

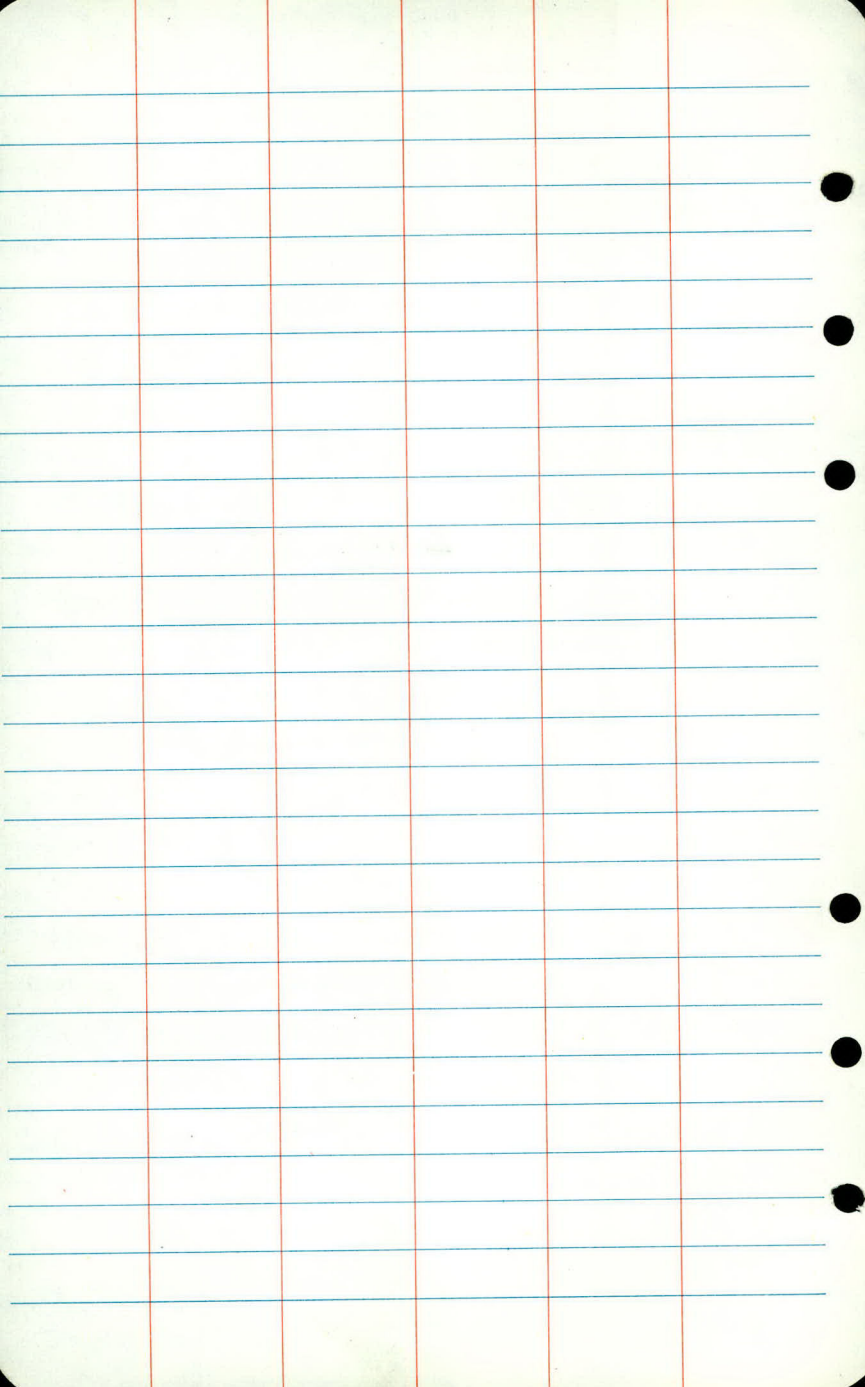
76-127 PLANS

13-57

Plan Survey
Soil Boring
Finals

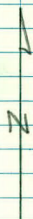
White Bear Park Beach Improvement 1980

Stadia	Topo	24 1-23
	Topo Borings	24
Band Lands		3-4
Stadia	<u>Elows</u>	1-20
Borings		1-4



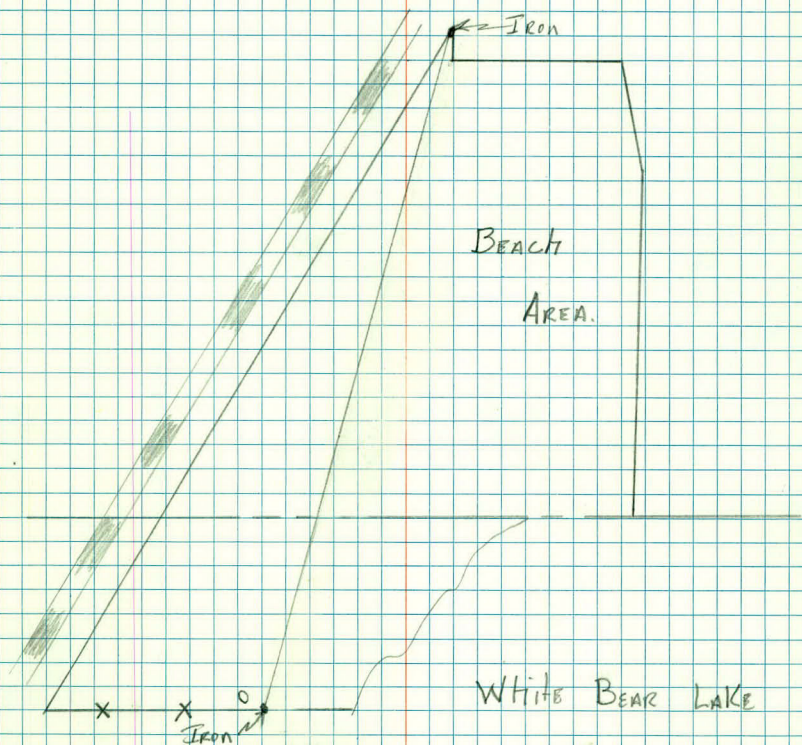
J.A.
D.S.
R.C.
M.R.

1



Studia Topo

White BEAR LAKE BEACH



Sta

Station

Index

Length

Area

Volume

2

10

10+66.83

7+07.98

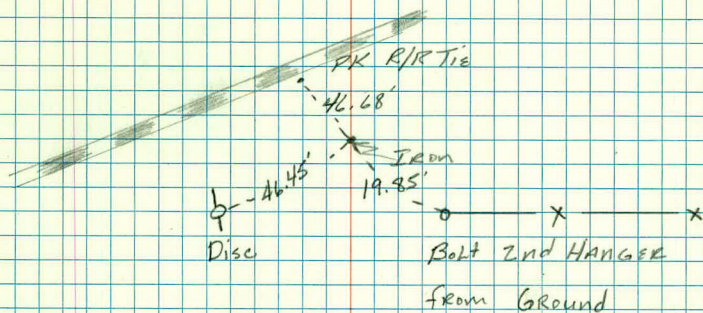
P.O.T.

0+00

J.A.
D.S.
R.C.

11-6-80
Cldy 45°

2



Disc P.P.
141.61'

P.K. 35.67 -- ()
Disc
30" Cot
53.74

()
Disc
4-30" Cot.

() Disc 18" Ash

32" OAK Disc

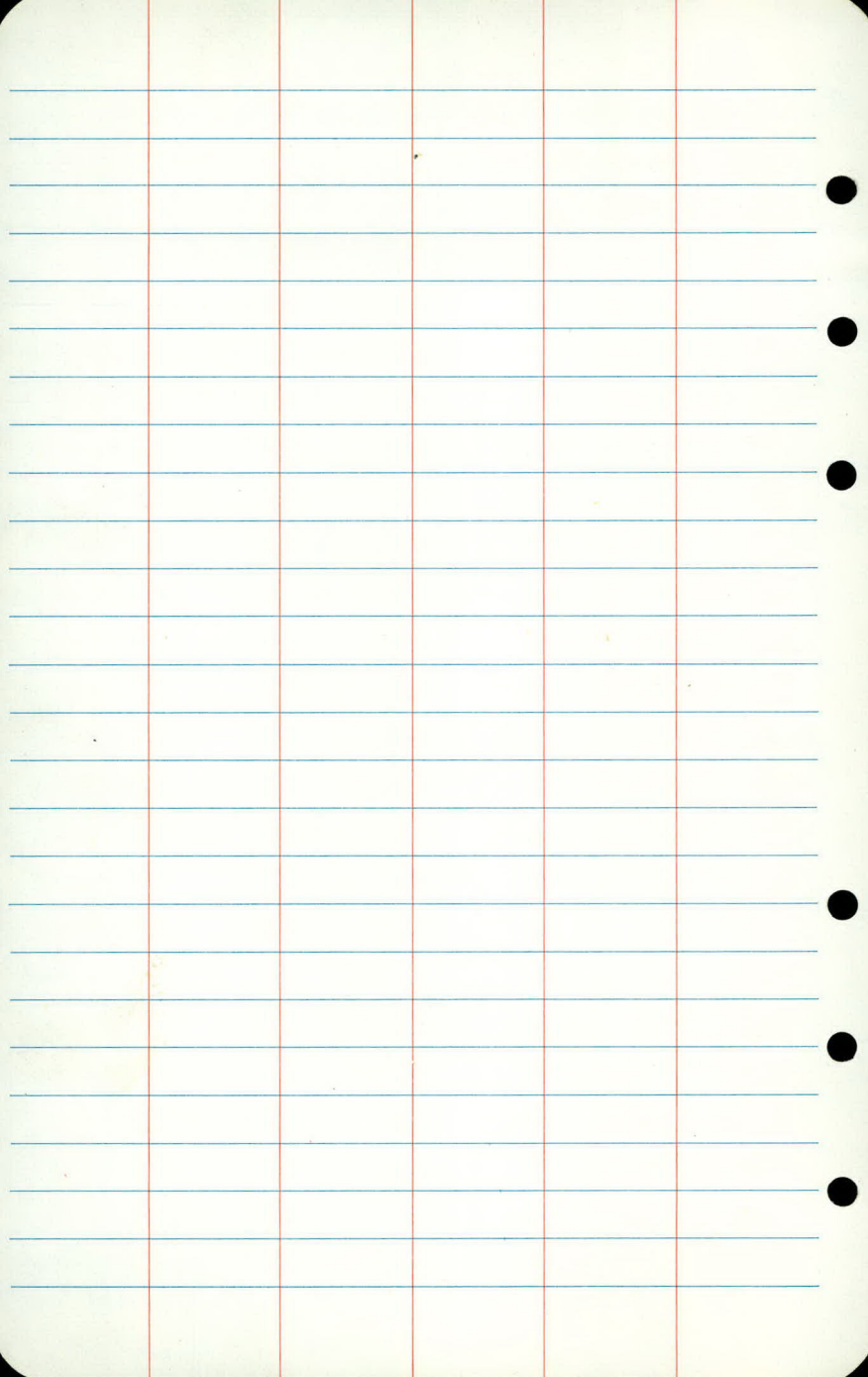
()

20.23

55.37

Iron
10.12

Top Fe Post
End of Fence



Stadin White Bear

LAKE BEACH

STA	Station	Azimuth	Vert. Angle or Rod L.	Horizontal Distance	ELEV
Sight STA 2	PI @ 0+00	ELEV.	933.72	H.I. =	
STA 2	2.00	0° 00'		200	
	.38	60° 19'		38	
	2.15	56° 50'		215	
	2.26	57° 34'		226	
	2.26	48° 50'		226	
	2.50	53° 42'		250	
	2.76	50° 07'		276	
	3.26	57° 20'		326	
	3.88	50° 35'		388	
	6.27	55° 58'		627	? 527
	5.35	51° 55'		535	
	4.22	50° 32'		422	
	2.60	46° 24'		260	
	1.02	27° 54'		102	
	1.02	27° 54'		102	
	2.04	15° 53'		204	
	2.38	14° 14'		238	
	2.80	11° 56'		280	

J.A.
M.L.
D.S.
R.L.
M.R.

Windy 38°

Description

6

End Fence 3' Chain Link

40" Cott

Fence 3' Chain Link

48" Cott

36" Cott

38" Cott

Fence 3' Chain Link

6" Cott

Water WBL.

End Fence 3wire strand

Fence 3wire strand

Fence 3wire strand

End Fence 3wire strand

Begin Guard Rail

Guard Rail

PP

End Guard Rail

Sta.	Sta Inter	Azimuth	VERT Angle OR Roof Reading	Horizontal Distances	
	1.28	359° 19'		128	
	1.00	10° 56'		100	
	1.06	21° 15'		106	
	2.04	292° 01'		204	
	2.29	288° 54'		229	
	3.19	254° 04'		319	
	3.46	251° 15'		346	
	3.60	251° 47'		360	
	2.80	244° 58'		280	
	2.16	243° 40'		216	
	1.84	243° 52'		184	
	1.81	247° 57'		181	
	1.61	238° 47'		161	
	1.39	237° 03'		139	
	1.38	237° 56'		138	
	1.57	255° 40'		157	
	1.22	243° 03'		122	
	.73	236° 14'		73	
	.16	354° 24'		16	

Description

13 OAK, 6 Pine

Cor. Wooded Area N.E. Cor. 57 Cott, 1 Ash, 8 Elm

West Edge Bit Rd Old Lake Ave

East Edge Bit Rd Old Lake Ave

South side Bit Rd

North side Bit Rd

West End Wooded Area

South Edge Rd

North Edge Rd.

30" Box Elder

Stump

24" OAK

Stump

MH

End 3' Chain Link Fence

P. P.

Prop Iron

14" Pine

Fence 3' C-L.

S.E. Cor Wooded Area.

Sta	Stadia Inter	Azimuth	Vert Angle or Rod Red	Horizontal Distance	
	.10	71° 28'		10	
	.12	73° 10'		12	
	.35	72° 55'		35	
	1.98	13° 37'		198	
	1.95	7° 01'		195	
	1.95	4° 01'		195	
SIGHT STA 4# T @ R+00					
	4.50	78° 51'		450	
	4.75	60° 25'		475	
	4.67	61° 00'		467	
	329	58° 48'		329	
	127	59° 26'		127	
	1.01	74° 37'		101	
	.96	51° 12'		96	
	.89	44° 21'		89	
	.91	46° 41'		91	
	4.08	57° 12'		408	

Description

8

End Fence 3' C-L.

West Edge Rd LAKE AVE

East Edge Rd LAKE AVE

End Conc Curb East Edge Rd (LAKE AVE)

End Conc Curb West Edge Rd (LAKE AVE)

PP / Acc Lite

END C-L FENCE

SHORELINE

SPILLWAY ? (BIT)

PP

BEG ROW OF 8" MAPLES (7)

PUMP HOUSE

METER POLE

VENT PIPE FOR LIFT STATION

LIFT STATION

END ROW 8" MAPLES

STA	STADIA	AZIMUTH	VERT ANGLE or ROD READ	HORIZONTAL DIST.
	INTER			
	4.35	54°31'		435'
	5.05	52°12'		505'
	3.95	50°14'		395'
	3.60	49°37'		360'
	2.95	48°34'		295'
	2.23	38°17'		223'
	1.76	39°34'		176'
	2.05	35°05'		205'
	1.90	35°00'		190'
	1.91	32°37'		191'
	2.11	31°15'		211'
	1.94	19°14'		194'
	1.09	27°32'		109'
	1.03	18°00'		103'
	2.03	16°23'		203'
	2.00	10°48'		200'
	2.12	357°18'		212'
	1.61	354°54'		161'
	.98	338°26'		98'

Nov 13, 80
Cloudy 34° Snow 9

DESCRIPTION

20" WILLOW

20" WILLOW

22" WILLOW

12" MAPLE

10" ELM

12" MAPLE

6" APPLE

10" RUSSIAN OLIVE

SOUTH END SIGN

NORTH END SIGN

12" RUSSIAN OLIVE

GRANITE MONUMENT

EAST EDGE ROAD 3+00

WEST EDGE ROAD 3+00

EAST EDGE ROAD 4+00

WEST EDGE ROAD 4+00

END GROUP OF OAK TREES

STUMP

END GROUP OF OAK TREES

STATION

VERT. ANGLE
OR

HORIZONTAL

STA

INTER

AZIMUTH

ROD READ

DIST

1.73

334°04'

173'

1.06

314°30'

106'

1.41

320°26'

141'

1.96

232°54'

196'

2.65

236°46'

265'

2.67

239°28'

267'

2.73

246°53'

273'

3.18

303°02'

318'

3.27

266°10'

327'

4.15

244°59'

415'

4.70

234°49'

470'

4.27

234°52'

427'

4.05

235°16'

405'

4.05

235°16'

405'

3.47

234°09'

347'

3.52

236°13'

352'

Nov 13, 80
Cloudy 34° SNOW

DESCRIPTION

10

16" BOX EDLER

30" BOX EDLER

BEGIN WOODED AREA

PP

ROAD SOUTH EDGE

ROAD NORTH EDGE

WOOD AREA

2 RR TRACKS

2 RR TRACKS

2 RR TRACKS

2 RR TRACES

PROPERTY LINE

PP

END WOODED AREA

EAST EDGE ROAD

WEST EDGE ROAD

STA	STADIA	VERT ANGLE OR	HORIZONTAL
	INTER	AZIMUTH	ROD READ DIST
SIGHT STA 8 & T @ 6100			
	1.17	179° 35'	1.17.
	1.25	167° 34'	1.25.
	1.56	170° 28'	1.56.
	2.02	149° 09'	2.02.
	2.55	116° 19'	2.55.
	3.71	99° 21'	3.71.
	4.00	97° 37'	4.00.
	1.32	168° 00'	1.32.
	1.20	166.58	1.20.
	1.88	156° 52'	1.88.
	1.50	150° 45'	1.50.
	1.45	153° 20'	1.45.
	1.36	151° 58'	1.36.
	1.28	150° 28'	1.28.
	1.31	146° 29'	1.31.
	.70	150° 43'	.70.
	.72	160° 04'	.72.

D. S.
M. R.
R. C.

CLOUPY
28.
NOV 17 11

DESCRIPTION

12" BOX ELDER

3 - 24" R.C.P. CULVERTS

HYDRANT

4" MAPLE

8" MAPLE

6" MAPLE

SHORE LINE

SO. EDGE RETAINING WALL CONCRETE

NO. EDGE RETAINING WALL CONCRETE

MANHOLE

SO. EDGE WING WALL-SPILLWAY
CONCRETE

SO. EDGE RETAINING WALL

CTR-3 - 24" R.C.P. CULVERTS

NO. EDGE CONCRETE RETAINING WALL
CONCRETE

NO. EDGE WING-WALL-SPILLWAY

SURFACE DRAIN

SO. EDGE RETAINING WALL-CON
CONCRETE

STA

STADIA

OR

HORIZONTAL

INTER

AZIMUTH

ROD READ

DIST

.69 159°31'

69.

.66 158°44'

66.

.91 155°00'

91.

1.04 144°22'

104.

1.77 152°22'

177.

1.68 142°53'

168.

1.73 130°18'

173.

1.85 109°51'

185.

1.99 105°28'

199.

1.80 106°32'

180.

1.90 103°56'

190.

1.83 100°55'

183.

1.91 100°49'

191.

1.62 110°37'

162.

1.39 123°16'

139.

1.28 126°32'

128.

1.20 124°09'

120.

1.12 122°00'

1.12

DESCRIPTION

CLOUD 4-30°
NOV 17
12

12" R.C.P. CULVERT

NO EDGE RETAINING WALL - CONCRETE

WEST EDGE GUARD RAIL

GUARD RAIL

WATER SHUT-OFF

14" MAPLE

12" MAPLE

CTR-3-30" C.M.P'S - WEST END

CTR-3-30 C.M.P'S - EAST END

END PORTABLE CONC CURB - PARKING LOT

PARKING LOT
BEGIN PORTABLE CONCRETE CURB

POINT ON PORTABLE CONC CURB

8" ASH

12" MAPLE

10" MAPLE

S.W COR. BIT PARKING LOT

PORTABLE CURB - BEGIN RADIUS

P.O.R. CURB - SO DRIVEWAY

STA	STADIA INTER	AZIMUTH	VERT ANGLE	DIST
			OR ROD READ	
	1.00	126°06'		100.
	1.12	129°09'		112.
	1.06	126°24'		106.
	.67	115°43'		67.
	79	114°17'		79.
	86	108°38'		86.
	.89	100°38'		89.
	.59	117°37'		59.
	1.03	145°23'		103.
	1.71	104°25'		171.
	1.81	107°00'		181.
	1.90	104°08'		190.
	2.18	93°38'		218.
	2.37	101°36'		237.
	2.69	103°29'		269.
	2.70	96°04'		270.
	3.01	90°36'		301.
	3.36	87°06'		336.

020404-30
NOV 17

DESCRIPTION

13

END RADIUS - SO. DRIVEWAY

QUINT 20" COTTONWOOD

END GUARD RAIL - 10 POSTS

BEGIN GUARD RAIL

BEGIN RADIUS
END GUARD RAIL - 3 POSTS

POR ON PORTABLE CURB - RADIUS

END RADIUS - PORTABLE CUR

BEGIN RADIUS

BEGIN RADIUS

S.W. COR OPENING IN PARKING LOT

GUARD POST

GUARD POST

S.E. COR BIT PARKING LOT

6" MAPLE

4" MAPLE

8" MAPLE

8" MAPLE

5" ASH

STA	STADIA	VERT ANG OR		HORIZONTAL
	INTER	AZIMUTH	ROD READ	DIST
	3.54	93° 01'		354.
	3.03	80° 25'		303.
	2.58	86° 26'		258.
	2.54	84° 13'		254.
	2.41	84° 54'		241.
	2.45	87° 16'		245.
	2.26	88° 06'		226.
	2.22	87° 12'		222.
	2.20	84° 00'		220.
	2.12	88° 25'		212.
	2.07	84° 50'		207.
	2.10	81° 08'		210.
	2.29	81° 14'		229.
	2.55	80° 22'		255.
	2.33	80° 09'		233.
	2.28	80° 28'		228.
	2.28	79° 00'		228.
	2.19	77° 22'		219.

DESCRIPTION

14

8" MAPLE

8" ASH

SO. END BIKE RACK

NO. END BIKE RACK

NO. END BIKE RACK

SO. END BIKE RACK

8" MAPLE

WOOD GUARD POST

CONCRETE GUARD POST

S.E BIT OPENING PARKING LOT

N.E BIT OPENING PARKING LOT

ARC LITE POLE

S.W COR 4' CONCRETE SIDEWALK

S.E COR 4' CONCRETE SIDEWALK

S.W COR BEACH HOUSE

SO. COR PRIVACY FENCE

NO COR PRIVACY FENCE

6" ASH

STA	INTER	AZIMUTH	VERT ANG	HORIZONTAL
			OR	
			ROD READ	DIST
	2.24	75°26'		224'
	2.25	73°57'		225'
	2.30	70°54'		230'
	2.27	69°66'		227'
	2.54	70°10'		254'
	.66	97°20'		66'
	.24	90°00'		24'
	.45	90°00'		.45-
	.80	90°00'		80-
	2.13	90°00'		213-
	.62	59°26'		62'
	2.55	70°24'		255'
	2.83	68°26'		283'
	2.46	64°24'		246'
	2.04	70°18'		204'
	2.37	61°24'		237'
	2.10	58°48'		210'
	2.25	57°14'		225'

CL0404 36°
NOV 17
15

DESCRIPTION

50 END PRIVACY FE.

110 END PRIVACY FE

N.W. COR BEACH HOUSE

N.W. COR 4' CONC SIDEWALK

N.E. COR 4' CONC SIDEWALK

10" ASH

WEST EDGE ROAD STA 6+00 (LAKE AV)

EAST EDGE ROAD STA 6+00 (LAKE AV)

POINT ON CURB WEST EDGE ^{BIT} PARK LOT

POINT ON CURB EAST EDGE BIT PARK LOT

10" ASH

TWIN 18" COTTONWOOD

10" ASH

TWIN 20" COTTONWOOD

LIFEGUARD PARKING SIGN

20" COTTONWOOD

PARKING LOT SIGN

6" ASH

STA	STADIA	AZIMUTH	VERT ANG OR	HORIZONTAL
	INTER		ROD READ	DIST
	2.45	57°20'		245 .
	2.83	57°55'		283 .
	3.24	58°25'		324 .
	2.45	53°27'		245 .
	2.51	39°55'		251 .
	3.21	48°42'		321 .
	2.40	48°03'		240 .
	2.49	47°44'		249 .
	2.64	41°40'		264 .
	2.58	40°21'		258 .
	.81	30°44'		81 .
	1.26	14°55'		126 .
	1.68	5°09'		168 .
	1.75	5°26'		175 .
	1.84	5°58'		184 .
	1.01	359°05'		101 .
	1.01	10°45'		101 .
	1.13	27°38'		113 .

CLOUDY 36°
NOV 17 16

DESCRIPTION

3-20" COTTONWOOD

10" MAPLE

8" MAPLE

♀ CHILDREN'S SLIDE

24" COTTONWOOD

8" MAPLE

6" ASH

SO. EDGE OF SWING SET

NO. " " "

10" MAPLE

60" COTTONWOOD

24" COTTONWOOD

6" ASH

SO. EDGE SIGN

NO. " "

W. EDGE OF LAKE AVE. STA. 7+00

E " " " "

W. EDGE OF PARKING LOT

STA.	STADIA INTER	VERT ANG OR AZIMUTH	ROD READ	HORIZONTAL DIST
------	-----------------	---------------------------	----------	--------------------

	2.08	58°29'		208
--	------	--------	--	-----

SIGHT 10+00 & π @ 8+00 &

	2.22	341°46'		222
--	------	---------	--	-----

	1.93	335°40'		193
--	------	---------	--	-----

	2.07	334°28'		207
--	------	---------	--	-----

	.81	293°43'		81
--	-----	---------	--	----

	1.39	266°24'		139
--	------	---------	--	-----

	2.06	218°38'		206
--	------	---------	--	-----

	2.36	230°37'		236
--	------	---------	--	-----

	2.87	191°46'		287
--	------	---------	--	-----

	2.83	194°21'		283
--	------	---------	--	-----

	3.10	197°23'		310
--	------	---------	--	-----

	3.76	208°55'		376
--	------	---------	--	-----

	4.00	216°09'		400
--	------	---------	--	-----

	5.53	205°00'		553
--	------	---------	--	-----

	5.52	210°50'		552
--	------	---------	--	-----

CLOUDY 36°
NOV 17

DESCRIPTION

17

E. EDGE OF PARKING LOT

EAST EDGE LAKE AVE. + E RR TRACKS

WEST EDGE LAKE AVE + E RR TRACKS

RR SIGN

PP

E RR TRACKS

PP

E RR TRACKS

QUAD 36" BOXED LK

8" WILLOW

10" ELM

PP

E RR TRACKS

PP

E RR TRACKS

STA	STADIA	AZIMUTH	VERT ANGLE OR ROD READ	HORIZONTAL DIST.
	INTER.			
	5.05	222°25'		505
	5.20	225°54'		520
	4.08	234°26'		408
	3.84	230°40'		384
	2.87	244°38'		287
	3.14	249°03'		314
	2.54	272°50'		254
	2.21	270°36'		221
	2.22	304°06'		222
	2.53	302°07'		253
	2.10	344°10'		210
	1.90	346°04'		190
	1.80	351°27'		180
	1.41	348°12'		141
	1.02	346°30'		102
	.98	349°29'		98
	.84	353°33'		84
	.95	358°16'		95

ML
DS
MR

NOV 18, 80
SUNNY 20

18

DESCRIPTION

SOUTH EDGE HWY 96

NORTH EDGE HWY 96

NORTH EDGE HWY 96

SOUTH EDGE HWY 96

SOUTH EDGE HWY 96

NORTH EDGE HWY 96

NORTH EDGE HWY 96

SOUTH EDGE HWY 96

SOUTH EDGE HWY 96

NORTH EDGE HWY 96

RR SIGN

COR OF ROW POSTS (NW)

NW COR PARKING LOT

8" ASH

COR OF ROW POSTS (SW)

6" MAPLE

END ROW POST

ER

STADIA

VERT ANGLE

HORIZONTAL

OR

INTER

AZIMUTH

ROD READ

DIST

.67

349°33'

67

.89

339°11'

89

.85

326°29'

85

.45

298°38'

45

.31

339°37'

31

.16

328°41'

16

.48

352°00'

48

.46

2°33'

46

.40

17°41'

40

.23

25°11'

23

.17

34°06'

17

.13

44°35'

13

.30

270°00'

30

.10

270°00'

10

.24

90°00'

24

1.50

90°00'

150

2.96

90°00'

296

3.60

109°37'

360

ML
DS
MR

NOV 18 1950
SUNNY 18°

DESCRIPTION

19

REG PORTABLE CURB + POR

BR

WEST EDGE LAKE AVE

WEST END BARRICADE

EAST END BARRICADE

BR

REG. PORTABLE CURB + POR

METAL POST

ER

QUAD 12" COTONWOOD

20" COTONWOOD

TWIN 24" COTONWOOD

WEST EDGE LAKE AVE

EAST EDGE LAKE AVE

WEST EDGE PARKING LOT

EAST EDGE PARKING LOT

SHORE LINE

SHORE LINE

SINDIA	VERT ANGLE OR	HORT.	
INTER	AZIMUTH	ROD READ	DIST
2.47	87°16'	247	'
1.89	86°27'	189	'
1.70	84°31'	170	'
1.61	79°16'	161	'
1.63	77°06'	163	'
2.32	78°39'	232	'
2.02	77°45'	202	'
1.81	79°45'	181	'
1.53	72°09'	153	'
2.00	72°09'	200	'
1.81	78°17'	181	'
1.58	72°09'	158	'
2.05	72°09'	205	'
1.81	66°04'	181	'
1.78	64°51'	178	'
1.99	66°05'	199	'
1.70	64°44'	170	'
1.61	64°14'	161	'

8" MAPLE

POST

TEETH TOTER

BAR B QUE

8" MAPLE

10" MAPLE

BAR B QUE

SOUTH EDGE BIT MAT

WEST SIDE SHELTER

EAST SIDE SHELTER

SOUTH EDGE SHELTER

WEST EDGE BIT MAT

EAST EDGE BIT MAT

NORTH EDGE BIT MAT

NORTH EDGE SHELTER

BAR B QUE

10" ELM

BAR B QUE

STA	STADIA	AZIMUTH	VERT. ANGLE OR	HORT
	INTER		ROD READ	DIST
	2.07	61°36'		207'
	1.50	59°43'		150'
	1.22	55°22'		122'
	1.07	53°21'		107'
	1.43	62°25'		143'
	1.55	55°42'		155'
	1.81	54°37'		181'
	2.60	59°55'		260'
	2.77	58°13'		277'
	2.73	54°53'		273'
	2.51	53°20'		251'
	2.38	50°41'		238'
	2.36	46°44'		236'
	2.53	39°21'		253'
	1.79	40°03'		179'

NOV 18 80

SUNNY 18°

DESCRIPTION

21

8" MAPLE

ARC LITE

METAL POST

METAL POST

BR

POR

FR

END PORTABLE CURB SO. SIDE RAMP

E BOAT RAMP SHORELINE

BEG PORTABLE CURB NORTH SIDE RAMP

BR

POR

FR

EAST POR TURNAROUND

10" ELM

STADIA

VERT ANGLE
OR

HORT.

STA

INTER

AZIMUTH

ROD READ

DIST.

SIGHT 10+66.83 π @ 10+00

1.57

168° 03'

157'

1.57

161° 19'

157'

2.38

124° 19'

238'

1.32

97° 05'

132'

1.48

106° 56'

148'

1.47

118° 11'

147'

1.16

118° 31'

116'

1.19

107° 37'

119'

1.08

100° 18'

108'

1.49

83° 36'

149'

.94

78° 12'

94'

1.58

72° 00'

158'

1.31

59° 50'

131'

1.28

58° 20'

128'

.80

60° 55'

80'

2.66

58° 22'

266'

2.00

52° 41'

200'

1.68

53° 43'

168'

DESCRIPTION

22

METAL POST

METAL POST

6" MAPLE

NORTHWEST COR. RAMP TURNAROUND

BR

POR

FR

BAR B QUE

8" MAPLE

10" ELM

8" MAPLE

BAR A QUE

8" ASH

BAR B QUE

NORTHEAST COR. PARKING LOT

SHORELINE + SE COR SWAMP

EDGE SWAMP

EDGE SWAMP

STA	STIPA INTER	AZIMUTH	VERT L OR ROD	HORT. DIST
	1.24	52°25'		124'
	.82	30°10'		.82'
	.51	11°56'		.51'
	.27	5°50'		.27'
	.24	330°53'		.24'
	.34	324°08'		.34'
	.25	308°49'		.25'
	1.15	339°51'		115'
	1.44	323°50'		144'
	1.42	317°31'		142'
	1.74	323°07'		174'
	2.05	328°05'		205'
	1.21	300°25'		1.21'
	1.33	302°52'		133'
	1.53	294°28'		153'
	1.26	291°03'		126'

ML
DS
MR

Nov 18, 80
Sunny 18°

DESCRIPTION

23

EDGE SWAMP

EAST END C-L FENCE + SW COR SWAMP

WEST END C-L FENCE

SE COR WOODED AREA

PP

SW COR WOODED AREA

END GUARD POST

R RR TRACKS

PP

BR SE COR LAKE AVE + 96

Por

"

"

ER

"

"

BR SW COR LAKE AVE + 96

Por

"

"

ER

PP

	STADIA		VERT L OR	HORIZONTAL	
STA	INTER	AZIMUTH	ROD	DIST	ELEV
SIGHT	STA 9+00 @ STA 7+00				
	5.27	933.05		927.78	
•	3.45	246° 54'	6.00	345	927.05
•	2.80	256° 15'	5.30	280	927.75
•	2.44	275° 42'	5.26	244	927.79
•	2.45	298° 55'	4.90	245	928.15
•	3.36	2° 25'	8.16	336	924.89
•	3.81	11° 01'	8.67	381	924.38
•	2.98	183° 23'	8.48	298	924.57
•	1.22	221° 50'	9.21	122	923.84
•	1.18	138° 16'	6.68	1.18	926.37
•	5.15	177° 34'	3.55	515	929.50
•	4.87	195° 04'	6.80	487	926.25
			5.38	927.67	927.66
B. M				927.42	
B. M				927.78	
B. M				927.66	

DESCRIPTION

24

PK STA 2+00 $\pm$

DRILL HOLE #

1

1"

"

2

1"

"

3

1"

"

4

1"

"

5

1"

"

6

1"

"

7

1"

"

8

1"

"

9

1"

"

10

1"

"

11

PK STA 7+00 $\pm$

TOP DISCHARGE PIPE PUMP HOUSE W.B.B.

P.K. STATION # 2

P.K. STA # 7

H4D STA 4+50 2.11

STA 7 5.38

Bench MARKS

White BEAR LAKE BEACH

[illegible]

J.H.
D.S.
RC

Description

11-6-80
CLdy 50°

4

Spot of Paint S.E. Cor of Discharge Slab
Water W.B.L.

Top Discharge Pipe @ Pump Ho @ W.B. Bench

P.K. STA 2+00

P.K. STA 7+00

Water W.B.L.

Sta 2

Top Iron 0+00 L.

STADIA SURVEY

STADIA

VERT L

INCH

AZIMUTH

RED BROW

STA

START 21

X @ 100

ELV

92

=

=

ML
DS
MR

Nov 19, 80
Sunny 35°

1

STADIA Survey
ELEVATIONS

	STADIA		VERT OR	HORT.	
STA	INTER	AZIMUTH	ROD READ	DIST.	ELEV
SIGHT 2+00	π @ 0+00	ELEV = 927.78 + 1149 = 939.27			
1	.12	90°00'	6.7	12	932.57
2	.23	90°00	6.5	23	932.77
3	.28	90°00'	6.9	28	932.37
4	.40	90°00'	6.3	40	932.97
5	.53	90°00'	9.3	53	929.97
6	.27	270°00	5.7	27	933.57
7	.69	270°00'	9.0	69	930.27
8	1.18	270°00	10.5	118	928.77
9	1.89	270°00'	11.9	189	927.37
10	2.73	273°12'	11.9	273	927.37
11	2.91	273°12'	11.3	291	927.97
12	3.17	273°13'	13.2	317	926.07
13	3.53	272°37'	13.4	353	925.87
14	3.56	272°29'	12.4	356	926.87
15	3.76	272°21'	12.6	376	926.67
16	.38	301°08'	9.4	38	929.87
17	.12	301°08	5.4	12	933.87
18	.50	0°00'	8.7	50	930.57

Nov 19, 80

2

BM STA 2+00 927.78 PK NAIG

GUTTER

& LORE AVE

GUTTER

& 12TH ST

DITCH

DITCH

& RR

STA	STADIA INTER	AZIMUTH	VERT L OR ROD READ	HORT. DIST	ELEV
$\pi @ 0+00 \text{ ELEV} = 939.27$					
19	.52	17°42'	7.6	52	931.67
20	.54	28°51'	7.4	54	931.87
21	.64	35°10'	7.9	64	931.37
22	.69	39°42'	7.4	69	931.87
23	.81	44°33'	10.0	81	929.27
24	1.74	57°44'	11.8	174	927.47
25	.49	341°08'	9.7	49	929.57
26	.97	295°15'	11.0	97	928.27
27	2.37	283°40'	11.4	237	927.87
28	2.63	283°03'	10.6	263	928.67
29	2.90	283°06'	13.4	290	925.87
30	3.08	282°57'	15.7	308	923.57
31	3.32	283°44'	16.2	332	923.07
32	3.49	283°47'	12.4	349	926.87
33	3.66	283°23'	13.2	366	926.07

T.P. $\pi \text{ ELEV } 939.27 - 9.29 = 929.98$

SIGHT 4+00 $\pi @ 2+00 \text{ ELEV } 929.98 + 3.25 = 933.23$

GUTTER

2

GUTTER

FENCE

4 12TH ST

4 RR TRACKS

SPIKE IN PP 2+20 RT 60+

" " " " " "

STATION

VERT L
OR

HORIZ.

STA

INTER

AZIMUTH

P.O. P.O.

DIST

ELEV

 Δ ELEV = 933.23

34	1.00	180°00'	4.5	100	928.73
35	1.02	169°20'	2.9	102	930.33
36	.97	160°07'	2.8	97	930.43
37	.94	154°46'	3.2	94	930.03
38	.95	151°00'	3.0	95	930.23
39	.99	145°37'	4.3	99	928.93
40	2.04	112°56'	5.9	204	927.33
41	1.04	190°33'	5.1	104	928.13
42	1.75	231°12'	5.0	175	928.23
43	2.23	238°38'	5.5	223	927.73
44	2.61	243°02'	5.4	261	927.83
45	2.96	245°34'	6.6	296	926.63
46	3.04	247°06'	9.0	304	924.23
47	3.30	250°34'	9.8	330	923.43
48	3.60	252°26'	5.1	360	927.53
49	.50	180°00'	5.1	50	927.53
50	.51	158°16'	3.5	51	929.73
51	.59	154°52'	3.9	59	929.33

11-19-80

4

GUTTER

£

GUTTER

FENCE

£ 12TH ST

£ RR TRACKS

GUTTER

STATION

HGT

STA	INTER	AZIMUTH	FOOT READ	DIST	ELEV
$\Sigma \text{ ELEV} = 933.23$					
52	.55	143°05'	3.5	55	929.73
53	.64	136°01'	3.8	64	929.43
54	.67	131°48'	3.4	67	929.83
55	.74	126°11'	5.0	74	928.23
56	1.75	103.42	6.2	175	927.03
57	2.57	98°25'	8.6	257	924.63
58	1.09	240°46'	5.4	109	927.83
59	1.76	247°56'	6.1	176	927.13
60	2.52	253°29'	8.1	252	925.13
61	2.67	254°55'	9.6	267	923.63
62	3.20	257.45'	9.6	320	923.63
63	3.30	264°35'	6.7	330	926.53
64	.00	0°00	5.5	00	927.73
65	.19	90°00'	5.1	19	928.13
66	.35	90°00'	4.3	35	928.93
67	.46	90°00'	4.4	46	928.83
68	.68	90°00	5.6	68	927.63
69	1.23	90°00'	7.4	123	925.83

11-19-80

5

E LAKE AVE

GUTTER

FENCE

E 12TH AVE

E RR TRACKS

GUTTER

E LAKE AVE

GUTTER

	STADIA			HORT	
STA	INTER	AZIMUTH	RODRIGO	DIST	ELEV
	π ELEV = 933.23				
70	2.51	90°00	7.7	251	925.53
71	3.11	90°00	9.1	311	924.13
72	.23	270°00	5.8	23	927.43
73	1.15	270°00	6.7	115	926.53
74	1.93	269°36'	7.1	193	926.13
75	2.08	269°27'	8.8	208	924.43
76	2.28	269°18'	8.4	228	924.83
77	2.40	269°25'	7.4	240	925.83
78	3.51	269°22'	7.4	351	925.83
79	3.93	269°27'	9.9	393	923.33
80	4.01	268°46'	9.5	401	923.73
81	4.25	268°45'	6.7	425	926.53
SIGHT 4+00 π @ 2+00 ELEV 929.98 + 3.28 = 933.26					
82	.50	0°00	6.2	50	927.06
83	.55	29°30'	5.1	55	928.16
84	.62	37°10'	4.8	62	928.46
85	.68	44°02'	4.9	68	928.36

11-19-80

6

FRACK

E 12TH ST

E RETRACK

? E T.H. 96

SPIKE PP 2+20 RT 60I

STA	STADIA INTER	AZIMUTH	ROD READ	HGT DIST	ELEV
	T ELEV = 933.26				
82	.78	48°27'	5.0	78	928.26
83	1.30	66°24'	7.7	130	925.56
84	1.48	68°18'	8.8	148	924.46
85	1.64	71°03'	7.6	164	925.66
86	2.81	78°35'	8.5	281	924.76
87	4.00	81°43'	10.0	400	923.26
88	.73	313°53'	6.6	73	926.66
89	1.37	296°36'	7.7	137	925.56
90	1.51	294°18'	9.3	151	923.96
91	1.78	290°39'	8.5	178	924.76
92	2.12	287°36'	10.8	212	922.46
93	2.95	285°00'	11.1	295	922.16
94	3.10	285°04'	8.8	310	924.46
95	1.00	0°00'	8.6	100	924.66
96	1.00	18°26'	5.4	100	927.86
97	1.04	22°59'	5.0	104	928.26
98	1.07	27°47'	5.0	107	928.26
99	1.14	31°02'	5.2	114	928.06

ML
DS
MR

11-20-80

7

E RR TRACKS

GUTTER

E LAKE AVE

GUTTER

STA	STN	INTER	AZIMUTH	ROD READ	HORT	DIST	ELEV
			T ELEV 933.26				
100		1.17	35°17'	6.4		117	926.86
101		1.89	60°15'	8.1		189	925.16
102		2.09	63°00'	9.7		209	923.56
103		2.37	66°26'	7.9		237	925.36
104		4.50	78°19'	10.8		450	922.46
105		7.00	78°12'	13.4		700	919.86
106		1.57	315°38'	8.8		157	924.46
107		1.84	306°43'	11.7		184	921.56
108		2.90	294°26'	11.6		290	921.66
109		3.08	294°16'	7.9		308	925.36
110		1.50	0°00'	8.8		150	924.46
111		1.50	6°19'	8.5		150	924.76
112		1.51	13°26'	5.4		151	927.86
113		1.52	16°25'	5.2		152	928.06
114		1.56	20°24'	5.2		156	928.06
115		1.63	27°25'	7.2		163	926.06
116		2.94	60°02'	9.0		294	924.26
117		3.14	61°30'	10.1		314	923.16

11-20-80

8

SHORE LINE

2.5' WATER

± RR TRACKS

GUTTER

± LAKE AVE

GUTTER

STADIA

HURT

STA	INTER	AZIMUTH	ROD READ	DIST	ELEV
	π ELEV = 933.26				
118	3.31	63°16'	8.9	331	924.36
119	4.67	71°24'	10.9	467	922.36
120	7.17	70°54'	13.4	717	919.86
121	1.54	342°14'	8.6	154	924.66
122	2.18	315°23'	10.4	218	922.86
123	3.00	302°36'	11.7	300	921.56
124	3.19	301°47'	7.9	319	925.36

T.P. π ELEV 933.26 - 268 = 930.58

SIGHT STA 8+00 π @ 6+00 ELEV 927.66 + 2.28 = 929.94

125	2.00	180°00'	5.1	200	924.84
126	2.02	169°08'	2.4	202	927.54
127	2.09	167°14'	1.9	209	928.04
128	2.11	164°35'	1.7	211	928.24
129	2.17	162°44'	2.0	217	927.94

11-20-80

9

E RR TRACKS

Top HYD

PK 7+00 E

GUTTER

E LAKE AVE

GUTTER

STADIA

HORT.

STA	INTER	AZIMUTH	Red Rod	DIST	
		π ELEV =	929.94	201	
130	2.19	159°39'	4.0	219	925.94
131	3.38	130°41'	5.0	338	924.94
132	3.80	123°51'	5.6	380	924.34
133	3.94	122°21'	6.8	394	923.14
134	4.13	120°15'	5.7	413	924.24
135	4.65	116°45'	6.9	465	923.04
136	7.05	105°37'	9.6	705	920.34
137	2.03	195°33'	6.0	203	923.94
138	2.43	224°40'	7.3	243	922.64
139	2.74	236°05'	8.8	274	921.14
140	2.83	238°41'	4.0	283	925.94
141	1.50	180°00'	5.4	150	924.54
142	1.47	173°25'	4.7	147	925.24
143	1.47	164°07'	2.5	147	927.44
144	1.48	160°55'	2.0	148	927.94
145	1.51	157°16'	1.6	151	928.34
146	1.53	155°09'	1.5	153	928.44
147	1.59	146°44'	3.7	159	926.24

ML
DS
MR

11-24-80
cloudy 33°

10

SHORE LINE

2.5' WATER

30' BCP

✓ FR TRACKS

GUTTER

✓ LARK

GUTTER

STA	STADIA	AZIMUTH	ROD READ	HGT	ELEV
	INTER			DIST	
π ELEV = 929.94					
148	2.97	123°41'	4.7	297	925.24
149	4.46	112°42'	6.8	446	923.14
150	6.96	105°31'	9.0	696	920.94
151	1.90	219°52'	7.2	190	922.74
152	2.48	240°11'	8.3	248	921.64
153	2.59	243°52'	3.9	259	926.04
154	2.75	247°10'	7.9	275	922.04
155	3.03	251°48'	8.7	303	921.24
156	3.29	252°26'	3.0	329	926.94
157	1.19	167°48'	6.49	119	923.45
158	1.33	151°48'	5.03	133	924.91
159	1.52	131°08'	5.5	152	924.44
160	1.85	109°52'	4.74	185	925.20
161	1.98	105°21'	4.78	198	925.16
162	2.58	92°04'	5.3	258	924.64
163	1.00	180°00'	5.3	100	924.64
164	1.03	167°37'	6.5	103	923.44
165	1.14	155°10'	2.1	114	927.84

SNORE LINE

2.5' WATER

SOUTH EDGE BIT HWY #96

WEST FLOW LINE 24" RCP

EAST END 24" RCP

E DITCH

WEST END 24" CMP

EAST END 24" CMP

E DITCH

E LAKE AVE

	STADIA			Horiz	
STA	INTER	AZIMUTH	ROD READ	DIST	ELEV
		π ELEV = 929.94			
166	1.28	143°00	20	128	927.94
167	1.50	134°10'	5.5	150	924.44
168	1.78	125°02'	38	178	926.14
169	2.86	110°57'	4.4	286	925.54
170	4.45	103°36'	6.5	445	923.44
171	6.88	98°25'	9.3	688	920.64
172	1.22	219°05'	60	122	923.94
173	1.60	221°22'	7.1	160	922.84
174	2.04	252°49'	7.3	204	922.64
175	2.32	255°14'	3.8	232	926.14
176	2.40	259°17'	7.6	240	922.34
177	2.70	262°03'	9.5	270	920.44
178	2.94	263°40'	2.5	294	927.44
179	.50	180°00'	5.6	50	924.34
180	.51	160°26°	5.6	51	924.34
181	.68	159°41'	5.55	68	924.39
182	.71	151°10'	3.19	71	926.75
183	.74	137°26'	1.8	74	928.14

SHORELINE

2.5' WATER

⊥ RR TRACKS

SOUTH RIF EDGE H4W #96

12" RCP FL.

C.B.

⊥ LAKE AVE

STA	STADIA INTER	AZIMUTH	FOOTING	HORT DIST	ELEV
π ELEV = 929.94					
184	1.49	111°38'	2.9	149	927.04
185	1.91	107°06'	2.4	191	927.54
186	2.79	100°26'	4.1	279	925.84
187	3.98	96°41'	6.8	398	923.14
188	6.64	94°10'	9.4	664	920.54
189	.68	227°50'	7.0	68	922.94
190	1.89	258°02'	6.8	189	923.14
191	2.12	259°33'	3.8	212	926.14
192	2.45	258°20'	7.5	245	922.44
193	2.74	260°50'	9.5	274	920.44
194	3.04	260°27'	2.8	304	927.14
SIGHT 10+00 π @ 7+00 ELEV 927.51 + 560 = 933.11					
195	1.00	180°00'	8.4	100	924.71
196	1.01	174°53'	8.4	101	924.71
197	1.06	160°43'	5.5	106	927.61
198	1.14	140°30'	6.1	114	927.01

11-24-80

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B.T. PARKING LOT

SHORELINE

2.5' WATER

E RR TRACKS

SOUTH B.T. EDGE NW 96

Top DISCHARGE Pipe @ Pump Ho

E LAKE AVE

Top CURB WEST

STADIA

HGT

STA	INTER	AZIMUTH	ROD READ	DIST	ELEV
π FLEV = 933.11					
199	2.15	109°43'	6.7	215	926.41
200	2.63	109°55'	7.0	263	926.11
201	2.91	108°17'	8.4	291	924.71
202	3.30	105°49'	7.9	330	925.21
203	5.95	106°23'	9.9	³⁹⁵ 595	923.21
204	6.80	105°49'	12.4	680	920.71
205	2.07	239°10'	9.9	207	923.21
206	2.25	241°53'	6.5	225	926.61
207	2.47	244°48'	10.7	247	922.41
208	2.72	248°57'	12.0	272	921.11
209	3.07	249°43'	5.4	307	927.71
210	.50	180°00'	8.3	50	924.81
211	.56	154°18'	5.2	56	927.91
212	.84	127°56'	6.2	84	926.91
213	2.10	107°02'	6.5	210	926.61
214	2.34	106°06'	6.20	234	926.91
215	1.61	254°44'	9.5	161	923.61
216	1.81	257°44'	6.0	181	927.11

ML
DS
MR

11.25 80
SUNNY 20°

14

Top CURB EAST EDGE PARKING LOT

SHORE LINE

2.5' WATER

R RR TRACKS

SO. EDGE BIT HYW # 96

R LAKE AVE

Top ^{CORNER} WEST EDGE PARKING

Top CURB EAST EDGE PARKING LOT

SW COR CONG SLAB BEACH HOUSE

R RR TRACKS

STA	STADIA	AZIMUTH	POD READ	HORT	ELEV
	INTER			DIST	
		Σ ELEV = 933.11			
217	2.09	259°18'	8.7	209	924.41
218	2.38	261°05'	11.0	238	922.11
219	2.68	262°04'	5.2	268	927.91
220	.00	0°00'	5.3	00	927.81
221	.10	90°00'	5.2	10	927.91
222	.52	90°00'	5.8	52	927.31
223	1.81	90°00'	6.5	181	926.61
224	3.08	90°00'	7.1	308	926.01
225	3.34	90°00'	9.9	334	923.21
226	6.06	90°00'	12.4	606	920.71
227	.19	270°00'	9.1	19	924.01
228	1.49	270°00'	10.1	149	923.01
229	1.56	270°00'	5.9	156	927.21
230	1.94	270°00'	9.0	194	924.11
231	2.23	270°00'	10.7	223	922.41
232	2.52	270°00'	5.1	252	928.01
233	.50	0°00'	5.0	50	928.11
234	.59	38°46'	5.9	59	927.21

So EDGE BIT N4W^P 96

2 LARK AUK

Top CURB WEST EDGE PARKING LOT

Top CURB EAST EDGE PARKING LOT

SHORELINE

2.5' WATER

2 RR TRACKS

So EDGE BIT N4W^P 96

Top CURB WEST EDGE PARKING LOT

STADIA

HORT

STA	INTER	AZIMUTH	ROD END	DIST	ELEV
$\Sigma \text{ ELEV} = 933.11$					
235	1.71	72°58'	6.3	171	926.81
236	2.96	79°59'	7.3	296	925.81
237	3.24	81°33'	9.9	324	923.21
238	5.30	84°23'	12.4	530	920.71
239	.61	324°42'	8.6	61	924.51
240	1.37	290°33'	9.8	137	923.31
241	1.58	288°00'	5.8	158	927.31
242	1.77	286°01'	8.8	177	924.31
243	2.17	284°11'	10.1	217	923.01
244	2.46	282°05'	6.1	246	927.01
245	1.00	0°00	4.9	100	928.21
246	.98	14°42	5.9	98	927.21
247	1.78	56°55'	6.4	178	926.71
248	2.90	70°50'	7.4	290	925.71
249	3.11	71°45'	10.1	311	923.01
250	5.11	79°31'	12.6	511	920.51
251	1.01	349°01'	4.8	101	928.31
252	1.06	336°24'	8.4	106	924.71

11-25-80

16

Top CURB EAST EDGE PARKING LOT

SHORELINE

2.5' WATER

2 RR TRACKS

S. EDGE BIT N/4W #96

Top CURB WEST EDGE PARKING LOT

Top CURB EAST EDGE PARKING LOT

SHORELINE

2.5' WATER

2 LAKE AVE

STADIA

HORT

STA	INTER	AZIMUTH	ROD READ	DIST	ELEV
π ELEV = 933.11					
251	1.62	311°05'	9.8	162	923.31
252	1.68	306°56'	5.8	168	927.31
253	1.86	302°43'	9.5	186	923.61
254	2.21	298°06'	10.5	221	922.61
255	2.43	295°02'	4.6	243	928.51

SIGHT 10+00 π @ 9+00 ELEV 927.66 + 4.94 = 932.60

256	.50	180°00'	5.1	50	927.50
257	1.46	113°03'	5.9	146	926.70
258	2.60	103°44'	7.1	260	925.50
259	5.05	98°51'	9.6	5.05	923.00
260	.58	212°58'	4.1	58	928.50
261	.84	236°18'	7.9	84	924.70
262	1.09	246°26'	9.3	109	923.30
263	1.26	249°19'	5.1	126	927.50
264	1.38	253°31'	8.9	138	923.70
265	1.81	256°25'	10.0	181	922.60

£ FR TRACKS

SO EDGE BIT HYD #96

P.K. 7+00 £

TOP CURB EAST SIDE PARKING

SHORELINE

2.5' WATER

£ LAKE AVE

STA	STADIA INTER	AZIMUTH	POO READ	HORT DIST	ELEV
		π ELEV = 932.60			
266	2.06	758°43'	3.8	206	928.80
267	00	0°00	5.5	00	927.10
268	1.38	90°00'	5.7	138	926.90
269	2.25	90°00'	7.5	225	925.10
270	2.45	90°00'	9.4	245	923.20
271	5.48	90°00'	11.9	548	920.70
272	.05	270°00'	5.4	5	927.20
273	.48	270°00'	4.1	48	928.50
274	.83	270°00'	8.0	83	924.60
275	1.03	270°00'	4.9	103	927.70
276	1.34	270°00'	8.8	134	923.80
277	1.75	270°00'	10.0	175	922.60
278	1.90	270°00'	3.8	190	928.80
279	.50	0°00	5.5	50	927.10
280	1.11	66°23'	6.2	111	926.40
281	2.21	79°47'	7.6	221	925.00
282	2.39	80°49'	9.4	239	923.20
283	5.44	87°09'	12.0	544	920.60

So EDGE BIT NYWth 96

SHORE LINE

2.5' WATER

Top CURB WEST EDGE PARKING LOT

& LAKE AVE

& RR TRACKS

So EDGE BIT NYWth 96

Top CURB EAST EDGE PARKING LOT

& BOAT RAMP

SHORE LINE AT BOAT RAMP

2.5' WATER

	STADIA			HORT	
STA	INTER	AZIMUTH	ROD READ	DIST	ELEV
		$\Sigma \text{ELEV} = 932.60$			
284	.53	328°51'	5.5	53	927.10
285	.73	322°51'	4.1	73	928.50
286	.84	309°56'	3.8	84	928.80
287	1.03	302°11'	4.4	103	928.20
288	1.22	296°23'	2.4	122	924.00
289	1.58	291°04'	9.6	158	923.00
290	1.82	288°50'	3.7	182	928.90
291	1.00	0°00	5.9	100	926.70
292	1.31	39°56'	6.4	131	926.20
293	2.00	59°07'	7.0	200	925.60
294	2.33	63°29'	9.4	233	923.20
295	4.80	76°47'	12.0	480	920.60
296	1.08	335°51'	4.8	108	927.80
297	1.21	321°48'	3.5	121	929.10
298	1.34	316°08'	3.8	134	928.80
299	1.42	313°47'	8.2	142	924.40
300	1.69	305°02'	9.1	169	923.50
301	1.88	301°04'	3.6	188	929.00

TOP CURB WEST EDGE PARKING LOT

E RR TRACKS

SO. EDGE BIT H4W 96

TOP CURB EAST EDGE PARKING LOT

SHORELINE

2.5 WATER

E LAKE AVE + E RR TRACKS

SOUTH EDGE BIT H4W 96

STA	INTER	AZIMUTH	ROD READ	DIST	ELEV
-----	-------	---------	----------	------	------

$$\Sigma \text{ELEV} = 932.60$$

302	1.66	0°00'	7.1	166	925.50
303	1.75	13 39	7.6	175	925.00
304	2.37	38°10'	6.8	237	925.80
305	2.99	46°41'	9.4	299	923.20
306	4.45	59°42'	11.8	445	920.80
307	1.73	343°52'	3.4	173	929.20
308	1.90	339°37'	4.5	190	928.10
309	1.95	336°49'	6.3	195	926.30
310	2.03	330°37'	3.4	203	929.20
311	2.45	321 12	3.0	245	929.60

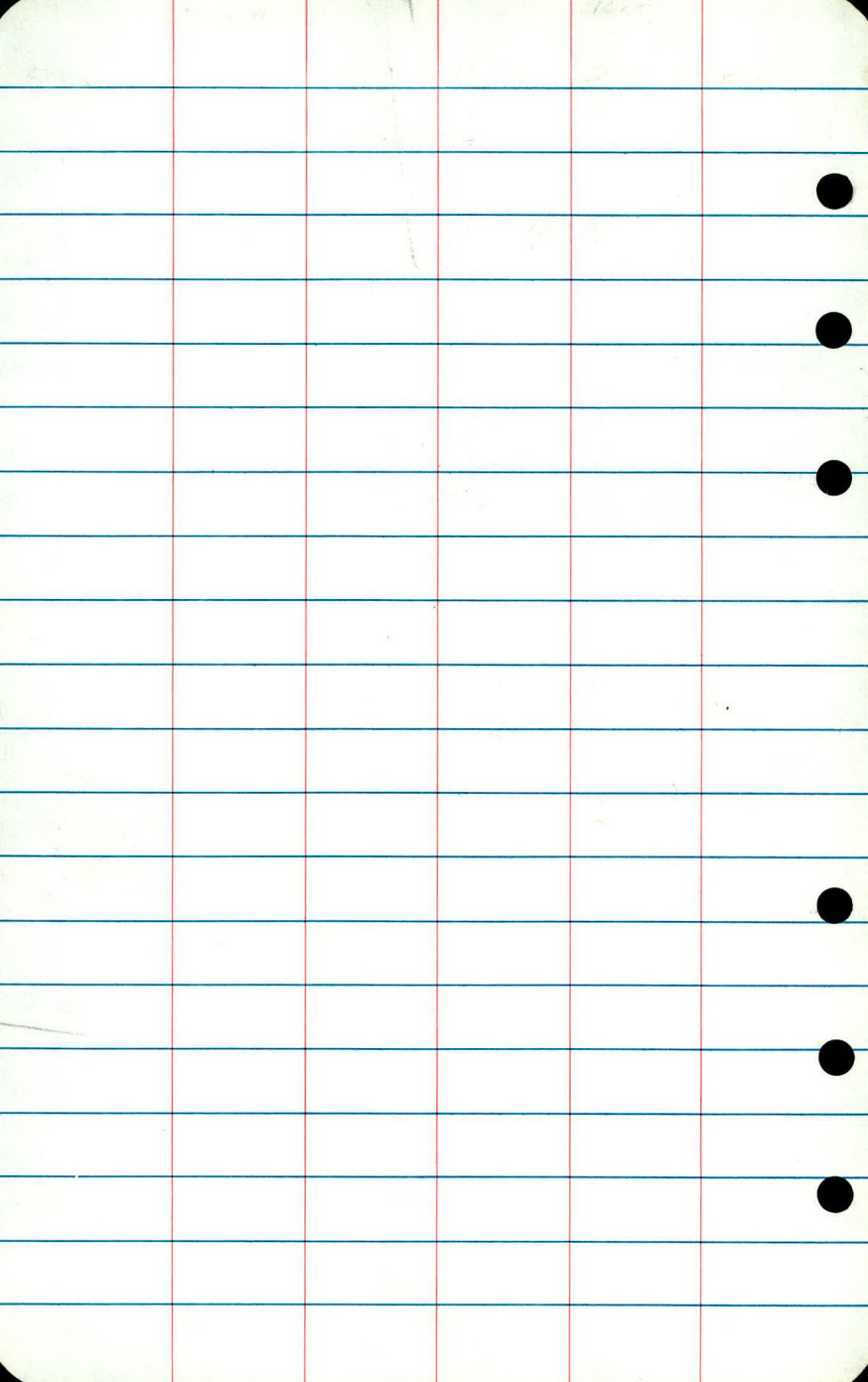
SHORELINE

2.5' WATER

2 RR TRACKS

2 LAKE AVE

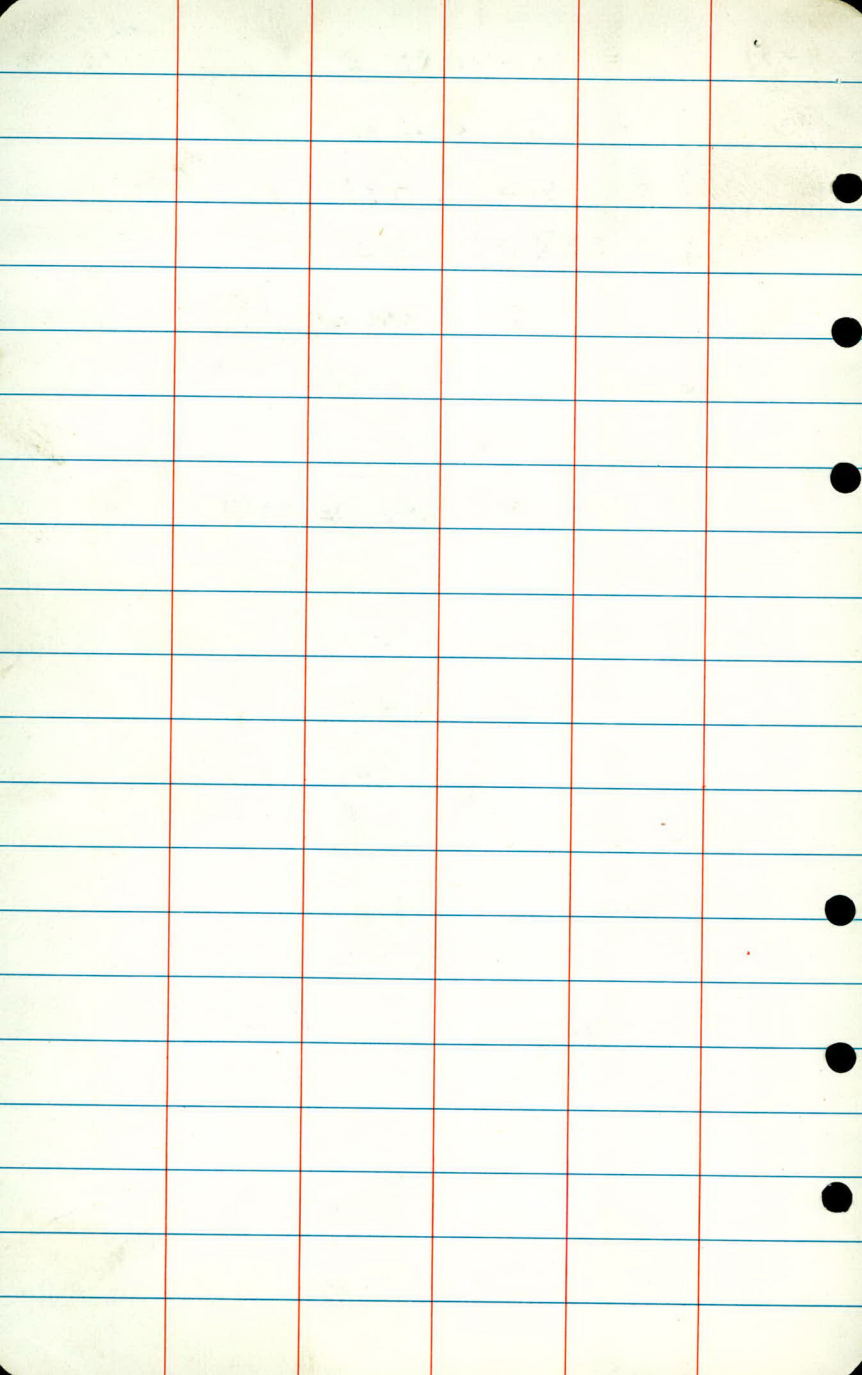
2 HWY 96



WHITE BEAR LAKE PARK

soil Borings

Park area



BW
DS

Test Hole #21+00 Rt. 18'

11-24-80
Clr. 25°-36°

0-1'	LS	bwn np
1'-2'	SL	tan pl
2'-3'	SL	bwn pl
3'-6'	LS	bwn np
6'-7'	S	gray np v-fine
7'-14'	Muck	blk
14'-17'	LS	gray np se fl v-fine

#3 2+00 Rt. 18'

0-2'	LS	bwn np
2'-4'	S	lt bwn np fine
4'-5'	SL	blk pl
5'-8'	S	white np v-fine
8'-15'	LS	gray np v-fine wet
15'-17'	LS	gray np se fl v-fine

BW
DS

#4 3+00 Rt. 18'

11-24-80
Cir 25-36

0-2'	SL	bwn sepl	
2'-5'	S	lt bwn np fine	
5'-6'	LS	gray np fine	
6'-7'	Peat	blk	
7'-17'	LS	gray np v-fine	wet @ 14'

Test Hole #1 0+00 Rt. 18'

0-2'	Gr. LS	bwn np	
2'-3'	CL	bwn pl	
3'-4'	Si L	bwn pl	
4'-6'	SL	lt bwn pl	
6'-17'	LS	gray np v-fine	wet @ 12'

BW
DS

Test Hole #5

11-25-80
PC 17°-32°

0-1'	SL	dkbwn pl
1'-3'	LS	gray np v-fine
3'-4'	LS	gray np fine
4'-5'	LS	gray np fine wet
5'-12'	LS	gray np wet

Test Hole #6

0-1'	L	blk pl
1'-3'	LS	gray np v-fine
3'-4'	LS	gray np
4'-11'	LS	gray np wet
11'-17	S	gray np wet

BW
DS

Test Hole #7

11-25-80
PC 17°-32°

0-1'	SiCL	blk pl
2'-3'	LS	gray np
3'-5'	Peat	blk
5'-8'	Peaty L	dk gray
8'-17'	LS	gray np v-fine wet

Test Hole #8

0-2'	Peaty L	dk gray
2'-4'	Peat	dk gray
4'-5'	Peaty L	dk gray
5'-8'	LS	dk gray fine wet
8'-12'	LS	dk gray v-fine se-fl

Test Hole #9

0-1'	SL	bwn spl
1'-2'	SL	bwn pl
2'-6'	S	gray np v-fine wet @ 5'
6'-12'	LS	gray np v-fine wet

BW
DS

Test Hole #10

11-26⁴-80
PC 25°-37°

0-4'	SL	bwn slp/
4'-5'	LS	bwn np
5'-6'	Peaty L	blk
6'-12'	LS	gray np wet @ 9' v-fine

Test Hole #11

0-2'	SL	bwn slp/
2'-3'	LS	bwn np
3'-4'	Peaty L	blk
4'-6'	Peat	blk
6'-8'	Peaty L	blk
8'-11'	LS	dk bwn np wet v-fine
11'-12'	LS	gray np wet v-fine

BW
DS
MR

2-9-82
CLR. -10°-5°

#12 7+12 Lt. 65'

0-1' SL bwn spl v-fine

1'-3' LS gray np

3'-8' Peat blk

8'-11' Peaty L blk

11'-17' LS gray np v-fine sefl wet @ 12'

#13 5+84 Lt. 40'

0-2' L blk pl

2'-5' LS bwn np

5'-8' Peat blk

8'-12' SL dk bwn spl wet

White Bear Lake Park Boat Ramp

Soil Borings

BW
MR

1-20-81
C/r. 21°-35°

0+00 = Water Line

0-6'	LS	gray np v-fine
6'-8'	SL	dk gray np v-fine
8'-12'	SL	bwn np v-fine se-fl

1+00

0-1.5'	Ice
1.5'-12'	LS gray np v-fine se-fl

1+25

0-1.6'	Ice
1.6'-3'	SL bwn np v-fine se-fl
3'-12'	LS gray np v-fine se-fl

1+50

0-2'	Ice
2'-2.3'	Water
2.3'-7'	LS gray np v-fine se-fl

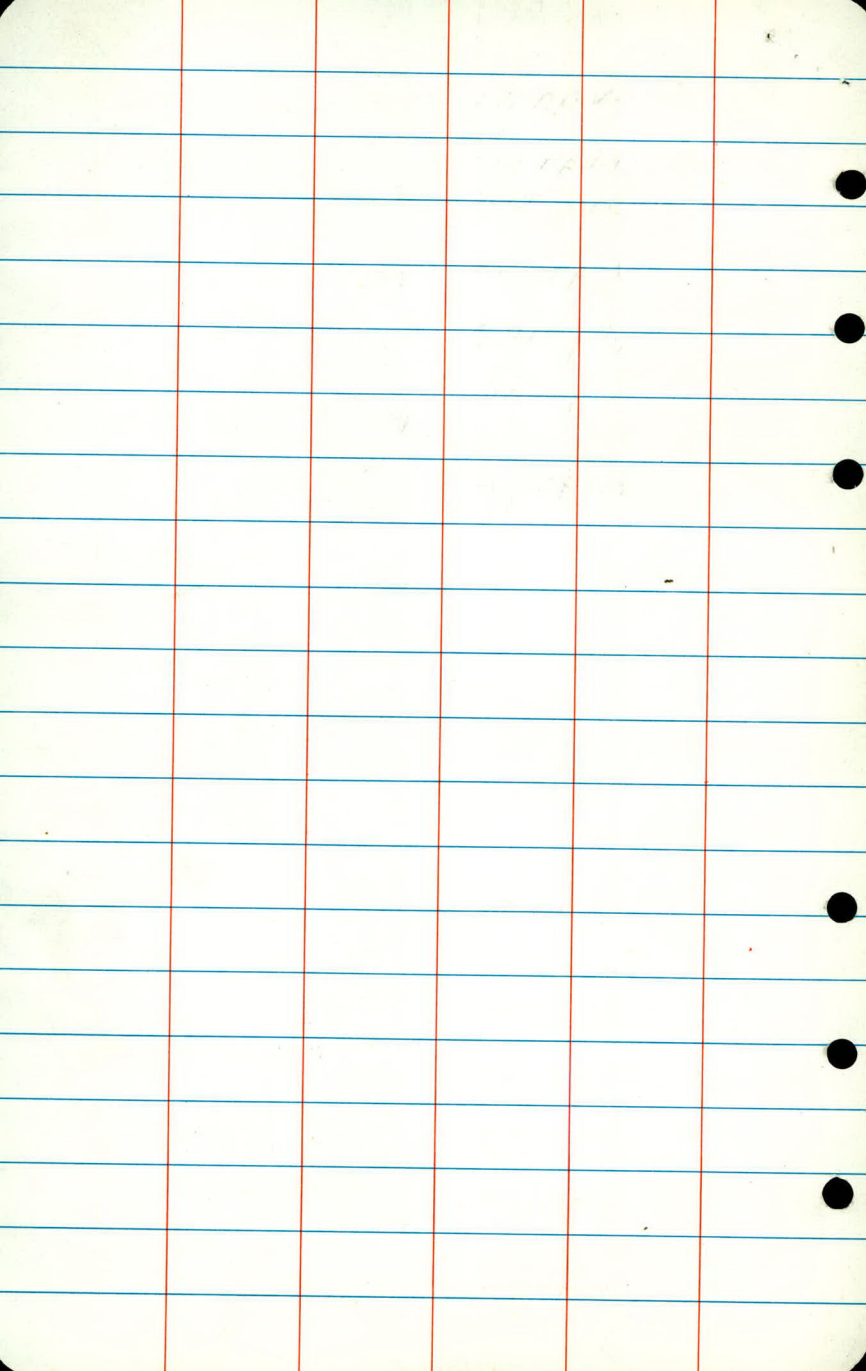
BW
M/R

2+00

1-20-81 2
Cln. 21°-35°

0-2' Ice

2'-10' Water



WHITE BEAR BEACH

GRADING, DRAINAGE
& CONCRETE CURB

R.M.
P.D.
D.S.
J.H.

July & Aug. 1982

	+	H.I.	-		
B.M.	2.21	929.72		927.51	
B.M.	2.68		2.69	927.03	
B.M.			2.20		
N.	Side	Ramp	Parking Lot		
	+	H.I.	-	Stake	
				Elev.	
B.M.	4.50	931.53			927.03
			7.62	923.91	
			6.78	924.75	
			5.85	925.68	
			6.94	924.59	
			4.57	926.96	
			3.07	928.46	
			4.51	927.02	
S.	side	N.	parking	lot	
			5.35	926.18	
			4.62	926.91	
			4.80	926.73	
			5.18	926.35	
			6.85	924.68	
B.M.			4.50	927.03	927.03

6-30-82

2

white spot on discharge pipe @ w. B. pump ho

white spot on wly base of shelter

Finish
GradeSub-cut
Elev.

Cut

Fill

white spot on wly base of shelter

	Finish Grade	Sub-cut Elev.	Cut	Fill
A	925.00 - 0.83 =	924.14		0.23
B	925.25 - 0.83 =	924.42	0.33	
C	926.21 - 0.83 =	925.38	0.30	
D	926.43 - 0.83 =	925.60		1.01
E	927.10 - 0.83 =	926.27	0.69	
K	925.65 - 0.83 =	924.82	3.64	
L	926.8 - 0.83 =	925.97	1.05	
F	925.15 - 0.83 =	924.32	1.86	
G	925.55 - 0.83 =	924.72	2.19	
H	925.79 - 0.83 =	924.96	1.77	
I	926.36 - 0.83 =	925.53	0.82	
J	926.80 - 0.83 =	925.97		1.29

S.W. Parking Lot

	+	H.I.	-	
B.M.	4.31	931.82		927.51

stake
elev.

A'		0.62	925.20
B'		8.50	923.32
C'		6.11	925.71
D'		6.54	925.28
E'		3.01	928.81
F'			
G'		4.36	927.46
H'		2.97	928.85
I'		5.41	926.41
J'		4.63	927.19

L.P.D.
D.S.
J.

6-28-82

3

White spot on discharge pipe @ W.B. pump house

	finish grade		sub-cut elev.	Cut	Fill
A'	928.0	-0.83	927.17		F-1.97
B'	927.62	"	926.79		F 3.47
C'	927.17	"	926.34		F 0.63
D'	927.0	"	926.17		^x F 0.89
E'	929.0	"	928.17	C 0.64	
F'	928.66	"	927.83		
G'	928.26	"	927.43	C 0.03	
H'	928.0	"	927.17	C 1.68	
I'	928.5	"	927.67		^x F 1.26
J'	927.72	"	926.89	C 0.30	

34 34
17 29.06
26

28.74
28.1

T.P.

4.1

32.2
4.1
28.1

+ H.I -

SW. Parking Lot (S. side Revised)

B.m. 4.68 932.19 927.51

Stake
Elev.

E' 3.88 928.31

F' 4.05 928.14

G' 4.92 927.27

H' 3.62 928.57

I' 5.75 926.44

J' 5.43 926.76

K'
A.P. 1 & 2 5.17 927.02

L' 76.98 P.T. hub 6.25 925.94

M' 33 (110) hub 6.49 925.70

N' 100 hub 7.59 924.60

O' 165 Shoreline 7.77 924.42

50' ± from shore 924.11

21.5'
3.10
3.61
3.20
6.50
24.11

6-29-82

4

white spot on discharge pipe @ W.B. pump house

finish
grade

sub-grade
elev.

Cut

Fill

928.17 0.14

927.83 0.31

927.43 0.16

927.17 1.40

927.67 1.23

926.89 0.13

924.5	0.25	924.25	2.52
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924.15	0.25	923.90	1.79
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924.0	0.25	923.75	1.70
-------	------	--------	------

923.9	0.25	923.55	0.7
-------	------	--------	-----

923.56	0.25	923.15	0.55
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3" topsoil in ditch (R.C. 6-29-82)

No topsoil in ditch (R.C. 6-29-82)

+ H.I.

East Line of middle parking Lot (3' ⑤)

B.M.	5.56	933.07	927.51
			Sta Elev.

0	5.62	927.45
---	------	--------

+50	5.55	927.52
-----	------	--------

1	7.51	925.56
---	------	--------

+50	8.00	925.07
-----	------	--------

2	7.70	925.37
---	------	--------

+40.47	7.16	925.91
--------	------	--------

+50	6.95	926.12
-----	------	--------

3	5.99	927.08
---	------	--------

+50	6.20	926.87
-----	------	--------

4	6.11	926.96
---	------	--------

+50	6.24	926.83
-----	------	--------

4+80.95	5.71	927.36
---------	------	--------

± P.T.	7.05	926.02
--------	------	--------

N.W. Cor.	8.52	924.55
-----------	------	--------

SW. Cor.	8.35	924.72
----------	------	--------

B.M.	5.55	927.52	927.51
------	------	--------	--------

6-30-82

5

White spot on discharge pipe @ w.B. pump h

Finish
Gradesub-gr.
elev.+
Cut-
Fill

927.00	-0.83	926.17	1.28	
927.10	"	926.27	1.25	
927.21	"	926.38		0.82
927.31	"	926.48		1.41
927.42	"	926.59		1.22
927.50	"	926.67		0.76
927.48	"	926.65		0.53
927.38	"	926.55	0.53	
927.27	"	926.44	0.43	
927.17	"	926.34	0.62	
927.06	"	926.23	0.60	
927.00	"	926.17	1.19	
926.50	"	925.67	0.35	
926.00	"	925.17		0.62
926.00	"	925.17		0.45

T H.I. -

West Line of Mid. parking Lot (3' 5)

B.M.	5.55	933.06	927.51	sta elev.
0			8.34	924.72
+50			7.21	925.85
1			8.75	924.31
+35.85 (14.15)			8.63	924.43
+50			9.43	923.63
2			8.61	924.45
+50			9.24	923.82
+71.71			8.50	924.56
± 2+74±			6.61	926.45
High point ± 1+88.16			7.41	925.65
± 0+75			5.44	927.62
± Beg. ⁰⁺⁰⁰ parking lot			5.90	927.16

B.M. 5.55 927.51

White spot on discharge pipe @ W.B. pump ho.
 Finish sub-gr. +
 Grade elev. cut fill

926.0	-0.83	925.17		0.45
926.18	"	925.35	0.50	
926.37	"	925.54		1.23
926.5	"	925.67		1.24
926.45	"	925.62		1.99
926.26	"	925.43		0.98
926.08	"	925.25		1.43
926.0	"	925.17		0.61
926.77	"	925.94	0.51	
927.0	"	926.17		0.52
926.70	"	925.87	1.75	
926.50	"	925.67	1.49	

+

H.I.

3.64

930.67

927.03

Entrance to park (3' back curb)
stake
elev.

1

2

3.60

927.07

3

4.08

926.59

4

4.79

925.88

5

5.41

925.26

6

5.19

925.48

7

4.93

925.74

8

4.83

925.84

9

5.24

925.43

10

4.02

926.65

11

3.43

927.24

12

7.54

923.13

A²

5.35

925.32

B²

4.75

925.92

B.M.

7-1-82

7

White Spot on Wly base of shelter

Finish Grade		sub-gr. elev.	+ cut	- fill
927.30	-0.83	926.47		
926.88	"	926.05	1.02	
926.33	"	925.50	1.09	
925.70	"	924.87	1.01	
925.51	"	924.68	0.58	
925.68	"	924.85	0.63	
926.31	"	925.48	0.26	
927.01	"	926.18		0.34
926.49	"	925.66		0.23
927.06	"	926.23	0.42	
927.20	"	926.37	0.87	
927.25	"	926.42		3.29
925.65		924.82	0.50	
926.29		925.46	0.46	

+

H.I.

-

B.M

4.05

931.56

927.51

S.W. Parking Lot

stake
elev.

I'

4.63

926.93

Q'

4.20

927.36

J'

4.42

927.14

P'

5.09

926.47

7-1-82

8

white spot on discharge pipe pump ho.

Finish Gr.	sub-gr. elev	+ cut	- fill
928.50	927.67		0.74
	927.31	0.05	
	926.89	0.25	
927.50	926.67		0.20

PONDING AREA

		⁺ H.I.	-	
B.M.	3.92	931.43		927.51
	Azm	Dist.		Stake Elev.
0 1 x	48° 00'	131'	7.42	924.01
0 2 x	61° 30'	63'	7.11	924.32
3	68° 15'	100'		
0 4	72° 00'	128'	7.30	924.13
Island 0 5 + x	78° 00'	147'	7.14	924.29
6	99° 30'	167'		
Island 0 7 + x	108° 15'	200'	7.10	924.33
0 8	114° 00'	193'	6.35	925.08
0 9	107° 00'	154'	7.28	924.15
10	102° 45'	120'		
0 11	106° 00'	98'	6.90	924.53
0 12 x	133° 00'	126'	6.42	925.01
13	122° 30'	157'		
0 14 x	134° 30'	176'	6.19	925.24
15	121° 30'	211'		
0 16 x	125° 00'	249'	6.95	925.48
0 17 x	113° 30'	270'	7.43	924.00

7-2-82 (staked x's)
7-7-82 (staked o's)

9

White spot on discharge pipe pump ho.

Finish
Grade

Cut

Fill

to contour
918

921.00

3.01

21'E

922.00

2.32

23'N

55

917.5

921.00

3.13

17'S

922.00

2.29

924.3

922.00

2.33

921.00

4.08

17'E

921.00

3.15

16'SE

917.5

921.00

3.53

15' N

922.00

3.01

22'NW

62

917.5

923.0

2.24

23'NW

53
55

917.5

922.00

3.48

24'W

49
55

921.00

3.00

50'S

Ramp Parking Lot

3.26

927.03

930.29

A

6.40

923.89

B

5.53

924.76

C

4.61

925.68

D

5.72

924.57

E

3.44

926.85

F

4.08

926.21

G

3.34

926.95

H

3.55

926.74

I

3.92

926.37

J

4.31

925.98

K

5.08

925.21

L

4.20

926.09

A²

5.50

924.79

B²

4.71

925.58

7-6-82

10

White-spot on wly base shelter

	cut ⁺	fill ⁻
924.14		0.25
924.42	0.34	
925.38	0.30	
925.60		1.03
926.27	0.58	
924.32	1.89	
924.72	2.23	
924.96	1.78	
925.50	0.87	
925.97	0.01	
924.82	0.39	
925.97	0.12	
924.82		0.03
925.46	0.12	

Staking ARCH PIPE (10' W. of W. pipe L)

+ H.I. 3.62 931.13 927.51

Rod Stake
Reading Elev.

0+00 7.38 923.75

+25 6.80 924.33

+50 5.23 925.90

+75 4.25 926.88

1 4.34 926.79

+25 4.58 926.55

+50 4.69 926.44

+75 3.80 927.23

2 2.47 928.66

+25 4.21 926.92

2+50 5.22 925.91

MH
0+65 4.39 926.74

White spot on discharge pipe pump ho.

Inv. Design Gr.	+ Cut	- Fill
922.00	1.75	
922.25	2.08	
922.50	3.40	
922.75	4.13	
923.00	3.79	
923.25	3.30	
923.50	2.94	
923.75	3.58	
924.00	4.66	
924.25	2.67	
924.50	1.41	
922.65	4.09	

⑤10'

+

HI - (E OF ENT)

STAKING PIPE ON SOUTH SIDE R.R.

4.42 931.45

927.03

ROD STAKE
READING ELEV.

0+00

4.89 926.56

+20

4.79 926.66

+45

4.80 926.65

+70

5.16 926.29

1+00

4.98 926.47

7-JULY-82

12

WHITE SPOT ON WLY BASE OF SHELTER

INV. DESIGN GR	CUT	FILL
923.2	3.36	
923.22	3.44	
923.25	3.40	
923.27	3.02	
923.3	3.17	

0.7± standing water in
pond E. of E of prop. entrance

	+	H.I.	-	
	3.71	931.22		927.51
			Rod	stake Elev.
C.B. # 5	Hub. 10' E.		4.97	926.25
	Hub 10' N.		4.53	926.69
	Hub 10' W		4.38	926.84
0+00	10' (S) East		4.64	926.58
+ 25	" (S) "		4.43	926.79
+ 50	" (S) "		4.29	926.93
+ 76.8	" (S) "		4.03	927.19
C.B. # 3	Hub 10' E		4.02	927.20
	Hub 10' S		3.92	927.30
	Hub 10' W		3.93	927.29

July 14, 1982 (computed)
 " 15, 1982 (marked in th)

13

Pump

White spot on discharge pipe @ W.B. house

Invert	Gutter	Top	+	-
Design Gr.	Grade	Curb	Cut	Fill

926.97	927.47			1.22
--------	--------	--	--	------

922.88			3.81	
--------	--	--	------	--

927.05	927.55			0.71
--------	--------	--	--	------

922.88			3.70	
--------	--	--	------	--

923.21			3.58	
--------	--	--	------	--

923.53			3.40	
--------	--	--	------	--

923.88			3.31	
--------	--	--	------	--

927.63	928.13			0.93
--------	--------	--	--	------

923.88			3.42	
--------	--	--	------	--

927.71	928.21			0.92
--------	--------	--	--	------

	+	H.I.	-	
	3.87	931.38		927.51
			Rod	Stake Elev.
C.B. #6	Hub 10'E		5.67	925.71
	Hub 10'N		6.06	925.32
	Hub 10'W		5.54	925.84
0 + 00			4.91	926.47
+ 25			5.37	926.01
+ 50			5.25	926.13
+ 80.7			4.99	926.39
C.B. #4	Hub 10'E		4.97	926.41
	Hub 10'S		4.98	926.40
	Hub 10'W		5.01	926.37

July 15, 1982 (notes)

14

" 16, 1982 (staked)

White spot on discharge pipe pump ho.
 Inv. Gutter Top + -
 Design Gr. Gr. Curb Cut Fill

926.05 926.55 0.84

922.7 2.62

925.97 926.47 0.63

922.70 3.77

922.76 3.25

922.83 3.30

922.90 3.49

926.66 927.16 0.75

922.9 3.50

926.60 927.10 0.73

80.19

	+	H.I.	-		
	3.70	931.21		927.51	
			Rod	Stake Elev.	
C.B. # 13	Hub 10' N		6.25	924.96	
	Hub 10' W		6.46	924.75	
	Hub 10' S		5.59	925.62	
0+00			5.87	925.34	
+25			5.36	925.85	
+50			5.18	926.03	
+79.3			4.82	926.39	
C.B. # 12	Hub 10' N		4.81	926.40	
	Hub 10' E		4.65	926.55	
	Hub 10' S		4.80	926.41	
A.P. # 11	0+60		8.28	922.93	
	+30		6.77	924.44	
C.B. # 13	0+00		5.48	925.73	
			4.19	927.02	927.03

7-19-82 Staked

15

white spot on discharge pipe

Inv.	Gutter	Top	W. B. Pump
Design	Gr.	Curb	ho.
			Fill

925.97	926.47	1.51
--------	--------	------

922.00	2.75
--------	------

926.05	926.55	0.93
--------	--------	------

922.00	3.34
--------	------

922.29	3.56
--------	------

922.57	3.46
--------	------

922.91	3.48
--------	------

926.59	927.09	0.69
--------	--------	------

922.91	3.65
--------	------

926.64	927.14	0.73
--------	--------	------

921.00	1.93
--------	------

921.50	2.94
--------	------

922.00	3.73
--------	------

white spot on wly base of shelter

	4.41	931.44		927.03
			Rod	Stake Elev.
A.P. #16	0+00		8.62	922.82
	+25		8.10	923.34
	+50		8.04	923.40
	+75		6.89	924.55
A.P. #17	+85		7.15	924.29

Pipe 45' N. $\pm$ tracks;

(5) 10' South.

9.8 921.6

8.9 922.5

7-21-82

16

White spot on Wly base shelter.

Inv. Design Cr.	+ Cut	Fill
--------------------	----------	------

922.2	0.62	
-------	------	--

922.32	1.02	
--------	------	--

922.44	0.96	
--------	------	--

922.55	2.00	
--------	------	--

922.6	1.69	
-------	------	--

S. W. Parking Lot

	+	N.I.	-	
	4.55	932.06		927.51
			Rod	Stake El.
P.C. (R=191.33)	2+18.48		6.37	925.69
	2+00		5.42	926.64
	+50		5.37	926.69
	1+00		5.35	926.71
	+50		4.88	927.18
N.W. Cor	0+00		5.23	926.83
Lot	0+00		4.82	927.24
	+50		4.57	927.49
	1+00		4.23	927.83
S.W. Cor.	1+30		3.70	928.36
Lot	0+00		3.75	928.31
	+50		4.03	928.03
	1+00		3.88	928.18
	+50		4.20	927.86
	2+00		4.36	927.70
P.C. (R:	2+18.48		4.78	927.28
	+43.48		4.58	927.48

White spot on discharge pipe Pump. No. ^{W. B.}
 Design ^{Top} ⁺ ⁻
 Gutter Gr. Curb Cut Fill

927.166	927.67	1.98
927.24	927.74	1.10
927.43	927.93	1.24
927.62	928.12	1.41
927.81	928.31	1.13
928.0	928.50	1.67
928.0	928.50	1.26
928.38	928.88	1.39
928.77	929.27	1.44
929.0	929.50	1.14
929.0	929.50	1.19
928.82	929.32	1.29
928.66	929.16	0.98
928.49	928.99	1.13
928.32	928.82	1.12
928.255	928.76	1.48
928.17	928.67	1.19

932.06

		Rod	Stake El.	
	2+68.48	4.26	927.80	
S.E. Cor.	2+93.56	3.47	928.59	
Lot	0+00	4.02	928.04	
P.C.(R=23.18)	+26.36	4.72	927.34	
	+52.87	5.63	926.43	
	+79.39	5.90	926.16	
	+86.01 (Low Point)	5.62	926.44	
P.T.(R=23.18)	1+05.90	5.13	926.93	
S.E. Cor.				
Mid-Lot	1+42.26	5.53	926.53	
B.M.		4.54	927.52	927.51
B.M.	4.44	931.95	927.51	
C.B. #3		Top Back 928.15 3.80	Gutter 927.69 4.26	
#5		927.50 4.45	927.0 4.95	
#4		927.10 4.85	926.61 5.34	
#6		926.50 5.45	925.99 5.96	

7-22-82 staked

18

Design
Gutter Gr.

Top curb

+
Cut-
Fill

928.085

928.58

0.78

928.0

928.50

0.09

928.0

928.50

0.46

927.80

928.30

0.96

927.266

927.77

1.34

926.73

927.23

1.07

926.60

927.10

0.66

926.74

927.24

0.31

927.0

927.50

0.97

7-27-82 checking ^{in place} castings

white spot on discharge pipe pump ho. w.B.

MID-PARKING LOT

(East curb R=338.67)

B.M.	4.44	931.95		927.51
			Rod	Stake Elev.
0+00			4.33	927.62
+25			4.35	927.60
+50			4.42	927.53
+75			5.11	926.84
1			6.39	925.56
+25			5.00	926.95
+50			6.85	925.10
+75			4.27	927.68
2			4.84	927.11
+25			4.75	927.20
+40.47 (High Pt)			6.03	925.92
+50			4.93	927.02
+75			4.93	927.02
3			4.50	927.45
+25			4.40	927.55
+50			4.67	927.28

7-27-82

19

Design Gr. Elev.	Top Curb	+ Cut	- Fill
927.0	927.50	0.12	
927.05	927.55	0.05	
927.11	927.61		0.08
927.16	927.66		0.82
927.21	927.71		2.15
927.26	927.76		0.81
927.32	927.82		2.72
927.37	927.87		0.19
927.42	927.92		0.81
927.47	927.97		0.77
927.50	928.00		2.08
927.48	927.98		0.96
927.43	927.93		0.91
927.37	927.87		0.42
927.32	927.82		0.27
927.27	927.77		0.49

H.I.
931.95

		Rod	Stake Elev.
3+75		4.70	927.25
4		4.76	927.19
+25		5.29	926.66
+50		5.45	926.50
+75		5.26	926.69
+80.95	NE. Cor Lot	4.65	927.30
SW Parking Lot			
P.C. (R=191.33)	2+10.48		
	+43.96	5.49	926.46
NE. Cor Lot	2+62.19	5.43	926.52
(S.W. Lot)	0+00	5.55	926.40
P.C. (R=20.3)	+30.78	4.90	927.05
	+53.26	5.92	926.03
	+75.72	5.84	926.11
Mid-Parking Lot)			
P.T. (R=20.3)	+98.19	5.87	926.08
NW Cor Lot	1+28.97	6.27	925.68
(Mid-Parking Lot)			

7-27-82

20

Design
Gutter Gr.Top
Curb+
Cut-
Fill

927.22

927.72

0.47

927.16

927.66

0.47

927.11

927.61

0.95

927.06

927.56

1.06

927.01

927.51

0.82

927.00

927.50

0.20

927.07

927.57

1.11

927.09

927.50

0.98

927.00

927.50

1.10

927.24

927.74

0.69

926.90

927.40

1.37

926.56

927.06

0.95

926.22

926.72

0.64

926.00

926.50

0.82

ISLAND S.W. PARKING LOT

B.M.	4.44	931.95		927.51
			Rod	Stake Elev.
P.C. (5' Rad)			4.03	927.92
P.T. (5' Rad)	0+00		4.07	927.88
	+15		3.99	927.96
	0+00		3.96	927.99
	+34.18		4.09	927.86
	+84.18		4.42	927.53
	1+34.18		4.52	927.43
	P.C. +84.18		4.79	927.16
	N. 2+07.18		5.05	926.90
	0+00		5.15	926.80
	P.C. (5' Rad) +15.61		5.03	926.92
	P.T. (5' Rad)		5.10	926.85
	P.C. (5' Rad)		3.88	928.07
	P.T. (5' Rad) 0+00		3.88	928.07
	+15		3.91	928.04

7-27-82

21

Design Gutter Elev.	Top Curb	+ Cut	- Fill
928.26	928.76		0.84
928.22	928.72		0.84
928.34	928.84		0.88
928.34	928.84		0.85
928.22	928.74		0.88
928.03	928.53		1.00
927.85	928.35		0.92
927.67	928.17		1.01
927.59	928.09		1.19
927.59	928.09		1.29
927.47	927.97		1.05
927.43	927.93		1.08
928.57	929.07		1.00
928.53	929.03		0.96
928.41	928.91		0.87

(Cont.) ISLAND S.W. PARKING LOT

931.95

Rod

Stake
Elev.

Median

0+00

3.93

928.02

+34.18

4.19

927.76

+84.18

4.36

927.59

Side

1+34.18

4.48

927.47

S.

P.C. +84.18

4.67

927.28

2+08.58

5.00

926.95

0+00

4.78

927.17

P.C. (5' Rad) +15.72

4.64

927.31

P.T. (5' Rad)

4.64

927.31

7-27-82

Design
Gutter El.

Top

Curb

Cut

Fill

928.42

928.92

0.90

928.30

928.80

1.04

928.12

928.62

1.03

927.94

928.44

0.97

927.76

928.26

0.98

927.67

928.17

1.22

927.67

928.17

1.00

927.79

928.29

0.98

927.75

928.25

0.94

MID- PARKING LOT (w. line ~ 3' (5))

4.04	931.55	Rod	927.51 Stake Elev.
0+00		6.07	925.48
+25		5.76	925.79
+50		5.44	926.11
+75		5.60	925.95
1		7.30	924.25
+25		5.70	925.85
+35.85		5.87	925.68
+50		6.28	925.27
+75		5.98	925.57
2		7.15	924.40
+25		5.79	925.76
+50		6.45	925.10
+71.71		6.12	925.43

C.B. #13

Top back
926.49
5.06

Grote
926.00
5.55

C.B. #12

927.10
4.45

926.62
4.93

7-28-82

23

white spot on Design Gr	W.B. Pump ho.	
	+ Cut	- Fill
926.0	926.50	1.02
926.09	926.59	0.80
926.19	926.69	0.58
926.28	926.78	0.83
926.37	926.87	2.62
926.46	926.96	1.11
926.50	927.0	1.32
926.45	926.95	1.68
926.36	926.86	1.29
926.26	926.76	2.36
926.17	926.67	0.91
926.08	926.58	1.48
926.00	926.50	1.07

ISLAND MID-PARKING LOT

(N.W. side)

H.I. 931.55

		Rod	Stake Elev.
P.C. (Rad. 4.33')		5.46	926.09
P.T. (Rad. 4.33)	0+00	5.49	926.06
	+15	5.38	926.17
End ±	0+00	No hubs	
	+04.33	5.42	926.13
	+25	5.13	926.42
	+50	5.10	926.45
	+75	5.11	926.44
	1	5.15	926.40
S. D. E	+25	5.13	926.42
	+50	5.09	926.46
	+60.34	High pt.	5.05 926.50
	+75	5.05	926.50
N. W.	2	5.03	926.52
	+25	5.10	926.45
	+50	5.15	926.40

Design Gutter Elev.	Top Curb	+ Cut	- Fill
926.40	926.90		0.81
926.43	926.93		0.87
926.54	927.04		0.87
926.53			
926.54	927.04		0.91
926.60	927.10		0.68
926.67	927.17		0.72
926.73	927.23		0.79
926.80	927.30		0.90
926.87	927.37		0.95
926.94	927.44		0.98
926.96	927.46		0.96
926.92	927.42		0.92
926.85	927.35		0.83
926.79	927.29		0.84
926.72	927.22		0.82

Cont. Island Mid-Parking Lot

		H.I. 931.55	Red	Stake Elev.
SIDE	2+75		5.16	926.39
N.W.	3		5.19	926.36
	+18.73		5.50	926.05
End ±	3+23.06	No	Hubs	
	0+15		5.39	926.16
P.C. (Rad. 4.33)	0+00		5.57	925.98
P.T. (Rad 4.33)			5.57	925.98
P.C. (Rad 4.33)			5.14	926.41
P.T. (")	0+00		5.14	926.41
	+15		5.13	926.42
End ±	0+00	No	hubs	
	+04.33		5.34	926.21
SIDE	+25		5.10	926.45
	+50		5.04	926.51
	+75		5.09	926.46
S.E.	1+00		5.10	926.45

7-28-82 Stakes Elev.

25

Design
Gutter Elev.Top
Curb+
Cut-
Fill

926.65

927.15

0.76

926.58

927.08

0.72

926.53

927.03

0.98

926.52

926.53

927.03

0.87

926.42

926.92

0.94

926.39

926.89

0.91

926.70

927.20

0.79

926.73

927.23

0.82

926.62

927.12

0.70

926.61

926.62

927.12

0.91

926.68

927.18

0.73

926.75

927.25

0.74

926.81

927.31

0.85

926.88

927.38

0.93

		H.I. 931.55	Rod	Stake Elev.	
SIDE E S	1 + 25		5.10	926.45	
	+ 50		5.04	926.51	
	+ 60.34		5.02	926.53	
	+ 75		4.98	926.57	
	2		4.99	926.56	
	+ 25		5.03	926.52	
	+ 50		5.13	926.42	
	+ 75		5.11	926.44	
	3		5.13	926.42	
	+ 18.73		5.39	926.16	
End ±	3 + 23.06	No	hubs		
	0 + 15		5.22	926.33	
P.C. (Rad 4.33)	0 + 00		5.03	926.52	
P.T. (")			5.01	926.54	
B.M.			4.03	927.52	927.51

7-28-82 Stake Elev.

26

Design Gutter Elev.	Top Curb	+ Cut	- Fill
926.95	927.45		1.00
927.02	927.52		1.01
927.04	927.54		1.01
927.00	927.50		0.93
926.93	927.43		0.87
926.87	927.37		0.85
926.80	927.30		0.88
926.73	927.23		0.79
926.66	927.16		0.74
926.61	927.11		0.95
926.60			
926.61	927.11		0.78
926.72	927.22		0.70
926.69	927.19		0.65

CONN. BTWN ENT. & MID-PARKING LOT

B.M.	3.66	930.69	927.03
		Rod	Stake Elev.

NE. Cor.			
Mid-Parking	0+00	3.63	927.06

P.C. (Rad 29.33)	+33	4.03	926.65
------------------	-----	------	--------

Mid Pt.	+56.56	4.36	926.33
---------	--------	------	--------

P.T. (Rad 29.33)	+80.12	4.42	926.27
------------------	--------	------	--------

P.C. (Rad 4.33)	+93.76	4.47	926.22
-----------------	--------	------	--------

CONN. BTWN. ENT. & RAMP PARKING LOT

P.T. (Rad. 4.33)	0+00	4.91	925.78
------------------	------	------	--------

P.C. (Rad. 51.33)	+34.80	5.18	925.51
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Low Point	+48.60	5.26	925.43
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Mid-Pt.	+62.40	5.16	925.53
---------	--------	------	--------

P.T. (Rad 51.33)	+90.00	4.70	925.99
------------------	--------	------	--------

P.C. (Rad 38.67)	1+00.57	3.73	926.96
------------------	---------	------	--------

	1+28.06	4.68	926.01
--	---------	------	--------

Aug. 3, 1982

27

Whits spot on Wly base shelter

Design
Gutter Elev.

Top
Curb

+
Cut

Fill

0.714% { 927.0 927.50 0.44
926.76 927.26 0.60

0.97% { 926.65 927.15 0.82
926.88 927.38 1.11
927.01 927.51 1.29

2.03% { 926.31 926.81 1.03
925.68 926.18 0.67
925.32 925.82 0.39
925.38 925.88 0.35

925.50 926.00 0.01
925.55 926.05 0.91
925.67 926.17 0.16

RAMP PARKING LOT (SE side)

930.69

	Rod	Stake Elev
P.T. (Rad 38.67) +55.55	4.14	926.55
" 2+05.55	4.98	925.71
+55.55	4.42	926.27
3+05.55	4.17	926.52
+55.55	3.89	926.80
P.C. (Rad 51.67) +85.61	4.64	926.05

B.M. 3.65 927.03

Island around pole in SW Parking Lot

B.M. 4.51 932.02 927.51

0+00 3.76 928.26

P.C. (Rad 3.83) +15.50 3.82 928.20

P.T. (") 3.81 928.21

x x 3.78 928.24

Aug 3, 1982

28

0.439%

Design Gutter Elev.	Top Curb	+ Cut	- Fill
925.79	926.29	0.26	
926.01	926.51		0.80
926.23	926.73		0.46
926.45	926.95		0.43
926.67	927.17		0.37
926.80	927.30		1.25

7-30-82 (staked)

W.B.

White spot on discharge pipe pump ho.

928.75	929.25	0.99
928.63	929.13	0.93
928.60	929.10	0.89
928.72	929.22	0.98

PARK ENTRANCE (sub-grade)

B.m.	4.50	931.53		927.03	
			Reel	Stake Elev	
± Hwy edge	0+00		2.39	928.14	
	0+06		4.34	927.19	
± tracks	+75.66	0.58% 0+06 to 0+86.31 (5. tracks)	4.62	926.91	
E. side Ent.	P.C.		3.71	927.82	
	P.T.		4.13	927.40	
			4.70	926.83	
W. side Ent.	P.C.		5.82	925.71	
	40.09 ft. to P.K.		4.47	927.06	
	P.T.		4.40	927.13	
B.m.			4.50	927.03	927.03
10.64					
Edge P.V.					
E. side Edge P.V.			3.18	928.35	
W. side			3.56	927.97	

40.09

Design
GradeSub gr.
elev+
Cut-
Fill

928.14 -0.83

927.31

0.83

928.02

"

927.19

0

927.62

"

926.79

0.12

928.35

"

927.52

0.30

927.88

"

927.05

0.35

927.10

"

926.27

0.56

927.85 -0.83

927.02

1.31

927.42

"

926.59

0.47

927.34

"

926.51

0.62

RAMP PARKING LOT (N. side)

B.M.	3.33	930.36	927.03
		Rod	Stake Elev.

P.C. (Rad 51.67) 3+85.61

4+10.61	4.42	925.94
---------	------	--------

P.R.C. (Rad=4.33)	3.95	926.41
-------------------	------	--------

P.T.	3.43	4.12	926.24
------	------	------	--------

End Ramp	10	4.32	926.04
----------	----	------	--------

BOAT RAMP

>10	4.68	925.68
-----	------	--------

>20	4.33	926.03
-----	------	--------

	4.33	926.03
--	------	--------

High Point	x	3.50	926.86
------------	---	------	--------

x	>51.03	4.27	926.09
---	--------	------	--------

x	>50	4.02	926.34
---	-----	------	--------

P.C. (Rad 35.67)	>18.32	5.78	924.58
------------------	--------	------	--------

Mid-point	>18.33	5.21	925.15
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P.T. (Rad 35.67)	>30.0	4.67	925.69
		4.58	925.78

Aug. 3, 1982 staked

30

White spot on wly base shelter

Design
Gutter Gr.Top
Curb+
Cut-
Fill

926.80

926.91

927.41

1.47

927.01

927.51

1.10

926.85

927.35

1.11

926.80

927.30

1.26

925.90

926.40

1.03

925.90

926.40

0.72

926.8

927.30

1.27

927.1

927.60

1.57

926.98

927.48

1.39

926.70

927.20

0.86

926.43

926.93

2.35

926.33

926.83

1.68

926.23

926.73

1.04

926.07

926.57

0.79

0.5447

(Cont) RAMP PARKING LOT (N. Side)

930.36

750 Rod Stake Elev.

x 4.99 925.37

x 5.38 924.98

P.C. (Rad 51.67) x 5.60 924.76

48.84 725 5.68 924.68

Low Point 6.42 923.94

P.R.C. 5.37 924.99

B.M. 3.33 927.03 927.03

SE. side ENT. CIRCLE

B.M. 3.28 930.31 927.03

R=4.33

P.C.C. R=48.67 3.95 926.36

46.41

Mid-point 4.64 925.67

R=48.67

P.C.C. R=4.33 4.63 925.68

Aug 3, 1982

31

	Design Gutter Elev.	Top Curb	$C +$	Fill
0.544	925.79	926.29		0.92
	925.52	926.02		1.04
0.511	925.25	925.75		0.99
	925.12	925.62		0.94
	925.0	925.50		1.56
	925.15	925.65		0.66

Aug. 4, 1982

927.01	927.51	1.15
926.71	927.21	1.54
926.41	926.91	1.23

S.W. ISLAND RAMP PARKING LOT

B.M.	3.28	930.31		927.03	
			Rod	Stake	
				Elev.	
South end P.C. (Rad 5.33)			4.83	925.48	
P.T. (Rad 5.33)			4.89	925.42	
N. end P.C. (Rad 5.33)			5.20	925.11	
P.T. (Rad 5.33)			5.11	925.20	
B.M.			3.28	927.03	927.03

N.W. ISLAND RAMP PARKING LOT

B.M.	3.40	930.43		927.03	
P.C. (Rad 4.33) SW Cor. Island			5.41	925.02	
P.C. (R=4.33 - 29.33)			5.39	925.04	
Low Pfx			5.56	924.87	
			5.39	925.04	
P.T. (Rad 29.33)			5.41	925.02	
P.C. (Rad 4.33)			5.39	925.04	
P.T. (Rad 4.33)			5.35	925.08	
			3.40	927.03	927.03

8-4-82 staked

32

Design
Gutter El.Top
Curb+
Cut-
Fill

925.58

926.08

0.60

925.55

926.05

0.63

925.36

925.86

0.75

925.45

925.95

0.75

Staked 8-5-82

925.30

925.80

0.78

925.27

925.77

0.73

925.15

925.65

0.78

925.32

925.82

0.78

925.50

926.00

0.98

925.62

926.12

1.08

925.58

926.08

1.00

N.E. SIDE ENTRANCE.

B.M.	4.24	931.27		927.03
			Stake	
			Rad	Elev.
In W. cor. Ramp Lot.				
P.R.C. (Rad 19.33)			6.28	924.99
mid-pt.			6.58	924.69
P.T. (Rad 19.33)	714.31		6.04	925.23
P.C (Rad 4.33)			5.56	925.71
P.R.C. (Rad. 4.33)				
P.R.C. (Rad. 45.67)			5.53	925.74
		62.58	5.39	925.88
			5.21	926.06
P.R.C. (Rad 45.67)				
P.R.C. (Rad 34.33)			5.12	926.15
mid-pt.	111529	39.27	5.21	926.06
P.T.		12.44	4.77	926.50
S. of tracks				
P.O.L			4.20	927.07
N. of tracks				
P.O.L.			4.45	926.82
P.C.			3.87	927.40
mid-pt.			3.62	927.65
P.T.			3.45	927.82

8-6-82

33

Design
Gutter Elev.Top
Curb+
Cut-
Fill

925.15

925.65

0.66

925.30

925.80

1.11

925.51

926.01

0.78

925.70

926.20

0.49

925.75

926.25

0.51

925.95

926.45

0.57

926.16

926.66

0.60

926.36

926.86

0.71

926.55

927.05

0.99

926.64

927.14

0.64

926.88

927.38

0.31

927.10

927.60

0.78

927.88

928.38

0.98

928.12

928.62

0.97

928.35

928.85

1.03

Cont.

ISLAND IN ENTRANCE

931.27

Rod

stake

Elev.

N. end

Rad. 1.33' 0+00

3.85

927.42

+54

3.64

927.63

S. end

Rad 1.33' 1+08

4.68

926.77 New Hub

926.59

S.W. SIDE ENTRANCE

P.C. (Rad 39.33) 0+00

5.55

925.72

Mid-pt.

2.96

928.31

927.05

P.T.

3.22

928.05

N. side tracks

P.O.T.

4.13

927.14

S. side tracks

P.O.T.

0+00

4.03

927.24

+20

4.57

926.70

+70

4.81

926.46

P.C. 1+20

5.67

925.60

1+40.44

> 20.44

5.42

925.85

1+60.88

>

5.50

925.77

P.T.

1+81.32

> 23.70

5.50

925.77

NW. Cor.

Mid. Parking Lot 2+05.02

6.18

925.09

B.M.

4.24

927.03 927.03

8-6-82

$$\begin{array}{r} 7.87 \\ 6.77 \\ \hline 1.12 \end{array}$$

34

Design Gutter Elev.		Top Curb	+ Cut	- Fill
East Side w. side		E 928.51		E 1.09
928.01	927.90	W 928.40		W 0.98
		E 928.20		E 0.57
927.70	927.60	W 928.10	New Fill	W 0.47
		E 927.89	E 1.12	E 1.30
927.39	927.29	W 927.79		W 1.20

8-6-82

927.85		928.35		2.63
927.64		928.14	0.17	
927.42		927.92		0.87
927.34		927.84		0.70
927.20		927.70		0.46
927.08		927.58		0.88
926.78		927.28		0.82
926.49		926.99		1.39
926.38		926.88		1.03
926.27		926.77		1.00
926.16		926.66		0.89
926.0		926.50		1.41

CIRCULAR ISLAND RAMP LOT

B.M.	4.24	931.27		927.03
Radius	29.33		Rad	Stake Elev.
Low Pt.	0°		5.15	926.12
	45°		5.13	926.14
	90°		5.00	926.27
	135°		4.70	926.57
High Pt.	180°		4.81	926.46
	225°		4.88	926.39
	270°		5.05	926.22
	315°		5.13	926.14
Low Pt.	360°±0°			
	3.10	930.13		927.03
	joint on curb on exist curb	5.11	925.02	
		5.16	924.97	
Rad 2.33		6.06	924.07	
SW Cor Spillway		6.51	923.62	
NW " "		6.99	923.14	
Rad 2.33		6.21	923.92	
		5.08	925.05	
SW ramp		7.40	922.73	

Staked 8-6-82

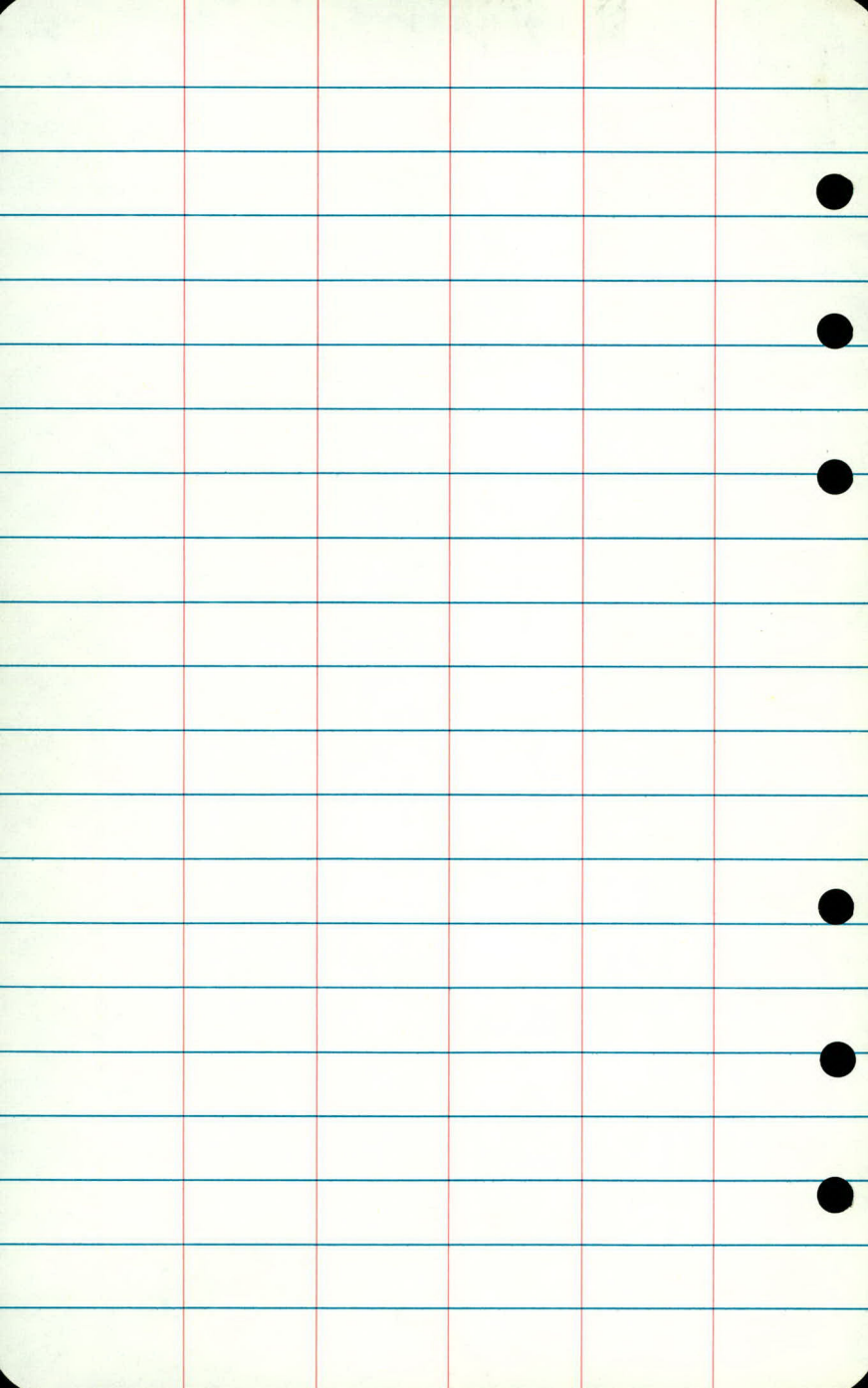
35

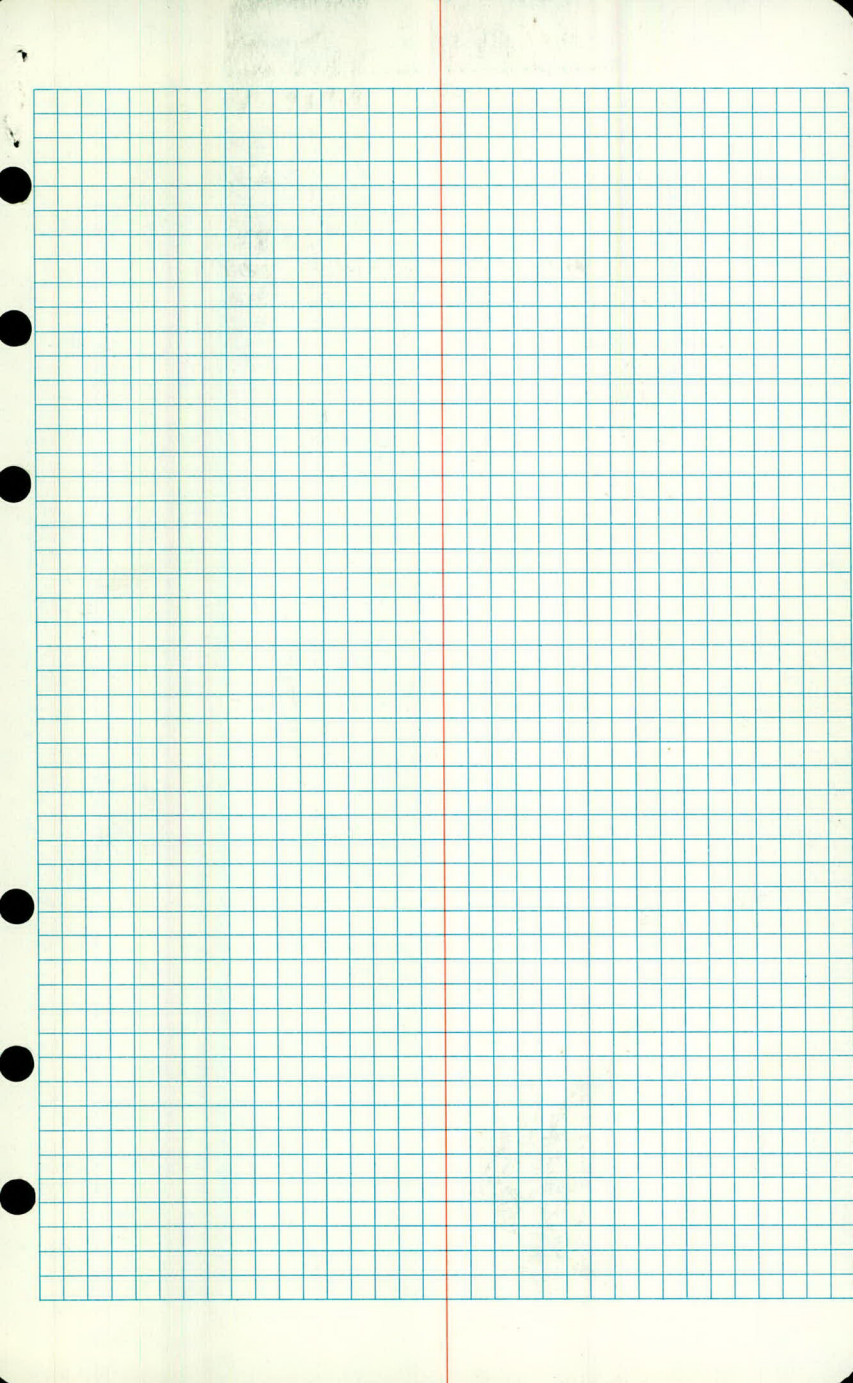
Design Gutter Elev.	Top Curb	+ Cut	- Fill
926.58	927.08		0.96
926.68	927.18		1.04
926.78	927.28		1.01
926.87	927.37		0.80
926.97	927.47		1.01
926.87	927.37		0.98
926.78	927.28		1.06
926.68	927.18		1.04

Aug 9, 1982

925.01		0.94
924.98		0.91
923.80		0.18
923.80		0.66
924.97		1.05
925.00		1.08

Outlet 923.3





B.M.	4.50	932.01	927.51
------	------	--------	--------

	4.34	927.66
--	------	--------

	3.86	928.14
--	------	--------

3.95	931.46	927.51
------	--------	--------

	6.89	924.57
--	------	--------

	6.88	924.58
--	------	--------

Top of discharge pipe @ pump house

Top of rail & entrance

Edge of pavement on T.H. 96 & entrance.

Aug. 19, 1982

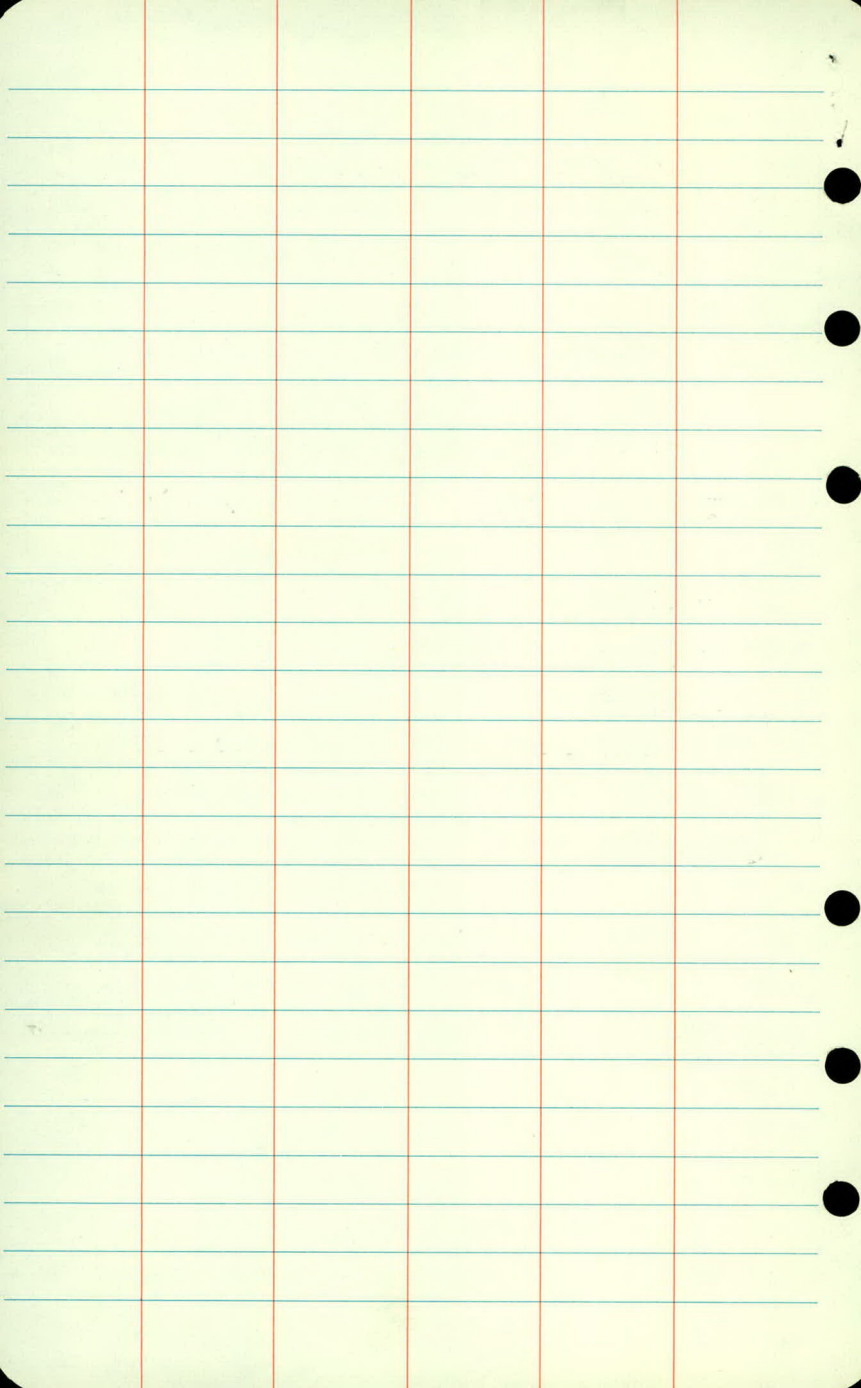
Top discharge pipe @ pump house

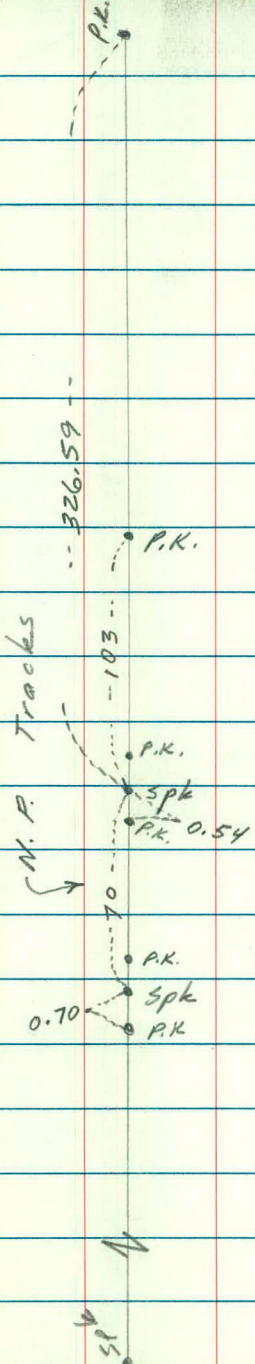
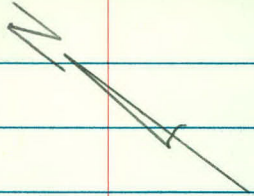
Apron # 2

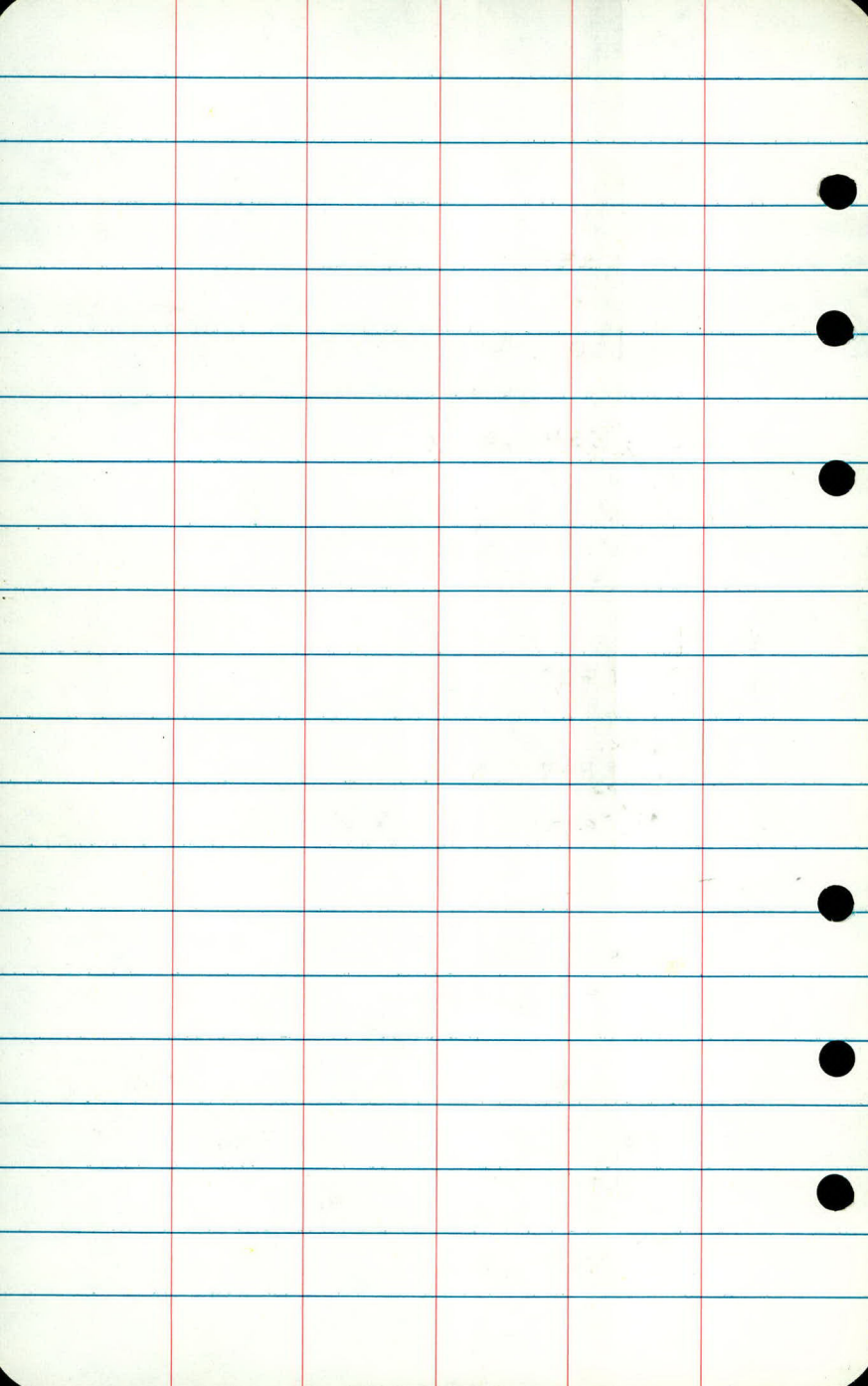
East

Apron # 1

West







$$\Delta = 45-11-50$$

$$R = 26.33$$

$$ch = 20.23$$

$$R = \frac{40}{3.67} \quad ch = 2R \sin \frac{\Delta}{2}$$

$$ch = 45.21 \quad \Delta/2 = 38.28$$

$$\Delta = 76-57-21 \quad \Delta/2 = \frac{25-39-00}{38-28-40}$$

$$L = 48.80$$

$$\text{stacking}$$

$$\Delta/2 = 12-49-33$$

$$R = 36.33$$

$$ch = 16.13$$

$$23.94$$

$$ch = 27.33$$

$$R =$$

$$\begin{array}{r} 13.67 \\ 2 \overline{) 27.33} \\ \underline{6} \\ 16.33 \end{array}$$

$$\begin{array}{r} 20 \\ 3.67 \\ \hline 16.33 \end{array}$$

$$ch = 33.34 \quad \delta = 64-17-31$$

$$R = 31.33 \quad R = 35$$

$$L = 39.27$$

0

45

90

135

180

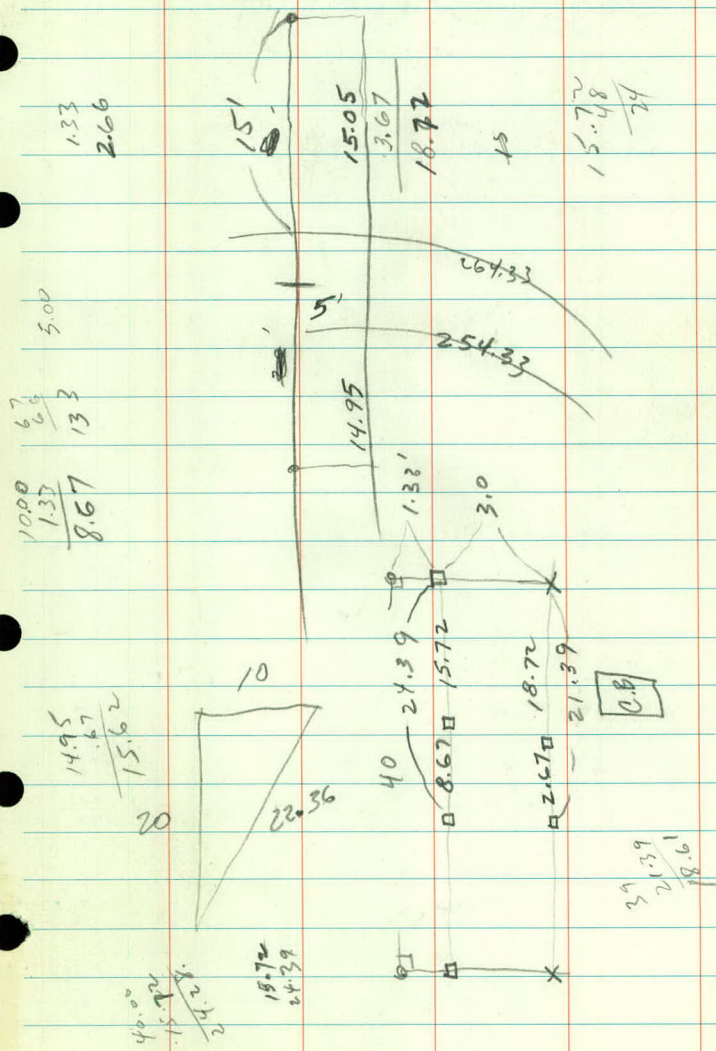
225

270

315

360

Slope Stake El. Dist Mat. - SS. Dwy & Elev. Dwy Width Culv. Inv.

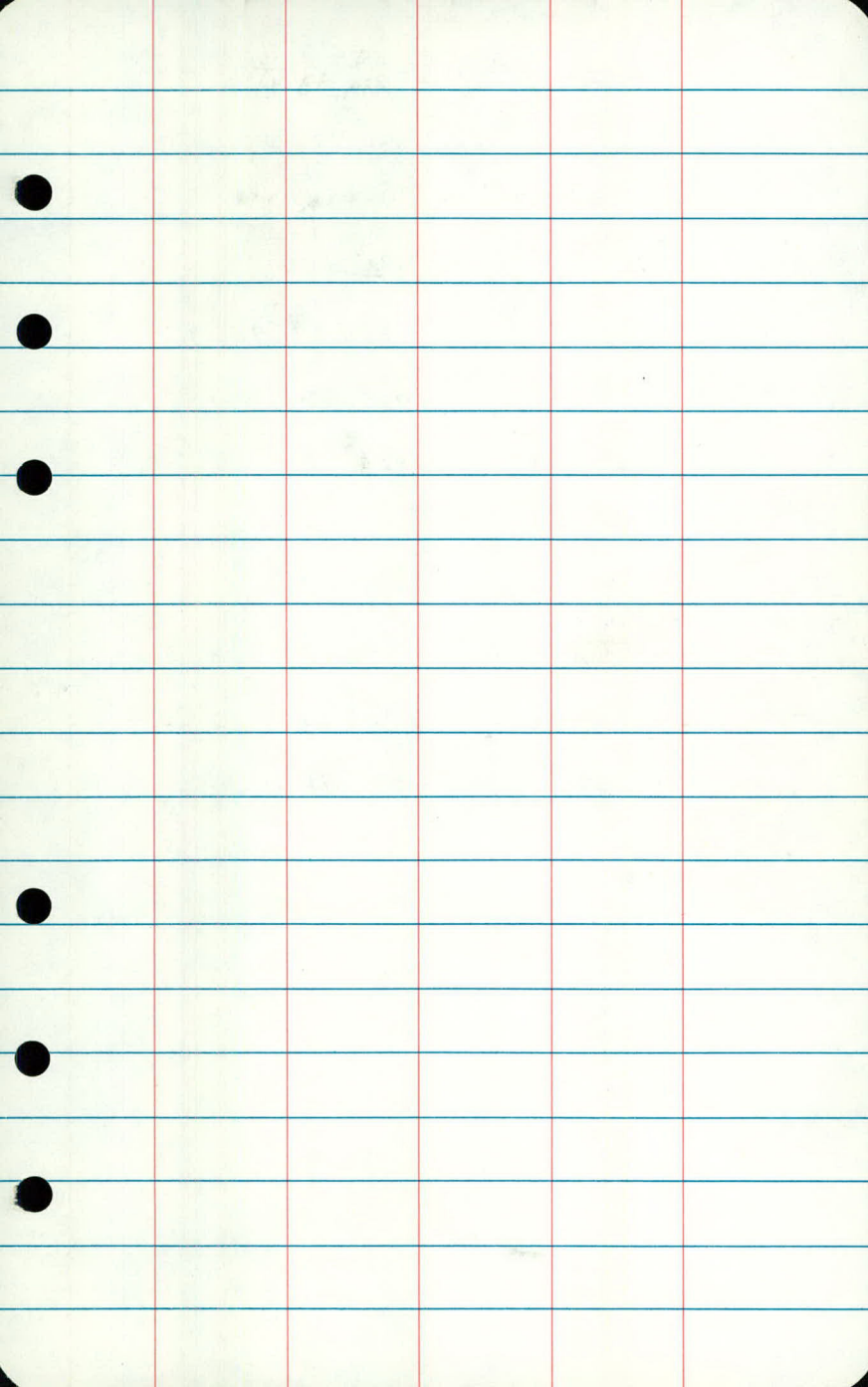


$$\begin{array}{r}
 76.3 \\
 7.37 \\
 \hline
 .26 \\
 36
 \end{array}$$

$$\begin{array}{r}
 26 \\
 \hline
 .52
 \end{array}$$

$$\begin{array}{r}
 11 \\
 56 \\
 \hline
 67
 \end{array}$$

Bench mark description



Ramp Parking Lot

B.m.

927.03

low pt circle

754 .31

926.58

762 .35

926.27

925.94

761 .35

925.92

925.59

nw island joint

925.57

Ramp (14% Gr)

33' E. of conc. curb

921.28

920.45

s. side

923.28

C 2.83

N. side

923.48

C 3.03

Bottom
of
class
#6

89 59 60

64-51-53

$\sqrt{25-08-07}$ W

37-46-23

62-54-30

25-08-07

81-18-22

106-26-29

$$T = R \times \tan \frac{\Delta}{2}$$

4.18

71

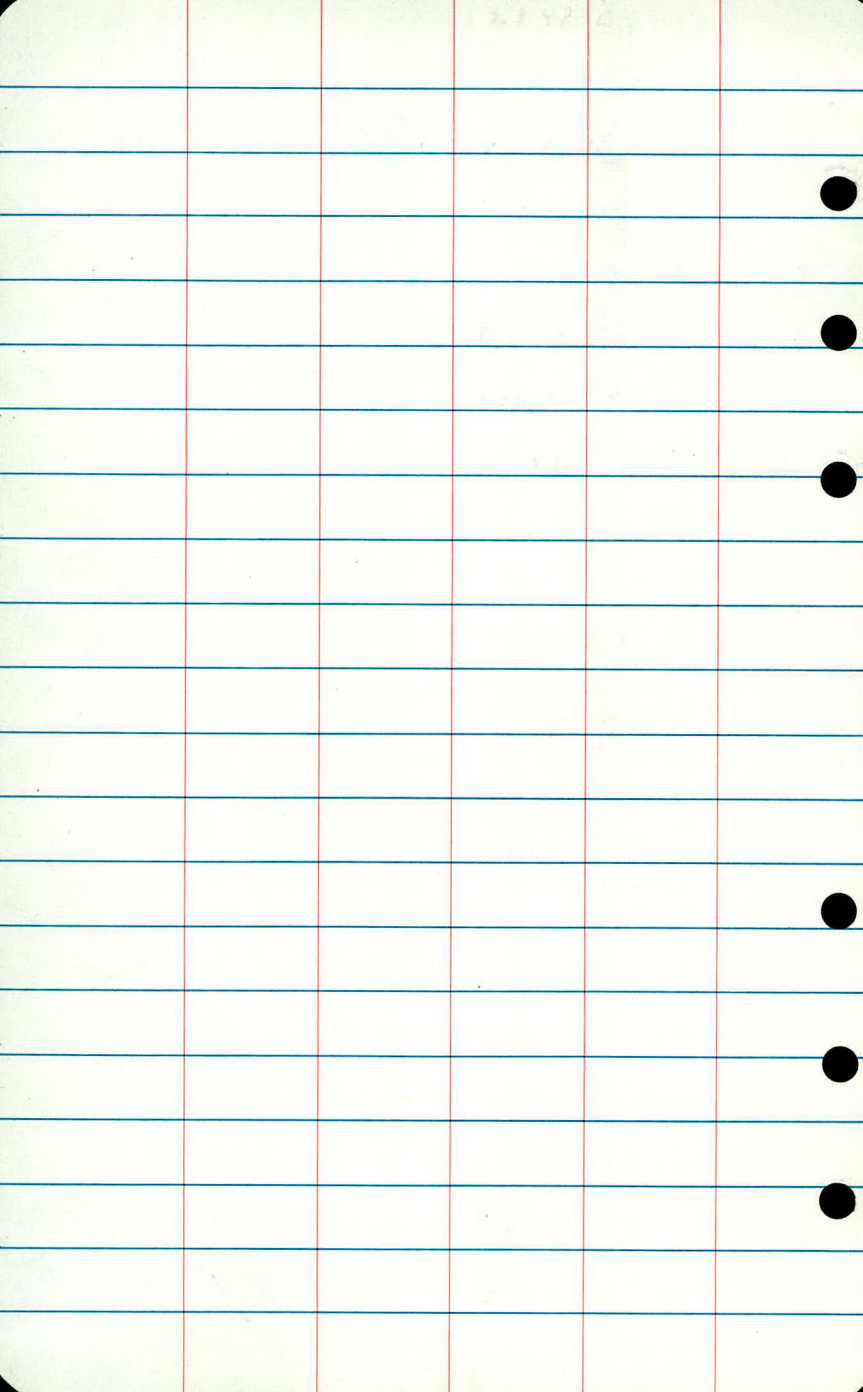
3.44

$\frac{2.89}{904.6}$

$= \frac{8.48}{2657}$

8-17-82

white spot on wly base shelter



Elevations

W. Bear Pond Area

R.m.

P.D.

D.S.

J. H.

Aug 31, 1982

9:30 A.m.

cloudy

	3.53	931.04	927.51
--	------	--------	--------

# 1		9.05	921.99
-----	--	------	--------

# 2		8.12	922.92
-----	--	------	--------

# 3		8.44	922.60
-----	--	------	--------

# 4		6.33	924.71
-----	--	------	--------

# 5		6.15	924.89
-----	--	------	--------

# 6		8.45	922.59
-----	--	------	--------

		9.81	921.23
--	--	------	--------

		9.09	921.95
--	--	------	--------

		10.15	920.89
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W. B.

● White spot on discharge pipe Pump. no.

Edge water

● In swale

Swamp elev.

● Top island

" "

Swamp elev.

Inv. culv. under tracks

Top water @ culv.

● Inv. culvert (NE cor pond) Design 921.00

Sept. 7, 1982

Checking Boat Ramp

B. M.	+	H. I.	White spot
	5.81	932.84	927.03 on shelter
mark's marking	-		Design Grade
20'	8.75		C
1 C-1.1	8.83	924.09	923.1 0.99
C-2.5			C
2 30'	8.75	924.09	921.7 2.39
C-3.9			C
40'			
3	8.78	924.06	920.3 3.76

B. M. 5.65 932.68 927.03

top pier

6.72

9.60

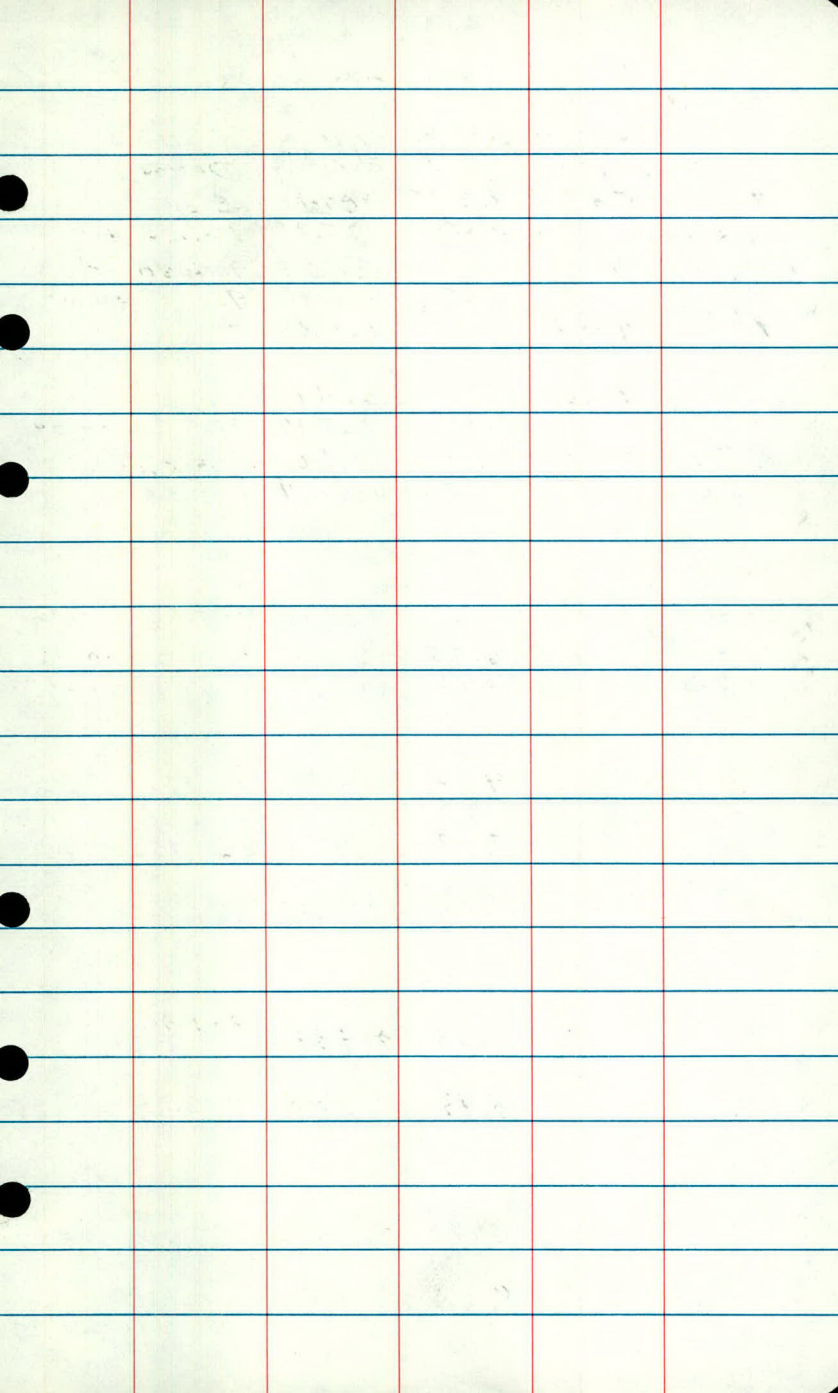
2.88

10.92 921.76

11.25 921.43

14.

20.3
1.13



BOAT RAMP 9-10-82

B.M.	4.88	931.91	Existing Elev.	Design Elev.	
South	0+00	5.95	925.96	925.90	+0.06
	+10	7.23	924.68	924.50	+0.18
	+18	8.45	923.46	923.38	+0.08
Middle	0+00	5.92	925.99	925.90	+0.09
	+10	7.05	924.86	924.50	+0.36
	+18	8.27	923.64	923.38	+0.26
North	0+00	5.95	925.96	925.90	+0.06
	+10	6.95	924.96	924.50	+0.46
	+18	8.16	923.75	923.38	+0.37
		31.9 11.6 20.3			Top of base
South	+30	7.27	924.64	921.78 921.45x	C-3.19
	+40	8.28	923.63	920.38 920.05x	C-3.58
Middle	+30	7.58	924.33	921.96 921.63x	C-2.70
	+40	8.43	923.48	920.56 920.23x	C-3.25
North	+30	6.90	925.01	922.07 921.74x	C-4.27
	+40	8.28	923.63	920.67 920.34x	C-3.29

9-13-82
Top Plank
Design

Existing

Bm.	3.14	930.17		927.03
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+30	5.51	924.66	921.45	C-3.21
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Ho	+40	6.67	923.50	920.05	C-3.45
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+30 Ex	8.99	921.18	921.45	F-0.27
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+40 Ex	10.13	920.04	920.05	F 0.01
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+30	5.89	924.28	921.63	C-2.65
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+ 40	6.78	923.39	920.23	C 3.16
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+30 Ex	8.55	921.62	921.63	F 0.01
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+40 Ex	9.62	920.55	920.23	C 0.32
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+ 30	4.98	925.19	921.74	C 3.45
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+40	6.05	924.12	920.34	C 3.78
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+30 Ex	8.34	921.83	921.74	C 0.09
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+40 Ex	9.98	920.19	920.34	F 0,15
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RIGHT TURN LANE

N. Edge Design Top
12' Lane S. Edge Hub

0+42.8 4.13^{2.4} 4.37 4.49 F 0.12¹

1+ 4.25 4.49 6.13 F 1.88

2+ 4.89^{2.4} 5.13 6.58 F 1.45

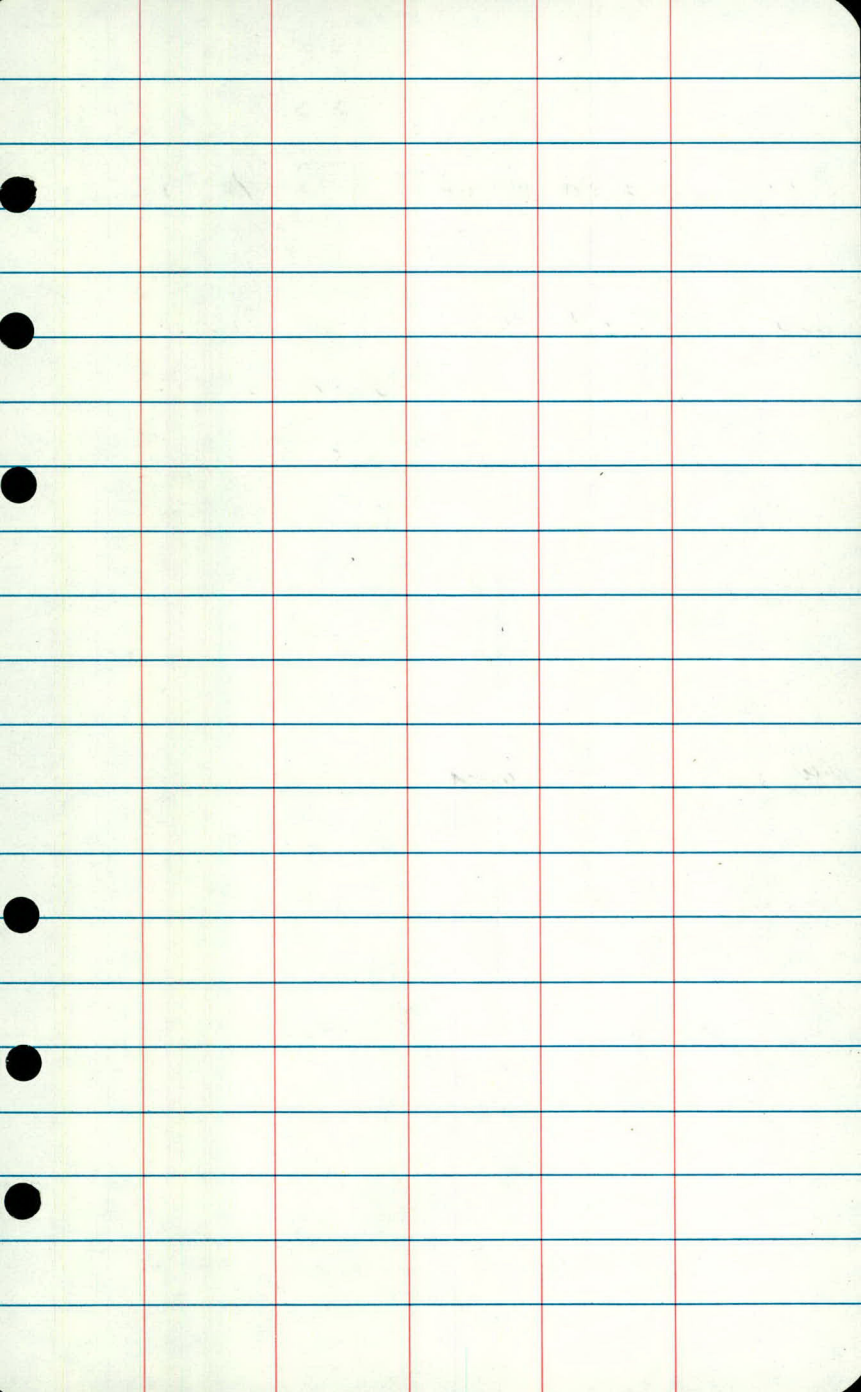
3+ 4.86 5.10 6.39 F 1.29

4+00.5 4.51 4.75 4.52

4+00.5 4.74 4.74 C 0.22

P.K. 4.20

5.3
2
10.6



B.M.	3.80	930.83	927.03
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Low Pt. S. side Ramp Lot	5.51	925.32
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5.58	925.25
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5.48	925.35
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P.R.C.	5.70	925.13
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SW Cor. NW. Island	5.53	925.30
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NW Cor. SW Island	5.46	925.37
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5.24	925.59
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P.T.	5.34	925.49
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mid-pt. NW.	5.43	925.40
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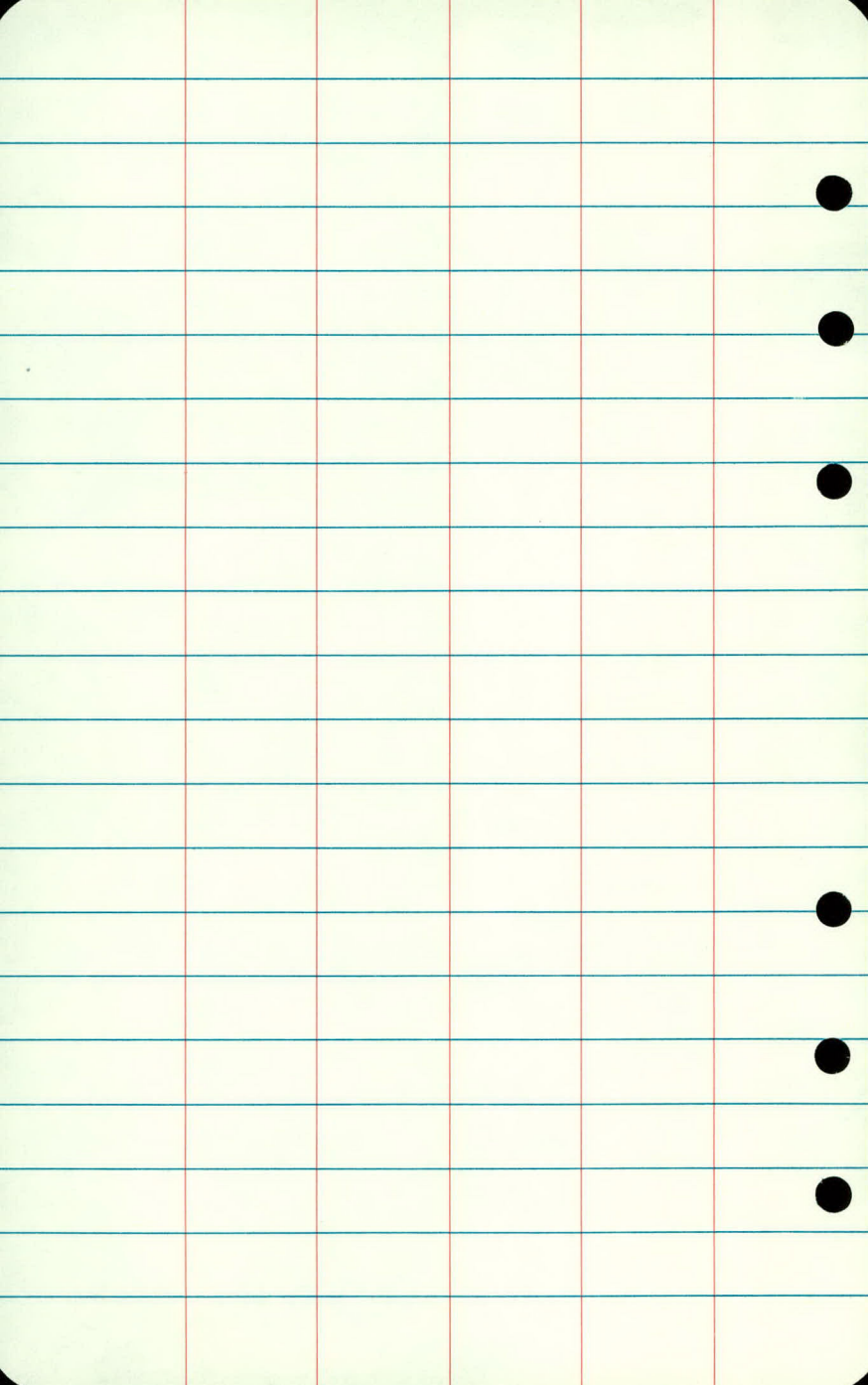
stake	6.15	924.68
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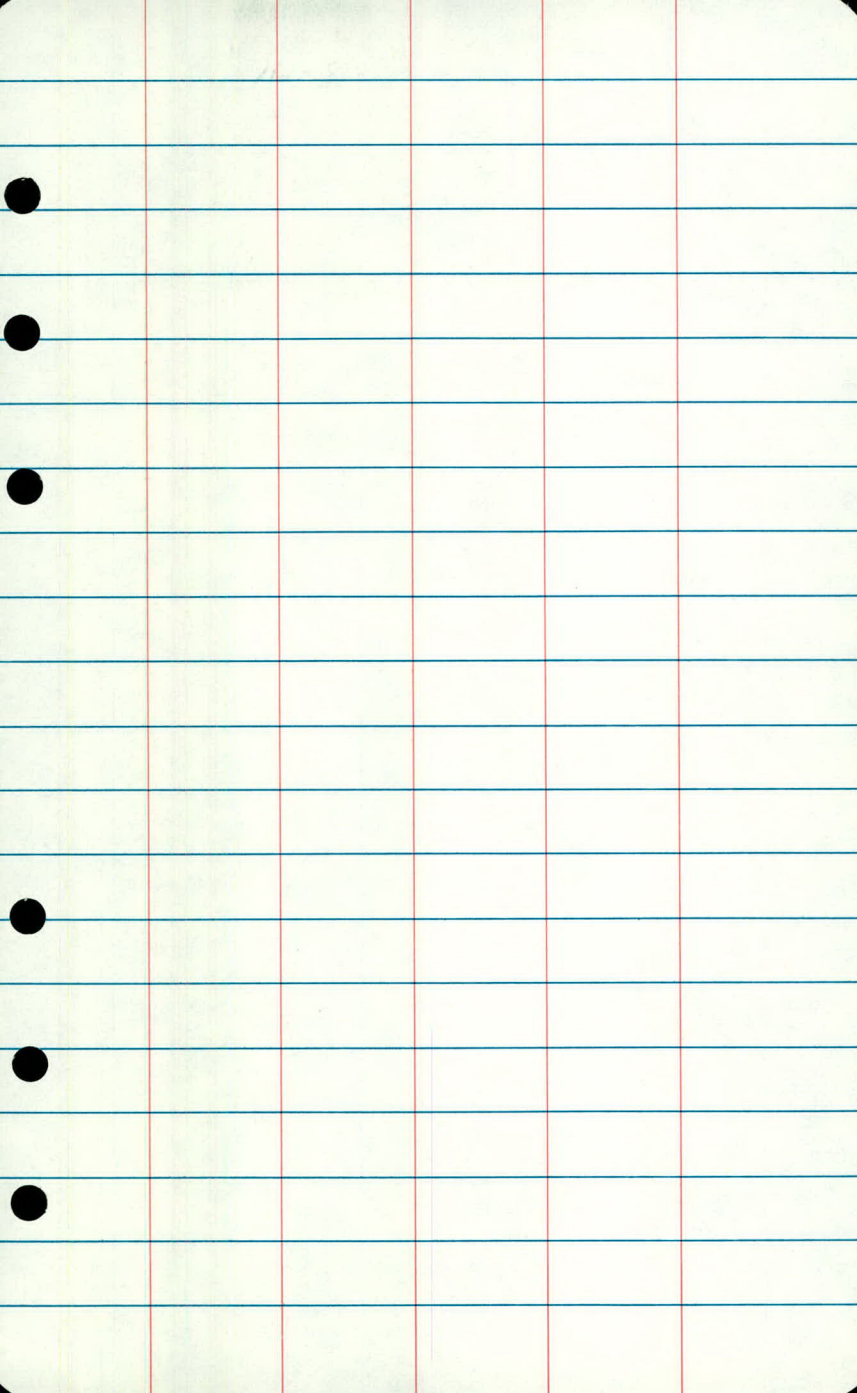
9-16-82

Design

925.30

925.68





$$\begin{array}{r} 30.83 \\ 5.43 \\ \hline 25.40 \end{array}$$

$$\begin{array}{r} 30.83 \\ 6.15 \\ \hline 24.68 \end{array}$$

$$\begin{array}{r} 30.83 \\ 5.45 \\ \hline 25.38 \end{array}$$

$$\begin{array}{r} 30.83 \\ 5.70 \\ \hline 25.13 \end{array}$$

$$\begin{array}{r} 30.83 \\ 6.65 \\ \hline 24.20 \end{array}$$