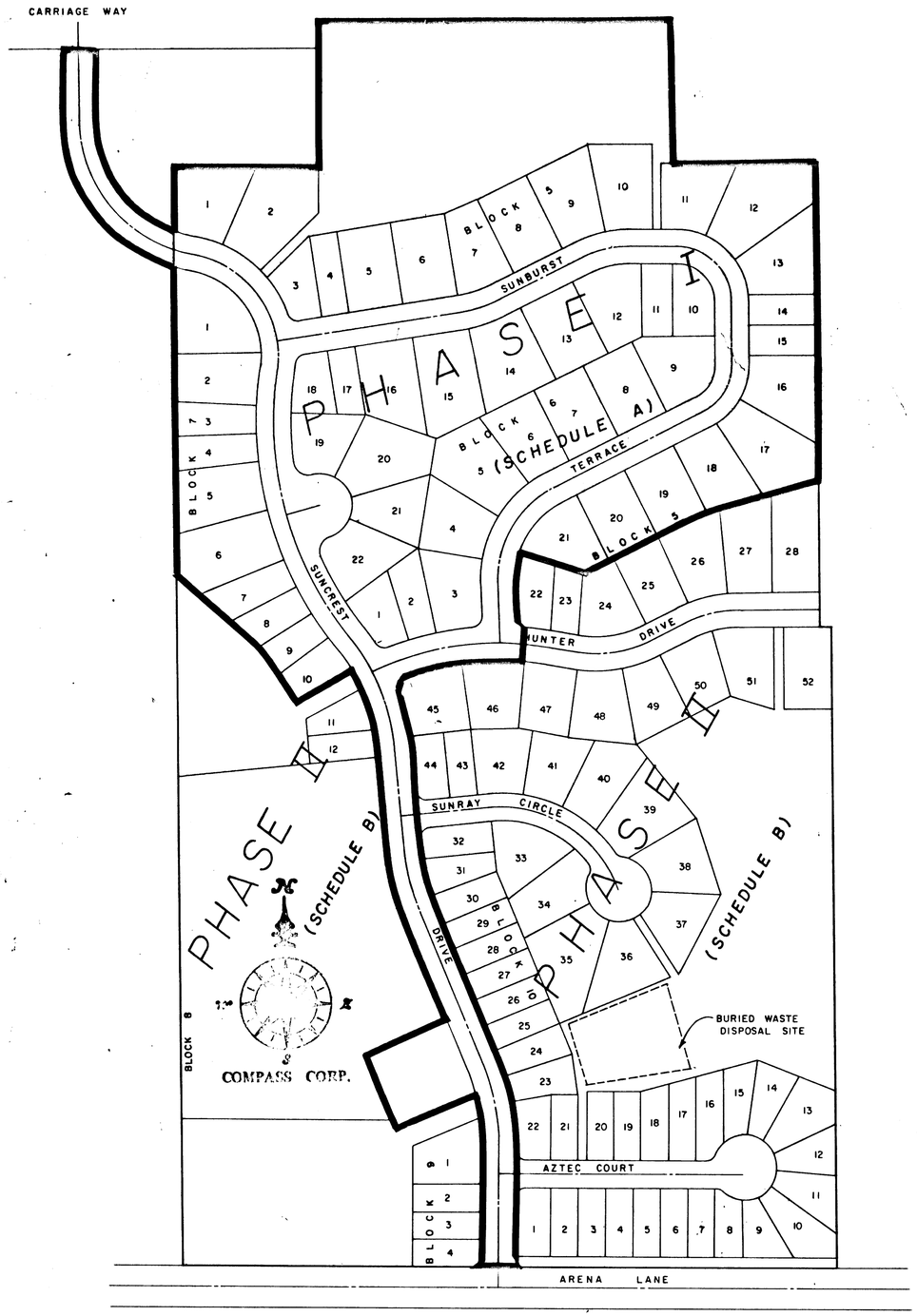


GENERAL NOTES:

ALL WORK AND MATERIALS TO BE IN ACCORDANCE WITH THE CITY OF WEST LINN PUBLIC WORKS DEPARTMENT, O.S.H.D. AND A.P.W.A. OREGON CHAPTER SPECIFICATIONS.
CONTRACTOR TO VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION AND SHALL RELOCATE ANY IN CONFLICT WITH THE PROPOSED CONSTRUCTION.
CONTRACTOR TO OBTAIN ALL REQUIRED PERMITS AND LICENSES BEFORE STARTING CONSTRUCTION.
EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE ONLY AND MUST BE VERIFIED BY THE CONTRACTOR. ADDITIONAL UNDERGROUND UTILITIES MAY EXIST.
THE ENGINEER HAS NOT BEEN RETAINED OR COMPENSATED TO PROVIDE DESIGN AND CONSTRUCTION REVIEW SERVICES RELATING TO THE CONTRACTOR'S SAFETY PRECAUTIONS OR TO MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES REQUIRED FOR THE CONTRACTOR TO PERFORM HIS WORK.
CONTRACTOR SHALL REMOVE AND DISPOSE OF TREES, STUMPS, BRUSH, ROOTS, AND OTHER MATERIAL IN THE ROADWAY AND WHERE INDICATED ON THE PLANS. MATERIAL SHALL BE DISPOSED OF IN SUCH A MANNER AS TO MEET LOCAL REGULATIONS.

STREET AND STORM DRAINAGE NOTES:

CONCRETE CULVERT PIPE SHALL BE ASTM C14 CLASS 3 NONREINFORCED CONCRETE PIPE UNLESS SHOWN OTHERWISE ON PROFILE.
PIPE BEDDING SHALL CONFORM WITH GRANULAR BEDDING AND BACKFILL REQUIREMENTS OF A.P.W.A. DIV. III SECTION 61-3.03 B2 AND 61-3.05.
CORRUGATED METAL PIPE SHALL BE ASPHALT-COATED 16 GAGE GALVANIZED STEEL PIPE AND COUPLING BANDS CONFORMING TO O.S.H.D. SECTION 605.
TRENCHES WITHIN THE RIGHTS-OF-WAY SHALL BE BACKFILLED WITH SELECT GRANULAR MATERIAL. BEDDING TO BE CLASS B.
COMPACTION SHALL BE SUFFICIENT TO PREVENT FUTURE SETTLEMENT.
CONTRACTOR TO DETERMINE TYPE OF EQUIPMENT AND METHOD TO USE TO ACHIEVE REQUIRED COMPACTION.
TRENCH BACKFILL OUTSIDE OF PAVED AREAS MAY BE EXCAVATED TRENCH MATERIAL. BEDDING TO BE CLASS "B".
MATERIAL IN SOFT SPOTS WITHIN THE ROADWAY SHALL BE REMOVED TO THE DEPTH REQUIRED TO PROVIDE A FIRM FOUNDATION AND SHALL BE REPLACED WITH PIT RUN CRUSHED ROCK. THE ENTIRE SUBGRADE SHALL BE THOROUGHLY COMPACTED AT THE LOWEST MOISTURE CONTENT AT WHICH A HANDFUL OF THE SOIL CAN BE MOLDED BY A FIRM CLOSING OF THE HAND. (95% COMPACTION AASHTO T180).

CONTRACTOR SHALL NOTIFY THE ENGINEER WHEN SUBGRADE IS COMPLETE AND 24 HOURS PRIOR TO PLACEMENT OF ROCK BASE MATERIAL AND 24 HOURS PRIOR TO FINAL PAVING FOR AN INSPECTION OF THE WORK. FAILURE TO DO SO WILL MAKE ANY SUBGRADE FAILURE OR DRAINAGE PROBLEMS THE RESPONSIBILITY OF THE CONTRACTOR.

ASPHALT CONCRETE PAVEMENT MIX TO BE DESIGNED FROM A MIX FORMULA APPROVED BY O.S.H.D. FOR MATERIAL USED. CONTRACTOR TO PROVIDE ENGINEER WITH CERTIFICATE OF COMPLIANCE FROM ASPHALT PAVEMENT PLANT UNLESS OTHERWISE INDICATED.

EXCESS EXCAVATION TO BE SPREAD AND COMPACTED EVENLY ON LOTS AS DIRECTED BY OWNER. VEGETATION AND TOPSOIL TO BE STRIPPED OFF FILL AREAS PRIOR TO FILLING.

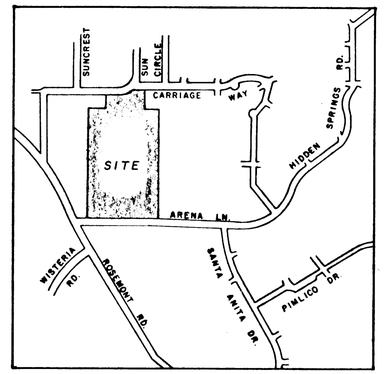
WATER SYSTEM NOTES:

ALL PIPE TO BE MINIMUM COVER OF 30 INCHES BELOW FUTURE STREET GRADES. CONTRACTOR SHALL TAKE PRECAUTIONS TO PROTECT PIPE INTERIORS, FITTINGS, AND VALVES AGAINST CONTAMINATION.
FIRE HYDRANTS TO BE DRY-BARREL WATEROUS TYPE AND COMPLY WITH A.W.W.A. C 502.
SERVICES TO HAVE FORD COMPRESSION FITTINGS.
HOUSE SERVICES TO BE COPPER TYPE "K" SEAMLESS SOFT ANNEALED.
SINGLE SERVICES TO BE 3/4-INCH.
DOUBLE SERVICES TO BE 1-INCH.
COPPER TUBE BENDS TO BE SMOOTH RADIUS.
METER BOXES TO BE NO. 1 METER BOX AS MANUFACTURED BY METER BOX EQUIPMENT COMPANY, TIGARD, OREGON. METER LOCATIONS TO BE 12-INCHES BELOW TOP OF CURB AND 6-INCHES BEHIND CURB.
SERVICE TAPS TO BE AT LEAST 18-INCHES APART.
GATE VALVES TO BE A.W.W.A. C 500. BUTTERFLY VALVES TO MEET A.W.W.A. C 504.
VALVES TO HAVE 2-INCH OPERATING NUT WITH COUNTER CLOCKWISE OPENING AND NON-RISING STEM.
DUCTILE IRON PIPE TO BE TYTON JOINT CEMENT MORTAR LINED CLASS 51 AND SHALL CONFORM TO ASTM C110, C150, AND C 151.

FITTINGS AND PIPE SECTIONS THAT WILL NOT BE DISINFECTED BY CHLORINE LINE 24 HOURS SHALL HAVE THE INTERIORS SWABBED WITH A 5 PERCENT HYPOCHLORITE SOLUTION BEFORE THEY ARE INSTALLED.
CONCRETE THRUST BLOCKS TO BE CONSTRUCTED AT TEES, BENDS, FIRE HYDRANTS, BLOWOFFS AND WHERE INDICATED ON PLANS. THE MINUMUM BEARING SURFACE AGAINST UNDISTURBED SOIL TO BE AS SHOWN ON PLANS. CONCRETE SHALL BE ALLOWED TO CURE BEFORE PIPELINE PRESSURE TESTING.
PIPELINE TO BE TESTED AT 150 P.S.I. AND HELD AT THE PRESSURE FOR 2 HOURS. TEST TO BE WITNESSED BY CITY WATER DEPARTMENT PERSONNEL. PIPE LINE TO BE THOROUGHLY DISINFECTED AND FLUSHED IN ACCORDANCE WITH A.W.W.A. STANDARD C601.

SANITARY SYSTEM NOTES:

CONCRETE SANITARY SEWER PIPE SHALL BE ASTM C14. CLASS 2 NONREINFORCED CONCRETE PIPE WITH RUBBER GASKETS UNLESS SHOWN OTHERWISE ON PROFILE.
ENGINEER RESERVES THE RIGHT TO ADJUST GRADES OR ALIGNMENT TO ACCOMMODATE UTILITIES OR EXISTING SEWER LINES AS REQUIRED.
BUILDING SERVICE CONNECTIONS TO SLOPE 2% MINIMUM UP TO FUTURE HOUSE LOCATION FROM SEWER LATERAL OR MAIN. SERVICE SHALL BE 6-INCH SEWER PIPE AND SHALL EXTEND TO DISTANCE SHOWN ON PLANS AND END AT ELEVATION SHOWN.
WYES AND 1/8th BENDS REQUIRED FOR SERVICE CONNECTION.
STATIONING AND DISTANCE SHOWN ON PLAN AND PROFILE ARE HORIZONTAL AND NOT SLOPE DISTANCE.
CONTRACTOR SHALL PREPARE A PRINT FOR THE ENGINEER SHOWING AS-CONSTRUCTION DATA: STATION OF WYE ALONG SEWER, LENGTH OF CONNECTION AND DEPTH OF SERVICE CONNECTION AT PROPERTY LINE OF END OF SERVICE AND ANY CHANGES MADE DURING CONSTRUCTION.
FIELD OBSERVATION WILL BE AS DEEMED NECESSARY BY ENGINEER. IF INSPECTOR IS NOT PRESENT, CONTRACTOR SHALL CALL FOR INSPECTION PRIOR TO BACKFILLING TRENCH AND TO WITNESS PIPELINE TESTING.
P.V.C. SANITARY SEWER PIPE AND FITTINGS SHALL BE ASTM D3034 WITH RUBBER GASKETS.



VICINITY MAP
N. T. S.

INDEX

ROAD & STORM SEWER	-	SHEETS 2 THRU 5
SANITARY SEWER & WATER	-	SHEETS 6 THRU 10
STANDARD DETAILS	-	SHEET 11 & 12

REGISTERED PROFESSIONAL ENGINEER
10,433
OREGON
DEC. 14, 1979
MICHAEL R WIERIMA

DATE	NO.	REVISION
1-12-83	2	AS BUILT (SCHEDULE A)
7-22-82	1	REVISED PHASE BOUNDARIES

DRAWN M M M | DESIGNED M R W | CHECKED
SCALE 1" = 100' | DATE APRIL '82
FILE 76-1019-918

COMPASS CORPORATION
ENGINEERING - SURVEYING - PLANNING
6564 S.E. LAKE ROAD
MILWAUKIE, OREGON 97222
(503) 222-4652
(503) 653-9093

K & F DEVELOPMENT, INC.
15790 S.E. PIAZZA AVE.
CLACKAMAS, OREGON 97015
656-2518

SUNBURST II

1/12

SUNBURST 2

Willamette Print & Blueprint Company

CONT. SHT. 3/11

CURVE DATA					
NO	RAD.	DELTA	LENGTH	
1	25'	90° 00' 00"	39.19'	CURB
2	22'	90° 00' 00"	34.56'	CURB
3	21'	43° 27' 50"	15.93'	CURB
4	41'	289° 41' 03"	207.29'	CURB
5	21'	66° 13' 12"	24.27'	CURB
6	250'	22° 55' 06"	100.00'	℄
7	300'	17° 11' 19"	90.00'	℄

P.C. 8+10.00 737.68

45

28' 53' R/W

44

N. 11° 11' 30" W. 100.00'

G-1 C.I. 7+06.34 3880.516 4615.715 725

7+10.00 SUNCREST 0+00 SUNRAY 730.95

CONT. SUNRAY SHT. 3/11

3822.900 G-1 C.I. 6+42.12 4685.818 ST. STA. 6+90 724

P.T. 6+60.00 727.17

16

SUNCREST

P.C. 5+70.00 718.35

15

14

28' 53' R/W 36' PAV.

13

N. 12° 42' 30" W. 250.00'

DRIVE

P.T. 3+20.00 692.10

12

CURB

D.I. 2+47.37 3452.209 4860.462 728

3433.718 G-2 C.I. 2+31.47 0+00 4715.981 ST. STA. 2+79.63 722

G-1 C.I. 0+33.65 ST. STA. 2+79.65 I.E. 685.00 RIM EL. 687.31 3441.361 4748.752 723

STORM LINE "A"

STORM LINE "B"

12" PLUG 1+60.00 E.O.L. 3398.813 4578.651 734

8' 5' 6' WIDE x 1½" THICK ASPHALT PATHWAY 8' 8' 4" OF 1'-0" C.R.

9 8 7

11 10' UTIL. EASE. 10

G-1 C.I. 1+30.53 ST. STA. 1+21 3335.174 4859.353 727

P.C. 2+20.00 682.72

P.T. 2+01.00 681.25 1/2 PT. 679.20 P.T. 0+40.00 677.69

F.R.C. 5+40.53 686.78

P.T. 5+64.84 = 5+03.36 686.73

66' R/W

55.00'

CENTER OF SAC 689.00

N. 0° 32' 36" E. 10.00'

41' 41'

1+65.00 SUNCREST 0+00 AZTEC

1 2 3 4 5 6

AZTEC COURT

S. 89° 27' 24" E. 360.00'

WHEELCHAIR RAMP-TYP. AT ALL INTERSECT. ACCESS TO OPEN SPACE PER CITY OF WEST LINN

3310.244 MH 1+02.09 4754.802 0+00 E, ST. STA. 1+52.09 721

P.T. 0+40.00 677.69 1/2 PT. 677.83 P.C. 1+29.00 676.28

G-1 C.I. 1+04.81 ST. STA. 1+21 3309.256 4859.107 726

P.C. 3+17.55 680.62

P.R.C. 3+33.38 687.78

CURB

40' R/W 28' PAV.

35' R/W 21' PAV.

CURB

N. 00° 32' 36" E. 165.00'

1.51'

3 65' R/W

END A.C. PAVEMENT (SCHED A)

P.T. 0+50 671.81 1/2 PT. 671.95 P.C. 5+76.93 677.07

4

LIMIT OF A.C. PAVEMENT

END EXISTING A.C.

ARENA LANE

HILLEN SPRINGS ROAD

EXISTING GRAVEL ROAD

G-2 C.I. 0+00 3208.209 4752.854 719

EXISTING GRAVEL ROADS

ROSEMONT ROAD

3208.578 G-1 C.I. 0+33.65 4720.186 ST. STA. 0+50 I.E. 668.00 RIM EL. 671.44 734

0+00 SUNCREST 6+17.93 ARENA

24" OUTFALL 3133.212 4755.127 735

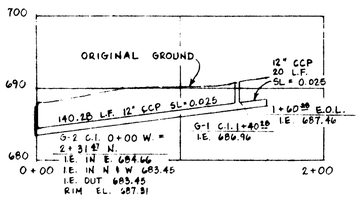
RIP RAP PER DETAIL SHT. 6

11+12.93 END CURB

PLAN

SCALE: 1" = 50'

** SIDEWALKS TO BE CONSTRUCTED DURING DEVELOPMENT CONSTRUCTION NOT DURING DWELLING UNIT CONSTRUCTION AT THESE LOCATIONS

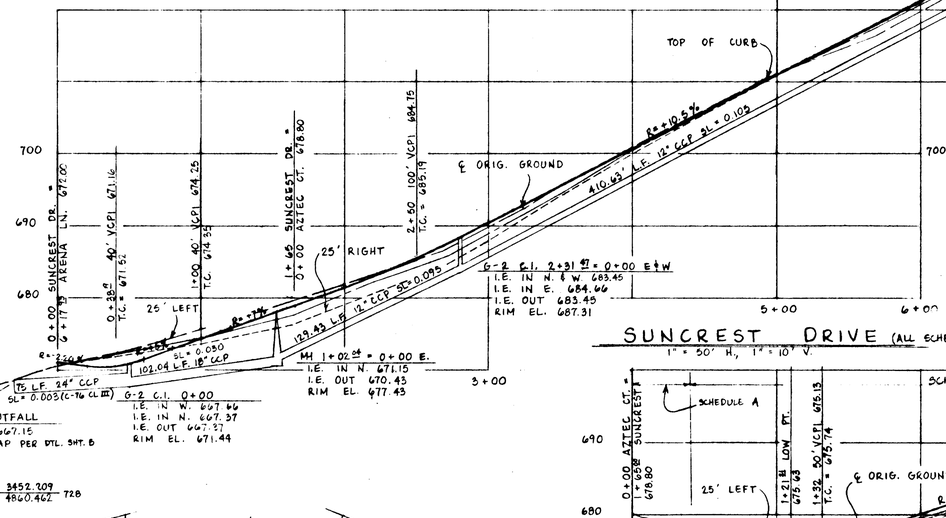


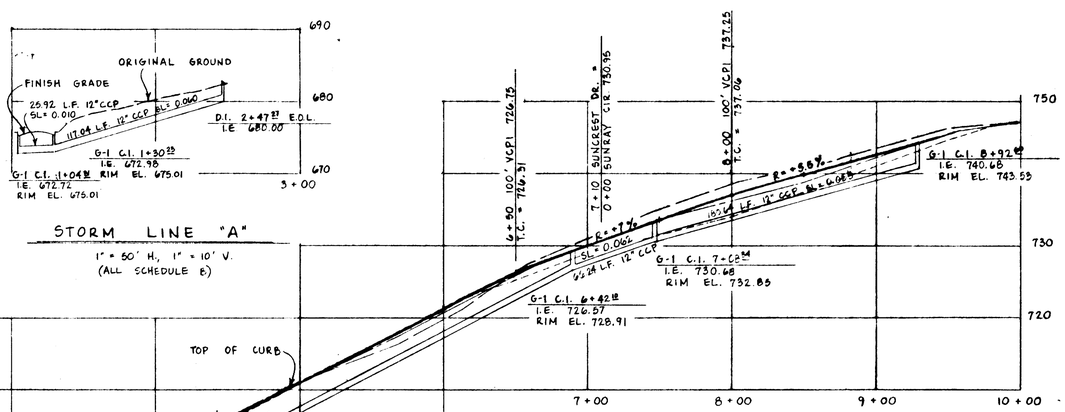
STORM LINE "B"

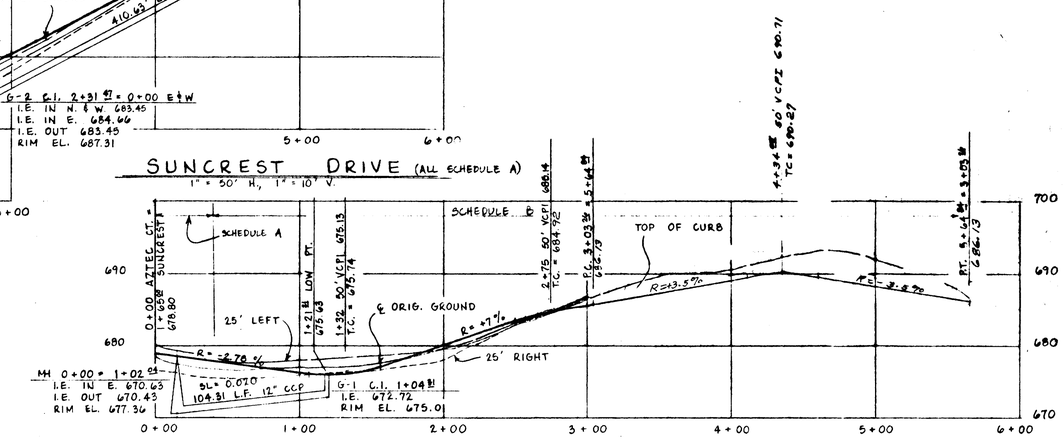
1" = 50' H., 1" = 10' V.
(ALL SCHEDULE B)

STORM LINE "A"

1" = 50' H., 1" = 10' V.
(ALL SCHEDULE B)

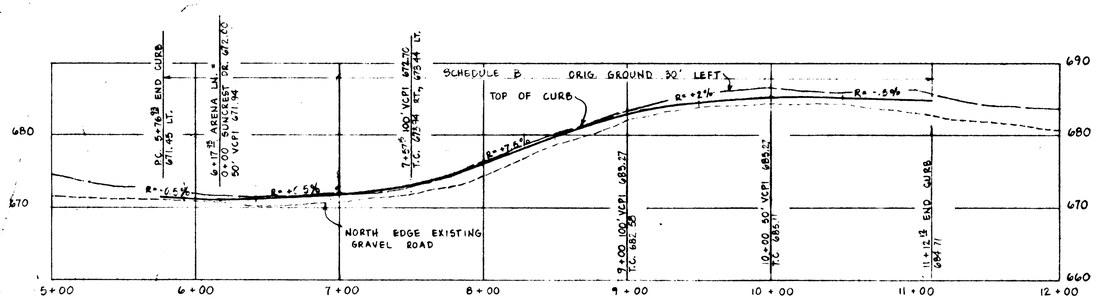






AZTEC COURT

1" = 50' H., 1" = 10' V.



ARENA LANE

1" = 50' H., 1" = 10' V.

NOTE:
ARENA LANE STREET IMPROVEMENTS NOT IN CONTRACT

REGISTERED PROFESSIONAL ENGINEER 10433 OREGON JULY 14, 1978 MICHAEL R. MEEK

SUNBURST II

10-31-83	7	AS BUILT AZTEC COURT
5-26-83	6	REVISIONS PER CITY
4-27-83	5	DELETED ARENA LANE
1-11-83	4	AS BUILT (SCHEDULE A)
7-6-82	3	REVISIONS PER CITY
6-28-82	2	REVISIONS PER CITY
5-25-82	1	REVISED AZTEC CT GRADES
DATE	NO.	REVISION

DRAWN MMM | DESIGNED M R W | CHECKED G.H.R.
SCALE AS SHOWN | DATE APRIL, '82
FILE 76 - 1019 - 918

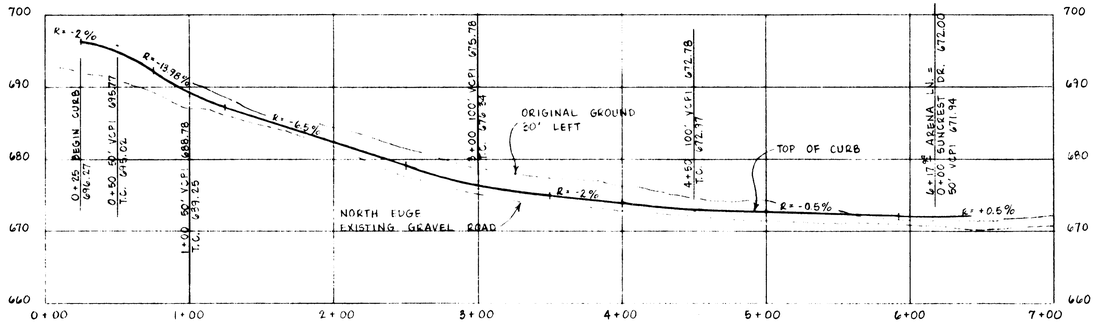
COMPASS CORPORATION
ENGINEERING - SURVEYING - PLANNING
8564 S.E. LAKE ROAD
MILWAUKIE, OREGON 97222
(503) 222-4652
(503) 653-9093

K & F DEVELOPMENT, INC.
15790 S.E. PIAZZA AVE.
CLACKAMAS, OREGON 97015
656-2518

ROAD & STORM SEWER IMPROVEMENTS
PLAN & PROFILES

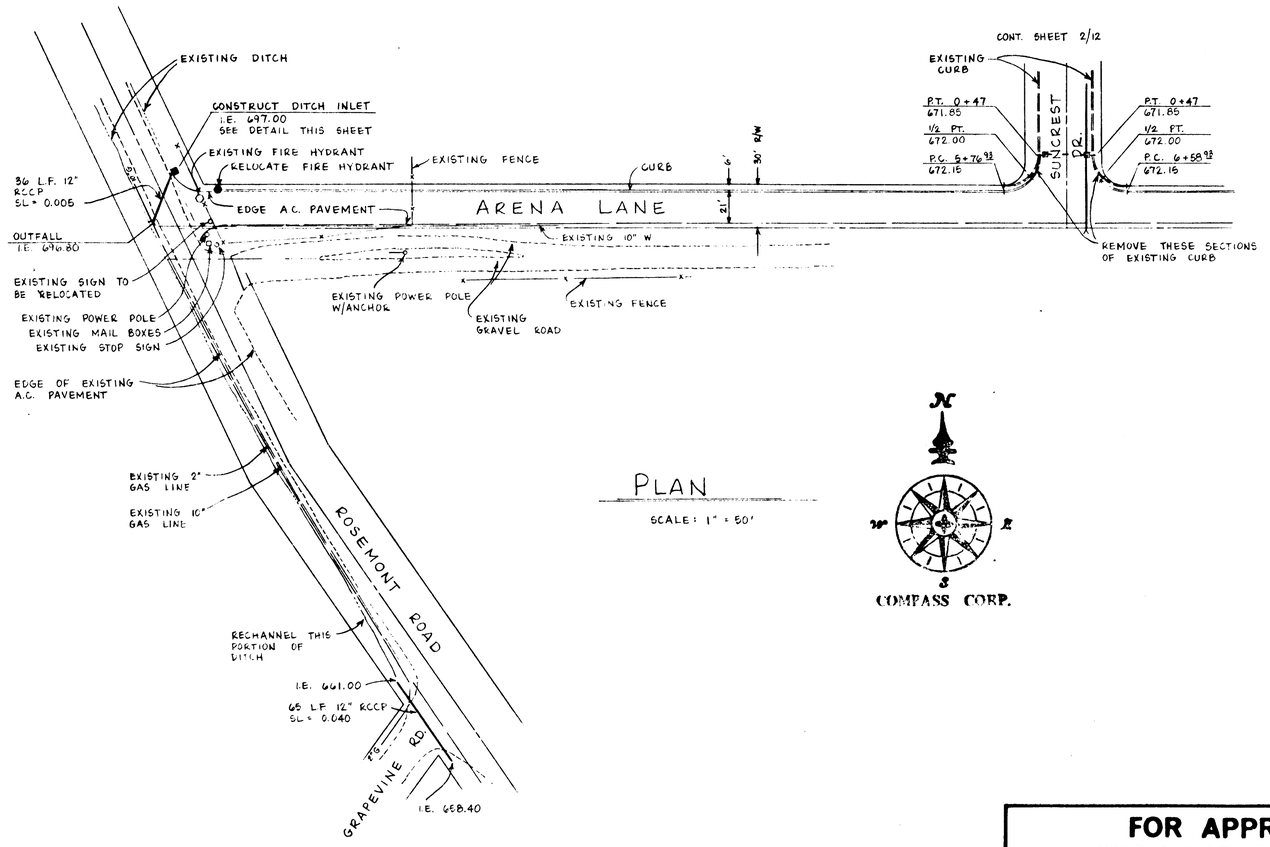
2 / 12

Willamette Print & Blueprint Company



ARENA LANE PROFILE

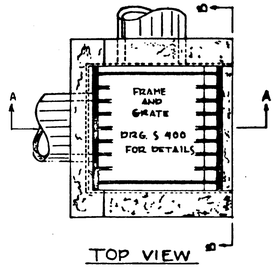
SCALE: 1" = 50' H., 1" = 10' V.



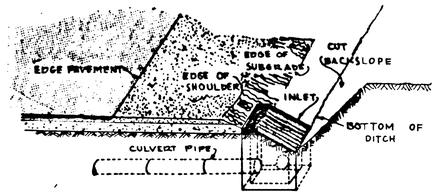
PLAN

SCALE: 1" = 50'

COMPASS CORP.

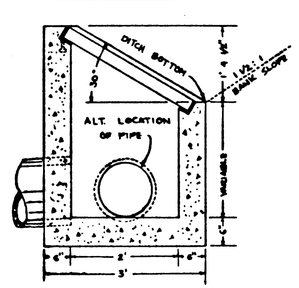


TOP VIEW

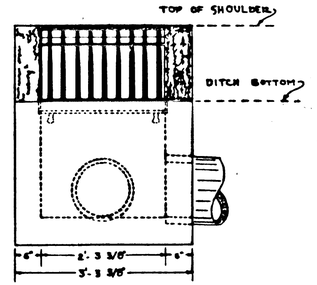


TYPICAL INSTALLATION

N.T.S.



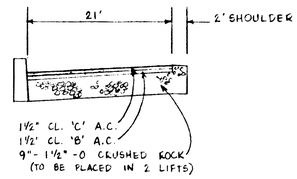
SECTION A-A



ELEVATION B-B

DITCH INLET

3/4" = 1'-0"



ARENA LANE SECTION

N.T.S.

FOR APPROVALS ONLY
"NOT FOR CONSTRUCTION"

SUNBURST II

REGISTERED PROFESSIONAL ENGINEER
10,433
OREGON
DEC. 14, 1979
MICHAEL R. WITTMAN

DATE	NO.	REVISION
10-31-83	1	Net Built

DRAWN M M M | DESIGNED M R W | CHECKED
SCALE AS SHOWN | DATE DEC. 1982
FILE 76-1019-918

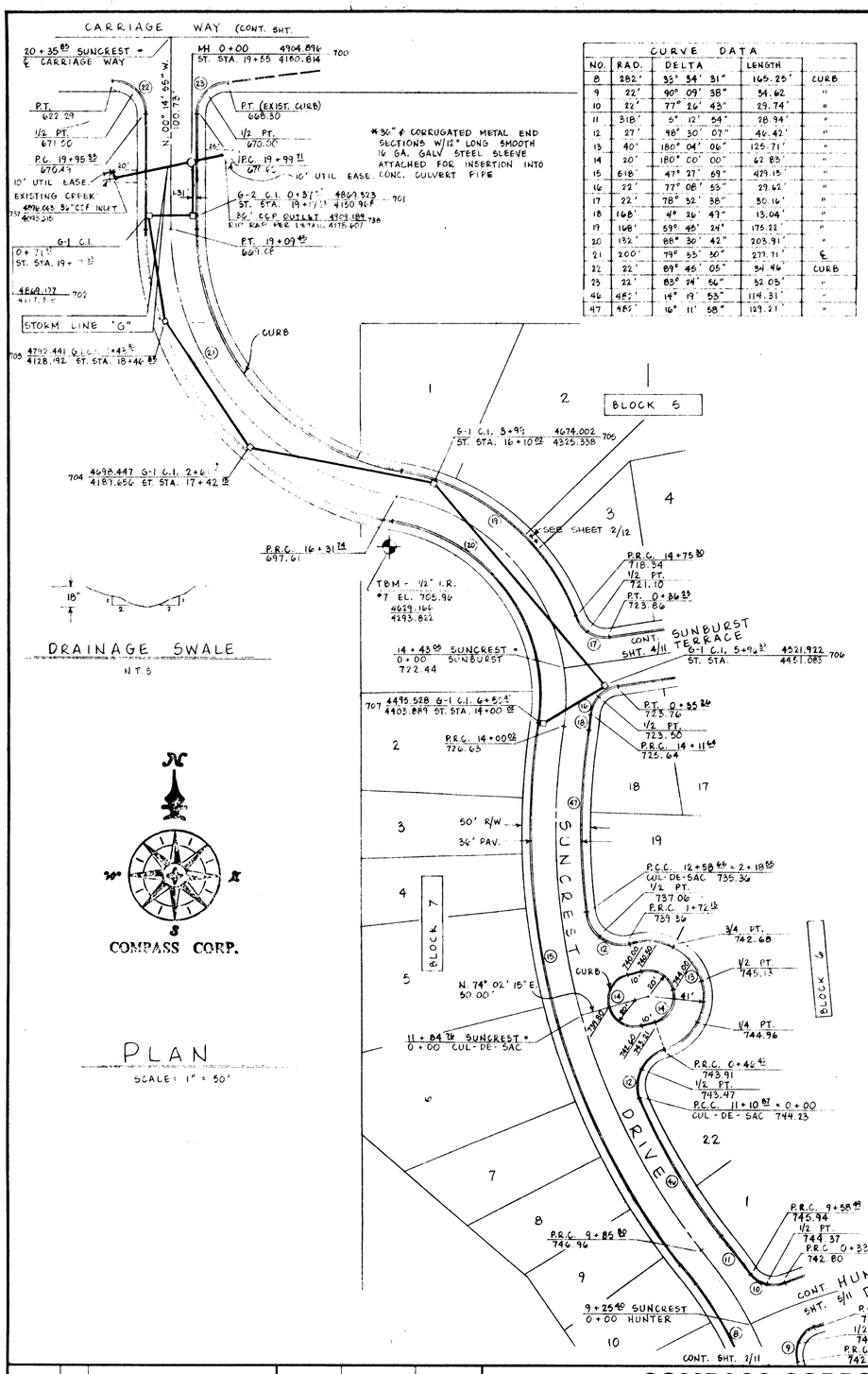
COMPASS CORPORATION
ENGINEERING – SURVEYING – PLANNING
8564 S.E. LAKE ROAD
MILWAUKIE, OREGON 97222
(503) 222-4652
(503) 653-9093

K & F DEVELOPMENT, INC.
15790 S.E. PIAZZA AVE.
CLACKAMAS, OREGON 97015
656-2518

ROAD AND STORM SEWER
PLAN AND PROFILE

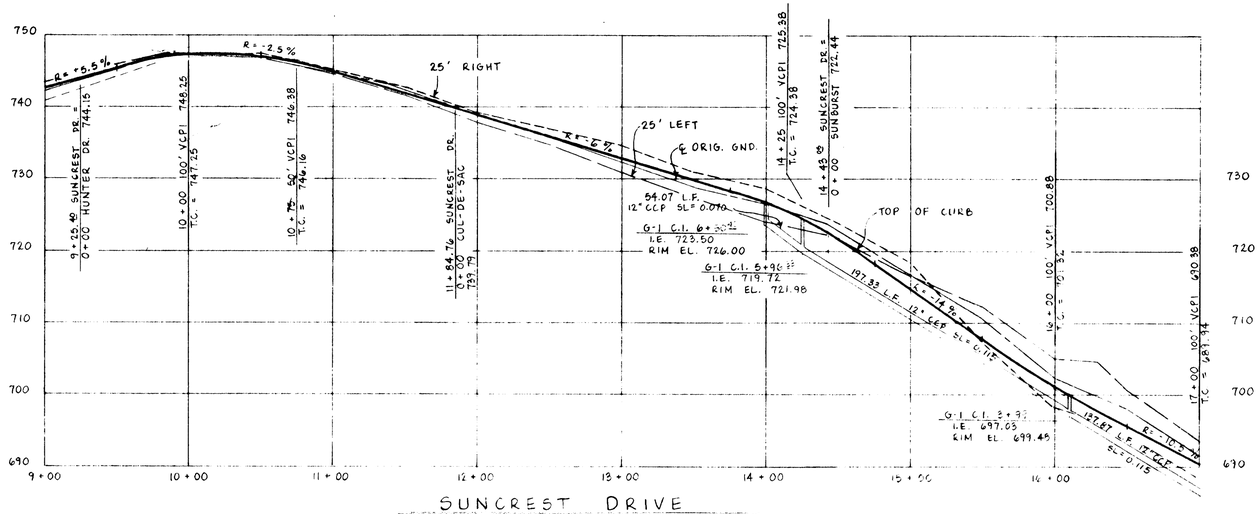
2A / 12

Willamette Print & Blueprint Company



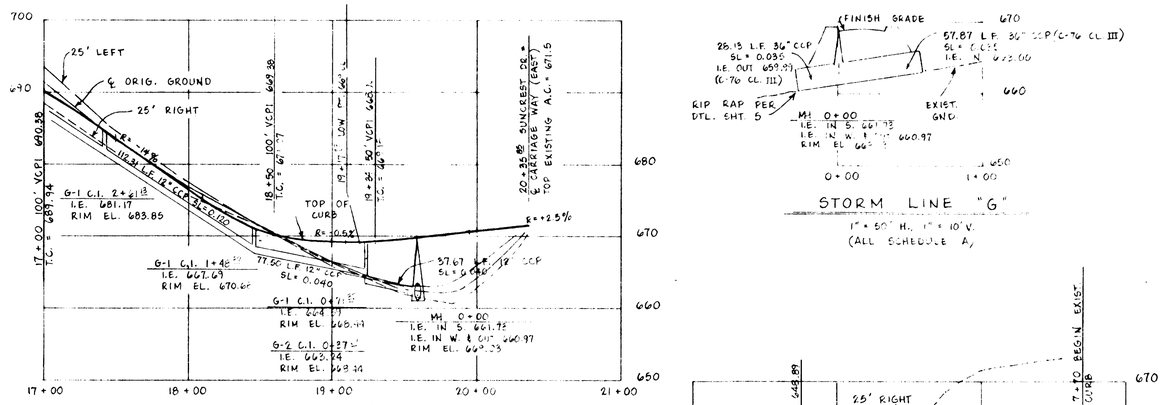
CURVE DATA				
NO.	RAD.	DELTA	LENGTH	
8	282'	35° 34' 31"	165.25'	CURB
9	22'	90° 09' 38"	34.62	"
10	22'	77° 26' 43"	29.74'	"
11	318'	5° 12' 54"	28.94'	"
12	27'	98° 30' 07"	46.42'	"
13	40'	180° 04' 06"	125.71'	"
14	20'	180° 00' 00"	62.83'	"
15	618'	47° 27' 59"	429.13'	"
16	22'	77° 08' 53"	29.62'	"
17	22'	78° 32' 38"	30.16'	"
18	168'	4° 26' 43"	13.04'	"
19	168'	59° 45' 24"	175.22'	"
20	132'	88° 30' 42"	203.91'	"
21	200'	79° 55' 50"	277.71'	℄
22	22'	89° 45' 05"	34.46'	CURB
23	22'	83° 24' 54"	32.05'	"
46	485'	14° 19' 53"	114.31'	"
47	485'	16° 11' 58"	129.21'	"

*36" Ø CORRUGATED METAL END SECTIONS W/12" LONG SMOOTH 16 GA. GALV. STEEL SLEEVE ATTACHED FOR INSERTION INTO CONC. CULVERT PIPE



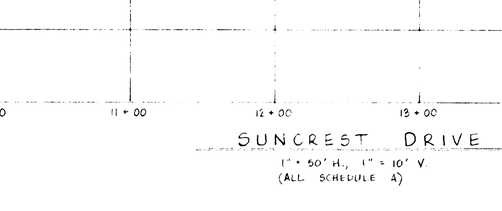
SUNCREST DRIVE

1" = 50' H., 1" = 10' V.
(ALL SCHEDULE A)



SUNCREST DRIVE (CONT.)

1" = 50' H., 1" = 10' V.
(ALL SCHEDULE A)



CARRIAGE WAY (PLAN ON SHT. 4/12)

1" = 50' H., 1" = 10' V.
(ALL SCHEDULE A)

STORM LINE "G"

1" = 50' H., 1" = 10' V.
(ALL SCHEDULE A)

REGISTERED PROFESSIONAL ENGINEER 10,433 OREGON MICHAEL R. WARNA

SUNBURST II

DATE	NO.	REVISION
1-12-83	2	AS BUILT (SCHEDULE A)
6-28-82	1	REVISIONS PER CITY

DRAWN M M M | DESIGNED M R W | CHECKED G.H.R.
SCALE AS SHOWN | DATE APRIL, '82
FILE 76 - 1019 - 918

COMPASS CORPORATION
ENGINEERING - SURVEYING - PLANNING
6564 S.E. LAKE ROAD
MILWAUKIE, OREGON 97222
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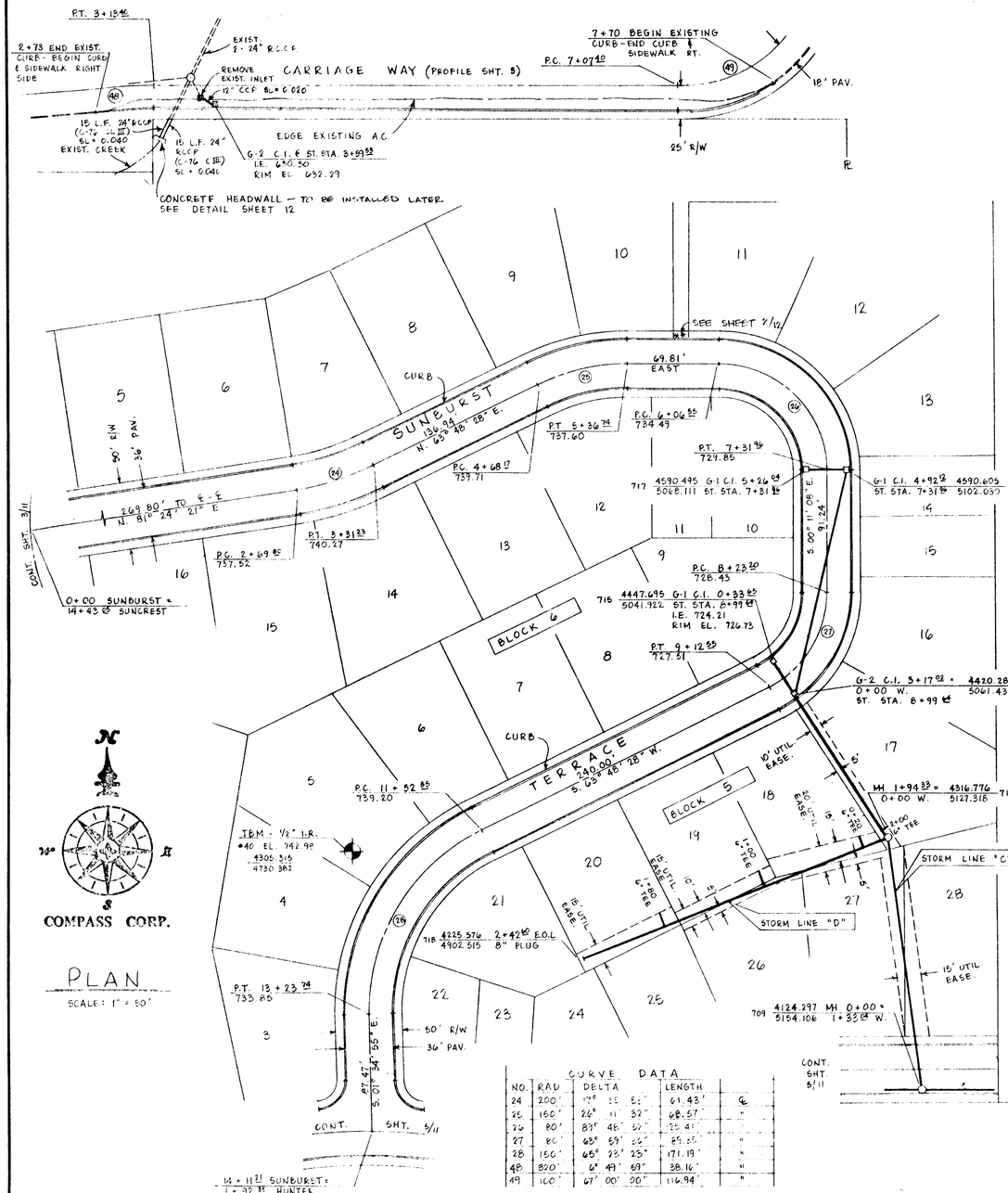
K & F DEVELOPMENT, INC.
15790 S.E. PIAZZA AVE.
CLACKAMAS, OREGON 97015
656-2518

ROAD & STORM SEWER IMPROVEMENTS
PLAN & PROFILES

3/12

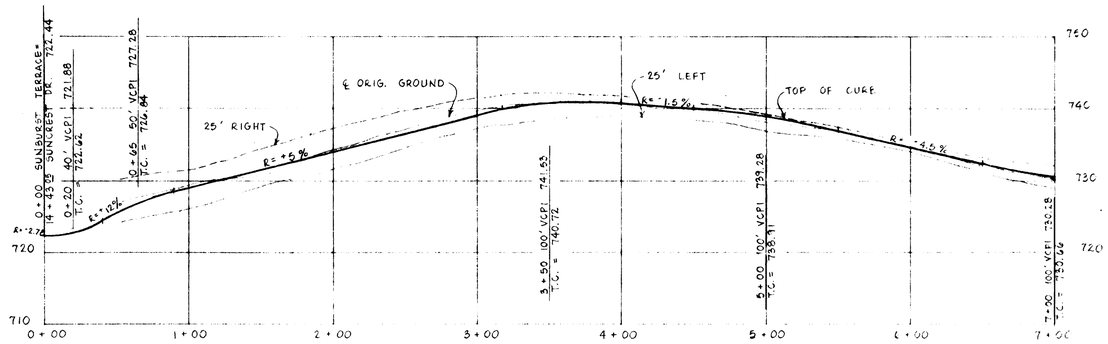
Willamette Print & Blueprint Company N74216



PLAN

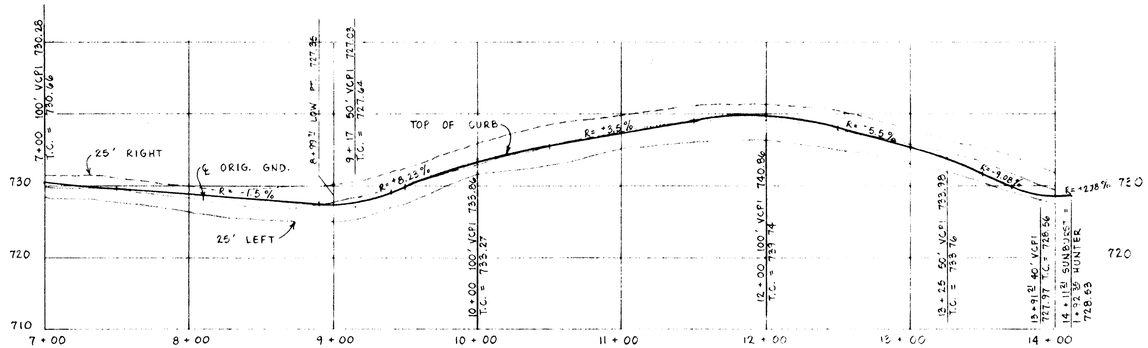
SCALE: 1" = 50'

CURVE DATA			
NO.	RAD	DELTA	LENGTH
24	200'	17° 35' 52"	61.43'
25	150'	26° 11' 32"	68.57'
26	80'	83° 48' 28"	117.01'
27	80'	63° 59' 44"	89.35'
28	150'	65° 22' 25"	171.19'
48	820'	6° 49' 49"	38.16'
49	100'	67° 00' 00"	116.94'



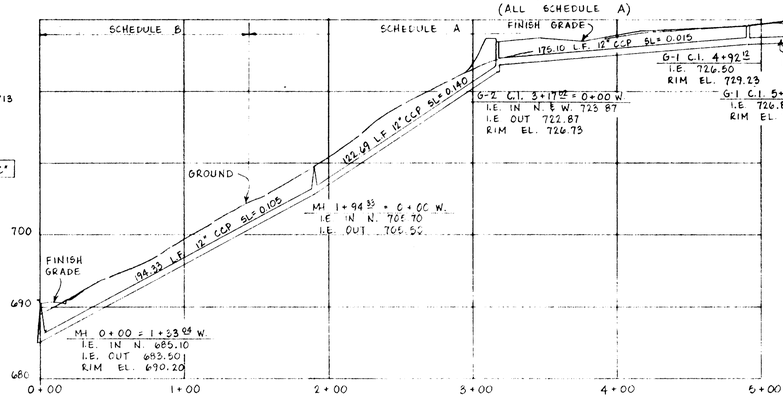
SUNBURST TERRACE

1" = 50' H., 1" = 10' V.
(ALL SCHEDULE A)



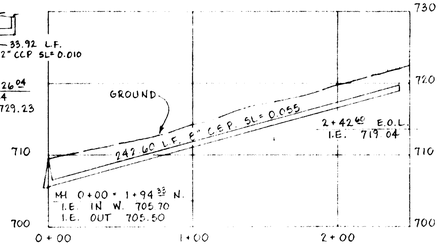
SUNBURST TERRACE (CONT.)

1" = 50' H., 1" = 10' V.
(ALL SCHEDULE A)



STORM LINE "C"

1" = 50' H., 1" = 10' V.



STORM LINE "D"

1" = 50' H., 1" = 10' V.
(ALL SCHEDULE A)

SUNBURST II

DATE	NO.	REVISION
1-12-83	3	AS BUILT (SCHEDULE A)
7-22-82	2	REVISED 2-24" R.C.C.P.
6-28-82	1	REVISIONS PER CITY

DRAWN M M M | DESIGNED M R W | CHECKED G.H.R.
SCALE AS SHOWN | DATE APRIL, '82
FILE 76 - 1019 - 918

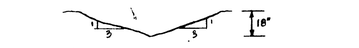
COMPASS CORPORATION
ENGINEERING - SURVEYING - PLANNING
6564 S.E. LAKE ROAD
MILWAUKIE, OREGON 97222
(503) 222-4652
(503) 653-9093

K & F DEVELOPMENT, INC.
15790 S.E. PIAZZA AVE.
CLACKAMAS, OREGON 97015
656 - 2518

ROAD & STORM SEWER IMPROVEMENTS
PLAN & PROFILES

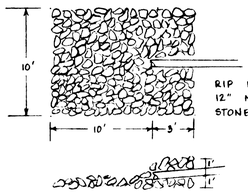
4/12

Willamette Print & Blueprint Company, N74PG



DRAINAGE SWALE DETAIL

N.T.S.

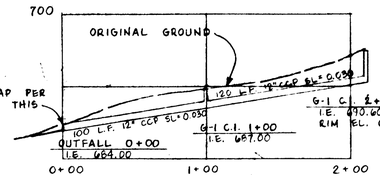


RIP RAP DETAIL

N.T.S.

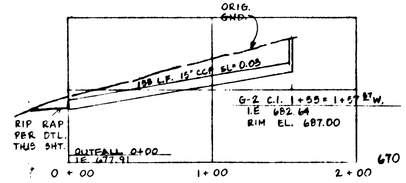
CURVE DATA

NO	RAD.	DELTA	LENGTH	
29	218'	14° 45' 52"	81.95'	CURB
30	407'	30° 02' 27"	213.39'	"
31	443'	16° 17' 25"	125.95'	"
32	22'	86° 52' 49"	33.36'	"
33	22'	85° 14' 42"	31.96'	"
34	443'	5° 04' 39"	39.26'	"
35	175'	36° 26' 34"	111.31'	℄
36	175'	26° 11' 32"	80.00'	℄
37	41'	290° 26' 55"	207.84'	CURB
38	21'	48° 29' 25"	17.77'	"
39	22'	90° 00' 00"	34.56'	"
40	166'	57° 55' 11"	167.81'	"
41	194'	61° 11' 55"	207.22'	"
42	21'	65° 14' 16"	23.91'	"
43	42'	102° 38' 08"	75.24'	"
44	22'	51° 19' 04"	19.71'	"
45	180'	76° 08' 46"	239.22'	℄



STORM LINE "E"

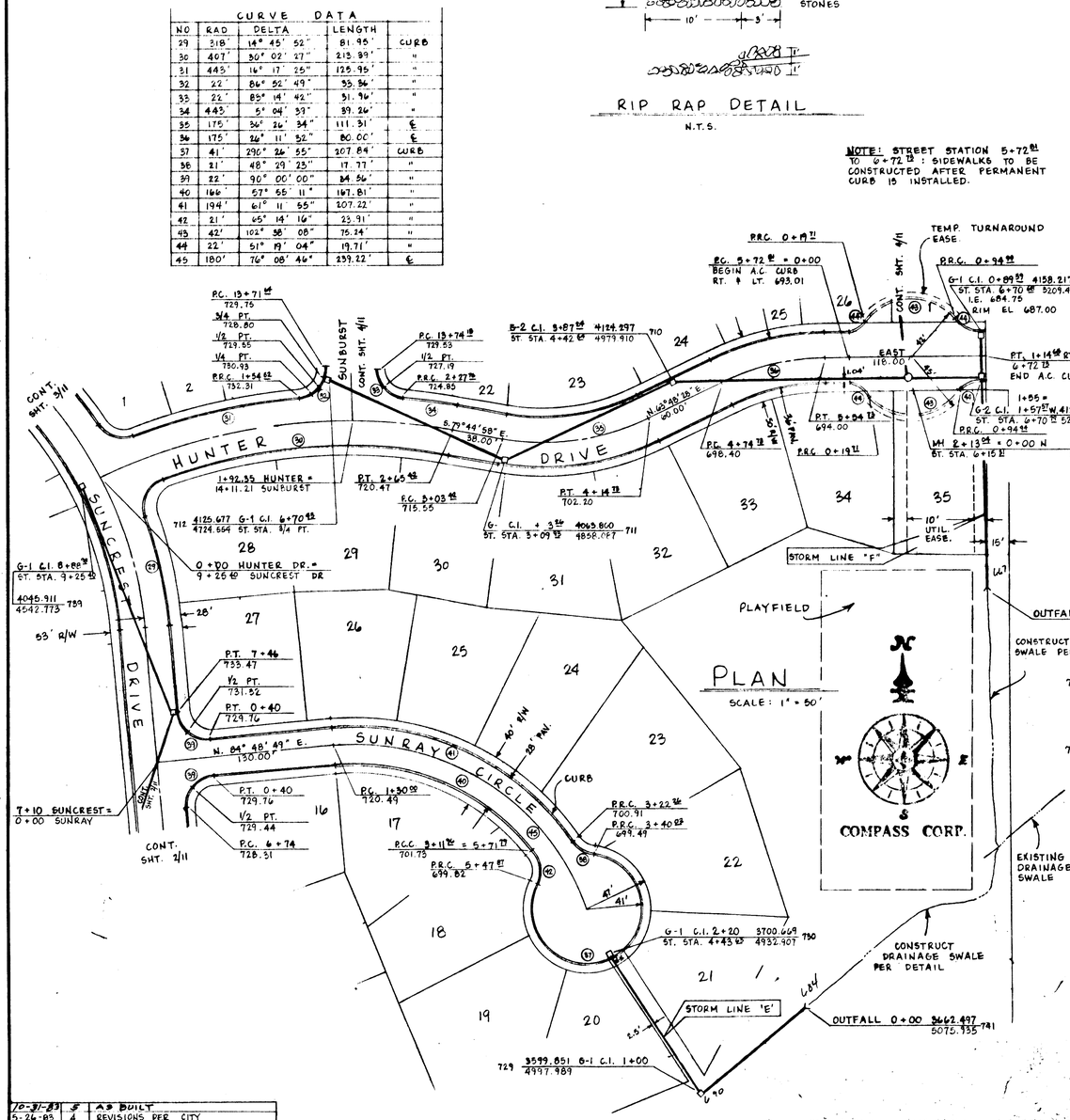
1" = 50' H., 1" = 10' V.
(ALL SCHEDULE B)

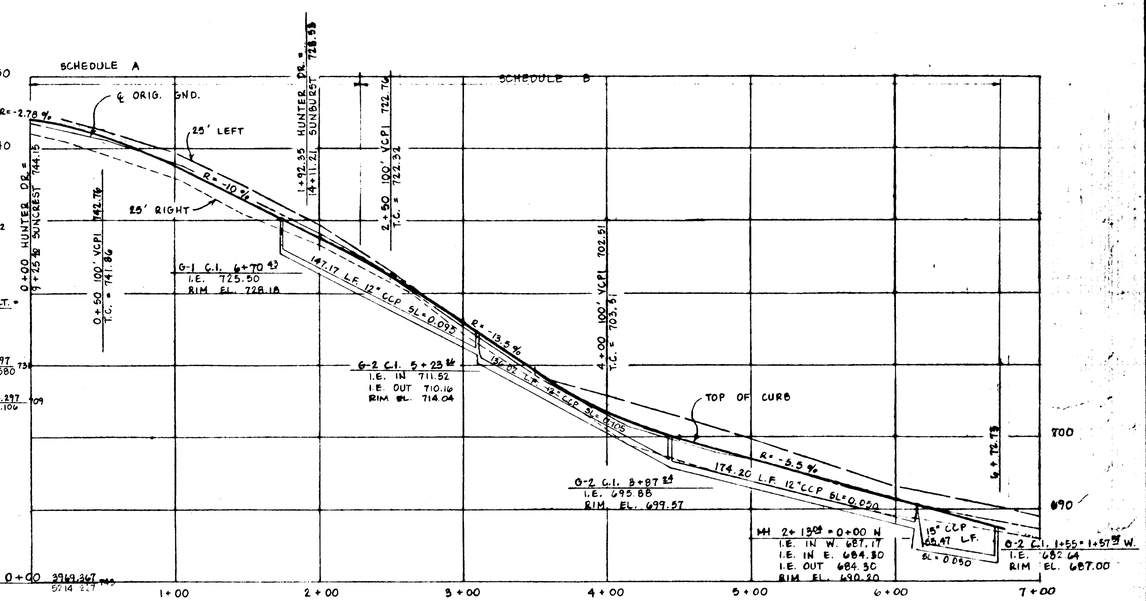


STORM LINE "F"

1" = 50' H., 1" = 10' V.
(ALL SCHEDULE B)

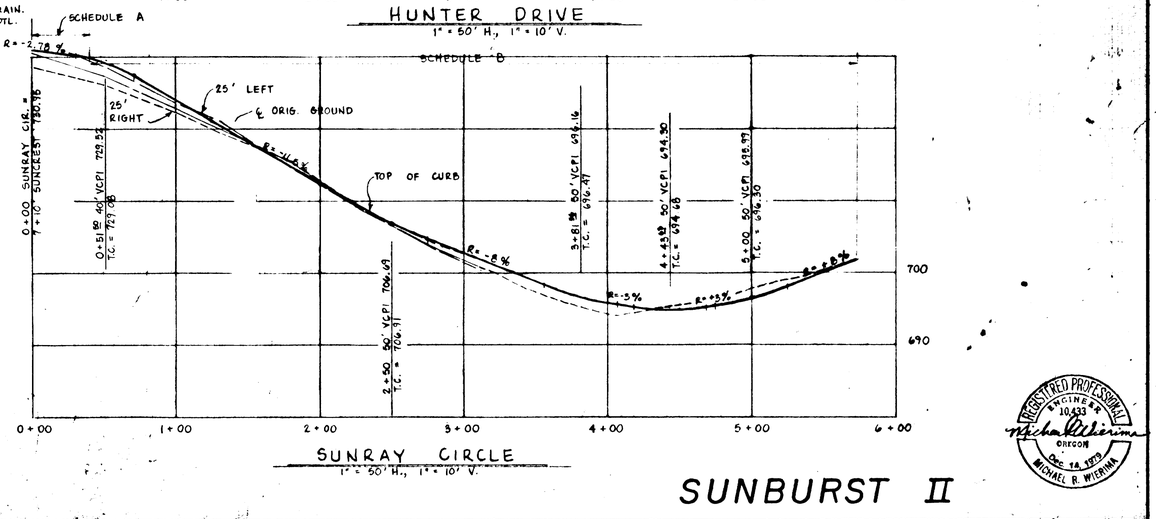
NOTE: STREET STATION 5+72.82 TO 6+72.13 : SIDEWALKS TO BE CONSTRUCTED AFTER PERMANENT CURB IS INSTALLED.





HUNTER DRIVE

1" = 50' H., 1" = 10' V.



SUNRAY CIRCLE

1" = 50' H., 1" = 10' V.

REGISTERED PROFESSIONAL ENGINEER 10,933 OREGON DEC. 14, 1979 MICHAEL R. WIERIMA

Michael Wierima

SUNBURST II

DATE	NO.	REVISION
10-31-83	5	AS BUILT
5-26-83	4	REVISIONS PER CITY
1-12-83	3	AS BUILT (SCHEDULE A)
7-7-82	2	REVISED STORM SEWER
7-6-82	2	REVISIONS PER CITY
6-28-82	1	REVISIONS PER CITY

DRAWN M.M.M. | DESIGNED M.R.W. | CHECKED G.H.R.

SCALE AS SHOWN | DATE APRIL, '82

FILE 76-1019-918

COMPASS CORPORATION

ENGINEERING - SURVEYING - PLANNING

8564 S.E. LAKE ROAD
MILWAUKIE, OREGON 97222

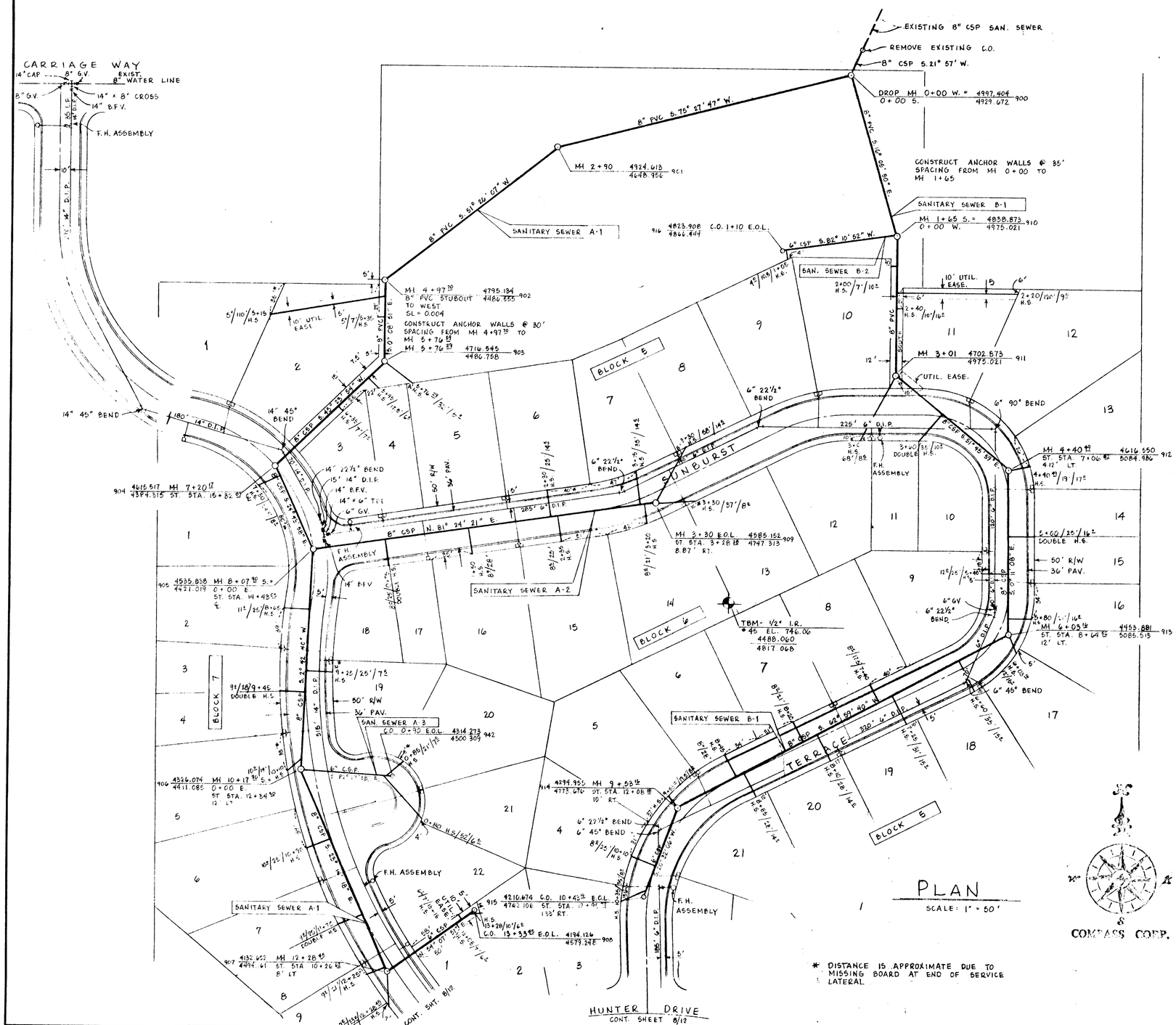
(503) 222-4652
(503) 653-9093

K & F DEVELOPMENT, INC.
15790 S.E. PIAZZA AVE.
CLACKAMAS, OREGON 97015
656-2518

ROAD & STORM SEWER IMPROVEMENTS
PLAN & PROFILES

5/12

Willamette Print & Blueprint Company 11/4/76



* DISTANCE IS APPROXIMATE DUE TO MISSING BOARD AT END OF SERVICE LATERAL.

SUNBURST II

DATE	NO.	REVISION
1-12-83	3	AS BUILT (SCHEDULE A)
7-23-82	2	REVISED WATER LINE
6-23-82	1	REVISIONS PER CITY

DRAWN M M M | DESIGNED M R W | CHECKED G.H.R.
SCALE AS SHOWN | DATE APRIL, '82
FILE 76-1019-918

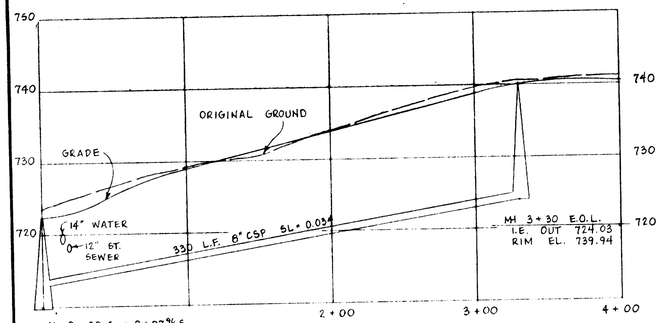
COMPASS CORPORATION
ENGINEERING - SURVEYING - PLANNING
6564 S.E. LAKE ROAD, MILWAUKIE, OREGON 97222
(503) 222-4652 (503) 653-9093

K & F DEVELOPMENT, INC.
15790 S.E. PIAZZA AVE.
CLACKAMAS, OREGON 97015
656-2518

SANITARY SEWER & WATER IMPROVEMENTS PLAN

6/12

Willamette Print & Blueprint Company

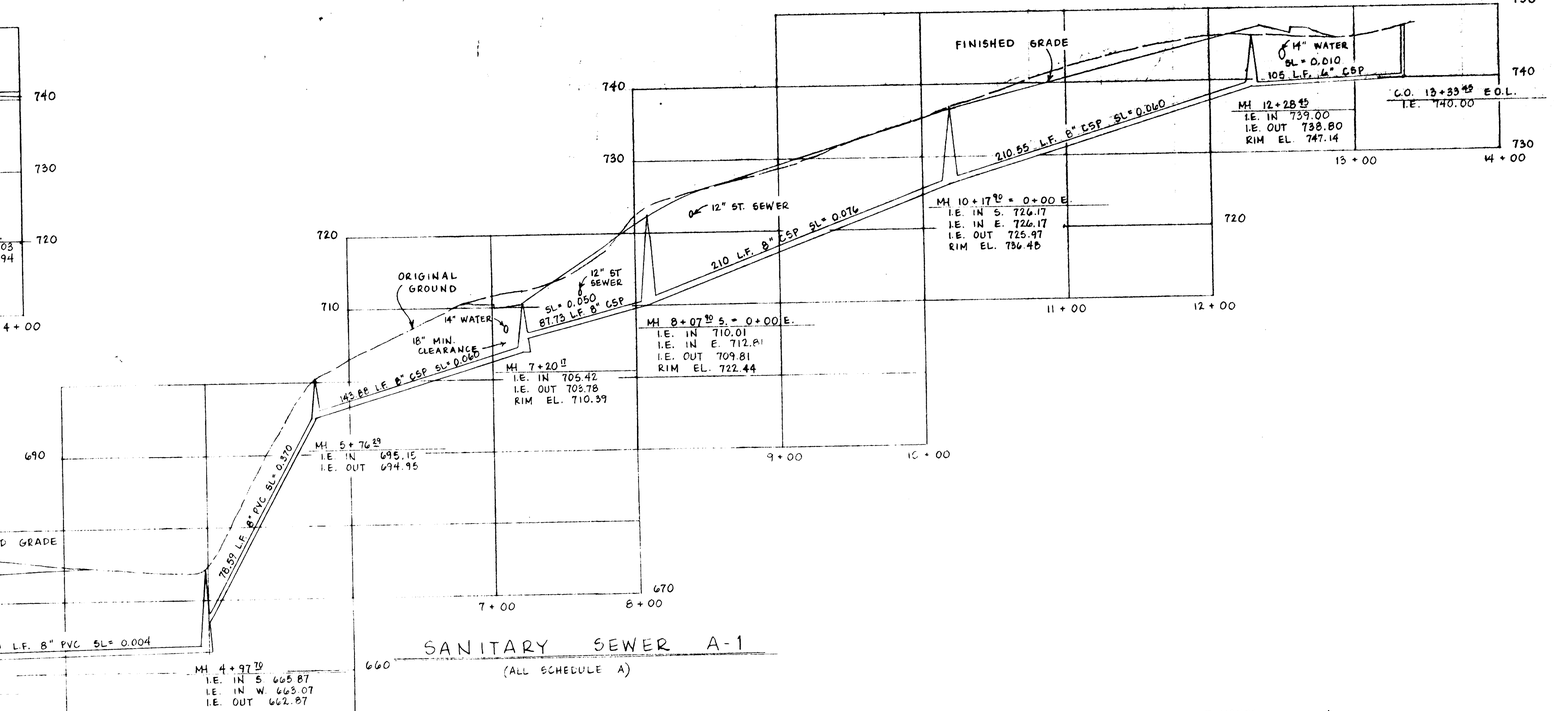


MH 0 + 00 E. = 8 + 07 $\frac{76}{}$ S.
I.E. IN E. 712.81
I.E. IN S. 710.01
I.E. OUT 709.81
RIM EL. 722.44

MH 3 + 30 E.O.L.
I.E. OUT 724.03
RIM EL. 739.94

SANITARY SEWER A-2

(ALL SCHEDULE A)



MH 7 + 20 $\frac{17}{}$
I.E. IN 705.42
I.E. OUT 703.78
RIM EL. 710.39

MH 5 + 76 $\frac{29}{}$
I.E. IN 695.15
I.E. OUT 694.95

MH 8 + 07 $\frac{76}{}$ S. = 0 + 00 E.
I.E. IN 710.01
I.E. IN E. 712.81
I.E. OUT 709.81
RIM EL. 722.44

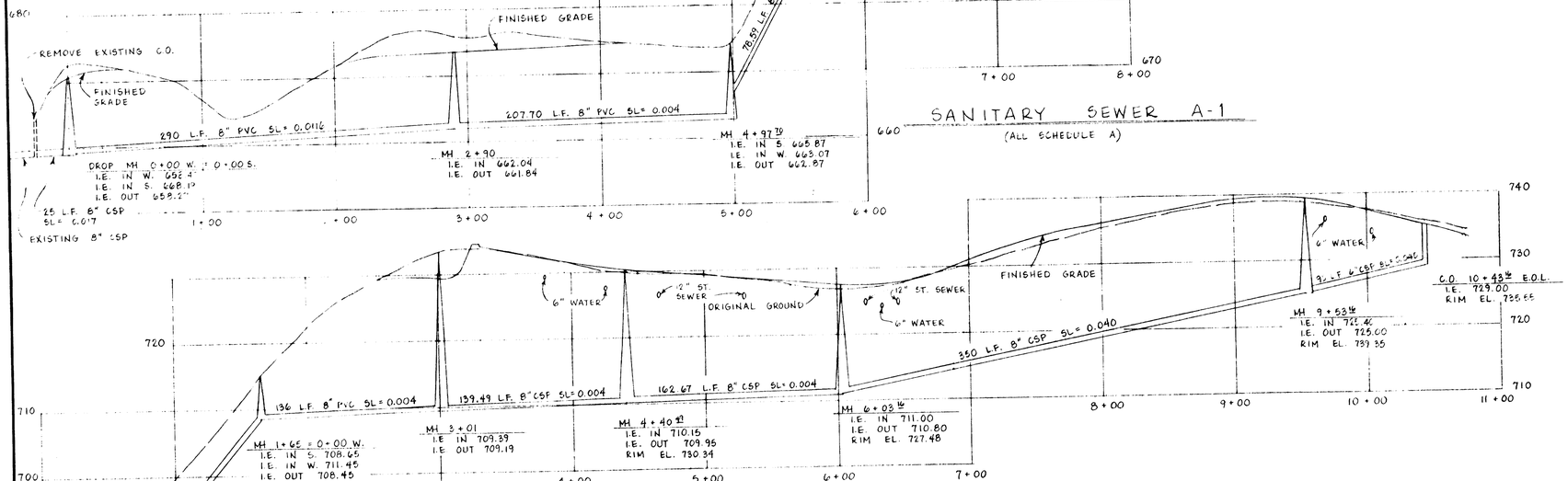
MH 10 + 17 $\frac{90}{}$ = 0 + 00 E.
I.E. IN S. 726.17
I.E. IN E. 726.17
I.E. OUT 725.97
RIM EL. 736.48

MH 12 + 28 $\frac{95}{}$
I.E. IN 739.00
I.E. OUT 738.80
RIM EL. 747.14

C.O. 13 + 33 $\frac{95}{}$ E.O.L.
I.E. 740.00

SANITARY SEWER A-1

(ALL SCHEDULE A)



DROP MH 0 + 00 W. = 0 + 00 S.
I.E. IN W. 658.47
I.E. IN S. 668.19
I.E. OUT 658.27

MH 2 + 90
I.E. IN 662.04
I.E. OUT 661.84

MH 4 + 97 $\frac{70}{}$
I.E. IN S 665.87
I.E. IN W. 665.07
I.E. OUT 662.87

MH 1 + 65 = 0 + 00 W.
I.E. IN S. 708.65
I.E. IN W. 711.45
I.E. OUT 708.45

MH 3 + 01
I.E. IN 709.39
I.E. OUT 709.19

MH 4 + 40 $\frac{92}{}$
I.E. IN 710.15
I.E. OUT 709.95
RIM EL. 730.34

MH 6 + 03 $\frac{16}{}$
I.E. IN 711.00
I.E. OUT 710.80
RIM EL. 727.48

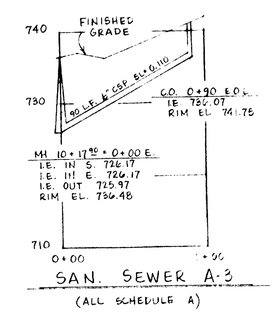
MH 9 + 53 $\frac{14}{}$
I.E. IN 722.46
I.E. OUT 725.00
RIM EL. 739.35

C.O. 10 + 43 $\frac{14}{}$ E.O.L.
I.E. 729.00
RIM EL. 738.65

DROP MH 0 + 00 S. = 0 + 00 W.
I.E. IN S. 668.19
I.E. IN W. 658.47
I.E. OUT 658.27

SANITARY SEWER B-1

(ALL SCHEDULE A)

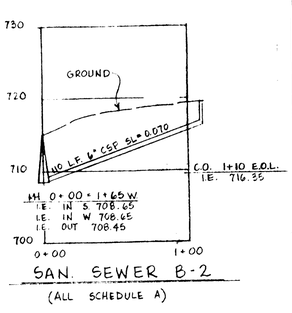


C.O. 0 + 90 E.O.L.
I.E. 730.07
RIM EL. 741.75

MH 10 + 17 $\frac{90}{}$ + 0 + 00 E.
I.E. IN S. 726.17
I.E. IN E. 726.17
I.E. OUT 725.97
RIM EL. 736.48

SAN. SEWER A-3

(ALL SCHEDULE A)



C.O. 1 + 10 E.O.L.
I.E. 716.35

MH 0 + 00 = 1 + 65 W.
I.E. IN S. 708.65
I.E. IN W. 708.65
I.E. OUT 708.45

SAN. SEWER B-2

(ALL SCHEDULE A)

REGISTERED PROFESSIONAL ENGINEER 10433 OREGON Dec. 14, 1979 MICHAEL R. WIERIMA

SUNBURST II

DATE	NO.	REVISION
1-12-83	2	AS BUILT (SCHEDULE A)
5-25-82	1	REVISED SAN. SEWER 'A-1'

DRAWN M. M. M. | DESIGNED M. R. W. | CHECKED G. H. R.
SCALE 1" = 50' H., 1" = 10' V. | DATE APRIL, '82
FILE 76 - 1019 - 918

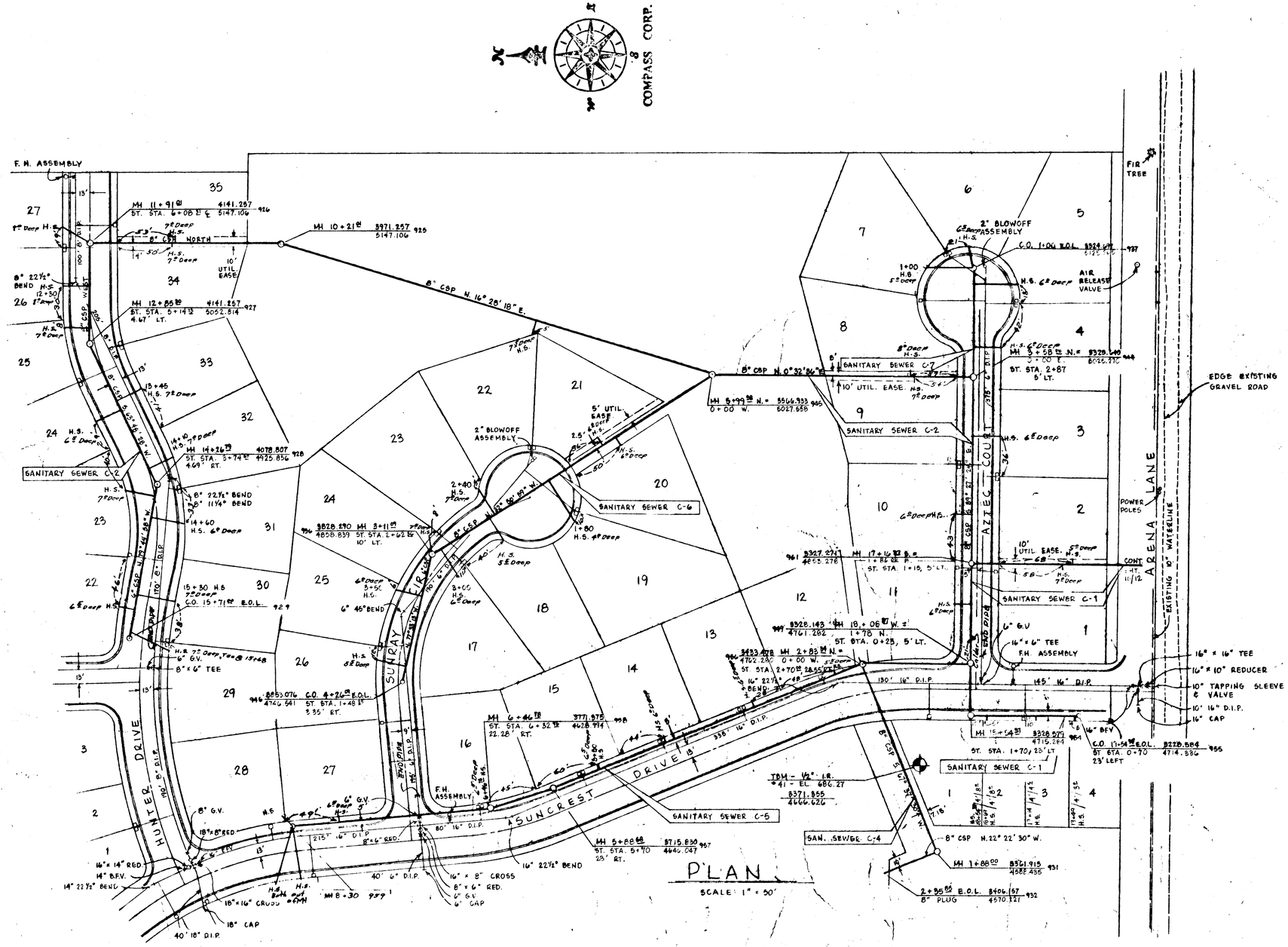
COMPASS CORPORATION
ENGINEERING - SURVEYING - PLANNING
6564 S.E. LAKE ROAD
MILWAUKIE, OREGON 97222
(503) 222-4652
(503) 653-9093

K & F DEVELOPMENT, INC.
15790 S.E. PIAZZA AVE.
CLACKAMAS, OREGON 97015
656-2518

SANITARY SEWER PROFILES

7/12

Willamette Print & Blueprint Company



SUNBURST II

REGISTERED PROFESSIONAL ENGINEER 10,439 OREGON Dec. 14, 1979 MICHAEL R. WIERMAN

DATE	NO.	REVISION
10-18-83	6	AS BUILT
6-24-83	5	REVISIONS PER CITY
4-7-83	4	REVISED SAN. MAIN C-7
1-12-83	3	AS BUILT (SCHEDULE A)
7-6-82	2	REVISED SANITARY SEWER
6-23-82	1	REVISIONS PER CITY

SEE SHEET 9/12 & 10/12

DRAWN M.M.M. | DESIGNED M.R.W. | CHECKED G.H.R.
SCALE AS SHOWN | DATE APRIL, '82
FILE 76 - 1019 - 918

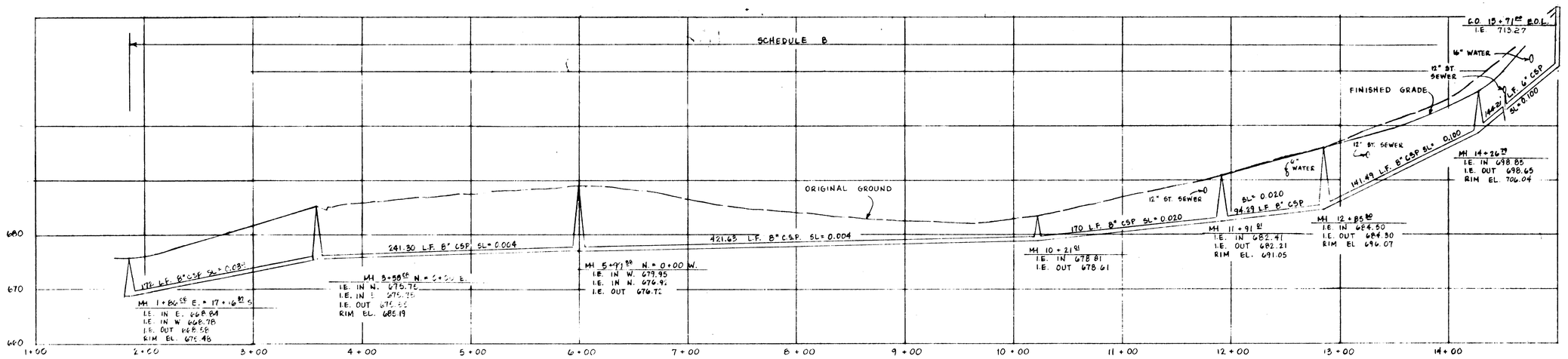
COMPASS CORPORATION
ENGINEERING - SURVEYING - PLANNING
6864 S.E. LAKE ROAD, MILWAUKIE, OREGON 97222
(503) 222-4652 (503) 653-9083

K & F DEVELOPMENT, INC.
15790 S.E. PIAZZA AVE.
CLACKAMAS, OREGON 97015 656-2518

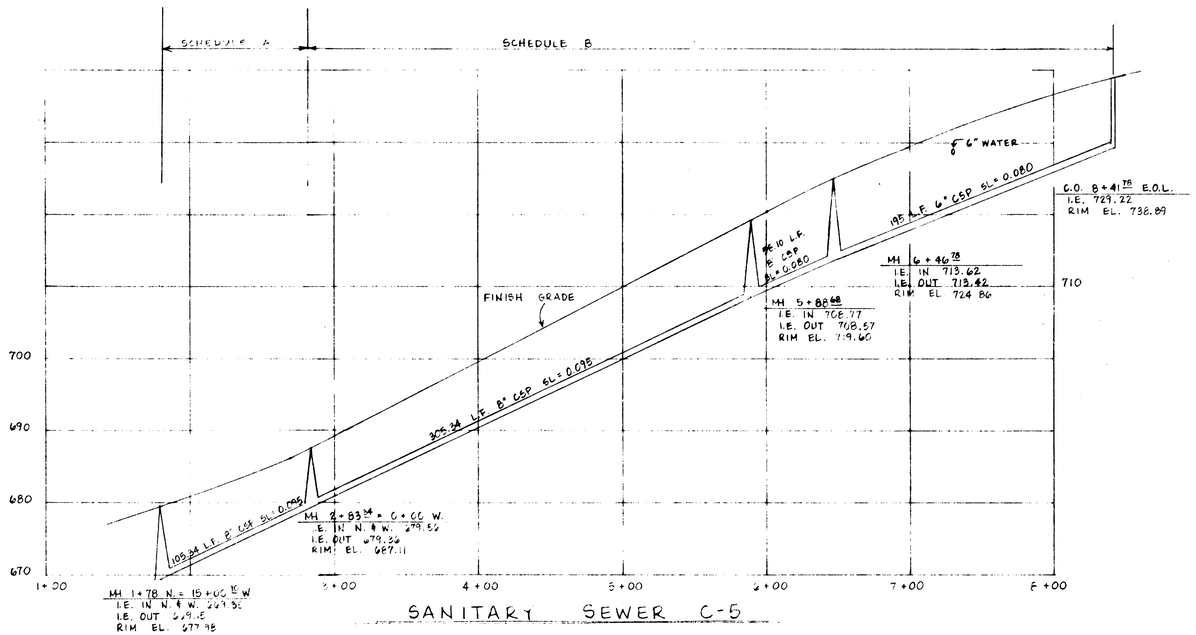
SANITARY SEWER & WATER IMPROVEMENTS PLAN

8/12

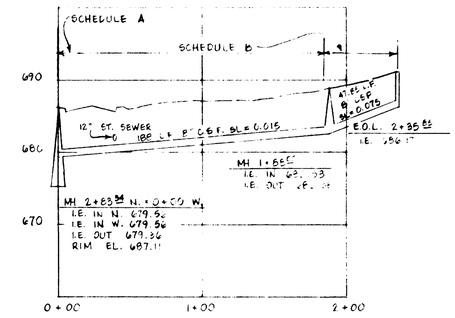
Willamette Print & Blueprint Company



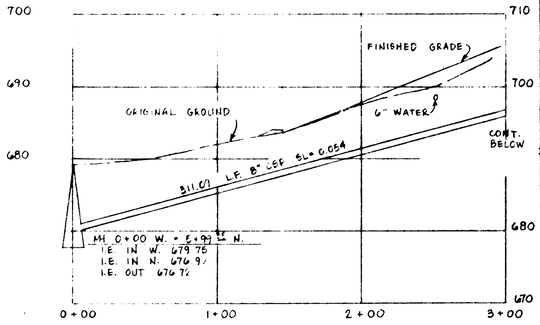
SANITARY SEWER C-2



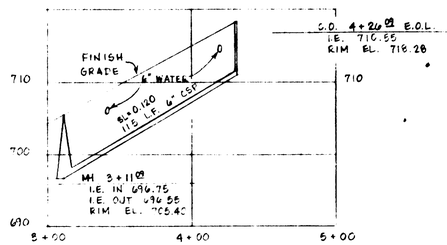
SANITARY SEWER C-5



SANITARY SEWER C-4



SANITARY SEWER C-6
(ALL SCHEDULE B)



SAN. SEWER C-6 (CONT.)

REGISTERED PROFESSIONAL ENGINEER
OREGON
JULY 10, 1979
10,433
MICHAEL R. WIERSUM

SUNBURST II

DATE	NO.	REVISION
10-31-83	6	AS BUILT
5-26-83	5	REVISIONS PER CITY
" "	"	" "
1-12-82	3	AS BUILT (SCHEDULE A)
7-6-82	2	REVISED SANITARY SEWER
6-28-82	1	REVISIONS PER CITY

DRAWN M.M.M. | DESIGNED M.R.W. | CHECKED G.H.R.
SCALE 1" = 10' V. 1" = 50' H. | DATE APRIL, '82
FILE 76 - 1019 - 918

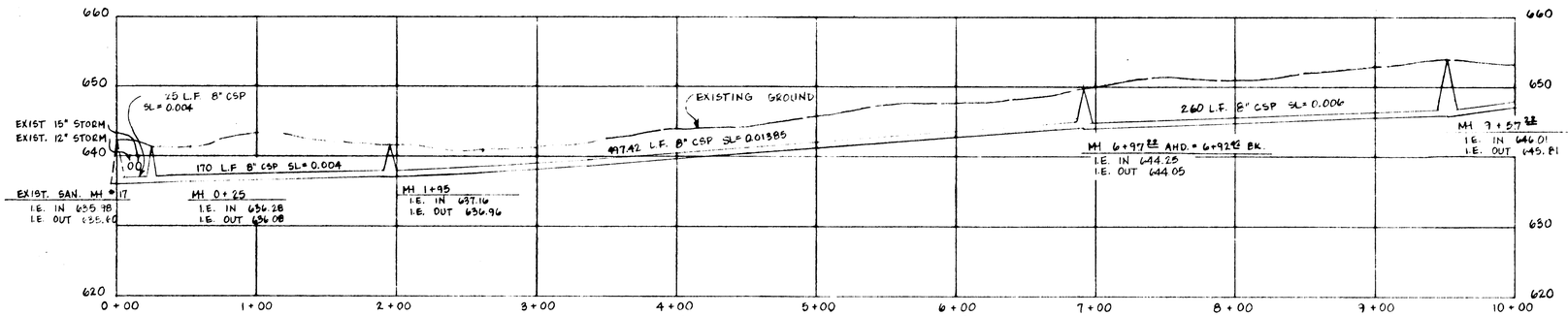
COMPASS CORPORATION
ENGINEERING - SURVEYING - PLANNING
8564 S.E. LAKE ROAD
MILWAUKIE OREGON 97222
(503) 222-4652
(503) 653-9093

K & F DEVELOPMENT, INC.
15790 S.E. PIAZZA AVE.
CLACKAMAS, OREGON 97015
656-2518

SANITARY SEWER PROFILES

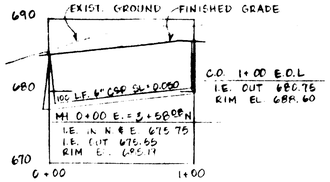
9
12

Willamette Print & Blueprint Company Portland



SANITARY SEWER C-1

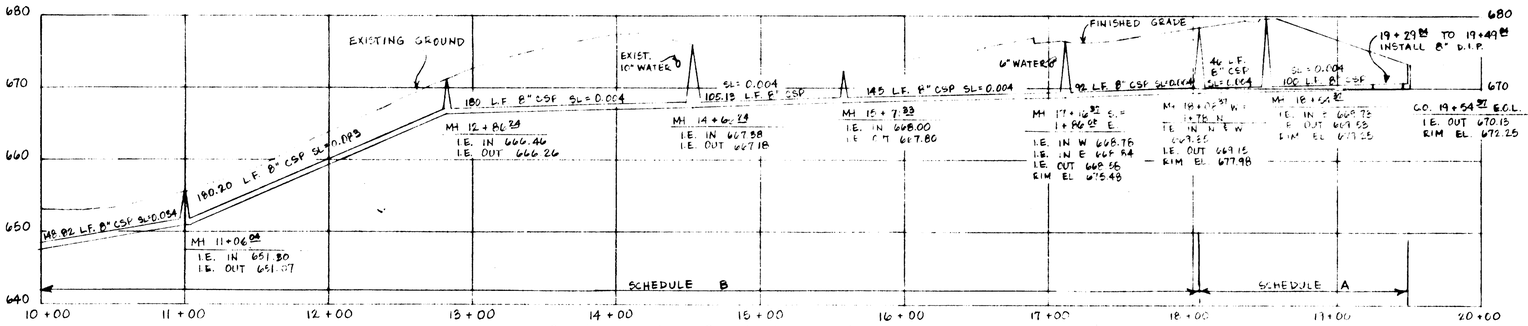
1" = 50' H, 1" = 10' V. (SCHEDULE B)



SAN. SEWER C-7

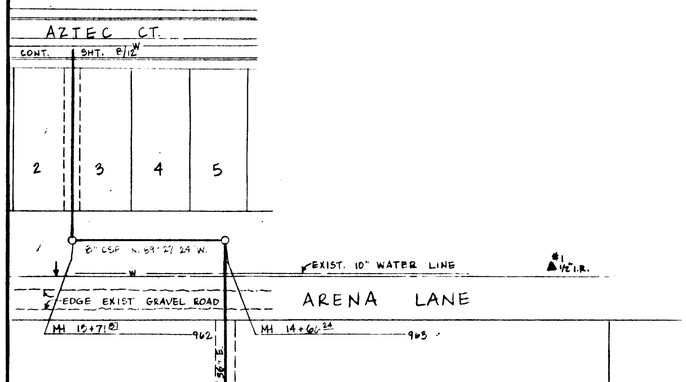
1" = 50' H., 1" = 10' V.

(SCHEDULE B)



SANITARY SEWER C-1 (CONT.)

1" = 50' H., 1" = 10' V.



PLAN

SCALE: 1" = 50'

(BEARINGS BASED ON THE PLAT OF SUNBURST II)

NOTE: UPON COMPLETION OF CONSTRUCTION EASEMENT AREAS TO BE RESTORED TO ORIGINAL CONDITION. RESIDENTS SHALL BE NOTIFIED PRIOR TO BEGINNING CONSTRUCTION.

COMPASS CORP.

SCALE: 1" = 50'

SUNBURST II

DATE	NO.	REVISION
10-31-83	7	AS BUILT
10-18-83	6	CHANGED MH LOCATION
5-26-83	5	REVISIONS PER CITY
[illegible]	4	[illegible]
[illegible]	3	AS BUILT (SCHEDULE A)
6-6-82	2	REVISED SANITARY SEWER
6-28-82	1	REVISED PER CITY

DRAWN M M M | DESIGNED M R W | CHECKED

SCALE AS SHOWN | DATE APRIL 1982

FILE 76-1019-918

COMPASS CORPORATION

ENGINEERING - SURVEYING - PLANNING

8564 S.E. LAKE ROAD
MILWAUKIE, OREGON 97222
(503) 222-4652
(503) 653-9093

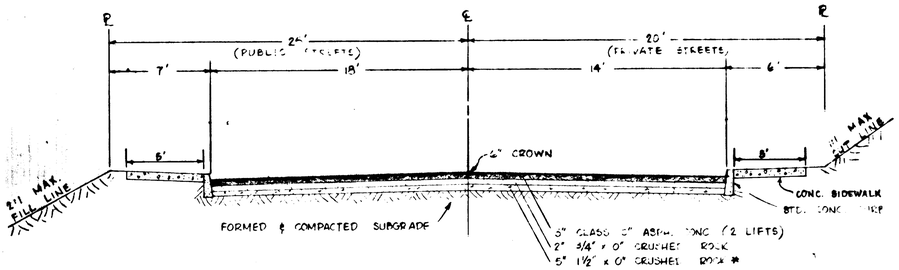
K & F DEVELOPMENT, INC.
15790 S.E. PIAZZA AVE.
CLACKAMAS, OREGON 97015
656-2518

SANITARY SEWER
IMPROVEMENTS PLAN

10/12

REGISTERED PROFESSIONAL ENGINEER
10,433
OREGON
DEC. 14, 1979
MICHAEL R. WIERMAN

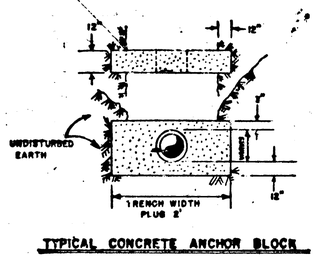
Willamette Print & Blueprint Company N19765



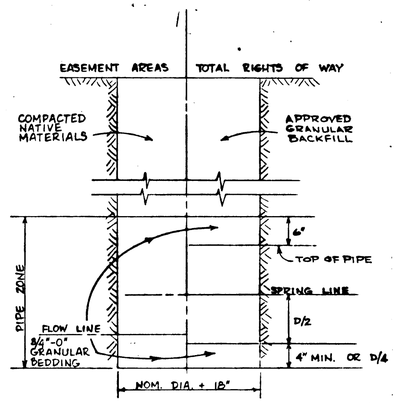
STANDARD STREET SECTION

N.T.S.

* 7" 1½" x 0" CRUSHED ROCK (ARENA LN.)

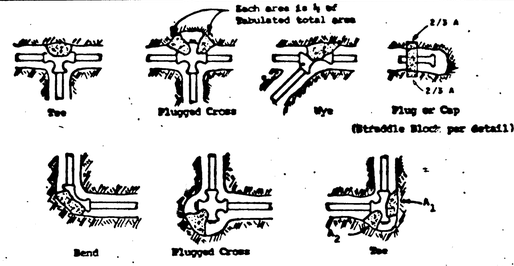


TYPICAL CONCRETE ANCHOR BLOCK



TRENCH SECTION

N.T.S.



NOTES:

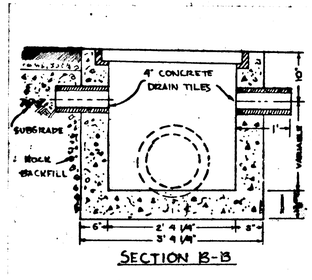
1. Concrete thrust blocking to be poured against undisturbed earth.
2. Keep concrete clear of joint and accessories.
3. If not shown on plans required bearing areas at fitting shall be as indicated below, adjusted if necessary, to conform to the test pressure(s) and allowable soil bearing stress(es) stated in the special specifications.
4. Bearing areas and special blocking details shown on plans take precedence over bearing areas and blocking details shown on this standard detail.

Fitting Size	Tee, Wye, Plug or Cap	90° Bend Plugged Cross	Tee Plugged On Run A1	Tee Plugged On Run A2	45° Bend	22½° Bend	11¼° Bend
4	1.0	1.4	1.0	1.4	1.0	-	-
6	2.1	3.0	4.8	3.0	1.6	1.0	-
8	3.8	5.3	7.6	5.4	2.9	1.5	1.0
10	5.9	8.4	11.8	8.4	4.6	2.4	1.2
12	8.5	12.0	17.0	12.0	6.6	3.4	1.7
14	11.5	16.3	23.0	16.3	8.9	4.6	2.3
16	15.0	21.3	30.0	21.3	11.6	6.0	3.0
18	19.0	27.0	38.0	27.0	14.6	7.6	3.8
20	23.5	33.3	47.0	33.3	18.1	9.4	4.7
24	34.0	48.0	68.0	48.0	26.2	13.6	6.8

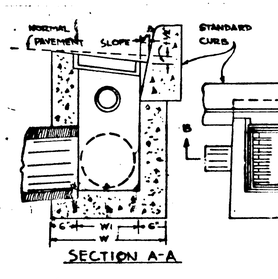
NOTE:
Above bearing areas based on test pressure of 150 p.s.i. and an allowable soil bearing stress of 2,000 pounds per square foot. To compute bearing areas for different test pressures and soil bearing stresses, use the following equation: Bearing Area = (test pressure/150)x(2000/soil bearing stress)x(table value).

THRUST BLOCKING DETAILS

N.T.S.

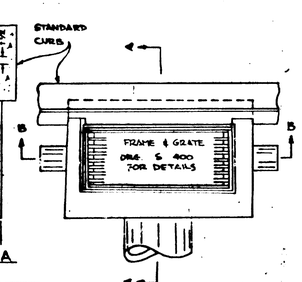


SECTION B-B



SECTION A-A

INLET TYPE	W	W1
G, GB	2' 1 7/8"	1' 1 7/8"
G1, GB1	2' 8 7/8"	1' 8 7/8"
G-2, GB-2	3' 8 3/8"	2' 3 3/8"

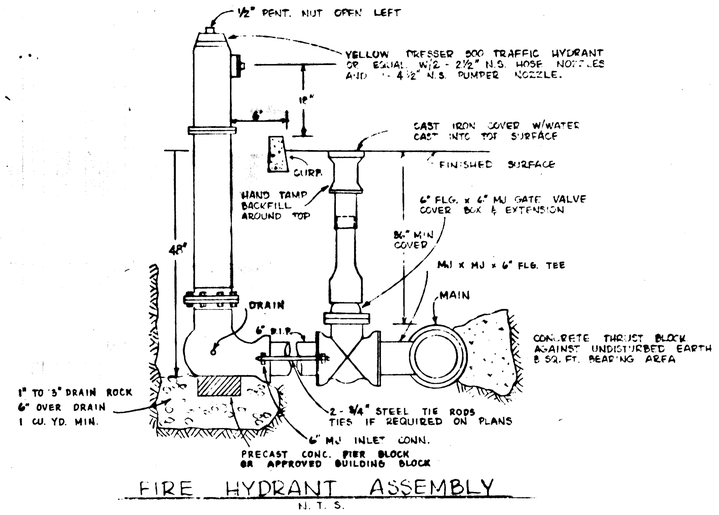


PLAN

NOTE: THE "B" IN "GB" DESIGNATES A 1'-0" SUMP BELOW THE OUTLET PIPE.

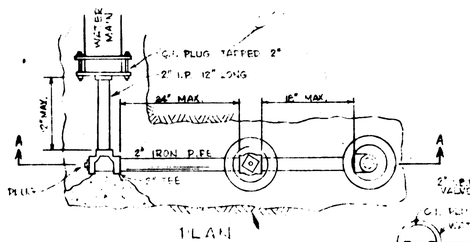
STANDARD INLETS- G, G-1, G-2

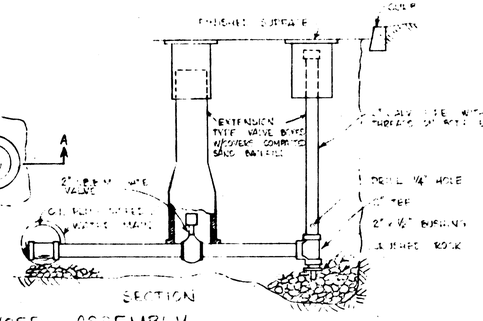
3/4" = 1'-0"



FIRE HYDRANT ASSEMBLY

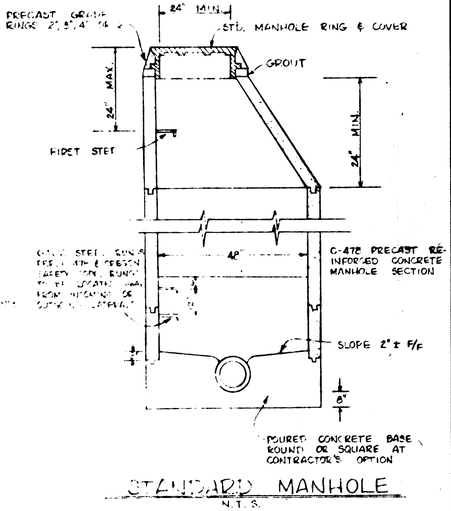
N. T. S.





STANDARD BLOWOFF ASSEMBLY

N.T.S.



STANDARD MANHOLE

N.T.S.

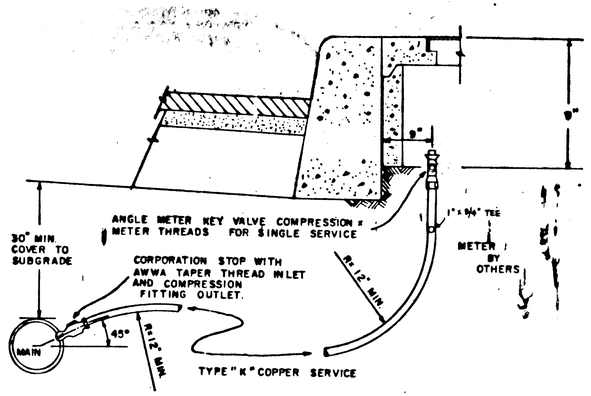
C-478 PRECAST REINFORCED CONCRETE MANHOLE SECTION

POURED CONCRETE BASE ROUND OR SQUARE AT CONTRACTOR'S OPTION

SUNBURST II

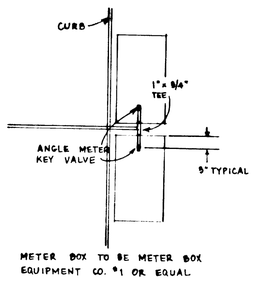
10-31-83 / AS BUILT	DRAWN M.M.M.	COMPASS CORPORATION	K & F DEVELOPMENT, INC.	CITY OF WEST LINN	11
DATE NO. REVISION	SCALE N.T.S. DATE APRIL, '82	ENGINEERING - SURVEYING - PLANNING	15790 S.E. PIAZZA AVE.	STANDARD DETAILS	12
	FILE 76 - 1019 - 918	6564 S.E. LAKE ROAD MILWAUKIE, OREGON 97222	CLACKAMAS, OREGON 97015		

Willamette Print & Blueprint Company

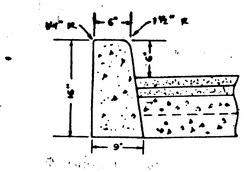


TYPICAL WATER SERVICE INSTALLATION

N.T.S.

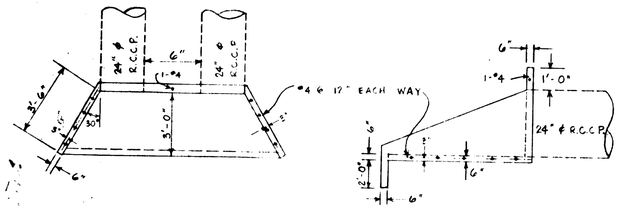


METER BOX TO BE METER BOX EQUIPMENT CO. #1 OR EQUAL



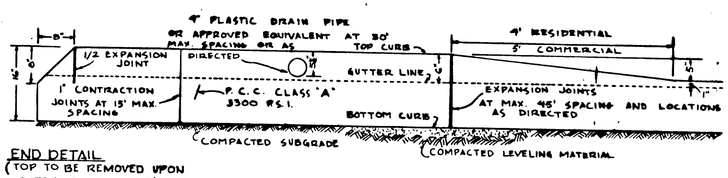
STANDARD CURB

N.T.S.



CONCRETE HEADWALL DETAIL

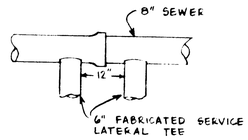
(SCHEDULE A) N.T.S



END DETAIL
(TOP TO BE REMOVED UPON EXTENSION OF CURB)

APRON DETAIL

GENERAL PURPOSE CURB



DOUBLE HOUSE SERVICE DETAIL

(SCHEDULE A) N.T.S.

SUNBURST II

DATE	NO	REVISION
10-31-83	3	AS BUILT
5-26-83	2	REVISED WATER SERV. DETAIL
7-23-82	1	REVISED HEADWALL DETAIL

DRAWN | DESIGNED | CHECKED

SCALE N.T.S. | DATE APRIL, '82

FILE 76 - 1019 - 918

Willamette Print & Blueprint Company

COMPASS CORPORATION
ENGINEERING - SURVEYING - PLANNING
8564 S.E. LAKE ROAD
MILWAUKIE, OREGON 97222
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(503) 653-9093

K & F DEVELOPMENT, INC.
15790 S.E. PIAZZA AVE.
CLACKAMAS, OREGON 97015

CITY OF WEST LINN
STANDARD DETAILS

12/12