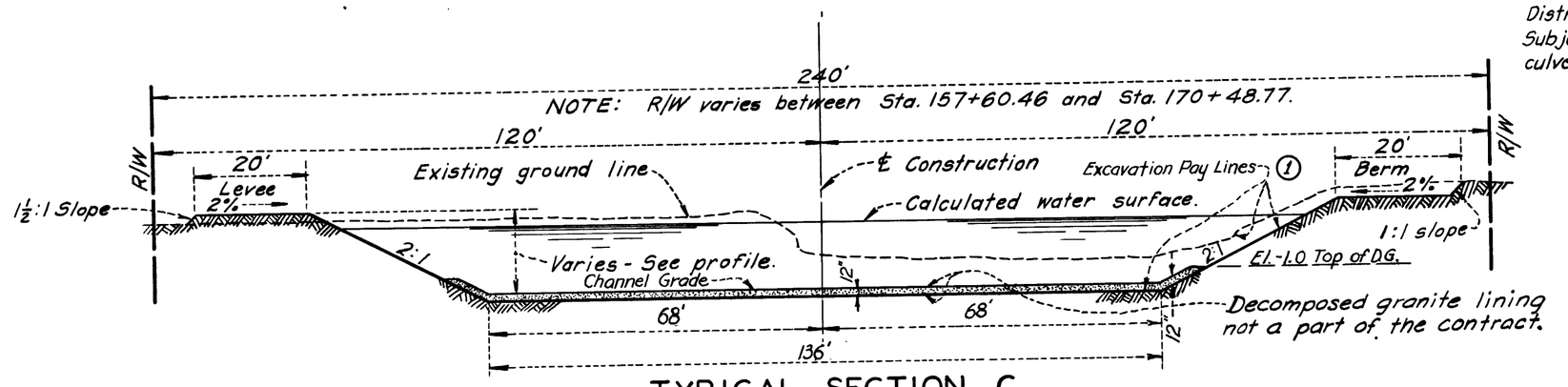
Curve Data - ℄ Constr.
Δ = 75° 07' 00"
R = 952.91'
T = 732.74'
L = 1249.30'

HALF-SECTION B., STA. 167+50 TO 150+00
(DOWNSTREAM END OF D.G. LINING IS STA. 150+00)

SECTIONS DOWNSTREAM FROM STA. 168+10

SCALE: 1" = 20'

Note: Decomposed granite lining shown is not a part of the contract.



TYPICAL SECTION C

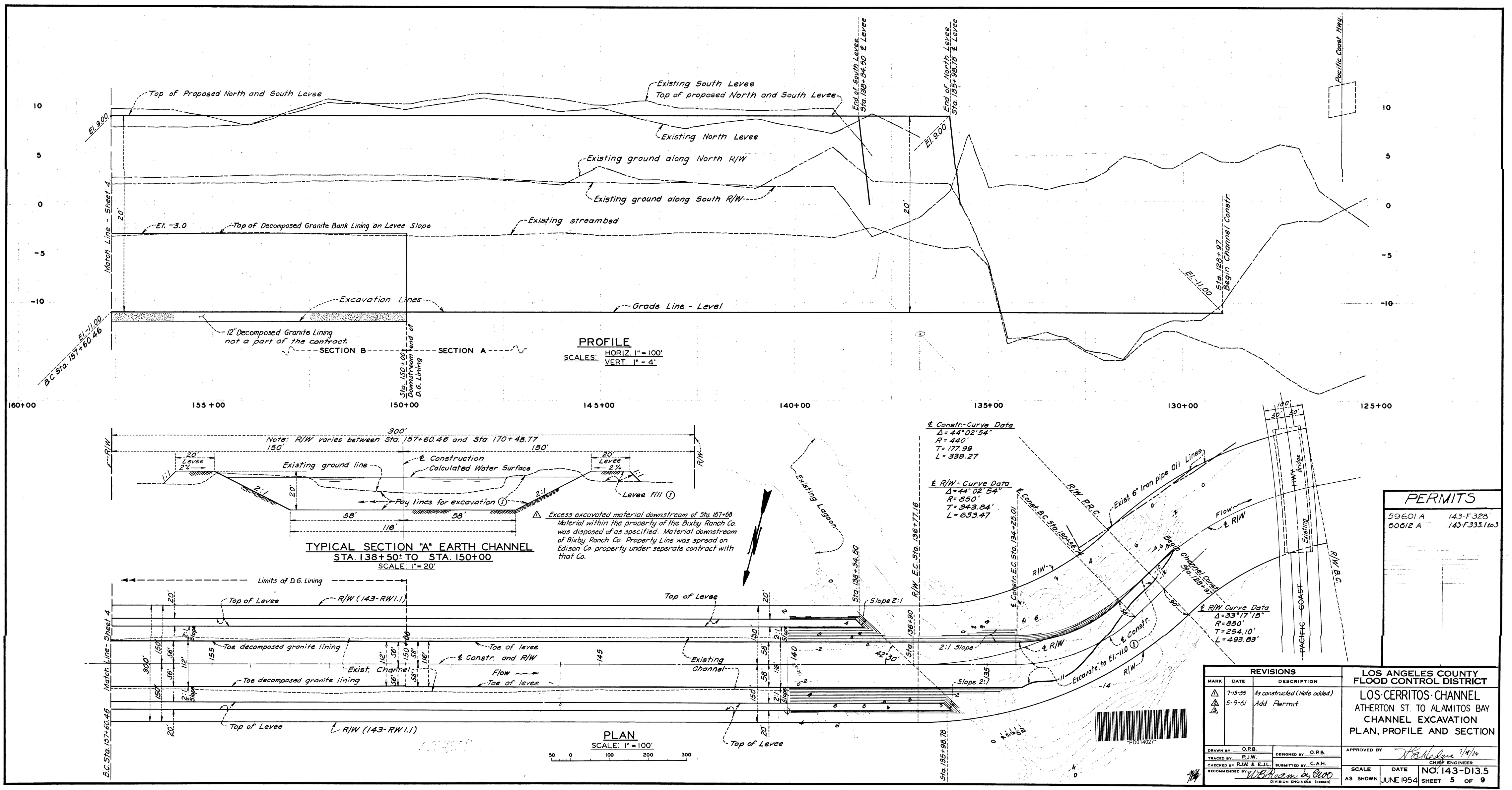
STA. 168+10 TO STA. 186+00

REVISIONS		
MARK	DATE	DESCRIPTION
1	7-15-55	As constructed (Notes added)
2	5-8-61	Permit Add. (143-F-328)

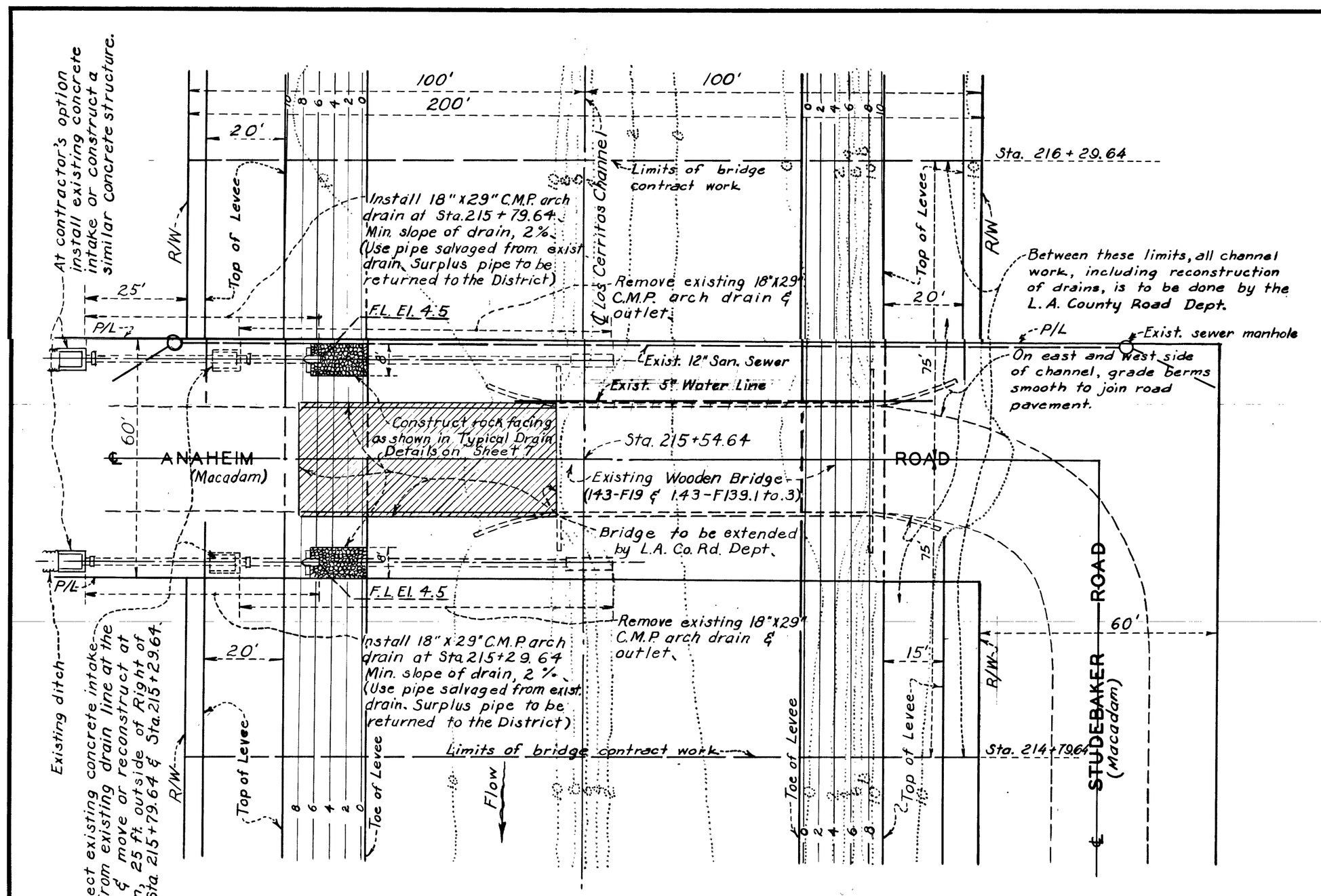
LOS ANGELES COUNTY FLOOD CONTROL DISTRICT

LOS CERRITOS CHANNEL
ATHERTON ST TO ALAMITOS BAY
CHANNEL EXCAVATION
PLAN, PROFILE AND SECTIONS

DRAWN BY O.P.B. | TRACED BY P.J.W. | CHECKED BY P.J.W. | RECOMMENDED BY W. E. Beam for Gwin, DIVISION ENGINEER (DESIGN)
DESIGNED BY O.P.B. | SUBMITTED BY C.A.H.
APPROVED BY H. E. Hedgin 7/8/64, CHIEF ENGINEER
SCALE AS SHOWN | DATE JUNE 1954 | NO. 143-D13.4 | SHEET 4 OF 9

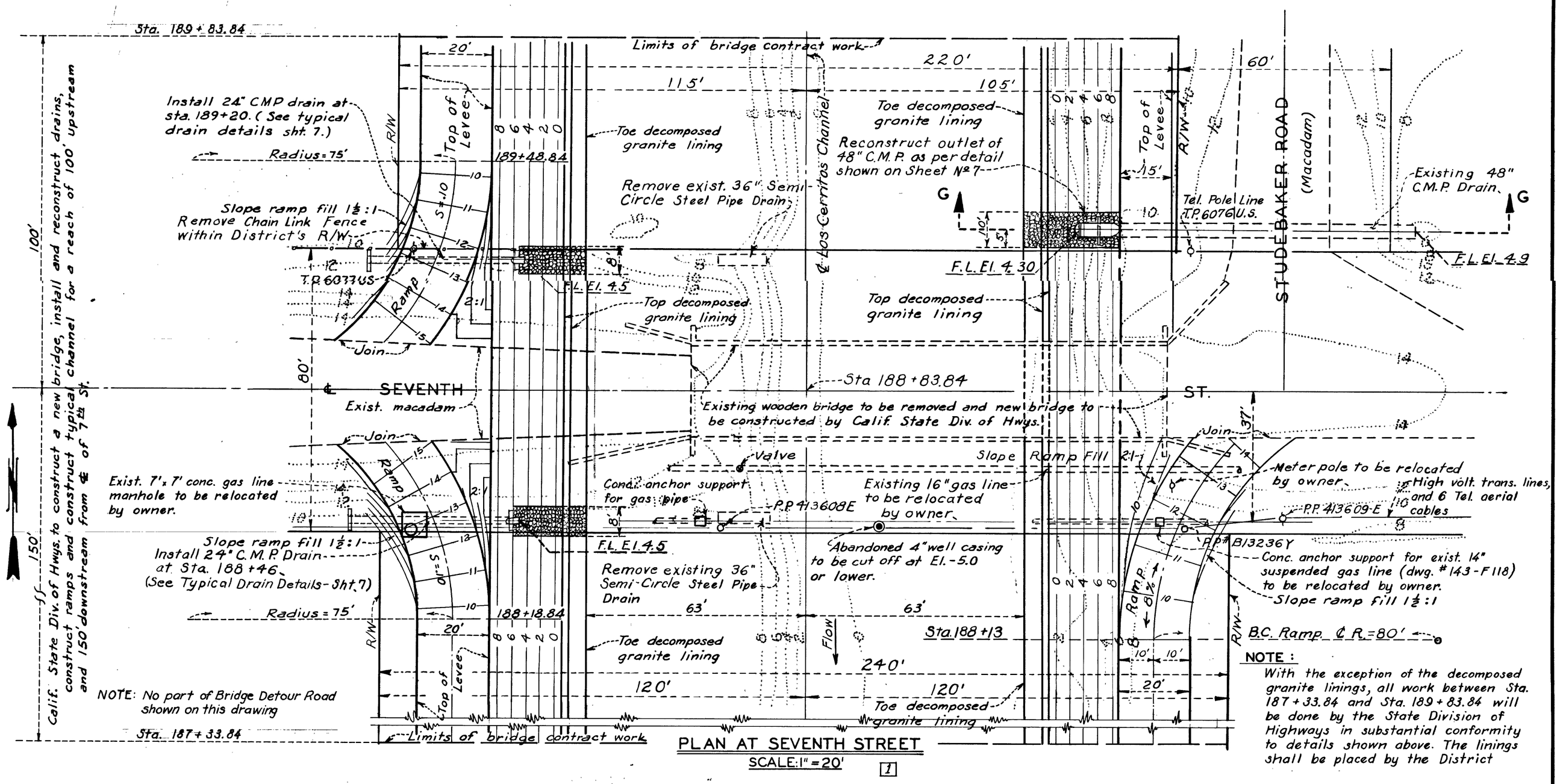


Top of Proposed North and South Levee
Existing South Levee
Top of proposed North and South Levee
Existing North Levee
Existing ground along North R/W
Existing ground along South R/W
Existing streambed
Top of Decomposed Granite Bank Lining on Levee Slope
El. -3.0
El. 9.00
Match Line - Sheet 4
Excavation Lines
Grade Line - Level
12" Decomposed Granite Lining not a part of the contract.
SECTION B
SECTION A
Sta. 150+00 Downstream end of D.G. Lining
End of South Levee Sta. 138+34.50 ℄ Levee
End of North Levee Sta. 135+98.78 ℄ Levee
Pacific Coast Hwy.
Sta. 128+97 Begin Channel Constr.
El. -11.00
B.C. Sta. 157+60.46
PROFILE
SCALES: HORIZ. 1" = 100' VERT. 1" = 4'
160+00
155+00
150+00
145+00
140+00
135+00
130+00
125+00
Note: R/W varies between Sta. 157+60.46 and Sta. 170+48.77
Existing ground line
℄ Construction
Calculated Water Surface
Levee fill ①
Pay lines for excavation ①
Excess excavated material downstream of Sta. 167+68 Material within the property of the Bixby Ranch Co. was disposed of as specified. Material downstream of Bixby Ranch Co. Property Line was spread on Edison Co. property under seperate contract with that Co.
TYPICAL SECTION "A" EARTH CHANNEL
STA. 138+50± TO STA. 150+00
SCALE: 1" = 20'
Limits of D.G. Lining
Top of Levee
R/W (143-RW1.1)
Toe decomposed granite lining
Toe of levee
℄ Constr. and R/W
Exist. Channel
Flow
Existing Channel
Existing Lagoon
Slope 2:1
2:1 Slope
Sta. 138+34.50
R/W E.C. Sta. 136+77.16
℄ Constr.-Curve Data
Δ = 44°02'54"
R = 440'
T = 177.99
L = 338.27
℄ R/W-Curve Data
Δ = 44°02'54"
R = 850'
T = 343.84'
L = 653.47
℄ Constr. B.C. Sta. 130+86.74
℄ Constr. E.C. Sta. 134+25.01
R/W P.R.C.
Exist. 6" Iron pipe Oil Lines
Begin Channel Constr. Sta. 128+97
℄ R/W Curve Data
Δ = 33°17'15"
R = 850'
T = 254.10'
L = 493.83'
Excavate to El. -11.0 ①
Sta. 135+98.78
PACIFIC COAST HWY.
Existing Bridge
R/W B.C.
PLAN
SCALE: 1" = 100'
PERMITS
59601 A 143-F328
60612 A 143-F335.1 to 3
REVISIONS
MARK DATE DESCRIPTION
1 7-15-55 As constructed (Note added)
2 5-9-61 Add Permit
LOS ANGELES COUNTY FLOOD CONTROL DISTRICT
LOS·CERRITOS·CHANNEL
ATHERTON ST. TO ALAMITOS BAY
CHANNEL EXCAVATION
PLAN, PROFILE AND SECTION
DRAWN BY O.P.B.
TRACED BY P.J.W.
CHECKED BY P.J.W. & E.J.L.
DESIGNED BY O.P.B.
SUBMITTED BY C.A.H.
RECOMMENDED BY W.B. Ream by GWO
DIVISION ENGINEER (DESIGN)
APPROVED BY
CHIEF ENGINEER
SCALE AS SHOWN
DATE JUNE 1954
NO. 143-D13.5
SHEET 5 OF 9



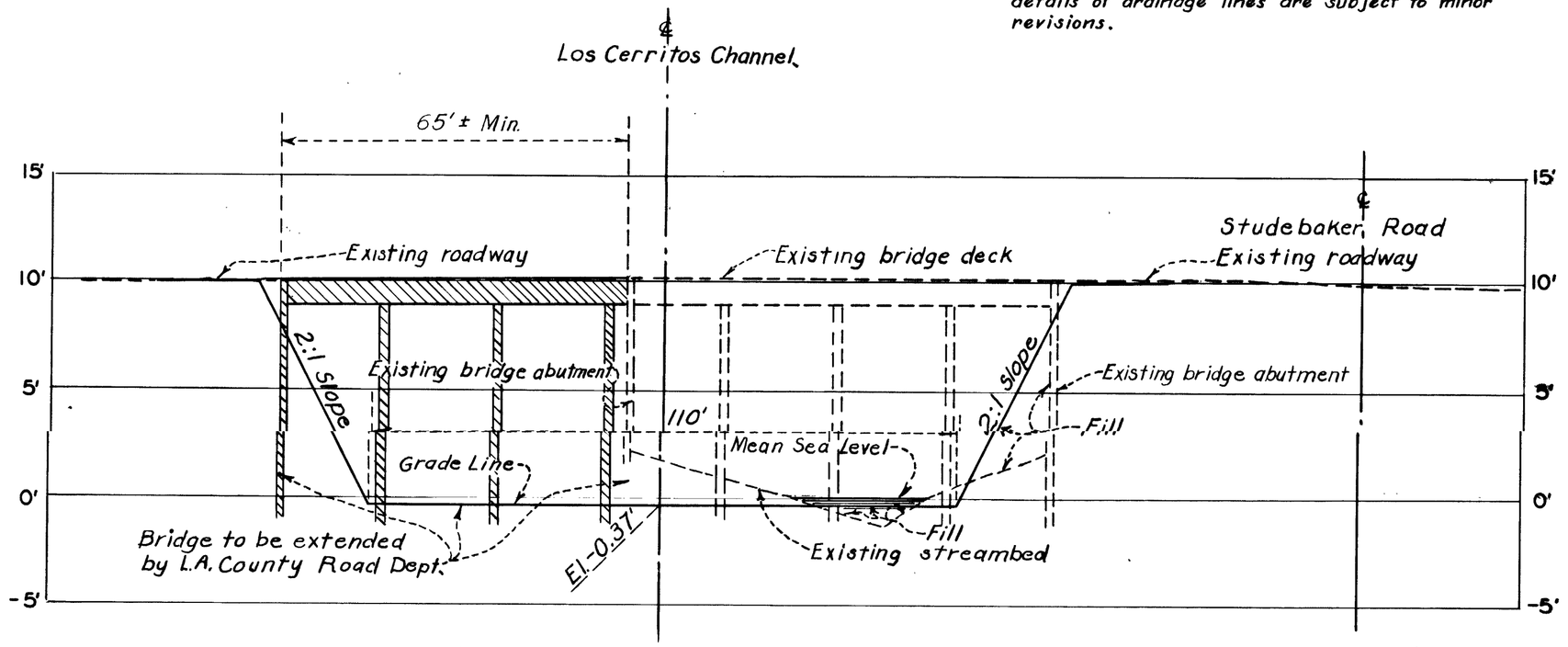
PLAN AT ANAHEIM ROAD
SCALE: 1" = 20'

NOTE:
All work done between Sta. 214 + 79.64 and Sta. 216 + 29.64 will be done by the County Road Dept. approximately as shown above; details of drainage lines are subject to minor revisions.

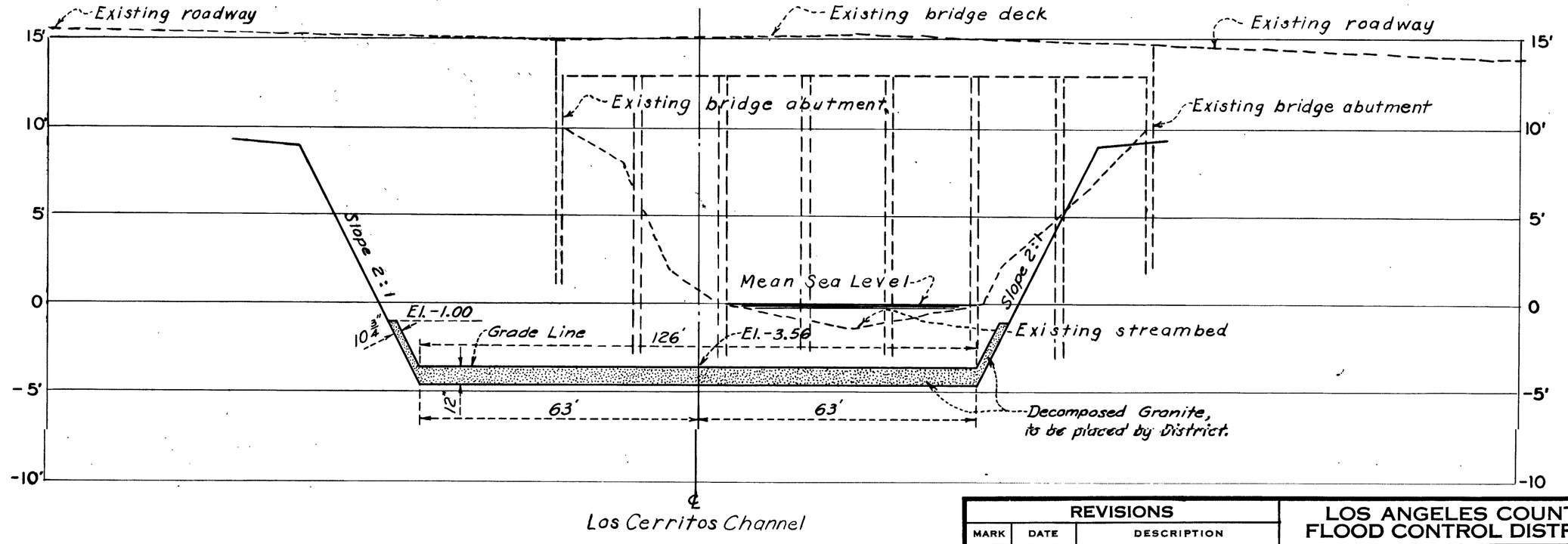


NOTE:
With the exception of the decomposed granite linings, all work between Sta. 187 + 33.84 and Sta. 189 + 83.84 will be done by the State Division of Highways in substantial conformity to details shown above. The linings shall be placed by the District

PLAN AT SEVENTH STREET
SCALE: 1" = 20' 7



SECTION AT ℄ ANAHEIM ROAD
SCALES: HORIZ. 1" = 20'
VERT. 1" = 5'



Los Cerritos Channel

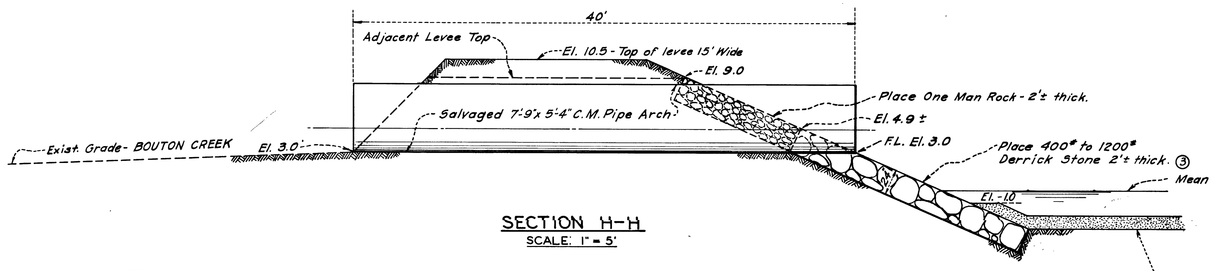
SECTION AT ℄ SEVENTH STREET
SCALES: HORIZ. 1" = 20'
VERT. 1" = 5' 7

REVISIONS		
MARK	DATE	DESCRIPTION
7	5-20-54	Channel Section Revised

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT

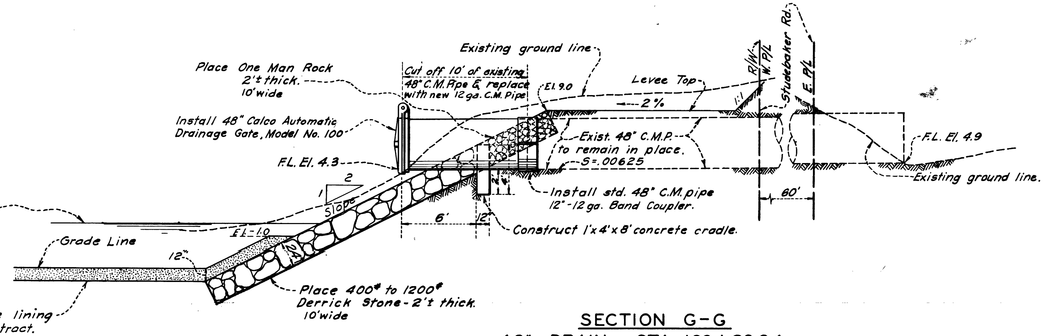
LOS CERRITOS CHANNEL
ATHERTON ST. TO ALAMITOS BAY
CHANNEL EXCAVATION
BRIDGE REVISIONS
DRAIN LOCATIONS

DRAWN BY P.J.W. | DESIGNED BY O.P.B.
TRACED BY J.ApR. | SUBMITTED BY C.A.H.
CHECKED BY O.P.B. & E.J.L.
RECOMMENDED BY W.B. Ramberg DIVISION ENGINEER (DESIGN)
APPROVED BY W. E. Kelsey 7/4/54 CHIEF ENGINEER
SCALE AS SHOWN | DATE JUNE 1954 | NO. 143-D13.6 SHEET 6 OF 9



SECTION H-H

SCALE: 1" = 5'

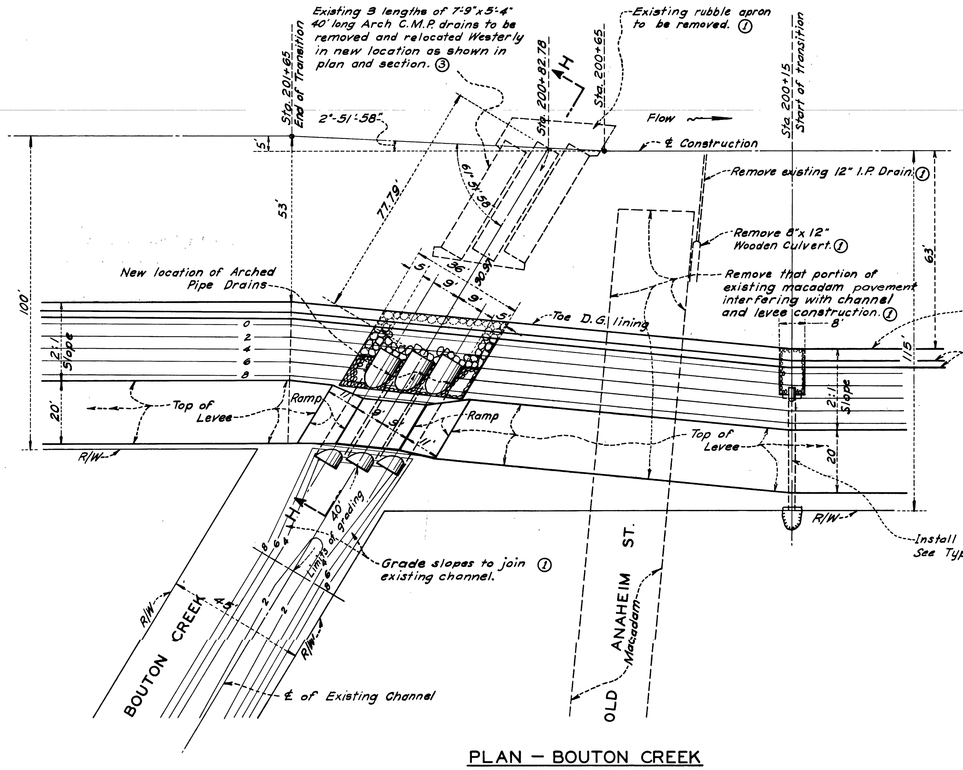


SECTION G-G

48" DRAIN - STA. 189+29.84

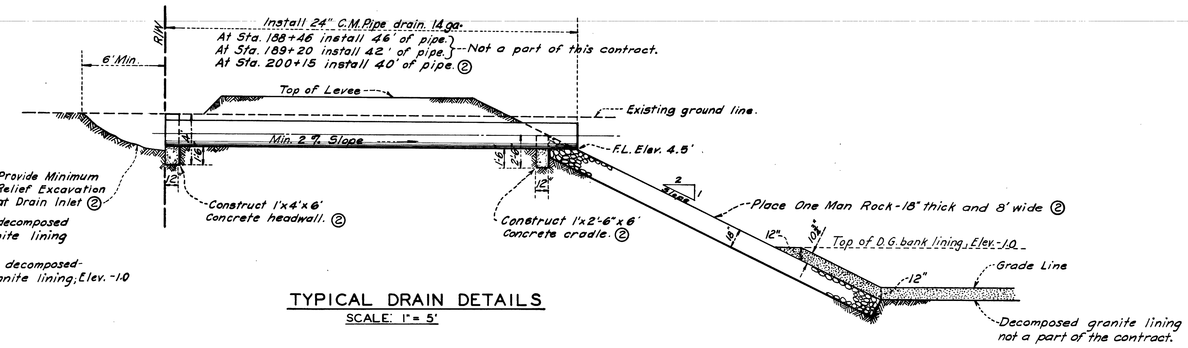
SCALE: 1" = 5'

NOT A PART OF THE CONTRACT



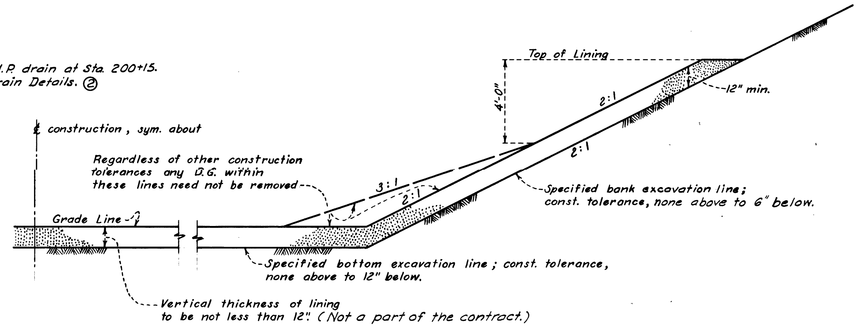
PLAN - BOUTON CREEK

SCALE: 1" = 20'



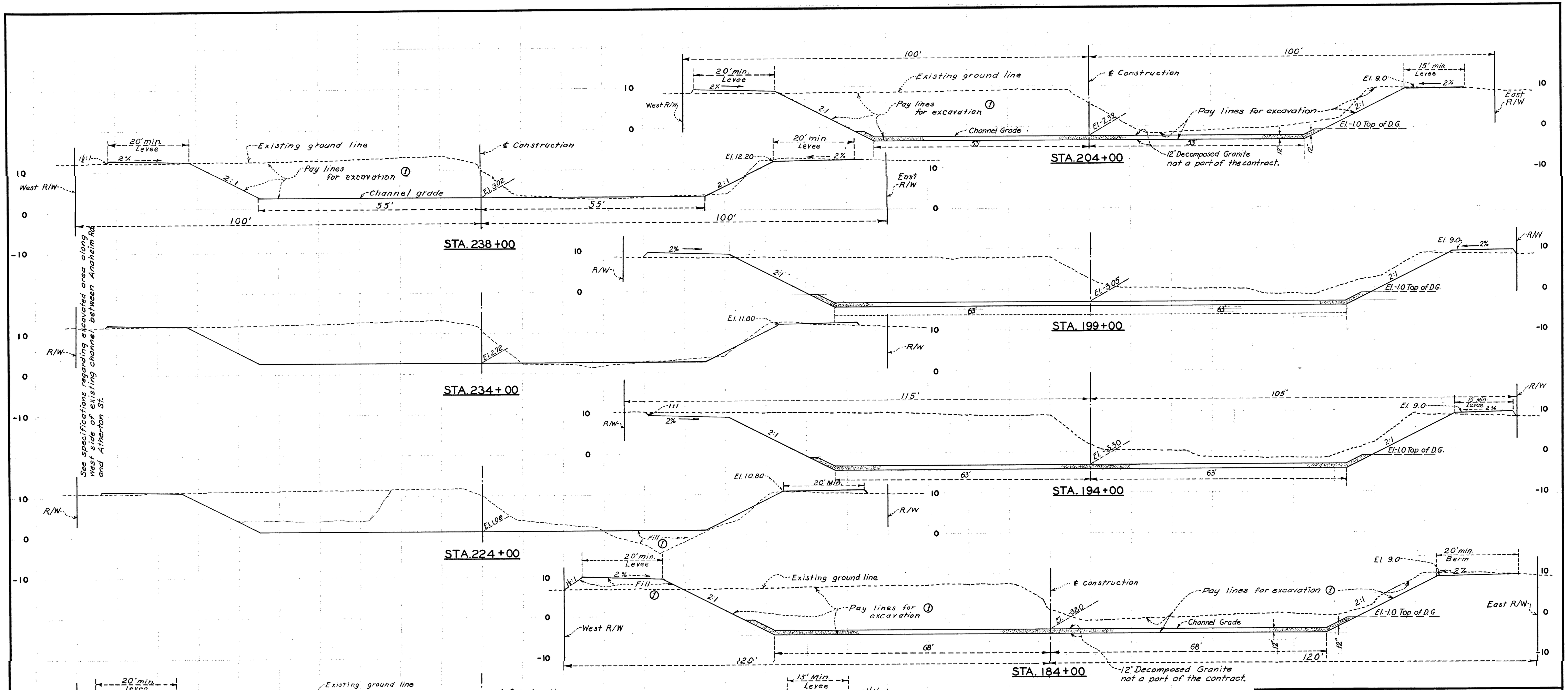
TYPICAL DRAIN DETAILS

SCALE: 1" = 5'



TYPICAL SECTION SHOWING CONSTRUCTION TOLERANCES

REVISIONS			LOS ANGELES COUNTY FLOOD CONTROL DISTRICT
MARK	DATE	DESCRIPTION	LOS CERRITOS CHANNEL ATHERTON ST. TO ALAMITOS BAY CHANNEL EXCAVATION BOUTON CREEK INLET AND DRAINAGE DETAILS
			APPROVED BY



NOTE:
FOR CONSTRUCTION TOLERANCES, SEE SHT. 7

REVISIONS		
MARK	DATE	DESCRIPTION

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT

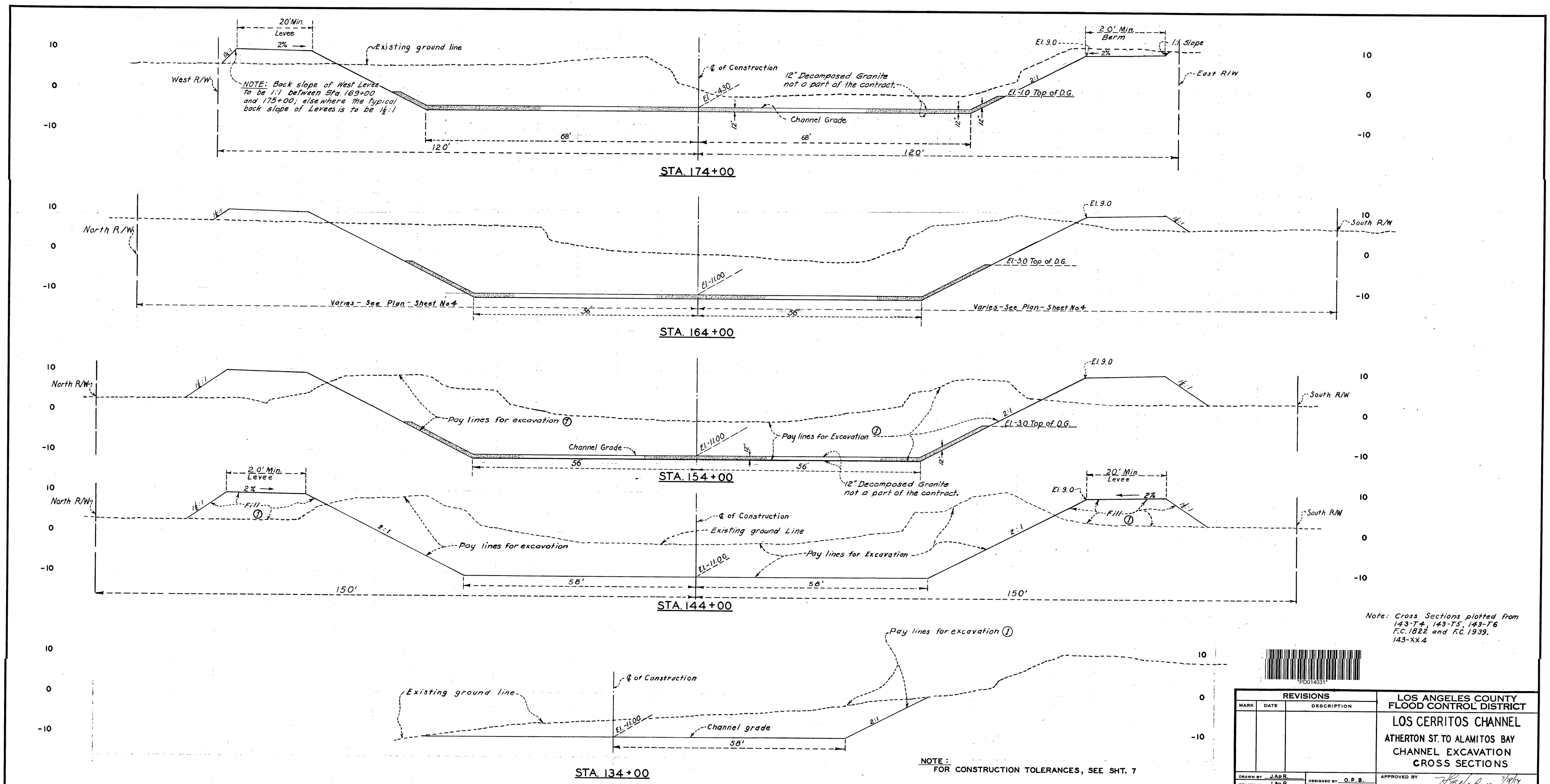
LOS CERRITOS CHANNEL
ATHERTON ST. TO ALAMITOS BAY
CHANNEL EXCAVATION
CROSS SECTIONS

DRAWN BY J.ApR. DESIGNED BY O.P.B.
TRACED BY J.ApR.
CHECKED BY P.J.W. SUBMITTED BY C.A.H.
RECOMMENDED BY W.B. Ream by GWS DIVISION ENGINEER (DESIGN)

APPROVED BY H.E. Hedger 7/8/54 CHIEF ENGINEER

SCALE 1" - 10' DATE JUNE 1954 NO. 143-D13.8 SHEET 8 OF 9

PD014030



Note: Cross Sections plotted from 143-T4, 143-T5, 143-T6 F.C. 1822 and F.C. 1939. 143-XX4

NOTE:
FOR CONSTRUCTION TOLERANCES, SEE SHT. 7

PD014031

REVISIONS		
MARK	DATE	DESCRIPTION

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT

LOS CERRITOS CHANNEL

ATHERTON ST. TO ALAMITOS BAY

CHANNEL EXCAVATION CROSS SECTIONS

DRAWN BY J.Ap.R. DESIGNED BY O.P.B.
TRACED BY J.Ap.R. SUBMITTED BY C.A.H.
CHECKED BY P.J.W.
RECOMMENDED BY W.P. Ream by GWO DIVISION ENGINEER (DESIGN)

APPROVED BY H.E. Hedger 7/28/54 CHIEF ENGINEER

SCALE 1" = 10' DATE JUNE 1954 NO. 143-D13.9 SHEET 9 OF 9