PUBLIC WORKS/HYDROLOGY

G14/D44

GENERAL CONSTRUCTION NOTES

1. An excavation/construction permit will be required before beginning any work within this right-of-way. An approved copy of these plans must be submitted at the time of application for this permit.
2. All work detailed on these plans is to be performed under supervision of a registered professional engineer. All work is to be constructed in accordance with the City of Albuquerque Interim Standard Specifications, "Public Service Improvements".
3. The City Inspector must be the contractor, developer, and/or owner's agent (Section 725-127), for inspection of existing utilities.
4. Prior to construction, the contractor shall construct and verify the horizontal and vertical locations of all utilities. Should a conflict exist, the contractor shall notify the engineer or surveyor so that the conflict can be resolved with a minimum amount of delay.
5. Conflict inspection shall be according to ___ASTM-D-2___ stress test.
6. Calculations of these facilities shall be the responsibility of the owner of the property served.

APPROVALS	NAME	DATE
A.C.E./DESIGN	Benny Montoya	11/2/87
INSPECTOR		
A.C.E./FIELD		

CONSTRUCTION NOTES:

1.) TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE AT 765-1234 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 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 CITY RIGHT-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE CITY OF ALBUQUERQUE STANDARDS AND PROCEDURES.

NOTE: ALL WORK WITHIN PUBLIC EASEMENT SHALL BE PERFORMED UNDER SEPARATE PERMIT.

EROSION CONTROL MEASURES:

THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR MANAGEMENT FOR STORM RUN-OFF DURING CONSTRUCTION; HE SHALL INSURE THAT THE FOLLOWING MEASURES ARE TAKEN:

1.) ADJACENT PROPERTY SHALL BE PROTECTED AT ALL TIMES BY CONSTRUCTION OF BERMS, DIKES, SWALES, PONDS, AND OTHER TEMPORARY GRADING AS REQUIRED TO PREVENT STORM RUNOFF FROM LEAVING THE SITE AND ENTERING ADJACENT PROPERTIES.

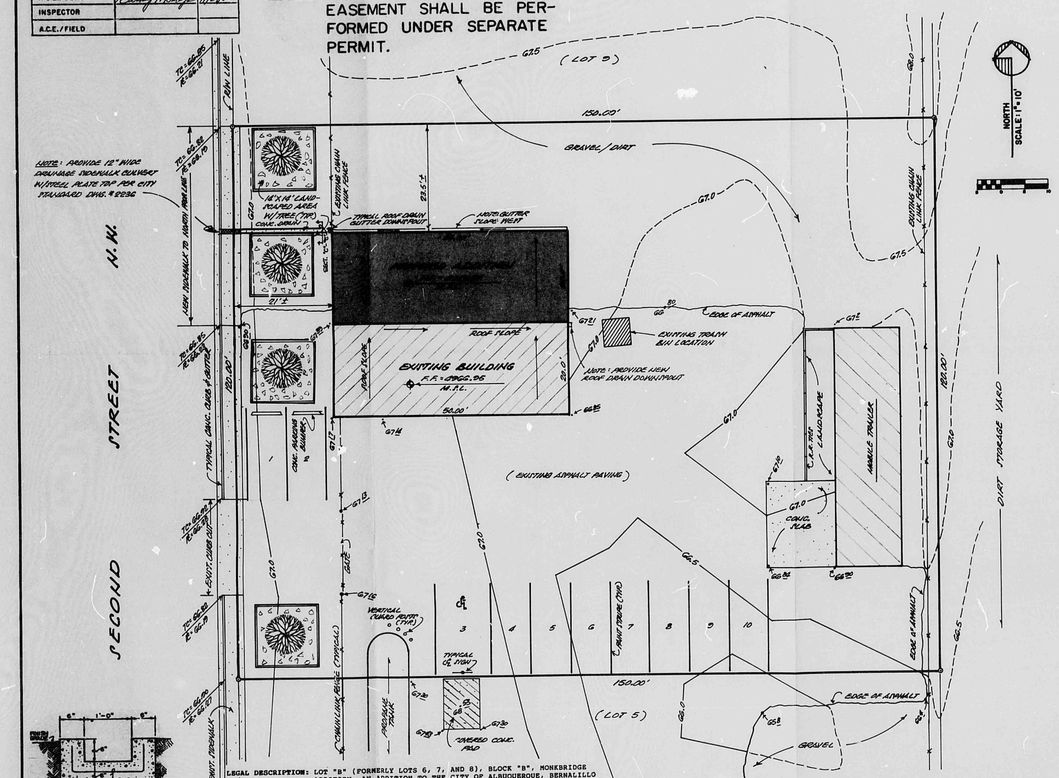
2.) ADJACENT PUBLIC RIGHT-OF-WAYS SHALL BE PROTECTED AT ALL TIMES FROM STORM WATER RUNOFF FROM THE SITE. NO SEDIMENT BEARING WATER SHALL BE PERMITTED TO ENTER PUBLIC STREETS.

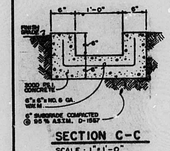
3.) THE CONTRACTOR SHALL IMMEDIATELY AND THROUGHLY REMOVE ANY AND ALL SEDIMENT WITHIN PUBLIC STREETS THAT HAS BEEN ERODED FROM THE SITE AND DEPOSITED THERE.

LEGEND:

- T.C. • 00.85 — TOP OF CURB ELEVATION
- F. • 00.81 — CURB FLOW LINE ELEVATION
- EXISTING OR PROPOSED CONCRETE
- ---97 ---- — EXISTING CONTOUR
- —95 —— — PROPOSED CONTOUR
- EXISTING FENCE
- 96.71 — PROPOSED SPOT ELEVATION
- PROPOSED LIMITS OF NEW PAVING

VICINITY MAP





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

LEGAL DESCRIPTION: LOT "B" (FORMERLY LOTS 6, 7, AND 8), BLOCK "B", MONKBRIDGE ADDITION, AN ADDITION TO THE CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO.

BENCH MARK REFERENCE: STATION NO. "NM 47-10" BRASS CAP LOCATED ON THE CENTER-LINE MEDIAN AT THE INTERSECTION OF 2 RD STREET N.W. AND MESCALERO ROAD N.W., M.S.L. ELEVATION = 4967.50; PROJECT BENCH MARK AS SHOWN ON THE PLAN HEREON.

DRAINAGE COMMENTS:

THE FOLLOWING ITEMS CONCERNING THE SUBJECT SITE ARE CONTAINED ON THE GRADING AND DRAINAGE PLAN AS SHOWN HEREON:

1.) SITE GRADING AND DRAINAGE PLAN
2.) VICINITY MAP
3.) LEGAL DESCRIPTION
4.) LIMITS AND CHARACTER OF THE EXISTING AND PROPOSED IMPROVEMENTS
5.) HYDRAULIC DRAINAGE CALCULATIONS

AS SHOWN ON THE VICINITY MAP HEREON THE SUBJECT SITE IS LOCATED ON THE EAST SIDE OF SECOND STREET N.W. BETWEEN BRADBURY AVENUE N.W. AND AZTEC ROAD N.W., WITHIN THE CITY LIMITS OF THE CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO, (CITY ZONE ATLAS MAP NO. "G-14-Z").

THE PROJECT SITE, (1.) DOES LIE WITHIN A FLOOD PLAIN, (2.) DOES NOT LIE ADJACENT TO A NATURAL OR ARTIFICIAL WATER COURSE, (3.) HAS NO DRAINAGE EASEMENTS ON THE PROPERTY.

BASED ON A SITE INVESTIGATION, IT HAS BEEN DETERMINED THAT THE FREE DISCHARGE OF SURFACE FLOWS OF THE EXISTING AND PROPOSED QUANTITIES HAVE NO ADVERSE AFFECT ON DOWNSTREAM PROPERTIES.

DRAINAGE CALCULATIONS:

I. REFERENCES:

A. CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL (DPM), VOL. 2, DESIGN CRITERIA, CHAPTER 22, DRAINAGE, FLOOD CONTROL AND EROSION CONTROL.

B. SOIL SURVEY OF BERNALILLO COUNTY AND PARTS OF SANDOVAL AND VALENCIA COUNTIES, NEW MEXICO, UNITED STATES DEPARTMENT OF AGRICULTURE, SOIL CONSERVATION SERVICE, (SCS SHEET No. 21).

II. GENERAL INFORMATION:

A. SOIL TYPE: SOIL TYPE IC "VbA", VINTON SANDY LOAM, 0 TO 1 PERCENT SLOPES; HYDROLOGIC SOIL GROUP "B".

B. IMPERVIOUSNESS:

SITE AREA = 0.413 ACRES, (18,000.00 SQ. FT.).
PRESENT UNDEVELOPED "C" FACTOR = 0.40

C. TYPE OF SURFACE (DEVELOPED):
EXISTING

HARD SURFACED (ASPHALT/GRAVEL)	= 0.212AC. = 51%	X (C=0.95) = 0.48
BUILDING ROOF AREA	= 0.023AC. = 06%	X (C=0.90) = 0.05
LANDSCAPED AREA	= 0.000AC. = 0%	X (C=0.25) = 0.00
UNDEVELOPED AREA	= 0.178AC. = 43%	X (C=0.40) = 0.17

AVERAGE "WEIGHTED" "C"= 0.70

C-1. TYPE OF SURFACE (PROPOSED DEVELOPED):

HARD SURFACE (ASPHALT/GRAVEL)	= 0.200 AC. = 48%	X (C=0.95) = 0.46
BUILDING ROOF AREA	= 0.045 AC. = 12%	X (C=0.90) = 0.11
LANDSCAPED AREA	= 0.014 AC. = 03%	X (C=0.25) = 0.01
UNDEVELOPED AREA	= 0.154 AC. = 37%	X (C=0.40) = 0.15

AVERAGE "WEIGHTED" 'C' = 0.73

D. RAINFALL, 100-YR., 6-HR., R_6: (SEE REF. A., PLATE 22.2 D-1) R_6 = 2.2 INCHES.

E. TIME OF CONCENTRATION, T_C = TEN (10) MINUTES FOR A SITE THIS SIZE.

F. RAINFALL INTENSITY, "I": (SEE REF. A., PLATE 22.2 D-2)
$I = R_6 \times 6.84 \times T_C^{-0.51} = 2.2 \times 6.84 \times (10)^{-0.51} = 4.65$ IN./HR.

III. PEAK DISCHARGE: (Q = CIA)

UNDEVELOPED: EXISTING
Q_{100} = 0.70 X 4.65 X 0.413 = 1.34 cfs
Q_{10} = 0.657 X 1.34 = 0.88 cfs

DEVELOPED: PROPOSED
Q_{100} = 0.73 X 4.65 X 0.413 = 1.40 cfs
Q_{10} = 0.657 X 1.40 = 0.92 cfs *** INCREASE OF 0.06 cfs

IV. PEAK VOLUME:

A. EXISTING CONDITIONS:
V_{100} = 0.70 X (2.2/12) X 18,000.0 = 2,310.0 CU. FT.
V_{10} = 0.657 X 2,310.0 = 1,517.7 CU. FT.

B. DEVELOPED CONDITIONS:
V_{100} = 0.73 X (2.2/12) X 18,000.0 = 2,409.0 CU. FT.
V_{10} = 0.657 X 2,409.0 = 1,582.7 CU. FT.

V. THE SUBJECT SITE PRESENTLY ACCEPTS MINIMAL OFF-SITE FLOWS FROM THE PROPERTY TO THE NORTH (GRAVELED SURFACED) AND WILL CONTINUE TO ACCEPT THESE FLOWS SHOULD IT BE NECESSARY. (0.24 cfs); THE "HISTORICAL" FLOWS OF THE SUBJECT PROPERTY CONTRIBUTE TO OFF-SITE FLOWS OF THE ADJACENT PROPERTY TO THE SOUTH WHICH IS ALSO OWNED BY THE SAME PROPERTY OWNER(S) OF THE PROPOSED DEVELOPED SITE ADDRESSED ON THE PLAN HEREON.

PROPOSED GRADING AND DRAINAGE PLAN FOR PROPOSED ADDITION TO ORTEGA'S PROPANE SERVICE INC. (3914 2ND STREET N.W., ALBUQUERQUE, NEW MEXICO) NOVEMBER, 1988

RECEIVED
NOV - 1 1988
HYDROLOGY SECTION

R# 2a DATE 3-26-92 BY RBP

CITY OF ALBUQUERQUE

This microimage is certified to be a complete and accurate copy of the original as it appears in the files of the Public Works Department and was created in the normal course of business.

The photographic process used meets the Basic Microfilm Standards of the National Micrographic Association (MS115-1977)

11/5/92
DIRECTOR

NOTARY PUBLIC
OFFICIAL SEAL
Roberta Duran
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires

PLAN SHOT TWICE
ONCE ON LIGHT
ONCE ON DARK

CITY OF ALBUQUERQUE
THIS MICROIMAGE IS THE BEST POSSIBLE REPRODUCTION DUE TO THE POOR QUALITY OF THE ORIGINAL DOCUMENT.

PLANS/PLATS ON FILE
FILE DESC: G14/D44
PLANS/PLATS 2

E 30 D 24 C 20 B 16 A 12 CITY OF ALBUQUERQUE C D F

NOTICE TO CONTRACTOR

1. 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.
2. All work detailed on these plans to be performed under contract or it, except as otherwise stated or provided for herein, to be constructed in accordance with the City of Albuquerque Current Standard Specifications - Public Works Construction - 1986.
3. The (2) working days prior to any excavation, contractor must contact Line Locating Service, 765-1234, for location of existing utilities.
4. Prior to construction, the contractor shall accurate ly verify the horizontal and vertical locations of all construction. Should a conflict exist, the contractor shall immediately notify the Engineer and shall not proceed with a without written authorization.
5. Backfill compaction shall be according to ASTM D-1557 direct use.
6. Maintenance of these facilities shall be the responsibility of the Owner of the property served.

APPROVALS	NAME	DATE
A.C.E./DESIGN	Barry Montoya	11/27/88
INSPECTOR		
A.C.E./FIELD		

CONSTRUCTION NOTES:

1.) TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE AT 765-1234 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 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 CITY RIGHT-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE CITY OF ALBUQUERQUE STANDARDS AND PROCEDURES.

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2.) ADJACENT PUBLIC RIGHT-OF-WAYS SHALL BE PROTECTED AT ALL TIMES FROM STORM WATER RUNOFF FROM THE SITE. NO SEDIMENT BEARING WATER SHALL BE PERMITTED TO ENTER PUBLIC STREETS.

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LEGEND:

- T.C. = 66.85 = TOP OF CURB ELEVATION
- F = 66.21 = CURB FLOW LINE ELEVATION
- = EXISTING OR PROPOSED CONCRETE
- 67 = EXISTING CONTOUR
- 65 = PROPOSED CONTOUR
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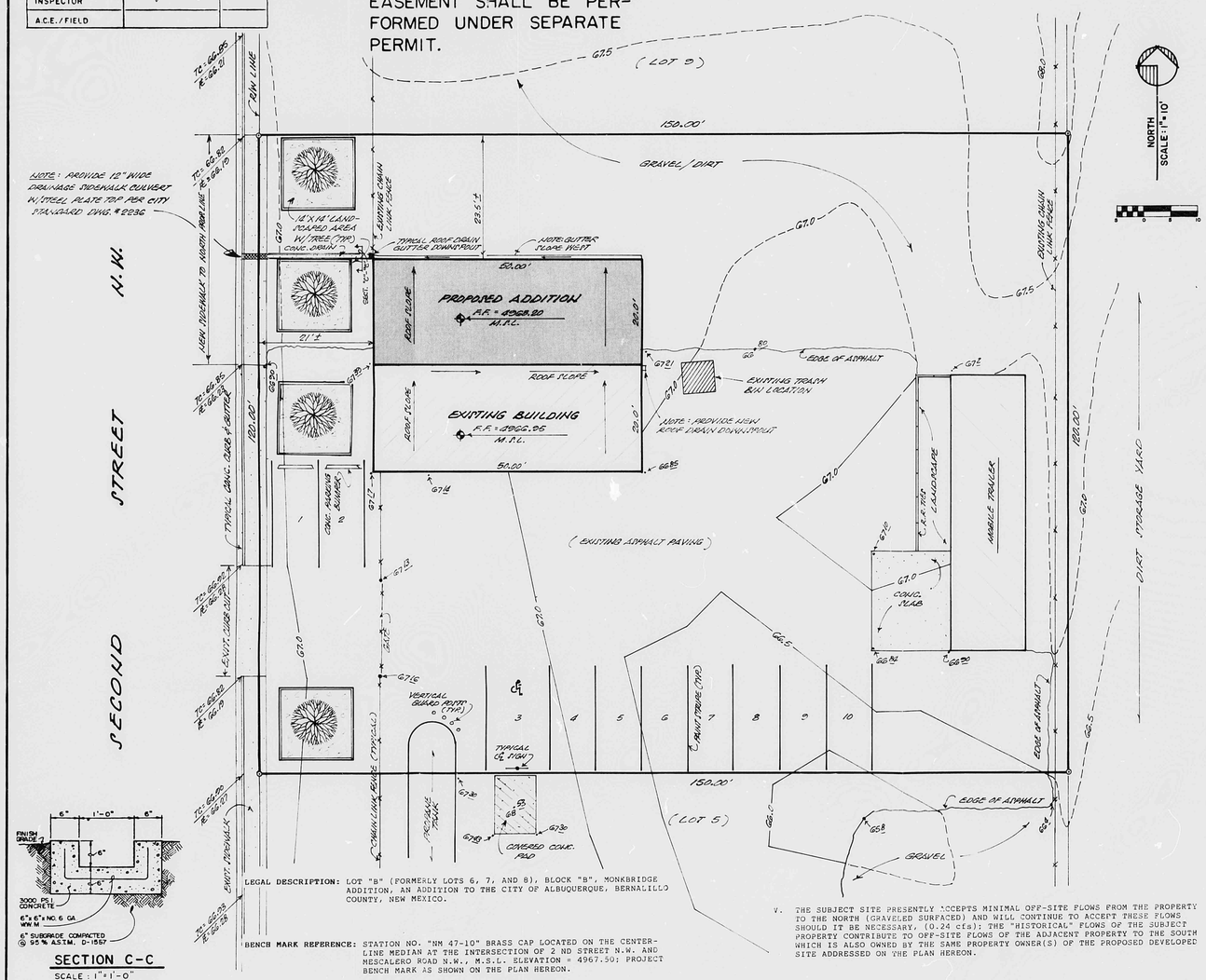
- 66.71 = PROPOSED SPOT ELEVATION
- = PROPOSED LIMITS OF NEW PAVING

NOTE: ALL WORK WITHIN PUBLIC EASEMENT SHALL BE PERFORMED UNDER SEPARATE PERMIT.



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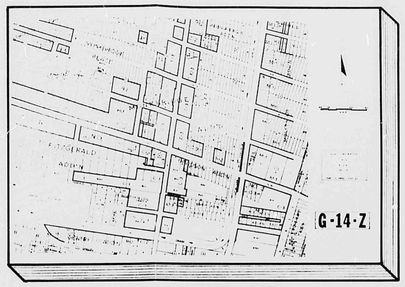
BENCH MARK REFERENCE: STATION NO. "NM 47-10" BRASS CAP LOCATED ON THE CENTER-LINE MEDIAN AT THE INTERSECTION OF 2 ND STREET N.W. AND MESCALERO ROAD N.W., M.S.L. ELEVATION = 4967.50; PROJECT BENCH MARK AS SHOWN ON THE PLAN HEREON.

V. THE SUBJECT SITE PRESENTLY ACCEPTS MINIMAL OFF-SITE FLOWS FROM THE PROPERTY TO THE NORTH (GRAVELED SURFACED) AND WILL CONTINUE TO ACCEPT THESE FLOWS SHOULD IT BE NECESSARY, (0.24 cfs); THE "HISTORICAL" FLOWS OF THE SUBJECT PROPERTY CONTRIBUTE TO OFF-SITE FLOWS OF THE ADJACENT PROPERTY TO THE SOUTH WHICH IS ALSO OWNED BY THE SAME PROPERTY OWNER(S) OF THE PROPOSED DEVELOPED SITE ADDRESSED ON THE PLAN HEREON.



VICINITY MAP

DRAINAGE COMMENTS:

THE FOLLOWING ITEMS CONCERNING THE SUBJECT SITE ARE CONTAINED ON THE GRADING AND DRAINAGE PLAN AS SHOWN HEREON:

1.) SITE GRADING AND DRAINAGE PLAN
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THE PROJECT SITE, (1.) DOES LIE WITHIN A FLOOD PLAIN, (2.) DOES NOT LIE ADJACENT TO A NATURAL OR ARTIFICIAL WATER COURSE, (3.) HAS NO DRAINAGE EASEMENTS ON THE PROPERTY.

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DRAINAGE CALCULATIONS:

I. REFERENCES:

A. CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL (DPM), VOL. 2, DESIGN CRITERIA, CHAPTER 22, DRAINAGE, FLOOD CONTROL AND EROSION CONTROL.

B. SOIL SURVEY OF BERNALILLO COUNTY AND PARTS OF SANDOVAL AND VALENCIA COUNTIES, NEW MEXICO, UNITED STATES DEPARTMENT OF AGRICULTURE, SOIL CONSERVATION SERVICE, (SCS SHEET No. 21).

II. GENERAL INFORMATION:

A. SOIL TYPE: SOIL TYPE IS "VbA", WINTON SANDY LOAM, 0 TO 1 PERCENT SLOPES; HYDROLOGIC SOIL GROUP "B".

B. IMPERVIOUSNESS:

SITE AREA = 0.413 ACRES, (18,000.00 SQ. FT.).
PRESENT UNDEVELOPED "C" FACTOR = 0.40

C. TYPE OF SURFACE (DEVELOPED):

EXISTING			
HARD SURFACED (ASPHALT/GRAVEL)	= 0.212AC.	= 51% X (C=0.95)	= 0.48
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LANDSCAPED AREA	= 0.000AC.	= 0% X (C=0.25)	= 0.00
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		AVERAGE "WEIGHTED" "C"	= 0.70

C-1. TYPE OF SURFACE (PROPOSED DEVELOPED):

HARD SURFACE (ASPHALT/GRAVEL)	= 0.200 AC.	= 48% X (C=0.95)	= 0.46
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		AVERAGE "WEIGHTED" 'C'	= 0.73

D. RAINFALL, 100-YR., 6-HR., R_6; (SEE REF. A., PLATE 22.2 D-1)
R_6 = 2.2 INCHES.

E. TIME OF CONCENTRATION, T_c = TEN (10) MINUTES FOR A SITE THIS SIZE.

F. RAINFALL INTENSITY, "I", (SEE REF. A., PLATE 22.2 D-2)
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III. PEAK DISCHARGE: (Q = CIA)

UNDEVELOPED: Q_{100} = 0.70 X 4.65 X 0.413 = 1.34 cfs
EXISTING
Q_{10} = 0.657 X 1.34 = 0.88 cfs

DEVELOPED: Q_{100} = 0.73 X 4.65 X 0.413 = 1.40 cfs
PROPOSED
Q_{10} = 0.657 X 1.40 = 0.92 cfs *** INCREASE OF 0.06 cfs

IV. PEAK VOLUME:

A. EXISTING CONDITIONS:
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PROPOSED GRADING AND DRAINAGE PLAN
FOR PROPOSED ADDITION TO
ORTEGA'S PROPANE SERVICE INC.
(3914 2ND STREET N.W., ALBUQUERQUE, NEW MEXICO)
NOVEMBER, 1988

LEVI J. VALDEZ
NEW MEXICO
11-27-88
NEW MEXICO REGISTERED ENGINEER

PLAN SHOT TWICE
ONCE ON LIGHT
ONCE ON DARK

CITY OF ALBUQUERQUE
THIS MICROIMAGE IS THE BEST POSSIBLE REPRODUCTION DUE TO THE POOR QUALITY OF THE ORIGINAL DOCUMENT.

R# 26 DATE 3-26-02 OP

CITY OF ALBUQUERQUE

This microimage is certified to be a complete and accurate copy of the original as it appears in the files of the **Public Works Department** and was created in the normal course of business.

The photographic process used meets the Basic Microfilm Standards of the National Micrographics Association (MS115-1977)

DIRECTOR 11-5-02

NOTARY PUBLIC
OFFICIAL SEAL
Roberta Duran
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires
07/07/02

D 24 C 20 B 16 A 12 | CITY OF ALBUQERQUE C D

NOTICE TO CONTRACTOR

1. 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.
2. All work detailed on these plans to be performed under contract shall, except as otherwise stated or provided for herein, be constructed in accordance with the City of Albuquerque Interim Standard Specifications - Public Works Construction - 1985.
3. You (2) working days prior to any excavation, contractor must contact Site Locating Service, 765-1234, for location of existing utilities.
4. Prior to construction, the contractor shall excavate and verify the horizontal and vertical locations of all obstructions. Should a conflict arise, the contractor shall notify the engineer or surveyor so that the conflict can be resolved with a minimum amount of delay.
5. Rush(ii) inspection shall be according to ARTERIAL minimum.
6. Maintenance of these facilities shall be the responsibility of the owner of the property served.

APPROVALS	NAME	DATE
A.C.E./DESIGN	O Montoya	2/1/91
INSPECTOR		
A.C.E./FIELD		

CONSTRUCTION NOTES:

1.) TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE AT 765-1234 FOR LOCATION OF EXISTING UTILITIES.

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4.) ALL CONSTRUCTION WITHIN CITY RIGHT-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE CITY OF ALBUQUERQUE STANDARDS AND PROCEDURES.

EROSION CONTROL MEASURES:

THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR MANAGEMENT FOR STORM RUN-OFF DURING CONSTRUCTION; HE SHALL INSURE THAT THE FOLLOWING MEASURES ARE TAKEN:

1.) ADJACENT PROPERTY SHALL BE PROTECTED AT ALL TIMES BY CONSTRUCTION OF BERMS, DIKES, SWALES, PONDS, AND OTHER TEMPORARY GRADING AS REQUIRED TO PREVENT STORM RUNOFF FROM LEAVING THE SITE AND ENTERING ADJACENT PROPERTIES.

2.) ADJACENT PUBLIC RIGHT-OF-WAYS SHALL BE PROTECTED AT ALL TIMES FROM STORM WATER RUNOFF FROM THE SITE. NO SEDIMENT BEARING WATER SHALL BE PERMITTED TO ENTER PUBLIC STREETS.

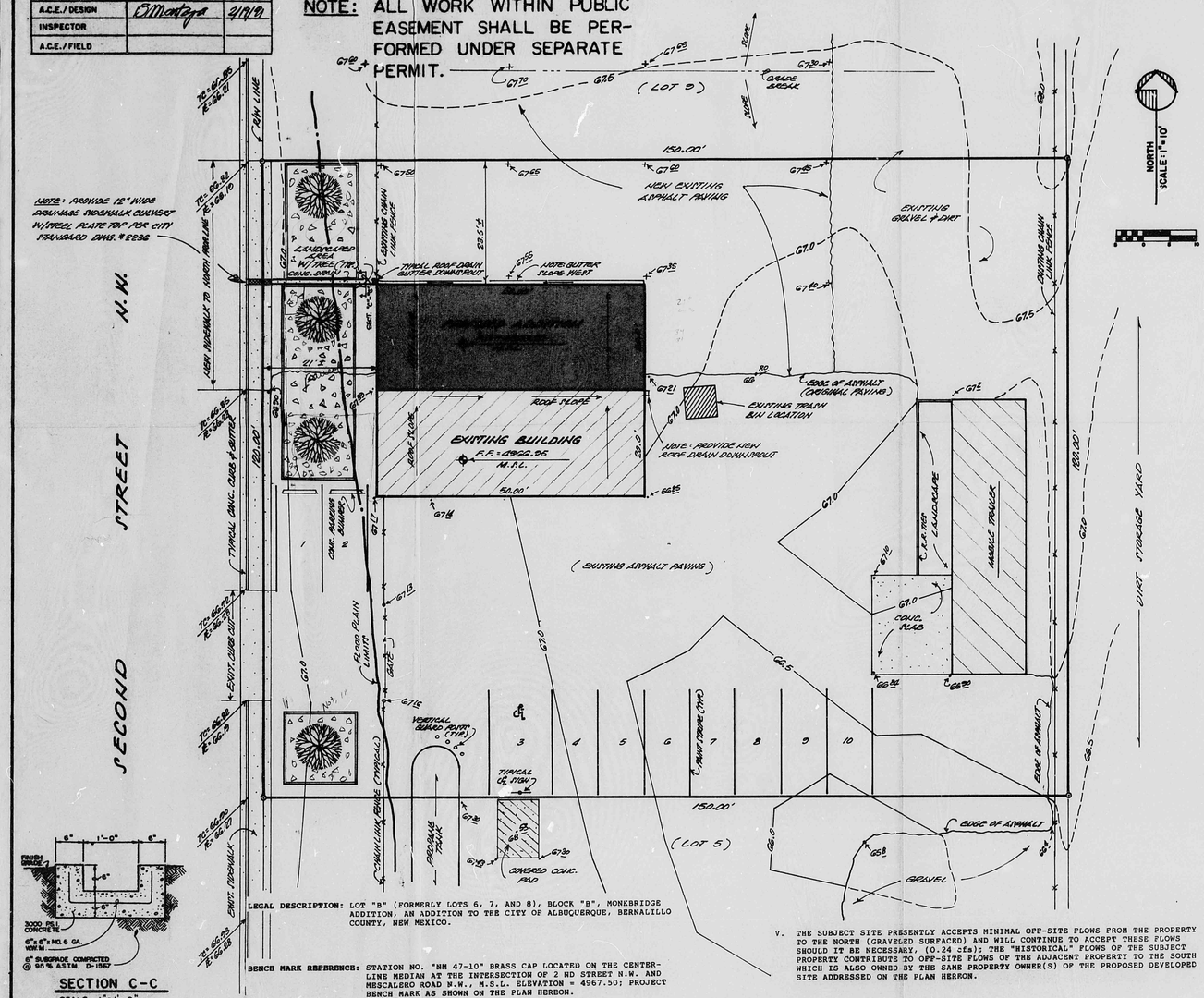
3.) THE CONTRACTOR SHALL IMMEDIATELY AND THROUGHLY REMOVE ANY AND ALL SEDIMENT WITHIN PUBLIC STREETS THAT HAS BEEN ERODED FROM THE SITE AND DEPOSITED THERE.

LEGEND:

- T.C. = 66.85 = TOP OF CURB ELEVATION
- F.E. = 66.21 = CURB FLOW LINE ELEVATION
- = EXISTING OR PROPOSED CONCRETE
- 67 = EXISTING CONTOUR
- 65 = PROPOSED CONTOUR
- = EXISTING FENCE
- 66.71 = PROPOSED SPOT ELEVATION
- = PROPOSED LIMITS OF NEW PAVING

* NOTE: THIS PLAN IS AN UP-DATED RE-SUBMITTAL OF THE PREVIOUS DRAINAGE PLAN FOR ORTEGA'S PROPANE SERVICE (FILE NO. G-14/D44) APPROVED FOR BUILDING PERMIT BY CITY OF ALBUQUERQUE-HYDROLOGY DEPARTMENT ON DECEMBER 1, 1988.

NOTE: ALL WORK WITHIN PUBLIC EASEMENT SHALL BE PERFORMED UNDER SEPARATE PERMIT.



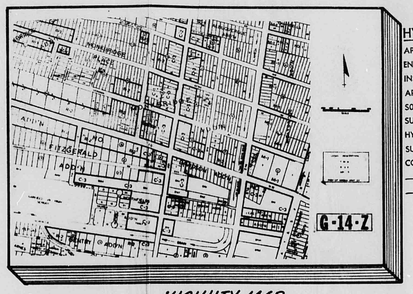
SECTION C-C

SCALE : 1"=1'-0"

LEGAL DESCRIPTION: LOT "B" (FORMERLY LOTS 6, 7, AND 8), BLOCK "B", MONKBRIDGE ADDITION, AN ADDITION TO THE CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO.

BENCH MARK REFERENCE: STATION NO. "NM 47-10" BRASS CAP LOCATED ON THE CENTER-LINE MEDIAN AT THE INTERSECTION OF 2 ND STREET N.W. AND MESCALERO ROAD N.W., M.S.L. ELEVATION = 4967.50; PROJECT BENCH MARK AS SHOWN ON THE PLAN HEREON.

V. THE SUBJECT SITE PRESENTLY ACCEPTS MINIMAL OFF-SITE FLOWS FROM THE PROPERTY TO THE NORTH (GRAVELED SURFACED) AND WILL CONTINUE TO ACCEPT THESE FLOWS SHOULD IT BE NECESSARY, (0.24 cfs); THE "HISTORICAL" FLOWS OF THE SUBJECT PROPERTY CONTRIBUTE TO OFF-SITE FLOWS OF THE ADJACENT PROPERTY TO THE SOUTH WHICH IS ALSO OWNED BY THE SAME PROPERTY OWNER(S) OF THE PROPOSED DEVELOPED SITE ADDRESSED ON THE PLAN HEREON.



VICINITY MAP

HYDROLOGY APPROVAL & INSPECTION

APPROVED FOR PUBLIC USE BY:
ENGINEER O Montoya 2/1/91
INSPECTION REQUES[illegible]
APPROVAL DATE [illegible] PPROVED
S019 APPROVAL DATE
SURVEY DATE
HYDROLOGY BOOK N[illegible] NO.
SURVEYED BY
COMMENTS

DRAINAGE COMMENTS:

THE FOLLOWING ITEMS CONCERNING THE SUBJECT SITE ARE CONTAINED ON THE GRADING AND DRAINAGE PLAN AS SHOWN HEREON:

1.) SITE GRADING AND DRAINAGE PLAN
2.) VICINITY MAP
3.) LEGAL DESCRIPTION
4.) LIMITS AND CHARACTER OF THE EXISTING AND PROPOSED IMPROVEMENTS
5.) HYDRAULIC DRAINAGE CALCULATIONS

AS SHOWN ON THE VICINITY MAP HEREON THE SUBJECT SITE IS LOCATED ON THE EAST SIDE OF SECOND STREET N.W. BETWEEN HEADINGXY AVENUE N.W. AND AZTEC ROAD N.W., WITHIN THE CITY LIMITS OF THE CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO, (CITY ZONE ATLAS MAP NO. "G-14-Z").

THE PROJECT SITE, (1.) DOES LIE WITHIN A FLOOD PLAIN, (2.) DOES NOT LIE ADJACENT TO A NATURAL OR ARTIFICIAL WATER COURSE, (3.) HAS NO DRAINAGE EASEMENTS ON THE PROPERTY.

BASED ON A SITE INVESTIGATION, IT HAS BEEN DETERMINED THAT THE FREE DISCHARGE OF SURFACE FLOWS OF THE EXISTING AND PROPOSED QUANTITIES HAVE NO ADVERSE AFFECT ON DOWNSTREAM PROPERTIES.

DRAINAGE CALCULATIONS:

I. REFERENCES:

A. CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL (DPM), VOL. 2, DESIGN CRITERIA, CHAPTER 22, DRAINAGE, FLOOD CONTROL AND EROSION CONTROL.

B. SOIL SURVEY OF BERNALILLO COUNTY AND PARTS OF SANDOVAL AND VALENCIA COUNTIES, NEW MEXICO, UNITED STATES DEPARTMENT OF AGRICULTURE, SOIL CONSERVATION SERVICE, (SCS SHEET No. 21).

II. GENERAL INFORMATION:

A. SOIL TYPE: SOIL TYPE IS "VbA", VINTON SANDY LOAM, 0 TO 1 PERCENT SLOPES; HYDROLOGIC SOIL GROUP "B".

B. IMPERVIOUSNESS:

SITE AREA = 0.413 ACRES, (18,000.00 SQ. FT.).
PRESENT UNDEVELOPED "C" FACTOR = 0.40

C. TYPE OF SURFACE (DEVELOPED):
EXISTING

HARD SURFACED (ASPHALT/GRAVEL)	= 0.212AC.	= 51%	X (C=0.95)	= 0.48
BUILDING ROOF AREA	= 0.023AC.	= 06%	X (C=0.90)	= 0.05
LANDSCAPED AREA	= 0.000AC.	= 0%	X (C=0.25)	= 0.00
UNDEVELOPED AREA	= 0.178AC.	= 43%	X (C=0.40)	= 0.17

AVERAGE "WEIGHTED" "C"= 0.70

C-1. TYPE OF SURFACE (PROPOSED DEVELOPED):

HARD SURFACE (ASPHALT/GRAVEL)	= 0.298 AC.	= 73%	X (C=0.95)	= 0.69
BUILDING ROOF AREA	= 0.045 AC.	= 11%	X (C=0.90)	= 0.10
LANDSCAPED AREA	= 0.030 AC.	= 07%	X (C=0.25)	= 0.02
UNDEVELOPED AREA	= 0.040 AC.	= 09%	X (C=0.40)	= 0.03

AVERAGE WEIGHTED "C" = 0.84

D. RAINFALL, 100-YR., 6-HR., R_6; (SEE REF. A., PLATE 22.2 D-1)
R_6 = 2.2 INCHES.

E. TIME OF CONCENTRATION, T_c = TEN (10) MINUTES FOR A SITE THIS SIZE.

F. RAINFALL INTENSITY, "I", (SEE REF. A., PLATE 22.2 D-2)
$I = R_6 \times 6.84 \times T_c^{-0.51} = 2.2 \times 6.84 \times (10)^{-0.51} = 4.65$ IN./HR.

III. PEAK DISCHARGE: (Q = CIA)

UNDEVELOPED: EXISTING
Q_{100} = 0.70 X 4.65 X 0.413 = 1.34 cfs
Q_{10} = 0.657 X 1.34 = 0.88 cfs

DEVELOPED: PROPOSED
Q_{100} = 0.84 X 4.65 X 0.413 = 1.61 cfs
Q_{10} = 0.657 X 1.61 = 1.06 cfs *** INCREASE OF 0.27 cfs

IV. PEAK VOLUME:

A. EXISTING CONDITIONS:
V_{100} = 0.70 X (2.2/12) X 18,000.0 = 2,310.0 CU. FT.
V_{10} = 0.657 X 2,310.0 = 1,517.7 CU. FT.

B. DEVELOPED CONDITIONS:
V_{100} = 0.84 X (2.2/12) X 18,000 = 2,772.0 CU. FT.
V_{10} = 0.657 X 2,772.0 = 1,821.2 CU. FT.

RECEIVED
FEB 14 1991
HYDROLOGY DIVISION

REGISTERED PROFESSIONAL ENGINEER
STATE OF NEW MEXICO
NO. 3390
NEED EDWIN

PROPOSED GRADING AND DRAINAGE PLAN
FOR PROPOSED ADDITION TO
ORTEGA'S PROPANE SERVICE INC.
(3914 2ND STREET N.W., ALBUQUERQUE, NEW MEXICO)
NOVEMBER, 1988
(UP-DATED: FEBRUARY, 1991)

PLAN SHOT TWICE
ONCE ON LIGHT
ONCE ON DARK

CITY OF ALBUQUERQUE
THIS MICROIMAGE IS THE BEST POSSIBLE REPRODUCTION DUE TO THE POOR QUALITY OF THE ORIGINAL DOCUMENT.

R# 26 DATE 3-26-92 OP

CITY OF ALBUQUERQUE

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The photographic process used meets the Basic Microfilm Standards of the National Micrographics Association (MS115-1977)

DIRECTOR

NOTARY PUBLIC

OFFICIAL SEAL
Roberta Duran
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires 4/20/92

D 24 C 20 B 16 A 12

CITY OF ALBUQUERQUE C D

NOTICE TO CONTRACTOR

1. 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.
2. All work detailed on these plans to be performed underground shall accept as otherwise stated or provided for herein, be constructed in accordance with the City of Albuquerque Standard Specifications - Public Works Construction (4th edition).
3. Two (2) working days prior to any excavation, contractor must contact Line Locating Service, 765-1234, for location of existing utilities.
4. Prior to construction, the contractor shall accurate and verify the horizontal and vertical locations of all conditions shown. If a conflict exists, the contractor shall immediately notify the engineer so that the conflict can be resolved with a minimum amount of delay.
5. Backfill compaction shall be according to ASTM D-1557 street use.
6. Maintenance of these facilities shall be the responsibility of the Owner of the property served.

APPROVALS	NAME	DATE
A.C.E./DESIGN	B Montoya	2/19/91
INSPECTOR		
A.C.E./FIELD		

CONSTRUCTION NOTES:

1.) TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE AT 765-1234 FOR LOCATION OF EXISTING UTILITIES.

2.) PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF ALL POTENTIAL CONSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM 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 CITY RIGHT-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE CITY OF ALBUQUERQUE STANDARDS AND PROCEDURES.

EROSION CONTROL MEASURES:

THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR MANAGEMENT FOR STORM RUNOFF DURING CONSTRUCTION. HE SHALL ENSURE THAT THE FOLLOWING MEASURES ARE TAKEN:

1.) ADJACENT PROPERTY SHALL BE PROTECTED AT ALL TIMES BY CONSTRUCTION OF BERMS, DIKES, SWALES, PONDS, AND OTHER TEMPORARY GRADING AS REQUIRED TO PREVENT STORM RUNOFF FROM LEAVING THE SITE AND ENTERING ADJACENT PROPERTIES.

2.) ADJACENT PUBLIC RIGHT-OF-WAYS SHALL BE PROTECTED AT ALL TIMES FROM STORM WATER RUNOFF FROM THE SITE. NO SEDIMENT BEARING WATER SHALL BE PERMITTED TO ENTER PUBLIC STREETS.

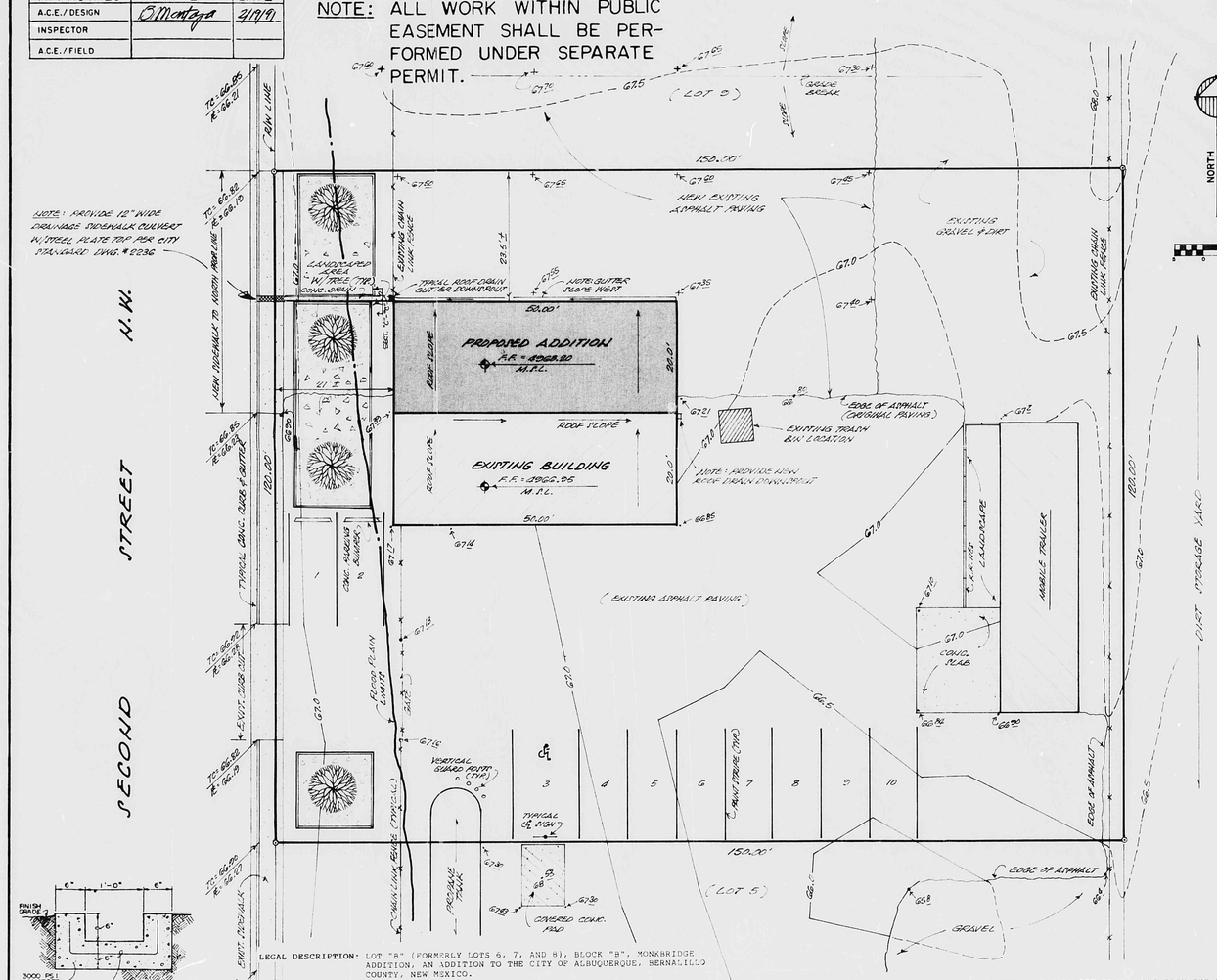
3.) THE CONTRACTOR SHALL IMMEDIATELY AND THROUGHLY REMOVE ANY AND ALL SEDIMENT WITHIN PUBLIC STREETS THAT HAS BEEN EROSED FROM THE SITE AND DEPOSITED THERE.

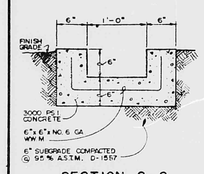
LEGEND:

- T.C. = 66.85 — TOP OF CURB ELEVATION
- F.L. = 66.21 — CURB FLOW LINE ELEVATION
- EXISTING OR PROPOSED CONCRETE
- 67 — EXISTING CONTOUR
- 65 — PROPOSED CONTOUR
- EXISTING FENCE
- 66.71 — PROPOSED SPOT ELEVATION
- PROPOSED LIMITS OF NEW PAVING

* NOTE: THIS PLAN IS AN UP-DATED RE-SUBMITTAL OF THE PREVIOUS DRAINAGE PLAN FOR ORTEGA'S PROPANE SERVICE (FILE NO. G-14/044) APPROVED FOR BUILDING PERMIT BY CITY OF ALBUQUERQUE-HYDROLOGY DEPARTMENT ON DECEMBER 1, 1988.

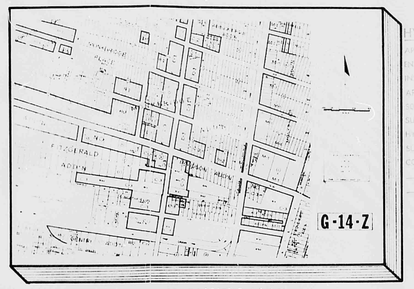
NOTE: ALL WORK WITHIN PUBLIC EASEMENT SHALL BE PERFORMED UNDER SEPARATE PERMIT.





SECTION C-C

SCALE: 1" = 1'-0"



VICINITY MAP

DRAINAGE COMMENTS:

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1.) SITE GRADING AND DRAINAGE PLAN
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5.) HYDRAULIC DRAINAGE CALCULATIONS

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BASED ON A SITE INVESTIGATION, IT HAS BEEN DETERMINED THAT THE FREE DISCHARGE OF SURFACE FLOWS OF THE EXISTING AND PROPOSED QUANTITIES HAVE NO ADVERSE AFFECT ON DOWNSTREAM PROPERTIES.

DRAINAGE CALCULATIONS:

I. REFERENCES:

A. CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL (DPM), VOL. 2, DESIGN CRITERIA, CHAPTER 22, DRAINAGE, FLOOD CONTROL AND EROSION CONTROL.

B. SOIL SURVEY OF BERNALILLO COUNTY AND PARTS OF SANDOVAL AND VALENCIA COUNTIES, NEW MEXICO, UNITED STATES DEPARTMENT OF AGRICULTURE, SOIL CONSERVATION SERVICE, (SCS SHEET No. 21).

II. GENERAL INFORMATION:

A. SOIL TYPE: SOIL TYPE IS "VDA", VINTON SANDY LOAM, 0 TO 1 PERCENT SLOPES; HYDROLOGIC SOIL GROUP "B".

B. IMPERVIOUSNESS:

SITE AREA = 0.413 ACRES, (18,000.00 SQ. FT.).
PRESENT UNDEVELOPED "C" FACTOR = 0.40

C. TYPE OF SURFACE (DEVELOPED):

	EXISTING		
HARD SURFACED (ASPHALT/GRAVEL)	= 0.212AC.	= 51% X (C=0.95)	= 0.48
BUILDING ROOF AREA	= 0.023AC.	= 06% X (C=0.90)	= 0.05
LANDSCAPED AREA	= 0.000AC.	= 0% X (C=0.25)	= 0.00
UNDEVELOPED AREA	= 0.178AC.	= 43% X (C=0.40)	= 0.17
		AVERAGE "WEIGHTED" "C"	= 0.70

C-1. TYPE OF SURFACE (PROPOSED DEVELOPED):

HARD SURFACE (ASPHALT/GRAVEL)	= 0.298 AC.	= 72% X (C=0.95)	= 0.68
BUILDING ROOF AREA	= 0.043 AC.	= 10% X (C=0.90)	= 0.09
LANDSCAPED AREA	= 0.030 AC.	= 07% X (C=0.25)	= 0.02
UNDEVELOPED AREA	= 0.040 AC.	= 09% X (C=0.40)	= 0.03
		AVERAGE WEIGHTED "C"	= 0.84

D. RAINFALL, 100-YR., 6-HR., R_6; (SEE REF. A., PLATE 22.2 D-1)
R_6 = 2.2 INCHES.

E. TIME OF CONCENTRATION, T_c = TEN (10) MINUTES FOR A SITE THIS SIZE.

F. RAINFALL INTENSITY, "I", (SEE REF. A., PLATE 22.2 D-2)
$I = R_6 \times 6.84 \times T_c^{-0.51} = 2.2 \times 6.84 \times (10)^{-0.51} = 4.65$ IN./HR.

III. PEAK DISCHARGE: (Q = CIA)

UNDEVELOPED: EXISTING $Q_{100} = 0.70 \times 4.65 \times 0.413 = 1.34$ cfs
$Q_{10} = 0.657 \times 1.34 = 0.88$ cfs

DEVELOPED: PROPOSED $Q_{100} = 0.84 \times 4.65 \times 0.413 = 1.61$ cfs
$Q_{10} = 0.657 \times 1.61 = 1.06$ cfs *** INCREASE OF 0.18 cfs

IV. PEAK VOLUME:

A. EXISTING CONDITIONS:
$V_{100} = 0.70 \times (2.2/12) \times 18,000.0 = 2,310.0$ CU. FT.
$V_{10} = 0.657 \times 2,310.0 = 1,517.7$ CU. FT.

B. DEVELOPED CONDITIONS:
$V_{100} = 0.84 \times (2.2/12) \times 18,000.0 = 2,772.0$ CU. FT.
$V_{10} = 0.657 \times 2,772.0 = 1,821.2$ CU. FT.

7. THE SUBJECT SITE PRESENTLY ACCEPTS MINIMAL OFF-SITE FLOWS FROM THE PROPERTY TO THE NORTH (GRAVELED SURFACED) AND WILL CONTINUE TO ACCEPT THESE FLOWS SHOULD IT BE NECESSARY. (0.24 cfs); THE "HISTORICAL" FLOWS OF THE SUBJECT PROPERTY CONTRIBUTE TO OFF-SITE FLOWS OF THE ADJACENT PROPERTY TO THE SOUTH WHICH IS ALSO OWNED BY THE SAME PROPERTY OWNER(S) OF THE PROPOSED DEVELOPED SITE ADDRESSED ON THE PLAN HEREON.

LEGAL DESCRIPTION: LOT "B" (FORMERLY LOTS 6, 7, AND 8), BLOCK "B", MONKBRIDGE ADDITION, AN ADDITION TO THE CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO.

BENCH MARK REFERENCE: STATION NO. "NM 47-10" BRASS CAP LOCATED ON THE CENTER-LINE MEDIAN AT THE INTERSECTION OF 2 ND STREET N.W. AND MESCALERO ROAD N.W., M.S.L. ELEVATION = 4967.50; PROJECT BENCH MARK AS SHOWN ON THE PLAN HEREON.

B Montoya 2/19/91

PROPOSED GRADING AND DRAINAGE PLAN FOR PROPOSED ADDITION TO ORTEGA'S PROPANE SERVICE INC. (3914 2ND STREET N.W., ALBUQUERQUE, NEW MEXICO) NOVEMBER, 1988 (UP-DATED: FEBRUARY, 1991)

PLAN SHOT TWICE ONCE ON LIGHT ONCE ON DARK

CITY OF ALBUQUERQUE
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R# 26 DATE 3-26-02 OP

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DIRECTOR 11/8/02
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R. Pedro Duran
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires 8/08/02

D24 C20 B16 A12 CITY OF ALBUQUERQUE C D