LEGAL DESCRIPTION

A certain tract of land located within the Corporate Limits of the City of Albuquerque, New Mexico, comprising the west one-half of Lots A and B, Block 5, Buena Ventura, as shown on the plat filed in the Office of the County Clerk of Bernalillo County, New Mexico on September 11, 1941, Book C1, Page 8.

PROJECT BENCHMARK:

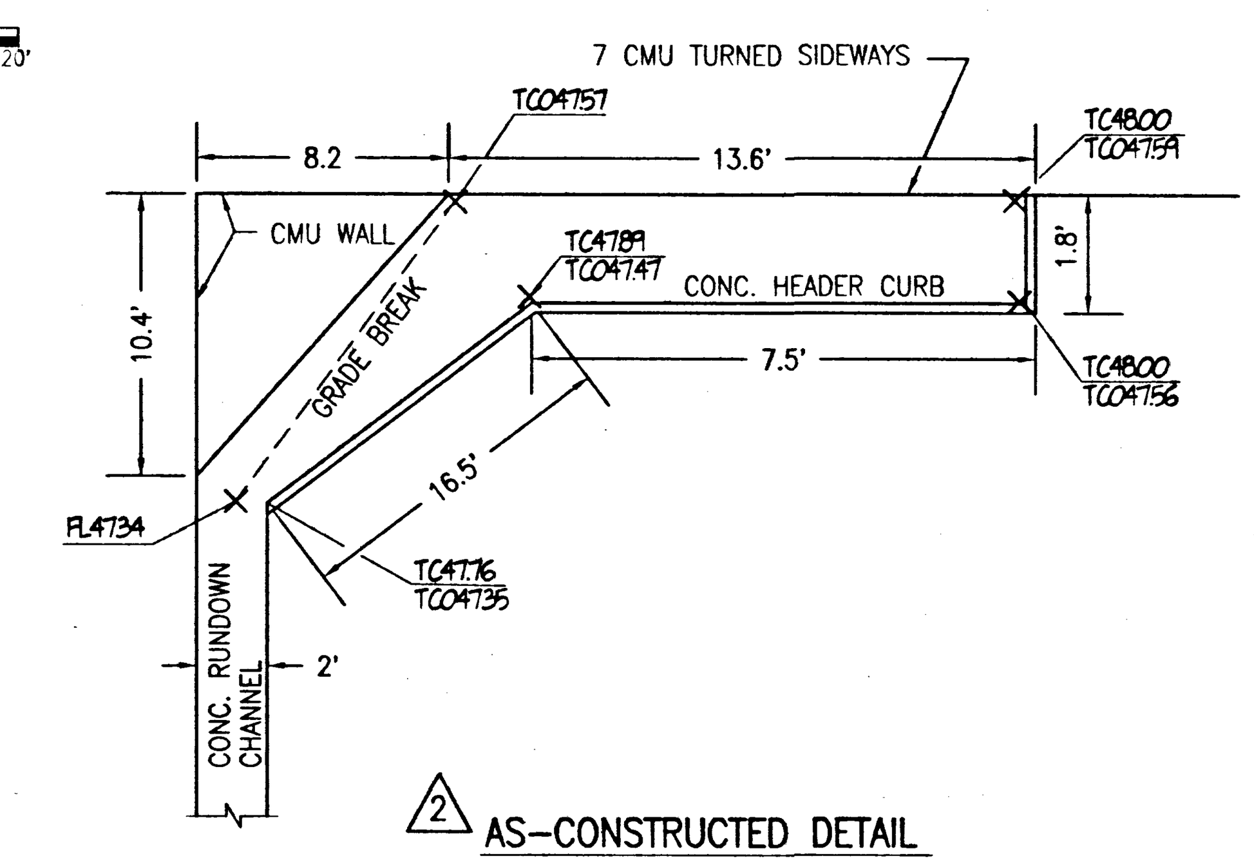
CITY OF ALBUQUERQUE STATION 5-K20. STATION IS A STANDARD ACS DISK SET IN A DRILLED HOLE ON TOP OF CURB. STATION IS STAMPED "5-K20-ACS", LOCATED AT THE NE QUADRANT OF THE INTERSECTION OF MOON ST. N.E. AND CENTRAL AVE. N.E.
ELEVATION = 5427.36'(M.S.L.D.)

TEMPORARY BENCHMARK:

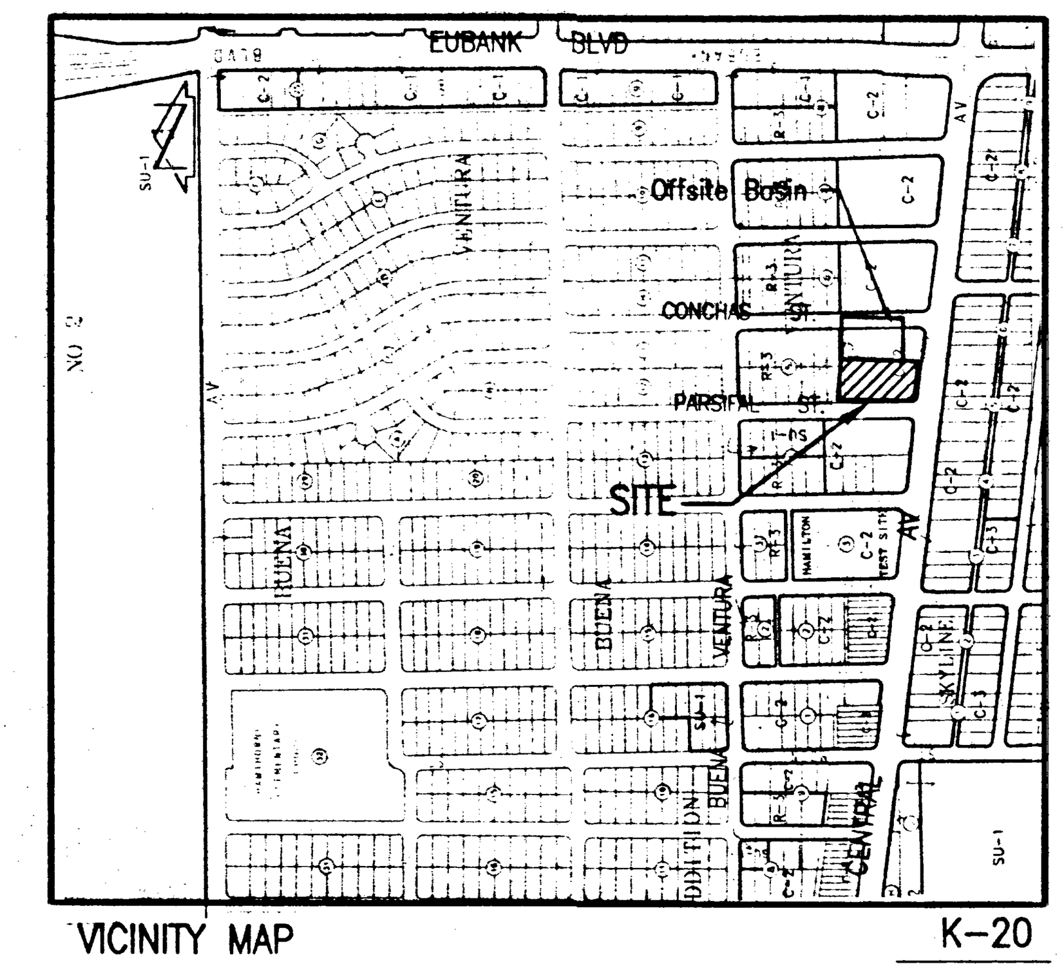
A SQUARE "□" CUT IN TOP OF CURB ON PARSIFAL ST. N.E. AS SHOWN BELOW.
ELEVATION = 5446.19 FEET (M.S.L.D.)

SCALE: 1" = 20'

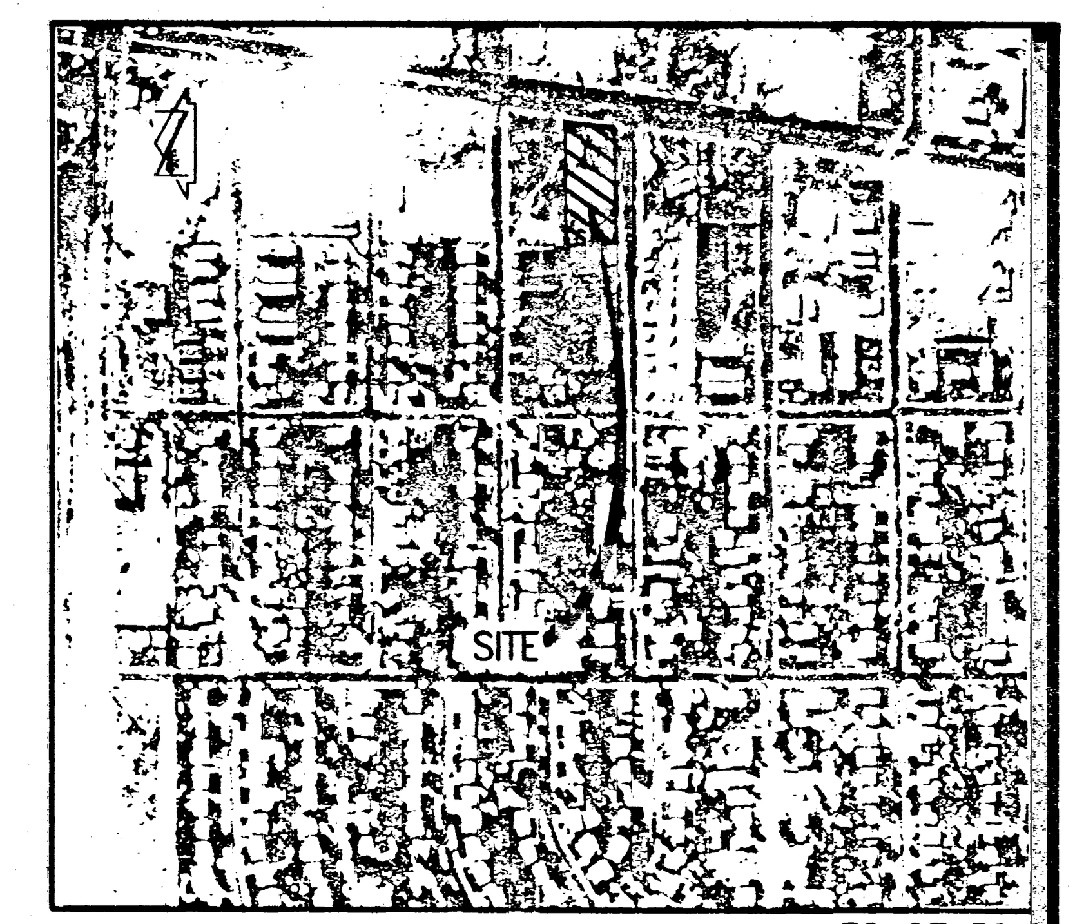
NOTE:
THIS IS NOT A BOUNDARY SURVEY. BOUNDARY DATA IS SHOWN FOR INFORMATION ONLY AND IS BASED ON THE PRELIMINARY BOUNDARY AND TOPOGRAPHIC SURVEY PREPARED BY JMA IN 1995.



AS-CONSTRUCTED DETAIL
NOT TO SCALE



VICINITY MAP K-20
SCALE: 1" = 750' ±



F.I.R.M. MAP 30 OF 50
SCALE: 1" = 500' ±

LEGEND

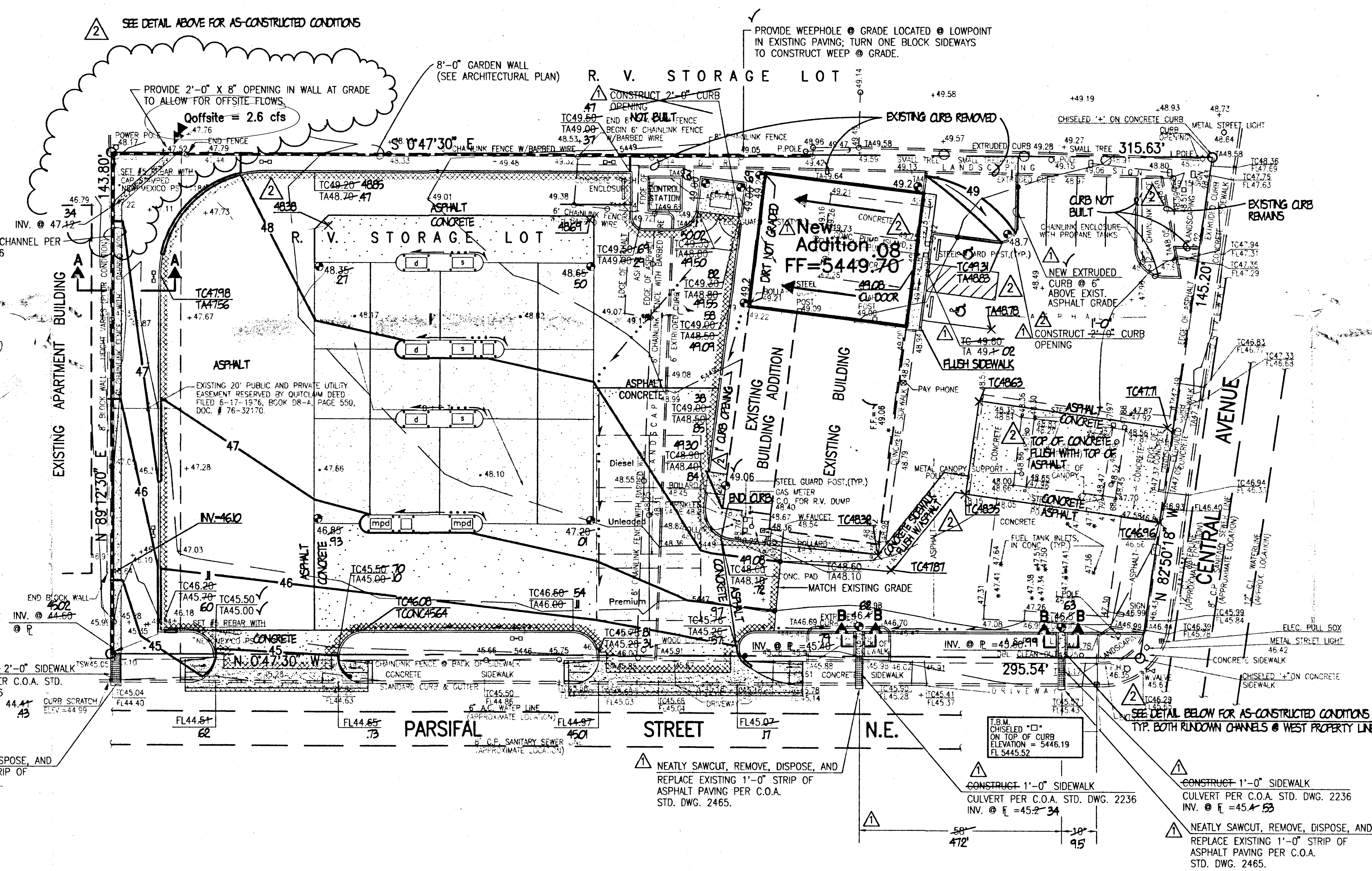
+ 49.27	EXISTING CONTOUR
	EXISTING SPOT ELEVATION
TC	TOP OF CURB
FL	FLOW LINE
TA	TOP OF ASPHALT
F.H.	FIRE HYDRANT
P.POLE	POWER POLE
TSW	TOP OF SIDEWALK
	PROPOSED SPOT ELEVATION
—49—	PROPOSED CONTOUR
	FLOW LINE
	NEW CONCRETE
	NEW ASPHALT PAVING
TC49.50	PROPOSED TOP OF CURB
TA49.00	PROPOSED TOP OF ASPHALT
	PROPOSED GARDEN WALL

AS-BUILT LEGEND

TC45.50✓	AS-DESIGNED, AS-BUILT ELEVATION
TC49.~~50~~ 47	AS-BUILT ELEVATION
4838 ✕	AS-BUILT ELEVATION

WATER AND SANITARY SEWER LINES ARE SHOWN IN AN APPROXIMATE MANNER ONLY. LOCATAION DATA WAS TAKEN FROM CITY OF ALBUQUERQUE WATER AND SANITARY SEWER DISTRIBUTION MAPS.

~~CONSTRUCT~~ 2'-0" TRICKLE CHANNEL PER TYPICAL SECTION. S=0.0196



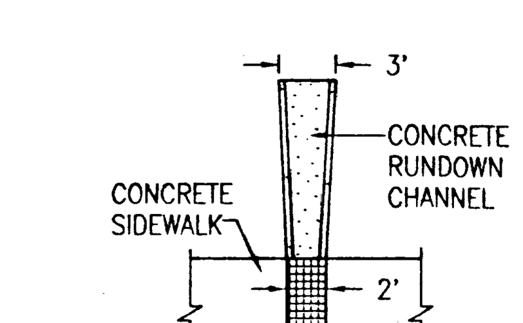
CERTIFICATION

As indicated by the as-built information shown hereon, this Ever Ready Oil Fueling Facility has been graded and drained in a manner which satisfies ~~the intent of~~ the approved Plan. It is based upon this evaluation of as-constructed conditions that issuance of a Permanent Certificate of Occupancy is hereby recommended. The as-built information shown hereon has been obtained by me or under my direct supervision and is true and correct to the best of my knowledge and belief.

which is in substantial compliance

Jeffrey G. Mortensen, NMPE 8547 — 02-06-97 Date

JEFFREY G. MORTENSEN — NEW MEXICO — 8547 — REGISTERED PROFESSIONAL ENGINEER



AS-CONSTRUCTED DETAIL
NOT TO SCALE

JEFF MORTENSEN & ASSOCIATES, INC.
6010-B MIDWAY PARK BLVD. N.E.
ALBUQUERQUE, NEW MEXICO 87109
ENGINEERS SURVEYORS (505) 345-4250

Grading Plan

1"=20'

NORTH

Kevin Georges & Associates
Architecture & Planning
127 Jefferson Street NE – Suite A Albuquerque, New Mexico 87108-1216 505/255-4975

Construction Notes:

1. Two (2) working days prior to any excavation, contractor must contact New Mexico One Call System 260-1990, for location of existing utilities.
2. Prior to construction, the contractor shall excavate and verify the horizontal and vertical location of all potential obstructions. Should a conflict exist, the contractor shall notify the engineer in writing so that the conflict can be resolved with a minimum amount of delay.
3. All work on this project shall be performed in accordance with applicable federal, state and local laws, rules and regulations concerning construction safety and health.
4. All construction within public right-of-way shall be performed in accordance with applicable City of Albuquerque Standards and Procedures.
5. If any utility lines, pipelines, or underground utility lines are shown on these drawings, they are shown in an approximate manner only, and such lines may exist where none are shown. If any such existing lines are shown, the location is based upon information provided by the owner of said utility, and the information may be incomplete, or may be obsolete by the time construction commences. The engineer has conducted only preliminary investigation of the location, depth, size, or type of existing utility lines, pipelines, or underground utility lines. This investigation is not conclusive, and may not be complete, therefore, makes no representation pertaining thereto, and assumes no responsibility or liability therefor. The contractor shall inform itself of the location of any utility line, pipeline, or underground utility line in or near the area of the work in advance of and during excavation work. The contractor is fully responsible for any and all damage caused by its failure to locate, identify and preserve any and all existing utilities, pipelines, and underground utility lines. In planning and conducting excavation, the contractor shall comply with state statutes, municipal and local ordinances, rules and regulations, if any, pertaining to the location of these lines and facilities.
6. An Excavation/Construction Permit will be required before beginning any work within City right-of-way. An approved copy of these plans must be submitted at the time of application for this permit.
7. Backfill compaction shall be according to Arterial street use.
8. Maintenance of these facilities shall be the responsibility of the owner of the property served.
9. The design of planters and landscaped areas is not part of this plan. All planters and landscaped areas adjacent to the building(s) shall be provided with positive drainage to avoid any ponding adjacent to the structure. For construction details, refer to landscaping plan.

Erosion Control Measures

1. The contractor shall ensure that no soil erodes from the site into public right-of-way or onto private property. This can be achieved by constructing temporary berms at the property lines and wetting the soil to keep it from blowing.
2. The contractor shall promptly clean up any material excavated within the public right-of-way so that the excavated material is not susceptible to being washed down the street.
3. The contractor shall secure "Topsoil Disturbance Permit" prior to beginning construction.

APPROVALS	NAME	DATE
A.C.E./DESIGN		
INSPECTOR		
A.C.E./FIELD		

EverReady Oil
Retail Fueling Facility
10001 Central Ave. N.E.
Albuquerque, New Mexico
Project Title

Drawn By S.G.H. **Checked By** J.G.M.

Proj. No. 950294 **Date** 2/1/96

1 02/96 BUILDING ADDITION MDS
2 11/96 AS-BUILT AND CERTIFY JGM 02-07-96

Revisions **Architect** **Engineer**

GRADING PLAN C2

Sheet Title **Sheet** 3 **of** 9

C:\DATA\ACADWG\950294G Thu Mar 6 07:28:49 1997 SGH

DRAINAGE PLAN

The following items concerning the Ever Ready Oil – Buena Ventura (formerly Gypsy Liquors L20/D48) Drainage Plan are contained hereon:

1. Vicinity Map
2. F.I.R.M.
3. Grading Plan
4. Calculations

As shown by the Vicinity Map, the site is located at the northeast corner of the intersection of Parsifal St. N.E. and East Central Avenue. At present, the site is characterized by an existing building along with associated landscaping and paving. This is consistent with the plan previously submitted for the southerly portion of the site titled "Gypsy Liquors" (L20/D48). The site also encompasses what was previously noted as a "RV storage lot" which lies to the north of the Gypsy Liquors site.

As shown by panel 30 of 50 of the National Flood Insurance Program, Flood Insurance Rate Maps published by F.E.M.A. for the City of Albuquerque, New Mexico dated October 14, 1983, this site does not lie in a designated flood hazard zone. Further review of Panel 30 combined with site investigation reveals that the site contributes to a designated flood hazard zone bearing the designation of AO (Depth 1). This designated flood hazard zone lies downstream from the site at the intersection of Wyoming Blvd. N.E. and Chico Rd. N.E. The proposed development is a minor modification to an existing site within an infill area. Much of the surrounding area is developed both commercially and residentially. Much, if not all, of the watershed is already developed, thereby limiting the possibility for significant development within the watershed.

The Grading Plan shows: 1) existing and proposed grades indicated by spot elevations and contours at 1'0" intervals, 2) the limit and character of the existing improvements, 3) the limit and character of the proposed improvements and 4) continuity between existing and proposed grades. As shown by this plan, the proposed improvements consist of replacing the RV storage lot with a fueling facility consisting of paving and landscaping improvements. A building addition to the existing building with some minor modifications to the landscaping on the existing service station portion of the site are also included with this project. In addition, the southernmost driveway on Parsifal Street N.E. will be removed and replaced with landscaping and sidewalk. Runoff previously exiting the site through this driveway will now exit via a sidewalk culvert. Generally, Land Treatment "C" will be replaced with Land Treatments B and D. At present, the site drains from east to west onto Parsifal Street N.E. From that point, runoff flows in a northerly direction to Chico Road N.E. Chico Road N.E. drains from east to west to Wyoming Blvd. N.E. A public storm drain is constructed within Wyoming Blvd. N.E. which receives runoff reaching that point. It is proposed to continue the free discharge of runoff from this site to Parsifal Street for the following reasons:

1. This is a modification to an existing site within an infill area.
2. The increase in runoff due to the proposed development is minimal.
3. This is one of the last infill sites remaining within the watershed.
4. The free discharge of runoff is consistent with the previously approved plan and with the drainage patterns established for adjacent properties.
5. Public storm drain improvements lie within Wyoming Blvd. N.E. which eventually drain the flood hazard zone referenced above.

Offsite flows will continue to be accepted by and conveyed through this site. Offsite flows are generated by the parcel which lies immediately to the east of the site. Offsite flows do not impact the site from the south, west, or north. Fully improved City streets lie to the south (East Central Avenue) and west (Parsifal Street N.E.). These streets contain public runoff and therefore do not contribute to the site. The property that lies to the north has parallel topography as well as being topographically lower than the project site. In addition, the two properties are separated by a CMU wall. It is because of these factors that offsite flows are not anticipated from the north. As stated above, offsite flows are anticipated from the east. Offsite runoff from the east has been calculated and will continue to be accepted under the proposed drainage scheme.

The Calculations which appear hereon analyze both the existing and developed conditions for the 100-year, 6-hour rainfall event. The procedure for the 40-acre and smaller basins, as set forth in the revisions of Section 22.2, Hydrology of the Development Process Manual, Volume 2, Design Criteria, dated January, 1993, has been used to quantify the peak rate of discharge and the volume of runoff generated. As shown by these Calculations, a negligible increase in runoff is expected due to the proposed development. As stated previously, offsite flows have also been calculated.

CALCULATIONS

Site Characteristics

1. Precipitation Zone = 4
2. $P_{6,100} = P_{360} = 2.90$ in.
3. Total Area (A_T) = 1.00 Acre (onsite) 0.71 Acre (offsite)
4. Existing Land Treatment

A. Onsite Basin	43,840/1.00	100%
Treatment	Area (sf/ac)	%
B	1,900/0.04	4.3
C	21,350/0.49	48.7
D	20,590/0.47	47.0

B. Offsite Basin	30,960/0.71	100%
Treatment	Area (sf/ac)	%
C	30,960/0.71	100.0

5. Developed Land Treatment

A. Onsite Basin	43,840/1.00	100%
Treatment	Area (sf/ac)	%
B	6,535/0.15	14.9
D	37,305/0.85	85.1

Existing Condition

A. Onsite Basin

1. Volume

$$E_W = (E_A A_A + E_B A_B + E_C A_C + E_D A_D)/A_T$$

$$E_W = [(1.08)(0.04)+(1.46)(0.49)+(2.64)(0.47)]/(1.00) = 2.00 \text{ in}$$

$$V_{100} = (E_W/12)A_T$$

$$V_{100} = (2.00/12)(1.00) = 0.1666 \text{ ac.ft.; } 7{,}260 \text{ cf}$$

2. Peak Discharge

$$Q_p = Q_{PA}A_A + Q_{PB}A_B + Q_{PC}A_C + Q_{PD}A_D$$

$$Q_p = Q_{100} = (2.92)(0.04)+(3.73)(0.49)+(5.25)(0.47) = 4.4 \text{ cfs}$$

B. Offsite Basin

1. Volume

$$E_W = (E_A A_A + E_B A_B + E_C A_C + E_D A_D)/A_T$$

$$E_W = (1.46)(0.71)/(0.71) = 1.46 \text{ in}$$

$$V_{100} = (E_W/12)A_T$$

$$V_{100} = (1.46/12)(0.71) = 0.0864 \text{ ac.ft.; } 3{,}765 \text{ cf}$$

? 2. Peak Discharge

$$Q_p = Q_{PA}A_A + Q_{PB}A_B + Q_{PC}A_C + Q_{PD}A_D$$

$$Q_p = Q_{100} = (3.73)(0.71) = 2.6 \text{ cfs}$$

Weir Equation (Entrance Condition, Wall Opening)

$$Q = CLH^{3/2}$$

$Q = 2.6$

$L = 2.0$

$C = 2.6$

$$H^{3/2} = Q/CL$$

$H = 0.63'$

Developed Condition

A. Onsite Basin

1. Volume

$$E_W = (E_A A_A + E_B A_B + E_C A_C + E_D A_D)/A_T$$

$$E_W = [(1.08)(0.15)+(2.64)(0.85)/(1.00) = 2.40 \text{ in.}$$

$$V_{100} = (E_W/12)A_T$$

$$V_{100} = (2.40/12)(01.00) = 0.2005 \text{ ac.ft.; } 8{,}735 \text{ cf}$$

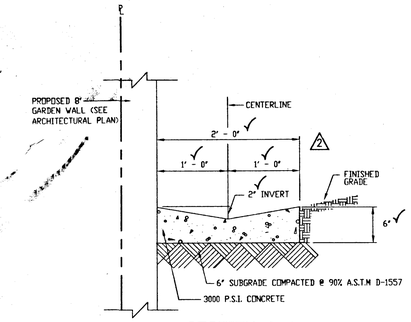
2. Peak Discharge

$$Q_p = Q_{PA}A_A + Q_{PB}A_B + Q_{PC}A_C + Q_{PD}A_D$$

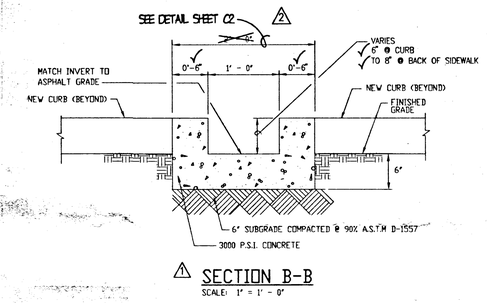
$$Q_p = Q_{100} = (2.92)(0.15)+(5.25)(0.85) = 4.9 \text{ cfs}$$

Comparison

1. $\Delta V_{100} = 8{,}735 - 7{,}260 = 1{,}475$ cf (increase)
2. $\Delta Q_{100} = 4.9 - 4.4 = 0.5$ cfs (increase)



SECTION A-A
SCALE: 1" = 1' - 0"



1 SECTION B-B
SCALE: 1" = 1' - 0"

Kevin Georges & Associates
Architecture & Planning
137 Jefferson Street NE - Suite A Albuquerque, New Mexico 87108-1316 505/255-6976

2 CERTIFICATION

As indicated by the as-built information shown hereon, this Ever Ready Oil Fueling Facility has been graded and drained in a manner which satisfies the intent of the approved Plan. It is based upon this evaluation of as-constructed conditions that issuance of a Permanent Certificate of Occupancy is hereby recommended. The as-built information shown hereon has been obtained by me or under my direct supervision and is true and correct to the best of my knowledge and belief.

Jeffrey G. Mortensen, NMPE 8547 — Date 02-07-96

JEFFREY G. MORTENSEN — NEW MEXICO — 8547 — REGISTERED PROFESSIONAL ENGINEER

JEFF MORTENSEN & ASSOCIATES, INC.
☐ 6010-B MIDWAY PARK BLVD. N.E.
☐ ALBUQUERQUE ☐ NEW MEXICO 87109
☐ ENGINEERS ☐ SURVEYORS (505) 345-4250

Drainage Plan, Sections, and Calculations

NORTH

EverReady Oil
Retail Fueling Facility
10001 Central Ave. N.E.
Albuquerque, New Mexico
Project Title

Drawn By E.M.S. **Checked By** J.G.M.

Proj. No. 950294 **Date** 2/1/96

1	02/96	SECTION B-B	MDS
2	11/96	AS-BUILT AND CERTIFY	JGM

Revisions **Architect** **Engineer**

JEFFREY G. MORTENSEN — NEW MEXICO — 8547 — REGISTERED PROFESSIONAL ENGINEER — 02-07-96 — 11-26-96

C3

DRAINAGE PLAN, SECTION, AND CALCULATIONS
Sheet Title **Sheet 2 of 2**

C:\DATA\ACADWG\950294D Thu Mar 6 07:38:32 1997 -SDH

LEGAL DESCRIPTION

A certain tract of land located within the Corporate Limits of the City of Albuquerque, New Mexico, comprising the west one-half of Lots A and B, Block 5, Buena Ventura, as shown on the plat filed in the Office of the County Clerk of Bernalillo County, New Mexico on September 11, 1941, Book C1, Page 8.

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LEGEND

+ 49.27	EXISTING CONTOUR
TC	EXISTING SPOT ELEVATION
FL	TOP OF CURB
TA	FLOW LINE
F.H.	TOP OF ASPHALT
P.POLE	FIRE HYDRANT
TSW	POWER POLE
	TOP OF SIDEWALK
	PROPOSED SPOT ELEVATION
49	PROPOSED CONTOUR
	FLOW LINE
	NEW CONCRETE
	NEW ASPHALT PAVING
TC49.50	PROPOSED TOP OF CURB
TA49.00	PROPOSED TOP OF ASPHALT
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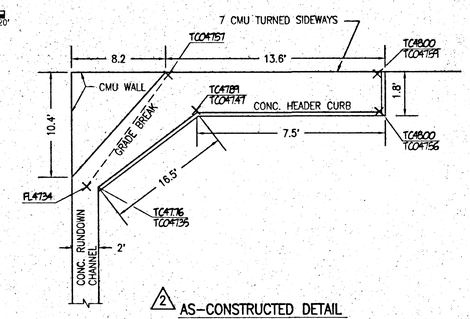
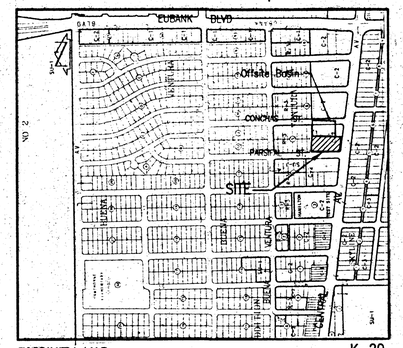
WATER AND SANITARY SEWER LINES ARE SHOWN IN AN APPROXIMATE MANNER ONLY. LOCATAION DATA WAS TAKEN FROM CITY OF ALBUQUERQUE WATER AND SANITARY SEWER DISTRIBUTION MAPS.

AS-BUILT LEGEND

TC45.50 ✓	AS-DESIGNED, AS-BUILT ELEVATION
TC49.~~50~~ 47	AS-BUILT ELEVATION
~~4938~~ 4936	AS-BUILT ELEVATION



2 AS-CONSTRUCTED DETAIL
NOT TO SCALE



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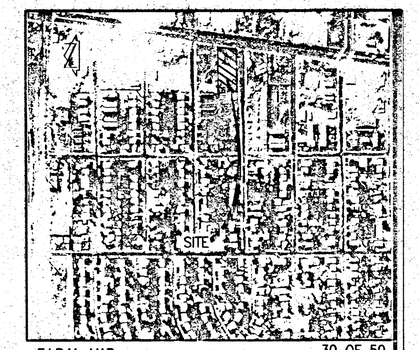

F.I.R.M. MAP 30 OF 50
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Kevin Georges & Associates
Architecture & Planning
127 Jefferson Street NE - Suite A Albuquerque, New Mexico 87108-1818 505/266-4975

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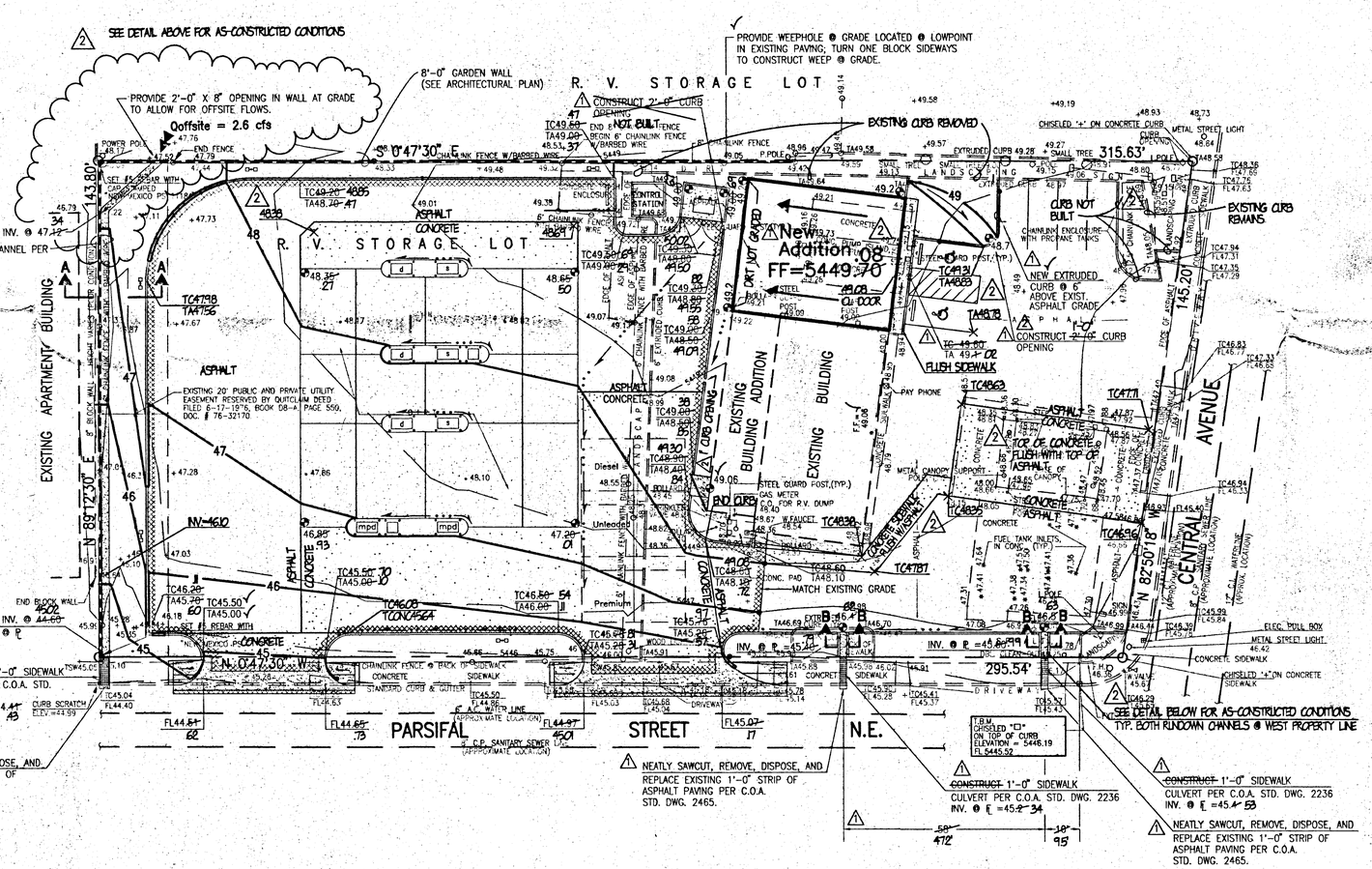

CERTIFICATION

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Jeffrey G. Mortensen, NMPE 8547 — Date 04-06-97

REGISTERED PROFESSIONAL ENGINEER — JEFFREY G. MORTENSEN — NEW MEXICO — 8547

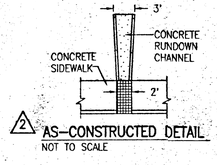
RECEIVED
APR 07 1997
HYDROLOGY SECTION

CERTIFICATION

As indicated by the as-built information shown hereon, this Ever Ready Oil Fueling Facility has been graded and drained in a manner which satisfies the intent and drainage requirements of the approved Plan. It is based upon this evaluation of as-constructed conditions that issuance of a Permanent Certificate of Occupancy is hereby recommended. The as-built information shown hereon has been obtained by me or under my direct supervision and is true and correct to the best of my knowledge and belief.

Jeffrey G. Mortensen, NMPE 8547 — Date 040597

REGISTERED PROFESSIONAL ENGINEER — JEFFREY G. MORTENSEN — NEW MEXICO — 8547



2 AS-CONSTRUCTED DETAIL
NOT TO SCALE

JEFF MORTENSEN & ASSOCIATES, INC.
6010-B MIDWAY PARK BLVD. N.E.
ALBUQUERQUE NEW MEXICO 87109
ENGINEERS SURVEYORS (505) 345-4250

APPROVALS	NAME	DATE
A.C.E./DESIGN		
INSPECTOR		
A.C.E./FIELD		

EverReady Oil
Retail Fueling Facility
10001 Central Ave. N.E.
Albuquerque, New Mexico

Project Title

Drawn By S.G.H. Checked By J.G.M.

Proj. No. 950294 Date 2/1/96

1 02/96 BUILDING ADDITION MDS
2 11/96 AS-BUILT AND CERTIFY JGM

Revisions Architect Engineer

REGISTERED PROFESSIONAL ENGINEER — JEFFREY G. MORTENSEN — NEW MEXICO — 8547 — 04-06-97

C2

GRADING PLAN

Sheet Title Sheet 3 of 9

Grading Plan
1"=20'

NORTH

C:\DATA\ACAD\DWG\950294G Thu Mar 6 07:28:49 1997 -SGH-

DRAINAGE PLAN

The following items concerning the Ever Ready Oil – Buena Ventura (formerly Gypsy Liquors L20/D48) Drainage Plan are contained hereon:

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3. Grading Plan
4. Calculations

As shown by the Vicinity Map, the site is located at the northeast corner of the intersection of Parsifal St. N.E. and East Central Avenue. At present, the site is characterized by an existing building along with associated landscaping and paving. This is consistent with the plan previously submitted for the southerly portion of the site titled "Gypsy Liquors" (L20/D48). The site also encompasses what was previously noted as a "RV storage lot" which lies to the north of the Gypsy Liquors site.

As shown by panel 30 of 50 of the National Flood Insurance Program, Flood Insurance Rate Maps published by F.E.M.A. for the City of Albuquerque, New Mexico dated October 14, 1983, this site does not lie in a designated flood hazard zone. Further review of Panel 30 combined with site investigation reveals that the site contributes to a designated flood hazard zone bearing the designation of AO (Depth 1). This designated flood hazard zone lies downstream from the site at the intersection of Wyoming Blvd. N.E. and Chico Rd. N.E. The proposed development is a minor modification to an existing site within an infill area. Much of the surrounding area is developed both commercially and residentially. Much, if not all, of the watershed is already developed, thereby limiting the possibility for significant development within the watershed.

The Grading Plan shows: 1) existing and proposed grades indicated by spot elevations and contours at 1'0" intervals, 2) the limit and character of the existing improvements, 3) the limit and character of the proposed improvements and 4) continuity between existing and proposed grades. As shown by this plan, the proposed improvements consist of replacing the RV storage lot with a fueling facility consisting of paving and landscaping improvements. A building addition to the existing building with some minor modifications to the landscaping on the existing service station portion of the site are also included with this project. In addition, the southernmost driveway on Parsifal Street N.E. will be removed and replaced with landscaping and sidewalk. Runoff previously exiting the site through this driveway will now exit via a sidewalk culvert. Generally, Land Treatment "C" will be replaced with Land Treatments B and D. At present, the site drains from east to west onto Parsifal Street N.E. From that point, runoff flows in a northerly direction to Chico Road N.E. Chico Road N.E. drains from east to west to Wyoming Blvd. N.E. A public storm drain is constructed within Wyoming Blvd. N.E. which receives runoff reaching that point. It is proposed to continue the free discharge of runoff from this site to Parsifal Street for the following reasons:

1. This is a modification to an existing site within an infill area.
2. The increase in runoff due to the proposed development is minimal.
3. This is one of the last infill sites remaining within the watershed.
4. The free discharge of runoff is consistent with the previously approved plan and with the drainage patterns established for adjacent properties.
5. Public storm drain improvements lie within Wyoming Blvd. N.E. which eventually drain the flood hazard zone referenced above.

Offsite flows will continue to be accepted by and conveyed through this site. Offsite flows are generated by the parcel which lies immediately to the east of the site. Offsite flows do not impact the site from the south, west, or north. Fully improved City streets lie to the south (East Central Avenue) and west (Parsifal Street N.E.). These streets contain public runoff and therefore do not contribute to the site. The property that lies to the north has parallel topography as well as being topographically lower than the project site. In addition, the two properties are separated by a CMU wall. It is because of these factors that offsite flows are not anticipated from the north. As stated above, offsite flows are anticipated from the east. Offsite runoff from the east has been calculated and will continue to be accepted under the proposed drainage scheme.

The Calculations which appear hereon analyze both the existing and developed conditions for the 100-year, 6-hour rainfall event. The procedure for the 40-acre and smaller basins, as set forth in the revisions of Section 22.2, Hydrology of the Development Process Manual, Volume 2, Design Criteria, dated January, 1993, has been used to quantify the peak rate of discharge and the volume of runoff generated. As shown by these Calculations, a negligible increase in runoff is expected due to the proposed development. As stated previously, offsite flows have also been calculated.

CALCULATIONS

Site Characteristics

1. Precipitation Zone = 4
2. $P_{6,100} = P_{360} =$ 2.90 in.
3. Total Area (A_T) = 1.00 Acre (onsite) 0.71 Acre (offsite)
4. Existing Land Treatment

A. Onsite Basin	43,840/1.00	100%
Treatment	Area (sf/ac)	%
B	1,900/0.04	4.3
C	21,350/0.49	48.7
D	20,590/0.47	47.0

B. Offsite Basin	30,960/0.71	100%
Treatment	Area (sf/ac)	%
C	30,960/0.71	100.0

5. Developed Land Treatment

A. Onsite Basin	43,840/1.00	100%
Treatment	Area (sf/ac)	%
B	6,535/0.15	14.9
D	37,305/0.85	85.1

Existing Condition

A. Onsite Basin

1. Volume

$E_W = (E_AA_A+E_BA_B+E_CA_C+E_DA_D)/A_T$

$E_W = [(1.08)(0.04)+(1.46)(0.49)+(2.64)(0.47)]/(1.00) = 2.00$ in

$V_{100} = (E_W/12)A_T$

$V_{100} = (2.00/12)(1.00) = 0.1666$ ac.ft.; 7,260 cf

2. Peak Discharge

$Q_p = Q_{PA}A_A + Q_{PB}A_B + Q_{PC}A_C + Q_{PD}A_D$

$Q_p = Q_{100} = (2.92)(0.04)+(3.73)(0.49)+(5.25)(0.47) = 4.4$ cfs

B. Offsite Basin

1. Volume

$E_W = (E_AA_A+E_BA_B+E_CA_C+E_DA_D)/A_T$

$E_W = (1.46)(0.71)/(0.71) = 1.46$ in

$V_{100} = (E_W/12)A_T$

$V_{100} = (1.46/12)(0.71) = 0.0864$ ac.ft.; 3,765 cf

2. Peak Discharge

$Q_p = Q_{PA}A_A + Q_{PB}A_B + Q_{PC}A_C + Q_{PD}A_D$

$Q_p = Q_{100} = (3.73)(0.71) = 2.6$ cfs

Weir Equation (Entrance Condition, Wall Opening)

$Q = CLH^{3/2}$

$Q = 2.6$

$L = 2.0$

$C = 2.6$

$H^{3/2} = Q/CL$

$H = 0.63'$

Developed Condition

A. Onsite Basin

1. Volume

$E_W = (E_AA_A+E_BA_B+E_CA_C+E_DA_D)/A_T$

$E_W = [(1.08)(0.15)+(2.64)(0.85)/(1.00) = 2.40$ in.

$V_{100} = (E_W/12)A_T$

$V_{100} = (2.40/12)(01.00) = 0.2005$ ac.ft.; 8,735 cf

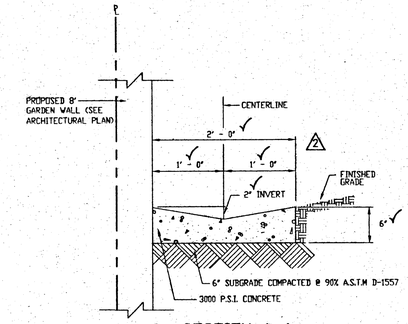
2. Peak Discharge

$Q_p = Q_{PA}A_A + Q_{PB}A_B + Q_{PC}A_C + Q_{PD}A_D$

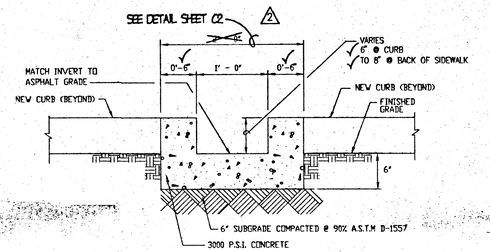
$Q_p = Q_{100} = (2.92)(0.15)+(5.25)(0.85) = 4.9$ cfs

Comparison

1. $\Delta V_{100} = 8,735 - 7,260 = 1,475$ cf (increase)
2. $\Delta Q_{100} = 4.9 - 4.4 = 0.5$ cfs (increase)



SECTION A-A
SCALE: 1" = 1' - 0"



1 SECTION B-B
SCALE: 1" = 1' - 0"

Kevin Georges & Associates
Architecture & Planning
127 Jefferson Street NE - Suite A Albuquerque, New Mexico 87108-1816 505/255-4975

2 CERTIFICATION

As indicated by the as-built information shown hereon, this Ever Ready Oil Fueling Facility has been graded and drained in a manner which satisfies the intent of the approved Plan. It is based upon this evaluation of as-constructed conditions that issuance of a Permanent Certificate of Occupancy is hereby recommended. The as-built information shown hereon has been obtained by me or under my direct supervision and is true and correct to the best of my knowledge and belief.

Jeffrey G. Mortensen, NMPE 8547 — Date 04-05-97

JEFFREY G. MORTENSEN NEW MEXICO 8547 REGISTERED PROFESSIONAL ENGINEER

CERTIFICATION

As indicated by the as-built information shown hereon, this Ever Ready Oil Fueling Facility has been graded and drained in a manner which satisfies the intent and drainage requirements of the approved Plan. It is based upon this evaluation of as-constructed conditions that issuance of a Permanent Certificate of Occupancy is hereby recommended. The as-built information shown hereon has been obtained by me or under my direct supervision and is true and correct to the best of my knowledge and belief.

Jeffrey G. Mortensen, NMPE 8547 — Date 04-05-97

RECEIVED
APR 07 1997
HYDROLOGY SECTION

JEFF MORTENSEN & ASSOCIATES, INC.
6010-B MIDWAY PARK BLVD. NE.
ALBUQUERQUE NEW MEXICO 87109
ENGINEERS SURVEYORS (505) 345-4250

EverReady Oil
Retail Fueling Facility
10001 Central Ave. N.E.
Albuquerque, New Mexico
Project Title

Drawn By E.M.S. Checked By J.G.M.
Prof No. 950294 Date 2/1/96

1 02/96 SECTION B-B MDS
2 11/98 AS-BUILT AND CERTIFY JGM 12-07-98 12-26-95
Revisions Architect Engineer

C3
DRAINAGE PLAN, SECTION, AND CALCULATIONS
Sheet Title Sheet 2 of 2

Drainage Plan, Sections, and Calculations

NORTH

C:\DATA\ACADDWG\950294D Thu Mar 6 07:38:32 1997 -SDH

LEGAL DESCRIPTION

A certain tract of land located within the Corporate Limits of the City of Albuquerque, New Mexico, comprising the west one-half of Lots A and B, Block 5, Bueno Ventura, as shown on the plat filed in the Office of the County Clerk of Bernalillo County, New Mexico on September 11, 1941, Book C1, Page 8.

PROJECT BENCHMARK:

CITY OF ALBUQUERQUE STATION 5-K20. STATION IS A STANDARD ACS DISK SET IN A DRILLED HOLE ON TOP OF CURB. STATION IS STAMPED "5-K20-ACS", LOCATED AT THE NE QUADRANT OF THE INTERSECTION OF MOON ST. N.E. AND CENTRAL AVE. N.E.
ELEVATION = 5427.36'(M.S.L.D.)

TEMPORARY BENCHMARK:

A SQUARE "L" CUT IN TOP OF CURB ON PARSIFAL ST. N.E. AS SHOWN BELOW.
ELEVATION = 5446.19 FEET (M.S.L.D.)

LEGEND

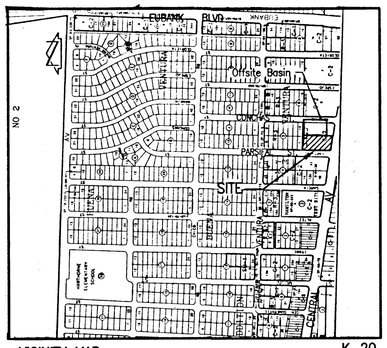
+ 49.27	EXISTING CONTOUR EXISTING SPOT ELEVATION
TC	TOP OF CURB
FL	FLOW LINE
TA	TOP OF ASPHALT
F.H.	FIRE HYDRANT
P.POLE	POWER POLE
TSW	TOP OF SIDEWALK
	PROPOSED SPOT ELEVATION
49	PROPOSED CONTOUR
	FLOW LINE
	NEW CONCRETE
	NEW ASPHALT PAVING
TC49.50	PROPOSED TOP OF CURB
TA49.00	PROPOSED TOP OF ASPHALT
	PROPOSED GARDEN WALL

WATER AND SANITARY SEWER LINES ARE SHOWN IN AN APPROXIMATE MANNER ONLY. LOCATAION DATA WAS TAKEN FROM CITY OF ALBUQUERQUE WATER AND SANITARY SEWER DISTRIBUTION MAPS.

SCALE: 1" = 20'

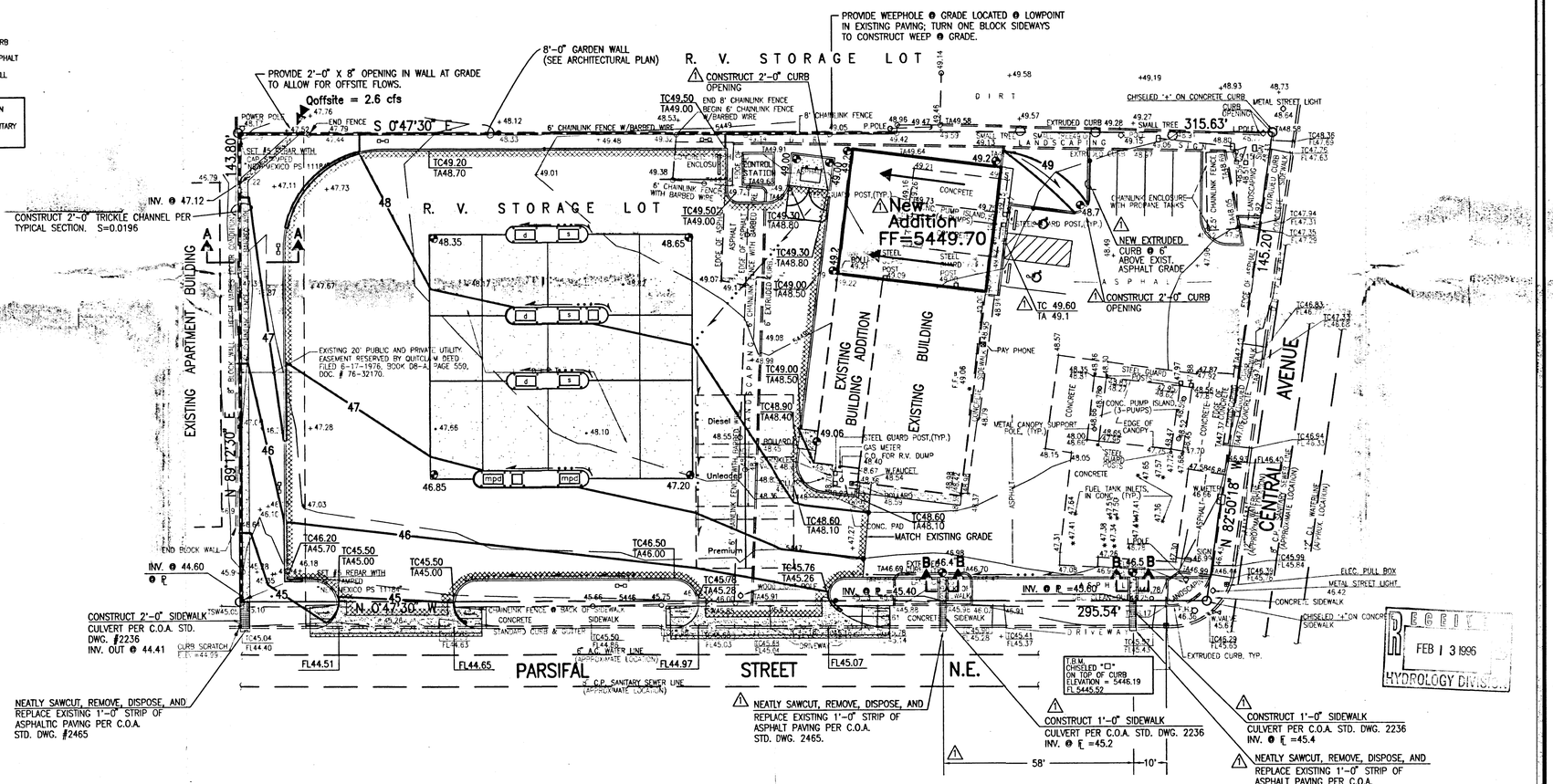
5' 10'
10' 0' 20'

NOTE:
THIS IS NOT A BOUNDARY SURVEY. BOUNDARY DATA IS SHOWN FOR INFORMATION ONLY AND IS BASED ON THE PRELIMINARY BOUNDARY AND TOPOGRAPHIC SURVEY PREPARED BY JMA IN 1995.



VICINITY MAP K-20
SCALE: 1" = 750' ±

F.I.R.M. MAP 30 OF 50
SCALE: 1" = 500' ±



JEFF MORTENSEN & ASSOCIATES, INC.
☐ 6010-B MIDWAY PARK BLVD. NE.
☐ ALBUQUERQUE ☐ NEW MEXICO 87109
☐ ENGINEERS ☐ SURVEYORS (505) 345-4250

Grading Plan

1"=20'

NORTH

RECEIVED
FEB 13 1996
HYDROLOGY DIVISION

Kevin Georges & Associates
Architecture & Planning
127 Jefferson Street NE - Suite A Albuquerque, New Mexico 87108-1218 505/265-4975

Construction Notes:

1. Two (2) working days prior to any excavation, contractor must contact New Mexico One Call System 260-1990, for location of existing utilities.
2. Prior to construction, the contractor shall excavate and verify the horizontal and vertical location of all potential obstructions. Should a conflict exist, the contractor shall notify the engineer in writing so that the conflict can be resolved with a minimum amount of delay.
3. All work on this project shall be performed in accordance with applicable federal, state and local laws, rules and regulations concerning construction safety and health.
4. All construction within public right-of-way shall be performed in accordance with applicable City of Albuquerque Standards and Procedures.
5. If any utility lines, pipelines, or underground utility lines are shown on these drawings, they are shown in an approximate manner only, and such lines may exist where none are shown. If any such existing lines are shown, the location is based upon information provided by the owner of said utility, and the information may be incomplete, or may be obsolete by the time construction commences. The engineer has conducted only preliminary investigation of the location, depth, size, or type of existing utility lines, pipelines, or underground utility lines. This investigation is not conclusive, and may not be complete, therefore, makes no representation pertaining thereto, and assumes no responsibility or liability therefor. The contractor shall inform itself of the location of any utility line, pipeline, or underground utility line in or near the area of the work in advance of and during excavation work. The contractor is fully responsible for any and all damage caused by its failure to locate, identify and preserve any and all existing utilities, pipelines, and underground utility lines. In planning and conducting excavation, the contractor shall comply with state statutes, municipal and local ordinances, rules and regulations, if any, pertaining to the location of these lines and facilities.
6. An Excavation/Construction Permit will be required before beginning any work within City right-of-way. An approved copy of these plans must be submitted at the time of application for this permit.
7. Backfill compaction shall be according to Arterial street use.
8. Maintenance of these facilities shall be the responsibility of the owner of the property served.
9. The design of planters and landscaped areas is not part of this plan. All planters and landscaped areas adjacent to the building(s) shall be provided with positive drainage to avoid any ponding adjacent to the structure. For construction details, refer to landscaping plan.

Erosion Control Measures

1. The contractor shall ensure that no soil erodes from the site into public right-of-way or onto private property. This can be achieved by constructing temporary berms at the property lines and wetting the soil to keep it from blowing.
2. The contractor shall promptly clean up any material excavated within the public right-of-way so that the excavated material is not susceptible to being washed down the street.
3. The contractor shall secure "Topsoil Disturbance Permit" prior to beginning construction.

APPROVALS	NAME	DATE
A.C.E./DESIGN		
INSPECTOR		
A.C.E./FIELD		

EverReady Oil
Retail Fueling Facility
10001 Central Ave. N.E.
Albuquerque, New Mexico

Project Title

Drawn By S.G.H. Checked By J.G.M.

Proj. No. 950294 Date 2/1/96

⚠ 02/96 BUILDING ADDITION MDS

Revisions **Architect** **Engineer**

JEFFREY G MORTENSEN NEW MEXICO 8547 REGISTERED PROFESSIONAL ENGINEER
02-07-96 PROFESSIONAL 1995

GRADING PLAN

Sheet Title **Sheet 3 of 9**

C2

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DRAINAGE PLAN

The following items concerning the Ever Ready Oil – Buena Ventura (formerly Gypsy Liquors L20/D48) Drainage Plan are contained hereon:

1. Vicinity Map
2. F.I.R.M.
3. Grading Plan
4. Calculations

As shown by the Vicinity Map, the site is located at the northeast corner of the intersection of Parsifal St. N.E. and East Central Avenue. At present, the site is characterized by an existing building along with associated landscaping and paving. This is consistent with the plan previously submitted for the southerly portion of the site titled "Gypsy Liquors" (L20/D48). The site also encompasses what was previously noted as a "RV storage lot" which lies to the north of the Gypsy Liquors site.

As shown by panel 30 of 50 of the National Flood Insurance Program, Flood Insurance Rate Maps published by F.E.M.A. for the City of Albuquerque, New Mexico dated October 14, 1983, this site does not lie in a designated flood hazard zone. Further review of Panel 30 combined with site investigation reveals that the site contributes to a designated flood hazard zone bearing the designation of AO (Depth 1). This designated flood hazard zone lies downstream from the site at the intersection of Wyoming Blvd. N.E. and Chico Rd. N.E. The proposed development is a minor modification to an existing site within an infill area. Much of the surrounding area is developed both commercially and residentially. Much, if not all, of the watershed is already developed, thereby limiting the possibility for significant development within the watershed.

The Grading Plan shows: 1) existing and proposed grades indicated by spot elevations and contours at 1'0" intervals, 2) the limit and character of the existing improvements, 3) the limit and character of the proposed improvements and 4) continuity between existing and proposed grades. As shown by this plan, the proposed improvements consist of replacing the RV storage lot with a fueling facility consisting of paving and landscaping improvements. A building addition to the existing building with some minor modifications to the landscaping on the existing service station portion of the site are also included with this project. In addition, the southernmost driveway on Parsifal Street N.E. will be removed and replaced with landscaping and sidewalk. Runoff previously exiting the site through this driveway will now exit via a sidewalk culvert. Generally, Land Treatment "C" will be replaced with Land Treatments B and D. At present, the site drains from east to west onto Parsifal Street N.E. From that point, runoff flows in a northerly direction to Chico Road N.E. Chico Road N.E. drains from east to west to Wyoming Blvd. N.E. A public storm drain is constructed within Wyoming Blvd. N.E. which receives runoff reaching that point. It is proposed to continue the free discharge of runoff from this site to Parsifal Street for the following reasons:

1. This is a modification to an existing site within an infill area.
2. The increase in runoff due to the proposed development is minimal.
3. This is one of the last infill sites remaining within the watershed.
4. The free discharge of runoff is consistent with the previously approved plan and with the drainage patterns established for adjacent properties.
5. Public storm drain improvements lie within Wyoming Blvd. N.E. which eventually drain the flood hazard zone referenced above.

Offsite flows will continue to be accepted by and conveyed through this site. Offsite flows are generated by the parcel which lies immediately to the east of the site. Offsite flows do not impact the site from the south, west, or north. Fully improved City streets lie to the south (East Central Avenue) and west (Parsifal Street N.E.). These streets contain public runoff and therefore do not contribute to the site. The property that lies to the north has parallel topography as well as being topographically lower than the project site. In addition, the two properties are separated by a CMU wall. It is because of these factors that offsite flows are not anticipated from the north. As stated above, offsite flows are anticipated from the east. Offsite runoff from the east has been calculated and will continue to be accepted under the proposed drainage scheme.

The Calculations which appear hereon analyze both the existing and developed conditions for the 100-year, 6-hour rainfall event. The procedure for the 40-acre and smaller basins, as set forth in the revisions of Section 22.2, Hydrology of the Development Process Manual, Volume 2, Design Criteria, dated January, 1993, has been used to quantify the peak rate of discharge and the volume of runoff generated. As shown by these Calculations, a negligible increase in runoff is expected due to the proposed development. As stated previously, offsite flows have also been calculated.

CALCULATIONS

Site Characteristics

1. Precipitation Zone = 4
2. $P_{6,100} = P_{360} =$ 2.90 in.
3. Total Area (A_T) = 1.00 Acre (onsite) 0.71 Acre (offsite)
4. Existing Land Treatment

A. Onsite Basin	43,840/1.00	100%
Treatment	Area (sf/ac)	%
B	1,900/0.04	4.3
C	21,350/0.49	48.7
D	20,590/0.47	47.0

B. Offsite Basin	30,960/0.71	100%
Treatment	Area (sf/ac)	%
C	30,960/0.71	100.0

5. Developed Land Treatment

A. Onsite Basin	43,840/1.00	100%
Treatment	Area (sf/ac)	%
B	6,535/0.15	14.9
D	37,305/0.85	85.1

Existing Condition

A. Onsite Basin

1. Volume

$E_W = (E_AA_A+E_BA_B+E_CA_C+E_DA_D)/A_T$

$E_W = [(1.08)(0.04)+(1.46)(0.49)+(2.64)(0.47)]/(1.00) = 2.00$ in

$V_{100} = (E_W/12)A_T$

$V_{100} = (2.00/12)(1.00) = 0.1666$ ac.ft.; 7,260 cf

2. Peak Discharge

$Q_p = Q_{PA}A_A + Q_{PB}A_B + Q_{PC}A_C + Q_{PD}A_D$

$Q_p = Q_{100} = (2.92)(0.04)+(3.73)(0.49)+(5.25)(0.47) = 4.4$ cfs

B. Offsite Basin

1. Volume

$E_W = (E_AA_A+E_BA_B+E_CA_C+E_DA_D)/A_T$

$E_W = (1.46)(0.71)/(0.71) = 1.46$ in

$V_{100} = (E_W/12)A_T$

$V_{100} = (1.46/12)(0.71) = 0.0864$ ac.ft.; 3,765 cf

2. Peak Discharge

$Q_p = Q_{PA}A_A + Q_{PB}A_B + Q_{PC}A_C + Q_{PD}A_D$

$Q_p = Q_{100} = (3.73)(0.71) = 2.6$ cfs

Weir Equation (Entrance Condition, Wall Opening)

$Q = CLH^{3/2}$

$Q = 2.6$

$L = 2.0$

$C = 2.6$

$H^{3/2} = Q/CL$

$H = 0.63'$

Developed Condition

A. Onsite Basin

1. Volume

$E_W = (E_AA_A+E_BA_B+E_CA_C+E_DA_D)/A_T$

$E_W = [(1.08)(0.15)+(2.64)(0.85)/(1.00) = 2.40$ in.

$V_{100} = (E_W/12)A_T$

$V_{100} = (2.40/12)(01.00) = 0.2005$ ac.ft.; 8,735 cf

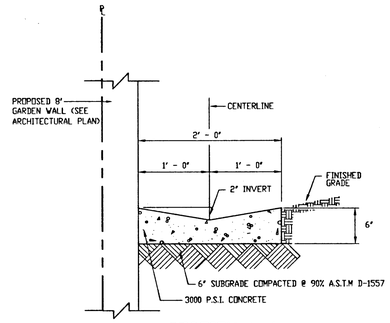
2. Peak Discharge

$Q_p = Q_{PA}A_A + Q_{PB}A_B + Q_{PC}A_C + Q_{PD}A_D$

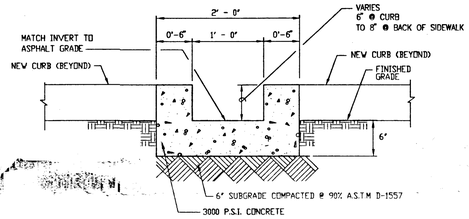
$Q_p = Q_{100} = (2.92)(0.15)+(5.25)(0.85) = 4.9$ cfs

Comparison

1. $\Delta V_{100} = 8,735 - 7,260 = 1,475$ cf (increase)
2. $\Delta Q_{100} = 4.9 - 4.4 = 0.5$ cfs (increase)



SECTION A-A
SCALE: 1" = 1' - 0"



⚠ SECTION B-B
SCALE: 1" = 1' - 0"

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ENVIRONMENTAL HEALTH

JEFF MORTENSEN & ASSOCIATES, INC.
☐ 6010-B MIDWAY PARK BLVD. N.E.
☐ ALBUQUERQUE ☐ NEW MEXICO 87109
☐ ENGINEERS ☐ SURVEYORS (505) 345-4250

Drainage Plan, Sections, and Calculations

NORTH

Kevin Georges & Associates
Architecture & Planning
197 Jefferson Street NE – Suite A Albuquerque, New Mexico 87108-1216 505/255-8878

EverReady Oil
Retail Fueling Facility
10001 Central Ave. N.E.
Albuquerque, New Mexico

Project Title

Drawn By E.M.S. Checked By J.G.M.

Proj. No. 950294 Date 2/1/96

⚠ 02/96 SECTION B-B MDS

Revisions Architect Engineer

REGISTERED PROFESSIONAL ENGINEER JEFFREY G. MORTENSEN NEW MEXICO 8547

02-07-96 9-26-95

C3

DRAINAGE PLAN, SECTION, AND CALCULATIONS

Sheet Title Sheet 4 of 9

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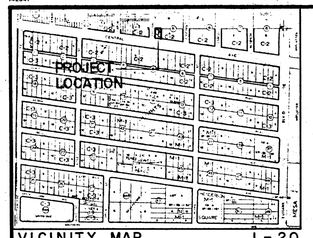
142347



VICINITY MAP L-20

SCALE: 1" = 800' ±

Construction Notes:

1. Two (2) working days prior to any excavation, contractor must contact New Mexico One Call System, 260-1990, for location of existing utilities.

2. Prior to construction, the contractor shall excavate and verify the horizontal and vertical location of all potential obstructions. Should a conflict exist, the contractor shall notify the engineer so that the conflict can be resolved with a minimum amount of delay.

3. All work on this project shall be performed in accordance with applicable federal, state and local laws, rules and regulations concerning safety and health.

4. All construction within public right-of-way shall be performed in accordance with applicable City of Albuquerque Standards and Procedures.

5. If any utility lines, pipelines, or underground utility lines are shown on these drawings, they are shown in an approximate manner only, and such lines may exist where none are shown. If any such existing lines are shown, the location is based upon information provided by the owner of said utility, and the information may be incomplete, or may be obsolete by the time construction commences. the engineer has undertaken no field verification of the location, depth, size, or type of existing utility lines, pipelines, or underground utility lines, makes no representation pertaining thereto, and assumes no responsibility or liability therefor. The contractor shall inform itself of the location of any utility line, pipeline, or underground utility line in or near the area of the work in advance of and during excavation work. The contractor is fully responsible for any and all damage caused by its failure to locate, identify and preserve any and all existing utilities, pipelines, and underground utility lines. In planning and conducting excavation, the contractor shall comply with state statutes, municipal and local ordinances, rules and regulations, if any, pertaining to the location of these lines and facilities.

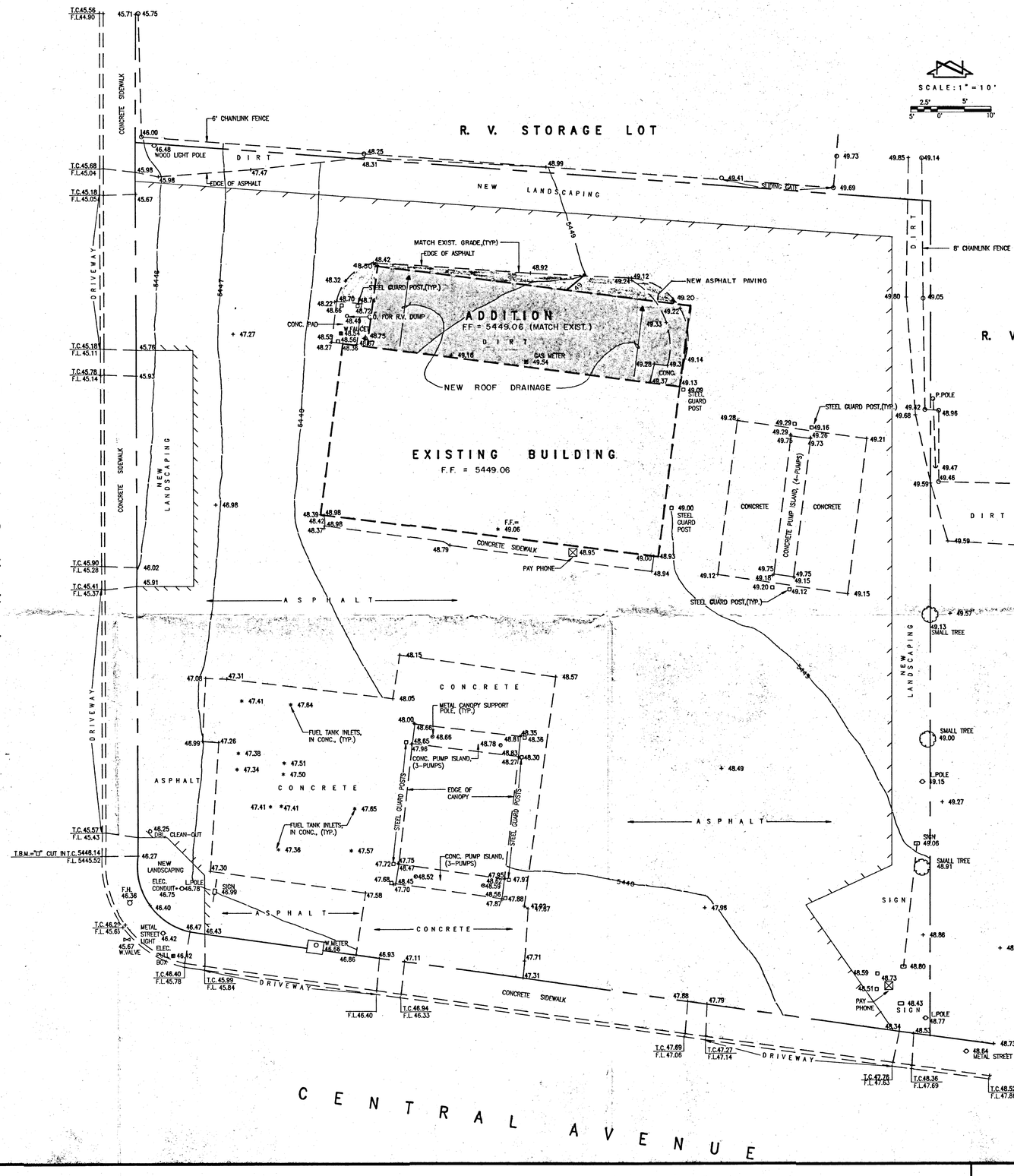
6. The design of planters and landscaped areas is not part of this plan. All planters and landscaped areas adjacent to the building(s) shall be provided with positive drainage to avoid any ponding adjacent to structures. For construction details, refer to landscaping plan.

Erosion Control Measures:

1. The contractor shall ensure that no soil erodes from the site into public right-of-way or onto private property. This can be achieved by constructing temporary berms at the property lines and wetting the soil to keep it from blowing.

2. The contractor shall promptly clean up any material excavated within the public right-of-way so that the excavated material is not susceptible to being washed down the street.

3. The contractor shall secure "topsoil disturbance permit" Prior to beginning construction.



LEGAL DESCRIPTION:

THE SOUTH APPROXIMATELY 139 FEET OF THE WEST HALF OF LOTS A & B, BLOCK 5, BUENA VENTURA.

PROJECT BENCHMARK:

CITY OF ALBUQUERQUE STATION 5-K20, STATION IS A STANDARD ACS DISK SET IN A DRILLED HOLE ON TOP OF CURB. STATION IS STAMPED "5-K20-ACS", LOCATED AT THE NE QUADRANT OF THE INTERSECTION OF MOON ST. N.E. AND CENTRAL AVE. N.E.
ELEVATION = 5427.36'(M.S.L.D.)

TEMPORARY BENCHMARK:

A SQUARE "L" CUT IN TOP OF CURB ON PARSIFAL ST. N.E. AS SHOWN BELOW.
ELEVATION = 5446.14'(M.S.L.D.)

DRAINAGE PLAN

The following items concerning the Gypsy Liquors Drainage Plan are contained hereon:

1. Vicinity Map
2. Grading Plan
3. Calculations

As shown by the Vicinity Map, the site is located at the northeast corner of the intersection of Parsifal Street and East Central Avenue. At present, the site is developed as a service station/mini-mart. Much of the surrounding area is developed commercially, thereby making this a modification to an existing site within an infill area.

As shown by Panels 30 and 36 of 50 of the National Flood Insurance Program Flood Insurance Rate Maps for the City of Albuquerque, New Mexico, dated October 14, 1983, this site does not lie within a designated flood hazard zone. Further review of these maps indicates that the site does not contribute runoff to a designated flood hazard zone. At present, the site drains from east to west and discharges to both East Central Avenue and Parsifal Street. Parsifal Street appears to drain in a northerly direction while East Central Avenue drains in a westerly direction. The proposed development will not alter the existing drainage pattern of the site.

The Grading Plan shows 1) existing and proposed grades indicated by spot elevations and contours at 1'0" intervals, 2) the limit and character of the existing improvements, 3) the limit and character of the proposed improvements, and 4) continuity between existing and proposed grades. As shown by this plan, the project consists of a small building addition to an existing structure. In addition, existing asphalt paving will be removed and replaced with new landscaping. The net affect of this work will be an overall reduction in site impervious area. This will further result in a decrease in runoff generated by this site. In view of this fact, coupled with the recognition that this is a modification to an existing site within an infill area, and that the proposed improvements will not alter the existing drainage pattern of the site, the continued free discharge of runoff from this site is appropriate.

The calculations which appear hereon analyze both the existing and developed conditions for the 100-year, 6-hour rainfall event. The peak rate of discharge has been calculated using the Rational Method, while the SCS Method has been used to quantify the volume of runoff generated. Both Methods have been used in accordance with the City of Albuquerque Development Process Manual, Volume II, combined with the Mayor's Emergency Rule dated January 14, 1986. A comparison of the runoff calculations for the existing and developed conditions indicates a minor decrease in the runoff generated by this site due to the proposed development.

CALCULATIONS

Ground Cover Information

From SCS Bernalillo County Soil Survey,
Plate 32: EMB - Embudo Gravelly Fine Sandy Loam
Hydrologic Soil Group: B
Existing Pervious CN = 82 (DPM Plate 22.2 C-2; Dirt)
Developed Pervious CN = 61 (DPM Plate 22.2 C-2; Open Space - Good Condition)

Time of Concentration/Time to Peak

$T_c = 0.0078\ L^{0.77}/S^{0.385}$ (Kirpich Equation)

$T_p = T_c = 10$ min.

Point Rainfall

$P_6 = 2.42$ in. (DPM Plate 22.2 D-1)

Rational Method

Discharge: $Q = CiA$

where C varies
$i = P_6\ (6.84)\ T_c^{-0.61} = 5.12$ in/hr
$P_6 = 2.42$ in (DPM Plate 22.2D-1)
$T_c = 10$ min (minimum)
A = area, acres

SCS Method

Volume: $V = 3630(DRO)\ A$

Where DRO = Direct runoff in inches
A = area, acres

Existing Condition

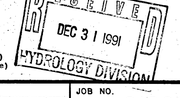
$A_{total} = 21{,}750$ sf = 0.5 Ac
Roof area = 2360 sf (0.11)
Paved area = 18,140 sf (0.83)
Unpaved area = 1250 sf (0.06)
C = 0.91 (Weighted average per Emergency Rule, 1/14/86)
$Q_{100} = CiA = 0.91(5.12)(0.5) = 2.3$ cfs
% Impervious = 94 %
Composite CN = 94
DRO = 1.8 in (DPM Plate 22.2 C-4)
$V_{100} = 3630\ (DRO)A = 3270$ cf

Developed Condition

$A_{total} = 21{,}750$ sf = 0.5 Ac
Roof area = 3230 sf (0.15)
Paved area = 15,800 sf (0.73)
Landscaped area = 2720 sf (0.12)
C = 0.86 (Weighted average per Emergency Rule, 1/14/86)
$Q_{100} = CiA = 0.86(5.12)(0.5) = 2.2$ cfs
% Impervious = 88 %
Composite CN = 90
DRO = 1.5 in (DPM Plate 22.2 C-4)
$V_{100} = 3630\ (DRO)A = 2720$ cf

Comparison

$\Delta Q_{100} = 2.3 - 2.2 = 0.1$ cfs (decrease)
$\Delta V_{100} = 3270 - 2720 = 550$ cf (decrease)



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ALBUQUERQUE, NEW MEXICO 87109
ENGINEERS & SURVEYORS (505)345-4250

GRADING & DRAINAGE PLAN

GYPSY LIQUORS

DESIGNED BY J.G.M.
DRAWN BY J.M.C.
APPROVED BY J.G.M.

NO.	DATE	BY	REVISIONS

JOB NO. 910961
DATE 12-91
SHEET 1 OF 1