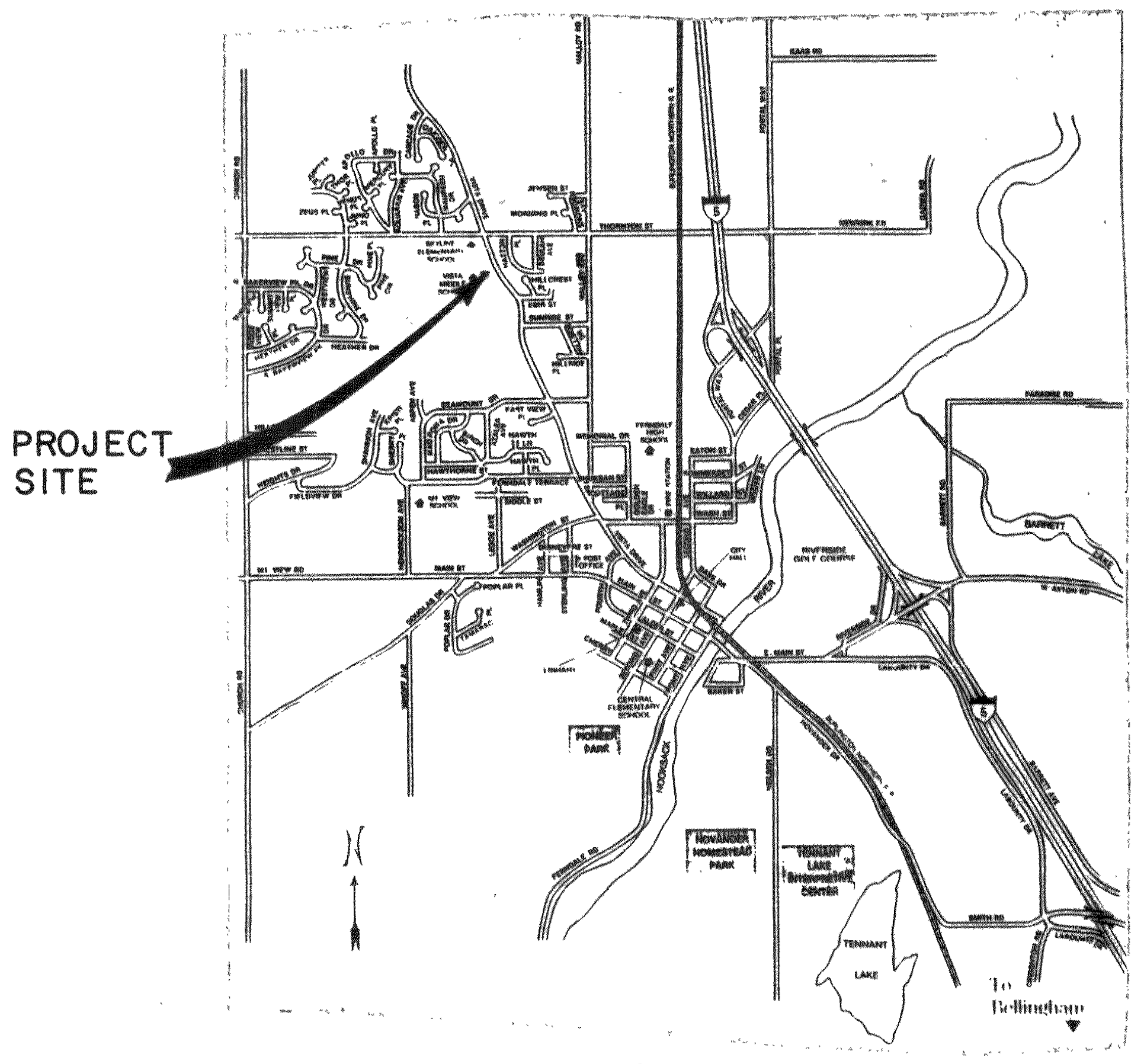
124375

00185.001 2.8.00 JK

VISTA DRIVE - FERNDALE TERRACE TO THORNTON ROAD

CONTRACT DRAWINGS FOR:
ROADWAY IMPROVEMENTS
T.I.B. NO. 9-W-985 (001)
WHATCOM COUNTY, WASHINGTON

OWNER: CITY OF FERNDALE
CONTACT PERSON: JOHN F. ELEY, PUBLIC WORKS DIRECTOR
CONSULTING ENGINEERS: WEDEN ENGINEERING, INC.
R.Z.A. GEOTECHNICAL CONSULTANTS



LOCATION MAP

DRAWING INDEX

SHT. NO.	TITLE
1	TITLE SHEET, VICINITY AND LOCATION MAPS
2	PLAN AND PROFILE 10+50 TO 16+00
3	PLAN AND PROFILE 16+00 TO 21+50
4	PLAN AND PROFILE 21+50 TO 27+00
5	PLAN AND PROFILE 27+00 TO 32+50
6	PLAN AND PROFILE 32+50 TO 38+00
7	PLAN AND PROFILE 38+00 TO 43+50
8	PLAN AND PROFILE 43+50 TO 48+20
9	DETAILS
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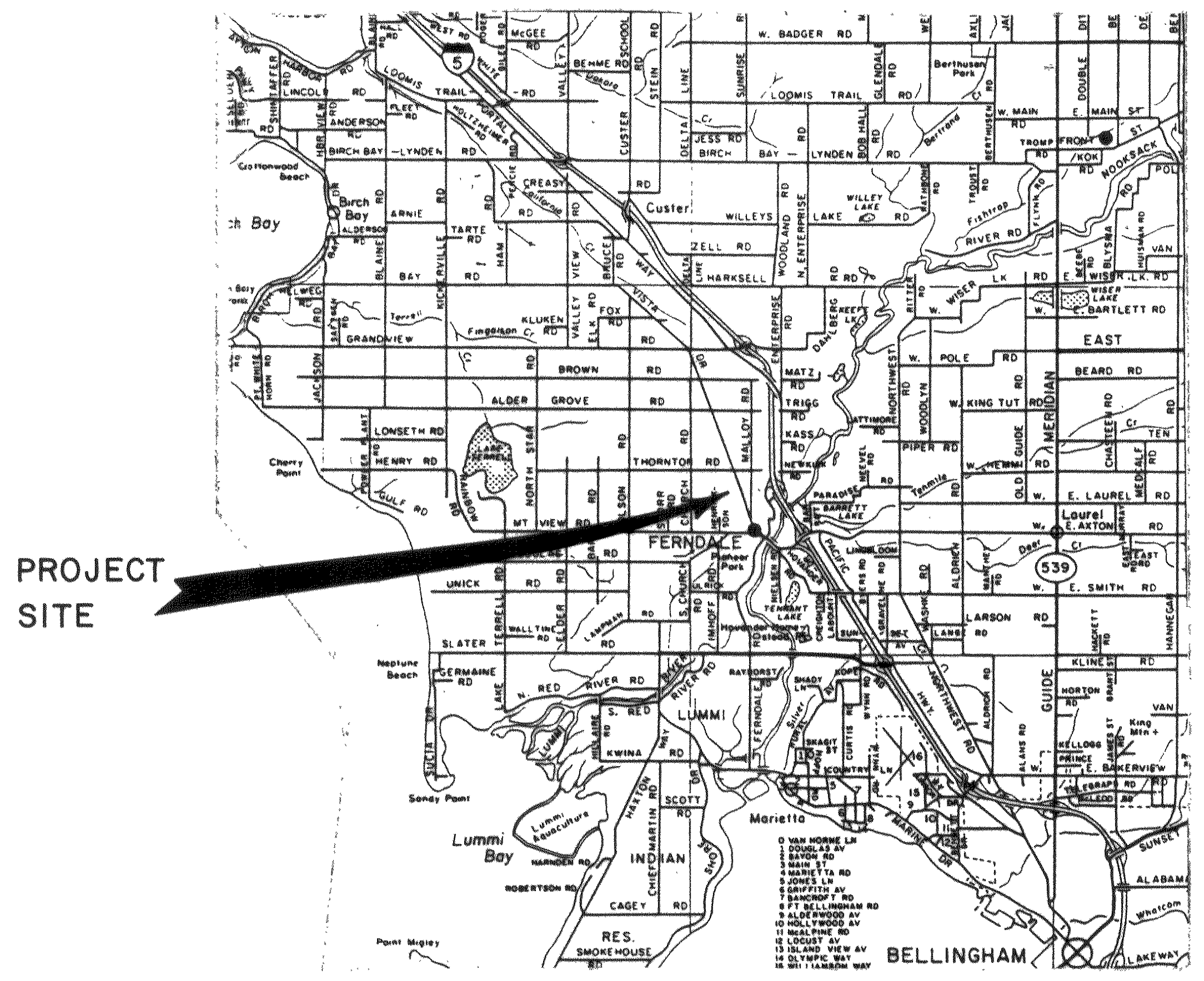
11-19	CROSS-SECTIONS



VICINITY MAP

LEGEND

EXISTING:		PROPOSED:
— — —	RIGHT OF WAY LINE	
————	ROAD CENTERLINE WITH 100 FOOT STATION INDICATED	
– – – –	EXIST. GROUND LINE AT ROADWAY CENTERLINE	
— SD —	STORM DRAIN WITH SIZE AND MANHOLE	—SD—
	GAS LINE (NO SIZES SHOWN)	
- W -	WATERLINE WITH SIZE AND VALVE	
⌀⟶	UTILITY POLES W/ GUY WIRES	
●⟶	UTILITY POLES TO BE RELOCATED BY OTHERS	
	CURB & GUTTER W/ SIDEWALK	═══
	CURTAIN DRAIN	---D----
⌣ ⌣ ⌣ ⌣	EDGE OF ASPHALT	
□	CATCH BASIN	■
○	MANHOLE	
⊖	WATER VALVE	●
○	FIRE HYDRANT	●
⊘	WATER METER BOX	⊘
□	MAILBOX	
	DRIVEWAY	⏢
>— —<	CULVERT	—<
— — —	DITCH	
(2/9)	DETAIL NUMBER SHEET NUMBER WHERE FOUND	

GENERAL NOTES

1. THE LOCATION OF EXISTING UTILITIES SHOWN IS APPROXIMATE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY THESE LOCATIONS PRIOR TO CONSTRUCTION.
2. ROADWAY STATIONS ARE USED FOR LAYOUT OF THE WORK WHERE PRACTICAL. THE PROPOSED FINISHED GRADE AND EXISTING GROUND LINE AT ROADWAY CENTERLINE ARE SHOWN ON THE PROFILE, UNLESS INDICATED OTHERWISE.
3. ALL WORK SHALL CONFORM TO THE STANDARD PLANS AND SPECIFICATIONS OF THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION (WSDOT), AND WHATCOM COUNTY DEVELOPMENT STANDARDS UNLESS INDICATED OTHERWISE BY THE CONTRACT DOCUMENTS. IN CASE OF A CONFLICT BETWEEN THE REGULATORY STANDARDS OR SPECIFICATIONS, THE MORE STRINGENT REQUIREMENT WILL PREVAIL.
4. ALL SLOPE AND CONSTRUCTION EASEMENTS SHOWN WILL BE OBTAINED BY THE CITY OF FERNDALE.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE INTEGRITY OF ADJACENT UTILITIES WHICH INCLUDE, BUT ARE NOT LIMITED TO, WATER, SEWER, STORM SEWER, POWER, TELEPHONE, CABLE TV, IRRIGATION, AND STREET LIGHTING.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING EROSION CONTROL MEASURES (SILT FENCE, STRAW BALE DAMS, SILT PONDS, ETC., AS DIRECTED BY THE ENGINEER) THROUGHOUT THE DURATION OF THE PROJECT.
7. PAY LIMITS FOR EXCAVATION AND EMBANKMENT (FILL) WILL BE DETERMINED FROM CROSS SECTIONS TAKEN FOLLOWING THE COMPLETION OF THESE BID ITEMS.
8. THE CONTRACTOR SHALL PROVIDE AND INSTALL TWO PROJECT SIGNS, ONE AT THE BEGINNING OF THE PROJECT AND ONE AT THE END OF THE PROJECT. THESE SIGNS SHALL BE 4 FEET x 8 FEET MOUNTED ON TWO 4 x 6 INCH POSTS TO A MAXIMUM HEIGHT OF 12 FEET. SUBMIT SHOP DRAWINGS AS SPECIFIED PRIOR TO FABRICATION.

RECORD DRAWINGS

NO.	REVISION	BY	DATE

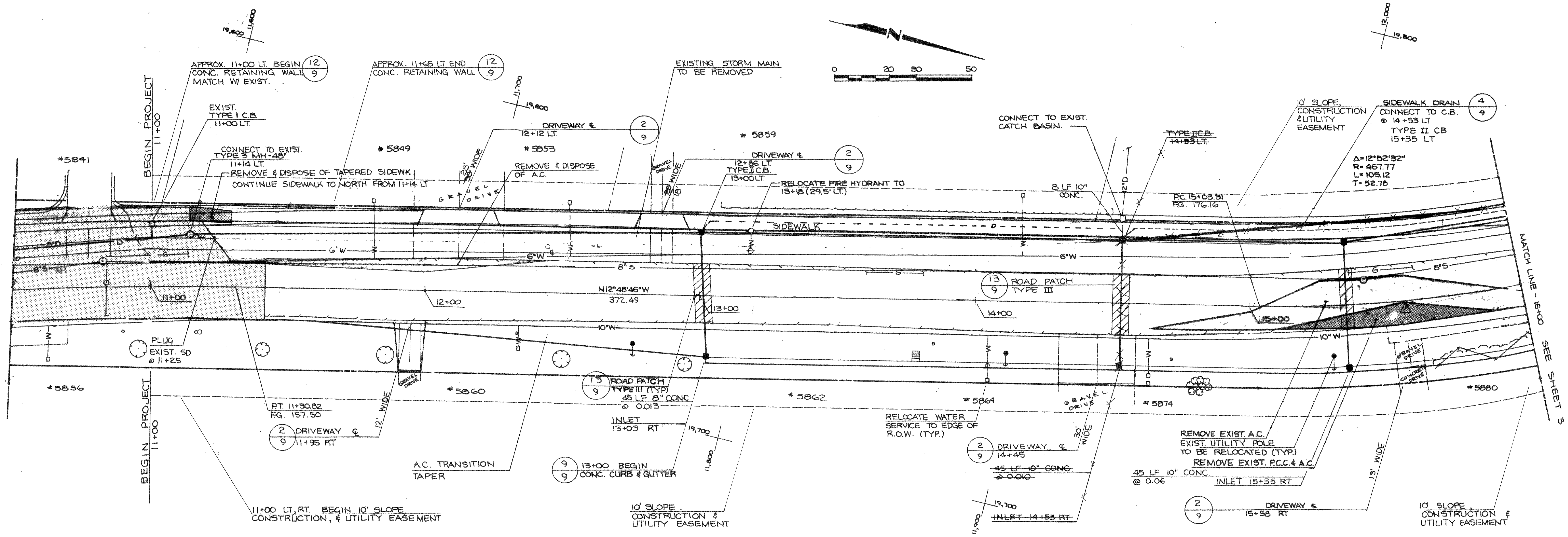
WEDEN ENGINEERING, INC.
ENGINEERING AND LAND SURVEYING
BELLINGHAM, WASHINGTON 671-8200, 354-3723

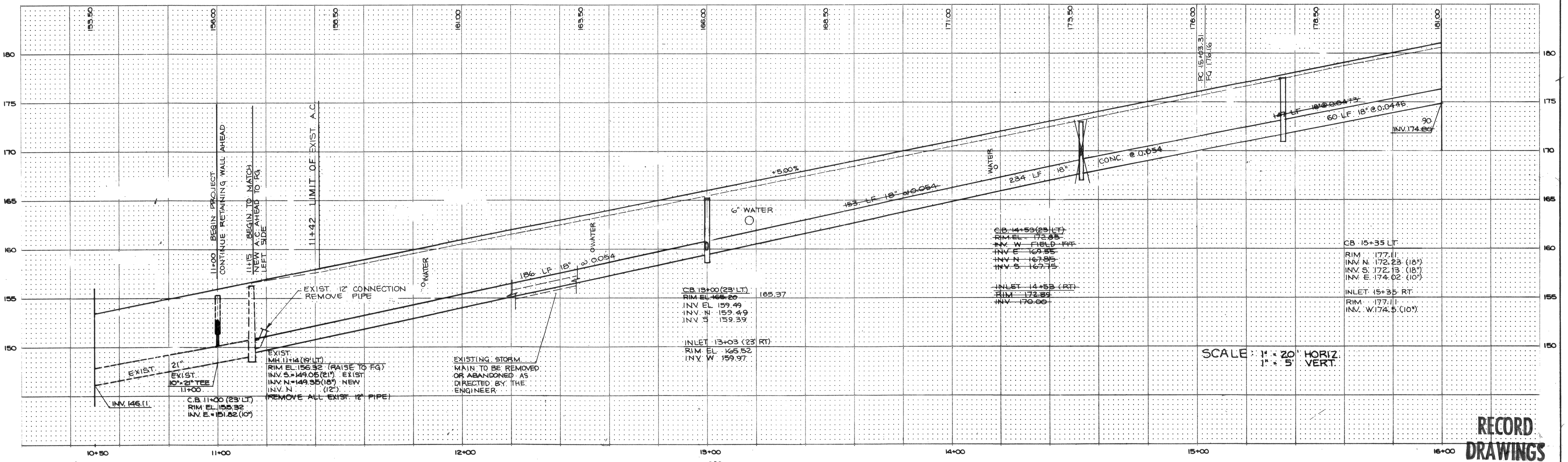
DESIGNED BY: J.L.W.
DRAWN BY: T.E.P.
CHECKED BY:

CITY OF FERNDALE
VISTA DRIVE ROADWAY IMPROVEMENTS
TIB NO. 9-W-985 (001)
TITLE SHEET

DATE	SHEET
MAY '91	1 OF 19
SCALE: AS SHOWN	
JOB NO. 90061	

0188002 28.00 K12


19,600
11,600
APPROX. 11+00 LT. BEGIN CONC. RETAINING WALL MATCH W/ EXIST.
12/9
APPROX. 11+65 LT END CONC. RETAINING WALL
12/9
11,700
19,600
EXISTING STORM MAIN TO BE REMOVED
0 20 30 50
N
12,000
19,500
BEGIN PROJECT 11+00
EXIST. TYPE I C.B. 11+00 LT.
DRIVEWAY ℄ 12+12 LT.
2/9
#5849
#5853
#5859
#5841
CONNECT TO EXIST. TYPE 3 MH-48" 11+14 LT.
REMOVE & DISPOSE OF TAPERED SIDEWK.
CONTINUE SIDEWALK TO NORTH FROM 11+14 LT
28' 30' WIDE
GRAVEL DRIVE
REMOVE & DISPOSE OF A.C.
GRAVEL DRIVE
20' WIDE
18'
DRIVEWAY ℄ 12+86 LT.
2/9
TYPE II C.B. 13+00 LT.
RELOCATE FIRE HYDRANT TO 13+18 (29.5' LT.)
SIDEWALK
CONNECT TO EXIST. CATCH BASIN.
8 LF 10" CONC.
12"D
~~TYPE II C.B. 14+53 LT.~~
10' SLOPE, CONSTRUCTION & UTILITY EASEMENT
SIDEWALK DRAIN CONNECT TO C.B. @ 14+53 LT
4/9
TYPE II CB 15+35 LT
Δ=12°52'32"
R=467.77
L=105.12
T=52.78
P.C. 15+03.31
F.G. 176.16
8"D
8"S
6"W
6"W
8"S
6"W
8"S
G
11+00
12+00
N12°48'46"W
372.49
13+00
13/9 ROAD PATCH TYPE III
14+00
15+00
10"W
10"W
W
MATCH LINE - 16+00 SEE SHEET 3
PLUG EXIST. SD @ 11+25
#5856
#5860
#5862
#5864
#5874
#5880
GRAVEL DRIVE
GRAVEL DRIVE
CONCRETE DRIVE
P.T. 11+30.82
F.G. 157.50
2/9 DRIVEWAY ℄ 11+95 RT
12' WIDE
13/9 ROAD PATCH TYPE III (TYP)
45 LF 8" CONC @ 0.013
INLET 13+03 RT
19,700
11,800
RELOCATE WATER SERVICE TO EDGE OF R.O.W. (TYP.)
2/9 DRIVEWAY ℄ 14+45
30' WIDE
~~45 LF 10" CONC. @ 0.010~~
REMOVE EXIST. A.C.
EXIST. UTILITY POLE TO BE RELOCATED (TYP.)
REMOVE EXIST. P.C.C. & A.C.
45 LF 10" CONC. @ 0.06
INLET 15+35 RT
13' WIDE
BEGIN PROJECT 11+00
A.C. TRANSITION TAPER
9/9 13+00 BEGIN CONC. CURB & GUTTER
19,700
11,900
~~INLET 14+53 RT~~
2/9 DRIVEWAY ℄ 15+58 RT
11+00 LT., RT. BEGIN 10' SLOPE, CONSTRUCTION, & UTILITY EASEMENT
10' SLOPE, CONSTRUCTION & UTILITY EASEMENT
10' SLOPE, CONSTRUCTION & UTILITY EASEMENT


153.50
156.00
158.50
161.00
163.50
166.00
168.50
171.00
173.50
176.00
178.50
181.00
180
175
170
165
160
155
150
PC 15+03.31
FG 176.16
11+00 BEGIN PROJECT
CONTINUE RETAINING WALL AHEAD
11+15 BEGIN TO MATCH NEW A.C. AHEAD TO FG LEFT SIDE
11+42 LIMIT OF EXIST. A.C.
+5.00%
6" WATER
WATER
WATER
WATER
186 LF 18" @ 0.054
~~153 LF 18" @ 0.054~~
234 LF 18" CONC. @ 0.054
~~147 LF 18" @ 0.0473~~
60 LF 18" @ 0.0446
90
INV. ~~174.89~~
EXIST. 12" CONNECTION REMOVE PIPE
EXIST. 21"
EXIST. 10"×21" TEE 11+00
INV. 146.11
C.B. 11+00 (23' LT.)
RIM EL. 155.32
INV. E.=151.82 (10")
EXIST. MH. 11+14 (19' LT.)
RIM EL. 156.32 (RAISE TO FG)
INV. S.=149.05 (21") EXIST
INV. N.=149.35 (18") NEW
INV. N (12")
(REMOVE ALL EXIST. 12" PIPE)
EXISTING STORM MAIN TO BE REMOVED OR ABANDONED AS DIRECTED BY THE ENGINEER
C.B. 13+00 (23' LT.)
~~RIM EL. 165.20~~ 165.37
INV. EL. 159.49
INV. N. 159.49
INV. S. 159.39
INLET 13+03 (23' RT)
RIM EL. 165.52
INV. W. 159.97
~~C.B. 14+53 (23' LT.)~~
~~RIM EL. 172.85~~
~~INV. W FIELD FIT~~
~~INV. E 169.85~~
~~INV. N 167.85~~
~~INV. S. 167.75~~
~~INLET 14+53 (RT)~~
~~RIM 172.89~~
~~INV 170.00~~
CB 15+35 LT
RIM 177.11
INV. N. 172.23 (18")
INV. S. 172.13 (18")
INV. E. 174.02 (10")
INLET 15+35 RT
RIM 177.11
INV. W. 174.5 (10")
SCALE: 1" = 20' HORIZ. 1" = 5' VERT.
10+50
11+00
12+00
13+00
14+00
15+00
16+00

RECORD DRAWINGS

NO.	REVISION	BY	DATE

WEDEN ENGINEERING
ENGINEERING AND LAND SURVEYING
BELLINGHAM, WASHINGTON 671-8200, 354-3723

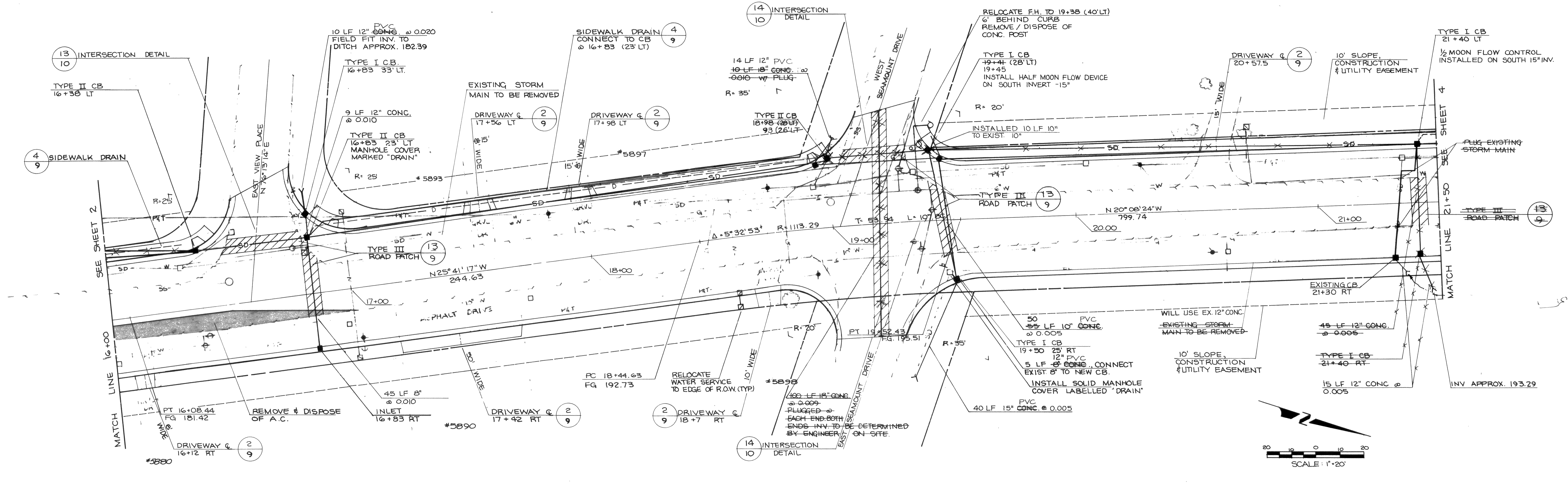
DESIGNED BY J.L.W.
DRAWN BY T.E.P.
CHECKED BY K.S., C.O.L.

CITY OF FERNDALE
VISTA DRIVE ROADWAY IMPROVEMENTS
T.I.B. NO. 9-W-985 (001)
PLAN AND PROFILE 11+00 TO 16+00

DATE MAY '91
SCALE AS SHOWN
JOB NO. 90061
SHEET 2 OF 19

SR 857

124375


13/10 INTERSECTION DETAIL
TYPE II CB 16+38 LT
4/9 SIDEWALK DRAIN
SEE SHEET 2
MATCH LINE 16+00
R=25'
EAST VIEW PLACE N 7°15'14" E
10 LF 12" PVC ~~CONC~~ @ 0.020 FIELD FIT INV. TO DITCH APPROX. 182.39
TYPE I C.B. 16+83 33' LT.
9 LF 12" CONC. @ 0.010
TYPE II CB 16+83 23' LT MANHOLE COVER MARKED "DRAIN"
R= 25'
#5893
EXISTING STORM MAIN TO BE REMOVED
DRIVEWAY ℄ 17+56 LT 2/9
15' WIDE
SIDEWALK DRAIN 4/9 CONNECT TO CB @ 16+83 (23' LT)
DRIVEWAY ℄ 17+98 LT 2/9
#5897
TYPE III ROAD PATCH 13/9
N25°41'17"W 244.63
17+00
18+00
ASPHALT DRIVE
Δ=5°32'53" R=1113.29
T=53.94 L=107.80
19+00
14/10 INTERSECTION DETAIL
14 LF 12" PVC ~~10 LF 18" CONC.~~ @ ~~0.010 W/ PLUG~~
R= 35'
TYPE II CB ~~18+98 (28'LT)~~ 93 (26'LT)
WEST SEAMOUNT DRIVE
RELOCATE F.H. TO 19+38 (40'LT) 6' BEHIND CURB REMOVE / DISPOSE OF CONC. POST
TYPE I CB ~~19+41~~ (28'LT) 19+45 INSTALL HALF MOON FLOW DEVICE ON SOUTH INVERT -15"
R= 20'
INSTALLED 10 LF 10" TO EXIST. 10"
TYPE III ROAD PATCH 13/9
N 20°08'24"W 799.74
20.00
21+00
DRIVEWAY ℄ 20+57.5 2/9
15' WIDE
10' SLOPE, CONSTRUCTION & UTILITY EASEMENT
TYPE I CB 21+40 LT
½ MOON FLOW CONTROL INSTALLED ON SOUTH 15" INV.
SEE SHEET 4
~~PLUG EXISTING STORM MAIN~~
MATCH LINE 21+50
~~TYPE III ROAD PATCH~~ ~~13/9~~
EXISTING CB 21+30 RT
WILL USE EX. 12" CONC.
~~EXISTING STORM MAIN TO BE REMOVED~~
~~45 LF 12" CONC. @ 0.005~~
~~TYPE I CB 21+40 RT~~
10' SLOPE, CONSTRUCTION & UTILITY EASEMENT
15 LF 12" CONC @ 0.005
INV APPROX. 193.29
50 ~~55~~ LF 10" PVC ~~CONC.~~ @ 0.005
TYPE I CB 19+50 25' RT
5 LF 12" PVC ~~8" CONC~~., CONNECT EXIST. 8" TO NEW C.B.
INSTALL SOLID MANHOLE COVER LABELLED "DRAIN"
40 LF 15" PVC ~~CONC.~~ @ 0.005
R=35'
PT 19+52.43 F.G. 195.51
EAST SEAMOUNT DRIVE
R= 20'
~~100 LF 18" CONC. @ 0.009 PLUGGED @ EACH END. BOTH ENDS INV. TO BE DETERMINED BY ENGINEER ON SITE.~~
14/10 INTERSECTION DETAIL
#5898
2/9 DRIVEWAY ℄ 18+7 RT
10' WIDE
RELOCATE WATER SERVICE TO EDGE OF R.O.W. (TYP)
PC 18+44.63 FG 192.73
DRIVEWAY ℄ 17+42 RT 2/9
30' WIDE
#5890
45 LF 8" @ 0.010
INLET 16+83 RT
REMOVE & DISPOSE OF A.C.
PT 16+08.44 FG 181.42
DRIVEWAY ℄ 16+12 RT 2/9
30' WIDE
#5880
N
20 10 0 10 20
SCALE: 1"=20'

181.00
183.50
186.00
188.50
190.96
192.62
192.91
193.65
194.26
195.46
196.67
198.26
200.40
202.70
100' VC
E= 0.324
100' VC
E= 0.26
PT 16+08.44 FG 181.42
BVC 17+83.08 FG 190.15
P.I.V.C. 18+33.08 EL 192.65 F.G. 192.32
EVC 18+83.08 FG 193.85
BVC 19+89.00 FG 196.39
P.I.V.C. 20+39 EL 197.59 F.G. 197.87
EVC 20+89.00 F.G. 199.89
5.00%
2.40%
4.60%
38 LF 18" @ ~~0.0473~~ 0.0446
45 LF 18" @ 0.0462
6" WATER
WATER
GAS
210 LF 18" CONC @ 0.035
~~215 LF 18" CONC @ 0.046~~
INV 174. ~~80~~ 90
52
~~45~~ LF 15" CONC. @ ~~0.009~~ 0.0115
6" SS
GAS
6" WATER
195 LF 15" CONC @ 0.0337
~~200 LF 15" CONC @ 0.017~~
WATER
10 LF 12" ~~CONC~~ PVC @ 0.0505
10 LF 10" CONC @ 0.001
INV. ~~193.67~~ 196.75
200
195
190
185
180
16+00
17+00
18+00
19+00
20+00
21+00
21+50
20+25 FG. 197.40
20+75 FG. 199.27

CB 16+38 LT
RIM EL 183.16
INV N ~~176.70~~ 178.70
INV S ~~176.60~~ 175.85

CB 16+83 (23' LT)
RIM EL 184.69
INV S ~~178.78~~ (18") 181.18
INV W 182.00 (12")
INV N ~~178.88~~ (18") 181.18
INV NE 182.15 (8")

CB 16+83 (33' LT)
RIM EL 184.77
INV SW 182.19 (12")
INV E 182.09 (12")

INLET 16+83 RT
RIM EL 184.~~30~~ 52
INV. W 182.60

CB 18+~~98~~ 93 LT
RIM EL 193.55
INV S 188.~~77~~ 59 (18")
INV W 188.87 (18")
INV NW 191.00 (8" EXIST.)
INV. N 188.~~90~~ 72 (15")

CB 19+~~41~~ 45 LT
RIM EL 194.~~73~~ 70
INV E. ~~189.51 (10")~~ 189.82 (15")
INV S. 189.32 (15")
INV N 189.42 (15")

CB 19+50 RT
RIM EL 194.82
INV. SW. 189.89 ~~(8")~~ (12")
INV. W. 189.~~79~~ 57 ~~(10")~~ (15")

CB 21+~~40~~ 30 RT
RIM EL. 201.~~44~~ 61
INV NE 193.21 (12")
~~INV W 193.11 (12")~~

CB 21+40 LT
RIM EL 201.~~44~~ 61
INV S. ~~192.79~~ (15") 196.00
~~INV E. 192.89 (12")~~
INV N. ~~193.00~~ (12") 196.25

SCALE: 1"=20' HORIZ.
1"=5' VERT.

RECORD DRAWINGS

00180.003 2800 KR

NO.	REVISION	BY	DATE

WEDEN ENGINEERING, INC.
ENGINEERING AND LAND SURVEYING
BELLINGHAM, WASHINGTON 671-8200, 354-3723

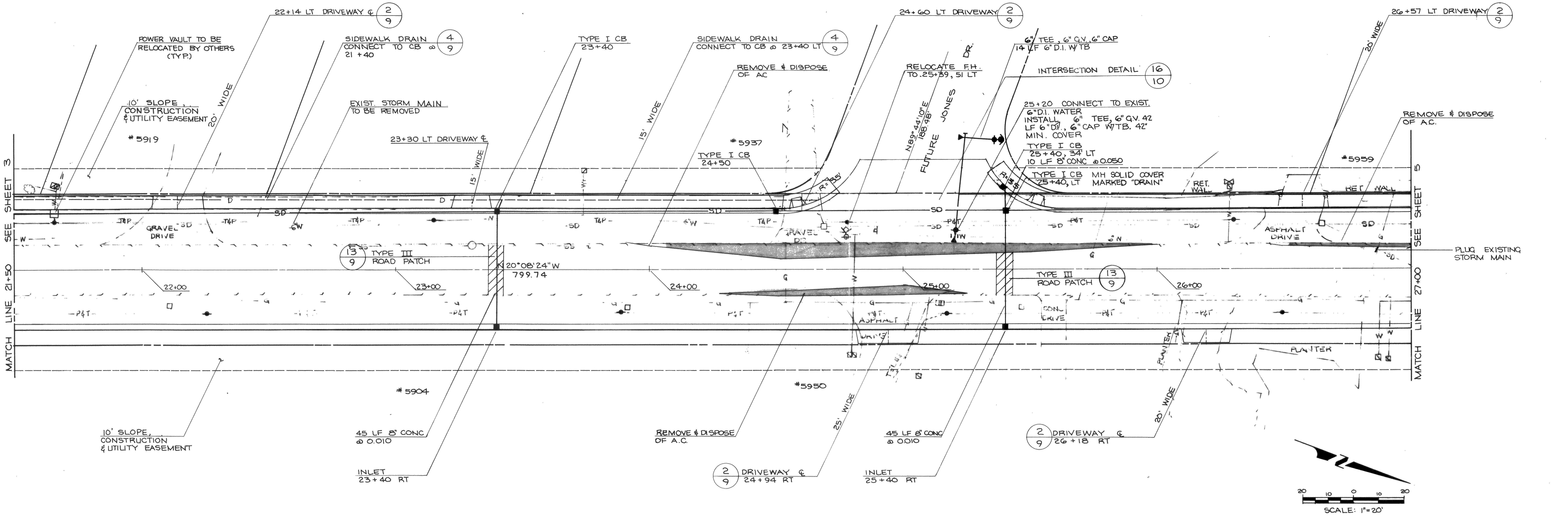
DESIGNED BY: JLW
DRAWN BY: TEP
CHECKED BY: COL

CITY OF FERNDALE
VISTA DRIVE ROADWAY IMPROVEMENTS
TIB NO. 9-W-985 (001)
PLAN AND PROFILE 16+00 TO 21+50

DATE MAY. '91
SCALE AS SHOWN
JOB NO. 90061
SHEET 3 OF 19

124375

00188.007 / 8.00 +R



22+14 LT DRIVEWAY ℄ 2/9
POWER VAULT TO BE RELOCATED BY OTHERS (TYP.)
SIDEWALK DRAIN CONNECT TO CB @ 21+40 4/9
TYPE I CB 23+40
SIDEWALK DRAIN CONNECT TO CB @ 23+40 LT 4/9
24+60 LT DRIVEWAY 2/9
26+57 LT DRIVEWAY 2/9
10' SLOPE, CONSTRUCTION & UTILITY EASEMENT
20' WIDE
EXIST. STORM MAIN TO BE REMOVED
REMOVE & DISPOSE OF AC
RELOCATE F.H. TO 25+39, 51 LT
6" TEE, 6" G.V. 6" CAP
14 LF 6" D.I. W/TB
INTERSECTION DETAIL 16/10
25+20 CONNECT TO EXIST. 6" D.I. WATER INSTALL 6" TEE, 6" G.V. 42 LF 6" DI, 6" CAP W/TB. 42" MIN. COVER
TYPE I CB 25+40, 34' LT 10 LF 8" CONC @ 0.050
TYPE I CB 25+40, LT MH SOLID COVER MARKED "DRAIN"
REMOVE & DISPOSE OF A.C.
#5919
#5937
#5959
#5904
#5950
23+30 LT DRIVEWAY ℄
15' WIDE
TYPE I CB 24+50
N89°44'10"E 188.48'
FUTURE JONES DR.
RET. WALL
SHEET 3
SEE SHEET 5
GRAVEL DRIVE
13/9 TYPE III ROAD PATCH
N20°08'24"W 799.74
22+00
23+00
24+00
25+00
26+00
ASPHALT DRIVE
PLUG EXISTING STORM MAIN
TYPE III ROAD PATCH 13/9
CONC. DRIVE
ASPHALT
PLANTER
MATCH LINE 21+50
MATCH LINE 27+00
SD
T&P
W
G
P&T
10' SLOPE, CONSTRUCTION & UTILITY EASEMENT
45 LF 8" CONC @ 0.010
INLET 23+40 RT
REMOVE & DISPOSE OF A.C.
25' WIDE
2/9 DRIVEWAY ℄ 24+94 RT
45 LF 8" CONC @ 0.010
INLET 25+40 RT
2/9 DRIVEWAY ℄ 26+18 RT
20' WIDE
20 10 0 10 20
SCALE: 1"=20'

RECORD DRAWINGS

NO.	REVISION	BY	DATE

WEDEN ENGINEERING, INC.
ENGINEERING AND LAND SURVEYING
BELLINGHAM, WASHINGTON 671-8200, 354-3723

DESIGNED BY: J.L.W.
DRAWN BY: T.E.P.
CHECKED BY:

CITY OF FERNDALE
VISTA DRIVE ROADWAY IMPROVEMENTS
TIB NO. 9-W-985 (001)
PLAN AND PROFILE 21+50 TO 27+00

DATE MAY '91
SCALE AS SHOWN
JOB NO. 90061
SHEET 4 OF 19

124378

00188.005 2.8.06 KZ

27+11 LT DRIVEWAY ℄ 2/9
27+82 LT DRIVEWAY ℄ 2/9
REMOVE & DISPOSE OF A.C.
TYPE I CB 27+50 LT
10' SLOPE, CONSTRUCTION & UTILITY EASEMENT
CONNECT EXIST. 3" DRAIN TO SIDEWALK DRAIN 29+18, LT
29+82 LT DRIVEWAY ℄ 2/9
~~TYPE I CB W/ SOLID COVER 31+47 LT CONNECT TO EXIST 8" CONC.~~
℄ CURVE DATA Δ = 21° 42' 42" R = 409.22 T = 78.48 L = 155.07
INTERSECTION DETAIL 31+66 DIRT ROAD 15/10
RELOCATE FH ASSEMBLY W/ G.V. 31+95 43' LT INSTALL 8"x10" TEE, 8" TEE, 8" G.V. 30 LF 8" D.I., 8" CAP
EXISTING STORM MAIN TO BE REMOVED
TYPE I CB 29+60 LT
TYPE I CB 31+25 LT
PC 31+13.24 BEGIN LEFT LANES FULL SUPER +1%
5 LF 8" PVC
R = 35'
INLET 1
8 LF 8" PVC
#5987
TYPE I CB 32+05
25' WIDE
35' WIDE
#5959
#5973
#5979
SEE SHEET 4
MATCH LINE 27+00
SEE SHEET 6
MATCH LINE 32+50
N 20°08' 24" W 799.74
TYPE III ROAD PATCH 13/9
PRV MANHOLE
28+00
29+00
30+00
31+00
32+00
N 16° 52' 39" W 218.72
64 LF 10" PVC
12" CULVERT
PLUG EXISTING STORM MAIN
EXISTING STORM MAIN TO BE REMOVED
℄ CURVE DATA Δ = 3° 15' 45" R = 2500.00 L = 142.35
45 LF 8" CONC. @ 0.005
PC 27+52.17
INLET 27+50 RT
10' SLOPE, CONSTRUCTION & UTILITY EASEMENT
PT 28+94.52
40' WIDE
DRIVEWAY ℄ 29+01 RT. 2/9
45 LF 8" CONC. @ 0.010
INLET 29+60 RT
29+77.21 ANGLE POINT
29+87.27 BEGIN LT. & RT LANES TRANSITION FOR SUPER AHEAD
31+00 BEGIN FULL SUPER 3% RIGHT LANES
#2165 SUNRISE CT.
15/10 INTERSECTION DETAIL
SUNRISE STREET
R = 20'
R = 30'
50 LF 8" CONC @ 0.010
#2166 SUNRISE CT
TYPE I CB 31+65 RT
32+00 END FULL SUPER +3% RIGHT LANES
PLANTER
RET. WALL
ASPHALT
CONCRETE
SD
SS
8" W
P&T
N
20 10 0 10 20

265
260
255
250
245
240
235
230
225
230.09
232.59
235.10
237.60
240.11
242.61
245.12
247.63
250.13
252.63
255.14
257.65
PC 31+13.24 FG 250.79
5.01%
WATER
GAS
U.G. P & 80 TEL
50 LF 12" PVC ~~CONC~~ @ 0.048
210 LF 12" PVC ~~CONC~~ @ 0.0502
165 LF 12" PVC ~~CONC~~ @ 0.052
22 LF 12" @ 0.060
64 LF 10" PVC
6" WATER
108 LF 12" CONC @ 0.045
49 LF 12" PVC
INV 251.10
INV 223.19
CB 32+05 LT
CB 31+65 RT RIM EL 251.82 INV NW 247.01
CB 31+25 LT RIM EL 251.35 INV S 244.95 INV N 245.00
~~CB 31+47 LT RIM EL 252.54 INV NE 246.51 (8") INV NW 248.60 (EXIST 8") INV S 246.14 (12") INV N 246.24 (12")~~
CB 29+60 LT RIM EL 242.32 INV E 236.53 (8) INV S 236.27 INV N 236.37
INLET 29+60 RT RIM EL 242.32 INV W 236.98
CB 27+50 LT RIM EL 231.80 INV E 225.89 (8") INV S 225.63 (12") INV N 225.73 (12")
INLET 27+50 RT RIM EL 231.80 INV W 226.12 (8")
27+00
28+00
29+00
30+00
31+00
32+00
32+50

SCHEDULE OF T.O.C. ELEVATIONS FOR SUPERELEVATION SECTIONS

STATION	TOC LEFT	TOC RIGHT
29+87.27	244.55	244.55
30+00	245.15	245.07
30+25	246.54	246.27
30+50	247.93	247.48
30+75	249.31	248.67
31+00	250.70	249.88
31+25	252.03	251.13
31+50	253.28	252.38
31+75	254.53	253.63
32+00	255.79	254.89
32+25	257.04	256.18
32+50	258.30	257.48

SCALE: 1" = 20' HORIZ. 1" = 5' VERT.

RECORD DRAWINGS

NO.	REVISION	BY	DATE
1	STORM ADDITION	COL	8/4/92

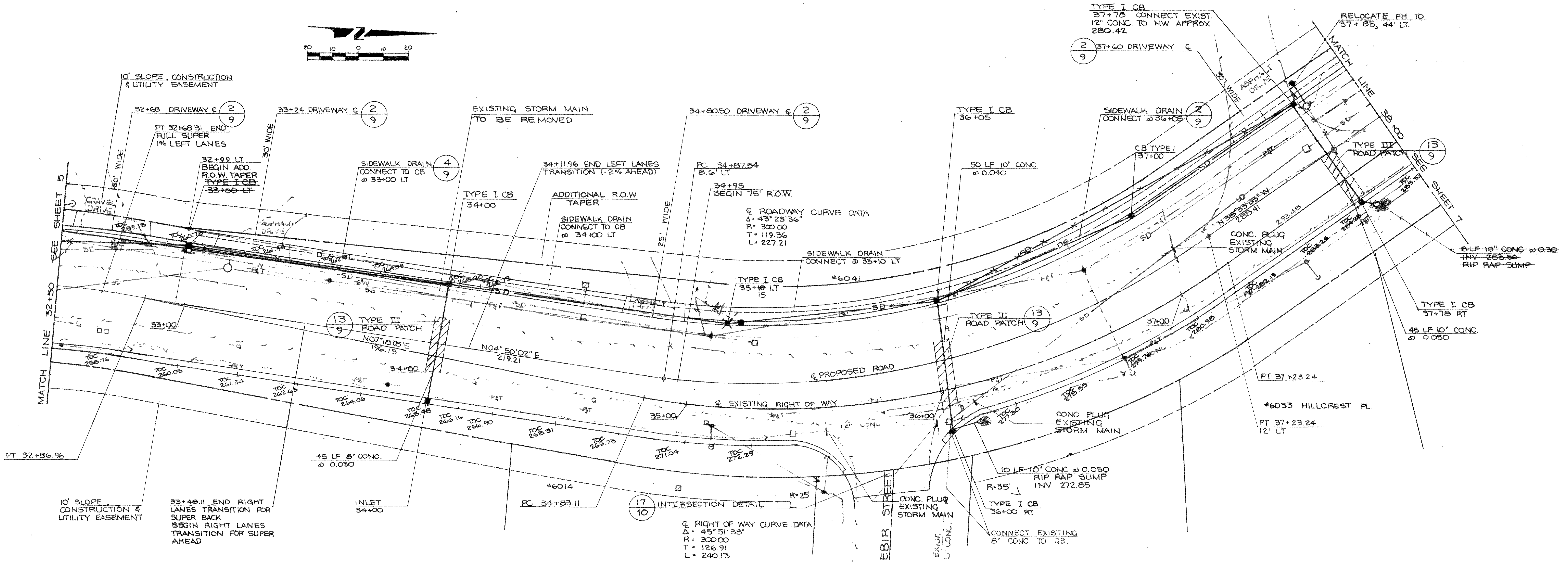
WEDEN ENGINEERING, INC.
ENGINEERING AND LAND SURVEYING
BELLINGHAM, WASHINGTON 671-8200, 354-3723

DESIGNED BY: J.L.W.
DRAWN BY: T.E.P.
CHECKED BY:

CITY OF FERNDALE
VISTA DRIVE ROADWAY IMPROVEMENTS
TIB NO. 9-W-985 (001)
PLAN AND PROFILE 27+00 TO 32+50

DATE MAY '91
SCALE AS SHOWN
JOB NO. 90061
SHEET 5 OF 19

124378


20 10 0 10 20
10' SLOPE CONSTRUCTION & UTILITY EASEMENT
32+68 DRIVEWAY ℄ 2/9
PT 32+68.31 END FULL SUPER 1% LEFT LANES
32+99 LT BEGIN ADD. R.O.W. TAPER ~~TYPE I CB 33+00 LT~~
33+24 DRIVEWAY ℄ 2/9
30' WIDE
SIDEWALK DRAIN CONNECT TO CB @ 33+00 LT 4/9
EXISTING STORM MAIN TO BE REMOVED
TYPE I CB 34+00
34+11.96 END LEFT LANES TRANSITION (-2% AHEAD)
ADDITIONAL R.O.W TAPER
SIDEWALK DRAIN CONNECT TO CB @ 34+00 LT
25' WIDE
34+80.50 DRIVEWAY ℄ 2/9
PC 34+87.54 8.6' LT
34+95 BEGIN 75' R.O.W.
℄ ROADWAY CURVE DATA
Δ= 43°23'36"
R= 300.00
T= 119.36
L= 227.21
SIDEWALK DRAIN CONNECT @ 35+10 LT
TYPE I CB 35+10 LT
#6041
TYPE I CB 36+05
50 LF 10" CONC @ 0.040
SIDEWALK DRAIN CONNECT @ 36+05 2/9
CB TYPE I 37+00
TYPE I CB 37+78 CONNECT EXIST. 12" CONC. TO NW APPROX 280.42
37+60 DRIVEWAY ℄ 2/9
30' WIDE ASPHALT DRIVE
RELOCATE FH TO 37+85, 44' LT.
MATCH LINE 38+00 SEE SHEET 7
TYPE III ROAD PATCH 13/9
CONC. PLUG EXISTING STORM MAIN
N 38°33'53" W 283.41
8 LF 10" CONC @ 0.30 ~~INV 283.50~~ RIP RAP SUMP
TYPE I CB 37+78 RT
45 LF 10" CONC. @ 0.050
PT 37+23.24
#6033 HILLCREST PL.
PT 37+23.24 12' LT
TYPE III ROAD PATCH 13/9
37+00
℄ PROPOSED ROAD
℄ EXISTING RIGHT OF WAY
36+00
35+00
CONC. PLUG EXISTING STORM MAIN
10 LF 10" CONC @ 0.050 RIP RAP SUMP INV 272.85
R=35'
TYPE I CB 36+00 RT
CONNECT EXISTING 8" CONC. TO CB.
CONC. PLUG EXISTING STORM MAIN
EBIR STREET
R=25'
℄ RIGHT OF WAY CURVE DATA
Δ= 45°51'38"
R= 300.00
T= 126.91
L= 240.13
INTERSECTION DETAIL 17/10
PC 34+83.11
#6014
INLET 34+00
45 LF 8" CONC. @ 0.030
33+48.11 END RIGHT LANES TRANSITION FOR SUPER BACK BEGIN RIGHT LANES TRANSITION FOR SUPER AHEAD
10' SLOPE CONSTRUCTION & UTILITY EASEMENT
PT 32+86.96
MATCH LINE 32+50 SEE SHEET 5
33+00
34+00
TYPE III ROAD PATCH 13/9
N07°18'05"E 196.15
N04°50'02"E 219.21
TOC 258.76
TOC 260.05
TOC 261.34
TOC 262.65
TOC 264.06
TOC 265.48
TOC 266.16
TOC 266.90
TOC 268.31
TOC 269.73
TOC 271.04
TOC 272.29
TOC 276.55
TOC 277.30
TOC 278.55
TOC 279.76
TOC 280.98
TOC 282.19
TOC 283.24
TOC 284.28
TOC 285.33
GRAVEL DRIVE
ASPHALT DRIVE
SD
SW

257.65
260.15
262.66
265.16
267.66
270.17
272.67
275.18
277.68
280.11
282.54
284.97
290
285
280
275
270
265
260
255
250
PT 32+68.31
PG 258.56
PC 34+83.11
PG 269.32
GRADE BREAK 36+50
PT 37+23.24
PG 281.24
5.01%
4.86%
INV 251.10
50 LF 12" CONC @ 0.045
6" WATER
8" CONC. SS
12" PVC
100 LF ~~10" CONC~~ @ 0.051
~~CB 33+00 LT~~
~~RIM 260.13~~
~~INV NW 257.81 (6" EX)~~
~~INV S 253.32 (12")~~
~~INV N 253.45 (10")~~
115 PVC
~~110~~ LF 10" @ 0.052
WATER
INLET 34+00 RT
RIM EL 264.80
INV W 260.00 (8")
CB 34+00 LT
RIM EL 264.52
INV. S. 258.55
INV. N. 258.65
15
CB 35+10 LT
RIM EL 270.05
INV. S 264.37
INV. N 264.47
80 ~~85~~ LF 10" ~~CONC.~~ PVC @ 0.046
CB 36+00 (26' RT)
RIM EL 275.49
INV. E 272.40 (EXIST. 10")
INV. W 270.50 (10")
INV. N 272.35 (10")
CB 36+05 LT
RIM EL 274.80
INV. N. 268.48
INV. E 268.48
INV. S 268.38
85 LF 10" PVC @ 0.052
~~150~~ LF 10" CONC @ 0.052
GAS
75 LF 10" PVC @ 0.0508
CB 37+00 LT
RIM EL 279.48
INV. N. 273.00
INV. S. 272.90
6" WATER
22 LF 10" CONC @ 0.054
INV 278.10
CB 37+78 LT
RIM EL 283.28
INV NW 280.42 (EXIST. 12")
INV. E 276.94 (10")
INV. S 276.81 (10")
INV. N 276.91 (10")
CB 37+78 RT
RIM EL 283.81
INV W 279.19 (10")
INV NE 281.10
SCALE: 1" = 20' HORIZ. 1" = 5' VERT.
32+50
33+00
34+00
35+00
36+00
37+00
38+00

SCHEDULE OF T.O.C. ELEVATIONS FOR SUPERELEVATION SECTIONS

STATION	TOC LEFT	TOC RIGHT
32+50	258.30	257.48
32+75	259.55	258.76
33+00	260.73	260.05
33+25	261.84	261.34
33+50	262.97	262.65
33+75	264.09	264.06
34+00	265.20	265.48
34+25	266.38	266.90
34+50	267.64	268.31
34+75	268.88	269.73
35+00	270.14	271.04
35+25	271.39	272.29
35+50	272.64	273.54
35+75	273.89	274.79
36+00	275.15	276.05
36+25	276.40	277.30
36+50	277.65	278.55
36+75	278.86	279.76
37+00	280.08	280.98
37+25	281.29	282.19
37+50	282.51	293.24
37+75	283.72	284.28
38+00	284.94	285.33
38+25	286.15	286.38

RECORD DRAWINGS

NO.	REVISION	BY	DATE

WEDEN ENGINEERING, INC.
ENGINEERING AND LAND SURVEYING
BELLINGHAM, WASHINGTON 671-8200, 354-3723

DESIGNED BY: J.L.W.
DRAWN BY: T.E.P.
CHECKED BY: C.O.L.

CITY OF FERNDALE
VISTA DRIVE ROADWAY IMPROVEMENTS
TIB NO. 9-W-985 (001)
PLAN AND PROFILE 32+50 TO 38+00

DATE MAY '91
SCALE AS SHOWN
JOB NO. 90061
SHEET 6 OF 19

00188.006 2.8.04 KK

124375

00188.007 2.8.00 KK

SIDEWALK DRAIN CONNECT AT 37+78 (4/9)
10' SLOPE, CONSTRUCTION & UTILITY EASEMENT
TYPE I CB 39+70 LT
R= 25'
MATCH EXISTING SIDEWALK, CURB & GUTTER AS SHOWN
INSTALL CROSSWALK, STOP BAR & RELOCATE STOP SIGN (11/9)
R=25'
PC 40+11.64 12' LT
SIDEWALK DRAIN CONNECT AT 40+55 LT (4/9)
TYPE I CB 40+55 LT
AREA TO BE GRADED AND SLOPED BY CONTRACTOR AS DIRECTED BY ENGINEER
TYPE I CB 41+50 LT
SIDEWALK DRAIN CONNECT AT 41+50 LT (4/9)
PT 42+02.55 10.04 LT
RELOCATE FH TO 43+20 38' LT
TYPE I CB 43+15 LT CONNECT 8" CONC. APPROX. INV. 308.31 BEGIN SIDEWALK DRAIN
EXIST. CONC. WATER VAULT TO BE DEMOLISHED BY CONTRACTOR
DRIVEWAY ℄ 43+38 LT
ASPHALT DRIVE
SEE SHEET 6
MATCH LINE 38+00
SEE SHEET 8
MATCH LINE 43+50
D
SD
P&T
CATV
℄ PROPOSED ROAD
℄ EXISTING RIGHT OF WAY
CONC. PLUG EXIST. STORM MAIN
Δ= 21°48'05" R=512.00 T= 98.60 L=194.82
Δ= 20°08'46" R=500.00 T= 88.82 L= 175.81
TYPE III ROAD PATCH (13/9)
TYPE III ROAD PATCH (13/9)
39+00
40+00
41+00
42+00
43+00
N18°24'48"W 568.13
N16°45'28"W 333.14
GRAVEL DRIVE
6053 HATTON PL.
6059 HATTON PL.
6063 HATTON PL.
REMOVE & DISPOSE OF AC
45 LF 10" CONC @ 0.010
TYPE I CB 39+70 RT
8 LF 10" CONC. @ 0.200 INV 291.66 RIP RAP SUMP
PC 40+16.71
45 LF 10" CONC @ 0.010
TYPE I CB 41+50 RT
~~8 LF 10" CONC @ 0.200 INV. 301.33 RIP RAP SUMP~~
PT 41+92.52
10' SLOPE, CONSTRUCTION & UTILITY EASEM'T
REMOVE & DISPOSE OF A.C.
38+58.54 RT END SUPER TRANSITION FULL CROWN AHEAD
20 10 0 10 20

284.97
287.40
289.83
292.52
295.21
297.90
300.59
303.28
305.97
308.22
309.60
310.13
320
315
310
305
300
295
290
285
280
GRADE BREAK 39+00
PC 40+16.71 FG 296.11
BVC 41+99 FG 305.92
200' VC E= 1.72
PIVC 42+99 EL 311.30 FG 309.58
4.86%
5.38%
PVC 170 LF 10" ~~CONC~~ @ 0.054
PVC 85 LF 10" ~~CONC~~ @ 0.052
PVC 100 LF 10" ~~CONC~~ @ 0.052
PVC 165 LF 10" ~~CONC~~ @ 0.051
INV 278.10
CB 39+70 LT RIM EL 292.80 INV E 287.41 (10") INV S 287.28 (10") INV N 287.38 (10")
CB 39+70 RT RIM EL 292.80 INV W 287.86 INV N 290.06
CB 40+55 LT RIM EL 297.37 INV S 291.80 (10") INV N 291.90 (10")
CB 41+50 LT RIM EL 302.48 INV E 297.20 (10") INV S 297.10 (10") INV N 297.20 (10")
CB 41+50 RT RIM EL 302.48 INV W 297.65 (10") INV N 299.73
PT 41+92.52 FG 305.57
CB 43+15 LT RIM EL 308.93 INV W 308.00 (EXIST 8") INV S 306.65 (10")
42+25 FG 307.20
42+75 FG 309.02
43+25 FG 309.97
38+00
39+00
40+00
41+00
42+00
43+00
43+50

SCHEDULE OF T.O.C. ELEVATIONS FOR SUPERELEVATION SECTION

STATION	TOC LEFT	TOC RIGHT
38+25	286.15	286.38
38+50	287.37	287.43
38+58.54	287.79	287.78

SCALE: 1" = 20' HORIZ.
1" = 5' VERT.

RECORD DRAWINGS

NO.	REVISION	BY	DATE

WEDEN ENGINEERING, INC.
ENGINEERING AND LAND SURVEYING
BELLINGHAM, WASHINGTON 671-8200, 354-3723

RICHARD E. State of Washington Registered Professional Engineer & Land Surveyor

DESIGNED BY: J.L.W.
DRAWN BY: T.E.P.
CHECKED BY: C.O.L.

CITY OF FERNDALE
VISTA DRIVE ROADWAY IMPROVEMENTS
TIB NO. 9-W-985 (001)
PLAN AND PROFILE 38+00 TO 43+50

DATE MAY '91
SCALE AS SHOWN
JOB NO. 90061
SHEET 7 OF 19

124375

00188.008 2.8.06 KR

PC 45+35.56 0.42 LT.
REMOVE & DISPOSE OF A.C.
REMOVE EXISTING CONC. STAIRS AND INSTALL NEW STAIRS TO SAME STANDARDS. MATCH W/ EXISTING LOWER WALK
11/9 10' WIDE CROSSWALK W/ 12" WHITE THERMO-PLASTIC BARS
REMOVE, DISPOSE OF & REPLACE CONC. CURB & SIDEWALK (TYP.)
MATCH CURB, GUTTER & SIDEWALK TO EXIST.
14/9 GUARD RAIL
INLET 45+50
INLET 47+10 LT
CONC S/W & CURB
#6041
ROCKERY
EXISTING WALK
PLANTER
EXIST. WALK
ROAD
N89°40'00"W
SEE SHEET 7
MATCH LINE 43+50
GRAVEL DRIVE
℄ PROPOSED ROADWAY
N18°24'48"W 568.13
N16°45'28"W 333.14
℄ EXISTING RIGHT OF WAY
44+00
45+00
46+00
47+00
TYPE III ROAD PATCH 13/9
TYPE III ROAD PATCH 13/9
T&P
W
SS
CONC. DRIVE
CONC. DRIVE
CONC. DRIVE
20' WIDE
40' WIDE
25' WIDE
#6063
#6080
#6094
THORNTON
12" PVC
99 LF 12" PVC
18 LF
PT 45+64.45 0.0 LT
45 LF 8" CONC. @ 0.010
45 LF 8" CONC @ 0.010
TYPE I CB 45+50 RT
TYPE I CB 47+10 RT
TYPE I CB 47+26 RT
RELOCATE WATER SERVICE TO R.O.W. (TYP.)
DRIVEWAY ℄ 44+13.5 RT 2/9
DRIVEWAY ℄ 44+47 RT 2/9
DRIVEWAY ℄ 45+25 RT 2/9
~~45+37.5 RT BEGIN GORE STRIPING FOR LANE REDUCTION - 8" WHITE LINE @ 45° 20 FEET O.C.~~
LANE REDUCTION SIGN - W4-2 43+75, 30' RT
~~TYPE I CB 47+71, 24' RT CONNECT EXIST. 18" CMP~~
INTERSECTION DETAIL 18/10
END OF PROJECT 48+20 MATCH EXISTING A.C.
EXISTING INLET
20 10 0 10 20
310.11
309.79
309.04
308.30
307.55
306.81
306.05
305.32
304.57
303.64
302.97
320
315
310
305
300
295
290
VC
EVC 43+99 FG 309.81
-1.49%
WATER
WATER
WATER
PVC
160 LF 10" ~~CONC~~ @ 0.012
INTERSECTION VISTA DRIVE 47+56.46 THORTON ROAD FG 304.47
GRADE BREAK 47+92 FG 303.95
END OF PROJECT 48+20
-3.50%
CB 47+26 RT.
CB 45+50 RT RIM 306.75 INV W 302.88 INV N 302.75
INLET 45+50 LT RIM 306.75 INV E 303.33 (8")
CB 47+10 RT RIM 304.37 INV W 300.86 (8") INV N 300.73 (12") INV S 300.83 (10")
INLET 47+10 LT RIM 304.37 INV E 301.31 (8")
~~CB 47+71 RT RIM 303.00 ± INV S 300.00 (12")~~
SCALE: 1" = 20' HORIZ. 1" = 5' VERT.
43+50 FG 310.13
43+75 FG 310.07
43+50
44+00
45+00
46+00
47+00
47+6
48+00

RECORD DRAWINGS

NO.	REVISION	BY	DATE

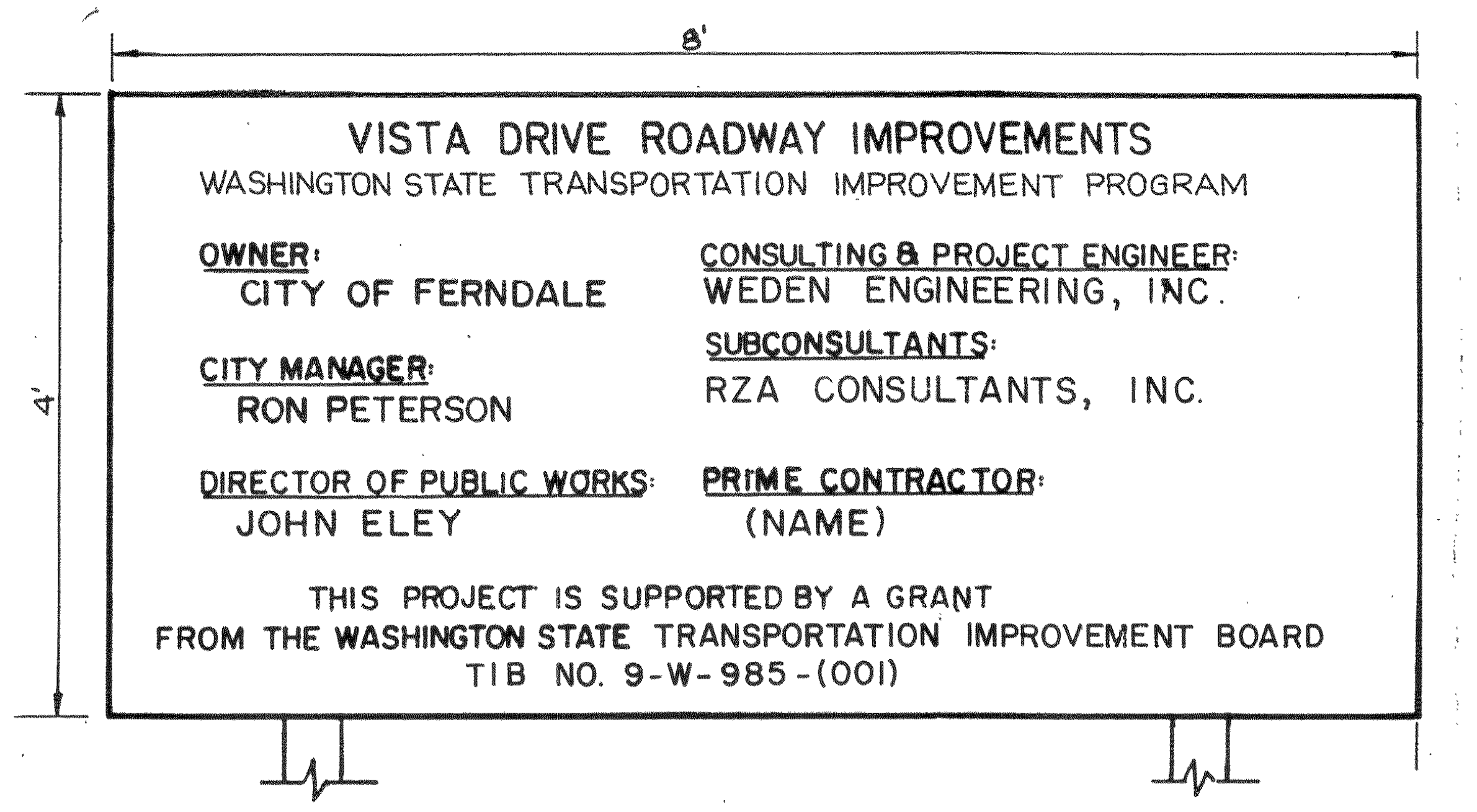
WEDEN ENGINEERING, INC.
ENGINEERING AND LAND SURVEYING
BELLINGHAM, WASHINGTON 671-8200, 354-3723

DESIGNED BY: J.L.W.
DRAWN BY: T.E.P.
CHECKED BY:

CITY OF FERNDALE
VISTA DRIVE ROADWAY IMPROVEMENTS
TIB NO. 9-W-985 (001)
PLAN AND PROFILE 43+50 TO 48+20

DATE MAY '91
SCALE AS SHOWN
JOB NO. 90061
SHEET 8 OF 19

124375



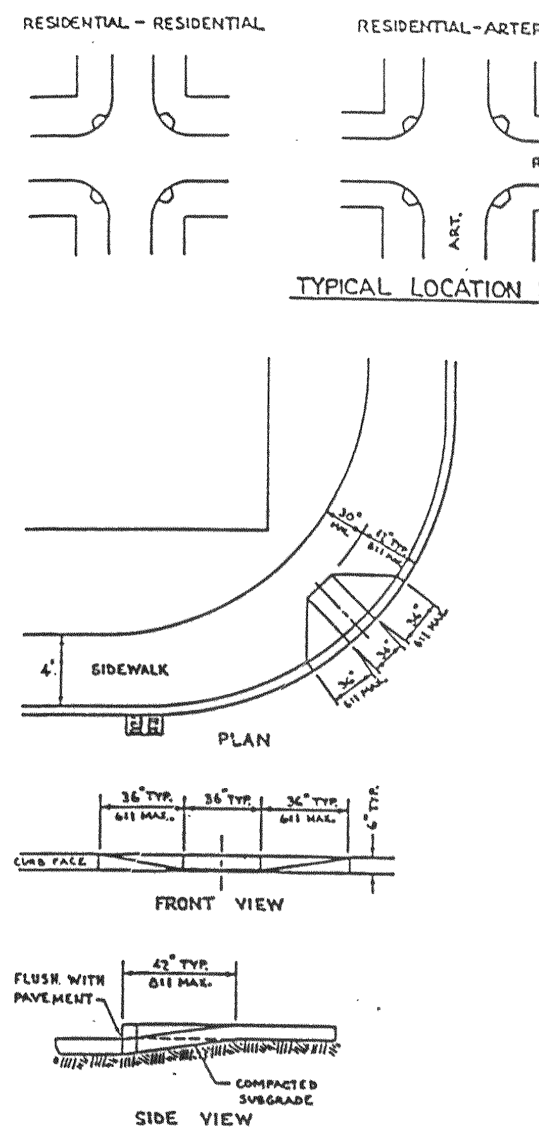
VISTA DRIVE ROADWAY IMPROVEMENTS
WASHINGTON STATE TRANSPORTATION IMPROVEMENT PROGRAM

OWNER: CITY OF FERNDALE
CONSULTING & PROJECT ENGINEER: WEDEN ENGINEERING, INC.
SUBCONSULTANTS: RZA CONSULTANTS, INC.
CITY MANAGER: RON PETERSON
DIRECTOR OF PUBLIC WORKS: JOHN ELEY
PRIME CONTRACTOR: (NAME)

THIS PROJECT IS SUPPORTED BY A GRANT
FROM THE WASHINGTON STATE TRANSPORTATION IMPROVEMENT BOARD
TIB NO. 9-W-985-(001)

PROJECT CONSTRUCTION SIGN

DETAIL 1/VAR.
N.T.S.


RESIDENTIAL - RESIDENTIAL
RESIDENTIAL-ARTERIAL
ARTERIAL - ARTERIAL
RES.
ART.
CROSSWALK UNMARKED
CROSSWALK MARKED
TYPICAL LOCATION PLANS
SIDEWALK
PLAN
FRONT VIEW
FLUSH WITH PAVEMENT
COMPACTED SUBGRADE
SIDE VIEW

NOTES:

1) CATCH BASIN AND INLETS SHALL BE OUTSIDE THE WHEEL CHAIR RAMP (24" MIN. CLEARANCE FROM RAMP)
2) CARE SHALL BE TAKEN TO KEEP THE RAMP FROM CONFLICTING WITH HYDRANTS, POLES, INLETS, AND OTHER UTILITIES.
3) THE RAMP SHALL HAVE A COARSE TEXTURED SURFACE APPROVED BY THE ENGINEER.
4) WHEN RAMPS ARE CONSTRUCTED ON ONE SIDE OF STREET, RAMPS SHALL BE CONSTRUCTED AT CORRESPONDING LOCATIONS ON OPPOSITE SIDE OF STREET.
5) 3/8" EXPANSION JOINT SHALL BE PLACED AROUND RAMP.

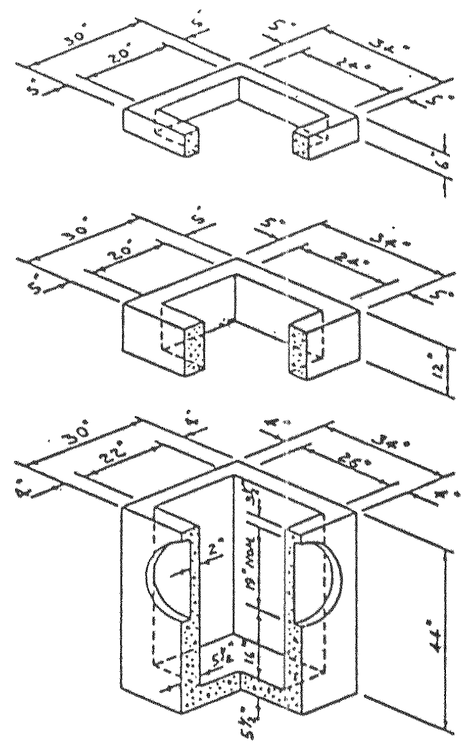
DO NOT SCALE

3/VAR. WHEELCHAIR RAMP

6" RISER SECTION
USED FOR SHORT ADJUSTMENT. 2 X 4 X 8 SOLID BRICK MAY BE USED FOR FINAL ADJUSTMENT TO A MAXIMUM LIFT OF 6"

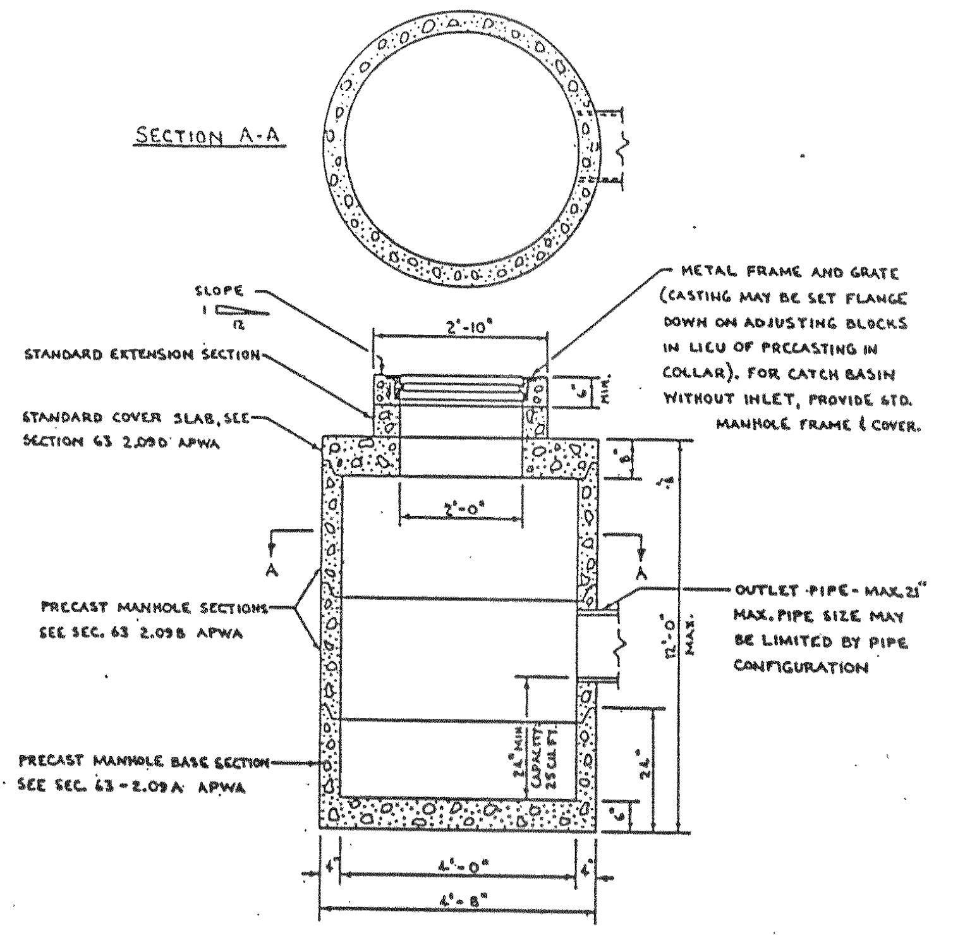
12" RISER SECTION

PRECAST BASE SECTION
4-WAY 18" THRU 20" (NOMINAL) KNOCKOUTS. PIPE SIZE AND PIPE ENTRANCE ANGLE TO BE LIMITED BY KNOCKOUTS. MAXIMUM PIPE SIZE - 15" DIAMETER ON WIDE SIDE AND 12" DIAMETER ON NARROW SIDE.


30"
20"
22"
5"
34"
24"
26"
6"
12"
2"
19" NOM.
16
5 7/8
5 1/2
44"

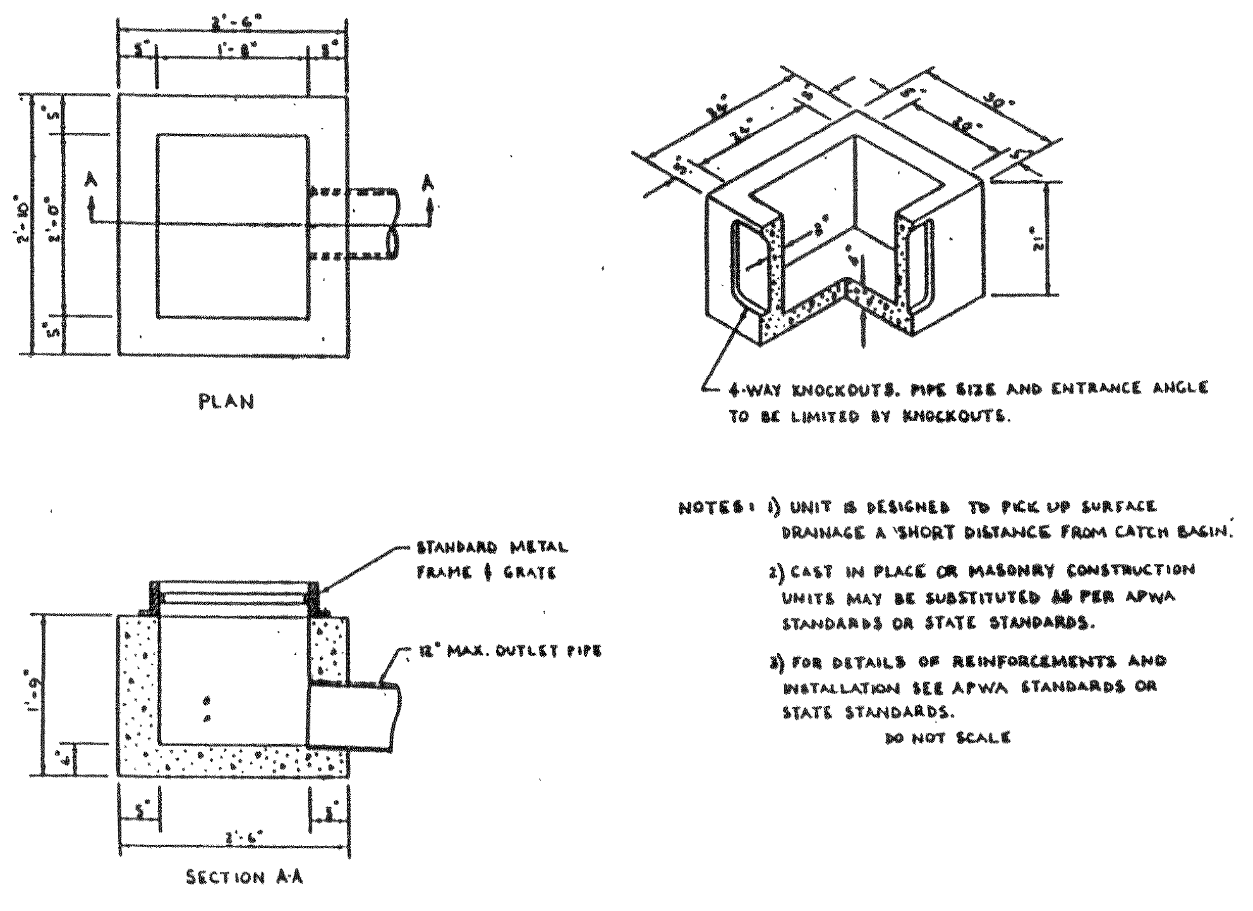
NOTES: 1) CAST IN PLACE OR MASONRY CONSTRUCTION UNITS MAY BE SUBSTITUTED AS PER APWA STANDARDS OR STATE STANDARDS.
2) FOR DETAILS OF REINFORCEMENTS AND INSTALLATION, SEE APWA STANDARDS OR STATE STANDARDS.

5/VAR. CATCH BASIN TYPE I


SECTION A-A
SLOPE 1/12
STANDARD EXTENSION SECTION
STANDARD COVER SLAB, SEE SECTION 63 2.09D APWA
2'-10"
2'-0"
METAL FRAME AND GRATE (CASTING MAY BE SET FLANGE DOWN ON ADJUSTING BLOCKS IN LIEU OF PRECASTING IN COLLAR). FOR CATCH BASIN WITHOUT INLET, PROVIDE STD. MANHOLE FRAME & COVER.
6" MIN.
8"
A
PRECAST MANHOLE SECTIONS SEE SEC. 63 2.09B APWA
OUTLET PIPE - MAX. 21" MAX. PIPE SIZE MAY BE LIMITED BY PIPE CONFIGURATION
12'-0" MAX.
PRECAST MANHOLE BASE SECTION SEE SEC. 63 - 2.09A APWA
24" MIN CAPACITY 25 CU. FT.
24"
6"
4"
4'-0"
4'-8"

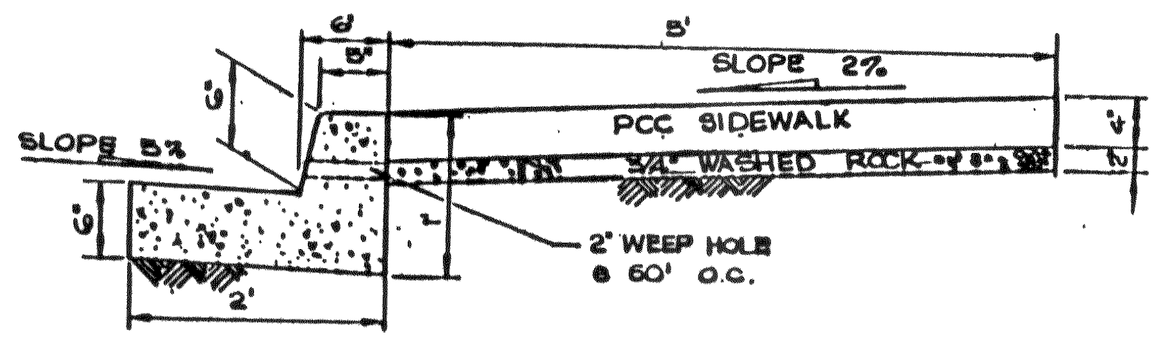
NOTES: 1) FOR DETAILS OF REINFORCEMENTS AND INSTALLATION, SEE APWA STANDARDS OR STATE STANDARDS.
2) CAST IN PLACE OR MASONRY CONSTRUCTION MAY BE SUBSTITUTED AS PER APWA STANDARDS OR STATE STANDARDS.

6/VAR. CATCH BASIN TYPE II

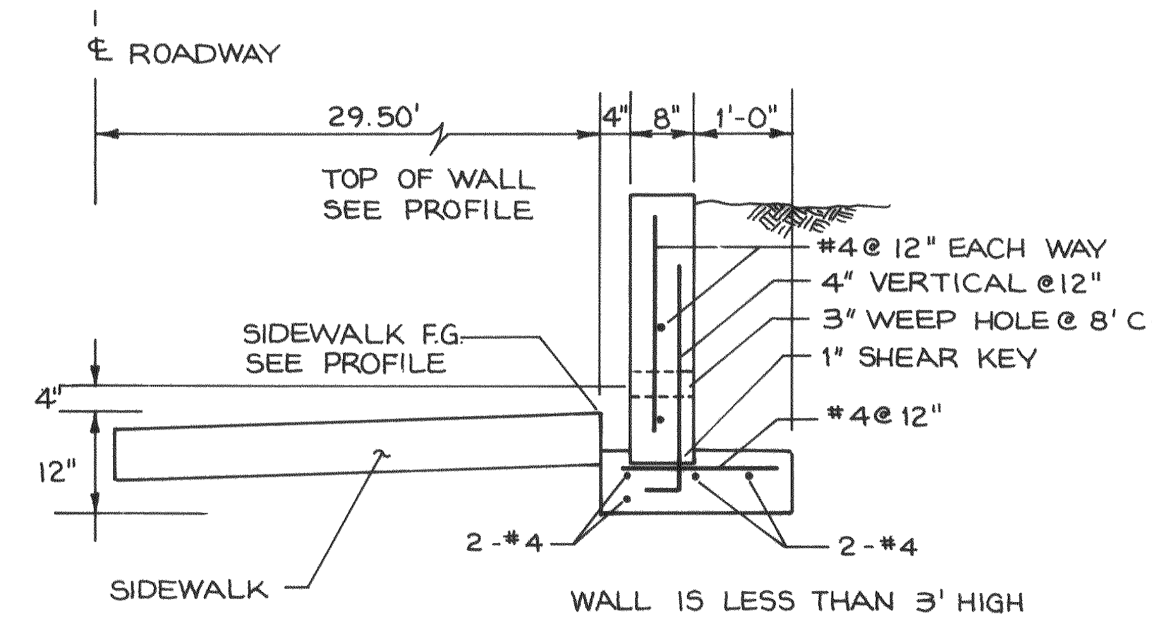

2'-6"
1'-6"
A
PLAN
STANDARD METAL FRAME & GRATE
12" MAX. OUTLET PIPE
SECTION A-A
21"
4-WAY KNOCKOUTS. PIPE SIZE AND ENTRANCE ANGLE TO BE LIMITED BY KNOCKOUTS.

NOTES: 1) UNIT IS DESIGNED TO PICK UP SURFACE DRAINAGE A SHORT DISTANCE FROM CATCH BASIN.
2) CAST IN PLACE OR MASONRY CONSTRUCTION UNITS MAY BE SUBSTITUTED AS PER APWA STANDARDS OR STATE STANDARDS.
3) FOR DETAILS OF REINFORCEMENTS AND INSTALLATION SEE APWA STANDARDS OR STATE STANDARDS.
DO NOT SCALE

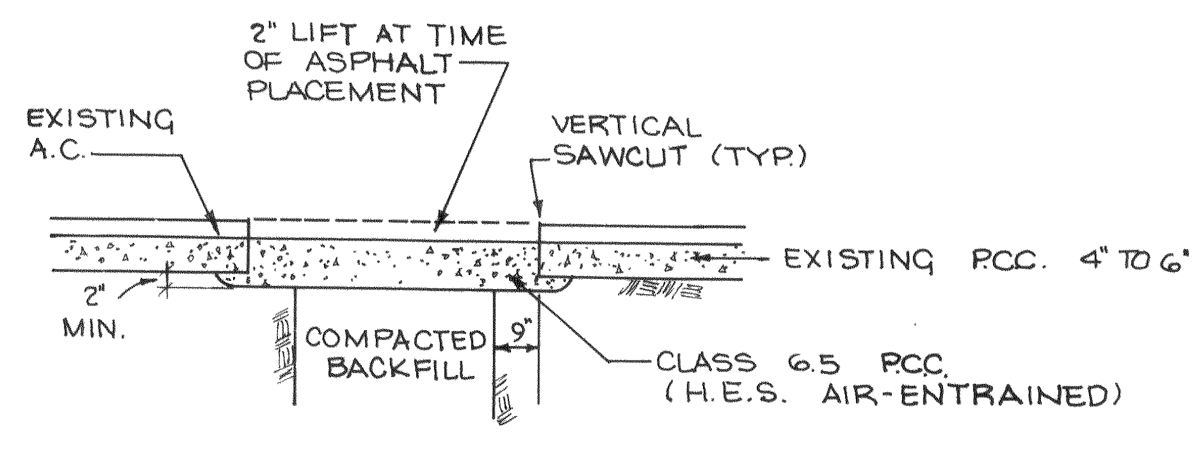
7/VAR INLET


6"
8"
5'
SLOPE 2%
PCC SIDEWALK
SLOPE 5%
3/4" WASHED ROCK
2" WEEP HOLE @ 60' O.C.
2'

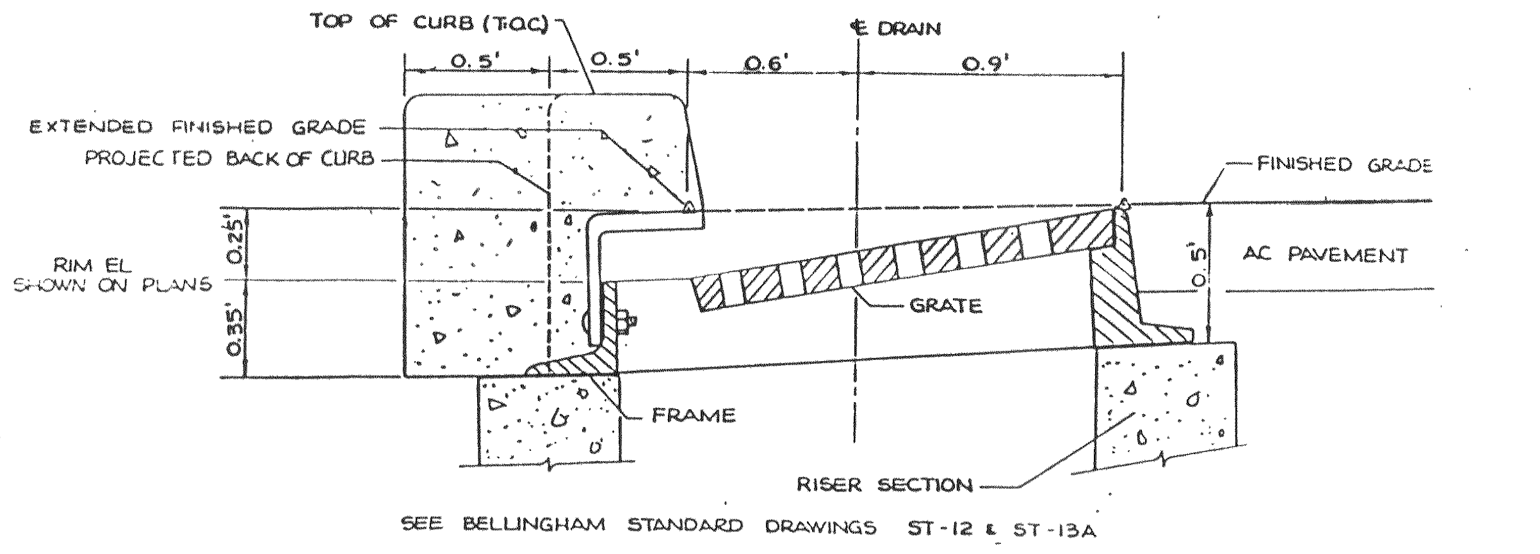
9/VAR CONCRETE SIDEWALK, CURB & GUTTER
N.T.S.


℄ ROADWAY
29.50'
4"
8"
1'-0"
TOP OF WALL SEE PROFILE
#4 @ 12" EACH WAY
4" VERTICAL @12"
3" WEEP HOLE @ 8' C-C
1" SHEAR KEY
SIDEWALK F.G. SEE PROFILE
#4 @ 12"
4"
12"
2-#4
2-#4
SIDEWALK
WALL IS LESS THAN 3' HIGH

12/2 TYPICAL RETAINING WALL SECTION
SCALE= 1"=2'

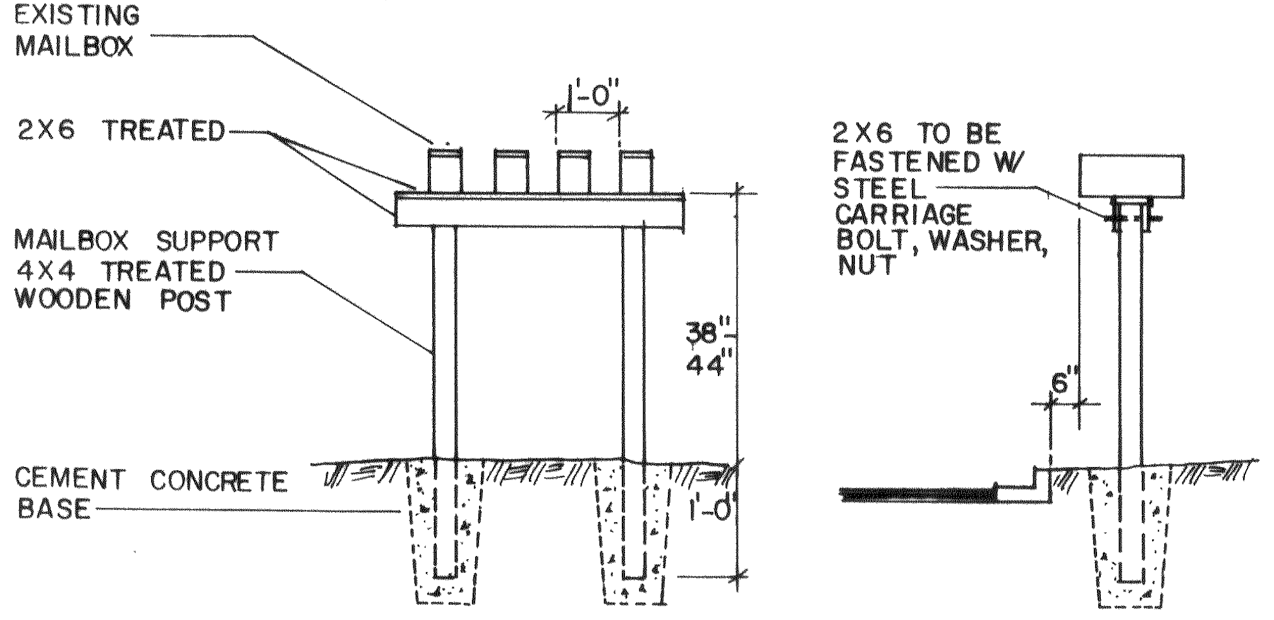

2" LIFT AT TIME OF ASPHALT PLACEMENT
EXISTING A.C.
VERTICAL SAWCUT (TYP)
EXISTING P.C.C. 4" TO 6"
2" MIN.
COMPACTED BACKFILL
9"
CLASS 6.5 PCC (H.E.S. AIR-ENTRAINED)

13/VAR ROAD PATCH DETAIL - TYPE III


TOP OF CURB (T.O.C.)
0.5'
0.5'
0.6'
℄ DRAIN
0.9'
EXTENDED FINISHED GRADE
PROJECTED BACK OF CURB
FINISHED GRADE
RIM EL SHOWN ON PLANS
0.25'
0.35'
AC PAVEMENT
GRATE
FRAME
RISER SECTION

SEE BELLINGHAM STANDARD DRAWINGS ST-12 & ST-13A

8/VAR TYPICAL THRU-CURB INLET
N.T.S.

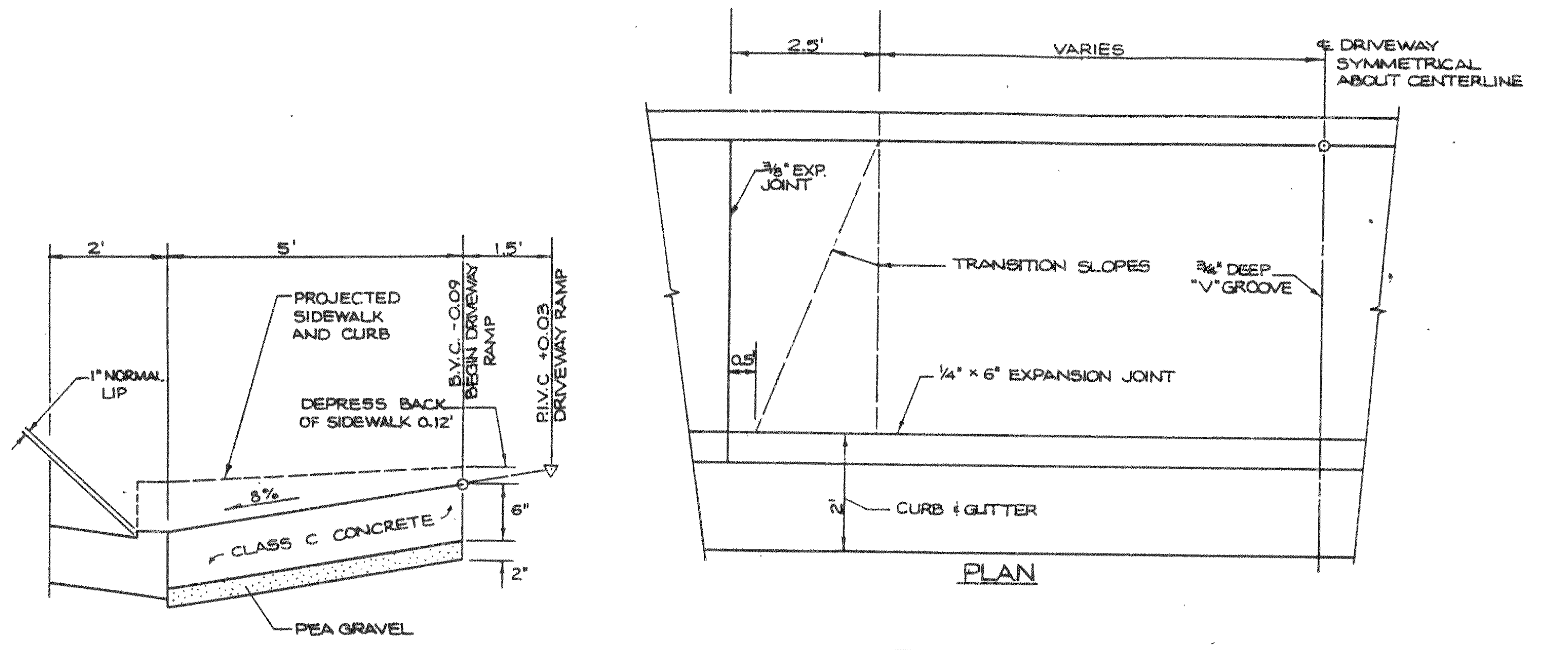

EXISTING MAILBOX
2X6 TREATED
1'-0"
2X6 TO BE FASTENED W/ STEEL CARRIAGE BOLT, WASHER, NUT
MAILBOX SUPPORT 4X4 TREATED WOODEN POST
38"
44"
6"
CEMENT CONCRETE BASE
1'-0"

MAILBOX DETAIL

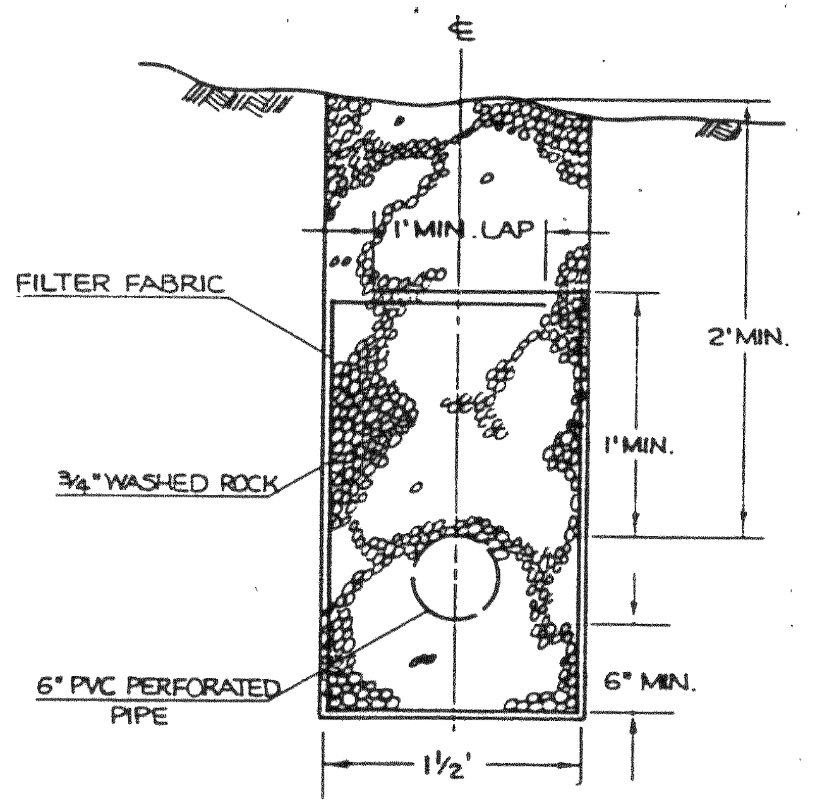
NOTES:
MAILBOXES SHALL BE REINSTALLED ON SINGLE OR DOUBLE SUPPORTS. THREE OR MORE MAILBOXES SHALL HAVE DOUBLE SUPPORTS.

MAILBOX SCHEDULE:

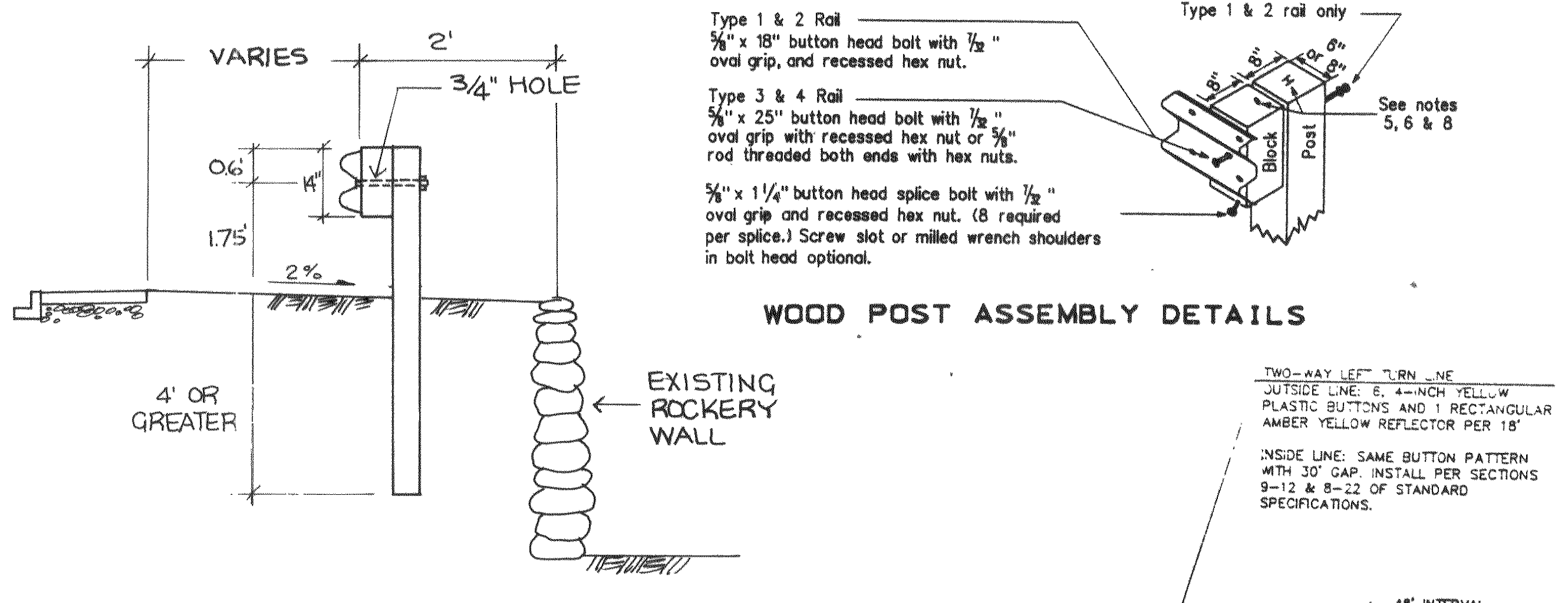
5803 5841 5849 5856
5862 5864
5880
5913
5937
5958 5959
5973 5979
6033
6086
5853 5860
5874
5890 5893 5897 5898
5919
5942 5946 5950
5972 1/2
5987 6009
6076 6080


2'
5'
1.5'
PROJECTED SIDEWALK AND CURB
1" NORMAL LIP
DEPRESS BACK OF SIDEWALK 0.12'
B.V.C. -0.09 BASIN DRIVEWAY RAMP
P.I.V.C. +0.03 DRIVEWAY RAMP
CLASS C CONCRETE
6"
2"
PEA GRAVEL
SECTION
2.5'
VARIES
℄ DRIVEWAY SYMMETRICAL ABOUT CENTERLINE
3/8" EXP. JOINT
TRANSITION SLOPES
3/4" DEEP "V" GROOVE
1/4" × 6" EXPANSION JOINT
CURB & GUTTER
PLAN

TYPICAL DRIVEWAY
DETAIL 2/VAR.


℄
1' MIN. LAP
FILTER FABRIC
2' MIN.
1' MIN.
3/4" WASHED ROCK
6" PVC PERFORATED PIPE
6" MIN.
1 1/2'

4/VAR. CURTAIN DRAIN
N.T.S.


VARIES
2'
3/4" HOLE
0.6'
1.75'
2%
4' OR GREATER
EXISTING ROCKERY WALL
8"
8"
6" or 8"
H
Block
Post
See notes 5, 6 & 8

Type 1 & 2 Rail
5/8" x 18" button head bolt with 7/32" oval grip, and recessed hex nut.

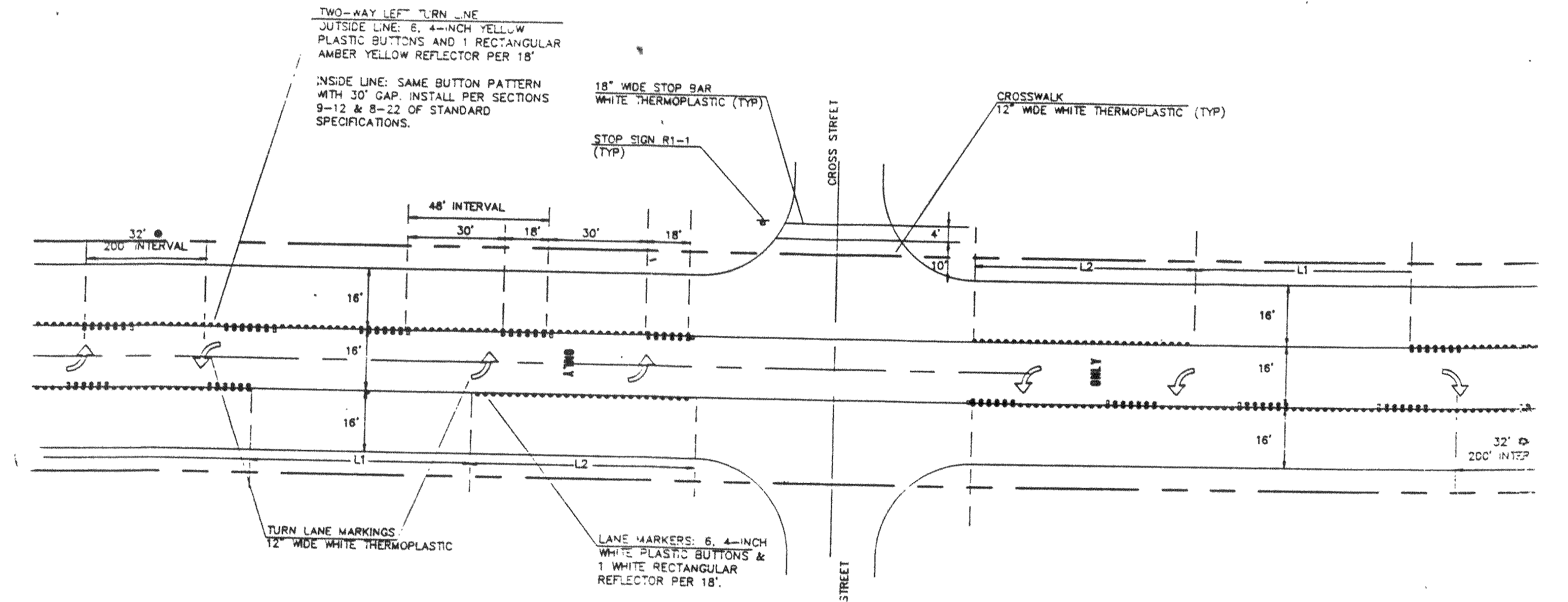
Type 3 & 4 Rail
5/8" x 25" button head bolt with 7/32" oval grip with recessed hex nut or 5/8" rod threaded both ends with hex nuts.

5/8" x 1 1/4" button head splice bolt with 7/32" oval grip and recessed hex nut. (8 required per splice.) Screw slot or milled wrench shoulders in bolt head optional.

1 3/4" DIA Post bolt washer for Type 1 & 2 rail only

WOOD POST ASSEMBLY DETAILS

14/8 W BEAM GUARDRAIL - TYPE I
NTS


TWO-WAY LEFT TURN LINE
OUTSIDE LINE: 6, 4-INCH YELLOW PLASTIC BUTTONS AND 1 RECTANGULAR AMBER YELLOW REFLECTOR PER 18'
INSIDE LINE: SAME BUTTON PATTERN WITH 30' GAP. INSTALL PER SECTIONS 9-12 & 8-22 OF STANDARD SPECIFICATIONS.
18" WIDE STOP BAR WHITE THERMOPLASTIC (TYP)
STOP SIGN R1-1 (TYP)
CROSS STREET
CROSSWALK 12" WIDE WHITE THERMOPLASTIC (TYP)
48' INTERVAL
30'
18'
30'
18'
32' @ 200' INTERVAL
16'
4'
10'
L1
L2
ONLY
TURN LANE MARKINGS 12" WIDE WHITE THERMOPLASTIC
LANE MARKERS: 6, 4-INCH WHITE PLASTIC BUTTONS & 1 WHITE RECTANGULAR REFLECTOR PER 18'.
CROSS STREET

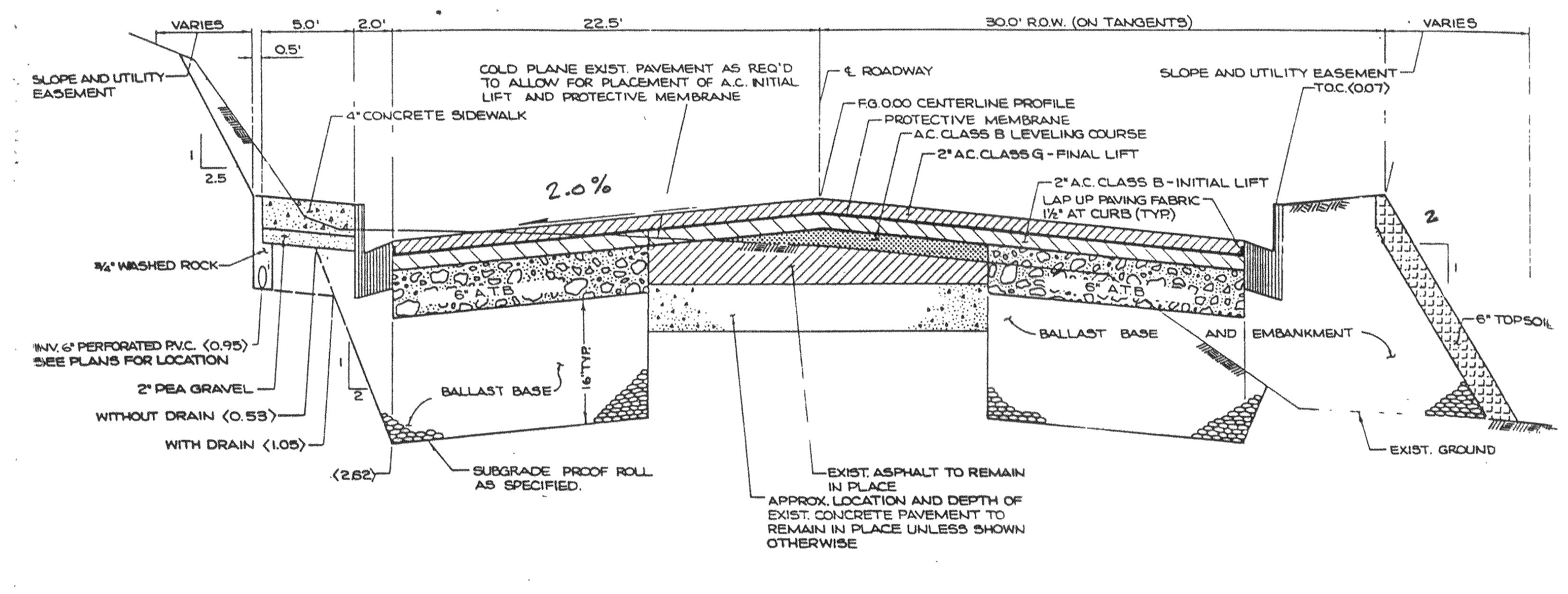
LEFT TURN LANE LENGTH SCHEDULE

CROSS STREET OR STATION		L1	L2
EAST VIEW PLACE	16+58	60'	54'
EAST & WEST SEAMOUNT	19+03,19+33	72'	72'
JONES DRIVE	24+86	72'	72'
EAST & WEST SUNRISE	31+48, 31+80	72'	72'
EBIR STREET	35+82	48'	48'
VISTA MIDDLE SCHOOL	40+10	84'	126'
THORNTON ROAD	47+70	72'	234'

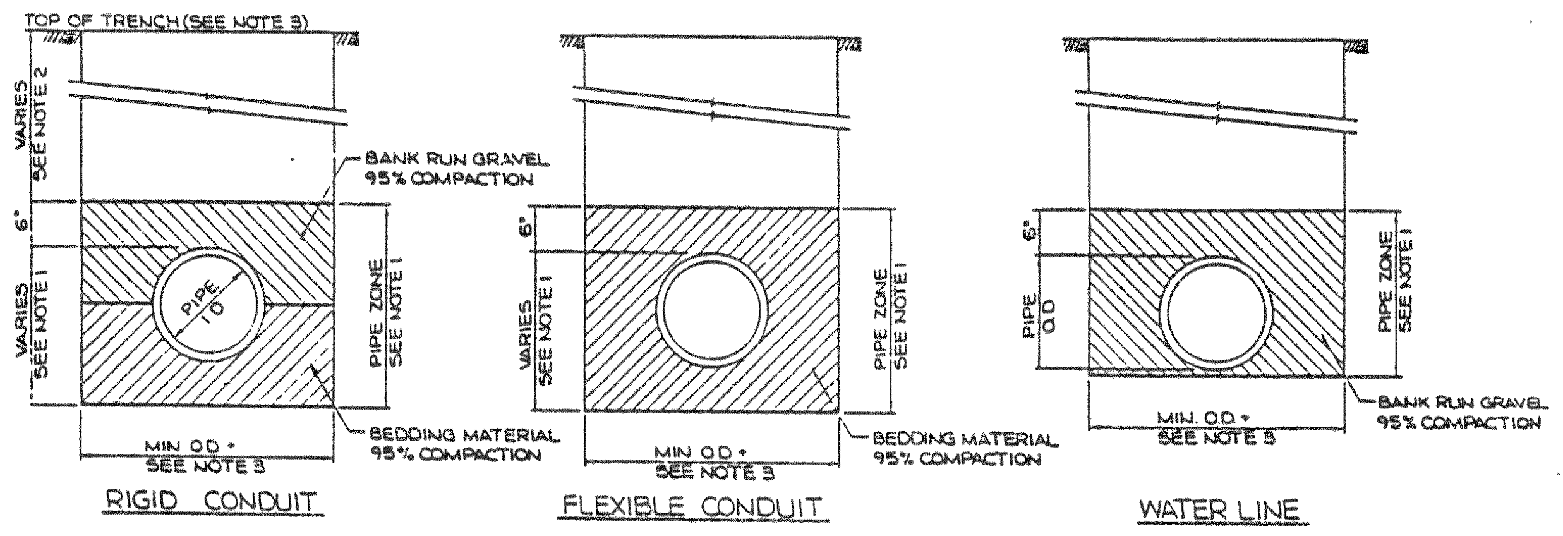
CITY OF FERNDALE
VISTA DRIVE ROADWAY IMPROVEMENTS
T.I.B. NO. 9W-985-001
REVISED PAVEMENT MARKING EXHIBIT
REVISION NO. 2

11/VAR PAVEMENT MARKING (TYP.)
NTS

RECORD DRAWINGS


VARIES
5.0'
2.0'
22.5'
30.0' R.O.W. (ON TANGENTS)
VARIES
0.5'
SLOPE AND UTILITY EASEMENT
COLD PLANE EXIST. PAVEMENT AS REQ'D TO ALLOW FOR PLACEMENT OF A.C. INITIAL LIFT AND PROTECTIVE MEMBRANE
℄ ROADWAY
SLOPE AND UTILITY EASEMENT
T.O.C. (0.07)
4" CONCRETE SIDEWALK
F.G. 0.00 CENTERLINE PROFILE
PROTECTIVE MEMBRANE
A.C. CLASS B LEVELING COURSE
2" A.C. CLASS G - FINAL LIFT
2" A.C. CLASS B - INITIAL LIFT
LAP UP PAVING FABRIC 1 1/2" AT CURB (TYP)
2.0%
2
2.5
3/4" WASHED ROCK
INV. 6" PERFORATED PVC (0.95) SEE PLANS FOR LOCATION
2" PEA GRAVEL
WITHOUT DRAIN (0.53)
WITH DRAIN (1.05)
(2.62)
BALLAST BASE
BALLAST BASE AND EMBANKMENT
6" TOPSOIL
SUBGRADE PROOF ROLL AS SPECIFIED
EXIST. ASPHALT TO REMAIN IN PLACE
APPROX. LOCATION AND DEPTH OF EXIST. CONCRETE PAVEMENT TO REMAIN IN PLACE UNLESS SHOWN OTHERWISE
EXIST. GROUND

TYPICAL ROADWAY SECTION
NTS


TOP OF TRENCH (SEE NOTE 3)
VARIES SEE NOTE 2
6"
VARIES SEE NOTE 1
PIPE I.D.
BANK RUN GRAVEL 95% COMPACTION
PIPE ZONE SEE NOTE 1
MIN O.D. + SEE NOTE 3
BEDDING MATERIAL 95% COMPACTION
RIGID CONDUIT
FLEXIBLE CONDUIT
PIPE O.D.
WATER LINE

Notes:
1. O.D. plus 4 inches for pipe 27 inches and smaller. O.D. plus 6 inches for pipe over 27 inches.
2. Backfill above the pipe zone in parking areas shall be bank run gravel compacted to 95%. Backfill above the pipe zone in non parking areas may be selected in 1 1/2 inch minus trench side material compacted to 95%.
3. The pay width for compaction of bank run gravel above the pipe zone will be I.D. plus 2 feet. The pay depth will be from the top of the pipe zone to the top of the trench measured at centerline of pipe.

10/VAR. TRENCH BACKFILL DETAIL
N.T.S.

NO.	REVISION	BY	DATE
1	PAVEMENT MARKING	JLW	8/21/92

WEDEN ENGINEERING, INC.
ENGINEERING AND LAND SURVEYING
BELLINGHAM, WASHINGTON 671-8200, 354-3723

DESIGNED BY: JLW
DRAWN BY: TEP
CHECKED BY: COL

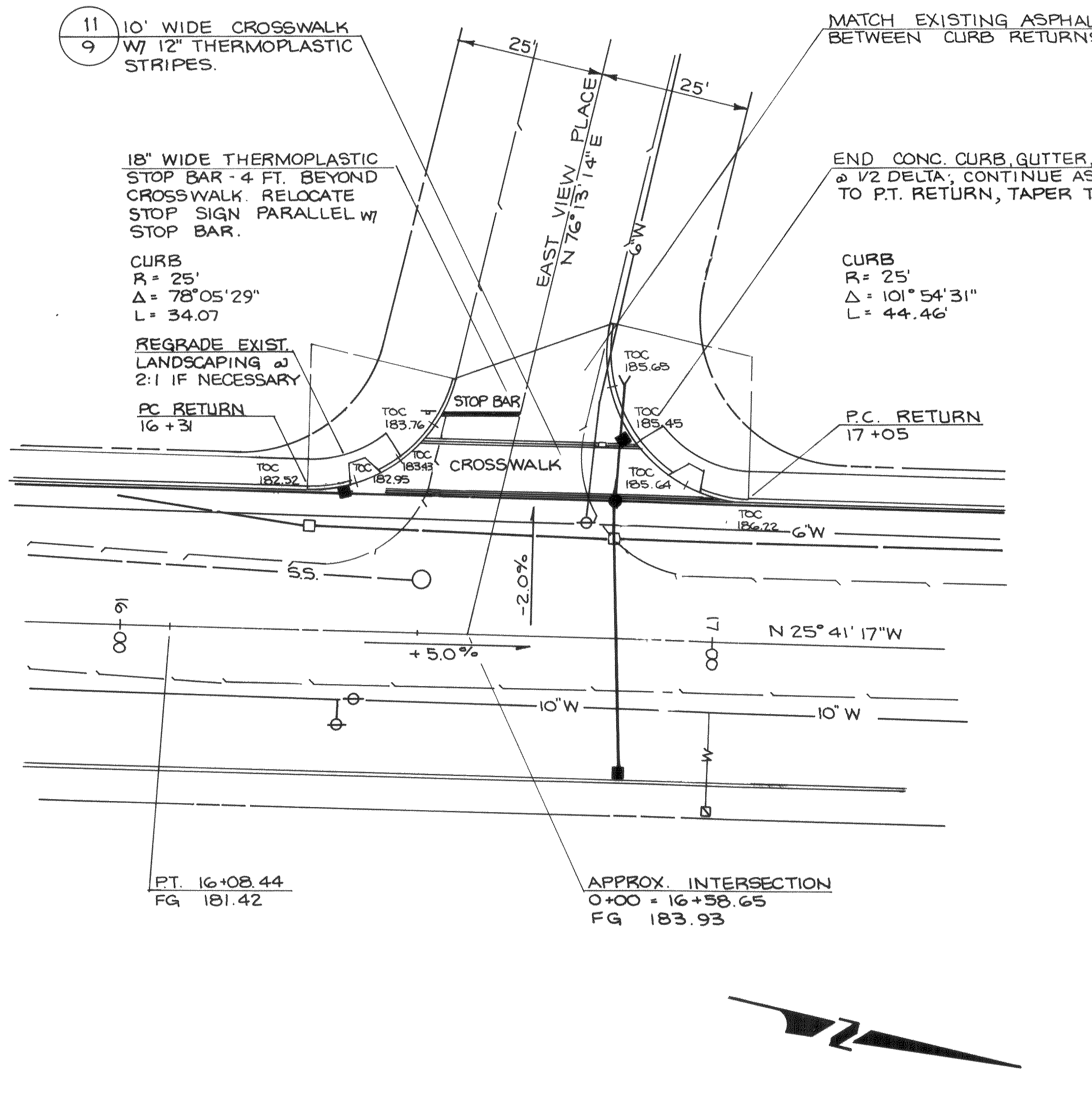
CITY OF FERNDALE
VISTA DRIVE ROADWAY IMPROVEMENTS
TIB NO. 9-W-985-(001)
DETAILS

DATE MAY '91
SCALE AS SHOWN
JOB NO. 90061
SHEET 9 OF 19

00188.009 2.8.96 KE

124375

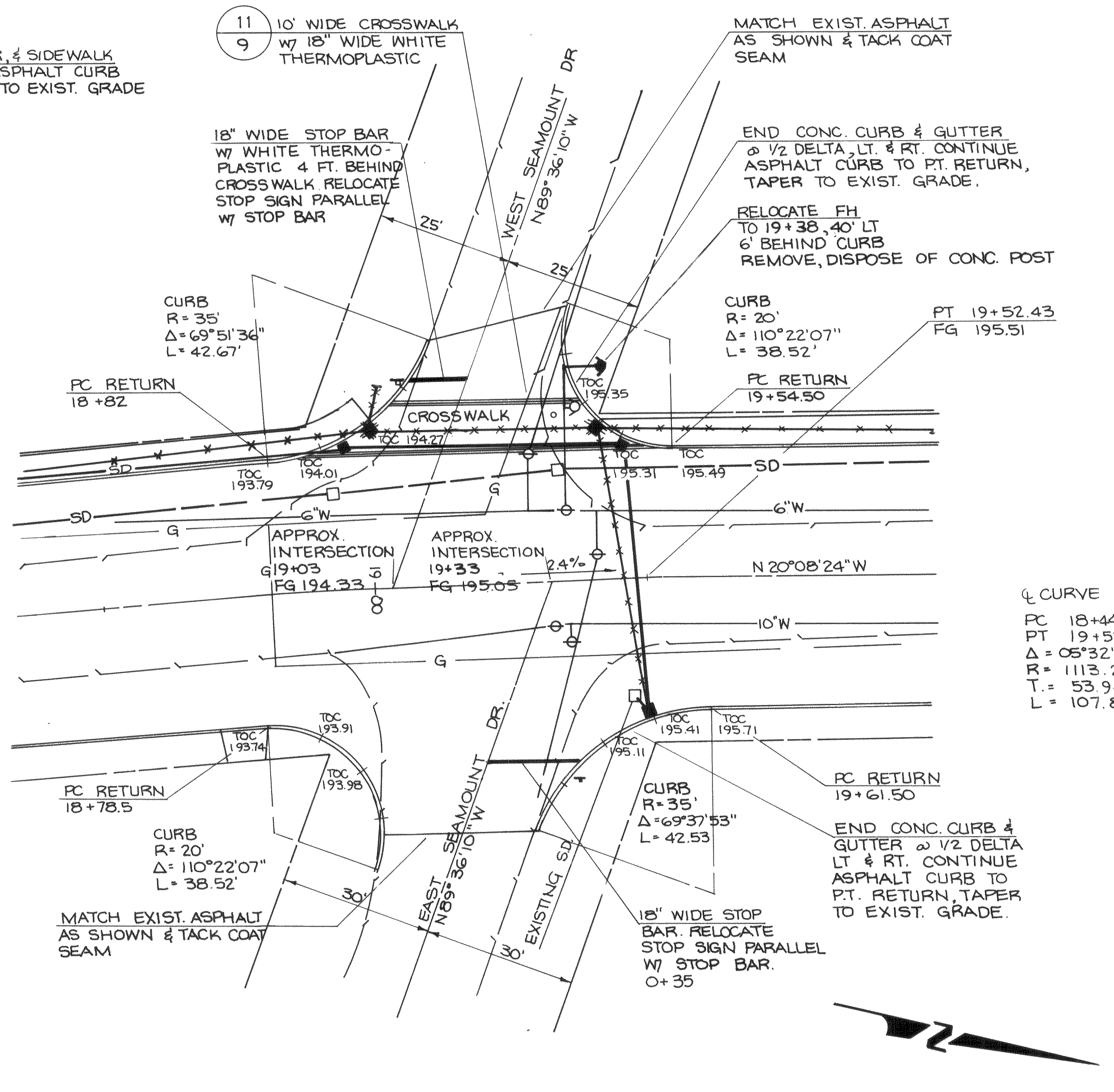
00188.010 2.8.00 KE



11/9 10' WIDE CROSSWALK W/ 12" THERMOPLASTIC STRIPES.
MATCH EXISTING ASPHALT AS SHOWN BETWEEN CURB RETURNS TACK COAT SEAM
25'
25'
EAST VIEW PLACE N 76°13'14" E
18" WIDE THERMOPLASTIC STOP BAR - 4 FT. BEYOND CROSSWALK. RELOCATE STOP SIGN PARALLEL W/ STOP BAR.
END CONC. CURB, GUTTER, & SIDEWALK @ 1/2 DELTA; CONTINUE ASPHALT CURB TO P.T. RETURN, TAPER TO EXIST. GRADE
CURB R= 25' Δ= 78°05'29" L= 34.07
CURB R= 25' Δ= 101°54'31" L= 44.46'
REGRADE EXIST. LANDSCAPING @ 2:1 IF NECESSARY
PC RETURN 16+31
P.C. RETURN 17+05
STOP BAR
CROSSWALK
TOC 182.52
TOC 183.76
TOC 182.95
TOC 185.68
TOC 185.45
TOC 185.64
TOC 186.22
6"W
S.S.
-2.0%
+5.0%
N 25°41'17" W
10"W
P.T. 16+08.44 FG 181.42
APPROX. INTERSECTION 0+00 = 16+58.65 FG 183.93

13/3 EAST VIEW PLACE INTERSECTION DETAIL

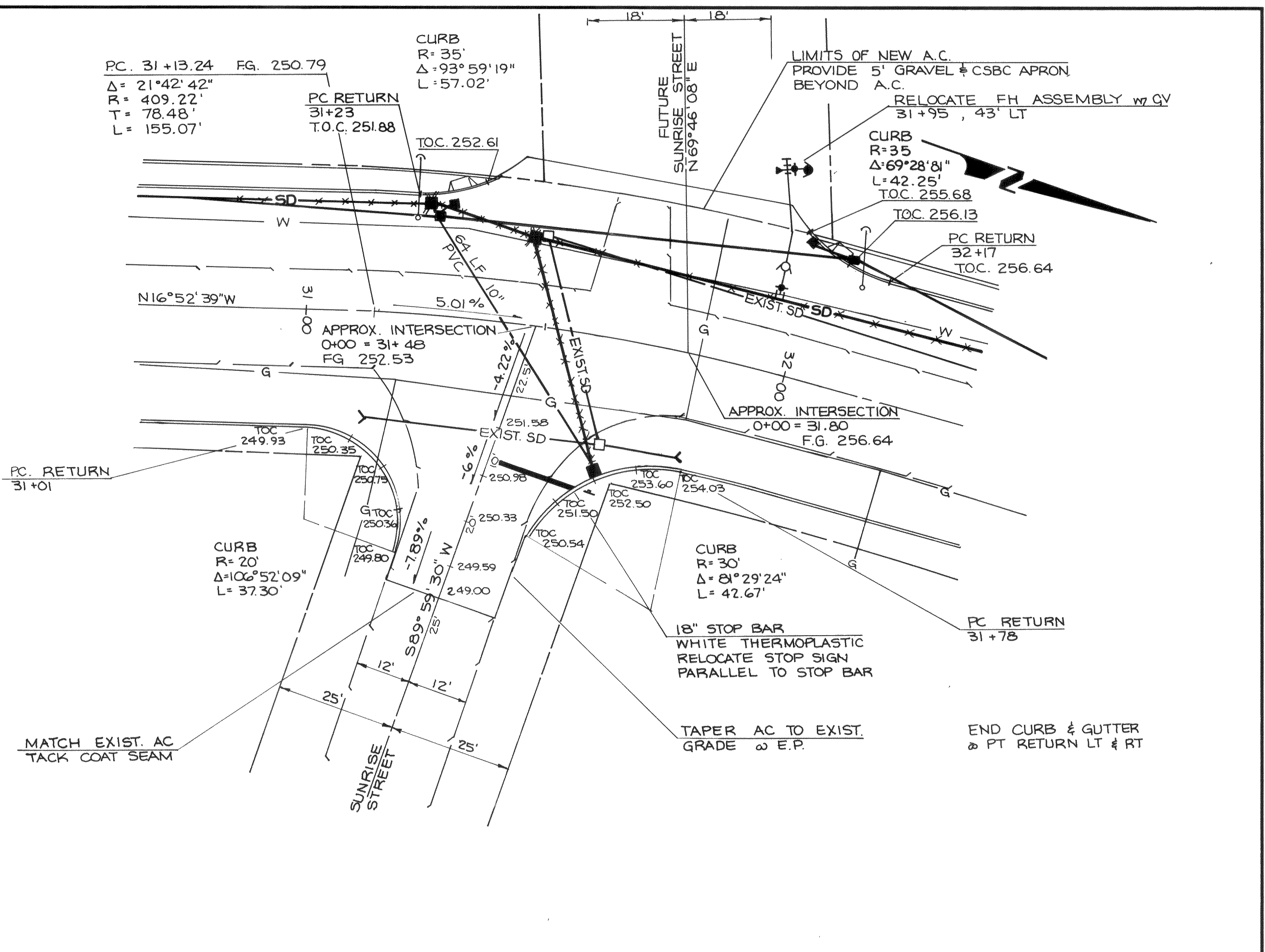
SCALE: 1" = 20'



11/9 10' WIDE CROSSWALK W/ 18" WIDE WHITE THERMOPLASTIC
MATCH EXIST. ASPHALT AS SHOWN & TACK COAT SEAM
18" WIDE STOP BAR W/ WHITE THERMOPLASTIC 4 FT. BEHIND CROSSWALK RELOCATE STOP SIGN PARALLEL W/ STOP BAR
WEST SEAMOUNT DR N89°36'10" W
END CONC. CURB & GUTTER @ 1/2 DELTA, LT. & RT. CONTINUE ASPHALT CURB TO P.T. RETURN, TAPER TO EXIST. GRADE.
RELOCATE FH TO 19+38, 40' LT 6' BEHIND CURB REMOVE, DISPOSE OF CONC. POST
CURB R= 35' Δ= 69°51'34" L= 42.67'
CURB R= 20' Δ= 110°22'07" L= 38.52'
PT 19+52.43 FG 195.51
PC RETURN 18+82
PC RETURN 19+54.50
CROSSWALK
TOC 193.79
TOC 194.01
TOC 194.27
TOC 195.35
TOC 195.31
TOC 195.49
SD
6"W
G
APPROX. INTERSECTION 19+03 FG 194.33
APPROX. INTERSECTION 19+33 FG 195.05
2.4%
N 20°08'24" W
10"W
℄ CURVE DATA PC 18+44.63 PT 19+52.43 Δ= 05°32'53" R= 1113.29' T.= 53.94 L= 107.80
TOC 193.74
TOC 193.91
TOC 193.98
TOC 195.41
TOC 195.71
TOC 195.11
PC RETURN 18+78.5
PC RETURN 19+61.50
CURB R= 20' Δ= 110°22'07" L= 38.52'
CURB R= 35' Δ= 69°37'53" L= 42.53
END CONC. CURB & GUTTER @ 1/2 DELTA LT & RT. CONTINUE ASPHALT CURB TO P.T. RETURN, TAPER TO EXIST. GRADE.
MATCH EXIST. ASPHALT AS SHOWN & TACK COAT SEAM
EAST SEAMOUNT DR. N89°36'10" W
EXISTING SD
18" WIDE STOP BAR. RELOCATE STOP SIGN PARALLEL W/ STOP BAR. 0+35
30'
30'
25'
25'

14/3 EAST & WEST SEAMOUNT DRIVES INTERSECTION DETAIL

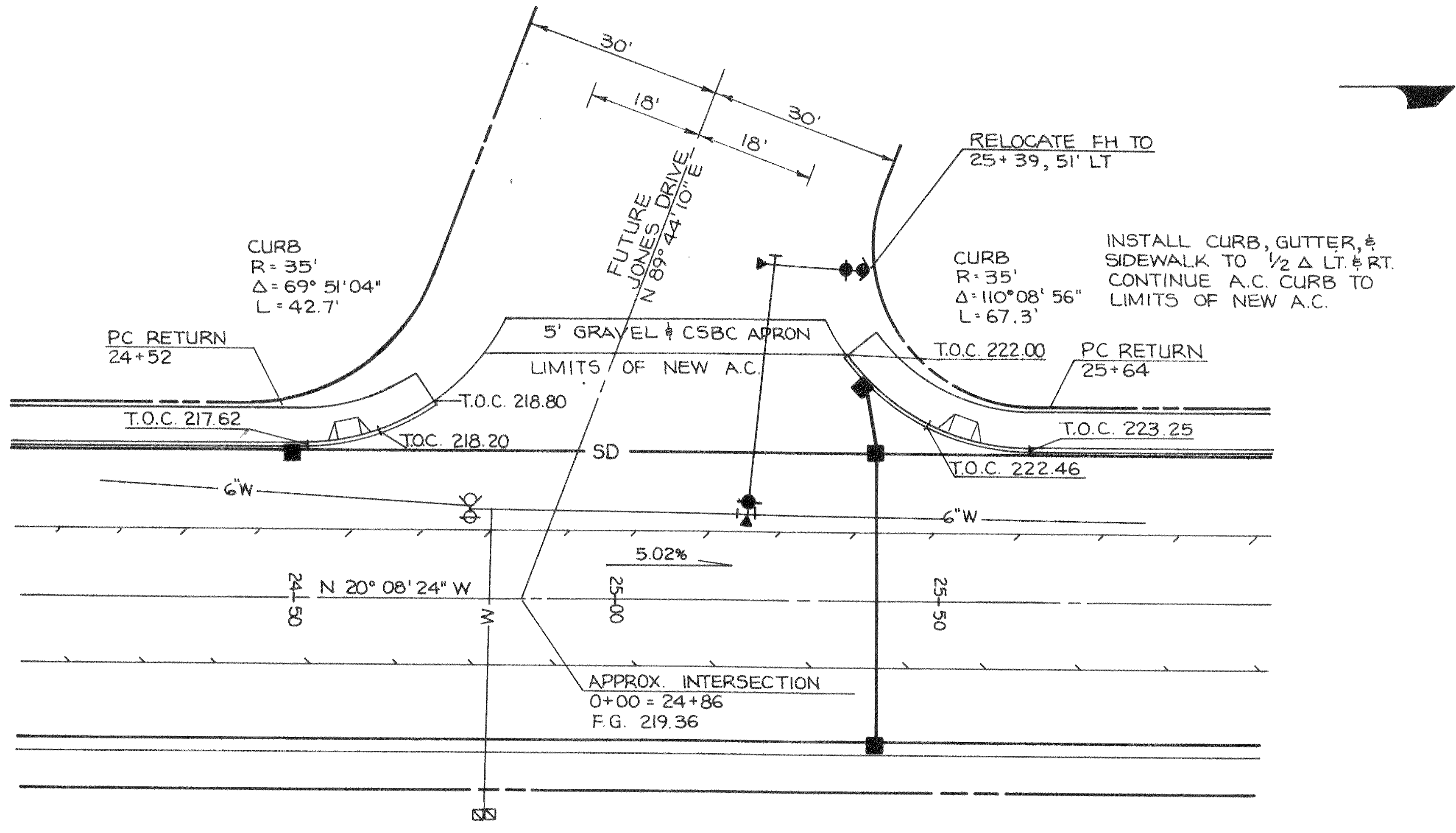
SCALE: 1" = 20'



18'
18'
PC. 31+13.24 FG. 250.79 Δ= 21°42'42" R= 409.22' T= 78.48' L= 155.07'
CURB R= 35' Δ= 93°59'19" L= 57.02'
PC RETURN 31+23 T.O.C. 251.88
FUTURE SUNRISE STREET N89°46'08" E
LIMITS OF NEW A.C. PROVIDE 5' GRAVEL & CSBC APRON BEYOND A.C.
RELOCATE FH ASSEMBLY W/ GV 31+95, 43' LT
CURB R= 35 Δ= 69°28'41" L= 42.25' T.O.C. 255.68
T.O.C. 256.13
PC RETURN 32+17 T.O.C. 256.64
T.O.C. 252.61
SD
W
5.01%
EXIST. SD
N16°52'39" W
APPROX. INTERSECTION 0+00 = 31+48 FG 252.53
APPROX. INTERSECTION 0+00 = 31.80 F.G. 256.64
EXIST. SD
G
PC RETURN 31+01
TOC 249.93
TOC 250.35
TOC 250.75
TOC 250.36
TOC 249.80
251.58
250.98
250.33
249.59
249.00
TOC 251.50
TOC 252.50
TOC 253.60
TOC 254.03
TOC 250.54
CURB R= 20' Δ= 106°52'09" L= 37.30'
CURB R= 30' Δ= 81°29'24" L= 42.67'
-7.89%
S89°53'30" W
18" STOP BAR WHITE THERMOPLASTIC RELOCATE STOP SIGN PARALLEL TO STOP BAR
PC RETURN 31+78
MATCH EXIST. AC TACK COAT SEAM
TAPER AC TO EXIST. GRADE @ E.P.
END CURB & GUTTER @ PT RETURN LT & RT
SUNRISE STREET
25'
12'
12'
25'

15/5 SUNRISE STREET INTERSECTION DETAIL

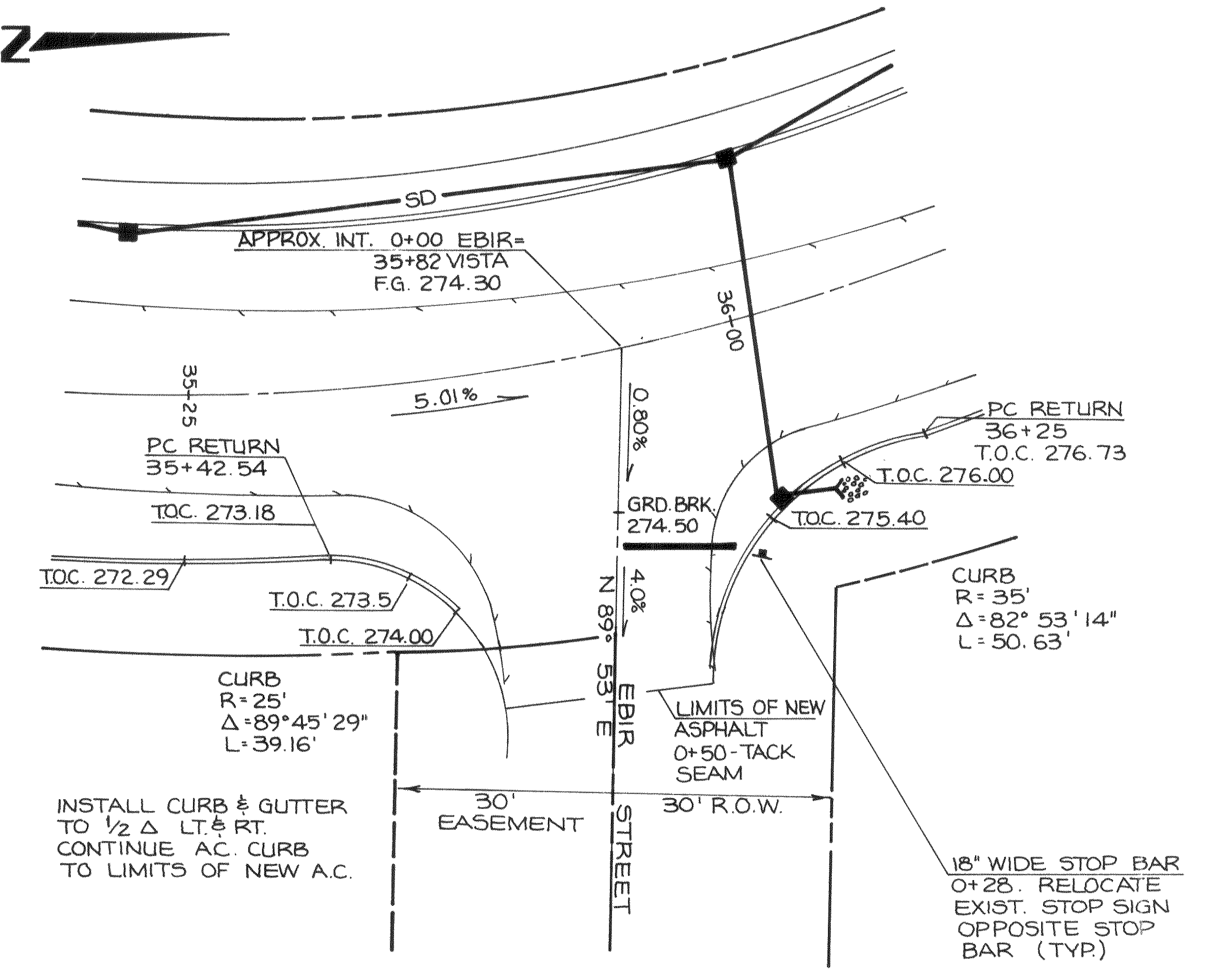
SCALE: 1" = 20'



30'
18'
18'
30'
FUTURE JONES DRIVE N 69°44'10" E
RELOCATE FH TO 25+39, 51' LT
CURB R= 35' Δ= 69°51'04" L= 42.7'
CURB R= 35' Δ= 110°08'56" L= 67.3'
INSTALL CURB, GUTTER, & SIDEWALK TO 1/2 Δ LT. & RT. CONTINUE A.C. CURB TO LIMITS OF NEW A.C.
5' GRAVEL & CSBC APRON
LIMITS OF NEW A.C.
PC RETURN 24+52
PC RETURN 25+64
T.O.C. 217.62
T.O.C. 218.80
T.O.C. 218.20
T.O.C. 222.00
T.O.C. 223.25
T.O.C. 222.46
SD
6"W
6"W
5.02%
N 20°08'24" W
W
APPROX. INTERSECTION 0+00 = 24+86 F.G. 219.36

16/4 JONES DRIVE INTERSECTION DETAIL

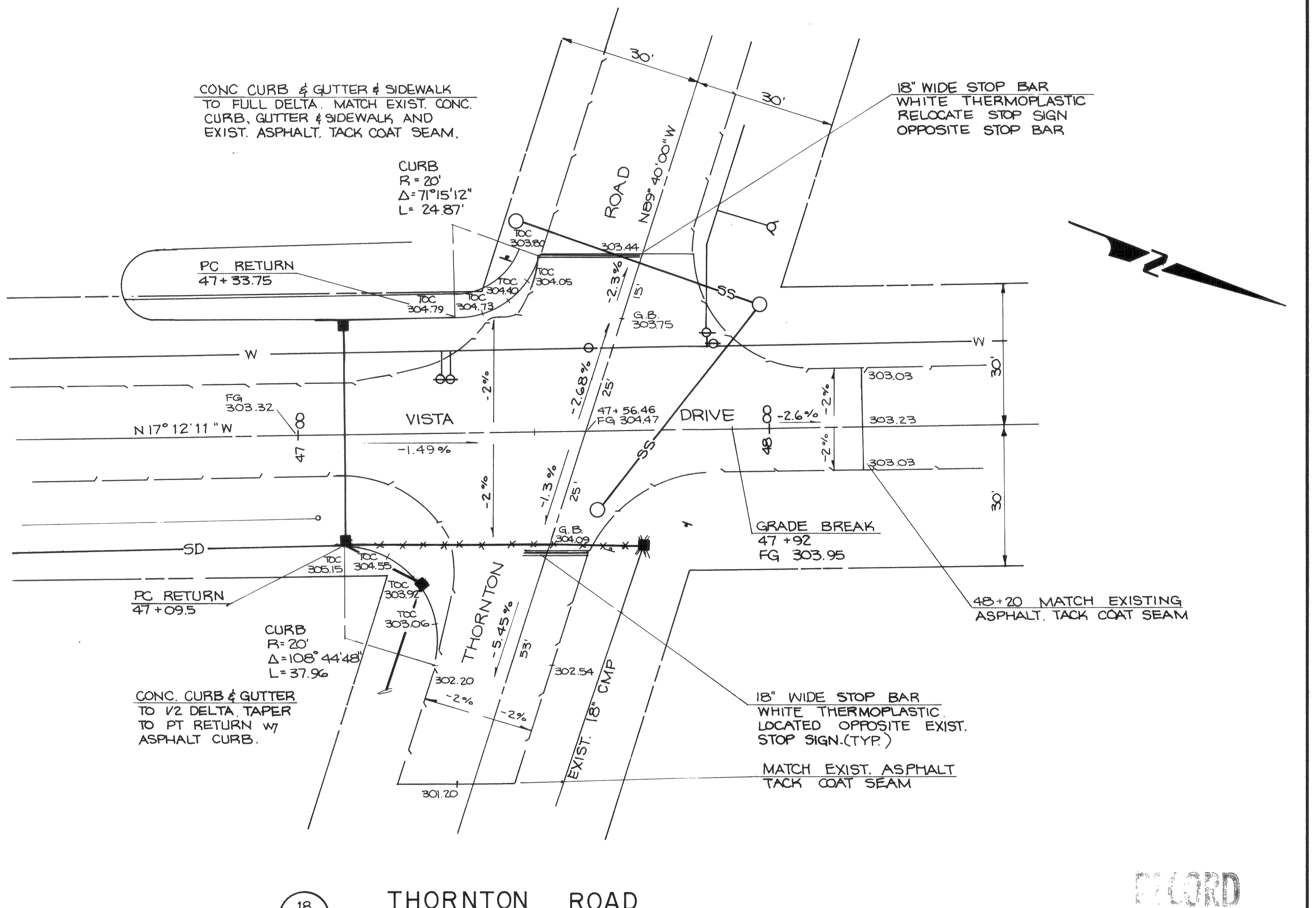
SCALE: 1" = 20'



SD
APPROX. INT. 0+00 EBIR= 35+82 VISTA F.G. 274.30
5.01%
0.60%
PC RETURN 35+42.54
T.O.C. 273.18
T.O.C. 272.29
T.O.C. 273.5
T.O.C. 274.00
GRD. BRK. 274.50
4.0%
N 89°53' E
EBIR STREET
PC RETURN 36+25 T.O.C. 276.73
T.O.C. 276.00
T.O.C. 275.40
CURB R= 35' Δ= 82°53'14" L= 50.63'
CURB R= 25' Δ= 89°45'29" L= 39.16'
INSTALL CURB & GUTTER TO 1/2 Δ LT. & RT. CONTINUE A.C. CURB TO LIMITS OF NEW A.C.
LIMITS OF NEW ASPHALT 0+50 - TACK SEAM
30' EASEMENT
30' R.O.W.
18" WIDE STOP BAR 0+28. RELOCATE EXIST. STOP SIGN OPPOSITE STOP BAR (TYP.)

17/6 EBIR STREET INTERSECTION DETAIL

SCALE: 1" = 20'



30'
30'
CONC. CURB & GUTTER & SIDEWALK TO FULL DELTA MATCH EXIST. CONC. CURB, GUTTER & SIDEWALK, AND EXIST. ASPHALT. TACK COAT SEAM.
18" WIDE STOP BAR WHITE THERMOPLASTIC RELOCATE STOP SIGN OPPOSITE STOP BAR
CURB R= 20' Δ= 71°15'12" L= 24.87'
ROAD N89°40'00" W
PC RETURN 47+33.75
TOC 303.80
TOC 304.05
TOC 304.79
TOC 304.42
TOC 304.33
303.44
G.B. 303.75
SS
W
W
FG 303.32
N 17°12'11" W
VISTA
DRIVE
-1.49%
-2.6%
303.03
303.23
303.03
47+56.46 FG 304.47
30'
30'
GRADE BREAK 47+92 FG 303.95
SD
PC RETURN 47+09.5
TOC 305.15
TOC 304.55
TOC 303.97
TOC 303.06
G.B. 304.09
CURB R= 20' Δ= 108°44'48" L= 37.96
THORNTON
-5.45%
302.20
302.54
301.20
EXIST. 18" CMP
48+20 MATCH EXISTING ASPHALT. TACK COAT SEAM
CONC. CURB & GUTTER TO 1/2 DELTA, TAPER TO PT RETURN W/ ASPHALT CURB.
18" WIDE STOP BAR WHITE THERMOPLASTIC LOCATED OPPOSITE EXIST. STOP SIGN. (TYP.)
MATCH EXIST. ASPHALT TACK COAT SEAM

18/8 THORNTON ROAD INTERSECTION DETAIL

SCALE: 1" = 20'

RECORD DRAWINGS

NO.	REVISION	BY	DATE

WEDEN ENGINEERING, INC.
ENGINEERING AND LAND SURVEYING
BELLINGHAM, WASHINGTON 671-8200, 354-3723

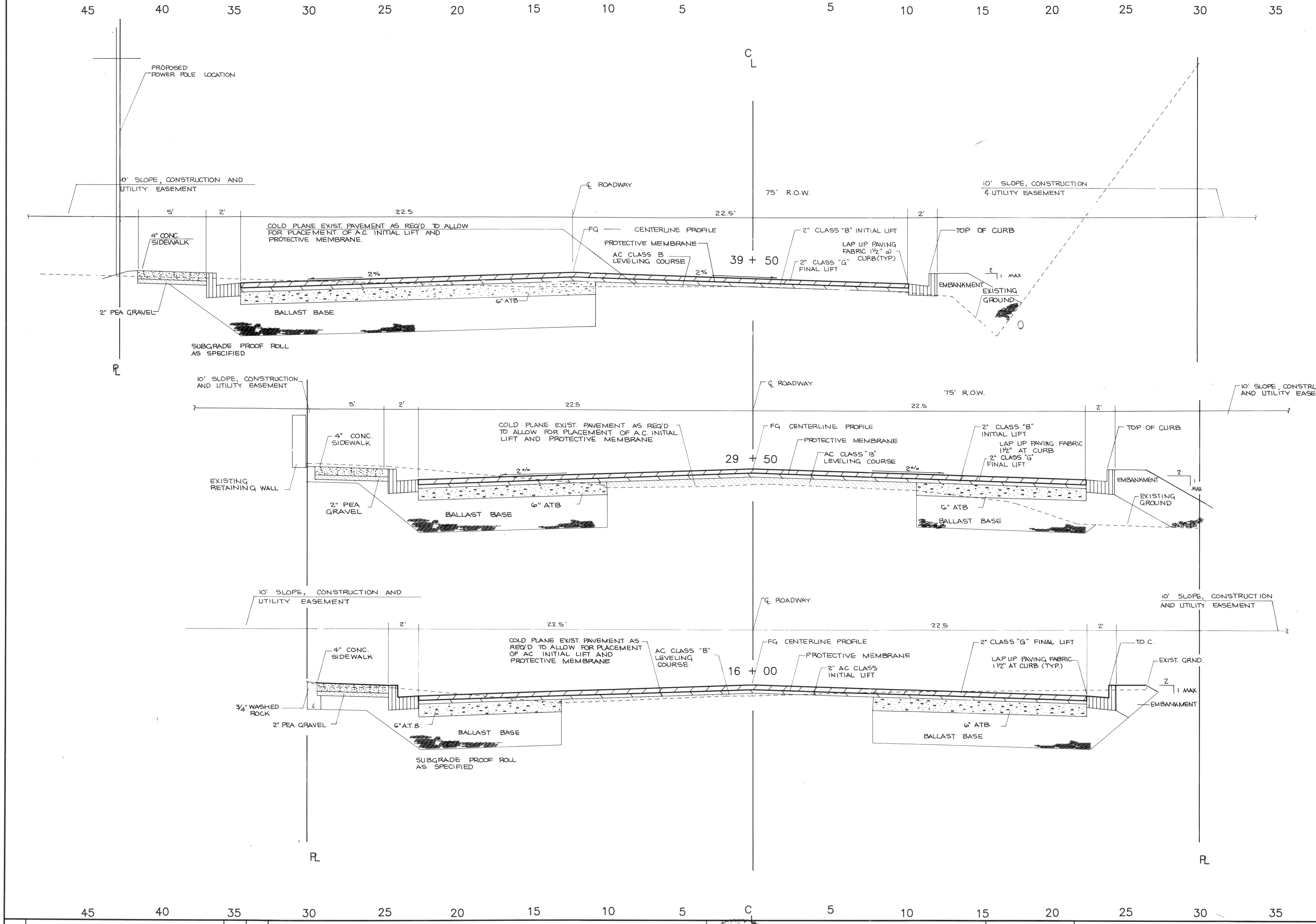
DESIGNED BY: J.L.W.
DRAWN BY: T.E.P.
CHECKED BY: C.O.L.

CITY OF FERNDALE
VISTA DRIVE ROADWAY IMPROVEMENTS
TIB NO. 9-W-985-(001)
DETAILS

DATE: MAY 91
SCALE: AS SHOWN
JOB NO. 90061
SHEET 10 OF 19

124375

00186.011 2.8.00 KR


45
40
35
30
25
20
15
10
5
5
10
15
20
25
30
35
C
L
PROPOSED
POWER POLE LOCATION
10' SLOPE, CONSTRUCTION AND
UTILITY EASEMENT
℄ ROADWAY
75' R.O.W.
10' SLOPE, CONSTRUCTION
& UTILITY EASEMENT
5'
2'
22.5
22.5'
2'
4" CONC.
SIDEWALK
COLD PLANE EXIST. PAVEMENT AS REQ'D TO ALLOW
FOR PLACEMENT OF A.C. INITIAL LIFT AND
PROTECTIVE MEMBRANE.
FG — CENTERLINE PROFILE
PROTECTIVE MEMBRANE
AC CLASS B
LEVELING COURSE
2%
2%
39 + 50
2" CLASS "B" INITIAL LIFT
LAP UP PAVING
FABRIC 1½" @
CURB (TYP.)
2" CLASS "G"
FINAL LIFT
TOP OF CURB
EMBANKMENT
2
1 MAX
EXISTING
GROUND
6" ATB
BALLAST BASE
2" PEA GRAVEL
SUBGRADE PROOF ROLL
AS SPECIFIED
PL
10' SLOPE, CONSTRUCTION
AND UTILITY EASEMENT
℄ ROADWAY
75' R.O.W.
10' SLOPE, CONSTRUCTION
AND UTILITY EASEMENT
5'
2'
22.5
22.5
2'
4" CONC.
SIDEWALK
COLD PLANE EXIST. PAVEMENT AS REQ'D
TO ALLOW FOR PLACEMENT OF A.C. INITIAL
LIFT AND PROTECTIVE MEMBRANE
FG CENTERLINE PROFILE
PROTECTIVE MEMBRANE
AC CLASS "B"
LEVELING COURSE
29 + 50
2%
2%
2" CLASS "B"
INITIAL LIFT
LAP UP PAVING FABRIC
1½" AT CURB
2" CLASS "G"
FINAL LIFT
TOP OF CURB
EMBANKMENT
2
1
MAX
EXISTING
GROUND
EXISTING
RETAINING WALL
2" PEA
GRAVEL
6" ATB
BALLAST BASE
6" ATB
BALLAST BASE
10' SLOPE, CONSTRUCTION AND
UTILITY EASEMENT
℄ ROADWAY
10' SLOPE, CONSTRUCTION
AND UTILITY EASEMENT
2'
22.5'
22.5
2'
4" CONC.
SIDEWALK
COLD PLANE EXIST. PAVEMENT AS
REQ'D TO ALLOW FOR PLACEMENT
OF AC INITIAL LIFT AND
PROTECTIVE MEMBRANE
AC CLASS "B"
LEVELING
COURSE
FG CENTERLINE PROFILE
PROTECTIVE MEMBRANE
16 + 00
2" AC CLASS
INITIAL LIFT
2" CLASS "G" FINAL LIFT
LAP UP PAVING FABRIC
1½" AT CURB (TYP.)
T.O.C.
EXIST. GRND.
2
1 MAX
EMBANKMENT
¾" WASHED
ROCK
2" PEA GRAVEL
6" A.T.B.
BALLAST BASE
6" ATB
BALLAST BASE
SUBGRADE PROOF ROLL
AS SPECIFIED
PL
PL
45
40
35
30
25
20
15
10
5
C
5
10
15
20
25
30
35

RECORD
DRAWINGS

NO.	REVISION	BY	DATE

WEDEN ENGINEERING, INC.
ENGINEERING AND LAND SURVEYING
BELLINGHAM, WASHINGTON 671-8200, 354-3723

DESIGNED BY: J.L.W.
DRAWN BY: T.E.P.
CHECKED BY: C.O.L.

CITY OF FERNDALE
VISTA DRIVE ROADWAY IMPROVEMENTS
TIB NO. 9-W-985 (001)
CROSS SECTIONS

DATE MAY '91
SCALE AS SHOWN
JOB NO. 90061
SHEET 11 OF 19