

INPACT STATEMENT:

Los Reyes Restaurant Inc. is planing to enlarge the restaurant. The location is at 811 South 7th Street. The project will start at the time the building permit is issued. If every thing goes well it will start on March 30, 1993.

The addition will be 36'x38' and added on the west of the existing building. The lot south is being bought and will be turned into a parking area. The lot will be striped and handicaped parking will be provided to meet the city code. Drainage and landscaping will also meet the city code.

The area surounding the restaurant is zoned industrial. I am putting in a small lounge and moving the entrance around to the south side of the building, leaving the ramp and old entrance for handicap and a fire door.

With 7th street being a main line for the Riverfront Project and the park thats suppose to be built, the restaurant will be a start to help bring 7th street a place to go. The restaurant has been these at the same location for 25 years.

The special use permit should have been done in 1988 when we added the front area. With the fire at the restaurant. I thought this would be the time to do this.

We are open 7 days a week and the hours of operation are 11:00 to 2:00 and 5:00 to 10:00. Our seating capacity is 108 people.

Thank You,

Juilo Reyes
Los Reyes Restaurant, Inc.

Umetco Minerals Corporation



39 OLD RIDGEBURY ROAD • DANBURY, CONNECTICUT 06817-0001

VIA FAX and MAIL

March 12, 1993

Mr. Julio Reyes
811 South 7th Street
Grand Junction, CO 81501

RE: UMETCO Minerals Co.
South 7th Street
Sale of Parcel #2
Grand Junction, Colorado

Dear Mr. Reyes:

In response to your telephone proposal yesterday afternoon, March 11, 1993, regarding the purchase by you of a parcel of our land adjoining your property on South 7th Street I would like this correspondence to constitute our Letter of Intent.

Subject to a more formal contract to be executed within days from this date, we are agreeable to sell such parcel consisting of 20,000 \pm s.f. of land to you for cash in the amount of \$30,000 or \$1.50 per square foot.

Of course, you need to satisfy yourself that your intended use meets all governmental rules and regulations. Any title search you may perform would probably address this.

We would be agreeable to a closing to take place no later than May 15, 1993, subject of course to your completing all necessary arrangements.

I have attached a drawing No. 6-99 which identifies the property marked in red as the parcel you propose to purchase.

REVIEW COMMENTS

Page 1 of 3

FILE NO. #36-93

TITLE HEADING: Special Use Permit - Restaurant in
I-2 Zone District

LOCATION: 811 South 7th Street

PETITIONER: Julio Reyes

PETITIONER'S ADDRESS/TELEPHONE: 588 Kirby Lane
Grand Junction, CO
245-8392

STAFF REPRESENTATIVE: Kristen Ashbeck

**NOTE: WRITTEN RESPONSE BY THE PETITIONER TO THE REVIEW COMMENTS IS
REQUIRED ON OR BEFORE 5:00 P.M., MAY 6, 1993.**

MESA COUNTY BUILDING DEPARTMENT
Bob Lee

4/14/93
244-1656

All required building permits have been issued and the project is in compliance with our rules and regulations at this time. The stated seating capacity of 108 may vary based on an occupant load calculation we will do at the time of Certificate of Occupancy.

U.S. WEST
Leon Peach

4/14/93
244-4964

No comments at this time.

CITY UTILITIES ENGINEER
Bill Cheney

4/15/93
244-1590

SEWER - Los Reyes Restaurant is billed for 10.08 E.Q.U. The addition will increase the E.Q.U. rating to 15.12 based on a seating capacity of 108. Consequently, an additional \$3,780 in Plant Investment Fees will be required prior to re-opening the business. The monthly service charge will be \$156.49 for sewer.

An Industrial Pretreatment Application is required to be filled out and an approved grease trap installed. Applications can be obtained by calling 244-1489, Persigo Treatment Facility.

CITY POLICE DEPARTMENT
Mark Angelo

4/16/93
244-3587

1. Recommend eliminating parking spaces on south side building.
2. Driveway width shows 26' parking spaces 20' deep, no room left for cars to pass by or safely back out.

FILE #36-93 / REVIEW COMMENTS

page 2 of 3

3. Confirming, you are adding an additional exit on the south side, so there are 2 exits, not one??
4. What type of bushes are you using? Confirming bushes to be installed into the parking lot near south entrance? Not a safe place, bushes could block view of pedestrians before they walk out into the parking lot.
5. Suggest NE entrance to be one-way off 7th Street, and south exits be one-way out.
6. Need transitional lighting near main entrance. Handicap entrance should be per the main entrance, south side. To allow for cars entering a chance to slow down or stop for handicap persons entering business. Existing entrance is close to parking lot entrance.
7. Need additional lighting in middle, or south side of middle of parking lot. Need additional lighting for the 3 parking spaces near dumpster.
8. Are you going to leave the 10'-12' fence along North 7th Street? I don't feel it would blend in with the landscaping plan of the City for South 7th Street. A 4' fence, I feel, would be adequate in keeping individuals out along the 7th Street side.

PUBLIC SERVICE COMPANY
Dale Clawson

4/15/93
244-2695

Electric & Gas: No objections.

CITY ENGINEER
Don Newton

4/20/93
244-1559

Petitioner will need to submit a grading and drainage plan for the proposed parking lot. All drainage should outlet into 7th Street unless easements are obtained from adjacent property owners. Storm water detention/retention could be located in landscaped area.

Property lines are required to be shown on site plan. The driveway along the south side of the parking lot should be paved and included in the grading plan.

FIRE DEPARTMENT
George Bennett

4/23/93
244-1400

The trash dumpster is not allowed within 5 feet of the building or building overhang.

A minimum of 20 foot clear and unobstructed access is required. Please be sure that **ALL** areas meet this requirement.

DOWNTOWN DEVELOPMENT AUTHORITY
Barbara Creasman

4/21/93
245-2926

No objection.

48-93

**SPECIAL USE PERMIT - LOS REYES RESTAURANT
REVIEW COMMENTS - COMMUNITY DEVELOPMENT
DEPARTMENT 4/27/93
KRISTEN ASHBECK 244-1437**

The following comments are based upon the revised site plan submitted by Western Engineers 4/26/93:

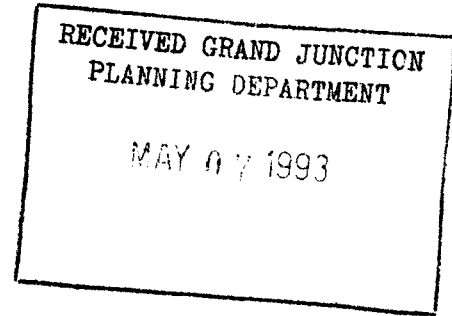
1. Will there be gates or just openings in the fence for driveways exiting to the south?
2. Show landing on new entrance on the south side of the building.
3. Indicate types of plants and groundcover in the landscaping strip along 7th Street (i.e. 5 street trees, shrubs, grass, etc.)
4. Signs indicating one-way circulation through the parking area are required (for example: "Exit Only - No Entrance" at driveways on the south and "Entrance Only - No Exit" on 7th Street entrance). Revise site plan to show where these signs will be placed.
5. Show dumpster location.
6. Is existing ramp on east side of building to remain? If so, show on site plan.
7. Irrigation to landscaped area is required. Please indicate on the site plan that this will be provided.
- ~~8.~~ An improvements agreement and guarantee (escrow money or provide a Letter of Credit from a local bank) are required for any improvements not constructed prior to issuance of a Certificate of Occupancy (C.O.).



Grand Valley National Bank

925 NORTH SEVENTH STREET • (303) 241-4400
P.O. BOX 4090 GRAND JUNCTION, COLORADO 81502

May 6, 1993



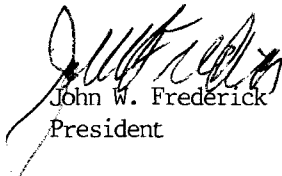
City of Grand Junction
Planning Department
250 N. 5th Street
Grand Junction, Co. 81501

Gentlemen:

This letter is to confirm that the Grand Valley National Bank is lending Los Reyes Restaurant, Inc. funds to acquire the property to the south of the current restaurant, improve the property and renovate the restaurant.

There are funds in the budget to provide for the necessary landscaping.

Sincerely,


John W. Frederick
President

JWF/kn

"Letter of Credit"

Drainage Study
 809 South Seventh
 Los Reyes Restaurant.

Sheet 1 of 5
 3420
 4/27/93
 LRB

UNDEVELOPED CONDITIONS.

SCS Soils Map \Rightarrow Billings silty clay, Classification "C"

2yr, C=0.25 100yr, C=0.35

Avg slope 0.007, Area = 18,499 sqft, 0.425 Ac.

2 YEAR RUNOFF

$$\text{sheet flow, } T_c = \frac{1.8(1.1 - 0.25)(147)^{1/2}}{(0.7)^{0.333}} = 21 \text{ min, } i = 1.08 \text{ in/hr}$$

$$Q = CIA = (0.25)(1.08)(0.425) = 0.115 \text{ cfs.}$$

100 YEAR RUNOFF

$$\text{sheet flow, } T_c = \frac{1.8(1.1 - 0.35)(147)^{1/2}}{(0.7)^{1/3}} = 18 \text{ min, } i = 2.99 \text{ in/hr}$$

$$Q_{100yr} = CIA = (0.35)(2.99)(0.425) = 0.445 \text{ cfs.}$$

DEVELOPED CONDITIONS

Runoff Coefficient

DESC	AREA	2YR	100YR	FACTOR	2YR WT.	100YR WT
LANDSCAPE	1,949	0.25	0.35	0.105	0.026	0.037
ASPHALT	16,550	0.90	0.95	<u>0.895</u>	<u>0.805</u>	<u>0.850</u>
	18,499.			1.00	0.831	0.887

DEVELOPED CONDITIONS (Total Basin)

$$T_{c2YR} = \frac{1.8(1.1 - 0.831)(93)^{1/2}}{(1.88)^{0.333}} < 5 \text{ min}$$

$$Q_0 = 0.67(0.115) = 0.077$$

$$T_{d2YR} \left[\frac{(633.4)(0.831)(0.425)}{(0.077) \cdot \frac{(0.077)^2(5)}{81.2(0.831)(0.425)}} \right]^{1/2} - 15.6 = 54.3 - 15.6 = 38.7 \text{ min}$$

$$I_d = 40.6/54.3 = 0.75 \text{ in/hr.}$$

$$Q_{d2YR} = (0.831)(0.75)(0.425) = 0.265 \text{ cfs.}$$

$$K = 2/5 = 4.2.$$

100 YEAR.

$$T_{c100YR} = \frac{1.8(1.1 - 0.887)(93)^{1/2}}{(1.88)^{0.333}} < 5 \text{ min} \quad Q_0 = 0.67(0.445) = 0.298 \text{ cfs}$$

$$T_{d100YR} \left[\frac{2925(0.887)(0.425)}{0.298 - \frac{(0.298)^2(5)}{234(0.887)(0.425)}} \right]^{1/2} - 25 = 61.3 - 25 = 36.3 \text{ min.}$$

$$I_{d100YR} = 106.5/(36.3 + 17.2) = 1.99 \text{ in/hr}$$

$$Q_{d100YR} = (0.887)(1.99)(0.425) = 0.750 \text{ cfs}$$

$$K = 18/5 = 3.6$$

Total Volume Required as a single basin $V_{100YR} = 1,181 \text{ cf.}$

SUB-BASINS RUNOFF.

Sub-basin I (Direct Runoff.)

Coefficient.

DESC.	AREA	CYR	100YR	FACTOR	WT 2YR	WT 100YR
Landscape	481 sqft	0.25	0.39	0.173	0.043	0.061
Asphalt.	2,293 sqft	0.90	0.95	0.827	0.744	0.785
	2,774 sqft (0.064 Ac)			1.000	0.787	0.846

$$Q_{d2YR} = (0.787)(0.75)(0.064 \text{ Ac}) = 0.0378 \text{ cfs}$$

$$Q_{d100YR} = (0.846)(1.99)(0.064 \text{ Ac}) = 0.1077 \text{ cfs.}$$

Subbasin II (to be detained)

Runoff Coefficient

DESC	AREA	Runoff Coefficient			WT	
		2YR	100YR	FACTOR	2YR	100YR
Landscape	1,468 sqft	0.25	0.35	0.093	0.023	0.033
Asphalt	14,257 sqft	0.90	0.95	0.907	0.816	0.861
	15,725 sqft (0.361 Ac)			1.000	0.839	0.894

$$Q_{d\ 2YR} = (0.839)(0.75)(0.361) = 0.227$$

$$Q_{d\ 100YR} = (0.894)(1.99)(0.361) = 0.642$$

Check:

	Subbasin I	+	Subbasin II	=	Total
2YR	0.038 cfs	+	0.227 cfs	=	0.265 cfs = 0.265 cfs
100YR	0.108 cfs	+	0.642 cfs	=	0.750 cfs = 0.750 cfs

ALLOWABLE RATE OF DISCHARGE

	Undeveloped - Subbasin I (Direct)	= Allowable for Subbasin II
2YR	0.115 cfs - 0.038 cfs	= 0.077 cfs
100YR	0.445 cfs - 0.108 cfs	= 0.337 cfs

REQUIRED DETENTION VOLUME Subbasin II

$$2YR \Rightarrow Q_d = 0.227 \quad Q_0 = (0.077)(0.67) = 0.052 \quad L = 4.2$$

$$T_{cd} = 5 \text{ min} \quad T_{d\ 2YR} = 38.7 \text{ min}$$

$$V = 66 \left[(38.7)(0.227) - (38.7)(0.052) - (0.052)(5) + \frac{(4.2)(5)(0.052)}{2} + \frac{(0.052)^2(5)}{2(0.227)} \right]$$

$$66 \left[(8.78 - 2.01 - 0.26 + 0.55 + 0.03) \right] = 66(7.09) = 467.9 \text{ cf.}$$

LOS REYES

SHEET 4 of 5

5/17/93

WEI 3426

$$100 \text{ YR} \Rightarrow Q_0 = 0.642 \text{ cfs} \quad Q_D = (0.332)(0.67) = 0.226 \text{ cfs} \quad k = 3.6$$

$$T_{cd} = 5 \quad T_{d/100} = 36.3 \text{ min}$$

$$V = 66 \left[(0.642)(36.3) - (0.226)(36.3) - (0.226)(5) + \frac{(0.226)(3.6)(5)}{2} + \frac{(0.226)^2 5}{2(0.642)} \right]$$
$$= 66(23.30 - 8.20 - 1.13 + 2.03 + 0.19) = 66(16.20) = 1,069.4 \text{ cf.}$$

DETENTION AREA VOLUMES.

EL.	AREA	VOLUME Incremental	Total
67.0	0.0	0	0
67.2	676.4	45.09	45.09
67.4	2,514.1	299.64	344.73
67.6	5,496.6	781.87	1,126.60
67.65	6,226.8	292.90	1,419.50

2YR Water Surface elev. \Rightarrow 67.45 EL. = 506. cf.

100YR Water Surface elev \Rightarrow 67.61 EL. = 1,182 cf.

2 YEAR DISCHARGE

High water 67.29

Allowable discharge 0.08 cfs

Top of orifice 66.12

C = 0.64

Depth 1.17'

$$A = \frac{Q}{C(2gH)^{1/2}} = \frac{0.08}{(0.64)(64.4(1.17))^{1/2}} = \frac{0.08}{5.555} = 0.0144 \text{ ft}^2 \sim 2.07 \text{ in}^2$$

$$2.07 \text{ in}^2 \sim \text{Dia.} = 1\text{-}5/8" \ll$$

100 YEAR DISCHARGE

High water 67.48

Allowable 0.337 cfs.

Two YR 67.29

0.19

$$2\text{ YR Orifice @ } 67.48, Q = (0.64)(0.0144)[64.4(1.36)]^{1/2} = 0.09 \text{ cfs}$$

$$100\text{ YR Orifice } 0.34 \text{ cfs} - 0.09 \text{ cfs} = 0.25 \text{ cfs}$$

$$A = \frac{Q}{C(2gH)^{1/2}} = \frac{0.25}{(0.64)(64.4(0.19))^{1/2}} = \frac{0.25}{2.2387} = 0.1117 \text{ ft}^2 \sim 16.08 \text{ in}^2$$

$$16.08 \text{ in}^2 \sim \text{Dia.} = 4\text{-}1/2" (14.52")$$

Check Outfall Pipe \Rightarrow Low Pt on berm 67.82

$$1\text{-}5/8" \text{ discharge } Q = 0.64(0.0144)(64.4(1.7))^{1/2} = 0.10 \text{ cfs}$$

$$4\text{-}1/2" \text{ discharge } Q = 0.64(0.1117)(64.4(0.53))^{1/2} = 0.42 \text{ cfs}$$

$$0.52 \text{ cfs}$$

12" ϕ PVC @ 2% slope = 0.6 cfs > 0.52 cfs OK

Master Petroleum & Development Co., Inc.
814 South 7th St.
Grand Junction, CO., 81501

May 17, 1993

Los Reyes Restaurant/ Julio Reyes
811 South 7th St.
Grand Junction, CO., 81501

RE: Parking Lot usage


Dear Julio,

As per our telephone conversation this morning I am forwarding this letter authorizing you and your business to use our parking lot for a two week period ending ~~June~~ ^{July} 2, 1993 under the following terms and conditions;

- 1.) You accept full responsibility and liability for any and all damages which may arise from your business usage of our lot. Including, but not limited to, any damages which may occur to your customer vehicles, any vehicles which our tenants may have parked there and our building and grounds as a result of your usage.
- 2.) Your customers will not park or block our tenants overhead or entrance doors. It shall be your responsibility to police this condition.
- 3.) You shall police the lot daily to assure that no broken glass or other potential liability causing conditions exist.
- 4.) You shall hold us and our tenants harmless from any legal action which may arise out of your usage of this lot, including but not limited to any legal fees which may be incurred as a result of defending ourselves from any such action.

Agreed to and Accepted this 17th day of May, 1993 by;


Julio Reyes
Los Reyes Restaurant


Thomas A. Kucel, pres.
Master Petroleum & Development
Co., Inc.

RECEIVED GRAND JUNCTION
PLANNING DEPARTMENT

MAY 17 1993

The Daily Sentinel

Established in 1893

A C O X N E W S P A P E R

George Orbanek

Editor and Publisher

May 17, 1993

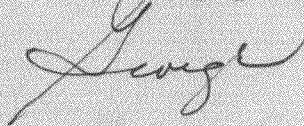
Mr. Julio Reyes
Los Reyes Restaurant
811 S. Seventh St.
Grand Junction, CO 81501

Dear Julio:

Per our discussion this morning, you and your patrons are welcome to use The Daily Sentinel's visitor parking lot as the need arises during your reopening. We are particularly able to help you accommodate your dinner-time patrons.

All of us here at The Daily Sentinel are eagerly anticipating your reopening. I'm in need of a meat sopapilla and margarita fix.

Sincerely yours,



go/jr

RECEIVED GRAND JUNCTION
PLANNING DEPARTMENT

MAY 17 1993



CONSULTING ENGINEERS / LAND SURVEYORS

2150 Hwy. 6 & 50, Grand Junction, CO 81505-9422 • 303/242-5202 • FAX 242-1672

DRAINAGE STUDY
Prepared For

Mr. Julio Reyes
809 South Seventh Street
Grand Junction, Colorado 81501

June 1993
Revised: November 1993

LOCATION: Los Reyes Restaurant, 809 South Seventh Street,
Grand Junction, Colorado

EXISTING CONDITIONS:

The property is a former storage yard consisting of 0.425 acres with a gravel surface within a 10' high chainlink fence. Existing runoff primarily sheet flows to the northwest corner. The undeveloped property is considered one basin with an average slope of 0.7% and a maximum reach of approximately 147'.

Undeveloped conditions:

2 year runoff 0.12 cfs
100 year runoff 0.45 cfs

DEVELOPED CONDITIONS:

The site improvements will consist of landscaping and asphalt parking. The hydrology calculations are based on one storm event for the entire lot. Within the lot basin, two sub-basins were generated. Sub-basin I is direct runoff and sub-basin II is detained. The storm intensity for the developed basin was used to calculate the runoff and detention volumes for the individual sub-basins. Runoff discharge is controlled by two circular orifices located in catch basins. The proposed outlet is connected to the City storm system in 4th Avenue.

Developed Conditions:

DESCRIPTION	DETENTION	DISCHARGE	
		2 Year	100 Year
Basin I (Direct Runoff)	0	0.04 cfs	0.11 cfs
Basin II	1,192 cf	0.08 cfs	0.34 cfs

WESTERN ENGINEERS, INC.

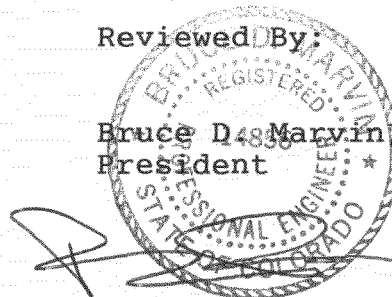
Prepared By:

L.R. Gebhart
Staff Engineer

WEI 3426

Reviewed By:

Bruce D. Marvin P.E.
President



11-15-93

OK
JRW
11/15/93

Umetco Minerals Corporation



39 OLD RIDGEBURY ROAD • DANBURY, CONNECTICUT 06817-0001

July 30, 1993

Mr. Julio Reyes
588 Kirby Lane
Grand Junction, CO. 81504

Re: Grand Jct., CO
Umetco Minerals
South 7th Street
(Parcel No. 2)

Dear Mr. Reyes:

This refers to our correspondence and telephone calls since last March regarding the Umetco Minerals land located on South 7th Street just south of your restaurant in Grand Junction, CO. Umetco is still holding the Purchase Agreement that you and your wife signed on April 13, 1993. Also, as you requested, Umetco is also still holding your earnest money deposit in the amount of \$3,000.

The purpose of this letter is to confirm again to you that the delay by Umetco in signing your proposed purchase agreement has been caused by the internal completion of Union Carbide's required environmental investigations and any possible required remediation. As this delay continues, Umetco is considering the possibility of an interim lease arrangement with you, pending completion of the environmental work.

In accordance with our telephone conversation today, it is my understanding that a possible lease pending the sale of the land to you is acceptable with you. In fact, such a lease would help you with your parking requirements with the City of Grand Junction.

Garland G. Warren, Manager of Real Estate, at Danbury, CT. now has responsibility for this project. I will be preparing a proposed lease agreement with you, and I anticipate mailing the proposed document to you next week. In the mean time, if you need any more information, please feel free to call me as you have been doing or Mr. Warren at 203-794-5261.

Yours very truly,

George B. Pruden
Consultant

cc: R. E. Baumann
G. G. Warren

RECEIVED GRAND JUNCTION
PLANNING DEPARTMENT

AUG 5 1993

DEVELOPED CONDITIONS

APPROXIMATE Storm Intensity for the parking lot as one BASIN.

Allowable runoff for entire site

$$2YR = 0.115 \text{ cfs}$$

$$100YR = 0.445 \text{ cfs.}$$

ASSUME outlet control by orifice.

$$Q_{0.2} = 0.75 Q_{max} = 0.75(0.115) = 0.09 \text{ cfs}$$

$$Q_{100} = 0.75(0.445) = 0.33 \text{ cfs.}$$

2YR INTENSITY

$$T_{d, 2YR} = \left[\frac{(633.4)(0.831)(0.425)}{(0.09) - \frac{(0.09)^2(5)}{(81.2)(0.831)(0.425)}} \right]^{-1/2} - 15.6 = 56.3 - 15.6 = 34.7 \text{ min}$$

$$I_{d, 2YR} = \frac{10.6}{34.7 + 15.6} = 0.81 \text{ in/hr}$$

100YR INTENSITY

$$T_{d, 100YR} = \left[\frac{1830.7(0.887)(0.425)}{0.33 - \frac{(0.33)^2(5)}{(113.0)(0.887)(0.425)}} \right]^{-1/2} - 17.2 = 46.6 - 17.2 = 29.4 \text{ min}$$

$$I_{d, 100YR} = \frac{10.6}{29.4 + 17.2} = 2.29 \text{ in/hr}$$

11/7/93

Los Reyes.

Apply intensity to individual sub basins

SUB-BASIN I - Direct Runoff

Runoff Coefficient

DESC	AREA	2YR	100YR	FACTOR	WT CYR	WT 100YR
Landscape	481 sqft	0.25	0.39	0.173	0.043	0.061
Asphalt	2,293 sqft	0.90	0.95	<u>0.827</u>	<u>0.744</u>	<u>0.785</u>
	2,774 sqft (0.064)			1.000	0.787	0.846

$$Q_{2YR} = (0.787)(0.81)(0.064) = 0.04 \text{ cfs}$$

$$Q_{100YR} = (0.846)(2.29)(0.064) = 0.12 \text{ cfs}$$

ALLOWABLE Discharge Rate for sub basin I

$$2YR. Q_a = 0.115 - 0.04 = 0.08 \text{ cfs.}$$

$$100YR Q_a = 0.45 - 0.12 = 0.33 \text{ cfs}$$

SUB BASIN II - Detention

Runoff Coefficient

DESC.	Area	2YR	100YR	FACTOR	WT 2YR	WT 100YR
Landscape	1,468 sqft	0.25	0.35	0.093	0.023	0.033
Asphalt	14,257 sqft	0.90	0.95	<u>0.907</u>	0.816	<u>0.861</u>
	15,725 sqft (0.361 ac)			1.000	0.839	0.894

$$Q_{2YR} = (0.839)(0.81)(0.36) = 0.25 \text{ cfs}$$

$$Q_{100YR} = (0.894)(2.29)(0.36) = 0.74 \text{ cfs}$$

11/7/93

REQUIRED DETENTION VOLUME

2 YR $\Rightarrow Q_d = 0.25 \text{ cfs}$

$Q_0 = 0.75 Q_{max} = (0.75)(0.08) = 0.06 \text{ cfs}$

$T_{CD} = 5 \text{ min}$ $T_c = 34.7 \text{ min}$

$K = 34.7/5 = 6.94$

$$V = 66 \left[Q_d T_d - Q_0 T_d - Q_0 T_{CD} + \frac{K Q_0 T_{CD}}{2} + \frac{(Q_0)^2 T_{CD}}{2 Q_d} \right]$$

$$= 66 \left[(0.25)(34.7) - (0.06)(34.7) - (0.06)(5) + (6.94)(0.06)(5)/2 + \frac{(0.06)^2 5}{2(0.25)} \right]$$

$$= 66 (8.68 - 2.08 - 0.30 + 1.04 + 0.04)$$

$$= 66 (7.37) = 486 \text{ ft}^3$$

100 YR $\Rightarrow Q_d = 0.75 \text{ cfs}$

$Q_0 = 0.75 (0.33) = 0.25 \text{ cfs}$

$T_{CD} = 5 \text{ min}$ $T_c = 29.4 \text{ min}$

$K = 29.4/5 = 5.88$

$$V = 66 \left[(0.75)(29.4) - (0.25)(29.4) - (0.25)(5) + \frac{(5.88)(0.25)(5)}{2} + \frac{(0.25)^2 5}{2(0.75)} \right]$$

$$= 66 (22.05 - 7.35 - 1.25 + 3.68 + 0.21)$$

$$= 66 (17.33) = 1,144 \text{ ft}^3$$

DETENTION AREA VOLUMES

EL.	AREA (ft ²)	Vol. Incr. (ft ³)	Total (ft ³)
66.8	0	0	0
67.0	728.4	48.56	48.56
67.2	7,969.3	259.69	308.25
67.4	3,670.2	555.20	1,863.45
67.6	5,874.2	945.84	1,809.29

11/7/93

2YR Water Surface elev. \Rightarrow 67.28 \sim 992 cfs100YR Water Surface elev. \Rightarrow 67.47 \sim 1,147 cfs

2YR Discharge

High Water 67.28

Allowable Q = 0.08 cfs

Top of orifice 66.12

C = 0.64

1.16'

$$A = \frac{Q}{C(2gH)^{1/2}} = \frac{0.08}{0.64(64.4 \cdot 1.16)^{1/2}} = \frac{0.08}{5.532} = 0.0145 \text{ ft}^2 = 2.08 \text{ in}^2$$

$$\sim \text{Dia} = 1 - 5/8''$$

100YR Discharge

High Wtr 67.47

Allowable q = 0.33 cfs

Two YR. 67.28

C = 0.64

0.19

2YR orifice @ 67.47'

$$Q = (0.64)(0.0144 \text{ sq ft}) [64.4(1.35)]^{1/2} = 0.09 \text{ cfs}$$

$$100YR \text{ Design} = 0.33 - 0.09 = 0.24 \text{ cfs}$$

High Water 67.47

Orifice Elev 65.59

1.88'

$$A = \frac{Q}{C(2gH)^{1/2}} = \frac{0.24}{0.64 [64.4(1.88)]^{1/2}} = 0.237 \sim 2.91 \text{ sq in}$$

$$2.91 \text{ sq in} \sim 2 - 1/2'' \phi$$

Discharge Pipe

Max water elev (spill way) 67.82'

$$2\text{yr orifice } Q = (0.64)(0.0145)[64.4(1.70)]^{\frac{1}{2}} = 0.10 \text{ cfs}$$

$$100\text{yr orifice } Q = (0.64)(0.034)[64.4(2.23)]^{\frac{1}{2}} = 0.26 \text{ cfs}$$

0.36 cfs

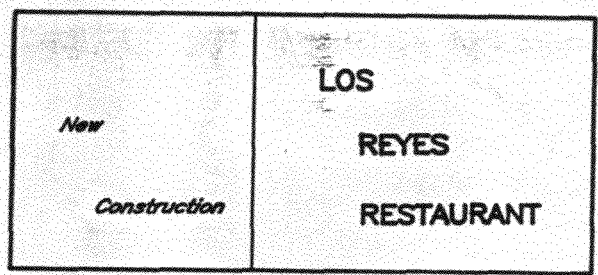
6" ϕ @ 0.02 slope

$$Q = \frac{0.463 d^{2.67}}{n (S_f)^{0.5}} = \frac{(0.463)(0.5)^{2.67}}{0.013 (0.02)^{0.5}} = 0.79 \text{ cfs.}$$

ok.



Scale: 1" = 30'



BASIN I
Direct Runoff
Asphalt
247.1 SqFt

Existing Asphalt
Parking/Driveway

BASIN I
Direct Runoff
Asphalt
159.5 SqFt

BASIN I
Direct Runoff
Landscape
481.4 SqFt

Detention
Basin/Area
14,252 SqFt

BASIN II

BASIN I
Direct Runoff
Asphalt
1,886.1 SqFt

Detained Landscape
1,468 SqFt

Existing Asphalt
Driveway

SOUTH SEVENTH STREET

Exist. 8' Mono. Sidewalk, C&C

Existing Asphalt
Driveway

D&RGW

RAILROAD

FOURTH AVENUE

DRAINAGE BASINS
LOS REYES RESTAURANT
809 South Seventh Street
Grand Junction, Colorado

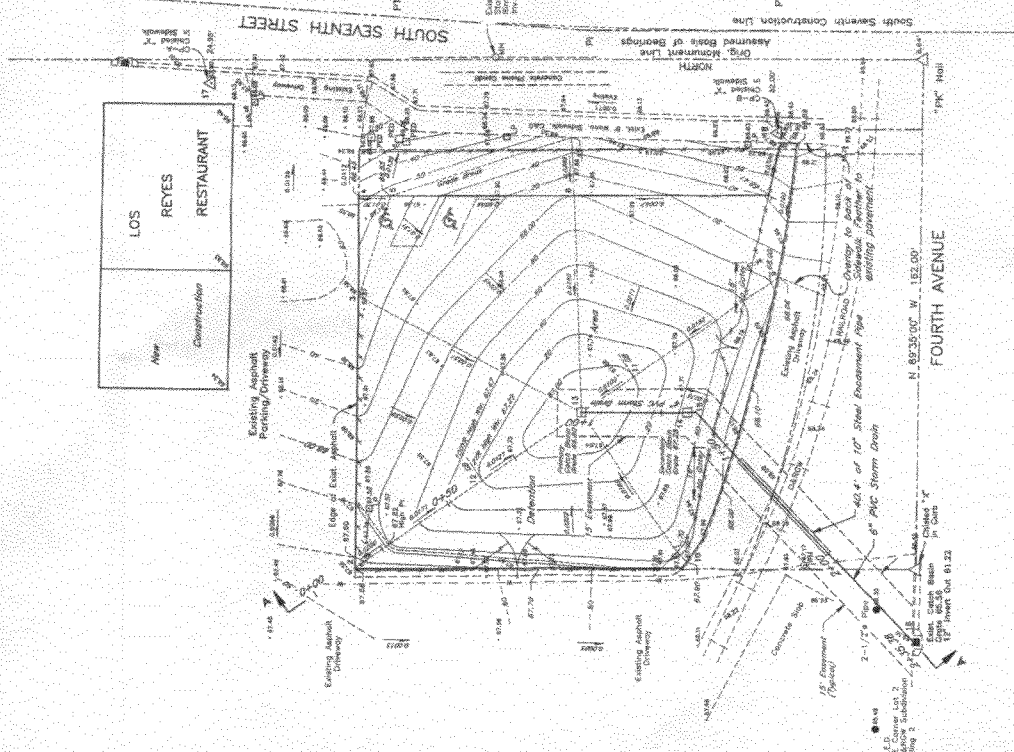
Design: Irg
Drawn: Irg
Checked: BDM

Date: 06/08/93
WEI No.: 3426



CONSULTING ENGINEERS / LAND SURVEYORS
2150 Hwy 6 & 50, Grand Junction, CO (303)242-5202

LOS REYES RESTAURANT



COORDINATE DATA

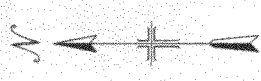
PT	NORTHING	EASTING	COORDINATE DATA
1	5295.931	888.524	888.524
2	5295.931	888.524	888.524
3	5295.931	888.524	888.524
4	5295.931	888.524	888.524
5	5295.931	888.524	888.524
6	5295.931	888.524	888.524
7	5295.931	888.524	888.524
8	5295.931	888.524	888.524
9	5295.931	888.524	888.524
10	5295.931	888.524	888.524
11	5295.931	888.524	888.524
12	5295.931	888.524	888.524
13	5295.931	888.524	888.524
14	5295.931	888.524	888.524
15	5295.931	888.524	888.524
16	5295.931	888.524	888.524

UTILITY LOCATIONS

Utility locations are approximate as provided by utility company. Utility locations are verified prior to any excavation, grading or shoring. Utility location shall be marked two business days in advance. 1-530-822-1387

NOTES:

- All installation shall conform and adhere to the City of Grand Junction, Department of Public Utilities, Engineering Section, "Standard Specifications for Construction of Water Lines, Sanitary Sewers, Storm Drainage, and Impaction Systems", "Detailed Street Construction Specifications" and "Standard Details".
- Payment design provided by others.
- All construction and installation of steel encasement pipe shall conform and adhere to the requirements specified by the Denver and Rio Grande Railroad. Contact: Mr. Orlando Meira, CARGO Engineering Department, 650 Davis City, Utah 84119, (801) 974-0333

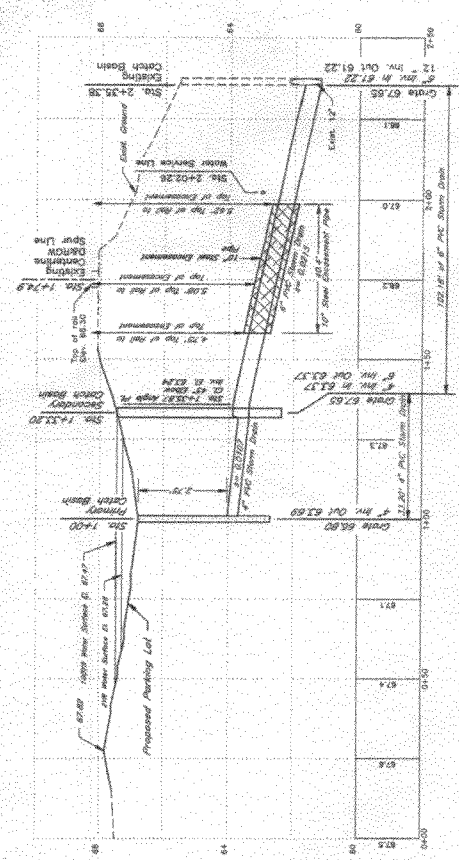


LEGEND

- Survey Lines
- Survey Control
- Power Poles
- Power Pole Guy Wires
- Overhead Power Lines
- Gas Meter
- Gas Water Line
- Buried Water Line
- Telephone, Repeater
- Chimney, Fence
- Buried Telephone
- Sanitary Sewer Line
- Light Pole
- Storm Water Flow
- Finish Asphalt Elevation
- Existing Spot Elevation

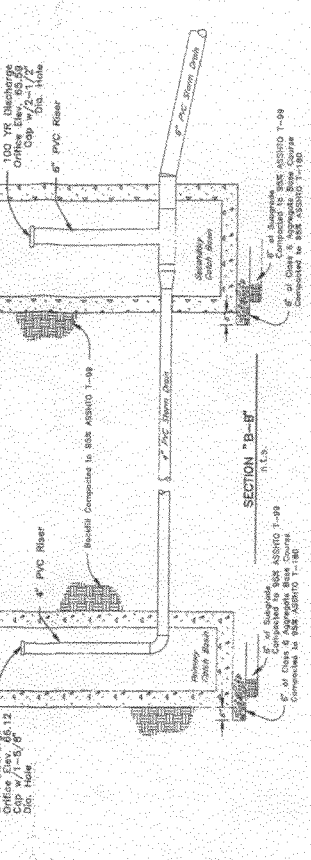
SECTION "A-A"

1:20
HORIZ. SCALE 1"=20'
VERT. SCALE 1"=20'



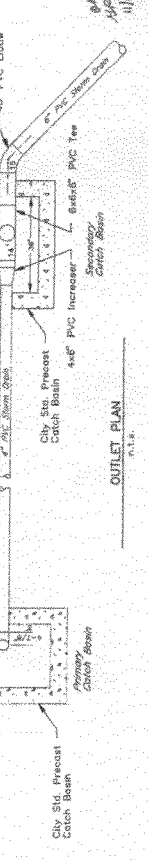
SECTION "B-B"

1:20
HORIZ. SCALE 1"=20'
VERT. SCALE 1"=20'



OUTLET PLAN

N.T.S.



Date of Survey: 4/7/83

PREPARED FOR
JULIO REYES
LOS REYES RESTAURANT
808 SOUTH SEVENTH STREET
GRAND JUNCTION, COLORADO

DESIGN: J. E. B. JR.
CHECKED: W. L. C.
DATE: 04/12/83

SCALE: 1"=20'

NO. DATE REVISION - DESCRIPTION

1	04/12/83	ISSUED	W. L. C.	2
2		APPROVED	W. L. C.	2
3		ISSUED	W. L. C.	2

REGISTERED PROFESSIONAL ENGINEER
STATE OF UTAH
No. 15-93

DATE: 04/12/83