FINAL CONSTRUCTION PLANS

BROOKWILLOW VILLAGE

CITY OF GRAND JUNCTION, COLORADO

SHEET INDEX

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PPSD-3	STORM IN THE NORTH REC AREA AND ALONG F 3/4 ROAD PLAN AND PROFILES STA: 0+00 TO END
PPSD-4	NORTH BROOKWILLOW LOOP, ALONG 24 1/2, ACROSS PLEASANT CT PLAN AND PROFILES STA: 0+00 TO END
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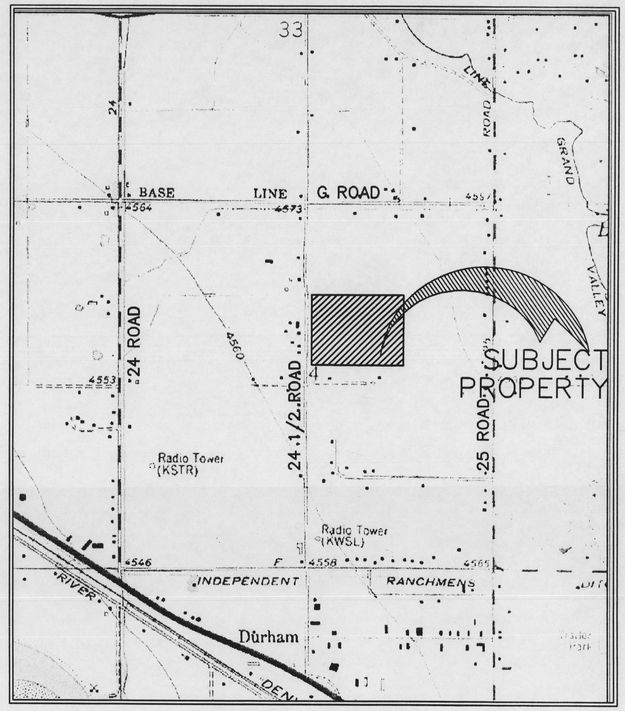
PPSD-7	18" STORM ON S. BROOKWILLOW LOOP AND E. OF TAMMERA LN PLAN AND PROFILES STA: 0+00 TO END
PPSD-8	18" STORM FROM MIDDLE 10-PLEXES TO MIDDLE POND PLAN AND PROFILES STA: 0+00 TO END
PPSD-9	24" STORM ALONG 24 1/2 RD TO MIDWEST POND PLAN AND PROFILES STA: 0+00 TO END
DET-ST1-2	STREET DETAILS
DET-STM1-2	STORM SEWER DETAILS
SWMPDET-1-2	STORMWATER MANAGEMENT PLAN DETAILS
X-1-3	THERESEA LANE ROAD CROSS SECTIONS
X-B1-B3	BROOKWILLOW DRIVE ROAD CROSS SECTIONS
X-BW1-BW2	ORION WAY ROAD CROSS SECTIONS
APPENDIX 1-5	LANDSCAPING PLAN (PREPARED BY LANDSCAPE SPEACIALTIES)

* SHADED BACK SHEETS ARE NOT PART OF PHASE 1 *

REVISION CLOUD

*NOTE-SHEETS PPSS-1-3 WERE REMOVED FROM SET



LOCATION MAP

SCALE: 1" = 1000'

RECEIVED
JAN 25 2006
COMMUNITY DEVELOPMENT DEPT.

FP-2005-144

BROOKWILLOW

OWNER:	ENGINEER:	PLANNER:
HALL PARTNERS, L.L.C. 786 VALLEY CT GRAND JUNCTION, COLORADO 81506 (970) 523-5555	HIGH COUNTRY ENGINEERING, INC. CONSULTING ENGINEERS AND SURVEYORS 1517 BLAKE AVENUE, SUITE 101 GLENWOOD SPRINGS, COLORADO 81601 (970) 945-8676	GENESIS DESIGNS:ARCHITECTURE & PLANNING 2764 COMPASS DRIVE GRAND JUNCTION, COLORADO 81506 (970) 245-6093

COLORADO REGISTERED PROFESSIONAL ENGINEER
Paul Nelson
39307
1/23/06

"APPROVED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE. ACCEPTANCE OF THESE PLANS DOES NOT RELIEVE THE DEVELOPER, CONTRACTOR OR ENGINEER FROM CONFORMANCE WITH CITY OF GRAND JUNCTION STANDARDS AND SPECIFICATIONS".

CITY DEVELOPMENT ENGINEER — DATE 2/7/06

REVISED PER CITY SEWER DESIGN 1-20-06
REVISED PER CITY OF GRAND JUNCTION COMMENTS 12-22-05
CITY OF GRAND JUNCTION COMMENTS 11-15-05
CITY OF GRAND JUNCTION COMMENTS 8-19-05
DRAWING NO. 1 OF 45 — 2005-145 — 8/19/05 — T1-BROOKWILLOW

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FIRE DEPARTMENT — DATE 2/3/06

APPROVED FOR CONSTRUCTION
UTE WATER CONSERVANCY DISTRICT

TITLE District Engineer — DATE 31 Jan 06

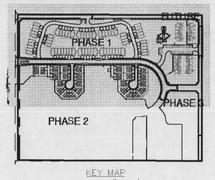
"APPROVED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE. ACCEPTANCE OF THESE PLANS DOES NOT RELIEVE THE DEVELOPER, CONTRACTOR OR ENGINEER FROM CONFORMANCE WITH CITY OF GRAND JUNCTION STANDARDS AND SPECIFICATIONS".

CITY DEVELOPMENT ENGINEER — DATE 2/7/06

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.



KEY MAP
SCALE: 1"=500'

NOTES:
1. PROPERTY SIZE: 30.045 ACRES
2. CONTOURING IS IN 1 FOOT INTERVALS
3. BROOKWILLOW VILLAGE IS ZONED AS PD.
4. ALL BORDERING PROPERTIES ARE ZONED RMF-8.
5. TOTAL UNITS: 292 (202 SINGLE-FAMILY, 90 MULTI-FAMILY).
   PHASE 1: TOTAL NUMBER OF LOTS PROPOSED = 91
   TOTAL NUMBER OF DWELLING UNITS PROPOSED = 100
6. BUILDINGS: 20.4%
   PAVEMENT/ROADWAY: 23.6%
   ROW, GRASS, PLAYGROUND: 56%
7. STREET SECTIONS:
   BROOKWILLOW LOOP: URBAN RESIDENTIAL STREET
   F 3/4 ROAD: COLLECTOR (NO ON STREET PARKING)
   24 3/4 ROAD: URBAN RESIDENTIAL COLLECTOR
   PRIVATE ROADS: FOLLOW GRAND JUNCTION TEDS STANDARDS
   AJAY LANE: URBAN RESIDENTIAL STREET (1/2 ROAD IMPROVEMENT)
8. UTILITY VENDORS
   WATER: UTE WATER
   GAS/ELECTRICITY: EXCEL ENERGY/GRAND VALLEY RURAL POWER
   SEWER: CITY OF GRAND JUNCTION
   COMMUNICATIONS: TELECOM: QWEST/CABLE: TCI
   IRRIGATION: GRAND VALLEY IRRIGATION DISTRICT
   DRAINAGE: GRAND JUNCTION DRAINAGE DISTRICT
9. STREET CUT AND PATCH WORK ON 24 1/2 ROAD SHALL ENCOMPASS THE ENTIRE EAST LANE FROM THE CENTERLINE. TWO FEET IN WIDTH TO THE CENTERLINE SHALL BE SAWCUT OR MILLED TO TIE IN THE NEW ASPHALT.
10. EACH 10-PLEX IS 2-STORY AND HAS A TOTAL AREA OF 10,000 S.F.
11. THE MAXIMUM SIZE OF THE ATTACHED SINGLE-FAMILY UNITS IS 2,880 S.F.
12. REFER TO GR1 FOR FINISH FLOOR ELEVATIONS.
13. REFER TO THE PLAN AND PROFILE SHEETS FOR SPECIFIC DEPTHS AND GRADES OF ROADS AND MAINS.
14. ELEVATIONS ARE BASED ON TBM, A REBAR IN THE SOUTHWEST CORNER OF THE PROPERTY AS SHOWN ON THE PLAT. ELEVATION EQUALS 4570.85 FEET TOP OF BAR. CONTOUR INTERVAL EQUALS ONE FOOT.
THIS TBM SHALL BE THE PERMANENT BM FOR THE PROJECT.

15. ALL SANITARY SEWER MANHOLES AND TIE-INS ALONG 24 1/2 ROAD ARE SHOWN CONCEPTUALLY ONLY. THE SANITARY SEWER MAIN ALONG 24 1/2 ROAD IS TO BE CONSTRUCTED BY OTHERS AND THEREFORE MANHOLE LOCATION RIM ELEVATION, AND INVERT ELEVATIONS ARE SUBJECT TO CHANGE. RIM ELEVATIONS AND INVERT ELEVATIONS AT ALL MANHOLES ALONG THE TRUNK LINE SHALL BE FIELD VERIFIED AND THE ENGINEER MUST BE NOTIFIED BEFORE CONSTRUCTION OF SANITARY SEWER MAIN WITHIN THE BROOKWILLOW SUBDIVISION.

ABBREVIATIONS:
W.C. = WITNESS CORNER
FND = FOUND
EP = EDGE OF PAVEMENT
ROW = RIGHT-OF-WAY
S.F. = SQUARE FEET

PLANS PREPARED AND REVIEWED BY HIGH COUNTRY ENGINEERING, INC. UNDER THE SUPERVISION OF RON E. WEIDLER, P.E., SR. PROJECT MANAGER

LEGEND

- PROPOSED GATE VALVE
- PROPOSED FIRE HYDRANT
- PROPOSED PRV
- PROPOSED PLUG AND BLOW OFF
- BLM BRASS CAP
- SURVEY REBAR AND CAP
- EXISTING GAS LINE
- EXISTING OVERHEAD ELECTRIC
- EXISTING TELEPHONE LINE
- EXISTING FENCE
- EXISTING CULVERT
- EXISTING WATER METER
- EXISTING ASPHALT
- EXISTING GRAVEL
- PROPOSED ASPHALT
- FUTURE ROAD CONSTRUCTION (BY OTHERS)
- PROPOSED CONCRETE
- FUTURE PHASE
- PROPOSED GARAGE
- PROPOSED IRRIGATION LINE
- PROPOSED PHASE LINE
- PROPOSED EDGE OF PAVEMENT
- PROPOSED FLOWLINE
- PROPOSED TOP BACK OF CURB
- PROPOSED TOP BACK OF WALK
- EXISTING PROPERTY LINE
- PROPOSED RIGHT-OF-WAY
- PROPOSED EASEMENT
- PROPOSED ROAD CENTERLINE
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED 12" WATER MAIN
- PROPOSED 10" WATER MAIN
- PROPOSED 8" WATER MAIN
- PROPOSED 4" WATER MAIN
- PROPOSED 8" SANITARY SEWER MAIN AND MANHOLES
- PROPOSED 15" SANITARY SEWER MAIN AND MANHOLES (BY OTHERS)
- PROPOSED SINGLE-FAMILY BUILDING NUMBER
- PROPOSED ROADWAY SLOPE
- PROPOSED STORM SEWER FLOW
- PROPOSED STORM INLET
- PROPOSED AREA INLET
- PROPOSED STORM PIPE
- REVISION NUMBER AND CLOUD

LINE TABLE		
LINE	LENGTH	BEARING
L1	815.07	S89°58'16"E
L2	68.37	N00°01'44"E
L3	117.40	N16°47'18"E
L4	88.29	S80°35'31"E
L5	109.08	N80°35'17"E
L6	121.33	S16°47'18"E
L7	68.22	S00°01'44"W
L8	722.84	S89°58'16"E
L9	873.06	N89°58'16"W
L10	550.72	S89°56'52"E
L11	160.32	N00°00'00"E
L12	20.00	N90°00'00"E
L13	304.85	N00°01'44"E
L14	160.53	N00°01'44"E
L15	20.00	N90°00'00"E
L16	269.19	S90°00'00"E
L17	96.00	N90°00'00"E
L18	49.72	S42°29'09"E
L19	270.38	S00°00'00"E
L20	322.23	S00°00'00"E
L21	120.00	S00°01'53"W
L22	49.72	N42°29'09"E
L23	0.21	N00°00'00"E
L24	226.98	S90°00'00"E
L25	264.85	N90°00'00"E
L26	160.62	S00°01'44"W
L27	20.00	N90°00'00"W
L28	160.85	S00°01'44"W
L29	20.00	N90°00'00"W
L30	223.50	S00°01'53"W

CURVE TABLE					
CURVE	LENGTH	RADIUS	TANGENT	DELTA	CHORD DIRECTION
C1	43.88	150.00	22.10	43.72	S08°24'31"W
C2	100.94	70.00	61.52	92.42	S58°05'54"W
C3	253.58	772.00	127.94	252.44	N89°59'53"E
C4	100.94	70.00	61.52	92.42	N58°06'00"W
C5	44.03	150.00	22.17	43.87	N08°22'47"W
C6	571.77	182.00	INFINITE	364.00	N00°00'00"E
C7	59.32	80.00	31.10	57.97	N21°14'34"W
C8	59.32	80.00	31.10	57.97	N21°14'34"E
C9	66.76	42.50	42.50	60.10	S45°00'00"W

NO.	DATE	REVISION	BY
1	8-19-05	CITY OF GRAND JUNCTION COMMENTS	RD
2	11-15-05	CITY OF GRAND JUNCTION COMMENTS	RD
3	12-23-05	UTE WATER AND CITY COMMENTS	ALA
4	1-20-06	SANITARY SEWER REDESIGN BY CITY	DRD

DRAWN BY: ALA
CHECKED BY: REW
DATE: 5-13-05
FILE: COMPOSITE PLAN

CALL UTILITY NOTIFICATION CENTER 48 HOURS BEFORE YOU DIG 1-800.922.1987
OR 554-0670 IN METRO DENVER
CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES

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PHONE (303) 925-0544 FAX (303) 925-0547
1517 BLAKE AVENUE, STE 101, GLENWOOD SPRINGS, CO 81601
PHONE (970) 945-8575 FAX (970) 945-2555
WWW.HCENG.COM

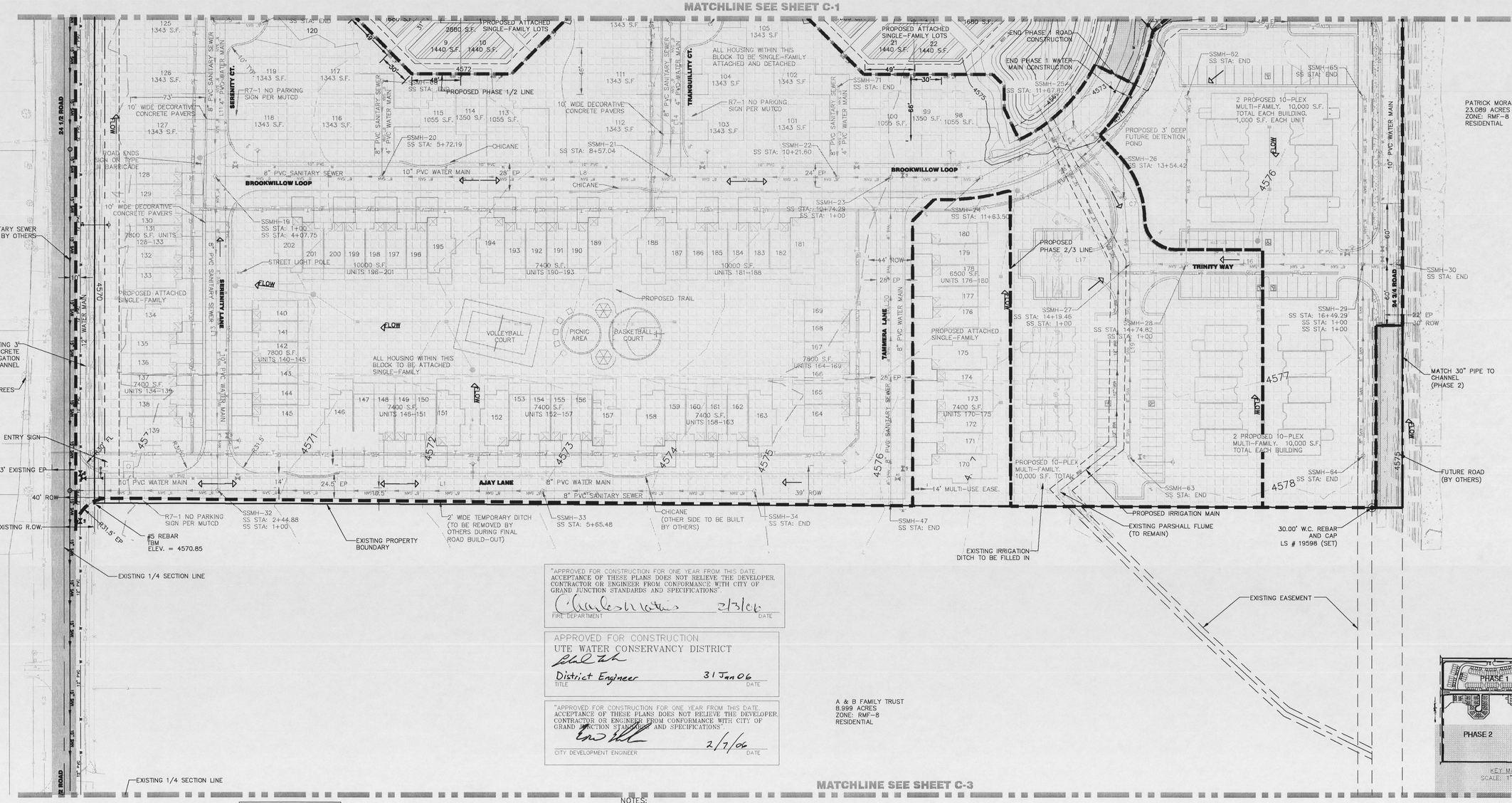
HALL PARTNERS, L.L.C.
CITY OF GRAND JUNCTION, COLORADO

BROOKWILLOW VILLAGE
COMPOSITE PLAN

PROJECT NO.
2031049.00

C-1

COLORADO LICENSED
RON E. WEIDLER
39307
2/1/06
PROFESSIONAL ENGINEER



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District Engineer — TITLE — 31 Jan 06 — DATE

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CITY DEVELOPMENT ENGINEER — 2/7/06 — DATE

LEGEND

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EXISTING GAS LINE	PROPOSED EASEMENT
EXISTING OVERHEAD ELECTRIC	PROPOSED ROAD CENTERLINE
EXISTING TELEPHONE LINE	PROPOSED MAJOR CONTOUR (4575)
EXISTING FENCE	PROPOSED MINOR CONTOUR (4574)
EXISTING CULVERT	EXISTING MAJOR CONTOUR (4575)
EXISTING WATER METER	EXISTING MINOR CONTOUR
EXISTING ASPHALT	PROPOSED 12" WATER MAIN
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(IN FEET)
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NORTH

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UNDER THE SUPERVISION OF RON E. WEIDLER, P.E., SR. PROJECT MANAGER

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4	1-20-06	SANITARY SEWER REDESIGN BY CITY	DRD

DRAWN BY: ALA
CHECKED BY: REW
DATE: 5-13-05
FILE: COMPOSITE PLAN

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OR 534-0700 IN METRO DENVER
CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES

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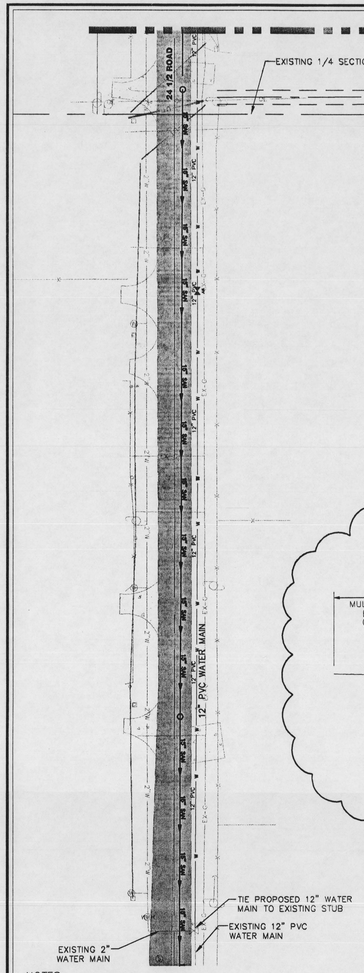
PHONE (303) 9250544 FAX (303) 9250547
1517 BLAKE AVENUE, STE 101, GLENWOOD SPRINGS, CO 81601
PHONE (970) 9458676 FAX (970) 9452555
WWW.HCENG.COM

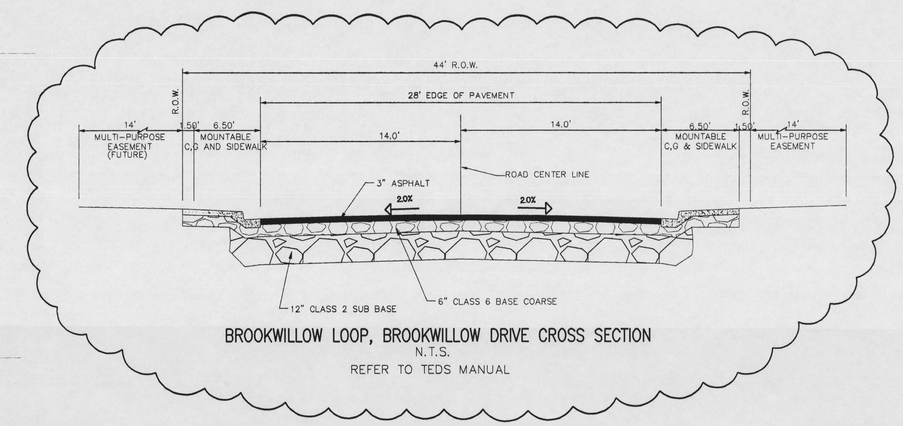
HALL PARTNERS, L.L.C.
CITY OF GRAND JUNCTION, COLORADO

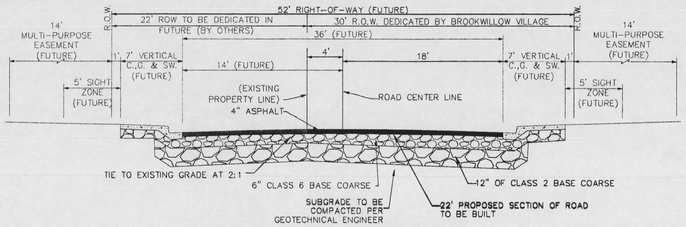
BROOKWILLOW VILLAGE COMPOSITE PLAN

PROJECT NO.
2031049.00

C-2







URBAN RESIDENTIAL COLLECTOR

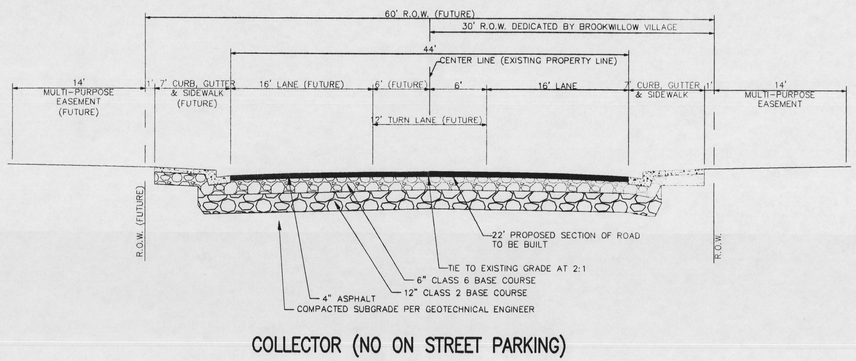
24 3/4 ROAD

NOTE: STATIONING IS NORTH TO SOUTH

BROOKWILLOW LOOP, BROOKWILLOW DRIVE CROSS SECTION

N.T.S.

REFER TO TEDS MANUAL



COLLECTOR (NO ON STREET PARKING)

F 3/4 ROAD

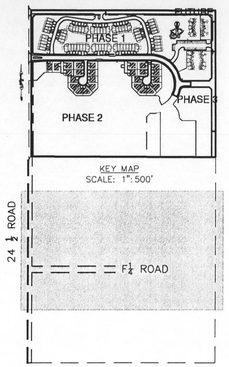
NOTE: STATIONING IS WEST TO SOUTH

NOTES:
1. PROPERTY SIZE: 30.045 ACRES
2. CONTOURING IS IN 1 FOOT INTERVALS
3. BROOKWILLOW VILLAGE IS ZONED AS PD.
4. ALL BORDERING PROPERTIES ARE ZONED RMF-8.
5. TOTAL UNITS: 292 (202 SINGLE-FAMILY, 90 MULTI-FAMILY).
   PHASE 1: TOTAL NUMBER OF LOTS PROPOSED = 91
   TOTAL NUMBER OF DWELLING UNITS PROPOSED = 100
6. BUILDINGS: 20.4%
   PAVEMENT/ROADWAY: 23.6%
   ROW, GRASS, PLAYGROUND: 56%
7. STREET SECTIONS:
   BROOKWILLOW LOOP: URBAN RESIDENTIAL STREET
   F 3/4 ROAD: COLLECTOR (NO ON STREET PARKING)
   24 3/4 ROAD: URBAN RESIDENTIAL COLLECTOR
   PRIVATE ROADS: FOLLOW GRAND JUNCTION TEDS STANDARDS
   AJAY LANE: URBAN RESIDENTIAL STREET (1/2 ROAD IMPROVEMENT)
8. UTILITY VENDORS
   WATER: UTE WATER
   GAS/ELECTRICITY: EXCEL ENERGY/GRAND VALLEY RURAL POWER
   SEWER: CITY OF GRAND JUNCTION
   COMMUNICATIONS: TELECOM: QWEST/CABLE: TCI
   IRRIGATION: GRAND VALLEY IRRIGATION DISTRICT
   DRAINAGE: GRAND JUNCTION DRAINAGE DISTRICT
9. STREET CUT AND PATCH WORK ON 24 1/2 ROAD SHALL ENCOMPASS THE ENTIRE EAST LANE FROM THE CENTERLINE. TWO FEET IN WIDTH TO THE CENTERLINE SHALL BE SAWCUT OR MILLED TO TIE IN THE NEW ASPHALT.
10. EACH 10-PLEX IS 2-STORY AND HAS A TOTAL AREA OF 10,000 S.F.
11. THE MAXIMUM SIZE OF THE ATTACHED SINGLE-FAMILY UNITS IS 2,880 S.F.
12. REFER TO GR1 FOR FINISH FLOOR ELEVATIONS.
13. REFER TO THE PLAN AND PROFILE SHEETS FOR SPECIFIC DEPTHS AND GRADES OF ROADS AND MAINS.
14. ELEVATIONS ARE BASED ON TBM, A REBAR IN THE SOUTHWEST CORNER OF THE PROPERTY AS SHOWN ON THE PLAT, ELEVATION EQUALS 4570.85 FEET TOP OF BAR. CONTOUR INTERVAL EQUALS ONE FOOT.
THIS TBM SHALL BE THE PERMANENT BM FOR THE PROJECT.

15. ALL SANITARY SEWER MANHOLES AND TIE-INS ALONG 24 1/2 ROAD ARE SHOWN CONCEPTUALLY ONLY. THE SANITARY SEWER MAIN ALONG 24 1/2 ROAD IS TO BE CONSTRUCTED BY OTHERS AND THEREFORE MANHOLE LOCATION RIM ELEVATION, AND INVERT ELEVATIONS ARE SUBJECT TO CHANGE. RIM ELEVATIONS AND INVERT ELEVATIONS AT ALL MANHOLES ALONG THE TRUNK LINE SHALL BE FIELD VERIFIED AND THE ENGINEER MUST BE NOTIFIED BEFORE CONSTRUCTION OF SANITARY SEWER MAIN WITHIN THE BROOKWILLOW SUBDIVISION.

ABBREVIATIONS:
W.C. = WITNESS CORNER
FND = FOUND
EP = EDGE OF PAVEMENT
ROW = RIGHT-OF-WAY
S.F. = SQUARE FEET

PLANS PREPARED AND REVIEWED BY HIGH COUNTRY ENGINEERING, INC. UNDER THE SUPERVISION OF RON E. WEIDLER, P.E., SR. PROJECT MANAGER



GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)

1 inch = 50 ft.

LEGEND

PROPOSED GATE VALVE	PROPOSED EDGE OF PAVEMENT
PROPOSED FIRE HYDRANT	PROPOSED FLOWLINE
PROPOSED PRV	PROPOSED TOP BACK OF CURB
PROPOSED PLUG AND BLOW OFF	PROPOSED TOP BACK OF WALK
BLM BRASS CAP	EXISTING PROPERTY LINE
SURVEY REBAR AND CAP	PROPOSED RIGHT-OF-WAY
EXISTING GAS LINE	PROPOSED EASEMENT
EXISTING OVERHEAD ELECTRIC	PROPOSED ROAD CENTERLINE
EXISTING TELEPHONE LINE	PROPOSED MAJOR CONTOUR
EXISTING FENCE	PROPOSED MINOR CONTOUR
EXISTING CULVERT	EXISTING MAJOR CONTOUR
EXISTING WATER METER	EXISTING MINOR CONTOUR
EXISTING ASPHALT	PROPOSED 12" WATER MAIN
EXISTING GRAVEL	PROPOSED 10" WATER MAIN
PROPOSED ASPHALT	PROPOSED 8" WATER MAIN
FUTURE ROAD CONSTRUCTION (BY OTHERS)	PROPOSED 4" WATER MAIN
PROPOSED CONCRETE	PROPOSED 8" SANITARY SEWER MAIN AND MANHOLES
FUTURE PHASE	PROPOSED 15" SANITARY SEWER MAIN AND MANHOLES (BY OTHERS)
PROPOSED GARAGE	PROPOSED SINGLE-FAMILY BUILDING NUMBER
PROPOSED IRRIGATION LINE	PROPOSED ROADWAY SLOPE
PROPOSED PHASE LINE	PROPOSED STORM SEWER FLOW
	PROPOSED STORM INLET
	PROPOSED AREA INLET
	PROPOSED STORM PIPE
	REVISION NUMBER AND CLOUD

COLORADO LICENSED DANIEL R. PEMBERTON 39307 PROFESSIONAL ENGINEER

"APPROVED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE. ACCEPTANCE OF THESE PLANS DOES NOT RELIEVE THE DEVELOPER, CONTRACTOR OR ENGINEER FROM CONFORMANCE WITH CITY OF GRAND JUNCTION STANDARDS AND SPECIFICATIONS".

FIRE DEPARTMENT — DATE 2/13/06

APPROVED FOR CONSTRUCTION
UTE WATER CONSERVANCY DISTRICT

TITLE District Engineer — DATE 31 Jan 06

"APPROVED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE. ACCEPTANCE OF THESE PLANS DOES NOT RELIEVE THE DEVELOPER, CONTRACTOR OR ENGINEER FROM CONFORMANCE WITH CITY OF GRAND JUNCTION STANDARDS AND SPECIFICATIONS".

CITY DEVELOPMENT ENGINEER — DATE 2/2/06

2/7/06

CALL UTILITY NOTIFICATION CENTER OF COLORADO
1-800-922-1987
OR 534-0700 IN METRO DENVER
CALL 2 FULL BUSINESS DAYS BEFORE YOU DIG, GRADE OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES

NO.	DATE	REVISION	BY
1	8-19-05	CITY OF GRAND JUNCTION COMMENTS	RD
2	11-15-05	CITY OF GRAND JUNCTION COMMENTS	RD
3	12-23-05	UTE WATER AND CITY COMMENTS	ALA
4	1-20-06	SANITARY SEWER REDESIGN PER CITY	RD

HIGH COUNTRY ENGINEERING, INC.
14 INVERNESS DRIVE EAST, STE F-120, ENGLEWOOD, CO 80112
PHONE (303) 925-0544 FAX (303) 925-0547
1517 BLAKE AVENUE, STE 101, GLENWOOD SPRINGS, CO 81601
PHONE (970) 945-8455 FAX (970) 945-2555
WWW.HCENG.COM

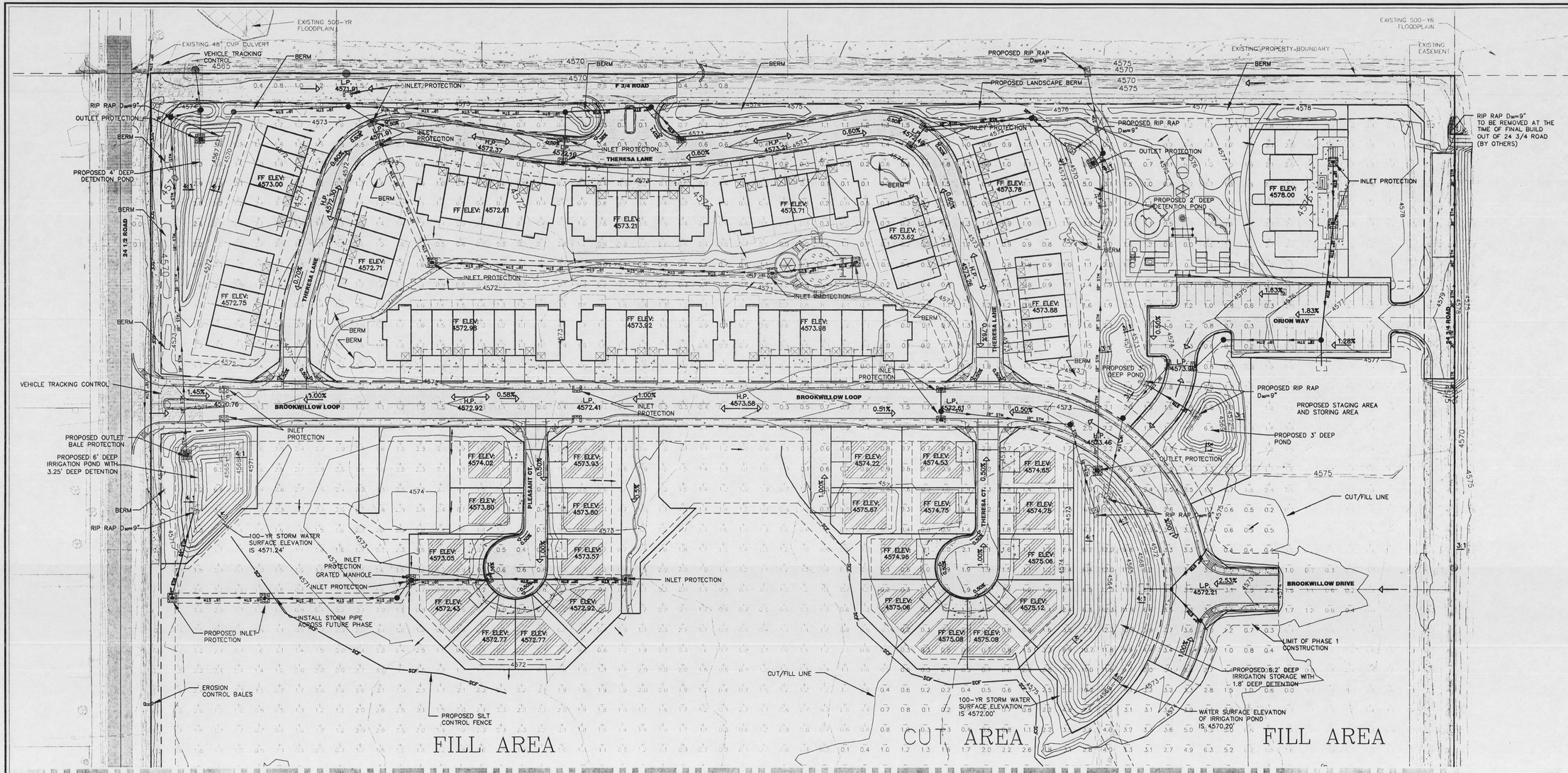
DRAWN BY: ALA
CHECKED BY: REW
DATE: 5-13-05
FILE: COMPOSITE PLAN

HALL PARTNERS, L.L.C.
CITY OF GRAND JUNCTION, COLORADO

BROOKWILLOW VILLAGE COMPOSITE PLAN

PROJECT NO.
2031049.00

C-3



MATCH TO SHEET SWMP-2

LEGEND

4570	EXISTING MINOR CONTOUR
4570	EXISTING MAJOR CONTOUR
4569	PROPOSED MINOR CONTOUR
4570	PROPOSED MAJOR CONTOUR
	PROPOSED EDGE OF PAVEMENT
	PROPOSED FLOWLINE
	PROPOSED TOP BACK OF CURB
	PROPOSED SIDEWALK
	PROPOSED PROPERTY LINE
	PROPOSED RIGHT-OF-WAY
	PROPOSED EASEMENT
	PROPOSED ROAD CENTERLINE
18" STM	PROPOSED STORM PIPE
SCF	PROPOSED SEDIMENT CONTROL FENCE
	INLET PROTECTION
	RIP RAP OUTLET PROTECTION
1.9 1.9	PROPOSED CUT/FILL AMOUNT (FT.)

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

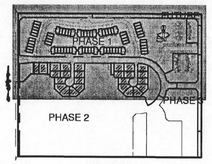
NOTES:

1. INLET AND OUTLET PROTECTION TYPES SHALL CHANGE WITH THE CHANGING STAGES OF CONSTRUCTION.
2. REFER TO THE DETAILS AND THE CITY OF GRAND JUNCTION STORMWATER DISTRICT FOR BEST MANAGEMENT PRACTICE (BMP) DETAILS AND SPECIFICATIONS.
3. LIMIT OF DISTURBANCE IS SHOWN BY PROPOSED CONTOURS. SILT FENCE INDICATES SOUTHERN-MOST LIMITS OF GRADING/DISTURBANCE.
4. ELEVATIONS ARE BASED ON TBM, A REBAR IN THE SOUTHWEST CORNER OF THE PROPERTY AS SHOWN, ELEVATION EQUALS 4570.85 FEET TOP OF BAR. TBM TO BECOME PERMENANT BENCH MARK.
5. ALL EROSION CONTROL IS SHOWN FOR PHASE 1 ONLY.

ABBREVIATIONS:

FF ELEV: FINISH FLOOR ELEVATION
TBM: TEMPORARY BENCH MARK

OWNER:
HALL PARTNERS, LLC
786 VALLEY COURT
GRAND JUNCTION, CO 81505
(970) 523-5555



KEY MAP
SCALE: 1":500'

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NO.	DATE	REVISION	BY
1	8-19-05	CITY OF GRAND JUNCTION COMMENTS	TJD
2	11-15-05	CITY OF GRAND JUNCTION COMMENTS	TJD

DRAWN BY: TJD
CHECKED BY: REW
DATE: 5/13/05
FILE: SWMP

HIGH COUNTRY ENGINEERING, INC.
14 INVERNESS DRIVE EAST, STE F120, ENGLEWOOD, CO 80112
PHONE (303) 925-0544 FAX (303) 925-0527
1517 BLAKE AVENUE, STE 101, GLENWOOD SPRINGS, CO 81601
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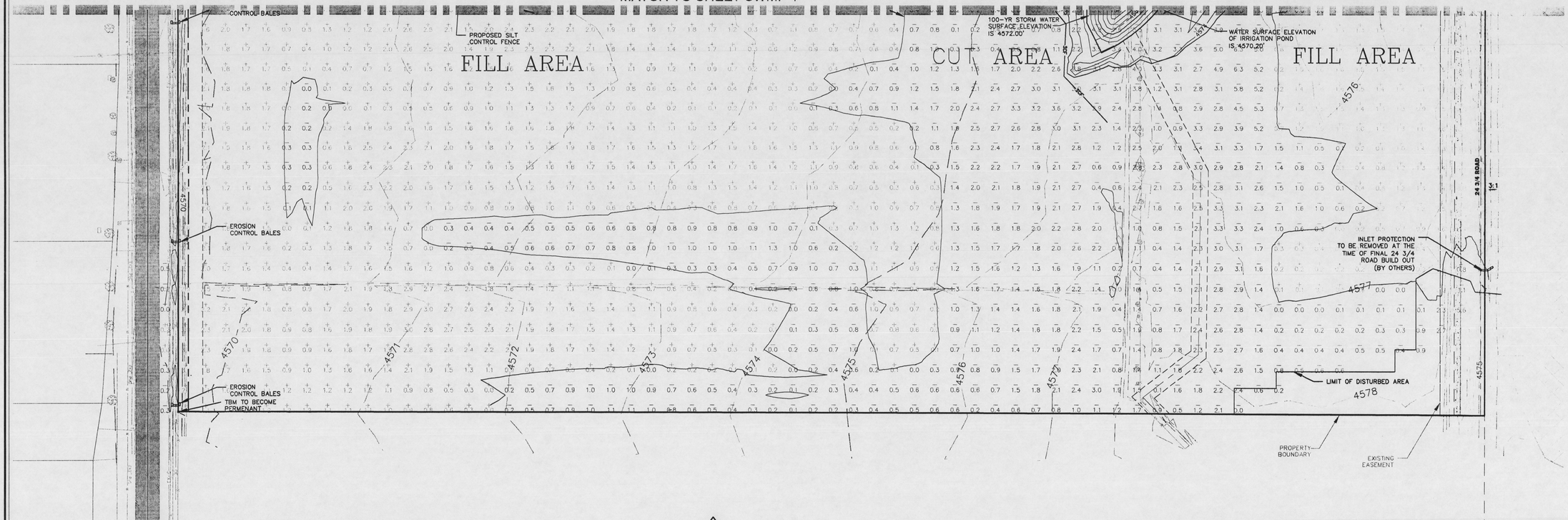
HALL PARTNERS, L.L.C.
CITY OF GRAND JUNCTION, COLORADO

BROOKWILLOW VILLAGE STORMWATER MANAGEMENT PLAN

PROJECT NO.
2031049.00

SWMP-1

MATCH TO SHEET SWMP-1



LEGEND

4570	EXISTING MINOR CONTOUR
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4569	PROPOSED MINOR CONTOUR
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	PROPOSED EDGE OF PAVEMENT
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18" STM	PROPOSED STORM PIPE
SCF SCF SCF	PROPOSED SEDIMENT CONTROL FENCE
	INLET PROTECTION
RIP RAP	RIP RAP OUTLET PROTECTION
1.9 1.5	PROPOSED CUT/FILL AMOUNT (FT.)

NOTES:

1. THE LOCATIONS OF UNDERGROUND UTILITIES HAVE BEEN PLOTTED BASED UPON UTILITY MAPS, OTHER INFORMATION PROVIDED BY UTILITY COMPANIES AND ACTUAL FIELD LOCATIONS IN SOME INSTANCES. THESE UTILITIES, AS SHOWN, MAY NOT REPRESENT ACTUAL FIELD CONDITIONS, AND SOME LOCATIONS ARE UNKNOWN. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT ALL UTILITY COMPANIES FOR FIELD LOCATIONS OF UTILITIES PRIOR TO CONSTRUCTION.
2. ALL CONSTRUCTION TO BE PER CURRENT GOVERNING AGENCY SPECIFICATIONS.
3. ALL UTILITIES, BOTH UNDERGROUND OR OVERHEAD, SHALL BE MAINTAINED IN CONTINUOUS SERVICE THROUGHOUT THE ENTIRE CONSTRUCTION PERIOD, EXCEPT AS NOTED IN THE SPECIAL CONDITIONS. THE CONTRACTOR SHALL BE RESPONSIBLE AND LIABLE FOR ANY DAMAGES TO, OR INTERRUPTION OF, SERVICES CAUSED BY THE CONSTRUCTION.
4. THE CONTRACTOR SHALL CONTAIN HIS CONSTRUCTION OPERATIONS TO THE AREA WITHIN THE LIMITS SHOWN ON THE PLANS. CONTRACTOR SHALL NOT OPERATE OUTSIDE THIS AREA WITHOUT THE PRIOR CONSENT OF THE PROPERTY OWNERS INVOLVED.
5. ANY DAMAGE TO PRIVATE PROPERTY BY THE CONTRACTOR OUTSIDE THESE LIMITS WITHOUT THE PERMISSION OF THE PRIVATE PROPERTY OWNER WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
6. MAINTAIN POSITIVE DRAINAGE AWAY FROM STRUCTURES IN ALL DIRECTIONS.
7. ALL LOTS TO BE GRADED SO THAT DRAINAGE CAN EITHER DRAIN BACK TO THE ROAD OR ALONG THE SIDE YARD EASEMENTS. SIDE LOT DRAINAGE PATHS MUST BE LARGE ENOUGH TO CARRY DRAINAGE FROM THE ADJOINING LOTS AS WELL AS LOTS UPHILL. CONTRACTOR TO VERIFY THE SIZE OF SIDE YARD SWALES WITH THE ENGINEER AT THE TIME OF BUILDING PERMIT.
8. A UTILITY LINE LOCATE SHOULD BE OBTAINED BEFORE ANY EXCAVATION IN THIS AREA, INCLUDING FENCE POST INSTALLATION. LOT OWNER IS RESPONSIBLE FOR ANY DAMAGE TO WATER MAIN CAUSED BY LOT OWNER ACTIONS, INCLUDING CONSEQUENTIAL DAMAGES DUE TO LOSS OF WATER SERVICE TO OTHERS. (THIS NOTE SHALL BE INSERTED IN DEVELOPER'S CONVEYANCE OF THESE LOTS.)

2

REVEGETATION PROCEDURES

ALL AREAS DISTURBED DURING CONSTRUCTION WILL BE REVEGETATED ACCORDING TO THE FOLLOWING CRITERIA, AND THE NORTHWEST COLORADO COUNCIL OF GOVERNMENTS WATER QUALITY PROTECTION STANDARDS. DURING CONSTRUCTION, EROSION WHICH MAY POSE A THREAT TO SURROUNDING PROPERTIES OR WATERWAYS WILL BE CONTAINED THROUGH THE USE OF TEMPORARY EROSION CONTROL MEASURES. REVEGETATION OF DISTURBED AREAS SHALL COMMENCE IN THE FALL, PRIOR TO THE FIRST MAJOR SNOWFALL, OR EARLY SPRING IF SITE CONDITIONS ALLOW.

EROSION CONTROL MEASURES ARE AIMED AT CONTROLLING/CONFINING SEDIMENT WITHIN OR NEAR THE AREA OF DISTURBANCE. THE LONG TERM STABILITY OF THESE AREAS WILL DEPEND ON THE ESTABLISHMENT OF APPROPRIATE GROUND COVER VEGETATION. THE PRIMARY GOAL OF THE REVEGETATION EFFORT IS TO PROTECT WATER QUALITY WHICH WILL REQUIRE A STURDY GROUND COVER AS SOON AS POSSIBLE.

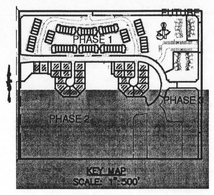
FOLLOWING ARE STANDARDS WHICH HAVE BEEN ESTABLISHED FOR REVEGETATION APPLICATION TECHNIQUES:

1. ALL TOPSOIL SHALL BE SALVAGED FROM DISTURBED AREAS, STOCKPILED AND RE-SPREAD PRIOR TO REVEGETATION. TOPSOIL SHOULD NOT BE RE-SPREAD ON AREAS OF THE SITE PROPOSED FOR FUTURE BUILDING OR PARKING LOT CONSTRUCTION. THE FINISHED SOIL SURFACE SHALL BE LEFT IN AN IRREGULAR, SCARIFIED CONDITION WHICH MAXIMIZES MOISTURE RETENTION ON THE SLOPE.
2. WHERE SLOPE ALLOWS, SEED SHALL BE DRILLED OR OTHERWISE MECHANICALLY INCORPORATED INTO THE SOIL ("FARMED"). WHERE STEEPNESS OF SLOPE RESTRICTS EQUIPMENT ACCESS, SEED SHALL BE HYDRAULICALLY APPLIED AND FOLLOWED BY APPLICATION OF HYDRAULICALLY APPLIED MULCH OR STRAW. STRAW MULCH SHALL BE SECURED IN PLACE WITH A HYDRAULICALLY APPLIED TACKIFIER.
3. SLOPES WITH GRADIENTS OF 2:1 OR STEEPER SHALL BE HYDRAULICALLY SEEDED, STRAW MULCHED AND PROTECTED BY PLACEMENT OF EROSION BLANKET (JUTE, EXCELSIOR OR SIMILAR ORGANIC PRODUCT). STRAW TACKIFIER IS NOT REQUIRED WHEN EROSION BLANKET IS USED.
4. THE EXPOSED SLOPE WOULD BE PREPARED WITH MINI BENCHES. TOPSOIL WOULD THEN BE SPREAD OVER THE SLOPE, SEEDED AND COVERED WITH STRAW. EROSION CONTROL BLANKET WOULD THEN BE TACKED INTO THE HILLSIDE COVERING ALL THE SEEDING. IF EXISTING MOISTURE CONDITIONS INDICATE THE REQUIREMENT FOR IRRIGATION, THEN EITHER DRIP IRRIGATION OR MINI-SPRAY IRRIGATION WOULD BE USED.
5. REVEGETATION WILL BE CONSIDERED SUCCESSFUL WHEN THE CONTRACTOR HAS ESTABLISHED A DESIRABLE PERENNIAL VEGETATION (SEED MIX) BY THE END OF THE SECOND GROWING SEASON SUFFICIENT IN COVER AND CAPABLE OF RENEWING ITSELF TO ADVANCE TO THE ACCEPTABLE STAGE OF REVEGETATION AND THE DISTURBED AREA IS CONSIDERED STABILIZED AND EROSION CONTROLLED.
6. REVEGATATION BY OWNER AFTER PUBLIC IMPROVEMENT CONTRUCTION.
7. SEE SHEET 18 OF PROMONTORY FILING 2 CONTRUCTION DRAWINGS FOR SILT FENCE AND HAY BALE DAM DETAILS.

2

NATIVE SEED MIX

SCIENTIFIC NAME	COMMON NAME	VARIETY	PLS LB/ACRE SEEDING RATE
GRASSES			
AGROPYRON SMITHII	WESTERN WHEATGRASS	ARRIBA	4
AGROPYRON TRACHYCAULUM	SLENDER WHEATGRASS	PRIMAR	4
FESTUCA IDAHOENSIS	IDAHO FESCUE	JOSEPH	2
FESTUCA RUBRA	RED FESCUE		2
KOELERIA MACRANTHA	JUNEGRASS		1
ORYZOPSIS HYMENOIDES	INDIAN RICEGRASS		1
POA SANDBERGII	SANDBERG BLUEGRASS	CANBAR	2
SITANION HYSTRIX	SQUIRRELTAIL		1
STIPA VIRIDULA	GREEN NEEDLEGRASS	LODORM	2



GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

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OWNER:
HALL PARTNERS, LLC
786 VALLEY COURT
GRAND JUNCTION, CO 81505
(970) 523-5555

COLORADO REGISTERED PROFESSIONAL ENGINEER
DAVID E. REX
33811
1/27/06

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CITY DEVELOPMENT ENGINEER — DATE 2/7/06

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NO.	DATE	REVISION	BY
1	8-19-05	CITY OF GRAND JUNCTION COMMENTS	SRD
2	11-15-05	CITY OF GRAND JUNCTION COMMENTS	SRD

DRAWN BY: DED
CHECKED BY: REW
DATE: 5-13-05
FILE: SWMP

HIGH COUNTRY ENGINEERING, INC.
14 INVERNESS DRIVE EAST, STE F-120, ENGLEWOOD, CO 80112
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1517 BLAKE AVENUE, STE 101, GLENWOOD SPRINGS, CO 81601
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WWW.HCE.NET

HALL PARTNERS, L.L.C.
CITY OF GRAND JUNCTION, COLORADO

BROOKWILLOW VILLAGE STORMWATER MANAGEMENT PLAN

PROJECT NO.
2031049.00

SWMP-2

LEGEND

4570	EXISTING 1' MINOR CONTOUR
4570	EXISTING 5' MAJOR CONTOUR
4569	PROPOSED 1' MINOR CONTOUR
4570	PROPOSED 5' MAJOR CONTOUR
	PROPOSED EDGE OF PAVEMENT
	PROPOSED FLOWLINE
	PROPOSED TOP BACK OF CURB
	PROPOSED SIDEWALK
	EXISTING PROPERTY LINE
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	PROPOSED EASEMENT
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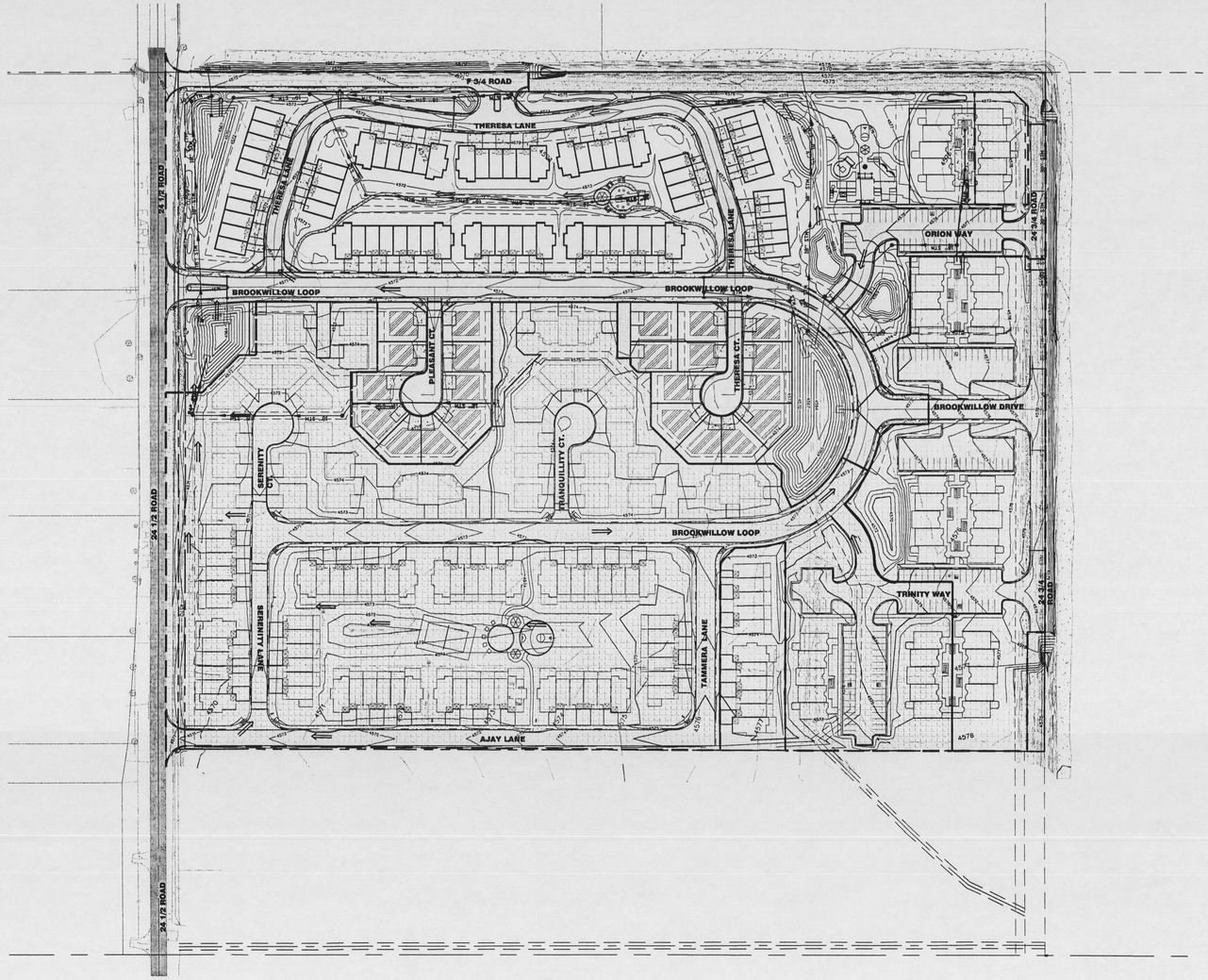
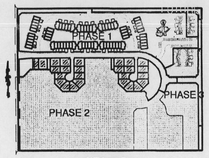
18" STM	PROPOSED STORM PIPE
SCF SCF SCF	PROPOSED SEDIMENT CONTROL FENCE
	INLET PROTECTION
	RIP RAP OUTLET PROTECTION
1	REVISION NUMBER AND CLOUD
	PROPOSED OVERFLOW PATH
	EXISTING ASPHALT
	EXISTING GRAVEL
	FUTURE CONSTRUCTION (BY OTHERS)
	PROPOSED CONCRETE
	PROPOSED ASPHALT
	FUTURE PHASE



GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)
1 inch = 100 ft.



KEY MAP
SCALE: 1":500'

NOTES:

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3. ALL UTILITIES, BOTH UNDERGROUND OR OVERHEAD, SHALL BE MAINTAINED IN CONTINUOUS SERVICE THROUGHOUT THE ENTIRE CONSTRUCTION PERIOD, EXCEPT AS NOTED IN THE SPECIAL CONDITIONS. THE CONTRACTOR SHALL BE RESPONSIBLE AND LIABLE FOR ANY DAMAGES TO, OR INTERRUPTION OF, SERVICES CAUSED BY THE CONSTRUCTION.
4. THE CONTRACTOR SHALL CONTAIN HIS CONSTRUCTION OPERATIONS TO THE AREA WITHIN THE LIMITS SHOWN ON THE PLANS. CONTRACTOR SHALL NOT OPERATE OUTSIDE THIS AREA WITHOUT THE PRIOR CONSENT OF THE PROPERTY OWNERS INVOLVED.
5. ANY DAMAGE TO PRIVATE PROPERTY BY THE CONTRACTOR OUTSIDE THESE LIMITS WITHOUT THE PERMISSION OF THE PRIVATE PROPERTY OWNER WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
6. MAINTAIN POSITIVE DRAINAGE AWAY FROM STRUCTURES IN ALL DIRECTIONS.
7. ALL LOTS TO BE GRADED SO THAT DRAINAGE CAN EITHER DRAIN BACK TO THE ROAD OR ALONG THE SIDE YARD EASEMENTS. SIDE LOT DRAINAGE PATHS MUST BE LARGE ENOUGH TO CARRY DRAINAGE FROM THE ADJOINING LOTS AS WELL AS LOTS UPHILL. CONTRACTOR TO VERIFY THE SIZE OF SIDE YARD SWALES WITH THE ENGINEER AT THE TIME OF BUILDING PERMIT.
8. A UTILITY LINE LOCATE SHOULD BE OBTAINED BEFORE ANY EXCAVATION IN THIS AREA, INCLUDING FENCE POST INSTALLATION. LOT OWNER IS RESPONSIBLE FOR ANY DAMAGE TO WATER MAIN CAUSED BY LOT OWNER ACTIONS, INCLUDING CONSEQUENTIAL DAMAGES DUE TO LOSS OF WATER SERVICE TO OTHERS. (THIS NOTE SHALL BE INSERTED IN DEVELOPER'S CONVEYANCE OF THESE LOTS.)
9. ALL GRADING AND DRAINAGE SHALL CONFORM TO THE CITY OF GRAND JUNCTION STANDARDS AND SPECIFICATIONS.
10. ALL 36" AND SMALLER STORM PIPE SHALL BE ADS-N12 AND WT PER THE CITY OF GRAND JUNCTION.
11. PROPOSED CONTOURS ARE SHOWN IN 1' INTERVALS.
12. PLEASE SEE PPSD SHEETS FOR STORM SEWER PLAN AND PROFILES.
13. ALL SPOT ELEVATIONS ARE TOP BACK OF CURB UNLESS OTHERWISE NOTED.
14. ADD 4500 TO ALL SPOT ELEVATIONS.
15. ALL INLET PROTECTION SHALL BE PER THE CITY OF GRAND JUNCTION STANDARDS.
16. ALL EROSION CONTROL METHODS SHALL PROGRESS WITH THE CONSTRUCTION PROJECT (BALE INLET PROTECTION SHALL BE SWITCHED TO GRAVEL FILTERS ONCE ASPHALT HAS BEEN LAID).

ABBREVIATIONS
WT: WATER TIGHT

2

REVEGETATION PROCEDURES

ALL AREAS DISTURBED DURING CONSTRUCTION WILL BE REVEGETATED ACCORDING TO THE FOLLOWING CRITERIA, AND THE NORTHWEST COLORADO COUNCIL OF GOVERNMENTS WATER QUALITY PROTECTION STANDARDS. DURING CONSTRUCTION, EROSION WHICH MAY POSE A THREAT TO SURROUNDING PROPERTIES OR WATERWAYS WILL BE CONTAINED THROUGH THE USE OF TEMPORARY EROSION CONTROL MEASURES. REVEGETATION OF DISTURBED AREAS SHALL COMMENCE IN THE FALL, PRIOR TO THE FIRST MAJOR SNOWFALL OR EARLY SPRING IF SITE CONDITIONS ALLOW.

EROSION CONTROL MEASURES ARE AIMED AT CONTROLLING/CONFINING SEDIMENT WITHIN OR NEAR THE AREA OF DISTURBANCE. THE LONG TERM STABILITY OF THESE AREAS WILL DEPEND ON THE ESTABLISHMENT OF APPROPRIATE GROUND COVER VEGETATION. THE PRIMARY GOAL OF THE REVEGETATION EFFORT IS TO PROTECT WATER QUALITY WHICH WILL REQUIRE A STURDY GROUND COVER AS SOON AS POSSIBLE.

FOLLOWING ARE STANDARDS WHICH HAVE BEEN ESTABLISHED FOR REVEGETATION APPLICATION TECHNIQUES:

1. ALL TOPSOIL SHALL BE SALVAGED FROM DISTURBED AREAS, STOCKPILED AND RE-SPREAD PRIOR TO REVEGETATION. TOPSOIL SHOULD NOT BE RE-SPREAD ON AREAS OF THE SITE PROPOSED FOR FUTURE BUILDING OR PARKING LOT CONSTRUCTION. THE FINISHED SOIL SURFACE SHALL BE LEFT IN AN IRREGULAR, SCARIFIED CONDITION WHICH MAXIMIZES MOISTURE RETENTION ON THE SLOPE.
2. WHERE SLOPE ALLOWS, SEED SHALL BE DRILLED OR OTHERWISE MECHANICALLY INCORPORATED INTO THE SOIL ("FARMED"). WHERE STEEPNESS OF SLOPE RESTRICTS EQUIPMENT ACCESS, SEED SHALL BE HYDRAULICALLY APPLIED AND FOLLOWED BY APPLICATION OF HYDRAULICALLY APPLIED MULCH OR STRAW. STRAW MULCH SHALL BE SECURED IN PLACE WITH A HYDRAULICALLY APPLIED TACKIFIER.
3. SLOPES WITH GRADIENTS OF 2:1 OR STEEPER SHALL BE HYDRAULICALLY SEEDED, STRAW MULCHED AND PROTECTED BY PLACEMENT OF EROSION BLANKET (JUTE, EXCELSIOR OR SIMILAR ORGANIC PRODUCT). STRAW TACKIFIER IS NOT REQUIRED WHEN EROSION BLANKET IS USED.
4. THE EXPOSED SLOPE WOULD BE PREPARED WITH MINI BENCHES. TOPSOIL WOULD THEN BE SPREAD OVER THE SLOPE, SEEDED AND COVERED WITH STRAW. EROSION CONTROL BLANKET WOULD THEN BE TACKED INTO THE HILLSIDE COVERING ALL THE SEEDING. IF EXISTING MOISTURE CONDITIONS INDICATE THE REQUIREMENT FOR IRRIGATION, THEN EITHER DRIP IRRIGATION OR MINI-SPRAY IRRIGATION WOULD BE USED.
5. REVEGETATION WILL BE CONSIDERED SUCCESSFUL WHEN THE CONTRACTOR HAS ESTABLISHED A DESIRABLE PERENNIAL VEGETATION (SEED MIX) BY THE END OF THE SECOND GROWING SEASON SUFFICIENT IN COVER AND CAPABLE OF RENEWING ITSELF TO ADVANCE TO THE ACCEPTABLE STAGE OF REVEGETATION AND THE DISTURBED AREA IS CONSIDERED STABILIZED AND EROSION CONTROLLED.
6. REVEGATATION BY OWNER AFTER PUBLIC IMPROVEMENT CONTRUCTION.
7. SEE SHEET 18 OF PROMONTORY FILING 2 CONTRUCTION DRAWINGS FOR SILT FENCE AND HAY BALE DAM DETAILS.

2

NATIVE SEED MIX

SCIENTIFIC NAME	COMMON NAME	VARIETY	PLS LB/ACRE SEEDING RATE
GRASSES			
AGROPYRON SMITHII	WESTERN WHEATGRASS	ARRIBA	4
AGROPYRON TRACHYCAULUM	SLENDER WHEATGRASS	PRIMAR	4
FESTUCA IDAHOENSIS	IDAHO FESCUE	JOSEPH	2
FESTUCA RUBRA	RED FESCUE		2
KOELERIA MACRANTHA	JUNEGRASS		1
ORYZOPSIS HYMENOIDES	INDIAN RICEGRASS		1
POA SANDBERGII	SANDBERG BLUEGRASS	CANBAR	2
SITANION HYSTRIX	SQUIRRELTAIL		1
STIPA VIRIDULA	GREEN NEEDLEGRASS	LODORM	2

COLORADO REGISTERED DAVID D. DONLEY 39307 PROFESSIONAL ENGINEER 1/23/06

"APPROVED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE. ACCEPTANCE OF THESE PLANS DOES NOT RELIEVE THE DEVELOPER, CONTRACTOR OR ENGINEER FROM CONFORMANCE WITH CITY OF GRAND JUNCTION STANDARDS AND SPECIFICATIONS".

GRAND JUNCTION DRAINAGE DISTRICT — DATE 2-7-2006

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CITY DEVELOPMENT ENGINEER — DATE 2/7/06

NO.	DATE	REVISION	BY
1	8-19-05	CITY OF GRAND JUNCTION COMMENTS	RD
2	11-15-05	CITY OF GRAND JUNCTION COMMENTS	RD

DRAWN BY: DD
CHECKED BY: REW
DATE: 6/30/04
FILE: GR0

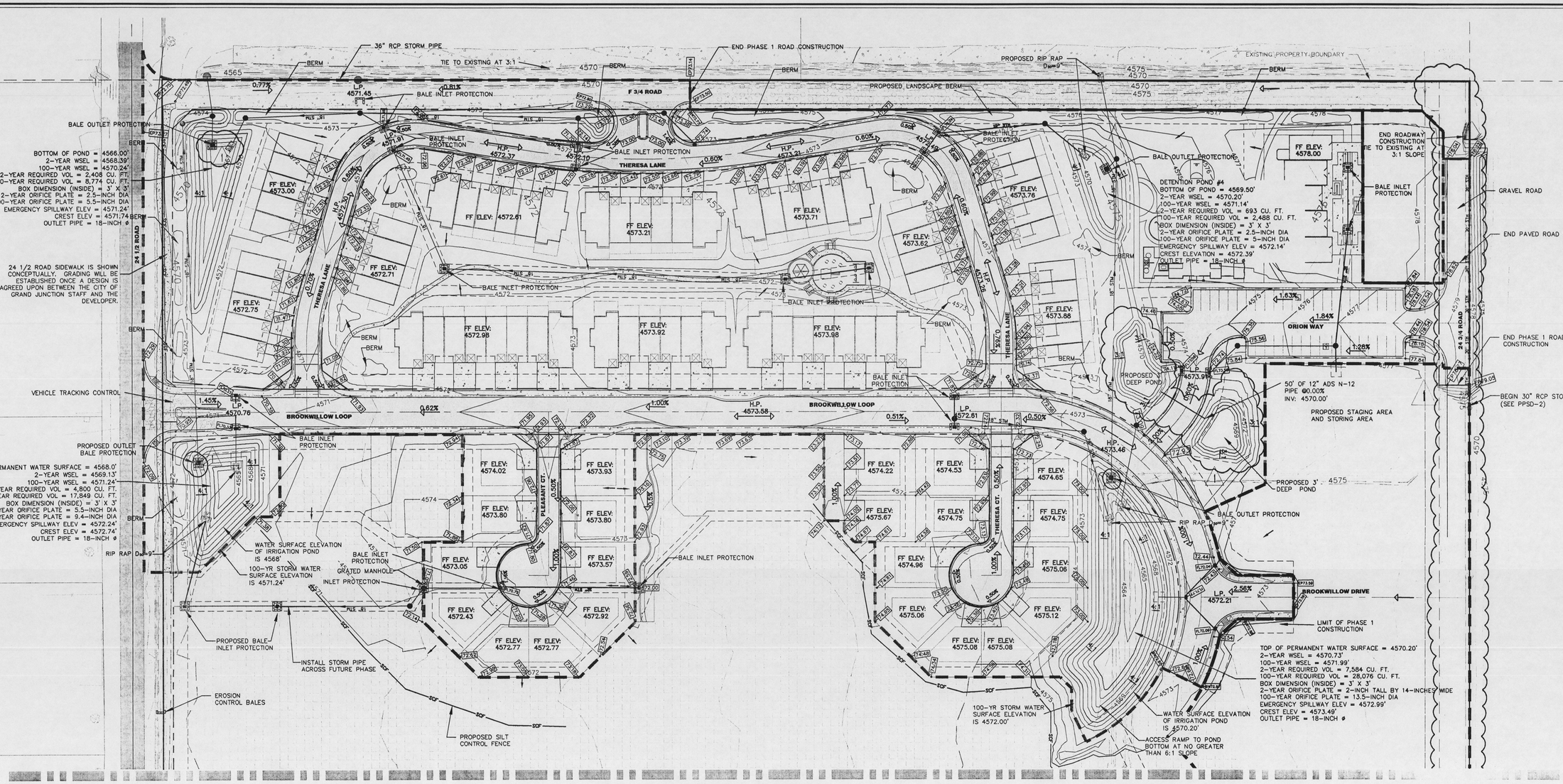
HIGH COUNTRY ENGINEERING, INC.
14 INVERNESS DRIVE EAST, STE F-120, ENGLEWOOD, CO 80112
PHONE (303) 925-0544 FAX (303) 925-0547
1517 BLAKE AVENUE, STE 101, GLENWOOD SPRINGS, CO 81601
PHONE (970) 945-8676 FAX (970) 945-2555
WWW.HCENG.COM

HALL PARTNERS, L.L.C.
CITY OF GRAND JUNCTION, COLORADO

BROOKWILLOW VILLAGE MASTER GRADING PLAN

PROJECT NO.
2031049.00

GR0



MATCH TO SHEET GR2

LEGEND

- EXISTING 1' MINOR CONTOUR
- 4570 — EXISTING 5' MAJOR CONTOUR
- 4569 — PROPOSED 1' MINOR CONTOUR
- 4570 — PROPOSED 5' MAJOR CONTOUR
- PROPOSED EDGE OF PAVEMENT
- PROPOSED FLOWLINE
- PROPOSED TOP BACK OF CURB
- PROPOSED SIDEWALK
- EXISTING PROPERTY LINE
- PROPOSED RIGHT-OF-WAY
- PROPOSED EASEMENT
- PROPOSED ROAD CENTERLINE
- 18" STM — PROPOSED STORM PIPE
- SCF — PROPOSED SEDIMENT CONTROL FENCE
- 72.75 — PROPOSED SPOT ELEVATION
- INLET PROTECTION
- RIP RAP OUTLET PROTECTION

- EXISTING ASPHALT
- EXISTING GRAVEL
- PROPOSED CONCRETE
- PROPOSED ASPHALT
- FUTURE PHASE
- FUTURE CONSTRUCTION (BY OTHERS)
- REVISION NUMBER AND CLOUD

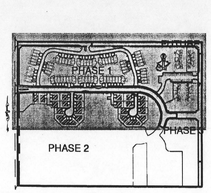
1. REMOVED BOX CULVERT AND REPLACED WITH 12" ADS-N12 PIPE
2. MOVED OUTLET STRUCTURES
3. SHIFTED 24 3/4 ROAD WEST 4' AND REGRADED
4. THE SIDEWALK ALONG 24 1/2 ROAD IS NOW SHOWN CONCEPTUALLY

NORTH

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.



KEY MAP
SCALE: 1"=500'

"APPROVED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE. ACCEPTANCE OF THESE PLANS DOES NOT RELIEVE THE DEVELOPER, CONTRACTOR OR ENGINEER FROM CONFORMANCE WITH CITY OF GRAND JUNCTION STANDARDS AND SPECIFICATIONS".

GRAND JUNCTION DRAINAGE DISTRICT — Feb 3, 2006 — DATE

"APPROVED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE. ACCEPTANCE OF THESE PLANS DOES NOT RELIEVE THE DEVELOPER, CONTRACTOR OR ENGINEER FROM CONFORMANCE WITH CITY OF GRAND JUNCTION STANDARDS AND SPECIFICATIONS".

CITY DEVELOPMENT ENGINEER — 2/7/06 — DATE

CALL UTILITY NOTIFICATION CENTER OF COLORADO 1-800-922-1987
OR 554-0700 IN METRO DENVER

CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES

NO	DATE	REVISION	BY
1	8-19-05	CITY OF GRAND JUNCTION COMMENTS	RD
2	11-15-05	CITY OF GRAND JUNCTION COMMENTS	RD

DRAWN BY: RD
CHECKED BY: REW
DATE: 5/13/05
F.I.F. GR1

HIGH COUNTRY ENGINEERING, INC.
14 INVERNESS DRIVE EAST, STE F-120, ENGLEWOOD, CO 80112
PHONE (303) 925-0544 FAX (303) 925-0547
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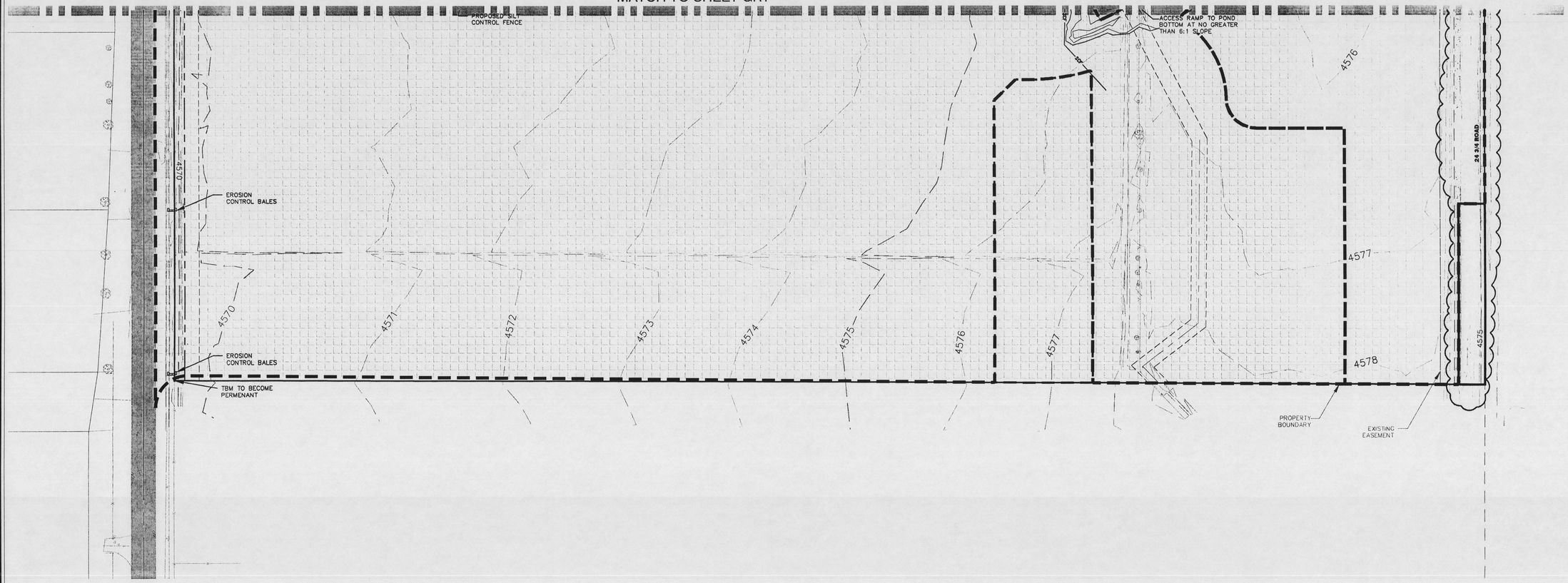
HALL PARTNERS, L.L.C.
CITY OF GRAND JUNCTION, COLORADO

BROOKWILLOW VILLAGE
MASTER GRADING PLAN

PROJECT NO.
2031049.00

GR1

MATCH TO SHEET GR1



LEGEND

EXISTING 1' MINOR CONTOUR	
4570 EXISTING 5' MAJOR CONTOUR	
4569 PROPOSED 1' MINOR CONTOUR	EXISTING ASPHALT
4570 PROPOSED 5' MAJOR CONTOUR	EXISTING GRAVEL
PROPOSED EDGE OF PAVEMENT	
PROPOSED FLOWLINE	PROPOSED CONCRETE
PROPOSED TOP BACK OF CURB	
PROPOSED SIDEWALK	PROPOSED ASPHALT
EXISTING PROPERTY LINE	
PROPOSED RIGHT-OF-WAY	FUTURE PHASE
PROPOSED EASEMENT	
PROPOSED ROAD CENTERLINE	FUTURE CONSTRUCTION (BY OTHERS)
18" STM PROPOSED STORM PIPE	
SCF SCF SCF PROPOSED SEDIMENT CONTROL FENCE	
72.75 PROPOSED SPOT ELEVATION	REVISION NUMBER AND CLOUD
INLET PROTECTION	
RIP RAP OUTLET PROTECTION	

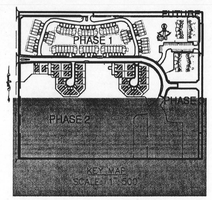
REVISION ON THIS SHEET: SHIFTED 24 3/4 ROAD TO THE WEST 4'

NORTH

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.



COLORADO REGISTERED DANIEL R. DAVIDSON 39307 1/31/06 PROFESSIONAL ENGINEER

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GRAND JUNCTION DRAINAGE DISTRICT — DATE Feb. 3, 2006

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DRAWN BY: DD
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DATE: 6/30/04
FILE: GR2

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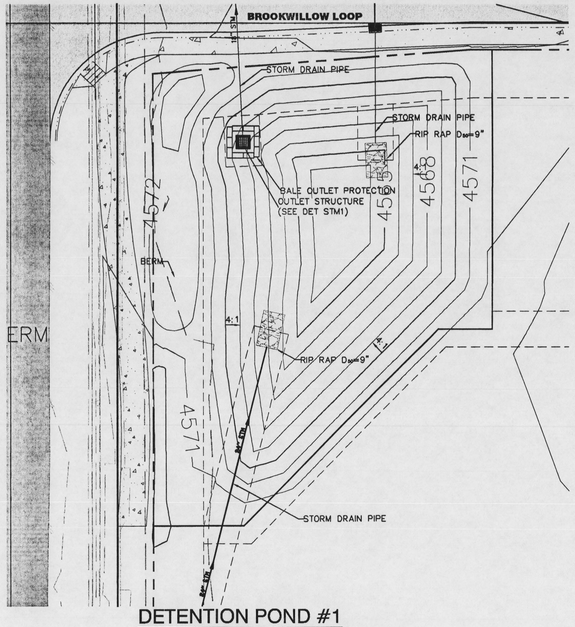
HALL PARTNERS, L.L.C.
CITY OF GRAND JUNCTION, COLORADO

BROOKWILLOW VILLAGE
MASTER GRADING PLAN

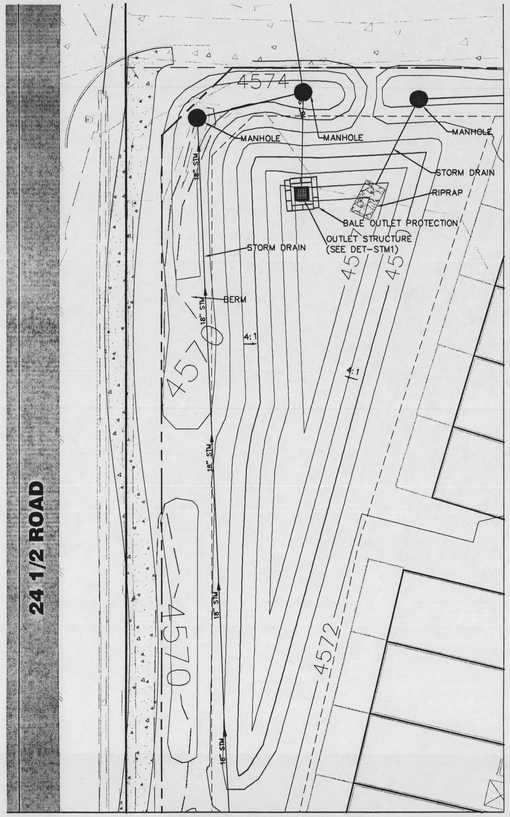
PROJECT NO.
2031049.00

GR2



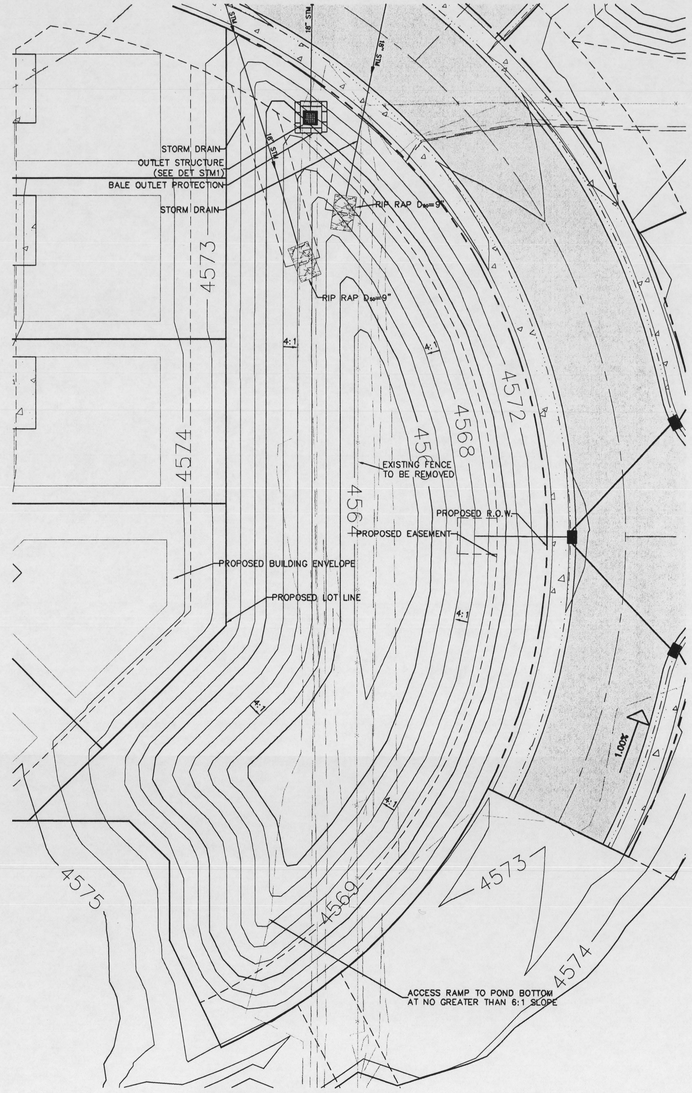
DETENTION POND #1

TOP OF PERMANENT WATER SURFACE = 4568.0'
2-YEAR WSEL = 4569.13'
100-YEAR WSEL = 4571.24'
2-YEAR REQUIRED VOLUME = 4,800 CU. FT.
100-YEAR REQUIRED VOLUME = 17,849 CU. FT.
BOX DIMENSION (INSIDE) = 3' X 3'
2-YEAR ORIFICE PLATE = 5.5-INCH DIAMETER
100-YEAR ORIFICE PLATE = 9.4-INCH DIAMETER
EMERGENCY SPILLWAY ELEVATION = 4572.24'
CREST ELEVATION = 4572.74'
OUTLET PIPE = 18-INCH ø



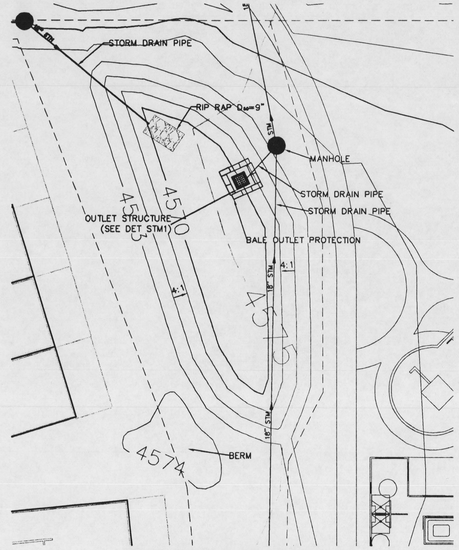
DETENTION POND #2

BOTTOM OF POND = 4566.00'
2-YEAR WSEL = 4568.39'
100-YEAR WSEL = 4570.24'
2-YEAR REQUIRED VOLUME = 2,408 CU. FT.
100-YEAR REQUIRED VOLUME = 8,774 CU. FT.
BOX DIMENSION (INSIDE) = 3' X 3'
2-YEAR ORIFICE PLATE = 2.5-INCH DIAMETER
100-YEAR ORIFICE PLATE = 5.5-INCH DIAMETER
EMERGENCY SPILLWAY ELEVATION = 4571.24'
CREST ELEVATION = 4571.74
OUTLET PIPE = 18-INCH ø



DETENTION POND #3

TOP OF PERMANENT WATER SURFACE = 4570.20'
2-YEAR WSEL = 4570.73'
100-YEAR WSEL = 4571.99'
2-YEAR REQUIRED VOLUME = 7,584 CU. FT.
100-YEAR REQUIRED VOLUME = 28,076 CU. FT.
BOX DIMENSION (INSIDE) = 3' X 3'
2-YEAR ORIFICE PLATE = 2-INCH TALL BY 14-INCHES WIDE
100-YEAR ORIFICE PLATE = 13.5-INCH DIAMETER
EMERGENCY SPILLWAY ELEVATION = 4572.99'
CREST ELEVATION = 4573.49'
OUTLET PIPE = 18-INCH ø



DETENTION POND #4

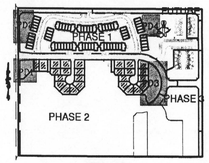
DETENTION POND #4
BOTTOM OF POND = 4569.50'
2-YEAR WSEL = 4570.20'
100-YEAR WSEL = 4571.14'
2-YEAR REQUIRED VOLUME = 693 CU. FT.
100-YEAR REQUIRED VOLUME = 2,488 CU. FT.
BOX DIMENSION (INSIDE) = 3' X 3'
2-YEAR ORIFICE PLATE = 2.5-INCH DIAMETER
100-YEAR ORIFICE PLATE = 5-INCH DIAMETER
EMERGENCY SPILLWAY ELEVATION = 4572.14'
CREST ELEVATION = 4572.39'
OUTLET PIPE = 18-INCH ø

LEGEND

	EXISTING 1' MINOR CONTOUR
4570	EXISTING 5' MAJOR CONTOUR
4569	PROPOSED 1' MINOR CONTOUR
4570	PROPOSED 5' MAJOR CONTOUR
	PROPOSED EDGE OF PAVEMENT
	PROPOSED FLOWLINE
	PROPOSED TOP BACK OF CURB
	PROPOSED SIDEWALK
	PROPOSED PROPERTY LINE
	PROPOSED RIGHT-OF-WAY
	PROPOSED EASEMENT
	PROPOSED ROAD CENTERLINE
18" STM	PROPOSED STORM PIPE
SCF SCF SCF	PROPOSED SEDIMENT CONTROL FENCE
72.75	PROPOSED SPOT ELEVATION
	INLET PROTECTION
	RIP RAP OUTLET PROTECTION
1	REVISION NUMBER AND CLOUD REVISION: MOVED LOCATIONS OF OUTLET STRUCTURES

	EXISTING ASPHALT
	EXISTING GRAVEL
	FUTURE ASPHALT (F 3/4 ROAD)
	PROPOSED CONCRETE
	PROPOSED ASPHALT
	FUTURE PHASE

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.



KEY MAP
SCALE: 1":500'

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CITY DEVELOPMENT ENGINEER — DATE 2/7/06

COLORADO — DANIEL J. DAVIS — 36907 — REGISTERED PROFESSIONAL ENGINEER — 1/23/06

CALL UTILITY NOTIFICATION CENTER OF COLORADO
1-800-922-1987
OR 534-0700 IN METRO DENVER
CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES

NO.	DATE	REVISION	BY
1	8-19-05	CITY OF GRAND JUNCTION COMMENTS	

DRAWN BY: DJD
CHECKED BY: REW
DATE: 8-9-05
FILE: GR2

HIGH COUNTRY ENGINEERING, INC.
14 INVERNESS DRIVE EAST, STE F-120, ENGLEWOOD, CO 80112
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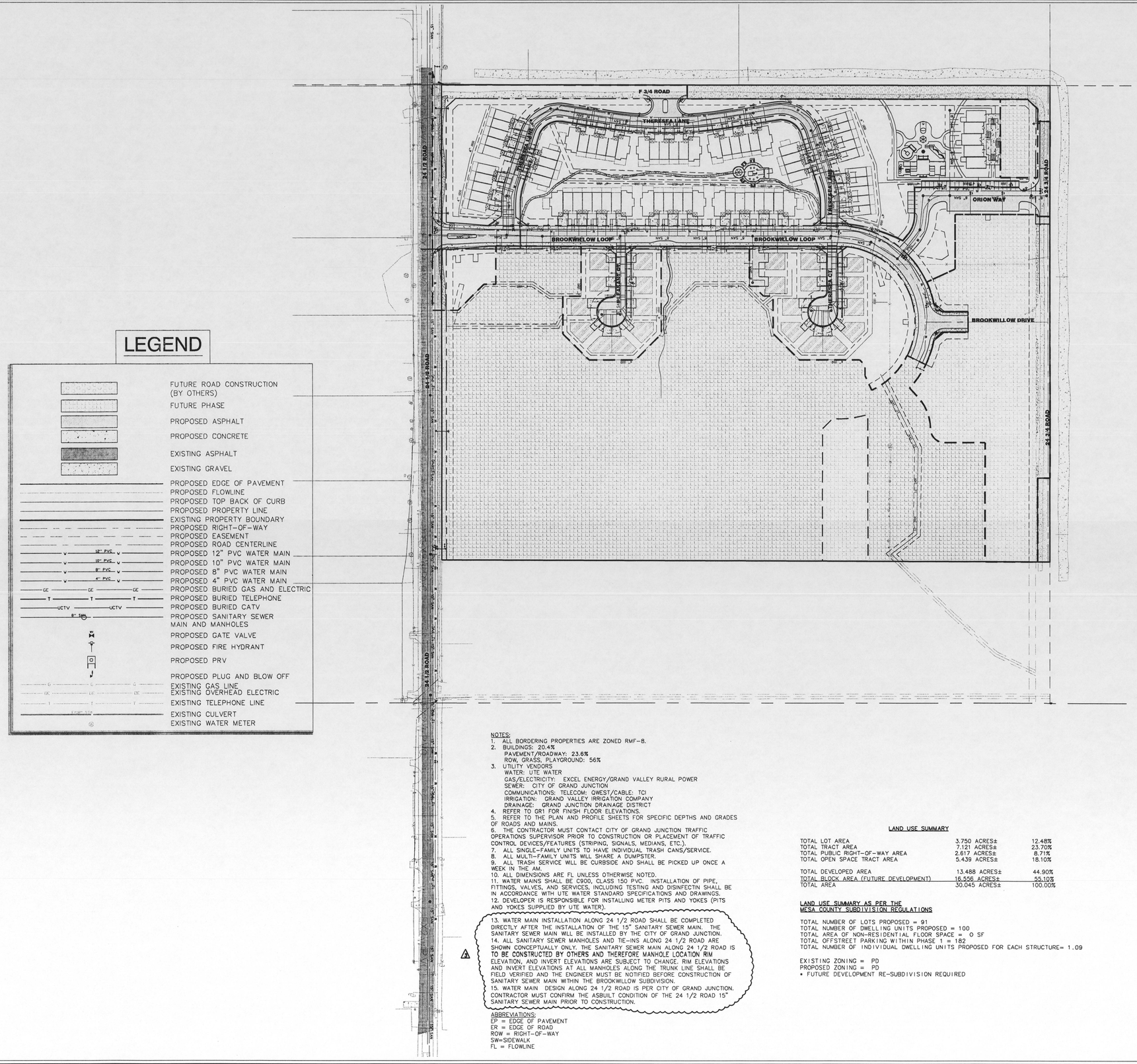
WWW.HCENG.COM

HALL PARTNERS, L.L.C.
CITY OF GRAND JUNCTION, COLORADO

BROOKWILLOW VILLAGE
DETENTION POND GRADING

PROJECT NO.
2031049.00

GR3



LEGEND

- FUTURE ROAD CONSTRUCTION (BY OTHERS)
- FUTURE PHASE
- PROPOSED ASPHALT
- PROPOSED CONCRETE
- EXISTING ASPHALT
- EXISTING GRAVEL
- PROPOSED EDGE OF PAVEMENT
- PROPOSED FLOWLINE
- PROPOSED TOP BACK OF CURB
- PROPOSED PROPERTY LINE
- EXISTING PROPERTY BOUNDARY
- PROPOSED RIGHT-OF-WAY
- PROPOSED EASEMENT
- PROPOSED ROAD CENTERLINE
- 12" PVC — PROPOSED 12" PVC WATER MAIN
- 10" PVC — PROPOSED 10" PVC WATER MAIN
- 8" PVC — PROPOSED 8" PVC WATER MAIN
- 4" PVC — PROPOSED 4" PVC WATER MAIN
- GE — PROPOSED BURIED GAS AND ELECTRIC
- T — PROPOSED BURIED TELEPHONE
- UCTV — PROPOSED BURIED CATV
- 8" SAN — PROPOSED SANITARY SEWER MAIN AND MANHOLES
- PROPOSED GATE VALVE
- PROPOSED FIRE HYDRANT
- PROPOSED PRV
- PROPOSED PLUG AND BLOW OFF
- G — EXISTING GAS LINE
- OE — EXISTING OVERHEAD ELECTRIC
- T — EXISTING TELEPHONE LINE
- EXISTING CULVERT
- EXISTING WATER METER

NOTES:
1. ALL BORDERING PROPERTIES ARE ZONED RMF-8.
2. BUILDINGS: 20.4%
   PAVEMENT/ROADWAY: 23.6%
   ROW, GRASS, PLAYGROUND: 56%
3. UTILITY VENDORS
   WATER: UTE WATER
   GAS/ELECTRICITY: EXCEL ENERGY/GRAND VALLEY RURAL POWER
   SEWER: CITY OF GRAND JUNCTION
   COMMUNICATIONS: TELECOM: QWEST/CABLE: TCI
   IRRIGATION: GRAND VALLEY IRRIGATION COMPANY
   DRAINAGE: GRAND JUNCTION DRAINAGE DISTRICT
4. REFER TO GR1 FOR FINISH FLOOR ELEVATIONS.
5. REFER TO THE PLAN AND PROFILE SHEETS FOR SPECIFIC DEPTHS AND GRADES OF ROADS AND MAINS.
6. THE CONTRACTOR MUST CONTACT CITY OF GRAND JUNCTION TRAFFIC OPERATIONS SUPERVISOR PRIOR TO CONSTRUCTION OR PLACEMENT OF TRAFFIC CONTROL DEVICES/FEATURES (STRIPING, SIGNALS, MEDIANS, ETC.).
7. ALL SINGLE-FAMILY UNITS TO HAVE INDIVIDUAL TRASH CANS/SERVICE.
8. ALL MULTI-FAMILY UNITS WILL SHARE A DUMPSTER.
9. ALL TRASH SERVICE WILL BE CURBSIDE AND SHALL BE PICKED UP ONCE A WEEK IN THE AM.
10. ALL DIMENSIONS ARE FL UNLESS OTHERWISE NOTED.
11. WATER MAINS SHALL BE C900, CLASS 150 PVC. INSTALLATION OF PIPE, FITTINGS, VALVES, AND SERVICES, INCLUDING TESTING AND DISINFECTIN SHALL BE IN ACCORDANCE WITH UTE WATER STANDARD SPECIFICATIONS AND DRAWINGS.
12. DEVELOPER IS RESPONSIBLE FOR INSTALLING METER PITS AND YOKES (PITS AND YOKES SUPPLIED BY UTE WATER).
13. WATER MAIN INSTALLATION ALONG 24 1/2 ROAD SHALL BE COMPLETED DIRECTLY AFTER THE INSTALLATION OF THE 15" SANITARY SEWER MAIN. THE SANITARY SEWER MAIN WILL BE INSTALLED BY THE CITY OF GRAND JUNCTION.
14. ALL SANITARY SEWER MANHOLES AND TIE-INS ALONG 24 1/2 ROAD ARE SHOWN CONCEPTUALLY ONLY. THE SANITARY SEWER MAIN ALONG 24 1/2 ROAD IS **TO BE CONSTRUCTED BY OTHERS AND THEREFORE MANHOLE LOCATION RIM** ELEVATION, AND INVERT ELEVATIONS ARE SUBJECT TO CHANGE. RIM ELEVATIONS AND INVERT ELEVATIONS AT ALL MANHOLES ALONG THE TRUNK LINE SHALL BE FIELD VERIFIED AND THE ENGINEER MUST BE NOTIFIED BEFORE CONSTRUCTION OF SANITARY SEWER MAIN WITHIN THE BROOKWILLOW SUBDIVISION.
15. WATER MAIN DESIGN ALONG 24 1/2 ROAD IS PER CITY OF GRAND JUNCTION. CONTRACTOR MUST CONFIRM THE ASBUILT CONDITION OF THE 24 1/2 ROAD 15" SANITARY SEWER MAIN PRIOR TO CONSTRUCTION.

ABBREVIATIONS:
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LAND USE SUMMARY

TOTAL LOT AREA	3.750 ACRES±	12.48%
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TOTAL AREA	30.045 ACRES±	100.00%

LAND USE SUMMARY AS PER THE MESA COUNTY SUBDIVISION REGULATIONS

TOTAL NUMBER OF LOTS PROPOSED = 91
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TOTAL AREA OF NON-RESIDENTIAL FLOOR SPACE = 0 SF
TOTAL OFFSTREET PARKING WITHIN PHASE 1 = 182
TOTAL NUMBER OF INDIVIDUAL DWELLING UNITS PROPOSED FOR EACH STRUCTURE= 1.09

EXISTING ZONING = PD
PROPOSED ZONING = PD
* FUTURE DEVELOPMENT RE-SUBDIVISION REQUIRED

GRAPHIC SCALE
100 0 50 100 200 400
(IN FEET)
1 inch = 100 ft.

"APPROVED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE. ACCEPTANCE OF THESE PLANS DOES NOT RELIEVE THE DEVELOPER, CONTRACTOR OR ENGINEER FROM CONFORMANCE WITH CITY OF GRAND JUNCTION STANDARDS AND SPECIFICATIONS".
FIRE DEPARTMENT — DATE 2-3-06

APPROVED FOR CONSTRUCTION
UTE WATER CONSERVANCY DISTRICT
District Engineer — 3 Feb 06
TITLE — DATE

"APPROVED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE. ACCEPTANCE OF THESE PLANS DOES NOT RELIEVE THE DEVELOPER, CONTRACTOR OR ENGINEER FROM CONFORMANCE WITH CITY OF GRAND JUNCTION STANDARDS AND SPECIFICATIONS".
CITY DEVELOPMENT ENGINEER — DATE 2/7/06

2/2/06

NO.	DATE	REVISION	BY
1	8-19-05	CITY OF GRAND JUNCTION COMMENTS	TBRD
2	11-15-05	CITY OF GRAND JUNCTION COMMENTS	TBRD
3	12-23-05	UTE WATER AND CITY COMMENTS	ALA
4	1-20-06	SANITARY SEWER REDESIGN PER CITY	DRD

HIGH COUNTRY ENGINEERING, INC.
14 INVERNESS DRIVE EAST, STE F-120, ENGLEWOOD, CO 80112
PHONE (303) 925-0544 FAX (303) 925-0547
1517 BLAKE AVENUE, STE 101, GLENWOOD SPRINGS, CO 81601
PHONE (970) 945-8676 FAX (970) 945-2555
WWW.HCENG.COM

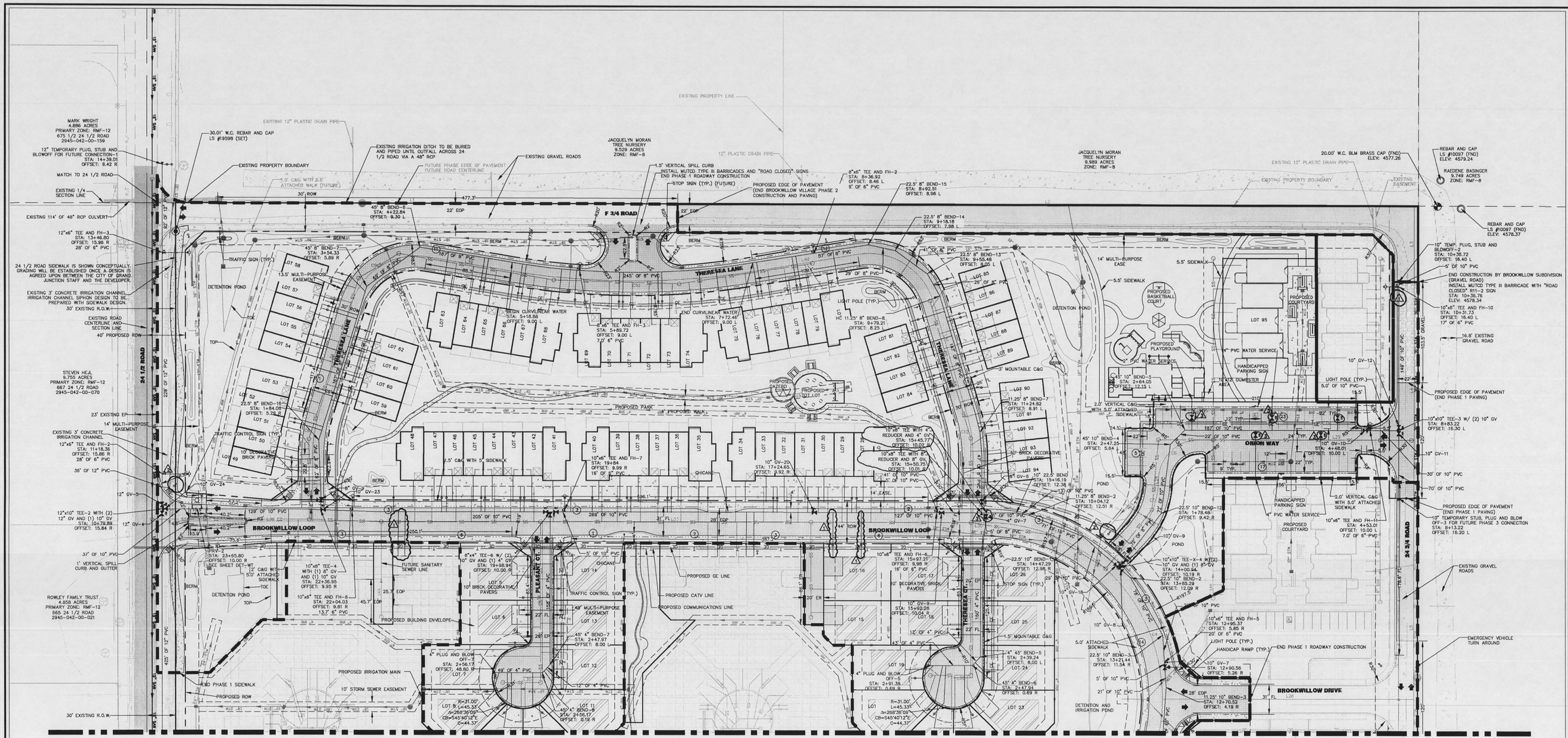
DRAWN BY: ALA
CHECKED BY: REW
DATE: 5-13-05
FILE: SP-0

HALL PARTNERS, L.L.C.
CITY OF GRAND JUNCTION, COLORADO

BROOKWILLOW VILLAGE
OVERALL SITE PLAN

PROJECT NO.
2031049.00

SP-0

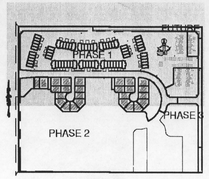


MATCH TO SHEET SP-2

REVISIONS THIS SHEET INCLUDE:
1. CHANGED WATER SERVICE LOCATIONS AND REMOVED 4" WATER LINE PER UTE WATER COMMENTS.
2. REMOVED GATE VALVE PER UTE WATER COMMENTS.
3. MOVED GATE VALVE LOCATIONS PER UTE WATER COMMENTS.
4. CHANGED PHASE OF F 3/4 ROAD.

LEGEND

PROPOSED GATE VALVE	PROPOSED EDGE OF PAVEMENT
PROPOSED FIRE HYDRANT	PROPOSED FLOWLINE
PROPOSED PRV	PROPOSED TOP BACK OF CURB
PROPOSED PLUG AND BLOW OFF	PROPOSED TOP BACK OF WALK
EXISTING GAS LINE	EXISTING PROPERTY LINE
EXISTING OVERHEAD ELECTRIC	PROPOSED RIGHT-OF-WAY
EXISTING TELEPHONE LINE	PROPOSED EASEMENT
EXISTING FENCE	PROPOSED ROAD CENTERLINE
EXISTING CULVERT	PROPOSED 12" WATER MAIN
EXISTING WATER METER	PROPOSED 10" WATER MAIN
EXISTING ASPHALT	PROPOSED 8" WATER MAIN
EXISTING GRAVEL	PROPOSED 4" WATER MAIN
PROPOSED ASPHALT	PROPOSED 8" SANITARY SEWER MAIN AND MANHOLES
FUTURE ASPHALT	PROPOSED 15" SANITARY SEWER MAIN AND MANHOLES (BY OTHERS)
PROPOSED CONCRETE	PROPOSED LOT NUMBER
FUTURE PHASE	PROPOSED STREET LIGHT
FUTURE ROAD CONSTRUCTION (BY OTHERS)	PROPOSED STORM INLET
PROPOSED PHASE LINE	PROPOSED AREA INLET
NUMBER OF PARKING SPOTS	PROPOSED STORM PIPE
	PROPOSED GARAGE
	PROPOSED TRAFFIC CONTROL SIGN
	REVISION NUMBER AND CLOUD
	PROPOSED BURIED GAS AND ELECTRIC
	PROPOSED BURIED TELEPHONE
	PROPOSED BURIED CATV



KEY MAP
SCALE: 1"=500'

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Public Works DEPARTMENT — 2/2/06 DATE

APPROVED FOR CONSTRUCTION
UTE WATER CONSERVANCY DISTRICT
District Engineer — 31 Jan 06
TITLE — DATE

"APPROVED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE. ACCEPTANCE OF THESE PLANS DOES NOT RELIEVE THE DEVELOPER, CONTRACTOR OR ENGINEER FROM CONFORMANCE WITH CITY OF GRAND JUNCTION STANDARDS AND SPECIFICATIONS".
CITY DEVELOPMENT ENGINEER — 2/1/06 DATE

COLORADO LICENSED — CHERYL L. SEVERSON — No. 38307 — 2/2/06 — PROFESSIONAL ENGINEER

NO.	DATE	REVISION	BY
1	8-19-05	CITY OF GRAND JUNCTION COMMENTS	DRD
2	11-15-05	CITY OF GRAND JUNCTION COMMENTS	DRD
3	12-23-05	UTE WATER AND CITY COMMENTS	ALA
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DRAWN BY: ALA
CHECKED BY: REW
DATE: 6-30-05
FILE: SP-1

HIGH COUNTRY ENGINEERING, INC.
14 INVERNESS DRIVE EAST, SITE F-120, ENGLEWOOD, CO 80112
PHONE (303) 925-9544 FAX (303) 925-0547
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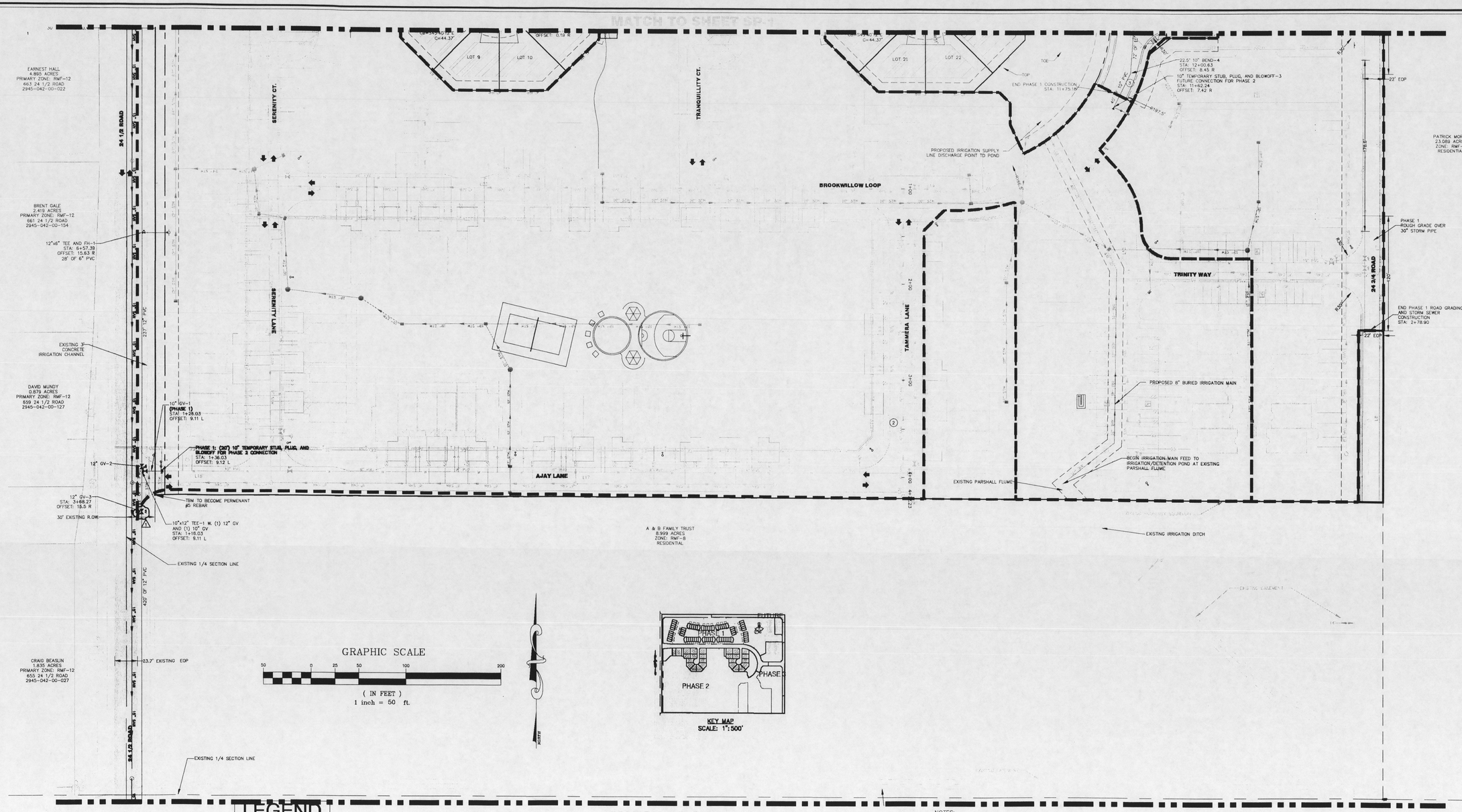
HALL PARTNERS, LLC
CITY OF GRAND JUNCTION, COLORADO

BROOKWILLOW VILLAGE
SITE PLAN

PROJECT NO.
2031049.00

SP-1



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	REVISION NUMBER AND CLOUD
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FIRE DEPARTMENT — DATE 2/8/06

APPROVED FOR CONSTRUCTION
UTE WATER CONSERVANCY DISTRICT
TITLE District Engineer — DATE 31 Jan 06

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CITY DEVELOPMENT ENGINEER — DATE 2/7/06

NO.	DATE	REVISION	BY
1	8-19-05	CITY OF GRAND JUNCTION COMMENTS	BRD
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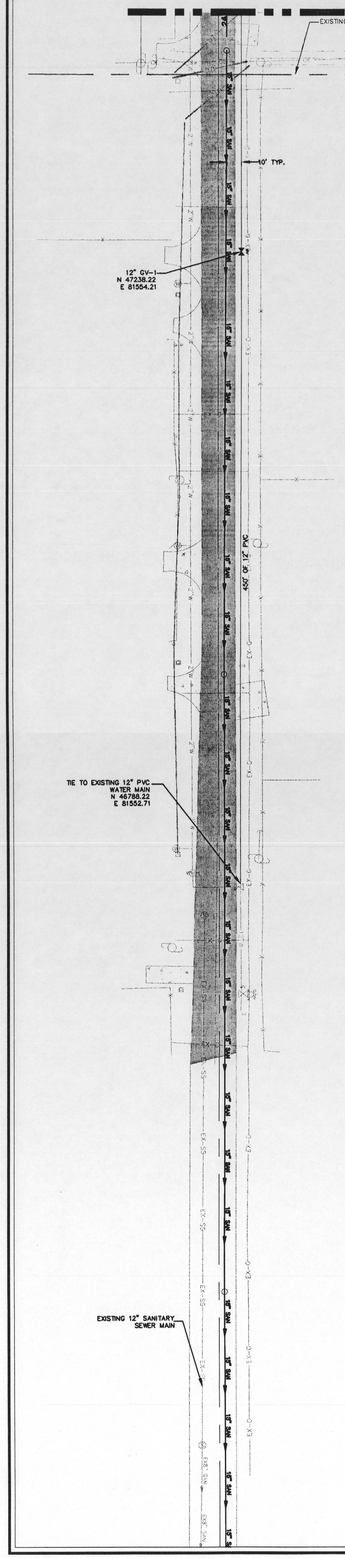
CITY OF GRAND JUNCTION, COLORADO

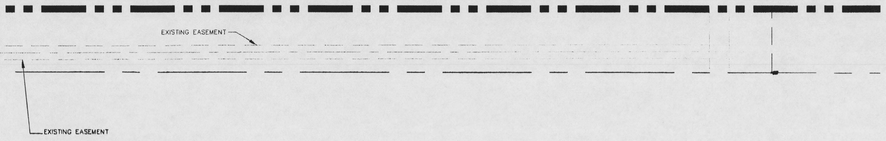
BROOKWILLOW VILLAGE
SITE PLAN

PROJECT NO.
2031049.00

SP-2

MATCH TO SHEET SP-2





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LOT 47

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
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NORTH

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14. ALL SANITARY SEWER MANHOLES AND TIE-INS ALONG 24 1/2 ROAD ARE SHOWN CONCEPTUALLY ONLY. THE SANITARY SEWER MAIN ALONG 24 1/2 ROAD IS TO BE CONSTRUCTED BY OTHERS AND THEREFORE MANHOLE LOCATION, RIM ELEVATION, AND INVERT ELEVATIONS ARE SUBJECT TO CHANGE. RIM ELEVATIONS AND INVERT ELEVATIONS AT ALL MANHOLES ALONG THE TRUNK LINE SHALL BE FIELD VERIFIED AND THE ENGINEER MUST BE NOTIFIED BEFORE CONSTRUCTION OF SANITARY SEWER MAIN WITHIN THE BROOKWILLOW SUBDIVISION.
15. WATER MAIN DESIGN ALONG 24 1/2 ROAD IS PER CITY OF GRAND JUNCTION. CONTRACTOR MUST CONFIRM THE ASBUILT CONDITION OF THE 24 1/2 ROAD 15" SANITARY SEWER MAIN PRIOR TO CONSTRUCTION.

ABBREVIATIONS:
EP = EDGE OF PAVEMENT
ER = EDGE OF ROAD
ROW = RIGHT-OF-WAY
SW=SIDEWALK
FL = FLOWLINE

ROAD CENTERLINE LINE DATA

LINE TABLE

LINE	LENGTH	BEARING
L1	550.72	S89°55'52"E
L2	769.30	S89°55'52"E
L3	78.86	S00°01'53"W
L4	223.50	S00°01'53"W
L5	267.63	S00°01'53"W
L6	147.63	S00°01'53"W
L7	120.00	S00°01'53"W
L8	177.98	S00°01'53"W
L9	269.19	S90°00'00"E
L10	227.67	S00°00'00"E
L11	96.00	N90°00'00"E
L12	42.71	S00°00'00"E
L13	49.72	S42°29'09"E
L14	58.33	S89°58'16"E
L15	304.85	S00°00'00"E
L16	17.38	S00°00'00"E
L17	664.66	S89°58'16"E
L18	150.40	S89°58'16"E
L19	304.85	N00°01'44"E
L20	160.32	N00°00'00"E
L21	20.00	N90°00'00"E
L22	449.26	S89°58'16"E
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L25	215.25	S89°58'16"E
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L31	160.62	S00°01'44"W
L32	20.00	N90°00'00"W
L33	685.82	N89°58'16"W
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L35	20.00	N90°00'00"W
L36	172.19	N89°58'16"W
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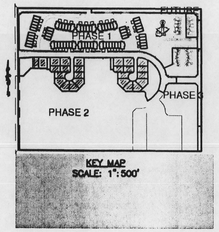
L38	117.40	N16°47'18"E
L39	88.29	S80°39'31"E
L40	109.08	N80°39'17"E
L41	121.33	S16°47'18"E
L42	68.22	S00°01'44"W

ROAD CENTERLINE CURVE DATA

CURVE TABLE

CURVE	LENGTH	RADIUS	TANGENT	DELTA	CHORD DIRECTION
C1	59.32	80.00	31.10	57.97	N21°14'34"W
C2	134.96	182.00	70.75	131.89	N68°45'26"E
C3	150.93	182.00	80.11	146.64	N23°45'26"E
C4	150.93	182.00	80.11	146.64	N23°45'26"W
C5	59.32	80.00	31.10	57.97	N21°14'34"E
C6	66.76	42.50	42.50	90.10	S45°00'00"W
C7	134.96	182.00	70.75	131.89	N68°45'26"W
C8	43.88	150.00	22.10	43.72	S08°24'31"W
C9	100.94	70.00	61.52	92.42	S58°05'54"W
C10	253.58	772.00	127.94	252.44	N88°59'53"E
C11	100.94	70.00	61.52	92.42	N58°06'00"W
C12	44.03	150.00	22.17	43.87	N08°22'47"W



"APPROVED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE. ACCEPTANCE OF THESE PLANS DOES NOT RELIEVE THE DEVELOPER, CONTRACTOR OR ENGINEER FROM CONFORMANCE WITH CITY OF GRAND JUNCTION STANDARDS AND SPECIFICATIONS".
Charles Mathis — 2/7/06
FIRE DEPARTMENT — DATE

APPROVED FOR CONSTRUCTION
UTE WATER CONSERVANCY DISTRICT
District Engineer — 31 Jan 06
TITLE — DATE

"APPROVED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE. ACCEPTANCE OF THESE PLANS DOES NOT RELIEVE THE DEVELOPER, CONTRACTOR OR ENGINEER FROM CONFORMANCE WITH CITY OF GRAND JUNCTION STANDARDS AND SPECIFICATIONS".
2/7/06
CITY DEVELOPMENT ENGINEER — DATE

COLORADO LICENSED
DANIEL R. DENTON
39307
1/31/06
PROFESSIONAL ENGINEER

CALL UTILITY NOTIFICATION CENTER OF COLORADO 1-800-922-1987 OR 534-0700 IN METRO DENVER
CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES

NO	DATE	REVISION	BY
1	8-19-05	CITY OF GRAND JUNCTION COMMENTS	RD
2	11-15-05	CITY OF GRAND JUNCTION COMMENTS	RD
3	12-23-05	UTE WATER AND CITY COMMENTS	ALA
4	1-20-06	SANITARY SEWER REDESIGN BY CITY	DRD

DRAWN BY: ALA
CHECKED BY: REW
DATE: 6-3-05
FILE: SP-1

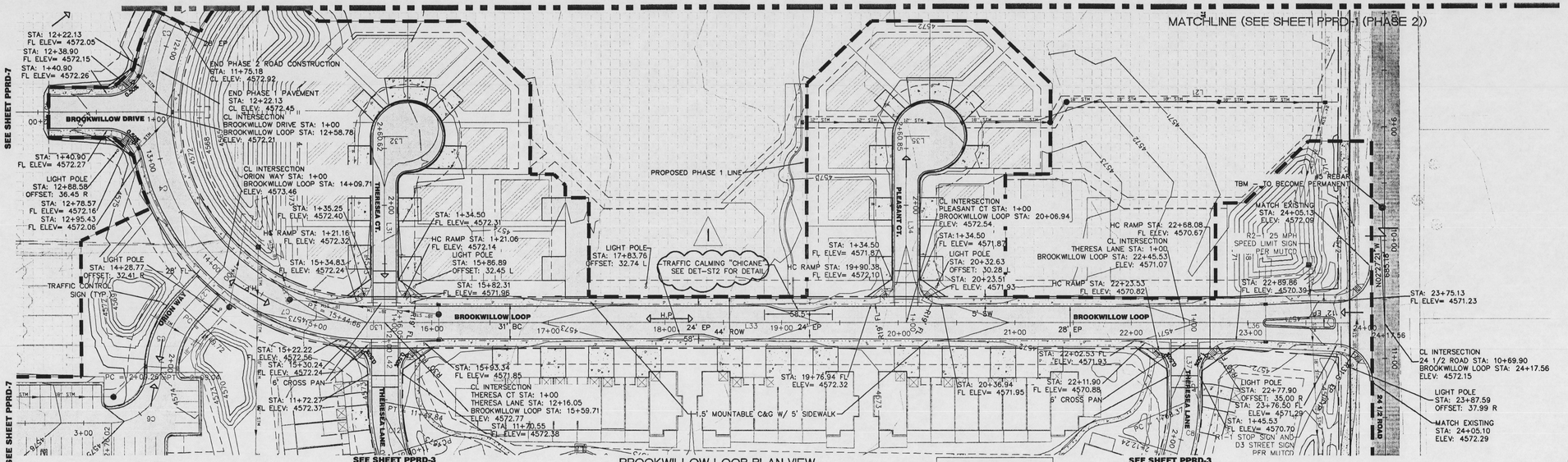
HIGH COUNTRY ENGINEERING, INC.
14 INVERNESS DRIVE EAST, STE F-120, ENGLEWOOD, CO 80112
PHONE (303) 925-0544 FAX (303) 925-0547
1517 BLAKE AVENUE, STE 101, GLENWOOD SPRINGS, CO 81601
PHONE (970) 945-8676 FAX (970) 945-2555
WWW.HCENG.COM

HALL PARTNERS, LLC
CITY OF GRAND JUNCTION, COLORADO

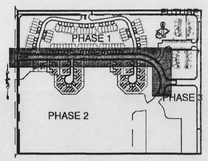
BROOKWILLOW VILLAGE
SITE PLAN

PROJECT NO.
2031049.00

SP-3

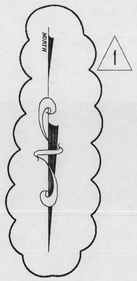


BROOKWILLOW LOOP PLAN VIEW
(STATIONING IS LEFT TO RIGHT)



KEY MAP
SCALE: 1"=500'

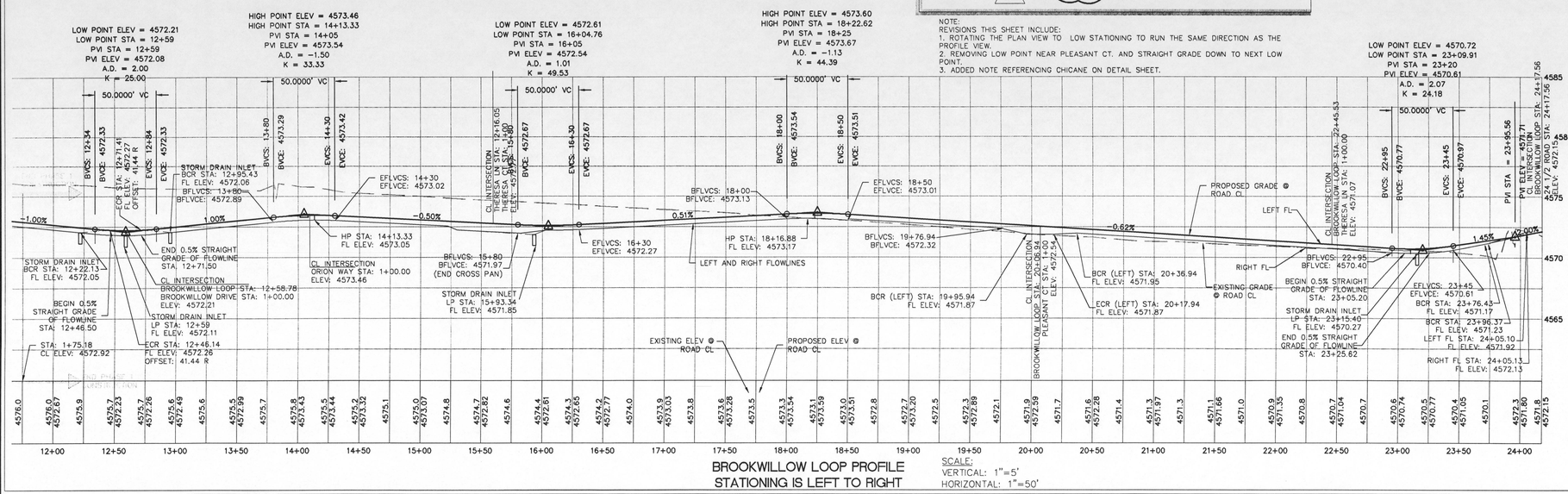
GRAPHIC SCALE
50 0 25 50 100 200
(IN FEET)
1 inch = 50 ft.



LEGEND

- EXISTING 5' MAJOR CONTOUR (5470)
- EXISTING 1' MINOR CONTOUR (5469)
- PROPOSED 5' MAJOR CONTOUR (5470)
- PROPOSED 1' MINOR CONTOUR (5469)
- PROPOSED EDGE OF PAVEMENT
- PROPOSED FLOWLINE
- PROPOSED TOP BACK OF CURB
- EXISTING PROPERTY LINE
- PROPOSED RIGHT-OF-WAY
- PROPOSED EASEMENT
- PROPOSED STORM PIPE
- PROPOSED PHASE LINE
- EXISTING ASPHALT
- EXISTING GRAVEL
- FUTURE ASPHALT (F 3/4 ROAD)
- PROPOSED CONCRETE
- PROPOSED ASPHALT
- FUTURE PHASE
- FUTURE CONSTRUCTION (BY OTHERS)
- PROPOSED LIGHT POLE
- PROPOSED SPOT ELEVATION
- REVISION NUMBER AND CLOUD

NOTE:
REVISIONS THIS SHEET INCLUDE:
1. ROTATING THE PLAN VIEW TO LOW STATIONING TO RUN THE SAME DIRECTION AS THE PROFILE VIEW.
2. REMOVING LOW POINT NEAR PLEASANT CT. AND STRAIGHT GRADE DOWN TO NEXT LOW POINT.
3. ADDED NOTE REFERENCING CHICANE ON DETAIL SHEET.



BROOKWILLOW LOOP PROFILE
STATIONING IS LEFT TO RIGHT

SCALE:
VERTICAL: 1"=5'
HORIZONTAL: 1"=50'

ROAD CENTERLINE LINE DATA

LINE TABLE		
LINE	LENGTH	BEARING
L1	550.72	S89°55'52"E
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L4	223.50	S00°01'53"W
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C12	44.03	150.00	22.17	43.87	N08°22'47"W

NOTES:
1. ROAD CROSS SECTION AND PROFILE SHALL BE CONSTRUCTED PER CITY OF GRAND JUNCTION STANDARDS AND SPECIFICATIONS.

2. REFER TO CROSS SECTION SHEETS FOR MORE DETAILED ROAD INFORMATION.

3. REFER TO SHEET DET-ST FOR STREET DETAILS AND CORE SECTIONS.

4. CONTRACTOR SHALL NOTE THE ADJUSTMENT OF ALL MH RIMS AND VALVE COVERS FOR FINAL GRADE.

5. SPOT ELEVATIONS ARE BACK OF CURB AND PROPERTY LINE.5

6. REFER TO GRADING PLAN FOR MORE GRADING DETAIL.

7. REFER TO THE MUTCD STANDARDS FOR ALL SIGNAGE AND BARRICADE DETAILS.

8. ELEVATIONS ARE BASED ON TBM, A REBAR IN THE SOUTHWEST CORNER OF THE PROPERTY AS SHOWN, ELEVATION EQUALS 4570.85 FEET TOP OF BAR. TBM TO BECOME PERMENANT BENCH MARK. TIE TBM TO CL STA 23+75.13.

9. CONTOURS ARE SHOWN IN 1' INTERVALS.

10. ADD 4500.00' TO ALL SPOT ELEVATIONS.

ABBREVIATIONS:
CL: CENTERLINE
EP: EDGE OF PAVEMENT
SW: SIDEWALK
FL: FLOWLINE
BFLVCS: BEGIN FLOWLINE VERTICAL CURVE STATION
BCR: BEGIN CURB RETURN
EFLVCS: END FLOWLINE VERTICAL CURVE STATION
ECR: END CURB RETURN
C&G: CURB AND GUTTER
STRM: STORM
STRMH: STORM MANHOLE
SSMH: SANITARY SEWER MANHOLE
PRV: PRESSURE REDUCING VAULT
BW: BACK OF SIDEWALK
TBM: TEMPORARY BENCH MARK

COLORADO LICENSED DATE 2/7/06 33807 PROFESSIONAL ENGINEER

"APPROVED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE. ACCEPTANCE OF THESE PLANS DOES NOT RELIEVE THE DEVELOPER, CONTRACTOR OR ENGINEER FROM CONFORMANCE WITH CITY OF GRAND JUNCTION STANDARDS AND SPECIFICATIONS".

CITY DEVELOPMENT ENGINEER — DATE 2/7/06

NOTE: CONTRACTOR MUST CONTACT CITY OF GRAND JUNCTION TRAFFIC OPERATIONS SUPERVISOR PRIOR TO CONSTRUCTION OR PLACEMENT OF TRAFFIC CONTROL DEVICES (STRIPING, SIGNALS, MEDIANS, ETC.)

CALL UTILITY NOTIFICATION CENTER OF COLORADO
1-800-922-1967
OR 534-0700 IN METRO DENVER

CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES

NO.	DATE	REVISION	BY
1.	8-19-05	CITY OF GRAND JUNCTION COMMENTS	SRD
2.	11-15-05	CITY OF GRAND JUNCTION COMMENTS	SRD

DRAWN BY: DD
CHECKED BY: REW
DATE: 5-13-05
F:\...\PPRDMAIN.DGN

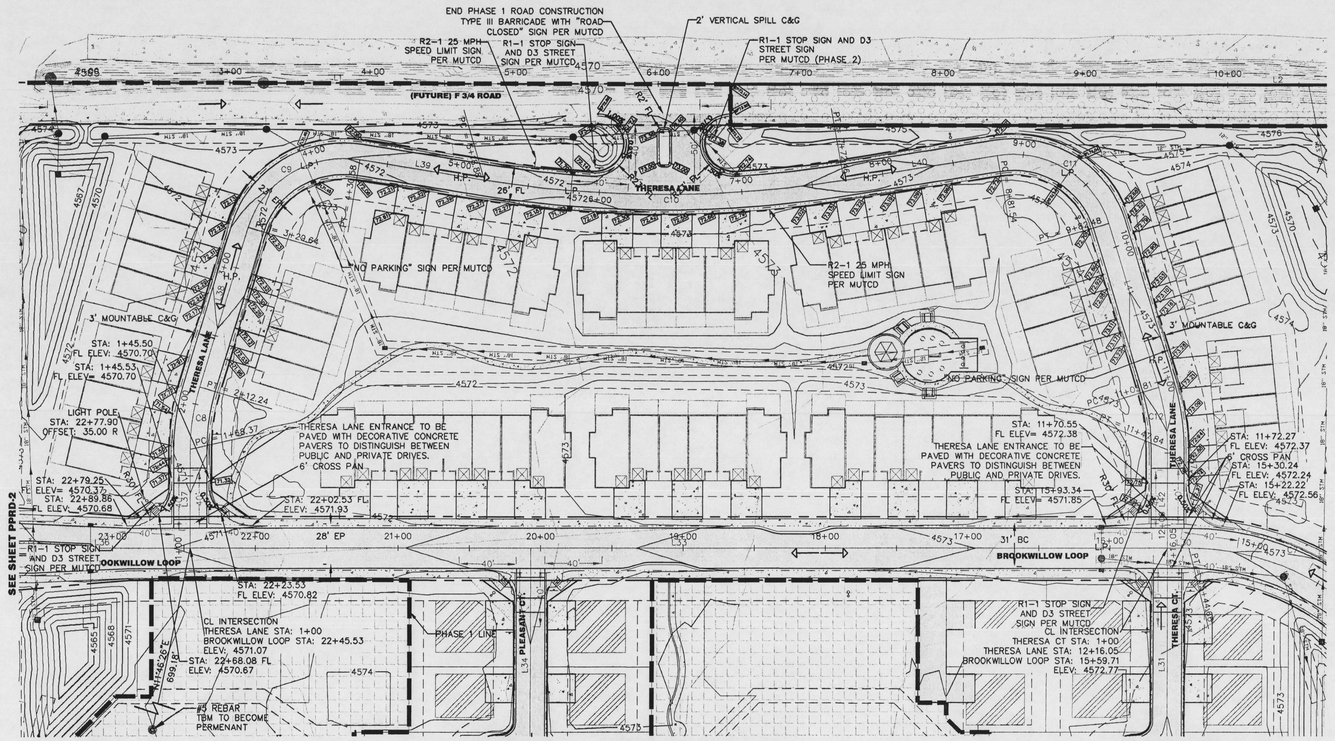
HIGH COUNTRY ENGINEERING, INC.
14 INVERNESS DRIVE EAST, STE F-120, ENGLEWOOD, CO 80112
PHONE (303) 925-0544 FAX (303) 925-0547
1517 BLAKE AVENUE, STE 101, GLENWOOD SPRINGS, CO 81601
PHONE (970) 945-8676 FAX (970) 945-2525
WWW.HCENG.COM

HALL PARTNERS, L.L.C.
CITY OF GRAND JUNCTION, COLORADO

BROOKWILLOW VILLAGE
BROOKWILLOW LOOP PLAN AND PROFILE STA: 11+75 TO END

PROJECT NO.
2031049.00

PPRD-2

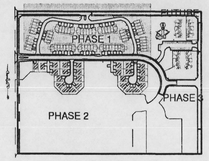


THERESEA LANE PLAN VIEW

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.



LEGEND

- EXISTING 5' MAJOR CONTOUR
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- PROPOSED EDGE OF PAVEMENT
- PROPOSED FLOWLINE
- PROPOSED TOP BACK OF CURB
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- PROPOSED ASPHALT
- FUTURE PHASE
- FUTURE CONSTRUCTION (BY OTHERS)
- PROPOSED LIGHT POLE
- PROPOSED SPOT ELEVATION
- REVISION NUMBER AND CLOUD

NOTES:
1. ROAD CROSS SECTION AND PROFILE SHALL BE CONSTRUCTED PER CITY OF GRAND JUNCTION STANDARDS AND SPECIFICATIONS.

2. REFER TO CROSS SECTION SHEETS FOR MORE DETAILED ROAD INFORMATION.

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4. CONTRACTOR SHALL NOTE THE ADJUSTMENT OF ALL MH RIMS AND VALVE COVERS FOR FINAL GRADE.

5. SPOT ELEVATIONS ARE BACK OF CURB AND PROPERTY LINE.5

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9. CONTOURS ARE SHOWN IN 1' INTERVALS.

10. ADD 4500.00' TO ALL SPOT ELEVATIONS.

11. REVISIONS ON THIS SHEET INCLUDE CHANGING GRADING ON BROOKWILLOW LOOP AND THERESA LANE INTERSECTION AND ADDING "NO PARKING" SIGNS.

ABBREVIATIONS:
CL: CENTERLINE
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SW: SIDEWALK
FL: FLOWLINE
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BCR: BEGIN CURB RETURN
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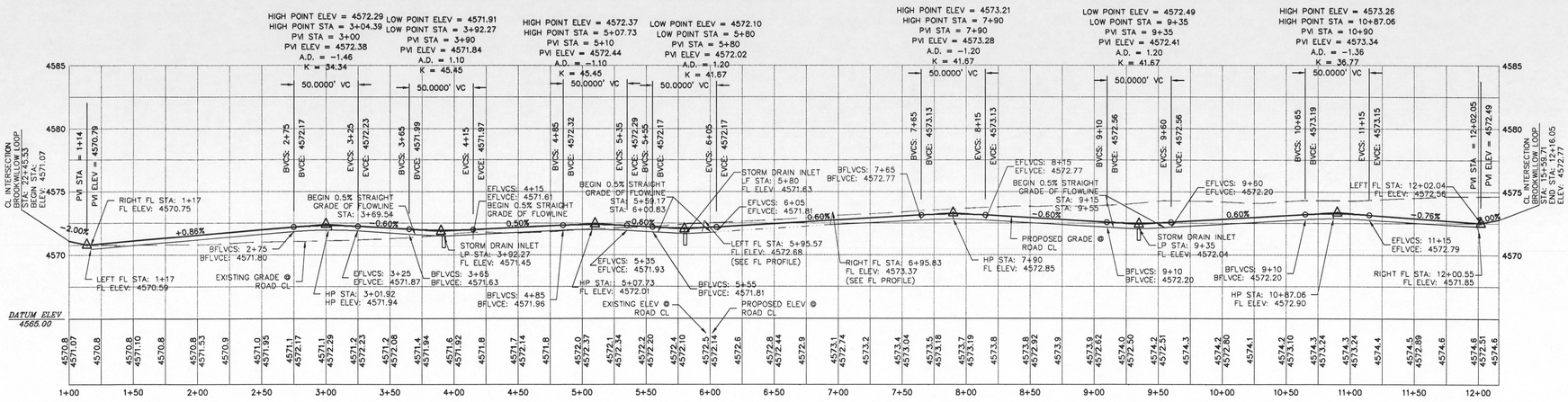

THERESEA LANE PROFILE
STATIONING IS LEFT TO RIGHT

SCALE:
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HORIZONTAL: 1"=50'

"APPROVED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE. ACCEPTANCE OF THESE PLANS DOES NOT RELIEVE THE DEVELOPER, CONTRACTOR OR ENGINEER FROM CONFORMANCE WITH CITY OF GRAND JUNCTION STANDARDS AND SPECIFICATIONS".

CITY DEVELOPMENT ENGINEER — 2/7/06 DATE

NOTE: CONTRACTOR MUST CONTACT CITY OF GRAND JUNCTION TRAFFIC OPERATIONS SUPERVISOR PRIOR TO CONSTRUCTION OR PLACEMENT OF TRAFFIC CONTROL DEVICES (STRIPING, SIGNALS, MEDIANS, ETC.)

NO.	DATE	REVISION	BY
1	8-19-05	CITY OF GRAND JUNCTION COMMENTS	SRD
2	11-1-505	CITY OF GRAND JUNCTION COMMENTS	SRD

DRAWN BY: DD
CHECKED BY: REW
DATE: 5-13-05
F.P.: PPRD-PRIVATE-LOOPS

CALL UTILITY NOTIFICATION CENTER OF COLORADO
1-800-922-1987
OR 8-54 (303) IN METRO DENVER

CALL BEFORE YOU DIG IN ADVANCE OF EXCAVATION. IT'S THE LAW! EXCAVATORS MUST NOTIFY UTILITIES DIRECTLY OF INTENT TO EXCAVATE.

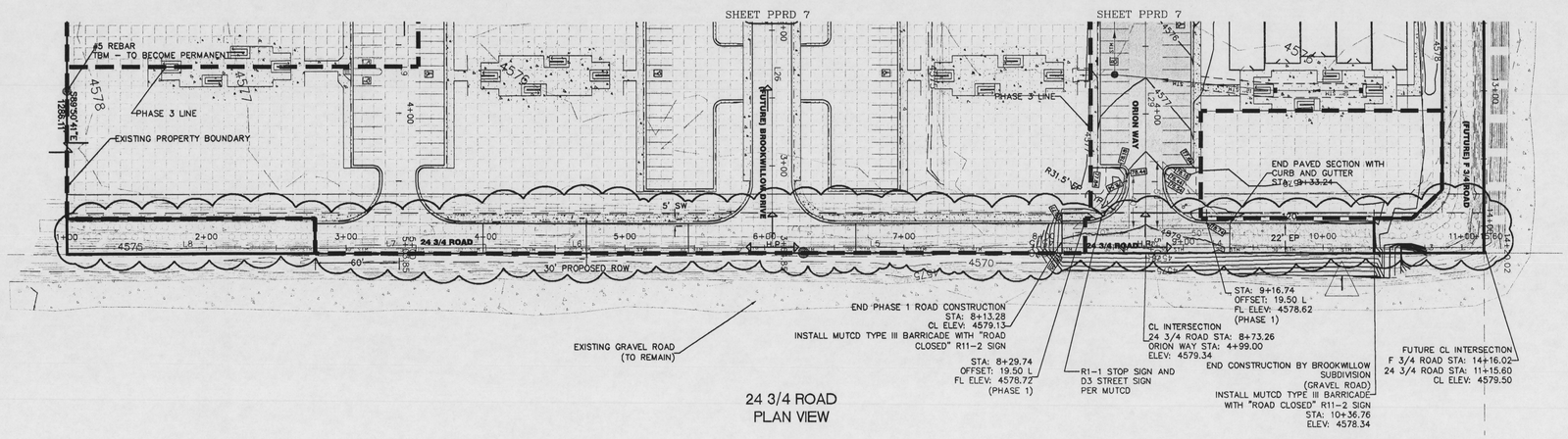
HIGH COUNTRY ENGINEERING, INC.
14 INVERNESS DRIVE EAST, STE F-120, ENGLEWOOD, CO 80112
PHONE (303) 925-0544 FAX (303) 925-0547
1517 BLAKE AVENUE, STE 101, GLENWOOD SPRINGS, CO 81601
PHONE (970) 945-2545 FAX (970) 945-2555
WWW.HCENG.COM

HALL PARTNERS, L.L.C.
CITY OF GRAND JUNCTION, COLORADO

BROOKWILLOW VILLAGE
THERESEA LANE PLAN AND PROFILE STA: 1+00 TO END

PROJECT NO.
2031049.00

PPRD-3



24 3/4 ROAD
PLAN VIEW

NOTES:
1. ROAD CROSS SECTION AND PROFILE SHALL BE CONSTRUCTED PER CITY OF GRAND JUNCTION STANDARDS AND SPECIFICATIONS.

2. REFER TO CROSS SECTION SHEETS FOR MORE DETAILED ROAD INFORMATION.

3. REFER TO SHEET DET-ST FOR STREET DETAILS AND CORE SECTIONS.

4. CONTRACTOR SHALL NOTE THE ADJUSTMENT OF ALL MH RIMS AND VALVE COVERS FOR FINAL GRADE.

5. THE NORTH AND SOUTH PORTIONS OF 24 3/4 ROAD DURING PHASE 1 SHALL BE GRAVEL AND NO CURB, GUTTER, AND SIDEWALK SHALL BE CONSTRUCTED UNTIL FUTURE CONSTRUCTION. FIRE ACCESS TURN AROUNDS WILL BE PAVED WITH CURB AND GUTTER AT CURB RETURNS.

6. SPOT ELEVATIONS ARE BACK OF CURB AND PROPERTY LINE.

7. REFER TO GRADING PLAN FOR MORE GRADING DETAIL.

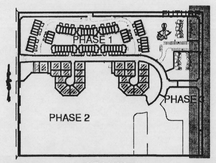
8. REFER TO THE MUTCD STANDARDS FOR ALL SIGNAGE AND BARRICADE DETAILS.

9. ELEVATIONS ARE BASED ON TBM, A REBAR IN THE SOUTHWEST CORNER OF THE PROPERTY AS SHOWN, ELEVATION EQUALS 4570.85 FEET TOP OF BAR. TBM TO BECOME PERMENANT BENCH MARK. TIE TBM TO CL STA 1+00.

10. CONTOURS ARE SHOWN IN 1' INTERVALS.

11. ADD 4500.00' TO ALL SPOT ELEVATIONS.

ABBREVIATIONS:
CL: CENTERLINE
EP: EDGE OF PAVEMENT
SW: SIDEWALK
FL: FLOWLINE
BFLVCS: BEGIN FLOWLINE VERTICAL CURVE STATION
BCR: BEGIN CURB RETURN
EFLVCS: END FLOWLINE VERTICAL CURVE STATION
ECR: END CURB RETURN
C&G: CURB AND GUTTER
STRM: STORM
STRMH: STORM MANHOLE
SSMH: SANITARY SEWER MANHOLE
PRV: PRESSURE REDUCING VAULT
BW: BACK OF SIDEWALK
TBM: TEMPORARY BENCH MARK



NORTH

GRAPHIC SCALE
50 0 25 50 100 200
(IN FEET)
1 inch = 50 ft.

LEGEND

5470	EXISTING MAJOR CONTOUR
5469	EXISTING MINOR CONTOUR
5470	PROPOSED MAJOR CONTOUR
5469	PROPOSED MINOR CONTOUR
	PROPOSED EDGE OF PAVEMENT
	PROPOSED FLOWLINE
	PROPOSED TOP BACK OF CURB
	EXISTING PROPERTY LINE
	PROPOSED RIGHT-OF-WAY
	PROPOSED EASEMENT
36" STM 30" STM 30" STM	PROPOSED STORM PIPE
	EXISTING ASPHALT
	EXISTING GRAVEL
	FUTURE ASPHALT (F 3/4 ROAD)
	PROPOSED CONCRETE
	PROPOSED ASPHALT
	FUTURE PHASE
	FUTURE CONSTRUCTION
	PROPOSED LIGHT POLE
	PROPOSED SPOT ELEVATION
1	REVISION NUMBER AND CLOUD

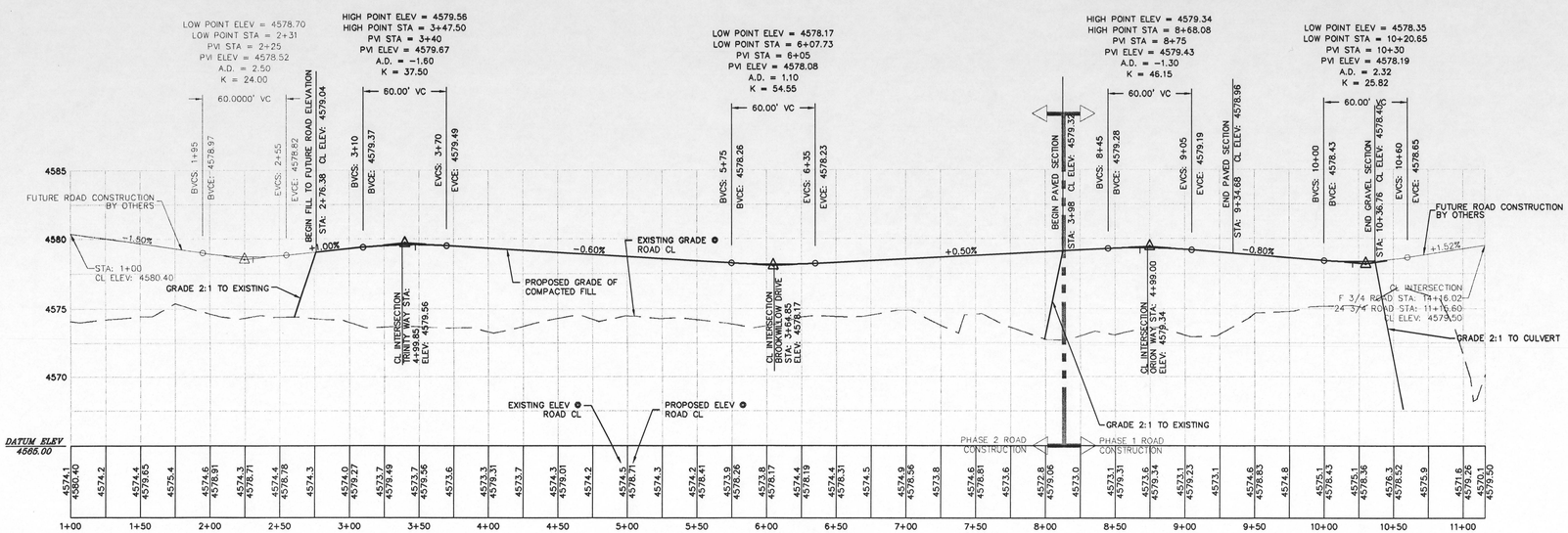
NOTE RVISION THIS SHEET:
SHIFTED 24 3/4 ROAD TO THE WEST 4' AND REGRADED

ROAD CENTERLINE LINE DATA

LINE TABLE		
LINE	LENGTH	BEARING
L1	550.72	S89°55'52"E
L2	769.30	S89°55'52"E
L3	78.86	S00°01'53"W
L4	223.50	S00°01'53"W
L5	267.63	S00°01'53"W
L6	147.63	S00°01'53"W
L7	120.00	S00°01'53"W
L8	177.98	S00°01'53"W
L9	269.19	S90°00'00"E
L10	227.67	S00°00'00"E
L11	96.00	N90°00'00"E
L12	42.71	S00°00'00"E
L13	49.72	S42°29'09"E
L14	58.33	S89°58'16"E
L15	304.85	S00°00'00"E
L16	17.38	S00°00'00"E
L17	684.66	S89°58'16"E
L18	150.40	S89°58'16"E
L19	304.85	N00°01'44"E
L20	160.32	N00°00'00"E
L21	20.00	N90°00'00"E
L22	449.26	S89°58'16"E
L23	160.53	N00°01'44"E
L24	20.00	N90°00'00"E
L25	215.25	S89°58'16"E
L26	264.85	N90°00'00"E
L27	49.72	N42°29'09"E
L28	0.21	N00°00'00"E
L29	226.98	S90°00'00"E
L30	15.04	N89°58'16"W
L31	160.62	S00°01'44"W
L32	20.00	N90°00'00"W
L33	685.82	N89°58'16"W
L34	160.85	S00°01'44"W
L35	20.00	N90°00'00"W
L36	172.19	N89°58'16"W
L37	68.37	N00°01'44"E
L38	117.40	N16°47'18"E
L39	88.29	S80°35'31"E
L40	109.08	N80°35'17"E
L41	121.33	S16°47'18"E
L42	68.22	S00°01'44"W

ROAD CENTERLINE CURVE DATA

CURVE TABLE					
CURVE	LENGTH	RADIUS	TANGENT	DELTA	CHORD DIRECTION
C1	59.32	80.00	31.10	57.97	N21°14'34"W
C2	134.96	182.00	70.75	131.89	N68°45'26"E
C3	150.93	182.00	80.11	146.64	N23°45'26"E
C4	150.93	182.00	80.11	146.64	N23°45'26"W
C5	59.32	80.00	31.10	57.97	N21°14'34"E
C6	66.76	42.50	42.50	60.10	S45°00'00"W
C7	134.96	182.00	70.75	131.89	N68°45'26"W
C8	43.88	150.00	22.10	43.72	S08°24'31"W
C9	100.94	70.00	61.52	92.42	S58°05'54"W
C10	253.58	772.00	127.94	252.44	N89°59'53"E
C11	100.94	70.00	61.52	92.42	N58°06'00"W
C12	44.03	150.00	22.17	43.87	N08°22'47"W



24 3/4 ROAD PROFLIE
STATIONING IS LEFT TO RIGHT

SCALE:
VERTICAL: 1"=5'
HORIZONTAL: 1"=50'

COLORADO REGISTERED DARRELL E. REINEKE 39307 PROFESSIONAL ENGINEER 1/27/06

"APPROVED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE. ACCEPTANCE OF THESE PLANS DOES NOT RELIEVE THE DEVELOPER, CONTRACTOR OR ENGINEER FROM CONFORMANCE WITH CITY OF GRAND JUNCTION STANDARDS AND SPECIFICATIONS".

CITY DEVELOPMENT ENGINEER — DATE 2/7/06

NOTE: CONTRACTOR MUST CONTACT CITY OF GRAND JUNCTION TRAFFIC OPERATIONS SUPERVISOR PRIOR TO CONSTRUCTION OR PLACEMENT OF TRAFFIC CONTROL DEVICES (STRIPING, SIGNALS, MEDIANS, ETC.)

CALL UTILITY NOTIFICATION CENTER OF COLORADO
1-800-922-1987
OR 534-7487 DENVER
CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR MEMBER UTILITIES

NO.	DATE	REVISION	BY
1.	8-19-05	CITY OF GRAND JUNCTION COMMENTS	

DRAWN BY: DJD
CHECKED BY: REW
DATE: 5-13-05
FILE: PPRD24 3OTF

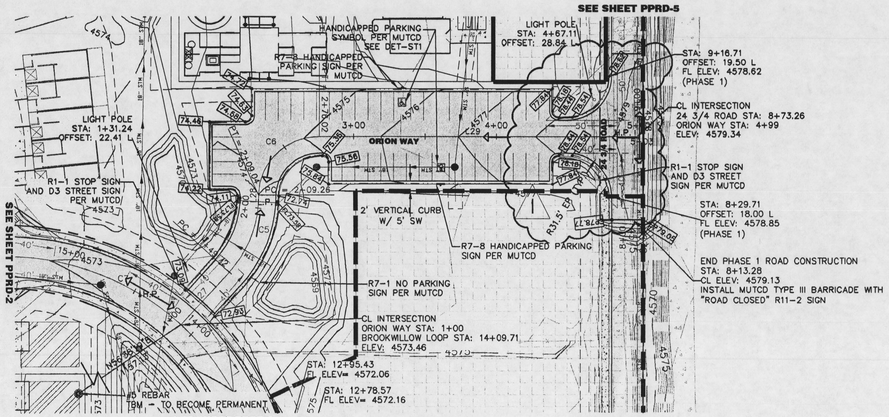
HIGH COUNTRY ENGINEERING, INC.
14 INVERNESS DRIVE EAST, STE F-120, ENGLEWOOD, CO 80112
PHONE (303) 925-0544 FAX (303) 925-0547
1517 BLAKE AVENUE, STE 101, GLENWOOD SPRINGS, CO 81601
PHONE (970) 945-8455 FAX (970) 945-2555
WWW.HCENG.COM

HALL PARTNERS, L.L.C.
CITY OF GRAND JUNCTION, COLORADO

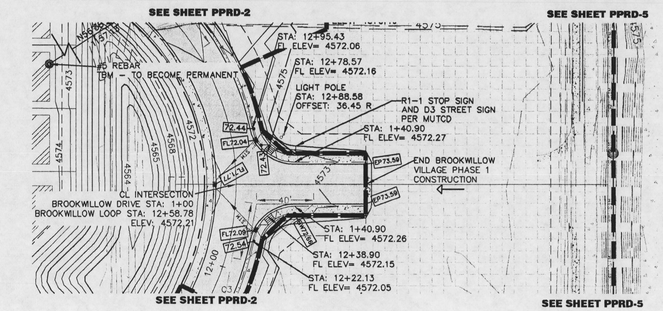
BROOKWILLOW VILLAGE
24 3/4 ROAD PLAN AND PROFILE STA: 1+00 TO END

PROJECT NO.
2031049.00

PPRD-5

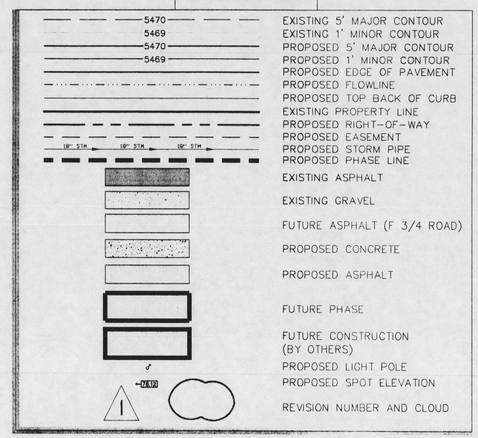


ORION WAY (PHASE 1)
PLAN VIEW



BROOKWILLOW DRIVE
(PHASE 3)
PLAN VIEW

LEGEND



REVISION:
1. SHIFTED 24 3/4 ROAD WEST 4 FEET, CHANGED INTERSECTION WITH ORION WAY AND GRADE OF ROAD.
2. ADDED TIE TO BENCHMARK.

NOTES:
1. ROAD CROSS SECTION AND PROFILE SHALL BE CONSTRUCTED PER CITY OF GRAND JUNCTION STANDARDS AND SPECIFICATIONS.

2. REFER TO CROSS SECTION SHEETS FOR MORE DETAILED ROAD INFORMATION.

3. REFER TO SHEET DET-ST FOR STREET DETAILS AND CORE SECTIONS.

4. CONTRACTOR SHALL NOTE THE ADJUSTMENT OF ALL MH RIMS AND VALVE COVERS FOR FINAL GRADE.

5. THE NORTH AND SOUTH PORTIONS OF 24 3/4 ROAD DURING PHASE 1 SHALL BE GRAVEL AND NO CURB, GUTTER, AND SIDEWALK SHALL BE CONSTRUCTED UNTIL FUTURE CONSTRUCTION. FIRE ACCESS TURN AROUNDS WILL BE PAVED WITH CURB AND GUTTER AT CURB RETURNS.

6. SPOT ELEVATIONS ARE BACK OF CURB AND PROPERTY LINE.

7. REFER TO GRADING PLAN FOR MORE GRADING DETAIL.

8. REFER TO THE MUTCD STANDARDS FOR ALL SIGNAGE AND BARRICADE DETAILS.

9. ELEVATIONS ARE BASED ON TBM, A REBAR IN THE SOUTHWEST CORNER OF THE PROPERTY AS SHOWN, ELEVATION EQUALS 4570.85 FEET TOP OF BAR. TBM TO BECOME PERMENANT BENCH MARK. TIE TBM TO CL STA 1+00.

10. CONTOURS ARE SHOWN IN 1' INTERVALS.

11. ADD 4500.00' TO ALL SPOT ELEVATIONS.

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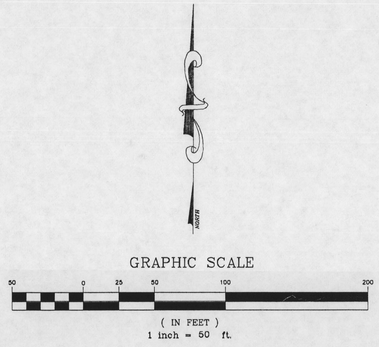
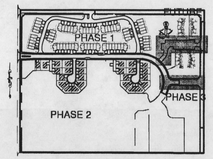
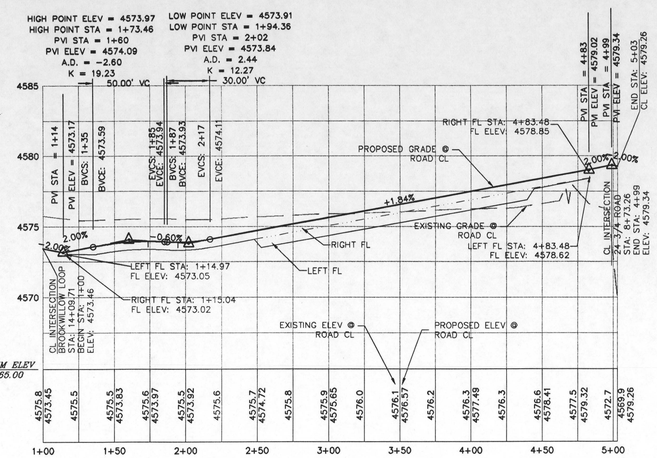
SSMH: SANITARY SEWER MANHOLE
PRV: PRESSURE REDUCING VAULT
BW: BACK OF SIDEWALK
TBM: TEMPORARY BENCH MARK

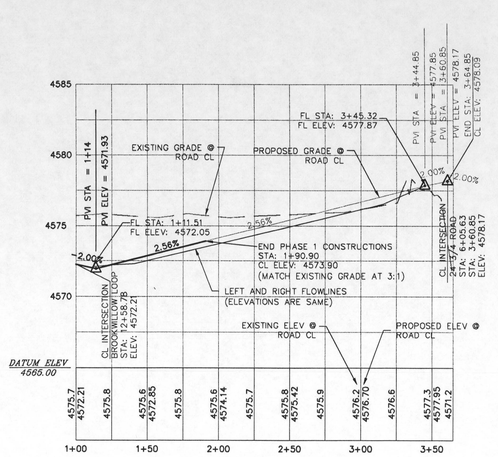






ORION WAY PROFLIE
STATIONING IS LEFT TO RIGHT

SCALE:
VERTICAL: 1"=5'
HORIZONTAL: 1"=50'



BROOKWILLOW DRIVE PROFILE VIEW
STATIONING IS LEFT TO RIGHT

SCALE:
VERTICAL: 1"=5'
HORIZONTAL: 1"=50'

"APPROVED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE. ACCEPTANCE OF THESE PLANS DOES NOT RELIEVE THE DEVELOPER, CONTRACTOR OR ENGINEER FROM CONFORMANCE WITH CITY OF GRAND JUNCTION STANDARDS AND SPECIFICATIONS".

CITY DEVELOPMENT ENGINEER — DATE 2/7/06

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CALL UTILITY NOTIFICATION CENTER OF COLORADO
1-800-922-1987
OR 811 - 06700 IN METRO DENVER

CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES

NO.	DATE	REVISION	BY
1	8-19-05	CITY OF GRAND JUNCTION COMMENTS (3RD)	
2	11-15-05	CITY OF GRAND JUNCTION COMMENTS (3RD)	

DRAWN BY: DD
CHECKED BY: REW
DATE: 5-13-05
FILE: PPRD.SYS

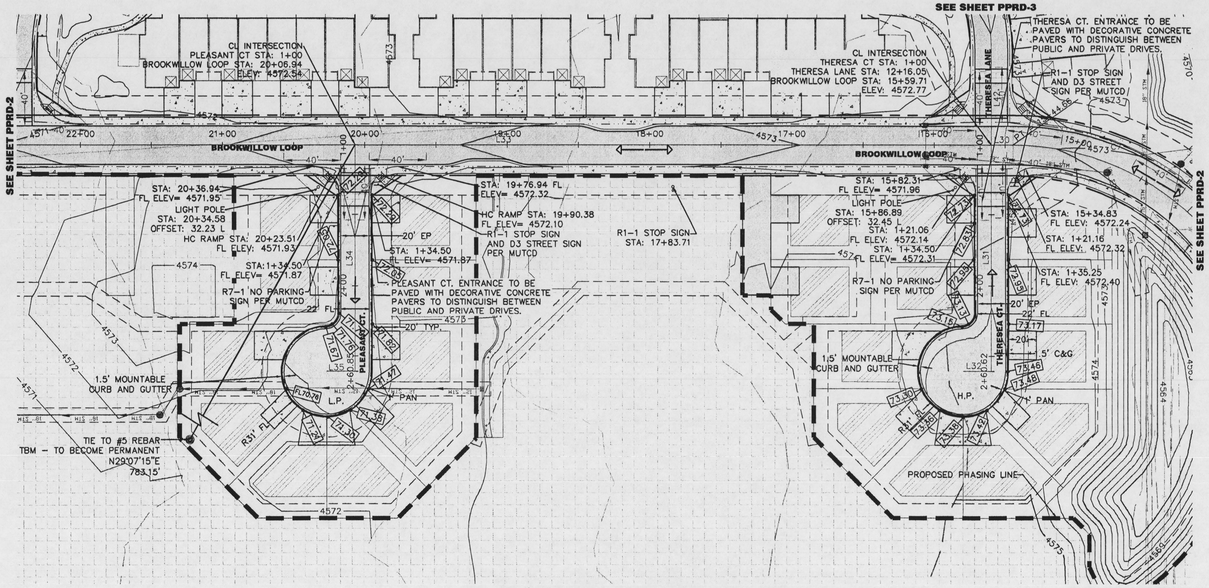
HIGH COUNTRY ENGINEERING, INC.
14 INVERNESS DRIVE EAST, STE F-120, ENGLEWOOD, CO 80112
PHONE (303) 925-0544 FAX (303) 925-0547
1517 BLAKE AVENUE, STE 101, GLENWOOD SPRINGS, CO 81601
PHONE (970) 945-8676 FAX (970) 945-2555
WWW.HCENG.COM

HALL PARTNERS, L.L.C.
CITY OF GRAND JUNCTION, COLORADO

BROOKWILLOW VILLAGE PARKING LOTS PLAN AND PROFILES STA: 1+00 TO END

PROJECT NO.
2031049.00

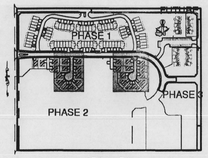
PPRD-7



CUL-DE-SACS OFF OF BROOKWILLOW LOOP
PLAN VIEW

LEGEND

5470	EXISTING 5' MAJOR CONTOUR
5469	EXISTING 1' MINOR CONTOUR
5470	PROPOSED 5' MAJOR CONTOUR
5469	PROPOSED 1' MINOR CONTOUR
	PROPOSED EDGE OF PAVEMENT
	PROPOSED FLOWLINE
	PROPOSED TOP BACK OF CURB
	EXISTING PROPERTY LINE
	PROPOSED RIGHT-OF-WAY
	PROPOSED EASEMENT
18" STM	PROPOSED STORM PIPE
	PROPOSED PHASE LINE
	EXISTING ASPHALT
	EXISTING GRAVEL
	FUTURE ASPHALT (F 3/4 ROAD)
	PROPOSED CONCRETE
	PROPOSED ASPHALT
	FUTURE PHASE
	FUTURE CONSTRUCTION (BY OTHERS)
	PROPOSED LIGHT POLE
78.12	PROPOSED SPOT ELEVATION
1	REVISION NUMBER AND CLOUD
GE	PROPOSED BURIED GAS AND ELECTRIC
T	PROPOSED BURIED TELEPHONE
UCTV	PROPOSED BURIED CATV



KEY MAP
SCALE: 1": 500'

GRAPHIC SCALE
50 0 25 50 100 200
(IN FEET)
1 inch = 50 ft.

NORTH

ROAD CENTERLINE CURVE DATA

CURVE TABLE					
CURVE	LENGTH	RADIUS	TANGENT	DELTA	CHORD DIRECTION
C1	59.32	80.00	31.10	57.97	N21°14'34"W
C2	134.96	182.00	70.75	131.89	N68°45'26"E
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C9	100.94	70.00	61.52	92.42	S58°05'54"W
C10	253.58	772.00	127.94	252.44	N89°59'53"E
C11	100.94	70.00	61.52	92.42	N58°06'00"W
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ROAD CENTERLINE LINE DATA

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NOTES:
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3. REFER TO SHEET DET-ST FOR STREET DETAILS AND CORE SECTIONS.

4. CONTRACTOR SHALL NOTE THE ADJUSTMENT OF ALL MH RIMS AND VALVE COVERS FOR FINAL GRADE.

5. SPOT ELEVATIONS ARE BACK OF CURB AND PROPERTY LINE.5

6. REFER TO GRADING PLAN FOR MORE GRADING DETAIL.

7. REFER TO THE MUTCD STANDARDS FOR ALL SIGNAGE AND BARRICADE DETAILS.

8. ELEVATIONS ARE BASED ON TBM. A REBAR IN THE SOUTHWEST CORNER OF THE PROPERTY AS SHOWN, ELEVATION EQUALS 4570.85 FEET TOP OF BAR. TBM TO BECOME PERMENANT BENCH MARK. TIE TBM TO CL STA 23+75.13.

9. CONTOURS ARE SHOWN IN 1' INTERVALS.

10. ADD 4500.00' TO ALL SPOT ELEVATIONS.

11. REVISIONS PER THIS SHEET: ADDED REFERENCE TO DETAIL SHEET FOR CHICANE.

ABBREVIATIONS:
CL: CENTERLINE
EP: EDGE OF PAVEMENT
SW: SIDEWALK
FL: FLOWLINE
BFLVCS: BEGIN FLOWLINE VERTICAL CURVE STATION
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PRV: PRESSURE REDUCING VAULT
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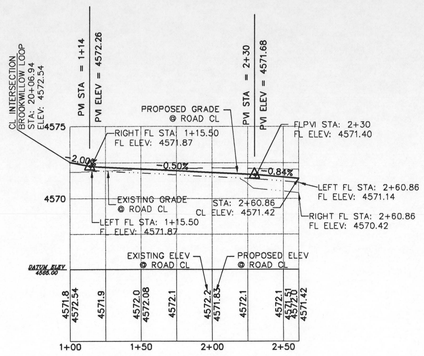
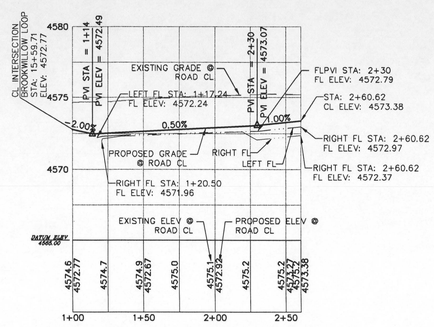


PLEASANT COURT PROFILE VIEW

SCALE:
VERTICAL: 1"=5'
HORIZONTAL: 1"=50'



THERESEA COURT PROFILE VIEW

SCALE:
VERTICAL: 1"=5'
HORIZONTAL: 1"=50'

CUL-DE-SACS OFF OF N. PART OF BROOKWILLOW LOOP
PROFILE VIEW

"APPROVED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE. ACCEPTANCE OF THESE PLANS DOES NOT RELIEVE THE DEVELOPER, CONTRACTOR OR ENGINEER FROM CONFORMANCE WITH CITY OF GRAND JUNCTION STANDARDS AND SPECIFICATIONS".

CITY DEVELOPMENT ENGINEER — 2/3/06 DATE

NOTE: CONTRACTOR MUST CONTACT CITY OF GRAND JUNCTION TRAFFIC OPERATIONS SUPERVISOR PRIOR TO CONSTRUCTION OR PLACEMENT OF TRAFFIC CONTROL DEVICES (STRIPING, SIGNALS, MEDIANS, ETC.)

CALL UTILITY NOTIFICATION CENTER OF COLORADO
1-800-922-1987
OR 534-0700 IN METRO DENVER
CALL 48 HOURS BEFORE YOU DIG, GRADE OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

NO.	DATE	REVISION	BY
1	8-1905	CITY OF GRAND JUNCTION COMMENTS	SRD
2	11-1505	CITY OF GRAND JUNCTION COMMENTS	SRD

DRAWN BY: ALA
CHECKED BY: REW
DATE: 5-1305
FILE: PPRDCULDESAC

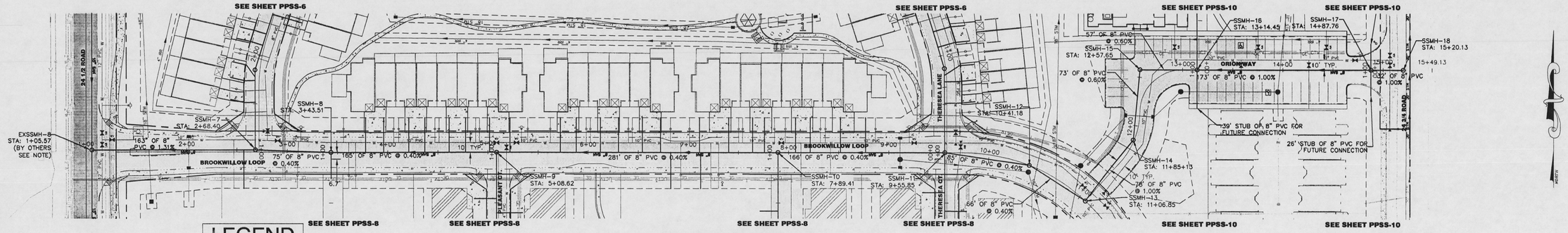
HIGH COUNTRY ENGINEERING, INC.
14 INVERNESS DRIVE EAST, STE F-120, ENGLEWOOD, CO 80112
PHONE (303) 925-0544 FAX (303) 925-0547
1517 BLAKE AVENUE, STE 101, GLENWOOD SPRINGS, CO 81601
PHONE (970) 945-8851 FAX (970) 945-2555
WWW.HIGHCE.COM

HALL PARTNERS, L.L.C.
CITY OF GRAND JUNCTION, COLORADO

BROOKWILLOW VILLAGE
CUL-DE-SACS PLAN & PROFILES
STA: 1+00 TO END

PROJECT NO.
2031049.00

PPRD-9



SS ALONG NORTH PART OF BROOKWILLOW LOOP
PLAN VIEW

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

LEGEND

- PROPOSED CONCRETE
- PROPOSED ASPHALT
- EXISTING GRAVEL
- EXISTING PAVEMENT
- PROPOSED EDGE OF PAVEMENT
- PROPOSED FLOWLINE
- PROPOSED TOP BACK OF CURB
- PROPOSED PROPERTY LINE
- EXISTING PROPERTY BOUNDARY
- PROPOSED RIGHT-OF-WAY
- PROPOSED EASEMENT
- PROPOSED ROAD CENTERLINE
- PROPOSED 10" WATER MAIN
- PROPOSED 8" WATER MAIN
- PROPOSED 4" WATER MAIN
- PROPOSED SANITARY SEWER MAIN AND MANHOLES
- PROPOSED WATER SERVICE WITH METER PIT
- PROPOSED SANITARY SEWER SERVICE
- PROPOSED GATE VALVE
- PROPOSED FIRE HYDRANT
- PROPOSED PRV
- PROPOSED PLUG AND BLOW OFF
- PROPOSED STORM PIPE
- EXISTING STORM PIPE
- EXISTING 12" WATER MAIN
- EXISTING GAS LINE
- EXISTING OVERHEAD ELECTRIC
- EXISTING TELEPHONE LINE
- EXISTING CULVERT
- EXISTING WATER METER
- PROPOSED BURIED GAS AND ELECTRIC
- PROPOSED BURIED TELEPHONE
- PROPOSED BURIED CATV

NOTES:
1.) ALL SANITARY SEWER MAINS SHALL BE SDR-35 PVC.
2.) ALL WATER MAINS SHALL BE C900, CLASS 150 PVC.
3.) REFER TO THE CITY OF GRAND JUNCTION STANDARDS AND SPECIFICATIONS FOR SANITARY SEWER AND WATER MAIN DESIGN/CONSTRUCTION DETAILS.
4.) ALL SANITARY SEWER AND WATER MAINS SHALL MAINTAIN A MINIMUM HORIZONTAL SEPARATION OF 10 FEET (TYPICAL).
5.) WATER MAINS SHALL BE INSTALLED WITH A MINIMUM DEPTH OF 4.5 FEET FROM TOP OF PIPE TO FINISH GRADE (UTE WATER STANDARDS).
6.) SANITARY SEWER MAINS SHALL BE INSTALLED WITH A MINIMUM DEPTH OF 6 FEET FROM TOP OF PIPE TO FINISH GRADE.
7.) UTE WATER SHALL TEST ALL WATER MAINS IN ACCORDANCE WITH CITY OF GRAND JUNCTION STANDARDS PRIOR TO ROADWAY CONSTRUCTION.
8.) SERVICES SHALL BE EXTENDED TO BACK OF MULTIPURPOSE EASEMENT AND MARKED WITH A POST.
9.) PROPOSED ROADWAY PROFILE WILL BE THE SAME AS THE EXISTING ROAD GRADE SHOWN ON THE SANITARY SEWER PROFILES AFTER CONSTRUCTION IS COMPLETE.
10.) GAS SERVICES MAY BE DEFLECTED AS NEEDED TO CONSTRUCT THE SANITARY SEWER AS LONG AS SERVICE IS NOT AFFECTED.
11.) BASIS OF BEARINGS FOR THIS SURVEY IS A BEARING OF N 00°01'44" E BETWEEN THE CENTER QUARTER CORNER OF SECTION FOUR AND THE CENTER NORTH SIXTEENTH CORNER OF SECTION FOUR.
12.) ELEVATIONS ARE BASED ON TBM, A REBAR IN THE SOUTHWEST CORNER OF THE PROPERTY AS SHOWN, ELEVATION EQUALS 4570.85 FEET TOP OF BAR. CONTOUR INTERVAL EQUALS ONE FOOT.
13.) REVISIONS THIS SHEET INCLUDE SHALLOWING THE ENTIRE SANITARY SEWER MAIN.

14.) ALL SANITARY SEWER MANHOLES AND TIE-INS ALONG 24 1/2 ROAD ARE SHOWN CONCEPTUALLY ONLY. THE SANITARY SEWER MAIN ALONG 24 1/2 ROAD IS TO BE CONSTRUCTED BY OTHERS AND THEREFORE MANHOLE LOCATION, RIM ELEVATION, AND INVERT ELEVATIONS ARE SUBJECT TO CHANGE. RIM ELEVATIONS AND INVERT ELEVATIONS AT ALL MANHOLES ALONG THE TRUNK LINE SHALL BE FIELD VERIFIED AND THE ENGINEER MUST BE NOTIFIED BEFORE CONSTRUCTION OF SANITARY SEWER MAIN WITHIN THE BROOKWILLOW SUBDIVISION.

"APPROVED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE. ACCEPTANCE OF THESE PLANS DOES NOT RELIEVE THE DEVELOPER, CONTRACTOR OR ENGINEER FROM CONFORMANCE WITH CITY OF GRAND JUNCTION STANDARDS AND SPECIFICATIONS".
FIRE DEPARTMENT 2/3/06 DATE

APPROVED FOR CONSTRUCTION
UTE WATER CONSERVANCY DISTRICT
District Engineer 3 Feb 06
TITLE DATE

2/7/06

ABBREVIATIONS:
CL: CENTERLINE
EP: EDGE OF PAVEMENT
INV: INVERT
SAN: SANITARY SEWER
SSMH: PROPOSED SANITARY SEWER MANHOLE
STA: STATION
L.F.: LINEAR FEET
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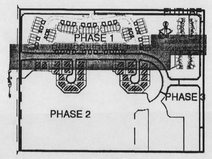
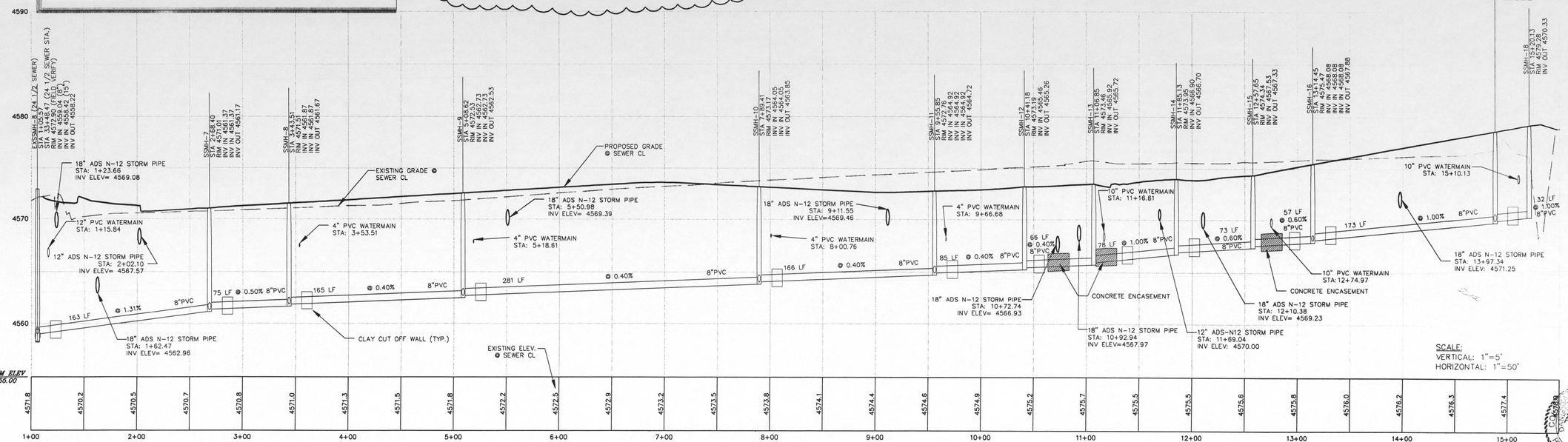


KEY MAP
SCALE: 1"=500'



SCALE:
VERTICAL: 1"=5'
HORIZONTAL: 1"=50'

SS ALONG NORTH PART OF BROOKWILLOW LOOP
PROFILE
STATIONING IS LEFT TO RIGHT

COLORADO REGISTERED PROFESSIONAL ENGINEER 30307 2/3/06

NO.	DATE	REVISION	BY
1	6-19-05	CITY OF GRAND JUNCTION COMMENTS	SRD
2	11-15-05	CITY OF GRAND JUNCTION COMMENTS	SRD
3	12-23-05	UTE WATER AND CITY COMMENTS	ALA
4	1-20-06	SANITARY SEWER REDESIGN BY CITY DPD	

DRAWN BY: ALA
CHECKED BY: REW
DATE: 5-13-05
FILE: PPSS-MAINLOOP

CALL UTILITY NOTIFICATION CENTER OF COLORADO 1-800-922-1987 OR 534-0700 IN METRO DENVER
CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES

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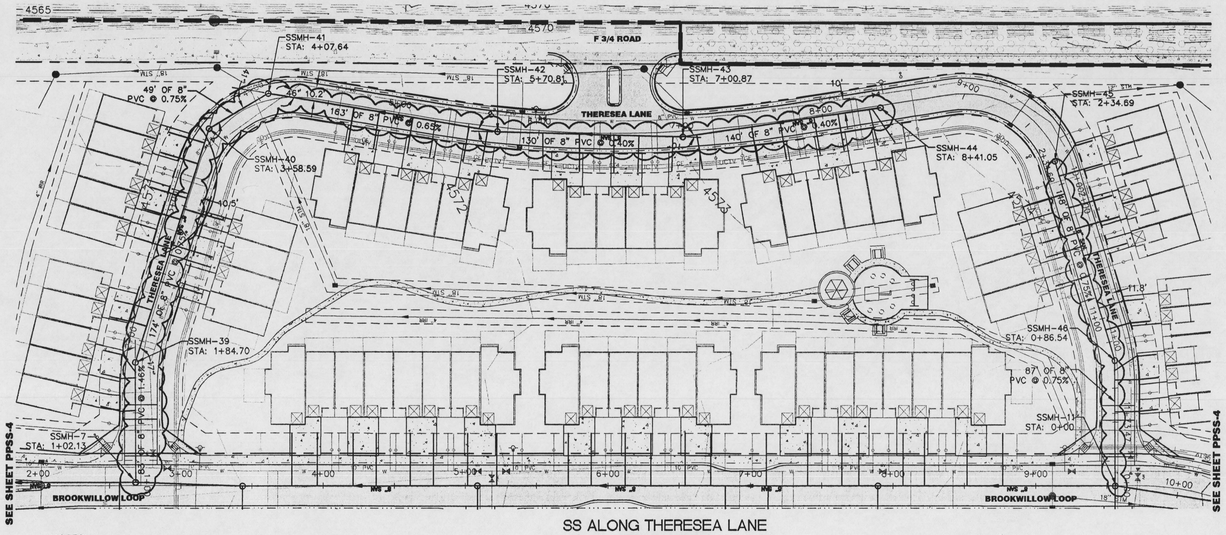
1517 BLAKE AVENUE, STE 101, GLENWOOD SPRINGS, CO 81601
PHONE (970) 945-8676 FAX (970) 945-8555
WWW.HCENG.COM

HALL PARTNERS, L.L.C.
CITY OF GRAND JUNCTION, COLORADO

BROOKWILLOW VILLAGE
N. BROOKWILLOW LOOP SEWER
PLAN&PROFILE STA:1+00 TO END

PROJECT NO.
2031049.00

PPSS-4



SS ALONG THERESEA LANE
PLAN VIEW

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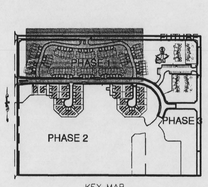

KEY MAP
SCALE: 1":500'

GRAPHIC SCALE
50 0 25 50 100 200
(IN FEET)
1 inch = 50 ft.

LEGEND

PROPOSED CONCRETE
PROPOSED ASPHALT
EXISTING GRAVEL
EXISTING PAVEMENT
PROPOSED EDGE OF PAVEMENT
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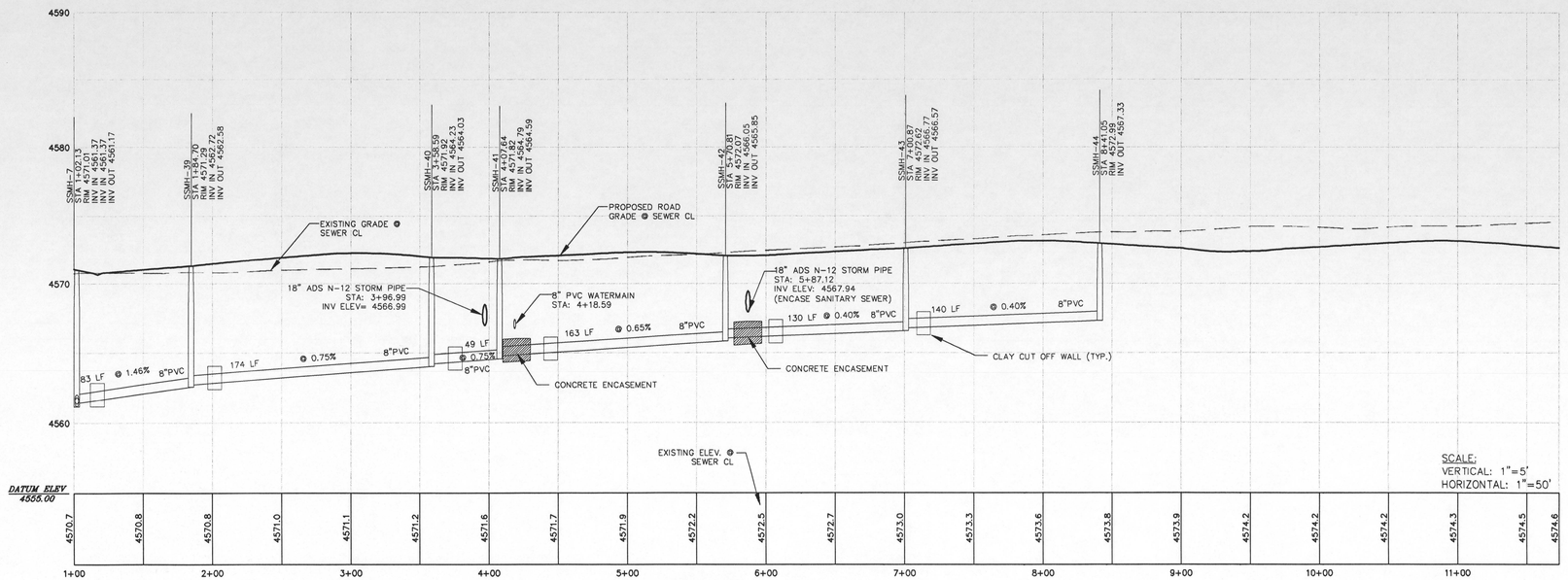
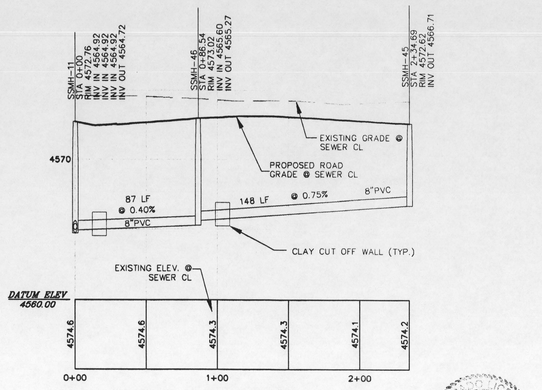
EXISTING CULVERT
EXISTING WATER METER
PROPOSED BURIED GAS AND ELECTRIC
PROPOSED BURIED TELEPHONE
PROPOSED BURIED CATV

REVISION FOR THIS SHEET: SHALLOWED SANITARY SEWER LINE.



SS ALONG THERESEA LANE
PROFILE VIEW
STATIONING IS LEFT TO RIGHT



SS ALONG EAST SIDE OF THERESEA LANE PROFILE
STATIONING IS LEFT TO RIGHT

SCALE:
VERTICAL: 1"=5'
HORIZONTAL: 1"=50'

"APPROVED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE. ACCEPTANCE OF THESE PLANS DOES NOT RELIEVE THE DEVELOPER, CONTRACTOR OR ENGINEER FROM CONFORMANCE WITH CITY OF GRAND JUNCTION STANDARDS AND SPECIFICATIONS".
Charles McMullen 2/2/06
FIRE DEPARTMENT DATE

APPROVED FOR CONSTRUCTION
UTE WATER CONSERVANCY DISTRICT
District Engineer 3 Feb 06
TITLE DATE

Eric Hall 2/1/06

CALL UTILITY NOTIFICATION CENTER OF COLORADO
1-800-922-1987
OR 811
CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES

NO.	DATE	REVISION	BY
1	8-19-05	CITY OF GRAND JUNCTION COMMENTS	3RD
2	11-15-05	CITY OF GRAND JUNCTION COMMENTS	3RD
3	12-23-05	UTE WATER AND CITY COMMENTS	ALA

DRAWN BY: ALA
CHECKED BY: REW
DATE: 5/13/05
FILE:

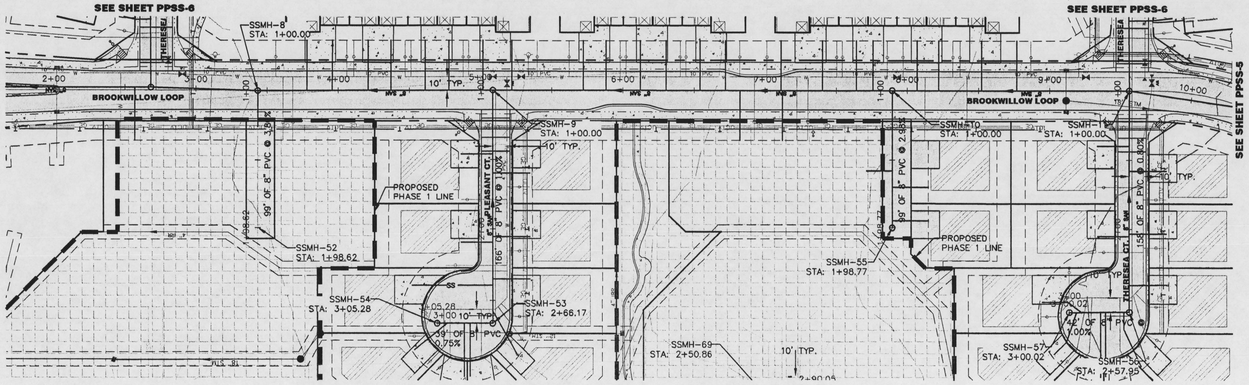
HIGH COUNTRY ENGINEERING, INC.
14 INVERNESS DRIVE EAST, STE F-120, ENGLEWOOD, CO 80112
PHONE (303) 925-0544 FAX (303) 925-0547
1517 BLAKE AVENUE, STE 101, GLENWOOD SPRINGS, CO 81601
PHONE (970) 945-8676 FAX (970) 945-2555

HALL PARTNERS, L.L.C.
CITY OF GRAND JUNCTION, COLORADO

BROOKWILLOW VILLAGE
THERESEA LANE SANITARY

PROJECT NO
2031049.0

PPSS-6



SS IN CUL-DE-SACS OFF OF NORTH PART OF BROOKWILLOW LOOP
PLAN VIEW

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LEGEND

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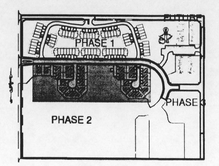
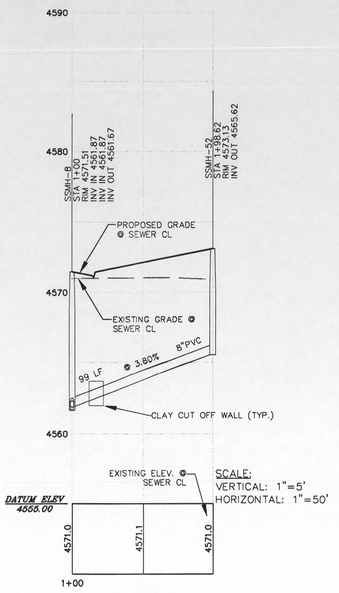
- EXISTING WATER METER
- PROPOSED BURIED GAS AND ELECTRIC
- PROPOSED BURIED TELEPHONE
- PROPOSED BURIED CATV

NOTE REVISION FOR THIS SHEET:
ALL SANITARY SEWER MAINS SHOWN WERE MADE SHALLOWER AND SLOPES STEEPENED

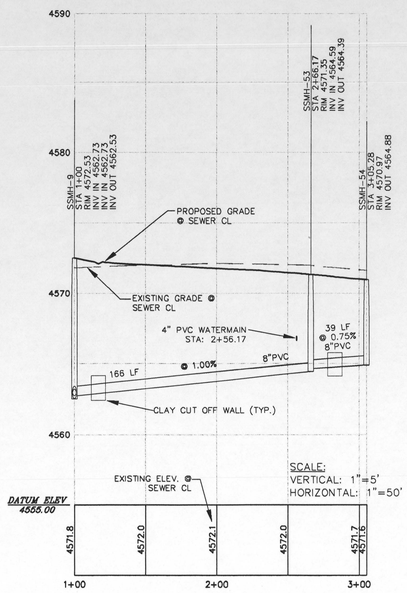
GRAPHIC SCALE
50 0 25 50 100 200
(IN FEET)
1 inch = 50 ft.



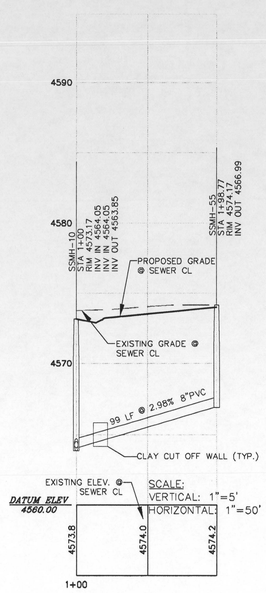
KEY MAP
SCALE: 1":500'



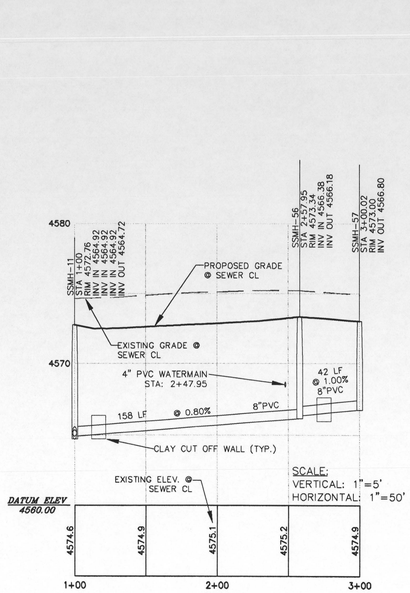
PRIVATE DRIVE 1
(PHASE 2)



PLEASANT CT.



PRIVATE DRIVE 2



THERESEA CT.

SS IN CUL-DE-SACS OFF OF NORTH PART OF BROOKWILLOW LOOP
PROFILE VIEW

"APPROVED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE. ACCEPTANCE OF THESE PLANS DOES NOT RELIEVE THE DEVELOPER, CONTRACTOR OR ENGINEER FROM CONFORMANCE WITH CITY OF GRAND JUNCTION STANDARDS AND SPECIFICATIONS".

Phillip Mathis 2/2/06
FIRE DEPARTMENT DATE

APPROVED FOR CONSTRUCTION
UTE WATER CONSERVANCY DISTRICT
District Engineer 3 Feb 06
TITLE DATE

Eric Hall 2/7/06

COLORADO REGISTERED ERIC J. HALL 33507 1/23/06 PROFESSIONAL ENGINEER

CALL UTILITY NOTIFICATION CENTER OF COLORADO
1-800-922-1987
OR 8-1-1 OR 811 IN METRO DENVER
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NO.	DATE	REVISION	BY
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PHONE (970) 945-8575 FAX (970) 945-8576
WWW.HCENG.COM

DRAWN BY: ALA
CHECKED BY: REW
DATE: 5-13-05
FILE: PPSS-CUL-DE-SAC

HALL PARTNERS, L.L.C.
CITY OF GRAND JUNCTION, COLORADO

BROOKWILLOW VILLAGE
CUL-DE-SACS SANITARY PLAN & PROFILES STA: 1+00 TO END

PROJECT NO.
2031049.00

PPSS-8

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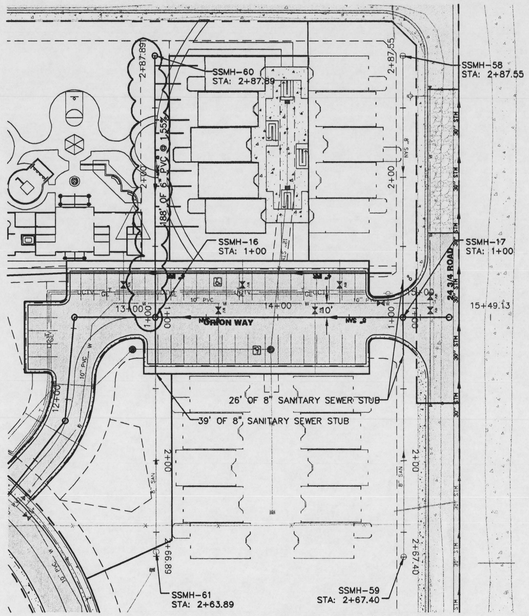
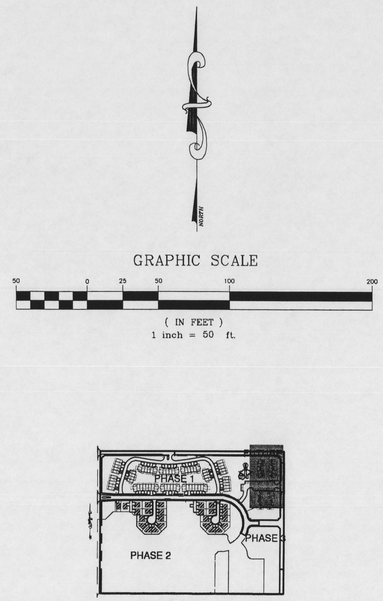
12.) ELEVATIONS ARE BASED ON TBM, A REBAR IN THE SOUTHWEST CORNER OF THE PROPERTY AS SHOWN, ELEVATION EQUALS 4570.85 FEET TOP OF BAR. CONTOUR INTERVAL EQUALS ONE FOOT.
13.) REVISIONS THIS SHEET INCLUDE SHALLOWING THE ENTIRE SANITARY SEWER MAIN.

ABBREVIATIONS:
CL: CENTERLINE
EP: EDGE OF PAVEMENT
INV: INVERT
SAN: SANITARY SEWER
SSMH: PROPOSED SANITARY SEWER MANHOLE
STA: STATION
L.F.: LINEAR FEET
EXSSMH: EXISTING SANITARY SEWER MANHOLE
PRV: PRESSURE REDUCING VALVE
WV: WATER VALVE



SS SERVICE LINES CONNECTING TO ORION WAY
PLAN VIEW

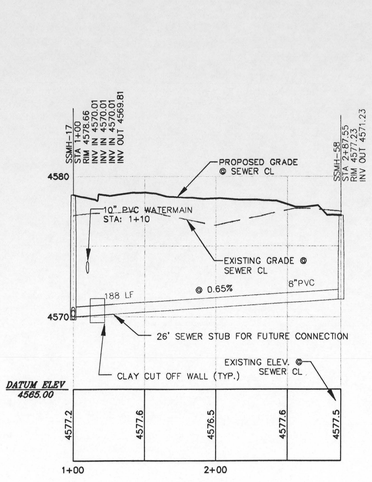


KEY MAP
SCALE: 1"=500'

LEGEND

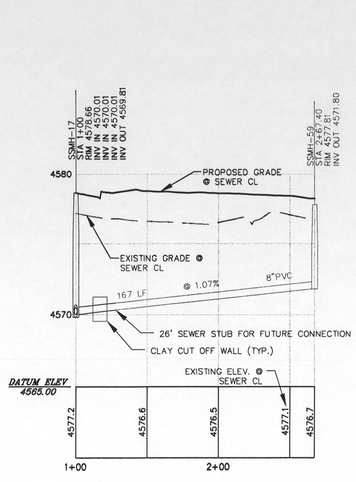
- PROPOSED CONCRETE
- PROPOSED ASPHALT
- EXISTING GRAVEL
- EXISTING PAVEMENT
- PROPOSED EDGE OF PAVEMENT
- PROPOSED FLOWLINE
- PROPOSED TOP BACK OF CURB
- PROPOSED PROPERTY LINE
- EXISTING PROPERTY BOUNDARY
- PROPOSED RIGHT-OF-WAY
- PROPOSED EASEMENT
- PROPOSED ROAD CENTERLINE
- PROPOSED 10" WATER MAIN
- PROPOSED 8" WATER MAIN
- PROPOSED 4" WATER MAIN
- PROPOSED SANITARY SEWER MAIN AND MANHOLES
- PROPOSED WATER SERVICE WITH METER PIT
- PROPOSED SANITARY SEWER SERVICE
- PROPOSED GATE VALVE
- PROPOSED FIRE HYDRANT
- PROPOSED PRV
- PROPOSED PLUG AND BLOW OFF
- PROPOSED STORM PIPE
- EXISTING STORM PIPE
- EXISTING 12" WATER MAIN
- EXISTING GAS LINE
- EXISTING OVERHEAD ELECTRIC
- EXISTING TELEPHONE LINE
- EXISTING CULVERT
- EXISTING WATER METER
- PROPOSED BURIED GAS AND ELECTRIC
- PROPOSED BURIED TELEPHONE
- PROPOSED BURIED CATV

NOTE REVISION FOR THIS SHEET:
ALL SANITARY SEWER MAINS SHOWN WERE MADE SHALLOWER AND SLOPES STEEPENED



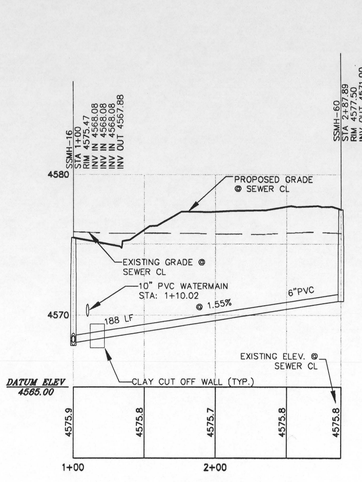
NE SS SERVICE (PHASE 3)

SCALE:
VERTICAL: 1"=5'
HORIZONTAL: 1"=50'



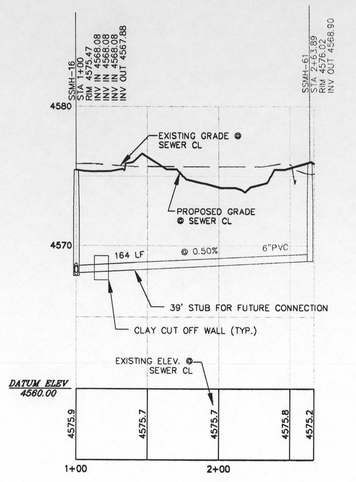
SE SS SERVICE (PHASE 3)

SCALE:
VERTICAL: 1"=5'
HORIZONTAL: 1"=50'



NW SS SERVICE (PHASE 1)

SCALE:
VERTICAL: 1"=5'
HORIZONTAL: 1"=50'



SW SS SERVICE (PHASE 3)

SCALE:
VERTICAL: 1"=5'
HORIZONTAL: 1"=50'

SS SERVICE LINES CONNECTING TO ORION WAY
PROFILE VIEW

COLORADO REGISTERED DANIEL R. MOSS 39307 1/27/06 PROFESSIONAL ENGINEER

2/7/06

"APPROVED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE. ACCEPTANCE OF THESE PLANS DOES NOT RELIEVE THE DEVELOPER, CONTRACTOR OR ENGINEER FROM CONFORMANCE WITH CITY OF GRAND JUNCTION STANDARDS AND SPECIFICATIONS".
Charles Martin 2/2/06
FIRE DEPARTMENT DATE

APPROVED FOR CONSTRUCTION
UTE WATER CONSERVANCY DISTRICT
Rhd Tah
District Engineer 3 Feb 06
TITLE DATE

CALL UTILITY NOTIFICATION CENTER OF COLORADO
1-800-922-1987
OR 534 - 0700 IN METRO DENVER
CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES

NO.	DATE	REVISION	BY
1	8-19-05	CITY OF GRAND JUNCTION COMMENTS	3RD
2	11-15-05	CITY OF GRAND JUNCTION COMMENTS	3RD

DRAWN BY: ALA
CHECKED BY: REW
DATE: 5/13/05
FILE: PPSSSVS

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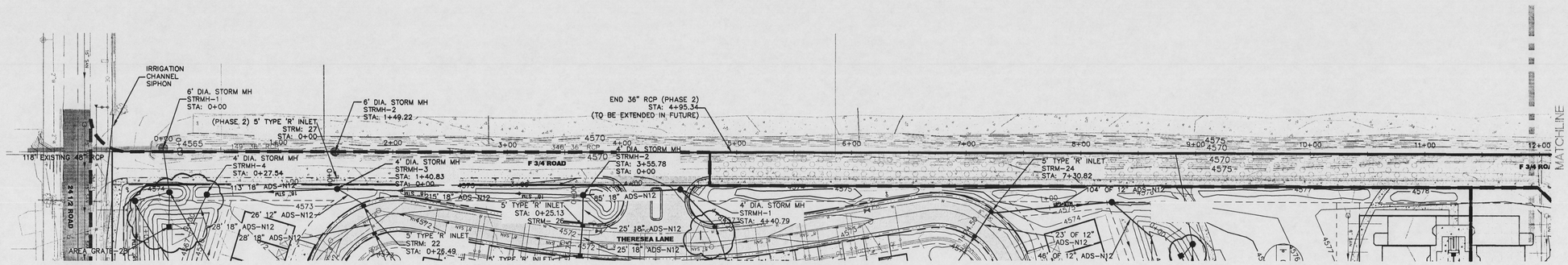
1517 BLAKE AVENUE, STE 101, GLENWOOD SPRINGS, CO 81601
PHONE (970) 945-8676 FAX (970) 945-2555
WWW.HCENG.COM

HALL PARTNERS, L.L.C.
CITY OF GRAND JUNCTION, COLORADO

BROOKWILLOW VILLAGE
ORION WAY SAN SEWER SVS
PLAN & PROFILES

PROJECT NO.
2031049.00

PPSS-10



36" STORM PIPE ALONG F 3/4 ROAD
PLAN VIEW

REVISIONS
1. MOVED LOCATION OF INLET
2. MOVED OUTLET STRUCTURE AND GRADED SPILLWAY

GRAPHIC SCALE

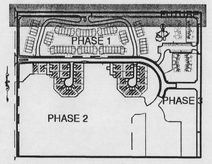
50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

NOTES:
1. ALL STORM SEWER PIPES, INLETS, AND MANHOLES SHALL BE CONSTRUCTED PER THE CITY OF GRAND JUNCTION STANDARDS AND SPECIFICATIONS.
2. 18" MINIMUM COVER SHALL BE MAINTAINED OVER ALL STORM PIPES.
3. SEE DETAIL SHEET DET-STM FOR STORM SEWER CONSTRUCTION/DESIGN DETAILS.
4. PROPOSED AND EXISTING CONTOURS ARE IN 1' INTERVALS.
5. ALL 12", 15", 18", AND 24" STORM PIPES SHALL BE ADS-N12 WT PER THE CITY OF GRAND JUNCTION STANDARD CONTRACT DOCUMENTS.
6. ALL 30" AND 36" STORM PIPES SHALL BE RCP.

ABBREVIATIONS:

RCP: REINFORCED CONCRETE PIPE.
STRMH: STORM MANHOLE.
AI: AREA INLET.
WT: WATER TIGHT.



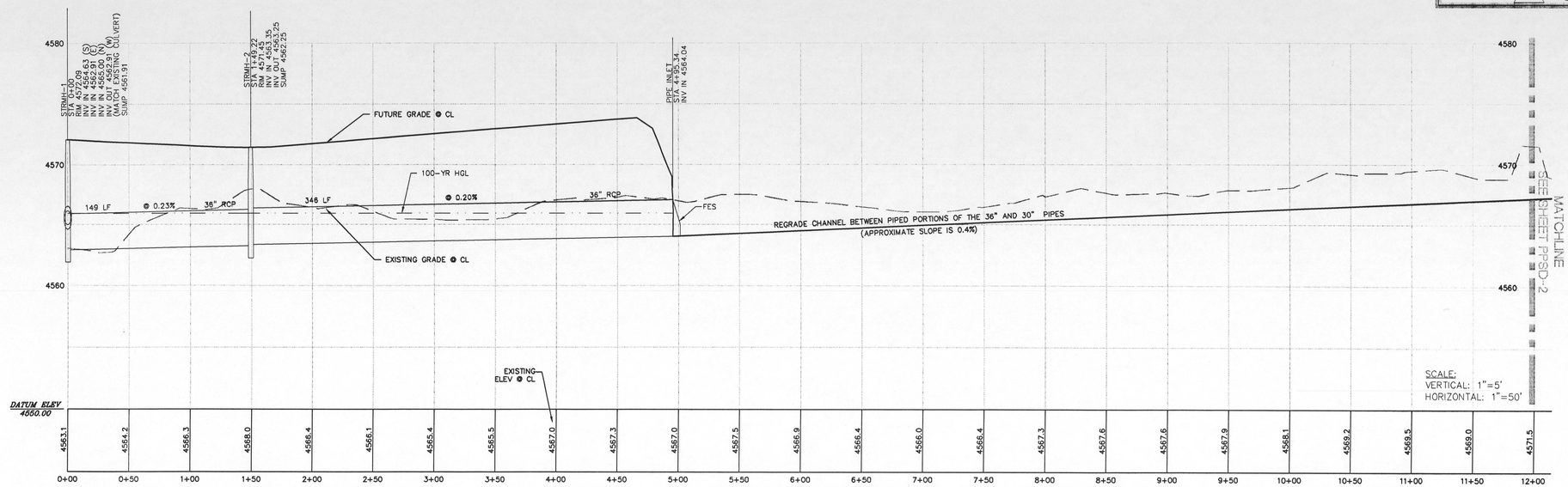
KEY MAP
SCALE: 1"=500'

"APPROVED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE. ACCEPTANCE OF THESE PLANS DOES NOT RELIEVE THE DEVELOPER, CONTRACTOR OR ENGINEER FROM CONFORMANCE WITH CITY OF GRAND JUNCTION STANDARDS AND SPECIFICATIONS".

CITY DEVELOPMENT ENGINEER — DATE 2/7/06

LEGEND

- PROPOSED STORM SEWER
- PROPOSED EDGE OF PAVEMENT
- PROPOSED FLOWLINE
- PROPOSED TOP BACK OF CURB
- EXISTING PROPERTY LINE
- PROPOSED RIGHT-OF-WAY
- PROPOSED EASEMENT
- PROPOSED ROAD CENTERLINE
- PROPOSED 12" WATER MAIN
- PROPOSED 8" WATER MAIN
- PROPOSED 4" WATER MAIN
- PROPOSED CATV
- PROPOSED TELEPHONE
- PROPOSED GAS AND ELECTRIC
- PROPOSED SANITARY SEWER MAIN AND MANHOLES
- PROPOSED WATER SERVICE WITH METER PIT
- PROPOSED SANITARY SEWER SERVICE
- PROPOSED GATE VALVE
- PROPOSED FIRE HYDRANT
- PROPOSED PRV
- PROPOSED PLUG AND BLOW OFF
- EXISTING GAS LINE
- EXISTING OVERHEAD ELECTRIC
- EXISTING TELEPHONE LINE
- EXISTING CULVERT
- EXISTING WATER METER
- PROPOSED PHASE LINE
- EXISTING ASPHALT
- EXISTING GRAVEL
- PROPOSED ASPHALT
- PROPOSED CONCRETE
- FUTURE CONSTRUCTION (BY OTHERS)
- REVISION NUMBER AND CLOUD



SCALE:
VERTICAL: 1"=5'
HORIZONTAL: 1"=50'

36" STORM PIPE ALONG F 3/4 ROAD
PROFILE VIEW

COLORADO REGISTERED DANIEL E. JOHNSON 38301 1/23/06 PROFESSIONAL ENGINEER

CALL UTILITY NOTIFICATION CENTER OF COLORADO 1-800-922-1967 OR 534-0670 IN METRO DENVER
CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES

NO.	DATE	REVISION	BY
1	8-19-05	CITY OF GRAND JUNCTION COMMENTS	

DRAWN BY: ALA
CHECKED BY: REW
DATE: 5-13-05
P.E.: PFSD

HIGH COUNTRY ENGINEERING, INC.
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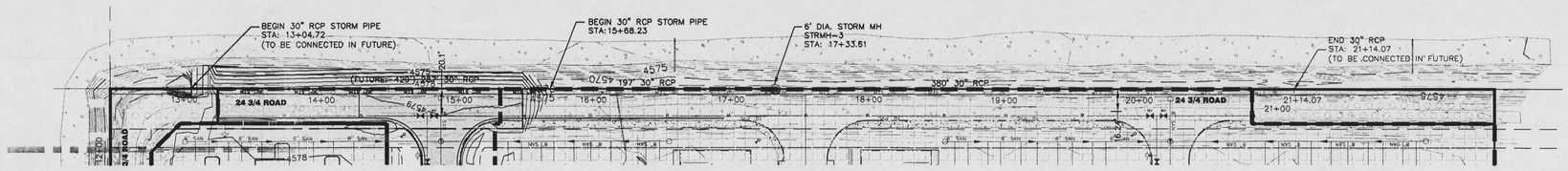
1517 BLAKE AVENUE, STE 101, GLENWOOD SPRINGS, CO 81601
PHONE (970) 945-8676 FAX (970) 945-2555
WWW.HCENG.COM

HALLS, L.L.C.
CITY OF GRAND JUNCTION, COLORADO

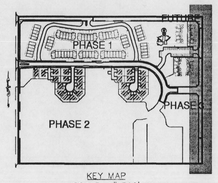
BROOKWILLOW VILLAGE STORM SEWER PLAN & PROFILE STA: 1+00 TO STA: 12+00

PROJECT NO.
2031049.00

PPSD-1



STORM SEWER ALONG 24 3/4 ROAD
PLAN VIEW



"APPROVED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE. ACCEPTANCE OF THESE PLANS DOES NOT RELIEVE THE DEVELOPER, CONTRACTOR OR ENGINEER FROM CONFORMANCE WITH CITY OF GRAND JUNCTION STANDARDS AND SPECIFICATIONS".

John L Ballagh — Feb 3, 2006

GRAND JUNCTION DRAINAGE DISTRICT — DATE

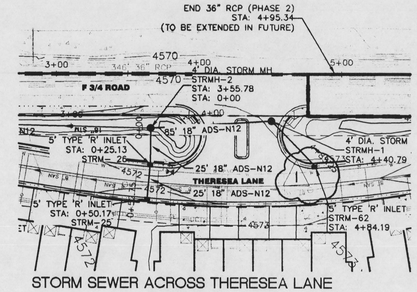
"APPROVED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE. ACCEPTANCE OF THESE PLANS DOES NOT RELIEVE THE DEVELOPER, CONTRACTOR OR ENGINEER FROM CONFORMANCE WITH CITY OF GRAND JUNCTION STANDARDS AND SPECIFICATIONS".

2/7/06

CITY DEVELOPMENT ENGINEER — DATE

LEGEND

- PROPOSED STORM SEWER
- PROPOSED EDGE OF PAVEMENT
- PROPOSED FLOWLINE
- PROPOSED TOP BACK OF CURB
- EXISTING PROPERTY LINE
- PROPOSED RIGHT-OF-WAY
- PROPOSED EASEMENT
- PROPOSED ROAD CENTERLINE
- PROPOSED 12" WATER MAIN
- PROPOSED 8" WATER MAIN
- PROPOSED 4" WATER MAIN
- PROPOSED CATV
- PROPOSED TELEPHONE
- PROPOSED GAS AND ELECTRIC
- PROPOSED SANITARY SEWER MAIN AND MANHOLES
- PROPOSED WATER SERVICE WITH METER PIT
- PROPOSED SANITARY SEWER SERVICE
- PROPOSED GATE VALVE
- PROPOSED FIRE HYDRANT
- PROPOSED PRV
- PROPOSED PLUG AND BLOW OFF
- EXISTING GAS LINE
- EXISTING OVERHEAD ELECTRIC
- EXISTING TELEPHONE LINE
- EXISTING CULVERT
- EXISTING WATER METER
- PROPOSED PHASE LINE
- EXISTING ASPHALT
- PROPOSED GRAVEL
- PROPOSED ASPHALT
- PROPOSED CONCRETE
- FUTURE CONSTRUCTION (BY OTHERS)
- REVISION NUMBER AND CLOUD



STORM SEWER ACROSS THERESEA LANE
PLAN VIEW

NOTES:
1. ALL STORM SEWER PIPES, INLETS, AND MANHOLES SHALL BE CONSTRUCTED PER THE CITY OF GRAND JUNCTION STANDARDS AND SPECIFICATIONS.
2. 18" MINIMUM COVER SHALL BE MAINTAINED OVER ALL STORM PIPES.
3. SEE DETAIL SHEET DET-STM FOR STORM SEWER CONSTRUCTION/DESIGN DETAILS.
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ABBREVIATIONS:

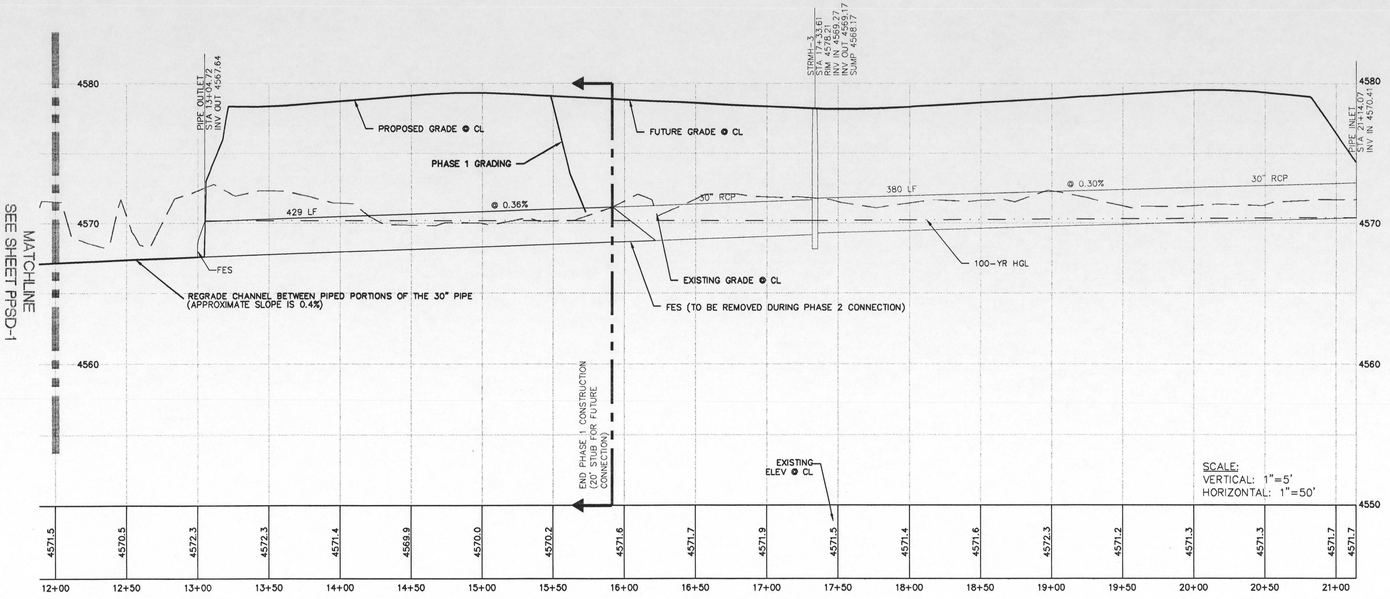
RCP: REINFORCED CONCRETE PIPE.
STRMH: STORM MANHOLE.
AI: AREA INLET.
WT: WATER TIGHT.

NORTH

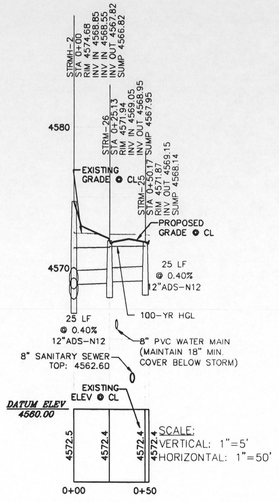
GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.



STORM SEWER 24 3/4 ROAD
PROFILE VIEW



STORM SEWER ACROSS THERESEA LANE
PROFILE VIEW

COLORADO — DANIEL A. LAWSON — 33807 — 1/31/06 — PROFESSIONAL ENGINEER

CALL UTILITY NOTIFICATION CENTER OF COLORADO
TOLL FREE 1-800-922-1987
OR 534-6700 IN METRO DENVER
CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES

NO.	DATE	REVISION	BY
1	8-19-05	CITY OF GRAND JUNCTION COMMENTS	RD
2	11-15-05	CITY OF GRAND JUNCTION COMMENTS	RD

DRAWN BY: ALA
CHECKED BY: REW
DATE: 5-13-05
FILE: PPSD

HIGH COUNTRY ENGINEERING, INC.
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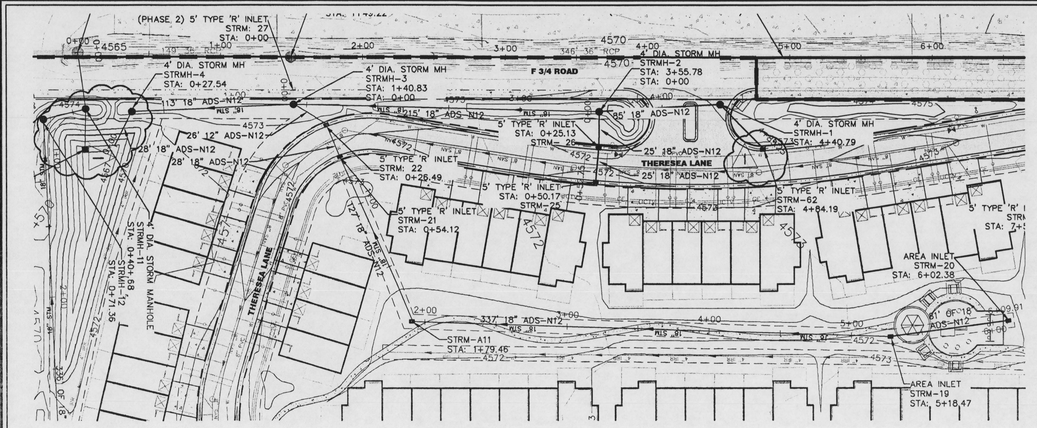
PHONE (970) 945-1545 FAX (970) 945-2555
WWW.HCENG.COM

HALL PARTNERS, L.L.C.
CITY OF GRAND JUNCTION, COLORADO

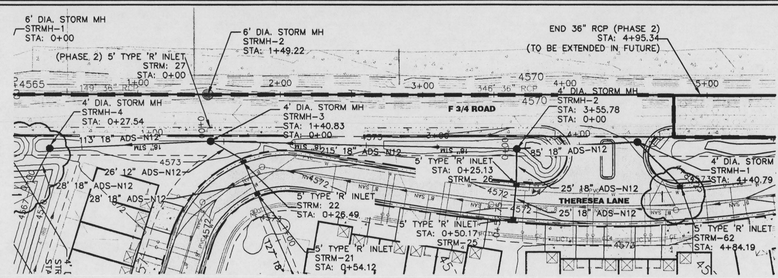
BROOKWILLOW VILLAGE
STORM SEWER PLAN & PROFILES

PROJECT NO.
2031049.00

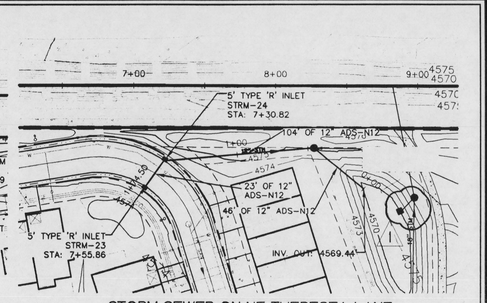
PPSD-2



STORM SEWER THROUGH NORTHERN RECREATION AREA
PLAN VIEW



STORM SEWER ALONG F 3/4 ROAD
PLAN VIEW



STORM SEWER ON NE THERESEA LANE
PLAN VIEW

NOTES:
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6. ALL 30" AND 36" STORM PIPES SHALL BE RCP.
7. REVISIONS THIS SHEET INCLUDE MOVING OUTLET STRUCTURES, PHASING STORM DIFFERENTLY, AND ADDING OUTFALL INFORMATION.

ABBREVIATIONS:

RCP: REINFORCED CONCRETE PIPE.
STRMH: STORM MANHOLE.
AI: AREA INLET.
WT: WATER TIGHT.

GRAPHIC SCALE

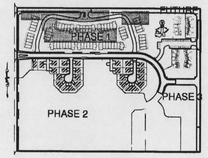
50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

NORTH

LEGEND

36" RCP 42" RCP 48" RCP	PROPOSED STORM SEWER
	PROPOSED EDGE OF PAVEMENT
	PROPOSED FLOWLINE
	PROPOSED TOP BACK OF CURB
	EXISTING PROPERTY LINE
	PROPOSED RIGHT-OF-WAY
	PROPOSED EASEMENT
	PROPOSED ROAD CENTERLINE
EXIST. PVC	PROPOSED 12" WATER MAIN
8" PVC	PROPOSED 8" WATER MAIN
4" PVC	PROPOSED 4" WATER MAIN
UCTV	PROPOSED CATV
T	PROPOSED TELEPHONE
GE	PROPOSED GAS AND ELECTRIC
8" SAN	PROPOSED SANITARY SEWER MAIN AND MANHOLES
	PROPOSED WATER SERVICE WITH METER PIT
SS	PROPOSED SANITARY SEWER SERVICE
	PROPOSED GATE VALVE
	PROPOSED FIRE HYDRANT
	PROPOSED PRV
	PROPOSED PLUG AND BLOW OFF
	EXISTING GAS LINE
	EXISTING OVERHEAD ELECTRIC
	EXISTING TELEPHONE LINE
	EXISTING CULVERT
	EXISTING WATER METER
	PROPOSED PHASE LINE
	EXISTING ASPHALT
	EXISTING GRAVEL
	PROPOSED ASPHALT
	PROPOSED CONCRETE
	FUTURE CONSTRUCTION (BY OTHERS)
1	REVISION NUMBER AND CLOUD



KEY MAP
SCALE: 1"=500'

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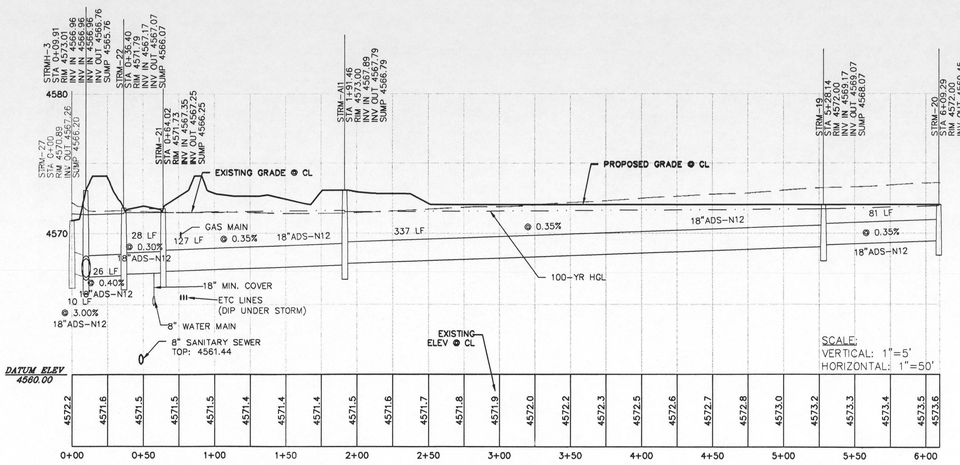
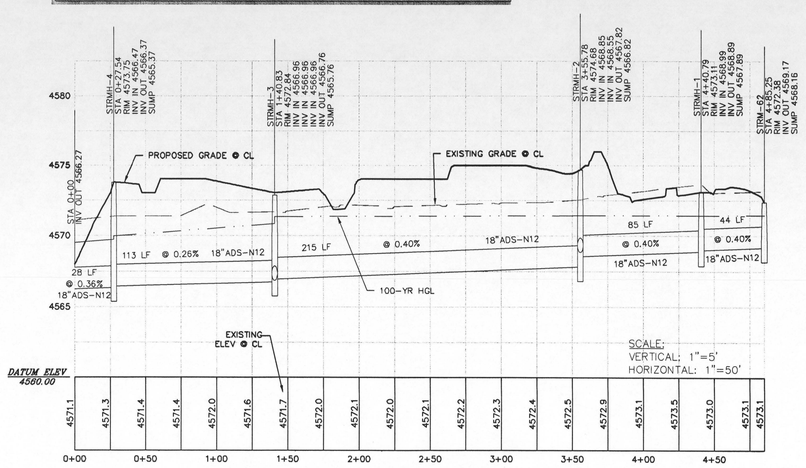
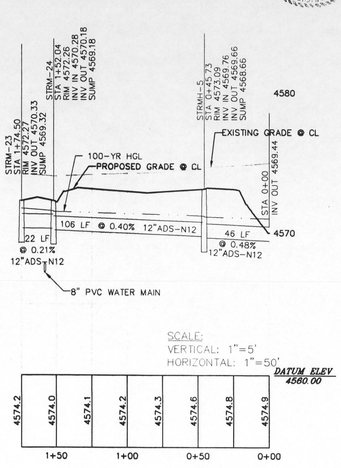
CITY DEVELOPMENT ENGINEER — DATE 2/7/06



STORM SEWER THROUGH NORTHERN RECREATION AREA
PROFILE VIEW



STORM SEWER ALONG F 3/4 ROAD
PROFILE VIEW



STORM SEWER ON NE THERESEA LANE
PROFILE VIEW

HIGH COUNTRY ENGINEERING, INC.
14 INVERNESS DRIVE EAST, STE F-120, ENGLEWOOD, CO 80112
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1517 BLAKE AVENUE, STE 101, GLENWOOD SPRINGS, CO 81601
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NO.	DATE	REVISION	BY
1	8-19-05	CITY OF GRAND JUNCTION COMMENTS	TBRD
2	11-15-05	CITY OF GRAND JUNCTION COMMENTS	TBRD

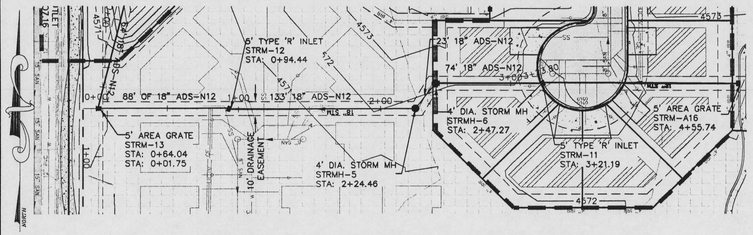
DRAWN BY: ALA
CHECKED BY: REW
DATE: 5-13-05
FILE: PPSTL

HALL PARTNERS, L.L.C.
CITY OF GRAND JUNCTION, COLORADO

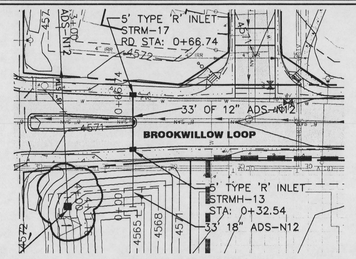
BROOKWILLOW VILLAGE
STORM SEWER PLAN & PROFILES

PROJECT NO
2031-049.00

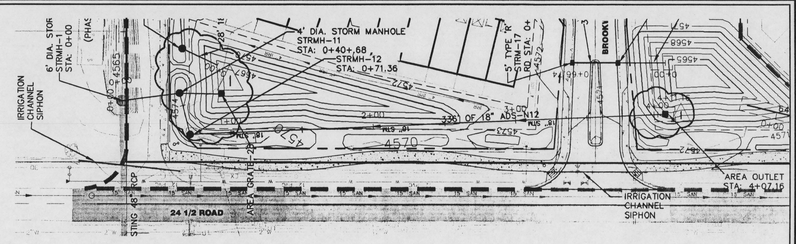
PPSD-3



STORM SEWER FROM PLEASANT COURT
PLAN VIEW



STORM SEWER FROM N. BROOKWILLOW LOOP TO WEST POND
PLAN VIEW



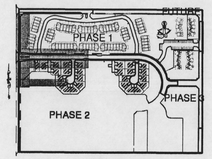
STORM SEWER ALONG 24 1/2 ROAD TO WEST POND
PLAN VIEW

LEGEND

- PROPOSED STORM SEWER
- PROPOSED EDGE OF PAVEMENT
- PROPOSED FLOWLINE
- PROPOSED TOP BACK OF CURB
- EXISTING PROPERTY LINE
- PROPOSED RIGHT-OF-WAY
- PROPOSED EASEMENT
- PROPOSED ROAD CENTERLINE
- PROPOSED 12" WATER MAIN
- PROPOSED 8" WATER MAIN
- PROPOSED 4" WATER MAIN
- PROPOSED CATV
- PROPOSED TELEPHONE
- PROPOSED GAS AND ELECTRIC
- PROPOSED SANITARY SEWER MAIN AND MANHOLES
- PROPOSED WATER SERVICE WITH METER PIT
- PROPOSED SANITARY SEWER SERVICE
- PROPOSED GATE VALVE
- PROPOSED FIRE HYDRANT
- PROPOSED PRV
- PROPOSED PLUG AND BLOW OFF
- EXISTING GAS LINE
- EXISTING OVERHEAD ELECTRIC
- EXISTING TELEPHONE LINE
- EXISTING CULVERT
- EXISTING WATER METER
- PROPOSED PHASE LINE
- EXISTING ASPHALT
- EXISTING GRAVEL
- PROPOSED ASPHALT
- PROPOSED CONCRETE
- FUTURE CONSTRUCTION (BY OTHERS)
- REVISION NUMBER AND CLOUD

"APPROVED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE. ACCEPTANCE OF THESE PLANS DOES NOT RELIEVE THE DEVELOPER, CONTRACTOR OR ENGINEER FROM CONFORMANCE WITH CITY OF GRAND JUNCTION STANDARDS AND SPECIFICATIONS".

CITY DEVELOPMENT ENGINEER — DATE 2/7/06



KEY MAP
SCALE: 1"=500'

GRAPHIC SCALE

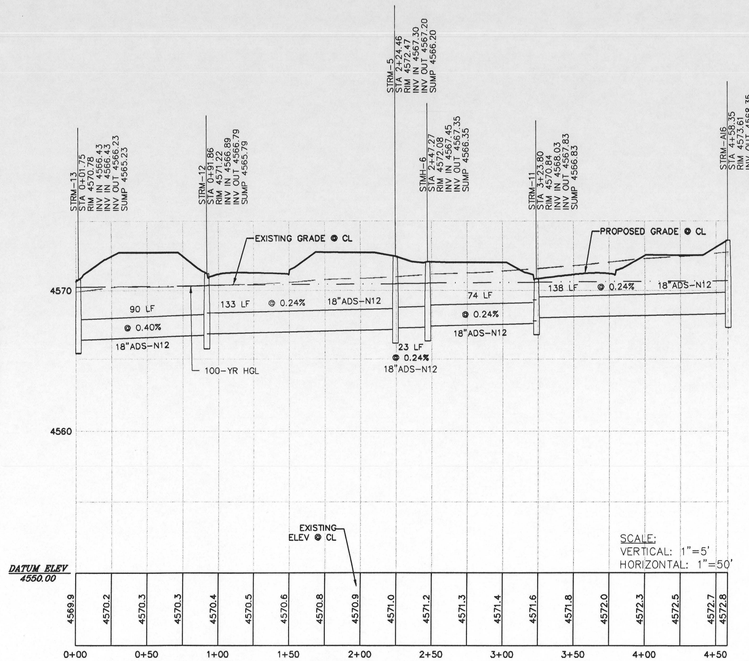
50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

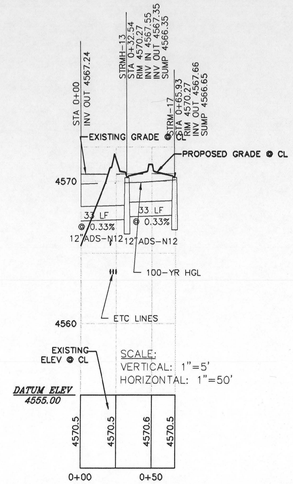
NOTES:
1. ALL STORM SEWER PIPES, INLETS, AND MANHOLES SHALL BE CONSTRUCTED PER THE CITY OF GRAND JUNCTION STANDARDS AND SPECIFICATIONS.
2. 18" MINIMUM COVER SHALL BE MAINTAINED OVER ALL STORM PIPES.
3. SEE DETAIL SHEET DET-STM FOR STORM SEWER CONSTRUCTION/DESIGN DETAILS.
4. PROPOSED AND EXISTING CONTOURS ARE IN 1' INTERVALS.
5. ALL 12", 15", 18", AND 24" STORM PIPES SHALL BE ADS-N12 WT PER THE CITY OF GRAND JUNCTION STANDARD CONTRACT DOCUMENTS.
6. ALL 30" AND 36" STORM PIPE SHALL BE RCP.
7. REVISION THIS SHEET: REMOVED TWO INLETS AND STORM PIPE RUNNING DOWN BROOKWILLOW LOOP AND CHANGED LOCATION OF OUTLET STRUCTURE. ADDED 100-YR HGL'S.

ABBREVIATIONS:

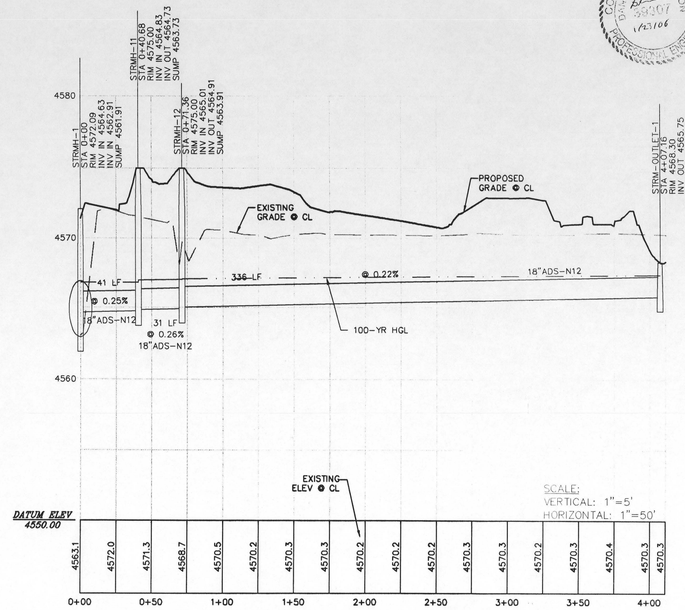
RCP: REINFORCED CONCRETE PIPE.
STRMH: STORM MANHOLE.
AI: AREA INLET.
WT: WATER TIGHT.



STORM SEWER FROM PLEASANT COURT
PROFILE VIEW



STORM SEWER FROM N. BROOKWILLOW LOOP TO WEST POND
PROFILE VIEW



STORM SEWER ALONG 24 1/2 ROAD TO WEST POND
PROFILE VIEW

NO.	DATE	REVISION	BY
1	8-19-05	CITY OF GRAND JUNCTION COMMENTS	RD
2	11-15-05	CITY OF GRAND JUNCTION COMMENTS	RD

CALL UTILITY NOTIFICATION CENTER OF COLORADO 1-800-922-1987 OR 534 0670 IN METRO DENVER
CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES

DRAWN BY: ALA
CHECKED BY: REW
DATE: 5-13-05
F.F. PPSD

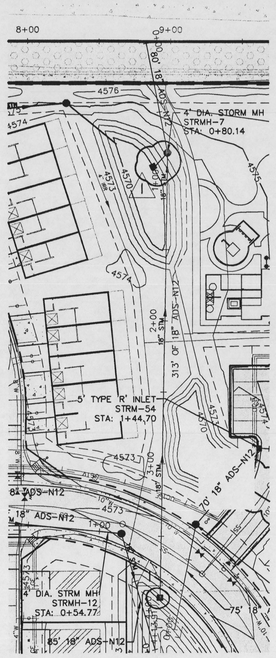
HIGH COUNTRY ENGINEERING, INC.
14 INVERNESS DRIVE EAST, STE F-120, ENGLEWOOD, CO 80112
PHONE (303) 925-0544 FAX (303) 925-0547
1517 BLAKE AVENUE, STE 101, GLENWOOD SPRINGS, CO 81601
PHONE (970) 945-8676 FAX (970) 945-2555
WWW.HCENG.COM

HALL PARTNERS, L.L.C.
CITY OF GRAND JUNCTION, COLORADO

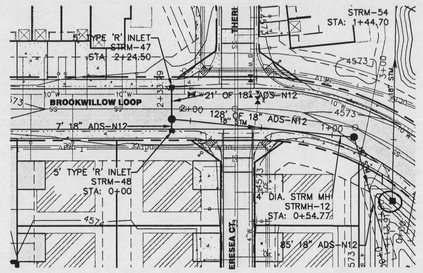
BROOKWILLOW VILLAGE
STORM SEWER PLAN & PROFILES

PROJECT NO
2031049.00

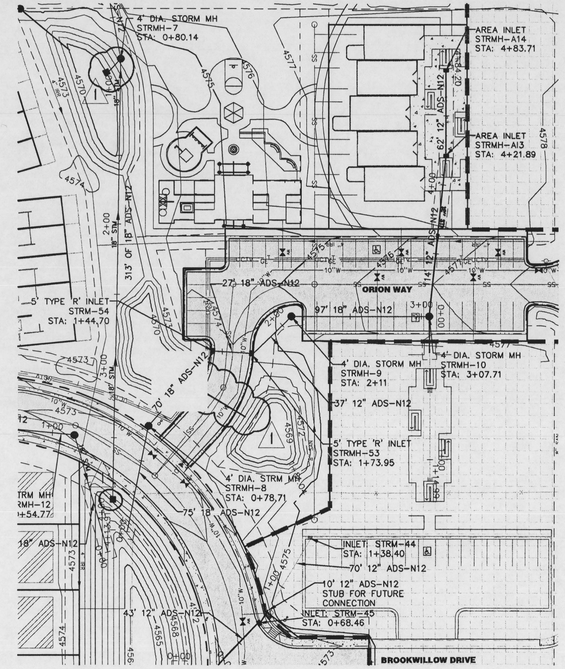
PPSD-4



STORM SEWER THROUGH NORTH EAST OPEN SPACE
PLAN VIEW



STORM SEWER FROM BROOKWILLOW LOOP TO CENTER POND
PLAN VIEW



STORM SEWER 10-PLEXES TO CENTER POND
PLAN VIEW

LEGEND

- PROPOSED STORM SEWER
- PROPOSED EDGE OF PAVEMENT
- PROPOSED FLOWLINE
- PROPOSED TOP BACK OF CURB
- EXISTING PROPERTY LINE
- PROPOSED RIGHT-OF-WAY
- PROPOSED EASEMENT
- PROPOSED ROAD CENTERLINE
- PROPOSED 12" WATER MAIN
- PROPOSED 8" WATER MAIN
- PROPOSED 4" WATER MAIN
- PROPOSED CATV
- PROPOSED TELEPHONE
- PROPOSED GAS AND ELECTRIC
- PROPOSED SANITARY SEWER MAIN AND MANHOLES
- PROPOSED WATER SERVICE WITH METER PIT
- PROPOSED SANITARY SEWER SERVICE
- PROPOSED GATE VALVE
- PROPOSED FIRE HYDRANT
- PROPOSED PRV
- PROPOSED PLUG AND BLOW OFF
- EXISTING GAS LINE
- EXISTING OVERHEAD ELECTRIC
- EXISTING TELEPHONE LINE
- EXISTING CULVERT
- EXISTING WATER METER
- PROPOSED PHASE LINE
- EXISTING ASPHALT
- EXISTING GRAVEL
- PROPOSED ASPHALT
- PROPOSED CONCRETE
- FUTURE CONSTRUCTION (BY OTHERS)
- REVISION NUMBER AND CLOUD

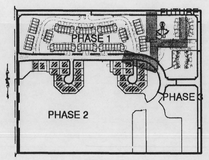
GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

"APPROVED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE. ACCEPTANCE OF THESE PLANS DOES NOT RELIEVE THE DEVELOPER, CONTRACTOR OR ENGINEER FROM CONFORMANCE WITH CITY OF GRAND JUNCTION STANDARDS AND SPECIFICATIONS".

CITY DEVELOPMENT ENGINEER — DATE 2/7/06



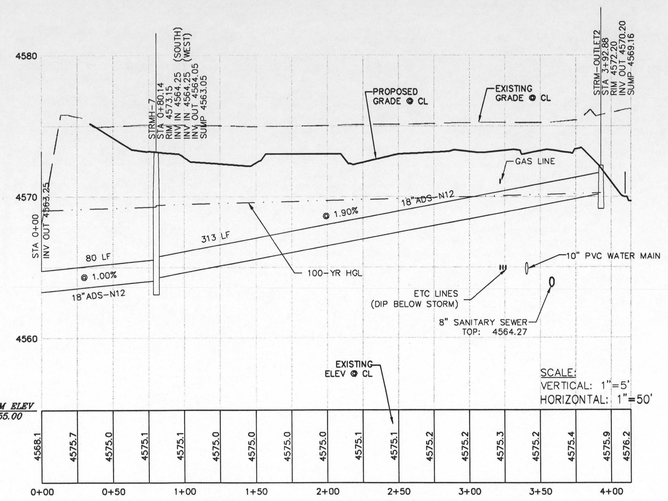
KEY MAP
SCALE: 1": 500'

NOTES:
1. ALL STORM SEWER PIPES, INLETS, AND MANHOLES SHALL BE CONSTRUCTED PER THE CITY OF GRAND JUNCTION STANDARDS AND SPECIFICATIONS.
2. 18" MINIMUM COVER SHALL BE MAINTAINED OVER ALL STORM PIPES.
3. SEE DETAIL SHEET DET-STM FOR STORM SEWER CONSTRUCTION/DESIGN DETAILS.
4. PROPOSED AND EXISTING CONTOURS ARE IN 1' INTERVALS.
5. ALL 12", 15", 18", AND 24" STORM PIPES SHALL BE ADS-N12 WT PER THE CITY OF GRAND JUNCTION STANDARD CONTRACT DOCUMENTS.
6. ALL 30" AND 36" STORM PIPES SHALL BE RCP.

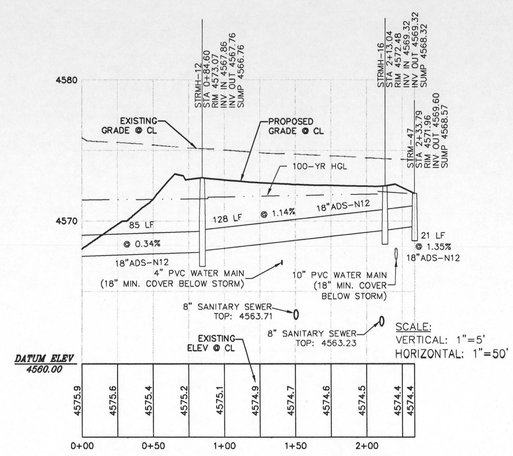
ABBREVIATIONS:

RCP: REINFORCED CONCRETE PIPE.
STRMH: STORM MANHOLE.
AI: AREA INLET.
WT: WATER TIGHT.

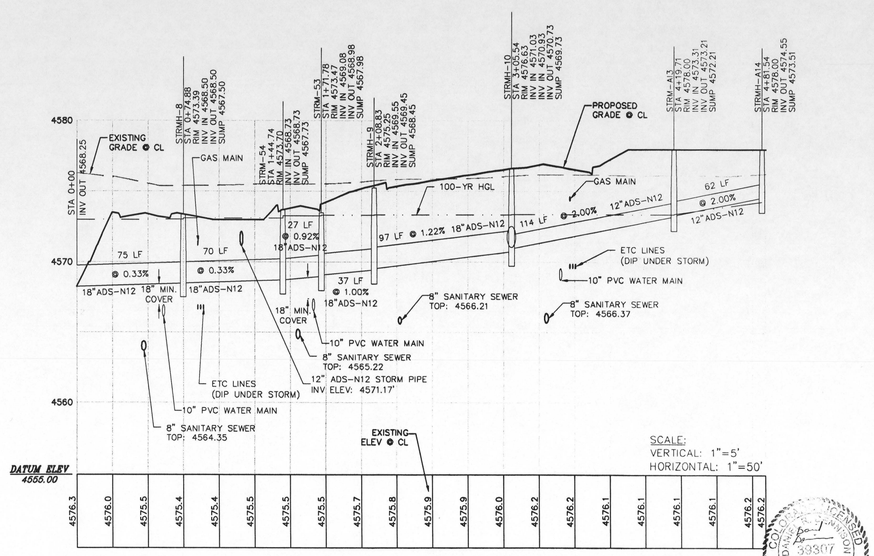
1. REMOVED BOX CULVERT AND REPLACED WT H12" ADS-N12 PIPE.
2. CHANGED OUTLET STRUCTURE LOCATIONS.
3. CHANGED ALIGNMENT OF STORM PIPE.



STORM SEWER THROUGH NORTH EAST OPEN SPACE
PROFILE VIEW



STORM SEWER FROM BROOKWILLOW LOOP TO CENTER POND
PROFILE VIEW



STORM SEWER 10-PLEX N. OF ORION WAY TO CENTER POND
PROFILE VIEW

COLORADO REGISTERED PROFESSIONAL ENGINEER
DANIEL E. KRAUS
39307
1/23/06

CALL UTILITY NOTIFICATION CENTER OF COLORADO
1-800-922-1987
OR 534-0700 IN METRO DENVER
CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES

NO.	DATE	REVISION	BY
1	8-19-05	CITY OF GRAND JUNCTION COMMENTS	DRD
2	11-15-05	REVISIONS PER CITY COMMENTS	DRD

DRAWN BY: ALA
CHECKED BY: REW
DATE: 5/13/05
FILE: PPSD5-6

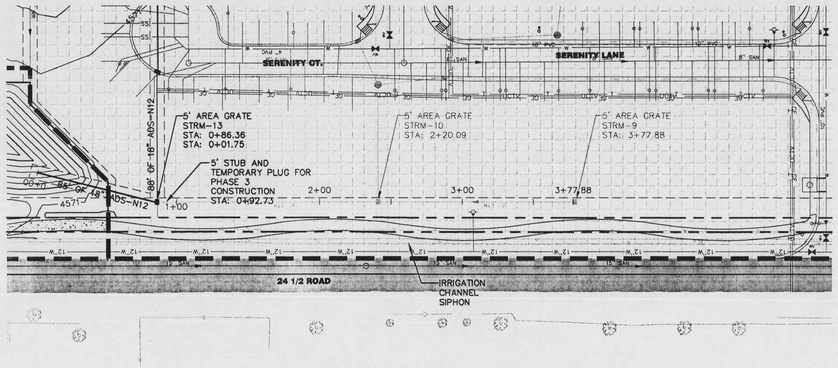
HIGH COUNTRY ENGINEERING, INC.
14 INVERNESS DRIVE EAST, STE F-120, ENGLEWOOD, CO 80112
PHONE (303) 925-0544 FAX (303) 925-0547
1517 BLAKE AVENUE, STE 101, GLENWOOD SPRINGS, CO 81601
PHONE (970) 945-8676 FAX (970) 945-2555
WWW.HIGHCO.COM

HALL PARTNERS, L.L.C.
CITY OF GRAND JUNCTION, COLORADO

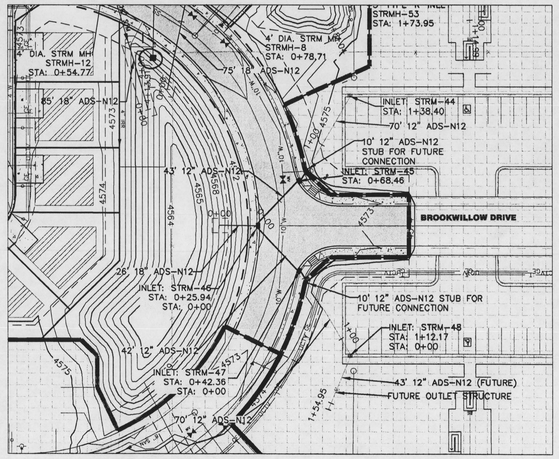
BROOKWILLOW VILLAGE
STORM SEWER PLAN
& PROFILE STA: 1+00 TO END

PROJECT NO.
2031049.00

PPSD-6



STORM SEWER HEADING NORTH TO MIDWEST POND
PLAN VIEW



STORM SEWERS FROM PONDS ON EAST SIDE OF
BROOKWILLOW POND TO LARGE POND
PLAN VIEW

LEGEND

- PROPOSED STORM SEWER
- PROPOSED EDGE OF PAVEMENT
- PROPOSED FLOWLINE
- PROPOSED TOP BACK OF CURB
- EXISTING PROPERTY LINE
- PROPOSED RIGHT-OF-WAY
- PROPOSED EASEMENT
- PROPOSED ROAD CENTERLINE
- PROPOSED 12" WATER MAIN
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- PROPOSED CATV
- PROPOSED TELEPHONE
- PROPOSED GAS AND ELECTRIC
- PROPOSED SANITARY SEWER MAIN AND MANHOLES
- PROPOSED WATER SERVICE WITH METER PIT
- PROPOSED SANITARY SEWER SERVICE
- PROPOSED GATE VALVE
- PROPOSED FIRE HYDRANT
- PROPOSED PRV
- PROPOSED PLUG AND BLOW OFF
- EXISTING GAS LINE
- EXISTING OVERHEAD ELECTRIC
- EXISTING TELEPHONE LINE
- EXISTING CULVERT
- EXISTING WATER METER
- PROPOSED PHASE LINE
- EXISTING ASPHALT
- EXISTING GRAVEL
- PROPOSED ASPHALT
- PROPOSED CONCRETE
- FUTURE CONSTRUCTION (BY OTHERS)
- REVISION NUMBER AND CLOUD

NOTES:
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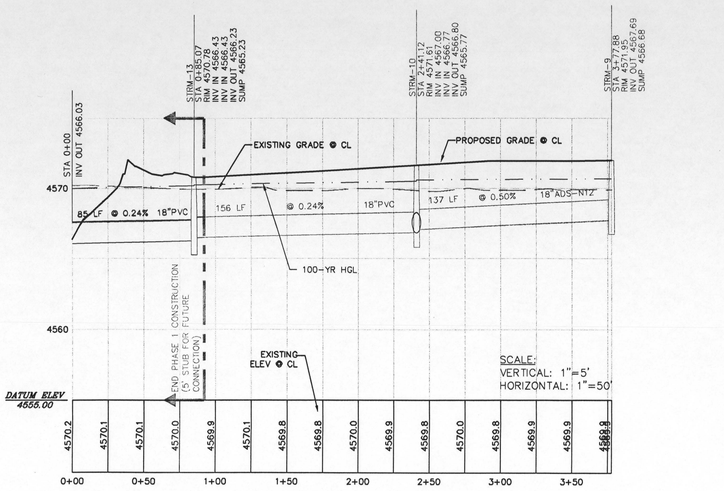
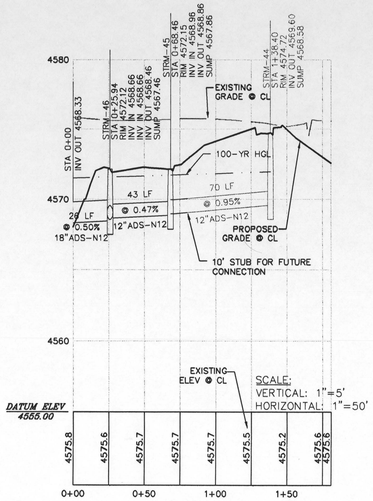
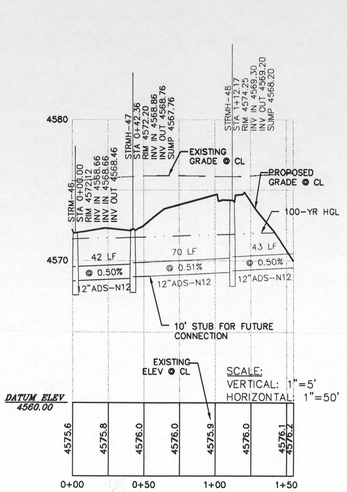


STORM SEWER HEADING NORTH TO MIDWEST POND
PROFILE VIEW



STORM SEWER HEADING SOUTH TO MIDWEST POND
FROM 10-PLEX PARKING LOT
PROFILE VIEW

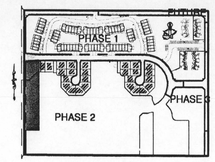


STORM SEWER HEADING NORTH TO MIDWEST POND
FROM 10-PLEX PARKING LOT
PROFILE VIEW

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.



KEY MAP
SCALE: 1":500'

"APPROVED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE. ACCEPTANCE OF THESE PLANS DOES NOT RELIEVE THE DEVELOPER, CONTRACTOR OR ENGINEER FROM CONFORMANCE WITH CITY OF GRAND JUNCTION STANDARDS AND SPECIFICATIONS".

CITY DEVELOPMENT ENGINEER — DATE 2/1/06

CALL UTILITY NOTIFICATION CENTER OF COLORADO
1-800-922-1987
OR 534-0700 IN METRO DENVER
CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES

NO.	DATE	REVISION	BY
1	8-19-05	CITY OF GRAND JUNCTION COMMENTS	3RD
2	11-15-05	CITY OF GRAND JUNCTION COMMENTS	5TH

DRAWN BY: ALA
CHECKED BY: REW
DATE: 5/13/05
FILE: PFSD5-9

HIGH COUNTRY ENGINEERING, INC.
14 INVERNESS DRIVE EAST, STE F-120, ENGLEWOOD, CO 80112
PHONE (303) 925-0544 FAX (303) 925-0547
1517 BLAKE AVENUE, STE 101, GLENWOOD SPRINGS, CO 81601
PHONE (970) 945-8676 FAX (970) 945-2555
WWW.HCENG.COM

HALL PARTNERS, L.L.C.
CITY OF GRAND JUNCTION, COLORADO

BROOKWILLOW VILLAGE
STORM SEWER PLAN
& PROFILE STA: 1+00 TO END

PROJECT NO.
2031049.00

PPSD-9

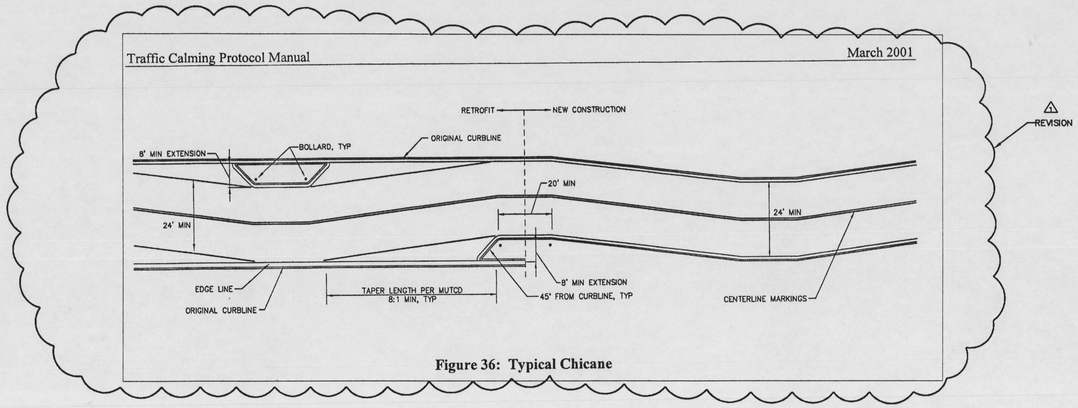
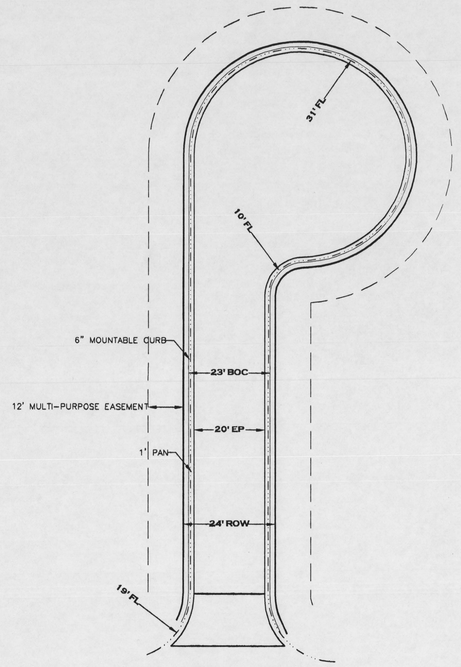
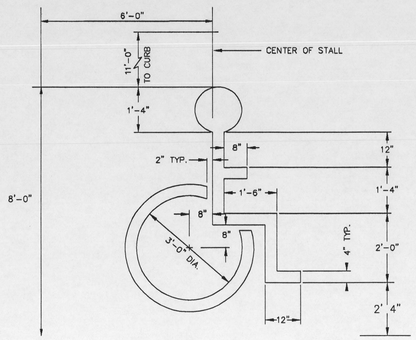


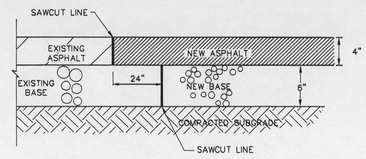
Figure 36: Typical Chicane



PRIVATE CUL-DE-SACS



HANDICAPPED PARKING
N.T.S.



SAWCUT DETAIL
N.T.S.

COLORADO LICENSED
DANIEL L. ERICKSON
39307
1/23/06
PROFESSIONAL ENGINEER

"APPROVED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE. ACCEPTANCE OF THESE PLANS DOES NOT RELIEVE THE DEVELOPER, CONTRACTOR OR ENGINEER FROM CONFORMANCE WITH CITY OF GRAND JUNCTION STANDARDS AND SPECIFICATIONS".

CITY DEVELOPMENT ENGINEER — 2/7/06 DATE

CALL UTILITY NOTIFICATION CENTER OF COLORADO
1-800-922-1987
OR 534-0700 IN METRO DENVER

CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES

NO.	DATE	REVISION	BY
1	8-19-05	CITY OF GRAND JUNCTION COMMENTS	ALA
2	12-23-05	UTE WATER AND CITY COMMENTS	ALA

DRAWN BY: ALA
CHECKED BY: REW
DATE: 5-13-05
FILE: DET-ST

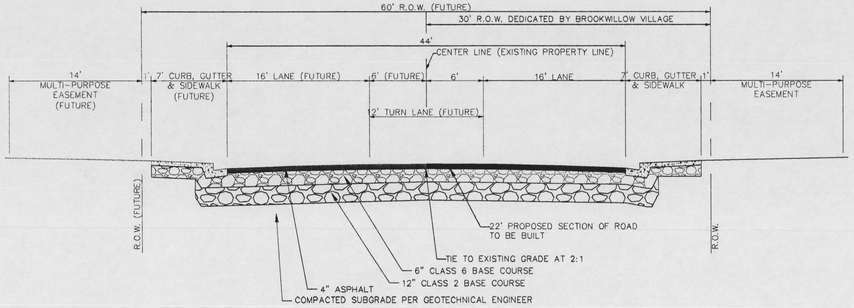
HIGH COUNTRY ENGINEERING, INC.
14 INVERNESS DRIVE EAST, STE F-120, ENGLEWOOD, CO 80112
PHONE (303) 925-0544 FAX (303) 925-0547
1517 BLAKE AVENUE, STE 101, GLENWOOD SPRINGS, CO 81601
PHONE (970) 945-8676 FAX (970) 945-2555
WWW.HCENG.COM

HALL PARTNERS, L.L.C.
CITY OF GRAND JUNCTION, COLORADO

BROOKWILLOW SUBDIVISION
STREET DETAILS

PROJECT NO.
2031049.00

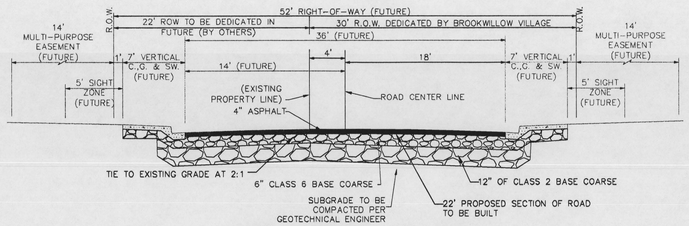
DET-ST1



COLLECTOR (NO ON STREET PARKING)

F 3/4 ROAD

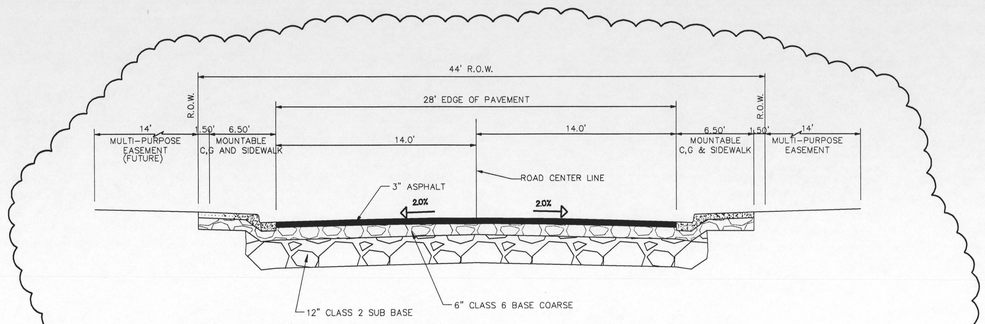
NOTE: STATIONING IS WEST TO EAST



URBAN RESIDENTIAL COLLECTOR

24 3/4 ROAD

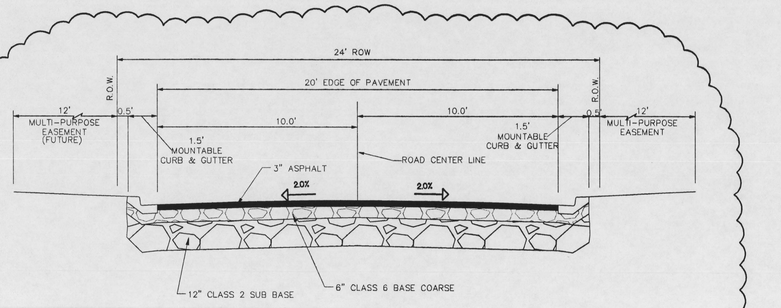
NOTE: STATIONING IS NORTH TO SOUTH



BROOKWILLOW LOOP, BROOKWILLOW DRIVE CROSS SECTION

N.T.S.

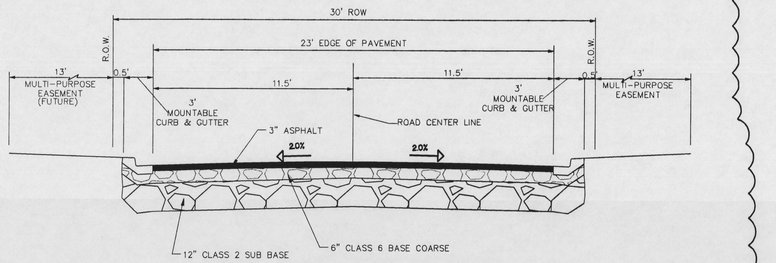
REFER TO TEDS MANUAL



SERENITY CT., THERESEA CT., PLEASANT CT. CROSS SECTION

N.T.S.

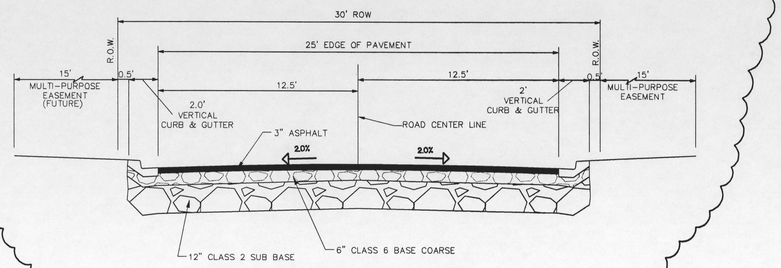
REFER TO TEDS MANUAL



THERESEA LANE CROSS SECTION

N.T.S.

REFER TO TEDS MANUAL



ORION WAY CROSS SECTION
STA: 1+00 TO STA: 2+12.94

N.T.S.

REFER TO TEDS MANUAL

"APPROVED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE. ACCEPTANCE OF THESE PLANS DOES NOT RELIEVE THE DEVELOPER, CONTRACTOR OR ENGINEER FROM CONFORMANCE WITH CITY OF GRAND JUNCTION STANDARDS AND SPECIFICATIONS".

CITY DEVELOPMENT ENGINEER — DATE 2/7/06

COLORADO — DANIEL E. LENTZ — 38307 — 1/27/06 — REGISTERED PROFESSIONAL ENGINEER

CALL UTILITY NOTIFICATION CENTER OF COLORADO
1-800-922-1987
OR 534-2700 IN METRO DENVER

CALL 2 WORKING DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

NO.	DATE	REVISION	BY
1	8-19-05	CITY OF GRAND JUNCTION COMMENTS	
2	11-15-05	CITY OF GRAND JUNCTION COMMENTS	

HIGH COUNTRY ENGINEERING, INC.
14 INVERNESS DRIVE EAST, STE F-120, ENGLEWOOD, CO 80112
PHONE (303) 925-0544 FAX (303) 925-0547
1517 BLAKE AVENUE, STE 101, GLENWOOD SPRINGS, CO 81601
PHONE (970) 945-8212 FAX (970) 945-8455
WWW.HCENG.COM

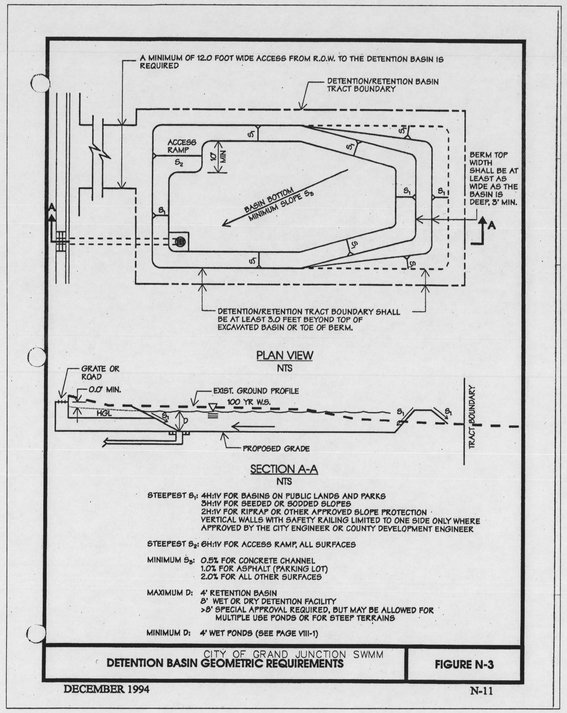
DRAWN BY: ALA
CHECKED BY: REW
DATE: 5-13-05
FILE: DET-ST

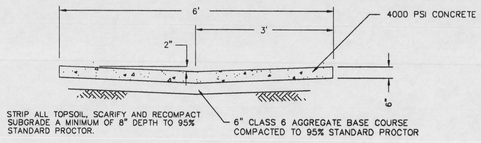
HALL PARTNERS, L.L.C.
CITY OF GRAND JUNCTION, COLORADO

BROOKWILLOW SUBDIVISION
STREET DETAILS

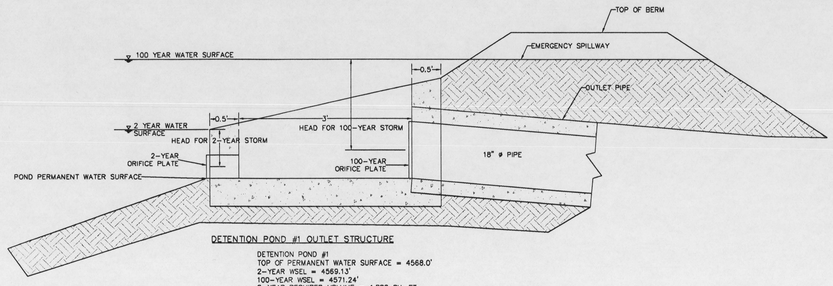
PROJECT NO.
2031049.00

DET-ST2



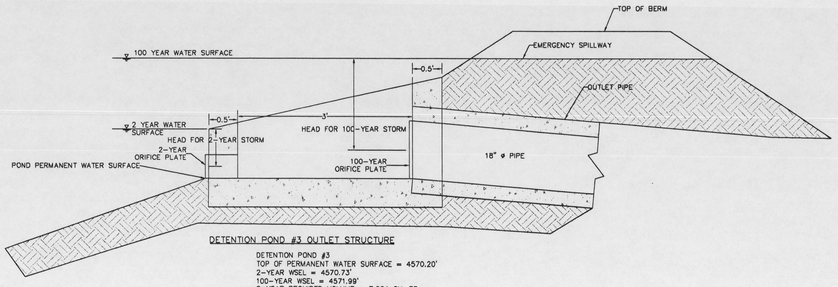


CROSS PAN DETAIL
N.T.S.



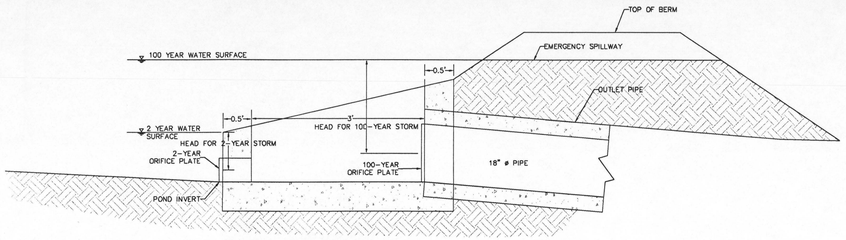
DETENTION POND #1 OUTLET STRUCTURE

DETENTION POND #1
TOP OF PERMANENT WATER SURFACE = 4568.0'
2-YEAR WSEL = 4569.13'
100-YEAR WSEL = 4571.24'
2-YEAR REQUIRED VOLUME = 4,800 CU. FT.
100-YEAR REQUIRED VOLUME = 17,849 CU. FT.
BOX DIMENSION= 3' X 3'
2-YEAR ORIFICE PLATE = 5.5-INCH DIAMETER
100-YEAR ORIFICE PLATE = 9.4-INCH DIAMETER
EMERGENCY SPILLWAY ELEVATION = 4572.24'
CREST ELEVATION = 4572.74'
OUTLET PIPE = 18-INCH ø



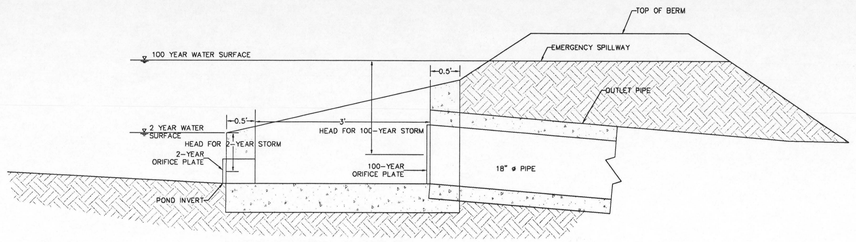
DETENTION POND #3 OUTLET STRUCTURE

DETENTION POND #3
TOP OF PERMANENT WATER SURFACE = 4570.20'
2-YEAR WSEL = 4570.73'
100-YEAR WSEL = 4571.98'
2-YEAR REQUIRED VOLUME = 7,584 CU. FT.
100-YEAR REQUIRED VOLUME = 28,076 CU. FT.
BOX DIMENSION= 3' X 3'
2-YEAR ORIFICE PLATE = 2-INCH TALL BY 14-INCHES WIDE
100-YEAR ORIFICE PLATE = 13.5-INCH DIAMETER
EMERGENCY SPILLWAY ELEVATION = 4572.99'
CREST ELEVATION = 4573.49'
OUTLET PIPE = 18-INCH ø



DETENTION POND #2 OUTLET STRUCTURE

DETENTION POND #2
BOTTOM OF POND = 4566.00'
2-YEAR WSEL = 4568.39'
100-YEAR WSEL = 4570.24'
2-YEAR REQUIRED VOLUME = 2,408 CU. FT.
100-YEAR REQUIRED VOLUME = 8,774 CU. FT.
BOX DIMENSION= 3' X 3'
2-YEAR ORIFICE PLATE = 2.5-INCH DIAMETER
100-YEAR ORIFICE PLATE = 5.5-INCH DIAMETER
EMERGENCY SPILLWAY ELEVATION = 4571.24'
CREST ELEVATION = 4571.74
OUTLET PIPE = 18-INCH ø



DETENTION POND #4 OUTLET STRUCTURE

DETENTION POND #4
BOTTOM OF POND = 4569.50'
2-YEAR WSEL = 4570.20'
100-YEAR WSEL = 4571.14'
2-YEAR REQUIRED VOLUME = 693 CU. FT.
100-YEAR REQUIRED VOLUME = 2,488 CU. FT.
BOX DIMENSION= 3' X 3'
2-YEAR ORIFICE PLATE = 2.5-INCH DIAMETER
100-YEAR ORIFICE PLATE = 5-INCH DIAMETER
EMERGENCY SPILLWAY ELEVATION = 4572.14'
CREST ELEVATION = 4572.39'
OUTLET PIPE = 18-INCH ø

COLORADO REGISTERED DANIEL E. HOLLIS 39307 1/23/06 PROFESSIONAL ENGINEER

"APPROVED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE. ACCEPTANCE OF THESE PLANS DOES NOT RELIEVE THE DEVELOPER, CONTRACTOR OR ENGINEER FROM CONFORMANCE WITH CITY OF GRAND JUNCTION STANDARDS AND SPECIFICATIONS".

CITY DEVELOPMENT ENGINEER — DATE 2/7/06

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1-800-922-1967
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NO.	DATE	REVISION	BY
1	8-19-05	CITY OF GRAND JUNCTION COMMENTS	

DRAWN BY: DJD
CHECKED BY: REW
DATE: 5-13-05
FILE: DET-STM

HIGH COUNTRY ENGINEERING, INC.
14 INVERNESS DRIVE EAST, STE F-120, ENGLEWOOD, CO 80112
PHONE (303) 925-0544 FAX (303) 925-0547
1517 BLAKE AVENUE, STE 101, GLENWOOD SPRINGS, CO 81601
PHONE (970) 945-8676 FAX (970) 945-2555
WWW.HCENG.COM

HALL PARTNERS, L.L.C.
CITY OF GRAND JUNCTION, COLORADO

BROOKWILLOW VILLAGE P.U.D.
STORM DRAIN DETAILS

PROJECT NO.
2031049.00
0510

DET-STM1

FLARED END SECTIONS

TOP VIEW | RIGHT SIDE VIEW | FRONT VIEW

PART #	PIPE SIZE	A	B (MAX)	H	L	W
1210NP	12 in (300 mm)	6.50 in (165 mm)	10.00 in (254 mm)	6.50 in (165 mm)	25.00 in (635 mm)	29.00 in (737 mm)
1510NP	15 in (375 mm)	6.50 in (165 mm)	10.00 in (254 mm)	6.50 in (165 mm)	25.00 in (635 mm)	29.00 in (737 mm)
1810NP	18 in (450 mm)	7.50 in (191 mm)	15.00 in (381 mm)	6.50 in (165 mm)	32.00 in (813 mm)	35.00 in (889 mm)
2410NP	24 in (600 mm)	7.50 in (191 mm)	18.00 in (457 mm)	6.50 in (165 mm)	36.00 in (914 mm)	45.00 in (1143 mm)
3015NP	30 in (750 mm)	7.50 in (191 mm)	12.00 in (305 mm)	8.60 in (218 mm)	58.00 in (1473 mm)	63.00 in (1600 mm)
3615NP	36 in (900 mm)	7.50 in (191 mm)	25.00 in (635 mm)	8.60 in (218 mm)	58.00 in (1473 mm)	63.00 in (1600 mm)

NOTE: PE THREADED ROD W/WING NUTS PROVIDED FOR END SECTIONS 12"–24". 30" & 36" END SECTIONS REQUIRE TWO (2) THREADED RODS FOR ASSEMBLE.

NOTE: ALL DIMENSIONS ARE NOMINAL

ADS ADVANCED DRAINAGE SYSTEMS, INC.

DRAWN BY	APPROVED BY	DRAWING #
AWM 10.07.02	AWM 10.07.02	6070

REVISIONS	
BY	DATE
AWM	01.31.05

2 2/3" x 1/2" CORRUGATIONS ROUND STEEL PIPE

PIPE DIA. (INCHES)	HEIGHT OF COVER LIMITS, H (FEET) + * Ø WALL THICKNESS (INCHES) 0.064	0.079	0.109	0.138	0.168
12	92	100	100	100	100
15	74	80	100	100	100
18	61	67	86	90	94
21	53	57	74	77	81
24	46	50	65	68	71
27	41	44	57	60	63
30	37	40	52	54	56
36	30	33	43	45	47
42	34	47	74	77	81
48	30	41	65	68	71
54		36	57	60	63
60			52	54	57
66				49	51
72				45	47
78					43
84					40

* 12" MIN. COVER

3"x1" CORRUGATIONS ROUND STEEL PIPE

PIPE DIA. (INCHES)	+ MIN. COVER (INCHES)	HEIGHT OF COVER LIMITS, H (FEET) Ø WALL THICKNESS (INCHES) 0.064	0.079	0.109	0.138	0.168
36	12	53	66	98	100	100
42	12	45	56	84	100	100
48	12	39	49	73	88	98
54	12	35	44	65	78	87
60	12	31	39	58	70	78
66	12	28	36	53	64	71
72	12	26	33	49	58	65
78	12	24	30	45	54	60
84	12	22	28	42	50	56
90	12	21	26	39	47	52
96	12		24	36	44	49
102	18		23	34	41	46
108	18			32	39	43
114	18			30	37	41
120	18			29	35	39

5"x1" CORRUGATIONS ROUND STEEL PIPE

PIPE DIA. (INCHES)	+ MIN. COVER (INCHES)	HEIGHT OF COVER LIMITS, H (FEET) Ø WALL THICKNESS (INCHES) 0.064	0.079	0.109	0.138	0.168
48	12	39	49	73	88	98
54	12	35	44	65	78	87
60	12	31	39	58	70	78
66	12	28	36	53	64	71
72	12	26	33	49	58	65
78	12	24	30	45	54	60
84	12	22	28	42	50	56
90	12	21	26	39	47	52
96	12		24	36	44	49
102	18		23	34	41	46
108	18			32	39	43
114	18			30	37	41
120	18			29	35	39

GENERAL NOTES

1. ADEQUATE COVER SHALL BE PROVIDED DURING CONSTRUCTION TO PROTECT THE STRUCTURE FROM DAMAGE.
2. PIPE SHALL BE PLACED WITH LONGITUDINAL SEAMS AT THE SIDES OR QUARTER POINTS BUT NOT ALONG TOP OF VERTICAL AXIS.
3. STRUCTURAL PLATE PIPES OF EQUAL OR GREATER DIAMETER, CONFORMING TO SECTION 510 OF THE STANDARD SPECIFICATIONS, MAY BE SUBSTITUTED FOR THE PIPES ON THESE SHEETS AT NO ADDITIONAL COST TO THE PROJECT.
4. WHEN A CULVERT IS TO BE EXTENDED WITH PIPE OF A DIFFERENT MATERIAL, THE CONNECTION SHALL CONFORM TO THE DETAILS ON THE PLANS OR BE APPROVED.
5. EXTENSIONS FOR CMP ARCH CULVERT SHALL MATCH THE CORRUGATIONS AND THE SPAN AND RISE DIMENSIONS OF THE CULVERT TO BE EXTENDED.
6. BACKFILL AND COMPACTION SHALL BE IN ACCORDANCE WITH SECTION 206.

▽ PIPE-ARCH WITH EQUAL PERIPHERY AND WITH SPAN AND RISE DIMENSIONS APPROXIMATELY EQUAL TO THOSE REQUIRED BY PLANS WILL BE PERMITTED.

◪ PIPE-ARCH IS INTENDED FOR USE WHERE MINIMUM COVER REQUIREMENTS FOR ROUND PIPE CANNOT BE MET. WHEN COVER EXCEEDS 11 FT., USE ROUND PIPE.

+ MINIMUM COVER FOR METAL OR PLASTIC PIPE IS THE DISTANCE FROM THE TOP OF THE PIPE TO THE TOP OF SUBGRADE.

Ø COVER GREATER THAN 90 FT. SHALL BE USED ONLY AFTER THOROUGH INVESTIGATION OF FOUNDATION MATERIAL.

2 2/3" x 1/2" CORRUGATIONS STEEL PIPE–ARCH ◪

PIPE SIZE ▽ SPAN x RISE (INCHES)	EQUIV. DIA.	WALL THICKNESS	HEIGHT OF COVER + * LIMITS H (FEET) CORNER BEARING PRESSURE 2 TONS PER SQ. FT.
17 x 13	15	0.064	11
21 x 15	18	0.064	9
24 x 18	21	0.064	8
28 x 20	24	0.064	7
35 x 24	30	0.064	5
42 x 29	36	0.064	5
49 x 33	42	0.079	5
57 x 38	48	0.109	5
64 x 43	54	0.109	6
71 x 47	60	0.138	6
77 x 52	66	0.168	6
83 x 57	72	0.168	7

* 12" MIN. COVER

3"x1" & 5"x1" CORRUGATIONS STEEL PIPE–ARCH ◪

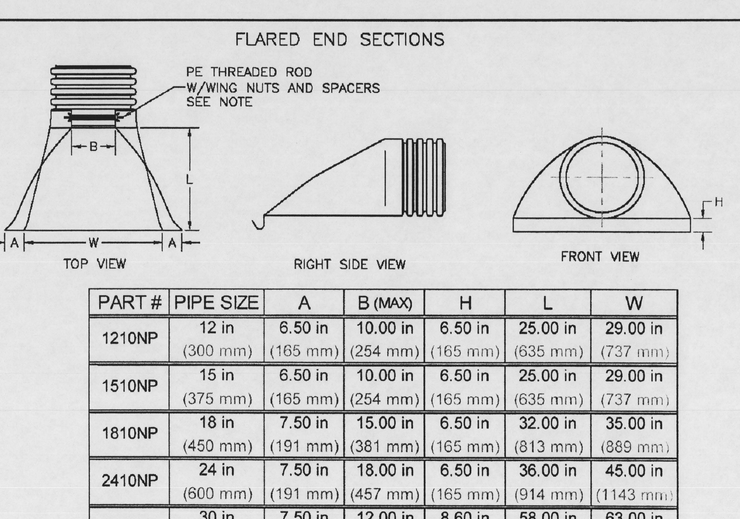
PIPE SIZE ▽ SPAN x RISE (INCHES)	EQUIV. DIA.	WALL THICKNESS	+ MIN. COVER	HEIGHT OF COVER LIMITS H (FEET) CORNER BEARING PRESSURE 2 TONS PER SQ. FT.
40 x 31	36	0.064	12	8
46 x 36	42	0.064	12	8
53 x 41	48	0.064	12	8
60 x 46	54	0.064	15	8
66 x 51	60	0.064	15	9
73 x 55	66	0.064	18	10
81 x 59	72	0.064	18	11
87 x 63	78	0.064	18	10
95 x 67	84	0.079	18	11
103 x 71	90	0.109	18	10
112 x 75	96	0.109	21	10
117 x 79	102	0.109	21	10
128 x 83	108	0.138	24	9
137 x 87	114	0.138	24	8
142 x 91	120	0.168	24	8

PLASTIC PIPE

TYPE AND MATERIAL	SIZES AVAILABLE (INCHES)	HEIGHT OF COVER + * LIMITS H (FEET)
CORRUGATED POLYETHYLENE (HDPE)	12 TO 48	30
RIBBED POLYETHYLENE (HDPE)	18 TO 96	20
RIBBED POLYVINYL CHLORIDE (PVC)	18 TO 48	25

FILL HEIGHT REQUIREMENTS GREATER THAN THE HEIGHT OF COVER LIMITS LISTED, WILL REQUIRE SPECIAL DESIGN.

* 12" MIN. COVER OR PER MANUFACTURE'S RECOMMENDATION, WHICHEVER IS GREATER.



PIPE DIA.	QTY. 3/4 ROCK REQ'D.
8"–12"	0.75 TON/L.F.
15"–18"	1.25 TON/L.F.
24"	1.50 TON/L.F.
30"	2.00 TON/L.F.

PIPED CARPENTER DITCH
30" AND 36" TRENCH DETAILS

TRENCH BACKFILL DETAIL
NOT TO SCALE

CREATED: MAY 1998 UPDATED: SEPTEMBER 2004

GRAND JUNCTION DRAINAGE DISTRICT
728 - 23 Road P.O. Box 859
Grand Junction, CO. 81502
(970) 242-4343

DETAIL NO.2

GRAND JUNCTION DRAINAGE DISTRICT

COLORADO REGISTERED PROFESSIONAL ENGINEER 33577 12/31/06

"APPROVED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE. ACCEPTANCE OF THESE PLANS DOES NOT RELIEVE THE DEVELOPER, CONTRACTOR OR ENGINEER FROM CONFORMANCE WITH CITY OF GRAND JUNCTION STANDARDS AND SPECIFICATIONS".

CITY DEVELOPMENT ENGINEER — DATE 2/7/06

CDOT MSTANDARDS

HIGH COUNTRY ENGINEERING, INC.
14 INVERNESS DRIVE EAST, STE F-120, ENGLEWOOD, CO 80112
PHONE (303) 925-9544 FAX (303) 925-0547
1517 BLAKE AVENUE, STE 101, GLENWOOD SPRINGS, CO 81601
PHONE (970) 945-8778 FAX (970) 945-8779
WWW.HCENG.COM

NO.	DATE	REVISION	BY
1	8-19-05	CITY OF GRAND JUNCTION COMMENTS	

CALL UTILITY NOTIFICATION CENTER OF COLORADO 1-800-922-1987 OR 534-0700 IN METRO DENVER

CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES

DRAWN BY: D.JD
CHECKED BY: REW
DATE: 5-13-05
FILE: DET-STM

HALL PARTNERS, L.L.C.
CITY OF GRAND JUNCTION, COLORADO

BROOKWILLOW VILLAGE P.U.D.
STORM DRAIN DETAILS

PROJECT NO.
2031049.00
0510

DET-STM2

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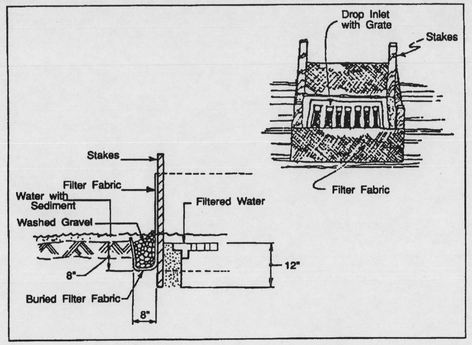
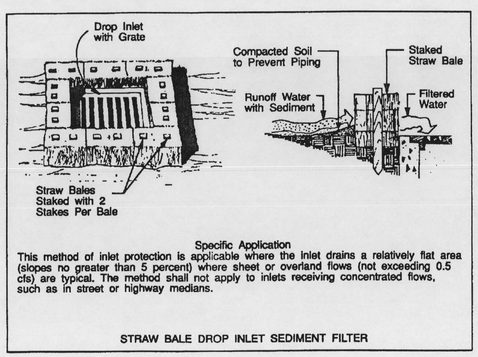
CITY DEVELOPMENT ENGINEER — DATE 2/7/06

SD INLET





Specific Application

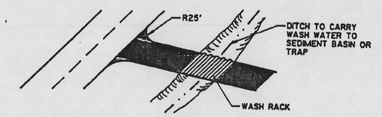
This method of inlet protection is applicable where the inlet drains a relatively flat area (slopes no greater than 5 percent) where sheet or overland flows (not exceeding 0.5 cfs) are typical. The method shall not apply to inlets receiving concentrated flows, such as in street or highway medians.

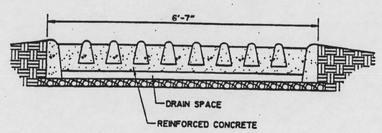
STRAW BALE DROP INLET SEDIMENT FILTER

STORM DRAIN INLET PROTECTION	I.P. Symbol	Exhibit M-23c

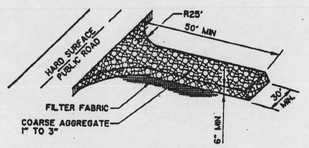
M-108 DEC 1994

CON. ENT.





WASH RACK

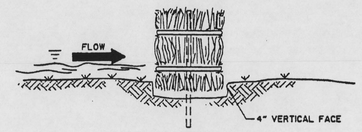


STABILIZED CONSTRUCTION ENTRANCE

CONSTRUCTION ENTRANCE STABILIZATION	C.E.S. Symbol	Exhibit M-4c

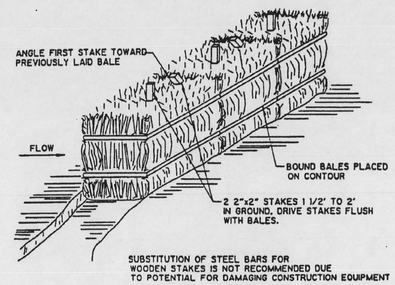
DEC 1994 — USE THIS METHOD OR AN APPROVED ALTERNATE — M-37

STRAW



• PROMOTES ON SITE SEDIMENTATION BY CREATING A TEMPORARY POND.

BEDDING DETAIL



SUBSTITUTION OF STEEL BARS FOR WOODEN STAKES IS NOT RECOMMENDED DUE TO POTENTIAL FOR DAMAGING CONSTRUCTION EQUIPMENT

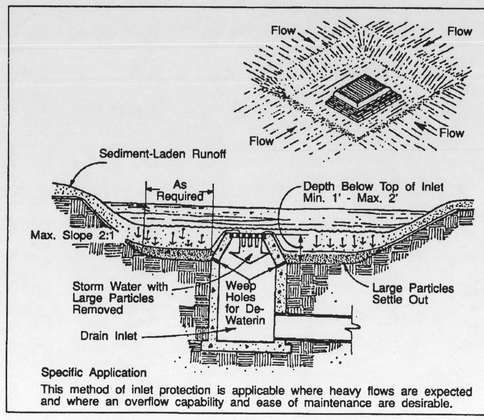
ANCHORING DETAIL

STRAW BALE BARRIERS

STRAW BALE BARRIERS	S.B.B. Symbol	Exhibit M-24c

M-114 DEC 1994

SD INLET



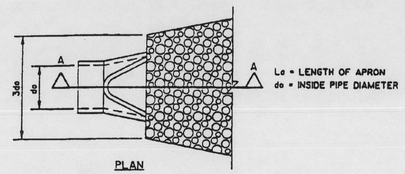
Specific Application

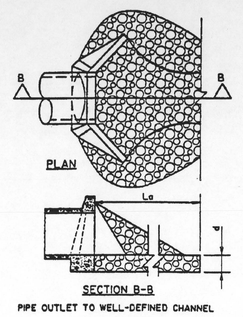
This method of inlet protection is applicable where heavy flows are expected and where an overflow capability and ease of maintenance are desirable.

STORM DRAIN INLET PROTECTION	I.P. Symbol	Exhibit M-23f

DEC 1994 M-111

ROCK





NOTES

1. APRON LINING MAY BE RIPRAP, GROUTED RIPRAP, OR CONCRETE.
2. WHEREAS TECHNICAL DESIGN PROCEDURES EXIST FOR DETERMING Lo, USE THE FOLLOWING TABLE FOR TEMPORARY ROCK OUTLET PROTECTION.

PIPE SIZE	AVERAGE ROCK DIA.	Lo
12"	6"	12'
15"	10"	18'
18"	12"	21'
21"	15"	25'
24"	15"	30'

3. d = 1.5 TIMES THE MAXIMUM STONE DIAMETER BUT NOT LESS THAN 6 INCHES.

PIPE OUTLET CONDITIONS

ROCK OUTLET PROTECTION	Symbol	Exhibit M-14c

M-74 DEC 1994

COLORADO REGISTERED DANIEL R. JOHNSON 38001 PROFESSIONAL ENGINEER 12/23/06

CALL UTILITY NOTIFICATION CENTER OF COLORADO 1-800-922-1987 OR 534-0700 IN METRO DENVER

CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES

NO.	DATE	REVISION	BY
1	8-19-05	CITY OF GRAND JUNCTION COMMENTS	

DRAWN BY: ALA
CHECKED BY: DRD
DATE: 8-3-05
FILE: SWMPDET

HIGH COUNTRY ENGINEERING, INC.
14 INVERNESS DRIVE EAST, STE F-120, ENGLEWOOD, CO 80112
PHONE (303) 925-0544 FAX (303) 925-0547
1517 BLAKE AVENUE, STE 101, GLENWOOD SPRINGS, CO 81601
PHONE (970) 945-8676 FAX (970) 945-2555
WWW.HCENG.COM

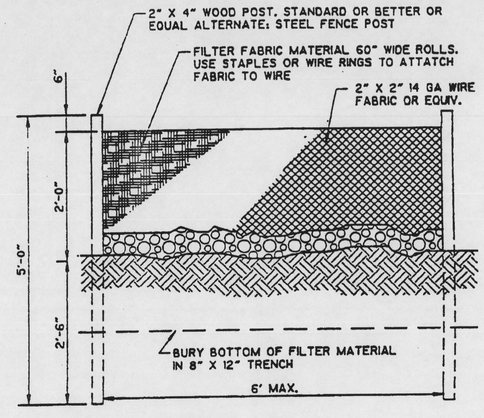
HALLS, LLC
CITY OF GRAND JUNCTION, COLORADO

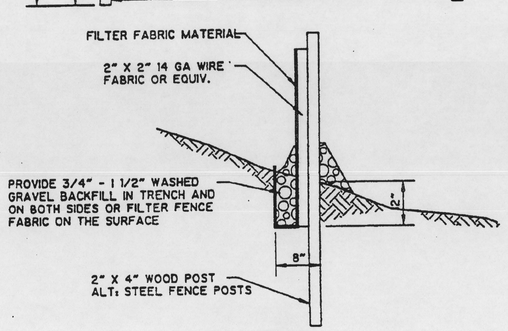
BROOKWILLOW VILLAGE
STORMWATER MANAGEMENT
PLAN DETAILS

PROJECT NO.
2031049.00

SWMPDET-1

SILT



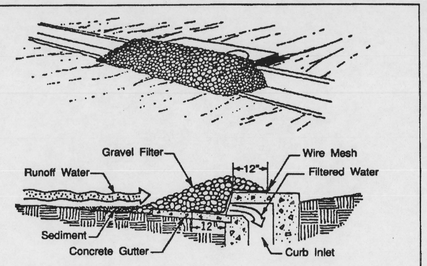


SILT FENCE

SILT FENCE	**SF** Symbol	**Exhibit M-18e**

DEC 1994 M-93

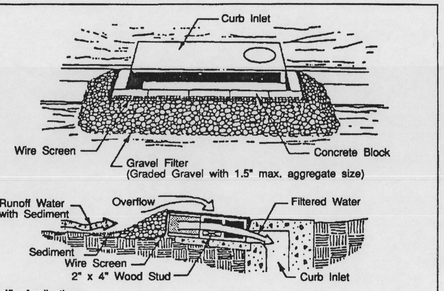
SD INLET



Specific Application

This method of inlet protection is applicable at curb inlets where ponding in front of the structure is not likely to cause inconvenience or damage to adjacent structures and unprotected areas.

Note: Alternate design could utilize gravel filled bags.



Specific Application

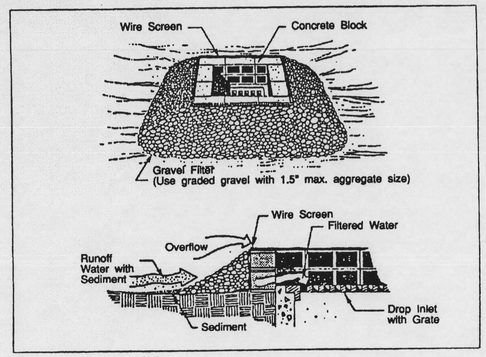
This method of inlet protection is applicable at curb inlets where an overflow capability is necessary to prevent excessive ponding in front of the structure.

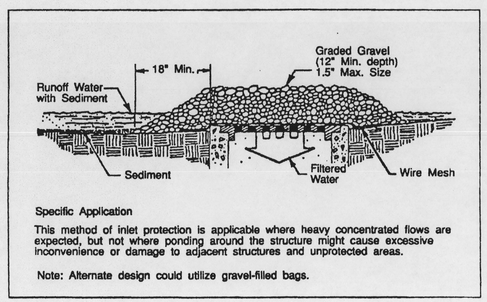
Note: Alternate design could utilize gravel filled bags.

STORM DRAIN INLET PROTECTION	I.P. Symbol	**Exhibit M-23d**

DEC 1994 M-109

SD INLET





Specific Application

This method of inlet protection is applicable where heavy concentrated flows are expected, but not where ponding around the structure might cause excessive inconvenience or damage to adjacent structures and unprotected areas.

Note: Alternate design could utilize gravel-filled bags.

STORM DRAIN INLET PROTECTION	I.P. Symbol	**Exhibit M-23e**

M-110 DEC 1994

PROFESSIONAL ENGINEER 23301 1/27/06

"APPROVED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE. ACCEPTANCE OF THESE PLANS DOES NOT RELIEVE THE DEVELOPER, CONTRACTOR OR ENGINEER FROM CONFORMANCE WITH CITY OF GRAND JUNCTION STANDARDS AND SPECIFICATIONS".

CITY DEVELOPMENT ENGINEER 2/7/06 DATE

CALL UTILITY NOTIFICATION CENTER OF COLORADO 1-800-922-1987 OR 534-0700 IN METRO DENVER
CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES

NO.	DATE	REVISION	BY
1	8-19-05	CITY OF GRAND JUNCTION COMMENTS	DRD
2	11-15-05	CITY OF GRAND JUNCTION COMMENTS	DRD

DRAWN BY: ALA
CHECKED BY: DRD
DATE: 8-3-05
FILE: SWMP-DET

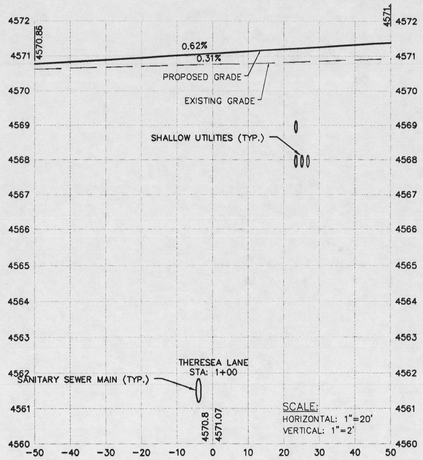
HIGH COUNTRY ENGINEERING, INC.
14 INVERNESS DRIVE EAST, STE F-120, ENGLEWOOD, CO 80112
PHONE (303) 925-0544 FAX (303) 925-0547
1517 BLAKE AVENUE, STE 101, GLENWOOD SPRINGS, CO 81601
PHONE (970) 945-8676 FAX (970) 945-2555
WWW.HCENG.COM

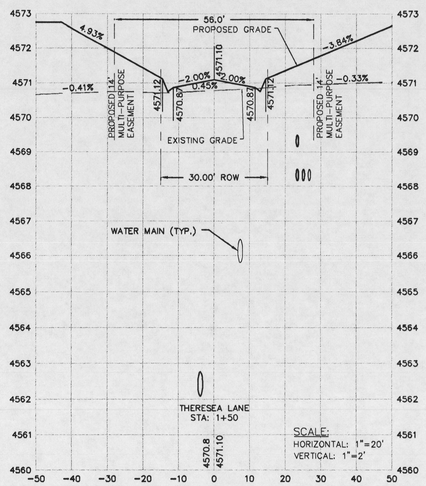
HALL PARTNERS, LLC
CITY OF GRAND JUNCTION, COLORADO

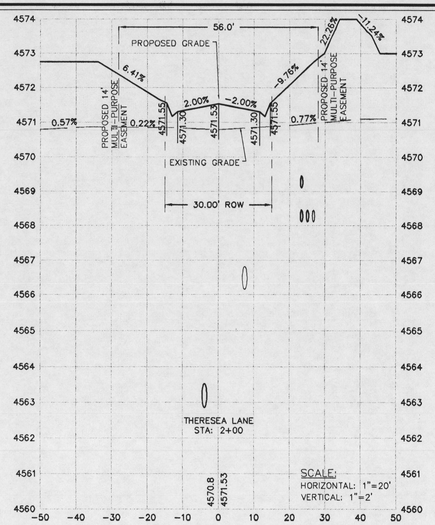
BROOKWILLOW VILLAGE
STORMWATER MANAGEMENT
PLAN DETAILS

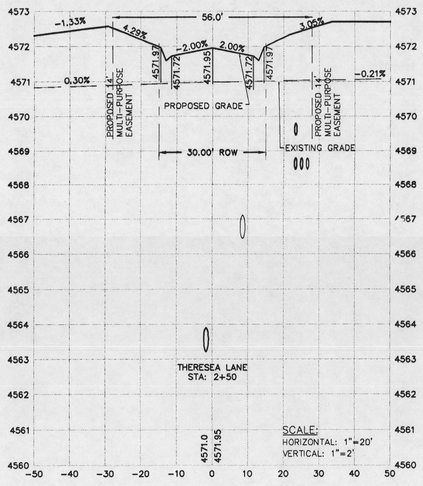
PROJECT NO.
2031049.00

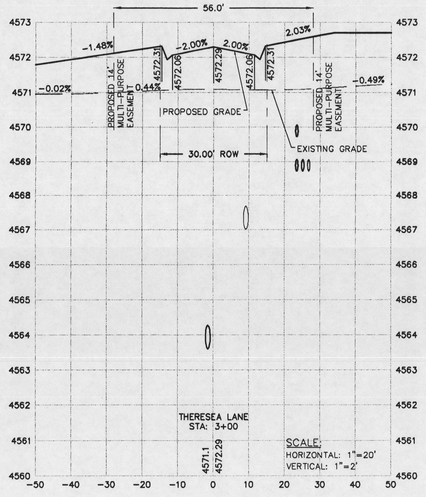
SWMPDET-2

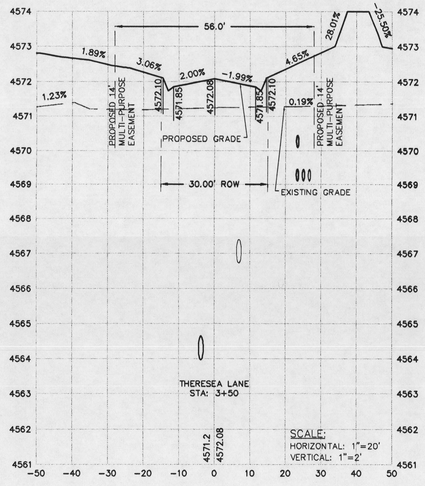


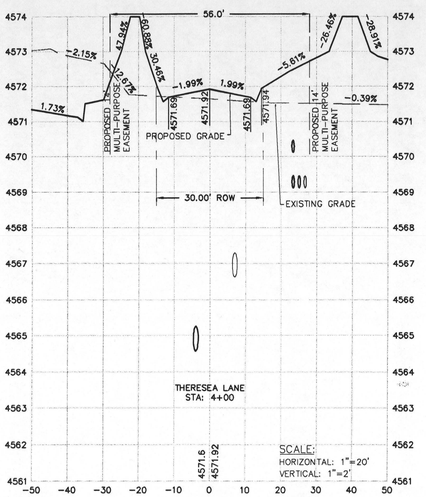


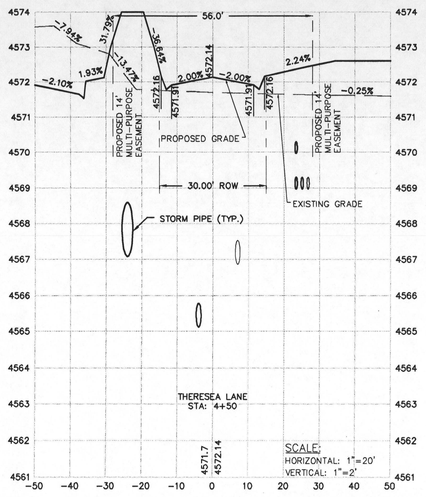


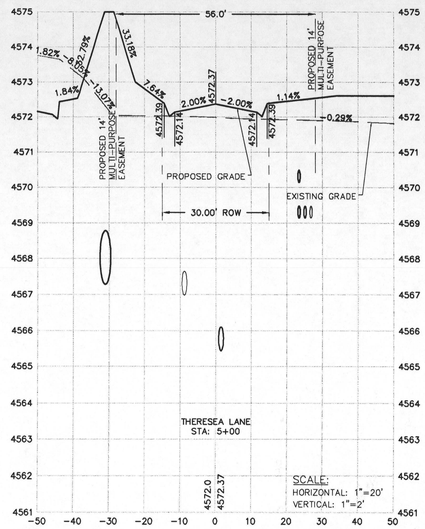


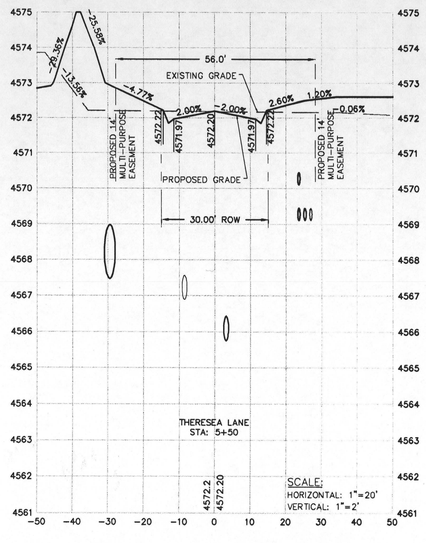












LEGEND

- PROPOSED GRADE
- EXISTING GRADE
- PROPOSED ROW LINE
- PROPOSED EASEMENT LINE
- PROPOSED 10" WATER MAIN
- PROPOSED 8" SANITARY SEWER
- PROPOSED CATV
- PROPOSED GAS & ELEC.
- PROPOSED TELEPHONE
- PROPOSED 18" STORM
- REVISION CLOUD AND NUMBER

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

NOTES:

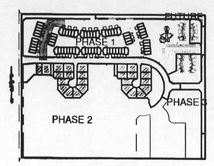
1. THERE IS NO EXISTING PAVEMENT FOR THE SITE NEAR THERESEA LANE.
2. ALL ROAD CROSS SECTIONS SHALL BE CONSTRUCTED PER THE CITY OF GRAND JUNCTION STANDARDS AND SPECIFICATIONS.
3. REFER TO PPRD-3 FOR ROAD PLAN AND PROFILES.
4. REFER TO GR-1 FOR OVERALL SITE GRADING.
5. REVISION THIS SHEET: CHANGED SCALE.

ABBREVIATION:

ROW: RIGHT-OF-WAY

"APPROVED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE. ACCEPTANCE OF THESE PLANS DOES NOT RELIEVE THE DEVELOPER, CONTRACTOR OR ENGINEER FROM CONFORMANCE WITH CITY OF GRAND JUNCTION STANDARDS AND SPECIFICATIONS".

CITY DEVELOPMENT ENGINEER — DATE 2/7/06



KEY MAP
SCALE: 1":500'

COLORADO LICENSED
DANIEL C. FENNESSY
39307
1/23/06
PROFESSIONAL ENGINEER

NO.	DATE	REVISION	BY
1	8-19-05	CITY OF GRAND JUNCTION COMMENTS	

DRAWN BY: ALA
CHECKED BY: REW
DATE: 5-13-05
FILE: CROSSSECTIONS

CALL UTILITY NOTIFICATION CENTER OF COLORADO 1-800-922-1987 OR 534-0700 IN METRO DENVER

CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES

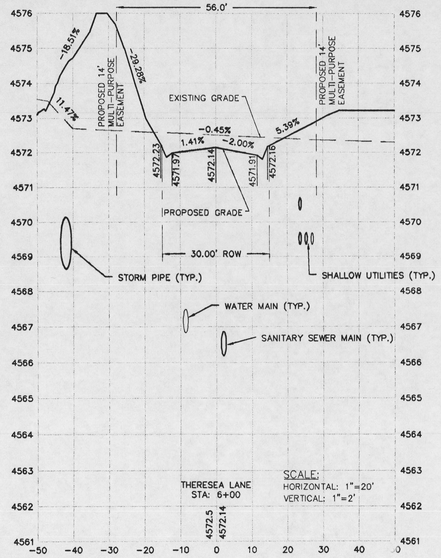
HIGH COUNTRY ENGINEERING, INC.
14 INVERNESS DRIVE EAST, STE F-120, ENGLEWOOD, CO 80112
PHONE (303) 925-0547 FAX (303) 925-0644
1517 BLAKE AVENUE, STE 101, GLENWOOD SPRINGS, CO 81601
PHONE (970) 945-2988 FAX (970) 945-8522
WWW.HCENG.COM

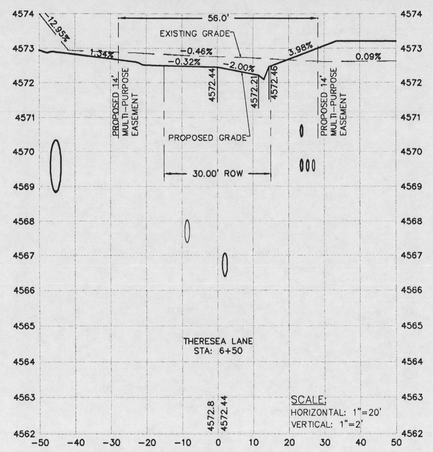
HALL PARTNERS, LLC
CITY OF GRAND JUNCTION, COLORADO

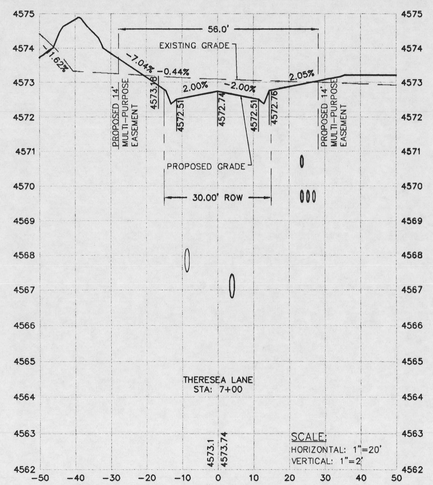
BROOKWILLOW VILLAGE
THERESEA LANE
ROAD CROSS SECTIONS

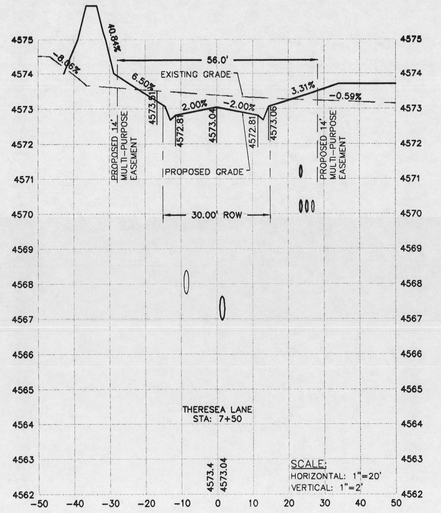
PROJECT NO.
2031049.00

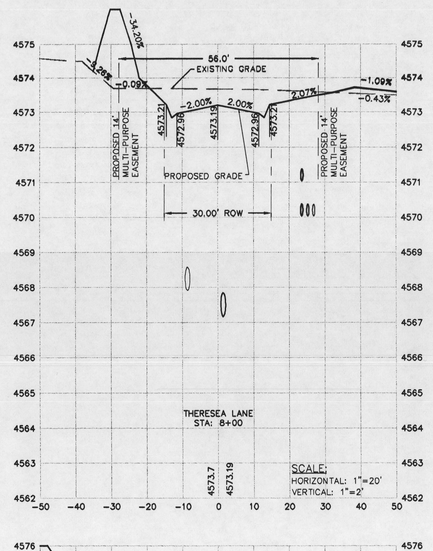
X-1

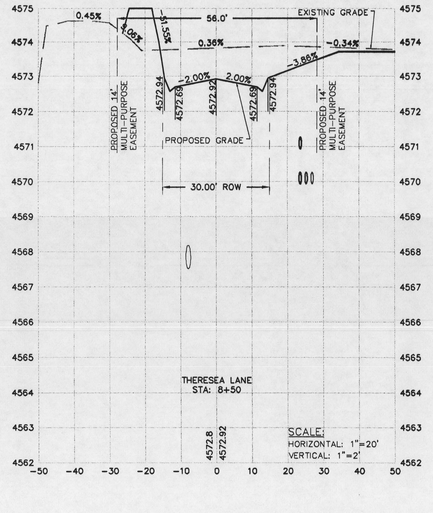


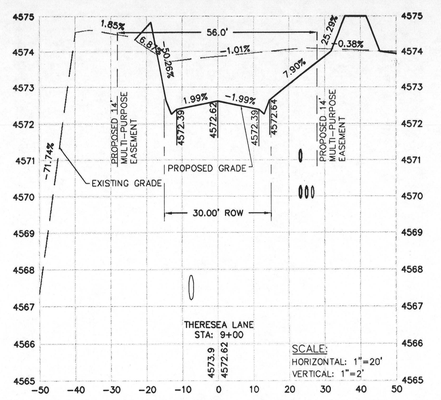


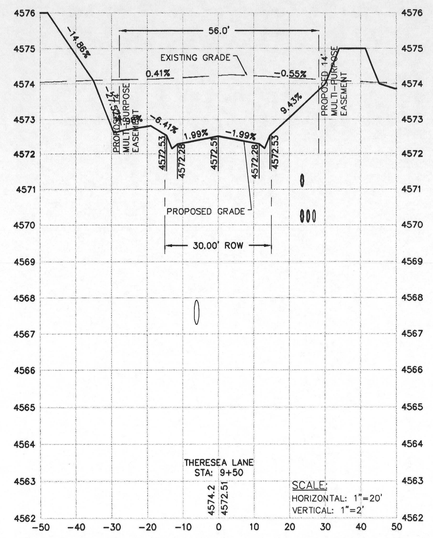


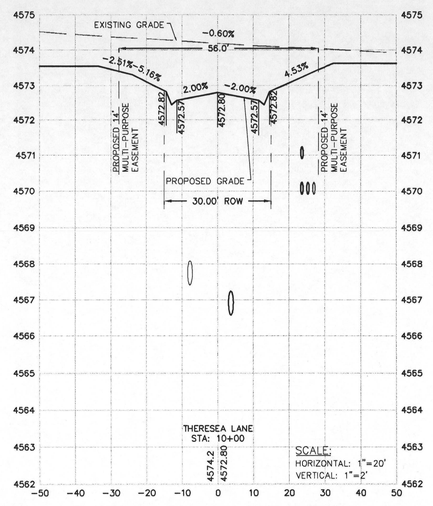


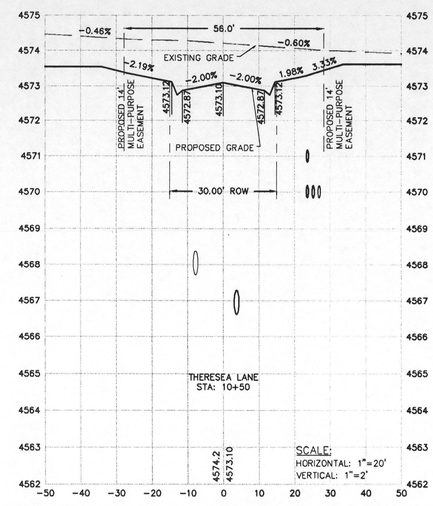












LEGEND

- PROPOSED GRADE
- EXISTING GRADE
- PROPOSED ROW LINE
- PROPOSED EASEMENT LINE
- PROPOSED 10" WATER MAIN
- PROPOSED 8" SANITARY SEWER
- PROPOSED CATV
- PROPOSED GAS & ELEC.
- PROPOSED TELEPHONE
- PROPOSED 18" STORM
- REVISION CLOUD AND NUMBER (1)

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

NOTES:

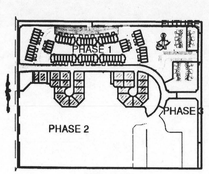
1. THERE IS NO EXISTING PAVEMENT FOR THE SITE NEAR THERESEA LANE.
2. ALL ROAD CROSS SECTIONS SHALL BE CONSTRUCTED PER THE CITY OF GRAND JUNCTION STANDARDS AND SPECIFICATIONS.
3. REFER TO PPRD-3 FOR ROAD PLAN AND PROFILES.
4. REFER TO GR-1 FOR OVERALL SITE GRADING.
5. REVISION THIS SHEET: CHANGED SCALE.

ABBREVIATION:

ROW: RIGHT-OF-WAY

"APPROVED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE. ACCEPTANCE OF THESE PLANS DOES NOT RELIEVE THE DEVELOPER, CONTRACTOR OR ENGINEER FROM CONFORMANCE WITH CITY OF GRAND JUNCTION STANDARDS AND SPECIFICATIONS".

CITY DEVELOPMENT ENGINEER — DATE 2/7/06



DANIEL R. BENNETT — COLORADO LICENSED — 39307 — 12/7/06 — PROFESSIONAL ENGINEER

CALL UTILITY NOTIFICATION CENTER OF COLORADO 1-800-922-1987 OR 554-1501 IN METRO DENVER

CALL ENGINEERING DIVISION 24 HOURS IN ADVANCE BEFORE YOU DIG, GRADE OR EXCAVATE FOR THE MARKING OF UNDERGROUND UTILITY LINES OWNED BY CITY

NO.	DATE	REVISION	BY
1	8-19-05	CITY OF GRAND JUNCTION COMMENTS	

DRAWN BY: AJA
CHECKED BY: REW
DATE: 5-13-05
FILE: CROSSSECTIONS

HIGH COUNTRY ENGINEERING, INC.
14 INVERNESS DRIVE EAST, STE F-120, ENGLEWOOD, CO 80112
PHONE (303) 925-0544 FAX (303) 925-0547
1517 BLAKE AVENUE, STE 101, GLENWOOD SPRINGS, CO 81601
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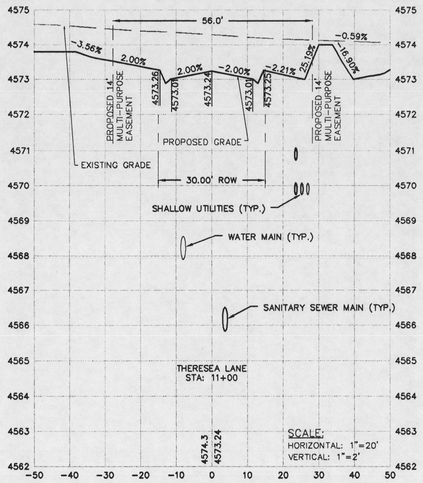
WWW.HCE2.COM

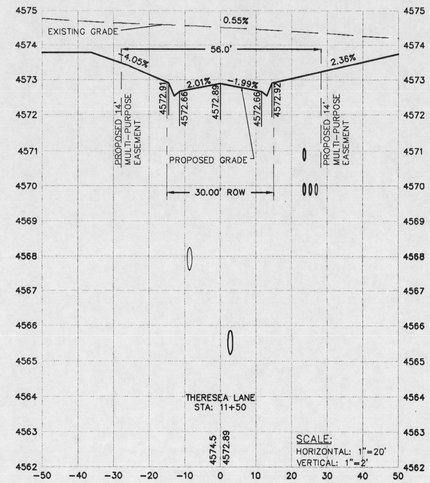
HALL PARTNERS, LLC
CITY OF GRAND JUNCTION, COLORADO

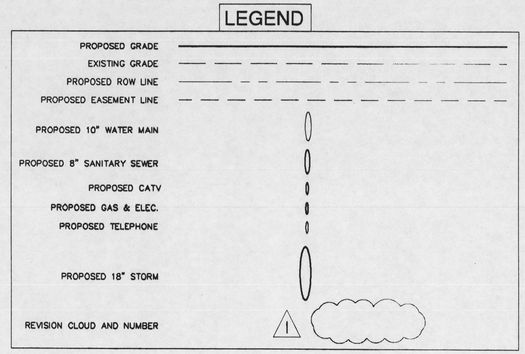
BROOKWILLOW VILLAGE
THERESEA LANE
ROAD CROSS SECTIONS

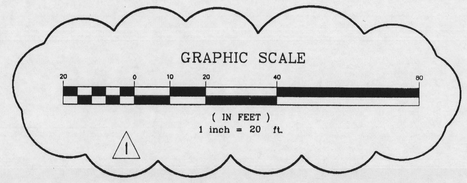
PROJECT NO.
2031049.00

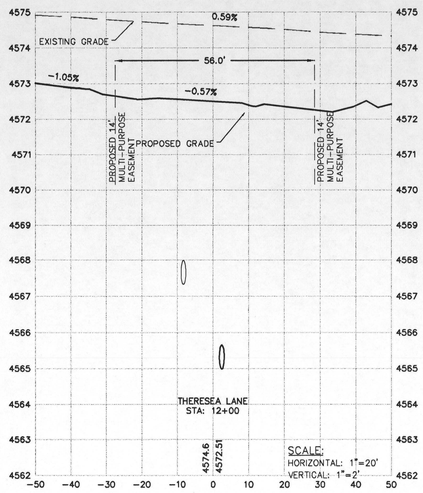
X-2

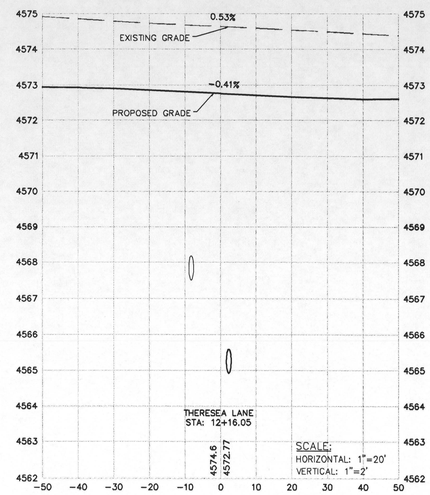










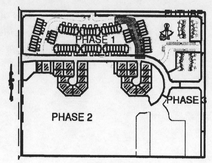


NOTES:

1. THERE IS NO EXISTING PAVEMENT FOR THE SITE NEAR THERESEA LANE.
2. ALL ROAD CROSS SECTIONS SHALL BE CONSTRUCTED PER THE CITY OF GRAND JUNCTION STANDARDS AND SPECIFICATIONS.
3. REFER TO PPRD-3 FOR ROAD PLAN AND PROFILES.
4. REFER TO GR-1 FOR OVERALL SITE GRADING.
5. REVISION THIS SHEET: CHANGED SCALE.

ABBREVIATION:

ROW: RIGHT-OF-WAY



KEY MAP
SCALE: 1":500'

"APPROVED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE. ACCEPTANCE OF THESE PLANS DOES NOT RELIEVE THE DEVELOPER, CONTRACTOR OR ENGINEER FROM CONFORMANCE WITH CITY OF GRAND JUNCTION STANDARDS AND SPECIFICATIONS".

CITY DEVELOPMENT ENGINEER — DATE 2/7/06

CALL UTILITY NOTIFICATION CENTER OF COLORADO
1-800-922-1987
OR 534-0700 IN METRO DENVER

CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES

NO.	DATE	REVISION	BY
1	8-19-05	CITY OF GRAND JUNCTION COMMENTS	3RD
2	11-15-05	CITY OF GRAND JUNCTION COMMENTS	3RD

DRAWN BY: ALA
CHECKED BY: REW
DATE: 5-13-05
FILE: CROSSSECTIONS

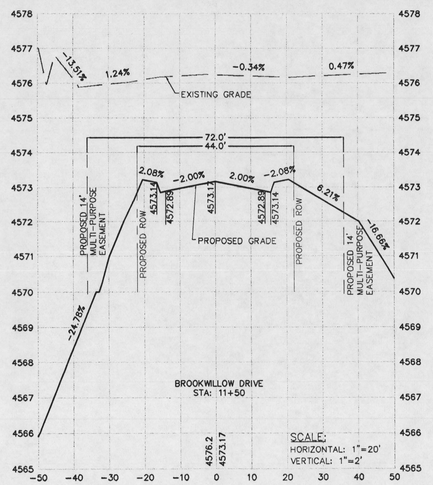
HIGH COUNTRY ENGINEERING, INC.
14 INVERNESS DRIVE EAST, STE F-120, ENGLEWOOD, CO 80112
PHONE (303) 925-0544 FAX (303) 925-0547
1517 BLAKE AVENUE, STE 101, GLENWOOD SPRINGS, CO 81601
PHONE (970) 945-8676 FAX (970) 945-2555
WWW.HCENG.COM

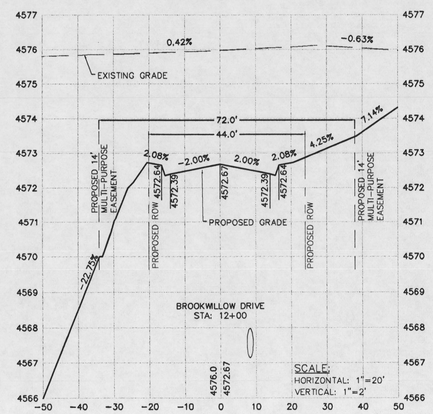
HALL PARTNERS, LLC
CITY OF GRAND JUNCTION, COLORADO

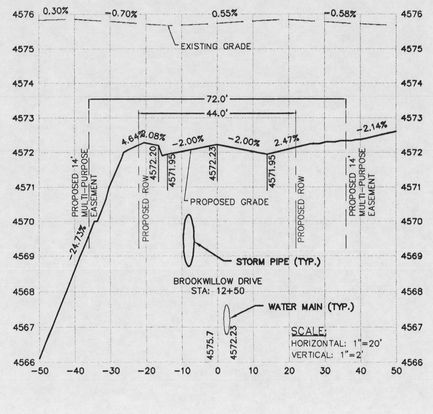
BROOKWILLOW VILLAGE
THERESEA LANE
ROAD CROSS SECTIONS

PROJECT NO.
2031049.00

X-3







LEGEND

- PROPOSED GRADE
- EXISTING GRADE
- PROPOSED ROW LINE
- PROPOSED EASEMENT LINE
- PROPOSED 10" WATER MAIN
- PROPOSED 8" SANITARY SEWER
- PROPOSED CATV
- PROPOSED GAS & ELEC.
- PROPOSED TELEPHONE
- PROPOSED 18" STORM
- REVISION CLOUD AND NUMBER

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

NOTES:

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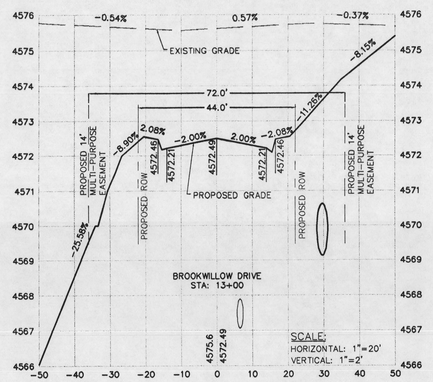
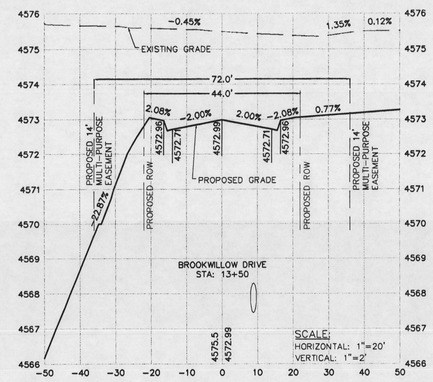
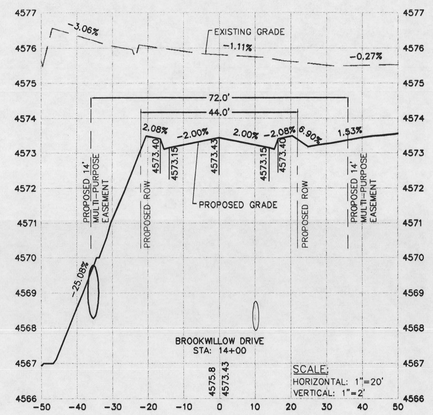
ABBREVIATION:

ROW: RIGHT-OF-WAY

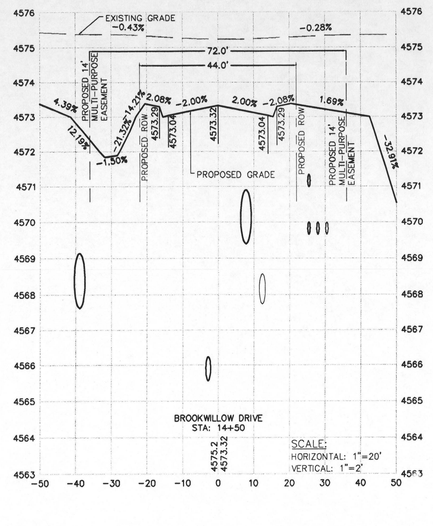


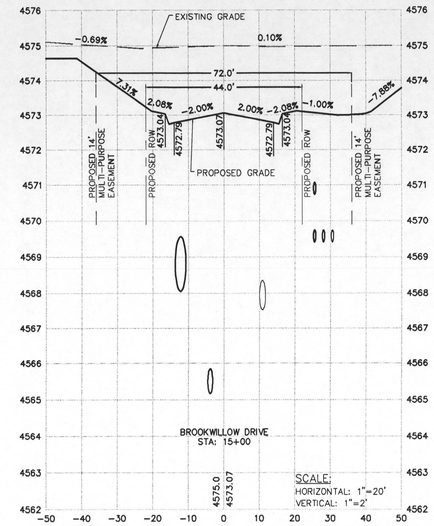


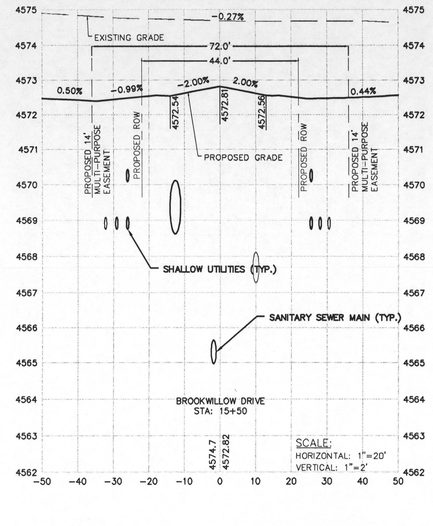


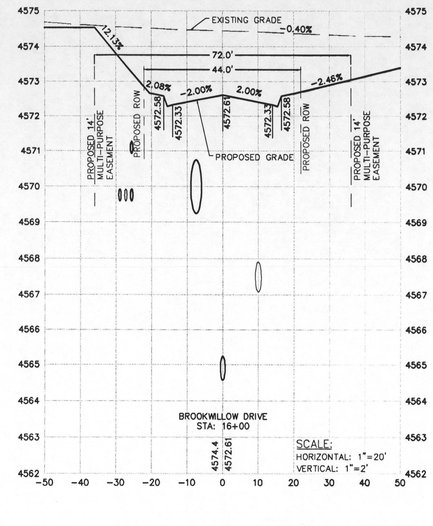
"APPROVED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE. ACCEPTANCE OF THESE PLANS DOES NOT RELIEVE THE DEVELOPER, CONTRACTOR OR ENGINEER FROM CONFORMANCE WITH CITY OF GRAND JUNCTION STANDARDS AND SPECIFICATIONS."

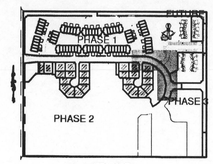
CITY DEVELOPMENT ENGINEER — DATE 2/1/06











KEY MAP
SCALE: 1": 500'

COLORADO LICENSED DANIEL A. ENNISON 39307 1/23/06 PROFESSIONAL ENGINEER

HIGH COUNTRY ENGINEERING, INC.
14 INVERNESS DRIVE EAST, STE-F-120, ENGLEWOOD, CO 80112
PHONE (303) 925-0544 FAX (303) 925-0547
1517 BLAKE AVENUE, STE 101, GLENWOOD SPRINGS, CO 81601
PHONE (970) 945-8576 FAX (970) 945-2555
WWW.HCENG.COM

NO.	DATE	REVISION	BY
1	8-19-05	CITY OF GRAND JUNCTION COMMENTS	

CALL UTILITY NOTIFICATION CENTER OF COLORADO 1-800-922-1987
OR 534-0700 IN METRO DENVER

CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES

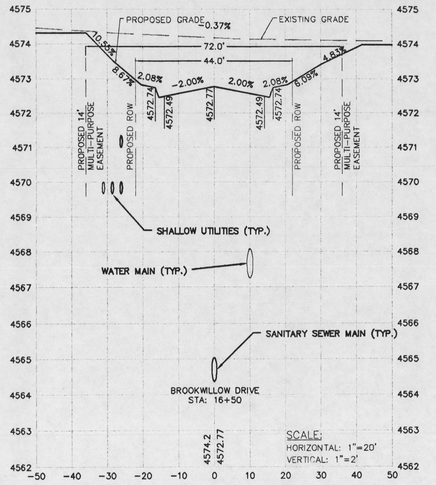
DRAWN BY: ALA
CHECKED BY: REW
DATE: 5-13-05
FILE: CROSSSECTIONS

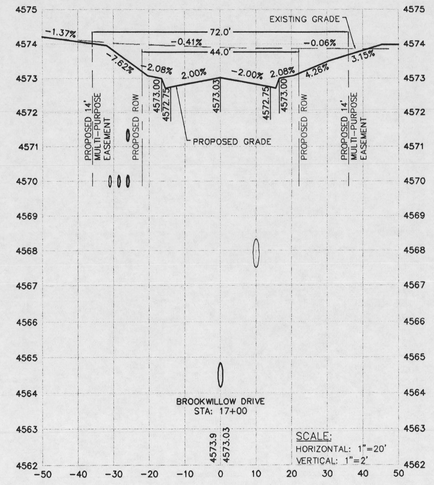
HALL PARTNERS, LLC
CITY OF GRAND JUNCTION, COLORADO

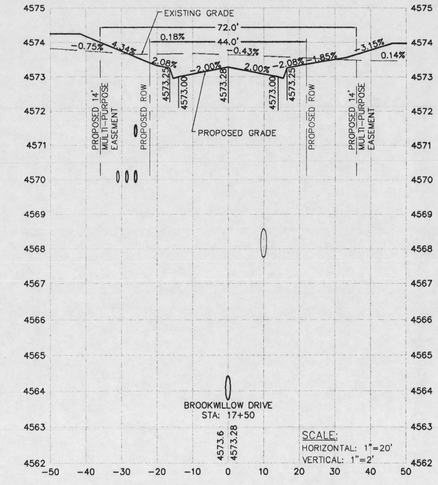
BROOKWILLOW VILLAGE
BROOKWILLOW LOOP
ROAD CROSS SECTIONS

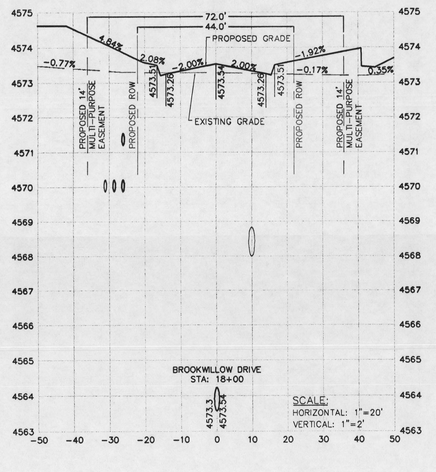
PROJECT NO.
2031049.00

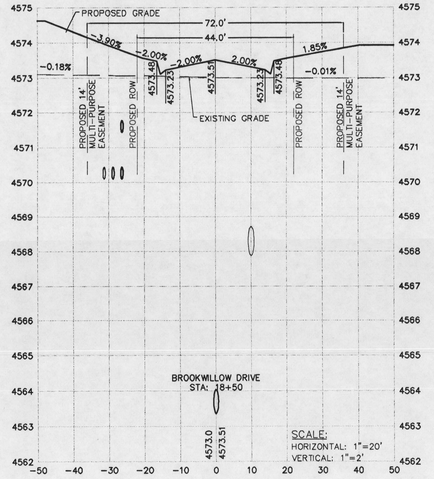
X-B1

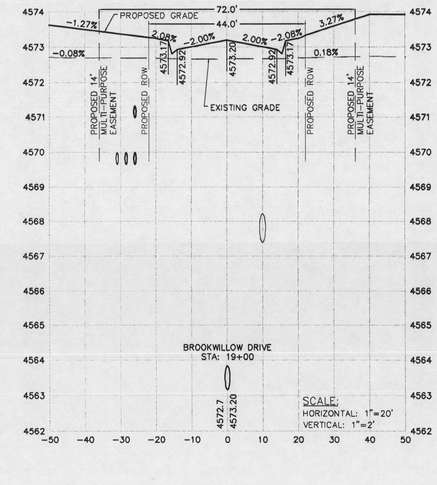


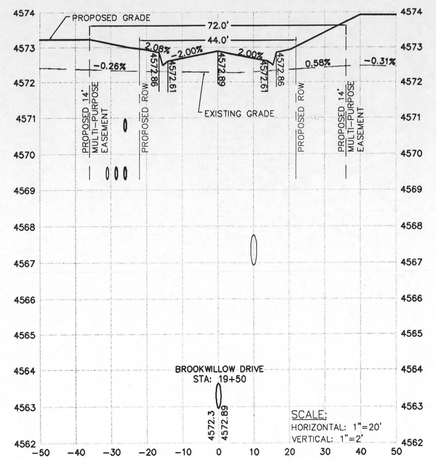


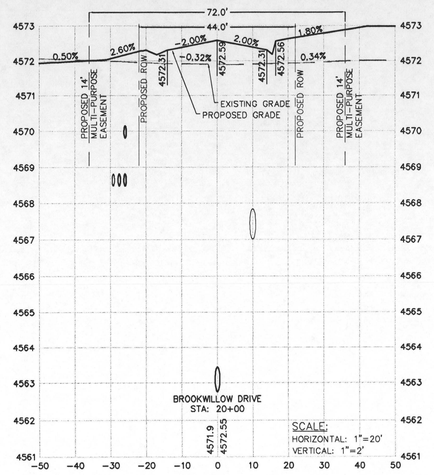


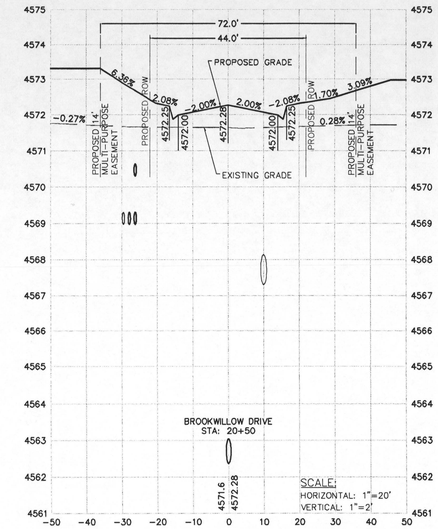


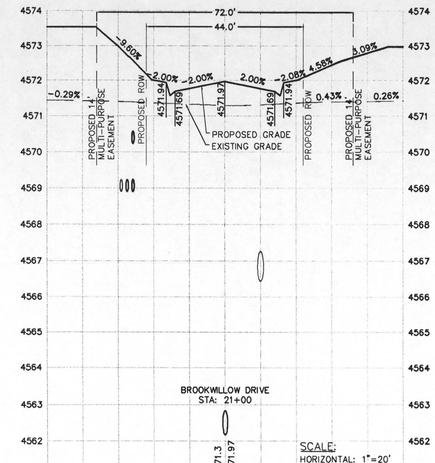












LEGEND

- PROPOSED GRADE
- EXISTING GRADE
- PROPOSED ROW LINE
- PROPOSED EASEMENT LINE
- PROPOSED 10" WATER MAIN
- PROPOSED 8" SANITARY SEWER
- PROPOSED CATV
- PROPOSED GAS & ELEC.
- PROPOSED TELEPHONE
- PROPOSED 18" STORM
- REVISION CLOUD AND NUMBER

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

NOTES:

1. ALL ROAD CROSS SECTIONS SHALL BE CONSTRUCTED PER THE CITY OF GRAND JUNCTION STANDARDS AND SPECIFICATIONS.
2. REFER TO PPRD-2 FOR ROAD PLAN AND PROFILES.
3. REFER TO GR-1 FOR OVERALL SITE GRADING.
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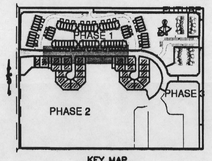
ABBREVIATION:

ROW: RIGHT-OF-WAY



KEY MAP
SCALE: 1"=500'

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CITY DEVELOPMENT ENGINEER — DATE 2/7/06

COLORADO LICENSED DANIEL R. TENNISON 39307 1/23/06 PROFESSIONAL ENGINEER

CALL UTILITY NOTIFICATION CENTER OF COLORADO 1-800-922-1987 OR 534-0700 IN METRO DENVER

CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES

NO.	DATE	REVISION	BY
1	8-19-05	CITY OF GRAND JUNCTION COMMENTS	

DRAWN BY: ALA
CHECKED BY: REW
DATE: 5-13-05
FILE: CROSSSECTIONS

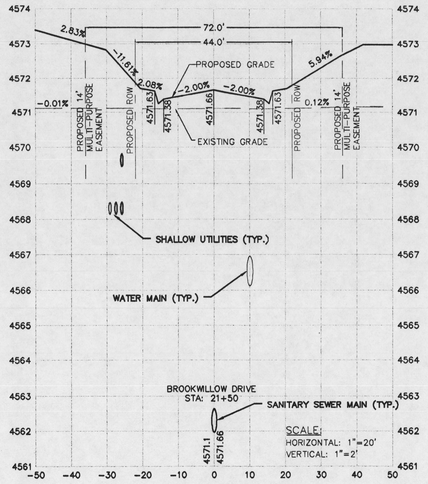
HIGH COUNTRY ENGINEERING, INC.
14 INVERNESS DRIVE EAST, STE F-120, ENGLEWOOD, CO 80112
PHONE (303) 7250644 FAX (303) 9254847
1517 BLAKE AVENUE, STE 101, GLENWOOD SPRINGS, CO 81601
PHONE (970) 9455644 FAX (970) 9452585
WWW.HCENG.COM

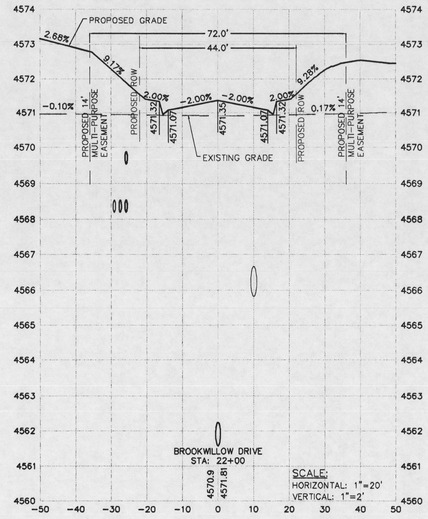
HALL PARTNERS, LLC
CITY OF GRAND JUNCTION, COLORADO

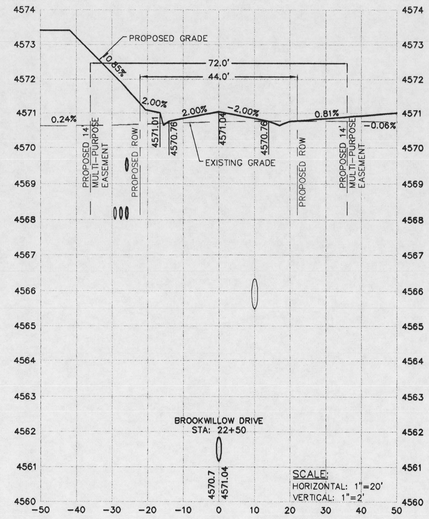
BROOKWILLOW VILLAGE
BROOKWILLOW LOOP
ROAD CROSS SECTIONS

PROJECT NO.
2031049.00

X-B2







LEGEND

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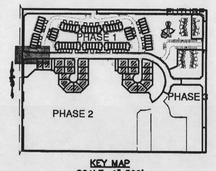
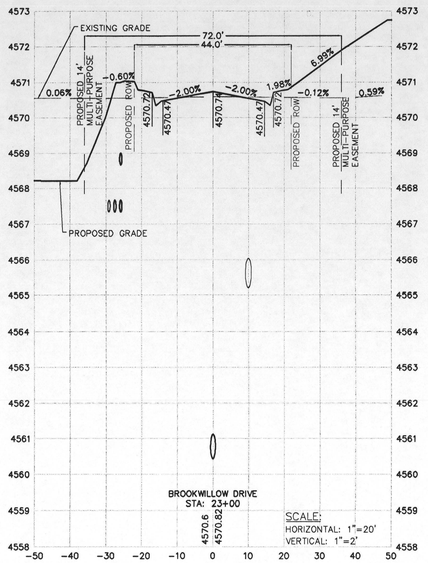
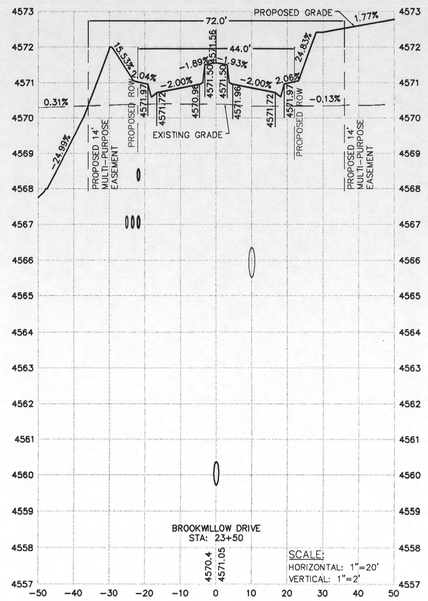
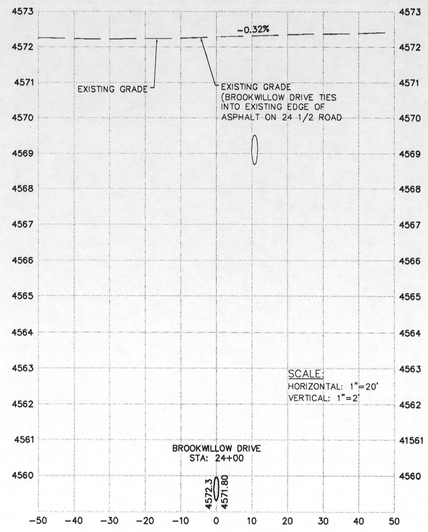
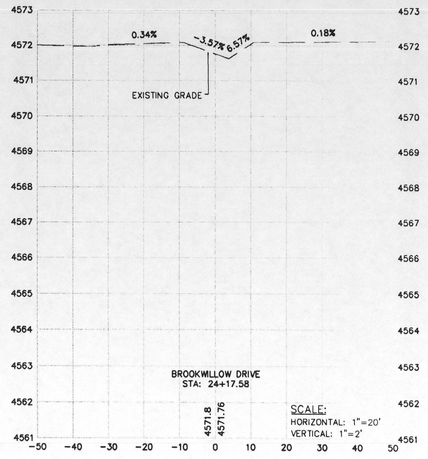


KEY MAP
SCALE: 1":500'









COLORADO LICENSED
DANIEL E. JENNINGS
39307
PROFESSIONAL ENGINEER

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CITY DEVELOPMENT ENGINEER — DATE 2/7/06

CALL UTILITY NOTIFICATION CENTER OF COLORADO 1-800-922-1987 OR 534-1070 IN METRO DENVER

CALL 48 HOURS BEFORE YOU DIG, GRADE OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES

NO.	DATE	REVISION	BY
1	8-19-05	CITY OF GRAND JUNCTION COMMENTS	

DRAWN BY: A.L.A.
CHECKED BY: REW
DATE: 5-13-05
FILE: CROSSSECTIONS

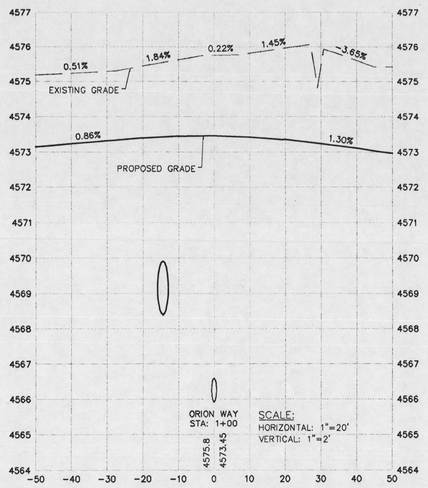
HIGH COUNTRY ENGINEERING, INC.
14 INVERNESS DRIVE EAST, STE F-120, ENGLEWOOD, CO 80112
PHONE (303) 925-0544 FAX (303) 925-0547
1517 BLAKE AVENUE, STE 101, GLENWOOD SPRINGS, CO 81601
PHONE (970) 945-8775 FAX (970) 945-2555
WWW.HCENG.COM

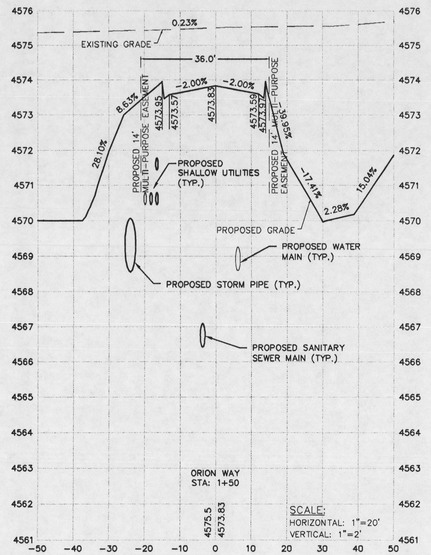
HALL PARTNERS, LLC
CITY OF GRAND JUNCTION, COLORADO

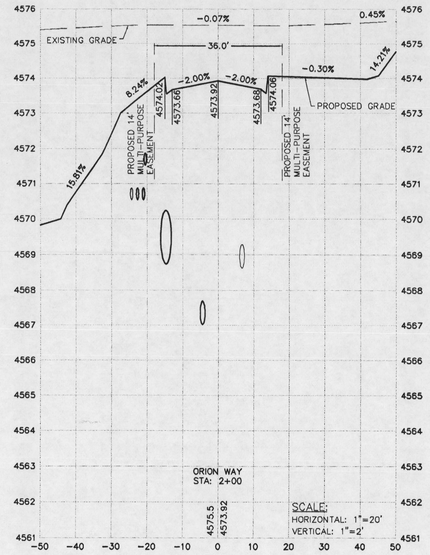
BROOKWILLOW VILLAGE
BROOKWILLOW LOOP
ROAD CROSS SECTIONS

PROJECT NO.
2031049.00

X-B3







LEGEND

- PROPOSED GRADE
- EXISTING GRADE
- PROPOSED ROW LINE
- PROPOSED EASEMENT LINE
- PROPOSED 10" WATER MAIN
- PROPOSED 8" SANITARY SEWER
- PROPOSED CATV
- PROPOSED GAS & ELEC.
- PROPOSED TELEPHONE
- PROPOSED 18" STORM
- REVISION CLOUD AND NUMBER (1)

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

NOTES:

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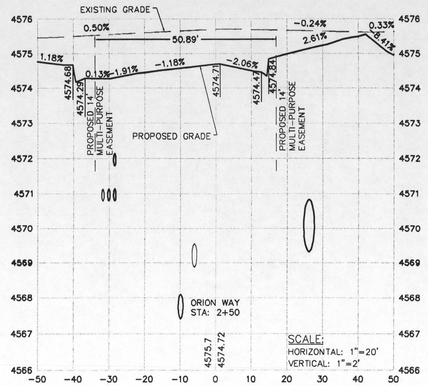
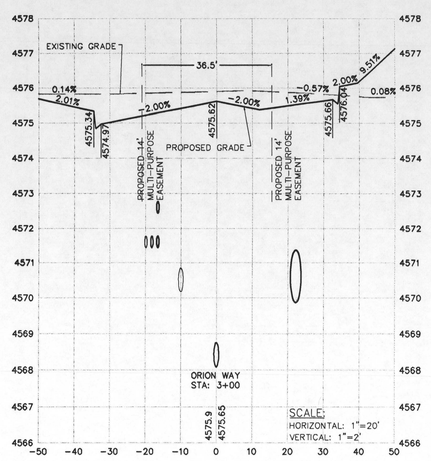
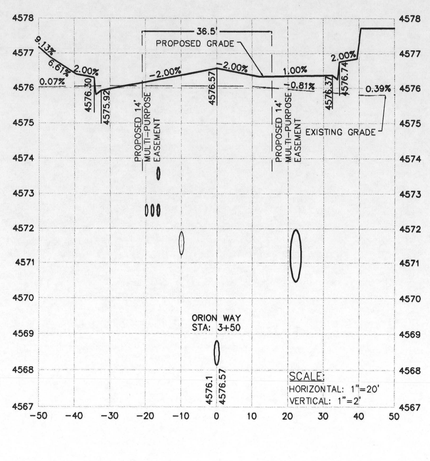
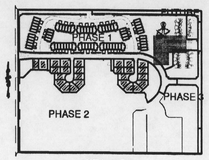
ABBREVIATION:

ROW: RIGHT-OF-WAY









KEY MAP
SCALE: 1":500'

COLORADO REGISTERED DANIEL E. HOLLENBECK 39307 1/27/06 PROFESSIONAL ENGINEER

"APPROVED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE. ACCEPTANCE OF THESE PLANS DOES NOT RELIEVE THE DEVELOPER, CONTRACTOR OR ENGINEER FROM CONFORMANCE WITH CITY OF GRAND JUNCTION STANDARDS AND SPECIFICATIONS".

CITY DEVELOPMENT ENGINEER — DATE 2/7/06

NO.	DATE	REVISION	BY
1	8-19-05	CITY OF GRAND JUNCTION COMMENTS	RD
2	11-15-05	CITY OF GRAND JUNCTION COMMENTS	RD

CALL UTILITY NOTIFICATION CENTER OF COLORADO 1-800-922-1987 OR 534-2700 IN METRO DENVER

CALL AT LEAST 2 FULL BUSINESS DAYS BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND UTILITIES

DRAWN BY: ALA
CHECKED BY: REW
DATE: 5-13-05
FILE: CROSSSECTIONS

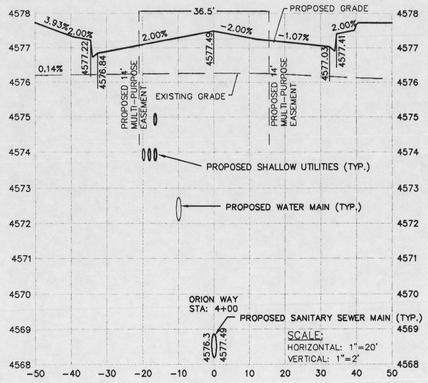
HIGH COUNTRY ENGINEERING, INC.
14 INVERNESS DRIVE EAST, STE F-120, ENGLEWOOD, CO 80112
PHONE (303) 925-0544 FAX (303) 925-0547
1517 BLAKE AVENUE, STE 101, GLENWOOD SPRINGS, CO 81601
PHONE (970) 945-8855 FAX (970) 945-2555
WWW.HCENG.COM

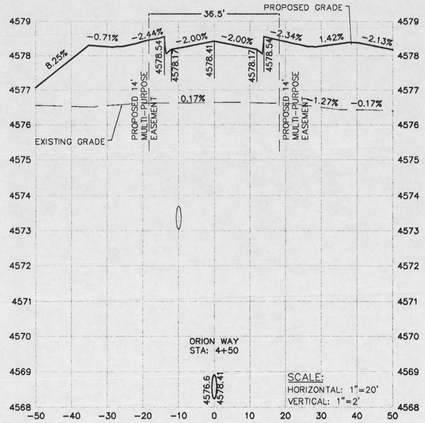
HALL PARTNERS, LLC
CITY OF GRAND JUNCTION, COLORADO

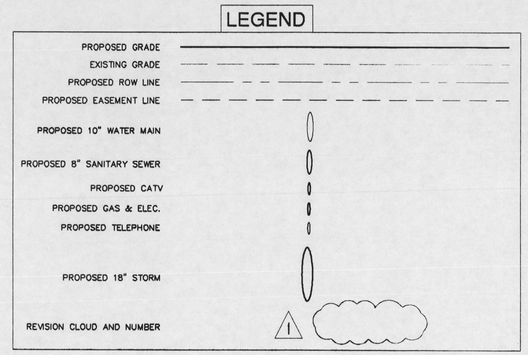
BROOKWILLOW VILLAGE
ORION WAY
ROAD CROSS SECTIONS

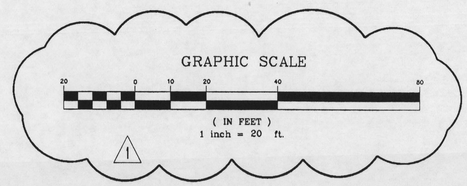
PROJECT NO.
2031049.00

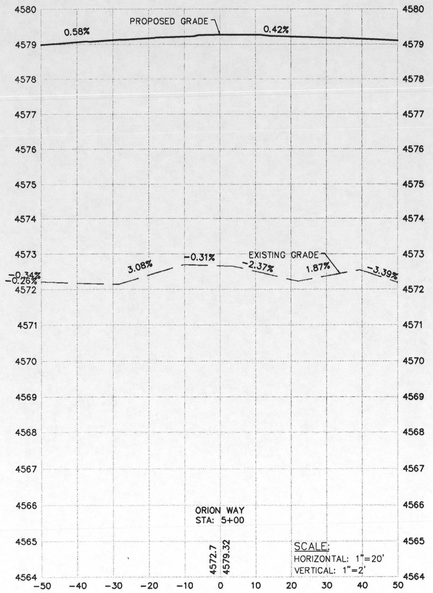
X-BW1

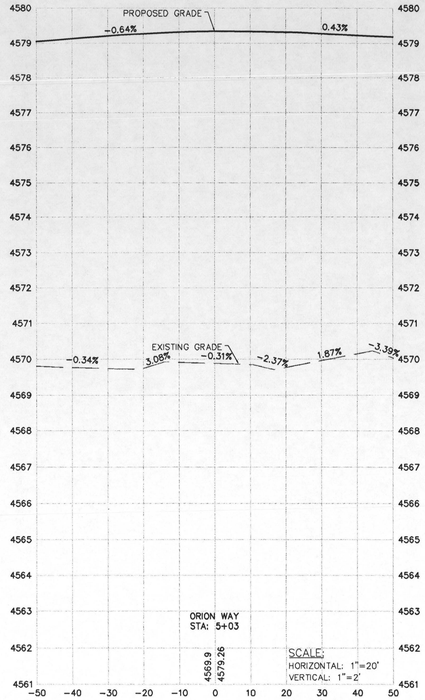












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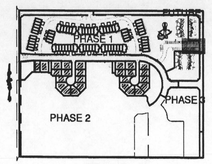

KEY MAP
SCALE: 1":500'

COLORADO LICENSED
DANIEL E. FENNESSY
39307
1/23/06
PROFESSIONAL ENGINEER

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CITY DEVELOPMENT ENGINEER — DATE 2/7/06

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OR 8-344-0700 IN METRO DENVER

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ORION WAY
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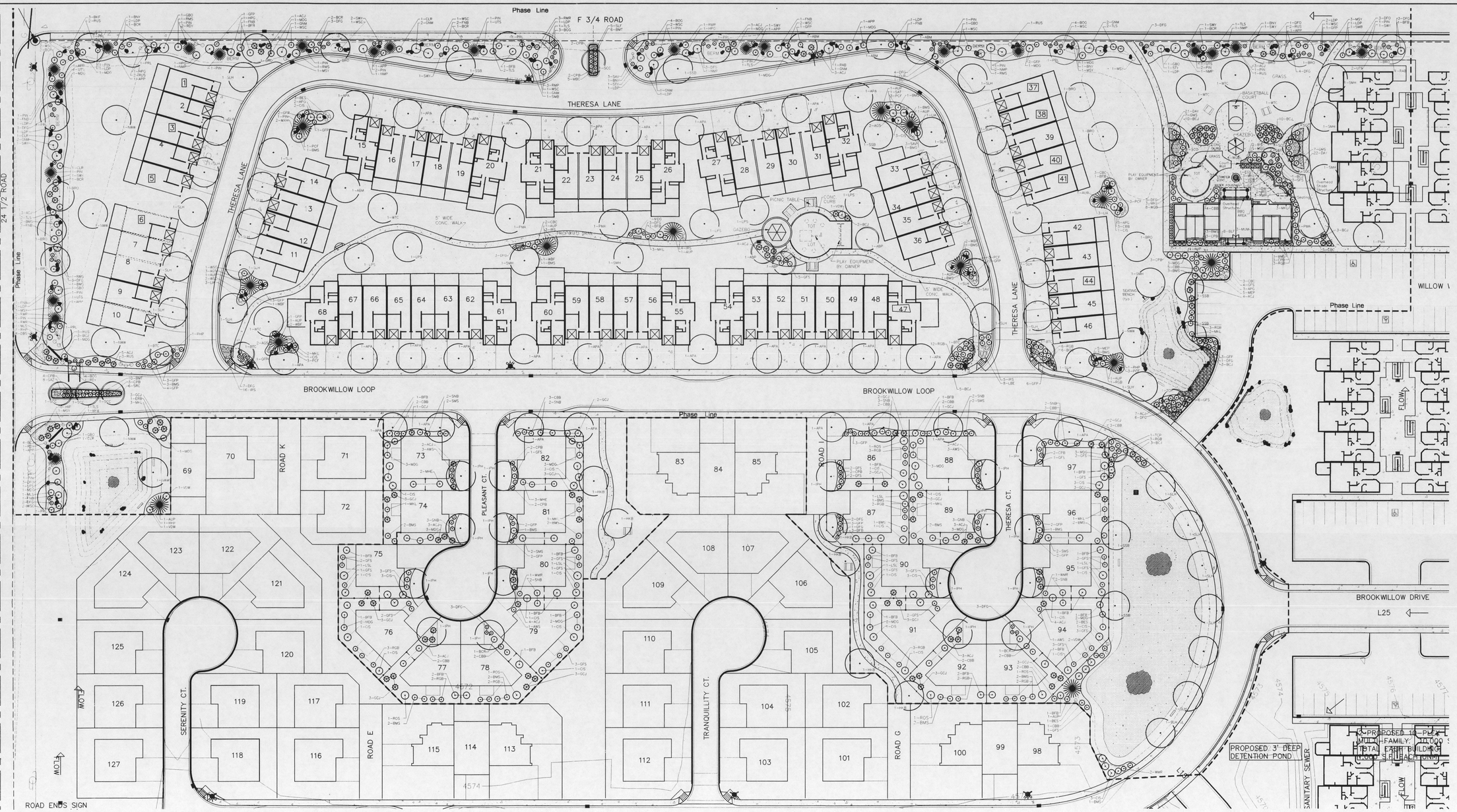
PROJECT NO.
2031049.00

X-BW2



PLANT LIST: (Phase I)

KEY:	COMMON NAME:	BOTANICAL NAME:	NO.	SIZE:	MATURE HT.
Trees:					
ABM	AUTUMN BLAZE MAPLE	ACER x FREEMANII 'JEFFERSRED'	4	2"-1/2" CAL.	40'-50' HT.
ABP	AUTUMN BLAZE PEAR	PYRUS CALLERIANA 'AUTUMN BLAZE'	3	2" CAL.	35'-35' HT.
APA	AUTUMN PURPLE ASH	FRAXINUS AMERICANA 'AUTUMN PURPLE'	26	2" CAL.	40'-50' HT.
AUP	AUSTRIAN PINE	PINUS NIGRA	12	6' HT.	35'-40' HT.
BRO	BURR OAK	QUERCUS MACROCARPA	1	2" CAL.	50' HT.
BTC	BECHTEL CRAB	MALUS ICENSIS 'BECHTEL'	4	1-1/2" CAL.	20'-25' HT.
ERD	EASTERN REDBUD	CERCIS CANADENSIS	1	1-1/2" CAL.	20'-25' HT.
GRT	GOLDEN RAIN TREE	KOELREUTERIA PANICULATA	1	1-1/2" CAL.	20'-25' HT.
HKB	COMMON HACKBERRY	CELTIS OCCIDENTALIS	6	2" CAL.	50'-60' HT.
IPH	IMPERIAL HONEYLOCUST	GLEDITSIA TRIACANTHOS 'IMPERIAL'	17	2" CAL.	35'-40' HT.
LPS	LONDON PLANE SYCAMORE	PLATANUS x ACERIFOLIA	1	2" CAL.	50'-60' HT.
PIN	PINYON PINE	PINUS EDULIS	25	6' HT.	25'-30' HT.
PNL	PURPLE LEAF PLUM	PRUNUS CERASIFERA 'PATMORE'	4	2" CAL.	15'-20' HT.
PRL	PURPLE ROBE LOCUST	ROBINIA x NEUDACHUA 'PURPLE ROBE'	7	2" CAL.	40'-50' HT.
SCC	SCHUBERT CHOKECHERRY	PRUNUS VIRGINIANA 'SCHUBERT'	10	1-1/2" CAL.	20'-25' HT.
SLH	SKYLINE HONEYLOCUST	GLEDITSIA TRIACANTHOS 'SKYLINE'	32	2" CAL.	40'-60' HT.
SMH	SHADEMASTER HONEYLOCUST	GLEDITSIA TRIACANTHOS 'SHADEMASTER'	6	2-1/2" CAL.	40'-50' HT.
SSB	SENSATION BOXELDER	ACER NEGUNDO 'SENSATION'	5	2" CAL.	50'-60' HT.
TCP	THUNDER CLOUD PLUM	PRUNUS CERASIFERA 'THUNDERCLOUD'	2	2" CAL.	20'-25' HT.
WTC	WESTERN CATALPA	CATALPA SPECIOSA	5	2" CAL.	40'-50' HT.
Shrubs & Ornamental Grass:			TOTAL TREES=	189	
ACJ	ARCADIA JUNIPER	JUNIPERUS SABINA 'ARCADIA'	60	5 GAL.	18"-24" HT.
ACR	AUSTRIAN COPPER ROSE	ROSA FOETIDA	8	5 GAL.	4'-5" HT.
APH	APACHE PLUME	FALLUGIA PARADOXA	8	5 GAL.	4'-6" HT.
AWS	ANTHONY WATERER SPIREA	SPIRAEA x BUMALDA 'ANTHONY WATERER'	8	5 GAL.	2'-3" HT.
BCJ	BLUE CHIP JUNIPER	JUNIPERUS HORIZONTALIS 'BLUE CHIP'	44	5 GAL.	12"-18" HT.
BCR	BONICA ROSE	ROSA 'BONICA'	10	5 GAL.	4'-5" HT.
BFB	BUTTERFLY BUSH	BUDDELIA DAVIDII 'BLACK KNIGHT'	39	5 GAL.	5'-6" HT.
BLF	BLUE FESCUE	FESTUCA OVINA GLAUCA	8	1 GAL.	12" HT.
BMS	BLUEMIST SPIREA	CARYOPTERIS X CLANDONENSIS	46	5 GAL.	2'-3" HT.
BMT	BLUE MORMON TEA	EPHEDRA EQUISETINA	16	2 GAL.	2'-3" HT.
BYU	BANYANA YUCCA	YUCCA BACCATA	1	5 GAL.	2'-3" HT.
BOG	BLUE OATS GRASS	HELICTOTRICHON SEMPERVIRENS	21	1 GAL.	2'-3" HT.
CBB	COMPACT BURNING BUSH	EUONYMUS ALATUS 'COMPACTA'	38	5 GAL.	2'-3" HT.
CBC	CRANBERRY COTONEASTER	COTONEASTER APICULATA	13	5 GAL.	3'-4" HT.
CLR	CLETHRA - RUBA	CLETHRA ALNIFOLIA	4	5 GAL.	5'-6" HT.
CMX	CITY OF MEXICO	ECHINOCEREUS MEXICANA	10	1 GAL.	2'-3" HT.
CPB	CRIMSON PYGMY BARBERRY	BERBERIS THUNGBERGII ATROPURPUREA 'NANA'	25	2 GAL.	2'-3" HT.
DFG	DWARF FOUNTAIN GRASS	PENNISETUM ALOPUROIDES 'HAMELN'	61	5 GAL.	2'-3" HT.
FNB	FERN BUSH	CHAMAEBATARIA MILLEFOLIUM	9	5 GAL.	5'-6" HT.
GBO	GAMBEL OAK	QUERCUS GAMBELLII	5	5 GAL.	8'-12" HT.
GCJ	GOLD COAST JUNIPER	JUNIPERUS CHINENSIS 'AUREA'	46	5 GAL.	4'-5" HT.
GPF	GOLDFINGER POTENTILLA	POTENTILLA FRUTICOSA 'GOLDFINGER'	47	5 GAL.	2'-3" HT.
GFS	GOLDFLAME SPIREA	SPIRAEA x BUMALDA 'GOLDFLAME'	59	5 GAL.	3'-4" HT.
GMS	GOLDMOUND SPIREA	SPIRAEA x BUMALDA 'GOLDMOUND'	21	5 GAL.	2'-3" HT.
GNB	GOLDEN NUGGET BARBERRY	BERBERIS THUNGBERGII 'GOLD NUGGET'	6	5 GAL.	2'-3" HT.
GNM	GINNALA MAPLE	ACER GINNALA	14	5 GAL.	15'-20' HT.
HPG	HARDY PLUME GRASS	ERIANTHUS RAVENNAE	4	5 GAL.	6'-8" HT.
LAV	LEAD PLUMBAGO	CERATOSTIGMA PLUMBAGINOIDES	5	5 GAL.	6'-8" HT.
LSK	LUDWIG SPEATH'S LILAC	SYRINGA VULGARIS 'LUDWIG SPEATH'	5	5 GAL.	6'-8" HT.

NOTE: -SOME NATIVE SPECIES ARE ONLY AVAILABLE IN 1 GAL. SIZE.
-CONTRACTOR SHALL VERIFY PLANT QUANTITIES LISTED ABOVE AND SHALL NOTIFY LANDSCAPE ARCHITECT OF ANY DISCREPANCIES OR PLANT SUBSTITUTIONS.

KEY:	COMMON NAME:	BOTANICAL NAME:	NO.	SIZE:	MATURE HT.
Shrubs & Ornamental Grass (Con't):					
MDG	MAIDEN GRASS	MISCANTHUS SINENSIS 'GRACILLIMUS'	42	5 GAL.	5'-6' HT.
MNE	MANHATTAN ELEGANCE	EUONYMUS KIAUTSCHOVICUS 'MANHATTAN'	5	5 GAL.	5'-6' HT.
MLS	MOONLIGHT SCOTCH BROOM	CYTISUS x SCOPARIUS 'MOONLIGHT'	23	5 GAL.	4'-6' HT.
MNP	NEW MEXICAN PRIVET	FORESTIERA NEOMEXICANA	7	5 GAL.	6'-12' HT.
RAB	RABBITBRUSH	CHRYSOTHAMNUS NAUSEOSUS	2	5 GAL.	4'-6' HT.
RGB	ROSE GLOW BARBERRY	BERBERIS THUNGBERGII 'ROSE GLOW'	2	5 GAL.	2'-3' HT.
RMR	RED MEDOLAND ROSE	ROSA 'RED MEDOLAND'	11	5 GAL.	2' HT.
RMS	ROCKY MOUNTAIN SUMAC	RHUS GLABRA 'COMONTANA'	4	5 GAL.	5'-10' HT.
ROS	ROSE OF SHARON	HIBISCUS SYRIACUS 'ARDENS'	5	5 GAL.	6'-12" HT.
SMB	SMITH BUCKTHORN	RHAMNUS SMITHII	4	5 GAL.	6'-8' HT.
SMS	SNOWMOUND SPIREA	SPIRAEA JAPONICA 'SNOWMOUND'	8	5 GAL.	4'-5' HT.
SNB	SNOWBERRY	SYMPHORICARPOS ALBUS	5	5 GAL.	3'-4' HT.
SPY	SPANISH YUCCA	YUCCA ELATA	3	5 GAL.	4'-6' HT.
SWV	SOAP TREE YUCCA	YUCCA GLAUCA	10	5 GAL.	4'-6' HT.
TLS	THREE LEAF SUMAC	RHUS TRILOBATA	7	5 GAL.	3'-5' HT.
UTS	UTAH SERVICEBERRY	AMELANCHIER UTAHENSIS	7	5 GAL.	8'-12" HT.
WGB	WINTER GEM BOXWOOD	BUXUS MICROPHILLA 'WINTER GEM'	5	2 GAL.	2'-3' HT.
WMR	WHITE MEDOLAND ROSE	ROSA 'WHITE MEDOLAND'	5	2 GAL.	1'-2' HT.
WSC	WESTERN SAND CHERRY	PRUNUS BESSEYI	17	5 GAL.	3'-4' HT.
VOW	VARIEGATED DOGWOOD	CORNUS ALBA 'ARGENTEO MARGINATA'	5	5 GAL.	6'-8' HT.
		TOTAL SHRUBS=	909		
Perennial Flowers & Groundcovers:					
AGS	AGASTACHE	AGASTACHE x 'DESERT SUNRISE'	9	1 GAL.	18" HT.
APG	ALPINE GERANIUM	GERANIUM SANGUINEUM	8	1 GAL.	12"-16" HT.
BES	BLACK EYED SUSAN	RUDBECKIA HUGHII 'GOLDSTRUM'	8	1 GAL.	12"-36" HT.
BLF	BLANKET FLOWER	GAILLARDIA x GRANDIFLORA 'GOBLIN'	5	1 GAL.	12"-18" HT.
DAY	DAYLILY	HEMEROCALLIS 'STELLA DE ORO'	43	1 GAL.	12"-24" HT.
DBS	DRAGON'S BLOOD SEDUM	SEDUM SPHNUM 'DRAGON'S BLOOD'	5	1 GAL.	6" HT.
DFO	DESERT FOUP 0' CLOCK	MIRABILIS MULTIFLORA	10	1 GAL.	12"-16" HT.
EDW	ENGLEMAN IVY	PARTHENOCISSUS QUINQUEFOLIA 'ENGLEMANNII'	1	1 GAL.	----
GAZ	HARDY GAZANIA	GAZANIA LINEARIS 'COLORADO GOLD'	8	1 GAL.	6"-12" HT.
HRP	HARDY PURPLE ICE PLANT	DELOSPERMA COOPERI	10	1 GAL.	6" HT.
IRS	BEARDED IRIS	IRIS HYBRID	32	1 GAL.	16"-30" HT.
LBE	LAMB'S EAR	STACHYS BYZANTINA	8	1 GAL.	6"-12" HT.
LIA	LIATRUS (GAYFEATHER)	LIATRUS SPICATA	7	1 GAL.	18"-24" HT.
MBG	MOONBEAM COREOPSIS	COREOPSIS VERTICILLATA 'MOONBEAM'	10	1 GAL.	12"-18" HT.
MEP	MISSOURI EVENING PRIMROSE	OENOTHERA MISSOURIENSIS	6	1 GAL.	6"-12" HT.
MLY	MEXICAN LILY	BESSERA ELEGANS 'CORAL'	8	1 GAL.	16"-24" HT.
MUM	GARDEN MUM	CHRYSANTHEMA MORIFOLIUM	1	1 GAL.	12"-18" HT.
MXH	MEXICAN HAT CONE FLOWER	RATIBIDA COLUMNIFERA 'MEXICAN HAT'	2	1 GAL.	18"-24" HT.
PCF	PURPLE CONE FLOWER	ECHINACEA PURPUREA	16	1 GAL.	18"-24" HT.
PDY	RED YUCCA	HESPERALOE PARVIFLORA	1	1 GAL.	1'-3" HT.
RHP	RED HOT POKER	KNYPHOFIA UVARIA	4	1 GAL.	1'-3' HT.
RMP	ROCKY MOUNTAIN PENSTEMON	PENSTEMON STRICTUS	5	1 GAL.	16"-20" HT.
RUS	RUSSIAN SAGE	PEROVSKIA ATRIPLICIFOLIA	13	1 GAL.	2'-4' HT.
SAT	SATOLINA	SATOLINA CHAMAECYPARISSUS	1	1 GAL.	12"-18" HT.
SAV	SALVIA	SALVIA X 'HOGO SPIRES'	1	1 GAL.	12"-18" HT.
SLF	SULFUR FLOWER	ERIOGONUM UMBELLATUM	5	1 GAL.	6"-12" HT.
SUC	SUNRAY COREOPSIS	COREOPSIS GRANDIFLORA 'SUNRAY'	5	1 GAL.	16"-24" HT.
TPV	TRUMPET VINE	CAMPSIS RADICANS	1	1 GAL.	----
WBF	WHIRLING BUTTERFLIES	GAARA LINDHEIMERI 'WHIRLING BUTTERFLIES'	6	1 GAL.	18"-30" HT.
		TOTAL PERENNIALS=	254		

NOTES:

1. Prior to construction, the contractor shall be responsible for locating all underground utilities and shall avoid damage to all utilities during the course of the work. The contractor is responsible for repairing any and all damage to utilities, structures, site appurtenances, etc. which occurs as a result of the landscape construction.

2. The contractor is responsible for verifying all plant quantities shown on these plans before pricing of their work. Contractor shall notify Landscape Architect of any discrepancies.

3. The contractor is responsible for fully maintaining all planting (including but not limited to: watering, spraying, pruning, mulching, fertilizing, etc.) of the planting areas and lawn until the work is accepted in total by the owner.

4. Contractor shall amend all soils in preparations for seeding or sod at a min. rate of 4 cu. yds per 1,000sft of area with composted organic matter (composted sawdust, composted 1/2" wood chip, leaf material and/ or peatmoss or equal). No manures of any type shall be used.

5. Concrete landscape curbing shall be 4" x6" rectangular shaped with radius corners. Provide smooth curves and straight corners where appropriate.

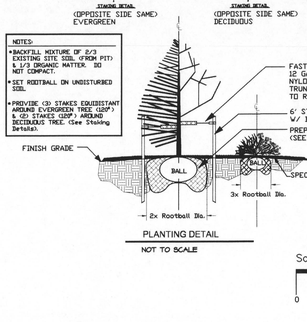
6. An underground pressurized irrigation system shall be provided to all landscaped improved area with low volume drip irrigation to all planting bed areas and rotor type or spray head sprinklers to turf grass areas.

7. Imported topsoil if needed, shall be free from debris larger than 1" in size with salt reading of no more than 3 mmhos/cm. All turf areas shall have a min. 4 inch depth of topsoil, planting beds shall have a min. 6 inch depth of topsoil. All parking lot planters shall have min. 8 inch depth of topsoil.

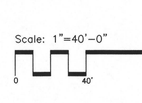
8. All planting beds shall be installed with weed barrier fabric and topdressed with a min. of 2-1/2 inches of 1/2" crushed tan granite rock mulch. Omit weed barrier and topdress with 2 inches of shredded cedar bark mulch in all areas where perennial groundcovers are to be planted.

9. All bermed planted beds are indicated on drawing. Fine grade to provide smooth transitions between adjoining grades. Refer to grading plan for finishes grades.

10. Landscape Specialties of G.J., Inc. shall not be held responsible for the means, methods or appropriateness of construction procedures chosen by any Contractor.



PLANTING DETAIL
NOT TO SCALE



LANDSCAPE CALCULATIONS:

-TOTAL IMPROVED AREA (Phase I):	557,932 S.F.
-REQ: TREES DIVIDED BY 2500	=223 TREES OR
(178 SHADE TREES & 45 ORNAMENTAL TREE)	=424 CAL. INCHES
-REQ: SHRUBS DIVIDED BY 300	=1,860
LESS 25% TURF GRASS REDUCTION	=1,396
-PROPOSED LANDSCAPE:	
-SHADE TREES	=137 (343.5 CAL. INCHES)
-ORNAMENTAL TREES	=52 (80.5 CAL INCHES)
-TOTAL CAL. INCH	=424
-*SHRUBS	=909 (5 GAL)
-PERENNIALS (254/3)	=85 SHRUBS
-TOTAL TURF GRASS	=104,862 S.F.

*6.5.B.2.b.ii of Development Code: "Landscape designs that mimic the "desert" character of Grand Junction's setting are also encouraged, but must be carefully designed so that the basic requirements of shade, screening and buffering are met. Because of this, the Director must approve "desert" landscape installations as well as variances from the required plant coverage ratios or minimum plant sizes(e.g. where xeric plants are only available in one gallon containers).

LEGEND:

- SANDSTONE ROCK BOULDER
- COBBLE ROCK
- CONC. LANDSCAPE CURB (see notes)
- BENCH SEATING
- PERENNIAL GROUNDCOVER
- PERENNIAL FLOWER
- GRASS AREA
- CONCRETE
- FLOATING AERATOR & FOUNTAIN FEATURE
- DECIDUOUS OR BROADLEAF SHRUB
- PICNIC TABLE
- EVERGREEN SHRUB
- PINE TREE
- ORNAMENTAL TREE
- DECIDUOUS SHADE TREE
- PHASE LINE

CITY OF GRAND JUNCTION
APPROVED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE:
BY: Jay D. Peterson For L.B. DATE: 2-7-06

ACCEPTED AS CONSTRUCTED:
BY: _____ DATE: _____

DRAWN BY: M.G.
CHECKED BY: M.G.
DATE: 5/13/2005
SCALE: 1"=40'-0"
JOB#: 2005-29
ACAD FILE#: Brookwillow-L-102505.dwg

REVISIONS:
DATE: BY:
10/25/05 CITY COMMENTS#2 M.G.

LANDSCAPE PLAN- Phase I
BROOKWILLOW VILLAGE
650 24-1/2 ROAD, GRAND JUNCTION, COLORADO

LANDSCAPE SPECIALTIES
LANDSCAPE DESIGN & CONSULTING
2004 N. 12TH STREET, STE. 4B
GRAND JUNCTION, CO 81501
(970) 242-4147
FAX(970) 242-4615

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1 of 5 Sheets

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Phase Line
F 3/4 ROAD
THERESA LANE
BROOKWILLOW LOOP
BERM
5' WIDE CONC. WALK
PROPOSED TRAIL
GAZEBO
1-PRL
1-SLH
1-NWW
1-APA
1-ABM
1-WTC
1-LPS
1-PMA
1-SMH
1-SSB
1-SCC
1-BRO
1-BTC
1-RHP
1-ABP
2-CPB
5-MBC
3-SAV
1-BNY
1-STY
1-LDP
1-GNM
1-SMB
1-TLS
1-BFB
1-WBF
1-BMS
1-AUP
1-IRS
1-CBC
3-MKL
4-IRS
4-ACJ
1-PIN
1-FNB
1-LDP
3-DFG
1-CLR
2-GNM
1-SWY
1-BCR
1-RMS
1-MSY
1-RMP
1-RMR
1-MLS
1-RHP
8-DBS
3-ACJ
2-TLS
2-BMS
1-FNB
1-GBO
1-UTS
1-APP
3-RUS
3-BCJ
1-MDG
5-ACJ
3-RUS
4-CPB
8-GAZ
4-BOG
1-RDY
10-BMT
3-CPB
6-SRC
3-GFP
3-BMS
4-GFP
7-DFG
16-IRS
1-WSC
3-AGS
1-AUP
2-WSC
3-LIA
2-AGS
1-CIS
3-PCF
3-BES
2-APG
2-CIS
2-GFP
2-MXH
1-PCF
1-BMS
1-GFP
1-WBF
2-WBF
1-BFB
2-TLS
3-RMP
1-WSC
1-GNM
1-SMB
1-HPG
2-RUS
1-APP
1-LDP
1-MDG
1-GBO
1-RMS
1-PIN
2-RDY
1-BNY
1-HPG
1-FNB
1-BFB
1-ACJ
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1-NMP
BERM
1-SLH
1-NWW
1-APA
1-ABM
1-WTC
1-LPS
1-PMA
1-SMH
1-SSB
1-BRO
1-BTC
1-RHP
1-ABP
1-GFP
1-WBF
1-AUP
2-WBF
2-AGS
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1-APA
1-GFP
1-PCF
1-BMS
1-ABM
1-WTC
1-PMA
1-SMH
1-LPS
1-APA
1-SSB
1-ABP
1-BRO
1-SLH
1-NWW
1-BTC
1-RHP
1-WSC
3-AGS
1-AUP
2-WSC
3-LIA
1-GFP
1-WBF
1-GFP
1-AUP
2-WBF
2-AGS
1-CIS
3-PCF
1-APA
7-DFG
16-IRS
1-LPS
1-PMA
1-SMH
1-WBF
1-BMS
2-CBC
1-AUP
3-IRS
1-MDG
3-DFG
1-BFB
3-MKL
4-IRS
1-AUP
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1-SCC
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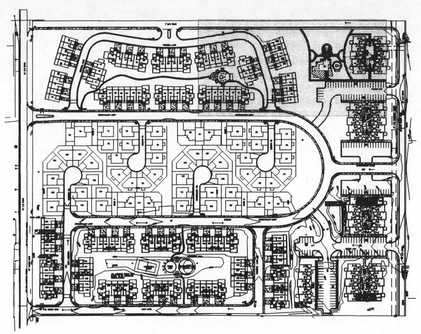

KEY PLAN
N.T.S.

Enlarged View - Northeast Section

Scale: 1"=20'-0"
0 20' 40' 80'
NORTH

CITY OF GRAND JUNCTION
APPROVED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE:
BY: DATE: 2-7-06
ACCEPTED AS CONSTRUCTED:
BY: DATE:

DRAWN BY: M.G.
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BROOKWILLOW VILLAGE
650 24-1/2 ROAD, GRAND JUNCTION, COLORADO

LANDSCAPE SPECIALTIES
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FAX(970) 243-4815

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3 of 5 Sheets

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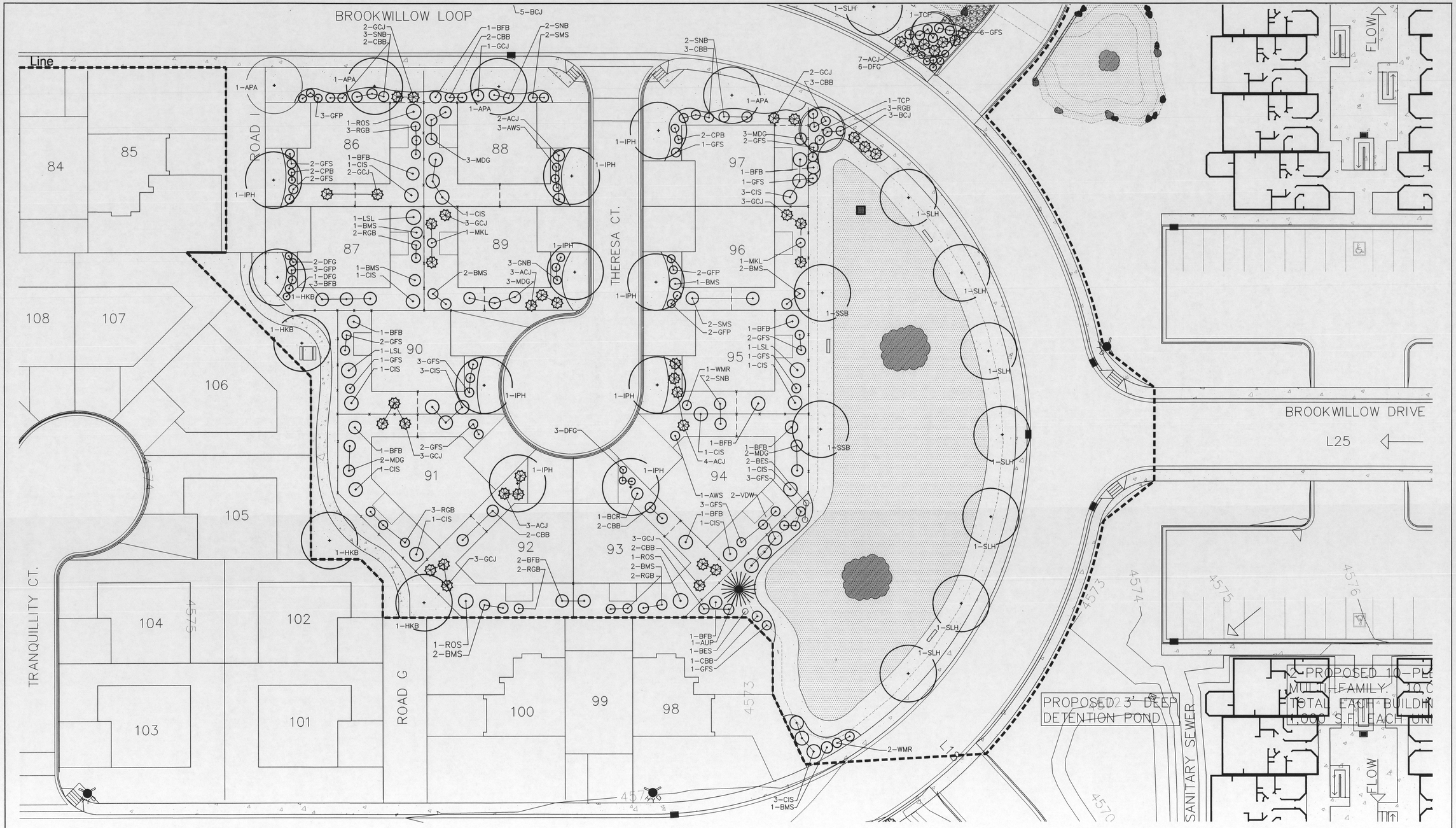
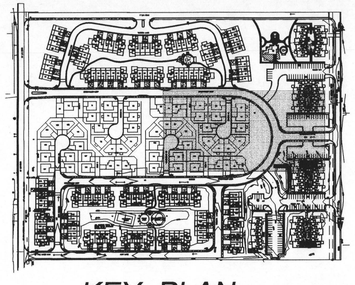


Enlarged View - Southeast Section



KEY PLAN
N.T.S.

Scale: 1"=20'-0"
0 20' 40' 80'
NORTH

CITY OF GRAND JUNCTION
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BY: Patt Peterson For L.B. DATE: 2-7-06
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DATE:	BY:
10/25/05 CITY COMMENTS#2	M.G.

LANDSCAPE PLAN- Phase I
BROOKWILLOW VILLAGE
650 24-1/2 ROAD, GRAND JUNCTION, COLORADO

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(970) 243-4127
FAX(970) 245-8015

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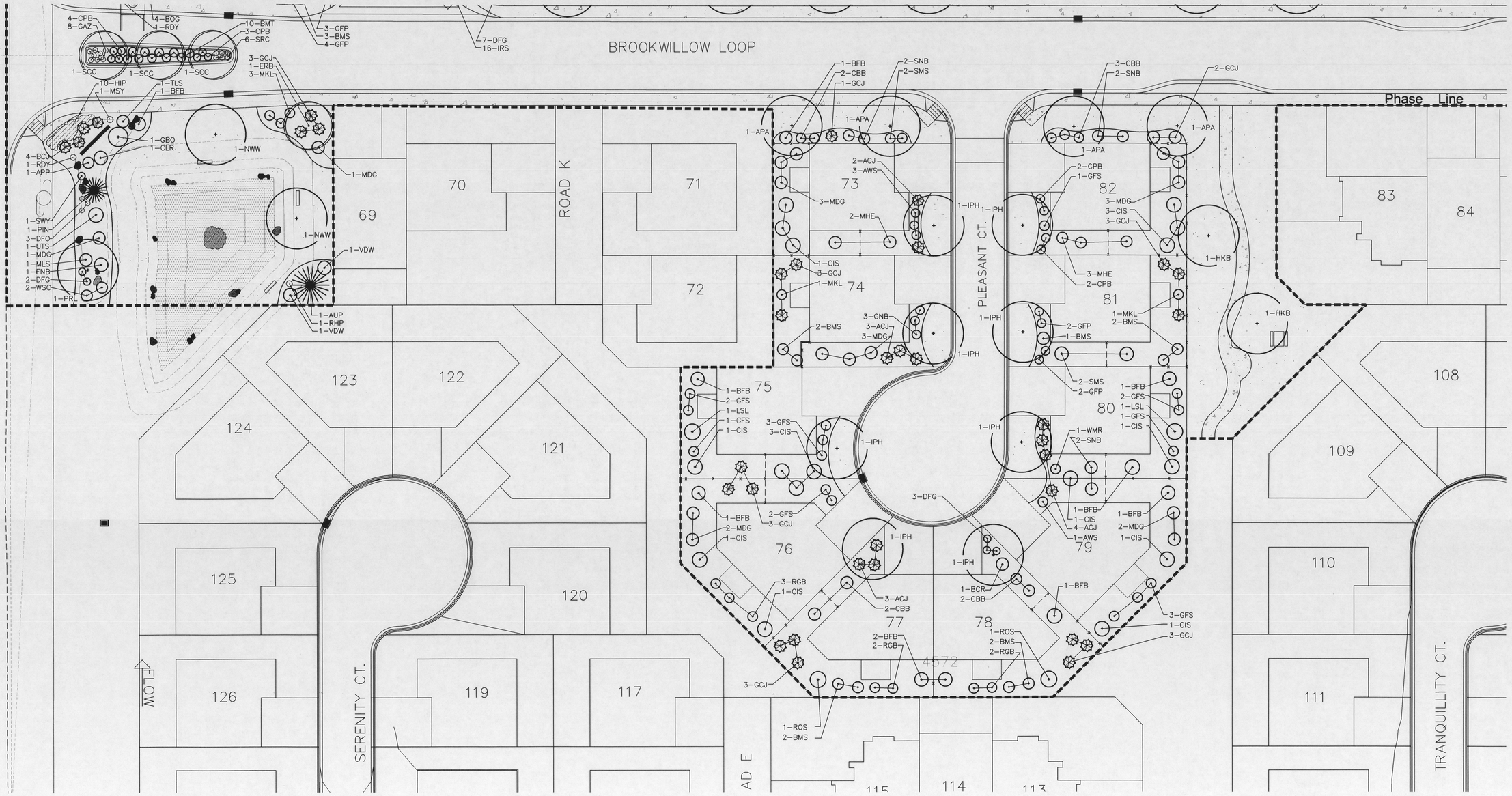

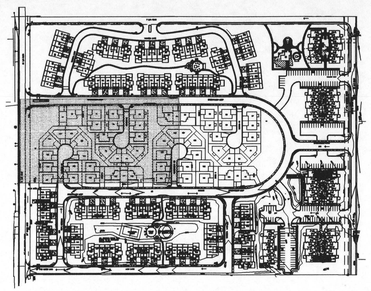

KEY PLAN
N.T.S.

Enlarged View - Southwest Section

Scale: 1"=20'-0"
0 20' 40' 80'
NORTH

CITY OF GRAND JUNCTION
APPROVED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE: FOR L.B.
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LANDSCAPE PLAN- Phase I
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