LEGEND

DESCRIPTION	SYMBOL
EXISTING GROUND CONTOUR	6910
PROPOSED FINISHED CONTOUR	6910
SUBDIVISION BOUNDARY	
BASIN BOUNDARY	
MDDP BOUNDARY	
PROPOSED DIRECTION OF DRAINAGE	
BASIN IDENTIFIER / AREA IN ACRES	A / 10.1
DESIGN POINT	XX
PIPE JUNCTION POINT	XX
PROPOSED STORM DRAIN	
EXISTING STORM DRAIN	

DESIGN POINT SUMMARY		
OS DP	Q_5 (CFS)	Q_{100} (CFS)
1	2	3
2	2	3
3	7	15
4	36	74
4A	12	25
5	10	25
6	11	23
7	16	34
8	12	28
9	51	90
10	10	18
11	12	21
12	11	18
13	114	216
14 *	8	22
E1	19	38
E2	9	18
W1	7	13

BASIN SUMMARY (XX / XX)			
BASIN	AREA (ACRES)	Q_5 (cfs)	Q_{100} (cfs)
1	2.15	7	15
1A	3.17	11	22
1B	1.81	5	10
1C	0.86	4	7
2	11.36	37	74
2A	2.74	7	14
3A	0.76	3	5
3B	1.25	3	5
3C	0.58	2	4
4	3.86	10	20
5A	1.63	8	14
5B	0.75	4	7
5C	2.84	12	21
5D	2.50	11	18
5E	1.68	8	13
6	0.22	1	2
7	1.05	5	8
8	0.38	2	3
9	5.74	19	39
10	2.66	9	18
11	2.30	4	8
12	2.00	3	7
13	5.13	7	16

STORM DRAIN JUNCTION SUMMARY		
JUNC. △	Q_5 (cfs)	Q_{100} (cfs)
1	9	16
2	58	100
2A	77	135
3A	43	83
3B	54	101
4	63	117
5	100	185
6	113	211
7	38	70
8	27	55

FLOW IN 54" S.D. PER "FINAL DRAINAGE REPORT FOR CHAPEL HILLS DRIVE"
Q_5 = 189 cfs
Q_{100} = 378 cfs

NOTE: IN THE "FINAL DRAINAGE REPORT FOR CHANNEL IMPROVEMENTS CHAPEL HILLS DRIVE BRIDGE OVER PINE CREEK" A SEPARATE 36" DIA OUTFALL WAS PROVIDED FOR THE 16' AND 32' INLETS, Q_{100}=100 cfs. Q_{100} WAS REDUCED TO 325 cfs IN THE 54" DIAMETER.

FLOW IN 36" S.D.
Q_{100} = 90 cfs
(68 cfs PER "FINAL DRAINAGE REPORT FOR CHAPEL HILLS DRIVE" PLUS 22 cfs)

PROPOSED PRIVATE DETENTION POND
PEAK FLOWS
Q_5 IN =115 cfs
Q_{100} IN = 216 CFS (222)
Q_{100} OUT = 16 CFS
REQUIRED STORAGE: 5.15 AC-FT

STORM DRAIN TO PINE CREEK

16' LONG D-10-R SUMP INLET TO REPLACE 8' LONG INLET PROPOSED IN FINAL DRAINAGE PLAN FOR CHAPEL HILLS DRIVE.

32' LONG D-10-R SUMP INLET TO REPLACE 24' LONG INLET PROPOSED IN FINAL DRAINAGE PLAN FOR CHAPEL HILLS DRIVE

EXIST. 18" RCP

PROP. 18" RCP

PROP. 24" RCP
Q_5 = 12 cfs
Q_{100} = 25 cfs

PROP. 48" RCP
Q_5 = 190 cfs
Q_{100} = 188 cfs

PROP. 42" RCP

PROP. TYPE 1 MANHOLE

STORM DRAIN SYSTEM "B"

PROP. 24" RCP

PROP. 42" RCP

PROP. TYPE 1 MANHOLE

PROP. 18" RCP

PROP. 24" RCP

PROP. 42" RCP

1 – 20' ON GRADE D-10-R INLET

PROP. 36" RCP

PROP. TYPE 1 MANHOLE

ON-GRADE INLETS 1-16' 1-20'

PROP. 24" RCP

PROP. 42" RCP ON-GRADE INLETS 1-16' 1-20'

EXISTING 54" RCP STORM SEWER

VILLAGE CENTER AT PINE CREEK FILING NO. 2

PROP. PRIV. 24" RCP

PROP. PRIV. 36" RCP

PROP. 18" RCP

1 – 10' ON GRADE D-10-R INLET

PROP. 24" RCP

1 – 6' ON GRADE D-10-R INLET

PROP. 42" RCP

PROP. 30" RCP

PROP. 30" RCP

PROP. PRIV. 24" RCP

PROPOSED PRIVATE STORM DRAIN SYSTEM FUTURE DRAINAGE REPORT

STORM DRAIN SYSTEM "A"

PROP. 42" RCP

FLOW IN 42" S.D. PER "FINAL DRAINAGE REPORT FOR BRIARGATE PARKWAY FILING NO. 1"
Q_5 = 51 cfs
Q_{100} = 90 cfs
CA_5 = 15.68
CA_{100} = 15.99
T_C = 17.2 MIN.

PROPOSED ENERGY DISAPATOR

PROP. 42" RCP
Q_5 = 77 cfs
Q_{100} = 135 cfs

EX. 42" RCP

CONSTRUCT WATER BLOCK

EXISTING ON GRADE GRADE D-10-R

PINE CREEK VILLAGE CENTER FILING NO. 1

FLOW IN PINE CREEK PER "AMENDMENT NO. 1 TO PINE CREEK DRAINAGE BASIN PLANNING STUDY."
FULLY DEVELOPED CONDITION Q_{100} = 1330 cfs
HISTORIC CONDITION Q_{100} = 1364 cfs

* DESIGN POINT 14 INCLUDES FLOWBY FROM THE INLETS AT DESIGN POINT 7 (Q_5 = 0 cfs; Q_{100} = 5 cfs), FLOWBY FROM THE INLETS AT DESIGN POINT 8 (Q_5 = 0 cfs; Q_{100}= 3 cfs) FLOW TO CHAPEL HILLS DRIVE FROM VILLAGE DRIVE, DESIGN POINT W1, (Q_5 = 7 cfs; Q_{100} = 13 cfs) AND FLOW FROM BASIN 8 (Q_5 = 2 cfs; Q_{100} = 3 cfs). DESIGN POINT 14 REPRESENTS THE TOTAL ROUTED SURFACE FLOW ADDED TO CHAPEL HILLS DRIVE BY VILLAGE CENTER AT PINE CREEK.

NOTE: THE INFORMATION SHOWN FOR PINE VILLAGE CENTER FILING NO. 1 AND NO. 2 DEPICTS A PREVIOUS CONCEPT. THE DRAINAGE CONCEPTS SHALL BE UPDATED AT SUCH THAT SITE SPECIFIC DATA IS AVAILABLE. SUBDIVISION BOUNDARIES WILL INDICATED AT THAT TIME.

PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF JR ENGINEERING, LTD.

KYLE R. CAMPBELL, COLORADO P.E. #29794 DATE

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING LTD. APPROVES THEIR USE ONLY FOR REVIEW PURPOSES ISSUED BY WRITTEN AUTHORIZATION.

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NO.	REVISION	BY	DATE
1	REVISED TEXT PER CITY COMMENTS	VSF	2-9-98
2	OUTFALLS, STORM SEWERS & POND	JRB	8-25-99

SCALES:
PLAN: 1"=100'
PROFILE: 1"=100'
DATE: 1/8/98
DES. BY: VAS
DWN. BY: SDG
CHK. BY: VSF

VILLAGE CENTER AT PINE CREEK
PRELIMINARY/FINAL DRAINAGE PLAN
OVERALL DRAINAGE PLAN

SHEET 1 OF 1
JOB NO. 8716.41

XREFS: 8716411Z, 8716411C, 8716411PC
PATH: X:\870000.all\871641\DRAWINGS
FILENAME: PREL-DP.DWG
X:\870000.all\871641\DRAWINGS\prel-dp.dwg Thu Aug 26 10:19:50 1999