Table of Contents

File FP-1996-055 Name: James Park Final Plan – NE corner 28 ¼ Road and Gunnison Avenue

Present	Scanned	
		A few items are denoted with an asterisk (*), which means they are to be scanned for permanent record on the ISYS retrieval system. In some instances, items are found on the list but are not present in the scanned electronic development file because they are already scanned elsewhere on the system. These scanned documents are denoted with (**) and will be found on the ISYS query system in their designated categories. Documents specific to certain files, not found in the standard checklist materials, are listed at the bottom of the page. Remaining items, (not selected for scanning), will be listed and marked present. This index can serve as a quick guide for the contents of each file.
X	X	**Table of Contents**
		***Review Sheet Summary**
X	X	***Application form**
X		Review Sheets
X		Receipts for fees paid for anything
X	X	***Submittal checklist**
X	X	***General project report**
		Reduced copy of final plans or drawings
		Reduction of assessor's map.
		Evidence of title, deeds, easements
		***Mailing list to adjacent property owners**
		Public notice cards
		Record of certified mail
X	X	Legal description
		Appraisal of raw land
		Reduction of any maps – final copy
		***Final reports for drainage and soils (geotechnical reports)**
		Other bound or non-bound reports
		Traffic studies
X	X	***Review Comments**
		***Petitioner's response to comments**
X	X	***Staff Reports**
		***Planning Commission staff report and exhibits**
		***City Council staff report and exhibits**
		***Summary sheet of final conditions**

DOCUMENT DESCRIPTION:

X	X	Decision letter – Approved with final conditions	X	X	Review of Construction
X	X	DIA – Bk 2301/Pg 336 - ** - release not scanned	X	X	Landscape Plan
X	X	Correspondence	X	X	Fence Detail Sheet
X	X	Storm Water Management Plan – 3/1/96	X	X	Site Plan
X		Planning Commission Notice of Public Hearing-sent 4/26/96	X	X	Drainage Plan
X		Commitment to Insure – Abstract and Title Co. – 10/21/95	X	X	Street Plan and Profile
X	X	Posting of Public Notice Signs form – 3/21/96	X		Copy of Darwin Subdivision Plat
X	X	Revised Final Drainage Report	X		Construction Drawing of Record
X	X	Ordinance No. 2940 - **	X	X	Site Plan
X		E-mails	X	X	Landscape Plan
X	X	Grant of Easement – Bk 2276 / Pg 69 - **	X	X	Grading and Drainage Plan
X		Grant of Easement – Ingress/Egress – Bk 2276 / Pg 72	X		Street Plan and Profile-Goodwill Drain Plan and Profile
X		Grant of Easement – Utilities Easement – Bk 2276 / Pg 75	X		Goodwill Drainage Improvements
X	X	Planning Commission Minutes – 5/7/96 - **	X		Privacy Plan and Detail
			X		Sewer As-builts

DEVELOPMENT APPLICATION

Community Development Department
250 North 5th Street, Grand Junction, CO 81501
(303) 244-1430

Receipt _____
Date _____
Rec'd By _____
File No. FP-96-55

We, the undersigned, being the owners of property situated in Mesa County, State of Colorado, as described herein do hereby petition this:

PETITION	PHASE	SIZE	LOCATION	ZONE	LAND USE
☐ Subdivision Plat/Plan	☐ Minor ☐ Major ☐ Resub				
☐ Rezone				From: To:	
☒ Planned Development	☐ ODP ☐ Prelim ☒ Final		281/4 & ~~Belford~~ N.E. Corner	Planned Mobil Home - GUNNISON	Residentual
☐ Conditional Use					
☐ Zone of Annex					
☐ Variance					
☐ Special Use					
☐ Vacation					☐ Right-of Way ☐ Easement
☐ Revocable Permit					

☐ PROPERTY OWNER	☐ DEVELOPER	☐ REPRESENTATIVE
Florence D. Wilcox	John Davis	Same
Name	Name	Name
2700 G Rd. #8C	1023- 24 Rd.	Same
Address	Address	Address
Grand Junction Co. 81506	Grand Junction, Colo.81505	Same
City/State/Zip	City/State/Zip	City/State/Zip
242-4587	250-0720	Same
Business Phone No.	Business Phone No.	Business Phone No.

NOTE: Legal property owner is owner of record on date of submittal.

We hereby acknowledge that we have familiarized ourselves with the rules and regulations with respect to the preparation of this submittal, that the foregoin information is true and complete to the best of our knowledge, and that we assume the responsibility to monitor the status of the application and the revie comments. We recognize that we or our representative(s) must be present at all required hearings. In the event that the petitioner is not represented, the ite will be dropped from the agenda, and an additional fee charged to cover rescheduling expenses before it can again be placed on the agenda.

John Davis — 2-28-96
Signature of Person Completing Application — Date

Florence D. Wilcox — 2-28-96
Signature of Property Owner(s) - attach additional sheets if necessary — Date

JAMES PARK

DRAWING STANDARDS CHECKLIST

WATER & SEWER PLAN & PROFILE

	ITEM	GRAPHIC STANDARDS	OK	NA
SECTION VIII	A	Scale: 1" = 20', 30', 40', or 50' H: 1" = 2', 3', 4', or 5' V		
	B	Sheet size: 24" x 36"		
	C	Primary features consist only of proposed water and sewer facilities		
	D	Notation: All non-construction text, and also construction notation for all primary features		
	E	Line weights of existing and proposed (secondary and primary) features per City standards		
	F	Location: All primary facilities are fully located horizontally and vertically		
	G	Horizontal control: Subdivisions and all public utilities (final drawings) tied to Section aliquot corners		
	H	Vertical control: Existing and proposed benchmarks on U.S.G.S. datum		
	I	Orientation and north arrow		
	J	Stamped and sealed drawings by registered professional competent in the work NOT STAMPED		
	K	Title block with names, titles, preparation and revision dates		
	L	Reference to City Standard Drawings and Specifications		
	M	Legend of symbols used		
	N	List of abbreviations used		
	P	Multiple sheets provided with overall graphical key and match lines		
	Q	Contouring interval and extent		
	R	Neatness and legibility		

	ITEM	FEATURES	Plan	Profile	OK	NA
WATER & SEWER DESIGN INFO	1	Use the Composite or Site Plan as a base map, or otherwise provide similar information	X			
	2	Segmentize plan view as required to provide profiles below plan views	X			
	3	Show all existing and proposed sewer facilities in profile		X		
	4	Show all existing and proposed buried facilities that cross the sewer		X		
	5	Show water mains at dips or crossings with other buried facilities		X		
	6	Dimension separation between water and sanitary or storm sewers	X	X		
	7	Show and identify encasement or structural pipe where applicable	X	X		
	8	Add water and sewer services	X			
	9	Station and label al manholes, add rim and invert elevations		X		
	10	Add sewer main slopes and distances between manholes (centerline to centerline)		X		
	11	Add existing and proposed surface profile		X		
	12	Call out water and sewer pipe type in notes				
	13	Call out minimum cover over water and sewer in notes				
	14	Provide all necessary details or reference detail sheet(s)				
	15	Systems shown conform to water and sewer report, if any	X	X		
	16	Provide note regarding separation of water and sewer mains				
	17	Provide note regarding service line markers and endpoint locations	X	X		
	18	Space for approval signature by City Engineering with date and title				
	19	Provide note requiring all Ute water lines be tested in accordance with City standards prior to street construction	X			

COMMENTS

JAMES PARK

DRAWING STANDARDS CHECKLIST

SITE PLAN

	ITEM	GRAPHIC STANDARDS	OK	NA
SECTION VIII	A	Scale: 1" = 20', 30', 40', or 50'		
	B	Sheet size: 24" x 36"		
	C	Primary features consist only of proposed facilities except those related to drainage		
	D	Notation: All non-construction text, and also construction notation for all primary features		
	E	Line weights of existing and proposed (secondary and primary) features per City standards		
	F	Location: All primary facilities are fully located horizontally (See Comment 1)		
	I	Orientation and north arrow		
	(J)	Stamped and sealed drawings by registered professional competent in the work		
	K	Title block with names, titles, preparation and revision dates		
	L	Reference to City Standard Drawings and Specifications		
	M	Legend of symbols used		
	N	List of abbreviations used		
	P	Multiple sheets provided with overall graphical key and match lines		
	R	Neatness and legibility		

ITEM		FEATURES	OK	NA
	1	Site boundary, and adjacent property lines, land use, and zoning		
	2	Total site acreage and proposed land use breakdown		
	3	All existing and proposed easements, streets, and ROWs		
	4	Identify utility vendors to the site		
	5	Identify existing and proposed utilities, including fire hydrants, meters, and service taps		
	(6)	Show existing and proposed drainage inlets, pipes, channels, and manholes GOODWILL DRAIN NOT SHOWN		
	7	Top and toe of slopes for retention/detention basins or other embankments		
	8	Traffic ingress, egress, traffic flow patterns, and traffic control features		
	(9)	All paving and concrete walks, pads, ramps, wheel chocks SHOW X-SECTION OF STREETS, WALKS		
	10	Building footprint, roof line, exterior doorways, and roof drain location		
	(11)	Parking areas, striping, stalls, lighting		
	12	Areas to receive gravel		
	(13)	Signage, trash collection areas, bike racks and paths, crosswalks, fire lanes HOW WILL TRASH PICK UP BE HANDLED?		
	14	Miscellaneous structures, fences, walls		
	15	Other non-landscaping surface facilities		
	16	Do not show existing or proposed contours		
	17	For perimeter streets, show roadway width from curb to curb or edge of pavement to edge of pavement, ROW width, and the monument or section line.		
	18	When applicable, identify the maximum delivery or service truck size and turning radius, hours of anticipated deliveries, and show truck turning radii on the plan to show adequacy of entry/exit and on-site design.		
	19	Identify trash dumpster type, anticipated pick-up time, and accessibility		
	20	Space for signature approval by City Engineering with date and title		
	21	Space for signature of County Clerk and Recorder (when required)		

COMMENTS

1. All angle, curvature, tangency, grade break and change, and other primary features must be fully located horizontally. However, these may be identified on the Grading an Drainage Plan, or may be put on a separate "Staking Plan"
2. If the scale is 1" = 10' or 20', instead of preparing a separate Landscaping Plan, that information may be provided hereon if it will not be too cluttered and confusing. Also, add space for signature approval by Community Development with date and title.

DRAWING STANDARDS CHECKLIST

GRADING AND DRAINAGE PLAN

	ITEM	GRAPHIC STANDARDS	OK	NA
SECTION VIII	A	Scale: Match the Site Plan scale		
	B	Sheet size: 24" x 36"		
	C	Primary features consist only of proposed grading and drainage facilities		
	D	Notation: All non-construction text, and also construction notation for all primary features		
	E	Line weights of existing and proposed (secondary and primary) features per City standards		
	F	Location: All primary facilities are fully located horizontally and vertically		
	G	Horizontal control: Subdivisions and all public utilities (final drawings) tied to Section aliquot corners		
	H	Vertical control: Benchmarks on U.S.G.S. datum if public facilities other than SW are proposed		
	I	Orientation and north arrow		
	J	Stamped and sealed drawings by registered professional competent in the work		
	K	Title block with names, titles, preparation and revision dates		
	L	Reference to City Standard Drawings and Specifications		
	M	Legend of symbols used		
	N	List of abbreviations used		
	P	Multiple sheets provided with overall graphical key and match lines		
	Q	Contouring interval and extent		
	R	Neatness and legibility		

	ITEM	FEATURES	OK	NA
ADDITIONAL INFORMATION	1	Use the Site Plan as a base map or otherwise provide the same information		
	2	Add existing contours		
	3	Add proposed contours. Do not show them under buildings or at concrete and asphalt pavement locations		
	4	Finish floor elevations are provided and are at least 1.0 foot above 100-year flood level, and 0.5 foot above the site outfall		
	5	Show grades at all points of curvature, angle, tangency, grade breaks and changes, swales, channels, pipes, inlets, and other primary features, and also existing grades at tie-in locations		
	6	Provide grade slopes between elevations provided in (5) above		
	7	Show detention/retention basins with contours (off pavement) or delineation(on pavement)		
	8	Indicate 2- and 100-year runoff storage volumes and ponded water surface elevation		
	9	If the site involves 5 acres or more that will be disturbed, then: a. Show or identify limits of surface disturbance due to construction b. Identify areas to be used for storage of building materials, fuels, or wastes c. Show location, type, and extent of BMP and erosion control practices		
	10	Space for approval signature by City Engineering with date and title		
		TWO PLANS WERE SUBMITTED - THESE CONFLICT WITH EACH AND ARE NOT CONSISTENT. WHICH IS THE REAL PLAN?		

COMMENTS

1 This plan may also have full horizontal control on it if not provided on the Site Plan

DRAWING STANDARDS CHECKLIST

STORM DRAINAGE PLAN & PROFILE

	ITEM	GRAPHIC STANDARDS	OK	NA
SECTION VIII	A	Scale: 1" = 20', 30', 40', or 50' H: 1" = 2', 3', 4', or 5' V		
	B	Sheet size: 24" x 36"		
	C	Primary features consist only of proposed storm drainage facilities		
	D	Notation: All non-construction text, and also construction notation for all primary features		
	E	Line weights of existing and proposed (secondary and primary) features per City standards		
	F	Location: All primary facilities are fully located horizontally and vertically		
	G	Horizontal control: Subdivisions and all public utilities (final drawings) tied to Section aliquot corners		
	H	Vertical control: Existing and proposed benchmarks on U.S.G.S. datum		
	I	Orientation and north arrow		
	J	Stamped and sealed drawings by registered professional competent in the work		
	K	Title block with names, titles, preparation and revision dates		
	L	Reference to City Standard Drawings and Specifications		
	M	Legend of symbols used		
	N	List of abbreviations used		
	P	Multiple sheets provided with overall graphical key and match lines		
	Q	Contouring interval and extent		
	R	Neatness and legibility		

	ITEM	FEATURES	Plan	Profile	OK	NA
DRAINAGE INFO	1	Use the Composite or Site Plan as a base map or otherwise provide similar information	X			
	2	Segmentize plan view as required to provide profiles below plan views	X			
	3	Show all existing and proposed drainage facilities in profile		X		
	4	Show all existing and proposed buried facilities that cross drainage facilities		X		
	5	Dimension separation between storm drains and waterlines		X	X	
	6	Show and identify encasement or structural pipe where applicable	X	X		
	7	Station and label all manholes, inlets, culverts, add rim and invert elevations		X		
	8	Add storm drain slopes and distances between MH's and/or inlets		X		
	9	Add existing and proposed surface profile over facilities		X		
	10	Call out pipe and culvert type and any special bedding classes in notes				
	11	Call out minimum cover over culverts and pipes				
	12	Provide all necessary details or reference detail sheet(s)				
	13	Facilities shown conform to drainage report				
	14	Space for signature approval by City Engineering with date and title				

COMMENTS

JAMES PARK – 28¼ ROAD PLANS & PROFILE NOT SUBMITTED – REQUIRED

DRAWING STANDARDS CHECKLIST

ROADWAY PLAN & PROFILE

ITEM		GRAPHIC STANDARDS	OK	NA
SECTION VIII	A	Scale: 1" = 20', 30', 40', or 50' H: 1" = 2', 3', 4', or 5' V		
	B	Sheet size: 24" x 36"		
	C	Primary features consist only of lighting and traffic features		
	D	Notation: All non-construction text, and also construction notation for all primary features		
	E	Line weights of existing and proposed (secondary and primary) features per City standards		
	F	Location: All primary facilities are fully located horizontally and vertically		
	G	Horizontal control: Subdivisions and all public utilities (final drawings) tied to Section aliquot corners		
	H	Vertical control: Existing and proposed benchmarks on U.S.G.S. datum		
	I	Orientation and north arrow		
	J	Stamped and sealed drawings by registered professional competent in the work		
	K	Title block with names, titles, preparation and revision dates		
	L	Reference to City Standard Drawings and Specifications		
	M	Legend of symbols used		
	N	List of abbreviations used		
	P	Multiple sheets provided with overall graphical key and match lines		
	Q	Contouring interval and extent		
	R	Neatness and legibility		

ITEM		FEATURES	Plan	Profile	OK	NA
	1	Use the Composite or Site Plan as a base map or otherwise provide similar information	X			
	2	Segmentize plan view as required to provide profiles below plan views	X			
	3	Show all existing and proposed profiles at C_L and right and left Fls. Provide slopes with "+" or "-"		X		
	4	Show existing and proposed profiles at edge of pavement if there is no gutter		X		
	5	Note adjustment of all MH rims and valve covers for final grade	X			
	6	Elevation of F_L at fillet/valley pan interface	X			
	7	Station & elevation of F_L at BCRs, ECRs, and handicap ramps	X			
	8	Station & elevation of pavement C_L and F_L at endpoints, BCRs, ECRs, PCs, PTs, PRCs, and PCCs		X		
	9	Station & elevation at all grade changes and C_L and F_L VPIs, VPCs, VPTs and high & low points.		X		
	10	Station & elevation at all grade changes and C_L pavement warp at valley pans		X		
	11	Provide pavement, base, and subgrade specifications				
	12	Barricades, turn-arounds, tapers, delineators, driveways	X			
	13	Street lights, signals, signing, and other traffic controls	X			
	14	Show future road extension alignment to support current design, where applicable	X	X		
	15	Provide all necessary details or reference detail and/or cross-section sheets				
	16	Show proposed permanent benchmark (for new subdivisions) and all proposed horizontal control survey markers and street intersections, offset if required	X			
	17	Space for approval signature by City Engineering with date and title.				

COMMENTS

1. For a definition of abbreviations used above, see page VIII-4.

JAMES PARK - THIS PLAN NOT SUBMITTED/IS REQUIRED

DRAWING STANDARDS CHECKLIST

PRELIMINARY MAJOR BASIN DRAINAGE MAP

ITEM		GRAPHIC STANDARDS	OK	NA
SECTION VIII	A	Scale: 1" = 50', 60', 100', or 200'		
	B	Sheet size: 11" x 17" or 24" x 36"		
	H	Vertical control: Benchmarks on U.S.G.S. datum if public facilities other than SW are proposed		
	I	Orientation and north arrow		
	J	Stamped and sealed drawings by registered professional competent in the work		
	K	Title block with names, titles, preparation and revision dates		
	M	Legend of symbols used		
	N	List of abbreviations used		
	P	Multiple sheets provided with overall graphical key and match lines		
	Q	Contouring interval and extent		
	R	Neatness and legibility		

ITEM		FEATURES	OK	NA
-	1	Use "Drainage Information" items of the Preliminary Plan (or that same portion of Item 1 of the Composite plan reduced as required, as a portion of the map). The map must show the site and the entire upstream watershed, which together is the "major basin"		
MAJOR BASIN INFO	2	Add a Vicinity Map if the major basin does not include collector or arterial roads		
	3	Show ROWs, canals, drains, ditches, culverts, ponds, detention basins, wetlands, and other major drainage features in the off-site area of the major basin		
	4	Provide township, range, section, and quarter section information		
	5	Identify existing subdivisions by name and show approximately boundary of the proposed subdivision		
	6	Identify prominent soil types and land uses		
	7	Show general off-site topography using available contour mapping		
	8	Show 100-year floodplains in the off-site area		
	9	Show major basin and off-site sub-basin runoff boundaries		
	10	Identify off-site sub-basin and major basin areages		
	11	Show existing off-site drainage patterns		
	12	Identify areas referenced in the report as having been previously studied		
ON-SITE INFO	13	Show existing characteristics of inflow to, through, and from the site		
	14	Show existing on-site drainage patterns		
	15	Show proposed on-site drainage patterns		

COMMENTS

"On-site Info" items above must be deleted prior to use as a base for the Final Major Basin Drainage Map

JAMES PARK

REPORT CHECKLIST AND OUTLINE

FINAL DRAINAGE REPORT

CHECKLIST	OK	NA
Typed Text (appendices may be handwritten)		
Bound with staple, bar binder, spiral binder or other method (not a notebook)		
Title Page: a. Name of report and preparer, date of preparation and revision (if any)		
b. Professional's seal and signature		
Table of Contents: For text and appendices, if any (appendices shall be paged)		
Exhibits: Folded to 8½"x11" size		
Maps attached to or contained in the report: Preliminary Major Basin Drainage Map; Pre-development Drainage Map; Final Major Basin Drainage Map; Post-development Drainage Map		

~~OUTLINE~~

I to IV. Same as for the Preliminary Drainage Report (see X-12) SEE ATTACHED CHECKLIST

V RESULTS AND CONCLUSIONS
- A. Runoff Rates for 2 and 100 Year Storm (use tabular format)
  1. Existing total site runoff rates
  2. Existing runoff rates to individual private properties
  3. Proposed total site runoff rates (after detention/retention)
  4. Proposed runoff rates to individual private properties (after detention/retention)
- B. Overall Compliance
  1. Policy
  2. Criteria
  3. Constraints

VI REFERENCES

VII APPENDICES
- A. Existing Runoff (2 and 100 year)
  1. Precipitation (if different than shown in SWMM)
  2. Runoff coefficients
  3. Times of concentration or lag times
  4. Intensities or other parameters
  5. Runoff calculations (individual sub-basins and combined at all design points)
  6. Tabular summary of runoff rates
- B. Proposed Runoff (2 and 100 year)
  1. Precipitation (if different than shown in SWMM)
  2. Runoff coefficients
  3. Times of concentration or lag times
  4. Intensities or other parameters
  5. Runoff calculations (individual sub-basins and combined at all design points)
  6. Tabular summary of runoff rates
- C. Detention Basin Calculations (2 and 100 year) → NOT DETERMINED IF THIS IS FEASIBLE BECAUSE OF CAPACITY IN DRAIN. DID YOU EVEN READ THE REPORT YOU COPIED?
  1. If Rational & Modified Rational methods are used
     - a. Average release rate
     - b. Critical durations and intensities
     - c. Volume required
     - d. Volume available
     - e. Storage - depth - discharge
     - f. Lower stage outlet → HOW WILL THE TWO PIPES WORK? DETAIL?
     - g. Upper stage outlet → SMALL PIPES CLOG EASILY — THEN DON'T WORK.
     - h. Erosion protection → MAINTENANCE ISSUE NOT ADDRESSED.
  2. If Computer or other method of analysis is used
     - a. Provide discharge parameters
     - b. Provide basin parameters
     - c. Provide inflow/outflow information
     - d. Erosion protection

JAMES PARK

REPORT CHECKLIST AND OUTLINE

FINAL DRAINAGE REPORT (continued)

OUTLINE

D. Retention Basin Calculations (100 year) → MAY BE ONLY AVAILABLE OPTION, BUT NOT DISCUSSED IN CONCLUSIONS.
   1. Basin Feasibility
      a. Groundwater depths
      b. Soil percolation results
      c. Letter from geotechnical Engr.
   2. If Rational Method is used
      a. Volume to be retained
      b. Volume available
   3. If computer or other analysis is used
      a. Provide basin parameters
      Provide inflow information

E. Street Flow NOT ADDRESSED - EVEN IF PRIVATE STREETS, MUST BE ANALYZED
   1. Rate
   2. Depth and velocity FOR DEPTHS & FLOWS

F. Inlets
   1. Rate
   2. Interception NO DETAIL PROVIDED
   3. Bypass and to where

G. Storm Drains CAN'T TELL IF BEING USED
   1. Rate
   2. Size and "n" value
   3. Capacity
   4. Hydraulic gradient (if pipe is surcharged or if frictional slope is greater than the pipe slope)

H. Open Channel Flow
   1. Channel geometrics
   2. "n" values and velocities
   3. Erosion protection
   4. Freeboard

I. Culverts
   1. Completed HDS-5 nomographs

J. Miscellaneous Hydraulic calculations

COMMENTS

1. It may not be necessary to cover all of the above topics, but the report should address all concerns applicable to the proposed project, even issues not identified above.

JAMES PARK

PRE-DR

REPORT CHECKLIST AND OUTLINE

PRELIMINARY DRAINAGE REPORT

CHECKLIST	OK	NA
Typed text		
Size: 8½ x 11" format		
Bound: Use bar or spiral binder or staple. Do not use a notebook.		
Title Page: Name of report and preparer, date of preparation and revision (if any)		
Exhibits: Maximum 11" high and 32" wide, bound in report and folded as required to 8½"x11" size		
Maps attached to or contained in the report: Vicinity Map and Preliminary Major Basin Drainage Map		

OUTLINE

I. GENERAL LOCATION AND DESCRIPTION
- A. Site and Major Basin Location
  1. Streets in the vicinity
  2. Development in the vicinity
- B. Site and Major Basin Description
  1. Acreage
  2. Ground cover types
  3. Hydrologic soil types

COMMENTS FROM PRELIMINARY REVIEW NOT ADDRESSED WITH FINAL SUBMITTAL.

II. EXISTING DRAINAGE CONDITIONS
- A. Major Basin
  1. General topography, drainage patterns and features, canals, ditches, wetlands
  2. Previously determined 100-year floodplains
- B. Site
  1. Historic drainage patterns
  2. Inflow characteristics from upstream
  3. Discharge characteristics to downstream sub-basins

III. PROPOSED DRAINAGE CONDITIONS
- A. Changes in Drainage Patterns
  1. Major basin
  2. Site
- B. Maintenance Issues
  1. Access
  2. Ownership and responsibility

NOT ADDRESSED IN FINAL REPORT

IV. DESIGN CRITERIA & APPROACH
- A. General Considerations
  1. Previous drainage studies performed for the area
  2. Master planning issues (large scale considerations)
  3. Constraints imposed by site and other proposed development
- B. Hydrology
  1. Design storms and precipitation
  2. Runoff calculation method
  3. Detention/retention basin design method
  4. Parameter selection procedures
  5. Analysis and design procedures
  6. Justification of proposed methods not presented or referenced in SWMM
- C. Hydraulics
  1. Hydraulic calculation methods
  2. Parameter selection procedures
  3. Analysis and design procedures
  4. Justification of proposed methods not presented or referenced in SWMM

COMMENTS

1. No calculations are required for the Preliminary Drainage Report.
2. It may not be necessary to cover all of the above topics, but the report should address all concerns applicable to the proposed project, even issues not identified above.

GENERAL PROJECT REPORT, JAMES PARK

A. Project Description
1. The project is located at the NE corner of 28.25 Rd. and Gunnison Ave. (Gunnison Ave. is not improved).
2. The acreage is approximately 8.25 acres.
3. The proposed use is for Planned Mobile Home for 55 units. Note that this a park and not a subdivision. All spaces and common area are owned as one parcel.

B. Public Benefit
The public benefit will be to provide affordable "detached" housing with convenient access to employment, shopping, restaurants, schools, and recreational facilities.

C. Project Compliance, Compatibility, and Impact
1. The justification for the request has been presented, reviewed, and approved by the City as part of its recently approved rezone for Planned Mobile Home, "FINAL DECISION RZP-95-199"
2. Surrounding land uses are as follows. Along the easterly 254 ft. boundary, the use and zone are C-1. There is a "notch" in the NW corner out of the otherwise rectangular shape of James Park that is C-2 zoned and used as a night club, to the east is C-2 zoned but is in fact an existing mobile home park; to the south is vacant land, I-1 zoned; to the SW is vacant land, C-1 zoned; to the west is a new manufactured housing project now under construction, zoned PR-5.8.
As part of the City's approval of the rezone described above, it is required that the James Park developer provide a sound mitigation fence around this night club. The developer has obtained engineering recommendations for the fence design which are contained in the enclosed letter reports by Adams and Associates (for acoustical design) and Lizer and Associates (for structural design). The developer will build a 9.5 ft. high, wood fence in accordance with the plans presented by these engineers.
3. Site access will be via 28.25 Rd. to the traffic signal at North Ave.
4. All utilities are available to the site and fire hydrants will be provided per City standards.
5. There are no special demands for utilities.
6. The effects on public facilities are only those for normal use for a project of this size. There are no unusual demands.
7. & 8. Generally, there are no known soils or geology conditions present that will preclude or unusually impact the development. The land is reasonably flat and the soils are expected to be slightly expansive. As explained in the Preliminary Plan application there are no housing structures to be erected; only pads, roads, sidewalks, fencing, etc. and those will be constructed to customary standards. All improvements will remain the private property of the owner as this is a park, not a subdivision.
9. Hours of operation: this is of course a 24 hours per day housing project.
10. There are no employees per se except as may be employed by the owner for maintenance or management.
11. A sign in conformance with City standards and permits will be placed at the entrance.
D. Development Schedule and Phasing.
The entire project is being final planned as part of this application. Actual construction of site improvements is planned for within the coming calendar year.

JAMES PARK, A MANUFACTURED HOUSING RENTAL PARK

The proposed park is for 56 units located at approximately 486 28 1/4 Road on approximately 8.25 acres. The property is legally described as Lot 2, Darwin Subdivision, Mesa County, CO, and known as Mesa County tax schedule no. 2943-182-09-002.

The intent for providing this subdivision is to provide economical housing for those persons or families who want convenient, affordable, "detached" housing at costs below that generally now available. The local papers and other media have recently and frequently addressed the issue of the lack of "affordable" housing within our community as growth has continued and home prices have risen dramatically. This project will help meet that currently undersupplied need by providing spaces suitable for manufactured homes, built to currently in-force codes, in a quality development.

This central location will provide convenient access for:

>engress/egress via a stop-lighted intersection at 28 1/4 Road and North Ave.

>close-by shopping at the many, convenient stores and restaurants on North Ave.

>less that one mile travel to recreational facilities at Lincoln Park

The location also has the rather unique advantage of being in an area conducive to and compatible with a higher-density, single family development. The subject property is in a C-2 zone, so the proposal is by most standards a "downzone" to a less severe use. The area immediately to the north is also a C-2 zone, to the east is again a C-2 zone but in fact is an existing manufactured housing development owned by the petitioner, to the south is industrial zone, I-1, and to the west is a mix of planned business and mulitfamily, PR-20, zones. All utilities are available or can be economically extended.

Amenities will be provided for our customers. Each rental space will be landscaped by the developer, have its own paved driveway and walks, and will feature a carport and exterior storage shed. There will be a central, pressurized irrigation system for the landscaping, a central park including landscaping and children's playground equipment, and a common, fenced storage lot for extra vehicles and trailers. There will be an attractive masonry entrance to create feelings of quality and pride in location.

We believe that this request for a rezone is entiely compatible with the regulation established criteria. The "need" has been previously discussed, and the benefits are simply the meeting of a seriously unmet community need for affordable housing. The request is not in conflict with our understanding of the proposed new Master Plan. Together with the availablility of utilities and access, the request is in line with code requirements.

INFORMATIONAL NOTE

James Park is privately owned. All streets, sewer and water lines are owned and maintained by owner.

Planning Dept.

To Whom It May Concern:

At the January 19, 1996 hearing of the Grand Junction City Council, the property located at 480 - 28 1/4 Road, also known as James Park mobile home park, was zoned "PMH." The approval was granted subject to specified conditions and only after extensive deliberation by the Council. The purpose of this letter is to summarize the concerns addressed by the Council at that hearing.

The James Park property has been zoned C-2 for years and, based on such zoning, the Cahoots nightclub was built in (year) on adjoining property (attach map). At the Council hearing, the owners of Cahoots represented that: Cahoots has operated at that location for a number of years without any complaints from adjoining properties regarding noise (a copy of a police report was tendered to the City Clerk to substantiate this position); Cahoots is generally open until 2:00 a.m. and often engages live bands.

Council's deliberations focussed on the fact that Cahoots' hours of operation, the nature of its business and the loud music from the live bands are not compatible with quiet, peaceful residential use. If a mobile home park had pre-existed, the Council would likely have been very concerned about permitting the construction and operation of an enterprise such as Cahoots in such close proximity to residential occupancy. The City Council expressed concern about the compatibility of Cahoots and residential use and expressed some reservation about granting a zoning change to allow James Park.

After due consideration, the City Council approved the PMH zone for the mobile home park subject to conditions intended to mitigate adverse impact on the operation of Cahoots. Those conditions included construction of a wall adjacent to Cahoots engineered to provide an adequate sound barrier between Cahoots and James Park. While the Council did not discuss it, "adequate" is defined by 25-12-101 *et. seq.*, C.R.S. The James Park developer is also prohibited from placing residences closer than 115' to the east line of Cahoots or 95' to the south property line of Cahoots. The developer must plant at least five species of large trees at maturity (minimum 1.5 inch caliper at planting) along the west property line adjacent to Cahoots. All lease and rental agreements for the mobile home park must contain a notice that warns persons of the noise generated from Cahoots.

Even with these conditions, the Council was concerned about the long-term adverse impacts of the existing use by the proposed mobile home park. Allowing the construction of mobile home units within 95' of Cahoots will likely result in the filing of complaints in future years.

The Council discussed the City Ordinance and the regulations under the State liquor laws prohibiting undue noise. Excessive noise is determined by the standards of the neighborhood and the Council acknowledged that the standards of the neighborhood are much different if the neighborhood is residential as opposed to commercial. While the Council cannot prohibit a property owner from filing claims against Cahoots for excessive

noise, and similarly the Council cannot prohibit the revocation of a liquor license as a result of excessive noise, the Council desired to inform all, including future councils and enforcement personnel, that future complaints should be considered in view of the fact that the residential development is being approved and built with full knowledge of the existing operation and its attendant noise and activities. Due consideration should be given Cahoots in any noise complaint proceeding.

Minutes of the meeting should be reviewed for the specifics of the Council discussion and direction if any issues arise in the future regarding the operation of Cahoots adjacent to a residential community.

Dan E Wilson

Dan Wilson, City Attorney
June 20, 1996

cc: Liquor file
Planning file

s: cahoots.doc: 6/20/96

6/26
Original to Planning
c liquor file
c Larry Beckner
c Ward Scott

DAVID L. ADAMS ASSOCIATES, INC.
Consultants in Acoustics and Performing Arts Technologies

February 29, 1996

Mr. Ward Scott
RE/MAX
1401 North 1st Street
Grand Junction, Colorado 81501

RE: James Park Lot 2 (DLAA Reference No. 5250)

Dear Ward:

Based on the plans and information we have received, we have compiled several recommendations to attenuate excessive noise levels produced by the existing nightclub, Cahoots, on Lot 1. Our recommendations are based on estimated noise levels produced by the nightclub based on historical data from similar projects we have worked on in the past.

1.0 Noise Regulations

The only applicable noise ordinances for the new mobile home park of which we are aware are set forth in Article 12, *Noise Abatement*, of the Colorado State Statutes. The following table indicates the maximum allowable sound levels established by the ordinance at 25 feet from the property line of the zones listed.

Zone	7:00 am to next 7:00 pm	7:00 pm to next 7:00 am
Residential	55 dBA	50 dBA
Commercial	60 dBA	55 dBA
Light Industrial	70 dBA	65 dBA
Industrial	80 dBA	75 dBA

The recommendations that follow are designed to maintain a maximum allowable noise level of 50 dBA at 25 feet south from the South wall of the nightclub. The nearest dwelling unit is to be approximately 95 feet from the southern property line of Lot 1.

2.0 Recommendations

Based on similar past projects, we estimated the average noise level at 10 feet from the nightclub to be 65 dBA, with a maximum level of 72 dBA at the same distance. It is our understanding the nightclub is constructed of masonry units.

To control the noise from the nightclub, we recommend constructing a barrier between the nightclub and the dwelling units. The barrier should prevent a direct line of sight between all the nearest dwelling units and the nightclub property since potential noise sources could exist in the nightclub's parking lot in addition to the noise coming from the nightclub itself. Therefore, the barrier should be constructed along the eastern and southern property lines of Lot 1. By constructing the wall as close as possible to the property line, i.e. as close as possible to the source, the barrier becomes more effective at attenuating noise.

Ideally, the barrier should be a minimum of 12 feet in height. We have assumed based on the drawings that the property between Lots 1 and 2 is relatively flat.

The barrier may have less effect attenuating typical maximum noise levels from the nightclub property. Typically the maximum noise levels are created by short duration events, such as car horn blasts, a car door slamming, cars starting, etc.

We recommend the following options for the construction of the barrier.

1. Construct the barrier with concrete masonry units.

2. Create the barrier with a free-standing transportation noise barrier, such as the Type FS Transportation Noishield Sound Barrier as manufactured by IAC (see enclosed product literature). The barrier's absorptive side should face the nightclub.

3. Construct the barrier of wood as shown in Figure 1. Wood battens should be used to cover the space between pickets, and the pickets should extend into the ground.

It is important that there be no holes or gaps in the fence construction for proper performance.

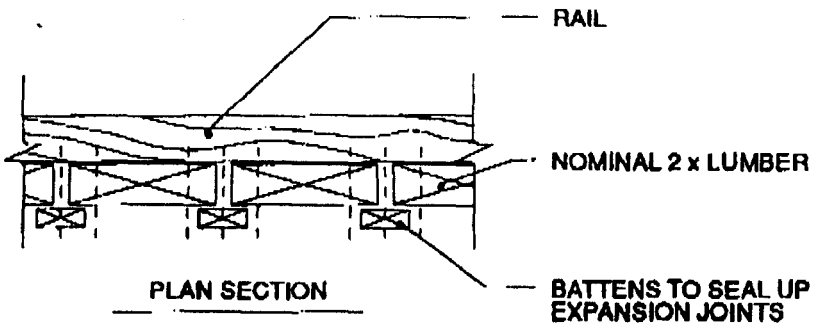
If you have any questions about our recommendations, please call.

Sincerely,

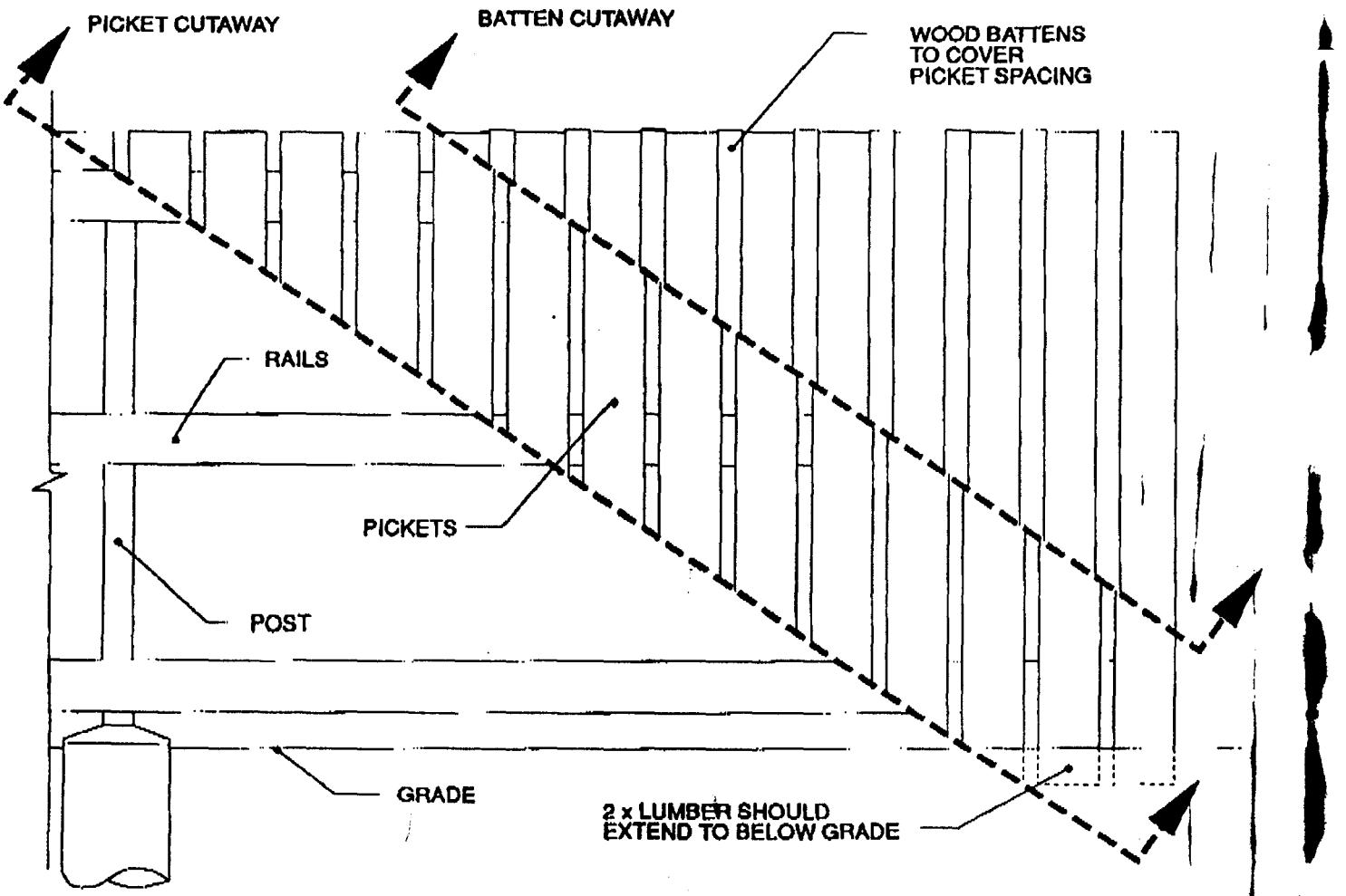
Sean Connolly

Sean Connolly

SMC/rlm



NOTE: THE WOOD SELECTED SHOULD HAVE A MINIMUM SURFACE WEIGHT OF 4 lbs./s.f. OR DENSITY OF 30 lbs./c.f. ACCEPTABLE TYPES ARE FIR OR REDWOOD



Wood Barrier Construction

DAVID L. ADAMS ASSOCIATES, INC.
1701 Boulder Street - Denver, Colorado 80211
303/455-1600

James Park Lot 2

no scale

project no. 5250 date: 28 Feb. '96 drawn by: SMC

Figure No. 1

Geotechnical Report

Do not need for privately owned land where we are not selling to other people and we are not building anything that needs a foundation. we just Block trailers on top of Ground. 28 1/4 RD soils report has already been done with nagral village.

W.H. LIZER & ASSOCIATES
Engineering Consulting and Land Surveying
576 25 road, Unit #8
Grand Junction, Colorado 81505
(970) 241-1129

March 1, 1996

STORMWATER MANAGEMENT PLAN
FOR
JAMES PARK
A PRIVATE MOBILE HOME SUBDIVISION
(Previously Referenced as Darwin Subdivision Lot 2)

Located in the NE 1/4 of Section 18, T1S, R1E, U.M.
City of Grand Junction, Mesa County, Colorado

A. Site and Project Description

Initially, the site will be grubbed to remove existing vegetation.

The streets will be rough cut and then main water and sewer lines will be installed.

Prior to construction the estimated runoff coefficients are 0.20 and 0.26 for 2-year and 100-year storm events, respectively.

Afterdevelopment, the estimated runoff coefficients are 0.56 and 0.60 for a 2-year and 100-year storm events, respectively.

It is expected that soil erosion and contaminants to the soil will be very minimal as the site is relatively flat and no toxic materials will be used for construction purposes.

At this time the site is covered with low growth weed cover.

There will be no storage of fuels or toxic material on the site during construction.

B. Management During Construction

The detention basin will be constructed when the project construction starts and runoff will be directed to the basin during construction.

Watering will be required for dust control.

Most equipment used for construction should be left on site until the work is completed in order to keep from tracking mud off-site during construction.

Safety procedures should be addressed to the contractors to reduce the risk of fuel spills.

Final stabilization would include grassed areas and site watering systems.

The mobile home park will have a maintenance person to check and do any required work to insure that watering, mowing, and sediment control are will maintained.

Respectfully submitted,

Wayne H. Lizer

Wayne H. Lizer, P.E., P.L.S.

WHL/sl

DAVID L. ADAMS ASSOCIATES, INC.
Consultants in Acoustics and Performing Arts Technologies

March 1, 1996

Mr. Ward Scott
RE/MAX
1401 North 1st Street
Grand Junction, Colorado 81501

Re: Revised - James Park Lot 2 (DLAA Reference No. 5250)

Dear Ward:

Based on the plans and information we have received, we have compiled several recommendations to attenuate excessive noise levels produced by the existing nightclub, Cahoots, on Lot 1. Our recommendations are based on estimated noise levels produced by the nightclub based on historical data from similar projects we have worked on in the past.

1.0 Noise Regulations

The only noise ordinance which may be applicable for the new mobile home park of which we are aware is set forth in Article 12, *Noise Abatement*, of the Colorado State Statutes. A copy of the ordinance is enclosed for your information. The following table indicates the maximum allowable sound levels established by the ordinance at 25 feet from the property line of the zones listed.

Zone	7:00 am to next 7:00 pm	7:00 pm to next 7:00 am
Residential	55 dBA	50 dBA
Commercial	60 dBA	55 dBA
Light Industrial	70 dBA	65 dBA
Industrial	80 dBA	75 dBA

The recommendations that follow are designed to maintain a maximum allowable noise level of 50 dBA at 25 feet south from the South wall of the nightclub. The nearest dwelling unit is to be approximately 95 feet from the southern property line of Lot 1.

2.0 Recommendations

Based on similar past projects, we estimated the average noise level at 10 feet from the nightclub to be 65 dBA, with a maximum level of 72 dBA at the same distance. It is our understanding the nightclub is constructed of masonry units.

To control the noise from the nightclub, we recommend constructing a barrier between the nightclub and the dwelling units. The barrier should prevent a direct line of sight between all of the nearest dwelling units and the nightclub property since potential noise sources could exist in the nightclub's parking lot in addition to the noise coming from the nightclub itself. Therefore, the barrier should be constructed along the eastern and southern property lines of Lot 1. By constructing the wall as close as possible to the property line, i.e. as close as possible to the source, the barrier becomes more effective at attenuating noise.

Ideally, the barrier should be a minimum of 12 feet in height to maintain a maximum noise level of 50 dBA at 25 feet from the property line. We have assumed based on the drawings that the property between Lots 1 and 2 is relatively flat.

At the request of the client, we have also calculated the necessary height of the barrier based on maintaining a maximum noise level of 50 dBA at the nearest dwelling unit to Lot 1, which is to be 95 feet from the property line. Using this criteria, the barrier should be a minimum of 9 feet-6 inches in height.

The barrier may not be able to maintain 50 dBA at the nearest dwelling unit due to typical maximum noise levels from the nightclub property. Typically these maximum noise levels are created by short duration events, such as car horn blasts, a car door slamming, cars starting, etc.

We recommend the following options for the construction of the barrier.

1. Construct the barrier with concrete masonry units.

2. Create the barrier with a free-standing transportation noise barrier, such as the Type FS Transportation Noishield Sound Barrier as manufactured by IAC (see enclosed product literature). The barrier's absorptive side should face the nightclub.

3. Construct the barrier of wood as shown in Figure 1. Wood battens should be used to cover the space between pickets, and the pickets should extend into the ground.

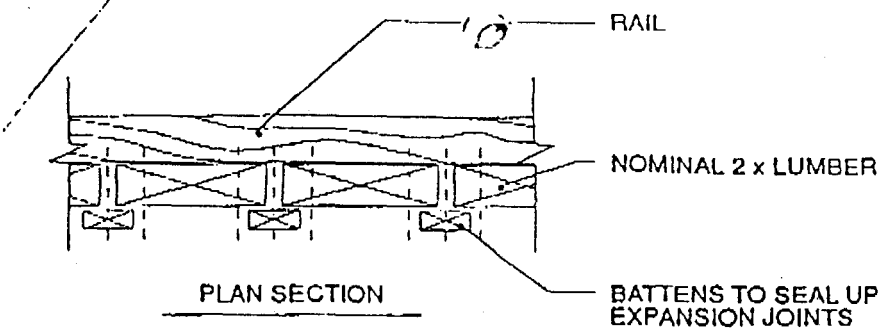
It is important that there be no holes or gaps in the fence construction for proper performance.

If you have any questions about our recommendations, please call.

Sincerely,

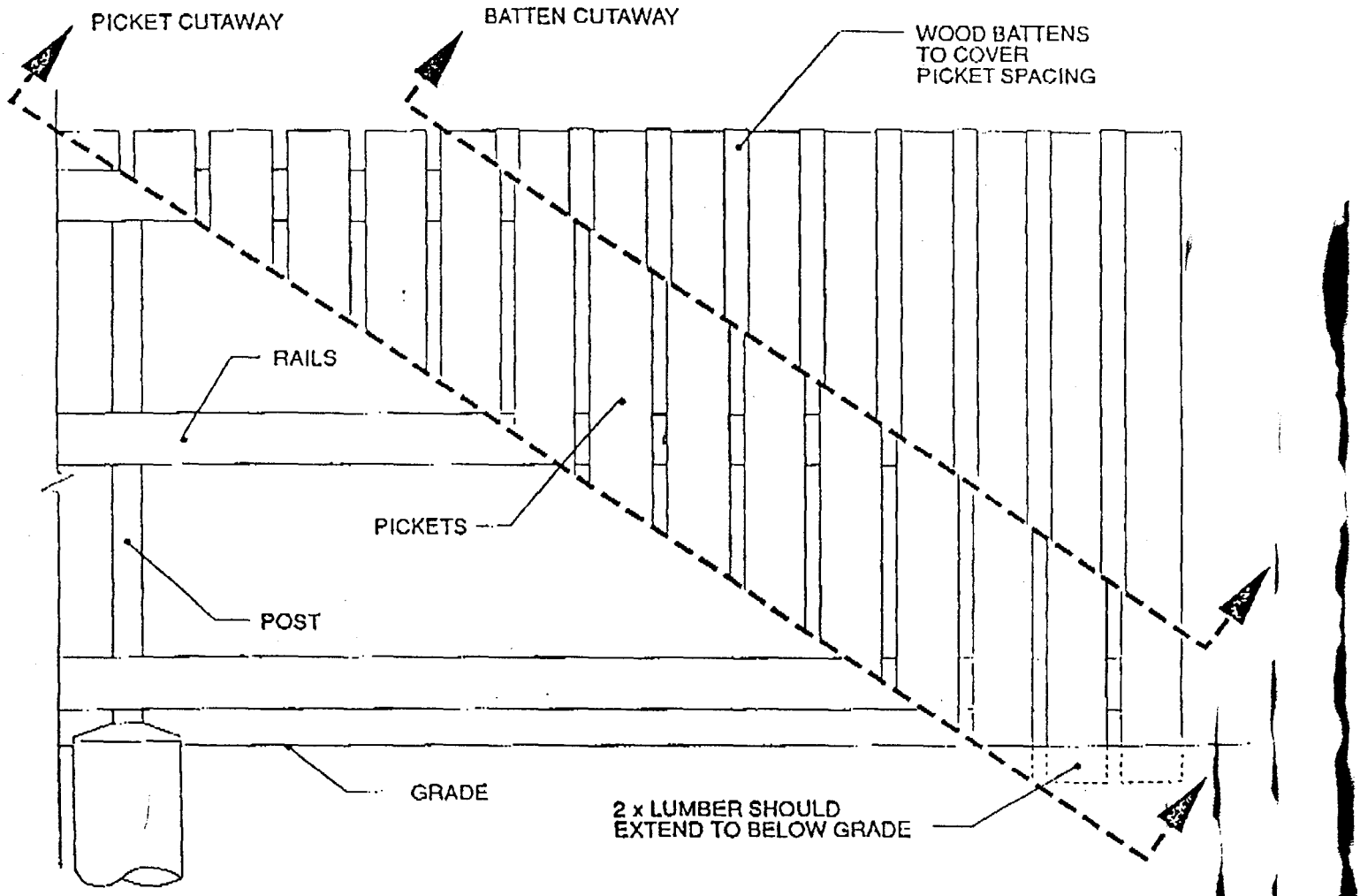
Sean Connolly

Jeffrey P. Kwolkoski, P.E.



PLAN SECTION

NOTE: THE WOOD SELECTED SHOULD HAVE A MINIMUM SURFACE WEIGHT OF 4 lbs./s.f. OR DENSITY OF 30 lbs./c.f. ACCEPTABLE TYPES ARE FIR OR REDWOOD



Wood Barrier Construction

DAVID L. ADAMS ASSOCIATES, INC.
1751 Boulder Street - Denver, Colorado 80211
303 455-1900

James Park Lot 2

no scale

project no. 5250 date: 28 Feb. '96 drawn by: SMC

Figure No.

authority of the federal government to perform remedial action terminates under the provisions of section 112 (a) of Public Law 95-604.

Source: L. 79, p. 1070, § 1.

Am. Jur.2d. See 61A Am. Jur.2d, Pollution Control, § 275.

ARTICLE 12

Noise Abatement

25-12-101. Legislative declaration. The general assembly finds and declares that noise is a major source of environmental pollution which represents a threat to the serenity and quality of life in the state of Colorado. Excess noise often has an adverse physiological and psychological effect on human beings, thus contributing to an economic loss to the community. Accordingly, it is the policy of the general assembly to establish statewide standards for noise level limits for various time periods and areas. Noise in excess of the limits provided in this article constitutes a public nuisance.

Source: L. 71, p. 647, § 1; C.R.S. 1963, § 66-35-1.

Applied in City of Lakewood v. DeRoos, ___ Colo. App. ___, 631 P.2d 1140 (1981).

25-12-102. Definitions. As used in this article, unless the context otherwise requires:

(1) "Commercial zone" means:

(a) An area where offices, clinics, and the facilities needed to serve them are located;

(b) An area with local shopping and service establishments located within walking distances of the residents served;

(c) A tourist-oriented area where hotels, motels, and gasoline stations are located;

(d) A large integrated regional shopping center;

(e) A business strip along a main street containing offices, retail businesses, and commercial enterprises;

(f) A central business district; or

(g) A commercially dominated area with multiple-unit dwellings.

(2) "db(A)" means sound levels in decibels measured on the "A" scale of a standard sound level meter having characteristics defined by the American National Standards Institute, Publication S1. 4 - 1971, and approved by the industrial commission of Colorado.

(3) "Decibel" is a unit used to express the magnitude of a change in sound level. The difference in decibels between two sound pressure levels is twenty times the common logarithm of their ratio. In sound pressure measurements sound levels are defined as twenty times the common logarithm of the ratio of that sound pressure level to a reference level of 2 x 10-5 N/m2 (Newton's/meter squared). As an example of the effect of the formula, a three-decibel change is a one hundred percent increase or decrease in the sound level, and a ten-decibel change is a one thousand percent increase or decrease in the sound level.

(4) "Industrial zone" means an area in which noise restrictions on industry are necessary to protect the value of adjacent properties for other economic activity but shall not include agricultural operations.

(5) "Light industrial and commercial zone" means:

(a) An area containing clean and quiet research laboratories;

(b) An area containing light industrial activities which are clean and quiet;

(c) An area containing warehousing; or

(d) An area in which other activities are conducted where the general environment is free from concentrated industrial activity.

(6) "Residential zone" means an area of single-family or multifamily dwellings where businesses may or may not be conducted in such dwellings. The zone includes areas where multiple-unit dwellings, high-rise apartment districts, and redevelopment districts are located. A residential zone may include areas containing accommodations for transients such as motels and hotels and residential areas with limited office development, but it may not include retail shopping facilities. "Residential zone" includes hospitals, nursing homes, and similar institutional facilities.

Source: L. 71, p. 647, § 1; C.R.S. 1963, § 66-35-2; L. 73, p. 1406, § 47.

25-12-103. Maximum permissible noise levels. (1) Every activity to which this article is applicable shall be conducted in a manner so that any noise produced is not objectionable due to intermittence, beat frequency, or shrillness. Sound levels of noise radiating from a property line at a distance of twenty-five feet or more therefrom in excess of the db(A) established for the following time periods and zones shall constitute prima facie evidence that such noise is a public nuisance:

Zone	7:00 a.m. to next 7:00 p.m.	7:00 p.m. to next 7:00 a.m.
Residential	55 db(A)	50 db(A)
Commercial	60 db(A)	55 db(A)
Light industrial	70 db(A)	65 db(A)
Industrial	80 db(A)	75 db(A)

(2) In the hours between 7:00 a.m. and the next 7:00 p.m., the noise levels permitted in subsection (1) of this section may be increased by ten db(A) for a period of not to exceed fifteen minutes in any one-hour period.

(3) Periodic, impulsive, or shrill noises shall be considered a public nuisance when such noises are at a sound level of five db(A) less than those listed in subsection (1) of this section.

(4) This article to other activities trol.

(5) Constructio noise levels speci struction is to be issued by proper able period of time

(6) All railroad the purposes of t the maximum per

(7) This articl conducting speed such exception i which such use governmental age

(8) For the pu shall be made wh ment is not more

(9) In all sou effect of the am environment fro surement.

(10) This arti of manufacturing section (10) shal political subdivis

Sourc L. 7

Am. Jur. See 6 Control, § 2 Residentia develo precluded wh a noi exceeds limits se

25-12-104. A sance exist maintain an ac which the all to perpetually owner, lessee, sance exis fr sance. When p be conducted stay the effec reasonably nec provisions of

Source: L

(4) This article is not intended to apply to the operation of aircraft or to other activities which are subject to federal law with respect to noise control.

(5) Construction projects shall be subject to the maximum permissible noise levels specified for industrial zones for the period within which construction is to be completed pursuant to any applicable construction permit issued by proper authority or, if no time limitation is imposed, for a reasonable period of time for completion of project.

(6) All railroad rights-of-way shall be considered as industrial zones for the purposes of this article, and the operation of trains shall be subject to the maximum permissible noise levels specified for such zone.

(7) This article is not applicable to the use of property for purposes of conducting speed or endurance events involving motor or other vehicles, but such exception is effective only during the specific period of time within which such use of the property is authorized by the political subdivision or governmental agency having lawful jurisdiction to authorize such use.

(8) For the purposes of this article, measurements with sound level meters shall be made when the wind velocity at the time and place of such measurement is not more than five miles per hour.

(9) In all sound level measurements, consideration shall be given to the effect of the ambient noise level created by the encompassing noise of the environment from all sources at the time and place of such sound level measurement.

(10) This article is not applicable to the use of property for the purpose of manufacturing, maintaining, or grooming machine-made snow. This subsection (10) shall not be construed to preempt or limit the authority of any political subdivision having jurisdiction to regulate noise abatement.

Source: L. 71, p. 648, § 1; C.R.S. 1963, § 66-35-3; L. 82, p. 424, § 1.

Am. Jur.2d. See 61A Am. Jur.2d, Pollution Control, § 267.

Residential development of property is not precluded when noise emanating onto property exceeds limits set forth in this section. Einarsen v. City of Wheat Ridge, 43 Colo. App. 232, 604 P.2d 691 (1979).

Applied in City of Lakewood v. DeRoos, ___ Colo. App. ___, 631 P.2d 1140 (1981).

25-12-104. Action to abate. Whenever there is reason to believe that a nuisance exists, as defined in section 25-12-103, any resident of the state may maintain an action in equity in the district court of the judicial district in which the alleged nuisance exists to abate and prevent such nuisance and to perpetually enjoin the person conducting or maintaining the same and the owner, lessee, or agent of the building or place in or upon which such nuisance exists from directly or indirectly maintaining or permitting such nuisance. When proceedings by injunction are instituted, such proceedings shall be conducted under the Colorado rules of civil procedure. The court may stay the effect of any order issued under this section for such time as is reasonably necessary for the defendant to come into compliance with the provisions of this article.

Source: L. 71, p. 649, § 1; C.R.S. 1963, § 66-35-4.

thereof, shall be punished by a fine of not less than fifty dollars nor more than three hundred dollars.

Source: L. 71, p. 650, § 1; C.R.S. 1963, § 66-35-6.

Am. Jur.2d. See 61A Am. Jur.2d, Pollution Control, § § 269, 270.

25-12-107. Powers of local authorities. (1) Counties or municipalities may adopt resolutions or ordinances prohibiting the operation of motor vehicles within their respective jurisdictions which produce noise in excess of the sound levels in decibels, measured on the "A" scale on a standard sound level meter having characteristics established by the American National Standards Institute, Publication S1.4 - 1971, and measured at a distance of fifty feet from the center of the lane of travel, or fifty feet or more from a vehicle designed for off-highway use and within the speed limits specified in this section:

	Speed limit of 35 mph or less	Speed limit of more than 35 mph but less than 55 mph
(a) Any motor vehicle with with a manufacturer's gross vehicle weight rating of six thousand pounds or more, any combination of vehicles towed by such motor vehicle, and any motorcycle other than a motor-driven cycle:		
(I) Before January 1, 1973	88 db(A)	90 db(A)
(II) On and after January 1, 1973	86 db(A)	90 db(A)
(b) Any other motor vehicle or self-propelled recreational vehicle primarily designed for off-highway use and for which registration as a motor vehicle is not required, and any combination of vehicles towed by such motor vehicle or self-propelled vehicle	82 db(A)	86db(A)

(2) The governing board shall adopt resolutions establishing any test procedures deemed necessary.

(3) This section applies to the total noise from a vehicle or combination of vehicles.

(4) For the purpose of this section, a truck, truck tractor, or bus that is not equipped with an identification plate or marking bearing the manufacturer's name and manufacturer's gross vehicle weight rating shall be

considered as having a manufacturer's gross vehicle weight rating of six thousand pounds or more if the unladen weight is more than five thousand pounds.

Source: L. 71, p. 651, § 1; C.R.S. 1963, § 66-35-7; L. 73, p. 1406, § 48.

Am. Jur.2d. See 61A Am. Jur.2d, Pollution Control, § § 267, 269, 270.

25-12-108. Preemption. The provisions of this article shall not be construed to preempt or limit the authority of any municipality to adopt standards which are no less restrictive than the provisions of this article.

Source: L. 71, p. 651, § 1; C.R.S. 1963, § 66-35-8.

ARTICLE 13

Recreation Land Preservation

25-13-101. Short title. This article shall be known and may be cited as the "Recreation Land Preservation Act of 1971".

Source: L. 71, p. 643, § 1; C.R.S. 1963, § 66-34-1.

25-13-102. Legislative declaration. The purpose of this article is to establish minimum controls to prohibit the pollution of the air, water, and land, to prevent the degradation of the natural environment of recreational and mountain areas in this state in order to preserve and maintain the ecology and environment in its natural condition, to facilitate the enjoyment of the state and its ecology, nature, and scenery by the inhabitants and visitors of the state, and to protect their health, safety, and welfare.

Source: L. 71, p. 643, § 1; C.R.S. 1963, § 66-34-2.

25-13-103. Definitions. As used in this article, unless the context otherwise requires:

(1) "Board" means the state board of health.

(2) "Campsite" means any specific area within organized campgrounds or other recreation areas which is used for overnight stays by an individual, a single camping family, a group, or any other similar entity.

(3) "Department" means the department of health.

Cross reference. As to injunctions, see Rule 65, C.R.C.P.

Am. Jur.2d. See 61A Am. Jur.2d, Pollution Control, § § 271, 272.

C.J.S. See 66 C.J.S., Nuisances, § 102-104.

Construction and operation of a public highway are not activities which can be abated as a public nuisance. City of Lakewood v. DeRoos, ____ Colo. App. ____, 631 P.2d 1140 (1981).

Applied in Einarsen v. City of Wheat Ridge, 43 Colo. App. 232, 604 P.2d 691 (1979).

25-12-105. Violation of injunction - penalty. Any violation or disobedience of any injunction or order expressly provided for by section 25-12-104 shall be punished as a contempt of court by a fine of not less than one hundred dollars nor more than two thousand dollars. Each day in which an individual is in violation of the injunction established by the court shall constitute a separate offense. The court shall give consideration in any such case to the practical difficulties involved with respect to effecting compliance with the requirements of any order issued by the court.

Source: L. 71, p. 650, § 1; C.R.S. 1963, § 66-35-5.

Am. Jur.2d. See 61A Am. Jur.2d, Pollution Control, § § 271, 272.

C.J.S. See 66 C.J.S., Nuisances, § 135.

25-12-106. Noise restrictions - sale of new vehicles. (1) Except for such vehicles as are designed exclusively for racing purposes, no person shall sell or offer for sale a new motor vehicle or any self-propelled vehicle designed for off-highway use and for which registration as a motor vehicle is not required which produces a maximum noise exceeding the following noise limit, at a distance of fifty feet from the center of the lane of travel or fifty feet or more from a vehicle designed for off-highway use, under test procedures established by the department of revenue:

(a) Any motorcycle, including a motor-driven cycle, manufactured on or after July 1, 1971, and before January 1, 1973.....88 db(A);

(b) Any motorcycle, including a motor-driven cycle, manufactured on or after January 1, 1973.....86 db(A);

(c) Any motor vehicle with a gross vehicle weight rating of six thousand pounds or more manufactured on or after July 1, 1971, and before January 1, 1973.....88 db(A);

(d) Any motor vehicle with a gross vehicle weight rating of six thousand pounds or more manufactured on or after January 1, 1973.....86 db(A);

(e) Any other motor vehicle manufactured on or after January 1, 1968, and before January 1, 1973.....86 db(A);

(f) Any other motor vehicle manufactured after January 1, 1973..84 db(A);

(g) Any self-propelled vehicle designed for off-highway use and for which registration as a motor vehicle is not required, as follows:

(I) Manufactured on or after January 1, 1971, and before January 1, 1973 .86 db(A);

(II) Manufactured on or after January 1, 1973.....84 db(A).

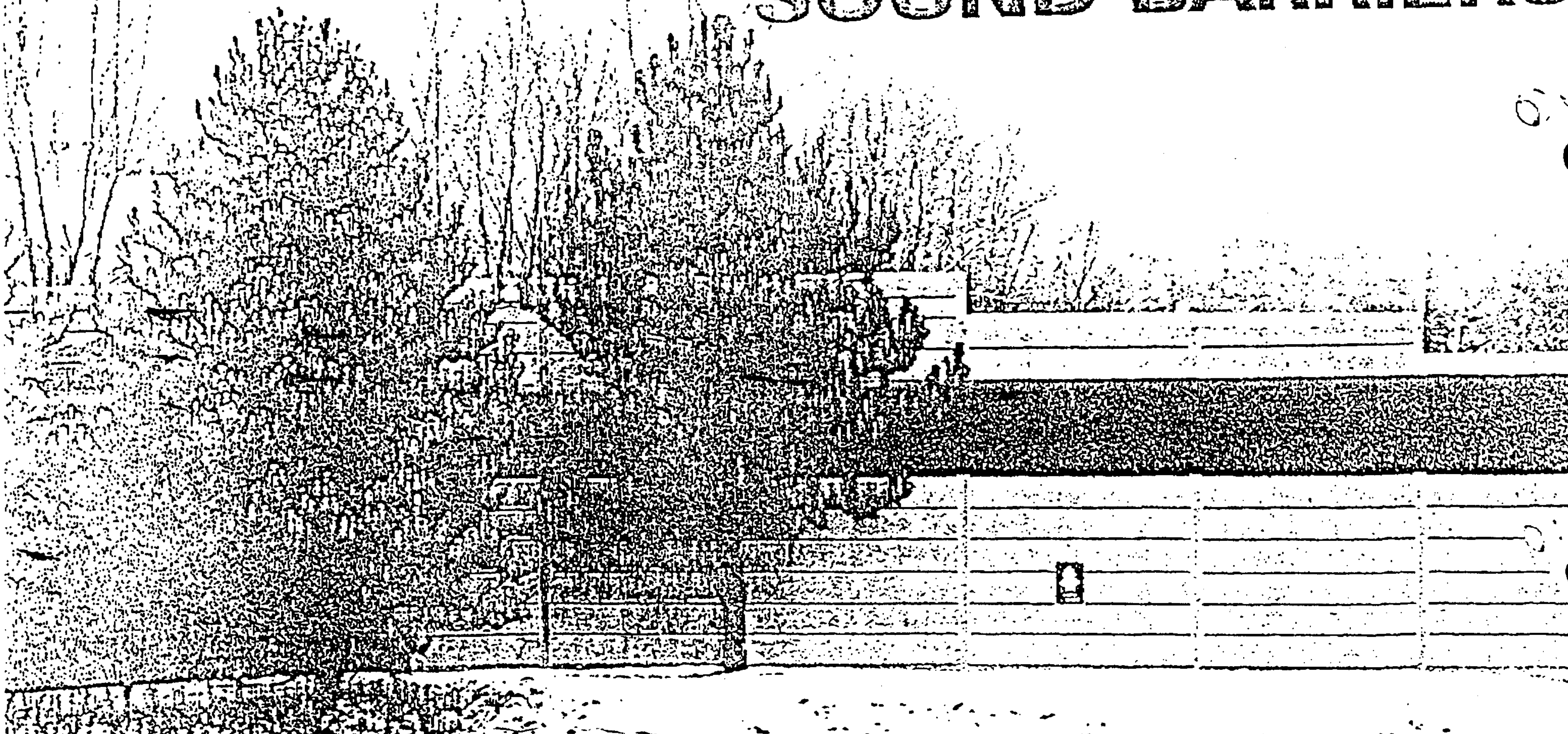
(2) Test procedures for compliance with this section shall be established by the department, taking into consideration the test procedures of the society of automotive engineers.

(3) Any person selling or offering for sale a motor vehicle or other vehicle in violation of this section is guilty of a misdemeanor and, upon conviction

Transportation

iac NOISHIELD

SOUND BARRIERS



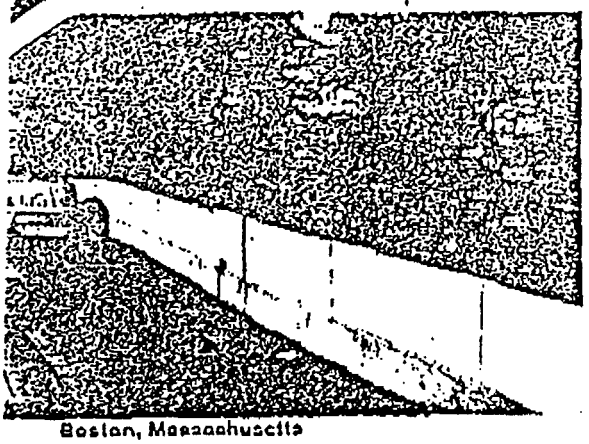
HIGHLY ABSORPTIVE SOUND BARRIERS MAXIMIZE NOISE REDUCTION

• GALVANIZED STEEL OR ALUMINUM CONSTRUCTION • FREE-DRAINING DESIGN • LIGHT WEIGHT • EASILY INSTALLED •
SOUND ABSORPTIVE ON ONE OR TWO SIDES • COST EFFECTIVE • SELECTION OF WEATHER-TESTED FINISHES
• RELOCATABLE • FREESTANDING OR ADD-ON CLADDING • HORIZONTAL OR VERTICAL INSTALLATION

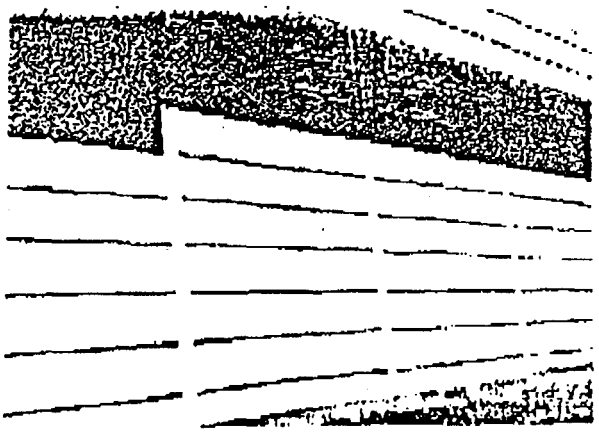
INDUSTRIAL ACOUSTICS COMPANY

BULLETIN 8.0001

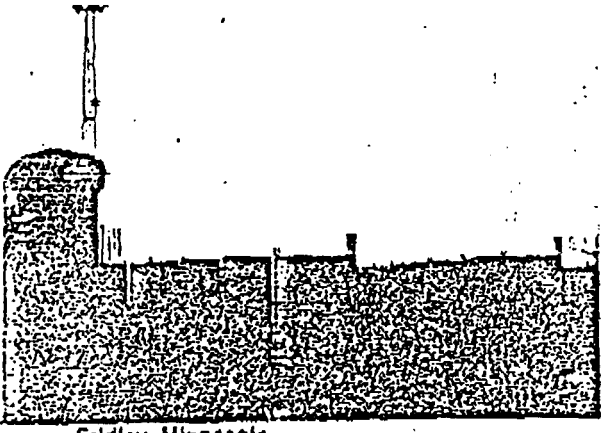
highways • railroads • buses • airports •



Boston, Massachusetts



Milwaukee, Wisconsin



Fridley, Minnesota

FREESTANDING BARRIERS

NOISHIELD Types FS and SFS Barriers – sound absorptive on one and two sides respectively – optimize sound transmission loss and sound absorbing properties in a durable and attractive wall system in harmony with the community.

- Excellent low-frequency absorption of truck and bus noise
- Laboratory-rated sound absorption on one or both sides
- Low weight, rugged construction – ideal for wall or bridge mounting
- 5-in.-thick (127mm) modular metal module system in steel or aluminum
- Abuse resistant dual-coated, galvanized steel or aluminum construction
- Withstands wind velocities of 110 mph (177km/hr) in accordance with The American Association of State Highway and Transportation Officials (AASHTO), Design Standards – designs for specific wind loads are available.
- Readily relocated in the event of highway widening or other projects

CONFIGURATION		 TYPE FC	 TYPE SFS
NOMINAL THICKNESS		5 in. (127mm)	6 in. (127mm)
WEIGHT, lb/ft² (kg/m²)	Steel (S)	Type FS/S 6.5 (20.9) Type FSU/S* 8.0 (42.0)	Type SFS/S 6.9 (30.7)
	Aluminum (A)	Type FC/A 4.5 (22.0)	Type SFS/A 5.2 (25.4)
APPLICATION		Freestanding alongside highways, rails, subways, airports	Freestanding between highways and frontage roads

*Select FSt for higher low frequency transmission loss.

ACOUSTIC PERFORMANCE CHARACTERISTICS

Transportation NOISHIELD Barriers are rated with sound transmission loss values fully compatible with typical barrier performance requirements.

All NOISHIELD Barriers incorporate sound absorbing materials to prevent noise reflections which degrade sound barrier performance. Type C modules are used to clad new or existing non-absorbing barriers while Type FS and SFS are freestanding walls which combine sound transmission loss (125 Hz insertion loss less than 10 dB) and high sound absorption ratings. Freestanding Type FSt is used for applications requiring 125 Hz insertion loss between 10 and 14 dB.

NOISHIELD BARRIER FINISHES

NOISHIELD Barriers are finished with a tough, thermosetting, polyester powder coating which is not damaged by the harsh cleaning chemicals used to remove graffiti paint. A wide variety of standard colors allow complementary decorative schemes and attractive designs to reduce apparent wall height as perceived by the community and motorists. Optional facings include brick, stone, stucco, wood, plate and others.

- Tested for accelerated weathering per ASTM G 23 for 2,400 hours with chalking no less than No. 8 rating (ASTM D 659) and color changes less than 5 NBS units (ASTM D 2244).
- Salt spray tested for checking, blistering, loss of adhesion or evidence of corrosion per ASTM B 117 for more than 4,000 hours without coating failure.

Specifications
Transportation NOISHIELD Sound Barriers FS/S Module

GENERAL

1.1 Sound Barrier Modules shall be manufactured and installed with an acoustically absorptive surface having guaranteed sound absorptive properties facing the predominant noise source. The barrier shall be constructed of vertical posts and sound absorptive polyester powder coated metallic modules stacked to achieve the required wall heights. The pre-approved barrier system shall be Transportation NOISHIELD modules as manufactured by Industrial Acoustics Company, 1160 Commerce Ave. Bronx, New York 10462-5599. Contact the product manager at 718-430-4515, fax: 718-430-4530.

1.2 Pre-bid submittals and approval shall include sample structural calculations and wall design drawings: current test data illustrating compliance with the requirements of the acoustical and durability specifications for modules made on production line supervised by craftsmen; proof of adequate manufacturing and financial capability consistent with project requirements; and a sample module made on production tooling.

2.0 DESIGN

2.1 The barrier shall be designed in accordance with the requirements of the latest edition of the AASHTO Guide Specification for the Structural Design of Sound Barriers.

2.2 Posts shall be spaced at 16 ft (4877mm) on center for steel posts, (plus concrete web thickness for concrete posts) consistent with the module spanning capability at the design wind pressure.

2.3 Ground Mounted Barriers (request long form specification)

2.4 Structure Mounted (e.g. Wall, Traffic Barrier, or Bridge-Mounted) Barriers

2.4.1 Structure mounted barriers shall not weigh more than 7.5 lb/ft² (36.7 kg/m²). Barrier modules shall be fabricated of metal and designed with a 1/4 in. (6mm) steel internal restraining cable attached to the structure. The cable shall be designed to be fastened to the structure during installation of the modules with 12 in. (305mm) of slack.

2.5 Color, Module Patterns, and Graffiti Removal

2.5.1 Modules shall have a consistent color from module to module. A sample of each color to be supplied shall be submitted for approval prior to the start of manufacturing.

2.5.2 Panels shall be stacked with joints aligned horizontally or joints may be uniformly stepped where the top or bottom of the wall change elevations. Barrier module color patterns shall be shown on shop drawings (using a legend keyed to color numbers).

2.5.3 Removal of graffiti shall be accomplished with soap and water or Turpentine, Varsol, or Acetone without damage to the module or module color coating.

2.6 Acoustical Characteristics

2.6.1 The barrier shall incorporate absorptive sound materials to prevent reverberation of noise between parallel walls, between vehicles and nearby sound barriers, and noise reflections to unshielded noise sensitive areas of the community.

2.6.2 The surface of the wall facing the predominant source of noise shall have a minimum sound absorption coefficient of 0.95 at each of the 1/3 octave band center frequencies of 125, 250, 500 and 1000 Hz.

2.6.3 The Sound Transmission Loss of the wall modules shall be a minimum of 20 dB at each of the 1/3 octave band center frequencies of 125, 250, 500, 1000, 2000 and 4000 Hz.

3.0 MATERIALS

3.1 Modules shall be constructed of cold rolled galvanized steel sheets manufactured in accordance with the requirements of ASTM A 527 galvanized to ASTM A525 specifications, minimum 16 gauge solid side and 20 gauge (0.9mm) perforated side. Modules shall be non-welded, free draining, and free of pockets or cavities in which water may collect. Modules shall be coated in the factory with a polyester powder coating applied through the use of an electrostatic charge, and thermally bonded to the surface of the galvanized steel or aluminum sheets.

3.2 Acoustic fill material shall be fiberglass, non-corrosive, resistant to attack by fungus, fire-resistant, vermin proof, and non-hygroscopic. Fill material shall be free draining, self supporting and shall retain physical and sound absorptive characteristics after long term exposure to the elements.

3.3 Posts shall be galvanized steel meeting the requirements of ASTM A 36, ASTM A 572 Grade 50 or ASTM A 588 Grade 50 weathering steel. Color coating of posts shall be as required by the owner/architect.

3.4 Anchor bolts shall be ASTM A 307 or approved equal, galvanized to ASTM A 153. Rebar in foundations shall be grade 60. Concrete in foundations shall have a compressive strength exceeding 3,000 psi at 28 days or as required by the approved design.

3.5 Bearing blocks shall be EPDM, neoprene, or rubber, 60 durometer.

3.6 Material Testing and Certification

3.6.1 Acoustical testing

3.6.1.1 Certified test reports shall be submitted to demonstrate compliance with the Sound Transmission Loss and Sound Absorption Coefficients specified. Tests shall have been conducted in a laboratory accredited by the National Voluntary Laboratory Accreditation Program (NVLAP), witnessed and certified by an independent acoustical consultant.

3.6.1.2 Sound Absorption Coefficient Tests shall be performed in accordance with ASTM C 423, Type A mounting.

3.6.1.3 Transmission Loss Tests shall be performed in accordance with ASTM E 90 and ASTM E 413.

3.6.2 Module Testing

3.6.2.1 Modules shall be tested for accelerated weathering in accordance with ASTM G 23 or G 26 in a NVLAP certified independent test laboratory. After 2,400 hours of testing, module samples shall not exhibit chalking less than No. 8 per ASTM D 4214 or color change greater than 5 NBS units per ASTM D2244.

3.6.2.2 Fire resistance tests shall be performed on non-metallic materials in accordance with ASTM E 84. All materials shall have a Class A fire rating with flame spread not greater than 25.

3.6.2.3 Modules shall be tested for corrosion resistance in accordance with ASTM B117 in a NVLAP certified independent test laboratory. After 2,400 hours of exposure the coating system shall not fail due to blistering, loss of adhesion, or corrosion along the score lines, or other defects.

4.0 SUBMITTALS, APPROVALS AND CONSTRUCTION

(Request long form specification)

5.0 MEASUREMENT AND PAYMENT

5.1 The quantity to be paid for sound absorptive modules shall be the square feet of wall surface area supplied.

5.2 Separate measurement and payment shall be made for site preparation, excavation and backfill, caissons, posts, wall erection, copings, doors, traffic barrier, appurtenances, and accessories.

All designs and specifications subject to change without notice. Metric dimensions nominal.
Request long form specifications for Types FS/A, FS/C, SFS/S, SFS/A and C.

INDUSTRIAL ACOUSTICS COMPANY
SINCE 1949 — LEADERS IN NOISE CONTROL ENGINEERING, PRODUCTS AND SYSTEMS

UNITED STATES
1160 COMMERCE AVENUE
BRONX, NEW YORK [illegible]
PHONE (718) [illegible]

UNITED KINGDOM
CENTRAL TRADING ESTATE
STAINES, MIDDLESEX, TW18 4XB
PHONE (01784) [illegible]

GERMANY
[illegible]
[illegible]
PHONE [illegible]

REVIEW COMMENTS

FILE #FP-96-55 **TITLE HEADING:** James Park

LOCATION: NE corner 28 1/2 Road & Belford Avenue

PETITIONER: John Davis

PETITIONER'S ADDRESS/TELEPHONE: 1023 24 Road
Grand Junction, CO 81505
250-0720

PETITIONER'S REPRESENTATIVE: Wayne Lizer

STAFF REPRESENTATIVE: Bill Nebeker

NOTE: THE PETITIONER IS REQUIRED TO SUBMIT FOUR (4) COPIES OF WRITTEN RESPONSE AND REVISED DRAWINGS ADDRESSING ALL REVIEW COMMENTS ON OR BEFORE 5:00 P.M., MARCH 22, 1996.

U.S. WEST **3/5/96**
Max Ward **244-4721**

For timely telephone service, as soon as you have a plat and power drawing for your housing development, please.....

MAIL COPY TO:
U.S. West Communications
Developer Contact Group
P.O. Box 1720
Denver, CO 80201

AND

CALL THE TOLL-FREE NUMBER FOR:
Developer Contact Group
1-800-526-3557

We need to hear from you at least 60 days prior to trenching.

MESA COUNTY BUILDING DEPARTMENT **3/5/96**
Bob Lee **244-1656**

A building permit, separate from that of the manufactured home, is required for each carport and shed over 120 square feet in area. No other comments.

PUBLIC SERVICE COMPANY **3/7/96**
John Salazar **244-2781**

GAS & ELECTRIC: Require additional utility easement 10 feet wide as highlighted on the attached site plan. Will require that developer have centerline of platted/recorded easement surveyed and staked prior to the start of construction of the gas & electric facilities.

CITY PROPERTY AGENT **3/12/96**
Steve Pace **256-4003**

No final plat to review.

GRAND JUNCTION DRAINAGE DISTRICT **3/13/96**
John L. Ballagh **242-4343**

See attached comments.

CITY DEVELOPMENT ENGINEER **3/14/96**
Jody Kliska **244-1591**

1. Submitted plans and reports were deficient, so redlined plans and SSID checklists are being returned with these comments. Acceptable plans and report must be submitted by the response to comments date or the project will be pulled from the Planning Commission agenda.
2. The Development Improvements Agreement needs to be completed as part of this submittal. The City does not do building permit holds. Public improvements must be guaranteed as detailed in the DIA.
3. A written stormwater management plan was submitted with this application. Because this project is greater than 5 acres, a permit from the Colorado Department of Health is required. Please see the SWMM Manual for requirements and who to contact and contact the CDOH directly. Notification of this project and its probable need for a permit will be given to CDOH by the Community Development Department.
4. Plans for the required 28 1/2 Road improvements are required and were not submitted with this application.
5. The final drainage report did not address comments raised during the preliminary review and it appears the preliminary report was not read by the engineer now doing the drainage for this project. Problems with the Goodwill Drain and its capacity are not addressed.

CITY COMMUNITY DEVELOPMENT **3/14/96**
Bill Nebeker **244-1447**

1. Your project narrative is exactly the same as the narrative submitted for the preliminary, yet your project and surrounding conditions have changed; # of units, zoning of this parcel and parcel to the west, road pattern, park and storage area, this request is not for a rezone but for a final plan. The project narrative (surrounding zoning) does not conform with the final plan. Project narrative does not meet SSID standard format.

   This is a complex project and it would have been helpful to provide some explanation on what you are planning.
2. Perimeter setbacks as required in condition #6c have not been addressed. Space 25 is encroaching in the 15' setback to Gunnison.
3. Revise the drawing to show that the residences in spaces 1 and 55 are no closer than 95' to the south property line of Cahoots, in accordance with condition #8 of preliminary approval.
4. Revise the landscape drawing to include the planting of at least 5 large trees along the west property line adjacent to Cahoots, in accordance with condition #9 of preliminary approval. Place a note on the plan that states that the trees will be at least 1.5 inches in caliper and 10-15' in height at the time of planting. A species must be selected that will reach a height of at least 50'.
5. Where is the detailed landscape plan showing that at least 10' of the perimeter street setback along 28 1/4 Road (and Gunnison) will be landscaped, as required in condition #6d? Tree spacing must be no more than 40' - the trees shown on your landscape plan are spaced from 60' to 90'. Submitted landscape plan does not meet SSID submittal requirements.

6. More detail is needed on the site plan that shows that the 6' chain link fence around the storage area complies with condition #6e.
7. Show information that condition #6i regarding street lighting, has been satisfied.
8. It appears that there is a sight distance problem with carports located on every corner in the park. This would also require driveways right at the intersection.
9. Your typical drawing shows no information related to size and boundaries of each space, placement of storage building, location and dimension of driveways (particularly for the carports located right at the intersection), and landscaping for each space, as required in condition #6a.
10. Why is Space 27's carport directly behind visitor parking in the cul-de-sac?
11. Your proposed 6' fence sound barrier around Cahoots doesn't match the engineering specifications in the report by David L. Adams Associates, Inc. They recommend a fence no shorter than 9.5' feet. Why a 6' fence and why was the wood fence design chosen over the other designs?
12. The site plan does not show the 15' utility & irrigation easement along the north line of the Goodwill Drain, along the south property line. Has this easement been vacated? If not, remove the structures (mobile homes & carports) from within this easement.
13. An open space fee equivalent to $225 per dwelling is required before final approval.
14. A note should be placed on the site plan that states that the off street parking in cul-de-sacs will be paved.

NOTE: The wrong parcel was highlighted on the full sized assessor's map. Please provide a new map with the correct parcel highlighted.

NOTE: Has the park moved? - The location described on your application is 28 1/4 & Belford.

TCI CABLEVISION **3/11/96**
Glen Vancil **245-8777**

See attached comments.

CITY FIRE DEPARTMENT **3/14/96**
Hank Masterson **244-1414**

An additional fire hydrant is required. Locate this hydrant along the street at space 36 or space 45. All hydrants must be fed by a minimum 6" water line.

CITY UTILITY ENGINEER **3/15/96**
Trent Prall **244-1590**

PLEASE SEE PAGE IC-35 (DRAWING STANDARDS CHECKLIST) OF THE SSID MANUAL. IN THE BEST INTEREST OF THE PETITIONER'S, SPECIAL DISTRICT'S AND CITY STAFF'S TIME, PLEASE VERIFY EACH ITEM HAS BEEN ADEQUATELY ADDRESSED PRIOR TO RESUBMITTAL.

SEWER - FRUITVALE SANITATION DISTRICT

1. Please contact Art Crawford for Fruitvale Sanitation District requirements for this development.
2. Please delineate where separation of public and private sewer will occur.

WATER - CITY OF GRAND JUNCTION

1. Please show existing utilities (water) and proposed location of water meter(s). Please add note stating that water meter pit and setter will be provided by City inspector for installation by the contractor. Curb stop is not required as a stop is incorporated in the City standard setter.

CITY PARKS & RECREATION DEPARTMENT **3/15/96**

Shawn Cooper **244-3869**

1. Parks & Open Space Fees - 56 dwelling units @ $225 = $12,600.00.
2. Should investigate pedestrian/bicycle access through north end of property to access commercial/ retail areas.

Grand Junction Community Development Department
Planning • Zoning • Code Enforcement
250 North Fifth Street
Grand Junction, Colorado 81501-2668
(970) 244-1430 FAX (970) 244-1599

March 5, 1996

Dave Anderson
c/o The Rose
2993 North Avenue
Grand Junction, CO 81504

Re: Cahoots Crossing Noise Wall

Dear Dave:

Enclosed is a copy of the sound study and wall design for James Park Manufactured Home Park, as submitted by John Davis and Ward Scott. A copy of a portion of the applicant's site plan indicates that option #3 on page 2 is being proposed. The fence will be six feet high. If you have any questions, comments or concerns with this design please submit them to me no later than March 18, 1996.

If you have any questions please call me at 244-1447.

Sincerely,

Bill Nebeker
Senior Planner

City of Grand Junction, Colorado
250 North Fifth Street
81501-2668
FAX: (970)244-1599

March 8, 1996

John Davis
1023 24 Road
Grand Junction, CO 81505

Re: James Park Final Plan

Dear John:

Final review comments will be forthcoming on James Park but I wanted to forewarn you that I am somewhat dismayed with your submittal. Many of the conditions from the preliminary approval have been ignored. Your proposed noise wall around Cahoots is not in conformance with the engineering recommendation made in the submitted consultant's report. It would seem that very little effort went into preparing the final plan to assure it was in compliance with the preliminary approval. If the response to comments is not complete and does not address the preliminary conditions of approval, this project will be pulled from the April Planning Commission hearing.

Attached are draft comments for James Park for your information. Do not resubmit until final comments are available. If you have any questions please call me at 244-1447.

Sincerely,

Bill Nebeker

Bill Nebeker
Senior Planner

c: Ward Scott

March 13, 1996

COPY

Sidney J. Spivak, Q.C.
Niagara Nevada Limited
202-1808 Wellington Avenue
Box 98, Sta. L.
Winnipeg, Manitoba, CANADA R3H 0Z4

Re: James Park and Niagara Village

Dear Mr. Spivak:

Confirming the discussions and negotiations of March 12, 1996, in consideration of your consent to the immediate installation of the extension of the sewer line from Niagara Way to 28¼ Road, I agree to work with you regarding improvements to the Goodwill Drain.

Upon development of James Park, I will pay one-half of the costs of improvements to the Goodwill Drain as required by the City and Grand Junction Drainage District. I reserve the right to work with the City and the District regarding the final plan of improvement to insure the improvement is done in the most efficient and economical manner.

I regret the confusion and conflict which occurred, and will do my best to insure it does not happen again. Thank you for your cooperation.

Sincerely yours,

John Davis

cc: LanDesign
Grand Junction Drainage District
City Planning

K:\LIV\NIANEV\SPIVAK.DAV

GRAND JUNCTION DRAINAGE DIST.

722 23 ROAD P.O. BOX 55246 GRAND JUNCTION, CO 81505
(303) 242-4343

JAMES PARK RP-96-55 March 13, 1996

The plans for grading and drainage and the plans marked storm drainage plans as well as the sanitary sewer plans were reviewed.

The proposed sanitary sewer if built as designed to tie into the sanitary sewer in NIAGARA VILLAGE will physically go through the tile line in the relocated GOODWILL DRAIN TILE as designed by LANDesign, dated September 26, 1995. That pipe line is a designed siphon and is not yet installed. The open drain has been relocated by the developers of NIAGARA VILLAGE. There needs to be coordination of designs before construction of either the sanitary sewer from JAMES PARK or the piping of the GOODWILL DRAIN.

There has been inquiry but no written request from the developer of JAMES PARK about relocating a portion of the GOODWILL DRAIN. The developer will first have to have the request approved then at his sole cost pay for the relocation of the drain, just like the developers of NIAGARA VILLAGE did on the reach of open drain in the 28 1/4 Road ROW. Standards of GJDD will have to be met in the piping / tiling of any portion of the GOODWILL DRAIN. Manholes are required at every change in direction of the pipe (the intersection of Gunnison Ave. and 28 1/4 Road), or where a pipe comes into the drain (the outfall from the pond). The Drainage District wants the relocated drain (or pipe) in the Gunnison Ave. ROW as shown of the plans which have Mike Drissel's stamp and signature, rather than in the private land where there will be a private curb and gutter over the line as the other set of plans show. There were no plans sent to the District for review for the piping of the reach of open drain which is being described as "to be relocated" by the developers of JAMES PARK. There must be coordinated design between the designers of the two developement, JAMES PARK and NIAGARA VILLAGE.

The storm water management plan on one sheet identities the pond as a detention pond and on the other as a retention pond. A retention pond uses evaporation to move the water. A detention pond has an outlet. There is a design for an outlet structure, so the pond must be a detention pond.

There are two designs of the pond which do not agree in top elevations. There is no description of the surface treatment of the pond. Which pond will be built? If there is to be grass, who will maintain it? If there is to be asphalt who is going to be responsible for removing trash and material which will blow or be carried into the pond site? Will the City or the Drainage District have authority to have maintenance performed on the detention site? How?

A copy of the letter from this office to the City dated September 29, 1995 is enclosed. It is the belief of the District that the area south of North Avenue to I-70B between 28 1/2 Road and 28 Road should be looked at as a whole. There should be a drainage plan for the entire area. Each development could then contribute to the improvement of surface drainage according to an overall plan rather than the present incremental approach.

John L. Ballagh

John L. Ballagh, Manager, Grand Junction Drainage District

GRAND JUNCTION DRAINAGE DIST.

722 23 ROAD P.O. BOX 55246 GRAND JUNCTION, CO 81505
(303) 242-4343

September 29, 1995

Mr. Don Newton, City Engineer
City of Grand Junction
250 N 5th Street
Grand Junction, CO 81501

Re: Surface Drainage 28 1/4 Road south of North Avenue

Dear Don,

LANDesign has submitted a set of plans for piping a portion of the drain ditch along the east side of 28 1/4 Road as a part of the improvements with NIAGARA VILLAGE. The plans are for a siphon. The District has been told that the reason for the depth of pipe is to get adequate cover over the RCP, the District requirement for pipe material. The siphon results because the downstream improvements in the GOODWILL DRAIN include pipe which is too high and would have to be lowered perhaps all the way under I-70B.

The fact is that the surface waters from that stretch of 28 1/4 Road do flow into INDIAN WASH via the GOODWILL DRAIN which flows into the FRUITVALE DRAIN. The water now just happens to flow towards 28 1/2 Road first. It seems like a wise future step would be to intercept the flows in this proposed siphon and transport the water to the south and then west through one of the properties south of the proposed NIAGARA VILLAGE. It seems like there should be adequate fall to the south to enable the siphon to be eliminated.

The District will pay attention to future developments in the area. Please give serious consideration to having additional developments in the area realize that when an upstream development provides a downstream site with improved access there can be an appropriate trade off by the lower site providing improved drainage for the upper site.

Sincerely,
Grand Junction Drainage District

John L Ballagh

John L. Ballagh, Manager

xc: Mike Best, P.E. LANDesign
Michael Drollinger, City Development Department

POSTING OF PUBLIC NOTICE SIGNS

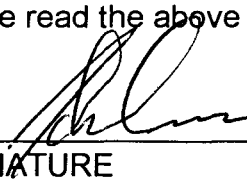
The posting of the Public Notice Sign is to make the public aware of development proposals. The requirement and procedure for public notice sign posting are required by the City of Grand Junction Zoning and Development Code.

To expedite the posting of public notice signs the following procedure list has been prepared to help the petitioner in posting the required signs on their properties.

1. All petitioners/representatives will receive a copy of the Development Review Schedule for the month advising them of the date by which the sign needs to be posted. **IF THE SIGN HAS NOT BEEN PICKED UP AND POSTED BY THE REQUIRED DATE, THE PROJECT WILL NOT BE SCHEDULED FOR THE PUBLIC HEARING.**
2. A deposit of $50.00 per sign is required at the time the sign is picked up.
3. You must call for utility locates before posting the sign. Mark the location where you wish to place the sign and call 1-800-922-1987. You must allow two (2) full working days after the call is placed for the locates to be performed.
4. Sign(s) shall be posted in a location, position and direction so that:
   a. It is accessible and readable, and
   b. It may be easily seen by passing motorists and pedestrians.
5. Sign(s) MUST be posted at least **10 days** before the Planning Commission hearing date and, if applicable, shall stay posted until after the City Council Hearing(s).
6. **After the Public Hearing(s) the sign(s) must be taken down and returned to the Community Development Department within FIVE (5) working days to receive a full refund of the sign deposit.** For each working day thereafter the petitioner will be charged a $5.00 late fee. After eight working days Community Development Department staff will retrieve the sign and the sign deposit will be forfeited in its' entirety.

The Community Development Department staff will field check the property to ensure proper posting of the sign. If the sign is not posted, or is not in an appropriate place, the item will be pulled from the public hearing agenda.

I have read the above information and agree to its terms and conditions.



SIGNATURE _____ DATE 3-21-96

FILE #/NAME FP-96-55 James Park RECEIPT # 3714

PETITIONER/REPRESENTATIVE: John Davis PHONE # 243-2308

DATE OF HEARING: 4/2/96 POST SIGN(S) BY: 3/22/96

DATE SIGN(S) PICKED-UP 3/21/96 RETURN SIGN(S) BY: ~~4/9/96~~

DATE SIGN(S) RETURNED 7-3-96 RECEIVED BY: SG

no deposit returned sign too late

Grand Junction Community Development Department
Planning • Zoning • Code Enforcement
250 North Fifth Street
Grand Junction, Colorado 81501-2668
(970) 244-1430 FAX (970) 244-1599

March 27, 1996

John Davis
1023 24 Road
Grand Junction, CO 81505

Re: James Park Final Plan

Dear John:

In accordance with Section 6-8-3 and 6-7-4 of the Grand Junction Zoning and Development Code, James Park Final Plan has been withdrawn from the April 2, 1996 Planning Commission hearing. The reason for this withdrawal is numerous deficiencies with the site plan, street plan for 28 1/4 Road, grading and drainage plan and final drainage report. In addition to these deficiencies, there are needed revisions on the noise wall plan. A list of these deficiencies are attached.

Please make necessary corrections and resubmit four sets of responses to our department no later than April 19, 1996. I suggest that you submit your corrected drawing before then to give sufficient time for review and correction if needed.

If you have any questions please call me at 244-1447.

Sincerely,

Bill Nebeker

Bill Nebeker
Senior Planner

c: Ward Scott
Wayne Lizer

James Park
Community Development Department Comments:

Noise Wall Plan

1. The fence detail sheet submitted by Wayne Lizer presents conflicting information. The fence detail shows the fence 9.6' high, the overall view shows the fence 12' high. The fence detail shows a supporting 2 X 6 rail every 4 feet, but the fence is only 9.5' high.

2. I don't believe the proposed fence detail meets the criteria proposed by David L. Adams Associates, Inc. The detail doesn't show that the fence slats are extended below grade. It also doesn't show wood battens to cover picket spacing. It appears that the recommended design for the pickets required 2" lumber. Your design is proposing 1" lumber nailed to 2" rails spaced 4' apart.

Site and Landscape Plan

3. The landscape plan for James Park notes that the 9.5' fence will be extended along 28 1/4 Road, the length of the storage area. Is this correct? This note belongs on the site plan, not just on the landscape plan.

4. Trees for all required landscaping must be at least 1.5 inch caliper (Section 5-4-15B.1). Change note #1 on the landscape plan accordingly.

5. A note wasn't placed on the site plan or landscape plan that the perimeter of the storage area along 28 1/4 Road be screened with a 6' high sight obscuring fence - unless you really intended to build the 9.5' wood fence in this location. Will this fence extend along the north side of space #1?

   I suggest that you combine the landscape and site plan onto one sheet, since most of your site plan information is on the landscape plan.

6. Your comment regarding street lighting in the response to comments should be on the site plan. Will there be any lighting of the park areas?

7. The driveway for space 6 should be relocated to the north of the trailer to avoid conflict with the stop sign and intersection.

MISC.

8. If you intend to vacate the 15' utility easement along the Goodwill Drain in the southern portion of the site and the 50' Grand Junction Drainage Ditch Right-of-way, I recommend that you request that when you resubmit in April. A legal description for that area to be vacated will be needed from you.

9. Open Space Fee is $12,375

10. The legal description for the Memorandum of Improvement Agreement & Guarantee and Development Improvements Agreement is Lot 2, Darwin Subdivision (not James Park or 28 1/4 Road).

To: Marcia Rabideaux,Bill Nebeker
From: Jody Kliska
Subject: James Park FP-96-55
Date: 3/25/96 Time: 3:07p

The resubmitted plans still contain a number of deficiencies, therefore the item will be pulled from the Planning Commission agenda for April. Outlined below are the deficiencies, previously noted on the returned redlined SSID checklists. Apparently, the redlined checklists were ignored. Please note, the relocation of the Goodwill Drain has not been addressed and must be before any plans can be approved.

Site Plan:

1. The current location of the Goodwill Drain is shown, but not its proposed new location and disposition.

2. A cross-section of the internal streets is not shown.

3. The question of trash pickup for the park has not been answered.

4. Is street lighting in the park proposed? It is not shown.

Street Plan for 28 1/4 Road:

5. Attached is the pavement design recommended for 28 1/4 Road, which evidently was not researched by the designer. It provides two alternatives. The street cross-section needs to match one of these recommendations.

6. No benchmark elevation is provided on the plan.

7. Stationing on the plan view is a little hard to follow, since it is not clearly labeled. There are two apparent stations called out at the south end of 28 1/4 Road which do not appear to match the rest of the dimensions shown.

8. The Goodwill Drain is not shown at all on these plans. This is an essntial component of the street plan. Timing of the planned improvements seems to hinge on what will be done with the Goodwill Drain and when, as the Drainage District has indicated no work on the drain will be allowed once the water is flowing in the drain.

9. The station and flowline elevation of BCR's, ECR's, ramps, fillets and pans need to be shown on the plan.

10. The sidewalk appears to be going across the entry to James Park.

11. The pavement taper rom the full width to the 22' width is not shown on the plan and needs to be shown.

Preliminary Major Drainage Basin Map

12. A map is required as part of the drainage report, but one was not submitted.

Grading and Drainage Plan

13. The pond is labeled retention/detention. Apparently there is some confusion as to what it is. Please clarify.

14. No benchmark is provided on the plan for vertical control.

15. Once again, the Goodwill Drain relocation and piping is ignored on this plan. The drain obviously needs to be relocated as noted on the plan; however, it is not clear if it is proposed to be piped. If so, how will the detention pond discharge connect?

16. There is an arrow shown just before the cul-de-sac which evidently indicates where water is to get into the pond. What is proposed for an inlet structure?

17. Ground cover and erosion control are required and need to be specified for the pond.

18. The 2 year and 100 year storage volumes are not indicated as required on the checklist.

19. The outlet structure shown does not appear to match what was provided in the drainage report for calculations.

20. There is a cross-section for a drainage swale shown, but it is not evident where the swale is to be constructed.

21. What is the slope of the bottom of the pond in order for it to drain?

22. The plan needs to indicate the actual storage volume being provided by the pond area.

Final Drainage Report

23. No revised drainage report was submitted. Comments from the preliminar report were not addressed, particularly as they relate to the master planning issues such as the Goodwill Drain.

24. Maintenance issues were not addressed in the final report.

25. The submitted preliminary report which was evidently intended to be the final report as well, left some questions unanswered as to whether detention or retention will be used. It appears detention will be the choice, however, the final report needs to state that clearly.

26. No storage-depth-discharge graphs are provided as required in the SSID checklist.

27. Erosion protection was not addressed, nor was whether the Goodwill Drain is open or piped at the point of pond discharge.

28. Street flows were not addressed in the report. Although these are private streets, the calculation needs to be made to assure there is adequate depth in the streets to accommodate flows.

29. It is not clear from the plans what kind of inlet will be used to

convey water to the pond. Inlets need to be sized in the report.

Improvements Agreement

30. The estimates for the DIA may need to be revised due to the wrong pavement section shown on the plans.

31. There is a question of timing of improvements which needs to be resolved and which may result in a longer term for the DIA. The Drainage District has indicated no work can take place on the Goodwill Drain until November, when the water is out of the ditch. This presents a problem, as the relocated open drain is currently inside the edge of the proposed new pavement on the east side of 28 1/4. A proposal for interim improvements to allow access to James Park needs to made, as well as resolution of what will be done with the drain, by whom, and when. Until these questions are answered, no plans will be approved.

FOR JAMES KARIC

ASPHALT INSTITUTE Method

The Mean Annual Air Temperature (MAAT) of 60°F was chosen to characterize the environmental conditions.

Residential Roadway, 18k EAL = 5:
Asphalt-Base Coarse

3 inches of asphaltic concrete pavement
on 6 inches of aggregate base coarse
on 8 inches of recompacted native material

Due to the Soft subgrade soils and instability of these soils, as indicated by the Hveem-Carmany Test, It is recommended that a minimum of 8 inches of Aggregate Base Course (ABC) be placed beneath the Asphalt Matte.

Full Depth Asphalt:

5 inches of asphaltic concrete pavement
on 12 inches of recompacted native material

1986 AASHTO Method

Based upon the existing topography, the anticipated final road grades and the anticipated future irrigation practices in the local area, a Drainage Factor of 0.7 (1986 AASHTO procedure) has been utilized for the section analysis.

The terminal Serviceability Index of 2.0, a Reliability of 70 and a design life of 20 years have been utilized.

Residential Roadway, 18k EAL = 5 :
Asphalt-Base Course

3 inches of asphaltic concrete pavement
on 8 inches of aggregate base course
on 8 inches of recompacted native material

Full Depth Asphalt:

5 inches of asphaltic concrete pavement
on 12 inches of recompacted native material

Grand Junction Community Development Department
Planning • Zoning • Code Enforcement
250 North Fifth Street
Grand Junction, Colorado 81501-2668
(970) 244-1430 FAX (970) 244-1599

March 29, 1996

ATTN: Permits & Enforcement
Colorado Department of Public Health & Environment
Water Quality Control Division
WQCD-PE-B2
4300 Cherry Creek Drive South
Denver, CO 80222-1530

Re: James Park Mobile Home Park - Grand Junction

Dear:

Enclosed is a Stormwater Management Plan for a 8.23 acre proposed mobile home park in Grand Junction. The park is located on the northeast corner of 28 1/4 Road and Gunnison Avenue. The applicant is John Davis, 1023 24 Road, Grand Junction, CO 81505 (970) 250-0720). Included also is a grading and drainage plan showing the site layout.

If you have any questions please call me at 244-1447 or the applicant directly. The item is tentatively scheduled for the May 7, 1996 Planning Commission hearing.

Sincerely,

Bill Nebeker
Senior Planner

TO: BILL NEBEKER, SENIOR PLANNER
GRAND JUNCTION COMMUNITY DEVELOPMENT DEPT.

FROM: JOHN DAVIS

DATE: APRIL 19, 1996

RE: JAMES PARK FINAL PLAN, FP-96-55

(HAND DELIVERED)

Following are responses to your letter to me of March 27, 1996. The responses are organized first in two groups, one for your comments and one for Jodi Kliska's, and then by numbered item corresponding to the same numbers used in your and her comments.

Attached, please find four sets containing revised or new submittals for:

1. Fence Detail Sheet
2. Site Plan
3. Landscape Plan
4. Street Plan And Profile
5. Major Drainage Basin Map (in Final Drainage Report)
6. Grading and Drainage Plan
7. Final Drainage Report
8. Development Improvements Agreement
9. Disbursement Agreement (front page only)
10. Memorandum of Improvements Agreement and Guarantee

<u>Nebeker Comments</u>

Fence Detail Sheet (Noise Wall Plan)

1. & 2. Please see the revised Site Plan and Fence Detail Sheet. Each comment has been addressed.

Site and Landscaping Plans

3. See revised Plans.
4. All trees are specified on the Landscape Plan notes to be at least 1.5 inch caliper.
5. The storage area, 28 1/4 Road fence is annotated for screening and its extension along the North side of space #1 is shown.
6. Lighting is shown on the Site Plan with a note for PSC standards. The park areas are lighted.
7. The driveway for space #6 has been relocated

Miscellaneous

8. The application for vacation and relocation for the drainage, utility, and irrigation easements has been submitted. A deed will be executed by me after closing of the purchase and recorded before work begins to affect the relocated easements. I will submit a copy of this deed for your review before closing. The legal description for the vacated easements has been given to Marcia Rabideaux.

<u>Kliska Comments</u>

Site Plan

1. The Site Plan, the Easement Vacation and Relocation, the Street Plan, the Major Drainage Plan Basin Map, and the Final Drainage Report have all been revised to show the drainage and other easements vacation and relocation.
2. The internal street cross section is shown.

3. Trash dumpster locations are shown at the NE and SW cul de sacs.
4. Street lighting is shown at all cul de sacs and the two four-way, internal street intersections with a note per PSC standards.

Street Plan and Profile

5. The street cross section using one of the given alternatives is shown.
6. The benchmark is shown at S.W. corner
7. Stationing is revised.
8. The Goodwill Drain location has been addressed (see 1. above). The relocation will be completed by my contractor to accommodate ongoing irrigation and surface drainage and will be coordinated with the Grand Junction Drainage District before start of work to meet their review and supervision requirements. This arrangement has been approved by the Grand Junction Drainage District.
9. Station and flowline elevations are shown on the attached Grading Plan.
10. The sidewalk across the entry is deleted on the revised plan.
11. The pavement taper is shown on the revised plan.

Major Drainage Basin Map

12. The map is attached.

Grading and Drainage Plan

13. Through 22. Please see the revised plan; all items are addressed.

Final Drainage Report

23. through 29. Please see the revised report.

Improvements Agreement

30. The DIA estimate has been revised.
31. Please see comment 8. above.

I regret the need for your voluminous comments resulting from my earlier submittal, and hope you find this response to be complete and satisfactory. Thank you for your forbearance.

Sincerely,

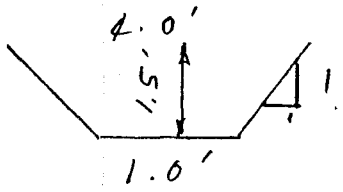
John Davis /by Ward Scott

John Davis

James Park

Goodwill drain

Q Requirements = 1 CFS as per. John Ballagh



conc Ditch

$A = \left(\frac{4+1}{2}\right)(1.5) = 3.75\ FT^2$

$P = 1 + 1.5(\sqrt{2})(2) \quad 5.24$

$R_h = \frac{A}{P} = \frac{3.75}{5.24} = 0.72$

$Q = \frac{1.49}{n} R_h^{2/3} S^{1/2} A$, min $S = 0.25\%$

$= \frac{1.49}{0.015} (0.72)^{2/3} (0.0025)^{1/2} (3.75) = 15\ CFS$

18" PIPE $A = 0.785(D)^2 = 1.776\ FT^2$

$P = \pi D = 4.71$

$R = \frac{A}{P} = \frac{1.776}{4.71} = 0.377$

$Q = \frac{1.49}{0.015} (0.377)^{2/3} (0.005)^{1/2} (1.766) = 6.4\ CFS$

REVISED
FINAL DRAINAGE REPORT

FOR

JAMES PARK
A PRIVATE MOBILE HOME SUBDIVISION
(Previously Referenced as Darwin Subdivision Lot 2)

LOCATED IN THE NE 1/4 OF SECTION 18, T1S, R1E, U.M.
CITY OF GRAND JUNCTION, MESA COUNTY, COLORADO

APRIL 19, 1996

PREPARED BY:
WAYNE H. LIZER, P.E., P.L.S.

W.H. LIZER & ASSOCIATES
Engineering Consulting and Land Surveying
576 25 Road, Unit #8
Grand Junction, Colorado 81505
241-1129

W.H. LIZER & ASSOCIATES
Engineering Consulting and Land Surveying
576 25 road, Unit #8
Grand Junction, Colorado 81505
(970) 241-1129

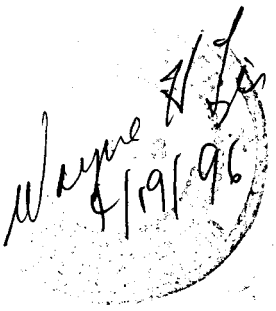
April 19, 1996

REVISED
FINAL DRAINAGE REPORT
FOR
JAMES PARK
A PRIVATE MOBILE HOME SUBDIVISION
(Previously Referenced as Darwin Subdivision Lot 2)

Located in the NE 1/4 of Section 18, T1S, R1E, U.M.
City of Grand Junction, Mesa County, Colorado

CERTIFICATION OF DOCUMENTS

I, Wayne H. Lizer, a registered Professional Engineer in the State of Colorado, hereby certify that this report was prepared by me.



Wayne H. Lizer

Wayne H. Lizer, P.E., P.L.S. 14113

W.H. LIZER & ASSOCIATES
Engineering Consulting and Land Surveying
576 25 road, Unit #8
Grand Junction, Colorado 81505
(970) 241-1129

April 19, 1996

REVISED FINAL DRAINAGE REPORT FOR JAMES PARK A PRIVATE MOBILE HOME SUBDIVISION

(Previously Referenced as Darwin Subdivision Lot 2)
Located in the NE 1/4 of Section 18, T1S, R1E, U.M.
City of Grand Junction, Mesa County, Colorado

I. GENERAL LOCATION AND DESCRIPTION

A. Site and Major Basin Location

1. The site is located on the East side of 28 1/4 Road, approximately 600 feet South of North Avenue. Access to the site will be from 28 1/4 Road. (Street Location Map - Appendix A)

2. At the present time, development in the area includes Cahoot's Crossin (a nightclub at the Northwesterly side of the proposed development), vacant land to the Northeast, A & W Trailer Park on the East, vacant land to the South, and Niagara Village (a manufactured housing subdivision) to the West.

B. Site and Major Basin Description

1. The major basin includes approximately 0.6 acres to the North of the site [approximately 0.3 acres from Cahoot's Crossin (designated "OF-1" on the Major Basin Map - Appendix B) and approximately 0.3 acres from the vacant land lying North of the Northeasterly boundary of the proposed development (designated "OF-2" on the Major Basin Map - Appendix B)] and the site itself which contains 7.89 acres.

2. The building and parking lot of Cahoot's Crossin drains to a grate in the Cahoot's parking lot which in turn drains to the existing 18-inch concrete-piped section of the Goodwill Drain located along the East side of 28 1/4 Road. This run-off is not included in the above-mentioned approximate 0.3 acres from Cahoot's Crossin ("OF-1"). "OF-1" is the area to the South and East of Cahoot's building which drains to the South where part of the drainage is picked up by a swale that goes across the Northwest corner of the proposed development to the Goodwill Drain which is an open ditch at this point. "OF-1" also includes Cahoot's South of the swale run-off which sheet-flows South across bare ground to the proposed development.

The site and the vacant land lying to the North ("OF-2") has sparse weed growth and salt brush. The site was tilled at one time as furrows are still evident.

3. The on-site soil is of (Bc), Billings silty clay loam, 0 to 2 percent slopes, of the hydrological soil group, "C". (Reference 2 Appendix C)

II. EXISTING DRAINAGE CONDITIONS

A. Major Basin

1. The site generally drains from Northeast to Southwest at approximately 0.63% slope.

   There is an irrigation ditch running from North to South along the East side of the property, and the Goodwill Drain (formerly the Mesa County Ditch) which runs from North to South along the West side of the property then turns Southeast across the Southwest corner of the site.

2. The site is within "Zone X" as determined by the FIRM Flood Insurance Map and is not within the 100 and 500 year floodplain of Indian Wash. (Appendix D)

B. Site

1. The proposed development site drains historically from Northeast to Southwest at approximately 0.63% slope in a sheetflow fashion.

2. Off-site contributions of inflow from upstream include the Cahoot's Crossin area South and East of the building ("OF-1") and the vacant land lying North of the Northeasterly boundary of the site ("OF-2"). Part of "OF-1" drains via a swale into the Goodwill Drain where it is an open ditch, and the other part onto the site, as does "OF-2", in a sheetflow fashion.

3. The proposed development site historically drains into the Goodwill Drain since the drain is located both on the West and South sides of the site. The Goodwill Drain, maintained by the Grand Junction Drainage District, eventually drains into the Colorado River about 1 mile South of the property.

   The run-off from Cahoot's Crossin building and parking lot drains into a grated inlet in their parking lot which drains into the 18-inch concrete pipe section of the Goodwill Drain, and does not drain onto the proposed development site.

Historically, at times, the Goodwill Drain is close to capacity on the South side of the site due to a completely flat grade from West to East and water is virtually "pushing" itself to the East.

Small amounts of run-off from James Park could be introduced into the Goodwill Drain from a detention basin which is planned for at the Southwest corner of the proposed development.

III. PROPOSED DRAINAGE CONDITIONS

A. Changes in Drainage Patterns

1. Major Basin

The City of Grand Junction is requiring a sound-barrier fence to be installed adjacent to Cahoot's Crossin with the bottom of the fence required to be extended below grade. This would preclude any run-off from Cahoot's Crossin to enter the site and would have to be drained to the West to the Goodwill Drain. The Cahoot's Crossin run-off that would be affected is the approximate 0.3 acre described in "Part 1 and 2 of B. Site and Major Basin Description, Page 1 of this report" and designated as "OF-1" on the Major Basin Map - Appendix B.

The stormwater contributed to the proposed development by the approximate 0.3 acre vacant land lying North of the Northeast property boundary ("OF-2") will be directed to retention basins by site grading and by the proposed streets.

2. Site

The site is designed to have a series of retention basins (3) with one detention basin at the Southwest corner of the site. Stormwater will be directed to these basins by site grading and by the proposed streets.

It is planned to move the location of the Goodwill Drain from the end of the 18-inch pipe on 28 1/4 Road at approximately the Northwest corner of James Park to the point where the drain intersects the South property line of James Park.

At the present time, this portion of the Goodwill Drain is an earth ditch and is located in 28 1/4 Rd. right-of-way on the West side of James Park to a point near the South end of James Park, then cuts diagonally to the Southeast across part of the South side of James Park.

It is planned to construct a concrete ditch within the property of James Park along the West side to the Southwest corner of the property, then construct an earth ditch along the South side of James Park in Gunnison Avenue right-of-way to the point where the drain now intersects the South side of James Park. At the request of the Grand Junction Drainage District, an earth ditch is preferred along the Gunnison Ave. ROW due to a flat grade and cleaning the ditch with a backhoe is the most practical way to keep the ditch maintained.

Under the entry street to James Park, the drain will be piped with reinforced concrete.

B. Maintenance Issues

1. Access

Access to James Park will be from 28 1/4 Road. Access through the site will be by private paved interior streets with curb, gutter, and sidewalks.

2. Ownership and responsibility

The proposed development is for a mobile home park and the ownership and responsibility of the site drainage system, including the detention basin and the three retention basins shall be the responsibility of the owner of the park. This will include access to, grassing of the basins with bluegrass and mowing of the grass, and in general, maintaining said basins and drainage system as well as the site itself, in good condition.

Ownership and responsibility of the Goodwill Drain will be that of the Grand Junction Drainage District. Easements within James Park have been given to the drainage district for maintenance of said drain.

IV. DESIGN CRITERIA & APPROACH

A. General Considerations

1. The Preliminary Drainage Report by Tom Cronk, P.E., dated October 28, 1995,(Darwin Subdivision Lot 2) is on file with the City of Grand Junction.

2. A meeting was held on March 18, 1996 between LANDesign (Phil Hart Group) representing Niagara Village, the Grand Junction Drainage District, the City of Grand Junction, and the developer of James Park in regard to designing and installing a storm

drain system which would intercept storm water from 28 1/4 Rd. James Park, Niagara Village, and water from the Goodwill Drain and transport these waters to Indian Wash on the West side of 28 Road.

No immediate or near future considerations to implement said storm sewer system was concluded at that meeting.

3. Constraints imposed by the site generally is the capacity of the Goodwill Drain to discharge any significant amount of run-off into the drain, therefore, as much retention as possible has been designed for the site.

Soil Conservation Service data shows the site to be homogeneous, i.e, Billings silty clay loam. One percolation test was done at the site which resulted in a percolation rate of 22.5 minutes per inch.

B. Hydrology

1. The design storm was for a 2-year and a 100-year frequency. (Appendix E)

2. The Rational Method was used for determining run-off.

3. Retention Basin Design Method

The retention basins were sized based on a 100-year event by the formula:

$$V = \frac{C_{100}\ I}{12} \times A \times 43560 \qquad \text{(Appendix F)}$$

The value of I was determined from Table"A-2" (Appendix G)

Detention Basin Design Method

The detention basin was sized using the Modified Rational Method (Appendix H)

4. & 5. Parameter Selection, Analysis and Design Procedures

The Rational Method was used since the site contains less than 25 acres.

Run-off factors were based on a density of 7 units per acre. (Appendix C)

The City of Grand Junction Stormwater Management Manual (SWMM) of June, 1994 was used as a basis of analysis. (Reference 1)

C. Hydraulics

All site facilities and conveyance elements are designed in accordance with the City of Grand Junction as provided in Reference 1.

V. RESULTS AND CONCLUSIONS

Summary of Run-off Rates

	Q_2 cfs	Q_{100} cfs
Interior		
Historical	1.72	6.2
After Development	3.8	12.0
Exterior		
Historical		
OF-1 (Cahoot's Crossin)	0.06	0.23
PF-2 (Vacant Land N of NE Corner of James Park)	0.06	0.23
After Development		
OF-1	0.0	0.0
OF-2	0.06	0.23

Run-off to Exterior Properties From James Park = 0

Outlet From James Park to Goodwill Drain After Detention = 0.48 cfs

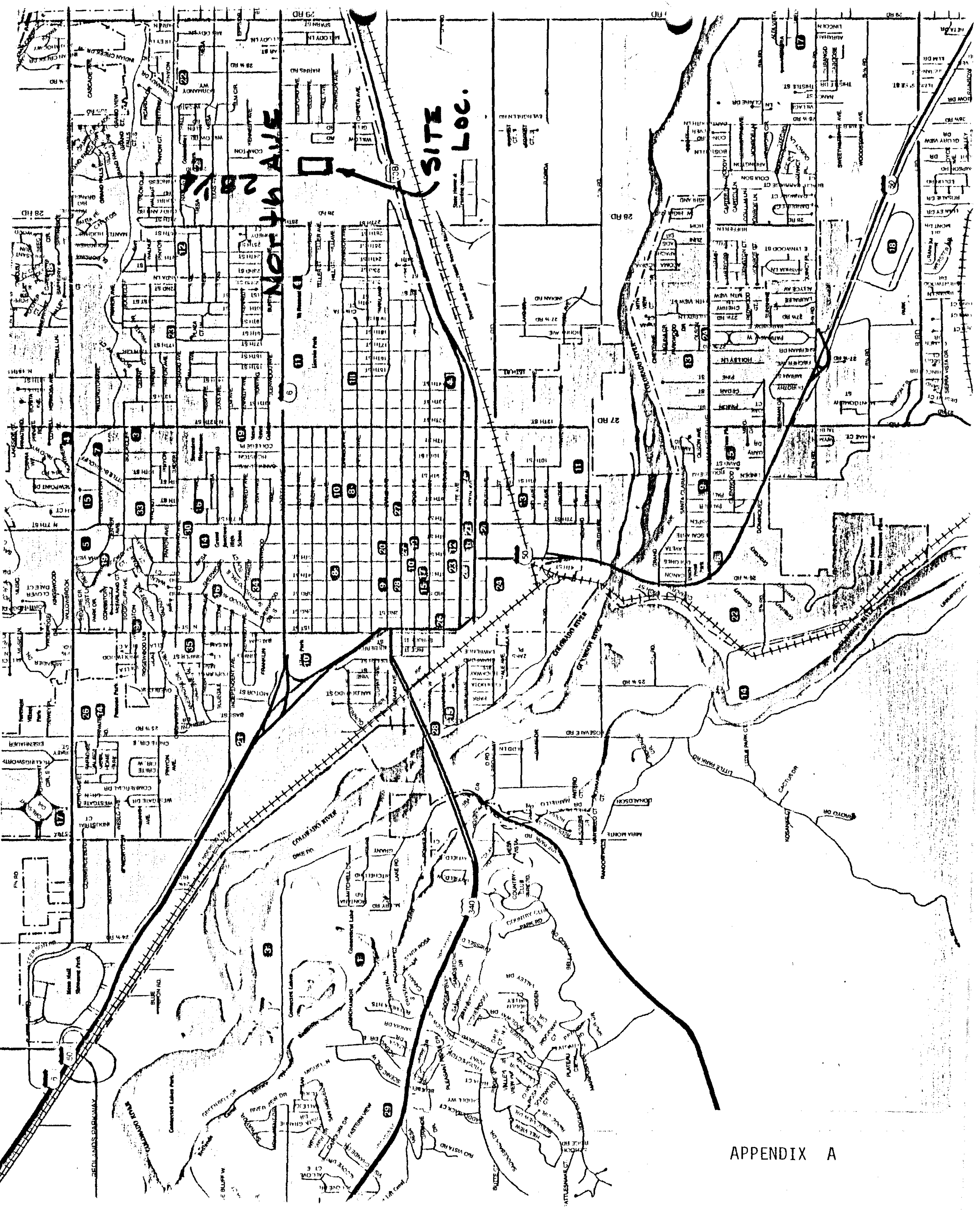
VI. REFERENCES

1. Stormwater Management Manual (SWMM), City of Grand Junction, Colorado, Department of Public Works, June 1994

2. Soil Survey, Mesa County Area, Colorado, U.S. Department of Agriculture, issued November, 1955.

3. Flood Insurance Rate Map, City of Grand Junction, Colorado, Mesa County, Community Panel Number 080117 0007 E, Federal Emergency Management Agency, Map Revised July 15th, 1992.

VII. APPENDICES



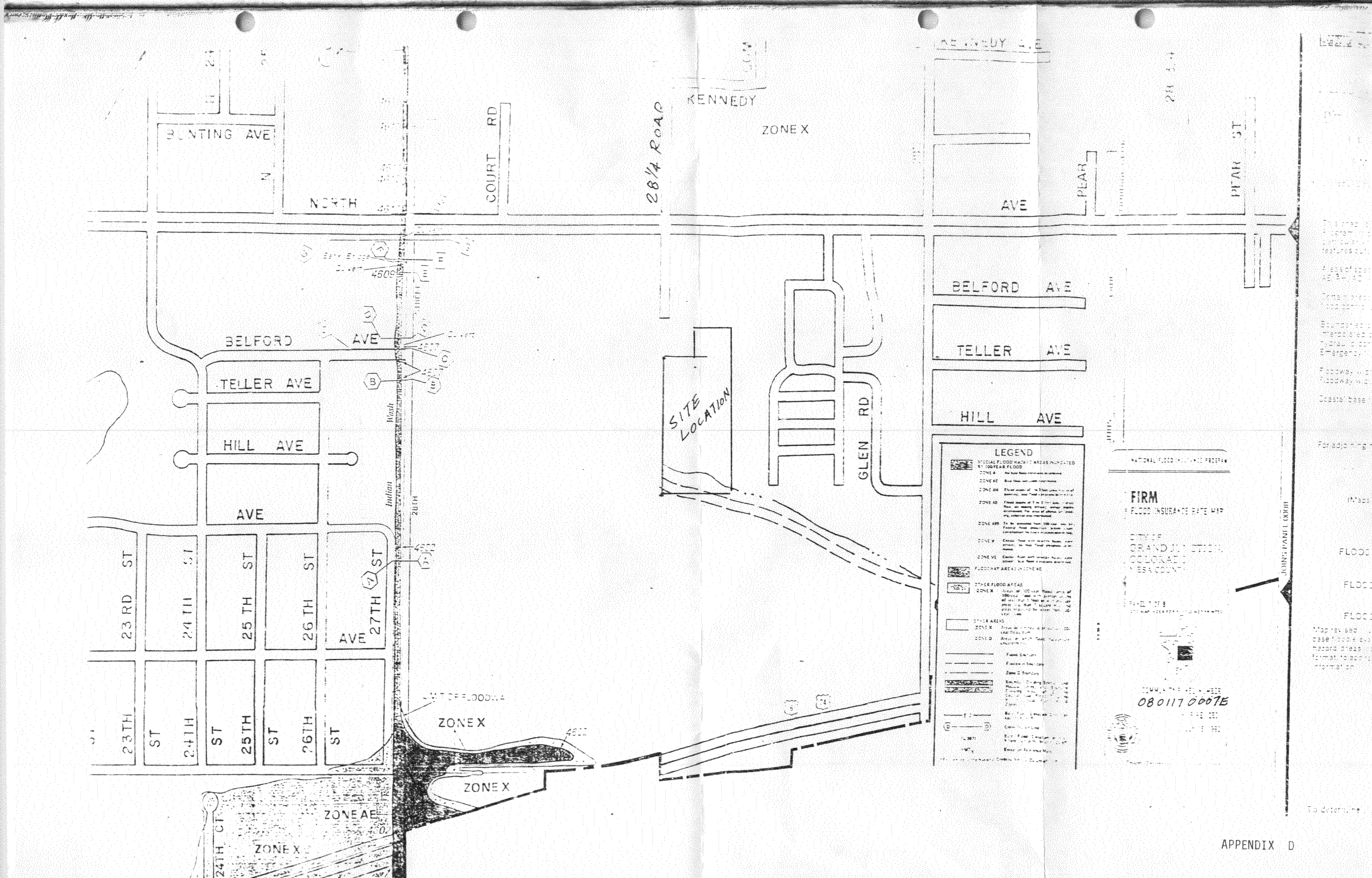
APPENDIX A

LAND USE OR SURFACE CHARACTERISTICS	SCS HYDROLOGIC SOIL GROUP (SEE APPENDIX "C" FOR DESCRIPTIONS)											
	A			B			C			D		
	0-2%	2-6%	6%+	0-2%	2-6%	6%+	0-2%	2-6%	6%+	0-2%	2-6%	6%+
UNDEVELOPED AREAS Bare ground	.10 - .20 .14 - .24	.16 - .26 .22 - .32	.25 - .35 .30 - .40	.14 - .22 .20 - .28	.22 - .30 .28 - .36	.30 - .38 .37 - .45	.20 - .28 .26 - .34	.28 - .36 .35 - .43	.36 - .44 .40 - .48	.24 - .32 .30 - .38	.30 - .38 .40 - .48	.40 - .48 .50 - .58
Cultivated/Agricultural	.08 - .18 .14 - .24	.13 - .23 .18 - .28	.16 - .26 .22 - .32	.11 - .19 .16 - .24	.15 - .23 .21 - .29	.21 - .29 .28 - .36	.14 - .22 .20 - .28	.19 - .27 .25 - .33	.26 - .34 .34 - .42	.18 - .26 .24 - .32	.23 - .31 .29 - .37	.31 - .39 .41 - .49
Pasture	.12 - .22 .15 - .25	.20 - .30 .25 - .35	.30 - .40 .37 - .47	.18 - .26 .23 - .31	.28 - .36 .34 - .42	.37 - .45 .45 - .53	.24 - .32 .30 - .38	.34 - .42 .42 - .50	.44 - .52 .52 - .60	.30 - .38 .37 - .45	.40 - .48 .50 - .58	.50 - .58 .62 - .70
Meadow	.10 - .20 .14 - .24	.16 - .26 .22 - .32	.25 - .35 .30 - .40	.14 - .22 .20 - .28	.22 - .30 .28 - .36	.30 - .38 .37 - .45	.20 - .28 .26 - .34	.28 - .36 .35 - .43	.36 - .44 .44 - .52	.24 - .32 .30 - .38	.30 - .38 .40 - .48	.40 - .48 .50 - .58
Forest	.05 - .15 .08 - .18	.08 - .18 .11 - .21	.11 - .21 .14 - .24	.08 - .16 .10 - .18	.11 - .19 .14 - .22	.14 - .22 .18 - .26	.10 - .18 .12 - .20	.13 - .21 .16 - .24	.16 - .24 .20 - .28	.12 - .20 .15 - .23	.16 - .24 .20 - .28	.20 - .28 .25 - .33
RESIDENTIAL AREAS 1/8 acre per unit	.40 - .50 .48 - .58	.43 - .53 .52 - .62	.46 - .56 .55 - .65	.42 - .50 .50 - .58	.45 - .53 .54 - .62	.50 - .58 .59 - .67	.45 - .53 .53 - .61	.48 - .56 .57 - .65	.53 - .61 .64 - .72	.48 - .56 .56 - .64	.51 - .59 .60 - .68	.57 - .65 .69 - .77
1/4 acre per unit	.27 - .37 .35 - .45	.31 - .41 .39 - .49	.34 - .44 .42 - .52	.29 - .37 .38 - .46	.34 - .42 .42 - .50	.38 - .46 .47 - .55	.32 - .40 .41 - .49	.36 - .44 .45 - .53	.41 - .49 .52 - .60	.35 - .43 .43 - .51	.39 - .47 .47 - .55	.45 - .53 .57 - .65
1/3 acre per unit	.22 - .32 .31 - .41	.26 - .36 .35 - .45	.29 - .39 .38 - .48	.25 - .33 .33 - .41	.29 - .37 .38 - .46	.33 - .41 .42 - .50	.28 - .36 .36 - .44	.32 - .40 .41 - .49	.37 - .45 .48 - .56	.31 - .39 .39 - .47	.35 - .43 .43 - .51	.42 - .50 .53 - .61
1/2 acre per unit	.16 - .26 .25 - .35	.20 - .30 .29 - .39	.24 - .34 .32 - .42	.19 - .27 .28 - .36	.23 - .31 .32 - .40	.28 - .36 .36 - .44	.22 - .30 .31 - .39	.27 - .35 .35 - .43	.32 - .40 .42 - .50	.26 - .34 .34 - .42	.30 - .38 .38 - .46	.37 - .45 .48 - .56
1 acre per unit	.14 - .24 .22 - .32	.19 - .29 .26 - .36	.22 - .32 .29 - .39	.17 - .25 .24 - .32	.21 - .29 .28 - .36	.26 - .34 .34 - .42	.20 - .28 .28 - .36	.25 - .33 .32 - .40	.31 - .39 .40 - .48	.24 - .32 .31 - .39	.29 - .37 .35 - .43	.35 - .43 .46 - .54
MISC. SURFACES Pavement and roofs	.93 .95	.94 .96	.95 .97	.93 .95	.94 .96	.95 .97	.93 .95	.94 .96	.95 .97	.93 .95	.94 .96	.95 .97
Traffic areas (soil and gravel)	.55 - .65 .65 - .70	.60 - .70 .70 - .75	.64 - .74 .74 - .79	.60 - .68 .68 - .76	.64 - .72 .72 - .80	.67 - .75 .75 - .83	.64 - .72 .72 - .80	.67 - .75 .75 - .83	.69 - .77 .77 - .85	.72 - .80 .79 - .87	.75 - .83 .82 - .90	.77 - .85 .84 - .92
Green landscaping (lawns, parks)	.10 - .20 .14 - .24	.16 - .26 .22 - .32	.25 - .35 .30 - .40	.14 - .22 .20 - .28	.22 - .30 .28 - .36	.30 - .38 .37 - .45	.20 - .28 .26 - .34	.28 - .36 .35 - .43	.36 - .44 .42 - .52	.24 - .32 .30 - .38	.30 - .38 .40 - .48	.40 - .48 .50 - .58
Non-green and gravel landscaping	.30 - .40 .34 - .44	.36 - .46 .42 - .52	.45 - .55 .50 - .60	.45 - .55 .50 - .60	.42 - .50 .48 - .56	.50 - .58 .57 - .65	.40 - .48 .46 - .54	.48 - .56 .55 - .63	.56 - .64 .64 - .72	.44 - .52 .50 - .58	.50 - .58 .60 - .68	.60 - .68 .70 - .78
Cemeteries, playgrounds	.20 - .30 .24 - .34	.26 - .36 .32 - .42	.35 - .45 .40 - .50	.35 - .45 .40 - .50	.32 - .40 .38 - .46	.40 - .48 .47 - .55	.30 - .38 .36 - .44	.38 - .44 .45 - .53	.46 - .54 .54 - .62	.34 - .42 .40 - .48	.40 - .48 .50 - .58	.50 - .58 .60 - .68

NOTES:
1. Values above and below pertain to the 2-year and 100-year storms, respectively.
2. The range of values provided allows for engineering judgement of site conditions such as basic shape, homogeneity of surface type, surface depression storage, and storm duration. In general, during shorter duration storms (Tc ≤ 10 minutes), infiltration capacity is higher, allowing use of a "C" value in the low range. Conversely, for longer duration storms (Tc) 30 minutes), use a ""C value in the higher range.
3. For residential development at less than 1/8 acre per unit or greater than 1 acre per unit, and also for commercial and industrial areas, use values under MISC SURFACES to estimate "C" value ranges for use.

RATIONAL METHOD RUNOFF COEFFICIENTS
(Modified from Table 4, UC-Davis, which appears to be a modification of work done by Rawls)

TABLE "B-1"



BUNTING AVE
NORTH AVE
COURT RD
28 1/4 ROAD
KENNEDY
ZONE X
PEAR ST
BELFORD AVE
TELLER AVE
HILL AVE
GLEN RD
SITE LOCATION
23 RD ST
24 TH ST
25 TH ST
26 TH ST
27TH ST
23TH ST
24TH ST
25TH ST
26TH ST
28TH
Indian Wash
LIMIT OF FLOODWAY
ZONE X
ZONE AE
24TH CT
LEGEND
FIRM
FLOOD INSURANCE RATE MAP
CITY OF GRAND JUNCTION, COLORADO
MESA COUNTY
080117 0007E
JOINS PANEL 0008

APPENDIX D

TABLE "A-1"
INTENSITY-DURATION-FREQUENCY (IDF) TABLE

Time (min)	2-Year Intensity (in/hr)	100-Year Intensity (in/hr)	Time (min)	2-Year Intensity (in/hr)	100-Year Intensity (in/hr)
5	1.95	4.95	33	0.83	2.15
6	1.83	4.65	34	0.82	2.12
7	1.74	4.40	35	0.81	2.09
8	1.66	4.19	36	0.80	2.06
9	1.59	3.99	37	0.79	2.03
10	1.52	3.80	38	0.78	2.00
11	1.46	3.66	39	0.77	1.97
12	1.41	3.54	40	0.76	1.94
13	1.36	3.43	41	0.75	1.91
14	1.32	3.33	42	0.74	1.88
15	1.28	3.24	43	0.73	1.85
16	1.24	3.15	44	0.72	1.82
17	1.21	3.07	45	0.71	1.79
18	1.17	2.99	46	0.70	1.76
19	1.14	2.91	47	0.69	1.73
20	1.11	2.84	48	0.68	1.70
21	1.08	2.77	49	0.67	1.67
22	1.05	2.70	50	0.66	1.64
23	1.02	2.63	51	0.65	1.61
24	1.00	2.57	52	0.64	1.59
25	0.98	2.51	53	0.63	1.57
26	0.96	2.46	54	0.62	1.55
27	0.94	2.41	55	0.61	1.53
28	0.92	2.36	56	0.60	1.51
29	0.90	2.31	57	0.59	1.49
30	0.88	2.27	58	0.58	1.47
31	0.86	2.23	59	0.57	1.45
32	0.84	2.19	60	0.56	1.43

Source: Mesa County 1991

ii. Percolation tests indicate that it is likely that required retention water can be dissipated within 48 hours (tests must be performed under the direction of an engineer and submitted to the City for review);

iii. Soil percolation will not damage nearby structures or facilities (a letter regarding adverse impact, if any, and consequent recommendation is required from a geotechnical engineer, and must be submitted to the City for review); and

iv. The retention pond must have a minimum size such that overflow occurs only after the generated runoff has subsided to undeveloped flow rates for the 100-year event.

2. Overflow Capacity Retention basins need not be sized to contain the full 100-year runoff generated on a site. A reduced storage volume may mitigate the developed peak runoff and not overflow until the developed runoff generated has subsided to QMAX, which is the historic peak runoff rate Q_{100h} minus direct runoff which bypasses the retention basin, Qb.

3. Total Retention (Without Overflow) The largest storage volume requirement is when a retention basin is used without overflow. The advantage of this type of retention basin over an overflow type is that normally a Drainage Report would not be required. The only need for drainage calculations beyond the simple volume equation would be if they were necessary to adequately size on-site conveyance facilities. Also, with 100% retention of the 100-year storm runoff, spillway requirements are minimized.

The volume to be stored is simply the total 100-year, 24 hour rainfall precipitation, which is 2.01 inches or 0.17 feet for the Grand Valley, times the site area, times the 100-year developed runoff coefficient. In equation form, the volume is

$$V = P100_{24\,HR} \times A \times C_{100d}$$

$$V(ft^3) = \frac{2.01''}{12} \times AREA\ (FT^2) \times C_{100d}$$

4. Partial Retention (With Outflow) If a retention basin is designed to overflow at the rate of QMAX in the 100-year storm event, the required volume is less than that required for total retention. However, additional drainage calculations are required, although not extensive. Also, with planned overflow, normal spillway design and erosion procedures are necessary.

The procedure is to determine at what time the developed condition runoff has subsided to the historic peak rate. This can be done by setting Q = CIA to the historic 100-year peak runoff rate. The acreage does not change, only the runoff coefficient "C". To offset the increase in "C", the intensity "I" must decrease, which has a corresponding critical time of duration Td. Use of Modified Rational Method principles then allows direct calculation of the volume. The procedure is systemized below:

3. **Basin Average Total Storm Precipitation** When using SCS rainfall distributions which are based upon a percent of rainfall, a basin average total precipitation depth is required. These same depths may also be used to calculate volume of runoff for total retention (see Section VIII and Appendix "N"). Depths for various storm durations for various frequencies (known as Depth-Duration-Frequency, or DDF) are provided in Table "A-2".

TABLE "A-2"
DEPTH-DURATION-FREQUENCY (DDF)
FOR THE GRAND VALLEY

Storm Duration (Hours)	Precipitation Depth (inches)	
	2-Year Storm	100-Year Storm
2	0.42	1.40
6	0.55	1.56
24	0.70	2.01

Source: Mesa County 1992

4. **Area Rainfall Depth Reduction Curves** The larger the watershed area, the less likely that the same level of intensity will be constant spatially. Curves have been provided which allow reduction of the values provided in Table "A-2" for larger watersheds. These have been reproduced and are provided in Figure "A-1".

5. **SCS Rainfall Distribution** Rainfall distributions have been developed by the SCS for several storm durations. The information is usually provided in "S" curve form, showing the percent of total precipitation depth at a given time. In HEC-1, data is entered either on PI or PC records; that is, incremental precipitation or cumulative precipitation. The data are based on increments of time which are specified on the "IN" record "JXMIN" parameter. Since the rainfall distribution data will most likely be used as tabular input into a computer file, information from curves has bene converted to a tabular cumulative precipitation versus time format. Additionally, it is presented in a way that may be directly inserted into a HEC-1 free format input file. The SCS rainfall distribution data is provided in Table "A-3".

The ominous looking but simple equations, modified to incorporate Grand Valley IDF data prepared by Henz Meteorological Services (Mesa County 1991), are presented below.

$$T_{d2} = \left(\frac{633.4\, C_d A}{Q_r - \frac{Q_r^2 Tc_d}{81.2\, C_d A}} \right)^{0.5} - 15.6$$

$$T_{d100} = \left(\frac{1832\, C_d A}{Q_r - \frac{Q_r^2\, Tc_d}{213\, C_d A}} \right)^{0.5} - 17.2$$

I_{d2} = Intensity at T_{d2} (approximately $40.6/(T_{d2} + 15.6)$

I_{d100} = Intensity at T_{d100} (approximately $106.5/(T_{d100} + 17.2)$

$Q_d = C_d A I_d$

$K = Tc_h/Tc_d$

$V = 60\,[Q_d T_d - Q_r T_d - Q_r Tc_d + KQ_r Tc_d/2 + Q_r^2 Tc_d/(2Q_d)]$

Where:

T_d = Time of critical storm duration, minutes;
C = Runoff coefficient;
A = Area in acres;
Q_r = Detention pond average release rate, cfs (Note that this will not likely be the historic rate Qh; nor even Qmax);
Tc = Time of concentration, minutes;
I_d = Intensity at T_d, inches per hour;
Q_d = Runoff rate at T_d, cfs;
K = Ratio of pre- and post-development Tc; and
V = Storage volume in ft^3.

The meaning of subscripts used are as follows:

2 = 2-year storm condition;
100 = 100-year storm condition;
h = historic condition; and
d = developed condition.

VII. HYDRAULICS

A. "n" VALUES

Manning "n" value selection may be from information provided in Appendix "F" or from other sources, provided that they are selected and used in accordance with procedures and guidelines presented in Appendix "F". It is recommended that Appendix "F" be read prior to selection of "n" values from other sources.

B. STREETS, CURBS, AND GUTTERS

1. **Hydraulic Calculations** Use of Manning's modified equation is required for calculating flow on street pavement. The equation is:

$$Q = 0.56\,(Z/n)\,S^{.5}d^{2.67}$$

Where:

Q = Flow rate in CFS;
Z = Inverse pavement cross slope, ft/ft;
n = Manning's "n" value;
S = Longitudinal slope of the street or gutter, ft/ft; and
d = Depth of gutter flow in feet.

2. **Two-Year Runoff Design Criteria**

   a. Runoff shall not overtop curbs nor extend outside of the street section.

   b. The maximum depth of flow in valley pans and gutters is 6 inches.

   c. No backup from detention/retention facilities into streets is allowed.

   d. Collector roads shall have at least one 8-foot wide traffic lane in each direction remaining free of inundation.

   e. Arterial roads shall have at least one 8-foot wide traffic lane in each direction and the center turning lane remaining free of inundation.

3. **100-Year Runoff Design Criteria**

   a. The maximum depth of flow in streets is 1.0 feet.

   b. No backup from detention/retention facilities into streets is allowed.

James Pk - Historical

Soil Group C - cultivated
$C_2 = 0.26$, $C_{100} = 0.34$, $S = 0.63\%$,
$D = 300'$ max, $A = 7.89$ AC

$$T_{c_2} = \frac{1.87(1.1 - 0.26)(300)^{1/2}}{(0.63)^{1/3}} = 32 \text{ min}$$

$$T_{c,100} = \frac{1.87(1.1 - 0.34)(300)^{1/2}}{(0.63)^{1/3}} = 29 \text{ min}$$

$I_2 = 0.84$, $I_{100} = 2.31$

$Q_2 = CIA = (0.26)(0.84)(7.89) = 1.72$ CFS

$Q_{100} = CIA = (0.34)(2.31)(7.89) = 6.2$ CFS

AFTER DEVELOPMENT

Density = 55 units/7.89 AC = 7 units/AC

$C_2 = 0.50$, $C_{100} = 0.58$, $S = 0.40$

$$T_{c_2} = \frac{1.87(1.1 - 0.50)(300)^{1/2}}{(0.40)^{1/3}} = 26 \text{ min}$$

$$T_{c_{100}} = \frac{1.87(1.1 - 0.58)(300)^{1/2}}{(0.40)^{1/3}} = 23 \text{ min}$$

$I_2 = 0.96$, $I_{100} = 2.63$

$Q_2 = CIA = (0.50)(0.96)(7.89) = 3.8$ CFS

$Q_{100} = CIA = (0.58)(2.63)(7.89) = 12$ CFS

James Park

Offsite

Cahoots Crossin

$Q_2 = CIA = (0.26)(0.84)(0.3) = 0.06$ CFS

$Q_{100} = CIA = (0.34)(2.31)(0.3) = 0.23$ CFS

The vacant land north of the East side of James Park would be the same as above

ie. for 0.3 Ac

$Q_2 = 0.06$ CFS
$Q_{100} = 0.23$ CFS

Total Offsite Contribution

Q_2	Q_{100}
0.12	0.46

VOLUME FOR RETENTION per acre

$= \frac{2.01}{12}(0.58)(1)(43560 = 4232$ ft^3/Acre

DETENTION - Southwest Corner

TOTAL AREA FOR SUB-BASIN = 2.94 Ac

AREA FOR DETENTION = 2.94 Ac

$Q = CIA = (0.56)(2.63)(2.94) = 4.48$ CFS

1/2 Street = 2.24 CFS

Flow in Street

$$Q = 0.56\left(\frac{Z}{n}\right) S^{1/2} d^{2.67}$$

$$d^{2.67} = \frac{Q}{0.56\left(\frac{Z}{n}\right) S^{1/2}}$$

$$= \frac{2.24}{0.56\left(\frac{\frac{1}{0.020}}{0.016}\right)(0.004)^{1/2}} = 0.02$$

$$d^{2.67} = (0.02)$$

$$d = (0.02)^{\frac{1}{2.67}} = 0.23' \text{ - OK}$$

For $S = 0.35\%$

$$d^{2.67} = \frac{2.24}{0.56 \quad \frac{\frac{1}{0.020}}{0.016} (0.0035)^{1/2}} = 0.0216$$

$$d = 0.0216^{\frac{1}{2.67}} = 0.37', \text{ OK}$$

James Park

$$T_{d2} = \left\{ \frac{633.4\, C_D A}{Q_R - \frac{Q_{r2}\, T_{cd}}{81.2\, C_d A}} \right\}^{1/2} - 15.6$$

$$= \left\{ \frac{633.4\,(0.50)(2.94)}{0.48 - \frac{(0.48)^2 (26)}{81.2(0.50)2.94)}} \right\}^{1/2} - 15.6 =$$

$614.4 = 0.40$

$$= 34.19 - 15.6 = 23.6$$

$$T_{d,100} = \left\{ \frac{1832\, C_d A}{Q_R - \frac{Q_r^2\, T_{cd}}{213\, C_d A}} \right\}^{1/2} - 17.5$$

$$= \left\{ \frac{1832\,(0.50)2.94}{0.48 - \frac{(0.48)^2\, 23}{213(0.56)(2.94)}} \right\}^{1/2} - 17.5$$

$2061.37 = 0.46$

$$= 66.9 - 17.5 = 49.4$$

$$I_{d2} = \frac{40.6}{T_{d2} + 15.6} = \frac{40.6}{23.6 + 15.6} = 1.03$$

$$I_{d,100} = \frac{106.5}{T_{2,100} + 17.2} = \frac{106.5}{49.4 + 17.2} = 1.60$$

For Detention Only

$Q_d = C_D A I_d$

$Q_2 = 0.5(2.94)(1.03) = 1.5$

$Q_{100} = (0.58)(2.94)(1.60) = 2.73$

$$V_2 = 60\left[1.5(23.6) - (0.48)(23.6) - (0.48)(26) + 1.23\frac{(0.48)(26)}{2} + \frac{(0.48)^2(26)}{2(1.5)}\right]$$

(35.4 = 11.3 + 12.5 + 7.7 + 2)

$$= 60\,[21.3] = 1278$$

$$V_{100} = 60\left[2.73(49.4) - (0.48)(49.4) - (0.48)(23) + 1.26\frac{(0.48)(23)}{2} + \frac{(0.48)^2(23)}{2(2.73)}\right]$$

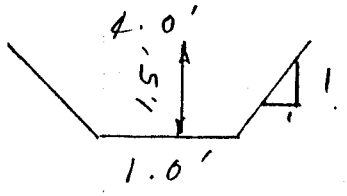
(134.9 = 23.7 + 11.0 + 7.0 + 1.0)

$$= 60\,[108.2] = 6492$$

James Park

Goodwill drain

Q Requirements = 1 CFS as per. John Ballagh



conc Ditch

$A = \left(\frac{4+1}{2}\right)(1.5) = 3.75\ FT^2$

$P = 1 + 1.5(\sqrt{2})(2) \quad 5.24$

$R_h = \frac{A}{P} = \frac{3.75}{5.24} = 0.72$

$Q = \frac{1.49}{n} R_h^{2/3} S^{1/2} A$, min $S = 0.25\%$

$= \frac{1.49}{0.015} (0.72)^{2/3} (0.0025)^{1/2} (3.75) = 15\ CFS$

18" PIPE $A = 0.785(D)^2 = 1.776\ FT^2$

$P = \pi D = 4.71$

$R = \frac{A}{P} = \frac{1.776}{4.71} = 0.377$

$Q = \frac{1.49}{0.015} (0.377)^{2/3} (0.005)^{1/2} (1.766) - 6.4\ CFS$

JAMES PARK FINAL PLAN

#FP-96-55 / REVIEW COMMENTS ON RESUBMITTAL / PAGE 1 OF 1

COMMENTS ON RESUBMITTAL:

CITY DEVELOPMENT ENGINEER	**4/30/96**
Jody Kliska	**244-1591**

1. Does the estimate from Parkerson for curb and gutter include the sidewalk and handicap ramps?
2. Will the mobile home sites be graded to drain to the proposed retention ponds?
3. The easement for the relocated Goodwill Drain must be recorded. As this parcel is not being platted, a separate easement must be prepared and recorded.
4. What is the proposed pavement design for the internal streets?
5. The Goodwill Drain appears to be running at 4+ cfs, but the design for concrete ditch was done for 1 cfs. The ditch appears to be undersized.

TO: JOHN SALAZAR
FROM: BILL NEBEKER
244-1447

faxed to John Salazar
4-30-96
1 page

Proposed wording on a deed of conveyance:

All property within Lot 2, Darwin Subdivision, except that located underneath a mobile home or other structure, granted to Public Service Company for a utility easement.

NOTE: this may be worded a little different since its not on a plat. I haven't had time to review it with the City Attorney. But please review and comment.

Fax corrections back to Bill Nebeker at 244-1599. Questions? call me at 244-1447

5-1-96 7:30Am TO: Bill Nebeker
FROM: John Salazar

Bill,

Wording looks real good... * Should add U.S. West Communications & TCI Cablevision since they usually drop their wire in our trench.

Thanks Bill.

John

RECEIVED GRAND JUNCTION
PLANNING DEPARTMENT
MAY 01 1996

RECEIVED GRAND JUNCTION
PLANNING DEPARTMENT
MAY 01

GJ DRAINAGE DIST

DATE: May 2, 1996
TO: John Ballagh
FROM: Bill Nebeker BN
SUBJECT: Grading & Drainage Plans ~~& Report for James~~ Park

FILE #: FP-96-55

Attached are plans you requested for James Park Mobile Home Park. Please call me at 244--1447 or Jody Kliska at 244-1591, or Wayne Lizer if you have any questions. Return any comments you have to me. Thanks.

THE DRAINAGE PLAN IS OK.

THE RELOCATED GOODWILL DRAIN ALONG THE SOUTH LINE NEEDS TO BE FARTHER SOUTH SO THERE IS A DITCH MAINTENANCE ROAD (20') ON BOTH SIDES OF THE OPEN DRAIN. THE PLAT WAS NOT MADE AVAILABLE FOR REVIEW BUT THE EASEMENT EAST OF 28¼ ROAD MUST BE TO THE DISTRICT AND INCLUDE DRAINAGE FACILITIES AS NAMED, ALLOWED USES. THE LAND SCAPE PLANS SHOW TREES OVER THE OPEN CONCRETE DRAIN DITCH, ALTERNATIVE SITING IS REQUESTED AS ROOT AND TRUNK GROWTH OVER TIME WILL DAMAGE THE PROPOSED CONCRETE DITCH. INTERIOR ACCESS MUST BE GUARANTEED.

John L Ballagh 5/7/96

FAXED 5-3-96

City of Grand Junction, Colorado
250 North Fifth Street
81501-2668
FAX: (970)244-1599

May 3, 1996

Ward Scott
REMAX 4000, Inc.
1401 N. 1st Street
Grand Junction, CO 81501

Dear Ward:

Jody had the following comments unresolved comments for James Park. Please also note that John Ballagh from Grand Junction Drainage District is in the process of reviewing the grading and drainage plans. His comments will be submitted to when they are available.

1. Does the estimate from Parkerson for curb and gutter include the sidewalk and handicap ramps?

2. Will the mobile home sites be graded to drain to the proposed retention ponds?

3. The easement for the relocated Goodwill Drain must be recorded. Staff recommends that a plat be prepared for all necessary easements.

4. What is the proposed pavement design for the internal streets?

5. From a site visit on 5-2-96, the Goodwill Drain appeared to be running at 4+ c.f.s.. The design for the concrete ditch was done for 1 c.f.s. The ditch appears to be undersized. Corrections are required.

Earlier this afternoon I FAXED a copy of an addendum to the James Park staff report. These changes are a result of feedback from the County Building Department and other staff that I was unable to contact prior to writing the report. Please make this letter and the addendum available to John Davis since I don't have his FAX number and a letter may arrive too late. Please call me at 244-1447 if you have any questions.

Sincerely,

Bill Nebeker

Bill Nebeker
Senior Planner

STAFF REVIEW - PLANNING COMMISSION

FILE: FP-96-55
DATE: May 7, 1996
STAFF: Bill Nebeker
REQUEST: Final plan approval for a 55 space mobile home park
LOCATION: Northeast Corner 28 ¼ Road & Gunnison Avenue
APPLICANT: John Davis

EXECUTIVE SUMMARY: Applicant requests to construct a 55 space mobile home park with RV storage and a park on a 8 acre parcel. Council and the Planning Commission have previously approved the zoning and preliminary plan for this site. Interior streets and utilities are private. An engineered noise wall is proposed adjacent to Cahoots Nightclub. Some technical issues of the site have not been resolved.

EXISTING LAND USE: Vacant

PROPOSED LAND USE: 55 space mobile home park

SURROUNDING LAND USE:

North:	Commercial
East:	Mobile Home Park
South:	vacant
West:	Manufactured Home Subdivision

EXISTING ZONING: PMH (Planned Mobile Homes)

SURROUNDING ZONING:

North:	C-1 & C-2
East:	C-2
South:	I-1
West:	PR 5.8

RELATIONSHIP TO COMPREHENSIVE PLAN: The preferred alternative for the Growth Plan (Concentrated Urban Growth) shows Residential Medium-High (8-11.9 dwellings per acre) for this site. 6.7 units per acre are proposed for this site.

STAFF ANALYSIS: The applicant proposes to construct a 55 space mobile home park on a 8 acre parcel. The park is located within the existing lot 2 of Darwin Subdivision, on the east side of 28 ¼ Road, south of North Avenue. No further subdividing or individual lot sales is proposed.

Site Layout

The applicant has submitted a plan with a revised street layout. Preliminary approval of the park allowed this revision. The applicant has taken this option for several reasons. The new layout takes into consideration the Gunnison Avenue right-of-way which was originally proposed to be vacated but denied by Planning Commission. Also the park/open space was moved to a location near the Cahoots nightclub to act as a partial buffer from the noise. The new street layout takes these changes into consideration while losing only one mobile home space. The new layout provides more safety. Since the streets are intended to be privately owned and maintained, the narrower width was preferred by the applicant. The streets and cul-de-sacs meet the minimums required by the Fire Department.. All streets are designed with sidewalk curb and gutter. All water and sanitary sewer lines are also private

Proposed carports have been eliminated from the site plan, due in part with a site visibility conflict with the sidewalk and particularly at intersections. Two spaces are provided for each mobile home space, with visitor parking off the cul-de-sacs. No parking will be allowed on the street due to its narrowness. The site plan shows a typical space with off-street parking, park provided landscaping, and a shed. The following setbacks apply to this development:

- Front - 10' from back of sidewalk
- Side - 26' between trailers
- Rear - 10' between ends of trailers
- Perimeter Street - 15'
- Perimeter non-street - 12'

These setbacks meet the Uniform Building Code for separation between structures. The perimeter non-street setback should be changed to 15 feet since the park is surrounded by a 15' utility and irrigation easement and no dwellings are allowed in this easement anyway. Street lighting typical of standard subdivisions will be installed in the park.

Easements over the internal street system will be required for public services such as postal service, trash collection, fire, police, emergency vehicles and the City of Grand Junction. These easements may be dedicated by a deed of conveyance since a final plat is not proposed. Public Service Company also requires a blanket easement over the entire site for service lines to each space.

Landscaping Plan

The submitted landscaping plan shows a 10 foot wide landscaped strip along the perimeter of the park adjacent to rights-of-way. The strip includes grass and trees spaced 40 feet apart. Since these trees and landscaping are located in the 15 foot drainage and utility easement, there may be some conflict with the relocated Goodwill Drain. The applicant will be required to submit a section drawing showing where the landscaping will be planted in relation to the Goodwill Drain, any other drainage facilities and utilities. Trees within the park interior are also encouraged. The Gunnison Avenue landscaping may be deferred until Gunnison is constructed.

Drainage

The Goodwill Drain, which cuts through the southwest corner of the site will be vacated by separate application, and rerouted along the perimeter of the site. An adjacent utility and irrigation easement is also to be vacated. The site plan must be revised to show that these easements have been vacated, or mobile home spaces removed from this area. Three retention basins and one detention pond are being provided in the park. The final grading and drainage plan has not been reviewed or approved by the Grand Junction Drainage District. Final approval of the plan will be contingent on this approval.

Noise Wall

A 9.5 foot high noise wall is proposed between the mobile home park and Cahoots Crossing nightclub to the north and west per conditions of preliminary approval. The applicant has submitted a study by David L. Adams Associates, Inc., Consultants in Acoustics and Performing Arts Technologies. The report is signed by Jeffrey Kwolkoski P.E. The report proposes a 12 foot high fence to achieve 50 dBA at 25 feet from the property line or a 9.5 foot high fence to achieve 50 dBA at the nearest dwelling which is 95 feet from the property line. (See attached noise study for more information). Three construction types are proposed: 1- concrete masonry units (CMU), 2- a free-standing transportation noise barrier, or 3- a wood barrier with wood battens used to cover the space between pickets and the pickets extended into the ground. The applicant has chosen the third type at 9.5 feet high. Staff has talked with the consultant who states that this design has been used for noise buffering in the Denver Metropolitan area with good results.

Staff has not requested a second opinion on the submitted sound study, nor do they have the expertise to assure that the proposed wall will work as designed. However staff has the following reservations with the wall as designed:

- Cahoots nightclub is approximately 12 feet high and the height of windows in the mobile homes in the park will be about 11 feet high. The noise wall is only proposed for 9.5 feet high. It is unknown if the minimum wall height recommended by the study took this into account.
- Staff has reservations that a wood noise wall can be maintained long term to provide a sufficient noise barrier. The pickets of the fence will be buried 6 inches underground. This fence is located in an area where Cahoots owner has stated that water puddles. The buried pickets may rot out over time and have to be replaced. Boards may also crack or warp. A block wall or free standing noise barrier may be more economical in the long run for providing an adequate noise barrier.

The applicant will be required to maintain the erected noise wall as long as there remains a noise conflict between the two uses.

STAFF RECOMMENDATION: Staff recommends approval of the final plan with the following conditions.

1. The noise wall shall be erected per submitted engineering plans (9.5 feet high, wood fence design) unless otherwise required by the Planning Commission. The wall shall be properly maintained by the owner of the mobile home park to provide an adequate noise barrier between Cahoots nightclub and the mobile home park. Maintenance shall include regular graffiti removal, if necessary. No homes shall be moved onto the site until the noise wall has been constructed.

2. Revise the site plan showing the vacation of the 15' utility and irrigation easement and 50' ditch easement along the southern portion of the site.

3. Change perimeter non-street setbacks to 15 feet.

4. Place a note on the site plan that states that no parking shall be allowed on either side of the streets. No parking signs shall also be erected along the streets at various locations.

5. The dumpsters located in the cul-de-sacs shall be screened with a 6' high sight obscuring fence.

6. Prior to final plan approval, submit a section drawing showing where the landscaping will be planted in relation to the Goodwill Drain, any other drainage facilities and utilities.

7. Landscaping as shown on the approved landscape plan shall be installed within one year of construction of Gunnison Avenue.

8. Per preliminary approval, the lease agreements for the mobile home park shall contain a notice that warns persons of the noise generated from Cahoots.

9. The applicant shall prepare instruments for recordation for providing easements on the park roads for ingress/egress to the leasees of the park. their guests and invitees, and also for use by public services, including but not limited to , postal service, trash collection, fire, police, emergency vehicles, and the City of Grand Junction. The exact wording of the easement to be determined.

10. The applicant shall prepare an instrument for recordation to provide an easement for Public Service Company to service the site with electric service. Wording of the easement to be determined.

11. The grading and drainage plan for the site shall be reviewed and approved by the Grand Junction Drainage district prior to final plan approval.

12. A $12,375 Open Space fee is due prior to final approval. Other fees may also apply.

RECOMMENDED PLANNING COMMISSION MOTION:

Mr. Chairman, on item 96-55, I move that we approve the final plan for James Park, a 55 space mobile home park within lot 2, Darwin Subdivision, with the conditions in the staff recommendation.

DAVID L. ADAMS ASSOCIATES, INC.
Consultants in Acoustics and Performing Arts Technologies

March 1, 1996

Mr. Ward Scott
RE/MAX
1401 North 1st Street
Grand Junction, Colorado 81501

Re: Revised - James Park Lot 2 (DLAA Reference No. 5250)

Dear Ward:

Based on the plans and information we have received, we have compiled several recommendations to attenuate excessive noise levels produced by the existing nightclub, Cahoots, on Lot 1. Our recommendations are based on estimated noise levels produced by the nightclub based on historical data from similar projects we have worked on in the past.

1.0 Noise Regulations

The only noise ordinance which may be applicable for the new mobile home park of which we are aware is set forth in Article 12, *Noise Abatement*, of the Colorado State Statutes. A copy of the ordinance is enclosed for your information. The following table indicates the maximum allowable sound levels established by the ordinance at 25 feet from the property line of the zones listed.

Zone	7:00 am to next 7:00 pm	7:00 pm to next 7:00 am
Residential	55 dBA	50 dBA
Commercial	60 dBA	55 dBA
Light Industrial	70 dBA	65 dBA
Industrial	80 dBA	75 dBA

The recommendations that follow are designed to maintain a maximum allowable noise level of 50 dBA at 25 feet south from the South wall of the nightclub. The nearest dwelling unit is to be approximately 95 feet from the southern property line of Lot 1.

2.0 Recommendations

Based on similar past projects, we estimated the average noise level at 10 feet from the nightclub to be 65 dBA, with a maximum level of 72 dBA at the same distance. It is our understanding the nightclub is constructed of masonry units.

To control the noise from the nightclub, we recommend constructing a barrier between the nightclub and the dwelling units. The barrier should prevent a direct line of sight between all of the nearest dwelling units and the nightclub property since potential noise sources could exist in the nightclub's parking lot in addition to the noise coming from the nightclub itself. Therefore, the barrier should be constructed along the eastern and southern property lines of Lot 1. By constructing the wall as close as possible to the property line, i.e. as close as possible to the source, the barrier becomes more effective at attenuating noise.

Ideally, the barrier should be a minimum of 12 feet in height to maintain a maximum noise level of 50 dBA at 25 feet from the property line. We have assumed based on the drawings that the property between Lots 1 and 2 is relatively flat.

At the request of the client, we have also calculated the necessary height of the barrier based on maintaining a maximum noise level of 50 dBA at the nearest dwelling unit to Lot 1, which is to be 95 feet from the property line. Using this criteria, the barrier should be a minimum of 9 feet-6 inches in height.

The barrier may not be able to maintain 50 dBA at the nearest dwelling unit due to typical maximum noise levels from the nightclub property. Typically these maximum noise levels are created by short duration events, such as car horn blasts, a car door slamming, cars starting, etc.

We recommend the following options for the construction of the barrier.

1. Construct the barrier with concrete masonry units.

2. Create the barrier with a free-standing transportation noise barrier, such as the Type FS Transportation Noishield Sound Barrier as manufactured by IAC (see enclosed product literature). The barrier's absorptive side should face the nightclub.

3. Construct the barrier of wood as shown in Figure 1. Wood battens should be used to cover the space between pickets, and the pickets should extend into the ground.

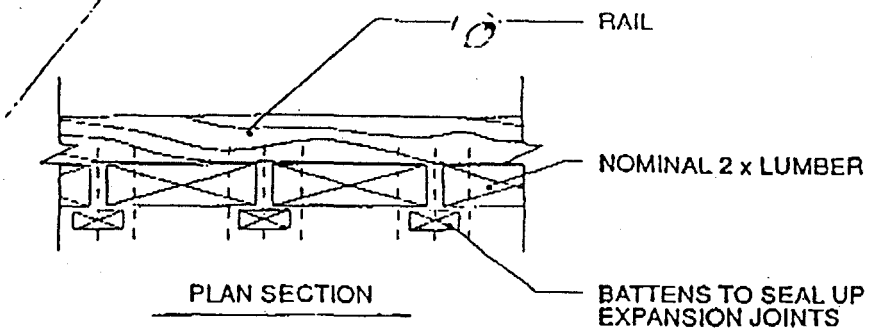
It is important that there be no holes or gaps in the fence construction for proper performance.

If you have any questions about our recommendations, please call.

Sincerely,

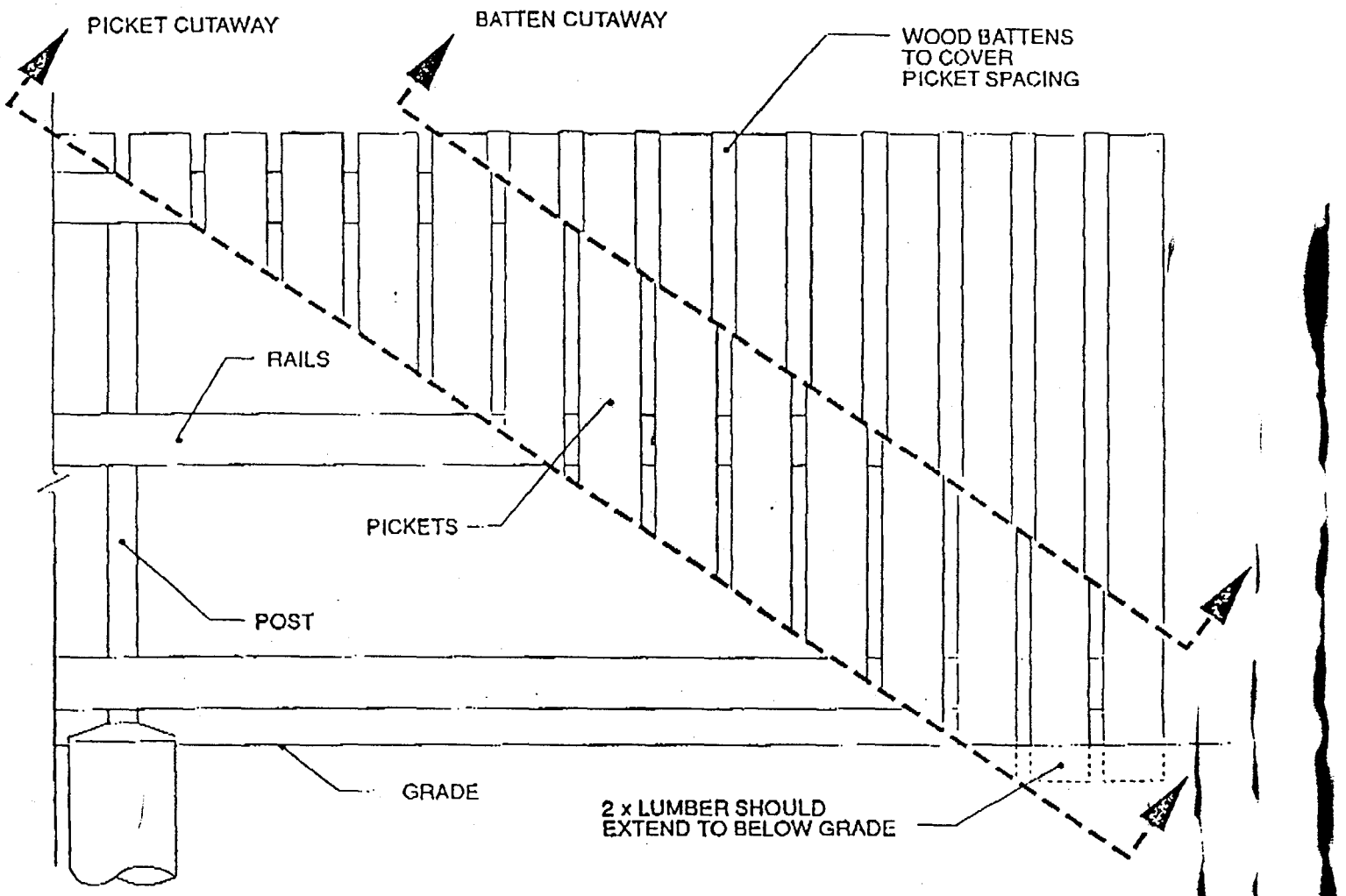
Sean Connolly

Jeffrey P. Kwolkoski, P.E.



PLAN SECTION

NOTE: THE WOOD SELECTED SHOULD HAVE A MINIMUM SURFACE WEIGHT OF 4 lbs./s.f. OR DENSITY OF 30 lbs./c.f. ACCEPTABLE TYPES ARE FIR OR REDWOOD



Wood Barrier Construction

DAVID L. ADAMS ASSOCIATES, INC.
1781 Boulder Street - Denver, Colorado 80211
303 455-1900

James Park Lot 2

no scale

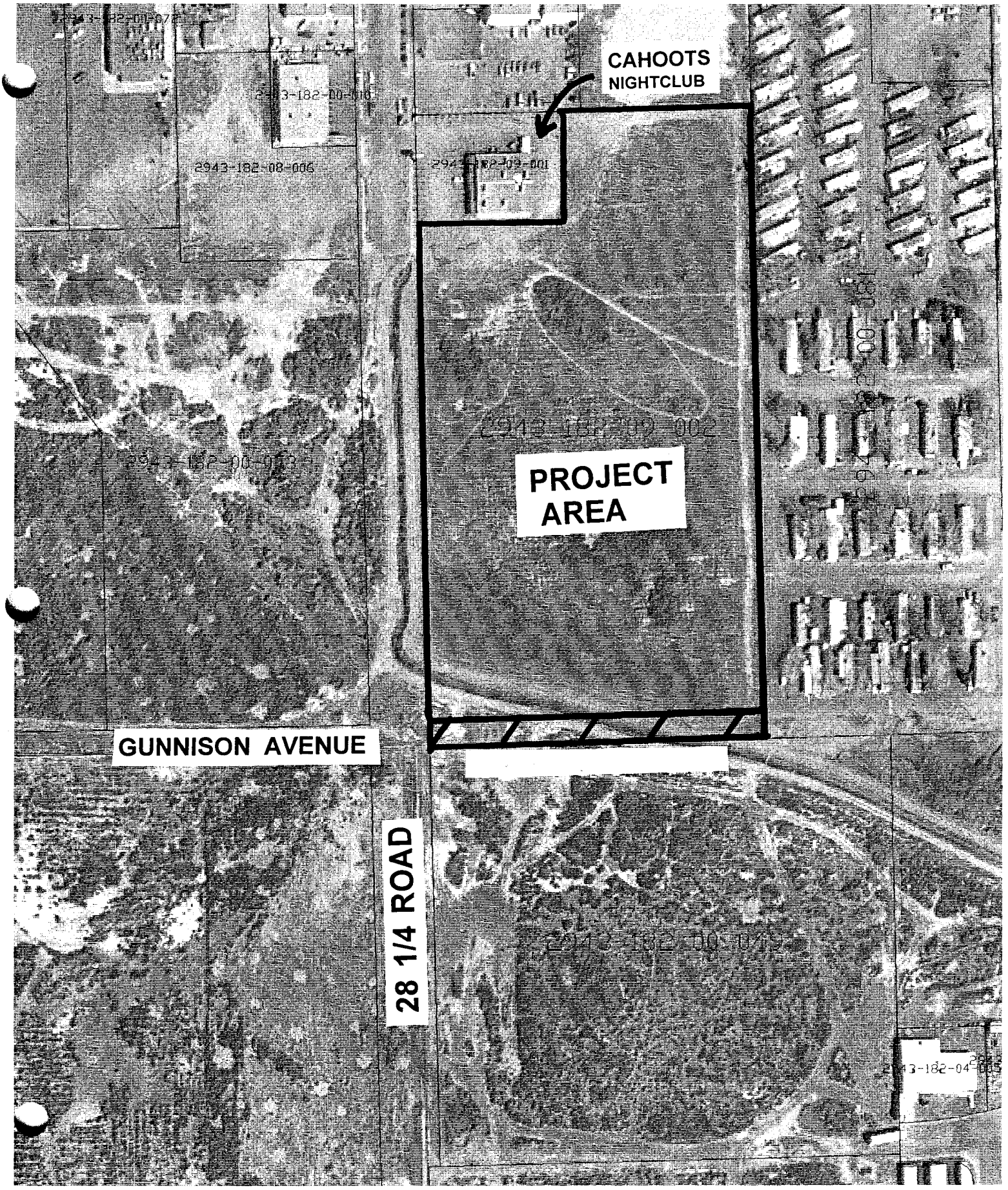
project no. 5250 date: 28 Feb. '96 drawn by: SMC

Figure No.

Helicopter Association International

ILLUSTRATIVE NOISES

dB(A)	OVER-ALL LEVEL	COMMUNITY (OUTDOOR)	HOME OR INDUSTRY (INDOOR)	LOUDNESS (HUMAN JUDGEMENT OF DIFFERENT SOUND LEVELS)
130		MILITARY JET AIRCRAFT TAKE OFF FROM AIRCRAFT CARRIER @ 50 FT (130)		
120	UNCOMFORTABLY LOUD	TURBO FAN AIRCRAFT @ TAKE OFF POWER @ 200 FT (118)	OXYGEN TORCH (121) RIVETING MACHINE (110) ROCK N ROLL BAND (108-114)	120 dB(A) 32 TIMES AS LOUD 110 dB(A) 16 TIMES AS LOUD
110		JET FLYOVER @ 1000 FT (103)		
100	VERY LOUD	POWER MOWER (95) MOTORCYCLE @ 25 FT (90)	NEWSPAPER PRESS (97)	100 dB(A) 8 TIMES AS LOUD 90 dB(A) 4 TIMES AS LOUD
90		CAR WASH @ 20 FT (89) DIESEL TRUCK 40 MPH @ 50 FT (84)	FOOD BLENDER (88) MILLING MACHINE (85) GARBAGE DISPOSAL (80)	80 dB(A) 2 TIMES AS LOUD
80	MODERATELY LOUD	HIGH URBAN AMBIENT SOUND (80) PASSENGER CAR 65 MPH @ 25 FT (77)	LIVING ROOM MUSIC (76) TV AUDIO, VACUUM CLEANER (70)	70 dB(A)
70		AIR CONDITIONING UNIT @ 100 FT (60)	ELECTRIC TYPEWRITER @ 10 FT (64) DISHWASHER (RINSE) @ 10 FT (60)	60 dB(A) ½ AS LOUD
60			CONVERSATION (60)	
50	QUIET	LARGE TRANSFORMERS @ 100 FT (50)		50 dB(A) ½ AS LOUD
40		BIRD CALLS (44) LOWER LIMIT URBAN AMBIENT SOUND (40)		40 dB(A) ½ AS LOUD
10	JUST AUDIBLE	(dB(A) SCALE INTERRUPTED)		
0	THRESHOLD OF HEARING			


CAHOOTS
NIGHTCLUB
PROJECT
AREA
GUNNISON AVENUE
28 1/4 ROAD

ADDENDUM TO STAFF REVIEW - JAMES PARK

FILE: FP-96-55
DATE: May 7, 1996
STAFF: Bill Nebeker
REQUEST: Final plan approval for a 55 space mobile home park
LOCATION: Northeast Corner 28 ¼ Road & Gunnison Avenue
APPLICANT: John Davis

EXECUTIVE SUMMARY: The following addendum is be attached to the Final Staff Report for James Park Final Plan. Some of the information contained in this report was not available when the original report was written. Pages 2 and 3 identify the reason for the recommended changes to the noise wall.

Staff recommends the following changes to the submitted staff report:

A. Change condition #1 to the following:

1. A 12 foot high noise barrier, designed and constructed in accordance with the specifications contained within the David L. Adams Associates recommendation, shall be built within 6 feet of the south and east property line of Cahoots nightclub. The barrier shall be designed to meet requirements of the Uniform Building Code and shall be stamped by a professional engineer. Appropriate wind load and structural calculations shall be submitted with the plan. All wood used for the barrier shall be treated fir, redwood, or an approved equal. An approved equal must be approved prior to obtaining a building permit for the fence. The City may require the applicant to submit certification that verifies that the "approved equal" will be an acceptable alternative.

B. Delete condition #2. The applicant has shown that this easement will be vacated.

C. Change condition #7 to the following:

2. An improvements guarantee or some other type of acceptable guarantee such as a power of attorney, shall be submitted for the landscaping adjacent to Gunnison Avenue to guarantee its installation when Gunnison is improved.

D. Replace condition #11 with the following: An equivalent amount of landscaping shall be planted at the entrance to the park in exchange for the landscaping lost where the southwest cul-de-sac is located in the 10 foot perimeter landscaping area.

Noise Wall

Condition #7 of preliminary plan approval required the following:

"A wall shall be constructed on the property lines adjacent to Cahoots nightclub, designed to provide an adequate sound barrier between Cahoots and James Park and to meet requirements of the Uniform Building Code (UBC). The wall shall have an appropriate setback from 28 1/4 Road. The final determination as to whether the design of the proposed wall will provide an adequate noise barrier between the uses will be determined at the time of Final Plan approval."

The applicant contracted the services of David L. Adams Associates, Inc., a consultant in acoustics and performing arts technologies in Denver, to provide design criteria for the noise wall. The consultant cited 25-12-101, CRS et seq as the only noise ordinance with sets objective, measurable standards, which is applicable for Cahoots and the mobile home park. Article 12 applies to home rule cities as a minimum. The city could, but has not, adopted more stringent standards. The only other ordinance that applies is Section 5-1-1 of the Zoning and Development Code which is much more subjective. It states that, "...noise... shall be effectively confined to the premises where located, or effectively minimized so as not to be injurious or detrimental to the adjacent uses, neighborhood, or general public."

25-12-103 states the following as it pertains to the applicant's proposed noise wall"

"...Sound levels of noise radiating from a property line at a distance of twenty-five feet or more therefrom in excess of the db(A) established for the following time periods and zones shall constitute prima facie evidence that such noise is a public nuisance:

Zone	7:00 a.m. to next 7:00 p.m.,	7:00 p.m. to next 7:00 p.m.
Residential	55 db(A)	50 db(A)
Commercial	60 db(A)	55 db(A)
Light Industrial	70 db(A)	65 db(A)
Industrial	80 db(A)	75 db(A)

The consultant recommended a barrier a minimum of 12 feet in height to maintain a maximum noise level of 50 db(A) at 25 feet from the property line; or a barrier of 9.5 feet in height to maintain a maximum noise level of 50 db(A) at 95 feet from the property line, which is the

location of the nearest dwelling. The applicant has proposed a barrier 9.5 feet in height, which is substandard to meet the requirements of state statute. A 12 foot high barrier is necessary. By providing a 12 foot high barrier **AND** a 95 foot setback (imposed as a condition of preliminary approval) the applicant is exceeding the requirement for an effective noise barrier.

Preliminary plan approval required that the noise wall meet requirements of the Uniform Building Code. The plan submitted by the applicant was prepared by a civil engineer but was not stamped and provided no calculations on wind load (70 mph) or structural requirements. The County Building Department requires that the fence detail be stamped by a professional engineer, with these specifications provided before a building permit for the wall is approved.

The consultant's study (David L. Adams Associates) specified that the acceptable wood for the fence be redwood or fir. Notes on the fence detail states that, "All wood shall be fir, redwood, or approved equal." An "approved equal" must be approved prior to obtaining a building permit for the fence. The City may require the applicant to submit certification that verifies that the "approved equal" will be an acceptable alternative.

final revision, 5-7-96

RE/MAX Above the Crowd!®

May 9, 1996

RECEIVED GRAND JUNCTION
PLANNING DEPARTMENT

MAY 09 1996

Mr. Bill Nebeker
Development Department
City of Grand Junction
Grand Junction, CO 81501

HAND DELIVERED

RE: JAMES PARK

Dear Mr. Nebeker,

Please accept this notice for Mr. Davis who wishes to appeal to the City Council the Planning Commission's condition for final approval of James Park, specifically the requirement for masonry or concrete construction of the sound barrier wall..

Sincerely,

Ward Scott
Broker Associate
Representative for John Davis

RE/MAX 4000, Inc.
1401 North 1st Street
Grand Junction, Colorado 81501
Phone: (970) 241-4000
Fax: (970) 241-4015
Each Office Independently Owned and Operated

REALTOR® MLS®

RE/MAX Above the Crowd!®

May 20, 1996

Mr. Bill Nebeker
Development Dept.
City of Grand Junction

RE: File FP-96-55 James Park

Dear Mr. Nebeker,

Please withdraw my appeal of the Planning Commissions conditions for James Park.

Thank you.

Sincerely,

Ward Scott for John Davis

RECEIVED GRAND JUNCTION PLANNING DEPARTMENT
MAY 21 1996

WS:rs

RE/MAX 4000, Inc.
1401 North 1st Street
Grand Junction, Colorado 81501
Phone: (970) 241-4000
Fax: (970) 241-4015
Each Office Independently Owned and Operated

REALTOR® MLS®

Dave Anderson
Cahoots Crossin'
490 28 1/4 Rd.
Grand Jct. Co. 81501

Bill Nebeker
Community Development
250 North 5th St.
Grand Jct. Co. 81501

May 23, 1996

Dear Bill,

Now that the dust has settled with James Park, I would like to review all of the issues discussed and make sure that I correctly understand everything that has transpired.

The Sound Barrier
The barrier is to be constructed out of concrete masonry units or poured concrete and will be a minimum finished height of 12 feet. It will be constructed and engineered to meet all requirements of the Uniform Building Code. The finished wall is expected to prevent the noise of the nightclub from disturbing the residents of James Park and render acceptable noise levels in accordance with all state and local statutes and ordinances. Maintenance of the barrier shall be the sole responsibility of the park owner and will be preformed in a timely and expedient manner, including all graffiti removal. The set back for the barrier shall be a maximum of 6 feet from the north boundary of the park.

The following are issues that remain vague and I would appreciate having the final detail and decision on the following items.

1. What will be the final appearance of the wall?
2. Will the wall be built on an embankment?

Notice contained in the lease.
A notice shall be included in all lease and rental agreements for James Park. This notice shall state that the adjacent property is a nightclub and that noise from the business and traffic can be expected during its business hours.

I was supposed to receive a copy of this notice for my approval and as of this letter I have not received anything.

Other conditions
Dan Wilson was supposed to send me a copy of the letter to be included in our Liquor License file dealing with the issues addressed by the City Council, I have not received that copy

as yet. If you prefer I can contact him directly regarding this issue.

Please include any other pertinent conditions or issues that I may have failed to addressed relating to Cahoots.

Bill, I would appreciate it if you would respond to these issues in writing so that I can include it in my file. Thank you for all of your assistance through this ordeal and your attention to the above matters.

Sincerely,

Dave Anderson

FAXED 5-29-96
1 PAGE

May 29, 1996

Ward Scott
REMAX 4000, Inc.
1401 N. 1st Street
Grand Junction, CO 81501

RE: James Park Easement Vacation

Dear Ward:

First reading of the ordinance for the above referenced vacation has not been scheduled for the June 5, 1996 City Council hearing. I felt that a meeting with John Ballagh of the Grand Junction Drainage District, Jody Kliska, yourself and myself was necessary prior to scheduling the vacation for first reading. I would hope that some of the issues listed below could be resolved at the meeting. Please call me on Thursday (5-30-96) at 244-1447 and let me know when you will be available for a meeting with John sometime next week.

The issues that need to be resolved before the easements can be vacated are summarized below.

1. Approved plans from GJDD and City for relocation of Goodwill Drain. John Ballagh's 5-2-96 comments required the drain to be farther south to accommodate a 20' wide ditch maintenance road on both sides of the open drain. To date these plans have not been revised and approved.
2. Warranty deed with new easements must be ready for recordation. New easements must be reviewed by City and GJDD and revised by applicant. Some changes are required.
3. Section drawing must be submitted for review and approval by City and GJDD for landscaping adjacent to the Goodwill Drain. (Condition #5 for final plan approval.)
4. Utility Coordinating Council (UCC) must approve the vacation. UCC approval is pending dedication of easement for Public Service to service site with electricity. This new easement is in addition to the 15' easement being dedicated as part of the vacation. Applicant has not indicated how this easement will be dedicated - by deed or plat.

Sincerely,

Bill Nebeker

NOTE - HOW WILL THE OTHER REQUIRED EASEMENTS BE DEDICATED?

Bill Nebeker
Senior Planner

May 30, 1996

Grand Junction Community Development Department
Planning • Zoning • Code Enforcement
250 North Fifth Street
Grand Junction, Colorado 81501-2668
(970) 244-1430 FAX (970) 244-1599

Dave Anderson
Cahoots Crossin'
490 28 1/4 Road
Grand Junction, CO 81501

Dear Dave:

Attached is a copy of the final Planning Commission decision for the James Park Mobile Home Park. In reply to your letter dated May 23, 1996 please be advised of the following.

The appearance of the wall will not be known until plans are submitted by the applicant for final approval. Also not known is if the wall will be built on an embankment. Although the wall may have an earthen berm around its base, the wall structure would still have to be embedded in the ground to support itself. I will notify you when the final plans are submitted and you may review them if you desire.

As shown on the attached final decision, you will also be given the opportunity to review the wording in the leasing agreements for the park. None has been forwarded to you to date because I'm sure the applicant is not that far along in the process.

I have forwarded a copy of your letter to Dan Wilson regarding the letter for the liquor license file. I know he's working on it because he asked me for my comments. If you don't hear back from him shortly I suggest you contact him directly.

I will be working closely with the applicant to assure that the conditions required by the Planning Commission are satisfied. I will apprise you of further developments as they arise on the wall issue as they may affect or you may contact me periodically if you wish.

If you have any questions concerning this letter please call me at 244-1447.

Sincerely,

Bill Nebeker
Senior Planner

6-5-96

STEVE THOMAS
JIM PATTY
DAVID [redacted] ? BAKER
JOHN BALLANTI
WARD SCOTT
BILL METZLER

Issues:

1. separation of landscaping and drain - how far? Inset to be shown on landscaping plan.

2. 20' access road on both sides of drain - along 28 1/4 and Gunnison or just Gunnison; if so, how will landscaping work?

3. If Gunnison is approved in the future, where will the drain go?

4. Have drain relocation plans been approved? NO

5. GJDD to review dedication of new easement - NOT REQUIRED

6. Is a development improvement agreement needed to guarantee relocation of the drain? (If not, will GJDD sign a letter stating that one is not necessary?) - AMEND REQUIRE DIA (IN PUBLIC R/W)

7. (REVISED) grading and drainage plan revisions, must be approved by GJDD as well as City OK

8. document needed from GJDD agreeing to vacation of drain OK

STAFF REVIEW - CITY COUNCIL REPORT - JULY 17, 1996 HEARING

FILE: VE-96-89
DATE: July 10, 1996
STAFF: Bill Nebeker
REQUEST: To vacate and relocate a 15 foot utility and irrigation easement and 50 foot Grand Junction Drainage Ditch right-of-way (Goodwill Drain)
LOCATION: Northeast Corner 28 ¼ Road & Gunnison Avenue
APPLICANT: John Davis

EXECUTIVE SUMMARY: The applicant requests to vacate two easements to accommodate the proposed James Park Mobile Home Park. The easements will be rededicated, as necessary, in an alternate location and drainage facilities relocated at the applicant's expense. Final plans for the relocation of the drain are subject to approval of the Grand Junction Drainage District.

EXISTING LAND USE: Vacant

PROPOSED LAND USE: 55 space mobile home park

SURROUNDING LAND USE:

North:	Commercial
East:	Mobile Home Park
South:	vacant
West:	Manufactured Home Subdivision

EXISTING ZONING: PMH (Planned Mobile Homes)

SURROUNDING ZONING:

North:	C-1 & C-2
East:	C-2
South:	I-1
West:	PR 5.8

RELATIONSHIP TO COMPREHENSIVE PLAN: The preferred alternative for the Growth Plan (Concentrated Urban Growth) shows Residential Medium-High (8-11.9 dwellings per acre) for this site. 6.7 units per acre are proposed for this site.

STAFF ANALYSIS: The applicant requests to vacate a 15 foot wide utility and irrigation easement that cuts through the southwest corner of the approved James Park - Mobile Home Park, located at the northeast corner of Gunnison Avenue and 28 1/4 Road. There were no utilities found in the utility easement. Public Service Company has requested that a utility

easement be provided in an alternate location to service homes located in the interior of the park. Vacation of these easements are contingent upon rededication of new easements.

A 50 foot wide ditch containing the Goodwill Drain is also requested to be vacated. Originally it was proposed to relocate this ditch along the south side of the property, in the Gunnison Avenue right-of-way. Currently Grand Junction Drainage District and the applicant have agreed to work together on a plan to divert the ditch to continue south along 1/4 Road. The ditch would also be placed underground. A new easement may be necessary along a portion of the west property line. Grand Junction Drainage District requires that the ditch be relocated wholly at the expense of the developer. The developer may pay the District to relocate the drain or have it done by private contractor, subject to District acceptance of plans and specifications and inspections. All plans and specifications will be approved before second reading of the ordinance to vacate the easement. A revised ordinance will also be submitted showing Grand Junction Drainage District's concurrence with the vacation of their easement.

The proposed vacations are in compliance with the established vacation criteria as specified in Section 8-3 of the Zoning and Development Code, including the following:

8-3-1 LANDLOCKING - The proposal does not land lock any parcel of land.

8-3-2 RESTRICTIVE ACCESS - The proposal does not restrict access to any parcel of land.

8-3-3 QUALITY OF SERVICES - The proposal has no adverse impacts on the health, safety, and/or welfare of the general community. It does not reduce the quality of utility services because easements will be rededicated in alternate locations to accommodate needed utilities to serve adjacent properties.

8-3-4 ADOPTED PLANS & POLICIES - The proposal does not conflict with adopted plans and policies.

8-3-5 BENEFITS TO CITY OR COUNTY - The proposal benefits the City indirectly by allowing for better efficiency of land area within the mobile home park. At least four additional spaces are gained with the relocation of the easements. Mobile homes parks provide affordable housing alternatives in Grand Junction.

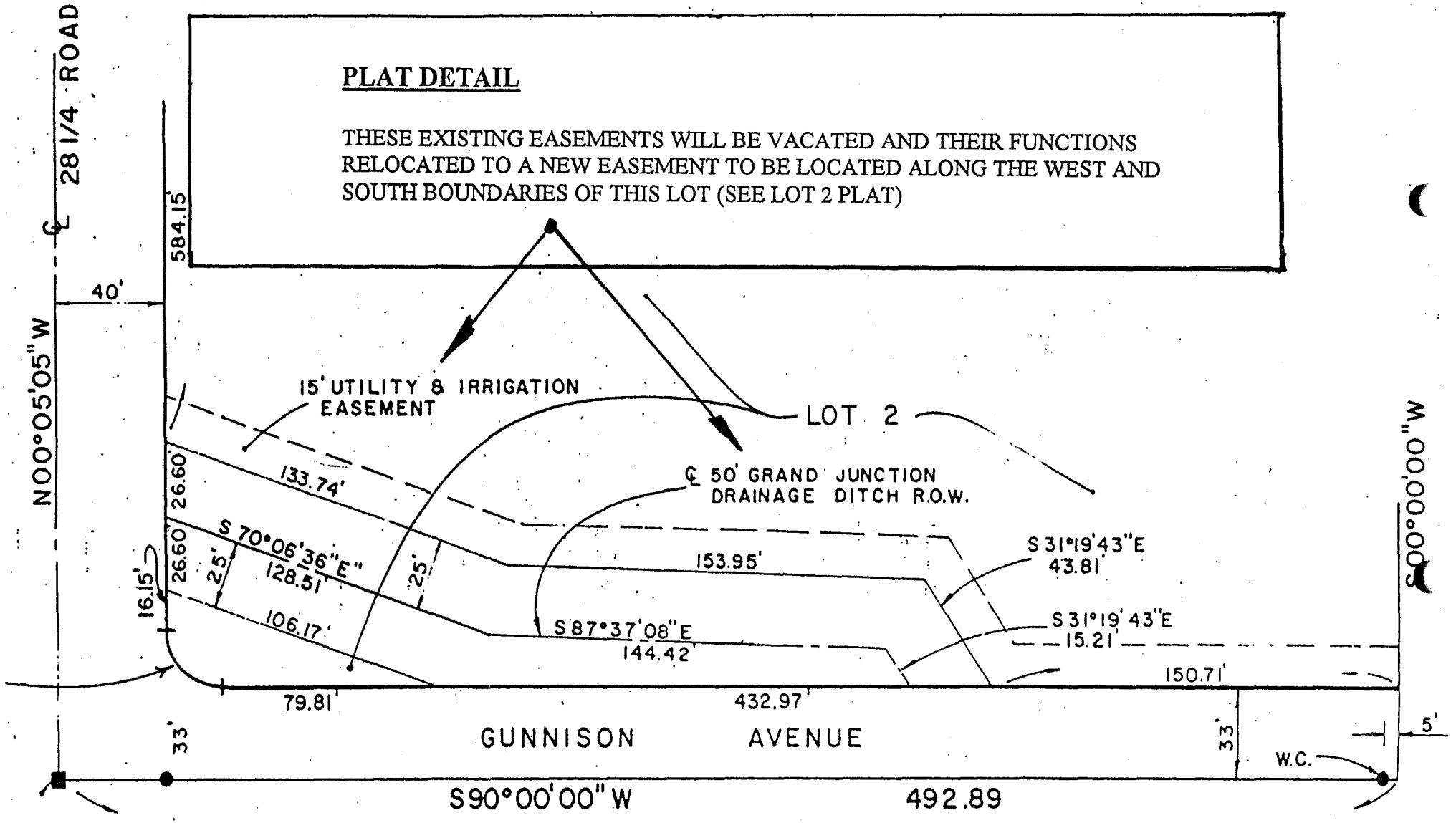
At their May 7, 1996 hearing, the Planning Commission recommended approval of this easement vacation with the following conditions:

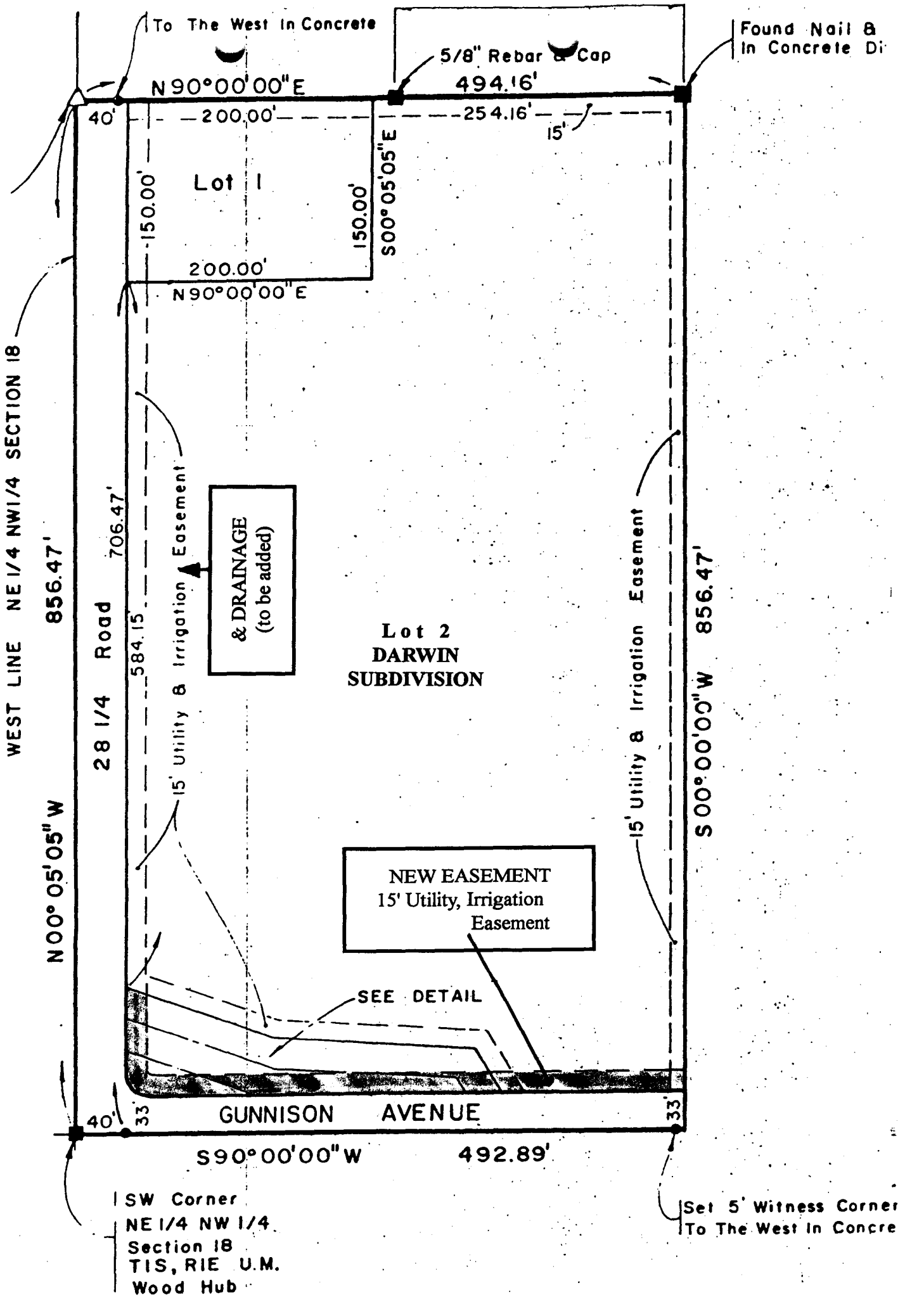
1. The applicant shall submit plans for the relocation of the Goodwill Drain to the City and Grand Junction Drainage District for review and approval prior to vacation of the easement. A development improvements agreement shall be filed, guaranteeing the relocation of the ditch prior to vacation.

2 The applicant shall submit deeds of conveyance for the relocation of the easements.

RECOMMENDATION:

Staff recommends that the Planning Commission's decision be upheld and the attached ordinance be adopted vacating these easements.


PLAT DETAIL
THESE EXISTING EASEMENTS WILL BE VACATED AND THEIR FUNCTIONS RELOCATED TO A NEW EASEMENT TO BE LOCATED ALONG THE WEST AND SOUTH BOUNDARIES OF THIS LOT (SEE LOT 2 PLAT)
℄ 28 1/4 ROAD
N00°05'05"W
584.15'
40'
15' UTILITY & IRRIGATION EASEMENT
LOT 2
℄ 50' GRAND JUNCTION DRAINAGE DITCH R.O.W.
133.74'
26.60'
S 70°06'36"E
128.51'
25'
25'
26.60'
16.15'
106.17'
153.95'
S 31°19'43"E
43.81'
S87°37'08"E
144.42'
S 31°19'43"E
15.21'
150.71'
S00°00'00"W
79.81'
432.97'
33'
GUNNISON AVENUE
33'
5'
W.C.
S90°00'00"W
492.89
SW CORNER
NE1/4 NW1/4
SECTION 18
SCALE: 1"= 50'


To The West In Concrete
5/8" Rebar & Cap
Found Nail &
In Concrete Di
N90°00'00"E
494.16'
40'
200.00'
254.16'
15'
S00°05'05"E
Lot 1
150.00'
150.00'
200.00'
N90°00'00"E
WEST LINE NE1/4 NW1/4 SECTION 18
856.47'
706.47'
584.15'
28 1/4 Road
15' Utility & Irrigation Easement
& DRAINAGE
(to be added)
Lot 2
DARWIN
SUBDIVISION
15' Utility & Irrigation Easement
S00°00'00"W 856.47'
N00°05'05"W
NEW EASEMENT
15' Utility, Irrigation
Easement
SEE DETAIL
40'
33'
GUNNISON AVENUE
33'
S90°00'00"W 492.89'
SW Corner
NE1/4 NW1/4
Section 18
T1S, R1E U.M.
Wood Hub
Set 5' Witness Corner
To The West In Concre

CITY OF GRAND JUNCTION

Ordinance No. _____

VACATING A 15 FOOT UTILITY AND IRRIGATION EASEMENT AND A 50 FOOT DRAINAGE DITCH RIGHT-OF-WAY TO ACCOMMODATE CONSTRUCTION OF A MOBILE HOME PARK LOCATED ON LOT 2 DARWIN SUBDIVISION AT THE NORTHEAST CORNER OF 28 1/4 ROAD AND GUNNISON AVENUE

Recitals.

To accommodate the construction of the James Park Mobile Home Park located at the northeast corner of 281/4 Road and Gunnison Avenue, certain easements are being vacated and relocated through the development process. There are no utilities identified in the utility easement to be vacated. A utility easement will be dedicated in an alternate location to serve this development. The Goodwill Drain is being relocated to the exterior of the site.

At its May 7, 1996 hearing, the Grand Junction Planning Commission recommended approval of vacation of the following described easements.

NOW, THEREFORE BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF GRAND JUNCTION, COLORADO:

City Council finds that the vacation meets the criteria set forth in Section 8-3 of the Zoning and Development Code and in accordance therewith the following described 15 foot utility and irrigation easement located in Lot 2, Darwin Subdivision as recorded in Plat Book 12 at Page 303 in the office of the Mesa County Clerk and Recorder, the south line of which is described as follows:

Commencing at the northwest corner of said Lot 2; thence S00°05'05"E a distance of 584.15 feet along the west line of said Lot 2, to the point of beginning;
thence S70°06'36"E a distance of 133.74 feet;
thence S87°37'08"E a distance of 153.95 feet;
thence S31°19'43"E a distance of 43.81 feet;
thence S90°00'00"E a distance of 150.71 feet to the point of terminus, being the southeast corner of said Lot 2.

and the 50 foot Grand Junction drainage ditch right-of-way located in Lot 2, Darwin Subdivision as recorded in Plat Book 12 at Page 303 in the office of the Mesa County Clerk, being 25 feet on each side of the following described center line:

Commencing at the northwest corner of said Lot 2; thence S00°05'05"E a distance of 610.75 feet along the west line of said Lot 2, to the point of beginning;
thence S70°06'36"E a distance of 128.51 feet;
thence S87°37'08"E a distance of 144.42 feet;
thence S31°19'43"E a distance of 15.21 feet to the point of terminus.

are hereby vacated. The vacation of each and/or both of the preceding easement and right-of-way is expressly contingent upon recordation of an instrument depicting and describing a 15 foot wide utility, irrigation and drainage easement along the south and portion of the west boundary of Lot 2, Darwin Subdivision as required by the City.

CHANGE TO REFLECT DEDICATION CHANGES

INTRODUCED for FIRST READING and PUBLICATION this day of 1996

PASSED on SECOND READING this day of , 1996.

ATTEST:

City Clerk

President of City Council

Grand Junction Community Development Department
Planning • Zoning • Code Enforcement
250 North Fifth Street
Grand Junction, Colorado 81501-2668
(970) 244-1430 FAX (970) 244-1599

July 11, 1996

Ward Scott
REMAX 4000, Inc.
1401 N. 1st Street
Grand Junction, CO 81501

RE: James Park Easements Vacation

Dear Ward:

The ordinance for these vacations has been scheduled for City Council's first reading on July 17, 1996. Prior to being scheduled for second reading the following must be completed:

1. I need a letter from John Ballagh of the Grand Junction Drainage District stating that the district agrees to the vacation of that portion of the Goodwill Drain easement that is being vacated. This letter will be attached to the ordinance.

2. The Utility Coordinating Council (UCC) must approve of the vacation of the easements. To do so, Public Service Company has requested either a blanket easement for their facilities over the entire lot, or an easement as shown on the plat map in your possession. I will need a copy of a signed Warranty Deed, ready for recording for this new easement. (NOTE: How will the other easements, i.e. easements for public ingress & egress, postal service, trash collection, fire, police, emergency vehicles and City of Grand Junction over the proposed road, be dedicated?)

3. I will need a warranty deed for the rededication of the utility and irrigation easements along the west and south boundary of lot 2. This deed should be signed and ready for recordation.

4. I must have approved plans for the relocation of the Goodwill Drain. Plans must be approved by the drainage district and Jody Kliska. Some form of gurantee for the relocation of the ditch must be made. This may be accommodated by rewording the ordinance to state that the vacation is expressly contingent upon relocation of the ditch into the new easement.

These items must be submitted by Tuesday July 16, 1996 at 5:00 p.m. If they are not, the vacation will be pulled from the City Council hearing on July 17th and rescheduled for a later hearing.

If you have any questions please call me at 244-1447.

Sincerely,

Bill Nebeker
Senior Planner

Remaining Items for James Park
August 9, 1996

1. Make needed corrections to plans:
   - site plan - see redlined copy
   - landscape plan - see redlined copy
     - -grass in right-of-way & irrigation system
     - -equivalent amount of landscaping lost due to cul-de-sac
     - -trees & shrubs on property
     - -landscaping along Gunnison Ave
     - -juniper - hedge-like effect?
   - wall plan with requirements from condition #1
   - any needed corrections on any other plans

   Resubmit a full set of plans with a cover sheet (stapled & rolled); 2 copies 1- Jody, 1- Bill

2. $16 recording fee for vacation ordinance; make check payable to Mesa County Clerk & Recorder

3. Dedication of new easements

   a- blanket utility easement
   b- irrigation easement along west and south line
   c- ingress/egress easement

   d- attachments

   Tim still working on form for irrigation easement, John Shaver still reviewing Tim's recommended form

   Recording fee for dedication of easements and attachments: fee to be determined

4. John Shaver still reviewing language in lease agreements for mention of noise at Cahoots; Dave Anderson from Cahoots to review prior to final approval

5. Development Improvements Agreement

6. Fees: Open Space $12,375
   Letter request for TCP credit: detail cost of street improvements

Note: UCC - approved

CITY OF GRAND JUNCTION PLANNING COMMISSION
GRAND JUNCTION, COLORADO

FOR	)	**FINAL DECISION**
	)	
John Davis	)	**FP-96-55**
1023 24 Road	)	
Grand Junction, CO 81505	)	

An application by John Davis, requesting approval of a Final Plan for a 55 space mobile home park in a Planned Mobile Home zoning district, affecting the real property described below, was considered by the City of Grand Junction Planning Commission on May 7, 1996.

The real property affected by said application is described as Lot 2, Darwin Subdivision, located at the northeast corner of Gunnison Avenue and 28 1/4 Road; tax parcel number 2943-182-09-002.

After considering all the pertinent testimony and reviewing various data, the Planning Commission approved the final plan with the following conditions:

CONDITIONS

1. A 12 foot high noise barrier, designed and constructed in accordance with the specifications contained within the David L. Adams Associates recommendation, shall be built within 6 feet of the south and east property line of Cahoots nightclub. The barrier shall be designed to meet requirements of the Uniform Building Code and shall be stamped by a professional engineer. Appropriate wind load and structural calculations shall be submitted with the plan. The barrier shall be constructed of concrete masonry units or concrete. Maintenance shall include regular graffiti removal, if necessary. No homes shall be moved onto the site until the noise wall has been constructed.

2. Change perimeter non-street setbacks to 15 feet.

3. Place a note on the site plan that states that no parking shall be allowed on either side of the streets. No parking signs shall also be erected along the streets at various locations.

4. The dumpsters located in the cul-de-sacs shall be screened with a 6 foot high sight obscuring fence.

5. Prior to final plan approval, submit a section drawing showing where the landscaping will be planted in relation to the Goodwill Drain, any other drainage facilities and utilities.

6. The landscape plan shall be revised to include shrubs along the 28 1/4 and Gunnision rights-of-way. A species shall be selected that will provide a hedge-like effect and act as a buffer. The shrubs shall replace half of the proposed grass.

7. Per preliminary approval, the lease agreements for the mobile home park shall contain a notice that warns persons of the noise generated from Cahoots. (Note: The wording for these lease agreements shall be reviewed by representatives of Cahoots Crossin' nightclub prior to final plan approval.)

8. A plat or other appropriate instrument shall be prepared by the applicant for providing easements on the park roads for ingress/egress to the leasees of the park. their guests and invitees, and also for use by public services, including but not limited to , postal service, trash collection, fire, police, emergency vehicles, and the City of Grand Junction. The exact wording of the easement to be determined. The plat shall include an easement for Public Service Company to service the site with electric service. Wording of the easement to be determined.

9. An equivalent amount of landscaping shall be planted at the entrance to the park in exchange for the landscaping lost where the southwest cul-de-sac is located in the 10 foot perimeter landscaping area.

10. The grading and drainage plan for the site shall be reviewed and approved by the Grand Junction Drainage district prior to final plan approval.

11. A $12,375 Open Space fee is due prior to final approval. Other fees may also apply.

NOTE: Revised plans incorporating the conditions listed above must be submitted and approved before construction may begin.

The undersigned does hereby declare that the said Planning Commission reached its decision as heretofore noted.

Bill Nebeker
Senior Planner

c: Ward Scott
Dave Anderson

CITY OF GRAND JUNCTION PLANNING COMMISSION
GRAND JUNCTION, COLORADO

City of Grand Junction, Colorado
250 North Fifth Street
81501-2668
FAX: (303) 244-1599

FOR	)	FINAL DECISION
John Davis 1023 24 Road Grand Junction, CO 81505	)	RZP-95-199

An application by John Davis, requesting a rezoning, preliminary plan and street vacation for development of a 56 space manufactured home rental park, affecting the real property described below, was considered by the City Council of the City of Grand Junction on January 17, 1996.

The real property affected by said application is described as lot 2, Darwin Subdivision, located at the northeast corner of Gunnison Avenue and 28 1/4 Road; tax parcel number 2943-182-09-002.

After considering all the pertinent testimony and reviewing various data, the City Council approved ordinance #2889, which adopted Planned Mobile Homes (PMH) zoning for this parcel. The street vacation request was withdrawn by the applicant. Council also approved the preliminary plan for the mobile home park, with the conditions listed below, upon a finding that the proposal complies with Section 4-4-4 of the city's zoning code.

CONDITIONS

1. The preliminary plan will be modified to show Gunnison Avenue. (If Gunnison Avenue is vacated an easement will be retained over the entire right-of-way for utilities.)

2. An increase in density greater than 10 percent will require re-review of the preliminary plan by the Planning Commission.

3. No vehicular access will be allowed to 28 1/4 Road except from the designated street.

4. Half street improvements shall be constructed on 28 1/4 Road.

5. Open spaces fees equal to $225 per mobile home space shall be required for this development.

6. The following standards are to be imposed as conditions of approval for the final plan:

   a. The final plan shall show a "typical drawing" for each space, showing minimums; e.g. size and boundaries of each space, placement of carport with setbacks to street and

other structures, location and dimensions of driveway, walks, storage shed and proposed landscaping for each unit.

b. Two off street parking spaces shall be provided for each dwelling. The "typical" drawing above should show where these spaces are located.

c*. Show a numerical figure for minimum setbacks:

perimeter street setback:	15′
perimeter non-street setback:	12′
other setbacks:	
carport to mobile home	6′
mobile home to mobile home	26′
mobile home to street (sidewalk)	10′
carport to street (sidewalk)	to be determined

d. At least 10′ of the perimeter street setback along 28 1/4 Road and Gunnison Avenue (unless vacated) shall be landscaped. A detailed landscape plan shall be submitted for review and approval prior to approval of the final plan for this site. The plan shall include trees spaced no further than 40′ apart.

e. The perimeter of the storage area along 28 1/4 Road shall be screened with a 6′ high sight-obscuring fence or wall. The fencing shall be set back at least 10′ from 28 1/4 road and the remainder of the area (to the road) landscaped.

f. More detail will be required for the park and community center. Parking areas for the community center shall be paved. Long term parking within storage area may be gravel. The community center may be moved to the park location.

g. Maximum height for any structure is 32′.

h. Maximum lot coverage is 50%.

i. Adequate street lighting shall be provided on interior streets.

*. Item 6c is considered advisory only with details being worked out at the final plan stage.

7. A wall shall be constructed on the property lines adjacent to Cahoots nightclub, designed to provide an adequate sound barrier between Cahoots and James Park and to meet requirements of the Uniform Building Code. The wall shall

have an appropriate setback from 28 1/4 Road. The final determination as to whether the design of the proposed wall will provide an adequate noise barrier between the uses will be determined at the time of Final Plan approval.

8. No residences shall be placed closer than 115 feet to the east property line of Cahoots or 95 feet to the south property line.

9. The park shall include the planting of at least 5 large trees along the west property line adjacent to Cahoots.

10. The lease agreements for the mobile home park shall contain a notice that warns persons of the noise generated from Cahoots.

11. The applicant may submit a final plan showing a revised road plan, subject to staff review.

The undersigned does hereby declare that the said City Council reached its decision as heretofore noted. Dated this 19th day of January, 1996.

Bill Nebeker
Senior Planner

c: Larry Beckner

City of Grand Junction
250 North 5th Street
Grand Junction, CO 81501
(970) 244-1447

Fax Cover Sheet

DATE:	September 16, 1996	**TIME:**	2:33 PM
TO:	Dave Anderson Cahoots Crossin	**PHONE:** **FAX:**	245-0606 256-9765
FROM:	Bill Nebeker BN Senior Planner	**PHONE:** **FAX:**	244-1447 244-1599
RE:	James Park lease agreement		

Number of pages including cover sheet: 1

Message

John Davis and his representative, Ward Scott proposed the following language to be included in the lease agreement for James Park.

"21. Cahoots Crossin bar and lounge has loud music during evening and night hours. Please notice the sound barrier wall that has been installed on the northwest corner of James Park to help reduce the noise level."

Please call me or FAX any changes you propose. Thanks.

BECKNER, ACHZIGER, McINNIS, PALO & JUNGE, LLC
Attorneys at Law
225 North 5th, Suite 850
P.O. Box 220
Grand Junction, CO. 81502
(970) 245-4300
Telefax: (970) 243-4358

TELECOPY/FAX COVER SHEET

DATE: October 1, 1996

FROM: Larry B. Beckner

TO: Bill Nebeker

Your FAX No. 244-1599

RE: Cahoots Bar

Dear Bill:

Please insert the following language in the John Davis Lease:

21. **Cahoots Crossin bar and lounge, located at the northwest corner of the Park, is a nightclub that plays loud music during evening and night hours. A sound barrier wall has been installed between the Park and Cahoots to reduce the noise level but residents may still experience unwanted noise. Cahoots was in business for many years prior to the construction of James Park. By signing this Lease you acknowledge the presence of the nightclub, the likelihood of noise, and [redacted]**

Give me a call with any questions.

Sincerely,

Larry B. Beckner

OK PER LARRY BECKNER
10-31-96

No. of Pages INCLUDING Cover Sheet:

Friday, October 04, 1996

Mr. Bill Nebeker
City Community Development
hand delivered

Dear Bill:

Attached please find three sets of James Park plans, easements, improvement agreement, and disbursement agreement. Note that the Goodwill Drain improvements will be separately ageed to with the Drainage District, the same as done for Niagara Village.

Sincerely,

Ward Scott
Broker Associate

RECEIVED GRAND JUNCTION
PLANNING DEPARTMENT
OCT 04 1996

RE/MAX 4000, Inc.
1401 N. 1st Street
Grand Junction, Colorado 81501
Office: (970) 241-4000
Toll Free: (800) 777-4573
Fax: (970) 241-4015
Each Office Independently Owned and Operated

MEMO 10-21-96 BN

TO: Ward Scott FROM: Bill Nebeker SUBJECT: James Park Final Comments

Please review attached comments and call me and/or make corrections and submit 4 full sets of revised plans.

Corrections needed:

1a. Development Improvements Agreement (DIA) must include all off-site improvements including goodwill drain pipe, manholes and siphon, 28 1/4 road improvements, any remaining off-site utility work, landscaping (grass) and irrigation system for grass, city inspection, general contract supervision and contingency. All improvements in the DIA must be completed within 12 months as noted.

1b. Page 2 of 2, line 16 of Exhibit "B" Improvements List/Detail, directs reader to attached bid sheet for street lights. I assume this is for the public street lights required along 28 1/4 Road and not the interior street lights? The attached estimate from Parkerson Construction Inc. for $33,622 doesn't include street lights or the detached sidewalk. As noted above, include estimates for the goodwill drain pipe, manholes and siphon. If the trees, shrubs and interior grass will not be planted this fall and you want a building permit prior to planting they must be included in the DIA.

~~2.~~ On site improvements such as trees, shrubs, irrigation system, noise wall, interior streets, utilities, etc. must be installed before a permit is issued for any manufactured home to be located on site. If installation of on site improvements are to be delayed, they must be included in the DIA so the building permits are not held up. The noise wall MUST be constructed before any homes are moved onto the site.

~~3.~~ Note: John Ballagh has approved final drainage plans.

~~4.~~ Change cover sheet on landscape plan to indicate that minimum 1.5" caliper trees will be planted along 28 1/4 Rd. and Gunnison. Delete the verbage that says the trees will be at least 4' high at the time of planting.

~~5.~~ Note: Wall design will require a building permit and must be approved by County Building Dept. prior to erection.

6. What is outcome of Ward's discussion with Larry Beckner regarding language in lease agreement for Cahoots noise?

7. Revised DIA and Disbursement Agreement needs signatures.

~~8~~ Fees: Recording easements - $38 easements; $6 memo for improvements agreement; Open Space Fees $12, 375. $500 TCP to be paid prior to placing trailers.

~~9.~~ What is proposed in the northerly 6' of Gunnision Ave. to be included on Exhibit A (legal description) of the DIA?

FAXED 10-21-96 1 page

#48

RE/MAX Above the Crowd!®

RECEIVED GRAND JUNCTION
PLANNING DEPARTMENT
25
OCT 31 1996

Thursday, October 24, 1996

Mr. Bill Nebeker
Current Community Development
City of Grand Junction
hand delivered

Re: James Park, your Memo of 10/21/96

Dear Bill:

The below paragraphs will respond to the same paragraph numbering used in the referenced memo.

1a. All off-site utility development required of the Developer has been completed, including extension of the Fruitvale sewer onto the property. The DIA has been revised to include the 28 1/4 Rd. sidewalk and is attached. As we have agreed, the Goodwill drain improvements need not be included in the DIA as the Niagara and James Park Developers have made arrangements with GJDD.
1b. Line 16. has been reworded to read "28 1/4 Rd. Street Total" and includes the sidewalk. No additional off-site street lights are required, as one has been installed as part of Niagara.
2. and 3. Noted.
4. Revised Landscaping Plan, Sheet 1 is attached; see Note 1.
5. Noted
6. I talked with Larry Beckner on 10/23 and advised him that John will incorporate the language in his memo of 10/1/96 except for the last phrase "...and your agreement not to complain about this prior existing condition", per attached. John feels that phrase is an unreasonable condition since there is State law that does in fact limit Cahoots noise level and this would exclude his tenants from that ultimate protection. Larry said he would get back to me, but I've not yet heard from him. Still have not. 9:00AM 10/25
7. As discussed with you, once John has had all plans and conditions of review approved by the City and paid the fees in 8. below, he will begin construction but will not put any homes in place. When he wants to obtain permits to put homes in place, he will first deliver to you the executed DIA and guarantee for any off and on site improvements not yet completed which

RE/MAX 4000, Inc.
1401 N. 1st Street
Grand Junction, Colorado 81501
Office: (970) 241-4000
Toll Free: (800) 777-4573
Fax: (970) 241-4015
Each Office Independently Owned and Operated

REALTOR® MLS®

will be subject to your on-site inspection and approval.
8. Recording and Open Space fee checks are attached.
9. Legal revised to delete Gunnison Ave. 6 ft.

If the above meets your requirements for approval of the James Park plans and conditions, may we please have your written confirmation.

Sincerely,

Ward Scott
Broker Associate

cc: John Davis

February 14, 1997

To: City of Grand Junction

From: John Davis

The following costs were incurred by John Davis on the improvements to 28 ¼ Rd. pursuant to the development of James Park.

Parkerson Construction:		
1. excavation	$ 650.00	
2. subgrade	1000.00	
3. cl-6 road base	7200.00	
4. traffic control	750.00	
5. sidewalk prep	862.50	
6. sidewalk base	909.00	
60' of 8" c-900 waterline	750.00	
connect to existing watermain	1150.00	
TOTAL		$13,271.50
Mays Concrete:		
Sidewalk 4" detached	$5198.00	
570' 24" curb & gutter	3819.00	
320' 7' vertical curb & gutter	4080.00	
930 sq ft 8' fillets & cross pans	3069.00	
TOTAL		$16166.50
United Companies:		
Asphalt TOTAL		$ 6791.40
Grand Junction Pipe & Supply:		
Drainage ditch pipe		$11,878.80
Surveying		$ 3,510.00
Engineering & testing		$ 2,780.00
TOTAL		$54,398.20

To: Bill Nebeker
Cc: Trenton Prall,Don Newton
From: Kerrie Ashbeck
Subject: James Park Status
Date: 10/20/98 Time: 8:26AM

I have the punch list from the final walk-through conducted by Jody on June 3, 1997. John Davis signed it and we always give the developer the original, so he should have it. Anyway, as noted on that form we need the following items:

1) As-built drawings for all public improvements including utilities and 28 1/4 Road.
2) A test result packet for all public improvements.
3) The engineer's certification of the drainage facilities.

A list of these items is in the SSID manual along with corresponding checklists for each item. I have copies of these documents and will bring a packet down for you to pass on to the developer. Please note that submittal and City approval of these items is a standard requirement for all projects with public improvements. The City does not accept maintenace of the public street improvements, the developer is not released from his DIA, and the developer's warranty for the public improvements does not begin until these steps are completed along with any punch list items. (Jody did not note any other punch list items for James Park besides submitting as-builts.)

Kerrie

Submittal Requirements for Final Acceptance of Improvements

The following items must be submitted prior to the acceptance of streets, drainage, and utilities by the City of Grand Junction.

X As-Built Drawings (Reference SSID IX-5,6,X,8,9) irrigation
- Sealed by a Professional Engineer
- Two Blue-line copies
- One Mylar Copy
- One 3 1/2" Floppy Disk with drawing files

X Report (Reference SSID X-2,3,4)
- Testing Location Map
- Inspection Diaries
- Testing Reports

X Certification of Detention/Retention Basin (Reference SSID IX-6)
- Sealed by a Professional Engineer

Note: A one-year warranty period begins once public facilities are accepted by the City of Grand Junction. Any defects or deficiencies which occur during this period must be corrected by the developer. (Reference Zoning and Development Code 5-4-12, A-4)

Memorandum

DATE: October 20, 1998

TO: Bob Hurni
Sundance Properties

FROM: Bill Nebeker

SUBJECT: Final Punchlist for James Park

Attached is information from Kerrie regarding final punchlist for improvements at James Park. If you have any specific questions regarding these requirements please call Kerrie Ashbeck at 244-1443. You may return these items to my attention and I'll get them to Kerrie. The DIA will be released after these items are completed.

If you have any questions please call me at 244-1447.

WESTERN COLORADO TESTING, INC.

REVIEW OF CONSTRUCTION

Job No.: 310296

Client: John Davis | Report No.: 2 | Date: 12-13-96

Project: James Village | Report By: M. Nutter | Date: 12-13-96

Prime Contractor: United Companies, Inc. | Superintendent:

Subcontractor: Mays Concrete, Inc. | Superintendent: Joe Gorrino

Work in progress and/or completed since last report: The subcontractor is placing concrete for curb/gutter and sidewalk cul-de-sac just south of Cahoot's Bar at James Village.

Unexpected site conditions: N/A

Sampling and/or testing performed: Sampled and tested concrete for slump, air content, unit weight, and concrete compressive strength.

Conformance of materials, operations and/or test results to project requirements: Slump = 1.5", air content = 6.0%, unit weight = 143.1 pcf, concrete temperature = 74°F, concrete compressive strength will be determined on curing schedule.

Person/persons notified of nonconformance to project requirements: N/A

Nonconformance corrected: N/A

Instructions or information received(from): N/A

Weather: Clear, warm, 50's

Technicians time on project today: 2 hours | No. of visits today: 1

Time and date of next visit: Will call | Reviewed by: R Fife

WESTERN COLORADO TESTING, INC.

REVIEW OF CONSTRUCTION

Job No.: 310296

Client: John Davis | Report No.: 1 | Date: 12-12-96

Project: James Village | Report By: L. Sanchez | Date: 12-12-96

Prime Contractor: United Companies, Inc. | Superintendent: Alan Boyles

Subcontractor: | Superintendent:

Work in progress and/or completed since last report: The contractor is placing (-)3/4" "C" City of Grand Junction m on 28 1/4 Road widening between Niagara Village and James Village.

Unexpected site conditions: N/A

Sampling and/or testing performed: Asphalt mix sampled by Richard Bailey with City Engineering Departmer Density tests on asphalt mat.

Conformance of materials, operations and/or test results to project requirements: All density tests taken met proj specifications. Asphalt materials conformance to be determined after laboratory analysis of sampled asphalt mix.

Person/persons notified of nonconformance to project requirements: N/A

Nonconformance corrected: N/A

Instructions or information received(from): On December 13, 1996, Alan Boyles requested technician on site at Niag Village for compaction monitoring of asphalt mix.

Weather: Partly cloudy and warm

Technicians time on project today: 2.5 hours | No. of visits today: 1

Time and date of next visit: 12-13-96, 9:00 a.m. | Reviewed by: BS

msa:jobs\3102rd12.doc

WESTERN COLORADO TESTING, INC.

COMPRESSIVE STRENGTH OF CYLINDER CONCRETE SPECIMENS

Job No.: 310296

Client: John Davis

Date of Report: 12-13-96

Reviewed By: R Life

Project: James Village Subdivision

Location of Placement: Cul-de-sac curb and gutter/sidewalk, just south of Cahoot's Bar

Contractor: Mays Concrete, Inc. Architect/Engineer:

Source of Sample: Truck discharge chute

Concrete Supplier: United Companies, Inc. Measured Slump, in. (C143): 1.5

Ticket Number: 4211 Measured Air Content, % (C231): 6.0

Batch Size, cu. yds.: 8 Concrete Temperature, °F: 75

Mix Identification: Class B curb and gutter Ambient Air Temperature, °F: ≈50

Design Strength, psi: 4000 / 28 days Plastic Unit Weight, pcf: 143.1

Max. Size Aggregate, in.: 3/4 No. Cylinders Molded: 4

Time in Mixer: 0 hrs. 25 min. Sampled By: M. Nutter Date: 12-13-96

Water Added on Job, gal.: 0 Submitted By: M. Kerns Date: 12-16-96

Test Procedure ASTM C39- Authorized By: John Davis Date: 12-13-96

Remarks:

Specimen Number	Specimen Age In Days	Date Tested	Compressive Strength Maximum Load		Type of Fracture	Unit Weight of Cylinder (pcf)	Tested By
			Pounds Force	psi			
3102-1	7	12-20-96	93,000	3260	E	143.2	MK
3102-2	28	1-10-97	120,000	4200	D	143.7	MK
3102-3	28	1-10-97	123,000	4310	D/E	143.9	MK
3102-4	28	1-10-97	118,500	4150	D	143.4	MK

Specimen Diameter, in.: 6.031

Specimen Area, sq. in.: 28.57

Test results will automatically be sent to the concrete supplier.

msa:jobs\3102cd13.doc

WESTERN COLORADO TESTING, INC.

HOT BITUMINOUS PAVEMENT FIELD DENSITY TEST

Client: John Davis | Test Locations Designated By: WCT | Job No.: 310296

Project: James Village | Authorized By: Client | Date: 12-12-96

Location: Grand Junction, Colorado | Tested/Calc'd By L. Sanchez | Date: 12-12-96

Type of Material: (-)3/4" "C" City of Grand Junction | Reviewed By BS | Date: 12-23-96

Source of Material: Railhead Pit

Test No.	Date	Location of Test	Elevation of Test Datum
1	12-12-96	28¼ Road widening, 23' N. of centerline of entry to James Village, 5' W. of curb	0
2	12-12-96	28¼ Road widening, 131' S. of centerline of entry to James Village, 7' W. of curb	0
3	12-12-96	28¼ Road widening, 130' S. of centerline of entry to James Village, 17' W. of curb	0
4	12-12-96	28¼ Road widening, 265' S. of centerline of entry to James Village, 17' W. of curb	0

Test No.	Max. Unit Weight pcf	In-Place Characteristics Wet Density pcf	Relative Compaction %	Within Specs	Comments*
1	145.5	138.5	95	Y	1,4,7
2	145.5	139.7	96	Y	1,4,7
3	145.5	139.8	96	Y	1,4,7
4	145.5	138.7	95	Y	1,4,7

*Comments:

1. Pavement Area
2. 100% min. req'd
3. 98% min. req'd
4. 95% min. req'd
5. 90% min. req'd
6. ___% min. req'd
7. Tested ASTM D-2922/D-3017
8. Tested ASTM D-2922/AASHTO T-217
9. Other:_____
10. Tested Locations on Accompanying Site Plan
11. Specifications Unknown
12. 92-96% Compaction required

Datum: Top of asphalt

Note: Tests reported herein are not part of a continuous monitoring program of compaction operations and accordingly

Copies to:

WESTERN COLORADO TESTING, INC.

COMPRESSIVE STRENGTH OF CYLINDER CONCRETE SPECIMENS

Job No.: 310296

Client: John Davis

Date of Report: 12-13-96

Reviewed By:

Project: James Village Subdivision

Location of Placement: Cul-de-sac curb and gutter just south of Cahoot's Bar

Contractor: Mays Concrete, Inc. Architect/Engineer:

Source of Sample: Truck discharge chute

Concrete Supplier: United Companies, Inc. Measured Slump, in. (C143): 1.5

Ticket Number: 4211 Measured Air Content, % (C231): 6.0

Batch Size, cu. yds.: 8 Concrete Temperature, °F: 75

Mix Identification: Class B curb and gutter Ambient Air Temperature, °F: ≈50

Design Strength, psi: 4000 / 28 days Plastic Unit Weight, pcf: 143.1

Max. Size Aggregate, in.: 3/4 No. Cylinders Molded: 4

Time in Mixer: _____ hrs. 25 min. Sampled By: M. Nutter Date: 12-13-96

Water Added on Job, gal.: 0 Submitted By: M. Kerns Date: 12-16-96

Test Procedure ASTM C39- Authorized By: John Davis Date: 12-13-96

Remarks:

Specimen Number	Specimen Age In Days	Date Tested	Compressive Strength Maximum Load		Type of Fracture	Unit Weight of Cylinder (pcf)	Tested By
			Pounds Force	psi			
3102-1	7	12-20-96	93,000	3260	E	143.2	MK
3102-2	28	1-10-97				143.7	MK
3102-3	28	1-10-97				143.9	MK
3102-4	Hold					143.4	MK

Specimen Diameter, in.: 6.031

Specimen Area, sq. in.: 28.57

Test results will automatically be sent to the concrete supplier.

msa:jobs\3102cd13.doc

WESTERN COLORADO TESTING, INC.

PHYSICAL PROPERTIES OF ASPHALTIC CONCRETE
Marshall Method Mix Design

Job No.: 310296

Client: John Davis | Reviewed By: [signature] | Date: 1-6-97

Project: James Village Subdivision | Sampled By: Rich Bailey | Date: 12-12-96

Location: Grand Junction, Colorado | Submitted By: L. Sanchez | Date: 12-12-96

Type of Material: (-)3/4" Grading "C" 50 Blow HBP | Authorized By: Alan Boyles | Date: 12-12-96

Sample Location: Laydown Machine | Source of Sample: Auger

Lot No.: _____ Ticket No.: _____ | Tons: _____ Time Sampled: _____

Bitumen Temp °F _____ Bitumen Temp °F _____ | Bitumen Temp °F _____

Sieve Analysis ASTM C136

Sieve Size	% Passing - Cumulative	Specification
1 1/4"		
1"	100	100
3/4"	100	90-100
1/2"	85	70-89
3/8"	75	60-88
No. 4	55	44-72
No. 8	42	30-62
No. 16	32	-
No. 30	26	12-38
No. 50	17	-
No. 100	9	-
Finer than 200 ASTM C117	5.8	3-7

Cold Feed Moisture _____ Asphalt Moisture _____

Test	Results	Specifications	ASTM Test Std.
Bitumen Content, % **	4.79	5.0-6.0	D2172
Marshall Specific Gr. g/cc	2.351	-	D2726
Marshall Unit Weight, lbs/ft3	146.3	-	
Maximum Specific Gr. g/cc	2.459	-	D2041
Number of Blows	50	-	
Stability, lbs.	-	-	D1559
Flow, .01, inch	-	-	D1559
Air Voids, %	4.4	3-5	
VMA, %	13.8	13 minimum	
Voids Filled, %	68		

* Indicates non-compliance with project requirements. ** By weight of total sample

Sonshine

Lincoln DeVore, Inc.
Geotechnical Consultants

1441 Motor St.
Grand Junction, CO 81505

TEL: (970) 242-8968
FAX: (970) 242-1561

March 14, 1997

Sonshine Construction
PO Box 2867
Grand Junction, CO 81502

Re: Asphalt Paving, James Park, North Cul-de-sac

At your request personnel of Lincoln DeVore have obtained asphalt samples, supplied to the above referenced project by United Companies. Following are the results of our testing:

SIEVE ANALYSIS

Sieve Size	Sample I	Job Mix Specs.
3/4	100	90-100
½	90	70-89
3/8	78.4	60-88
#4	53.3	44-72
#8	36	30-62
#16	26	-
#30	21	12-38
#50	16	-
#100	11	-
#200	8.8	3-7

OTHER TESTING

	Sample I	Specs
AC% of Total	4.86	5.0±0.5
Sample of Location	See above	
Sample Date	3-12-97	
Sample Time	1030	
Sample Temp.	260°	275±5
Air Temp.	55°	
Gs (Rice)	2.443	2.45
VMA %	14.54	>13%
Air Voids %	2.404	3-5%

If any questions arise regarding these results or if we can be of any further assistance to you, please do not hesitate to contact this office at any time.

Respectfully submitted,

LINCOLN DeVore, Inc.

by: Edward M. Morris, PE
Engineer/Western Slope Manager

EM/bw

LD Job # 85113-J

Lincoln DeVore, Inc.
Geotechnical Consultants
1441 Motor St.
Grand Junction, CO 81505
TEL: (970) 242-8968
FAX: (970) 242-1561

March 17, 1997

Sonshine Construction
PO Box 2867
Grand Junciton, CO 81502

Re: Asphalt Paving, James Park, Sample #2

At your request personnel of Lincoln DeVore have obtained asphalt samples, supplied to the above referenced project by United Companies. Following are the results of our testing:

SIEVE ANALYSIS

Sieve Size	Sample I	Job Mix Specs.
3/4	100	90-100
½	90	70-89
3/8	77	60-88
#4	52	44-72
#8	34	30-62
#16	24	-
#30	19	12-38
#50	14	-
#100	10	-
#200	6.7	3-7

OTHER TESTING

	Sample I	Specs
AC% of Total	5.12	5.0±0.5
Sample of Location	See above	
Sample Date	3-12-97	
Sample Time	1430	
Sample Temp.	260°	275±5
Air Temp.	58°	
Gs (Rice)	2.46	2.45
VMA %	14.506	>13%
Air Voids %	4.598	3-5%

If any questions arise regarding these results or if we can be of any further assistance to you, please do not hesitate to contact this office at any time.

Respectfully submitted,

LINCOLN DeVore, Inc.

by: Edward M. Morris, PE
Engineer/Western Slope Manager

EM/bw

LD Job # 85889-1439-J

CLIENT: Sonshine Construction

PROJECT: James Park - 28½ & North Ave.

LOCATION:

REPORT No. 1

DATE of TEST: 11-14-96

TEST BY: LRS

LD JOB No.: 85826-1376

TEST TYPE: Nuclear Backscatter ___ Nuclear Direct Trans. X

SPECIFICATIONS: Project: ___ City: X County: ___ State: ___

Test No.	Location of Test	COMPACTION %	COMPAC. SPEC. %	MOISTURE CONT %	MOISTURE SPEC. %	PROCTOR VALUE	SOIL TYPE
1	Sewer main Niagra Cir 45' W MH A1 @ FSG	100	95	13.1	+-2	118.6 @ 13.1	C
2	Utility crossing Niagra Cir @ FSG	95	95	15.2**	+-2	104.9 @ 17.5	C
3	Utility crossing Niagra Cir @ FSG	96	95	14.9	+-2	118.6 @ 13.1	C
4	Water main crossing Niagra Cir Albany Rd N @ 2' BSG	100	95	17.0	+-2	104.9 @ 17.5	C
5	Water main crossing Niagra Cir Albany Rd N @ FSG	99	95	16.0	+-2	104.9 @ 17.5	C
6	Utility crossing @ FSG	98	95	17.1	+-2	118.9 @ 18.6	C
7	Sewer main 75' E of MH A1 @ FSG	96	95	19.2	+-2	118.9 @ 18.6	C
8	Sewer main MH A2 @ FSG	95	95	16.8	+-2	118.9 @ 18.6	C
9	Sewer main stubout N of MH A2 @ FSG	100	95	16.3	+-2	104.9 @ 17.5	C
10	Sewer main stubout S of MH A2 @ FSG	100	95	16.0	+-2	104.9 @ 17.5	C
11	Utility crossing Niagra Cir @ FSG	98	95	15.4	+-2	116.9 @ 15.4	C
12	Sewer main 35' E of MH A2 @ FSG	100	95	14.2	+-2	116.9 @ 15.4	C
13	Sewer stubout S of main A2 @ FSG	100	95	18.2	+-2	104.9 @ 17.5	C
14	Sewer stubout N of main S of MH A2 @ FSG	100	95	17.5	+-2	104.9 @ 17.5	C
15	Sewer MH A3 @ FSG	97	95	19.3	+-2	104.9 @ 17.5	C

Distribution:
2-Client
1-LD/CS
1-Subdiv. Env.

KEY: * Fails Compaction SPEC. C = Cohesive
** Fails Moisture SPEC. NC = NonCohesive
S = Standard Proctor ABC = Aggregate Base
M = Modified Proctor PR = Pit Run

GRAND JUNCTION LINCOLN-DeVORE, Inc.

BY: 

FILL DENSITY TEST DAILY REPORT

NOTE: Results indicate in-place Soil densities at the locations and depths identified above. Grand Junction Lincoln-DeVore has relied on the contractor to provide uniform mix placement and compactive effort throughout the fill area.

GRAND JUNCTION LINCOLN-DeVORE, Inc.
GEOTECHNICAL ENGINEERS-GEOLOGISTS

CLIENT: Sonshine Construction

PROJECT: James Park - 28½ & North Ave.

LOCATION:

REPORT No. 1

DATE of TEST: 11-14-96

TEST BY: LRS

LD JOB No.: 85826-1376

TEST TYPE: Nuclear Backscatter ___ Nuclear Direct Trans. X

SPECIFICATIONS: Project: ___ City: X County: ___ State: ___

Test No.	Location of Test	COMPACTION %	COMPAC. SPEC. %	MOISTURE CONT %	MOISTURE SPEC. %	PROCTOR VALUE	SOIL TYPE
16	Sewer stubout N of MH 3 @ FSG	100	95	18.2	+-2	104.9 @ 17.5	C
17	Sewer main 60' E of MH 3 @ FSG	100	95	17.4	+-2	104.9 @ 17.5	C
18	Sewer stubout S of MH 4 @ FSG	100	95	17.1	+-2	104.9 @ 17.5	C
19	Sewer MH A4 @ FSG	100	95	16.3	+-2	104.9 @ 17.5	C
20	Sewer stubout N of MH A4 @ FSG	97	95	17.6	+-2	118.9 @ 18.6	C
21	Sewer main 15' E of MH A4 @ FSG	97	95	18.0	+-2	118.9 @ 18.6	C
22	Utility crossing E end of Niagra Cir @ FSG	100	95	15.7	+-2	116.9 @ 15.4	C
23	Water crossing E Jersey Rd @ 2' BSG	100	95	18.2	+-2	104.9 @ 17.5	C
24	Water crossing E Jersey Rd @ FSG	100	95	16.7	+-2	104.9 @ 17.5	C
25	Water crossing Albany Rd S @ 2' BSG	99	95	18.8	+-2	104.9 @ 17.5	C
26	Water crossing Albany Rd S @ FSG	100	95	19.3**	+-2	104.9 @ 17.0	C
27	Street Albany Rd N 25' N of intersection E Lane @ FSG	100	95	18.5	+-2	104.9 @ 17.0	C
28	Street Albany Rd N 125' N of intersection W Ln @ FSG	100	95	17.0	+-2	104.9 @ 17.0	C
29	Street Albany Rd N 250' N of intersection E Ln @ FSG	100	95	17.6	+-2	104.9 @ 17.0	C
30	Street Albancy Rd N @ Ctr of Cul de sac @ FSG	100	95	18.7	+-2	104.9 @ 17.0	C

Distribution:
2-Client
1-LD/CS
1-Subdiv. Env.

KEY: * Fails Compaction SPEC. C = Cohesive
** Fails Moisture SPEC. NC = NonCohesive
S = Standard Proctor ABC = Aggregate Base
M = Modified Proctor PR = Pit Run

GRAND JUNCTION LINCOLN-DeVORE, Inc.

BY: [signature]

FILL DENSITY TEST DAILY REPORT

NOTE: Results indicate in-place Soil densities at the locations and depths identified above. Grand Junction Lincoln-DeVore has relied on the contractor to provide uniform mix placement and compactive effort throughout the fill area.

GRAND JUNCTION LINCOLN-DeVORE, Inc.
GEOTECHNICAL ENGINEERS-GEOLOGISTS

CLIENT: Sonshine Construction

PROJECT: James Park - 28½ & North Ave.

LOCATION:

REPORT No. 1
DATE of TEST: 11-14-96
TEST BY: LRS
LD JOB No.: 85826-1376

TEST TYPE: Nuclear Backscatter ___ Nuclear Direct Trans. X

SPECIFICATIONS: Project: ___ City: X County: ___ State: ___

Test No.	Location of Test	COMPACTION %	COMPAC. SPEC. %	MOISTURE CONT %	MOISTURE SPEC. %	PROCTOR VALUE	SOIL TYPE
31	Street Jersey Rd 100' N of Niagra Cir E Lane @ FSG	99	95	16.4	+-2	104.9 @ 17.5	C
32	Street Jersey Rd 100' N of Niagra Cir W Lane @ FSG	100	95	17.6	+-2	104.9 @ 17.5	C
33	Street Jersey Rd 100' N of Niagra Cir E Lane @ FSG	100	95	18.1	+-2	104.9 @ 17.5	C
34	Street Jersey Rd 100' N of Niagra Cir @ Ctr of Cul de sac @ FSG	100	95	18.0	+-2	104.9 @ 17.5	C
35	Water main @ 28¼ Rd @ 2' BSG	100	95	18.4	+-2	104.9 @ 17.5	C
36	Street Jersey Rd S @ Ctr of Cul de sac @ FSG	100	95	16.8	+-2	104.9 @ 17.5	C
37	Street Jersey Rd 50' S of Niagra Cir @ FSG	100	95	16.2	+-2	104.9 @ 17.5	C
38	Water line @ 28¼ Rd @ FG	96	95	6.9	+-2	136.7 @ 6.6	C
39	Street Albany Rd 175' S of Niagra Cir W Lane @ FSG	100	95	17.7	+-2	104.9 @ 17.5	C
40	Street Albany Rd 100' S of Niagra Cir E Lane @ FSG	100	95	18.4	+-2	104.9 @ 17.5	C
41	Street Niagra Cir @ intersection of Albany Rd @ FSG	100	95	16.2	+-2	104.9 @ 17.5	C
42	Street Niagra Cir 100' W of existing street @ FSG	100	95	16.8	+-2	104.9 @ 17.5	C
43	Street Albany Rd @ center of Cul de sac @ FSG	100	95	17.1	+-2	104.9 @ 17.5	C

Distribution:
2-Client
1-LD/CS
1-Subdiv. Env.

KEY: * Fails Compaction SPEC. C = Cohesive
** Fails Moisture SPEC. NC = NonCohesive
S = Standard Proctor ABC = Aggregate Base
M = Modified Proctor PR = Pit Run

GRAND JUNCTION LINCOLN-DeVORE, Inc.

BY:

FILL DENSITY TEST DAILY REPORT

NOTE: Results indicate in-place Soil densities at the locations and depths identified above. Grand Junction Lincoln-DeVore has relied on the contractor to provide uniform mix placement and compactive effort throughout the fill area.

GRAND JUNCTION LINCOLN-DeVORE, Inc.
GEOTECHNICAL ENGINEERS-GEOLOGISTS

CLIENT: Sonshine Construction

PROJECT: James Park

LOCATION:

REPORT No. 2

DATE of TEST: 11-15-96

TEST BY: LRS

LD JOB No.: 85826-1376

TEST TYPE: Nuclear Backscatter ___ Nuclear Direct Trans. X

SPECIFICATIONS: Project: ___ City: X County: ___ State: ___

Test No.	Location of Test	COMPACTION %	COMPAC. SPEC. %	MOISTURE CONT %	MOISTURE SPEC. %	PROCTOR VALUE	SOIL TYPE
44	28¼ Rd extension E side 100' N of S end @ FSG	100	95	15.4	+-2	104.9 @ 17.5	C
45	28¼ Rd extension E side 200' N of S end @ FSG	95	95	16.6	+-2	116.9 @ 15.4	C
46	28¼ Rd extension E side 300' N of S end @ FSG	95	95	16.2	+-2	116.9 @ 15.4	C
47	Street Niagra Cir 35' E of 28¼ Rd @ FSG	95	95	15.2	+-2	116.9 @ 15.4	C

Distribution:
2-Client
1-LD/CS
1-Subdiv. Env.

KEY: * Fails Compaction SPEC. C = Cohesive
** Fails Moisture SPEC. NC = NonCohesive
S = Standard Proctor ABC = Aggregate Base
M = Modified Proctor PR = Pit Run

GRAND JUNCTION LINCOLN-DeVORE, Inc.

BY:

FILL DENSITY TEST DAILY REPORT

NOTE: Results indicate in-place Soil densities at the locations and depths identified above. Grand Junction Lincoln-DeVore has relied on the contractor to provide uniform mix placement and compactive effort throughout the fill area.

GRAND JUNCTION LINCOLN-DeVORE, Inc.
GEOTECHNICAL ENGINEERS-GEOLOGISTS

CLIENT: Sonshine Construction

PROJECT: James Park - 28½ & North Ave.

LOCATION: All tests @ BSG

REPORT No. 3

DATE of TEST: 11-22-96

TEST BY: RSW

LD JOB No.: 85826-1376

TEST TYPE: Nuclear Backscatter ___ Nuclear Direct Trans. X

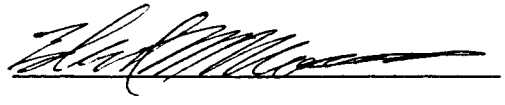
SPECIFICATIONS: Project: ___ City: X County: ___ State: ___

Test No.	Location of Test	COMPACTION %	COMPAC. SPEC. %	MOISTURE CONT %	MOISTURE SPEC. %	PROCTOR VALUE	SOIL TYPE
48	Widening of E side of 28½ Rd 100' S of existing sidewalk	98	95	6.8	+-2	136.7 @ 6.6	BC
49	Widening of E side of 28½ Rd 200' S of existing sidewalk	97	95	6.9	+-2	136.7 @ 6.6	BC
50	Widening of E side of 28½ Rd 300' S of existing sidewalk	98	95	6.7	+-2	136.7 @ 6.6	BC
51	Widening of E side of 28½ Rd 400' S of existing sidewalk	96	95	6.2	+-2	136.7 @ 6.6	BC
52	Widening of E side of 28½ Rd 500' S of existing sidewalk	95	95	6.0	+-2	136.7 @ 6.6	BC
53	NW cul de sac N end of sidewalk	95	95	7.7	+-2	136.7 @ 6.6	BC
54	Sidewalk W side of NW cul de sac 150' S of N end	98	95	8.5	+-2	136.7 @ 6.6	BC
55	Sidewalk E side of NW cul de sac 150' S of N end	97	95	8.0	+-2	136.7 @ 6.6	BC

Distribution:
2-Client
1-LD/CS
1-Subdiv. Env.

KEY: * Fails Compaction SPEC. C = Cohesive
** Fails Moisture SPEC. NC = NonCohesive
S = Standard Proctor ABC = Aggregate Base
M = Modified Proctor PR = Pit Run

GRAND JUNCTION LINCOLN-DeVORE, Inc.

BY: 

FILL DENSITY TEST DAILY REPORT

NOTE: Results indicate in-place Soil densities at the locations and depths identified above. Grand Junction Lincoln-DeVore has relied on the contractor to provide uniform mix placement and compactive effort throughout the fill area.

GRAND JUNCTION LINCOLN-DeVORE, Inc.
GEOTECHNICAL ENGINEERS-GEOLOGISTS

CLIENT: Sonshine Construction

PROJECT: James Park - 28½ & North Ave.

LOCATION:

REPORT No. 4
DATE of TEST: 11-25-96
TEST BY: LRS
LD JOB No.: 85826-1376

TEST TYPE: Nuclear Backscatter ___ Nuclear Direct Trans. X

SPECIFICATIONS: Project: ___ City: X County: ___ State: ___

Test No.	Location of Test	COMPACTION %	COMPAC. SPEC. %	MOISTURE CONT %	MOISTURE SPEC. %	PROCTOR VALUE	SOIL TYPE
56	Street Albany Rd, North @ FG	97	95	8.1	+-2	136.7 @ 6.6	BC
57	Street Albany Rd, North @ FG	98	95	8.0	+-2	136.7 @ 6.6	BC
58	Street Albany Rd, North @ FG	98	95	7.5	+-2	136.7 @ 6.6	BC
59	Street Albany Rd, North @ FG	96	95	6.8	+-2	136.7 @ 6.6	BC
60	Street E. Jersey, North @ FG	97	95	6.6	+-2	136.7 @ 6.6	BC
61	Street E. Jersey, North @ FG	96	95	5.5	+-2	136.7 @ 6.6	BC
62	Street E. Jersey, North @ FG	95	95	6.0	+-2	136.7 @ 6.6	BC
63	Street E. Jersey, North @ FG	97	95	7.3	+-2	136.7 @ 6.6	BC

Distribution:
2-Client
1-LD/CS
1-Subdiv. Env.

KEY: * Fails Compaction SPEC. C = Cohesive
** Fails Moisture SPEC. NC = NonCohesive
S = Standard Proctor ABC = Aggregate Base
M = Modified Proctor PR = Pit Run

GRAND JUNCTION LINCOLN-DeVORE, Inc.

BY:

FILL DENSITY TEST DAILY REPORT

NOTE: Results indicate in-place Soil densities at the locations and depths identified above. Grand Junction Lincoln-DeVore has relied on the contractor to provide uniform mix placement and compactive effort throughout the fill area.

GRAND JUNCTION
LINCOLN-DeVORE, Inc.
GEOTECHNICAL ENGINEERS-GEOLOGISTS

CLIENT: Sonshine Construction

PROJECT: James Park - 28½ & North Ave.

LOCATION:

REPORT No. 5

DATE of TEST: 11-26-96

TEST BY: RSW

LD JOB No.: 85826-1376

TEST TYPE: Nuclear Backscatter ___ Nuclear Direct Trans. X

SPECIFICATIONS: Project: ___ City: X County: ___ State: ___

Test No.	Location of Test	COMPACTION %	COMPAC. SPEC. %	MOISTURE CONT %	MOISTURE SPEC. %	PROCTOR VALUE	SOIL TYPE
64	Sidewalk end of cul de sac in N Jersey @ BCG	100	95	7.1	+-2	136.7 @ 6.6	BC
65	Sidewalk E side of N Jersey 200' N of Niagra @ BCG	95	95	6.6	+-2	136.7 @ 6.6	BC
66	Sidewalk W side of N Jersey 200' N of Niagra @ BCG	95	95	5.7	+-2	136.7 @ 6.6	BC
67	Sidewalk E side of N Jersey 50' N of Niagra @ BCG	95	95	5.6	+-2	136.7 @ 6.6	BC
68	Sidewalk W side of N Jersey 50' N of Niagra @ BCG	93*	95	5.9	+-2	136.7 @ 6.6	BC
69	Sidewalk S Albany end of cul de sac @ BCG	95	95	6.3	+-2	136.7 @ 6.6	BC
70	Sidewalk S Albany W side 60' S of Niagra @ BCG	95	95	6.5	+-2	136.7 @ 6.6	BC
71	Sidewalk S Albany E side 60' S of Niagra @ BCG	96	95	5.6	+-2	136.7 @ 6.6	BC
72	S Albany W Lane 100' S of Niagra @ BCG	95	95	6.0	+-2	136.7 @ 6.6	BC
73	S Albany E Lane 200' S of Niagra @ BCG	95	95	6.8	+-2	136.7 @ 6.6	BC
74	S Albany 300' S of Niagra center line @ BCG	95	95	7.7	+-2	136.7 @ 6.6	BC

Distribution:
2-Client
1-LD/CS
1-Subdiv. Env.

KEY: * Fails Compaction SPEC. C = Cohesive
** Fails Moisture SPEC. NC = NonCohesive
S = Standard Proctor ABC = Aggregate Base
M = Modified Proctor PR = Pit Run

GRAND JUNCTION LINCOLN-DeVORE, Inc.

BY:

FILL DENSITY TEST DAILY REPORT

NOTE: Results indicate in-place Soil densities at the locations and depths identified above. Grand Junction Lincoln-DeVore has relied on the contractor to provide uniform mix placement and compactive effort throughout the fill area.

GRAND JUNCTION LINCOLN-DeVORE, Inc.
GEOTECHNICAL ENGINEERS-GEOLOGISTS

CLIENT: Sonshine Construction

PROJECT: James Park - 28½ & North Ave.

LOCATION: All tests @ BCG

REPORT No. 6

DATE of TEST: 11-27-96

TEST BY: RSW

LD JOB No.: 85826-1376

TEST TYPE: Nuclear Backscatter ___ Nuclear Direct Trans. X

SPECIFICATIONS: Project: ___ City: X County: ___ State: ___

Test No.	Location of Test	COMPACTION %	COMPAC. SPEC. %	MOISTURE CONT %	MOISTURE SPEC. %	PROCTOR VALUE	SOIL TYPE
75	Sidewalk S side of Niagra 50' E f 28½ Rd .	96	95	5.3	+-2	136.7 @ 6.6	BC
76	Sidewalk N side of Niagra 50' E of 28¼ Rd	95	95	4.9	+-2	136.7 @ 6.6	BC
77	Niagra N Lane 100" E of 28¼ Rd	100	95	5.9	+-2	136.7 @ 6.6	BC
78	Sidewalk S side of Niagra 200' E of 28¼ Rd	100	95	4.6	+-2	136.7 @ 6.6	BC
79	Sidewalk W side of Niagra 200' E of 28¼ Rd	100	95	7.0	+-2	136.7 @ 6.6	BC
80	Niagra S Lane 200' E of 28¼ Rd	100	95	6.4	+-2	136.7 @ 6.6	BC
81	Sidewalk 60' S of Niagra W side	100	95	6.4	+-2	136.7 @ 6.6	BC
82	Sidewalk 60' S of Niagra E side	96	95	7.2	+-2	136.7 @ 6.6	BC
83	Sidewalk end of cul de sac	100	95	4.6	+-2	136.7 @ 6.6	BC
84	Sidewalk middle of cul de sac 200' S of Niagra	99	95	5.4	+-2	136.7 @ 6.6	BC
85	Sidewalk 60' S of Niagra E Lane	100	95	6.1	+-2	136.7 @ 6.6	BC

Distribution:
2-Client
1-LD/CS
1-Subdiv. Env.

KEY: * Fails Compaction SPEC. C = Cohesive
** Fails Moisture SPEC. NC = NonCohesive
S = Standard Proctor ABC = Aggregate Base
M = Modified Proctor PR = Pit Run

GRAND JUNCTION LINCOLN-DeVORE, Inc.

BY: [signature]

FILL DENSITY TEST DAILY REPORT

NOTE: Results indicate in-place Soil densities at the locations and depths identified above. Grand Junction Lincoln-DeVore has relied on the contractor to provide uniform mix placement and compactive effort throughout the fill area.

GRAND JUNCTION LINCOLN-DeVORE, Inc.
GEOTECHNICAL ENGINEERS-GEOLOGISTS

CLIENT: Sonshine Construction

PROJECT: James Park - 28½ & North Ave.

LOCATION:

REPORT No. 7
DATE of TEST: 12-11-96
TEST BY: MS
LD JOB No.: 85826-1376

TEST TYPE: Nuclear Backscatter ___ Nuclear Direct Trans. X

SPECIFICATIONS: Project: ___ City: X County: ___ State: ___

Test No.	Location of Test	COMPACTION %	COMPAC. SPEC. %	MOISTURE CONT %	MOISTURE SPEC. %	PROCTOR VALUE	SOIL TYPE
86	80' from end of 28¼ on 28¼ @ FG	96	95	5.9	+-2	136.7 @ 6.6	ABC
87	120' from end of 28¼ on 28¼ @ FG	96	95	5.7	+-2	136.7 @ 6.6	ABC
88	220' from end of 28¼ on 28¼ @ FG	100	95	7.7	+-2	136.7 @ 6.6	ABC
89	320' from end of 28¼ on 28¼ @ FG	96	95	5.5	+-2	136.7 @ 6.6	ABC
90	420' from end of 28¼ on 28¼ @ FG	96	95	5.0	+-2	136.7 @ 6.6	ABC

Distribution:
2-Client
1-LD/CS
1-Subdiv. Env.

KEY: * Fails Compaction SPEC. C = Cohesive
** Fails Moisture SPEC. NC = NonCohesive
S = Standard Proctor ABC = Aggregate Base
M = Modified Proctor PR = Pit Run

GRAND JUNCTION LINCOLN-DeVORE, Inc.

BY: Edward [illegible]

FILL DENSITY TEST DAILY REPORT

NOTE: Results indicate in-place Soil densities at the locations and depths identified above. Grand Junction Lincoln-DeVore has relied on the contractor to provide uniform mix placement and compactive effort throughout the fill area.

GRAND JUNCTION
LINCOLN-DeVORE, Inc.
GEOTECHNICAL ENGINEERS-GEOLOGISTS

CLIENT: Sonshine Construction

PROJECT: James Park

LOCATION:

REPORT No. 1

DATE of TEST: 1-9-97

TEST BY: RSW

LD JOB No.: 85889-1439

TEST TYPE: Nuclear Backscatter ___ Nuclear Direct Trans. X

SPECIFICATIONS: Project: ___ City: X County: ___ State: ___

Test No.	Location of Test	COMPACTION %	COMPAC. SPEC. %	MOISTURE CONT %	MOISTURE SPEC. %	PROCTOR VALUE	SOIL TYPE
1	Sidewalk on E side of 28¼ Rd., 60'S of existing sidewalk @ FSG	100	95	16.8	+-2	104.9 @ 17.5	C
2	Sidewalk on E side of 28¼ Rd., 60' N of Niagra @ FSG	100	95	17.0	+-2	104.9 @ 17.5	C
3	Sidewalk on E side of 28¼ Rd., 80' S of Niagra @ FSG	100	95	16.1	+-2	104.9 @ 17.5	C

Distribution:
2-Client
1-LD/CS
1-Subdiv Env

KEY: * Fails Compaction SPEC. ** Fails Moisture SPEC. S = Standard Proctor M = Modified Proctor C = Cohesive NC = NonCohesive ABC = Aggregate Base PR = Pit Run

GRAND JUNCTION LINCOLN-DeVORE, Inc.

BY:

FILL DENSITY TEST DAILY REPORT

NOTE: Results indicate in-place Soil densities at the locations and depths identified above. Grand Junction Lincoln-DeVore has relied on the contractor to provide uniform mix placement and compactive effort throughout the fill area.

GRAND JUNCTION LINCOLN-DeVORE, Inc.
GEOTECHNICAL ENGINEERS-GEOLOGISTS

CLIENT: Sonshine Construction

PROJECT: James Park - 28½ & North Ave.

LOCATION:

REPORT No. 2

DATE of TEST: 1-9-97

TEST BY: MS

LD JOB No.: 85889-1439

TEST TYPE: Nuclear Backscatter ___ Nuclear Direct Trans. X

SPECIFICATIONS: Project: ___ City: X County: ___ State: ___

Test No.	Location of Test	COMPACTION %	COMPAC. SPEC. %	MOISTURE CONT %	MOISTURE SPEC. %	PROCTOR VALUE	SOIL TYPE
4	Sidewalk E of 28½ Rd. & 20' N of Niagra Cir @ FG	96	95	6.1	+-2	136.7 @ 6.7	ABC
5	Sidewalk E of 28½ Rd. & 220' N of Niagra Cir @ FG	95	95	7.3	+-2	136.7 @ 6.7	ABC
6	Sidewalk E of 28½ Rd. & 20' S of Niagra Cir @ FG	96	95	6.8	+-2	136.7 @ 6.7	ABC
7	Sidewalk E of 28½ Rd. & 220' S of Niagra Cir @ FG	96	95	5.9	+-2	136.7 @ 6.7	ABC

Distribution:
2-Client
1-LD/CS
1-Subdiv. Env.

KEY: * Fails Compaction SPEC. C = Cohesive
** Fails Moisture SPEC. NC = NonCohesive
S = Standard Proctor ABC = Aggregate Base
M = Modified Proctor PR = Pit Run

GRAND JUNCTION LINCOLN-DeVORE, Inc.

BY:

FILL DENSITY TEST DAILY REPORT

NOTE: Results indicate in-place Soil densities at the locations and depths identified above. Grand Junction Lincoln-DeVore has relied on the contractor to provide uniform mix placement and compactive effort throughout the fill area.

GRAND JUNCTION
LINCOLN-DeVORE, Inc.
GEOTECHNICAL ENGINEERS-GEOLOGISTS

CLIENT: Sonshine Construction

PROJECT: James Park

LOCATION: 28½ and North Ave.

REPORT No. 3

DATE of TEST: 3-12-97

TEST BY: RL

LD JOB No.: 85889-1439

TEST TYPE: Nuclear Backscatter ___ Nuclear Direct Trans. X

SPECIFICATIONS: Project: ___ City: X County: ___ State: ___

Test No.	Location of Test	Mix Design Compaction %	Mix Design Max. Den. pcf	Rice Gs Compaction %	Rice Gs Max. Den. pcf	Compac. Specif.
8	North cul-de-sac			96	152.6	92-96
9	West lane			96	152.6	92-96
10	East lane			96	152.6	92-96
11	West lane			96	152.6	92-96
12	East lane			96	152.6	92-96
13	North lane, east end			95	152.6	92-96
14	South lane			96	152.6	92-96

KEY: * Fails Compaction Specif.

GRAND JUNCTION LINCOLN-DeVORE, Inc.

BY:

Distribution:
1-Client
1-LD/CS
1-Subdiv Env
1-Banner & Assoc.
1-City of GJ
1-Fruitvale Sanitation Dist.

NOTE: Results indicate in-place Asphalt Concrete (AC) densities at the locations identified above. Lincoln-DeVore of Grand Junction has relied on the contractor to provide uniform mix placement and compactive effort throughout the pavement area.

A.C. DENSITY TEST DAILY REPORT

GRAND JUNCTION LINCOLN-DeVORE, Inc.
GEOTECHNICAL ENGINEERS-GEOLOGISTS

CLIENT: Sonshine Construction

PROJECT: James Park

LOCATION: 28¼ and North Ave.

REPORT No. 4

DATE of TEST: 3-13-97

TEST BY: RL

LD JOB No.: 85889-1439

TEST TYPE: Nuclear Backscatter ___ Nuclear Direct Trans. X

SPECIFICATIONS: Project: ___ City: X County: ___ State: ___

Test No.	Location of Test	Mix Design Compaction %	Mix Design Max. Den. pcf	Rice Gs Compaction %	Rice Gs Max. Den. pcf	Compac. Specif.
15	10' W end, South lane			93	152.6	92-96
16	100' from W end, North lane			92	152.6	92-96
17	180' from W end, South lane			93	152.6	92-96
18	Intersection			92	152.6	92-96
19	100' S of intersection, East lane			92	152.6	92-96
20	South cul-de-sac			93	152.6	92-96

KEY: * Fails Compaction Specif.

GRAND JUNCTION LINCOLN-DeVORE, Inc.

BY: [signature]

Distribution:
1-Client
1-LD/CS
1-Subdiv Env
1-Banner & Assoc.
1-City of GJ
1-Fruitvale Sanitation Dist.

NOTE: Results indicate in-place Asphalt Concrete (AC) densities at the locations identified above. Lincoln-DeVore of Grand Junction has relied on the contractor to provide uniform mix placement and compactive effort throughout the pavement area.

A.C. DENSITY TEST DAILY REPORT

GRAND JUNCTION LINCOLN-DeVORE, Inc.
GEOTECHNICAL ENGINEERS-GEOLOGISTS

James Park DIA
February 6, 1997

1. Need bid for 110 globe willows @ 1.5" caliper

2. Need bid for grass seeding

3. Need bid for painting wall.

4. Rebars sticking out of top of wall must be cut off, per detail on site plan.

5. Gravel storage area cannot extend into park

James Park - Development Improvements Agreement Revisions
January 22, 1997

1. Tree size shown on estimate from Bookcliff Gardens must be 1.5" caliper (not 1.25" caliper).

2. Grass seeding is not included on estimate. It must be included for ALL areas to be seeded.

3. There's no breakdown on remaining asphalt or concrete pavement for $14,000; no breakdown for plant material and planting for $4,400 and it doesn't match the estimate from Bookcliff Gardens; no bid submitted showing that an irrigation system can be installed for $2400. What's the $3200 miscellaneous for?

4. ALL uncompleted improvements on site plan must be guaranteed before building permits are issued. This includes paved parking pads, paved off-street parking on cul-de-sacs, fencing including screening of dumpsters, gravel in storage area, stop signs, no parking signs, dumpster pads...

5. Building Dept. must make final inspection of wall before building permits are released. The wall needs a finished surface.

6. Submit copy of contract with Public Service for installation of lights.

7. The legal description on Exhibit A of the DIA should read Lot 2, Darwin Subdivision.

8. If landscaping is to be placed in the right-of-way along 28 1/4 Road instead of on the property a revocable permit will be required and an agreement for perpetual maintenance recorded. This change and the addition of a fence along 28 1/4 Road will require a minor amendment to the plan; Submit $50 and 4 copies of a revised site plan/landscape plan showing the changes.

9. There will be a $6 fee payable to Mesa County Clerk & Recorder for recordation of the DIA memo and a fee to be determined at a later date for recordation of the revocable permit and maintenance agreement.

10. Submit a final copy of the lease agreements showing the wording as agreed upon with Cahoots.

James Park - Development Improvements Agreement (DIA) Revision
February 4, 1997

1. Tree size changes have been made for the perimeter trees shown on page 2 of the landscape plan. There are 33 trees shown on page 2.

   Page 1 of the landscape plan shows 2 trees for each mobile home space; add 110 trees to your estimate.

2. Page 1 of the landscape plan shows the typical trailer layout for the park. In addition to the asphalt or concrete driveway, trailer, shed and 2 trees, it shows the remainder of the area as bluegrass seeding. I estimate that there is approximately 171,358 square feet of area to be seeded on this site; not the 6400 sq. ft. as indicated in the DIA.

3. The irrigation system is required for all of the seeded area - I doubt $3200 will cover an area 171, 358 square feet in size.

4. According to Bob Lee at the Building Dept. a Certificate of Occupancy is not issued for a mobile home, nor did he talk with you regarding this matter. The city does not inspect for C of O's. The paved parking pads must be included in the DIA amount.

   I came up with 370 sq. yd. for paved off street parking (cul-de-sacs), not 150 as shown on your estimate; @ $4.50/yd = $1665.

   I estimated that there is at least 500' of fencing plus 50' for screening of dumpsters @ $13/ft = $7150.

   The site plan shows two stop signs, not one.

5. Building Dept. has made final inspection of wall. What type of a finished surface is proposed for the wall.

6. You stated that you'd get me a copy of the contract with Public Service for the installation of the lights, not a copy of an expired price quote. If the contract is not submitted add $1500 per light pole.

7. change in legal description - okay

8. -

9. -

10. copy of lease - okay

James Park - Development Improvements Agreement (DIA) Revision
February 4, 1997

1. Tree size changes have been made for the perimeter trees shown on page 2 of the landscape plan. There are 33 trees shown on page 2.

   Page 1 of the landscape plan shows 2 trees for each mobile home space; add 110 trees to your estimate.

2. Page 1 of the landscape plan shows the typical trailer layout for the park. In addition to the asphalt or concrete driveway, trailer, shed and 2 trees, it shows the remainder of the area as bluegrass seeding. I estimate that there is approximately 171,358 square feet of area to be seeded on this site; not the 6400 sq. ft. as indicated in the DIA.

3. The irrigation system is required for all of the seeded area - I doubt $3200 will cover an area 171, 358 square feet in size. PARK & GRASS IN R/W

OK FINAL INSPECTION.

4. According to Bob Lee at the Building Dept. a Certificate of Occupancy is not issued for a mobile home, nor did he talk with you regarding this matter. The city does not inspect for C of O's. The paved parking pads must be included in the DIA amount.

   OK I came up with 370 sq. yd. for paved off street parking (cul-de-sacs), not ~~150 as~~ 4" shown on your estimate; @ $4.50/yd = $1665.

   I estimated that there is at least 500' of fencing plus 50' for screening of dumpsters @ $13/ft = $7150.

   The site plan shows two stop signs, not one.

5. Building Dept. has made final inspection of wall. What type of a finished surface is proposed for the wall.

   POLES ARE THERE

6. You stated that you'd get me a copy of the contract with Public Service for the installation of the lights, not a copy of an expired price quote. If the contract is not submitted add $1500 per light pole.

7. change in legal description - okay OK

8. - OKAY GLOBE WILLOW?

9. - GRAVEL FOR STORAGE IS THERE

10. copy of lease - okay

James Park - Development Improvements Agreement Revisions
January 22, 1997

1. Tree size shown on estimate from Bookcliff Gardens must be 1.5" caliper (not 1.25" caliper).

2. Grass seeding is not included on estimate. It must be included for ALL areas to be seeded.

3. There's no breakdown on remaining asphalt or concrete pavement for $14,000; no breakdown for plant material and planting for $4,400 and it doesn't match the estimate from Bookcliff Gardens; no bid submitted showing that an irrigation system can be installed for $2400. What's the $3200 miscellaneous for?

4. ALL uncompleted improvements on site plan must be guaranteed before building permits are issued. This includes paved parking pads, paved off-street parking on cul-de-sacs, fencing including screening of dumpsters, gravel in storage area, stop signs, no parking signs, dumpster pads...

5. Building Dept. must make final inspection of wall before building permits are released. The wall needs a finished surface.

6. Submit copy of contract with Public Service for installation of lights.

7. The legal description on Exhibit A of the DIA should read Lot 2, Darwin Subdivision.

8. If landscaping is to be placed in the right-of-way along 28 1/4 Road instead of on the property a revocable permit will be required and an agreement for perpetual maintenance recorded. This change and the addition of a fence along 28 1/4 Road will require a minor amendment to the plan; Submit $50 and 4 copies of a revised site plan/landscape plan showing the changes.

9. There will be a $6 fee payable to Mesa County Clerk & Recorder for recordation of the DIA memo and a fee to be determined at a later date for recordation of the revocable permit and maintenance agreement.

10. Submit a final copy of the lease agreements showing the wording as agreed upon with Cahoots.

February 5, 1997

Bill Nebeker:

Re: James Park-Development Improvements Agreement Revisions

Item # 1: Add 110 Globe Willow trees @ $45/ tree = $ 4950.00

2: Area to be grass seeded = 171,358 sq. ft.
50 lb bag of seed covers 5000 sq.ft
50 lb bag costs $60/ bag
labor is $10/bag = $ 350.00
171,358 / 5000 = 34.3 bags @ $60/bag = $ 2058.00
Total = $ 2408.00

#3: Irrigation is for park and right of way only = $ 3200.00

#4: 370 sq yd for paved off street parking (cul-de-sacs)
@ $4.50 / sq yd = $ 1665.00

500 ft of fencing plus 50 ft for screening dumpsters @ $13/ft = $ 7150.00

Added 1 stop sign

5: The finished surface proposed for the wall is paint.
8400 sq ft /168 sq ft /gal = 50 gal paint @ $10 /gal = $500.00
labor is $10/gal x 50 gal = $500.00
Total = $ 1000.00

#6: light s are already installed.

IV LANDSCAPING

item 3: paved off street parking (cul-de-sac) 20 spaces
9 x 18.5 x 20 = 3330 sq ft/9 = 370 sq yd @ $4.50/yd =$1665.00

fencing 500' plus 50' for screening dumpsters @ $13/ft =$7150.00
gravel in storage areas is completed
dumpster pads 200 sq ft @ $100/yd =$ 260.00
city's BERLIN WALL 8400 sq ft (see above) =$1000.00
Total = $ 11740.00

item 4: Grass area 171,358 sq ft (see above) = $2408.00
Trees 33 cottonwood $2475.00
110 Globe Willow $4950.00
49 5 gal juniper $1223.00
Total = $8648.00

City of Grand Junction
Community Development Department
Planning • Zoning • Code Enforcement
250 North 5th Street
Grand Junction, CO 81501-2668

Phone: (970) 244-1430
FAX: (970) 244-1599

February 13, 1997

John Davis
1023 24 Road
Grand Junction, CO 81505

Dear John:

On a recent site visit to James Park mobile home park I noticed that the excavation and laying of gravel for the storage area nearest the northeasternmost cul-de-sac did not follow the limits of the area prescribed on the approved site plan. The site plan shows the storage area south of the "bulb" of the cul-de-sac. The actual laying of gravel is almost to the middle of the cul-de-sac, eliminating a large portion of the park. On-site improvements must match the site plan unless a modification is requested and approved by the Planning Commission.

Please take note of this discrepancy and assure that the site is built out according to the approved site plan. If you have any questions please call me at 244-1447.

Sincerely,

Bill Nebeker

Bill Nebeker
Senior Planner

Sundance Properties

243-2308

P.O. Box 2867
Grand Jct., CO 81502

March 24, 1997

City of Grand Junction
Community Development Department
Mr. William H. Nebeker
250 North 5th Street
Grand Junction, CO 81501

Transmitted Via Fax:
(970)244-1599

Re: 480 28-1/4 Road
Grand Junction, CO

Dear Mr. Nebeker,

Please consider this our official request to add a 6'0" high wood fence on the property line adjacent to 28-1/4 at our property at the above listed address. We would also like to locate the trees and shrubs in the 6' of right away that lies between our property line and the sidewalk on 28-1/4 road. It is our committment to maintain these trees and shrubs and the fence in good condition.

The above noted revisions are noted on the 4 copies of the Landscape Plan Revision drawings James Park Subdivision revised 3/21/97 and delivered to your office on the same date.

Please advise me if you have any concerns or questions on the above and notify me as soon as the above items receive approval. Thank you for your time and consideration of the above items.

Sincerely,

Jana L. Bingham

Jana L.Bingham
Development Manager
Sundance Properties

FINAL APPROVED CONDITIONS - JAMES PARK - May 8, 1996
Conditions have been renumbered to reflect Planning Commission's final decision.

1. A 12 foot high noise barrier, designed and constructed in accordance with the specifications contained within the David L. Adams Associates recommendation, shall be built within 6 feet of the south and east property line of Cahoots nightclub. The barrier shall be designed to meet requirements of the Uniform Building Code and shall be stamped by a professional engineer. Appropriate wind load and structural calculations shall be submitted with the plan. The barrier shall be constructed of concrete masonry units or concrete. Maintenance shall include regular graffiti removal, if necessary. No homes shall be moved onto the site until the noise wall has been constructed.

2. Change perimeter non-street setbacks to 15 feet.

3. Place a note on the site plan that states that no parking shall be allowed on either side of the streets. No parking signs shall also be erected along the streets at various locations.

4. The dumpsters located in the cul-de-sacs shall be screened with a 6' high sight obscuring fence.

5. Prior to final plan approval, submit a section drawing showing where the landscaping will be planted in relation to the Goodwill Drain, any other drainage facilities and utilities.

6. The landscape plan shall be revised to include shrubs along the 28 1/4 and Gunnision rights-of-way. A species shall be selected that will provide a hedge-like effect and act as a buffer. The shrubs shall replace half of the proposed grass.

7. Per preliminary approval, the lease agreements for the mobile home park shall contain a notice that warns persons of the noise generated from Cahoots.

8. A plat or other appropriate instrument shall be prepared by the applicant for providing easements on the park roads for ingress/egress to the leasees of the park. their guests and invitees, and also for use by public services, including but not limited to , postal service, trash collection, fire, police, emergency vehicles, and the City of Grand Junction. The exact wording of the easement to be determined. The plat shall include an easement for Public Service Company to service the site with electric service. Wording of the easement to be determined.

9. An equivalent amount of landscaping shall be planted at the entrance to the park in exchange for the landscaping lost where the southwest cul-de-sac is located in the 10 foot perimeter landscaping area.

10. The grading and drainage plan for the site shall be reviewed and approved by the Grand Junction Drainage district prior to final plan approval.

11. A $12,375 Open Space fee is due prior to final approval. Other fees may also apply.

BANNER

CONSULTING ENGINEERS & ARCHITECTS

BANNER ASSOCIATES, INC.
2777 Crossroads Boulevard
Grand Junction, Colorado 81506
(303) 243-2242
FAX (303)243-3810

605 East Main, Suite 6
Aspen, Colorado 81611
(303) 925-5857

January 27, 1997

Building Inspections
Grand Junction Community Development
250 N. 5th Street
Grand Junction, CO 81501

RE: James Park Subdivision
Privacy Wall

To Whom It May Concern:

Banner Associates, Inc., has inspected the excavation for and construction of the privacy wall at James Park Subdivision, 28¼ Road, Grand Junction, Colorado.

The inspections were performed as needed during the construction of the privacy wall. The inspections revealed that the construction of the privacy wall was in conformance with the engineer's plans, designed by Banner Associates, Job #8324-37, Published September 13, 1996.

Sincerely,

BANNER ASSOCIATES, INC.

Brad Rickard

Brad Rickard
Chief Inspector

BR/rr

Memorandum

DATE: April 11, 1997

TO: Jana Bingham, Sundance Properties

FROM: Bill Nebeker BN

RE: James Park Minor Amendment

Jana - please note the following. If you have any questions please call me at 244-1447.

1. Addition of fence is approved and can be installed immediately if desired, after obtaining a fence permit. See #2 below for additional information regarding placement of the fence.

The following required changes shall be incorporated into the final plan for the James Park major amendment. These comments shall be included within the comments for the major amendment.

2. Submit a revised plan showing the fence outside of the 40' sight triangle at the intersection of 28 1/4 Road and the entrance into James Park. The 40' triangle shall be measured along the curb line. The 4' X 6' entrance sign(s) must also be located outside the 40' sight triangle. Any shrubs within this area shall be maintained no higher than 30" above grade. (Section 5-3-2)

3. Required landscaping may be placed in the right-of-way subject to the following conditions:

   a. cottonwood trees are not allowed in City right-of-way; a City Parks Dept. approved species may be permitted as a substitute. Please contact them and propose a different species along with your response to review comments for the major amendment.

   b. a specific shrub shall be proposed and noted on the plan

   c. ground cover for the tree and shrub area shall be bark chips, not river rock.

   d. a maintenance agreement shall be signed and recorded between the property owner and the City for continual maintenance of this landscape area by the property owner.

4. speed bump located immediately within the park shall be removed

5. addressing changes affecting A & W Trailer Park must be approved by the City and Post Office.

File Close-out Summary

File #: FP-96-55

Name: James Park - Mobile Home Park

Staff: Bill Nebeker

Action: Approved – after a long arduous review.

Comments: See file FPA-1997-097 for amendment detailing changes in perimeter fencing, location of speed humps, trash enclosure changes and entrance sign. (RZP-95-199 for preliminary approval).

Release of Improvements Agreement & Guarantee cannot be recorded until the following plans are submitted: As-Builts for utilities, certification that detention ponds were constructed as designed.

File Turned In: February 17, 1999

April 11, 1999

Sundance Properties
Attn: Bob Hurni
1460 North Avenue
Grand Junction, CO 81501

City of Grand Junction
Public Works Department
250 North 5TH Street
Grand Junction CO 81501-2668
FAX: (970) 256-4022

RE: James Park Subdivision

Dear Mr. Hurni:

A final inspection of the streets and public utilities in James Park was conducted on June 3, 1997. As a result of this final inspections a list of items remaining to be completed was given to your office. These items included the submittal of final as-builts and test results for the public street and utility improvements. These items have since been submitted to the City and found to be satisfactorily completed.

The complete package of "As Built" record drawings and required test results for the streets and public utilities, including a certification of the retention pond, were received from Banner and Associates in February 1999. These documents have been reviewed and found to be acceptable.

In light of the above, the streets, public sewer, and drainage improvements within the public right-of-way for 28 1/4 Road are eligible to be accepted for future maintenance by the City of Grand Junction one year after the date of substantial completion. The date of substantial completion is February 1, 1999.

Your warranty obligation for all materials and workmanship for a period of one year beginning with the date of substantial completion will expire upon acceptance by the City.

If you are required to replace or correct any defects which are apparent during the period of the warranty, a new acceptance date and extended warranty period will be established by the City.

Thank you for your cooperation in the completion of the work on this project.

Sincerely,

Kerrie Ashbeck, P.E.
City Development Engineer

Sincerely,

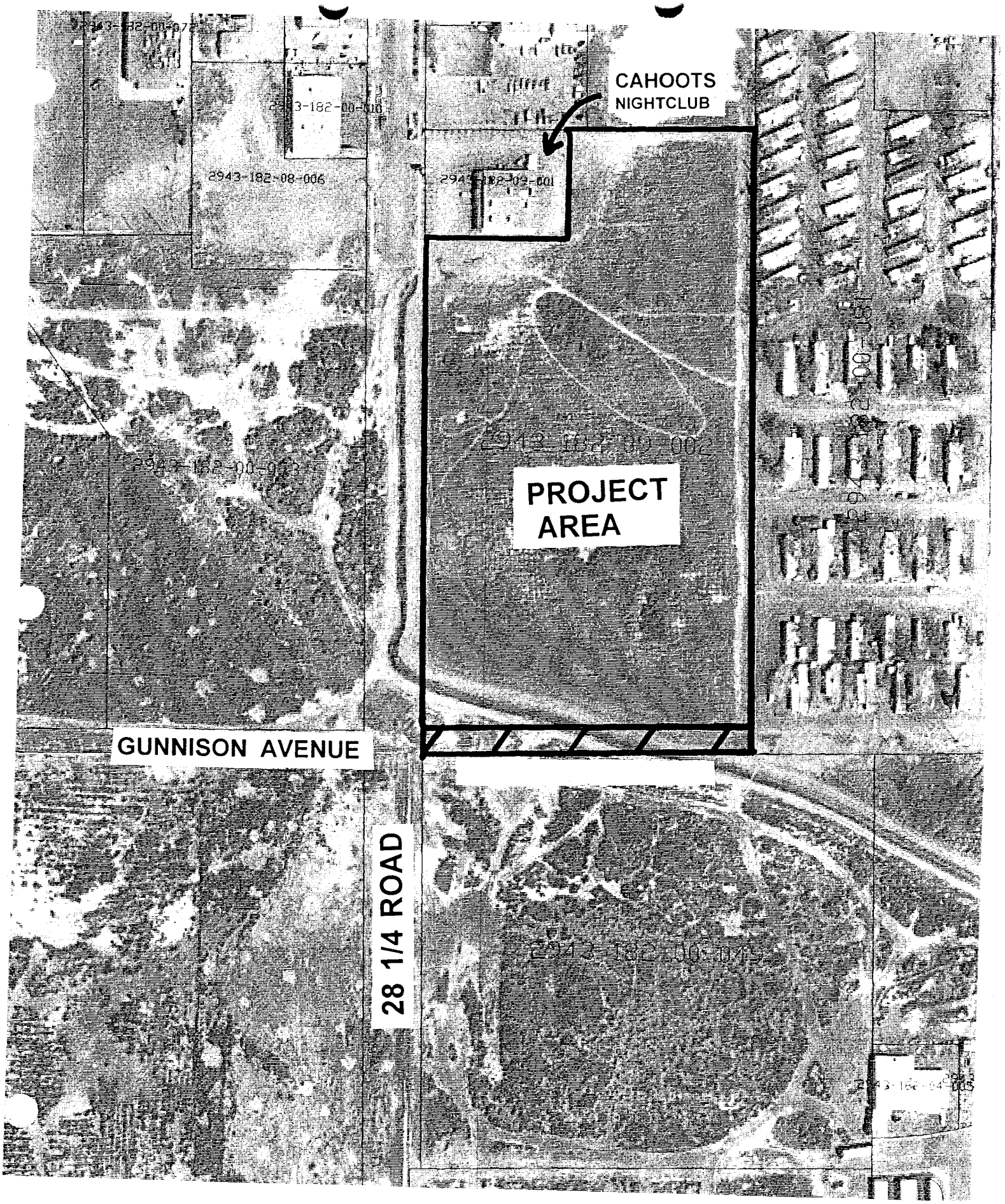
Trenton Prall, P.E.
City Utility Engineer

cc: Don Newton
Doug Cline
Walt Hoyt
Jerry-OBrien
Community Development File #FP-96-55
Banner Associates

TYPE LEGAL DESCRIPTION(S) BELOW, USING ADDITIONAL SHEETS AS NECESSARY. USE SINGLE SPACING WITH A ONE INCH MARGIN ON EACH SIDE.

****

LOT 2 IN DARWIN SUBDIVISION


CAHOOTS
NIGHTCLUB
2943-182-08-006
PROJECT
AREA
GUNNISON AVENUE
28 1/4 ROAD

Helicopter Association International

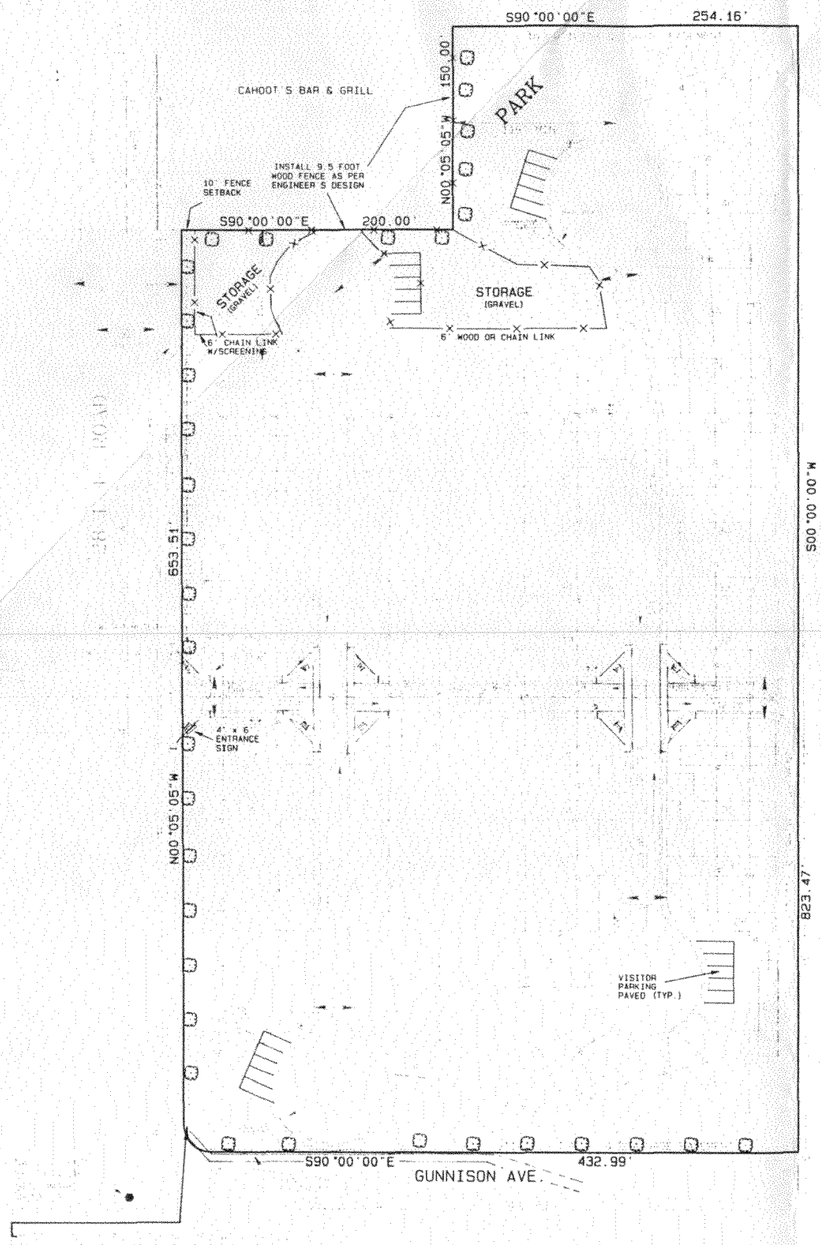
ILLUSTRATIVE NOISES

dB(A)	OVER-ALL LEVEL	COMMUNITY (OUTDOOR)	HOME OR INDUSTRY (INDOOR)	LOUDNESS (HUMAN JUDGEMENT OF DIFFERENT SOUND LEVELS)
130		MILITARY JET AIRCRAFT TAKE OFF FROM AIRCRAFT CARRIER @ 50 FT (130)		
120	UNCOMFORTABLY LOUD	TURBO FAN AIRCRAFT @ TAKE OFF POWER @ 200 FT (110)	OXYGEN TORCH (121) RIVETING MACHINE (110) ROCK N ROLL BAND (108-114)	120 dB(A) 32 TIMES AS LOUD 110 dB(A) 16 TIMES AS LOUD
110		JET FLYOVER @ 1000 FT (103)		
100	VERY LOUD	POWER MOWER (95) MOTORCYCLE @ 25 FT (90)	NEWSPAPER PRESS (97)	100 dB(A) 8 TIMES AS LOUD 90 dB(A) 4 TIMES AS LOUD
90		CAR WASH @ 20 FT (89) DIESEL TRUCK 40 MPH @ 50 FT (84)	FOOD BLENDER (88) MILLING MACHINE (85) GARBAGE DISPOSAL (80)	80 dB(A) 2 TIMES AS LOUD
80	MODERATELY LOUD	HIGH URBAN AMBIENT SOUND (80) PASSENGER CAR 65 MPH @ 25 FT (77)	LIVING ROOM MUSIC (76) TV AUDIO, VACUUM CLEANER (70)	70 dB(A)
70				
60		AIR CONDITIONING UNIT @ 100 FT (60)	ELECTRIC TYPEWRITER @ 10 FT (64) DISHWASHER (RINSE) @ 10 FT (60)	60 dB(A) ½ AS LOUD
50	QUIET	LARGE TRANSFORMERS @ 100 FT (50)	CONVERSATION (60)	50 dB(A) ¼ AS LOUD
40		BIRD CALLS (44) LOWER LIMIT URBAN AMBIENT SOUND (40)		40 dB(A) ⅛ AS LOUD
10	JUST AUDIBLE	(dB(A) SCALE INTERRUPTED)		
0	THRESHOLD OF HEARING			

JAMES PARK

LOT 2, DARWIN SUBDIVISION

LANDSCAPE PLAN



LANDSCAPING NOTES

1.) A 10 foot strip along 28 1/4 Road and Gunnison Ave. will be landscaped with bluegrass seed and Cottonless Cottonwood trees (Populus Angustifolia) of at least 1.50 inches in caliper and a minimum of 4 feet in height at the time of planting. These trees will be spaced no further than 40 feet apart.

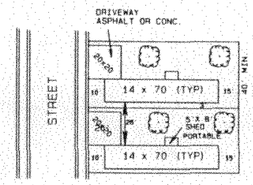
2.) The landscaping along Gunnison Ave. will not take place until Gunnison Ave. has been improved.

3.) Five Cottonless Cottonwood trees (Populus Angustifolia) will be planted along the west property adjacent to Cahoot's of at least 1.5 inches in caliper and 10 to 15 feet in height at the time of planting.

4.) Four trees will be planted along the north property line adjacent to Cahoot's in accordance with Note #1.

5.) Planting requirements will be according to nursery instructions for the specific type of tree.

6.) An underground, pressurized irrigation system will be provided.

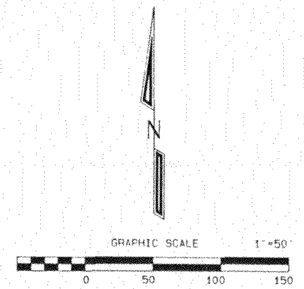


TYPICAL TRAILER LAYOUT
N.T.S.

LEGEND

- COTTONLESS COTTONWOOD (POPULUS ANGUSTIFOLIA)
- BLUEGRASS SEEDING
- GRAVEL

SOIL TYPE: SILTY LOAM CLAY



Rec 5-1-96

APPROVED BY COMMUNITY DEVELOPMENT _____

DATE: _____

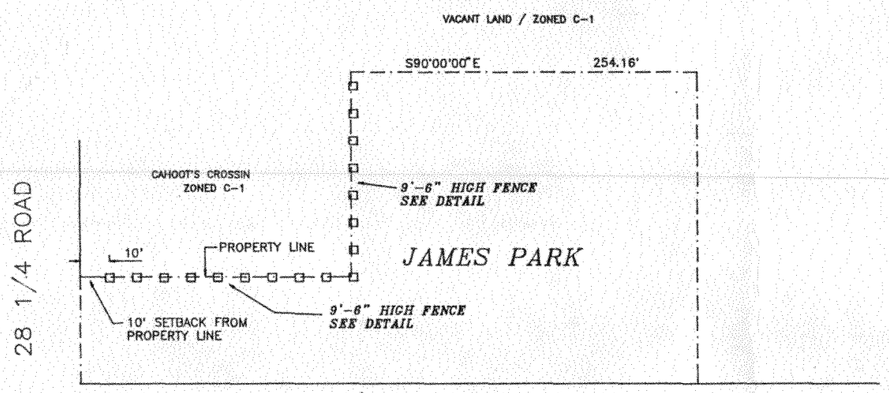
JAMES PARK

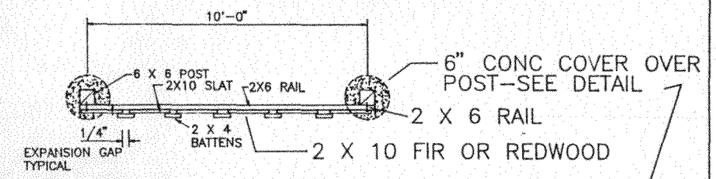
LANDSCAPE PLAN

D H SURVEYS INC.
118 OURAY AVE. - GRAND JUNCTION, CO.
(970) 245-8749

Designed By M.W.D.	Checked By S.L.H.	Job No.	198-95-10
Drawn By TMODEL	Date MARCH 1996	Sheet	1 OF 1

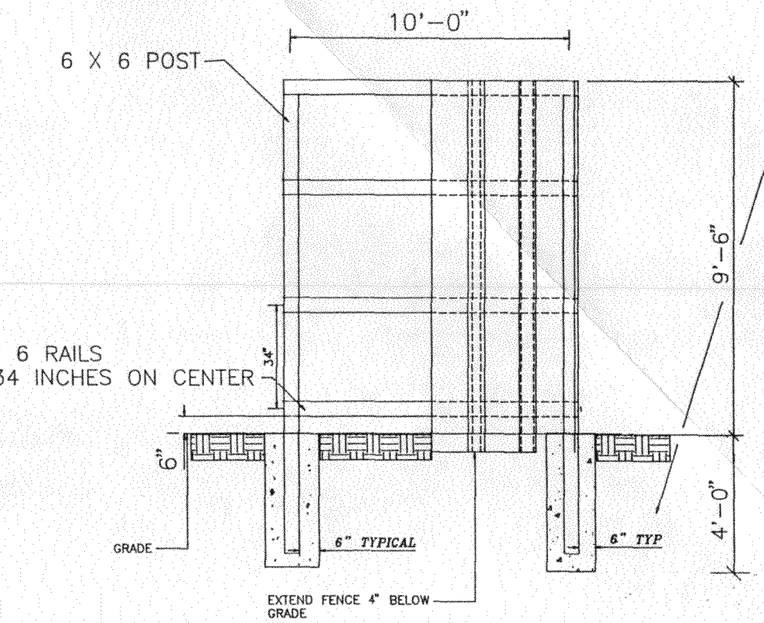
JAMES PARK





FENCE DETAIL-PLAN VIEW

NO SCALE



FENCE DETAIL

NO SCALE

NOTE:
1. FASTENERS ARE TO BE COATED SCREWS
2. ALL WOOD SHALL BE FIR, REDWOOD, OR APPROVED EQUAL. AND TREATED AS PER ATTACHED SPECIFICATIONS.
3. ALL WORK SHALL BE DONE IN ACCORDANCE WITH SPECIFICATIONS FOR WOOD BARRIER CONSTRUCTION CONTAINED IN THE SPECIFIC REPORT FOR JAMES PARK BY DAVID L. ADAMS ASSOCIATES, INC. DATED 28 FEB., 1996.

RET 5-1-96

4/17/96

JAMES PARK

FENCE DETAIL SHEET

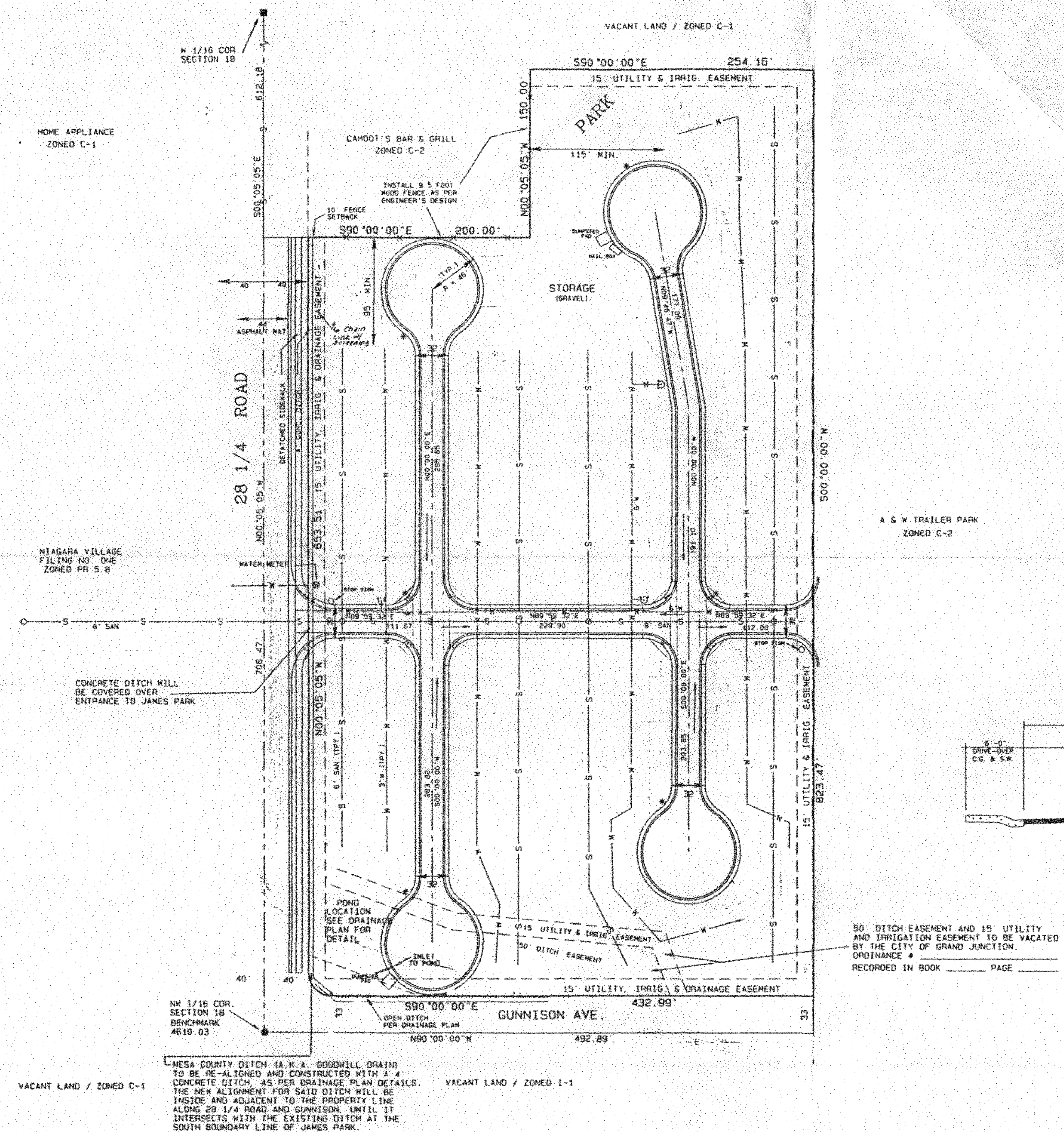
W.H. LIZER AND ASSOCIATES
576 25 ROAD - GRAND JUNCTION, CO.
(970) 241-1129

Designed By	WHL	Checked By	WHL	Job No.	
Drawn By	WHL	Date	MAR., 1996	Sheet	1 OF 1

JAMES PARK

LOT 2, DARWIN SUBDIVISION

SITE PLAN



50' DITCH EASEMENT AND 15' UTILITY AND IRRIGATION EASEMENT TO BE VACATED BY THE CITY OF GRAND JUNCTION.
ORDINANCE # ______
RECORDED IN BOOK ______ PAGE ______

MESA COUNTY DITCH (A.K.A. GOODWILL DRAIN) TO BE RE-ALIGNED AND CONSTRUCTED WITH A 4' CONCRETE DITCH, AS PER DRAINAGE PLAN DETAILS. THE NEW ALIGNMENT FOR SAID DITCH WILL BE INSIDE AND ADJACENT TO THE PROPERTY LINE ALONG 28 1/4 ROAD AND GUNNISON, UNTIL IT INTERSECTS WITH THE EXISTING DITCH AT THE SOUTH BOUNDARY LINE OF JAMES PARK.

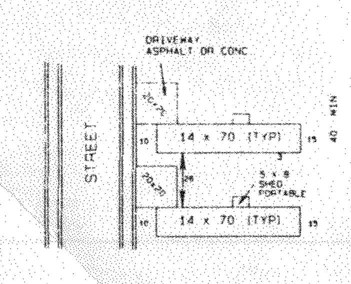
NOTES

1.) This property is under private ownership.
2.) There will be no vehicular access to 28 1/4 Road except from designated street.
3.) All street improvements made within this Lot will be privately owned and maintained.
4.) All water, sanitary and irrigation lines installed within this subdivision will be privately owned and maintained.
5.) Setback requirements for trailer are as follows:
- Front set-back is 10 feet from back of sidewalk
- Side set-back is 26 feet between trailers
- Rear set-back is 10 feet between ends of trailers
- Perimeter street set-back 15 feet
- Perimeter non-street set-back 12 feet

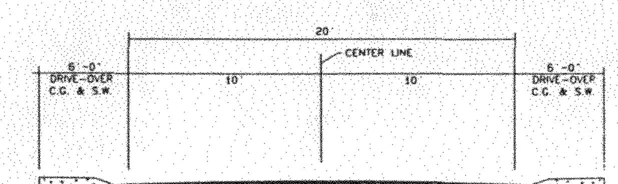
6.) Off street parking in cul-de-sacs will be paved
7.) Street lights to be installed as per Public Service subdivision requirements.

LEGEND

- WATER METER
- FIRE HYDRANT
- STREET SIGN
- STREET LIGHT
- ELECTRIC LINE
- SANITARY SEWER
- WATER LINE
- TRAFFIC FLOW



TYPICAL TRAILER LAYOUT
N.T.S.



INTERIOR STREET SECTION
N.T.S.

UTILITY COMPANIES

PUBLIC SERVICE CO.
G.J. WATER
FRUITVALE SANITATION
TCI CABLEVISION
US WEST
GRAND VALLEY IRRIGATION
GRAND JCT. DRAINAGE DIST.

AREA SUMMARY

6.3_ ACRES IN ONE LOT
1.59 ACRES IN PRIVATE ROAD
7.9_ ACRES TOTAL

N

GRAPHIC SCALE 1"=50'
0 50 100 150

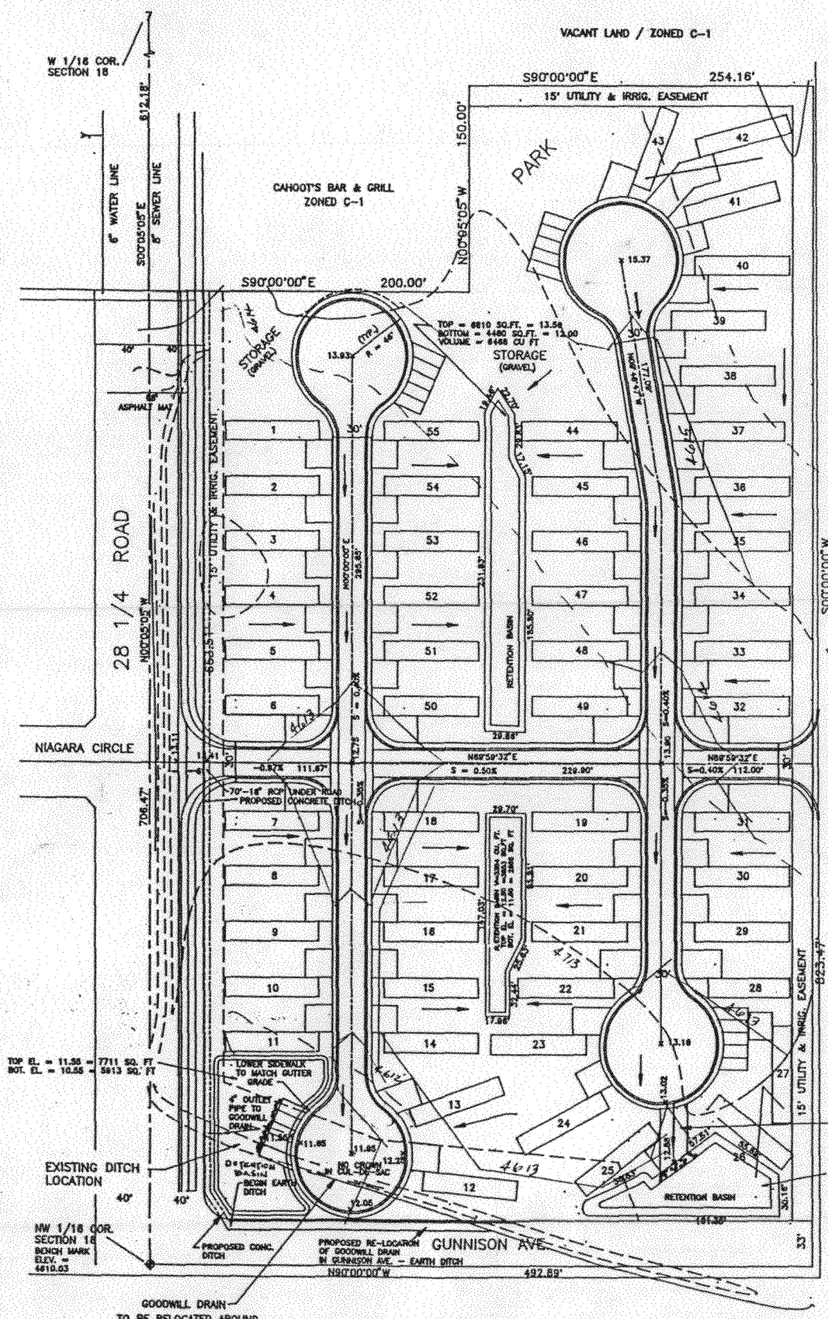
REC 5-1-96
(CHANGED FROM SUBMITTED PLAN) PER PCJ

APPROVED BY CITY ENGINEER ______
DATE ______

JAMES PARK SITE PLAN	
D H SURVEYS INC. 118 OURAY AVE - GRAND JUNCTION, CO. (970) 245-8749	

Designed By M.W.D.	Checked By	Job No.
Drawn By TMODEL	Date	Sheet

JAMES PARK
GRADING AND DRAINAGE PLAN

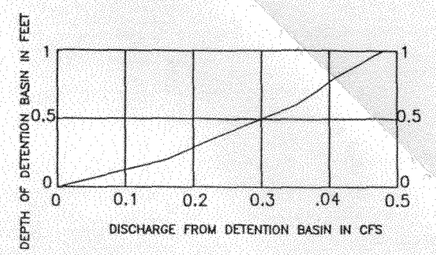


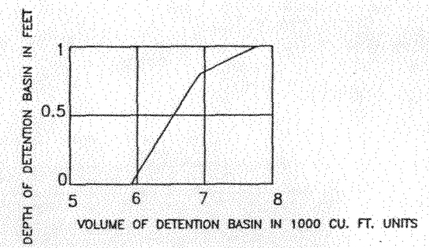
NOTE
1. THE RETENTION BASINS WILL BE GRASSED WITH BLUEGRASS AND MAINTAINED BY THE PROPERTY OWNERS
2. SEE STREET PLAN FOR GOODWILL DRAIN PROFILE AND DETAILS
3. THE DETENTION BASIN WILL BE GRASSED WITH BLUEGRASS AND MAINTAINED BY THE PROPERTY OWNERS.

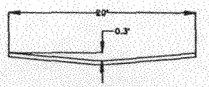
4614 FINISH CONTOUR
4614 EXISTING CONTOUR
DRAINAGE PATTERN
x 13.83 STREET ELEV.
S = 0.40% STREET GRADE
RIP-RAP, 6" COBBLE X 2' WIDE MIN.

AREA SUMMARY

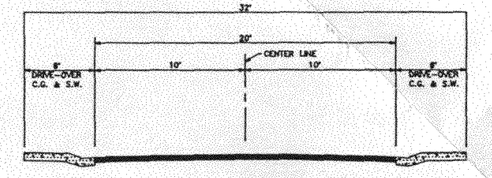
6.30 ACRES	IN ONE LOT
1.59 ACRES	IN PRIVATE ROAD
7.89 ACRES	TOTAL



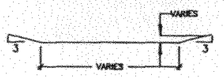




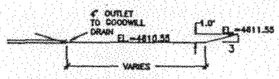
DETAIL D
CONC. V PAN TO RETENTION BASIN
NOT TO SCALE



TYPICAL INTERIOR PRIVATE STREET SECTION
NOT TO SCALE



TYPICAL SECTION
RETENTION BASIN
NOT TO SCALE



TYPICAL SECTION
DETENTION BASIN
NOT TO SCALE

SCALE: 1" = 50'

APPROVED BY CITY ENGINEER

BY _____ DATE _____

REC 5-1-96

JAMES PARK
GRADING AND DRAINAGE PLAN

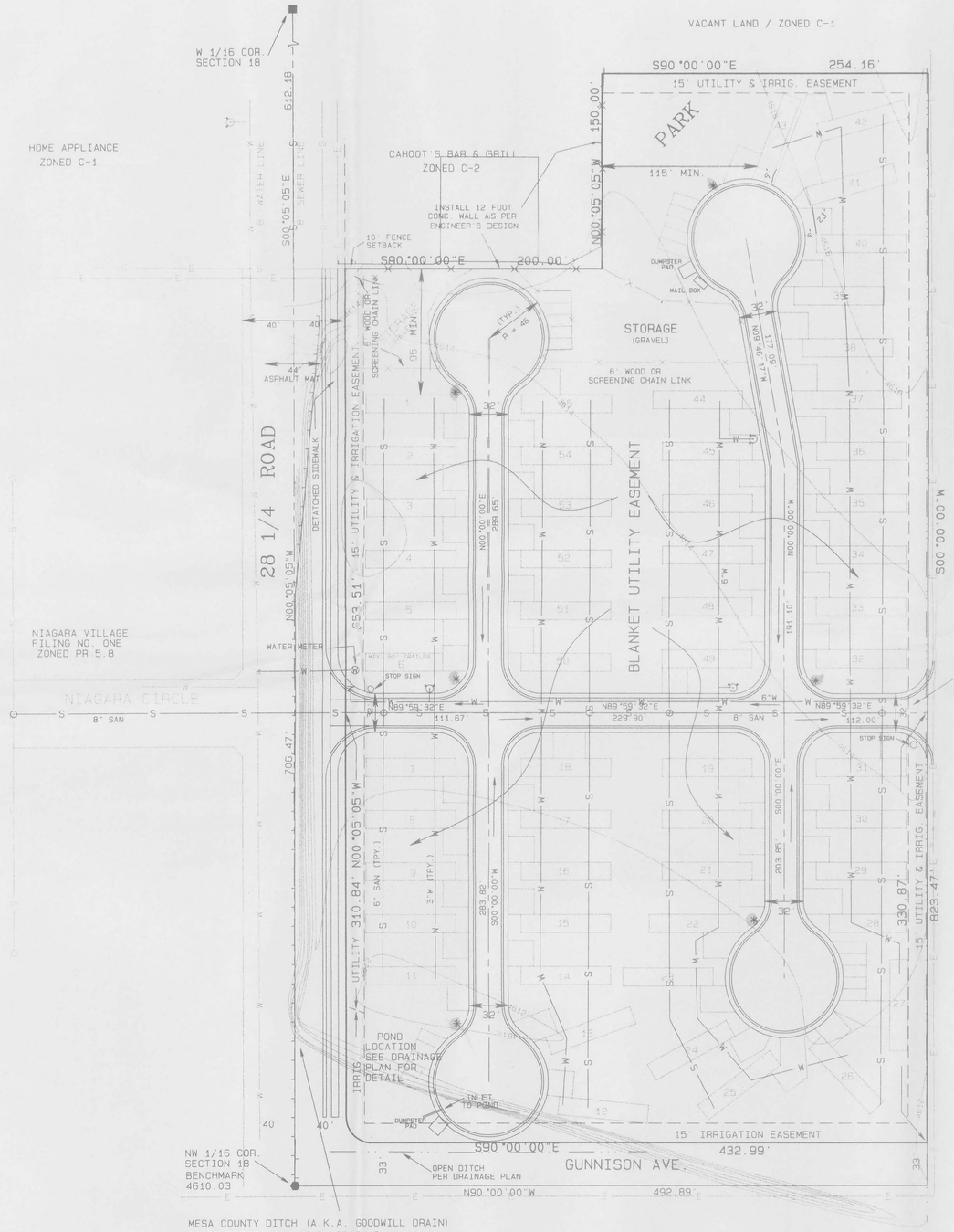
WH LIZER AND ASSOCIATES
ENGINEERING CONSULTING AND LAND SURVEYING
576 25 ROAD-UNIT 8-GRAND JCT. COLO. 81505

Designed By WHL	Checked By WHL	Job No.	
Drawn By WHL	Date APR., 1996	Sheet 1 OF 1	

JAMES PARK

LOT 2, DARWIN SUBDIVISION

SITE PLAN

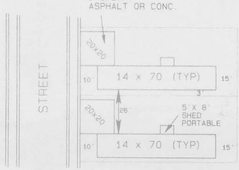


NOTES

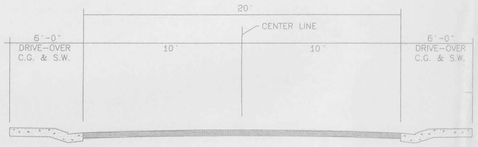
1.) This property is under private ownership.
2.) There will be no vehicular access to 28 1/4 Road except from designated street.
3.) All street improvements made within this Lot will be privately owned and maintained.
4.) All water, sanitary and irrigation lines installed within this subdivision will be privately owned and maintained.
5.) Setback requirements for trailer are as follows:
Front set-back is 10 feet from back of sidewalk
Side set-back is 26 feet between trailers
Rear set-back is 10 feet between ends of trailers
Perimeter street set-back 15 feet
Perimeter non-street set-back 15 feet
6.) Off street parking in cul-de-sacs will be paved
7.) Street lights to be installed as per Public Service subdivision requirements.
8.) No parking shall be allowed on either side of the street. There will be adequate NO-PARKING signage installed.
9.) Dumpster locations shall be screened with a 6' high sight obscuring fence.
10.) The 12 foot wall at the northwest corner of this plan (next to Cahoot's) shall be maintained by the owner of Lot 2, Darwin Subdivision and kept free of graffiti.

LEGEND

- W WATER METER
- FIRE HYDRANT
- STREET SIGN
- STREET LIGHT
- E ELECTRIC LINE
- S SANITARY SEWER
- W WATER LINE
- TRAFFIC FLOW



TYPICAL TRAILER LAYOUT
N.T.S.



INTERIOR STREET SECTION
N.T.S.

UTILITY COMPANIES

PUBLIC SERVICE CO.
G.J. WATER
FRUITVALE SANITATION
TCI CABLEVISION
US WEST
GRAND VALLEY IRRIGATION
GRAND JCT. DRAINAGE DIST.

AREA SUMMARY

6.30 ACRES IN ONE LOT
1.59 ACRES IN PRIVATE ROAD
7.89 ACRES TOTAL

11-4-96
ACCEPTED
ANY CHANGE OF SETBACKS MUST BE APPROVED BY THE CITY PLANNING DEPT. IT IS THE APPLICANT'S RESPONSIBILITY TO PROPERLY LOCATE AND IDENTIFY EASEMENTS AND PROPERTY LINES.

APPROVED BY CITY ENGINEER _____

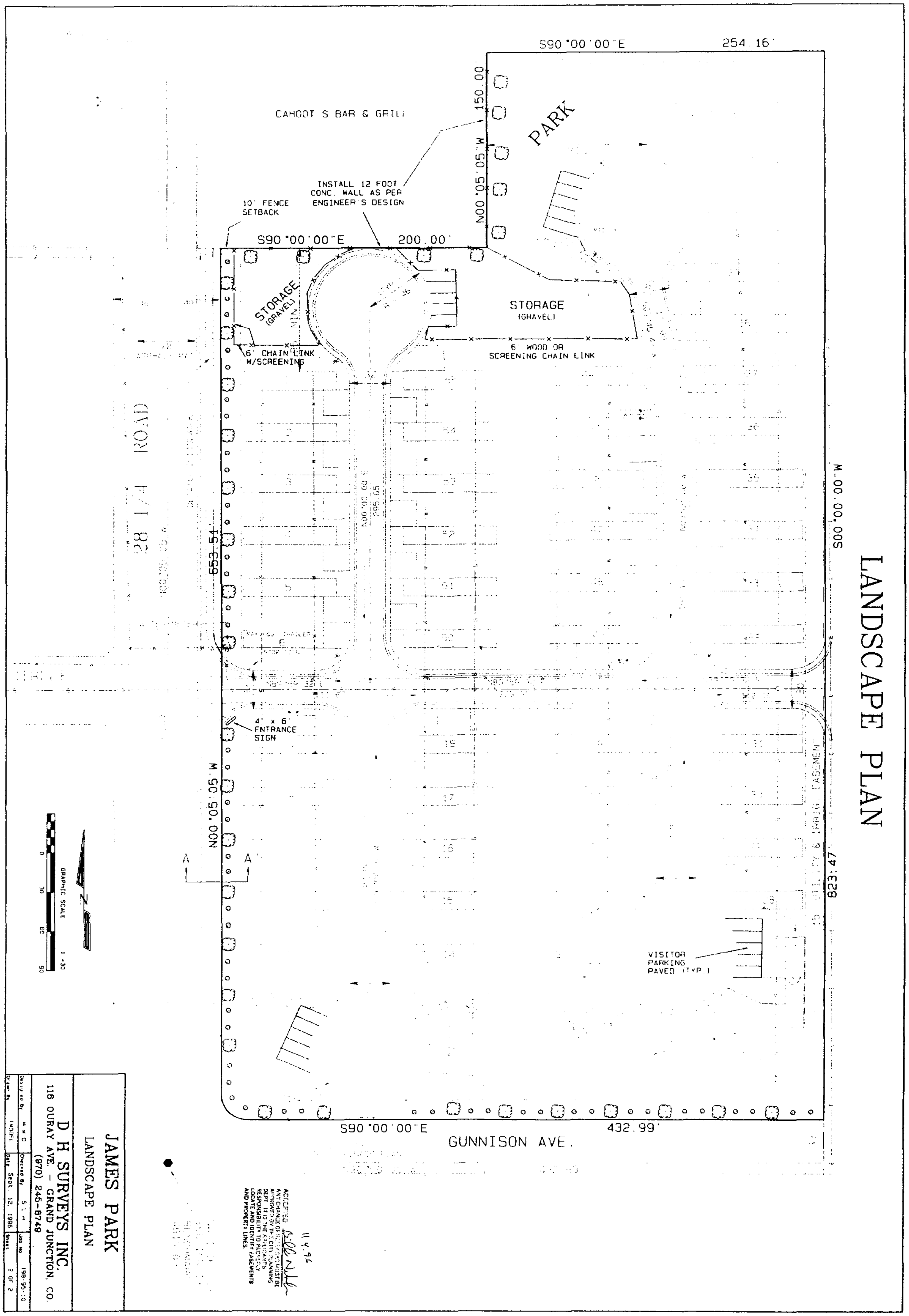
DATE: _____

COLORADO REGISTERED MICHAEL W. DANIELS 20679 PROFESSIONAL LAND SURVEYOR

GRAPHIC SCALE 1"=50'
0 50 100 150

JAMES PARK SITE PLAN	
D H SURVEYS INC. 118 OURAY AVE. – GRAND JUNCTION, CO. (970) 245-8749	
Designed By M.W.D.	Checked By S.L.H.
Drawn By TMODEL	Date Sept. 12, 1996
Job No. 198-95-10	Sheet 1 OF 1

FP-1995-055


LANDSCAPE PLAN
S90°00'00"E
254.16'
150.00'
N00°05'05"W
CAHOOT'S BAR & GRILL
PARK
INSTALL 12 FOOT
CONC. WALL AS PER
ENGINEER'S DESIGN
10' FENCE
SETBACK
S90°00'00"E
200.00'
STORAGE
(GRAVEL)
STORAGE
(GRAVEL)
6' CHAIN LINK
W/SCREENING
6' WOOD OR
SCREENING CHAIN LINK
28 1/4 ROAD
653.51'
N00°05'05"W
S00°00'00"W
823.47'
4' x 6'
ENTRANCE
SIGN
A
A'
VISITOR
PARKING
PAVED (TYP.)
S90°00'00"E
432.99'
GUNNISON AVE.
GRAPHIC SCALE
1"=30'
0
30
60
90
JAMES PARK
LANDSCAPE PLAN
D H SURVEYS INC.
118 OURAY AVE. - GRAND JUNCTION, CO.
(970) 245-8749
Sept 12 1996
198-95-10
2 OF 2

FP-1996-095